Los Angeles County
Sheriff's Department

48TH ANNUAL
LAW ENFORCEMENT VEHICLE TEST
AND
EVALUATION PROGRAM

VEHICLE MODEL YEAR 2023

Robert Luna, SHERIFF

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PREFACE

The Los Angeles County Sheriff's Department first implemented its police vehicle testing program in 1974. Since that time, our department has become nationally recognized as a major source of information relative to police vehicles and their use. It is our goal to provide law enforcement agencies with the information they require to successfully evaluate those vehicles currently being offered for police service. The Los Angeles County Sheriff's Department is proud to publish this information, via the internet, to all law enforcement agencies.

Since the inception of our vehicle testing program in 1974, we have continually refined our efforts in this area in order to provide the law enforcement community with the most current information available. During the 1997 model year testing, the Sheriff's department expanded its existing criteria to include an urban or city street course. This course consists of multiple city block distances punctuated by the various types of turns normally found in most inner city environments. The city street course is designed to simulate the conditions encountered by most officers working in typical urban communities. The test is only conducted on vehicles offered with a factory "police package". Since many law enforcement agencies buy "non-police packaged" vehicles, we also test vehicles offered in a "special service" configuration when offered by the manufacturers. These vehicles are tested in a similar fashion as "police package" vehicles. However, we do not subject them to the city street course.

The booklet is not intended as a recommendation for any specific vehicle contained within. The Sheriff's Department conducts the vehicle testing program in order to accomplish two primary goals: (1) to provide law enforcement agencies with the data necessary to assist those in the vehicle selection process and (2) to provide the various vehicle manufacturers with the input necessary to better meet the needs of law enforcement. We recognize the fact that individual agency necessities can be influenced by cost, operational considerations, and other factors.

Our testing process is designed to address the law enforcement officer's operational requirements in terms of vehicle performance, vehicle safety, and comfort. Each test is designed and executed to simulate actual field conditions as closely as possible. The vehicles being tested are driven by law enforcement personnel on city streets and interstates, as well as the performance track. The maneuvers duplicated during the electronic test procedures are those encountered in actual patrol and emergency operations which the law enforcement officer may encounter in the field.

Interpretation of test results is the responsibility of each agency. The importance with which each individual phase is weighted is a subjective decision which should be made by each agency based upon that agency's needs.

ACKNOWLEDGEMENTS

The Los Angeles County Sheriff's Department, Fleet Management Bureau would like to thank all those who contributed their time and efforts in making this year's test a success.

Vehicle Test Track Drivers

Deputy Ramiro Juarez - LASD
Deputy Richard Dee - LASD
Officer Douglas Barnhart - LAPD
Officer James White- LAPD

Vehicle Manufactures

Ford Motor Company Police Vehicles
General Motors Police Program
Dodge Law Enforcement Program

Brake Testing

Sergeant - David Davis -LASD

Support Personnel

Lieutenant Robert Furman (CFMB)
Sergeant David Davis (CFMB)
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George Ramirez (CFMB)
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Lap Timers / Flag Attendants

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Vivian Estrada (Centerra)
Sergio Segovia (Centerra)

2023 MODEL YEAR VEHICLE TEST

On October 24th–28nd, 2022, vehicle testing was performed at the Auto Club Speedway in Fontana, California. Chrysler, General Motors, and Ford all submitted vehicles in the "Police Package" category. Police Package vehicles have been identified by the manufacturers as factory installed Police package vehicles. All of the vehicles satisfactorily completed the test .

The vehicles submitted for evaluation were 2023 models and are identified below.

HIGH SPEED POLICE PACKAGE VEHICLE CATEGORY:

2023 Chevrolet Tahoe 5.3L PPV 2WD: Full size four door sport utility, rear wheel drive , 5.3 liter V-8 engine, 10-speed automatic transmission with overdrive and a 3.23:1 axle ratio.

2023 Chevrolet Tahoe 5.3L PPV 4WD: Full size four door sport utility, four wheel drive, 5.3 liter V-8 engine, 10-speed automatic transmission with overdrive and a 3.23:1 axle ratio.

2023 Chevrolet Silverado Z7X 5.3L 4WD: Full size four door Pickup 4-wheel drive (rear), 5.3-liter V-8 engine, 10-speed automatic overdrive transmission, 2 speed T-Case with auto mode and a 3.23:1 axle ratio.

2023 Chevrolet Silverado Z71 5.3L 4WD: Full size four door Pickup 4-wheel drive (rear), 5.3-liter V-8 engine, 10-speed automatic overdrive transmission, 2 speed T-Case with auto mode and a 3.23:1 axle ratio.

2023 Dodge Charger 3.6L AWD: Full size four door sedan, all wheel drive, 3.6 liter V-6 engine, 5-speed automatic transmission with overdrive and a 3.08:1 axle ratio.

2023 Dodge Charger 5.7L RWD: Full size four door sedan, rear wheel drive, 5.7 liter V-8 engine, 8-speed automatic transmission with overdrive and a 2.62:1 axle ratio.

2023 Dodge Durango 3.6L AWD: Full size four door sport utility, all-wheel drive, 3.6 liter V-6 engine, 8-speed automatic transmission with overdrive and a 3.45:1 axle ratio.

2023 Dodge Durango 5.7L AWD: Full size four door sport utility all-wheel drive, 5.7 liter V-8 engine, 8- speed automatic transmission with overdrive and a 3.09:1 axle ratio.

2023 Ford P.I. Utility 3.3L AWD: Full size four door sport utility, all-wheel drive, 3.3 liter V-6 engine, 10- speed electronic automatic transmission with overdrive and a 3.73:1 axle ratio.

2023 Ford P.I. Utility Ecoboost 3.0L AWD: Full size four door sport utility, all-wheel drive, 3.0 liter EcoBoost Twin Turbocharged V-6 engine, 10-speed electronic automatic transmission with overdrive and a 3.31:1 axle ratio

2023 Ford P.I. Utility Hybrid AWD: Full size four door sport utility, all-wheel drive, 3.3 liter V-6 Hybrid, 10 speed electronic automatic transmission with a 3.73:1 axle ratio.

2023 Ford F150 3.5L 4WD EcoBoost: Full size four door truck, four-wheel drive, 5 passenger SuperCrew cab, and 5.5 ft bed, 3.5 liter, V6, EcoBoost engine with 10 speed SelectShift automatic transmission with 3.31:1.axle ratio

2023 Ford Mustang Mach- E AWD: 480 HP all electric 5 passenger AWD sedan featuring an EPA estimated 270 miles of range made possible by its 88k Wh extended range high voltage battery.

MAKE: 2023 CHEVROLET MODEL: TAHOE 2WD SALES CODE: 9C1

Vehicle Type: Full size four door sport utility, 2 wheel drive (rear), 5.3 liter V-8 engine, 10 speed automatic transmission with overdrive and a 3.23:1 axle ratio.

EPA		TESTED
CITY	HWY	AVERAGE MPG
15	19	14.3

INTERIOR

SEATS

Front: Cloth bucket, Driver10-way power, lumbar and recline. (40/20/40 std, 40/40 opt, buckets opt.)

Rear: Cloth split folding 60/40 bench.(Vinyl no cost option)

MEASUREMENTS

	Front	Rear
Headroom:	42.3 in	38.9 in
Legroom:	44.5 in	42.0 in
Shoulder:	66.0 in	64.8 in
Hip Room:	61.5 in	61.3 in

Interior Volume:

Front: 64.1 cu-ft.

Rear: 59.2 cu-ft.

Comb: 123.2 cu-ft.

MAX Cargo: 125.9 cu-ft.

DIMENSIONS

Fuel Capacity: 24 Gallons 90.8 Liters

GVWR: 7,200 lbs.

Wheelbase: 120.9 in

Ground Clearance: 7.1 in

Overall Length: 210.7 in

Overall Height: 75.7 in

CHASSIS

STEERING

Type: Electric power assisted rack and pinion

Curb-to-curb: 39 ft.

SUSPENSION

Front: Independent double A-arm with coil over shock and stabilizer bar.

Rear: Independent Multi-link with coil over shock and stabilizer bar.

WHEEL + TIRES

Wheel size/type: 20”x 9” steel

Tire make: Firestone

Tire model: Firehawk Pursuit

Tire size: P275/55R20

Speed rating: 113V

BRAKES

Type: Heavy duty 4 wheel anti-lock front & rear disc with E- boost.

Front: 16.1 inch vented disc

Rear: 13.6 inch vented disc

ENGINE

Naturally aspirated V8

Fuel delivery system: Direct injection

Displacement: 5.3 Liters

Compression Ratio: 11:1

Horse Power: 355 bhp @ 5600 rpm
Torque (SAE net): 383 ft-lb @ 4100 rpm

Alternator: 250 amp

Battery: 900 CCA Primary
760 CCA Auxiliary

DRIVETRAIN

Transmission: Model 10L80, 10 speed automatic with lockup torque converter.

Axle Ratio: 3.23:1 (Rear Wheel Drive with H/D Limited slip Differential)

ACCELERATION

0-60 mph 8.47 sec
30-60 mph– 5.50 sec
60-100 mph– 12.48 sec
1/4 mile– 16.59 sec @ 88.5 mph

TEST RESULTS

BRAKING

136.5 ft. @ 60mph

32 LAP HIGH SPEED

Average Lap Time – 1:25.62
Average Speed - 61.4 mph

CITY COURSE

Average Lap Time – 4:57.94
Average Speed 31.4 mph

MAKE: 2023 CHEVROLET MODEL: TAHOE 4WD SALES CODE: 9C1

Vehicle Type: Full size four door sport utility, 4 wheel drive (rear), 5.3 liter V-8 engine, 10 speed automatic transmission with overdrive and a 3.23:1 axle ratio.

EPA		TESTED
CITY	HWY	AVERAGE MPG
14	18	12.9

INTERIOR

SEATS

Front: Cloth bucket, 10-way power, lumber and recline.

Rear: Cloth split folding 60/40 bench. (Vinyl no cost option)

MEASUREMENTS

	Front	Rear
Headroom:	42.3 in	38.9 in
Legroom:	44.5 in	42.0 in
Shoulder:	66.0 in	64.8 in
Hip Room:	61.5 in	61.3 in

Interior Volume:

Front: 64.1 cu-ft.

Rear: 59.2 cu-ft.

Comb: 123.2 cu-ft.

Max. Cargo: 125.9 cu-ft.

DIMENSIONS

Fuel Capacity: 24 Gallons 90.8 Liters

GVWR: 7,400 lbs.

Wheelbase: 120.9 in

Ground Clearance: 7.1 in

Overall Length: 210.7 in

Overall Height: 75.7 in

CHASSIS

STEERING

Type: Electric power assist rack and pinion

Curb-to-curb: 39 ft.

SUSPENSION

Front: Independent double A-arm with coil over shock and stabilizer bar.

Rear: Independent Multi-link with coil over shock and stabilizer bar..

WHEEL + TIRES

Wheel size/type: 20” x 9”steel

Tire make: Firestone

Tire model: Firehawk Pursuit

Tire size: P275/55R20

Speed rating: 113V

BRAKES

Type: Heavy duty 4 wheel anti-lock front & rear disc with E- boost.

Front: 16.1 inch vented disc

Rear: 13.6 inch vented disc

ENGINE

Naturally aspirated V8

Fuel delivery system: Direct Injection

Displacement 5.3 Liters

Compression Ratio: 11.0:1

Horse Power: 355bhp @ 5600 rpm

Torque (SAE net): 383 ft-lb @ 4100 rpm

Alternator 250 amp

Battery: 900 CCA Primary
760 CCA Auxiliary

DRIVETRAIN

Transmission: Model 10L80, 10-speed automatic with lockup torque converter.

Axle Ratio: 3.23:1 (Rear Wheel Drive with H/D Locking Differential)

ACCELERATION

0-60 mph 9.09 sec
30-60 mph– 5.83 sec
60-100 mph– 14.79 sec
1/4 mile– 17.04 sec @ 85.7 mph

TEST RESULTS

BRAKING

138.3 ft. @ 60mph

32 LAP HIGH SPEED

Average Lap Time – 1:26.23
Average Speed – 61.1 mph

CITY COURSE

Average Lap Time - 4:60.58
Average Speed – 31.1 mph

MAKE: 2023 CHEVROLET MODEL: 4WD PP Silverado Z7X SALES CODE: 9C1

Vehicle Type: Full size four door Pickup, 4 wheel drive (rear), 5.3 liter V-8 engine, 10 -speed automatic overdrive transmission, 2- speed T-Case with Auto mode and a 3.23:1 axle ratio.

EPA		TESTED
CITY	HWY	AVERAGE MPG
15	19	18

INTERIOR

SEATS

Front: Cloth bucket, driver 10-way power, with lumber and recline. (40/20/40 std, 40/40 opt, buckets opt.)

Rear: Cloth split folding 60/40 bench. (Vinyl no cost option)

MEASUREMENTS

	Front	Rear
Headroom:	43.0 in	40.1 in
Legroom:	44.5 in	43.4 in
Shoulder:	66.0 in	65.5 in
Hip Room:	61.2 in	60.2 in

Interior Volume:

Front: 64.2 cu-ft.

Rear: 65.6 cu-ft.

Comb: 129.8 cu-ft.

Max. Cargo: 62.9 cu-ft.

DIMENSIONS

Fuel Capacity: 24 Gallons 90.8 Liters

GVWR: 7,100 lbs.

Wheelbase: 120.9 in

Ground Clearance: 11.4 in

Overall Length: 231.7 in

Overall Height: 77.6 in

CHASSIS

STEERING

Type: Electric power steering rack and pinion

Curb-to-curb: 46.3 ft.

SUSPENSION

Front: Independent double A-arm with coil over shock and stabilizer bar.

Rear: Hotchkiss leaf spring

WHEEL + TIRES

Wheel size/type: 20” x 9”steel

Tire make: Goodyear

Tire model: Wrangler trail runner AT

Tire size: P275/60R20 AT

Speed rating: S

BRAKES

Type: Heavy duty 4 wheel anti-lock front & rear disc with E- boost.

Front: 16.1 inch vented disc

Rear: 13.6 inch vented disc

ENGINE

Naturally aspirated V8

Fuel delivery system: Direct Injection

Displacement 5.3 Liters

Compression Ratio: 11.0:1

Horse Power: 355bhp @ 5600 rpm
Torque (SAE net): 383 ft-lb @ 4100 rpm
Alternator 220 amp

Battery: 730 CCA AGM Primary

DRIVETRAIN

Transmission: Model 10L80, 10-speed automatic with lockup torque converter.

Axle Ratio: 3.23:1 (Rear Wheel Drive with H/D Locking Differential)

ACCELERATION

0-60 mph 8.01 sec
30-60 mph– 5.22 sec
60-100 mph– 13.23 sec
1/4 mile– 16.20 sec @ 88.7 mph

TEST RESULTS

BRAKING

149.9 ft. @ 60mph

32 LAP HIGH SPEED

Average Lap Time – 1:27.22
Average Speed – 60.4 mph

CITY COURSE

Average Lap Time - 4:47.03
Average Speed – 32.6 mph

MAKE: 2023 CHEVROLET MODEL: 4WD PP Silverado Z71 SALES CODE: 9C1

Vehicle Type: Full size four door Pickup, 4 wheel drive (rear), 5.3 liter V-8 engine, 10 -speed automatic overdrive transmission, 2- speed T-Case with Auto mode and a 3.23:1 axle ratio.

EPA		TESTED
CITY	HWY	AVERAGE MPG
15	19	18

INTERIOR

SEATS

Front: Cloth bucket, driver 10-way power, with lumber and recline. (40/20/40 std, 40/40 opt, buckets opt.)

Rear: Cloth split folding 60/40 bench. (Vinyl no cost option)

MEASUREMENTS

	Front	Rear
Headroom:	43.0 in	40.1 in
Legroom:	44.5 in	43.4 in
Shoulder:	66.0 in	65.5 in
Hip Room:	61.2 in	60.2 in

Interior Volume:

Front: 64.2 cu-ft.

Rear: 65.6 cu-ft.

Comb: 129.8 cu-ft.

Max. Cargo: 62.9 cu-ft.

DIMENSIONS

Fuel Capacity: 24 Gallons 90.8 Liters

GVWR: 7,100 lbs.

Wheelbase: 120.9 in

Ground Clearance: 9.2 in

Overall Length: 231.7 in

Overall Height: 75.5 in

CHASSIS

STEERING

Type: Electric power steering rack and pinion

Curb-to-curb: 46.3 ft.

SUSPENSION

Front: Independent double A-arm with coil over shock and stabilizer bar.

Rear: Hotchkiss leaf spring

WHEEL + TIRES

Wheel size/type: 20” x 9”steel

Tire make: Goodyear

Tire model: Wrangler trail runner AT

Tire size: P275/60R20 AT

Speed rating: S

BRAKES

Type: Heavy duty 4 wheel anti-lock front & rear disc with E- boost.

Front: 16.1 inch vented disc

Rear: 13.6 inch vented disc

ENGINE

Naturally aspirated V8

Fuel delivery system: Direct Injection

Displacement 5.3 Liters

Compression Ratio: 11.0:1

Horse Power: 355bhp @ 5600 rpm
Torque (SAE net): 383 ft-lb @ 4100 rpm
Alternator 220 amp

Battery: 730 CCA AGM Primary

DRIVETRAIN

Transmission: Model 10L80, 10-speed automatic with lockup torque converter.

Axle Ratio: 3.23:1 (Rear Wheel Drive with H/D Locking Differential)

ACCELERATION

0-60 mph 8.27 sec
30-60 mph– 5.26 sec
60-100 mph– 12.87 sec
1/4 mile– 16.42 sec @ 89.3 mph

TEST RESULTS

BRAKING

144.6 ft. @ 60mph

32 LAP HIGH SPEED

Average Lap Time – 1:26.25
Average Speed – 61.1 mph

CITY COURSE

Average Lap Time - 4:47.27
Average Speed – 32.6 mph

MAKE:2023 DODGE MODEL : CHARGER 3.6L AWD SALES CODE:28A

Vehicle Type: Full size four door sedan, all wheel drive, 3.6 liter V-6 engine, 8 speed automatic transmission with overdrive and a 3.08:1 axle ratio.

EPA		TESTED
CITY	HWY	AVERAGE MPG
18	26	22.5

INTERIOR

SEATS

Front: Heavy duty cloth bucket

Rear: Cloth bench

MEASUREMENTS

	Front	Rear
Headroom:	38.6 in	36.6 in
Legroom:	41.8 in	40.1 in
Shoulder:	59.5 in	57.9 in
Hip Room:	56.2 in	56.1 in

Interior Volume:

Front: 55.6 cu-ft.

Rear: 49.2 cu-ft.

Comb: 104.7 cu-ft.

Trunk: 16.5 cu-ft.

DIMENSIONS

Fuel Capacity: 18.5 Gallons

GVWR: 5,500 lbs.

Wheelbase: 120.2 in

Ground Clearance: 5.1 in

Overall Length: 198.4 in

Overall Height: 58.4 in

CHASSIS

STEERING

Type: Electric power assisted rack and pinion.

Curb-to-curb: 38.7 ft.

SUSPENSION

Front: Independent SLA with high upper "A" arm, coil spring over gas-charged mono-tube shock absorbers, stabilizer bar and one-piece lower control arms.

Rear: 5 link independent with coil springs, gas charged load-leveling NIVOMAT rear shocks, stabilizer bar and isolated suspension cradle.

WHEEL + TIRES

Wheel size/type: 18" x 7.5" steel

Tire make: Goodyear

Tire model: Eagle RS-A

Tire size: 225/60R18

Speed rating: W-rated

BRAKES

Type: Power with dual piston front calipers, single piston rear calipers, anti-lock.

Front Disc: 14.6 inch vented disc

Rear Disc: 13.8 inch vented disc

ENGINE

Naturally aspirated V6

Fuel delivery system: SPFI

Cubic Inches: 220

Displacement: 3.6 liters

Compression Ratio: 10.2:1

Horse Power: 300 bhp @ 6350 rpm

Torque (SAE net): 264 ft-lb @ 4800 rpm

Alternator: 220 amp

Battery: 800 CCA

DRIVETRAIN

Transmission: TorqueFlite 8Hp50 8-speed automatic

Axle Ratio: 3.08:1

ACCELERATION

0-60 mph 7.61 sec
30-60 mph– 5.00 sec
60-100 mph– 11.31 sec
1/4 mile– 15.94 sec @ 90.4 mph

TEST RESULTS

BRAKING

132.8 ft. @ 60 mph

32 LAP HIGH SPEED

Average Lap Time – 1:23.62
Average Speed – 62.6 mph

CITY COURSE

Average Lap Time – 4:27.05
Average Speed – 35.1 mph

MAKE: 2023 DODGE MODEL: CHARGER 5.7L RWD SALES CODE: 26A

Vehicle Type: Full size four door sedan, rear wheel drive, 5.7 liter V-8 engine, 8 -speed automatic transmissions with overdrive and a 3.08:1 axle ratio.

EPA		TESTED
CITY	HWY	AVERAGE MPG
16	25	16.1

INTERIOR

SEATS

Front: Heavy duty cloth bucket

Rear: Cloth bench

MEASUREMENTS

	Front	Rear
Headroom:	38.6 in	36.6 in
Legroom:	41.8 in	40.1 in
Shoulder:	59.5 in	57.9 in
Hip Room:	56.2 in	56.1 in

Interior Volume:

Front: 55.6 cu-ft.

Rear: 49.2 cu-ft.

Comb: 104.7 cu-ft.

Trunk: 16.5 cu-ft.

DIMENSIONS

Fuel Capacity: 18.5 Gallons

GVWR: 5,500 lbs.

Wheelbase: 120.2 in

Ground Clearance: 5.1 in

Overall Length: 198.4 in

Overall Height: 58.4 in

CHASSIS

STEERING

Type: Electric power assist rack and pinion

Curb-to-curb: 38.7 ft.

SUSPENSION

Front: Independent high arm SLA with upper "A" arm, coil spring over gas-charged mono-tube shock absorbers and stabilizer bar. Lateral and diagonal lower links with dual ball joint knuckles. One piece lower control arms.

Rear: Five-link independent with coil springs, gas-charged load-leveling NIVOMAT rear shocks, stabilizer bar and isolated suspension cradle.

WHEEL + TIRES

Wheel size/type: 18" x 7.5" steel

Tire make: Goodyear

Tire model: Eagle RS-A

Tire size: 245/55R18

Speed rating: V -rated

BRAKES

Type: Power with dual piston front calipers, single piston rear calipers, anti-lock.

Front: 14.6 inch vented disc

Rear: 13.8 inch vented disc

ENGINE

Naturally aspirated V-8

Fuel delivery system: SPFI

Cubic Inches: 345 cid

Displacement: 5.7 Liters

Compression Ratio: 10.5:1

Horse Power: 370 @ 5250 rpm

Torque (SAE net): 395 ft. lb. @ 4200 rpm

Alternator: 220 amp

Battery: 800 CCA

DRIVETRAIN

Transmission: Torqueflite 8HP70 8-speed automatic.

Axle Ratio: 2.62:1

ACCELERATION

0-60 mph 6.30 sec
30-60 mph– 3.48 sec
60-100 mph– 7.87 sec
1/4 mile– 14.73 sec @ 99.8 mph

TEST RESULTS

BRAKING

140.8 ft. @ 60mph

32 LAP HIGH SPEED

Average Lap Time– 1:23.11
Average Speed – 63.3 mph

CITY COURSE

Average Lap Time – 4:32.91
Average Speed – 34.3 mph

MAKE: 2023 DODGE MODEL: DURANGO 3.6L AWD SALES CODE:2BZ

Vehicle Type: Full size four door SUV, all wheel drive, 3.6 liter V-6 engine, 8 speed automatic transmission with overdrive and a 3.45:1 axle ratio.

EPA		TESTED
CITY	HWY	AVERAGE MPG
18	26	17.7

INTERIOR

SEATS

Front: Cloth bucket

Rear: Cloth bench

MEASUREMENTS

	Front	Rear
Headroom:	39.9 in	39.8 in
Legroom:	40.3 in	38.6 in
Shoulder:	58.5 in	50.4 in
Hip Room:	57.0 in	42.8 in

Interior Volume:

Front: 54.4 cu-ft.

Rear: 51.2 cu-ft.

Behind 2nd row: 43.3 in

Behind 1st row: With 2nd row seats folded: 85.1 in

DIMENSIONS

Fuel Capacity: 24.6 Gallons

GVWR: 6,500 lbs.

Wheelbase: 119.8 in

Ground Clearance: 8.1 in

Overall Length: 200.8 in

Overall Height: 70.9 in

CHASSIS

STEERING

Type: Electric power assist rack and pinion

Curb-to-curb: 41.0 ft.

SUSPENSION

Front: Short- and long arm independent (SLA), coil springs, gas-charged twin tube coil-over shocks, steel upper, Al lower control arms, Al knuckle, stabilizer bar.

Rear: Multi-link rear suspension, coil spring, twin tube shocks (including load leveling), aluminum lower control arm, independent tension and camber links plus a separate toe link.

WHEEL + TIRES

Wheel size/type: 18" x 8" steel

Tire make: Firestone

Tire model: Firehawk Pursuit

Tire size: 255/60R18

Speed rating: V-rated

BRAKES

Type: Power with dual piston front calipers, single piston rear calipers, anti-lock

Front: 14.4 inch vented disc

Rear: 13.8 inch vented disc

ENGINE

Naturally aspirated V-6

Fuel delivery system: SMFI

Cubic Inches: 220 cid

Displacement: 3.6 Liters

Compression Ratio: 10.2:1

Horse Power: 293 bhp @ 6400 rpm

Torque (SAE net):
260 ft-lb @ 4000 rpm

Alternator: 220 amp

Battery: 650 CCA
Aux. 200 CCA

DRIVETRAIN

Transmission: TorqueFlite Automatic 8 -speed 850RE

Transfer Case: MP3010
Single-speed, full-time AWD

Axle Ratio: 3.45:1

ACCELERATION

0-60 mph 10.43 sec
30-60 mph– 6.31 sec
60-100 mph– 18.33 sec
1/4 mile– 17.80 sec @ 80.05 mph

TEST RESULTS

BRAKING

135.4 ft. @ 60 mph

32 LAP HIGH SPEED

Average Lap Time – 1:28.70
Average Speed – 59.1 mph

CITY COURSE

Average Lap Time – 4:42.79
Average Speed – 33.1 mph

MAKE: 2023 DODGE MODEL: DURANGO 5.7L AWD SALES CODE:22Z

Vehicle Type: Full size four door SUV, all wheel drive, 5.7 liter V-8 engine, 8-speed automatic transmission with overdrive and a 3.09:1 axle ratio.

EPA		TESTED
CITY	HWY	AVERAGE MPG
14	22	15.3

INTERIOR

SEATS

Front: Cloth bucket

Rear: Cloth bench

MEASUREMENTS

	Front	Rear
Headroom:	39.9 in	39.8 in
Legroom:	40.3 in	38.6 in
Shoulder:	58.5 in	50.4 in
Hip Room:	57.0 in	42.8 in

Interior Volume:

Front: 54.4 cu-ft.

Rear: 51.2 cu-ft.

Behind 2nd row: 43.3 in

Behind 1st row: With 2nd row seats folded: 85.1 in

DIMENSIONS

Fuel Capacity: 24.6 Gallons

GVWR: 7,100 lbs.

Wheelbase: 119.8 in

Ground Clearance: 8.1 in

Overall Length: 200.8 in

Overall Height: 70.9 in

CHASSIS

STEERING

Type: Electric power assist rack and pinion

Curb-to-curb: 41.0 ft.

SUSPENSION

Front: Short- and long arm independent (SLA), coil springs, gas-charged twin tube coil-over shocks, steel upper, Al lower control arms, Al knuckle, stabilizer bar.

Rear: Multi-link rear suspension, coil spring, twin tube shocks (including load leveling), aluminum lower control arm, independent tension and camber links plus a separate toe link.

WHEEL + TIRES

Wheel size/type: 18” x 8” steel

Tire make: Firestone

Tire model: Firehawk Pursuit

Tire size: 255/60R18

Speed rating: V-rated

BRAKES

Type: Power with dual piston front calipers, single piston rear calipers, anti-lock

Front: 14.4 inch vented disc

Rear: 13.8 inch vented disc

ENGINE

Naturally aspirated V-8

Fuel delivery system: SMFI

Cubic Inches: 345 cid

Displacement: 5.7 Liters

Compression Ratio: 10.5:1

Horse Power: 360 bhp @ 5150 rpm

Torque (SAE net): 390 ft-lb @ 4250 rpm

Alternator: 220 amp

Battery: 800 CCA

DRIVETRAIN

Transmission: Torqueflite Automatic 8 -Speed Overdrive 8HP70

Transfer Case: MP3023 Two-speed, electronically shifted. Modes: AWD Low (Lock), Neutral; full-time active AWD. Low range ratio: 2.72

Axle Ratio: 3.09:1

ACCELERATION

0-60 mph 8.00 sec
30-60 mph– 4.80 sec
60-100 mph– 13.03 sec
1/4 mile– 16.12 sec @ 87.6 mph

TEST RESULTS

BRAKING

137.7 ft. @ 60 mph

32 LAP HIGH SPEED

Average Lap Time – 1:25.79
Average Speed – 61.1 mph

CITY COURSE

Average Lap Time – 4:54.21
Average Speed – 31.8 mph

MAKE: 2023 FORD MODEL: P.I. UTILITY 3.3L AWD SALES CODE: K8A, 99B

Vehicle Type: Full size four door sport utility, all-wheel drive, 3.3 liter V-6 engine, 10-speed automatic transmission with overdrive and a 3.73 axle ratio.

EPA		TESTED
CITY	HWY	AVERAGE MPG
17	23	18

INTERIOR

SEATS

Front: Heavy duty cloth bucket, 6-way adjustable, 4-way adjustable headrest.; 2-way power lumbar

Rear: Vinyl bench, 35/30/35 split-fold

MEASUREMENTS

	Front	Rear
Headroom:	40.7 in	40.4 in
Legroom:	40.9 in	40.7 in
Shoulder:	61.8 in	61.3 in
Hip Room:	59.3 in	59.1 in

Interior Volume:

Front: 59.7 cu-ft.

Rear: 58.4 cu-ft.

Comb: 118 cu-ft.

Cargo: 52 cu-ft.

DIMENSIONS

Fuel Capacity: 21.4 Gallons
GVWR: 6,465 lbs.
Wheelbase: 119.1 in
Ground Clearance: 7.6 in
Overall Length: 198.8 in
Overall Height: 69.3 in

CHASSIS

STEERING

Type: Electric power assist rack and pinion

Curb-to-curb: 40.4 ft.

SUSPENSION

Front: Independent MacPherson coil over strut.

Rear: Multi-link fully independent suspension

WHEEL + TIRES

Wheel size/type: 18" x 8" steel, 5-spoke

Tire make: Goodyear

Tire model: Eagle Enforcer
Tire size: 255/60R18

Speed rating: V

BRAKES

Type: Power dual piston calipers front, single piston calipers rear, 4-circuit and Automatic Braking System (ABS).

Front: 14.4 in, vented.

Rear: 13.8 in, vented.

ENGINE

Naturally aspirated V6

Fuel delivery system: SDI

Displacement: 3.3 Liters 201 cid

Compression Ratio: 12:1

Horse Power: 285 bhp @ 6500 rpm

Torque (SAE net): 260 ft-lb @ 4000 rpm

Alternator: 250 amps

Battery: 730 CCA

DRIVETRAIN

Transmission: 10-speed electronic automatic with lockup torque converter.

Axle Ratio: 3.73:1 with all-wheel drive.

ACCELERATION

0-60 mph 8.33 sec
30-60 mph– 5.09 sec
60-100 mph– 13.09 sec
1/4 mile– 16.48 sec @ 89.03 mph

TEST RESULTS

BRAKING

140.1 ft. @ 60 mph

32 LAP HIGH SPEED

Average Lap Time- 1:25.90
Average Speed – 67.0 mph

CITY COURSE

Average Lap Time – 4:40.19
Average Speed – 33.4 mph

MAKE: 2023 FORD MODEL: P.I. UTILITY 3.0L AWD EcoBoost SALES CODE: K8A, 99C

Vehicle Type: Full size four door sport utility, all-wheel drive, 3.0 liter EcoBoost Twin Turbocharged V-6 engine, 10 speed automatic transmission with overdrive and a 3.31:1 axle ratio.

EPA		TESTED
CITY	HWY	AVERAGE MPG
17	22	15.7

INTERIOR

SEATS

Front: Heavy duty cloth bucket, 6-way power adjustable; 4-way adjustable headrest; 2-way power lumbar

Rear: Vinyl bench, 35/30/35 split-fold

MEASUREMENTS

	Front	Rear
Headroom:	40.7 in	40.4 in
Legroom:	40.9 in	40.7 in
Shoulder:	61.8 in	61.3 in
Hip Room:	59.3 in	59.1 in

Interior Volume:

Front: 59.7 cu-ft

Rear: 58.5 cu-ft

Comb: 118.2 cu-ft

Cargo: 52 cu-ft

DIMENSIONS

Fuel Capacity: 21.4 Gallons

GVWR: 6,500 lbs.

Wheelbase: 119.1 in

Ground Clearance: 7.2 in

Overall Length: 198.8 in

Overall Height: 69 in

CHASSIS

STEERING

Type: Electric power assist rack and pinion

Curb-to-curb: 40.4 ft.

SUSPENSION

Front: Independent MacPherson strut with coil over shocks

Rear: Multi-link full independent suspension

WHEEL + TIRES

Wheel size/type: 18" x 8" steel, 5-spoke

Tire make: Goodyear

Tire model: Eagle Enforcer

Tire size: 255/60R18

Speed rating: V

BRAKES

Type: Power with dual piston calipers front, single piston calipers rear, 4 circuit and Automatic Braking System (ABS)

Front: 14.4 inch vented disc

Rear: 13.8 inch vented disc

ENGINE

Twin Turbocharged V-6

Fuel delivery system: SDI

Displacement: 3.0 Liters

Compression Ratio: 9.5:1

Horse Power: 400 bhp @ 5500 rpm

Torque (SAE net): 415 ft-lb @ 3000 rpm

Alternator: 250 amp

Battery: 730 CCA

DRIVETRAIN

Transmission: 10 speed electronic automatic with lockup torque converter

Axle Ratio: 3.31:1 with all-wheel drive.

ACCELERATION

0-60 mph 6.50 sec
30-60 mph– 3.69 sec
60-100 mph– 9.31 sec
1/4 mile– 15.16 sec @ 95.9 mph

TEST RESULTS

BRAKING

138.5 ft. @ 60mph

32 LAP HIGH SPEED

Average Lap Time – 1:22.40
Average Speed – 70.2 mph

CITY COURSE

Average Lap Time – 4:26.11
Average Speed – 35.2 mph

MAKE: 2023 FORD MODEL: P.I. UTILITY HYBRID AWD SALES CODE: K8A, 99W

Vehicle Type: Full size four door sport utility, all-wheel drive, 3.3 liter V-6 engine with hybrid drive, lithium-ion battery and regenerative braking, 10 speed automatic transmission with overdrive and a 3.73:1 axle ratio.

EPA		TESTED
CITY	HWY	AVERAGE MPG
23	24	20

INTERIOR

SEATS

Front: Heavy duty cloth bucket; 6-way adjustable; 4-way adjustable headrest; 2-way power lumbar

Rear: Vinyl bench, 35/30/35 split-fold

MEASUREMENTS

	Front	Rear
Headroom:	40.7 in	40.4 in
Legroom:	40.9 in	40.7 in
Shoulder:	61.8 in	61.3 in
Hip room:	59.3 in	59.1 in

Interior Volume:

Front: 59.7 cu-ft.

Rear: 58.5 cu-ft.

Comb: 118.2 cu-ft.

Trunk: 52.0 cu-ft.

DIMENSIONS

Fuel Capacity: 19.0 Gallons

GVWR: 6,840 lbs.

Wheelbase: 119.1 in

Ground Clearance: 7.4 in

Overall Length: 198.8 in

Overall Height: 69.2 in

CHASSIS

STEERING

Type: Electric power assist rack and pinion

Curb-to-curb: 40.4 ft.

SUSPENSION

Front: Independent MacPherson strut. with coil over shocks.

Rear: Multi-link fully independent

WHEEL + TIRES

Wheel size/type: 18" x 8" steel, 5 spoke

Tire make: Goodyear

Tire model: Eagle Enforcer

Tire size: 255/60R18

Speed rating: V

BRAKES

Type: Power– dual piston calipers front, single piston calipers rear, 4 circuit and Automatic Braking System (ABS)

Front Disc: 14.4 in, vented disc

Rear Disc: 13.8 in, vented disc

ENGINE

Naturally aspirated V-6 Hybrid

Fuel delivery system: SDI

Displacement: 3.3 liters

Compression Ratio: 12:1

Horse Power: 318 bhp combined system, 265 bhp @ 6500 rpm gas engine only

Torque (SAE net): 322 ft-lb combined system, 260 ft-lb @ 4000 rpm gas engine only

Alternator: 220 amp DC/DC Converter

Battery: 800 CCA

DRIVETRAIN

Transmission: 10-speed electronic automatic with lockup torque converter.

Axle Ratio: 3.73:1 with all-wheel drive

ACCELERATION

0-60 mph 7.81 sec
30-60 mph– 4.75 sec
60-100 mph– 13.10 sec
1/4 mile– 16.04 sec @ 91.5 mph

TEST RESULTS

BRAKING

140.8 ft. @ 60 mph

32 LAP HIGH SPEED

Average Lap Time – 1:25.77
Average Speed – 67.0 mph

CITY COURSE

Average Lap Time– 4:40.48
Average Speed - 33.4 mph

MAKE: 2023 FORD MODEL: F150 Police Responder 4WD SALES CODE: W1P

Vehicle Type: Police package truck includes 3.5L Ecoboost engine with 10 speed SelectShift automatic transmission, four-wheel drive, 5 passenger, 4 door SuperCrew cab and 5.5 ft bed.

EPA		TESTED
CITY	HWY	AVERAGE MPG
16	20	Not tested

INTERIOR

SEATS

Front: Heavy duty cloth bucket; 8-way adjustable; Power driver/manual passenger (power optional) seats.

Rear: Vinyl 60/40 split, flip-up bench.

MEASUREMENTS

	Front	Rear
Headroom:	40.8 in	40.4 in
Legroom:	43.9 in	43.6 in
Shoulder:	66.7 in	66 in
Hip Room:	62.5 in	62.6 in

Interior Volume:

Front: 79.9 cu-ft.

Rear: 51.9 cu-ft.

Comb: 131.8 cu-ft.

Cargo Box: 52.8 cu-ft.

DIMENSIONS

Fuel Capacity: 26.0 Gallons

GVWR: 7,050 lbs.

Wheelbase: 145.4 in

Ground Clearance: 9.4 in

Overall Length: 231.7 in

Overall Height: 77.2 in

Max Payload: 2,030 lbs.

Max Towing: 11,200 lbs.

CHASSIS

STEERING

Type: Electric power assist rack and pinion

Curb-to-curb: 47.8 ft.

SUSPENSION

Front: Independent double-wishbone with coil-over shock and stamped lower control arm

Rear: Leaf spring/solid axle

WHEEL + TIRES

Wheel size/type: 18" x 8.5", Alum, 6-spoke

Tire make: Goodyear

Tire model: Wrangler Enforcer AT

Tire size: LT265/70R18

Speed rating: 113H

BRAKES

Type: Power 4-wheel ABS vented disc with electronically controlled brake boost; dual piston caliper front, single piston calipers rear.

Front Disc: 13.8 in, vented

Rear Disc: 13.2 in, vented

ENGINE

3.5L– V6 GTDI EcoBoost

Fuel delivery system: SDI

Displacement: 3.5 Liters 213 cid.

Compression Ratio: 10.5:1

Horse Power: 400 bhp @ 6000 rpm

Torque (SAE net): 500 ft-lb @ 3,100 rpm

Alternator: 240 amp

Battery: 800 CCA

DRIVETRAIN

Transmission: 10– speed SelectShift automatic transmission configured with progressive range select and selectable drive models.

Axle Ratio: (3.31:1 electronic locking rear differential with Four-wheel drive)

ACCELERATION

0-60mph– 6.49 sec
30-60mph– 3.86 sec
60-100mph– 9.71 sec
1/4 mile – 14.90 sec @ 97.0 mph

TEST RESULTS

BRAKING

149.3 ft. @ 60 mph

32 LAP HIGH SPEED

Average Lap Time– 1:25.78
Average Speed – 67.0 mph

CITY COURSE

Average Lap Time – 4:40.83
Average Speed – 33.3 mph

MAKE: 2023 FORD MODEL: Mustang Mach- E **SALES CODE: K4S**

Vehicle Type: 480 HP all electric 5 passenger AWD sedan featuring an EPA estimated 270 miles of range made possible by it's 88 kWh extended range high voltage battery.

EPA		TESTED
CITY	HWY	AVERAGE MPG
90	77	

INTERIOR

SEATS

Front: Sport-style bucket with AtiveXTM material, 8-way adjustable, power driver/manual passenger (power optional)

Rear: Cloth 60/40 split bench.

MEASUREMENTS

	Front	Rear
Headroom:	38.9 in	38.2 in
Legroom:	43.3 in	38.1 in
Shoulder:	57.6 in	55.9 in
Hip Room:	55.4 in	53.2 in

Interior Volume:

Front: 54 cu-ft.

Rear: 47 cu-ft.

Comb: 101.1 cu-ft.

Trunk: 29.7 cu-ft.

DIMENSIONS

Fuel Capacity: N/A Gal

GVWR: 5,990 lbs.

Wheelbase: 117 in

Ground Clearance: 5.7 in

Overall Length: 186 in

Overall Height: 63 in

CHASSIS

STEERING

Type: Rack-Pinion

Curb-to-curb: 39.7 ft.

SUSPENSION

Front: Independent Macpherson strut with hollow stabilizer bar

Rear: Independent multilink with hollow stabilizer bar

WHEEL + TIRES

Wheel size/type: 20"x8" Alum

Tire make: Continental

Tire model: Cross Contact

Tire size: 245/45R20

Speed rating: H

BRAKES

Type: Power, 4 piston Monoblock front, 2 piston rear, 4 circuit ABS

Front Disc: 18"

Rear Disc: 18"

ENGINE

Fuel delivery system: N/A

Displacement: N/A

Compression Ratio: N/A

Horse Power: 480 bhp @ N/A rpm

Torque (SAE net): 600 ft-lb @ N/A rpm

Alternator: 220 amp

Battery: 380 CCA

DRIVETRAIN

Transmission: Single speed direct drive with selectable drive modes.

Axle Ratio: 9.05

ACCELERATION

0-60mph– 3.89 sec
30-60mph– 2.26 sec
60-100mph– 7.04 sec
1/4 mile – 12.78 sec @ 102.4 mph

TEST RESULTS

BRAKING

134.5 ft. @ 60 mph

32 LAP HIGH SPEED

Average Lap Time– 1:26.57
Average Speed – 66.2 mph

CITY COURSE

Average Lap Time – 4:17.05
Average Speed – 36.4 mph

32 LAP HIGH-SPEED VEHICLE DYNAMICS EVALUATION RESULTS

This test is conducted on a high-speed driving course. It is designed to evaluate, identify and eliminate the obviously unacceptable vehicles (i.e., those vehicles that are demonstrably unstable or otherwise exhibit unsafe characteristics).

Four instructors from Emergency Vehicle Operations Center (EVOC) complete the evaluations. They are equally from the LASD and LAPD and share driving and evaluation of the vehicles. All four drivers will evaluate each vehicle. For this test, each driver completes eight laps around the 1.46 mile test track at the Auto Club Speedway in Fontana, a total of 32 timed laps. Lap timing is via a GPS based Race Logic "Touch RTK V1" data-logger mounted in the vehicle. Lap times are immediately recorded via RF telemetry signal produced by the data-logger. All timing is backed up on SD cards in each unit. The average time and speed are recorded next to the driver's name.

At the conclusion of the preliminary handling portion of the test, each driver completes a "Driver's Subjective Evaluation" form. If the test vehicle is judged unacceptable in this preliminary review, it is rejected and not subject to further testing and evaluation.

32 LAP HIGH-SPEED COURSE
VEHICLE DYNAMICS EVALUATION

2023 CHEVROLET TAHOE 5.3L PPV 2WD

DRIVER	TIME TEST STARTED	AIR TEMP / TRACK TEMP (Deg. F)
Ramiro Juarez- LASD	12:43 pm	75°F//98°F
Douglas Barnhart- LAPD	1:03 pm	76°F//104°F
Richard Dee- LASD	1:23 pm	76°F//104°F
James White- LAPD	1:43 pm	77°F//105°F

DRIVER	LAP 1	LAP 2	LAP 3	LAP 4	LAP 5	LAP 6	LAP 7	LAP 8	AVG TIME	AVG SPEED
Ramiro Juarez	1:25.84	1:24.52	1:24.26	1:25.12	1:24.61	1:24.75	1:24.91	1:24.99	1:24.88	62.0
Douglas Barnhart	1:25.90	1:24.52	1:24.28	1:24.37	1:24.34	1:24.40	1:24.51	1:24.98	1:24.66	62.1
Richard Dee	1:28.49	1:26.99	1:26.14	1:26.04	1:25.69	1:26.78	1:25.85	1:25.65	1:26.45	61.0
James White	1:28.84	1:28.28	1:27.41	1:26.84	1:26.11	1:26.04	1:26.39	1:26.36	1:27.03	60.5

* The fastest and slowest times are listed in red.

32 LAP HIGH-SPEED COURSE
VEHICLE DYNAMICS EVALUATION

2023 CHEVROLET TAHOE 5.3L PPV 2WD

** 1 – Poor 5 – Average 10 – Outstanding

ITEM	RATING **
Steering Response	8
Steering Effort/ Feedback	7.75
Body Roll	7
Body Bounce	5.75
Braking Performance	9
Brake Pull	9
ABS/ Traction Control	9.25
Engine Acceleration	8.25
Transmission Performance	8.5
Driving Performance	7.5

FLUID TEMPERATURES AFTER COMPLETION OF 32 LAPS

	ENGINE OIL	TRANSMISSION OIL	COOLANT
MANUFACTURER'S MAXIMUM RECOMMENDED TEMPERATURE	302°F	248°F	262°F
TESTED AT	210°F	192°F	198°F

32 LAP HIGH-SPEED COURSE
VEHICLE DYNAMICS EVALUATION

2023 CHEVEROLET TAHOE 5.3L PPV 4WD

DRIVER	TIME TEST STARTED	AIR TEMP / TRACK TEMP (Deg. F)
Ramiro Juarez- LASD	2:57 pm	73°F//98°F
Douglas Barnhart- LAPD	3:17 pm	72°F//96°F
Richard Dee- LASD	3:37 pm	71°F//96°F
James White- LAPD	3:57 pm	71°F//96°F

DRIVER	LAP 1	LAP 2	LAP 3	LAP 4	LAP 5	LAP 6	LAP 7	LAP 8	AVG TIME	AVG SPEED
Ramiro Juarez	1:26.14	1:25.53	1:25.33	1:25.32	1:25.79	1:26.22	1:25.98	1:26.40	1:25.84	61.36
Douglas Barnhart	1:26.69	1:25.79	1:25.67	1:25.45	1:25.20	1:25.20	1:25.01	1:25.26	1:25.54	61.52
Richard Dee	1:28.24	1:27.13	1:27.55	1:26.93	1:27.00	1:27.24	1:26.43	1:26.63	1:27.14	60.47
James White	1:29.25	1:26.57	1:26.72	1:26.75	1:27.16	1:26.33	1:26.13	1:26.33	1:26.90	60.46

* The fastest and slowest times are listed in red.

32 LAP HIGH-SPEED COURSE
VEHICLE DYNAMICS EVALUATION

2023 CHEVROLET TAHOE 5.3L PPV 4WD

** 1 – Poor 5 – Average 10 – Outstanding

ITEM	RATING **
Steering Response	8.5
Steering Effort/ Feedback	8.5
Body Roll	8
Body Bounce	8.25
Braking Performance	10
Brake Pull	9.75
ABS/ Traction Control	10
Engine Acceleration	9.25
Transmission Performance	9.5
Driving Performance	8.75

FLUID TEMPERATURES AFTER COMPLETION OF 32 LAPS

	ENGINE OIL	TRANSMISSION OIL	COOLANT
MANUFACTURER'S MAXIMUM RECOMMENDED TEMPERATURE	302°F	248°F	262°F
TESTED AT	235°F	195°F	210°F

* Brake warning light and warning brake temperature on display came on at completion of 32 lap.

32 LAP HIGH-SPEED COURSE
VEHICLE DYNAMICS EVALUATION

2023 CHEVEROLET SILVERADO PPV 5.3L 4WD Z71 CODE #: 9C1

DRIVER	TIME TEST STARTED	AIR TEMP / TRACK TEMP (Deg. F)
Ramiro Juarez- LASD	12:28 pm	72°F//97°F
Douglas Barnhart- LAPD	12:47 pm	70°F//96°F
Richard Dee- LASD	1:10 pm	70°F//99°F
James White- LAPD	1:29 pm	70°F//102°F

DRIVER	LAP 1	LAP 2	LAP 3	LAP 4	LAP 5	LAP 6	LAP 7	LAP 8	AVG TIME	AVG SPEED
Ramiro Juarez	1:26.35	1:25.76	1:25.87	1:25.64	1:25.98	1:26.14	1:26.07	1:26.25	1:26.00	61.24
Douglas Barnhart	1:27.35	1:25.36	1:25.35	1:25.78	1:26.27	1:25.57	1:26.26	1:25.91	1:25.98	61.26
Richard Dee	1:27.45	1:26.63	1:27.34	1:27.02	1:26.71	1:26.08	1:26.40	1:26.51	1:26.77	60.76
James White	1:27.68	1:26.36	1:26.51	1:26.86	1:26.75	1:26.40	1:26.38	1:26.08	1:26.63	60.82

* The fastest and slowest times are listed in red.

32 LAP HIGH-SPEED COURSE
VEHICLE DYNAMICS EVALUATION

2023 CHEVROLET SILVERADO PPV 5.3L 4WD Z71 CODE #: 9C1

** 1 – Poor 5 – Average 10 – Outstanding

ITEM	RATING **
Steering Response	8
Steering Effort/ Feedback	8
Body Roll	7.75
Body Bounce	7.75
Braking Performance	9.75
Brake Pull	9.75
ABS/ Traction Control	9.5
Engine Acceleration	9
Transmission Performance	9.25
Driving Performance	8.25

FLUID TEMPERATURES AFTER COMPLETION OF 32 LAPS

	ENGINE OIL	TRANSMISSION OIL	COOLANT
MANUFACTURER'S MAXIMUM RECOMMENDED TEMPERATURE	302°F	248°F	262°F
TESTED AT	234°F	207°F	210°F

* Brake warning light and warning brake temperature on display came on at completion of 32 lap.

32 LAP HIGH-SPEED COURSE
VEHICLE DYNAMICS EVALUATION

2023 CHEVEROLET SILVERADO PPV 5.3L 4WD Z7X CODE #: 9C1

DRIVER	TIME TEST STARTED	AIR TEMP / TRACK TEMP (Deg. F)
Ramiro Juarez- LASD	11:01 am	67°F//88°F
Douglas Barnhart- LAPD	11:20 am	66°F//88°F
Richard Dee- LASD	11:37 am	67°F//92°F
James White- LAPD	12:05 pm	68°F//95°F

DRIVER	LAP 1	LAP 2	LAP 3	LAP 4	LAP 5	LAP 6	LAP 7	LAP 8	AVG TIME	AVG SPEED
Ramiro Juarez	1:27.65	1:26.57	1:26.73	1:27.02	1:26.74	1:26.63	1:26.31	1:26.80	1:26.81	60.52
Douglas Barnhart	1:28.55	1:27.08	1:26.80	1:26.92	1:26.52	1:26.69	1:26.39	1:26.67	1:26.95	60.81
Richard Dee	1:27.80	1:27.82	1:27.23	1:27.90	1:27.45	1:27.19	1:27.48	1:28.32	1:27.65	60.19
James White	1:29.41	1:28.09	1:28.15	1:27.78	1:27.83	1:27.66	1:27.47	1:27.60	1:28.00	59.89

* The fastest and slowest times are listed in red.

32 LAP HIGH-SPEED COURSE
VEHICLE DYNAMICS EVALUATION

2023 CHEVROLET SILVERADO PPV 5.3L 4WD Z7X CODE #: 9C1

** 1 – Poor 5 – Average 10 – Outstanding

ITEM	RATING **
Steering Response	7.75
Steering Effort/ Feedback	8
Body Roll	7.5
Body Bounce	8
Braking Performance	10
Brake Pull	9.75
ABS/ Traction Control	9.5
Engine Acceleration	8.75
Transmission Performance	9.25
Driving Performance	8.25

FLUID TEMPERATURES AFTER COMPLETION OF 32 LAPS

	ENGINE OIL	TRANSMISSION OIL	COOLANT
MANUFACTURER'S MAXIMUM RECOMMENDED TEMPERATURE	302°F	248°F	262°F
TESTED AT	235°F	198°F	210°F

* Brake warning light and warning brake temperature on display came on at completion of 32 lap.

32 LAP HIGH-SPEED COURSE
VEHICLE DYNAMICS EVALUATION

2023 DODGE CHARGER 3.6L 3.08 AWD

DRIVER	TIME TEST STARTED	AIR TEMP / TRACK TEMP (Deg. F)
Ramiro Juarez- LASD	2:03 pm	77°F//105°F
Douglas Barnhart- LAPD	2:26 pm	77°F//104°F
Richard Dee- LASD	2:46 pm	77°F//103°F
James White- LAPD	3:07 pm	76°F//103°F

DRIVER	LAP 1	LAP 2	LAP 3	LAP 4	LAP 5	LAP 6	LAP 7	LAP 8	AVG TIME	AVG SPEED
Ramiro Juarez	1:23.50	1:23.21	1:22.67	1:22.80	1:22.31	1:22.97	1:22.52	1:22.97	1:22.87	63.41
Douglas Barnhart	1:23.80	1:23.30	1:23.32	1:23.13	1:23.08	1:23.51	1:23.62	1:23.57	1:23.42	63.12
Richard Dee	1:24.19	1:23.04	1:24.51	1:23.21	1:23.92	1:24.37	1:23.98	1:23.85	1:23.88	62.73
James White	1:26.73	1:24.72	1:24.78	1:23.99	1:24.06	1:24.17	1:24.12	1:23.62	1:24.52	62.31

* The fastest and slowest times are listed in red.

32 LAP HIGH-SPEED COURSE
VEHICLE DYNAMICS EVALUATION

** 1 – Poor 5 – Average 10 – Outstanding

2023 DODGE CHARGER 3.6L 3.08 AWD

ITEM	RATING **
Steering Response	9.5
Steering Effort/ Feedback	9.5
Body Roll	9.25
Body Bounce	9.5
Braking Performance	8.5
Brake Pull	8.75
ABS/ Traction Control	8.75
Engine Acceleration	9.25
Transmission Performance	9.25
Driving Performance	9.25

FLUID TEMPERATURES AFTER COMPLETION OF 32 LAPS

	ENGINE OIL	TRANSMISSION OIL	COOLANT
MANUFACTURER'S MAXIMUM RECOMMENDED TEMPERATURE	280°F	235°F	255°F
TESTED AT	219°F	212°F	217°F

32 LAP HIGH-SPEED COURSE
VEHICLE DYNAMICS EVALUATION

2023 DODGE CHARGER 5.7L 2.62 RWD

DRIVER	TIME TEST STARTED	AIR TEMP / TRACK TEMP (Deg. F)
Ramiro Juarez- LASD	9:59 am	61°F//75°F
Douglas Barnhart- LAPD	10:18 am	65°F//81°F
Richard Dee- LASD	10:39 am	64°F//79°F
James White- LAPD	10:57 am	67°F//88°F

DRIVER	LAP 1	LAP 2	LAP 3	LAP 4	LAP 5	LAP 6	LAP 7	LAP 8	AVG TIME	AVG SPEED
Ramiro Juarez	1:22.07	1:21.65	1:21.04	1:21.71	1:21.38	1:21.44	1:21.07	1:21.89	1:21.53	64.50
Douglas Barnhart	1:23.45	1:23.40	1:22.83	1:22.16	1:22.15	1:22.38	1:22.28	1:23.25	1:22.74	63.57
Richard Dee	1:24.88	1:24.20	1:23.41	1:24.10	1:23.84	1:24.42	1:23.15	1:24.12	1:24.01	62.71
James White	1:24.48	1:23.43	1:27.71	1:23.88	1:24.23	1:23.49	1:24.42	1:24.62	1:24.52	62.23

* The fastest and slowest times are listed in red.

32 LAP HIGH-SPEED COURSE
VEHICLE DYNAMICS EVALUATION

** 1 – Poor 5 – Average 10 – Outstanding

2023 DODGE CHARGER 5.7L 2.62 RWD

ITEM	RATING **
Steering Response	8.75
Steering Effort/ Feedback	8.75
Body Roll	9
Body Bounce	8.75
Braking Performance	8
Brake Pull	8.25
ABS/ Traction Control	7.5
Engine Acceleration	9.5
Transmission Performance	9
Driving Performance	8.25

FLUID TEMPERATURES AFTER COMPLETION OF 32 LAPS

	ENGINE OIL	TRANSMISSION OIL	COOLANT
MANUFACTURER'S MAXIMUM RECOMMENDED TEMPERATURE	300°F	248°F	260°F
TESTED AT	219°F	199°F	199°F

32 LAP HIGH-SPEED COURSE
VEHICLE DYNAMICS EVALUATION

2023 DODGE DURANGO 3.6L 3.45 AWD

DRIVER	TIME TEST STARTED	AIR TEMP / TRACK TEMP (Deg. F)
Ramiro Juarez- LASD	12:04 pm	72°F//95°F
Douglas Barnhart- LAPD	12:27 pm	72°F//97°F
Richard Dee- LASD	12:48 pm	73°F//96°F
James White- LAPD	1:10 pm	73°F//99°F

DRIVER	LAP 1	LAP 2	LAP 3	LAP 4	LAP 5	LAP 6	LAP 7	LAP 8	AVG TIME	AVG SPEED
Ramiro Juarez	1:29.17	1:28.02	1:28.04	1:27.72	1:28.61	1:27.69	1:28.21	1:29.09	1:28.32	59.57
Douglas Barnhart	1:30.15	1:28.23	1:27.66	1:28.10	1:28.47	1:28.12	1:27.94	1:28.60	1:28.41	59.45
Richard Dee	1:30.94	1:29.40	1:28.98	1:29.56	1:30.05	1:28.54	1:29.07	1:29.18	1:29.46	58.83
James White	1:32.68	1:29.26	1:28.24	1:28.57	1:29.12	1:28.21	1:29.17	1:28.93	1:29.27	58.97

* The fastest and slowest times are listed in red.

32 LAP HIGH-SPEED COURSE
VEHICLE DYNAMICS EVALUATION

** 1 – Poor 5 – Average 10 – Outstanding

2023 DODGE DURANGO 3.6L 3.45 AWD

ITEM	RATING **
Steering Response	8.25
Steering Effort/ Feedback	8.25
Body Roll	8.5
Body Bounce	8.25
Braking Performance	8.25
Brake Pull	8.75
ABS/ Traction Control	8.75
Engine Acceleration	7.5
Transmission Performance	8.5
Driving Performance	7.75

FLUID TEMPERATURES AFTER COMPLETION OF 32 LAPS

	ENGINE OIL	TRANSMISSION OIL	COOLANT
MANUFACTURER'S MAXIMUM RECOMMENDED TEMPERATURE	320°F	275°F	262°F
TESTED AT	212°F	197°F	193°F

32 LAP HIGH-SPEED COURSE
VEHICLE DYNAMICS EVALUATION

2023 DODGE DURANGO 5.7L 3.09 AWD

DRIVER	TIME TEST STARTED	AIR TEMP / TRACK TEMP (Deg. F)
Ramiro Juarez- LASD	1:32 pm	74°F/102°F
Douglas Barnhart- LAPD	1:53 pm	74°F/101°F
Richard Dee- LASD	2:15 pm	75°F/102°F
James White- LAPD	2:37 pm	73°F/102°F

DRIVER	LAP 1	LAP 2	LAP 3	LAP 4	LAP 5	LAP 6	LAP 7	LAP 8	AVG TIME	AVG SPEED
Ramiro Juarez	1:26.04	1:25.29	1:24.87	1:24.97	1:24.86	1:25.38	1:25.44	1:25.28	1:25.27	61.75
Douglas Barnhart	1:26.68	1:25.07	1:24.81	1:24.96	1:24.98	1:25.17	1:25.67	1:26.20	1:25.44	61.55
Richard Dee	1:27.56	1:26.58	1:26.36	1:25.88	1:26.35	1:26.10	1:26.34	1:26.70	1:26.48	60.91
James White	1:28.93	1:26.81	1:25.90	1:25.92	1:26.06	1:26.13	1:26.36	1:26.07	1:26.52	60.76

* The fastest and slowest times are listed in red.

32 LAP HIGH-SPEED COURSE
VEHICLE DYNAMICS EVALUATION

** 1 – Poor 5 – Average 10 – Outstanding

2023 DODGE DURANGO 5.7L 3.09 AWD

ITEM	RATING **
Steering Response	9
Steering Effort/ Feedback	8.75
Body Roll	8.5
Body Bounce	8.5
Braking Performance	8.75
Brake Pull	9
ABS/ Traction Control	9.5
Engine Acceleration	9.25
Transmission Performance	9.25
Driving Performance	8.5

FLUID TEMPERATURES AFTER COMPLETION OF 32 LAPS

	ENGINE OIL	TRANSMISSION OIL	COOLANT
MANUFACTURER'S MAXIMUM RECOMMENDED TEMPERATURE	280°F	235°F	255°F
TESTED AT	230°F	197°F	199°F

32 LAP HIGH-SPEED COURSE
VEHICLE DYNAMICS EVALUATION

2023 FORD P.I. UTILITY 3.3L AWD

DRIVER	TIME TEST STARTED	AIR TEMP / TRACK TEMP (Deg. F)
Ramiro Juarez- LASD	2:46 pm	77°F/103°F
Douglas Barnhart- LAPD	3:06 pm	77°F/103°F
Richard Dee- LASD	3:26 pm	77°F/103°F
James White- LAPD	3:46 pm	77°F/96°F

DRIVER	LAP 1	LAP 2	LAP 3	LAP 4	LAP 5	LAP 6	LAP 7	LAP 8	AVG TIME	AVG SPEED
Ramiro Juarez	1:24.91	1:23.85	1:24.70	1:24.82	1:24.54	1:25.54	1:25.09	1:25.13	1:24.82	61.97
Douglas Barnhart	1:25.88	1:25.24	1:24.81	1:25.25	1:25.79	1:25.67	1:25.43	1:25.83	1:25.49	61.61
Richard Dee	1:27.41	1:26.43	1:25.85	1:25.79	1:26.37	1:27.18	1:26.38	1:26.52	1:26.49	60.92
James White	1:26.96	1:26.68	1:26.65	1:26.67	1:27.30	1:27.12	1:26.23	1:26.29	1:26.74	60.75

* The fastest and slowest times are listed in red.

32 LAP HIGH-SPEED COURSE
VEHICLE DYNAMICS EVALUATION

** 1 – Poor 5 – Average 10 – Outstanding

2023 FORD P.I. UTILITY 3.3L AWD

ITEM	RATING **
Steering Response	9
Steering Effort/ Feedback	8.75
Body Roll	9.25
Body Bounce	9.5
Braking Performance	9.75
Brake Pull	9.75
ABS/ Traction Control	9
Engine Acceleration	9
Transmission Performance	9.5
Driving Performance	9.25

FLUID TEMPERATURES AFTER COMPLETION OF 32 LAPS

	ENGINE OIL	TRANSMISSION OIL	COOLANT
MANUFACTURER'S MAXIMUM RECOMMENDED TEMPERATURE	300°F	248°F	260°F
TESTED AT	224°F	223°F	201°F

32 LAP HIGH-SPEED COURSE
VEHICLE DYNAMICS EVALUATION

2023 FORD P.I. UTILITY 3.0L ECOBOOST AWD

DRIVER	TIME TEST STARTED	AIR TEMP / TRACK TEMP (Deg. F)
Ramiro Juarez- LASD	9:38 am	61°F/69°F
Douglas Barnhart- LAPD	9:58 am	61°F/75°F
Richard Dee- LASD	10:19 am	63°F/80°F
James White- LAPD	10:39 am	64°F/79°F

DRIVER	LAP 1	LAP 2	LAP 3	LAP 4	LAP 5	LAP 6	LAP 7	LAP 8	AVG TIME	AVG SPEED
Ramiro Juarez	1:21.47	1:20.77	1:21.19	1:21.97	1:21.58	1:21.53	1:21.29	1:21.86	1:21.46	64.62
Douglas Barnhart	1:21.98	1:21.79	1:21.81	1:22.25	1:21.79	1:22.07	1:22.51	1:22.55	1:22.09	64.12
Richard Dee	1:23.03	1:22.21	1:22.84	1:23.29	1:22.55	1:22.80	1:23.22	1:23.22	1:22.90	63.47
James White	1:24.61	1:23.33	1:23.70	1:23.04	1:22.66	1:22.61	1:22.73	1:23.14	1:23.23	63.16

* The fastest and slowest times are listed in red.

32 LAP HIGH-SPEED COURSE
VEHICLE DYNAMICS EVALUATION

** 1 – Poor 5 – Average 10 – Outstanding

2023 FORD P.I. UTILITY 3.0L ECOBOOST AWD

ITEM	RATING **
Steering Response	9.25
Steering Effort/ Feedback	9
Body Roll	9.25
Body Bounce	9.5
Braking Performance	10
Brake Pull	10
ABS/ Traction Control	9.75
Engine Acceleration	10
Transmission Performance	9.75
Driving Performance	9.75

FLUID TEMPERATURES AFTER COMPLETION OF 32 LAPS

	ENGINE OIL	TRANSMISSION OIL	COOLANT
MANUFACTURER'S MAXIMUM RECOMMENDED TEMPERATURE	315°F	280°F	260°F
TESTED AT	224°F	228°F	189°F

32 LAP HIGH-SPEED COURSE
VEHICLE DYNAMICS EVALUATION

2023 FORD P.I. UTILITY 3.3L HYBRID AWD

DRIVER	TIME TEST STARTED	AIR TEMP / TRACK TEMP (Deg. F)
Ramiro Juarez- LASD	1:22 pm	76°F//104°F
Douglas Barnhart- LAPD	1:42 pm	77°F//105°F
Richard Dee- LASD	2:04 pm	77°F//105°F
James White- LAPD	2:24 pm	77°F//105°F

DRIVER	LAP 1	LAP 2	LAP 3	LAP 4	LAP 5	LAP 6	LAP 7	LAP 8	AVG TIME	AVG SPEED
Ramiro Juarez	1:25.51	1:23.89	1:23.98	1:24.11	1:24.48	1:24.52	1:24.46	1:24.63	1:24.45	62.29
Douglas Barnhart	1:25.45	1:25.16	1:24.67	1:25.19	1:25.16	1:25.75	1:25.62	1:25.58	1:25.45	61.65
Richard Dee	1:26.65	1:26.09	1:27.76	1:26.38	1:26.65	1:26.54	1:26.75	1:26.60	1:26.68	60.75
James White	1:27.95	1:26.22	1:25.62	1:26.48	1:26.95	1:26.39	1:27.27	1:27.04	1:26.74	60.67

* The fastest and slowest times are listed in red.

32 LAP HIGH-SPEED COURSE
VEHICLE DYNAMICS EVALUATION

** 1 – Poor 5 – Average 10 – Outstanding

2023 FORD P.I. UTILITY 3.3L HYBRID AWD

ITEM	RATING **
Steering Response	9
Steering Effort/ Feedback	9
Body Roll	8.75
Body Bounce	9.25
Braking Performance	9
Brake Pull	9.5
ABS/ Traction Control	9.5
Engine Acceleration	8.75
Transmission Performance	9.25
Driving Performance	9

FLUID TEMPERATURES AFTER COMPLETION OF 32 LAPS

	ENGINE OIL	TRANSMISSION OIL	COOLANT
MANUFACTURER'S MAXIMUM RECOMMENDED TEMPERATURE	315°F	280°F	280°F
TESTED AT	197°F	229°F	203°F

32 LAP HIGH-SPEED COURSE
VEHICLE DYNAMICS EVALUATION

2023 FORD F150 POLICE RESPONDER 3.5L 4WD

DRIVER	TIME TEST STARTED	AIR TEMP / TRACK TEMP (Deg. F)
Ramiro Juarez- LASD	1:53 pm	72°F/101°F
Douglas Barnhart- LAPD	2:15 pm	73°F/102°F
Richard Dee- LASD	2:37 pm	73°F/102°F
James White- LAPD	2:57 pm	73°F/98°F

DRIVER	LAP 1	LAP 2	LAP 3	LAP 4	LAP 5	LAP 6	LAP 7	LAP 8	AVG TIME	AVG SPEED
Ramiro Juarez	1:25.41	1:24.03	1:25.46	1:25.08	1:24.70	1:25.06	1:26.22	1:26.18	1:25.27	61.86
Douglas Barnhart	1:25.30	1:23.93	1:24.74	1:24.20	1:25.02	1:24.53	1:25.21	1:24.92	1:24.73	62.03
Richard Dee	1:27.83	1:26.46	1:26.60	1:26.99	1:26.20	1:26.76	1:26.14	1:26.31	1:26.66	60.87
James White	1:28.46	1:26.75	1:26.21	1:26.94	1:26.33	1:27.48	1:26.86	1:26.21	1:26.90	60.57

* The fastest and slowest times are listed in red.

32 LAP HIGH-SPEED COURSE
VEHICLE DYNAMICS EVALUATION

** 1 – Poor 5 – Average 10 – Outstanding

2023 FORD F150 POLICE RESPONDER 3.5L 4WD

ITEM	RATING **
Steering Response	8
Steering Effort/ Feedback	8
Body Roll	7.75
Body Bounce	7.5
Braking Performance	8.25
Brake Pull	8.5
ABS/ Traction Control	8
Engine Acceleration	10
Transmission Performance	10
Driving Performance	8.25

FLUID TEMPERATURES AFTER COMPLETION OF 32 LAPS

	ENGINE OIL	TRANSMISSION OIL	COOLANT
MANUFACTURER'S MAXIMUM RECOMMENDED TEMPERATURE	310°F	284°F	260°F
TESTED AT	216°F	228°F	218°F

Battery Electric Vehicle Testing

With the emergence of new technologies comes the challenges of properly testing and evaluating these new technologies. Direct comparisons between the new and well-established existing technologies, in this instance Battery Electric Vehicles (BEV) and Internal Combustion Engines (ICE), can be difficult so an assessment of how to best gather the data points any test seeks to identify must remain open and flexible. The LASD vehicle testing program is designed to provide data points and metrics that help law enforcement fleet managers make informed decisions when seeking the best products to meet the vehicle needs of their agencies.

Battery Electric Vehicles are now beginning to find their way into the emergency and first responder fleet market. The BEV is the future of vehicle transportation that must be recognized by law enforcement. As with ICE vehicles, it is important to identify both strengths and weaknesses of any platform to better help law enforcement fleet managers make more informed decisions. It is also important to adapt testing protocols to best achieve valid data points and for law enforcement fleet managers to become educated on the workings of BEV vehicles.

Battery Electric Vehicle manufacturers are currently finding battery technology as the greatest limiting factor on sustained vehicle performance. High current power delivery creates heat within the battery which, if not controlled, could result in a fire or bursting of the battery pack. To reduce these risks, BEV manufactures implement various thermal management procedures including, but not limited to, current delivery reduction. This is similar to an ICE vehicle being placed into a reduced power state by the engine control module, also known as "limp mode." However, BEV vehicles can have more of a variable application in the amount of the actual reduction based on thermal management needs.

An additional technology-based adaptation BEV manufactures have implemented to increase potential range of BEV vehicles is the use of power delivery based on the state of charge (SOC) or charge level. Due to the inability to recharge as quickly as replacing fuel in an ICE vehicle, the need to extend the range of a BEV vehicle as it reaches lower SOC's becomes paramount. This is done through the application of various power reduction algorithms, which can affect accessory power as well as drivetrain power. Given the above variations created by the current battery technology limitations that impact all BEV manufactures, the high-speed testing has been modified to help reduce the impact these battery limitations present while maintaining substantive data acquisition with regards to the mechanical durability of the chassis, suspension, and braking components along with drivetrain integrity.

The 32-lap certification is comprised of four drivers, each driving eight lap intervals, with a five-minute rest period between intervals. This rest period was intended to allow heat soak into the brake system, further stressing the braking system. To reduce the potential impact of SOC power reduction in BEV vehicles, 16 laps were run (two drivers, eight laps each with a five-minute rest period) after which manufactures were allowed 90 minutes to recharge their vehicles before the second 16 laps were run. During this time no other work may be performed on the vehicle being tested. This modification to the testing procedure was made to reduce impacts on vehicle pace which would negatively impact the mechanical durability test data. As battery technology advances, further re-evaluation of testing protocols will be assessed with the continued input from all parties. For more information about BEV vehicles, law enforcement fleet managers are encouraged to contact their local fleet sales representative.

32 LAP HIGH-SPEED COURSE
VEHICLE DYNAMICS EVALUATION

2023 FORD MUSTANG MACH E AWD

DRIVER	TIME TEST STARTED	AIR TEMP / TRACK TEMP (Deg. F)
Ramiro Juarez- LASD	9:03 am	60°F/65°F
Douglas Barnhart- LAPD	9:22 am	60°F/69°F
Richard Dee- LASD	11:20 am	69°F/88°F
James White- LAPD	11:43 am	69°F/92°F

DRIVER	LAP 1	LAP 2	LAP 3	LAP 4	LAP 5	LAP 6	LAP 7	LAP 8	AVG TIME	AVG SPEED
Ramiro Juarez	1:21.11	1:24.11	1:25.20	1:24.84	1:24.89	1:25.05	1:24.98	1:25.80	1:24.51	62.24
Douglas Barnhart	1:22.07	1:25.09	1:26.39	1:26.22	1:26.55	1:27.48	1:28.58	1:29.35	1:26.47	60.76
Richard Dee	1:22.01	1:24.89	1:26.42	1:26.82	1:26.19	1:26.53	1:27.43	1:27.44	1:25.97	61.23
James White	1:24.80	1:27.40	1:28.35	1:27.47	1:29.39	1:28.12	1:29.18	1:31.54	1:28.28	59.60

* The fastest and slowest times are listed in red.

32 LAP HIGH-SPEED COURSE
VEHICLE DYNAMICS EVALUATION

** 1 – Poor 5 – Average 10 – Outstanding

2023 FORD MUSTANG MACH E AWD

ITEM	RATING **
Steering Response	10
Steering Effort/ Feedback	10
Body Roll	9.75
Body Bounce	9.75
Braking Performance	9.5
Brake Pull	9.5
ABS/ Traction Control	9.75
Engine Acceleration	7.25
Transmission Performance	7.25
Driving Performance	8.75

FLUID TEMPERATURES AFTER COMPLETION OF 32 LAPS

	ENGINE OIL	TRANSMISSION OIL	COOLANT
MANUFACTURER'S MAXIMUM RECOMMENDED TEMPERATURE	N/A	N/A	N/A
TESTED AT	N/A	N/A	N/A

CITY COURSE
EVALUATION RESULTS

This test is for those vehicles equipped with a factory installed POLICE PACKAGE and identified by the manufacturer as police packaged vehicles. This evaluation is conducted on a closed 2.6 mile city street course which closely represents the environment most urban law enforcement agencies must contend with. The course has several straight-a-ways. It also consists of many right and left turns and obstacles in the roadway.

This is the final test during our road certification. The manufacturers, if they so choose, are allowed to rebuild the vehicle's brake system and replace tires prior to this test.

For this test, two drivers are used for each vehicle. Each driver completes two laps around the city course. Lap timing is via a GPS based Race Logic "DriftBox02" mounted in the car. The combined times of the two laps are recorded next to the driver's name.

If the test vehicle is determined to be unacceptable in this preliminary review by not completing the course in less than 5 minutes, it is rejected and not subject to further testing and evaluation.

CITY COURSE
VEHICLE DYNAMICS EVALUATION

2023 CHEVROLET TAHOE 5.3L PPV 2WD

DRIVERS	TOTAL TIME	AIR /TRACK	SPEED
Douglas Barnhart- LAPD	4:34.99	60°F/ 72°F	34
James White- LAPD	4:37.85	60°F/ 72°F	33.7
Average Time	4:36.42	**Average Speed**	33.9

** 1 – Poor 5 – Average 10 – Outstanding

ITEM	RATING **
Steering Response	8
Steering Effort/ Feedback	8
Body Roll	8
Body Bounce	8
Braking Performance	10
Brake Pull	10
ABS/ Traction Control	10
Engine Acceleration	8.5
Transmission Performance	9
Driving Performance	8.5

CITY COURSE
VEHICLE DYNAMICS EVALUATION

2023 CHEVROLET TAHOE 5.3L PPV 4WD

DRIVERS	TOTAL TIME	AIR /TRACK	SPEED
James White- LAPD	4:43.63	62°F/ 72°F	33
Douglas Barnhart- LAPD	4:35.48	62°F/ 72°F	34
Average Time	4:39.55	**Average Speed**	33.4

** 1 – Poor 5 – Average 10 – Outstanding

ITEM	RATING **
Steering Response	8
Steering Effort/ Feedback	8
Body Roll	8.5
Body Bounce	8
Braking Performance	10
Brake Pull	10
ABS/ Traction Control	10
Engine Acceleration	8.5
Transmission Performance	9
Driving Performance	8.5

CITY COURSE
VEHICLE DYNAMICS EVALUATION

2023 CHEVROLET SILVERADO PPV 5.3L 4WD Z71 CODE #: 9C1

DRIVERS	TOTAL TIME	AIR /TRACK	SPEED
Ramiro Juarez- LASD	4:47.49	64°F/ 76°F	32.6
Richard Dee- LASD	4:47.04	64°F/ 76°F	32.6
Average Time	4:47.27	**Average Speed**	32.6

** 1 – Poor 5 – Average 10 – Outstanding

ITEM	RATING **
Steering Response	7.5
Steering Effort/ Feedback	8
Body Roll	7.5
Body Bounce	7.5
Braking Performance	9.5
Brake Pull	9.5
ABS/ Traction Control	9.5
Engine Acceleration	9
Transmission Perfor-mance	9
Driving Performance	8.5

CITY COURSE
VEHICLE DYNAMICS EVALUATION

2023 CHEVROLET SILVERADO PPV 5.3L 4WD Z7X CODE #: 9C1

DRIVERS	TOTAL TIME	AIR /TRACK	SPEED
Richard Dee- LASD	4:46.78	64°F/ 76°F	32.6
Ramiro Juarez- LASD	4:47.27	64°F/ 76°F	32.6
Average Time	4:47.03	**Average Speed**	32.6

** 1 – Poor 5 – Average 10 – Outstanding

ITEM	RATING **
Steering Response	7
Steering Effort/ Feedback	7.5
Body Roll	7.5
Body Bounce	7.5
Braking Performance	9.5
Brake Pull	9.5
ABS/ Traction Control	9.5
Engine Acceleration	9
Transmission Perfor-mance	8.5
Driving Performance	7.5

CITY COURSE
VEHICLE DYNAMICS EVALUATION

2023 DODGE CHARGER 3.6L 3.08 RWD

DRIVERS	TOTAL TIME	AIR /TRACK	SPEED
Ramiro Juarez- LASD	4:26.40	60°F/ 74°F	35.2
Richard Dee- LASD	4:28.69	60°F/ 74°F	34.8
Average Time	4:27.55	**Average Speed**	34.9

** 1 – Poor 5 – Average 10 – Outstanding

ITEM	RATING **
Steering Response	10
Steering Effort/ Feedback	9.5
Body Roll	9.5
Body Bounce	9.5
Braking Performance	10
Brake Pull	10
ABS/ Traction Control	10
Engine Acceleration	9
Transmission Performance	10
Driving Performance	9.5

CITY COURSE
VEHICLE DYNAMICS EVALUATION

2023 DODGE CHARGER 5.7L 2.62 RWD

DRIVERS	TOTAL TIME	AIR /TRACK	SPEED
Richard Dee- LASD	4:34.90	60°F/ 74°F	34
Ramiro Juarez- LASD	4:30.91	60°F/ 74°F	34.5
Average Time	4:32.91	**Average Speed**	34.3

** 1 – Poor 5 – Average 10 – Outstanding

ITEM	RATING **
Steering Response	8.5
Steering Effort/ Feedback	8.5
Body Roll	9
Body Bounce	9.5
Braking Performance	9.5
Brake Pull	10
ABS/ Traction Control	9
Engine Acceleration	8.5
Transmission Performance	9.5
Driving Performance	8.5

CITY COURSE
VEHICLE DYNAMICS EVALUATION

2023 DODGE DURANGO SUV 3.6L AWD

DRIVERS	TOTAL TIME	AIR /TRACK	SPEED
James White- LAPD	4:45.70	59°F/ 68°F	32.6
Douglas Barnhart- LAPD	4:39.89	59°F/ 68°F	33.4
Average Time	4:42.80	**Average Speed**	33.1

** 1 – Poor 5 – Average 10 – Outstanding

ITEM	RATING **
Steering Response	8.5
Steering Effort/ Feedback	8.5
Body Roll	8.5
Body Bounce	9
Braking Performance	6.5
Brake Pull	8.5
ABS/ Traction Control	8.5
Engine Acceleration	7
Transmission Performance	9
Driving Performance	7.5

CITY COURSE
VEHICLE DYNAMICS EVALUATION

2023 DODGE DURANGO 5.7L AWD

DRIVERS	TOTAL TIME	AIR /TRACK	SPEED
Douglas Barnhart- LAPD	4:29.91	59°F/ 68°F	34.7
James White- LAPD	4:37.55	59°F/ 68°F	33.7
Average Time	4:33.73	**Average Speed**	34.2

** 1 – Poor 5 – Average 10 – Outstanding

ITEM	RATING **
Steering Response	8.5
Steering Effort/ Feedback	8.5
Body Roll	8.5
Body Bounce	9
Braking Performance	6
Brake Pull	8.5
ABS/ Traction Control	8.5
Engine Acceleration	9
Transmission Performance	9
Driving Performance	8

CITY COURSE
VEHICLE DYNAMICS EVALUATION

2023 FORD P.I. UTILITY 3.3L AWD

DRIVERS	TOTAL TIME	AIR /TRACK	SPEED
James White- LAPD	4:40.83	67°F/ 82°F	33.3
Douglas Barnhart- LAPD	4:39.54	67°F/ 82°F	33.4
Average Time	4:40.19	**Average Speed**	33.4

** 1 – Poor 5 – Average 10 – Outstanding

ITEM	RATING **
Steering Response	9.5
Steering Effort/ Feedback	9.5
Body Roll	9
Body Bounce	9.5
Braking Performance	9.5
Brake Pull	9.5
ABS/ Traction Control	9.5
Engine Acceleration	8.5
Transmission Performance	9.5
Driving Performance	8.5

CITY COURSE
VEHICLE DYNAMICS EVALUATION
2023 FORD P.I. UTILITY 3.0L AWD ECOBOOST

DRIVERS	TOTAL TIME	AIR /TRACK	SPEED
Richard Dee- LASD	4:27.59	64°F/ 82°F	34.9
Ramiro Juarez- LASD	4:24.38	64°F/ 82°F	35.5
Average Time	4:25.99	**Average Speed**	35.2

** 1 – Poor 5 – Average 10 – Outstanding

ITEM	RATING **
Steering Response	9.5
Steering Effort/ Feedback	9.5
Body Roll	10
Body Bounce	10
Braking Performance	9.5
Brake Pull	9.5
ABS/ Traction Control	10
Engine Acceleration	10
Transmission Performance	10
Driving Performance	10

CITY COURSE
VEHICLE DYNAMICS EVALUATION

2023 FORD P.I. UTILITY HYBRID 3.3L AWD

DRIVERS	TOTAL TIME	AIR /TRACK	SPEED
James White- LAPD	4:40.51	64°F/ 76°F	33.3
Douglas Barnhart- LAPD	4:40.44	64°F/ 76°F	33.4
Average Time	4:40.48	**Average Speed**	33.4

** 1 – Poor 5 – Average 10 – Outstanding

ITEM	RATING **
Steering Response	9.5
Steering Effort/ Feedback	9.5
Body Roll	9
Body Bounce	9.5
Braking Performance	9
Brake Pull	9.5
ABS/ Traction Control	9.5
Engine Acceleration	7.5
Transmission Performance	8
Driving Performance	8

CITY COURSE
VEHICLE DYNAMICS EVALUATION
2023 FORD F150 POLICE RESPONDER 3.5L 4WD

DRIVERS	TOTAL TIME	AIR /TRACK	SPEED
Douglas Barnhart- LAPD	4:35.96	64°F/ 76°F	33.9
James White- LAPD	4:45.69	64°F/ 76°F	32.7
Average Time	4:40.83	**Average Speed**	33.3

** 1 – Poor 5 – Average 10 – Outstanding

ITEM	RATING **
Steering Response	7.5
Steering Effort/ Feedback	7.5
Body Roll	7.5
Body Bounce	8
Braking Performance	9.5
Brake Pull	9.5
ABS/ Traction Control	9.5
Engine Acceleration	10
Transmission Performance	9
Driving Performance	8

CITY COURSE
VEHICLE DYNAMICS EVALUATION
2023 FORD MUSTANG MACH-E AWD CODE #:K4S

DRIVERS	TOTAL TIME	AIR /TRACK	SPEED
Ramiro Juarez- LASD	4:15.68	78°F/ 82°F	36.6
Richard Dee- LASD	4:18.43	78°F/ 82°F	36.3
Average Time	4:17.06	**Average Speed**	36.4

** 1 – Poor 5 – Average 10 – Outstanding

ITEM	RATING **
Steering Response	10
Steering Effort/ Feedback	10
Body Roll	10
Body Bounce	10
Braking Performance	10
Brake Pull	10
ABS/ Traction Control	10
Engine Acceleration	10
Transmission Performance	10
Driving Performance	10

Brake Evaluation Results

Vehicle brake evaluation is conducted to reflect real life braking situations that Law Enforcement experience every day in the field. The testing procedure measures the braking response that the driver would experience in High speed pursuits, emergency situations and normal driving. All vehicles are tested with original equipment including brake pads and tires. The vehicles are driven by professional Emergency Vehicle Operations Center (EVOC) drivers. All vehicles are equipped with an electronic logging device (VBox Datalogger) to record all evaluation events.

The evaluation is conducted immediately following the preliminary handling test. The vehicles are driven for 32 laps (approximately 48 miles). The first evaluation is conducted by having the driver accelerate to 80 miles per hour than decelerating to a stop without activating antilock braking system. This procedure is repeated three additional times. After the third test, the vehicle has a 5-minute mandatory cooldown period. The next evaluation incorporates accelerating the vehicle to 60 miles per hour and applying the brakes just before the anti-lock brake system activates, coming to a complete stop. Than a two minute cool down period. The next evaluation, the vehicle is accelerated to 60 miles, brakes are applied to stop the vehicle as quickly as possible without activating the antilock brake system. Finally with no cool down, the vehicle is accelerated to 60 miles per hour, brakes are applied with full antilock. This simulates a panic stop.

During the evaluation, if any braking malfunctions are experienced, an effort is made to determine the cause. If the failure is associated with a correctable situation, it is corrected and the evaluation is restarted. If no correctable concerns are noted, and it is decided that the failure was due to an inherent engineering fault, the vehicle is disqualified from further evaluation. Any corrections or defects are noted in the evaluation results.

BRAKE EVALUATION RESULTS

PANIC STOP FROM 60 MPH TO 0 MPH

VEHICLE	STOPPING DISTANCE IN FEET- FROM 60 MPH TO ZERO
2023 Chevrolet Tahoe 5.3L PPV 2WD	136.5
2023 Chevrolet Tahoe 5.3L PPV 4WD	138.3
2023 Chevrolet Silverado 5.3L PPV Z71 4WD	144.6
2023 Chevrolet Silverado 5.3L PPV Z7X 4WD	149.9
2023 Dodge Charger 3.6L 3.08 AWD	132.8
2023 Dodge Charger 5.7L 2.62 RWD	140.8
2023 Dodge Durango 3.6L 3.45 AWD	135.4
2023 Dodge Durango 5.7L 3.09 AWD	137.7
2023 Ford P.I. Utility 3.3L AWD	140.1
2023 Ford P.I. Utility 3.0L AWD EcoBoost	138.5
2023 Ford P.I. Utility Hybrid 3.3L AWD	140.8
2023 Ford F150 Police Responder 3.5L 4WD	149.3
2023 Ford Mustang Mach-E AWD	134.5

ACCELERATION EVALUATION RESULTS

This test is designed to measure vehicle performance in terms of acceleration, including speed and time at the quarter mile. Although the top speed is not recorded, a minimum of 100 MPH is obtained to satisfy the requirements for high speed law enforcement patrol.

To get the information on the 30 – 60 MPH and 60 – 100 MPH two separate runs were driven. In each run, the vehicle was accelerated to just under the target speed. The vehicle's speed was allowed to level off, and then the vehicle was accelerated through the target speed. This allowed for an actual time between the targeted speed.

All of the information gathered during the acceleration and subsequent brake test is gathered using a Race Logic "Drift Box 02". The data logger is a GPS based measuring device.

ACCELERATION EVALUATION RESULTS

SPEED	2023 Chevrolet Tahoe 5.3L PPV 2WD	2023 Chevrolet Tahoe 5.3L PPV 4WD	2023 Chevrolet Silverado 5.3L PPV Z71 4WD
0 - 60 MPH	8.47 sec.	9.09 sec.	8.27 sec.
30 – 60 MPH	5.50 sec.	5.83 sec.	5.26 sec.
60 – 100 MPH	12.48 sec.	14.79 sec.	12.87 sec.
***SS – ¼ Mile**	16.59 @ 88.45 MPH	17.04 @ 85.72 MPH	16.42 @ 89.29 MPH

SPEED	2023 Chevrolet Silverado 5.3L PPV Z7X 4WD	2023 Dodge Charger 3.6L 3.08 AWD	2023 Dodge Charger 5.7L 2.62 RWD
0- 60 MPH	8.01 sec.	7.61 sec.	6.30 sec.
30 – 60 MPH	5.22 sec.	5.00 sec.	3.48 sec.
60 – 100 MPH	13.23 sec.	11.31 sec.	7.87 sec.
***SS – ¼ Mile**	16.20 @ 88.70 MPH	15.94 @ 90.40 MPH	14.73 @ 99.83 MPH

SPEED	2023 Dodge Durango 3.6L 3.45 AWD	2023 Dodge Durango 5.7L 3.09 AWD	2023 Ford P.I. Utility 3.3L AWD
0 - 60 MPH	10.43 sec.	8.00 sec.	8.33 sec.
30 – 60 MPH	6.31 sec.	4.80 sec.	5.09 sec.
60 – 100 MPH	18.33 sec.	13.03 sec.	13.09 sec.
***SS – ¼ Mile**	17.80 @ 80.05 MPH	16.12 @ 87.56 MPH	16.48 @ 89.03 MPH

SPEED	2023 Ford P.I . Utility 3.0L AWD EcoBoost	2023 Ford P.I. Utility Hybrid AWD	2023 Ford F150 Police Responder 3.5L 4WD
0- 60 MPH	6.50 sec.	7.81 sec.	6.49 sec.
30 – 60 MPH	3.69 sec.	4.75 sec.	3.86 sec.
60 – 100 MPH	9.31 sec.	13.10 sec.	9.71 sec.
***SS – ¼ Mile**	15.16 @ 95.85 MPH	16.04 @ 91.48 MPH	14.90 @ 97.00 MPH

*Standing Start

ACCELERATION EVALUATION RESULTS

SPEED	2023 Ford Mustang Mach-E AWD
0 - 60 MPH	3.89 sec.
30 – 60 MPH	2.26 sec.
60 – 100 MPH	7.04 sec.
***SS – ¼ Mile**	12.78 @ 102.35 MPH

*Standing Start

HEAT EVALUATION RESULTS

Today's modern exhaust emission and computer monitored automobile is designed to operate at much higher temperatures than vehicles from the 1970's and 1980's. Scientific breakthroughs in metallurgy and lubrication compositions allow the modern engine to operate at temperatures formerly thought to be detrimental. A vehicle from the 1970 era usually exceeded 180 degrees under normal driving conditions and generally overheated at 212 degrees. Today, modern engines operate safely between 200 to 260 degrees. Our heat testing is a "PASS-FAIL" scenario and is based on manufacturer's allowable operating temperatures.

Heat from each engine component is measured by a diagnostic tool via the vehicles data link connector. Components not electronically monitored by the onboard computers are measured by means of a digital thermometer. Measurements are taken at the conclusion of the 32 high speed laps. This process is accomplished in the following manner:

1. Transmission Fluid — Measurement taken via DLC (data link connector).
2. Engine Oil — Measurement taken via DLC (data link connector).
3. Power Steering — The probe is inserted into the pump reservoir fluid.
4. Radiator Coolant — Measurement taken via DLC (data link connector)
5. Outside Air — Temperature is measured away from the vehicle and in direct sunlight.

VEHICLE HEAT EVALUATION

2023 CHEVROLET TAHOE 5.3L PPV 2WD

	ENGINE OIL	TRANSMISSION OIL	POWER STEERING	RADIATOR
MANUFACTURER'S MAXIMUM RECOMMENDED TEMPERATURE	302°F	270°F	N/A	262°F
TESTED AT	210°F	192°F	N/A	198°F

2023 CHEVROLET TAHOE 5.3L PPV 4WD

	ENGINE OIL	TRANSMISSION OIL	POWER STEERING	RADIATOR
MANUFACTURER'S MAXIMUM RECOMMENDED TEMPERATURE	302°F	270°F	N/A	262°F
TESTED AT	235°F	195°F	N/A	210°F

2023 CHEVROLET SILVERADO 5.3L PPV Z71 4WD

	ENGINE OIL	TRANSMISSION OIL	POWER STEERING	RADIATOR
MANUFACTURER'S MAXIMUM RECOMMENDED TEMPERATURE	302°F	270°F	N/A	262°F
TESTED AT	234°F	207°F	N/A	210°F

2023 CHEVROLET SILVERADO 5.3L PPV Z7X 4WD

	ENGINE OIL	TRANSMISSION OIL	POWER STEERING	RADIATOR
MANUFACTURER'S MAXIMUM RECOMMENDED TEMPERATURE	302°F	270°F	N/A	262°F
TESTED AT	210°F	198°F	N/A	235°F

2023 DODGE CHARGER 3.6L 3.08 AWD

	ENGINE OIL	TRANSMISSION OIL	POWER STEERING	RADIATOR
MANUFACTURER'S MAXIMUM RECOMMENDED TEMPERATURE	280°F	235°F	N/A	255°F
TESTED AT	219°F	212°F	N/A	217°F

VEHICLE HEAT EVALUATION

2023 DODGE CHARGER 5.7L 2.62 RWD

	ENGINE OIL	TRANSMISSION OIL	POWER STEERING	RADIATOR
MANUFACTURER'S MAXIMUM RECOMMENDED TEMPERATURE	300°F	235°F	N/A	260°F
TESTED AT	219°F	199°F	N/A	199°F

2023 DODGE DURANGO 3.6L 3.45 AWD

	ENGINE OIL	TRANSMISSION OIL	POWER STEERING	RADIATOR
MANUFACTURER'S MAXIMUM RECOMMENDED TEMPERATURE	320°F	275°F	N/A	262°F
TESTED AT	212°F	197°F	N/A	193°F

2023 DODGE DURANGO 5.7L 3.09 AWD

	ENGINE OIL	TRANSMISSION OIL	POWER STEERING	RADIATOR
MANUFACTURER'S MAXIMUM RECOMMENDED TEMPERATURE	280°F	235°F	N/A	255°F
TESTED AT	230°F	197°F	N/A	199°F

2023 FORD P.I. UTILITY ECOBOOST AWD

	ENGINE OIL	TRANSMISSION OIL	POWER STEERING	RADIATOR
MANUFACTURER'S MAXIMUM RECOMMENDED TEMPERATURE	315°F	280°F	N/A	260°F
TESTED AT	224°F	228°F	N/A	189°F

2023 FORD P.I UTILITY HYBRID AWD

	ENGINE OIL	TRANSMISSION OIL	POWER STEERING	RADIATOR
MANUFACTURER'S MAXIMUM RECOMMENDED TEMPERATURE	315°F	280°F	N/A	280°F
TESTED AT	197°F	229°F	N/A	203°F

VEHICLE HEAT EVALUATION

2023 FORD P.I. UTILITY 3.3 AWD

	ENGINE OIL	TRANSMISSION OIL	POWER STEERING	RADIATOR
MANUFACTURER'S MAXIMUM RECOMMENDED TEMPERATURE	300°F	248°F	N/A	260°F
TESTED AT	224°F	223°F	N/A	201°F

2023 FORD F150 POLICE RESPONDER 4WD

	ENGINE OIL	TRANSMISSION OIL	POWER STEERING	RADIATOR
MANUFACTURER'S MAXIMUM RECOMMENDED TEMPERATURE	310°F	284°F	N/A	260°F
TESTED AT	216°F	228°F	N/A	218°F

2023 FORD MUSTANG MACH-E AWD

	ENGINE OIL	TRANSMISSION OIL	POWER STEERING	RADIATOR
MANUFACTURER'S MAXIMUM RECOMMENDED TEMPERATURE	N/A	N/A	N/A	N/A
TESTED AT	N/A	N/A	N/A	N/A

COMMUNICATION EVALUATION RESULTS

The communication evaluation of each vehicle is conducted by technicians assigned to the Los Angeles County Sheriff's Department's Communications and Fleet Management Bureau. This evaluation analyzes the radio installation, the effect of radio operation on vehicle performance and the effect of the vehicle on radio performance.

The Electromagnetic Interference Susceptibility test is intended for use in the presence of electromagnetic fields resulting from use of public safety two-way radios.

Vehicle performance must not be affected in any way by transmissions from a radio and antenna installed in the vehicle and operating in any of the frequency ranges of 450 to 512 MHz, and having a radio frequency output no more than 50 watts. Vehicle performance shall not be affected by the presence of another vehicle equipped with the above described radio and operated next to the subject vehicle.

Radiated and conducted electromagnetic interference vehicle systems and accessories shall be designed to reduce interference with the use of public safety radio receivers or electronic sirens or sound amplifiers. The effective sensitivity of a receiver installed in the vehicle shall not be reduced by more than the amount tabulated below for each frequency band:

FREQUENCY BAND	ALLOWABLE DEGRADATION
450 to 512 MHz	3 dB

Degradation is the difference in effective receiver sensitivity measured with the vehicle engine and accessories turned off as compared to that measured with the engine and accessories turned on.

Sensitivity is measured in terms of the 12 dB Sinad signal as defined in EIA Standard RS-204. To determine effective sensitivity, the receiver is connected to the antenna through an isolating connector which allows introduction of the signal generator through the isolated port. Comparative signal strength readings are then taken with and without the interference present.

**** At this time Communications Evaluation Results were not performed on the following vehicles due to no distinctive changes made from the previous year model. The following pages are evaluations from last years models.**

2021 Chevrolet Tahoe 5.3L PPV 2WD

2021 Chevrolet Tahoe 5.3L PPV 4WD

2021 Dodge Charger 3.6L 2.62 AWD

2021 Dodge Charger 5.7L 2.62 RWD

2021 Dodge Durango 3.6L 3.45 AWD

2021 Dodge Durango 5.7L 3.09 AWD

2021 Ford P.I. Utility 3.3L Hybrid AWD

COMMUNICATION NOISE EVALUATION

2021 CHEVROLET TAHOE 5.3L PPV 2WD

RADIO MAKE	MODEL NO.	ANTENNA TYPE	LOCATION
Motorola XTL-5000	MWU4002S	5dB Gain Whip	Roof

WITH ANTENNA	12 dB SINAD	20 dB QUIETING	DESENS dB
Engine Off	-90dB	-92dB	0
Engine Idle (No Acc.)	-90dB	-92dB	0
Engine High RPM (No Acc.)	-90dB	-92dB	0
Engine Idle W/Air	-90dB	-92dB	0
Engine Idle W/ Lights	-90dB	-92dB	0
Engine Idle W/Heater	-90dB	-92dB	0
Engine Idle W/All Acc.	-90dB	-92dB	0
Engine High RPM W/All Acc.	-90dB	-92dB	0

Also Tested: Interference detected at 470.6875 and 484.0125 MHz on XTS5000 Portable.

FREQUENCY: 483.0875 MHz **Rating Scale: 1-10 (1-Poor/5-Average / 10- Outstanding)--**

Glove Compartment Accessibility - (Undercover Use)	Rating**
Control Head	5
Microphone	5
Electronic Siren	5
Dashboard Accessibility	
Radio Control Head	6
Siren Console	6
Mobile Digital Terminal Computer	5
Speakers	6
Microphones	5
Trunk Accessibility	
Factory Power Terminal in Trunk	5
One Radio Installation	9
Two Radio Installation	9
Antenna Installation	6
Computer Installation	6
Engine Accessibility	
Battery Terminal Connection	5
Accommodation for Cables	5
Hidden Siren Installation	5
Ignition Fuse Terminal Block	
Clip-on Connections for Accessibility	5

COMMUNICATION NOISE EVALUATION

2021 CHEVROLET TAHOE 5.3L PPV 4WD

RADIO MAKE	MODEL NO.	ANTENNA TYPE	LOCATION
Motorola XTL-5000	MWU4002S	5dB Gain Whip	Roof

WITH ANTENNA	12 dB SINAD	20 dB QUIETING	DESENS dB
Engine Off	-90dB	-92dB	0
Engine Idle (No Acc.)	-90dB	-92dB	0
Engine High RPM (No Acc.)	-90dB	-92dB	0
Engine Idle W/Air	-90dB	-92dB	0
Engine Idle W/ Lights	-90dB	-92dB	0
Engine Idle W/Heater	-90dB	-92dB	0
Engine Idle W/All Acc.	-90dB	-92dB	0
Engine High RPM W/All Acc.	-90dB	-92dB	0

Also Tested: Interference detected at 470.6875 and 484.0125 MHz on XTS5000 Portable.

FREQUENCY: 483.0875 MHz **Rating Scale: 1-10 (1-Poor/5-Average / 10- Outstanding)--**

Glove Compartment Accessibility - (Undercover Use)	Rating**
Control Head	5
Microphone	5
Electronic Siren	5
Dashboard Accessibility	
Radio Control Head	6
Siren Console	6
Mobile Digital Terminal Computer	5
Speakers	6
Microphones	5
Trunk Accessibility	
Factory Power Terminal in Trunk	5
One Radio Installation	9
Two Radio Installation	9
Antenna Installation	6
Computer Installation	6
Engine Accessibility	
Battery Terminal Connection	5
Accommodation for Cables	5
Hidden Siren Installation	5
Ignition Fuse Terminal Block	
Clip-on Connections for Accessibility	5

COMMUNICATION NOISE EVALUATION

2021 DODGE CHARGER 3.6L 2.62 AWD

RADIO MAKE	MODEL NO.	ANTENNA TYPE	LOCATION
Motorola XTL-5000	MWU4002S	2dB Gain Whip	Roof

WITH ANTENNA	12 dB SINAD	20 dB QUIETING	DESENS dB
Engine Off	-88dB	-95dB	0
Engine Idle (No Acc.)	-88dB	-95dB	0
Engine High RPM (No Acc.)	-88dB	-95dB	0
Engine Idle W/Air	-88dB	-95dB	0
Engine Idle W/ Lights	-88dB	-95dB	0
Engine Idle W/Heater	-88dB	-95dB	0
Engine Idle W/All Acc.	-88dB	-95dB	0
Engine High RPM W/All Acc.	-88dB	-95dB	0

Also Tested: Interference detected at 470.6875 and 484.0125 MHz on XTS5000 Portable.

FREQUENCY: 483.0875 MHz **Rating Scale: 1-10 (1-Poor/5-Average / 10- Outstanding)--**

Glove Compartment Accessibility - (Undercover Use)	Rating**
Control Head	4
Microphone	5
Electronic Siren	5
Dashboard Accessibility	
Radio Control Head	5
Siren Console	5
Mobile Digital Terminal Computer	5
Speakers	6
Microphones	5
Trunk Accessibility	
Factory Power Terminal in Trunk	8
One Radio Installation	7
Two Radio Installation	6
Antenna Installation	5
Computer Installation	5
Engine Accessibility	
Battery Terminal Connection	9
Accommodation for Cables	6
Hidden Siren Installation	3
Ignition Fuse Terminal Block	
Clip-on Connections for Accessibility	6

COMMUNICATION NOISE EVALUATION

2021 DODGE CHARGER 5.7L 2.62 RWD

RADIO MAKE	MODEL NO.	ANTENNA TYPE	LOCATION
Motorola XTL-5000	MWU4002S	2dB Gain Whip	Roof

WITH ANTENNA	12 dB SINAD	20 dB QUIETING	DESENS dB
Engine Off	-90dB	-92dB	0
Engine Idle (No Acc.)	-90dB	-92dB	0
Engine High RPM (No Acc.)	-90dB	-92dB	0
Engine Idle W/Air	-90dB	-92dB	0
Engine Idle W/ Lights	-90dB	-92dB	0
Engine Idle W/Heater	-90dB	-92dB	0
Engine Idle W/All Acc.	-90dB	-92dB	0
Engine High RPM W/All Acc.	-89dB	-92dB	0

Also Tested: Interference detected at 470.6875 and 484.0125 MHz on XTS5000 Portable.

FREQUENCY: 483.0875 MHz **Rating Scale: 1-10 (1-Poor/5-Average / 10- Outstanding)--**

Glove Compartment Accessibility - (Undercover Use)	Rating**
Control Head	4
Microphone	5
Electronic Siren	5
Dashboard Accessibility	
Radio Control Head	5
Siren Console	5
Mobile Digital Terminal Computer	5
Speakers	6
Microphones	5
Trunk Accessibility	
Factory Power Terminal in Trunk	8
One Radio Installation	7
Two Radio Installation	6
Antenna Installation	5
Computer Installation	5
Engine Accessibility	
Battery Terminal Connection	9
Accommodation for Cables	6
Hidden Siren Installation	3
Ignition Fuse Terminal Block	
Clip-on Connections for Accessibility	6

COMMUNICATION NOISE EVALUATION

2021 DODGE DURANGO 3.6L 3.45 AWD

RADIO MAKE	MODEL NO.	ANTENNA TYPE	LOCATION
Motorola XTL-5000	MWU4002S	2dB Gain Whip	Roof

WITH ANTENNA	12 dB SINAD	20 dB QUIETING	DESENS dB
Engine Off	-90dB	-93dB	0
Engine Idle (No Acc.)	-90dB	-93dB	0
Engine High RPM (No Acc.)	-90dB	-93dB	0
Engine Idle W/Air	-90dB	-93dB	0
Engine Idle W/ Lights	-90dB	-93dB	0
Engine Idle W/Heater	-90dB	-93dB	0
Engine Idle W/All Acc.	-90dB	-93dB	0
Engine High RPM W/All Acc.	-90dB	-93dB	0

Also Tested: Interference detected at 470.6875 and 484.0125 MHz on XTS5000 Portable.

FREQUENCY: 483.0875 MHz **Rating Scale: 1-10 (1-Poor/5-Average / 10- Outstanding)--**

Glove Compartment Accessibility - (Undercover Use)	Rating**
Control Head	5
Microphone	5
Electronic Siren	5
Dashboard Accessibility	
Radio Control Head	6
Siren Console	6
Mobile Digital Terminal Computer	7
Speakers	7
Microphones	5
Trunk Accessibility	
Factory Power Terminal in Trunk	7
One Radio Installation	7
Two Radio Installation	7
Antenna Installation	7
Computer Installation	7
Engine Accessibility	
Battery Terminal Connection	5
Accommodation for Cables	5
Hidden Siren Installation	5
Ignition Fuse Terminal Block	
Clip-on Connections for Accessibility	5

COMMUNICATION NOISE EVALUATION

2021 DODGE DURANGO 5.7L 3.09 AWD

RADIO MAKE	MODEL NO.	ANTENNA TYPE	LOCATION
Motorola XTL-5000	MWU4002S	2dB Gain Whip	Roof

WITH ANTENNA	12 dB SINAD	20 dB QUIETING	DESENS dB
Engine Off	-89dB	-90dB	1 dB.
Engine Idle (No Acc.)	-88dB	-90dB	1 dB.
Engine High RPM (No Acc.)	-89dB	-90dB	1 dB.
Engine Idle W/Air	-89dB	-90dB	1 dB.
Engine Idle W/ Lights	-89dB	-90dB	1 dB.
Engine Idle W/Heater	-89dB	-90dB	1 dB.
Engine Idle W/All Acc.	-89dB	-90dB	1 dB.
Engine High RPM W/All Acc.	-89dB	-90dB	1 dB.

Also Tested: Interference detected at 470.6875 and 484.0125 MHz on XTS5000 Portable.

FREQUENCY: 483.0875 MHz **Rating Scale: 1-10 (1-Poor/5-Average / 10- Outstanding)--**

Glove Compartment Accessibility - (Undercover Use)	Rating**
Control Head	5
Microphone	5
Electronic Siren	5
Dashboard Accessibility	
Radio Control Head	6
Siren Console	6
Mobile Digital Terminal Computer	7
Speakers	7
Microphones	5
Trunk Accessibility	
Factory Power Terminal in Trunk	7
One Radio Installation	7
Two Radio Installation	7
Antenna Installation	7
Computer Installation	7
Engine Accessibility	
Battery Terminal Connection	5
Accommodation for Cables	5
Hidden Siren Installation	5
Ignition Fuse Terminal Block	
Clip-on Connections for Accessibility	5

COMMUNICATION NOISE EVALUATION

2021 FORD P.I. UTILITY HYBRID AWD

RADIO MAKE	MODEL NO.	ANTENNA TYPE	LOCATION
Motorola XTL-5000	MWU4002S	2dB Gain Whip	Roof

WITH ANTENNA	12 dB SINAD	20 dB QUIETING	DESENS dB
Engine Off	-91dB	-93dB	0
Engine Idle (No Acc.)	-91dB	-92dB	0
Engine High RPM (No Acc.)	-91dB	-92dB	0
Engine Idle W/Air	-91dB	-92dB	0
Engine Idle W/ Lights	-91dB	-92dB	0
Engine Idle W/Heater	-91dB	-92dB	0
Engine Idle W/All Acc.	-91dB	-92dB	0
Engine High RPM W/All Acc.	-91dB	-92dB	0

Also Tested: Interference detected at 470.6875 and 484.0125 MHz on XTS5000 Portable.

FREQUENCY: 483.0875 MHz **Rating Scale: 1-10 (1-Poor/5-Average / 10- Outstanding)--**

Glove Compartment Accessibility - (Undercover Use)	Rating**
Control Head	5
Microphone	5
Electronic Siren	5
Dashboard Accessibility	
Radio Control Head	6
Siren Console	6
Mobile Digital Terminal Computer	6
Speakers	6
Microphones	5
Trunk Accessibility	
Factory Power Terminal in Trunk	2
One Radio Installation	7
Two Radio Installation	7
Antenna Installation	5
Computer Installation	6
Engine Accessibility	
Battery Terminal Connection	2
Accommodation for Cables	3
Hidden Siren Installation	5
Ignition Fuse Terminal Block	
Clip-on Connections for Accessibility	5

COMMUNICATION NOISE EVALUATION

2023 CHEVROLET SILVERADO PPV 5.3L Z71 4WD

RADIO MAKE	MODEL NO.	ANTENNA TYPE	LOCATION
Motorola	XTL5000	2dB Gain Whip	Roof

WITH ANTENNA	12 dB SINAD	20 dB QUIETING	DESENS dB
Engine Off	-92dB	-86dB	2dB
Engine Idle (No Acc.)	-92dB	-86dB	2dB
Engine High RPM (No Acc.)	-92dB	-86dB	2dB
Engine Idle W/Air	-92dB	-86dB	2dB
Engine Idle W/ Lights	-92dB	-86dB	2dB
Engine Idle W/Heater	-92dB	-86dB	2dB
Engine Idle W/All Acc.	-92dB	-86dB	2dB
Engine High RPM W/All Acc.	-92dB	-86dB	2dB

Also Tested: Interference detected at 470.6875 and 484.0125 MHz on XTS5000 Portable.

FREQUENCY: 483.0875 MHz **Rating Scale: 1-10 (1-Poor/5-Average / 10- Outstanding)--**

Glove Compartment Accessibility - (Undercover Use)	Rating**
Control Head	8
Microphone	8
Electronic Siren	7
Dashboard Accessibility	
Radio Control Head	6
Siren Console	6
Mobile Digital Terminal Computer	6
Speakers	7
Microphones	8
Trunk Accessibility	
Factory Power Terminal in Trunk	N/A
One Radio Installation	8
Two Radio Installation	8
Antenna Installation	9
Computer Installation	7
Engine Accessibility	
Battery Terminal Connection	10
Accommodation for Cables	10
Hidden Siren Installation	8
Ignition Fuse Terminal Block	
Clip-on Connections for Accessibility	8

COMMUNICATION NOISE EVALUATION

2023 CHEVROLET SILVERADO PPV 5.3L Z7X 4WD

RADIO MAKE	MODEL NO.	ANTENNA TYPE	LOCATION
Motorola	XTL5000	2dB Gain Whip	Roof

WITH ANTENNA	12 dB SINAD	20 dB QUIETING	DESENS dB
Engine Off	-93dB	-86dB	2dB
Engine Idle (No Acc.)	-93dB	-86dB	2dB
Engine High RPM (No Acc.)	-93dB	-86dB	2dB
Engine Idle W/Air	-93dB	-86dB	2dB
Engine Idle W/ Lights	-93dB	-86dB	2dB
Engine Idle W/Heater	-93dB	-86dB	2dB
Engine Idle W/All Acc.	-93dB	-86dB	2dB
Engine High RPM W/All Acc.	-93dB	-86dB	2dB

Also Tested: Interference detected at 470.6875 and 484.0125 MHz on XTS5000 Portable.

FREQUENCY: 483.0875 MHz **Rating Scale: 1-10 (1-Poor/5-Average / 10- Outstanding)--**

Glove Compartment Accessibility - (Undercover Use)	Rating**
Control Head	8
Microphone	8
Electronic Siren	7
Dashboard Accessibility	
Radio Control Head	6
Siren Console	6
Mobile Digital Terminal Computer	6
Speakers	7
Microphones	8
Trunk Accessibility	
Factory Power Terminal in Trunk	N/A
One Radio Installation	8
Two Radio Installation	8
Antenna Installation	9
Computer Installation	8
Engine Accessibility	
Battery Terminal Connection	10
Accommodation for Cables	10
Hidden Siren Installation	8
Ignition Fuse Terminal Block	
Clip-on Connections for Accessibility	8

COMMUNICATION NOISE EVALUATION

2023 FORD MUSTANG MACH-E AWD

RADIO MAKE	MODEL NO.	ANTENNA TYPE	LOCATION
Motorola	XTL5000	2dB Gain Whip	Roof

WITH ANTENNA	12 dB SINAD	20 dB QUIETING	DESENS dB
Engine Off	-91dB	-85dB	1dB
Engine Idle (No Acc.)	-91dB	-85dB	1dB
Engine High RPM (No Acc.)	-91dB	-85dB	1dB
Engine Idle W/Air	-91dB	-85dB	1dB
Engine Idle W/ Lights	-91dB	-85dB	1dB
Engine Idle W/Heater	-91dB	-85dB	1dB
Engine Idle W/All Acc.	-91dB	-85dB	1dB
Engine High RPM W/All Acc.	-91dB	-85dB	1dB

Also Tested: Interference detected at 470.6875 and 484.0125 MHz on XTS5000 Portable.

FREQUENCY: 483.0875 MHz **Rating Scale: 1-10 (1-Poor/5-Average / 10- Outstanding)--**

Glove Compartment Accessibility - (Undercover Use)	Rating**
Control Head	6
Microphone	6
Electronic Siren	7
Dashboard Accessibility	
Radio Control Head	6
Siren Console	6
Mobile Digital Terminal Computer	4
Speakers	7
Microphones	6
Trunk Accessibility	
Factory Power Terminal in Trunk	N/A
One Radio Installation	8
Two Radio Installation	7
Antenna Installation	4
Computer Installation	5
Engine Accessibility	
Battery Terminal Connection	7
Accommodation for Cables	7
Hidden Siren Installation	?
Ignition Fuse Terminal Block	
Clip-on Connections for Accessibility	?

ERGONOMICS

This subjective evaluation is a rating of human factors and space utilization done individually and independently by four patrol trained Deputy Sheriffs from the Los Angeles County Sheriff's Department. Each vehicle is driven through a 100 mile loop four times, each time by a different driver. The loop is divided equally into urban, suburban, and freeway driving conditions. The vehicle is operated with the air conditioner and headlights "turned on" and with the transmission selector in the overdrive position. No attempt is made to coddle the vehicle through the loop, but hard acceleration starts are avoided. The ratings are averaged to minimize personal prejudices that individuals may have in favor or against any given vehicle.

Statements in the "driver comments" section of the evaluation reflect a consensus of their individual comments.

Additionally, during the Ergonomics evaluation, fuel efficiency is also recorded. While EPA mileage estimates may be helpful for comparative purposes, they are based on simulated driving conditions. The fuel efficiency evaluation is an attempt to estimate MPG (miles per gallon) based on actual driving conditions.

The test results are averaged between the four drivers and recorded.

** 1- Poor 5 - Average 10 - Outstanding

**** At this time Ergonomics Evaluation Results were not performed on the following vehicles due to no distinctive changes made from the previous year model. The following pages are evaluations from previous years models.**

2021 Chevrolet Tahoe 5.3L PPV 2WD

2021 Chevrolet Tahoe 5.3L PPV 4WD

2021 Dodge Charger 3.6L 2.62 AWD

2021 Dodge Charger 5.7L 2.62 RWD

2021 Dodge Durango 3.6L 3.45 AWD

2021 Dodge Durango 5.7L 3.09 AWD

2021 Ford P.I. Utility 3.3L Hybrid AWD

2021 Ford P.I. Utility 3.3L AWD

2021 Ford P.I. Utility 3.0L EcoBoost AWD

ERGONOMICS EVALUATION

2021 CHEVROLET TAHOE 5.3L PPV 2WD

VISIBILTY	CONSIDERATION	RATING
Overall Forward Visibility	Ceiling Height, Dash Height, Pillar Placement, Windshield Size & Distortion	7

VISIBILITY	RATING USING MIRRORS	RATING NOT USING MIRRORS
3 o'clock Position	10	6.5
4 o'clock Position	6.5	6
5 o'clock Position	6.5	6.5
6 o'clock Position	7	6.5
7 o'clock Position	7	6.5
8 o'clock Position	7	6.5
9 o'clock Position	10	7

FRONT SEAT	CONSIDERATIONS	RATING
Seat Comfort	Overall Seat Comfort, Hip/Shoulder Room	6.5
Seat Position	Range of Adjustment	7
Seat Compatibility to Sam Brown	Comfort, Seatbelt Interference	6
Seat to Controls	Steering Wheel, Pedals, Dashboard	7
Headrest Position: With Hat/Helmet	Adequate	10
Headrest Position: Without Hat/ Helmet	Adequate	7
Headroom	Adequate	7
Legroom	Adequate	7
Seatbelt	Ease of Hook-Up/Release	6
Shoulder Strap	Interference with duty gear	6

INSTRUMENT PANEL	CONSIDERATIONS	RATING
Instrument Placement	Ease of Viewing, Are They Obstructed by the Steering Wheel or Other Components	7
Instrument Visibility	Can You See Them	7
Instrument Legibility	Can You Read Them	7

CONTROLS	CONSIDERATIONS	RATING
Steering Wheel	Size, Position	7
Shift Lever	Accessibility, Indicator Visibility	7
Knobs & Switches	Location, Visibility, Markings, Arrangement	7
Pedals	Location	7
Pedals	Size	7
Pedals	Spacing (Do you hit more than one pedal with boots on?)	7
Parking Brake	Location	6.5
Parking Brake	Method of Release.	6.5

MIRRORS	CONSIDERATIONS	RATING
Rearview Mirror	Placement	6.5
Rearview Mirror	Size	5.5
Rearview Mirror	Ease of Adjustment	7
Rearview Mirror	Distortion	7
Driver Side Mirror	Placement	7
Driver Side Mirror	Size	7
Driver Side Mirror	Ease of Adjustment	7
Driver Side Mirror	Distortion	7
Passenger Side Mirror	Placement	7
Passenger Side Mirror	Size	7
Passenger Side Mirror	Ease of Adjustment	7
Passenger Side Mirror	Distortion	7

DOORS	CONSIDERATIONS	RATING
Front Door	Ease of Ingress/Egress	7
Rear Door	Ease of Ingress/Egress	7
Window & Door Handles	Accessibility, Ease of Operation	7

REAR SEAT	CONSIDERATIONS	RATING
Seat Comfort	Overall Seat Comfort, Hip/Shoulder Room	10
Headroom	Adequate	10
Legroom	Adequate	10
Seatbelt	Ease of Hook-Up/Release	10

TRUNK	CONSIDERATIONS	RATING
Lid	Ease of Opening	N/A
Lid	Size of Opening	N/A
Compartment	Ease of Loading/Unloading	N/A

SLALOM	CONSIDERATIONS	RATING
Overall Backing Visibility	Ceiling Height, Dash Height, Pillar Placement, Windshield Size & Distortion	10

PARALLEL PARK - LEVEL	CONSIDERATIONS	RATING
Overall Backing Visibility	Ceiling Height, Dash Height, Pillar Placement, Windshield Size & Distortion	7

PARALLEL PARK – INCLINE	CONSIDERATIONS	RATING
Overall Backing Visibility	Ceiling Height, Dash Height, Pillar Placement, Windshield Size & Distortion	7

PARALLEL PARK- DECLINE	CONSIDERATIONS	RATING
Overall Backing Visibility	Ceiling Height, Dash Height, Pillar Placement, Windshield Size & Distortion	7

REAR 3-POINT TURN	CONSIDERATIONS	RATING
Overall Backing Visibility	Ceiling Height, Dash Height, Pillar Placement, Windshield Size & Distortion	7

ERGONOMICS EVALUATION

2021 CHEVROLET TAHOE 5.3L PPV 4WD

VISIBILTY	CONSIDERATION	RATING
Overall Forward Visibility	Ceiling Height, Dash Height, Pillar Placement, Windshield Size & Distortion	3.5

VISIBILITY	RATING USING MIRRORS	RATING NOT USING MIRRORS
3 o'clock Position	10	3
4 o'clock Position	6.5	2.5
5 o'clock Position	6.5	3
6 o'clock Position	7	3
7 o'clock Position	7	3
8 o'clock Position	7	3
9 o'clock Position	10	3.5

FRONT SEAT	CONSIDERATIONS	RATING
Seat Comfort	Overall Seat Comfort, Hip/Shoulder Room	3.5
Seat Position	Range of Adjustment	4
Seat Compatibility to Sam Brown	Comfort, Seatbelt Interference	3
Seat to Controls	Steering Wheel, Pedals, Dashboard	3.5
Headrest Position: With Hat/Helmet	Adequate	3
Headrest Position: Without Hat/ Helmet	Adequate	3.5
Headroom	Adequate	3.5
Legroom	Adequate	3.5
Seatbelt	Ease of Hook-Up/Release	3
Shoulder Strap	Interference with duty gear	3

INSTRUMENT PANEL	CONSIDERATIONS	RATING
Instrument Placement	Ease of Viewing, Are They Obstructed by the Steering Wheel or Other Components	4
Instrument Visibility	Can You See Them	4
Instrument Legibility	Can You Read Them	4

CONTROLS	CONSIDERATIONS	RATING
Steering Wheel	Size, Position	3.5
Shift Lever	Accessibility, Indicator Visibility	3.5
Knobs & Switches	Location, Visibility, Markings, Arrangement	3.5
Pedals	Location	3.5
Pedals	Size	3.5
Pedals	Spacing (Do you hit more than one pedal with boots on?)	3.5
Parking Brake	Location	3.5
Parking Brake	Method of Release.	3.5

MIRRORS	CONSIDERATIONS	RATING
Rearview Mirror	Placement	3.5
Rearview Mirror	Size	3
Rearview Mirror	Ease of Adjustment	3.5
Rearview Mirror	Distortion	3.5
Driver Side Mirror	Placement	3.5
Driver Side Mirror	Size	3.5
Driver Side Mirror	Ease of Adjustment	3.5
Driver Side Mirror	Distortion	3.5
Passenger Side Mirror	Placement	3.5
Passenger Side Mirror	Size	3.5
Passenger Side Mirror	Ease of Adjustment	3.5
Passenger Side Mirror	Distortion	3.5

DOORS	CONSIDERATIONS	RATING
Front Door	Ease of Ingress/Egress	3.5
Rear Door	Ease of Ingress/Egress	3.5
Window & Door Handles	Accessibility, Ease of Operation	3.5

REAR SEAT	CONSIDERATIONS	RATING
Seat Comfort	Overall Seat Comfort, Hip/Shoulder Room	3
Headroom	Adequate	3
Legroom	Adequate	3
Seatbelt	Ease of Hook-Up/Release	3

TRUNK	CONSIDERATIONS	RATING
Lid	Ease of Opening	N/A
Lid	Size of Opening	N/A
Compartment	Ease of Loading/Unloading	N/A

SLALOM	CONSIDERATIONS	RATING
Overall Backing Visibility	Ceiling Height, Dash Height, Pillar Placement, Windshield Size & Distortion	4

PARALLEL PARK - LEVEL	CONSIDERATIONS	RATING
Overall Backing Visibility	Ceiling Height, Dash Height, Pillar Placement, Windshield Size & Distortion	3.5

PARALLEL PARK – INCLINE	CONSIDERATIONS	RATING
Overall Backing Visibility	Ceiling Height, Dash Height, Pillar Placement, Windshield Size & Distortion	3.5

PARALLEL PARK- DECLINE	CONSIDERATIONS	RATING
Overall Backing Visibility	Ceiling Height, Dash Height, Pillar Placement, Windshield Size & Distortion	3.5

REAR 3-POINT TURN	CONSIDERATIONS	RATING
Overall Backing Visibility	Ceiling Height, Dash Height, Pillar Placement, Windshield Size & Distortion	3.5

ERGONOMICS EVALUATION

2021 DODGE CHARGER 3.6L AWD

VISIBILTY	CONSIDERATION	RATING
Overall Forward Visibility	Ceiling Height, Dash Height, Pillar Placement, Windshield Size & Distortion	10

VISIBILITY	RATING USING MIRRORS	RATING NOT USING MIRRORS
3 o'clock Position	10	9
4 o'clock Position	10	8.5
5 o'clock Position	10	8
6 o'clock Position	10	8
7 o'clock Position	9	8
8 o'clock Position	9	10
9 o'clock Position	10	10

FRONT SEAT	CONSIDERATIONS	RATING
Seat Comfort	Overall Seat Comfort, Hip/Shoulder Room	6.5
Seat Position	Range of Adjustment	10
Seat Compatibility to Sam Brown	Comfort, Seatbelt Interference	8.8
Seat to Controls	Steering Wheel, Pedals, Dashboard	10
Headrest Position: With Hat/Helmet	Adequate	10
Headrest Position: Without Hat/ Helmet	Adequate	10
Headroom	Adequate	10
Legroom	Adequate	10
Seatbelt	Ease of Hook-Up/Release	10
Shoulder Strap	Interference with duty gear	10

INSTRUMENT PANEL	CONSIDERATIONS	RATING
Instrument Placement	Ease of Viewing, Are They Obstructed by the Steering Wheel or Other Components	10
Instrument Visibility	Can You See Them	10
Instrument Legibility	Can You Read Them	10

CONTROLS	CONSIDERATIONS	RATING
Steering Wheel	Size, Position	10
Shift Lever	Accessibility, Indicator Visibility	10
Knobs & Switches	Location, Visibility, Markings, Arrangement	10
Pedals	Location	10
Pedals	Size	10
Pedals	Spacing (Do you hit more than one pedal with boots on?)	10
Parking Brake	Location	10
Parking Brake	Method of Release.	10

MIRRORS	CONSIDERATIONS	RATING
Rearview Mirror	Placement	10
Rearview Mirror	Size	10
Rearview Mirror	Ease of Adjustment	10
Rearview Mirror	Distortion	10
Driver Side Mirror	Placement	10
Driver Side Mirror	Size	9
Driver Side Mirror	Ease of Adjustment	10
Driver Side Mirror	Distortion	10
Passenger Side Mirror	Placement	10
Passenger Side Mirror	Size	9
Passenger Side Mirror	Ease of Adjustment	10
Passenger Side Mirror	Distortion	10

DOORS	CONSIDERATIONS	RATING
Front Door	Ease of Ingress/Egress	10
Rear Door	Ease of Ingress/Egress	10
Window & Door Handles	Accessibility, Ease of Operation	10

REAR SEAT	CONSIDERATIONS	RATING
Seat Comfort	Overall Seat Comfort, Hip/Shoulder Room	10
Headroom	Adequate	10
Legroom	Adequate	10
Seatbelt	Ease of Hook-Up/Release	10

TRUNK	CONSIDERATIONS	RATING
Lid	Ease of Opening	N/A
Lid	Size of Opening	N/A
Compartment	Ease of Loading/Unloading	N/A

SLALOM	CONSIDERATIONS	RATING
Overall Backing Visibility	Ceiling Height, Dash Height, Pillar Placement, Windshield Size & Distortion	10

PARALLEL PARK - LEVEL	CONSIDERATIONS	RATING
Overall Backing Visibility	Ceiling Height, Dash Height, Pillar Placement, Windshield Size & Distortion	10

PARALLEL PARK - INCLINE	CONSIDERATIONS	RATING
Overall Backing Visibility	Ceiling Height, Dash Height, Pillar Placement, Windshield Size & Distortion	10

PARALLEL PARK – DECLINE	CONSIDERATIONS	RATING
Overall Backing Visibility	Ceiling Height, Dash Height, Pillar Placement, Windshield Size & Distortion	10

REAR 3-POINT TURN	CONSIDERATIONS	RATING
Overall Backing Visibility	Ceiling Height, Dash Height, Pillar Placement, Windshield Size & Distortion	8

ERGONOMICS EVALUATION

2021 DODGE CHARGER 5.7L RWD

VISIBILTY	CONSIDERATION	RATING
Overall Forward Visibility	Ceiling Height, Dash Height, Pillar Placement, Windshield Size & Distortion	10

VISIBILITY	RATING USING MIRRORS	RATING NOT USING MIRRORS
3 o'clock Position	10	10
4 o'clock Position	10	9.5
5 o'clock Position	10	9
6 o'clock Position	7	7
7 o'clock Position	8	8
8 o'clock Position	8	8
9 o'clock Position	10	10

FRONT SEAT	CONSIDERATIONS	RATING
Seat Comfort	Overall Seat Comfort, Hip/Shoulder Room	7.5
Seat Position	Range of Adjustment	10
Seat Compatibility to Sam Brown	Comfort, Seatbelt Interference	9
Seat to Controls	Steering Wheel, Pedals, Dashboard	10
Headrest Position: With Hat/Helmet	Adequate	10
Headrest Position: Without Hat/ Helmet	Adequate	10
Headroom	Adequate	10
Legroom	Adequate	10
Seatbelt	Ease of Hook-Up/Release	9.5
Shoulder Strap	Interference with duty gear	9.5

INSTRUMENT PANEL	CONSIDERATIONS	RATING
Instrument Placement	Ease of Viewing, Are They Obstructed by the Steering Wheel or Other Components	10
Instrument Visibility	Can You See Them	10
Instrument Legibility	Can You Read Them	10

CONTROLS	CONSIDERATIONS	RATING
Steering Wheel	Size, Position	10
Shift Lever	Accessibility, Indicator Visibility	10
Knobs & Switches	Location, Visibility, Markings, Arrangement	10
Pedals	Location	10
Pedals	Size	10
Pedals	Spacing (Do you hit more than one pedal with boots on?)	10
Parking Brake	Location	10
Parking Brake	Method of Release.	10

MIRRORS	CONSIDERATIONS	RATING
Rearview Mirror	Placement	10
Rearview Mirror	Size	8.5
Rearview Mirror	Ease of Adjustment	10
Rearview Mirror	Distortion	10
Driver Side Mirror	Placement	10
Driver Side Mirror	Size	7.5
Driver Side Mirror	Ease of Adjustment	10
Driver Side Mirror	Distortion	10
Passenger Side Mirror	Placement	10
Passenger Side Mirror	Size	7.5
Passenger Side Mirror	Ease of Adjustment	10
Passenger Side Mirror	Distortion	10

DOORS	CONSIDERATIONS	RATING
Front Door	Ease of Ingress/Egress	9
Rear Door	Ease of Ingress/Egress	10
Window & Door Handles	Accessibility, Ease of Operation	10

REAR SEAT	CONSIDERATIONS	RATING
Seat Comfort	Overall Seat Comfort, Hip/Shoulder Room	10
Headroom	Adequate	10
Legroom	Adequate	10
Seatbelt	Ease of Hook-Up/Release	10

TRUNK	CONSIDERATIONS	RATING
Lid	Ease of Opening	10
Lid	Size of Opening	10
Compartment	Ease of Loading/Unloading	10

SLALOM	CONSIDERATIONS	RATING
Overall Backing Visibility	Ceiling Height, Dash Height, Pillar Placement, Windshield Size & Distortion	10

PARALLEL PARK - LEVEL	CONSIDERATIONS	RATING
Overall Backing Visibility	Ceiling Height, Dash Height, Pillar Placement, Windshield Size & Distortion	9

PARALLEL PARK - INCLINE	CONSIDERATIONS	RATING
Overall Backing Visibility	Ceiling Height, Dash Height, Pillar Placement, Windshield Size & Distortion	9

PARALLEL PARK – DECLINE	CONSIDERATIONS	RATING
Overall Backing Visibility	Ceiling Height, Dash Height, Pillar Placement, Windshield Size & Distortion	9

REAR 3-POINT TURN	CONSIDERATIONS	RATING
Overall Backing Visibility	Ceiling Height, Dash Height, Pillar Placement, Windshield Size & Distortion	9

ERGONOMICS EVALUATION

2021 DODGE DURANGO 3.6L AWD

VISIBILTY	CONSIDERATION	RATING
Overall Forward Visibility	Ceiling Height, Dash Height, Pillar Placement, Windshield Size & Distortion	9

VISIBILITY	RATING USING MIRRORS	RATING NOT USING MIRRORS
3 o'clock Position		8
4 o'clock Position		8
5 o'clock Position		8
6 o'clock Position		9
7 o'clock Position		8
8 o'clock Position		8
9 o'clock Position		8

FRONT SEAT	CONSIDERATIONS	RATING
Seat Comfort	Overall Seat Comfort, Hip/Shoulder Room	7
Seat Position	Range of Adjustment	9
Seat Compatibility to Sam Brown	Comfort, Seatbelt Interference	9
Seat to Controls	Steering Wheel, Pedals, Dashboard	8
Headrest Position: With Hat/Helmet	Adequate	10
Headrest Position: Without Hat/ Helmet	Adequate	10
Headroom	Adequate	10
Legroom	Adequate	10
Seatbelt	Ease of Hook-Up/Release	9
Shoulder Strap	Interference with duty gear	9

INSTRUMENT PANEL	CONSIDERATIONS	RATING
Instrument Placement	Ease of Viewing, Are They Obstructed by the Steering Wheel or Other Components	10
Instrument Visibility	Can You See Them	10
Instrument Legibility	Can You Read Them	10

CONTROLS	CONSIDERATIONS	RATING
Steering Wheel	Size, Position	10
Shift Lever	Accessibility, Indicator Visibility	6
Knobs & Switches	Location, Visibility, Markings, Arrangement	8
Pedals	Location	8
Pedals	Size	8
Pedals	Spacing (Do you hit more than one pedal with boots on?)	6
Parking Brake	Location	10
Parking Brake	Method of Release.	10

MIRRORS	CONSIDERATIONS	RATING
Rearview Mirror	Placement	10
Rearview Mirror	Size	10
Rearview Mirror	Ease of Adjustment	9
Rearview Mirror	Distortion	9
Driver Side Mirror	Placement	9
Driver Side Mirror	Size	6
Driver Side Mirror	Ease of Adjustment	9
Driver Side Mirror	Distortion	9
Passenger Side Mirror	Placement	9
Passenger Side Mirror	Size	6
Passenger Side Mirror	Ease of Adjustment	9
Passenger Side Mirror	Distortion	9

DOORS	CONSIDERATIONS	RATING
Front Door	Ease of Ingress/Egress	9
Rear Door	Ease of Ingress/Egress	7
Window & Door Handles	Accessibility, Ease of Operation	10

REAR SEAT	CONSIDERATIONS	RATING
Seat Comfort	Overall Seat Comfort, Hip/Shoulder Room	8
Headroom	Adequate	10
Legroom	Adequate	7
Seatbelt	Ease of Hook-Up/Release	7

TRUNK	CONSIDERATIONS	RATING
Lid	Ease of Opening	10
Lid	Size of Opening	10
Compartment	Ease of Loading/Unloading	10

SLALOM	CONSIDERATIONS	RATING
Overall Backing Visibility	Ceiling Height, Dash Height, Pillar Placement, Windshield Size & Distortion	8

PARALLEL PARK - LEVEL	CONSIDERATIONS	RATING
Overall Backing Visibility	Ceiling Height, Dash Height, Pillar Placement, Windshield Size & Distortion	6

PARALLEL PARK - INCLINE	CONSIDERATIONS	RATING
Overall Backing Visibility	Ceiling Height, Dash Height, Pillar Placement, Windshield Size & Distortion	8

PARALLEL PARK – DECLINE	CONSIDERATIONS	RATING
Overall Backing Visibility	Ceiling Height, Dash Height, Pillar Placement, Windshield Size & Distortion	8

REAR 3-POINT TURN	CONSIDERATIONS	RATING
Overall Backing Visibility	Ceiling Height, Dash Height, Pillar Placement, Windshield Size & Distortion	8

ERGONOMICS EVALUATION

2021 DODGE DURANGO 5.7L AWD

VISIBILTY	CONSIDERATION	RATING
Overall Forward Visibility	Ceiling Height, Dash Height, Pillar Placement, Windshield Size & Distortion	9.5

VISIBILITY	RATING USING MIRRORS	RATING NOT USING MIRRORS
3 o'clock Position	10	9
4 o'clock Position	10	8
5 o'clock Position	10	6.5
6 o'clock Position	10	9.5
7 o'clock Position	10	6.5
8 o'clock Position	10	8
9 o'clock Position	10	9

FRONT SEAT	CONSIDERATIONS	RATING
Seat Comfort	Overall Seat Comfort, Hip/Shoulder Room	7.5
Seat Position	Range of Adjustment	9.5
Seat Compatibility to Sam Brown	Comfort, Seatbelt Interference	8
Seat to Controls	Steering Wheel, Pedals, Dashboard	8.5
Headrest Position: With Hat/Helmet	Adequate	10
Headrest Position: Without Hat/ Helmet	Adequate	10
Headroom	Adequate	10
Legroom	Adequate	10
Seatbelt	Ease of Hook-Up/Release	8.5
Shoulder Strap	Interference with duty gear	8.5

INSTRUMENT PANEL	CONSIDERATIONS	RATING
Instrument Placement	Ease of Viewing, Are They Obstructed by the Steering Wheel or Other Components	8
Instrument Visibility	Can You See Them	8
Instrument Legibility	Can You Read Them	8

CONTROLS	CONSIDERATIONS	RATING
Steering Wheel	Size, Position	10
Shift Lever	Accessibility, Indicator Visibility	6
Knobs & Switches	Location, Visibility, Markings, Arrangement	7.5
Pedals	Location	9
Pedals	Size	9
Pedals	Spacing (Do you hit more than one pedal with boots on?)	8
Parking Brake	Location	10
Parking Brake	Method of Release.	10

MIRRORS	CONSIDERATIONS	RATING
Rearview Mirror	Placement	10
Rearview Mirror	Size	10
Rearview Mirror	Ease of Adjustment	9.5
Rearview Mirror	Distortion	9.5
Driver Side Mirror	Placement	9
Driver Side Mirror	Size	8
Driver Side Mirror	Ease of Adjustment	9.5
Driver Side Mirror	Distortion	9
Passenger Side Mirror	Placement	9.5
Passenger Side Mirror	Size	8
Passenger Side Mirror	Ease of Adjustment	9.5
Passenger Side Mirror	Distortion	9

DOORS	CONSIDERATIONS	RATING
Front Door	Ease of Ingress/Egress	9.5
Rear Door	Ease of Ingress/Egress	8.5
Window & Door Handles	Accessibility, Ease of Operation	10

REAR SEAT	CONSIDERATIONS	RATING
Seat Comfort	Overall Seat Comfort, Hip/Shoulder Room	9
Headroom	Adequate	10
Legroom	Adequate	8.5
Seatbelt	Ease of Hook-Up/Release	7

TRUNK	CONSIDERATIONS	RATING
Lid	Ease of Opening	10
Lid	Size of Opening	10
Compartment	Ease of Loading/Unloading	10

SLALOM	CONSIDERATIONS	RATING
Overall Backing Visibility	Ceiling Height, Dash Height, Pillar Placement, Windshield Size & Distortion	9

PARALLEL PARK - LEVEL	CONSIDERATIONS	RATING
Overall Backing Visibility	Ceiling Height, Dash Height, Pillar Placement, Windshield Size & Distortion	7

PARALLEL PARK - INCLINE	CONSIDERATIONS	RATING
Overall Backing Visibility	Ceiling Height, Dash Height, Pillar Placement, Windshield Size & Distortion	8

PARALLEL PARK – DECLINE	CONSIDERATIONS	RATING
Overall Backing Visibility	Ceiling Height, Dash Height, Pillar Placement, Windshield Size & Distortion	8

REAR 3-POINT TURN	CONSIDERATIONS	RATING
Overall Backing Visibility	Ceiling Height, Dash Height, Pillar Placement, Windshield Size & Distortion	8.5

ERGONOMICS EVALUATION

2021 FORD P.I. UTILITY HYBRID

VISIBILTY	CONSIDERATION	RATING
Overall Forward Visibility	Ceiling Height, Dash Height, Pillar Placement, Windshield Size & Distortion	5.7

VISIBILITY	RATING USING MIRRORS	RATING NOT USING MIRRORS
3 o'clock Position	4.7	5.3
4 o'clock Position	5.0	5.0
5 o'clock Position	5.0	4.7
6 o'clock Position	4.3	4.3
7 o'clock Position	5.0	4.7
8 o'clock Position	5.0	5.0
9 o'clock Position	4.7	5.3

FRONT SEAT	CONSIDERATIONS	RATING
Seat Comfort	Overall Seat Comfort, Hip/Shoulder Room	6.3
Seat Position	Range of Adjustment	6.7
Seat Compatibility to Sam Brown	Comfort, Seatbelt Interference	5.7
Seat to Controls	Steering Wheel, Pedals, Dashboard	6.7
Headrest Position: With Hat/Helmet	Adequate	6.0
Headrest Position: Without Hat/ Helmet	Adequate	6.0
Headroom	Adequate	6.7
Legroom	Adequate	6.7
Seatbelt	Ease of Hook-Up/Release	5.7
Shoulder Strap	Interference with duty gear	5.3

INSTRUMENT PANEL	CONSIDERATIONS	RATING
Instrument Placement	Ease of Viewing, Are They Obstructed by the Steering Wheel or Other Components	6.0
Instrument Visibility	Can You See Them	6.3
Instrument Legibility	Can You Read Them	6.0

CONTROLS	CONSIDERATIONS	RATING
Steering Wheel	Size, Position	5.3
Shift Lever	Accessibility, Indicator Visibility	5.0
Knobs & Switches	Location, Visibility, Markings, Arrangement	3.0
Pedals	Location	4.3
Pedals	Size	4.3
Pedals	Spacing (Do you hit more than one pedal with boots on?)	4.3
Parking Brake	Location	4.0
Parking Brake	Method of Release.	5.3

MIRRORS	CONSIDERATIONS	RATING
Rearview Mirror	Placement	5.0
Rearview Mirror	Size	5.3
Rearview Mirror	Ease of Adjustment	5.3
Rearview Mirror	Distortion	5.3
Driver Side Mirror	Placement	5.3
Driver Side Mirror	Size	5.3
Driver Side Mirror	Ease of Adjustment	5.3
Driver Side Mirror	Distortion	5.3
Passenger Side Mirror	Placement	5.3
Passenger Side Mirror	Size	5.3
Passenger Side Mirror	Ease of Adjustment	5.3
Passenger Side Mirror	Distortion	5.3

DOORS	CONSIDERATIONS	RATING
Front Door	Ease of Ingress/Egress	5.3
Rear Door	Ease of Ingress/Egress	5.0
Window & Door Handles	Accessibility, Ease of Operation	5.3

REAR SEAT	CONSIDERATIONS	RATING
Seat Comfort	Overall Seat Comfort, Hip/Shoulder Room	5.0
Headroom	Adequate	5.0
Legroom	Adequate	5.0
Seatbelt	Ease of Hook-Up/Release	5.0

TRUNK	CONSIDERATIONS	RATING
Lid	Ease of Opening	4.5
Lid	Size of Opening	5.0
Compartment	Ease of Loading/Unloading	5.0

SLALOM	CONSIDERATIONS	RATING
Overall Backing Visibility	Ceiling Height, Dash Height, Pillar Placement, Windshield Size & Distortion	4.7

PARALLEL PARK - LEVEL	CONSIDERATIONS	RATING
Overall Backing Visibility	Ceiling Height, Dash Height, Pillar Placement, Windshield Size & Distortion	4.7

PARALLEL PARK – INCLINE	CONSIDERATIONS	RATING
Overall Backing Visibility	Ceiling Height, Dash Height, Pillar Placement, Windshield Size & Distortion	4.7

PARALLEL PARK- DECLINE	CONSIDERATIONS	RATING
Overall Backing Visibility	Ceiling Height, Dash Height, Pillar Placement, Windshield Size & Distortion	5.0

REAR 3-POINT TURN	CONSIDERATIONS	RATING
Overall Backing Visibility	Ceiling Height, Dash Height, Pillar Placement, Windshield Size & Distortion	4.7

ERGONOMICS EVALUATION

2021 FORD P.I. UTILITY 3.3L AWD

VISIBILTY	CONSIDERATION	RATING
Overall Forward Visibility	Ceiling Height, Dash Height, Pillar Placement, Windshield Size & Distortion	9

VISIBILITY	RATING USING MIRRORS	RATING NOT USING MIRRORS
3 o'clock Position		9
4 o'clock Position		7.5
5 o'clock Position		5
6 o'clock Position		5.5
7 o'clock Position		1
8 o'clock Position		2
9 o'clock Position		6

FRONT SEAT	CONSIDERATIONS	RATING
Seat Comfort	Overall Seat Comfort, Hip/Shoulder Room	9.5
Seat Position	Range of Adjustment	10
Seat Compatibility to Sam Brown	Comfort, Seatbelt Interference	8
Seat to Controls	Steering Wheel, Pedals, Dashboard	9
Headrest Position: With Hat/Helmet	Adequate	10
Headrest Position: Without Hat/ Helmet	Adequate	9
Headroom	Adequate	10
Legroom	Adequate	10
Seatbelt	Ease of Hook-Up/Release	9
Shoulder Strap	Interference with duty gear	8

INSTRUMENT PANEL	CONSIDERATIONS	RATING
Instrument Placement	Ease of Viewing, Are They Obstructed by the Steering Wheel or Other Components	9.5
Instrument Visibility	Can You See Them	9.5
Instrument Legibility	Can You Read Them	9.5

CONTROLS	CONSIDERATIONS	RATING
Steering Wheel	Size, Position	10
Shift Lever	Accessibility, Indicator Visibility	8
Knobs & Switches	Location, Visibility, Markings, Arrangement	8.5
Pedals	Location	9
Pedals	Size	9
Pedals	Spacing (Do you hit more than one pedal with boots on?)	7.5
Parking Brake	Location	9.5
Parking Brake	Method of Release.	9.5

MIRRORS	CONSIDERATIONS	RATING
Rearview Mirror	Placement	9
Rearview Mirror	Size	8
Rearview Mirror	Ease of Adjustment	9
Rearview Mirror	Distortion	9.5
Driver Side Mirror	Placement	9
Driver Side Mirror	Size	7
Driver Side Mirror	Ease of Adjustment	6.5
Driver Side Mirror	Distortion	8
Passenger Side Mirror	Placement	9.5
Passenger Side Mirror	Size	7
Passenger Side Mirror	Ease of Adjustment	6.5
Passenger Side Mirror	Distortion	8

DOORS	CONSIDERATIONS	RATING
Front Door	Ease of Ingress/Egress	9
Rear Door	Ease of Ingress/Egress	8.5
Window & Door Handles	Accessibility, Ease of Operation	10

REAR SEAT	CONSIDERATIONS	RATING
Seat Comfort	Overall Seat Comfort, Hip/Shoulder Room	9
Headroom	Adequate	10
Legroom	Adequate	10
Seatbelt	Ease of Hook-Up/Release	8

TRUNK	CONSIDERATIONS	RATING
Lid	Ease of Opening	8
Lid	Size of Opening	9
Compartment	Ease of Loading/Unloading	10

SLALOM	CONSIDERATIONS	RATING
Overall Backing Visibility	Ceiling Height, Dash Height, Pillar Placement, Windshield Size & Distortion	9

PARRALLEL PARK - LEVEL	CONSIDERATIONS	RATING
Overall Backing Visibility	Ceiling Height, Dash Height, Pillar Placement, Windshield Size & Distortion	9.5

PARALLEL PARK - LEVEL	CONSIDERATIONS	RATING
Overall Backing Visibility	Ceiling Height, Dash Height, Pillar Placement, Windshield Size & Distortion	9.5

PARALLEL PARK – INCLINE	CONSIDERATIONS	RATING
Overall Backing Visibility	Ceiling Height, Dash Height, Pillar Placement, Windshield Size & Distortion	9.5

PARALLEL PARK- DECLINE	CONSIDERATIONS	RATING
Overall Backing Visibility	Ceiling Height, Dash Height, Pillar Placement, Windshield Size & Distortion	8.5

REAR 3-POINT TURN	CONSIDERATIONS	RATING
Overall Backing Visibility	Ceiling Height, Dash Height, Pillar Placement, Windshield Size & Distortion	9

ERGONOMICS EVALUATION

2021 FORD P.I. UTILITY 3.0L ECOBOOST AWD

VISIBILTY	CONSIDERATION	RATING
Overall Forward Visibility	Ceiling Height, Dash Height, Pillar Placement, Windshield Size & Distortion	10

VISIBILITY	RATING USING MIRRORS	RATING NOT USING MIRRORS
3 o'clock Position	9	8.5
4 o'clock Position	9	6
5 o'clock Position	9	5
6 o'clock Position	10	6.5
7 o'clock Position	9	1
8 o'clock Position	8	4.5
9 o'clock Position	10	9.5

FRONT SEAT	CONSIDERATIONS	RATING
Seat Comfort	Overall Seat Comfort, Hip/Shoulder Room	10
Seat Position	Range of Adjustment	10
Seat Compatibility to Sam Brown	Comfort, Seatbelt Interference	8.5
Seat to Controls	Steering Wheel, Pedals, Dashboard	10
Headrest Position: With Hat/Helmet	Adequate	10
Headrest Position: Without Hat/ Helmet	Adequate	9.5
Headroom	Adequate	10
Legroom	Adequate	10
Seatbelt	Ease of Hook-Up/Release	9
Shoulder Strap	Interference with duty gear	8

INSTRUMENT PANEL	CONSIDERATIONS	RATING
Instrument Placement	Ease of Viewing, Are They Obstructed by the Steering Wheel or Other Components	10
Instrument Visibility	Can You See Them	10
Instrument Legibility	Can You Read Them	10

CONTROLS	CONSIDERATIONS	RATING
Steering Wheel	Size, Position	10
Shift Lever	Accessibility, Indicator Visibility	8
Knobs & Switches	Location, Visibility, Markings, Arrangement	8.5
Pedals	Location	8
Pedals	Size	8.5
Pedals	Spacing (Do you hit more than one pedal with boots on?)	8.5
Parking Brake	Location	8.5
Parking Brake	Method of Release.	9.5

MIRRORS	CONSIDERATIONS	RATING
Rearview Mirror	Placement	9.5
Rearview Mirror	Size	9
Rearview Mirror	Ease of Adjustment	9.5
Rearview Mirror	Distortion	9.5
Driver Side Mirror	Placement	9
Driver Side Mirror	Size	8.5
Driver Side Mirror	Ease of Adjustment	8
Driver Side Mirror	Distortion	9
Passenger Side Mirror	Placement	9.5
Passenger Side Mirror	Size	8.5
Passenger Side Mirror	Ease of Adjustment	8
Passenger Side Mirror	Distortion	9.5

DOORS	CONSIDERATIONS	RATING
Front Door	Ease of Ingress/Egress	10
Rear Door	Ease of Ingress/Egress	10
Window & Door Handles	Accessibility, Ease of Operation	10

REAR SEAT	CONSIDERATIONS	RATING
Seat Comfort	Overall Seat Comfort, Hip/Shoulder Room	10
Headroom	Adequate	10
Legroom	Adequate	10
Seatbelt	Ease of Hook-Up/Release	10

TRUNK	CONSIDERATIONS	RATING
Lid	Ease of Opening	9
Lid	Size of Opening	9
Compartment	Ease of Loading/Unloading	9.5

SLALOM	CONSIDERATIONS	RATING
Overall Backing Visibility	Ceiling Height, Dash Height, Pillar Placement, Windshield Size & Distortion	9

PARALLEL PARK - LEVEL	CONSIDERATIONS	RATING
Overall Backing Visibility	Ceiling Height, Dash Height, Pillar Placement, Windshield Size & Distortion	9.5

PARALLEL PARK – INCLINE	CONSIDERATIONS	RATING
Overall Backing Visibility	Ceiling Height, Dash Height, Pillar Placement, Windshield Size & Distortion	9.5

PARALLEL PARK- DECLINE	CONSIDERATIONS	RATING
Overall Backing Visibility	Ceiling Height, Dash Height, Pillar Placement, Windshield Size & Distortion	9.5

REAR 3-POINT TURN	CONSIDERATIONS	RATING
Overall Backing Visibility	Ceiling Height, Dash Height, Pillar Placement, Windshield Size & Distortion	10

ERGONOMICS EVALUATION

2023 CHEVROLET SILVERADO PPV Z71 4WD

VISIBILTY	CONSIDERATION	RATING
Overall Forward Visibility	Ceiling Height, Dash Height, Pillar Placement, Windshield Size & Distortion	8

VISIBILITY	RATING USING MIRRORS	RATING NOT USING MIRRORS
3 o'clock Position	1	5.5
4 o'clock Position	1	5.5
5 o'clock Position	5	5
6 o'clock Position	5.5	5
7 o'clock Position	6	5
8 o'clock Position	6	3
9 o'clock Position	6	5

FRONT SEAT	CONSIDERATIONS	RATING
Seat Comfort	Overall Seat Comfort, Hip/Shoulder Room	5.5
Seat Position	Range of Adjustment	3
Seat Compatibility to Sam Brown	Comfort, Seatbelt Interference	5
Seat to Controls	Steering Wheel, Pedals, Dashboard	4
Headrest Position: With Hat/Helmet	Adequate	7
Headrest Position: Without Hat/ Helmet	Adequate	7
Headroom	Adequate	8
Legroom	Adequate	7.5
Seatbelt	Ease of Hook-Up/Release	5.5
Shoulder Strap	Interference with duty gear	6.5

INSTRUMENT PANEL	CONSIDERATIONS	RATING
Instrument Placement	Ease of Viewing, Are They Obstructed by the Steering Wheel or Other Components	7
Instrument Visibility	Can You See Them	7
Instrument Legibility	Can You Read Them	7

CONTROLS	CONSIDERATIONS	RATING
Steering Wheel	Size, Position	7
Shift Lever	Accessibility, Indicator Visibility	7
Knobs & Switches	Location, Visibility, Markings, Arrangement	7
Pedals	Location	7
Pedals	Size	7
Pedals	Spacing (Do you hit more than one pedal with boots on?)	7
Parking Brake	Location	8
Parking Brake	Method of Release.	8

MIRRORS	CONSIDERATIONS	RATING
Rearview Mirror	Placement	7.5
Rearview Mirror	Size	8
Rearview Mirror	Ease of Adjustment	7.5
Rearview Mirror	Distortion	7.5
Driver Side Mirror	Placement	7
Driver Side Mirror	Size	7
Driver Side Mirror	Ease of Adjustment	7
Driver Side Mirror	Distortion	7
Passenger Side Mirror	Placement	7
Passenger Side Mirror	Size	7
Passenger Side Mirror	Ease of Adjustment	7
Passenger Side Mirror	Distortion	7

DOORS	CONSIDERATIONS	RATING
Front Door	Ease of Ingress/Egress	6.5
Rear Door	Ease of Ingress/Egress	6.5
Window & Door Handles	Accessibility, Ease of Operation	6.5

REAR SEAT	CONSIDERATIONS	RATING
Seat Comfort	Overall Seat Comfort, Hip/Shoulder Room	5.5
Headroom	Adequate	8
Legroom	Adequate	7
Seatbelt	Ease of Hook-Up/Release	5.5

TRUNK	CONSIDERATIONS	RATING
Lid	Ease of Opening	N/A
Lid	Size of Opening	N/A
Compartment	Ease of Loading/Unloading	N/A

SLALOM	CONSIDERATIONS	RATING
Overall Backing Visibility	Ceiling Height, Dash Height, Pillar Placement, Windshield Size & Distortion	7

PARALLEL PARK - LEVEL	CONSIDERATIONS	RATING
Overall Backing Visibility	Ceiling Height, Dash Height, Pillar Placement, Windshield Size & Distortion	6

PARALLEL PARK – INCLINE	CONSIDERATIONS	RATING
Overall Backing Visibility	Ceiling Height, Dash Height, Pillar Placement, Windshield Size & Distortion	6

PARALLEL PARK- DECLINE	CONSIDERATIONS	RATING
Overall Backing Visibility	Ceiling Height, Dash Height, Pillar Placement, Windshield Size & Distortion	6

REAR 3-POINT TURN	CONSIDERATIONS	RATING
Overall Backing Visibility	Ceiling Height, Dash Height, Pillar Placement, Windshield Size & Distortion	6

ERGONOMICS EVALUATION

2023 CHEVROLET SILVERADO PPV Z7X 4WD

VISIBILTY	CONSIDERATION	RATING
Overall Forward Visibility	Ceiling Height, Dash Height, Pillar Placement, Windshield Size & Distortion	7

VISIBILITY	RATING USING MIRRORS	RATING NOT USING MIRRORS
3 o'clock Position	3	7
4 o'clock Position	3	7
5 o'clock Position	5	5.5
6 o'clock Position	7	7
7 o'clock Position	6	5.5
8 o'clock Position	5	6.5
9 o'clock Position	3	7

FRONT SEAT	CONSIDERATIONS	RATING
Seat Comfort	Overall Seat Comfort, Hip/Shoulder Room	7
Seat Position	Range of Adjustment	6
Seat Compatibility to Sam Brown	Comfort, Seatbelt Interference	5.5
Seat to Controls	Steering Wheel, Pedals, Dashboard	6
Headrest Position: With Hat/Helmet	Adequate	6.5
Headrest Position: Without Hat/ Helmet	Adequate	6.5
Headroom	Adequate	8
Legroom	Adequate	7.5
Seatbelt	Ease of Hook-Up/Release	4.5
Shoulder Strap	Interference with duty gear	6

INSTRUMENT PANEL	CONSIDERATIONS	RATING
Instrument Placement	Ease of Viewing, Are They Obstructed by the Steering Wheel or Other Components	7
Instrument Visibility	Can You See Them	7
Instrument Legibility	Can You Read Them	7

CONTROLS	CONSIDERATIONS	RATING
Steering Wheel	Size, Position	7
Shift Lever	Accessibility, Indicator Visibility	7
Knobs & Switches	Location, Visibility, Markings, Arrangement	7
Pedals	Location	5.5
Pedals	Size	6.5
Pedals	Spacing (Do you hit more than one pedal with boots on?)	6.5
Parking Brake	Location	7
Parking Brake	Method of Release.	7

MIRRORS	CONSIDERATIONS	RATING
Rearview Mirror	Placement	7
Rearview Mirror	Size	7
Rearview Mirror	Ease of Adjustment	7
Rearview Mirror	Distortion	7
Driver Side Mirror	Placement	7
Driver Side Mirror	Size	7
Driver Side Mirror	Ease of Adjustment	7
Driver Side Mirror	Distortion	7
Passenger Side Mirror	Placement	7
Passenger Side Mirror	Size	7
Passenger Side Mirror	Ease of Adjustment	7
Passenger Side Mirror	Distortion	7

DOORS	CONSIDERATIONS	RATING
Front Door	Ease of Ingress/Egress	7
Rear Door	Ease of Ingress/Egress	7
Window & Door Handles	Accessibility, Ease of Operation	7

REAR SEAT	CONSIDERATIONS	RATING
Seat Comfort	Overall Seat Comfort, Hip/Shoulder Room	6.5
Headroom	Adequate	8
Legroom	Adequate	7.5
Seatbelt	Ease of Hook-Up/Release	6

TRUNK	CONSIDERATIONS	RATING
Lid	Ease of Opening	7
Lid	Size of Opening	7
Compartment	Ease of Loading/Unloading	7

SLALOM	CONSIDERATIONS	RATING
Overall Backing Visibility	Ceiling Height, Dash Height, Pillar Placement, Windshield Size & Distortion	6.5

PARALLEL PARK - LEVEL	CONSIDERATIONS	RATING
Overall Backing Visibility	Ceiling Height, Dash Height, Pillar Placement, Windshield Size & Distortion	6.5

PARALLEL PARK – INCLINE	CONSIDERATIONS	RATING
Overall Backing Visibility	Ceiling Height, Dash Height, Pillar Placement, Windshield Size & Distortion	6.5

PARALLEL PARK- DECLINE	CONSIDERATIONS	RATING
Overall Backing Visibility	Ceiling Height, Dash Height, Pillar Placement, Windshield Size & Distortion	6.5

REAR 3-POINT TURN	CONSIDERATIONS	RATING
Overall Backing Visibility	Ceiling Height, Dash Height, Pillar Placement, Windshield Size & Distortion	6.5

ERGONOMICS EVALUATION

2023 FORD MUSTANG MACH-E AWD

VISIBILTY	CONSIDERATION	RATING
Overall Forward Visibility	Ceiling Height, Dash Height, Pillar Placement, Windshield Size & Distortion	7.5

VISIBILITY	RATING USING MIRRORS	RATING NOT USING MIRRORS
3 o'clock Position	N/A	7
4 o'clock Position	N/A	5
5 o'clock Position	N/A	5
6 o'clock Position	6	6
7 o'clock Position	N/A	5
8 o'clock Position	N/A	5
9 o'clock Position	N/A	6.5

FRONT SEAT	CONSIDERATIONS	RATING
Seat Comfort	Overall Seat Comfort, Hip/Shoulder Room	3
Seat Position	Range of Adjustment	7
Seat Compatibility to Sam Brown	Comfort, Seatbelt Interference	3
Seat to Controls	Steering Wheel, Pedals, Dashboard	7.5
Headrest Position: With Hat/Helmet	Adequate	7
Headrest Position: Without Hat/ Helmet	Adequate	7.5
Headroom	Adequate	7
Legroom	Adequate	7.5
Seatbelt	Ease of Hook-Up/Release	4.5
Shoulder Strap	Interference with duty gear	5

INSTRUMENT PANEL	CONSIDERATIONS	RATING
Instrument Placement	Ease of Viewing, Are They Obstructed by the Steering Wheel or Other Components	8
Instrument Visibility	Can You See Them	8
Instrument Legibility	Can You Read Them	8

CONTROLS	CONSIDERATIONS	RATING
Steering Wheel	Size, Position	8
Shift Lever	Accessibility, Indicator Visibility	8
Knobs & Switches	Location, Visibility, Markings, Arrangement	8
Pedals	Location	8
Pedals	Size	8
Pedals	Spacing (Do you hit more than one pedal with boots on?)	8
Parking Brake	Location	8
Parking Brake	Method of Release.	8

MIRRORS	CONSIDERATIONS	RATING
Rearview Mirror	Placement	8
Rearview Mirror	Size	8
Rearview Mirror	Ease of Adjustment	8
Rearview Mirror	Distortion	8
Driver Side Mirror	Placement	8
Driver Side Mirror	Size	8
Driver Side Mirror	Ease of Adjustment	8
Driver Side Mirror	Distortion	8
Passenger Side Mirror	Placement	8
Passenger Side Mirror	Size	8
Passenger Side Mirror	Ease of Adjustment	8
Passenger Side Mirror	Distortion	8

DOORS	CONSIDERATIONS	RATING
Front Door	Ease of Ingress/Egress	7
Rear Door	Ease of Ingress/Egress	8
Window & Door Handles	Accessibility, Ease of Operation	7.5

REAR SEAT	CONSIDERATIONS	RATING
Seat Comfort	Overall Seat Comfort, Hip/Shoulder Room	6
Headroom	Adequate	6
Legroom	Adequate	6
Seatbelt	Ease of Hook-Up/Release	6

TRUNK	CONSIDERATIONS	RATING
Lid	Ease of Opening	7
Lid	Size of Opening	7
Compartment	Ease of Loading/Unloading	6

SLALOM	CONSIDERATIONS	RATING
Overall Backing Visibility	Ceiling Height, Dash Height, Pillar Placement, Windshield Size & Distortion	6.5

PARALLEL PARK - LEVEL	CONSIDERATIONS	RATING
Overall Backing Visibility	Ceiling Height, Dash Height, Pillar Placement, Windshield Size & Distortion	6.5

PARALLEL PARK – INCLINE	CONSIDERATIONS	RATING
Overall Backing Visibility	Ceiling Height, Dash Height, Pillar Placement, Windshield Size & Distortion	6.5

PARALLEL PARK- DECLINE	CONSIDERATIONS	RATING
Overall Backing Visibility	Ceiling Height, Dash Height, Pillar Placement, Windshield Size & Distortion	6.5

REAR 3-POINT TURN	CONSIDERATIONS	RATING
Overall Backing Visibility	Ceiling Height, Dash Height, Pillar Placement, Windshield Size & Distortion	6.5

FUEL EFFICIENCY RESULTS

VEHICLE	AVERAGE MPG
2021 Chevrolet Tahoe 5.3L PPV 2WD **	14.3 MPG
2021 Chevrolet Tahoe 5.3L PPV 4WD **	12.9 MPG
2023 Chevrolet Silverado PPV Z71 4WD	18 MPH
2023 Chevrolet Silverado PPV Z7X 4WD	18 MPG
2021 Dodge Charger 3.6L 3.08 AWD **	22.5 MPG
2021 Dodge Charger 5.7L 2.62 RWD **	16.1 MPG
2021 Dodge Durango 3.6L 3.45 AWD **	17.7 MPG
2021 Dodge Durango 5.7L 3.09 AWD **	15.3.MPG
2021 Ford P.I. Utility 3.3L AWD **	18 MPG
2021 Ford P.I. Utility 3.0L AWD EcoBoost **	15.7 MPG
2021 Ford P.I. Utility Hybrid AWD **	20 MPG
2021 Ford F150 Police Responder 3.5L 4WD **	Not tested
2023 Ford Mustang Mach-E AWD	84 EPA MPGe

** Due to no distinctive changes from the previous model ,these vehicles results are from the 2021 test.**

Los Angeles County
Sheriff's Department
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