Electromagnetic Compatibility
Test Report

Test Report No: MOB 130918 Rev.2
Issued on: October 03, 2018

Product Name
MCU-30 Lite

Tested According to
FCC 47 CFR, Part 15.247

Tests Performed for
MOBILICOM
HaMetzoda 31, Azor 58001, Israel
Tel: 0777 10 30 60

QualiTech EMC Laboratory
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Petah-Tikva, 4951169, Israel
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Certificate 1633.01
Electrical Testing

Test Personnel

Tests Performed By: ----------

Agenehu Yizhak

Report Prepared By: ----------

Bina Talkar

Report Approved By: ----------

Rami Nataf
EMC Lab. Manager
QualiTech EMC Laboratory

Test Report details:

Test commencement date: 21.06.2018

Test completion date: 26.08.2018

Customer's representative: Nitsan Mushkatel

Issued on: 03.10.2018

Revision details:

Version	Date	Details/Reasons
Rev. 1	13.09.2018	-
Rev. 2	03.10.2018	Test report updated according to TCB comments.

Assessment information:

This report contains an assessment of the EUT against Electromagnetic Compatibility based upon tests carried out on the samples submitted. The results contained in this report relate only to the items tested. Manufactured products will not necessarily give identical results due to production and measurement tolerances. QualiTech, EMC Lab does not assume responsibility for any conclusion and generalization drawn from the test results with regards to other specimens or samples of type of the equipment represented by test item.

The EUT was set up and exercised using the configuration, modes of operation and arrangements defined in this report only.

Modifications:

Modifications made to the EUT

None

Modifications made to the Test Standard

None

Summary of Compliance Status

The EUT was tested according to the following test methods.
Test results are given in full in section 3.

Test Case	Test Spec. Clause	Remarks
DTS Bandwidth	47 CFR §15.247 (a) (2)	Pass
Fundamental Emission Output Power	47 CFR §15.247 (b) (3) (4)	Pass
Maximum Power Spectral Density Level in the Fundamental Emission	47 CFR §15.247 (e)	Pass
Emissions in Non-Restricted Frequency Bands	47 CFR §15.247 (d)	Pass
Emissions in Restricted Frequency Bands	47 CFR §15.247 (d), & §15.205, & §15.209(a)	Pass
Band-edge Measurements	47 CFR §15.247 (d)	Pass
Antenna Connector Requirements	47 CFR §15.203	Pass
Conducted Emission Power Lines	47 CFR §15.207	N/A Battery powered only

Table of Contents

1. General

1.1. Referenced documents:

ANSI C63.4-2014	Limits and Methods of Measurement for Conducted and Radiated Emissions of Information Technology Equipment
ANSI C63.10-2013	American National Standard of Procedures for Compliance Testing of Unlicensed Wireless Devices

1.2. Description of the EUT system/test Item:

Product name: MCU-30 Lite

FCC ID: Q88-MCU-30L

Description:

Communication unit used for security, robotics & surveillance

Frequency range: 905 – 925 MHz for BW = 4.2 MHz bandwidth, 3.2 Mbps & 4.0 Mbps

907– 923 MHz for BW = 8.4 MHz bandwidth, 6.4 Mbps & 8.0 Mbps

Frequency range: 2403 – 2478 MHz for BW = 4.2 MHz configuration, 3.2 Mbps & 4.0 Mbps

2405 – 2475 MHz for BW = 8.4 MHz configuration**,** 6.4 Mbps & 8.0 Mbps

Type of Modulation: QPSK

Antenna Gain: 2.0 dBi

Power Feed: operates only via 12 VDC battery and not via AC/DC transformer.

1.3. Worst Case Results:

In order to determine the worst-case emissions for all modes/data rates/tests and EUT's position(three axis- x,y,z), all modes/data rates and position were investigated for each required test to determine which produces the worst- case data and then full testing was performed in that mode/data rate and position,

2. Test Facility & Uncertainty of Measurement

2.1. Accreditation/ Registration reference:

- *A2LA Certificate Number: 1633.01*

2.2. Test Facility description

The tests were performed at the EMC Laboratory, QualiTech Division, ECI Telecom Group

Address: 30, Hasivim St., Petah Tikva, Israel.
Tel: 972-3-926-6994

Semi Anechoic Configuration:

Measurement distance	3m
Chamber dimensions	9.5m x 6.5m x 5.2m
Antenna height	1 - 4m
Shielding Effectiveness	Magnetic field ≥80dB at 15 kHz ≥90dB at 100 kHz Electric field >120dB from 1MHz to 1GHz >110dB from 1GHz to 10GHz
Absorbing material	Ferrite tiles on the walls and ceiling Emerson & Cuming hybrid absorbing material in selected positions on the walls
Normalized Site Attenuation measured at 5 positions	±3.49dB, 30MHz to 1GHz
Transmission Loss measured at 5 positions, at 1.5m height	±3dB, 1GHz to 18GHz

2.3. Uncertainty of Measurement:

Test Name	Test Method & Range	Uncertainty	
		Combined std. Uc(y)	Expanded U
Radiated Emission	30MHz÷230MHz, Horiz. polar. 30MHz÷230MHz, Ver. polar. 230MHz÷1000MHz, Horiz. polar. 230MHz÷1000MHz, Vert. polar.	[dB] 1.8 1.967 1.487 1.499	[dB] 3.6 3.934 2.973 2.998
Conducted Emission	9 kHz÷150 kHz 150 kHz÷30MHz	[dB] 1.378 1.095	[dB] 2.756 2.190
Radio frequency	Up to 18 GHz	$\pm 1*10^{-6}$	$< \pm 1*10^{-5}$
Total Conducted RF Power	Up to 18 GHz	±1.378 dB	< ±1.5dB
Conducted Power density	Up to 18 GHz	±1.378 dB	< ±3dB
Temperature	23.6 °C	±0.6°C	< ±2°C
Humidity	54.9%	±3.1%	< ±5%
DC Voltage	0-60 VDC	±0.3%	< ±3%

3. Report of Measurements and Examinations

3.1. 6dB DTS Bandwidth

Date of Test: 21.06.2018
Relative Humidity: 48.5%
Ambient Temperature:22.3 °C
Atmospheric Pressure: 1011.4 hPa
Test performed by: Agi Yizhak

Reference document:	**47 CFR §15.247 (a)(2)**		
Test Requirements:	Systems using digital modulation techniques may operate in the 902-928 MHz, 2400-2483.5 MHz, and 5725–5850 MHz bands. The minimum 6dB bandwidth shall be at least 500 kHz for systems with antenna gain not exceed 6dBi.		
Method of testing:	KDB 558074 D01 v04, Sec.8.2 Conducted	**Pass**	
Operating conditions:	Under normal test conditions		
S.A. Settings:	RBW: 100 kHz, VBW: 1MHz		
Environment conditions:	Ambient Temperature: 21°C	Relative Humidity:48 %	Atmospheric Pressure: 1011.4 hPa
Test Result:	See below		

Test results for RF1 output: 905 – 925 MHz

Fundamental Frequency, [MHz]	6 dB DTS Bandwidth, [kHz]	Minimum Bandwidth, [kHz]	Pass/Fail
BW = 4.2 MHz, Bit Rate = 3.2 Mbps			
905	4148	500	Pass
915	4142	500	Pass
925	4143	500	Pass
BW = 4.2 MHz, Bit Rate = 4.0 Mbps			
905	4143	500	Pass
915	4142	500	Pass
925	4141	500	Pass
BW = 8.4 MHz, Bit Rate = 6.4 Mbps			
907	8439	500	Pass
915	8449	500	Pass
923	8439	500	Pass
BW = 8.4 MHz, Bit Rate = 8.0 Mbps			
907	8439	500	Pass
915	8448	500	Pass
923	8439	500	Pass

Test results for RF2 output: 905 – 925 MHz

Fundamental Frequency, [MHz]	6 dB DTS Bandwidth, [kHz]	Minimum Bandwidth, [kHz]	Pass/Fail
BW = 4.2 MHz, Bit Rate = 3.2 Mbps,			
905	4135	500	Pass
915	4149	500	Pass
925	4145	500	Pass
BW = 4.2 MHz, Bit Rate = 4.0 Mbps,			
905	4148	500	Pass
915	4138	500	Pass
925	4148	500	Pass
BW = 8.4 MHz, Bit Rate = 6.4 Mbps,			
907	8443	500	Pass
915	8448	500	Pass
923	8435	500	Pass
BW = 8.4 MHz, Bit Rate = 8.0 Mbps,			
907	8437	500	Pass
915	8450	500	Pass
923	8440	500	Pass

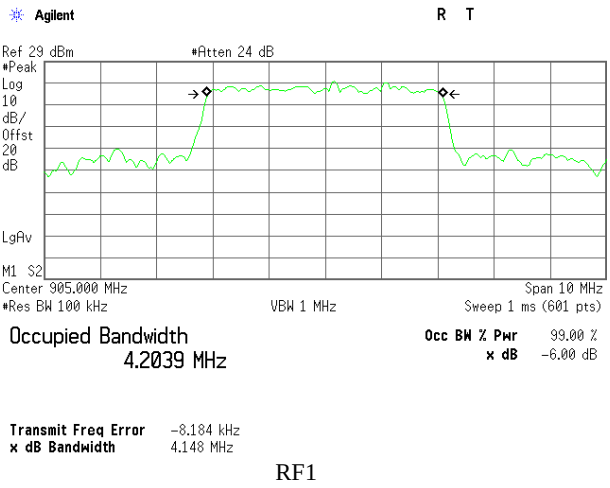
Test results for RF1 output: 2403 – 2478MHz

Fundamental Frequency, [MHz]	6 dB DTS Bandwidth, [kHz]	Minimum Bandwidth, [kHz]	Pass/Fail
BW = 4.2 MHz, Bit Rate 3.2 Mbps, continuous transmission			
2403	4175.0	500	Pass
2442	4121.0	500	Pass
2478	4127.0	500	Pass
BW = 4.2 MHz, Bit Rate = 4.0 Mbps, continuous transmission			
2403	4121.0	500	Pass
2442	4126.0	500	Pass
2478	4125.0	500	Pass
BW = 8.4 MHz, Bit Rate = 6.4 Mbps, continuous transmission			
2405	8394.0	500	Pass
2440	8410.0	500	Pass
2475	8410.0	500	Pass
BW = 8.4 MHz, Bit Rate = 8.0 Mbps, continuous transmission			
2405	8412.0	500	Pass
2440	8403.0	500	Pass
2475	8406.0	500	Pass

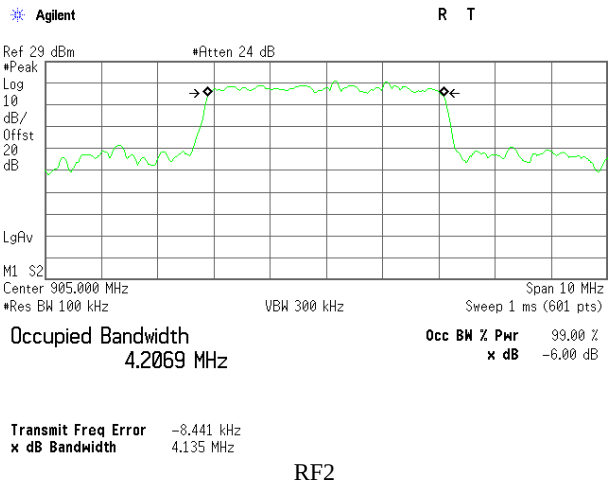
Test results for RF2 output: 2403 – 2478MHz

Fundamental Frequency, [MHz]	6 dB DTS Bandwidth, [kHz]	Minimum Bandwidth, [kHz]	Pass/Fail
BW = 4.2 MHz, Bit Rate = 3.2 Mbps, continuous transmission			
2403	4128.0	500	Pass
2442	4120.0	500	Pass
2478	4115.0	500	Pass
BW = 4.2 MHz, Bit Rate = 4.0 Mbps, continuous transmission			
2403	4132.0	500	Pass
2442	4118.0	500	Pass
2478	4116.0	500	Pass
BW = 8.4 MHz, Bit Rate = 6.4 Mbps, continuous transmission			
2405	8417.0	500	Pass
2440	8408.0	500	Pass
2475	8421.0	500	Pass
BW = 8.4 MHz, Bit Rate = 8.0 Mbps, continuous transmission			
2405	8407.0	500	Pass
2440	8411.0	500	Pass
2475	8402.0	500	Pass

Plot 3.1.1 6 dB DTS Bandwidth, BW = 4.2 MHz, Bit rate = 3.2 Mbps, Fc = 905MHz

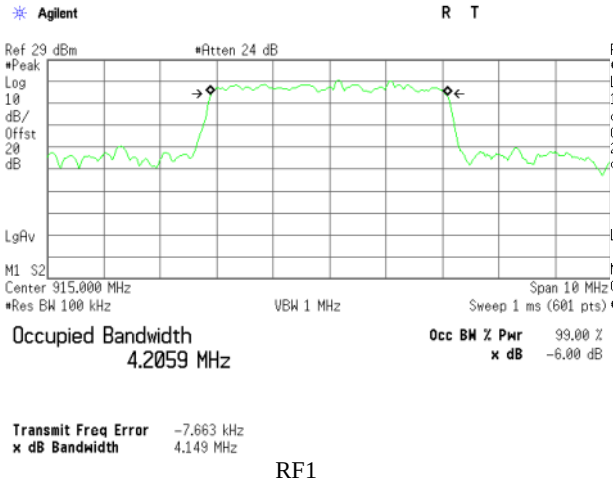


RF1

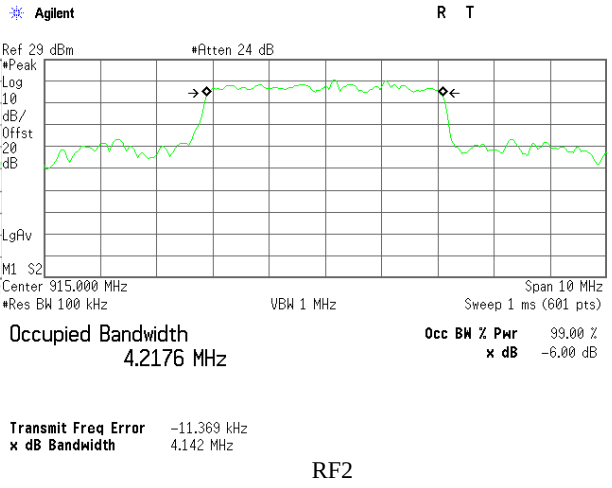


RF2

Plot 3.1.2 6 dB DTS Bandwidth, BW = 4.2 MHz, Bit rate = 3.2 Mbps, Fc = 915MHz

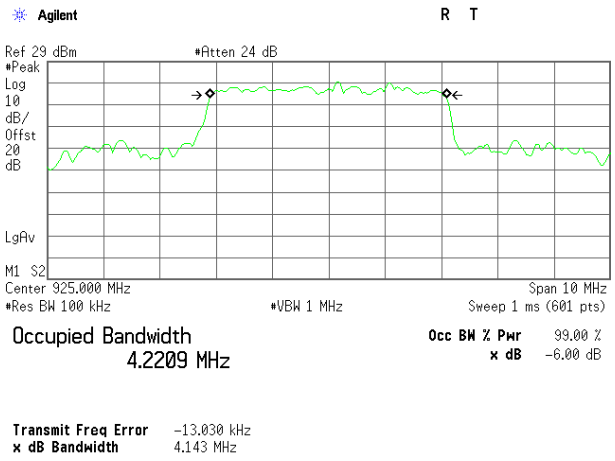


RF1

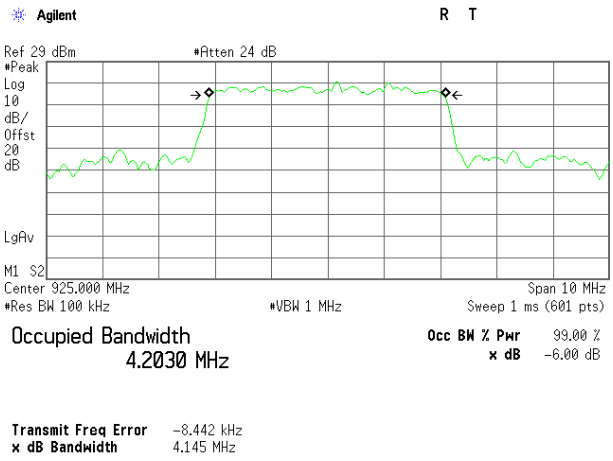


RF2

Plot 3.1.3 6 dB DTS Bandwidth, BW = 4.2 MHz, Bit rate = 3.2 Mbps, Fc = 925MHz

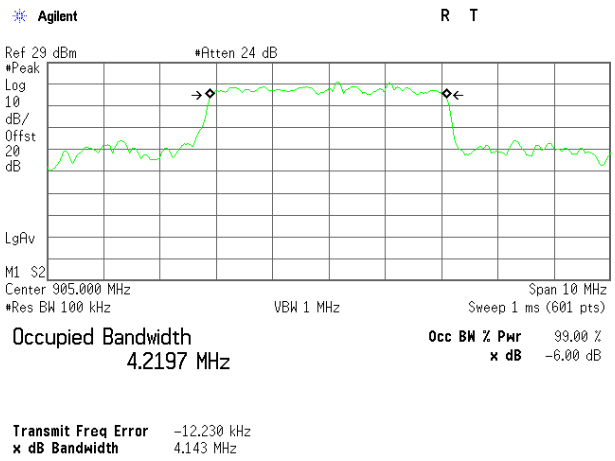


RF1

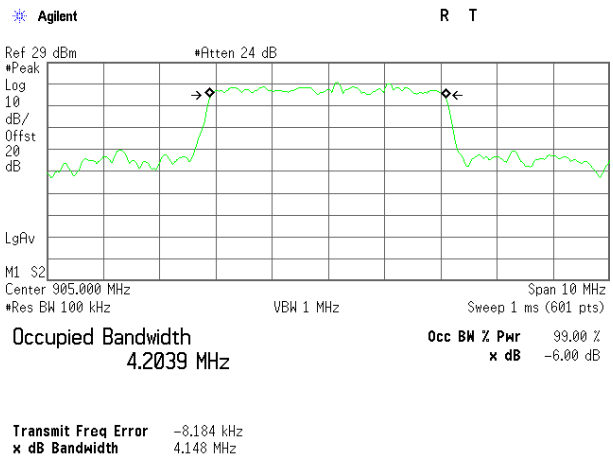


RF2

Plot 3.1.4 6 dB DTS Bandwidth, BW = 4.2 MHz, Bit rate = 4.0 Mbps, Fc = 905MHz

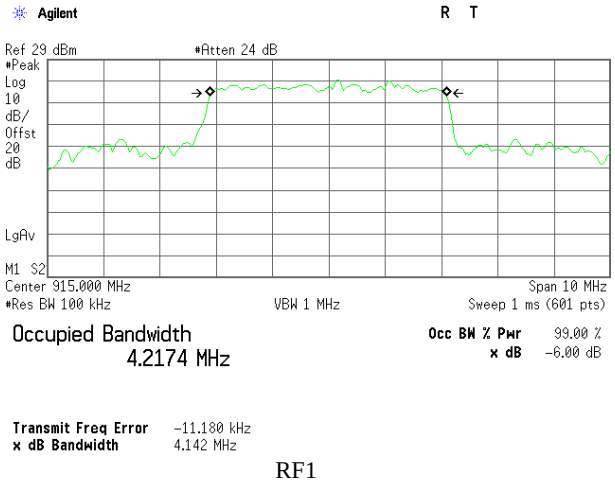


RF1

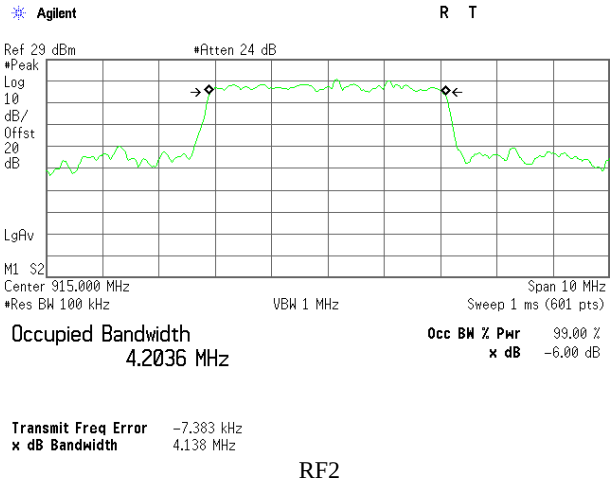


RF2

Plot 3.1.5 6 dB DTS Bandwidth, BW = 4.2 MHz, Bit rate = 4.0 Mbps, Fc = 915

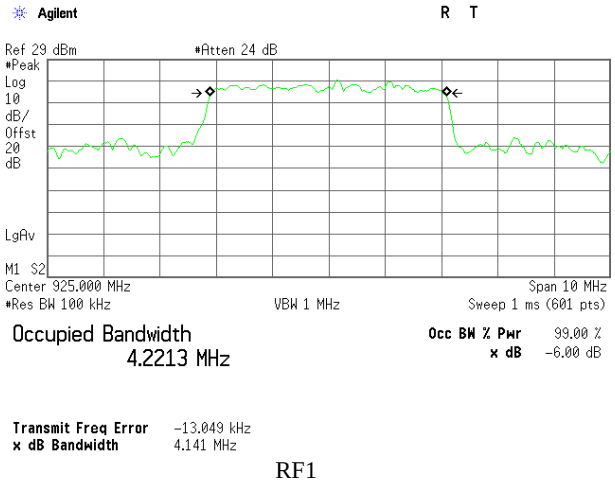


RF1

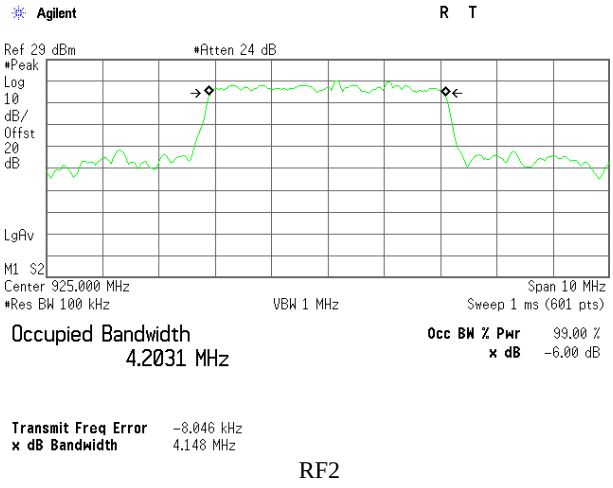


RF2

Plot 3.1.6 6 dB DTS Bandwidth, BW = 4.2 MHz, Bit rate = 4.0 Mbps, Fc = 925MHz

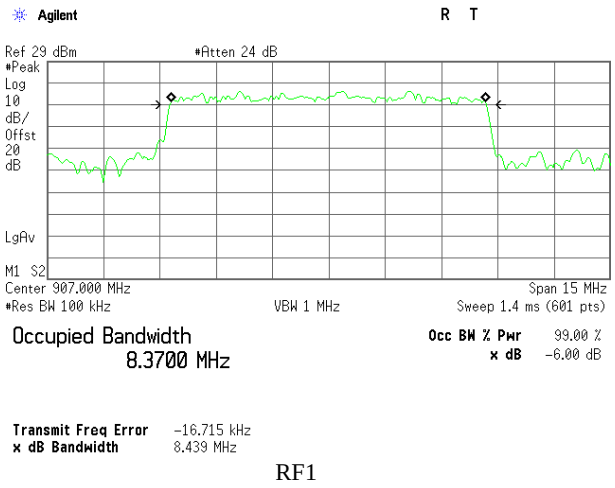


RF1

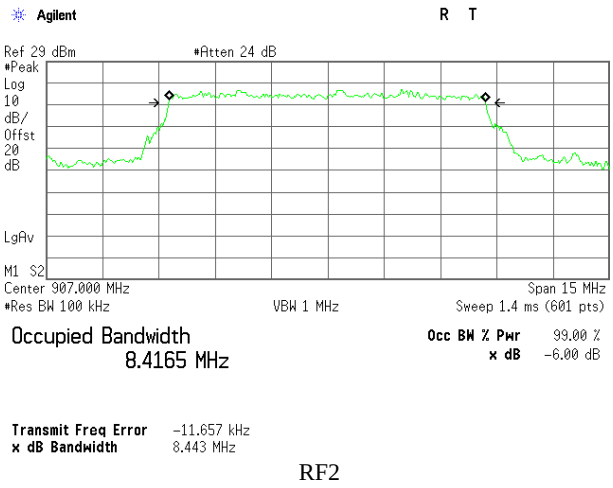


RF2

Plot 3.1.7 6 dB DTS Bandwidth, BW = 8.4 MHz, Bit rate = 6.4 Mbps, Fc = 907 MHz

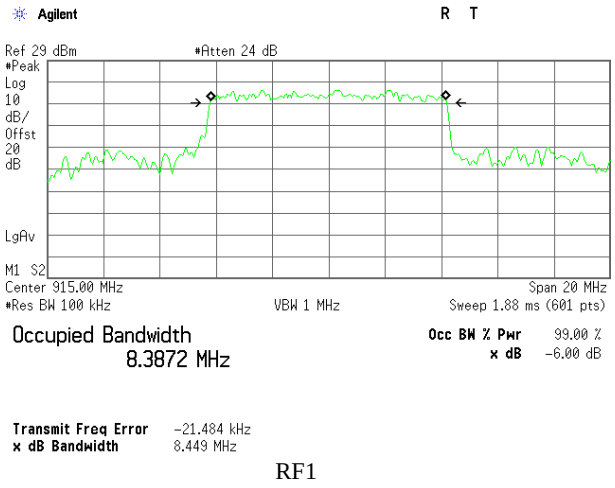


RF1

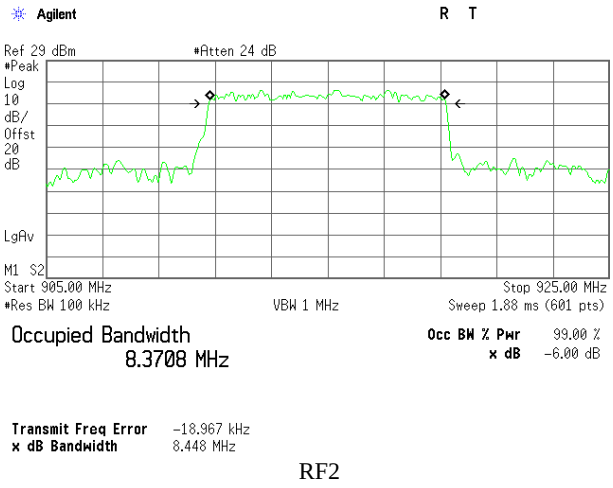


RF2

Plot 3.1.8 6 dB DTS Bandwidth, BW = 8.4 MHz, Bit rate = 6.4 Mbps, Fc = 915MHz

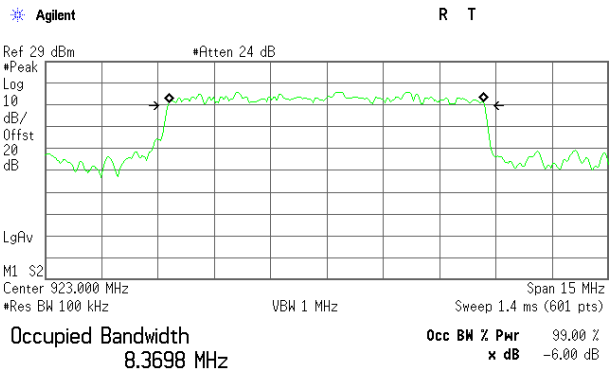


RF1

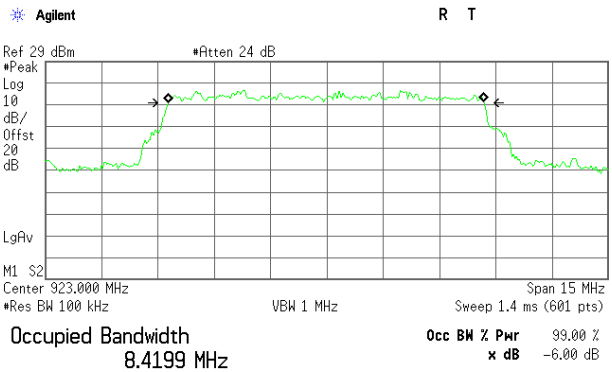


RF2

Plot 3.1.9 6 dB DTS Bandwidth, RF1 output, BW = 8.4 MHz, Bit rate = 6.4 Mbps, Fc = 923 MHz

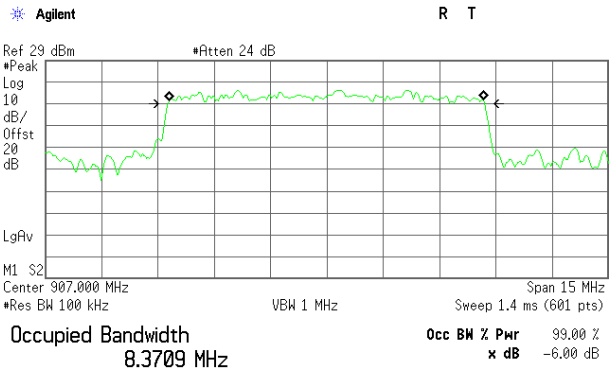


RF1

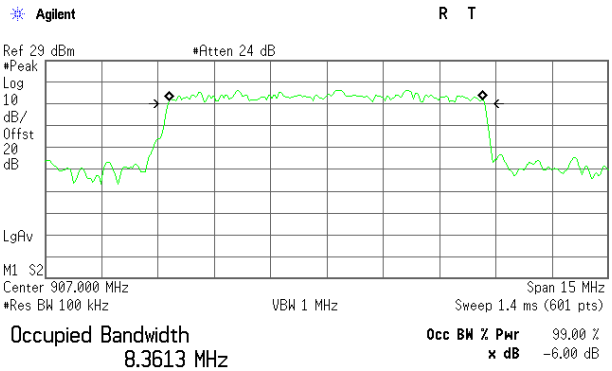


RF2

Plot 3.1.10 6 dB DTS Bandwidth, BW = 8.4 MHz, Bit rate = 8.0 Mbps, Fc = 907 MHz

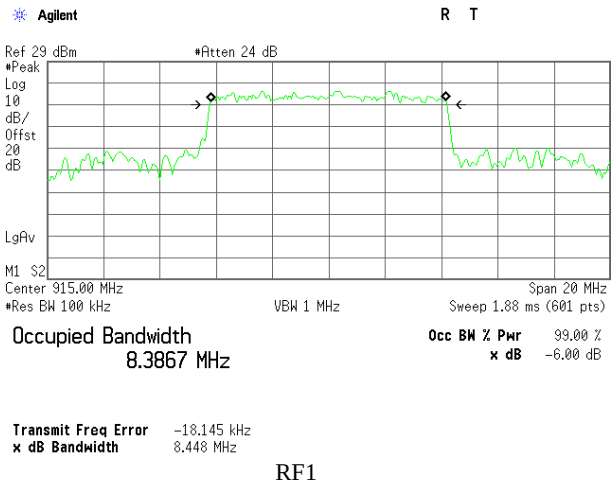


RF1

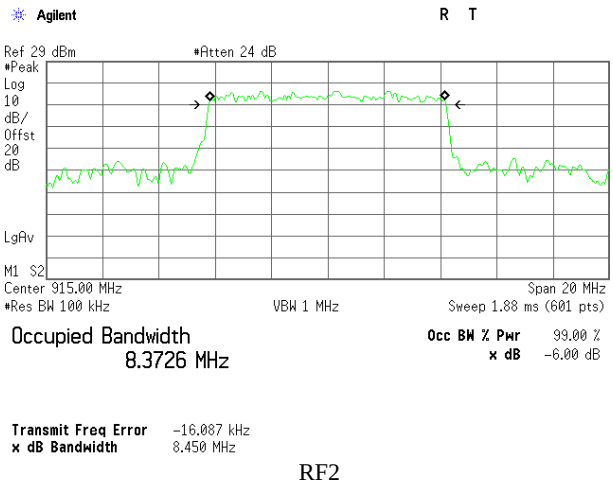


RF2

Plot 3.1.11 6 dB DTS Bandwidth, BW = 8.4 MHz, Bit rate = 8.0 Mbps, Fc = 915 MHz

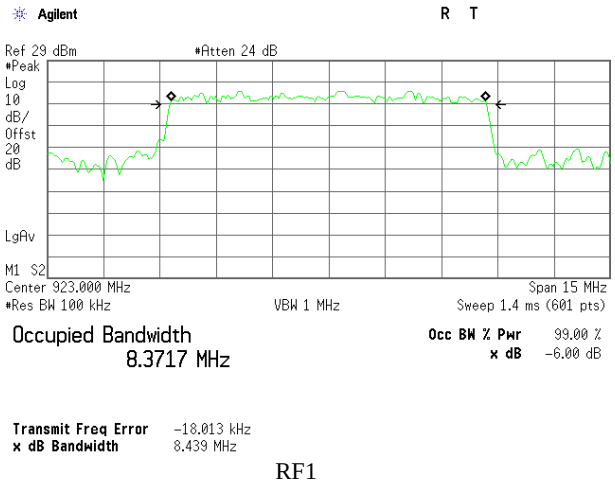


RF1

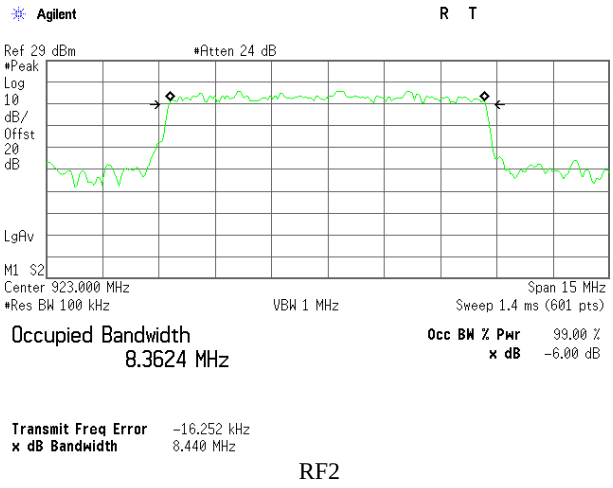


RF2

Plot 3.1.12 6 dB DTS Bandwidth, BW = 8.4 MHz, Bit rate = 8.0 Mbps, Fc = 923 MHz

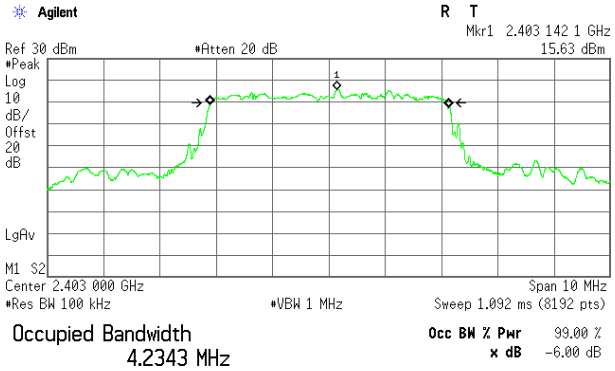


RF1

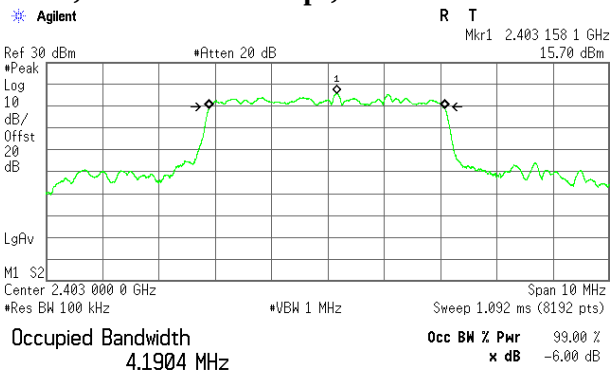


RF2

Plot 3.1.13 6 dB DTS Bandwidth, BW = 4.2 MHz, Bit rate = 3.2 Mbps, Fc = 2403MHz

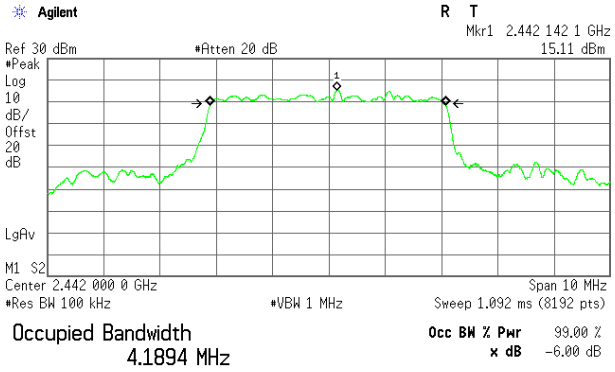


RF1

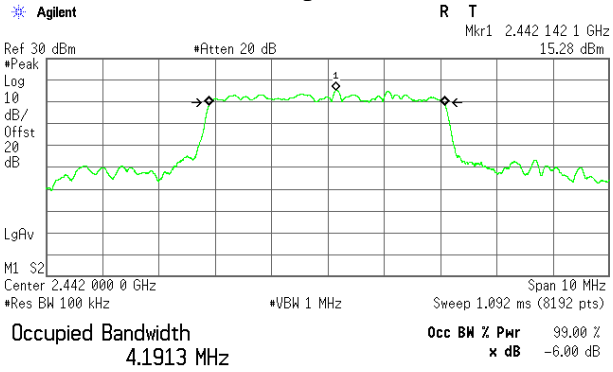


RF2

Plot 3.1.14 6 dB DTS Bandwidth, BW = 4.2 MHz, Bit rate = 3.2 Mbps, Fc = 2442MHz

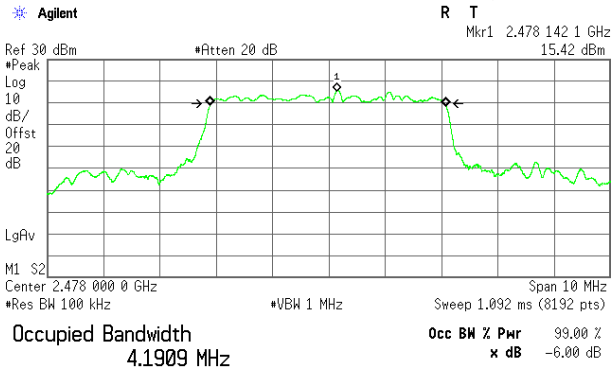


RF1

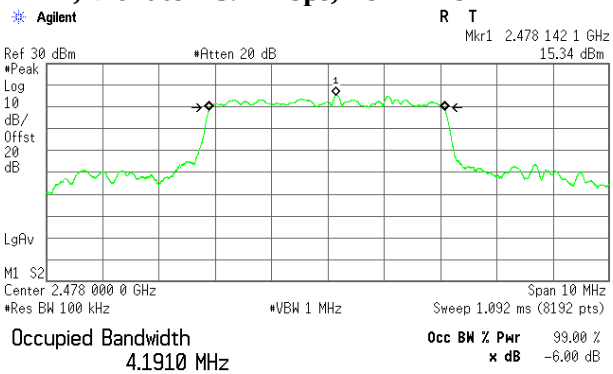


RF2

Plot 3.1.15 6 dB DTS Bandwidth, BW = 4.2 MHz, Bit rate = 3.2 Mbps, Fc = 2478MHz

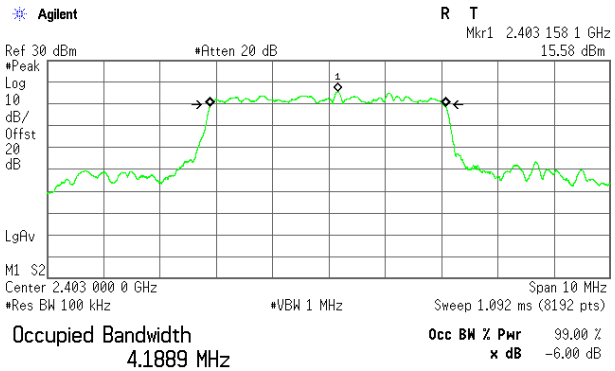


RF1

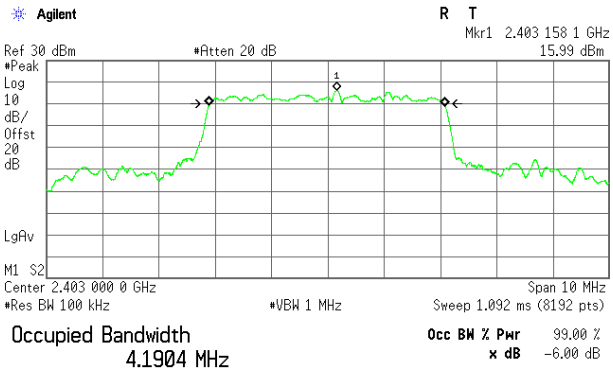


RF2

Plot 3.1.16 6 dB DTS Bandwidth, BW = 4.2 MHz, Bit rate = 4.0 Mbps, Fc = 2403MHz

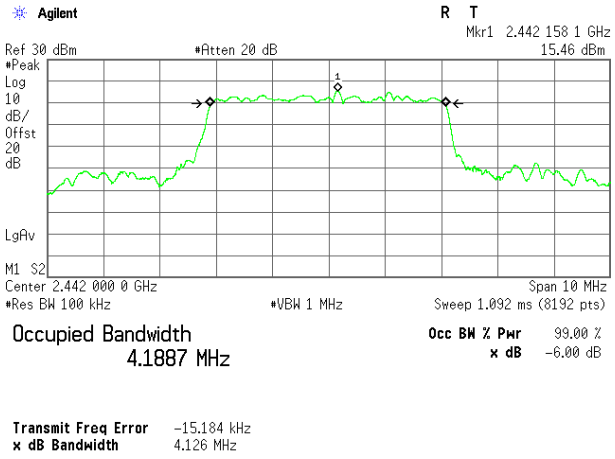


RF1

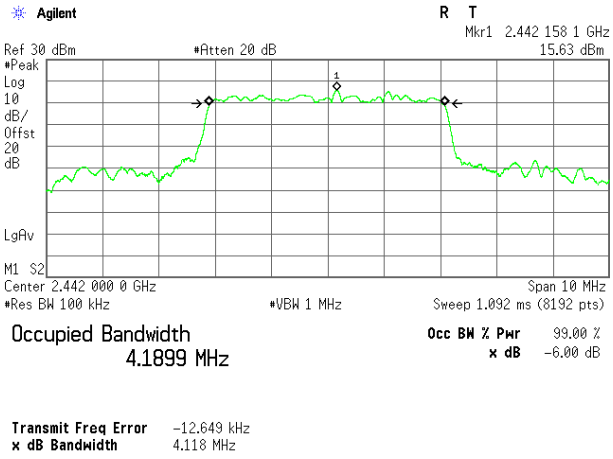


RF2

Plot 3.1.17 6 dB DTS Bandwidth, BW = 4.2 MHz, Bit rate = 4.0 Mbps, Fc = 2442

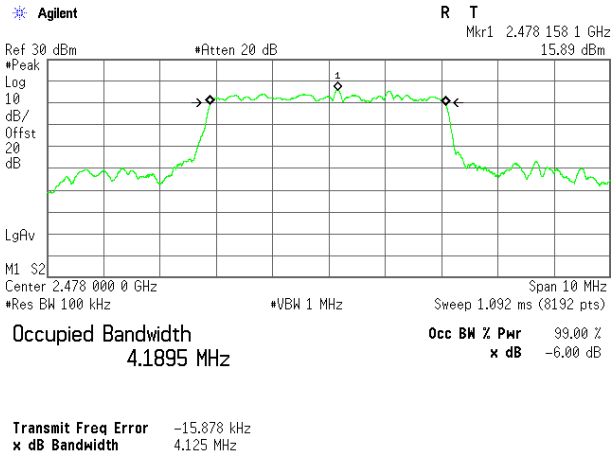


RF1

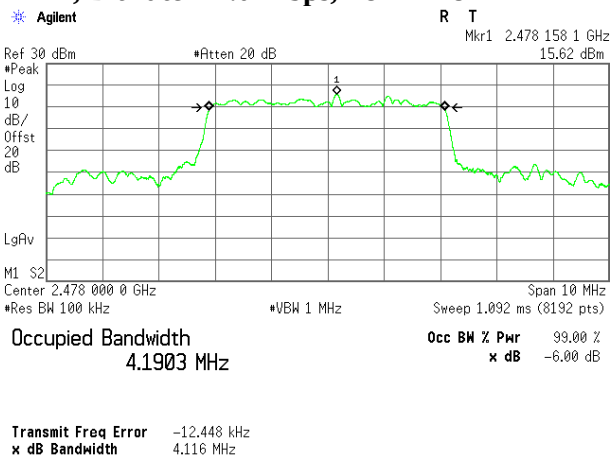


RF2

Plot 3.1.18 6 dB DTS Bandwidth, BW = 4.2 MHz, Bit rate = 4.0 Mbps, Fc = 2478MHz

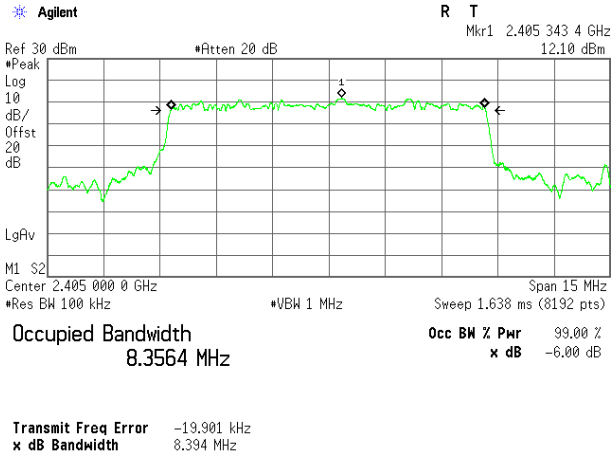


RF1

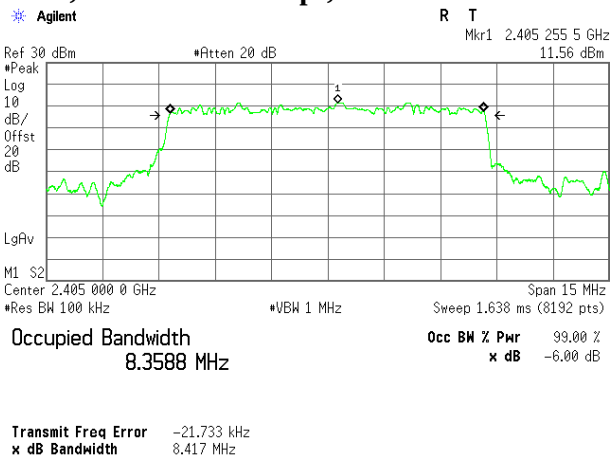


RF2

Plot 3.1.19 6 dB DTS Bandwidth, BW = 8.4 MHz, Bit rate = 6.4 Mbps, Fc = 2405 MHz

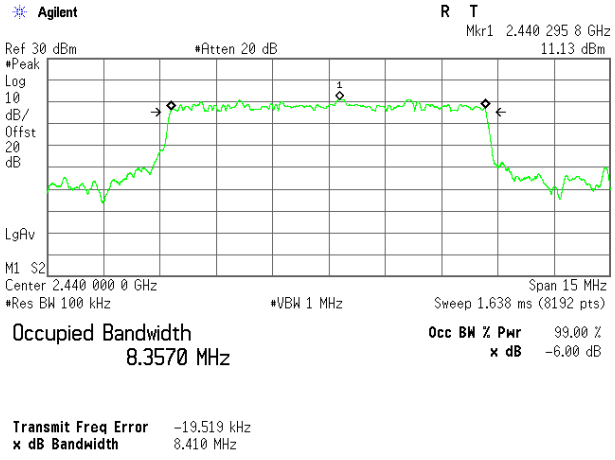


RF1

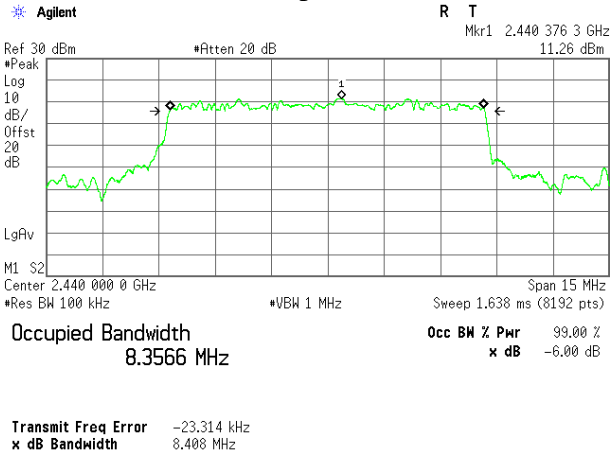


RF2

Plot 3.1.20 6 dB DTS Bandwidth, BW = 8.4 MHz, Bit rate = 6.4 Mbps, Fc = 2440 MHz

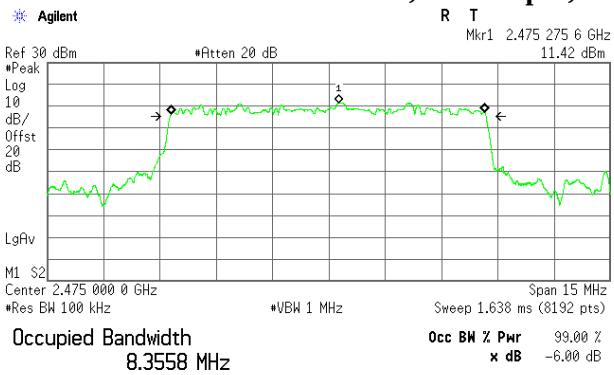


RF1

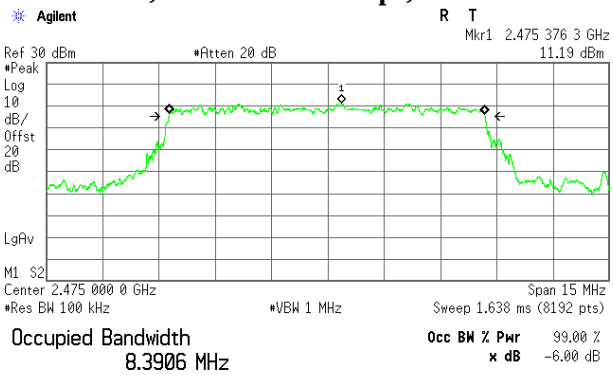


RF2

Plot 3.1.21 6 dB DTS Bandwidth, RF1 output, BW = 8.4 MHz, Bit rate = 6.4 Mbps, Fc = 2475 MHz

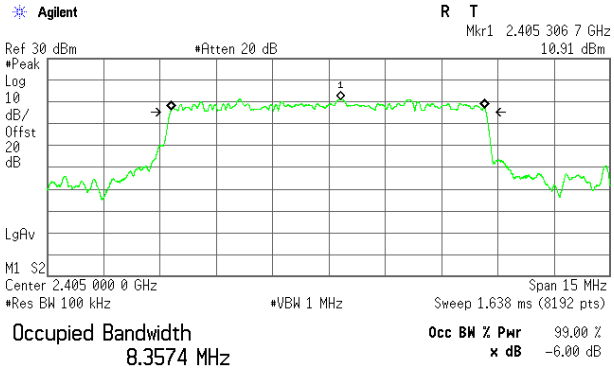


RF1

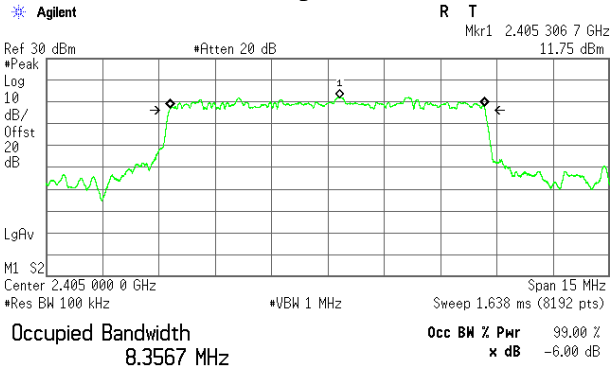


RF2

Plot 3.1.22 6 dB DTS Bandwidth, BW = 8.4 MHz, Bit rate = 8.0 Mbps, Fc = 2405 MHz

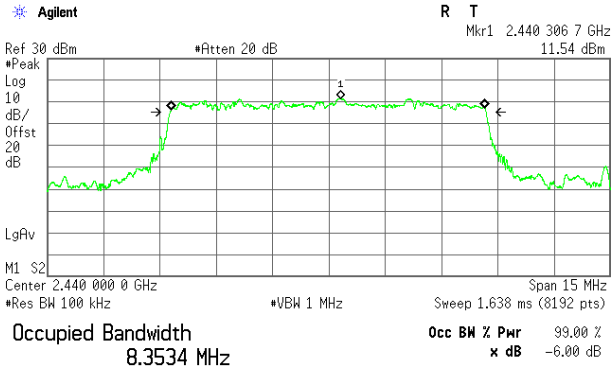


RF1

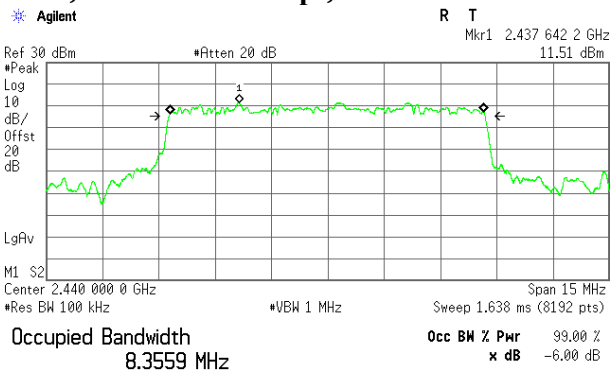


RF2

Plot 3.1.23 6 dB DTS Bandwidth, BW = 8.4 MHz, Bit rate = 8.0 Mbps, Fc = 2440 MHz

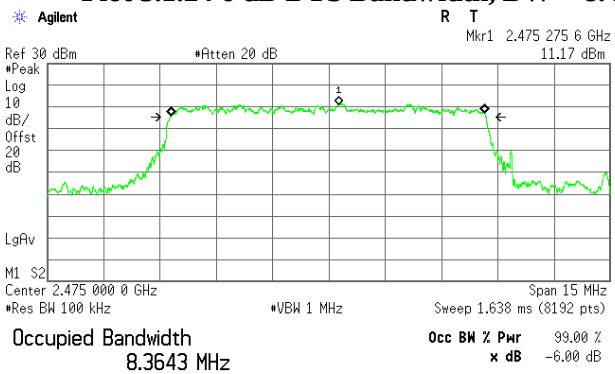


RF1

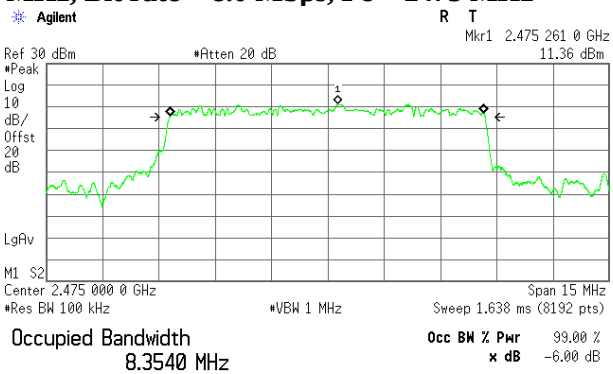


RF2

Plot 3.1.24 6 dB DTS Bandwidth, BW = 8.4 MHz, Bit rate = 8.0 Mbps, Fc = 2475 MHz



RF1



RF2

3.2. Fundamental Emission Output Power

Date of Test: 19.07.2018
Relative Humidity: 47.5%
Ambient Temperature: 22.8 °C
Atmospheric Pressure: 1011.4 hPa
Test performed by: Agi Yizhak

Reference document:	**47 CFR §15.247 (b)(3)(4)**		
Test Requirements:	The maximum peak conducted output power of the intentional radiator for systems using digital modulation in the 902-928 MHz, 2400-2483.5 MHz, and 5725-5850 MHz bands shall not exceed 1 Watt. As an alternative to a peak power measurement, compliance with the one Watt limit can be based on a measurement of the maximum conducted (average) output power. 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. Except as shown in paragraph (c) of this section, if transmitting antennas of directional gain greater than 6 dBi are used, the conducted output power from the intentional radiator shall be reduced below the stated values in paragraphs (b)(1), (b)(2), and (b)(3) of this section, as appropriate, by the amount in dB that the directional gain of the antenna exceeds 6 dBi.		
Method of testing:	KDB 558074 D01 v04, Sec.9.2.3.2 AVGPM-G	**Pass**	
Operating conditions:	Under normal test conditions		
Settings:	Triggered/signal-gated broadband power meter		
Environment conditions:	Ambient Temperature: 21°C	Relative Humidity: 48%	Atmospheric Pressure: 1011.4 hPa
Test Result:	See below		

Test Results: 905 – 925 MHz

Fundamental Frequency, [MHz]	Transmitter Output	Emission Output Power, [mW]			Limit,	Margin, [mW]	Pass/Fail
		Fundamental		Total	[mW]		
		dBm	mW				
BW = 4.2 MHz, Bit Rate = 3.2Mbps							
905	RF1	23.40	218.8	420.6	1000	-579.4	Pass
	RF2	23.05	201.8				
915	RF1	23.35	216.3	421.4	1000	-578.6	Pass
	RF2	23.12	205.1				
925	RF1	23.10	204.2	413.1	1000	-586.9	Pass
	RF2	23.20	208.9				
BW = 4.2 MHz, Bit Rate = 4.0 Mbps							
905	RF1	23.40	218.8	426.3	1000	-573.7	Pass
	RF2	23.17	207.5				
915	RF1	23.30	213.8	422.7	1000	-577.3	Pass
	RF2	23.20	208.9				
925	RF1	23.05	201.8	406.0	1000	-594.0	Pass
	RF2	23.1	204.2				
BW = 8.4 MHz, Bit Rate = 6.4 Mbps							
907	RF1	23.00	199.5	401.4	1000	-598.6	Pass
	RF2	23.05	201.8				
915	RF1	23.15	206.5	407.0	1000	-593.0	Pass
	RF2	23.02	200.4				
923	RF1	22.95	197.2	391.3	1000	-608.7	Pass
	RF2	22.88	194.1				
BW = 8.4 MHz, Bit Rate = 8.0 Mbps							
907	RF1	23.33	215.3	411.2	1000	-588.8	Pass
	RF2	22.92	195.9				
915	RF1	23.22	209.9	412.2	1000	-587.8	Pass
	RF2	23.06	202.3				
923	RF1	22.85	192.8	392.3	1000	-607.7	Pass
	RF2	23.00	199.5				

***Note:** a) Limit (Pout) = 30 – (Gtx – 6), where Gtx is the maximum transmitting antenna directional gain in dBi;

b) Per KDB 662911 D01 v02r01, directional gain of N transmit antennas in case of correlated transmit signals is computed as follows:

Gtx = Gant + 10 log(N) dBi = 2+10Log(2) = 5 dBi, Gant = 2 dBi per customer's declaration.

c) Hence, Pout = 30 dBm = 1Watt

Test Results: 2403 – 2478MHz

Fundamental Frequency, [MHz]	Transmitter Output	Emission Output Power, [mW]			Limit,	Margin, [mW]	Pass/Fail
		Fundamental		Total	[mW]		
		dBm	mW				
BW = 4.2 MHz, Bit Rate = 3.2Mbps							
2403	RF1	15.46	35.3	71.1	1000	-928.9	Pass
	RF2	15.5	35.8				
2442	RF1	15.37	35.0	67.8	1000	-932.2	Pass
	RF2	15.10	32.8				
2478	RF1	15.60	36.6	71.6	1000	-928.4	Pass
	RF2	15.3	35.0				
BW = 4.2 MHz, Bit Rate = 4.0 Mbps							
2403	RF1	15.40	35.0	71.0	1000	-929.0	Pass
	RF2	15.5	36.0				
2442	RF1	15.37	34.9	68.8	1000	-931.2	Pass
	RF2	15.16	33.9				
2478	RF1	15.61	36.7	71.5	1000	-928.5	Pass
	RF2	15.3	34.8				
BW = 8.4 MHz, Bit Rate = 6.4 Mbps							
2405	RF1	15.37	34.7	71.4	1000	-928.6	Pass
	RF2	15.6	36.7				
2440	RF1	15.27	34.0	67.6	1000	932.4	Pass
	RF2	15.2	33.6				
2475	RF1	15.63	37.0	73.5	1000	-926.5	Pass
	RF2	15.6	36.5				
BW = 8.4 MHz, Bit Rate = 8.0 Mbps							
2405	RF1	15.47	35.7	71.6	1000	-928.4	Pass
	RF2	15.52	35.9				
2440	RF1	15.37	34.4	67.4	1000	-932.6	Pass
	RF2	15.1	33.0				
2475	RF1	15.62	36.7	73.7	1000	-926.3	Pass
	RF2	15.64	37.0				

***Note:** a) Limit (Pout) = 30 – (Gtx – 6), where Gtx is the maximum transmitting antenna directional gain in dBi;

b) Per KDB 662911 D01 v02r01, directional gain of N transmit antennas in case of correlated transmit signals is computed as follows:

Gtx = Gant + 10 log(N) dBi = 2+10Log(2) = 5 dBi, Gant = 2 dBi per customer's declaration.

c) Hence, Pout = 30 dBm = 1Watt

3.3. Maximum Power Spectral Density Level in the Fundamental Emissions

Date of Test: 19.07.2018
Relative Humidity: 48.5%
Ambient Temperature:22.3 °C
Atmospheric Pressure: 1011.4 hPa
Test performed by: Agi Yizhak

Reference document:	**47 CFR §15.247 (e)**		
Test Requirements:	For digitally modulated systems, the power spectral density conducted from the intentional radiator to the antenna shall not be greater than 8dBm in any 3 kHz band during any time interval of continuous transmission. This power spectral density shall be determined in accordance with the provisions of paragraph (b) of this section. The same method of determining the conducted output power shall be used to determine the power spectral density.		
Method of testing:	KDB 558074 D01 v04 Sec.10.3 Conducted, AVGPSD-1 method	**Pass**	
Operating conditions:	Under normal test conditions		
S.A. Settings:	RBW: 10kHz, VBW: 30 KHz		
Environment conditions:	Ambient Temperature: 21°C	Relative Humidity: 48%	Atmospheric Pressure: 1011.4 hPa
Test Result:	See below		

Test Results: 905 – 925 MHz

Fundamental Frequency, [MHz]	RF Output	PSD Measured, [dBm/3kHz]	Correction for 2 outputs*	Duty Cycle Correction Factor	PSD Corrected [dBm/3kHz]**	PSD Limit, [dBm/3kHz]	Margin, [dB]	Pass/ Fail
BW = 4.2 MHz, Bit Rate = 3.2 Mbps, continuous transmission								
905	RF1	2.83	3	NA	5.83	8.0	-2.17	Pass
	RF2	2.46			5.46		-2.54	
915	RF1	2.66			5.66	8.0	-2.34	Pass
	RF2	2.57			5.57		-2.43	
925	RF1	2.60			5.60	8.0	-2.40	Pass
	RF2	2.58			5.58		-2.42	
BW = 4.2 MHz, Bit Rate = 4.0 Mbps, continuous transmission								
905	RF1	2.86	3	NA	5.86	8.0	-2.14	Pass
	RF2	3.24			6.24		-1.76	
915	RF1	2.80			5.8	8.0	-2.2	Pass
	RF2	3.08			6.08		-1.92	
925	RF1	2.73			5.73	8.0	-2.27	Pass
	RF2	2.72			5.72		-2.28	
BW = 8.4 MHz, Bit Rate = 6.4 Mbps, continuous transmission								
907	RF1	2.33	3	NA	5.33	8.0	-2.67	Pass
	RF2	2.26			5.26		-2.74	
915	RF1	2.21			5.21	8.0	-2.79	Pass
	RF2	2.32			5.32		-2.68	
923	RF1	1.99			4.99	8.0	-3.01	Pass
	RF2	2.10			5.1		-2.9	
BW = 8.4 MHz, Bit Rate = 8.0 Mbps, continuous transmission								
907	RF1	2.41	3	NA	5.41	8.0	-2.59	Pass
	RF2	2.06			5.06		-2.94	
915	RF1	2.26			5.26	8.0	-2.74	Pass
	RF2	2.39			5.39		-2.61	
923	RF1	2.22			5.22	8.0	-2.78	Pass
	RF2	2.25			5.25		-2.75	

*Correction for N outputs = 10log(Nant), where Nant is the number of outputs
**PSD Corrected = PSD Measured + Correction for N outputs

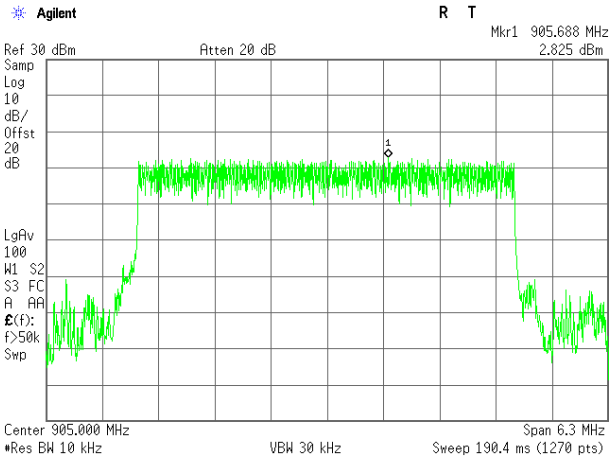
Test Results: 2403 – 2478 MHz

Fundamental Frequency, [MHz]	RF Output	PSD Measured, [dBm/3kHz]	Correction for 2 outputs*	Duty Cycle Correction Factor	PSD Corrected [dBm/3kHz]**	PSD Limit, [dBm/3kHz]	Margin, [dB]	Pass/ Fail
BW = 4.2 MHz, Bit Rate = 3.2 Mbps, continuous transmission								
2403	RF1	0.55	3	NA	3.6	8.0	-4.5	Pass
	RF2	0.63			3.6		-4.4	
2442	RF1	0.41			3.4	8.0	-4.6	Pass
	RF2	0.57			3.6		-4.4	
2478	RF1	0.98			4.0	8.0	-4.0	Pass
	RF2	0.12			3.1		-4.9	
BW = 4.2 MHz, Bit Rate = 4.0 Mbps, continuous transmission								
2403	RF1	0.48	3	NA	3.5	8.0	-4.5	Pass
	RF2	0.93			3.9		-4.1	
2442	RF1	0.14			3.1	8.0	-4.9	Pass
	RF2	0.64			3.6		-4.4	
2478	RF1	0.66			3.7	8.0	-4.3	Pass
	RF2	0.59			3.6		-4.4	
BW = 8.4 MHz, Bit Rate = 6.4 Mbps, continuous transmission								
2405	RF1	0.27	3	NA	3.3	8.0	-4.7	Pass
	RF2	0.84			3.8		-4.2	
2440	RF1	0.30			3.3	8.0	-4.7	Pass
	RF2	0.57			3.6		-4.4	
2475	RF1	0.89			3.9	8.0	-4.1	Pass
	RF2	0.29			3.3		-4.7	
BW = 8.4 MHz, Bit Rate = 8.0 Mbps, continuous transmission								
2405	RF1	0.51	3	NA	3.5	8.0	-4.5	Pass
	RF2	0.79			3.8		-4.2	
2440	RF1	0.22			3.2	8.0	-4.8	Pass
	RF2	0.64			3.6		-4.4	
2475	RF1	0.46			3.5	8.0	-4.5	Pass
	RF2	0.77			3.8		-4.2	

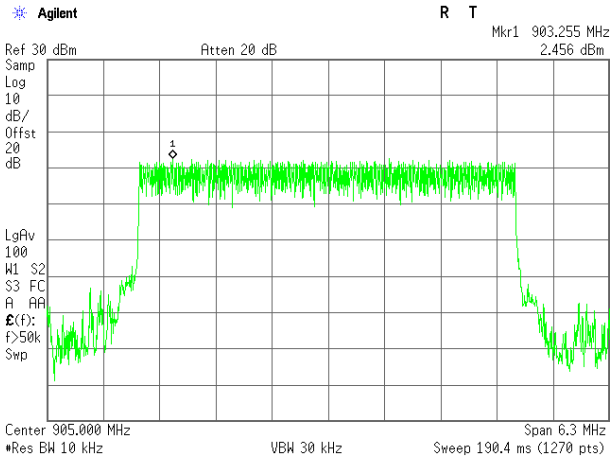
*Correction for N outputs = 10log(Nant), where Nant is the number of outputs

**PSD Corrected = PSD Measured + Correction for N outputs + Duty Cycle Correction Factor

Plot 3.3.1 Maximum Power Spectral Density test results, Fc = 905MHz, BW = 4.2 MHz, Bit Rate = 3.2Mbps

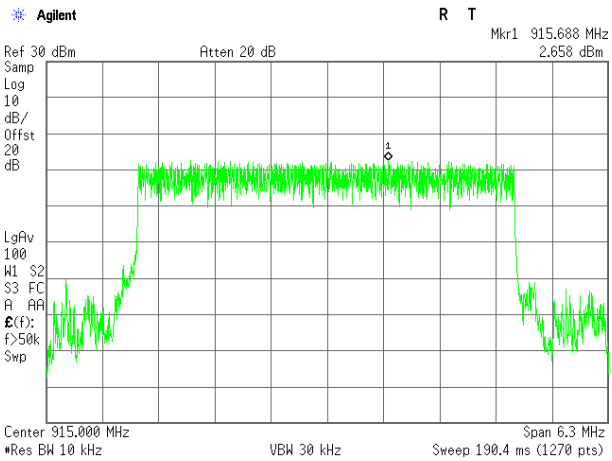


RF1

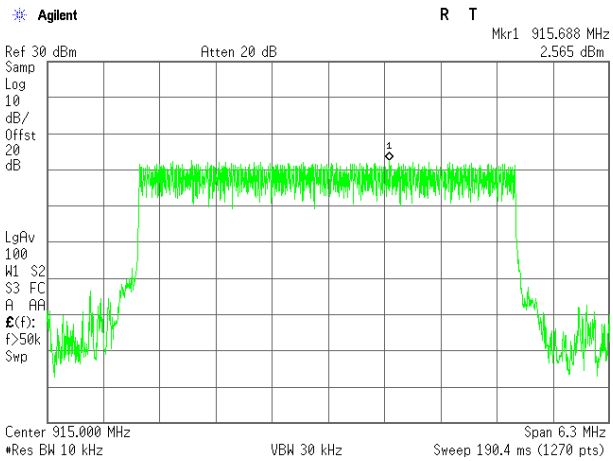


RF2

Plot 3.3.2 Maximum Power Spectral Density test results, Fc = 915MHz, BW = 4.2 MHz, Bit Rate = 3.2 Mbps

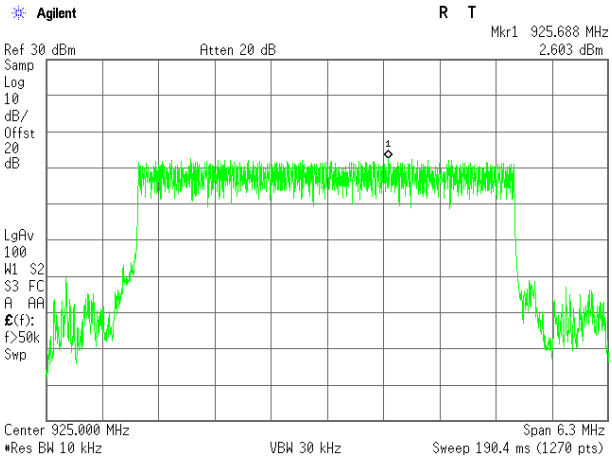


RF1

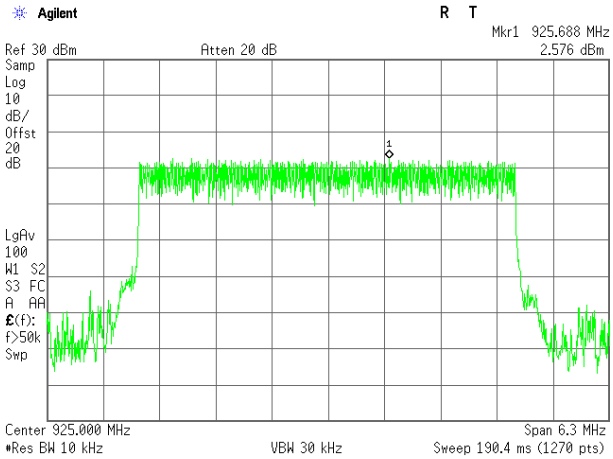


RF2

Plot 3.3.3 Maximum Power Spectral Density test results, Fc = 925Hz, BW = 4.2 MHz, Bit Rate = 3.2 Mbps

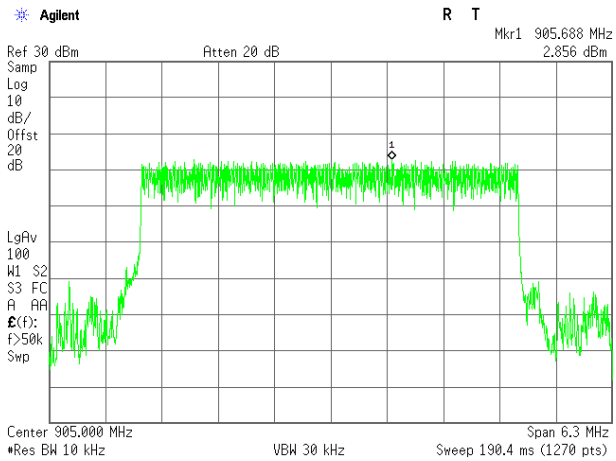


RF1

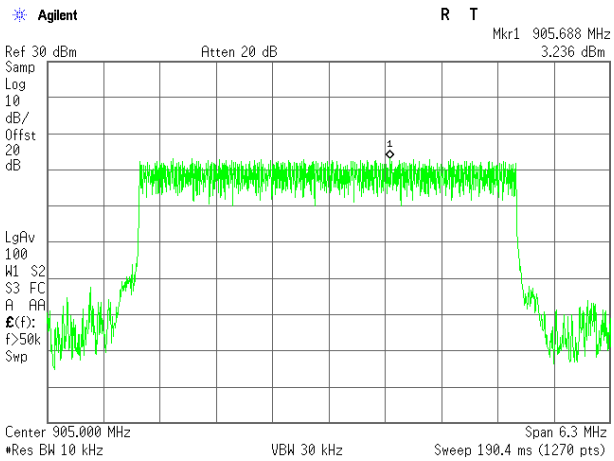


RF2

Plot 3.3.4 Maximum Power Spectral Density test results, Fc = 905MHz, BW = 4.2 MHz, Bit Rate = 4 Mbps

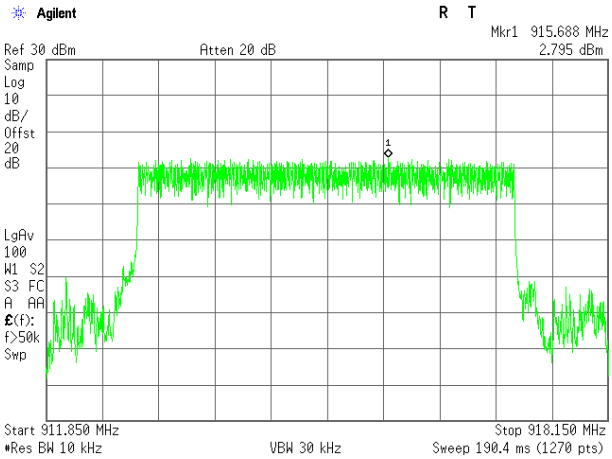


RF1

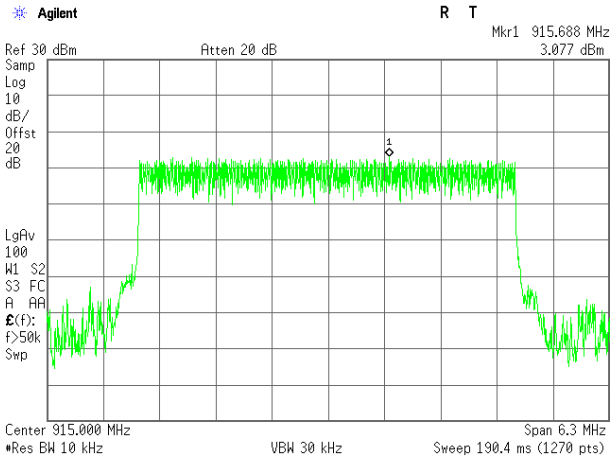


RF2

Plot 3.3.5 Maximum Power Spectral Density test results, Fc = 915MHz, BW = 4.2 MHz, Bit Rate = 4 Mbps

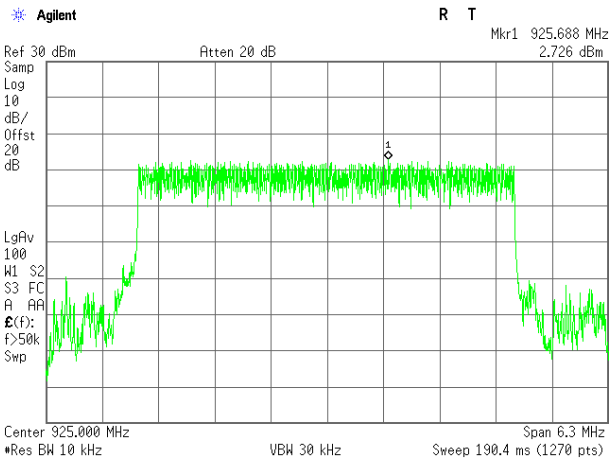


RF1

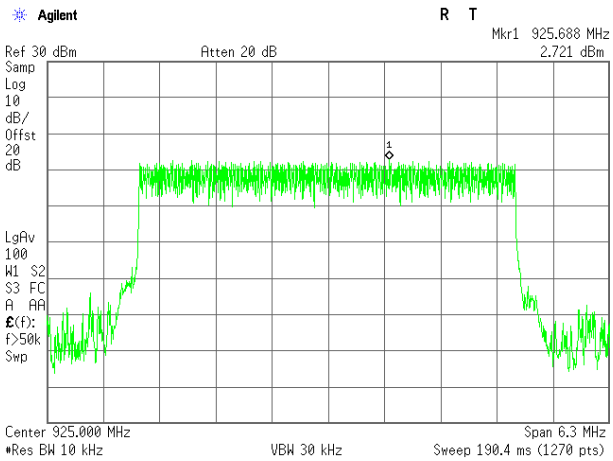


RF2

Plot 3.3.6 Maximum Power Spectral Density test results, Fc = 925MHz, BW = 4.2 MHz, Bit Rate = 4 Mbps

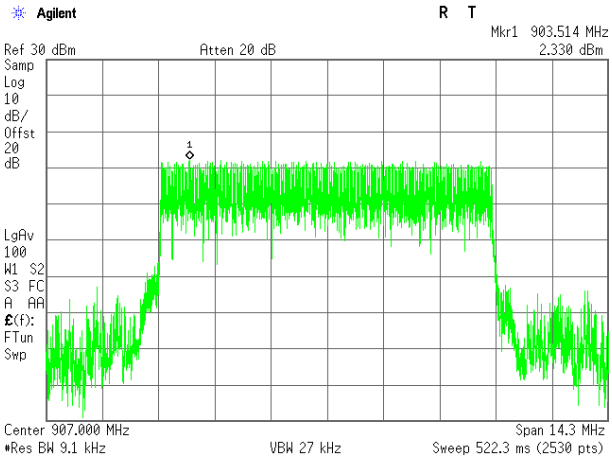


RF1

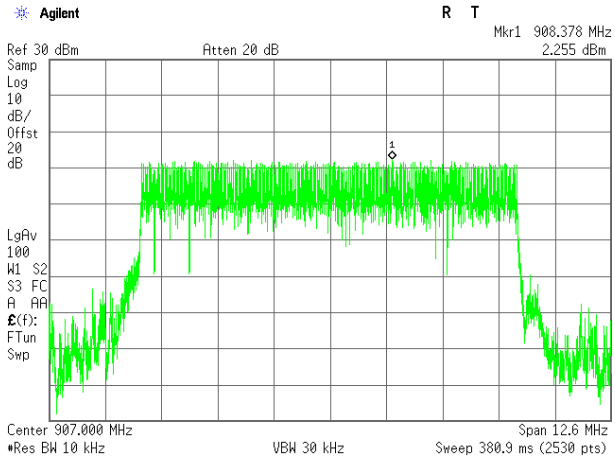


RF2

Plot 3.3.7 Maximum Power Spectral Density test results, Fc = 907MHz, BW = 8.4 MHz, Bit Rate = 6.4 Mbps

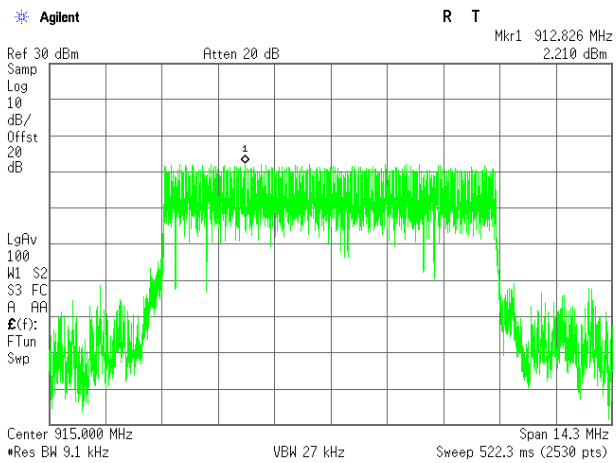


RF1

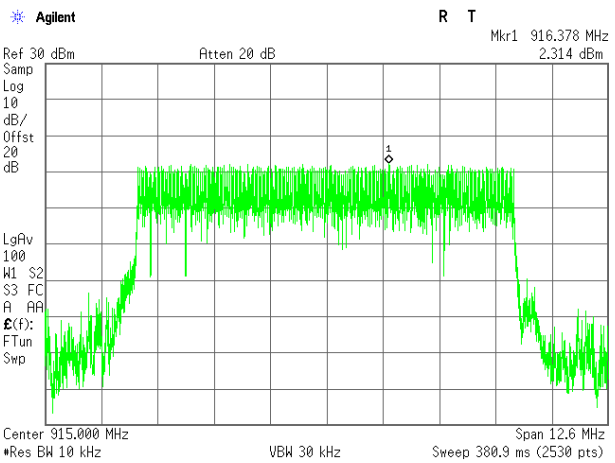


RF2

Plot 3.3.8 Maximum Power Spectral Density test results, Fc = 915MHz, BW = 8.4 MHz, Bit Rate = 6.4 Mbps

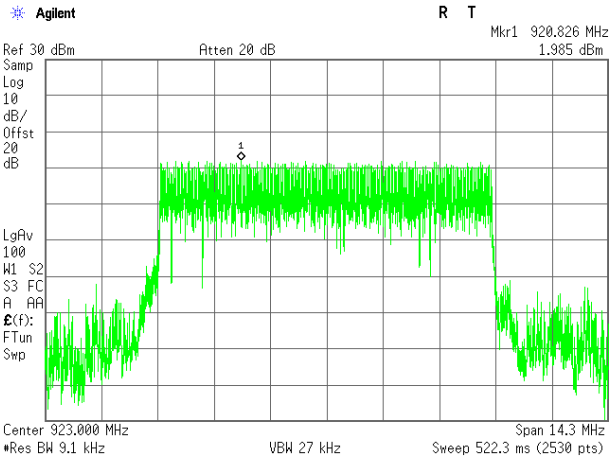


RF1

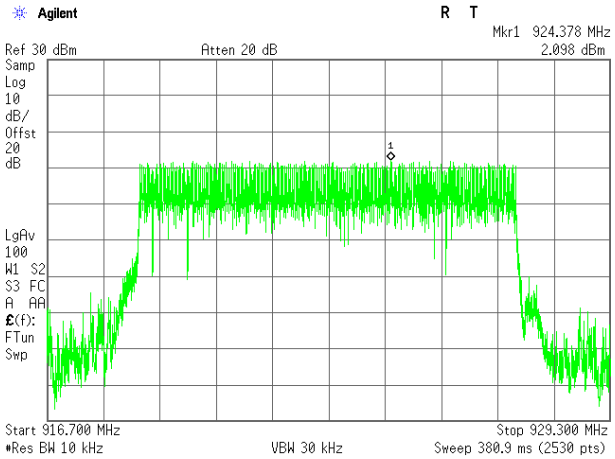


RF2

Plot 4.3.9 Maximum Power Spectral Density test results, Fc = 923MHz, BW = 8.4 MHz, Bit Rate = 6.4 Mbps

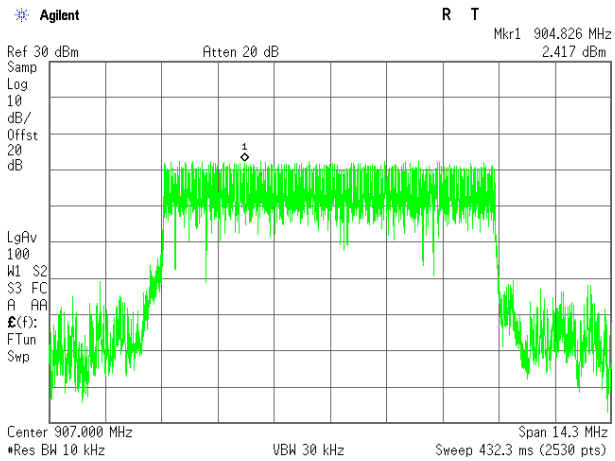


RF1

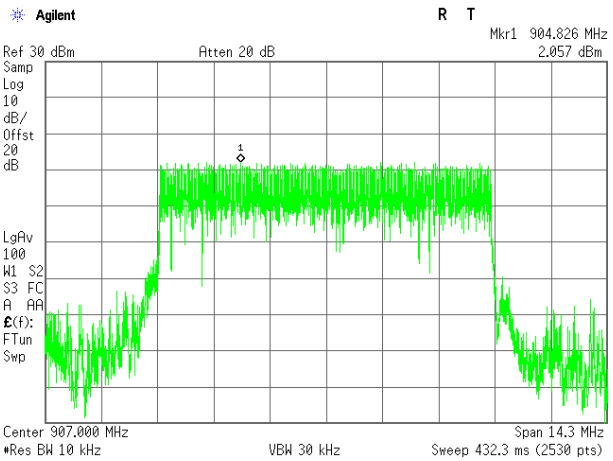


RF2

Plot 3.3.10 Maximum Power Spectral Density test results, Fc = 907MHz, BW = 8.4 MHz, Bit Rate = 8 Mbps

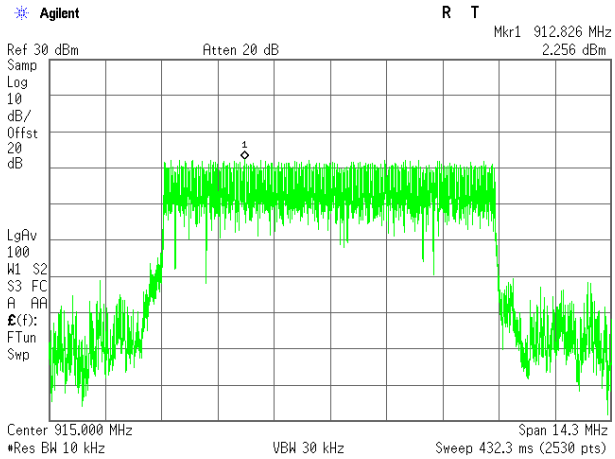


RF1

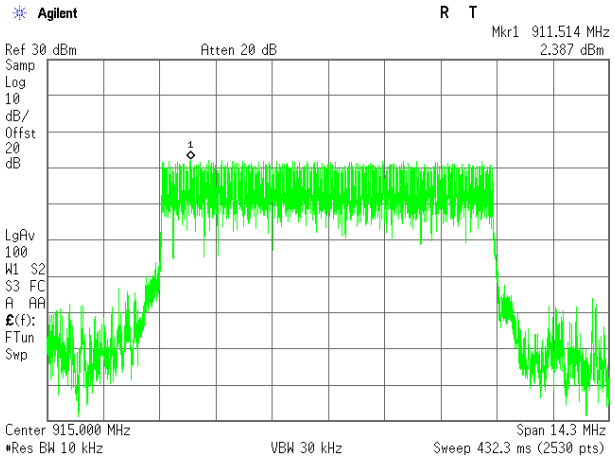


RF2

Plot 3.3.11 Maximum Power Spectral Density test results, Fc = 915MHz, BW = 8.4 MHz, Bit Rate = 8 Mbps

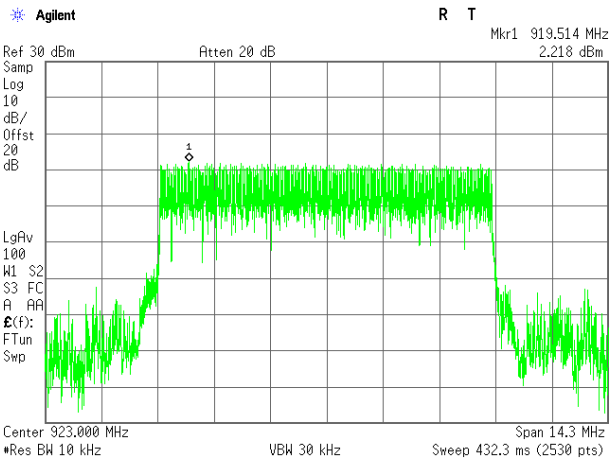


RF1

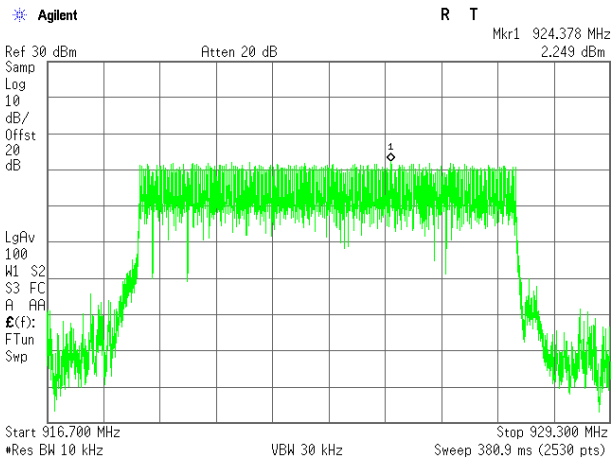


RF2

Plot 3.3.12 Maximum Power Spectral Density test results, Fc = 923MHz, BW = 8.4 MHz, Bit Rate = 8 Mbps

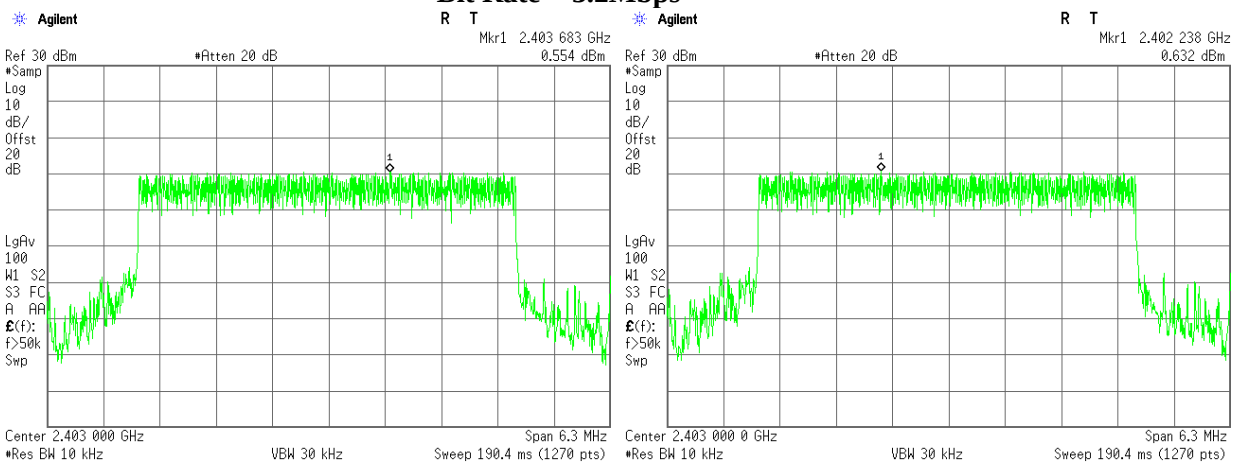


RF1



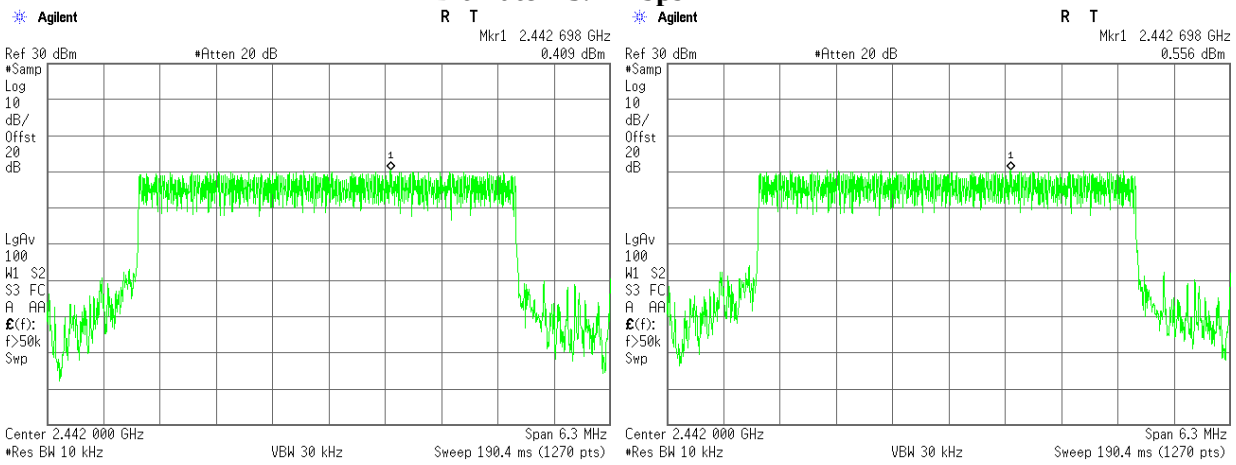
RF2

Plot 3.3.13 Maximum Power Spectral Density test results, Fc = 2403MHz, BW = 4.2 MHz, Bit Rate = 3.2Mbps



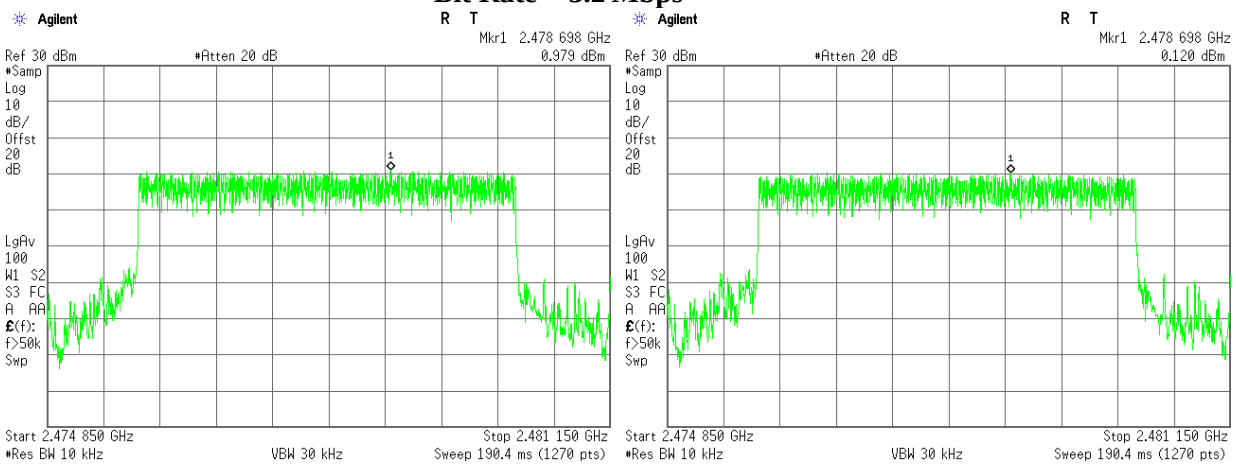
RF1 RF2

Plot 3.3.14 Maximum Power Spectral Density test results, Fc = 2442MHz, BW = 4.2 MHz, Bit Rate = 3.2 Mbps



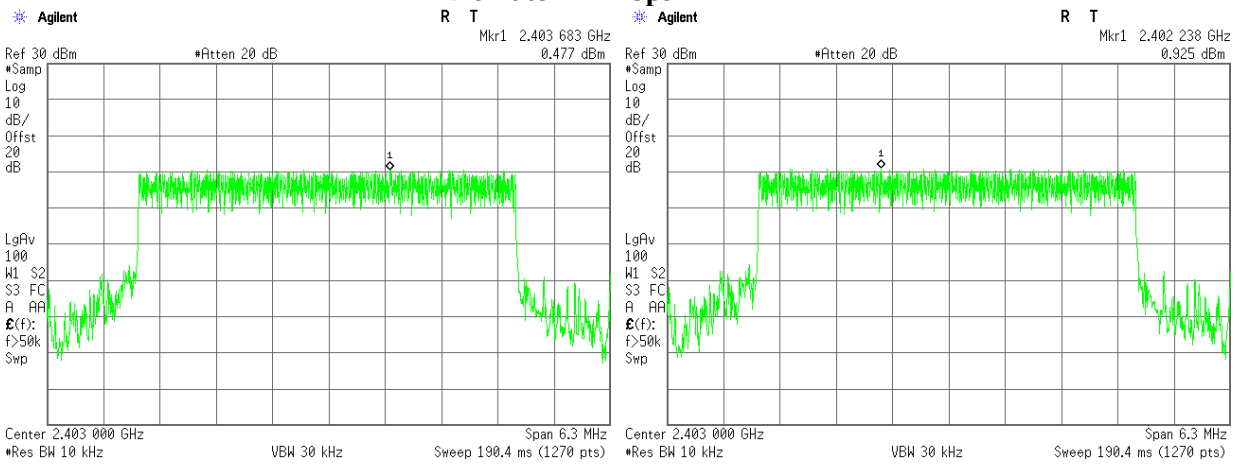
RF1 RF2

Plot 3.3.15 Maximum Power Spectral Density test results, Fc = 2478MHz, BW = 4.2 MHz, Bit Rate = 3.2 Mbps



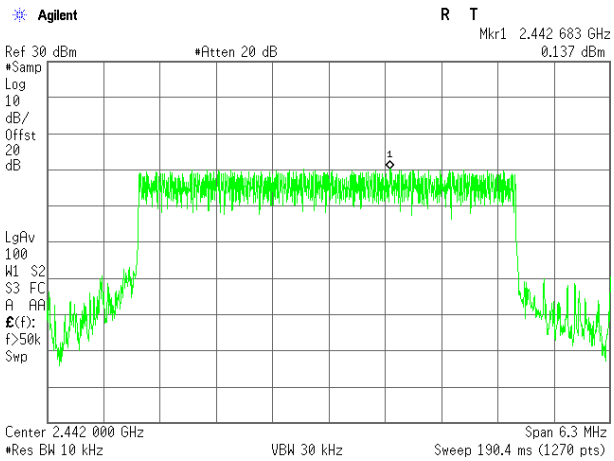
RF1 RF2

Plot 3.3.16 Maximum Power Spectral Density test results, Fc = 2403MHz, BW = 4.2 MHz, Bit Rate = 4 Mbps

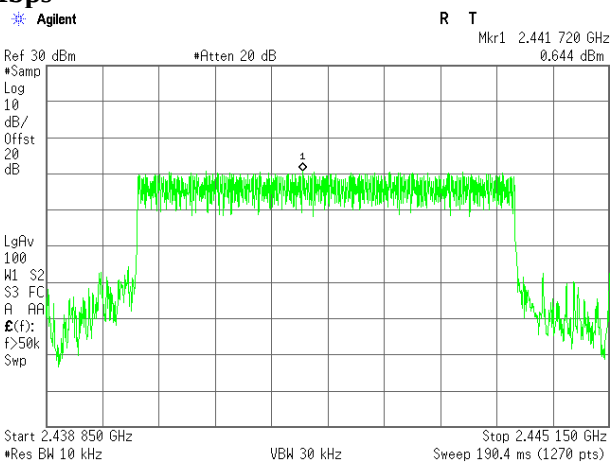


RF1 RF2

Plot 3.3.17 Maximum Power Spectral Density test results, Fc = 2442MHz, BW = 4.2 MHz, Bit Rate = 4 Mbps

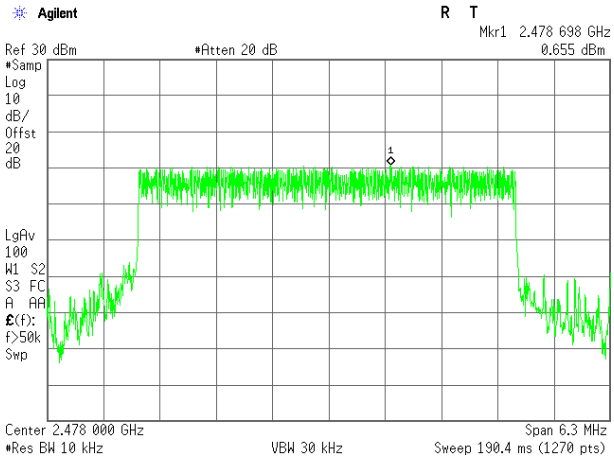


RF1

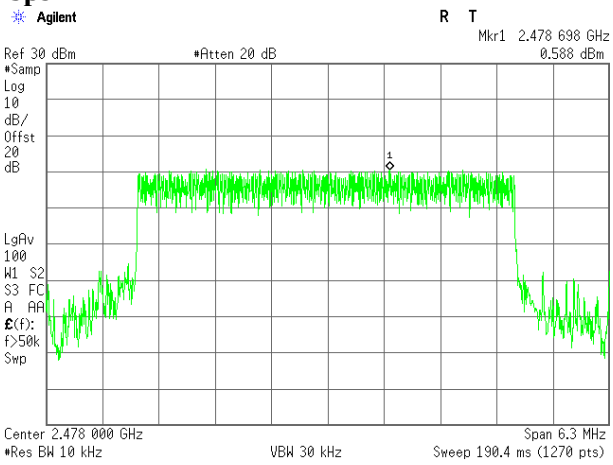


RF2

Plot 3.3.18 Maximum Power Spectral Density test results, Fc = 2478MHz, BW = 4.2 MHz, Bit Rate = 4 Mbps

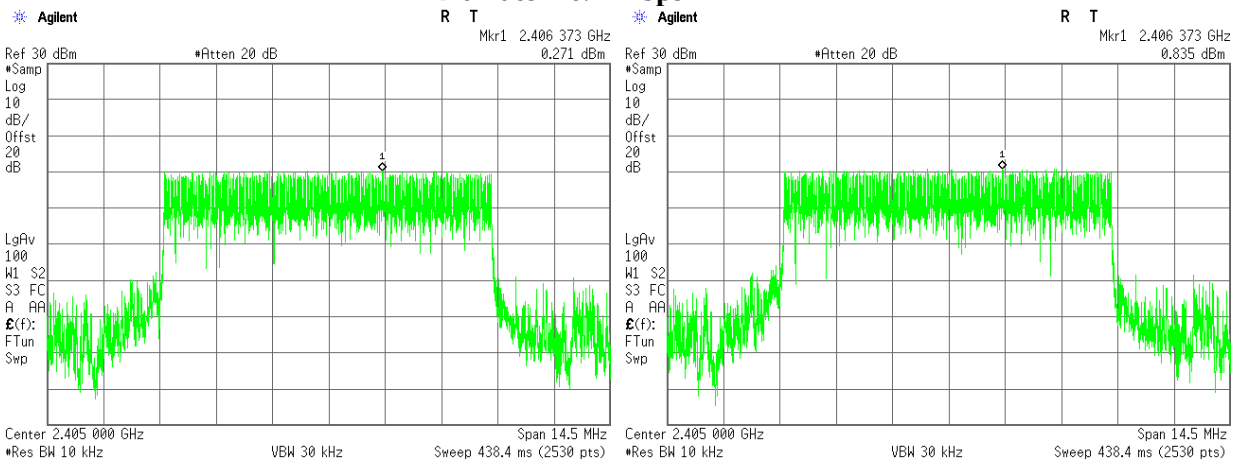


RF1



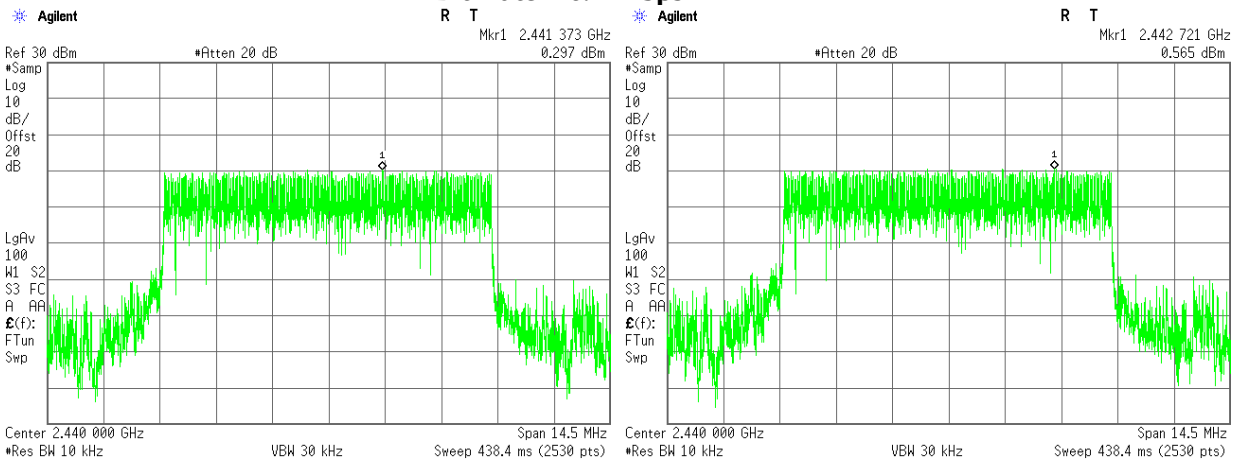
RF2

Plot 3.3.19 Maximum Power Spectral Density test results, Fc = 2405MHz, BW = 8.4 MHz, Bit Rate = 6.4 Mbps



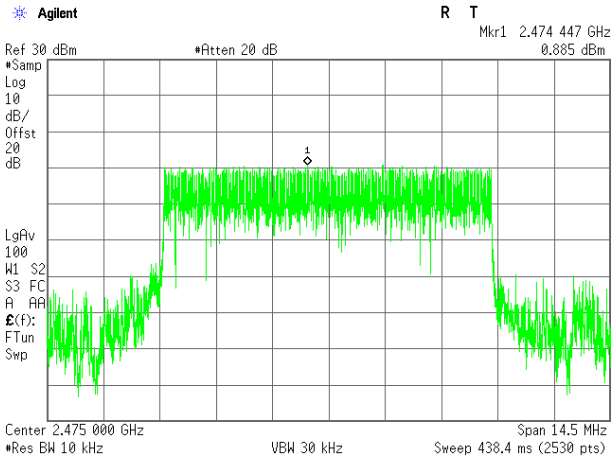
RF1 RF2

Plot 3.3.20 Maximum Power Spectral Density test results, Fc = 2440MHz, BW = 8.4 MHz, Bit Rate = 6.4 Mbps

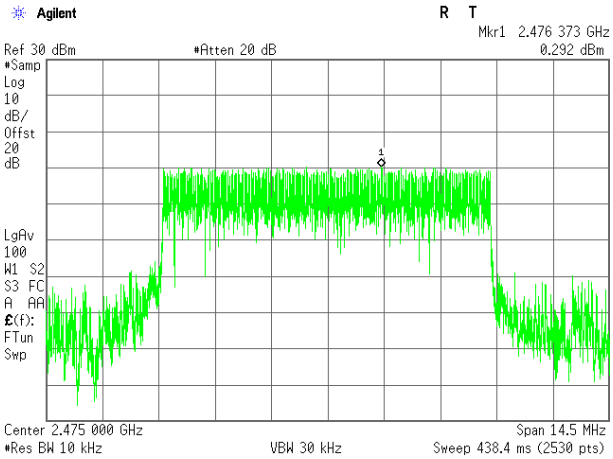


RF1 RF2

Plot 4.3.21 Maximum Power Spectral Density test results, Fc = 2475MHz, BW = 8.4 MHz, Bit Rate = 6.4 Mbps

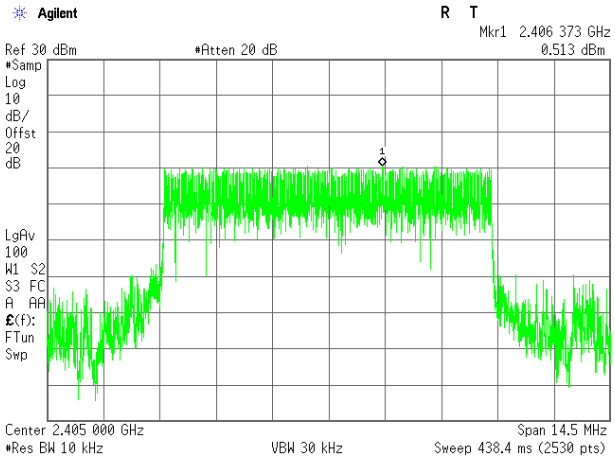


RF1

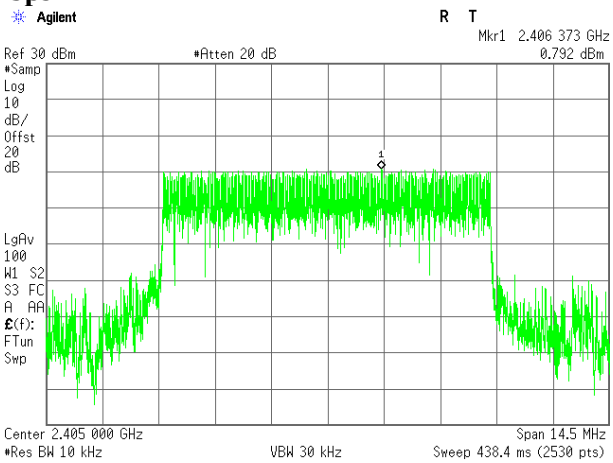


RF2

Plot 3.3.22 Maximum Power Spectral Density test results, Fc = 2405MHz, BW = 8.4 MHz, Bit Rate = 8 Mbps

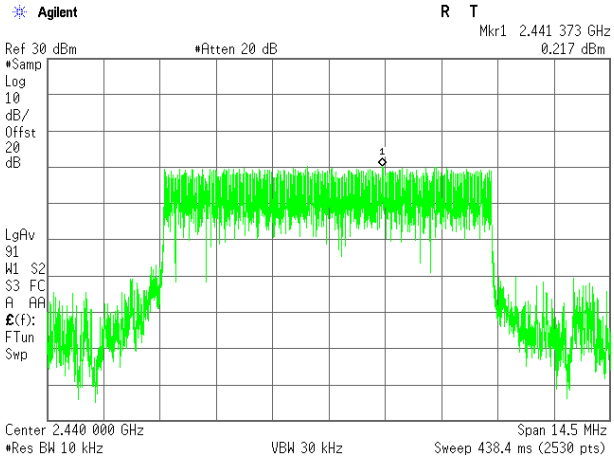


RF1

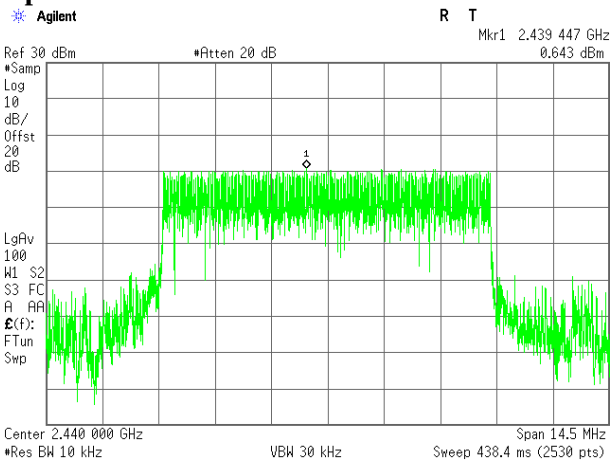


RF2

Plot 3.3.23 Maximum Power Spectral Density test results, Fc = 2440MHz, BW = 8.4 MHz, Bit Rate = 8 Mbps

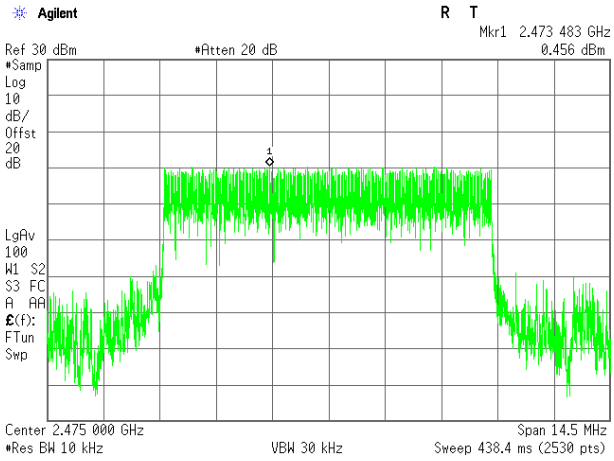


RF1

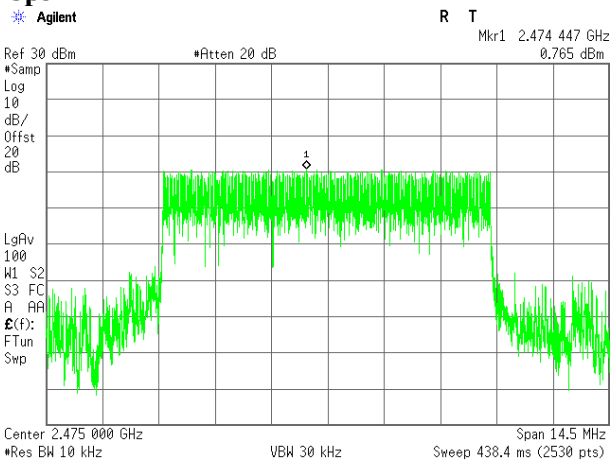


RF2

Plot 3.3.24 Maximum Power Spectral Density test results, Fc = 2475MHz, BW = 8.4 MHz, Bit Rate = 8 Mbps



RF1



RF2

3.4. Emissions in Non-Restricted Frequency Bands

Date of Test: 22.07.2018
Relative Humidity: 48%
Ambient Temperature: 22 °C
Atmospheric Pressure: 1011.4 hPa
Test performed by: Agi Yizhak

Reference document:	**47 CFR §15.247 (d)**		
Test Requirements:	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. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under paragraph (b)(3) of this section, the attenuation required under this paragraph shall be 30dB instead of 20dB. Attenuation below the general limits specified in §15.209(a) is not required. In addition, 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)).		
Method of testing:	KDB 558074 D01 v04 Sec.11.1, b), Sec.11.2-11.3 Conducted	**Pass**	
Operating conditions:	Under normal test conditions		
S.A. Settings:	RBW: 100 kHz, VBW:300kHz		
Environment conditions:	Ambient Temperature: 21°C	Relative Humidity: 48%	Atmospheric Pressure: 1011.4 hPa
Test Result:	See below		

Test results:

Unwanted Emissions Measurements: 905 – 925 MHz

Fundamental Frequency, [MHz]	Fundamental Emission Reference Level, [dBm]	Unwanted Emissions Frequency, [MHz]	Unwanted Emissions Level, [dBm]	Correction factor for 2 outputs	Corrected Unwanted Emissions Level, [dBm]	Attenuation Below Fundamental [dB]	Minimum Attenuation Below Fundamental [dB]	Margin, [dB]	Pass/Fail
BW = 4.2 MHz, Bit Rate = 3.2 Mbps RF1 output(as a worst case in power test)									
905	17.50	All emissions were at least 20 dB below the limit					30.0	NA	Pass
915	17.57	All emissions were at least 20 dB below the limit					30.0	NA	Pass
925	17.40	All emissions were at least 20 dB below the limit					30.0	NA	Pass
BW = 8.4 MHz, Bit Rate = 8 Mbps RF1 output (as a worst case in power test)									
907	12.98	All emissions were at least 20 dB below the limit					30.0	NA	Pass
915	12.92	All emissions were at least 20 dB below the limit					30.0	NA	Pass
923	12.77	All emissions were at least 20 dB below the limit					30.0	NA	Pass

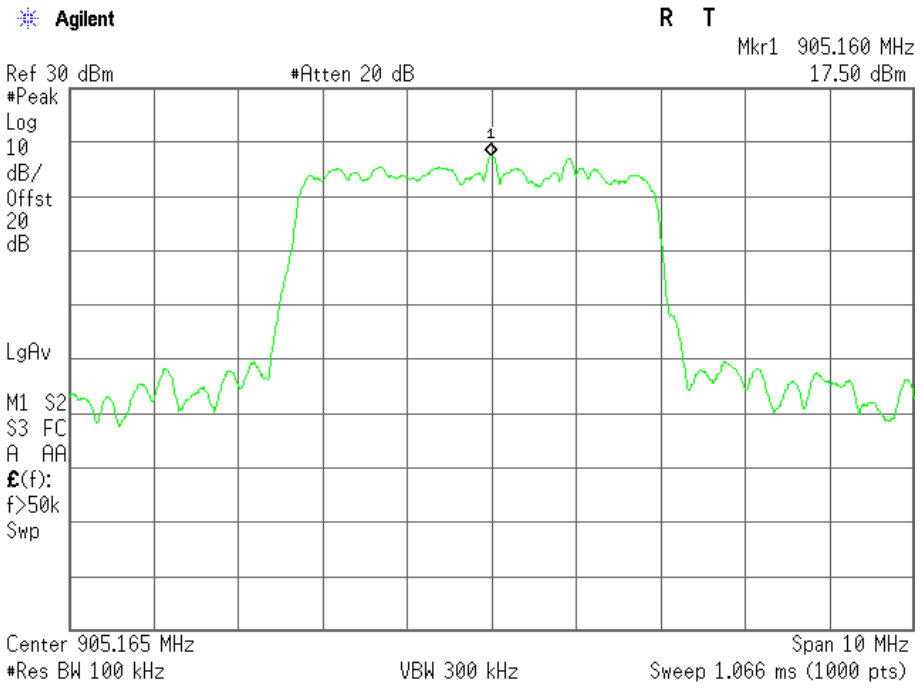
*Correction for N outputs = 10log(Nant), where Nant is the number of outputs

Unwanted Emissions Measurements: 2403 – 2478 MHz

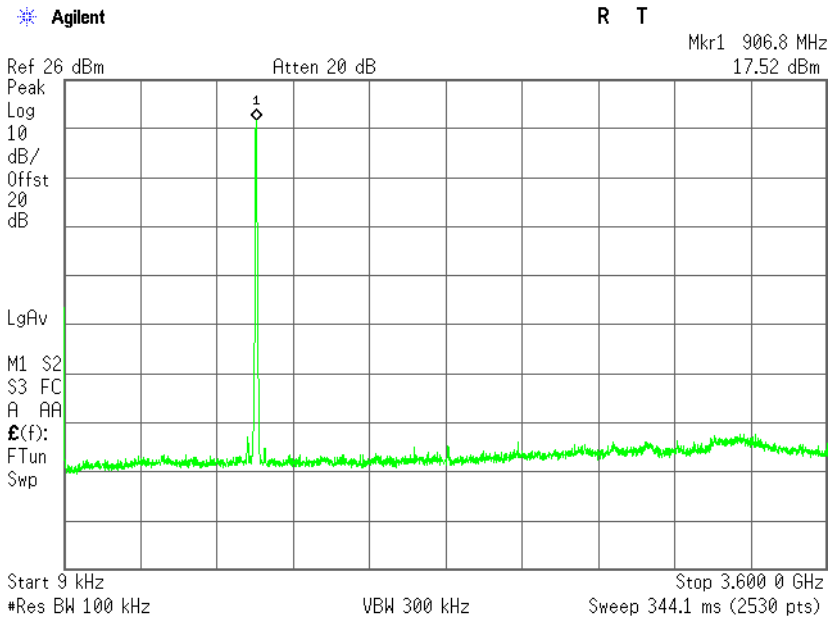
Fundamental Frequency, [MHz]	Fundamental Emission Reference Level, [dBm]	Unwanted Emissions Frequency, [MHz]	Unwanted Emissions Level, [dBm]	Correction factor for 2 outputs	Corrected Unwanted Emissions Level, [dBm]	Attenuation Below Fundamental [dB]	Minimum Attenuation Below Fundamental [dB]	Margin, [dB]	Pass/Fail
BW = 4.2 MHz, Bit Rate = 4 Mbps RF1 output(as a worst case in power test)									
2403	10.8	2399.700	All emissions were at least 20 dB below the limit				30.0	NA	Pass
2442	10.3	2398.600	All emissions were at least 20 dB below the limit				30.0	NA	Pass
2478	10.2	2483.200	All emissions were at least 20 dB below the limit				30.0	NA	Pass
BW = 8.4 MHz, Bit Rate = 8 Mbps RF1 output (as a worst case in power test)									
2405	7.4	2399.700	All emissions were at least 20 dB below the limit				30.0	NA	Pass
2440	6.3	2483.100	All emissions were at least 20 dB below the limit				30.0	NA	Pass
2475	6.3	2484.300	All emissions were at least 20 dB below the limit				30.0	NA	Pass

*Correction for N outputs = 10log(Nant), where Nant is the number of outputs

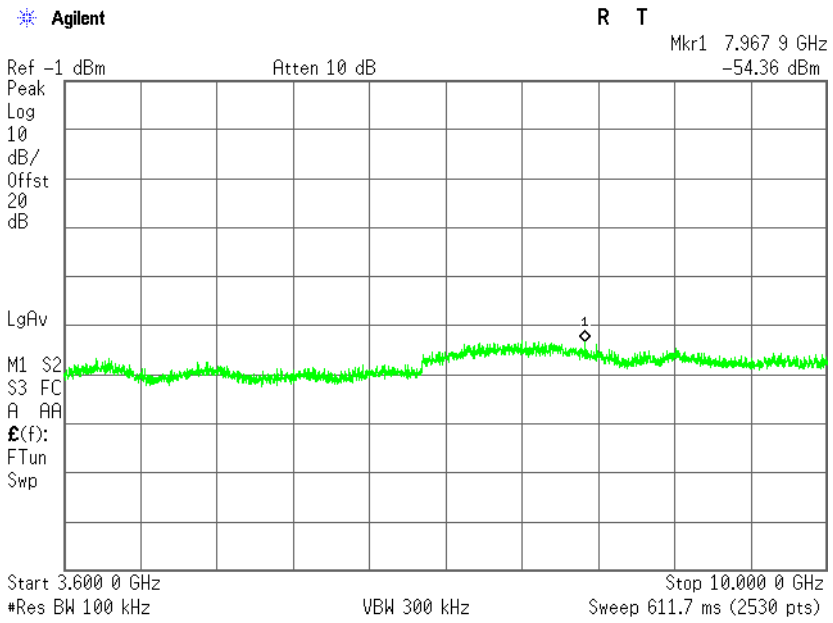
Plot 3.4.1 Unwanted Conducted Emissions into Non-Restricted Frequency Bands test results, Fundamental Emission Reference Level, Fc = 905MHz, BW = 4.2 MHz, Bit Rate = 3.2 Mbps RF1



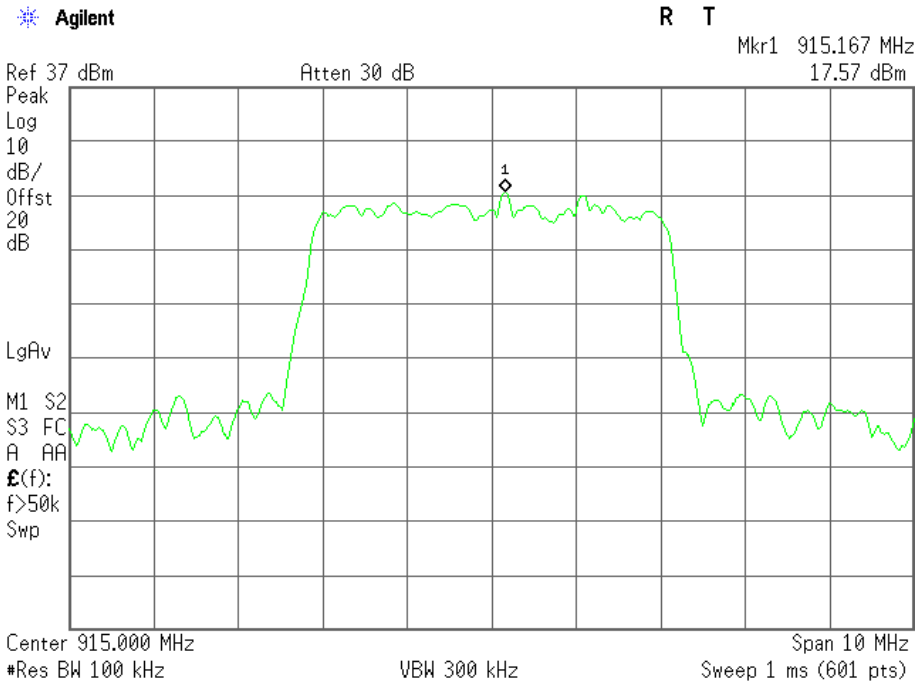
Plot 3.4.2 Unwanted Conducted Emissions into Non-Restricted Frequency Bands test results in 9 kHz – 3.6 GHz frequency range, Fc = 905 MHz, BW = 4.2 MHz, Bit Rate = 3.2 Mbps RF1



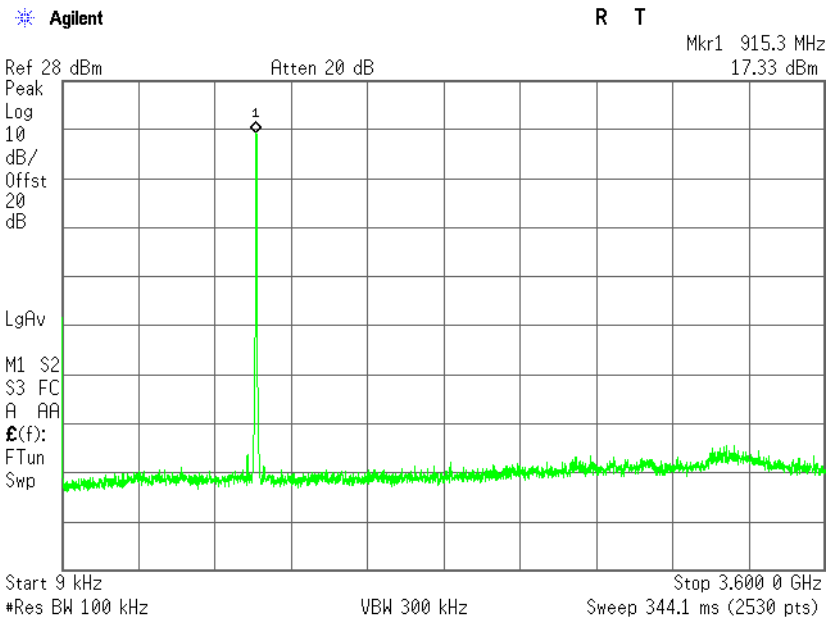
Plot 3.4.3 Unwanted Conducted Emissions into Non-Restricted Frequency Bands test results in 3.6 GHz – 10 GHz frequency range, Fc = 905 MHz, BW = 4.2 MHz, Bit Rate = 3.2 Mbps RF1



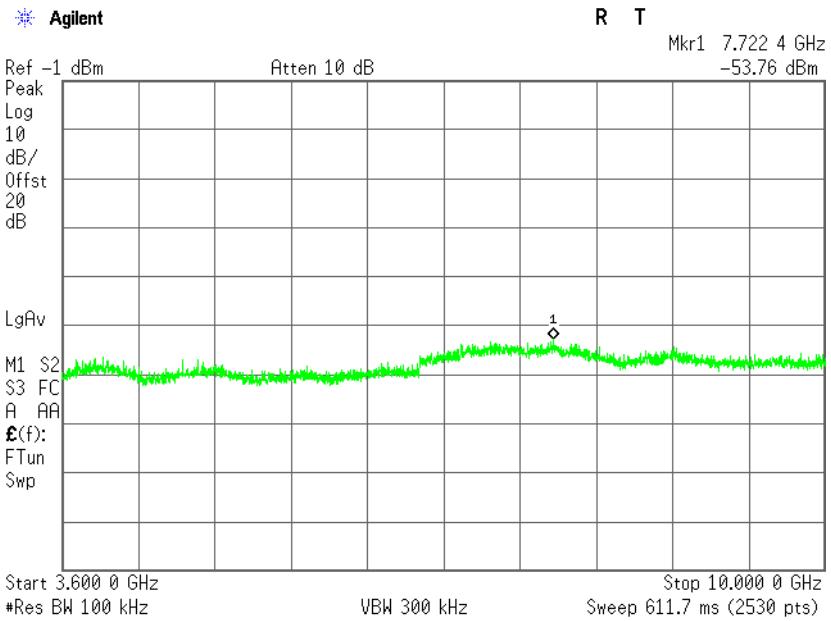
Plot 3.4.4 Unwanted Conducted Emissions into Non-Restricted Frequency Bands test results, Fundamental Emission Reference Level, Fc = 915MHz, BW = 4.2 MHz, Bit Rate = 3.2 Mbps RF1



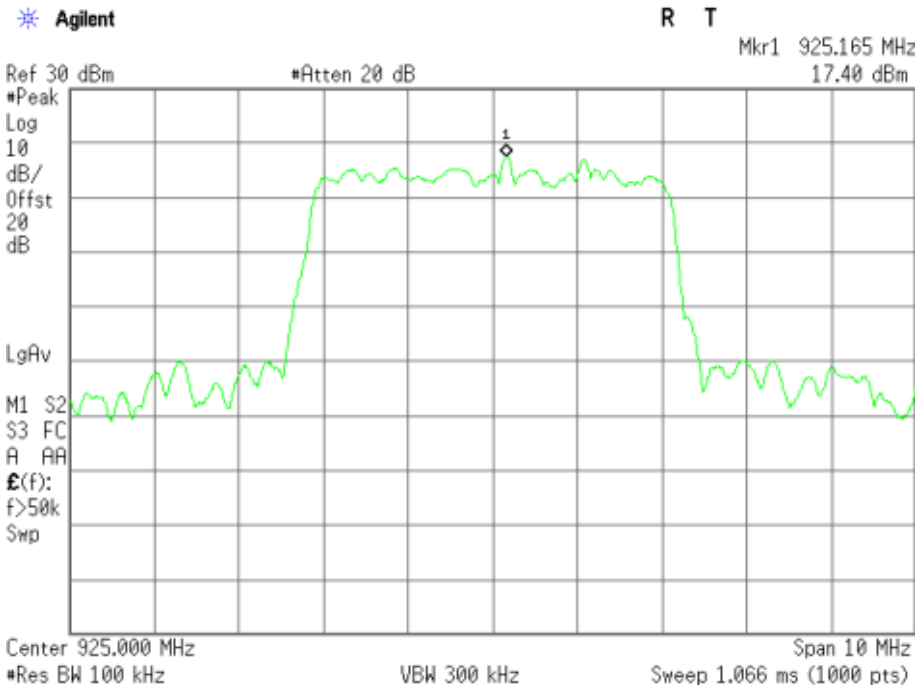
Plot 3.4.5 Unwanted Conducted Emissions into Non-Restricted Frequency Bands test results in 9 kHz – 3.6 GHz frequency range, Fc = 915 MHz, BW = 4.2 MHz, Bit Rate = 3.2 Mbps RF1



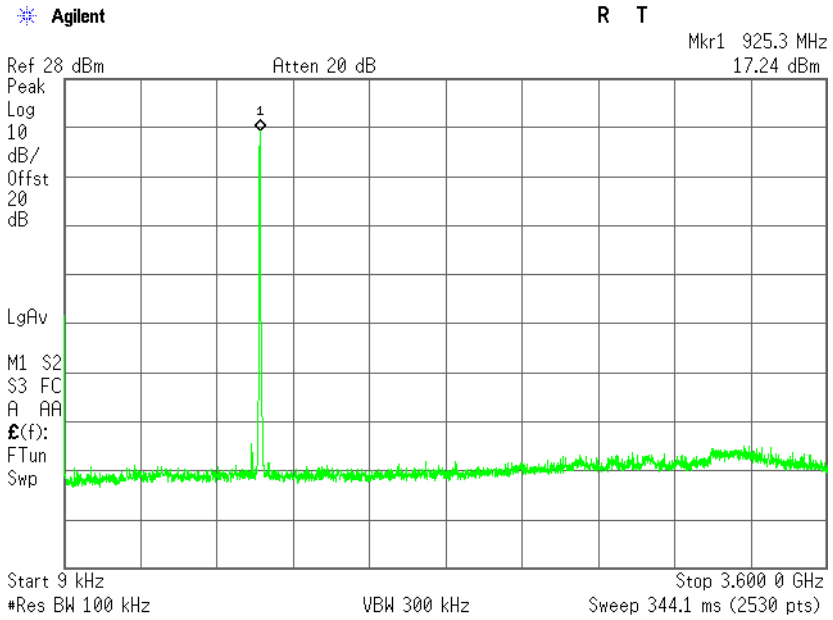
Plot 3.4.6 Unwanted Conducted Emissions into Non-Restricted Frequency Bands test results in 3.6 GHz – 25 GHz frequency range, Fc = 915 MHz, BW = 4.2 MHz, Bit Rate = 3.2 Mbps RF1



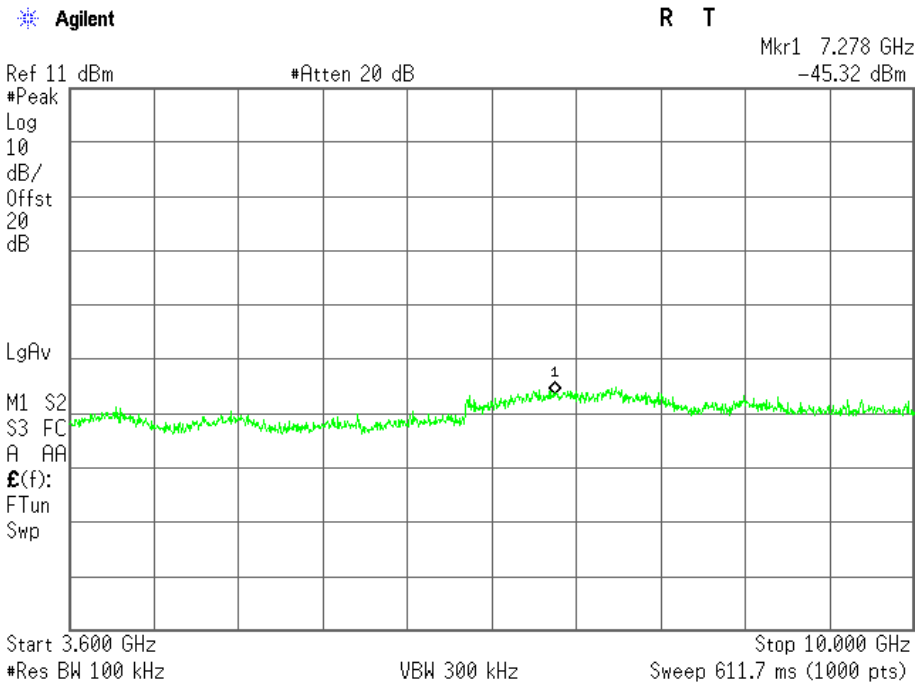
Plot 3.4.7 Unwanted Conducted Emissions into Non-Restricted Frequency Bands test results, Fundamental Emission Reference Level, Fc = 925 MHz, BW = 4.2 MHz, Bit Rate = 3.2 Mbps RF1



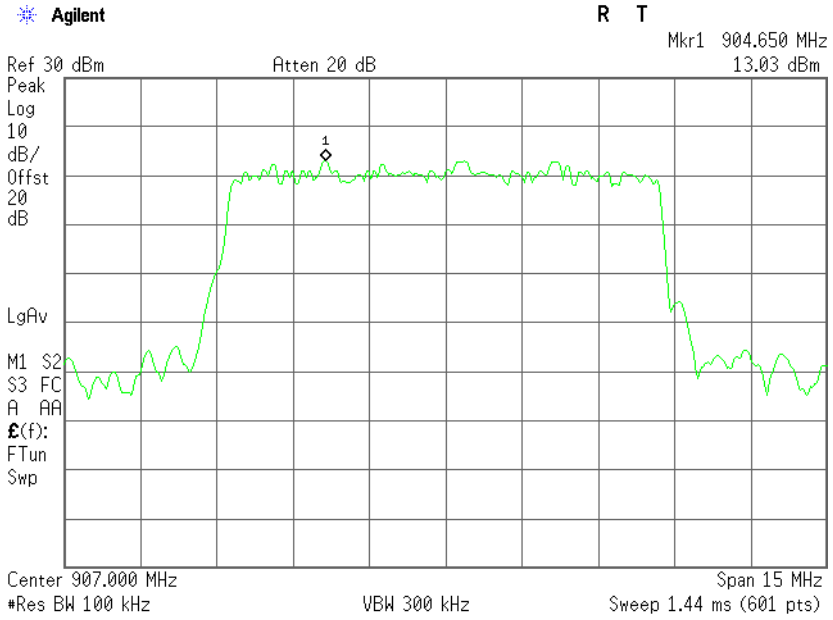
Plot 3.4.8 Unwanted Conducted Emissions into Non-Restricted Frequency Bands test results in 9 kHz – 3.6 GHz frequency range, Fc = 925 MHz, BW = 4.2 MHz, Bit Rate = 3.2 Mbps RF1



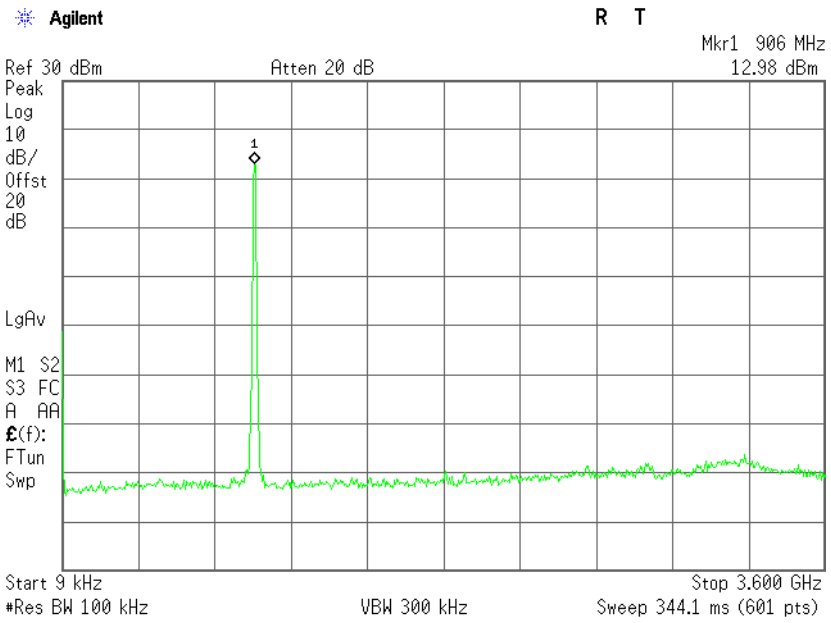
Plot 3.4.9 Unwanted Conducted Emissions into Non-Restricted Frequency Bands test results in 3.6 GHz – 10 GHz frequency range, Fc =905 MHz, BW = 4.2 MHz, Bit Rate = 3.2 Mbps RF1



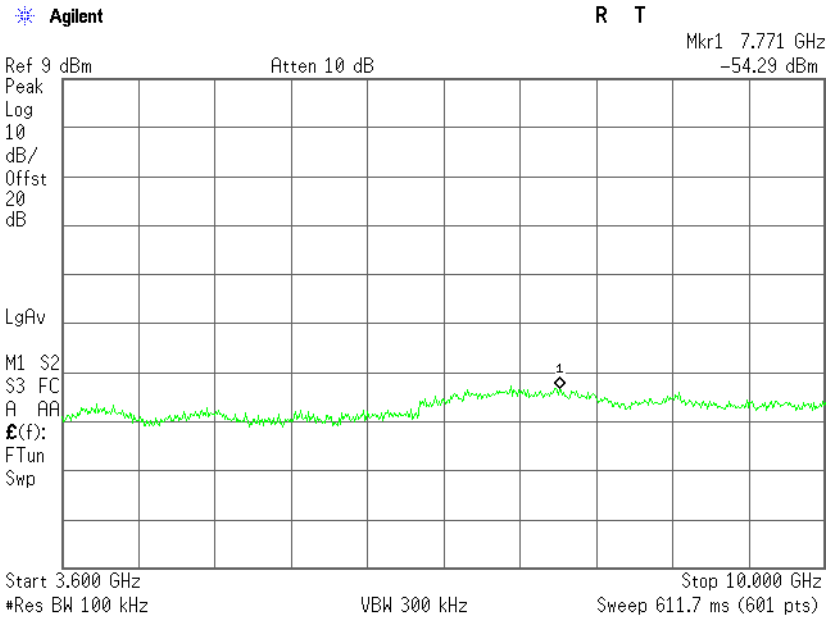
Plot 3.4.10 Unwanted Conducted Emissions into Non-Restricted Frequency Bands test results, Fundamental Emission Reference Level, Fc = 907 MHz, BW = 8.4 MHz, Bit Rate = 8 MHz



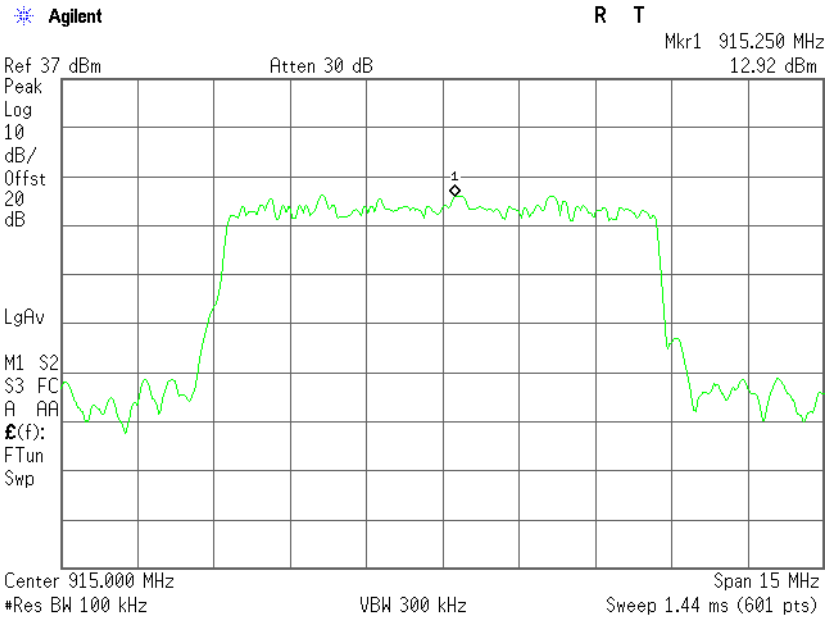
Plot 3.4.11 Unwanted Conducted Emissions into Non-Restricted Frequency Bands test results in 9 kHz – 3.6 GHz frequency range, Fc = 907 MHz, BW = 8.4 MHz, Bit Rate = 8 MHz



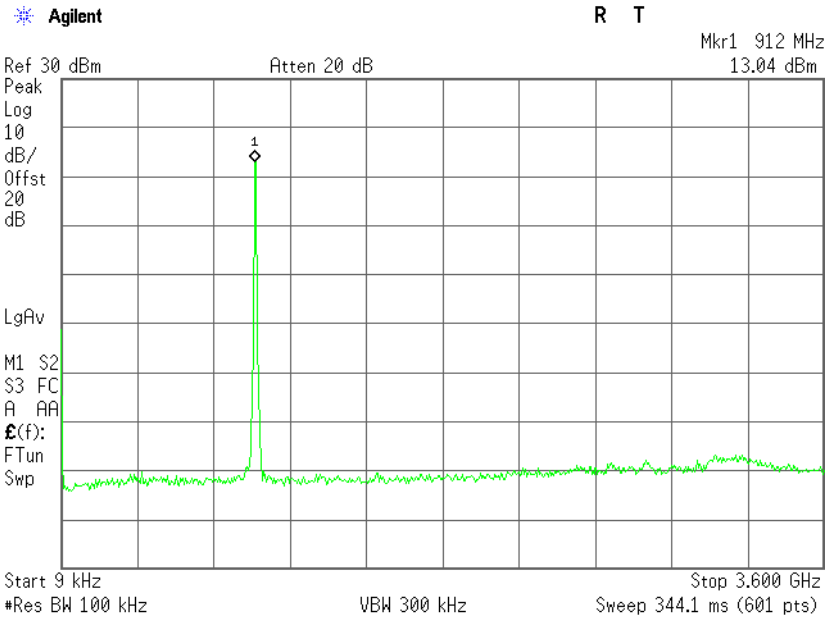
Plot 3.4.12 Unwanted Conducted Emissions into Non-Restricted Frequency Bands test results in 3.6 GHz – 10 GHz frequency range, Fc = 907 MHz, BW = 8.4 MHz, Bit Rate = 8 MHz



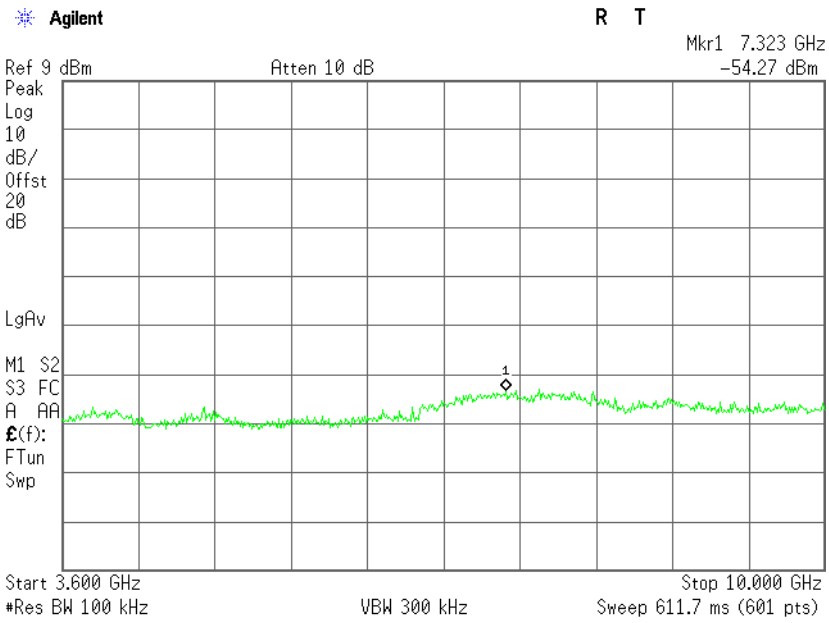
Plot 3.4.13 Unwanted Conducted Emissions into Non-Restricted Frequency Bands test results, Fundamental Emission Reference Level, Fc = 915 MHz, BW = 8.4 MHz, Bit Rate = 8 MHz



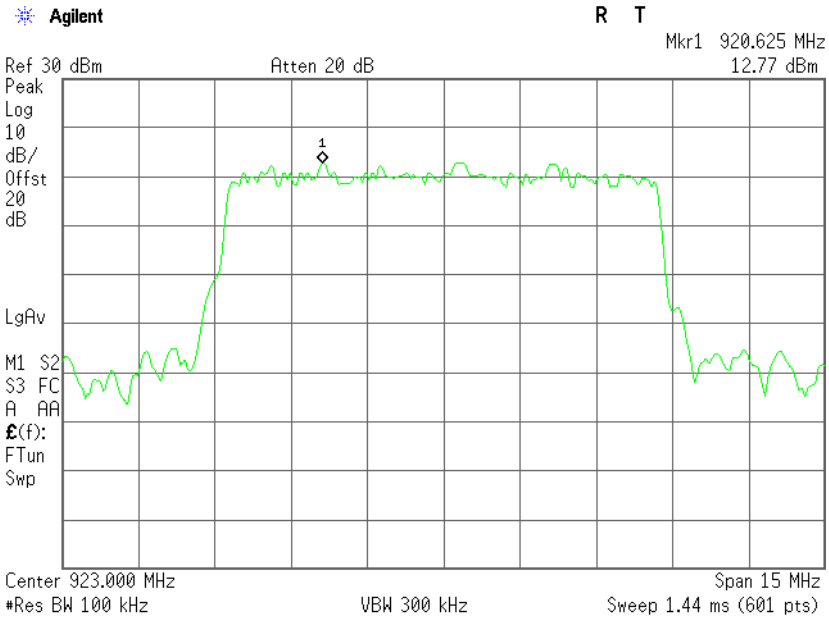
Plot 3.4.14 Unwanted Conducted Emissions into Non-Restricted Frequency Bands test results in 9 kHz – 3.6 GHz frequency range, Fc = 915 MHz, BW = 8.4 MHz, Bit Rate = 8 MHz



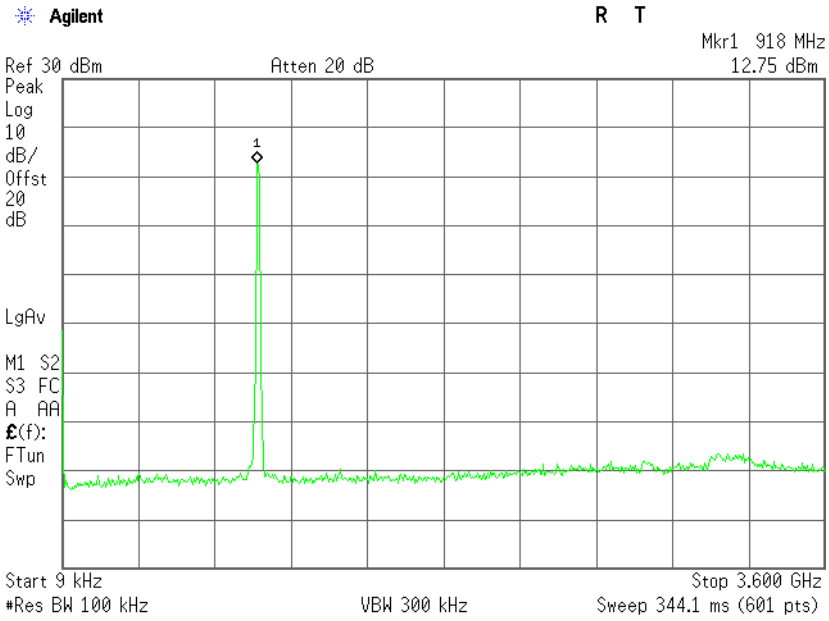
Plot 3.4.15 Unwanted Conducted Emissions into Non-Restricted Frequency Bands test results in 3.6 GHz – 10 GHz frequency range, Fc = 915MHz, BW = 8.4 MHz, Bit Rate = 8 MHz



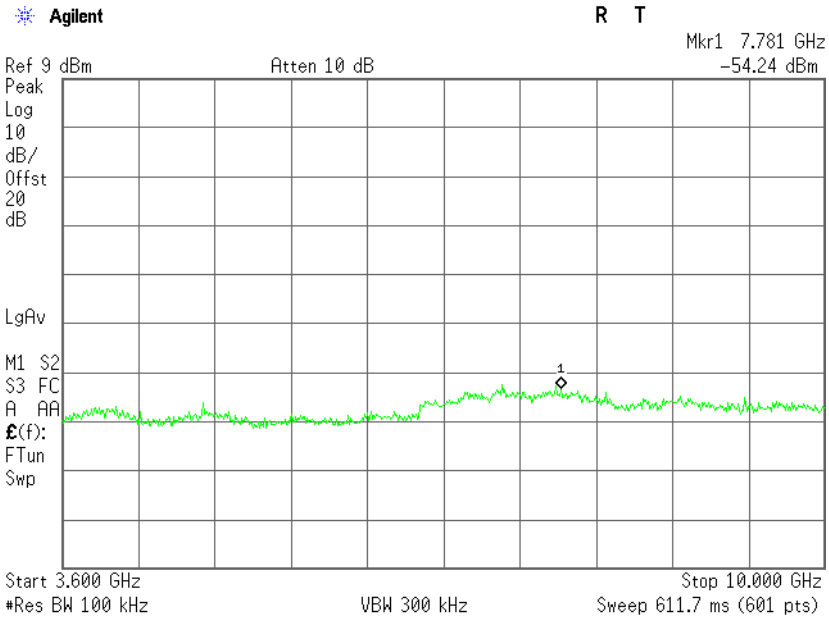
Plot 3.4.16 Unwanted Conducted Emissions into Non-Restricted Frequency Bands test results, Fundamental Emission Reference Level, Fc = 923 MHz, BW = 8.4 MHz, Bit Rate = 8 MHz



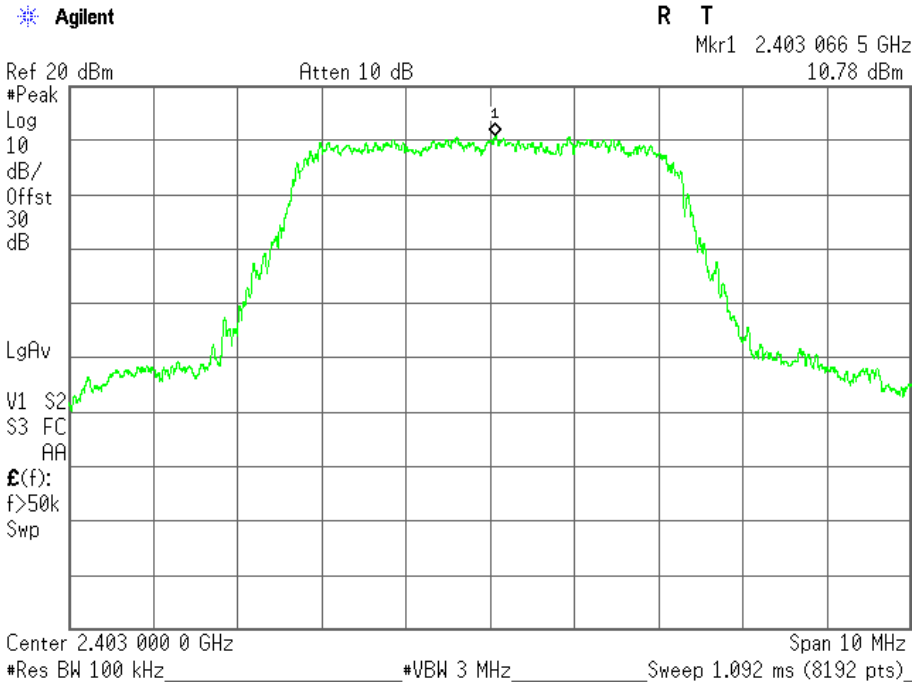
Plot 3.4.17 Unwanted Conducted Emissions into Non-Restricted Frequency Bands test results in 9 kHz – 3.6 GHz frequency range, Fc = 923MHz, BW = 8.4 MHz, Bit Rate = 8 MHz



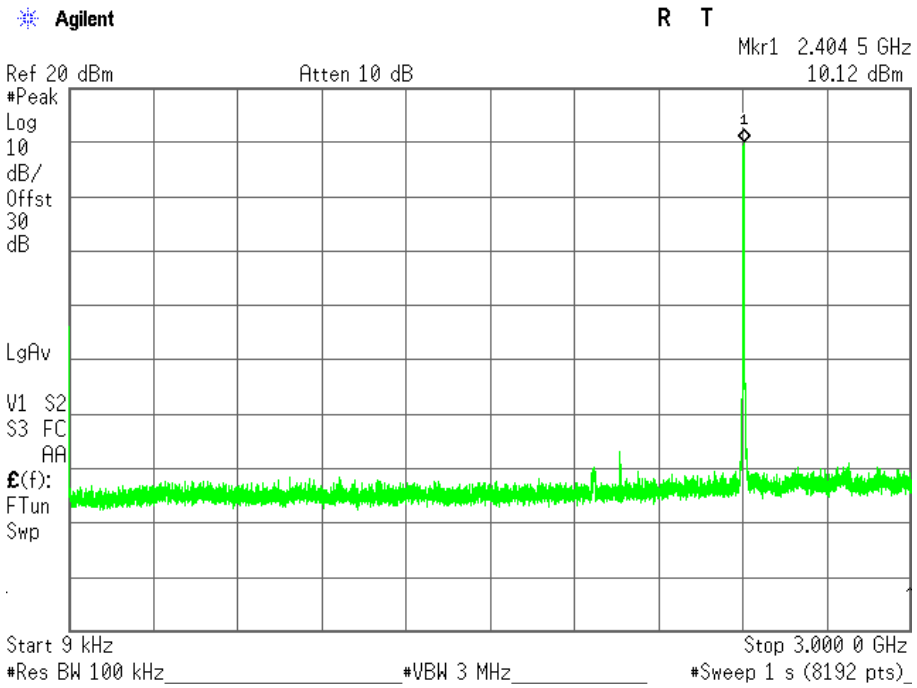
Plot 3.4.18 Unwanted Conducted Emissions into Non-Restricted Frequency Bands test results in 3.6 GHz – 10 GHz frequency range, Fc = 923 MHz, BW = 8.4 MHz, Bit Rate = 8 MHz



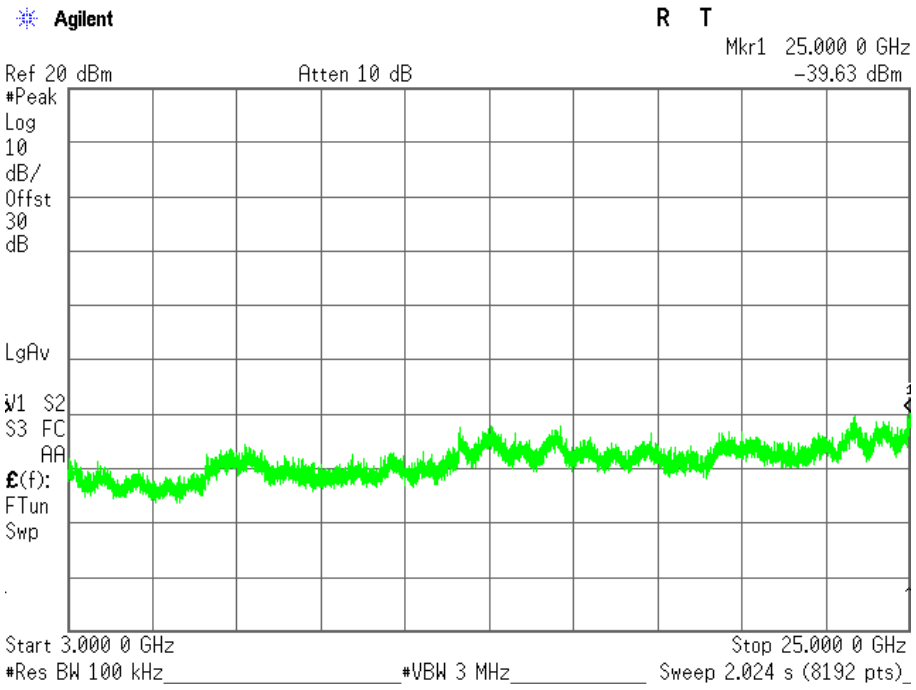
Plot 3.4.19 Unwanted Conducted Emissions into Non-Restricted Frequency Bands test results, Fundamental Emission Reference Level, Fc = 2403 MHz, BW = 4.2 MHz, Bit Rate = 4 MHz



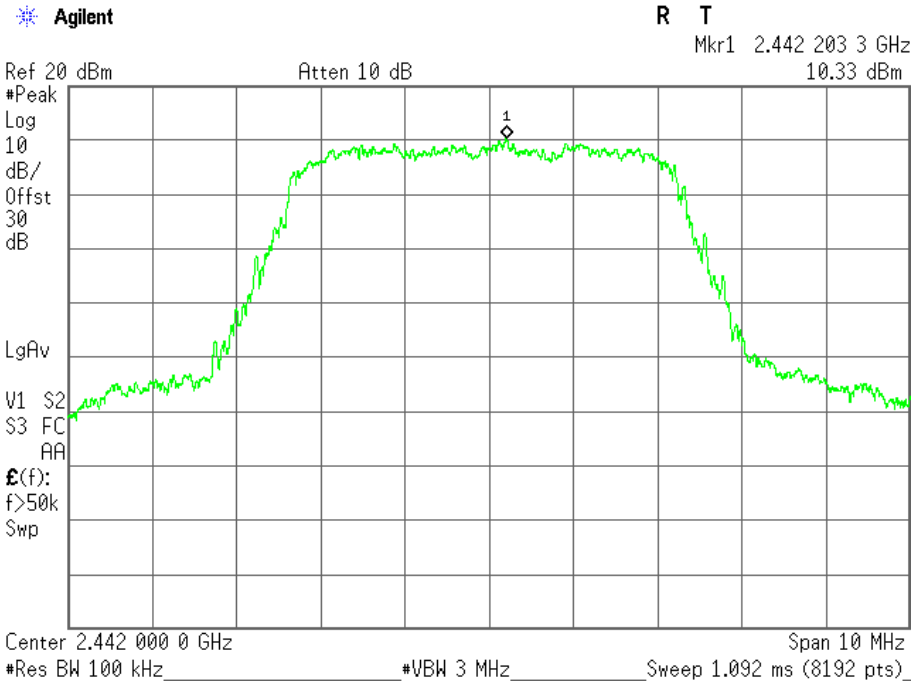
Plot 3.4.20 Unwanted Conducted Emissions into Non-Restricted Frequency Bands test results in 9 kHz – 3 GHz frequency range, Fc = 2403 MHz, BW = 4.2 MHz, Bit Rate = 4 MHz



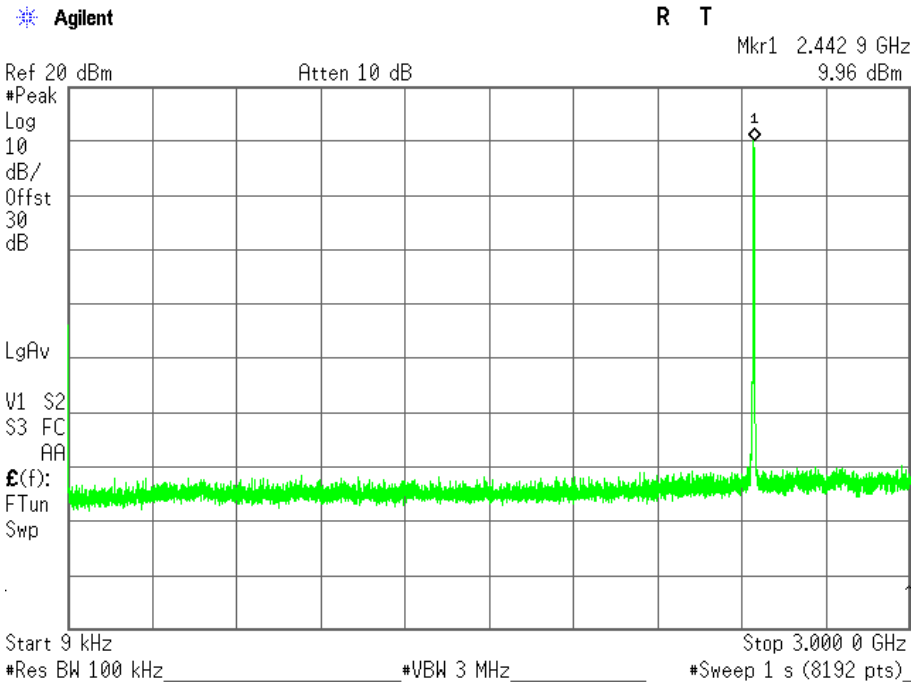
Plot 3.4.21 Unwanted Conducted Emissions into Non-Restricted Frequency Bands test results in 3 GHz – 25 GHz frequency range, Fc = 2403 MHz, BW = 4.2 MHz, Bit Rate = 4 MHz



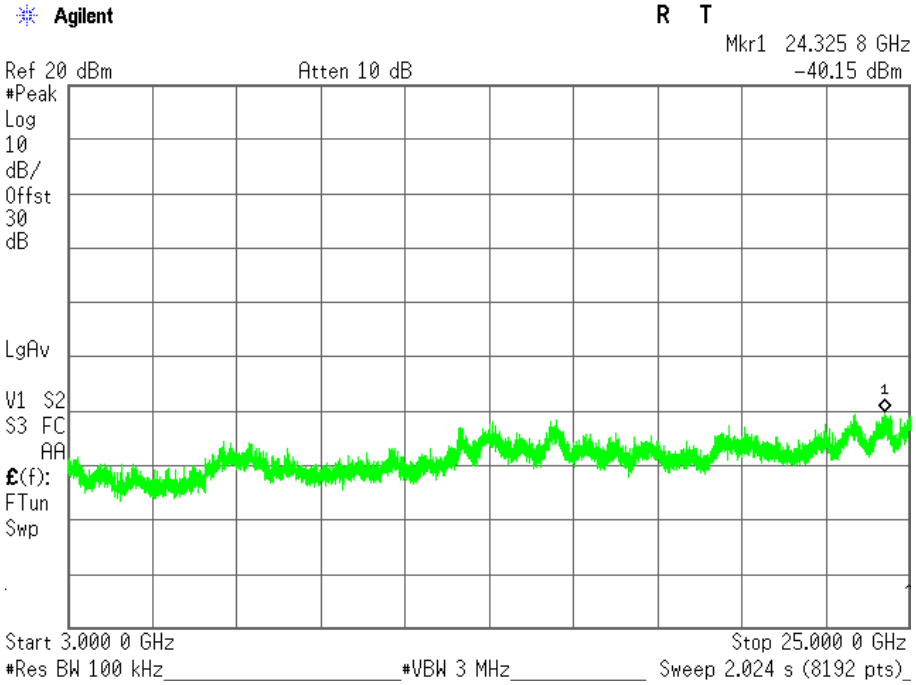
Plot 3.4.22 Unwanted Conducted Emissions into Non-Restricted Frequency Bands test results, Fundamental Emission Reference Level, Fc = 2442 MHz, BW = 4.2 MHz, Bit Rate = 4 MHz



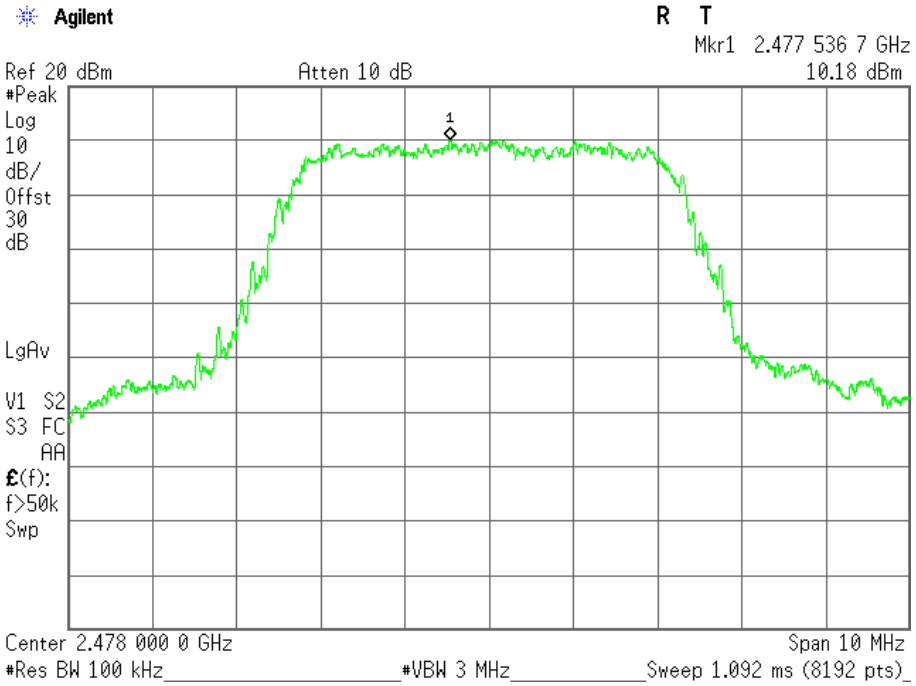
Plot 3.4.23 Unwanted Conducted Emissions into Non-Restricted Frequency Bands test results in 9 kHz – 3 GHz frequency range, Fc = 2442 MHz, BW = 4.2 MHz, Bit Rate = 4 MHz



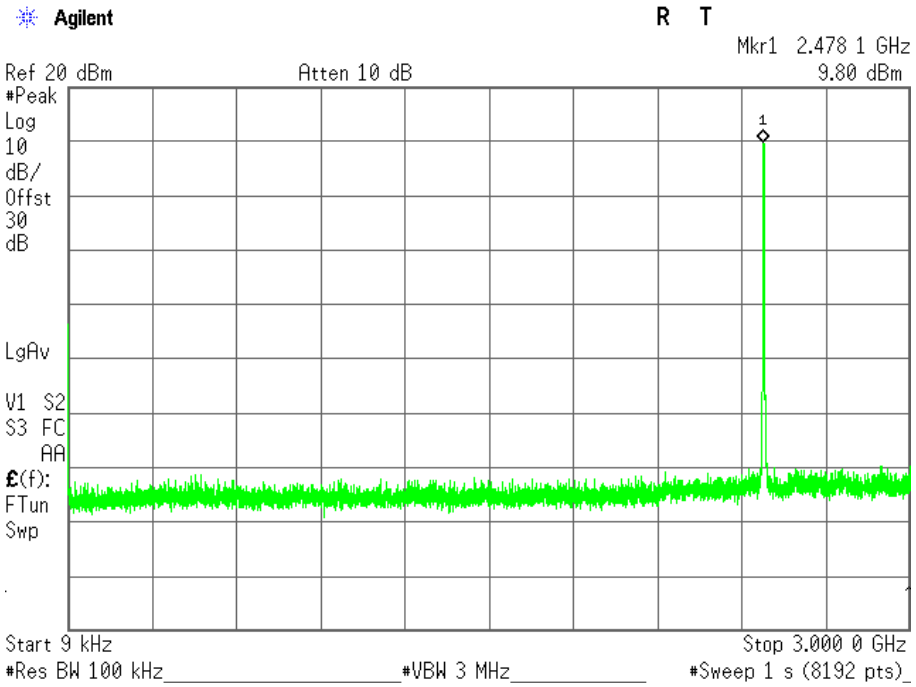
Plot 3.4.24 Unwanted Conducted Emissions into Non-Restricted Frequency Bands test results in 3 GHz – 25 GHz frequency range, Fc = 2442 MHz, BW = 4.2 MHz, Bit Rate = 4 MHz



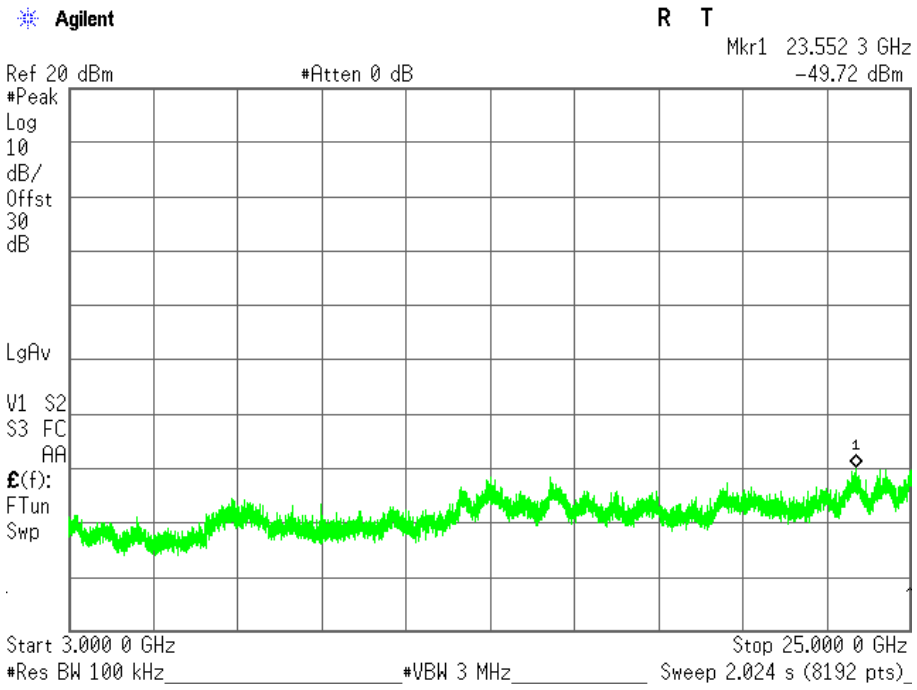
Plot 3.4.25 Unwanted Conducted Emissions into Non-Restricted Frequency Bands test results, Fundamental Emission Reference Level, Fc = 2478 MHz, BW = 4.2 MHz, Bit Rate = 4 MHz



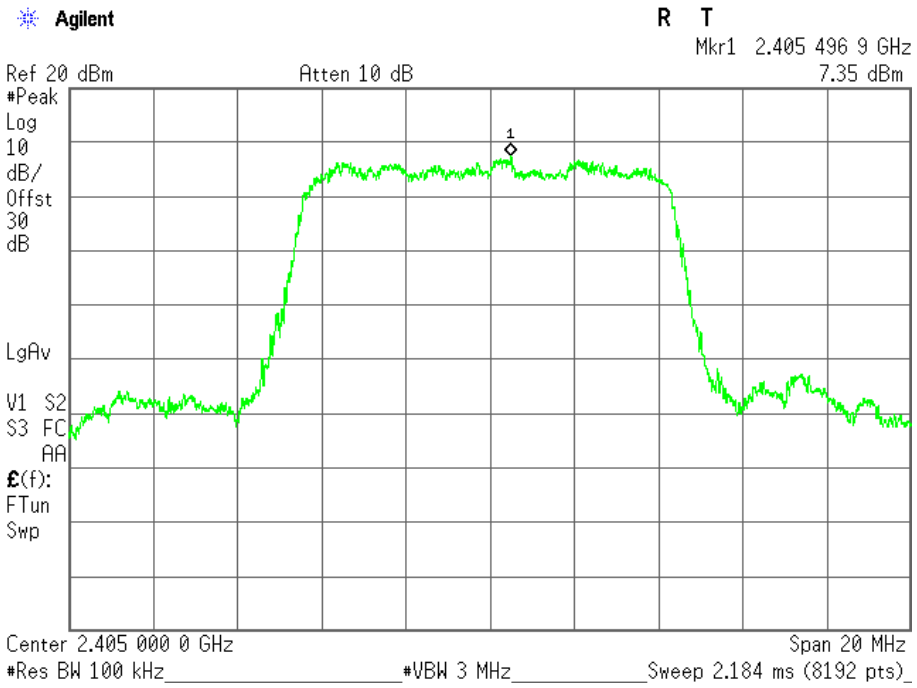
Plot 3.4.26 Unwanted Conducted Emissions into Non-Restricted Frequency Bands test results in 9 kHz – 3 GHz frequency range, Fc = 2478 MHz, BW = 4.2 MHz, Bit Rate = 4 MHz



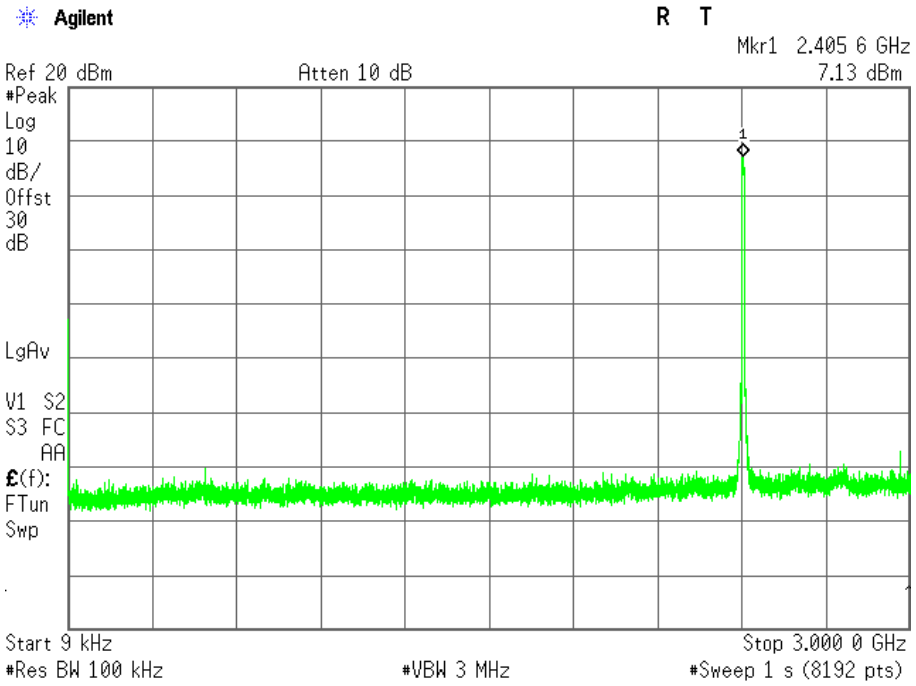
Plot 3.4.27 Unwanted Conducted Emissions into Non-Restricted Frequency Bands test results in 3 GHz – 25 GHz frequency range, Fc = 2478 MHz, BW = 4.2 MHz, Bit Rate = 4 MHz



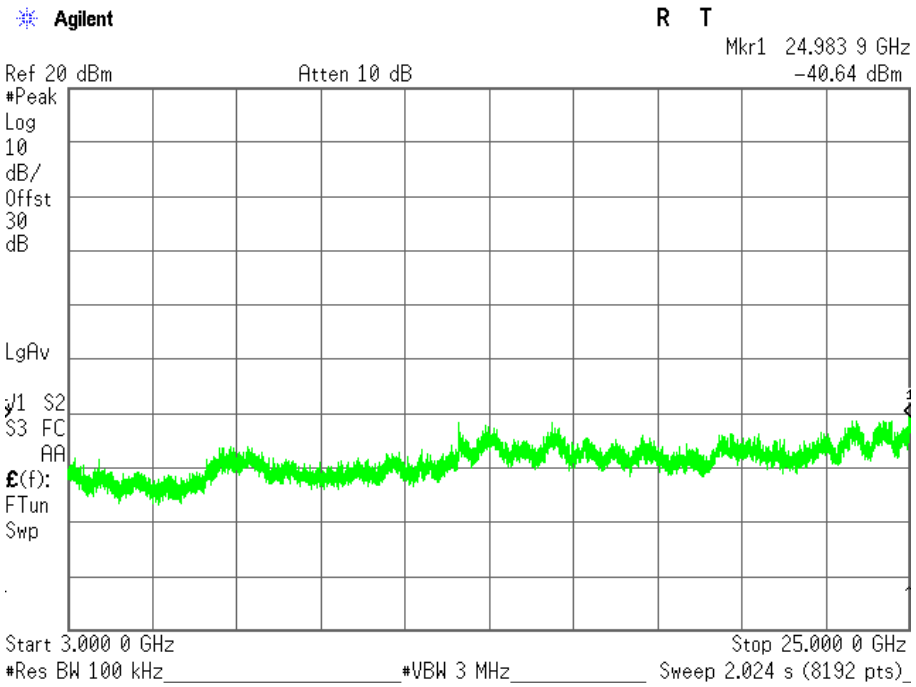
Plot 3.4.28 Unwanted Conducted Emissions into Non-Restricted Frequency Bands test results, Fundamental Emission Reference Level, Fc = 2405 MHz, BW = 8.4 MHz, Bit Rate = 8 MHz



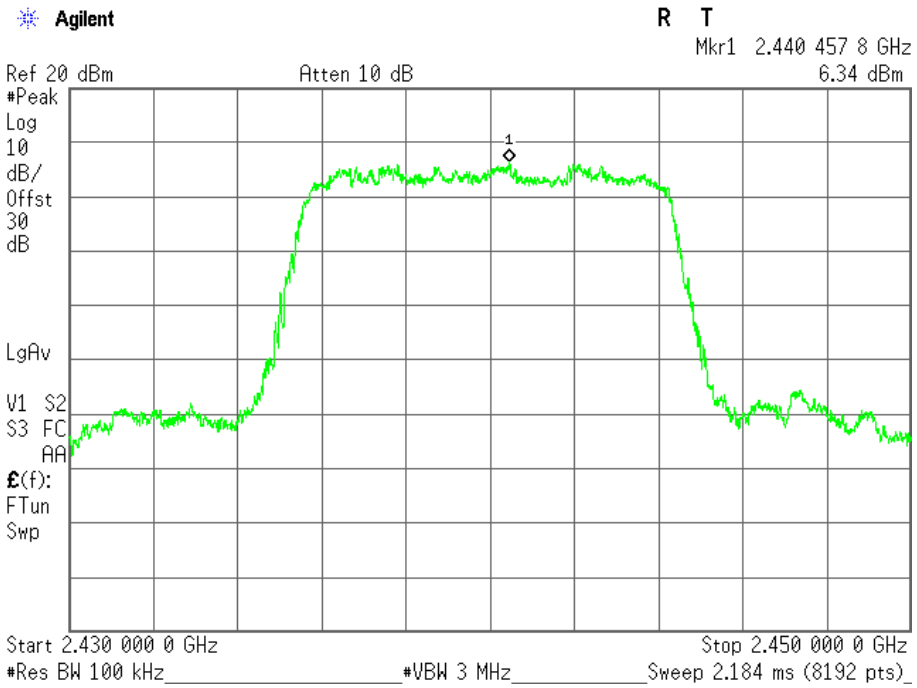
Plot 3.4.29 Unwanted Conducted Emissions into Non-Restricted Frequency Bands test results in 9 kHz – 3 GHz frequency range, Fc = 2405 MHz, BW = 8.4 MHz, Bit Rate = 8 MHz



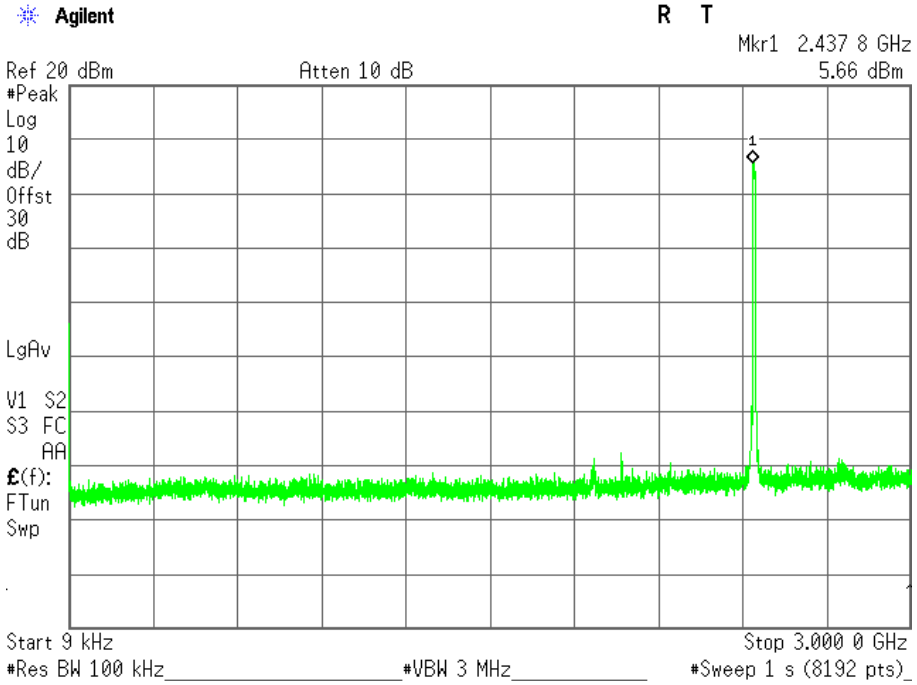
Plot 3.4.30 Unwanted Conducted Emissions into Non-Restricted Frequency Bands test results in 3 GHz – 25 GHz frequency range, Fc = 2405 MHz, BW = 8.4 MHz, Bit Rate = 8 MHz



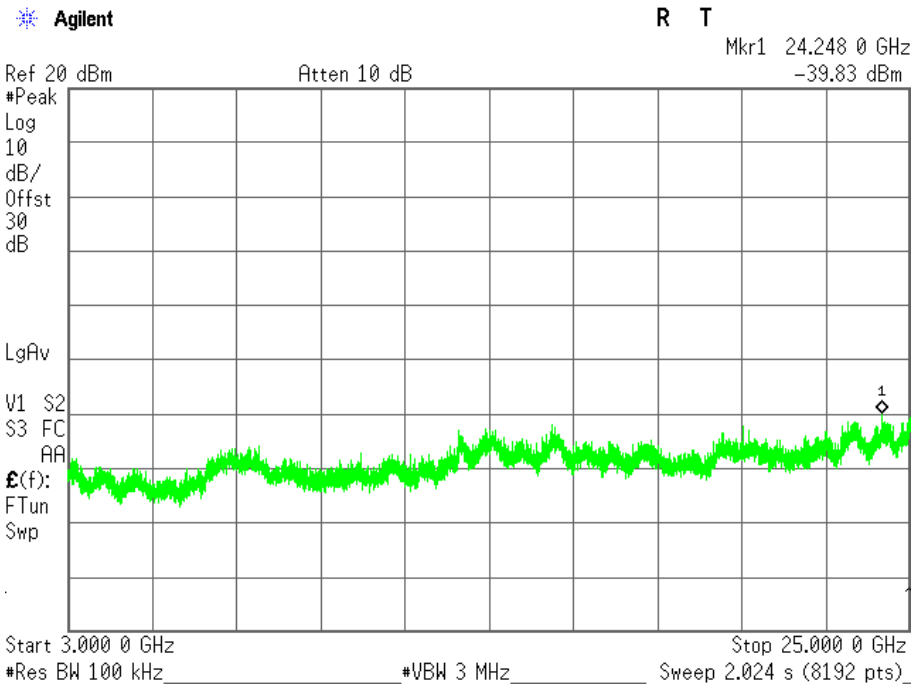
Plot 3.4.31 Unwanted Conducted Emissions into Non-Restricted Frequency Bands test results, Fundamental Emission Reference Level, Fc = 2440 MHz, BW = 8.4 MHz, Bit Rate = 8 MHz



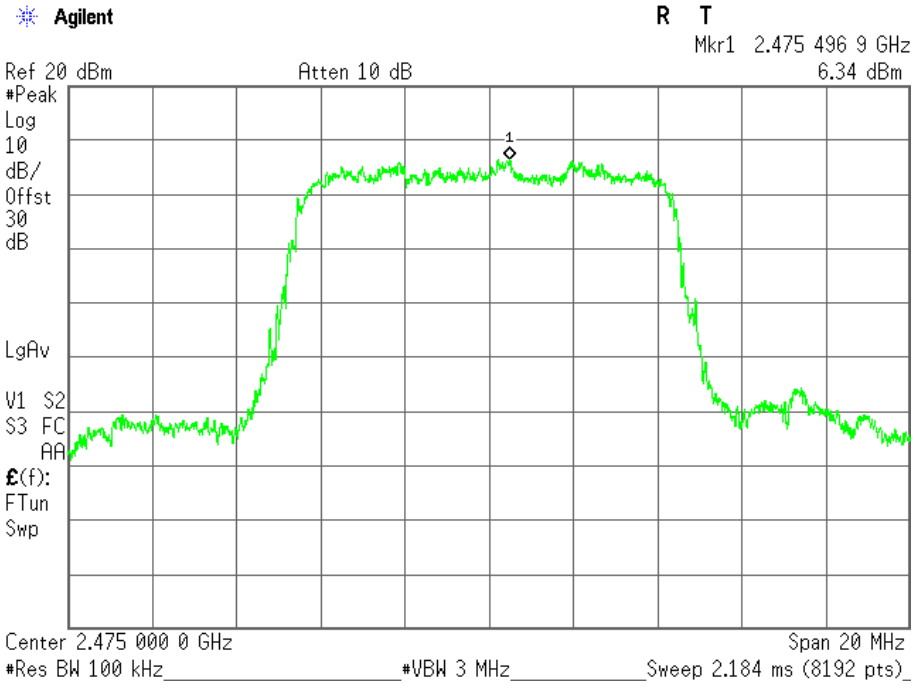
Plot 3.4.32 Unwanted Conducted Emissions into Non-Restricted Frequency Bands test results in 9 kHz – 3 GHz frequency range, Fc = 2440 MHz, BW = 8.4 MHz, Bit Rate = 8 MHz



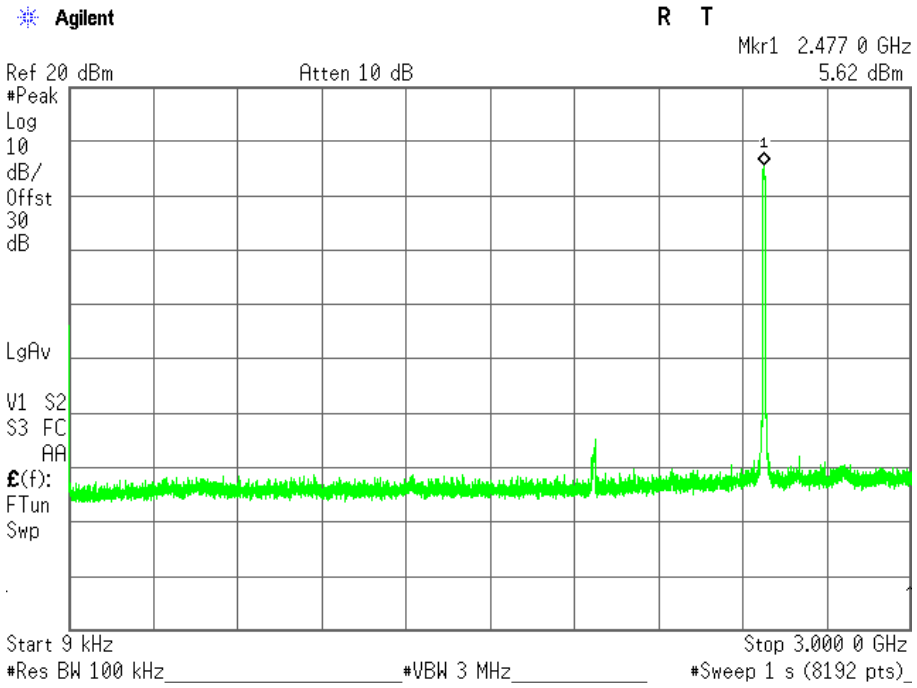
Plot 3.4.33 Unwanted Conducted Emissions into Non-Restricted Frequency Bands test results in 3 GHz – 25 GHz frequency range, Fc = 2440 MHz, BW = 8.4 MHz, Bit Rate = 8 MHz



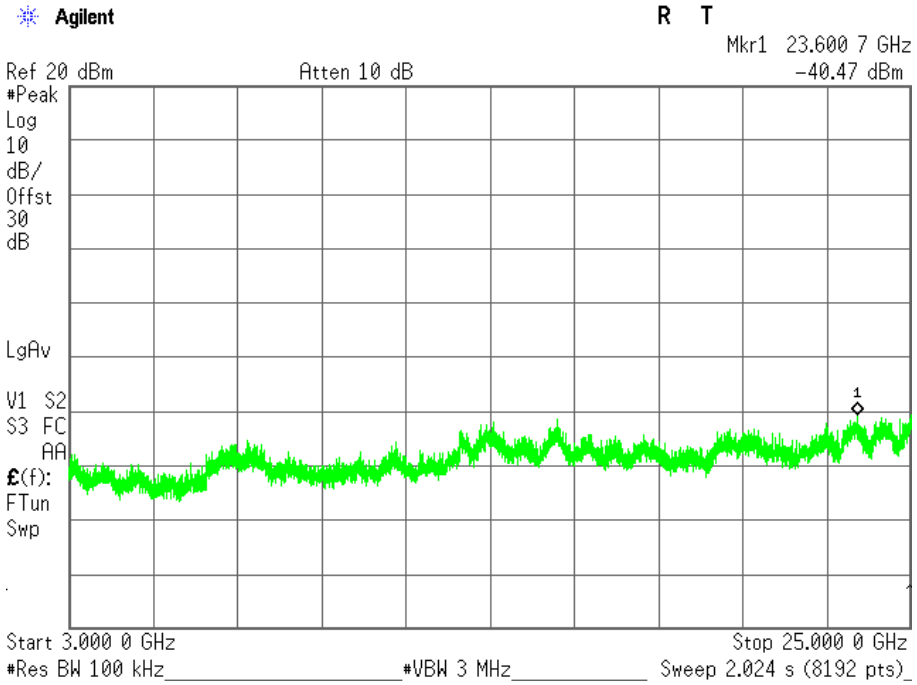
Plot 3.4.34 Unwanted Conducted Emissions into Non-Restricted Frequency Bands test results, Fundamental Emission Reference Level, Fc = 2475 MHz, BW = 8.4 MHz, Bit Rate = 8 MHz



Plot 3.4.35 Unwanted Conducted Emissions into Non-Restricted Frequency Bands test results in 9 kHz – 3 GHz frequency range, Fc = 2475 MHz, BW = 8.4 MHz, Bit Rate = 8 MHz



Plot 3.4.36 Unwanted Conducted Emissions into Non-Restricted Frequency Bands test results in 3 GHz – 25 GHz frequency range, Fc = 2475 MHz, BW = 8.4 MHz, Bit Rate = 8 MHz



3.5 Emissions in restricted frequency bands

Date of Test: 29.07.2018
Relative Humidity: 48.5%
Ambient Temperature: 22.5 °C
Atmospheric Pressure: 1011.4 hPa
Test performed by: Agi Yizhak

Reference document:	**47 CFR §15.247 (d), & §15.205, & §15.209(a)**		
Test Requirements:	Radiated emissions which fall in the restricted bands, as defined in §15.205(a), must comply with the radiated emissions limits specified in §15.209(a) (see §15.205(c)).		
Method of testing:	KDB 558074 D01 v04, Sec.12.2.1-12.2.5 Conducted & 12.2.7 Radiated for cabinet/case spurious emissions	Pass	
Operating conditions:	Under normal test conditions		
S.A. Settings:	According to KDB 558074 D01 v04		
Environment conditions:	Ambient Temperature: 21°C	Relative Humidity: 48%	Atmospheric Pressure: 1011.4 hPa
Test Result:	See below		

Limits:

30MHz to 1GHz frequency range:

Frequency [MHz]	QP Limit [dBµV /m] Class A	QP Limit [dBµV /m] Class B
30÷88	49.5	40.0
88÷216	54.0	43.5
216÷960	57.0	46.0
960÷1000	60.0	54.0

Above 1GHz frequency range:

Frequency [GHz]	AVR Limit [dBµV m] Class A	AVR Limit [dBµV /m] Class B
Above 1GHz	74	54

Test Results: 905 – 925 MHz

Test results below 1GHz for BW = 8.4MHz, Bit Rate = 6.4 Mbps* (Radiated Spurious emissions from cabinet/case):

All measurements were done in horizontal, vertical polarizations and 3 frequencies; the results show the worst case.

Fundamental Frequency, MHz	Unwanted Emission Frequency, MHz	Antenna Polarization	QP Measured Emission, dBµV/m	Limit, dBµV/m	Delta, dB	Pass/Fail
915	268.4	H	41.50	46.0	-4.50	Pass
	All other emissions were not in the restricted band					

Test results above 1GHz for BW = 4.2 MHz, Bit Rate = 3.2 Mbps (Radiated Spurious emissions form cabinet/case):

Fundamental Frequency, MHz	Unwanted Emission Frequency, GHz	Antenna Polarization	Measured Emission, dBµV/m		Limit, dBµV/m		Delta, dB		Pass/ Fail
			Peak	AVG	Peak	AVG	Peak	AVG	
905	2.7153	H	59.98	49.8	74.0	54.0	-14.0	-4.2	Pass
	3.620	H	54.1	52.0	74.0	54.0	-19.9	-2.0	Pass
915	2.7415	H	61.72	50.2	74.0	54.0	-12.3	-3.8	Pass
	3.6601	H	55.2	50.53	74.0	54.0	-18.8	-3.5	Pass
925	2.775	H	61.01	47.0	74.0	54.0	-13.0	-7.0	Pass
	3.6997	H	57.0	52.45	74.0	54.0	-17.0	-1.6	Pass
All other emissions were not in the restricted band									Pass

Test results above 1GHz for BW = 4.2 MHz, Bit Rate = 4.0 Mbps (Radiated Spurious emissions form cabinet/case):

Fundamental Frequency, MHz	*Unwanted Emission Frequency, GHz	Antenna Polarization	Measured Emission, dBµV/m		Limit, dBµV/m		Delta, dB		Pass/ Fail
			Peak	AVG	Peak	AVG	Peak	AVG	
905	2.7163	H	59.23	46.5	74.0	54.0	-14.8	-7.5	Pass
	3.620	H	53.10	49.65	74.0	54.0	-20.9	-4.4	Pass
915	2.747	H	61.84	50.0	74.0	54.0	-12.2	-4.0	Pass
	3.6601	H	56.10	52.82	74.0	54.0	-17.9	-1.2	Pass
925	2.775	H	48.50	43.2	74.0	54.0	-25.5	-10.8	Pass
	3.6997	V	52.89	51.85	74.0	54.0	-21.1	-2.2	Pass
All other emissions were not in the restricted band									Pass

Test results above 1GHz for BW = 8.4 MHz, Bit Rate = 6.4 Mbps (Radiated Spurious emissions form cabinet/case):

Fundamental Frequency, MHz	Unwanted Emission Frequency, GHz	Antenna Polarization	Measured Emission, dBµV/m		Limit, dBµV/m		Delta, dB		Pass/ Fail
			Peak	AVG	Peak	AVG	Peak	AVG	
907	3.6283	V	55.62	48.64	74.0	54.0	-18.4	-5.4	Pass
	3.6283	H	54.30	52.60	74.0	54.0	-19.7	-1.4	Pass
915	3.6601	V	54.25	51.49	74.0	54.0	-19.8	-2.5	Pass
	3.6601	H	54.20	51.55	74.0	54.0	-19.8	-2.5	Pass
923	3.692	V	53.43	51.57	74.0	54.0	-20.6	-2.4	Pass
	3.692	H	54.44	52.28	74.0	54.0	-19.6	-1.7	Pass
All other emissions were not in the restricted band									Pass

Test results above 1GHz for BW = 8.4 MHz, Bit Rate = 8 Mbps (Radiated Spurious emissions form cabinet/case):

Fundamental Frequency, MHz	Unwanted Emission Frequency, GHz	Antenna Polarization	Measured Emission, dBµV/m		Limit, dBµV/m		Delta, dB		Pass/ Fail
			Peak	AVG	Peak	AVG	Peak	AVG	
907	3.6283	V	53.12	50.71	74.0	54.0	-20.9	-3.3	Pass
	3.6283	H	55.12	49.79	74.0	54.0	-18.9	-4.2	Pass
915	3.6206	V	53.69	51.81	74.0	54.0	-20.3	-2.2	Pass
	3.6195	H	54.67	51.86	74.0	54.0	-19.3	-2.1	Pass
923	3.692	V	53.30	51.11	74.0	54.0	-20.7	-2.9	Pass
	3.692	H	54.55	52.10	74.0	54.0	-19.5	-1.9	Pass
All other emissions were not in the restricted band									Pass

rious Emission [dBµV/m] = measured [dBµV] + Correction-factor [dB (1/m)]
Correction Factor = Antenna factor + Cable Loss

Test results (Antenna-port conducted emission) :

Fundamental Frequency, MHz	**Emission Frequency Range, GHz	Measured Emission, dBm		Duty Cycle Correction Factor	Max Transmit Antenna Gain, dBi	MIMO Correction Factor	*Equivalent EIRP, dBµV/m						Pass/ Fail
		Peak	AVG (RMS)				Peak			Average			
							Emission*	Limit	Delta	Emission*	Limit	Delta	
BW = 4.2 MHz, Bit Rate = 3.2 Mbps, RF1, continuous transmission													
905	3.620	-59.8	-70.0	0.0	2	3	39.66	74	34.34	29.46	54	24.54	Pass
915	2.747	-52.53	-62.03	0.0	2	3	46.93	74	27.07	37.43	54	16.57	pass
925	2.7763	-52.0	-62.0	0.0	2	3	47.46	74	26.54	37.46	54	16.54	Pass
BW = 4.2 MHz, Bit Rate = 3.2Mbps, output RF 2, continuous transmission													
905	5.432	-54.2	-64.38	0.0	2	3	45.26	74	28.74	35.08	54	18.92	Pass
915	2.747	-48.9	-58.2	0.0	2	3	50.56	74	23.44	41.26	54	12.74	pass
925	2.7763	-51.6	-61.49	0.0	2	3	47.86	74	26.14	37.97	54	16.03	Pass
BW = 4.2 MHz, Bit Rate = 4.0Mbps, RF1, continuous transmission													
905	3.620	-60.26	-70.46	0.0	2	3	39.20	74	34.80	29.00	54	25.00	Pass
915	3.660	-55.76	-65.26	0.0	2	3	43.70	74	30.30	34.20	54	19.80	pass
925	3.700	-56.17	-66.17	0.0	2	3	43.29	74	30.71	33.29	54	20.71	Pass
BW = 4.2 MHz, Bit Rate =4.0 Mbps, output RF 2, continuous transmission													
905	5.431	-54.53	-64.53	0.0	2	3	44.93	74	29.07	34.93	54	19.07	Pass
915	5.490	-55.1	-63.1	0.0	2	3	44.36	74	29.64	36.36	54	17.64	pass
925	5.549	-56.29	-66.79	0.0	2	3	43.17	74	30.83	32.67	54	21.33	Pass

Note:

*E = EIRP – 20log D + 104.8

Duty Cycle Correction Factor for RMS measure = 10log(1/x), x is a duty cycle acc to KDB 662911 sec F)2)i)

Max Transmit Antenna Gain acc to KDB558074 D01 v03r03 sec 12.2.6

** All other emissions were not in the restricted band

Fundamental Frequency, MHz	**Emission Frequency Range, GHz	Measured Emission, dBm		Duty Cycle Correction Factor	Max Transmit Antenna Gain, dBi	MIMO Correction Factor	*Equivalent EIRP, dBµV/m						Pass/ Fail
		Peak	AVG (RMS)				Peak			Average			
							Emission*	Limit	Delta	Emission*	Limit	Delta	
BW = 8.4MHz, Bit Rate = 6.4 Mbps, RF1, continuous transmission													
907	3.628	-60.4	-69.4	0.0	2	3	39.06	74	34.94	30.06	54	23.94	Pass
915	2.747	-52.01	-62.73	0.0	2	3	47.45	74	26.55	36.73	54	17.27	pass
923	2.7676	-53.22	-62.73	0.0	2	3	46.24	74	27.76	36.73	54	17.27	Pass
BW = 8.4 MHz, Bit Rate = 6.4 Mbps, output RF 2, continuous transmission													
907	5.445	-51.1	-61.46	0.0	2	3	48.36	74	25.64	38.00	54	16.00	Pass
915	2.7474	-50.0	-58.00	0.0	2	3	49.46	74	24.54	41.46	54	12.54	pass
923	5.533	-49.61	-59.11	0.0	2	3	49.85	74	24.15	40.35	54	13.65	Pass
BW = 8.4 MHz, Bit Rate = 8 Mbps, RF1, continuous transmission													
907	3.6280	-60.05	-69.07	0.0	2	3	39.41	74	34.59	30.40	54	23.60	Pass
915	2.7474	-51.0	-64.0	0.0	2	3	48.46	74	25.54	35.46	54	18.54	pass
923	2.7695	-60.05	-61.80	0.0	2	3	48.46	74	25.54	37.66	54	16.34	Pass
BW = 8.4 MHz, Bit Rate = 8 Mbps, output RF 2, continuous transmission													
907	5.4442	-50.5	-61.71	0.0	2	3	48.96	74	25.04	37.75	54	16.25	Pass
915	5.4922	-51.0	-60.01	0.0	2	3	48.46	74	25.54	39.45	54	14.55	pass
923	5.5322	-49.0	-60.10	0.0	2	3	50.46	74	23.54	39.36	54	14.64	Pass

Note:

*E = EIRP – 20log D + 104.8
Duty Cycle Correction Factor for RMS measure = 10log(1/x), x is a duty cycle acc to KDB 662911 sec F)2)i)

Max Transmit Antenna Gain acc to KDB558074 D01 v03r03 sec 12.2.6

**All other emissions weren't fallen in the restricted band

Test Results: 2403 – 2478 MHz

Test results below 1GHz for BW = 4.2 MHz, Bit Rate = 4 Mbps* (Radiated Spurious emissions from cabinet/case):

Fundamental Frequency, MHz	Unwanted Emission Frequency, MHz	Antenna Polarization	QP Measured Emission, dBµV/m	Limit, dBµV/m	Delta, dB	Pass/Fail
2403	353.89	H	41.8	46.0	4.2	Pass
	439.72	H	44.9	46.0	1.1	Pass
	79.71	V	32.5	40.2	7.3	Pass
	439.53	V	38.7	46.0	7.5	Pass

All measurements were done in horizontal, vertical polarizations and 3 frequencies; the results show the worst case**.**

Test results above 1GHz for BW = 4.2 MHz, Bit Rate = 4 Mbps (Radiated Spurious emissions form cabinet/case):

Fundamental Frequency, MHz	Unwanted Emission Frequency, GHz	Antenna Polarization	Measured Emission, dBµV/m		Limit, dBµV/m		Delta, dB		Pass/ Fail
			Peak	AVG	Peak	AVG	Peak	AVG	
2403	4.806	V	56.64	49.91	74.0	54.0	17.4	4.09	Pass
2442	4.885	V	54.56	46.4	74.0	54.0	19.4	7.6	Pass
	7.326	V	51.68	40.80	74.0	54.0	22.3	13.2	Pass
2478	2.483	H	65.30	45.57	74.0	54.0	8.7	8.43	Pass
	4.953	V	51.54	44.58	74.0	54.0	22.5	9.4	Pass
	7.436	V	49.96	40.27	74.0	54.0	24.0	13.7	Pass

Test results above 1GHz for BW = 8.4 MHz, Bit Rate = 8 Mbps (Radiated Spurious emissions form cabinet/case):

Fundamental Frequency, MHz	Unwanted Emission Frequency, GHz	Antenna Polarization	Measured Emission, dBµV/m		Limit, dBµV/m		Delta, dB		Pass/ Fail
			Peak	AVG	Peak	AVG	Peak	AVG	
2405	7.213	V	51.213	44.23	74.0	54.0	22.8	9.8	Pass
	4.8084	H	49.03	41.5	74.0	54.0	25.0	12.5	Pass
2440	5.2422	V	55.29	43.6	74.0	54.0	18.7	10.4	Pass
	7.321	V	51.44	42.11	74.0	54.0	22.6	11.9	Pass
2475	2.4835	V	62.19	53.93	74.0	54.0	11.8	0.07	Pass
	4.9537	V	51.83	43.2	74.0	54.0	22.2	10.8	Pass
	5.2422	V	54.96	44.5	74.0	54.0	19.0	9.5	Pass
	7.425	V	50.1	39.00	74.0	54.0	23.9	15.0	Pass
	1.7679	H	46.85	46.85	74.0	54.0	27.2	7.2	Pass

Test results: Antenna-port conducted emission

Fundamental Frequency, MHz	Frequency Range, GHz	Measured Emission, dBm		Duty Cycle Correction Factor	Max Transmit Antenna Gain, dBi	MIMO Correction Factor	Equivalent EIRP, dBµV/m						Pass/ Fail
		Peak	AVG (RMS)				Peak			Average			
							Emission*	Limit	Delta	Emission*	Limit	Delta	
BW = 4.2 MHz, Bit Rate = 3.2 Mbps, RF1, continuous transmission													
2403	4.8075	-52.38	*N/A	0.0	2	3	47.1	74	16.9	*N/A	54.0	*N/A	Pass
	2.363	-43.2	-50.94	0.0	2	3	57.058	74	16.94	49.26	54	4.74	Pass
2442	4.8830	-44.62	-54.94	0.0	2	3	54.8	74	19.2	45.5	54.0	9.5	Pass
2478	4.9541	-46.8	-52.11	0.0	2	3	52.7	74	21.0	47.3	54.0	6.7	Pass
	7.4367	-49.98	-49.98	0.0	2	3	49.5	74	24.5	49.5	54.0	4.5	Pass
	2.4836	-29.43	-46.83	0	2	3	70.83	74	3.172	53.43	54	0.57	Pass
BW = 4.2 MHz, Bit Rate = 3.2 Mbps, output RF 2, continuous transmission													
2403	4.8075	-60.93	-54.7	0.0	2	3	39.3	74.0	34.7	45.6	54.0	8.4	Pass
	2.362	-41.95	-48.64	0	2	3	58.308	74	15.692	51.62	54	2.38	Pass
2442	4.886	-57.38	-57.38	0.0	2	3	42.9	74.0	31.1	42.9	54.0	11.1	Pass
2478	7.4309	-57.13	-57.13	0.0	2	3	43.1	74.0	30.9	43.1	54.0	10.9	Pass
	2.4836	-29.43	-46.83	0.0	2	3	70.83	74	3.172	53.43	54	0.57	2.4836
BW = 4.2 MHz, Bit Rate = 4 Mbps, RF1, continuous transmission													
2403	4.8075	-52.83	-52.83	0.0	2	3	47.4	74.0	26.6	47.4	54.0	6.6	Pass
	2.362	-41.95	-48.64	0	2	3	58.308	74	15.692	51.62	54	2.38	Pass
2442	4.8867	-44.59	-54.89	0.0	2	3	55.7	74.0	18.3	45.4	54.0	8.6	Pass
2478	7.4309	-57.18	-57.18	0.0	2	3	43.1	74.0	30.9	43.1	54.0	10.9	Pass
	2.4836	-28.31	-46.83	0	2	3	71.948	74	2.052	53.428	54	0.57	Pass
BW = 4.2 MHz, Bit Rate = 4 Mbps, output RF 2, continuous transmission													
2403	4.8075	-60.70	-60.70	0.0	2	3	39.6	74.0	34.4	39.6	54.0	14.4	Pass
	2.364	-43.11	-51.74	0	2	3	57.15	74	16.85	48.52	54	5.48	Pass
2442	4.8867	-57.33	-57.33	0.0	2	3	42.9	74.0	31.1	42.9	54.0	11.1	Pass
2478	7.4367	-50.34	-50.34	0.0	2	3	49.9	74.0	24.1	49.9	54.0	4.1	Pass
	2.4836	-29.43	-46.83	0.0	2	3	70.83	74	3.17	53.43	54	0.57	Pass

*Peak measurement meets AVG limit.

Fundamental Frequency, MHz	Frequency Range, GHz	Measured Emission, dBm		Duty Cycle Correction Factor	Max Transmit Antenna Gain, dBi	MIMO Correction Factor	Equivalent EIRP, dBµV/m						Pass/ Fail
		Peak	AVG (RMS)				Peak			Average			
							Emission*	Limit	Delta	Emission*	Limit	Delta	
BW = 8.4 MHz, Bit Rate 6.4 Mbps, RF1, continuous transmission													
2405	4.8105	-51.23	-51.23	0.0	2	3	49.0	74.0	25.0	49.0	54.0	5.0	Pass
	2.389	-39.44	-46.31	0.0	2	3	60.8	74.0	13.2	53.9	54.0	0.1	Pass
2440	4.883	-46.44	-57.14	0.0	2	3	53.8	74.0	20.2	43.1	54.0	10.9	Pass
2475	7.4221	-60.16	-60.16	0.0	2	3	40.1	74.0	33.9	40.1	54.0	13.9	Pass
	2.4837	-27.83	-46.61	0	2	3	72.428	74	1.572	53.648	54	0.35	pass
BW = 8.4 MHz, Bit Rate = 6.4Mbps, output RF 2, continuous transmission													
2405	4.8134	-52.38	-52.38	0.0	2	3	47.9	74.0	26.1	47.9	54.0	6.1	Pass
	2.389	-40.09	-51.55	0	2	3	60.17	74	13.83	48.71	54	5.29	Pass
2440	4.8760	-46.44	-57.55	0.0	2	3	53.8	74.0	20.2	42.7	54.0	11.3	Pass
2475	7.4279	-52.74	-52.74	0.0	2	3	47.5	74.0	26.5	47.5	54.0	6.5	Pass
	2.4835	-29.26	-46.68	0	2	3	70.99	74	3.002	53.578	54	0.42	Pass
BW = 8.4 MHz, Bit Rate = 8Mbps, RF1, continuous transmission													
2405	7.2081	-58.49	-58.49	0.0	2	3	41.8	74.0	32.2	41.8	54.0	12.2	Pass
	2.389	-39.6	-48.86	0.0	2	3	60.66	74	13.34	51.40	54	2.60	Pass
2440	4.8837	-46.44	-57.53	0.0	2	3	53.8	74.0	20.2	42.7	54.0	11.3	Pass
2475	7.4309	-60.80	-60.80	0.0	2	3	39.5	74.0	34.5	39.5	54.0	14.5	Pass
	2.4837	-27.83	-46.61	0.0	2	3	72.43	74	1.57	53.65	54	0.35	Pass
BW = 8.4 MHz, Bit Rate = 8 Mbps, output RF 2, continuous transmission													
2405	4.8105	-62.05	-62.05	0.0	2	3	38.2	74.0	35.8	38.2	54.0	15.8	Pass
	2.3896	-39.75	-48.20	0.0	2.0	3	60.5	74.0	13.5	52.1	54.0	1.9	Pass
2440	4.8749	-59.89	-59.89	0.0	2	3	40.4	74.0	33.6	40.4	54.0	13.6	Pass
2475	7.4309	-52.26	-52.26	0.0	2	3	48.0	74	26.00	48.0	54	6.0	Pass
	2.4835	-29.26	-46.68	0.0	2	3	70.99	74	3.002	53.578	54	0.42	Pass

Note:

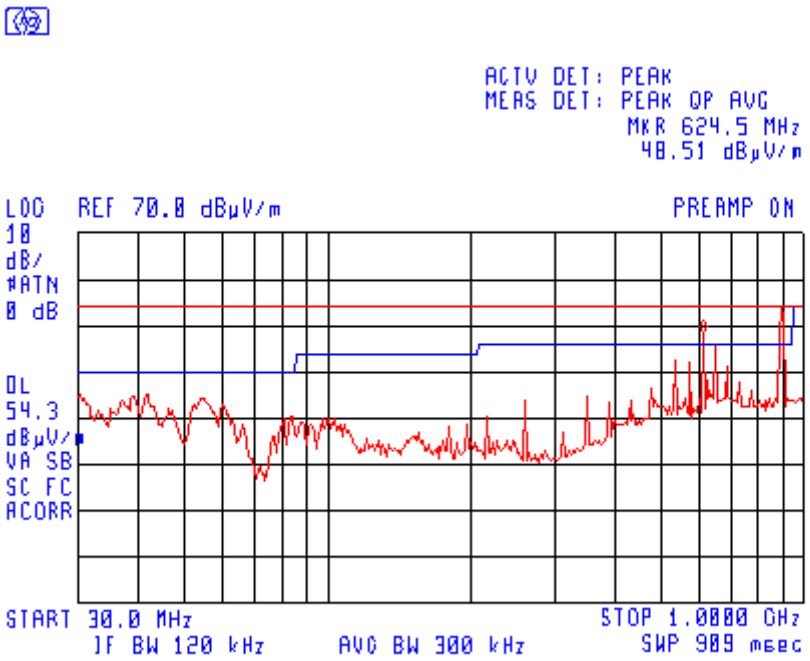
*E = EIRP – 20log D + 104.8

Duty Cycle Correction Factor for RMS measure = 10log(1/x), x is a duty cycle acc to KDB 662911 sec F)2)i)

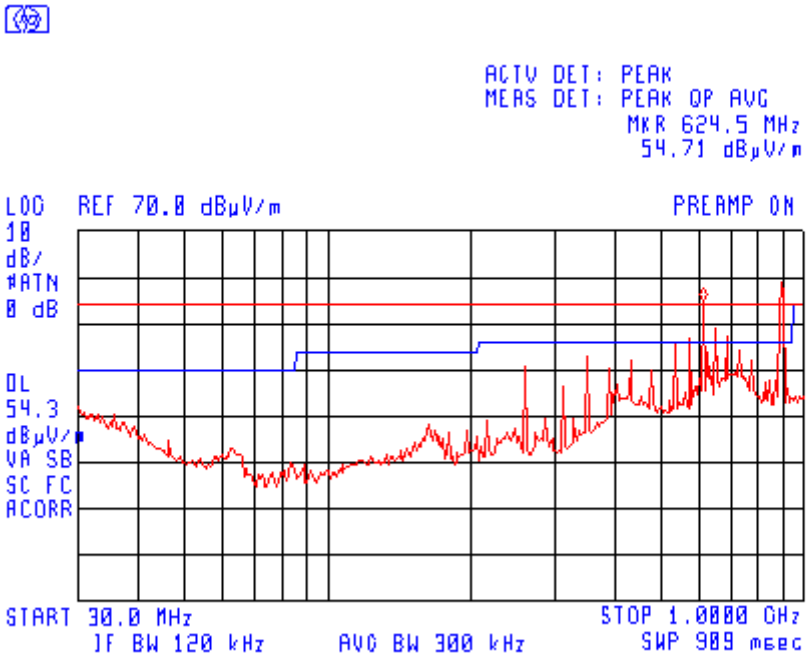
Max Transmit Antenna Gain acc to KDB558074 D01 v03r03 sec 12.2.6

For MIMO: Correction Factor = 10log(Nant) dBi acc to KDB 662911D01 v02r01

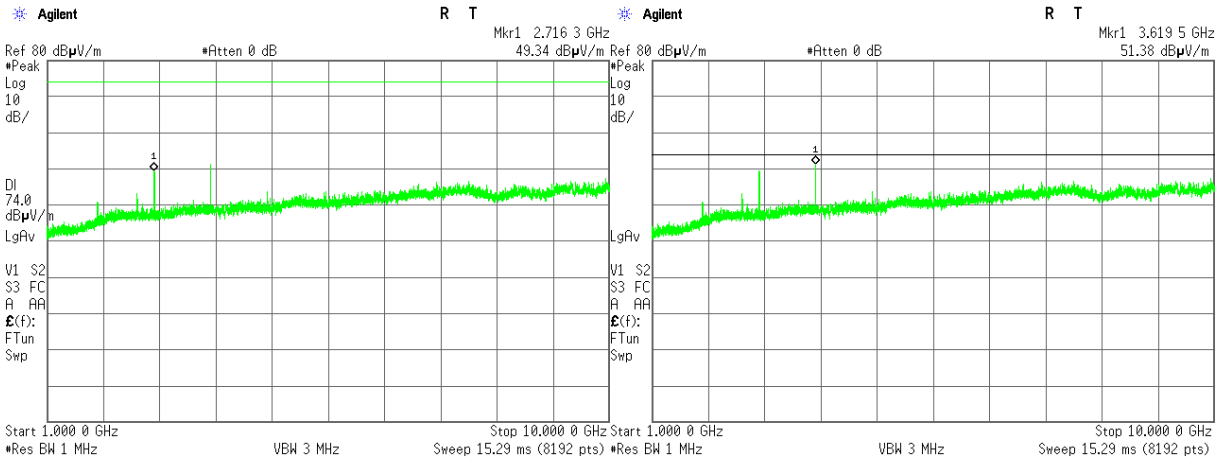
Plot 3.5.1 Emissions in restricted frequency bands test results, 30 MHz – 1 GHz range, Vertical polarization, Fc = 915 MHz, BW = 8.4 MHz, Bit Rate = 6.4 Mbps



Plot 3.5.2 Emissions in restricted frequency bands test results, 30 MHz – 1 GHz range, Horizontal polarization, Fc = 915 MHz, BW = 8.4 MHz, Bit Rate =6.4 Mbps –worst case documented

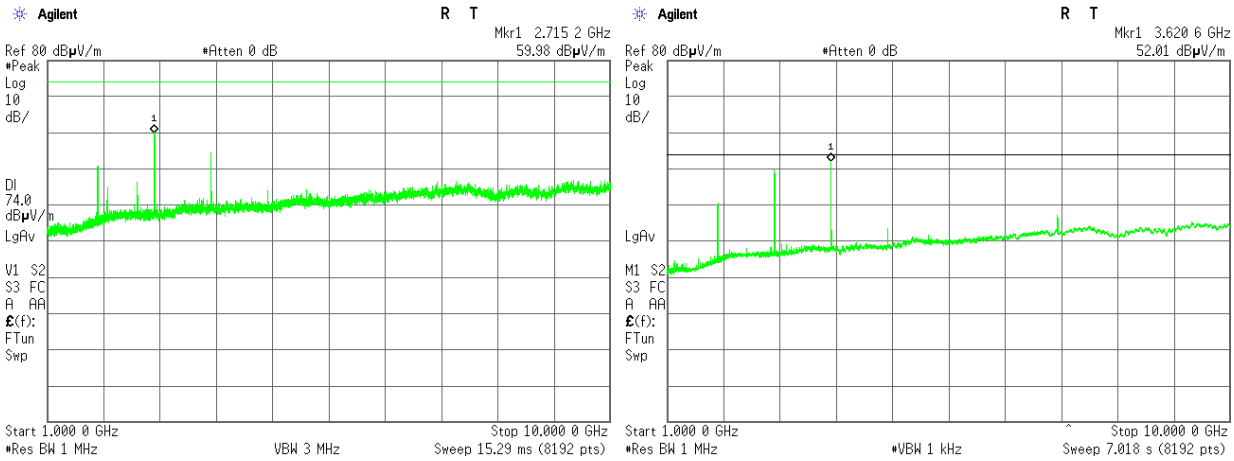


Plot 3.5.3 Emissions in restricted frequency bands test results, 1 – 10 GHz range, Vertical, Fc = 905 MHz, BW = 4.2 MHz, Bit Rate = 3.2 Mbps



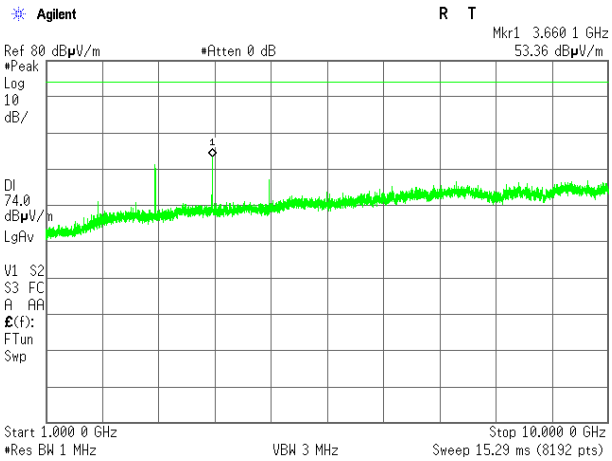
Peak Average

Plot 3.5.4 Emissions in restricted frequency bands test results, 1 – 10 GHz range, Horizontal, Fc = 905 MHz, BW = 4.2 MHz, Bit Rate = 3.2 Mbps

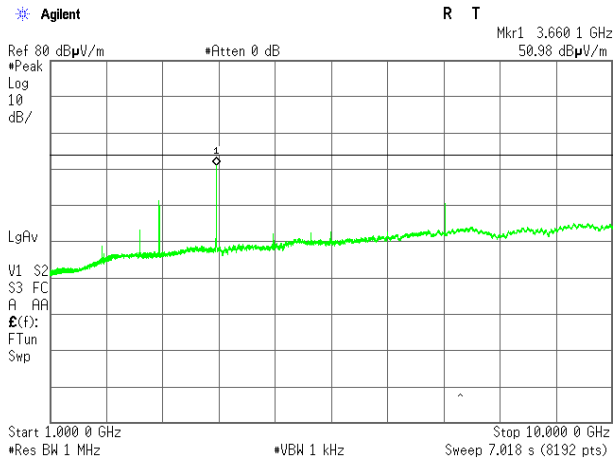


Peak Average

Plot 3.5.5 Emissions in restricted frequency bands test results, 1 – 10 GHz range, Vertical, Fc = 915 MHz, BW = 4.2 MHz, Bit Rate = 3.2 Mbps

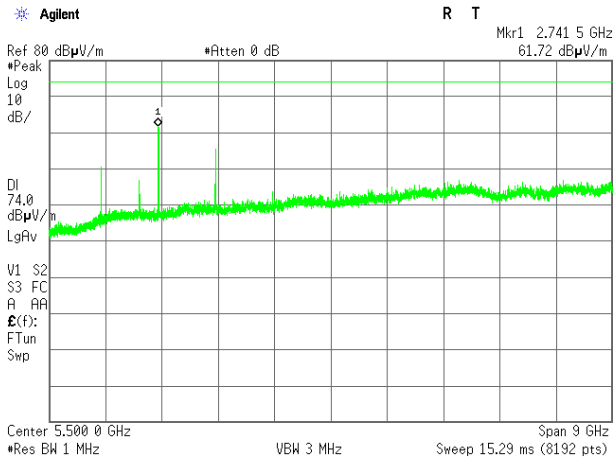


Peak

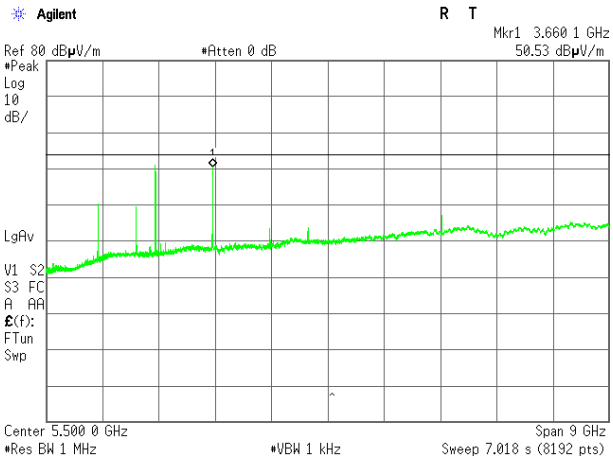


Average

Plot 3.5.6 Emissions in restricted frequency bands test results, 1 – 10 GHz range, Horizontal, Fc = 915 MHz, BW = 4.2 MHz, Bit Rate = 3.2 Mbps

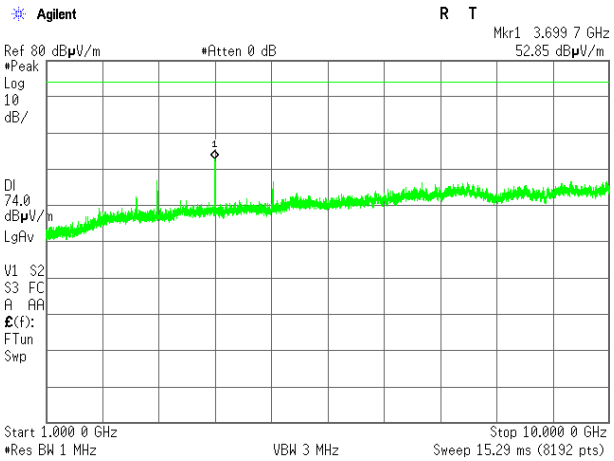


Peak

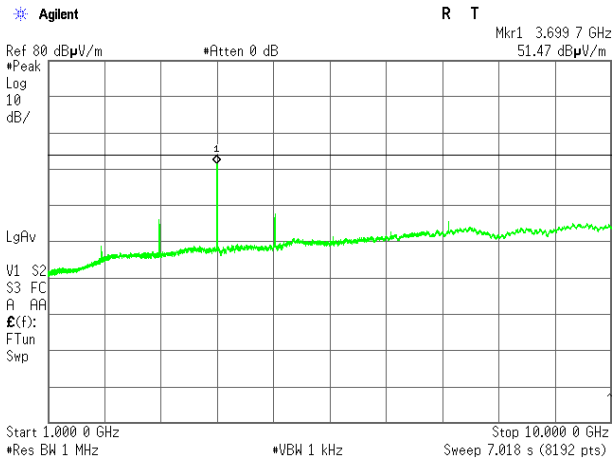


Average

Plot 3.5.7 Emissions in restricted frequency bands test results, 1 – 10 GHz range, Vertical, Fc = 925 MHz, BW = 4.2 MHz, Bit Rate = 3.2 Mbps

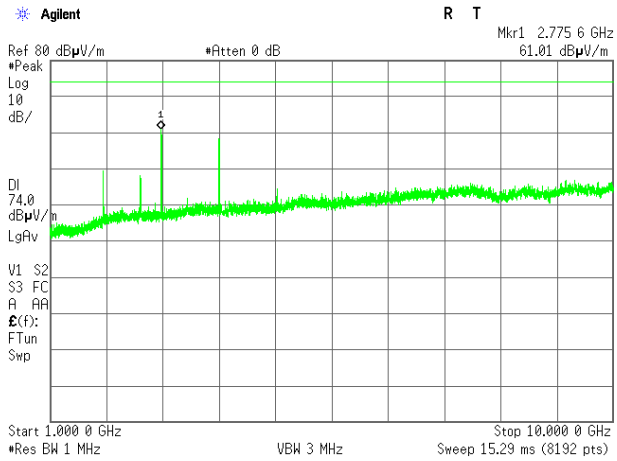


Peak

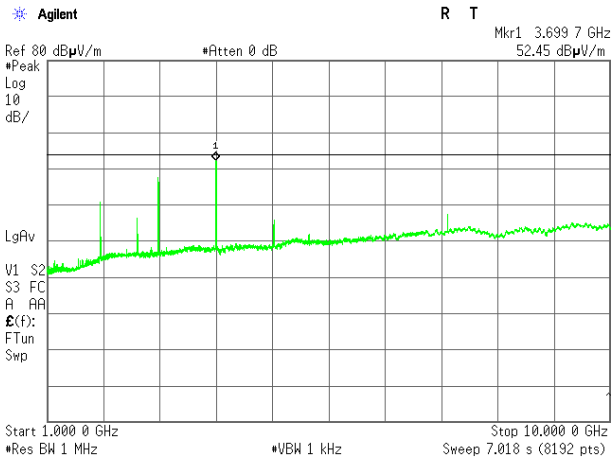


Average

Plot 3.5.8 Emissions in restricted frequency bands test results, 1 – 10GHz range, Horizontal, Fc = 925 MHz, BW = 4.2 MHz, Bit Rate = 3.2 Mbps

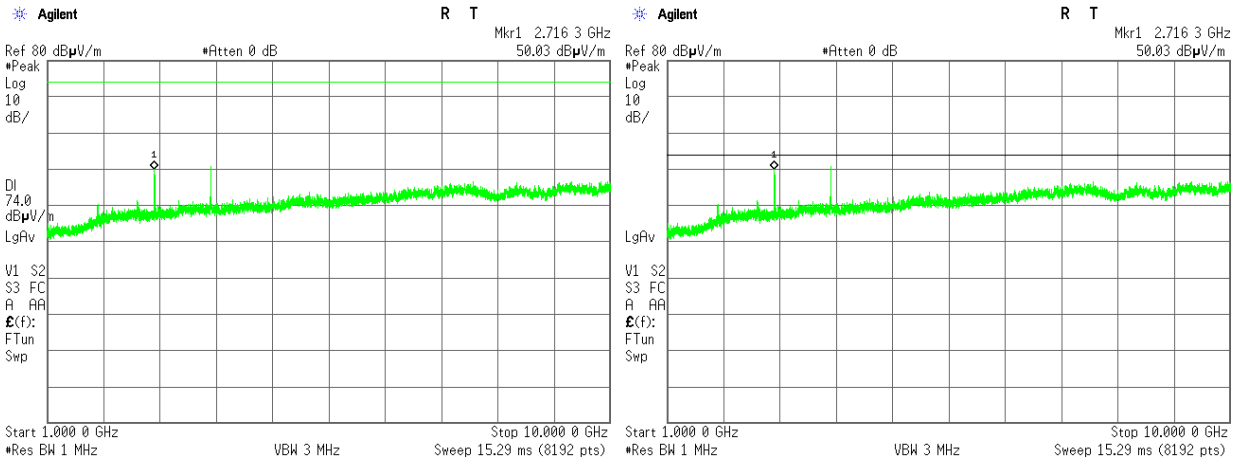


Peak



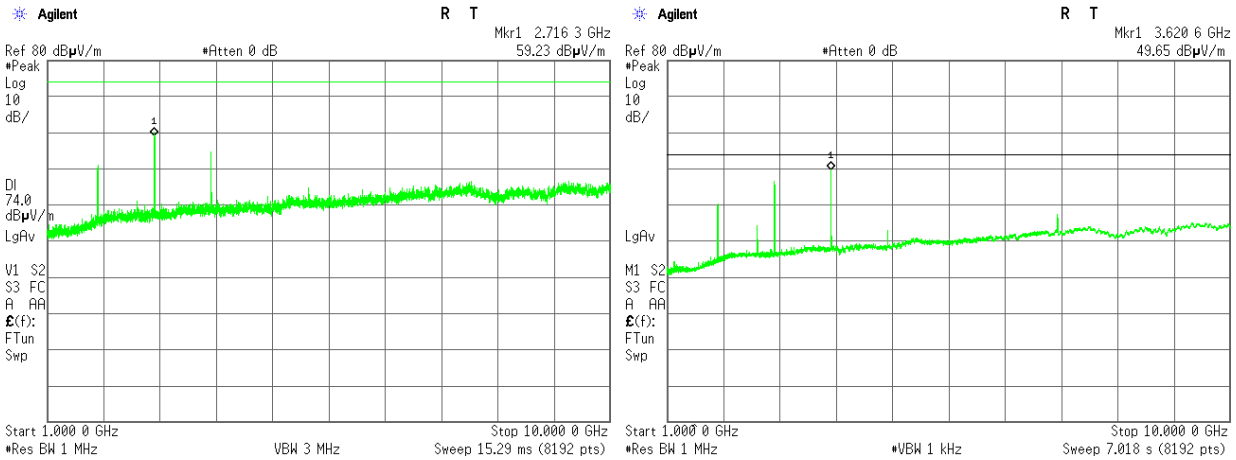
Average

Plot 3.5.9 Emissions in restricted frequency bands test results, 1 – 10 GHz range, Vertical, Fc = 905 MHz, BW = 4.2 MHz, Bit Rate = 4 Mbps



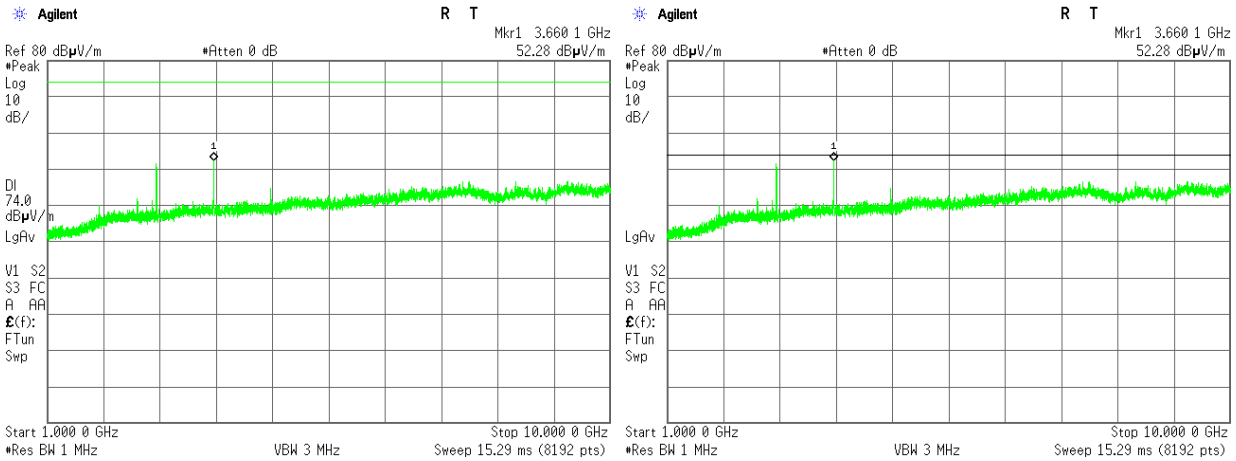
Peak Average

Plot 3.5.10 Emissions in restricted frequency bands test results, 1 – 10 GHz range, Horizontal, Fc = 905 MHz, BW = 4.2 MHz, Bit Rate = 4 Mbps



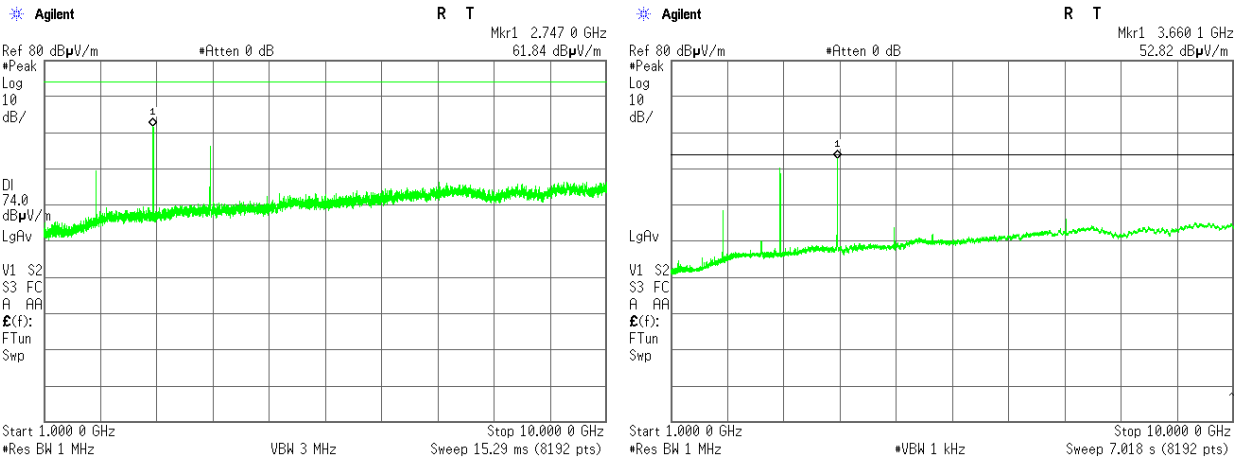
Peak Average

Plot 3.5.11 Emissions in restricted frequency bands test results, 1 – 10GHz range, Vertical, Fc = 915 MHz, BW = 4.2 MHz, Bit Rate = 4.0 Mbps



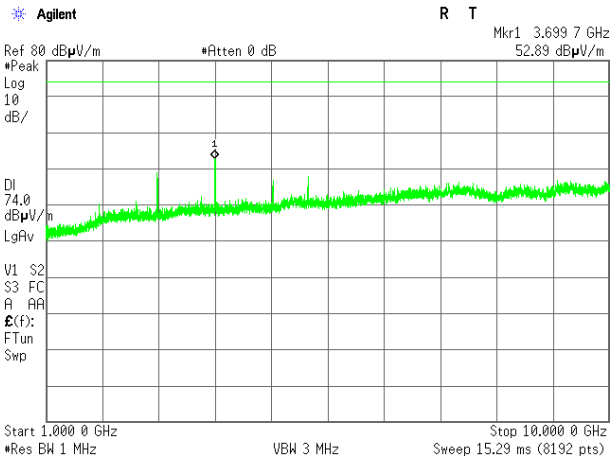
Peak Average

Plot 3.5.12 Emissions in restricted frequency bands test results, 1 – 10 GHz range, Horizontal, Fc = 915 MHz, BW = 4.2 MHz, Bit Rate = 4 Mbps

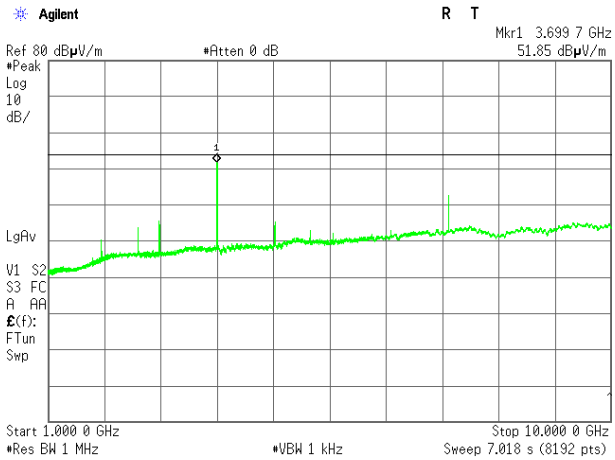


Peak Average

Plot 3.5.13 Emissions in restricted frequency bands test results, 1 – 10 GHz range, Vertical, Fc =925 MHz, BW = 4.2 MHz, Bit Rate = 4.0 Mbps

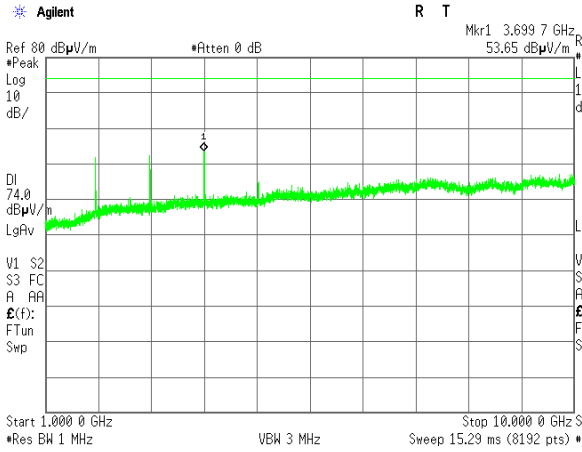


Peak

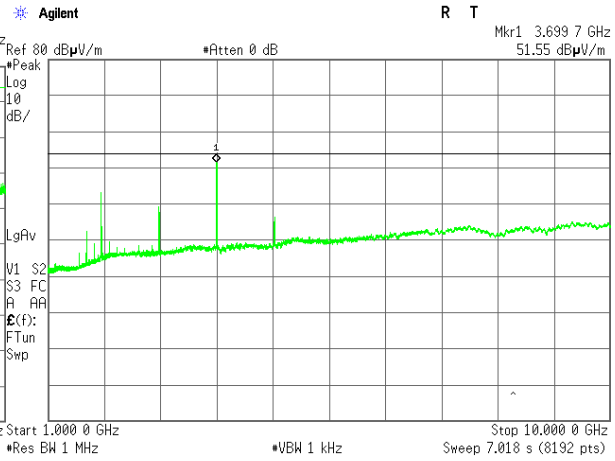


Average

Plot 3.5.14 Emissions in restricted frequency bands test results, 1 – 10 GHz range, Horizontal, Fc = 925 MHz, BW = 4.2 MHz, Bit Rate = 4.0 Mbps

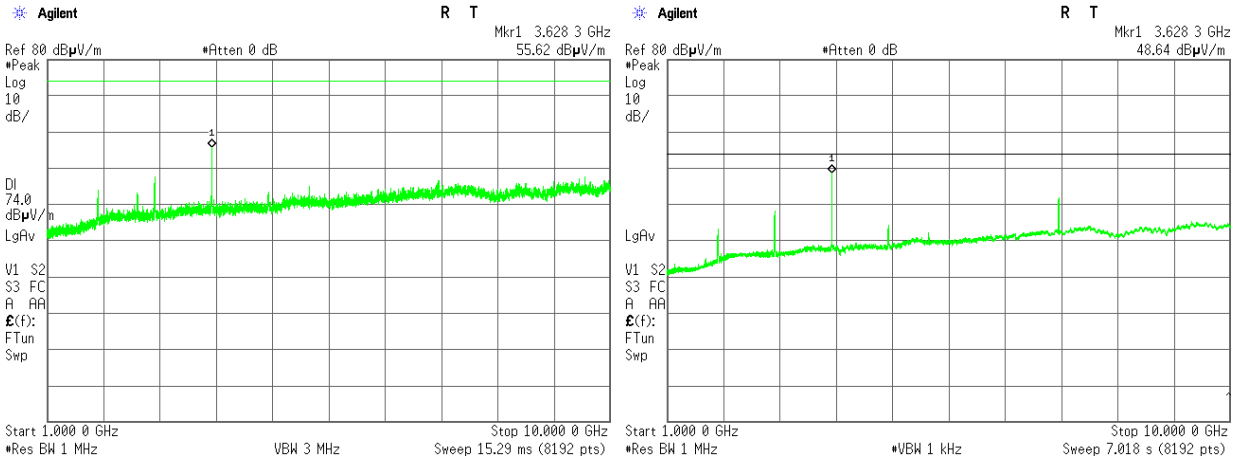


Peak



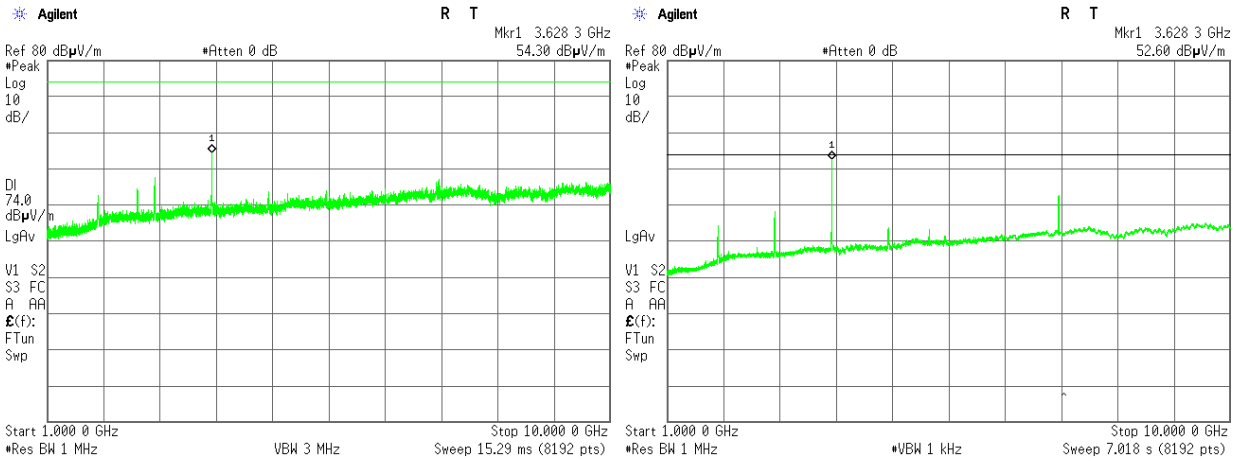
Average

Plot 3.5.15 Emissions in restricted frequency bands test results, 1 – 10 GHz range, Vertical, Fc = 907 MHz, BW = 8.4 MHz, Bit Rate = 6.4 Mbps



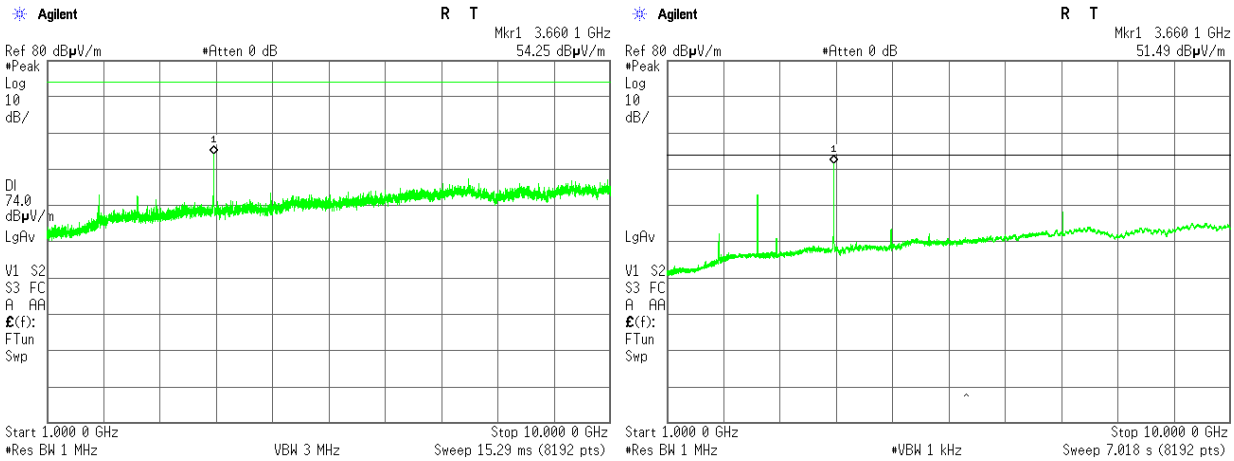
Peak Average

Plot 3.5.16 Emissions in restricted frequency bands test results, 1 – 10 GHz range, Horizontal, Fc = 907MHz, BW = 8.4 MHz, Bit Rate = 6.4 Mbps



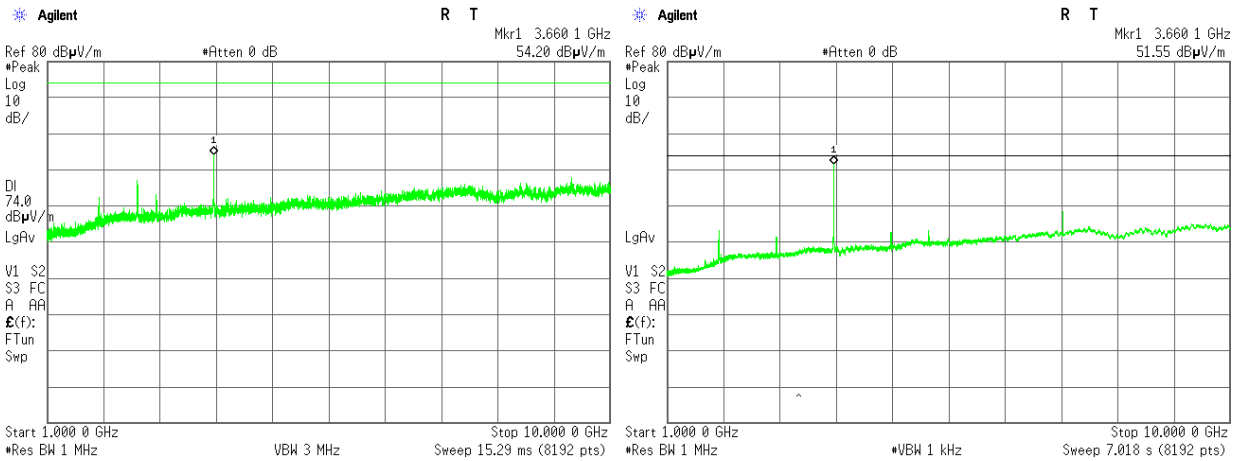
Peak Average

Plot 3.5.17 Emissions in restricted frequency bands test results,1 – 10 GHz range, Vertical, Fc = 915 MHz, BW = 8.4 MHz, Bit Rate = 6.4 Mbps



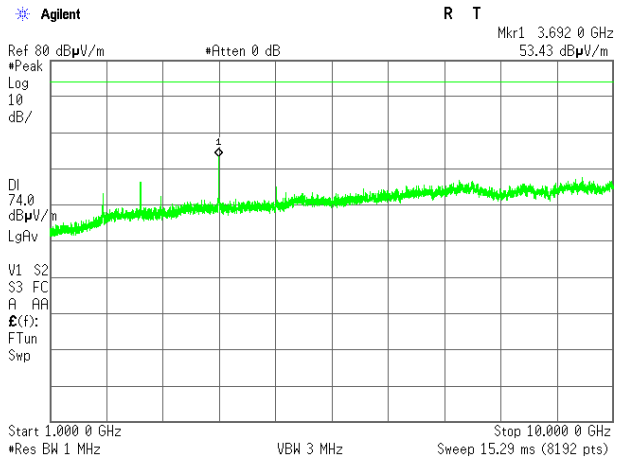
Peak Average

Plot 3.5.18 Emissions in restricted frequency bands test results, 1 – 10 GHz range, Horizontal, Fc = 915 MHz, BW = 8.4 MHz, Bit Rate = 6.4 Mbps

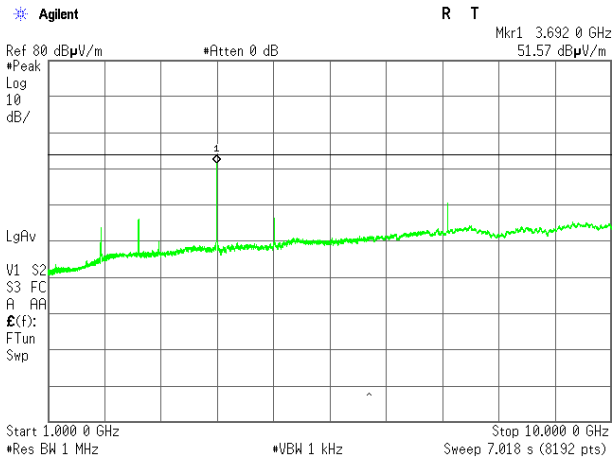


Peak Average

Plot 3.5.19 Emissions in restricted frequency bands test results, 1 –10 GHz range, Vertical, Fc = 923 MHz, BW = 8.4 MHz, Bit Rate = 6.4 Mbps

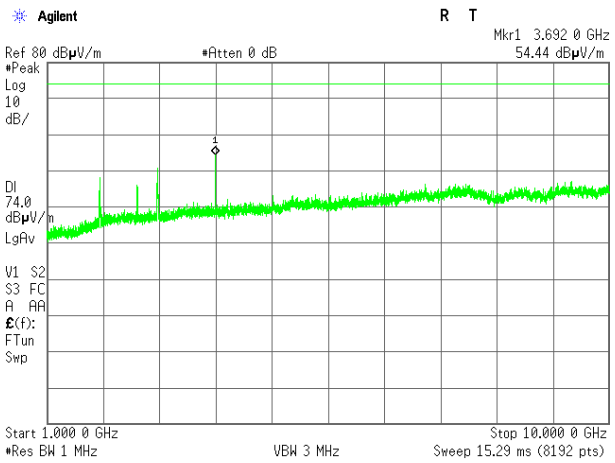


Peak

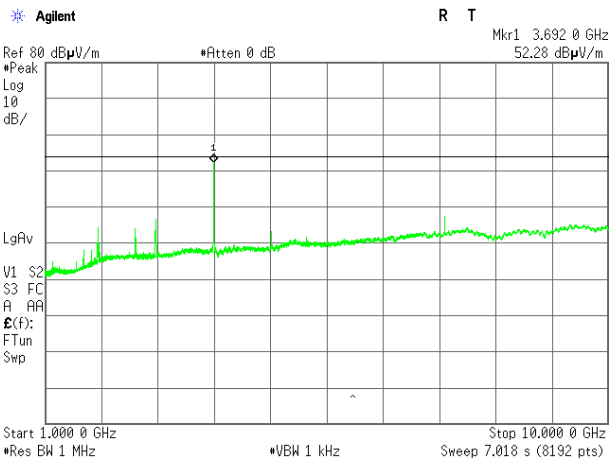


Average

Plot 3.5.20 Emissions in restricted frequency bands test results, 1–10 GHz range, Horizontal, Fc = 923 MHz, BW = 8.4 MHz, Bit Rate = 6.4 Mbps

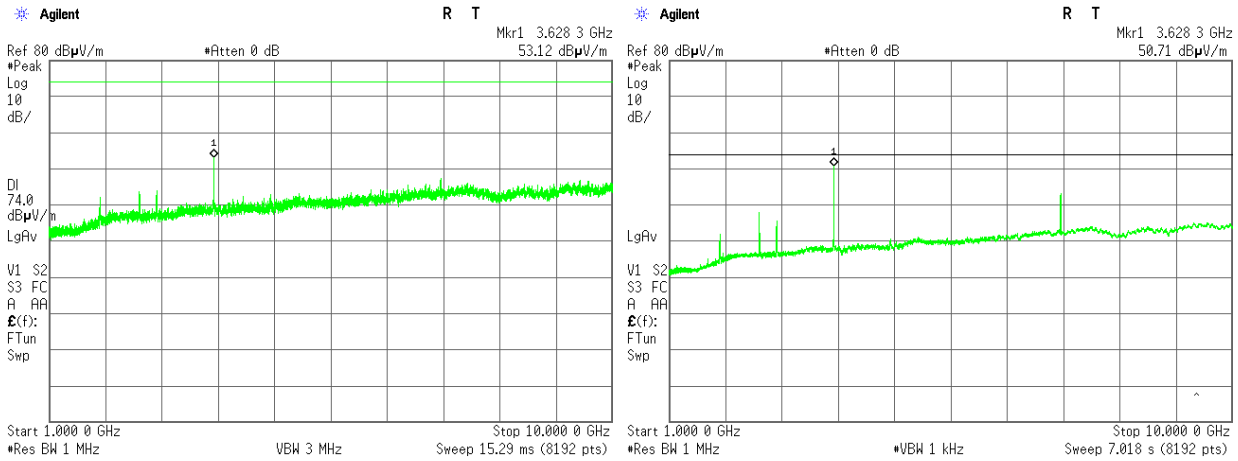


Peak



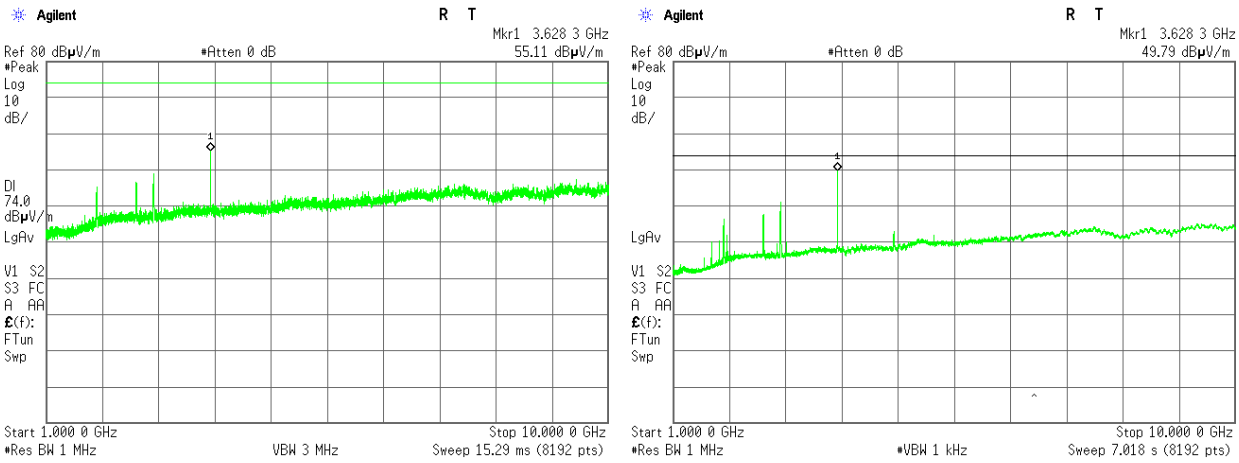
Average

Plot 3.5.21 Emissions in restricted frequency bands test results, 1 – 10 GHz range, Vertical, Fc = 907 MHz, BW = 8.4 MHz, Bit Rate = 8 Mbps



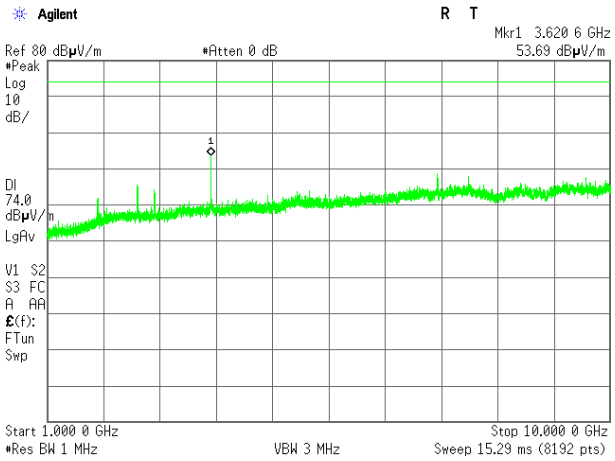
Peak Average

Plot 3.5.22 Emissions in restricted frequency bands test results, 1 – 10 GHz range, Horizontal, Fc = 907 MHz, BW = 8.4 MHz, Bit Rate = 8 Mbps

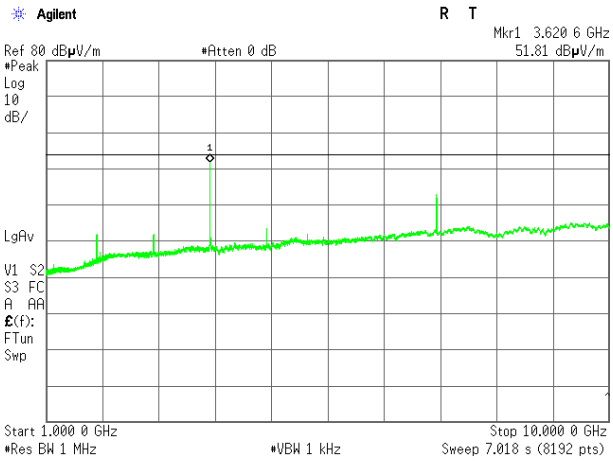


Peak Average

Plot 3.5.23 Emissions in restricted frequency bands test results, 1 – 10GHz range, Vertical, Fc = 915 MHz, BW = 8.4 MHz, Bit Rate = 8 Mbps

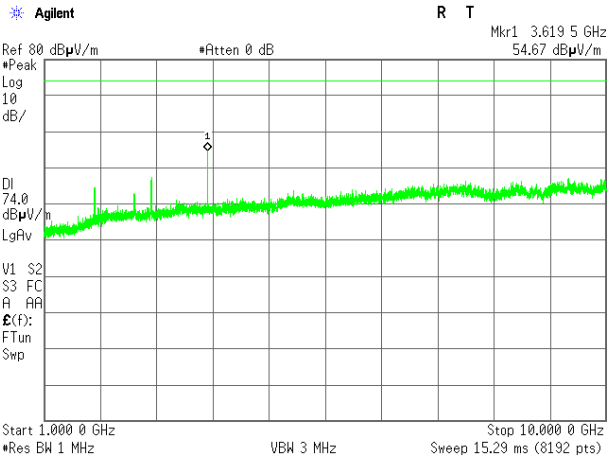


Peak

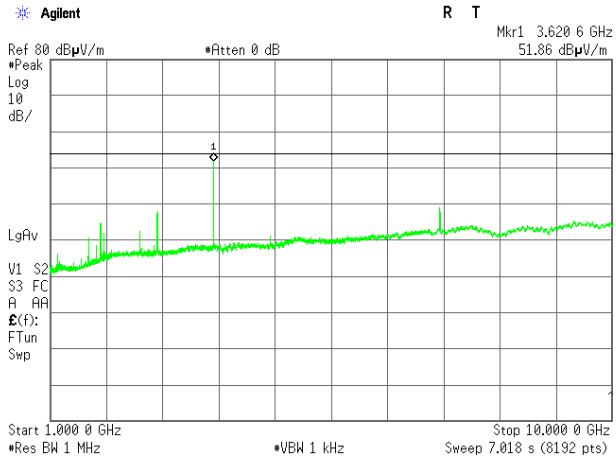


Average

Plot 3.5.24 Emissions in restricted frequency bands test results, 1 – 10 GHz range, Horizontal, Fc = 915 MHz, BW = 8.4 MHz, Bit Rate = 8 Mbps

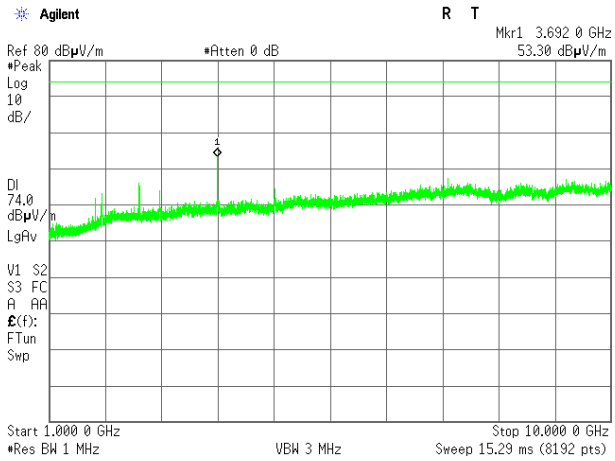


Peak

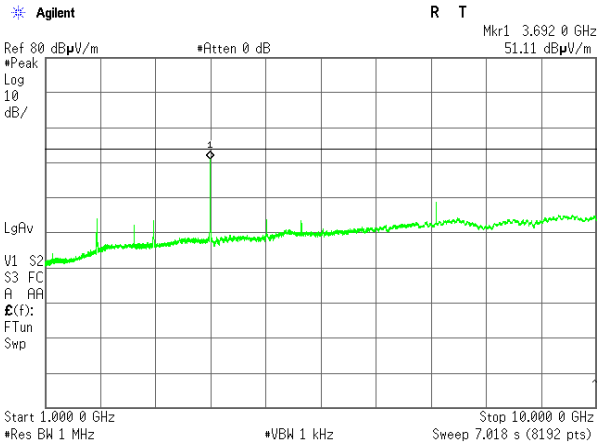


Average

Plot 3.5.25 Emissions in restricted frequency bands test results, 1 – 10 GHz range, Vertical, Fc = 923MHz, BW = 8.4 MHz, Bit Rate = 8 Mbps

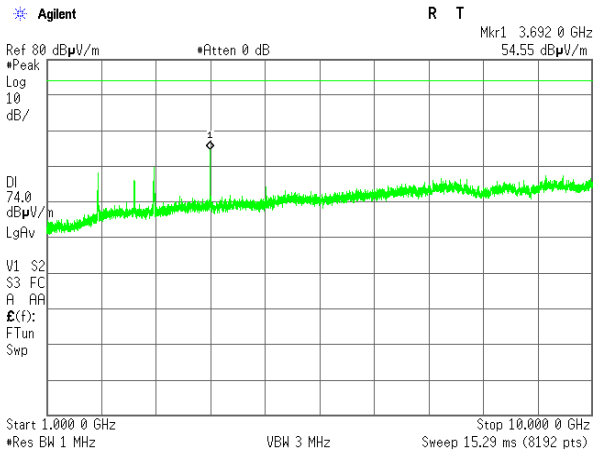


Peak

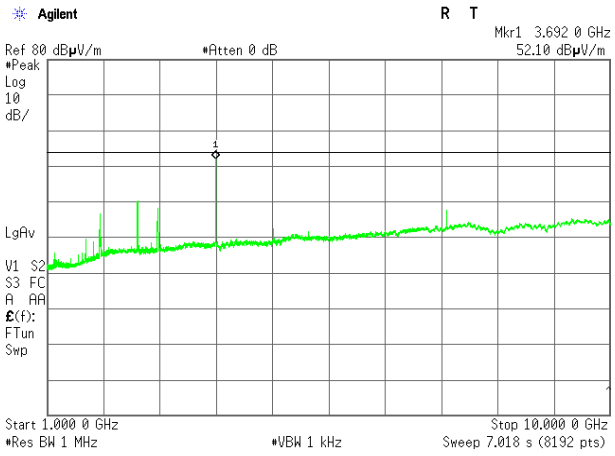


Average

Plot 3.5.26 Emissions in restricted frequency bands test results, 1 – 10 GHz range, Horizontal, Fc = 923 MHz, BW = 8.4 MHz, Bit Rate = 8 Mbps

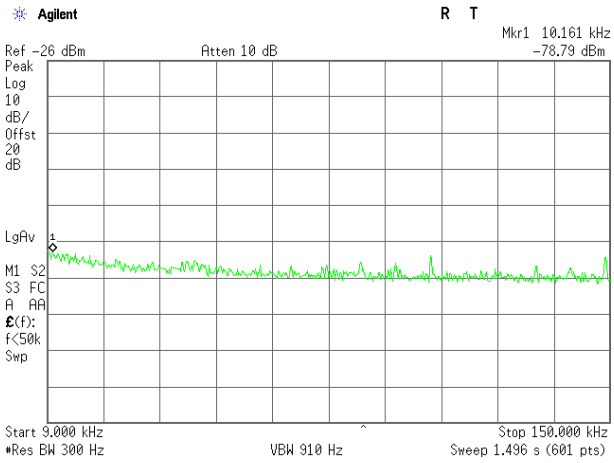


Peak

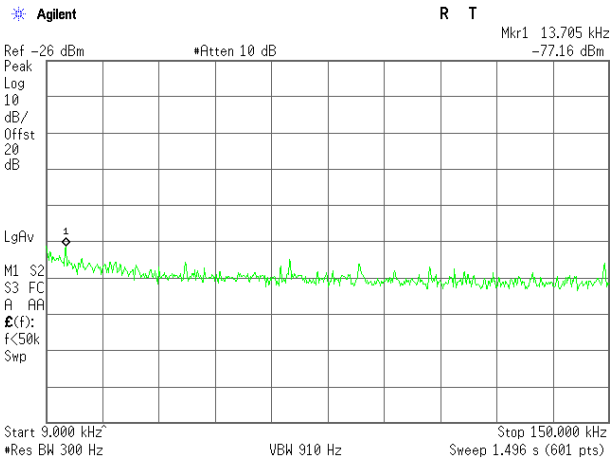


Average

Plot 3.5.27 Emissions in restricted frequency bands test results, Conducted measurements, 9 kHz – 150 kHz, Fc = 905 MHz, BW = 4.2 MHz, Bit Rate = 3.2 Mbps

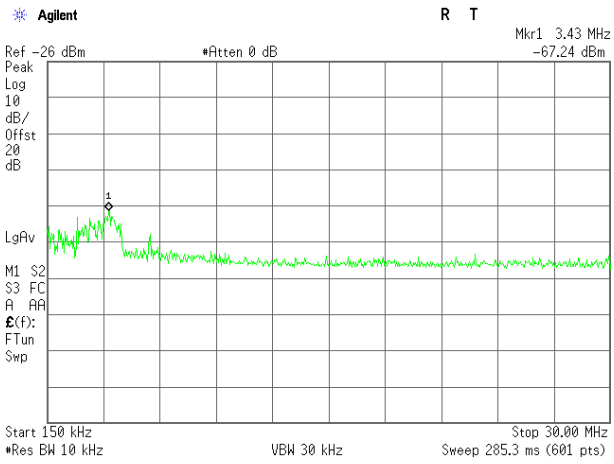


RF1

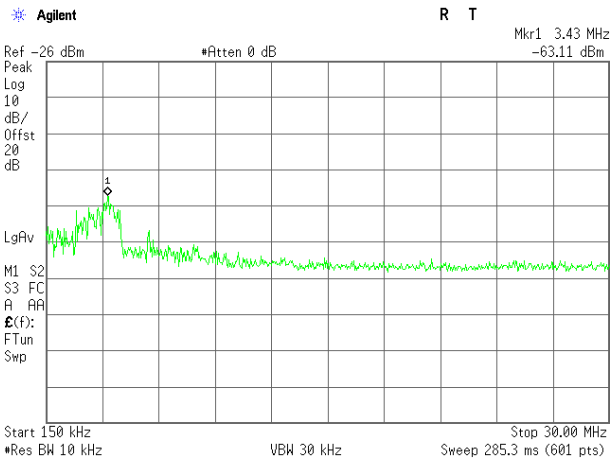


RF2

Plot 3.5.28 Emissions in restricted frequency bands test results, Conducted measurements, 150 kHz – 30 MHz, Fc = 905MHz, BW = 4.2 MHz, Bit Rate = 3.2 Mbps

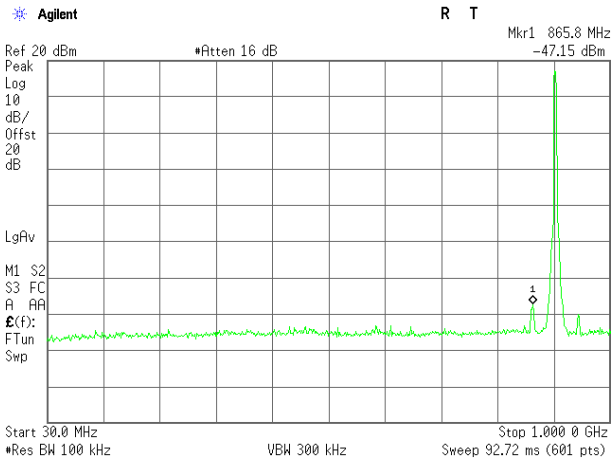


RF1

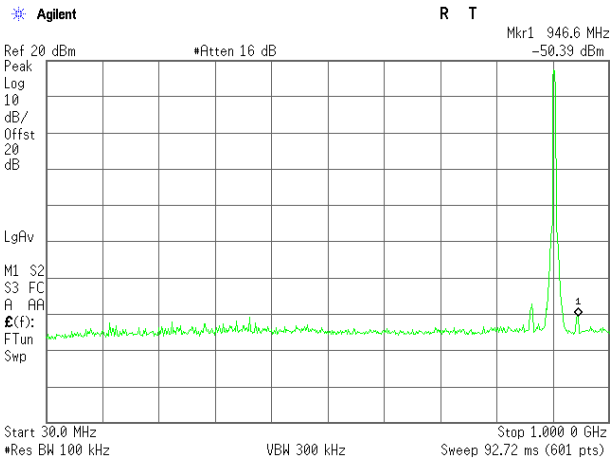


RF2

Plot 3.5.29Emissions in restricted frequency bands test results, Conducted measurements, 30 MHz – 1000 MHz, Fc = 905 MHz, BW = 4.2 MHz, Bit Rate = 3.2 Mbps

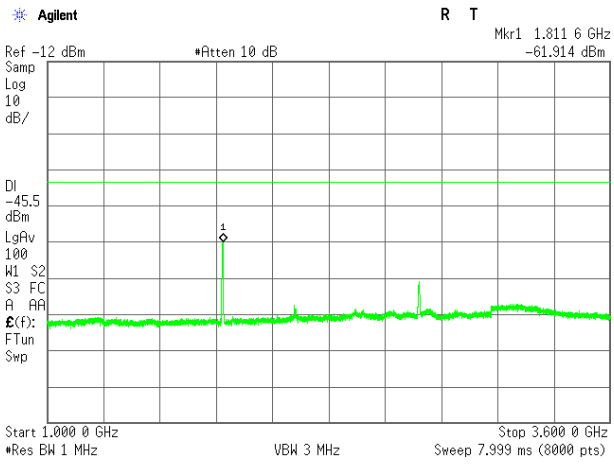


RF1

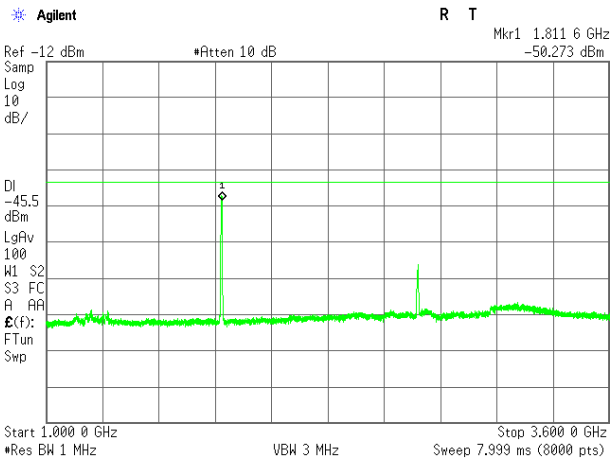


RF2

Plot 3.5.30 Emissions in restricted frequency bands test results, Conducted measurements, 1 GHz – 3.6 GHz, Fc = 905 MHz, BW = 4.2 MHz, Bit Rate = 3.2 Mbps

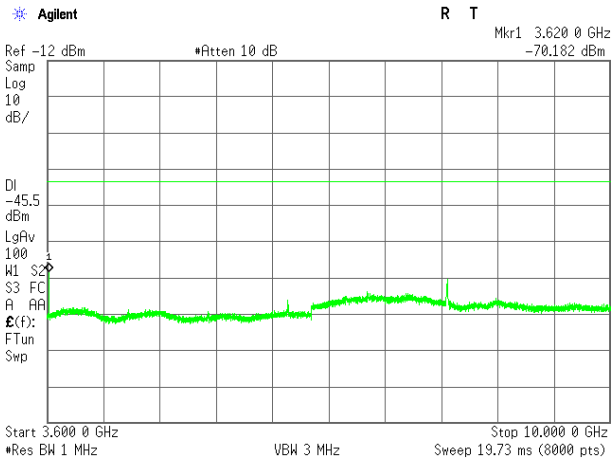


RF1

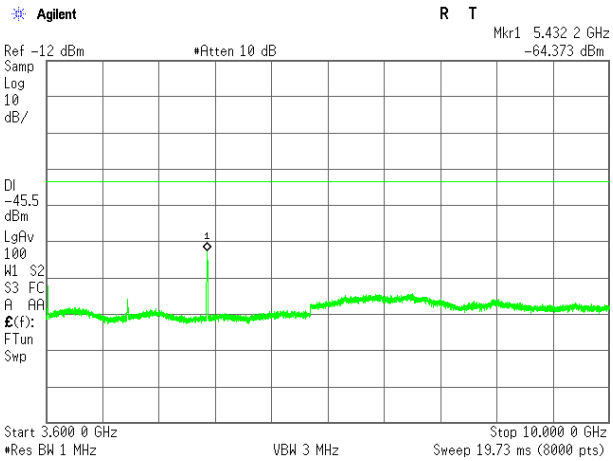


RF2

Plot 3.5.31 Emissions in restricted frequency bands test results, Conducted measurements, 3.6 GHz – 10 GHz, Fc = 905 MHz, BW = 4.2 MHz, Bit Rate = 3.2 Mbps

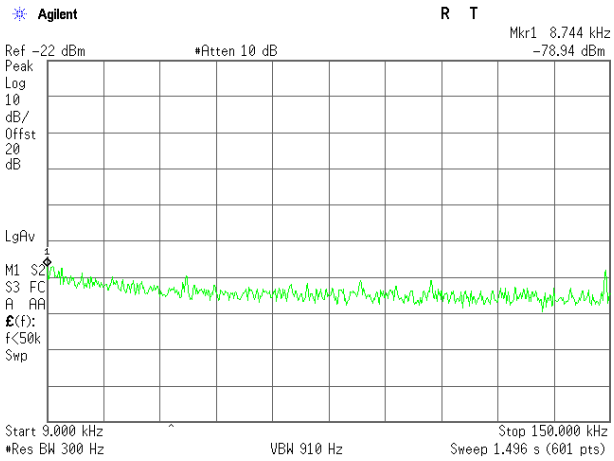


RF1

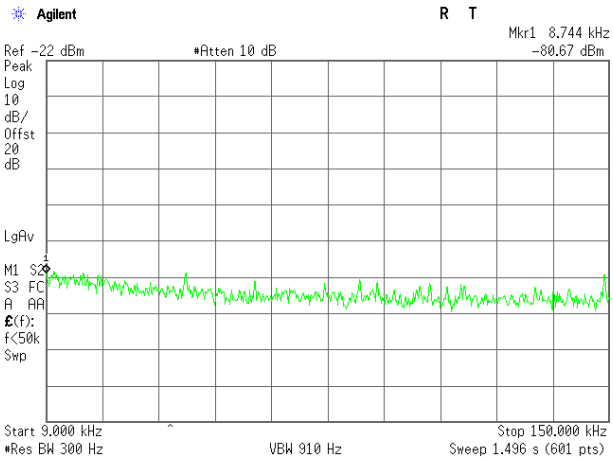


RF2

Plot 3.5.32 Emissions in restricted frequency bands test results, Conducted measurements, 9 kHz – 150 kHz, Fc =915 MHz, BW = 4.2 MHz, Bit Rate = 3.2 Mbps

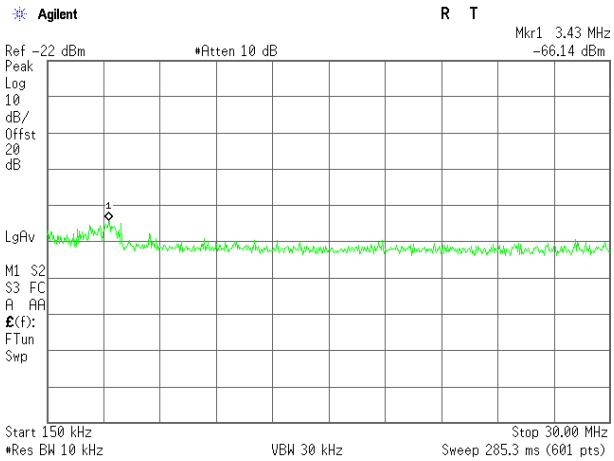


RF1

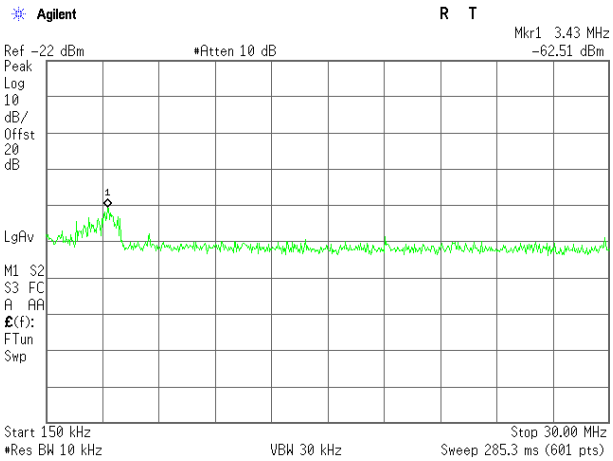


RF2

Plot 3.5.33 Emissions in restricted frequency bands test results, Conducted measurements, 150 kHz – 30 MHz, Fc = 915 MHz, BW = 4.2 MHz, Bit Rate = 3.2 Mbps

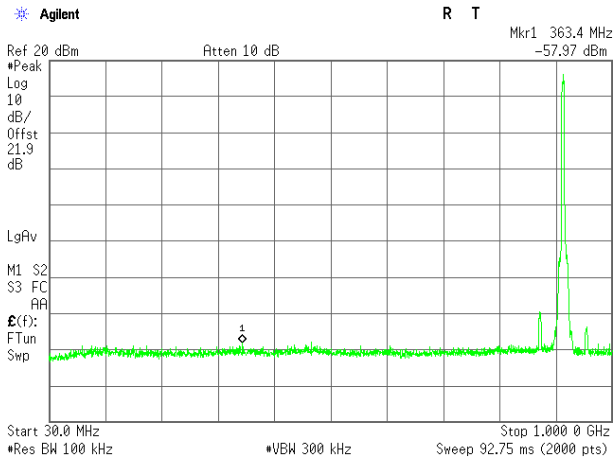


RF1

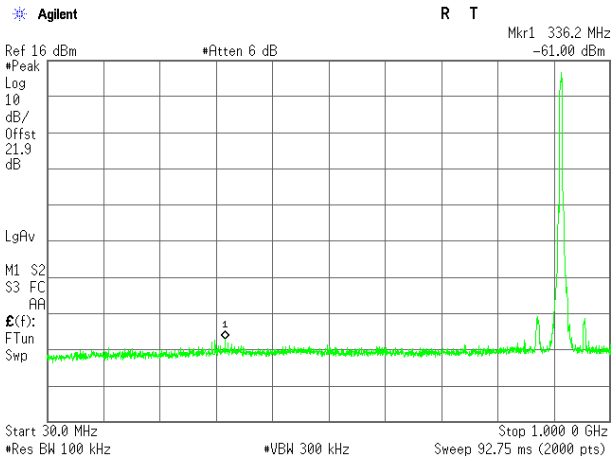


RF2

Plot 3.5.34 Emissions in restricted frequency bands test results, Conducted measurements, 30 MHz – 1000 MHz, Fc = 915 MHz, BW = 4.2 MHz, Bit Rate = 3.2 Mbps

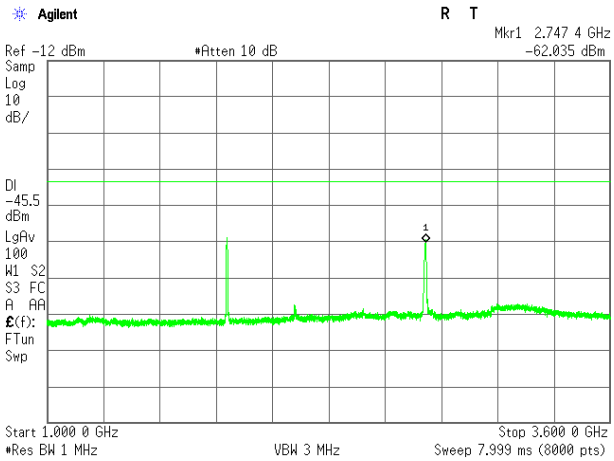


RF1

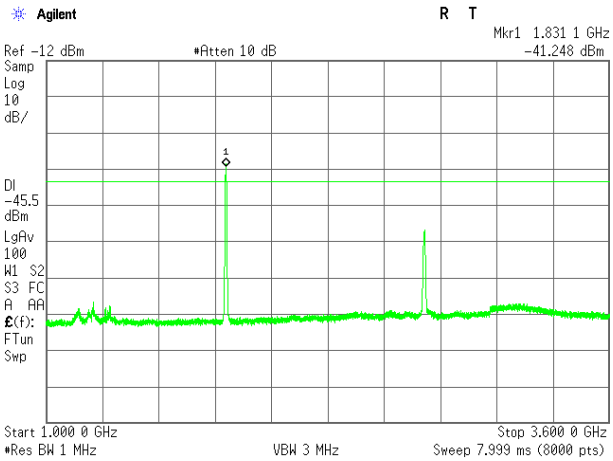


RF2

Plot 3.5.35 Emissions in restricted frequency bands test results, Conducted measurements, 1 GHz – 3.6 GHz, Fc = 915 MHz, BW = 4.2 MHz, Bit Rate = 3.2 Mbps

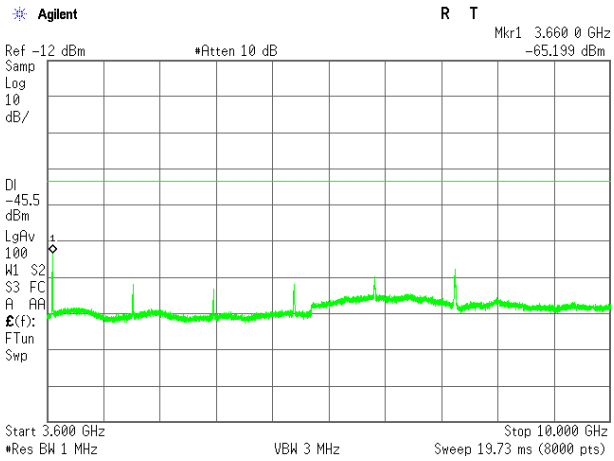


RF1

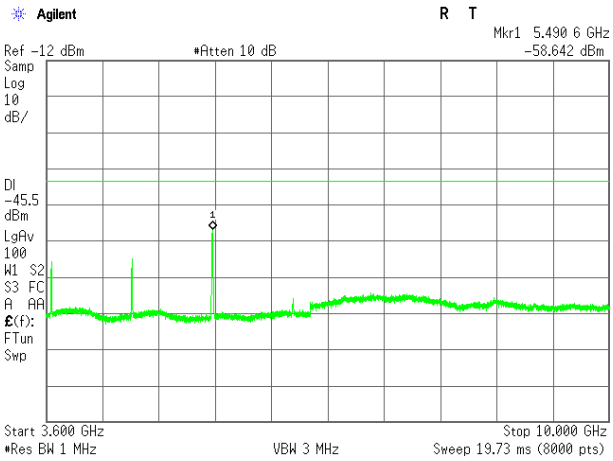


RF2

Plot 3.5.36 Emissions in restricted frequency bands test results, Conducted measurements, 3.6 GHz –10 GHz, Fc =915 MHz, BW = 4.2 MHz, Bit Rate = 3.2 Mbps

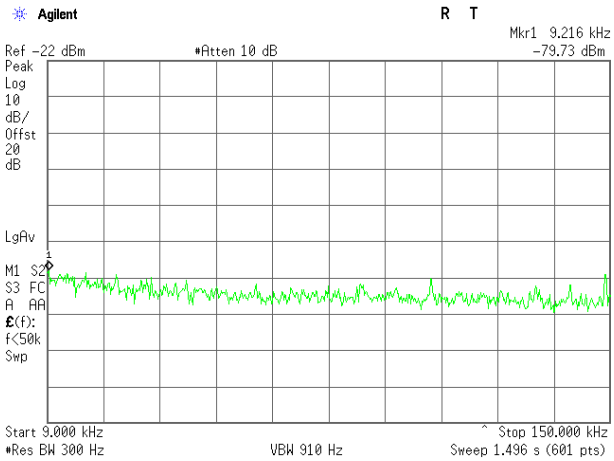


RF1

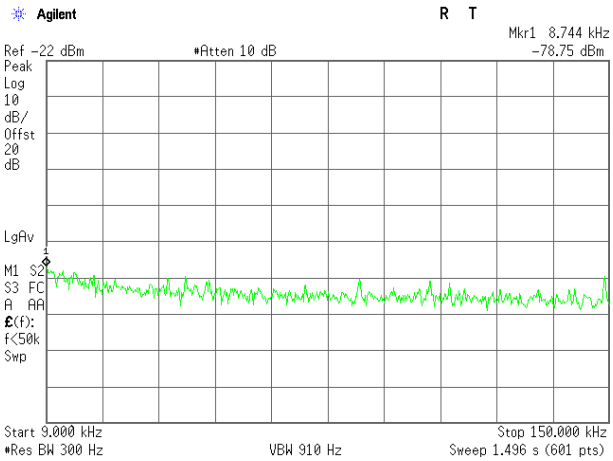


RF2

Plot 3.5.37 Emissions in restricted frequency bands test results, Conducted measurements, 9 kHz – 150 kHz, Fc = 925 MHz, BW = 4.2 MHz, Bit Rate = 3.2 Mbps

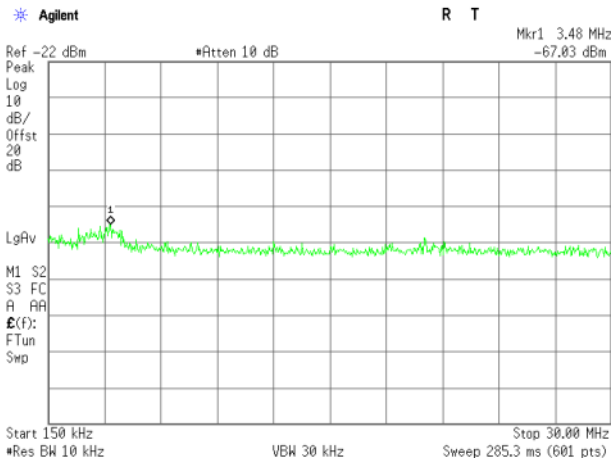


RF1

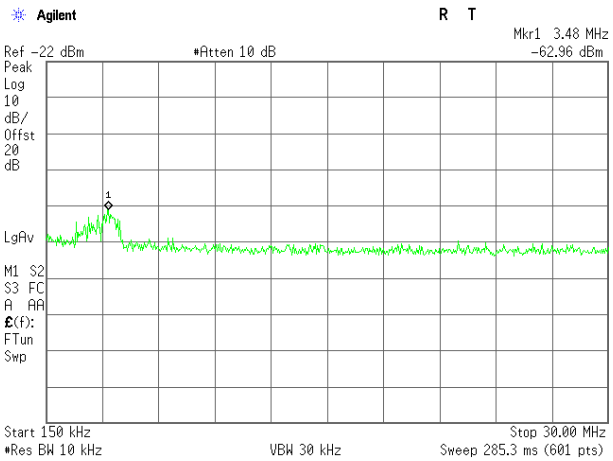


RF2

Plot 3.5.38 Emissions in restricted frequency bands test results, Conducted measurements, 150 kHz – 30 MHz, Fc = 925 MHz, BW = 4.2 MHz, Bit Rate = 3.2 Mbps

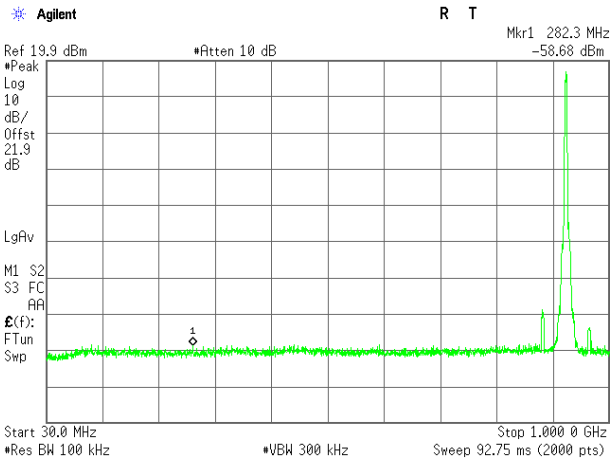


RF1

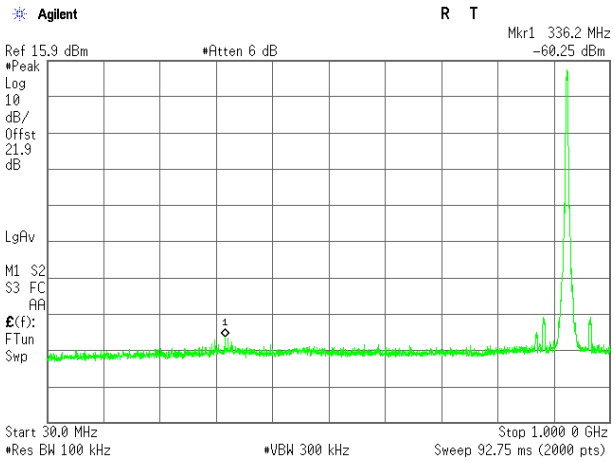


RF2

Plot 3.5.39 Emissions in restricted frequency bands test results, Conducted measurements, 30 MHz – 1000 MHz, Fc = 925 MHz, BW = 4.2 MHz, Bit Rate 3.2 Mbps

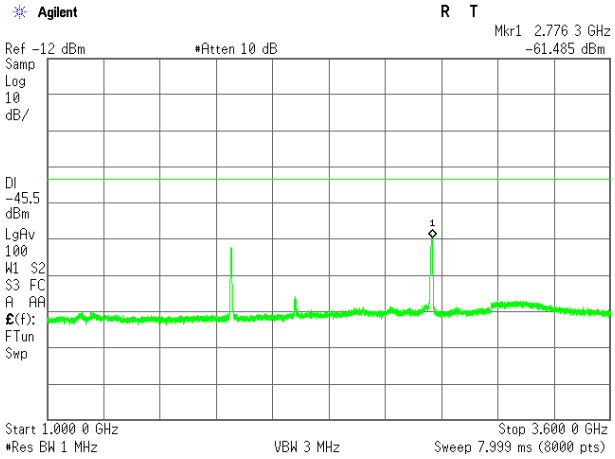


RF1

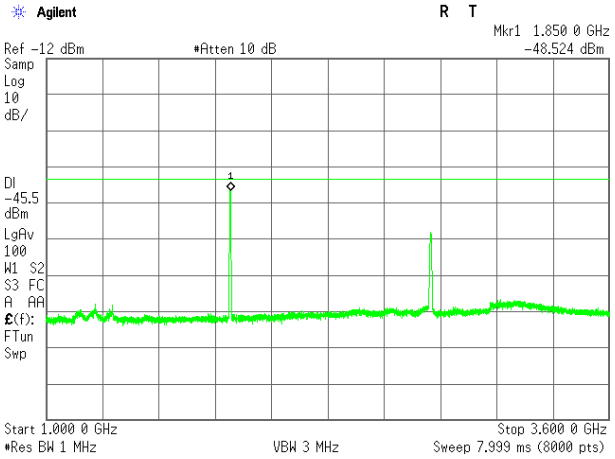


RF2

Plot 3.5.40 Emissions in restricted frequency bands test results, Conducted measurements, 1 GHz – 3.6 GHz, Fc = 925 MHz, BW = 4.2 MHz, Bit Rate = 3.2 Mbps

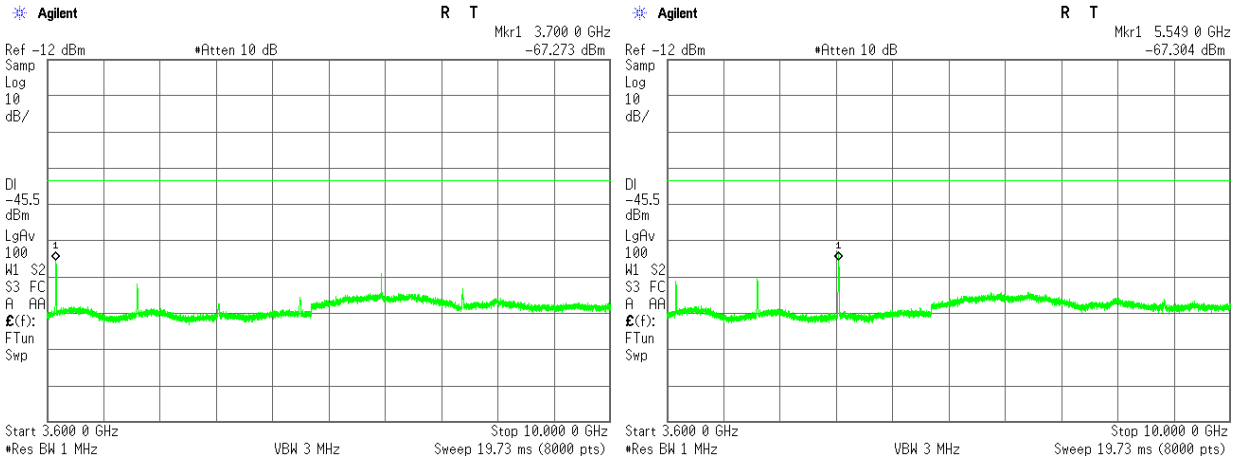


RF1

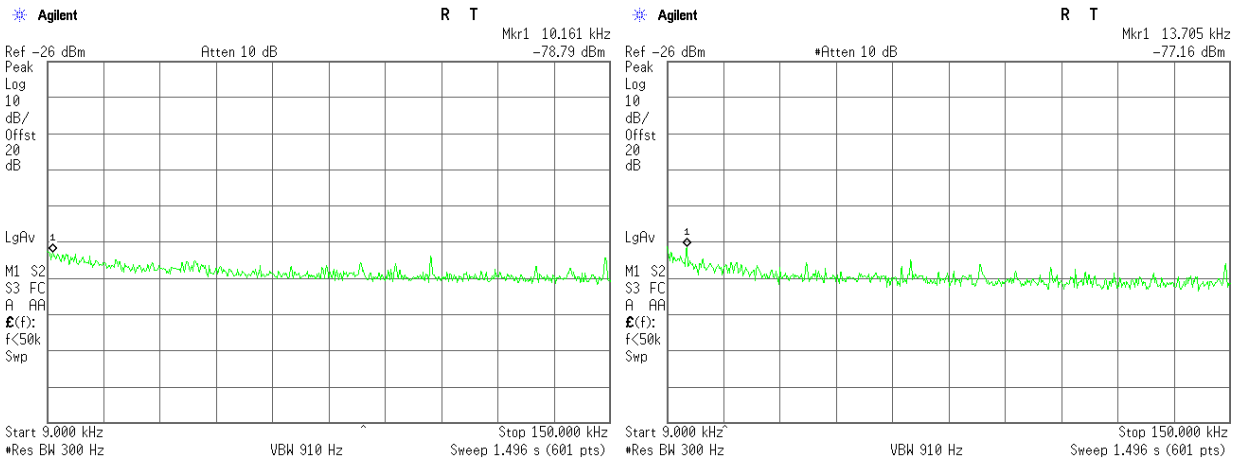


RF2

Plot 3.5.41 Emissions in restricted frequency bands test results, Conducted measurements, 3.6 GHz – 10 GHz, Fc =925 MHz, BW = 4.2 MHz, Bit Rate =3.2 Mbps

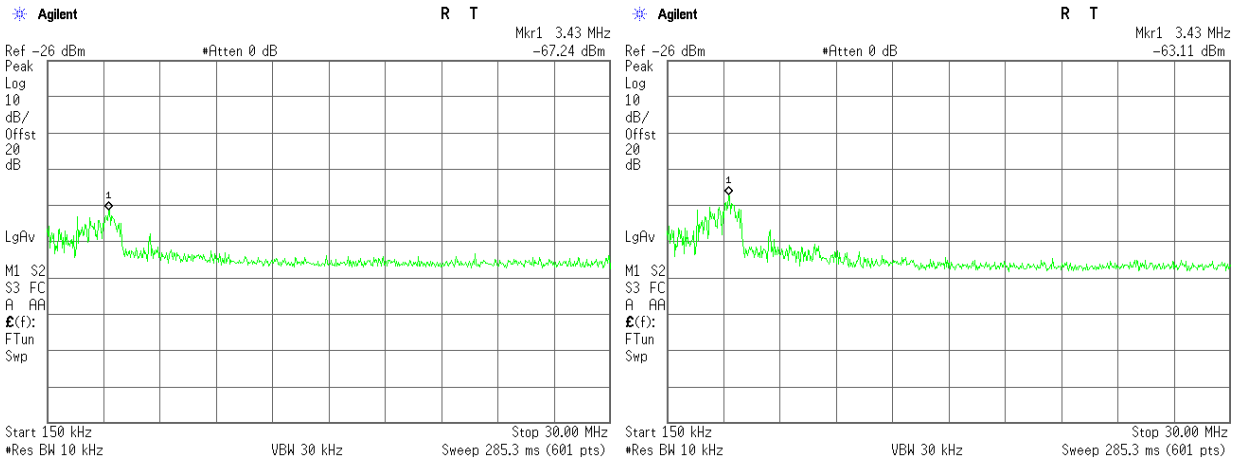


Plot 3.5.42 Emissions in restricted frequency bands test results, Conducted measurements, 9 kHz – 150 kHz, Fc = 905 MHz, BW = 4.2 MHz, Bit Rate = 4 Mbps



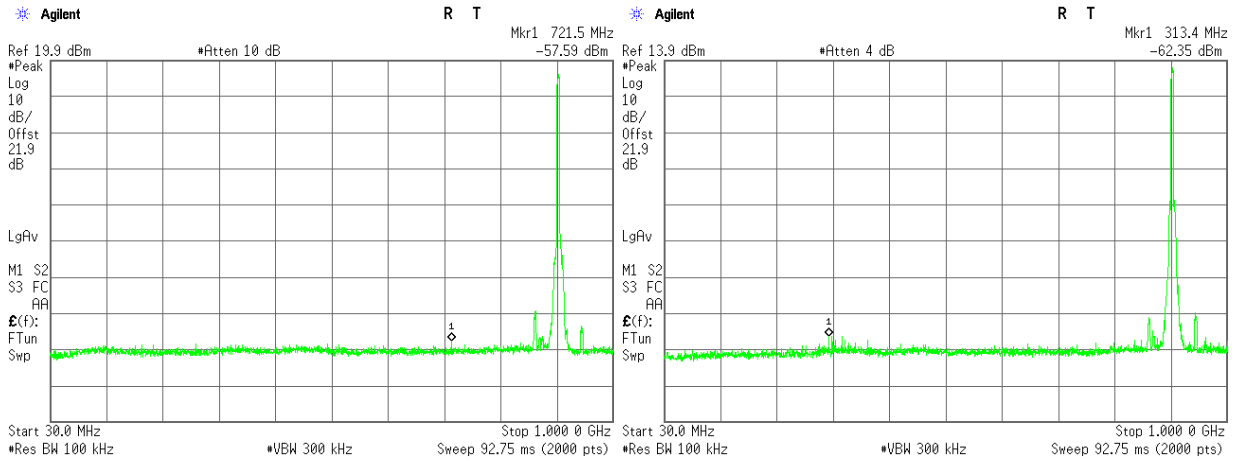
RF1 RF2

Plot 3.5.43 Emissions in restricted frequency bands test results, Conducted measurements, 150 kHz – 30 MHz, Fc = 905MHz, BW = 4.2 MHz, Bit Rate = 4.0 Mbps



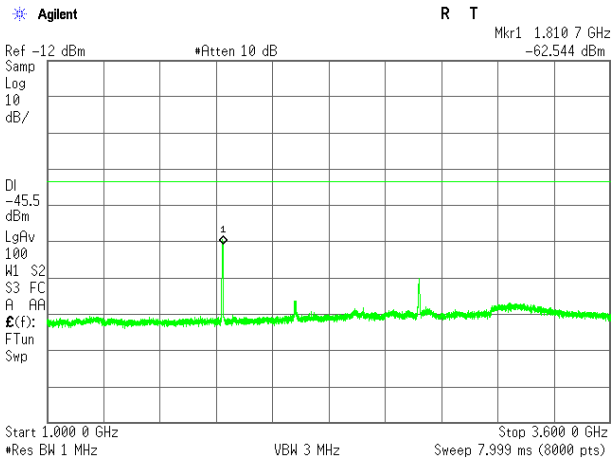
RF1 RF2

Plot 3.5.44 Emissions in restricted frequency bands test results, Conducted measurements, 30 MHz – 1000 MHz, Fc = 905 MHz, BW = 4.2 MHz, Bit Rate = 4 Mbps

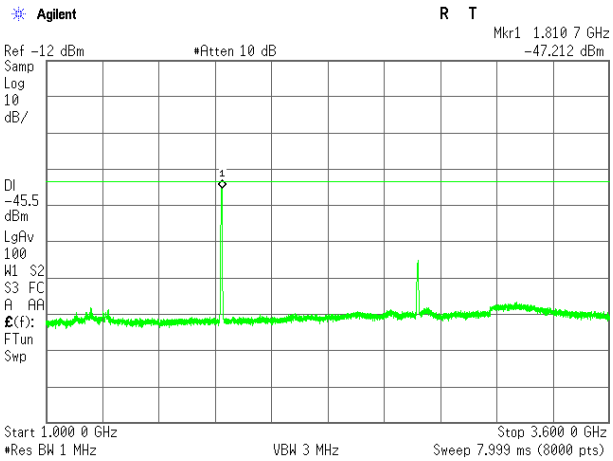


RF1 RF2

Plot 3.5.45 Emissions in restricted frequency bands test results, Conducted measurements, 1 GHz – 3.6 GHz, Fc = 905 MHz, BW = 4.2 MHz, Bit Rate = 4 Mbps

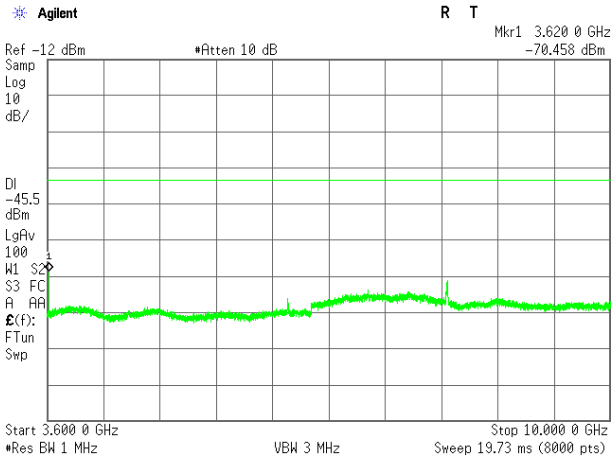


RF1

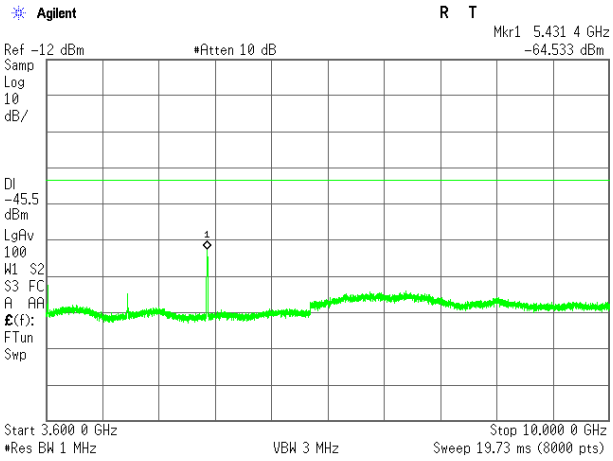


RF2

Plot 3.5.46 Emissions in restricted frequency bands test results, Conducted measurements, 3.6 GHz – 10 GHz, Fc = 905 MHz, BW = 4.2 MHz, Bit Rate = 4 Mbps

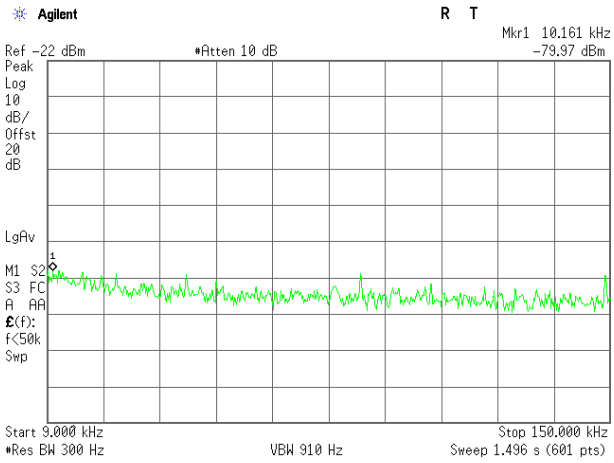


RF1

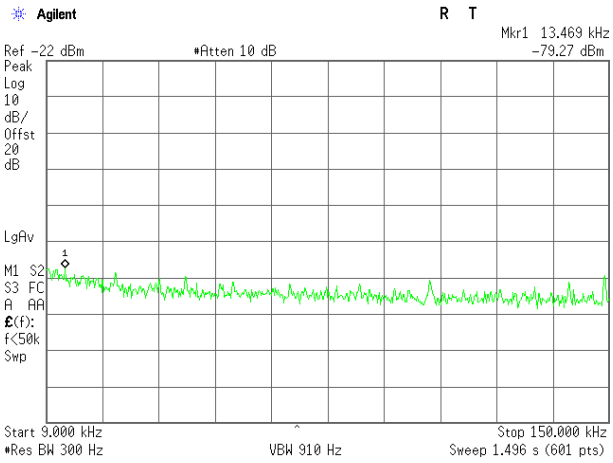


RF2

Plot 3.5.47 Emissions in restricted frequency bands test results, Conducted measurements, 9 kHz – 150 kHz, Fc =915 MHz, BW = 4.2 MHz, Bit Rate = 4Mbps

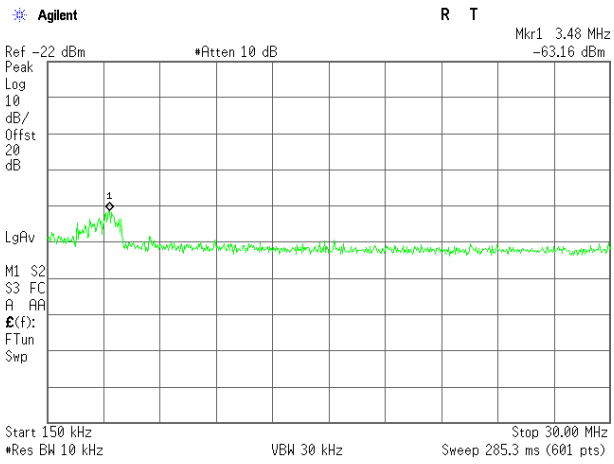


RF1

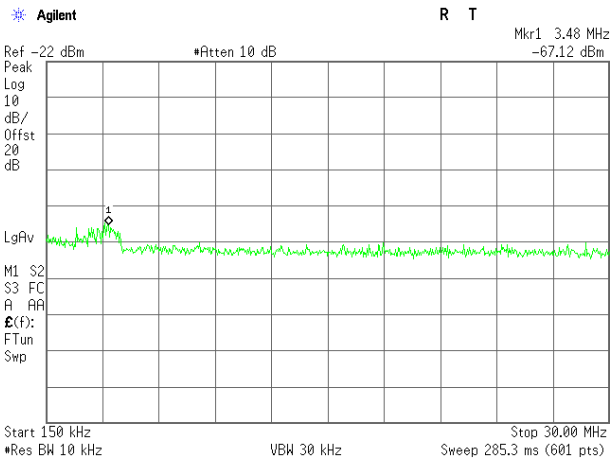


RF2

Plot 3.5.48 Emissions in restricted frequency bands test results, Conducted measurements, 150 kHz – 30 MHz, Fc = 915 MHz, BW = 4.2 MHz, Bit Rate = 4 Mbps

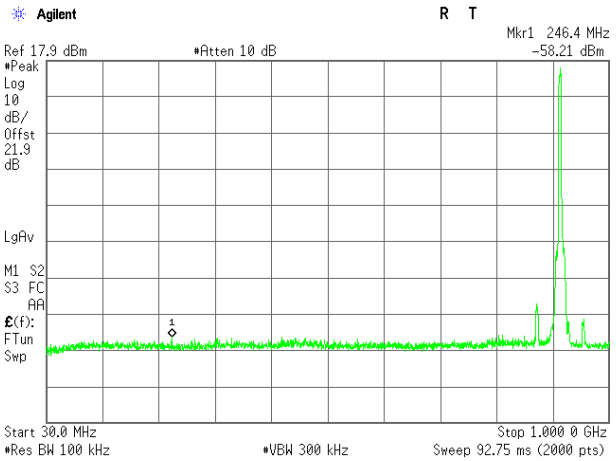


RF1

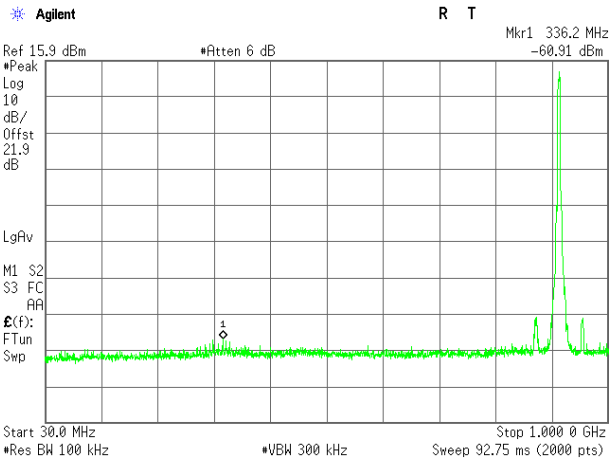


RF2

Plot 3.5.49 Emissions in restricted frequency bands test results, Conducted measurements, 30 MHz – 1000 MHz, Fc = 915 MHz, BW = 4.2 MHz, Bit Rate = 4 Mbps

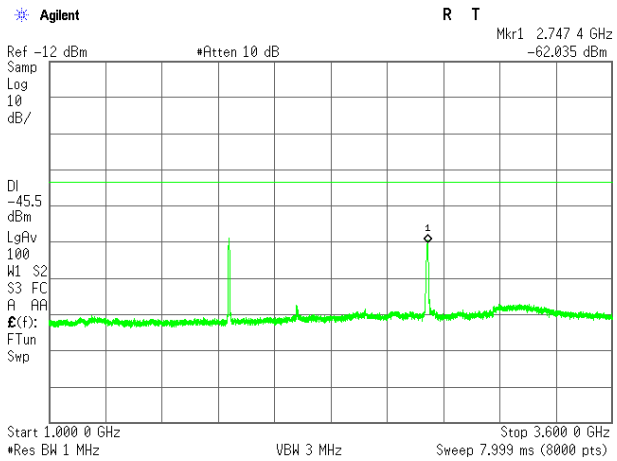


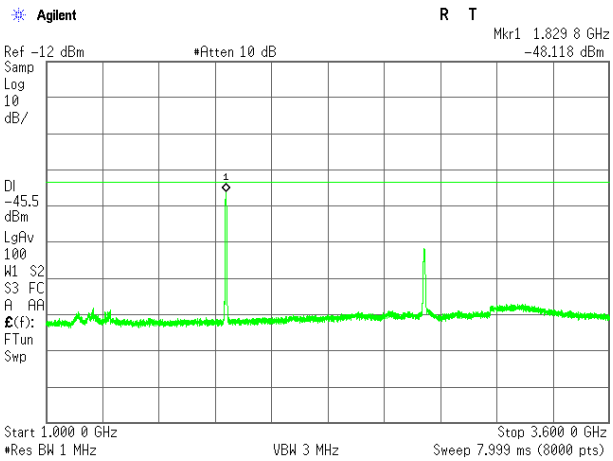
RF1



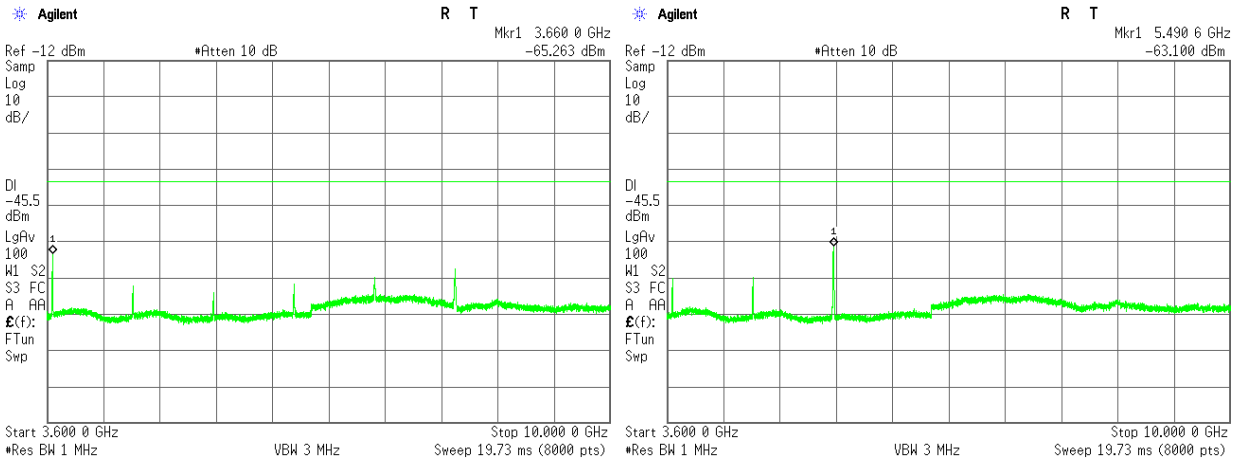
RF2

Plot 3.5.50 Emissions in restricted frequency bands test results, Conducted measurements, 1 GHz – 3.6 GHz, Fc = 915 MHz, BW = 4.2 MHz, Bit Rate = 4 Mbps

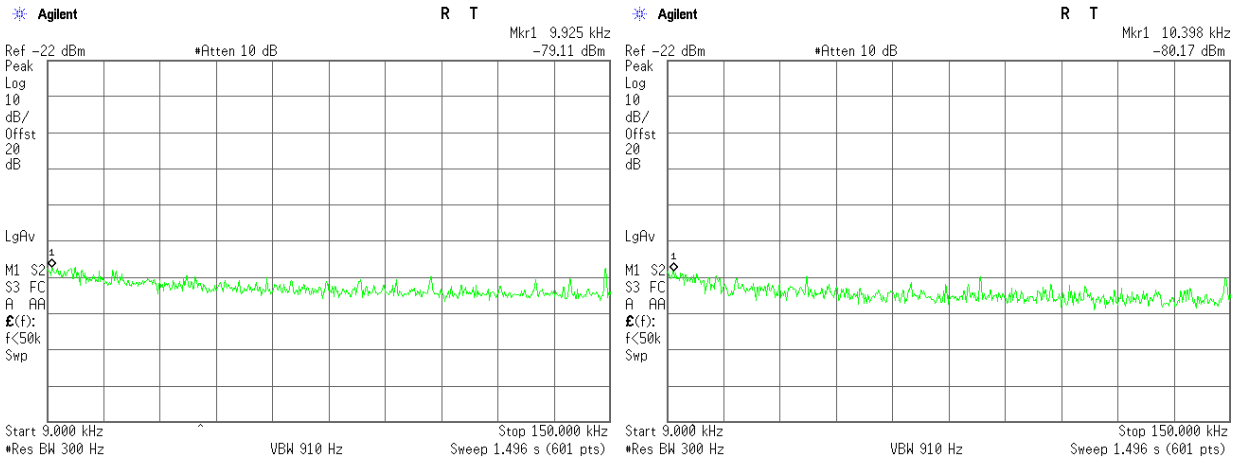




Plot 3.5.51 Emissions in restricted frequency bands test results, Conducted measurements, 3.6 GHz –10 GHz, Fc =915 MHz, BW = 4.2 MHz, Bit Rate = 4 Mbps

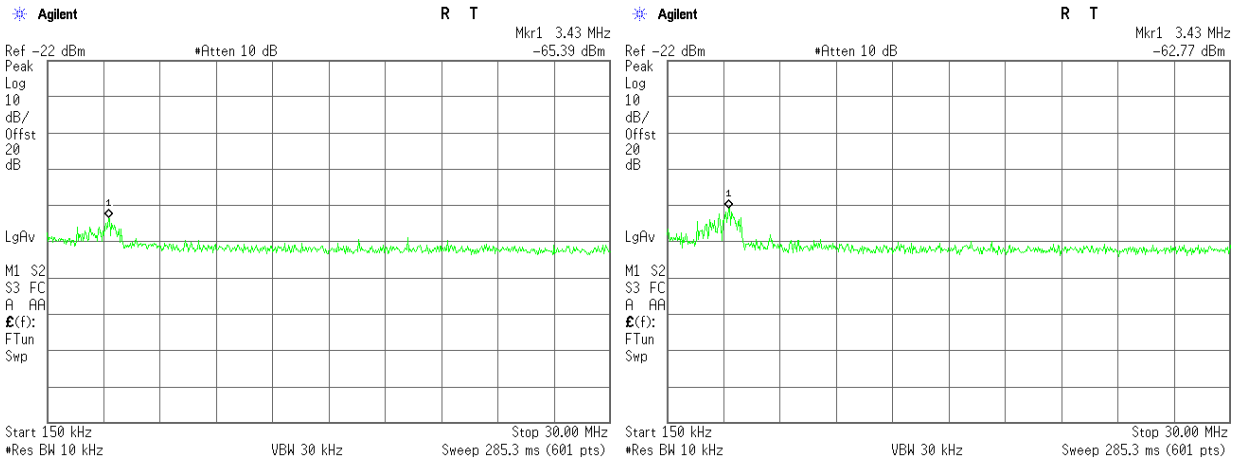


Plot 3.5.52 Emissions in restricted frequency bands test results, Conducted measurements, 9 kHz – 150 kHz, Fc = 925 MHz, BW = 4.2 MHz, Bit Rate = 4 Mbps



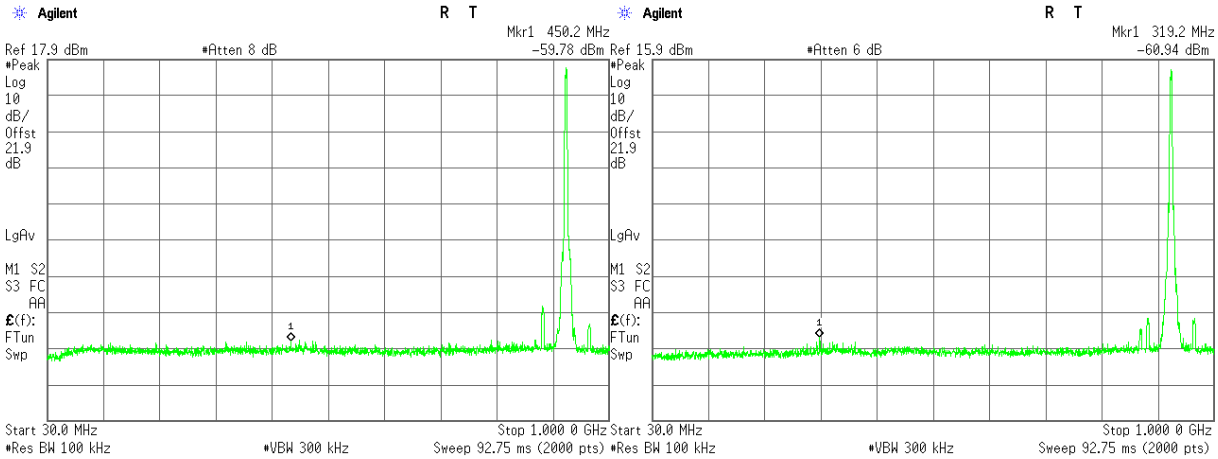
RF1 RF2

Plot 3.5.53 Emissions in restricted frequency bands test results, Conducted measurements, 150 kHz – 30 MHz, Fc = 925 MHz, BW = 4.2 MHz, Bit Rate = 4 Mbps



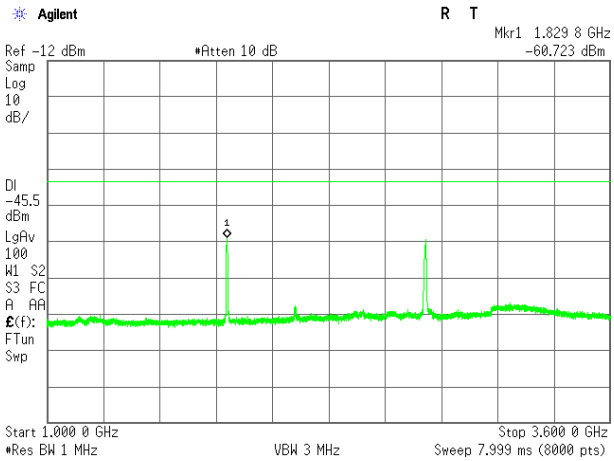
RF1 RF2

Plot 3.5.54 Emissions in restricted frequency bands test results, Conducted measurements, 30 MHz – 1000 MHz, Fc = 925 MHz, BW = 4.2 MHz, Bit Rate = 4 Mbps

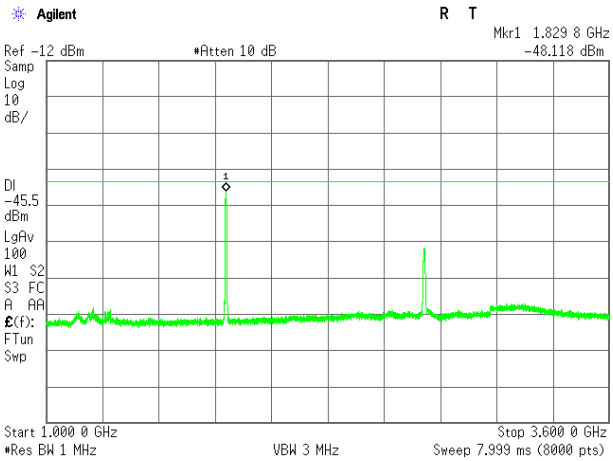


RF1 RF2

Plot 3.5.55 Emissions in restricted frequency bands test results, Conducted measurements, 1 GHz – 3.6 GHz, Fc = 925 MHz, BW = 4.2 MHz, Bit Rate = 3.2 Mbps

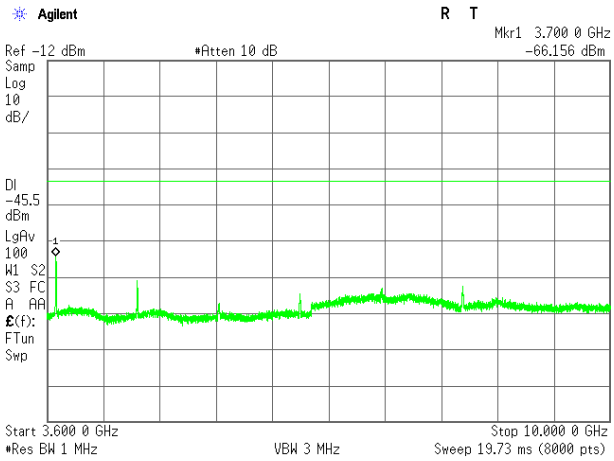


RF1

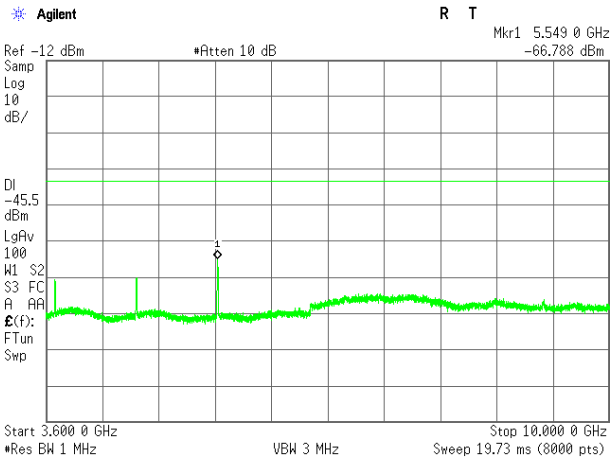


RF2

Plot 3.5.56 Emissions in restricted frequency bands test results, Conducted measurements, 3.6 GHz – 10 GHz, Fc = 925 MHz, BW = 4.2MHz, Bit Rate =4 Mbps

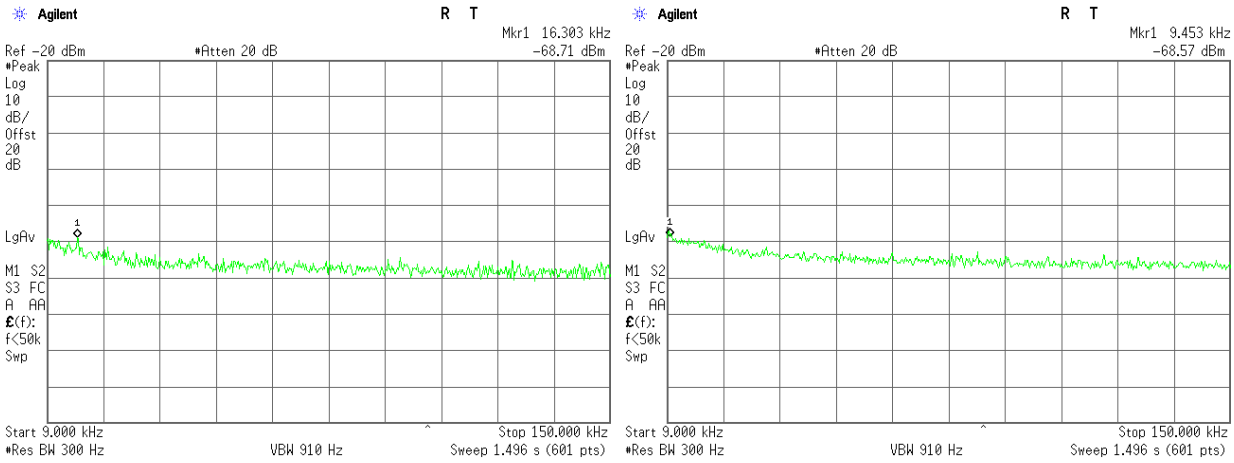


RF1



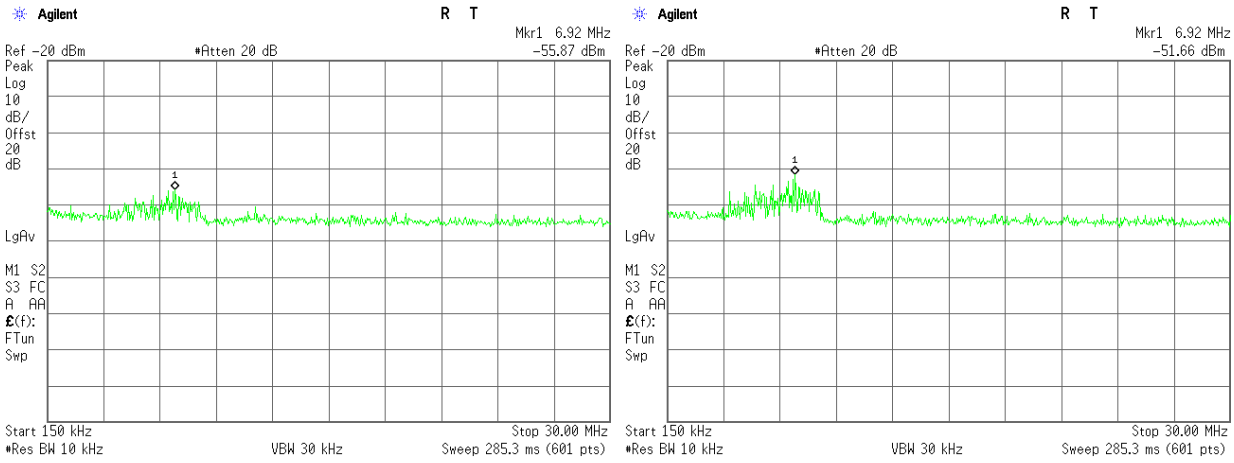
RF2

Plot 3.5.57 Emissions in restricted frequency bands test results, Conducted measurements, 9 kHz – 150 kHz, Fc = 907 MHz, BW = 8.4 MHz, Bit Rate = 6.4 Mbps



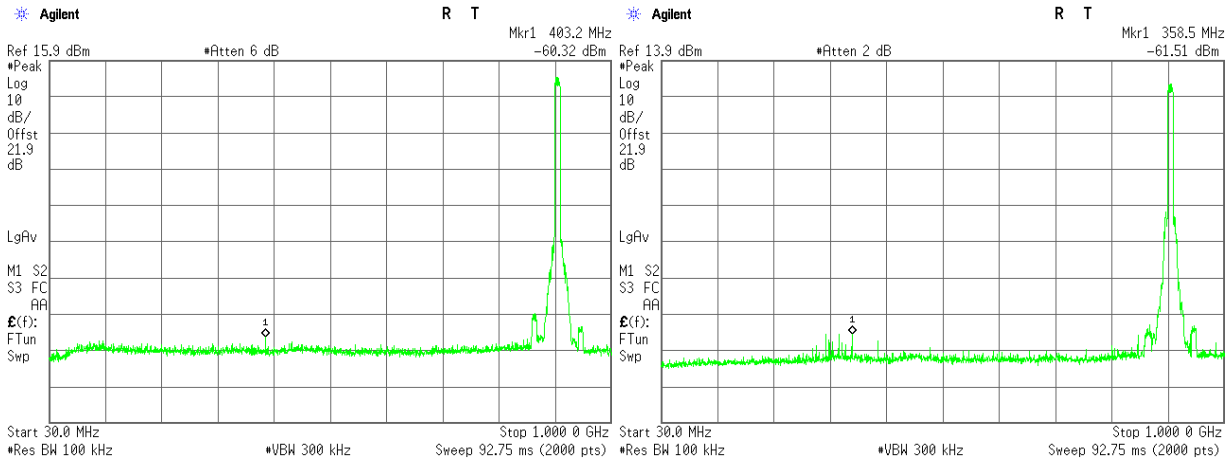
RF1 RF2

Plot 3.5.58 Emissions in restricted frequency bands test results, Conducted measurements, 150 kHz – 30 MHz, Fc = 907 MHz, BW = 8.4 MHz, Bit Rate 6.4 Mbps



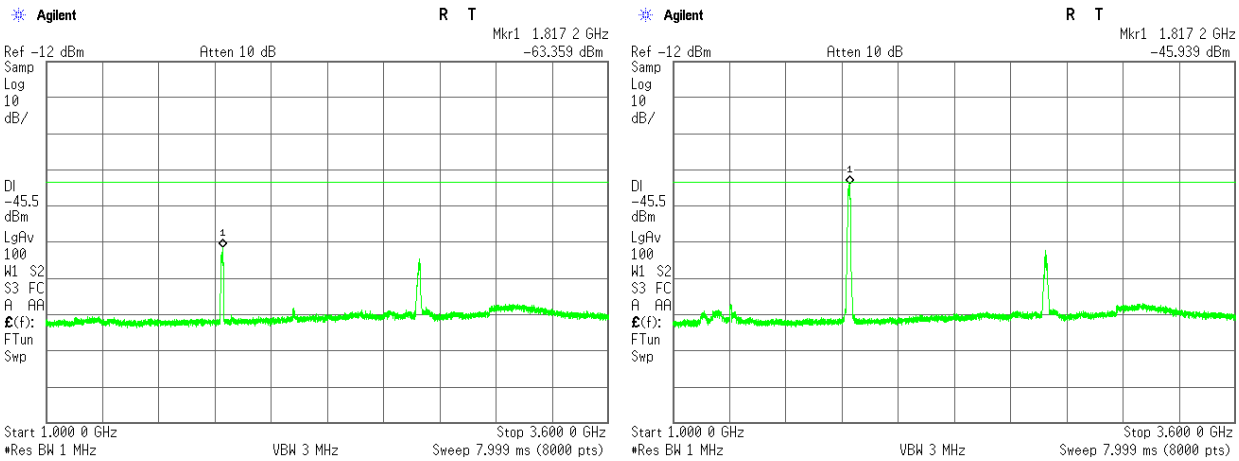
RF1 RF2

Plot 3.5.59 Emissions in restricted frequency bands test results, Conducted measurements, 30 MHz – 1000 MHz, Fc = 907 MHz, BW = 8.4 MHz, Bit Rate =6.4 Mbps



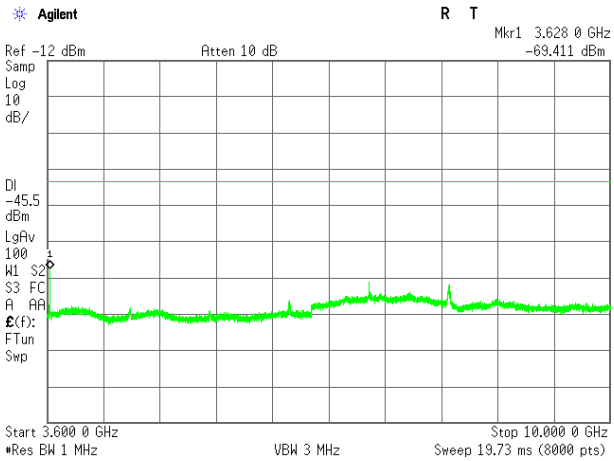
RF1 RF

Plot 3.5.60 Emissions in restricted frequency bands test results, Conducted measurements, 1 GHz – 3.6 GHz, Fc = 907 MHz, BW = 8.4 MHz, Bit Rate =6.4 Mbps

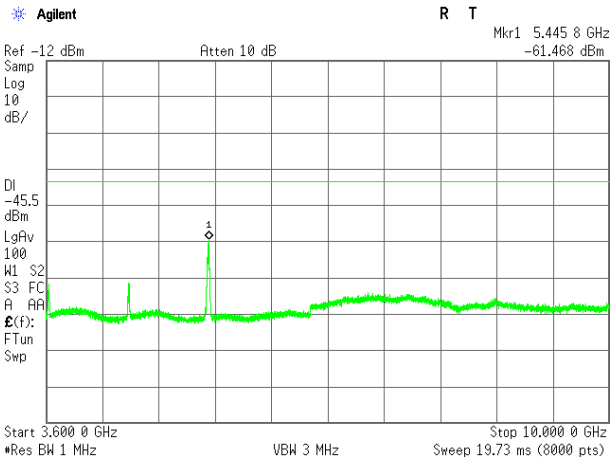


RF1 RF2

Plot 3.5.61 Emissions in restricted frequency bands test results, Conducted measurements, 3.6 GHz – 10 GHz, Fc =907 MHz, BW = 8.4 MHz, Bit Rate = 6.4 Mbps

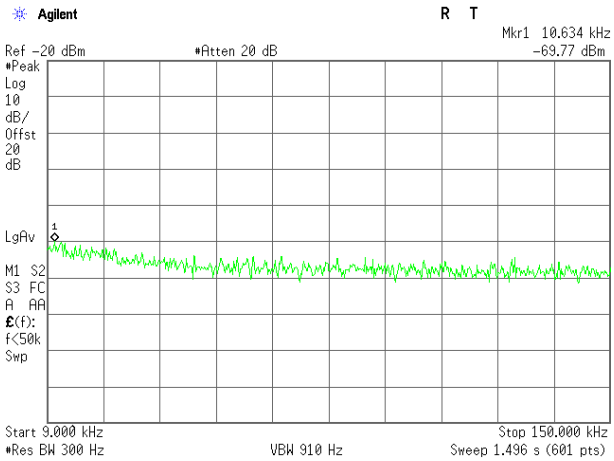


RF1

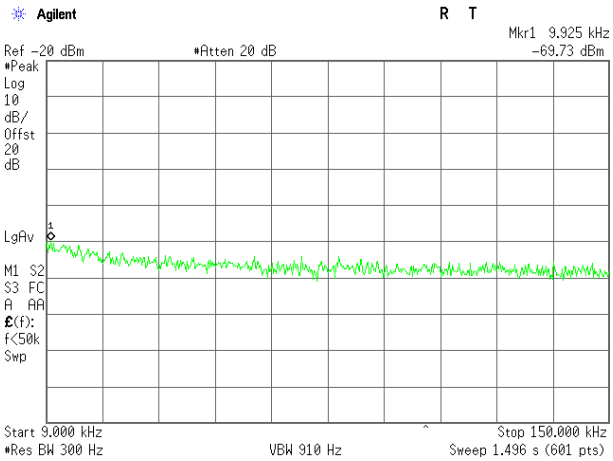


RF2

Plot 3.5.62 Emissions in restricted frequency bands test results, Conducted measurements, 9 kHz – 150 kHz, Fc = 915 MHz, BW = 8.4 MHz, Bit Rate = 6.4Mbps

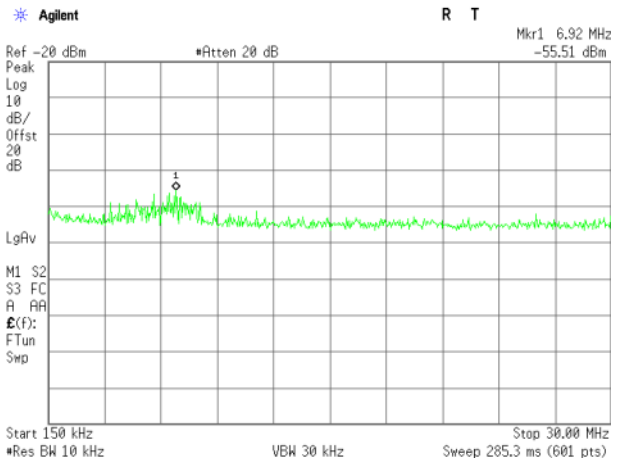


RF1

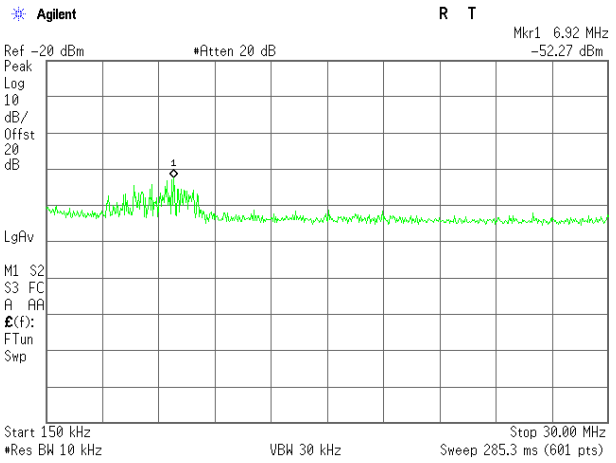


RF2

Plot 3.5.63 Emissions in restricted frequency bands test results, Conducted measurements, 150 kHz – 30 MHz, Fc = 915 MHz, BW = 8.4 MHz, Bit Rate = 6.4 Mbps

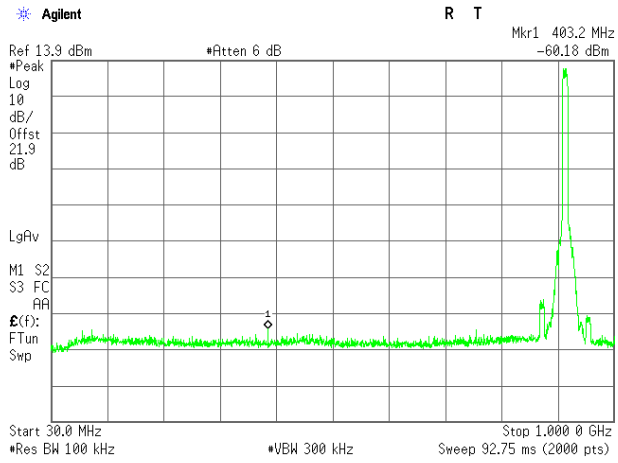


RF1

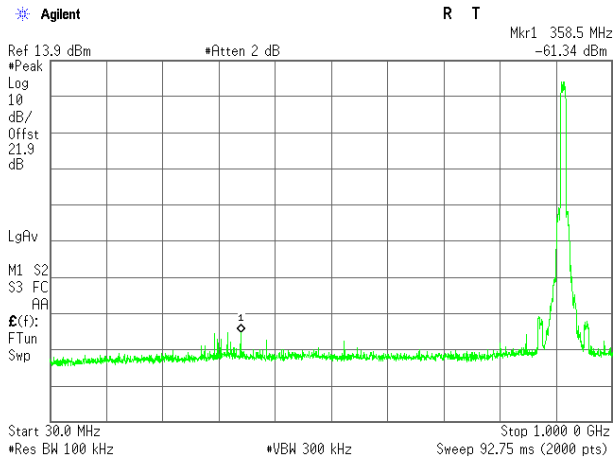


RF2

Plot 3.5.64 Emissions in restricted frequency bands test results, Conducted measurements, 30 MHz – 1000 MHz, Fc = 915 MHz, BW = 8.4 MHz, Bit Rate =6.4 Mbps

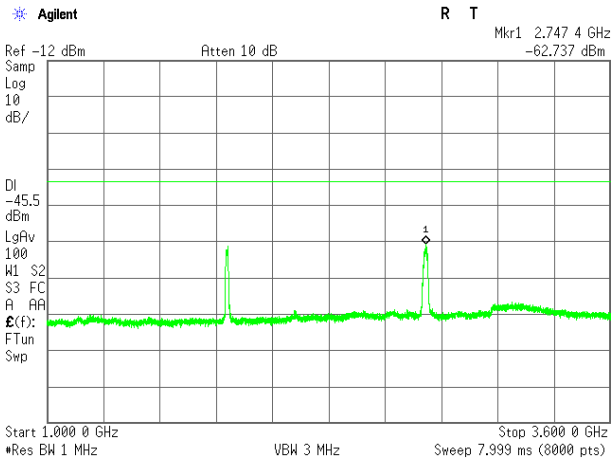


RF1

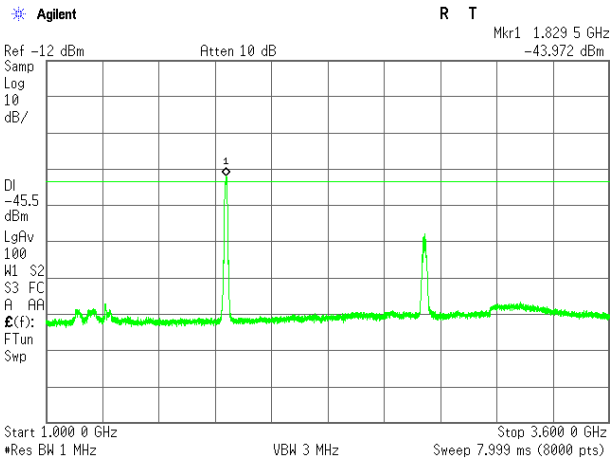


RF2

Plot 3.5.65 Emissions in restricted frequency bands test results, Conducted measurements, 1 GHz – 3.6 GHz, Fc = 915 MHz, BW = 8.4 MHz, Bit Rate = 6.4 Mbps

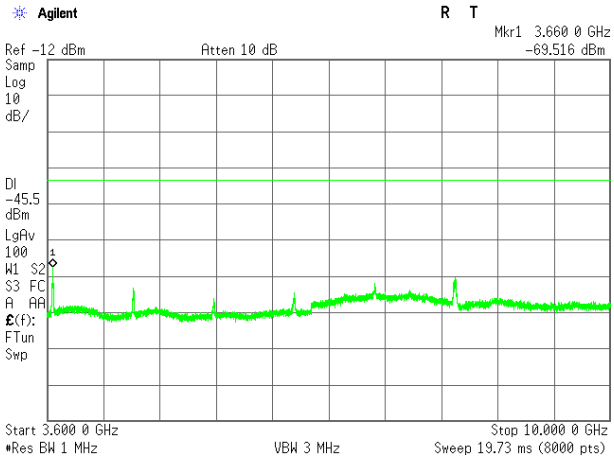


RF1

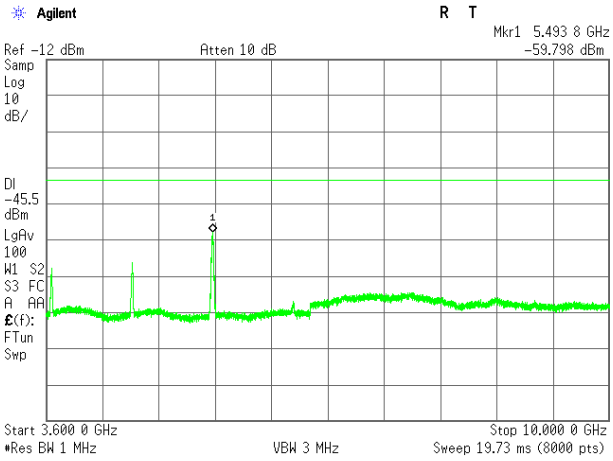


RF2

Plot 3.5.66 Emissions in restricted frequency bands test results, Conducted measurements, 3.6 GHz – 10 GHz, Fc = 915 MHz, BW = 8.4 MHz, Bit Rate =6.4 Mbps

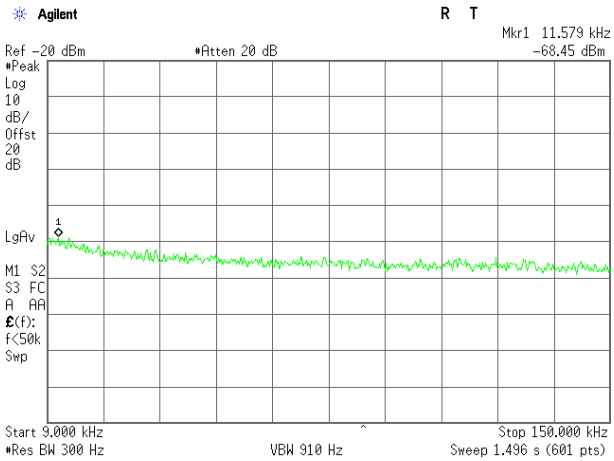


RF1

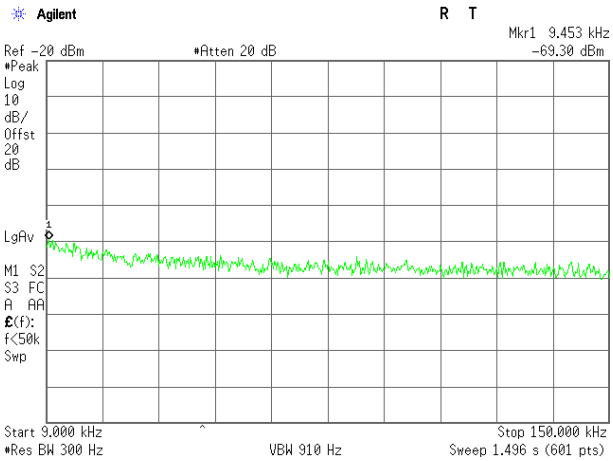


RF2

Plot 3.5.67 Emissions in restricted frequency bands test results, Conducted measurements, 9 kHz – 150 kHz, Fc = 923 MHz, BW = 8.4 MHz, Bit Rate = 6.4 Mbps

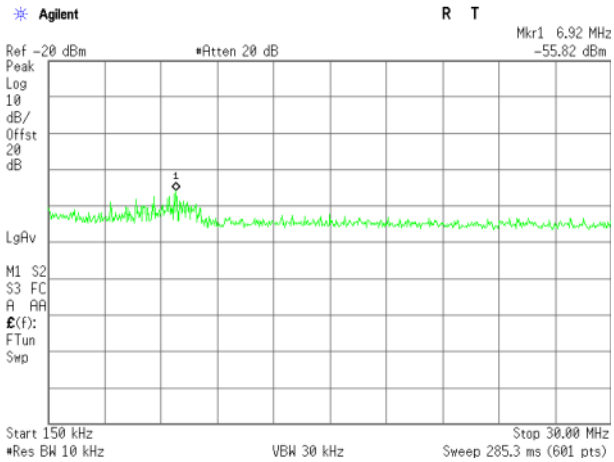


RF1

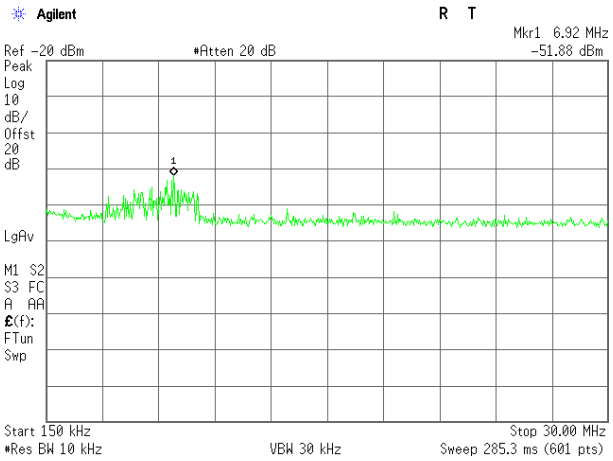


RF2

Plot 3.5.68 Emissions in restricted frequency bands test results, Conducted measurements, 150 kHz – 30 MHz, Fc = 923 MHz, BW = 8.4 MHz, Bit Rate = 6.4 Mbps

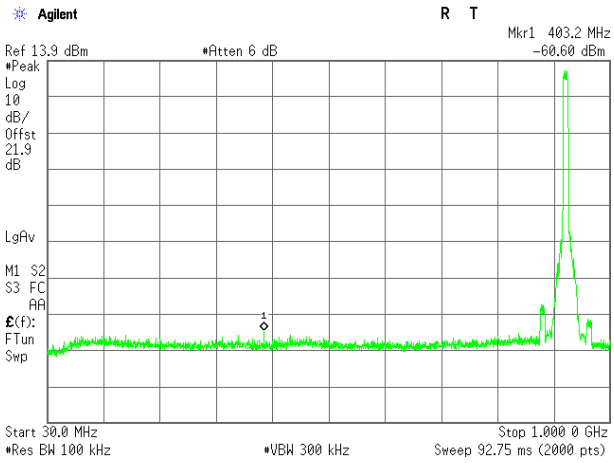


RF1

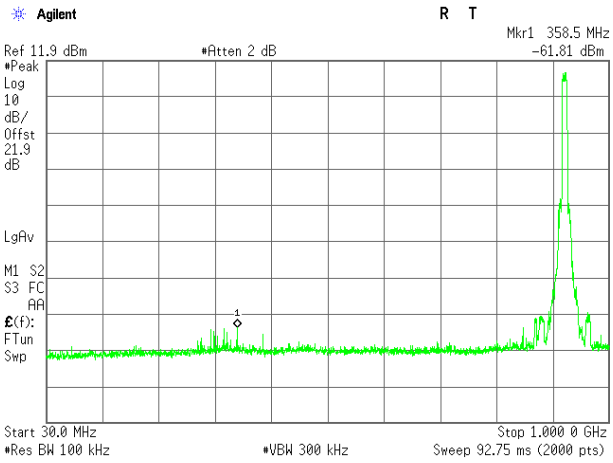


RF2

Plot 3.5.69 Emissions in restricted frequency bands test results, Conducted measurements, 30 MHz – 1000 MHz, Fc = 923 MHz, BW = 8.4 MHz, Bit Rate = 6.4 Mbps

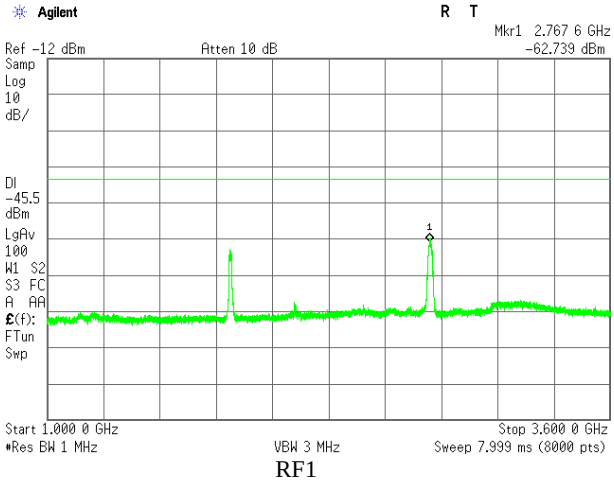


RF1

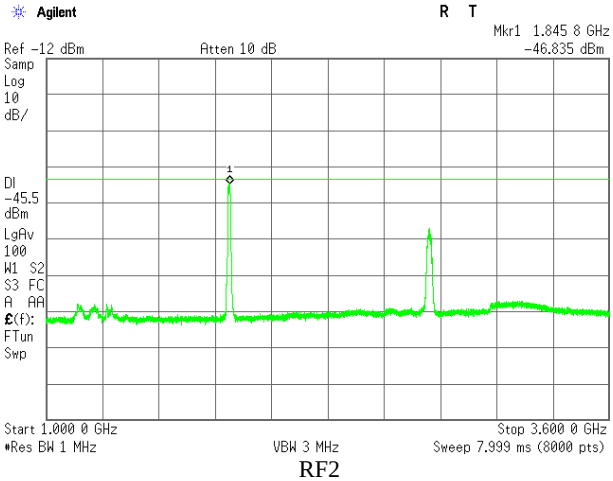


RF2

Plot 3.5.70 Emissions in restricted frequency bands test results, Conducted measurements, 1 GHz – 3.6 GHz, Fc = 923 MHz, BW = 8.4 MHz, Bit Rate = 6.4 Mbps

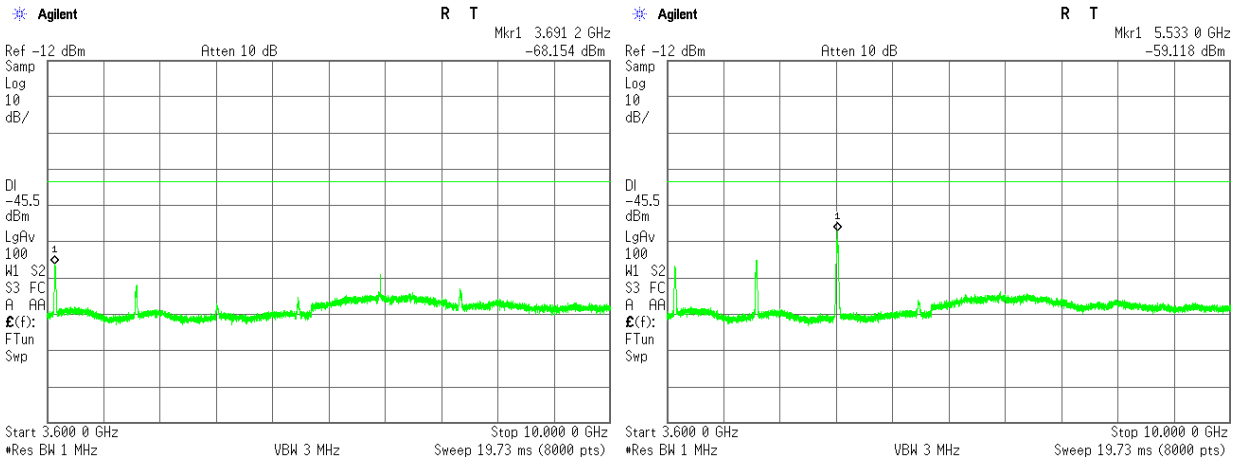


RF1



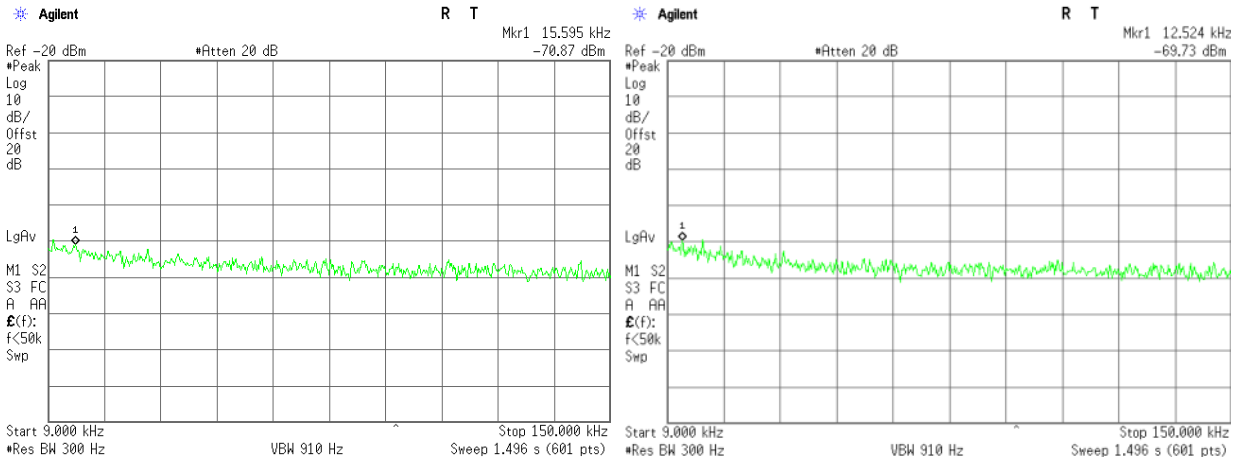
RF2

Plot 3.5.71 Emissions in restricted frequency bands test results, Conducted measurements, 3.6 GHz – 10 GHz, Fc = 923 MHz, BW = 8.4 MHz, Bit Rate = 6.4 Mbps



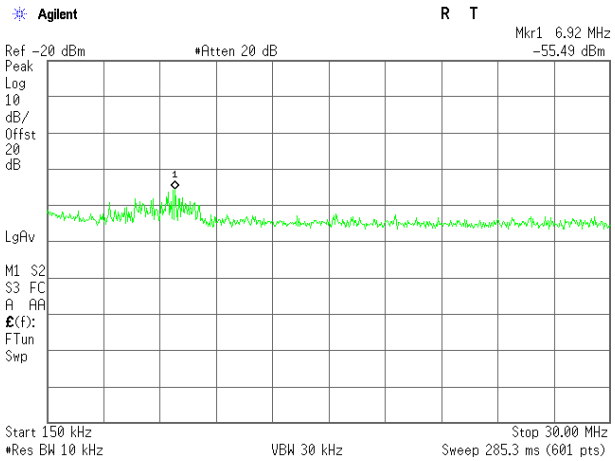
RF1 RF2

Plot 3.5.72 Emissions in restricted frequency bands test results, Conducted measurements, 9 kHz – 150 kHz, Fc = 907 MHz, BW = 8.4 MHz, Bit Rate = 8 Mbps

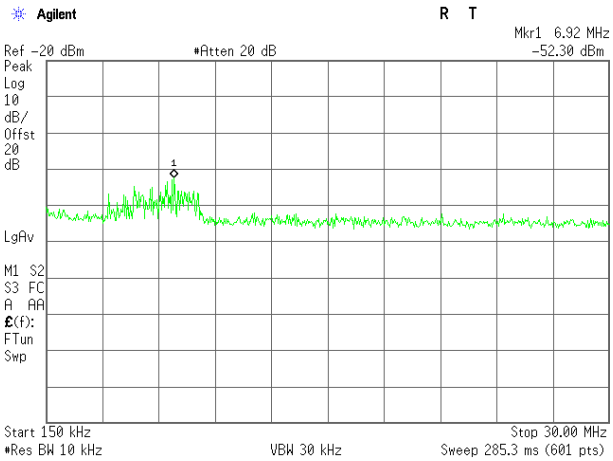


RF1 RF2

Plot 3.5.73 Emissions in restricted frequency bands test results, Conducted measurements, 150 kHz – 30 MHz, Fc = 907 MHz, BW = 8.4 MHz, Bit Rate = 8 Mbps

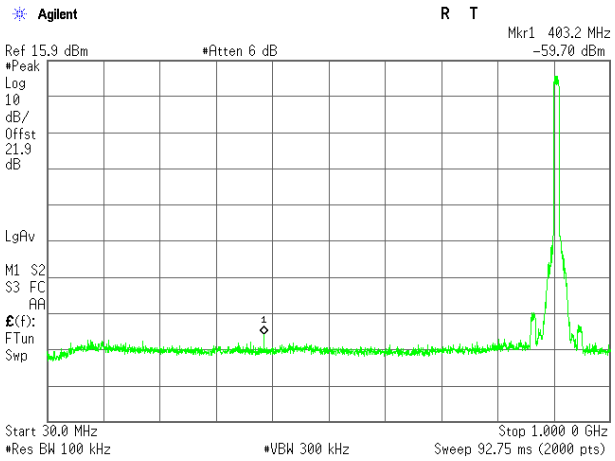


RF1

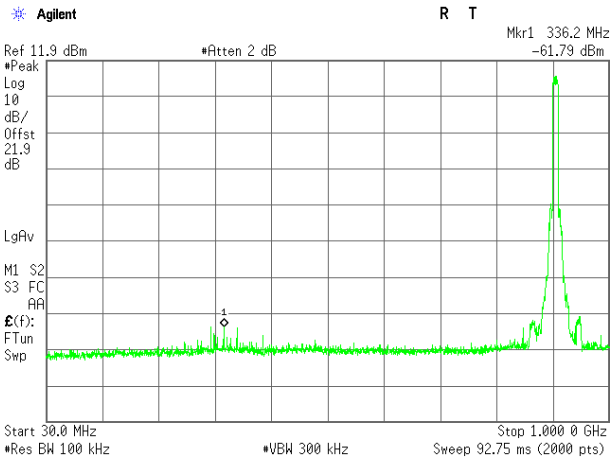


RF2

Plot 3.5.74 Emissions in restricted frequency bands test results, Conducted measurements, 30 MHz – 1000 MHz, Fc = 907 MHz, BW = 8.4 MHz, Bit Rate = 8 Mbps

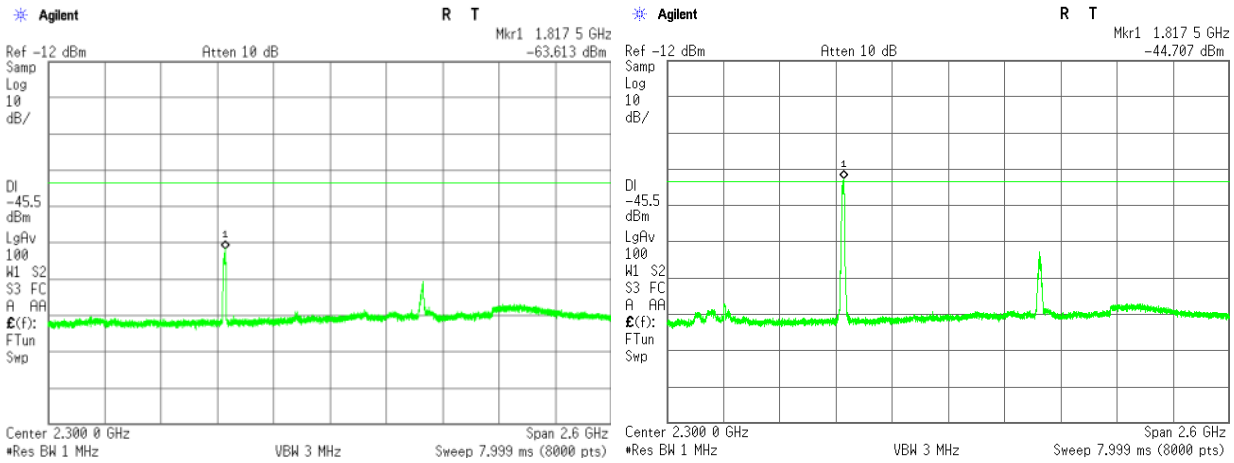


RF1



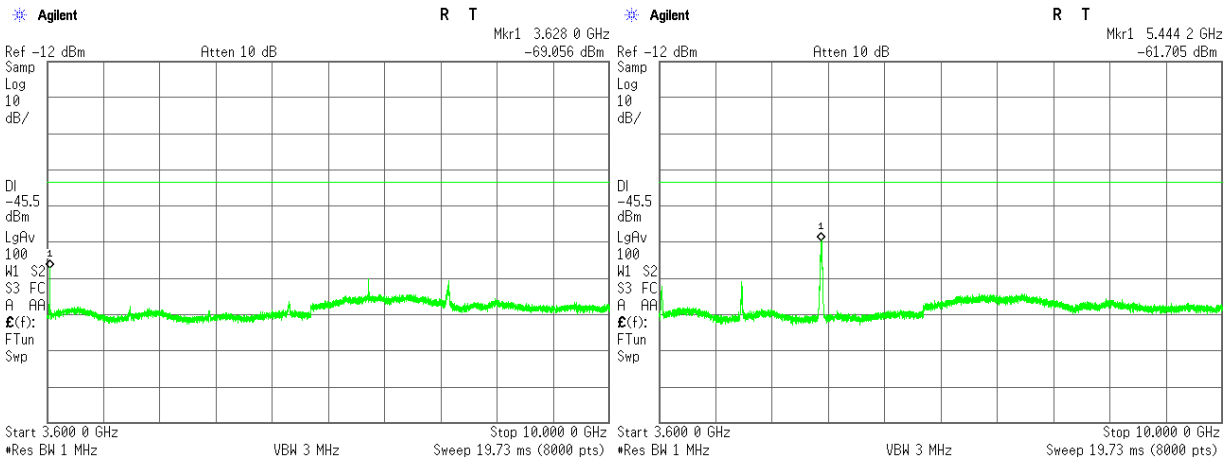
RF2

Plot 3.5.75 Emissions in restricted frequency bands test results, Conducted measurements, 1 GHz – 3.6 GHz, Fc = 907 MHz, BW = 8.4 MHz, Bit Rate = 8 Mbps



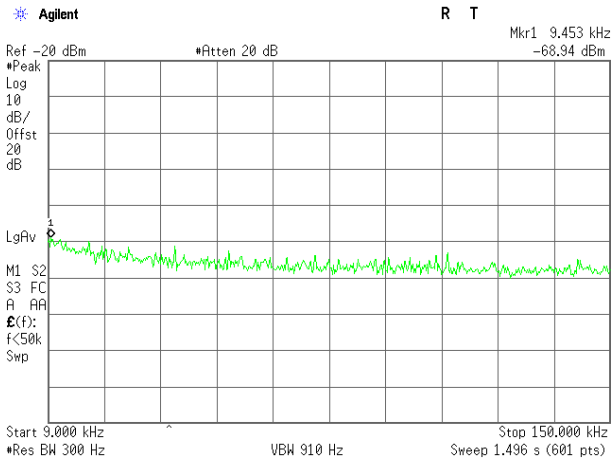
RF1 RF2

Plot 3.5.76 Emissions in restricted frequency bands test results, Conducted measurements, 3.6 GHz – 10 GHz, Fc =907 MHz, BW = 8.4 MHz, Bit Rate = 8 Mbps

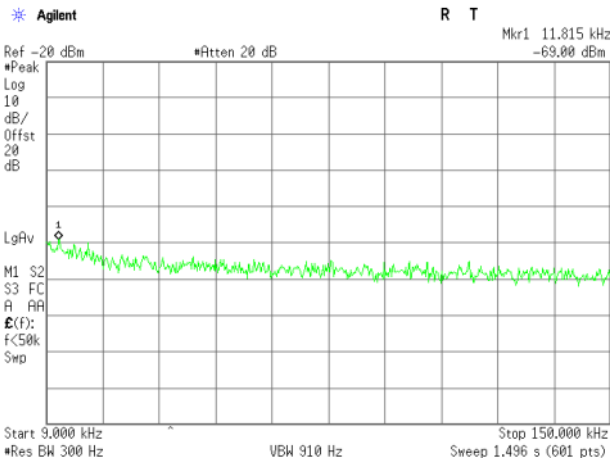


RF1 RF2

Plot 3.5.77 Emissions in restricted frequency bands test results, Conducted measurements, 9 kHz – 150 kHz, Fc = 915 MHz, BW = 8.4 MHz, Bit Rate = 8 Mbps

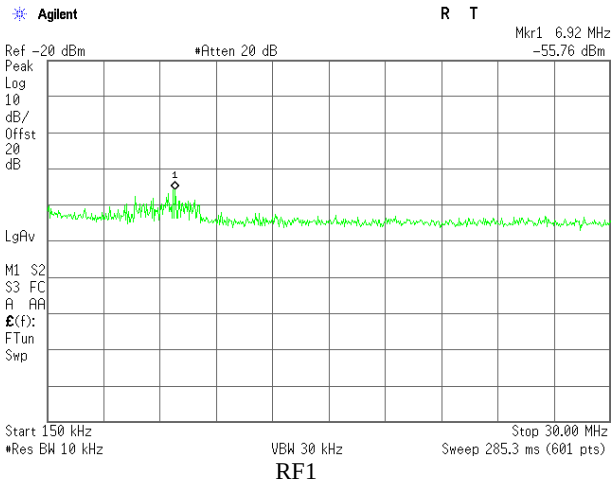


RF1

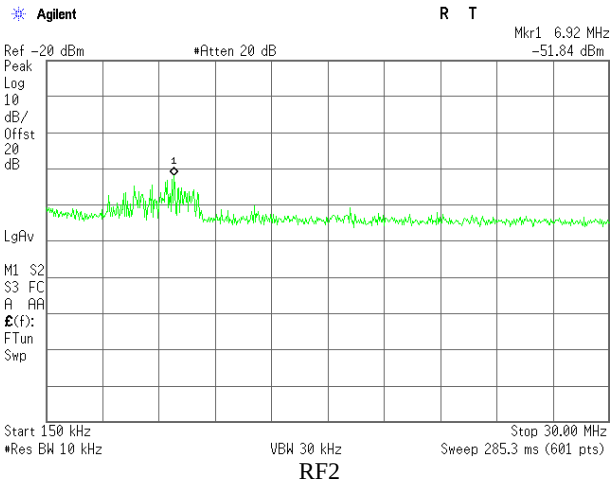


RF2

Plot 3.5.78 Emissions in restricted frequency bands test results, Conducted measurements, 150 kHz – 30 MHz, Fc = 915 MHz, BW = 8.4 MHz, Bit Rate = 8 Mbps

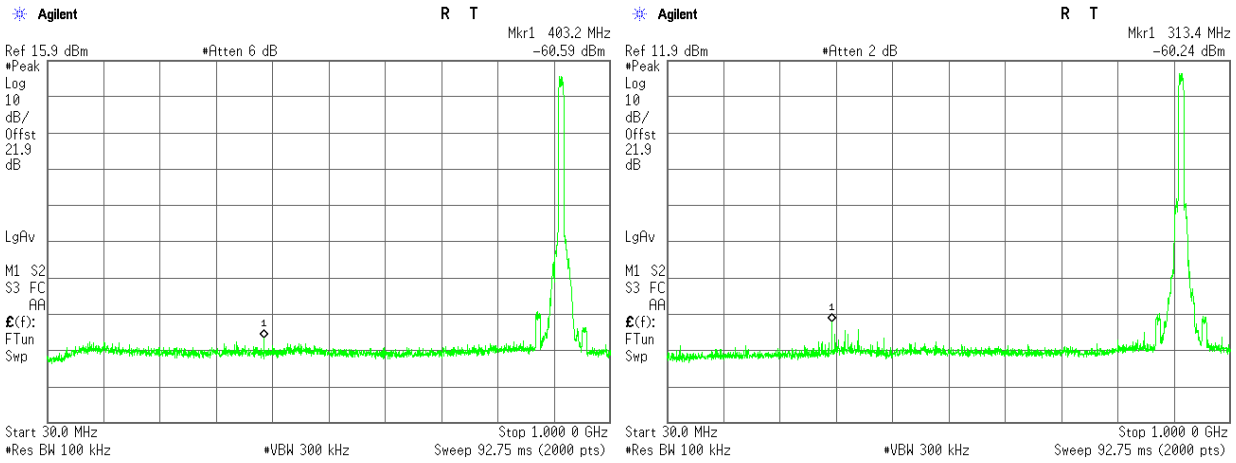


RF1



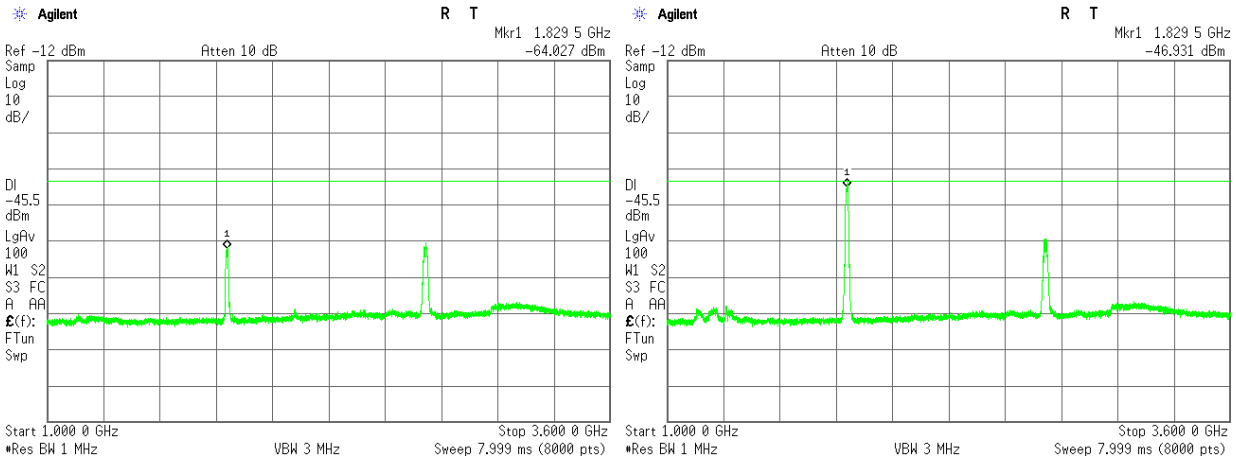
RF2

Plot 3.5.79 Emissions in restricted frequency bands test results, Conducted measurements, 30 MHz – 1000 MHz, Fc = 915 MHz, BW = 8.4 MHz, Bit Rate = 8 Mbps



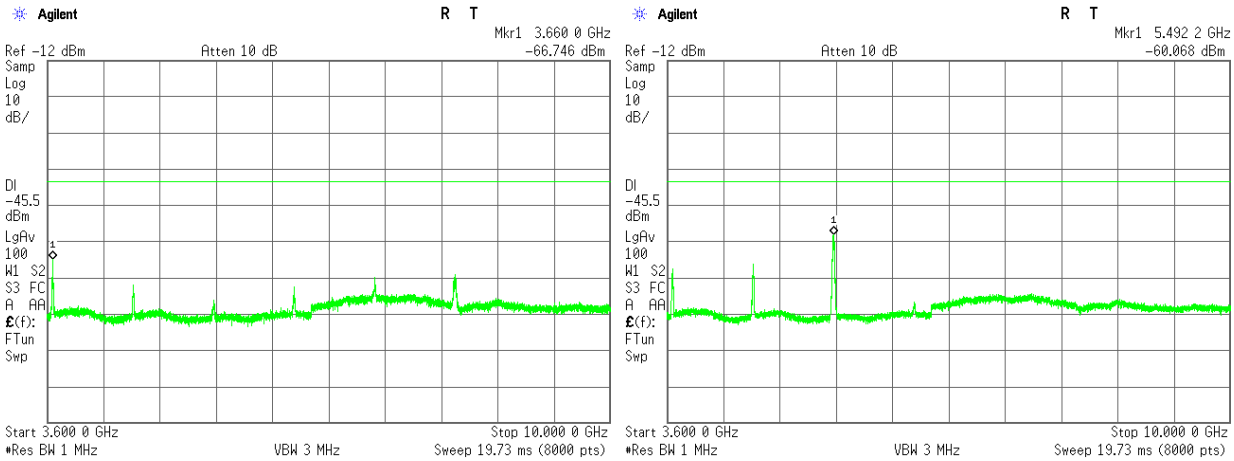
RF1 RF2

Plot 3.5.80 Emissions in restricted frequency bands test results, Conducted measurements, 1 GHz – 3.6 GHz, Fc = 915 MHz, BW = 8.4 MHz, Bit Rate = 8 Mbps



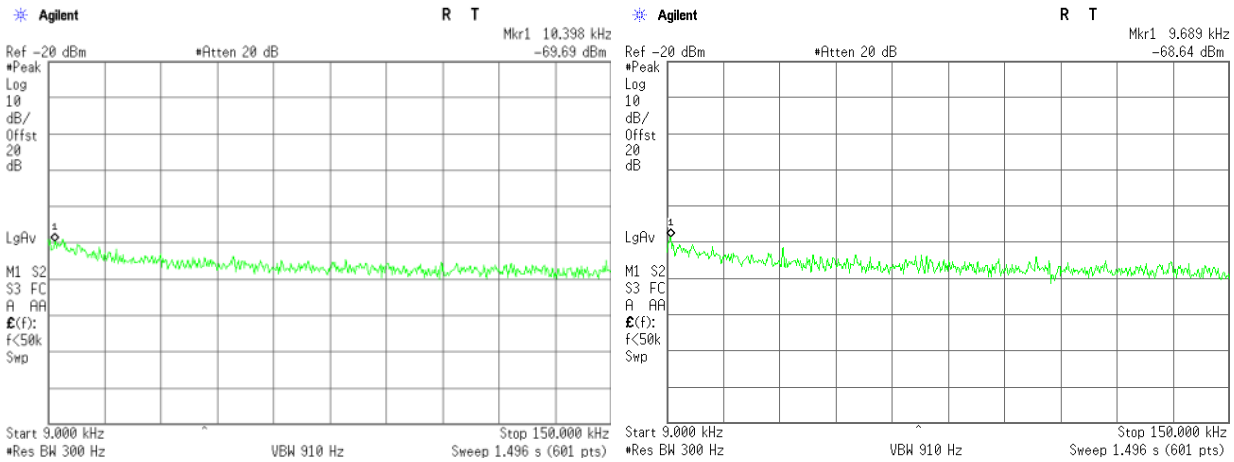
RF1 RF2

Plot 3.5.81 Emissions in restricted frequency bands test results, Conducted measurements, 3.6 GHz –10 GHz, Fc = 915 MHz, BW = 8.4 MHz, Bit Rate = 8 Mbps



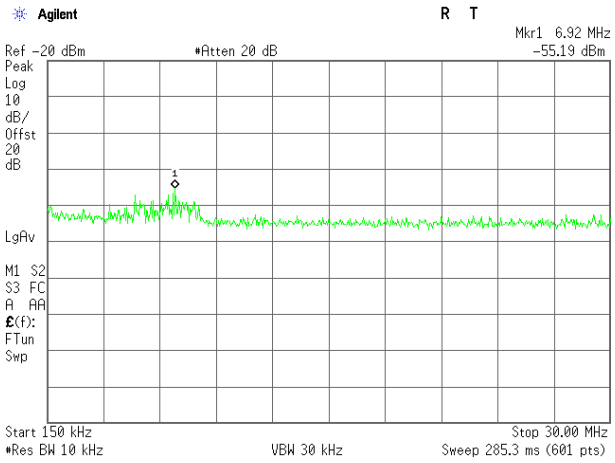
RF1 RF2

Plot 3.5.82 Emissions in restricted frequency bands test results, Conducted measurements, 9 kHz – 150 kHz, Fc = 923 MHz, BW = 8.4 MHz, Bit Rate = 8 Mbps

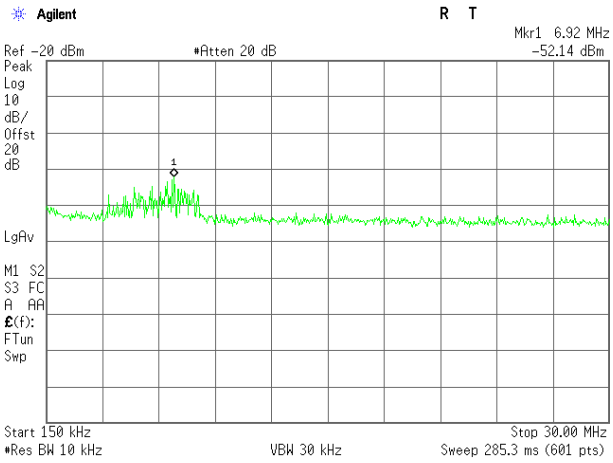


RF1 RF2

Plot 3.5.83 Emissions in restricted frequency bands test results, Conducted measurements, 150 kHz – 30 MHz, Fc = 923 MHz, BW = 8.4 MHz, Bit Rate = 8 Mbps

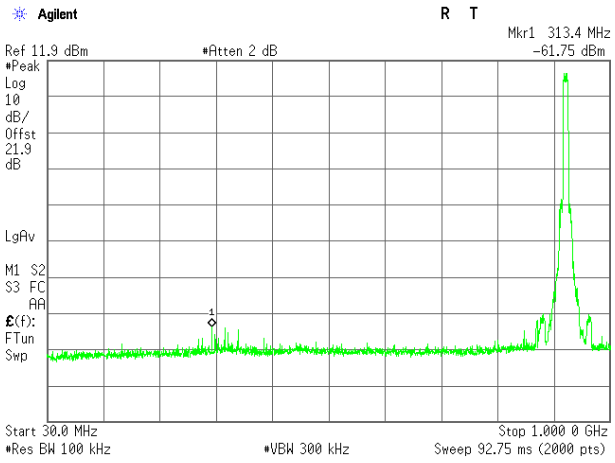


RF1

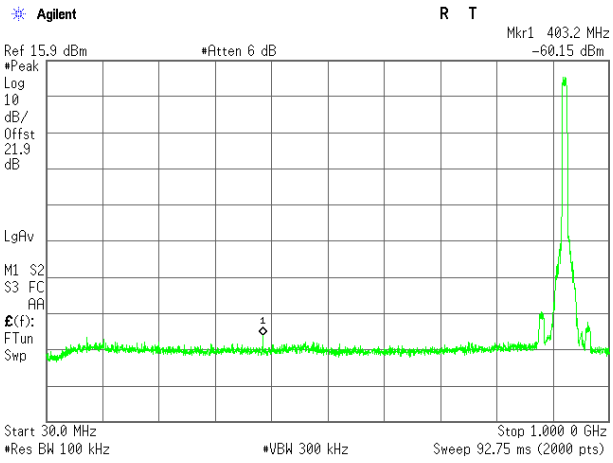


RF2

Plot 3.5.84 Emissions in restricted frequency bands test results, Conducted measurements, 30 MHz – 1000 MHz, Fc = 923 MHz, BW = 8.4 MHz, Bit Rate = 8 Mbps

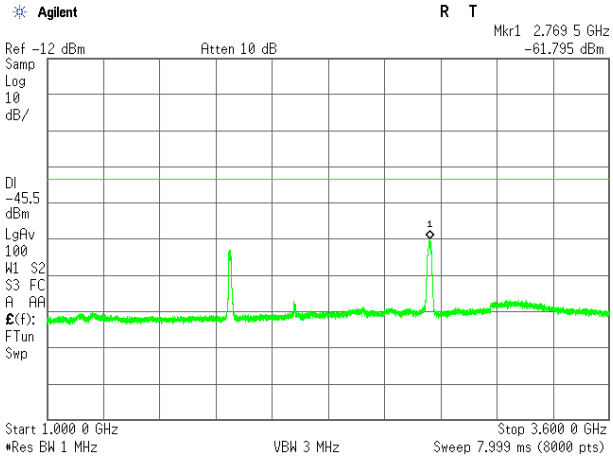


RF1

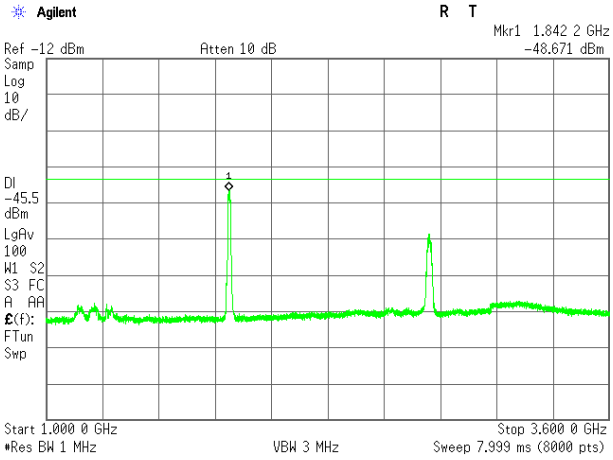


RF2

Plot 3.5.85 Emissions in restricted frequency bands test results, Conducted measurements, 1 GHz – 3.6 GHz, Fc = 923 MHz, BW = 8.4 MHz, Bit Rate = 8 Mbps

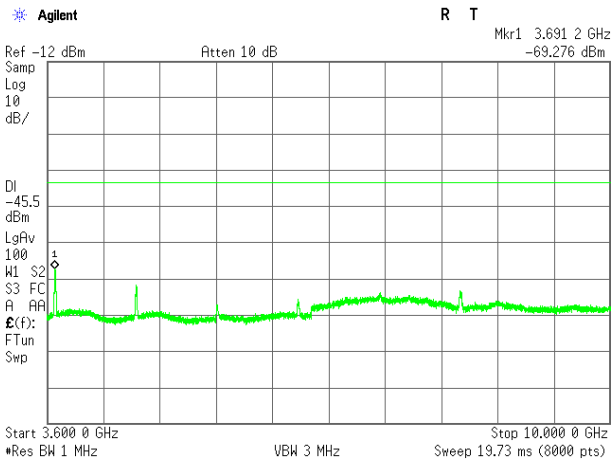


RF1

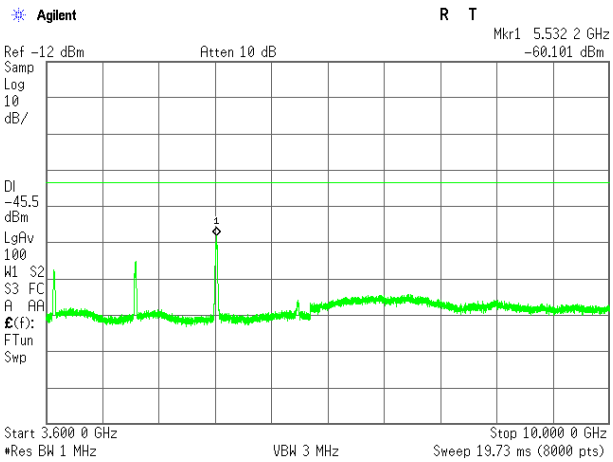


RF2

Plot 3.5.86 Emissions in restricted frequency bands test results, Conducted measurements, 3.6 GHz – 10 GHz, Fc = 923 MHz, BW = 8.4 MHz, Bit Rate = 8 Mbps

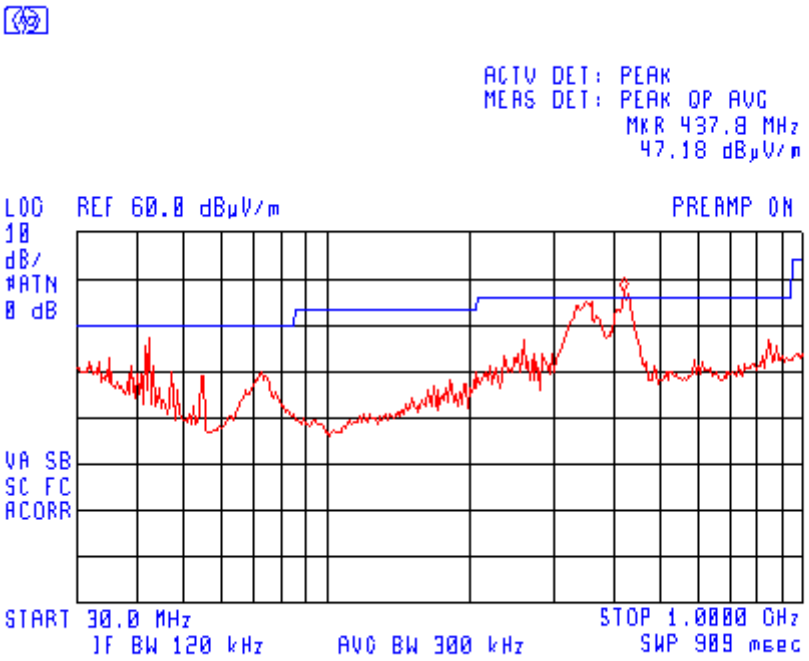


RF1

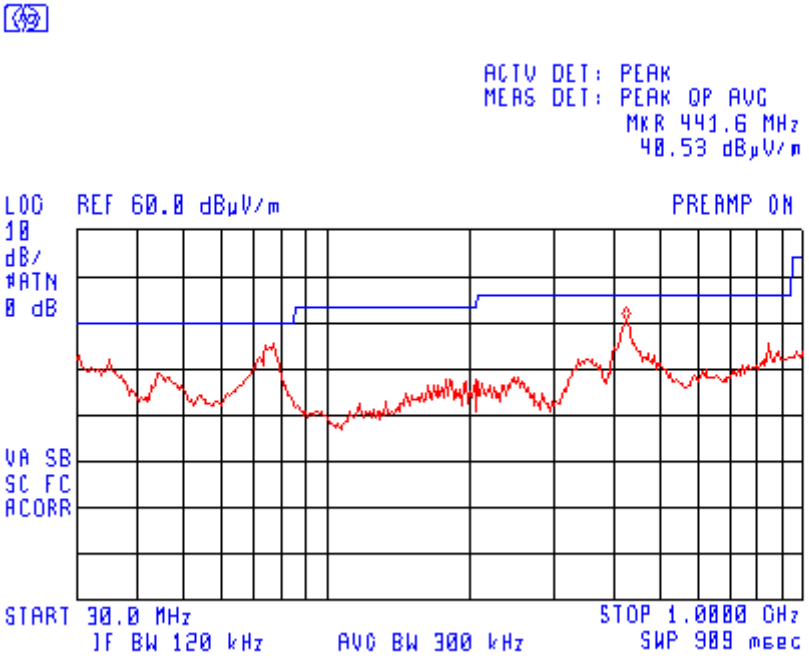


RF2

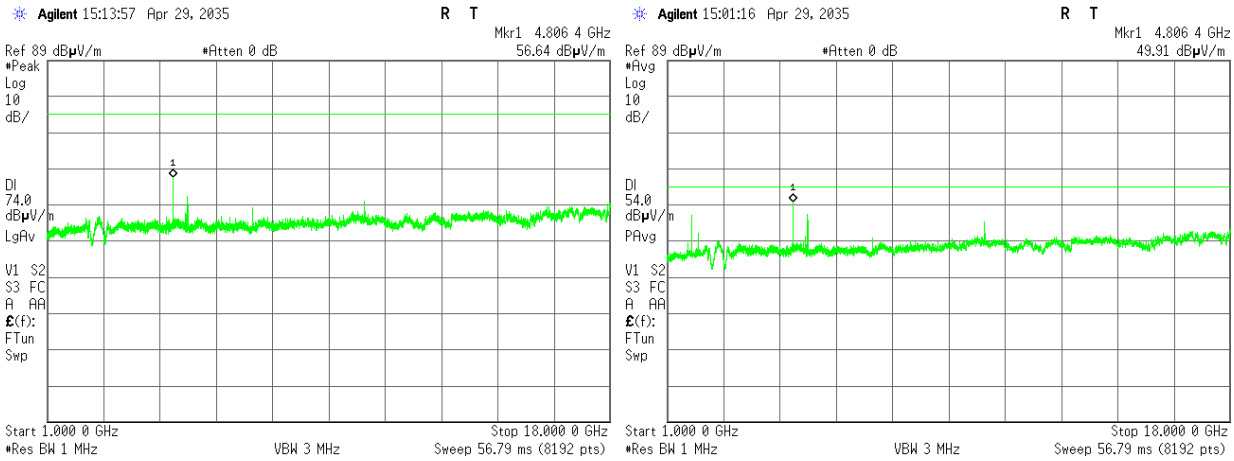
Plot 3.5.87 Emissions in restricted frequency bands test results, 30 MHz – 1 GHz range, Vertical polarization, Fc = 2403 MHz, BW = 4.2 MHz, Bit Rate = 4 Mbps



Plot 3.5.88 Emissions in restricted frequency bands test results, 30 MHz – 1 GHz range, Horizontal polarization, Fc = 2403 MHz, BW = 4.2 MHz, Bit Rate = 4 Mbps

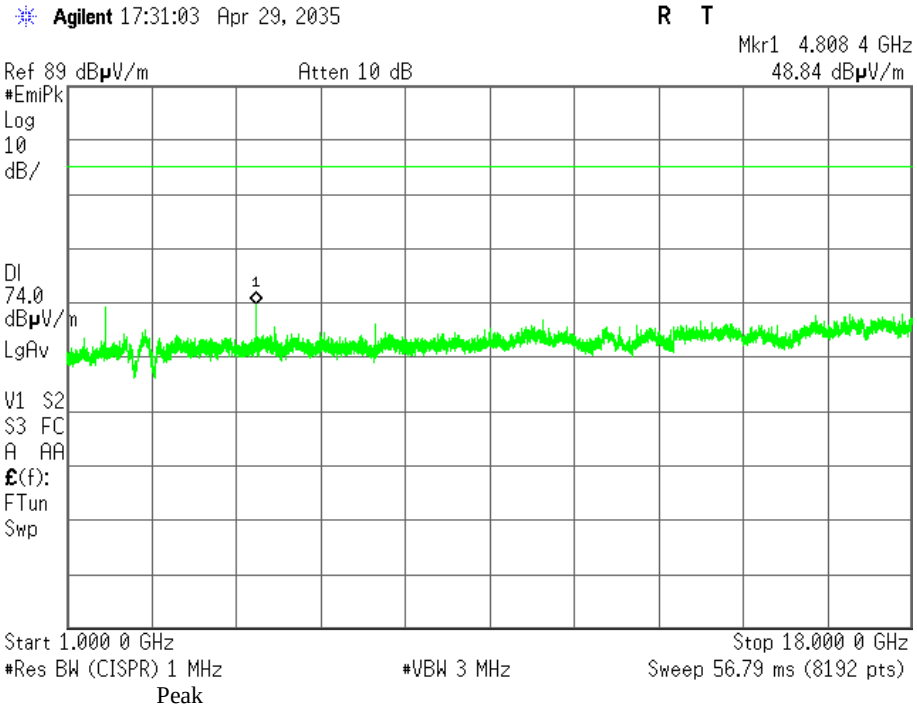


Plot 3.5.89 Emissions in restricted frequency bands test results, 1 – 10 GHz range, Vertical, Fc = 2403 MHz, BW = 4.2 MHz, Bit Rate = 4 Mbps(with notch filter)



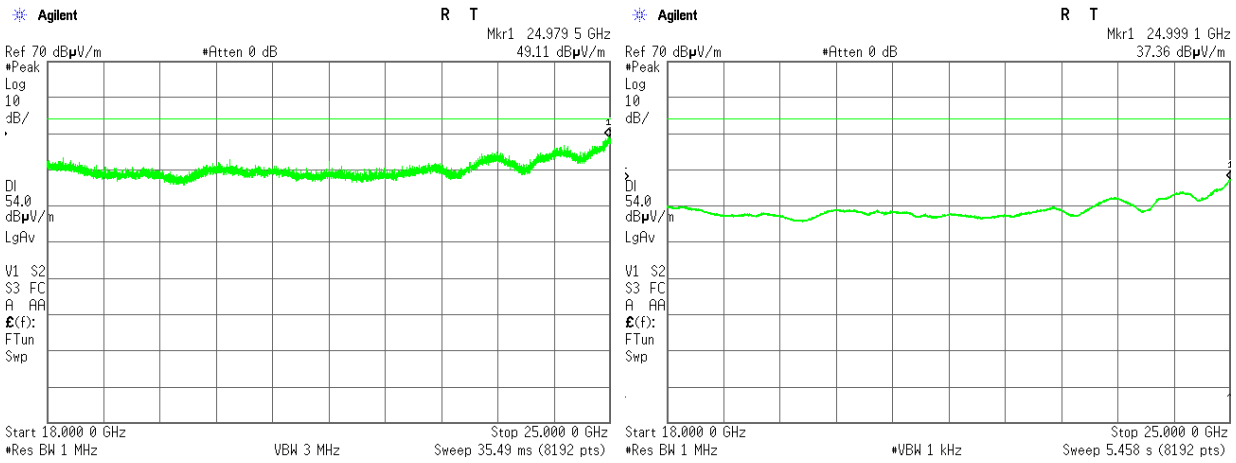
Peak Average

Plot 3.5.90 Emissions in restricted frequency bands test results, 1 – 10 GHz range, Horizontal, Fc = 2403 MHz, BW = 4.2 MHz, Bit Rate = 4 Mbps(with notch filter)-



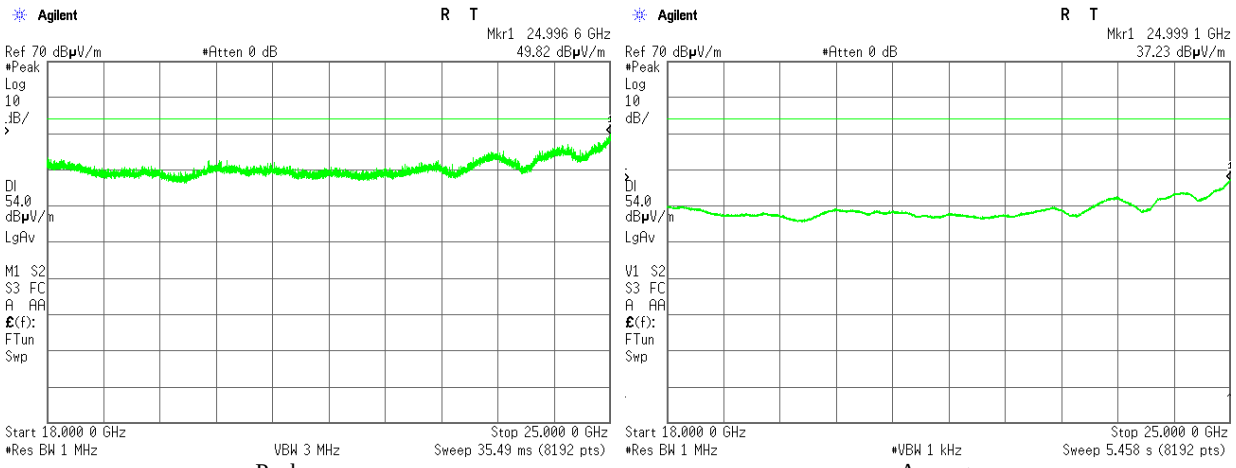
Peak

Plot 3.5.91 Emissions in restricted frequency bands test results, 18 – 25 GHz range, Vertical, Fc = 2403 MHz, BW = 4.2 MHz, Bit Rate = 4 Mbps(with notch filter)



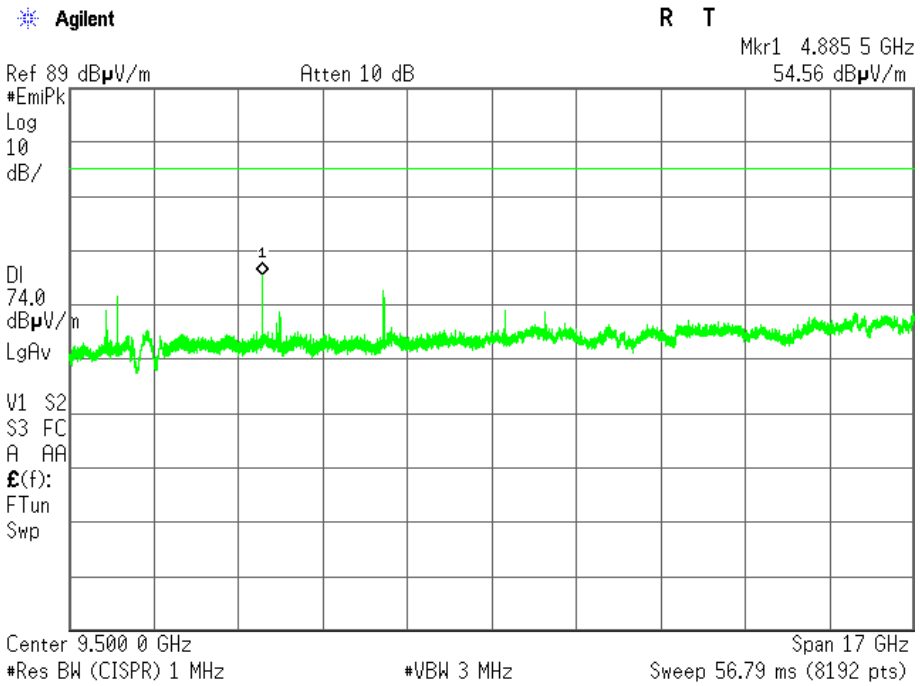
Peak Average

Plot 3.5.92 Emissions in restricted frequency bands test results, 18 – 25 GHz range, Horizontal, Fc = 2403 MHz, BW = 4.2 MHz, Bit Rate = 4 Mbps(with notch filter)



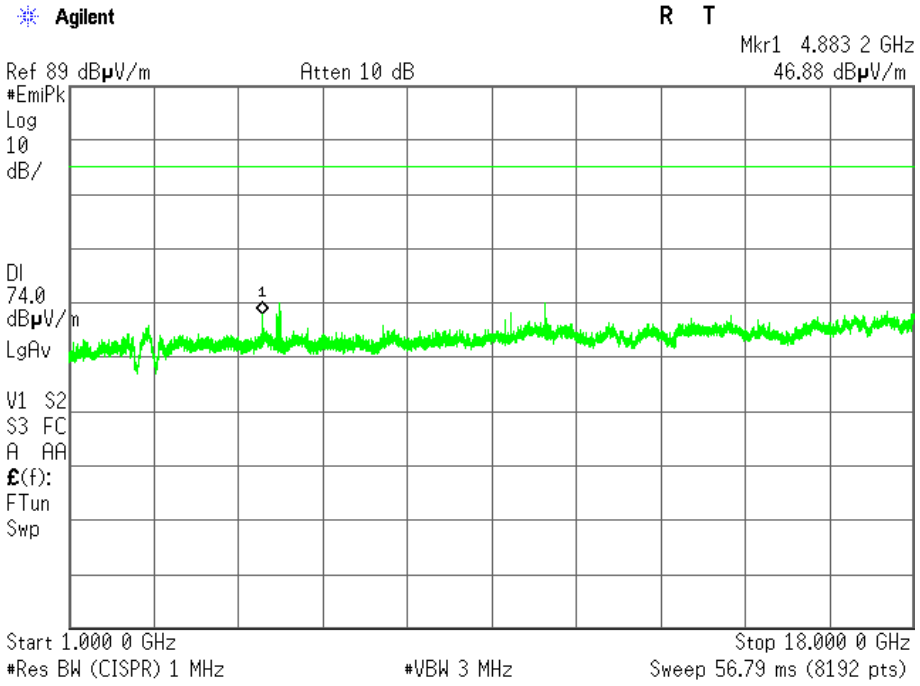
Peak Average

Plot 3.5.93 Emissions in restricted frequency bands test results, 1 – 18 GHz range, Vertical, Fc = 2442 MHz, BW = 4.2 MHz, Bit Rate = 4 Mbps(with notch filter)



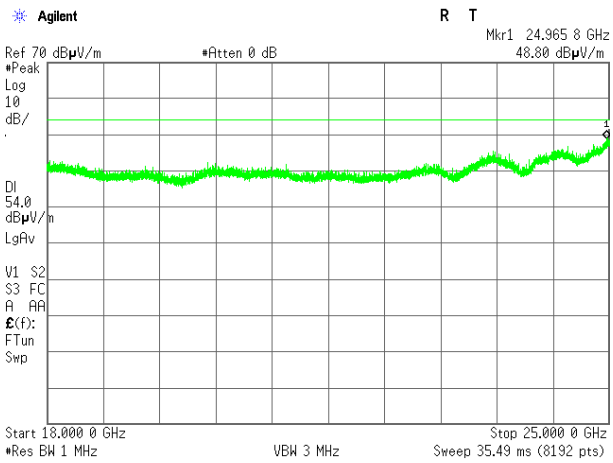
Peak

Plot 3.5.94 Emissions in restricted frequency bands test results, 1 – 18 GHz range, Horizontal, Fc = 2442 MHz, BW = 4.2 MHz, Bit Rate = 4 Mbps(with notch filter)

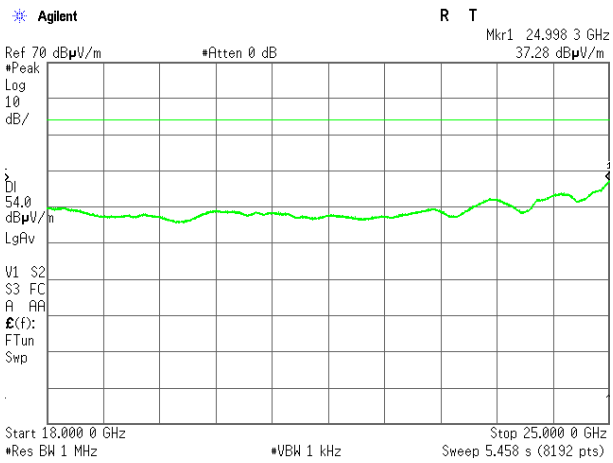


Peak

Plot 3.5.95 Emissions in restricted frequency bands test results, 18 – 25 GHz range, Vertical, Fc = 2442 MHz, BW = 4.2 MHz, Bit Rate = 4 Mbps(with notch filter)

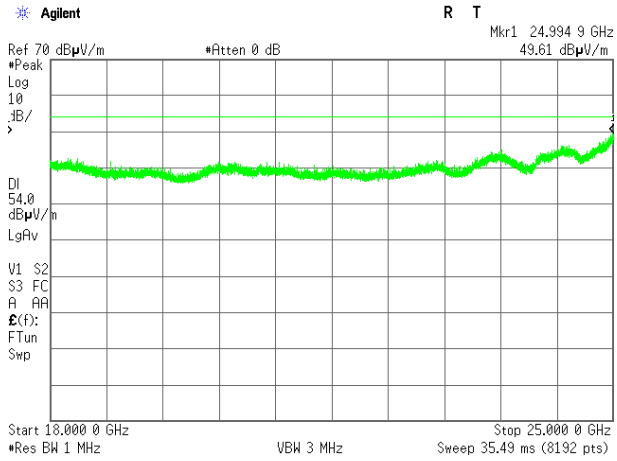


Peak

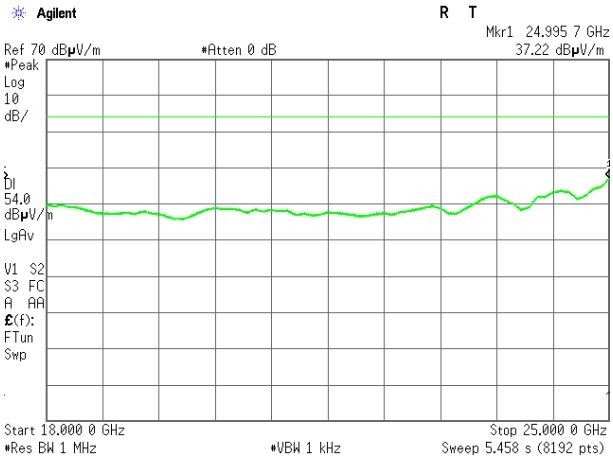


Average

Plot 3.5.96 Emissions in restricted frequency bands test results, 18 – 25 GHz range, Horizontal, Fc = 2442 MHz, BW = 4.2 MHz, Bit Rate = 4 Mbps(with notch filter)

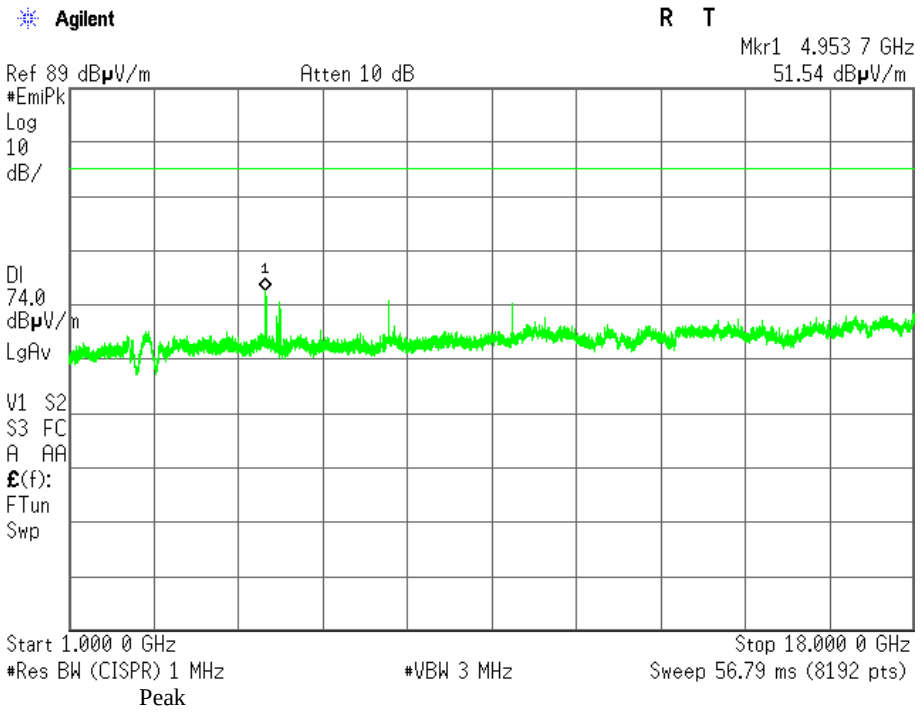


Peak

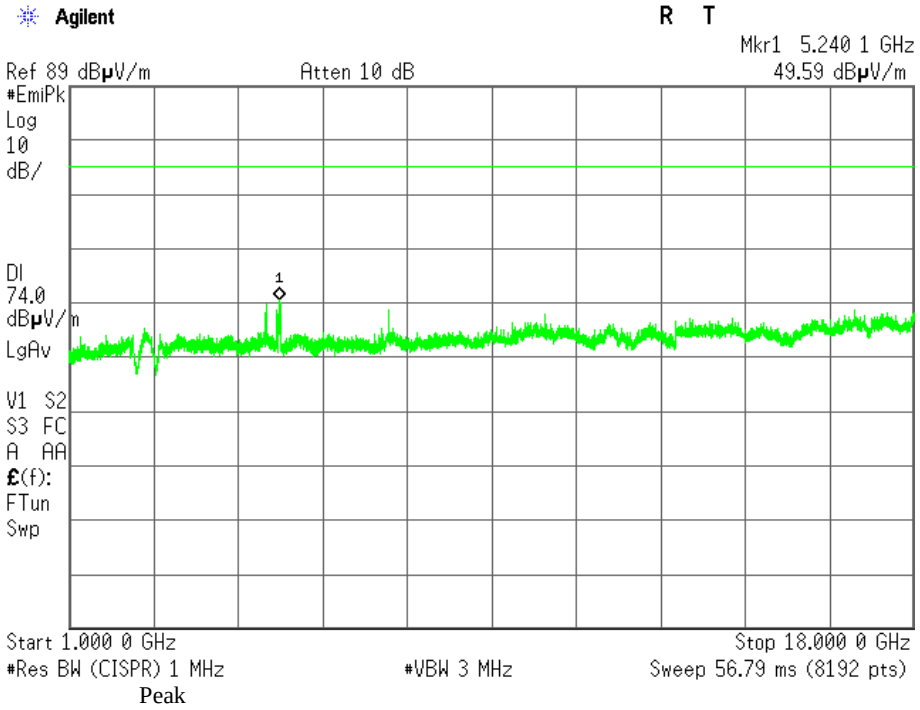


Average

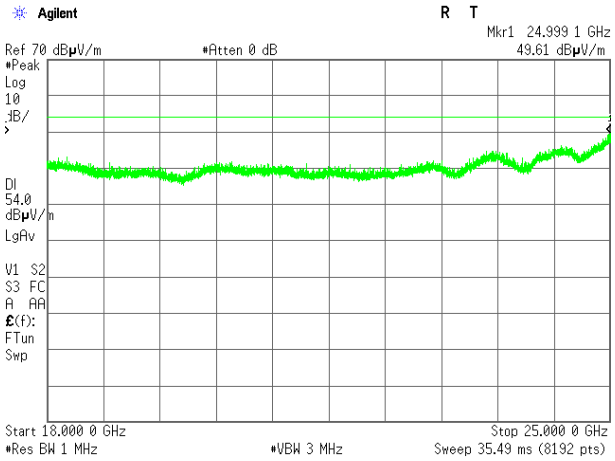
Plot 3.5.97 Emissions in restricted frequency bands test results, 1 – 18 GHz range, Vertical, Fc = 2478 MHz, BW = 4.2 MHz, Bit Rate = 4 Mbps(with notch filter)



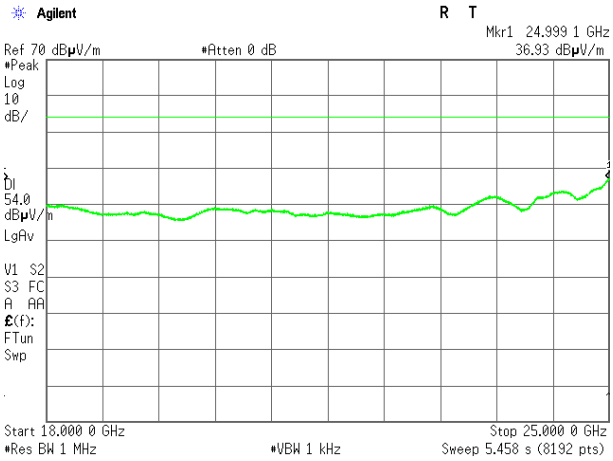
Plot 3.5.98 Emissions in restricted frequency bands test results, 1 – 18 GHz range, Horizontal, Fc = 2478 MHz, BW = 4.2 MHz, Bit Rate = 4 Mbps(with notch filter)



Plot 3.5.99 Emissions in restricted frequency bands test results, 18 – 25 GHz range, Vertical, Fc = 2478 MHz, BW = 4.2 MHz, Bit Rate = 4 Mbps(with notch filter)

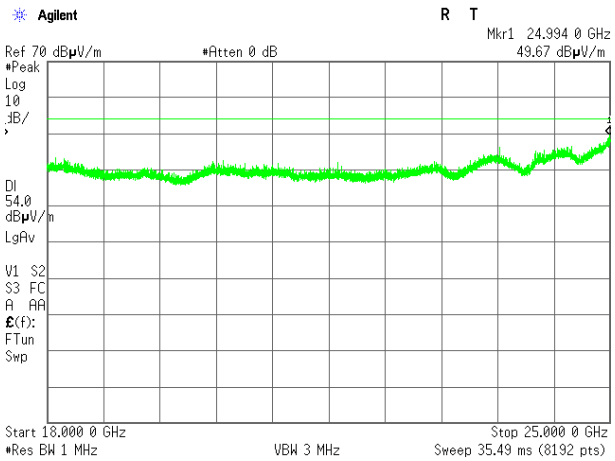


Peak

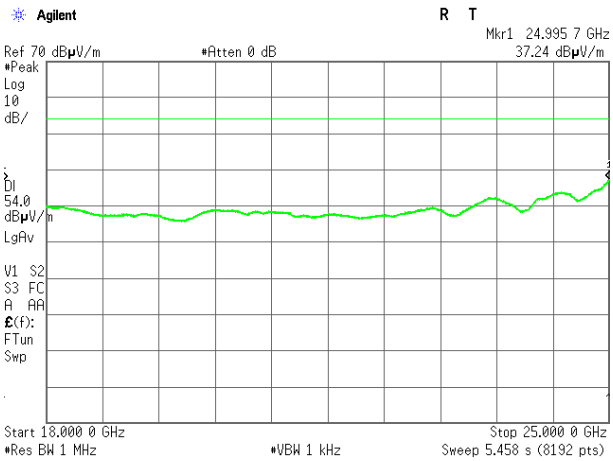


Average

Plot 3.5.100 Emissions in restricted frequency bands test results, 18 – 25 GHz range, Horizontal, Fc = 2478 MHz, BW = 4.2 MHz, Bit Rate = 4 Mbps(with notch filter)

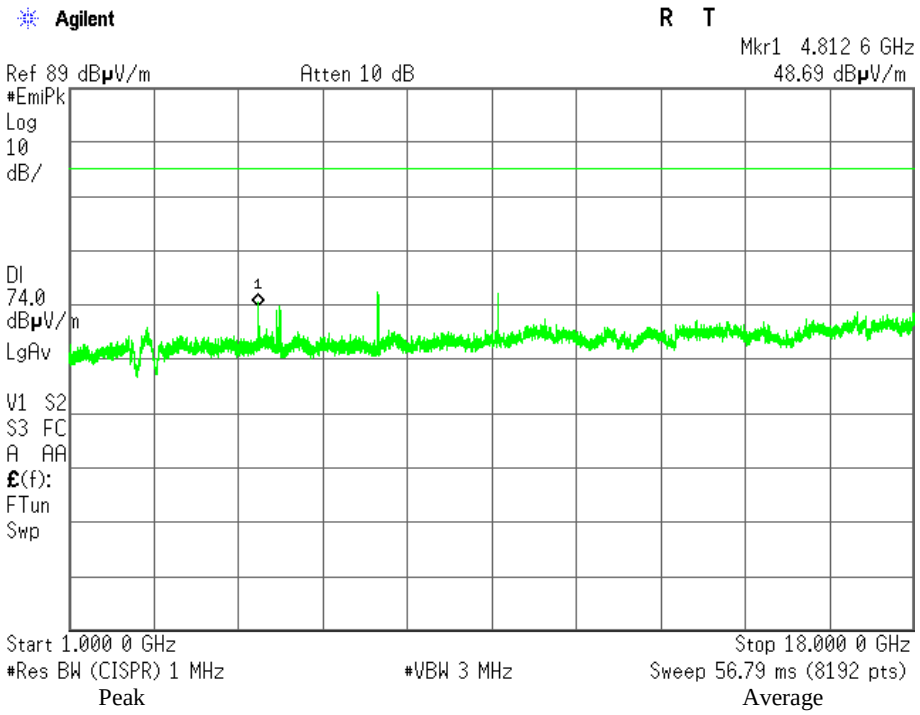


Peak

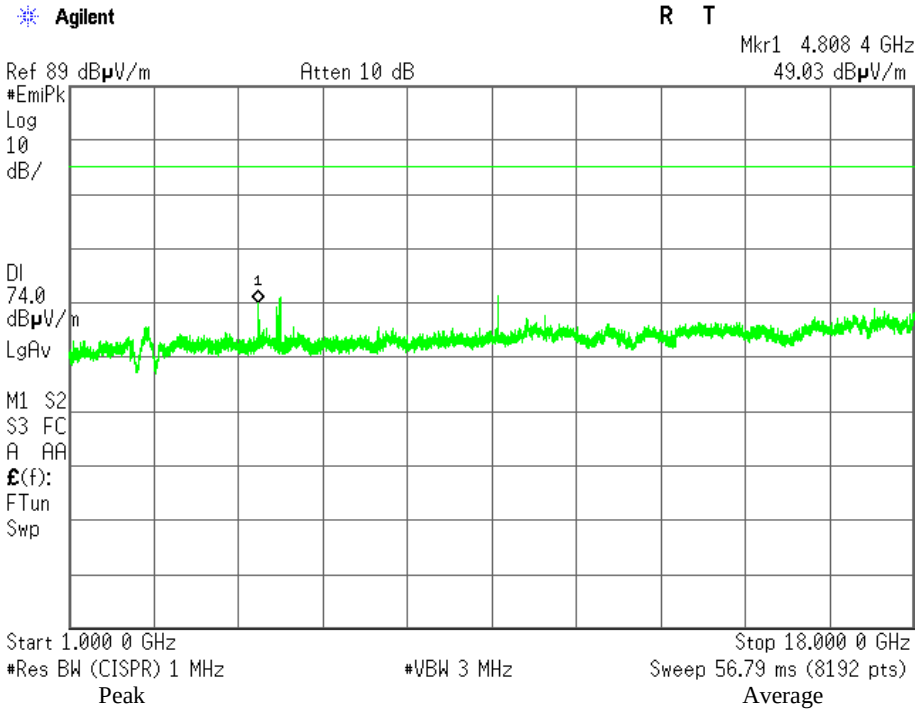


Average

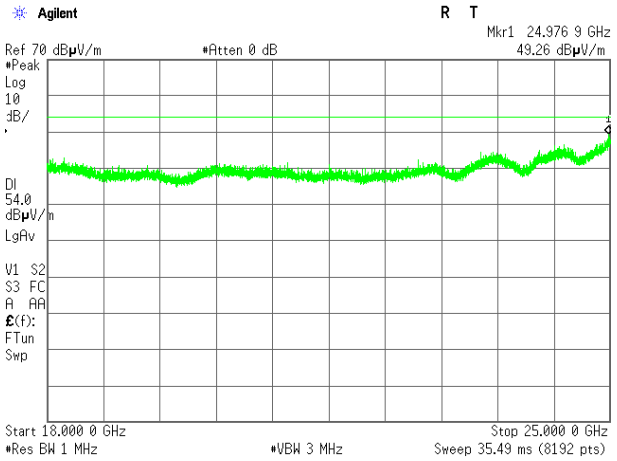
Plot 3.5.101 Emissions in restricted frequency bands test results, 1 – 18 GHz range, Vertical, Fc = 2405 MHz, BW = 8.4 MHz, Bit Rate = 8 Mbps(with notch filter)



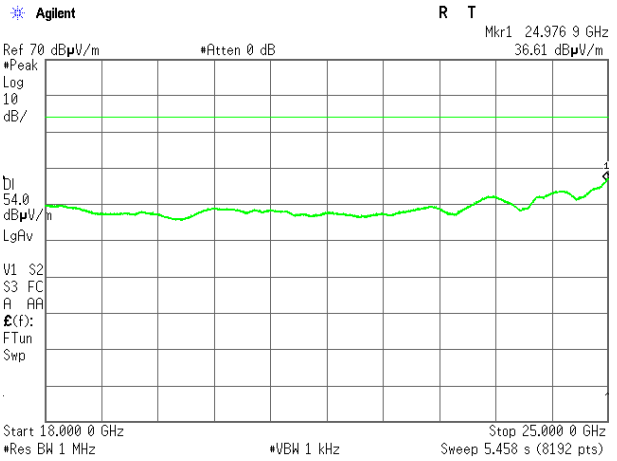
Plot 3.5.102 Emissions in restricted frequency bands test results, 1 – 18 GHz range, Horizontal, Fc = 2405 MHz, BW = 8.4 MHz, Bit Rate = 8 Mbps(with notch filter)



Plot 3.5.103 Emissions in restricted frequency bands test results, 18 – 25 GHz range, Vertical, Fc = 2405 MHz, BW = 8.4 MHz, Bit Rate = 8 Mbps(with notch filter)

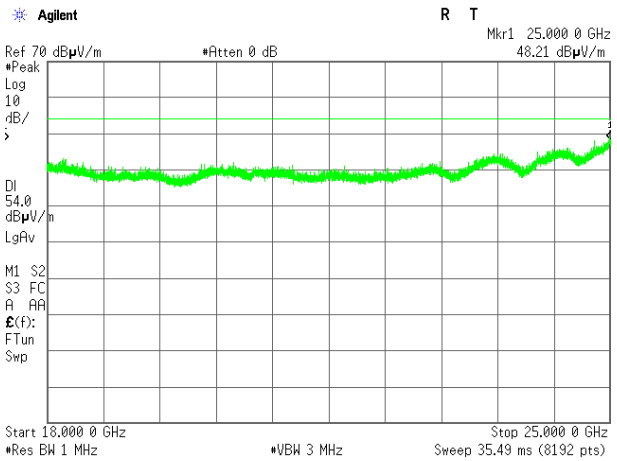


Peak

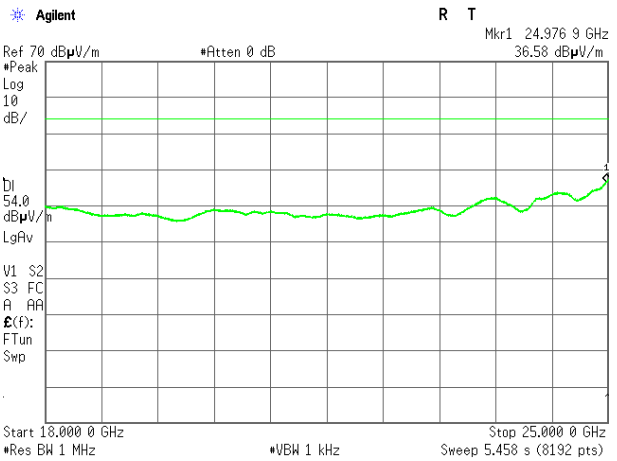


Average

Plot 3.5.104 Emissions in restricted frequency bands test results, 18 – 25 GHz range, Horizontal, Fc = 2405 MHz, BW = 8.4 MHz, Bit Rate = 8 Mbps(with notch filter)

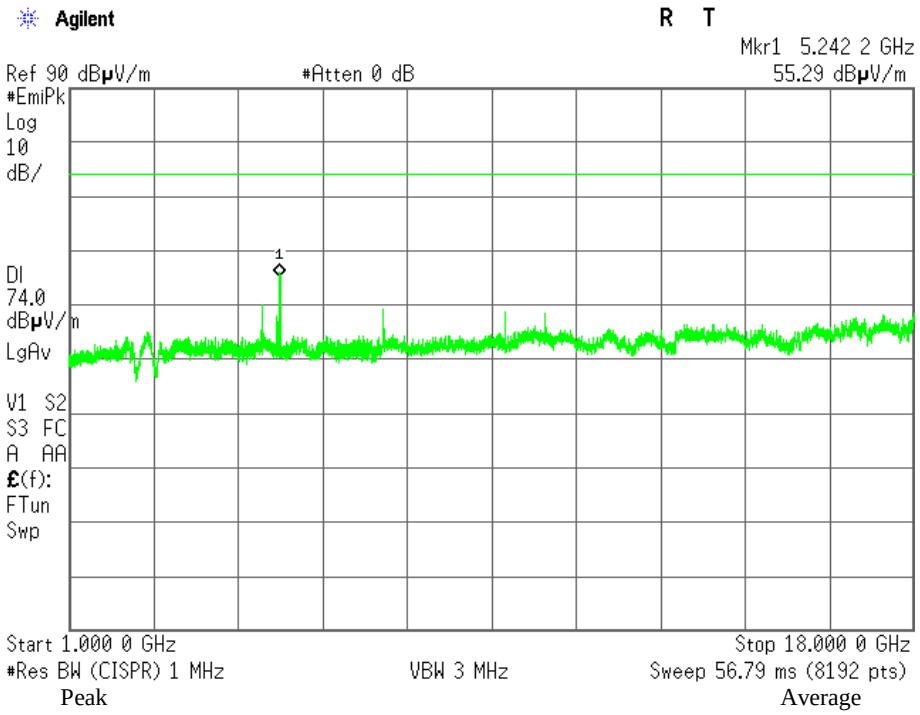


Peak

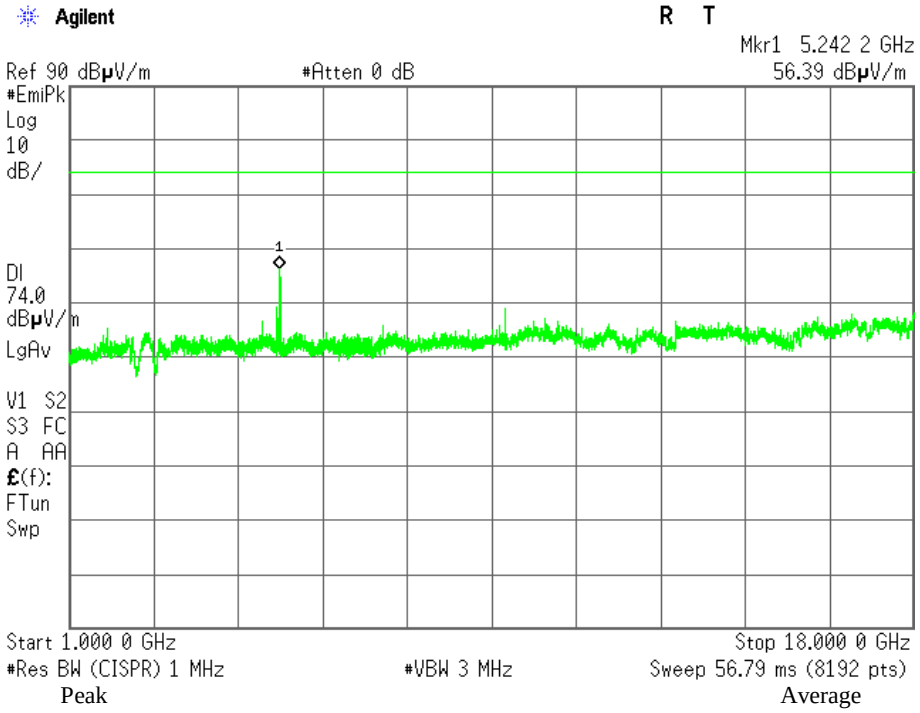


Average

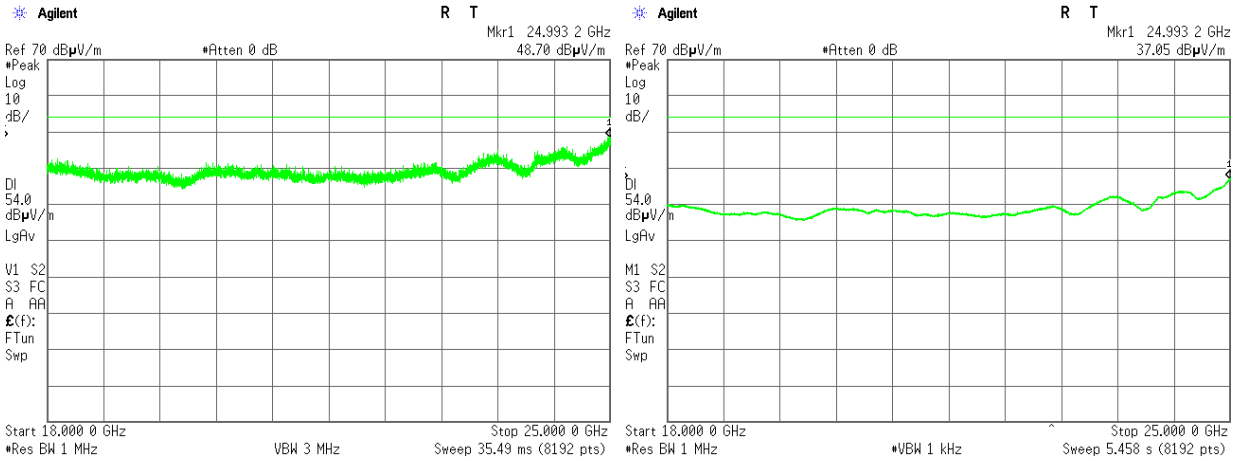
Plot 3.5.105 Emissions in restricted frequency bands test results, 1 – 18 GHz range, Vertical, Fc = 2440 MHz, BW = 8.4 MHz, Bit Rate = 8 Mbps(with notch filter)



Plot 3.5.106 Emissions in restricted frequency bands test results, 1 – 18 GHz range, Horizontal, Fc = 2440 MHz, BW = 8.4 MHz, Bit Rate = 8 Mbps(with notch filter)

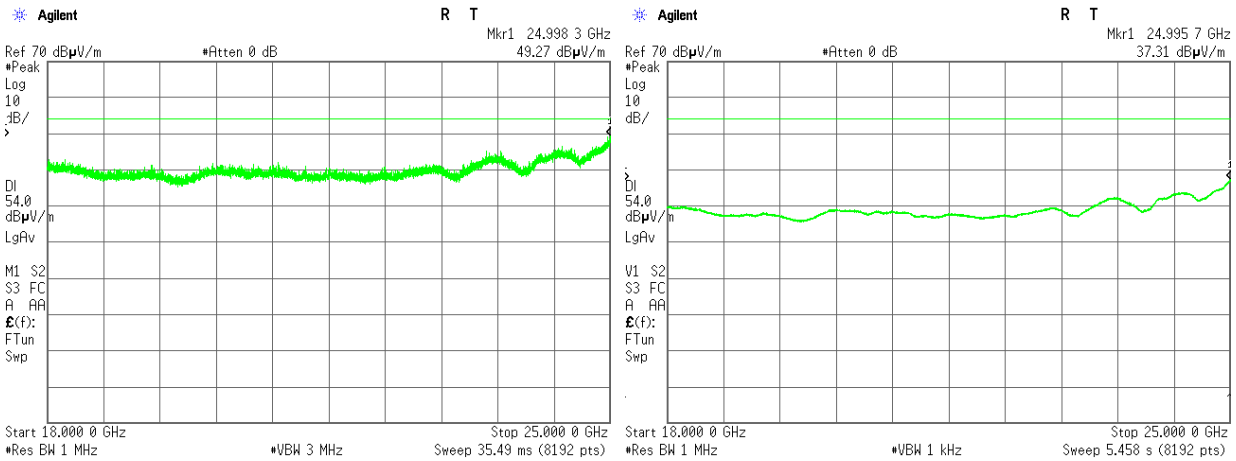


Plot 3.5.107 Emissions in restricted frequency bands test results, 18 – 25 GHz range, Vertical, Fc = 2440 MHz, BW = 8.4 MHz, Bit Rate = 8 Mbps(with notch filter)



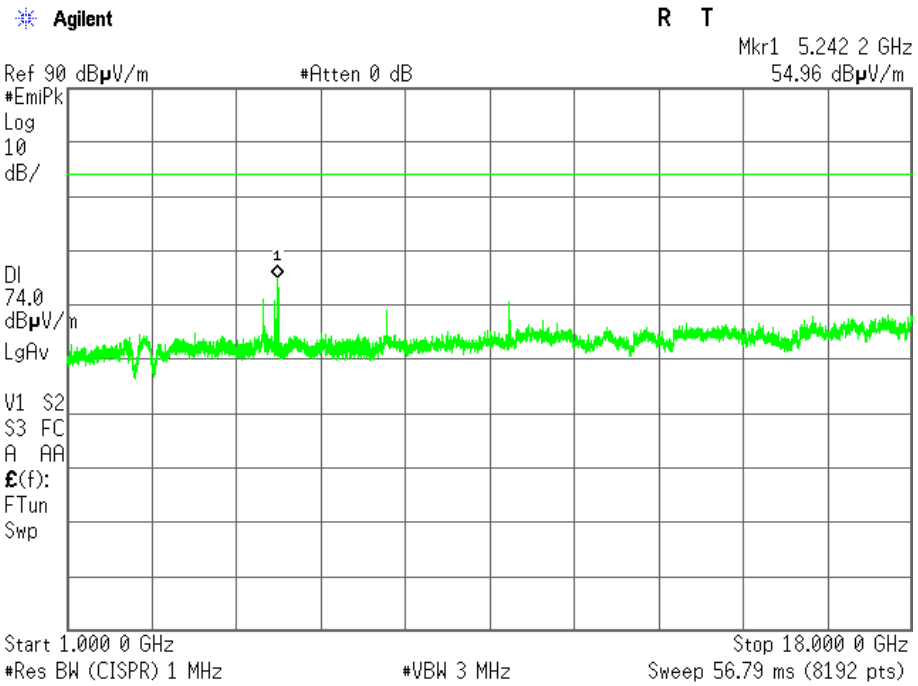
Peak Average

Plot 3.5.108 Emissions in restricted frequency bands test results, 18 – 25 GHz range, Horizontal, Fc = 2440 MHz, BW = 8.4 MHz, Bit Rate = 8 Mbps(with notch filter)



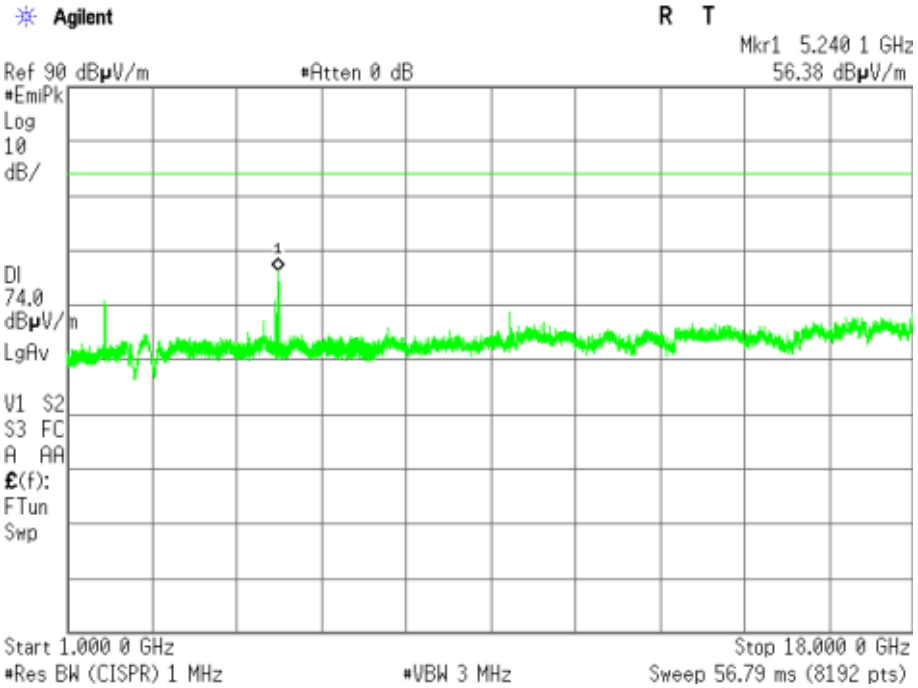
Peak Average

Plot 3.5.109 Emissions in restricted frequency bands test results, 1 – 18 GHz range, Vertical, Fc = 2475 MHz, BW = 8.4 MHz, Bit Rate = 8 Mbps(with notch filter)



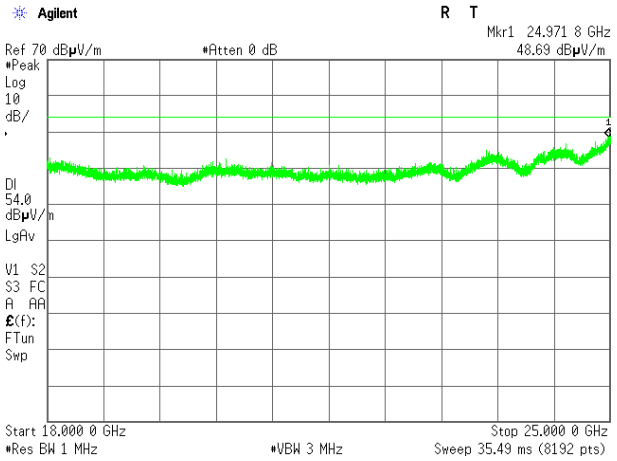
Peak Average

Plot 3.5.110 Emissions in restricted frequency bands test results, 1 – 18 GHz range, Horizontal, Fc = 2475 MHz, BW = 8.4 MHz, Bit Rate = 8 Mbps(with notch filter)

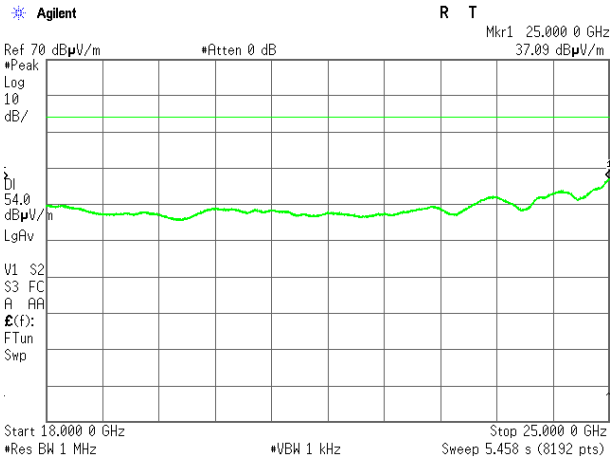


Peak Average

Plot 3.5.111 Emissions in restricted frequency bands test results, 18 – 25 GHz range, Vertical, Fc = 2475 MHz, BW = 8.4 MHz, Bit Rate = 8 Mbps(with notch filter)

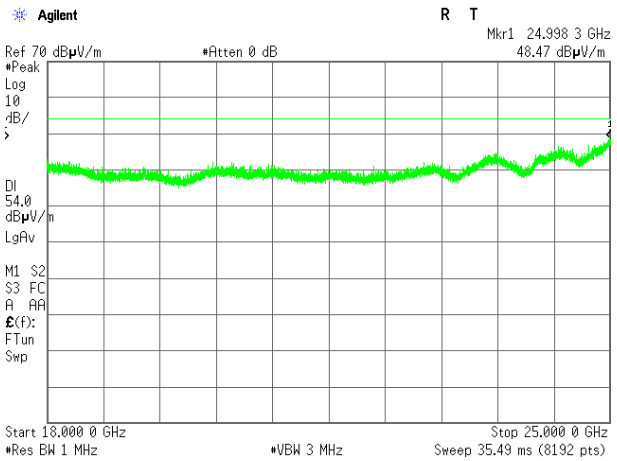


Peak

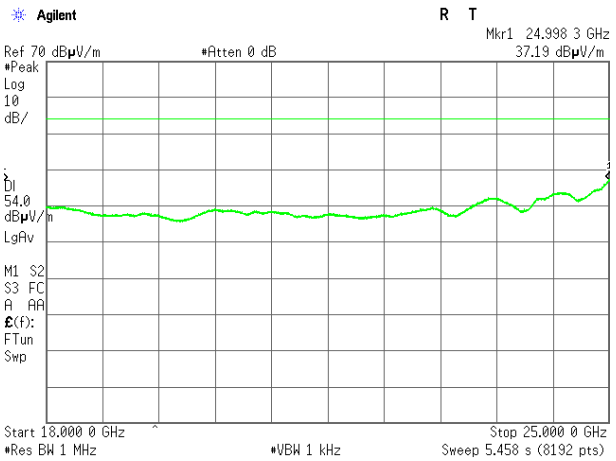


Average

Plot 3.5.112 Emissions in restricted frequency bands test results, 18 – 25 GHz range, Horizontal, Fc = 2475 MHz, BW = 8.4 MHz, Bit Rate = 8 Mbps(with notch filter)

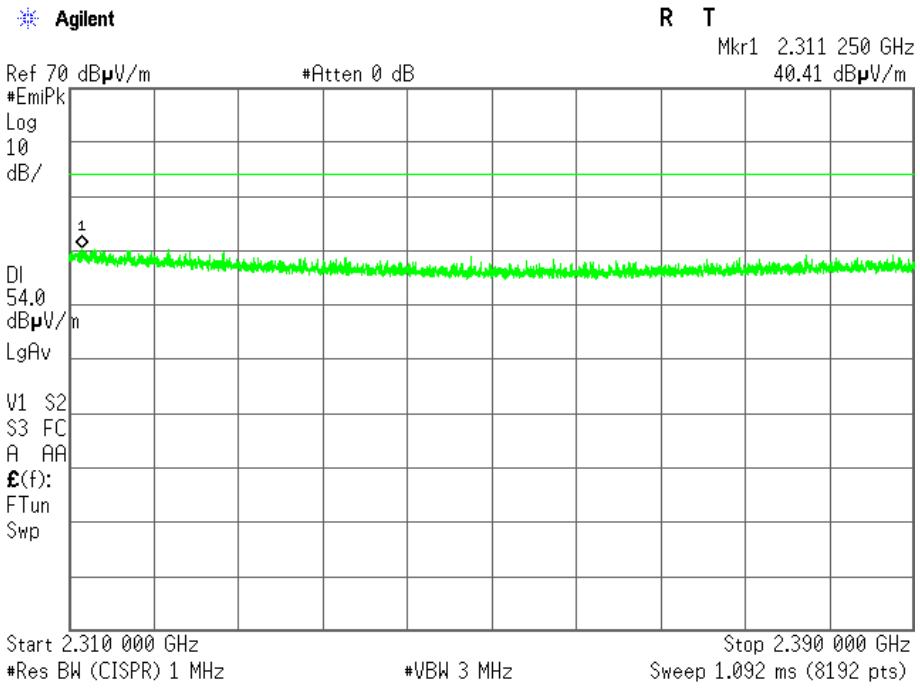


Peak

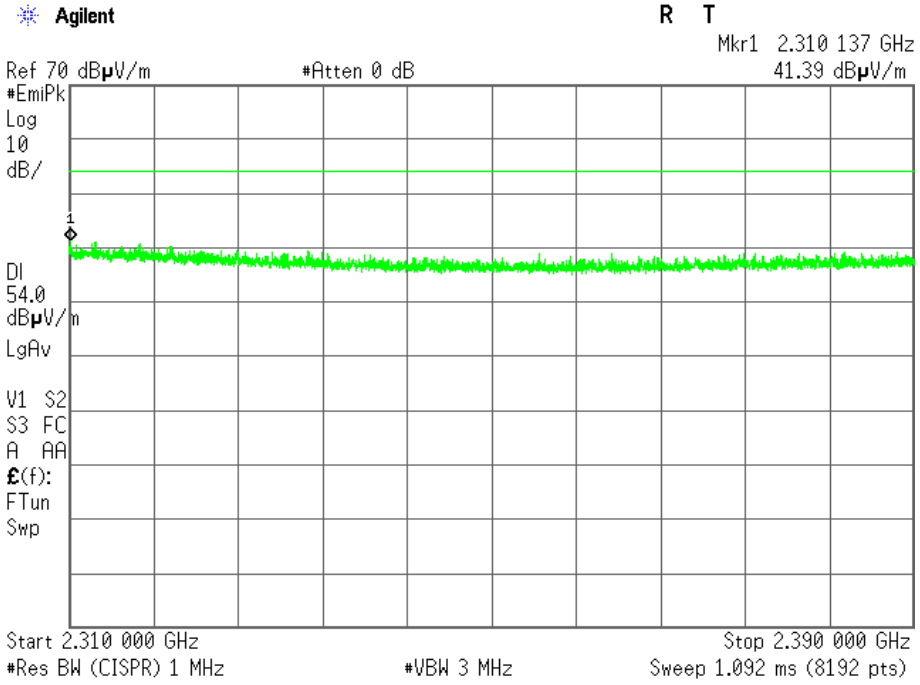


Average

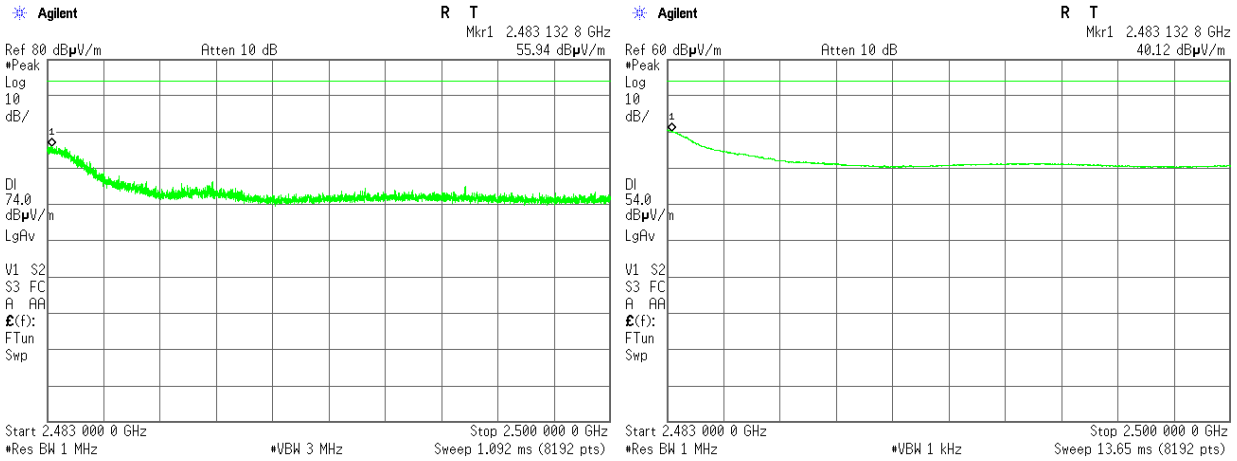
Plot 3.5.113 Emissions in restricted frequency bands test results, 2310 – 2390 MHz band, Vertical polarization, Fc = 2403 MHz, BW = 4.2 MHz, Bit Rate = 4 Mbps



Plot 3.5.114 Emissions in restricted frequency bands test results, 2310 – 2390 MHz band, Horizontal polarization, Fc = 2403 MHz, BW = 4.2 MHz, Bit Rate = 4 Mbps

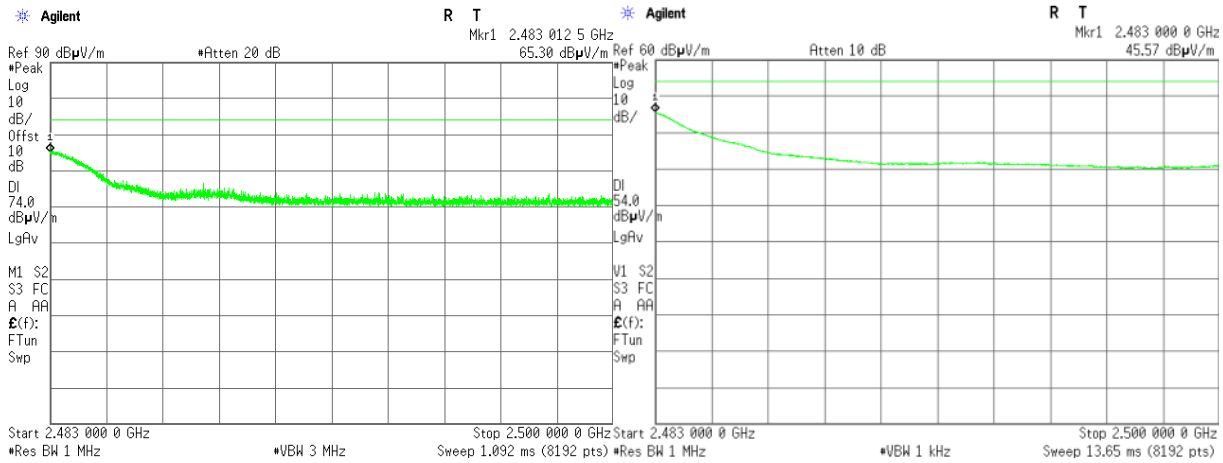


Plot 3.5.115 Emissions in restricted frequency bands test results, 2483.5 – 2500 MHz band, Vertical polarization, Fc = 2478 MHz, BW = 4.2 MHz, Bit Rate = 4 Mbps



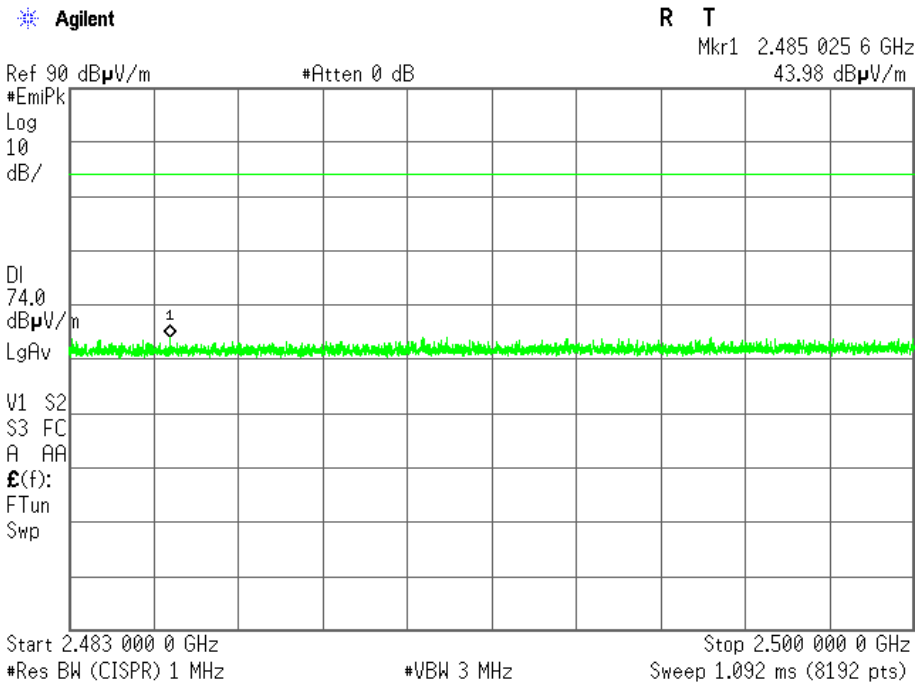
Peak Average

Plot 3.5.116 Emissions in restricted frequency bands test results, 2483.5 – 2500 MHz band, Horizontal polarization, Fc = 2478 MHz, BW = 4.2 MHz, Bit Rate = 4 Mbps

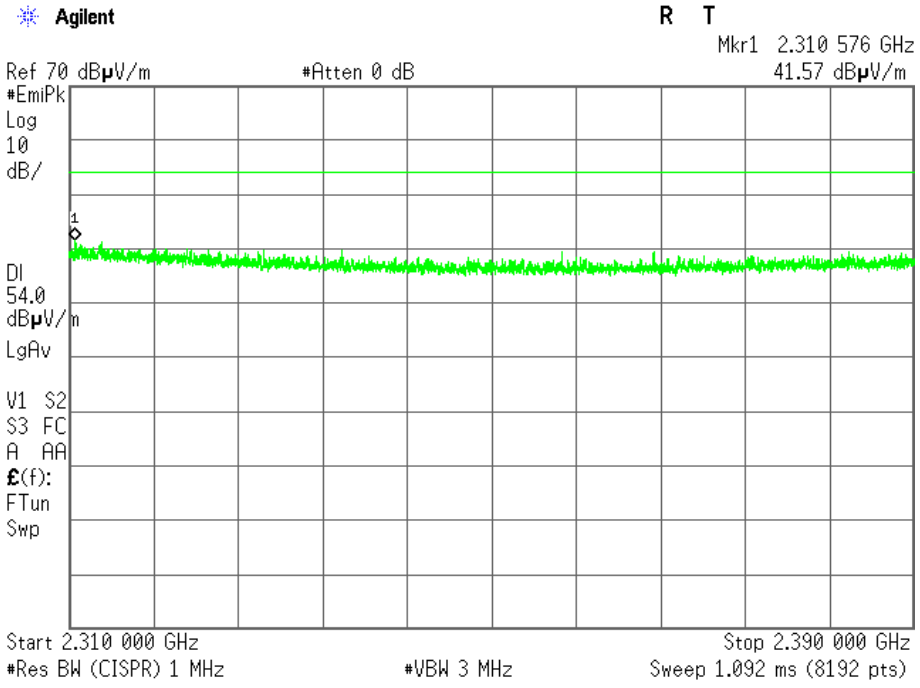


Peak Average

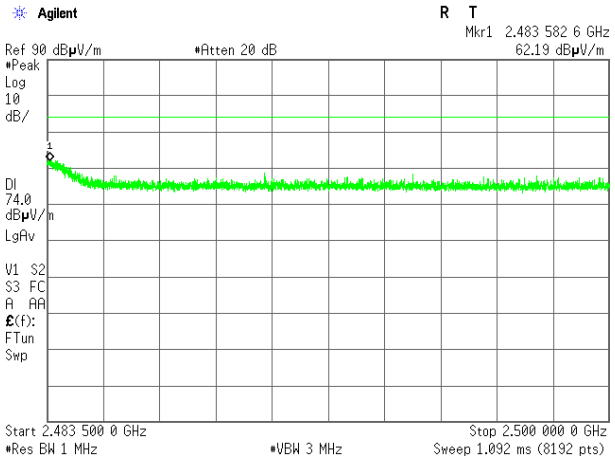
Plot 3.5.117 Emissions in restricted frequency bands test results, 2310 – 2390 MHz band, Vertical polarization, Fc = 2405 MHz, BW = 8.4 MHz, Bit Rate = 8 Mbps



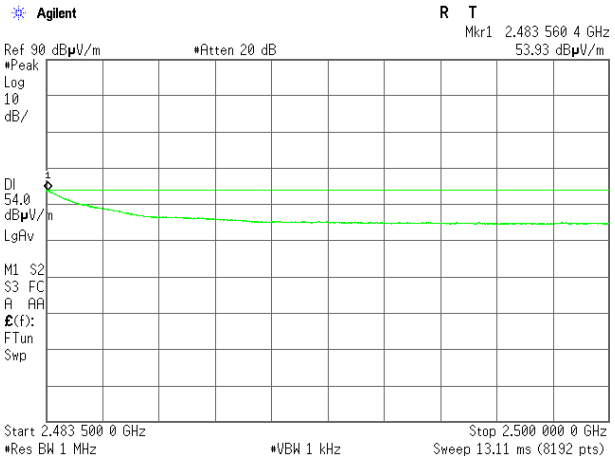
Plot 3.5.118 Emissions in restricted frequency bands test results, 2310 – 2390 MHz band, Horizontal polarization, Fc = 2405 MHz, BW = 8.4 MHz, Bit Rate = 8 Mbps



Plot 3.5.119 Emissions in restricted frequency bands test results, 2483.5 – 2500 MHz band, Vertical polarization, Fc = 2475 MHz, BW = 8.4 MHz, Bit Rate = 8 Mbps

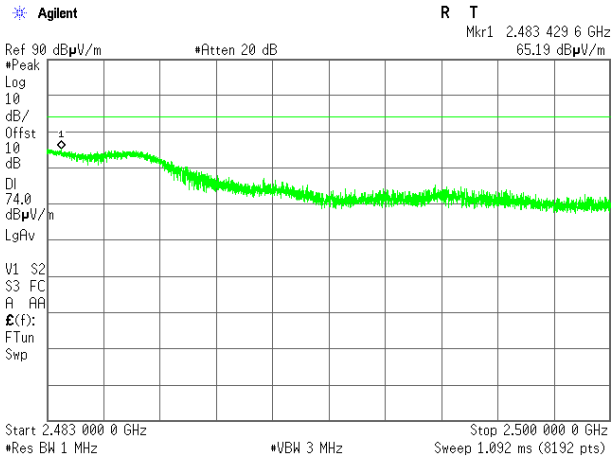


Peak

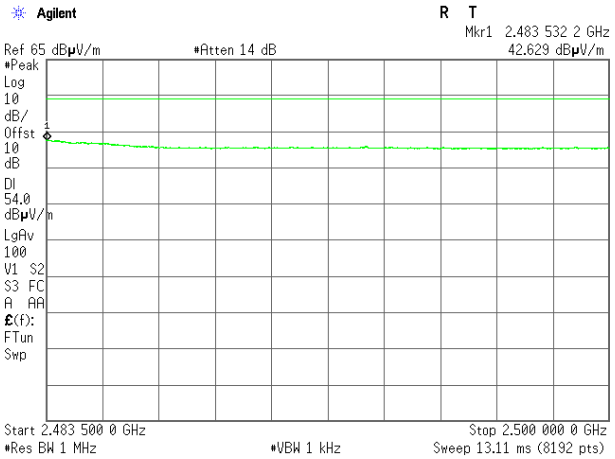


Average

Plot 3.5.120 Emissions in restricted frequency bands test results, 2483.5 – 2500 MHz band, Horizontal polarization, Fc = 2475 MHz, BW = 8.4 MHz, Bit Rate = 8 Mbps

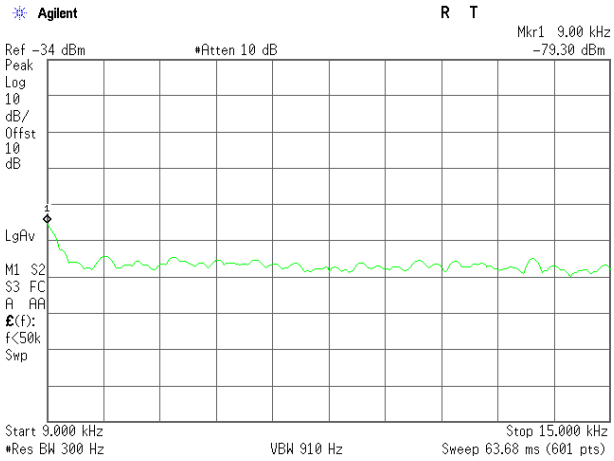


Peak

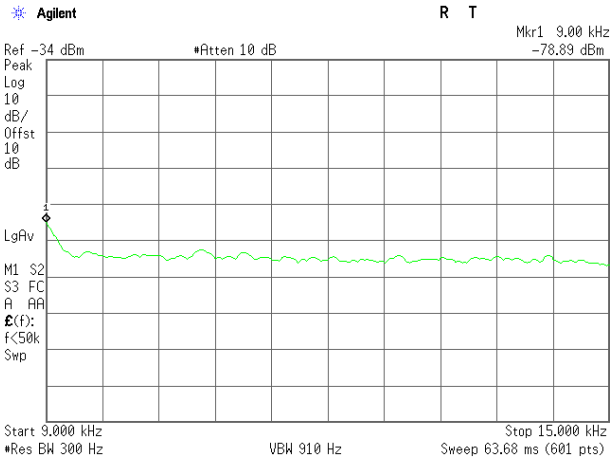


Average

Plot 3.5.121 Emissions in restricted frequency bands test results, Conducted measurements, 9 kHz – 150 kHz, Fc = 2403 MHz, BW = 4.2 MHz, Bit Rate =3.2 Mbps

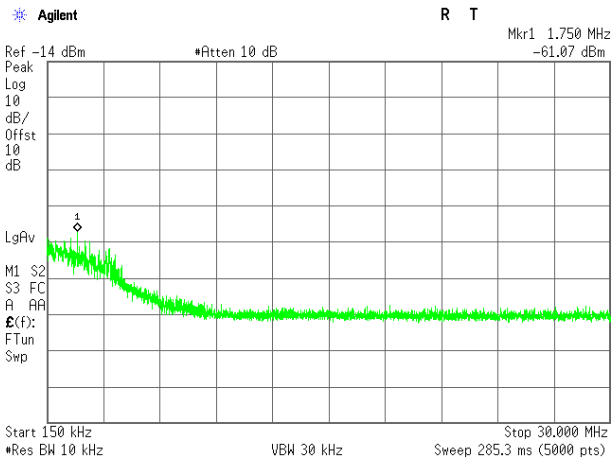


RF1

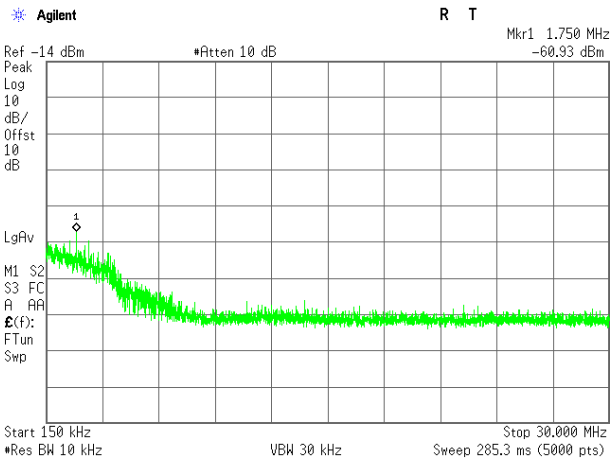


RF2

Plot 3.5.122 Emissions in restricted frequency bands test results, Conducted measurements, 150 kHz – 30 MHz, Fc = 2403 MHz, BW = 4.2 MHz, Bit Rate = 3.2 Mbps

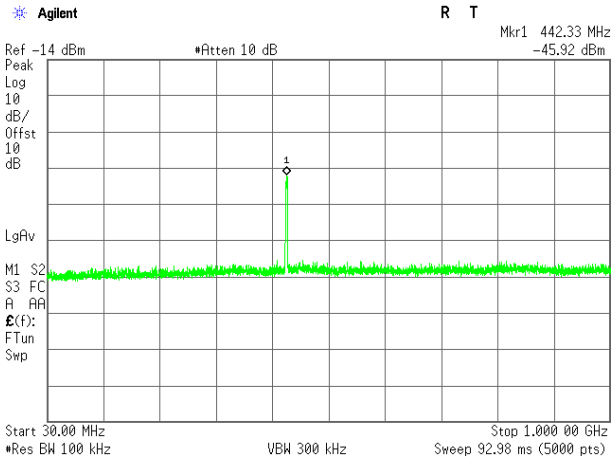


RF1

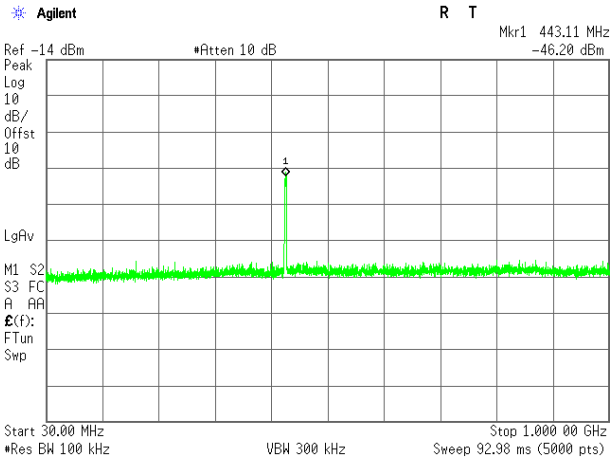


RF2

Plot 3.5.123 Emissions in restricted frequency bands test results, Conducted measurements, 30 MHz – 1000 MHz, Fc = 2403 MHz, BW = 4.2 MHz, Bit Rate = 3.2 Mbps

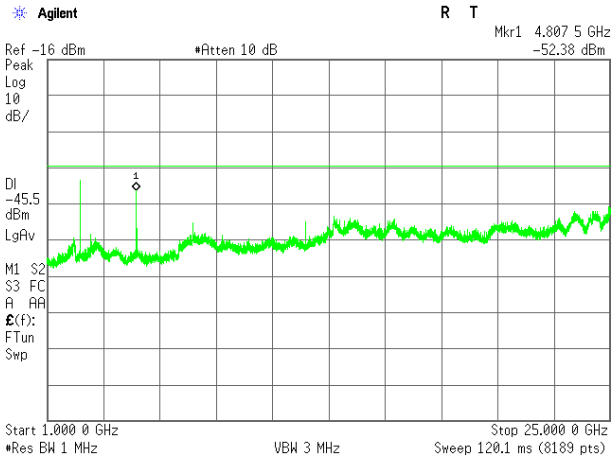


RF1

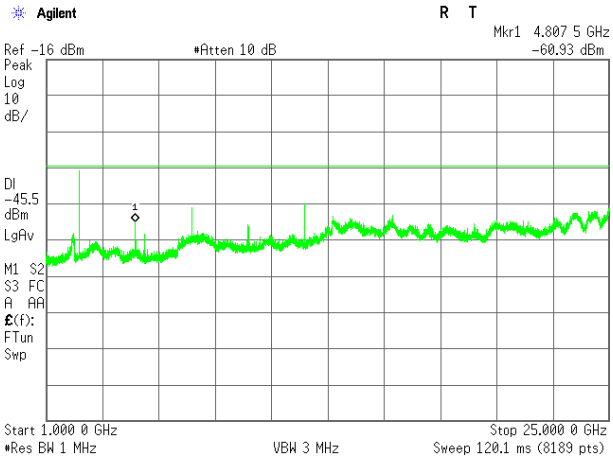


RF2

Plot 3.5.124 Emissions in restricted frequency bands test results, Conducted measurements, 1 GHz – 25 GHz, Fc = 2403 MHz, BW = 4.2 MHz, Bit Rate =3.2 Mbps

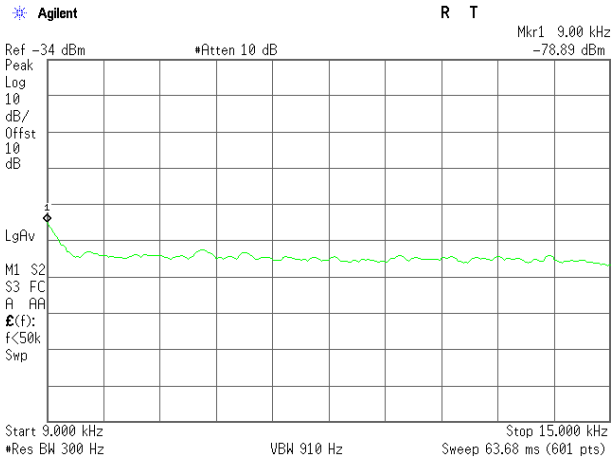


RF1

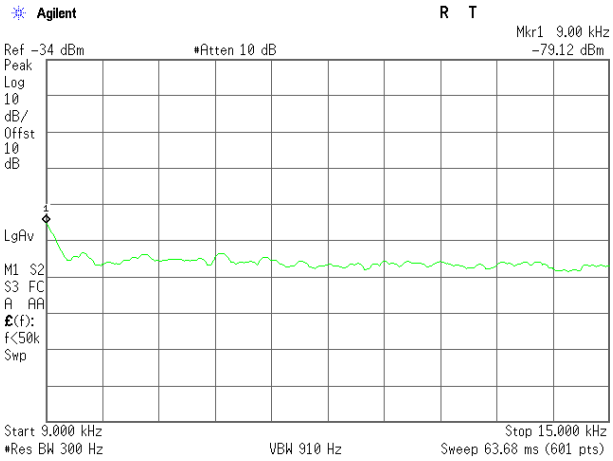


RF2

Plot 3.5.125 Emissions in restricted frequency bands test results, Conducted measurements, 9 kHz – 150 kHz, Fc = 2442 MHz, BW = 4.2 MHz, Bit Rate =3.2 Mbps

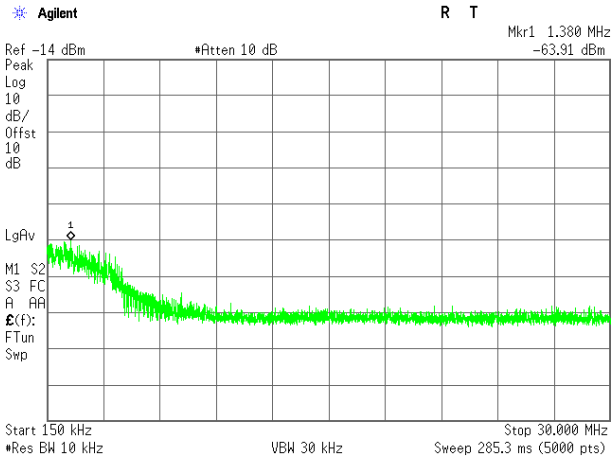


RF1

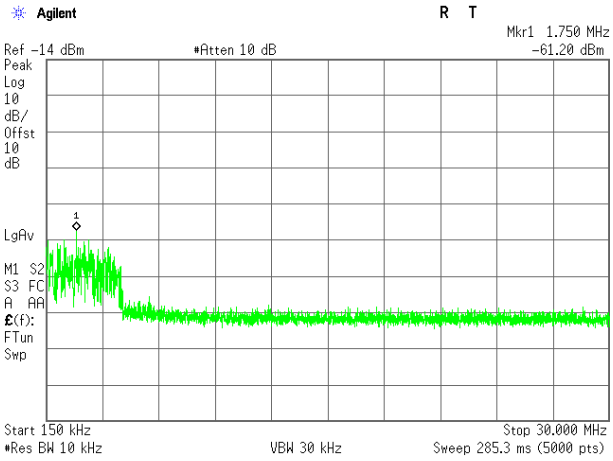


RF2

Plot 3.5.126 Emissions in restricted frequency bands test results, Conducted measurements, 150 kHz – 30 MHz, Fc = 2442 MHz, BW = 4.2 MHz, Bit Rate = 3.2Mbps

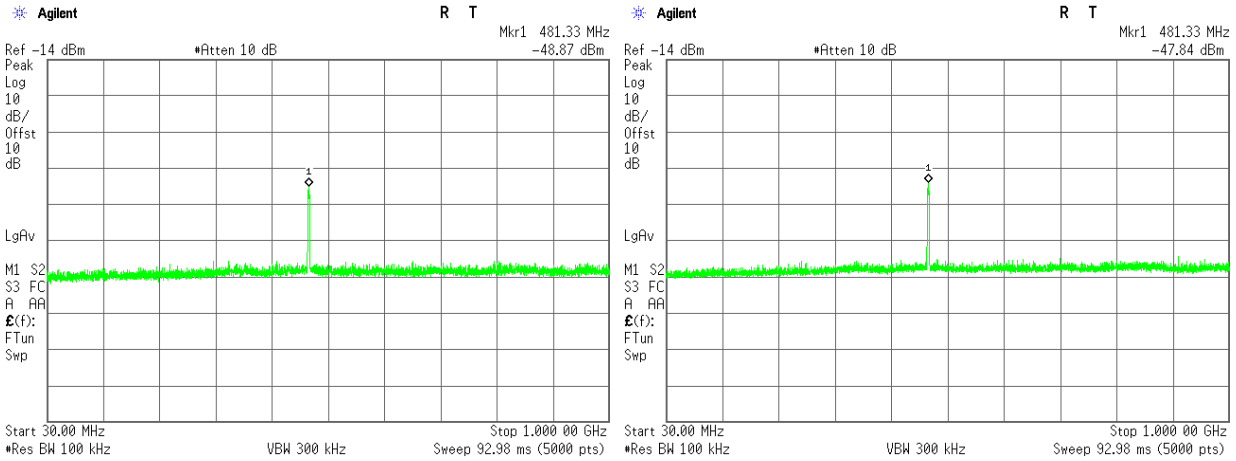


RF1



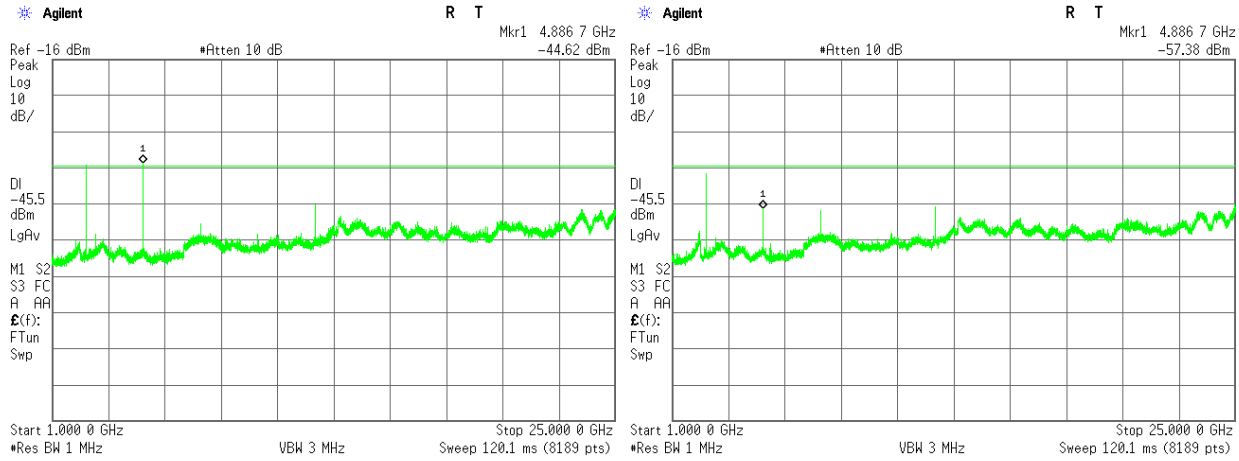
RF2

Plot 3.5.127 Emissions in restricted frequency bands test results, Conducted measurements, 30 MHz – 1000 MHz, Fc = 2442 MHz, BW = 4.2 MHz, Bit Rate = 3.2 Mbps



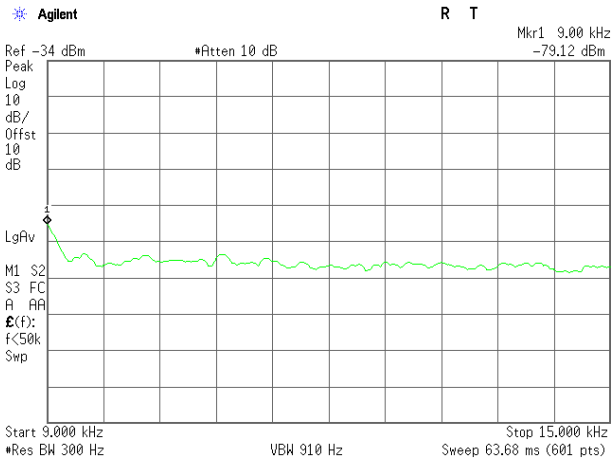
RF1 RF2

Plot 3.5.128 Emissions in restricted frequency bands test results, Conducted measurements, 1 GHz – 25 GHz, Fc = 2442 MHz, BW = 4.2 MHz, Bit Rate = 3.2 Mbps-(with notch filter)

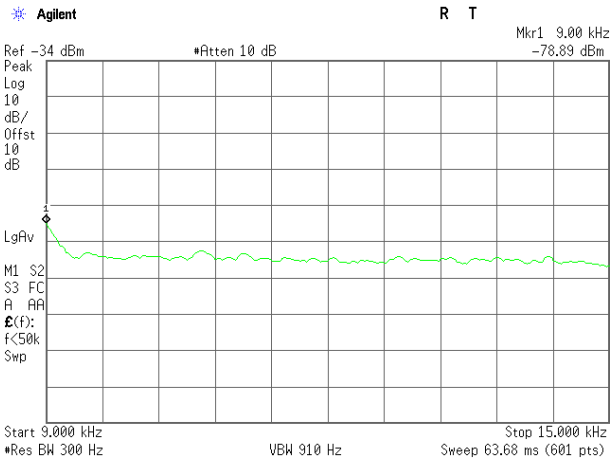


RF1 RF2

Plot 3.5.129 Emissions in restricted frequency bands test results, Conducted measurements, 9 kHz – 150 kHz, Fc = 2478 MHz, BW = 4.2 MHz, Bit Rate = 3.2Mbps

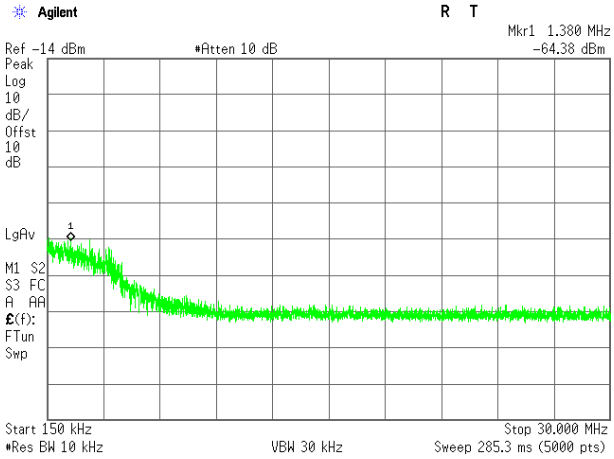


RF1

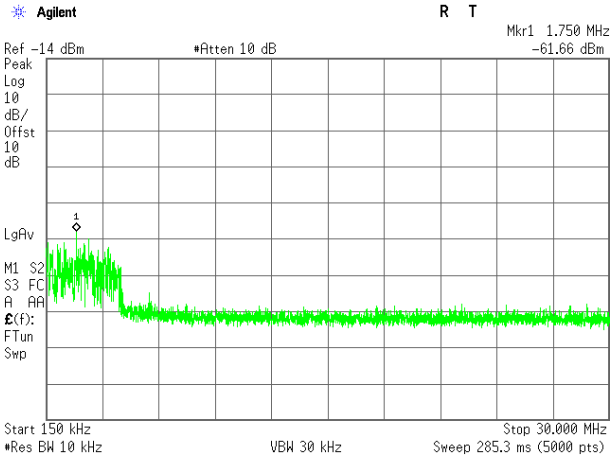


RF2

Plot 3.5.130 Emissions in restricted frequency bands test results, Conducted measurements, 150 kHz – 30 MHz, Fc = 2478 MHz, BW = 4.2 MHz, Bit Rate = 4 Mbps

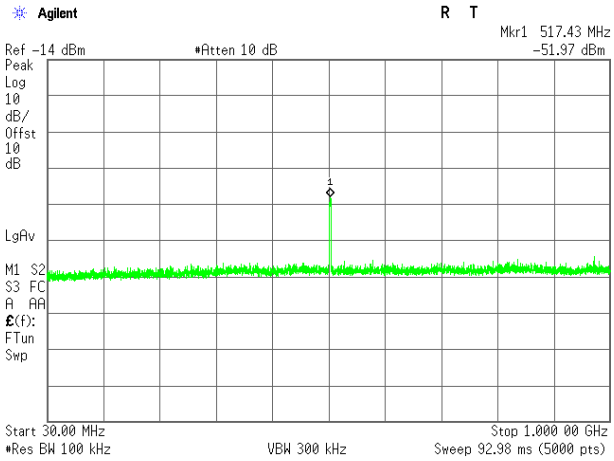


RF1

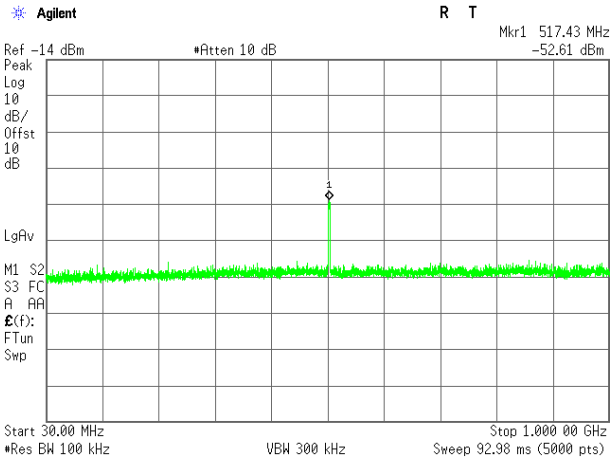


RF2

Plot 3.5.131 Emissions in restricted frequency bands test results, Conducted measurements, 30 MHz – 1000 MHz, Fc = 2478 MHz, BW = 4.2 MHz, Bit Rate = 3.2Mbps

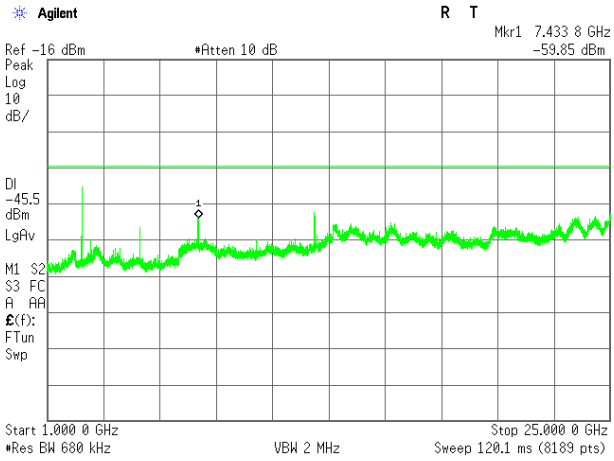


RF1

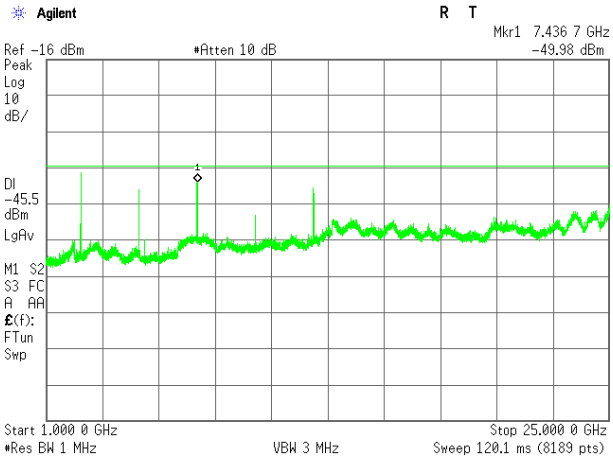


RF2

Plot 3.5.132 Emissions in restricted frequency bands test results, Conducted measurements, 1 GHz – 25 GHz, Fc = 2478 MHz, BW = 4.2 MHz, Bit Rate = 3.2 Mbps -(with notch filter)

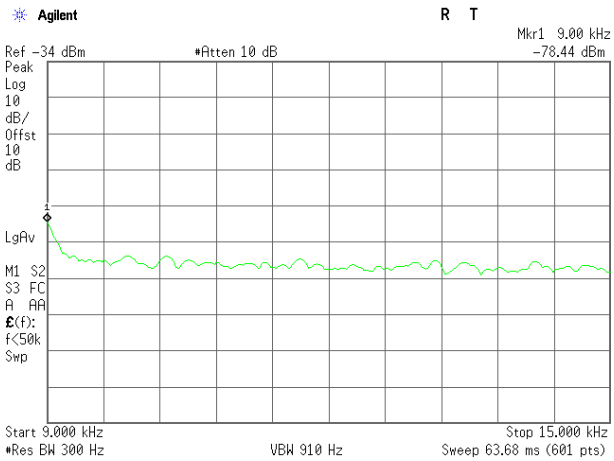


RF1

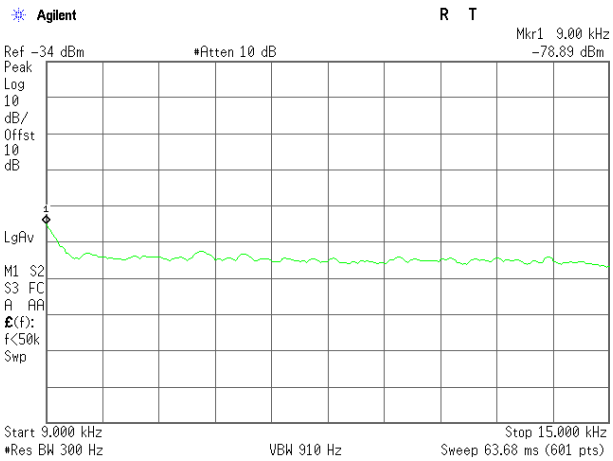


RF2

Plot 3.5.133 Emissions in restricted frequency bands test results, Conducted measurements, 9 kHz – 150 kHz, Fc = 2403 MHz, BW = 4.2 MHz, Bit Rate =4 Mbps

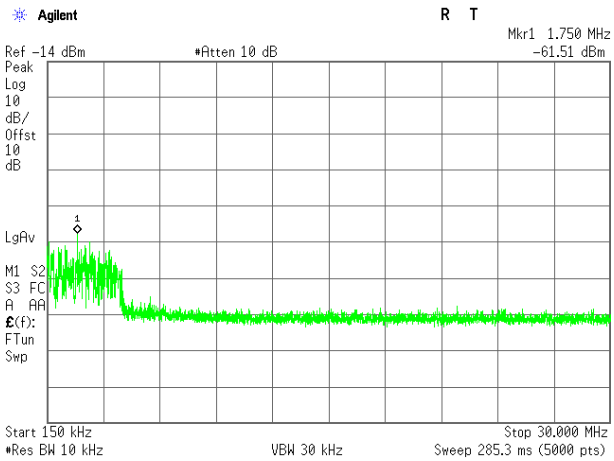


RF1

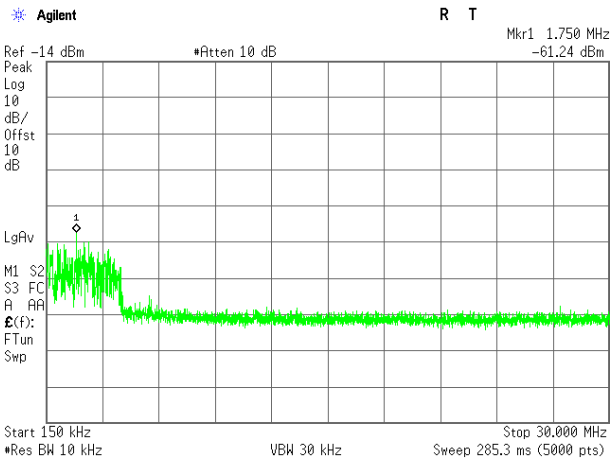


RF2

Plot 3.5.134 Emissions in restricted frequency bands test results, Conducted measurements, 150 kHz – 30 MHz, Fc = 2403 MHz, BW = 4.2 MHz, Bit Rate = 4 Mbps

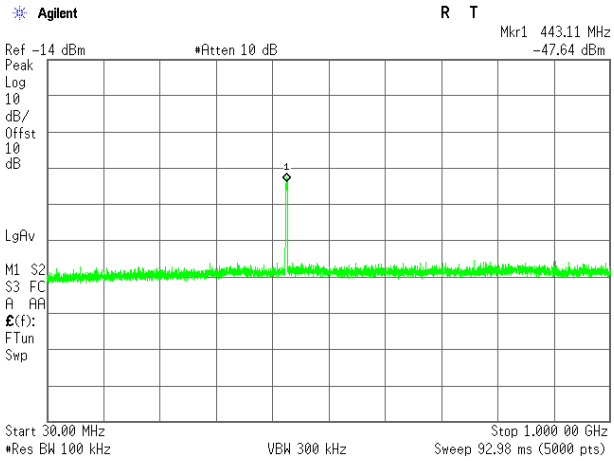


RF1

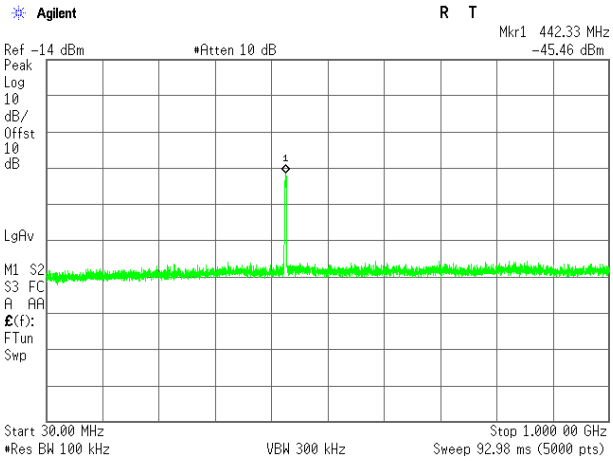


RF2

Plot 3.5.135 Emissions in restricted frequency bands test results, Conducted measurements, 30 MHz – 1000 MHz, Fc = 2403 MHz, BW = 4.2 MHz, Bit Rate = 4 Mbps

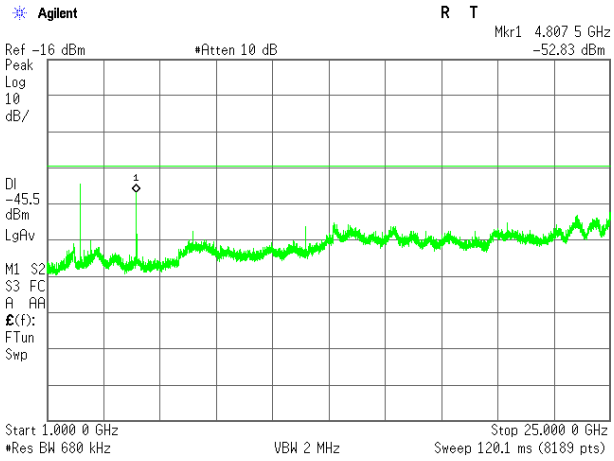


RF1

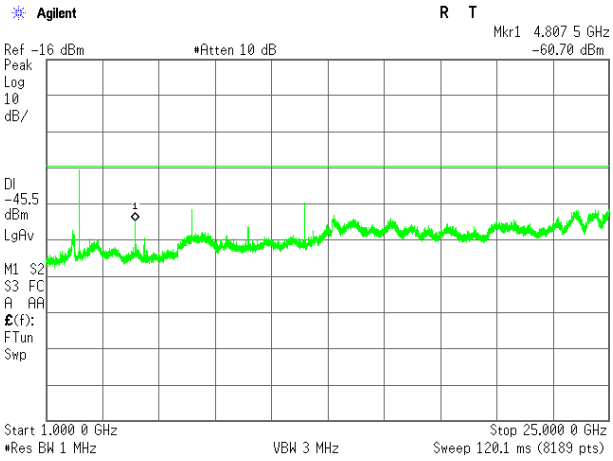


RF2

Plot 3.5.136 Emissions in restricted frequency bands test results, Conducted measurements, 1 GHz – 25 GHz, Fc = 2403 MHz, BW = 4.2 MHz, Bit Rate =4 Mbps -(with notch filter)

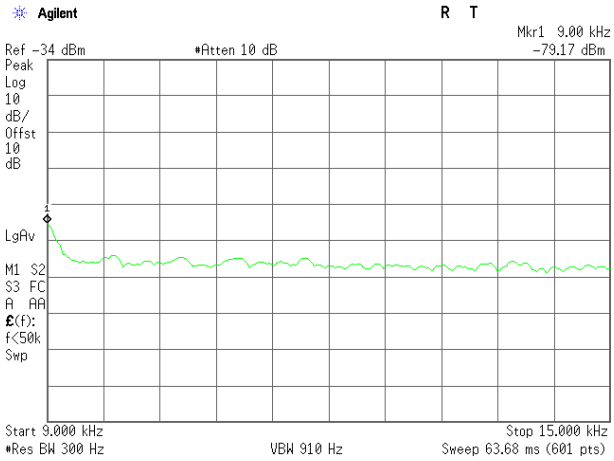


RF1

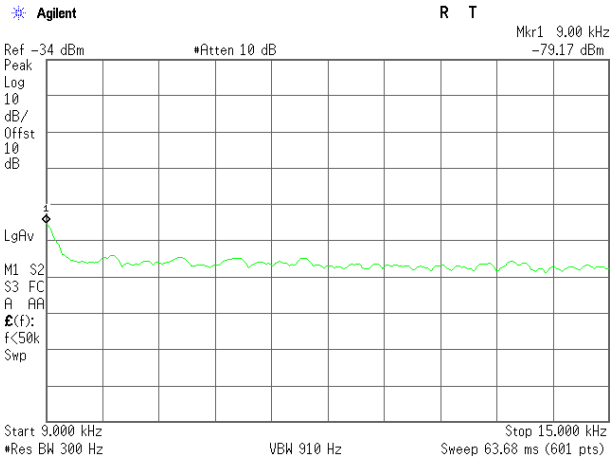


RF2

Plot 3.5.137 Emissions in restricted frequency bands test results, Conducted measurements, 9 kHz – 150 kHz, Fc = 2442 MHz, BW = 4.2 MHz, Bit Rate =4 Mbps

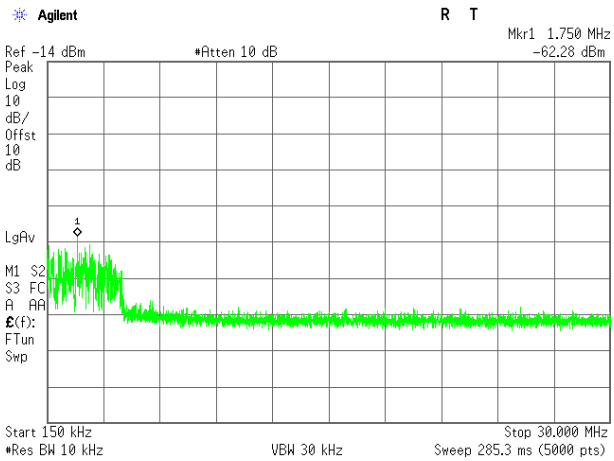


RF1

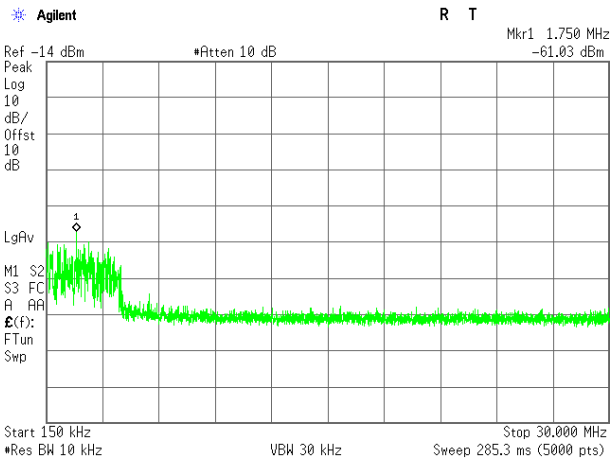


RF2

Plot 3.5.138 Emissions in restricted frequency bands test results, Conducted measurements, 150 kHz – 30 MHz, Fc = 2442 MHz, BW = 4.2 MHz, Bit Rate = 4Mbps

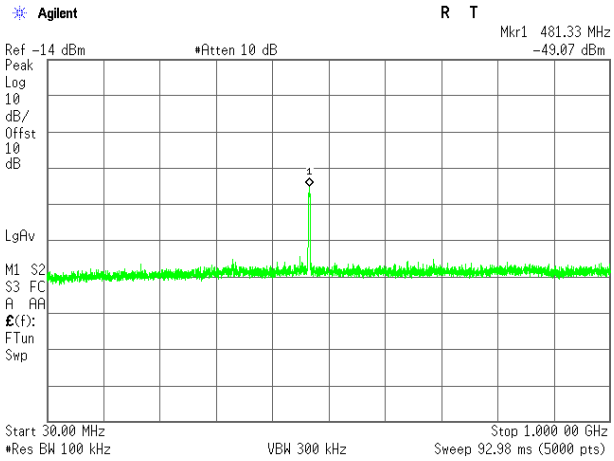


RF1

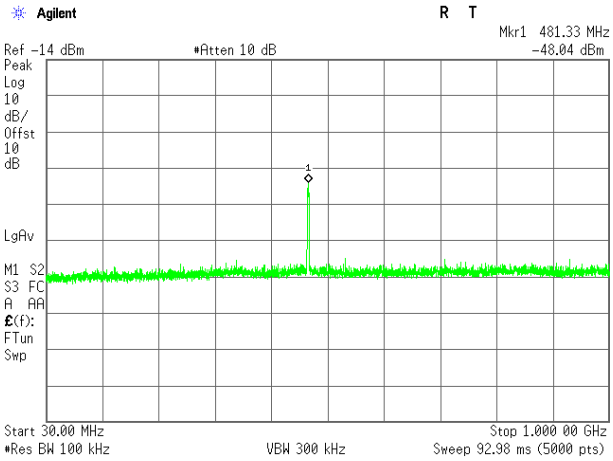


RF2

Plot 3.5.139 Emissions in restricted frequency bands test results, Conducted measurements, 30 MHz – 1000 MHz, Fc = 2442 MHz, BW = 4.2 MHz, Bit Rate = 4 Mbps

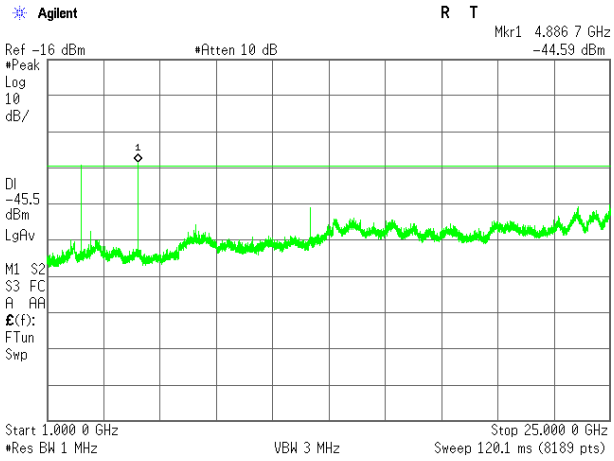


RF1

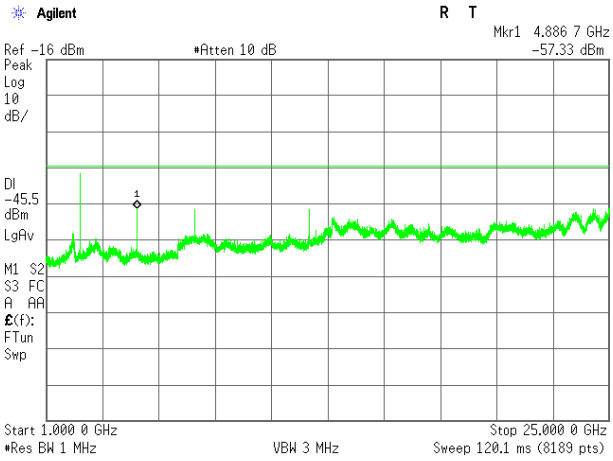


RF2

Plot 3.5.140 Emissions in restricted frequency bands test results, Conducted measurements, 1 GHz – 25 GHz, Fc = 2442 MHz, BW = 4.2 MHz, Bit Rate = 4 Mbps-(with notch filter)

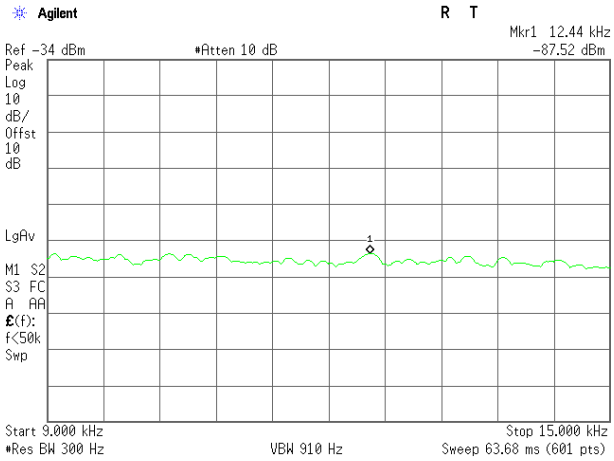


RF1

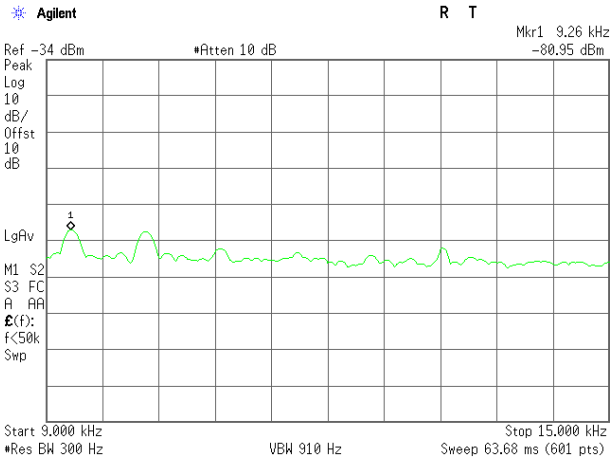


RF2

Plot 3.5.141 Emissions in restricted frequency bands test results, Conducted measurements, 9 kHz – 150 kHz, Fc = 2478 MHz, BW = 4.2 MHz, Bit Rate = 4Mbps

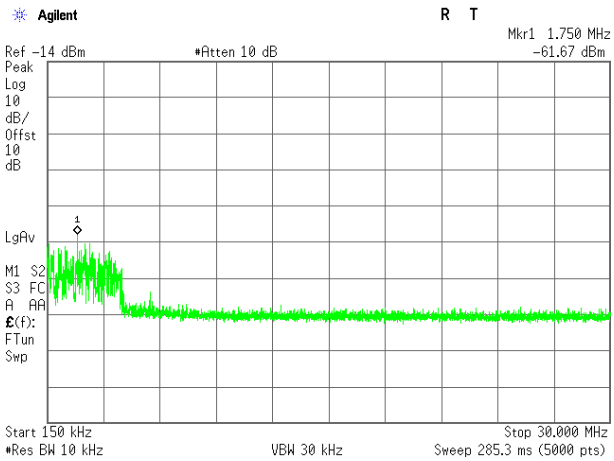


RF1

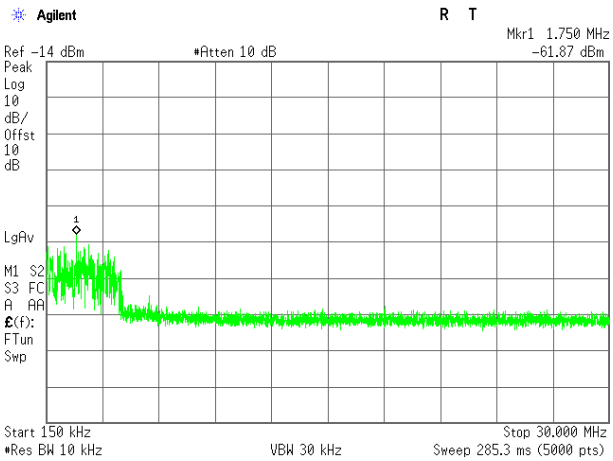


RF2

Plot 3.5.142 Emissions in restricted frequency bands test results, Conducted measurements, 150 kHz – 30 MHz, Fc = 2478 MHz, BW = 4.2 MHz, Bit Rate = 4 Mbps

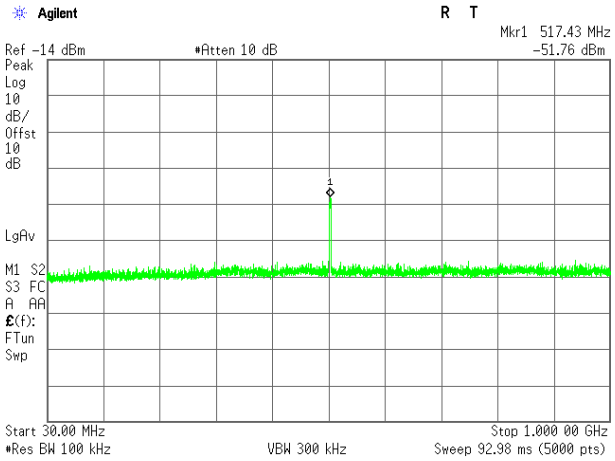


RF1

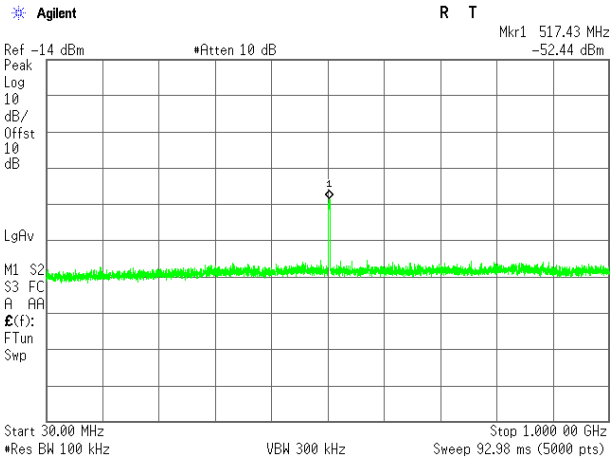


RF2

Plot 3.5.143 Emissions in restricted frequency bands test results, Conducted measurements, 30 MHz – 1000 MHz, Fc = 2478 MHz, BW = 4.2 MHz, Bit Rate = 4Mbps

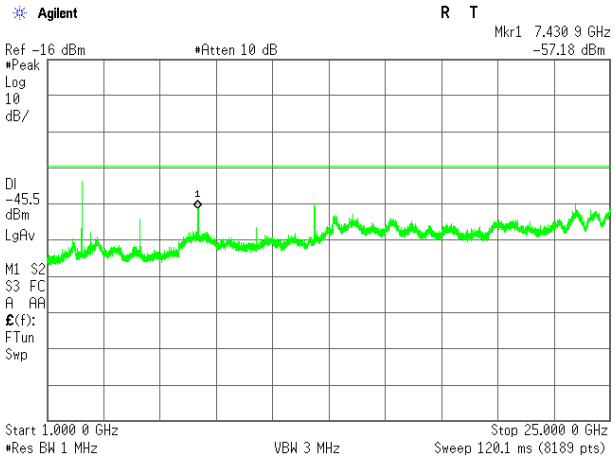


RF1

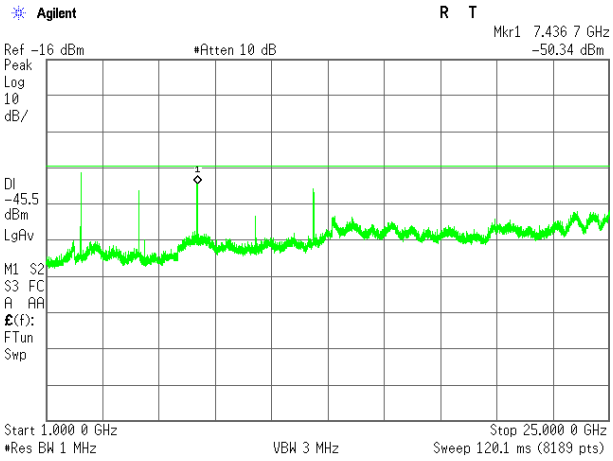


RF2

Plot 3.5.144 Emissions in restricted frequency bands test results, Conducted measurements, 1 GHz – 25 GHz, Fc = 2478 MHz, BW = 4.2 MHz, Bit Rate 4 Mbps -(with notch filter)

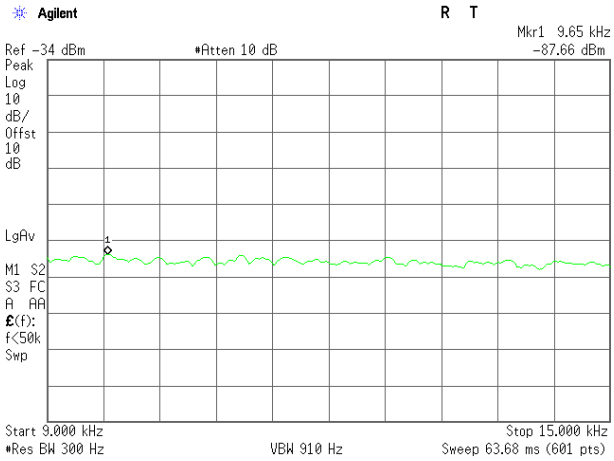


RF1

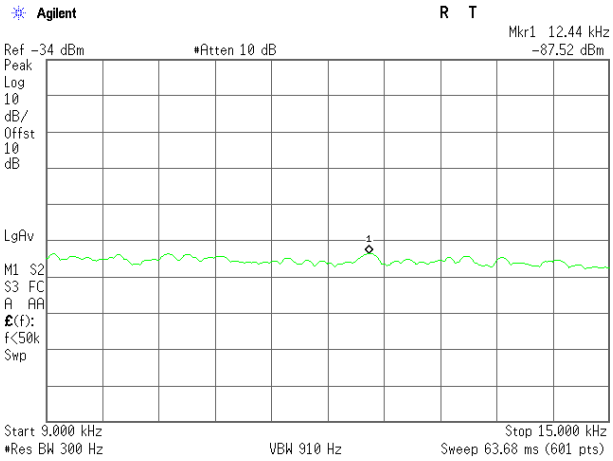


RF2

Plot 3.5.145 Emissions in restricted frequency bands test results, Conducted measurements, 9 kHz – 150 kHz, Fc = 2405 MHz, BW = 8.4 MHz, Bit Rate = 8 Mbps

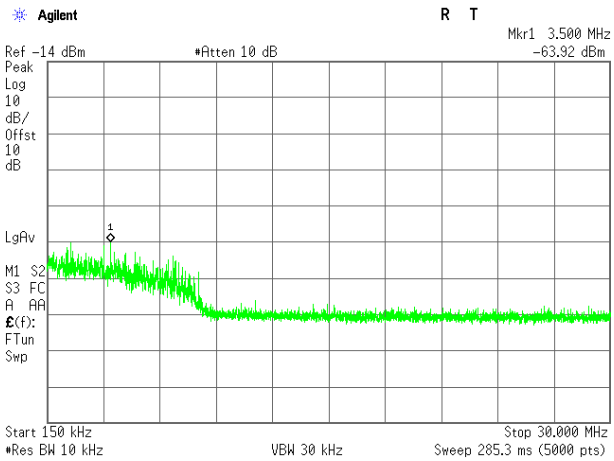


RF1

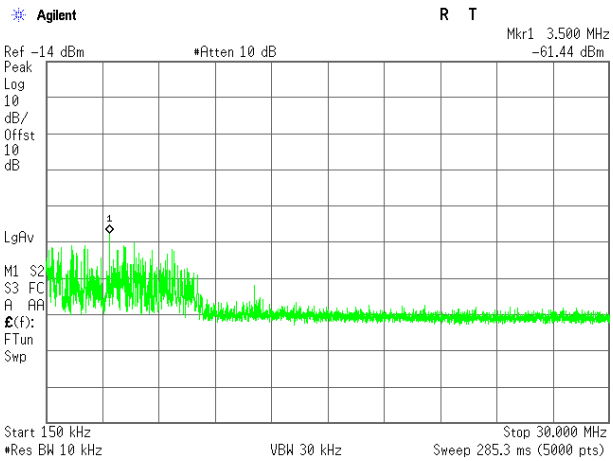


RF2

Plot 3.5.146 Emissions in restricted frequency bands test results, Conducted measurements, 150 kHz – 30 MHz, Fc = 2405 MHz, BW = 8.4 MHz, Bit Rate = 8 Mbps

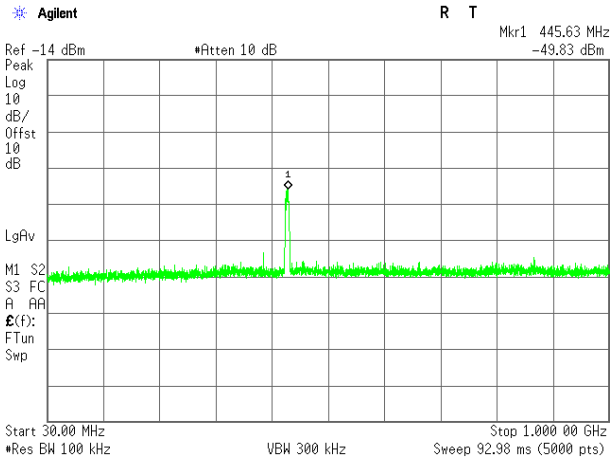


RF1

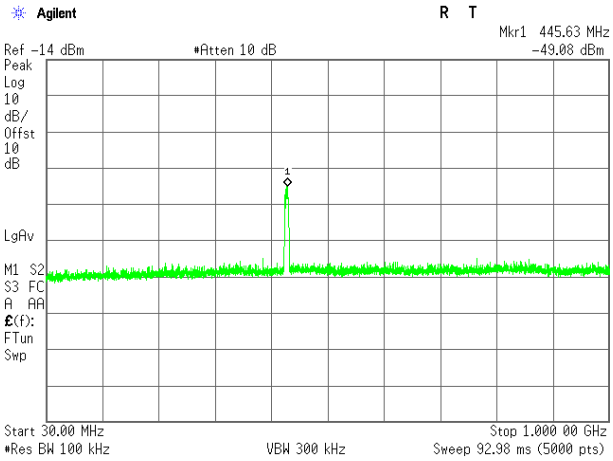


RF2

Plot 3.5.147 Emissions in restricted frequency bands test results, Conducted measurements, 30 MHz – 1000 MHz, Fc = 2405 MHz, BW = 8.4 MHz, Bit Rate = 8 Mbps

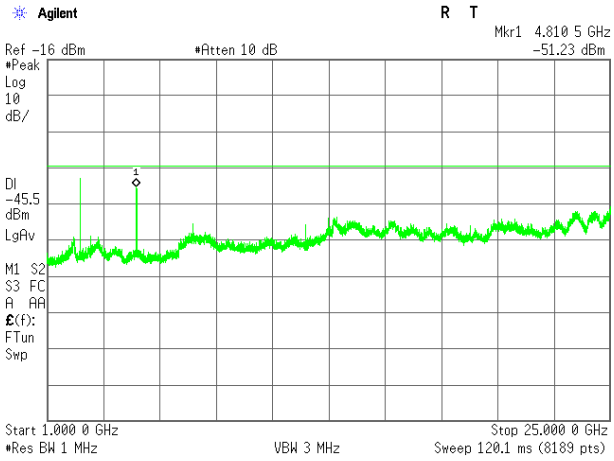


RF1

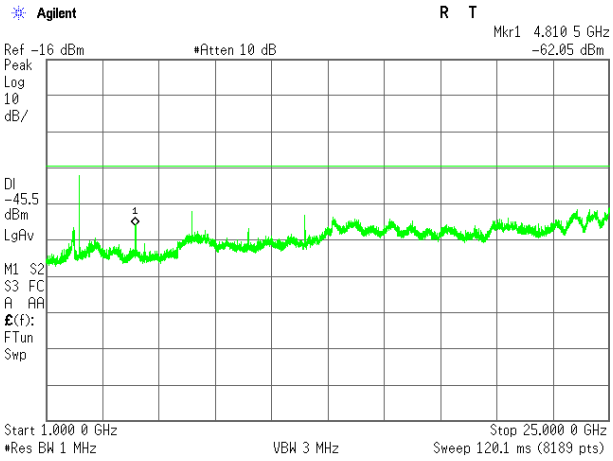


RF2

Plot 3.5.148 Emissions in restricted frequency bands test results, Conducted measurements, 1 GHz – 25 GHz, Fc = 2405 MHz, BW = 8.4 MHz, Bit Rate = 8 Mbps -(with notch filter)

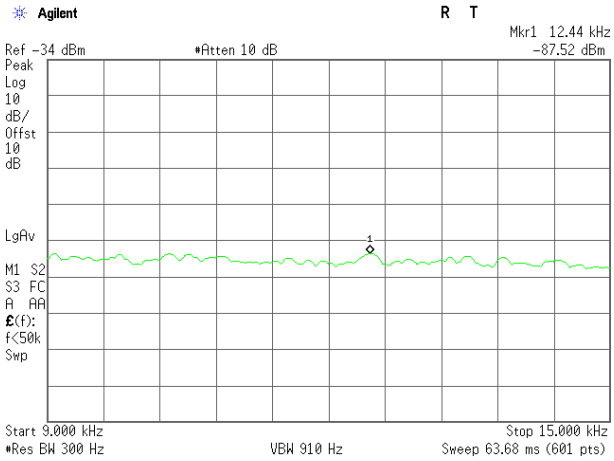


RF1

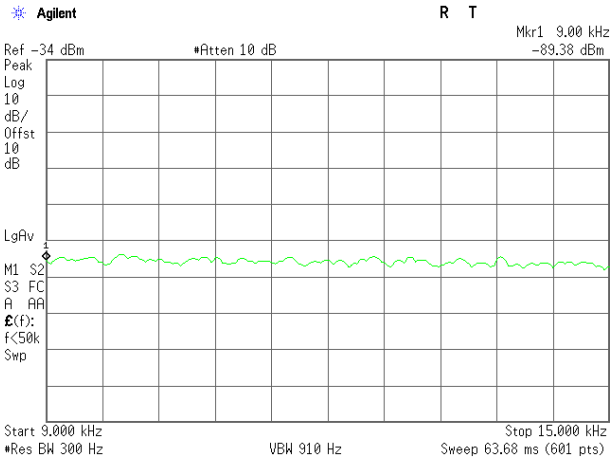


RF2

Plot 3.5.149 Emissions in restricted frequency bands test results, Conducted measurements, 9 kHz – 150 kHz, Fc = 2440 MHz, BW = 8.4 MHz, Bit Rate = 8 Mbps

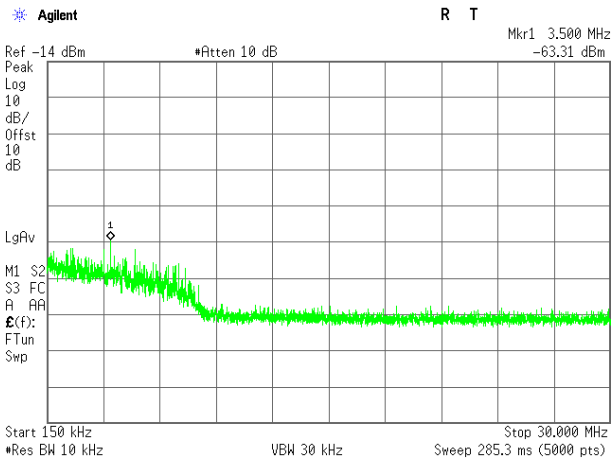


RF1

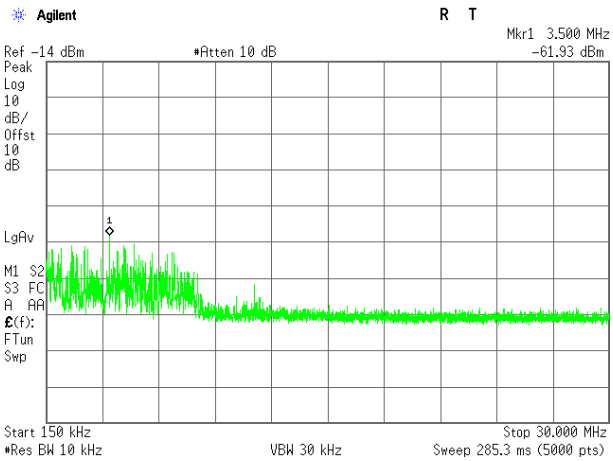


RF2

Plot 3.5.150 Emissions in restricted frequency bands test results, Conducted measurements, 150 kHz – 30 MHz, Fc = 2440 MHz, BW = 8.4 MHz, Bit Rate = 8 Mbps

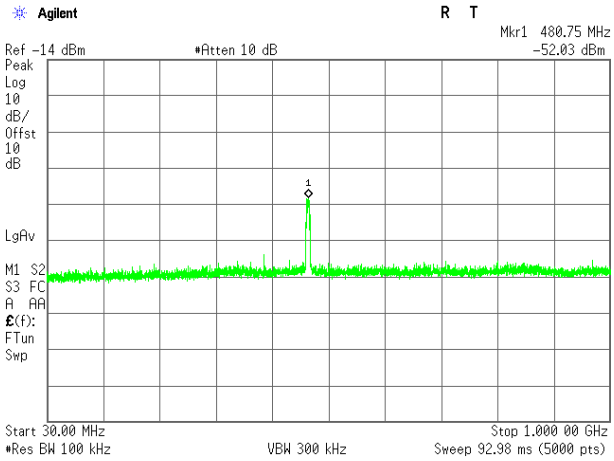


RF1

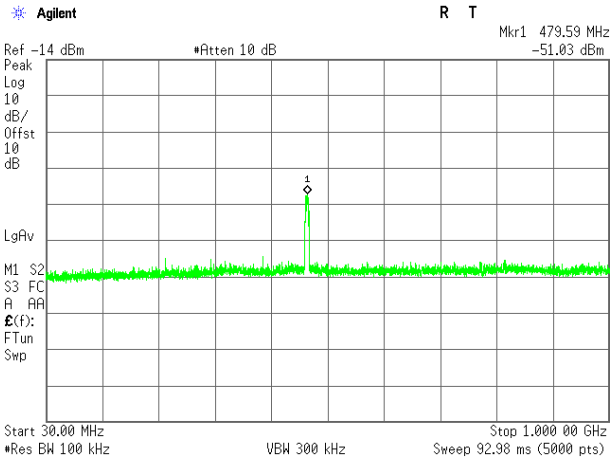


RF2

Plot 3.5.151 Emissions in restricted frequency bands test results, Conducted measurements, 30 MHz – 1000 MHz, Fc = 2440 MHz, BW = 8.4 MHz, Bit Rate = 8 Mbps

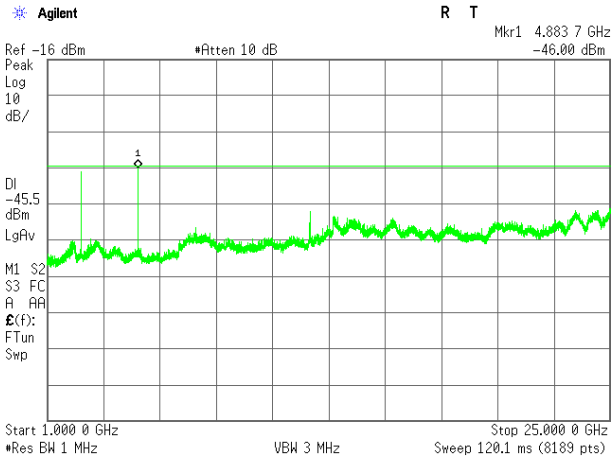


RF1

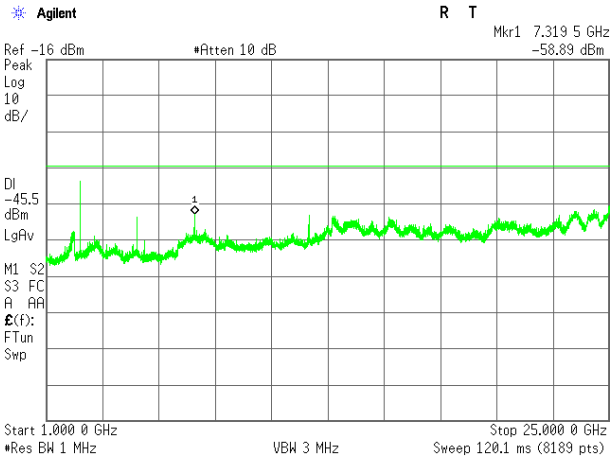


RF2

Plot 3.5.152 Emissions in restricted frequency bands test results, Conducted measurements, 1 GHz – 25 GHz, Fc = 2440 MHz, BW = 8.4 MHz, Bit Rate = 8 Mbps -(with notch filter)

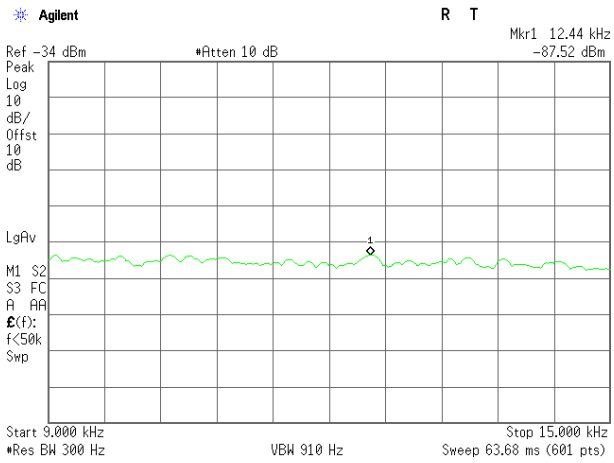


RF1

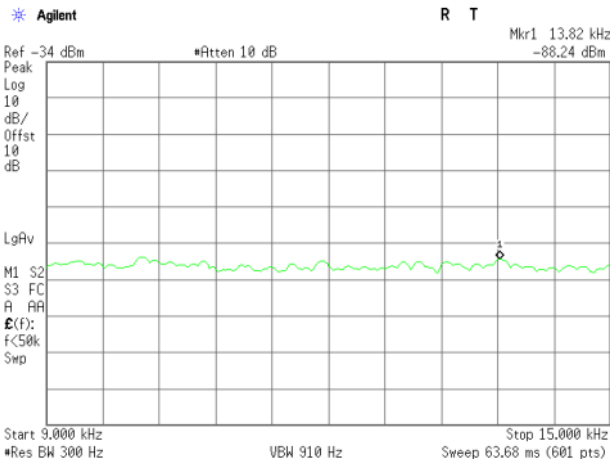


RF2

Plot 3.5.153 Emissions in restricted frequency bands test results, Conducted measurements, 9 kHz – 150 kHz, Fc = 2475 MHz, BW = 8.4 MHz, Bit Rate = 8 Mbps

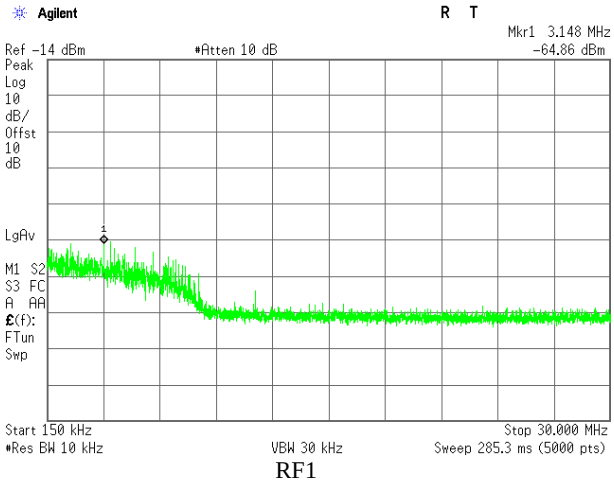


RF1

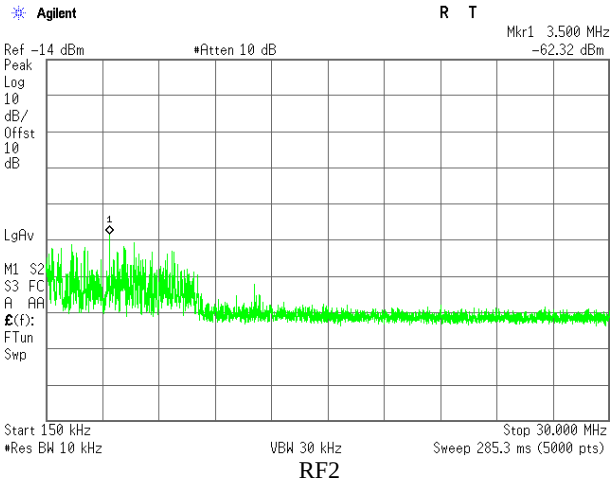


RF2

Plot 3.5.154 Emissions in restricted frequency bands test results, Conducted measurements, 150 kHz – 30 MHz, Fc = 2475 MHz, BW = 8.4 MHz, Bit Rate = 8 Mbps

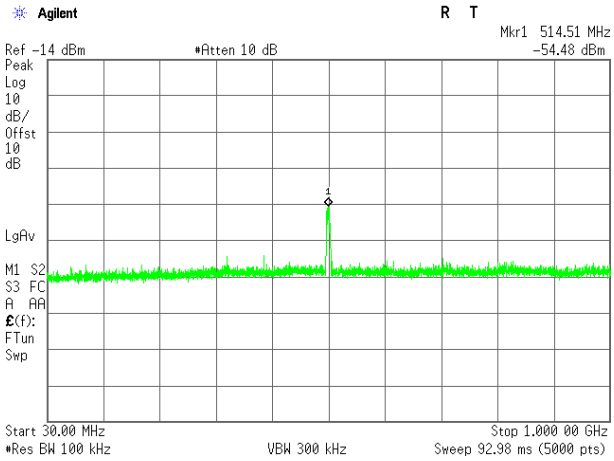


RF1

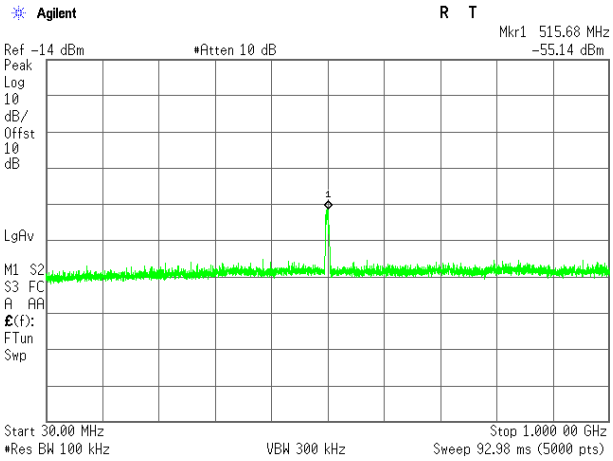


RF2

Plot 3.5.155 Emissions in restricted frequency bands test results, Conducted measurements, 30 MHz – 1000 MHz, Fc = 2475 MHz, BW = 8.4 MHz, Bit Rate = 8 Mbps

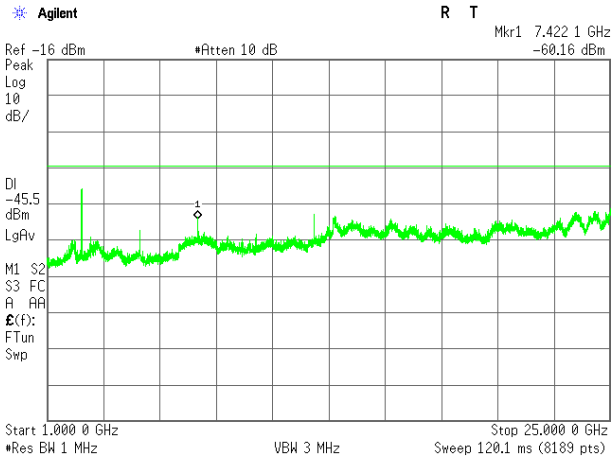


RF1

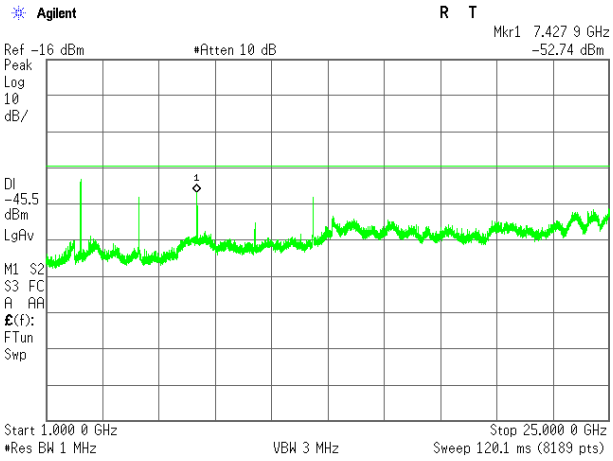


RF2

Plot 3.5.156 Emissions in restricted frequency bands test results, Conducted measurements, 1 GHz – 25 GHz, Fc = 2475 MHz, BW = 8.4 MHz, Bit Rate = 8 Mbps -(with notch filter)

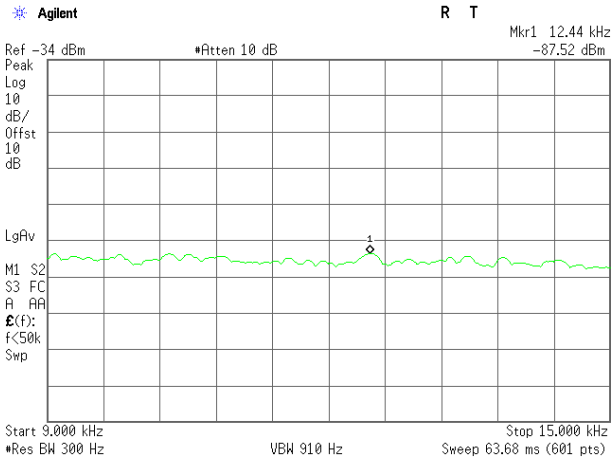


RF1

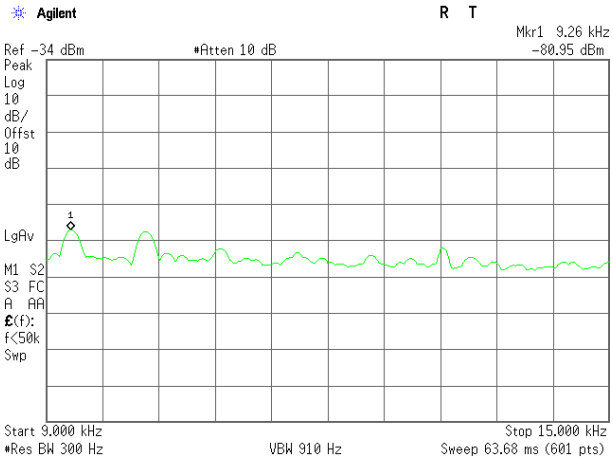


RF2

Plot 3.5.157 Emissions in restricted frequency bands test results, Conducted measurements, 9 kHz – 150 kHz, Fc = 2405 MHz, BW = 8.4 MHz, Bit Rate = 6.4 Mbps

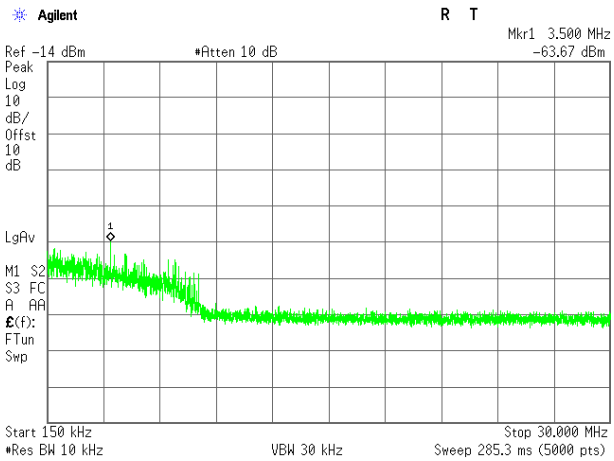


RF1

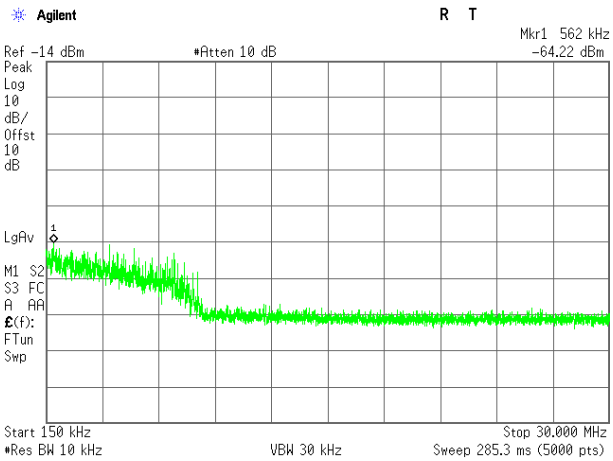


RF2

Plot 3.5.158 Emissions in restricted frequency bands test results, Conducted measurements, 150 kHz – 30 MHz, Fc = 2405 MHz, BW = 8.4 MHz, Bit Rate = 6.4 Mbps

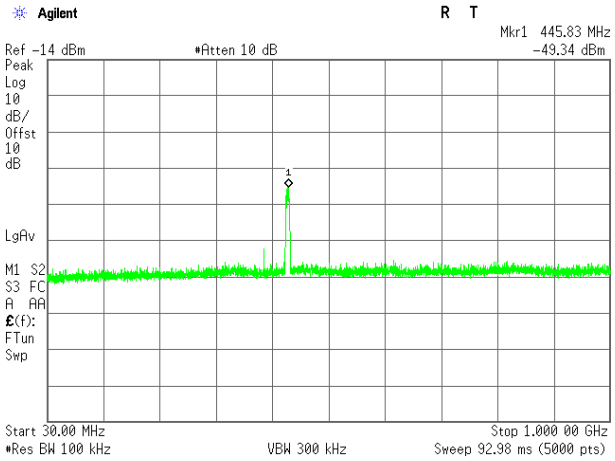


RF1

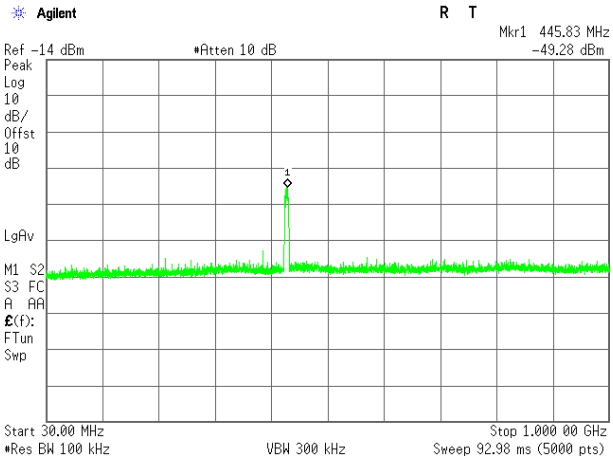


RF2

Plot 3.5.159 Emissions in restricted frequency bands test results, Conducted measurements, 30 MHz – 1000 MHz, Fc = 2405 MHz, BW = 8.4 MHz, Bit Rate = 6.4 Mbps

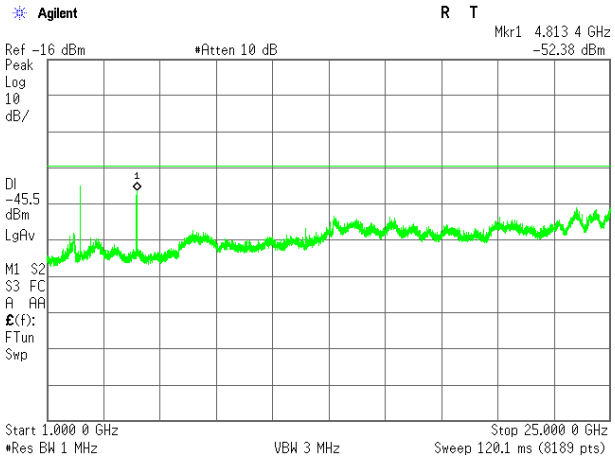


RF1

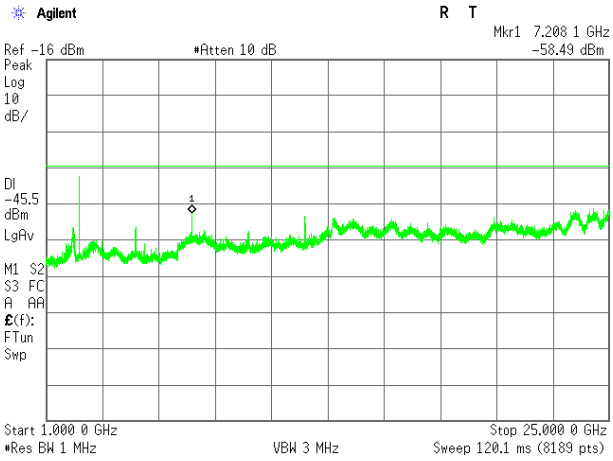


RF2

Plot 3.5.160 Emissions in restricted frequency bands test results, Conducted measurements, 1 GHz – 25 GHz, Fc = 2405 MHz, BW = 8.4 MHz, Bit Rate = 6.4 Mbps -(with notch filter)

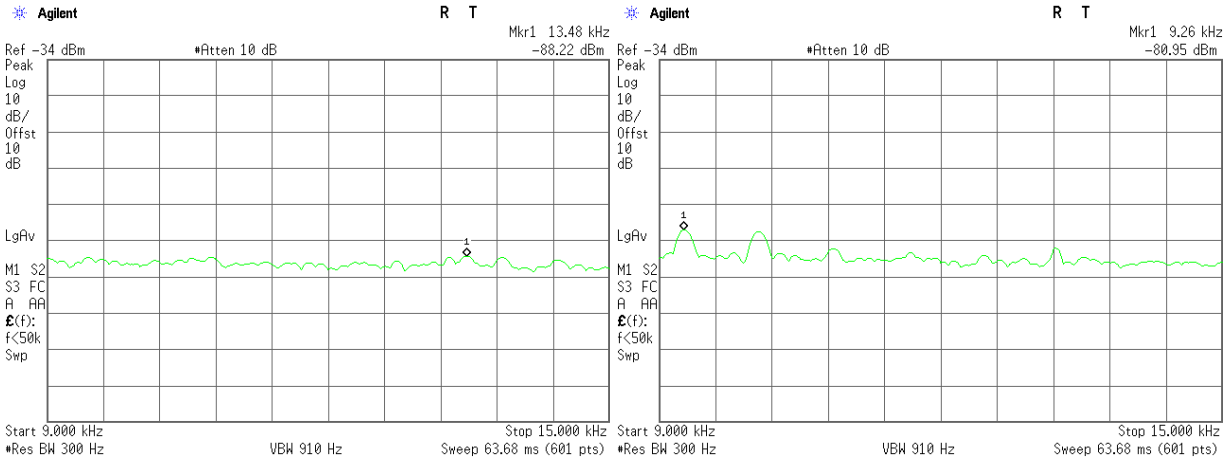


RF1



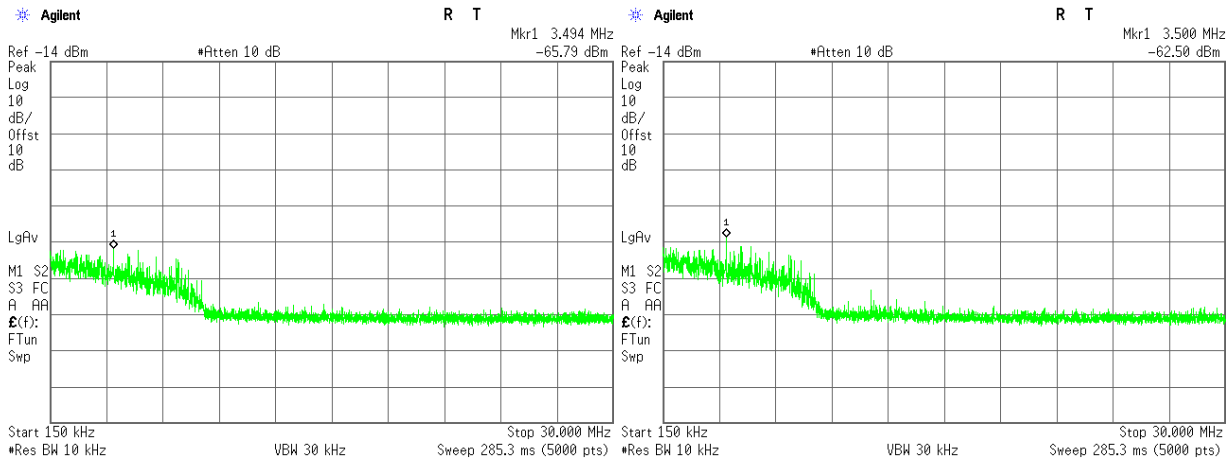
RF2

Plot 3.5.161 Emissions in restricted frequency bands test results, Conducted measurements, 9 kHz – 150 kHz, Fc = 2440 MHz, BW = 8.4 MHz, Bit Rate = 6.4 Mbps



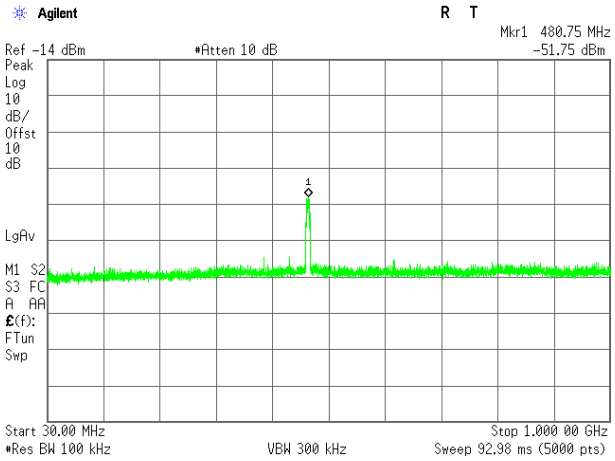
RF1 RF2

Plot 3.5.162 Emissions in restricted frequency bands test results, Conducted measurements, 150 kHz – 30 MHz, Fc = 2440 MHz, BW = 8.4 MHz, Bit Rate = 6.4Mbps

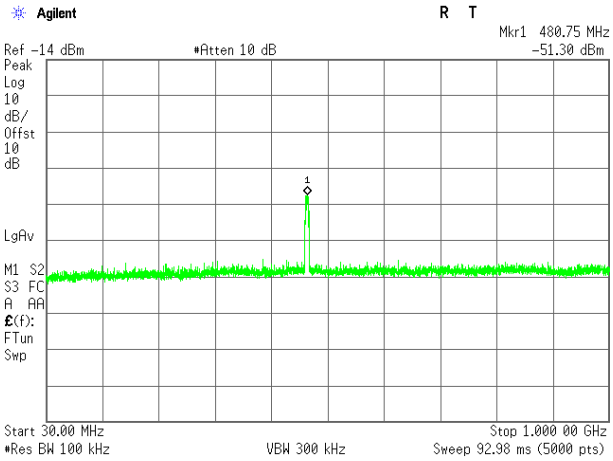


RF1 RF2

Plot 3.5.163 Emissions in restricted frequency bands test results, Conducted measurements, 30 MHz – 1000 MHz, Fc = 2440 MHz, BW = 8.4 MHz, Bit Rate = 6.4 Mbps

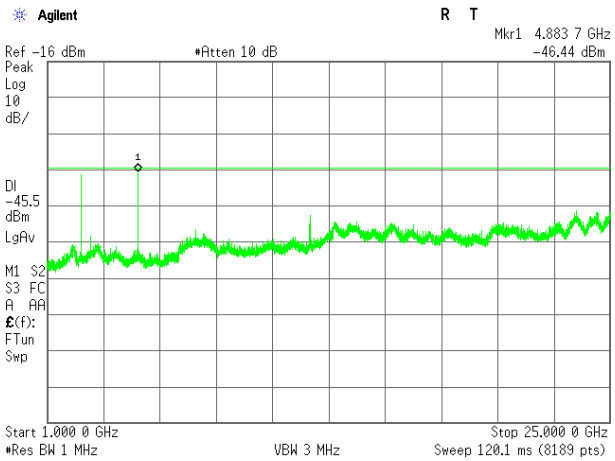


RF1

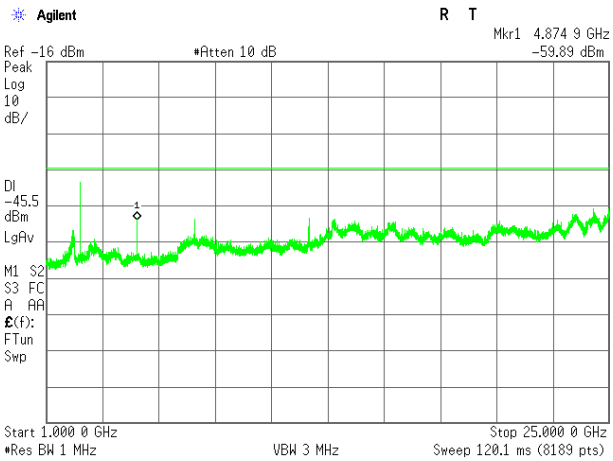


RF2

Plot 3.5.164 Emissions in restricted frequency bands test results, Conducted measurements, 1 GHz – 25 GHz, Fc = 2440 MHz, BW = 8.4 MHz, Bit Rate = 6.4 Mbps -(with notch filter)

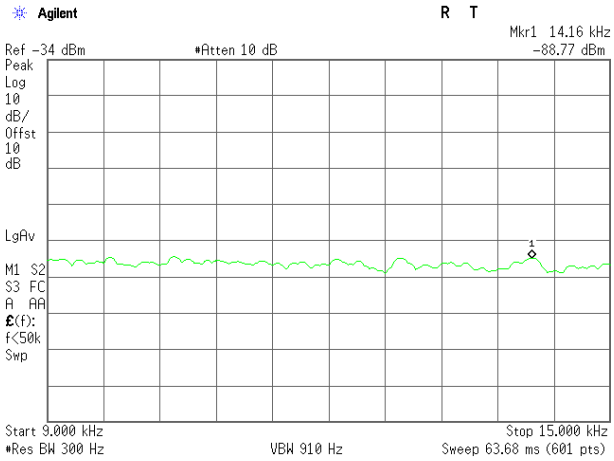


RF1

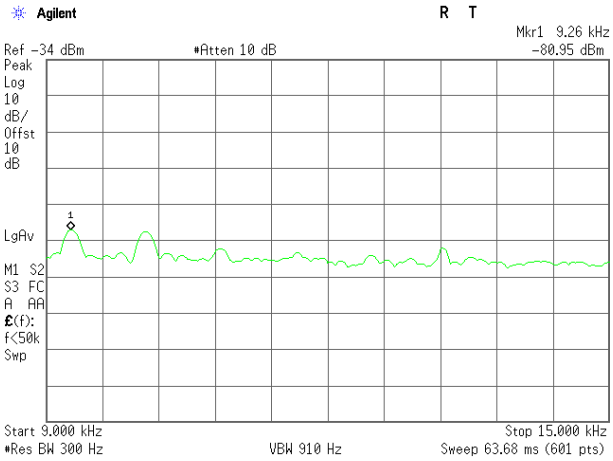


RF2

Plot 3.5.165 Emissions in restricted frequency bands test results, Conducted measurements, 9 kHz – 150 kHz, Fc = 2475 MHz, BW = 8.4 MHz, Bit Rate = 6.4 Mbps

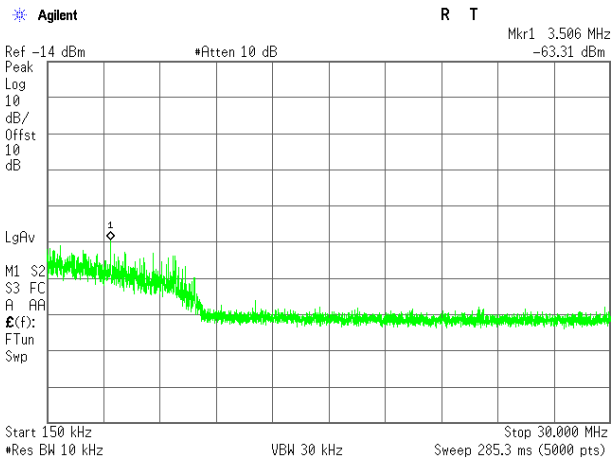


RF1

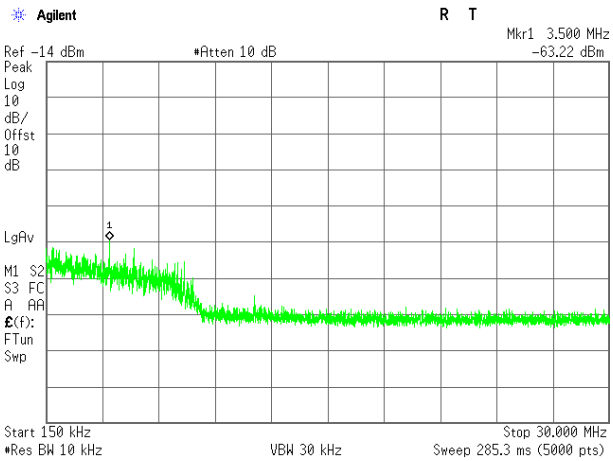


RF2

Plot 3.5.166 Emissions in restricted frequency bands test results, Conducted measurements, 150 kHz – 30 MHz, Fc = 2475 MHz, BW = 8.4 MHz, Bit Rate = 6.4 Mbps

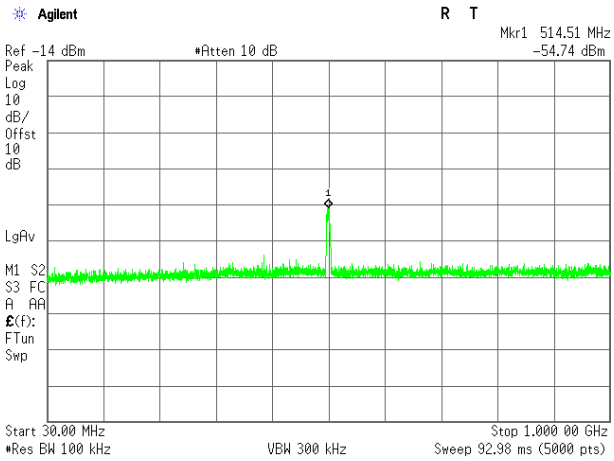


RF1

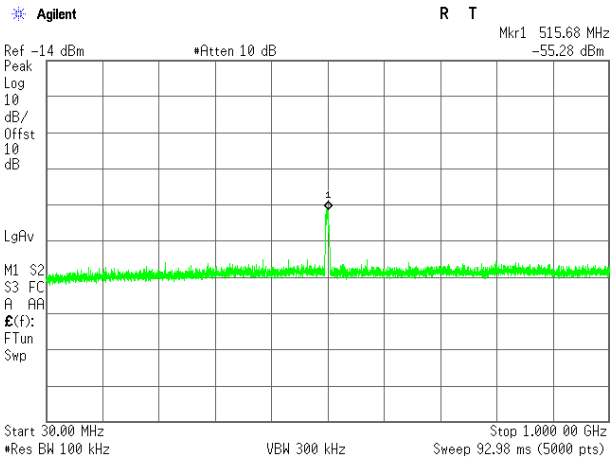


RF2

Plot 3.5.167 Emissions in restricted frequency bands test results, Conducted measurements, 30 MHz – 1000 MHz, Fc = 2475 MHz, BW = 8.4 MHz, Bit Rate = 6.4 Mbps

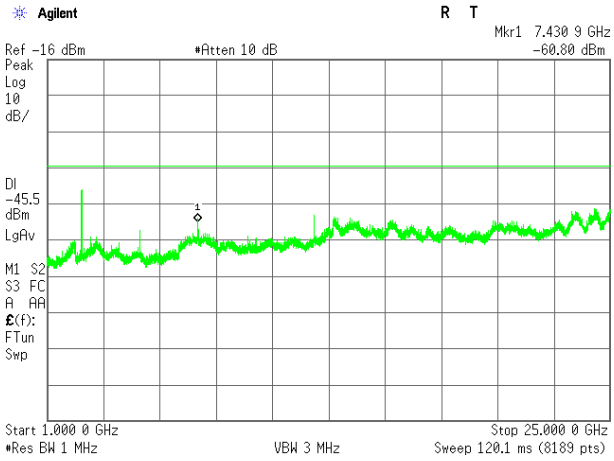


RF1

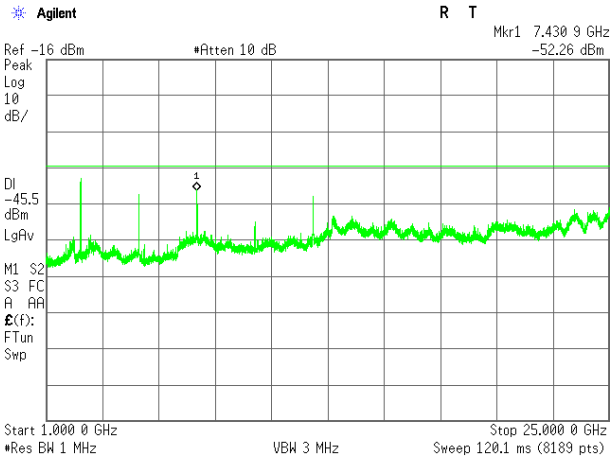


RF2

Plot 3.5.168 Emissions in restricted frequency bands test results, Conducted measurements, 1 GHz – 25 GHz, Fc = 2475 MHz, BW = 8.4 MHz, Bit Rate = 6.4 Mbps-(with notch filter)

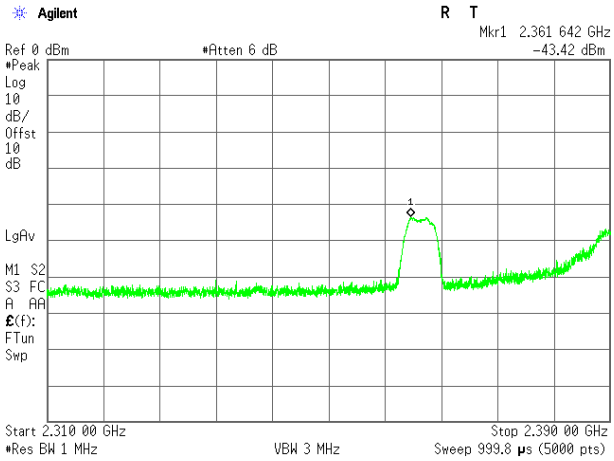


RF1

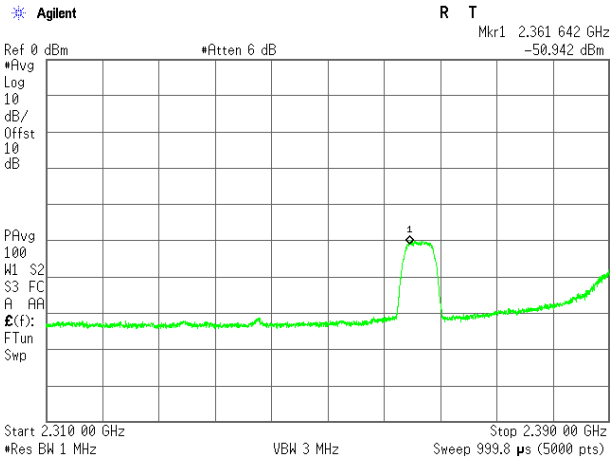


RF2

Plot 3.5.169 Emissions in restricted frequency bands test results, 2310 – 2390 MHz band, Conducted measurements, Fc = 2403 MHz, BW = 4.2 MHz, Bit Rate = 3.2 Mbps, output RF 1

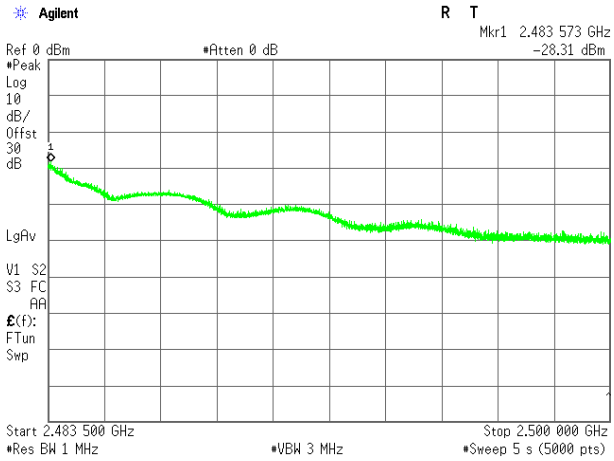


Peak

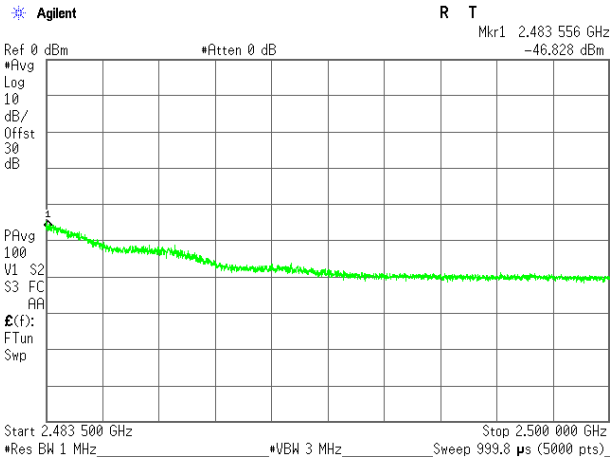


Average

Plot 3.5.170 Emissions in restricted frequency bands test results, 2483.5 – 2500 MHz band, Conducted measurements, Fc = 2478 MHz, BW = 4.2 MHz, Bit Rate = 3.2 Mbps, output RF 1

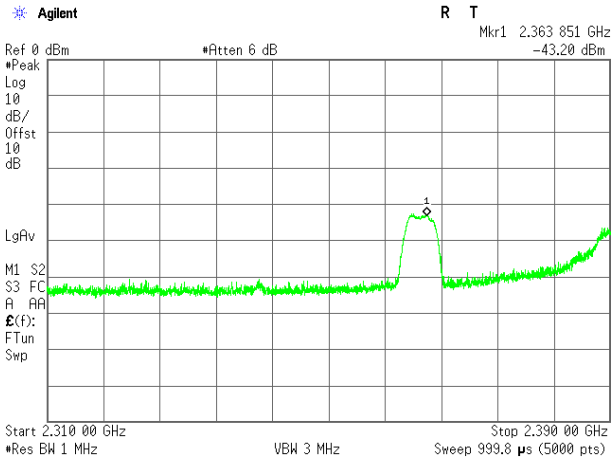


Peak

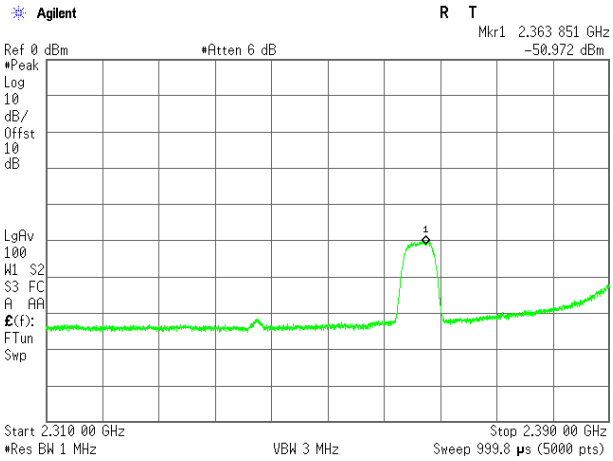


Average

Plot 3.5.171 Emissions in restricted frequency bands test results, 2310 – 2390 MHz band, Conducted measurements, Fc = 2403 MHz, BW = 4.2 MHz, Bit Rate = 3.2 Mbps, output RF 2

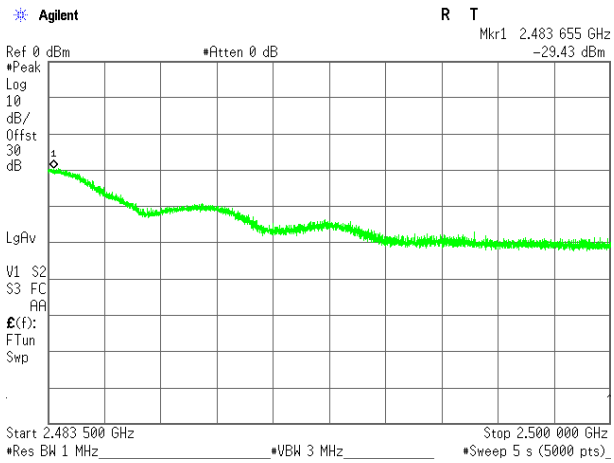


Peak

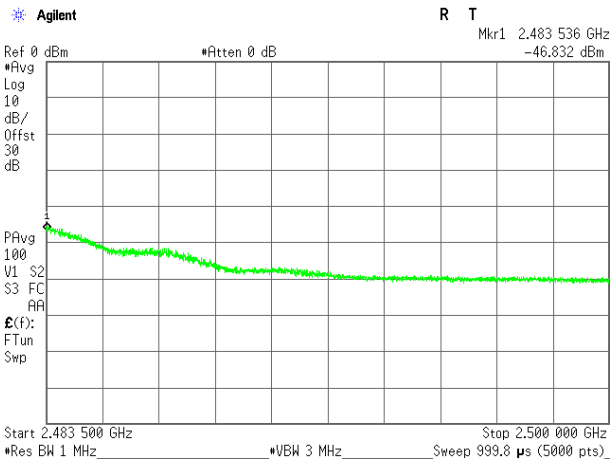


Average

Plot 3.5.172 Emissions in restricted frequency bands test results, 2483.5 – 2500 MHz band, Conducted measurements, Fc = 2478 MHz, BW = 4.2 MHz, Bit Rate = 3.2 Mbps, output RF 2

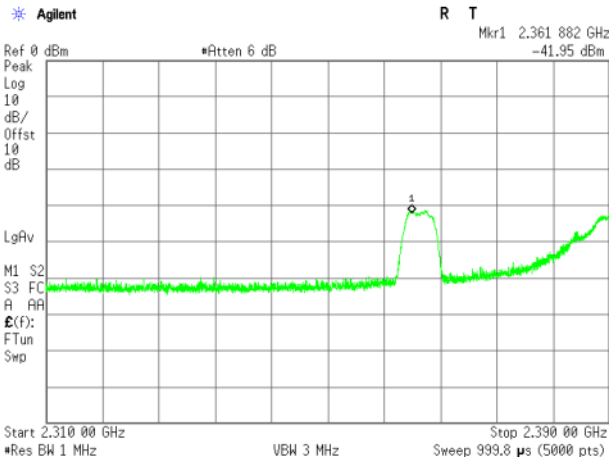


Peak

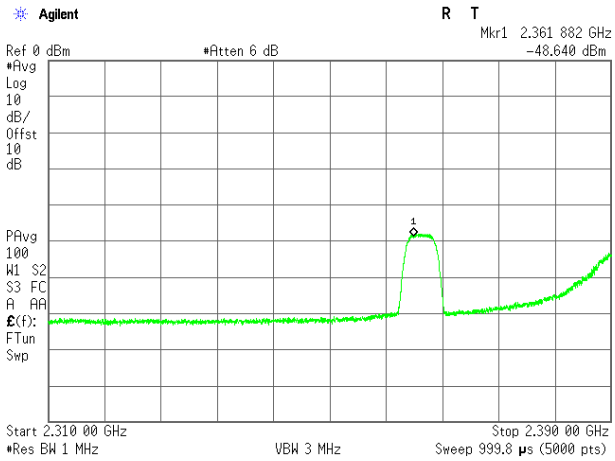


Average

Plot 3.5.173 Emissions in restricted frequency bands test results, 2310 – 2390 MHz band, Conducted measurements, Fc = 2403 MHz, BW = 4.2 MHz, Bit Rate = 4 Mbps, output RF 1

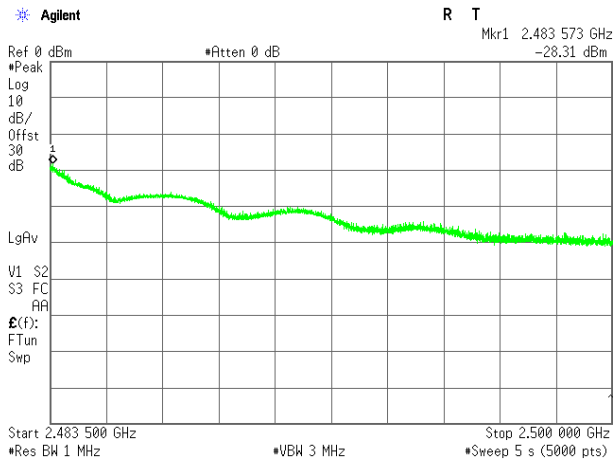


Peak

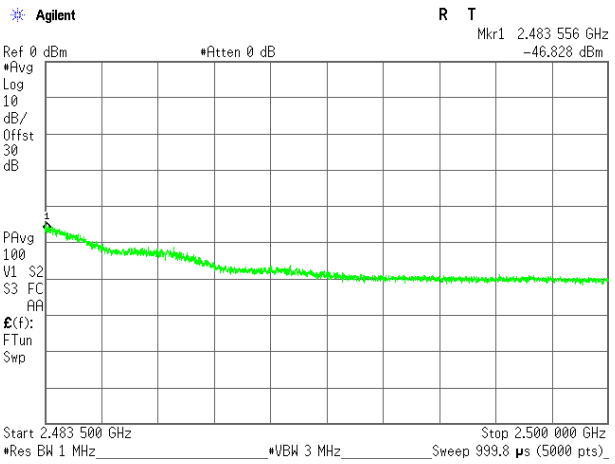


Average

Plot 3.5.174 Emissions in restricted frequency bands test results, 2483.5 – 2500 MHz band, Conducted measurements, Fc = 2478 MHz, BW = 4.2 MHz, Bit Rate = 4Mbps, output RF 1

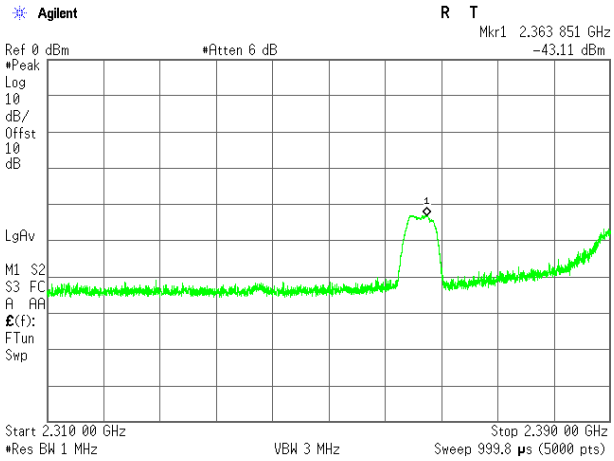


Peak

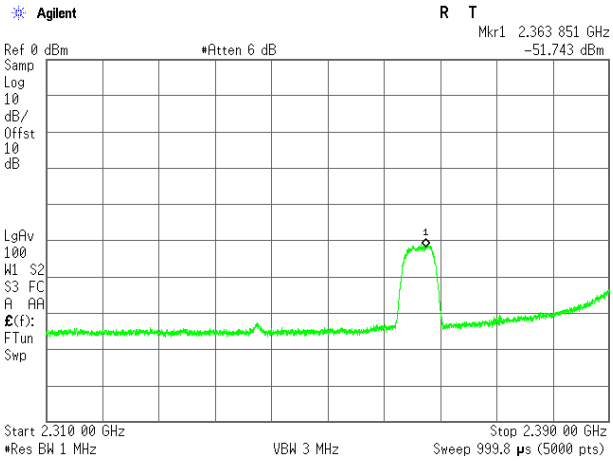


Average

Plot 3.5.175 Emissions in restricted frequency bands test results, 2310 – 2390 MHz band, Conducted measurements, Fc = 2403 MHz, BW = 4.2 MHz, Bit Rate = 4 Mbps, output RF 2

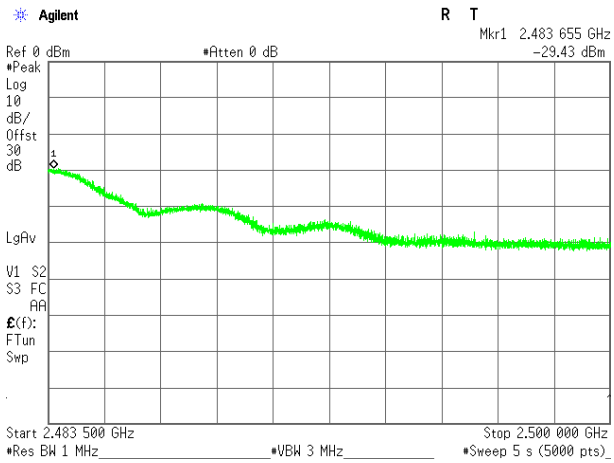


Peak

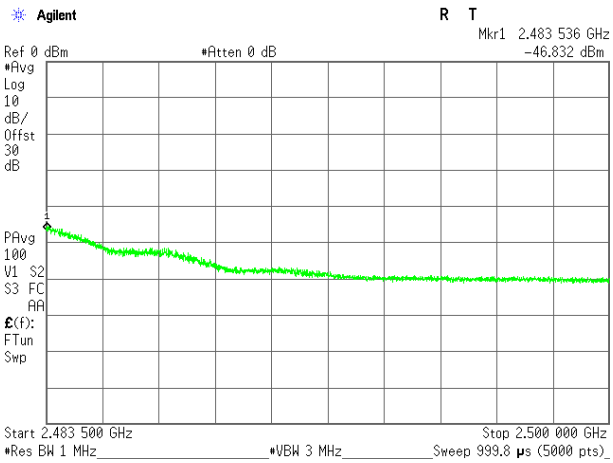


Average

Plot 3.5.176 Emissions in restricted frequency bands test results, 2483.5 – 2500 MHz band, Conducted measurements, Fc = 2478 MHz, BW = 4.2 MHz, Bit Rate = 4 Mbps, output RF 2

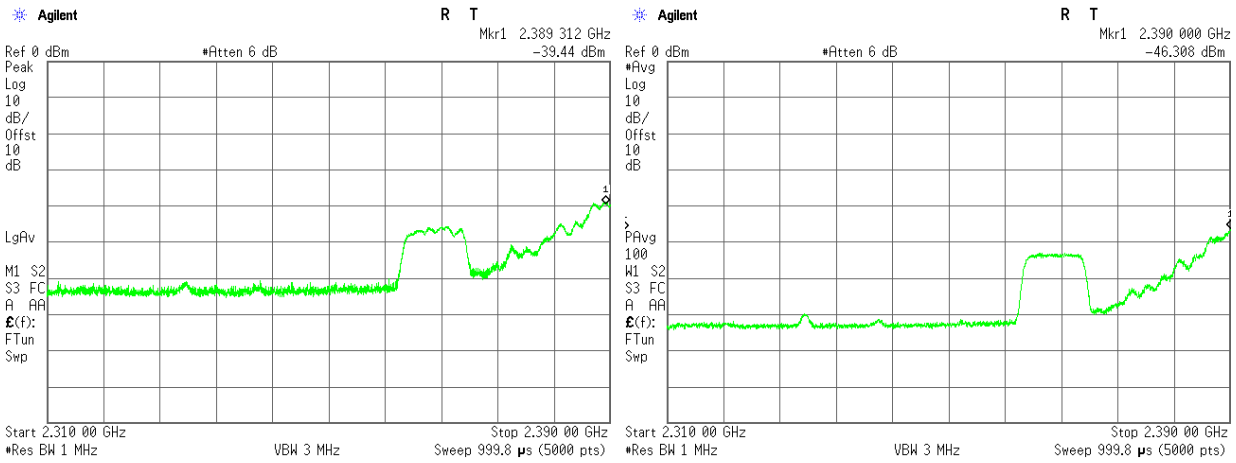


Peak

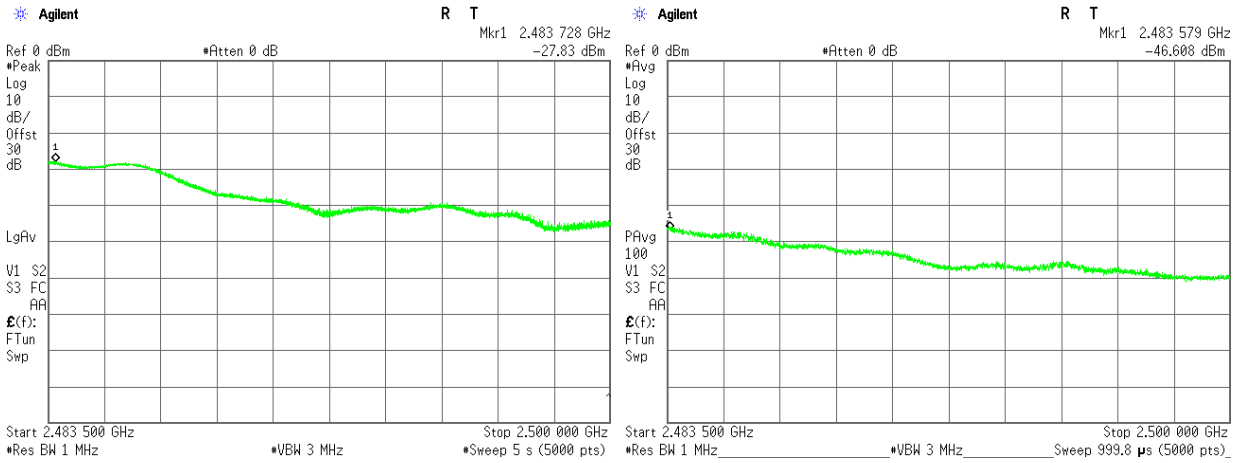


Average

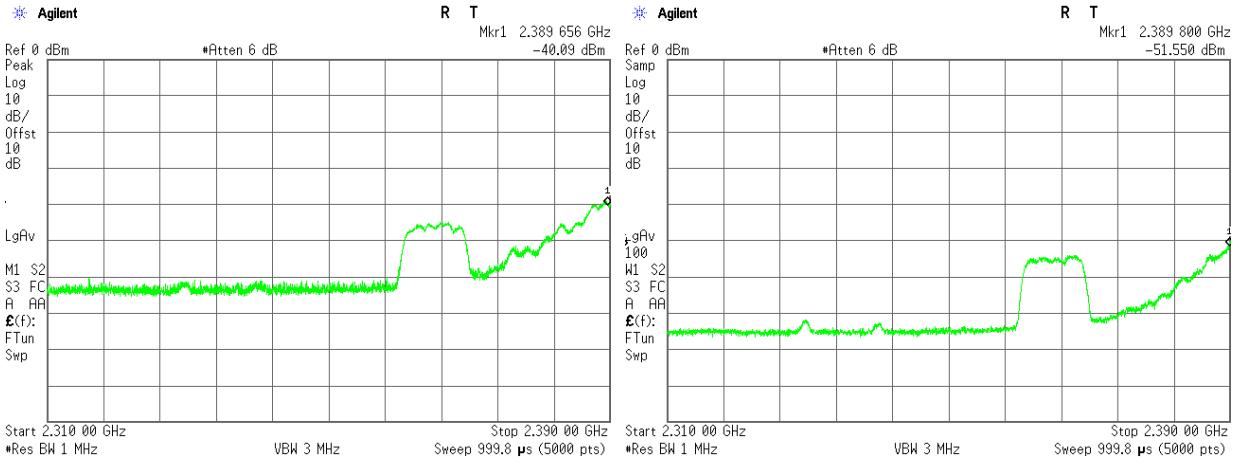
Plot 3.5.177 Emissions in restricted frequency bands test results, 2310 – 2390 MHz band, Conducted measurements, Fc = 2405 MHz, BW = 8.4 MHz, Bit Rate = 6.4 Mbps, output RF 1



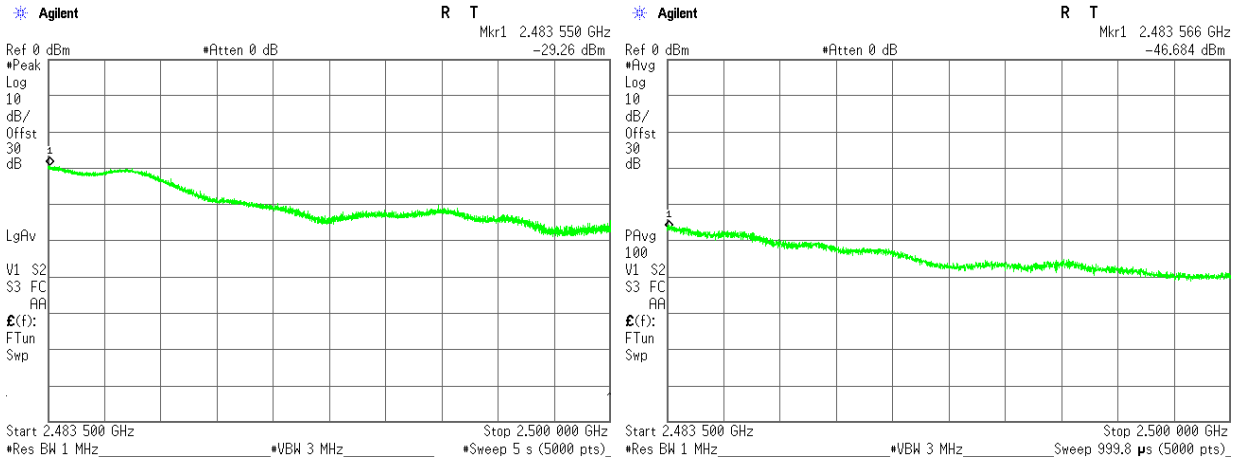
Plot 3.5.178 Emissions in restricted frequency bands test results, 2483.5 – 2500 MHz band, Conducted measurements, Fc = 2475 MHz, BW = 8.4 MHz, Bit Rate = 6.4 Mbps, output RF 1



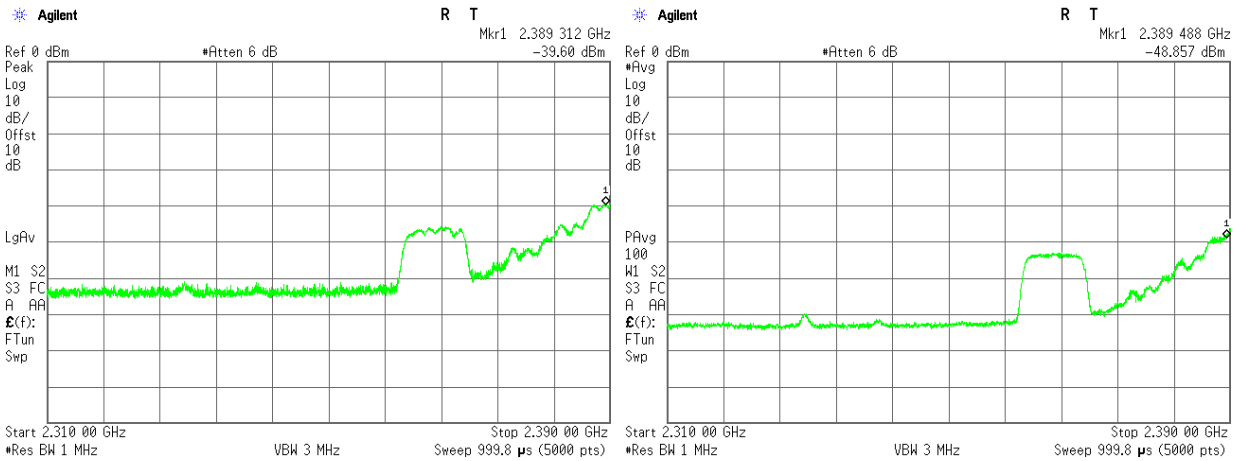
Plot 3.5.179 Emissions in restricted frequency bands test results, 2310 – 2390 MHz band, Conducted measurements, Fc = 2405 MHz, BW = 8.4 MHz, Bit Rate =6.4 Mbps, output RF 2



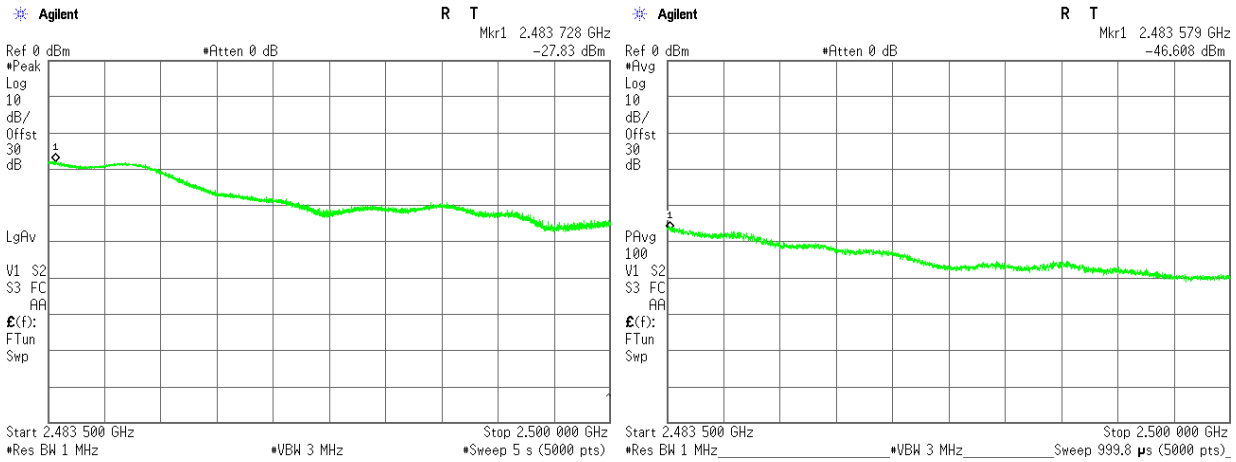
Plot 3.5.180 Emissions in restricted frequency bands test results, 2483.5 – 2500 MHz band, Conducted measurements, Fc = 2475 MHz, BW = 8.4 MHz, Bit Rate = 6.4 Mbps, output RF 2



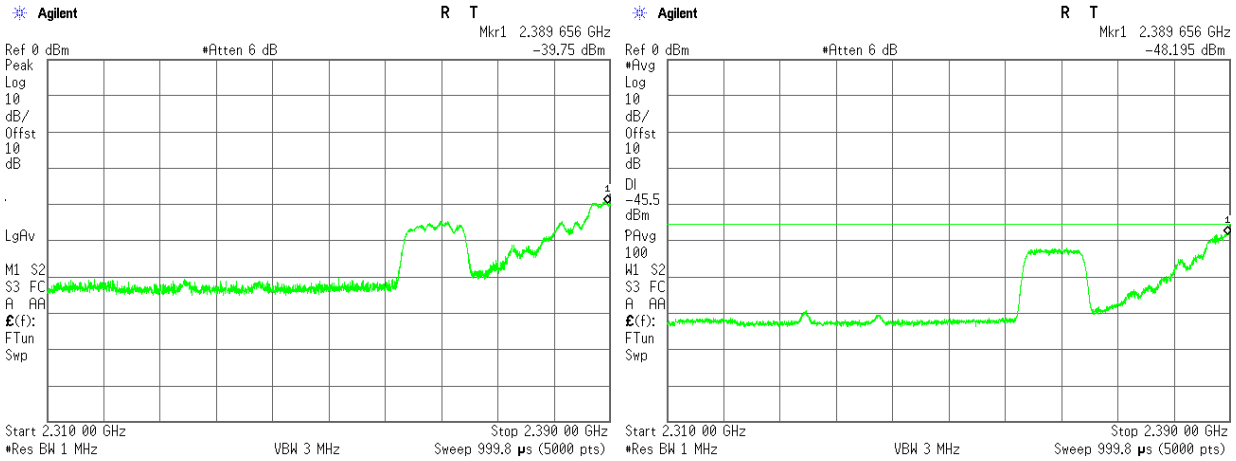
Plot 3.5.181 Emissions in restricted frequency bands test results, 2310 – 2390 MHz band, Conducted measurements, Fc = 2405 MHz, BW = 8.4 MHz, Bit Rate = 8 Mbps, output RF 1



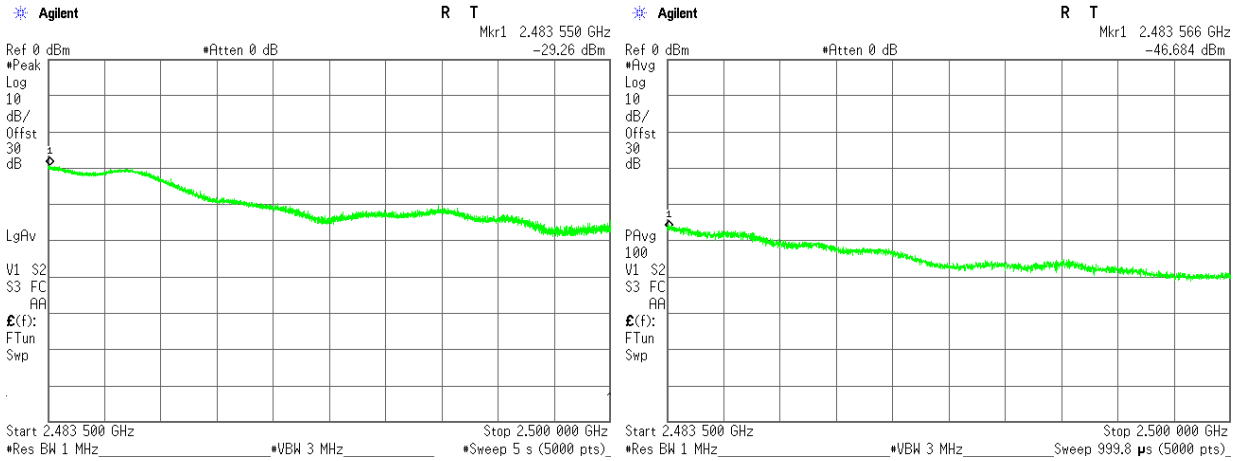
Plot 3.5.182 Emissions in restricted frequency bands test results, 2483.5 – 2500 MHz band, Conducted measurements, Fc = 2475 MHz, BW = 8.4 MHz, Bit Rate = 8 Mbps, output RF 1



Plot 3.5.183 Emissions in restricted frequency bands test results, 2310 – 2390 MHz band, Conducted measurements, Fc = 2405 MHz, BW = 8.4 MHz, Bit Rate = 8 Mbps, output RF 2



Plot 3.5.184 Emissions in restricted frequency bands test results, 2483.5 – 2500 MHz band, Conducted measurements, Fc = 2475 MHz, BW = 8.4 MHz, Bit Rate = 8 Mbps, output RF 2



3.6. Band edge measurements

Date of Test: 19.07.2018
Relative Humidity: 48.5%
Ambient Temperature: 22.5 °C
Atmospheric Pressure: 1011.4 hPa
Test performed by: Agi Yizhak

Reference document:	**47 CFR §15.247 (d)**		
Test Requirements:	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. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under paragraph (b)(3) of this section, the attenuation required under this paragraph shall be 30dB instead of 20dB. Attenuation below the general limits specified in §15.209(a) is not required. In addition, 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)).		
Method of testing:	KDB 558074 D01 v04, Sec.13.3.1 Conducted	Pass	
Operating conditions:	Under normal test conditions		
S.A. Settings:	RBW: 100 kHz, VBW: ≥3×RBW		
Environment conditions:	Ambient Temperature: 48°C	Relative Humidity: 21%	Atmospheric Pressure: 1011.4 hPa
Test Result:	See below		

Test results: 905 – 925 MHz

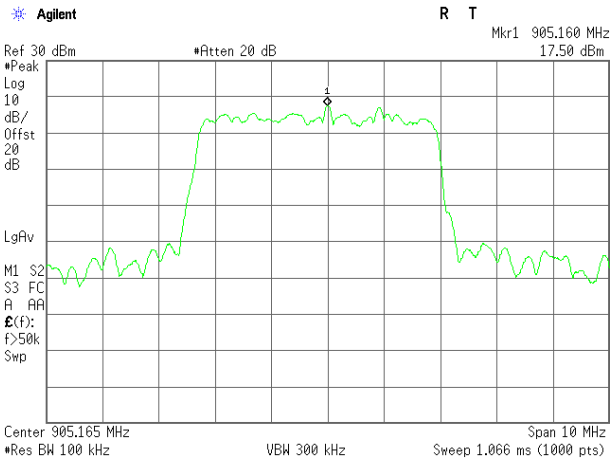
Fundamental Frequency, [MHz]	Fundamental Emission Reference Level, [dBm]	Measured Average Power, [dBm]	Duty Cycle Correction Factor	Calculated Average Power, [dBm]	Attenuation Below Fundamental, [dB]	Minimum Attenuation Below Fundamental, [dB]	Margin, [dB]	Pass/ Fail
RF1 output, BW = 4.2 MHz, Data rate = 3.2Mbps, continuous transmission								
905	17.50	-19.86	NA*	-19.86	37.36	30	7.36	Pass
925	17.53	-18.06	NA*	-18.06	35.59	30	5.59	Pass
RF2 output, BW = 4.2 MHz, Data rate = 3.2 Mbps, continuous transmission								
905	17.42	-21.96	NA*	-21.96	39.38	30	9.38	Pass
925	17.40	-24.07	NA*	-24.07	41.47	30	11.47	Pass
RF1 output, BW = 4.2 MHz, Data rate = 4 Mbps, continuous transmission								
905	17.53	-20.07	NA*	-20.07	37.6	30	7.6	Pass
925	17.23	-22.26	NA*	-22.26	39.49	30	9.49	Pass
RF2 output, BW = 4.2 MHz, Data rate = 4 Mbps, continuous transmission								
905	17.53	-22.26	NA*	-22.26	39.79	30	9.79	Pass
925	17.32	-22.94	NA*	-22.94	40.26	30	10.26	Pass
RF1 output, BW = 8.4 MHz, Data rate = 6.4 Mbps, continuous transmission								
907	12.98	-22.82	NA*	-22.82	35.8	30	5.8	Pass
923	12.95	-21.17	NA*	-21.17	34.12	30	4.12	Pass
RF2 output, BW = 8.4 MHz, Data rate =6.4Mbps, continuous transmission								
907	12.92	-23.59	NA*	-23.59	36.51	30	6.51	Pass
923	12.95	-26.89	NA*	-26.89	39.84	30	9.84	Pass
RF1 output, BW = 8.4 MHz, Data rate = 8 Mbps, continuous transmission								
907	13.04	-22.42	NA*	-22.42	35.46	30	5.46	Pass
923	13.0	-21.11	NA*	-21.11	34.11	30	4.11	Pass
RF2 output, BW = 8.4 MHz, Data rate = 8 Mbps, continuous transmission								
907	12.98	-23.23	NA*	-23.23	36.21	30	6.21	Pass
923	12.80	-25.83	NA*	-25.83	38.63	30	8.63	Pass

Test results: 2403 – 2478 MHz

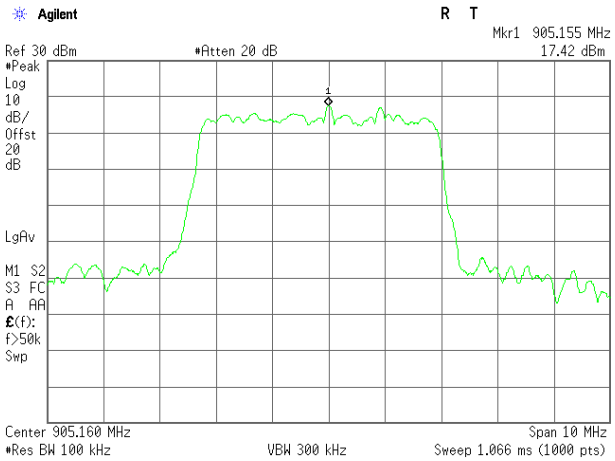
Fundamental Frequency, [MHz]	Fundamental Emission Reference Level, [dBm]	Measured Average Power, [dBm]	Duty Cycle Correction Factor	Calculated Average Power, [dBm]	Attenuation Below Fundamental , [dB]	Minimum Attenuation Below Fundamental, [dB]	Margin, [dB]	Pass/ Fail
RF1 output, BW = 4.2 MHz, Data rate = 3.2 Mbps, continuous transmission								
2403	15.56	-18.54	NA*	-18.54	34.1	30	4.1	Pass
2478	15.73	-28.12	NA*	-28.12	43.85	30	13.85	Pass
RF2 output, BW = 4.2 MHz, Data rate = 3.2 Mbps, continuous transmission								
2403	15.82	-17.49	NA*	-17.49	33.31	30	3.31	Pass
2478	15.57	-27.04	NA*	-27.04	42.61	30	12.61	Pass
RF1 output, BW = 4.2 MHz, Data rate = 4 Mbps, continuous transmission								
2403	15.89	-17.13	NA*	-17.13	33.02	30	3.02	Pass
2478	15.86	-28.27	NA*	-28.27	44.13	30	14.13	Pass
RF2 output, BW = 4.2 MHz, Data rate = 4 Mbps, continuous transmission								
2403	15.84	-15.88	NA*	-15.88	31.72	30	1.72	Pass
2478	15.62	-27.16	NA*	-27.16	42.78	30	12.78	Pass
RF1 output, BW = 8.4 MHz, Data rate = 6.4 Mbps, continuous transmission								
2405	11.18	-21.0	NA*	-21.0	32.18	30	2.18	Pass
2475	11.26	-24.8	NA*	-24.8	36.06	30	6.06	Pass
RF2 output, BW = 8.4 MHz, Data rate = 6.4 Mbps, continuous transmission								
2405	11.15	-20.5	NA*	-20.5	31.65	30	1.65	Pass
2475	11.34	-24.8	NA*	-24.8	36.14	30	6.14	Pass
RF1 output, BW = 8.4 MHz, Data rate = 8 Mbps, continuous transmission								
2405	11.82	-20.2	NA*	-20.2	32.02	30	2.02	Pass
2475	11.27	-26.2	NA*	-26.2	37.47	30	7.47	Pass
RF2 output, BW = 8.4 MHz, Data rate = 8 Mbps, continuous transmission								
2405	11.69	-20.6	NA*	-20.6	32.29	30	2.29	Pass
2475	11.3	-26.5	NA*	-26.5	37.8	30	7.8	Pass

*Duty Cycle Correction Factor = 10log(1/X) = 10log(1/1) = 0, X is transmit Duty Cycle [1/100%]

Plot 3.6.1 Band-Edge test results, Fundamental Emission Reference Level, BW = 4.2 MHz, Data rate =3.2 Mbps, Fc = 905 MHz

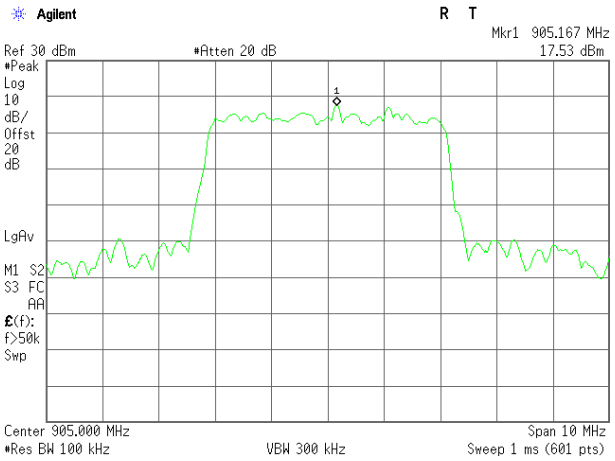


RF1

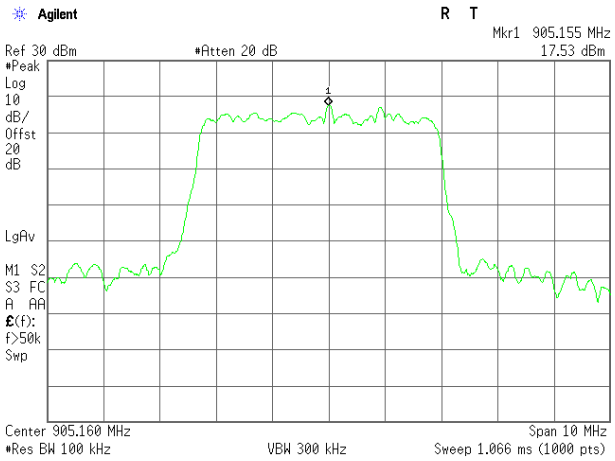


RF2

Plot 3.6.2 Band-Edge test results, Fundamental Emission Reference Level, BW = 4.2 MHz, Data rate = 4 Mbps, Fc = 905 MHz

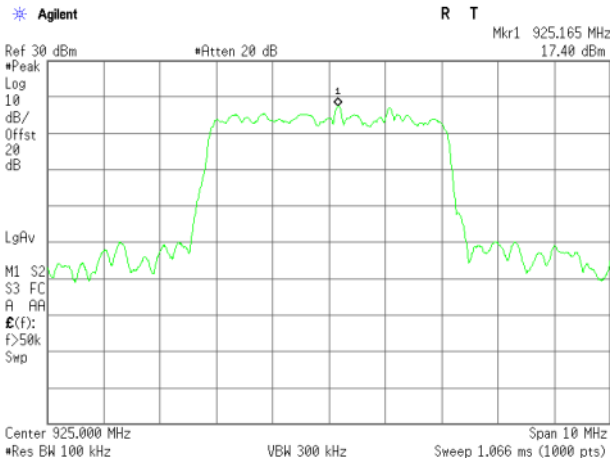


RF1

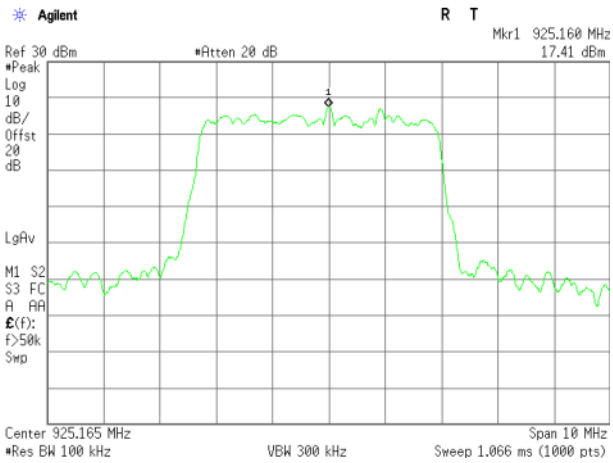


RF2

Plot 3.6.3 Band-Edge test results, Fundamental Emission Reference Level, BW = 4.2 MHz, Data rate = 3.2 Mbps, Fc = 925 MHz

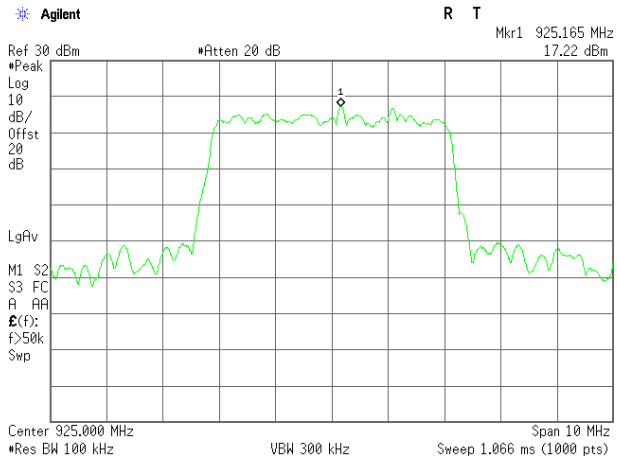


RF1

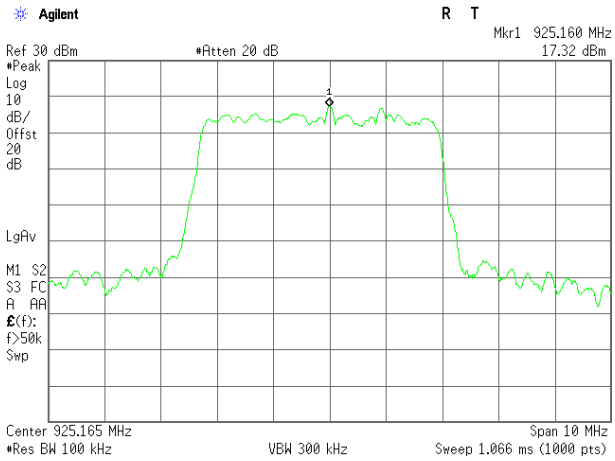


RF2

Plot 3.6.4 Band-Edge test results, Fundamental Emission Reference Level, BW = 4.2 MHz, Data rate = 4 Mbps, Fc = 925 MHz

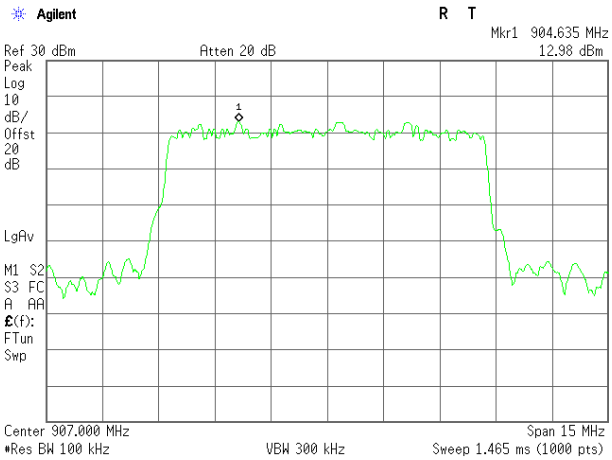


RF1

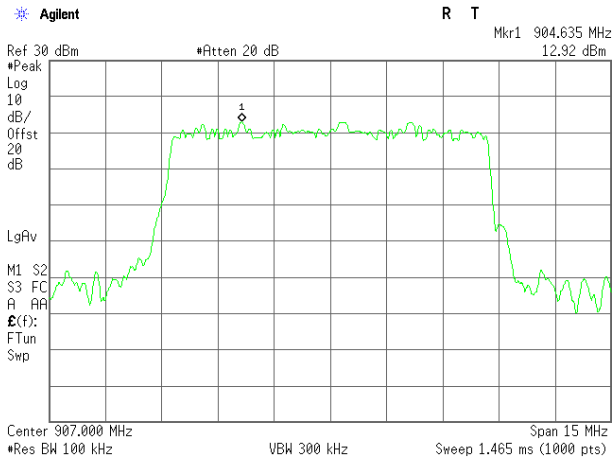


RF2

Plot 3.6.5 Band-Edge test results, Fundamental Emission Reference Level, BW = 8.4 MHz, Data rate = 6.4 Mbps, Fc = 907 MHz

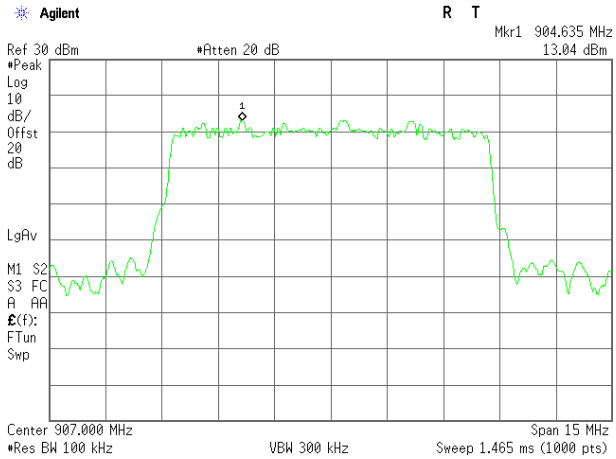


RF1

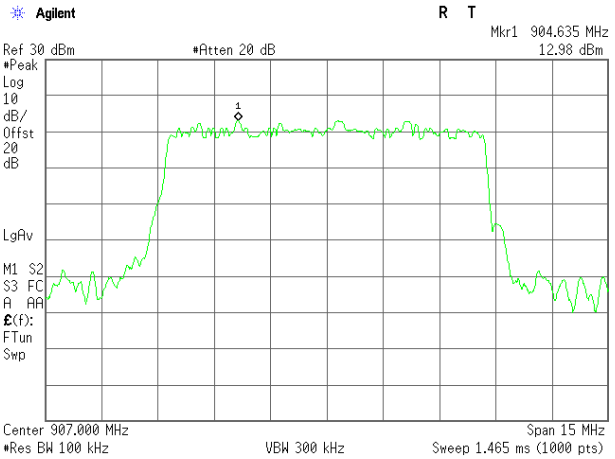


RF2

Plot 3.6.6 Band-Edge test results, Fundamental Emission Reference Level, BW = 8.4 MHz, Data rate = 8 Mbps, Fc = 907 MHz

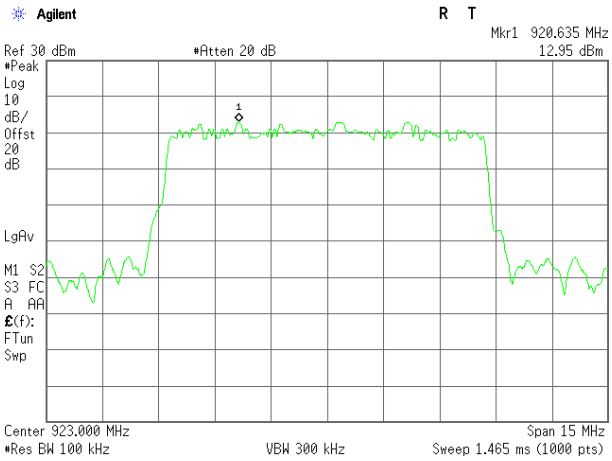


RF1

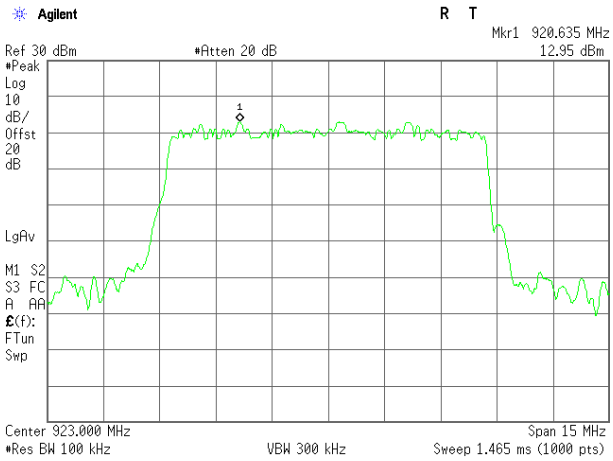


RF2

Plot 3.6.7 Band-Edge test results, Fundamental Emission Reference Level, BW = 8.4 MHz, Data rate =6.4 Mbps, Fc =923 MHz

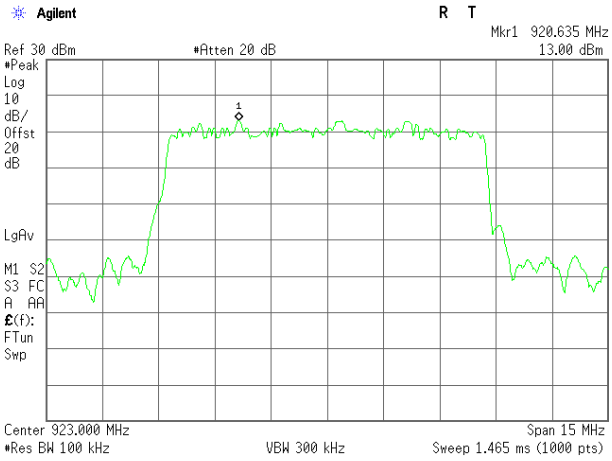


RF1

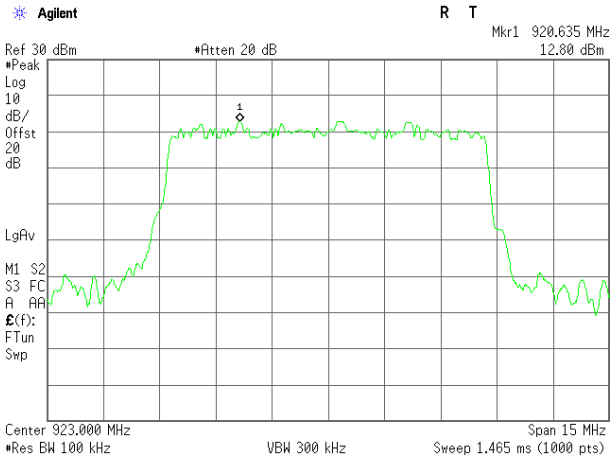


RF2

Plot 3.6.8 Band-Edge test results, Fundamental Emission Reference Level, BW = 8.4 MHz, Data rate =8 Mbps, Fc =923 MHz

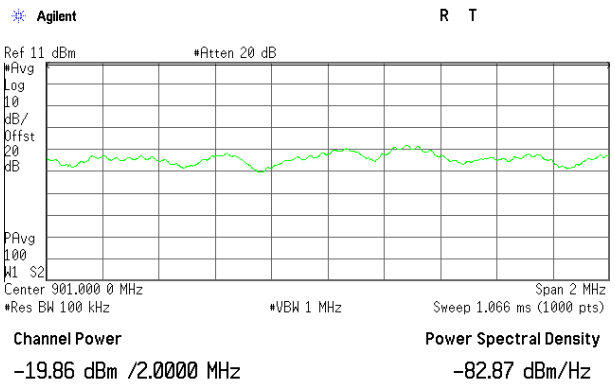


RF1

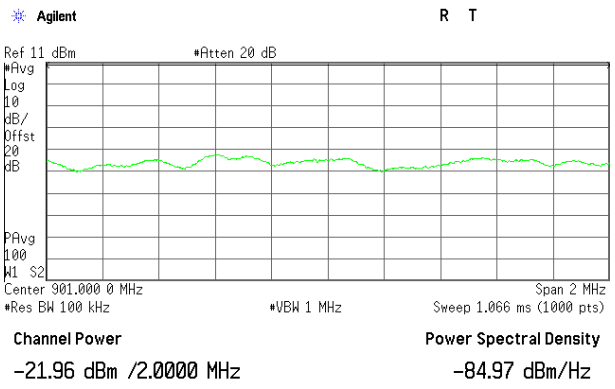


RF2

Plot 3.6.9 Band-Edge test results, BW = 4.2 MHz, Data rate = 3.2 Mbps, Fc = 905 MHz

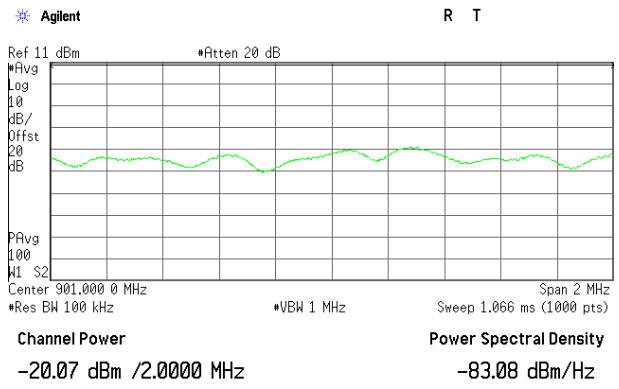


RF1

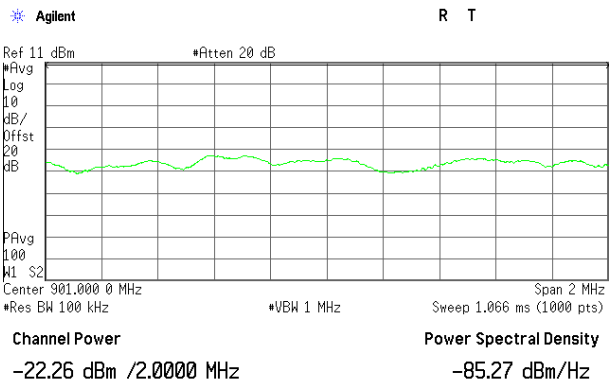


RF2

Plot 3.6.10 Band-Edge test results, BW = 4.2 MHz, Data rate = 4 Mbps, Fc = 905 MHz

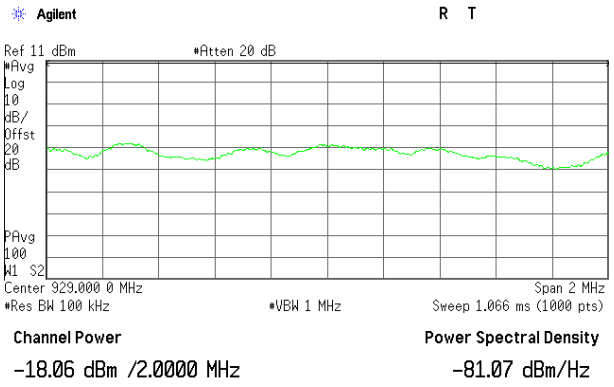


RF1

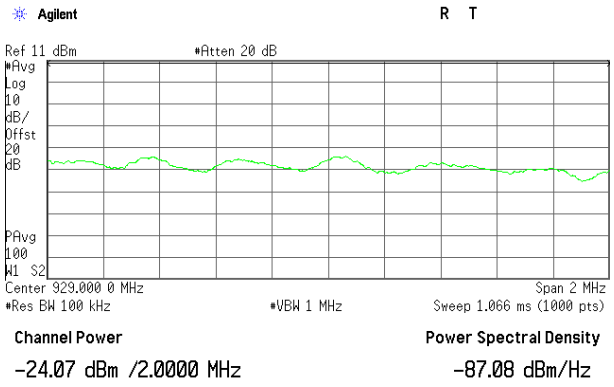


RF2

Plot 3.6.11 Band-Edge test results, BW = 4.2 MHz, Data rate = 3.2 Mbps, Fc = 925 MHz

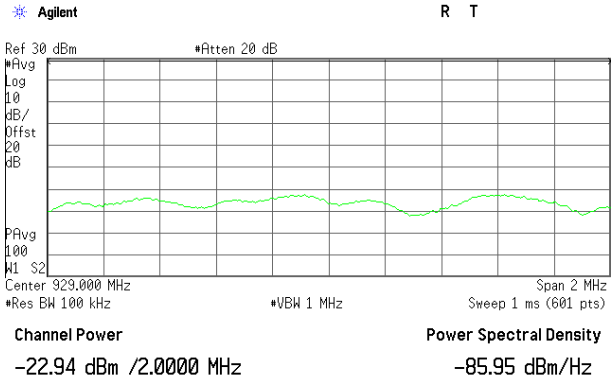


RF1

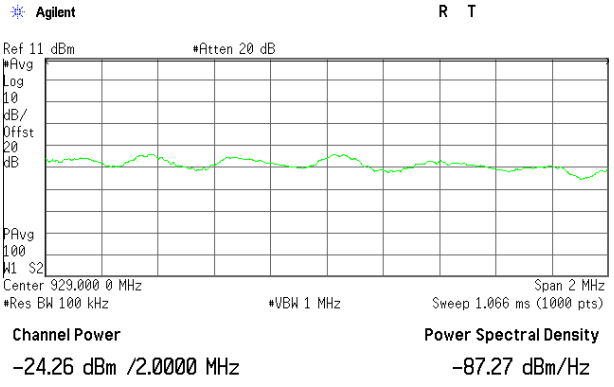


RF2

Plot 3.6.12 Band-Edge test results, BW = 4.2 MHz, Data rate = 4 Mbps, Fc = 925 MHz

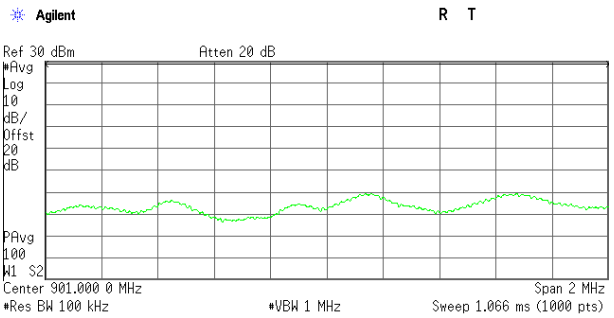


RF1

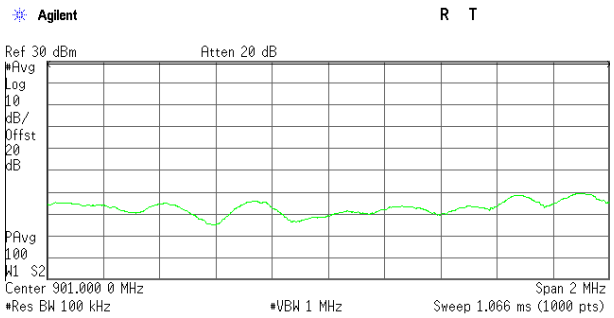


RF2

Plot 3.6.13 Band-Edge test results, BW = 8.4 MHz, Data rate = 6.4 Mbps, Fc = 907 MHz

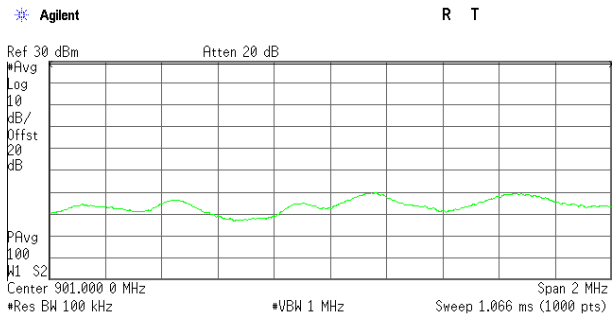


RF1

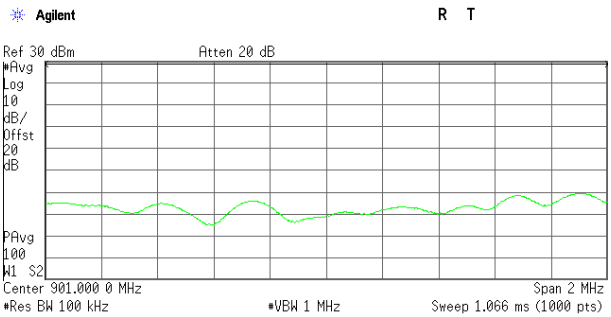


RF2

Plot 3.6.14 Band-Edge test results, BW = 8.4 MHz, Data rate = 8 Mbps, Fc = 907 MHz

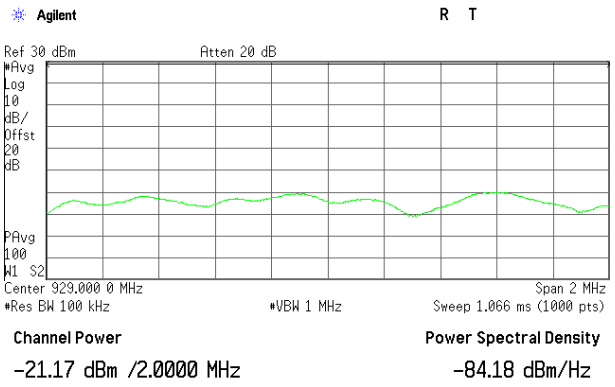


RF1

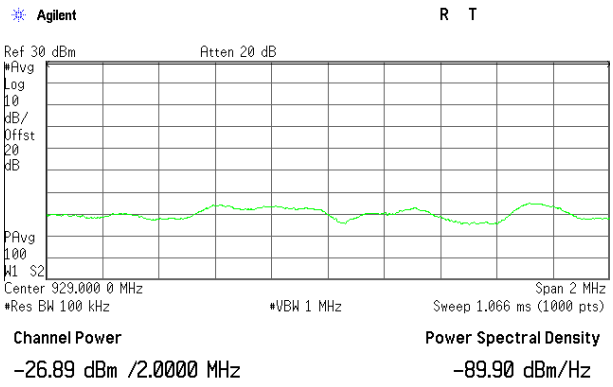


RF2

Plot 3.6.15 Band-Edge test results, BW = 8.4 MHz, Data rate = 6.4 Mbps, Fc = 923 MHz

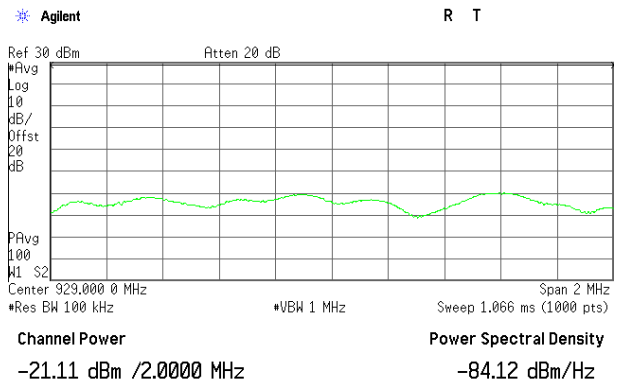


RF1

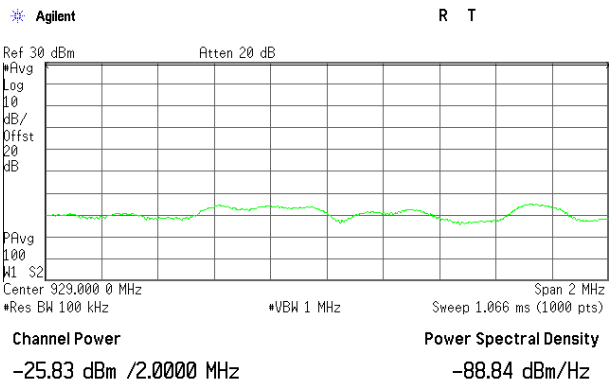


RF2

Plot 3.6.16 Band-Edge test results, BW = 8.4 MHz, Data rate = 8 Mbps, Fc = 923 MHz

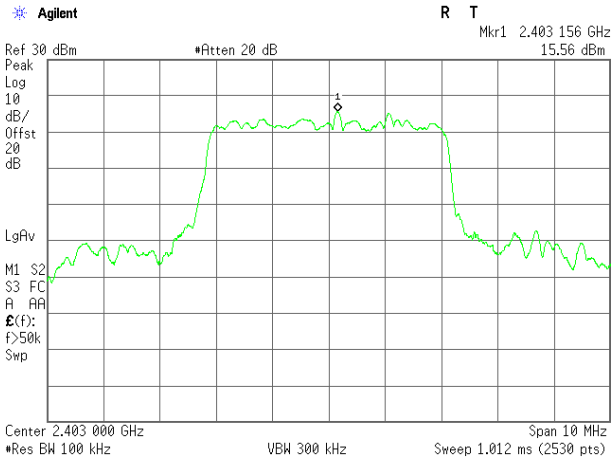


RF1

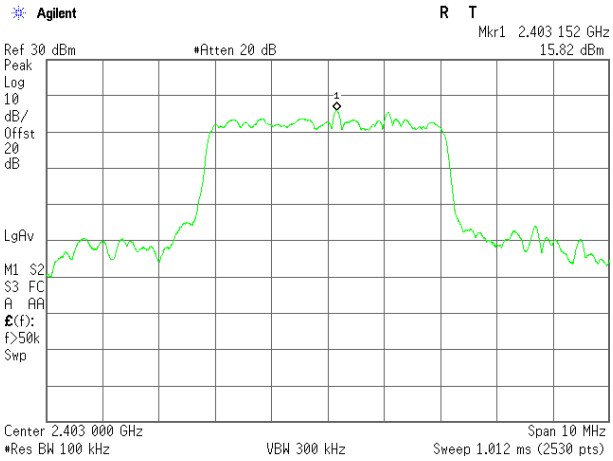


RF2

Plot 3.6.17 Band-Edge test results, Fundamental Emission Reference Level, BW = 4.2 MHz, Data rate = 3.2 Mbps, Fc = 2403 MHz

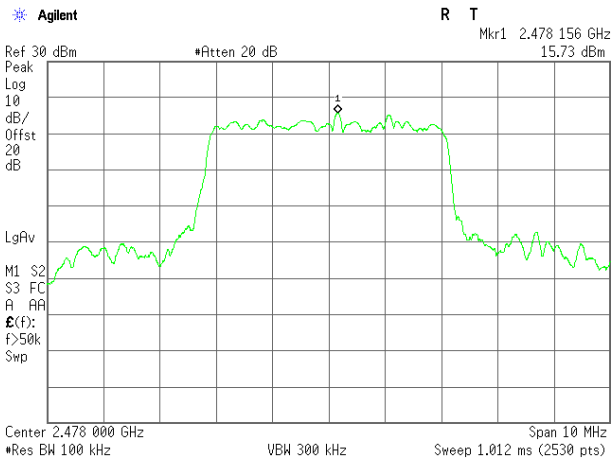


RF1

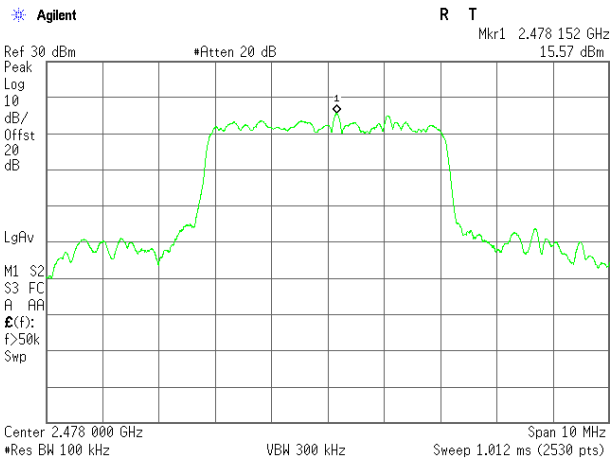


RF2

Plot 3.6.18 Band-Edge test results, Fundamental Emission Reference Level, BW = 4.2 MHz, Data rate = 3.2Mbps, Fc = 2478 MHz

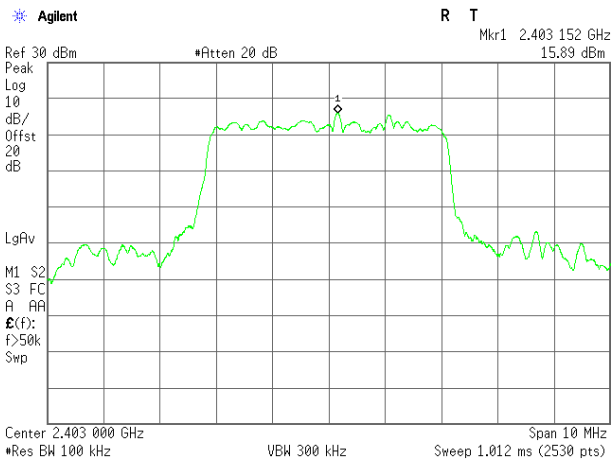


RF1

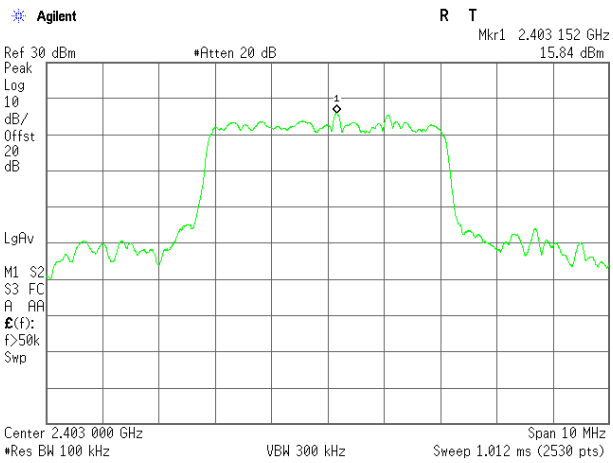


RF2

Plot 3.6.19 Band-Edge test results, Fundamental Emission Reference Level, BW = 4.2 MHz, Data rate = 4 Mbps, Fc = 2403 MHz

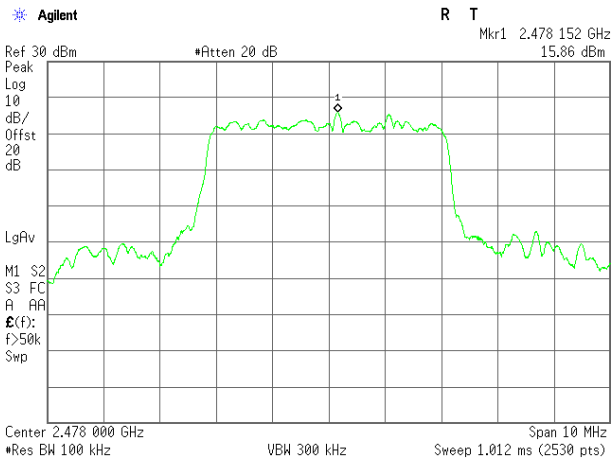


RF1

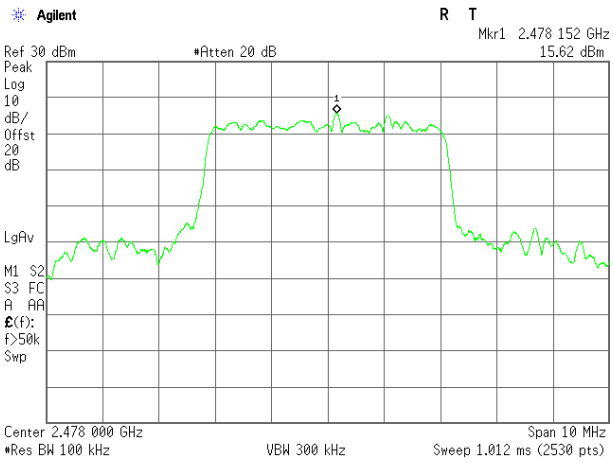


RF2

Plot 3.6.20 Band-Edge test results, Fundamental Emission Reference Level, BW = 4.2 MHz, Data rate = 4 Mbps, Fc = 2478 MHz

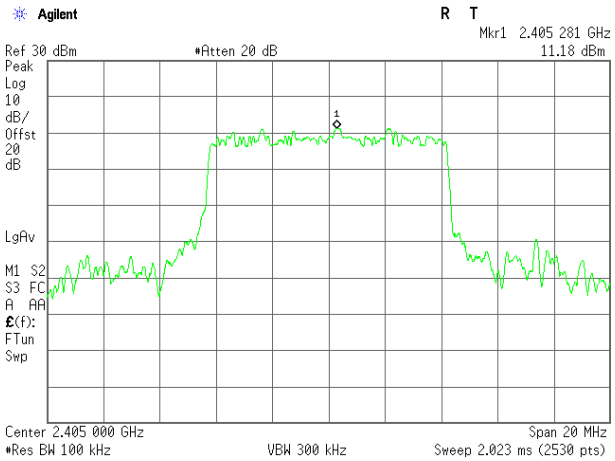


RF1

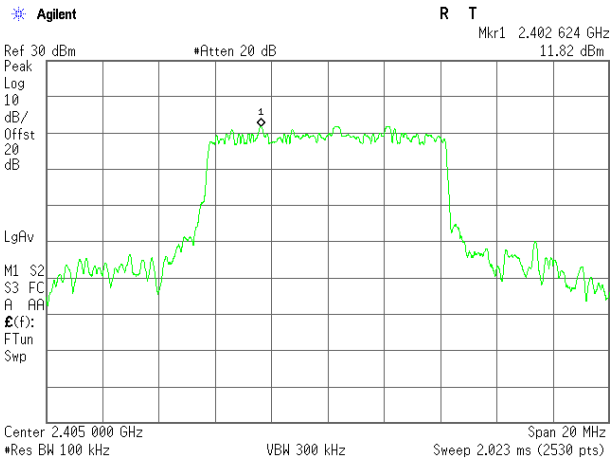


RF2

Plot 3.6.21 Band-Edge test results, Fundamental Emission Reference Level, BW = 8.4 MHz, Data rate = 6.4 Mbps, Fc = 2405 MHz

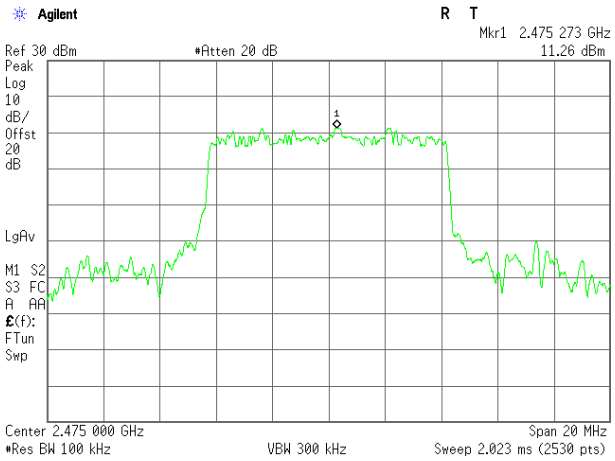


RF1

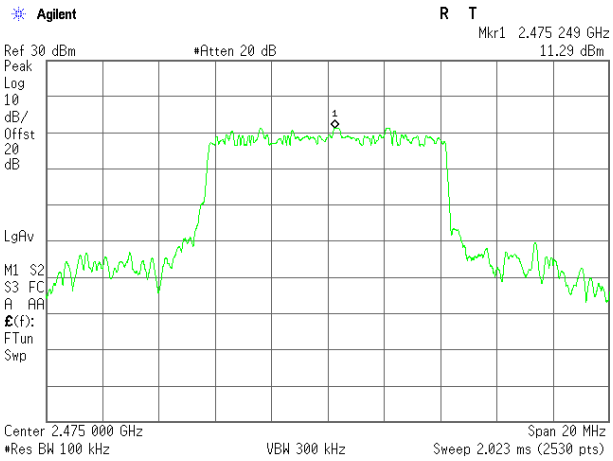


RF2

Plot 3.6.22 Band-Edge test results, Fundamental Emission Reference Level, BW = 8.4 MHz, Data rate = 6.4 Mbps, Fc = 2475 MHz

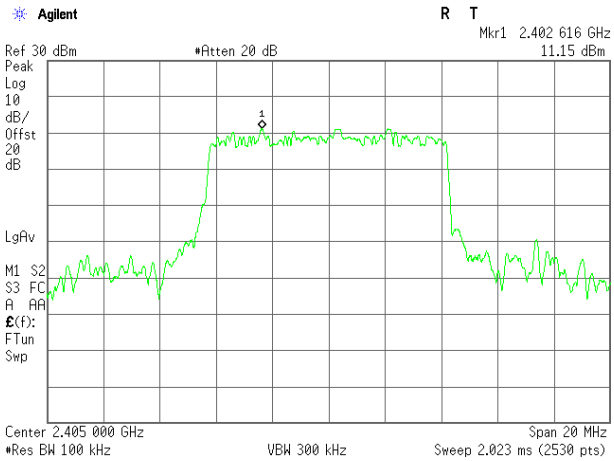


RF1

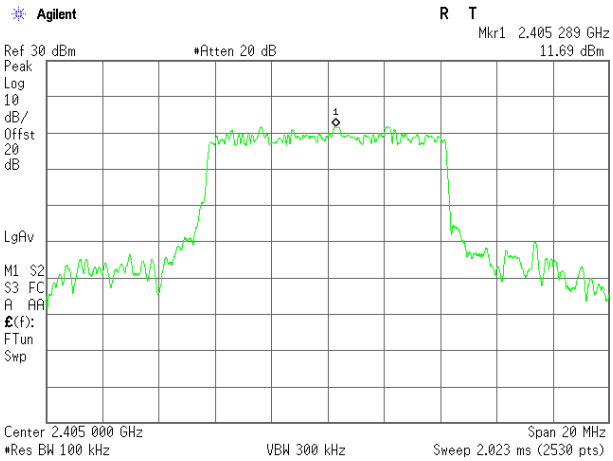


RF2

Plot 3.6.23 Band-Edge test results, Fundamental Emission Reference Level, BW = 8.4 MHz, Data rate = 8 Mbps, Fc = 2405 MHz

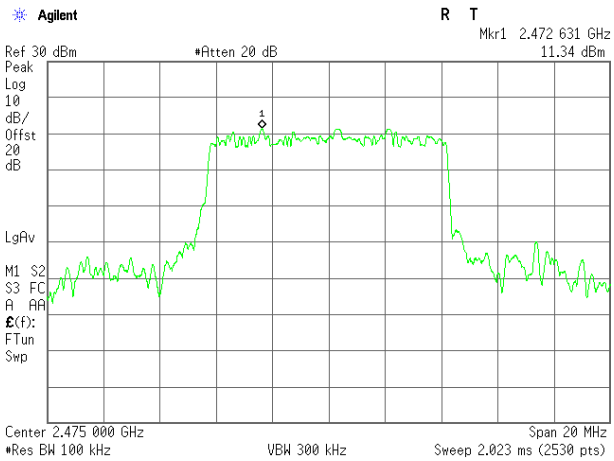


RF1

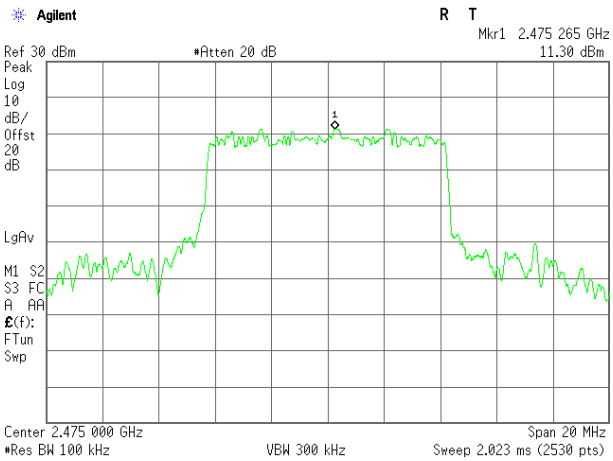


RF2

Plot 3.6.24 Band-Edge test results, Fundamental Emission Reference Level, BW = 8.4 MHz, Data rate = 8 Mbps, Fc = 2475 MHz

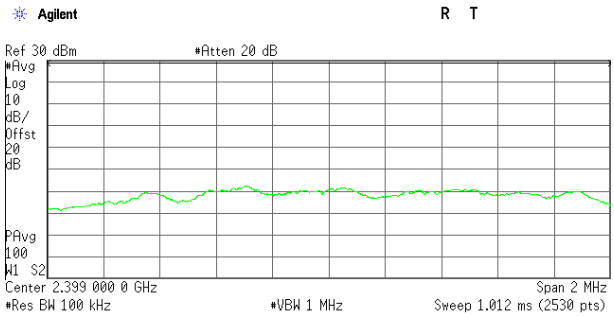


RF1

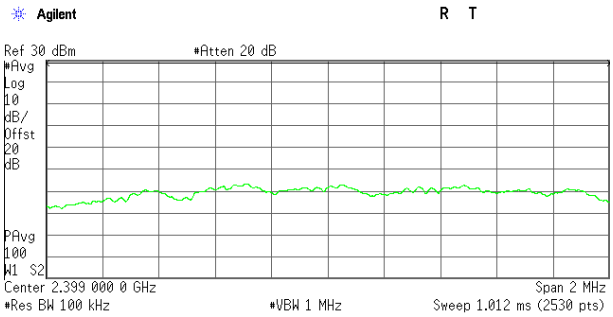


RF2

Plot 3.6.25 Band-Edge test results, BW = 4.2 MHz, Data rate = 3.2 Mbps, Fc = 2403 MHz

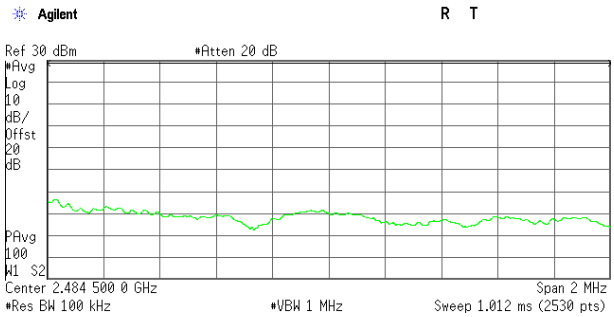


RF1

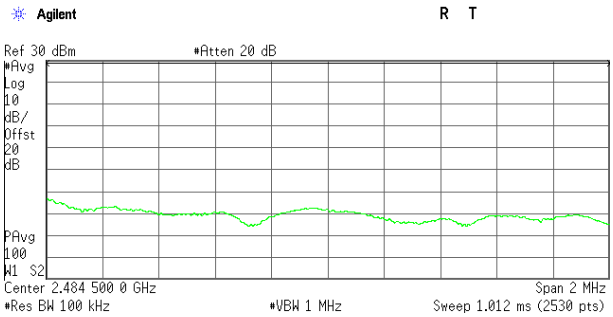


RF2

Plot 3.6.26 Band-Edge test results, BW = 4.2 MHz, Data rate = 3.2 Mbps, Fc = 2478 MHz

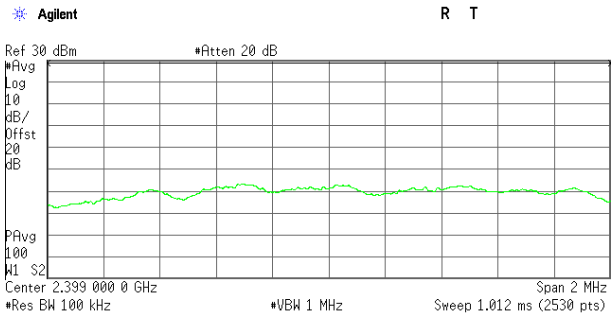


RF1

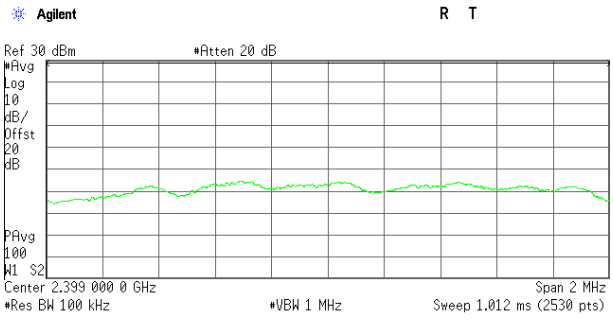


RF2

Plot 3.6.27 Band-Edge test results, BW = 4.2 MHz, Data rate = 4 Mbps, Fc = 2403 MHz

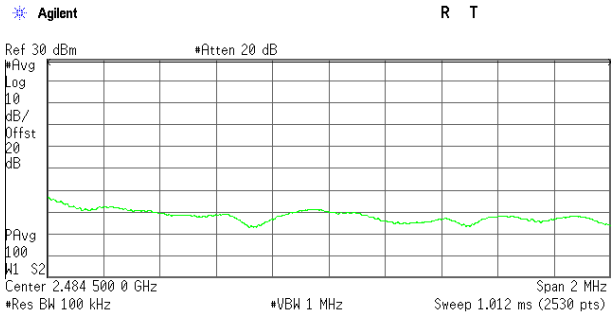


RF1

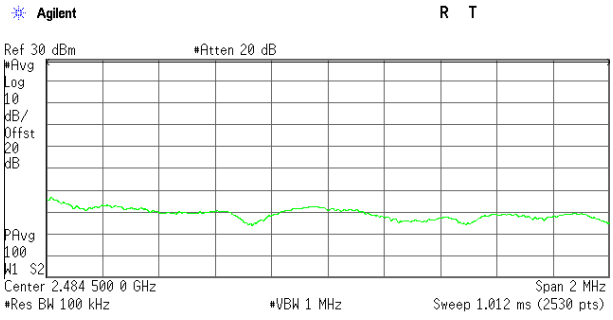


RF2

Plot 3.6.28 Band-Edge test results, BW = 4.2 MHz, Data rate = 4 Mbps, Fc = 2478 MHz

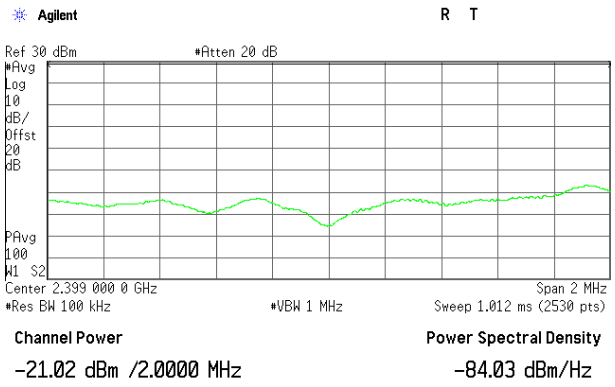


RF1

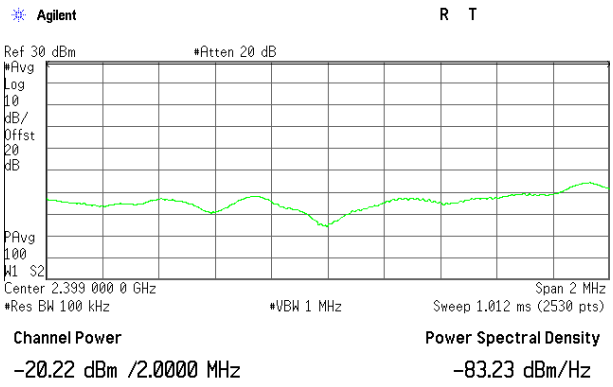


RF2

Plot 3.6.29 Band-Edge test results, BW = 8.4 MHz, Data rate = 6.4 Mbps, Fc = 2405 MHz

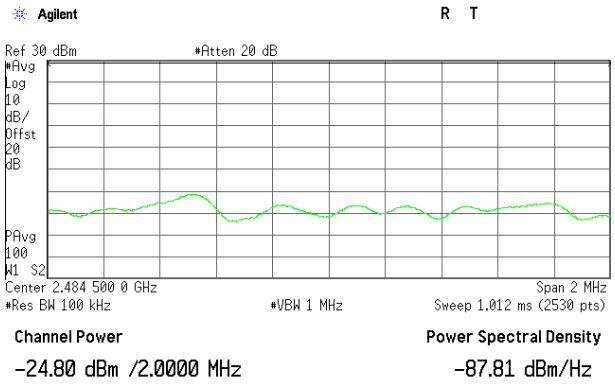


RF1

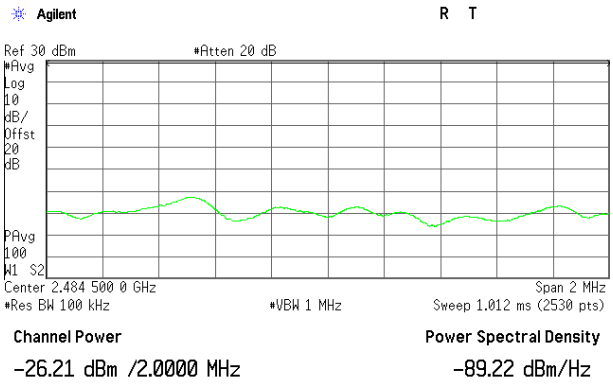


RF2

Plot 3.6.30 Band-Edge test results, BW = 8.4 MHz, Data rate = 6.4 Mbps, Fc = 2475 MHz

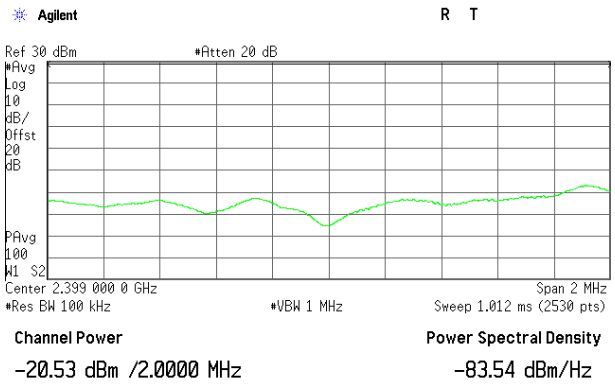


RF1

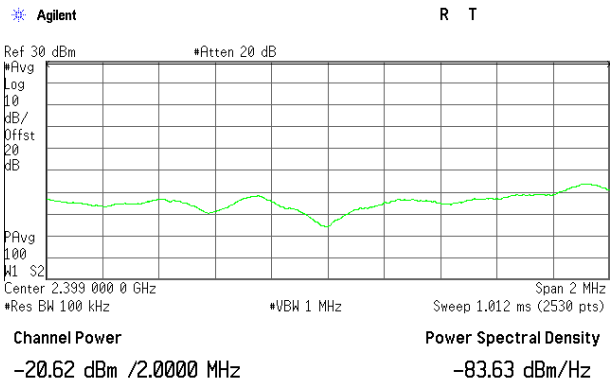


RF2

Plot 3.6.31 Band-Edge test results, BW = 8.4 MHz, Data rate = 8 Mbps, Fc = 2405 MHz

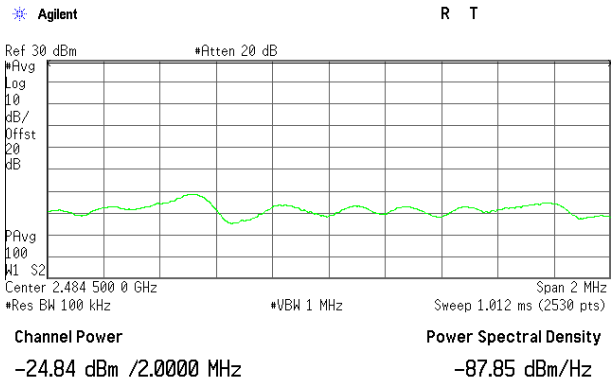


RF1

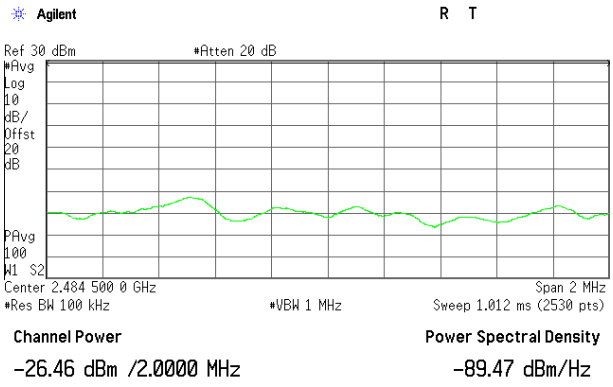


RF2

Plot 3.6.32 Band-Edge test results, BW = 8.4 MHz, Data rate = 8 Mbps, Fc = 2475 MHz



RF1



RF2

3.7. Antenna Connector Requirements

Reference document:	**47 CFR §15.203**	
Test Requirements:	An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with provisions of this section.	
Test Result:	The EUT must be install as a professional installation equipment, see user manual.	

4. Appendix

Appendix A: List of test equipment

Description	Manufacturer	Model	Serial No.	Last Cal	Cal Due
Low-Noise Amplifier 18GHz - 26.5 GHz	Spacek Labs	SL1018-56-5	17J29	29/09/2017	29/09/2018
Spectrum Analyzer (9KHz-3.6GHz)	Agilent	N9010A	MY50060093	27/09/2017	27/09/2018
EMC Analyzer	Agilent	E7405A	US41160436	27/09/2017	27/09/2018
RF Filter Section (2.9GHz)	HP	85460A	3448A00282	25/06/2018	25/06/2019
EMI Receiver (2.9GHz)	HP	8546A	3617A00318	24/06/2018	24/06/2019
Temp & Hum Meter	Zico	Zi-9622	141101658	23/05/2018	23/05/2019
RF Filter Section (6.5GHz)	HP	85460A	3704A00366	20/03/2018	20/03/2019
EMI Receiver (6.5GHz)	HP	8546A	3710A00392	19/03/2018	19/03/2019
Spectrum Analyzer 9KHz-22GHz	Agilent/HP	8593EM	3536A00131	27/09/2017	27/09/2019
Signal Generator	Marconi	2025	202301940	25/12/2017	25/12/2018
Signal Generator	Marconi	2024	1122681029	27/11/2017	27/11/2018
Bilog Antenna	Teseq	CBL 6141B	34119	14/08/2017	14/08/2018
Line impedance stabilization network, 9 kHz to 30 MHz, 3-Phase	Schwarzbeck	NNLK 8121	8121-526	19/04/2017	19/04/2018
Horn Antenna (EMM) 1-18GHz	A.R.A	DRG-118/A	17188	15/08/2017	15/08/2018
ESD Adapter	EMTest	CTR2	0712-49	26/06/2018	26/06/2021
ESD Adapter	EMTest	CTR2-AD	0712-196	19/06/2018	19/06/2021
Horn Antenna (for IMM) 1-18GHz	EMCO	3115	9602-4677	06/07/2016	06/07/2019
DCAMN (LISN) 150 kHz to 30 MHz	Schwarzbeck	PVDC 8300	30	25/04/2017	25/04/2020
Isotropic Probe (10MHz-40GHz)	ETS-Lindgren	HI-6153	168752	19/11/2017	19/11/2018
LISN	FCC	50/250-25-2	9705	20/11/2017	20/11/2018
LISN	Schwarzbeck	NNBL 8226-2	8226120	12/11/2017	12/11/2018
Horn Antenna 15-40 GHz	Schwarzbeck	BBHA 9170	BBHA9170214	12/03/2018	12/03/2021
RF Transient Limiter	Agilent	11947A	3107A04121	20/11/2017	20/11/2018
RF Transient Limiter	Agilent	11947A	3107A04119	12/11/2017	12/11/2018
Spectrum Analyzer 3Hz-44GHz	Agilent	E4446A	MY46180602	16/12/2016	16/12/2018
Low-Noise Amplifier 18GHz - 26.5GHz	MITEQ	AMF-7D-00182650-30-10P	45372	04/01/2018	04/01/2019
Low-Noise Amplifier 1GHz to 18GHz	AMP	7D-010180-30-10P-GW (OLD)	618653	06/12/2017	06/12/2018

Appendix B: Accreditation Certificate

Accredited Laboratory

A2LA has accredited

QUALITECH

Petah-Tikva, Israel

for technical competence in the field of

Electrical Testing

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2005 *General requirements for the competence of testing and calibration laboratories*. This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (*refer to joint ISO-ILAC-IAF Communiqué dated April 2017*).

Presented this 31st day of May 2018.

President and CEO
For the Accreditation Council
Certificate Number 1633.01
Valid to June 30, 2020

For the tests to which this accreditation applies, please refer to the laboratory's Electrical Scope of Accreditation.

End of the Test Report