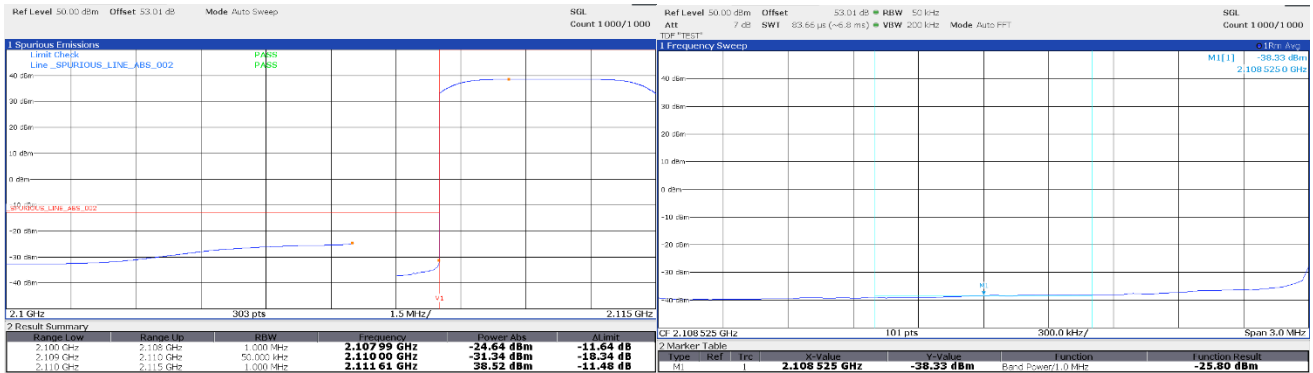


Section 8
Test name
Specification

Testing data
 FCC 27.53(g), (h) Emission limits
 FCC Part 27



Band Edge. TX:21085GHz, BW: 20MHz, MOD: 256QAM



Band Edge. TX:2112.5MHz, BW: 5MHz, MOD: 1024QAM



Band Edge. TX:2115MHz, BW: 10MHz, MOD: 1024QAM

Section 8
Test name
Specification

Testing data
 FCC 27.53(g), (h) Emission limits
 FCC Part 27



Band Edge. TX:2117.5MHz, BW: 15MHz, MOD: 1024QAM



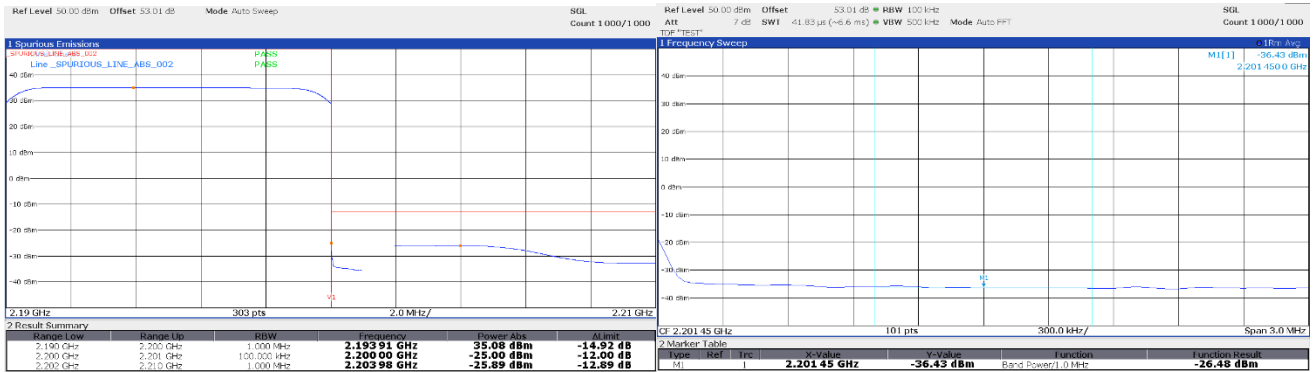
Band Edge. TX:2120MHz, BW: 20MHz, MOD: 1024QAM



Band Edge. TX:2197.5MHz, BW: 5MHz, MOD: 1024QAM

Section 8
Test name
Specification

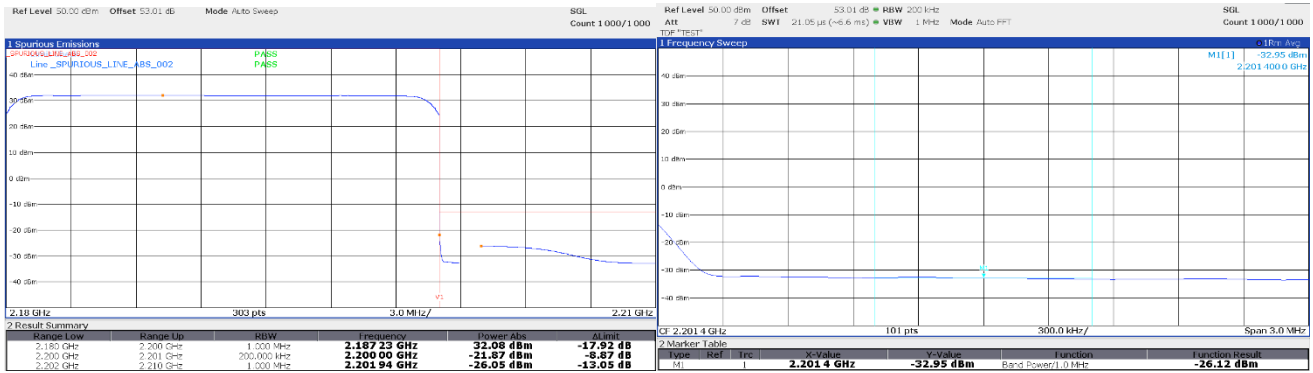
Testing data
 FCC 27.53(g), (h) Emission limits
 FCC Part 27



Band Edge. TX:2195MHz, BW: 10MHz, MOD: 1024QAM



Band Edge. TX:2192.5MHz, BW: 15MHz, MOD: 1024QAM

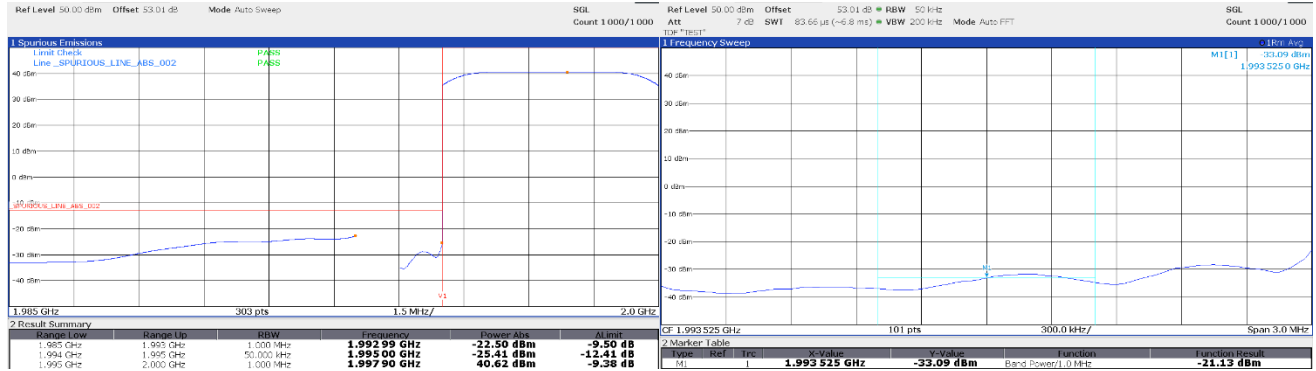


Band Edge. TX:2120MHz, BW: 20MHz, MOD: 1024QAM



Band n70 band edge plots

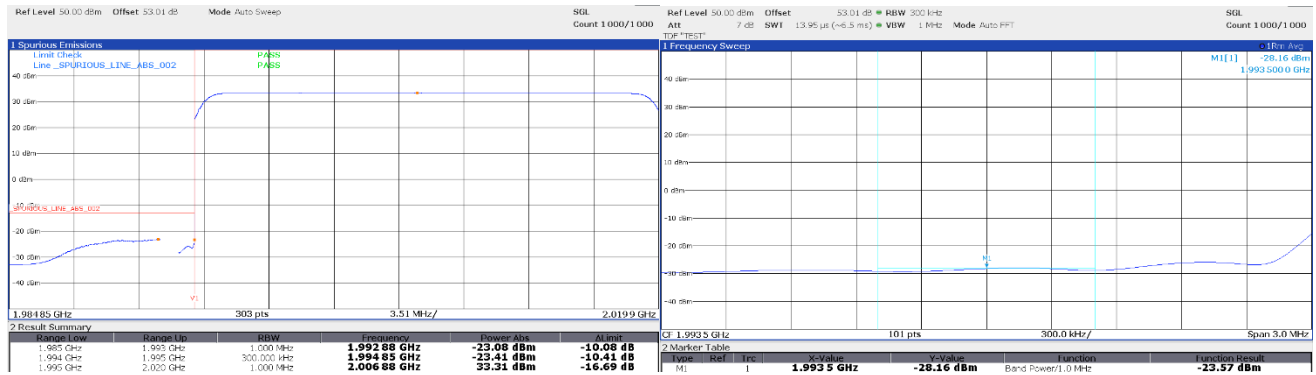
Note: In the 1 MHz band adjacent to the band edge, a resolution bandwidth of approximately 1-5 % of the occupied bandwidth was used. In the next adjacent 1 MHz band, the same resolution bandwidth was used and the total power in that 1 MHz measured using the band power function of the spectrum analyzer. In the plots below, the left hand plot shows the emissions in the 1 MHz band immediately adjacent to the band edge and the right hand plot shows the emissions in the next adjacent 1 MHz region, measured as a total channel power over 1 MHz.



Band Edge. TX:1997.5MHz, BW: 5MHz, MOD: QPSK



Band Edge. TX:2005MHz, BW: 20MHz, MOD: QPSK



Band Edge. TX:2007.5MHz, BW: 25MHz, MOD: QPSK

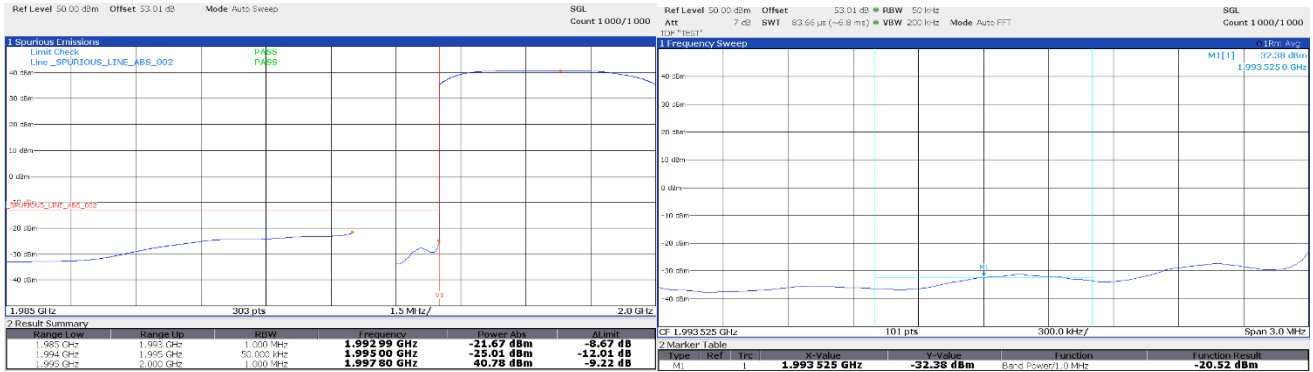
Section 8
Test name
Specification

Testing data
 FCC 27.53(g), (h) Emission limits
 FCC Part 27

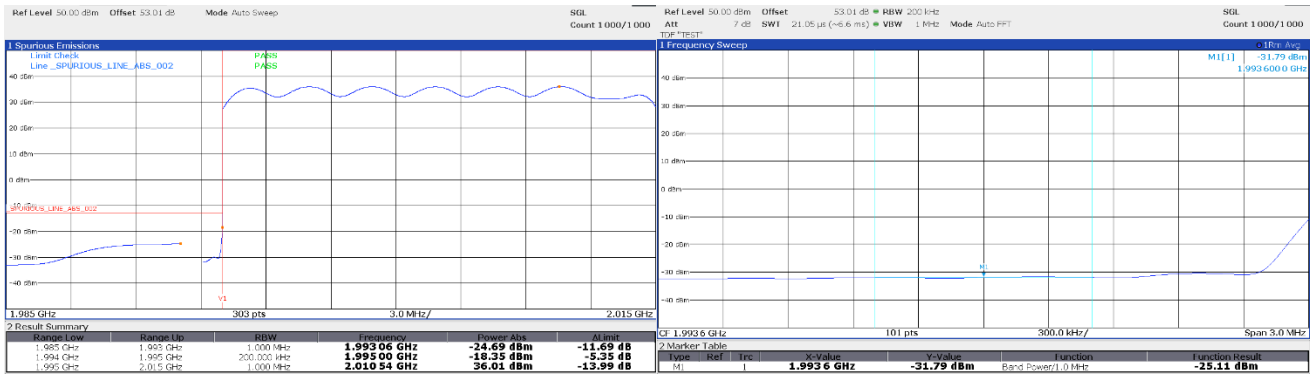


Section 8
Test name
Specification

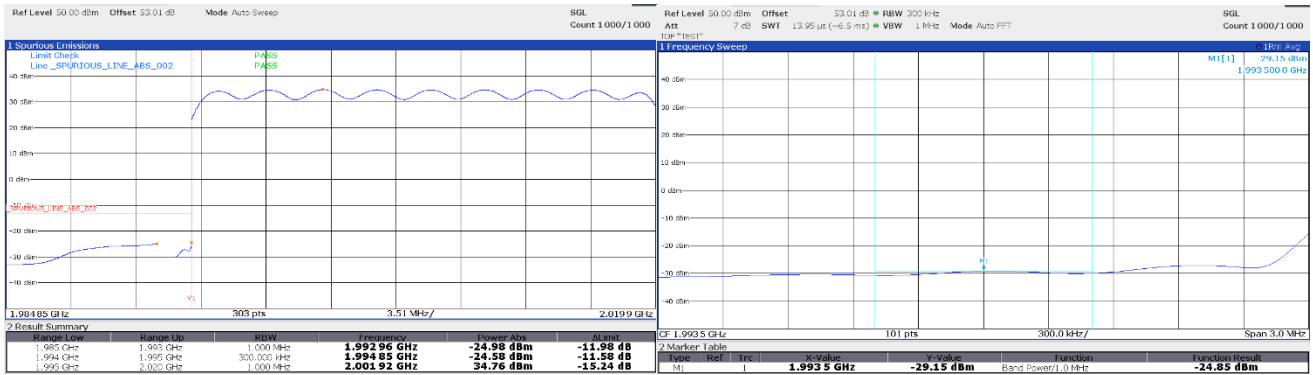
Testing data
 FCC 27.53(g), (h) Emission limits
 FCC Part 27



Band Edge. TX:1997.5MHz, BW:5MHz, MOD: 16QAM



Band Edge. TX:2005MHz, BW:20MHz, MOD: 16QAM



Band Edge. TX:2007.5MHz, BW:25MHz, MOD: 16QAM

Section 8
Test name
Specification

Testing data
 FCC 27.53(g), (h) Emission limits
 FCC Part 27



Band Edge. TX:2017.5MHz, BW:5MHz, MOD: 16QAM



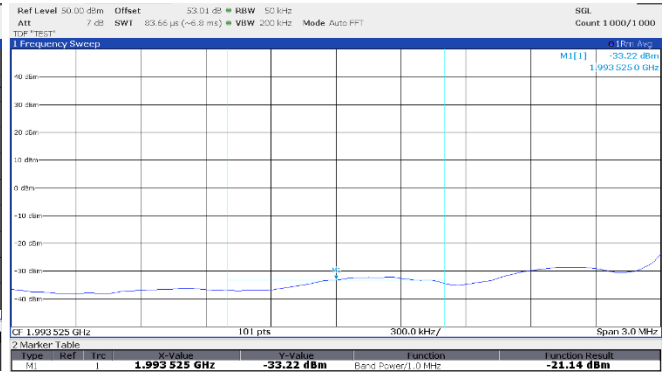
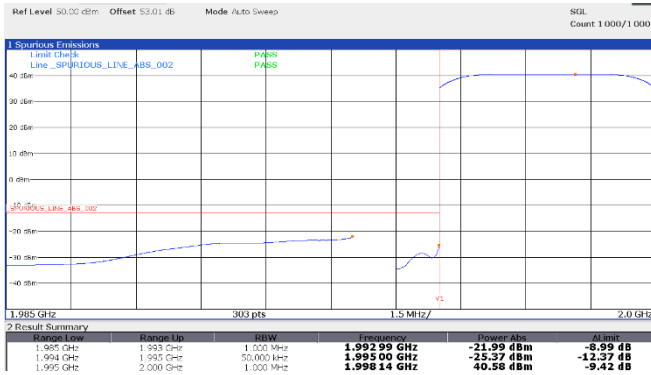
Band Edge. TX:2010MHz, BW:20MHz, MOD: 16QAM



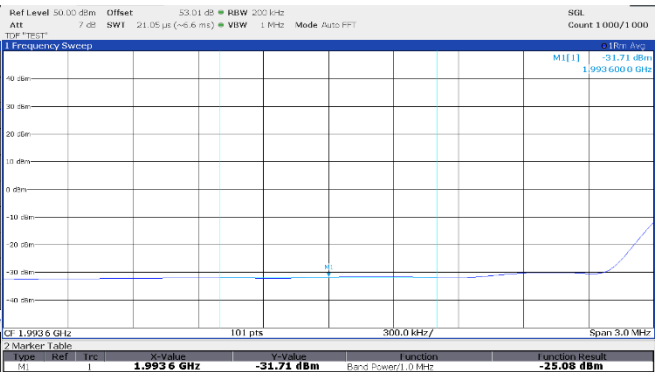
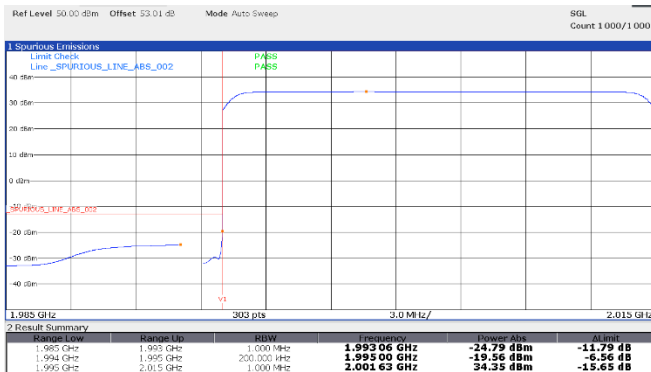
Band Edge. TX:2007.5MHz, BW:25MHz, MOD: 16QAM

Section 8
Test name
Specification

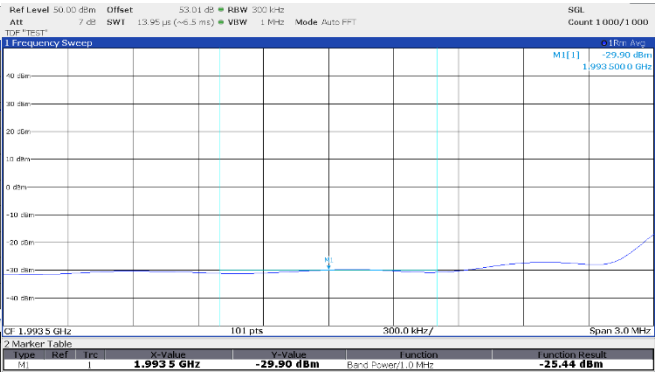
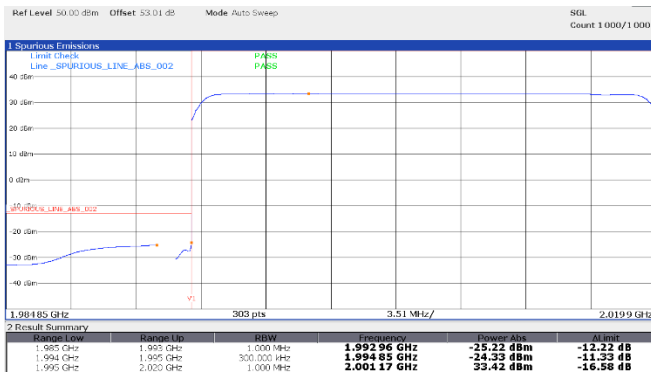
Testing data
 FCC 27.53(g), (h) Emission limits
 FCC Part 27



Band Edge. TX:1997.5MHz, BW:5MHz, MOD: 64QAM



Band Edge. TX:2005MHz, BW:20MHz, MOD: 64QAM



Band Edge. TX:2007.5MHz, BW:25MHz, MOD: 64QAM

Section 8
Test name
Specification

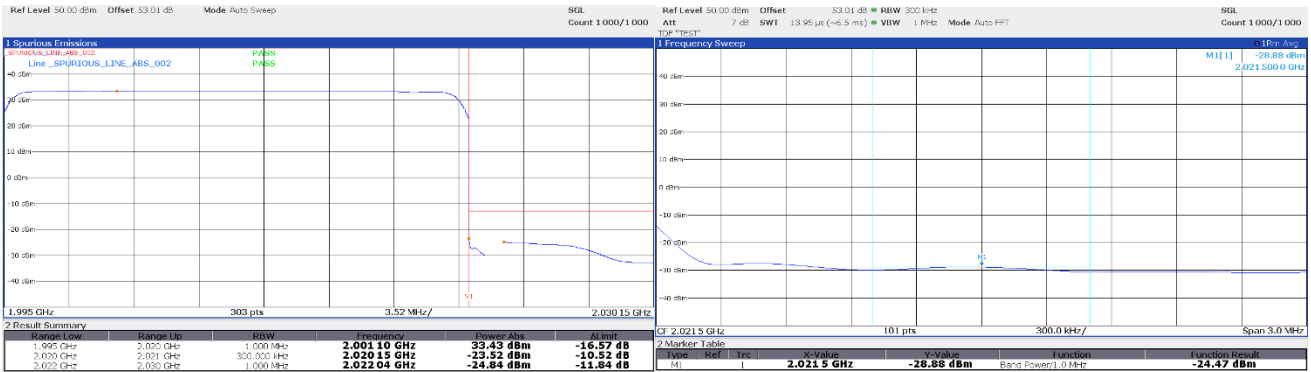
Testing data
 FCC 27.53(g), (h) Emission limits
 FCC Part 27



Band Edge. TX:2017.5MHz, BW:5MHz, MOD: 64QAM



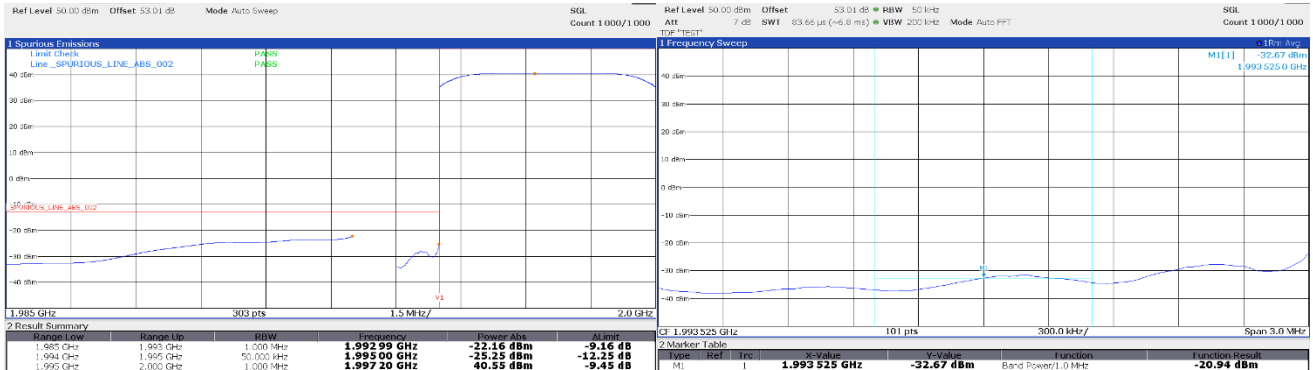
Band Edge. TX:2010MHz, BW:20MHz, MOD: 64QAM



Band Edge. TX:2007.5MHz, BW:25MHz, MOD: 64QAM

Section 8
Test name
Specification

Testing data
 FCC 27.53(g), (h) Emission limits
 FCC Part 27



Band Edge. TX:1997.5MHz, BW:5MHz, MOD: 256QAM



Band Edge. TX:2005MHz, BW:20MHz, MOD: 256QAM



Band Edge. TX:2007.5MHz, BW:25MHz, MOD: 256QAM

Section 8
Test name
Specification

Testing data
 FCC 27.53(g), (h) Emission limits
 FCC Part 27



Band Edge. TX:2017.5MHz, BW:5MHz, MOD: 256QAM



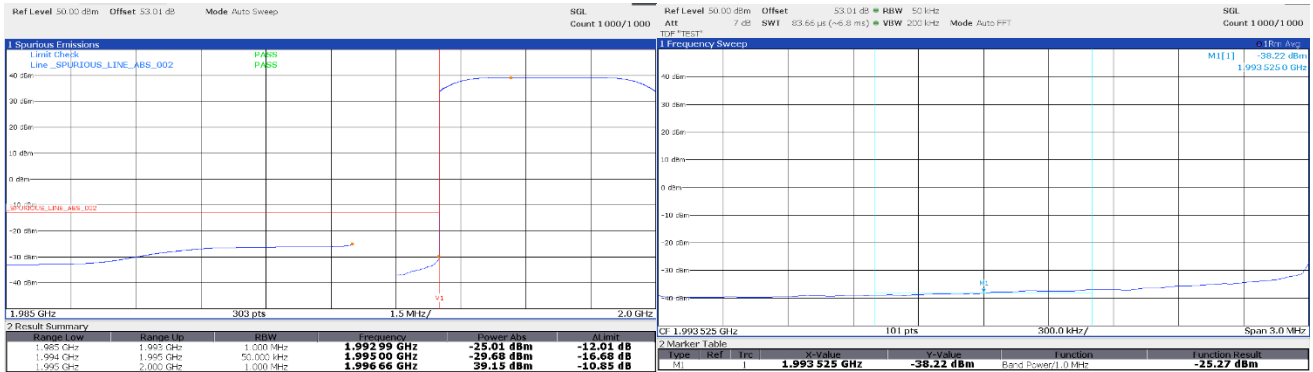
Band Edge. TX:2010MHz, BW:20MHz, MOD: 256QAM



Band Edge. TX:2007.5MHz, BW:25MHz, MOD: 256QAM

Section 8
Test name
Specification

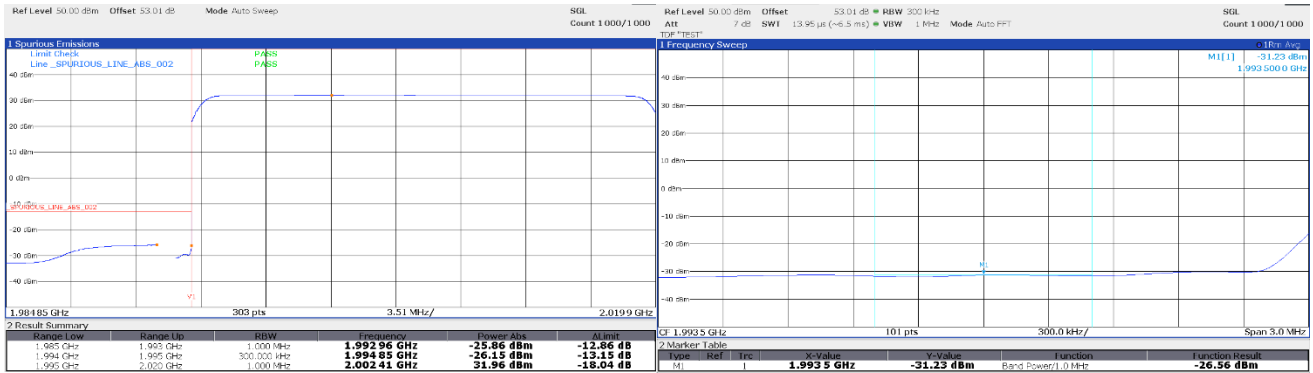
Testing data
 FCC 27.53(g), (h) Emission limits
 FCC Part 27



Band Edge. TX:1997.5MHz, BW:5MHz, MOD: 1024QAM



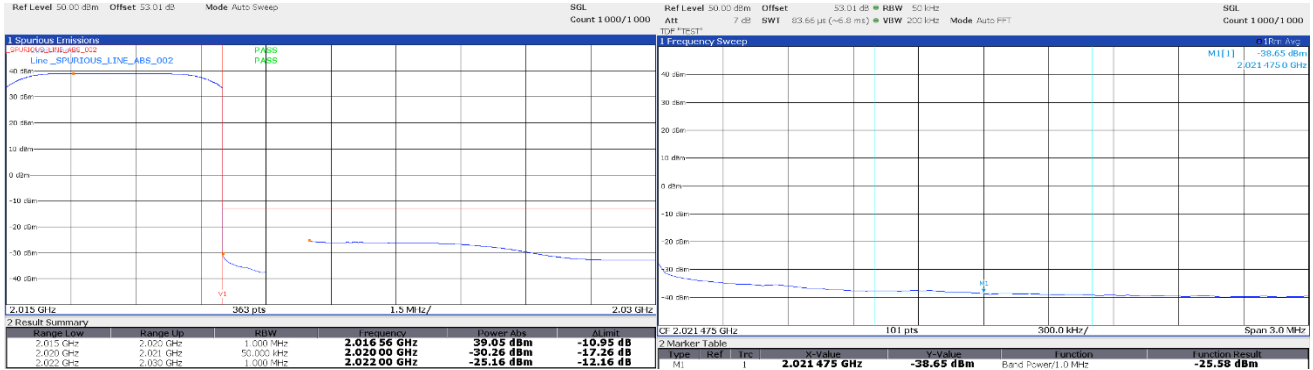
Band Edge. TX:2005MHz, BW:20MHz, MOD: 1024QAM



Band Edge. TX:2007.5MHz, BW:25MHz, MOD: 1024QAM

Section 8
Test name
Specification

Testing data
 FCC 27.53(g), (h) Emission limits
 FCC Part 27



Band Edge. TX:2017.5MHz, BW:5MHz, MOD: 1024QAM



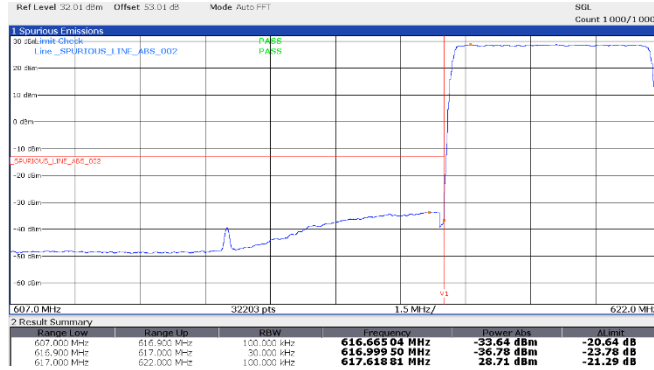
Band Edge. TX:2010MHz, BW:20MHz, MOD: 1024QAM



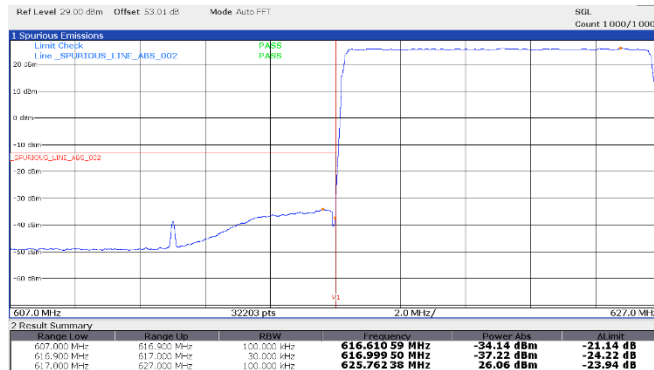
Band Edge. TX:2007.5MHz, BW:25MHz, MOD: 1024QAM

Band n71 band edge plots

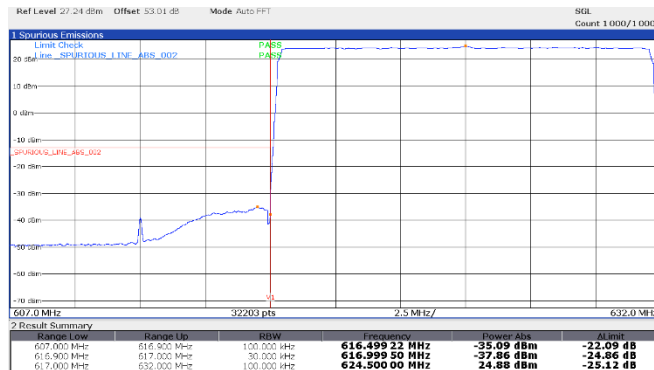
Note: In the 100 kHz band adjacent to the band edge, a resolution bandwidth of 30 kHz was used.



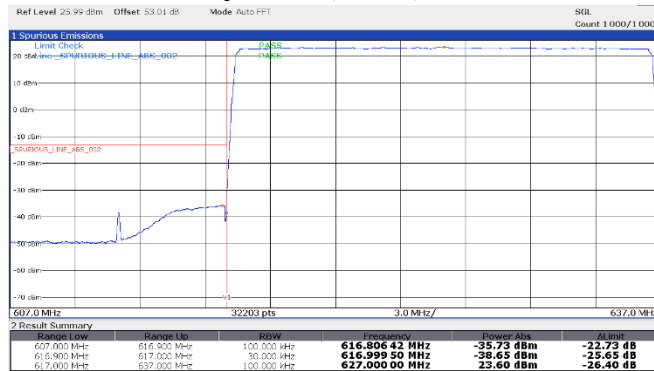
Band Edge. TX:619.5MHz, BW:5MHz, MOD: QPSK



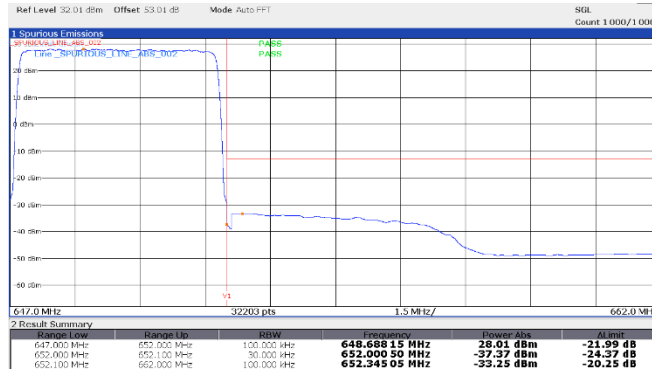
Band Edge. TX:622MHz, BW:10MHz, MOD: QPSK



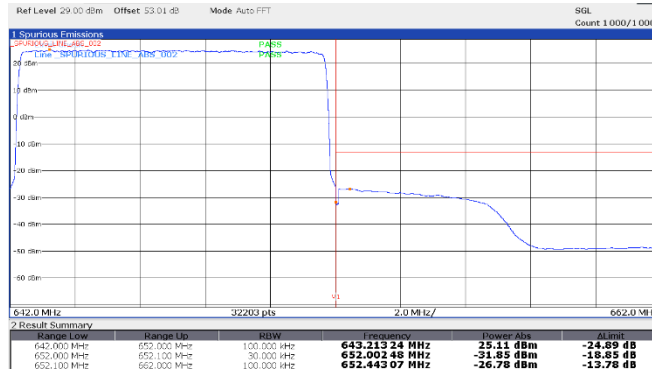
Band Edge. TX:624.5MHz, BW:15MHz, MOD: QPSK



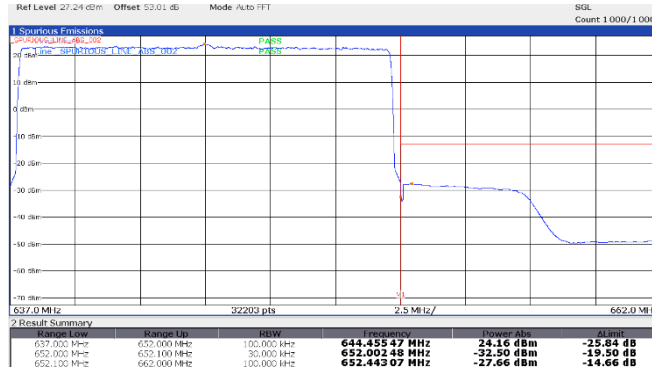
Band Edge. TX:627MHz, BW:20MHz, MOD: QPSK



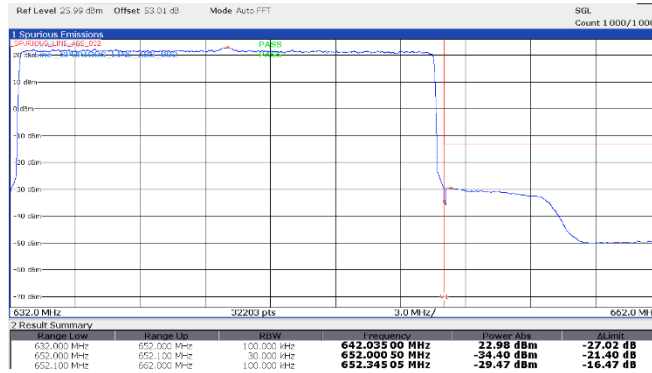
Band Edge. TX:649.5MHz, BW:5MHz, MOD: QPSK



Band Edge. TX:647MHz, BW:10MHz, MOD: QPSK



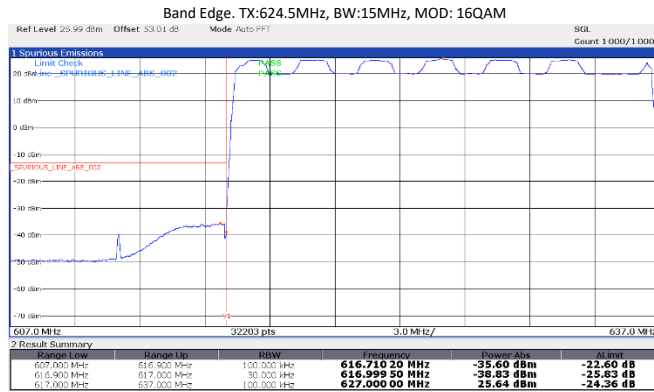
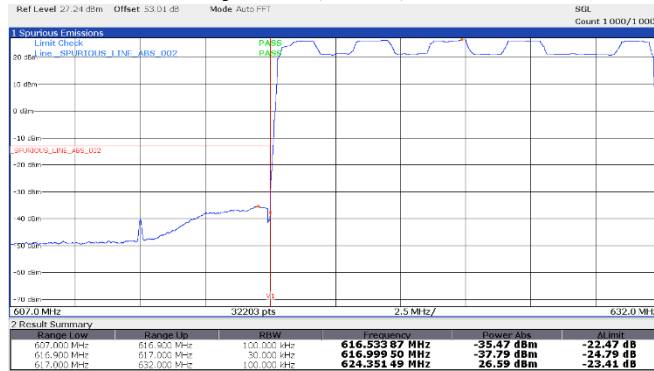
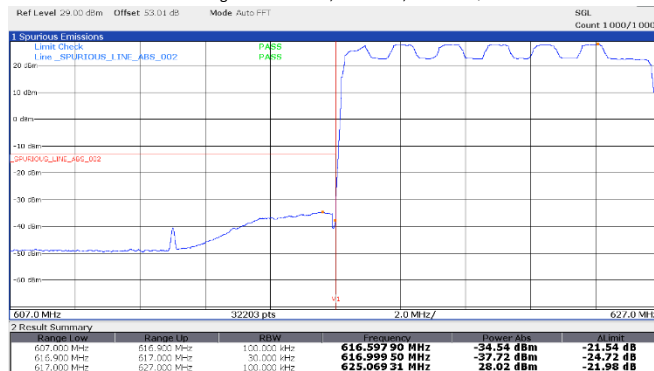
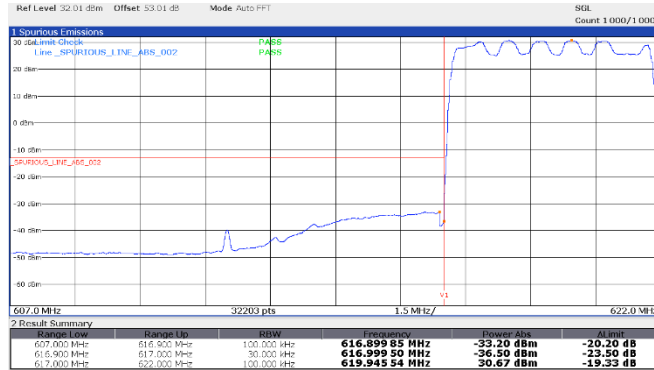
Band Edge. TX:644.5MHz, BW:15MHz, MOD: QPSK



Band Edge. TX:642MHz, BW:20MHz, MOD: QPSK

Section 8
Test name
Specification

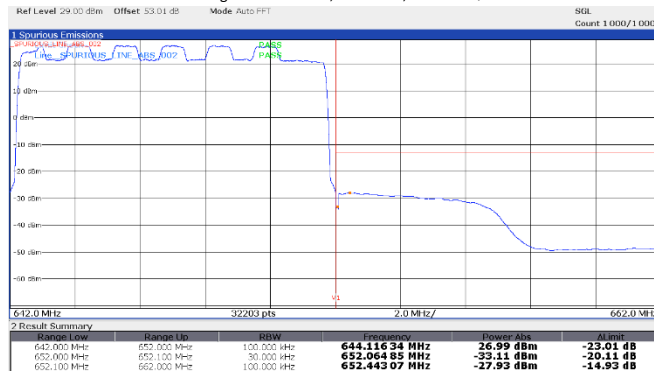
Testing data
FCC 27.53(g), (h) Emission limits
FCC Part 27



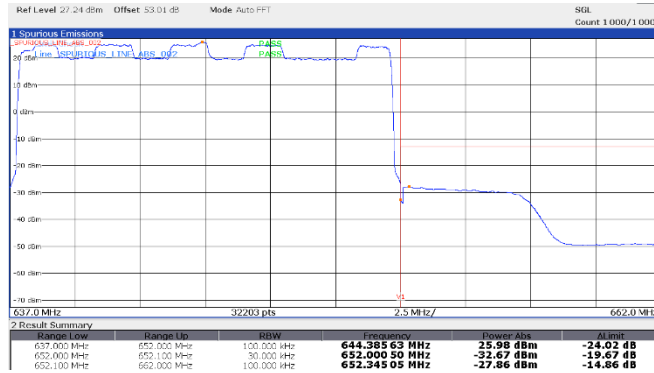
Band Edge. TX:627MHz, BW:20MHz, MOD: 16QAM



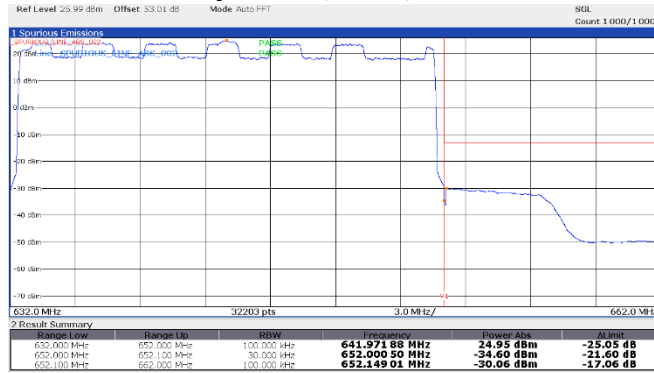
Band Edge. TX:649.5MHz, BW:5MHz, MOD: 16QAM



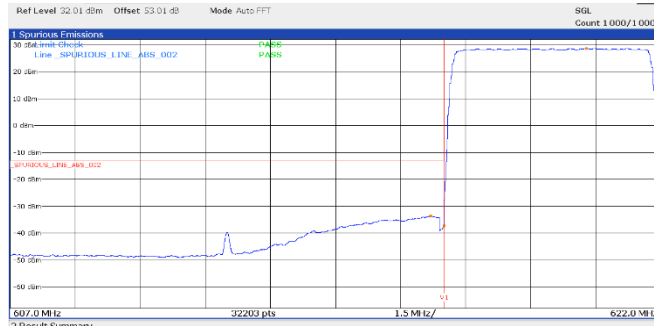
Band Edge. TX:647MHz, BW:10MHz, MOD: 16QAM



Band Edge. TX:644.5MHz, BW:15MHz, MOD: 16QAM

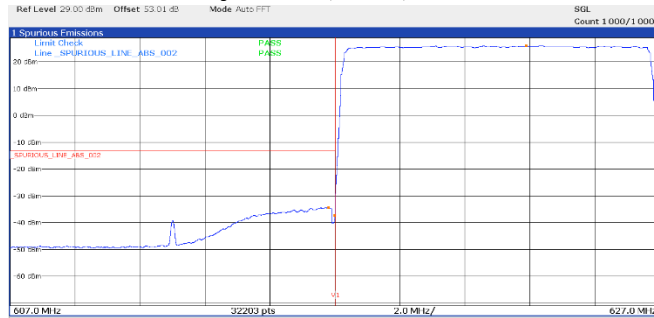


Band Edge. TX:642MHz, BW:20MHz, MOD: 16QAM



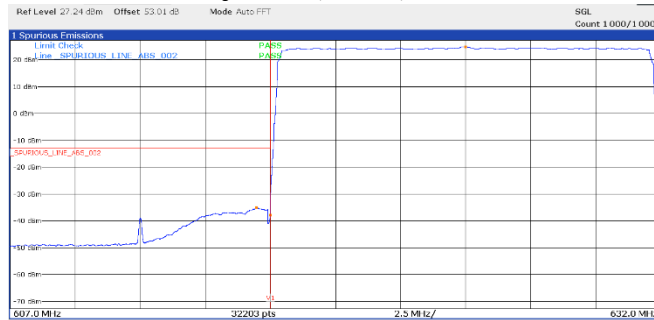
Range Low	Range Up	RW	Frequency	Power Abs	Alimit
607.000 MHz	616.800 MHz	100.000 kHz	616.694 12 MHz	-33.71 dBm	-20.71 dB
616.900 MHz	617.000 MHz	30.000 kHz	616.999 50 MHz	-37.35 dBm	-24.35 dB
617.000 MHz	622.000 MHz	100.000 kHz	620.292 08 MHz	28.67 dBm	-21.33 dB

Band Edge. TX:619.5MHz, BW:5MHz, MOD: 64QAM



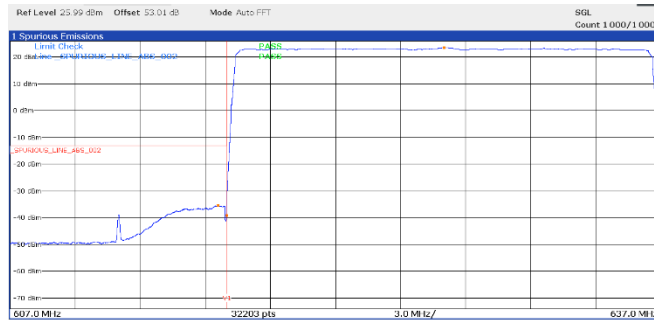
Range Low	Range Up	RW	Frequency	Power Abs	Alimit
607.000 MHz	616.800 MHz	100.000 kHz	616.806 42 MHz	-34.41 dBm	-21.41 dB
616.900 MHz	617.000 MHz	30.000 kHz	616.999 50 MHz	-37.32 dBm	-24.32 dB
617.000 MHz	622.000 MHz	100.000 kHz	622.891 09 MHz	25.90 dBm	-24.10 dB

Band Edge. TX:622MHz, BW:10MHz, MOD: 64QAM



Range Low	Range Up	RW	Frequency	Power Abs	Alimit
607.000 MHz	616.800 MHz	100.000 kHz	616.473 23 MHz	-35.10 dBm	-22.10 dB
616.900 MHz	617.000 MHz	30.000 kHz	616.999 50 MHz	-37.88 dBm	-24.88 dB
617.000 MHz	632.000 MHz	100.000 kHz	624.500 00 MHz	24.82 dBm	-25.18 dB

Band Edge. TX:624.5MHz, BW:15MHz, MOD: 64QAM

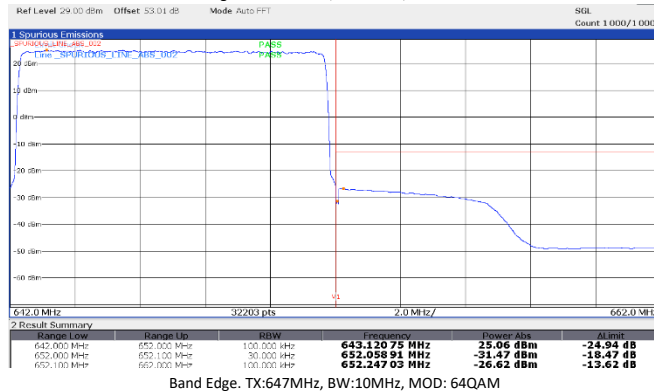
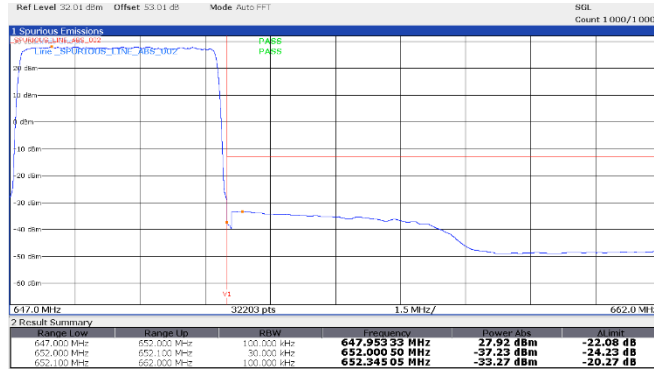


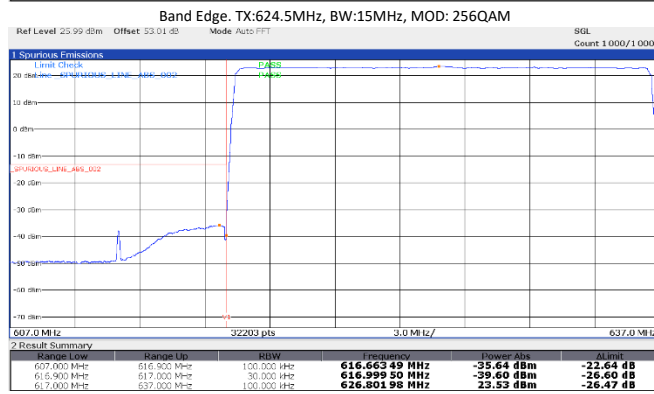
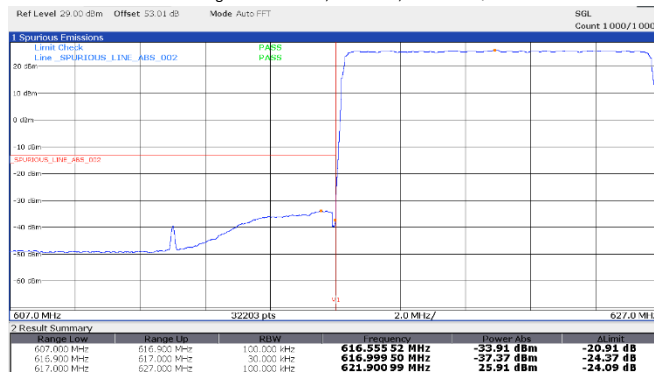
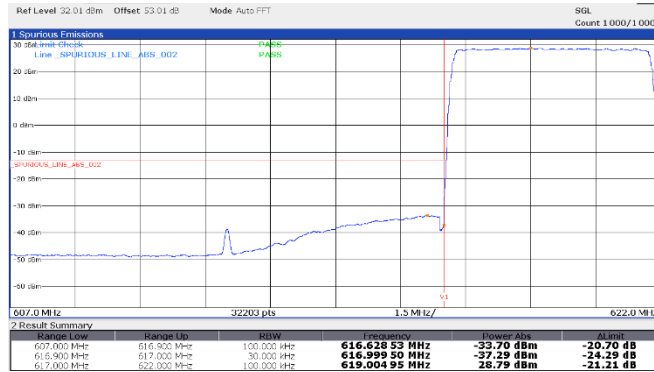
Range Low	Range Up	RW	Frequency	Power Abs	Alimit
607.000 MHz	616.800 MHz	100.000 kHz	616.591 72 MHz	-35.42 dBm	-22.42 dB
616.900 MHz	617.000 MHz	30.000 kHz	616.999 50 MHz	-39.17 dBm	-26.17 dB
617.000 MHz	637.000 MHz	100.000 kHz	627.000 00 MHz	23.54 dBm	-26.46 dB

Band Edge. TX:627MHz, BW:20MHz, MOD: 64QAM

Section 8
Test name
Specification

Testing data
FCC 27.53(g), (h) Emission limits
FCC Part 27

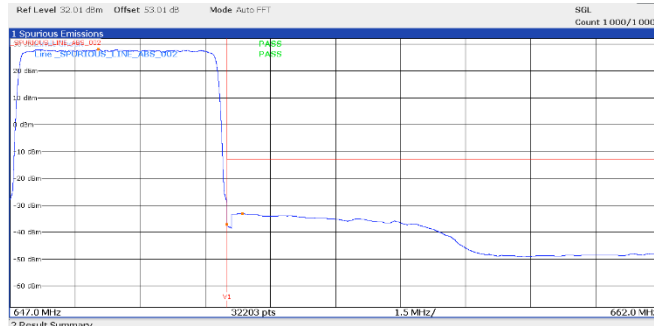




Band Edge. TX:627MHz, BW:20MHz, MOD:256QAM

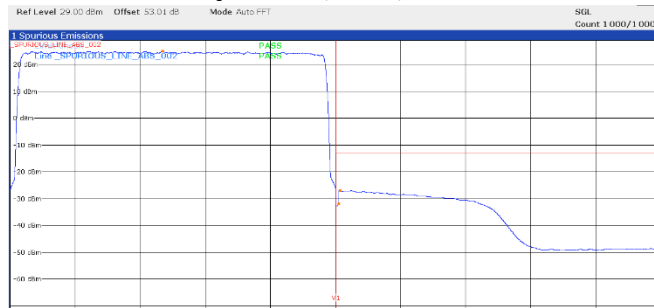
Section 8
Test name
Specification

Testing data
FCC 27.53(g), (h) Emission limits
FCC Part 27



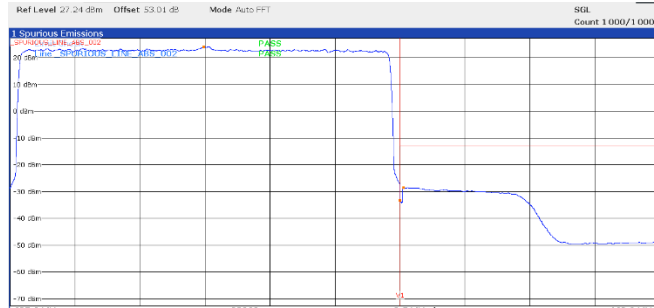
Range Low	Range Up	RBW	Frequency	Power Abs	Limit
647.000 MHz	652.000 MHz	100.000 kHz	649.021 58 MHz	-27.97 dBm	-22.03 dB
652.000 MHz	652.100 MHz	30.000 kHz	652.000 50 MHz	-37.13 dBm	-24.13 dB
652.100 MHz	662.000 MHz	100.000 kHz	652.345 05 MHz	-33.16 dBm	-20.16 dB

Band Edge TX:649.5MHz, BW:5MHz, MOD:256QAM



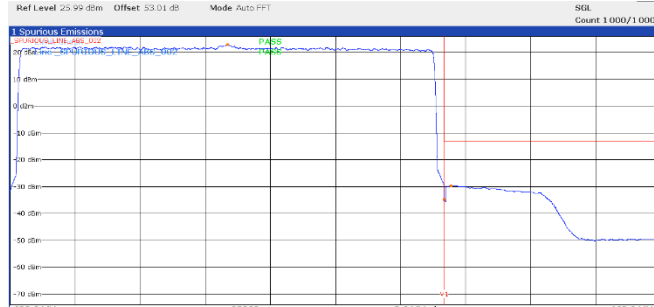
Range Low	Range Up	RBW	Frequency	Power Abs	Limit
642.000 MHz	652.000 MHz	100.000 kHz	646.686 26 MHz	-25.07 dBm	-24.93 dB
652.000 MHz	652.100 MHz	30.000 kHz	652.096 53 MHz	-31.97 dBm	-18.97 dB
652.100 MHz	662.000 MHz	100.000 kHz	652.149 01 MHz	-26.97 dBm	-13.97 dB

Band Edge TX:647MHz, BW:10MHz, MOD:256QAM



Range Low	Range Up	RBW	Frequency	Power Abs	Limit
637.000 MHz	652.000 MHz	100.000 kHz	644.447 03 MHz	-24.01 dBm	-25.99 dB
652.000 MHz	652.100 MHz	30.000 kHz	652.000 50 MHz	-33.30 dBm	-20.30 dB
652.100 MHz	662.000 MHz	100.000 kHz	652.149 01 MHz	-28.66 dBm	-15.66 dB

Band Edge TX:644.5MHz, BW:15MHz, MOD:256QAM

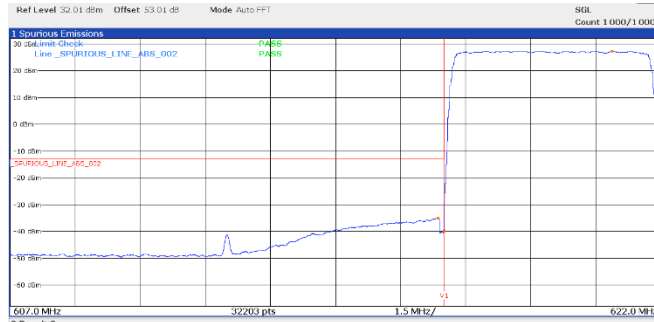


Range Low	Range Up	RBW	Frequency	Power Abs	Limit
632.000 MHz	652.000 MHz	100.000 kHz	642.021 87 MHz	-22.93 dBm	-27.07 dB
652.000 MHz	652.100 MHz	30.000 kHz	652.000 50 MHz	-34.85 dBm	-21.85 dB
652.100 MHz	662.000 MHz	100.000 kHz	652.345 05 MHz	-29.54 dBm	-16.54 dB

Band Edge TX:642MHz, BW:20MHz, MOD:256QAM

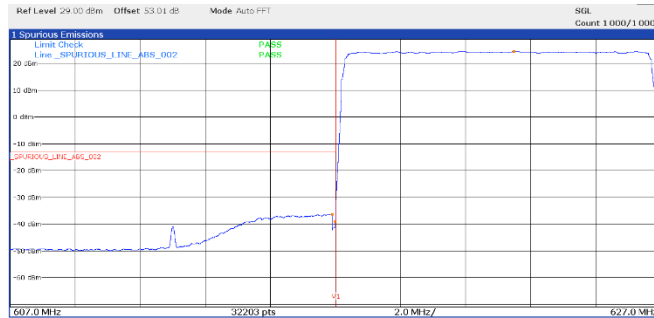
Section 8
Test name
Specification

Testing data
FCC 27.53(g), (h) Emission limits
FCC Part 27



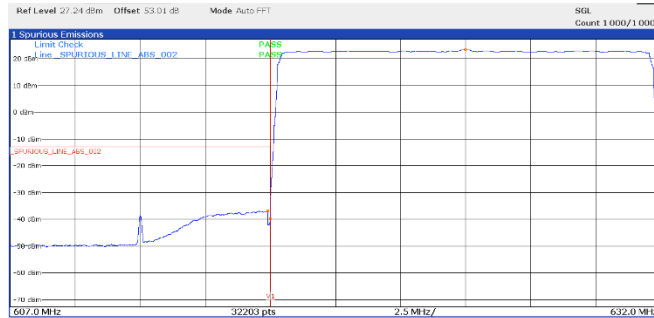
Range Low	Range Up	RBW	Frequency	Power Abs	Limit
607.000 MHz	616.800 MHz	100.000 kHz	616.86736 MHz	-35.02 dBm	-22.02 dB
616.900 MHz	617.000 MHz	30.000 kHz	616.99950 MHz	-39.79 dBm	-26.79 dB
617.000 MHz	622.000 MHz	100.000 kHz	620.88614 MHz	27.30 dBm	-22.70 dB

Band Edge TX:619.5MHz, BW:5MHz, MOD:1024QAM



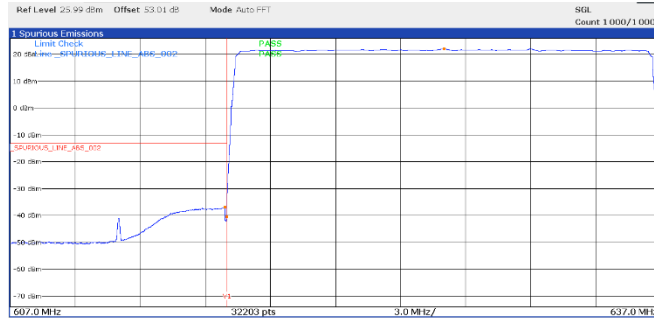
Range Low	Range Up	RBW	Frequency	Power Abs	Limit
607.000 MHz	616.800 MHz	100.000 kHz	616.89985 MHz	-36.28 dBm	-23.28 dB
616.900 MHz	617.000 MHz	30.000 kHz	616.99950 MHz	-38.91 dBm	-25.91 dB
617.000 MHz	622.000 MHz	100.000 kHz	622.49505 MHz	24.43 dBm	-25.55 dB

Band Edge TX:622MHz, BW:10MHz, MOD:1024QAM



Range Low	Range Up	RBW	Frequency	Power Abs	Limit
607.000 MHz	616.800 MHz	100.000 kHz	616.89985 MHz	-36.97 dBm	-23.97 dB
616.900 MHz	617.000 MHz	30.000 kHz	616.99950 MHz	-39.85 dBm	-26.85 dB
617.000 MHz	632.000 MHz	100.000 kHz	624.50000 MHz	23.39 dBm	-26.61 dB

Band Edge TX:624.5MHz, BW:15MHz, MOD:1024QAM

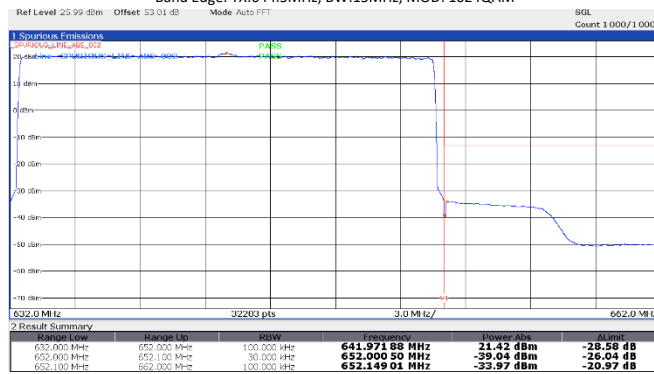
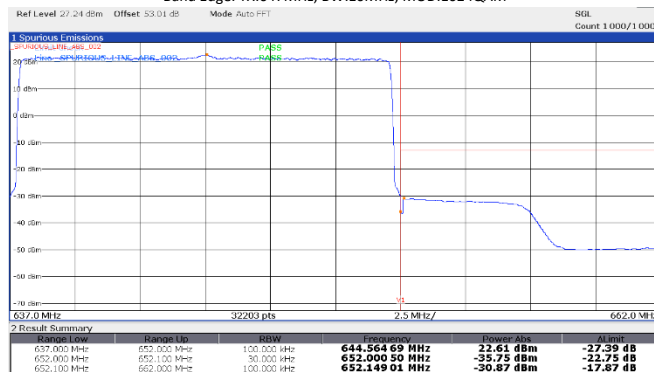


Range Low	Range Up	RBW	Frequency	Power Abs	Limit
607.000 MHz	616.800 MHz	100.000 kHz	616.89985 MHz	-36.92 dBm	-23.92 dB
616.900 MHz	617.000 MHz	30.000 kHz	616.99950 MHz	-40.52 dBm	-27.52 dB
617.000 MHz	637.000 MHz	100.000 kHz	627.00000 MHz	22.19 dBm	-27.61 dB

Band Edge TX:627MHz, BW:20MHz, MOD:1024QAM

Section 8
Test name
Specification

Testing data
 FCC 27.53(g), (h) Emission limits
 FCC Part 27

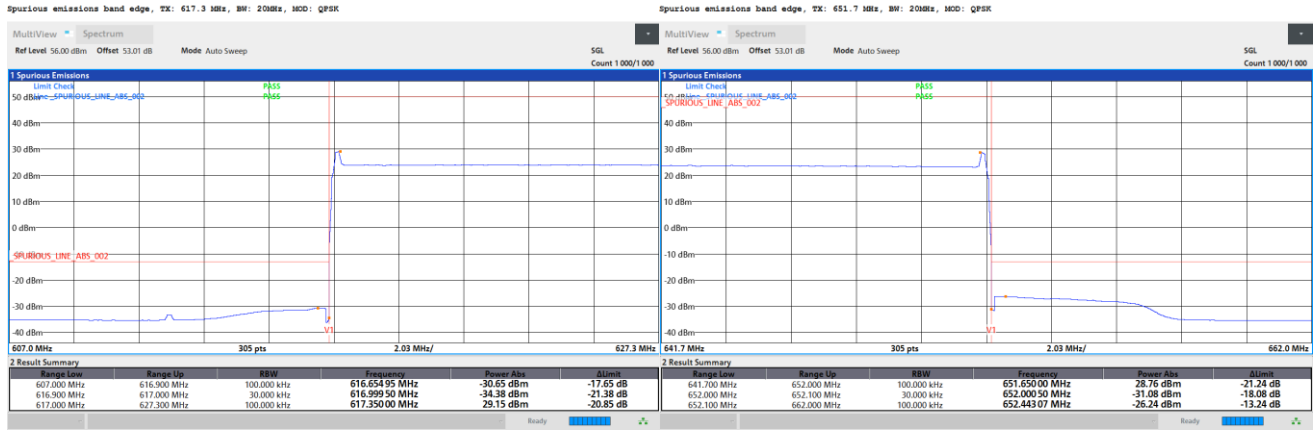


Band Edge TX:642MHz, BW:20MHz, MOD:1024QAM



Band n71 + NB-IoT band edge plots

Note: In the 100 kHz band adjacent to the band edge, a resolution bandwidth of 30 kHz was used.



Radiated spurious emissions:

Note: All operating modes were investigated including single carrier operation in each supported frequency band and multiple carrier operation (both multiple carriers in a single supported frequency band and carriers in all supported frequency bands simultaneously). Results were similar across all operating modes. The presented data below represents the worst-case configuration (QPSK modulation, 5 MHz channel bandwidth, middle channel).

Band n66:

Full Spectrum

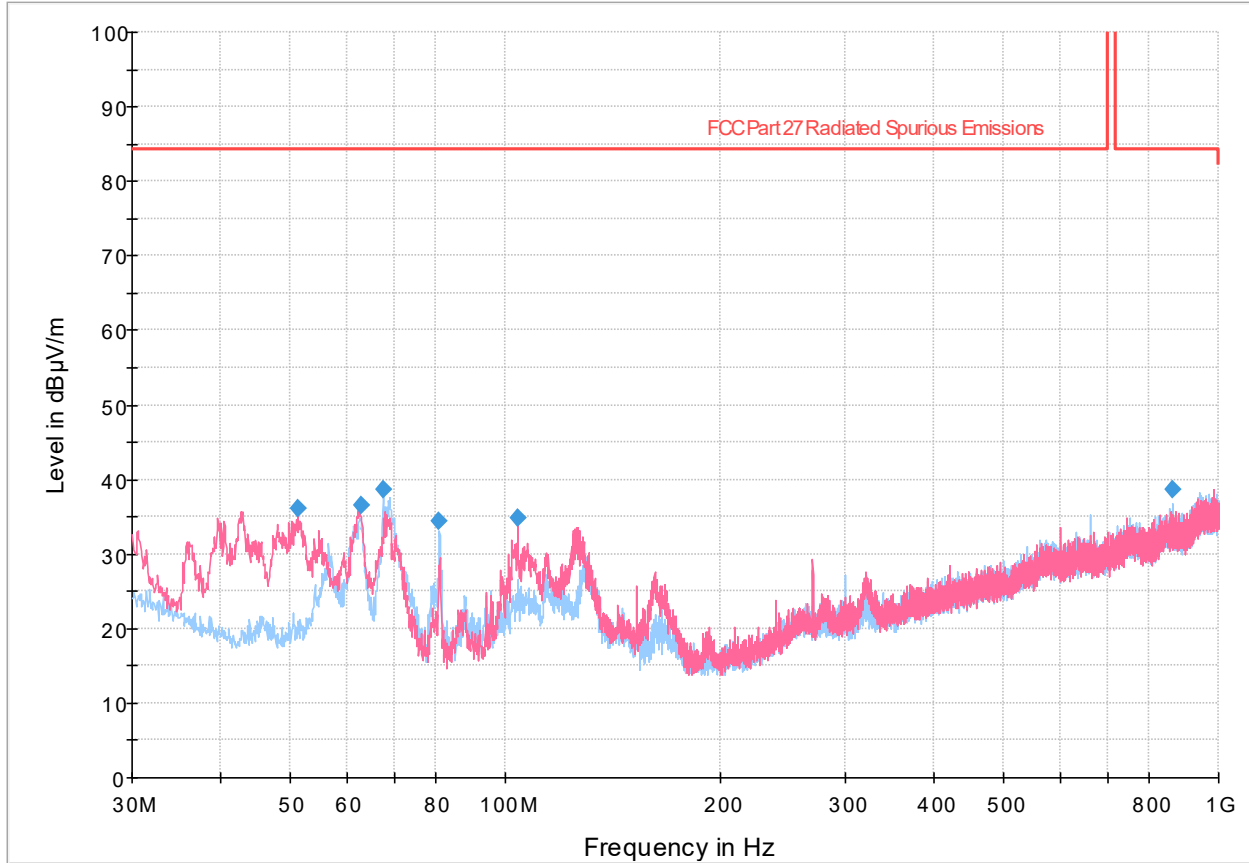


Figure 8.6-1: Radiated emissions spectral plot (30 MHz - 1 GHz), Mid channel, 5 MHz BW

Table 8.6-1: Radiated emissions results

Frequency (MHz)	MaxPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
51.239167	36.17	84.38	48.21	5000.0	100.000	115.0	V	346.0	14.1
62.793333	36.57	84.38	47.81	5000.0	100.000	200.0	V	174.0	12.2
67.526667	38.60	84.38	45.78	5000.0	100.000	200.0	H	260.0	12.6
80.905000	34.31	84.38	50.07	5000.0	100.000	200.0	H	71.0	14.0
104.345000	34.92	84.38	49.46	5000.0	100.000	100.0	V	84.0	17.6
861.340000	38.68	84.38	45.70	5000.0	100.000	104.0	H	0.0	33.3

Notes: ¹ Field strength (dB V/m) = receiver/spectrum analyzer value (dB V) + correction factor (dB)

² Correction factors = antenna factor ACF (dB) + cable loss (dB)

³ Emissions that were continuously present for a minimum of 1 second and occurred more than once for every 15 seconds observation period were considered valid emissions. The maximum value of valid emissions has been recorded.

Full Spectrum

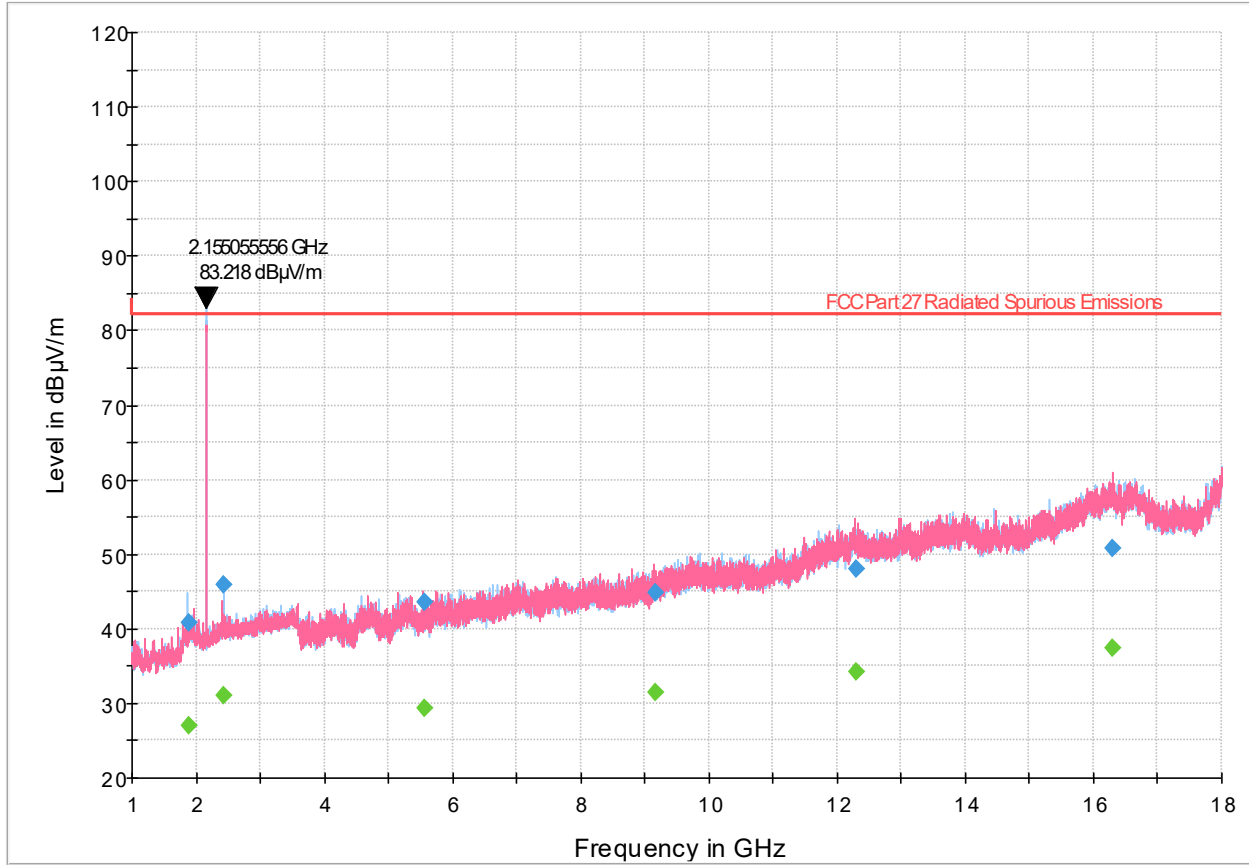


Figure 8.6-2: Radiated emissions spectral plot (1 GHz - 18 GHz), Mid channel, 5 MHz BW

Table 8.6-2: Radiated emissions results

Frequency (MHz)	MaxPeak (dBµV/m)	CAverage (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1876.555556	---	27.04	82.23	55.19	5000.0	1000.000	120.0	H	70.0	-6.1
1876.555556	40.71	---	82.23	41.52	5000.0	1000.000	120.0	H	70.0	-6.1
2439.188889	45.82	---	82.23	36.41	5000.0	1000.000	222.0	H	122.0	-4.1
2439.188889	---	31.09	82.23	51.14	5000.0	1000.000	222.0	H	122.0	-4.1
5555.677778	43.51	---	82.23	38.72	5000.0	1000.000	174.0	V	358.0	3.1
5555.677778	---	29.35	82.23	52.88	5000.0	1000.000	174.0	V	358.0	3.1
9154.666667	---	31.53	82.23	50.70	5000.0	1000.000	400.0	V	167.0	8.5
9154.666667	44.76	---	82.23	37.47	5000.0	1000.000	400.0	V	167.0	8.5
12289.600000	---	34.12	82.23	48.11	5000.0	1000.000	400.0	H	11.0	15.1
12289.600000	47.94	---	82.23	34.29	5000.0	1000.000	400.0	H	11.0	15.1
16306.766667	---	37.32	82.23	44.91	5000.0	1000.000	357.0	V	252.0	22.6
16306.766667	50.77	---	82.23	31.46	5000.0	1000.000	357.0	V	252.0	22.6

Notes: ¹ Field strength (dB V/m) = receiver/spectrum analyzer value (dB V) + correction factor (dB)

² Correction factors = antenna factor ACF (dB) + cable loss (dB)

³ Emissions that were continuously present for a minimum of 1 second and occurred more than once for every 15 seconds observation period were considered valid emissions. The maximum value of valid emissions has been recorded.

Full Spectrum

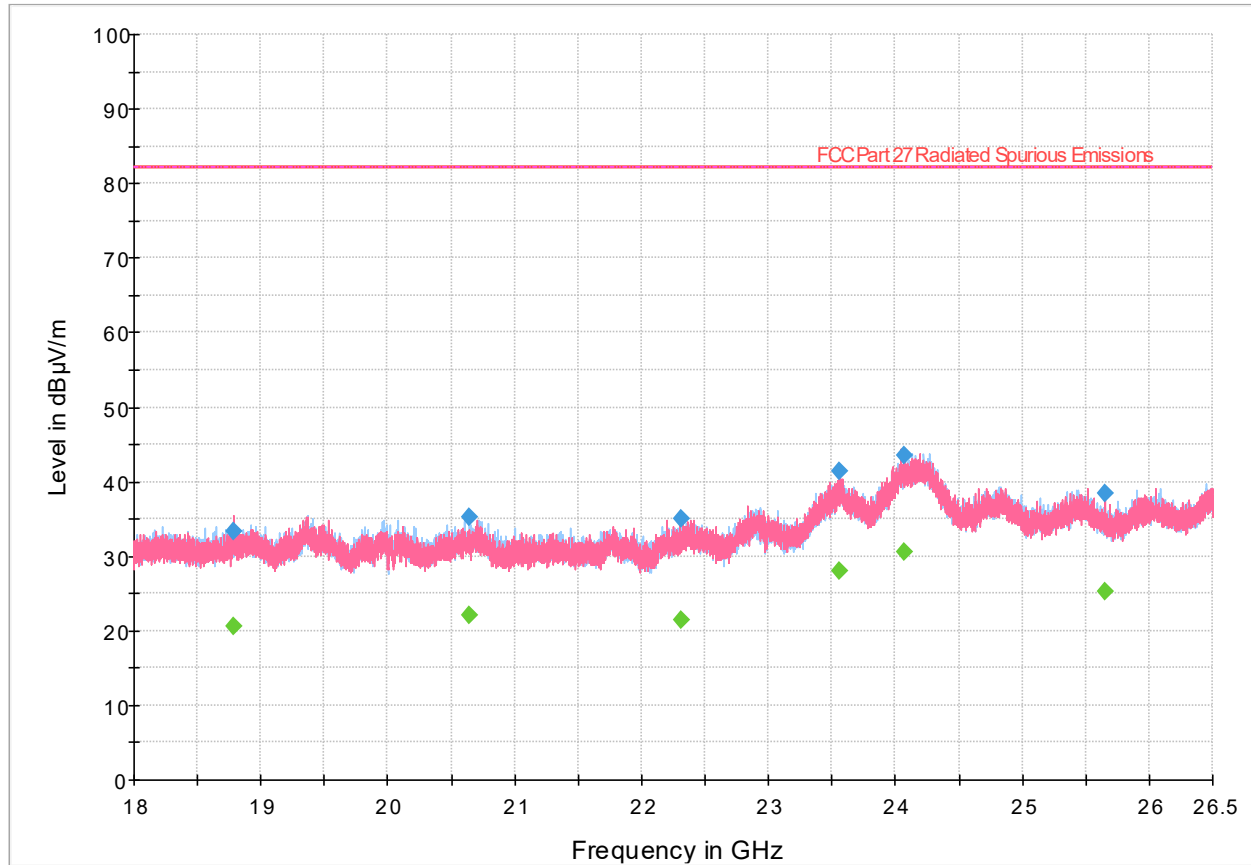


Figure 8.6-3: Radiated emissions spectral plot (18 GHz - 26.5 GHz), Mid channel, 5 MHz BW

Table 8.6-3: Radiated emissions results

Frequency (MHz)	MaxPeak (dBµV/m)	CAverage (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
18785.856250	33.42	---	82.23	48.81	5000.0	1000.000	219.0	V	31.0	15.9
18785.856250	---	20.54	82.23	61.69	5000.0	1000.000	219.0	V	31.0	15.9
20636.000000	---	22.05	82.23	60.18	5000.0	1000.000	310.0	H	78.0	17.8
20636.000000	35.35	---	82.23	46.88	5000.0	1000.000	310.0	H	78.0	17.8
22310.562500	---	21.34	82.23	60.89	5000.0	1000.000	155.0	H	331.0	17.6
22310.562500	34.95	---	82.23	47.28	5000.0	1000.000	155.0	H	331.0	17.6
23557.750000	---	28.12	82.23	54.11	5000.0	1000.000	389.0	V	357.0	23.7
23557.750000	41.34	---	82.23	40.89	5000.0	1000.000	389.0	V	357.0	23.7
24066.137500	43.63	---	82.23	38.60	5000.0	1000.000	128.0	V	295.0	27.5
24066.137500	---	30.49	82.23	51.74	5000.0	1000.000	128.0	V	295.0	27.5
25648.618750	---	25.18	82.23	57.05	5000.0	1000.000	347.0	V	347.0	21.7
25648.618750	38.33	---	82.23	43.90	5000.0	1000.000	347.0	V	347.0	21.7

Notes: ¹ Field strength (dB V/m) = receiver/spectrum analyzer value (dB V) + correction factor (dB)

² Correction factors = antenna factor ACF (dB) + cable loss (dB)

³ Emissions that were continuously present for a minimum of 1 second and occurred more than once for every 15 seconds observation period were considered valid emissions. The maximum value of valid emissions has been recorded.

Band n70:

Full Spectrum

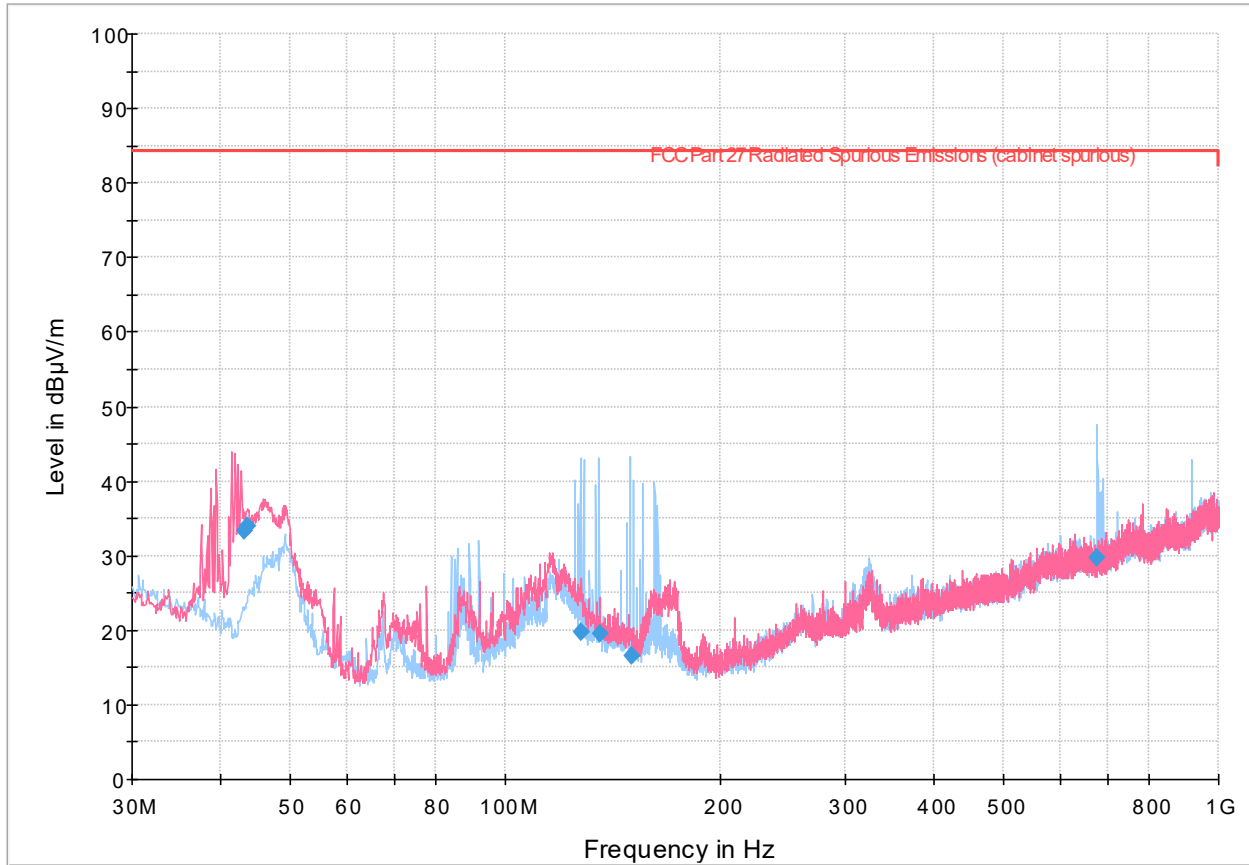


Figure 8.6-4: Radiated emissions spectral plot (30 MHz - 1 GHz), Mid channel, 5 MHz BW

Table 8.6-4: Radiated emissions results

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
43.046000	33.41	84.38	50.97	5000.0	120.000	101.0	V	0.0	17.4
43.474000	34.03	84.38	50.35	5000.0	120.000	104.0	V	10.0	17.2
128.102000	19.64	84.38	64.74	5000.0	120.000	240.0	H	252.0	18.4
135.999000	19.56	84.38	64.82	5000.0	120.000	230.0	H	32.0	18.7
150.401000	16.66	84.38	67.72	5000.0	120.000	113.0	H	113.0	18.2
676.202000	29.69	84.38	54.69	5000.0	120.000	236.0	H	90.0	30.0

Notes: ¹ Field strength (dB V/m) = receiver/spectrum analyzer value (dB V) + correction factor (dB)

² Correction factors = antenna factor ACF (dB) + cable loss (dB)

³ Emissions that were continuously present for a minimum of 1 second and occurred more than once for every 15 seconds observation period were considered valid emissions. The maximum value of valid emissions has been recorded.

Full Spectrum

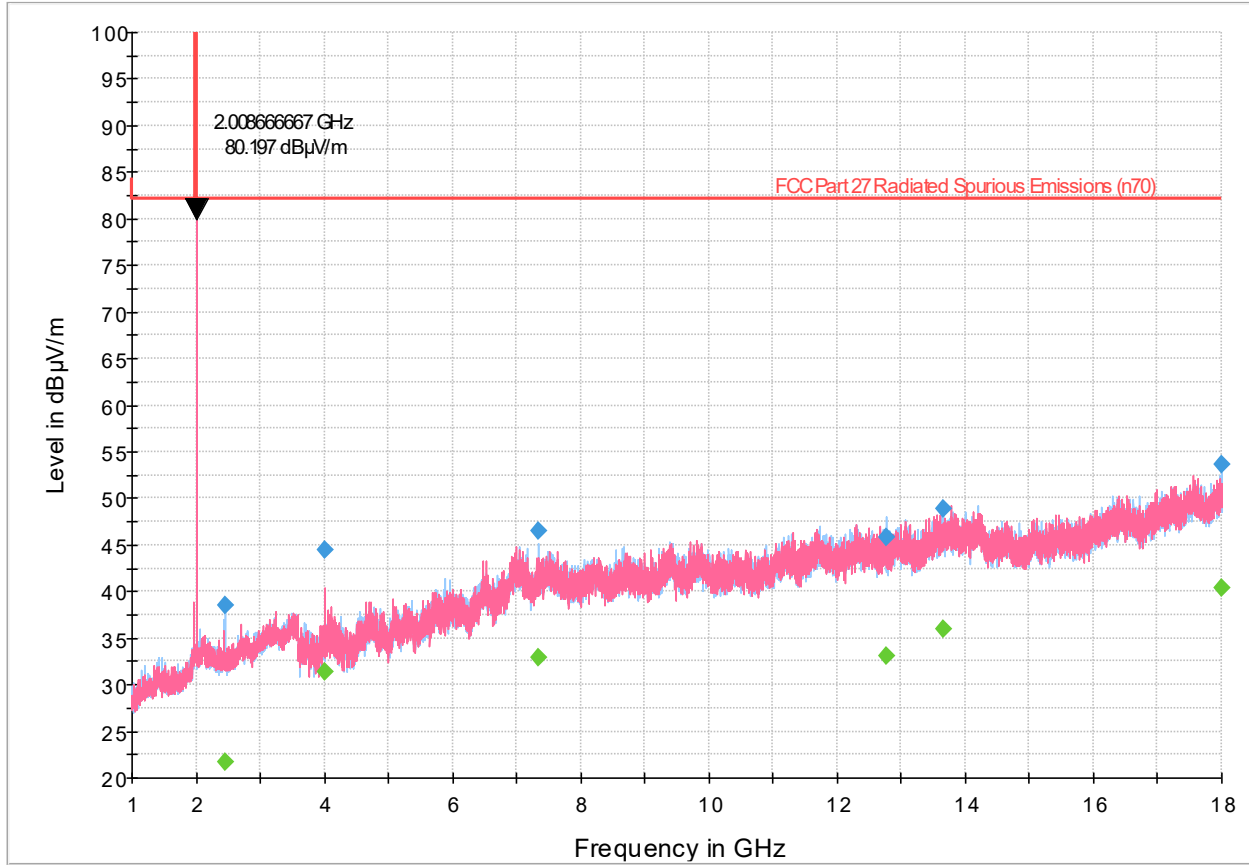


Figure 8.6-5: Radiated emissions spectral plot (1 GHz - 18 GHz), Mid channel, 5 MHz BW

Table 8.6-5: Radiated emissions results

Frequency (MHz)	MaxPeak (dBµV/m)	CAverage (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2445.177778	---	21.76	---	---	5000.0	1000.000	187.0	H	125.0	5.7
2445.177778	38.49	---	82.23	43.74	5000.0	1000.000	187.0	H	125.0	5.7
4015.355556	---	31.46	---	---	5000.0	1000.000	190.0	V	56.0	13.6
4015.355556	44.53	---	82.23	37.70	5000.0	1000.000	190.0	V	56.0	13.6
7344.677778	46.50	---	82.23	35.73	5000.0	1000.000	181.0	H	223.0	24.4
7344.677778	---	32.88	---	---	5000.0	1000.000	181.0	H	223.0	24.4
12765.566667	---	33.15	---	---	5000.0	1000.000	200.0	H	90.0	29.7
12765.566667	45.85	---	82.23	36.38	5000.0	1000.000	200.0	H	90.0	29.7
13655.344444	---	35.94	---	---	5000.0	1000.000	120.0	H	312.0	31.5
13655.344444	48.89	---	82.23	33.34	5000.0	1000.000	120.0	H	312.0	31.5
17993.422222	53.61	---	82.23	28.62	5000.0	1000.000	157.0	H	11.0	37.6
17993.422222	---	40.45	---	---	5000.0	1000.000	157.0	H	11.0	37.6

Notes: ¹ Field strength (dB V/m) = receiver/spectrum analyzer value (dB V) + correction factor (dB)

² Correction factors = antenna factor ACF (dB) + cable loss (dB)

³ Emissions that were continuously present for a minimum of 1 second and occurred more than once for every 15 seconds observation period were considered valid emissions. The maximum value of valid emissions has been recorded.

Full Spectrum

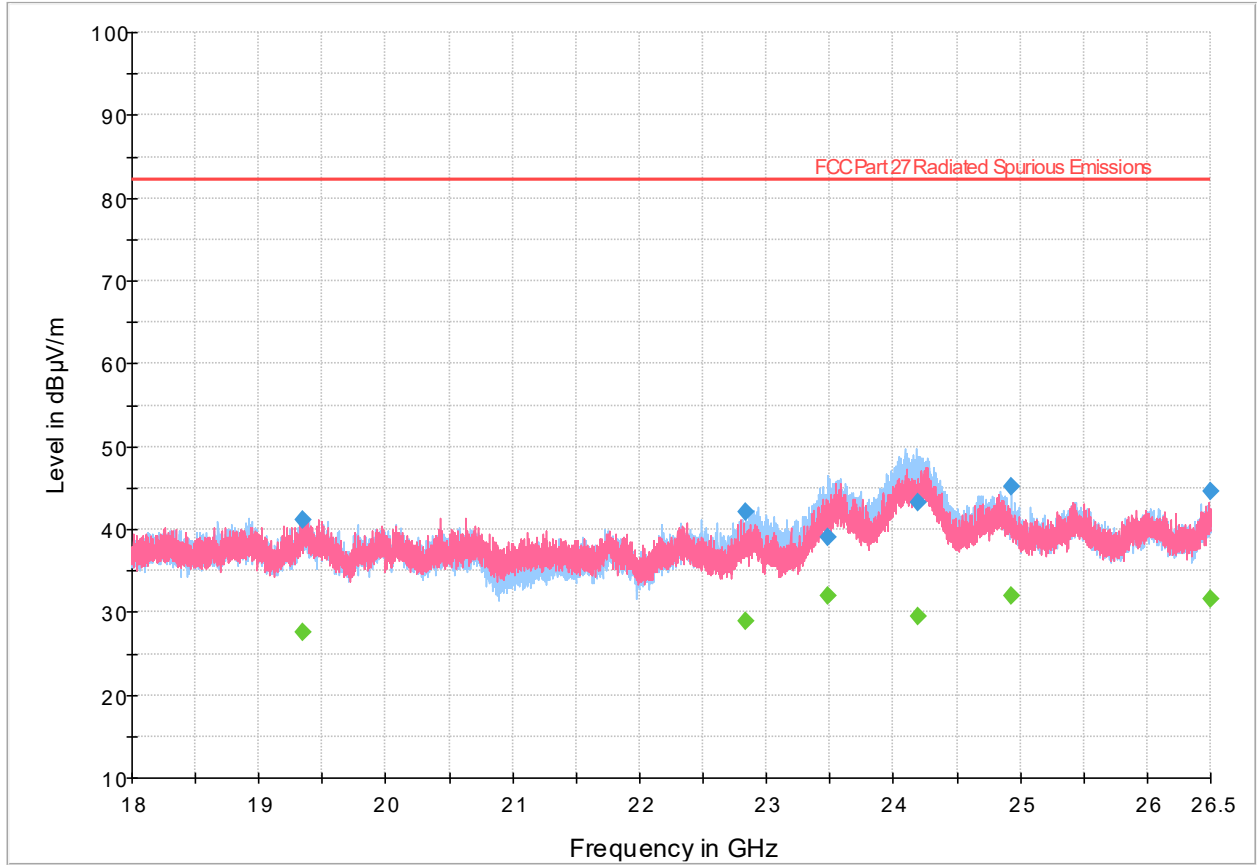


Figure 8.6-6: Radiated emissions spectral plot (18 GHz - 26.5 GHz), Mid channel, 5 MHz

Table 8.6-6: Radiated emissions results

Frequency (MHz)	MaxPeak (dBµV/m)	CAverage (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
19351.618750	41.06	---	82.23	41.17	5000.0	1000.000	124.0	H	180.0	16.7
19351.618750	---	27.58	82.23	54.65	5000.0	1000.000	124.0	H	180.0	16.7
22831.025000	---	28.90	82.23	53.33	5000.0	1000.000	183.0	H	32.0	18.9
22831.025000	42.07	---	82.23	40.16	5000.0	1000.000	183.0	H	32.0	18.9
23486.675000	---	32.00	82.23	50.23	5000.0	1000.000	107.0	H	0.0	23.0
23486.675000	38.99	---	82.23	43.24	5000.0	1000.000	107.0	H	0.0	23.0
24188.343750	---	29.46	82.23	52.77	5000.0	1000.000	107.0	H	231.0	27.1
24188.343750	43.28	---	82.23	38.95	5000.0	1000.000	107.0	H	231.0	27.1
24925.237500	45.22	---	82.23	37.01	5000.0	1000.000	197.0	H	197.0	22.4
24925.237500	---	31.97	82.23	50.26	5000.0	1000.000	197.0	H	197.0	22.4
26497.937500	---	31.51	82.23	50.72	5000.0	1000.000	170.0	V	11.0	23.4
26497.937500	44.53	---	82.23	37.70	5000.0	1000.000	170.0	V	11.0	23.4

Notes: ¹ Field strength (dB V/m) = receiver/spectrum analyzer value (dB V) + correction factor (dB)

² Correction factors = antenna factor ACF (dB) + cable loss (dB)

³ Emissions that were continuously present for a minimum of 1 second and occurred more than once for every 15 seconds observation period were considered valid emissions. The maximum value of valid emissions has been recorded.

Band n71:

Full Spectrum

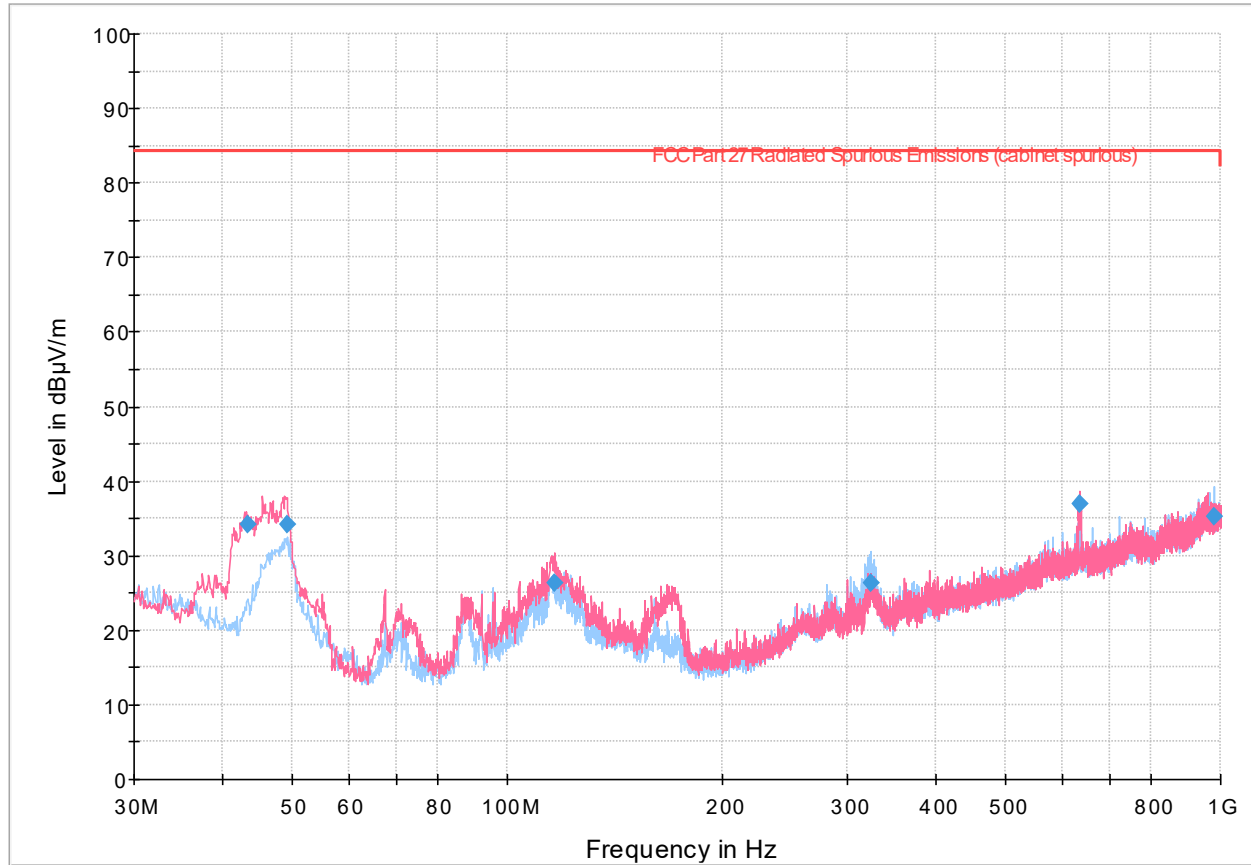


Figure 8.6-7: Radiated emissions spectral plot (30 MHz - 1 GHz), Mid channel, 5 MHz BW

Table 8.6-7: Radiated emissions results

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
43.302000	34.13	84.38	50.25	5000.0	120.000	100.0	V	0.0	17.3
49.098000	34.08	84.38	50.30	5000.0	120.000	165.0	V	11.0	14.9
116.501000	26.34	84.38	58.04	5000.0	120.000	114.0	V	335.0	18.4
323.436000	26.40	84.38	57.98	5000.0	120.000	205.0	H	287.0	21.7
636.382000	36.86	84.38	47.52	5000.0	120.000	201.0	V	113.0	30.3
979.345000	35.32	84.38	49.06	5000.0	120.000	140.0	H	44.0	35.5

Notes: ¹ Field strength (dB V/m) = receiver/spectrum analyzer value (dB V) + correction factor (dB)

² Correction factors = antenna factor ACF (dB) + cable loss (dB)

³ Emissions that were continuously present for a minimum of 1 second and occurred more than once for every 15 seconds observation period were considered valid emissions. The maximum value of valid emissions has been recorded.

Full Spectrum

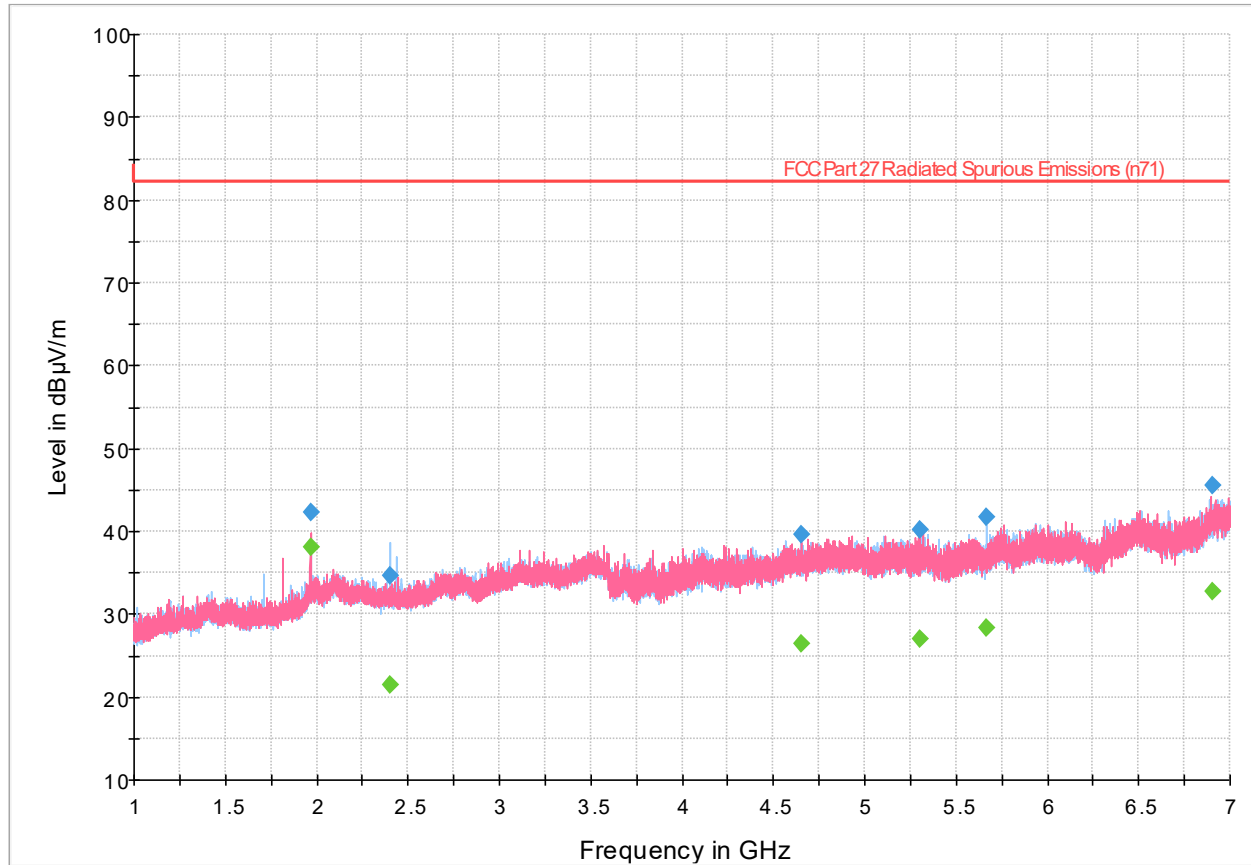


Figure 8.6-8: Radiated emissions spectral plot (1 GHz - 7 GHz), Mid channel, 5 MHz BW

Table 8.6-8: Radiated emissions results

Frequency (MHz)	MaxPeak (dBµV/m)	CAverage (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1966.000000	42.31	---	82.23	39.92	5000.0	1000.000	186.0	V	313.0	4.9
1966.000000	---	38.01	---	---	5000.0	1000.000	186.0	V	313.0	4.9
2398.400000	34.62	---	82.23	47.61	5000.0	1000.000	113.0	H	290.0	5.6
2398.400000	---	21.55	---	---	5000.0	1000.000	113.0	H	290.0	5.6
4652.466667	39.70	---	82.23	42.53	5000.0	1000.000	200.0	H	270.0	14.7
4652.466667	---	26.36	---	---	5000.0	1000.000	200.0	H	270.0	14.7
5301.466667	40.11	---	82.23	42.12	5000.0	1000.000	131.0	V	284.0	16.9
5301.466667	---	26.95	---	---	5000.0	1000.000	131.0	V	284.0	16.9
5664.266667	41.68	---	82.23	40.55	5000.0	1000.000	130.0	H	32.0	18.8
5664.266667	---	28.39	---	---	5000.0	1000.000	130.0	H	32.0	18.8
6901.400000	45.60	---	82.23	36.63	5000.0	1000.000	176.0	V	275.0	23.1
6901.400000	---	32.64	---	---	5000.0	1000.000	176.0	V	275.0	23.1

Notes: ¹ Field strength (dB V/m) = receiver/spectrum analyzer value (dB V) + correction factor (dB)

² Correction factors = antenna factor ACF (dB) + cable loss (dB)

³ Emissions that were continuously present for a minimum of 1 second and occurred more than once for every 15 seconds observation period were considered valid emissions. The maximum value of valid emissions has been recorded.

8.7 FCC §27.54 Frequency stability

8.7.1 Definitions and limits

The frequency stability shall be sufficient to ensure that the fundamental emissions stay within the authorized bands of operation.

8.7.2 Test summary

Test date	September 13, 2023	Temperature	23 °C
Test engineer	Martha Espinoza Chenhao Ma	Air pressure	1001 mbar
Verdict	Pass	Relative humidity	54 %

8.7.3 Observations, settings and special notes

The EUT was configured to continuously transmit. An un-modulated continuous wave signal was not possible therefore a 5 MHz modulated test signal was used, and the frequency was calculated from occupied bandwidth measurements: $f_c = (f_h + f_l)/2$.

8.7.4 Test data

Channel	Condition	Start frequency (MHz)	End frequency (MHz)	Center frequency (MHz)	ppm
Band n71	120V 55 °C	632.220	636.756	634.488	18.913
	120V 50°C	632.232	636.756	634.494	9.456
	120V 40 °C	632.232	636.756	634.494	9.456
	120V 30°C	632.232	636.756	634.494	9.456
	120V 20°C	632.232	636.756	634.494	9.456
	120V 10 °C	632.244	636.744	634.494	9.456
	120V 0°C	632.244	636.744	634.494	9.456
	120V -10°C	632.244	636.744	634.494	9.456
	120V -20°C	632.232	636.756	634.494	9.456
	120V -30°C	632.232	636.756	634.494	9.456
	120V -40°C	632.232	636.756	634.494	9.456
	138 V 25°C	632.232	636.756	634.494	9.456
	102V 25°C	632.232	636.756	634.494	9.456
	120V 25°C	632.232	636.756	634.494	9.456
Band n66	120V 55 °C	2005.244	2009.744	2007.494	2.989
	120V 50°C	2005.244	2009.744	2007.494	2.989
	120V 40 °C	2005.244	2009.744	2007.494	2.989
	120V 30°C	2005.244	2009.744	2007.494	2.989
	120V 20°C	2005.244	2009.744	2007.494	2.989
	120V 10 °C	2005.244	2009.744	2007.494	2.989
	120V 0°C	2005.244	2009.744	2007.494	2.989
	120V -10°C	2005.244	2009.744	2007.494	2.989
	120V -20°C	2005.244	2009.744	2007.494	2.989
	120V -30°C	2005.244	2009.744	2007.494	2.989
	120V -40°C	2005.244	2009.744	2007.494	2.989
	138 V 25°C	2005.244	2009.744	2007.494	2.989
	102V 25°C	2005.244	2009.744	2007.494	2.989
	120V 25°C	2005.244	2009.744	2007.494	2.989



Channel	Condition	Start frequency (MHz)	End frequency (MHz)	Center frequency (MHz)	ppm
Band n70	120V 55 °C	2152.756	2157.268	2155.012	-5.568
	120V 50°C	2152.756	2157.268	2155.012	-5.568
	120V 40 °C	2152.756	2157.268	2155.012	-5.568
	120V 30°C	2152.756	2157.268	2155.012	-5.568
	120V 20°C	2152.756	2157.268	2155.012	-5.568
	120V 10 °C	2152.756	2157.268	2155.012	-5.568
	120V 0°C	2152.756	2157.268	2155.012	-5.568
	120V -10°C	2152.756	2157.268	2155.012	-5.568
	120V -20°C	2152.756	2157.268	2155.012	-5.568
	120V -30°C	2152.744	2157.268	2155.006	-2.784
	120V -40°C	2152.756	2157.268	2155.012	-5.568
	138 V 25°C	2152.756	2157.268	2155.012	-5.568
	102V 25°C	2152.756	2157.268	2155.012	-5.568
	120V 25°C	2152.756	2157.268	2155.012	-5.568

End of report