



FCC LISTED, REGISTRATION
NUMBER: 2764.01

Test report No:

ISED LISTED REGISTRATION
NUMBER: 23595-1

2676ERM.003

Test report

**USA FCC Part 15.407 (U-NII), 15.209
CANADA RSS-210, RSS-Gen
Unlicensed National Information Infrastructure Devices. General technical
requirements.
Licence-Exempt Radio Apparatus (All Frequency Bands): Category I Equipment.
General Requirements and Information for the Certification of Radio
Apparatus.**

Identification of item tested	Wireless Module
Trademark	Telit
Model and /or type reference	WL865E4-P
Other identification of the product	FCC: RI7WL865E4 IC ID: 5131A-WL865E4
Features	BT LE +Wi-Fi 802.11 a/b/g/n @ 2.4 GHz and @ 5GHz
Manufacturer	Telit Communications S.p.A. Viale Stazione di Prosecco 5/b, 34010 Sgonico, Trieste, Italy
Test method requested, standard	USA FCC Part 15.407 10-1-18 Edition: Unlicensed National Information Infrastructure Devices. General technical requirements. USA FCC Part 15.209 10-1-18 Edition: Radiated emission limits; general requirements. CANADA RSS-247 Issue 2 (February 2017). CANADA RSS-Gen Issue 5 (April 2018). 789033 D02 General UNII Test Procedures New Rules v02r01 Guidance for Compliance Testing of Unlicensed National Information Infrastructure (U-NII) Devices ANSI C63.10-2013: American National Standard for Testing Unlicensed Wireless Devices.
Summary	IN COMPLIANCE
Approved by (name / position & signature)	Domingo Galvez EMC&RF Lab Manager
Date of issue	11-04-2019
Report template No	FDT08_21

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Competences and guarantees

DEKRA Certification Inc. is a testing laboratory accredited by A2LA (The American Association for Laboratory Accreditation), to perform the tests indicated in the Certificate 2764.01

DEKRA Certification Inc. is a testing laboratory competent to carry out the tests described in this report.

In order to assure the traceability to other national and international laboratories, DEKRA Certification Inc. has a calibration and maintenance program for its measurement equipment.

DEKRA Certification Inc. guarantees the reliability of the data presented in this report, which is the result of the measurements and the tests performed to the item under test on the date and under the conditions stated on the report and, it is based on the knowledge and technical facilities available at DEKRA Certification at the time of performance of the test.

DEKRA Certification Inc. is liable to the client for the maintenance of the confidentiality of all information related to the item under test and the results of the test.

The results presented in this Test Report apply only to the particular item under test established in this document.

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General conditions

1. This report is only referred to the item that has undergone the test.
2. This report does not constitute or imply on its own an approval of the product by the Certification Bodies or competent Authorities.
3. This document is only valid if complete; no partial reproduction can be made without previous written permission of DEKRA Certification Inc.
4. This test report cannot be used partially or in full for publicity and/or promotional purposes without previous written permission of DEKRA Certification Inc. and the Accreditation Bodies.

Uncertainty

Uncertainty (factor $k=2$) was calculated according to the DEKRA Certification internal document PODT000.

Frequency (MHz)	U(k=2)	Units
0,009 - 30	2.69	dB
30-180	3.82	dB
180-1000	2.61	dB
1000-18000	2.92	dB
18000-40000	2.15	dB

Data provided by the client

Wi-Fi / BLE module

DEKRA declines any responsibility with respect to the information provided by the client and that may affect the validity of results.

Usage of samples

Samples undergoing test have been selected by: The client.

Sample S/01 is composed of the following elements:

Control N°	Description	Model	Serial N°	Date of reception
2262/04	WL865E4-P on debug board	WL865E4-P	00217E249E8C	05/07/2019
2262/05	USB Cable	--	--	05/07/2019

1. Sample S/01 has undergone following test (s):.

All conducted tests indicated in appendix B.

Sample S/02 is composed of the following elements:

Control N°	Description	Model	Serial N°	Date of reception
2262/03	WL865E4-P on debug board	WL865E4-P	00217E249E74	05/07/2019
2262/05	USB Cable	--	--	05/07/2019

1. Sample S/02 has undergone following test(s):.

All radiated tests indicated in appendix B.

Test sample description

Ports..... :	Port name and description	Cable				
		Specified length [m]	Attached during test	Shielded		
	USB	0.5	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
			<input type="checkbox"/>	<input type="checkbox"/>		
Supplementary information to the ports..... :	<i>Not provided data</i>					
Rated power supply	Voltage and Frequency	Reference poles				
		L1	L2	L3	N	PE
	<input type="checkbox"/>	AC:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	AC:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	DC				
<input checked="" type="checkbox"/>	DC: 3.3V typ.					
Rated Power	<i>No data provided</i>					
Clock frequencies	<i>40 MHz</i>					
Other parameters..... :	<i>No data provided</i>					
Software version	<i>MOG.000002</i>					
Hardware version..... :	<i>HW 0.0</i>					
Dimensions in cm (L x W x D)	<i>2.44 x 0.29 x 2.44</i>					
Mounting position..... :	<input type="checkbox"/>	Table top equipment				
	<input type="checkbox"/>	Wall/Ceiling mounted equipment				
	<input type="checkbox"/>	Floor standing equipment				
	<input type="checkbox"/>	Hand-held equipment				
	<input checked="" type="checkbox"/>	Other:				
Modules/parts	Module/parts of test item	Type	Manufacturer			
Accessories (not part of the test item)	Description	Type	Manufacturer			
	<i>WL865E4-P EVB IF</i>	<i>Interface board</i>	<i>Telit</i>			
	<i>Micro USB cable</i>	<i>Cable</i>				
	<i>T-AT9552 external antenna</i>	<i>Antenna</i>	<i>ATEL-ANTENNAS</i>			

Documents as provided by the applicant.....:	Description	File name	Issue date
	<i>Declaration Equipment Data</i>	<i>FDT30_14_FCC_TELI T_WL865E4-P_rev0</i>	<i>2019-02-04</i>



Identification of the client

TELIT COMMUNICATIONS S.P.A
 VIALE STAZIONE DI PROSECCO 5/B,
 34010 SGONICO, TRIESTE, ITALY.

Testing period and place

Test Location	DEKRA Certification Inc.
Date (start)	2019-10-29
Date (finish)	2019-10-31

Document history

Report number	Date	Description
2676ERM.003	11-04-2019	First release

Environmental conditions

In the control chamber, the following limits were not exceeded during the test:

Temperature	Min. = 15 °C Max. = 35 °C
Relative humidity	Min. = 30 % Max. = 75 %
Air pressure	Min. = 860 mbar Max. = 1060 mbar

In the semi-anechoic chamber, the following limits were not exceeded during the test.

Temperature	Min. = 15 °C Max. = 35 °C
Relative humidity	Min. = 30 % Max. = 75 %
Air pressure	Min. = 860 mbar Max. = 1060 mbar

In the chamber for conducted measurements, the following limits were not exceeded during the test:

Temperature	Min. = 15 °C Max. = 35 °C
Relative humidity	Min. = 30 % Max. = 60 %
Air pressure	Min. = 860 mbar Max. = 1060 mbar

Remarks and comments

The tests have been performed by the technical personnel: Divya Adusumilli, Koji Nishimoto and Poojita Bhattu.

Testing verdicts

Not applicable :	N/A
Pass :	P
Fail :	F
Not measured :	N/M

Summary

FCC PART 15 PARAGRAPH / RSS-247 (WIFI 5GHz) 5.47 GHz -5.725 GHz Band					
Report Section	15.407 Spec Clause	RSS Spec Clause	Test Description	Verdict	Remark
B.1	§ 15.403 (i) KDB 789033 D02	RSS 247 6.2.4	26dB Emission Bandwidth & Occupied Bandwidth	P	N/A
B.2	§ 15.407 (e)	RSS 247 6.2.4.1	6dB Bandwidth	P	N/A
B.3	§ 15.407 (a)(3)(4)	RSS 247 6.2.4.1	Power Limits. Maximum Output Power	P	N/A
B.4	§ 15.407 (a)(3)(5)	RSS-247 6.2.4.1	Maximum Power Spectral Density	P	N/A
B.5	§ 15.407 (b)(4)	RSS-247 6.2.4.2	Band-edge conducted emissions compliance (Transmitter)	P	N/A
B.6	§ 15.407 (b)(6) § 15.207	RSS-Gen 8.8	Emission limitations Conducted (Transmitter)	P	N/A
B.7	§ 15.407 (b)(4)(6)(7) § 15.209 § 15.205	RSS-247 6.2.4.2 RSS-Gen 8.9 & 8.10	Undesirable radiated emissions (Transmitter)	P	N/A
--	§ 15.407 (g)	RSS-Gen 6.11 & 8.11	Frequency Stability	N/M	Refer 1

Supplementary information and remarks:

The test set-up was made in accordance to the general provisions of ANSI C63.10: 2013 and FCC KDB 789033 D02 General UNII Test Procedures New Rules v02r01 dated 12/14/2017

1) Acc. To FCC, Manufacturers of UNII devices are responsible for frequency stability compliance.

FCC PART 15 PARAGRAPH / RSS-247 (Wi-Fi 5GHz) Common Requirements for all bands					
Report Section	15.407 Spec Clause	RSS Spec Clause	Test Description	Verdict	Remark
--	§ 15.407 (c)	--	Transmission in case of absence of information to transmit, or operational failure.	N/M	Refer 1

Supplementary information and remarks:

1) The compliance is checked through a description of how this requirement is met that is provided by the applicant.

List of equipment used during the test

Conducted Measurements

Test system Rohde & Schwarz TS 8997:

CONTROL NUMBER	DESCRIPTION	LAST CALIBRATION	NEXT CALIBRATION
1039	Signal analyzer Rohde & Schwarz FSV40	2018/10	2020/10
1009	RF generator Rohde & Schwarz SMB100A	2019/08	2021/08
1042	RF generator Rohde & Schwarz SMBV100A	2018/01	2021/01
101	Climatic chamber Espec	2019/01	2020/01

Radiated Measurements

CONTROL NUMBER	DESCRIPTION	LAST CALIBRATION	NEXT CALIBRATION
1179	Semi anechoic Absorber Lined Chamber Frankonia SAC 3 plus "L"	N/A	N/A
1064	BiconicalLog antenna ETS LINDGREN 3142E	2018/01	2021/01
1057	Double-ridge Waveguide Horn antenna 1-18 GHz	2017/03	2020/03
1056	Double-ridge Waveguide Horn antenna 18-40 GHz	2016/12	2019/12
1014	Spectrum analyzer Rohde & Schwarz FSV40	2019/04	2021/04
0982	RF pre-amplifier 18-40 GHz Bonn Elektronik BLMA1840-1M	2018/10	2020/10
1015, 1017, 1019, 1020	Rohde & Schwarz EMC32 software	N/A	N/A

Appendix A: DUT Description

DUT Description

The following information is provided by the client

Information	Description
Equipment type	Wi-Fi 5GHz/2.4 GHz + BTLE
DFS Operating Mode	Slave without Radar Detection
TPC Function	Not Supported ¹
Antenna Specification	Equipment with only one antenna
Operating Frequency Range	5150 - 5250 MHz / 5250 - 5350 MHz / 5470 -5725 MHz / 5725 – 5825 MHz
Nominal Channel Bandwidth	20 MHz
RF Output Power	a mode – 15.9 dBm n mode – 15.5 dBm
Antenna type	Dedicated antenna (single)
Antenna gain	+4.5 dBi
Supply Voltage	3.3 Vdc
Modulation:	OFDM (QPSK, BPSK, 16QAM, 64QAM)
Communication Mode:	IP Based (Load Based)
Transmit Data Rate:	IEEE 802.11a: 6, 9, 12, 18, 24, 36, 48, 54 Mbps IEEE 802.11n HT20: 7.2, 14.4, 21.7, 28.9, 43.3, 57.8, 65, 72.2 Mbps
Geo-location capability	No

1. TPC not required if Max EIRP < 500mW (27 dBm)

Appendix B:

Test results 5.725 GHz – 5.825 GHz Band

Appendix B Content

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DESCRIPTION OF TEST CONDITIONS

TEST CONDITIONS	DESCRIPTION
TC#01 ⁽¹⁾ (a mode)	<u>Power supply (V):</u> $V_{\text{nominal}} = 3.3 \text{ Vdc}$ <u>Test Frequencies for Conducted/Radiated tests: (20 MHz)</u> Lowest range: 5745 MHz Middle channel: 5785 MHz Highest range: 5825 MHz
TC#02 ⁽¹⁾ (n mode)	<u>Power supply (V):</u> $V_{\text{nominal}} = 3.3 \text{ Vdc}$ <u>Test Frequencies for Conducted/Radiated tests: (20 MHz)</u> Lowest channel: 5745 MHz Middle channel: 5785 MHz Highest channel: 5825 MHz

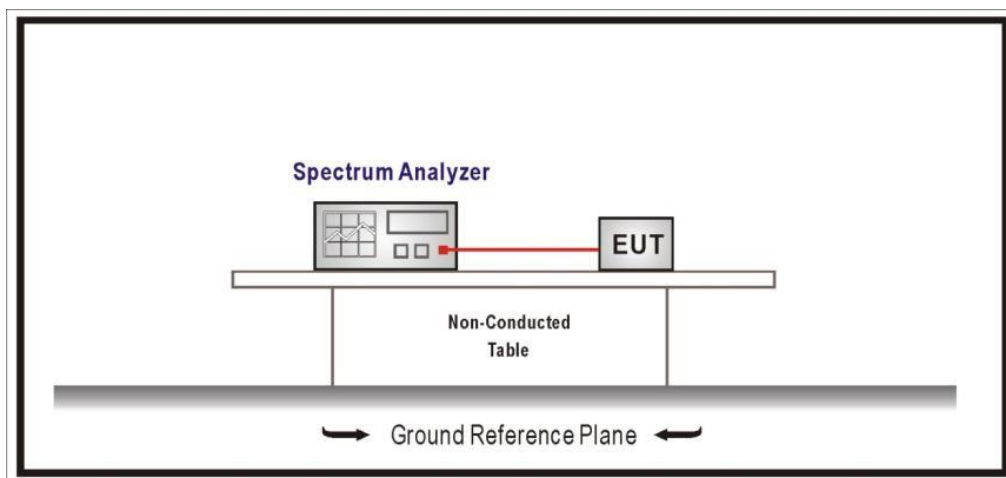
Note (1): For spurious emissions for OFDM modes 802.11a and 802.11n20 a preliminary scan was performed to determine the worst case. The data rates of 6Mb/s for 802.11a, MCS0 (SISO) for 802.11n20 were selected based on preliminary testing that identified those rates corresponding to the worst cases.

SECTION B.1: 26DB EMISSION BANDWIDTH & OCCUPIED BANDWIDTH

LIMITS:	Product standard:	Part 15 Subpart C §15.403 and RSS-247
	Test standard:	Part 15 Subpart C §15.403 and RSS-247 6.2.4

No requirements requested

TEST SETUP:	
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TESTED SAMPLES:	S/01
TESTED CONDITIONS MODES:	TC#01 (a mode)
TEST RESULTS:	PASS

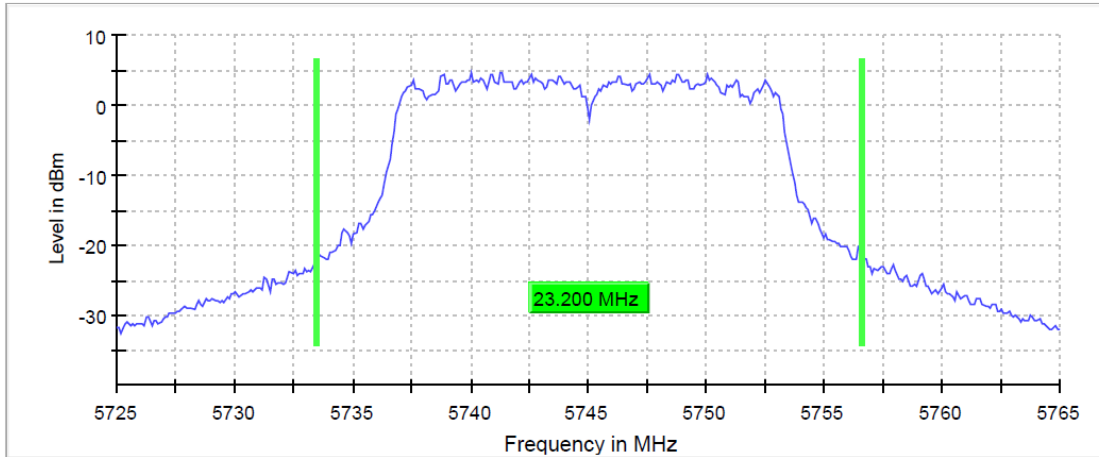
Bandwidth: 20 MHz

	Lowest frequency	Middle frequency	Highest frequency
	5745 MHz	5785 MHz	5825 MHz
26dB Bandwidth (MHz)	23.20	22.70	22.20
Occupied bandwidth (MHz)	16.60	16.60	16.50
Measurement uncertainty (kHz)	<± 8.33		

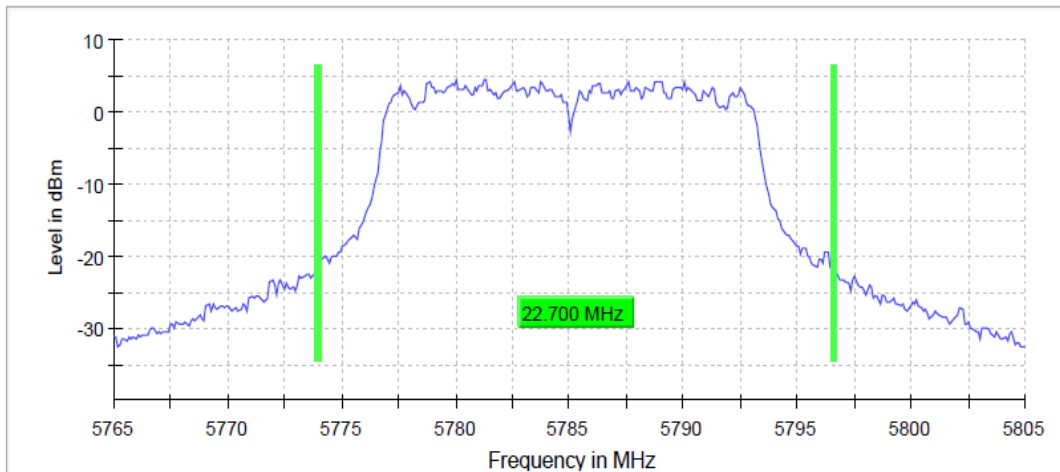
TEST RESULTS (Cont.):

26 dB BANDWIDTH

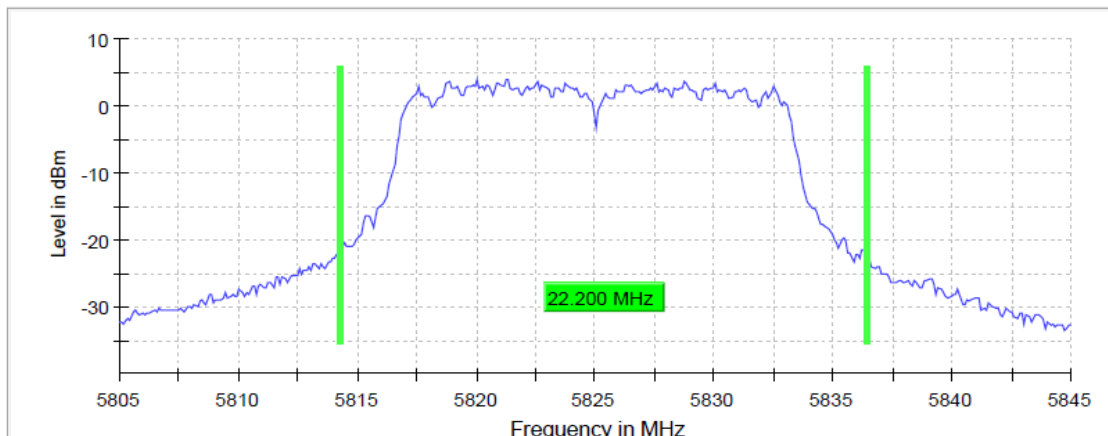
Lowest Channel



Middle Channel



Highest Channel



TEST RESULTS (Cont.):

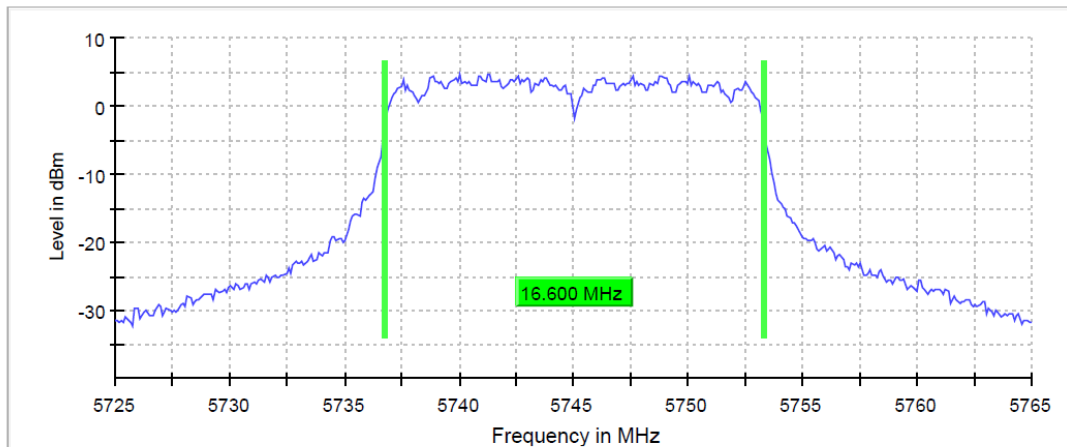
Measurement

Setting	Instrument Value	Instrument Value	Instrument Value
Start Frequency	5.72500 GHz	5.76500 GHz	5.80500 GHz
Stop Frequency	5.76500 GHz	5.80500 GHz	5.84500 GHz
Span	40.000 MHz	40.000 MHz	40.000 MHz
RBW	200.000 kHz	200.000 kHz	200.000 kHz
VBW	1.000 MHz	1.000 MHz	1.000 MHz
SweepPoints	400	400	400
SweepTime	28.447 μ s	28.447 μ s	28.477 μ s
Reference Level	10.000 dBm	10.000 dBm	10.000 dBm
Attenuation	30.000 dB	30.000 dB	30.000 dB
Detector	MaxPeak	MaxPeak	MaxPeak
SweepCount	200	200	200
Filter	3 dB	3 dB	3 dB
Trace Mode	Max Hold	Max Hold	Max Hold
SweepType	FFT	FFT	FFT
Preamp	off	off	off
Stablemode	Trace	Trace	Trace
Stablevalue	0.30 dB	0.30 dB	0.30 dB
Run	62 / max. 150	35 / max. 150	83 / max. 150
Stable	5 / 5	5 / 5	5 / 5
Max Stable Difference	0.00 dB	0.03 dB	0.00 dB

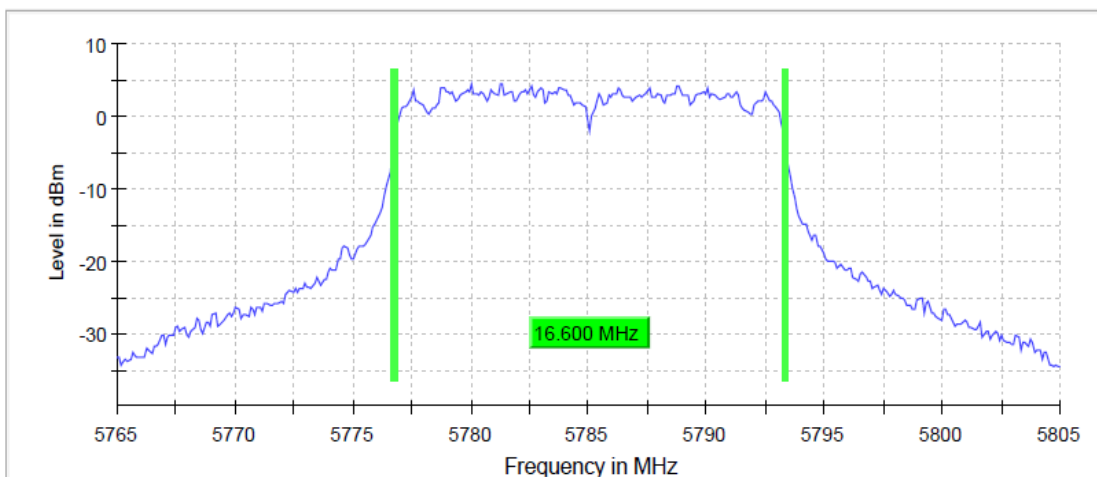
TEST RESULTS (Cont.):

OCCUPIED BANDWIDTH

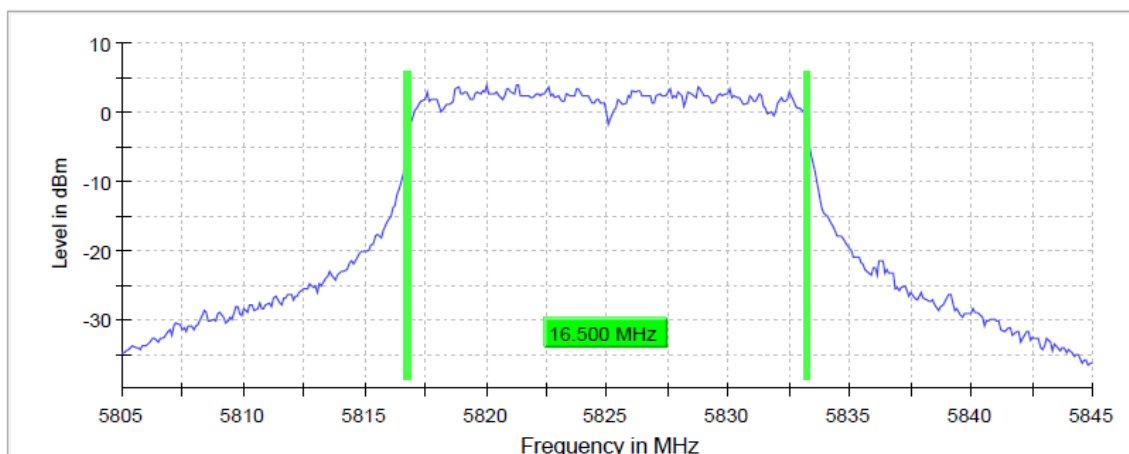
Lowest Channel



Middle Channel



Highest Channel



TEST RESULTS (Cont.)

Measurement

Setting	Instrument Value	Instrument Value	Instrument Value
Start Frequency	5.72500 GHz	5.765000 GHz	5.80500 GHz
Stop Frequency	5.76500 GHz	5.80500 GHz	5.84500 GHz
Span	40.000 MHz	40.000 MHz	40.000 MHz
RBW	200.000 KHz	200.000 KHz	200.000 KHz
VBW	1.000 MHz	1.000 MHz	1.000 MHz
SweepPoints	400	400	400
SweepTime	28.477 μ s	28.477 μ s	28.477 μ s
Reference Level	10.000 dBm	0.000 dBm	0.000 dBm
Attenuation	30.000 dB	20.000 dB	20.000 dB
Detector	MaxPeak	MaxPeak	MaxPeak
SweepCount	200	200	200
Filter	3 dB	3 dB	3 dB
Trace Mode	Max Hold	Max Hold	Max Hold
Sweeptype	FFT	FFT	FFT
Preamp	off	off	off
Stablemode	Trace	Trace	Trace
Stablevalue	0.30 dB	0.30 dB	0.30 dB
Run	25 / max. 150	51 / max. 150	51 / max. 150
Stable	5 / 5	5 / 5	5 / 5
Max Stable Difference	0.19 dB	0.21 dB	0.09 dB

TESTED SAMPLES: S/01

TEST RESULTS (Cont.): TC#02 (n mode)

TEST RESULTS: PASS

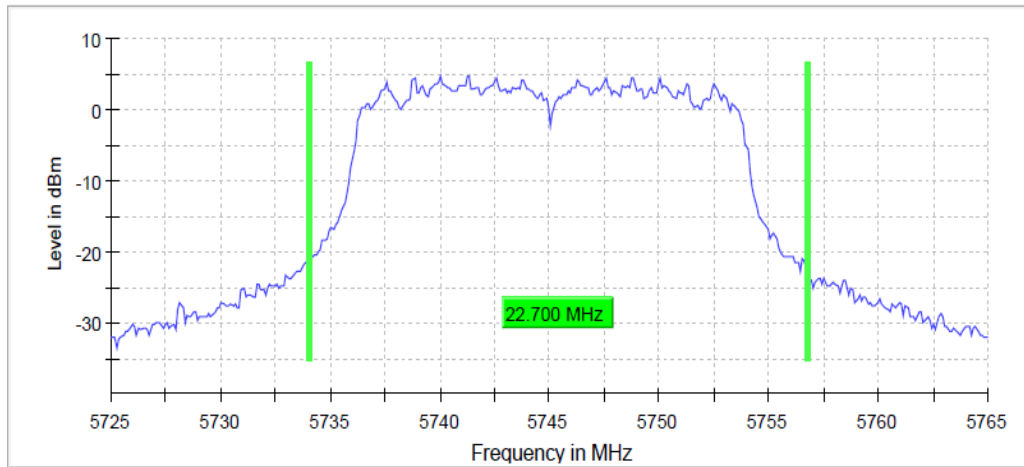
Bandwidth: 20 MHz

	Lowest frequency	Middle frequency	Highest frequency
	5745 MHz	5785 MHz	5825 MHz
26dB Bandwidth (MHz)	22.70	22.60	21.80
Occupied bandwidth (MHz)	17.60	17.60	17.60
Measurement uncertainty (kHz)	± 8.33		

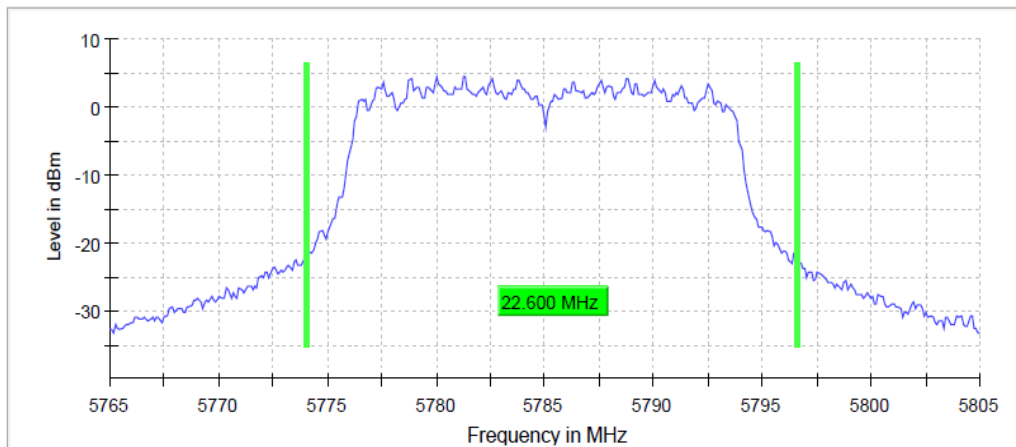
TEST RESULTS (Cont.):

26 dB BANDWIDTH

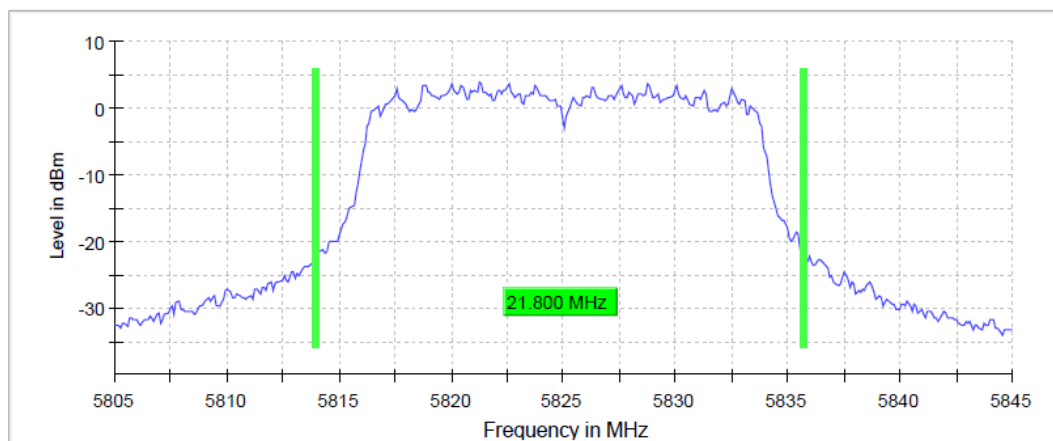
Lowest Channel



Middle Channel



Highest Channel



TEST RESULTS (Cont.):

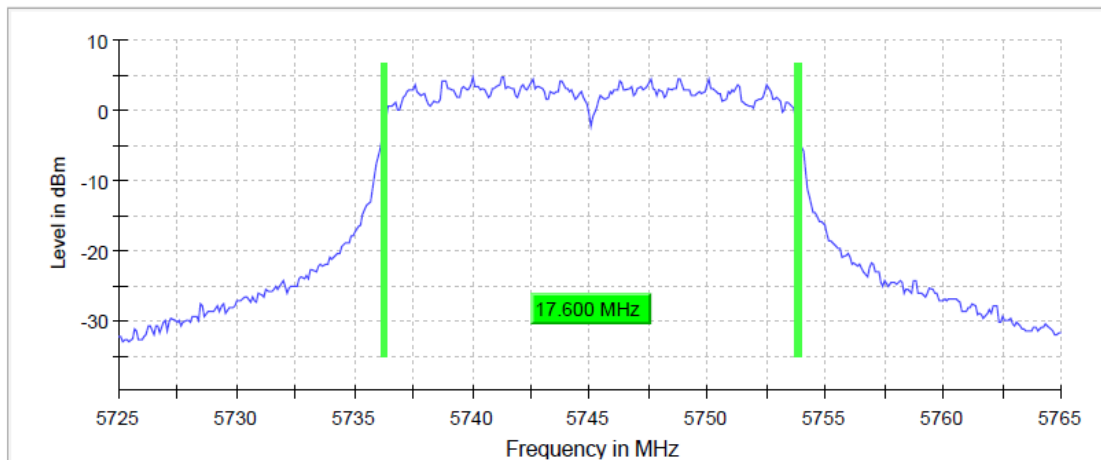
Measurement

Setting	Instrument Value	Instrument Value	Instrument Value
Start Frequency	5.72500 GHz	5.76500 GHz	5.80500 GHz
Stop Frequency	5.76500 GHz	5.80500 GHz	5.84500 GHz
Span	40.000 MHz	40.000 MHz	40.000 MHz
RBW	200.000 KHz	200.000 KHz	200.000 KHz
VBW	1.000 MHz	1.000 MHz	1.000 MHz
SweepPoints	400	400	400
Sweeptime	28.447 µs	28.447 µs	28.477 µs
Reference Level	10.000 dBm	10.000 dBm	10.000 dBm
Attenuation	30.000 dB	30.000 dB	30.000 dB
Detector	MaxPeak	MaxPeak	MaxPeak
SweepCount	200	200	200
Filter	3 dB	3 dB	3 dB
Trace Mode	Max Hold	Max Hold	Max Hold
SweepType	FFT	FFT	FFT
Preamp	off	off	off
Stablemode	Trace	Trace	Trace
Stablevalue	0.30 dB	0.30 dB	0.30 dB
Run	78 / max. 150	34 / max. 150	43 / max. 150
Stable	5 / 5	5 / 5	5 / 5
Max Stable Difference	0.00 dB	0.16 dB	0.04 dB

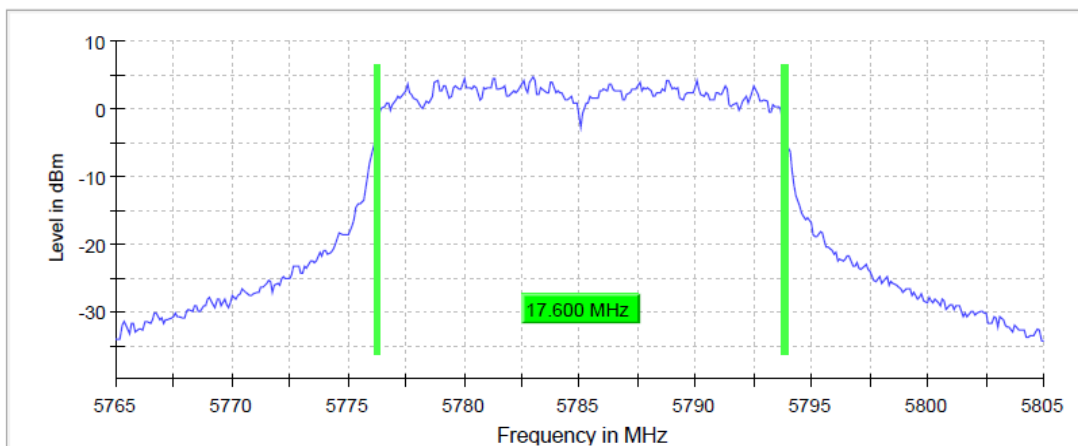
TEST RESULTS (Cont.):

OCCUPIED BANDWIDTH

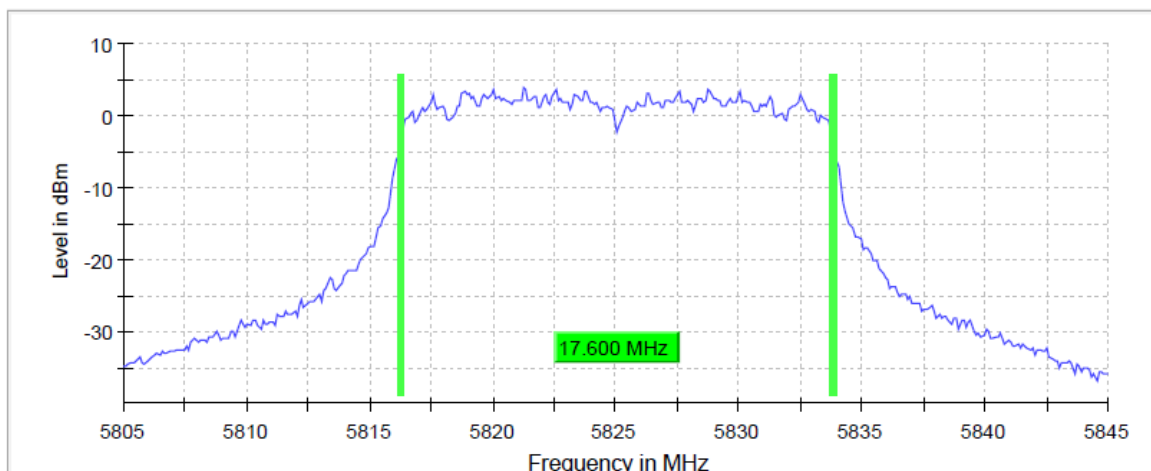
Lowest Channel



Middle Channel



Highest Channel



TEST RESULTS (Cont.)

Measurement

Setting	Instrument Value	Instrument Value	Instrument Value
Start Frequency	5.72500 GHz	5.765000 GHz	5.80500 GHz
Stop Frequency	5.76500 GHz	5.80500 GHz	5.84500 GHz
Span	40.000 MHz	40.000 MHz	40.000 MHz
RBW	200.000 KHz	200.000 KHz	200.000 KHz
VBW	1.000 MHz	1.000 MHz	1.000 MHz
SweepPoints	400	400	400
Sweeptime	28.477 μ s	28.477 μ s	28.477 μ s
Reference Level	10.000 dBm	0.000 dBm	0.000 dBm
Attenuation	30.000 dB	20.000 dB	20.000 dB
Detector	MaxPeak	MaxPeak	MaxPeak
SweepCount	200	200	200
Filter	3 dB	3 dB	3 dB
Trace Mode	Max Hold	Max Hold	Max Hold
SweepType	FFT	FFT	FFT
Preamp	off	off	off
Stablemode	Trace	Trace	Trace
Stablevalue	0.30 dB	0.30 dB	0.30 dB
Run	59 / max. 150	58 / max. 150	61 / max. 150
Stable	5 / 5	5 / 5	5 / 5
Max Stable Difference	0.00 dB	0.01 dB	0.28 dB

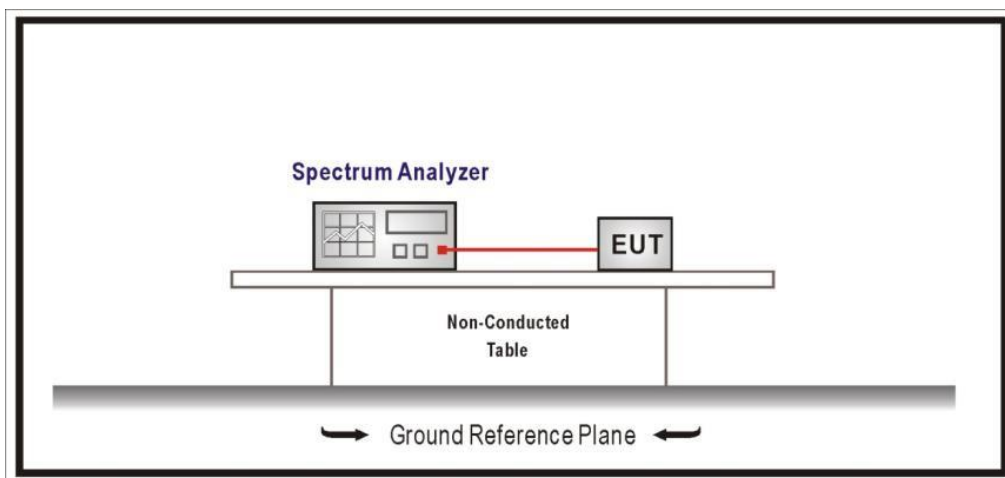
SECTION B.2: 6DB EMISSION BANDWIDTH

LIMITS:	Product standard:	Part 15 Subpart C §15.407 and RSS-247
	Test standard:	Part 15 Subpart C §15.407(e) and RSS-247 6.2.4.1

LIMITS:

Within the 5.725 – 5.85 GHz band, the minimum 6dB bandwidth of U-NII devices shall be at least 500 KHz.

TEST SETUP:	
--------------------	--



TESTED SAMPLES:	S/01
TESTED CONDITIONS MODES:	TC#01 (a mode)
TEST RESULTS:	PASS

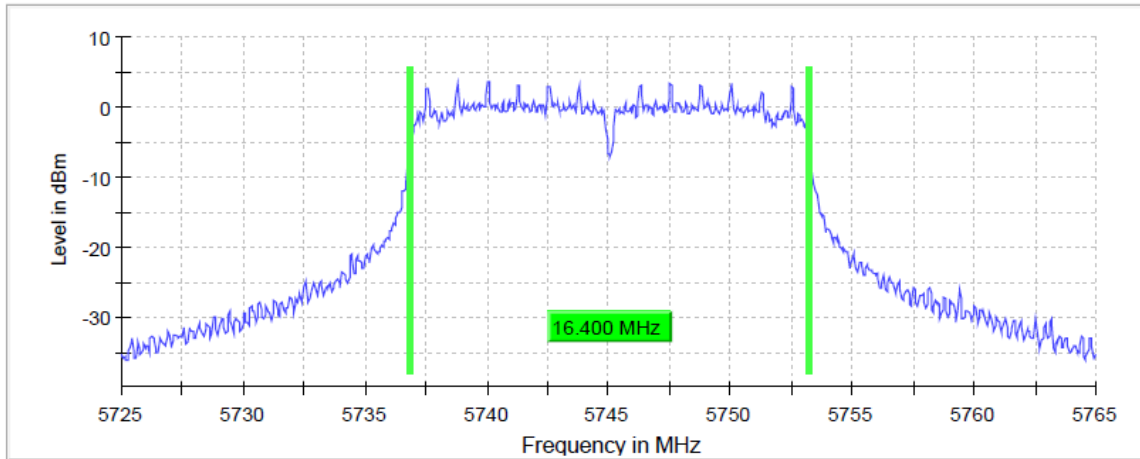
Bandwidth: 20 MHz

	Lowest frequency	Middle frequency	Highest frequency
	5745 MHz	5785 MHz	5825 MHz
6dB Bandwidth (MHz)	16.4	16.35	16.35
Measurement uncertainty (kHz)	<± 8.33		

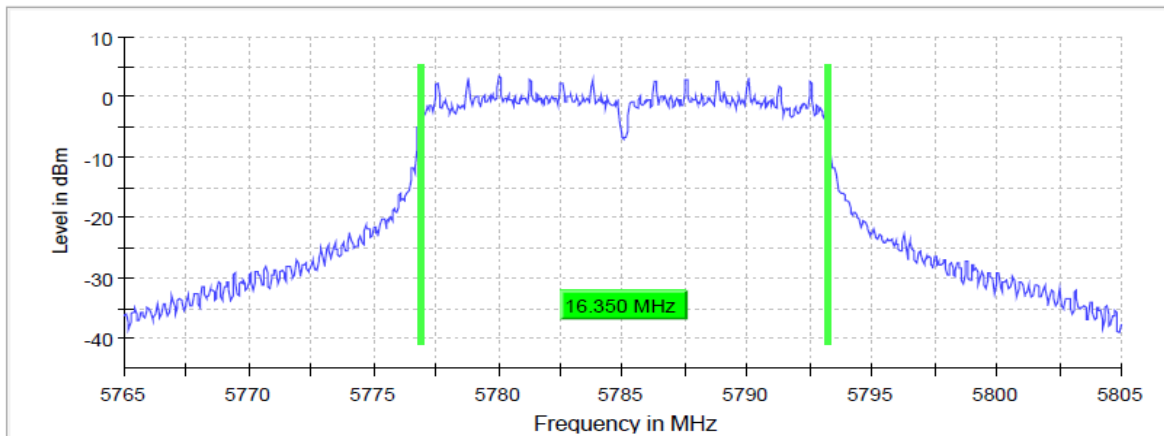
TEST RESULTS (Cont.):

6 dB BANDWIDTH

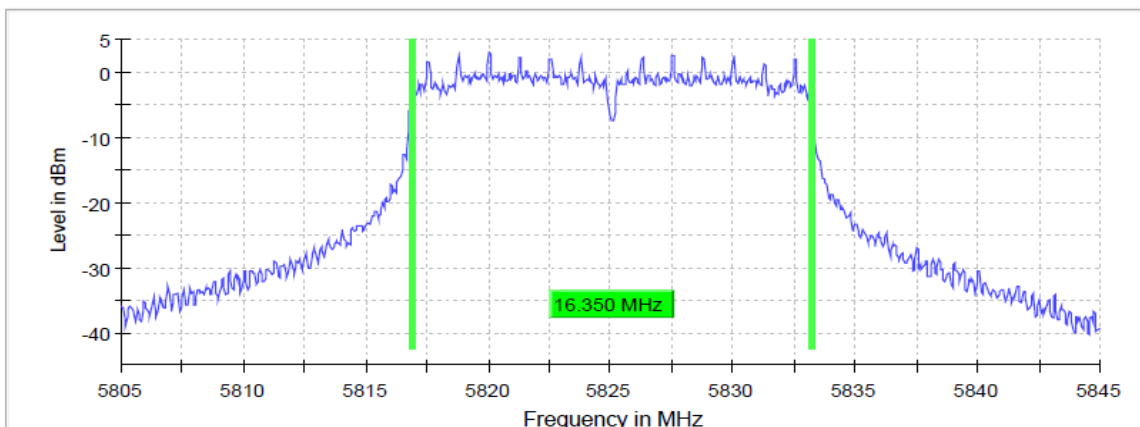
Lowest Channel



Middle Channel



Highest Channel



TEST RESULTS (Cont.)

Measurement

Setting	Instrument Value	Instrument Value	Instrument Value
Start Frequency	5.72500 GHz	5.76500 GHz	5.80500 GHz
Stop Frequency	5.76500 GHz	5.80500 GHz	5.84500 GHz
Span	40.000 MHz	40.000 MHz	40.000 MHz
RBW	100.000 kHz	100.000 kHz	100.000 kHz
VBW	300.000 kHz	300.000 kHz	300.000 kHz
SweepPoints	800	800	800
Sweeptime	56.836 μ s	56.836 μ s	56.836 μ s
Reference Level	10.000 dBm	0.000 dBm	0.000 dBm
Attenuation	30.000 dB	20.000 dB	20.000 dB
Detector	MaxPeak	MaxPeak	MaxPeak
SweepCount	200	200	200
Filter	3 dB	3 dB	3 dB
Trace Mode	Max Hold	Max Hold	Max Hold
Sweeptype	FFT	FFT	FFT
Preamp	off	off	off
Stablemode	Trace	Trace	Trace
Stablevalue	0.30 dB	0.30 dB	0.30 dB
Run	83 / max. 150	72 / max. 150	67 / max. 150
Stable	5 / 5	5 / 5	5 / 5
Max Stable Difference	0.00 dB	0.10 dB	0.25 dB

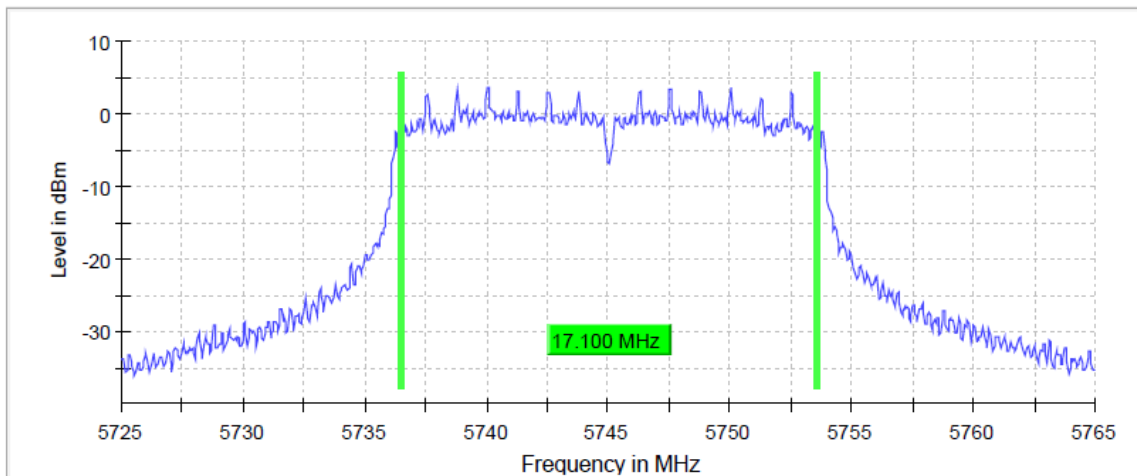
TESTED SAMPLES:	S/01
TESTED CONDITIONS MODES:	TC#02 (n Mode)
TEST RESULTS:	PASS

Bandwidth: 20 MHz

	Lowest frequency	Middle frequency	Highest frequency
	5745 MHz	5785 MHz	5825 MHz
6dB bandwidth (MHz)	17.1	16.6	16.85
Measurement uncertainty (kHz)	<± 8.33		

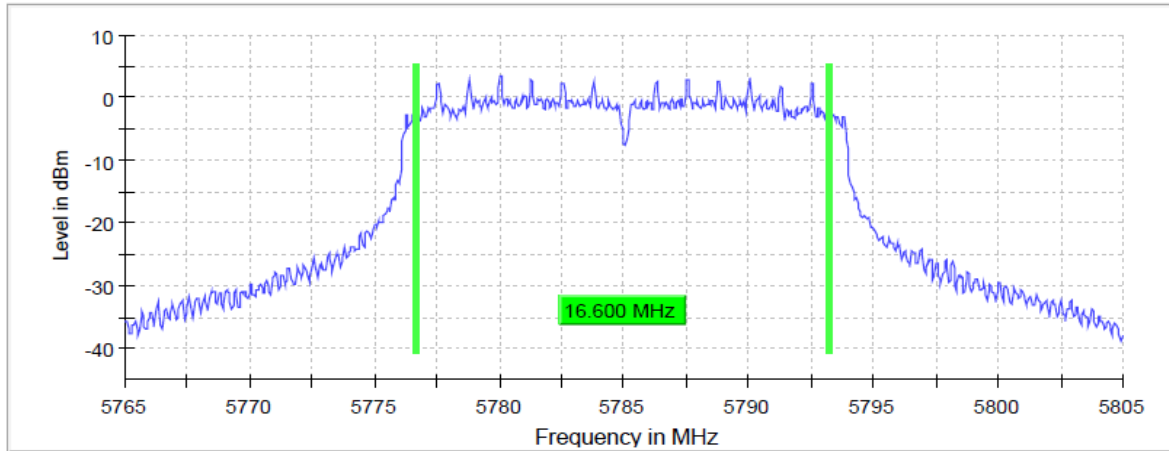
TEST RESULTS (Cont.):	6 dB BANDWIDTH
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Lowest Channel

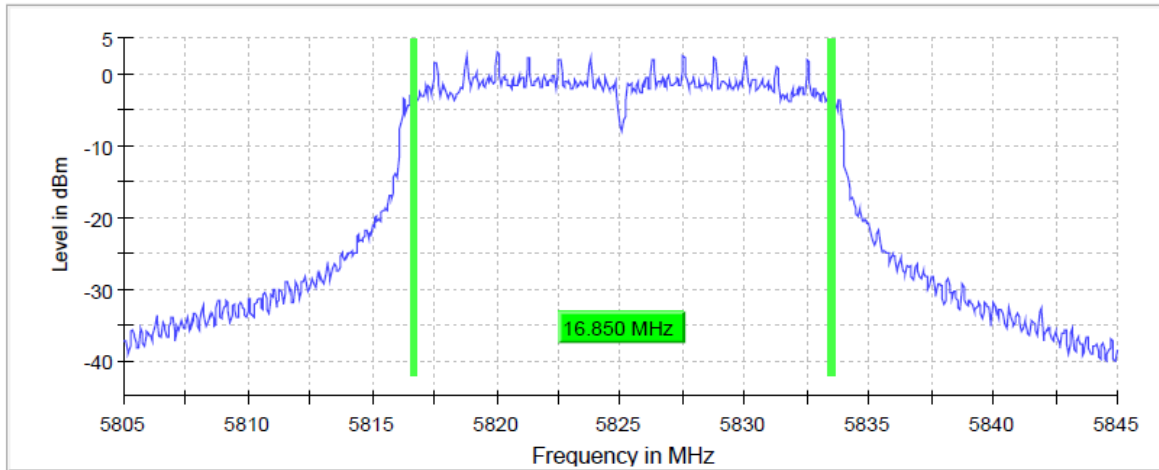


TEST RESULTS (Cont.):

Middle Channel



Highest Channel



Measurement

Setting	Instrument Value	Instrument Value	Instrument Value
Start Frequency	5.72500 GHz	5.76500 GHz	5.80500 GHz
Stop Frequency	5.76500 GHz	5.80500 GHz	5.84500 GHz
Span	40.000 MHz	40.000 MHz	40.000 MHz
RBW	100.000 kHz	100.000 kHz	100.000 kHz
VBW	300.000 kHz	300.000 kHz	300.000 kHz
SweepPoints	800	800	800
Sweeptime	56.836 μ s	56.836 μ s	56.836 μ s
Reference Level	10.000 dBm	0.000 dBm	0.000 dBm
Attenuation	30.000 dB	20.000 dB	20.000 dB
Detector	MaxPeak	MaxPeak	MaxPeak
SweepCount	200	200	200
Filter	3 dB	3 dB	3 dB
Trace Mode	Max Hold	Max Hold	Max Hold
Sweeptype	FFT	FFT	FFT
Preamp	off	off	off
Stablemode	Trace	Trace	Trace
Stablevalue	0.30 dB	0.30 dB	0.30 dB
Run	92 / max. 150	89 / max. 150	103 / max. 150
Stable	5 / 5	5 / 5	5 / 5
Max Stable Difference	0.00 dB	0.00 dB	0.13 dB

SECTION B.3: POWER LIMITS. MAXIMUM OUTPUT POWER

LIMITS:	Product standard:	Part 15 Subpart C §15.407 and RSS-247
	Test standard:	Part 15 Subpart C §15.407(a) (3) (4) and RSS-247 6.2.4.1

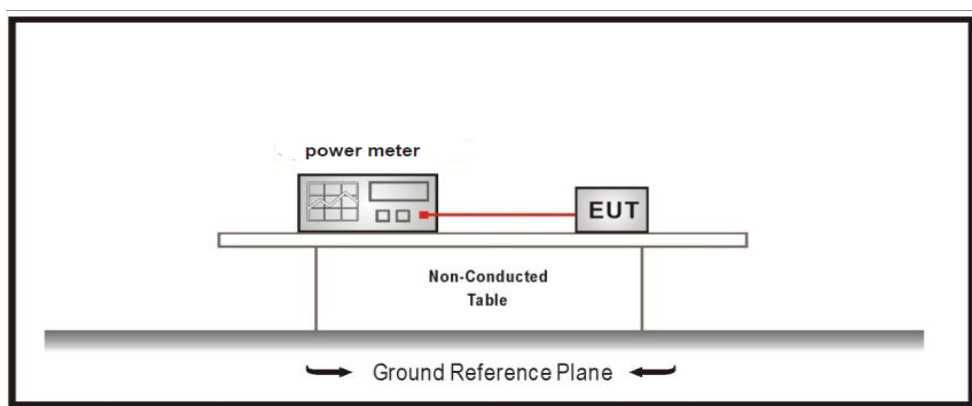
LIMITS

In band 5.725-5.850 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W provided the maximum antenna gain does not exceed 6 dBi. In addition, the maximum power spectral density shall not exceed 17 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

TEST SETUP

Measured according to ANSI C63.10, Section 11.9.2.3.2 Method AVGPM-G

The EIRP power (dBm) is calculated by adding the declared maximum antenna gain to the measured conducted power



TESTED SAMPLES:	S/01
TESTED CONDITIONS MODES:	TC#01 (a mode)
TEST RESULTS:	PASS

Bandwidth: 20 MHz

Maximum declared antenna gain: 4.5 dBi

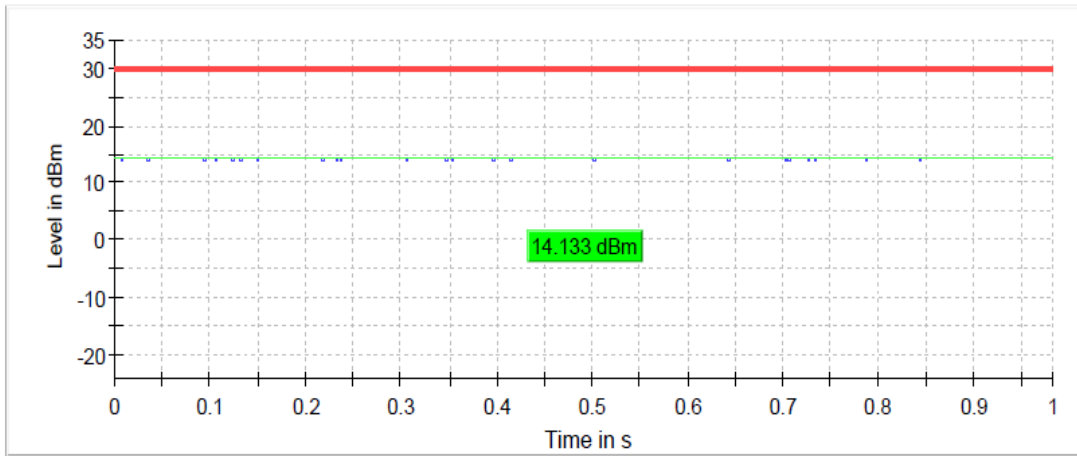
	Lowest frequency 5745 MHz	Middle frequency 5785 MHz	Highest frequency 5825 MHz
Maximum conducted power (dBm)	14.1	13.7	13.3
Maximum EIRP power (dBm)	18.6	18.2	17.8
Measurement uncertainty (dB)	<±0.78		

The maximum directional gain of the antenna is less than 6 dBi and therefore the maximum output power is not required to be reduced from the stated values

TEST RESULTS (Cont.):

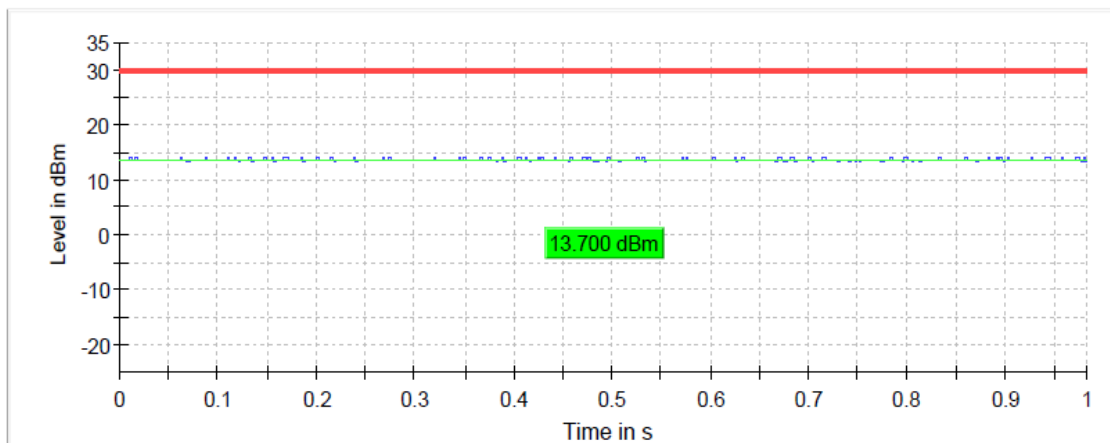
CONDUCTED OUTPUT POWER

Lowest Channel



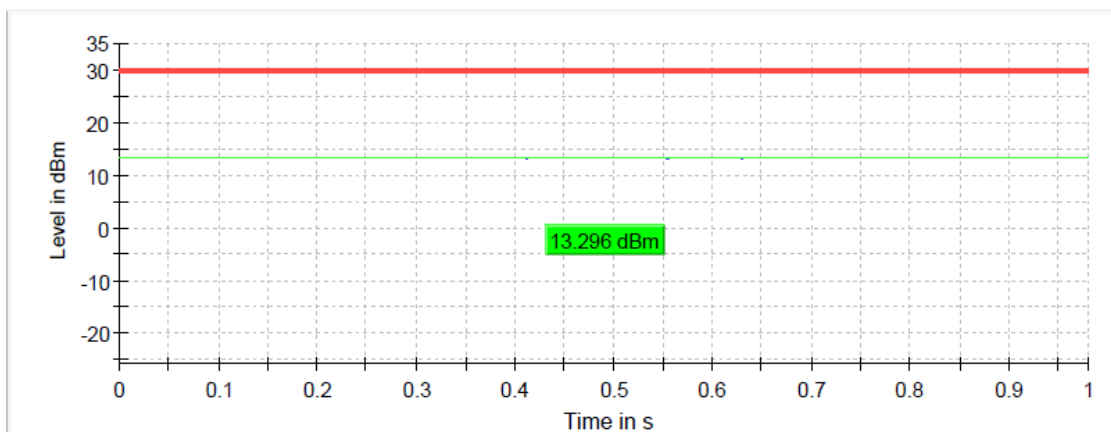
— Gated Trace — Overall — Limit

Middle Channel



— Gated Trace — Overall — Limit

Highest Channel



— Gated Trace — Overall — Limit

TESTED SAMPLES:	S/01
TESTED CONDITIONS MODES:	TC#02 (n mode)
TEST RESULTS:	PASS

Bandwidth: 20 MHz

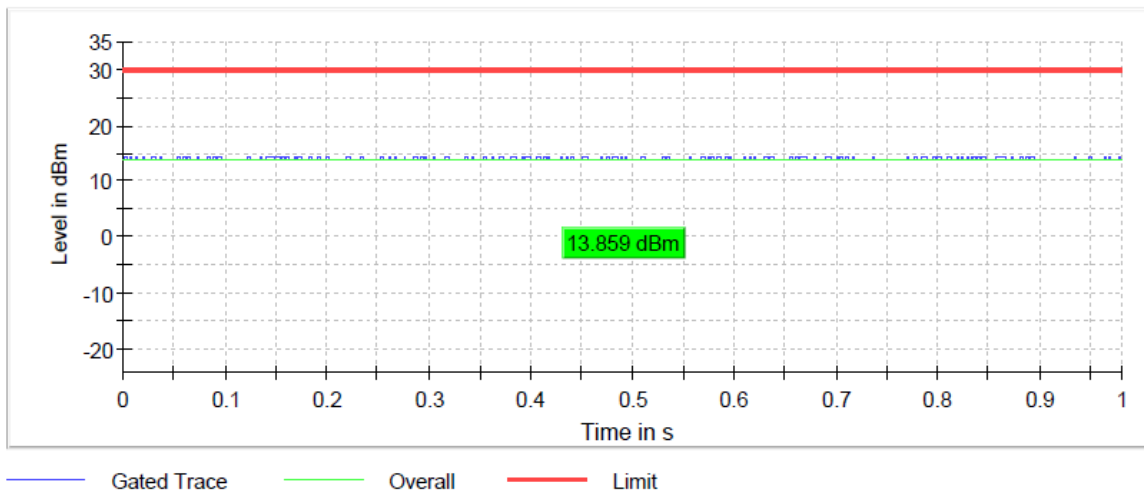
Maximum declared antenna gain: 4.5 dBi

	Lowest frequency 5745 MHz	Middle frequency 5785 MHz	Highest frequency 5825 MHz
Maximum conducted power (dBm)	13.9	13.4	13.0
Maximum EIRP power (dBm)	18.4	17.9	17.5
Measurement uncertainty (dB)	<±0.78		

The maximum directional gain of the antenna is less than 6 dBi and therefore the maximum output power is not required to be reduced from the stated values.

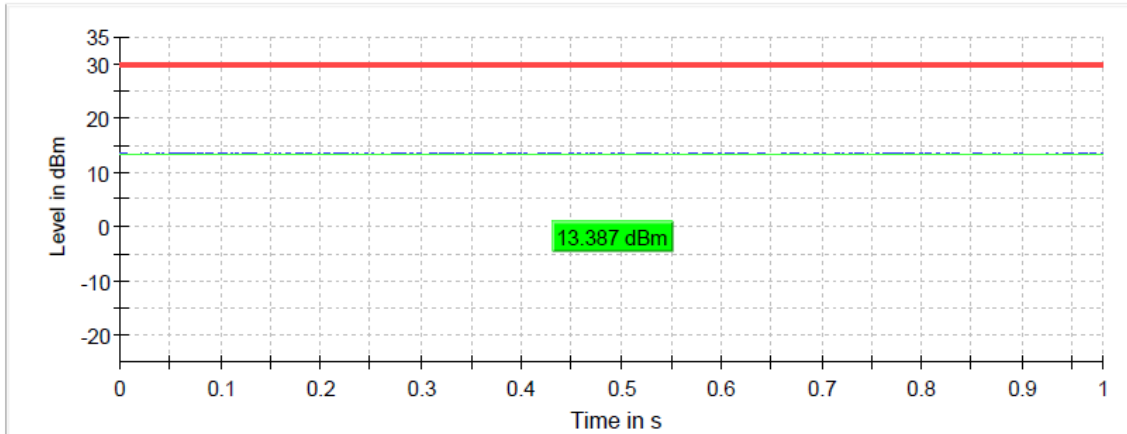
TEST RESULTS (Cont.):	CONDUCTED OUTPUT POWER
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Lowest Channel



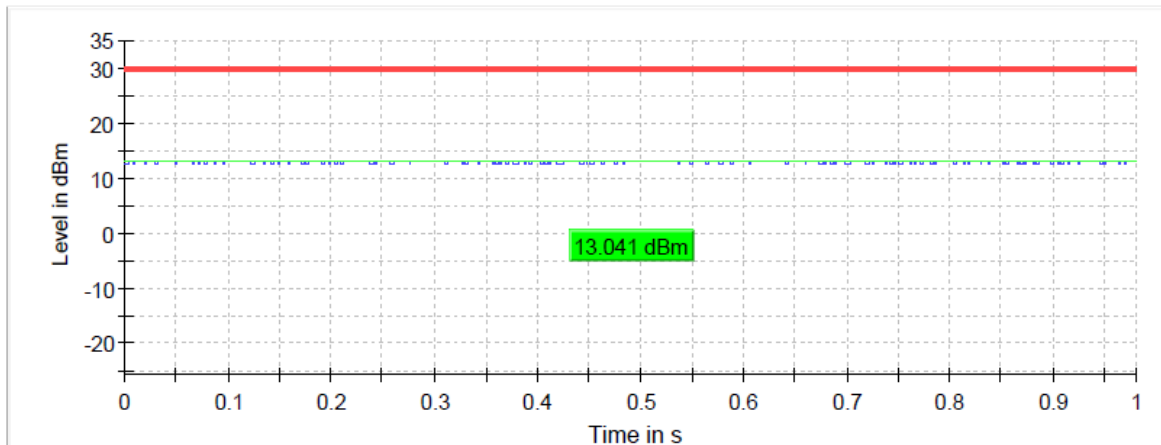
TEST RESULTS (Cont.)

Middle Channel



— Gated Trace — Overall — Limit

Highest Channel



— Gated Trace — Overall — Limit

SECTION B.4: POWER SPECTRAL DENSITY

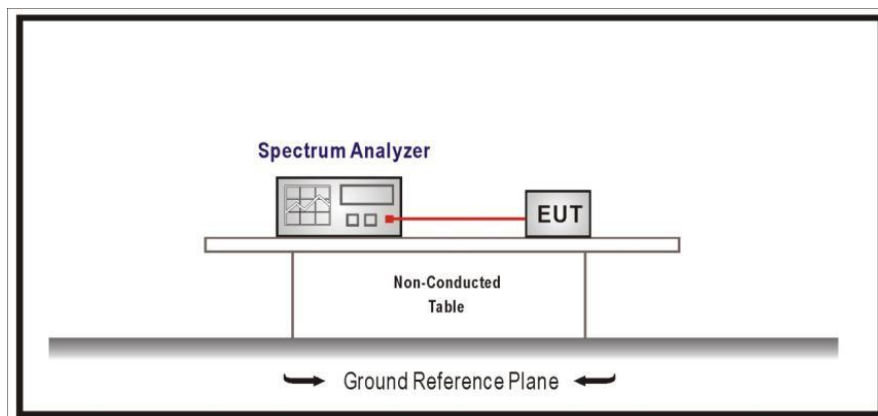
LIMITS:	Product standard:	Part 15 Subpart C §15.407 and RSS-247
	Test standard:	Part 15 Subpart C §15.407(a) (3) (5) and RSS-247 6.2.4.1

LIMITS

In the band 5.15-5.25 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W provided the maximum antenna gain does not exceed 6 dBi. In addition, the maximum power spectral density shall not exceed 17 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

TEST SETUP

For all modes, the maximum power spectral density level in the fundamental emission was measured using the method according to point F) (Method SA-1) of Guidance 789033 D02 General UNII Test Procedures New Rules v01.



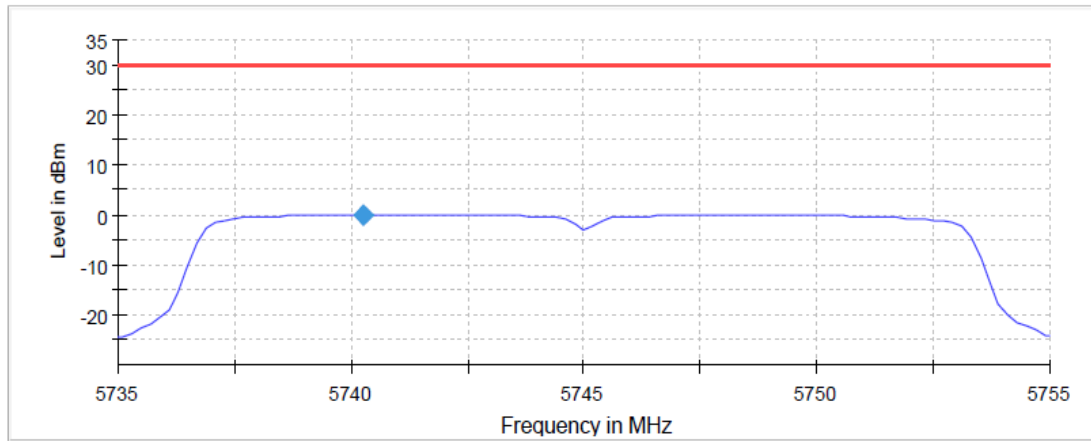
TESTED SAMPLES:	S/01
TESTED CONDITIONS MODES:	TC#01 (a mode)
TEST RESULTS:	PASS

Bandwidth: 20 MHz

	Lowest frequency 5745 MHz	Middle frequency 5785 MHz	Highest frequency 5825 MHz
Power spectral density (dBm)	0.04	-0.148	-0.79
Measurement uncertainty (dB)	<±0.78		

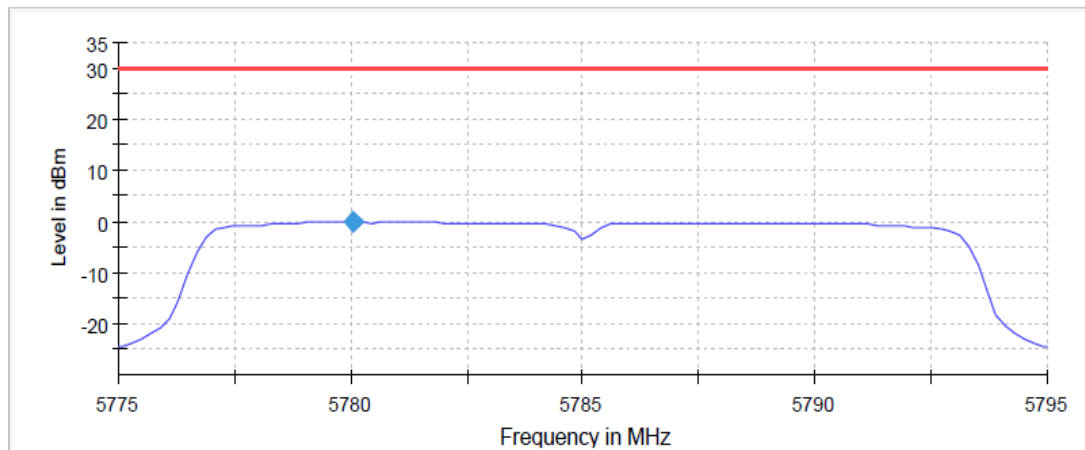
TEST RESULTS (Cont.):

Lowest Channel



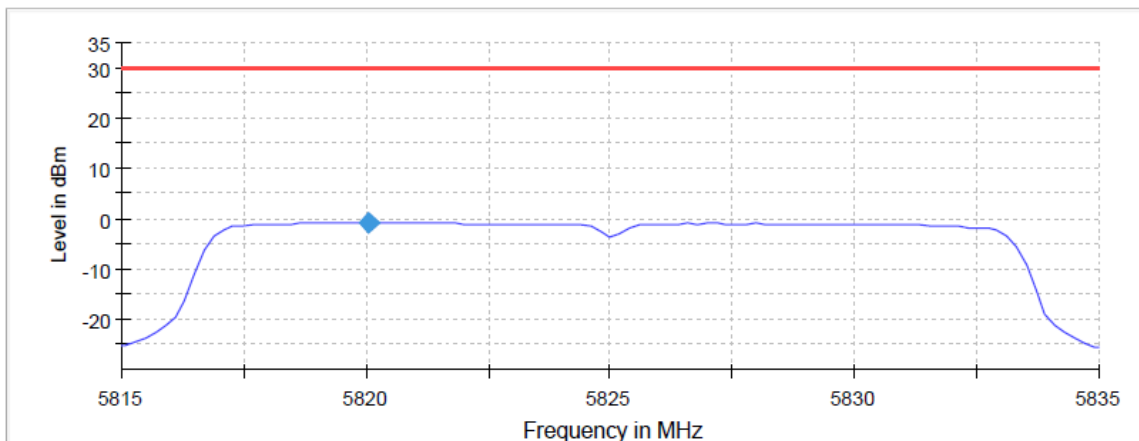
— Limit — Sum Level ◆ PSD

Middle Channel



— Limit — Sum Level ◆ PSD

Highest Channel



— Limit — Sum Level ◆ PSD

TEST RESULTS (Cont.):

Measurement

Setting	Instrument Value	Instrument Value	Instrument Value
Start Frequency	5.73500 GHz	5.77500GHz	5.81500 GHz
Stop Frequency	5.75500 GHz	5.79500 GHz	5.83500 GHz
Span	20.000 MHz	20.000 MHz	20.000 MHz
RBW	500.00 KHz	500.00 KHz	500.00 KHz
VBW	2.000 MHz	2.000 MHz	2.000 MHz
SweepPoints	101	101	101
SweepTime	2.020 s	2.020 s	2.020 s
Reference Level	10.000 dBm	10.000 dBm	10.000 dBm
Attenuation	30.000 dB	30.000 dB	30.000 dB
Detector	RMS	RMS	RMS
SweepCount	29703	29703	29703
Filter	3 dB	3 dB	3 dB
Trace Mode	Max Hold	Max Hold	Max Hold
SweepType	FFT	FFT	FFT
Preamplifier	off	off	off
Stablemode	Trace	Trace	Trace
Stablevalue	0.30 dB	0.30 dB	0.30 dB
Run	4 / max. 15	4 / max. 15	4 / max. 15
Stable	3 / 3	3 / 3	3 / 3
Max Stable Difference	0.05 dB	0.01 dB	0.02 dB

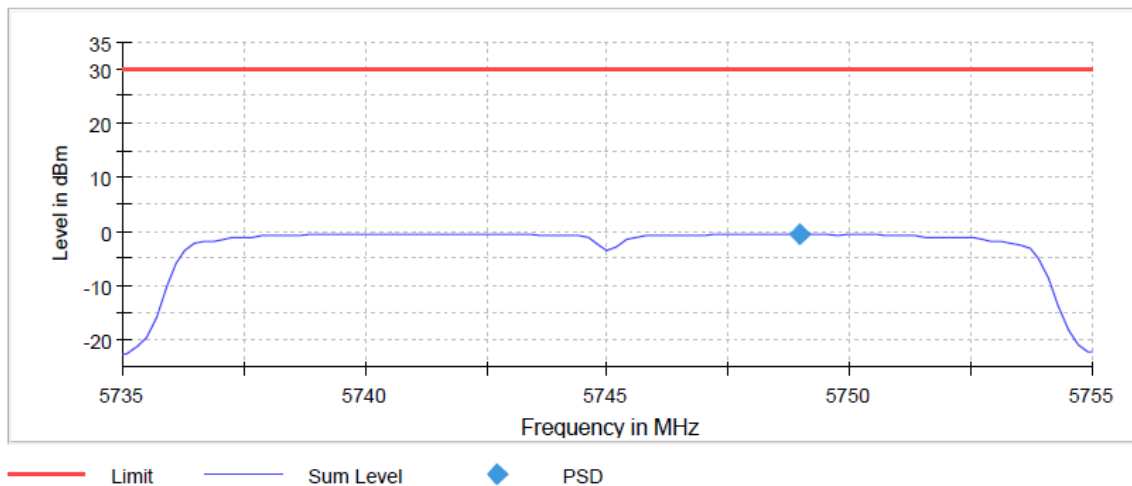
TESTED SAMPLES:	S/01
TESTED CONDITIONS MODES:	TC#02 (n mode)
TEST RESULTS:	PASS

Bandwidth: 20 MHz

	Lowest frequency 5745 MHz	Middle frequency 5785 MHz	Highest frequency 5825 MHz
Power spectral density (dBm)	-0.338	-0.539	-1.271
Measurement uncertainty (dB)	<±0.78		

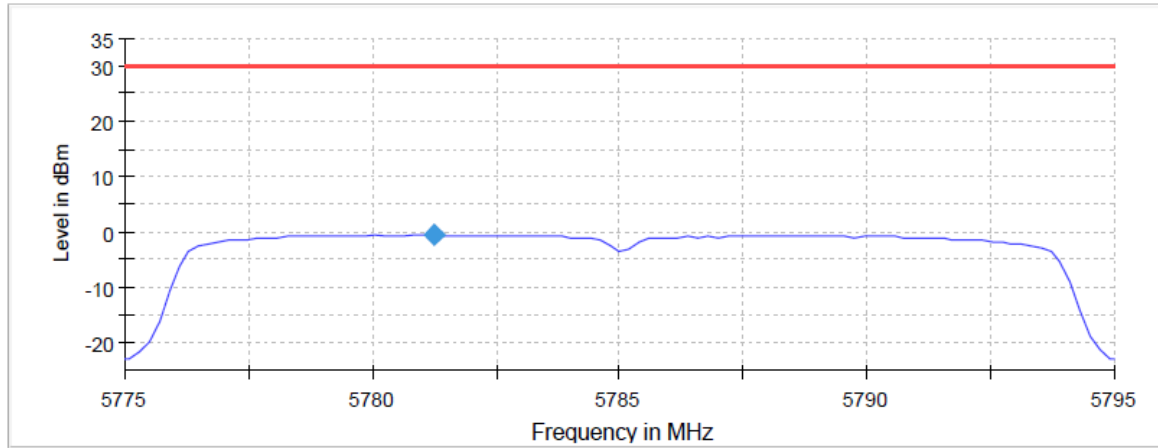
TEST RESULTS (Cont.):	
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Lowest Channel



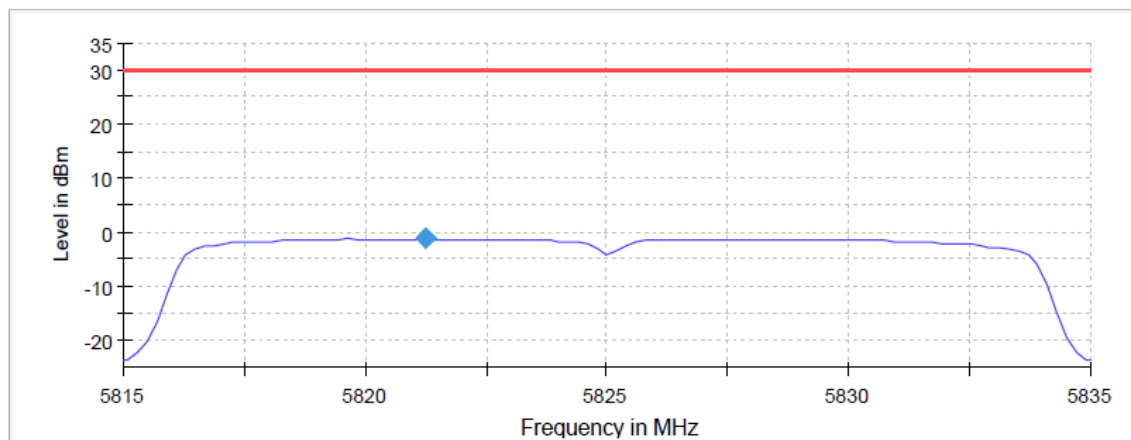
TEST RESULTS (Cont.):

Middle Channel



— Limit — Sum Level ◆ PSD

Highest Channel



— Limit — Sum Level ◆ PSD

TEST RESULTS (Cont.):

Measurement

Setting	Instrument Value	Instrument Value	Instrument Value
Start Frequency	5.73500 GHz	5.77500 GHz	5.81500 GHz
Stop Frequency	5.75500 GHz	5.79500 GHz	5.83500 GHz
Span	20.000 MHz	20.000 MHz	20.000 MHz
RBW	500.00 KHz	500.00 KHz	500.00 KHz
VBW	2.000 MHz	2.000 MHz	2.000 MHz
SweepPoints	101	101	101
Sweeptime	2.020 s	2.020 s	2.020 s
Reference Level	10.000 dBm	10.000 dBm	10.000 dBm
Attenuation	30.000 dB	30.000 dB	30.000 dB
Detector	RMS	RMS	RMS
SweepCount	29703	29703	29703
Filter	3 dB	3 dB	3 dB
Trace Mode	Max Hold	Max Hold	Max Hold
SweepType	FFT	FFT	FFT
Preamp	off	Off	Off
Stablemode	Trace	Trace	Trace
Stablevalue	0.30 dB	0.30 dB	0.30 dB
Run	4 / max. 15	4 / max. 15	4 / max. 15
Stable	3 / 3	3 / 3	3 / 3
Max Stable Difference	0.02 dB	0.02 dB	0.05 dB

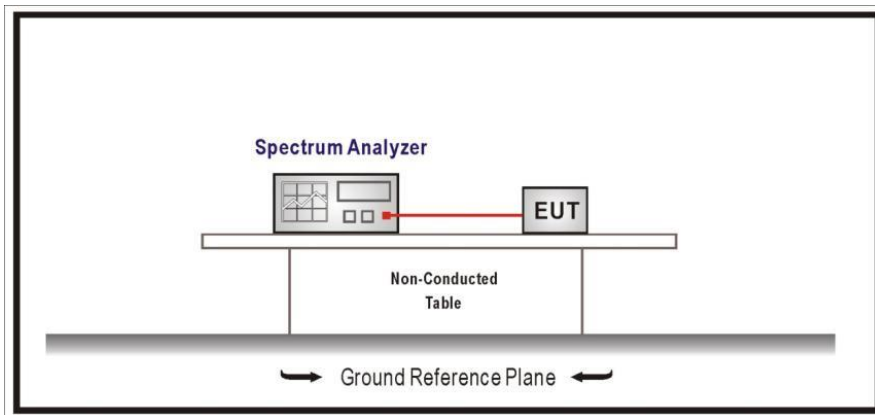
SECTION B.5: BAND-EDGE EMISSIONS COMPLIANCE (TRANSMITTER)

LIMITS:	Product standard:	Part 15 Subpart C §15.407 and RSS-247
	Test standard:	Part 15 Subpart C §15.407(b)(4) and RSS-247 6.2.4.2

LIMITS: For transmitters operating in the 5.725 – 5.850 GHz band:

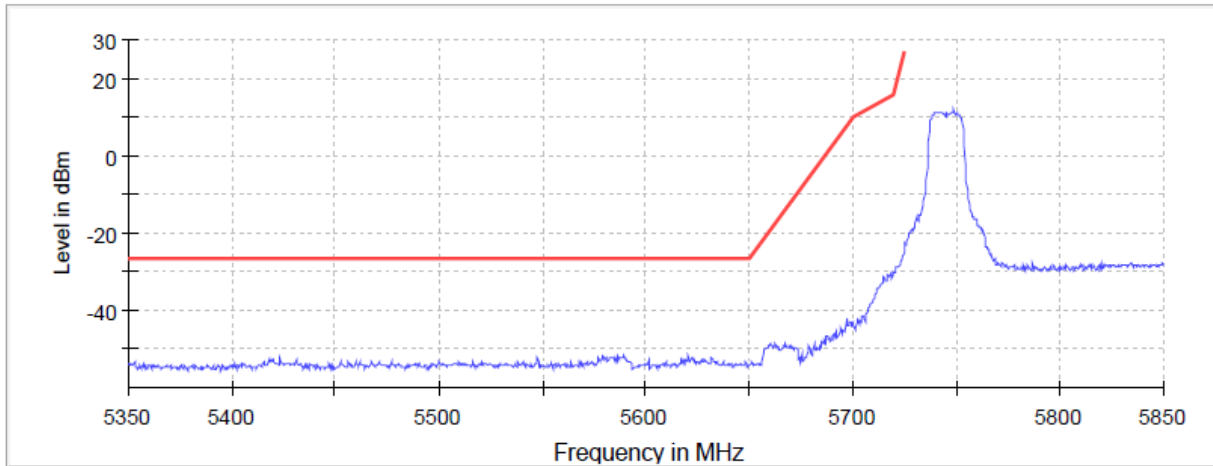
All emissions shall be limited to a level of $-27 \text{ dB}\mu\text{V}/\text{m}$ at 3m distance at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 25 dBm/MHz at the band edge.

TEST SETUP



TESTED SAMPLES:	S/01
TESTED CONDITIONS MODES:	TC#01 (a mode)
TEST RESULTS:	PASS

Low Channel

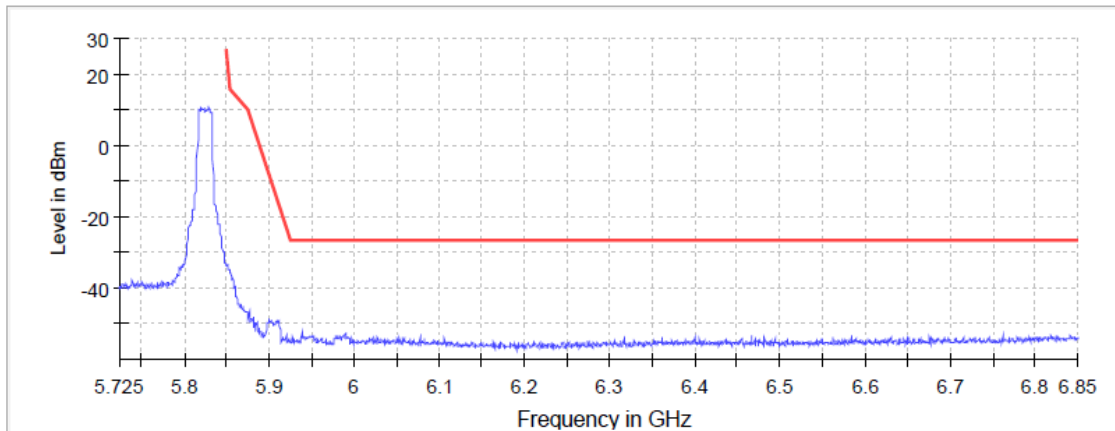


Measurement

Setting	Instrument Value	Instrument Value
Start Frequency	5.72500 GHz	5.35000 GHz
Stop Frequency	5.85000 GHz	5.72500 GHz
Span	125.000 MHz	375.000 MHz
RBW	1.000 MHz	1.000 MHz
VBW	3.000 MHz	3.000 MHz
SweepPoints	250	750
Sweeptime	25.000 ms	75.000 ms
Reference Level	10.000 dBm	-20.000 dBm
Attenuation	30.000 dB	0.000 dB
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	Channel	Channel
Trace Mode	Max Hold	Max Hold
SweepType	Sweep	Sweep
Preamp	off	Off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	12 / max. 150	7 / max. 150
Stable	3 / 3	3 / 3
Max Stable Difference	0.20 dB	0.14 dB

TEST RESULTS (Cont.):

High Channel



— Limit — Sum Level × Fail

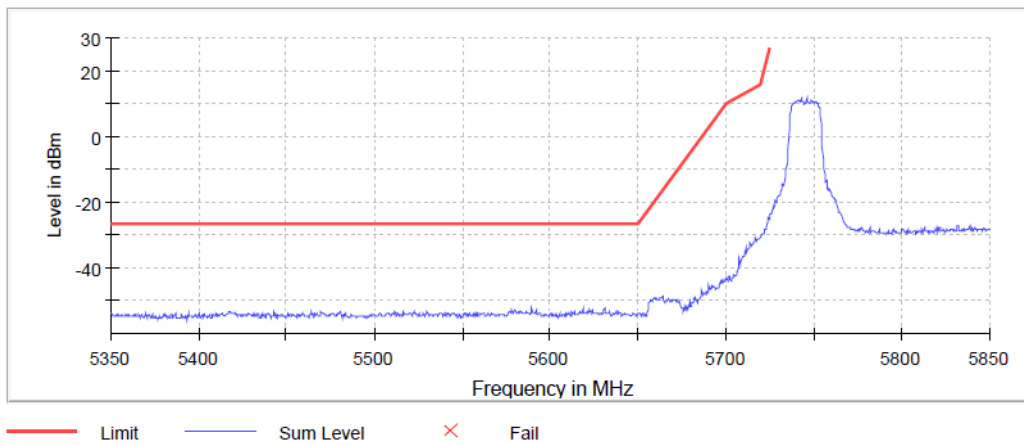
Measurement

Setting	Instrument Value	Instrument Value
Start Frequency	5.72500 GHz	5.85000 GHz
Stop Frequency	5.85000 GHz	6.85000 GHz
Span	125.000 MHz	1.000 GHz
RBW	1.000 MHz	1.000 MHz
VBW	3.000 MHz	3.000 MHz
SweepPoints	250	2000
Sweeptime	25.000 ms	200.000 ms
Reference Level	0.000 dBm	-20.000 dBm
Attenuation	20.000 dB	0.000 dB
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	Channel	Channel
Trace Mode	Max Hold	Max Hold
Sweeptype	Sweep	Sweep
Preamp	off	Off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	8 / max. 150	15 / max. 150
Stable	3 / 3	3 / 3
Max Stable Difference	0.45 dB	0.18 dB

TESTED SAMPLES:	S/01
TESTED CONDITIONS MODES:	TC#02 (n mode)
TEST RESULTS:	PASS

Bandwidth: 20 MHz

Lowest Channel

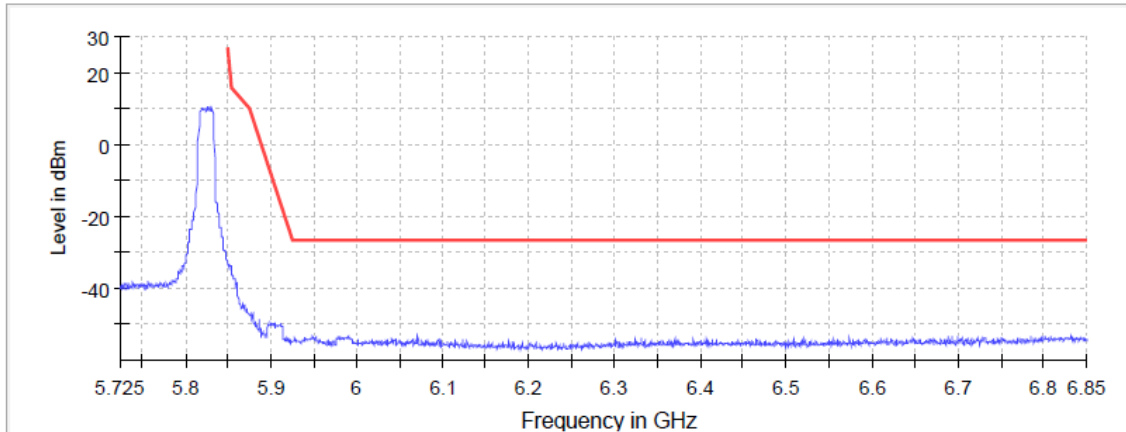


Measurement

Setting	Instrument Value	Instrument Value
Start Frequency	5.72500 GHz	5.35000 GHz
Stop Frequency	5.85000 GHz	5.72500 GHz
Span	125.000 MHz	375.000 MHz
RBW	1.000 MHz	1.000 MHz
VBW	3.000 MHz	3.000 MHz
SweepPoints	250	750
Sweeptime	25.000 ms	75.000 ms
Reference Level	10.000 dBm	-20.000 dBm
Attenuation	30.000 dB	0.000 dB
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	Channel	Channel
Trace Mode	Max Hold	Max Hold
Sweeptype	Sweep	Sweep
Preamp	off	Off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	16 / max. 150	7 / max. 150
Stable	3 / 3	3 / 3
Max Stable Difference	0.24 dB	0.14 dB

TEST SETUP (CONT.)

High Channel



— Limit — Sum Level × Fail

Measurement

Setting	Instrument Value	Instrument Value
Start Frequency	5.72500 GHz	5.85000 GHz
Stop Frequency	5.85000 GHz	6.85000 GHz
Span	125.000 MHz	1.000 GHz
RBW	1.000 MHz	1.000 MHz
VBW	3.000 MHz	3.000 MHz
SweepPoints	250	2000
Sweeptime	25.000 ms	200.000 ms
Reference Level	0.000 dBm	-20.000 dBm
Attenuation	20.000 dB	0.000 dB
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	Channel	Channel
Trace Mode	Max Hold	Max Hold
Sweeptype	Sweep	Sweep
Preamp	off	Off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	11 / max. 150	19 / max. 150
Stable	3 / 3	3 / 3
Max Stable Difference	0.11 dB	0.00 dB

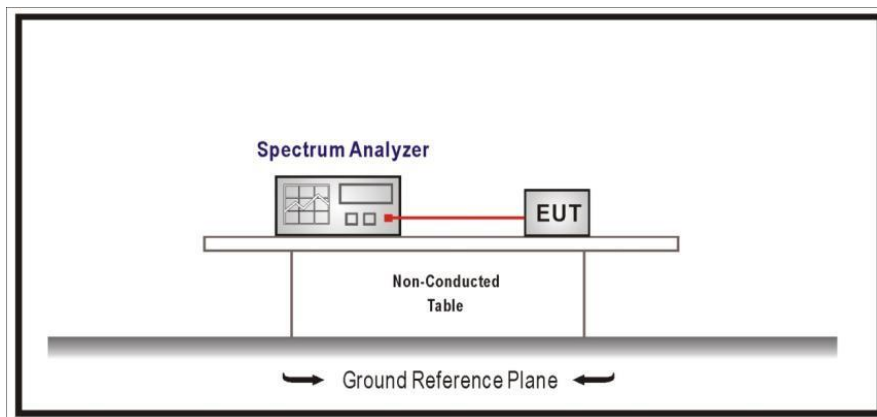
SECTION B.6: EMISSION LIMITATIONS CONDUCTED (TRANSMITTER)

LIMITS:	Product standard:	Part 15 Subpart C §15.407, 15.207 and RSS-Gen
	Test standard:	Part 15 Subpart C §15.407(b)(6), 15.207 and RSS-Gen 8.8

LIMITS

In any 100 kHz bandwidth outside the frequency band in which the digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, the attenuation required shall be 30 dB instead of 20 dB.

TEST SETUP

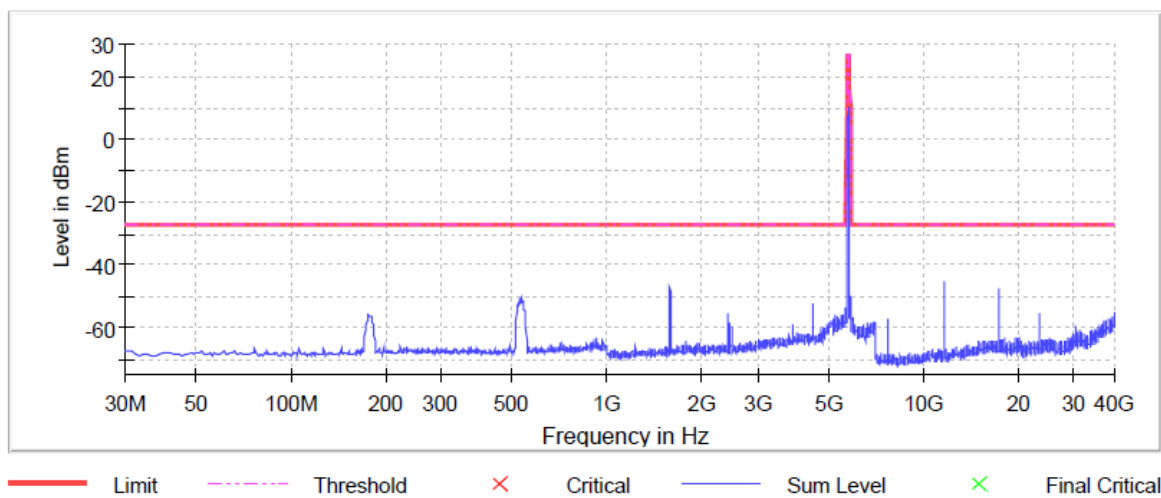


TESTED SAMPLES:	S/01
TESTED CONDITIONS MODES:	TC#01 (a mode)
TEST RESULTS:	PASS

Bandwidth: 20 MHz

Frequency: 5785 MHz

No spurious signal was detected at 20dB below the limit or above for the channel.



Measurement Settings

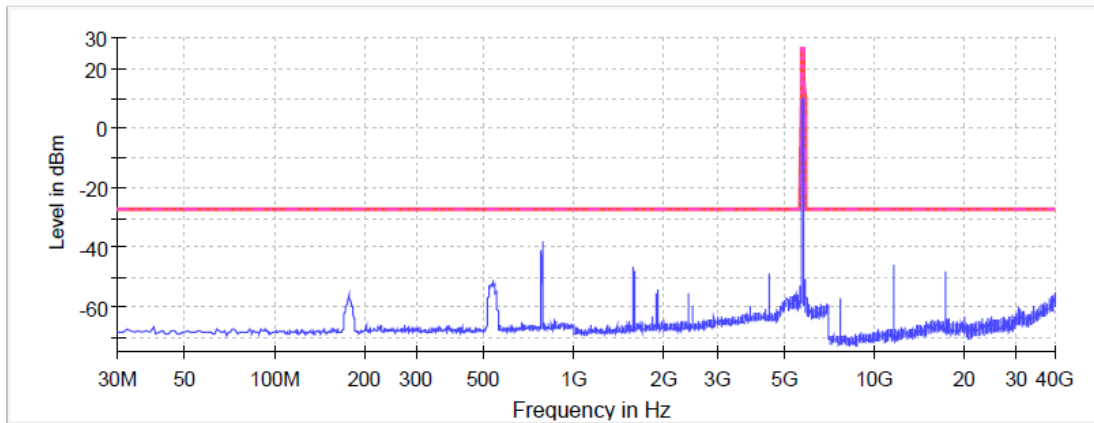
Setting	Instrument Value	Instrument Value
Start Frequency	30.000 MHz	30.000 MHz
Stop Frequency	40 GHz	40 GHz
RBW	1.000 MHz	1.000 MHz
VBW	3.000 MHz	3.000 MHz
Sweep Points	970	4150
Sweep time	194 ms	4.150 ms
Reference Level	-20.000 dBm	-20.000 dBm
Attenuation	10.000 dB	10.000 dB
Detector	MaxPeak	MaxPeak
Sweep Count	3	30
Filter	Channel	3 dB
Trace Mode	Max Hold	Max Hold
Sweep type	sweep	Sweep
Preamp	off	off
Stable mode	Trace	Trace
Stable value	0.50 dB	0.50 dB
Run	31 / max. 150	24 / max. 150
Stable	3 / 3	3 / 3
Max Stable Difference	0.23 dB	0.00 dB

TESTED SAMPLES:	S/01
TESTED CONDITIONS MODES:	TC#02 (n mode)
TEST RESULTS:	PASS

Bandwidth: 20 MHz

Frequency: 5785 MHz

No spurious signal was detected at 20dB below the limit or above for the channel.



— Limit - - - - - Threshold × Critical — Sum Level × Final Critical

Measurement Settings

Setting	Instrument Value	Instrument Value
Start Frequency	30.000 MHz	30.000 MHz
Stop Frequency	40 GHz	40 GHz
RBW	1.000 MHz	1.000 MHz
VBW	3.000 MHz	3.000 MHz
Sweep Points	970	4150
Sweep time	194 ms	4.150 ms
Reference Level	-20.000 dBm	-20.000 dBm
Attenuation	10.000 dB	10.000 dB
Detector	MaxPeak	MaxPeak
Sweep Count	3	30
Filter	Channel	3 dB
Trace Mode	Max Hold	Max Hold
Sweep type	sweep	Sweep
Preamp	off	off
Stable mode	Trace	Trace
Stable value	0.50 dB	0.50 dB
Run	24 / max. 150	44 / max. 150
Stable	3 / 3	3 / 3
Max Stable Difference	0.00 dB	0.00 dB

SECTION B.7: UNDESIRABLE RADIATED EMISSIONS (TRANSMITTER)

LIMITS:	Product standard:	Part 15 Subpart C §15.407 and RSS-247
	Test standard:	Part 15 Subpart C §15.407(b) (4)(6)(7) and RSS-247 6.2.4.2

LIMITS

For transmitters operating in the 5.725 – 5.850 GHz band: all emissions outside of the 5.725 – 5.850GHz band shall not exceed an EIRP of -27 dBm/MHz (68.23 dBμ V/m at 3m distance).

Radiated emissions which fall in the restricted bands, as defined in §15.205(a), must also comply with the radiated emission limits specified in §15.209(a) (see §15.205(c) / RSS-Gen):

Frequency Range (MHz)	Field strength (μV/m)	Field strength (dBμV/m)	Measurement distance (m)
0.009-0.490	2400/F(kHz)	-	300
0.490-1.705	24000/F(kHz)	-	30
1.705 - 30.0	30	-	30
30 - 88	100	40	3
88 - 216	150	43.5	3
216 - 960	200	46	3
960 - 25000	500	54	3

The emission limits shown in the above table are based on measurements employing CISPR quasi-peak detector except for the frequency bands 9-90 kHz, 110-490 kHz and above 1000 MHz. Radiated emission limits in these three bands are based on measurements employing an average detector.

For average radiated emission measurements above 1000 MHz, there is also a limit corresponding to 20 dB above the indicated values in the table is specified when measuring with peak detector function

TEST SETUP

All radiated tests were performed in a semi-anechoic chamber. The measurement antenna is situated at 3 m for the frequency range 30-1000 MHz (Bi-log antenna) and at 1m for the frequency range 1-40 GHz (1 GHz-18 GHz and 18 GHz-40 GHz Double ridge horn antennas).

For radiated emissions in the range 1-40 GHz that is performed at a distance closer than the specified distance, an inverse proportionality factor of 20 dB per decade is used to normalize the measured data for determining compliance.

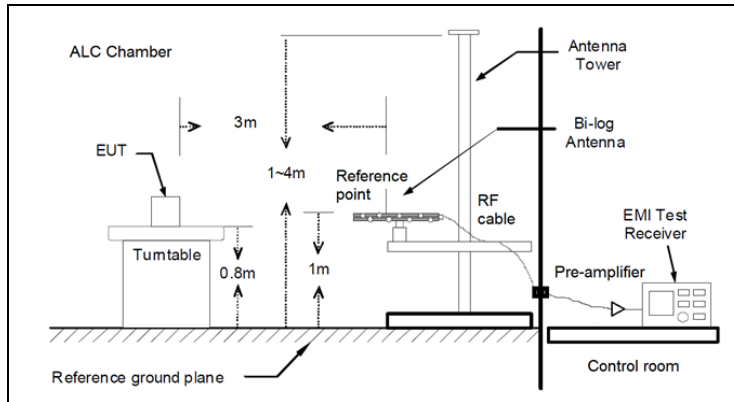
The equipment under test was set up on a non-conductive platform above the ground plane and the situation and orientation was varied to find the maximum radiated emission. It was also rotated 360° and the antenna height was varied from 1 to 4 meters to find the maximum radiated emission.

Measurements were made in both horizontal and vertical planes of polarization.

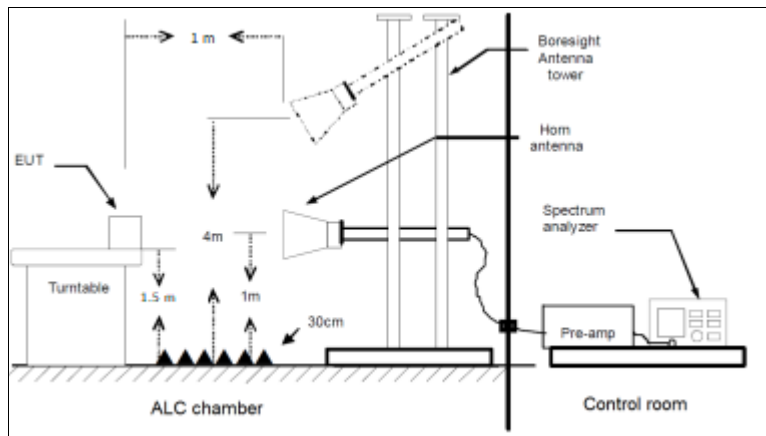
The field strength is calculated by adding correction factor to the measured level from the spectrum analyzer. This correction factor includes antenna factor, cable loss and pre-amplifiers gain.

TEST SETUP (CONT.)

Radiated measurements Setup $f < 1$ GHz



Radiated measurements setup $f > 1$ GHz



TESTED SAMPLES:	S/02
TESTED CONDITIONS MODES:	TC#01 (a mode 20 MHz)
TEST RESULTS:	PASS

Frequency range 30 MHz – 1000 MHz

The spurious emissions below 1 GHz do not depend on either the operating channel or the modulation mode selected in the EUT

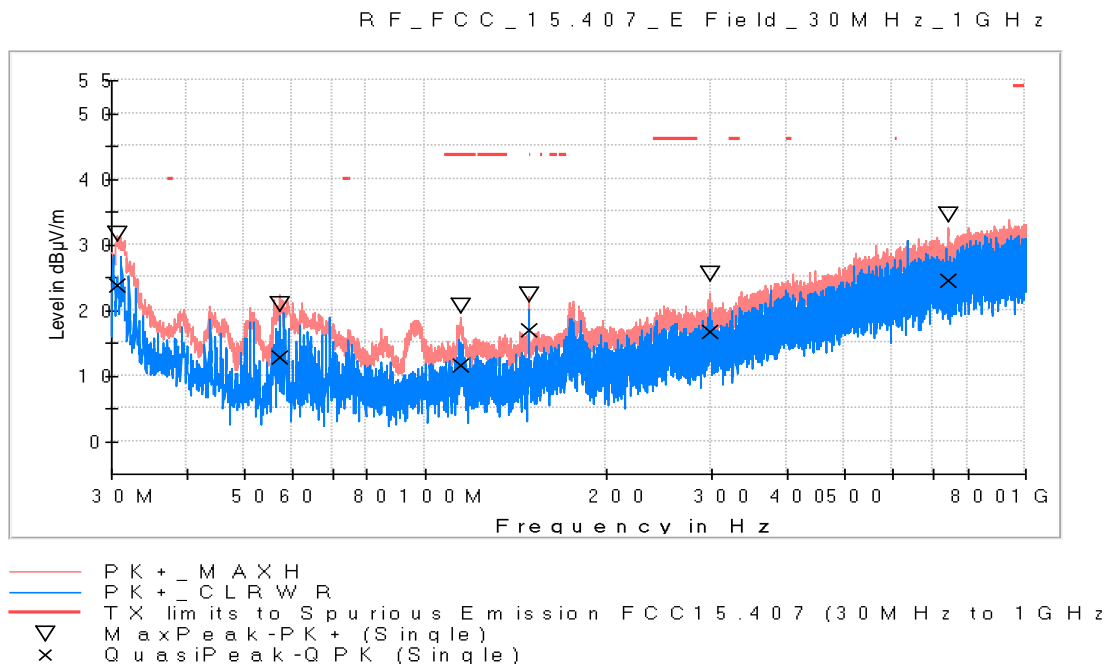
Frequency range 1 GHz – 40 GHz

The results and plots below show the maximum measured levels in the 1- 40 GHz range.

For 18 GHz – 40 GHz frequency range the radiated spurious signals detected were 20 dB below the reference limit or lower for low, middle and high channels.

TEST RESULTS (Cont.)	FREQUENCY RANGE 30 – 1000 MHz
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Middle Channel

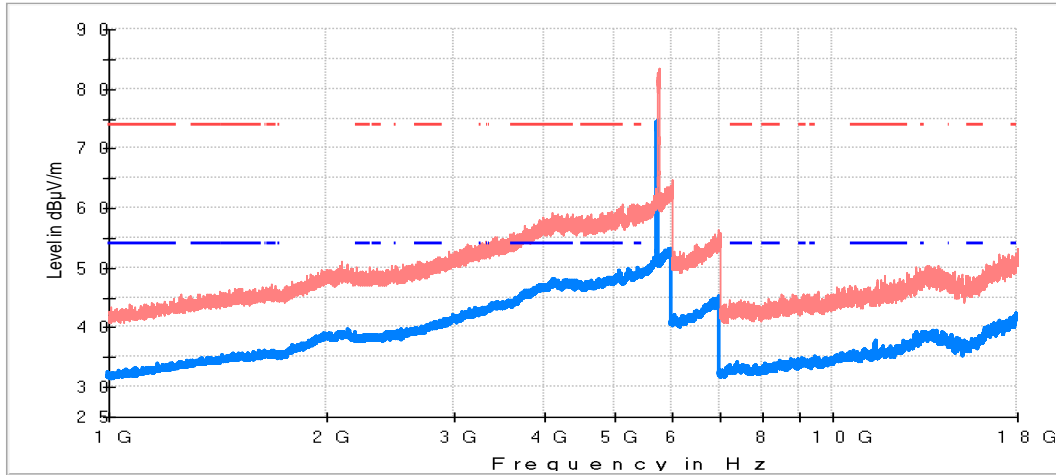


Frequency (MHz)	MaxPeak (dBµV/m)	QuasiPeak (dBµV/m)	Pol
30.630500	31.7	23.8	V
57.257000	20.9	12.8	H
114.244500	20.7	11.6	V
148.534000	22.4	17.0	V
297.041000	25.5	16.8	H
742.513500	34.5	24.5	V

TEST RESULTS (Cont.)

FREQUENCY RANGE 1 GHz – 18 GHz

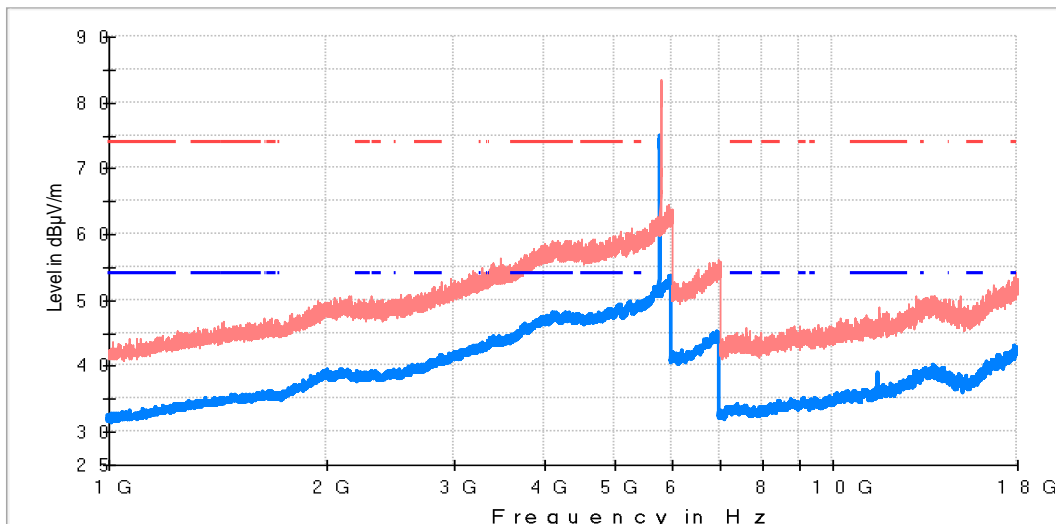
Lowest Channel



— AVG_MAXH
— PK+_MAXH
- - - TX limits to Spurious Emission FCC15.407 (1 GHz to 40 GHz)
- - - TX limits to Spurious Emission FCC15.407 (1 GHz to 40 GHz)

Frequency (MHz)	PK+_MAXH (dBµV/m)	AVG_MAXH (dBµV/m)	Pol	Comment
5747.727273	82.3	74.6	V	Fundamental
11492.727273	45.6	37.6	V	

Middle Channel



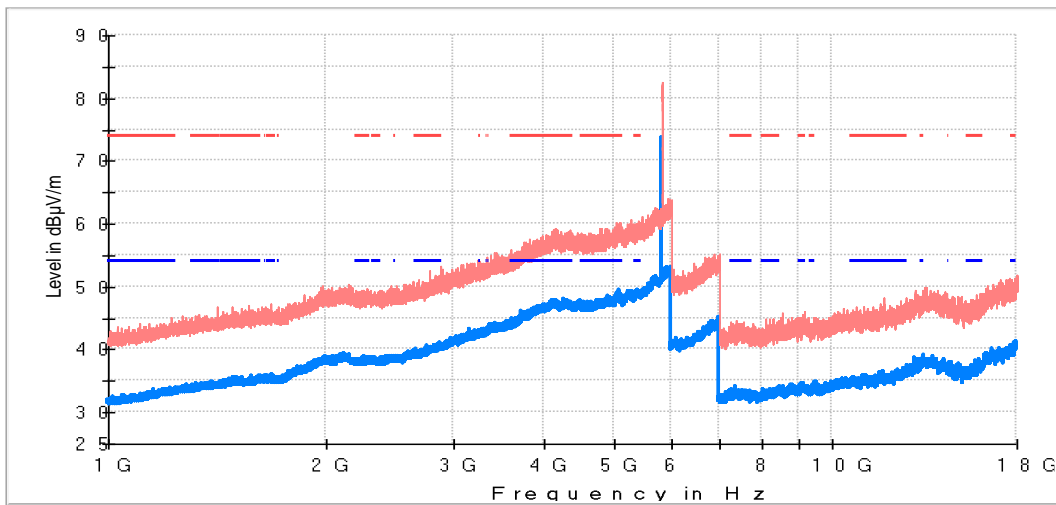
— AVG_MAXH
— PK+_MAXH
- - - TX limits to Spurious Emission FCC15.407 (1 GHz to 40 GHz)
- - - TX limits to Spurious Emission FCC15.407 (1 GHz to 40 GHz)

TEST RESULTS (Cont.)

FREQUENCY RANGE 1 GHz – 18 GHz

Frequency (MHz)	PK+_MAXH (dBµV/m)	AVG_MAXH (dBµV/m)	Pol	Comment
5786.136364	81.6	74.8	V	Fundamental
11574.545455	47.3	39.0	V	

Highest Channel



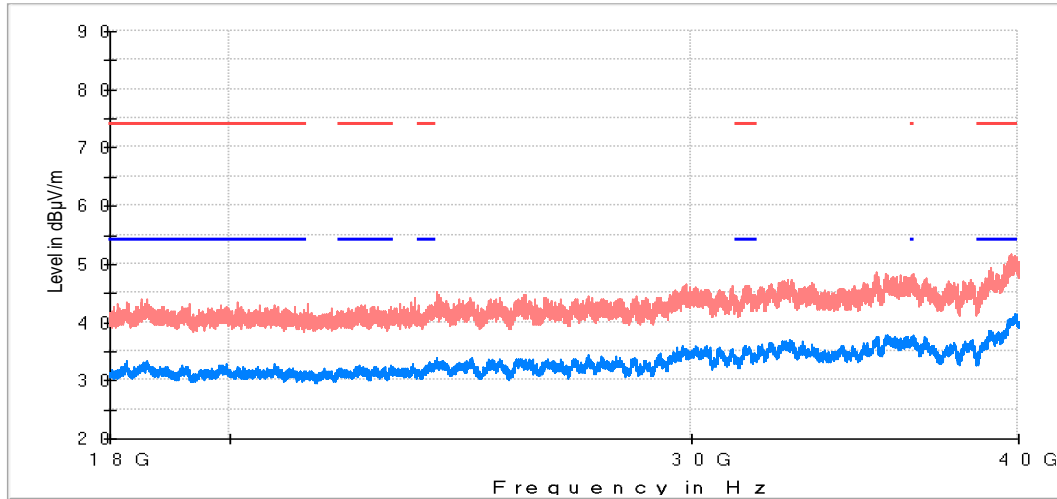
— AVG_MAXH
— PK+_MAXH
- - - TX limits to Spurious Emission FCC15.407 (1 GHz to 40 GHz)
- - - TX limits to Spurious Emission FCC15.407 (1 GHz to 40 GHz)

Frequency (MHz)	PK+_MAXH (dBµV/m)	AVG_MAXH (dBµV/m)	Pol	Comment
5828.863636	80.9	73.7	V	Fundamental
13379.454546	48.3	39.2	H	

TEST RESULTS (Cont.)

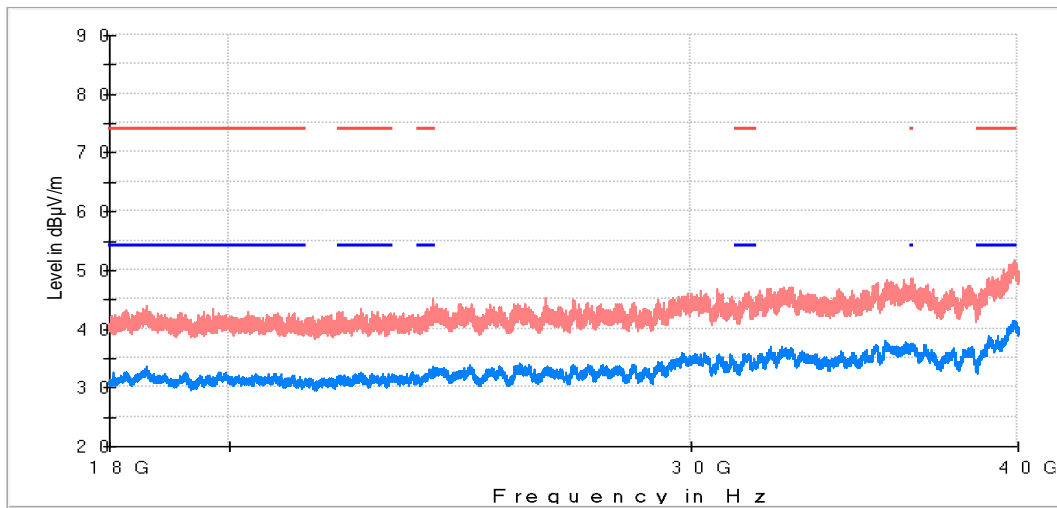
FREQUENCY RANGE 18 – 40 GHz

Lowest Channel



— AVG _ M A X H
 — P K + _ M A X H
 — T X lim its to S p u r i o u s E m i s s i o n F C C 1 5 . 4 0 7 (1 G H z t o 4 0 G H z)
 — T X lim its to S p u r i o u s E m i s s i o n F C C 1 5 . 4 0 7 (1 G H z t o 4 0 G H z)

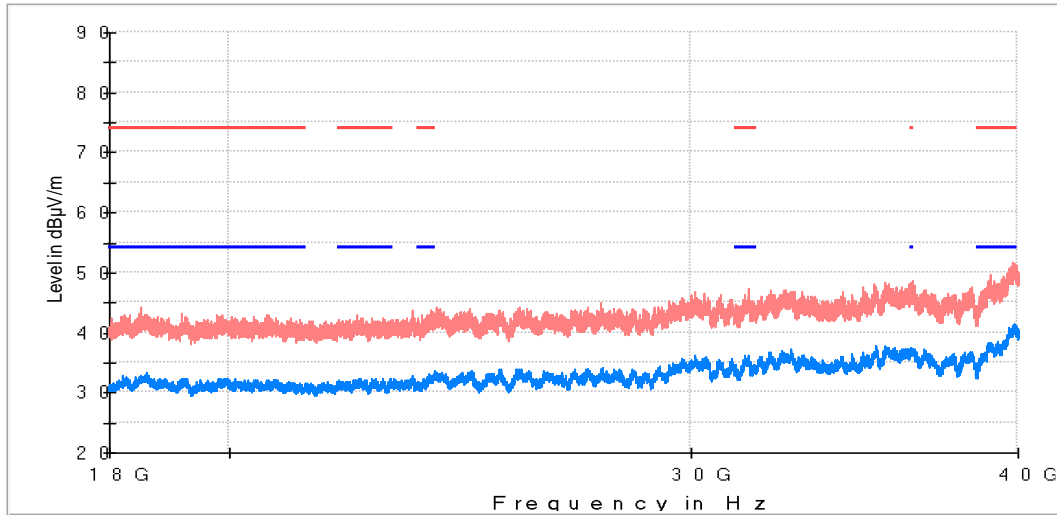
Middle Channel



— AVG _ M A X H
 — P K + _ M A X H
 — T X lim its to S p u r i o u s E m i s s i o n F C C 1 5 . 4 0 7 (1 G H z t o 4 0 G H z)
 — T X lim its to S p u r i o u s E m i s s i o n F C C 1 5 . 4 0 7 (1 G H z t o 4 0 G H z)

TEST RESULTS (Cont.)	FREQUENCY RANGE 18 – 40 GHz
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Highest Channel



— A V G _ M A X H
— P K + _ M A X H
- - - T X lim its to S p u r i o u s E m i s s i o n F C C 1 5 . 4 0 7 (1 G H z t o 4 0 G H z)
- - - T X lim its to S p u r i o u s E m i s s i o n F C C 1 5 . 4 0 7 (1 G H z t o 4 0 G H z)

TESTED SAMPLES:	S/02
TESTED CONDITIONS MODES:	TC#02 (n mode 20 MHz)
TEST RESULTS:	PASS

Frequency range 30 MHz – 1000 MHz

The spurious emissions below 1 GHz do not depend on either the operating channel or the modulation mode selected in the EUT

Frequency range 1 GHz – 40 GHz

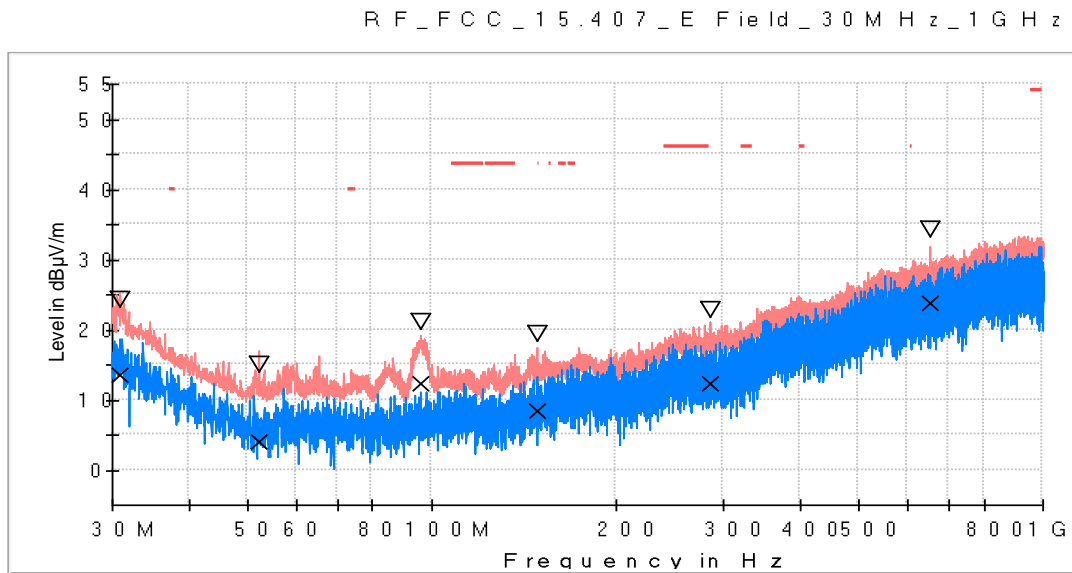
The results and plots below show the maximum measured levels in the 1- 40 GHz range.

For 18 GHz – 40 GHz frequency range the radiated spurious signals detected were 20 dB below the reference limit or lower for low, middle and high channels.

TEST RESULTS (Cont.)

FREQUENCY RANGE 30 – 1000 MHz

Middle Channel



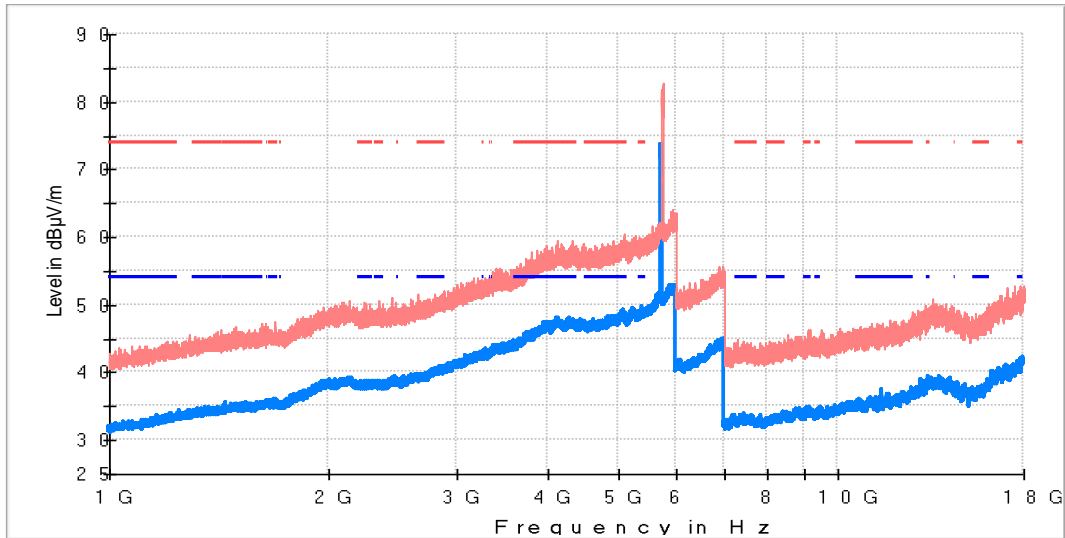
- PK+_MAXH
- PK+_CLRWR
- TX limits to Spurious Emission FCC15.407 (30 MHz to 1 GHz)
- ▽ MaxPeak-PK+ (Single)
- × QuasiPeak-QPK (Single)

Frequency (MHz)	MaxPeak (dBµV/m)	QuasiPeak (dBµV/m)	Pol
30.970000	24.2	13.5	V
52.164500	15.1	4.1	V
96.105500	21.2	12.2	V
148.485500	19.4	8.3	V
285.352500	22.8	12.4	V
652.497500	34.3	23.9	V

TEST RESULTS (Cont.)

FREQUENCY RANGE 1 GHz – 18 GHz

Lowest Channel



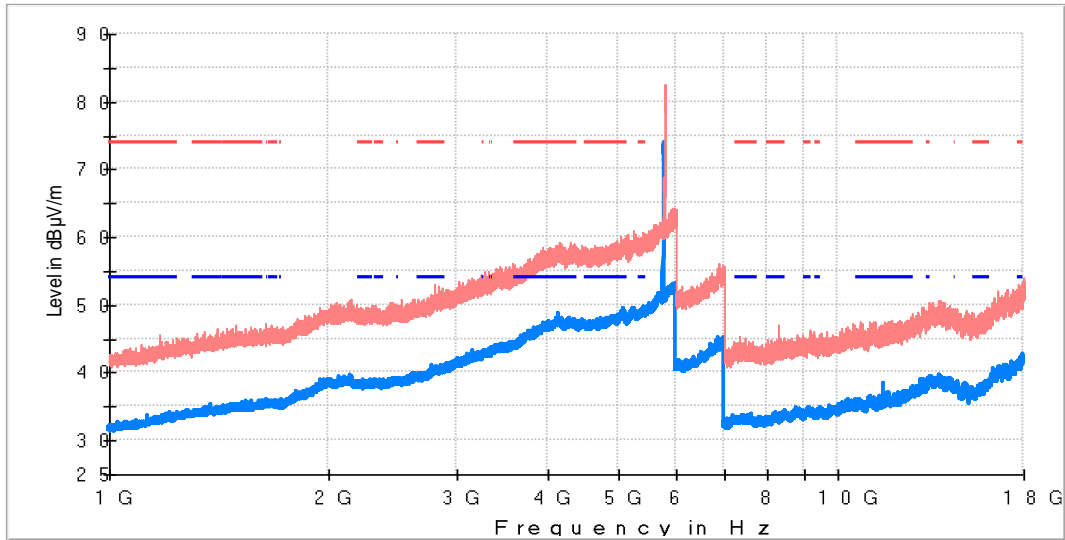
— A V G _ M A X H
— P K + _ M A X H
- - - T X l i m i t s t o S p u r i o u s E m i s s i o n F C C 1 5 . 4 0 7 (1 G H z t o 4 0 G H z)
- - - T X l i m i t s t o S p u r i o u s E m i s s i o n F C C 1 5 . 4 0 7 (1 G H z t o 4 0 G H z)

Frequency (MHz)	PK+_MAXH (dBµV/m)	AVG_MAXH (dBµV/m)	Pol	Comment
5749.318182	81.7	73.6	V	Fundamental
11490.000000	46.8	37.4	V	

TEST RESULTS (Cont.)

FREQUENCY RANGE 1 GHz – 18 GHz

Middle Channel



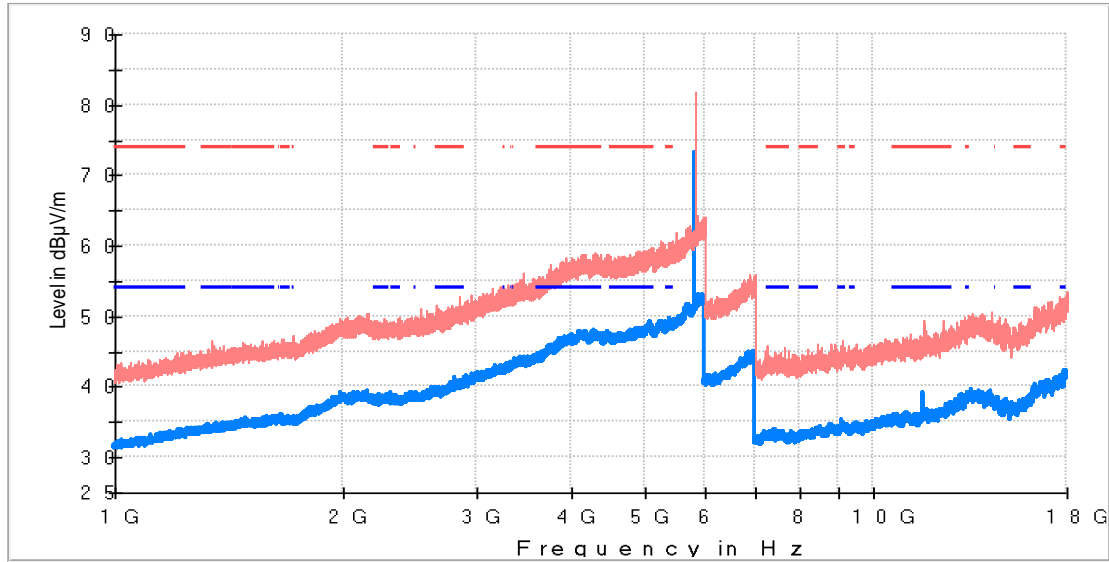
— A V G _ M A X H
— P K + _ M A X H
- - - T X l i m i t s t o S p u r i o u s E m i s s i o n F C C 1 5 . 4 0 7 (1 G H z t o 4 0 G H z)
- - - T X l i m i t s t o S p u r i o u s E m i s s i o n F C C 1 5 . 4 0 7 (1 G H z t o 4 0 G H z)

Frequency (MHz)	PK+_MAXH (dBµV/m)	AVG_MAXH (dBµV/m)	Pol	Comment
5780.227273	80.4	73.8	V	Fundamental
17978.181818	52.1	42.8	V	

TEST RESULTS (Cont.)

FREQUENCY RANGE 1 GHz – 18 GHz

Highest Channel



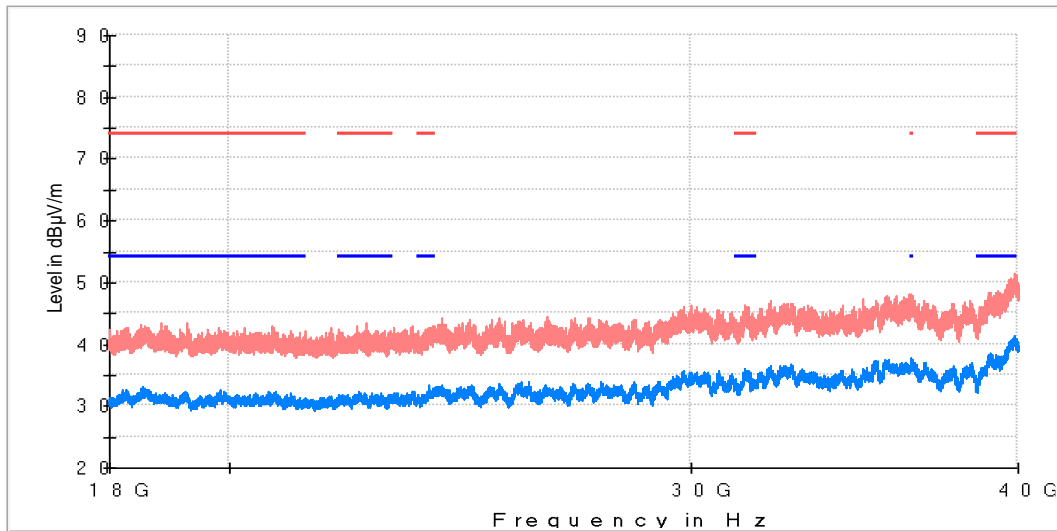
- AVG_MAXH
- PK+_MAXH
- TX limits to Spurious Emission FCC15.407 (1 GHz to 40 GHz)
- TX limits to Spurious Emission FCC15.407 (1 GHz to 40 GHz)

Frequency (MHz)	PK+_MAXH (dBµV/m)	AVG_MAXH (dBµV/m)	Pol	Comment
5822.500000	80.5	73.1	V	Fundamental
11649.818182	48.4	39.2	V	

TEST RESULTS (Cont.)

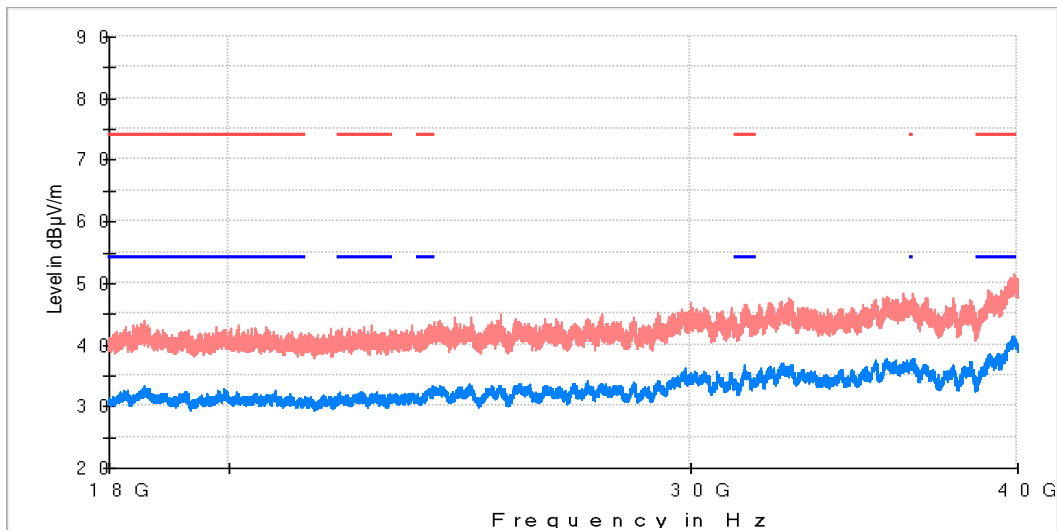
FREQUENCY RANGE 18 – 40 GHz

Lowest Channel



— A V G _ M A X H
— P K + _ M A X H
— T X lim its to S purious E m ission F C C 1 5 . 4 0 7 (1 G H z to 4 0 G H z)
— T X lim its to S purious E m ission F C C 1 5 . 4 0 7 (1 G H z to 4 0 G H z)

Middle Channel

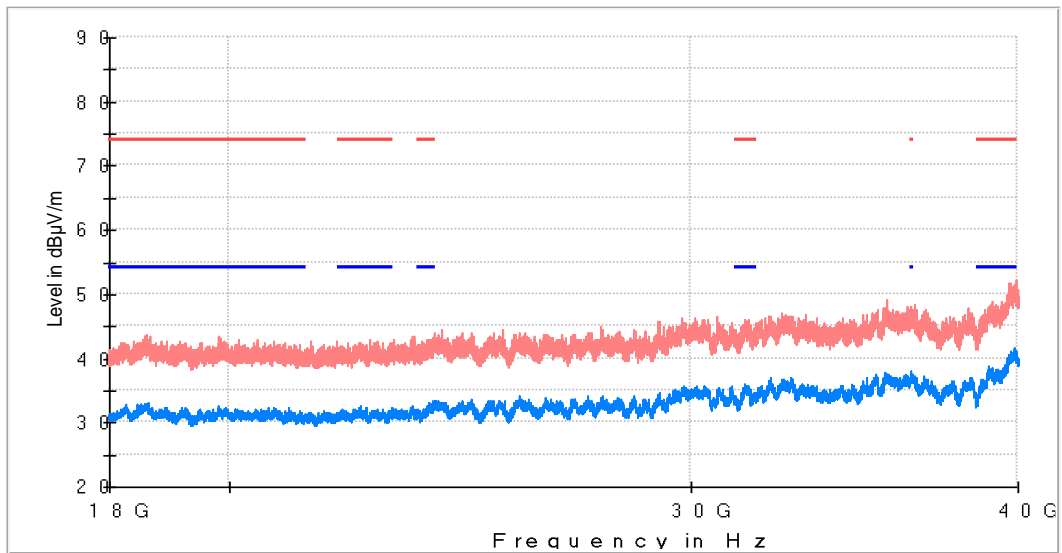


— A V G _ M A X H
— P K + _ M A X H
— T X lim its to S purious E m ission F C C 1 5 . 4 0 7 (1 G H z to 4 0 G H z)
— T X lim its to S purious E m ission F C C 1 5 . 4 0 7 (1 G H z to 4 0 G H z)

TEST RESULTS (Cont.)

FREQUENCY RANGE 18 – 40 GHz

Highest Channel



- AVG_MAXH
- PK_MAXH
- TX limits to Spurious Emission FCC15.407 (1 GHz to 40 GHz)
- TX limits to Spurious Emission FCC15.407 (1 GHz to 40 GHz)