

**SAE Power Certification
Form J2723 B**

Manufacturer Name	GM Powertrain
Address:	30003 Van Dyke Avenue
City:	Warren
State:	Michigan
Country:	United States
Postal Code	48090-9060
Engine:	LGD Federal Bin-4
Type of Certification:	Family Of Engines
Model Year & Vehicle	2009 LGD
Application(s).	Chevrolet Impala
Test Standard:	J1349:Aug2004
Test Location:	WE04North
Engine Serial Number:	P9Z9G812AJ
Test/Run Number:	1105-029P9Z9G812AJ
	ISO power chart
Test Date:	12/10/07

RESULTS:

The engine described herein was tested on 12/10/07 according to the requirements prescribed in J1349:Aug2004, Engine Power Test Code in the presence of a qualified SAE Witness, and was determined to produce the following results:

Parameter	Rated Speed	Rated Output	Measured Speed	Measured Output	% Difference
Power (hp)	5700	224	5700	221.8	1.0%
Torque (lb-ft)	3200	235	3200	233.4	0.7%

SAE Certified Witness: *R. R. R. R.*
Date: *11-Apr-2008*

APPROVALS:

GM Powertrain declares that the engine tested for this report is representative of engines in series production. GM Powertrain further declares that the performance of engines in series production will characteristically fall within 2% of the rated torque and power values indicated on this report.

Name: *George T. Stup*
Title: *Asst. Chief Engineer*
Date: *3-31-2008*

**SAE Power Certification
Form J2723 B**

Manufacturer Name:	GM Powertrain
Address:	30003 Van Dyke Avenue
City:	Warren
State:	Michigan
Country:	United States
Postal Code:	48090-9060
Engine:	3.9L LGD / LZ9
Type of Certification:	Family Of Engines
Model Year & Vehicle Application(s):	2009 Engine Test Data at Various Backpressures to Qualify Iso-Power/Iso-Torque Analytical Engine Model
Test Standard:	J1349:Aug2004
Test Location:	WE04South
Engine Serial Number:	P9Z9G812AJ
Test/Run Number:	1105-029P9Z9G812AJ /ISO power chart
Test Date:	12/10/2007

RESULTS:

The engine described herein was tested on 12/10/2007 according to the requirements prescribed in J1349:Aug2004, Engine Power Test Code in the presence of a qualified SAE Witness, and was determined to produce the following results:

Iso-Power / Iso-Torque Model Verified Using Following Witnessed Test Points:

Parameter	Exhaust Restriction @ Speed (Total Pressure)	Induction Restriction @ Speed (Total Pressure)	Measured Output	Measured Speed	Date Witnessed
Power	72 kPa @ 5700 rpm	3.83 @ 5700 rpm	224.8 hp	5700 rpm	12/10/2007
Torque	72 kPa @ 5700 rpm	3.83 @ 5700 rpm	234.6 ft-lbs	3200 rpm	12/10/2007
Power	60.8 kPa @ 5700 rpm	3.90 @ 5700 rpm	228.4 hp	5700 rpm	12/10/2007
Torque	60.8 kPa @ 5700 rpm	3.90 @ 5700 rpm	236 ft-lbs	3200 rpm	12/10/2007

SAE Certified Witness

Date

[Signature]
 11-Apr-2008

APPROVALS:

GM Powertrain declares that the engine tested for this report is representative of engines in series production. GM Powertrain further declares that the performance of engines in series production will characteristically fall within 2% of the rated torque and power values indicated on this report.

Name: *George F. [Signature]*
 Title: Asst. Chief Engineer
 Date: 3-31-2008