EMC Test Report
Application for Grant of Equipment Authorization
FCC Part 15 Subpart C

Models: MERCURY 5800 Base Station & MERCURY 5800 Subscriber

FCC ID:	E5MDS-MERCMIMO5
APPLICANT:	GE MDS LLC 175 Science Parkway Rochester, NY 14620
TEST SITE(S):	Elliott Laboratories 41039 Boyce Road. Fremont, CA. 94538-2435
IC SITE REGISTRATION #:	2845B-3; 2845B-4, 2845B-5, 2845B-7
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REVISION HISTORY

Rev#	Date	Comments	Modified By
-	11-3-2011	First release	
1	11-9-2011	Corrected Antenna gain on Page 8	

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SCOPE

An electromagnetic emissions test has been performed on the GE MDS LLC model MERCURY 5800 Base Station & MERCURY 5800 Subscriber, pursuant to the following rules:

FCC Part 15 Subpart C

Conducted and radiated emissions data has been collected, reduced, and analyzed within this report in accordance with measurement guidelines set forth in the following reference standards and as outlined in Elliott Laboratories test procedures:

ANSI C63.4:2003
FCC DTS Measurement Procedure KDB558074, March 2005

The intentional radiator above has been tested in a simulated typical installation to demonstrate compliance with the relevant Industry Canada performance and procedural standards.

Final system data was gathered in a mode that tended to maximize emissions by varying orientation of EUT, orientation of power and I/O cabling, antenna search height, and antenna polarization.

Every practical effort was made to perform an impartial test using appropriate test equipment of known calibration. All pertinent factors have been applied to reach the determination of compliance.

OBJECTIVE

The primary objective of the manufacturer is compliance with the regulations outlined in the previous section.

Prior to marketing in the USA, all unlicensed transmitters and transceivers require certification. Receive-only devices operating between 30 MHz and 960 MHz are subject to either certification or a manufacturer's declaration of conformity, with all other receive-only devices exempt from the technical requirements.

Prior to marketing in Canada, Class I transmitters, receivers and transceivers require certification. Class II devices are required to meet the appropriate technical requirements but are exempt from certification requirements.

Certification is a procedure where the manufacturer submits test data and technical information to a certification body and receives a certificate or grant of equipment authorization upon successful completion of the certification body's review of the submitted documents. Once the equipment authorization has been obtained, the label indicating compliance must be attached to all identical units, which are subsequently manufactured.

Maintenance of compliance is the responsibility of the manufacturer. Any modification of the product which may result in increased emissions should be checked to ensure compliance has been maintained (i.e., printed circuit board layout changes, different line filter, different power supply, harnessing or I/O cable changes, etc.).

STATEMENT OF COMPLIANCE

The tested sample of GE MDS LLC model MERCURY 5800 Base Station & MERCURY 5800 Subscriber complied with the requirements of the following regulations:

FCC Part 15 Subpart C

Maintenance of compliance is the responsibility of the manufacturer. Any modifications to the product should be assessed to determine their potential impact on the compliance status of the device with respect to the standards detailed in this test report.

The test results recorded herein are based on a single type test of GE MDS LLC model MERCURY 5800 Base Station & MERCURY 5800 Subscriber and therefore apply only to the tested sample. The sample was selected and prepared by Dennis McCarthy of GE MDS LLC.

The GE MDS LLC model MERCURY 5800 Base Station & MERCURY 5800 Subscriber are identical except for the software that allows the Base Station to act as the center of each point-to-multipoint network and the Subscriber to act as one of the multipoints in the network

DEVIATIONS FROM THE STANDARDS

No deviations were made from the published requirements listed in the scope of this report.

TEST RESULTS SUMMARY

DIGITAL TRANSMISSION SYSTEMS (5725 –5850 MHz)

FCC Rule Part		Description	Measured Value / Comments	Limit / Requirement	Result
15.247(a)		Digital Modulation	System uses OFDM techniques	System must utilize a digital transmission technology	Complies
15.247 (a) (2)		6dB Bandwidth	3.5 MHz: 3.12 MHz 5.0 MHz: 4.42 MHz 7.0 MHz: 6.40 MHz 8.75 MHz: 7.63 MHz 10.0 MHz: 8.77 MHz	>500kHz	Complies
15.247 (b)		Output Power (multipoint systems) Sector Antenna	3.5 MHz: 16.2 dBm 5 MHz: 16.3 dBm 7 MHz: 16.0 dBm 8.75 MHz: 16.2 dBm 10 MHz: 16.5 dBm EIRP = 3.16 W Note 1	1Watt, EIRP limited to 4 Watts.	Complies
15.247 (b)		Output Power (multipoint systems) Panel Antenna	3.5 MHz: 17.7 dBm 5 MHz: 17.7 dBm 7 MHz: 17.6 dBm 8.75 MHz: 17.4 dBm 10 MHz: 16.2 dBm EIRP = 3.67 W Note 1	1Watt, EIRP limited to 4 Watts.	Complies
15.247(d)		Power Spectral Density	3.5 MHz: -4.6 dBm 5 MHz: -4.6 dBm 7 MHz: -6.0 dBm 8.75 MHz: -6.9 dBm 10 MHz: -8.4 dBm All in 3kHz	Maximum permitted is 8dBm/3kHz	Complies
15.247(c)		Antenna Port Spurious Emissions – 30MHz – 40 GHz	All spurious emissions < -30dBc	< -30dBc Note 2	Complies
15.247(c) / 15.209		Radiated Spurious Emissions 30MHz – 40 GHz	53.8dBµV/m @ 11450.0MHz (-0.2dB)	15.207 in restricted bands, all others <-30dBc Note 2	Complies
15.203		RF Connector	Professionally installed	Professional Installation, unique connector or integral antenna required	Complies
15.207		AC Conducted Emissions	32.4dBµV @ 0.419MHz (-15.1dB)	Refer to page 17	Complies
15.247 (b) (5) 15.407 (f)		RF Exposure Requirements	Refer to MPE calculations and User Manual statements.	Refer to OET 65 and FCC Part 1	Complies

Note 1: EIRP calculated using antenna gain of 15.5 dBi (Sector) and 18.0 dBi (Panel) for the highest EIRP system multi-point system.
Note 2: Limit of -30dBc used because the power was measured using the UNII test procedure (maximum power averaged over a transmission burst).

MEASUREMENT UNCERTAINTIES

ISO/IEC 17025 requires that an estimate of the measurement uncertainties associated with the emissions test results be included in the report. The measurement uncertainties given below are based on a 95% confidence level and were calculated in accordance with UKAS document LAB 34.

Measurement Type	Measurement Unit	Frequency Range	Expanded Uncertainty
RF power, conducted (power meter)	dBm	25 to 7000 MHz	± 0.52 dB
RF power, conducted (Spectrum analyzer)	dBm	25 to 7000 MHz	± 0.7 dB
Conducted emission of transmitter	dBm	25 to 26500 MHz	± 0.7 dB
Conducted emission of receiver	dBm	25 to 26500 MHz	± 0.7 dB
Radiated emission (substitution method)	dBm	25 to 26500 MHz	± 2.5 dB
Radiated emission (field strength)	dBµV/m	25 to 1000 MHz	± 3.6 dB
		1000 to 40000 MHz	± 6.0 dB
Conducted Emissions (AC Power)	dBµV	0.15 to 30 MHz	± 2.4 dB

EQUIPMENT UNDER TEST (EUT) DETAILS

GENERAL

The GE MDS LLC models MERCURY 5800 Base Station & MERCURY 5800 Subscriber IDUs are WiMAX transceivers that are designed to transmit data. Since the EUT could be placed anywhere in use, it was placed on a table top during testing to simulate the end-user environment. The electrical rating of the EUT is 10 - 60 Volts DC, 3 Amps.

The sample was received on June 23, 2011 and tested on June 23, 24, July 13, 14, August 4, 29, September 20, 21, 27, October 6 and 13, 2011. The EUT consisted of the following component(s):

Company	Model	Description	Serial Number	FCC ID
GE MDS LLC	MERCURY5800 IDU	WiMAX transceiver	PreProduction	E5MDS-MERCMIMO5

ANTENNA SYSTEM

The EUT antenna is external. Sector, 15.5 or Panel, 18dBi.
The radio is professional installed thereby meeting the requirements of FCC 15.203.

ENCLOSURE

The EUT enclosure is primarily constructed of Aluminum. It measures approximately 20cm wide by 11cm deep by 5cm high.

MODIFICATIONS

No modifications were made to the EUT during the time the product was at Elliott.

SUPPORT EQUIPMENT

The following equipment was used as local support equipment for testing:

Company	Model	Description	Serial Number	FCC ID
Agilent	E3610A	Power Supply	MY40011740	-

The following equipment was used as remote support equipment for emissions testing:

Company	Model	Description	Serial Number	FCC ID
Cisco	SD2005	Network Switch	DNI145303V1	-

EUT INTERFACE PORTS

The I/O cabling configuration during testing was as follows:

Port	Connected To	Cable(s)		
		Description	Shielded or Unshielded	Length(m)
LAN1	Remote Switch	CAT 5	Unshielded	15
LAN2	Remote Switch	CAT 5	Unshielded	15
GPS	Terminator	Coax	Shielded	1
TX/RX1	Terminator	Coax	Shielded	1
TX/RX2	Terminator	Coax	Shielded	1
DC Power	Power Supply	Two wire	Unshielded	1.5
Power Supply AC Power	AC Mains	Three wire	Unshielded	2

Note: The USB and COM1 ports were not connected during testing. GE MDS stated that these are for diagnostic/maintenance purposes and therefore would not normally be connected.

EUT OPERATION

During emissions testing the EUT was set to transmit at a specified power setting on the selected channel.

TEST SITE

GENERAL INFORMATION

Final test measurements were taken at the test sites listed below. Pursuant to section 2.948 of the FCC's Rules and section 3.3 of RSP-100, construction, calibration, and equipment data has been filed with the Commission and with industry Canada.

Site	Registration Numbers		Location
	FCC	Canada	
Chamber 3	769238	2845B-3	41039 Boyce Road Fremont, CA 94538-2435
Chamber 4	211948	2845B-4	
Chamber 5	211948	2845B-5	
Chamber 7	A2LA accreditation	2845B-7	

ANSI C63.4:2003 recommends that ambient noise at the test site be at least 6 dB below the allowable limits. Ambient levels are below this requirement. The test site(s) contain separate areas for radiated and conducted emissions testing. Considerable engineering effort has been expended to ensure that the facilities conform to all pertinent requirements of ANSI C63.4:2003.

CONDUCTED EMISSIONS CONSIDERATIONS

Conducted emissions testing is performed in conformance with ANSI C63.4:2003. Measurements are made with the EUT connected to the public power network through a nominal, standardized RF impedance, which is provided by a line impedance stabilization network, known as a LISN. A LISN is inserted in series with each current-carrying conductor in the EUT power cord.

RADIATED EMISSIONS CONSIDERATIONS

The FCC has determined that radiation measurements made in a shielded enclosure are not suitable for determining levels of radiated emissions. Radiated measurements are performed in an open field environment or in a semi-anechoic chamber. The test sites are maintained free of conductive objects within the CISPR defined elliptical area incorporated in ANSI C63.4:2003 guidelines and meet the Normalized Site Attenuation (NSA) requirements of ANSI C63.4:2003.

MEASUREMENT INSTRUMENTATION

RECEIVER SYSTEM

An EMI receiver as specified in CISPR 16-1-1 is used for emissions measurements. The receivers used can measure over the frequency range of 9 kHz up to 2000 MHz. These receivers allow both ease of measurement and high accuracy to be achieved. The receivers have Peak, Average, and CISPR (Quasi-peak) detectors built into their design so no external adapters are necessary. The receiver automatically sets the required bandwidth for the CISPR detector used during measurements. If the repetition frequency of the signal being measured is below 20Hz, peak measurements are made in lieu of Quasi-Peak measurements.

For measurements above the frequency range of the receivers, a spectrum analyzer is utilized because it provides visibility of the entire spectrum along with the precision and versatility required to support engineering analysis. Average measurements above 1000MHz are performed on the spectrum analyzer using the linear-average method with a resolution bandwidth of 1 MHz and a video bandwidth of 10 Hz, unless the signal is pulsed in which case the average (or video) bandwidth of the measuring instrument is reduced to onset of pulse desensitization and then increased.

INSTRUMENT CONTROL COMPUTER

The receivers utilize either a Rohde & Schwarz EZM Spectrum Monitor/Controller or contain an internal Spectrum Monitor/Controller to view and convert the receiver measurements to the field strength at an antenna or voltage developed at the LISN measurement port, which is then compared directly with the appropriate specification limit. This provides faster, more accurate readings by performing the conversions described under Sample Calculations within the Test Procedures section of this report. Results are printed in a graphic and/or tabular format, as appropriate. A personal computer is used to record all measurements made with the receivers.

The Spectrum Monitor provides a visual display of the signal being measured. In addition, the controller or a personal computer run automated data collection programs which control the receivers. This provides added accuracy since all site correction factors, such as cable loss and antenna factors are added automatically.

LINE IMPEDANCE STABILIZATION NETWORK (LISN)

Line conducted measurements utilize a fifty microhenry Line Impedance Stabilization Network as the monitoring point. The LISN used also contains a 250 uH CISPR adapter. This network provides for calibrated radio frequency noise measurements by the design of the internal low pass and high pass filters on the EUT and measurement ports, respectively.

FILTERS/ATTENUATORS

External filters and precision attenuators are often connected between the receiving antenna or LISN and the receiver. This eliminates saturation effects and non-linear operation due to high amplitude transient events.

ANTENNAS

A loop antenna is used below 30 MHz. For the measurement range 30 MHz to 1000 MHz either a combination of a biconical antenna and a log periodic or a bi-log antenna is used. Above 1000 MHz, horn antennas are used. The antenna calibration factors to convert the received voltage to an electric field strength are included with appropriate cable loss and amplifier gain factors to determine an overall site factor, which is then programmed into the test receivers or incorporated into the test software.

ANTENNA MAST AND EQUIPMENT TURNTABLE

The antennas used to measure the radiated electric field strength are mounted on a non-conductive antenna mast equipped with a motor-drive to vary the antenna height. Measurements below 30 MHz are made with the loop antenna at a fixed height of 1m above the ground plane.

ANSI C63.4:2003 specifies that the test height above ground for table mounted devices shall be 80 centimeters. Floor mounted equipment shall be placed on the ground plane if the device is normally used on a conductive floor or separated from the ground plane by insulating material from 3 to 12 mm if the device is normally used on a non-conductive floor. During radiated measurements, the EUT is positioned on a motorized turntable in conformance with this requirement.

INSTRUMENT CALIBRATION

All test equipment is regularly checked to ensure that performance is maintained in accordance with the manufacturer's specifications. All antennas are calibrated at regular intervals with respect to tuned half-wave dipoles. An exhibit of this report contains the list of test equipment used and calibration information.

TEST PROCEDURES

EUT AND CABLE PLACEMENT

The regulations require that interconnecting cables be connected to the available ports of the unit and that the placement of the unit and the attached cables simulate the worst case orientation that can be expected from a typical installation, so far as practicable. To this end, the position of the unit and associated cabling is varied within the guidelines of ANSI C63.4:2003, and the worst-case orientation is used for final measurements.

CONDUCTED EMISSIONS

Conducted emissions are measured at the plug end of the power cord supplied with the EUT. Excess power cord length is wrapped in a bundle between 30 and 40 centimeters in length near the center of the cord. Preliminary measurements are made to determine the highest amplitude emission relative to the specification limit for all the modes of operation. Placement of system components and varying of cable positions are performed in each mode. A final peak mode scan is then performed in the position and mode for which the highest emission was noted on all current carrying conductors of the power cord.

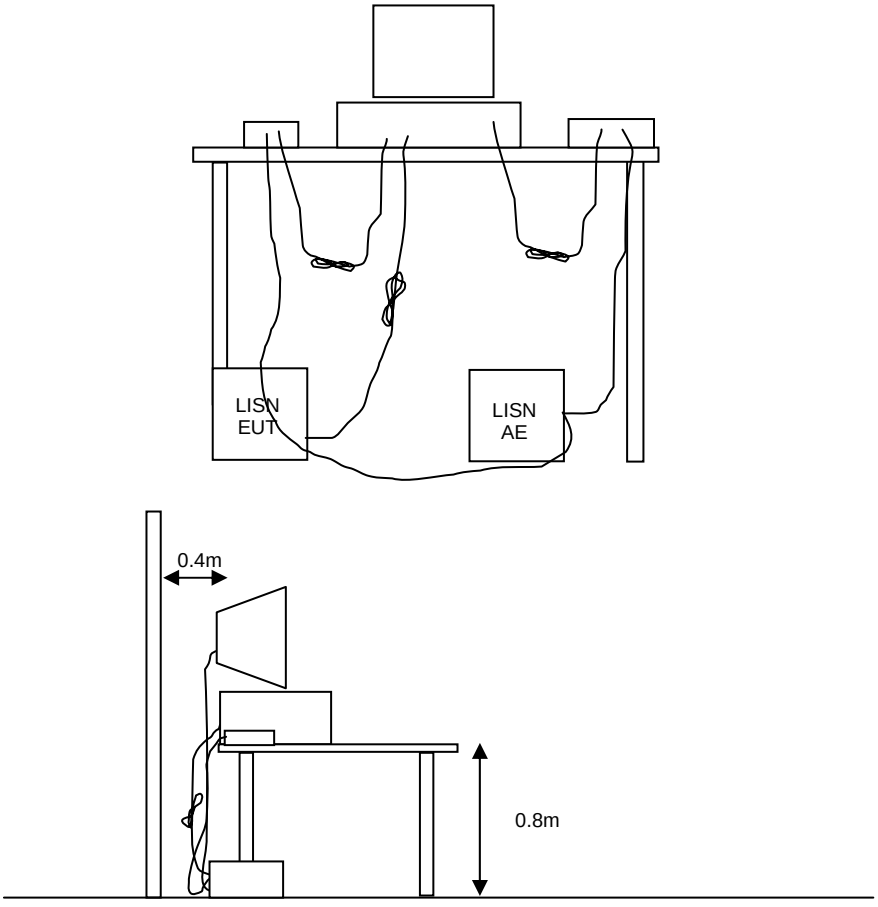


Figure 1 Typical Conducted Emissions Test Configuration

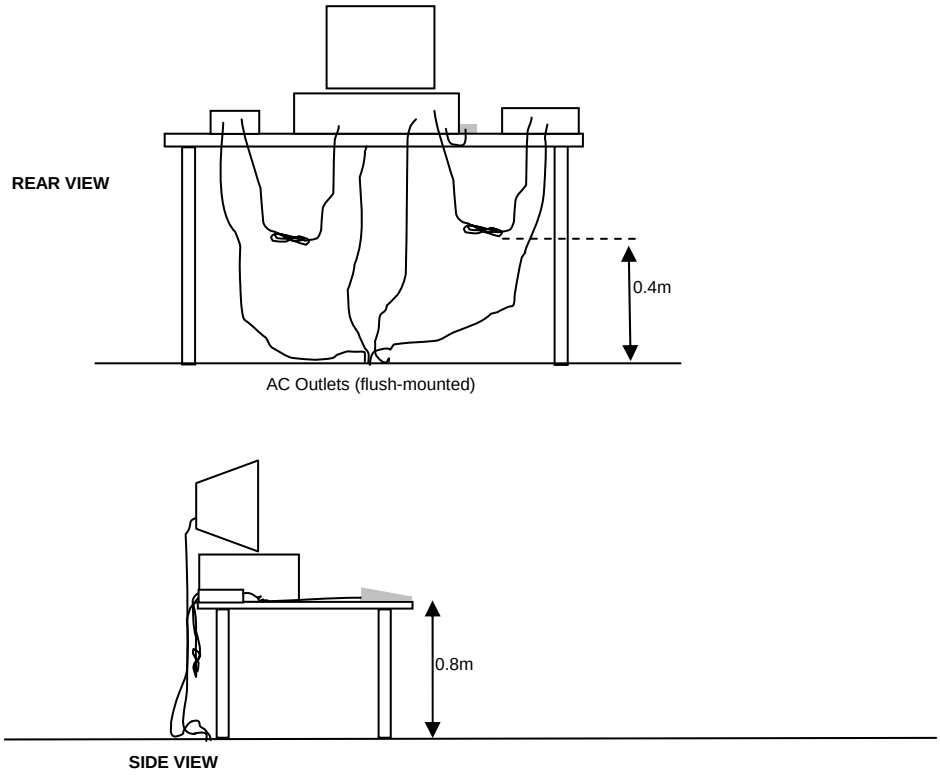
RADIATED EMISSIONS

A preliminary scan of the radiated emissions is performed in which all significant EUT frequencies are identified with the system in a nominal configuration. At least two scans are performed, one scan for each antenna polarization (horizontal and vertical; loop parallel and perpendicular to the EUT). During the preliminary scans, the EUT is rotated through 360˚, the antenna height is varied (for measurements above 30 MHz) and cable positions are varied to determine the highest emission relative to the limit. Preliminary scans may be performed in a fully anechoic chamber for the purposes of identifying the frequencies of the highest emissions from the EUT.

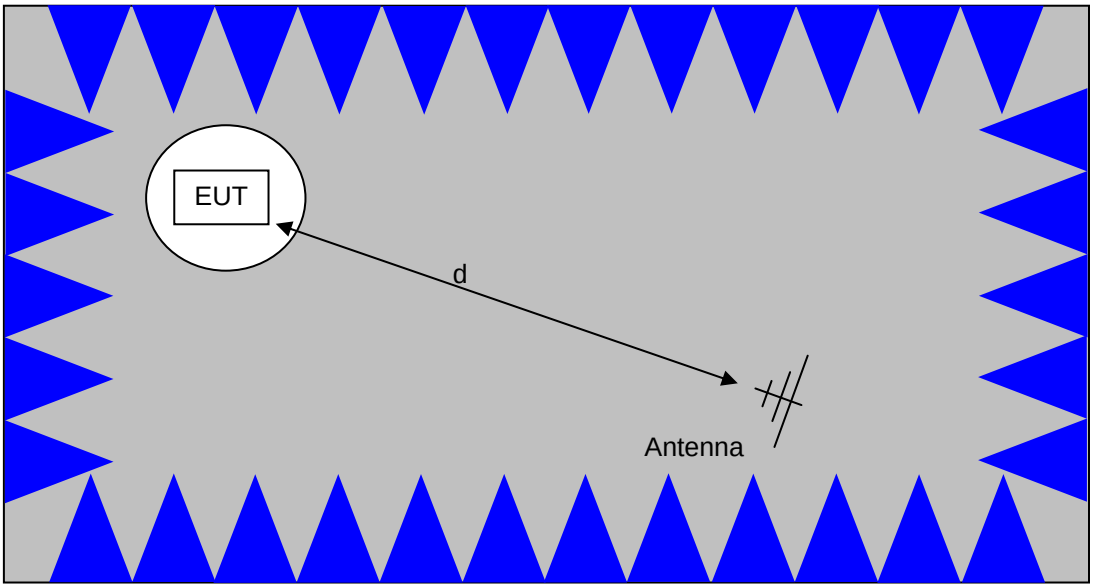
A speaker is provided in the receiver to aid in discriminating between EUT and ambient emissions. Other methods used during the preliminary scan for EUT emissions involve scanning with near field magnetic loops, monitoring I/O cables with RF current clamps, and cycling power to the EUT.

Final maximization is a phase in which the highest amplitude emissions identified in the spectral search are viewed while the EUT azimuth angle is varied from 0 to 360 degrees relative to the receiving antenna. The azimuth, which results in the highest emission is then maintained while varying the antenna height from one to four meters (for measurements above 30 MHz, measurements below 30 MHz are made with the loop antenna at a fixed height of 1m). The result is the identification of the highest amplitude for each of the highest peaks. Each recorded level is corrected in the receiver using appropriate factors for cables, connectors, antennas, and preamplifier gain.

When testing above 18 GHz, the receive antenna is located at 1meter from the EUT and the antenna height is restricted to a maximum of 2.5 meters.

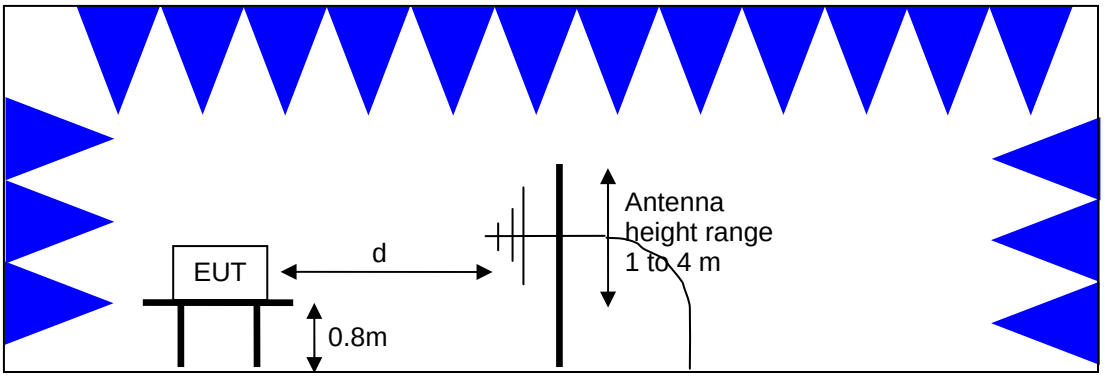


Typical Test Configuration for Radiated Field Strength Measurements



The anechoic materials on the walls and ceiling ensure compliance with the normalized site attenuation requirements of CISPR 16 / CISPR 22 / ANSI C63.4 for an alternate test site at the measurement distances used.

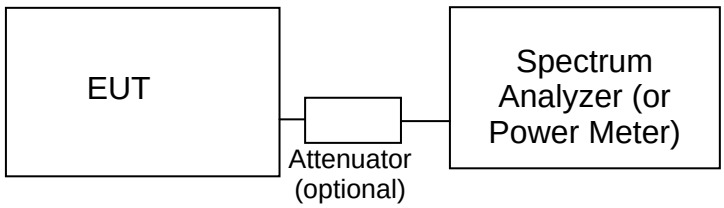
Floor-standing equipment is placed on the floor with insulating supports between the unit and the ground plane.



Test Configuration for Radiated Field Strength Measurements
Semi-Anechoic Chamber, Plan and Side Views

CONDUCTED EMISSIONS FROM ANTENNA PORT

Direct measurements of power, bandwidth and power spectral density are performed, where possible, with the antenna port of the EUT connected to either the power meter or spectrum analyzer via a suitable attenuator and/or filter. These are used to ensure that the front end of the measurement instrument is not overloaded by the fundamental transmission.



Test Configuration for Antenna Port Measurements

Measurement bandwidths (video and resolution) are set in accordance with the relevant standards and Elliott's test procedures for the type of radio being tested. When power measurements are made using a resolution bandwidth less than the signal bandwidth the power is calculated by summing the power across the signal bandwidth using either the analyzer channel power function or by capturing the trace data and calculating the power using software. In both cases the summed power is corrected to account for the equivalent noise bandwidth (ENBW) of the resolution bandwidth used.

If power averaging is used (typically for certain digital modulation techniques), the EUT is configured to transmit continuously. Power averaging is performed using either the built-in function of the analyzer or, if the analyzer does not feature power averaging, using external software. In both cases the average power is calculated over a number of sweeps (typically 100). When the EUT cannot be configured to continuously transmit then either the analyzer is configured to perform a gated sweep to ensure that the power is averaged over periods that the device is transmitting or power averaging is disabled and a max-hold feature is used.

If a power meter is used to make output power measurements the sensor head type (peak or average) is stated in the test data table.

BANDWIDTH MEASUREMENTS

The 6dB, 20dB and/or 26dB signal bandwidth is measured in using the bandwidths recommended by ANSI C63.4. When required, the 99% bandwidth is measured using the methods detailed in RSS GEN.

SPECIFICATION LIMITS AND SAMPLE CALCULATIONS

The limits for conducted emissions are given in units of microvolts, and the limits for radiated emissions are given in units of microvolts per meter at a specified test distance. Data is measured in the logarithmic form of decibels relative to one microvolt, or dB microvolts (dBuV). For radiated emissions, the measured data is converted to the field strength at the antenna in dB microvolts per meter (dBuV/m). The results are then converted to the linear forms of uV and uV/m for comparison to published specifications.

For reference, converting the specification limits from linear to decibel form is accomplished by taking the base ten logarithm, then multiplying by 20. These limits in both linear and logarithmic form are as follows:

CONDUCTED EMISSIONS SPECIFICATION LIMITS: FCC 15.207; FCC 15.107(a), RSS GEN

The table below shows the limits for the emissions on the AC power line from an intentional radiator and a receiver.

Frequency (MHz)	Average Limit (dBuV)	Quasi Peak Limit (dBuV)
0.150 to 0.500	Linear decrease on logarithmic frequency axis between 56.0 and 46.0	Linear decrease on logarithmic frequency axis between 66.0 and 56.0
0.500 to 5.000	46.0	56.0
5.000 to 30.000	50.0	60.0

GENERAL TRANSMITTER RADIATED EMISSIONS SPECIFICATION LIMITS

The table below shows the limits for the spurious emissions from transmitters that fall in restricted bands[1] (with the exception of transmitters operating under FCC Part 15 Subpart D and RSS 210 Annex 9), the limits for all emissions from a low power device operating under the general rules of RSS 310 (tables 3 and 4), RSS 210 (table 2) and FCC Part 15 Subpart C section 15.209.

Frequency Range (MHz)	Limit (uV/m)	Limit (dBuV/m @ 3m)
0.009-0.490	$2400/F_{KHz}$ @ 300m	$67.6-20*\log_{10}(F_{KHz})$ @ 300m
0.490-1.705	$24000/F_{KHz}$ @ 30m	$87.6-20*\log_{10}(F_{KHz})$ @ 30m
1.705 to 30	30 @ 30m	29.5 @ 30m
30 to 88	100 @ 3m	40 @ 3m
88 to 216	150 @ 3m	43.5 @ 3m
216 to 960	200 @ 3m	46.0 @ 3m
Above 960	500 @ 3m	54.0 @ 3m

RECEIVER RADIATED SPURIOUS EMISSIONS SPECIFICATION LIMITS

The table below shows the limits for the spurious emissions from receivers as detailed in FCC Part 15.109, RSS 210 Table 2, RSS GEN Table 1 and RSS 310 Table 3. Note that receivers operating outside of the frequency range 30 MHz – 960 MHz are exempt from the requirements of 15.109.

Frequency Range (MHz)	Limit (uV/m @ 3m)	Limit (dBuV/m @ 3m)
30 to 88	100	40
88 to 216	150	43.5
216 to 960	200	46.0
Above 960	500	54.0

[1] The restricted bands are detailed in FCC 15.203, RSS 210 Table 1 and RSS 310 Table 2

OUTPUT POWER LIMITS – DIGITAL TRANSMISSION SYSTEMS

The table below shows the limits for output power and output power density. Where the signal bandwidth is less than 20 MHz the maximum output power is reduced to the power spectral density limit plus 10 times the log of the bandwidth (in MHz).

Operating Frequency (MHz)	Output Power	Power Spectral Density
902 – 928	1 Watt (30 dBm)	8 dBm/3kHz
2400 – 2483.5	1 Watt (30 dBm)	8 dBm/3kHz
5725 – 5850	1 Watt (30 dBm)	8 dBm/3kHz

The maximum permitted output power is reduced by 1dB for every dB the antenna gain exceeds 6dBi. Fixed point-to-point applications using the 5725 – 5850 MHz band are not subject to this restriction.

TRANSMIT MODE SPURIOUS RADIATED EMISSIONS LIMITS – FHSS and DTS SYSTEMS

The limits for unwanted (spurious) emissions from the transmitter falling in the restricted bands are those specified in the general limits sections of FCC Part 15 and RSS 210. All other unwanted (spurious) emissions shall be at least 20dB below the level of the highest in-band signal level (30dB if the power is measured using the sample detector/power averaging method).

SAMPLE CALCULATIONS - CONDUCTED EMISSIONS

Receiver readings are compared directly to the conducted emissions specification limit (decibel form) as follows:

$$R_r - S = M$$

where:

R_r = Receiver Reading in dBuV

S = Specification Limit in dBuV

M = Margin to Specification in +/- dB

SAMPLE CALCULATIONS - RADIATED EMISSIONS

Receiver readings are compared directly to the specification limit (decibel form). The receiver internally corrects for cable loss, preamplifier gain, and antenna factor. The calculations are in the reverse direction of the actual signal flow, thus cable loss is added and the amplifier gain is subtracted. The Antenna Factor converts the voltage at the antenna coaxial connector to the field strength at the antenna elements.

A distance factor, when used for electric field measurements above 30MHz, is calculated by using the following formula:

$$F_d = 20*LOG_{10} (D_m/D_s)$$

where:

F_d = Distance Factor in dB

D_m = Measurement Distance in meters

D_s = Specification Distance in meters

For electric field measurements below 30MHz the extrapolation factor is either determined by making measurements at multiple distances or a theoretical value is calculated using the formula:

$$F_d = 40*LOG_{10} (D_m/D_s)$$

Measurement Distance is the distance at which the measurements were taken and Specification Distance is the distance at which the specification limits are based. The antenna factor converts the voltage at the antenna coaxial connector to the field strength at the antenna elements.

The margin of a given emission peak relative to the limit is calculated as follows:

$$R_c = R_r + F_d$$

and

$$M = R_c - L_s$$

where:

R_r = Receiver Reading in dBuV/m

F_d = Distance Factor in dB

R_c = Corrected Reading in dBuV/m

L_s = Specification Limit in dBuV/m

M = Margin in dB Relative to Spec

SAMPLE CALCULATIONS - FIELD STRENGTH TO EIRP CONVERSION

Where the radiated electric field strength is expressed in terms of the equivalent isotropic radiated power (eirp), or where a field strength measurement of output power is made in lieu of a direct measurement, the following formula is used to convert between eirp and field strength at a distance of d (meters) from the equipment under test:

$$E = \frac{1000000 \sqrt{30 P}}{d} \quad \text{microvolts per meter}$$

where P is the eirp (Watts)

For a measurement at 3m the conversion from a logarithmic value for field strength (dBuV/m) to an eirp power (dBm) is -95.3dB.

Appendix A Test Equipment Calibration Data

Conducted Emissions - AC Power Ports, 23-Jun-11

Manufacturer	Description	Model	Asset #	Cal Due
Hewlett Packard	SpecAn 9 kHz - 40 GHz, FT (SA40) Blue	8564E (84125C)	1393	7/14/2011
Rohde & Schwarz	Pulse Limiter	ESH3 Z2	1401	4/21/2012
Fischer Custom Comm	LISN, 25A, 150kHz to 30MHz, 25 Amp,	FCC-LISN-50-25-2-09	2000	12/15/2011

Radio Antenna Port (Power and Spurious Emissions), 23, 24-Jun-11

Manufacturer	Description	Model	Asset #	Cal Due
Agilent	PSA, Spectrum Analyzer, (installed options, 111, 115, 123, 1DS, B7J, HYX,	E4446A	2139	1/26/2012

Radiated Emissions, 1000 - 40,000MHz, 13, 14-Jul-11

Manufacturer	Description	Model	Asset #	Cal Due
Hewlett Packard	Microwave Preamplifier, 1-26.5GHz	8449B	263	12/8/2011
EMCO	Antenna, Horn, 1-18 GHz	3115	786	12/11/2011
Hewlett Packard	SpecAn 30 Hz -40 GHz, SV (SA40) Red	8564E (84125C)	1148	8/12/2011
Micro-Tronics	Band Reject Filter, 5725-5875 MHz	BRC50705-02	1728	3/21/2012

Radio Antenna Port (Power and Spurious Emissions), 19-Jul-11

Manufacturer	Description	Model	Asset #	Cal Due
Agilent	PSA, Spectrum Analyzer, (installed options, 111, 115, 123, 1DS, B7J, HYX,	E4446A	2139	1/26/2012

Radio Antenna Port (Power and Spurious Emissions), 4-Aug-11

Manufacturer	Description	Model	Asset #	Cal Due
Agilent	PSA, Spectrum Analyzer, (installed options, 111, 115, 123, 1DS, B7J, HYX,	E4446A	2139	1/26/2012

Radiated Emissions, 1,000 - 40,000 MHz, 29-Aug-11

Manufacturer	Description	Model	Asset #	Cal Due
Hewlett Packard	Microwave Preamplifier, 1-26.5GHz	8449B	263	12/8/2011
EMCO	Antenna, Horn, 1-18 GHz (SA40-Red)	3115	1142	8/2/2012
Hewlett Packard	SpecAn 30 Hz -40 GHz, SV (SA40) Red	8564E (84125C)	1148	8/15/2012
Micro-Tronics	Band Reject Filter, 5725-5875 MHz	BRC50705-02	1728	3/21/2012
Hewlett Packard	High Pass filter, 8.2 GHz (Purple System)	P/N 84300-80039 (84125C)	1767	11/29/2011

Radiated Emissions, 1,000 - 18,000 MHz, 20-Sep-11

Manufacturer	Description	Model	Asset #	Cal Due
Hewlett Packard	Microwave Preamplifier, 1-26.5GHz	8449B	785	5/18/2012
EMCO	Antenna, Horn, 1-18 GHz (SA40-Red)	3115	1142	8/2/2012
Hewlett Packard	SpecAn 9 kHz - 40 GHz, FT	8564E (84125C)	1393	8/9/2012

	(SA40) Blue			
Micro-Tronics	Band Reject Filter, 5725-5875 MHz	BRC50705-02	1682	3/23/2012

Radiated Emissions, 1000 - 40,000 MHz, 21-Sep-11

Manufacturer	Description	Model	Asset #	Cal Due
Hewlett Packard	Microwave Preamplifier, 1-26.5GHz	8449B	263	12/8/2011
Narda West	High Pass Filter, 8 GHz	HPF 180	821	3/23/2012
EMCO	Antenna, Horn, 1-18GHz	3115	868	6/8/2012
Hewlett Packard	SpecAn 30 Hz -40 GHz, SV (SA40) Red	8564E (84125C)	1148	8/15/2012
Micro-Tronics	Band Reject Filter, 5725-5875 MHz	BRC50705-02	1682	3/23/2012

RE TX Spurious, 27-Sep-11

Manufacturer	Description	Model	Asset #	Cal Due
Hewlett Packard	Microwave Preamplifier, 1-26.5GHz	8449B	785	5/18/2012
EMCO	Antenna, Horn, 1-18 GHz (SA40-Red)	3115	1142	8/2/2012
Hewlett Packard	High Pass filter, 8.2 GHz	P/N 84300-80039	1156	6/24/2012
Hewlett Packard	SpecAn 9 kHz - 40 GHz, FT (SA40) Blue	8564E (84125C)	1393	8/9/2012
Hewlett Packard	Head (Inc W1-W4, 1742 , 1743) Blue	84125C	1620	5/9/2012
A.H. Systems	Blue System Horn, 18-40GHz	SAS-574, p/n: 2581	2159	3/23/2012
Micro-Tronics	Band Reject Filter, 5725-5875 MHz	BRC50705-02	2241	10/1/2011

Radiated Emissions, 1,000 - 12,000 MHz, 06-Oct-11

Manufacturer	Description	Model	Asset #	Cal Due
EMCO	Antenna, Horn, 1-18 GHz	3115	786	12/11/2011
Hewlett Packard	Microwave Preamplifier, 1-26.5GHz	8449B	2199	2/23/2012
Micro-Tronics	Band Reject Filter, 5725-5875 MHz	BRC50705-02	2241	10/4/2012
Hewlett Packard	SpecAn 9 kHz - 40 GHz, (SA40) Purple	8564E (84125C)	2415	7/28/2012

Radiated Spurious Emissions, 30 - 1,000 MHz, 13-Oct-11

Manufacturer	Description	Model	Asset #	Cal Due
Hewlett Packard	EMC Spectrum Analyzer, 9 kHz - 6.5 GHz	8595EM	787	7/29/2012
Rohde & Schwarz	Test Receiver, 9 kHz-2750 MHz	ESCS 30	1337	11/24/2011
Sunol Sciences	Biconilog, 30-3000 MHz	JB3	1548	6/24/2012
Com-Power Corp.	Preamplifier, 30-1000 MHz	PA-103	1632	4/29/2012

Appendix B Test Data

T83623 Pages 25 - 102

Client:	GE MDS LLC	Job Number:	J83512
Model:	Mercury5800	T-Log Number:	T83623
		Account Manager:	Susan Pelzl
Contact:	Dennis McCarthy		-
Emissions Standard(s):	FCC 15.247, RSS-210, RSS-GEN	Class:	A
Immunity Standard(s):	-	Environment:	Radio

EMC Test Data

For The

GE MDS LLC

Model

Mercury5800

Date of Last Test: 10/13/2011

Client:	GE MDS LLC	Job Number:	J83512
Model:	Mercury5800	T-Log Number:	T83623
		Account Manager:	Susan Pelzl
Contact:	Dennis McCarthy		
Standard:	FCC 15.247, RSS-210, RSS-GEN	Class:	N/A

RSS 210 and FCC 15.247 (DTS) Radiated Spurious Emissions

Test Specific Details

Objective: The objective of this test session is to perform final qualification testing of the EUT with respect to the specification listed above.

General Test Configuration

The EUT and all local support equipment were located on the turntable for radiated spurious emissions testing. All remote support equipment was located outside the chamber, with all I/O connections running under the groundplane & passed through a ferrite clamp upon exiting the chamber..

For radiated emissions testing the measurement antenna was located 3 meters from the EUT.

Ambient Conditions:

Temperature:	26 °C
Rel. Humidity:	40 %

Summary of Results - Device Operating in the 5725 - 5850 MHz Band

Run #	Mode	Channel	Power Setting	Measured Power	Test Performed	Limit	Result / Margin
1a	3.5 MHz	low	21	-	Radiated Emissions, 30 -1000 MHz	FCC Part 15.209 / 15.247(c)	50.4dBµV/m @ 1000.0MHz (-3.6dB)
1c	3.5 MHz	high	20	-	Radiated Emissions, 30 -1000 MHz		51.0dBµV/m @ 1000.0MHz (-3.0dB)

Based on the similarities of the scans at two different frequencies with two different antennas, it was concluded that testing at other frequencies in other bandwidths would not give different results. Therefore, no further testing below 1 GHz was done.

Modifications Made During Testing

No modifications were made to the EUT during testing

Deviations From The Standard

No deviations were made from the requirements of the standard.

Client:	GE MDS LLC	Job Number:	J83512
Model:	Mercury5800	T-Log Number:	T83623
		Account Manager:	Susan Pelzl
Contact:	Dennis McCarthy		
Standard:	FCC 15.247, RSS-210, RSS-GEN	Class:	N/A

Run #1: Radiated Spurious Emissions, 30 - 1000 MHz.

Date of Test: 10/13/2011
Test Engineer: John Caizzi & Jack Liu
Test Location: FT7

Run #1a: Low Channel @ 5727 MHz, 3.5 MHz BW, QPSK, pwr setting = 21, sector antenna.

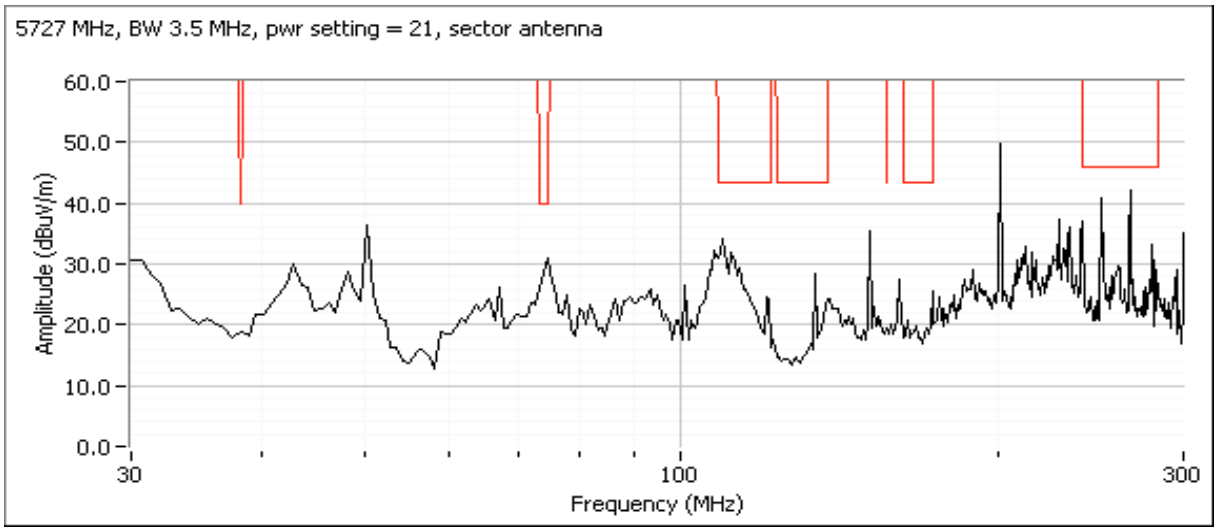
Fundamental emission level @ 3m in 100kHz RBW:	120.4	dBµV/m	
Limit for emissions outside of restricted bands:	90.4	dBµV/m	Limit is -30dBc (UNII power measurement)

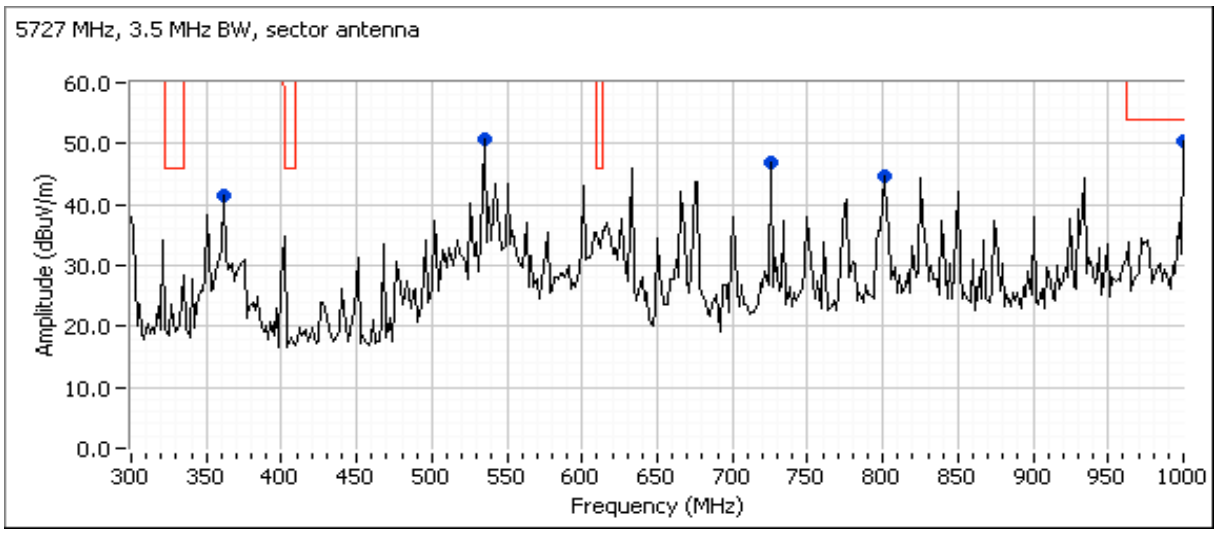
Spurious Emissions

Frequency	Level	Pol	15.209 / 15.247		Detector	Azimuth	Height	Comments
MHz	dBµV/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
50.250	*36.5*	*V*	*90.4*	*-53.9*	*Peak*	*140*	*1.5*	
108.792	34.3	V	43.5	-9.2	Peak	193	1.0	
150.825	*35.4*	*V*	*90.4*	*-55.0*	*Peak*	*59*	*1.0*	
200.775	*49.7*	*H*	*90.4*	*-40.7*	*Peak*	*317*	*2.0*	
249.998	40.9	V	46.0	-5.1	Peak	352	1.0	
265.976	42.0	H	46.0	-4.0	Peak	6	1.5	
361.250	*41.5*	*V*	*90.4*	*-48.9*	*Peak*	*208*	*2.0*	
534.500	*50.9*	*V*	*90.4*	*-39.5*	*Peak*	*359*	*1.5*	
725.250	*47.0*	*H*	*90.4*	*-43.4*	*Peak*	*350*	*1.5*	
800.500	*44.6*	*H*	*90.4*	*-45.8*	*Peak*	*130*	*1.0*	
1000.000	50.4	V	54.0	-3.6	Peak	191	1.0	
1000.000	50.4	V	54.0	-3.6	QP	191	1.00	
265.976	38.9	H	46.0	-7.1	QP	14	1.22	
250.008	37.3	V	46.0	-8.7	QP	352	1.00	
108.792	32.5	V	43.5	-11.0	QP	137	1.00	

Note 1:	For emissions in restricted bands, the limit of 15.209 was used. For all other emissions, the limit was set 30dB below the level of the fundamental and measured in 100kHz.

Client:	GE MDS LLC	Job Number:	J83512
Model:	Mercury5800	T-Log Number:	T83623
		Account Manager:	Susan Pelzl
Contact:	Dennis McCarthy		
Standard:	FCC 15.247, RSS-210, RSS-GEN	Class:	N/A





Client:	GE MDS LLC	Job Number:	J83512
Model:	Mercury5800	T-Log Number:	T83623
		Account Manager:	Susan Pelzl
Contact:	Dennis McCarthy		
Standard:	FCC 15.247, RSS-210, RSS-GEN	Class:	N/A

Run #1c: High Channel @ 5848 MHz, 3.5 MHz BW, QPSK, pwr setting = 20, panel antenna.

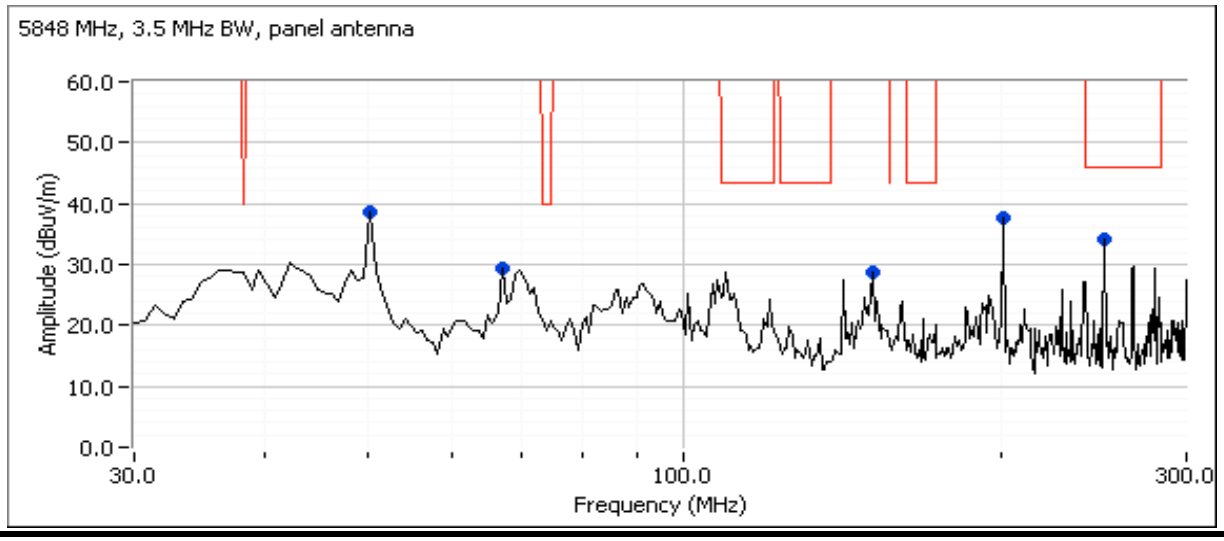
Fundamental emission level @ 3m in 100kHz RBW:	116.2	dBµV/m
Limit for emissions outside of restricted bands:	86.2	dBµV/m

Limit is -30dBc (UNII power measurement)

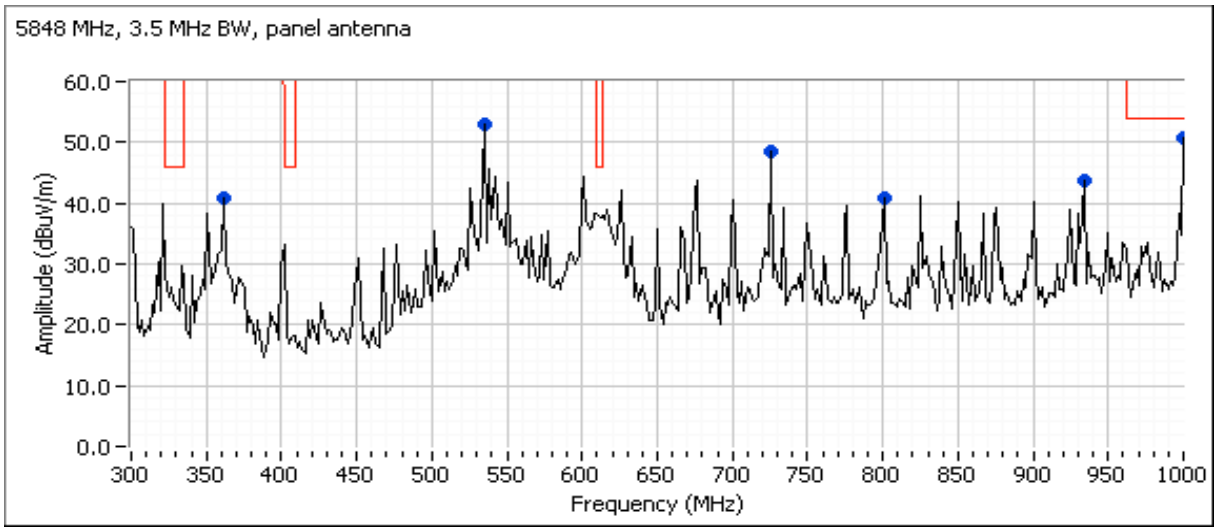
Other Spurious Emissions

Frequency	Level	Pol	15.209 / 15.247		Detector	Azimuth	Height	Comments
MHz	dBµV/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
1000.000	50.9	H	54.0	-3.1	Peak	345	1.5	
250.008	34.3	V	46.0	-11.7	Peak	274	1.0	
534.500	*52.9*	*V*	*86.2*	*-33.3*	*Peak*	*268*	*1.0*	
725.250	*48.6*	*V*	*86.2*	*-37.6*	*Peak*	*286*	*1.5*	
933.500	*43.8*	*V*	*86.2*	*-42.4*	*Peak*	*208*	*2.0*	
361.250	*41.0*	*V*	*86.2*	*-45.2*	*Peak*	*252*	*1.5*	
800.500	*41.0*	*H*	*86.2*	*-45.2*	*Peak*	*347*	*2.0*	
50.250	*38.5*	*V*	*86.2*	*-47.7*	*Peak*	*106*	*3.0*	
200.775	*37.8*	*H*	*86.2*	*-48.4*	*Peak*	*10*	*1.5*	
67.125	*29.4*	*V*	*86.2*	*-56.8*	*Peak*	*160*	*1.0*	
150.825	*28.8*	*V*	*86.2*	*-57.4*	*Peak*	*18*	*1.0*	
1000.000	51.0	H	54.0	-3.0	QP	345	1.4	
250.008	34.4	V	46.0	-11.6	QP	320	1.0	

Note 1:	For emissions in restricted bands, the limit of 15.209 was used. For all other emissions, the limit was set 30dB below the level of the fundamental and measured in 100kHz.



Client:	GE MDS LLC	Job Number:	J83512
Model:	Mercury5800	T-Log Number:	T83623
		Account Manager:	Susan Pelzl
Contact:	Dennis McCarthy		
Standard:	FCC 15.247, RSS-210, RSS-GEN	Class:	N/A



Client:	GE MDS LLC	Job Number:	J83512
Model:	Mercury5800	T-Log Number:	T83623
		Account Manager:	Susan Pelzl
Contact:	Dennis McCarthy		
Standard:	FCC 15.247, RSS-210, RSS-GEN	Class:	N/A

RSS 210 and FCC 15.247 (DTS) Radiated Spurious Emissions (Sector Antenna)

Test Specific Details

Objective: The objective of this test session is to perform final qualification testing of the EUT with respect to the specification listed above.

General Test Configuration

The EUT and all local support equipment were located on the turntable for radiated spurious emissions testing. All remote support equipment was located approximately 30 meters from the EUT with all I/O connections running on top of the groundplane or routed in overhead in the GR-1089 test configuration.

For radiated emissions testing the measurement antenna was located 3 meters from the EUT.

Ambient Conditions:

Temperature:	20-25 °C
Rel. Humidity:	30-40 %

Modifications Made During Testing

No modifications were made to the EUT during testing

Deviations From The Standard

No deviations were made from the requirements of the standard.

Client:	GE MDS LLC	Job Number:	J83512
Model:	Mercury5800	T-Log Number:	T83623
		Account Manager:	Susan Pelzl
Contact:	Dennis McCarthy		
Standard:	FCC 15.247, RSS-210, RSS-GEN	Class:	N/A

Summary of Results - Device Operating in the 5725 - 5850 MHz Band

Run #	Mode	Channel	Power Setting	Measured Power	Test Performed	Limit	Result / Margin
1a	3.5MHz BW	Low	21	-	Radiated Emissions, 1 - 40GHz	FCC Part 15.209 / 15.247(c)	53.8dBµV/m @ 11450.0MHz (-0.2dB)
1b	3.5MHz BW	Center	20	-	Radiated Emissions, 1 - 40GHz	FCC Part 15.209 / 15.247(c)	53.3dBµV/m @ 11576.0MHz (-0.7dB)
1c	3.5MHz BW	High	20	-	Radiated Emissions, 1 - 40GHz	FCC Part 15.209 / 15.247(c)	51.8dBµV/m @ 11696.1MHz (-2.2dB)
2a	5MHz BW	low	20	-	Radiated Emissions, 1 - 40GHz	FCC Part 15.209 / 15.247(c)	51.4dBµV/m @ 5386.5MHz (-2.6dB)
2b	5MHz BW	center	19	-	Radiated Emissions, 1 - 40GHz	FCC Part 15.209 / 15.247(c)	49.4dBµV/m @ 5381.3MHz (-4.6dB)
2c	5MHz BW	high	19	-	Radiated Emissions, 1 - 40GHz	FCC Part 15.209 / 15.247(c)	50.3dBµV/m @ 5465.8MHz (-3.7dB)
3a	7MHz BW	low	20	-	Radiated Emissions, 1 - 40GHz	FCC Part 15.209 / 15.247(c)	78.0dBµV/m @ 5977.5MHz (-5.9dB)
3b	7MHz BW	center	20	-	Radiated Emissions, 1 - 40GHz	FCC Part 15.209 / 15.247(c)	71.1dBµV/m @ 6069.2MHz (-13.6dB)
3c	7MHz BW	high	20	-	Radiated Emissions, 1 - 40GHz	FCC Part 15.209 / 15.247(c)	67.4dBµV/m @ 10340.8MHz (-16.2dB)
4a	8.75MHz BW	low	22	-	Radiated Emissions, 1 - 40GHz	FCC Part 15.209 / 15.247(c)	70.8dBµV/m @ 5986.7MHz (-15.0dB)
4b	8.75MHz BW	center	19	-	Radiated Emissions, 1 - 40GHz	FCC Part 15.209 / 15.247(c)	70.9dBµV/m @ 6069.2MHz (-12.2dB)
4c	8.75MHz BW	high	18	-	Radiated Emissions, 1 - 40GHz	FCC Part 15.209 / 15.247(c)	66.7dBµV/m @ 10340.8MHz (-16.0dB)
5a	10MHz BW	low	20	-	Radiated Emissions, 1 - 40GHz	FCC Part 15.209 / 15.247(c)	75.7dBµV/m @ 5986.7MHz (-6.2dB)
5b	10MHz BW	center	19	-	Radiated Emissions, 1 - 40GHz	FCC Part 15.209 / 15.247(c)	71.1dBµV/m @ 6069.2MHz (-10.1dB)
5c	10MHz BW	high	18	-	Radiated Emissions, 1 - 40GHz	FCC Part 15.209 / 15.247(c)	66.5dBµV/m @ 10340.8MHz (-3.5dB)

Client:	GE MDS LLC	Job Number:	J83512
Model:	Mercury5800	T-Log Number:	T83623
		Account Manager:	Susan Pelzl
Contact:	Dennis McCarthy		
Standard:	FCC 15.247, RSS-210, RSS-GEN	Class:	N/A

Run #1: Radiated Spurious Emissions, 30 - 40000 MHz. Operating Mode: 3.5MHz BW

Date of Test: 9/27/2011 Test Location: FT Chamber #4

Test Engineer: Mark Hill

Note:	No emissions observed between 18-40GHz

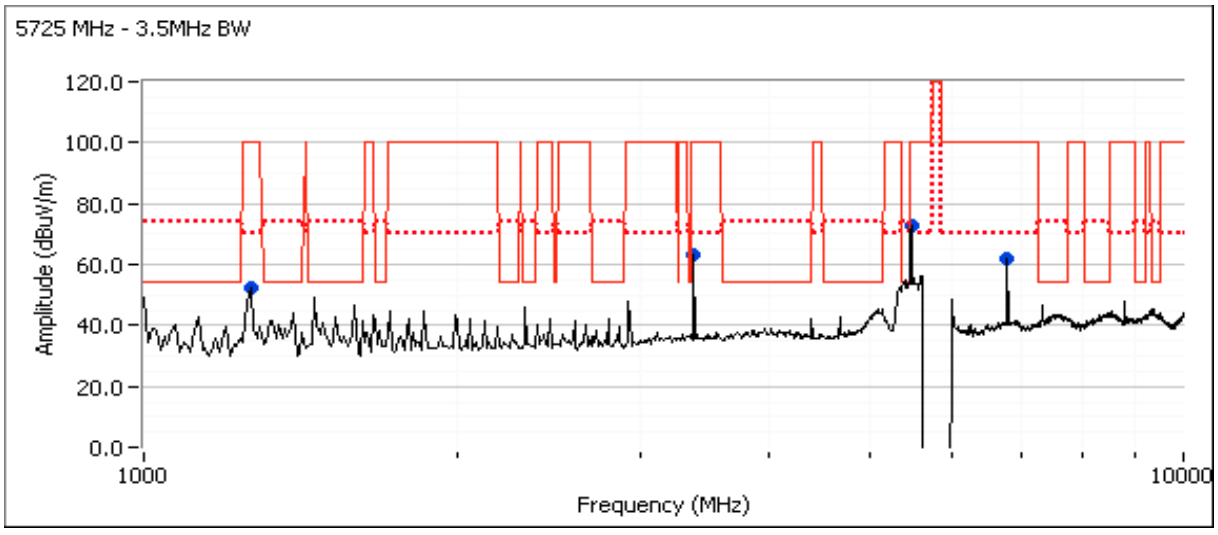
Run #1a: Low Channel @ 5727 MHz

Fundamental emission level @ 3m in 100kHz RBW:	120.4 dBµV/m

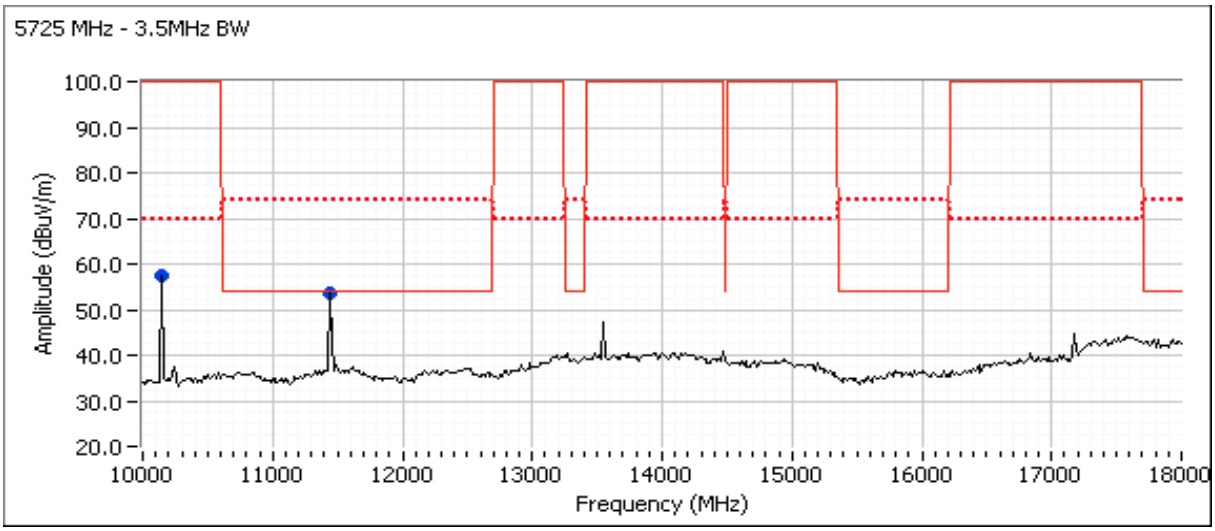
Other Spurious Emissions

Frequency	Level	Pol	15.209 / 15.247		Detector	Azimuth	Height	Comments
MHz	dBµV/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
11449.990	53.8	H	54.0	-0.2	AVG	324	1.0	RB 1 MHz;VB 10 Hz;Pk
11451.890	66.3	H	74.0	-7.7	PK	324	1.0	RB 1 MHz;VB 3 MHz;Pk
10154.900	57.3	V	90.4	-33.1	Peak	50	1.3	
5474.550	70.8	V	90.4	-19.6	Pk	277	1.3	RB 100 kHz;VB 100 kHz;Pk
6771.990	70.5	V	90.4	-19.9	Pk	124	1.6	RB 100 kHz;VB 100 kHz;Pk
3386.030	63.9	H	90.4	-26.5	Pk	227	1.2	RB 100 kHz;VB 100 kHz;Pk
1266.680	53.3	V	90.4	-37.1	Pk	279	1.7	RB 100 kHz;VB 100 kHz;Pk

Note 1:	For emissions in restricted bands, the limit of 15.209 was used. For all other emissions, the limit was set 30dB below the level of the fundamental and measured in 100kHz.



Client:	GE MDS LLC	Job Number:	J83512
Model:	Mercury5800	T-Log Number:	T83623
		Account Manager:	Susan Pelzl
Contact:	Dennis McCarthy		
Standard:	FCC 15.247, RSS-210, RSS-GEN	Class:	N/A



Run #1b: Center Channel @ 5788 MHz

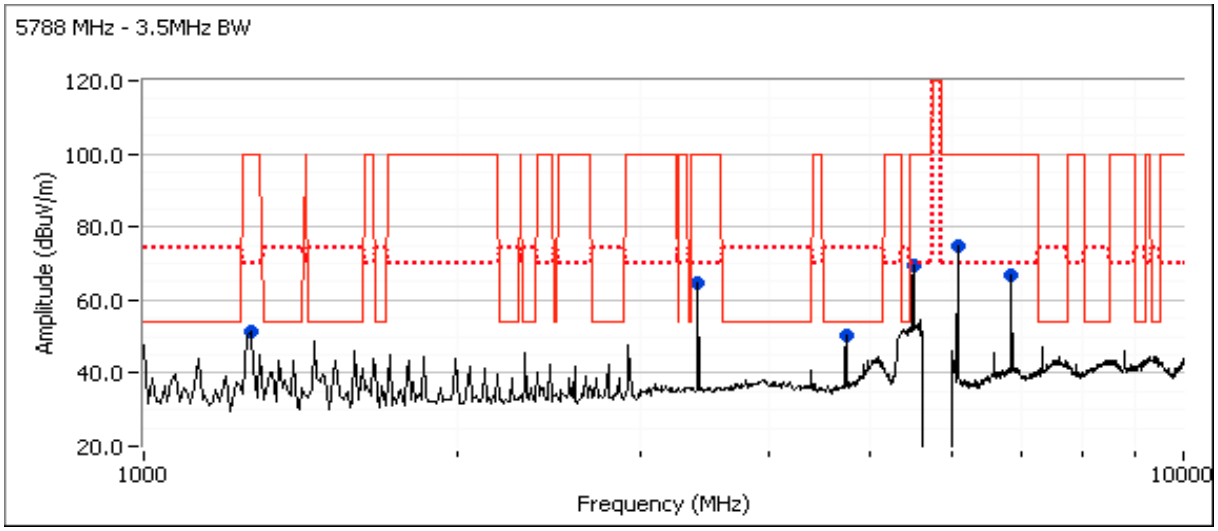
Fundamental emission level @ 3m in 100kHz RBW:	118.9 dBµV/m

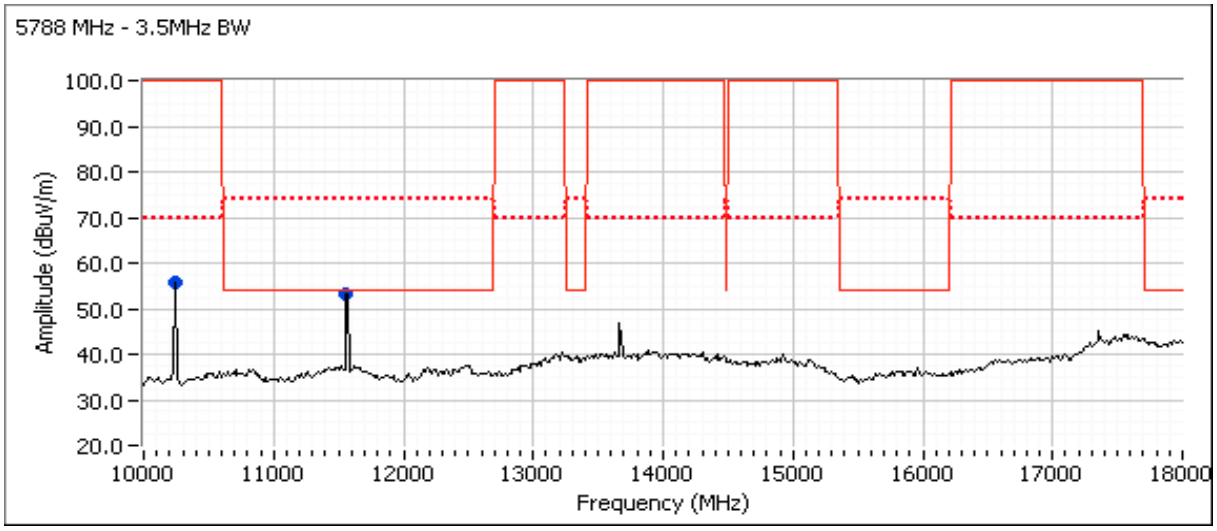
Other Spurious Emissions

Frequency	Level	Pol	15.209 / 15.247		Detector	Azimuth	Height	Comments
MHz	dBµV/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
11575.960	53.3	V	54.0	-0.7	AVG	24	1.0	RB 1 MHz;VB 10 Hz;Pk
11577.960	67.0	V	74.0	-7.0	PK	24	1.0	RB 1 MHz;VB 3 MHz;Pk
10249.470	55.6	V	88.9	-33.3	Peak	8	1.0	
4742.910	46.2	V	54.0	-7.8	AVG	259	1.3	RB 1 MHz;VB 10 Hz;Pk
6069.520	76.7	H	88.9	-12.2	PK	278	1.2	RB 100 kHz;VB 100 kHz;Pk
4742.630	56.2	V	74.0	-17.8	PK	259	1.3	RB 1 MHz;VB 3 MHz;Pk
6832.980	68.6	V	88.9	-20.3	PK	124	1.6	RB 100 kHz;VB 100 kHz;Pk
5506.580	66.5	H	88.9	-22.4	PK	257	1.2	RB 100 kHz;VB 100 kHz;Pk
3416.510	65.7	H	88.9	-23.2	PK	139	1.3	RB 100 kHz;VB 100 kHz;Pk
1266.700	51.3	V	88.9	-37.6	PK	245	2.2	RB 100 kHz;VB 100 kHz;Pk

Note 1:	For emissions in restricted bands, the limit of 15.209 was used. For all other emissions, the limit was set 30dB below the level of the fundamental and measured in 100kHz.

Client:	GE MDS LLC	Job Number:	J83512
Model:	Mercury5800	T-Log Number:	T83623
		Account Manager:	Susan Pelzl
Contact:	Dennis McCarthy		
Standard:	FCC 15.247, RSS-210, RSS-GEN	Class:	N/A





Client:	GE MDS LLC	Job Number:	J83512
Model:	Mercury5800	T-Log Number:	T83623
		Account Manager:	Susan Pelzl
Contact:	Dennis McCarthy		
Standard:	FCC 15.247, RSS-210, RSS-GEN	Class:	N/A

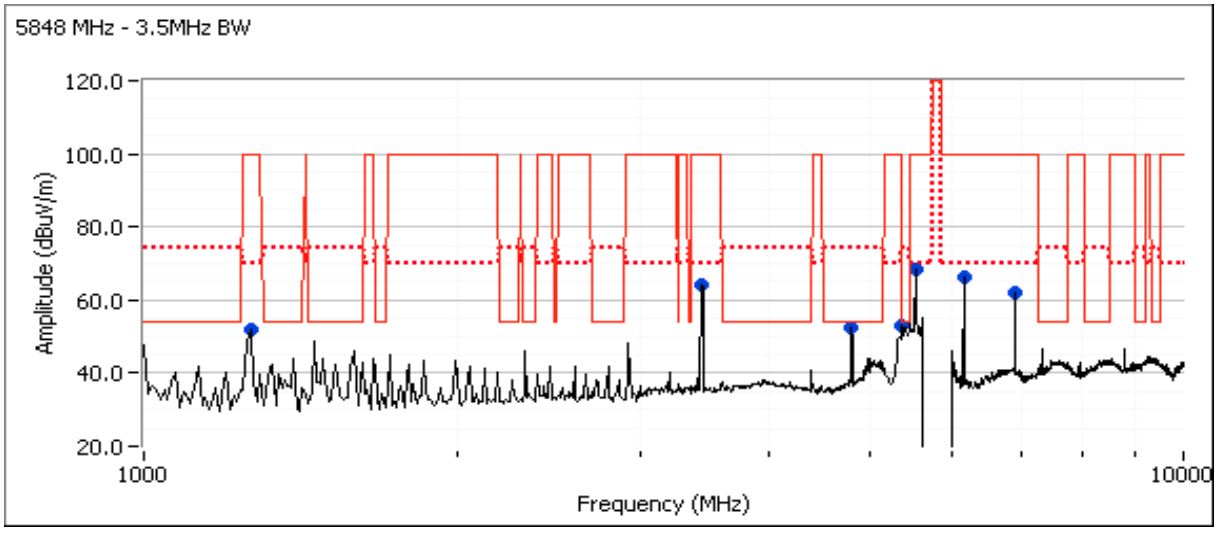
Run #1c: High Channel @ 5848 MHz

Fundamental emission level @ 3m in 100kHz RBW:	116.2 dBµV/m

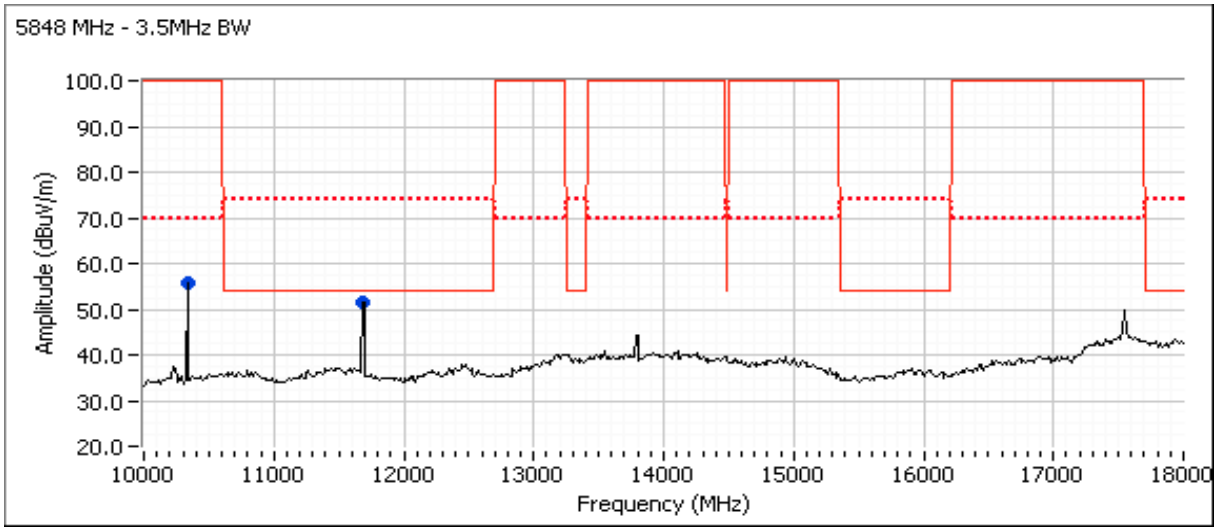
Other Spurious Emissions

Frequency	Level	Pol	15.209 / 15.247		Detector	Azimuth	Height	Comments
MHz	dBµV/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
11696.090	51.8	V	54.0	-2.2	AVG	341	1.0	RB 1 MHz;VB 10 Hz;Pk
11698.360	67.6	V	74.0	-6.4	PK	341	1.0	RB 1 MHz;VB 3 MHz;Pk
10339.540	55.9	V	86.2	-30.3	Peak	14	1.0	
4802.880	50.0	V	54.0	-4.0	AVG	261	1.3	RB 1 MHz;VB 10 Hz;Pk
5359.060	49.0	V	54.0	-5.0	AVG	269	1.2	RB 1 MHz;VB 10 Hz;Pk
4805.270	59.5	V	74.0	-14.5	PK	261	1.3	RB 1 MHz;VB 3 MHz;Pk
5359.940	58.9	V	74.0	-15.1	PK	269	1.2	RB 1 MHz;VB 3 MHz;Pk
6159.520	68.9	H	86.2	-17.3	PK	257	1.2	RB 100 kHz;VB 100 kHz;Pk
5535.770	67.7	H	86.2	-18.5	PK	268	1.2	RB 100 kHz;VB 100 kHz;Pk
3446.500	65.4	H	86.2	-20.8	PK	139	1.3	RB 100 kHz;VB 100 kHz;Pk
6892.980	64.2	V	86.2	-22.0	PK	125	1.6	RB 100 kHz;VB 100 kHz;Pk
1266.680	51.9	V	86.2	-34.3	PK	252	2.2	RB 100 kHz;VB 100 kHz;Pk

Note 1:	For emissions in restricted bands, the limit of 15.209 was used. For all other emissions, the limit was set 30dB below the level of the fundamental and measured in 100kHz.



Client:	GE MDS LLC	Job Number:	J83512
Model:	Mercury5800	T-Log Number:	T83623
		Account Manager:	Susan Pelzl
Contact:	Dennis McCarthy		
Standard:	FCC 15.247, RSS-210, RSS-GEN	Class:	N/A



Client:	GE MDS LLC	Job Number:	J83512
Model:	Mercury5800	T-Log Number:	T83623
		Account Manager:	Susan Pelzl
Contact:	Dennis McCarthy		
Standard:	FCC 15.247, RSS-210, RSS-GEN	Class:	N/A

Run #2: Radiated Spurious Emissions, 30 - 40000 MHz. Operating Mode: 5MHz BW

Date of Test: 9/27/2011 Test Location: FT Chamber #4

Test Engineer: Mark Hill

Note:	No emissions observed between 18-40GHz

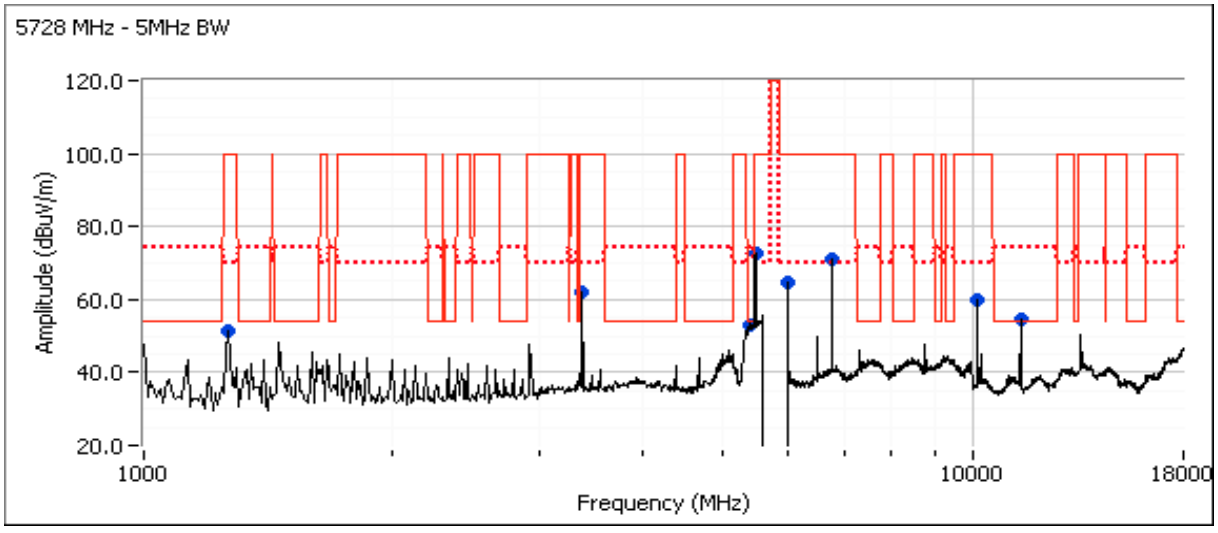
Run #2a: Low Channel @ 5728 MHz

Fundamental emission level @ 3m in 100kHz RBW:	117.2 dBµV/m

Other Spurious Emissions

Frequency	Level	Pol	15.209 / 15.247		Detector	Azimuth	Height	Comments
MHz	dBµV/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
5386.510	51.4	V	54.0	-2.6	AVG	275	1.3	RB 1 MHz;VB 10 Hz;Pk
5979.570	82.4	V	87.2	-4.8	PK	264	1.3	RB 100 kHz;VB 100 kHz;Pk
11455.990	46.4	H	54.0	-7.6	AVG	47	1.0	RB 1 MHz;VB 10 Hz;Pk
5389.950	62.0	V	74.0	-12.0	PK	275	1.3	RB 1 MHz;VB 3 MHz;Pk
11458.910	59.8	H	74.0	-14.2	PK	47	1.0	RB 1 MHz;VB 3 MHz;Pk
5473.630	72.4	H	87.2	-14.8	PK	275	1.2	RB 100 kHz;VB 100 kHz;Pk
6772.990	72.0	V	87.2	-15.2	PK	122	1.1	RB 100 kHz;VB 100 kHz;Pk
3386.460	62.9	H	87.2	-24.3	PK	229	1.1	RB 100 kHz;VB 100 kHz;Pk
10159.570	60.1	H	87.2	-27.1	PK	156	1.0	RB 100 kHz;VB 100 kHz;Pk
1266.680	51.6	V	87.2	-35.6	PK	247	2.2	RB 100 kHz;VB 100 kHz;Pk

Note 1:	For emissions in restricted bands, the limit of 15.209 was used. For all other emissions, the limit was set 30dB below the level of the fundamental and measured in 100kHz.



Client:	GE MDS LLC	Job Number:	J83512
Model:	Mercury5800	T-Log Number:	T83623
		Account Manager:	Susan Pelzl
Contact:	Dennis McCarthy		
Standard:	FCC 15.247, RSS-210, RSS-GEN	Class:	N/A

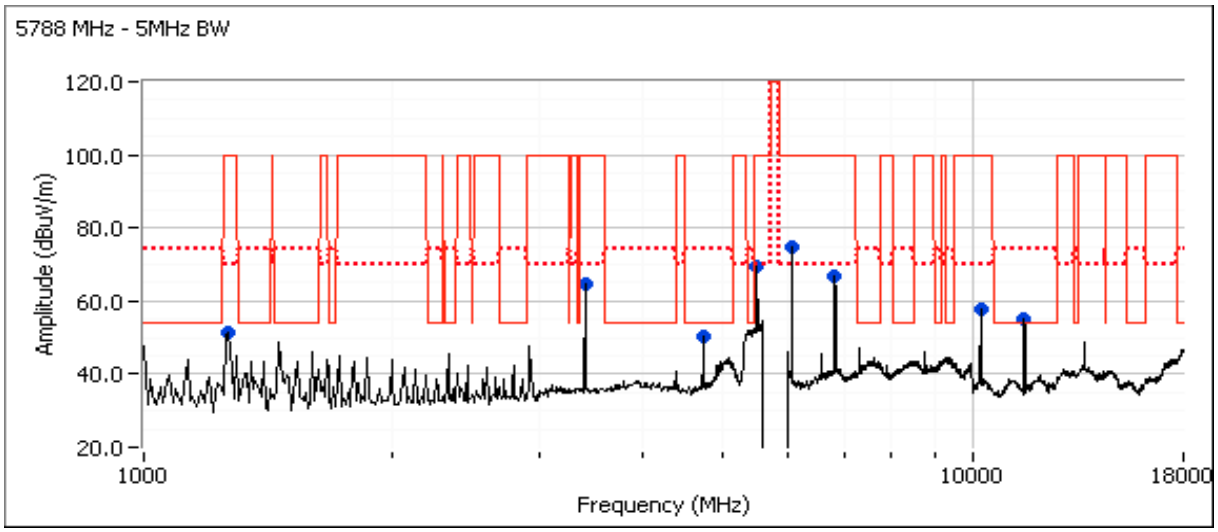
Run #2b: Center Channel @ 5788 MHz

Fundamental emission level @ 3m in 100kHz RBW:	115.1 dBµV/m

Other Spurious Emissions

Frequency	Level	Pol	15.209 / 15.247		Detector	Azimuth	Height	Comments
MHz	dBµV/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
5381.290	49.4	V	54.0	-4.6	AVG	279	1.3	RB 1 MHz;VB 10 Hz;Pk
11575.930	46.8	V	54.0	-7.2	AVG	66	1.0	RB 1 MHz;VB 10 Hz;Pk
6069.530	77.1	V	85.1	-8.0	PK	258	1.3	RB 100 kHz;VB 100 kHz;Pk
11578.180	61.9	V	74.0	-12.1	PK	66	1.0	RB 1 MHz;VB 3 MHz;Pk
5381.760	60.3	V	74.0	-13.7	PK	279	1.3	RB 1 MHz;VB 3 MHz;Pk
5504.940	67.3	V	85.1	-17.8	PK	255	1.4	RB 100 kHz;VB 100 kHz;Pk
6832.990	66.6	V	85.1	-18.5	PK	122	1.1	RB 100 kHz;VB 100 kHz;Pk
3416.510	66.2	H	85.1	-18.9	PK	136	1.3	RB 100 kHz;VB 100 kHz;Pk
10249.480	60.5	H	85.1	-24.6	PK	174	1.0	RB 100 kHz;VB 100 kHz;Pk
1266.680	52.8	V	85.1	-32.3	PK	281	1.7	RB 100 kHz;VB 100 kHz;Pk

Note 1:	For emissions in restricted bands, the limit of 15.209 was used. For all other emissions, the limit was set 30dB below the level of the fundamental and measured in 100kHz.



Client:	GE MDS LLC	Job Number:	J83512
Model:	Mercury5800	T-Log Number:	T83623
		Account Manager:	Susan Pelzl
Contact:	Dennis McCarthy		
Standard:	FCC 15.247, RSS-210, RSS-GEN	Class:	N/A

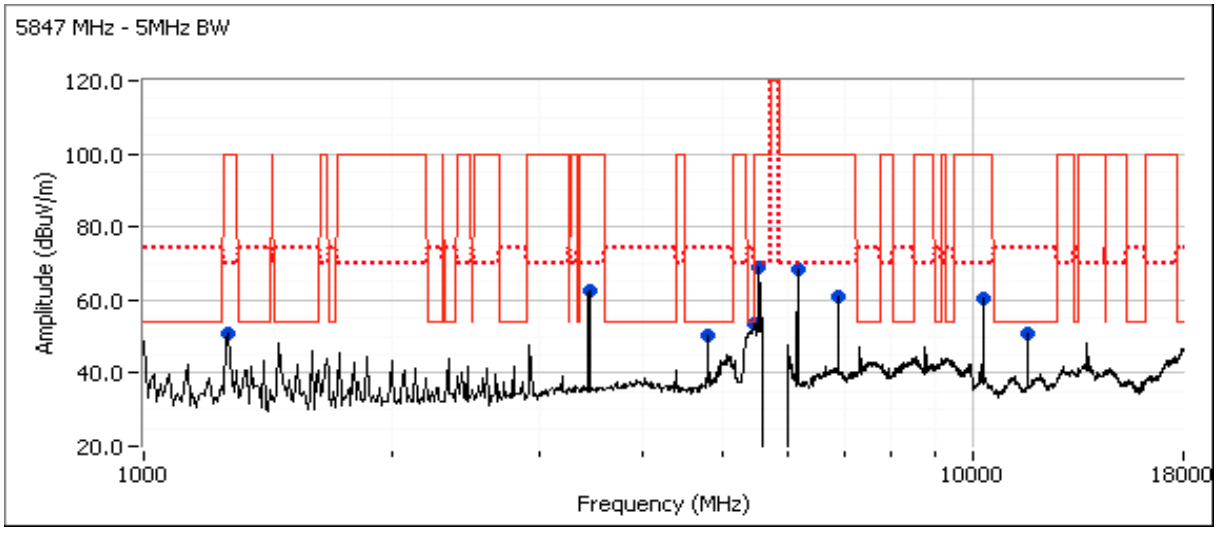
Run #2c: High Channel @ 5847 MHz

Fundamental emission level @ 3m in 100kHz RBW:	115.4 dBµV/m

Other Spurious Emissions

Frequency	Level	Pol	15.209 / 15.247		Detector	Azimuth	Height	Comments
MHz	dBµV/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
5465.820	50.3	V	54.0	-3.7	AVG	277	1.2	RB 1 MHz;VB 10 Hz;Pk
4802.070	48.0	V	54.0	-6.0	AVG	269	1.3	RB 1 MHz;VB 10 Hz;Pk
11693.960	41.1	V	54.0	-12.9	AVG	70	1.1	RB 1 MHz;VB 10 Hz;Pk
5460.840	60.8	V	74.0	-13.2	PK	277	1.2	RB 1 MHz;VB 3 MHz;Pk
4805.830	58.7	V	74.0	-15.3	PK	269	1.3	RB 1 MHz;VB 3 MHz;Pk
11696.690	58.7	V	74.0	-15.3	PK	70	1.1	RB 1 MHz;VB 3 MHz;Pk
6158.000	69.7	V	85.4	-15.7	PK	247	1.3	RB 100 kHz;VB 100 kHz;Pk
5533.990	68.5	H	85.4	-16.9	PK	277	1.2	RB 100 kHz;VB 100 kHz;Pk
6891.980	63.4	V	85.4	-22.0	PK	124	1.6	RB 100 kHz;VB 100 kHz;Pk
3446.010	63.0	H	85.4	-22.4	PK	162	1.3	RB 100 kHz;VB 100 kHz;Pk
10337.980	62.4	H	85.4	-23.0	PK	174	1.0	RB 100 kHz;VB 100 kHz;Pk
1266.680	52.8	V	85.4	-32.6	PK	286	1.7	RB 100 kHz;VB 100 kHz;Pk

Note 1:	For emissions in restricted bands, the limit of 15.209 was used. For all other emissions, the limit was set 30dB below the level of the fundamental and measured in 100kHz.



Client:	GE MDS LLC	Job Number:	J83512
Model:	Mercury5800	T-Log Number:	T83623
		Account Manager:	Susan Pelzl
Contact:	Dennis McCarthy		
Standard:	FCC 15.247, RSS-210, RSS-GEN	Class:	N/A

Run #3: Radiated Spurious Emissions, 30 - 40000 MHz. Operating Mode: 7MHz BW

Date of Test: 10/6/2011 Test Location: FT Chamber #3

Test Engineer: M. Birgani

Note:	No emissions observed between 12-40GHz

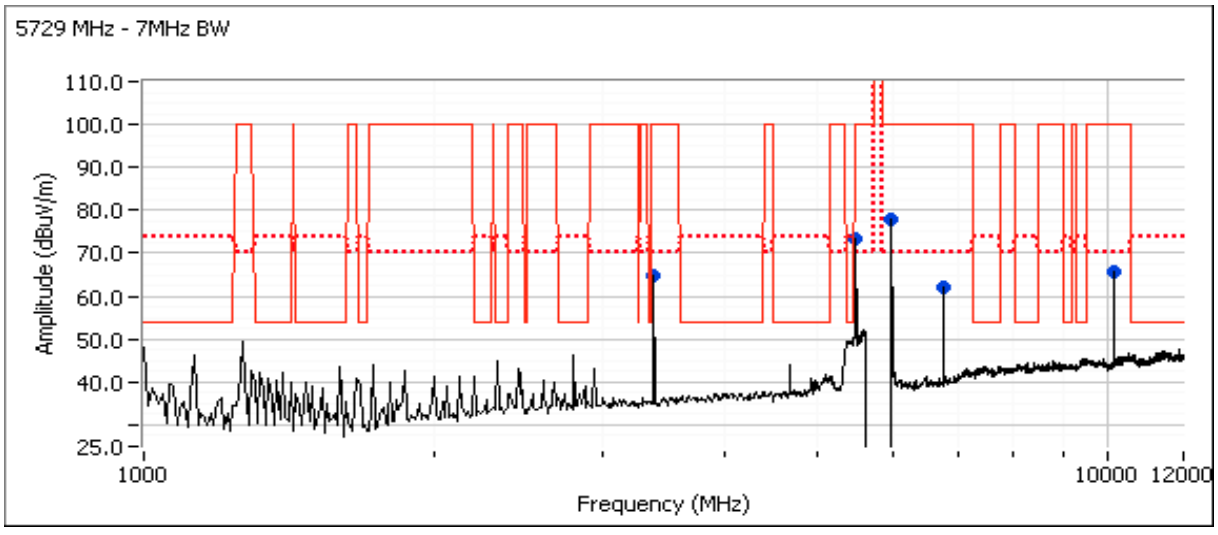
Run #3a: Low Channel @ 5729 MHz

Fundamental emission level @ 3m in 100kHz RBW:	113.9 dBµV/m

Other Spurious Emissions

Frequency	Level	Pol	15.209 / 15.247		Detector	Azimuth	Height	Comments
MHz	dBµV/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
5977.500	78.0	H	83.9	-5.9	PK	4	1.0	RB 100 kHz;VB 100 kHz;Pk
3386.490	65.9	H	83.9	-18.0	PK	102	1.0	RB 100 kHz;VB 100 kHz;Pk
10160.000	65.9	H	83.9	-18.0	PK	8	1.6	RB 100 kHz;VB 100 kHz;Pk
5459.050	33.3	H	54.0	-20.7	AVG	61	1.0	RB 1 MHz;VB 10 Hz;Pk
6774.170	62.3	V	83.9	-21.6	PK	12	1.6	RB 100 kHz;VB 100 kHz;Pk
5454.820	44.2	H	74.0	-29.8	PK	61	1.0	RB 1 MHz;VB 3 MHz;Pk

Note 1:	For emissions in restricted bands, the limit of 15.209 was used. For all other emissions, the limit was set 30dB below the level of the fundamental and measured in 100kHz.



Client:	GE MDS LLC	Job Number:	J83512
Model:	Mercury5800	T-Log Number:	T83623
		Account Manager:	Susan Pelzl
Contact:	Dennis McCarthy		
Standard:	FCC 15.247, RSS-210, RSS-GEN	Class:	N/A

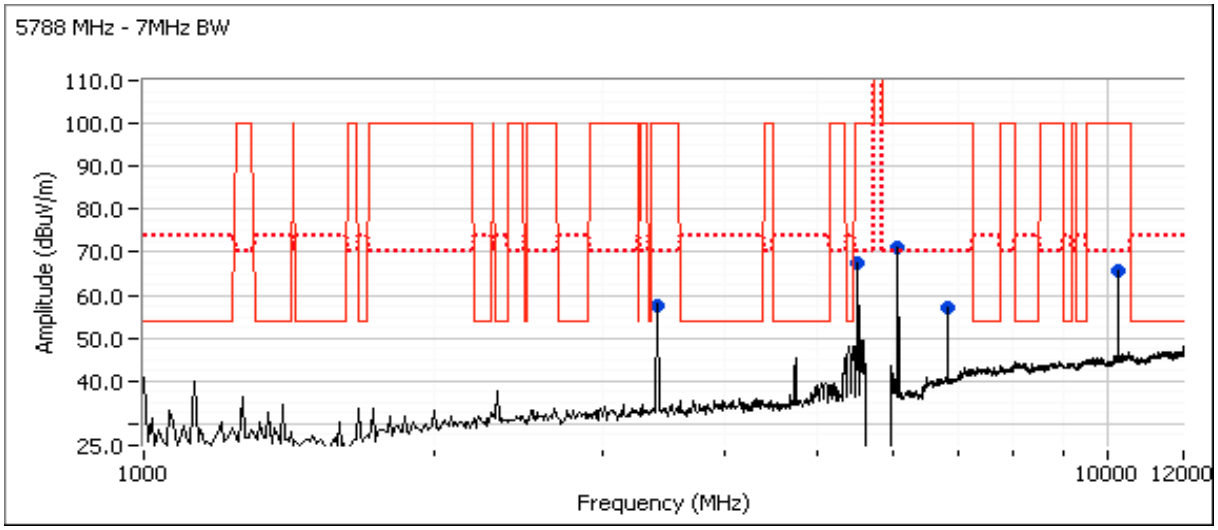
Run #3b: Center Channel @ 5788 MHz

Fundamental emission level @ 3m in 100kHz RBW:	114.7 dBµV/m

Other Spurious Emissions

Frequency	Level	Pol	15.209 / 15.247		Detector	Azimuth	Height	Comments
MHz	dBµV/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
6069.170	71.1	H	84.7	-13.6	PK	24	1.0	RB 100 kHz;VB 100 kHz;Pk
5510.000	67.4	H	84.7	-17.3	PK	24	1.0	RB 100 kHz;VB 100 kHz;Pk
10258.330	65.9	H	84.7	-18.8	PK	306	1.6	RB 100 kHz;VB 100 kHz;Pk
3410.830	57.7	H	84.7	-27.0	PK	52	1.0	RB 100 kHz;VB 100 kHz;Pk
6839.170	57.2	V	84.7	-27.5	PK	9	1.9	RB 100 kHz;VB 100 kHz;Pk

Note 1:	For emissions in restricted bands, the limit of 15.209 was used. For all other emissions, the limit was set 30dB below the level of the fundamental and measured in 100kHz.
Note 2:	Signal is not in a restricted band but the more stringent restricted band limit was used.



Client:	GE MDS LLC	Job Number:	J83512
Model:	Mercury5800	T-Log Number:	T83623
		Account Manager:	Susan Pelzl
Contact:	Dennis McCarthy		
Standard:	FCC 15.247, RSS-210, RSS-GEN	Class:	N/A

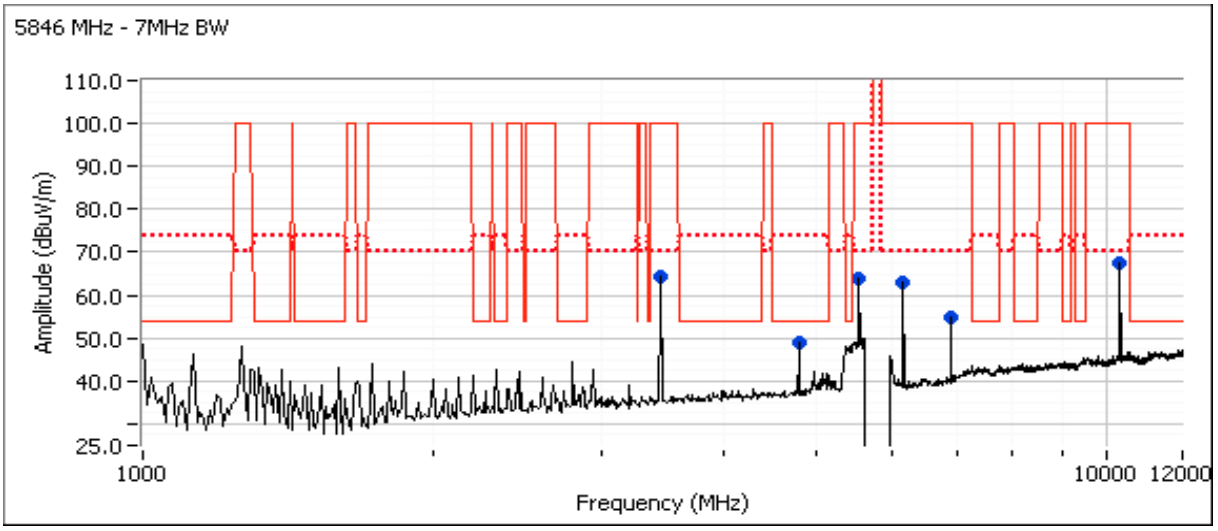
Run #3c: High Channel @ 5846 MHz

Fundamental emission level @ 3m in 100kHz RBW:	113.6 dBµV/m

Other Spurious Emissions

Frequency	Level	Pol	15.209 / 15.247		Detector	Azimuth	Height	Comments
MHz	dBµV/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
10340.830	67.4	H	83.6	-16.2	PK	24	1.6	RB 100 kHz;VB 100 kHz;Pk
3447.500	64.5	V	83.6	-19.1	PK	318	1.6	RB 100 kHz;VB 100 kHz;Pk
5528.330	64.0	H	83.6	-19.6	PK	350	1.0	RB 100 kHz;VB 100 kHz;Pk
6151.670	63.2	H	83.6	-20.4	PK	14	1.0	RB 100 kHz;VB 100 kHz;Pk
4784.240	31.9	H	54.0	-22.1	AVG	27	1.5	RB 1 MHz;VB 10 Hz;Pk
6894.170	54.8	H	83.6	-28.8	PK	314	1.3	RB 100 kHz;VB 100 kHz;Pk
4803.300	43.5	H	74.0	-30.5	PK	27	1.5	RB 1 MHz;VB 3 MHz;Pk

Note 1:	For emissions in restricted bands, the limit of 15.209 was used. For all other emissions, the limit was set 30dB below the level of the fundamental and measured in 100kHz.
Note 2:	Signal is not in a restricted band but the more stringent restricted band limit was used.



Client:	GE MDS LLC	Job Number:	J83512
Model:	Mercury5800	T-Log Number:	T83623
		Account Manager:	Susan Pelzl
Contact:	Dennis McCarthy		
Standard:	FCC 15.247, RSS-210, RSS-GEN	Class:	N/A

Run #4: Radiated Spurious Emissions, 30 - 40000 MHz. Operating Mode: 8.75MHz BW

Date of Test: 10/6/2011 Test Location: FT Chamber #3

Test Engineer: M. Birgani

Note:	No emissions observed between 12-40GHz

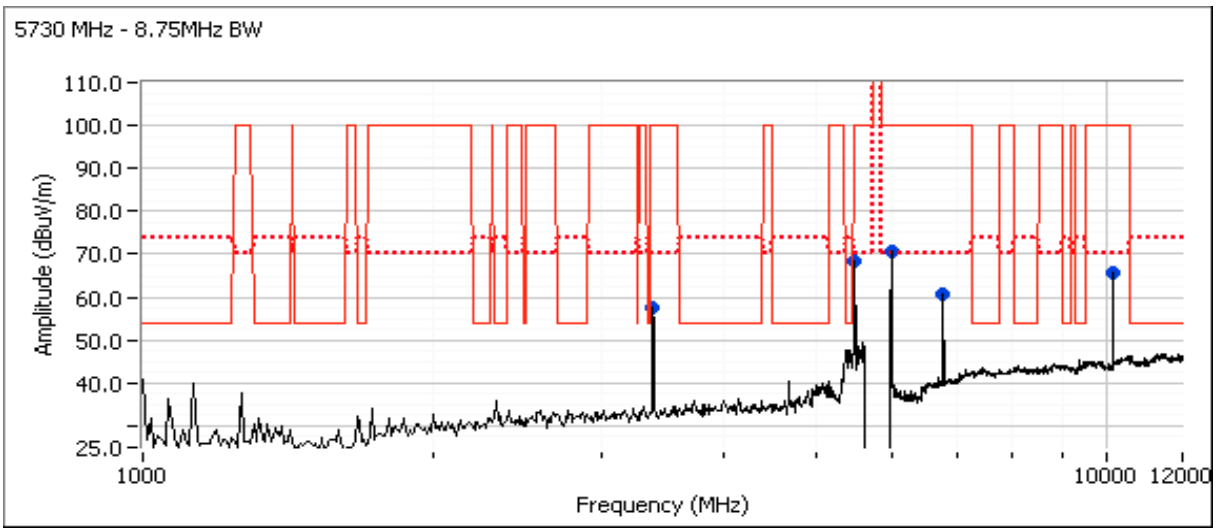
Run #4a: Low Channel @ 5730 MHz

Fundamental emission level @ 3m in 100kHz RBW:	115.8 dBµV/m

Other Spurious Emissions

Frequency	Level	Pol	15.209 / 15.247		Detector	Azimuth	Height	Comments
MHz	dBµV/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
5986.670	70.8	H	85.8	-15.0	PK	51	1.0	RB 100 kHz;VB 100 kHz;Pk
5482.500	68.5	H	85.8	-17.3	PK	21	1.0	RB 100 kHz;VB 100 kHz;Pk
10166.670	65.9	H	85.8	-19.9	PK	8	1.6	RB 100 kHz;VB 100 kHz;Pk
6775.000	60.6	V	85.8	-25.2	PK	11	1.9	RB 100 kHz;VB 100 kHz;Pk
3383.330	57.5	H	85.8	-28.3	PK	51	1.0	RB 100 kHz;VB 100 kHz;Pk

Note 1:	For emissions in restricted bands, the limit of 15.209 was used. For all other emissions, the limit was set 30dB below the level of the fundamental and measured in 100kHz.
Note 2:	Signal is not in a restricted band but the more stringent restricted band limit was used.



Client:	GE MDS LLC	Job Number:	J83512
Model:	Mercury5800	T-Log Number:	T83623
		Account Manager:	Susan Pelzl
Contact:	Dennis McCarthy		
Standard:	FCC 15.247, RSS-210, RSS-GEN	Class:	N/A

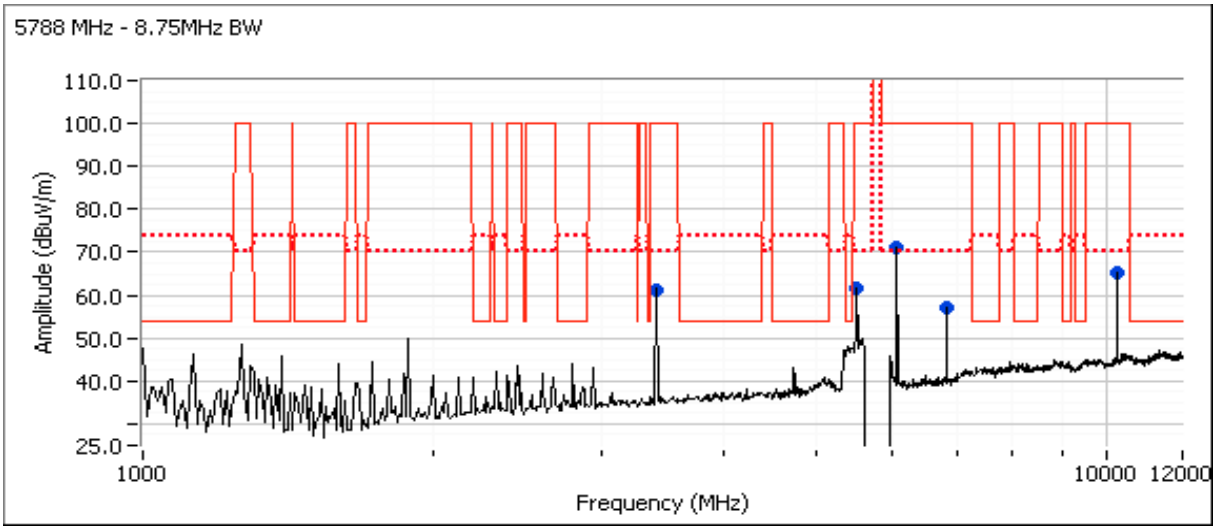
Run #4b: Center Channel @ 5788 MHz

Fundamental emission level @ 3m in 100kHz RBW:	113.1 dBµV/m

Other Spurious Emissions

Frequency	Level	Pol	15.209 / 15.247		Detector	Azimuth	Height	Comments
MHz	dBµV/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
6069.170	70.9	H	83.1	-12.2	PK	6	1.0	RB 100 kHz;VB 100 kHz;Pk
10258.330	65.4	H	83.1	-17.7	PK	306	1.6	RB 100 kHz;VB 100 kHz;Pk
5500.830	61.8	H	83.1	-21.3	PK	13	1.0	RB 100 kHz;VB 100 kHz;Pk
3420.000	61.2	V	83.1	-21.9	PK	161	1.0	RB 100 kHz;VB 100 kHz;Pk
6839.170	57.3	V	83.1	-25.8	PK	11	1.9	RB 100 kHz;VB 100 kHz;Pk

Note 1:	For emissions in restricted bands, the limit of 15.209 was used. For all other emissions, the limit was set 30dB below the level of the fundamental and measured in 100kHz.
Note 2:	Signal is not in a restricted band but the more stringent restricted band limit was used.



Client:	GE MDS LLC	Job Number:	J83512
Model:	Mercury5800	T-Log Number:	T83623
		Account Manager:	Susan Pelzl
Contact:	Dennis McCarthy		
Standard:	FCC 15.247, RSS-210, RSS-GEN	Class:	N/A

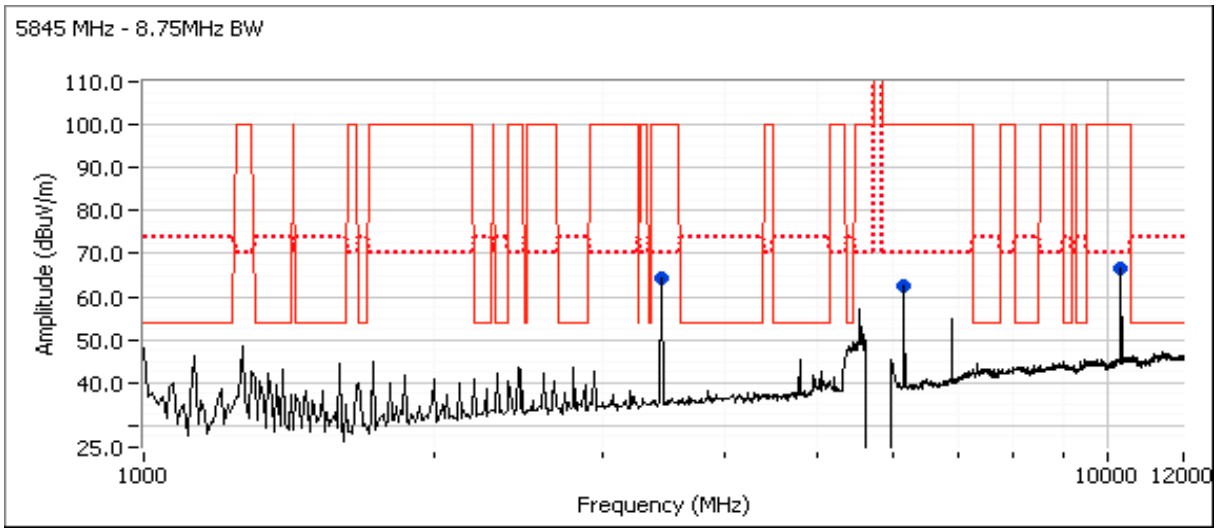
Run #4c: High Channel @ 5845 MHz

Fundamental emission level @ 3m in 100kHz RBW:	112.7 dBµV/m

Other Spurious Emissions

Frequency	Level	Pol	15.209 / 15.247		Detector	Azimuth	Height	Comments
MHz	dBµV/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
10340.830	66.7	H	82.7	-16.0	PK	25	1.6	RB 100 kHz;VB 100 kHz;Pk
3447.500	64.5	V	82.7	-18.2	PK	325	1.9	RB 100 kHz;VB 100 kHz;Pk
6151.670	62.5	H	82.7	-20.2	PK	11	1.0	RB 100 kHz;VB 100 kHz;Pk

Note 1:	For emissions in restricted bands, the limit of 15.209 was used. For all other emissions, the limit was set 30dB below the level of the fundamental and measured in 100kHz.
Note 2:	Signal is not in a restricted band but the more stringent restricted band limit was used.



Client:	GE MDS LLC	Job Number:	J83512
Model:	Mercury5800	T-Log Number:	T83623
		Account Manager:	Susan Pelzl
Contact:	Dennis McCarthy		
Standard:	FCC 15.247, RSS-210, RSS-GEN	Class:	N/A

Run #5: Radiated Spurious Emissions, 30 - 40000 MHz. Operating Mode: 10MHz BW

Date of Test: 10/6/2011 Test Location: FT Chamber #3

Test Engineer: M. Birgani

Note:	No emissions observed between 12-40GHz

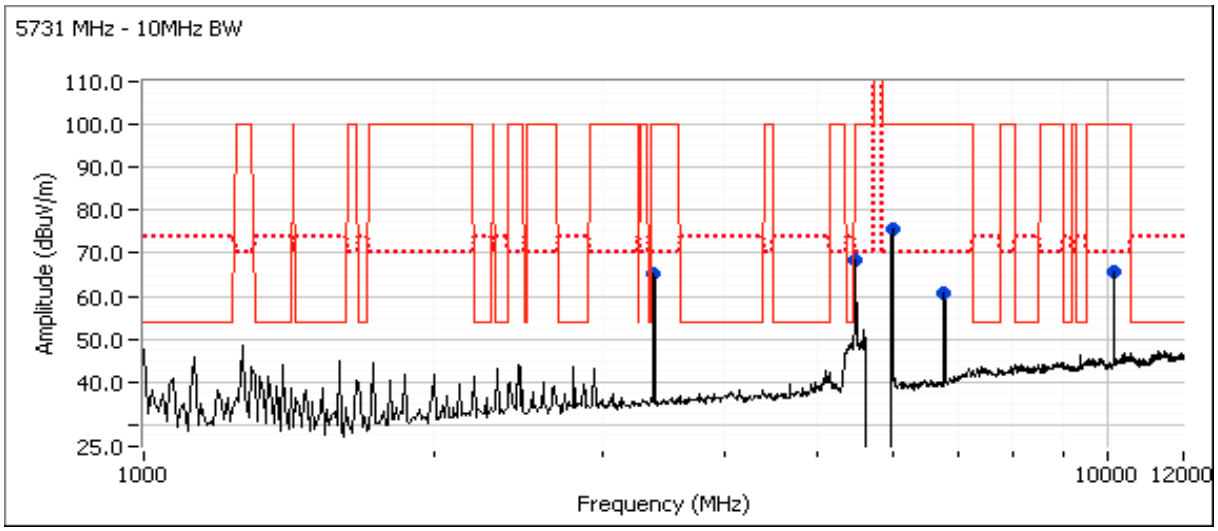
Run #5a: Low Channel @ 5731 MHz

Fundamental emission level @ 3m in 100kHz RBW:	111.9 dBµV/m

Other Spurious Emissions

Frequency	Level	Pol	15.209 / 15.247		Detector	Azimuth	Height	Comments
MHz	dBµV/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
5986.670	75.7	H	81.9	-6.2	PK	11	1.0	RB 100 kHz;VB 100 kHz;Pk
5473.330	68.4	H	81.9	-13.5	PK	358	1.3	RB 100 kHz;VB 100 kHz;Pk
10175.830	65.6	H	81.9	-16.3	PK	5	1.6	RB 100 kHz;VB 100 kHz;Pk
3383.330	65.2	H	81.9	-16.7	PK	125	1.0	RB 100 kHz;VB 100 kHz;Pk
6775.000	60.5	V	81.9	-21.4	PK	12	1.6	RB 100 kHz;VB 100 kHz;Pk

Note 1:	For emissions in restricted bands, the limit of 15.209 was used. For all other emissions, the limit was set 30dB below the level of the fundamental and measured in 100kHz.
Note 2:	Signal is not in a restricted band but the more stringent restricted band limit was used.



Client:	GE MDS LLC	Job Number:	J83512
Model:	Mercury5800	T-Log Number:	T83623
		Account Manager:	Susan Pelzl
Contact:	Dennis McCarthy		
Standard:	FCC 15.247, RSS-210, RSS-GEN	Class:	N/A

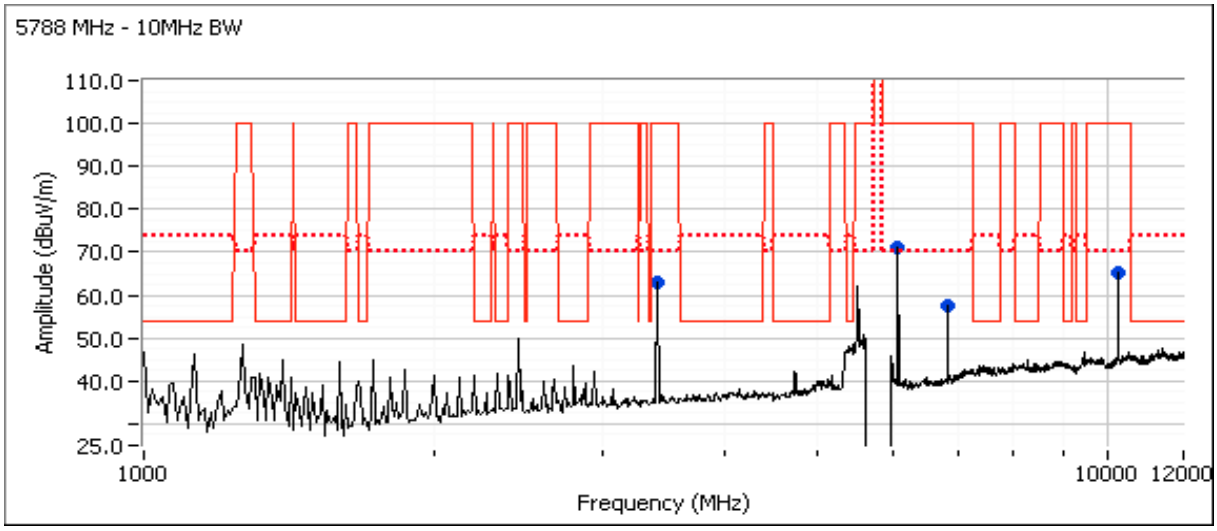
Run #5b: Center Channel @ 5788 MHz

Fundamental emission level @ 3m in 100kHz RBW:	111.2 dBµV/m

Other Spurious Emissions

Frequency	Level	Pol	15.209 / 15.247		Detector	Azimuth	Height	Comments
MHz	dBµV/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
6069.170	71.1	H	81.2	-10.1	PK	19	1.0	RB 100 kHz;VB 100 kHz;Pk
10258.330	65.1	H	81.2	-16.1	PK	311	1.6	RB 100 kHz;VB 100 kHz;Pk
3410.830	63.2	H	81.2	-18.0	PK	123	1.0	RB 100 kHz;VB 100 kHz;Pk
6839.170	57.7	V	81.2	-23.5	PK	313	1.3	RB 100 kHz;VB 100 kHz;Pk

Note 1:	For emissions in restricted bands, the limit of 15.209 was used. For all other emissions, the limit was set 30dB below the level of the fundamental and measured in 100kHz.
Note 2:	Signal is not in a restricted band but the more stringent restricted band limit was used.



Client:	GE MDS LLC	Job Number:	J83512
Model:	Mercury5800	T-Log Number:	T83623
		Account Manager:	Susan Pelzl
Contact:	Dennis McCarthy		
Standard:	FCC 15.247, RSS-210, RSS-GEN	Class:	N/A

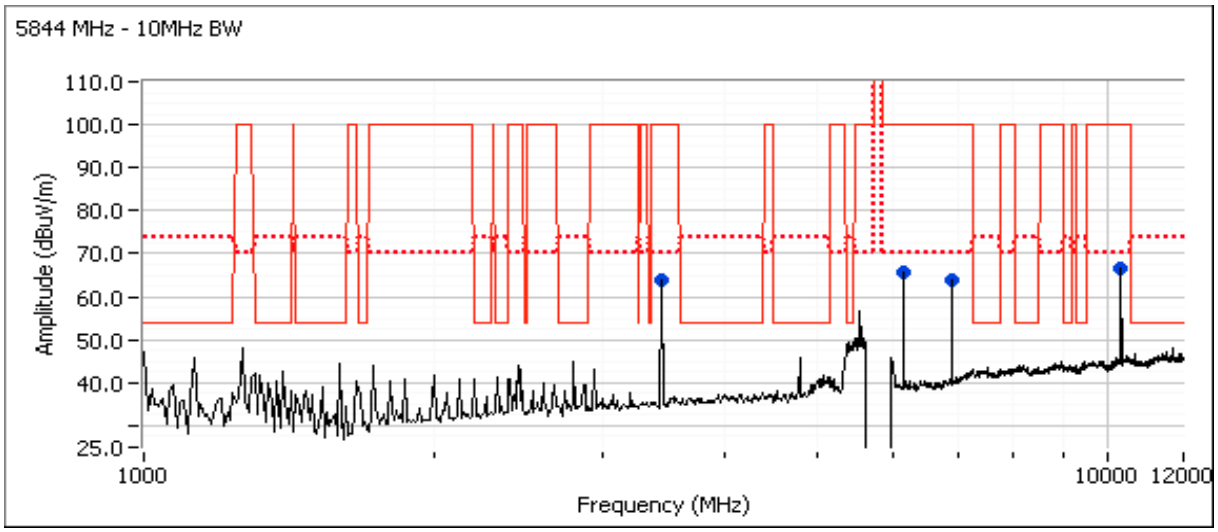
Run #5c: High Channel @ 5844 MHz

Fundamental emission level @ 3m in 100kHz RBW:	110.6 dBµV/m

Other Spurious Emissions

Frequency	Level	Pol	15.209 / 15.247		Detector	Azimuth	Height	Comments
MHz	dBµV/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
10340.830	66.5	H	70.0	-3.5	PK	26	1.6	RB 100 kHz;VB 100 kHz;Pk
6151.670	65.8	V	70.0	-4.2	PK	327	1.3	RB 100 kHz;VB 100 kHz;Pk
3447.500	64.1	V	70.0	-5.9	PK	320	1.6	RB 100 kHz;VB 100 kHz;Pk
6894.170	63.8	H	70.0	-6.2	PK	30	1.6	RB 100 kHz;VB 100 kHz;Pk

Note 1:	For emissions in restricted bands, the limit of 15.209 was used. For all other emissions, the limit was set 30dB below the level of the fundamental and measured in 100kHz.



Client:	GE MDS LLC	Job Number:	J83512
Model:	Mercury5800	T-Log Number:	T83623
		Account Manager:	Susan Pelzl
Contact:	Dennis McCarthy		
Standard:	FCC 15.247, RSS-210, RSS-GEN	Class:	N/A

RSS 210 and FCC 15.247 (DTS) Radiated Spurious Emissions

Test Specific Details

Objective: The objective of this test session is to perform final qualification testing of the EUT with respect to the specification listed above.

General Test Configuration

The EUT and all local support equipment were located on the turntable for radiated spurious emissions testing.

For radiated emissions testing the measurement antenna was located 3 meters from the EUT.

Ambient Conditions:

Temperature: 20-25 °C

Rel. Humidity: 30-40 %

Summary of Results - Device Operating in the 5725 - 5850 MHz Band

Run #	Mode	Channel	Power Setting	Measured Power	Test Performed	Limit	Result / Margin
4a panel	bw 8.75	low	22	-	Radiated Emissions, 1 - 40GHz	FCC Part 15.209 / 15.247(c)	45.8dBµV/m @ 11459.3MHz (-8.2dB)
4b panel	bw 8.75	center	20	-	Radiated Emissions, 1 - 40GHz	FCC Part 15.209 / 15.247(c)	49.4dBµV/m @ 1465.5MHz (-4.6dB)
4c panel	bw 8.75	high	20	-	Radiated Emissions, 1 - 40GHz	FCC Part 15.209 / 15.247(c)	46.8dBµV/m @ 7322.4MHz (-7.2dB)
5a panel	bw 10	low	21	-	Radiated Emissions, 1 - 40GHz	FCC Part 15.209 / 15.247(c)	82.8dBµV/m @ 5984.0MHz (-4.8dB)
5b panel	bw 10	center	21	-	Radiated Emissions, 1 - 40GHz	FCC Part 15.209 / 15.247(c)	49.3dBµV/m @ 11576.2MHz (-4.7dB)
5c panel	bw 10	high	20	-	Radiated Emissions, 1 - 40GHz	FCC Part 15.209 / 15.247(c)	53.3dBµV/m @ 11688.0MHz (-0.7dB)

Modifications Made During Testing

No modifications were made to the EUT during testing

Deviations From The Standard

No deviations were made from the requirements of the standard.

Panel antenna

Client:	GE MDS LLC	Job Number:	J83512
Model:	Mercury5800	T-Log Number:	T83623
		Account Manager:	Susan Pelzl
Contact:	Dennis McCarthy		
Standard:	FCC 15.247, RSS-210, RSS-GEN	Class:	N/A

Run #4a: Radiated Spurious Emissions, 1000 - 40000 MHz. Operating 5730MHz BW 8.75 MHz

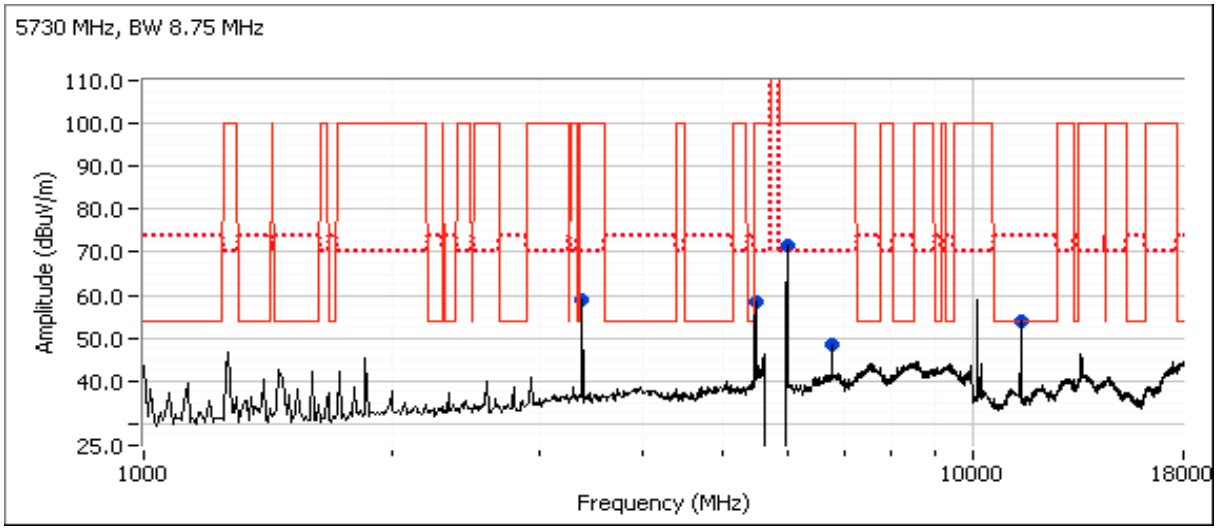
Date of Test: 9/20/2011 Test Location: FT Chamber #7

Test Engineer: M. Hill, M. Birgani

Other Spurious Emissions, pwr = 22

Frequency	Level	Pol	15.209 / 15.247		Detector	Azimuth	Height	Comments
MHz	dBµV/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
5726.300	118.1	V	-	-	-	95	1.0	RB 100 kHz;VB 100 kHz;Pk
5729.190	118.4	H	-	-	-	95	1.0	RB 100 kHz;VB 100 kHz;Pk
11459.330	45.8	H	54.0	-8.2	AVG	268	1.0	RB 1 MHz;VB 10 Hz;Pk
11456.500	58.1	H	74.0	-15.9	PK	268	1.0	RB 1 MHz;VB 3 MHz;Pk
5982.490	70.6	V	88.4	-17.8	PK	0	1.4	RB 100 kHz;VB 100 kHz;Pk
5478.700	58.3	V	88.4	-30.1	PK	360	1.9	RB 100 kHz;VB 100 kHz;Pk
3387.500	55.8	V	88.4	-32.6	PK	136	1.4	RB 100 kHz;VB 100 kHz;Pk
6775.100	52.4	V	88.4	-36.0	PK	346	2.0	RB 100 kHz;VB 100 kHz;Pk

Note 1:	Peak emissions not in restriced bands during scan were < -40dB of the fundamental amplitude.
Note 2:	No emissions observed between 18-40GHz



Client:	GE MDS LLC	Job Number:	J83512
Model:	Mercury5800	T-Log Number:	T83623
		Account Manager:	Susan Pelzl
Contact:	Dennis McCarthy		
Standard:	FCC 15.247, RSS-210, RSS-GEN	Class:	N/A

Run #4b: Radiated Spurious Emissions, 1000 - 40000 MHz. Operating 5788MHz BW 8.75 MHz

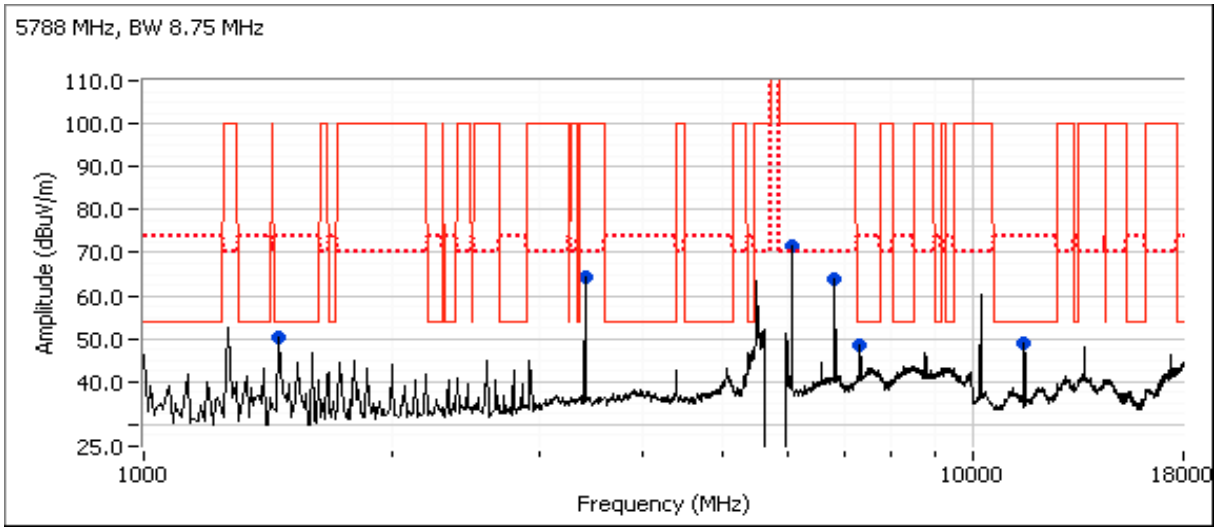
Date of Test: 9/20/2011 Test Location: FT Chamber #7

Test Engineer: M. Birgani

Other Spurious Emissions, pwr = 20

Frequency	Level	Pol	15.209 / 15.247		Detector	Azimuth	Height	Comments
MHz	dBµV/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
5787.630	116.9	H	-	-	-	90	1.0	RB 100 kHz;VB 100 kHz;Pk
5787.500	117.0	V	-	-	-	89	1.0	RB 100 kHz;VB 100 kHz;Pk
1465.450	49.4	V	54.0	-4.6	AVG	101	1.0	RB 1 MHz;VB 10 Hz;Pk
7324.610	47.5	V	54.0	-6.5	AVG	260	1.6	RB 1 MHz;VB 10 Hz;Pk
6069.530	79.6	H	87.0	-7.4	PK	101	1.0	RB 100 kHz;VB 100 kHz;Pk
11570.240	46.2	H	54.0	-7.8	AVG	31	1.1	RB 1 MHz;VB 10 Hz;Pk
11569.770	59.4	H	74.0	-14.6	PK	31	1.1	RB 1 MHz;VB 3 MHz;Pk
7324.920	56.5	V	74.0	-17.5	PK	260	1.6	RB 1 MHz;VB 3 MHz;Pk
3416.500	65.7	H	87.0	-21.3	PK	165	1.8	RB 100 kHz;VB 100 kHz;Pk
1465.520	51.6	V	74.0	-22.4	PK	101	1.0	RB 1 MHz;VB 3 MHz;Pk
6832.990	64.4	V	87.0	-22.6	PK	260	1.5	RB 1 MHz;VB 10 kHz;Pk

Note 1:	Peak emissions not in restriced bands during scan were < -40dB of the fundamental amplitude.
Note 2:	No emissions observed between 18-40GHz



Client:	GE MDS LLC	Job Number:	J83512
Model:	Mercury5800	T-Log Number:	T83623
		Account Manager:	Susan Pelzl
Contact:	Dennis McCarthy		
Standard:	FCC 15.247, RSS-210, RSS-GEN	Class:	N/A

Run #4c: Radiated Spurious Emissions, 1000 - 40000 MHz. Operating 5845MHz BW 8.75 MHz

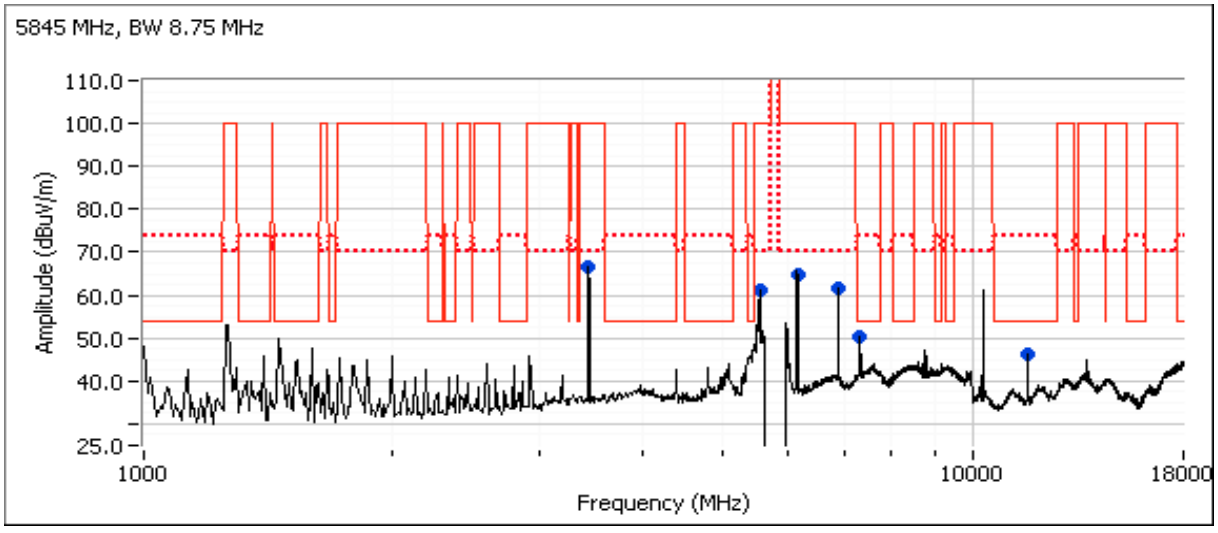
Date of Test: 9/20/2011 Test Location: FT Chamber #7

Test Engineer: M. Birgani

Other Spurious Emissions, pwr = 20

Frequency	Level	Pol	15.209 / 15.247		Detector	Azimuth	Height	Comments
MHz	dBµV/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
5844.020	113.9	H	-	-	-	94	1.0	RB 100 kHz;VB 100 kHz;Pk
5846.320	116.5	V	-	-	-	89	1.0	RB 100 kHz;VB 100 kHz;Pk
7322.370	46.8	V	54.0	-7.2	AVG	260	1.5	RB 1 MHz;VB 10 Hz;Pk
11690.050	46.2	H	54.0	-7.8	AVG	67	1.0	RB 1 MHz;VB 10 Hz;Pk
11686.120	59.9	H	74.0	-14.1	PK	67	1.0	RB 1 MHz;VB 3 MHz;Pk
7321.550	56.0	V	74.0	-18.0	PK	260	1.5	RB 1 MHz;VB 3 MHz;Pk
6155.040	67.8	V	86.5	-18.7	PK	92	1.3	RB 100 kHz;VB 100 kHz;Pk
3445.050	65.6	V	86.5	-20.9	PK	260	1.4	RB 100 kHz;VB 100 kHz;Pk
5538.080	63.8	H	86.5	-22.7	PK	97	1.0	RB 100 kHz;VB 100 kHz;Pk
6890.040	61.2	V	86.5	-25.3	PK	260	1.5	RB 100 kHz;VB 100 kHz;Pk
7322.350	48.1	V	86.5	-38.4	PK	260	1.5	RB 100 kHz;VB 100 kHz;Pk

Note 1:	Peak emissions not in restriced bands during scan were < -40dB of the fundamental amplitude.
Note 2:	No emissions observed between 18-40GHz



Client:	GE MDS LLC	Job Number:	J83512
Model:	Mercury5800	T-Log Number:	T83623
		Account Manager:	Susan Pelzl
Contact:	Dennis McCarthy		
Standard:	FCC 15.247, RSS-210, RSS-GEN	Class:	N/A

Run #5a: Radiated Spurious Emissions, 1000 - 40000 MHz. Operating 5731MHz BW 10MHz

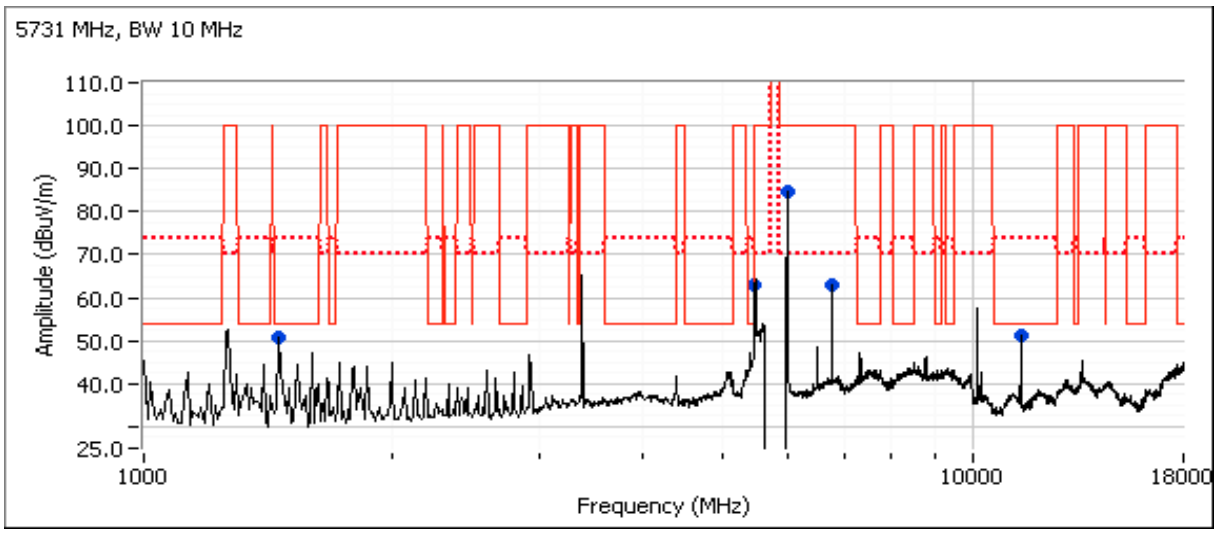
Date of Test: 9/20/2011 Test Location: FT Chamber #7

Test Engineer: M. Birgani

Other Spurious Emissions, pwr = 21

Frequency	Level	Pol	15.209 / 15.247		Detector	Azimuth	Height	Comments
MHz	dBµV/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
5731.700	117.5	V	-	-	-	97	1.1	RB 100 kHz;VB 100 kHz;Pk
5734.000	117.6	H	-	-	-	98	1.0	RB 100 kHz;VB 100 kHz;Pk
5984.030	82.8	H	87.6	-4.8	PK	95	1.0	RB 100 kHz;VB 100 kHz;Pk
1465.900	47.1	V	54.0	-6.9	AVG	200	1.4	RB 1 MHz;VB 10 Hz;Pk
11461.120	42.7	V	54.0	-11.3	AVG	268	1.0	RB 1 MHz;VB 10 Hz;Pk
11460.720	55.5	V	74.0	-18.5	PK	268	1.0	RB 1 MHz;VB 3 MHz;Pk
1466.140	50.2	V	74.0	-23.8	PK	200	1.4	RB 1 MHz;VB 3 MHz;Pk
6775.990	62.7	V	87.6	-24.9	PK	270	1.5	RB 100 kHz;VB 100 kHz;Pk
5476.810	62.1	V	87.6	-25.5	PK	95	1.0	RB 100 kHz;VB 100 kHz;Pk

Note 1:	Peak emissions not in restriced bands during scan were < -40dB of the fundamental amplitude.
Note 2:	No emissions observed between 18-40GHz



Client:	GE MDS LLC	Job Number:	J83512
Model:	Mercury5800	T-Log Number:	T83623
		Account Manager:	Susan Pelzl
Contact:	Dennis McCarthy		
Standard:	FCC 15.247, RSS-210, RSS-GEN	Class:	N/A

Run #5b: Radiated Spurious Emissions, 1000 - 40000 MHz. Operating 5788MHz BW 10MHz

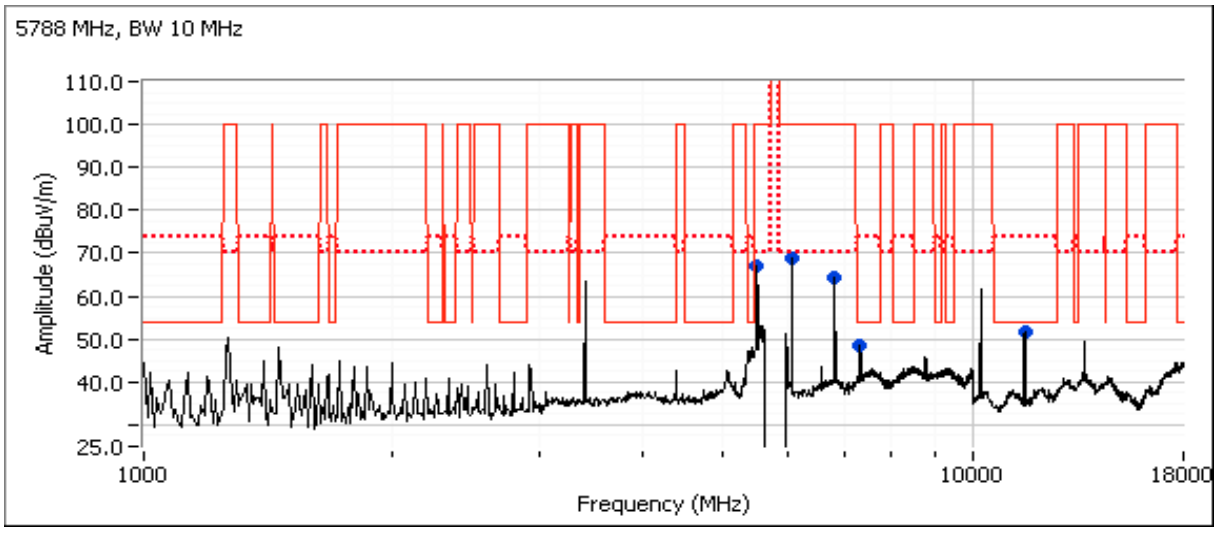
Date of Test: 9/20/2011 Test Location: FT Chamber #7

Test Engineer: M. Birgani

Other Spurious Emissions, pwr = 21

Frequency	Level	Pol	15.209 / 15.247		Detector	Azimuth	Height	Comments
MHz	dBµV/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
5789.170	116.4	H	-	-	-	95	1.0	RB 100 kHz;VB 100 kHz;Pk
5787.400	118.0	V	-	-	-	97	1.0	RB 100 kHz;VB 100 kHz;Pk
11576.160	49.3	H	54.0	-4.7	AVG	34	1.2	RB 1 MHz;VB 10 Hz;Pk
7324.900	47.3	V	54.0	-6.7	AVG	260	1.5	RB 1 MHz;VB 10 Hz;Pk
11572.030	62.0	H	74.0	-12.0	PK	34	1.2	RB 1 MHz;VB 3 MHz;Pk
6069.670	75.8	V	88.0	-12.2	PK	106	1.0	RB 100 kHz;VB 100 kHz;Pk
7324.470	56.4	V	74.0	-17.6	PK	260	1.5	RB 1 MHz;VB 3 MHz;Pk
6833.020	64.8	V	88.0	-23.2	PK	260	1.5	RB 100 kHz;VB 100 kHz;Pk
5505.100	64.2	H	88.0	-23.8	PK	106	1.0	RB 100 kHz;VB 100 kHz;Pk

Note 1:	Peak emissions not in restriced bands during scan were < -40dB of the fundamental amplitude.
Note 2:	No emissions observed between 18-40GHz



Client:	GE MDS LLC	Job Number:	J83512
Model:	Mercury5800	T-Log Number:	T83623
		Account Manager:	Susan Pelzl
Contact:	Dennis McCarthy		
Standard:	FCC 15.247, RSS-210, RSS-GEN	Class:	N/A

Run #5c: Radiated Spurious Emissions, 1000 - 40000 MHz. Operating 5844MHz BW 10MHz

Date of Test: 9/20/2011 & 9/21/11 Test Location: FT Chamber #7 & FT Chamber #5

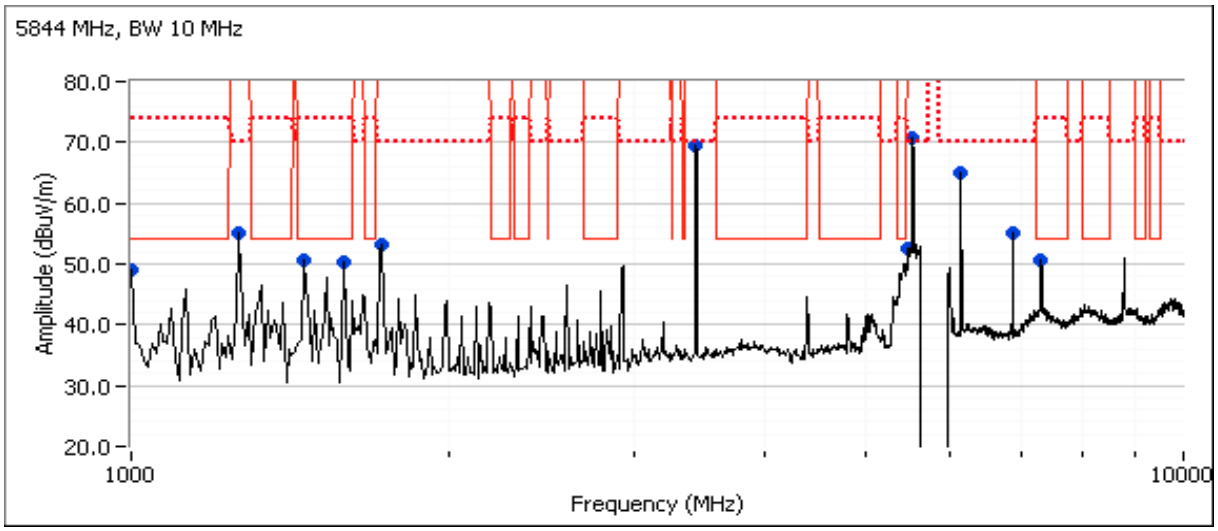
Test Engineer: M. Birgani & J. Caizzi

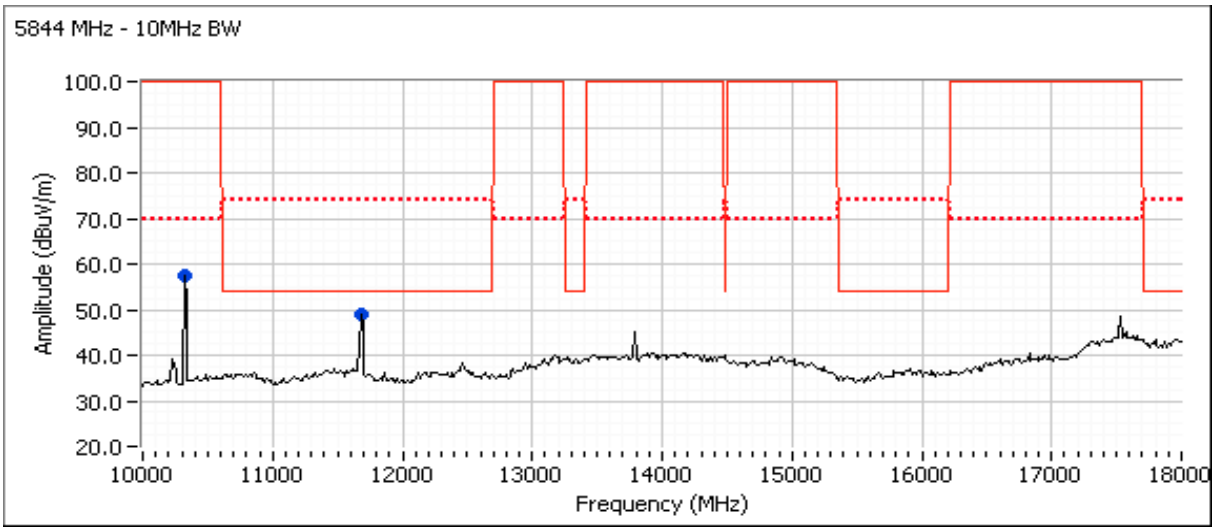
Spurious Emissions, pwr = 21 unless noted otherwise.

Frequency	Level	Pol	15.209 / 15.247		Detector	Azimuth	Height	Comments
MHz	dBµV/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
5847.470	118.3	V	-	-	-	98	1.0	RB 100 kHz;VB 100 kHz;Pk
5846.400	117.8	H	-	-	-	101	1.0	RB 100 kHz;VB 100 kHz;Pk
11680.000	*58.5*	*V*	*54.0*	*4.5*	*Peak*	*159*	*1.0*	
1458.330	*50.7*	*H*	*54.0*	*-3.3*	*Peak*	*76*	*1.0*	
7322.500	*50.7*	*V*	*54.0*	*-3.3*	*Peak*	*160*	*1.0*	
1595.830	*50.4*	*V*	*54.0*	*-3.6*	*Peak*	*192*	*1.9*	
1000.000	*49.1*	*V*	*54.0*	*-4.9*	*Peak*	*234*	*2.5*	
5528.330	*70.9*	*V*	*88.3*	*-17.4*	*Peak*	*360*	*1.3*	
3438.330	*69.4*	*V*	*88.3*	*-18.9*	*Peak*	*178*	*1.0*	
10320.000	*65.9*	*H*	*88.3*	*-22.4*	*Peak*	*208*	*1.0*	
6151.670	*65.1*	*V*	*88.3*	*-23.2*	*Peak*	*351*	*1.0*	
1265.830	*55.2*	*V*	*88.3*	*-33.1*	*Peak*	*193*	*1.6*	
6890.830	*55.1*	*V*	*88.3*	*-33.2*	*Peak*	*191*	*1.6*	
1733.330	*53.2*	*V*	*88.3*	*-35.1*	*Peak*	*118*	*1.0*	
5482.500	*52.7*	*V*	*88.3*	*-35.6*	*Peak*	*356*	*1.0*	
10333.670	57.5	H	*88.3*	*-30.8*	Peak	149	1.0	
1600.080	51.9	V	54.0	-2.1	AVG	196	1.00	
1599.830	54.2	V	74.0	-19.8	PK	196	1.00	
1464.010	51.1	H	54.0	-2.9	AVG	83	1.00	
1463.900	52.6	H	74.0	-21.4	PK	83	1.00	
7315.970	49.9	V	54.0	-4.1	AVG	185	1.33	
7317.770	58.3	V	74.0	-15.7	PK	185	1.33	
1000.070	49.1	V	54.0	-4.9	AVG	230	2.50	
1000.080	51.4	V	74.0	-22.6	PK	230	2.50	
11688.200	54.5	V	54.0	0.5	AVG	163	1.00	
11684.530	69.2	V	74.0	-4.8	PK	163	1.00	
11687.970	53.3	V	54.0	-0.7	AVG	163	1.00	Pwr = 20
11688.500	68.1	V	74.0	-5.9	PK	163	1.00	Pwr = 20

Note 1:	No emissions observed between 18-40GHz

Client:	GE MDS LLC	Job Number:	J83512
Model:	Mercury5800	T-Log Number:	T83623
		Account Manager:	Susan Pelzl
Contact:	Dennis McCarthy		
Standard:	FCC 15.247, RSS-210, RSS-GEN	Class:	N/A





Client:	GE MDS LLC	Job Number:	J83512
Model:	Mercury5800	T-Log Number:	T83623
		Account Manager:	Susan Pelzl
Contact:	Dennis McCarthy		
Standard:	FCC 15.247, RSS-210, RSS-GEN	Class:	N/A

RSS 210 and FCC 15.247 (DTS) Radiated Spurious Emissions

Test Specific Details

Objective: The objective of this test session is to perform final qualification testing of the EUT with respect to the specification listed above.

General Test Configuration

The EUT and all local support equipment were located on the turntable for radiated spurious emissions testing. All remote support equipment was located approximately 30 meters from the EUT with all I/O connections running on top of the groundplane or routed in overhead in the GR-1089 test configuration.

For radiated emissions testing the measurement antenna was located 3 meters from the EUT.

Ambient Conditions:

Temperature:	25 °C
Rel. Humidity:	37 %

Summary of Results - Device Operating in the 5725 - 5850 MHz Band

Run #	Mode	Channel	Power Setting	Measured Power	Test Performed	Limit	Result / Margin
1a	bw 3.5	low	22	-	Radiated Emissions, 1 - 40GHz	FCC Part 15.209 / 15.247(c)	50.2dBµV/m @ 6800.0MHz (-3.8dB)
1b	bw 3.5	center	21	-	Radiated Emissions, 1 - 40GHz	FCC Part 15.209 / 15.247(c)	50.1dBµV/m @ 6800.1MHz (-3.9dB)
1c	bw 3.5	high	20	-	Radiated Emissions, 1 - 40GHz	FCC Part 15.209 / 15.247(c)	49.9dBµV/m @ 6800.0MHz (-4.1dB)
2a	bw 5	low	21	-	Radiated Emissions, 1 - 40GHz	FCC Part 15.209 / 15.247(c)	50.8dBµV/m @ 6800.0MHz (-3.2dB)
2b	bw 5	center	20	-	Radiated Emissions, 1 - 40GHz	FCC Part 15.209 / 15.247(c)	51.9dBµV/m @ 6800.0MHz (-2.1dB)
2c	bw 5	high	19	-	Radiated Emissions, 1 - 40GHz	FCC Part 15.209 / 15.247(c)	51.8dBµV/m @ 6800.0MHz (-2.2dB)
3a	bw 7	low	22	-	Radiated Emissions, 1 - 40GHz	FCC Part 15.209 / 15.247(c)	51.9dBµV/m @ 6800.0MHz (-2.1dB)
3b	bw 7	center	21	-	Radiated Emissions, 1 - 40GHz	FCC Part 15.209 / 15.247(c)	47.5dBµV/m @ 1400.1MHz (-6.5dB)
3c	bw 7	high	18	-	Radiated Emissions, 1 - 40GHz	FCC Part 15.209 / 15.247(c)	44.5dBµV/m @ 7293.4MHz (-9.5dB)

Client:	GE MDS LLC	Job Number:	J83512
Model:	Mercury5800	T-Log Number:	T83623
		Account Manager:	Susan Pelzl
Contact:	Dennis McCarthy		
Standard:	FCC 15.247, RSS-210, RSS-GEN	Class:	N/A

Modifications Made During Testing

No modifications were made to the EUT during testing

Deviations From The Standard

No deviations were made from the requirements of the standard.

Panel antenna

Client:	GE MDS LLC	Job Number:	J83512
Model:	Mercury5800	T-Log Number:	T83623
		Account Manager:	Susan Pelzl
Contact:	Dennis McCarthy		
Standard:	FCC 15.247, RSS-210, RSS-GEN	Class:	N/A

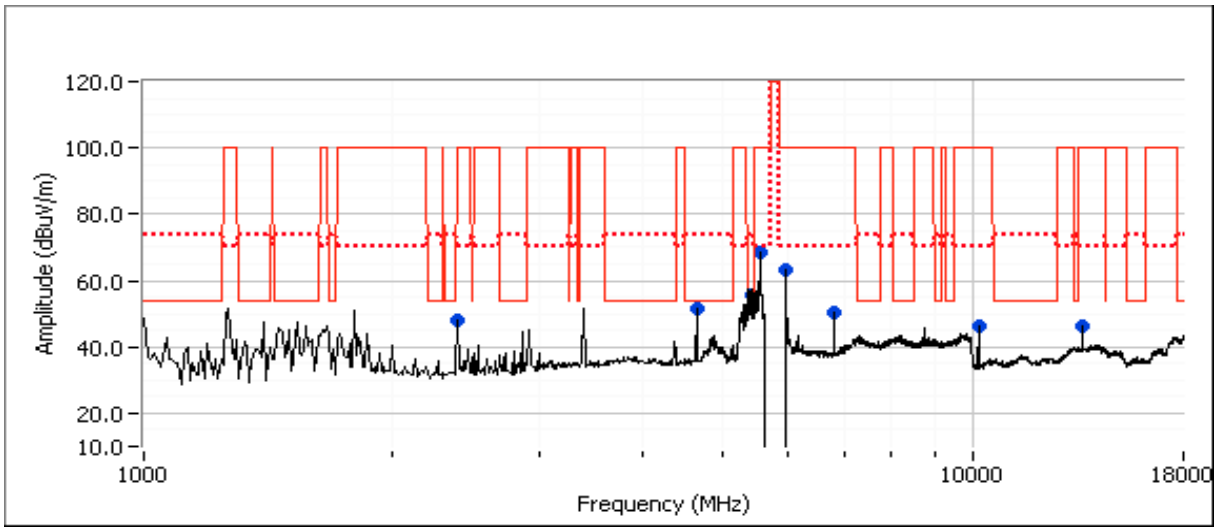
Run #1: Radiated Spurious Emissions, 1000 - 40000 MHz. Operating 5727MHz 3.5 bw

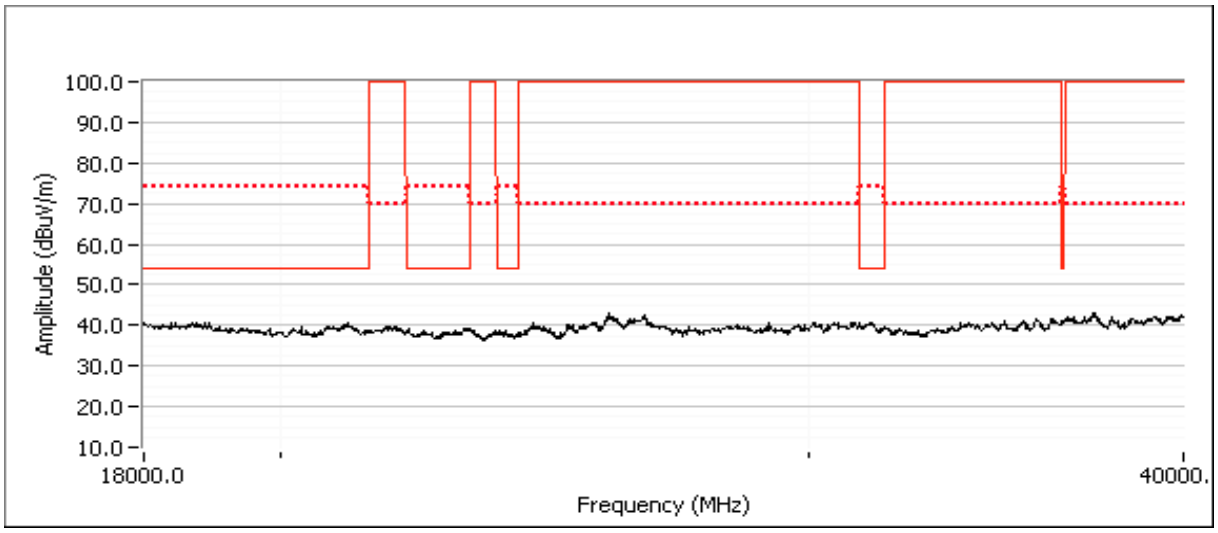
Date of Test: 7/13/2011
Test Engineer: Joseph Cadigal
Test Location: FT Chamber#7

Other Spurious Emissions

Frequency	Level	Pol	15.209 / 15.247		Detector	Azimuth	Height	Comments	
MHz	dBµV/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters		
6800.030	50.2	V	54.0	-3.8	AVG	161	1.6	RB 1 MHz;VB 10 Hz;Pk	Note 1
2400.080	47.6	V	54.0	-6.4	AVG	158	1.6	RB 1 MHz;VB 10 Hz;Pk	Note 1
5958.210	42.5	V	54.0	-11.5	AVG	0	1.0	RB 1 MHz;VB 10 Hz;Pk	Note 1
10199.990	37.6	H	54.0	-16.4	AVG	317	1.3	RB 1 MHz;VB 10 Hz;Pk	Note 1
5958.320	53.7	V	74.0	-20.3	PK	0	1.0	RB 1 MHz;VB 3 MHz;Pk	Note 1
5536.860	33.4	V	54.0	-20.6	AVG	4	1.3	RB 1 MHz;VB 10 Hz;Pk	Note 1
6799.990	53.4	V	74.0	-20.6	PK	161	1.6	RB 1 MHz;VB 3 MHz;Pk	Note 1
5404.800	32.8	V	54.0	-21.2	AVG	4	1.3	RB 1 MHz;VB 10 Hz;Pk	
13612.980	32.5	V	54.0	-21.5	AVG	156	1.3	RB 1 MHz;VB 10 Hz;Pk	Note 1
4638.030	31.3	V	54.0	-22.7	AVG	18	1.6	RB 1 MHz;VB 10 Hz;Pk	
2399.950	50.5	V	74.0	-23.5	PK	158	1.6	RB 1 MHz;VB 3 MHz;Pk	Note 1
5538.580	44.7	V	74.0	-29.3	PK	4	1.3	RB 1 MHz;VB 3 MHz;Pk	Note 1
5405.090	44.3	V	74.0	-29.7	PK	4	1.3	RB 1 MHz;VB 3 MHz;Pk	
13612.760	44.2	V	74.0	-29.8	PK	156	1.3	RB 1 MHz;VB 3 MHz;Pk	Note 1
10200.050	43.4	H	74.0	-30.6	PK	317	1.3	RB 1 MHz;VB 3 MHz;Pk	Note 1
4640.250	42.6	V	74.0	-31.4	PK	18	1.6	RB 1 MHz;VB 3 MHz;Pk	

Client:	GE MDS LLC	Job Number:	J83512
Model:	Mercury5800	T-Log Number:	T83623
		Account Manager:	Susan Pelzl
Contact:	Dennis McCarthy		
Standard:	FCC 15.247, RSS-210, RSS-GEN	Class:	N/A



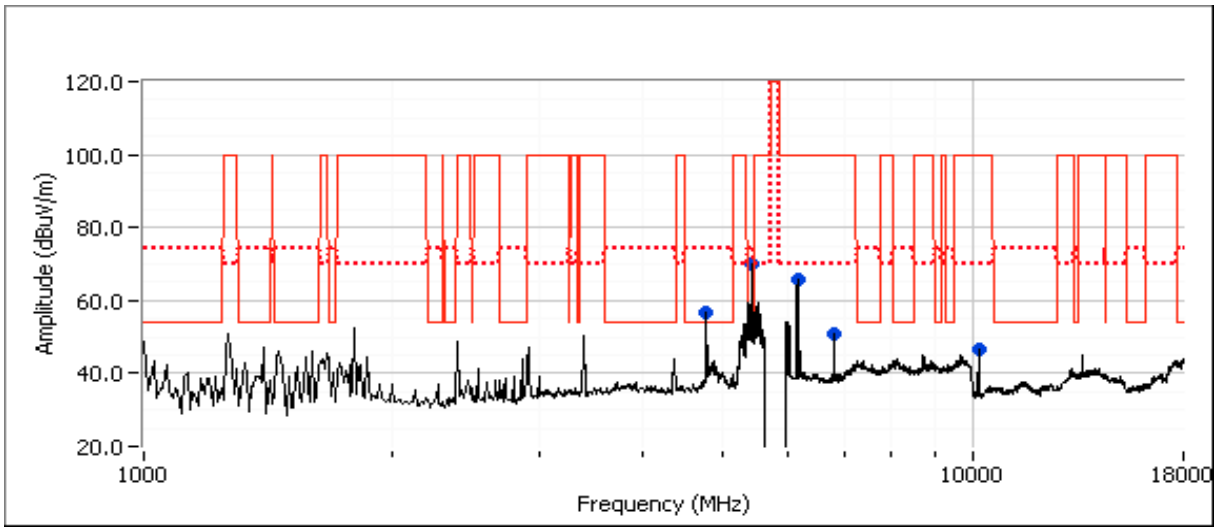


Note 1:	Signal is not in a restricted band but the more stringent restricted band limit was used.

Client:	GE MDS LLC	Job Number:	J83512
Model:	Mercury5800	T-Log Number:	T83623
		Account Manager:	Susan Pelzl
Contact:	Dennis McCarthy		
Standard:	FCC 15.247, RSS-210, RSS-GEN	Class:	N/A

Run #1b: Center Channel @ 5788 MHz 3.5 bw

Frequency	Level	Pol	15.209 / 15.247		Detector	Azimuth	Height	Comments	
MHz	dBµV/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters		
6800.060	50.1	V	54.0	-3.9	AVG	160	1.6	RB 1 MHz;VB 10 Hz;Pk	Note 1
10200.030	45.9	V	54.0	-8.1	AVG	0	1.0	RB 1 MHz;VB 10 Hz;Pk	Note 1
6160.250	34.4	V	54.0	-19.6	AVG	359	1.9	RB 1 MHz;VB 10 Hz;Pk	Note 1
6800.010	53.4	V	74.0	-20.6	PK	160	1.6	RB 1 MHz;VB 3 MHz;Pk	Note 1
5411.920	33.1	V	54.0	-20.9	AVG	0	1.0	RB 1 MHz;VB 10 Hz;Pk	
4780.300	32.1	V	54.0	-21.9	AVG	353	1.0	RB 1 MHz;VB 10 Hz;Pk	
10200.120	48.6	V	74.0	-25.4	PK	0	1.0	RB 1 MHz;VB 3 MHz;Pk	Note 1
6161.550	45.5	V	74.0	-28.5	PK	359	1.9	RB 1 MHz;VB 3 MHz;Pk	Note 1
5413.770	44.8	V	74.0	-29.2	PK	0	1.0	RB 1 MHz;VB 3 MHz;Pk	
4780.930	44.4	V	74.0	-29.6	PK	353	1.0	RB 1 MHz;VB 3 MHz;Pk	

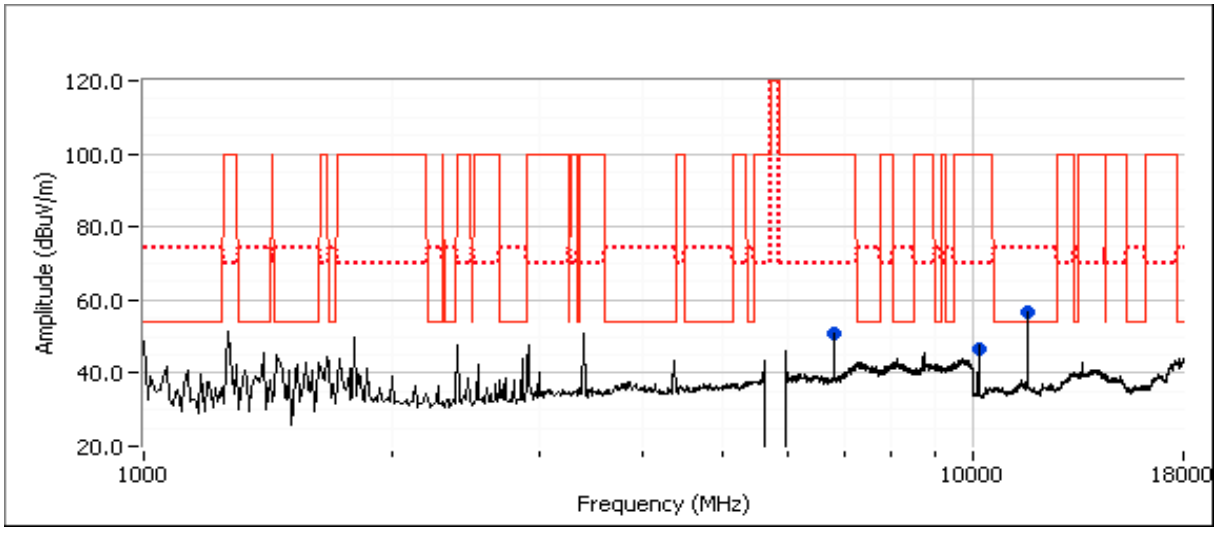


Note 1:	Signal is not in a restricted band but the more stringent restricted band limit was used.
Note 2:	No emissions observed between 18-40GHz

Client:	GE MDS LLC	Job Number:	J83512
Model:	Mercury5800	T-Log Number:	T83623
		Account Manager:	Susan Pelzl
Contact:	Dennis McCarthy		
Standard:	FCC 15.247, RSS-210, RSS-GEN	Class:	N/A

Run #1c: High Channel @ 5848 MHz 3.5 bw

Frequency	Level	Pol	15.209 / 15.247		Detector	Azimuth	Height	Comments	
MHz	dBµV/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters		
6800.010	49.9	V	54.0	-4.1	AVG	160	1.6	RB 1 MHz;VB 10 Hz;Pk	Note 1
10200.030	45.8	V	54.0	-8.2	AVG	0	1.0	RB 1 MHz;VB 10 Hz;Pk	Note 1
6800.090	53.5	V	74.0	-20.5	PK	160	1.6	RB 1 MHz;VB 3 MHz;Pk	Note 1
11689.530	30.0	V	54.0	-24.0	AVG	32	1.3	RB 1 MHz;VB 10 Hz;Pk	
10199.940	48.7	V	74.0	-25.3	PK	0	1.0	RB 1 MHz;VB 3 MHz;Pk	Note 1
11690.930	41.2	V	74.0	-32.8	PK	32	1.3	RB 1 MHz;VB 3 MHz;Pk	



Note 1:	Signal is not in a restricted band but the more stringent restricted band limit was used.
Note 2:	No emissions observed between 18-40GHz

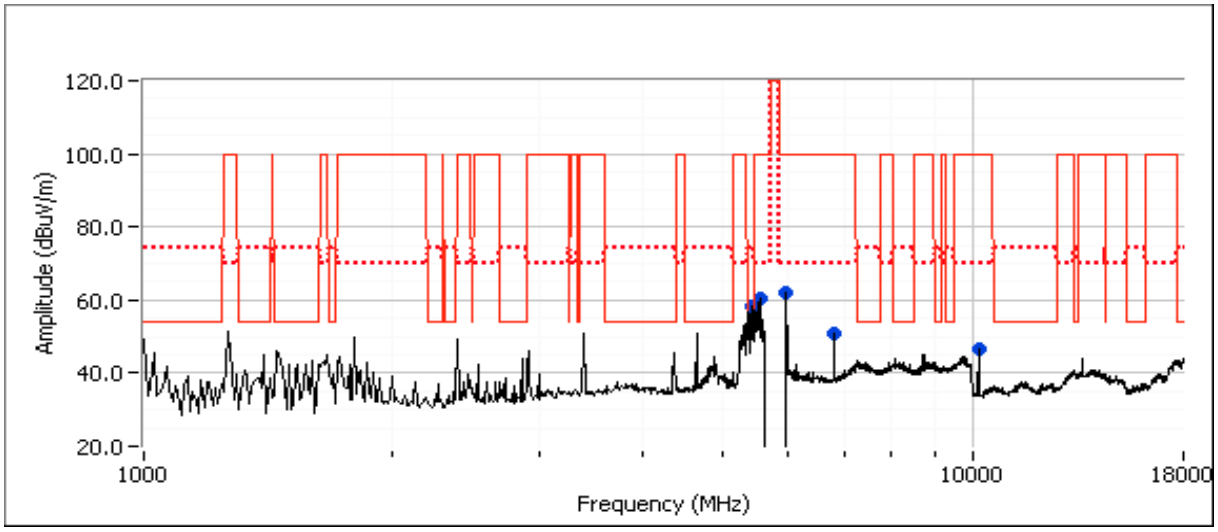
Client:	GE MDS LLC	Job Number:	J83512
Model:	Mercury5800	T-Log Number:	T83623
		Account Manager:	Susan Pelzl
Contact:	Dennis McCarthy		
Standard:	FCC 15.247, RSS-210, RSS-GEN	Class:	N/A

Run #2a: Radiated Spurious Emissions, 1000 - 40000 MHz. Operating 5728MHz 5 bw

Date of Test: 7/13/2011
Test Engineer: Joseph Cadigal
Test Location: FT Chamber#7

Other Spurious Emissions

Frequency	Level	Pol	15.209 / 15.247		Detector	Azimuth	Height	Comments	
MHz	dBµV/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters		
6800.030	50.8	V	54.0	-3.2	AVG	158	1.6	RB 1 MHz;VB 10 Hz;Pk	Note 1
5957.820	42.8	V	54.0	-11.2	AVG	0	1.0	RB 1 MHz;VB 10 Hz;Pk	Note 1
5957.150	54.0	V	74.0	-20.0	PK	0	1.0	RB 1 MHz;VB 3 MHz;Pk	Note 1
6800.280	53.7	V	74.0	-20.3	PK	158	1.6	RB 1 MHz;VB 3 MHz;Pk	Note 1
5527.110	33.4	V	54.0	-20.6	AVG	360	1.9	RB 1 MHz;VB 10 Hz;Pk	Note 1
5411.460	33.0	V	54.0	-21.0	AVG	0	1.0	RB 1 MHz;VB 10 Hz;Pk	
5529.650	44.7	V	74.0	-29.3	PK	360	1.9	RB 1 MHz;VB 3 MHz;Pk	Note 1
5411.920	44.7	V	74.0	-29.3	PK	0	1.0	RB 1 MHz;VB 3 MHz;Pk	



Note 1:	Signal is not in a restricted band but the more stringent restricted band limit was used.
Note 2:	No emissions observed between 18-40GHz

Client:	GE MDS LLC	Job Number:	J83512
Model:	Mercury5800	T-Log Number:	T83623
		Account Manager:	Susan Pelzl
Contact:	Dennis McCarthy		
Standard:	FCC 15.247, RSS-210, RSS-GEN	Class:	N/A

Run #2b: Center Channel @ 5788 MHz 5 bw

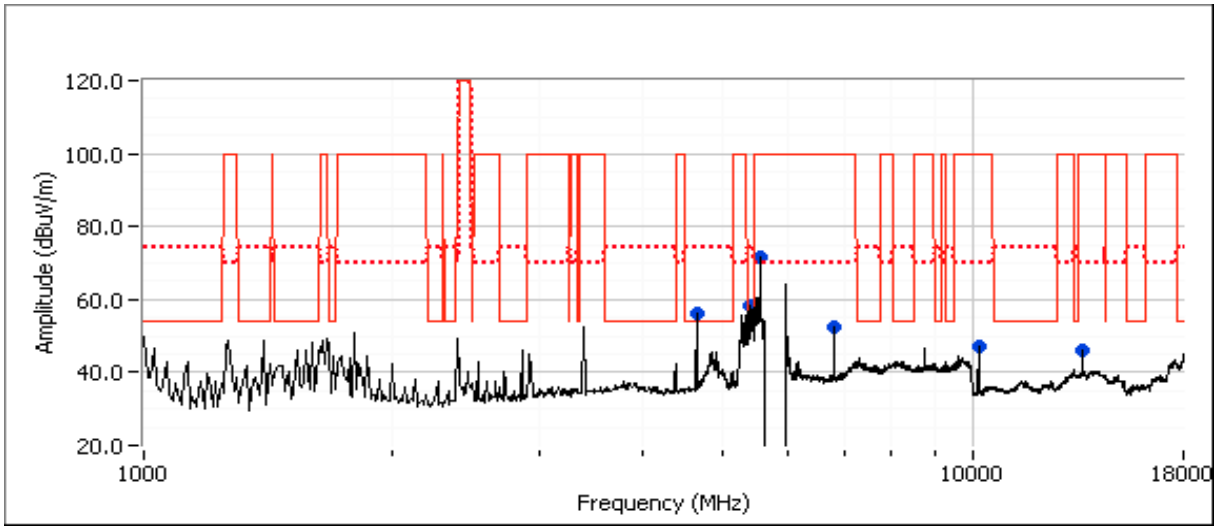
Date of Test: 7/14/2011

Test Engineer: Joseph Cadigal

Test Location: FT Chamber#7

Other Spurious Emissions

Frequency	Level	Pol	15.209 / 15.247		Detector	Azimuth	Height	Comments	
MHz	dBµV/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters		
6800.010	51.9	V	54.0	-2.1	AVG	160	1.6	RB 1 MHz;VB 10 Hz;Pk	Note 1
10200.050	43.7	V	54.0	-10.3	AVG	8	1.0	RB 1 MHz;VB 10 Hz;Pk	Note 1
6799.970	54.6	V	74.0	-19.4	PK	160	1.6	RB 1 MHz;VB 3 MHz;Pk	Note 1
5544.100	33.4	V	54.0	-20.6	AVG	0	1.6	RB 1 MHz;VB 10 Hz;Pk	Note 1
13611.010	33.0	V	54.0	-21.0	AVG	163	1.0	RB 1 MHz;VB 10 Hz;Pk	Note 1
5384.180	32.8	V	54.0	-21.2	AVG	6	1.3	RB 1 MHz;VB 10 Hz;Pk	
4648.230	30.5	V	54.0	-23.5	AVG	348	1.0	RB 1 MHz;VB 10 Hz;Pk	
10200.120	46.9	V	74.0	-27.1	PK	8	1.0	RB 1 MHz;VB 3 MHz;Pk	Note 1
5544.790	44.9	V	74.0	-29.1	PK	0	1.6	RB 1 MHz;VB 3 MHz;Pk	Note 1
13612.030	44.6	V	74.0	-29.4	PK	163	1.0	RB 1 MHz;VB 3 MHz;Pk	Note 1
5386.840	43.9	V	74.0	-30.1	PK	6	1.3	RB 1 MHz;VB 3 MHz;Pk	
4648.550	41.9	V	74.0	-32.1	PK	348	1.0	RB 1 MHz;VB 3 MHz;Pk	



Note 1:	Signal is not in a restricted band but the more stringent restricted band limit was used.
Note 2:	No emissions observed between 18-40GHz

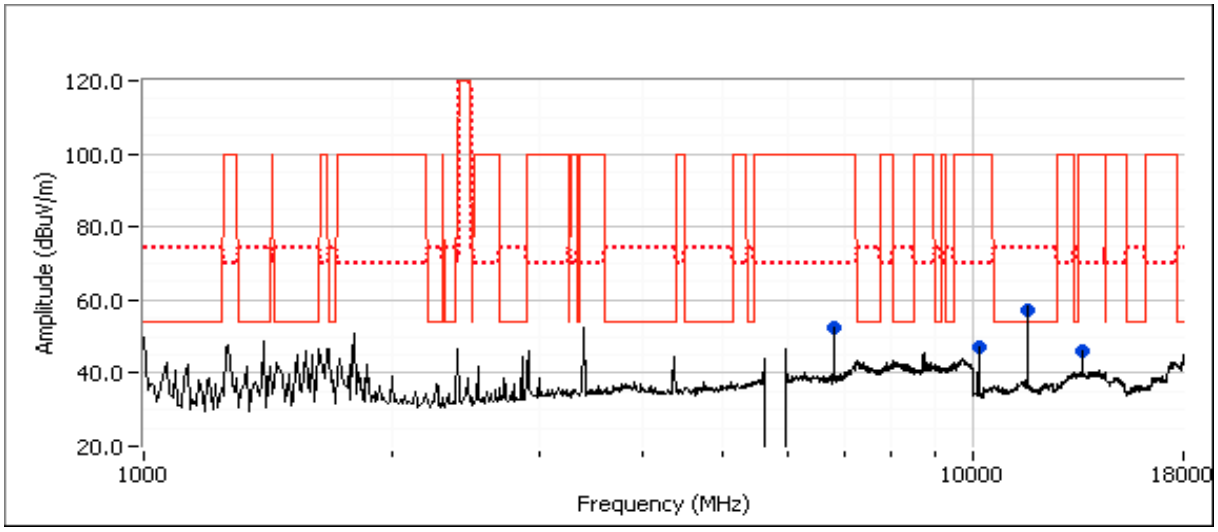
Client:	GE MDS LLC	Job Number:	J83512
Model:	Mercury5800	T-Log Number:	T83623
		Account Manager:	Susan Pelzl
Contact:	Dennis McCarthy		
Standard:	FCC 15.247, RSS-210, RSS-GEN	Class:	N/A

Run #2c: High Channel @ 5847 MHz 5 bw

Date of Test: 7/14/2011
Test Engineer: Joseph Cadigal
Test Location: FT Chamber#7

Other Spurious Emissions

Frequency	Level	Pol	15.209 / 15.247		Detector	Azimuth	Height	Comments	
MHz	dBµV/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters		
6800.010	51.8	V	54.0	-2.2	AVG	160	1.6	RB 1 MHz;VB 10 Hz;Pk	Note 1
13600.000	44.9	V	54.0	-9.1	AVG	161	1.0	RB 1 MHz;VB 10 Hz;Pk	Note 1
6800.030	54.4	V	74.0	-19.6	PK	160	1.6	RB 1 MHz;VB 3 MHz;Pk	Note 1
11688.250	30.1	V	54.0	-23.9	AVG	37	1.6	RB 1 MHz;VB 10 Hz;Pk	
13600.100	50.1	V	74.0	-23.9	PK	161	1.0	RB 1 MHz;VB 3 MHz;Pk	Note 1
10190.300	28.0	V	54.0	-26.0	AVG	8	1.0	RB 1 MHz;VB 10 Hz;Pk	Note 1
11689.660	42.3	V	74.0	-31.7	PK	37	1.6	RB 1 MHz;VB 3 MHz;Pk	
10189.890	39.5	V	74.0	-34.5	PK	8	1.0	RB 1 MHz;VB 3 MHz;Pk	Note 1



Note 1:	Signal is not in a restricted band but the more stringent restricted band limit was used.
Note 2:	No emissions observed between 18-40GHz

Client:	GE MDS LLC	Job Number:	J83512
Model:	Mercury5800	T-Log Number:	T83623
		Account Manager:	Susan Pelzl
Contact:	Dennis McCarthy		
Standard:	FCC 15.247, RSS-210, RSS-GEN	Class:	N/A

Run #3a: Radiated Spurious Emissions, 1000 - 40000 MHz. Operating 5729MHz 7 bw

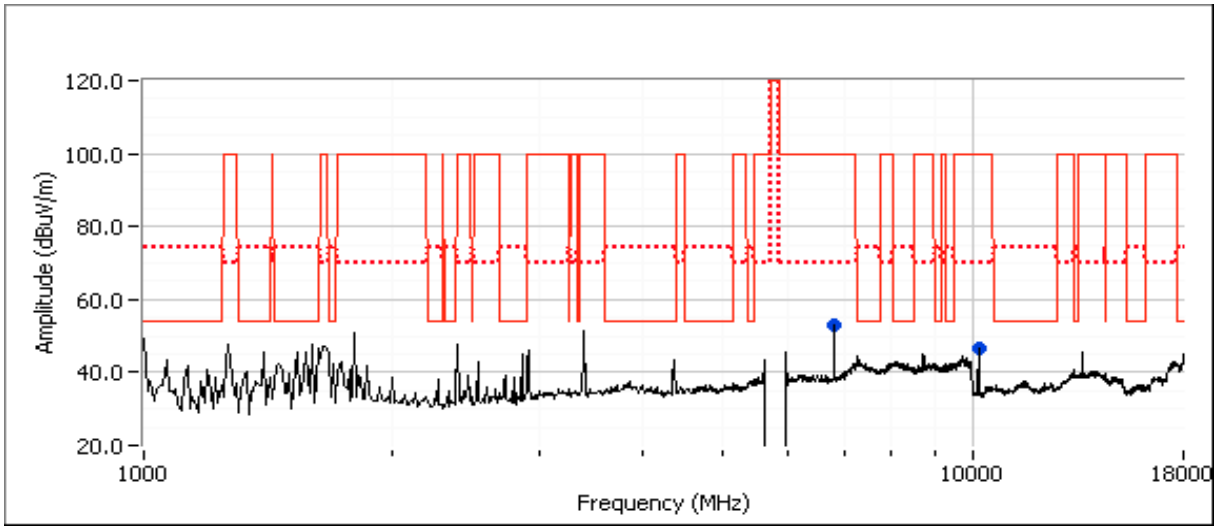
Date of Test: 7/14/2011

Test Engineer: Joseph Cadigal

Test Location: FT Chamber#7

Other Spurious Emissions

Frequency	Level	Pol	15.209 / 15.247		Detector	Azimuth	Height	Comments	
MHz	dBµV/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters		
6800.030	51.9	V	54.0	-2.1	AVG	160	1.6	RB 1 MHz;VB 10 Hz;Pk	Note 1
6800.100	54.6	V	74.0	-19.4	PK	160	1.6	RB 1 MHz;VB 3 MHz;Pk	Note 1
5528.120	33.3	V	54.0	-20.7	AVG	8	1.3	RB 1 MHz;VB 10 Hz;Pk	Note 1
5394.250	32.5	V	54.0	-21.5	AVG	5	1.9	RB 1 MHz;VB 10 Hz;Pk	
4652.210	30.3	V	54.0	-23.7	AVG	350	1.0	RB 1 MHz;VB 10 Hz;Pk	
10191.110	28.1	V	54.0	-25.9	AVG	8	1.0	RB 1 MHz;VB 10 Hz;Pk	Note 1
5527.970	44.6	V	74.0	-29.4	PK	8	1.3	RB 1 MHz;VB 3 MHz;Pk	Note 1
5394.020	44.1	V	74.0	-29.9	PK	5	1.9	RB 1 MHz;VB 3 MHz;Pk	
4652.480	41.8	V	74.0	-32.2	PK	350	1.0	RB 1 MHz;VB 3 MHz;Pk	
10189.350	40.0	V	74.0	-34.0	PK	8	1.0	RB 1 MHz;VB 3 MHz;Pk	Note 1



Note 1:	Signal is not in a restricted band but the more stringent restricted band limit was used.
Note 2:	No emissions observed between 18-40GHz

Client:	GE MDS LLC	Job Number:	J83512
Model:	Mercury5800	T-Log Number:	T83623
		Account Manager:	Susan Pelzl
Contact:	Dennis McCarthy		
Standard:	FCC 15.247, RSS-210, RSS-GEN	Class:	N/A

Run #3b: Radiated Spurious Emissions, 1000 - 40000 MHz. Operating 5788MHz 7 bw

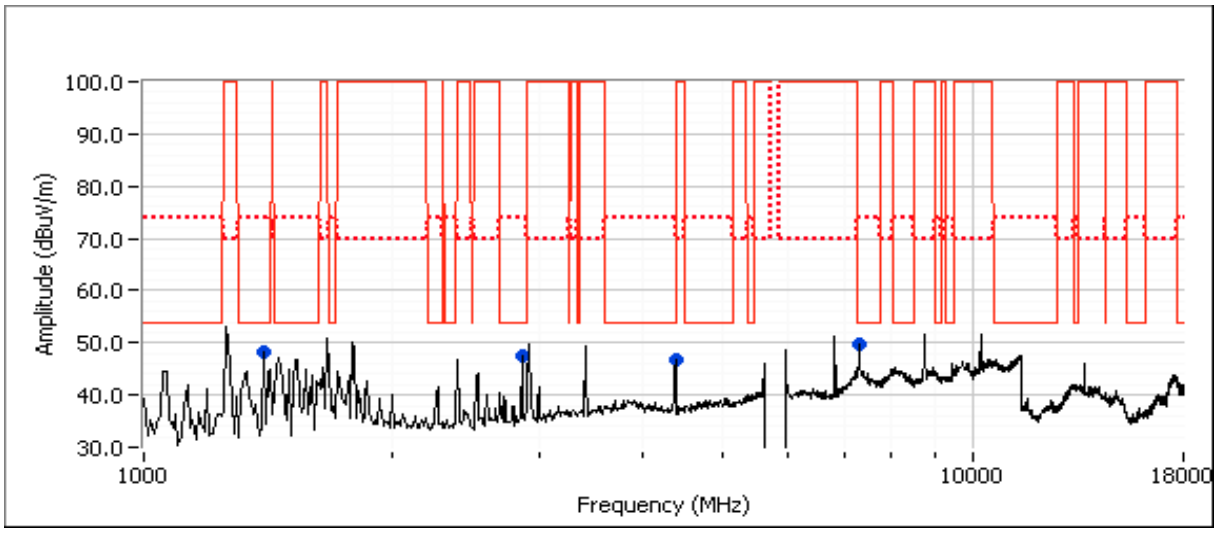
Date of Test: 8/29/2011

Test Engineer: David Bare

Test Location: Fremont Chamber #4

Other Spurious Emissions

Frequency	Level	Pol	15.209 / 15.247		Detector	Azimuth	Height	Comments
MHz	dBµV/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
1400.060	47.5	V	54.0	-6.5	AVG	185	1.9	RB 1 MHz;VB 10 Hz;Pk
2866.700	46.7	V	54.0	-7.3	AVG	181	1.7	RB 1 MHz;VB 10 Hz;Pk
7300.000	45.1	V	54.0	-8.9	AVG	169	1.8	RB 1 MHz;VB 10 Hz;Pk
4381.130	41.4	V	54.0	-12.6	AVG	228	1.3	RB 1 MHz;VB 10 Hz;Pk
7300.000	55.0	V	74.0	-19.0	PK	169	1.8	RB 1 MHz;VB 3 MHz;Pk
4381.090	51.5	V	74.0	-22.5	PK	228	1.3	RB 1 MHz;VB 3 MHz;Pk
1400.140	50.3	V	74.0	-23.7	PK	185	1.9	RB 1 MHz;VB 3 MHz;Pk
2866.750	49.6	V	74.0	-24.4	PK	181	1.7	RB 1 MHz;VB 3 MHz;Pk
5787.840	119.4	V	-	-	PK	352	1.0	RB 100 kHz;VB 100 kHz;Pk



Note 1:	Peak emissions not in restriced bands during scan were < -40dB of the fundamental amplitude.
Note 2:	No emissions observed between 18-40GHz

Client:	GE MDS LLC	Job Number:	J83512
Model:	Mercury5800	T-Log Number:	T83623
		Account Manager:	Susan Pelzl
Contact:	Dennis McCarthy		
Standard:	FCC 15.247, RSS-210, RSS-GEN	Class:	N/A

Run #3c: Radiated Spurious Emissions, 1000 - 40000 MHz. Operating 5846MHz 7 bw

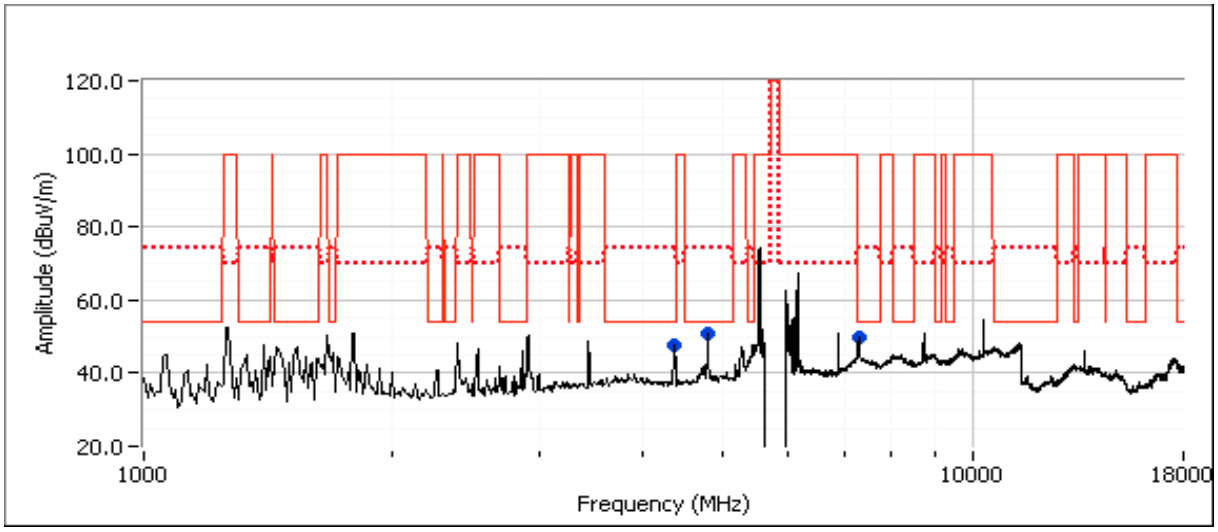
Date of Test: 8/29/2011

Test Engineer: David Bare

Test Location: Fremont Chamber #4

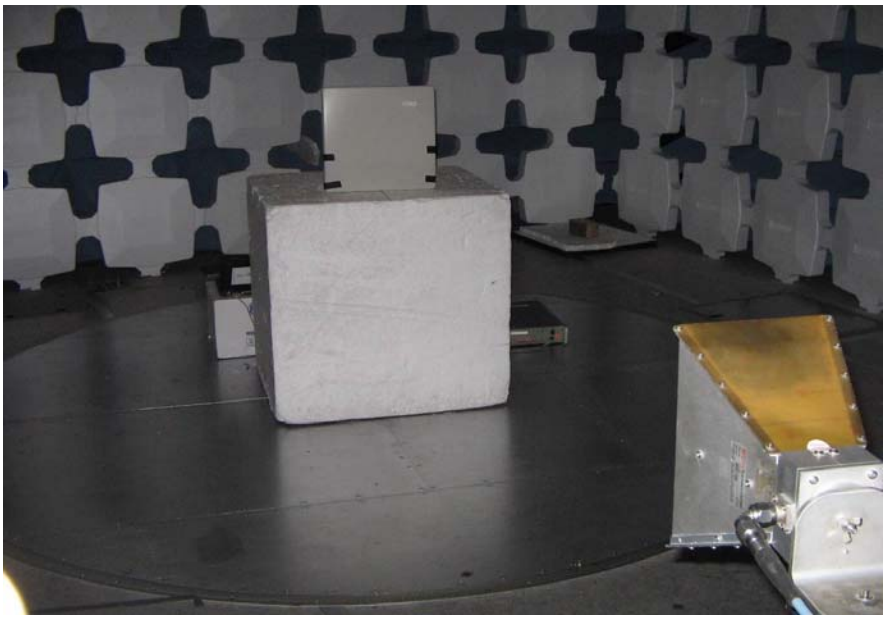
Other Spurious Emissions

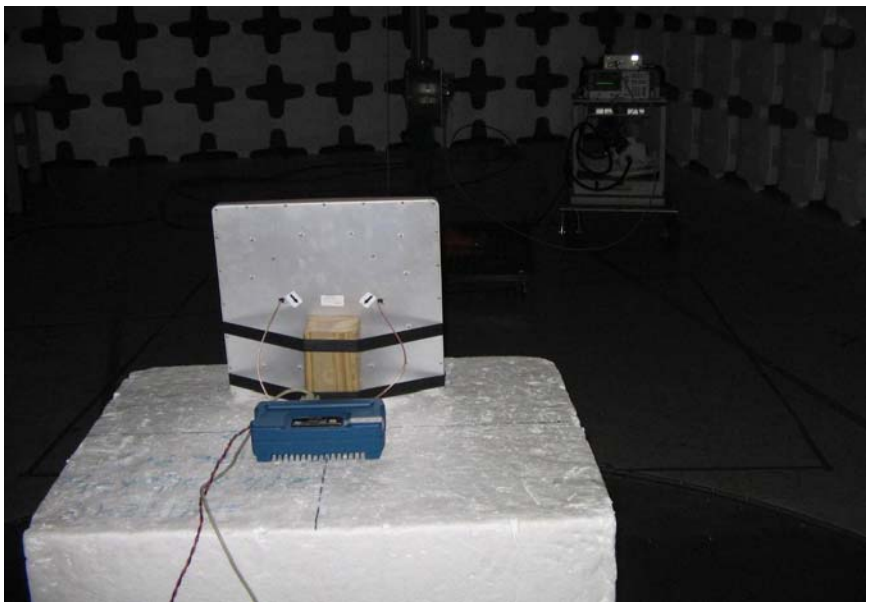
Frequency	Level	Pol	15.209 / 15.247		Detector	Azimuth	Height	Comments
MHz	dBµV/m	v/h	Limit	Margin	Pk/QP/Avg	degrees	meters	
7293.400	44.5	V	54.0	-9.5	AVG	170	1.6	RB 1 MHz;VB 10 Hz;Pk
7294.760	54.7	V	74.0	-19.3	PK	170	1.6	RB 1 MHz;VB 3 MHz;Pk
4377.000	42.8	V	54.0	-11.2	AVG	228	1.1	RB 1 MHz;VB 10 Hz;Pk
4378.100	51.7	V	74.0	-22.3	PK	228	1.1	RB 1 MHz;VB 3 MHz;Pk
4790.100	38.7	V	54.0	-15.3	AVG	17	1.0	RB 1 MHz;VB 10 Hz;Pk
4791.670	48.0	V	74.0	-26.0	PK	17	1.0	RB 1 MHz;VB 3 MHz;Pk
5848.100	118.3	V	-	-	PK	352	1.0	RB 100 kHz;VB 100 kHz;Pk



Note 1:	Peak emissions not in restriced bands during scan were < -40dB of the fundamental amplitude.
Note 2:	No emissions observed between 18-40GHz

Client:	GE MDS LLC	Job Number:	J83512
Model:	Mercury5800	T-Log Number:	T83623
		Account Manager:	Susan Pelzl
Contact:	Dennis McCarthy		
Standard:	FCC 15.247, RSS-210, RSS-GEN	Class:	N/A





Client:	GE MDS LLC	Job Number:	J83512
Model:	Mercury5800	T-Log Number:	T83623
		Account Manager:	Susan Pelzl
Contact:	Dennis McCarthy		
Standard:	FCC 15.247, RSS-210, RSS-GEN	Class:	N/A

RSS 210 and FCC 15.247 (DTS) Antenna Port Measurements
MIMO and Smart Antenna Systems
Power, PSD, Bandwidth and Spurious Emissions

Test Specific Details

Objective: The objective of this test session is to perform final qualification testing of the EUT with respect to the specification listed above.

Date of Test: 6/23/11, 6/24/11, 8/4/11
Config. Used: 1
Test Engineer: David Bare / Joseph Cadigal / John Caizzi / Mehran Birgani
Config Change: none
Test Location: EMC Lab #4
EUT Voltage: 13.8Vdc

General Test Configuration

The EUT was connected to the spectrum analyzer or power meter via a suitable attenuator. All measurements were made on a single chain.

All measurements have been corrected to allow for the external attenuators used.

Ambient Conditions:

Temperature: 25 °C
Rel. Humidity: 37 %

Modifications Made During Testing

No modifications were made to the EUT during testing

Deviations From The Standard

No deviations were made from the requirements of the standard.

Client:	GE MDS LLC	Job Number:	J83512
Model:	Mercury5800	T-Log Number:	T83623
		Account Manager:	Susan Pelzl
Contact:	Dennis McCarthy		
Standard:	FCC 15.247, RSS-210, RSS-GEN	Class:	N/A

Summary of Results - Point to Multipoint Radio

Run #	Pwr setting		Test Performed	Limit	Pass / Fail	Result / Margin
1	18 16 18 22 20		Output Power - sector antenna	15.247(b)	Pass	3.5 MHz: 16.2 dBm 5 MHz: 16.3 dBm 7 MHz: 16.0 dBm 8.75 MHz: 16.2 dBm 10 MHz: 16.5 dBm
1b	20 19 18 20 19		Output Power - panel antenna	15.247(b)	Pass	3.5 MHz: 17.7 dBm 5 MHz: 17.7 dBm 7 MHz: 17.6 dBm 8.75 MHz: 17.4 dBm 10 MHz: 16.2 dBm
2	20 18 20 22 20		Power spectral Density (PSD) per 3kHz	15.247(d)	Pass	3.5 MHz: -4.6 dBm 5 MHz: -4.6 dBm 7 MHz: -6.0 dBm 8.75 MHz: -6.9 dBm 10 MHz: -8.4 dBm
3	-		Minimum 6dB Bandwidth	15.247(a)	Pass	3.12 MHz
4			Spurious emissions	15.247(b)	Pass	All emissions > -30dBc below the fundamental

Client:	GE MDS LLC	Job Number:	J83512
Model:	Mercury5800	T-Log Number:	T83623
		Account Manager:	Susan Pelzl
Contact:	Dennis McCarthy		
Standard:	FCC 15.247, RSS-210, RSS-GEN	Class:	N/A

Run #1a: Output Power - Sector Antenna

Operating Mode: 3.5 MHz BW

Transmitted signal on chain is coherent ? no

5727 MHz	Chain 1	Chain 2	Chain 3	Chain 4	Total Across All Chains		Limit	
Power Setting Note 3	20.0	20.0						
Output Power (dBm) Note 1	12.8	13.5			16.2 dBm	0.041 W	20.5 dBm	0.112 W
Antenna Gain (dBi) Note 2	15.5	15.5				15.5 dBi	Pass	
eirp (dBm) Note 2	28.3	29			31.7 dBm	1.470 W		
5788 MHz	**Chain 1**	**Chain 2**	**Chain 3**	**Chain 4**	**Total Across All Chains**		**Limit**	
Power Setting Note 3	19.0	19.0						
Output Power (dBm) Note 1	12.7	13.6			16.2 dBm	0.042 W	20.5 dBm	0.112 W
Antenna Gain (dBi) Note 2	15.5	15.5				15.5 dBi	Pass	
eirp (dBm) Note 2	28.2	29.1			31.7 dBm	1.474 W		
5848 MHz	**Chain 1**	**Chain 2**	**Chain 3**	**Chain 4**	**Total Across All Chains**		**Limit**	
Power Setting Note 3	18.0	18.0						
Output Power (dBm) Note 1	12.3	13.8			16.1 dBm	0.041 W	20.5 dBm	0.112 W
Antenna Gain (dBi) Note 2	15.5	15.5				15.5 dBi	Pass	
eirp (dBm) Note 2	27.8	29.3			31.6 dBm	1.454 W		

Operating Mode: 5 MHz BW

5728 MHz	Chain 1	Chain 2	Chain 3	Chain 4	Total Across All Chains		Limit	
Power Setting Note 3	20.0	20.0						
Output Power (dBm) Note 1	12.9	13.7			16.3 dBm	0.043 W	20.5 dBm	0.112 W
Antenna Gain (dBi) Note 2	15.5	15.5				15.5 dBi	Pass	
eirp (dBm) Note 2	28.4	29.2			31.8 dBm	1.524 W		
5788 MHz	**Chain 1**	**Chain 2**	**Chain 3**	**Chain 4**	**Total Across All Chains**		**Limit**	
Power Setting Note 3	19.0	19.0						
Output Power (dBm) Note 1	12.9	13.7			16.3 dBm	0.043 W	20.5 dBm	0.112 W
Antenna Gain (dBi) Note 2	15.5	15.5				15.5 dBi	Pass	
eirp (dBm) Note 2	28.4	29.2			31.8 dBm	1.524 W		
5847 MHz	**Chain 1**	**Chain 2**	**Chain 3**	**Chain 4**	**Total Across All Chains**		**Limit**	
Power Setting Note 3	18.0	18.0						
Output Power (dBm) Note 1	12.5	14			16.3 dBm	0.043 W	20.5 dBm	0.112 W
Antenna Gain (dBi) Note 2	15.5	15.5				15.5 dBi	Pass	
eirp (dBm) Note 2	28	29.5			31.8 dBm	1.522 W		

Client:	GE MDS LLC	Job Number:	J83512
Model:	Mercury5800	T-Log Number:	T83623
		Account Manager:	Susan Pelzl
Contact:	Dennis McCarthy		
Standard:	FCC 15.247, RSS-210, RSS-GEN	Class:	N/A

Operating Mode: 7 MHz BW

5729 MHz	Chain 1	Chain 2	Chain 3	Chain 4	Total Across All Chains		Limit	
Power Setting Note 3	20.0	20.0						
Output Power (dBm) Note 1	11.3	11.7			14.5 dBm	0.028 W	20.5 dBm	0.112 W
Antenna Gain (dBi) Note 2	15.5	15.5				15.5 dBi	Pass	
eirp (dBm) Note 2	26.8	27.2			30.0 dBm	1.003 W		
5788 MHz	Chain 1	Chain 2	Chain 3	Chain 4	Total Across All Chains		Limit	
Power Setting Note 3	20.0	20.0						
Output Power (dBm) Note 1	12	12.8			15.4 dBm	0.035 W	20.5 dBm	0.112 W
Antenna Gain (dBi) Note 2	15.5	15.5				15.5 dBi	Pass	
eirp (dBm) Note 2	27.5	28.3			30.9 dBm	1.238 W		
5846 MHz	Chain 1	Chain 2	Chain 3	Chain 4	Total Across All Chains		Limit	
Power Setting Note 3	20.0	20.0						
Output Power (dBm) Note 1	12.3	13.6			16.0 dBm	0.040 W	20.5 dBm	0.112 W
Antenna Gain (dBi) Note 2	15.5	15.5				15.5 dBi	Pass	
eirp (dBm) Note 2	27.8	29.1			31.5 dBm	1.415 W		

Operating Mode: 8.75 MHz BW

5730 MHz	Chain 1	Chain 2	Chain 3	Chain 4	Total Across All Chains		Limit	
Power Setting Note 3	22.0	22.0						
Output Power (dBm) Note 1	12.8	13.5			16.2 dBm	0.041 W	20.5 dBm	0.112 W
Antenna Gain (dBi) Note 2	15.5	15.5				15.5 dBi	Pass	
eirp (dBm) Note 2	28.3	29			31.7 dBm	1.470 W		
5788 MHz	Chain 1	Chain 2	Chain 3	Chain 4	Total Across All Chains		Limit	
Power Setting Note 3	19.0	19.0						
Output Power (dBm) Note 1	12.6	13.3			16.0 dBm	0.040 W	20.5 dBm	0.112 W
Antenna Gain (dBi) Note 2	15.5	15.5				15.5 dBi	Pass	
eirp (dBm) Note 2	28.1	28.8			31.5 dBm	1.404 W		
5845 MHz	Chain 1	Chain 2	Chain 3	Chain 4	Total Across All Chains		Limit	
Power Setting Note 3	18.0	18.0						
Output Power (dBm) Note 1	12.2	13.6			16.0 dBm	0.040 W	20.5 dBm	0.112 W
Antenna Gain (dBi) Note 2	15.5	15.5				15.5 dBi	Pass	
eirp (dBm) Note 2	27.7	29.1			31.5 dBm	1.402 W		

Client:	GE MDS LLC	Job Number:	J83512
Model:	Mercury5800	T-Log Number:	T83623
		Account Manager:	Susan Pelzl
Contact:	Dennis McCarthy		
Standard:	FCC 15.247, RSS-210, RSS-GEN	Class:	N/A

Operating Mode: 10 MHz BW

5731 MHz	Chain 1	Chain 2	Chain 3	Chain 4	Total Across All Chains		Limit	
Power Setting Note 3	20.0	20.0						
Output Power (dBm) Note 1	13.2	13.78			16.5 dBm	0.045 W	20.5 dBm	0.112 W
Antenna Gain (dBi) Note 2	15.5	15.5				15.5 dBi	Pass	
eirp (dBm) Note 2	28.65	29.28			32.0 dBm	1.580 W		
5788 MHz	Chain 1	Chain 2	Chain 3	Chain 4	Total Across All Chains		Limit	
Power Setting Note 3	19.0	19.0						
Output Power (dBm) Note 1	12.90	13.6			16.3 dBm	0.042 W	20.5 dBm	0.112 W
Antenna Gain (dBi) Note 2	15.5	15.5				15.5 dBi	Pass	
eirp (dBm) Note 2	28.4	29.1			31.8 dBm	1.505 W		
5844 MHz	Chain 1	Chain 2	Chain 3	Chain 4	Total Across All Chains		Limit	
Power Setting Note 3	18.0	18.0						
Output Power (dBm) Note 1	12.5	13.9			16.3 dBm	0.042 W	20.5 dBm	0.112 W
Antenna Gain (dBi) Note 2	15.5	15.5				15.5 dBi	Pass	
eirp (dBm) Note 2	28	29.4			31.8 dBm	1.502 W		

Note 1:	Output power measured using a spectrum analyzer (see plots below) with RBW=1MHz, VB=3 MHz, sample detector, power averaging on (transmitted signal was not continuous but the analyzer was configured with a gated sweep such that the analyzer was only sweeping when the device was transmitting) and power integration over 10 MHz (option #2, method 1 in KDB 558074, equivalent to method 1 of DA-02-2138A1 for U-NII devices). Spurious limit becomes -30dBc.
Note 2:	As there is no coherency between chains the total EIRP is the sum of the individual EIRPs and effective antenna gain equals the eirp divide by the sum of the power on each chain.

Client:	GE MDS LLC	Job Number:	J83512
Model:	Mercury5800	T-Log Number:	T83623
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Contact:	Dennis McCarthy		
Standard:	FCC 15.247, RSS-210, RSS-GEN	Class:	N/A

Run #1b: Output Power - Panel Antenna

Operating Mode: 3.5 MHz BW

Transmitted signal on chain is coherent ? no as antennas are cross polarized

5727 MHz	Chain 1	Chain 2	Chain 3	Chain 4	Total Across All Chains		Limit	
Power Setting Note 3	21	21						
Output Power (dBm) Note 1	14.1	14.8			17.5 dBm	0.056 W	18.0 dBm	0.063 W
Antenna Gain (dBi) Note 2	18	18				18.0 dBi	Pass	
eirp (dBm) Note 2	32.09	32.84			35.5 dBm	3.541 W		
5788 MHz	Chain 1	Chain 2	Chain 3	Chain 4	Total Across All Chains		Limit	
Power Setting Note 3	20	20						
Output Power (dBm) Note 1	14.1	15.1			17.7 dBm	0.059 W	18.0 dBm	0.063 W
Antenna Gain (dBi) Note 2	18	18				18.0 dBi	Pass	
eirp (dBm) Note 2	32.13	33.14			35.7 dBm	3.694 W		
5848 MHz	Chain 1	Chain 2	Chain 3	Chain 4	Total Across All Chains		Limit	
Power Setting Note 3	20	20						
Output Power (dBm) Note 1	13.7	15.4			17.6 dBm	0.057 W	18.0 dBm	0.063 W
Antenna Gain (dBi) Note 2	18	18				18.0 dBi	Pass	
eirp (dBm) Note 2	31.65	33.35			35.6 dBm	3.625 W		

Operating Mode: 5 MHz BW

5728 MHz	Chain 1	Chain 2	Chain 3	Chain 4	Total Across All Chains		Limit	
Power Setting Note 3	20	20						
Output Power (dBm) Note 1	13.8	14.6			17.3 dBm	0.053 W	18.0 dBm	0.063 W
Antenna Gain (dBi) Note 2	18	18				18.0 dBi	Pass	
eirp (dBm) Note 2	31.83	32.63			35.3 dBm	3.356 W		
5788 MHz	Chain 1	Chain 2	Chain 3	Chain 4	Total Across All Chains		Limit	
Power Setting Note 3	19	19						
Output Power (dBm) Note 1	14.0	14.7			17.4 dBm	0.055 W	18.0 dBm	0.063 W
Antenna Gain (dBi) Note 2	18	18				18.0 dBi	Pass	
eirp (dBm) Note 2	31.97	32.72			35.4 dBm	3.445 W		
5847 MHz	Chain 1	Chain 2	Chain 3	Chain 4	Total Across All Chains		Limit	
Power Setting Note 3	19	19						
Output Power (dBm) Note 1	13.8	15.4			17.7 dBm	0.058 W	18.0 dBm	0.063 W
Antenna Gain (dBi) Note 2	18	18				18.0 dBi	Pass	
eirp (dBm) Note 2	31.78	33.36			35.7 dBm	3.674 W		

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Operating Mode: 7 MHz BW

5729 MHz	Chain 1	Chain 2	Chain 3	Chain 4	Total Across All Chains		Limit	
Power Setting Note 3	22.0	22.0						
Output Power (dBm) Note 1	11.8	14.9			16.6 dBm	0.046 W	18.0 dBm	0.063 W
Antenna Gain (dBi) Note 2	18	18				18.0 dBi	Pass	
eirp (dBm) Note 2	29.8	32.91			34.6 dBm	2.909 W		
5788 MHz	Chain 1	Chain 2	Chain 3	Chain 4	Total Across All Chains		Limit	
Power Setting Note 3	21.0	21.0						
Output Power (dBm) Note 1	12.3	14.8			16.8 dBm	0.047 W	18.0 dBm	0.063 W
Antenna Gain (dBi) Note 2	18	18				18.0 dBi	Pass	
eirp (dBm) Note 2	30.33	32.81			34.8 dBm	2.989 W		
5846 MHz	Chain 1	Chain 2	Chain 3	Chain 4	Total Across All Chains		Limit	
Power Setting Note 3	18	18						
Output Power (dBm) Note 1	13.8	15.3			17.6 dBm	0.058 W	18.0 dBm	0.063 W
Antenna Gain (dBi) Note 2	18	18				18.0 dBi	Pass	
eirp (dBm) Note 2	31.81	33.28			35.6 dBm	3.645 W		

Operating Mode: 8.75 MHz BW

5730 MHz	Chain 1	Chain 2	Chain 3	Chain 4	Total Across All Chains		Limit	
Power Setting Note 3	21.0	21.0						
Output Power (dBm) Note 1	9.0	14.4			15.5 dBm	0.036 W	18.0 dBm	0.063 W
Antenna Gain (dBi) Note 2	18	18				18.0 dBi	Pass	
eirp (dBm) Note 2	27.01	32.4			33.5 dBm	2.240 W		
5788 MHz	Chain 1	Chain 2	Chain 3	Chain 4	Total Across All Chains		Limit	
Power Setting Note 3	20.0	20.0						
Output Power (dBm) Note 1	13.7	14.9			17.4 dBm	0.055 W	18.0 dBm	0.063 W
Antenna Gain (dBi) Note 2	18	18				18.0 dBi	Pass	
eirp (dBm) Note 2	31.7	32.93			35.4 dBm	3.442 W		
5845 MHz	Chain 1	Chain 2	Chain 3	Chain 4	Total Across All Chains		Limit	
Power Setting Note 3	19.0	19.0						
Output Power (dBm) Note 1	9.0	14.4			15.5 dBm	0.035 W	18.0 dBm	0.063 W
Antenna Gain (dBi) Note 2	18	18				18.0 dBi	Pass	
eirp (dBm) Note 2	27.02	32.37			33.5 dBm	2.229 W		

Client:	GE MDS LLC	Job Number:	J83512
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Standard:	FCC 15.247, RSS-210, RSS-GEN	Class:	N/A

Operating Mode: 10 MHz BW

5731 MHz	Chain 1	Chain 2	Chain 3	Chain 4	Total Across All Chains		Limit	
Power Setting Note 3	21.0	21.0						
Output Power (dBm) Note 1	13.7	10.8			15.5 dBm	0.035 W	18.0 dBm	0.063 W
Antenna Gain (dBi) Note 2	18	18				18.0 dBi	Pass	
eirp (dBm) Note 2	31.7	28.81			33.5 dBm	2.239 W		
5788 MHz	Chain 1	Chain 2	Chain 3	Chain 4	Total Across All Chains		Limit	
Power Setting Note 3	20.0	20.0						
Output Power (dBm) Note 1	13.3	9.0			14.7 dBm	0.029 W	18.0 dBm	0.063 W
Antenna Gain (dBi) Note 2	18	18				18.0 dBi	Pass	
eirp (dBm) Note 2	31.29	26.95			32.7 dBm	1.841 W		
5844 MHz	Chain 1	Chain 2	Chain 3	Chain 4	Total Across All Chains		Limit	
Power Setting Note 3	19.0	19.0						
Output Power (dBm) Note 1	10.9	14.7			16.2 dBm	0.042 W	18.0 dBm	0.063 W
Antenna Gain (dBi) Note 2	18	18				18.0 dBi	Pass	
eirp (dBm) Note 2	28.93	32.67			34.2 dBm	2.631 W		

Note 1:	Output power measured using a spectrum analyzer (see plots below) with RBW=1MHz, VB=3 MHz, sample detector, power averaging on (transmitted signal was not continuous but the analyzer was configured with a gated sweep such that the analyzer was only sweeping when the device was transmitting) and power integration over 10 MHz (option #2, method 1 in KDB 558074, equivalent to method 1 of DA-02-2138A1 for U-NII devices). Spurious limit becomes -30dBc.
Note 2:	As there is no coherency between chains the total EIRP is the sum of the individual EIRPs and effective antenna gain equals the eirp divide by the sum of the power on each chain.

Client:	GE MDS LLC	Job Number:	J83512
Model:	Mercury5800	T-Log Number:	T83623
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Standard:	FCC 15.247, RSS-210, RSS-GEN	Class:	N/A

Run #2: Power spectral Density (use highest power setting from sector or panel)

3.5 MHz mode

Power Setting	Frequency (MHz)	PSD (dBm/3kHz) Note 1					Limit dBm/3kHz	Result
		Chain 1	Chain 2	Chain 3	Chain 4	Total		
21	5727	-8.2	-7.1			-4.6	8.0	Pass
20	5788	-8.1	-7.3			-4.6	8.0	Pass
20	5848	-8.0	-9.9			-5.8	8.0	Pass

5 MHz mode

Power Setting	Frequency (MHz)	PSD (dBm/3kHz) Note 1					Limit dBm/3kHz	Result
		Chain 1	Chain 2	Chain 3	Chain 4	Total		
20	5728	-9.0	-8.4			-5.7	8.0	Pass
19	5788	-8.9	-7.3			-5.0	8.0	Pass
19	5847	-7.2	-8.0			-4.6	8.0	Pass

7 MHz mode

Power Setting	Frequency (MHz)	PSD (dBm/3kHz) Note 1					Limit dBm/3kHz	Result
		Chain 1	Chain 2	Chain 3	Chain 4	Total		
22	5729	-12.2	-11.3			-8.7	8.0	Pass
21	5788	-10.0	-9.0			-6.5	8.0	Pass
20	5846	-9.8	-8.3			-6.0	8.0	Pass

8.75 MHz mode

Power Setting	Frequency (MHz)	PSD (dBm/3kHz) Note 1					Limit dBm/3kHz	Result
		Chain 1	Chain 2	Chain 3	Chain 4	Total		
22	5730	-10.4	-9.5			-6.9	8.0	Pass
20	5788	-11.6	-10.8			-8.2	8.0	Pass
19	5845	-12.1	-10.6			-8.2	8.0	Pass

10 MHz mode

Power Setting	Frequency (MHz)	PSD (dBm/3kHz) Note 1					Limit dBm/3kHz	Result
		Chain 1	Chain 2	Chain 3	Chain 4	Total		
21	5731	-11.8	-11.1			-8.4	8.0	Pass
20	5788	-12.0	-11.4			-8.7	8.0	Pass
19	5844	-12.5	-11.0			-8.7	8.0	Pass

Note 1:	Power spectral density measured using RB=3 kHz, VB=10kHz, analyzer with sample detector, power averaging enabled. The span is set to ensure there are at least two sample points per resolution bandwidth (with 401 points span < 600kHz, with 601 points the span < 900kHz). The frequency with the highest PPSD is first determined using a peak detector with the same resolution and video bandwidth settings but over the 6dB bandwidth of the transmitted signal.

Client:	GE MDS LLC	Job Number:	J83512
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Standard:	FCC 15.247, RSS-210, RSS-GEN	Class:	N/A

Run #3: Signal Bandwidth

BW setting	Frequency (MHz)	Resolution Bandwidth	Bandwidth (MHz)		
			6dB	20dB	99%
3.5 MHz	5727	100 kHz	3.12	3.49	3.34
3.5 MHz	5788	100 kHz	3.22		3.34
3.5 MHz	5848	100 kHz	3.36	3.58	3.38
5 MHz	5728	100 kHz	4.42	4.87	4.54
5 MHz	5788	100 kHz	4.43		4.51
5 MHz	5847	100 kHz	4.58	4.88	4.61
7 MHz	5729	100 kHz	6.55	6.68	6.56
7 MHz	5788	100 kHz	6.40		6.47
7 MHz	5846	100 kHz	6.48	6.73	6.56
8.75 MHz	5730	300 kHz	7.88	8.63	8.19
8.75 MHz	5788	300 kHz	7.65		8.29
8.75 MHz	5845	300 kHz	7.63	8.53	8.31
10 MHz	5731	300 kHz	8.90	9.60	9.15
10 MHz	5788	300 kHz	9.00		9.19
10 MHz	5844	300 kHz	8.77	9.73	9.15

Note 1:	Measured on a single chain.

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Run #4: Out of Band Spurious Emissions

3.5 MHz mode

Power Setting Per Chain				Frequency (MHz)	Limit	Result
#1	#2	#3	#4			
21	21			5727	-30dBc	PASS
20	20			5788	-30dBc	PASS
20	20			5848	-30dBc	PASS

5 MHz mode

Power Setting Per Chain				Frequency (MHz)	Limit	Result
#1	#2	#3	#4			
20	20			5728	-30dBc	PASS
19	19			5788	-30dBc	PASS
19	19			5847	-30dBc	PASS

7 MHz mode

Power Setting Per Chain				Frequency (MHz)	Limit	Result
#1	#2	#3	#4			
22	22			5729	-30dBc	PASS
21	21			5788	-30dBc	PASS
20	20			5846	-30dBc	PASS

8.75 MHz mode

Power Setting Per Chain				Frequency (MHz)	Limit	Result
#1	#2	#3	#4			
22	22			5730	-30dBc	PASS
20	20			5788	-30dBc	PASS
19	19			5845	-30dBc	PASS

10 MHz mode

Power Setting Per Chain				Frequency (MHz)	Limit	Result
#1	#2	#3	#4			
21	21			5731	-30dBc	PASS
20	20			5788	-30dBc	PASS
19	19			5844	-30dBc	PASS

Note 1:	Measured on each chain individually

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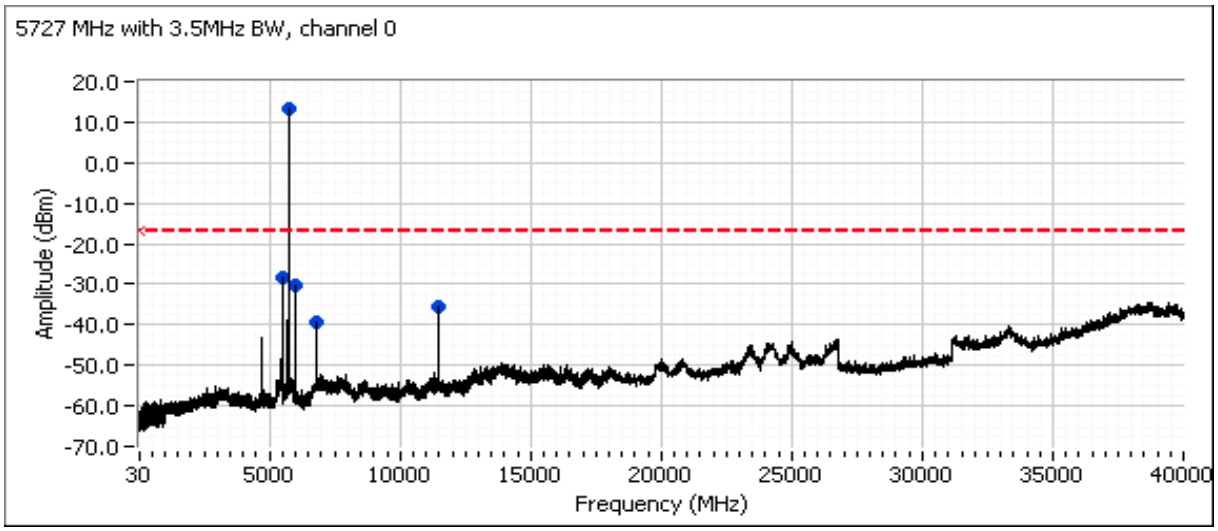
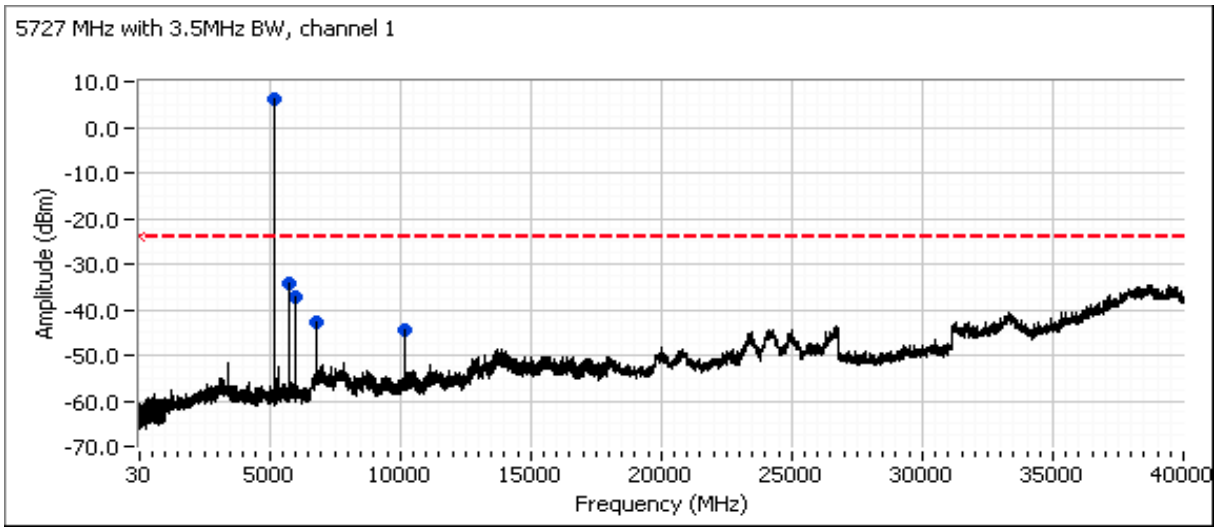
Contact:	Dennis McCarthy		
Standard:	FCC 15.247, RSS-210, RSS-GEN	Class:	N/A





Client:	GE MDS LLC	Job Number:	J83512
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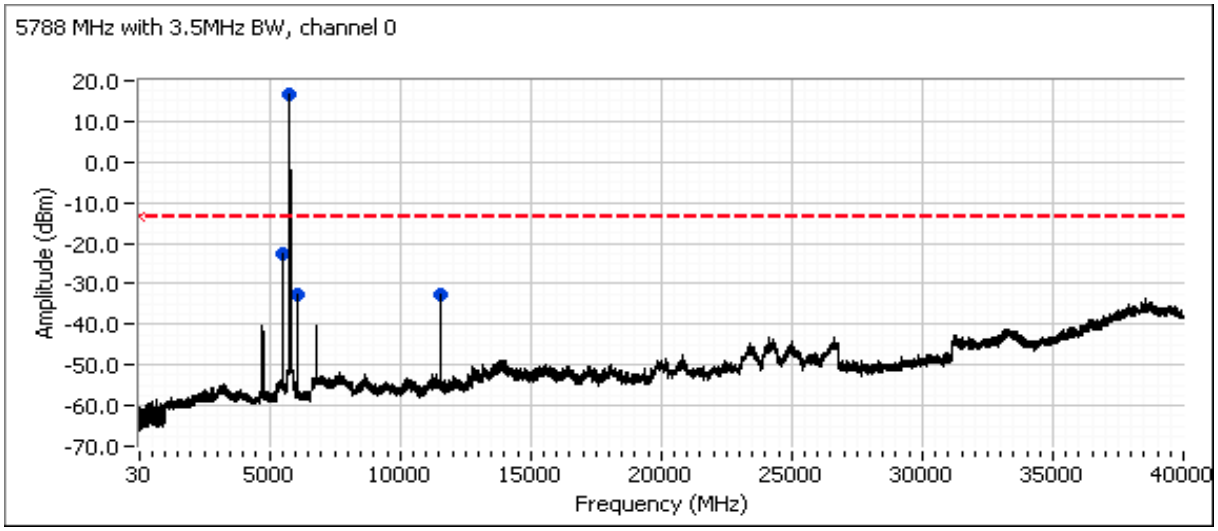
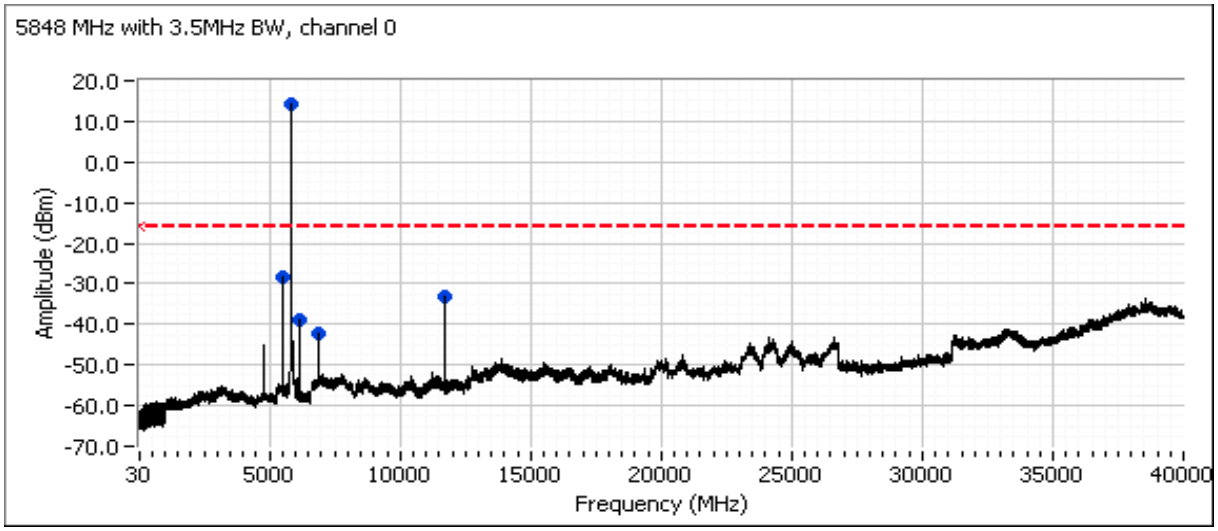
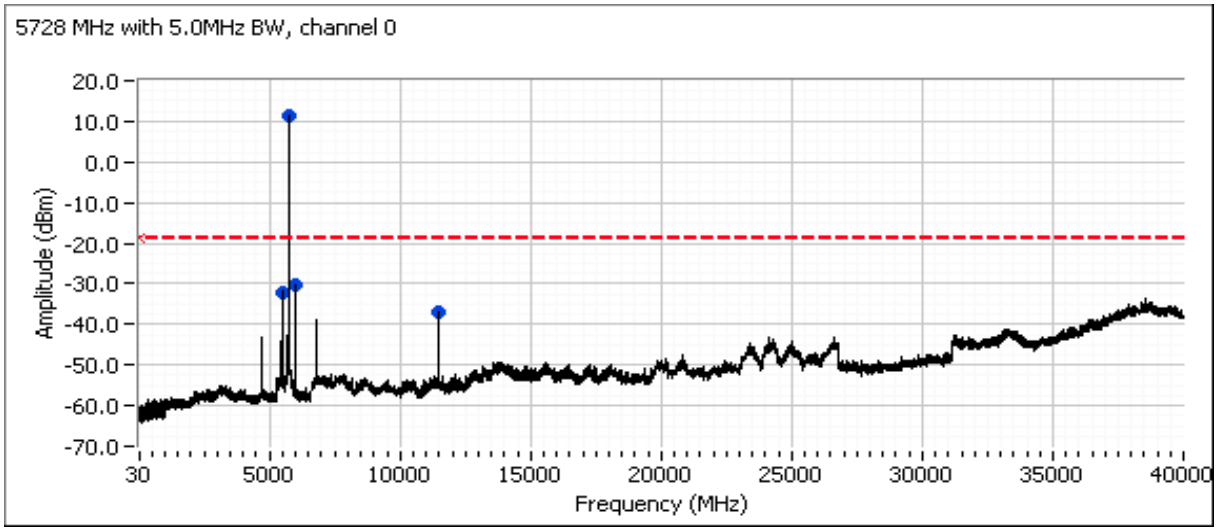
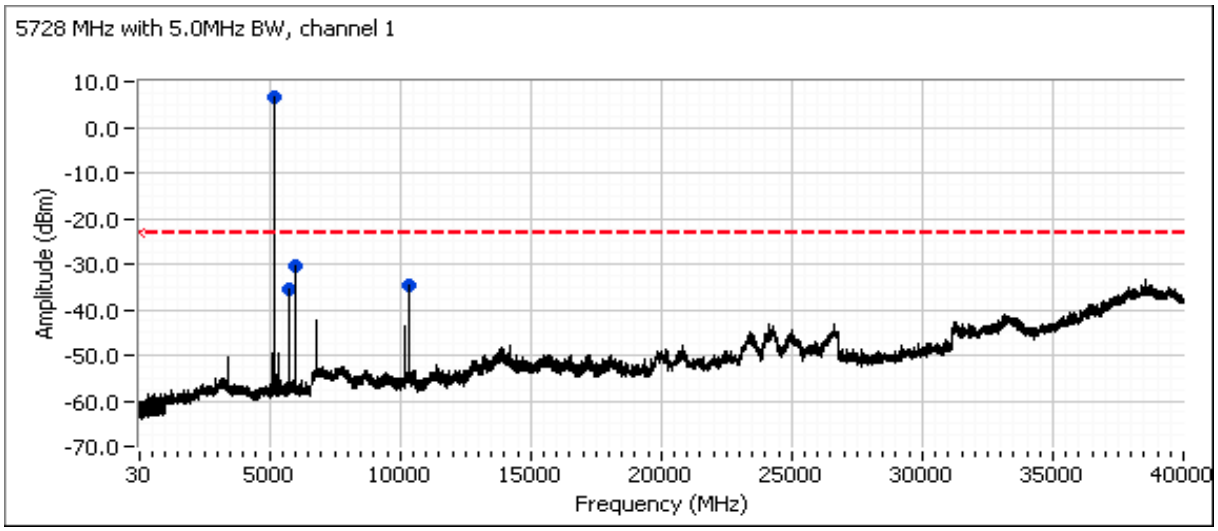
Standard:	FCC 15.247, RSS-210, RSS-GEN	Class:	N/A





Client:	GE MDS LLC	Job Number:	J83512
Model:	Mercury5800	T-Log Number:	T83623
		Account Manager:	Susan Pelzl
Contact:	Dennis McCarthy		
Standard:	FCC 15.247, RSS-210, RSS-GEN	Class:	N/A





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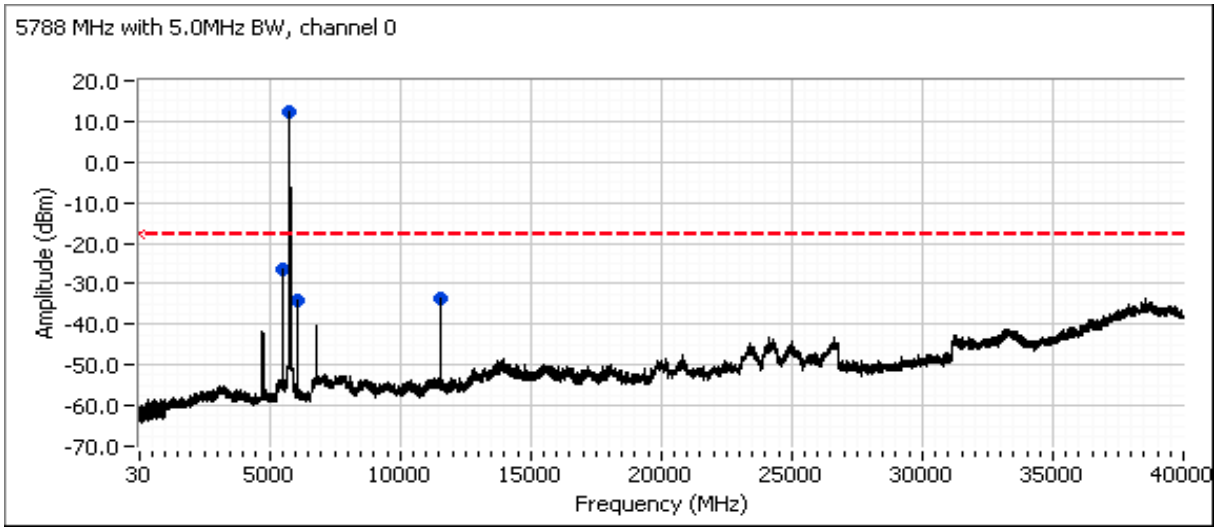
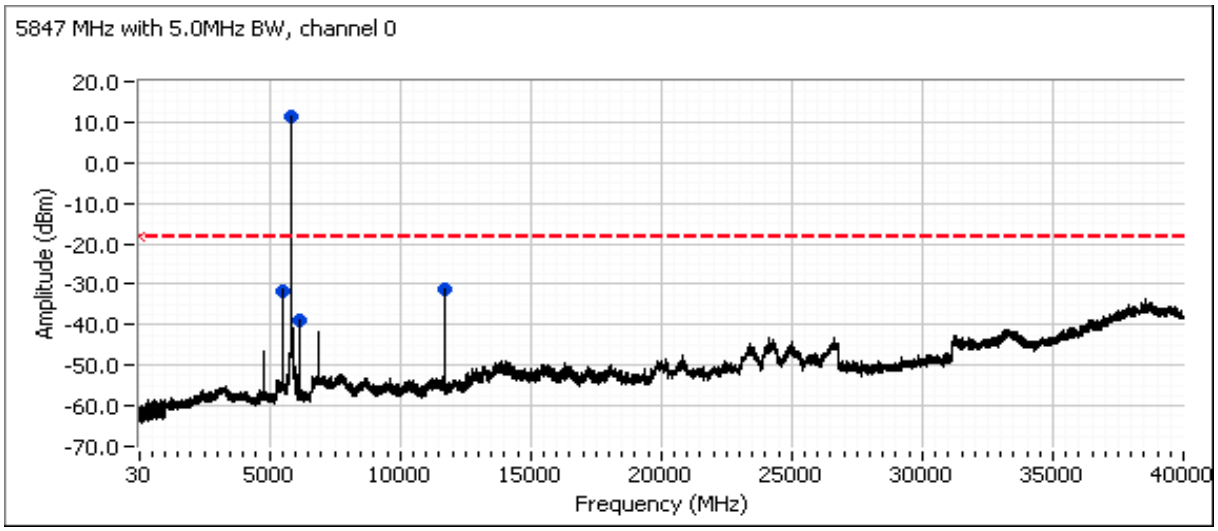
Standard:	FCC 15.247, RSS-210, RSS-GEN	Class:	N/A





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		Account Manager:	Susan Pelzl
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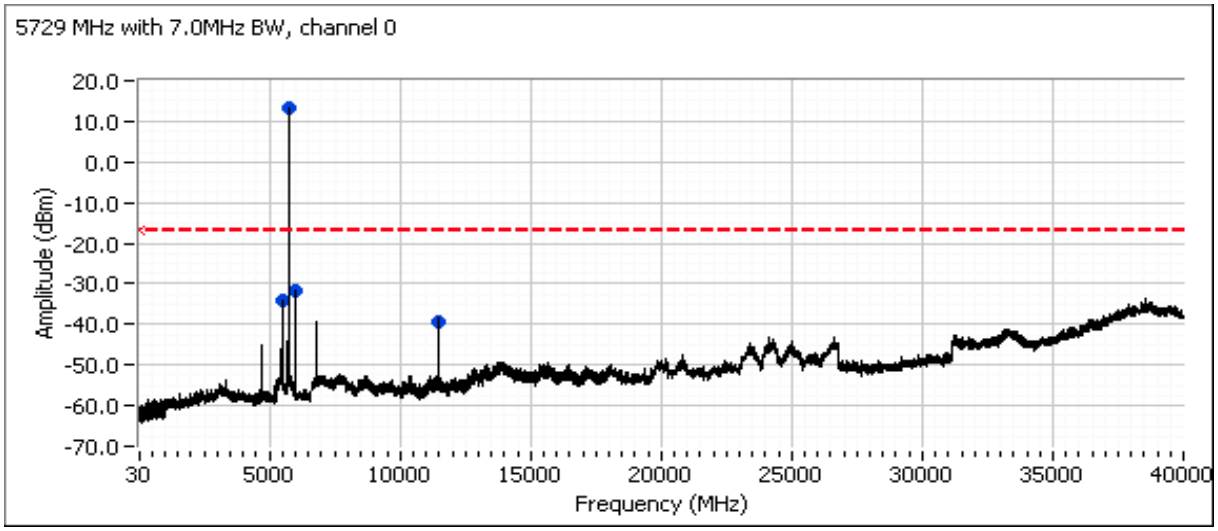
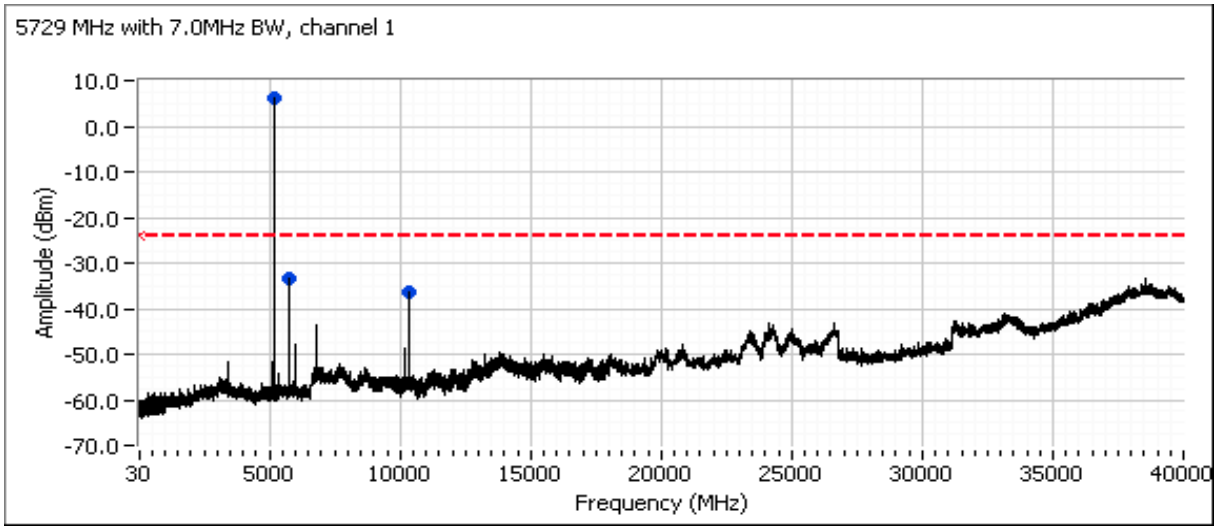
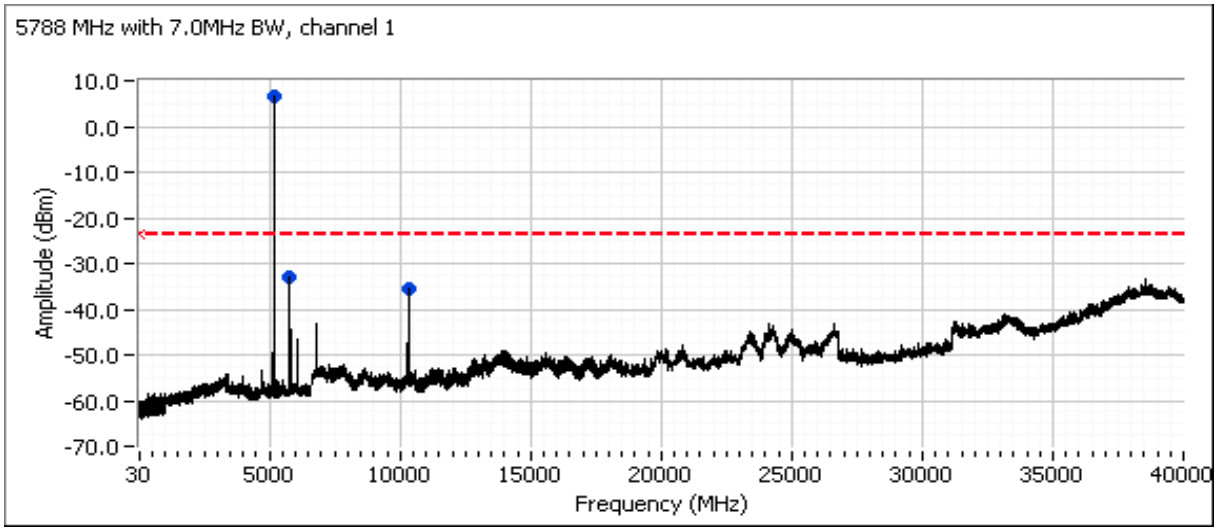
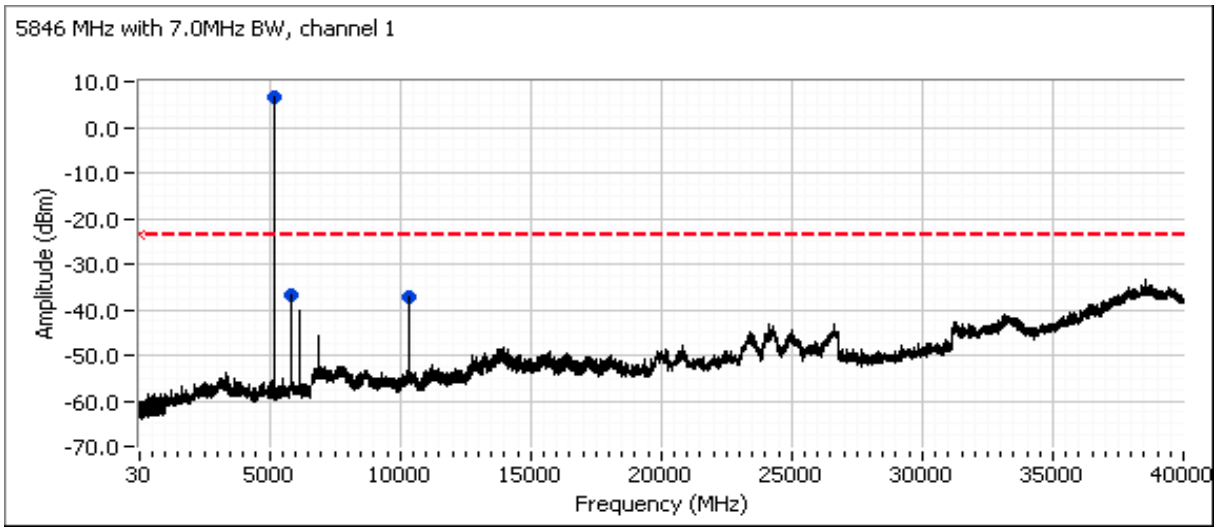
Standard:	FCC 15.247, RSS-210, RSS-GEN	Class:	N/A





Client:	GE MDS LLC	Job Number:	J83512
Model:	Mercury5800	T-Log Number:	T83623
		Account Manager:	Susan Pelzl
Contact:	Dennis McCarthy		
Standard:	FCC 15.247, RSS-210, RSS-GEN	Class:	N/A





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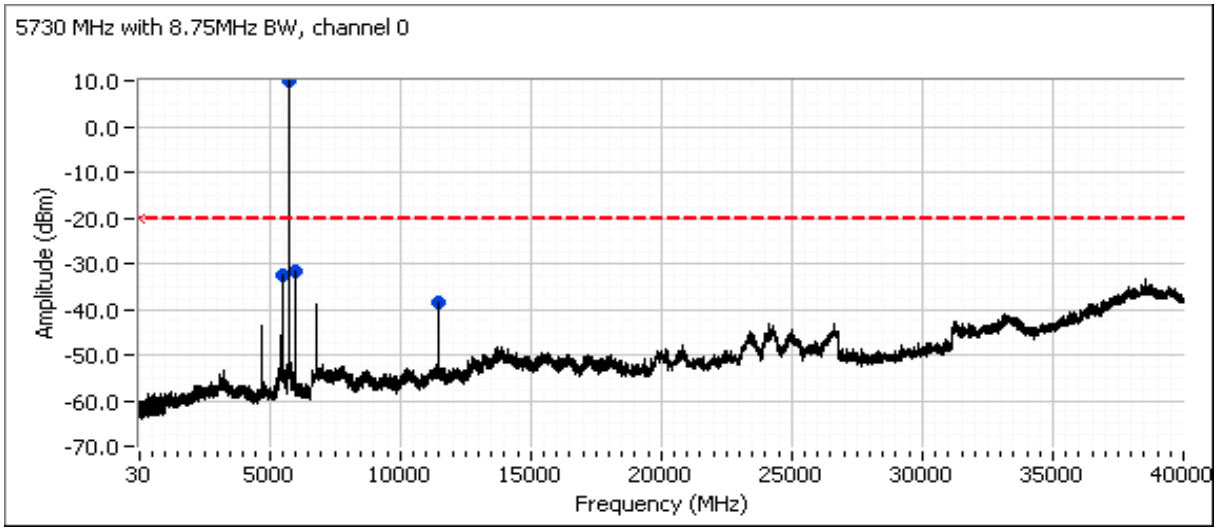
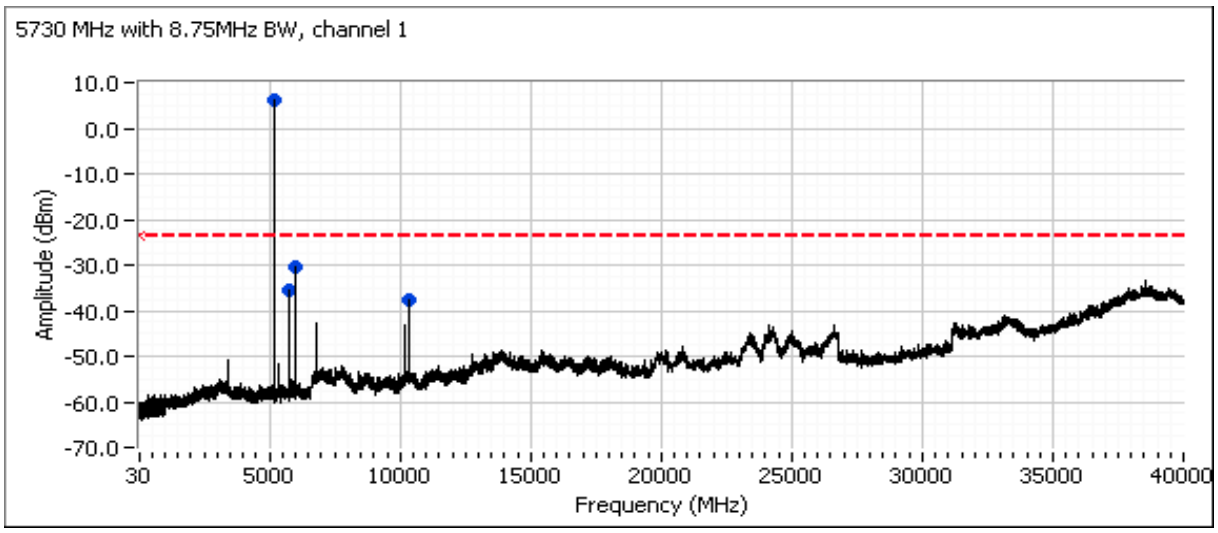
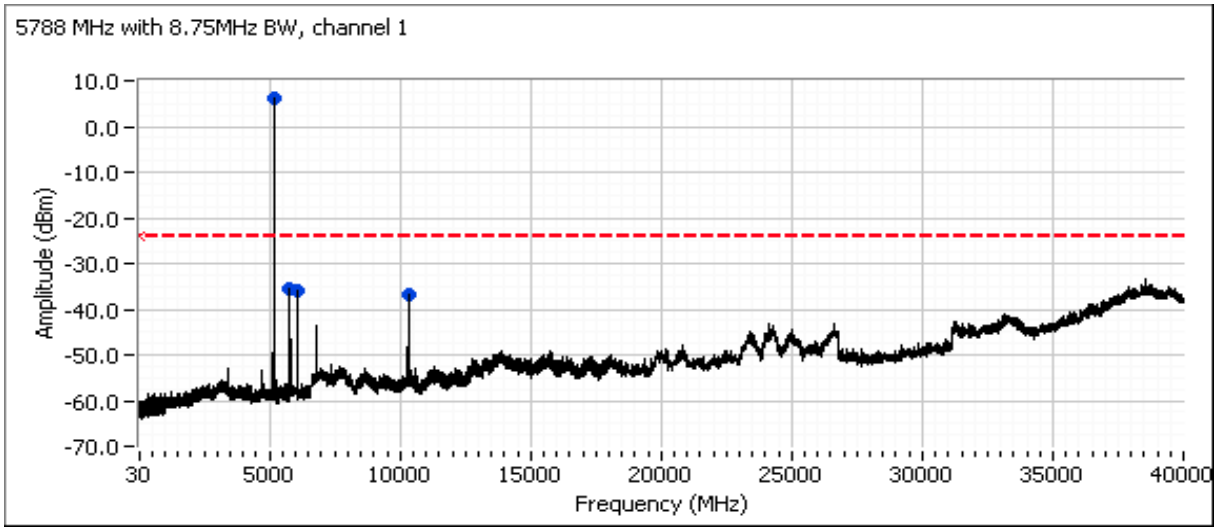
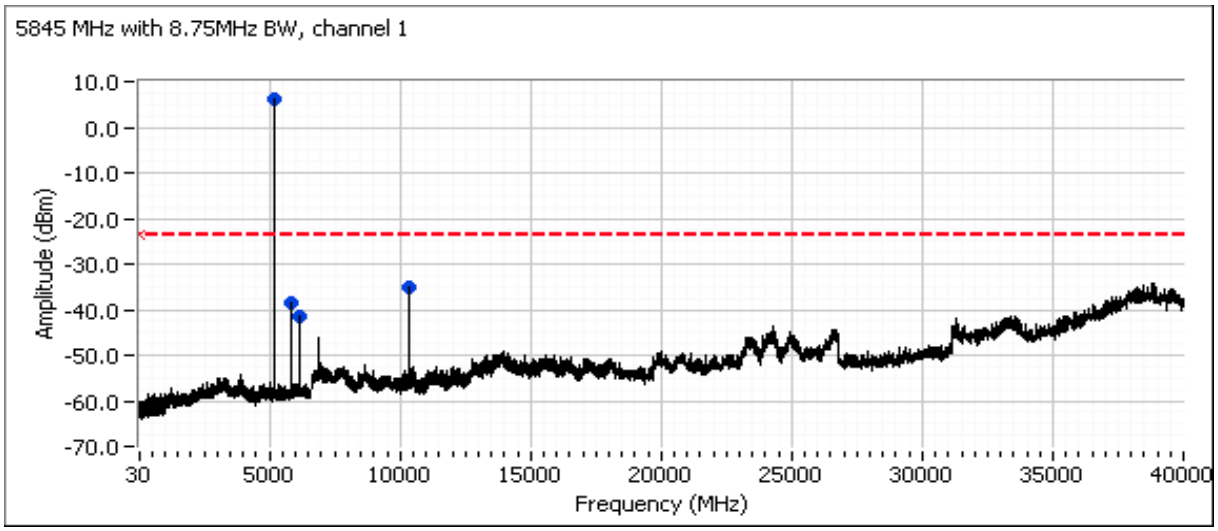
Model:	Mercury5800	T-Log Number:	T83623
		Account Manager:	Susan Pelzl
Contact:	Dennis McCarthy		
Standard:	FCC 15.247, RSS-210, RSS-GEN	Class:	N/A



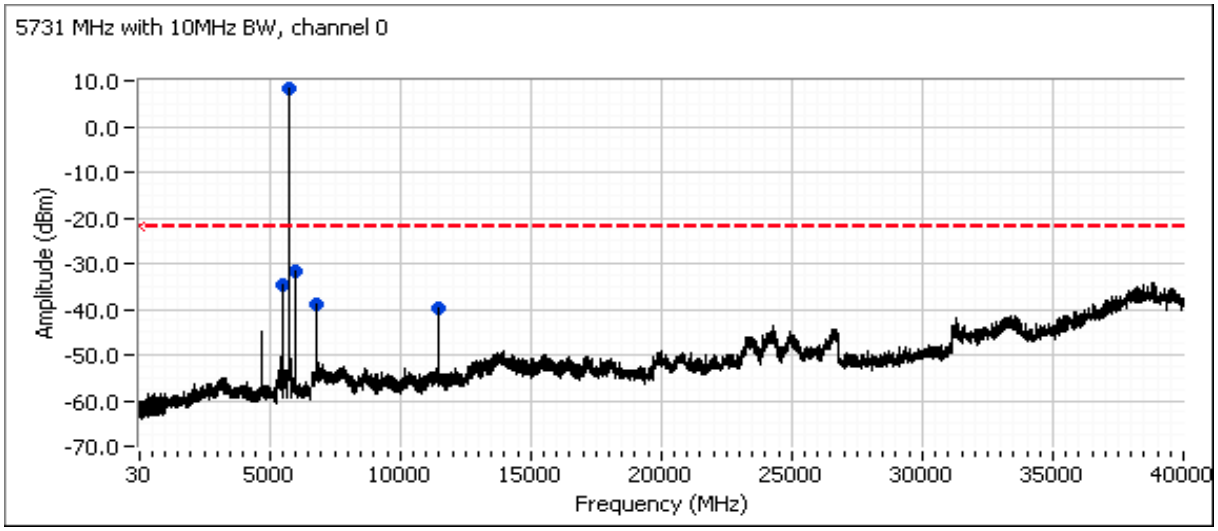


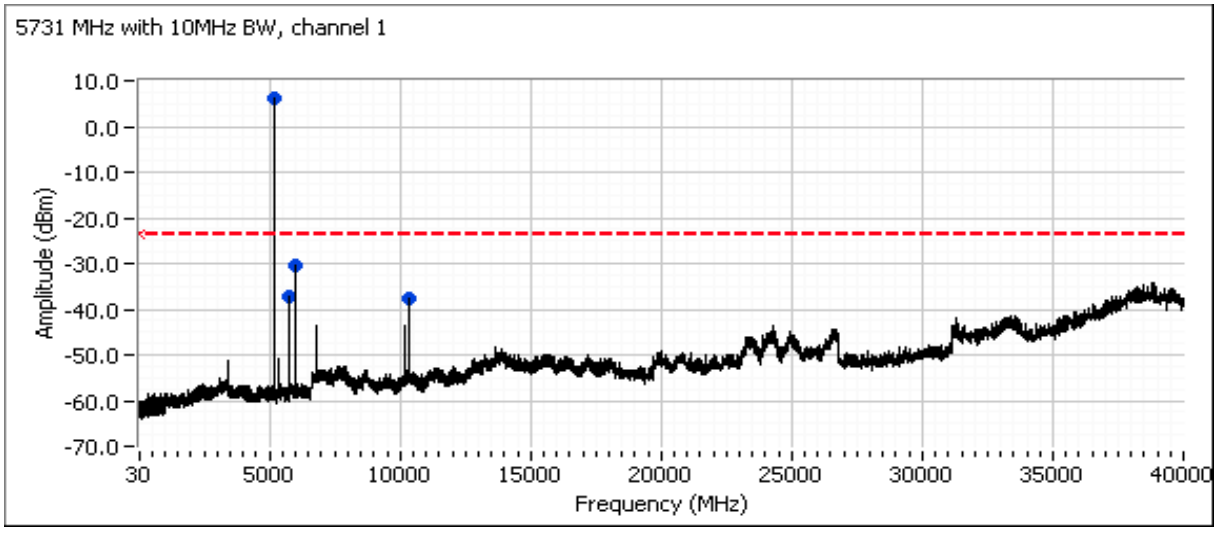
Client:	GE MDS LLC	Job Number:	J83512
Model:	Mercury5800	T-Log Number:	T83623
		Account Manager:	Susan Pelzl
Contact:	Dennis McCarthy		
Standard:	FCC 15.247, RSS-210, RSS-GEN	Class:	N/A



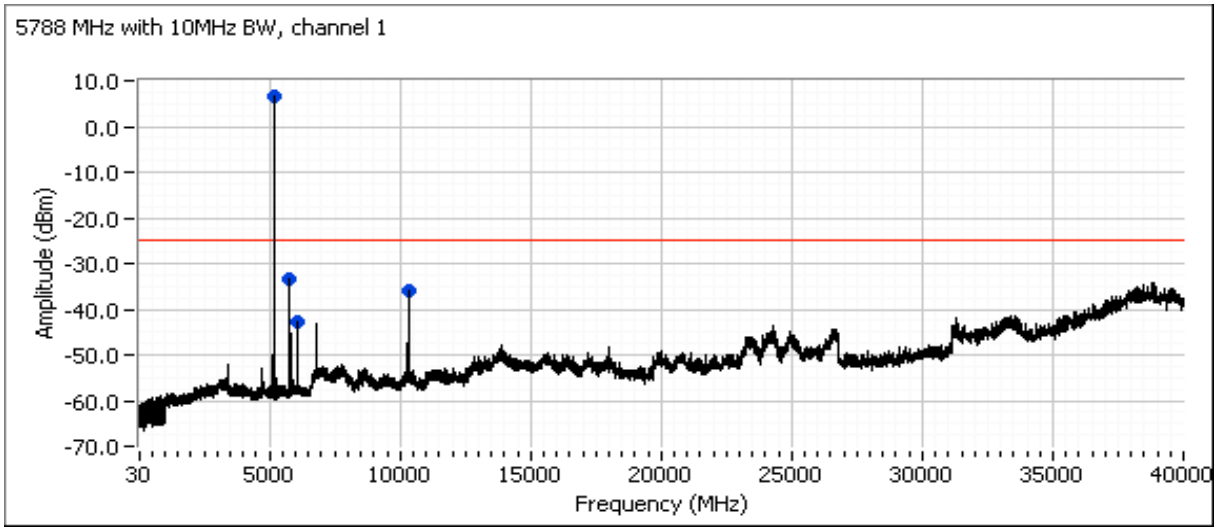


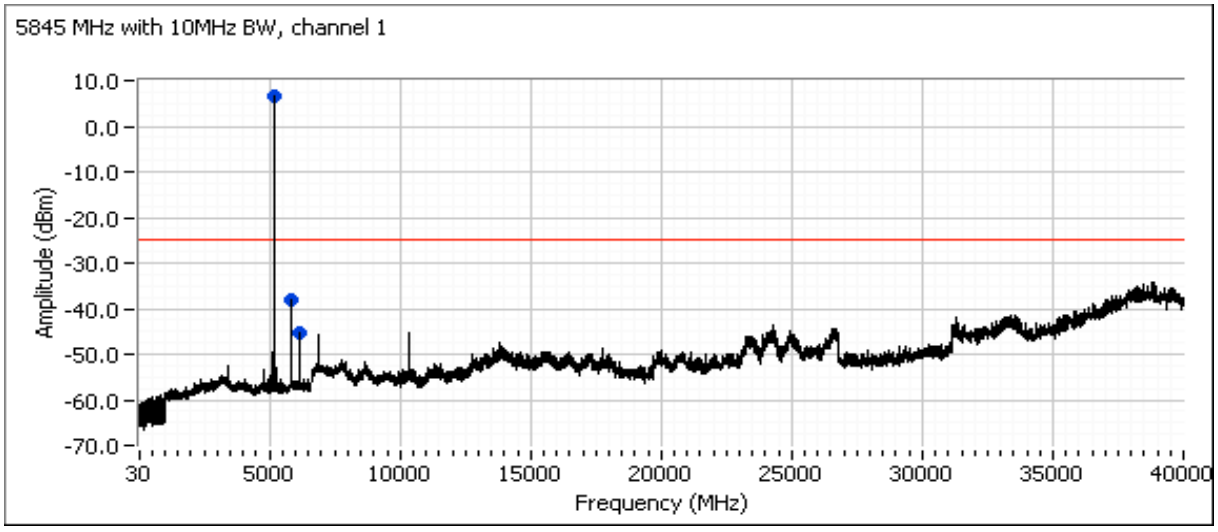
Client:	GE MDS LLC	Job Number:	J83512
Model:	Mercury5800	T-Log Number:	T83623
		Account Manager:	Susan Pelzl
Contact:	Dennis McCarthy		
Standard:	FCC 15.247, RSS-210, RSS-GEN	Class:	N/A





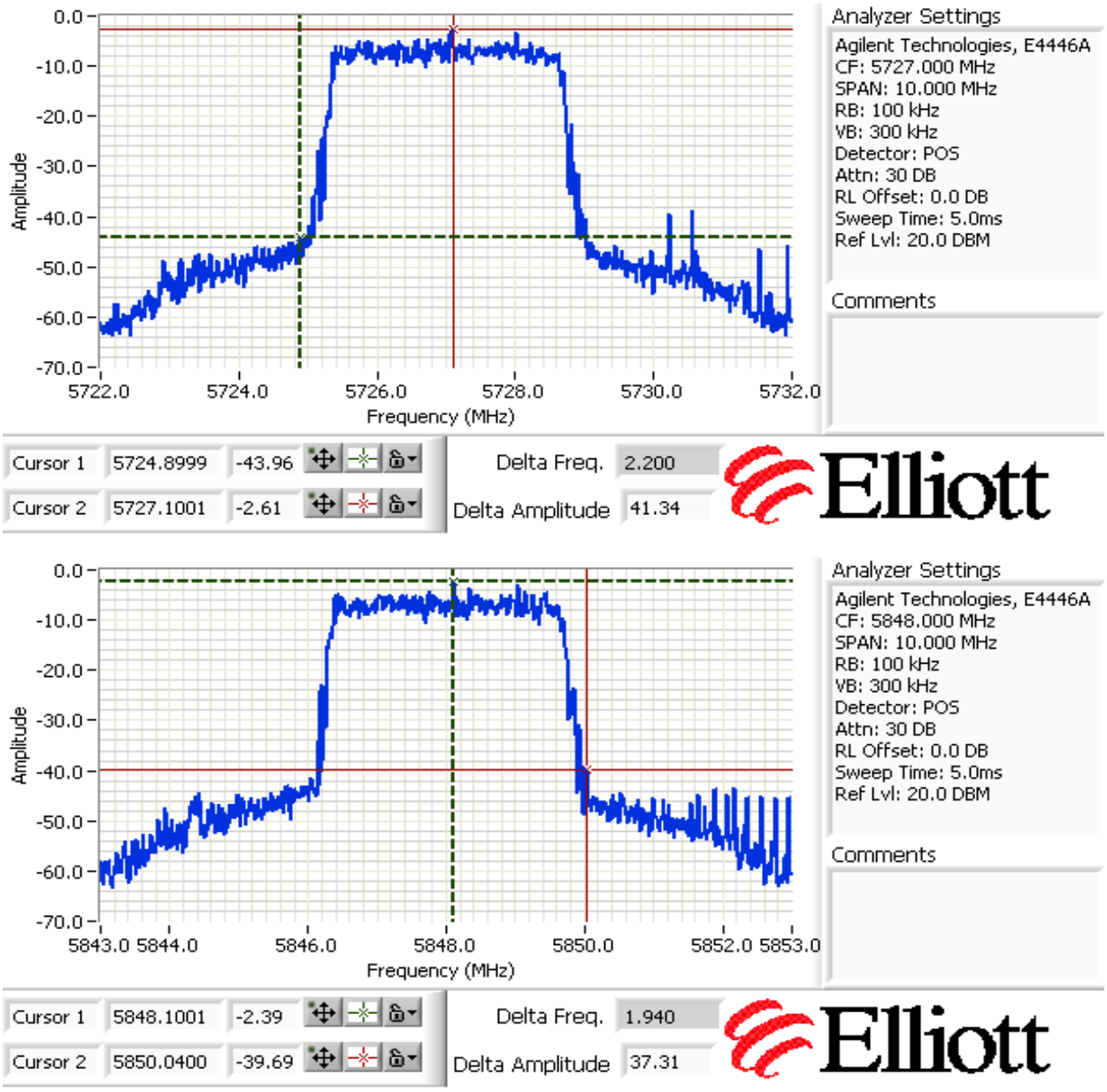
Client:	GE MDS LLC	Job Number:	J83512
Model:	Mercury5800	T-Log Number:	T83623
		Account Manager:	Susan Pelzl
Contact:	Dennis McCarthy		
Standard:	FCC 15.247, RSS-210, RSS-GEN	Class:	N/A





Client:	GE MDS LLC	Job Number:	J83512
Model:	Mercury5800	T-Log Number:	T83623
		Account Manager:	Susan Pelzl
Contact:	Dennis McCarthy		
Standard:	FCC 15.247, RSS-210, RSS-GEN	Class:	N/A

Additional plot showing compliance with -30dBc at the band edge.



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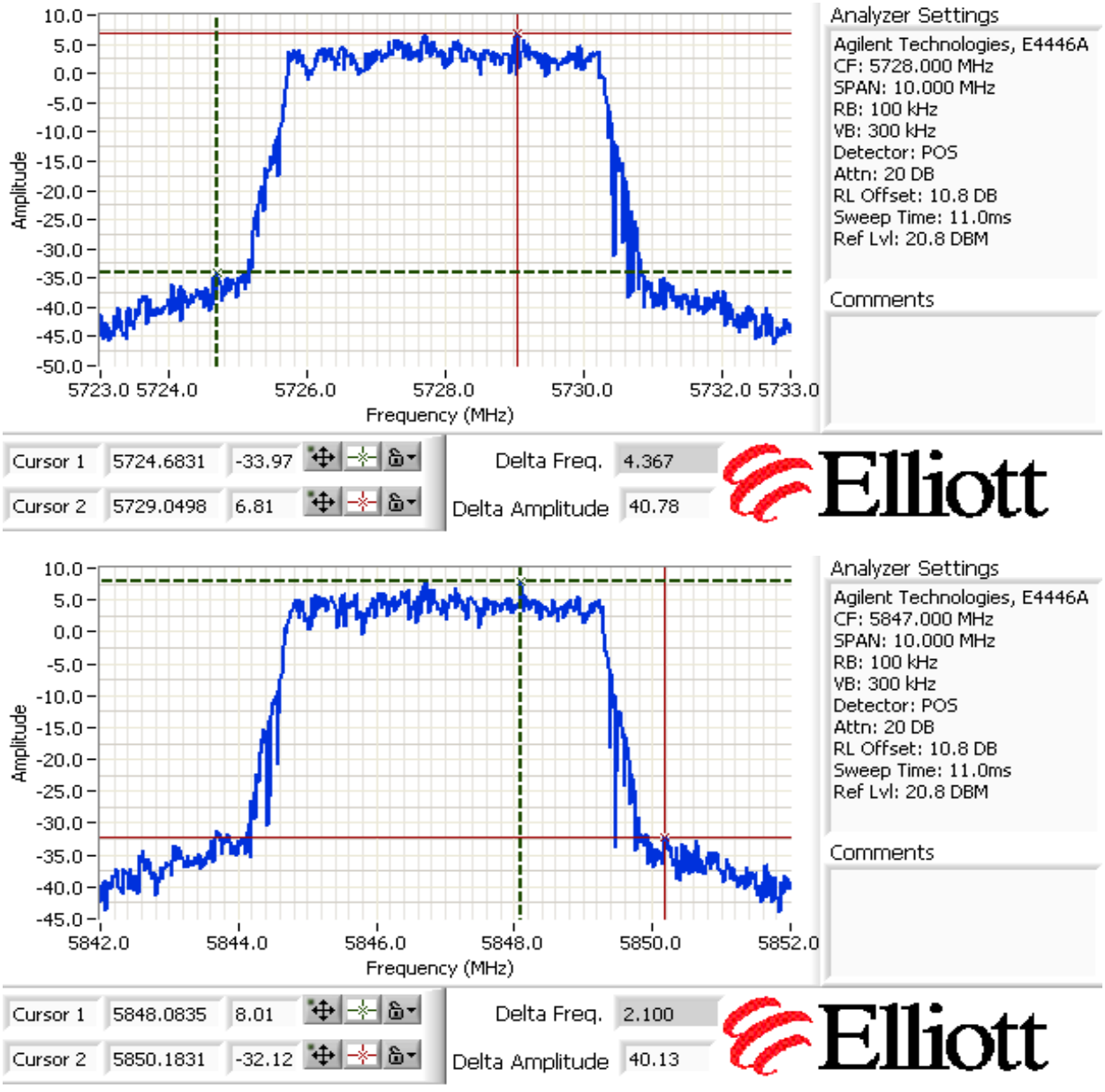
Model:	Mercury5800	T-Log Number:	T83623
		Account Manager:	Susan Pelzl
Contact:	Dennis McCarthy		
Standard:	FCC 15.247, RSS-210, RSS-GEN	Class:	N/A



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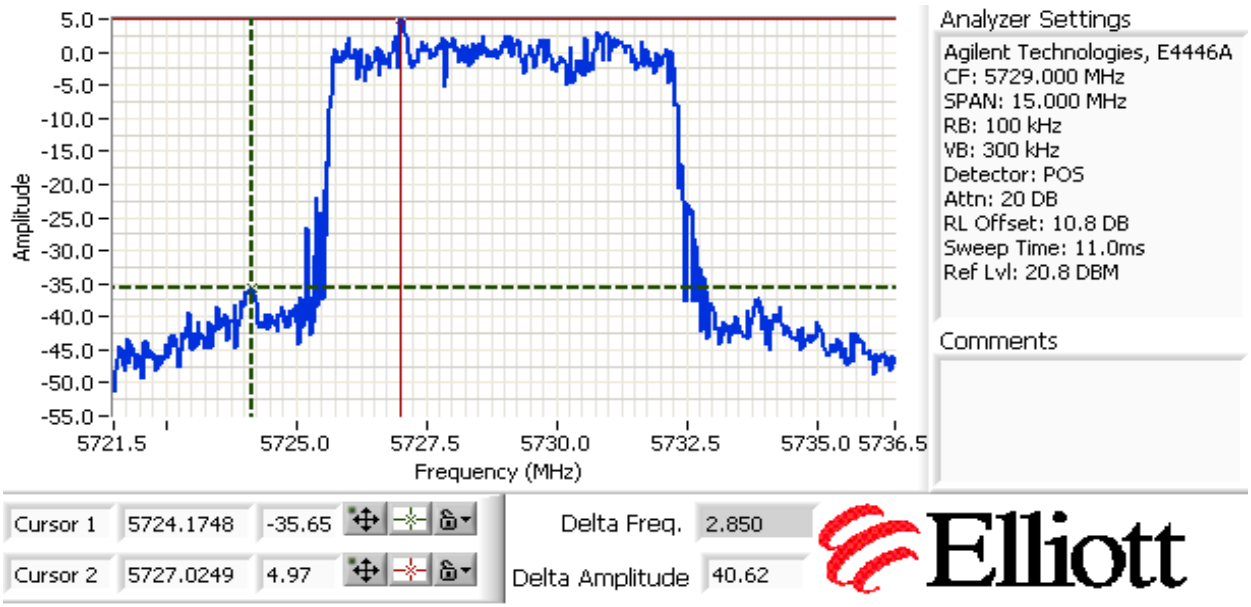
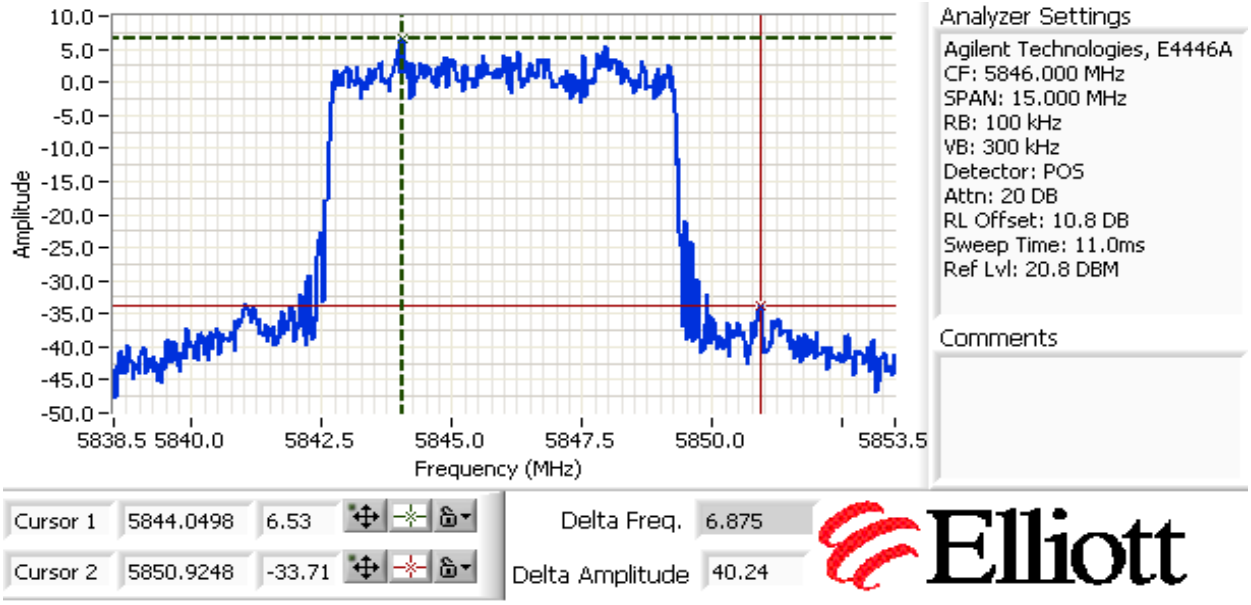
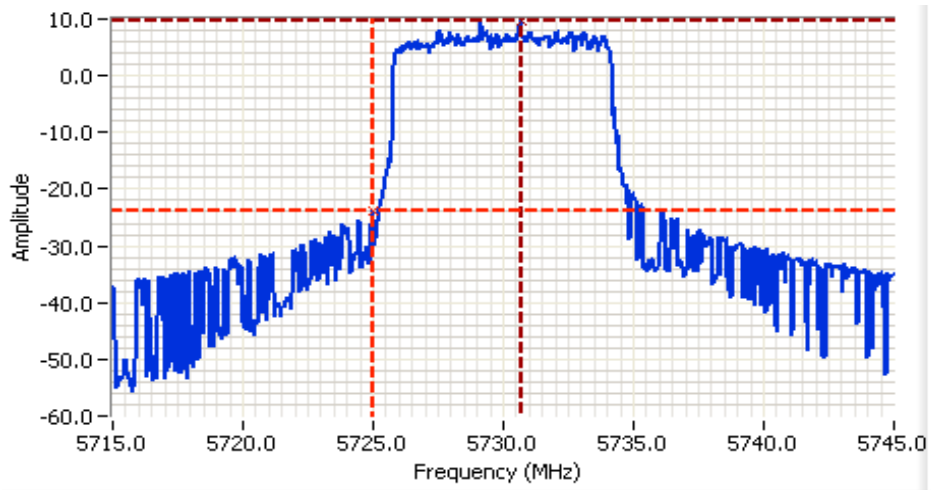
Model:	Mercury5800	T-Log Number:	T83623
		Account Manager:	Susan Pelzl
Contact:	Dennis McCarthy		
Standard:	FCC 15.247, RSS-210, RSS-GEN	Class:	N/A





Client:	GE MDS LLC	Job Number:	J83512
Model:	Mercury5800	T-Log Number:	T83623
		Account Manager:	Susan Pelzl
Contact:	Dennis McCarthy		
Standard:	FCC 15.247, RSS-210, RSS-GEN	Class:	N/A



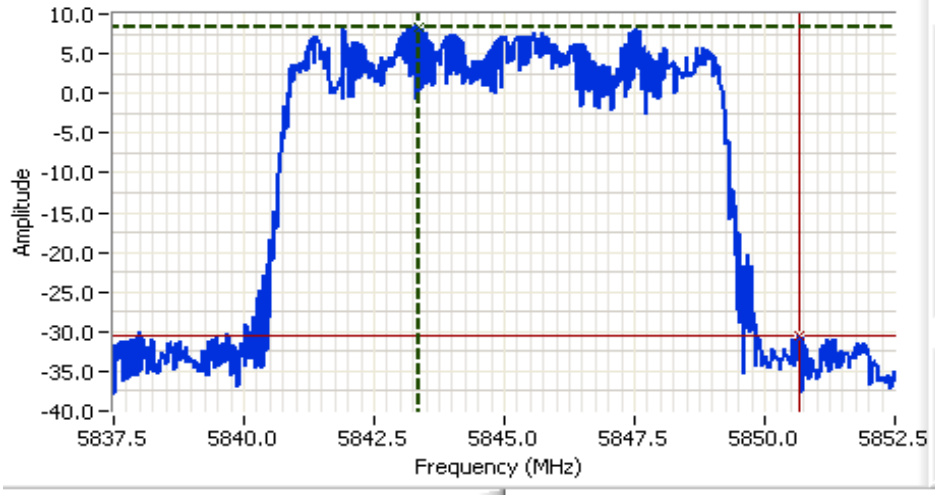
Analyzer Settings

Agilent Technologies, E4446A
CF: 5730.000 MHz
SPAN: 30.000 MHz
RB: 100 kHz
VB: 300 kHz
Detector: POS
Attn: 10 DB
RL Offset: 20.7 DB
Sweep Time: 2.9ms
Ref Lvl: 20.7 DBM

Comments

8.75 MHz BW
Band edge

Cursor 1	5724.9697	-23.75	Delta Freq.	5.706	Elliott
Cursor 2	5730.6758	9.53	Delta Amplitude	33.28	



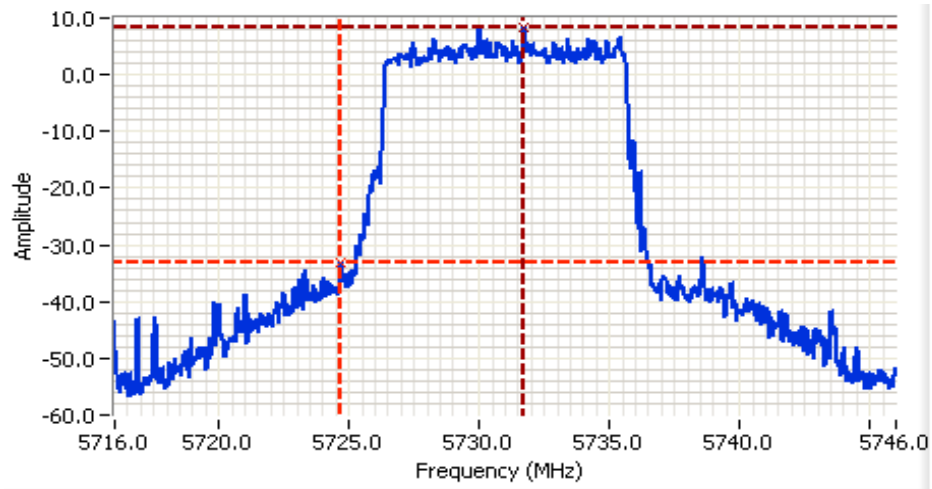
Analyzer Settings

Agilent Technologies, E4446A
CF: 5845.000 MHz
SPAN: 15.000 MHz
RB: 300 kHz
VB: 910 kHz
Detector: POS
Attn: 20 DB
RL Offset: 10.8 DB
Sweep Time: 11.0ms
Ref Lvl: 20.8 DBM

Comments

Cursor 1	5843.3501	8.37	Delta Freq.	7.300	Elliott
Cursor 2	5850.6499	-30.46	Delta Amplitude	38.83	

Client:	GE MDS LLC	Job Number:	J83512
Model:	Mercury5800	T-Log Number:	T83623
		Account Manager:	Susan Pelzl
Contact:	Dennis McCarthy		
Standard:	FCC 15.247, RSS-210, RSS-GEN	Class:	N/A



Analyzer Settings

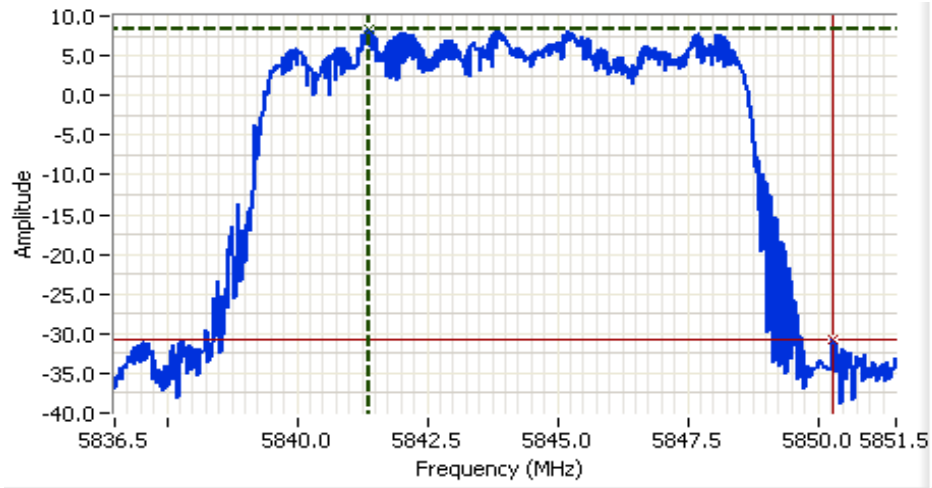
Agilent Technologies, E4446A
CF: 5731.000 MHz
SPAN: 30.000 MHz
RB: 100 kHz
VB: 300 kHz
Detector: POS
Attn: 10 DB
RL Offset: 20.7 DB
Sweep Time: 2.9ms
Ref Lvl: 20.7 DBM

Comments

10MHz BW
Band edge

Cursor 1	5724.7085	-33.14	Delta Freq.	7.027
Cursor 2	5731.7358	8.42	Delta Amplitude	41.56

Elliott



Analyzer Settings

Agilent Technologies, E4446A
CF: 5844.000 MHz
SPAN: 15.000 MHz
RB: 300 kHz
VB: 910 kHz
Detector: POS
Attn: 20 DB
RL Offset: 10.8 DB
Sweep Time: 11.0ms
Ref Lvl: 20.8 DBM

Comments

Cursor 1	5841.3750	8.35	Delta Freq.	8.925
Cursor 2	5850.2998	-30.77	Delta Amplitude	39.12

Elliott

Client:	GE MDS LLC	Job Number:	J83512
Model:	Mercury5800	T-Log Number:	T83623
		Account Manager:	Susan Pelzl
Contact:	Dennis McCarthy		
Standard:	FCC 15.247, RSS-210, RSS-GEN	Class:	N/A

Frequency MHz	Level dBm		Radio Limit	Radio Margin	Detector QP/Ave	Comments	
BW: 3.5 MHz							
5850.000	-39.7	RF Port	-32.4	-7.3	Peak	5848 MHz, chain 0	BE
5724.900	-44.0	RF Port	-32.6	-11.4	Peak	5727 MHz, chain 0	BE
5476.340	-28.5	RF Port	-16.7	-11.8	Peak	5727 MHz, chain 0	
5726.980	-34.2	RF Port	-23.9	-10.3	Peak	5727 MHz, chain 1	
5506.560	-22.8	RF Port	-13.4	-9.4	Peak	5788 MHz, chain 0	
5788.000	-31.9	RF Port	-23.9	-8.0	Peak	5788 MHz, chain 1	
5537.280	-28.2	RF Port	-15.8	-12.4	Peak	5848 MHz, chain 0	
10348.350	-34.5	RF Port	-23.0	-11.5	Peak	5848 MHz, chain 1	
BW: 5.0 MHz							
5724.683	-34.0	RF Port	-23.2	-10.8	Peak	5728 MHz, chain 0	BE
5850.183	-32.1	RF Port	-22.0	-10.1	Peak	5847 MHz, chain 0	BE
5979.510	-30.3	RF Port	-18.7	-11.6	Peak	5728 MHz, chain 0	
5979.510	-30.5	RF Port	-23.3	-7.2	Peak	5728 MHz, chain 1	
5507.500	-26.5	RF Port	-17.7	-8.8	Peak	5788 MHz, chain 0	
5786.600	-35.3	RF Port	-23.0	-12.3	Peak	5788 MHz, chain 1	
11693.900	-31.4	RF Port	-18.4	-13.0	Peak	5847 MHz, chain 0	
5846.620	-36.6	RF Port	-23.5	-13.1	Peak	5847 MHz, chain 1	
BW: 7.0 MHz							
5724.175	-35.7	RF Port	-25.0	-10.6	Peak	5729 MHz, chain 0	BE
5850.925	-33.7	RF Port	-23.5	-10.2	Peak	5729 MHz, chain 0	BE
5981.660	-31.5	RF Port	-16.9	-14.6	Peak	5729 MHz, chain 0	
5729.580	-33.6	RF Port	-24.0	-9.6	Peak	5729 MHz, chain 1	
5786.600	-32.9	RF Port	-23.6	-9.3	Peak	5788 MHz, chain 1	
5846.620	-36.7	RF Port	-23.5	-13.2	Peak	5846 MHz, chain 1	
BW: 8.75 MHz							
5724.970	-23.8	RF Port	-20.5	-3.3	Peak	5730 MHz, chain 0	BE
5850.650	-30.5	RF Port	-21.6	-8.8	Peak	5845 MHz, chain 0	BE
5981.660	-31.7	RF Port	-20.1	-11.6	Peak	5730 MHz, chain 0	
5981.660	-30.6	RF Port	-23.7	-6.9	Peak	5730 MHz, chain 1	
5786.600	-35.4	RF Port	-24.0	-11.4	Peak	5788 MHz, chain 1	
10349.450	-35.2	RF Port	-23.7	-11.5	Peak	5845 MHz, chain 1	
BW: 10 MHz							
5724.709	-33.1	RF Port	-21.6	-11.6	Peak	5731 MHz, chain 0	BE
5850.300	-30.8	RF Port	-21.7	-9.1	Peak	5845 MHz, chain 0	BE
5984.660	-31.6	RF Port	-21.8	-9.8	Peak	5731 MHz, chain 0	
5984.660	-30.4	RF Port	-23.8	-6.6	Peak	5731 MHz, chain 1	
5786.600	-33.4	RF Port	-23.6	-9.8	Peak	5788 MHz, chain 1	
5843.610	-38.0	RF Port	-23.2	-14.8	Peak	5845 MHz, chain 1	

Client:	GE MDS LLC	Job Number:	J83512
Model:	Mercury5800	T-Log Number:	T83623
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Standard:	FCC 15.247, RSS-210, RSS-GEN	Class:	A

Conducted Emissions

(Elliott Laboratories Fremont Facility, Semi-Anechoic Chamber)

Test Specific Details

Objective: The objective of this test session is to perform final qualification testing of the EUT with respect to the specification listed above.

Date of Test: 6/23/2011
Test Engineer: David Bare
Test Location: Fremont Chamber #7
Config. Used: 2
Config Change: None
PS Input Voltage: 120V/60Hz

General Test Configuration

For tabletop equipment, the EUT was located on a table inside the semi-anechoic chamber, 40 cm from a vertical coupling plane and 80cm from the LISN. A second LISN was used for all local support equipment. Remote support equipment was located outside of the semi-anechoic chamber. Any cables running to remote support equipment where routed through metal conduit and when possible passed through a ferrite clamp upon exiting the chamber.

Ambient Conditions:

Temperature: 20 °C
Rel. Humidity: 39 %

Summary of Results

Run #	Test Performed	Limit	Result	Margin
1	CE, AC Power, 120V/60Hz	FCC 15.207 Radio	Pass	32.4dBµV @ 0.419MHz (-15.1dB)

Modifications Made During Testing

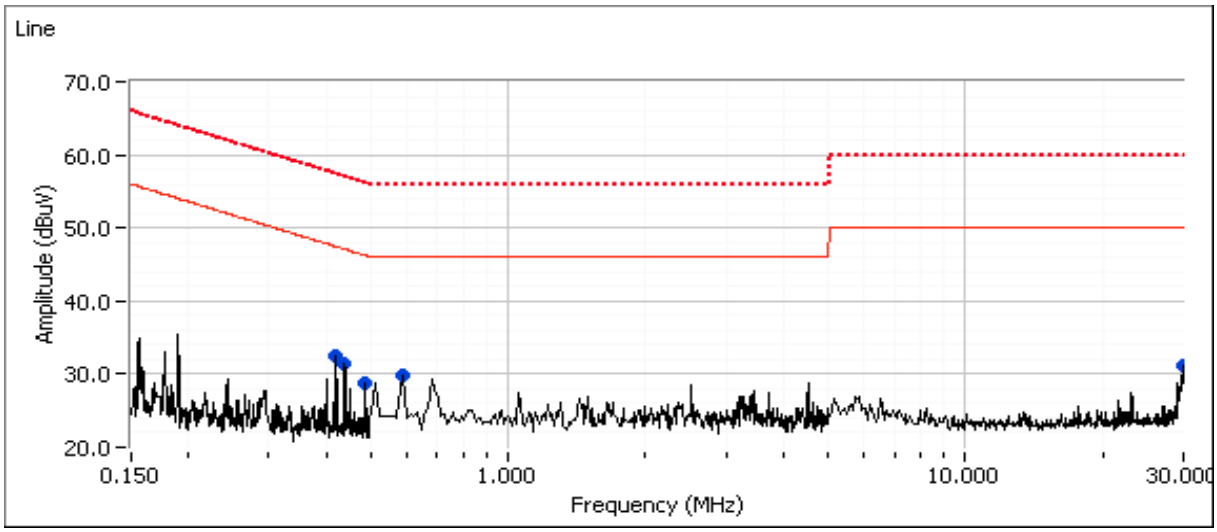
No modifications were made to the EUT during testing

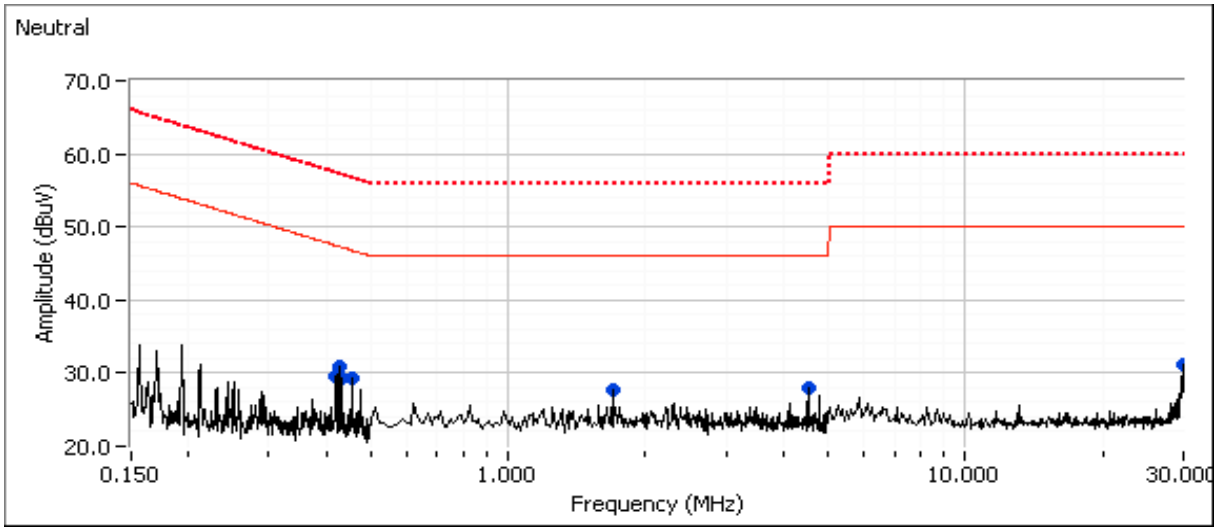
Deviations From The Standard

No deviations were made from the requirements of the standard.

Client:	GE MDS LLC	Job Number:	J83512
Model:	Mercury5800	T-Log Number:	T83623
		Account Manager:	Susan Pelzl
Contact:	Dennis McCarthy		
Standard:	FCC 15.247, RSS-210, RSS-GEN	Class:	A

Run #1: AC Power Port Conducted Emissions, 0.15 - 30MHz, 120V/60Hz





Client:	GE MDS LLC	Job Number:	J83512
Model:	Mercury5800	T-Log Number:	T83623
		Account Manager:	Susan Pelzl
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Standard:	FCC 15.247, RSS-210, RSS-GEN	Class:	A

Run #1: AC Power Port Conducted Emissions, 0.15 - 30MHz, 120V/60Hz

Peak readings captured during pre-scan (peak readings vs. average limit)

Frequency	Level	AC	Radio		Detector	Comments
MHz	dBµV	Line	Limit	Margin	QP/Ave	
0.419	32.4	Line 1	47.5	-15.1	Peak	
0.441	31.4	Line 1	47.1	-15.7	Peak	
0.487	28.9	Line 1	46.2	-17.3	Peak	
0.579	29.8	Line 1	46.0	-16.2	Peak	
30.000	31.3	Line 1	50.0	-18.7	Peak	
0.419	29.7	Neutral	47.5	-17.8	Peak	
0.427	30.8	Neutral	47.3	-16.5	Peak	
0.434	29.2	Neutral	47.2	-18.0	Peak	
0.456	29.4	Neutral	46.8	-17.4	Peak	
1.691	27.6	Neutral	46.0	-18.4	Peak	
4.536	27.9	Neutral	46.0	-18.1	Peak	

Note 1:	As all the peak amplitudes were well below the average limit, no average or quasi peak measurements were performed.

Client:	GE MDS LLC	Job Number:	J83512
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		Account Manager:	Susan Pelzl
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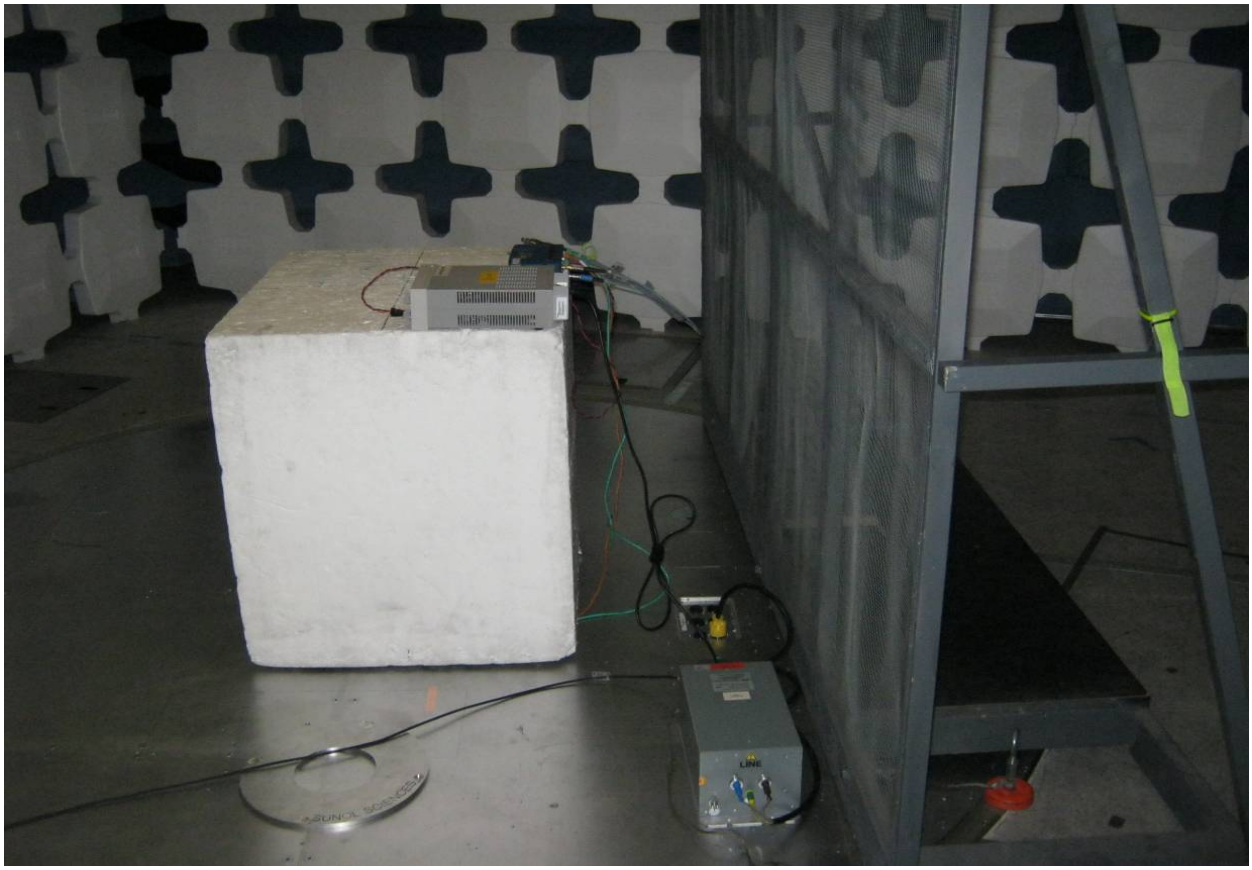

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Contact:	Dennis McCarthy		
Standard:	FCC 15.247, RSS-210, RSS-GEN	Class:	A

End of Report

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