

## **Certification Test Report**

**FCC ID: AZ489FT7087**  
**IC: 109U-89FT7087**

**FCC Rule Part: 15.247**  
**IC Radio Standards Specification: RSS-247**

**ACS Report Number: 16-2018.W06.1A**

Applicant: Motorola Solutions Sdn Bhd

Model(s): H98KGH9PW7BN

Test Begin Date: **March 7, 2016**  
Test End Date: **May 11, 2016**

Report Issue Date: May 19, 2016



FOR THE SCOPE OF ACCREDITATION UNDER CERTIFICATE NUMBER AT-1533

This report must not be used by the client to claim product certification, approval, or endorsement by ANAB, ANSI, or any agency of the Federal Government.

**Reviewed by:**

A handwritten signature in black ink, appearing to read "Thierry Jean-Charles".

**Thierry Jean-Charles**  
**EMC Engineer**  
**Advanced Compliance Solutions, Inc.**

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**This report contains 34 pages**

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**1 GENERAL****1.1 Purpose**

The purpose of this report is to demonstrate compliance with Part 15 Subpart C of the FCC's Code of Federal Regulations and Industry Canada's Radio Standards Specification RSS-247.

**1.2 Applicant Information**

Motorola Solutions Sdn Bhd  
Plot 2 Bayan Lepas Innoplex,  
Industrial Park Mukim 12 SWD  
11900 Bayan Lepas, Penang Malaysia

**1.3 Product Description**

The APX6000 VHF model H98KGH9PW7BN is a two way portable radio capable of analog FM, digital C4FM and TDMA. This radio includes Bluetooth 2.0+EDR, Bluetooth Low Energy (BLE), WLAN 802.11 b/g/n and GPS features. This test report documents compliance of the BLE transceiver.

Technical Details

Mode of Operation: Bluetooth Low Energy (BLE)  
Frequency Range: 2402 MHz - 2480 MHz  
Number of Channels: 40  
Channel Separation: 2 MHz  
Modulations: GFSK  
Antenna Type/Gain: PIFA, 2.58 dBi  
Input Power: 7.4 V Lithium Ion Battery

Model Number: H98KGH9PW7BN

Test Sample Serial Number(s): 756TSB0727 (RF Conducted Emissions), 756TSF2622 (Radiated and Power Line Conducted Emissions).

Test Sample Condition: The equipment was provided in good condition without any physical damage.

#### **1.4 Test Methodology and Considerations**

The EUT was evaluated for radiated, RF conducted and power line conducted emissions for the Bluetooth Low Energy (BLE) radio while configured using software power setting 23.

Preliminary radiated emission evaluation was performed for the EUT standalone, set in three orthogonal orientations as well as for the EUT set on a single unit charger, the EUT set on a multi-unit charger and the unit connected to a laptop computer via a GCAI cable. The worst case configuration was obtained with the EUT standalone, lying on one side for the band edge measurements and the EUT lying flat on the tabletop for the radiated spurious emissions.

The EUT was also evaluated for radiated intermodulation product for the BLE radio transmitting at the same time as the land mobile radio. All intermodulation products were observed to be compliant to the limits of the FCC Section 15.209 and RSS-Gen.

The RF conducted measurements were performed on a sample modified with a temporary connector at the antenna port for direct coupling to the spectrum analyzer.

For power line conducted emissions, preliminary measurements were performed on the unit powered via a multi-unit charger and on the unit set on a single unit charger. The multi-unit charger was fully loaded during the evaluation and led to the worst case configuration as reported in this document.

The assessment for unintentional emissions is documented separately in a Declaration of Conformity/Verification test report.

## **2 TEST FACILITIES**

### **2.1 Location**

The radiated and conducted emissions test sites are located at the following address:

Advanced Compliance Solutions, Inc.  
3998 FAU Blvd, Suite 310  
Boca Raton, Florida 33431  
Phone: (561) 961-5585  
Fax: (561) 961-5587  
[www.acstestlab.com](http://www.acstestlab.com)

FCC Test Firm Registration #: 475089  
Industry Canada Lab Code: 4175C

### **2.2 Laboratory Accreditations/Recognitions/Certifications**

ACS is accredited to ISO/IEC 17025 by ANSI-ASQ National Accreditation Board under their ANAB program and has been issued certificate number AT-1533 in recognition of this accreditation. Unless otherwise specified, all test methods described within this report are covered under the ISO/IEC 17025 scope of accreditation.

**2.3 Radiated & Conducted Emissions Test Site Description**

**2.3.1 Semi-Anechoic Chamber Test Site**

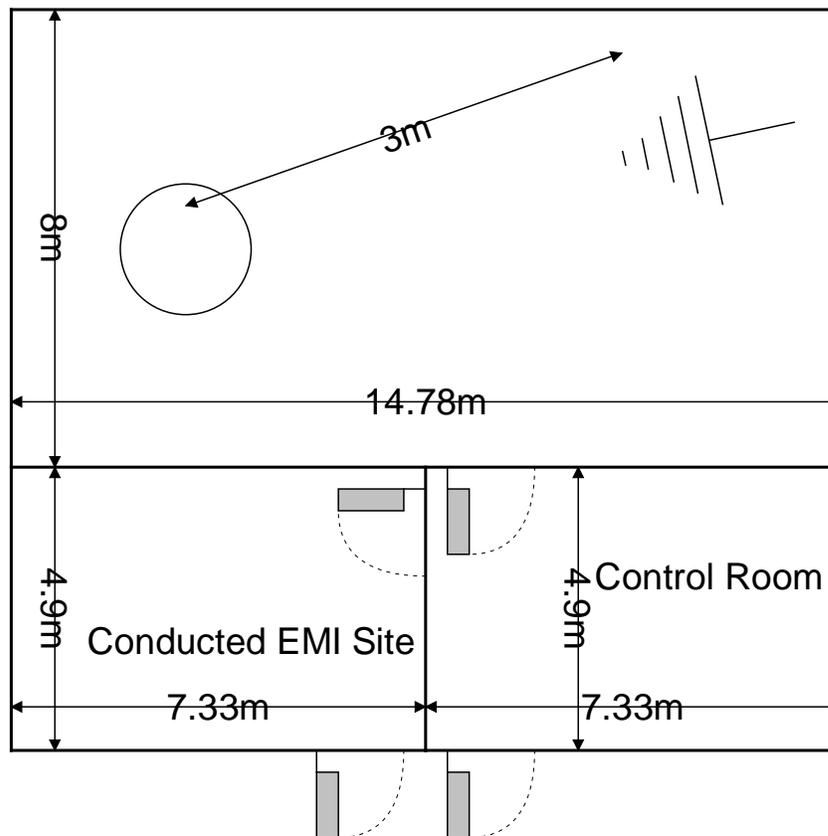
The EMC radiated test facility consists of an RF-shielded enclosure. The interior dimensions of the indoor semi-anechoic chamber are approximately 48 feet (14.6 m) long by 36 feet (10.8 m) wide by 24 feet (7.3 m) high and consist of rigid, 1/8 inch (0.32 cm) steel-clad, wood core modular panels with steel framing. In the shielded enclosure, the faces of the panels are galvanized and the chamber is self-supporting. 8-foot RF absorbing cones are installed on 4 walls and the ceiling. The steel-clad ground plane is covered with vinyl flooring.

The turntable is driven by pneumatic motor, which is capable of supporting a 2000 lb. load. The turntable is flush with the chamber floor which it is connected to, around its circumference, with a continuous metallic loaded spring. An EMCO Model 1060 Multi-device controller controls the turntable position.

A pneumatic motor is used to control antenna polarizations and height relative to the ground. The height information is displayed on the control unit EMCO Model 1050.

The control room is an RF shielded enclosure attached to the semi-anechoic chamber with two bulkhead panels for connecting RF, and control cables. The dimension of the room is 7.3 m x 4.9 m x 3 m high and the entrance doors of both control and conducted rooms are 3 feet (0.91 m) by 7 feet (2.13 m).

A diagram of the Semi-Anechoic Chamber Test Site is shown in Figure 2.3.1-1 below:



**Figure 2.3.1-1: Semi-Anechoic Chamber Test Site**

### 2.3.2 Conducted Emissions Test Site Description

The dimensions of the shielded conducted room are 7.3 x 4.9 x 3 m<sup>3</sup>. The power line conducted emission site includes two LISNs: a Solar Model 8028-50 50 Ω/50 μH and an EMCO Model 3825/2R, which are installed as shown in the figure below. For evaluations requiring 230 V, 50 Hz AC input, a Polarad LISN (S/N 879341/048) is used in conjunction with a California Instruments signal generator Model 2001RP-OP1.

A diagram of the room is shown below in figure 2.3.2-1:

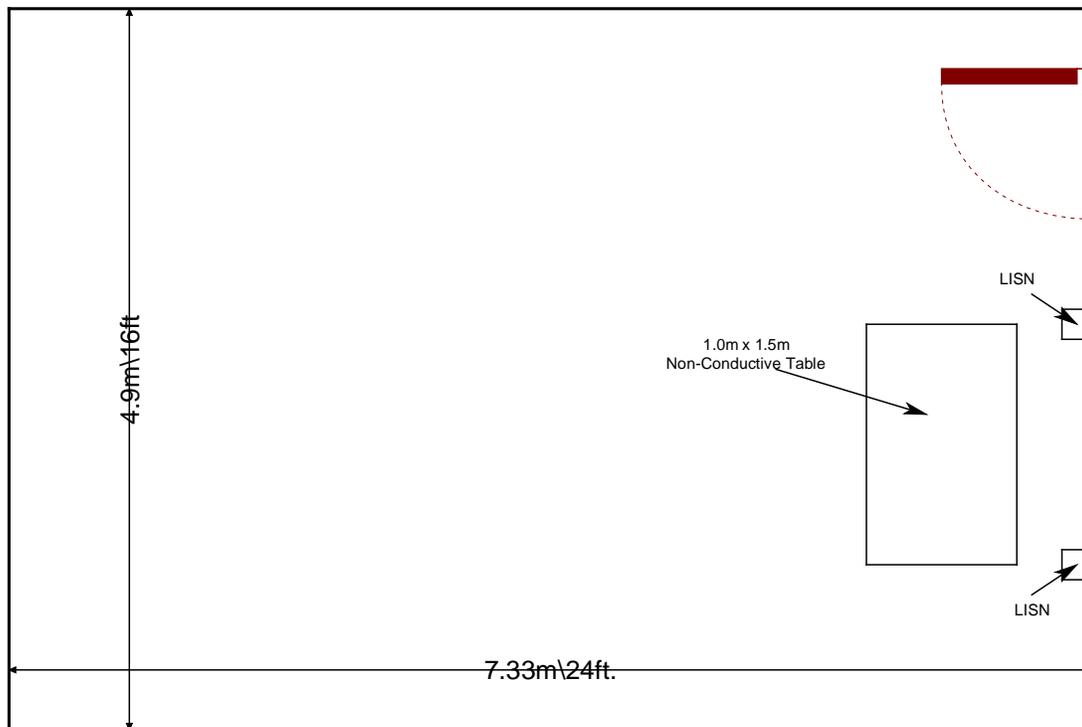


Figure 2.3.2-1: AC Mains Conducted EMI Site

### **3 APPLICABLE STANDARD REFERENCES**

The following standards were used:

- ❖ ANSI C63.4-2014: Method of Measurements of Radio-Noise Emissions from Low-Voltage Electrical and Electronic Equipment in the 9 kHz to 40 GHz.
- ❖ ANSI C63.10-2013: American National Standard of Procedures for Compliance Testing of Unlicensed Wireless Devices
- ❖ US Code of Federal Regulations (CFR): Title 47, Part 2, Subpart J: Equipment Authorization Procedures, 2016.
- ❖ US Code of Federal Regulations (CFR): Title 47, Part 15, Subpart C: Radio Frequency Devices, Intentional Radiators, 2016
- ❖ Industry Canada Radio Standards Specification: RSS-247 — Digital Transmission Systems (DTSs), Frequency Hopping Systems (FHSs) and Licence-Exempt Local Area Network (LE-LAN) Devices, Issue 1, May 2015.
- ❖ Industry Canada Radio Standards Specification: RSS-GEN – General Requirements for Compliance of Radio Apparatus, Issue 4, November 2014.

#### 4 LIST OF TEST EQUIPMENT

The calibration interval of test equipment is annually or the manufacturer's recommendations. Where the calibration interval deviates from the annual cycle based on the instrument manufacturer's recommendations, it shall be stated below.

**Table 4-1: Test Equipment**

**Table 4-1: Test Equipment List**

AssetID	Manufacturer	Model #	Equipment Type	Serial #	Last Calibration Date	Calibration Due Date
283	Rohde & Schwarz	FSP40	Spectrum Analyzers	1000033	7/1/2015	7/1/2016
479	Electro-Metrics	ALP-70	Antennas	158	12/3/2015	12/3/2017
523	Agilent	E7405	Spectrum Analyzers	MY45103293	12/26/2014	12/26/2016
653	Suhner	SF-102A	Cables	0944/2A	9/15/2015	9/15/2016
2002	EMCO	3108	Antennas	2147	11/19/2015	11/19/2017
2004	EMCO	3146	Antennas	1385	11/19/2015	11/19/2017
2006	EMCO	3115	Antennas	2573	4/14/2015	4/14/2017
2008	COM-Power	AH-826	Antennas	81009	NCR	NCR
2011	Hewlett-Packard	HP 8447D	Amplifiers	2443A03952	11/18/2015	11/18/2016
2022	EMCO	LISN3825/2R	LISN	1095	9/14/2015	9/14/2017
2045	ACS Boca	Conducted Cable Set	Cable Set	2045	11/11/2015	11/11/2016
2070	Mini Circuits	VHF-8400+	Filter	2070	11/17/2015	11/17/2016
2072	Mini Circuits	VHF-3100+	Filter	30737	11/17/2015	11/17/2016
2086	Merrimac	FAN-6-10K	Attenuators	23148-83-1	11/16/2015	11/16/2016
2089	Agilent Technologies, Inc.	83017A	Amplifiers	3123A00214	12/9/2015	12/9/2016
2111	Aeroflex Inmet	40AH2W-20	Attenuator	2111	7/22/2015	7/22/2016
2112	Teledyne Storm Products	921-0101-036	Cables	12-06-698	11/13/2015	11/13/2016
2121	ACS Boca	Radiated Cable Set	Cable Set	2121	8/22/2015	8/22/2016
3004	Teseq	CFL 9206A	Attenuators	34720	10/7/2015	10/7/2016
2095	ETS Lindgren	TILE4! - Version 4.2.A	Software	85242	NCR	NCR
2082	Teledyne Storm Products	90-010-048	Cables	2082	4/22/2015	4/22/2016
2082	Teledyne Storm Products	90-010-048	Cables	2082	4/21/2016	4/21/2017

**Notes:**

- **NCR=No Calibration Required**
- **The calibration cycle information for Asset 2082 is provided to cover the entire test period.**

## 5 SUPPORT EQUIPMENT

Table 5-1: EUT and Support Equipment (Radiated Emissions)

Item #	Type Device	Manufacturer	Model/Part #	Serial #
1	EUT	Motorola Solutions	H98KGH9PW7BN	756TSF2622

Note: The EUT was evaluated standalone without any support equipment

Table 5-2: EUT and Support Equipment (Power Line Conducted Emissions)

Item #	Type Device	Manufacturer	Model/Part #	Serial #
1	EUT	Motorola Solutions	H98KGH9PW7BN	756TSF2622
3	APX6000 UHF2 Two-Way Radio	Motorola Solutions	H98SDH9PW7BN	756TSB0824
4	APX6000 UHF1 Two-Way Radio	Motorola Solutions	H98QDH9PW7BN	756TRX0603
6	APX6000 UHF1 Two-Way Radio	Motorola Solutions	H98QDH9PW7BN	756TRX0633
7	APX6000 7/800 Two-Way Radio	Motorola Solutions	H98UCH9PW7BN	756TSD0467
5	SRX2200	Motorola Solutions	H99QDH9PW7BN	756TSB0792
8	6 x Resistive Loads	Motorola Solutions	N/A	N/A
2	Multi-Unit Charger	Motorola Solutions	NNTN8844A	N/A

Table 5-3: Cable Description (Power Line Conducted Emissions)

Cable #	Cable Type	Length	Shield	Termination
A	Power	2.2 m	No	Charger to AC Mains
B	6 x USB	0.2 m	Yes	Charger to Resistive Load

6 EQUIPMENT UNDER TEST SETUP BLOCK DIAGRAM

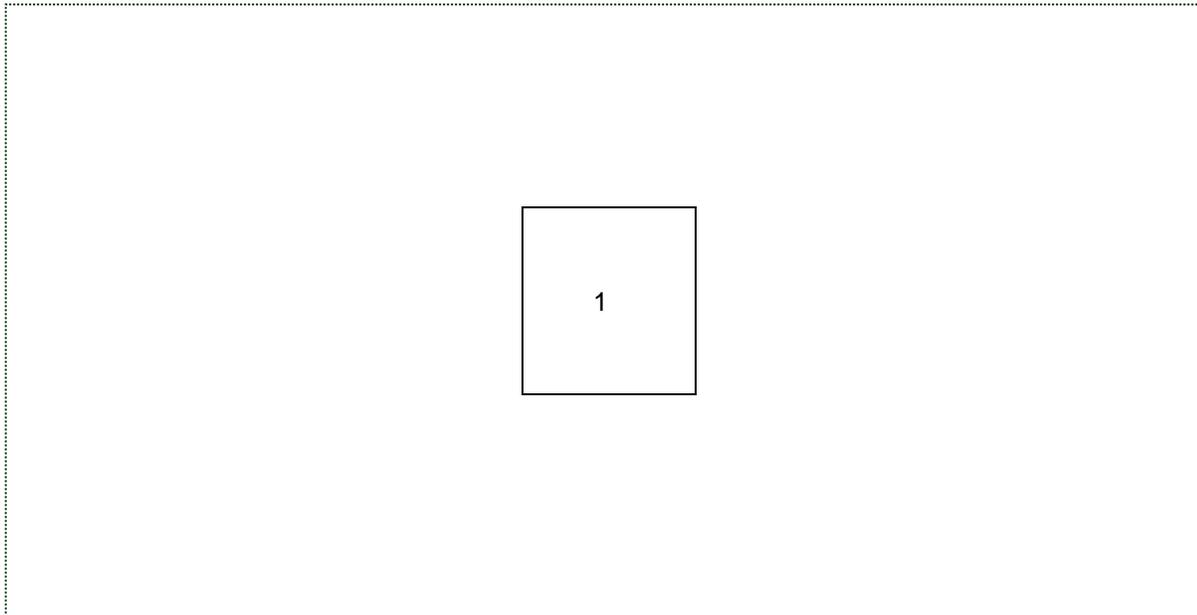


Figure 6-1: EUT Test Setup (Radiated Emissions)

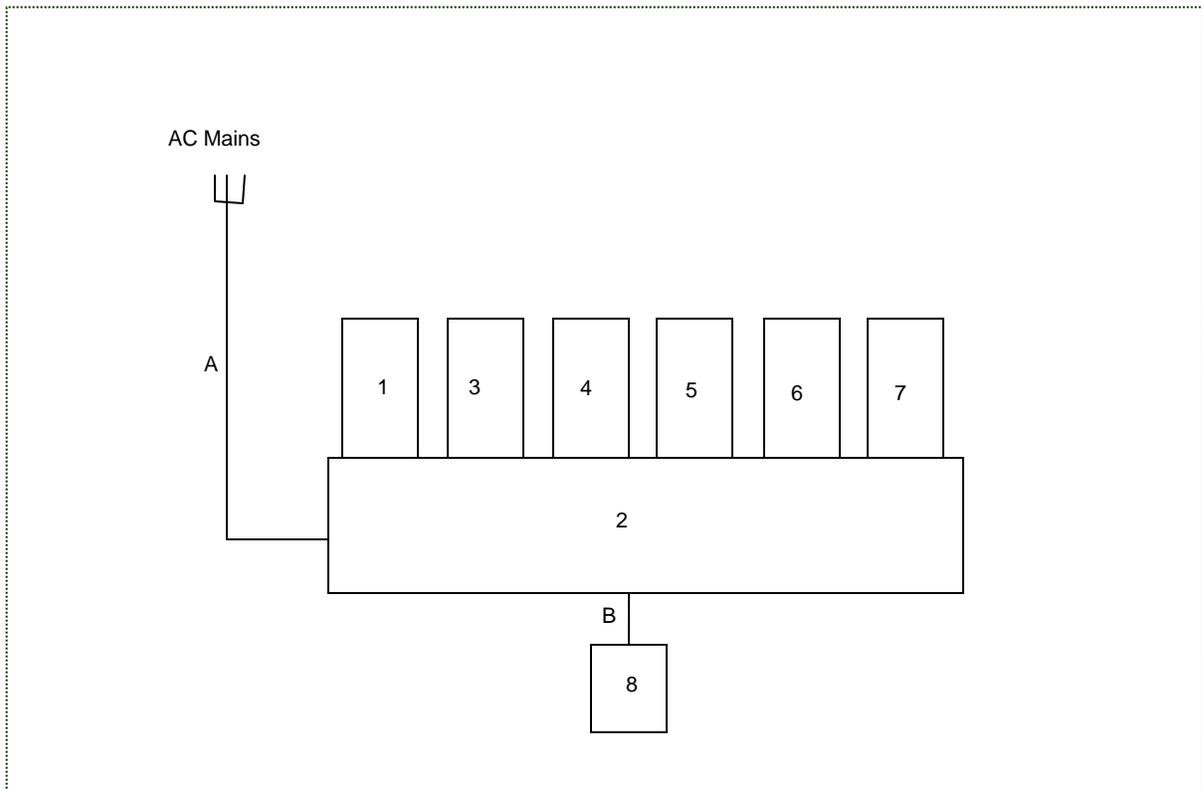


Figure 6-2: EUT Test Setup (Power Line Conducted Emissions)

## 7 SUMMARY OF TESTS

Along with the tabular data shown below, plots were taken of all signals deemed important enough to document.

### 7.1 Antenna Requirement – FCC: Section 15.203

The EUT uses a 2.58 dBi internal PIFA which connects to the RF port via a spring contact. The EUT meets the requirements of FCC Section 15.203.

### 7.2 6 dB Bandwidth - FCC: Section 15.247(a)(2) IC: RSS-247 5.5(1); 99% Bandwidth IC: RSS-GEN 6.6

#### 7.2.1 Measurement Procedure

The 6dB bandwidth was measured in accordance with ANSI C63.10:2013 Section 11.8 DTS Bandwidth Option 2. The RBW of the spectrum analyzer was set to 100 kHz and VBW 300 kHz. Span was set large enough to capture the emissions and  $\gg$  RBW.

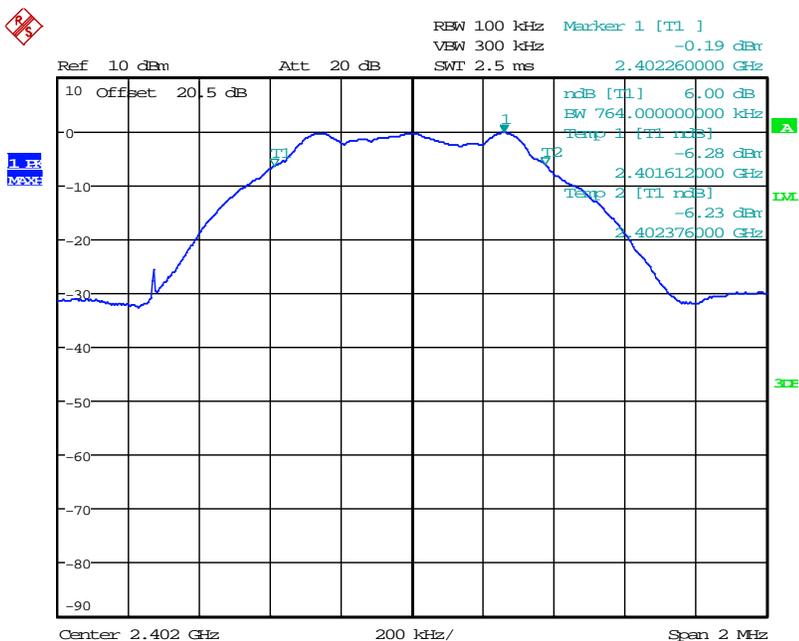
The 99% occupied bandwidth was measured with the spectrum analyzer span set to fully display the emission. The RBW was set to 1% to 5% of the approximated bandwidth. The occupied 99% bandwidth was measured by using 99% bandwidth equipment function of the spectrum analyzer.

#### 7.2.2 Measurement Results

Results are shown below.

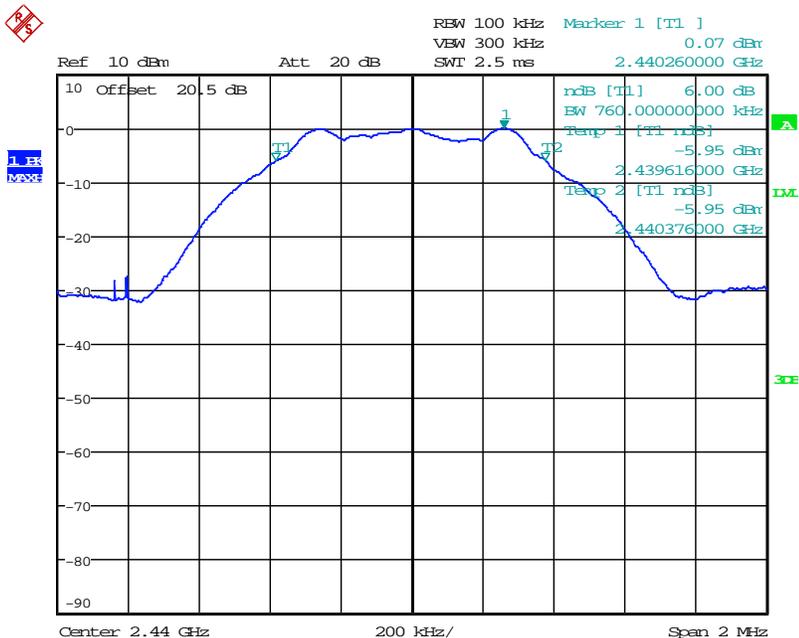
Table 7.2.2-1: 6dB / 99% Bandwidth

Frequency [MHz]	6dB Bandwidth [kHz]	99% Bandwidth (kHz)
2402	764.0	1050.0
2440	760.0	1040.0
2480	764.0	1050.0



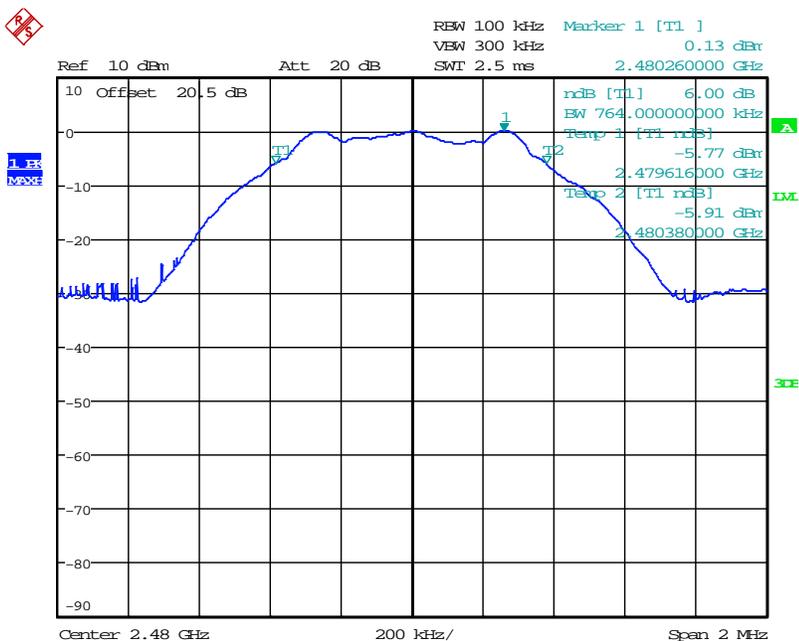
Date: 5.MAY.2016 12:33:30

Figure 7.2.2-1: 6dB BW - Low Channel



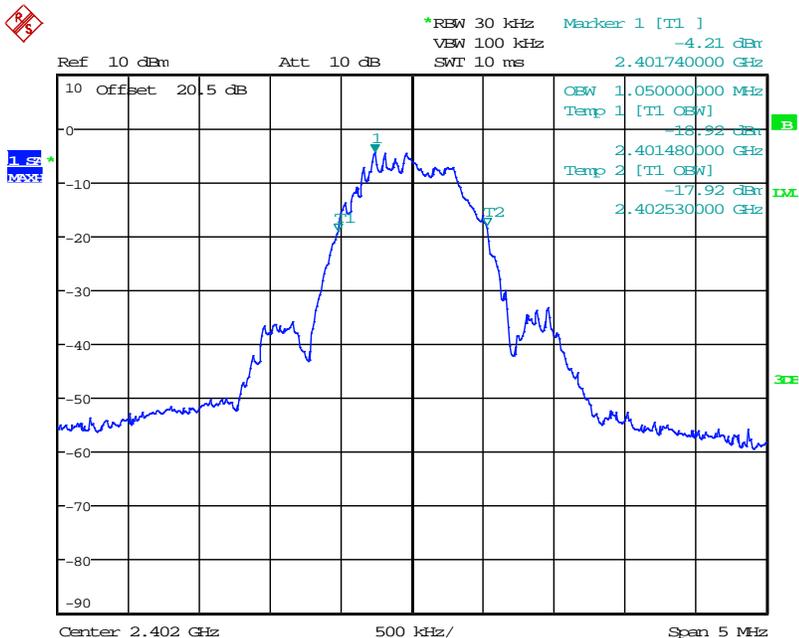
Date: 5.MAY.2016 12:41:59

Figure 7.2.2-2: 6dB BW - Middle Channel



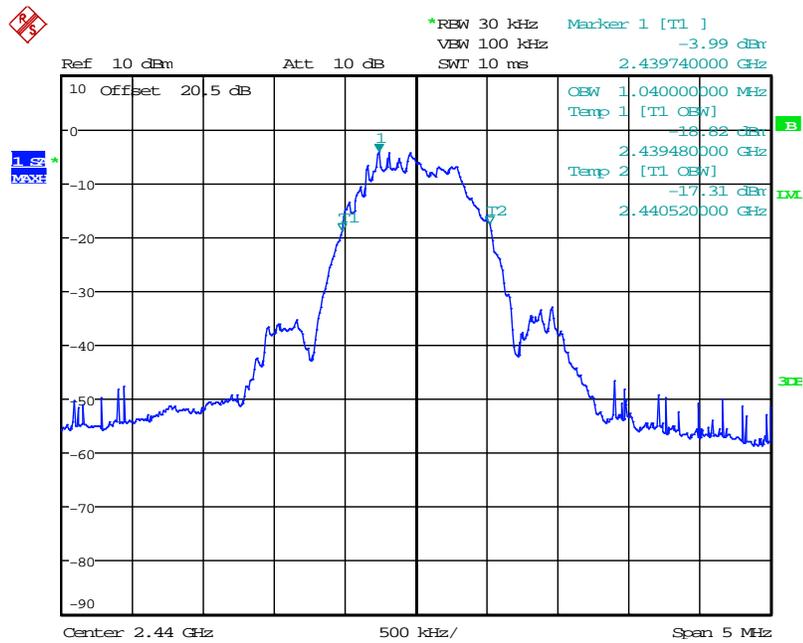
Date: 5.MAY.2016 12:52:08

Figure 7.2.2-3: 6dB BW - High Channel



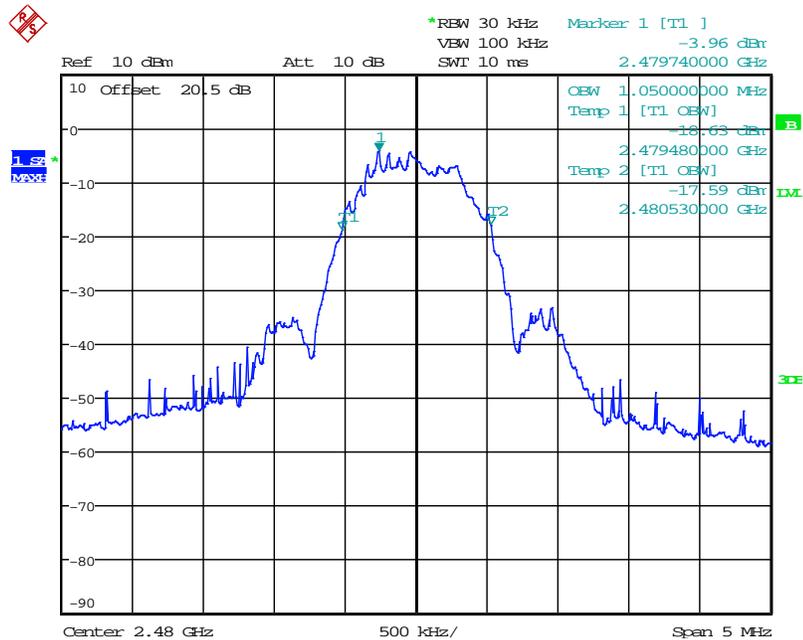
Date: 5.MAY.2016 12:36:39

Figure 7.2.2-4: 99% OBW - Low Channel



Date: 5.MAY.2016 12:38:56

Figure 7.2.2-5: 99% OBW - Middle Channel



Date: 5.MAY.2016 12:53:52

Figure 7.2.2-6: 99% OBW - High Channel

7.3 Peak Output Power - FCC Section 15.247(b)(3) IC: RSS-247 5.4(4)

7.3.1 Measurement Procedure (Conducted Method)

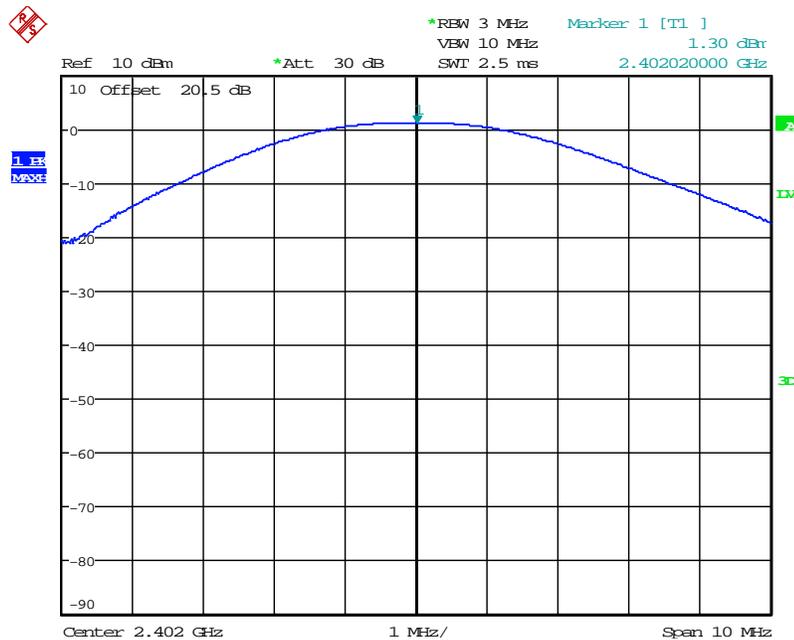
The fundamental emission output power was measured in accordance with ANSI C63.10:2013 Section 11.9.1.1 RBW  $\geq$  DTS bandwidth. The RF output of the equipment under test was directly connected to the input of the spectrum analyzer through suitable attenuation.

7.3.2 Measurement Results

Results are shown below.

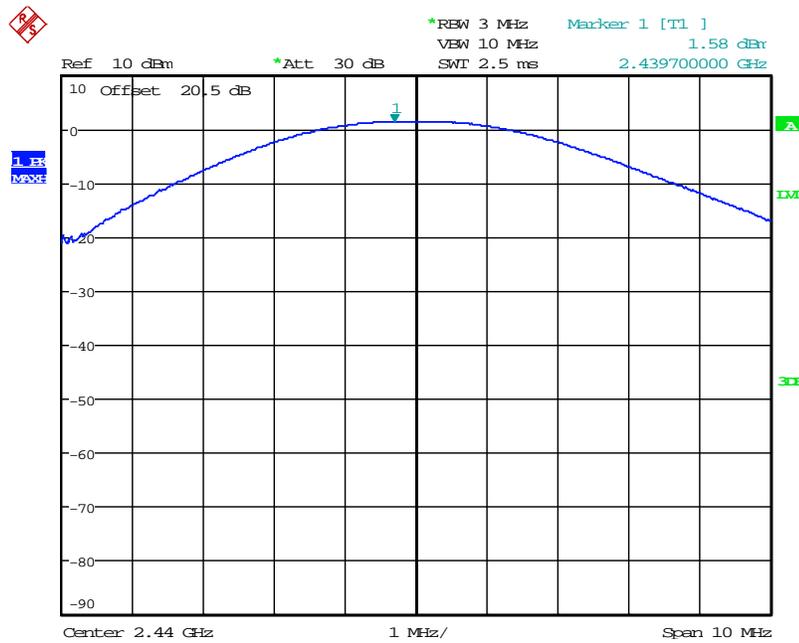
Table 7.3.2-1: RF Output Power

Frequency [MHz]	Level [dBm]
2402	1.30
2440	1.58
2480	1.76



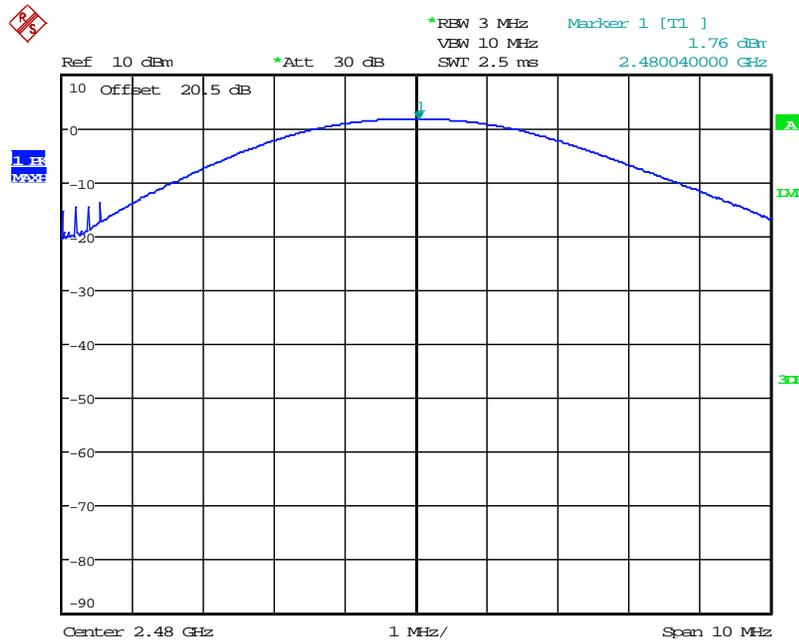
Date: 11.MAY.2016 22:14:49

Figure 7.3.2-1: RF Output Power - Low Channel



Date: 11.MAY.2016 22:15:47

Figure 7.3.2-2: RF Output Power - Middle Channel



Date: 11.MAY.2016 22:21:42

Figure 7.3.2-3: RF Output Power - High Channel

7.4 Band-Edge Compliance and Spurious Emissions-FCC 15.247(d) IC: RSS-247 5.5

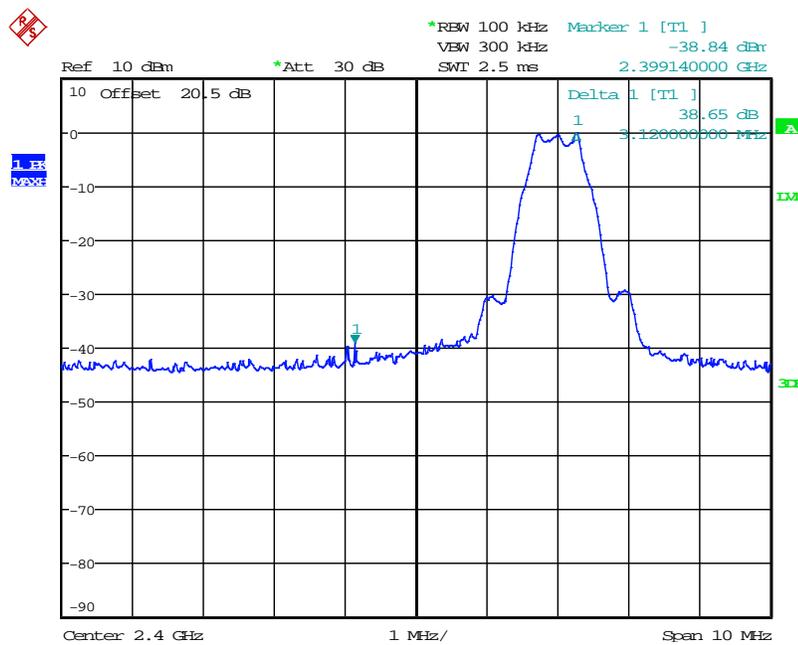
7.4.1 Band-Edge Compliance of RF Conducted Emissions

7.4.1.1 Measurement Procedure

The RF output port of the EUT was directly connected to the input of the spectrum analyzer via suitable attenuation. The EUT was investigated at the lowest and highest channel available to determine band-edge compliance. For each measurement the spectrum analyzer's RBW was set to 100 kHz, and the VBW was set to 300 kHz.

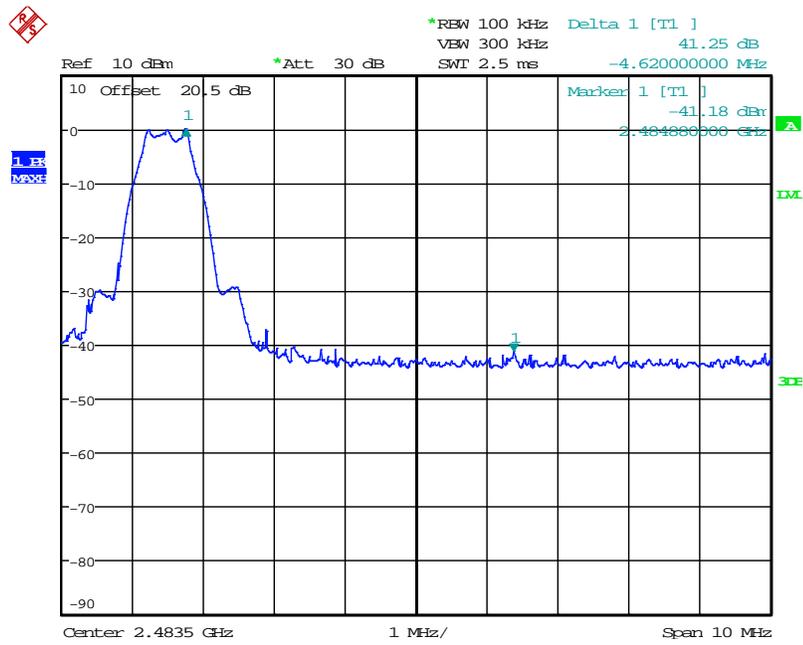
7.4.1.2 Measurement Results

Results are shown below.



Date: 11.MAY.2016 09:04:08

Figure 7.4.1.2-1: Lower Band-edge



Date: 11.MAY.2016 09:07:00

Figure 7.4.1.2-2: Upper Band-edge

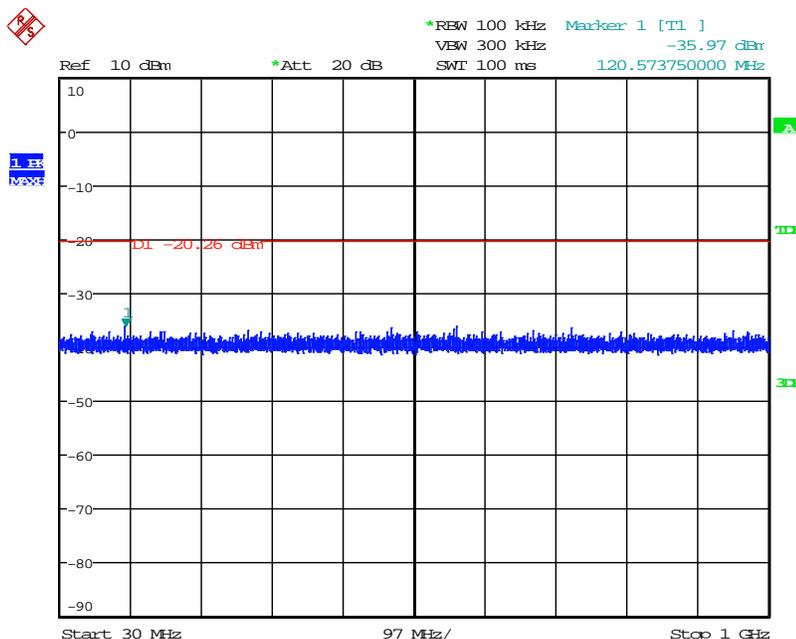
7.4.2 RF Conducted Spurious Emissions

7.4.2.1 Measurement Procedure

The RF Conducted Spurious Emissions were measured in accordance with ANSI C63.10:2013 Section 11.11 Emissions in non-restricted frequency bands. The RF output port of the equipment under test was directly connected to the input of the spectrum analyzer. The EUT was investigated for conducted spurious emissions from 30MHz to 26 GHz, 10 times the highest fundamental frequency. Measurements were made at the low, center and high channels of the EUT. For each measurement, the spectrum analyzer’s RBW was set to 100 kHz and the VBW was set to 300 kHz. The peak Max Hold function of the analyzer was utilized. The reference level was determined by measuring the Peak PSD level in any 100 kHz bandwidth within the DTS channel bandwidth.

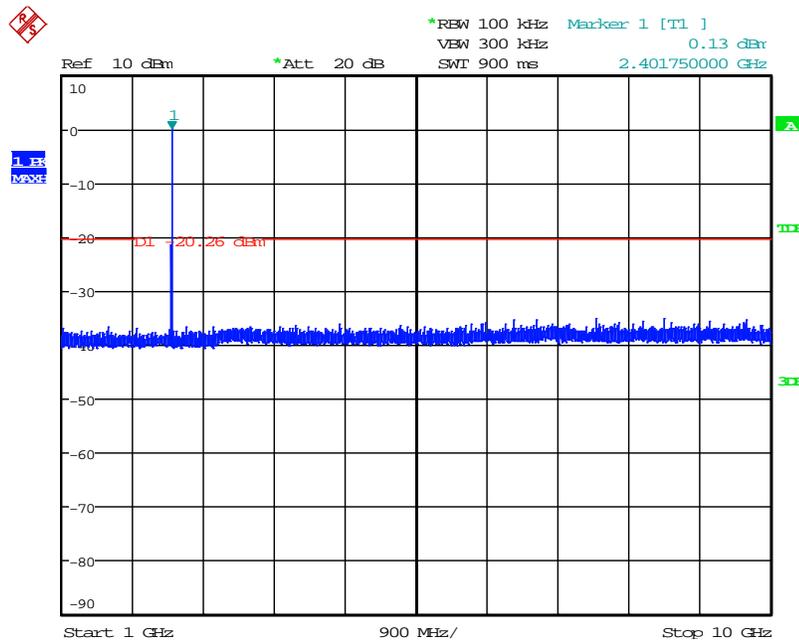
7.4.2.2 Measurement Results

Results are shown below.



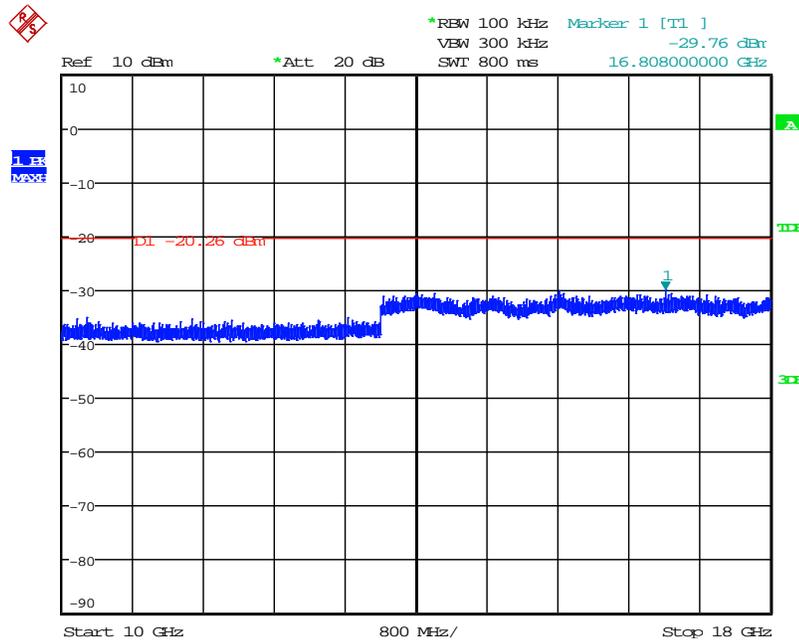
Date: 5.MAY.2016 14:35:41

Figure 7.4.2.2-1: 30 MHz – 1 GHz – Low Channel



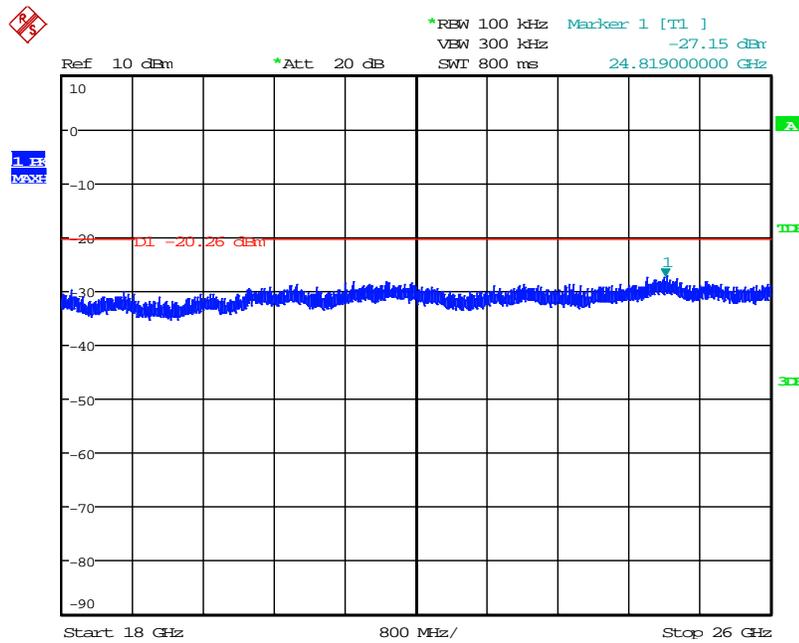
Date: 5.MAY.2016 14:33:00

Figure 7.4.2.2-2: 1 GHz –10 GHz – Low Channel



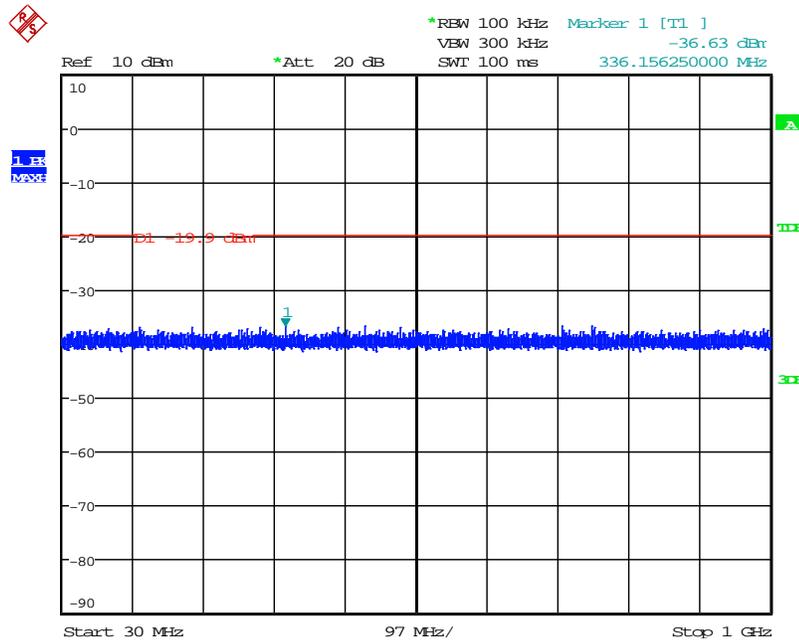
Date: 5.MAY.2016 14:28:35

Figure 7.4.2.2-3: 10 GHz –18 GHz – Low Channel



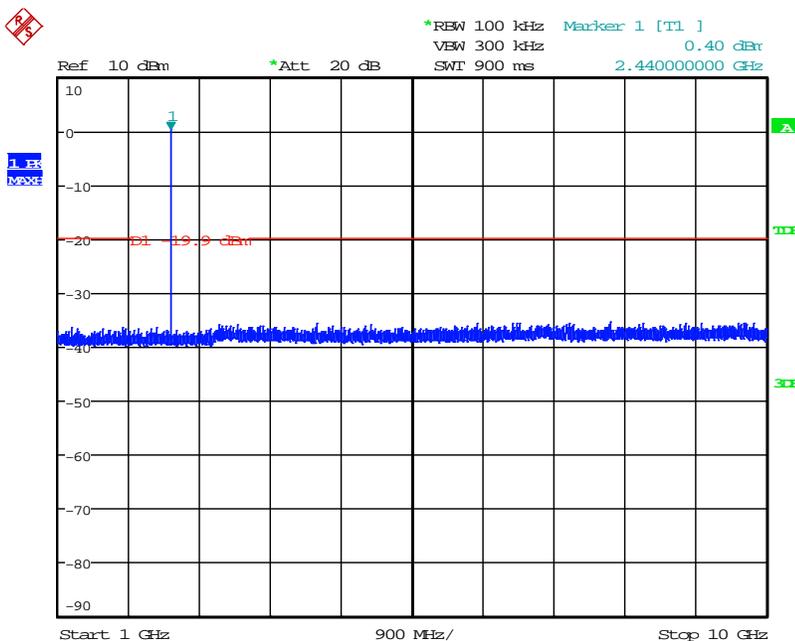
Date: 5.MAY.2016 14:23:53

Figure 7.4.2.2-4: 18 GHz – 26 GHz – Low Channel



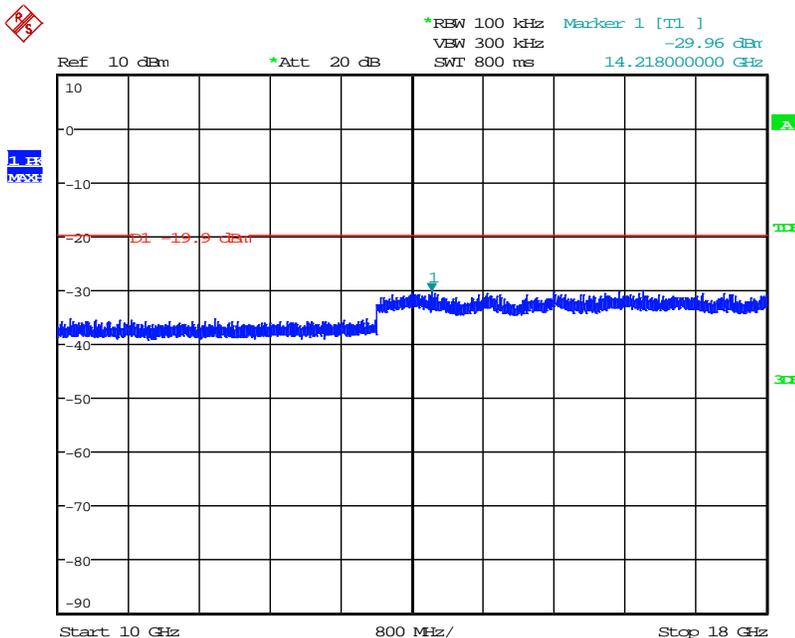
Date: 5.MAY.2016 13:55:49

Figure 7.4.2.2-5: 30 MHz – 1 GHz –Middle Channel



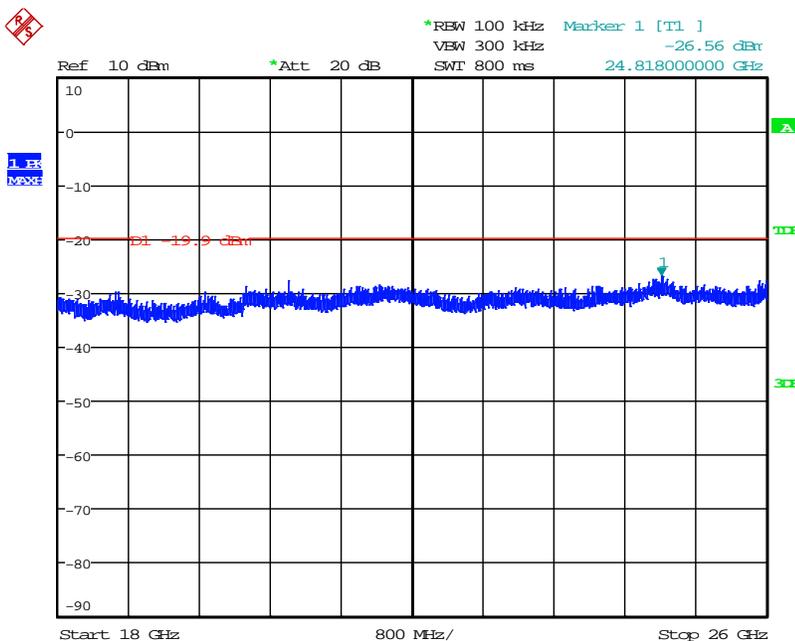
Date: 5.MAY.2016 14:09:44

Figure 7.4.2.2-6: 1 GHz –10 GHz – Middle Channel



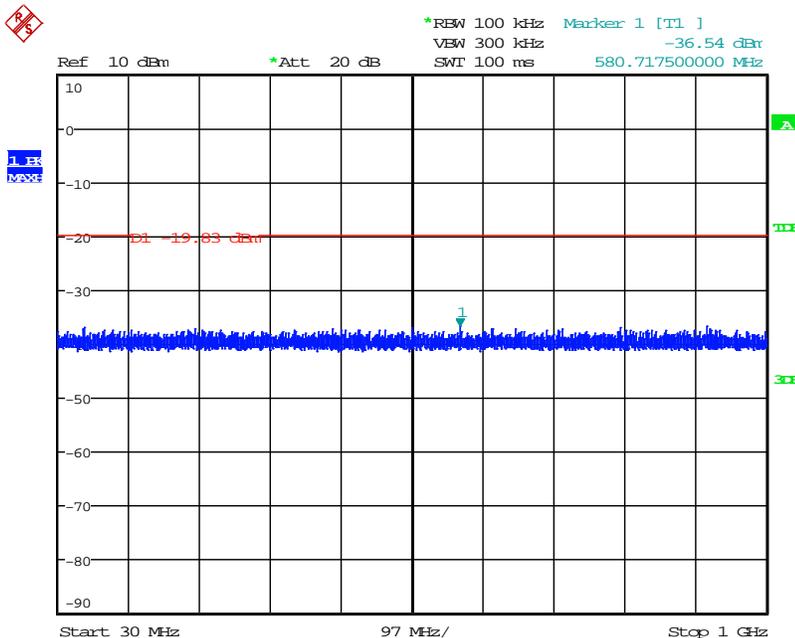
Date: 5.MAY.2016 14:18:10

Figure 7.4.2.2-7: 10 GHz –18 GHz – Middle Channel



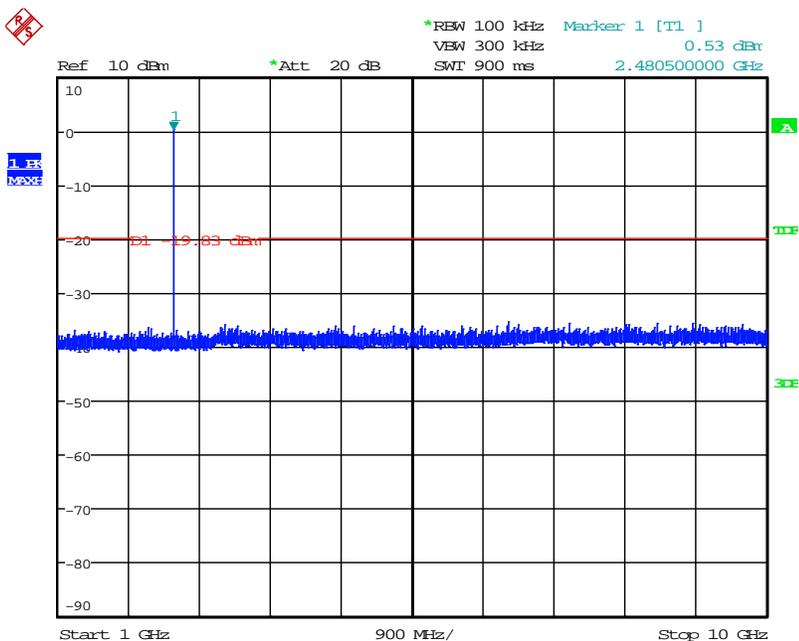
Date: 5.MAY.2016 14:20:26

Figure 7.4.2.2-8: 18 GHz – 26 GHz – Middle Channel



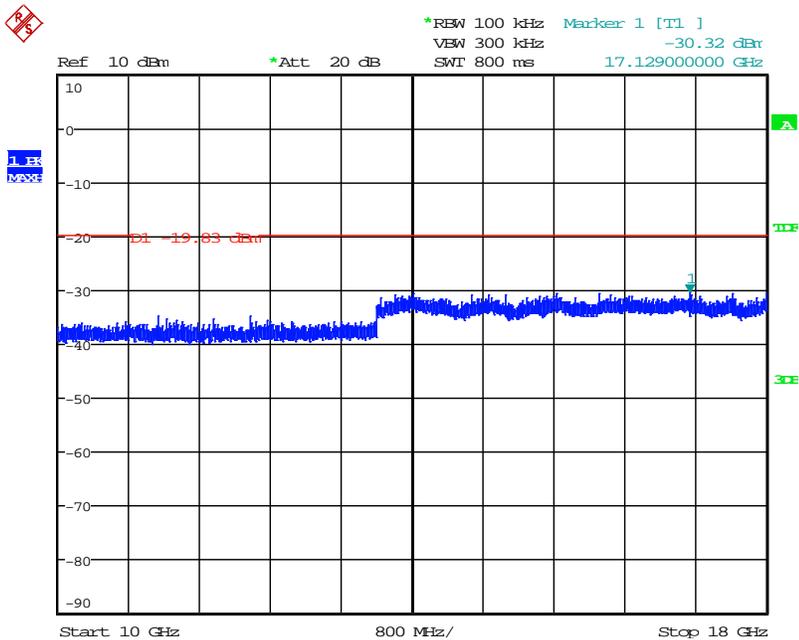
Date: 5.MAY.2016 13:52:35

Figure 7.4.2.2-9: 30 MHz – 1 GHz – High Channel



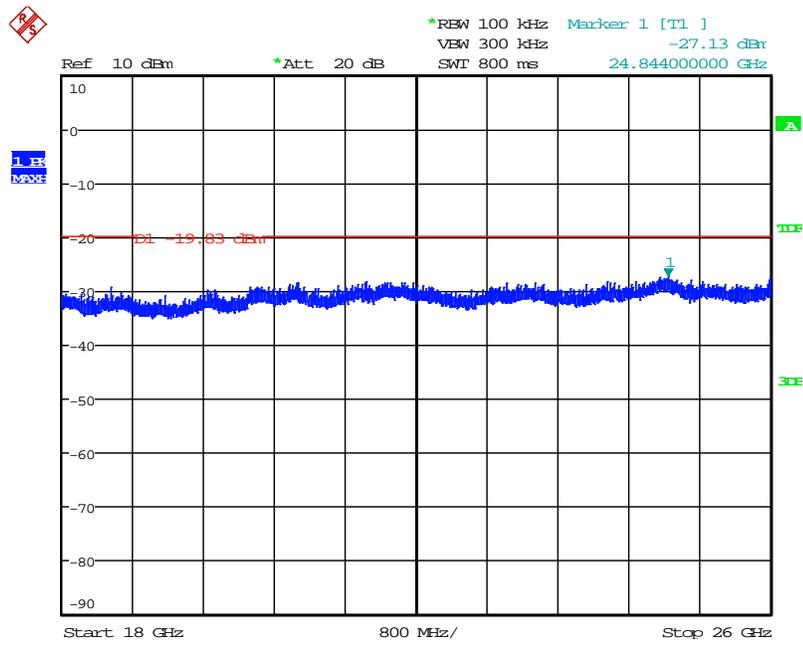
Date: 5.MAY.2016 13:50:13

Figure 7.4.2.2-10: 1 GHz –10 GHz –High Channel



Date: 5.MAY.2016 13:46:33

Figure 7.4.2.2-11: 10 GHz – 18 GHz –High Channel



Date: 5.MAY.2016 13:43:43

Figure 7.4.2.2-12: 18 GHz – 26 GHz –High Channel

### 7.4.3 Radiated Spurious Emissions into Restricted Frequency Bands - FCC 15.205, 15.209; IC: RSS-Gen 8.9, 8.10

#### 7.4.3.1 Measurement Procedure

Radiated emissions tests were made over the frequency range of 9 kHz to 26 GHz, 10 times the highest fundamental frequency. Each emission found to be in a restricted band as defined by section 15.205, including any emission at the operational band-edge, was compared to the radiated emission limits as defined in section 15.209.

For measurements below 30 MHz, the receive antenna height was set to 1m and the EUT was rotated through 360 degrees. The resolution bandwidth was set to 200 Hz below 150 kHz and to 9 kHz above 150 kHz.

The EUT was rotated through 360° and the receive antenna height was varied from 1m to 4m so that the maximum radiated emissions level would be detected. For frequencies below 1000 MHz, quasi-peak measurements were made using a resolution bandwidth RBW of 120 kHz and a video bandwidth VBW of 300 kHz. For frequencies above 1000 MHz, peak measurements are made with RBW of 1 MHz and VBW of 3 MHz. Average measurements are performed in the linear scale using VBW of 30 Hz over a 5 second sweep.

#### 7.4.3.2 Measurement Results

Radiated band-edge and spurious emissions found in the restricted frequency bands of 9 kHz to 26 GHz are reported in the tables below.

**Table 7.4.3.2-1: Radiated Spurious Emissions Tabulated Data**

Frequency (MHz)	Level (dBuV)		Antenna Polarity (H/V)	Correction Factors (dB)	Corrected Level (dBuV/m)		Limit (dBuV/m)		Margin (dB)	
	pk	Qpk/Avg			pk	Qpk/Avg	pk	Qpk/Avg	pk	Qpk/Avg
<b>Low Channel 2402 MHz</b>										
2390	62.94	45.41	H	-5.60	57.34	39.81	74.0	54.0	16.7	14.2
<b>Middle Channel 2440 MHz</b>										
7320	43.65	33.39	H	8.84	52.49	42.23	74.0	54.0	21.5	11.8
7320	44.50	34.79	V	8.84	53.34	43.63	74.0	54.0	20.7	10.4
<b>High Channel 2480 MHz</b>										
2483.5	78.63	52.98	H	-5.15	73.48	47.83	74.0	54.0	0.5	6.2
2483.5	64.32	44.99	V	-5.15	59.17	39.84	74.0	54.0	14.8	14.2
7440	43.34	33.74	H	9.37	52.71	43.11	74.0	54.0	21.3	10.9
7440	44.78	35.79	V	9.37	54.15	45.16	74.0	54.0	19.8	8.8

**Note: All emissions above 7.44 GHz were attenuated below the limits and the noise floor of the measurement equipment.**

**Sample Calculation:**

$$R_C = R_U + CF_T$$

Where:

CF<sub>T</sub> = Total Correction Factor (AF+CA+AG)-DC (Average Measurements Only)R<sub>U</sub> = Uncorrected ReadingR<sub>C</sub> = Corrected Level

AF = Antenna Factor

CA = Cable Attenuation

AG = Amplifier Gain

DC = Duty Cycle Correction Factor

**Example Calculation: Peak**Corrected Level: 62.94 + (-5.6) = 57.34 dB $\mu$ V/mMargin: 74 dB $\mu$ V/m – 57.34 dB $\mu$ V/m = 16.7 dB**Example Calculation: Average**Corrected Level: 45.41 + (-5.6) = 39.81 dB $\mu$ V/mMargin: 54 dB $\mu$ V/m – 39.81 dB $\mu$ V/m = 14.2 dB

7.5 Power Spectral Density - FCC Section 15.247(e) IC: RSS-247 5.2(2)

7.5.1 PSD Measurement Procedure (Conducted Method)

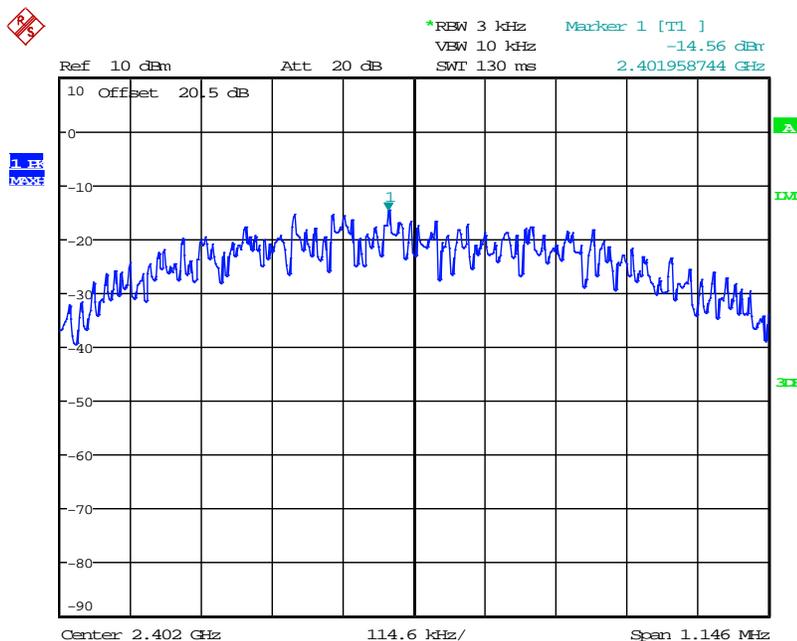
The power spectral density was measured in accordance with ANSI C63.10:2013 Section 11.10.2 Method PKPSD (peak PSD). The RF output port of the EUT was directly connected to the input of the spectrum analyzer. Offset values were input for cable and external attenuation. The spectrum analyzer RBW was set to 3 kHz and VBW 10 kHz. Span was adjusted to 1.5 times the 6 dB bandwidth and the sweep time was set to auto.

7.5.2 Measurement Results

Results are shown below.

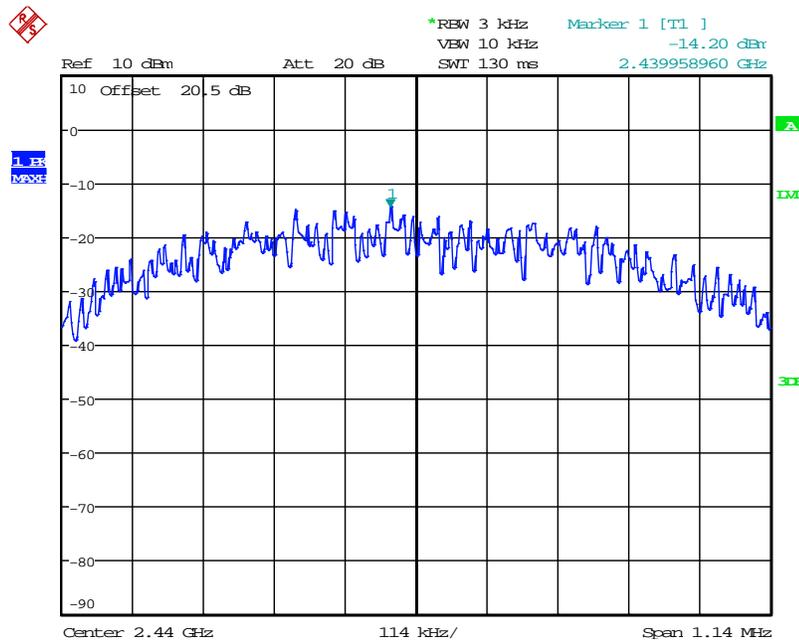
Table 7.5.2-1: Power Spectral Density

Frequency (MHz)	PSD (dBm)	Limit (dBm)	Margin (dB)
2402	-14.56	8.0	22.56
2440	-14.20	8.0	22.20
2480	-14.11	8.0	22.11



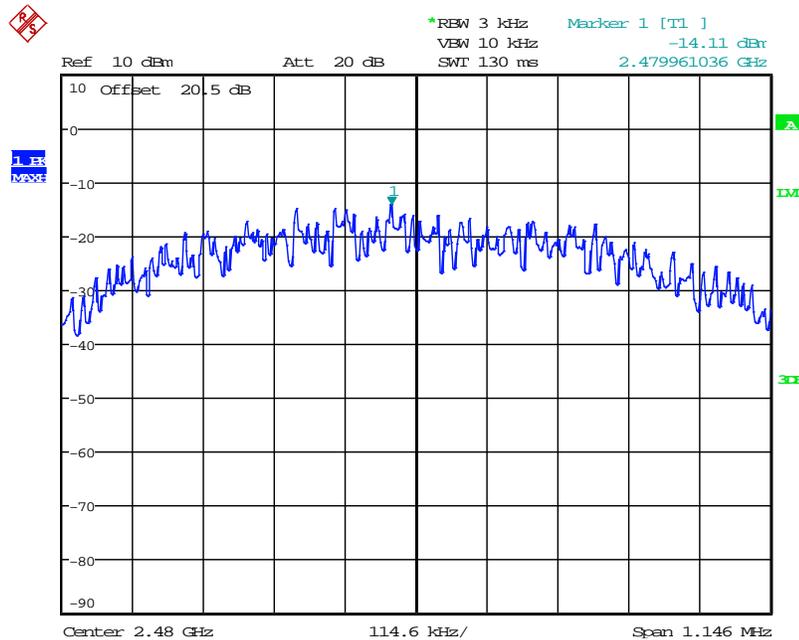
Date: 5.MAY.2016 13:22:06

Figure 7.5.2-1: Power Spectral Density - Low Channel



Date: 5.MAY.2016 13:23:51

Figure 7.5.2-2: Power Spectral Density - Middle Channel



Date: 5.MAY.2016 13:34:52

Figure 7.5.2-3: Power Spectral Density – High Channel

7.6 Power Line Conducted Emissions – FCC: Section 15.207 IC: RSS-Gen 8.8

7.6.1 Measurement Procedure

ANSI C63.4 sections 6 and 7 were the guiding documents for this evaluation. Conducted emissions were performed from 150 kHz to 30 MHz with the spectrum analyzer’s resolution bandwidth set to 9 kHz and the video bandwidth set to 30 kHz. The calculation for the conducted emissions is as follows:

**Corrected Reading = Analyzer Reading + LISN Loss + Cable Loss**  
**Margin = Applicable Limit - Corrected Reading**

7.6.2 Measurement Results

Results are shown below.

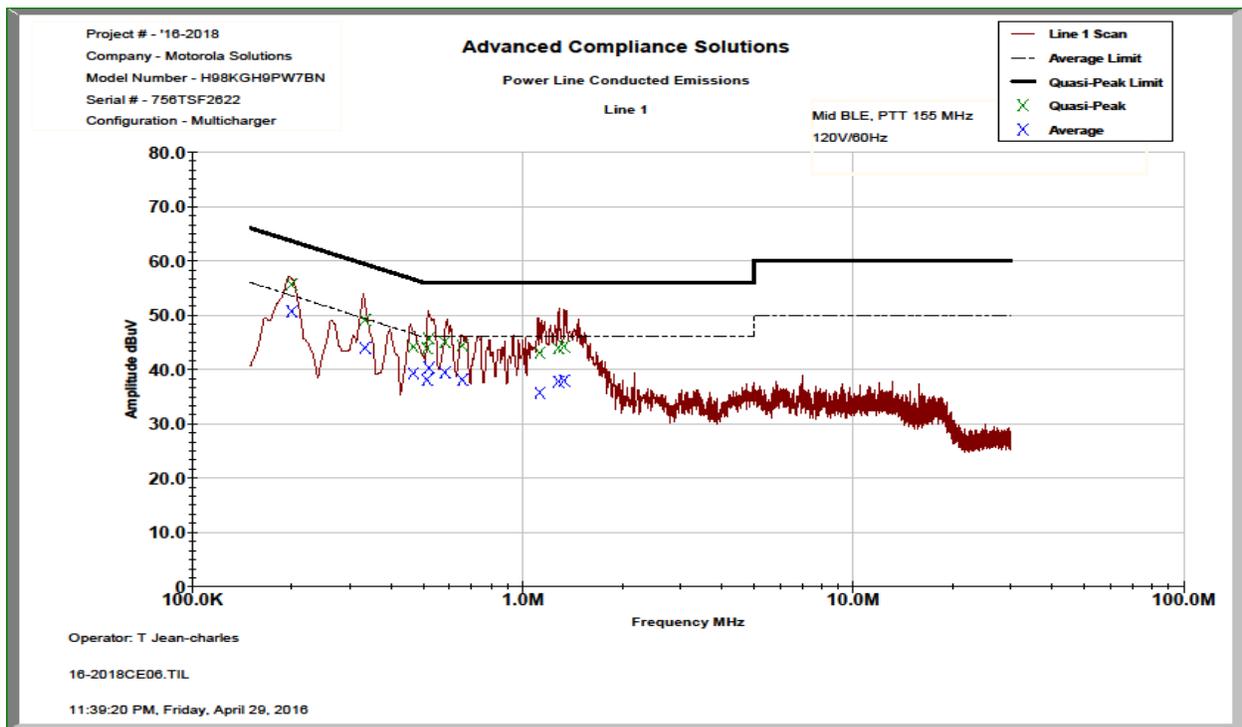


Figure 7.6.2-1: Conducted Emissions Results – Line 1

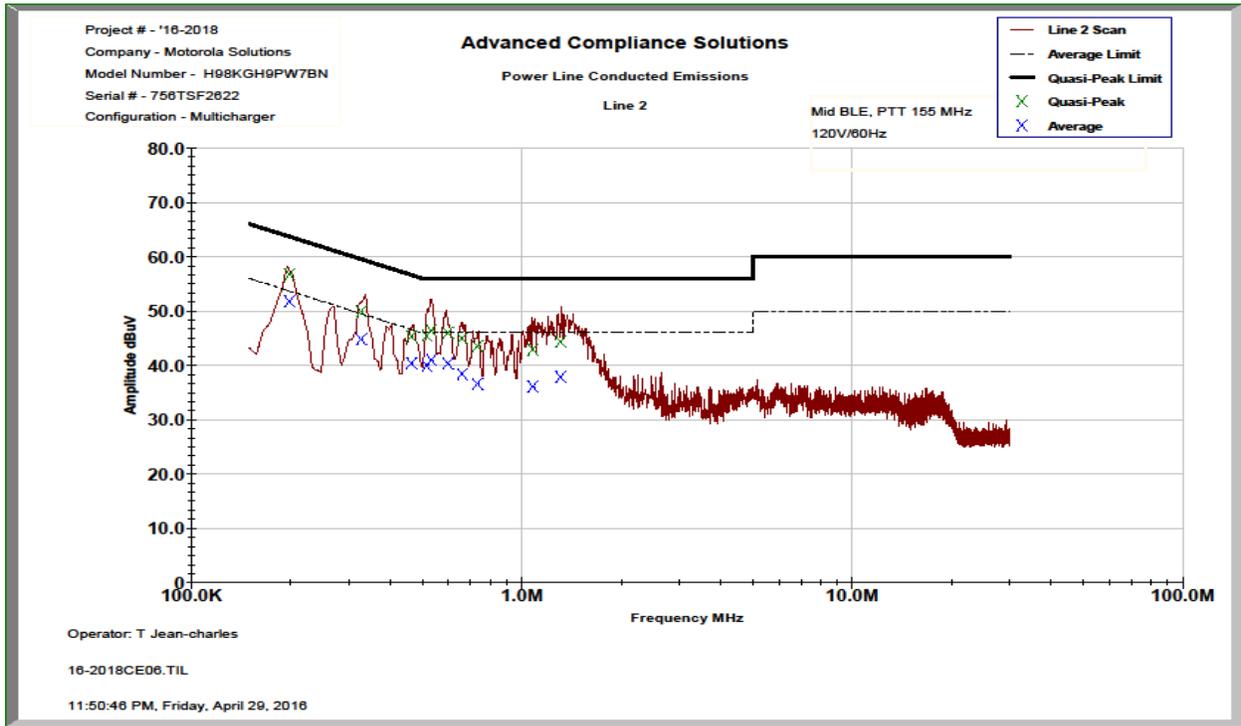


Figure 7.6.2-2: Conducted Emissions Results – Line 2

Table 7.6.2-1: Conducted EMI Results

Line 1    Line 2    Line 3  
 Line 4  
 To Ground    Floating  
 Telecom Port \_\_\_\_\_  
 dBµV    dBµA  
  
 Plot Number: 16-2018CE06  
 Power Supply Description: N/A

Frequency (MHz)	Uncorrected Reading		Total Correction Factor (dB)	Corrected Level		Limit		Margin (dB)	
	Quasi-Peak	Average		Quasi-Peak	Average	Quasi-Peak	Average	Quasi-Peak	Average
<b>Line 1</b>									
0.200175	45.485	40.484	10.21	55.69	50.69	63.60	53.60	7.9	2.9
0.3334	38.895	33.802	10.20	49.10	44.00	59.37	49.37	10.3	5.4
0.467513	33.961	29.139	10.21	44.17	39.35	56.56	46.56	12.4	7.2
0.513951	33.692	27.904	10.20	43.90	38.11	56.00	46.00	12.1	7.9
0.521563	35.471	30.08	10.20	45.67	40.28	56.00	46.00	10.3	5.7
0.582837	34.864	29.234	10.20	45.07	39.44	56.00	46.00	10.9	6.6
0.657738	34.249	27.872	10.20	44.45	38.07	56.00	46.00	11.6	7.9
1.12691	32.855	25.555	10.20	43.06	35.76	56.00	46.00	12.9	10.2
1.2828	33.753	27.576	10.20	43.96	37.78	56.00	46.00	12.0	8.2
1.33474	34.02	27.764	10.20	44.22	37.97	56.00	46.00	11.8	8.0
<b>Line 2</b>									
0.198625	46.546	41.554	10.22	56.77	51.78	63.67	53.67	6.9	1.9
0.327163	39.761	34.611	10.21	49.97	44.82	59.52	49.52	9.5	4.7
0.464137	35.158	30.2	10.21	45.37	40.41	56.62	46.62	11.2	6.2
0.51655	35.266	29.751	10.21	45.47	39.96	56.00	46.00	10.5	6.0
0.532738	36.233	30.802	10.21	46.44	41.01	56.00	46.00	9.6	5.0
0.598888	35.855	30.121	10.21	46.07	40.33	56.00	46.00	9.9	5.7
0.66155	34.713	28.214	10.21	44.92	38.42	56.00	46.00	11.1	7.6
0.735338	33.337	26.426	10.23	43.57	36.65	56.00	46.00	12.4	9.3
1.08115	32.701	25.853	10.25	42.95	36.10	56.00	46.00	13.0	9.9
1.3138	34.113	27.611	10.25	44.36	37.86	56.00	46.00	11.6	8.1

**8 CONCLUSION**

In the opinion of ACS, Inc., the model H98KGH9PW7BN manufactured by Motorola Solutions Sdn Bhd meets the requirements of FCC Part 15 subpart C and Industry Canada's Radio Standards Specification RSS-247 for the test procedures documented in the test report.

**END REPORT**