Cummins Inc.	Basic Engine Model:	Curve Number:	*G-DRIVE*
Columbus, Indiana 47202-3005	**QSB7-G5 NR3**	**FR-96530**	**QSB**
EXHAUST EMISSIONS DATA SHEET	Engine Critical Parts List: **CPL: 5359**	Date: **12Dec18**	**1**

Displacement : **6.69** litre (**408** in^3)	Bore : **107** mm (**4.21** in.) Stroke : **124** mm (**4.88** in.)
No. of Cylinders : **6**	Aspiration : **Turbocharged and Air to Air Aftercooled**

Engine Speed	Standby Power		Prime Power		Continuous Power	
rpm	kWm	hp	kWm	hp	kWm	hp
1500	213	285	182	244	152	204
1800	242	324	208	279	164	220

US EPA/CARB (1500/1800 rpm)

This engine, tested in accordance with 40 CFR 89, is in compliance with the US EPA Nonroad Tier 3 regulations:

	Component	g/hp-hr	g/kW-hr
NO_x + HC	(Oxides of Nitrogen + Hydrocarbons)	3.0	4.0
CO	(Carbon Monoxide)	2.6	3.5
PM	(Particulate Matter)	0.15	0.20

Test Methods and Conditions:

Tests to demonstrate compliance with the regulated levels shown above were conducted per 40CFR89 (ref. ISO8178-1) and weighted at load points prescribed in Subpart E, Appendix A for Constant Speed Engines.
(ref.ISO8178-4,D2).

Fuel Specifications:
40-46 Cetane Number, 0.03 - 0.05 Wt.% Sulfur; Reference ISO8178-5, 40CFR86, 1313-98 Type 2-D and ASTM D975 No. 2 D.

Reference:
25°C (77°F) Air Inlet Temperature, 40°C (104°F) Fuel Inlet Temperature, 100 kPa (29.53 in Hg) Barometric Pressure; 10.7 g/kg (75 grains H2O/lb) of dry air Humidity (required for NOx correction): Intake Restriction set to maximum allowable limit for clean filter; Exhaust Back Pressure set to maximum allowable limit.

TA Luft (1500/1800 rpm)

Engine Emissions at prime rating corrected to 5% O_2 content, are in compliance with the following TA Luft Standards:

NOx : 2000 mg/nm^3 **NMHC : 150 mg/nm^3**
CO : 650 mg/nm^3 **Particulates : 130 mg/nm^3**

Test Methods and Conditions:

Steady-State emissions recorded per ISO8178-1 during operation at rated engine speed (+/-2%) and stated constant load (+/-2%) with engine temperatures, pressures and emission rates stabilized.

Fuel Specifications:
40-48 Cetane Number, 0.03 -0.05 Wt.% Sulfur; Reference ISO8178-5, 40CFR86, 1313--98 Type 2-D and ASTM D975 No. 2-D.

Reference Conditions:
25°C (77°F) Air Inlet Temperature, 40°C (104°F) Fuel Inlet Temperature, 100 kPa (29.53 in Hg) Barometric Pressure; 10.7 g/kg (75 grains H2O/lb) of dry air Humidity (required for NOx correction): Intake Restriction set to maximum allowable limit for clean filter; Exhaust Back Pressure set to maximum allowable limit.
Data was taken from a single engine test according to the test methods, fuel specification and reference conditions stated above and is subject to engine-to-engine variability. Test conducted with alternate test methods, instrumentation, fuel or reference conditions can yield different results.

EU NRMM (1500/1800 rpm)

This engine, tested in accordance with directive 97/68/EC, is in compliance with the EU NRMM Stage III A regulations.

	Component	g/hp-hr	g/kW-hr
NO_x + HC	(Oxides of Nitrogen + Hydrocarbons)	3.0	4.0
CO	(Carbon Monoxide)	2.6	3.5
PM	(Particulate Matter)	0.15	0.20

Test Methods and Conditions:

Tests to demonstrate compliance with the regulated levels shown above were conducted per 97/68/EC (ref. ISO8178-1) and weighted at load points prescribed in 97/68/EC Annex 3, "test procedures". (ref.ISO8178-4,D2).

Fuel Specifications:
52-54 Cetane Number, 0.03 Max. Wt.% Sulfur; as referenced by directive 97/68/EC.

Reference:
25°C (77°F) Air Inlet Temperature, 40°C (104°F) Fuel Inlet Temperature, 100 kPa (29.53 in Hg) Barometric Pressure; 10.7 g/kg (75 grains H2O/lb) of dry air Humidity (required for NOx correction): Intake Restriction set to maximum allowable limit for clean filter; Exhaust Back Pressure set to maximum allowable limit.