

2014 Chevrolet 4.3L EcoTec3 LV3 Tier 2 Fuel - Test Data Plots

SUGGESTED CITATION: 2014 Chevrolet 4.3L EcoTec3 LV3 Engine Tier 2 Fuel - Test Data Package. Version 2018-08. Ann Arbor, MI: US EPA, National Vehicle and Fuel Emissions Laboratory, National Center for Advanced Technology, 2018.

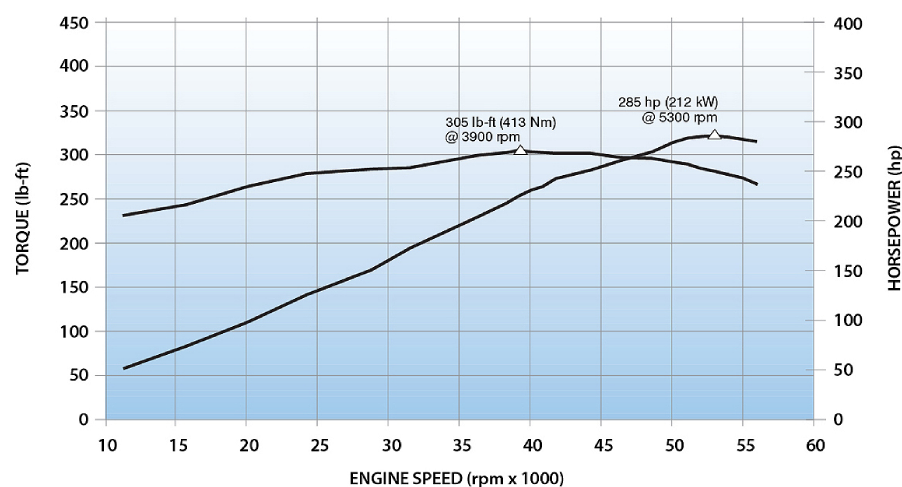
- - Dashed line indicates the maximum torque curve from published data
- Black dots indicate speed/load points at which steady state data was acquired
- ✗ Red Xs indicate speed/load points where data was not collected or did not meet quality standards

Note: In these contour plots, individual data points may be ignored or removed, using our best engineering judgment, to correct irregularities in the visual presentation of the contour lines; additional details are contained in the test report.

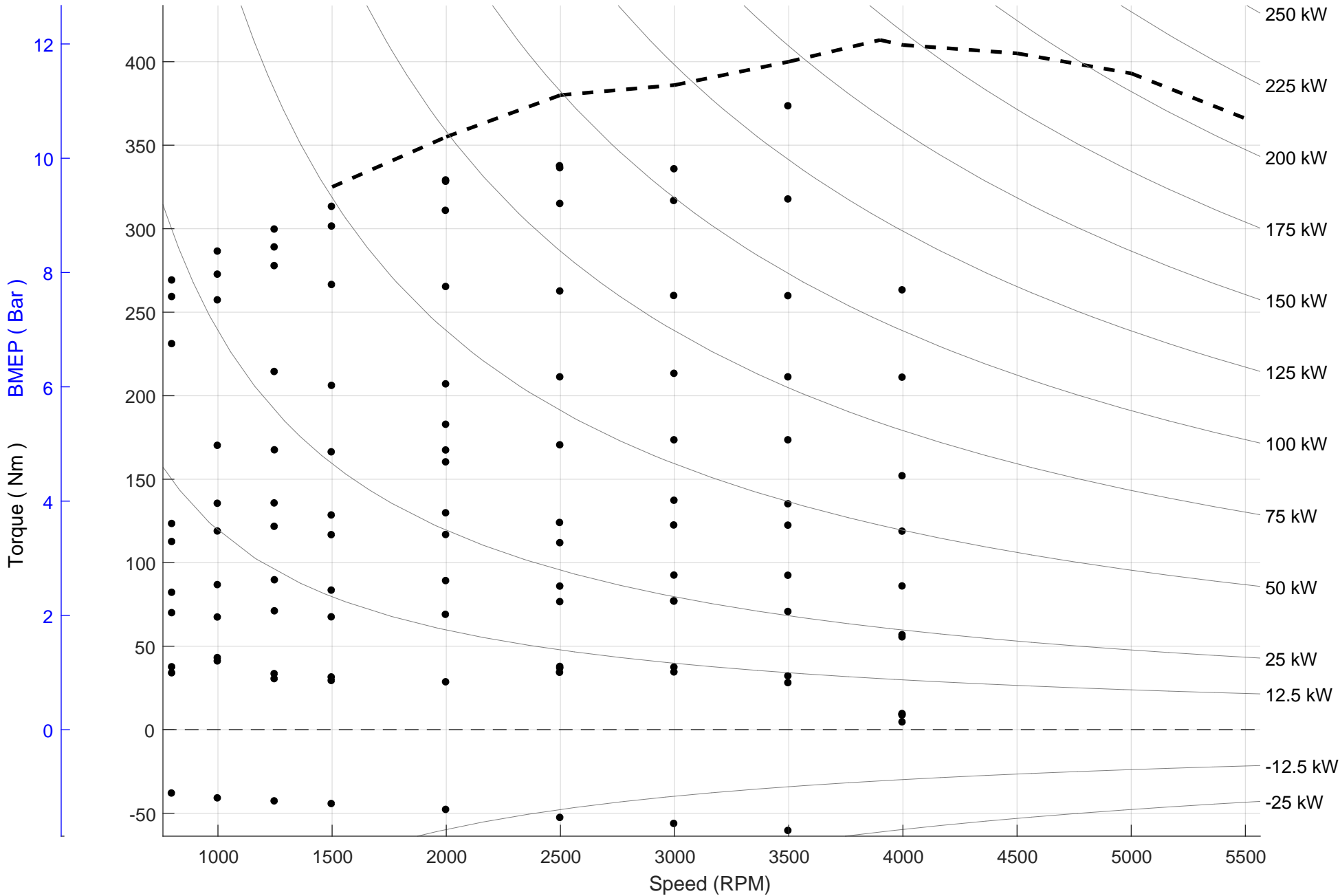
Published maximum torque data from:

[WOT Curve Source Data]

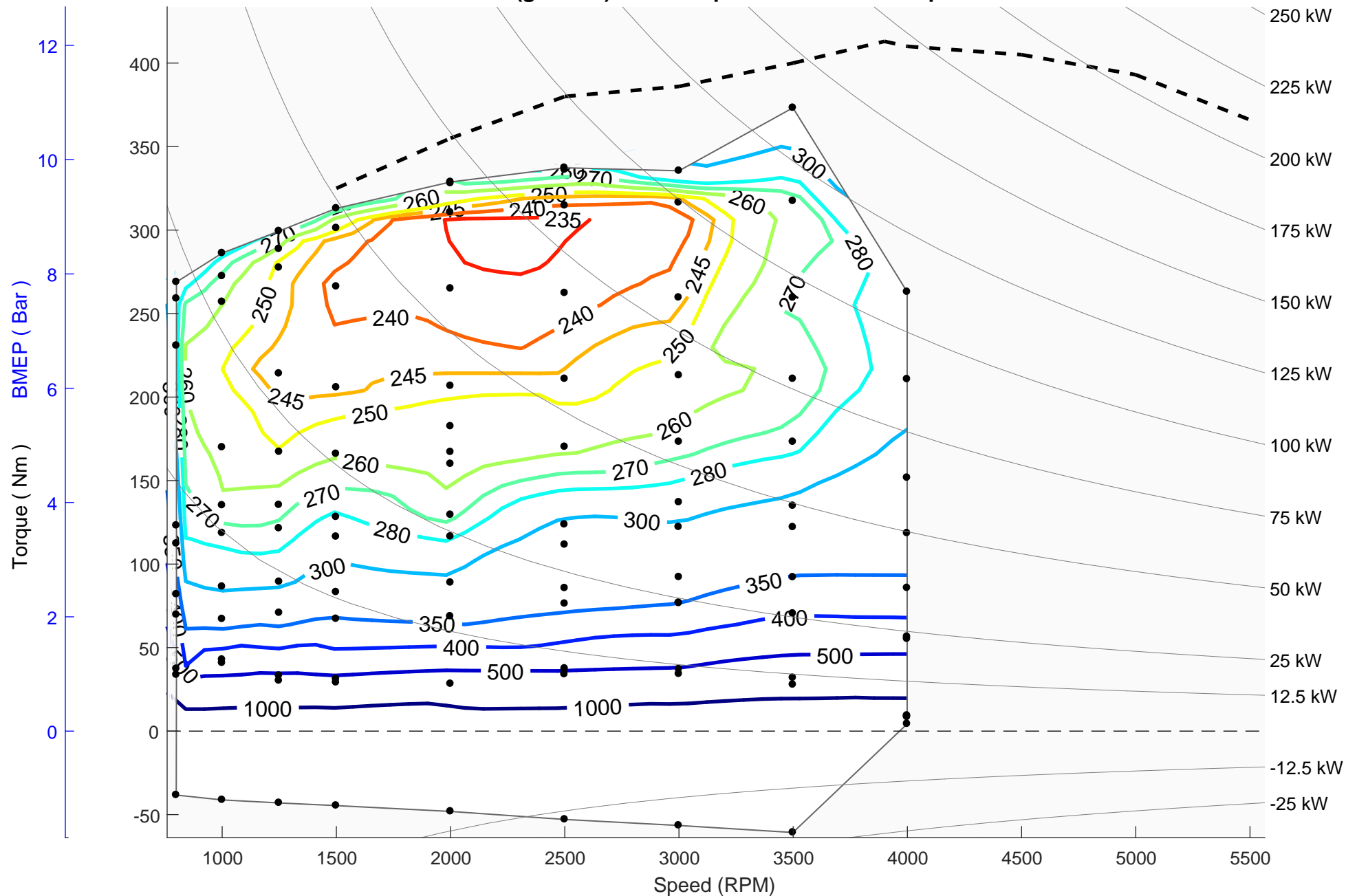
<http://media.gm.com/content/dam/Media/images/US/Vehicles/Chevrolet/Other/2014-silveradorelease/061813-sae-2014-silverado-torque-chart.jpg>
(2013-06-19)



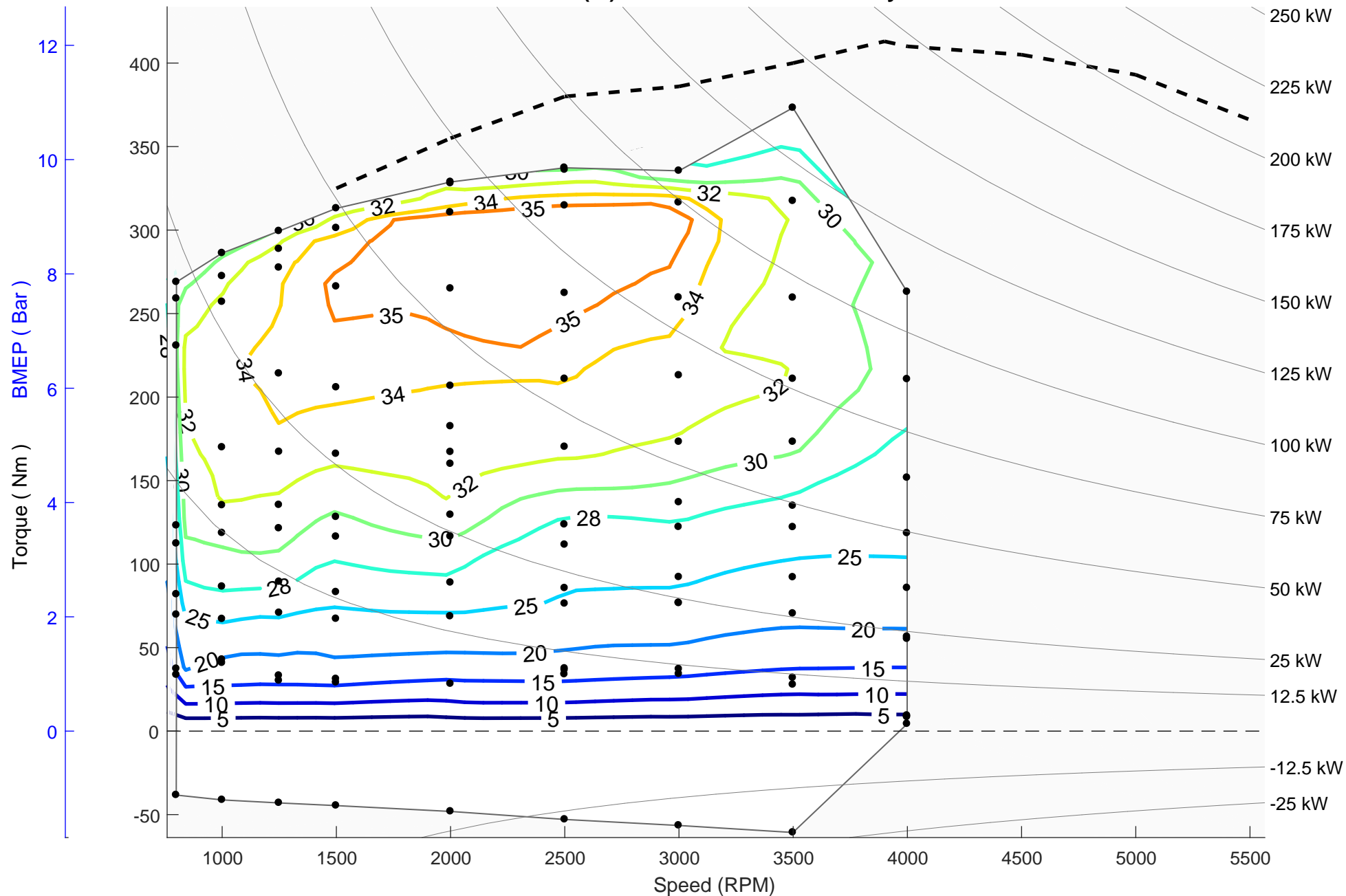
2014 Chevrolet 4.3L EcoTec3 LV3 Engine Tier 2 Fuel - Test Data Plots
Test Data Points



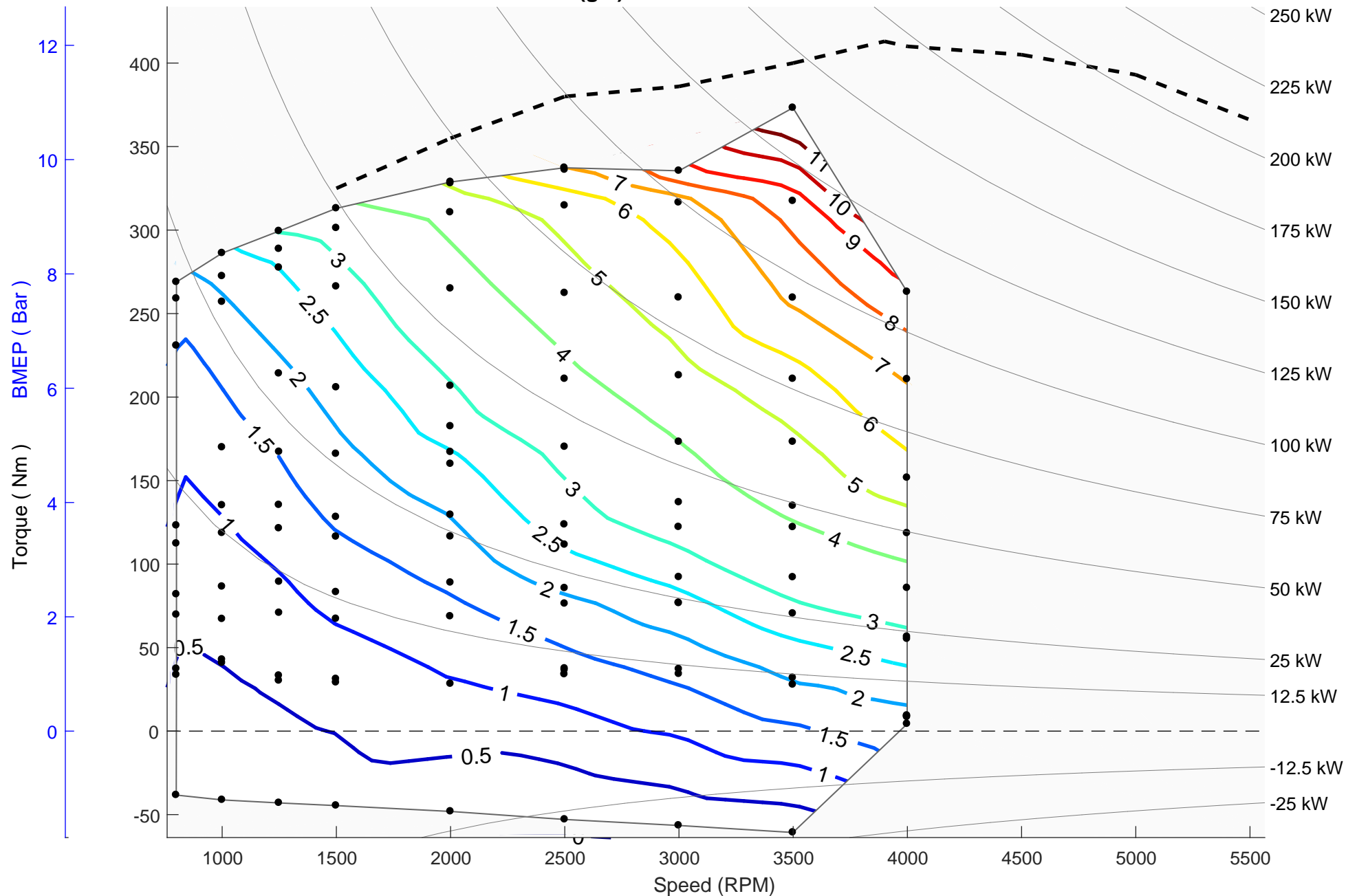
2014 Chevrolet 4.3L EcoTec3 LV3 Engine Tier 2 Fuel - Test Data Plots
Steady State - Cylinder Deactivation Disabled
BSFC (g/kW-hr) - Brake Specific Fuel Consumption



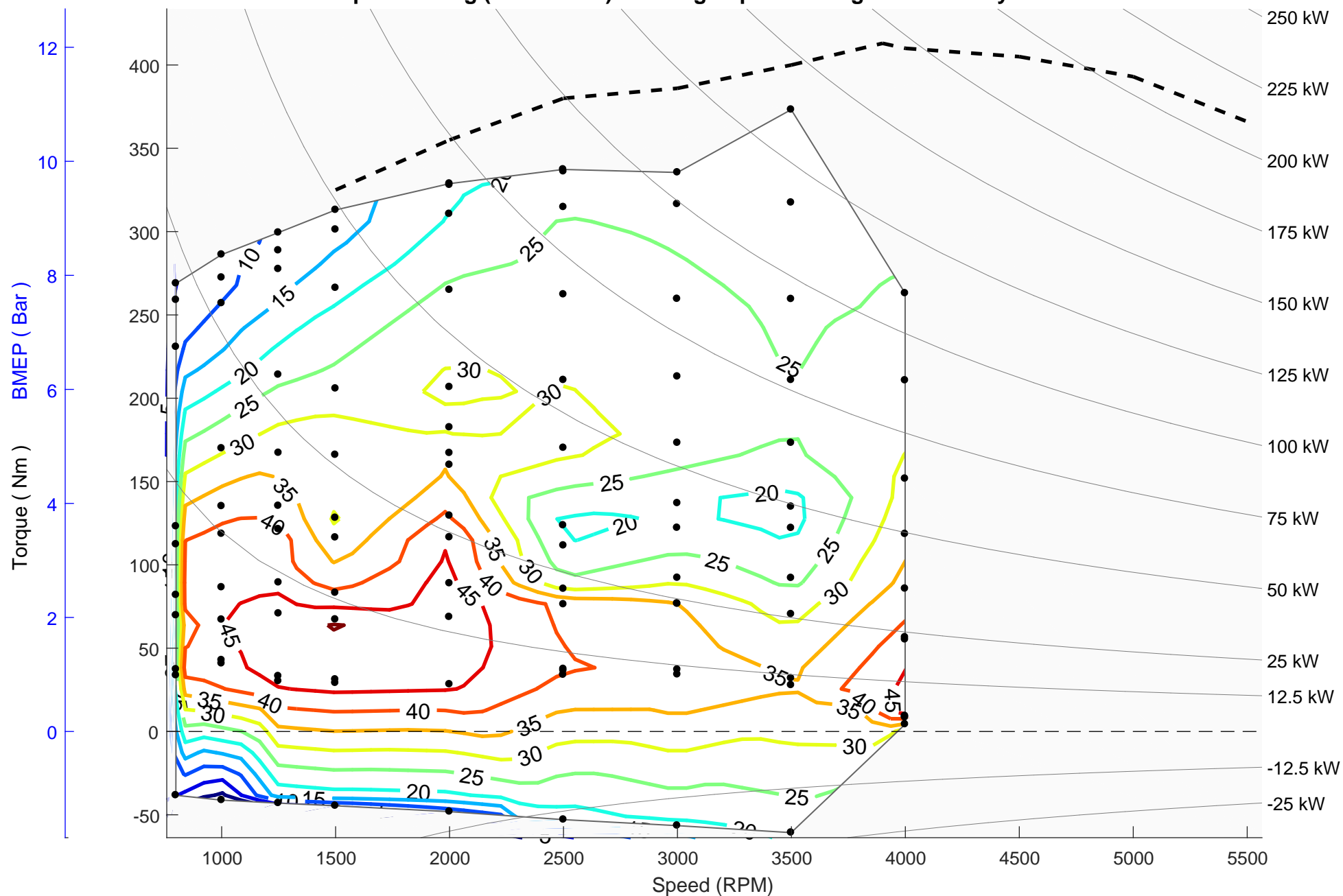
2014 Chevrolet 4.3L EcoTec3 LV3 Engine Tier 2 Fuel - Test Data Plots
Steady State - Cylinder Deactivation Disabled
BTE (%) - Brake Thermal Efficiency



2014 Chevrolet 4.3L EcoTec3 LV3 Engine Tier 2 Fuel - Test Data Plots
Steady State - Cylinder Deactivation Disabled
Fuel Meter Flow (g/s) - Fuel Flow Measured with Flow Meter

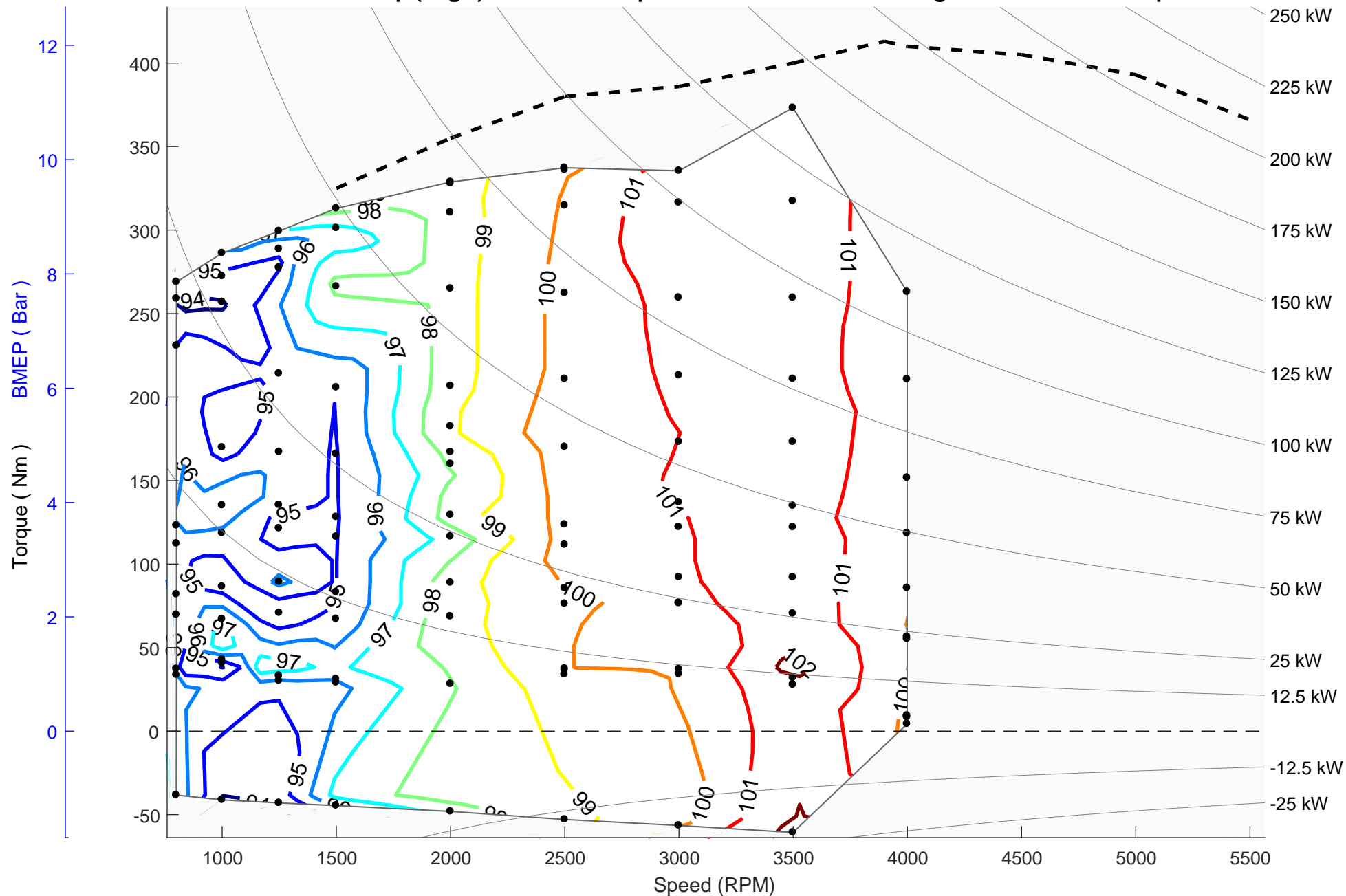


2014 Chevrolet 4.3L EcoTec3 LV3 Engine Tier 2 Fuel - Test Data Plots
Steady State - Cylinder Deactivation Disabled
Spark Timing (CAD BTDC) - Average Spark Timing Across all Cylinders*

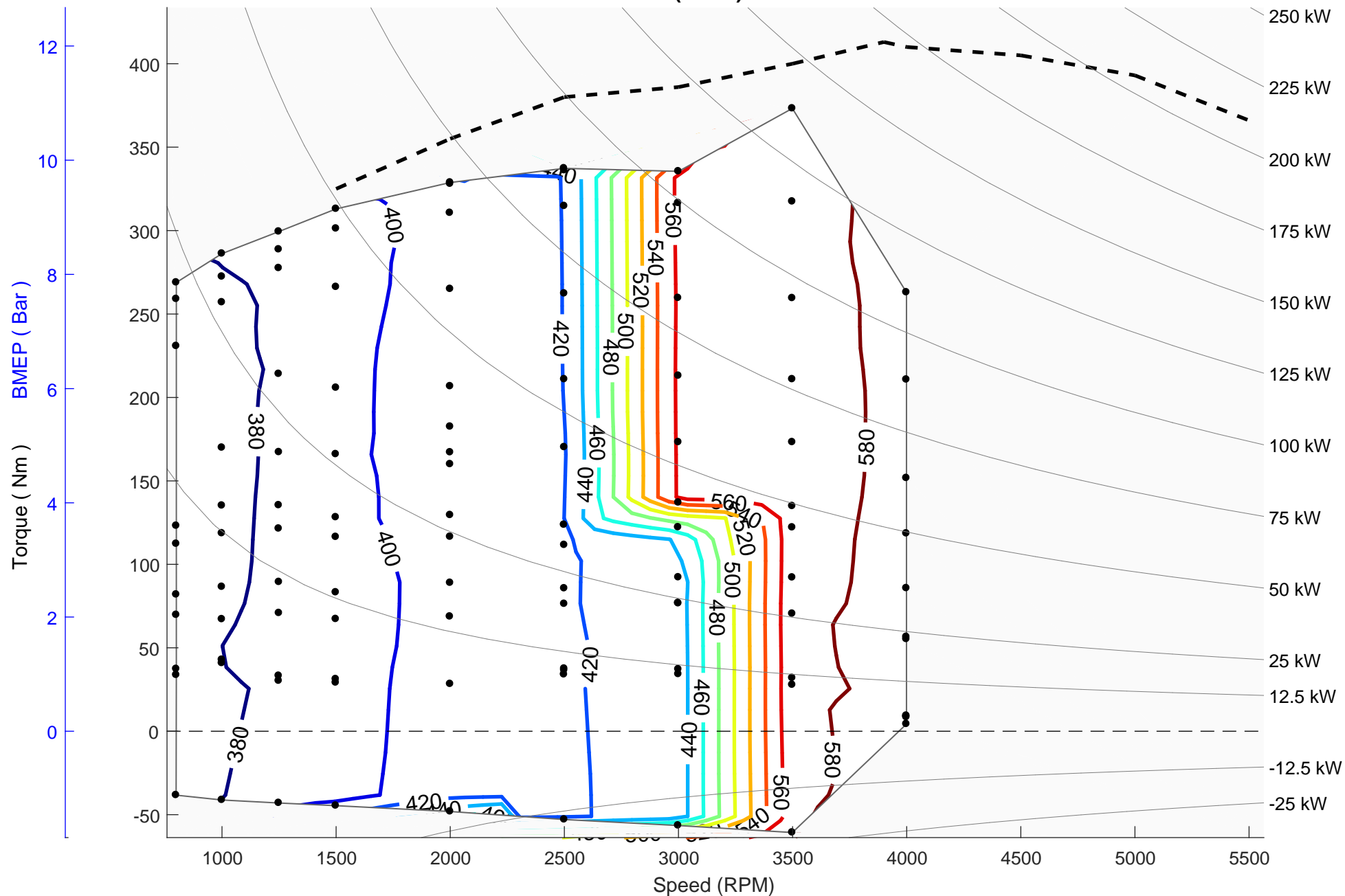


* Reference Only

2014 Chevrolet 4.3L EcoTec3 LV3 Engine Tier 2 Fuel - Test Data Plots
Steady State - Cylinder Deactivation Disabled
Coolant Temp (degC) - Coolant Temperature Measured in the Engine Heater Core Loop



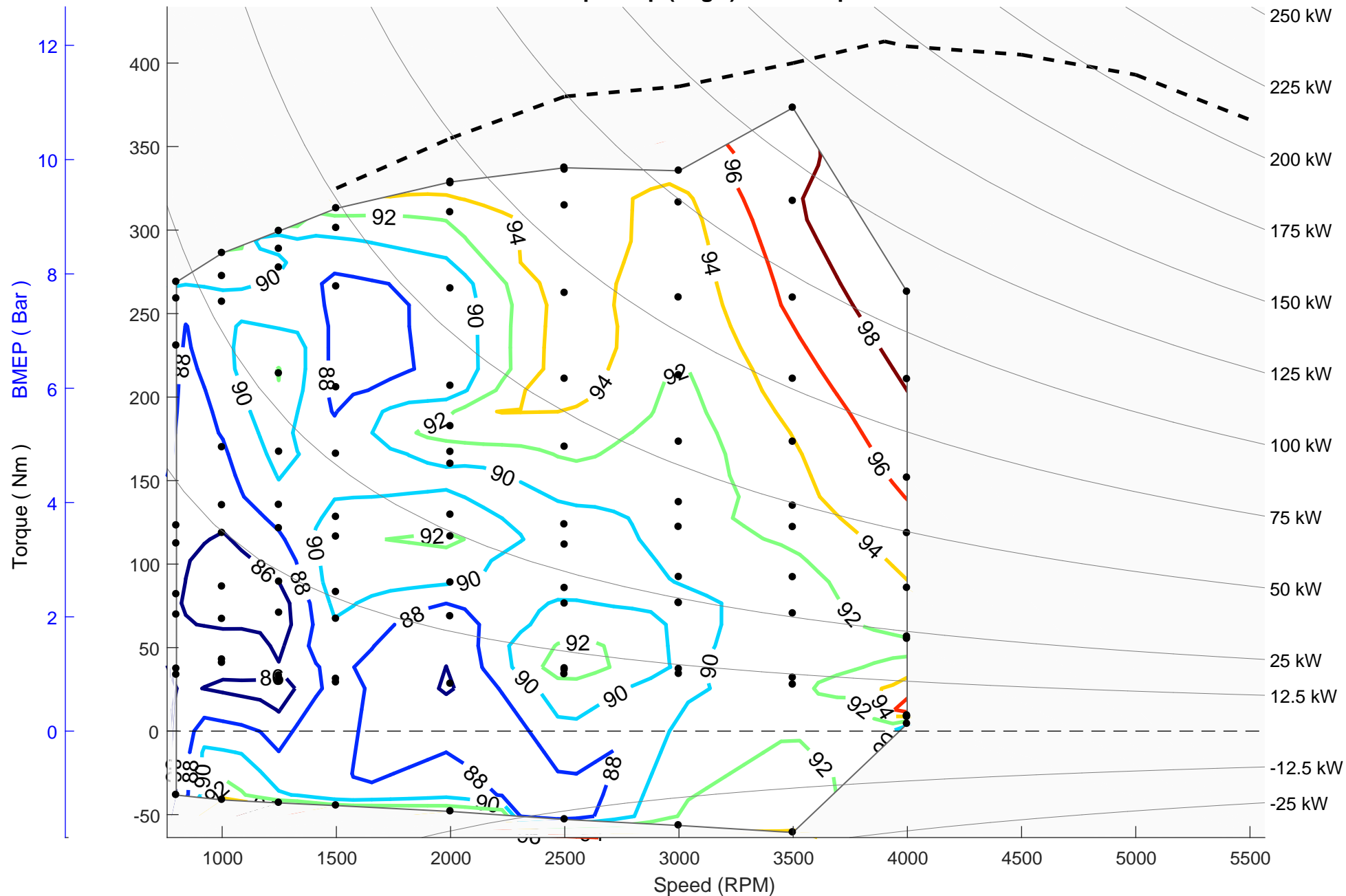
2014 Chevrolet 4.3L EcoTec3 LV3 Engine Tier 2 Fuel - Test Data Plots
Steady State - Cylinder Deactivation Disabled
Oil Pressure (kPaA) - Oil Pressure



2014 Chevrolet 4.3L EcoTec3 LV3 Engine Tier 2 Fuel - Test Data Plots

Steady State - Cylinder Deactivation Disabled

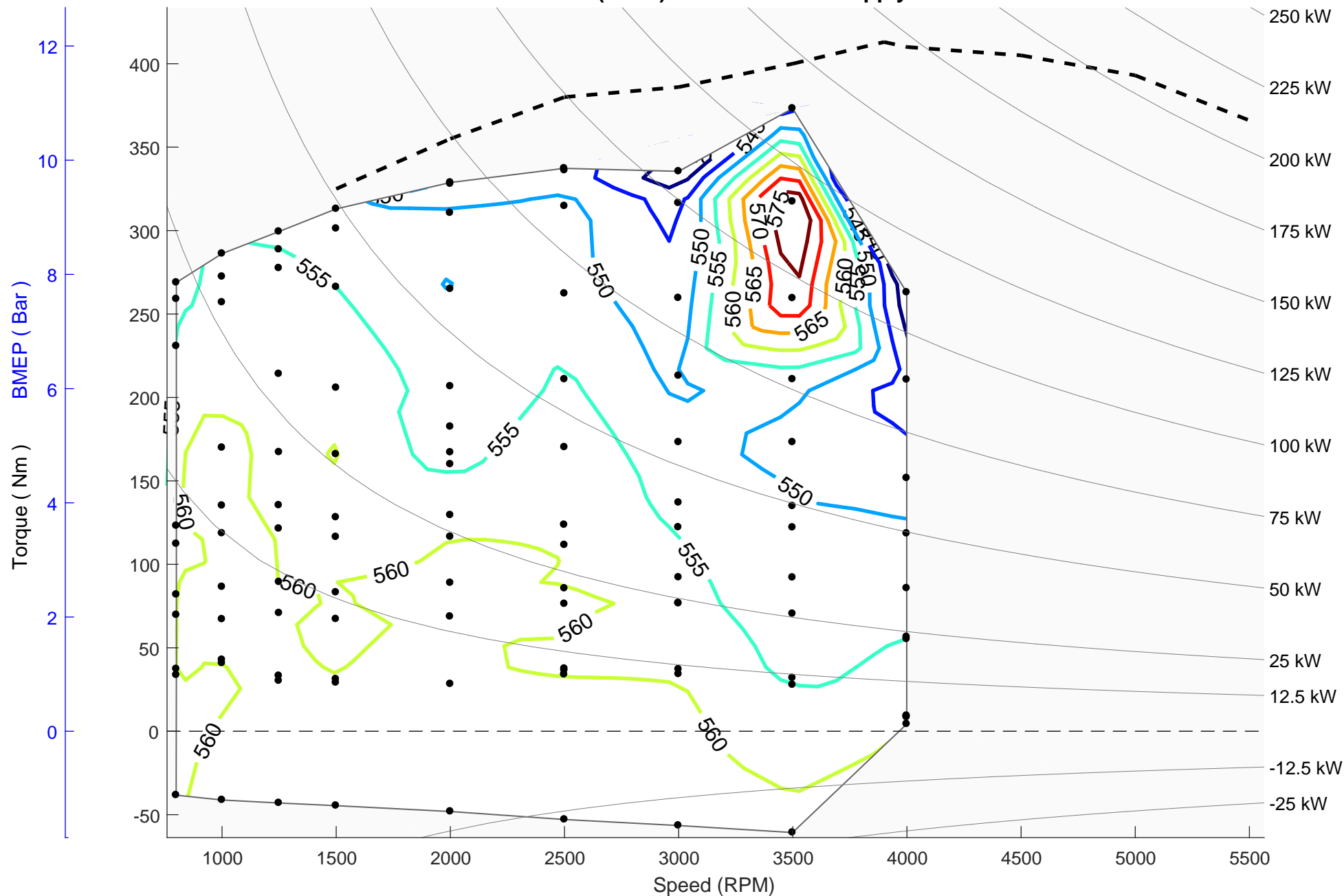
Oil Sump Temp (degC) - Oil Temperature



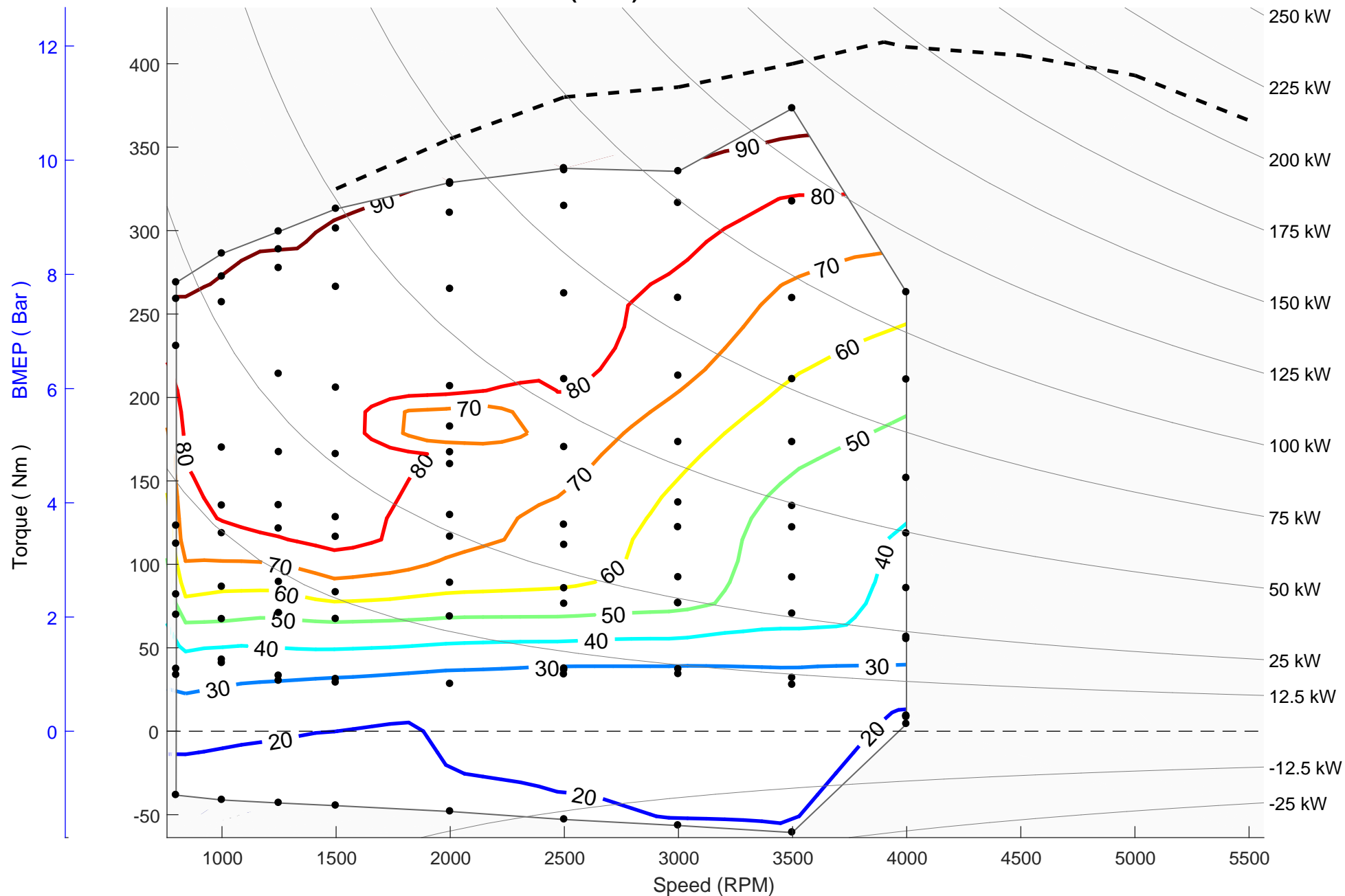
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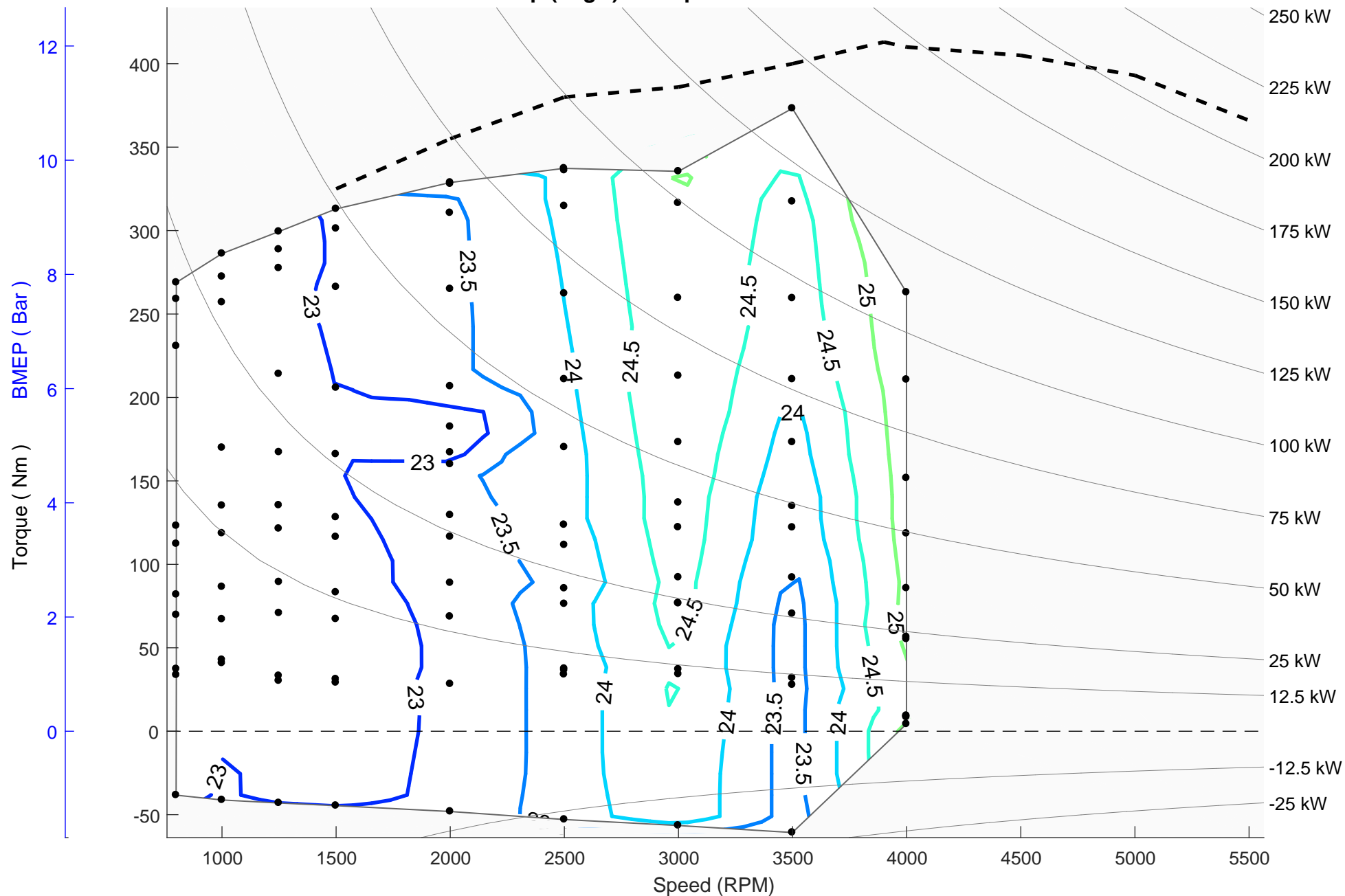
Steady State - Cylinder Deactivation Disabled

Fuel Feed Press (kPaA) - Test Cell Fuel Supply Pressure

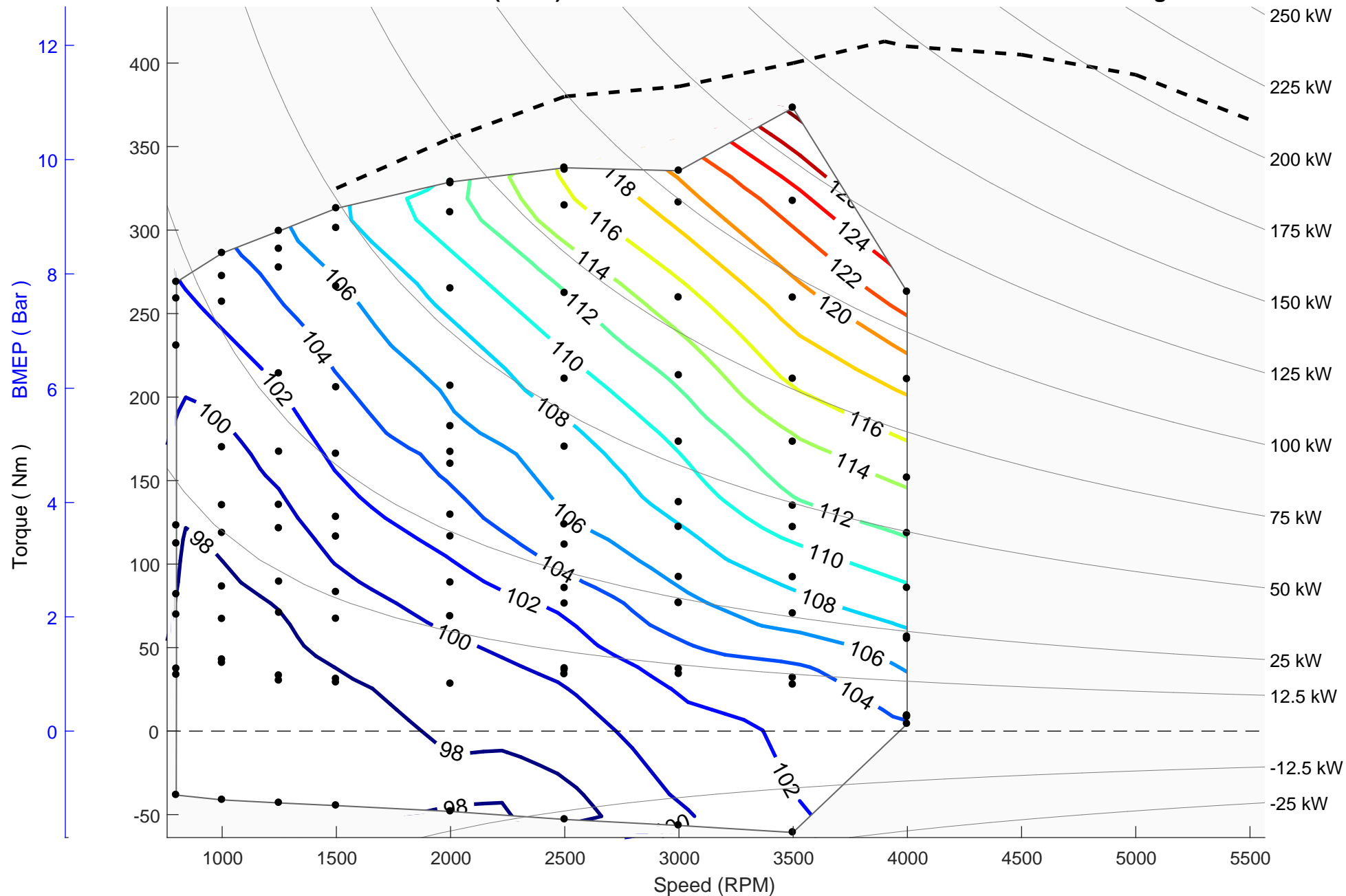


2014 Chevrolet 4.3L EcoTec3 LV3 Engine Tier 2 Fuel - Test Data Plots
Steady State - Cylinder Deactivation Disabled
Intake Manifold Press (kPaA) - Pressure Measured in the Intake Manifold

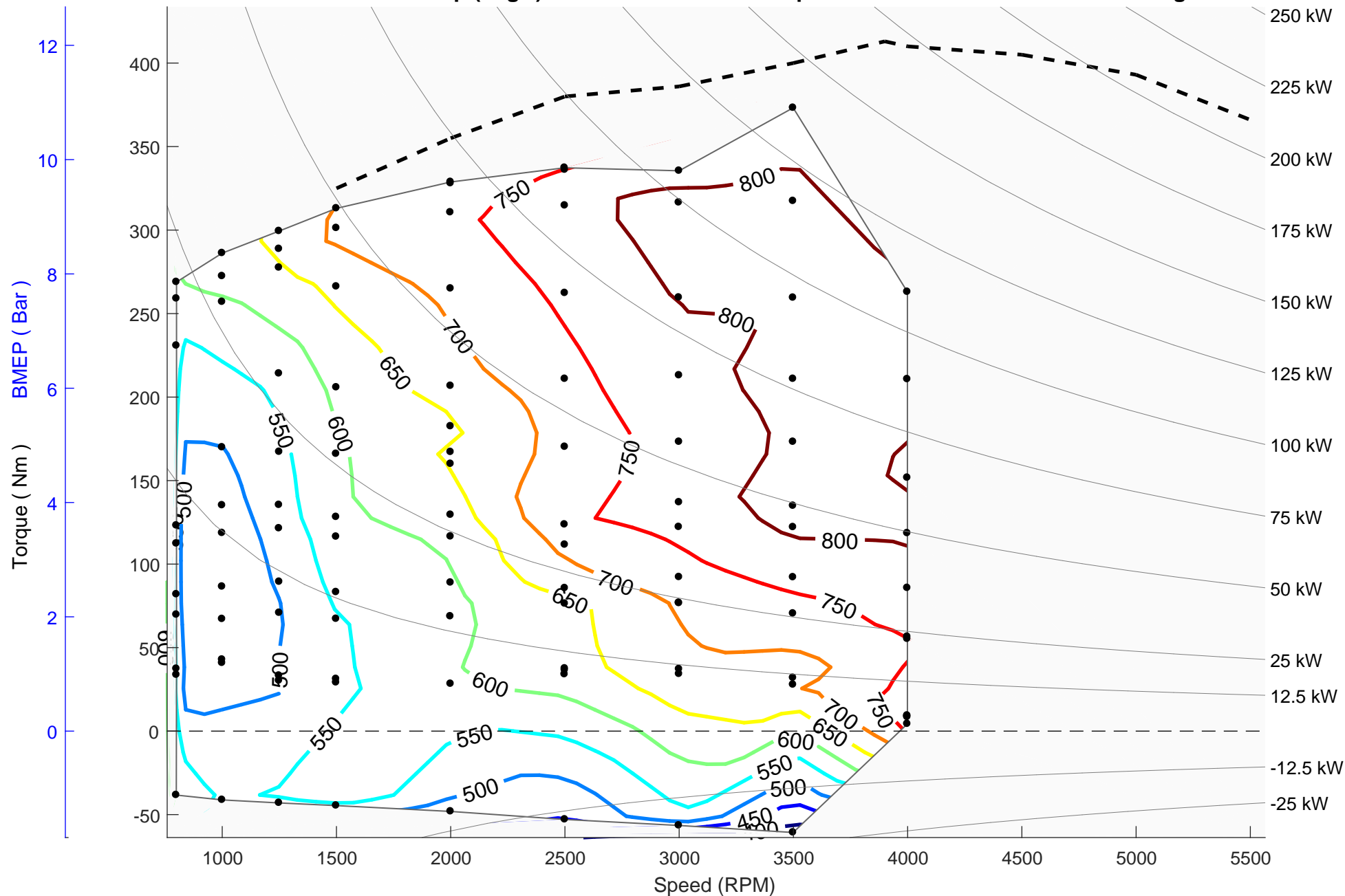




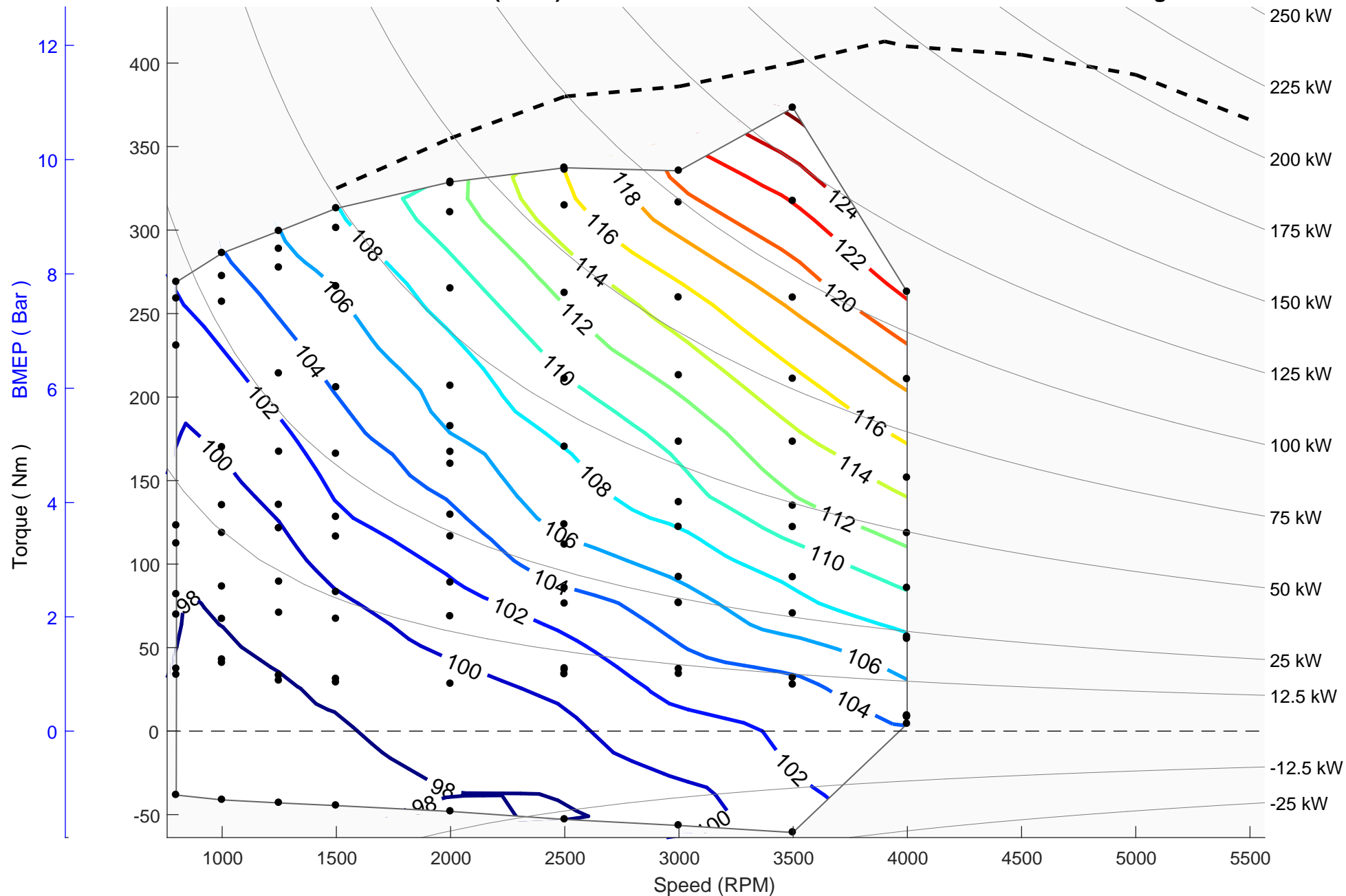
2014 Chevrolet 4.3L EcoTec3 LV3 Engine Tier 2 Fuel - Test Data Plots
Steady State - Cylinder Deactivation Disabled
Exhaust Bank 135 Press (kPaA) - Exhaust Manifold Pressure on Bank 135 Side of the Engine



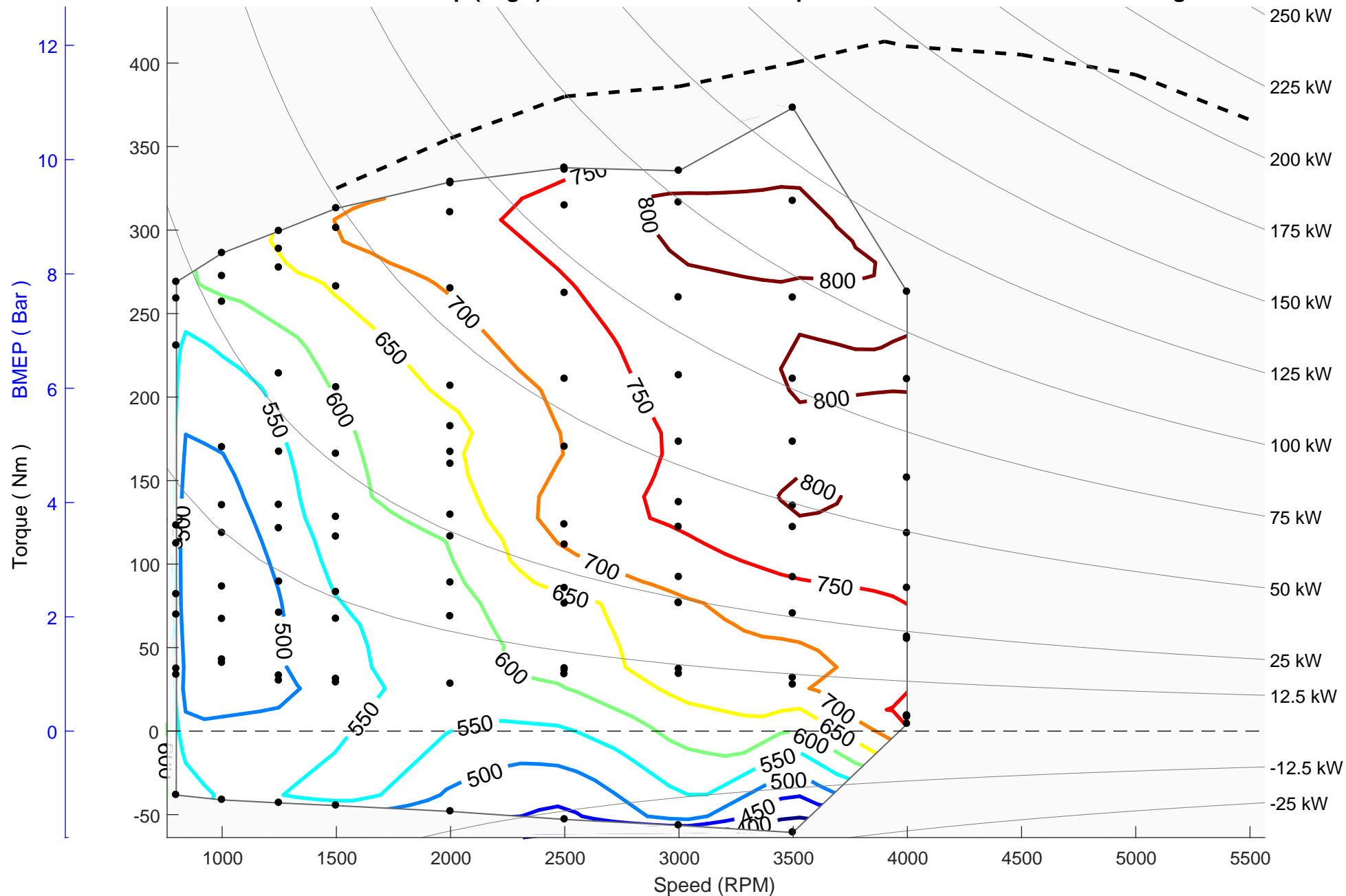
2014 Chevrolet 4.3L EcoTec3 LV3 Engine Tier 2 Fuel - Test Data Plots
Steady State - Cylinder Deactivation Disabled
Exhaust Bank 135 Temp (degC) - Exhaust Manifold Temperature on Bank 135 Side of the Engine



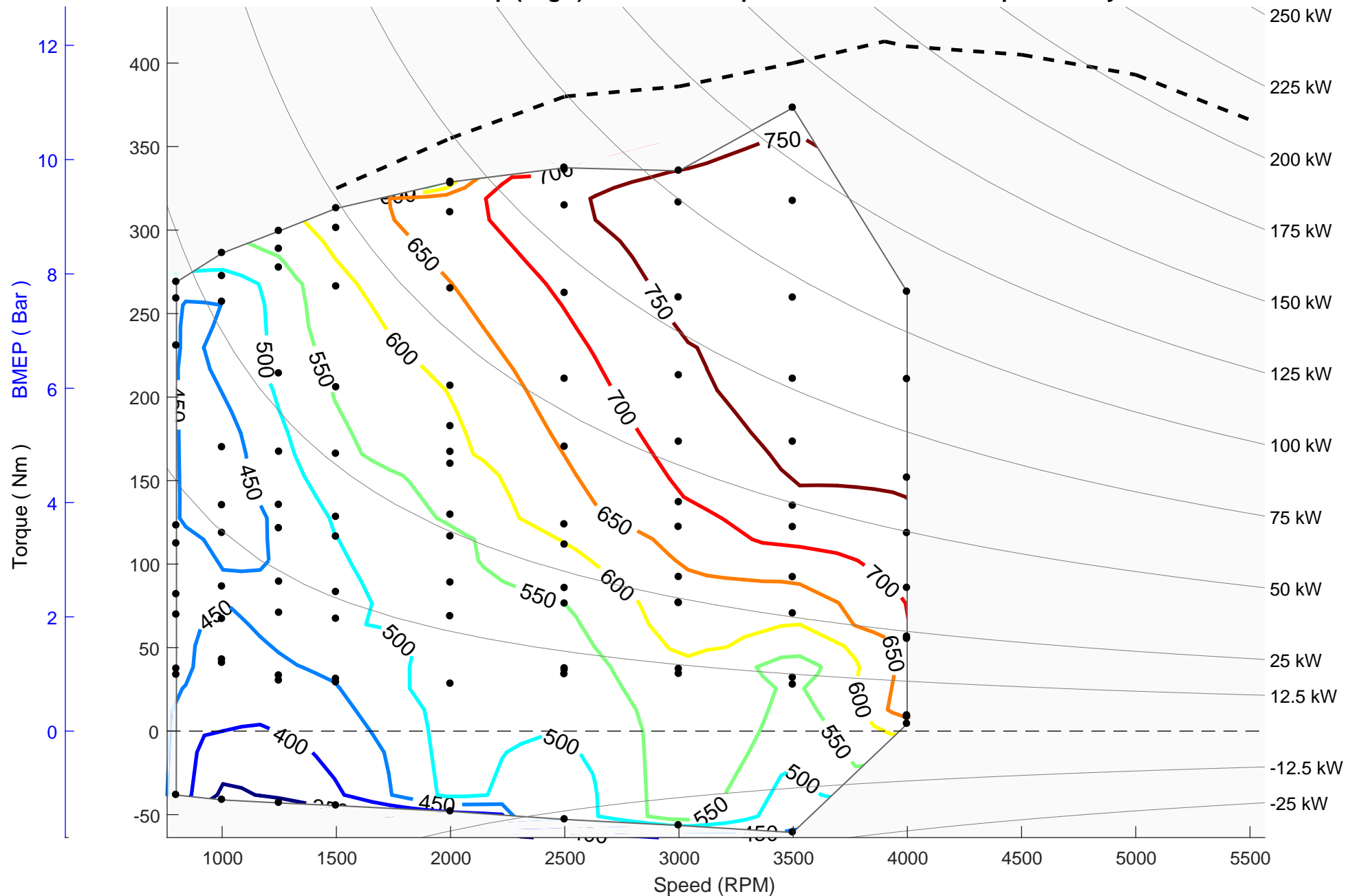
2014 Chevrolet 4.3L EcoTec3 LV3 Engine Tier 2 Fuel - Test Data Plots
Steady State - Cylinder Deactivation Disabled
Exhaust Bank 246 Press (kPaA) - Exhaust Manifold Pressure on Bank 246 Side of the Engine



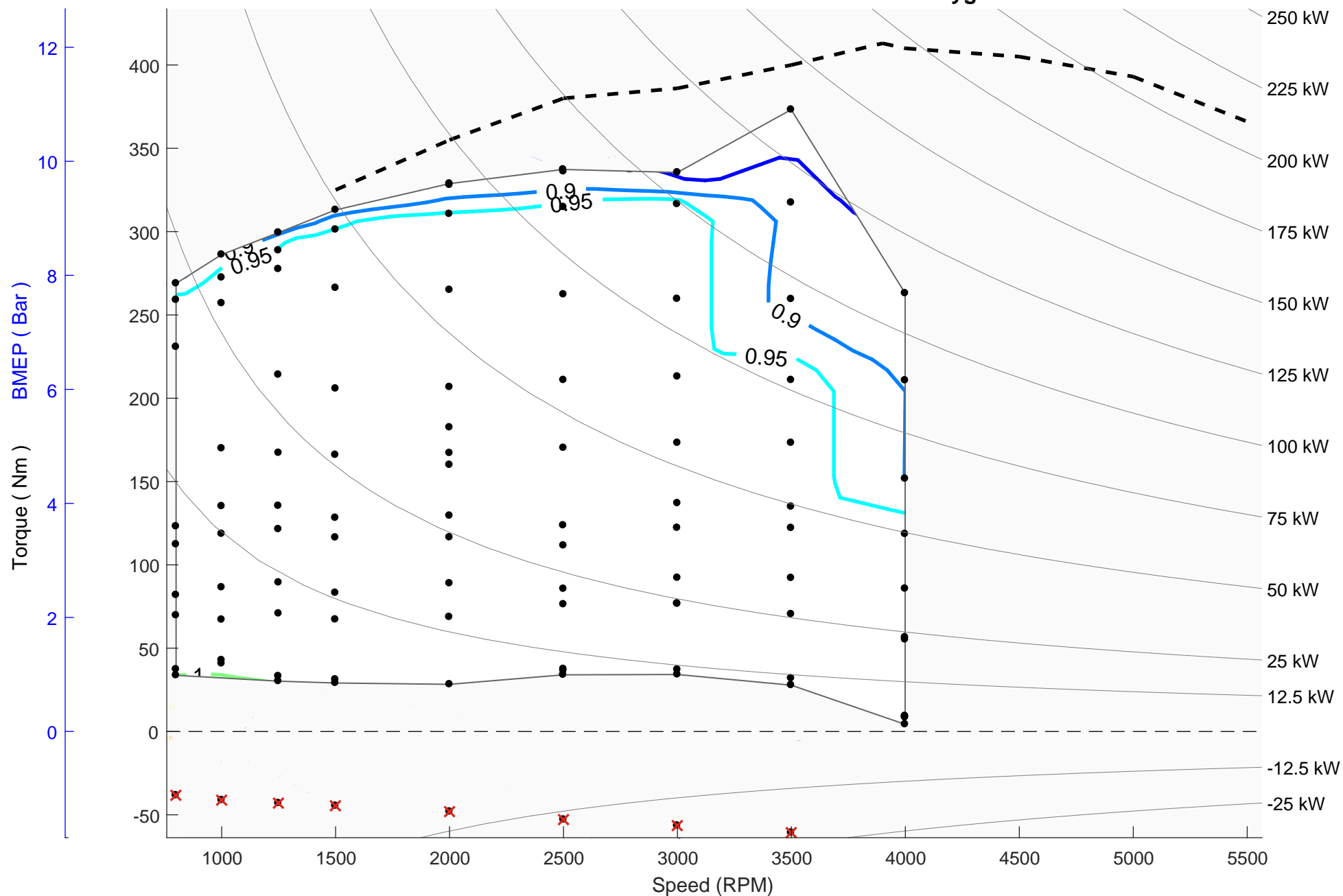
2014 Chevrolet 4.3L EcoTec3 LV3 Engine Tier 2 Fuel - Test Data Plots
Steady State - Cylinder Deactivation Disabled
Exhaust Bank 246 Temp (degC) - Exhaust Manifold Temperature on Bank 246 Side of the Engine



2014 Chevrolet 4.3L EcoTec3 LV3 Engine Tier 2 Fuel - Test Data Plots
Steady State - Cylinder Deactivation Disabled
Post Twin Cats Temp (degC) - Exhaust Temperature After Close Coupled Catalyst

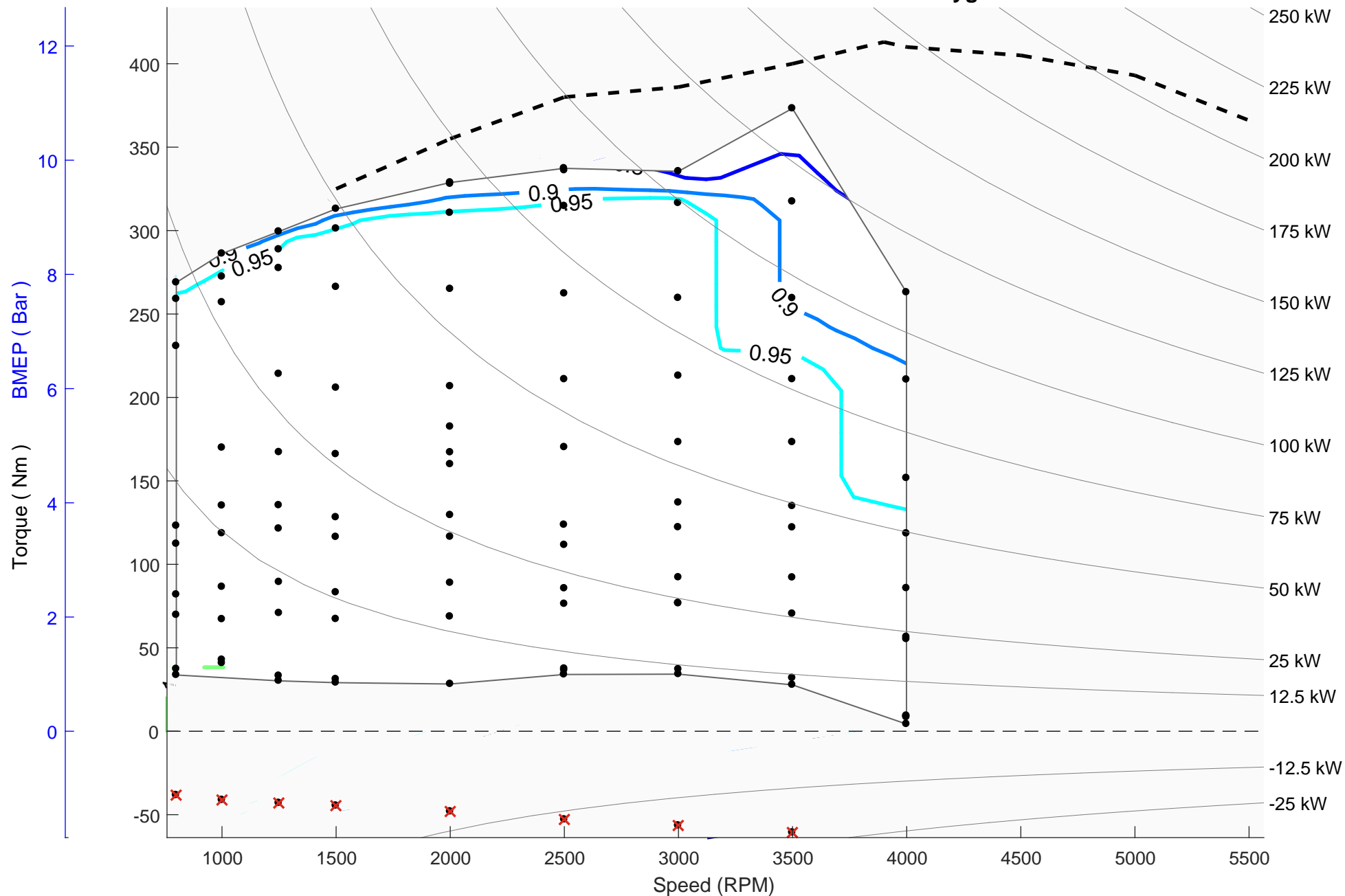


2014 Chevrolet 4.3L EcoTec3 LV3 Engine Tier 2 Fuel - Test Data Plots
Steady State - Cylinder Deactivation Disabled
Exhaust Lambda 135 - Measured via Wideband Exhaust Oxygen Sensor*



* Reference Only

2014 Chevrolet 4.3L EcoTec3 LV3 Engine Tier 2 Fuel - Test Data Plots
Steady State - Cylinder Deactivation Disabled
Exhaust Lambda 246 - Measured via Wideband Exhaust Oxygen Sensor*



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2014 Chevrolet 4.3L EcoTec3 LV3 Engine Tier 2 Fuel - Test Data Plots
Steady State - Cylinder Deactivation Disabled
Cam Phase (CAD) - Cam Phaser Retard

