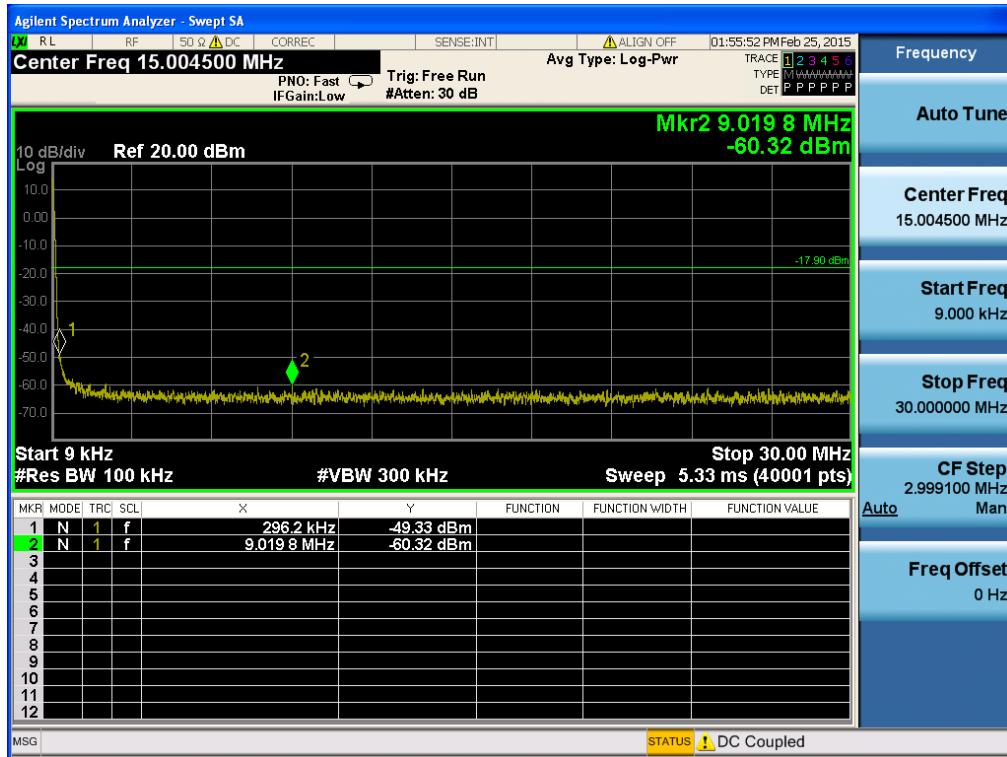


TM 2 & ANT 2 & Middle

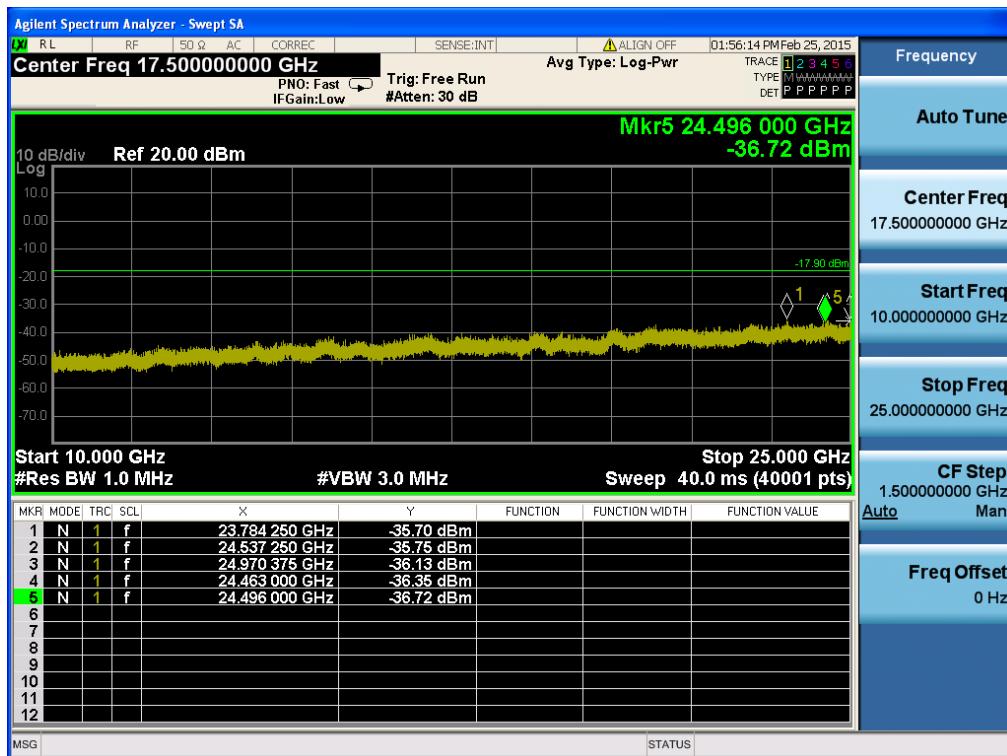
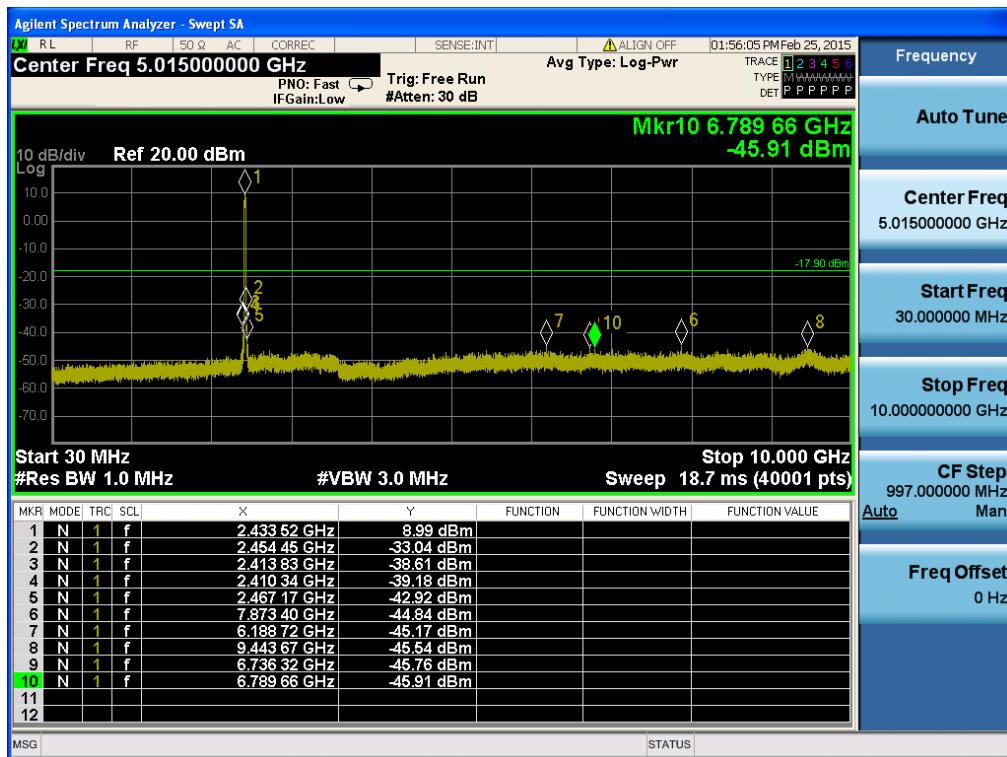
Reference



Conducted Spurious Emissions

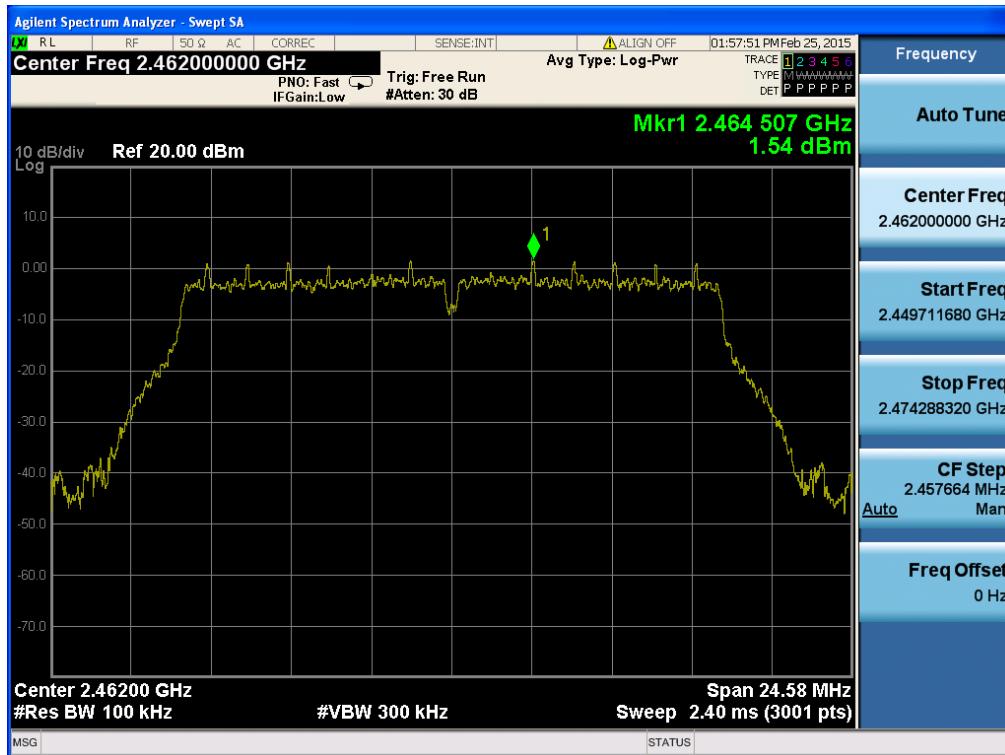


Conducted Spurious Emissions

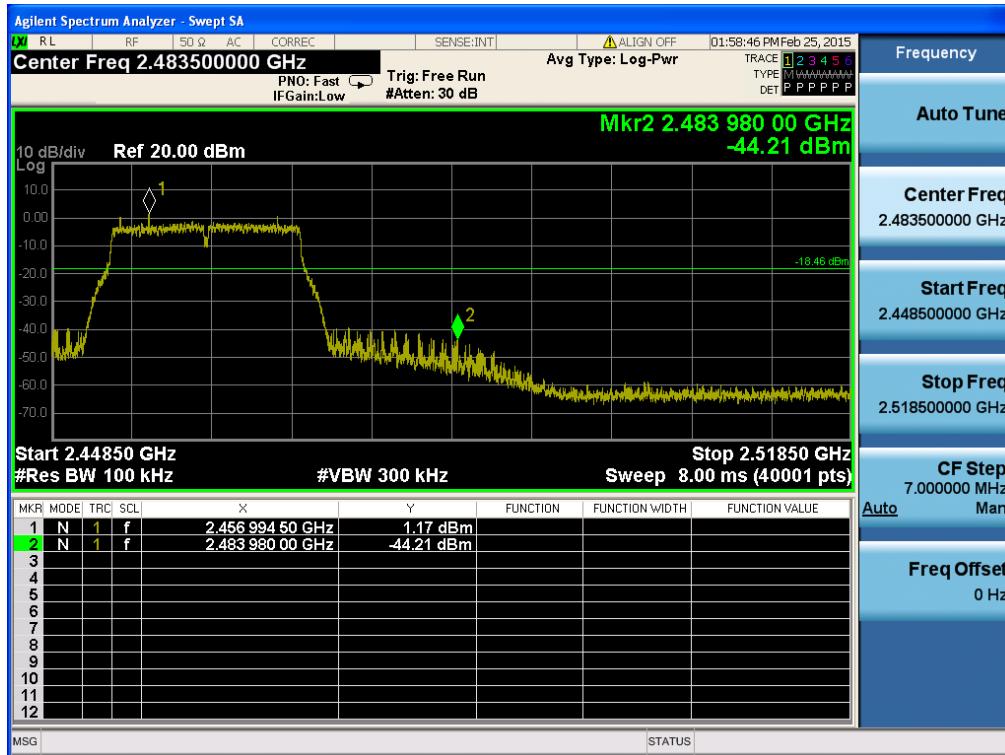


TM 2 & ANT 2 & Highest

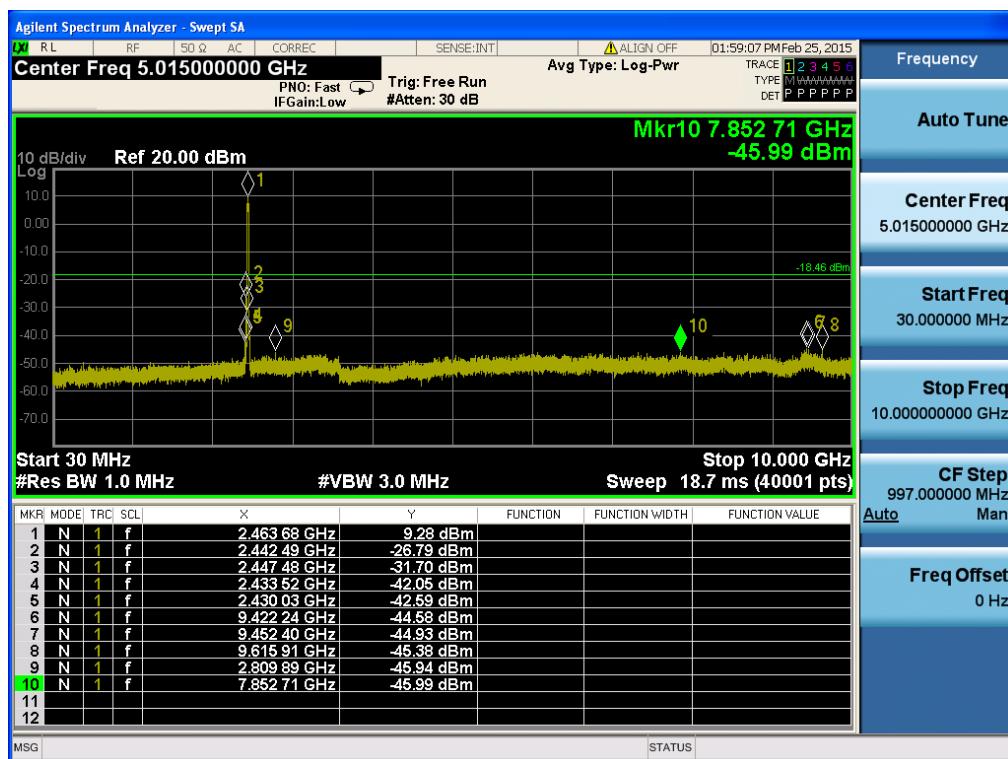
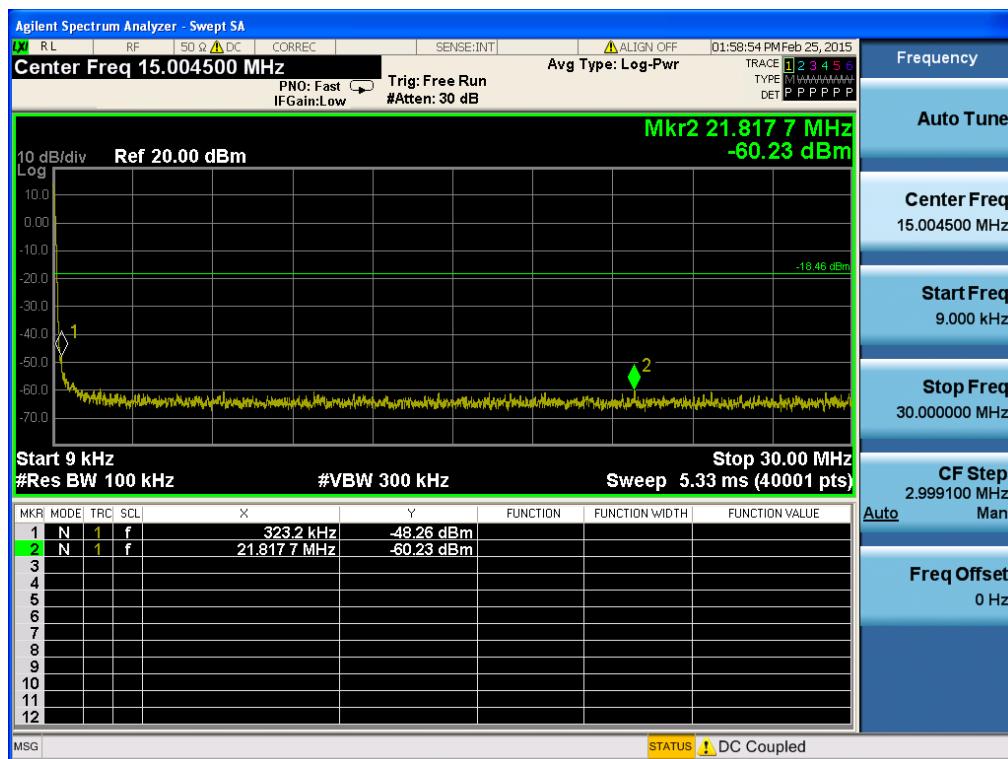
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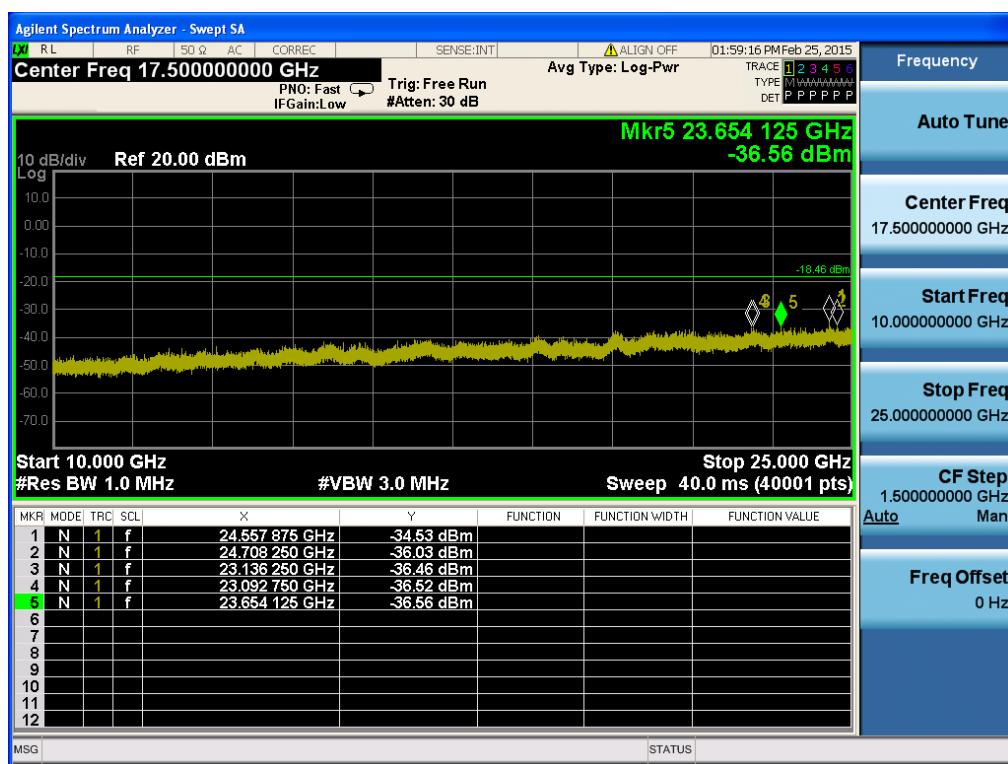
High Band-edge



Conducted Spurious Emissions

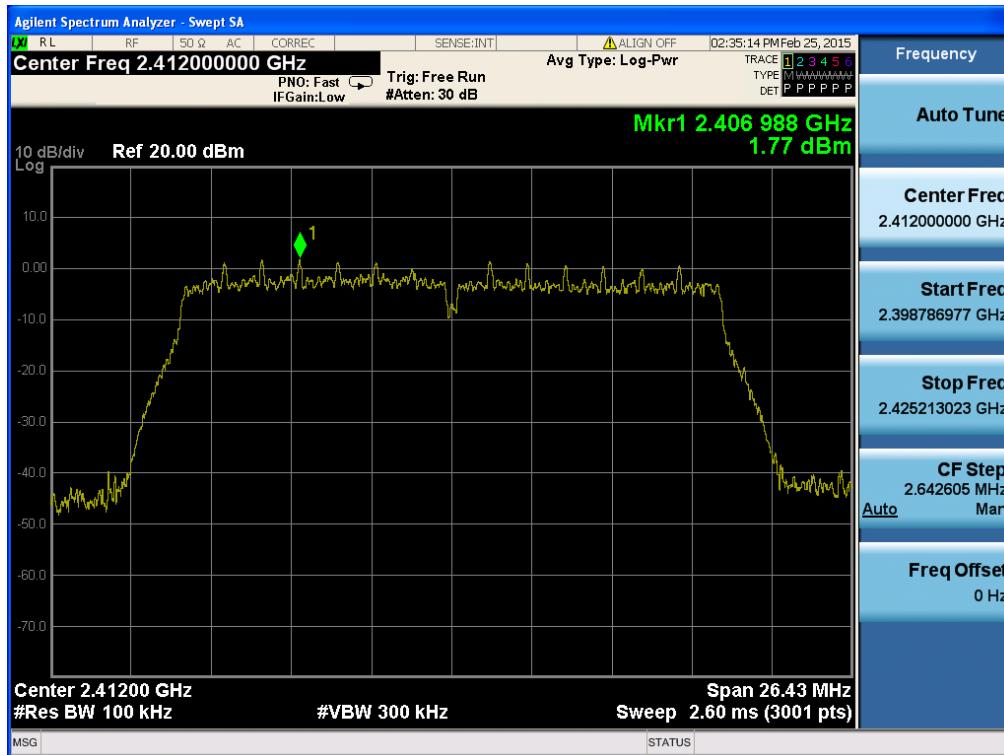


Conducted Spurious Emissions

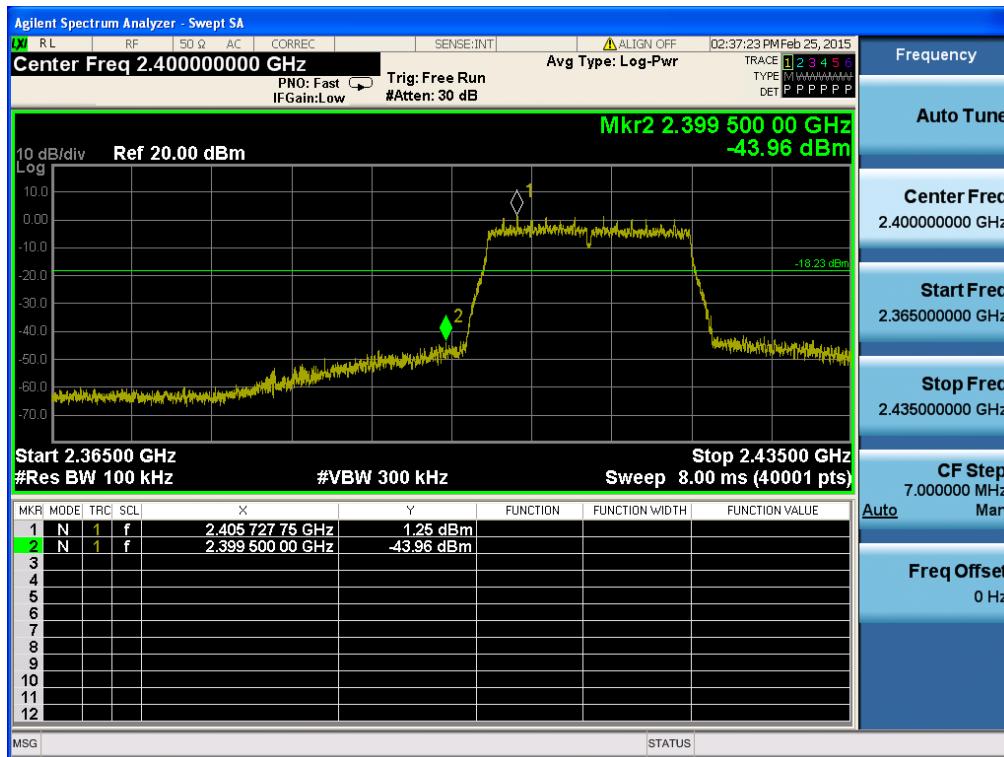


TM 3 & ANT 1 & Lowest

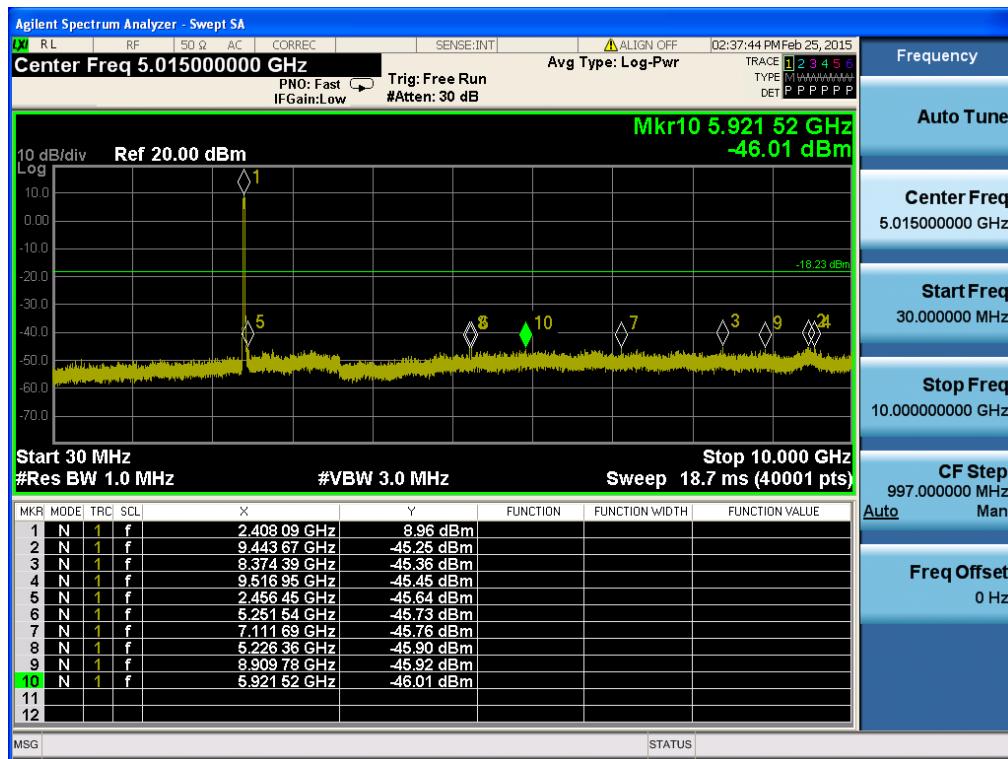
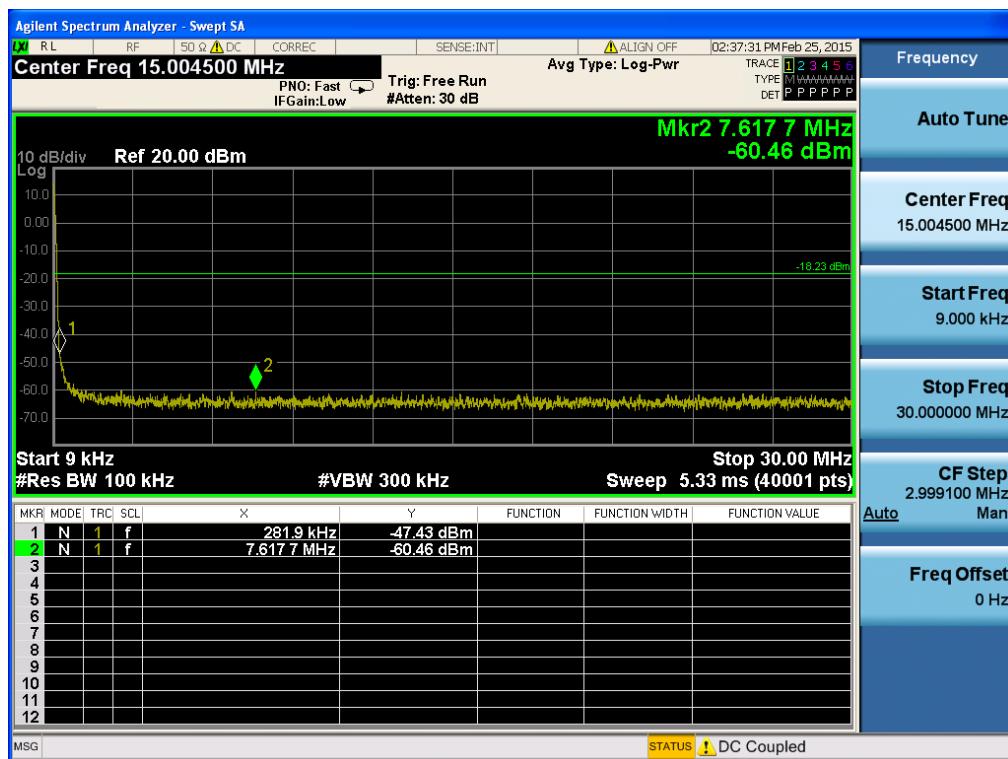
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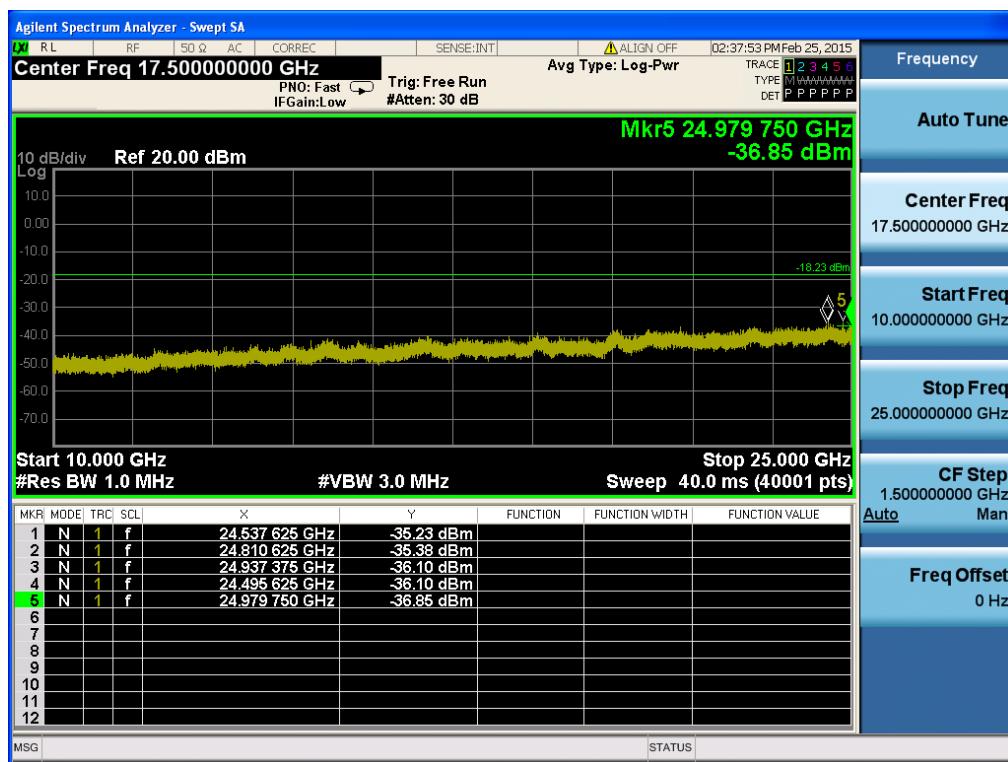
Low Band-edge



Conducted Spurious Emissions

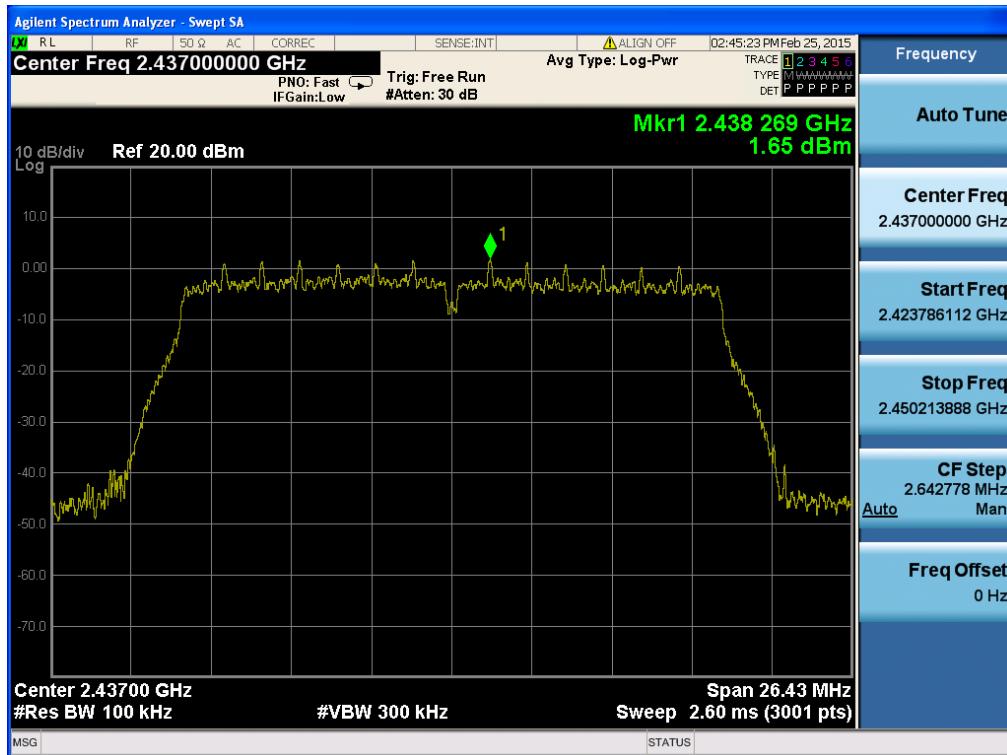


Conducted Spurious Emissions

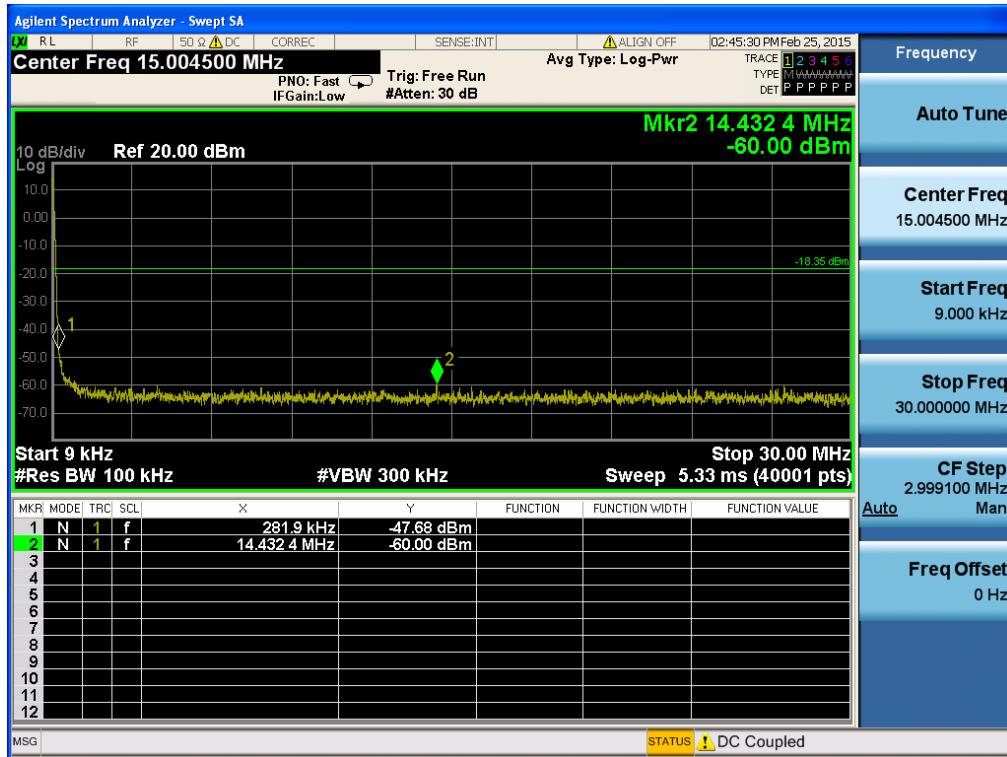


TM 3 & ANT 1 & Middle

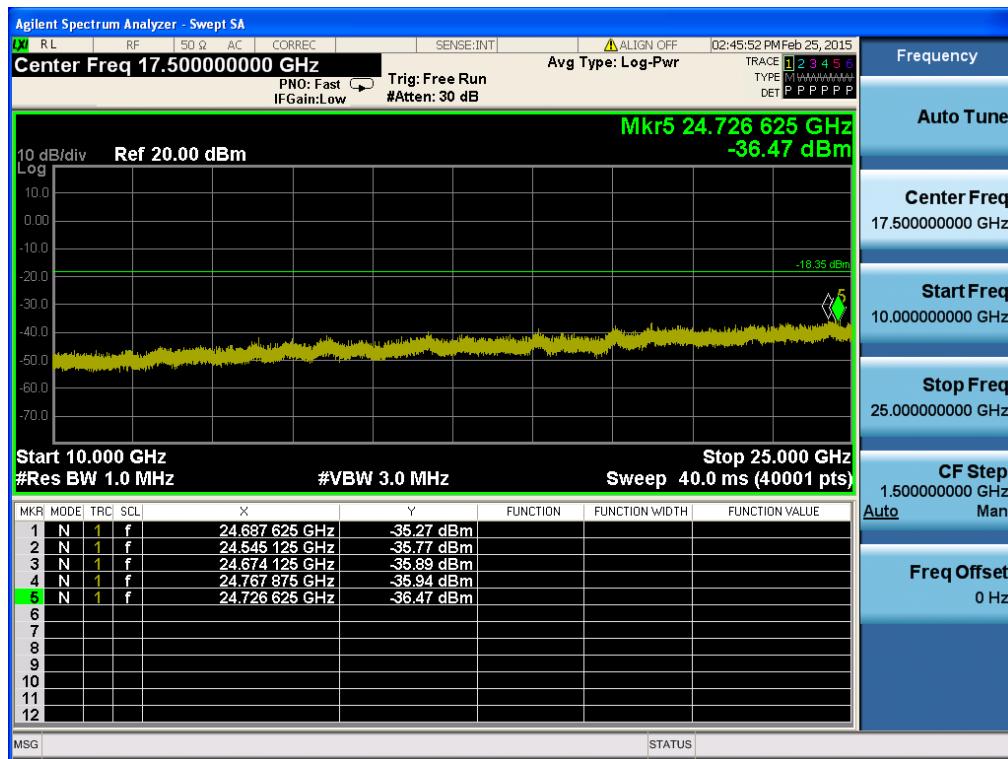
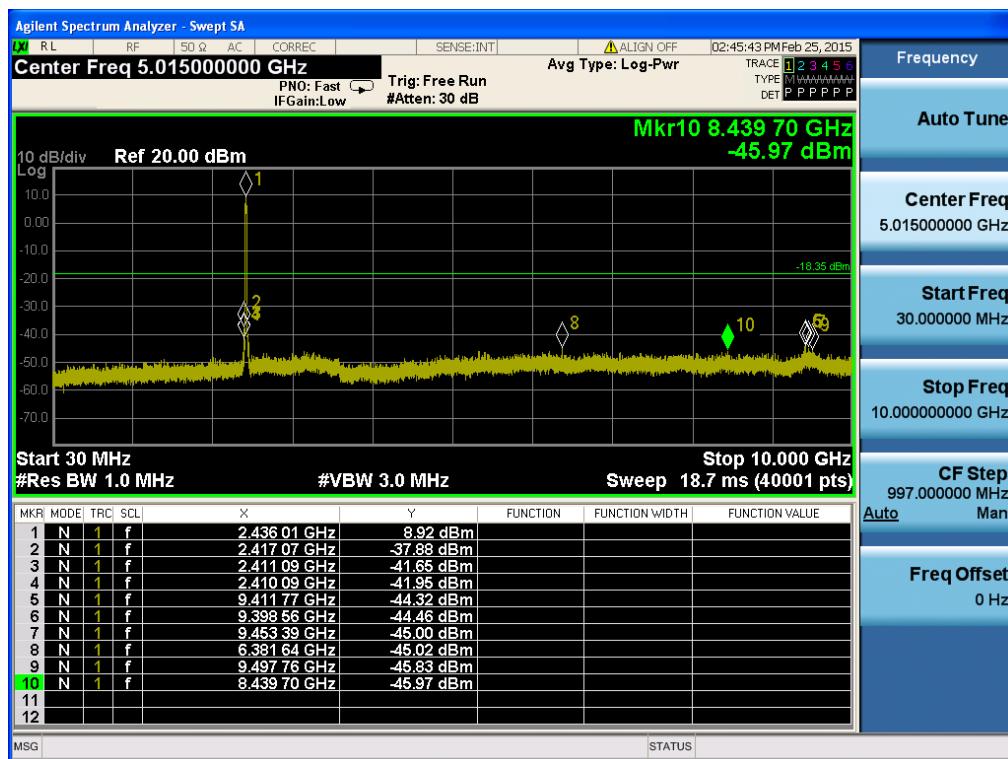
Reference

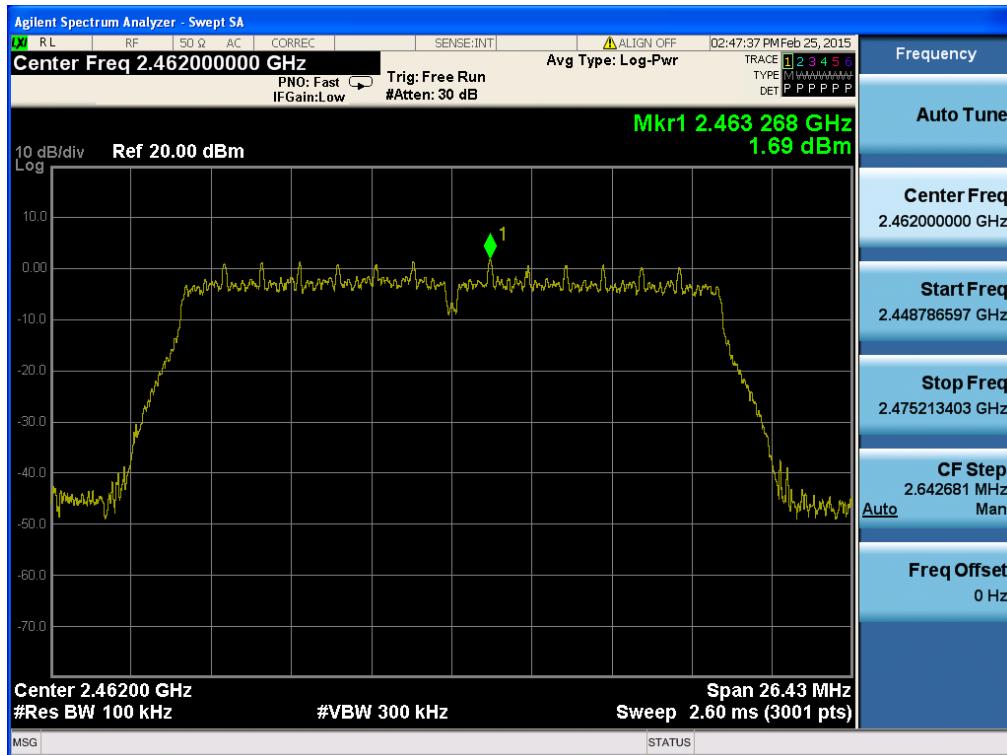
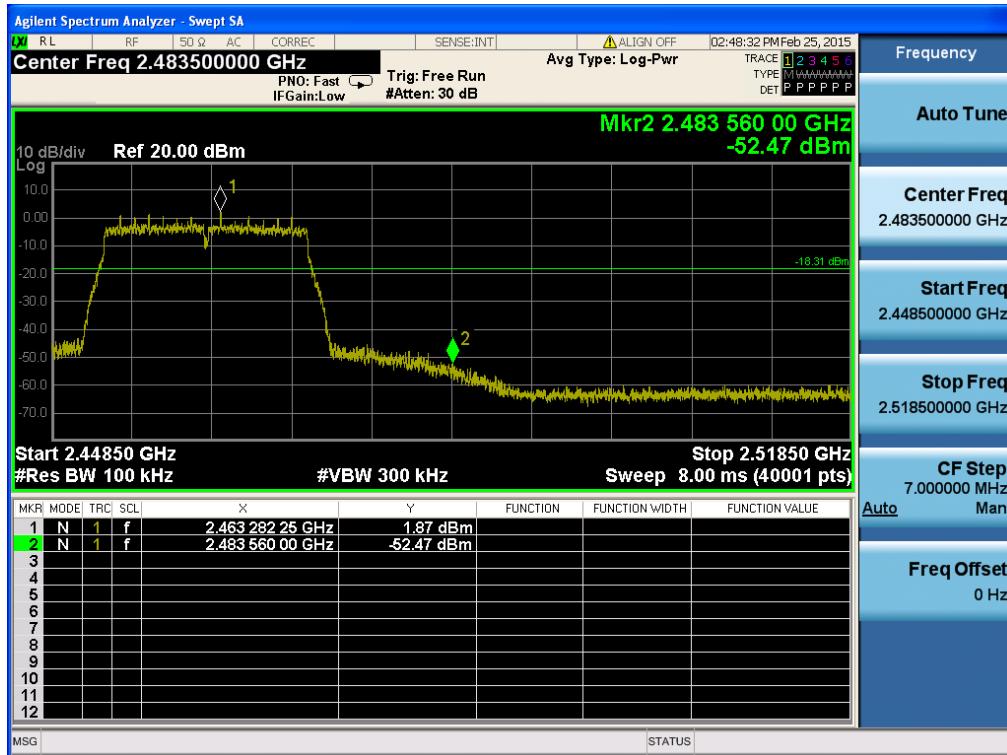


Conducted Spurious Emissions

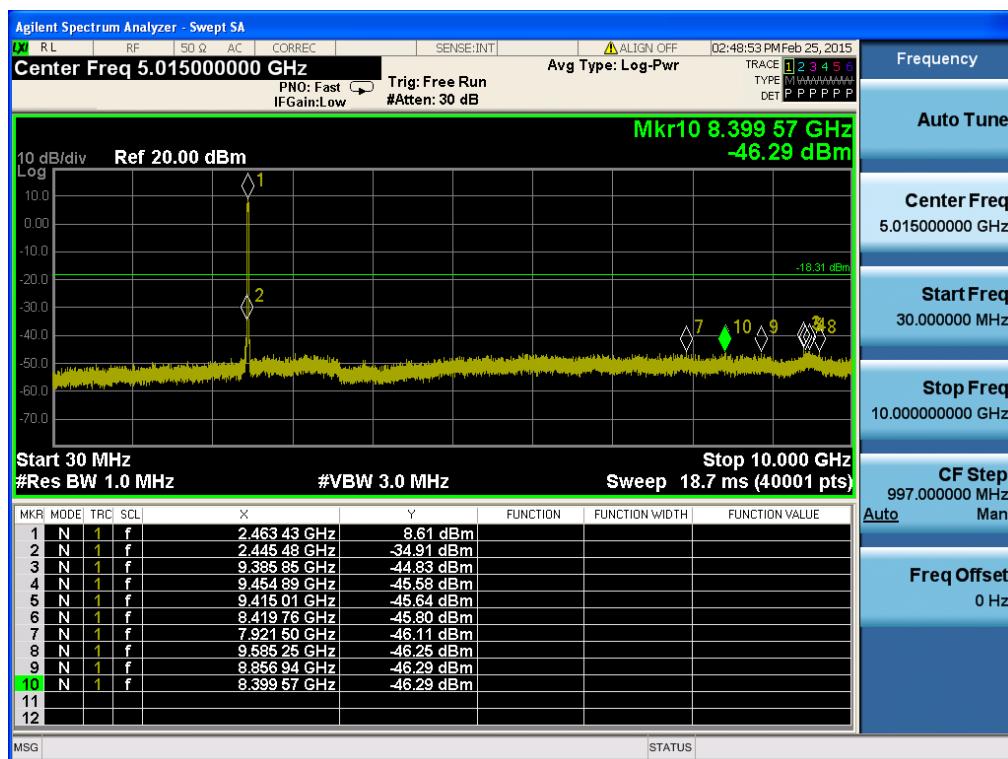
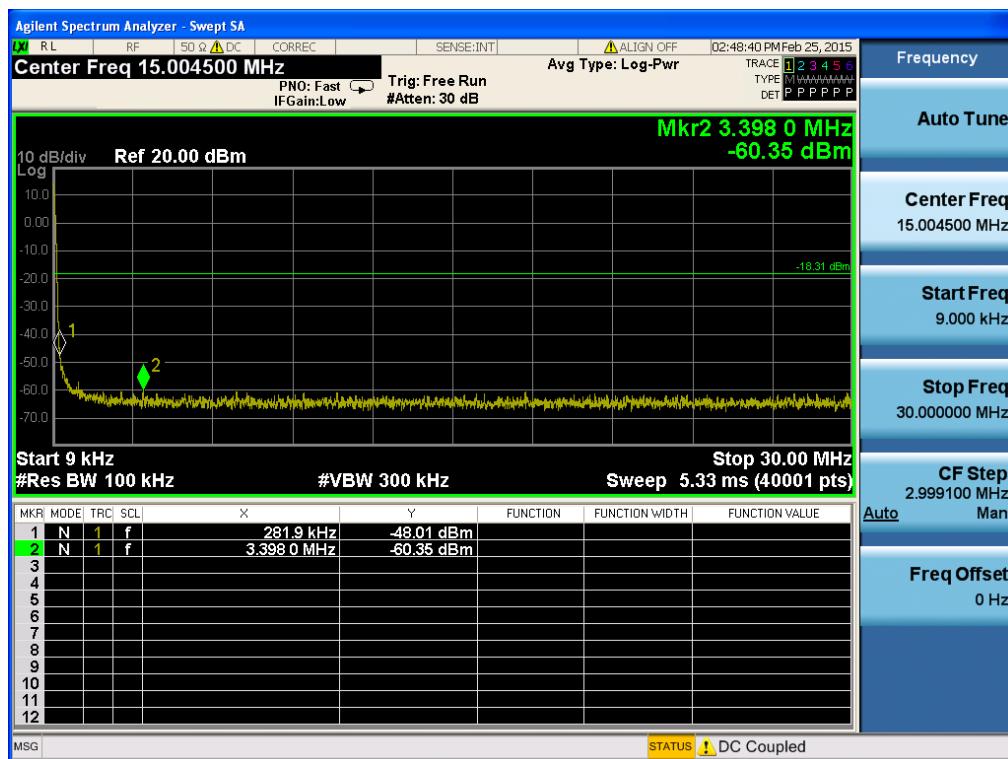


Conducted Spurious Emissions

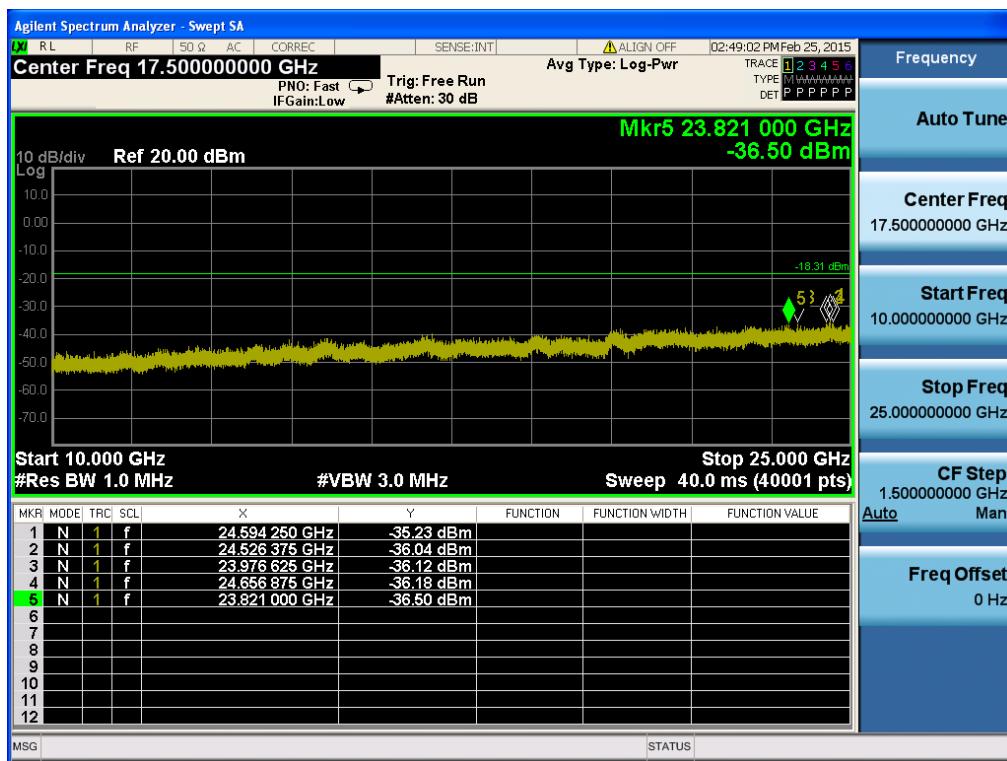


TM 3 & ANT 1 & Highest**Reference****High Band-edge**

Conducted Spurious Emissions

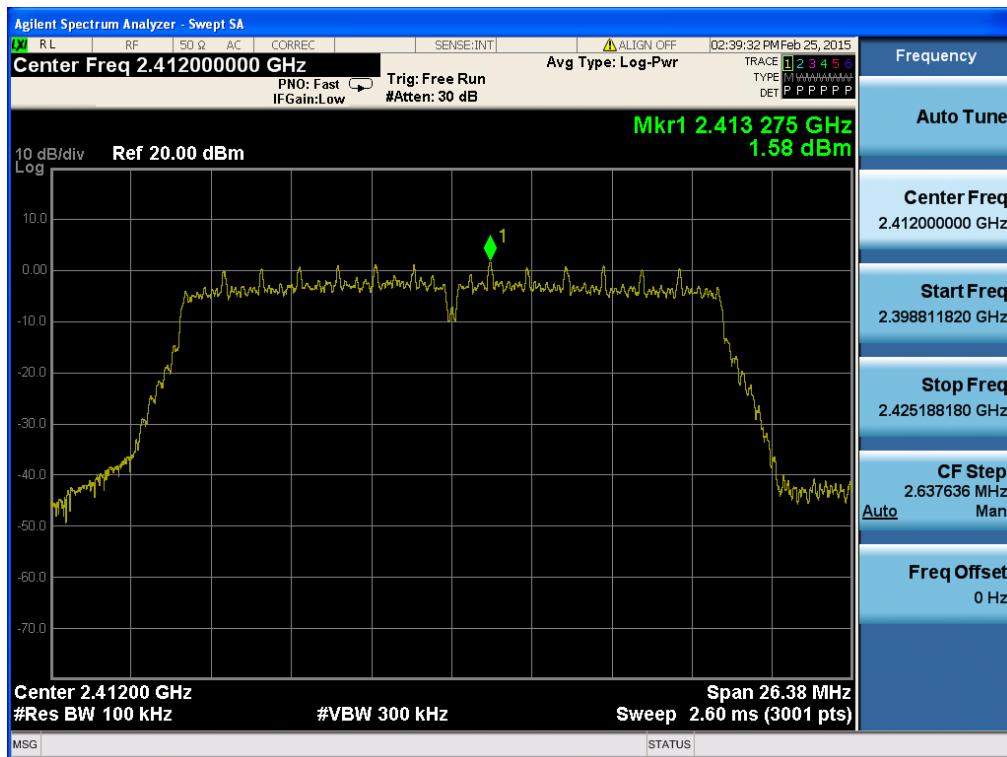


Conducted Spurious Emissions

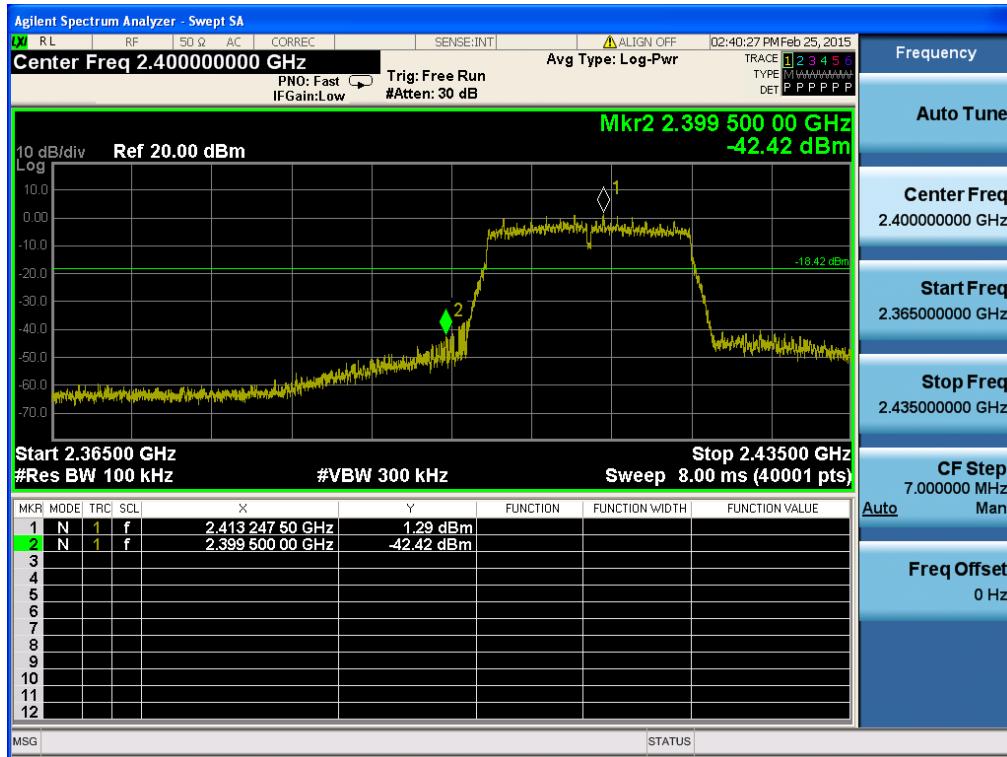


TM 3 & ANT 2 & Lowest

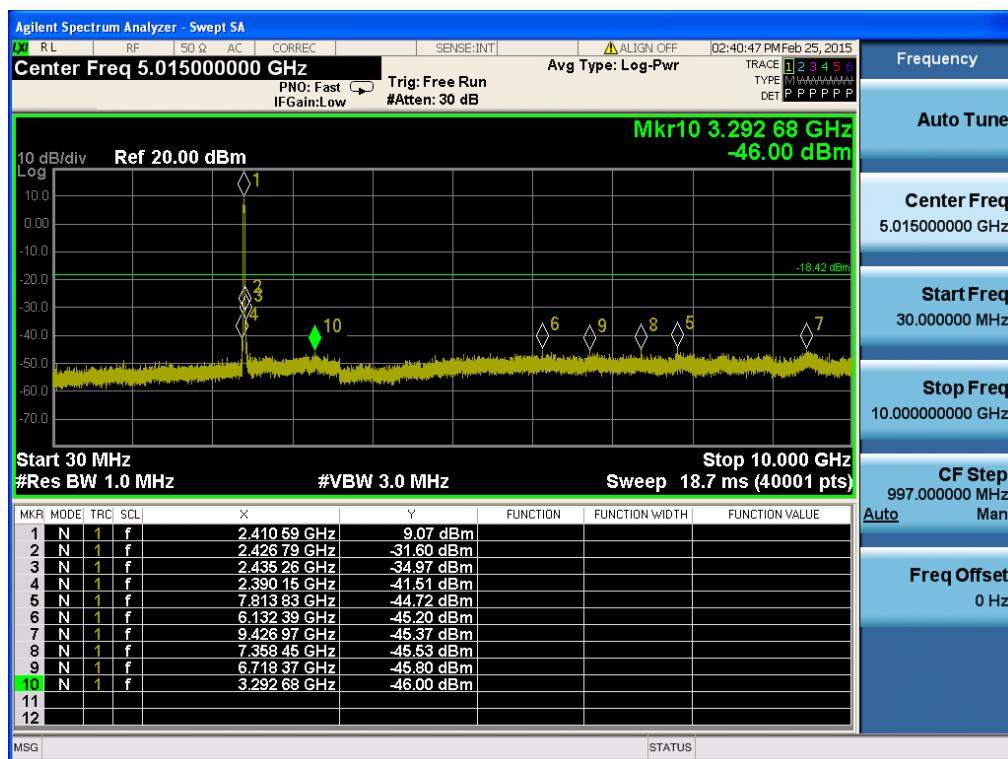
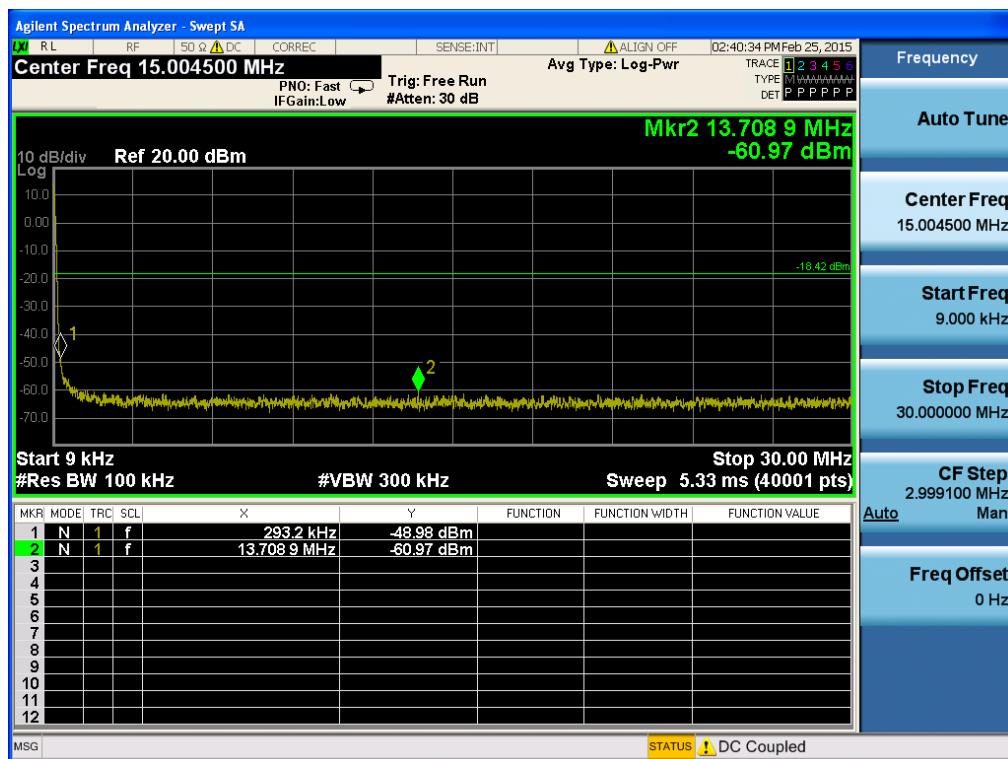
Reference



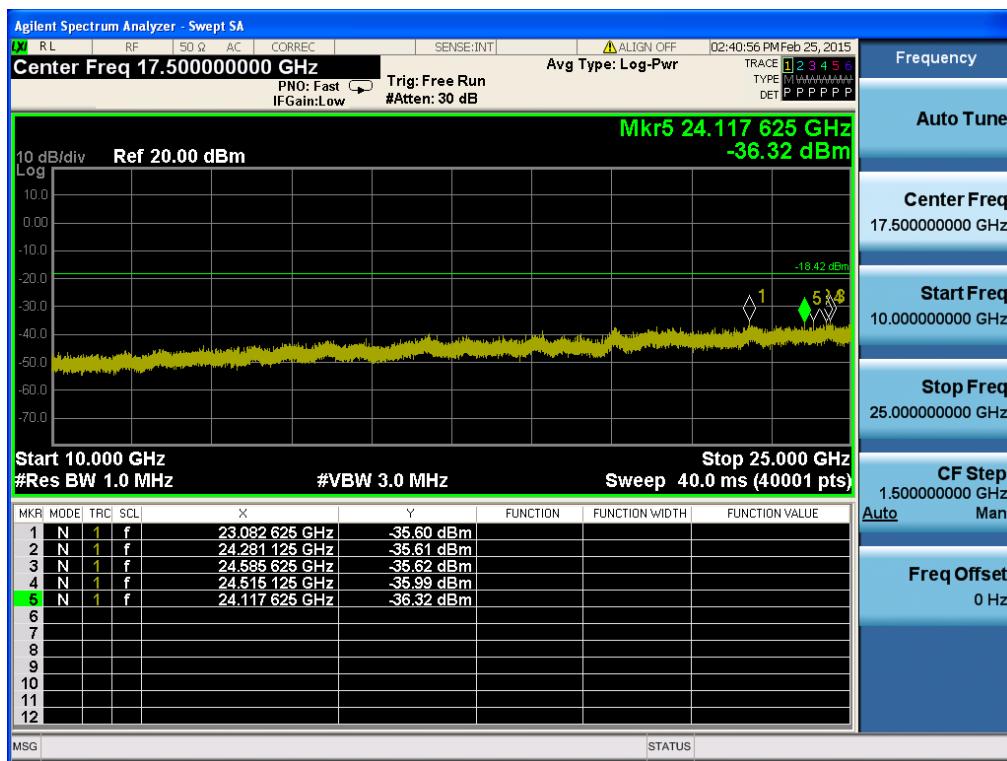
Low Band-edge



Conducted Spurious Emissions

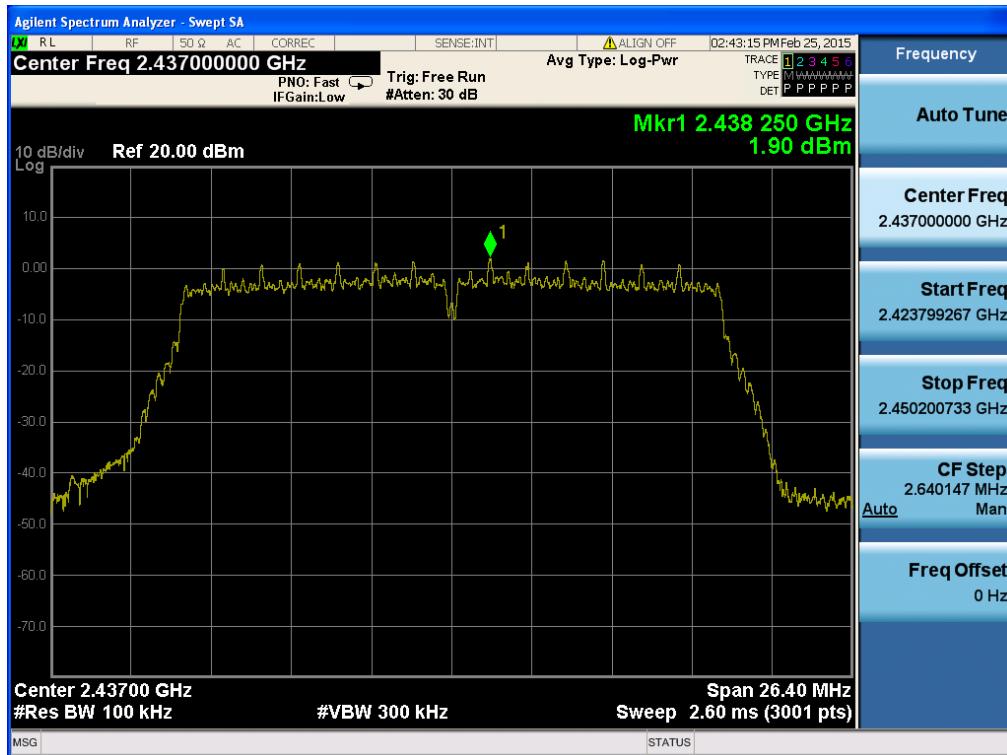


Conducted Spurious Emissions

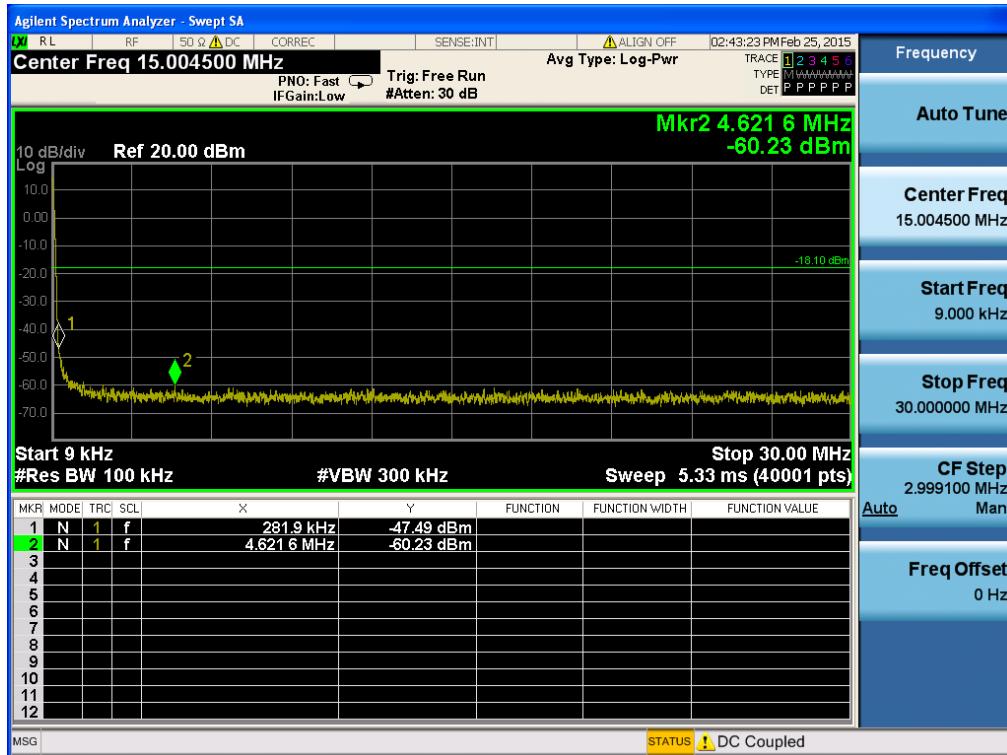


TM 3 & ANT 2 & Middle

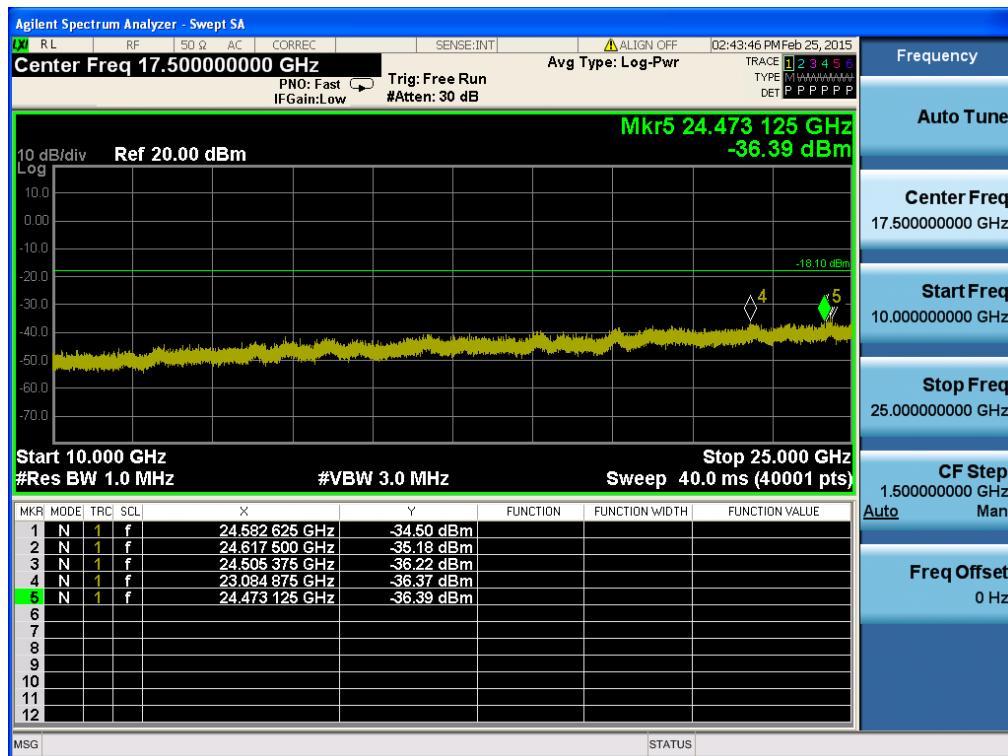
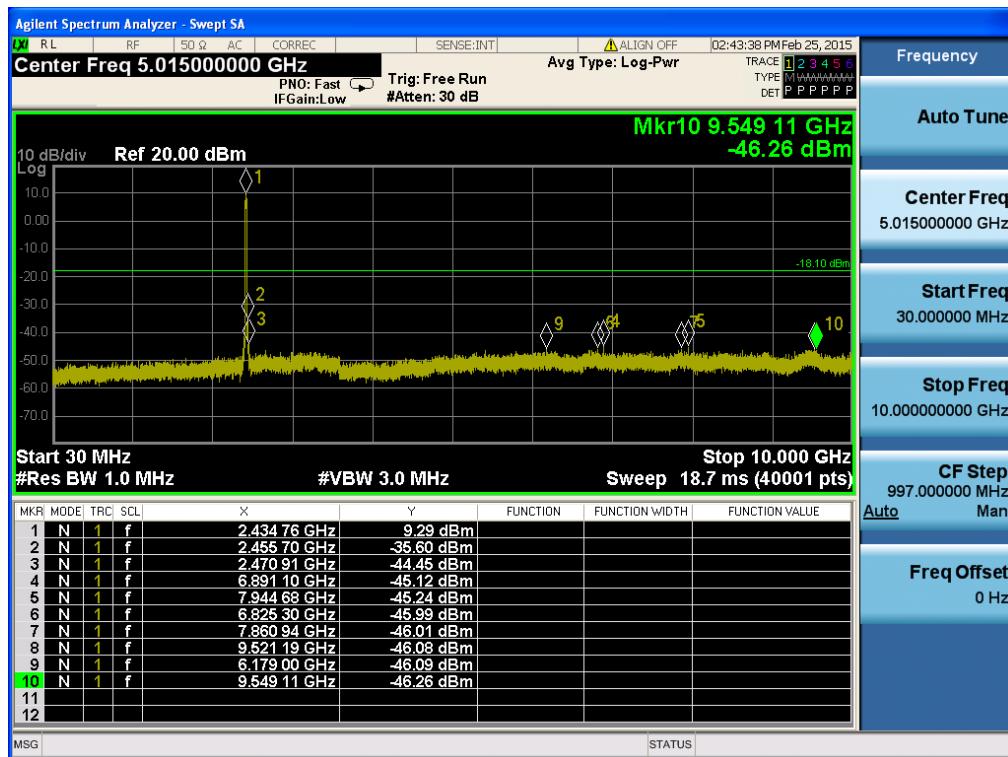
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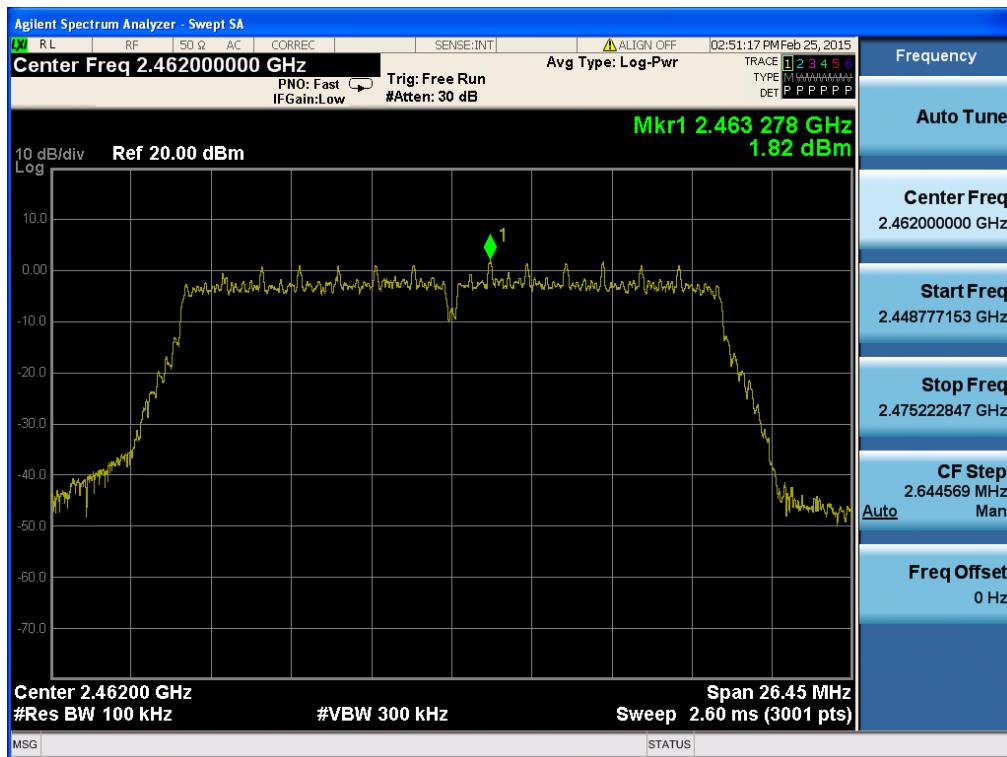
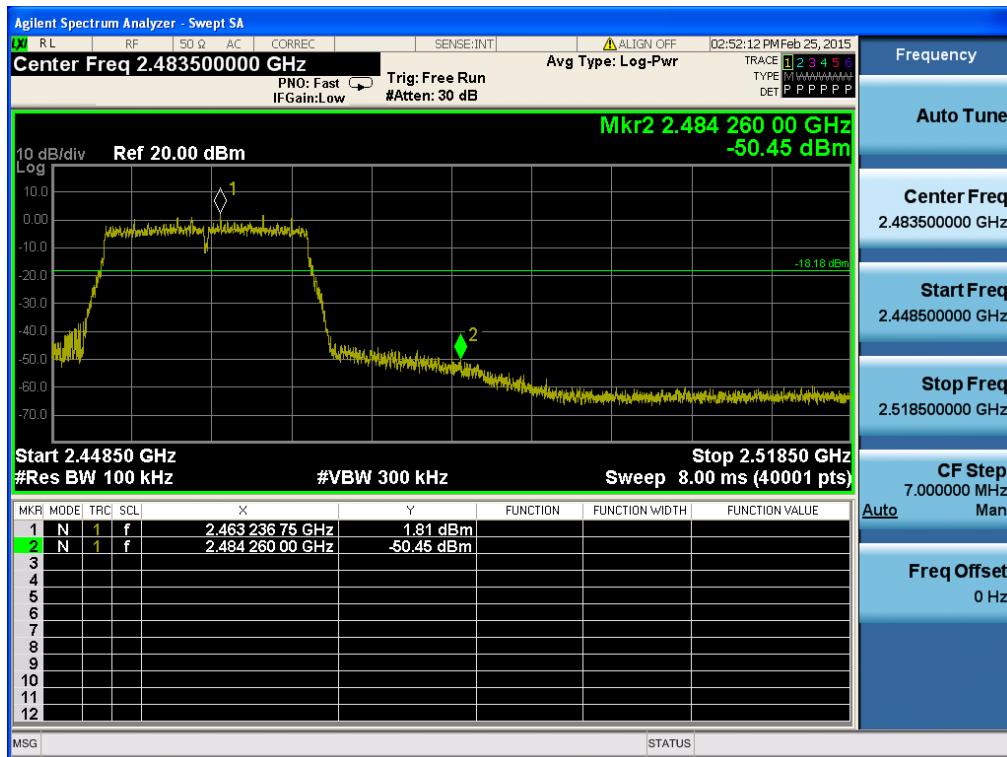


Conducted Spurious Emissions

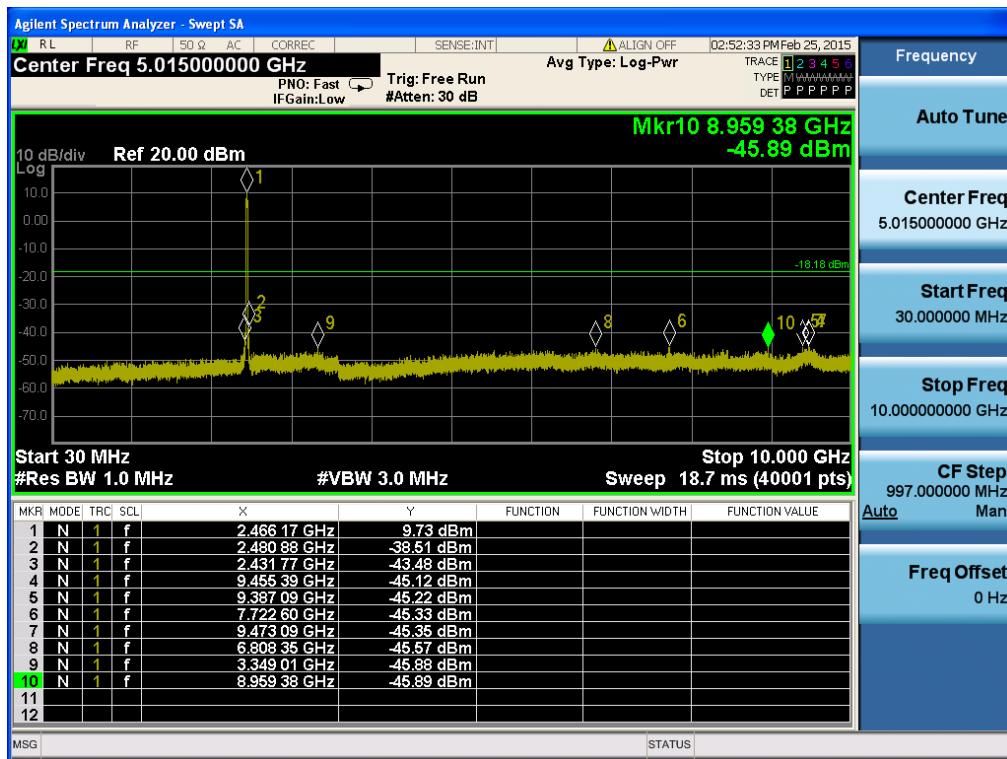
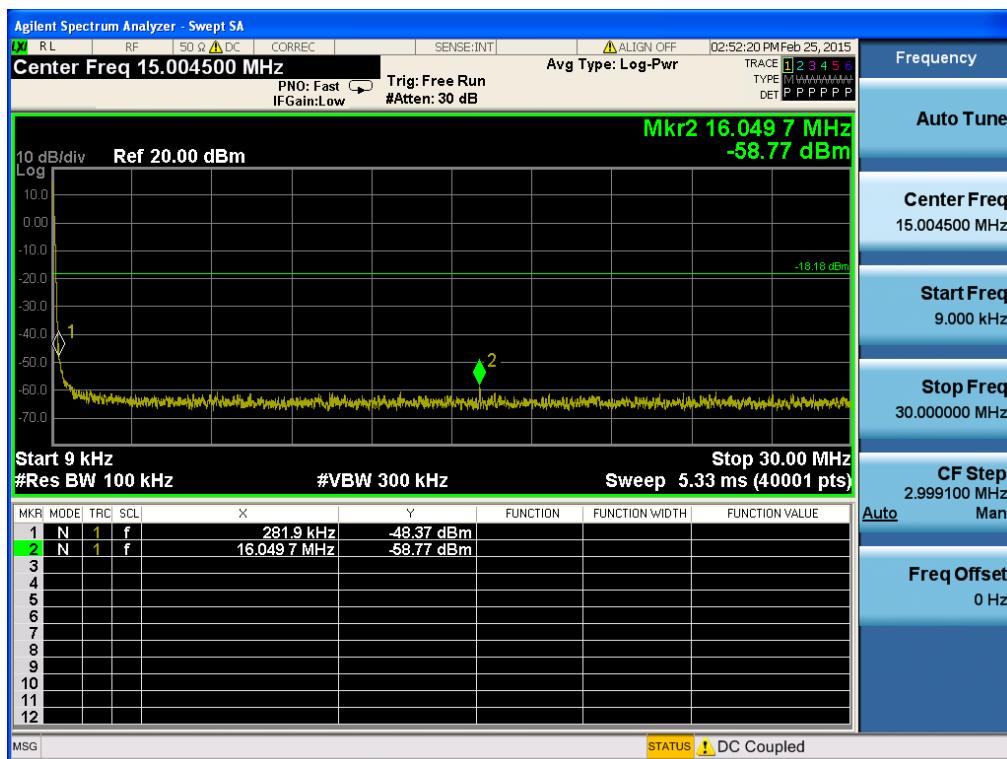


Conducted Spurious Emissions

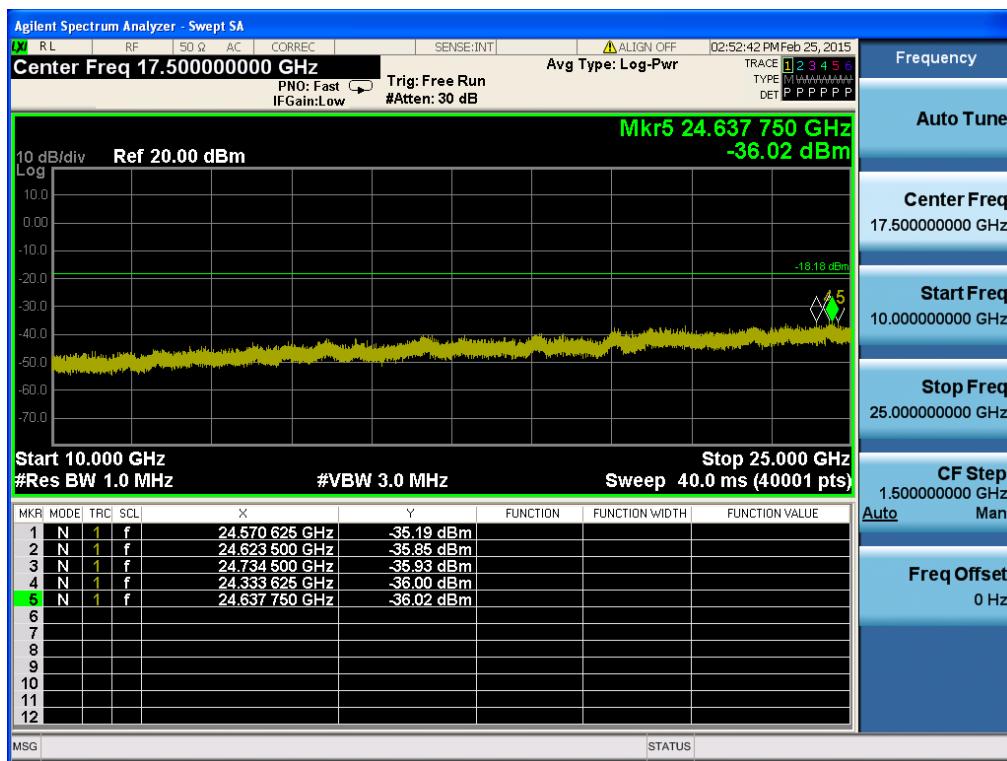


TM 3 & ANT 2 & Highest**Reference****High Band-edge**

Conducted Spurious Emissions

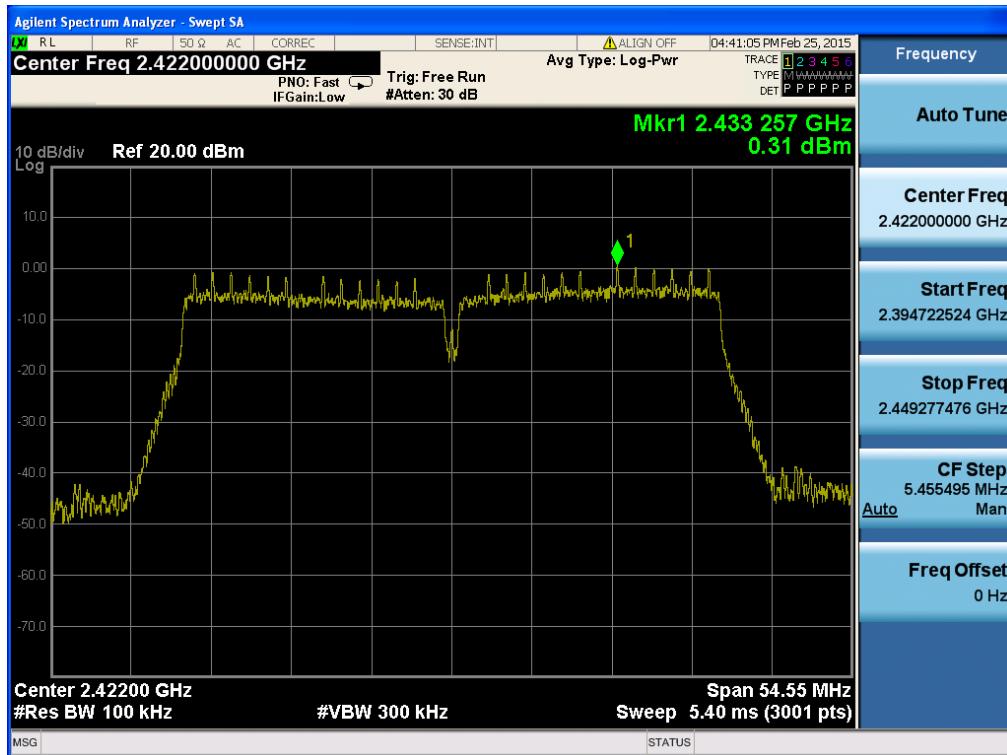


Conducted Spurious Emissions

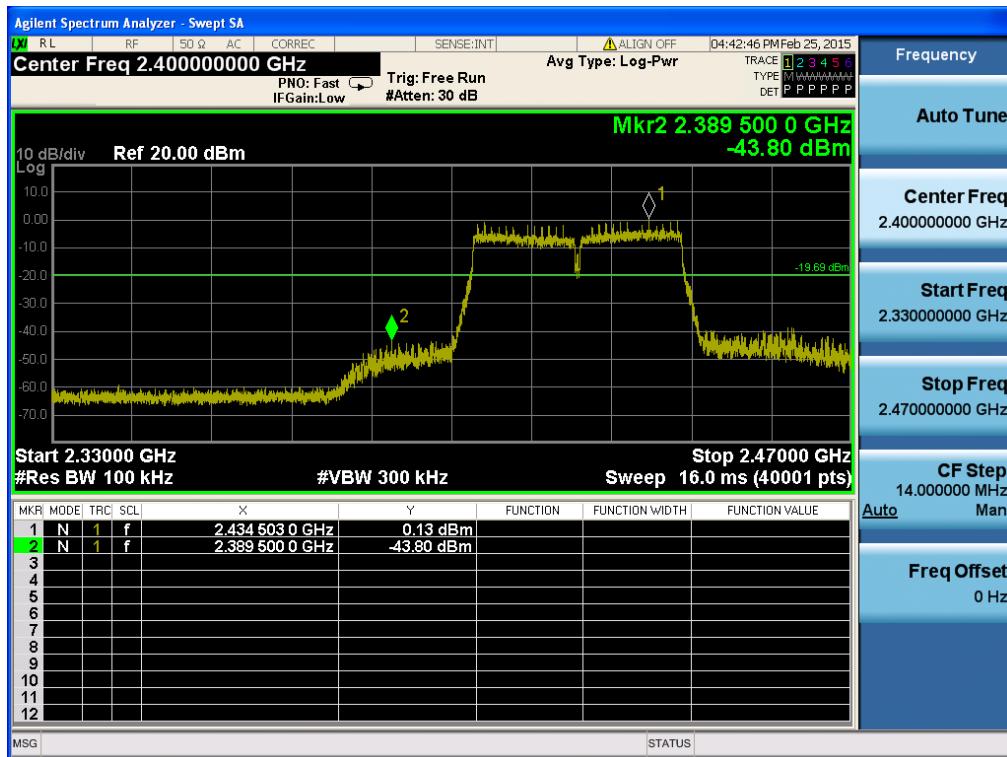


TM 4 & ANT 1 & Lowest

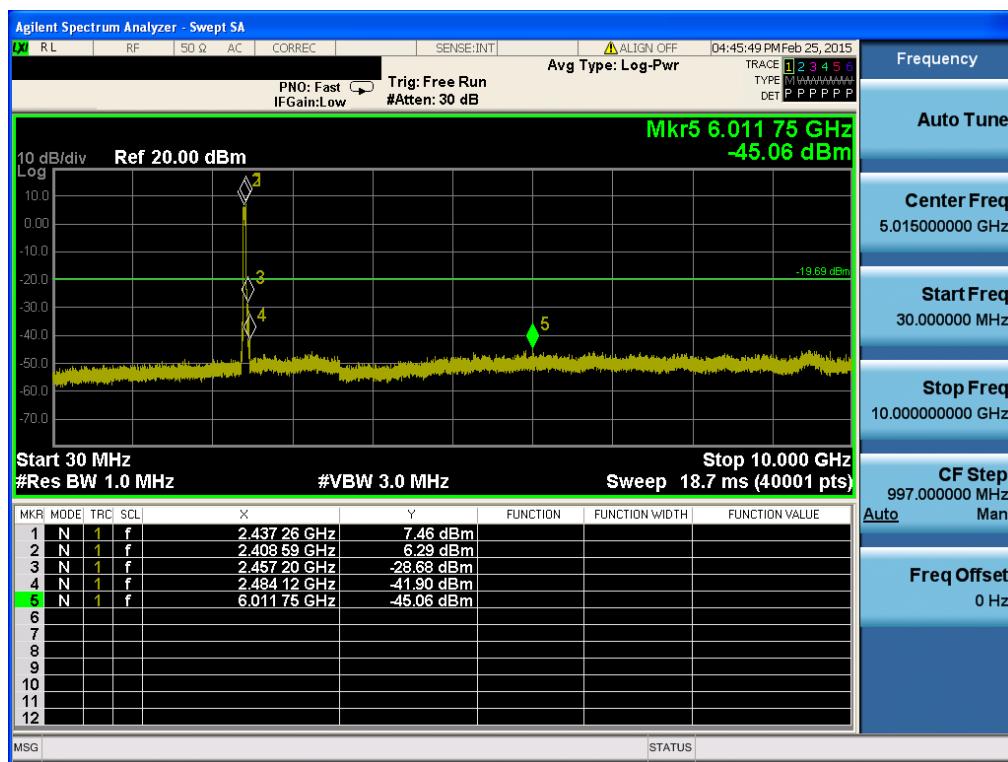
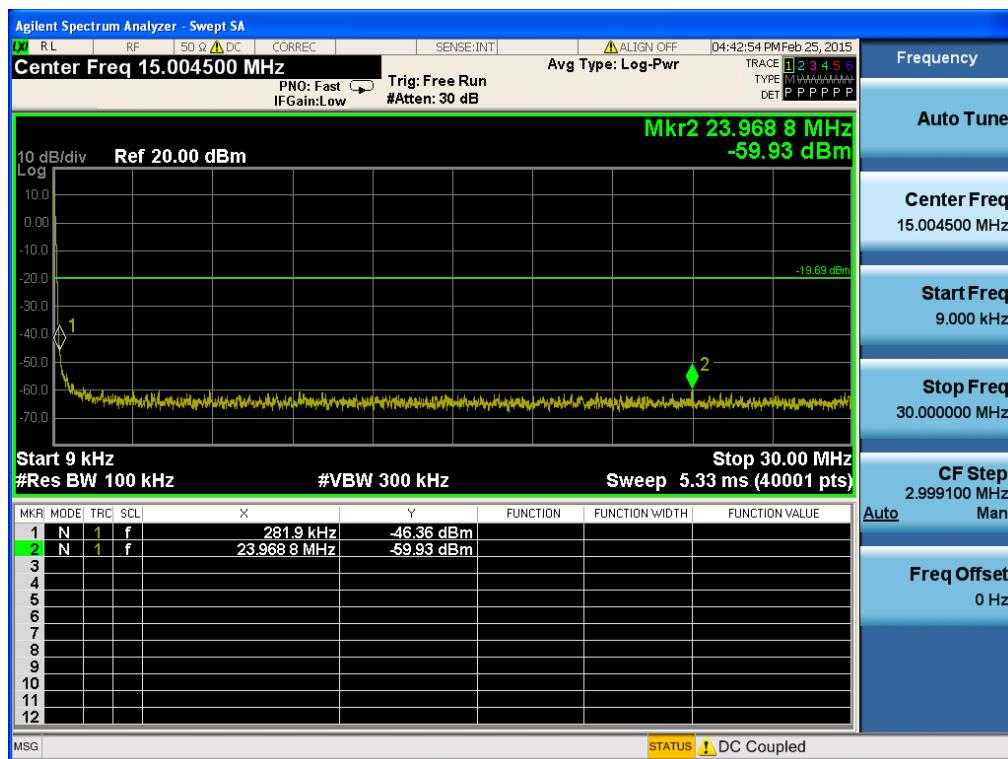
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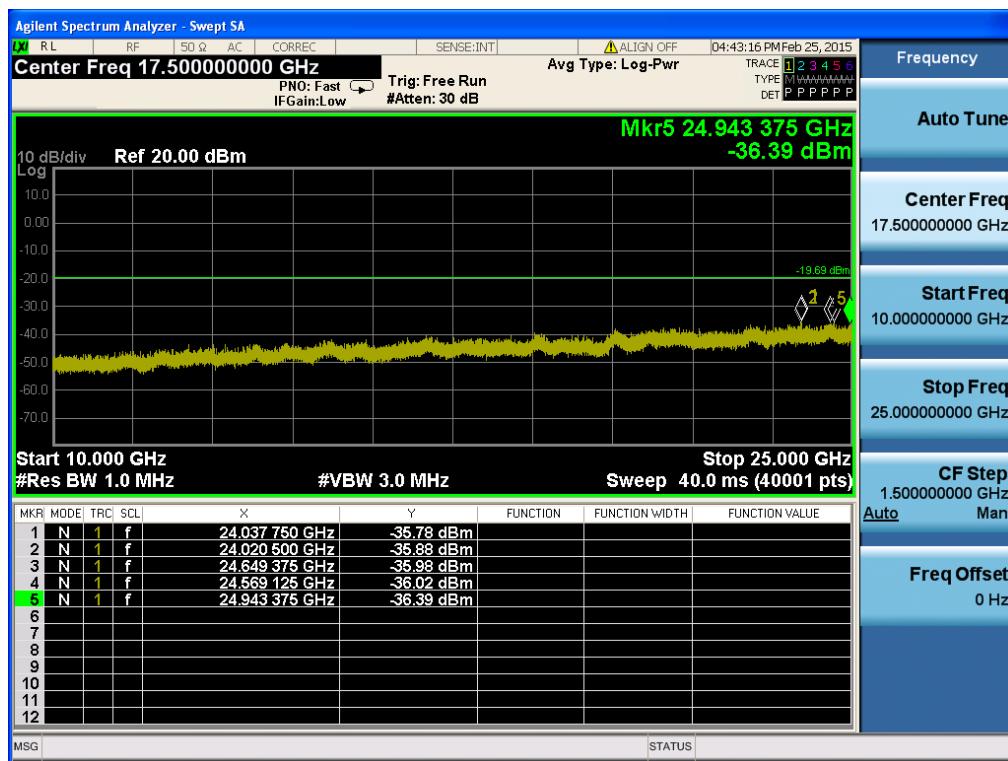
Low Band-edge



Conducted Spurious Emissions

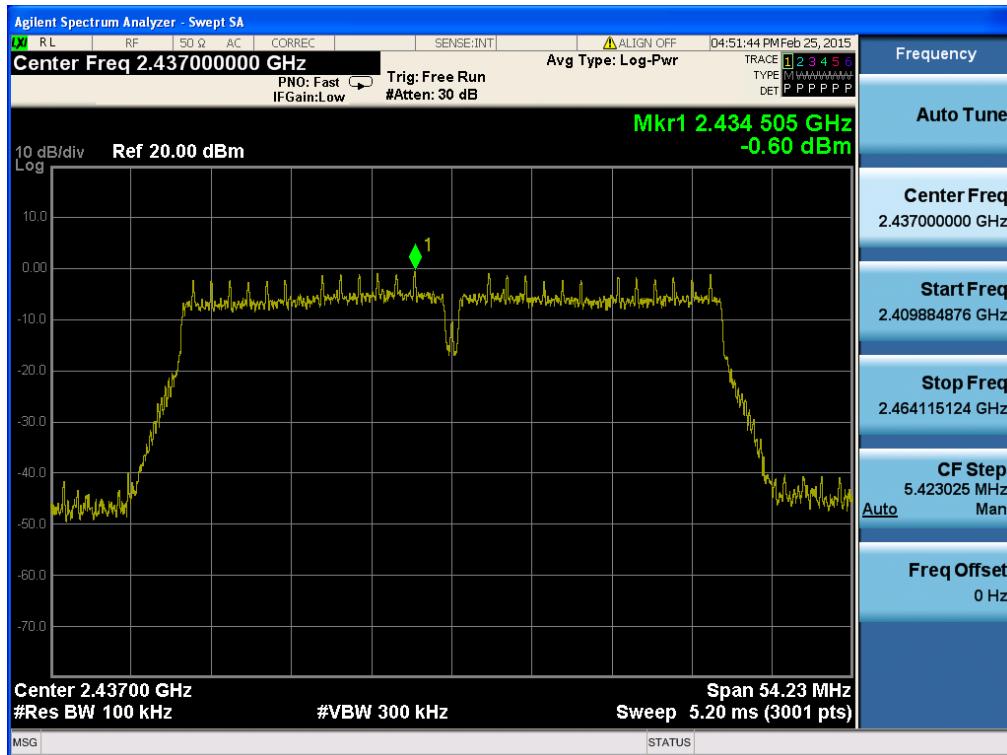


Conducted Spurious Emissions

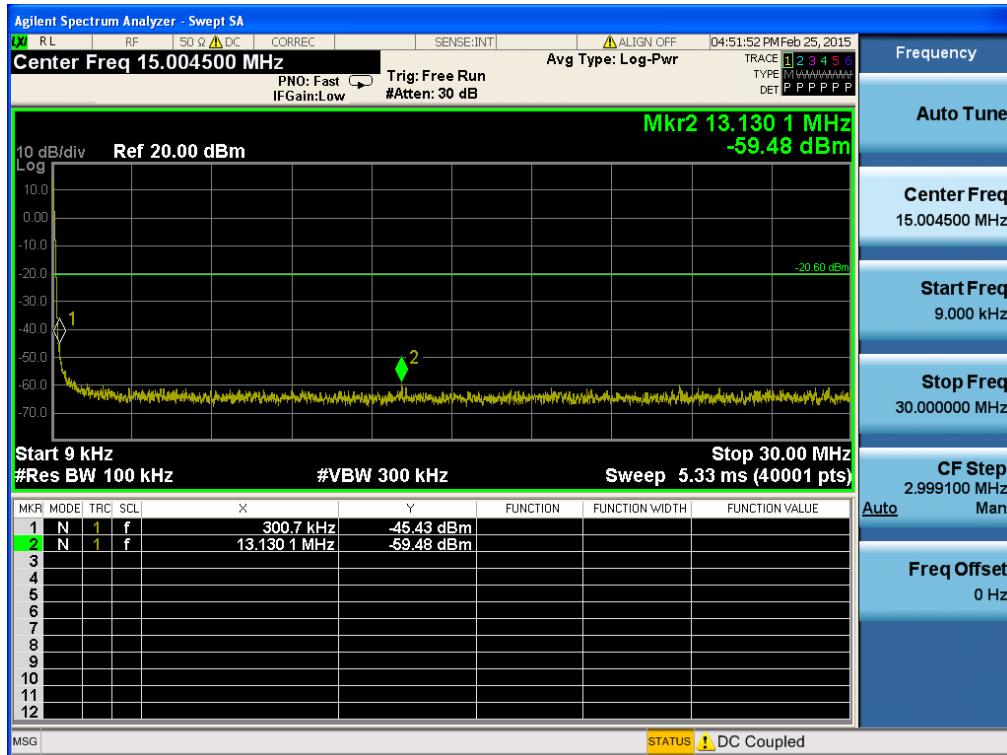


TM 4 & ANT 1 & Middle

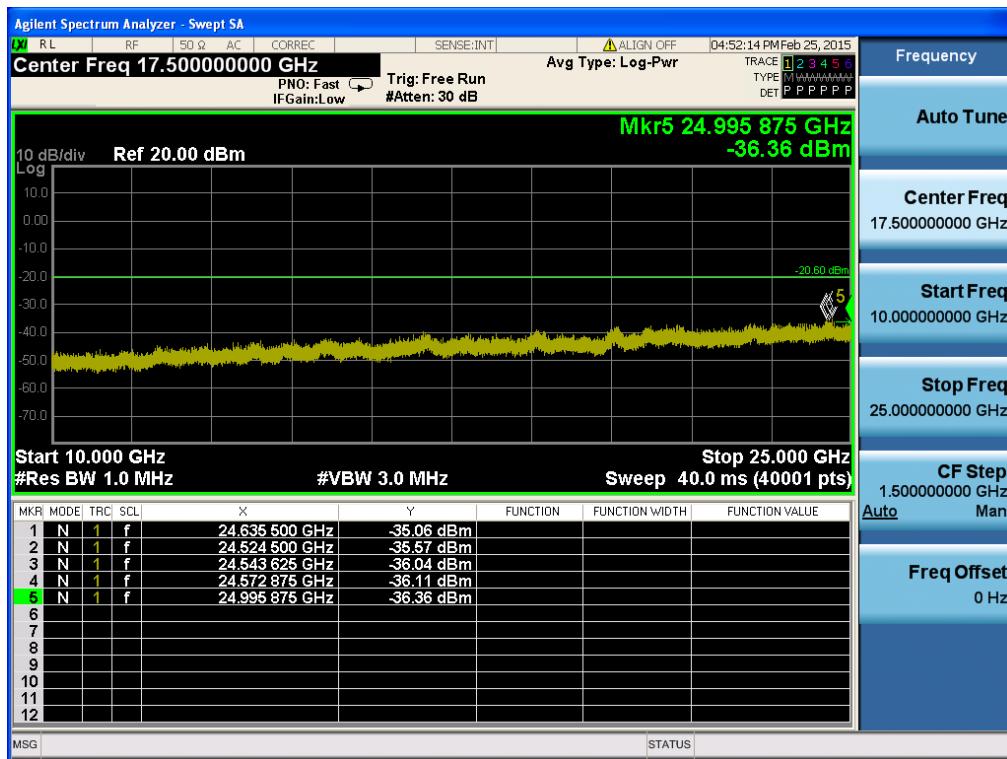
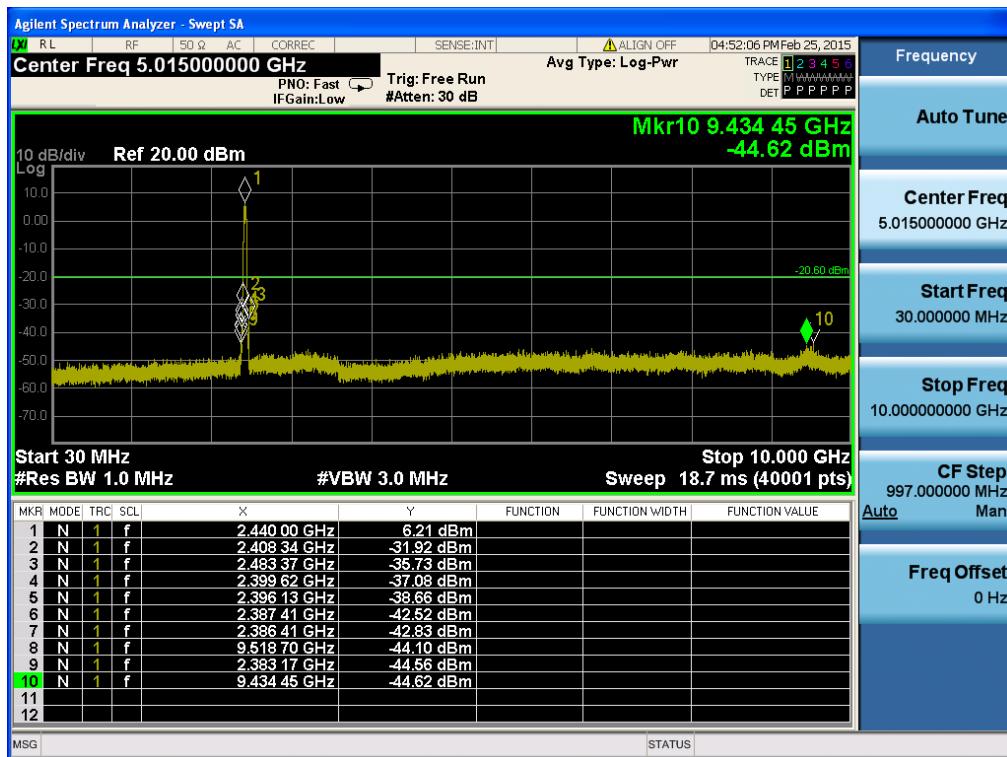
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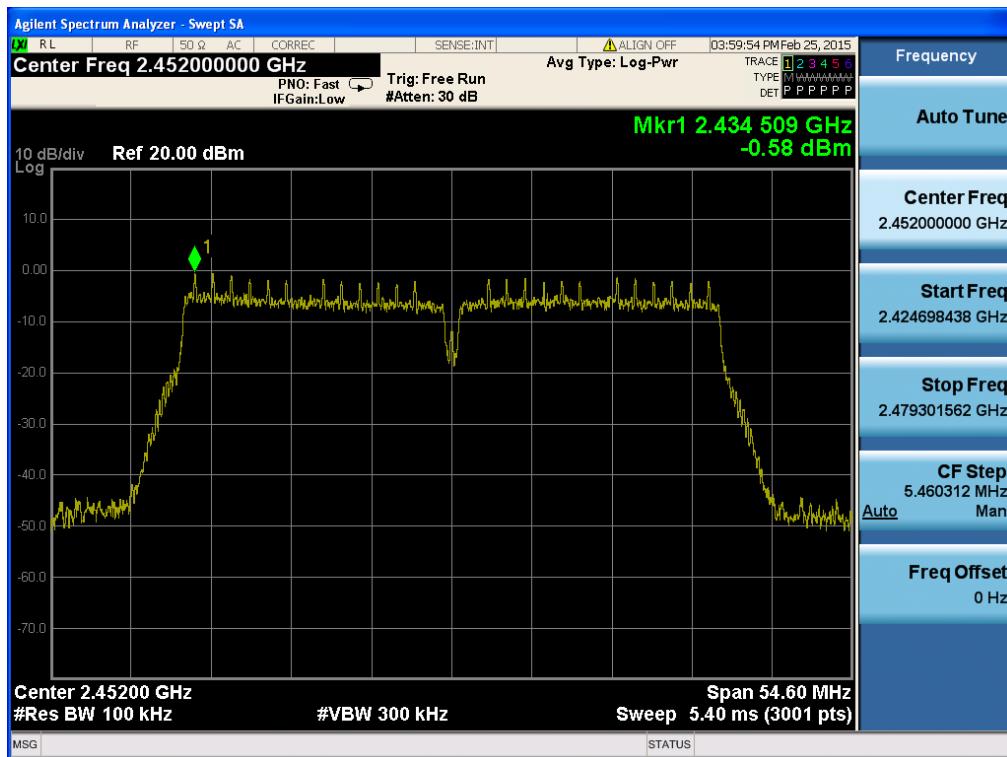
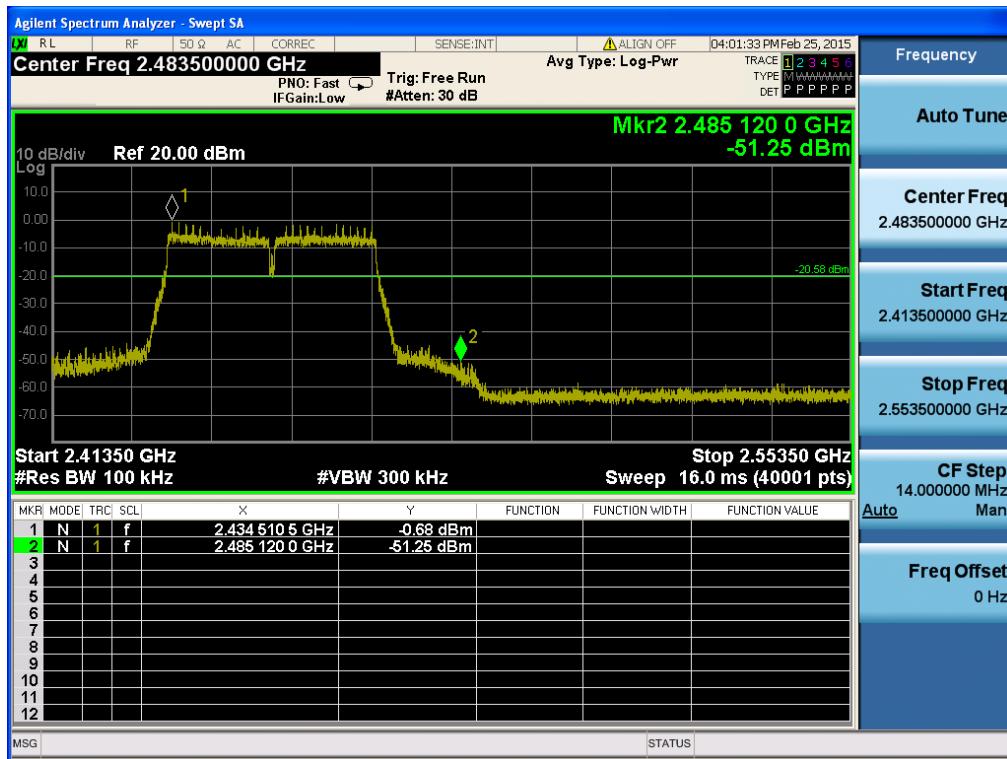


Conducted Spurious Emissions

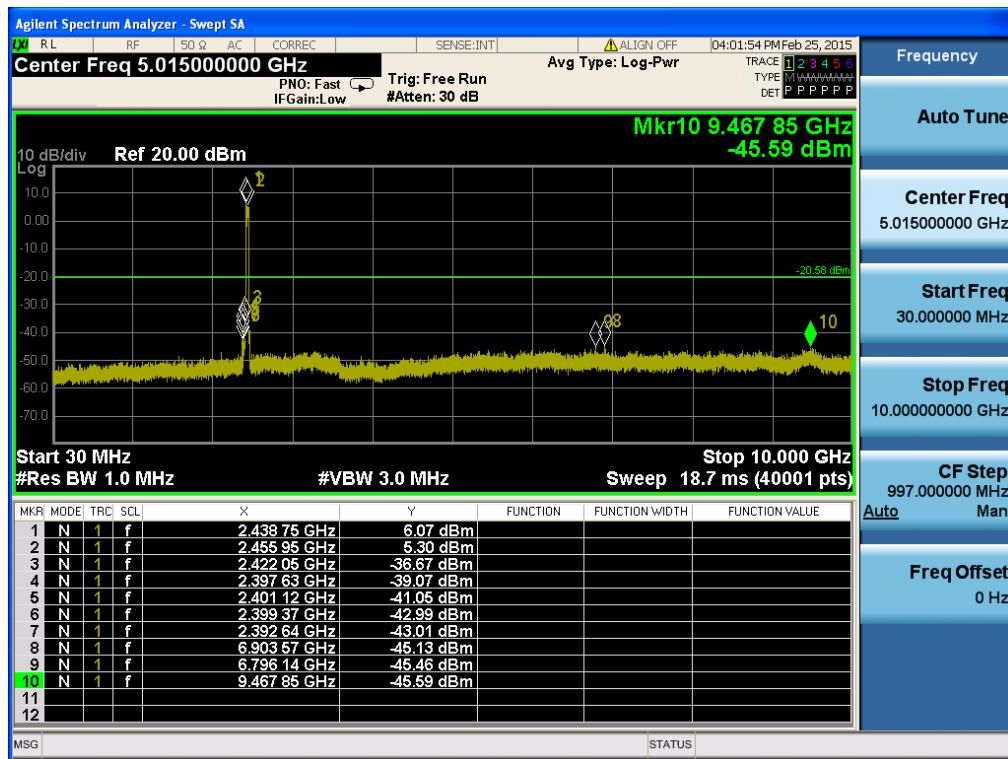
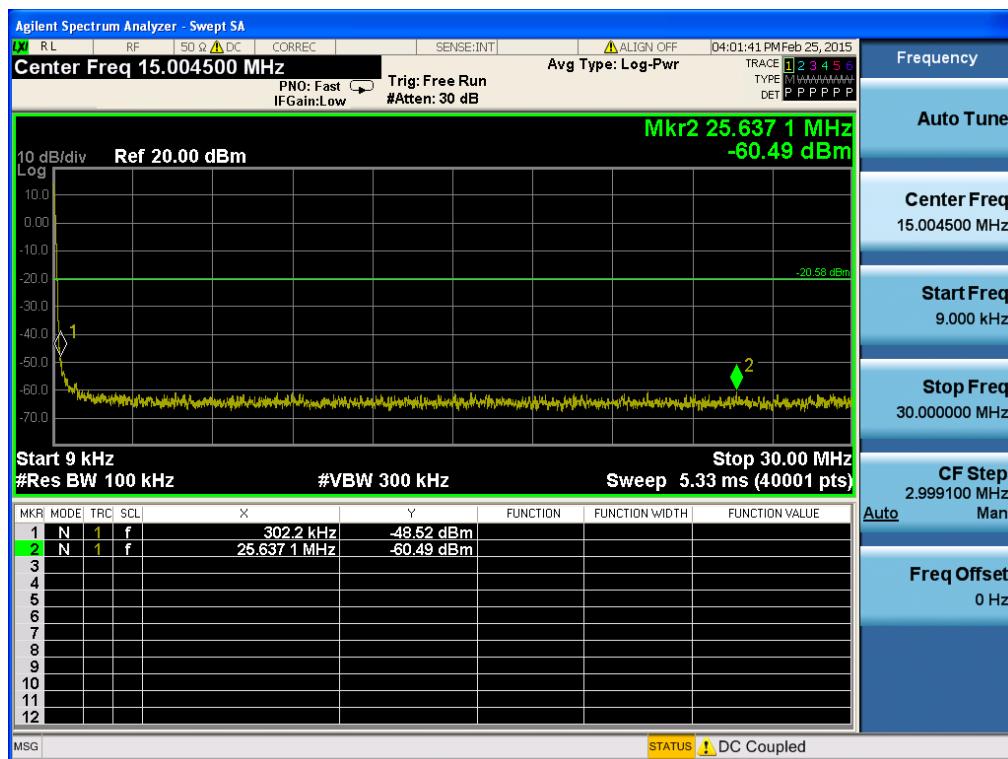


Conducted Spurious Emissions

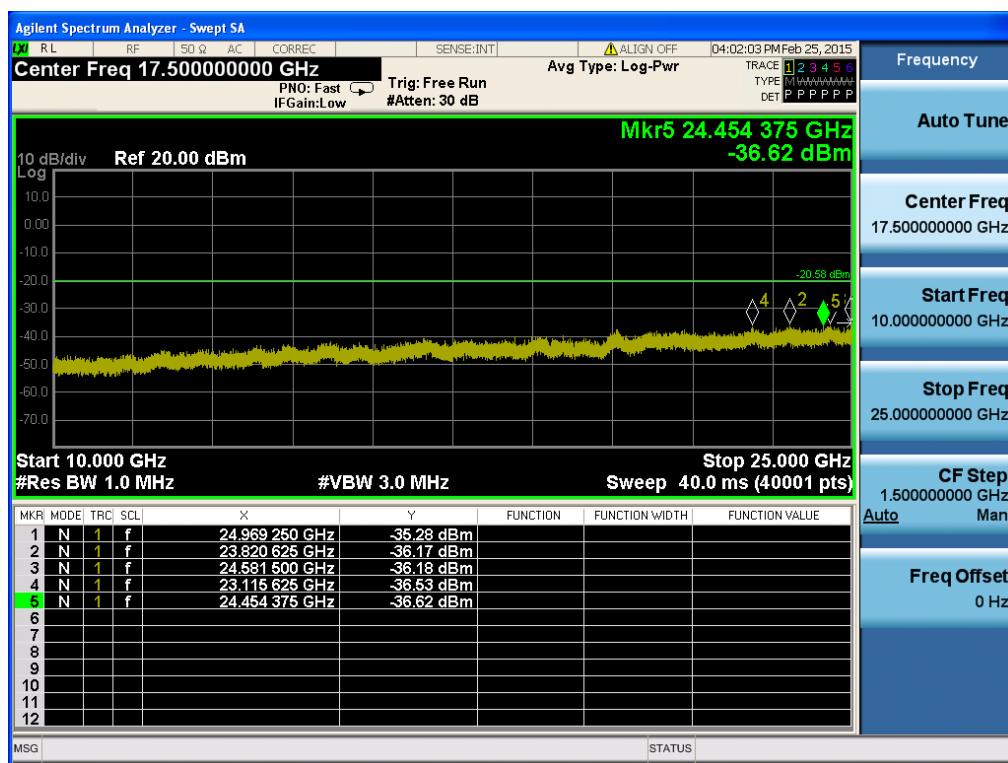


TM 4 & ANT 1 & Highest**Reference****High Band-edge**

Conducted Spurious Emissions

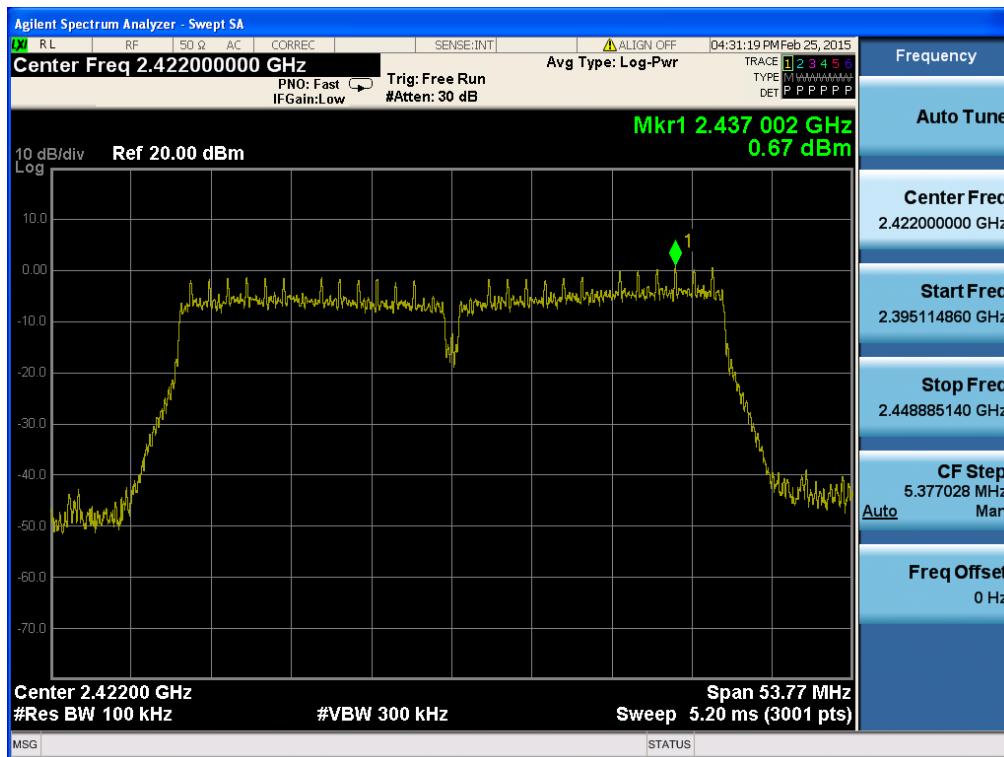


Conducted Spurious Emissions

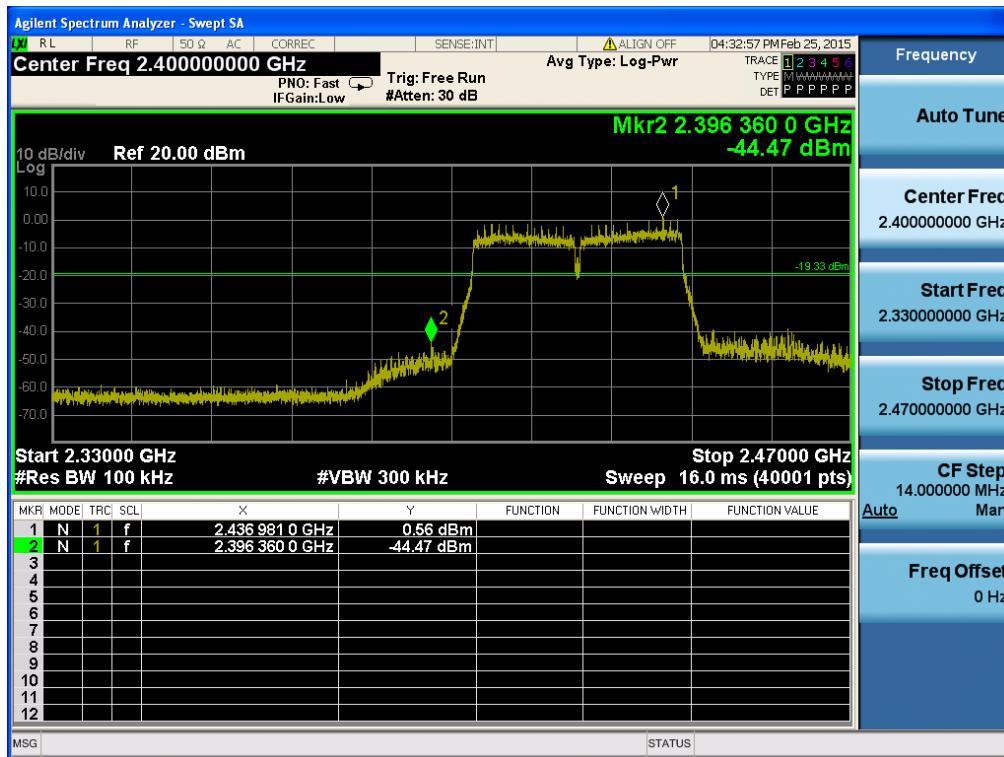


TM 4 & ANT 2 & Lowest

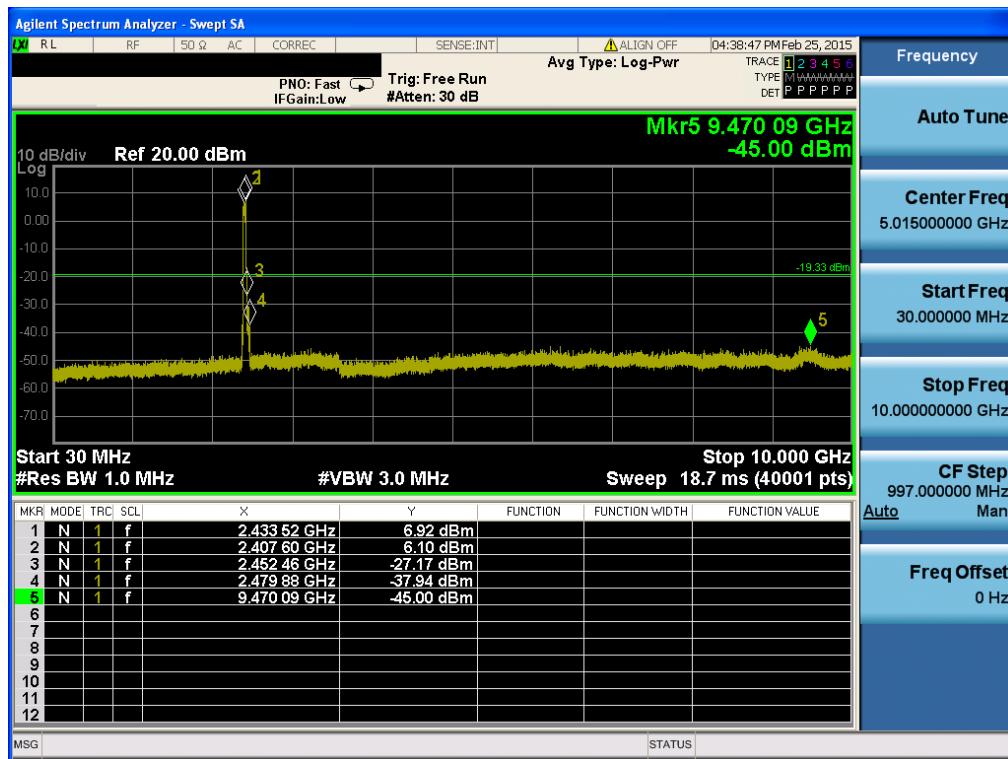
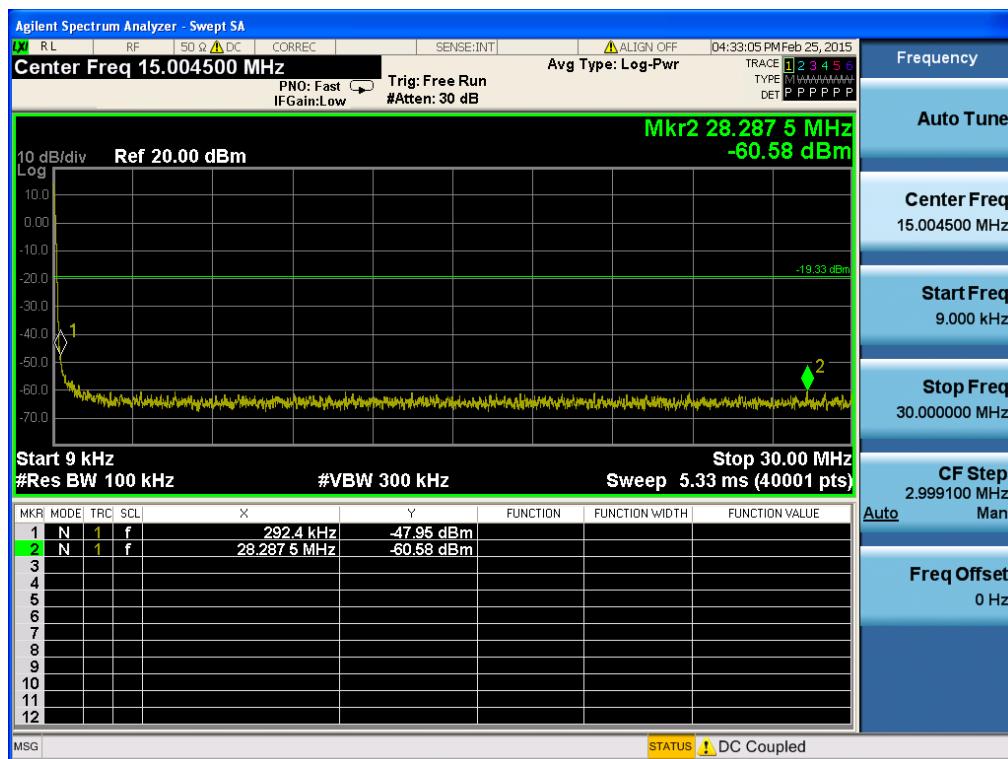
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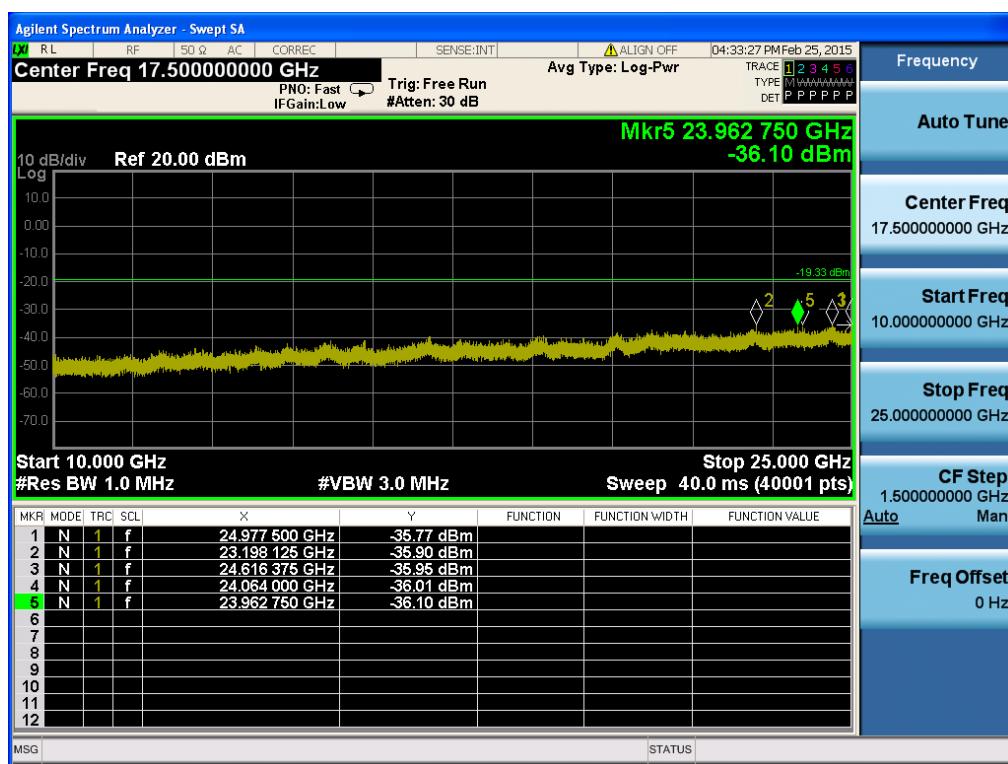
Low Band-edge



Conducted Spurious Emissions

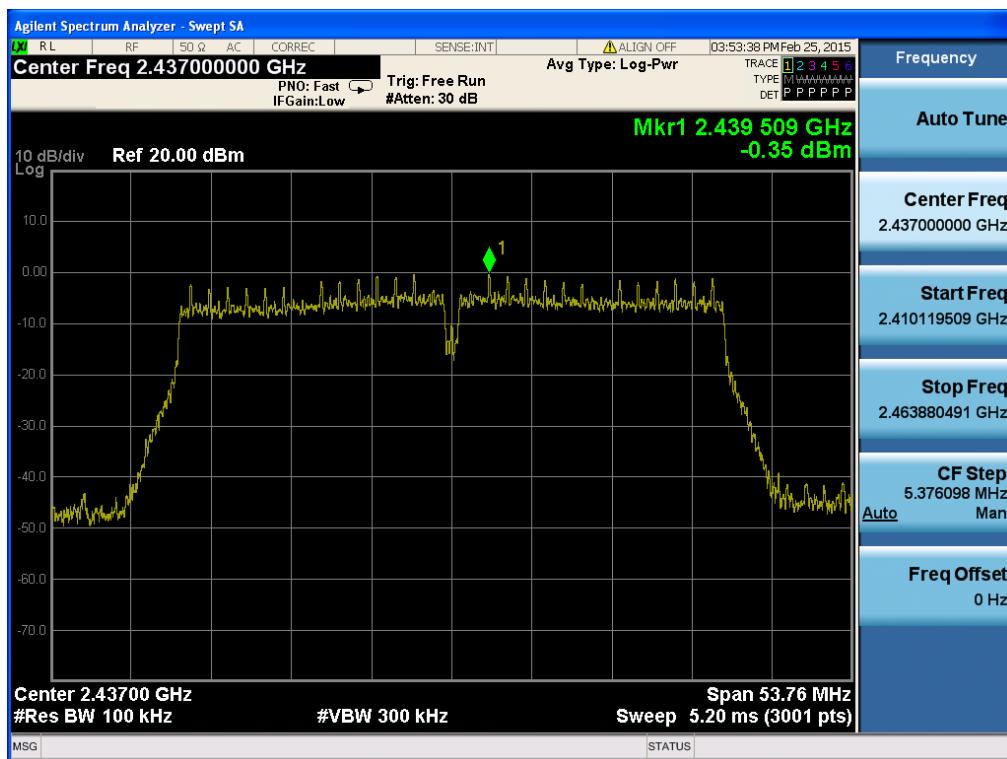


Conducted Spurious Emissions

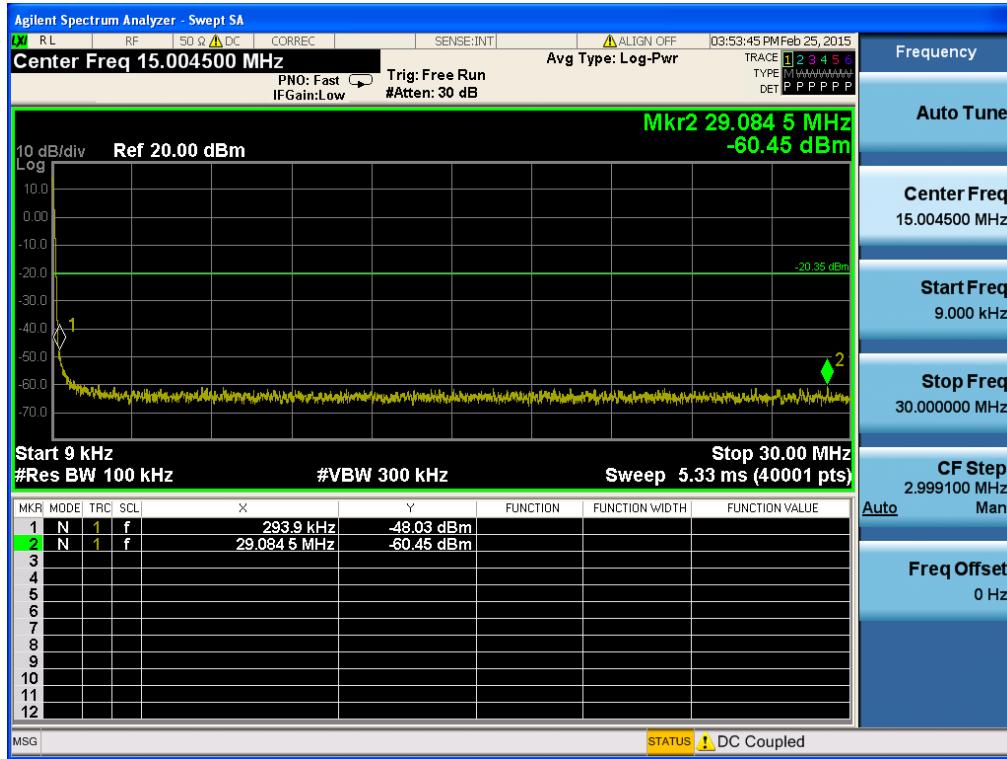


TM 4 & ANT 2 & Middle

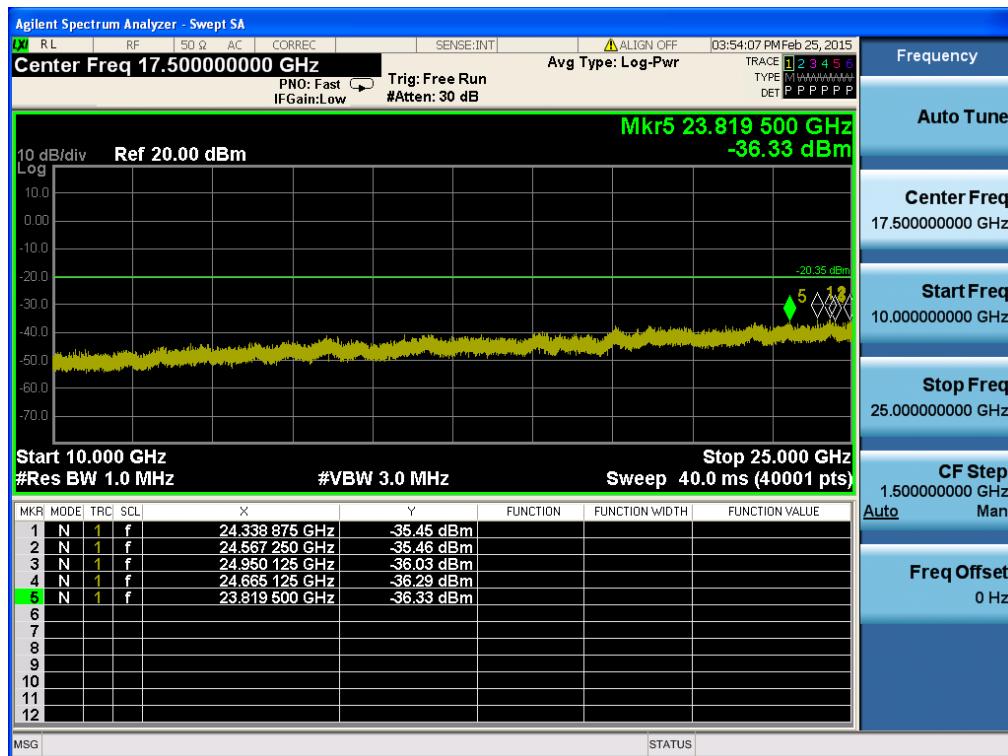
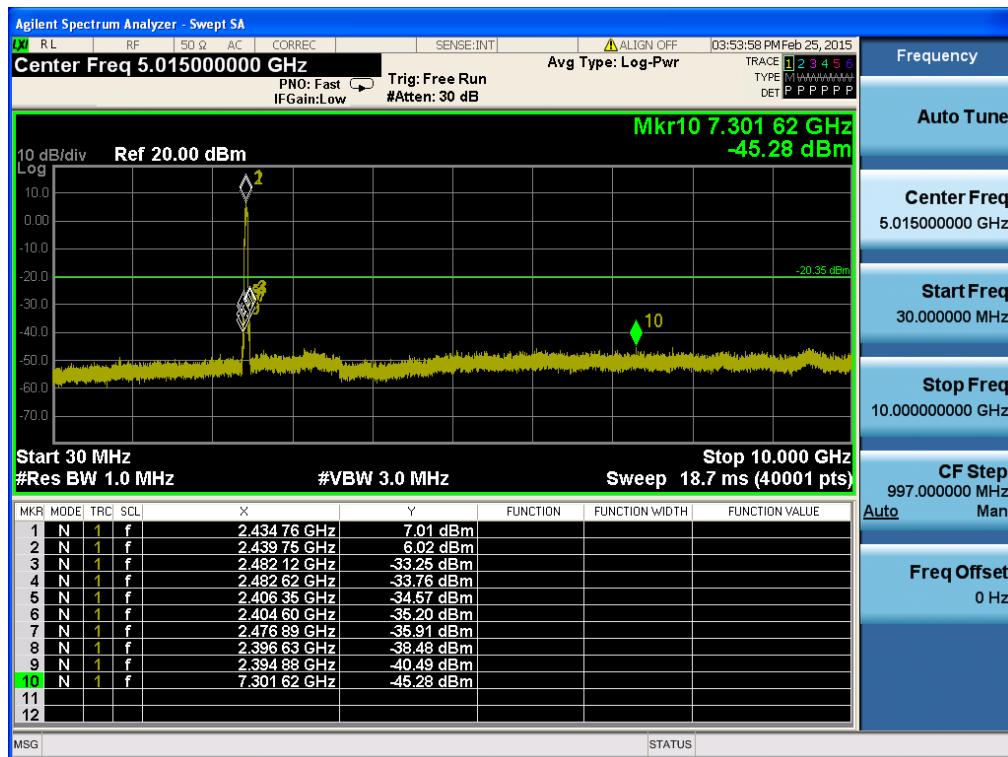
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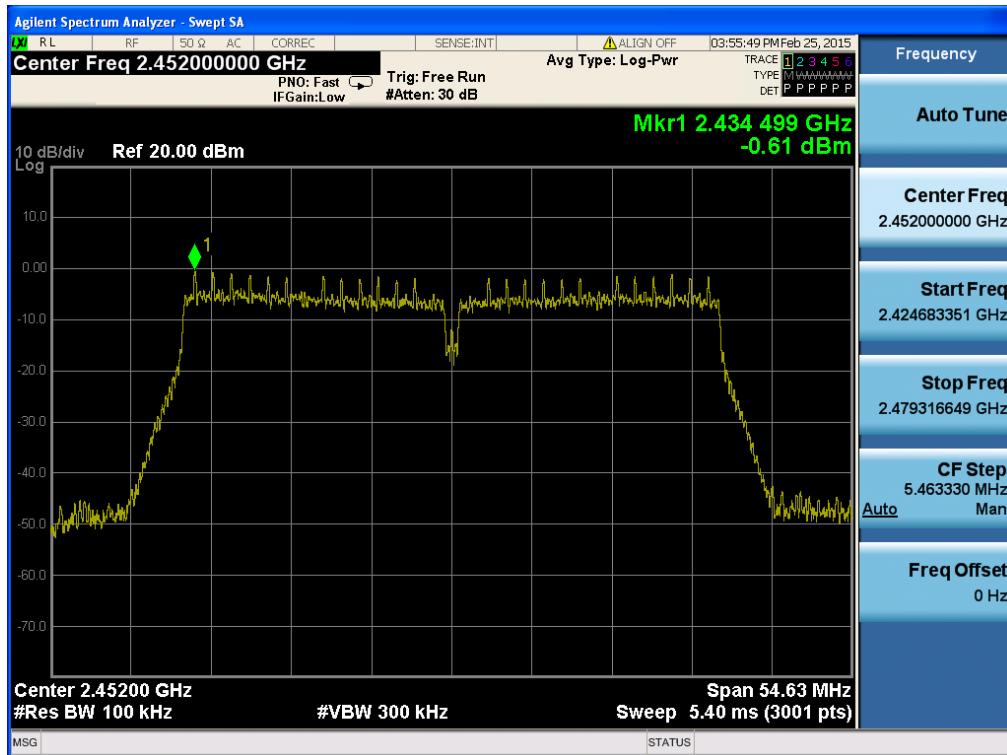
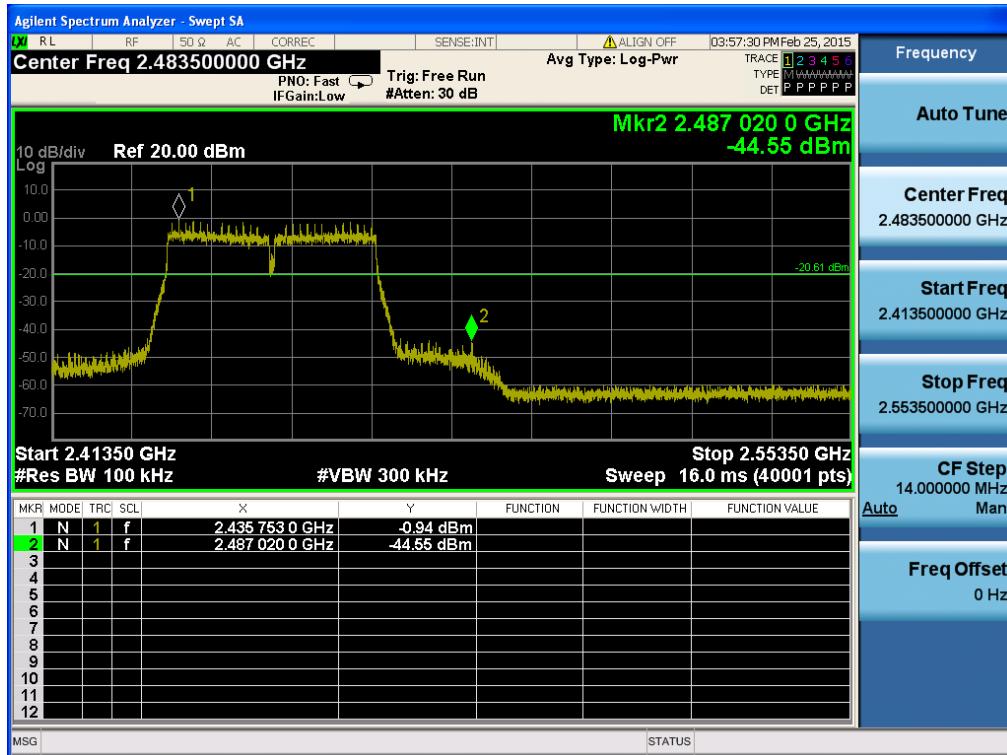


Conducted Spurious Emissions

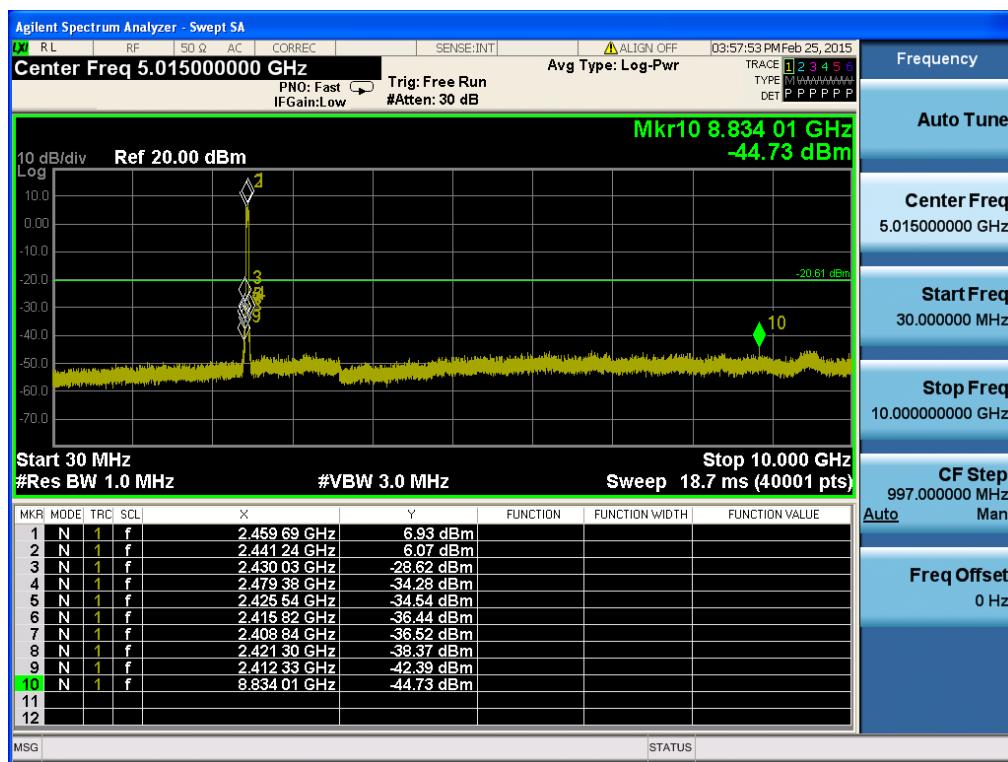
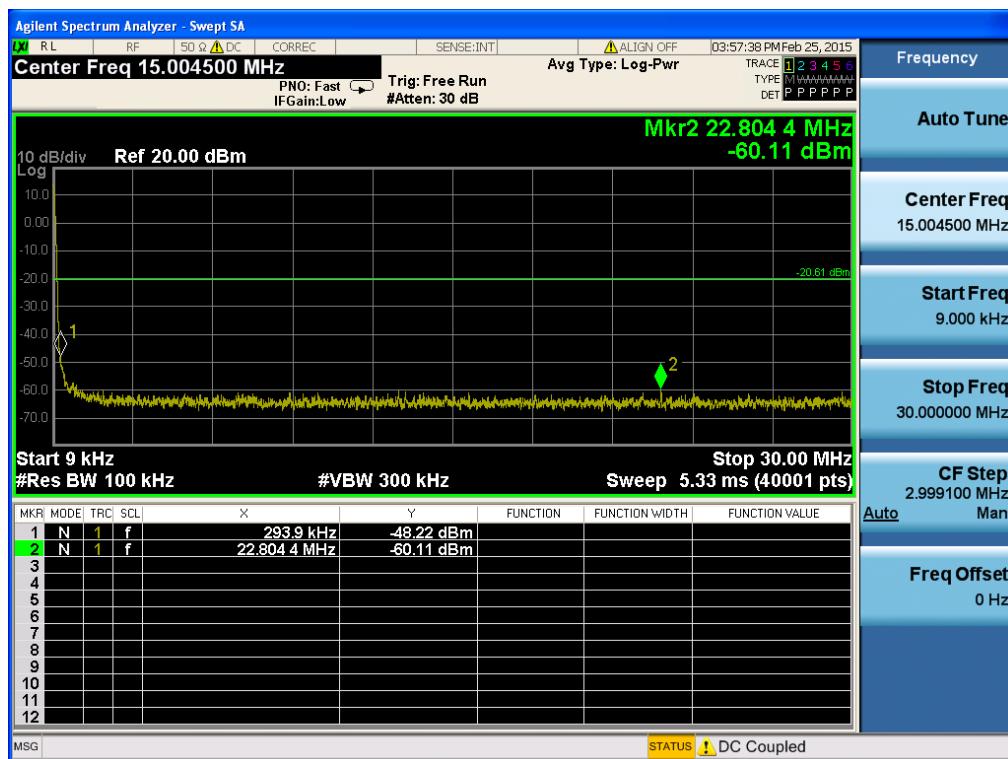


Conducted Spurious Emissions

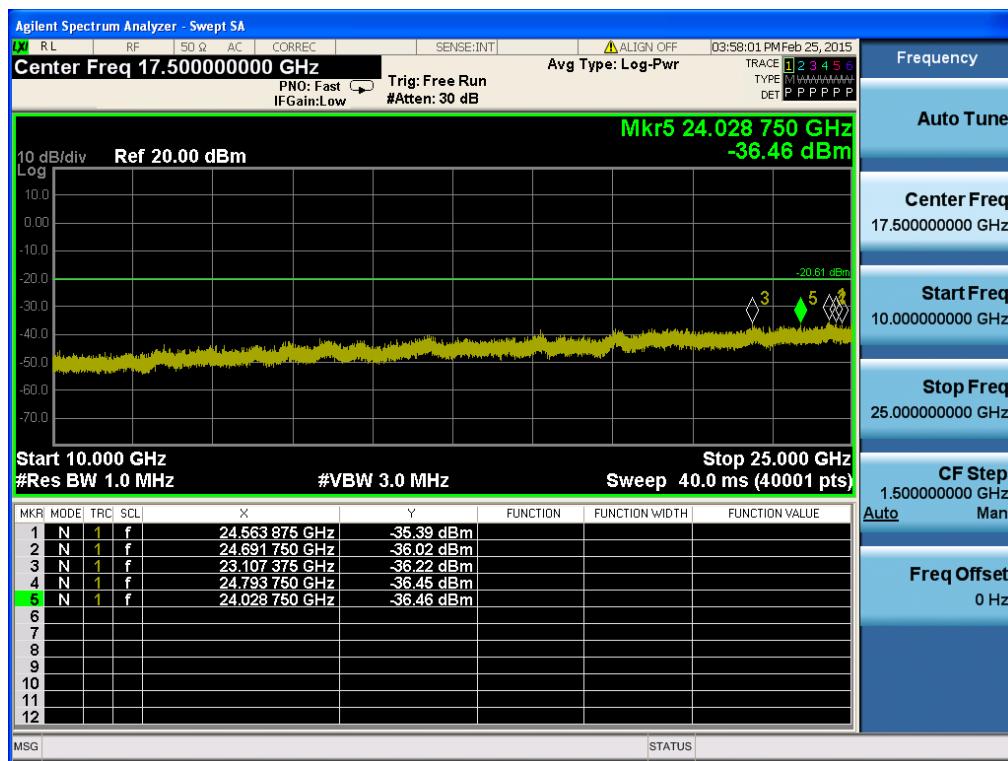


TM 4 & ANT 2 & Highest**Reference****High Band-edge**

Conducted Spurious Emissions



Conducted Spurious Emissions



8.5 Radiated spurious emissions

Test Requirements and limit, §15.247(d), §15.205, §15.209& RSS-210 [A8.5], RSS-Gen [8.9/8.10]

In any 100 kHz bandwidth outside the operating frequency band. In case the emission fall within the restricted band specified on 15.205(a) and (b), then the 15.209(a) limit in the table below has to be followed

- FCC Part 15.209(a) and (b)

Frequency (MHz)	Limit (uV/m)	Measurement Distance (meter)
0.009 – 0.490	2400/F(KHz)	300
0.490 – 1.705	24000/F(KHz)	30
1.705 – 30.0	30	30
30 ~ 88	100 **	3
88 ~ 216	150 **	3
216 ~ 960	200 **	3
Above 960	500	3

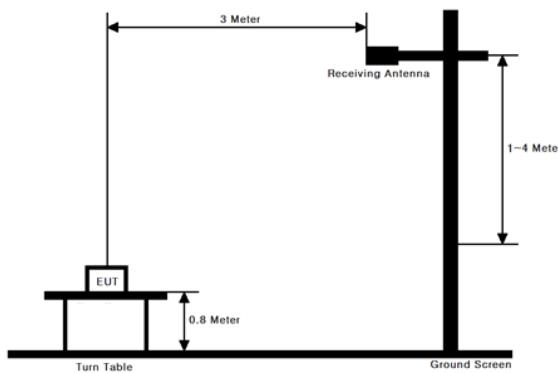
** Except as provided in 15.209(g), fundamental emissions from intentional radiators operating under this Section shall not be located in the frequency bands 54-72 MHz, 76-88MHz, 174-216MHz or 470-806MHz. However, operation within these frequency bands is permitted under other sections of this Part, e.g. 15.231 and 15.241.

- FCC Part 15.205 (a): Only spurious emissions are permitted in any of the frequency bands listed below:

MHz	MHz	MHz	MHz	GHz	GHz
0.009 ~ 0.110	8.41425 ~ 8.41475	108 ~ 121.94	1300 ~ 1427	4.5 ~ 5.15	14.47 ~ 14.5
0.495 ~ 0.505	12.29 ~ 12.293	123 ~ 138	1435 ~ 1626.5	5.35 ~ 5.46	15.35 ~ 16.2
2.1735 ~ 2.1905	12.51975 ~	149.9 ~ 150.05	1645.5 ~ 1646.5	7.25 ~ 7.75	17.7 ~ 21.4
4.125 ~ 4.128	12.52025	156.52475 ~	1660 ~ 1710	8.025 ~ 8.5	22.01 ~ 23.12
4.17725 ~ 4.17775	12.57675 ~	156.52525	1718.8 ~ 1722.2	9.0 ~ 9.2	23.6 ~ 24.0
4.20725 ~ 4.20775	12.57725	156.7 ~ 156.9	2200 ~ 2300	9.3 ~ 9.5	31.2 ~ 31.8
6.215 ~ 6.218	13.36 ~ 13.41	162.0125 ~ 167.17	2310 ~ 2390	10.6 ~ 12.7	36.43 ~ 36.5
6.26775 ~ 6.26825	16.42 ~ 16.423	167.72 ~ 173.2	2483.5 ~ 2500	13.25 ~ 13.4	Above 38.6
6.31175 ~ 6.31225	16.69475 ~	240 ~ 285	2655 ~ 2900		
8.291 ~ 8.294	16.69525	322 ~ 335.4	3260 ~ 3267		
8.362 ~ 8.366	16.80425 ~	399.90 ~ 410	3332 ~ 3339		
8.37625 ~ 8.38675	16.80475	608 ~ 614	3345.8 ~ 3358		
	25.5 ~ 25.67	960 ~ 1240	3600 ~ 4400		
	37.5 ~ 38.25				
	73 ~ 74.6				
	74.8 ~ 75.2				

FCC Part 15.205(b): The field strength of emissions appearing within these frequency bands shall not exceed the limits shown in §15.209. At frequencies equal to or less than 1000 MHz, compliance with the limits in §15.209 shall be demonstrated using measurement instrumentation employing a CISPR quasi-peak detector. Above 1000 MHz, compliance with the emission limits in §15.209 shall be demonstrated based on the average value of the measured emissions. The provisions in §15.35 apply to these measurements.

Test Configuration



TEST PROCEDURE

1. The EUT is placed on a non-conductive table, which is 0.8 m above ground plane.
2. The turntable shall be rotated for 360 degrees to determine the position of maximum emission level.
3. EUT is set 3 m away from the receiving antenna, which is varied from 1m to 4m to find out the highest emissions.
4. Maximum procedure was performed on the six highest emissions to ensure EUT compliance.
5. And also, each emission was to be maximized by changing the polarization of receiving antenna both horizontal and vertical.
6. Repeat above procedures until the measurements for all frequencies are complete.

Measurement Instrument Setting for Radiated Emission Measurements.

Peak Measurement: 12.2.4 of KDB 558074 v03r2

RBW = As specified in below table, VBW \geq 3 x RBW, Sweep = Auto, Detector = Peak, Trace mode = Max Hold until the trace stabilizes.

Frequency	RBW
9-150 kHz	200-300 Hz
0.15-30 MHz	9-10 kHz
30-1000 MHz	100-120 kHz
> 1000 MHz	1 MHz

Average Measurement: 12.2.5.2 of KDB 558074 v03r2

1. RBW = 1MHz(unless otherwise specified)
2. VBW \geq 3 X RBW
3. Detector = RMS, if span / sweep point \leq (RBW/2)
4. Averaging type = Power
5. Sweep time = auto
6. Trace average = At least 100 traces
7. A duty cycle correction factor($10\log(1/x)$, where x is the duty cycle) shall be added to the measurement results prior to comparing to the emission limit in order to compute the emission level that would have been measured had the test been performed at 100 percent duty cycle.

Test Mode	Duty Cycle (%)	Duty Cycle Correction Factor (dB)
TM 1	99.31	0.04
TM 2	96.37	0.17
TM 3	92.00	0.37
TM 4	85.10	0.71

Note: Please refer to Appendix I for detailed information.

Radiated Spurious Emissions data(9kHz ~ 25GHz) : Test Mode 1(TM 1)

Tested ANT	Tested Frequency (MHz)	ANT Pol	EUT Position (Axis)	Detector Mode	Reading (dBuV)	T.F (dB/m)	DCCF (dB)	DCF (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	
ANT 2	Lowest	2388.74	H	X	PK	50.07	1.96	N/A	N/A	52.03	74.00	21.97
		2389.77	H	X	AV	40.23	1.96	N/A	N/A	42.19	54.00	11.81
		4824.05	H	X	PK	44.37	8.27	N/A	N/A	52.64	74.00	21.36
		4824.04	H	X	AV	34.25	8.27	N/A	N/A	42.52	54.00	11.48
	Middle	4873.96	H	X	PK	44.27	8.49	N/A	N/A	52.76	74.00	21.24
		4873.99	H	X	AV	34.33	8.49	N/A	N/A	42.82	54.00	11.18
	Highest	2483.56	H	X	PK	51.70	2.44	N/A	N/A	54.14	74.00	19.86
		2483.81	H	X	AV	39.29	2.44	N/A	N/A	41.73	54.00	12.27
		4924.06	H	X	PK	44.51	8.72	N/A	N/A	53.23	74.00	20.77
		4924.09	H	X	AV	34.75	8.72	N/A	N/A	43.47	54.00	10.53

Note.

1. No other spurious and harmonic emissions were found greater than listed emissions on above table.
2. The band-edge test has performed between 2310-2390MHz for low channel and 2483.5-2500MHz for high channel. Above listed point data is the worst case data.
3. Sample Calculation.

$$\text{Margin} = \text{Limit} - \text{Result} / \text{Result} = \text{Reading} + \text{T.F} + \text{DCCF} + \text{DCF} / \text{T.F} = \text{AF} + \text{CL} - \text{AG}$$

Where, T.F = Total Factor, AF = Antenna Factor, CL = Cable Loss, AG = Amplifier Gain,
 DCCF = Duty Cycle Correction Factor, DCF = Distance Correction Factor
4. Measurement Distance = 3 m for below 10 GHz, Measurement Distance = 1 m for above 10 GHz.
 Therefore Distance Correction Factor(DCF) : - 9.54 dB = $20 \times \log(1m/3m)$

Radiated Spurious Emissions data(9kHz ~ 25GHz) : Test Mode 2(TM 2)

Tested ANT	Tested Frequency (MHz)	ANT Pol	EUT Position (Axis)	Detector Mode	Reading (dBuV)	T.F (dB/m)	DCCF (dB)	DCF (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	
ANT 2	Lowest	2388.04	H	Z	PK	64.38	1.96	N/A	N/A	66.34	74.00	7.66
		2389.73	H	Z	AV	47.49	1.96	0.17	N/A	49.62	54.00	4.38
		4824.12	H	Z	PK	45.03	8.27	N/A	N/A	53.30	74.00	20.70
		4824.02	H	Z	AV	35.06	8.27	0.17	N/A	43.50	54.00	10.50
	Middle	4874.14	H	Z	PK	45.28	8.49	N/A	N/A	53.77	74.00	20.23
		4874.10	H	Z	AV	34.74	8.49	0.17	N/A	43.40	54.00	10.60
	Highest	2483.74	H	Z	PK	62.06	2.44	N/A	N/A	64.50	74.00	9.50
		2483.62	H	Z	AV	46.11	2.44	0.17	N/A	48.72	54.00	5.28
		4924.04	H	Z	PK	44.46	8.72	N/A	N/A	53.18	74.00	20.82
		4924.10	H	Z	AV	34.21	8.72	0.17	N/A	43.10	54.00	10.90

Note.

1. No other spurious and harmonic emissions were found greater than listed emissions on above table.
2. The band-edge test has performed between 2310-2390MHz for low channel and 2483.5-2500MHz for high channel. Above listed point data is the worst case data.
3. Sample Calculation.

$$\text{Margin} = \text{Limit} - \text{Result} / \text{Result} = \text{Reading} + \text{T.F} + \text{DCCF} + \text{DCF} / \text{T.F} = \text{AF} + \text{CL} - \text{AG}$$

Where, T.F = Total Factor, AF = Antenna Factor, CL = Cable Loss, AG = Amplifier Gain,
 DCCF = Duty Cycle Correction Factor, DCF = Distance Correction Factor
4. Measurement Distance = 3 m for below 10 GHz, Measurement Distance = 1 m for above 10 GHz.
 Therefore Distance Correction Factor(DCF) : - 9.54 dB = $20 \times \log(1m/3m)$

Radiated Spurious Emissions data(9kHz ~ 25GHz) : Test Mode 3(TM 3)

Tested ANT	Tested Frequency (MHz)	ANT Pol	EUT Position (Axis)	Detector Mode	Reading (dBuV)	T.F (dB/m)	DCCF (dB)	DCF (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	
MIMO	Lowest	2389.54	H	Z	PK	66.47	1.96	N/A	N/A	68.43	74.00	5.57
		2389.73	H	Z	AV	48.99	1.96	0.37	N/A	51.32	54.00	2.68
		4824.06	H	Z	PK	45.22	8.27	N/A	N/A	53.49	74.00	20.51
		4824.11	H	Z	AV	35.30	8.27	0.37	N/A	43.94	54.00	10.06
	Middle	4873.84	H	Z	PK	45.30	8.49	N/A	N/A	53.79	74.00	20.21
		4873.99	H	Z	AV	35.64	8.49	0.37	N/A	44.50	54.00	9.50
	Highest	2483.78	H	Z	PK	65.74	2.44	N/A	N/A	68.18	74.00	5.82
		2483.62	H	Z	AV	47.69	2.44	0.37	N/A	50.50	54.00	3.50
		4923.87	H	Z	PK	45.15	8.72	N/A	N/A	53.87	74.00	20.13
		4923.96	H	Z	AV	35.24	8.72	0.37	N/A	44.33	54.00	9.67

Note.

1. No other spurious and harmonic emissions were found greater than listed emissions on above table.
2. The band-edge test has performed between 2310-2390MHz for low channel and 2483.5-2500MHz for high channel. Above listed point data is the worst case data.
3. Sample Calculation.

$$\text{Margin} = \text{Limit} - \text{Result} / \text{Result} = \text{Reading} + \text{T.F} + \text{DCCF} + \text{DCF} / \text{T.F} = \text{AF} + \text{CL} - \text{AG}$$

Where, T.F = Total Factor, AF = Antenna Factor, CL = Cable Loss, AG = Amplifier Gain,
 DCCF = Duty Cycle Correction Factor, DCF = Distance Correction Factor
4. Measurement Distance = 3 m for below 10 GHz, Measurement Distance = 1 m for above 10 GHz.
 Therefore Distance Correction Factor(DCF) : - 9.54 dB = $20 \log(1m/3m)$

Radiated Spurious Emissions data(9kHz ~ 25GHz) : Test Mode 4(TM 4)

Tested ANT	Tested Frequency (MHz)	ANT Pol	EUT Position (Axis)	Detector Mode	Reading (dBuV)	T.F (dB/m)	DCCF (dB)	DCF (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	
MIMO	Lowest	2388.93	H	Z	PK	70.57	1.96	N/A	N/A	72.53	74.00	1.47
		2389.87	H	Z	AV	50.22	1.96	0.71	N/A	52.89	54.00	1.11
		4844.06	H	Z	PK	45.74	8.36	N/A	N/A	54.10	74.00	19.90
		4844.11	H	Z	AV	35.60	8.36	0.71	N/A	44.67	54.00	9.33
	Middle	4873.85	H	Z	PK	45.78	8.49	N/A	N/A	54.27	74.00	19.73
		4874.12	H	Z	AV	35.32	8.49	0.71	N/A	44.52	54.00	9.48
	Highest	2483.51	H	Z	PK	69.47	2.44	N/A	N/A	71.91	74.00	2.09
		2483.56	H	Z	AV	49.60	2.44	0.71	N/A	52.75	54.00	1.25
		4903.92	H	Z	PK	44.35	8.63	N/A	N/A	52.98	74.00	21.02
		4904.08	H	Z	AV	34.96	8.63	0.71	N/A	44.30	54.00	9.70

Note.

1. No other spurious and harmonic emissions were found greater than listed emissions on above table.
2. The band-edge test has performed between 2310-2390MHz for low channel and 2483.5-2500MHz for high channel. Above listed point data is the worst case data.
3. Sample Calculation.

$$\text{Margin} = \text{Limit} - \text{Result} / \text{Result} = \text{Reading} + \text{T.F} + \text{DCCF} + \text{DCF} / \text{T.F} = \text{AF} + \text{CL} - \text{AG}$$

Where, T.F = Total Factor, AF = Antenna Factor, CL = Cable Loss, AG = Amplifier Gain,
 DCCF = Duty Cycle Correction Factor, DCF = Distance Correction Factor
4. Measurement Distance = 3 m for below 10 GHz, Measurement Distance = 1 m for above 10 GHz.
 Therefore Distance Correction Factor(DCF) : - 9.54 dB = $20 \log(1m/3m)$

8.6 Power-line conducted emissions

Test Requirements and limit, §15.207& RSS-Gen [8.8]

For an intentional radiator which is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies within the band 150 kHz to 30 MHz shall not exceed 250 microvolts (The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.50 MHz). The limits at specific frequency range is listed as follows:

Frequency Range (MHz)	Conducted Limit (dBuV)	
	Quasi-Peak	Average
0.15 ~ 0.5	66 to 56 *	56 to 46 *
0.5 ~ 5	56	46
5 ~ 30	60	50

* Decreases with the logarithm of the frequency

Compliance with this provision shall be based on the measurement of the radio frequency voltage between each power line (LINE and NEUTRAL) and ground at the power terminals.

□ TEST PROCEDURE

1. The EUT is placed on a wooden table 80 cm above the reference ground plane.
2. The EUT is connected via LISN to the test power supply.
3. The measurement results are obtained as described below:
4. Detectors – Quasi Peak and Average Detector.

□ Test Results: Comply(Refer to next page.)

The worst data was reported in 2.4GHz band

■ RESULT PLOTS**AC Line Conducted Emissions (Graph)**

Test mode 1(TM 1) & Middle

Results of Conducted Emission

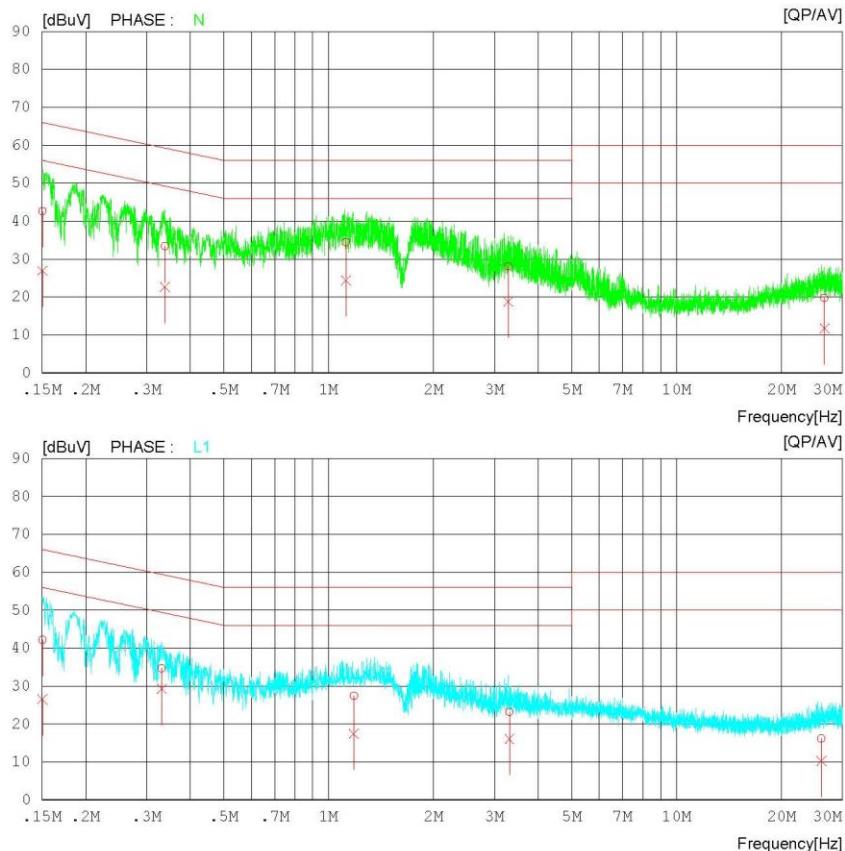
DTNC

Date : 2015-03-05

Order No. : IML-C4300W
Model No. :
Serial No. : Identical prototype
Test Condition : 802.11b/2437

Reference No.
Power Supply : 120V / 60Hz
Temp/Humi. : 21 °C / 42 % R.H.
Operator : C.M KIM

Memo :

LIMIT : CISPR22_B QP
CISPR22_B AV

AC Line Conducted Emissions (List)

Test mode 1(TM 1) & Middle

Results of Conducted Emission

DTNC

Date : 2015-03-05

Order No.	:	IML-C4300W	Reference No.	:	
Model No.	:		Power Supply	:	120V / 60Hz
Serial No.	:	Identical prototype	Temp/Humi.	:	21 °C / 42 % R.H.
Test Condition	:	802.11b/2437	Operator	:	C.M KIM

Memo :

LIMIT : CISPR22_B QP
CISPR22_B AV

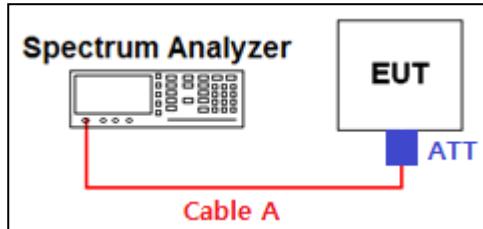
NO	FREQ [MHz]	READING		C.FACTOR [dB]	RESULT		LIMIT		MARGIN [dBuV]	PHASE
		QP [dBuV]	AV [dBuV]		QP [dBuV]	AV [dBuV]	QP [dBuV]	AV [dBuV]		
1	0.15037	32.7	16.9	10.0	42.7	26.9	66.0	56.0	23.3	29.1 N
2	0.33836	23.4	12.7	10.0	33.4	22.7	59.2	49.2	25.8	26.5 N
3	1.12160	24.3	14.2	10.1	34.4	24.3	56.0	46.0	21.6	21.7 N
4	3.28360	18.1	8.8	10.0	28.1	18.8	56.0	46.0	27.9	27.2 N
5	26.62640	8.9	1.0	10.8	19.7	11.8	60.0	50.0	40.3	38.2 N
6	0.15040	32.1	16.5	10.0	42.1	26.5	66.0	56.0	23.9	29.5 L1
7	0.33094	24.7	19.2	10.0	34.7	29.2	59.4	49.4	24.7	20.2 L1
8	1.18200	17.2	7.3	10.1	27.3	17.4	56.0	46.0	28.7	28.6 L1
9	3.30720	12.9	5.8	10.2	23.1	16.0	56.0	46.0	32.9	30.0 L1
10	26.11860	4.9	-1.0	11.2	16.1	10.2	60.0	50.0	43.9	39.8 L1

8.7 Occupied bandwidth

Test Requirements, RSS-Gen [6.6]

When an occupied bandwidth value is not specified in the applicable RSS, the transmitted signal bandwidth to be reported is to be its 99% emission bandwidth, as calculated or measured.

TEST CONFIGURATION



TEST PROCEDURE

The resolution bandwidth shall be set to as close to 1% of the selected span as is possible without being below 1%. The video bandwidth shall be set to 3 times the resolution bandwidth. Video averaging is not permitted. Where practical, a sampling detector shall be used given that a peak or peak hold may produce a wider bandwidth than actual.

TEST RESULTS: N/A

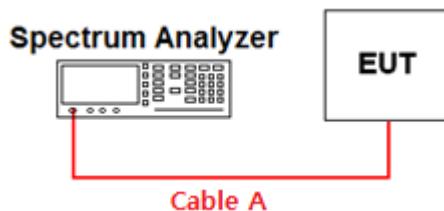
9. LIST OF TEST EQUIPMENT

MXA Signal Analyzer	Agilent Technologies	N9020A	14/09/15	15/09/15	MY50200867
Dynamic Measurement DC Source	Agilent Technologies	66332A	14/09/11	15/09/11	MY43000719
Vector Signal Generator	Rohde Schwarz	SMJ100A	15/01/06	16/01/06	100148
Signal Generator	Rohde Schwarz	SMF100A	14/07/01	15/07/01	102341
Multimeter	FLUKE	17B	14/05/12	15/05/12	26030065WS
PreAmplifier	Agilent	8449B	14/11/06	15/11/06	3008A02108
Low Noise Pre Amplifier	tsj	MLA-010K01-B01-27	14/04/09	15/04/09	1844538
High-pass filter	Wainwright Instruments	WHKX12-2580-3000-18000-80SS	14/10/17	15/10/17	3
Loop Antenna	Schwarzbeck	FMZB1513	14/04/29	16/04/29	1513-128
TRILOG Broadband Test-Antenna(30MHz-1GHz)	Schwarzbeck	VULB 9160	14/04/30	16/04/30	3358
Double-Ridged Guide Antenna	ETS	3117	14/05/12	16/05/12	140394
HORN Antenna	A.H.Systems	SAS-574	13/03/20	15/03/20	154
EMI TEST RECEIVER	R&S	ESR7	14/10/21	15/10/21	101109
Thermohygrometer	BODYCOM	BJ5478	14/05/13	15/05/13	120612-2
Power Meter & Wide Bandwidth Sensor	Anritsu	ML2495A/MA2490A	14/03/12	15/03/12	1306007/1249001
Attenuator	SMAJK	SMAJK-2-3	14/10/21	15/10/21	3
EMI TEST RECEIVER	R&S	ESCI	14/02/27	15/02/27	100364
			15/02/25	16/02/25	
FREQUENCY CONVERTER	Taejin Electronic	CVCF	14/09/11	15/09/11	ZU0033
ARTIFICIAL MAINS NETWORK	Narda S.T.S. / PMM	PMM L2-16B	14/06/26	15/06/26	000WX20305

APPENDIX I

Conducted Test set up Diagram & Path loss Information

-Conducted Measurement



Path loss information

Frequency (GHz)	Path Loss (dB)	Frequency (GHz)	Path Loss (dB)
0.03	1.09	15	4.01
1	1.35	20	4.25
2402 & 2440 & 2480	1.57	25	4.38
5	3.33	-	
10	3.84	-	

Note. 1: The path loss from EUT to Spectrum analyzer was measured and used for test.

Path loss (=S/A's offset value) = Cable A (Attenuator, Applied only when it was used externally)

APPENDIX II

Duty cycle information

TEST PROCEDURE

Duty cycle measured using **section 6.0 b) of KDB558074 v03r2** :

The zero-span mode on a spectrum analyzer or EMI receiver if the response time and spacing between bins on the sweep are sufficient to permit accurate measurements of the on and off times of the transmitted signal.

Set the center frequency of the instrument to the center frequency of the transmission. Set RBW \geq OBW if possible; otherwise, set RBW to the largest available value. Set VBW \geq RBW. Set detector = peak or average.

The zero-span measurement method shall not be used unless both RBW and VBW are $> 50/T$ and the number of sweep points across duration T exceeds 100. (For example, if VBW and/or RBW are limited to 3 MHz, then the zero-span method of measuring duty cycle shall not be used if $T \leq 16.7$ microseconds.)

TEST DATA

Test Mode	Tested frequency	T_{ON} (ms)	T_{ON+OFF} (ms)	Duty Cycle (%)	Duty Cycle Correction Factor (dB)
TM 1	Lowest	8.610	8.670	99.31	0.04
TM 2	Lowest	1.434	1.488	96.37	0.17
TM 3	Lowest	0.690	0.750	92.00	0.37
TM 4	Lowest	0.354	0.416	85.10	0.71

Please refer to next page for actual test plot.

