CERTIFICATE #3478.01

TEST REPORT

EUT Description	**WLAN and BT, 2x2 PCIe M.2 2230 adapter card**
Brand Name	**Intel® Wireless-AC 9560**
Model Name	**9560NGW**
FCC ID IC ID	**PD99560NG** **1000M-9560NG**
Date of Test Start/End	**2017-06-02 /2017-06-09**
Features	**802.11 a/b/g/n/ac Wireless LAN + Bluetooth 5** (see section 5)

Applicant	**Intel Mobile Communications**
Address	**100 Center Point Circle, Suite 200** **Columbia, South Carolina 29210** **USA**
Contact Person	**Steven Hackett**
Telephone/Fax/ Email	**steven.c.hackett@intel.com**

Reference Standards	**FCC CFR Title 47 Part 15 C** **RSS-247 issue 2, RSS-Gen issue 4** (see section 1)

Test Report identification	**170524-02.TR05**
Revision Control	**Rev. 00** **This test report revision replaces any previous test report revision** (see section 8)

The test results relate only to the samples tested.
The test report shall not be reproduced in full, without written approval of the laboratory.

Issued by

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Gregory ROUSTAN
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1. Standards, reference documents and applicable test methods

1. FCC 47 CFR part 15 - Subpart C – §15.247 Operation within the bands 902-928 MHz, 2400-2483.5 MHz, and 5725-5850 MHz.
2. FCC 47 CFR part 15 - Subpart C – §15.209 Radiated emission limits; general requirements.
3. ANSI C63.10-2013 - American National Standard of Procedures for Compliance Testing of Unlicensed Wireless Devices
4. RSS-247 Issue 2 - Digital Transmission Systems (DTSs), Frequency Hopping Systems (FHSs) and Licence-Exempt Local Area Network (LE-LAN) Devices
5. RSS-Gen Issue 4 - General Requirements for Compliance of Radio Apparatus.
6. ANSI C63.10-2013 American National Standard of Procedures for Compliance Testing of Unlicensed Wireless Devices.

2. General conditions, competences and guarantees

- ✓ Intel Mobile Communications France SAS Wireless RF Lab (Intel WRF Lab) is an ISO/IEC 17025:2005 testing laboratory accredited by the American Association for Laboratory Accreditation (A2LA) with the certificate number 3478.01.
- ✓ Intel Mobile Communications France SAS Wireless RF Lab (Intel WRF Lab) is an Accredited Test Firm recognized by the FCC, with Designation Number FR0011.
- ✓ Intel Mobile Communications France SAS Wireless RF Lab (Intel WRF Lab) is a Registered Test Site listed by IC, with IC Assigned Code 1000Y.
- ✓ Intel WRF Lab only provides testing services and is committed to providing reliable, unbiased test results and interpretations.
- ✓ Intel WRF Lab 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.
- ✓ Intel WRF Lab has developed calibration and proficiency programs for its measurement equipment to ensure correlated and reliable results to its customers.
- ✓ This report is only referred to the item that has undergone the test.
- ✓ This report does not imply an approval of the product by the Certification Bodies or competent Authorities.

3. Environmental Conditions

- ✓ At the site where the measurements were performed the following limits were not exceeded during the tests:

Temperature	23 ºC ± 2 ºC
Humidity	55 % ± 11 %

4. Test samples

Sample	Control #	Description	Model	Serial #	Date of receipt	Note
#01	170524-02.S01	Module	9560NGW	WFM 3413E8901EAB	2017-05-30	Used for conducted tests
	170524-02.S11	Extender Board	PCB00609_01	6092416-453	2017-05-30	
	170000-01.S03	Laptop	Latitude E5470	6Q9LMC2	2017-04-25	
#02	170524-02.S02	Module	9560NGW	WFM 3413E88FF066	2017-05-30	Used for radiated tests
	170220-02.S03	Extender Board	PCB00609_01	6092416-446	2017-02-20	
	170000-01.S13	Laptop	Latitude E5470	FT6LMC2	2017-05-30	
#03	170524-02.S06	Module	9560NGW	WFM 3413E890192E	2017-05-30	
	170524-02.S16	Extender Board	PCB00609_01	6092416-451	2017-06-15	
	161129-02.S01	Laptop	Latitude 6430U	25PVLX1	2016-06-12	

5. EUT Features

Brand Name	Intel® Wireless-AC 9560
Model Name	9560NGW
FCC/IC ID	PD99560NG
IC ID	1000M-9560NG
Software Version	10.1720.0-05195
Driver Version	99.0.28.6
Prototype / Production	Production
Supported Radios	802.11b/g/n 2.4GHz (2400.0 – 2483.5 MHz) 802.11a/n/ac 5.2GHz (5150.0 – 5350.0 MHz) 5.6GHz (5470.0 – 5725.0 MHz) 5.8GHz (5725.0 – 5850.0 MHz) Bluetooth 5 2.4GHz (2400.0 – 2483.5 MHz)
Antenna Information	**Main WLAN:** Slot antenna. WiFi 2.4GHz & 5GHz (DRTU CHAIN B) **Aux WLAN:** Slot antenna. WiFi 2.4GHz & 5GHz and BT (DRTU CHAIN A)
Additional Information	

6. Remarks and comments

N/A

7. Test Verdicts summary

7.1. BT Basic Data Rate / Enhanced Data Rate

FCC part	RSS part	Test name	Verdict
15.247 (a) (1)	RSS-247 Clause 5.1 (a) and (b)	20dB Bandwidth and Carrier frequency separation	P
15.247 (a) (1) (iii)	RSS-247 Clause 5.1 (d)	Number of hopping channels	P
15.247 (a) (1) (iii)	RSS-247 Clause 5.1 (d)	Time of Occupancy (Dwell Time)	P
15.247 (b) (1)	RSS-247 Clause 5.4 (b)	Maximum Peak Output Power and antenna gain	P
15.247 (d)	RSS-247 Clause 5.5	Out-of-band Emissions (conducted)	P
15.247 (d) 15.209	RSS-247 Clause 5.5 RSS GEN Clause 8.9	Out-of-band Emissions (radiated)	P

8. Document Revision History

Revision #	Date	Modified by	Revision Details
Rev. 00	2017-07-07	B.Lavenant	First Issue

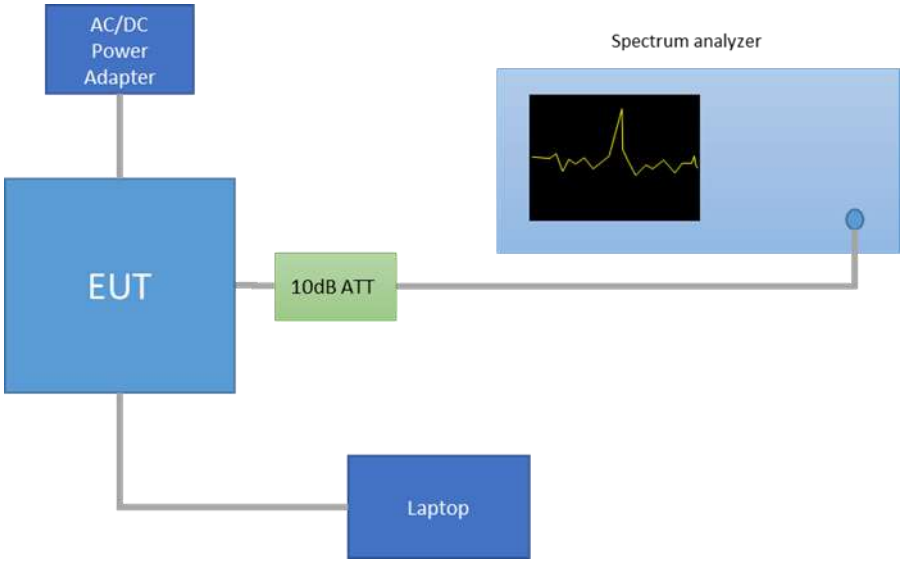
Annex A. Test & System Description

A.1 Measurement System

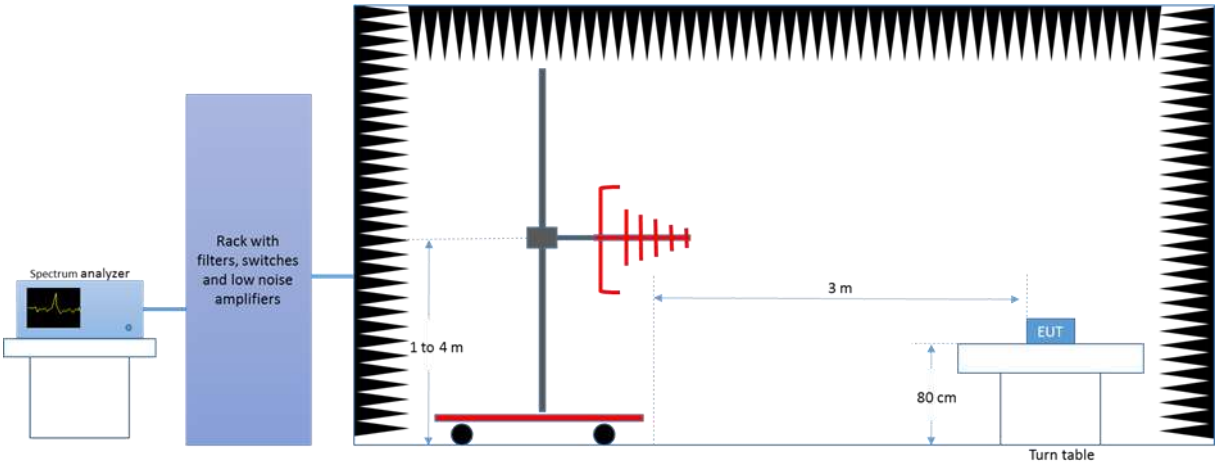
Measurements were performed using the following setups.

The DUT was installed in a test fixture and this test fixture is connected to a laptop computer and AC/DC power adapter. The laptop computer was used to configure the EUT to continuously transmit at a specified output power using all different modes and modulation schemes.

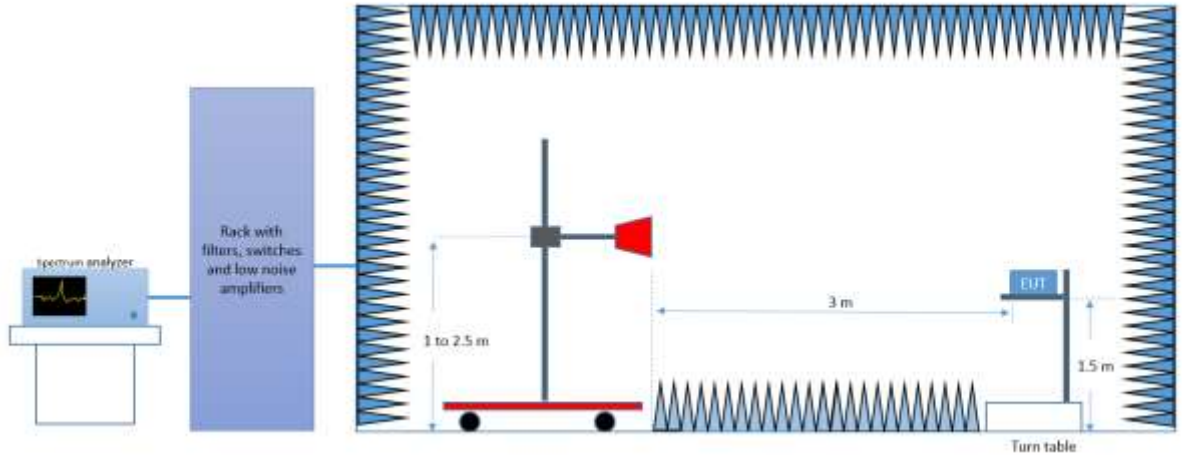
Conducted Setup



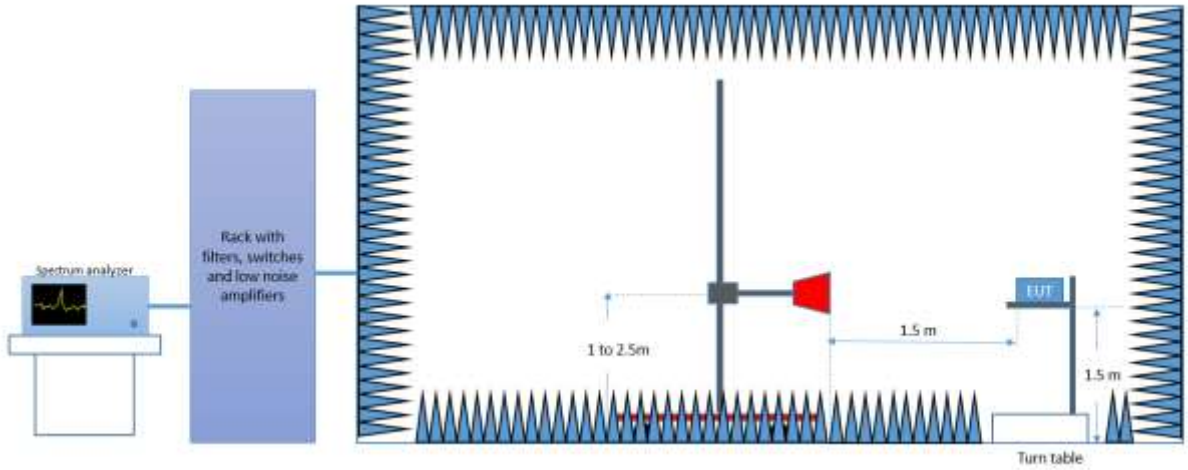
Radiated Setup < 1GHz



Radiated Setup 1 GHz – 18 GHz



Radiated Setup 18 GHz – 26.5 GHz



A.2 Test Equipment List

Conducted Setup

ID#	Device	Type/Model	Serial #	Manufacturer	Cal. Date	Cal. Due Date
0315	Spectrum analyzer	FSV30	103307	Rohde & Schwarz	2017-01-30	2019-01-30

Radiated Setup

ID#	Device	Type/Model	Serial #	Manufacturer	Cal. Date	Cal. Due Date
0420	Spectrum analyzer	FSV40	101556	Rohde & Schwarz	2016-04-15	2018-04-15
0133	Spectrum analyzer	FSV40	101358	Rohde & Schwarz	2016-04-15	2018-04-15
0137	Log antenna 30 MHz – 1 GHz	3142E	00156946	ETS Lindgren	2015-12-11	2017-12-11
0138	Horn antenna 1 GHz – 6.4 GHz	3117	00152266	ETS Lindgren	2016-03-14	2018-03-14
0141	Double Ridged Horn Antenna 1 GHz – 18 GHz	3117	00157736	ETS Lindgren	2016-04-13	2018-04-13
0409	PreAmplifier	3117-PA	00157993	ETS Lindgren	N/A	N/A
0334	Double Ridged Horn Antenna with Pre-amplifier 18 GHz - 40 GHz	3116C-PA	00196308	ETS Lindgren	2015-07-15	2017-07-15
0135	Semi Anechoic chamber	FACT 3	5720	ETS Lindgren	2016-04-28	2018-04-28
0337	Full Anechoic chamber	RFD_FA_100	5996	ETS Lindgren	2016-04-28	2018-04-28
0329	Measurement Software	EMC32	100401	Rohde & Schwarz	N/A	N/A
0530	Measurement Software	EMC32	100623	Rohde & Schwarz	N/A	N/A
0296	Power Supply	6673A	MY41000318	Agilent	N/A	N/A
0346	Multimeter	34401A	US36054685	HP	2016-02-04	2018-02-04
0014	Power Sensor	NRP-Z57	101280	Rohde & Schwarz	2017-04-25	2019-04-25

A.3 Measurement Uncertainty Evaluation

The system uncertainty evaluation is shown in the below table:

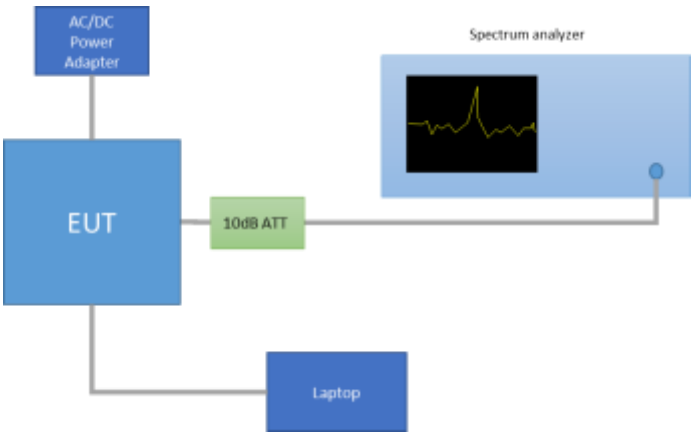
Measurement type	Uncertainty [±dB]
Conducted Power	±1.0
Conducted Spurious Emission	±2.9
Radiated tests <1GHz	±3.8
Radiated tests 1GHz - 40 GHz	±4.7

Annex B. Test Results

B.1 20dB Bandwidth and carrier frequency separation

Test limits

FCC part	RSS part	Limits
15.247 (a) (1)	RSS-247 Clause 5.1 (a) and (b)	Frequency hopping systems shall have hopping channel carrier frequencies separated by a minimum of 25 kHz or the 20 dB bandwidth of the hopping channel, whichever is greater. Alternatively, frequency hopping systems operating in the 2400-2483.5 MHz band may have hopping channel carrier frequencies that are separated by 25 kHz or two-thirds of the 20 dB bandwidth of the hopping channel, whichever is greater, provided the systems operate with an output power no greater than 125 mW.



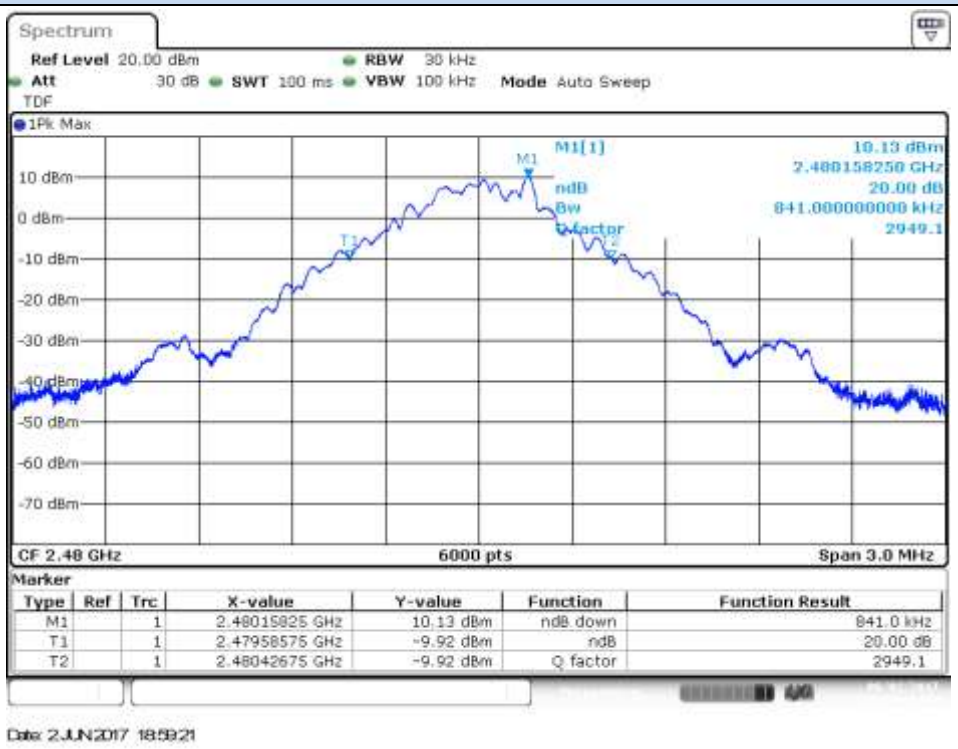
Results tables:

Mode	Channel Number	Frequency [MHz]	20dB BW [MHz]	Freq. Separation [kHz]
Basic Rate GFSK	0	2402	0.837	1000
	39	2441	0.839	
	78	2480	0.841	
EDR π/4-DQPSK	0	2402	1.416	1000
	39	2441	1.413	
	78	2480	1.399	
EDR 8-DPSK	0	2402	1.411	1000
	39	2441	1.415	
	78	2480	1.430	

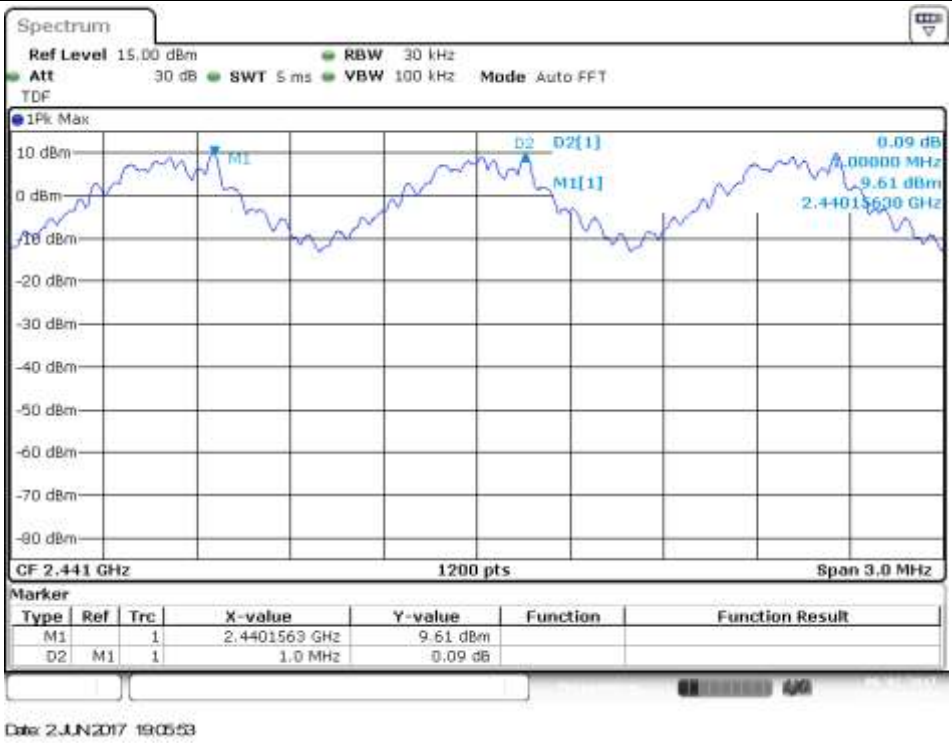
Results screenshot

Basic Rate - GFSK

20dB BW – CH78

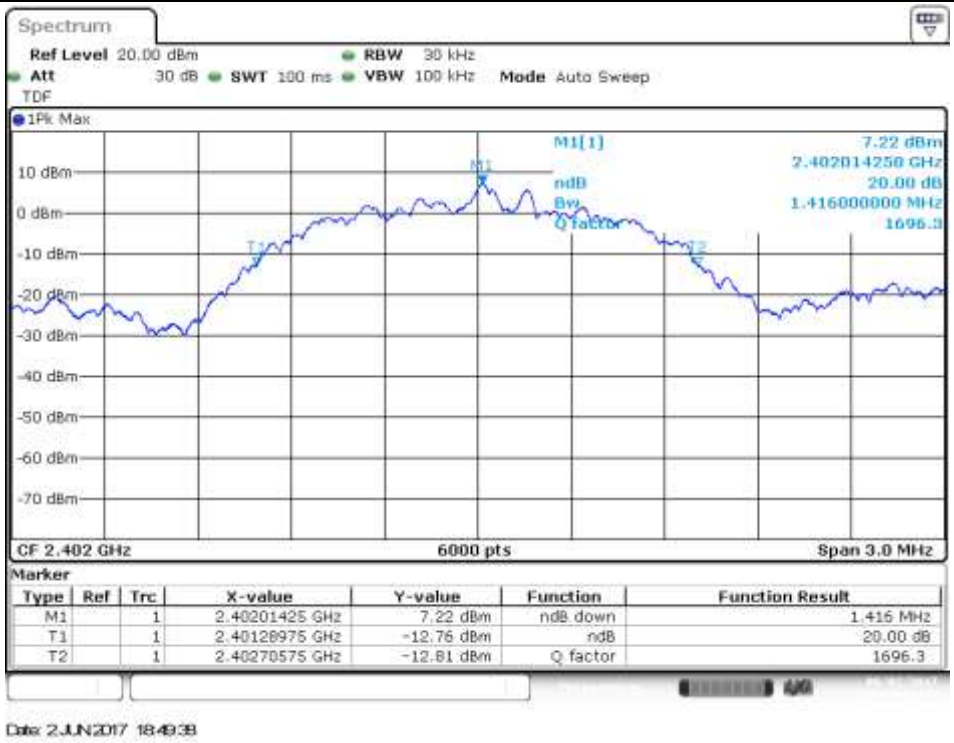


Freq. Separation

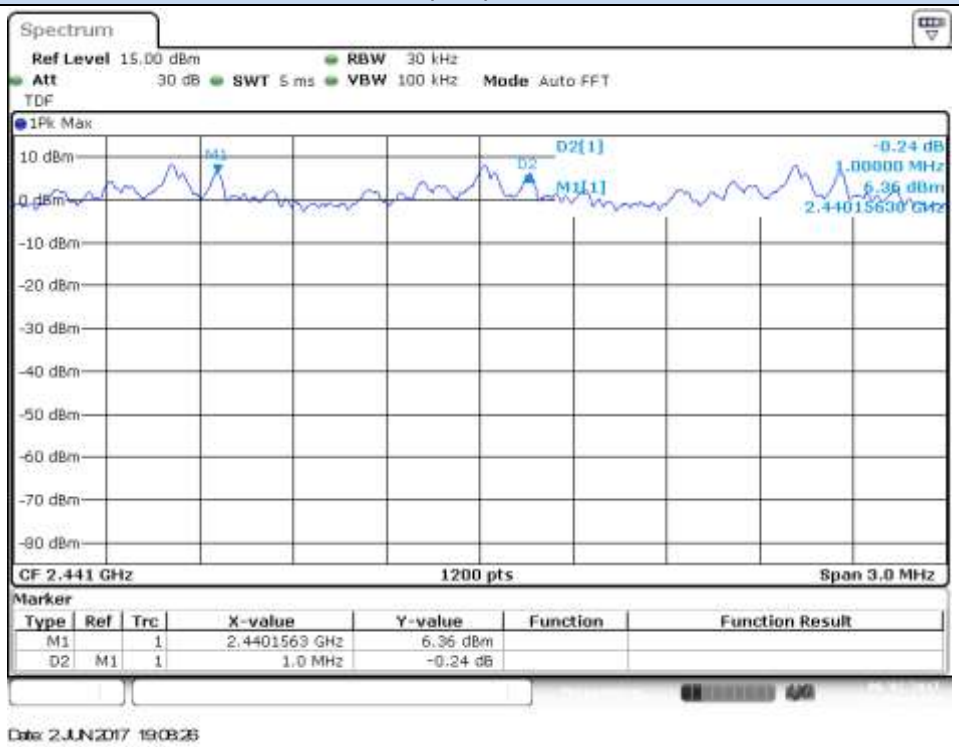


EDR – π/4-DQPSK

20dB BW – CH0

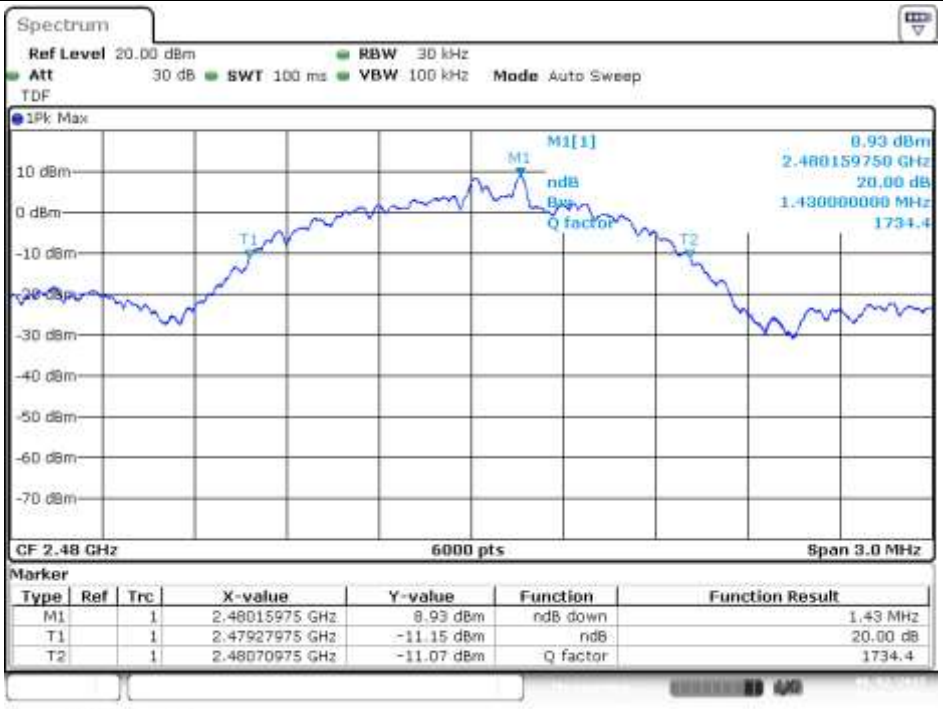


Freq. Separation

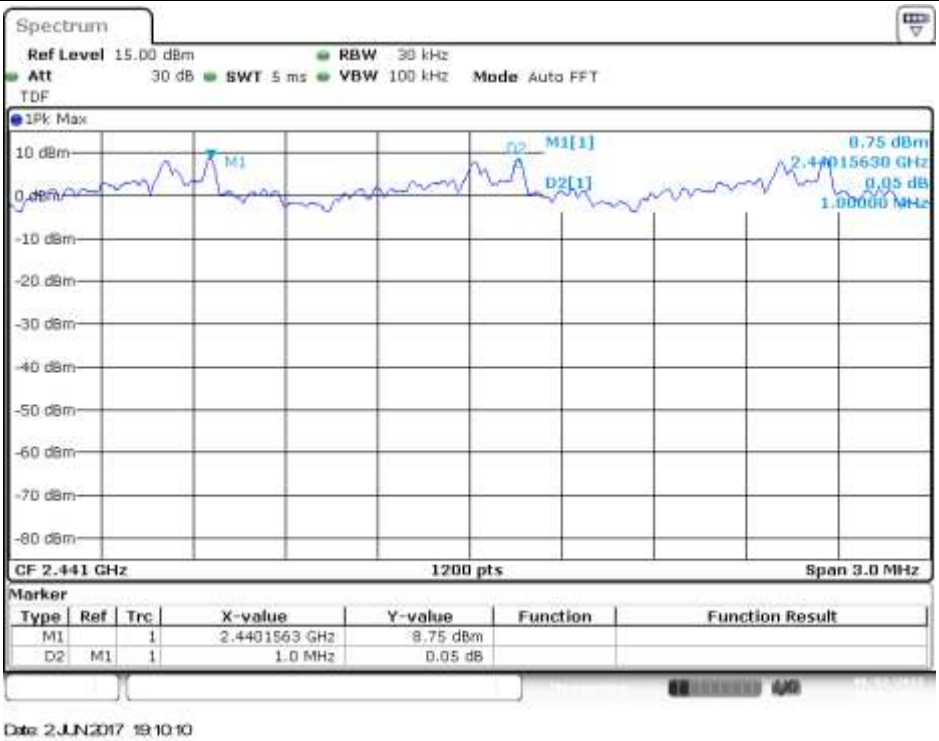


EDR – 8-DPSK

20dB BW – CH78



Freq. Separation



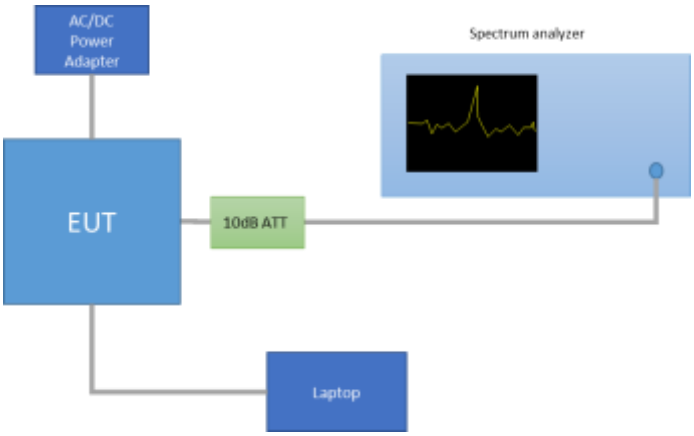
B.2 Number of hopping channels

Test limits

FCC part	RSS part	Limits
15.247 (a) (1) (iii)	RSS-247 Clause 5.1 (d)	Frequency hopping systems in the 2400-2483.5 MHz band shall use at least 15 channels.

Test procedure

The setup below was used to measure the number of hopping channels. The antenna terminal of the EUT is connected to the spectrum through an attenuator, and the spectrum analyzer reading is compensated to include the RF path loss.



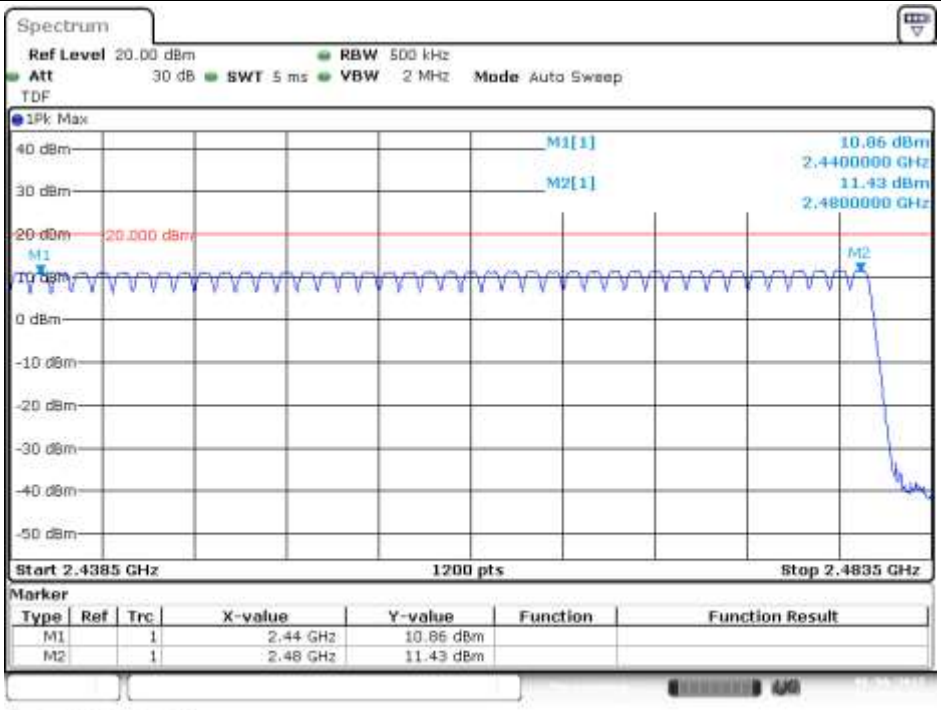
Results tables

Mode	Number of hopping channels
Basic Rate GFSK	79
EDR π/4-DQPSK	79
EDR 8-DPSK	79

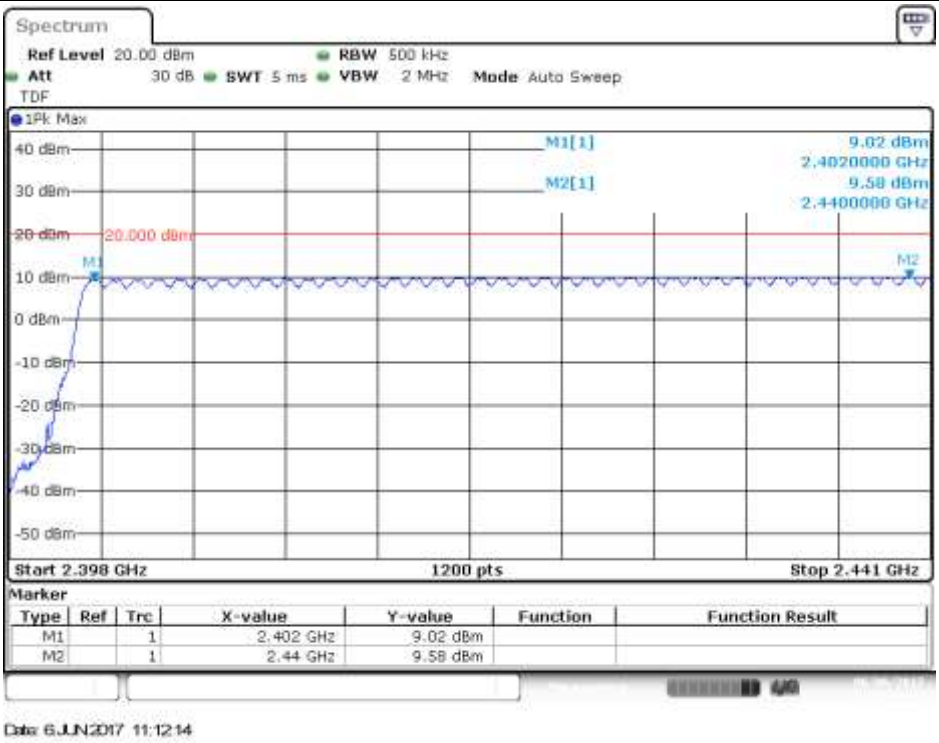
Number of hopping channels

Basic Rate – GFSK

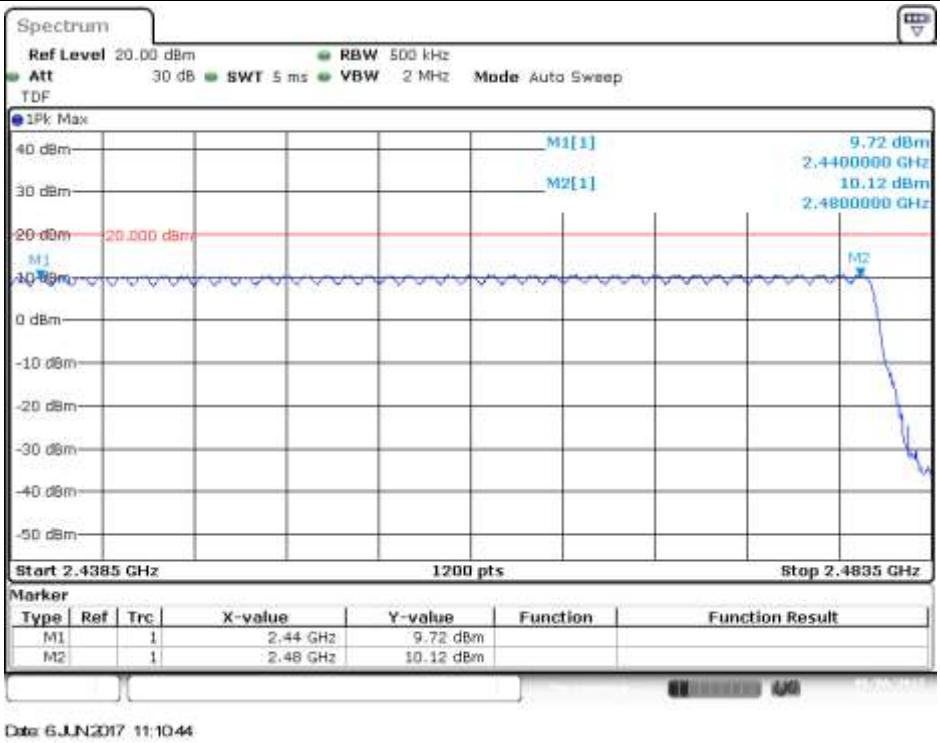
Basic Rate – GFSK



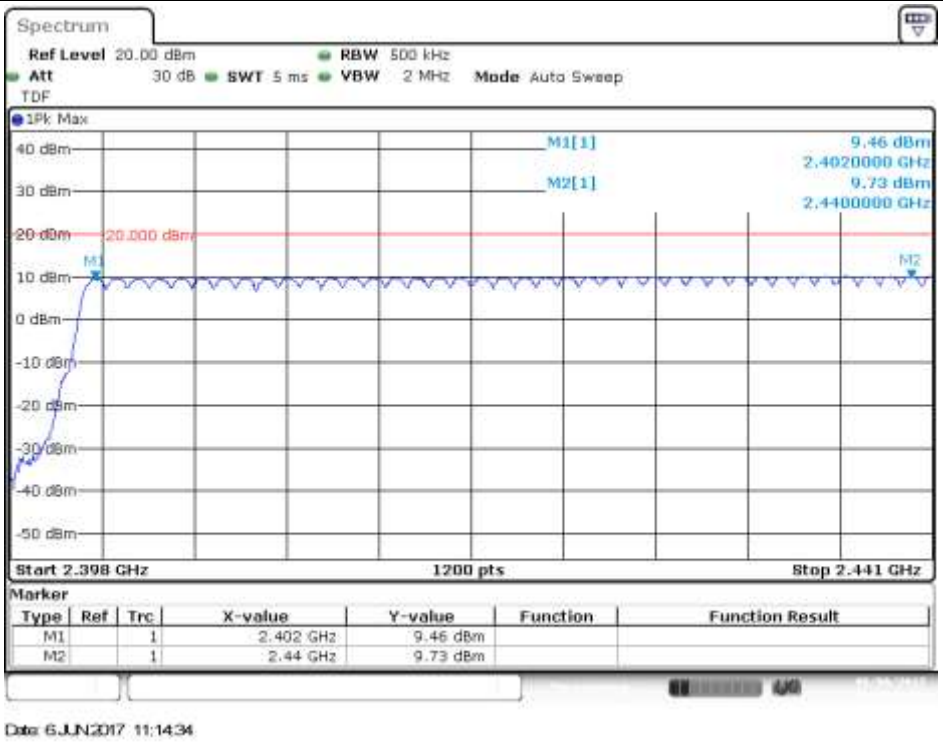
EDR – π/4-DPSK



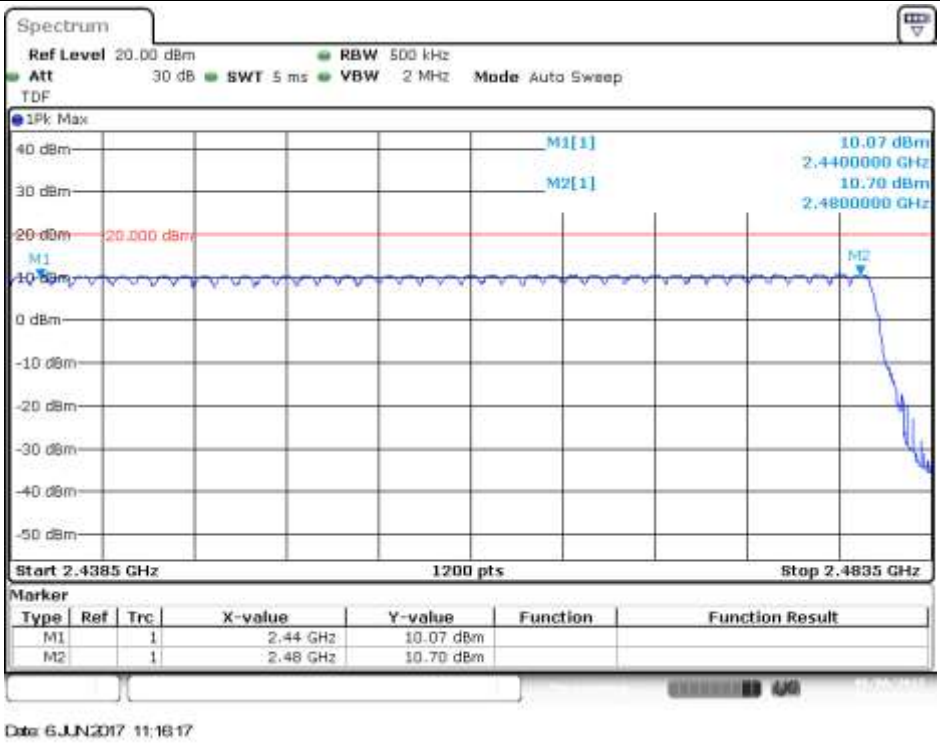
EDR – π/4-DPSK



EDR – 8-DPSK



EDR – 8-DPSK

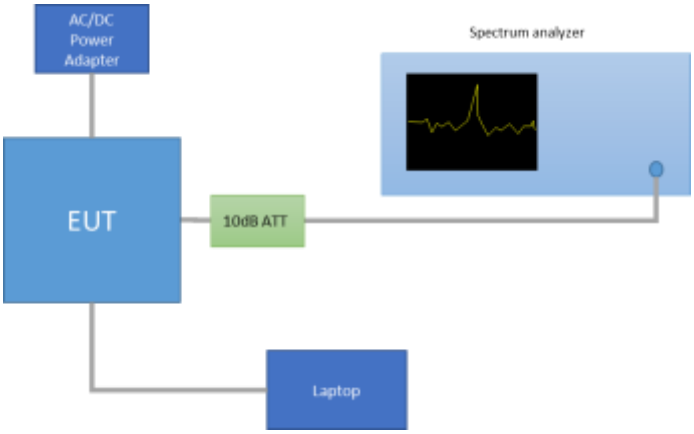


B.3 Time of Occupancy (Dwell Time)

FCC part	RSS part	Limits
15.247 (a) (1) (iii)	RSS-247 Clause 5.1 (d)	The average time of occupancy (Dwell Time) on any channel shall not be greater than 0.4 seconds within a period of 0.4 seconds multiplied by the number of hopping channels employed.

Test procedure

The setup below was used to measure the dwell time. The antenna terminal of the EUT is connected to the spectrum through an attenuator, and the spectrum analyzer reading is compensated to include the RF path loss.



In the worst case, the system makes 1600 hops per second with 79 channels, providing a 1 timeslot length of 625µs.

A DH1 packet, with independence of the modulation, needs 1 time slot for transmitting and 1 time slot for receiving. Then, the system makes in the worst case 1600/2 = 800 hops per second with 79 channels. So each channel appears 800/79 = 10.13 times per second and, for a period of 0.4 x 79 = 31.6 seconds, each channel appears 10.13 x 31.6 = 320.11 times.

A DH3 packet, with independence of the modulation, needs 3 time slots for transmitting and 1 time slot for receiving. Then, the system makes in the worst case 1600/4 = 400 hops per second with 79 channels. So each channel appears 400/79 = 5.1 times per second and, for a period of 0.4 x 79 = 31.6 seconds, each channel appears 5.1 x 31.6 = 161.16 times.

A DH5 packet, with independence of the modulation, needs 5 time slots for transmitting and 1 time slot for receiving. Then, the system makes in the worst case 1600/6 = 266.67 hops per second with 79 channels. So each channel appears 166.67/79 = 3.37 times per second and, for a period of 0.4 x 79 = 31.6 seconds, each channel appears 3.37 x 31.6 = 106.49 times.

Thus, the total time of occupancy is obtained by multiplying the calculated maximum number of appearances per packet type and the measured Tx-time, as shown in the results screenshots.

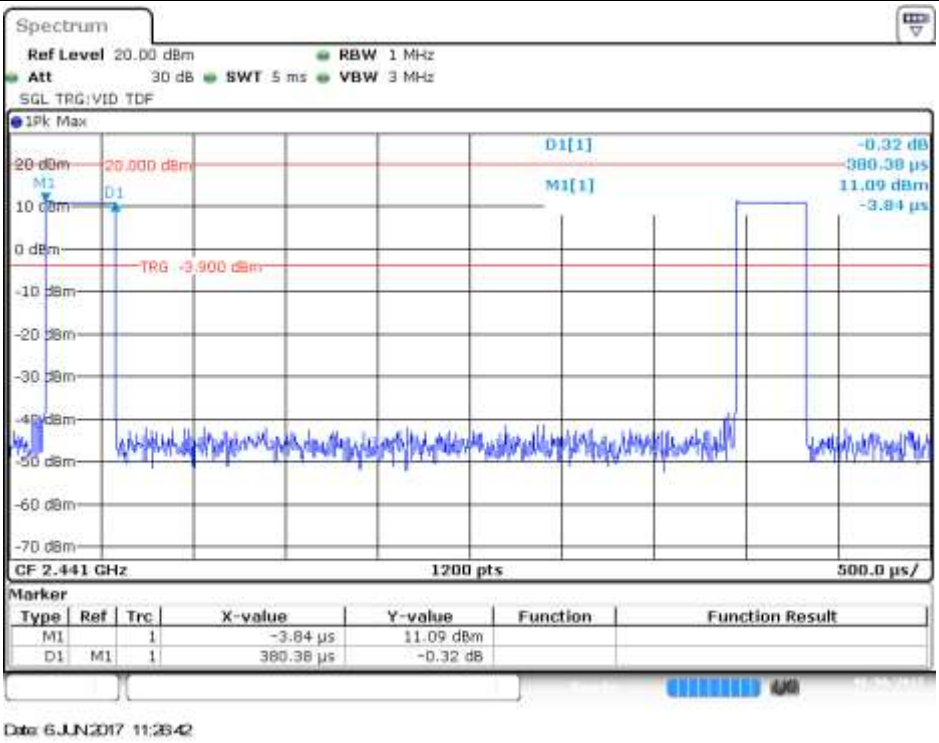
Results tables

Mode	Packet Type	Times of appearance	Tx-time [ms]	Dwell Time [ms]
Basic Rate GFSK	DH1	320.11	0.380	121.642
	DH3	161.16	1.635	263.497
	DH5	106.49	2.881	306.798
EDR π/4-DQPSK	2-DH1	320.11	0.383	122.602
	2-DH3	161.16	1.644	264.947
	2-DH5	106.49	2.885	307.224
EDR 8-DPSK	3-DH1	320.11	0.387	123.883
	3-DH3	161.16	1.641	264.464
	3-DH5	106.49	2.889	307.650

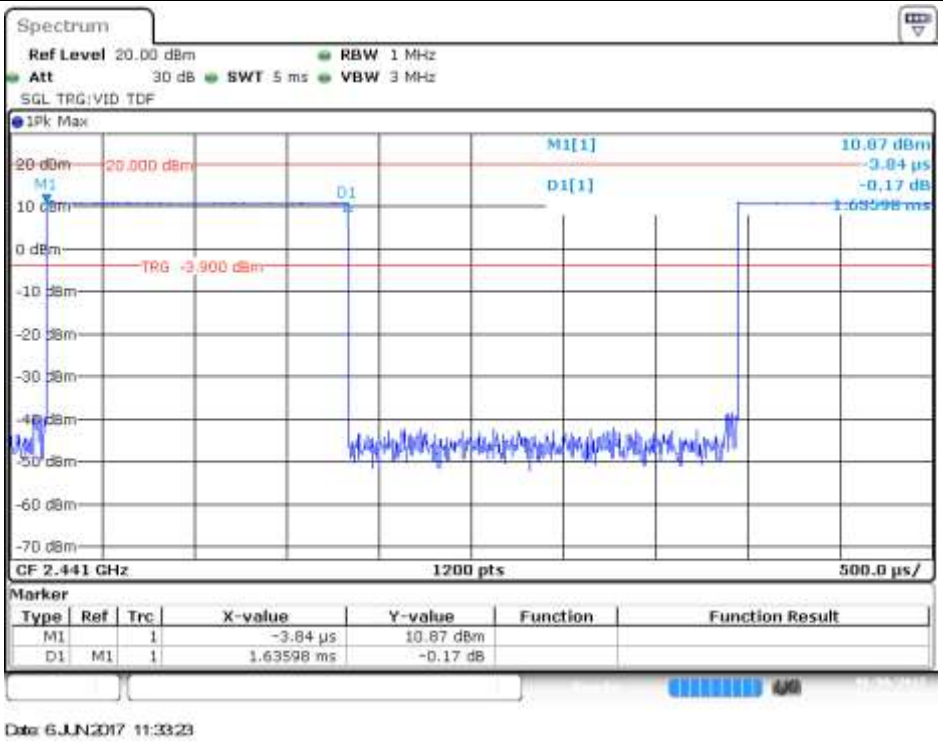
Results Screenshot:

BDR – GFSK

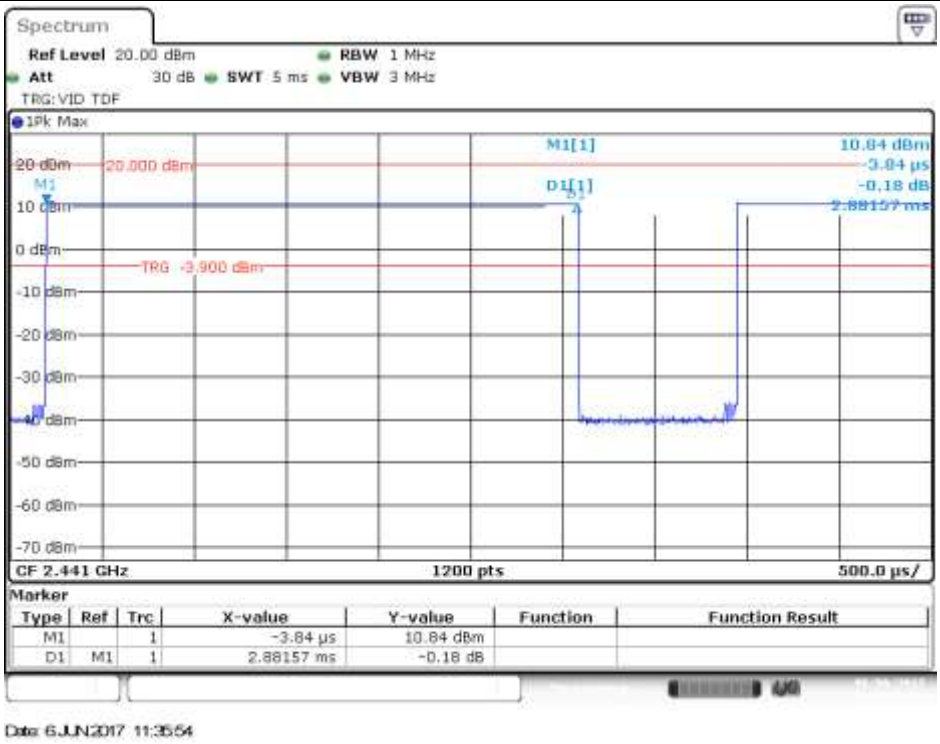
DH1 Tx-Time



DH3 Tx-Time

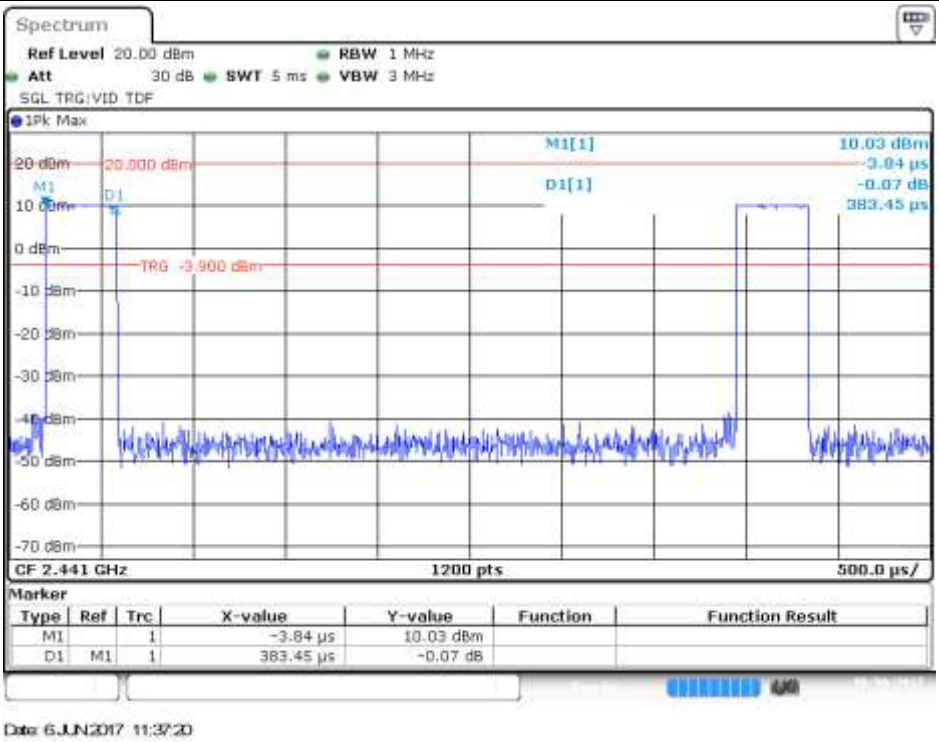


DH5 Tx-Time

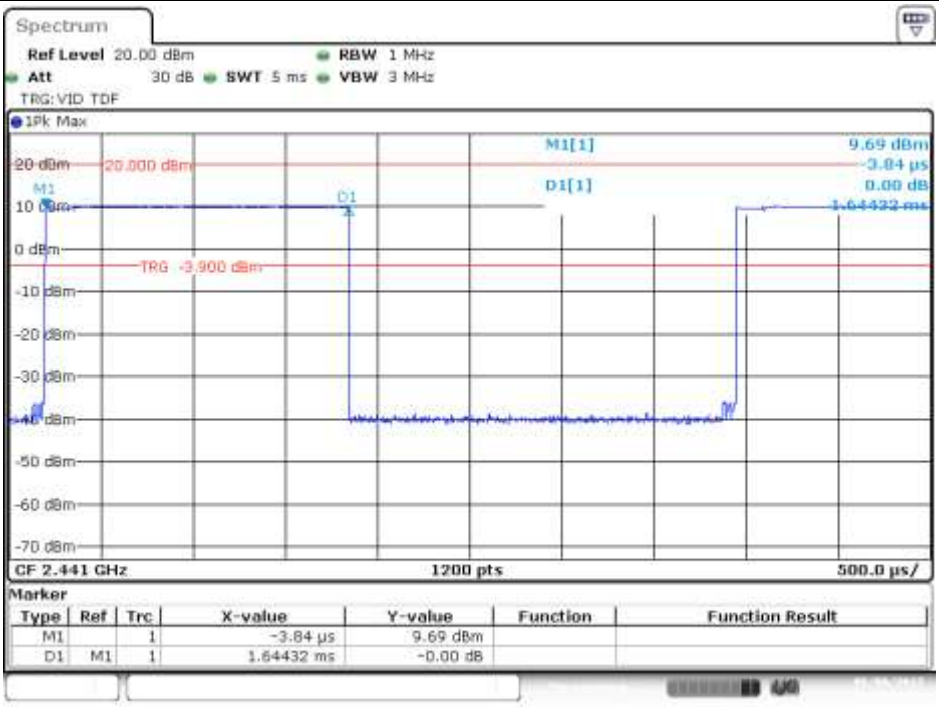


EDR – π/4-DQPSK

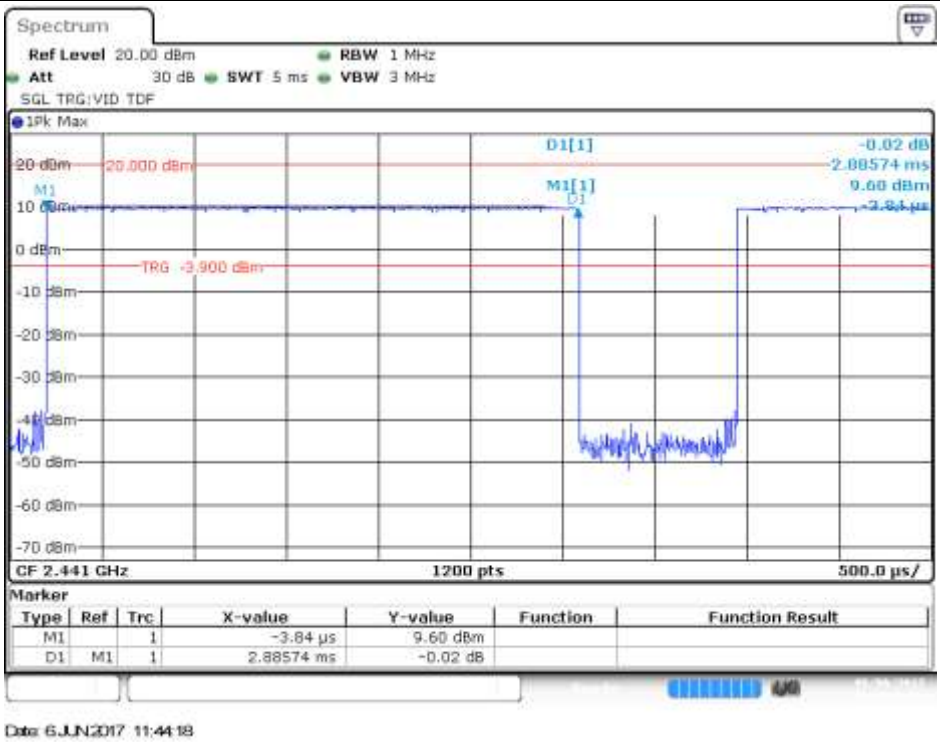
2-DH1 Tx-Time



2-DH3 Tx-Time

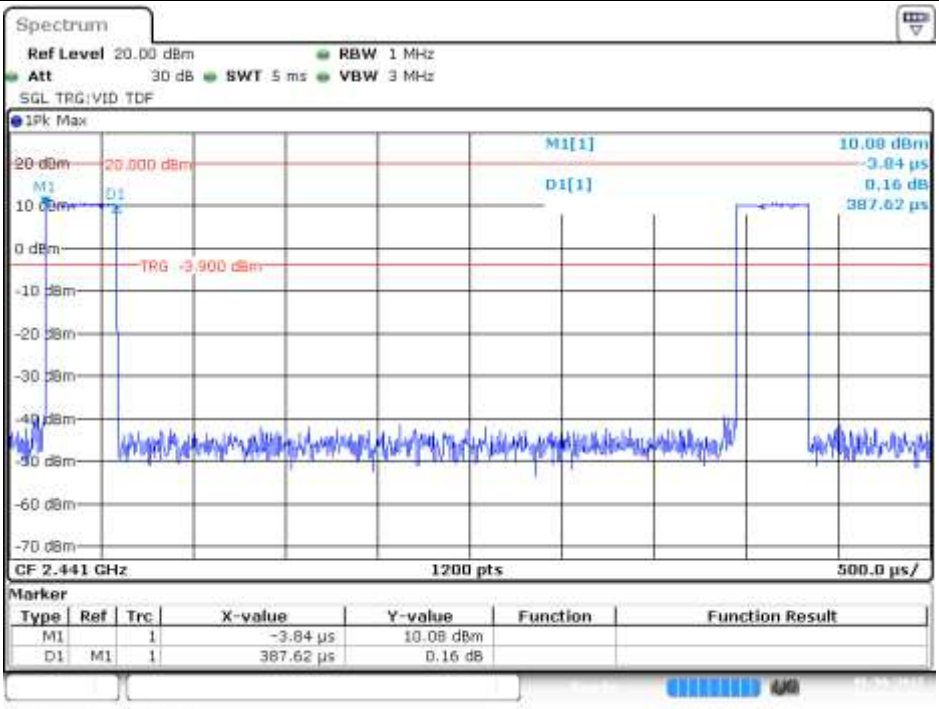


2-DH5 Tx-Time



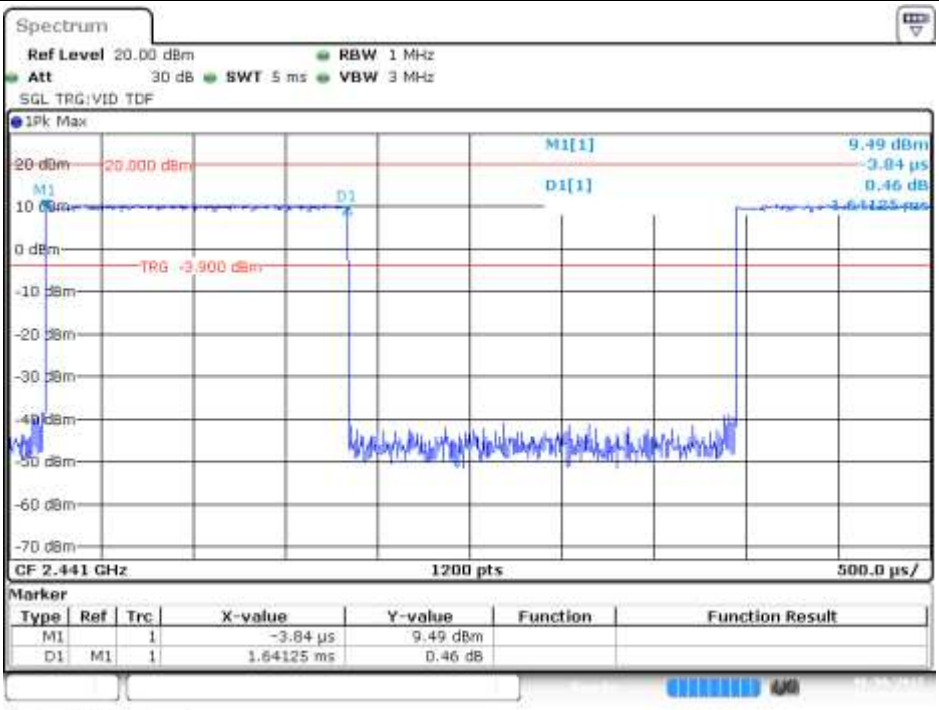
EDR – 8-DPSK

3-DH1 Tx-Time



Date: 6.JUN.2017 11:47:22

3-DH3 Tx-Time



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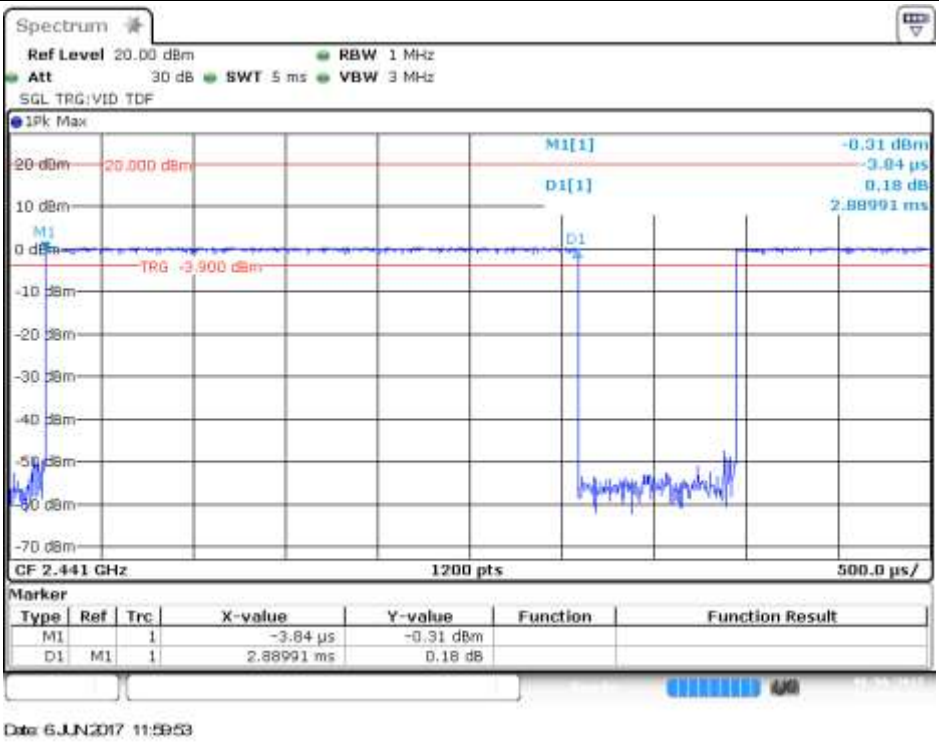
3-DH5 Tx-Time


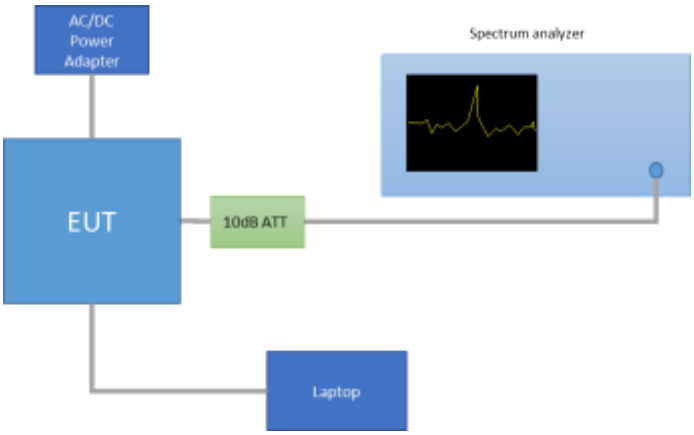
B.4 Maximum Peak Output Power antenna gain

Test Limits

FCC part	RSS part	Limits
15.247 (b) (1)	RSS-247 Clause 5.4 (b)	(b) The maximum peak conducted output power of the intentional radiator shall not exceed the following: (1) For frequency hopping systems operating in the 2400-2483.5 MHz band employing at least 75 non-overlapping hopping channels, and all frequency hopping systems in the 5725-5850 MHz band: 1 watt. (…) (4) The conducted output power limit specified in paragraph (b) of this section is based on the use of antennas with directional gains that do not exceed 6 dBi.

Test procedure

The setup below was used to measure the maximum peak output power. The antenna terminal of the EUT is connected to the spectrum through an attenuator, and the spectrum analyzer reading is compensated to include the RF path loss.



The declared maximum antenna gain is 3.24dBi.

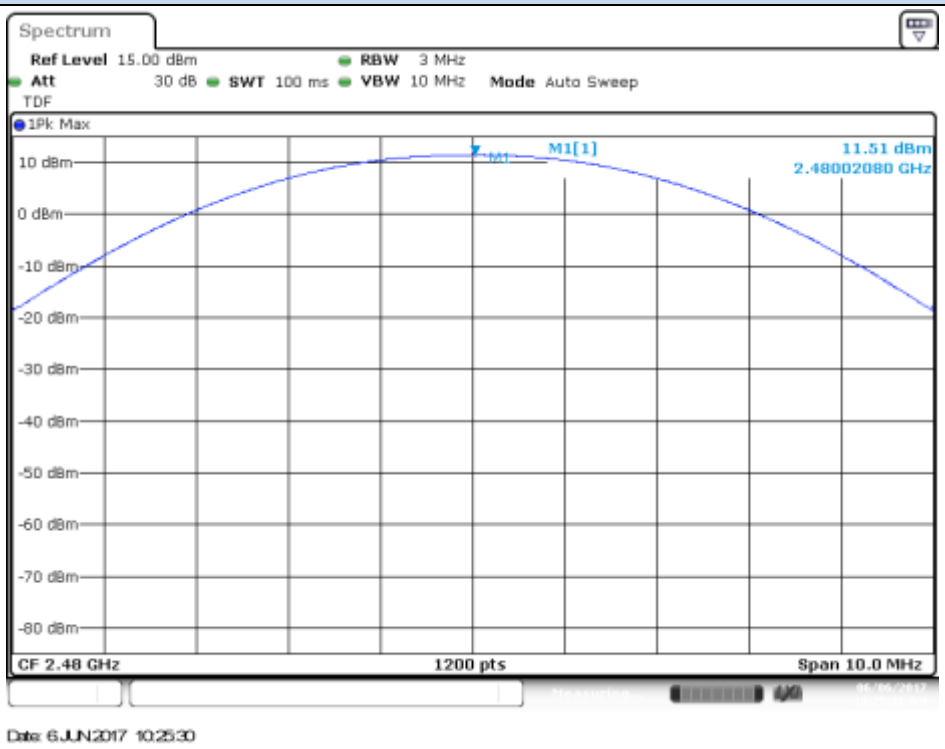
Results tables

Mode	Channel Number	Frequency [MHz]	Peak Power [dBm]	Peak Power [mW]	Peak Power EIRP [dBm]	Peak Power EIRP [mW]
Basic Rate GFSK	0	2402	10.58	11.43	13.82	24.10
	39	2441	10.98	12.53	14.22	26.42
	78	2480	11.51	14.16	14.75	29.85
EDR π/4-DQPSK	0	2402	10.15	10.35	13.39	21.83
	39	2441	10.54	11.32	13.78	23.88
	78	2480	11.08	12.82	14.32	27.04
EDR 8-DPSK	0	2402	10.21	10.50	13.45	22.13
	39	2441	10.64	11.59	13.88	24.43
	78	2480	11.13	12.97	14.37	27.35

Results Screenshot

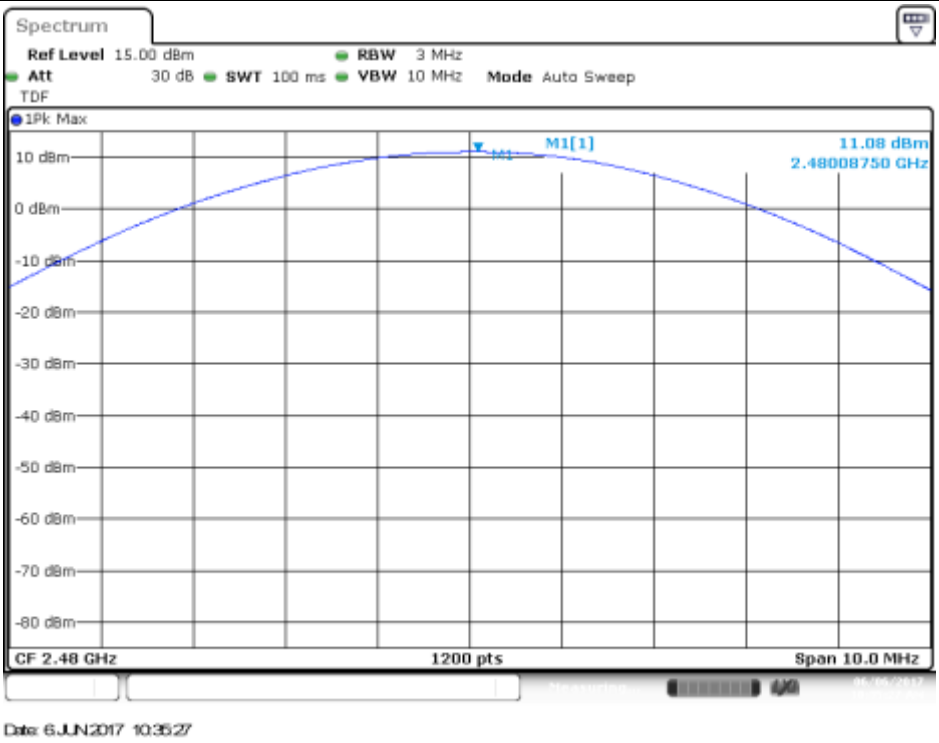
Basic Rate - GFSK

Peak Power – CH78



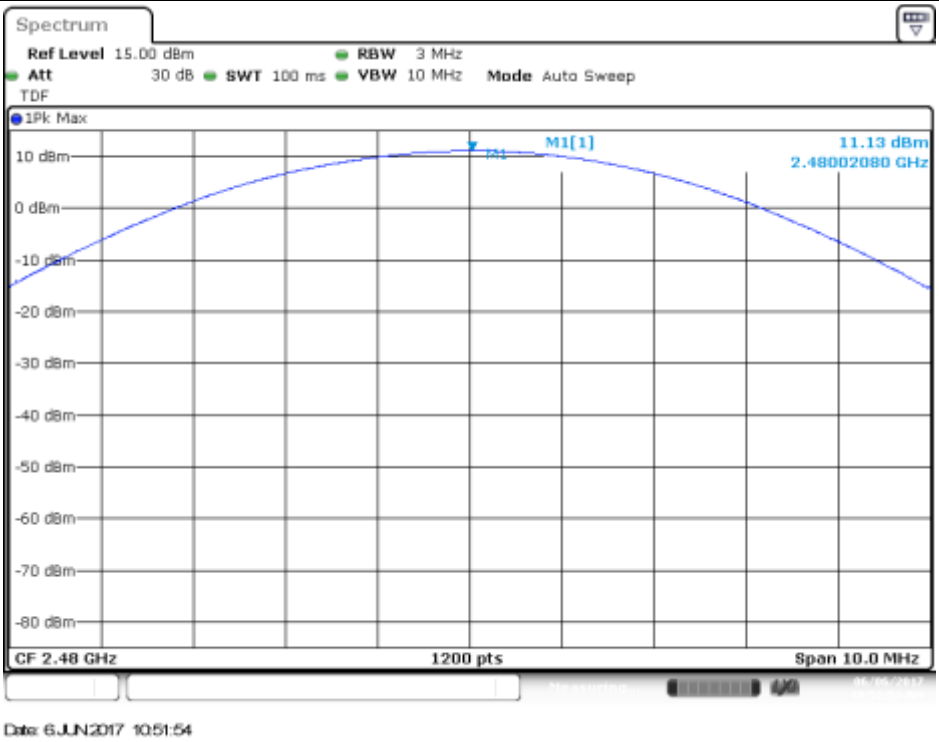
EDR – π/4-DQPSK

Peak Power – CH78



EDR – 8-DPSK

Peak Power – CH39



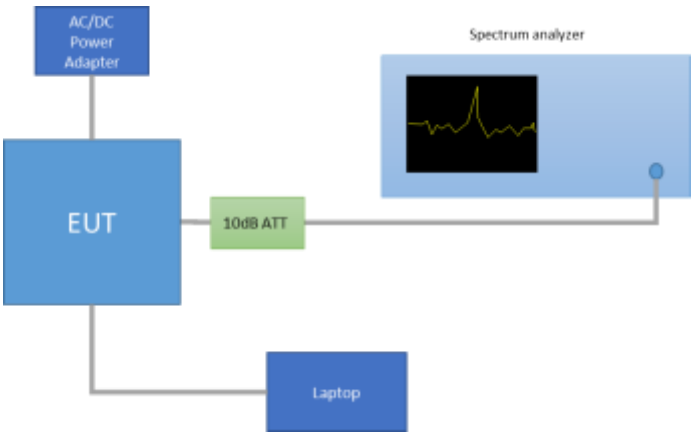
B.5 Out-of-band emission (conducted)

Test limits

FCC part	RSS part	Limits
15.247 (d)	RSS-247 Clause 5.5	In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or 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, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits.

Test procedure

The setup below was used to measure the out-of-band emissions (conducted). The antenna terminal of the EUT is connected to the spectrum through an attenuator, and the spectrum analyzer reading is compensated to include the RF path loss.

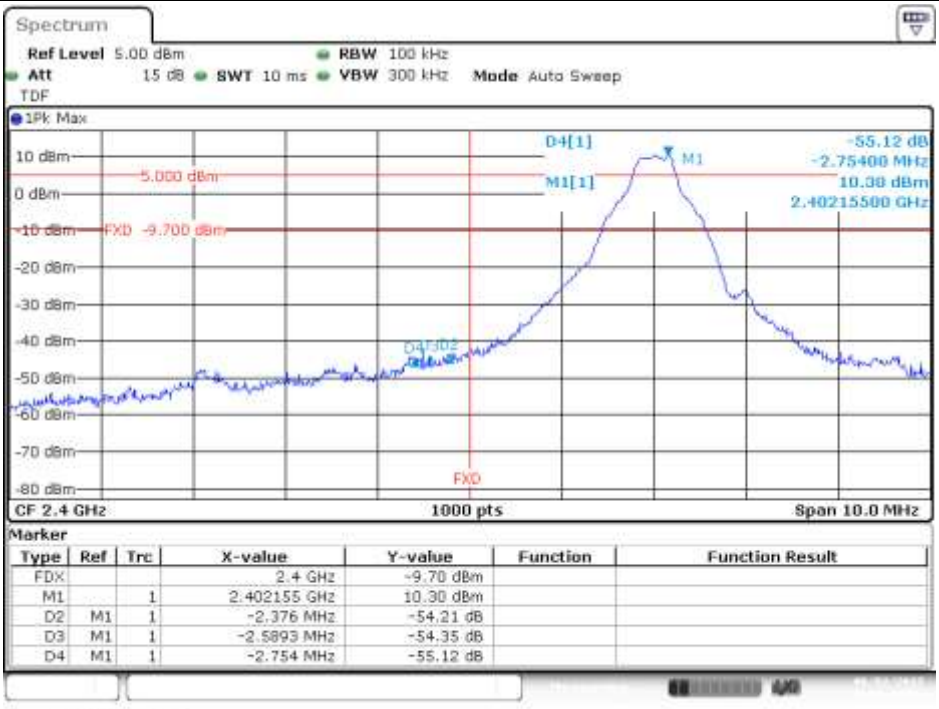


Note: these PSD_{Peak} values are shown just as a reference for the compliance of the Out-of-band Measurements. Thus the RBW used for these measurements was 100 kHz.

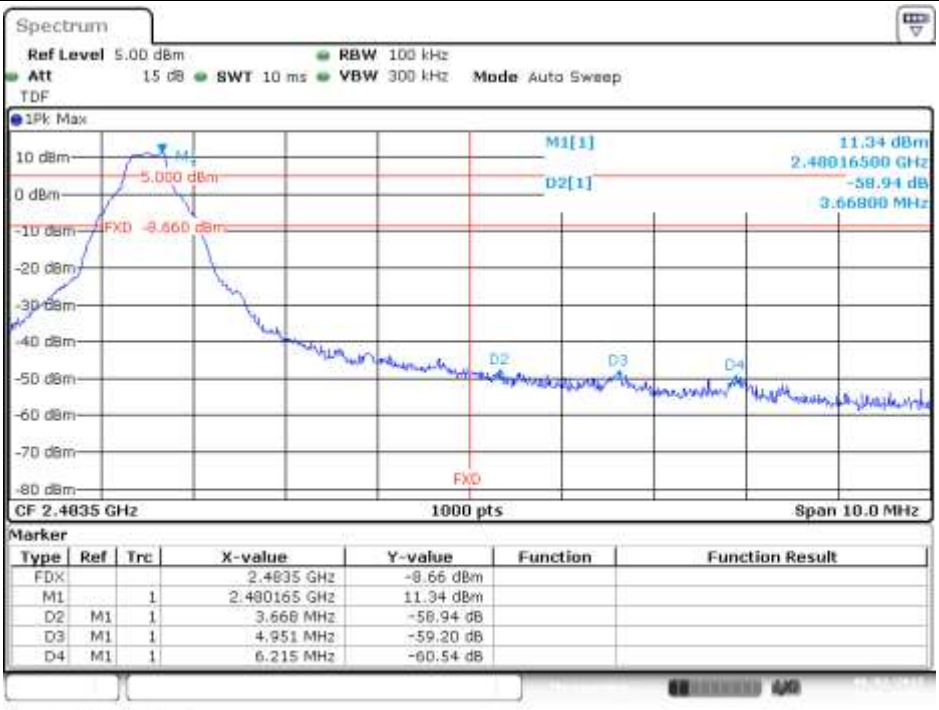
Mode	**CH**	**Frequency [MHz]**	**PSD Peak [dBm]**
Basic Rate - GFSK	0	2402	10.30
	39	2441	10.73
	78	2480	11.34
EDR – π/4-DQPSK	0	2402	9.14
	39	2441	9.55
	78	2480	10.08
EDR – 8-DPSK	0	2402	9.18
	39	2441	9.59
	78	2480	10.19

Basic Rate - GFSK

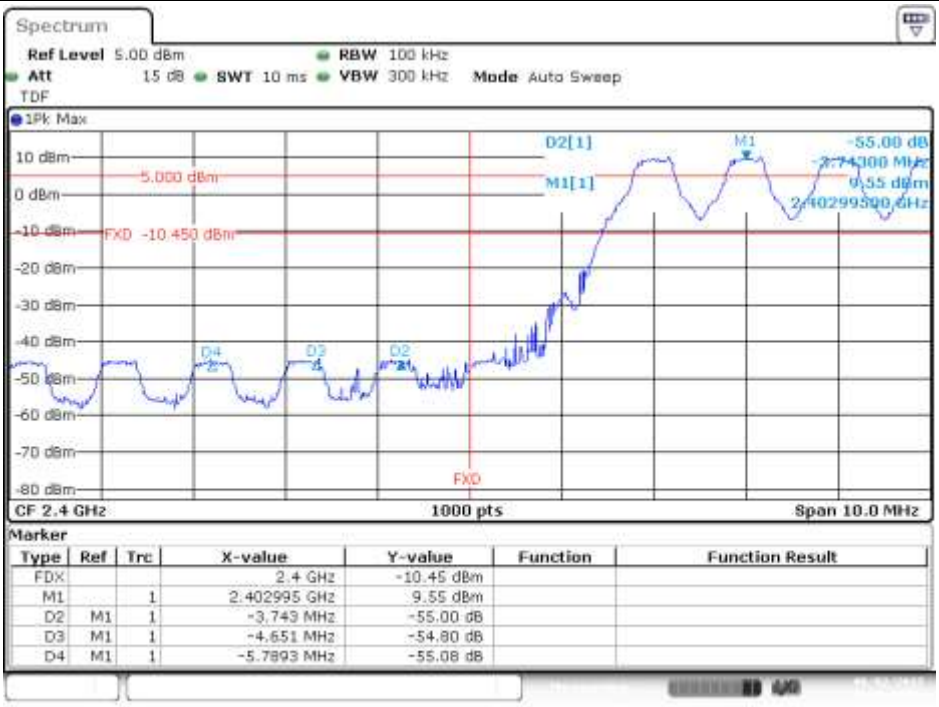
BE Low Freq Section – CH0



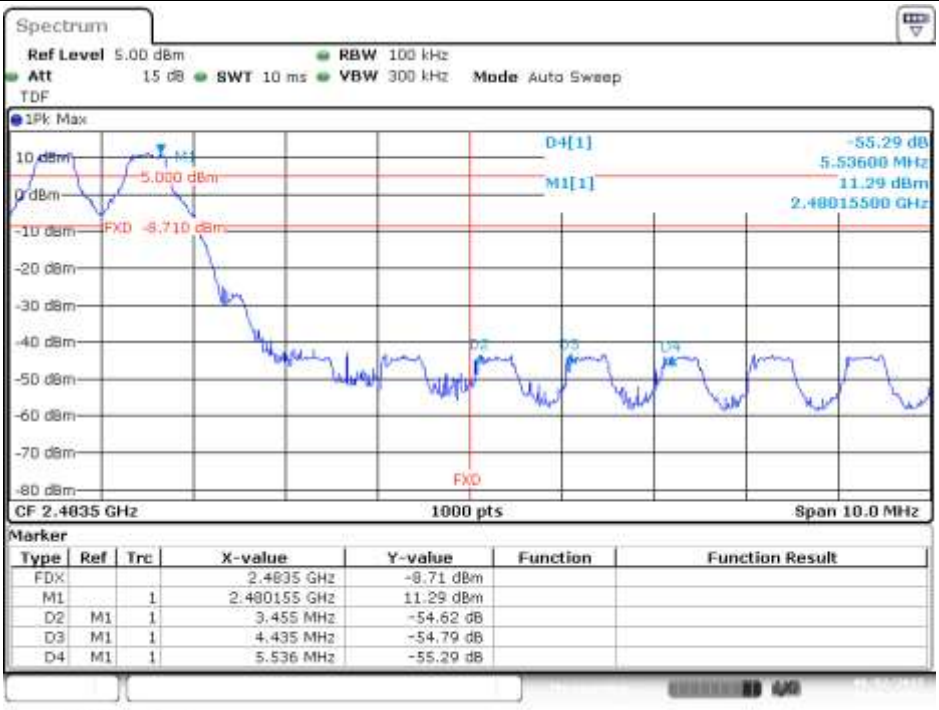
BE High Freq Section – CH78



BE Low Freq Section – Hopping

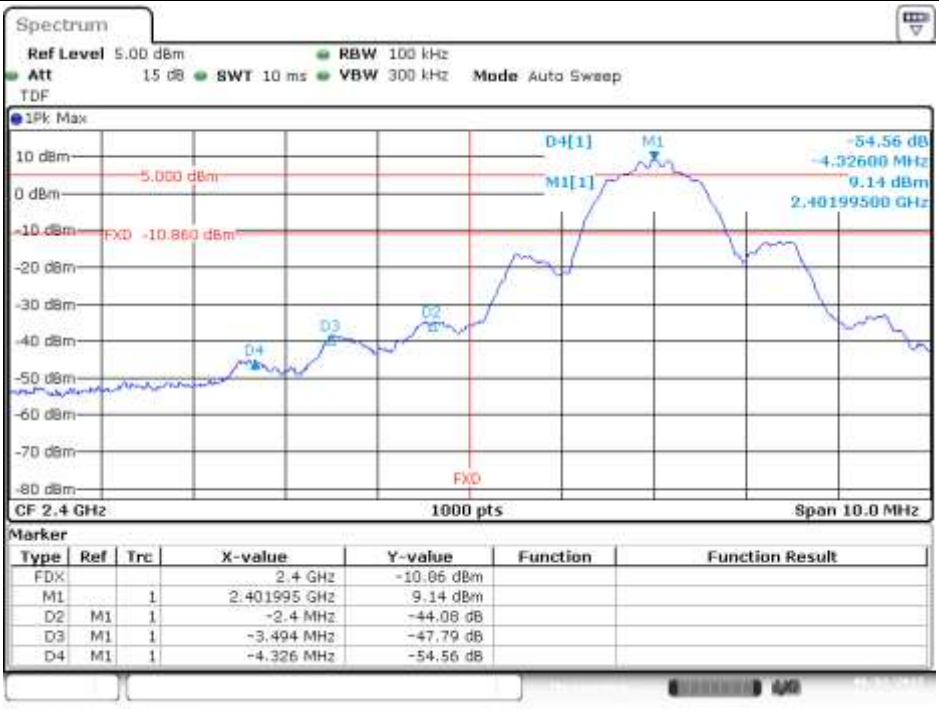


BE High Freq Section – Hopping

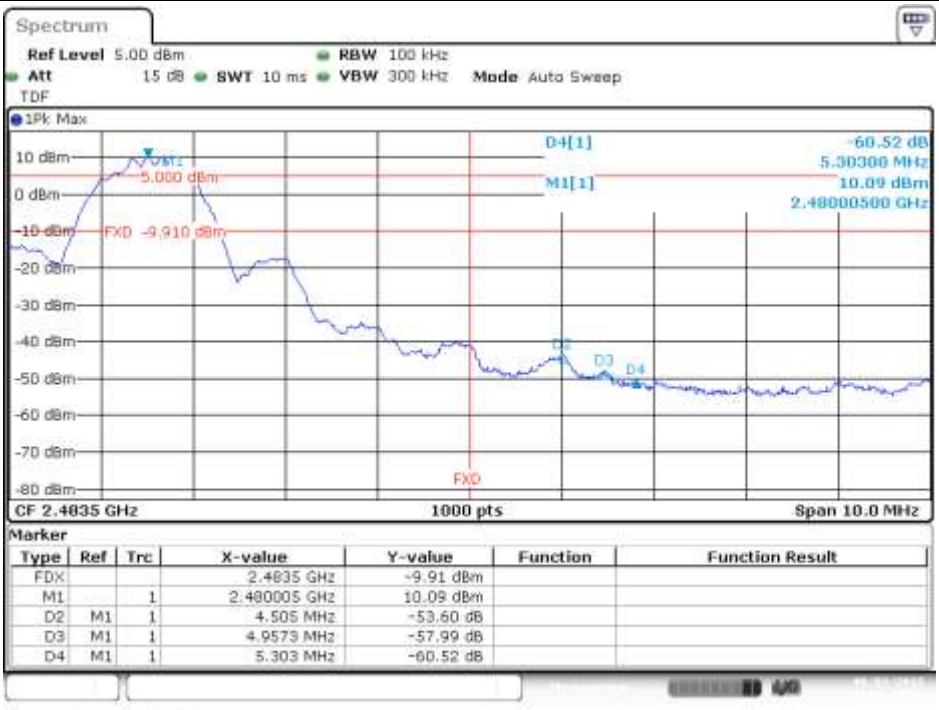


EDR – π/4-DQPSK

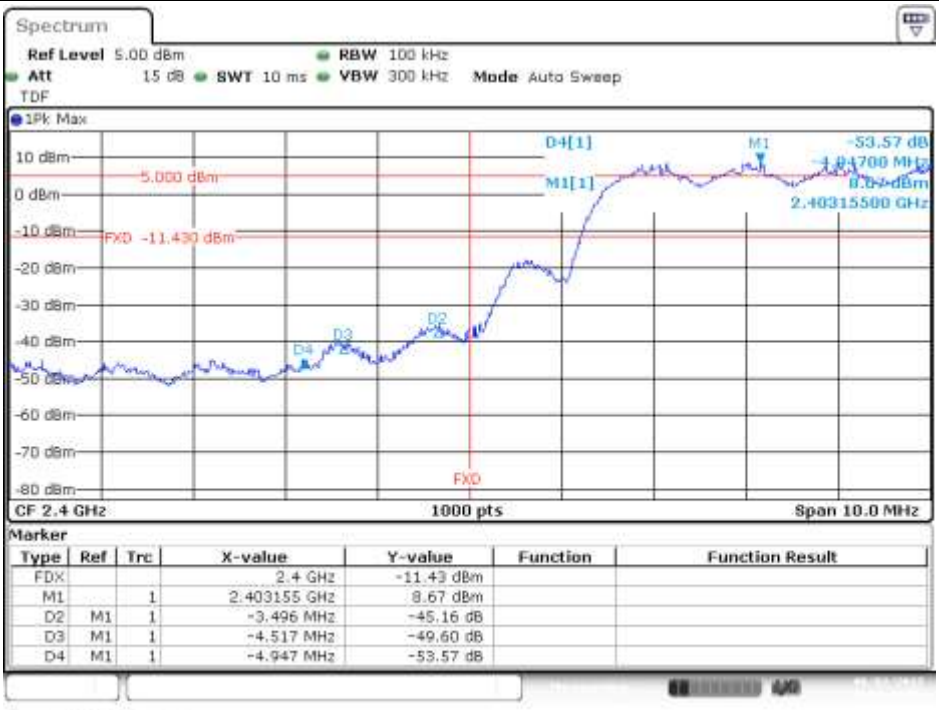
BE Low Freq Section – CH0



BE High Freq Section – CH78



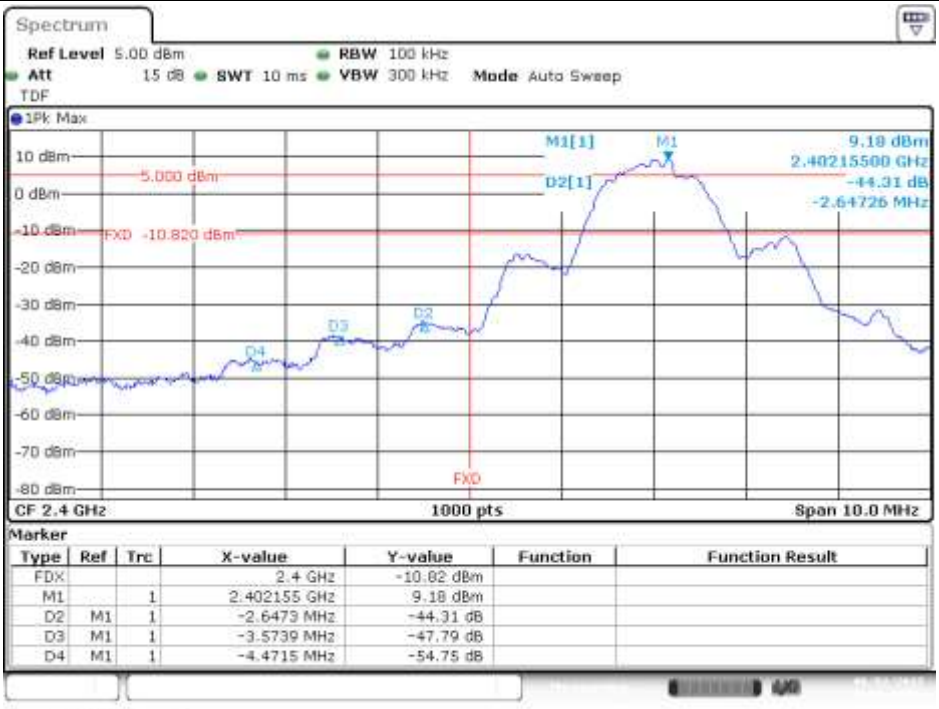
BE Low Freq Section – Hopping



BE High Freq Section – Hopping

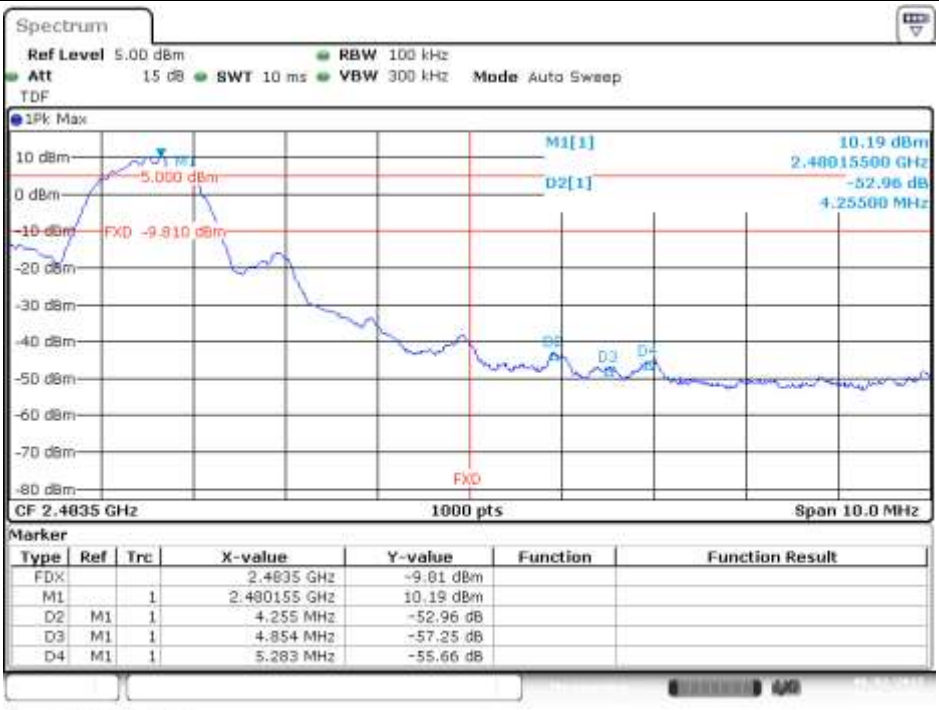
EDR – 8-DPSK

BE Low Freq Section – CH0



Date: 2.JUN.2017 18:16:10

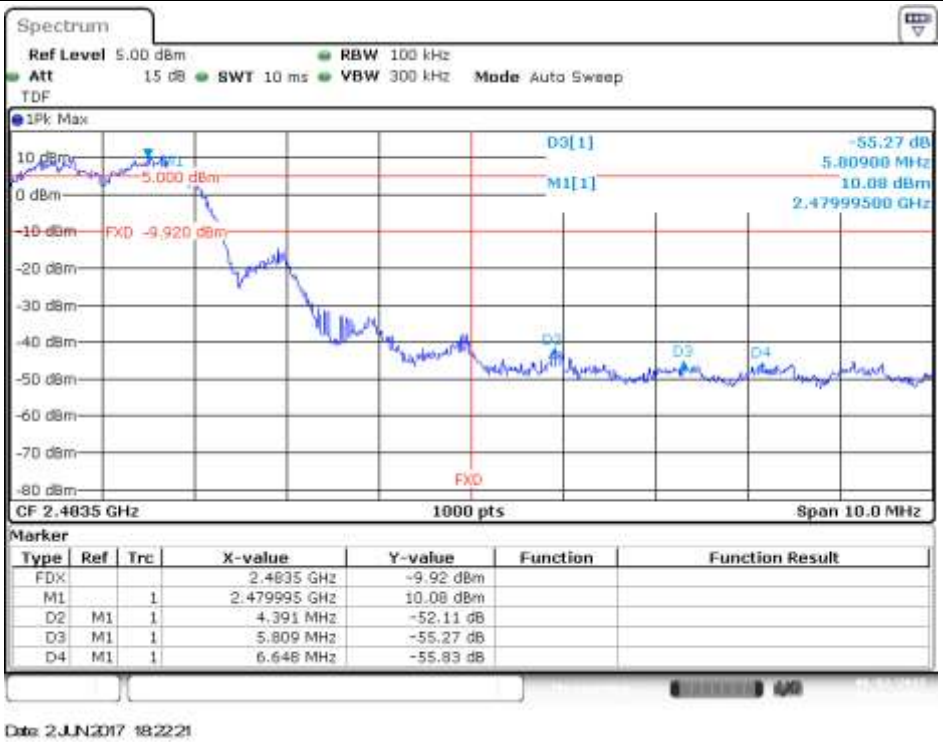
BE High Freq Section – CH78



Date: 2.JUN.2017 18:25:36

BE Low Freq Section – Hopping

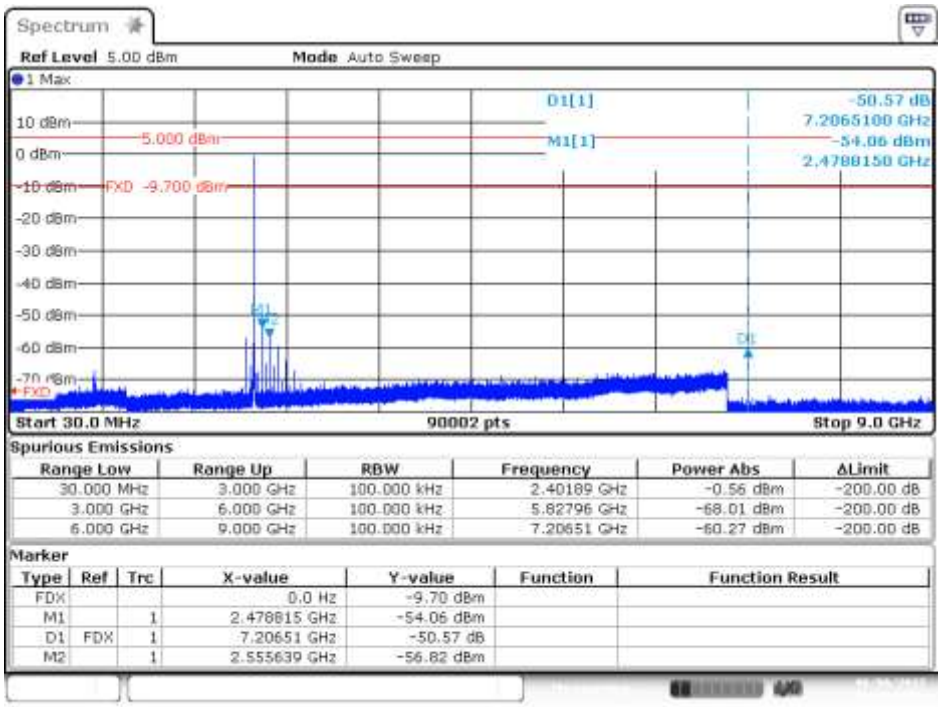
BE High Freq Section – Hopping



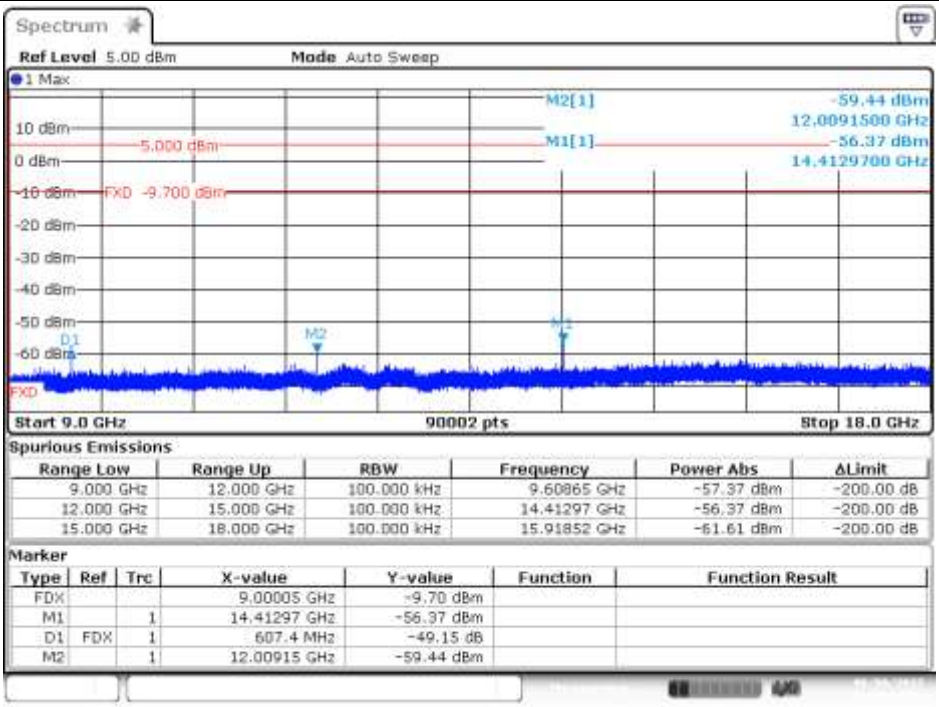
Conducted Spurious results Screenshot

Basic Rate - GFSK

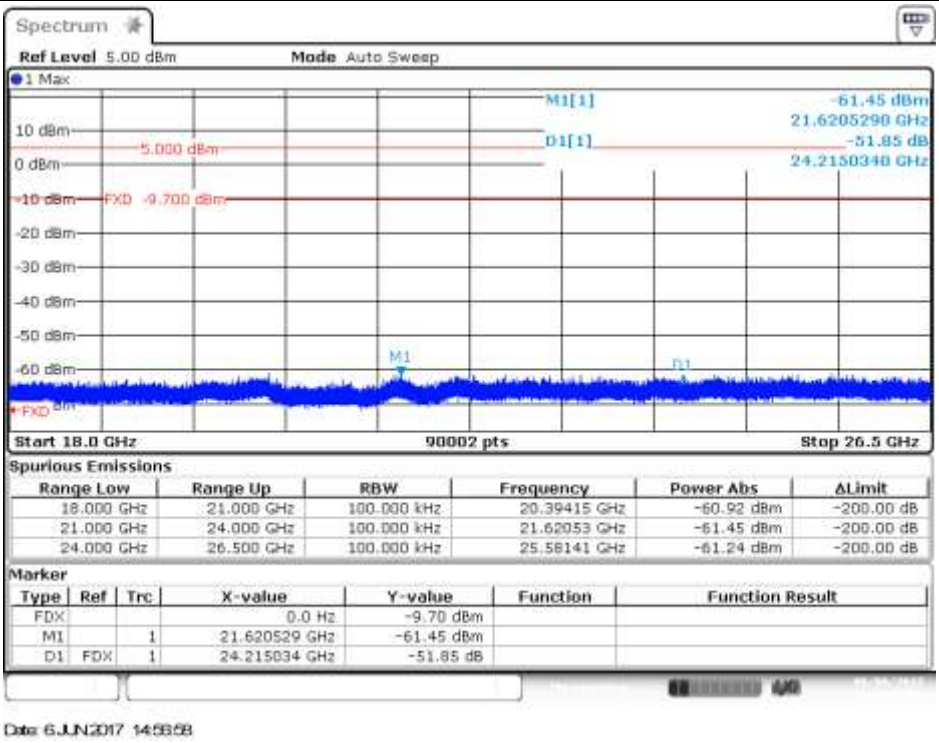
Cond Spur – CH0 (30MHz - 9GHz)



Cond Spur – CH0 (9GHz - 18GHz)



Cond Spur – CH0 (18GHz – 26.5GHz)



Spurious Emissions

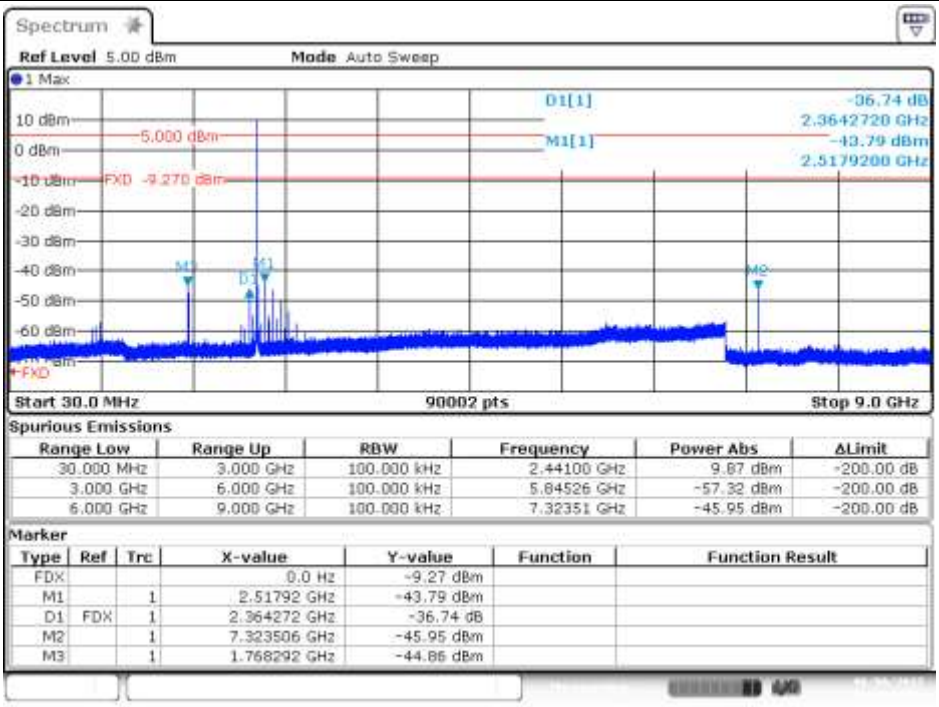
Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
18.000 GHz	21.000 GHz	100.000 kHz	20.39415 GHz	-60.92 dBm	-200.00 dB
21.000 GHz	24.000 GHz	100.000 kHz	21.62053 GHz	-61.45 dBm	-200.00 dB
24.000 GHz	26.500 GHz	100.000 kHz	25.58141 GHz	-61.24 dBm	-200.00 dB

Marker

Type	Ref	Trc	X-value	Y-value	Function	Function Result
FDX			0.0 Hz	-9.70 dBm		
M1		1	21.620529 GHz	-61.45 dBm		
D1	FDX	1	24.215034 GHz	-51.85 dB		

Date: 6.JUN.2017 14:58:58

Cond Spur – CH39 (30MHz - 9GHz)



Spurious Emissions

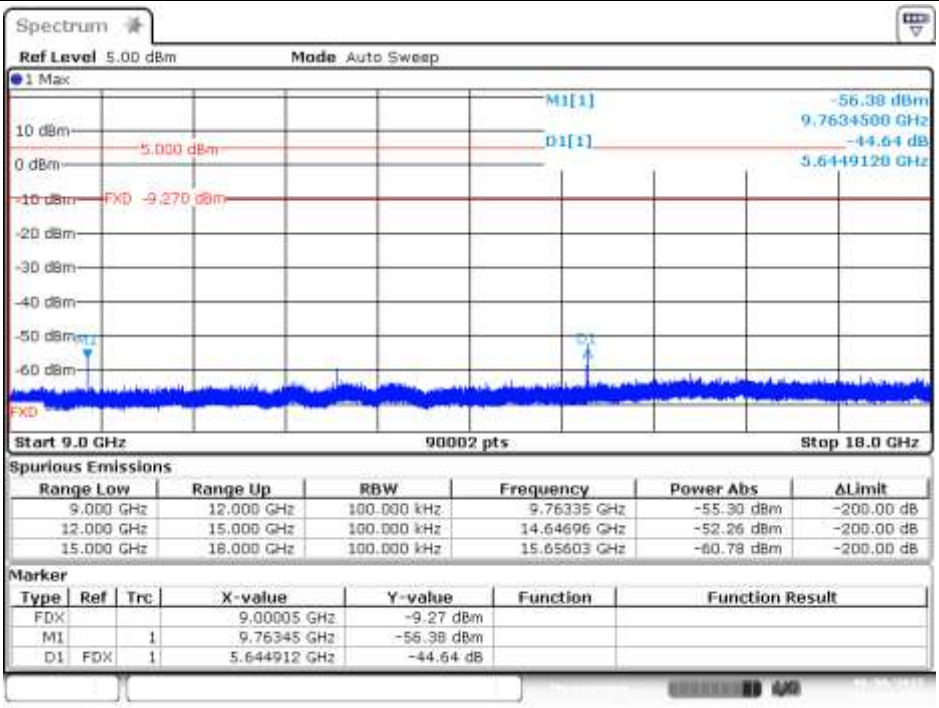
Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	3.000 GHz	100.000 kHz	2.44100 GHz	9.87 dBm	-200.00 dB
3.000 GHz	6.000 GHz	100.000 kHz	5.84526 GHz	-57.32 dBm	-200.00 dB
6.000 GHz	9.000 GHz	100.000 kHz	7.32351 GHz	-45.95 dBm	-200.00 dB

Marker

Type	Ref	Trc	X-value	Y-value	Function	Function Result
FDX			0.0 Hz	-9.27 dBm		
M1		1	2.51792 GHz	-43.79 dBm		
D1	FDX	1	2.364272 GHz	-36.74 dB		
M2		1	7.323506 GHz	-45.95 dBm		
M3		1	1.768292 GHz	-44.86 dBm		

Date: 6.JUN.2017 12:45:39

Cond Spur – CH39 (9GHz - 18GHz)



Spurious Emissions

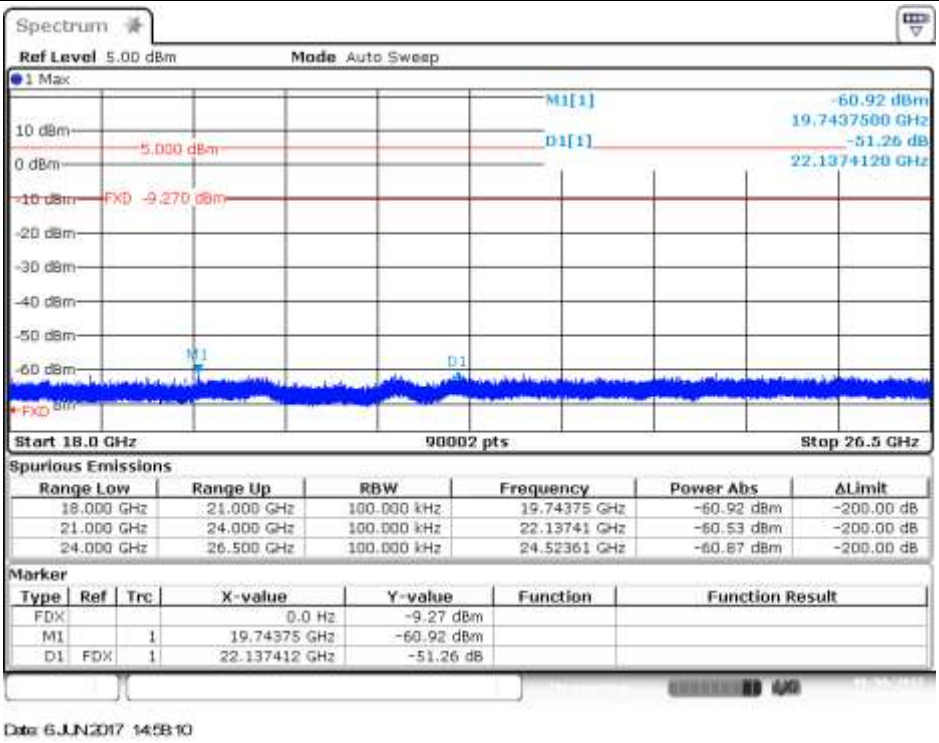
Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
9.000 GHz	12.000 GHz	100.000 kHz	9.76335 GHz	-55.30 dBm	-200.00 dB
12.000 GHz	15.000 GHz	100.000 kHz	14.64696 GHz	-52.26 dBm	-200.00 dB
15.000 GHz	18.000 GHz	100.000 kHz	15.65603 GHz	-60.78 dBm	-200.00 dB

Marker

Type	Ref	Trc	X-value	Y-value	Function	Function Result
FDX			9.00005 GHz	-9.27 dBm		
M1		1	9.76345 GHz	-56.38 dBm		
D1	FDX	1	5.644912 GHz	-44.64 dB		

Date: 6.JUN.2017 12:47:04

Cond Spur – CH39 (18GHz – 26.5GHz)



Spurious Emissions

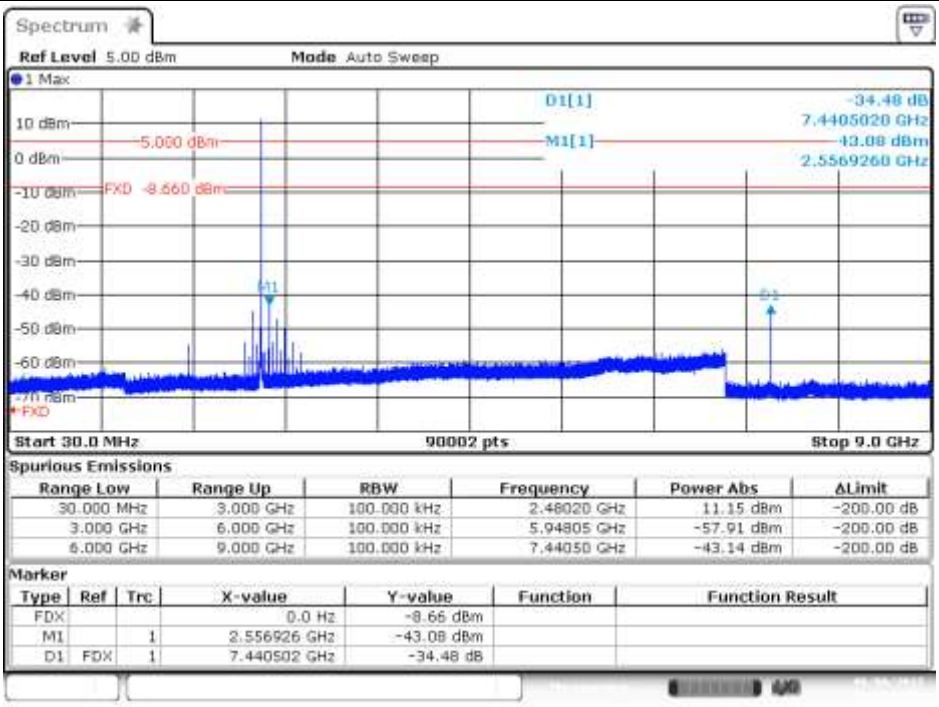
Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
18.000 GHz	21.000 GHz	100.000 kHz	19.74375 GHz	-60.92 dBm	-200.00 dB
21.000 GHz	24.000 GHz	100.000 kHz	22.13741 GHz	-60.53 dBm	-200.00 dB
24.000 GHz	26.500 GHz	100.000 kHz	24.52361 GHz	-60.87 dBm	-200.00 dB

Marker

Type	Ref	Trc	X-value	Y-value	Function	Function Result
FDX			0.0 Hz	-9.27 dBm		
M1		1	19.74375 GHz	-60.92 dBm		
D1	FDX	1	22.137412 GHz	-51.26 dB		

Date: 6.JUN.2017 14:58:10

Cond Spur – CH78 (30MHz - 9GHz)



Spurious Emissions

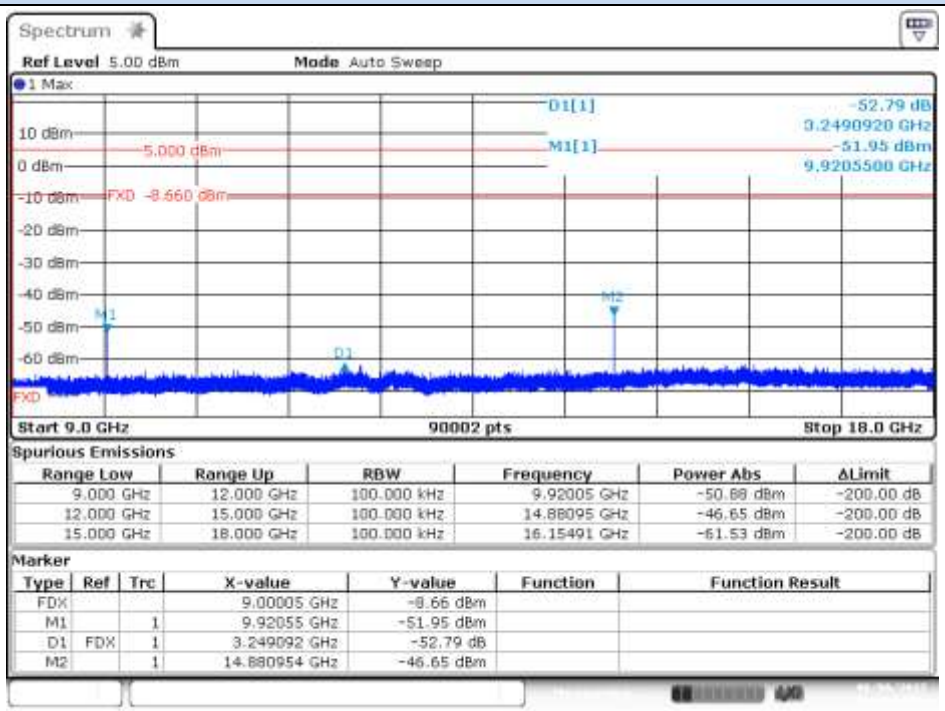
Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	3.000 GHz	100.000 kHz	2.48020 GHz	11.15 dBm	-200.00 dB
3.000 GHz	6.000 GHz	100.000 kHz	5.94805 GHz	-57.91 dBm	-200.00 dB
6.000 GHz	9.000 GHz	100.000 kHz	7.44050 GHz	-43.14 dBm	-200.00 dB

Marker

Type	Ref	Trc	X-value	Y-value	Function	Function Result
FDX			0.0 Hz	-8.66 dBm		
M1		1	2.556926 GHz	-43.08 dBm		
D1	FDX	1	7.440502 GHz	-34.48 dB		

Date: 6.JUN.2017 15:48:31

Cond Spur – CH78 (9GHz - 18GHz)



Spurious Emissions

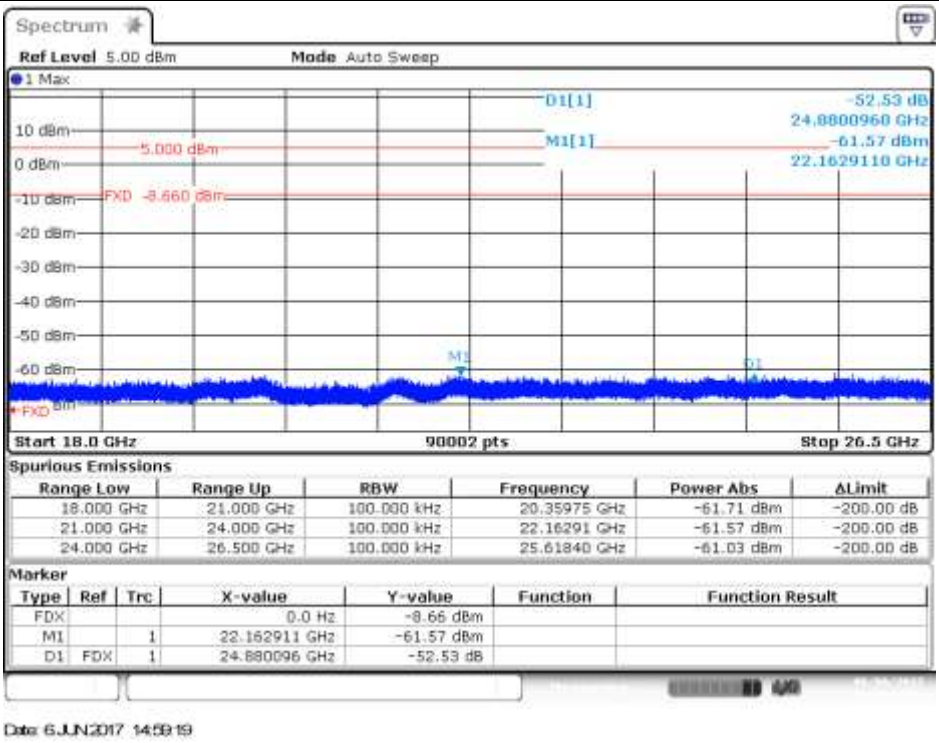
Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
9.000 GHz	12.000 GHz	100.000 kHz	9.92005 GHz	-50.88 dBm	-200.00 dB
12.000 GHz	15.000 GHz	100.000 kHz	14.88095 GHz	-46.65 dBm	-200.00 dB
15.000 GHz	18.000 GHz	100.000 kHz	16.15491 GHz	-61.53 dBm	-200.00 dB

Marker

Type	Ref	Trc	X-value	Y-value	Function	Function Result
FDX			9.00005 GHz	-8.66 dBm		
M1		1	9.92055 GHz	-51.95 dBm		
D1	FDX	1	3.249092 GHz	-52.79 dB		
M2		1	14.880954 GHz	-46.65 dBm		

Date: 6.JUN.2017 12:54:54

Cond Spur – CH78 (18GHz – 26.5GHz)



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
18.000 GHz	21.000 GHz	100.000 kHz	20.35975 GHz	-61.71 dBm	-200.00 dB
21.000 GHz	24.000 GHz	100.000 kHz	22.16291 GHz	-61.57 dBm	-200.00 dB
24.000 GHz	26.500 GHz	100.000 kHz	25.61840 GHz	-61.03 dBm	-200.00 dB

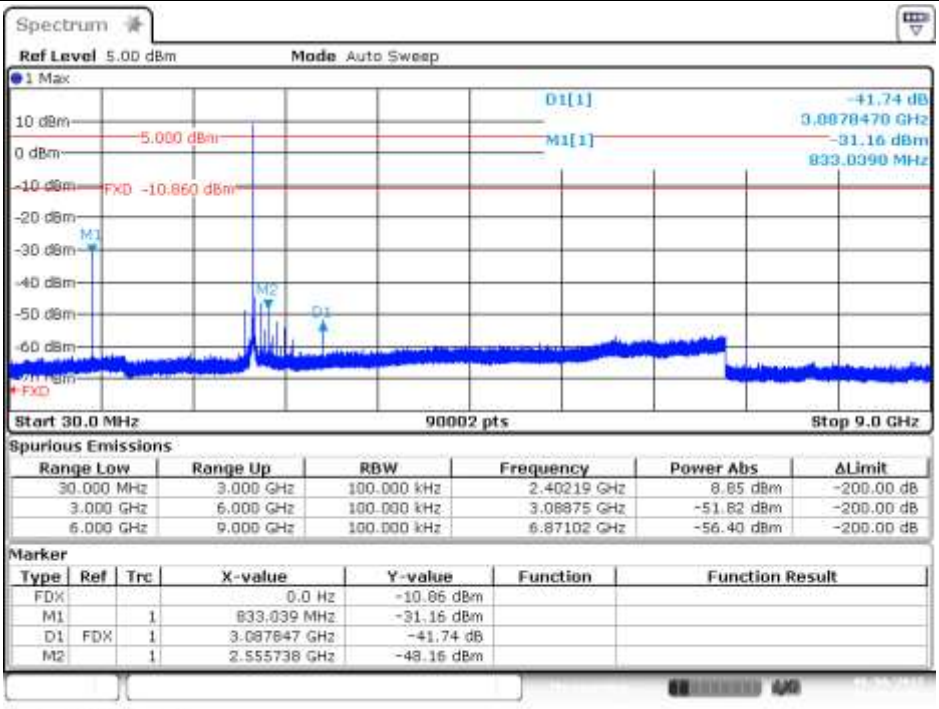
Marker

Type	Ref	Trc	X-value	Y-value	Function	Function Result
FDX			0.0 Hz	-8.66 dBm		
M1		1	22.162911 GHz	-61.57 dBm		
D1	FDX	1	24.880096 GHz	-52.53 dB		

Date: 6.JUN.2017 14:59:19

EDR – π/4-DQPSK

Cond Spur – CH0 (30MHz - 9GHz)



Spurious Emissions

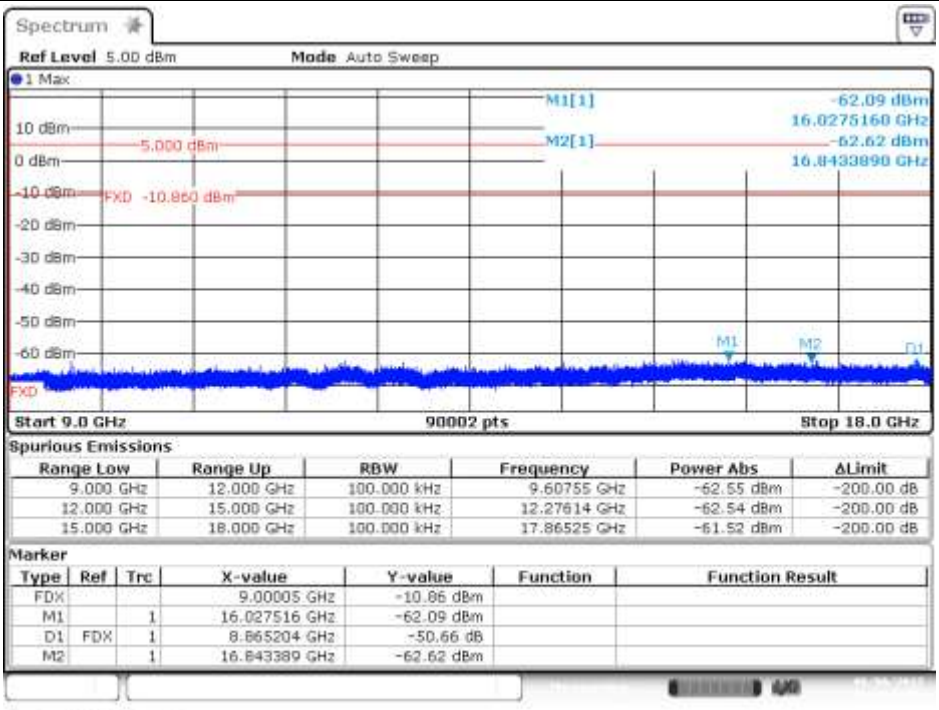
Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	3.000 GHz	100.000 kHz	2.40219 GHz	8.85 dBm	-200.00 dB
3.000 GHz	6.000 GHz	100.000 kHz	3.08875 GHz	-51.82 dBm	-200.00 dB
6.000 GHz	9.000 GHz	100.000 kHz	6.87102 GHz	-56.40 dBm	-200.00 dB

Marker

Type	Ref	Trc	X-value	Y-value	Function	Function Result
FDX			0.0 Hz	-10.86 dBm		
M1		1	833.039 MHz	-31.16 dBm		
D1	FDX	1	3.087847 GHz	-41.74 dB		
M2		1	2.555738 GHz	-48.16 dBm		

Date: 6.JUN.2017 13:00:16

Cond Spur – CH0 (9GHz - 18GHz)



Spurious Emissions

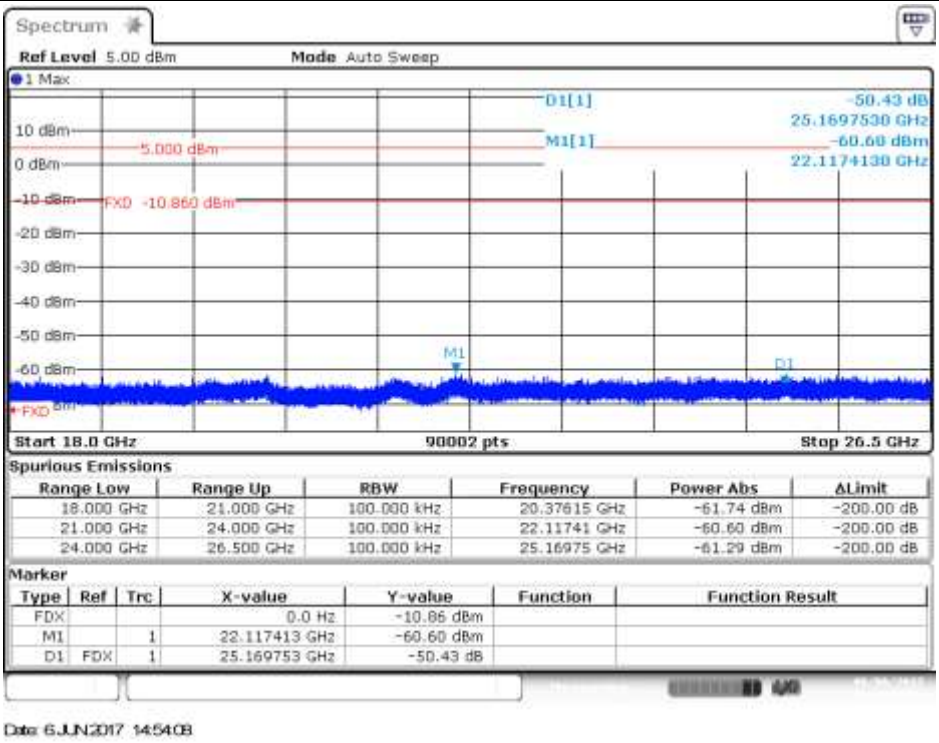
Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
9.000 GHz	12.000 GHz	100.000 kHz	9.60755 GHz	-62.55 dBm	-200.00 dB
12.000 GHz	15.000 GHz	100.000 kHz	12.27614 GHz	-62.54 dBm	-200.00 dB
15.000 GHz	18.000 GHz	100.000 kHz	17.86525 GHz	-61.52 dBm	-200.00 dB

Marker

Type	Ref	Trc	X-value	Y-value	Function	Function Result
FDX			9.00005 GHz	-10.86 dBm		
M1		1	16.027516 GHz	-62.09 dBm		
D1	FDX	1	8.865204 GHz	-50.66 dB		
M2		1	16.843389 GHz	-62.62 dBm		

Date: 6.JUN.2017 13:03:47

Cond Spur – CH0 (18GHz – 26.5GHz)



Spurious Emissions

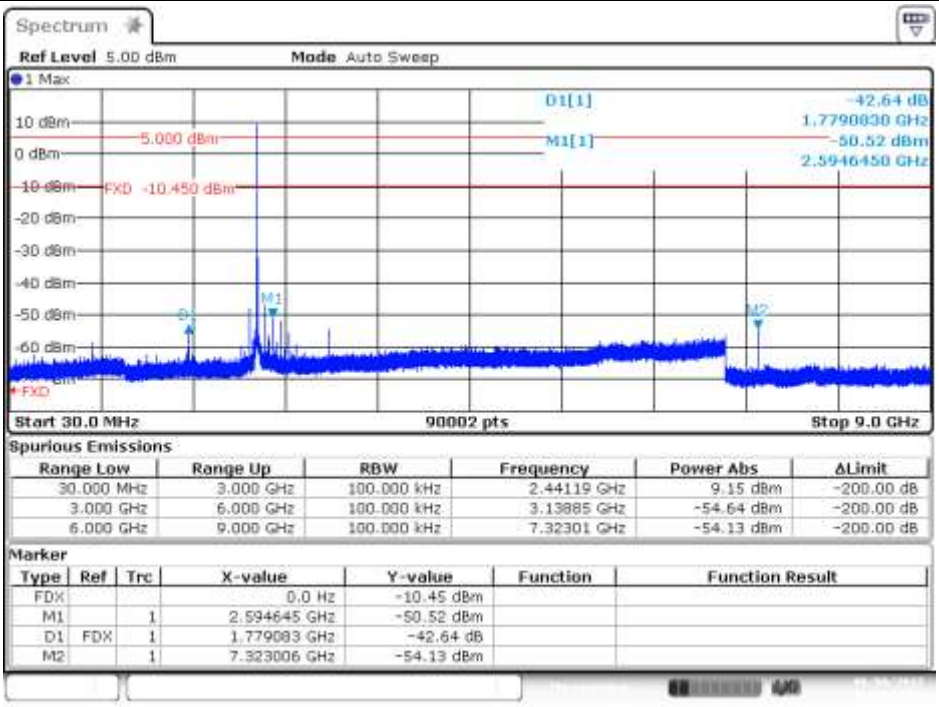
Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
18.000 GHz	21.000 GHz	100.000 kHz	20.37615 GHz	-61.74 dBm	-200.00 dB
21.000 GHz	24.000 GHz	100.000 kHz	22.11741 GHz	-60.60 dBm	-200.00 dB
24.000 GHz	26.500 GHz	100.000 kHz	25.16975 GHz	-61.29 dBm	-200.00 dB

Marker

Type	Ref	Trc	X-value	Y-value	Function	Function Result
FDX			0.0 Hz	-10.86 dBm		
M1		1	22.117413 GHz	-60.60 dBm		
D1	FDX	1	25.169753 GHz	-50.43 dB		

Date: 6.JUN.2017 14:54:08

Cond Spur – CH39 (30MHz - 9GHz)



Spurious Emissions

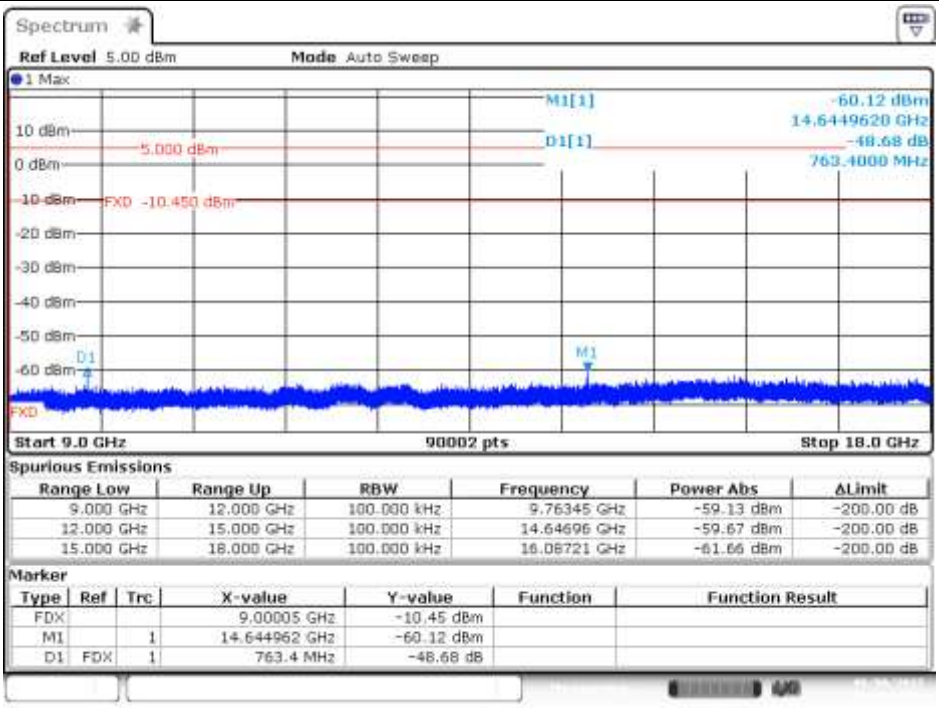
Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	3.000 GHz	100.000 kHz	2.44119 GHz	9.15 dBm	-200.00 dB
3.000 GHz	6.000 GHz	100.000 kHz	3.13885 GHz	-54.64 dBm	-200.00 dB
6.000 GHz	9.000 GHz	100.000 kHz	7.32301 GHz	-54.13 dBm	-200.00 dB

Marker

Type	Ref	Trc	X-value	Y-value	Function	Function Result
FDX			0.0 Hz	-10.45 dBm		
M1		1	2.594645 GHz	-50.52 dBm		
D1	FDX	1	1.779083 GHz	-42.64 dB		
M2		1	7.323006 GHz	-54.13 dBm		

Date: 6.JUN.2017 13:09:30

Cond Spur – CH39 (9GHz - 18GHz)



Spurious Emissions

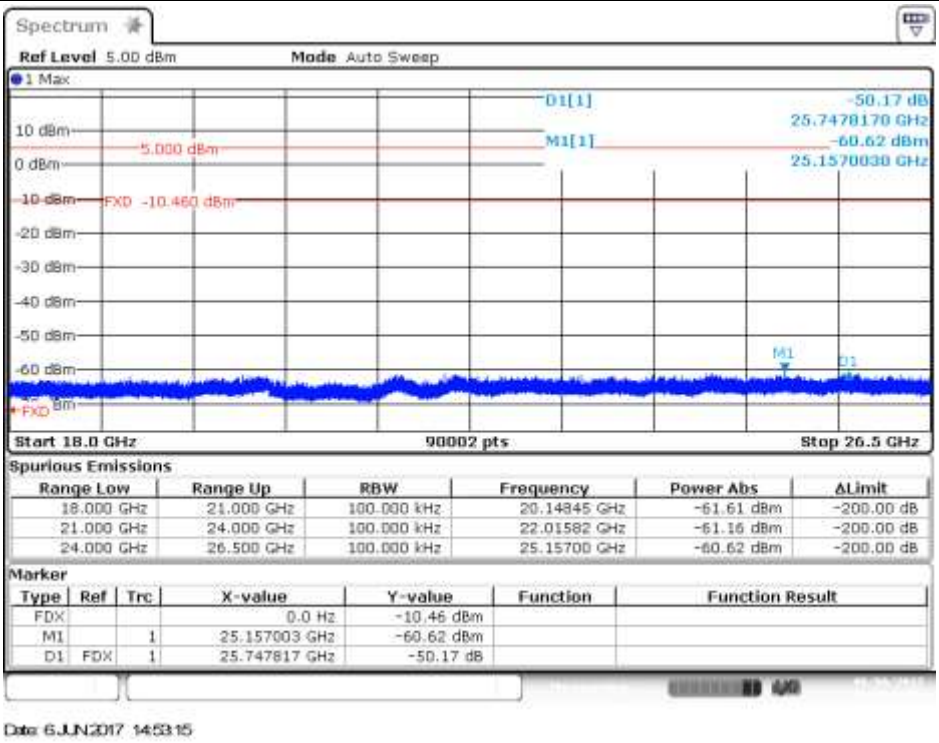
Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
9.000 GHz	12.000 GHz	100.000 kHz	9.76345 GHz	-59.13 dBm	-200.00 dB
12.000 GHz	15.000 GHz	100.000 kHz	14.64696 GHz	-59.67 dBm	-200.00 dB
15.000 GHz	18.000 GHz	100.000 kHz	16.08721 GHz	-61.66 dBm	-200.00 dB

Marker

Type	Ref	Trc	X-value	Y-value	Function	Function Result
FDX			9.00005 GHz	-10.45 dBm		
M1		1	14.644962 GHz	-60.12 dBm		
D1	FDX	1	763.4 MHz	-48.68 dB		

Date: 6.JUN.2017 13:10:35

Cond Spur – CH39 (18GHz – 26.5GHz)



Spurious Emissions

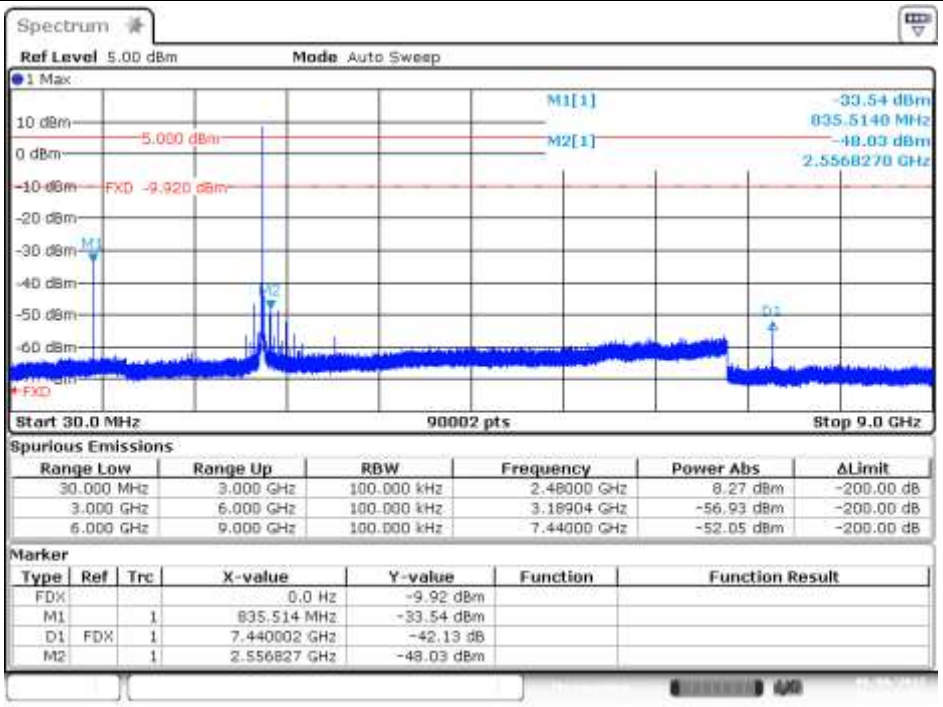
Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
18.000 GHz	21.000 GHz	100.000 kHz	20.14845 GHz	-61.61 dBm	-200.00 dB
21.000 GHz	24.000 GHz	100.000 kHz	22.01582 GHz	-61.16 dBm	-200.00 dB
24.000 GHz	26.500 GHz	100.000 kHz	25.15700 GHz	-60.62 dBm	-200.00 dB

Marker

Type	Ref	Trc	X-value	Y-value	Function	Function Result
FDX			0.0 Hz	-10.46 dBm		
M1		1	25.157003 GHz	-60.62 dBm		
D1	FDX	1	25.747817 GHz	-50.17 dB		

Date: 6.JUN.2017 14:53:15

Cond Spur – CH78 (30MHz - 9GHz)



Spurious Emissions

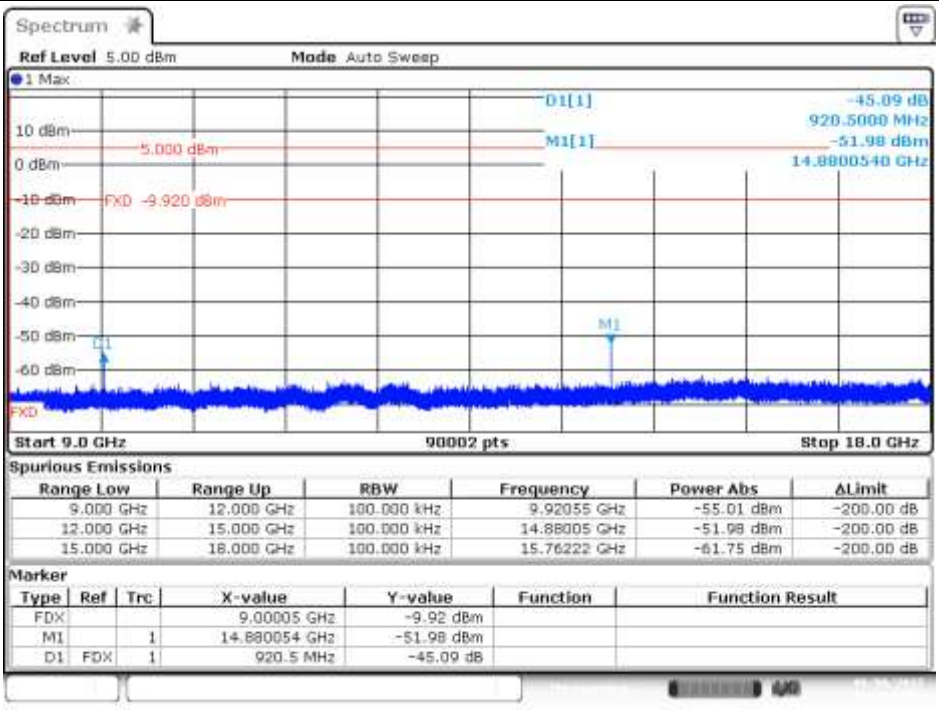
Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	3.000 GHz	100.000 kHz	2.48000 GHz	8.27 dBm	-200.00 dB
3.000 GHz	6.000 GHz	100.000 kHz	3.18904 GHz	-56.93 dBm	-200.00 dB
6.000 GHz	9.000 GHz	100.000 kHz	7.44000 GHz	-52.05 dBm	-200.00 dB

Marker

Type	Ref	Trc	X-value	Y-value	Function	Function Result
FDX			0.0 Hz	-9.92 dBm		
M1		1	835.514 MHz	-33.54 dBm		
D1	FDX	1	7.440002 GHz	-42.13 dB		
M2		1	2.556827 GHz	-48.03 dBm		

Date: 6.JUN.2017 13:14:41

Cond Spur – CH78 (9GHz - 18GHz)



Spurious Emissions

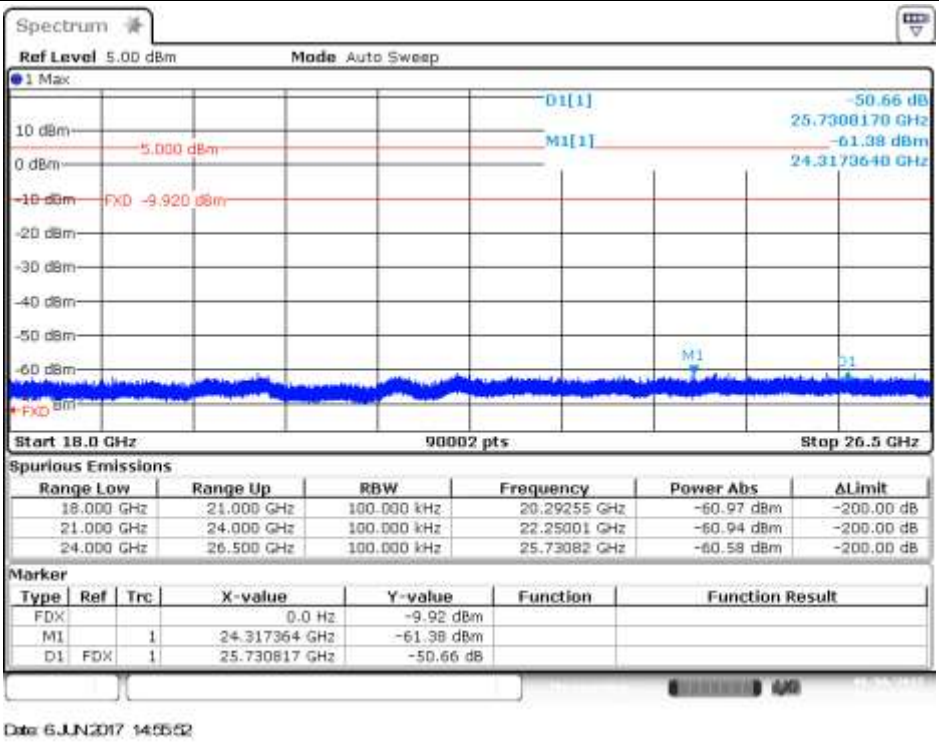
Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
9.000 GHz	12.000 GHz	100.000 kHz	9.92055 GHz	-55.01 dBm	-200.00 dB
12.000 GHz	15.000 GHz	100.000 kHz	14.88005 GHz	-51.98 dBm	-200.00 dB
15.000 GHz	18.000 GHz	100.000 kHz	15.76222 GHz	-61.75 dBm	-200.00 dB

Marker

Type	Ref	Trc	X-value	Y-value	Function	Function Result
FDX			9.00005 GHz	-9.92 dBm		
M1		1	14.880054 GHz	-51.98 dBm		
D1	FDX	1	920.5 MHz	-45.09 dB		

Date: 6.JUN.2017 13:15:35

Cond Spur – CH78 (18GHz – 26.5GHz)



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
18.000 GHz	21.000 GHz	100.000 kHz	20.29255 GHz	-60.97 dBm	-200.00 dB
21.000 GHz	24.000 GHz	100.000 kHz	22.25001 GHz	-60.94 dBm	-200.00 dB
24.000 GHz	26.500 GHz	100.000 kHz	25.73082 GHz	-60.58 dBm	-200.00 dB

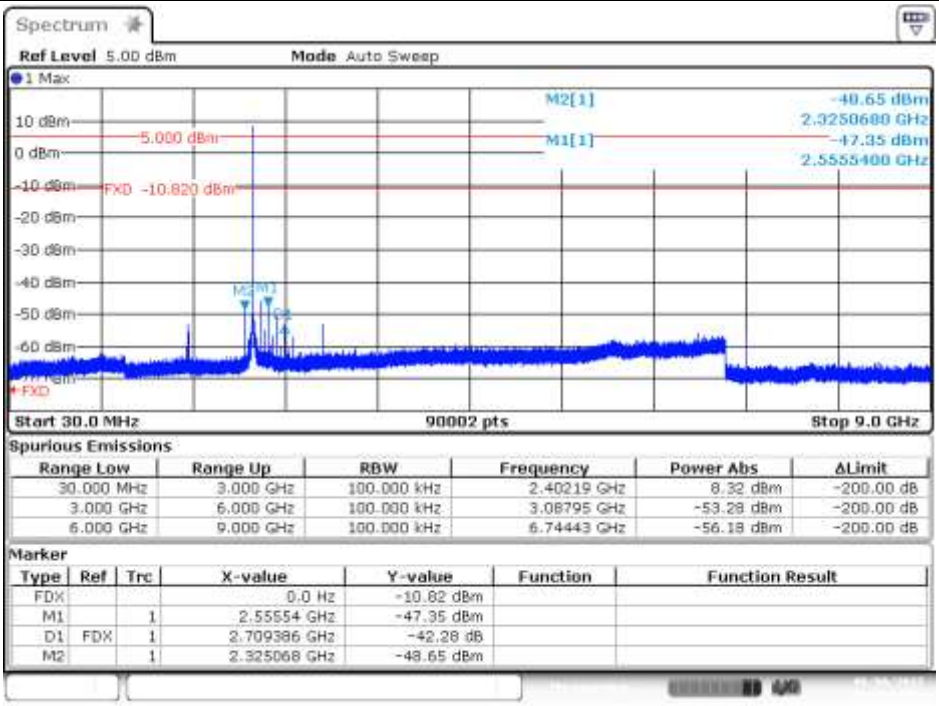
Marker

Type	Ref	Trc	X-value	Y-value	Function	Function Result
FDX			0.0 Hz	-9.92 dBm		
M1		1	24.317364 GHz	-61.38 dBm		
D1	FDX	1	25.730817 GHz	-50.66 dB		

Date: 6.JUN.2017 14:55:52

EDR – 8-DPSK

Cond Spur – CH0 (30MHz - 9GHz)



Spurious Emissions

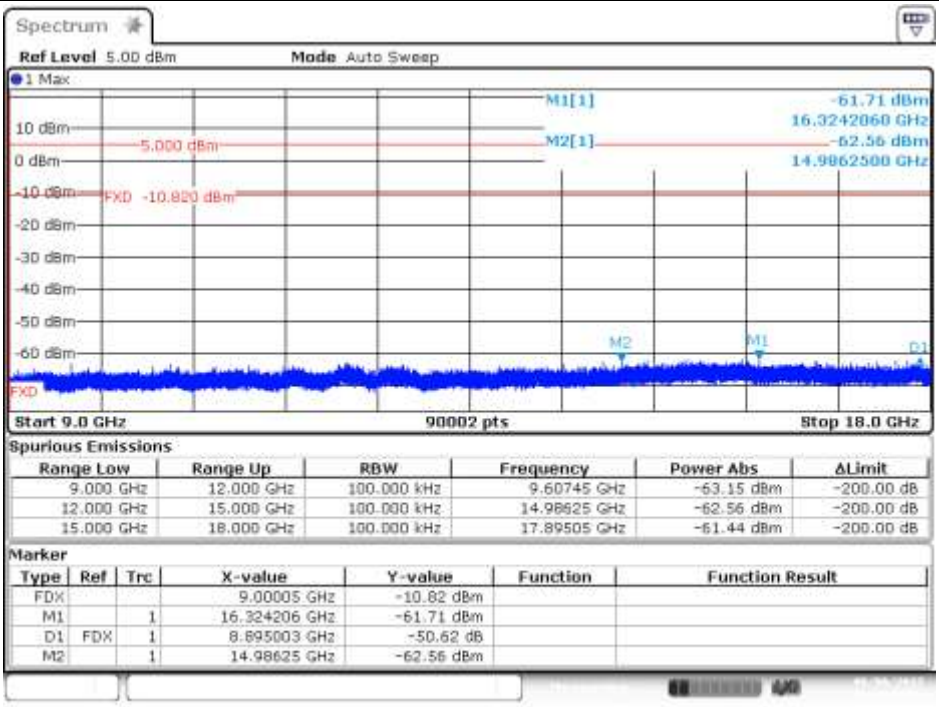
Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	3.000 GHz	100.000 kHz	2.40219 GHz	8.32 dBm	-200.00 dB
3.000 GHz	6.000 GHz	100.000 kHz	3.08795 GHz	-53.28 dBm	-200.00 dB
6.000 GHz	9.000 GHz	100.000 kHz	6.74443 GHz	-56.18 dBm	-200.00 dB

Marker

Type	Ref	Trc	X-value	Y-value	Function	Function Result
FDX			0.0 Hz	-10.82 dBm		
M1		1	2.55554 GHz	-47.35 dBm		
D1	FDX	1	2.709386 GHz	-42.28 dB		
M2		1	2.325068 GHz	-48.65 dBm		

Date: 6.JUN.2017 13:20:04

Cond Spur – CH0 (9GHz - 18GHz)



Spurious Emissions

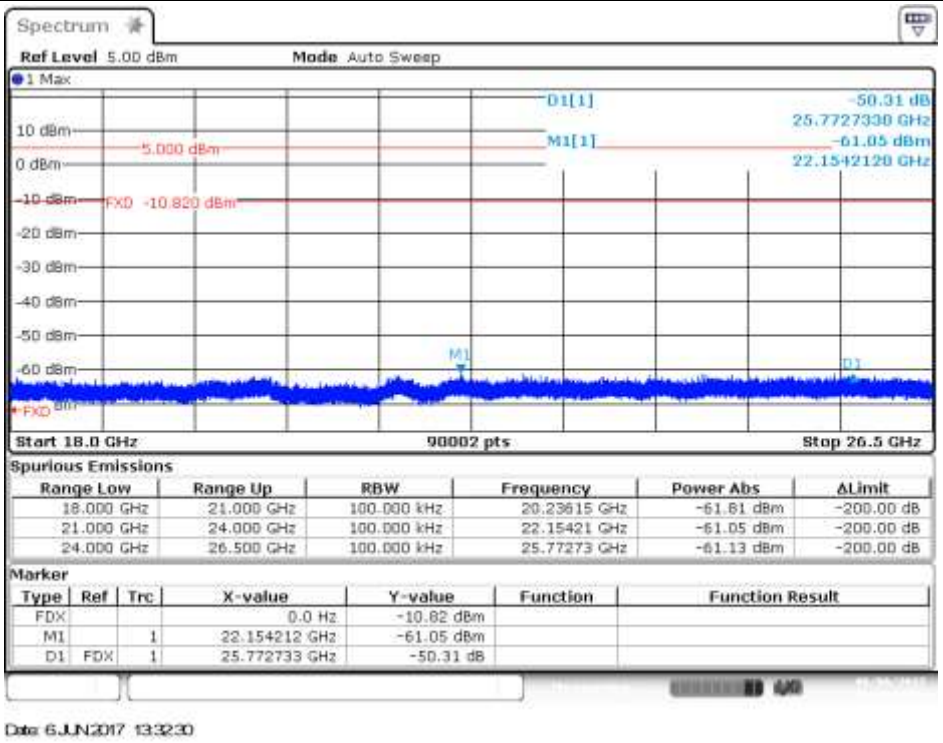
Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
9.000 GHz	12.000 GHz	100.000 kHz	9.60745 GHz	-63.15 dBm	-200.00 dB
12.000 GHz	15.000 GHz	100.000 kHz	14.98625 GHz	-62.56 dBm	-200.00 dB
15.000 GHz	18.000 GHz	100.000 kHz	17.89505 GHz	-61.44 dBm	-200.00 dB

Marker

Type	Ref	Trc	X-value	Y-value	Function	Function Result
FDX			9.00005 GHz	-10.82 dBm		
M1		1	16.324206 GHz	-61.71 dBm		
D1	FDX	1	8.895003 GHz	-50.62 dB		
M2		1	14.98625 GHz	-62.56 dBm		

Date: 6.JUN.2017 13:21:34

Cond Spur – CH0 (18GHz – 26.5GHz)



Spurious Emissions

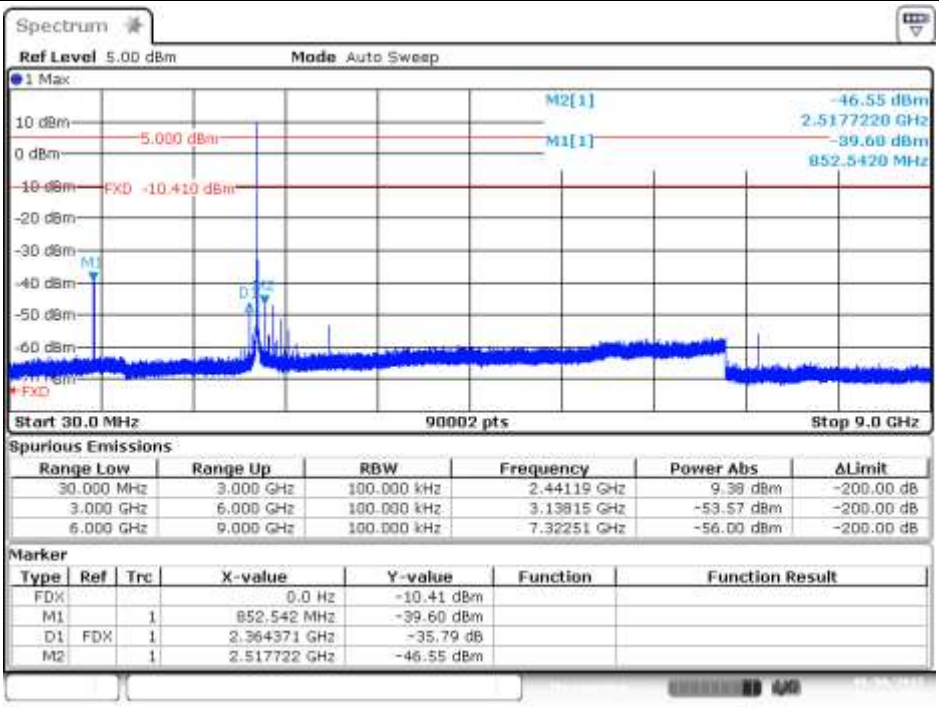
Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
18.000 GHz	21.000 GHz	100.000 kHz	20.23615 GHz	-61.61 dBm	-200.00 dB
21.000 GHz	24.000 GHz	100.000 kHz	22.15421 GHz	-61.05 dBm	-200.00 dB
24.000 GHz	26.500 GHz	100.000 kHz	25.77273 GHz	-61.13 dBm	-200.00 dB

Marker

Type	Ref	Trc	X-value	Y-value	Function	Function Result
FDX			0.0 Hz	-10.82 dBm		
M1		1	22.154212 GHz	-61.05 dBm		
D1	FDX	1	25.772733 GHz	-50.31 dB		

Date: 6.JUN.2017 13:32:30

Cond Spur – CH39 (30MHz - 9GHz)



Spurious Emissions

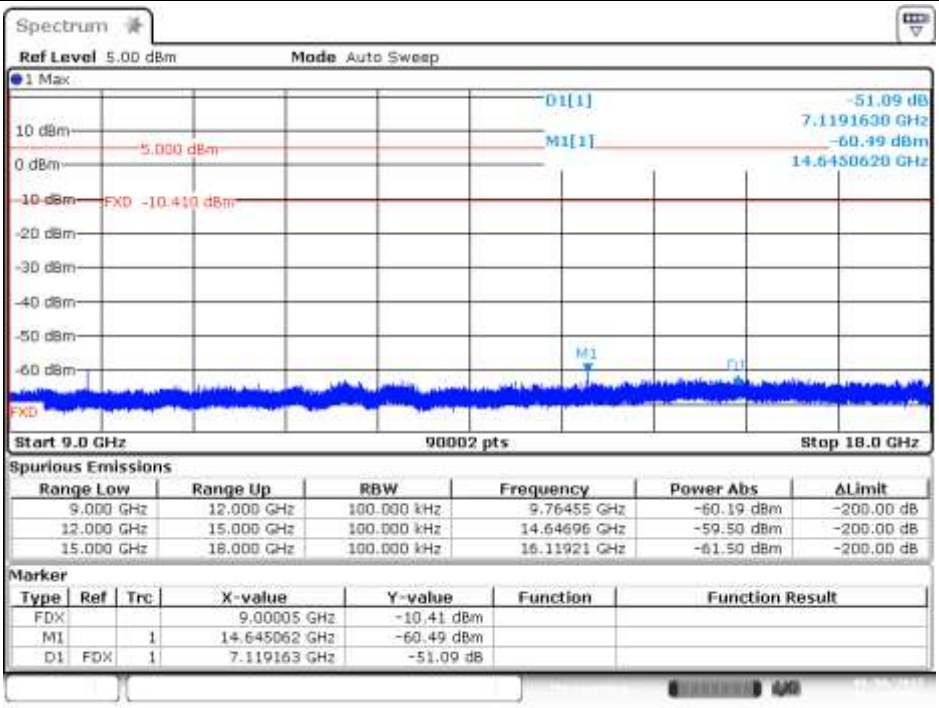
Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	3.000 GHz	100.000 kHz	2.44119 GHz	9.38 dBm	-200.00 dB
3.000 GHz	6.000 GHz	100.000 kHz	3.13815 GHz	-53.57 dBm	-200.00 dB
6.000 GHz	9.000 GHz	100.000 kHz	7.32251 GHz	-56.00 dBm	-200.00 dB

Marker

Type	Ref	Trc	X-value	Y-value	Function	Function Result
FDX			0.0 Hz	-10.41 dBm		
M1		1	852.542 MHz	-39.60 dBm		
D1	FDX	1	2.364371 GHz	-35.79 dB		
M2		1	2.517722 GHz	-46.55 dBm		

Date: 6.JUN.2017 13:38:03

Cond Spur – CH39 (9GHz - 18GHz)



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
9.000 GHz	12.000 GHz	100.000 kHz	9.76455 GHz	-60.19 dBm	-200.00 dB
12.000 GHz	15.000 GHz	100.000 kHz	14.64696 GHz	-59.50 dBm	-200.00 dB
15.000 GHz	18.000 GHz	100.000 kHz	16.11921 GHz	-61.50 dBm	-200.00 dB

Marker

Type	Ref	Trc	X-value	Y-value	Function	Function Result
FDX			9.00005 GHz	-10.41 dBm		
M1		1	14.645062 GHz	-60.49 dBm		
D1	FDX	1	7.119163 GHz	-51.09 dB		

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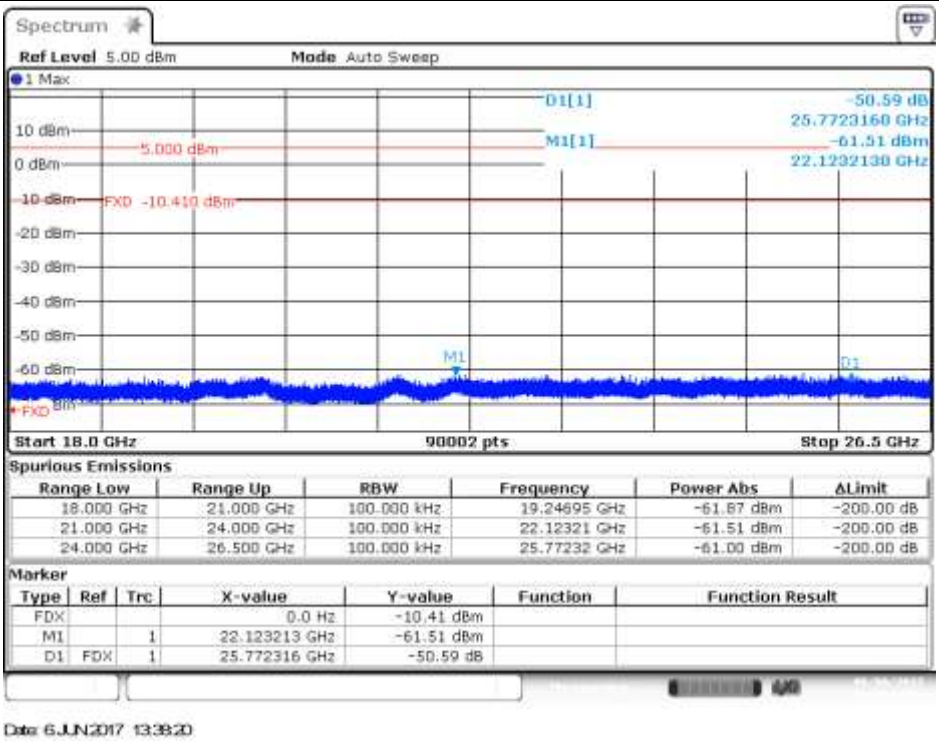
Cond Spur – CH39 (18GHz – 26.5GHz)



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
18.000 GHz	21.000 GHz	100.000 kHz	19.24695 GHz	-61.87 dBm	-200.00 dB
21.000 GHz	24.000 GHz	100.000 kHz	22.12321 GHz	-61.51 dBm	-200.00 dB
24.000 GHz	26.500 GHz	100.000 kHz	25.77232 GHz	-61.00 dBm	-200.00 dB

Marker

Type	Ref	Trc	X-value	Y-value	Function	Function Result
FDX			0.0 Hz	-10.41 dBm		
M1		1	22.123213 GHz	-61.51 dBm		
D1	FDX	1	25.772316 GHz	-50.59 dB		

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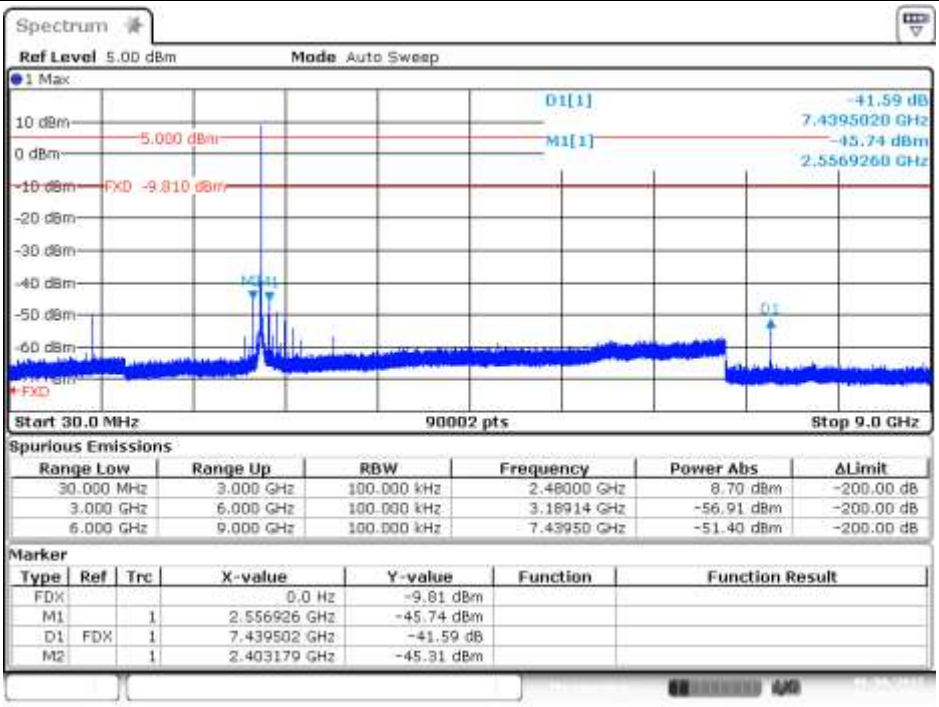
Cond Spur – CH78 (30MHz - 9GHz)



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	3.000 GHz	100.000 kHz	2.48000 GHz	8.70 dBm	-200.00 dB
3.000 GHz	6.000 GHz	100.000 kHz	3.18914 GHz	-56.91 dBm	-200.00 dB
6.000 GHz	9.000 GHz	100.000 kHz	7.43950 GHz	-51.40 dBm	-200.00 dB

Marker

Type	Ref	Trc	X-value	Y-value	Function	Function Result
FDX			0.0 Hz	-9.81 dBm		
M1		1	2.556926 GHz	-45.74 dBm		
D1	FDX	1	7.439502 GHz	-41.59 dB		
M2		1	2.403179 GHz	-45.31 dBm		

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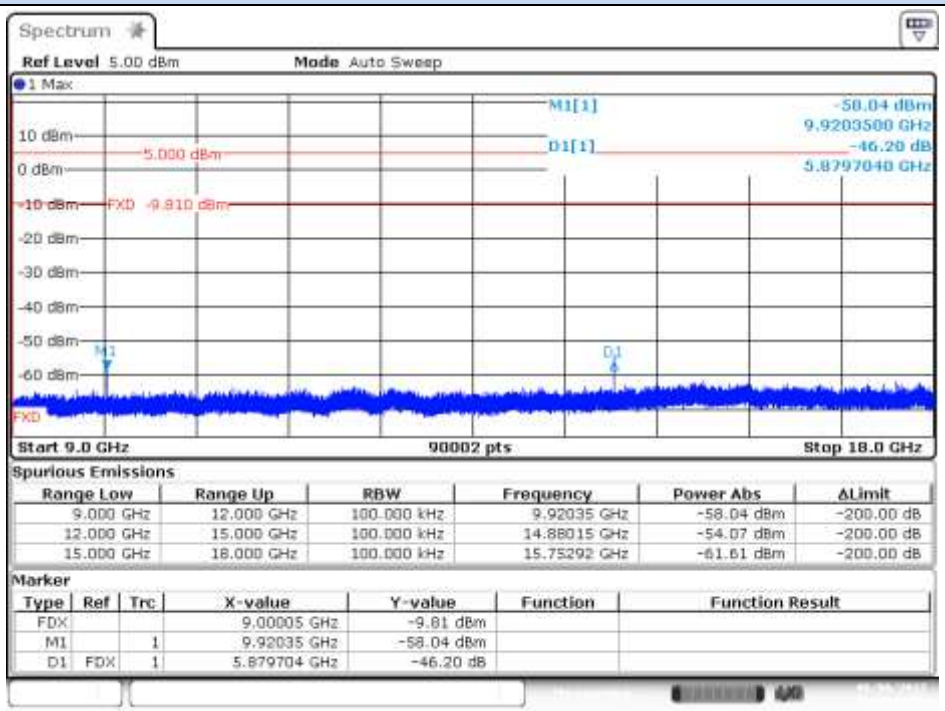
Cond Spur – CH78 (9GHz - 18GHz)



Spurious Emissions

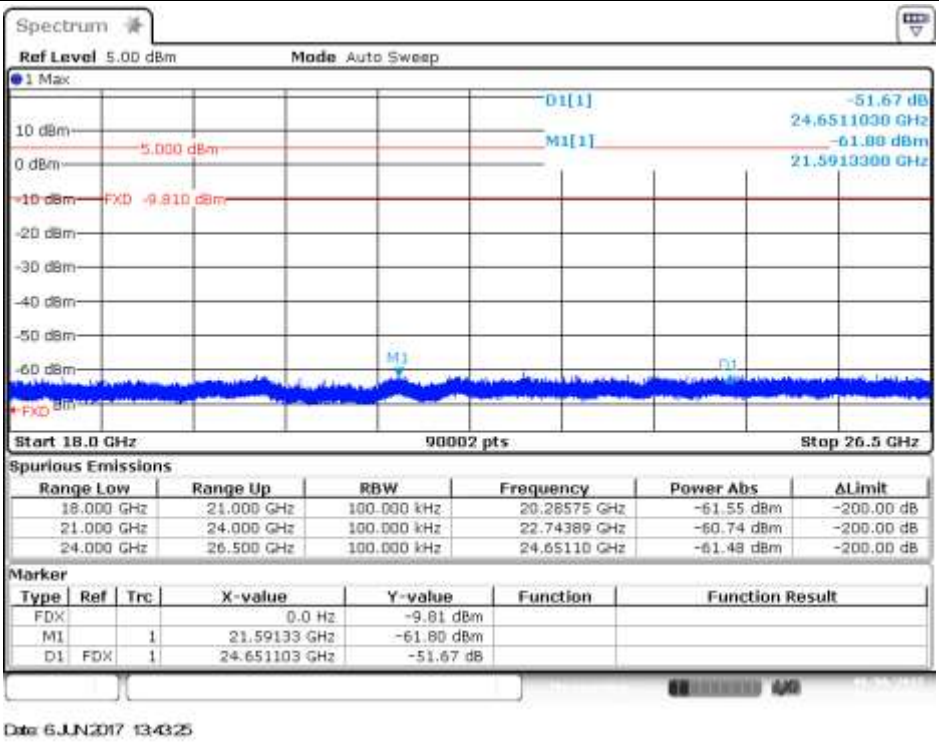
Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
9.000 GHz	12.000 GHz	100.000 kHz	9.92035 GHz	-58.04 dBm	-200.00 dB
12.000 GHz	15.000 GHz	100.000 kHz	14.88015 GHz	-54.07 dBm	-200.00 dB
15.000 GHz	18.000 GHz	100.000 kHz	15.75292 GHz	-61.61 dBm	-200.00 dB

Marker

Type	Ref	Trc	X-value	Y-value	Function	Function Result
FDX			9.00005 GHz	-9.81 dBm		
M1		1	9.92035 GHz	-58.04 dBm		
D1	FDX	1	5.879704 GHz	-46.20 dB		

Date: 6.JUN.2017 13:42:16

Cond Spur – CH78 (18GHz – 26.5GHz)



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
18.000 GHz	21.000 GHz	100.000 kHz	20.28575 GHz	-61.55 dBm	-200.00 dB
21.000 GHz	24.000 GHz	100.000 kHz	22.74389 GHz	-60.74 dBm	-200.00 dB
24.000 GHz	26.500 GHz	100.000 kHz	24.65110 GHz	-61.48 dBm	-200.00 dB

Marker

Type	Ref	Trc	X-value	Y-value	Function	Function Result
FDX			0.0 Hz	-9.81 dBm		
M1		1	21.59133 GHz	-61.80 dBm		
D1	FDX	1	24.651103 GHz	-51.67 dB		

Date: 6.JUN.2017 13:43:25

B.6 Radiated spurious emission

Standards references

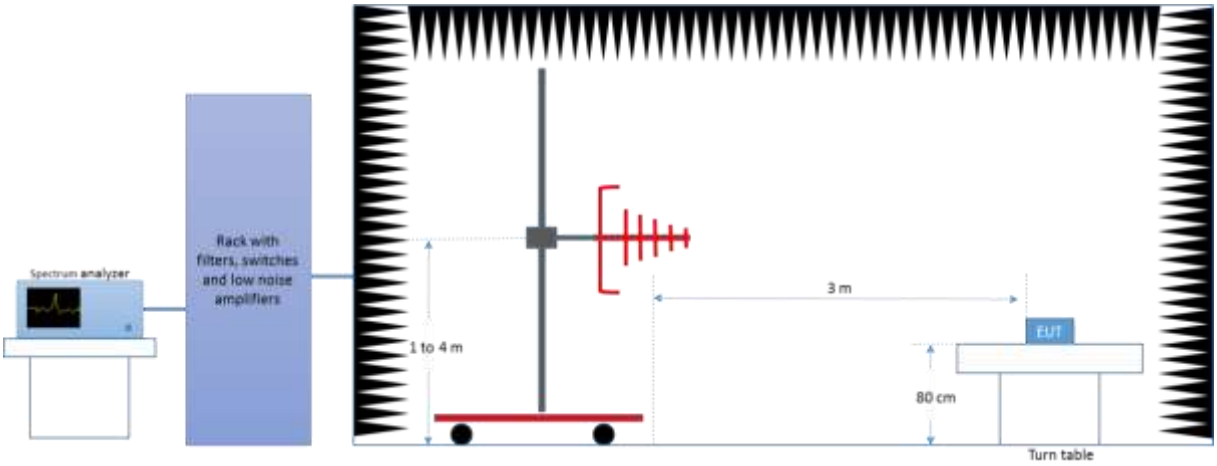
<table>
<tr><th>FCC part</th><th>RSS part</th><th>Limits</th></tr>
<tr><td>15.247 (d)
15.209 (a)</td><td>RSS-247
Clause 5.5

RSS GEN
Clause 8.9</td><td>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):
<table>
<tr><th>Freq Range (MHz)</th><th>Field Stregth (µV/m)</th><th>Field Stregth (dBµV/m)</th><th>Meas. Distance (m)</th></tr>
<tr><td>30-88</td><td>100</td><td>40</td><td>3</td></tr>
<tr><td>88-216</td><td>150</td><td>43.5</td><td>3</td></tr>
<tr><td>216-960</td><td>200</td><td>46</td><td>3</td></tr>
<tr><td>Above 960</td><td>500</td><td>54</td><td>3</td></tr>
</table>
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 specified when measuring with peak detector function, corresponding to 20 dB above the indicated values in the table.</td></tr>
</table>

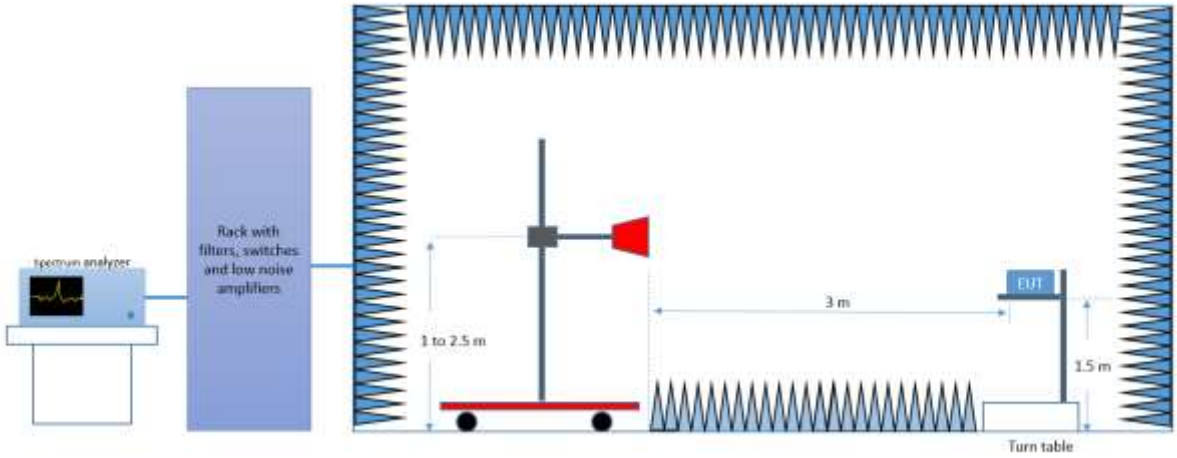
Test procedure:

The setups below were used to measure the radiated spurious emissions.
Depending of the frequency range and bands being tested, different antennas and filters were used.
The final measurement is done by varying the antenna height as indicated in the setups below for each band, the EUT azimuth over 360º and for both Vertical and Horizontal polarizations.
The radiated spurious emission was measured on the worst case configuration found.

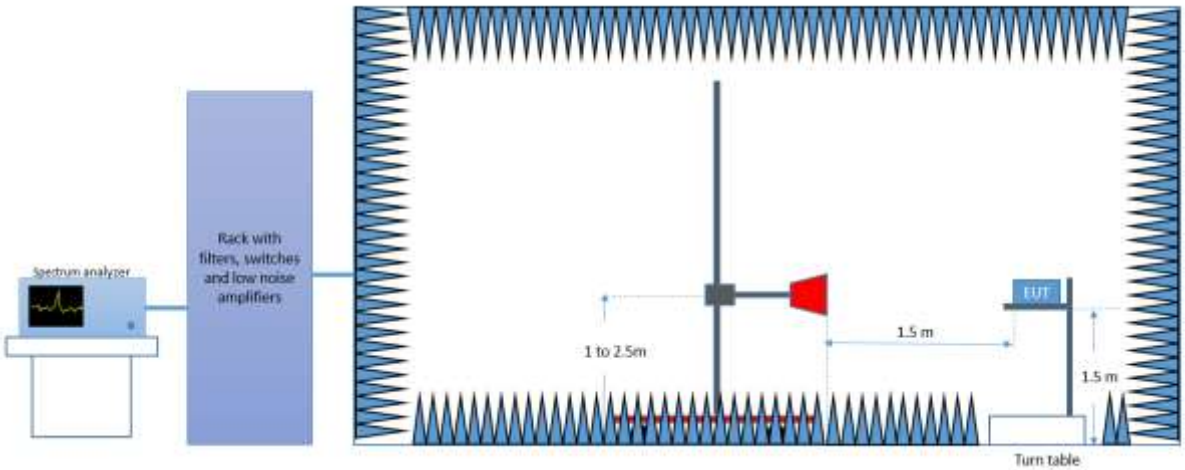
Radiated Setup < 1GHz



Radiated Setup 1 GHz - 18 GHz



Radiated Setup 18 GHz - 26.5 GHz



Sample Calculation

The field strength is deduced from the radiated measurement using the following equation:

$$E = 126.8 - 20\log(\lambda) + P - G$$

where

E is the field strength of the emission at the measurement distance, in dBµV/m

P is the power measured at the output of the test antenna, in dBm

λ is the wavelength of the emission under investigation [300/f_{MHz}], in m

G is the gain of the test antenna, in dBi

NOTE – The measured power P includes all applicable instrument correction factors up to the connection to the test

Antenna e.g. cable losses, amplifier gains.

For field strength measurements made at other than the distance at which the applicable limit is specified, the field strength of the emission at the distance specified by the limit is deduced as follows:

$$E_{SpecLimit} = E_{Meas} + 20\log(D_{Meas}/D_{SpecLimit})$$

where

$E_{SpecLimit}$ is the field strength of the emission at the distance specified by the limit, in dBµV/m

E_{Meas} is the field strength of the emission at the measurement distance, in dBµV/m

D_{Meas} is the measurement distance, in m

$D_{SpecLimit}$ is the distance specified by the limit, in m

Test Results

30 MHz – 26.5 GHz, BR – GFSK

Radiated Spurious – CH0 DH5

Frequency	MaxPeak	Avg	Limit	Margin
MHz	dBuV/m	dBuV/m	dBuV/m	dB
62.5	**39.3**	---	40.0	0.8
3378.4	60.1	---	74.0	14.0
3405.0	---	46.6	54.0	7.5
6261.9	---	48.1	54.0	6.0
6269.9	61.5	---	74.0	12.6
7205.7	---	42.0	54.0	12.1
7205.7	48.5	---	74.0	25.6
12307.8	---	38.6	54.0	15.5
12316.0	51.0	---	74.0	23.1
17973.4	61.4	---	74.0	12.7
17978.7	---	49.1	54.0	4.9
24557.0	---	36.2	54.0	17.9
24284.0	48.7	---	74.0	25.3

Radiated Spurious – CH39 DH5

Frequency	MaxPeak	Avg	Limit	Margin
MHz	dBuV/m	dBuV/m	dBuV/m	dB
62.5	33.4	---	40.0	6.6
3437.8	---	46.6	54.0	7.5
3446.6	59.8	---	74.0	14.2
6307.2	60.8	---	74.0	13.2
6309.7	---	47.8	54.0	6.2
7322.7	---	40.5	54.0	13.5
7323.2	48.2	---	74.0	25.9
12506.9	50.7	---	74.0	23.3
12507.9	---	37.8	54.0	16.3
17993.2	61.7	---	74.0	12.4
17993.7	---	49.4	54.0	4.7
19526.8	---	37.3	54.0	16.7
22565.2	49.6	---	74.0	24.4

Radiated Spurious – CH78 DH5

Frequency	MaxPeak	Avg	Limit	Margin
MHz	dBuV/m	dBuV/m	dBuV/m	dB
62.5	34.1	---	40.0	6.0
3457.8	---	46.6	54.0	7.5
3459.4	59.0	---	74.0	15.0
6280.0	61.6	---	74.0	12.5
6289.4	---	47.9	54.0	6.2
7439.7	---	41.7	54.0	12.4
7440.1	47.9	---	74.0	26.2
12370.6	---	38.7	54.0	15.4
12386.1	50.8	---	74.0	23.2
17988.9	---	49.3	54.0	4.7
17998.6	61.7	---	74.0	12.3
19838.8	---	42.5	54.0	11.6
19838.8	50.1	---	74.0	23.9

30 MHz – 26.5 GHz, EDR – π/4-DQPSK

Radiated Spurious – CH0 2DH5

Frequency	MaxPeak	Avg	Limit	Margin
MHz	dBuV/m	dBuV/m	dBuV/m	dB
62.5	34.9	---	40.0	5.1
3445.0	59.3	---	74.0	14.8
3448.1	---	46.6	54.0	7.4
6298.5	---	47.8	54.0	6.2
6315.9	61.0	---	74.0	13.1
7205.2	46.2	---	74.0	27.9
7205.2	---	36.8	54.0	17.3
12321.3	51.2	---	74.0	22.9
12366.8	---	38.7	54.0	15.3
17987.9	61.2	---	74.0	12.8
17994.2	---	49.7	54.0	4.4
25934.0	---	36.1	54.0	18.0
23959.6	48.9	---	74.0	25.2

Radiated Spurious – CH39 2DH5

Frequency	MaxPeak	Avg	Limit	Margin
MHz	dBuV/m	dBuV/m	dBuV/m	dB
62.5	**37.8**	---	40.0	2.3
3413.1	60.0	---	74.0	14.1
3416.9	---	46.6	54.0	7.4
6259.7	---	48.2	54.0	5.9
6265.9	61.3	---	74.0	12.8
7322.7	---	36.3	54.0	17.7
7323.2	44.5	---	74.0	29.6
12322.8	51.4	---	74.0	22.6
12361.9	---	38.7	54.0	15.4
17988.4	61.6	---	74.0	12.4
17998.6	---	49.6	54.0	4.5
23870.3	---	36.3	54.0	17.8
25952.5	48.9	---	74.0	25.2

Radiated Spurious – CH78 2DH5

Frequency	MaxPeak	Avg	Limit	Margin
MHz	dBuV/m	dBuV/m	dBuV/m	dB
62.5	---	33.9	40.0	6.1
62.5	35.6	---	40.0	4.5
3407.2	---	46.5	54.0	7.5
3411.3	60.1	---	74.0	14.0
6334.8	---	47.8	54.0	6.2
6339.1	60.8	---	74.0	13.3
7439.7	45.0	---	74.0	29.0
7439.7	---	36.3	54.0	17.8
12345.5	51.1	---	74.0	22.9
12371.1	---	38.7	54.0	15.4
17986.5	60.9	---	74.0	13.1
17993.2	---	49.4	54.0	4.7
25568.9	49.4	---	74.0	24.6

30 MHz – 26.5 GHz, EDR – 8-DPSK

Radiated Spurious – CH0 3DH5

Frequency	MaxPeak	Avg	Limit	Margin
MHz	dBuV/m	dBuV/m	dBuV/m	dB
62.5	37.5	---	40.0	2.6
3475.0	---	46.7	54.0	7.4
3480.6	59.2	---	74.0	14.9
6298.9	---	47.9	54.0	6.2
6312.6	61.9	---	74.0	12.2
7205.7	---	36.4	54.0	17.6
7205.7	46.7	---	74.0	27.3
12367.7	---	39.1	54.0	15.0
12371.6	51.1	---	74.0	23.0
17999.5	---	49.6	54.0	4.5
18000.0	61.6	---	74.0	12.4
25890.1	48.9	---	74.0	25.2
25946.8	---	36.3	54.0	17.7

Radiated Spurious – CH39 3DH5

Frequency	MaxPeak	Avg	Limit	Margin
MHz	dBuV/m	dBuV/m	dBuV/m	dB
32.5	33.7	---	40.0	6.4
3424.7	59.3	---	74.0	14.7
3438.1	---	46.6	54.0	7.4
6240.5	---	48.2	54.0	5.9
6283.6	60.9	---	74.0	13.2
7322.7	---	37.0	54.0	17.1
7323.2	45.3	---	74.0	28.8
12372.1	---	38.7	54.0	15.3
12390.9	51.2	---	74.0	22.8
17979.7	61.4	---	74.0	12.6
17982.6	---	49.4	54.0	4.7
23928.0	48.8	---	74.0	25.3
24576.5	---	36.5	54.0	17.6

Radiated Spurious – CH78 3DH5

Frequency	MaxPeak	Avg	Limit	Margin
MHz	dBuV/m	dBuV/m	dBuV/m	dB
62.5	**37.7**	---	40.0	2.4
3457.8	59.6	---	74.0	14.5
3467.2	---	46.6	54.0	7.5
6367.4	---	48.1	54.0	5.9
6376.4	61.2	---	74.0	12.9
7433.9	46.0	---	74.0	28.1
7439.7	---	37.2	54.0	16.9
12355.6	50.5	---	74.0	23.5
12386.1	---	38.9	54.0	15.2
17987.4	61.4	---	74.0	12.7
17995.2	---	49.6	54.0	4.5
22576.9	49.3	---	74.0	24.7