



Exhaust Emission Data Sheet

880DFHD

50 Hz Diesel Generator Set

Engine Information:

Model:	Cummins Inc. QST30-G4	Bore:	5.51 in. (140 mm)
Type:	4 Cycle, 50°V, 12 Cylinder Diesel	Stroke:	6.50 in. (165 mm)
Aspiration:	Turbocharged and Low Temperature Aftercooled	Displacement:	1860 cu. in. (30.5 liters)
Compression Ratio:	14:1		
Emission Control Device:	Step Timing Control (STC) and Separate Circuit Low Temperature Aftercooling		

	<u>Standby</u>	<u>Prime</u>
<u>PERFORMANCE DATA</u>		
BHP @ 1500 RPM (50 Hz)	1300	1180
Fuel Consumption (gal/Hr)	59.1	53.2
Exhaust Gas Flow (CFM)	6310	5820
Exhaust Gas Temperature (°F)	1070	1050
<u>EXHAUST EMISSION DATA</u>		
HC (Total Unburned Hydrocarbons)	0.30	0.35
NOx (Oxides of Nitrogen as NO2)	6.70	6.60
CO (carbon Monoxide)	1.50	1.20
PM (Particular Matter)	0.10	0.11
SO2 (Sulfur Dioxide)	0.13	0.13
All values are Grams per HP-Hour		

TEST CONDITIONS

Data was recorded during steady-state rated engine speed (± 25 RPM) with full load ($\pm 2\%$). Pressures, temperatures, and emission rates were stabilized.

Fuel Specification:	ASTM D975 No. 2-D diesel fuel with 0.03-0.05% sulfur content (by weight), and 40-48 cetane number.
Fuel Temperature:	99 \pm 9 °F (at fuel pump inlet)
Intake Air Temperature:	77 \pm 9 °F
Barometric Pressure:	29.6 \pm 1 in. Hg
Humidity:	NOx measurement corrected to 75 grains H2O/lb dry air
Reference Standard:	ISO 8178

The NOx, HC, CO and PM emission data tabulated here were taken from a single engine under the test conditions shown above. Data for the other components are estimated. These data are subjected to instrumentation and engine-to-engine variability. Field emission test data are not guaranteed to these levels. Actual field test results may vary due to test site conditions, installation, fuel specification, test procedures and instrumentation. Engine operation with excessive air intake or exhaust restriction beyond published maximum limits, or with improper maintenance, may result in elevated emission levels.