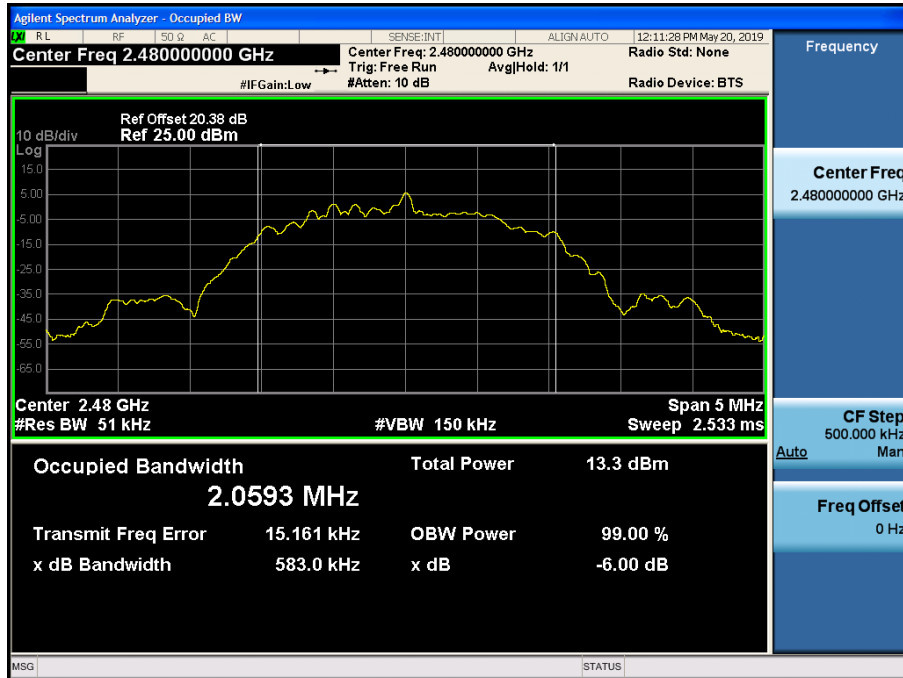


99 % Bandwidth plot (High-CH 39)



9.3 OUTPUT POWER

Peak Power

Data rate (Bit/s)	Packet length (Byte)	LE Mode		Measured Power(dBm)	Limit (dBm)
		Frequency [MHz]	Channel		
125k	37	2402	0	6.730	30
		2440	19	6.610	
		2480	39	6.586	
	255	2402	0	6.707	
		2440	19	6.606	
		2480	39	6.568	
500k	37	2402	0	6.793	
		2440	19	6.679	
		2480	39	6.668	
	255	2402	0	6.730	
		2440	19	6.625	
		2480	39	6.584	
1M	37	2402	0	6.792	
		2440	19	6.693	
		2480	39	6.674	
	255	2402	0	6.760	
		2440	19	6.632	
		2480	39	6.603	
2M	37	2402	0	7.082	
		2440	19	7.019	
		2480	39	6.927	
	255	2402	0	7.054	
		2440	19	6.957	
		2480	39	6.856	

Average Power

Data rate (Bit/s)	Packet length (Byte)	LE Mode		Measured Power (dBm)	Duty Cycle Factor (dB)	Result (dBm)	Limit (dBm)
		Frequency [MHz]	Channel				
125k	37	2402	0	5.65	0.82	6.47	30
		2440	19	5.61	0.82	6.43	
		2480	39	5.50	0.82	6.32	
	255	2402	0	6.54	0.12	6.66	
		2440	19	6.41	0.12	6.53	
		2480	39	6.30	0.12	6.42	
500k	37	2402	0	4.11	2.44	6.55	
		2440	19	4.16	2.44	6.60	
		2480	39	4.00	2.44	6.44	
	255	2402	0	6.12	0.40	6.52	
		2440	19	6.04	0.40	6.44	
		2480	39	5.89	0.40	6.29	
1M	37	2402	0	4.64	2.03	6.67	
		2440	19	4.45	2.03	6.48	
		2480	39	4.44	2.03	6.47	
	255	2402	0	5.82	0.69	6.51	
		2440	19	5.84	0.69	6.53	
		2480	39	5.68	0.69	6.37	
2M	37	2402	0	1.86	4.81	6.67	
		2440	19	1.74	4.81	6.55	
		2480	39	1.57	4.81	6.38	
	255	2402	0	4.23	2.42	6.65	
		2440	19	4.00	2.42	6.42	
		2480	39	4.11	2.42	6.53	

Note :

1. Spectrum reading values are not plot data.

The power results in plot is already including the actual values of loss for the attenuator and cable combination.

2. Spectrum offset = Attenuator loss(20 dB) + Cable loss

3. We apply to the offset in the 2.4 GHz range that was rounded off to the closest tenth dB.

So, 20.38 dB is offset for 2.4 GHz Band.

9.4 POWER SPECTRAL DENSITY

Frequency (MHz)	Channel No.	Mode	Test Result			
			Measured Power(dBm)	Duty Cycle Factor(dB)	Measured Power(dBm) + Duty Cycle Factor(dB)	Limit (dBm)
2402	0	1M Bit 37 Byte	-11.455	2.029	-9.426	8.000
2440	19		-12.666	2.029	-10.637	
2480	39		-11.437	2.029	-9.408	
2402	0	2M Bit 37 Byte	-16.391	4.807	-11.584	
2440	19		-16.754	4.807	-11.947	
2480	39		-16.606	4.807	-11.799	

Note :

1. Spectrum reading values are not plot data.

The PSD results in plot is already including the actual values of loss for the attenuator and cable combination.

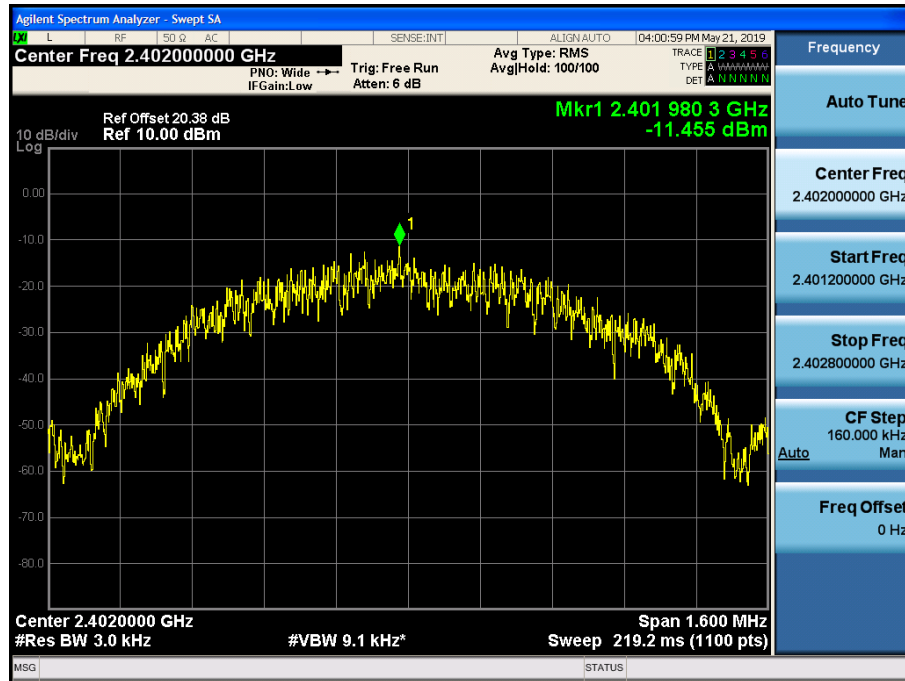
2. Spectrum offset = Attenuator loss(20 dB) + Cable loss

3. We apply to the offset in the 2.4 GHz range that was rounded off to the closest tenth dB.

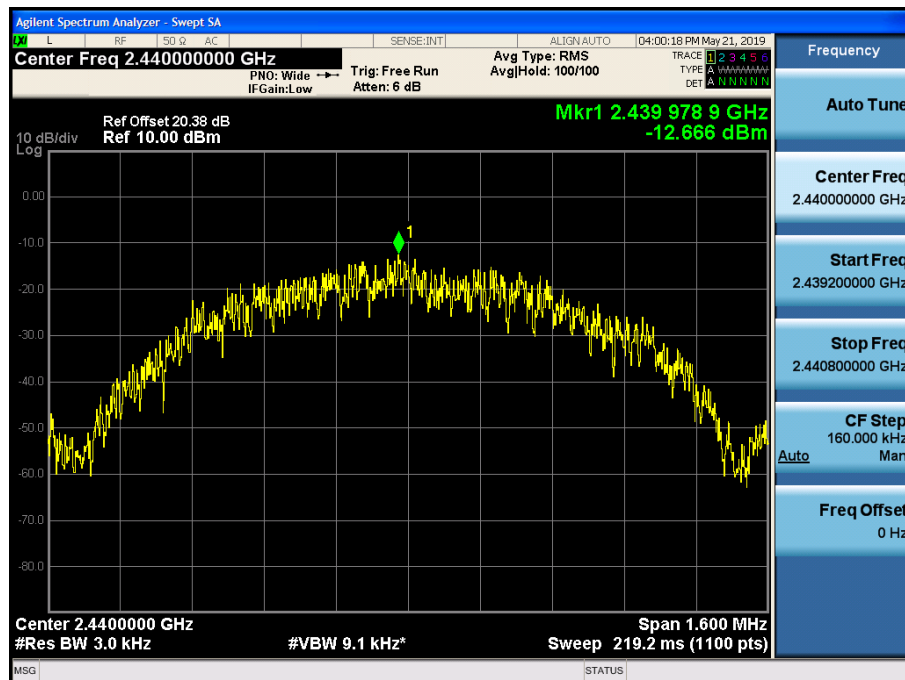
So, 20.38 dB is offset for 2.4 GHz Band.

1M Bit/s (37 Byte) Test Plots

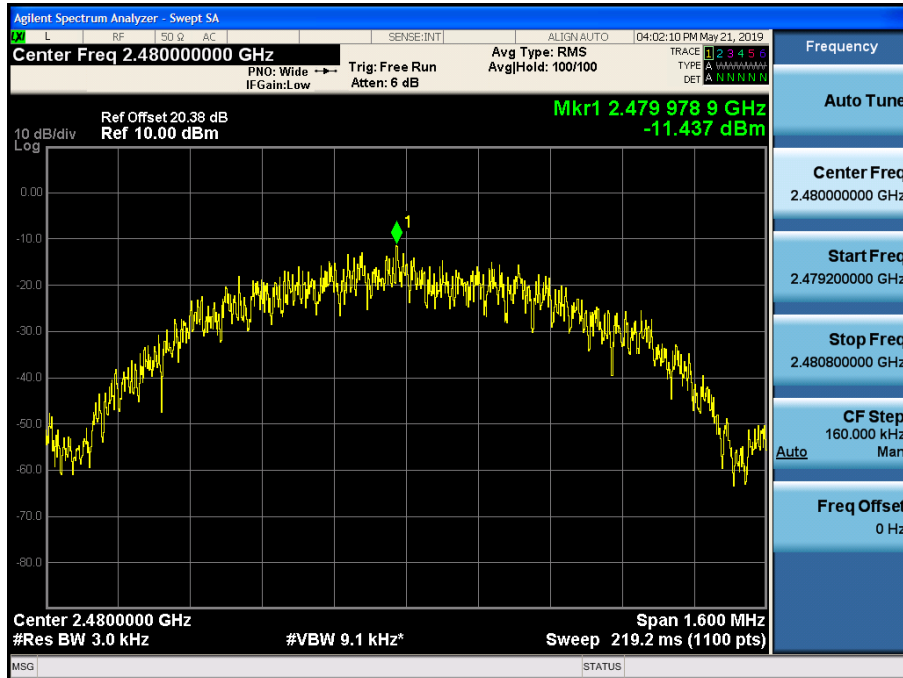
Power Spectral Density (Low-CH 0)



Power Spectral Density (Mid-CH 19)

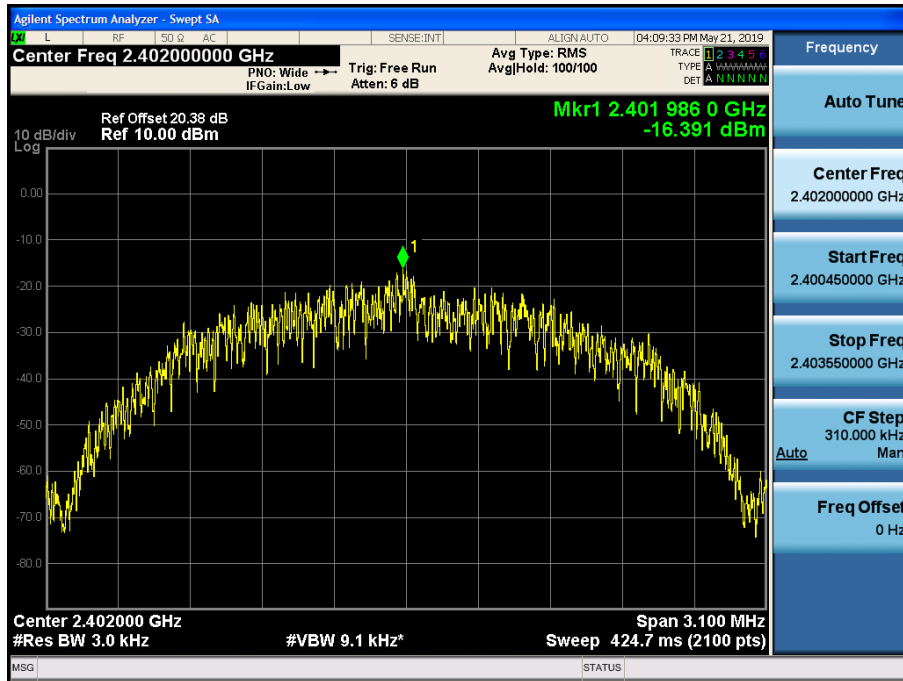


Power Spectral Density (High-CH 39)

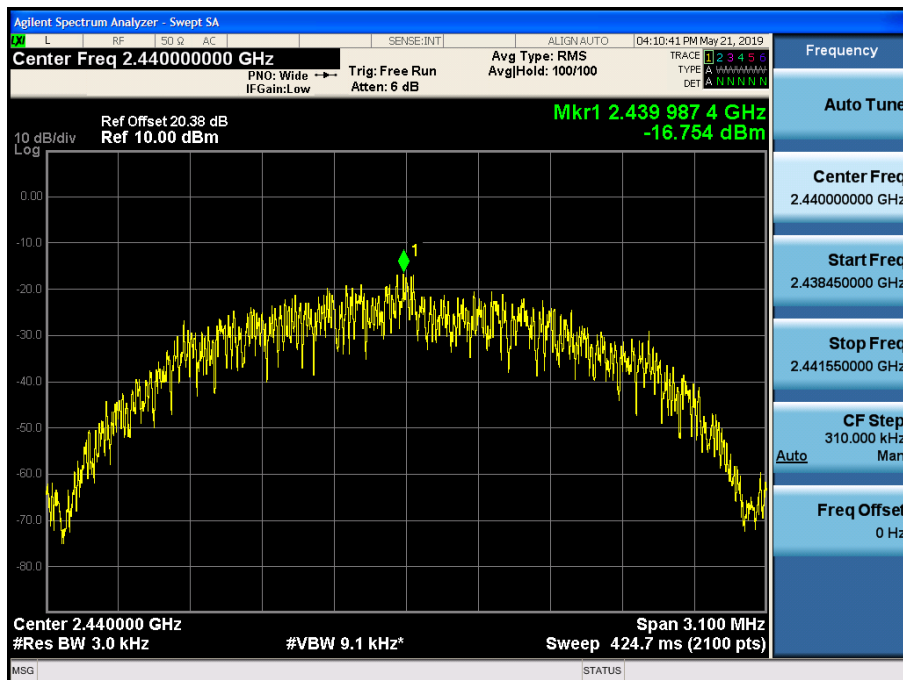


2M Bit/s (37 Byte) Test Plots

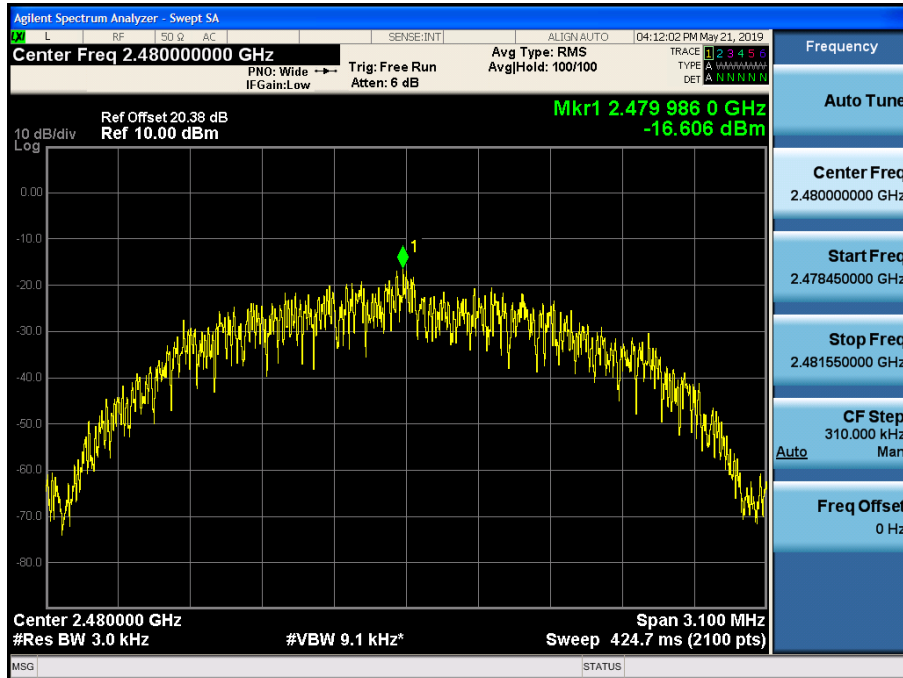
Power Spectral Density (Low-CH 0)



Power Spectral Density (Mid-CH 19)



Power Spectral Density (High-CH 39)



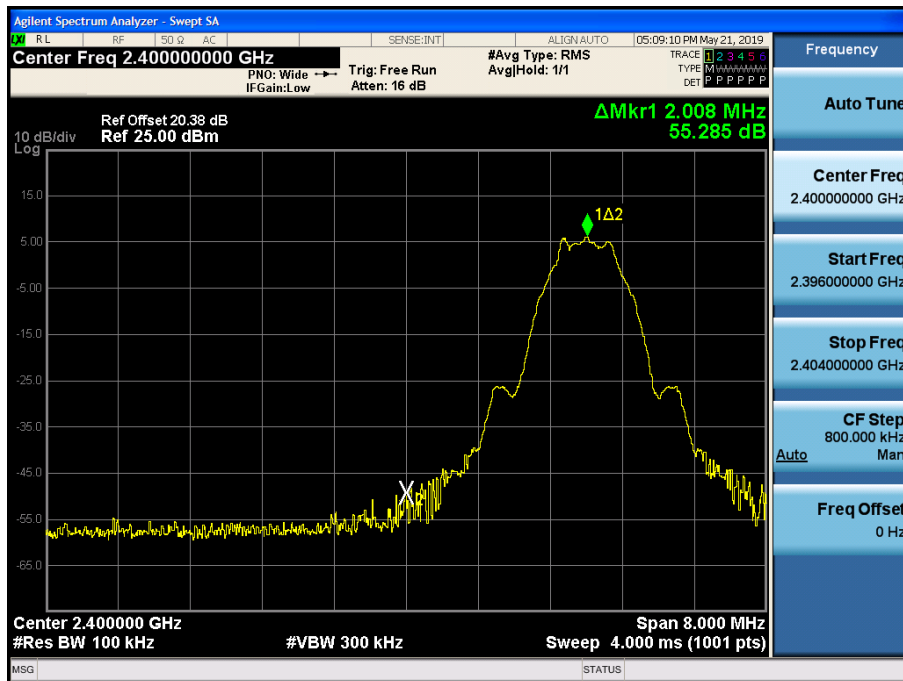
9.5 BAND EDGE/ CONDUCTED SPURIOUS EMISSIONS

Test Result : please refer to the plot below.

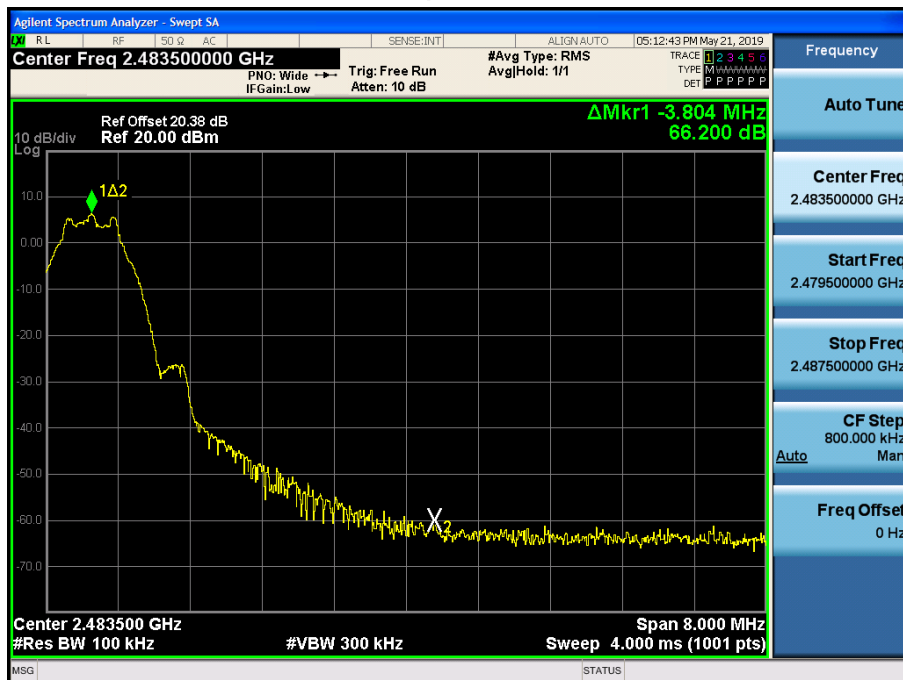
In order to simplify the report, attached plots were only the worst case channel and data rate.

1M Bit/s (37 Byte) Test Plots -BandEdge

Low-CH 0



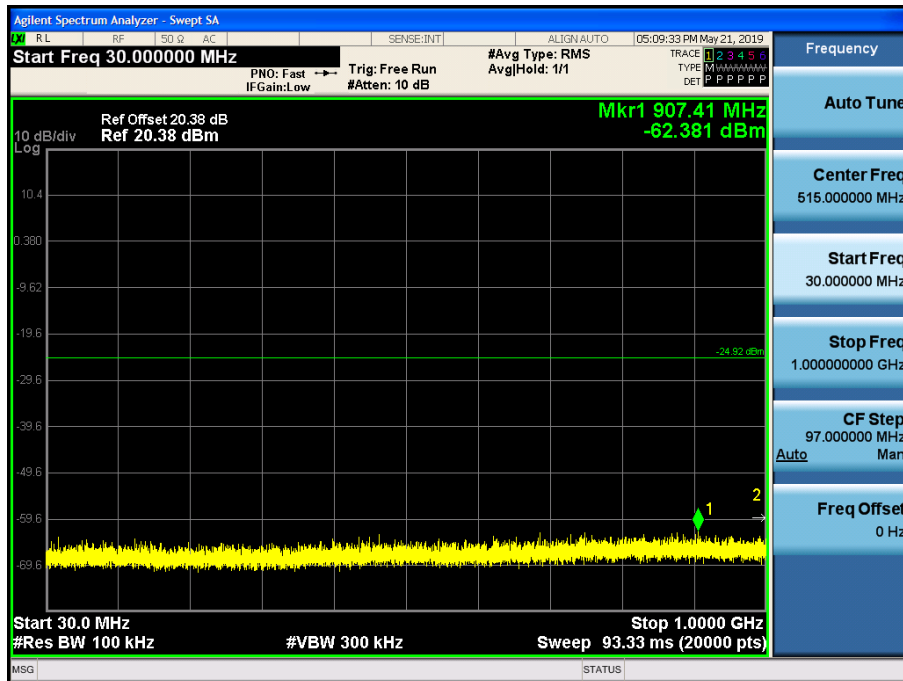
High-CH 39



1M Bit/s (37 Byte) Test Plots -Conducted Spurious Emission

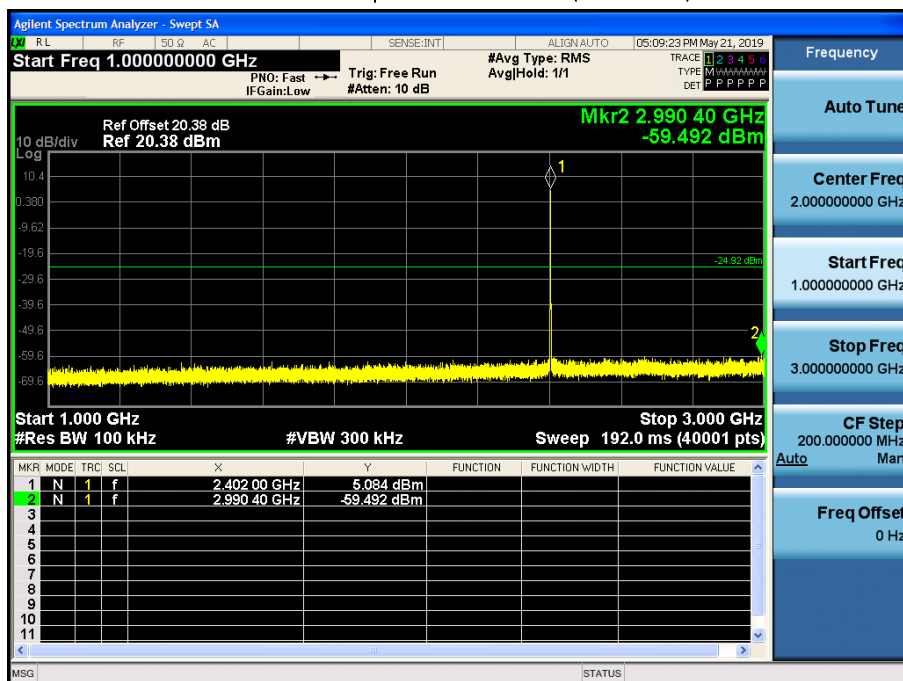
30 MHz ~ 1 GHz

Conducted Spurious Emission (Low-CH 0)



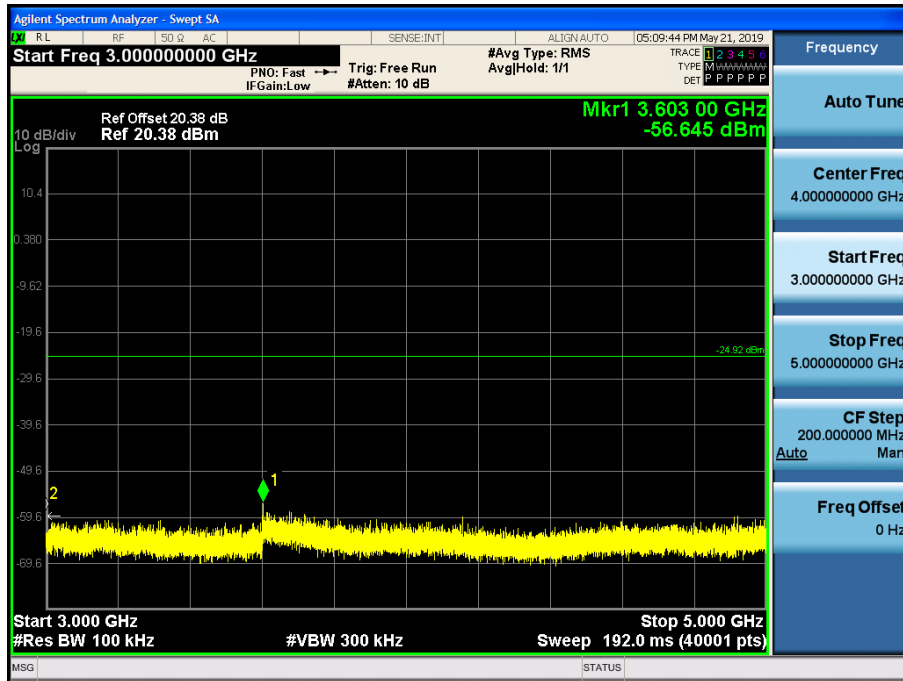
1 GHz ~ 3 GHz

Conducted Spurious Emission (Low-CH 0)



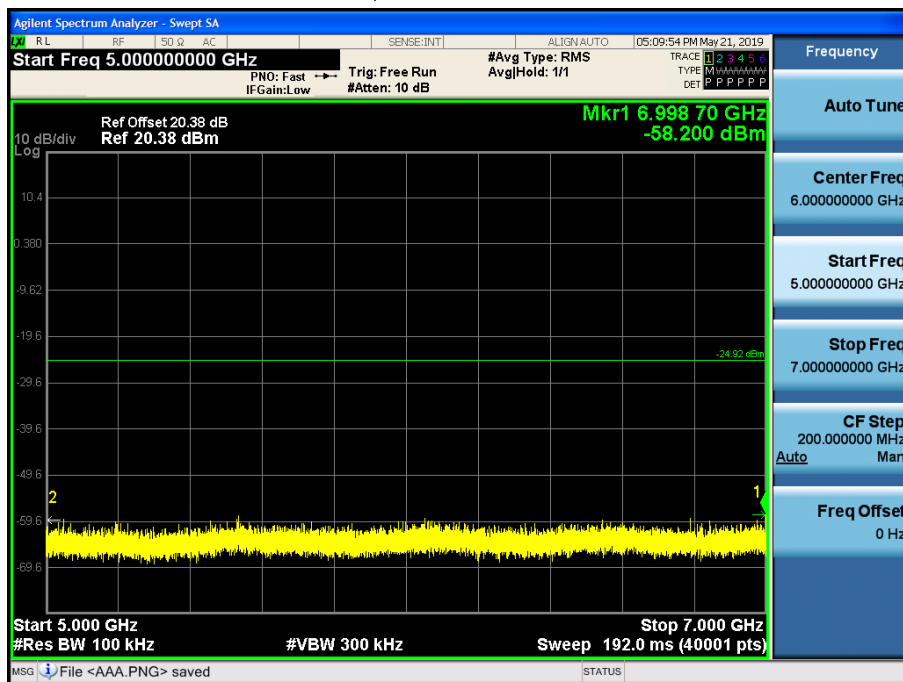
3 GHz ~ 5 GHz

Conducted Spurious Emission (Low-CH 0)



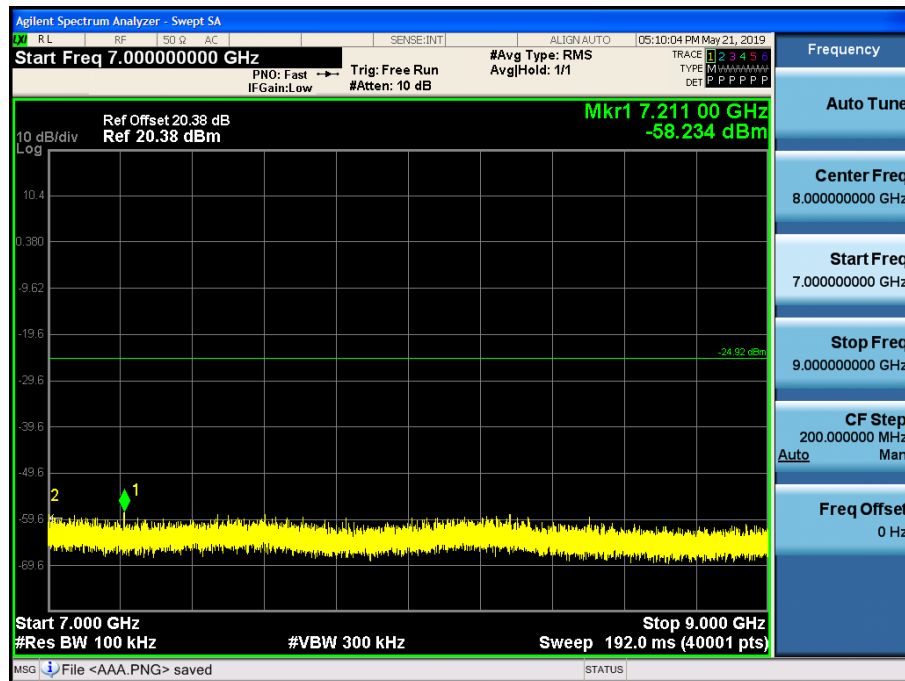
5 GHz ~ 7 GHz

Conducted Spurious Emission (Low-CH 0)



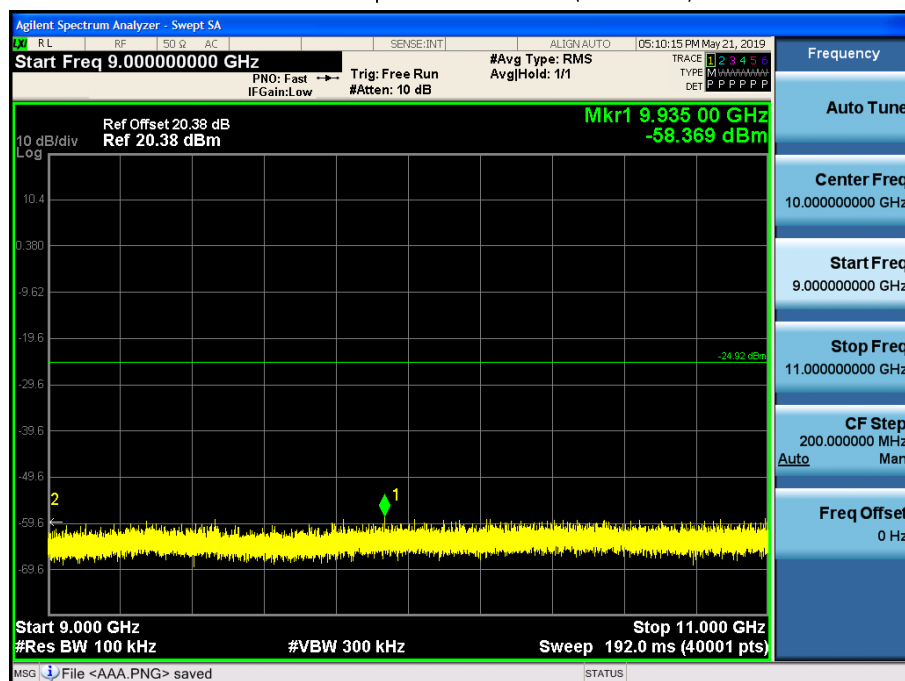
7 GHz ~ 9 GHz

Conducted Spurious Emission (Low-CH 0)



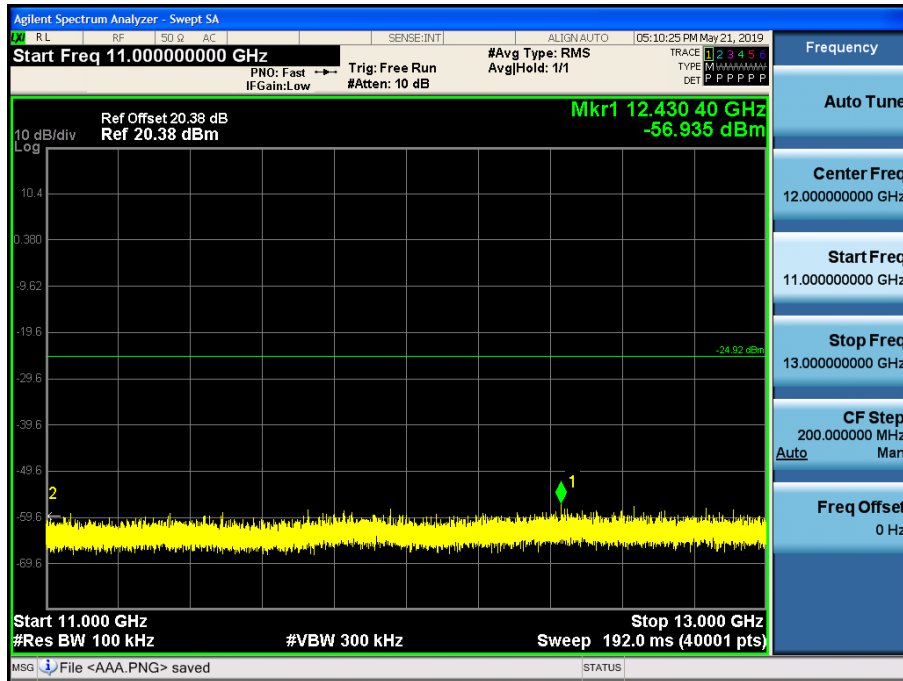
9 GHz ~ 11 GHz

Conducted Spurious Emission (Low-CH 0)



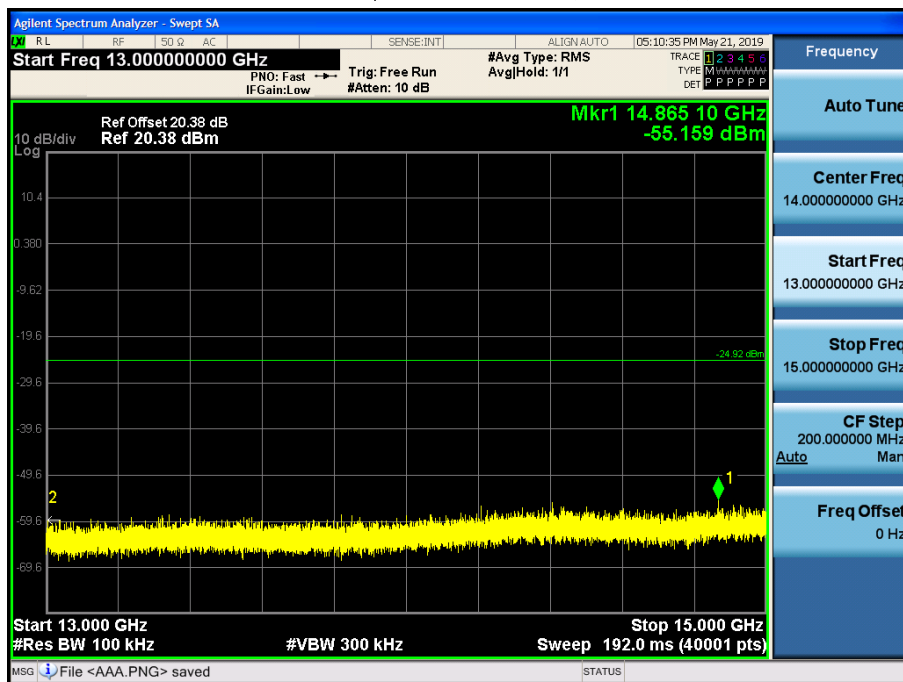
11 GHz ~ 13 GHz

Conducted Spurious Emission (Low-CH 0)



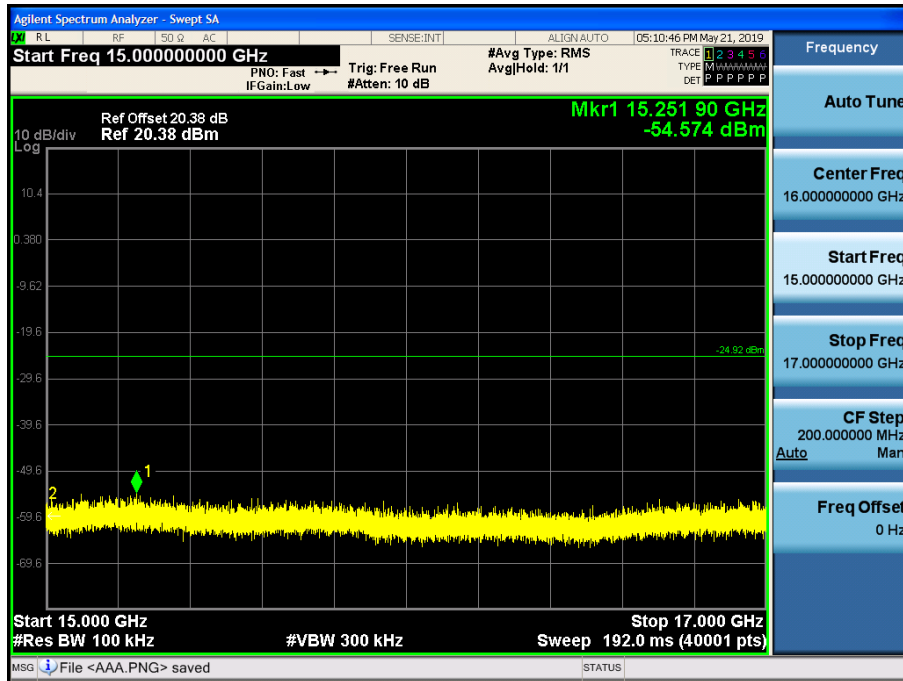
13 GHz ~ 15 GHz

Conducted Spurious Emission (Low-CH 0)



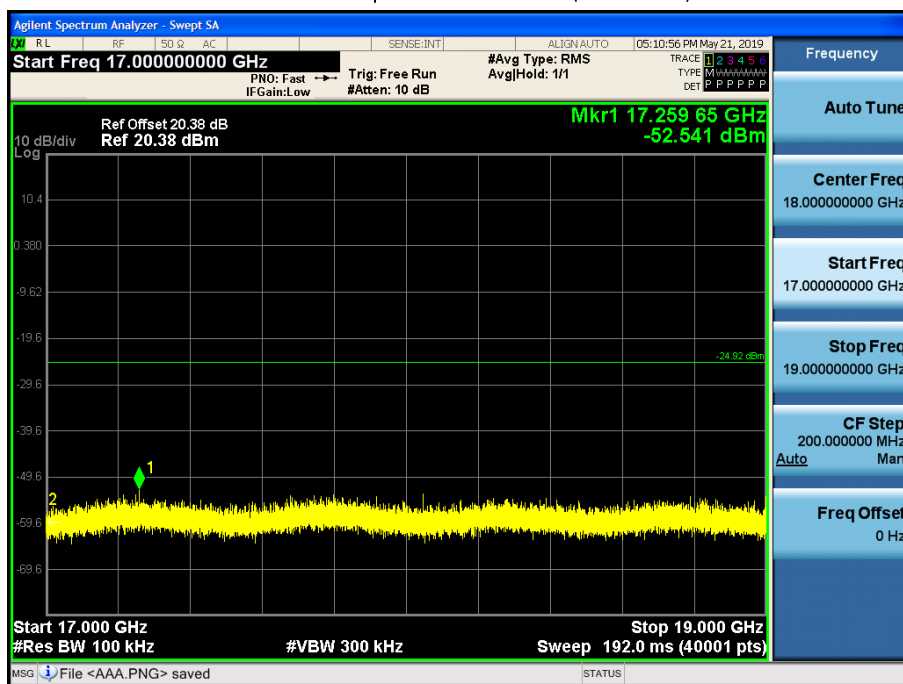
15 GHz ~ 17 GHz

Conducted Spurious Emission (Low-CH 0)



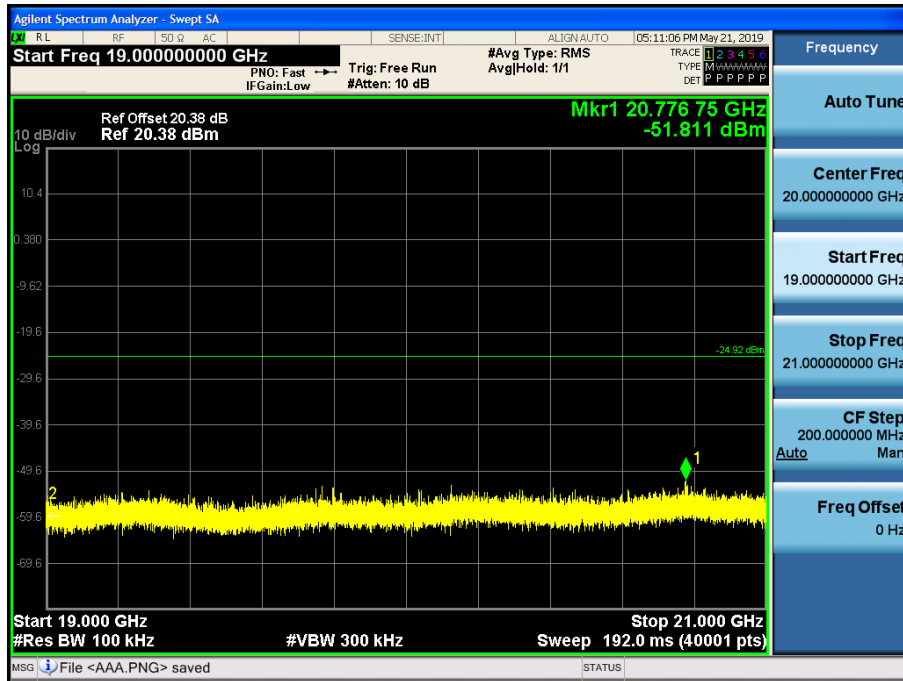
17 GHz ~ 19 GHz

Conducted Spurious Emission (Low-CH 0)



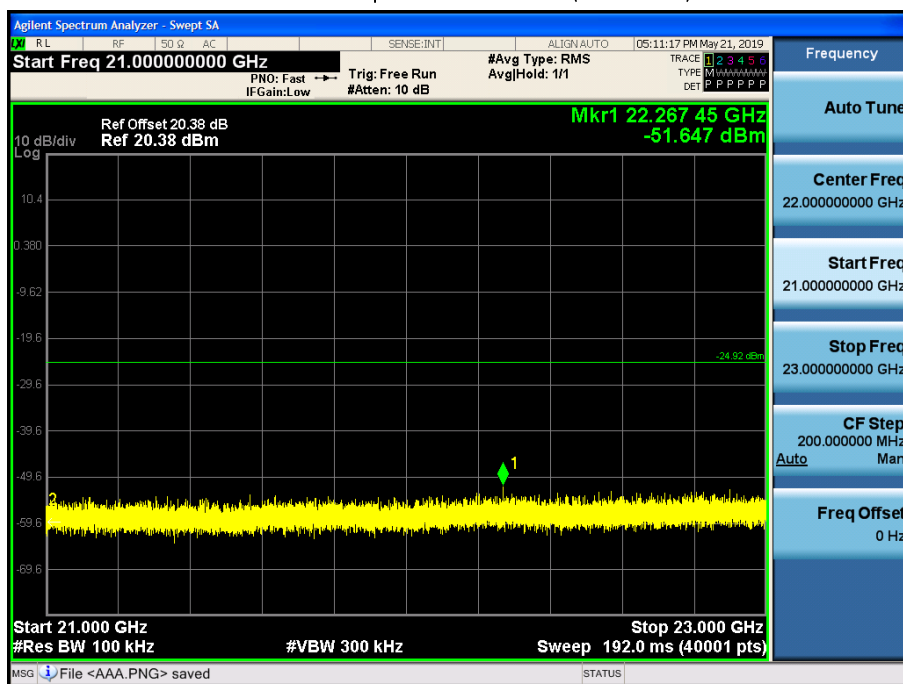
19 GHz ~ 21 GHz

Conducted Spurious Emission (Low-CH 0)



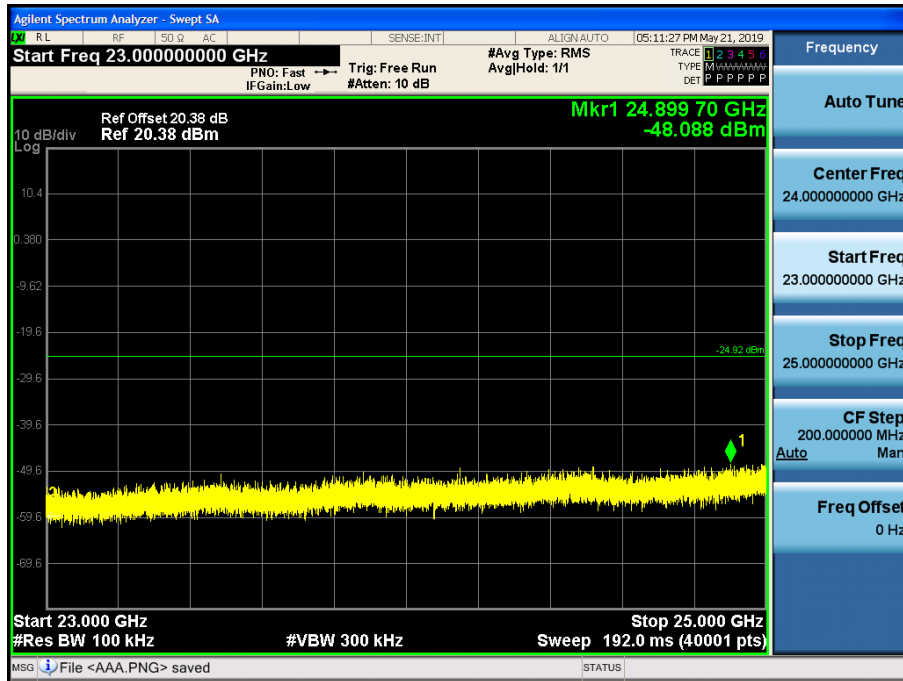
21 GHz ~ 23 GHz

Conducted Spurious Emission (Low-CH 0)



23 GHz ~ 25 GHz

Conducted Spurious Emission (Low-CH 0)



2M Bit/s (37 Byte) Test Plots -BandEdge

Low-CH 0



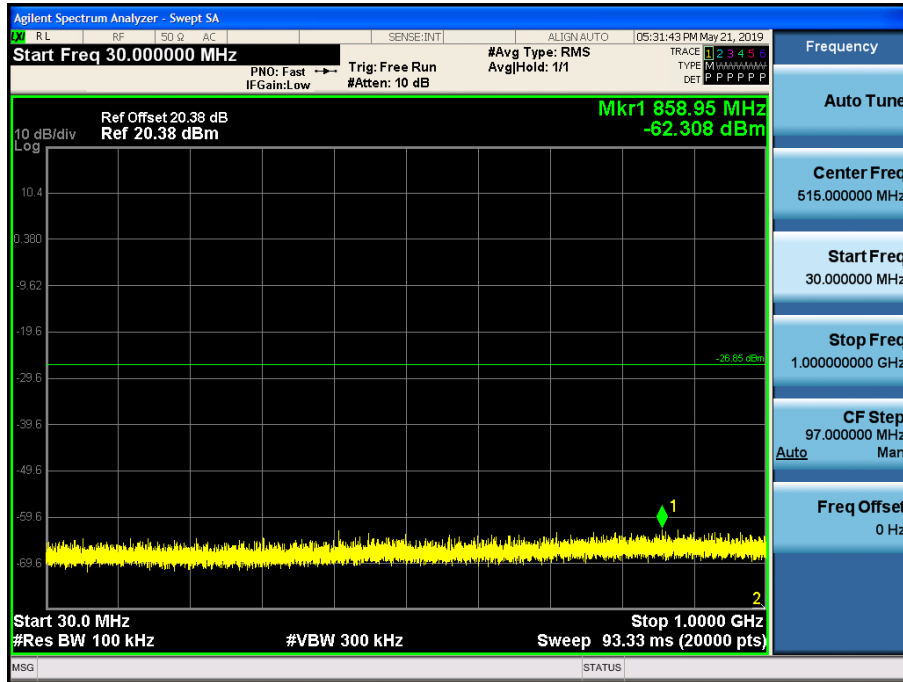
High-CH 39



2M Bit/s (37 Byte) Test Plots -Conducted Spurious Emission

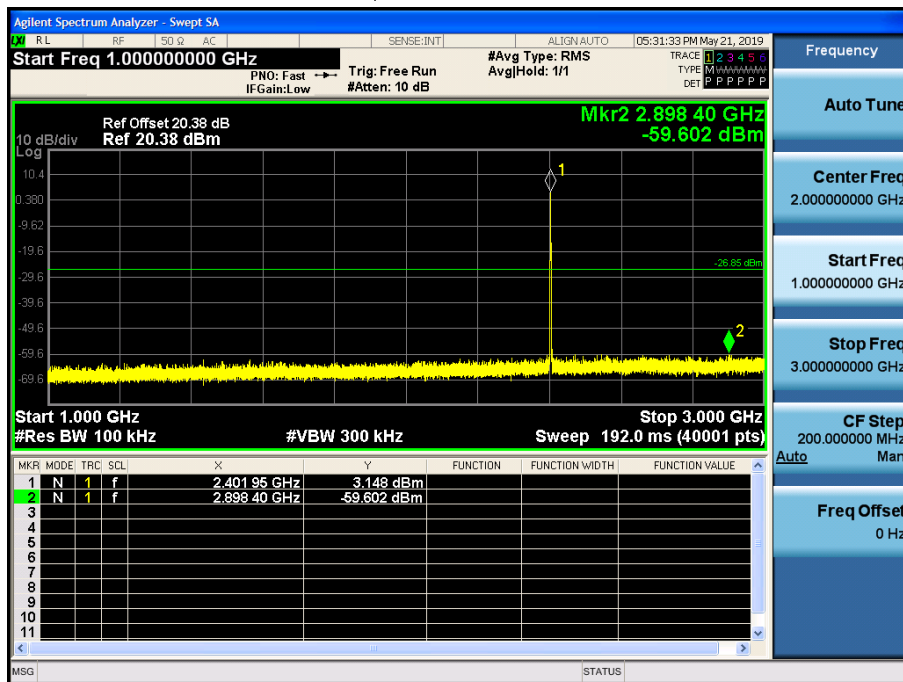
30 MHz ~ 1 GHz

Conducted Spurious Emission (Low-CH 0)



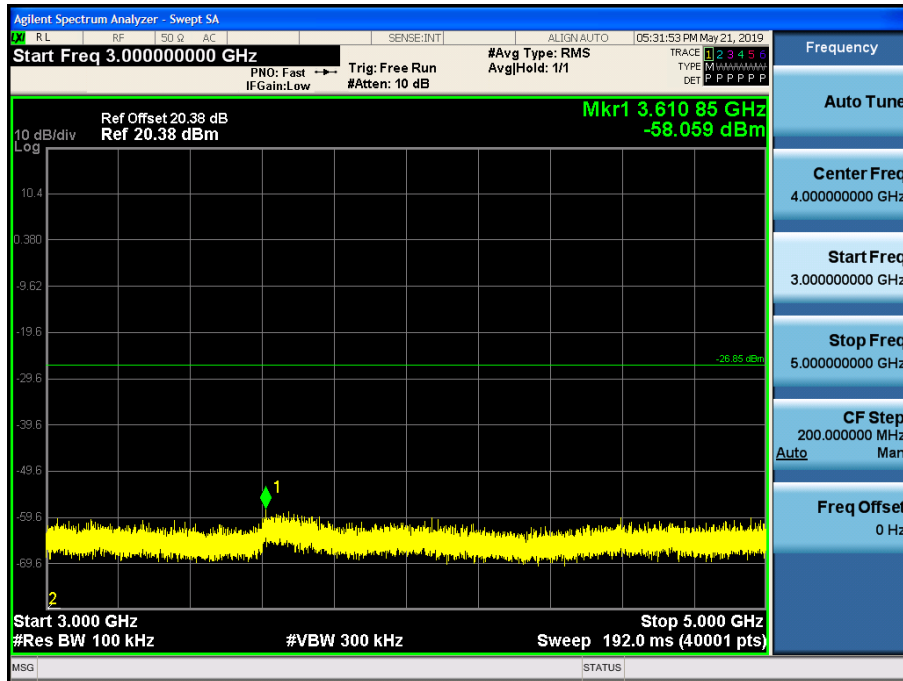
1 GHz ~ 3 GHz

Conducted Spurious Emission (Low-CH 0)



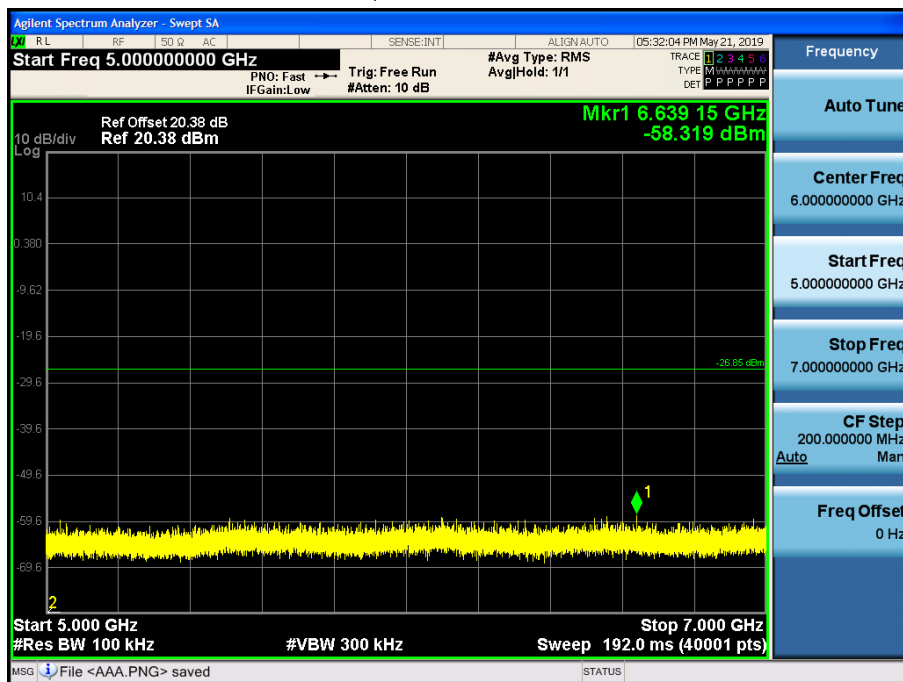
3 GHz ~ 5 GHz

Conducted Spurious Emission (Low-CH 0)



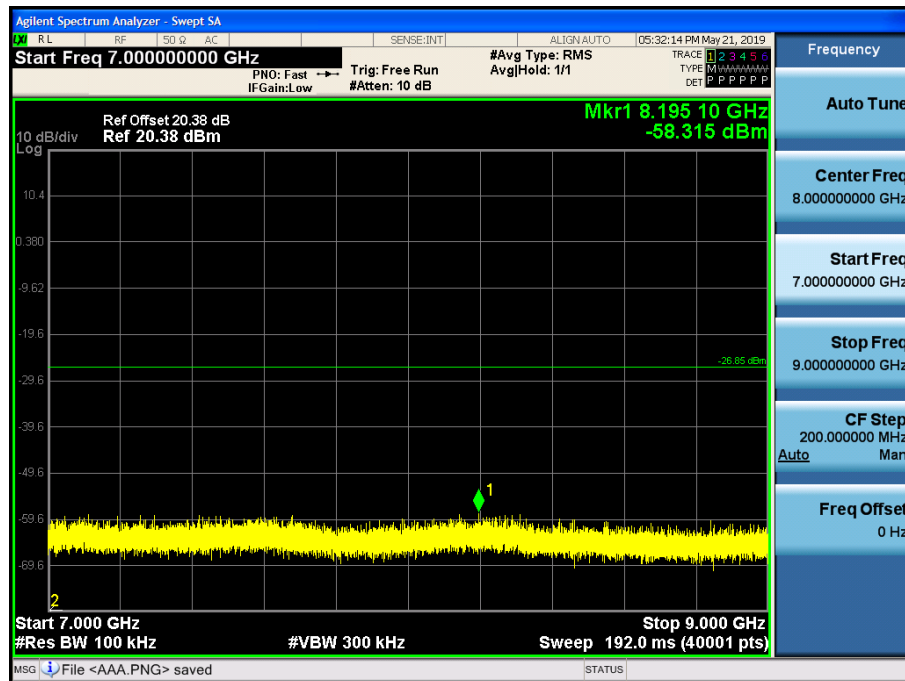
5 GHz ~ 7 GHz

Conducted Spurious Emission (Low-CH 0)



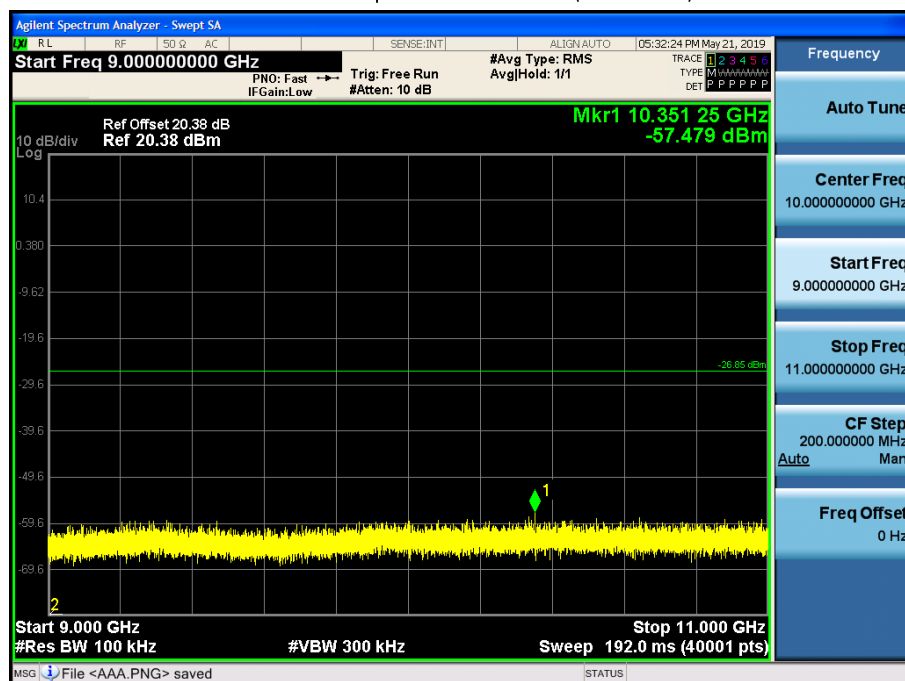
7 GHz ~ 9 GHz

Conducted Spurious Emission (Low-CH 0)



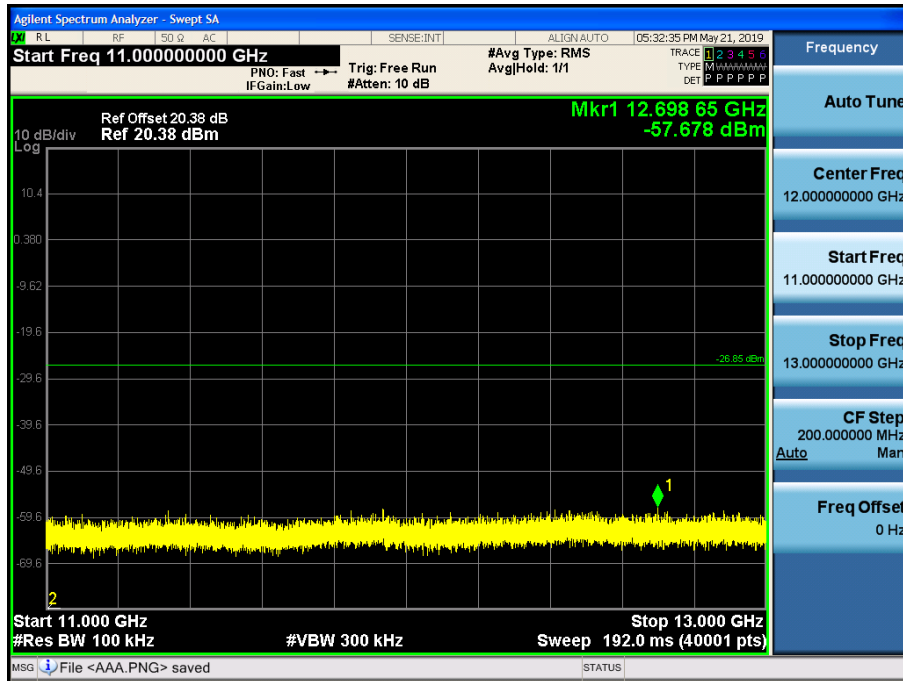
9 GHz ~ 11 GHz

Conducted Spurious Emission (Low-CH 0)



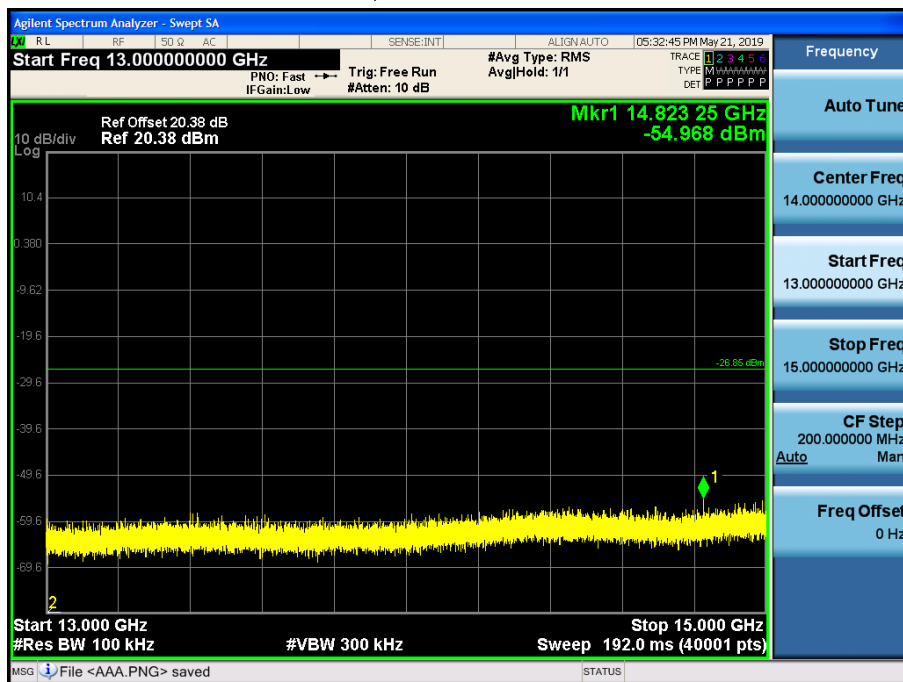
11 GHz ~ 13 GHz

Conducted Spurious Emission (Low-CH 0)



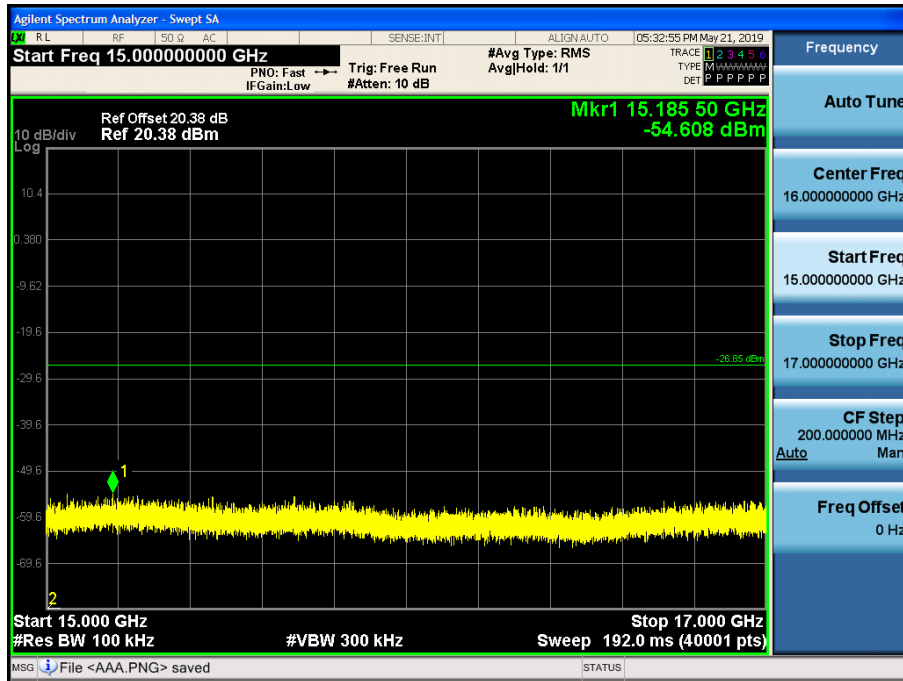
13 GHz ~ 15 GHz

Conducted Spurious Emission (Low-CH 0)



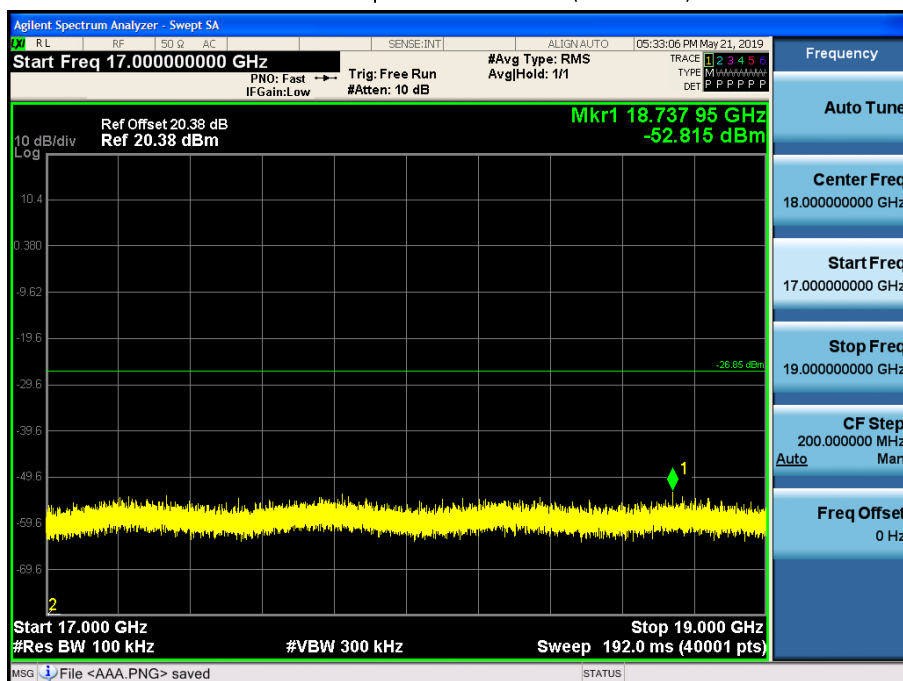
15 GHz ~ 17 GHz

Conducted Spurious Emission (Low-CH 0)



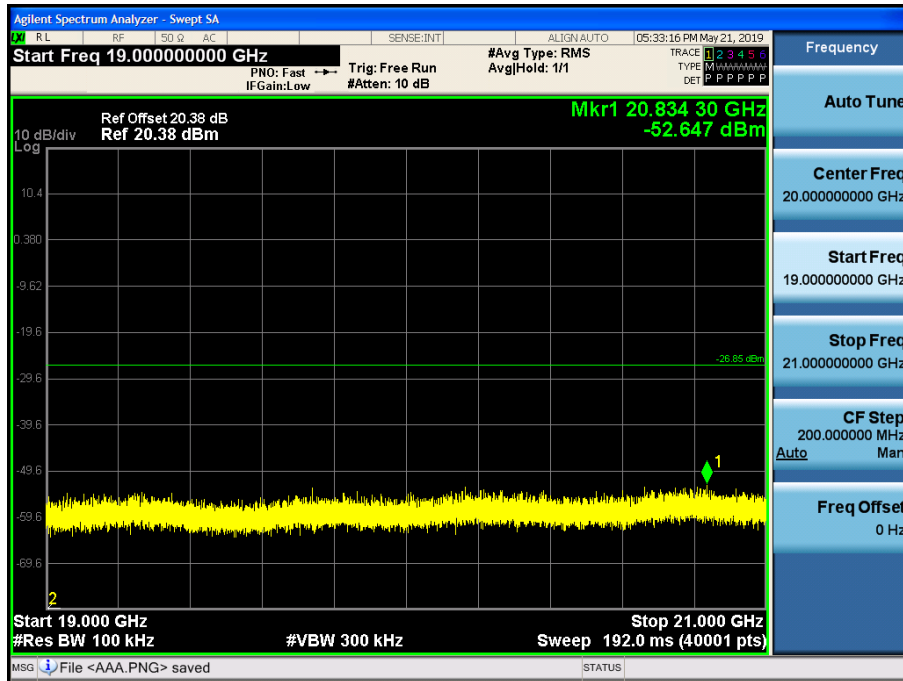
17 GHz ~ 19 GHz

Conducted Spurious Emission (Low-CH 0)



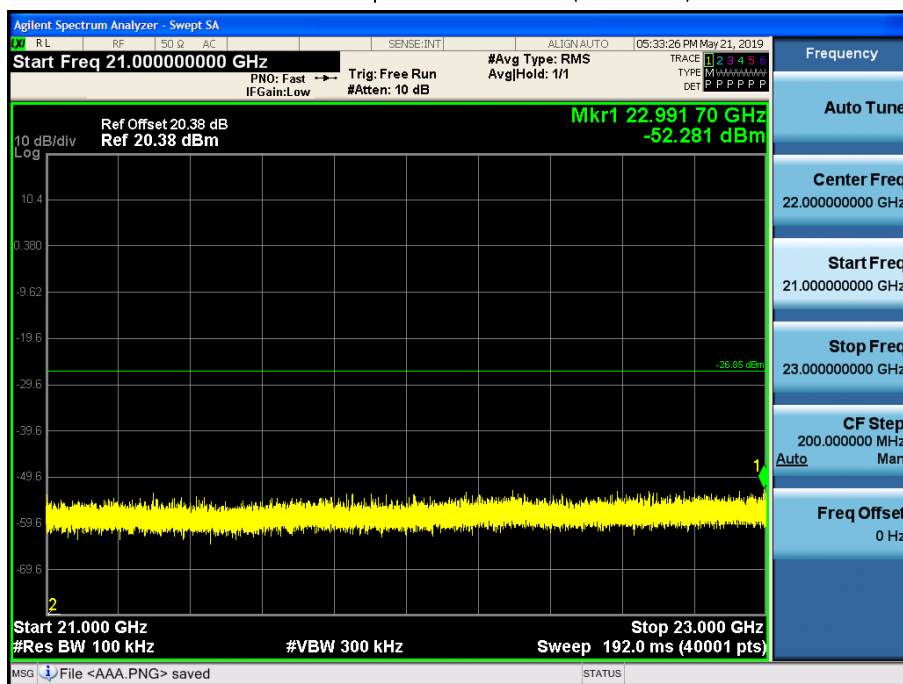
19 GHz ~ 21 GHz

Conducted Spurious Emission (Low-CH 0)



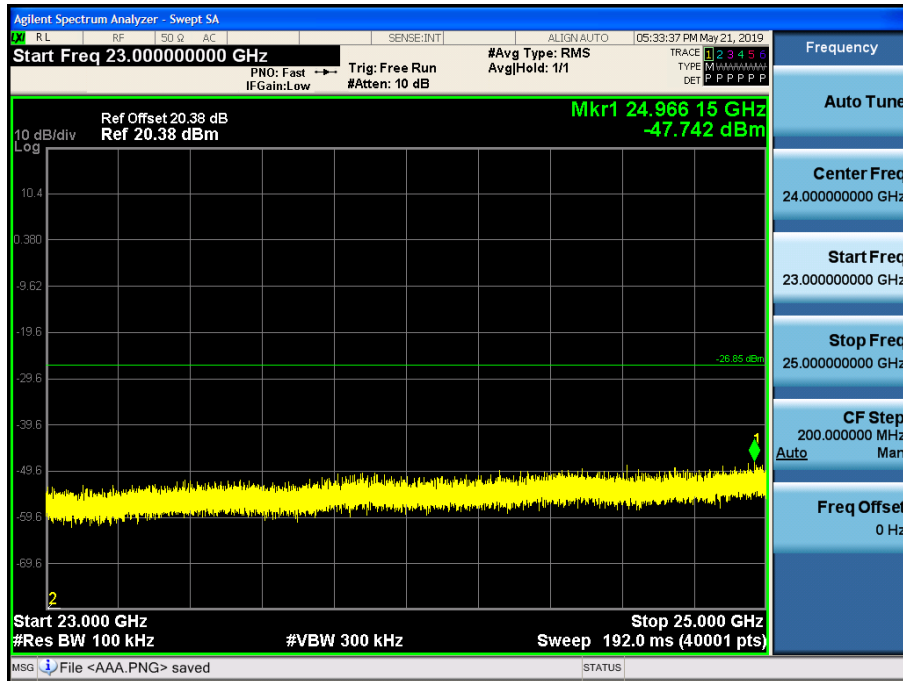
21 GHz ~ 23 GHz

Conducted Spurious Emission (Low-CH 0)



23 GHz ~ 25 GHz

Conducted Spurious Emission (Low-CH 0)



9.6 RADIATED SPURIOUS EMISSIONS

Frequency Range : 9 kHz – 30MHz

Frequency	Reading	Ant. factor	Cable loss	Ant. POL	Total	Limit	Margin
MHz	dBuV/m	dBm/m	dBm	(H/V)	dBuV/m	dBuV/m	dB
No Critical peaks found							

Note:

1. The reading of emissions are attenuated more than 20 dB below the permissible limits or the field strength is too small to be measured.
2. Distance extrapolation factor = $40 \cdot \log(\text{specific distance} / \text{test distance})$ (dB)
3. Limit line = specific Limits (dBuV) + Distance extrapolation factor
4. Radiated test is performed with hopping off.
5. The test results for below 30 MHz is correlated to an open site.
The result on OFS is about 2 dB higher than semi-anechoic chamber(10 m chamber)

Frequency Range : Below 1 GHz

Frequency	Reading	Ant. factor	Cable loss	Ant. POL	Total	Limit	Margin
MHz	dBuV/m	dBm/m	dBm	(H/V)	dBuV/m	dBuV/m	dB
No Critical peaks found							

Note:

1. Radiated emissions measured in frequency range from 30 MHz to 1000 MHz were made with an instrument using Quasi peak detector mode.

Frequency Range : Above 1 GHz

Mode : 1M Bit/s (37 Byte)

Operation Mode: CH Low

Frequency [MHz]	Reading [dBuV]	Duty Cycle Factor [dB]	A.F + C.L - A.G + D.F [dB]	Pol. [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
4804	50.02	0	1.83	V	51.85	73.98	22.13	PK
4804	37.55	2.03	1.83	V	41.41	53.98	12.57	AV
7206	49.12	0	9.65	V	58.77	73.98	15.21	PK
7206	37.02	2.03	9.65	V	48.7	53.98	5.28	AV
4804	50.28	0	1.83	H	52.11	73.98	21.87	PK
4804	38.40	2.03	1.83	H	42.26	53.98	11.72	AV
7206	49.76	0	9.65	H	59.41	73.98	14.57	PK
7206	37.43	2.03	9.65	H	49.11	53.98	4.87	AV

Operation Mode: CH Mid

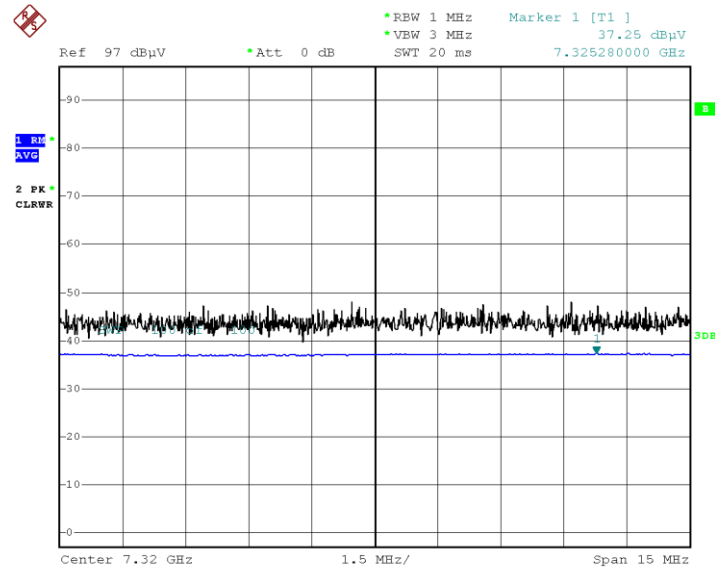
Frequency [MHz]	Reading [dBuV]	Duty Cycle Factor [dB]	A.F + C.L - A.G + D.F [dB]	Pol. [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
4880	49.05	0	2.34	V	51.39	73.98	22.59	PK
4880	37.95	2.03	2.34	V	42.32	53.98	11.66	AV
7320	48.45	0	9.98	V	58.43	73.98	15.55	PK
7320	36.92	2.03	9.98	V	48.93	53.98	5.05	AV
4880	49.57	0	2.34	H	51.91	73.98	22.07	PK
4880	38.03	2.03	2.34	H	42.4	53.98	11.58	AV
7320	49.64	0	9.98	H	59.62	73.98	14.36	PK
7320	37.25	2.03	9.98	H	49.26	53.98	4.72	AV

Operation Mode: CH High

Frequency [MHz]	Reading [dBuV]	Duty Cycle Factor [dB]	A.F + C.L - A.G + D.F [dB]	Pol. [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
4960	50.59	0	2.26	V	52.85	73.98	21.13	PK
4960	38.97	2.03	2.26	V	43.26	53.98	10.72	AV
7440	47.65	0	9.78	V	57.43	73.98	16.55	PK
7440	36.81	2.03	9.78	V	48.62	53.98	5.36	AV
4960	50.10	0	2.26	H	52.36	73.98	21.62	PK
4960	39.03	2.03	2.26	H	43.32	53.98	10.66	AV
7440	48.85	0	9.78	H	58.63	73.98	15.35	PK
7440	37.09	2.03	9.78	H	48.9	53.98	5.08	AV

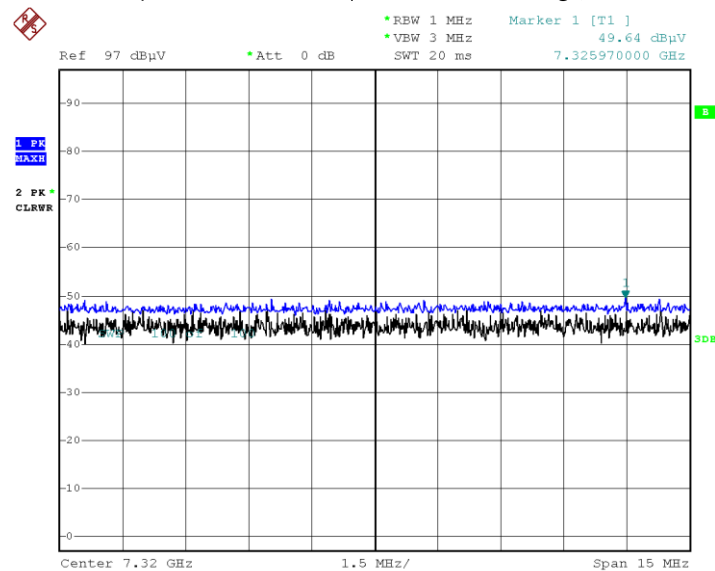
1M Bit 37 Byte Test Plots (Worst case : Y-H)

Radiated Spurious Emissions plot – Average Reading (Ch.19 3rd Harmonic)



Date: 27.MAY.2019 19:11:34

Radiated Spurious Emissions plot – Peak Reading (Ch.19 3rd Harmonic)



Date: 27.MAY.2019 19:11:04

Note:

Plot of worst case are only reported.

9.7 RADIATED RESTRICTED BAND EDGES

Mode : 125k Bit/s 37 byte

Operating Frequency 2402 MHz
Channel No. 0

Frequency [MHz]	Reading [dBuV/m]	Duty Cycle Factor [dB]	A.F.+C.L.+D.F. -AMP+ATT. [dB]	Ant. Pol. [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
2390.0	19.84	0.00	35.09	H	54.93	73.98	19.05	PK
2390.0	7.28	0.82	35.09	H	43.19	53.98	10.79	AV
2390.0	17.61	0.00	35.09	V	52.70	73.98	21.28	PK
2390.0	6.84	0.82	35.09	V	42.75	53.98	11.23	AV

Operating Frequency 2480 MHz
Channel No. 39

Frequency [MHz]	Reading [dBuV/m]	Duty Cycle Factor [dB]	A.F.+C.L.+D.F. -AMP+ATT. [dB]	Ant. Pol. [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
2483.5	17.57	0.00	35.11	H	52.68	73.98	21.30	PK
2483.5	7.36	0.82	35.11	H	43.29	53.98	10.69	AV
2483.5	16.43	0.00	35.11	V	51.54	73.98	22.45	PK
2483.5	6.68	0.82	35.11	V	42.61	53.98	11.37	AV

Mode : 125k Bit/s 255 byte

Operating Frequency 2402 MHz
Channel No. 0

Frequency [MHz]	Reading [dBuV/m]	Duty Cycle Factor [dB]	A.F.+C.L.+D.F. -AMP+ATT [dB]	Ant. Pol. [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
2390.0	19.16	0.00	35.09	H	54.25	73.98	19.73	PK
2390.0	7.09	0.12	35.09	H	42.30	53.98	11.68	AV
2390.0	18.12	0.00	35.09	V	53.21	73.98	20.77	PK
2390.0	6.96	0.12	35.09	V	42.17	53.98	11.81	AV

Operating Frequency 2480 MHz
Channel No. 39

Frequency [MHz]	Reading [dBuV/m]	Duty Cycle Factor [dB]	A.F.+C.L.+D.F. -AMP+ATT [dB]	Ant. Pol. [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
2483.5	18.14	0.00	35.11	H	53.25	73.98	20.73	PK
2483.5	7.31	0.12	35.11	H	42.54	53.98	11.44	AV
2483.5	17.78	0.00	35.11	V	52.89	73.98	21.09	PK
2483.5	6.98	0.12	35.11	V	42.21	53.98	11.77	AV

Mode : 500k Bit/s 37 byte

Operating Frequency 2402 MHz
Channel No. 0

Frequency [MHz]	Reading [dBuV/m]	Duty Cycle Factor [dB]	A.F.+C.L.+D.F. -AMP+ATT [dB]	Ant. Pol. [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
2390.0	18.35	0.00	35.09	H	53.44	73.98	20.54	PK
2390.0	6.61	2.44	35.09	H	44.14	53.98	9.84	AV
2390.0	17.35	0.00	35.09	V	52.44	73.98	21.54	PK
2390.0	6.48	2.44	35.09	V	44.01	53.98	9.97	AV

Operating Frequency 2480 MHz
Channel No. 39

Frequency [MHz]	Reading [dBuV/m]	Duty Cycle Factor [dB]	A.F.+C.L.+D.F. -AMP+ATT [dB]	Ant. Pol. [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
2483.5	19.13	0.00	35.11	H	54.24	73.98	19.74	PK
2483.5	7.22	2.44	35.11	H	44.77	53.98	9.21	AV
2483.5	17.17	0.00	35.11	V	52.28	73.98	21.70	PK
2483.5	7.17	2.44	35.11	V	44.72	53.98	9.26	AV

Mode : 500k Bit/s 255 byte

Operating Frequency 2402 MHz
Channel No. 0

Frequency [MHz]	Reading [dBuV/m]	Duty Cycle Factor [dB]	A.F.+C.L.+D.F. -AMP+ATT [dB]	Ant. Pol. [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
2390.0	18.40	0.00	35.09	H	53.49	73.98	20.49	PK
2390.0	6.97	0.40	35.09	H	42.46	53.98	11.53	AV
2390.0	17.58	0.00	35.09	V	52.67	73.98	21.31	PK
2390.0	6.81	0.40	35.09	V	42.30	53.98	11.68	AV

Operating Frequency 2480 MHz
Channel No. 39

Frequency [MHz]	Reading [dBuV/m]	Duty Cycle Factor [dB]	A.F.+C.L.+D.F. -AMP+ATT [dB]	Ant. Pol. [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
2483.5	18.40	0.00	35.11	H	53.51	73.98	20.48	PK
2483.5	7.29	0.40	35.11	H	42.80	53.98	11.18	AV
2483.5	17.48	0.00	35.11	V	52.59	73.98	21.39	PK
2483.5	6.98	0.40	35.11	V	42.49	53.98	11.49	AV

Mode : 1M Bit/s 37 byte

Operating Frequency 2402 MHz
Channel No. 0

Frequency [MHz]	Reading [dBuV/m]	Duty Cycle Factor [dB]	A.F.+C.L.+D.F -AMP+ATT [dB]	Ant. Pol. [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
2390.0	18.81	0.00	35.09	H	53.90	73.98	20.08	PK
2390.0	6.67	2.03	35.09	H	43.79	53.98	10.19	AV
2390.0	17.94	0.00	35.09	V	53.03	73.98	20.95	PK
2390.0	6.53	2.03	35.09	V	43.65	53.98	10.33	AV

Operating Frequency 2480 MHz
Channel No. 39

Frequency [MHz]	Reading [dBuV/m]	Duty Cycle Factor [dB]	A.F.+C.L.+D.F -AMP+ATT [dB]	Ant. Pol. [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
2483.5	18.06	0.00	35.11	H	53.17	73.98	20.81	PK
2483.5	7.22	2.03	35.11	H	44.36	53.98	9.62	AV
2483.5	18.02	0.00	35.11	V	53.13	73.98	20.85	PK
2483.5	7.11	2.03	35.11	V	44.25	53.98	9.74	AV

Mode : 1M Bit/s 255 byte

Operating Frequency 2402 MHz
Channel No. 0

Frequency [MHz]	Reading [dBuV/m]	Duty Cycle Factor [dB]	A.F.+C.L.+D.F. -AMP+ATT [dB]	Ant. Pol. [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
2390.0	18.70	0.00	35.09	H	53.79	73.98	20.19	PK
2390.0	7.08	0.69	35.09	H	42.86	53.98	11.13	AV
2390.0	16.07	0.00	35.09	V	51.16	73.98	22.83	PK
2390.0	6.99	0.69	35.09	V	42.77	53.98	11.21	AV

Operating Frequency 2480 MHz
Channel No. 39

Frequency [MHz]	Reading [dBuV/m]	Duty Cycle Factor [dB]	A.F.+C.L.+D.F. -AMP+ATT [dB]	Ant. Pol. [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
2483.5	18.63	0.00	35.11	H	53.74	73.98	20.24	PK
2483.5	7.30	0.69	35.11	H	43.10	53.98	10.88	AV
2483.5	17.65	0.00	35.11	V	52.76	73.98	21.23	PK
2483.5	6.88	0.69	35.11	V	42.68	53.98	11.30	AV

Mode : 2M Bit/s 37 byte

Operating Frequency 2402 MHz
Channel No. 0

Frequency [MHz]	Reading [dBuV/m]	Duty Cycle Factor [dB]	A.F.+C.L.+D.F. -AMP+ATT [dB]	Ant. Pol. [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
2390.0	18.37	0.00	35.09	H	53.46	73.98	20.52	PK
2390.0	7.31	4.81	35.09	H	47.21	53.98	6.77	AV
2390.0	17.89	0.00	35.09	V	52.98	73.98	21.00	PK
2390.0	7.02	4.81	35.09	V	46.92	53.98	7.06	AV

Operating Frequency 2480 MHz
Channel No. 39

Frequency [MHz]	Reading [dBuV/m]	Duty Cycle Factor [dB]	A.F.+C.L.+D.F. -AMP+ATT [dB]	Ant. Pol. [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
2483.5	20.70	0.00	35.11	H	55.81	73.98	18.17	PK
2483.5	7.26	4.81	35.11	H	47.18	53.98	6.80	AV
2483.5	19.82	0.00	35.11	V	54.93	73.98	19.05	PK
2483.5	7.12	4.81	35.11	V	47.04	53.98	6.94	AV

Mode : 2M Bit/s 255 byte

Operating Frequency 2402 MHz
Channel No. 0

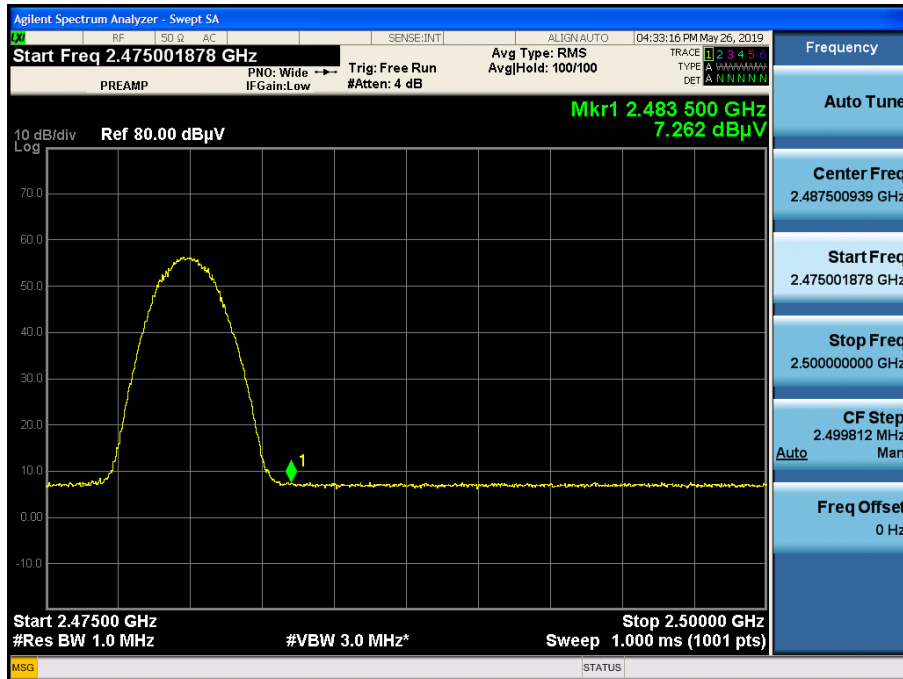
Frequency [MHz]	Reading [dBuV/m]	Duty Cycle Factor [dB]	A.F.+C.L.+D.F. -AMP+ATT [dB]	Ant. Pol. [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
2390.0	18.57	0.00	35.09	H	53.66	73.98	20.32	PK
2390.0	7.27	2.42	35.09	H	44.78	53.98	9.20	AV
2390.0	16.61	0.00	35.09	V	51.70	73.98	22.28	PK
2390.0	7.10	2.42	35.09	V	44.61	53.98	9.37	AV

Operating Frequency 2480 MHz
Channel No. 39

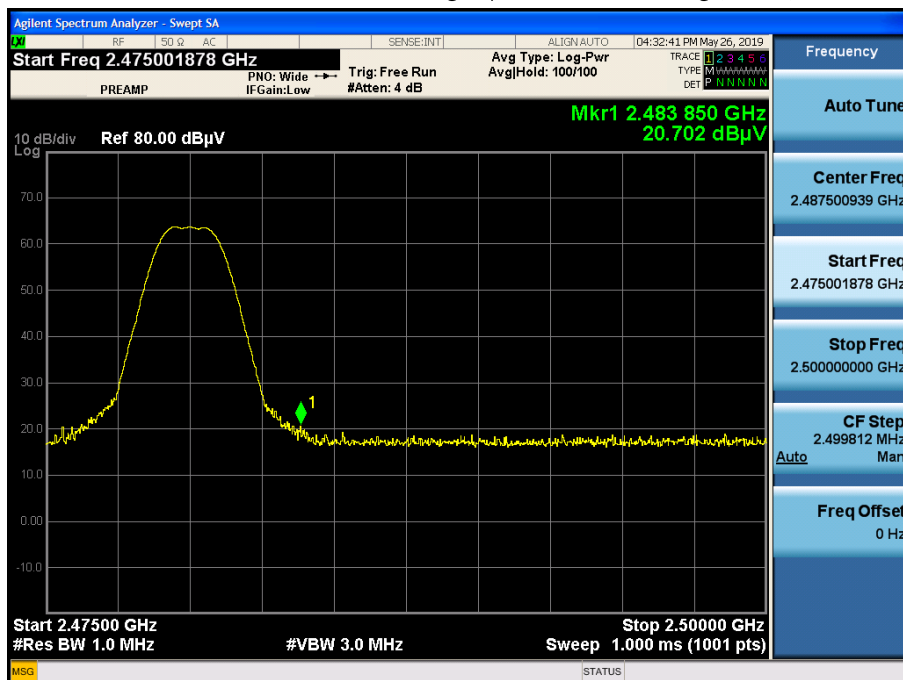
Frequency [MHz]	Reading [dBuV/m]	Duty Cycle Factor [dB]	A.F.+C.L.+D.F. -AMP+ATT [dB]	Ant. Pol. [H/V]	Total [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Measurement Type
2483.5	19.38	0.00	35.11	H	54.49	73.98	19.49	PK
2483.5	7.14	2.42	35.11	H	44.67	53.98	9.31	AV
2483.5	18.18	0.00	35.11	V	53.29	73.98	20.69	PK
2483.5	6.98	2.42	35.11	V	44.51	53.98	9.47	AV

Mode : 2M Bit/s (37 Byte) Test Plots (Worst case : X-H)

Radiated Restricted Band Edges plot – Average Reading (Ch.39)



Radiated Restricted Band Edges plot – Peak Reading (Ch.39)



Note:

Plot of worst case are only reported.

9.8 RECEIVER SPURIOUS EMISSIONS

Frequency Range : Below 1 GHz

Frequency	Reading	Ant. factor	Cable loss	Ant. POL	Total	Limit	Margin
MHz	dBuV/m	dBm/m	dBm	(H/V)	dBuV/m	dBuV/m	dB
No Critical peaks found							

Note:

1. Radiated emissions measured in frequency range from 30 MHz to 1000 MHz were made with an instrument using Quasi peak detector mode.

Frequency Range : Above 1 GHz

Frequency	Reading	Ant. factor	Cable loss	Ant. POL	Total	Limit	Margin
MHz	dBuV/m	dBm/m	dBm	(H/V)	dBuV/m	dBuV/m	dB
No Critical peaks found							

9.9 POWERLINE CONDUCTED EMISSIONS

Conducted Emissions (Line 1)

BT(LE)_L1

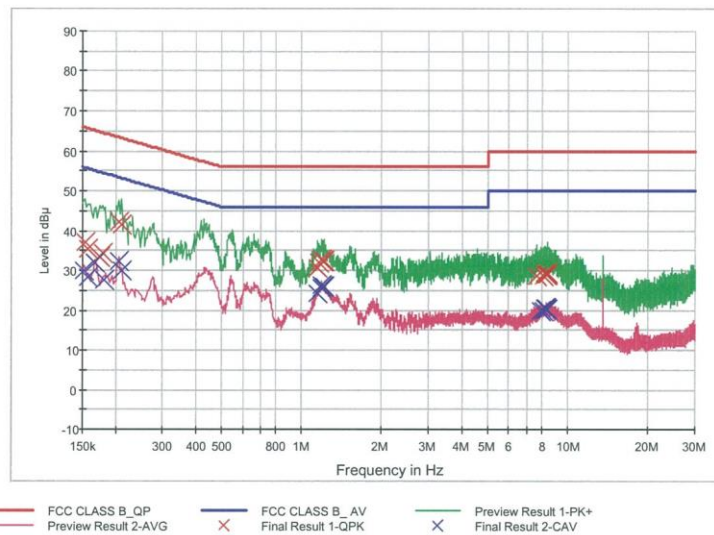
1 / 2

HCT TEST Report

Common Information

EUT: SM-T725
Manufacturer: SAMSUNG
Test Site: SHIELD ROOM
Operating Conditions: BT LE_L1

FCC CLASS B_Exten Cable



Final Result 1

Frequency (MHz)	QuasiPeak (dBuV)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBuV)
0.154000	37.3	9.000	Off	L1	9.7	28.5	65.8
0.158000	35.4	9.000	Off	L1	9.7	30.2	65.6
0.174000	33.2	9.000	Off	L1	9.7	31.5	64.8
0.178000	34.3	9.000	Off	L1	9.7	30.2	64.6
0.206000	42.3	9.000	Off	L1	9.7	21.1	63.4
0.210000	41.4	9.000	Off	L1	9.7	21.8	63.2
1.152000	30.7	9.000	Off	L1	9.8	25.3	56.0
1.168000	32.2	9.000	Off	L1	9.8	23.8	56.0
1.190000	32.7	9.000	Off	L1	9.8	23.3	56.0
1.194000	32.8	9.000	Off	L1	9.8	23.2	56.0
1.200000	32.5	9.000	Off	L1	9.8	23.5	56.0
1.218000	32.3	9.000	Off	L1	9.8	23.7	56.0
7.632000	28.7	9.000	Off	L1	10.2	31.3	60.0
8.084000	28.5	9.000	Off	L1	10.2	31.5	60.0
8.224000	29.2	9.000	Off	L1	10.2	30.8	60.0
8.250000	29.0	9.000	Off	L1	10.2	31.0	60.0
8.362000	29.3	9.000	Off	L1	10.2	30.7	60.0
8.386000	29.0	9.000	Off	L1	10.2	31.0	60.0

2019-05-16

오후 7:52:10

BT(LE)_L1

2 / 2

Final Result 2

Frequency (MHz)	CAverage (dBuV)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBuV)
0.152000	30.1	9.000	Off	L1	9.7	25.8	55.9
0.158000	28.1	9.000	Off	L1	9.7	27.4	55.6
0.166000	32.1	9.000	Off	L1	9.7	23.0	55.2
0.180000	27.5	9.000	Off	L1	9.7	26.9	54.5
0.206000	32.4	9.000	Off	L1	9.7	21.0	53.4
0.210000	30.1	9.000	Off	L1	9.7	23.1	53.2
1.152000	24.1	9.000	Off	L1	9.8	21.9	46.0
1.184000	25.6	9.000	Off	L1	9.8	20.4	46.0
1.188000	26.2	9.000	Off	L1	9.8	19.8	46.0
1.194000	26.1	9.000	Off	L1	9.8	19.9	46.0
1.198000	26.1	9.000	Off	L1	9.8	19.9	46.0
1.218000	25.8	9.000	Off	L1	9.8	20.2	46.0
7.948000	20.0	9.000	Off	L1	10.2	30.0	50.0
8.084000	19.9	9.000	Off	L1	10.2	30.1	50.0
8.224000	20.4	9.000	Off	L1	10.2	29.6	50.0
8.250000	20.5	9.000	Off	L1	10.2	29.5	50.0
8.294000	20.2	9.000	Off	L1	10.2	29.8	50.0
8.386000	20.0	9.000	Off	L1	10.2	30.0	50.0

2019-05-16

오후 7:52:10

Conducted Emissions (Line 2)

BT(LE)_N

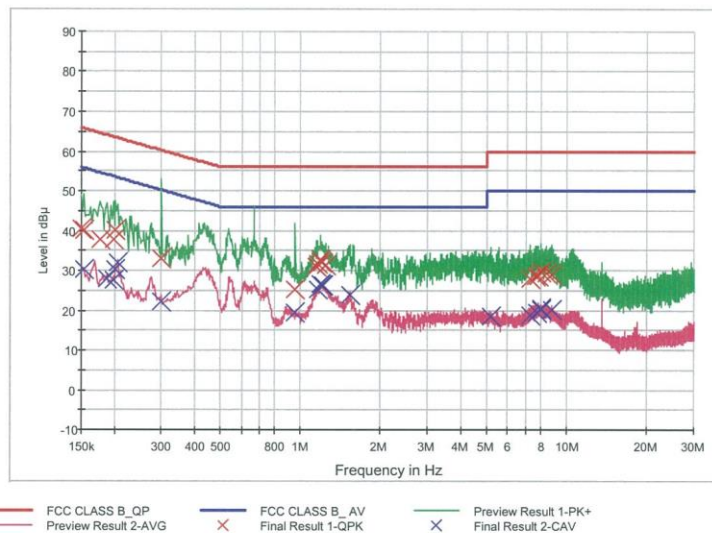
1 / 2

HCT TEST Report

Common Information

EUT: SM-T725
 Manufacturer: SAMSUNG
 Test Site: SHIELD ROOM
 Operating Conditions: BT LE_L1

FCC CLASS B_Exten Cable



Final Result 1

Frequency (MHz)	QuasiPeak (dBuV)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBuV)
0.150000	40.6	9.000	Off	N	9.8	25.4	66.0
0.154000	40.3	9.000	Off	N	9.8	25.5	65.8
0.176000	37.7	9.000	Off	N	9.8	27.0	64.7
0.198000	37.8	9.000	Off	N	9.8	25.9	63.7
0.202000	40.1	9.000	Off	N	9.9	23.4	63.5
0.300000	33.0	9.000	Off	N	9.9	27.2	60.2
0.956000	25.2	9.000	Off	N	10.0	30.8	56.0
1.152000	31.1	9.000	Off	N	10.0	24.9	56.0
1.160000	31.8	9.000	Off	N	10.0	24.2	56.0
1.188000	32.6	9.000	Off	N	10.0	23.4	56.0
1.202000	32.2	9.000	Off	N	10.0	23.8	56.0
1.242000	31.2	9.000	Off	N	10.0	24.8	56.0
7.296000	28.1	9.000	Off	N	10.4	31.9	60.0
7.662000	28.7	9.000	Off	N	10.4	31.3	60.0
7.794000	28.5	9.000	Off	N	10.4	31.5	60.0
7.966000	29.5	9.000	Off	N	10.4	30.5	60.0
8.404000	29.2	9.000	Off	N	10.4	30.8	60.0
8.742000	28.9	9.000	Off	N	10.4	31.1	60.0

2019-05-16

오후 7:43:32

BT(LE)_N

2 / 2

Final Result 2

Frequency (MHz)	CAverage (dBuV)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBuV)
0.154000	30.2	9.000	Off	N	9.8	25.5	55.8
0.188000	27.8	9.000	Off	N	9.8	26.3	54.1
0.198000	27.6	9.000	Off	N	9.8	26.1	53.7
0.202000	30.4	9.000	Off	N	9.9	23.2	53.5
0.206000	32.0	9.000	Off	N	9.9	21.3	53.4
0.300000	22.2	9.000	Off	N	9.9	28.0	50.2
0.956000	19.4	9.000	Off	N	10.0	26.6	46.0
1.160000	25.2	9.000	Off	N	10.0	20.8	46.0
1.190000	26.6	9.000	Off	N	10.0	19.4	46.0
1.196000	26.3	9.000	Off	N	10.0	19.7	46.0
1.216000	26.3	9.000	Off	N	10.0	19.7	46.0
1.530000	23.9	9.000	Off	N	10.1	22.1	46.0
5.188000	18.4	9.000	Off	N	10.2	31.6	50.0
7.296000	18.7	9.000	Off	N	10.4	31.3	50.0
7.710000	19.6	9.000	Off	N	10.4	30.4	50.0
7.982000	20.5	9.000	Off	N	10.4	29.5	50.0
7.990000	20.3	9.000	Off	N	10.4	29.7	50.0
8.742000	20.2	9.000	Off	N	10.4	29.8	50.0

2019-05-16

오후 7:43:32

10. LIST OF TEST EQUIPMENT

Conducted Test

Manufacturer	Model / Equipment	Calibration Date	Calibration Interval	Serial No.
Rohde & Schwarz	ENV216 / LISN	12/12/2018	Annual	102245
Rohde & Schwarz	ESCI / Test Receiver	06/27/2018	Annual	100033
ESPAC	SU-642 / Temperature Chamber	03/12/2019	Annual	0093008124
Agilent	N9020A / Signal Analyzer	06/08/2018	Annual	MY51110085
Agilent	N9030A / Signal Analyzer	11/20/2018	Annual	MY49431210
Agilent	N1911A / Power Meter	04/10/2019	Annual	MY45100523
Agilent	N1921A / Power Sensor	04/10/2019	Annual	MY52260025
Agilent	87300B / Directional Coupler	11/20/2018	Annual	3116A03621
Hewlett Packard	11667B / Power Splitter	06/07/2018	Annual	05001
Hewlett Packard	E3632A / DC Power Supply	06/26/2018	Annual	KR75303960
WEINSCHEL	2-20 / Attenuator(20 dB)	10/26/2018	Annual	BR0592
Rohde & Schwarz	EMC32 / Software	N/A	N/A	N/A
HCT CO., LTD.	FCC WLAN&BT&BLE Conducted Test Software v3.0	N/A	N/A	N/A
Rohde & Schwarz	CBT / Bluetooth Tester	03/07/2019	Annual	100808

Note:

1. Equipment listed above that calibrated during the testing period was set for test after the calibration.
2. Equipment listed above that has a calibration due date during the testing period, the testing is completed before equipment expiration date.

Radiated Test

Manufacturer	Model / Equipment	Calibration Date	Calibration Interval	Serial No.
Innco system	CO3000 / Controller(Antenna mast)	N/A	N/A	CO3000-4p
Innco system	MA4640/800-XP-EP / Antenna Position Tower	N/A	N/A	N/A
Audix	EM1000 / Controller	N/A	N/A	060520
Audix	Turn Table	N/A	N/A	N/A
Rohde & Schwarz	Loop Antenna	08/23/2018	Biennial	1513-175
Schwarzbeck	VULB 9168 / Hybrid Antenna	08/31/2018	Biennial	00895
Schwarzbeck	VULB 9168 / Hybrid Antenna	08/09/2018	Annual	3368
Schwarzbeck	BBHA 9120D / Horn Antenna	06/30/2017	Biennial	1300
Schwarzbeck	BBHA9170 / Horn Antenna(15 GHz ~ 40 GHz)	12/04/2017	Biennial	BBHA9170541
Rohde & Schwarz	FSP(9 kHz ~ 40 GHz) / Spectrum Analyzer	07/24/2018	Annual	100843
Wainwright Instruments	WHK3.0/18G-10EF / High Pass Filter	01/03/2019	Annual	F6
Wainwright Instruments	WHFX7.0/18G-8SS / High Pass Filter	05/03/2019	Annual	29
Wainwright Instruments	WRCJV2400/2483.5-2370/2520-60/12SS / Band Reject Filter	06/29/2018	Annual	2
Wainwright Instruments	WRCJV5100/5850-40/50-8EEK / Band Reject Filter	01/03/2019	Annual	2
Weinschel	2-3 / Attenuator (3 dB)	10/10/2018	Annual	BR0617
H+S	5910-N-50-010 / Attenuator(10 dB)	11/08/2018	Annual	NONE
CERNEX	CBLU1183540B-01 / Power Amplifier	12/21/2018	Annual	25540
CERNEX	CBL06185030 / Power Amplifier	03/26/2019	Annual	28550
CERNEX	CBL18265035 / Power Amplifier	01/03/2019	Annual	22966
CERNEX	CBL26405040 / Power Amplifier	06/29/2018	Annual	25956
TESCOM	TC-3000C / Bluetooth Tester	03/26/2019	Annual	3000C000276

Note:

1. Equipment listed above that calibrated during the testing period was set for test after the calibration.
2. Equipment listed above that has a calibration due date during the testing period, the testing is completed before equipment expiration date.

11. ANNEX A_ TEST SETUP PHOTO

Please refer to test setup photo file no. as follows;

No.	Description
1	HCT-RF-1907-FI004-P