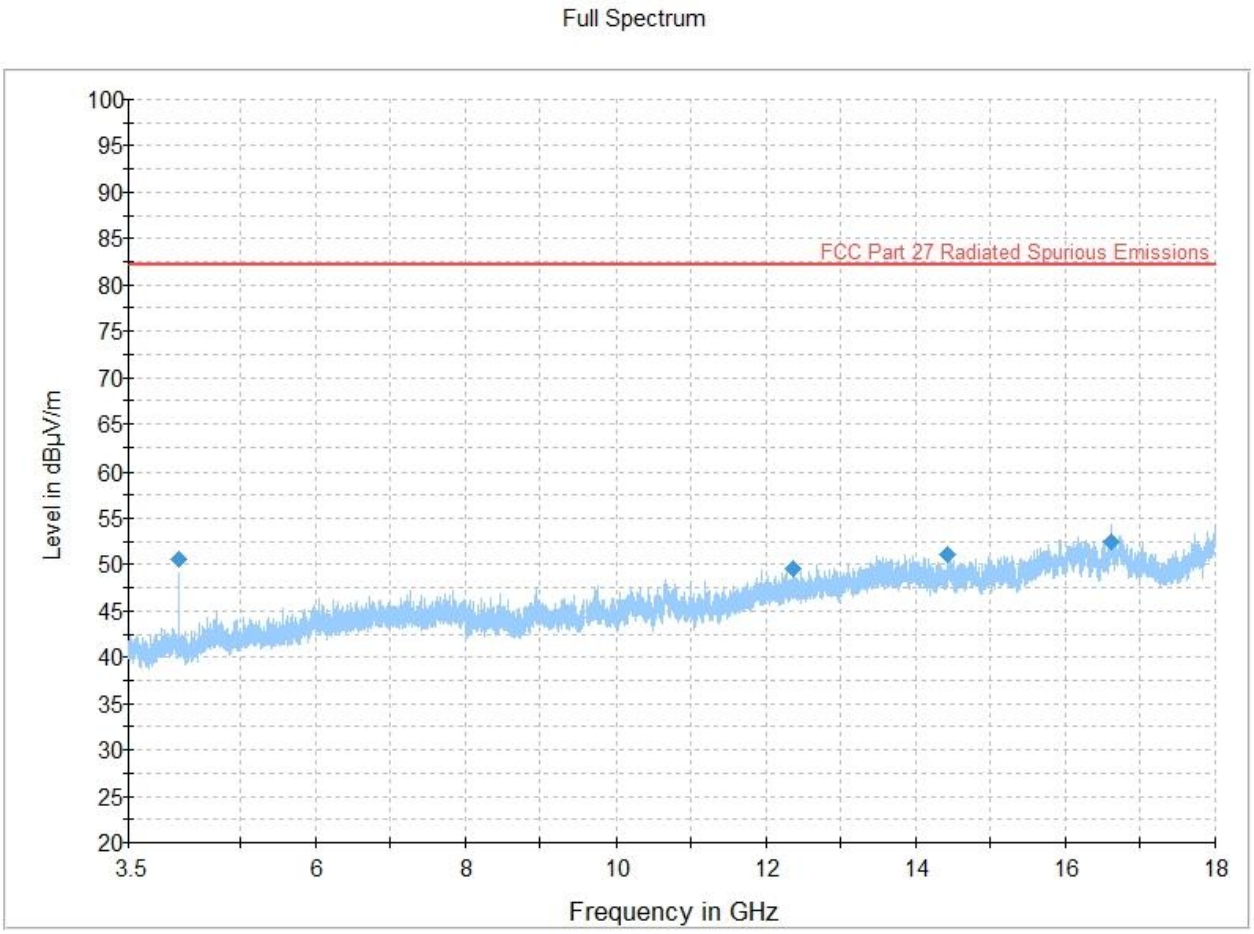

Figure 8.7-12: Radiated emissions spectral plot (3.5 GHz - 18 GHz) – Mid_1392.5MHz, 3.6MHz BW

Table 8.7-12: 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)
4179.077778	50.63	82.23	31.60	5000.0	1000.000	142.0	H	196.0	1.7
12369.994444	49.55	82.23	32.68	5000.0	1000.000	349.0	V	0.0	16.7
14426.550000	51.15	82.23	31.08	5000.0	1000.000	103.0	H	120.0	18.7
16616.461111	52.44	82.23	29.79	5000.0	1000.000	302.0	V	264.0	23.8

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.

8.7.5 Test data – 1432-1435 MHz

Radiated spurious emissions:

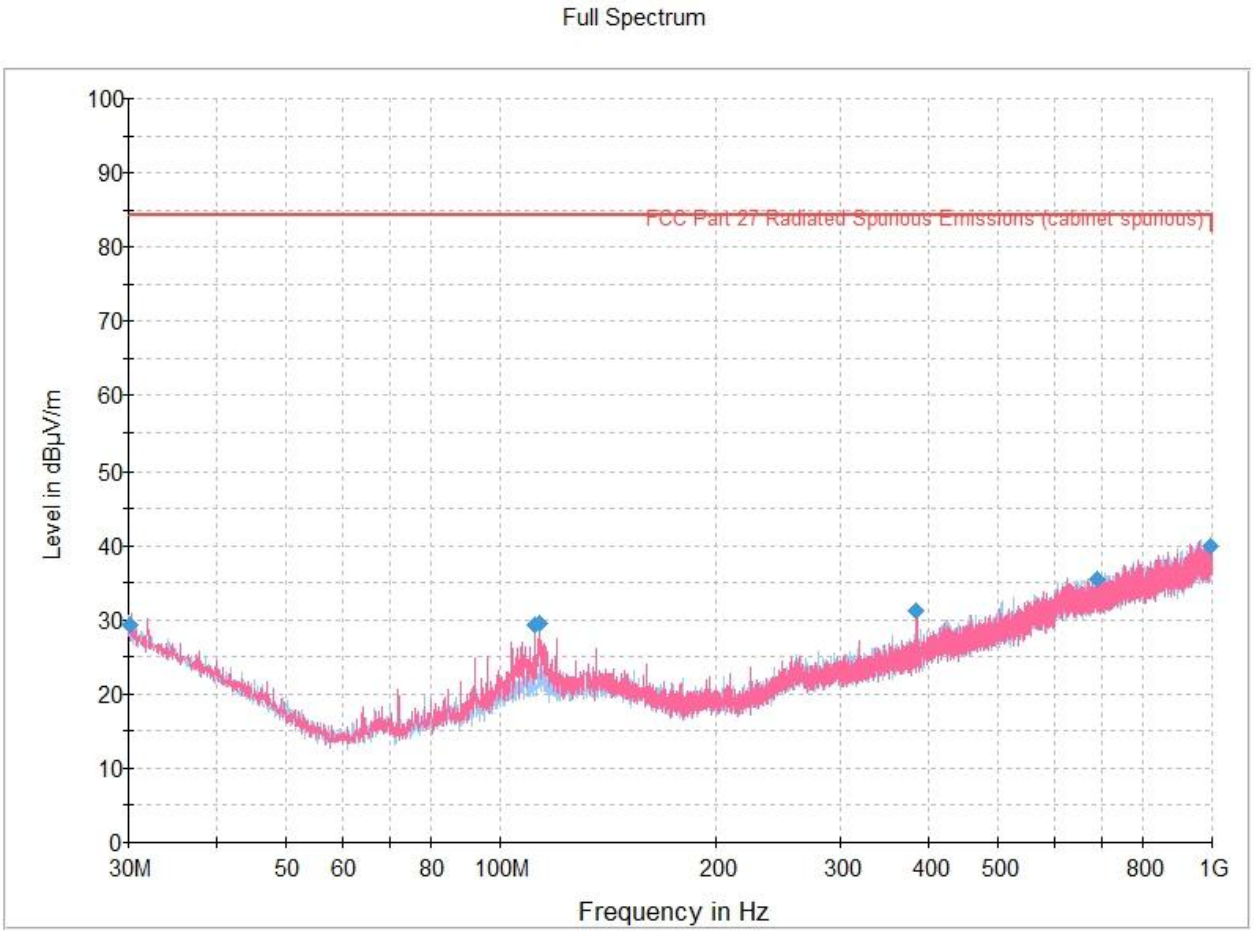

Figure 8.7-13: Radiated emissions spectral plot (30 MHz - 1 GHz) - Low_1433MHz, 0.05MHz BW

Table 8.7-13: 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)
30.120000	29.38	84.38	55.00	5000.0	100.000	204.0	V	253.0	26.5
112.025000	29.22	84.38	55.16	5000.0	100.000	401.0	V	137.0	19.0
113.642500	29.49	84.38	54.89	5000.0	100.000	376.0	V	278.0	19.2
383.989167	31.29	84.38	53.09	5000.0	100.000	138.0	V	316.0	24.6
688.209167	35.49	84.38	48.89	5000.0	100.000	401.0	V	314.0	30.5
996.700833	39.98	84.38	44.40	5000.0	100.000	237.0	H	98.0	34.7

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.

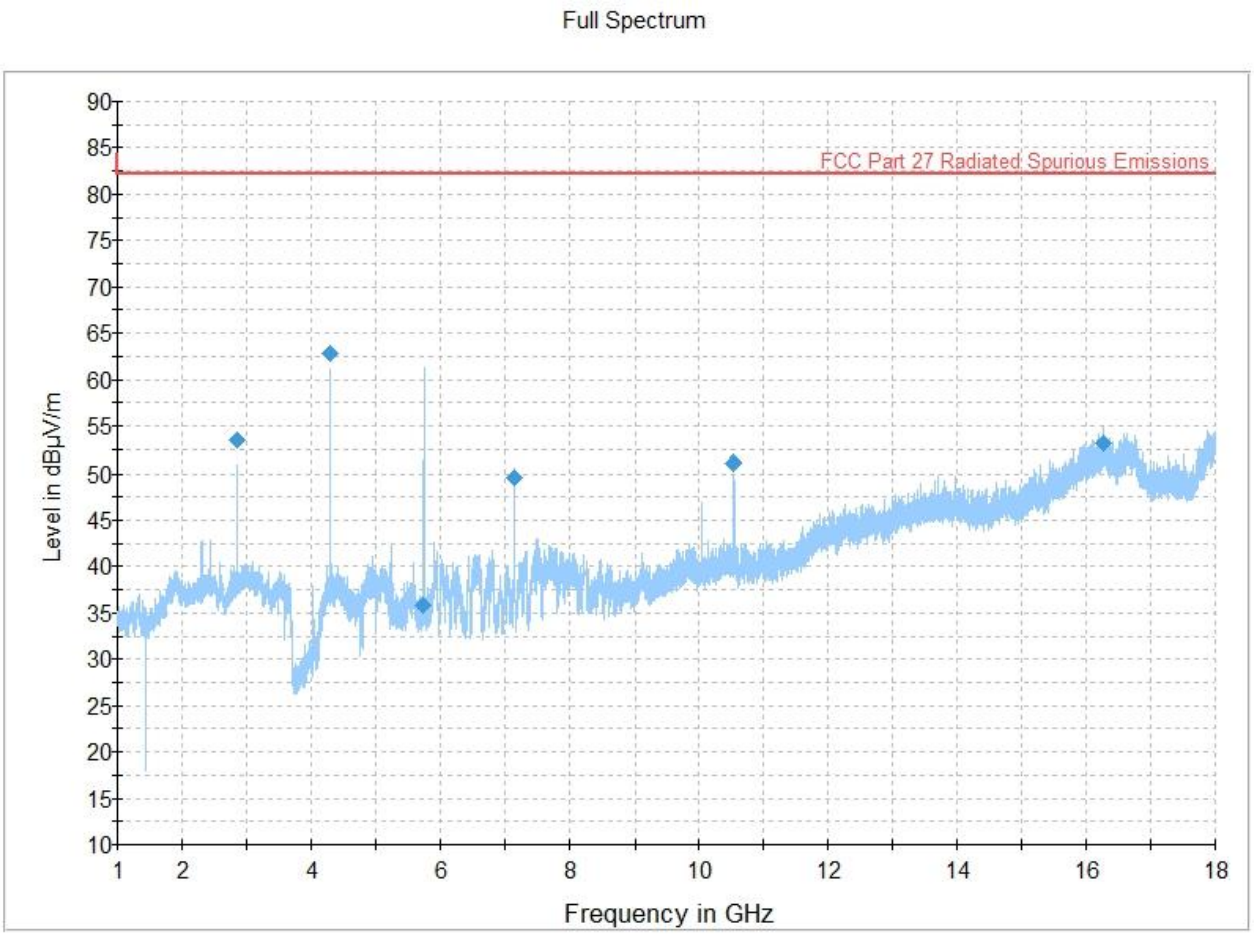

Figure 8.7-14: Radiated emissions spectral plot (1 GHz - 18 GHz) - Low_1433MHz, 0.05MHz BW

Table 8.7-14: 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)
2866.033333	53.47	82.23	28.76	100.0	1000.000	179.0	V	264.0	-2.5
4298.966667	62.85	82.23	19.38	100.0	1000.000	191.0	V	223.0	0.6
5749.833333	35.80	82.23	46.43	100.0	1000.000	401.0	H	170.0	4.1
7165.166667	49.52	82.23	32.71	100.0	1000.000	190.0	V	234.0	5.9
10534.400000	51.05	82.23	31.18	100.0	1000.000	277.0	V	274.0	11.4
16260.233333	53.18	82.23	29.05	100.0	1000.000	382.0	H	0.0	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.

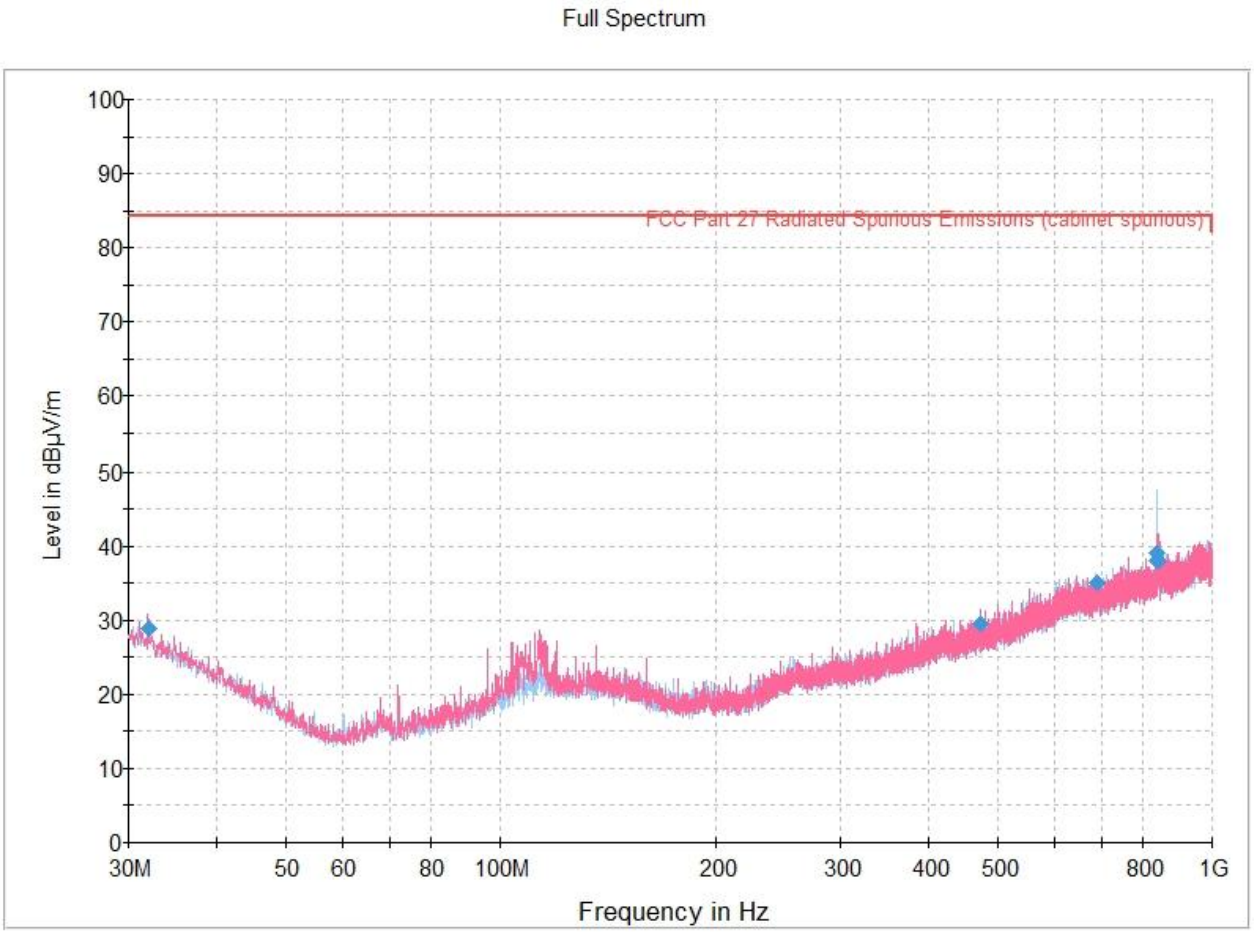

Figure 8.7-15: Radiated emissions spectral plot (30 MHz - 1 GHz) - Mid_1433.5MHz, 0.05MHz BW

Table 8.7-15: 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)
32.040000	28.94	84.38	55.44	5000.0	100.000	168.0	V	327.0	25.5
471.252500	29.55	84.38	54.83	5000.0	100.000	110.0	V	110.0	26.8
687.633333	34.94	84.38	49.44	5000.0	100.000	160.0	H	173.0	30.5
835.605000	39.13	84.38	45.25	5000.0	100.000	397.0	V	48.0	32.8
835.777500	37.91	84.38	46.47	5000.0	100.000	274.0	H	354.0	32.8
838.556667	37.98	84.38	46.40	5000.0	100.000	215.0	V	24.0	32.9

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.

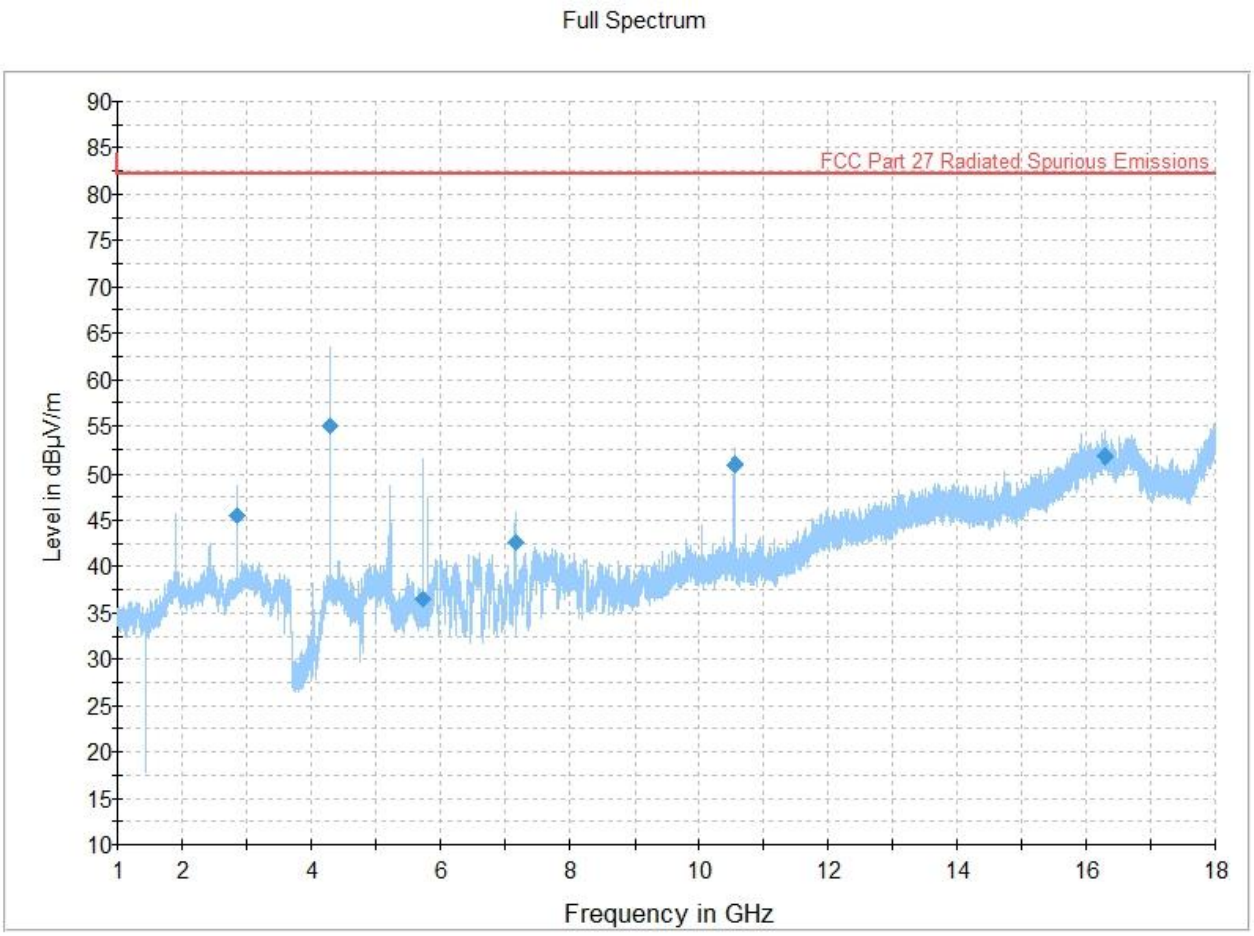

Figure 8.7-16: Radiated emissions spectral plot (1 GHz - 18 GHz) - Mid_1433.5MHz, 0.05MHz BW

Table 8.7-16: 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)
2867.000000	45.49	82.23	36.74	100.0	1000.000	180.0	V	298.0	-2.5
4300.666667	54.95	82.23	27.28	100.0	1000.000	182.0	V	223.0	0.6
5737.933333	36.54	82.23	45.69	100.0	1000.000	117.0	V	135.0	4.1
7167.600000	42.57	82.23	39.66	100.0	1000.000	324.0	H	153.0	5.9
10542.666667	50.97	82.23	31.26	100.0	1000.000	195.0	V	59.0	11.5
16299.366667	51.82	82.23	30.41	100.0	1000.000	152.0	H	190.0	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.

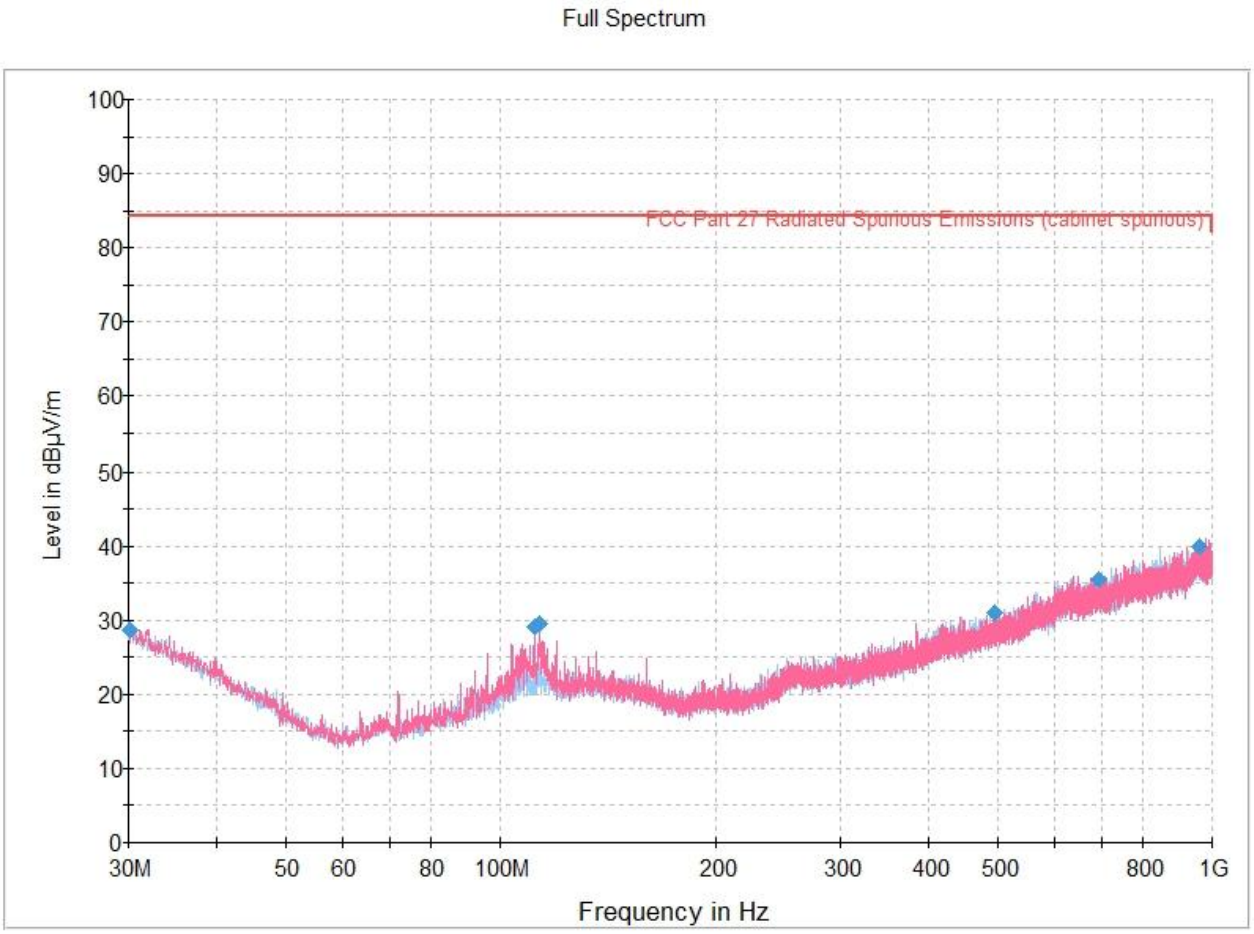

Figure 8.7-17: Radiated emissions spectral plot (30 MHz - 1 GHz) - High_1434MHz, 0.05MHz BW

Table 8.7-17: 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)
30.120000	28.56	84.38	55.82	5000.0	100.000	144.0	V	0.0	26.5
112.025000	29.00	84.38	55.38	5000.0	100.000	359.0	V	34.0	19.0
113.682500	29.42	84.38	54.96	5000.0	100.000	369.0	V	220.0	19.2
495.335000	31.03	84.38	53.36	5000.0	100.000	364.0	V	115.0	27.2
692.199167	35.42	84.38	48.96	5000.0	100.000	99.0	H	134.0	30.5
957.951667	39.90	84.38	44.48	5000.0	100.000	145.0	H	85.0	34.8

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.

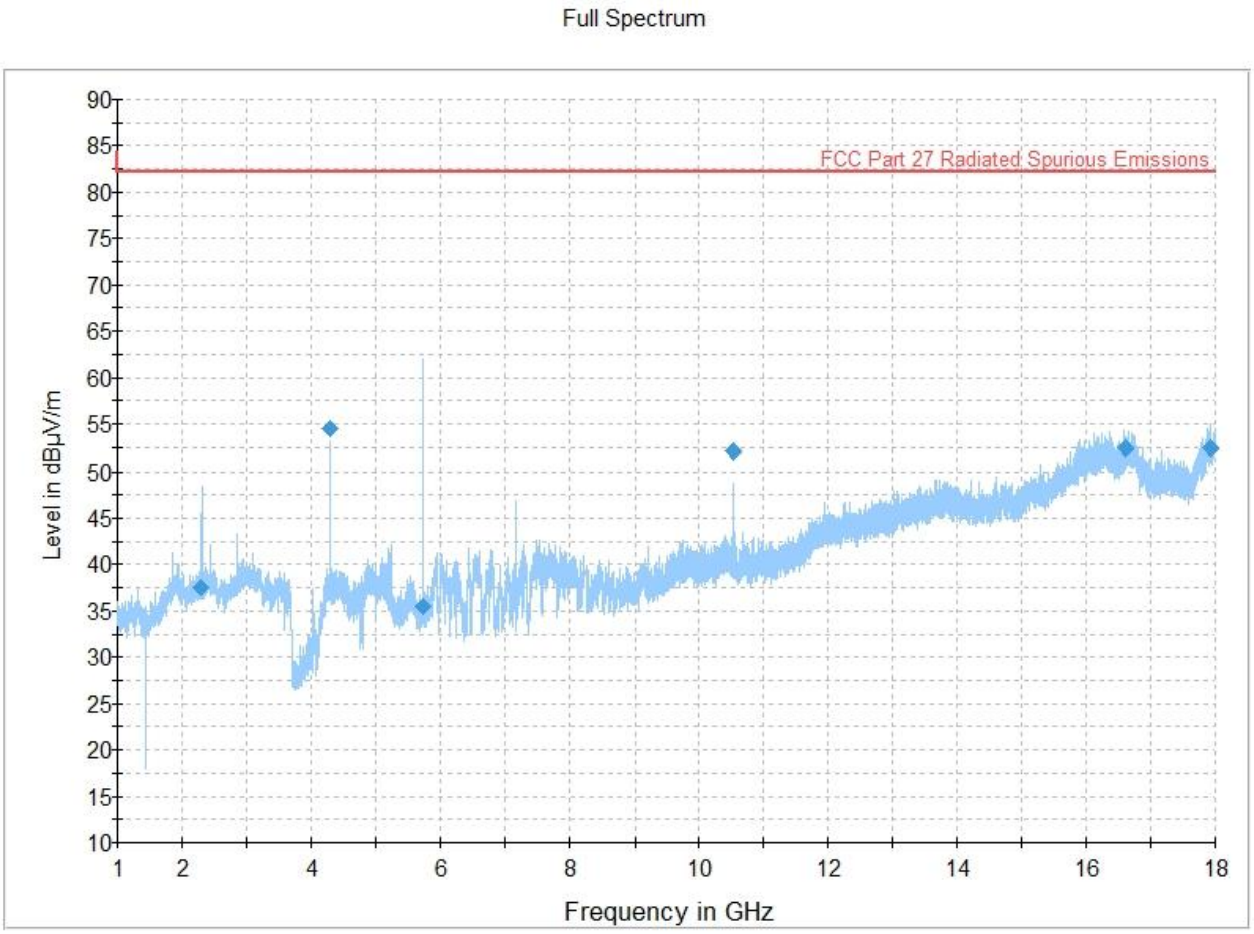

Figure 8.7-18: Radiated emissions spectral plot (1 GHz - 18 GHz) - High_1434MHz, 0.05MHz BW

Table 8.7-18: 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)
2302.700000	37.45	82.23	44.78	100.0	1000.000	312.0	H	174.0	-4.5
4302.200000	54.54	82.23	27.69	100.0	1000.000	177.0	V	222.0	0.6
5747.866667	35.55	82.23	46.68	100.0	1000.000	225.0	V	126.0	4.1
10534.400000	52.17	82.23	30.06	100.0	1000.000	217.0	V	34.0	11.4
16599.200000	52.42	82.23	29.81	100.0	1000.000	343.0	H	349.0	23.1
17926.333333	52.46	82.23	29.77	100.0	1000.000	300.0	H	59.0	23.5

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.

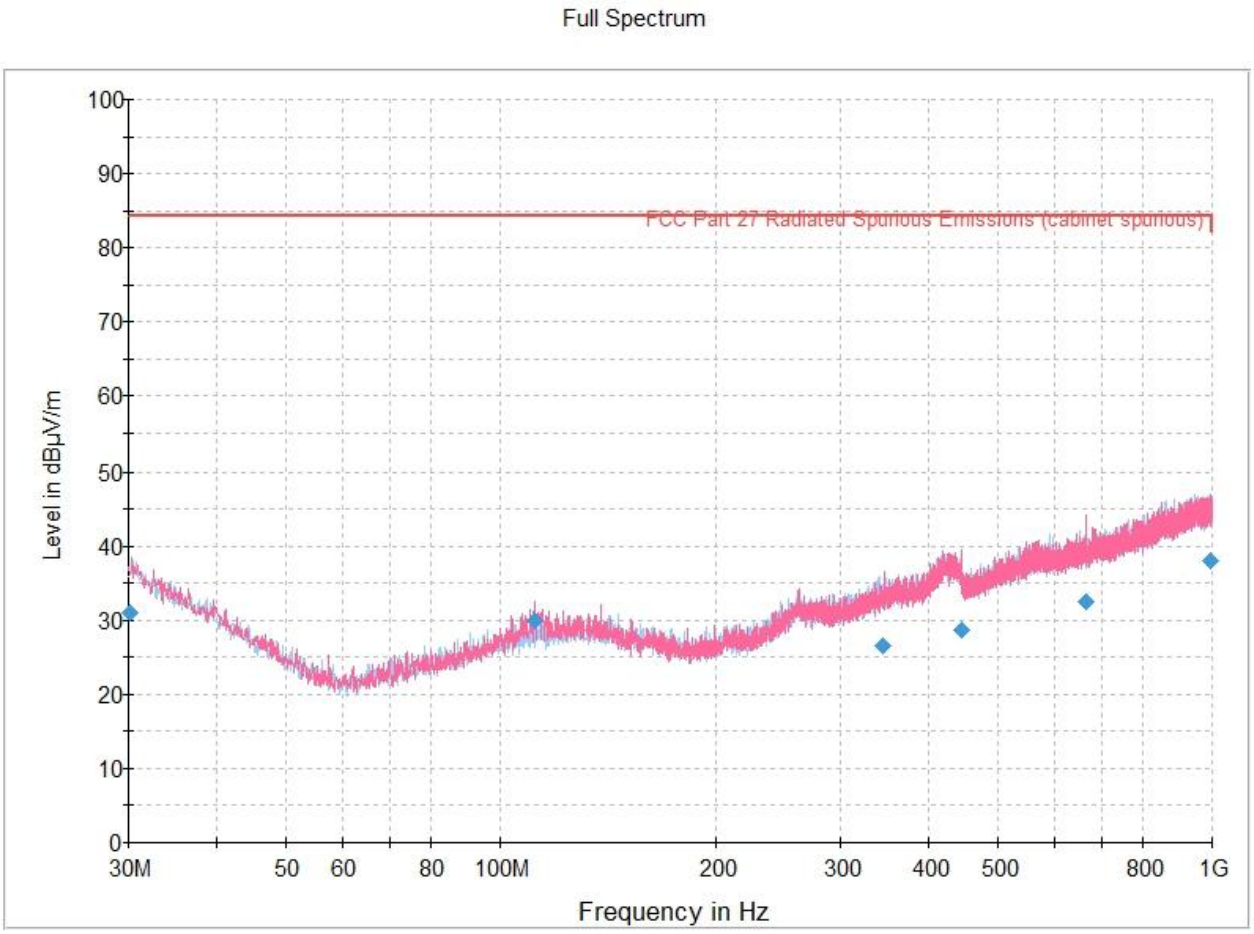

Figure 8.7-19: Radiated emissions spectral plot (30 MHz - 1 GHz) - Mid_1433.5MHz, 1.2MHz BW

Table 8.7-19: 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)
30.200000	30.98	84.38	53.40	5000.0	100.000	228.0	V	217.0	26.5
112.025000	29.92	84.38	54.46	5000.0	100.000	399.0	V	192.0	19.2
344.917500	26.51	84.38	57.87	5000.0	100.000	291.0	V	0.0	23.8
443.364167	28.75	84.38	55.63	5000.0	100.000	116.0	V	0.0	26.3
666.335000	32.57	84.38	51.81	5000.0	100.000	234.0	V	68.0	30.3
994.398333	38.07	84.38	46.31	5000.0	100.000	227.0	V	343.0	35.2

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.

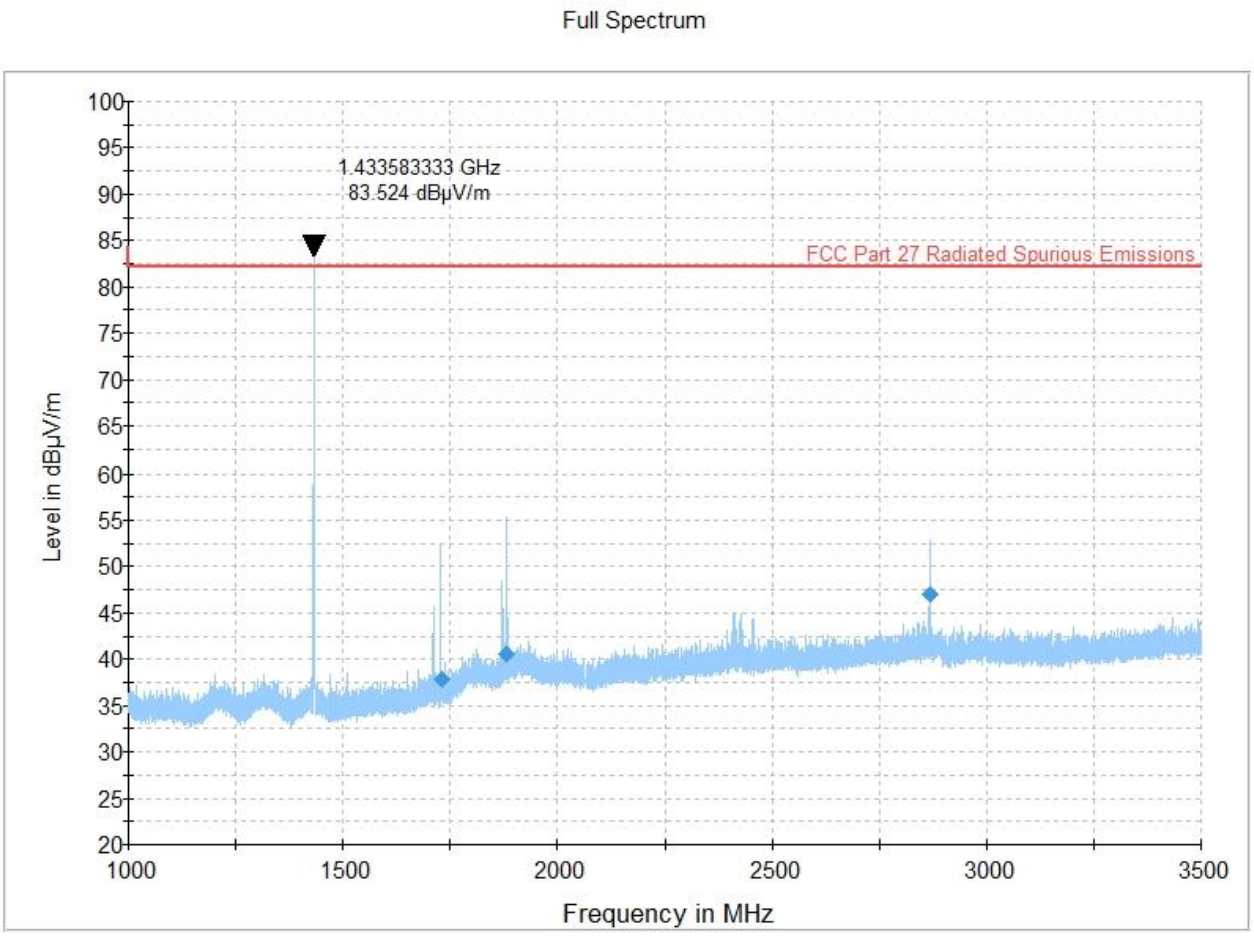

Figure 8.7-20: Radiated emissions spectral plot (1 GHz - 3.5 GHz) - Mid_1433.5MHz, 1.2MHz BW

Table 8.7-20: 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)
1733.450000	37.85	82.23	44.38	5000.0	1000.000	183.0	H	168.0	-7.4
1883.583333	40.57	82.23	41.66	5000.0	1000.000	156.0	H	245.0	-5.0
2866.850000	47.01	82.23	35.22	5000.0	1000.000	166.0	H	182.0	-1.9

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.
The marked emission at ~ 1433 MHz corresponds to the fundamental transmitter emission and is not evaluated against the limits.

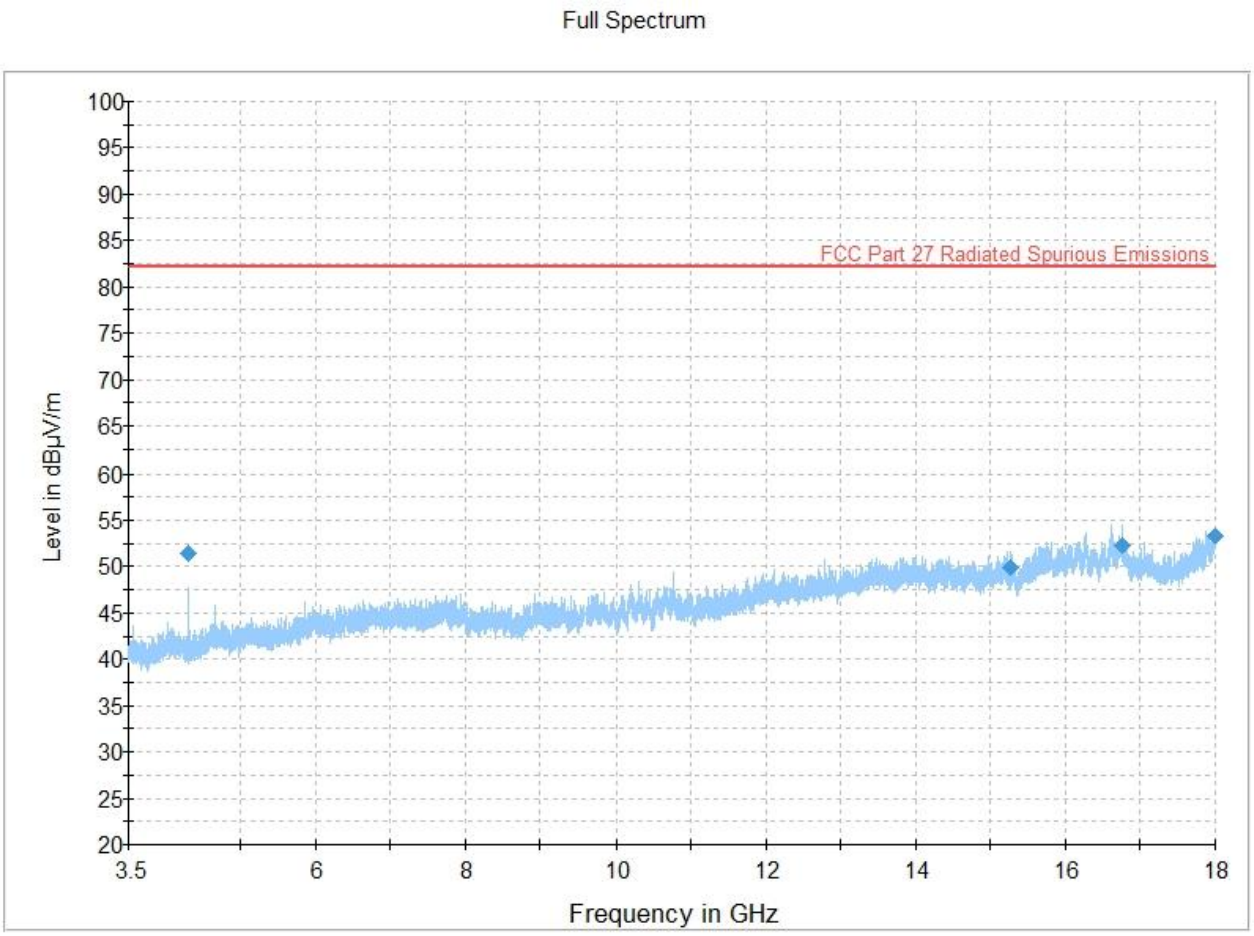

Figure 8.7-21: Radiated emissions spectral plot (3.5 GHz - 18 GHz) - Mid_1433.5MHz, 1.2MHz BW

Table 8.7-21: 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)
4300.722222	51.39	82.23	30.84	5000.0	1000.000	112.0	V	171.0	1.4
15258.738889	49.91	82.23	32.32	5000.0	1000.000	156.0	V	245.0	20.1
16755.850000	52.34	82.23	29.89	5000.0	1000.000	103.0	V	357.0	24.1
17999.200000	53.30	82.23	28.93	5000.0	1000.000	241.0	V	0.0	25.5

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.

8.7.5 Test data – 1695-1710 MHz

Radiated spurious emissions:

Figure 8.7-22: Radiated emissions spectral plot (30 MHz - 1 GHz) - Low_1696MHz, 0.05MHz BW

Table 8.7-22: 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)
68.428333	18.48	84.38	65.90	5000.0	100.000	197.0	V	47.0	13.5
69.392500	16.61	84.38	67.77	5000.0	100.000	378.0	H	160.0	13.6
75.314167	16.63	84.38	67.75	5000.0	100.000	339.0	H	73.0	14.5
92.469167	21.72	84.38	62.66	5000.0	100.000	148.0	V	21.0	16.7
904.663333	38.30	84.38	46.08	5000.0	100.000	194.0	H	111.0	33.4
908.970000	39.77	84.38	44.61	5000.0	100.000	216.0	H	166.0	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.

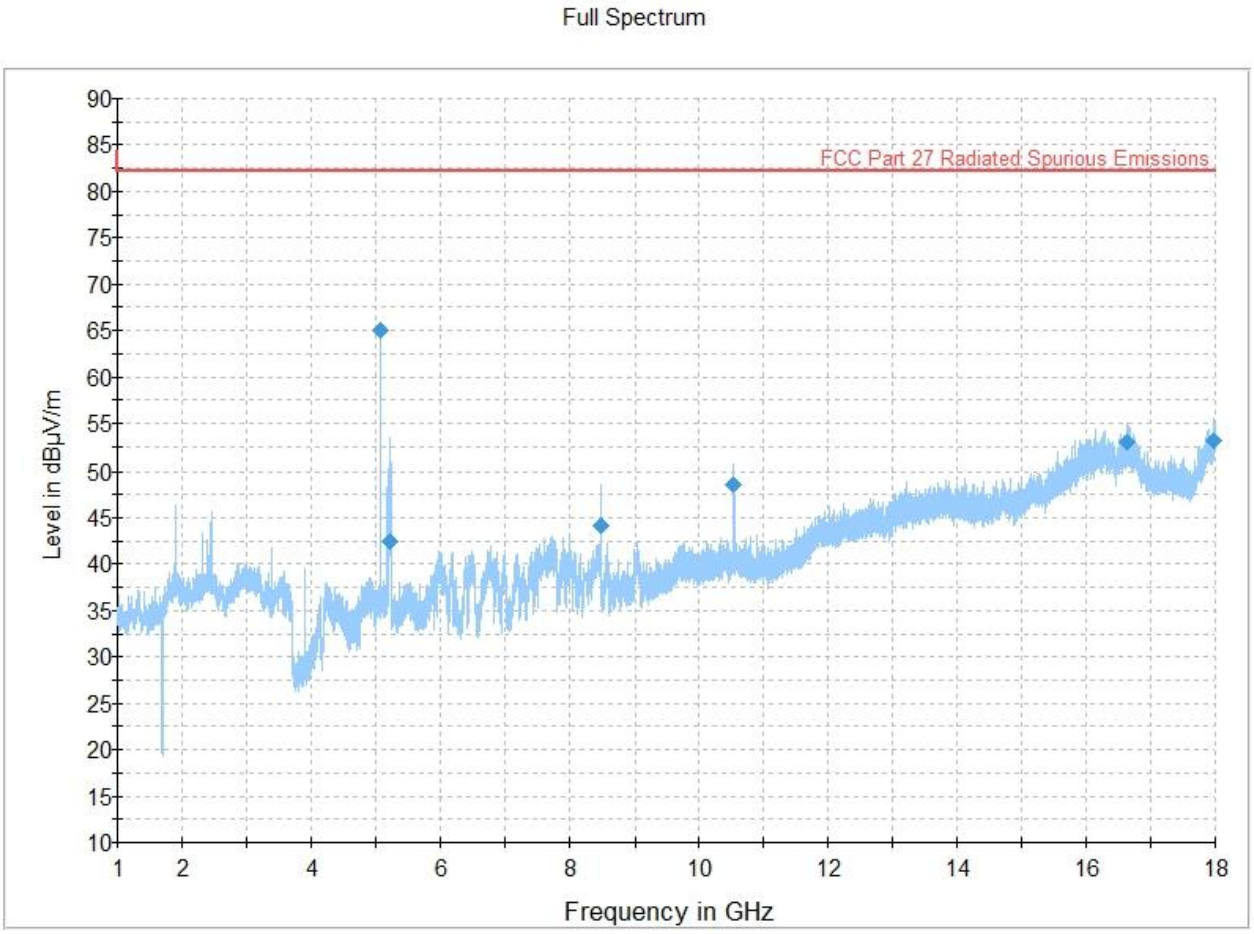

Figure 8.7-23: Radiated emissions spectral plot (1 GHz - 18 GHz) - Low_1696MHz, 0.05MHz BW

Table 8.7-23: 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)

5087.933333	65.07	82.23	17.16	100.0	1000.000	216.0	H	122.0	2.2
5216.233333	42.51	82.23	39.72	100.0	1000.000	401.0	H	34.0	3.0
8480.000000	44.15	82.23	38.08	100.0	1000.000	201.0	V	275.0	7.6
10534.000000	48.50	82.23	33.73	100.0	1000.000	143.0	H	26.0	11.4
16640.900000	52.98	82.23	29.25	100.0	1000.000	338.0	V	160.0	23.6
17971.466667	53.17	82.23	29.06	100.0	1000.000	140.0	V	182.0	24.1

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.

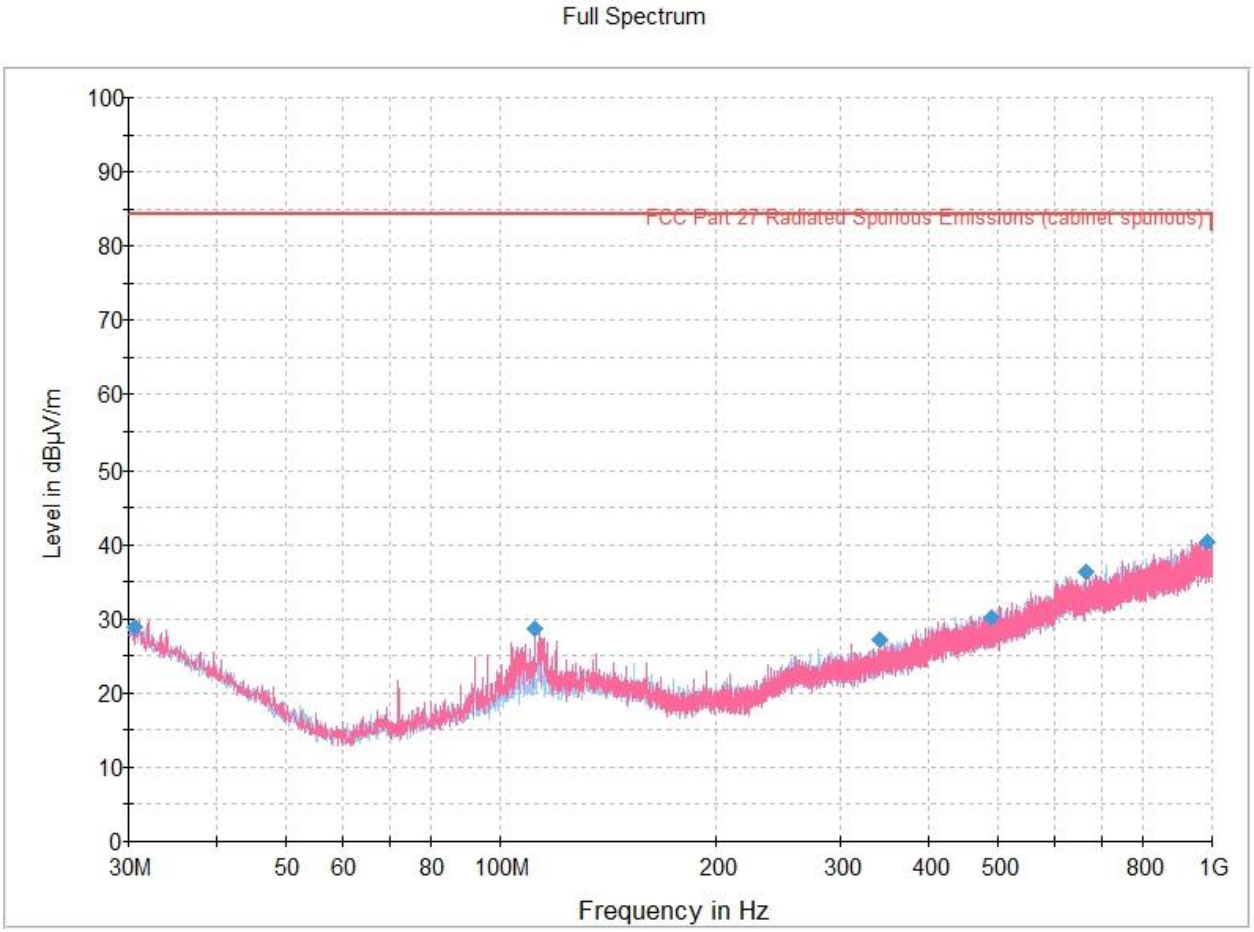

Figure 8.7-24: Radiated emissions spectral plot (30 MHz - 1 GHz) - Mid_1705MHz, 0.05MHz BW

Table 8.7-24: 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)
30.671667	28.96	84.38	55.42	5000.0	100.000	382.0	V	316.0	26.2
112.065000	28.57	84.38	55.81	5000.0	100.000	373.0	V	122.0	19.0
341.307500	27.26	84.38	57.12	5000.0	100.000	234.0	H	150.0	23.5
488.841667	30.06	84.38	54.32	5000.0	100.000	401.0	H	317.0	27.0
665.775000	36.40	84.38	47.98	5000.0	100.000	253.0	V	36.0	29.9
984.779167	40.35	84.38	44.03	5000.0	100.000	124.0	H	272.0	34.6

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.

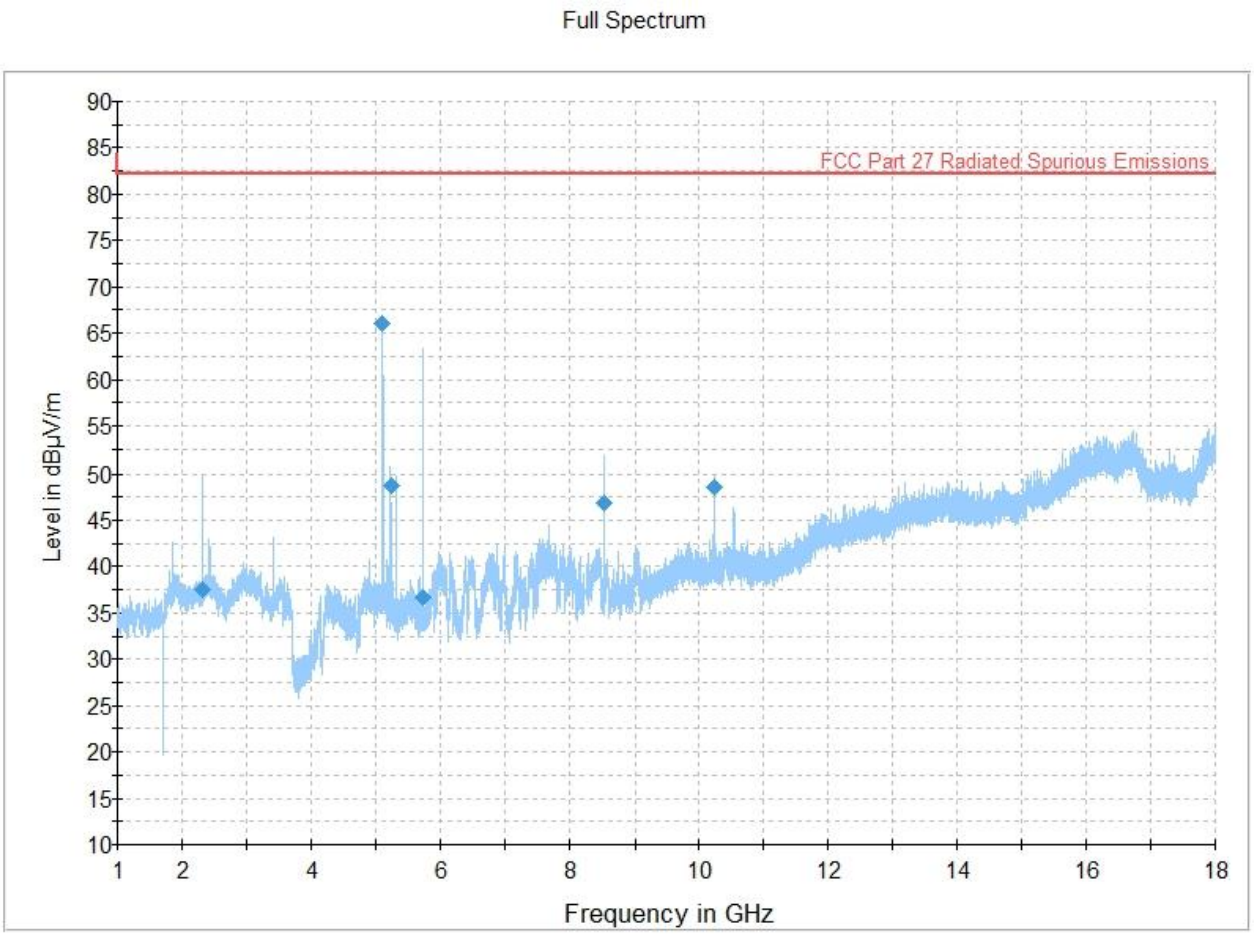

Figure 8.7-25: Radiated emissions spectral plot (1 GHz - 18 GHz) - Mid_1705MHz, 0.05MHz BW

Table 8.7-25: 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)
2312.533333	37.59	82.23	44.64	100.0	1000.000	151.0	H	35.0	-4.4
5114.966667	66.11	82.23	16.12	100.0	1000.000	191.0	V	236.0	2.5
5238.066667	48.70	82.23	33.53	100.0	1000.000	255.0	H	34.0	3.1
5740.066667	36.66	82.23	45.57	100.0	1000.000	401.0	H	0.0	4.1
8525.166667	46.83	82.23	35.40	100.0	1000.000	196.0	V	260.0	7.7
10230.266667	48.64	82.23	33.59	100.0	1000.000	128.0	V	110.0	11.0

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.

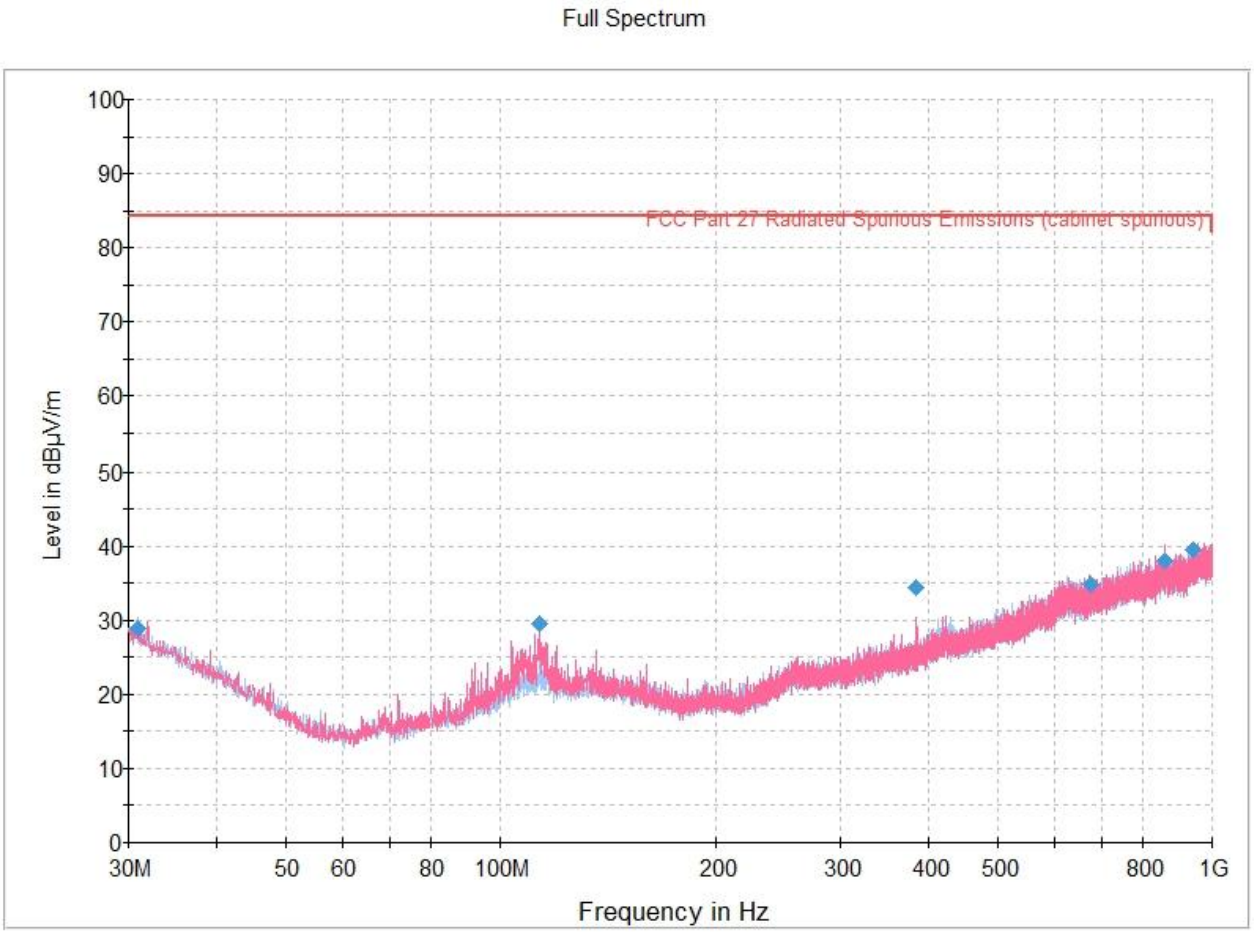

Figure 8.7-26: Radiated emissions spectral plot (30 MHz - 1 GHz) - High_1709MHz, 0.05MHz BW

Table 8.7-26: 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)
30.860000	28.90	84.38	55.48	5000.0	100.000	123.0	H	38.0	26.2
113.642500	29.50	84.38	54.88	5000.0	100.000	369.0	V	199.0	19.2
383.989167	34.43	84.38	49.95	5000.0	100.000	127.0	V	228.0	24.6
673.410833	34.82	84.38	49.56	5000.0	100.000	125.0	V	175.0	30.1
856.589167	37.98	84.38	46.40	5000.0	100.000	362.0	V	325.0	33.3
941.782500	39.49	84.38	44.89	5000.0	100.000	270.0	H	162.0	34.5

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.

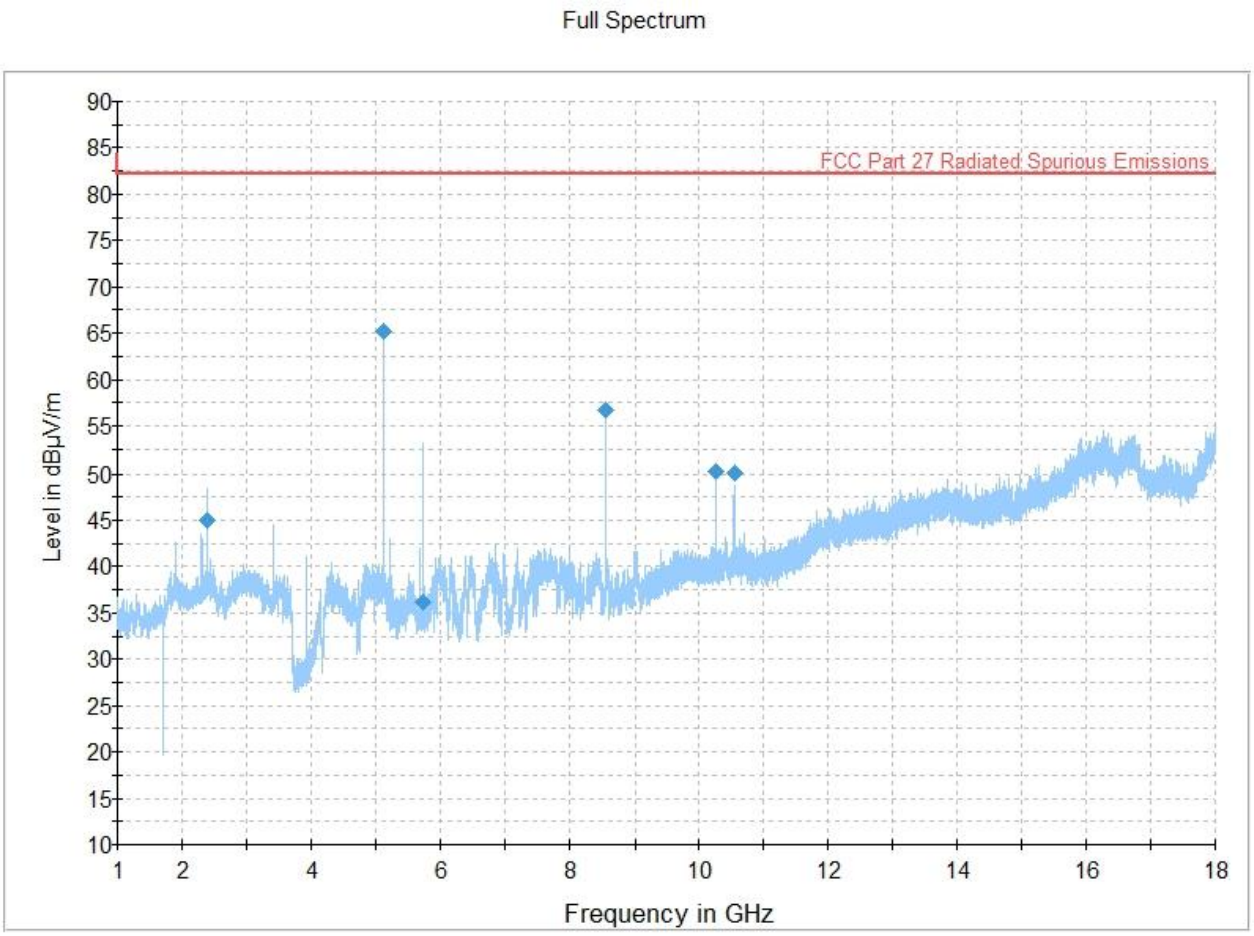

Figure 8.7-27: Radiated emissions spectral plot (1 GHz - 18 GHz) - High_1709MHz, 0.05MHz BW

Table 8.7-27: 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)
2401.933333	44.96	82.23	37.27	100.0	1000.000	110.0	H	160.0	-4.0
5126.866667	65.18	82.23	17.05	100.0	1000.000	180.0	H	300.0	2.6
5739.033333	36.12	82.23	46.11	100.0	1000.000	141.0	H	343.0	4.1
8545.000000	56.68	82.23	25.55	100.0	1000.000	226.0	V	172.0	7.7
10253.833333	50.28	82.23	31.95	100.0	1000.000	206.0	V	139.0	11.0
10542.266667	50.15	82.23	32.08	100.0	1000.000	326.0	V	46.0	11.5

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.

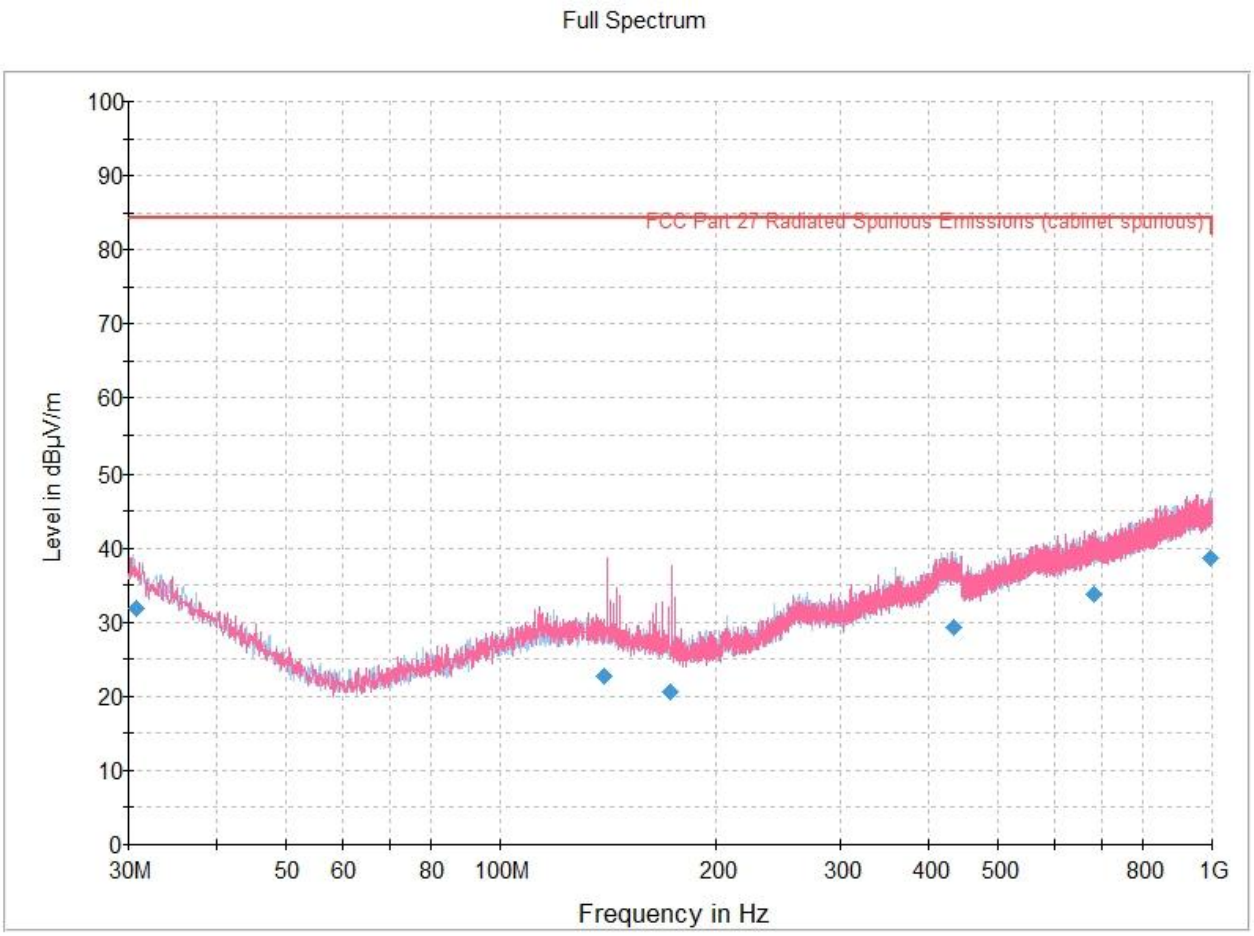

Figure 8.7-28: Radiated emissions spectral plot (30 MHz - 1 GHz) - Low_1697MHz, 1.2MHz BW

Table 8.7-28: 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)
30.700000	31.89	84.38	52.49	5000.0	100.000	313.0	H	200.0	26.3
139.724167	22.69	84.38	61.69	5000.0	100.000	385.0	V	240.0	19.8
173.022500	20.51	84.38	63.87	5000.0	100.000	170.0	V	51.0	17.9
431.871667	29.28	84.38	55.10	5000.0	100.000	399.0	V	128.0	26.3
680.290000	33.79	84.38	50.59	5000.0	100.000	296.0	H	86.0	30.9
995.139167	38.66	84.38	45.72	5000.0	100.000	169.0	H	0.0	35.2

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.

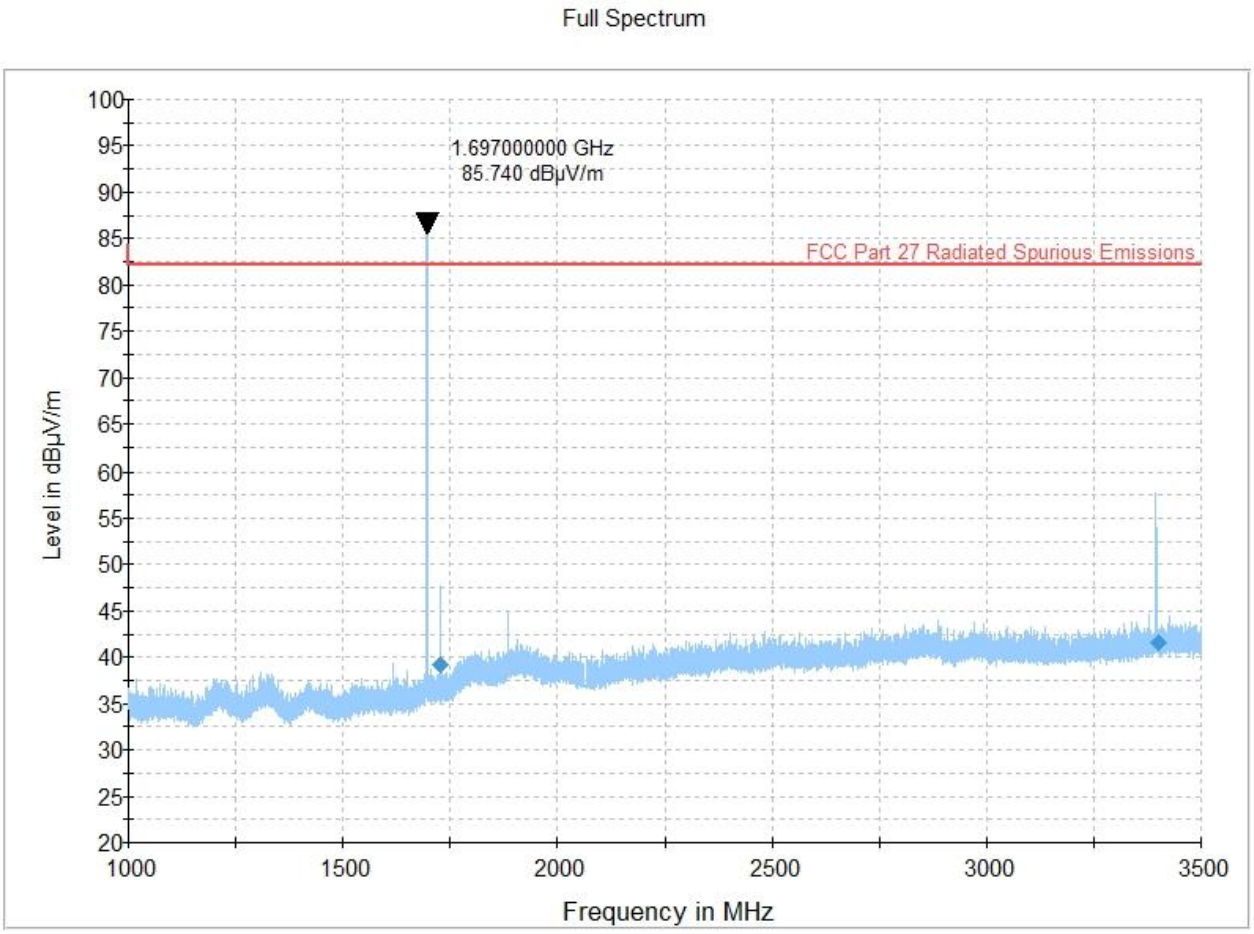

Figure 8.7-29: Radiated emissions spectral plot (1 GHz - 3.5 GHz) - Low_1697MHz, 1.2MHz BW

Table 8.7-29: 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)
1729.433333	39.28	82.23	42.95	5000.0	1000.000	247.0	H	0.0	-7.5
3401.933333	41.57	82.23	40.66	5000.0	1000.000	328.0	V	38.0	0.0

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.
The marked emission at ~ 1697 MHz corresponds to the fundamental transmitter emission and is not evaluated against the limits.

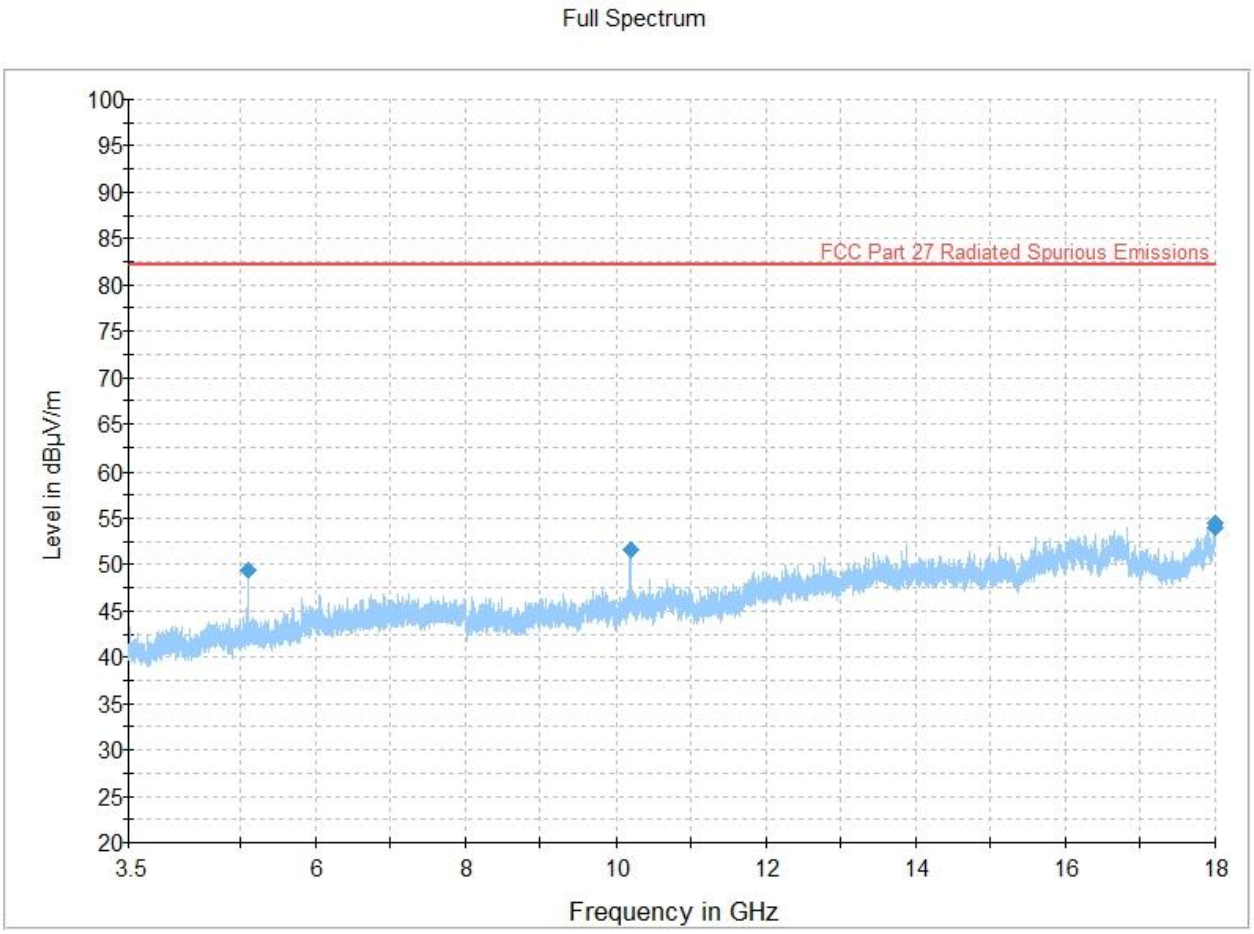

Figure 8.7-30: Radiated emissions spectral plot (3.5 GHz - 18 GHz) - Low_1697MHz, 1.2MHz BW

Table 8.7-30: 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)
5091.366667	49.46	82.23	32.77	5000.0	1000.000	212.0	H	225.0	3.1
10182.077778	51.67	82.23	30.56	5000.0	1000.000	110.0	V	287.0	12.3
17999.572222	54.02	82.23	28.21	5000.0	1000.000	250.0	V	77.0	25.5
18000.000000	54.45	82.23	27.78	5000.0	1000.000	106.0	V	250.0	25.5

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.

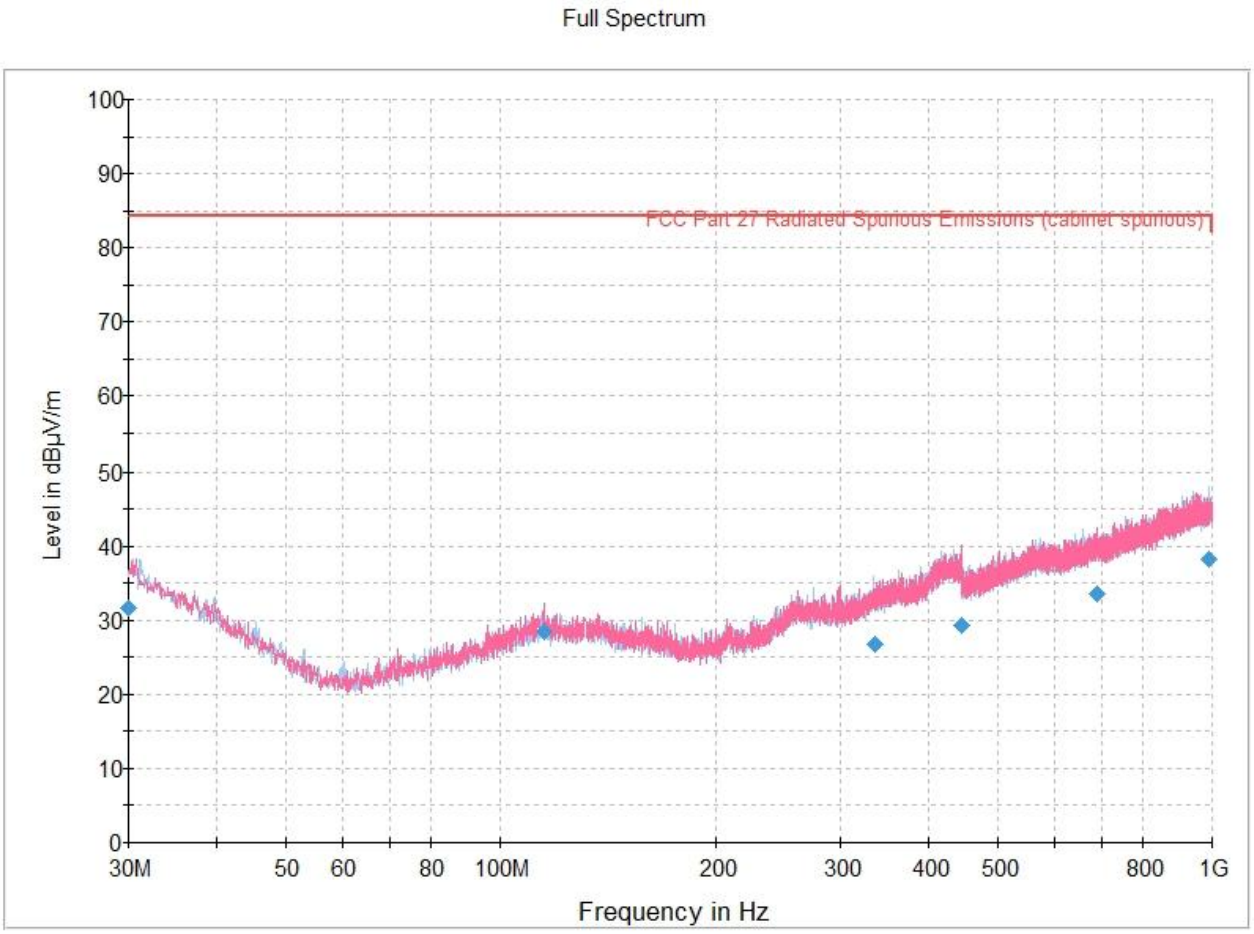

Figure 8.7-31: Radiated emissions spectral plot (30 MHz - 1 GHz) - Mid_1705MHz, 1.2MHz BW

Table 8.7-31: 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)
30.040000	31.70	84.38	52.68	5000.0	100.000	377.0	V	325.0	26.6
115.221667	28.40	84.38	55.98	5000.0	100.000	369.0	V	306.0	19.4
335.115833	26.70	84.38	57.68	5000.0	100.000	115.0	H	303.0	23.5
443.333333	29.25	84.38	55.13	5000.0	100.000	368.0	V	0.0	26.3
688.008333	33.65	84.38	50.73	5000.0	100.000	320.0	V	79.0	30.9
991.246667	38.24	84.38	46.14	5000.0	100.000	269.0	H	0.0	35.1

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.

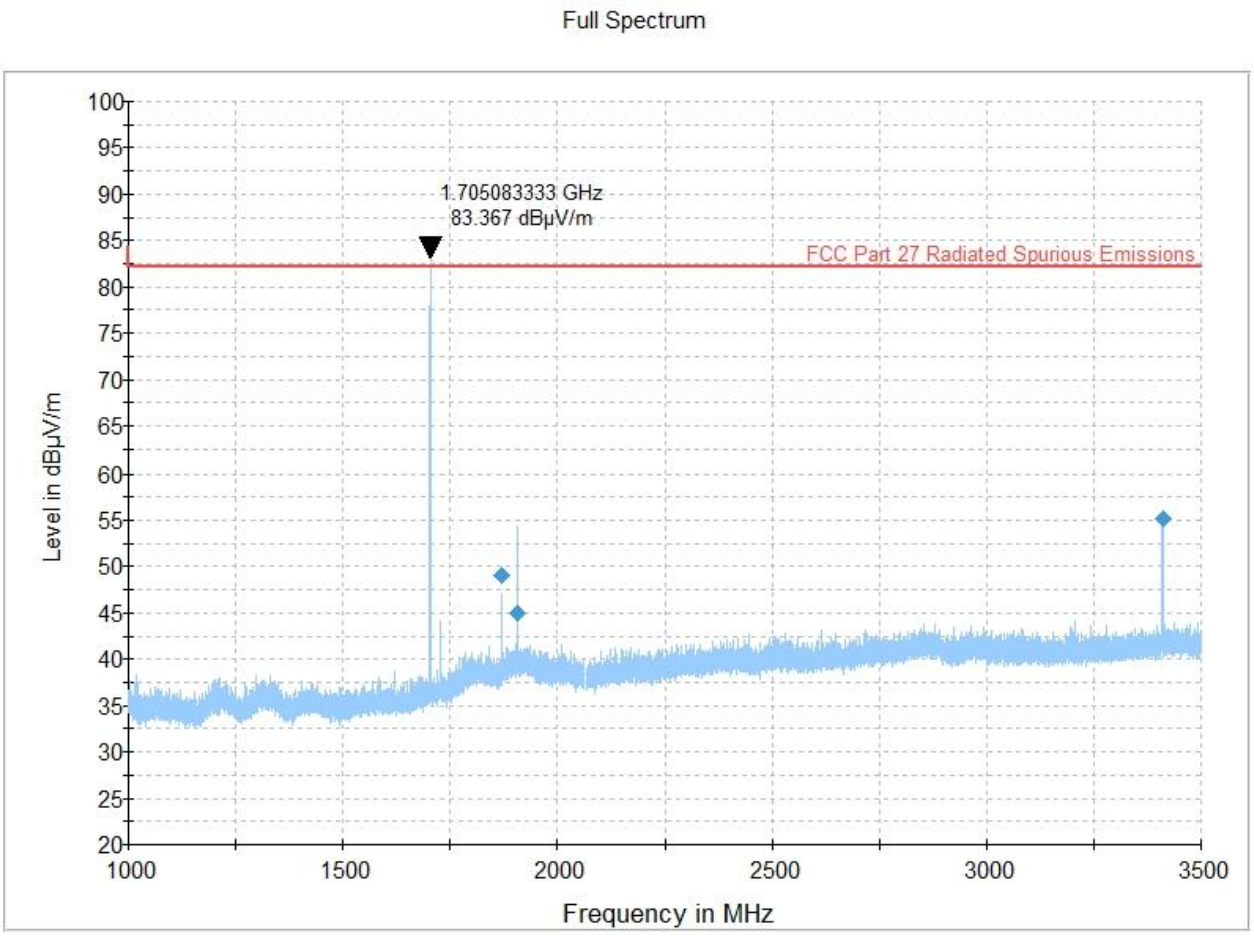

Figure 8.7-32: Radiated emissions spectral plot (1 GHz - 3.5 GHz) - Mid_1705MHz, 1.2MHz BW

Table 8.7-32: 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)
1871.016667	49.02	82.23	33.21	5000.0	1000.000	199.0	V	324.0	-5.1
1907.150000	45.05	82.23	37.18	5000.0	1000.000	296.0	H	212.0	-4.8
3410.000000	55.11	82.23	27.12	5000.0	1000.000	344.0	H	158.0	0.0

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.
The marked emission at ~ 1705 MHz corresponds to the fundamental transmitter emission and is not evaluated against the limits.

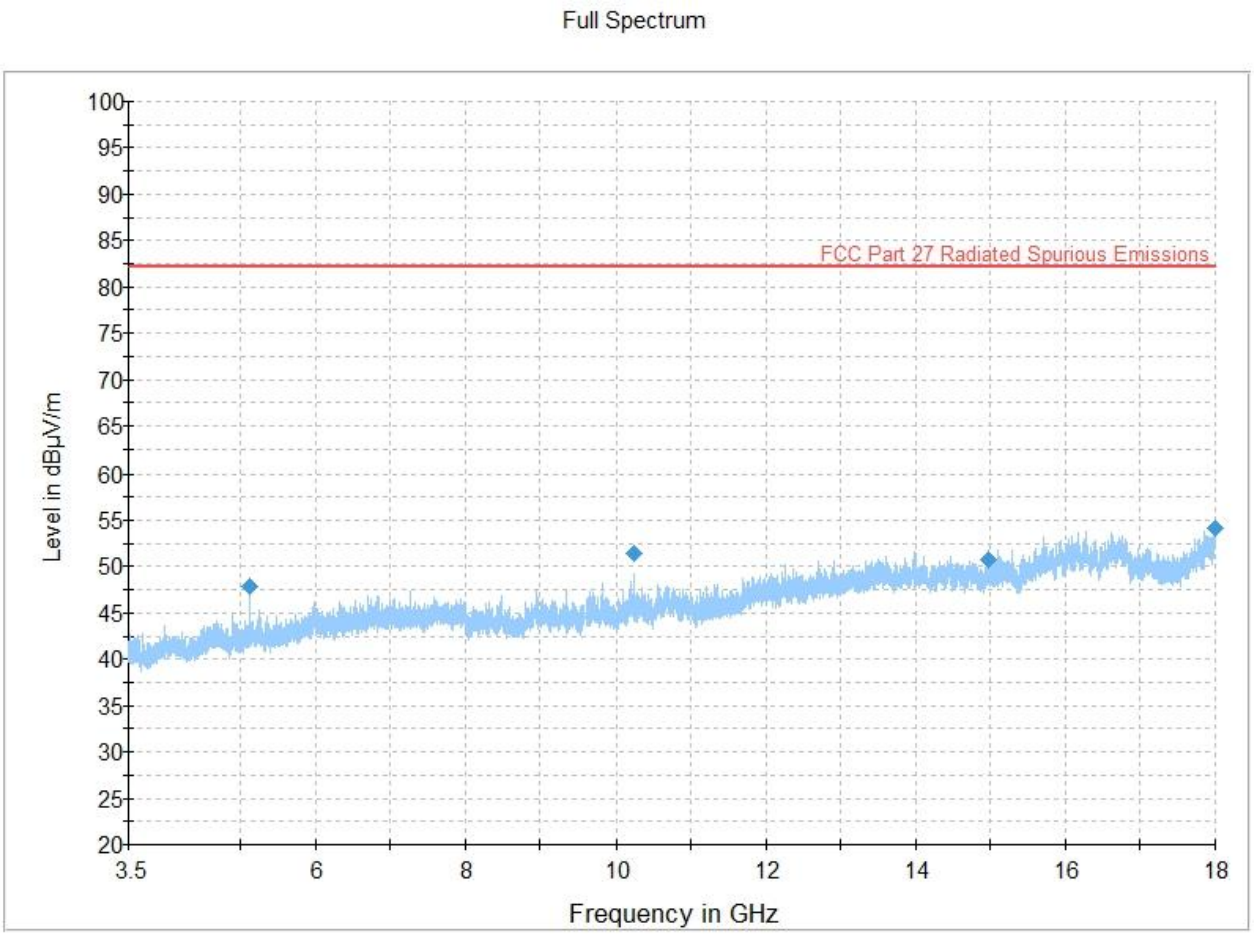

Figure 8.7-33: Radiated emissions spectral plot (3.5 GHz - 18 GHz) - Mid_1705MHz, 1.2MHz BW

Table 8.7-33: 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)
5113.938889	47.81	82.23	34.42	5000.0	1000.000	146.0	H	261.0	3.3
10231.216667	51.44	82.23	30.79	5000.0	1000.000	108.0	V	291.0	12.2
14967.038889	50.83	82.23	31.40	5000.0	1000.000	274.0	V	159.0	19.2
17997.972222	54.16	82.23	28.07	5000.0	1000.000	201.0	H	47.0	25.4

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.

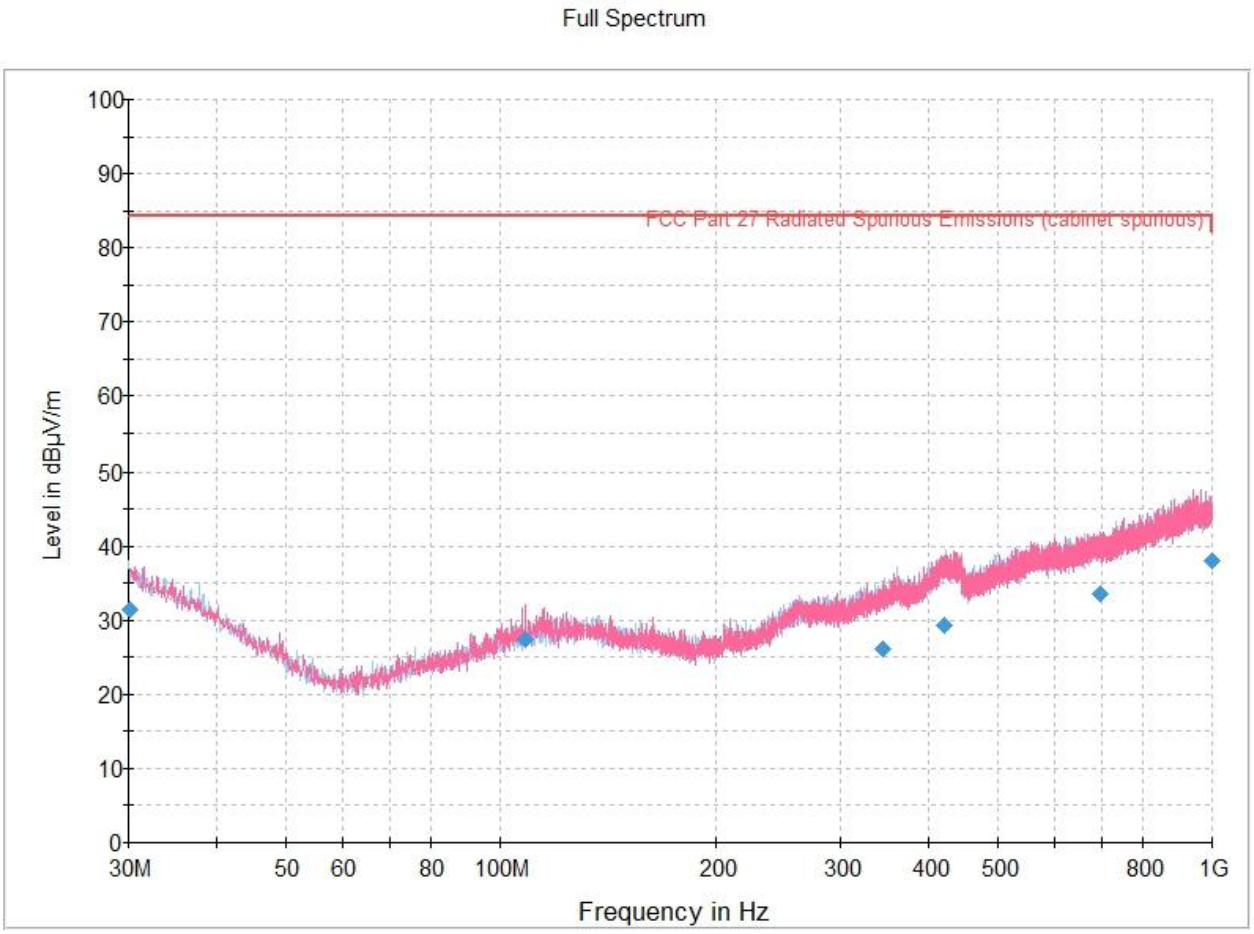

Figure 8.7-34: Radiated emissions spectral plot (30 MHz - 1 GHz) - High_1708MHz, 1.2MHz BW

Table 8.7-34: 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)
30.160000	31.33	84.38	53.05	5000.0	100.000	322.0	H	295.0	26.5
108.590000	27.38	84.38	57.00	5000.0	100.000	396.0	V	136.0	18.9
344.587500	26.13	84.38	58.25	5000.0	100.000	113.0	H	94.0	23.8
420.171667	29.20	84.38	55.18	5000.0	100.000	156.0	H	160.0	26.5
695.694167	33.58	84.38	50.80	5000.0	100.000	229.0	V	149.0	30.9
998.580000	37.94	84.38	46.44	5000.0	100.000	186.0	V	191.0	35.2

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.

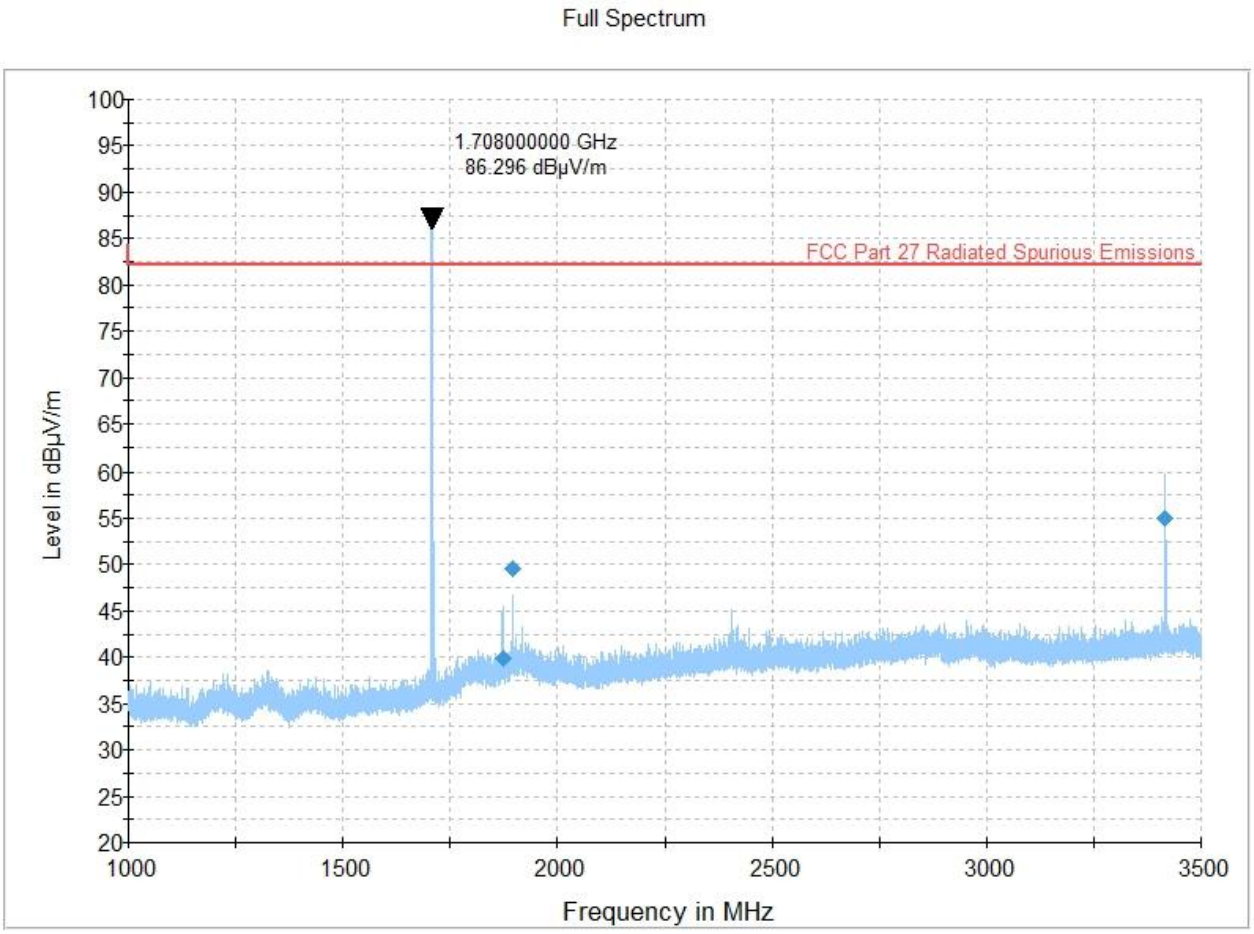

Figure 8.7-35: Radiated emissions spectral plot (1 GHz - 3.5 GHz) - High_1708MHz, 1.2MHz BW

Table 8.7-35: 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)
1875.616667	39.88	82.23	42.35	5000.0	1000.000	376.0	V	0.0	-5.1
1895.450000	49.64	82.23	32.59	5000.0	1000.000	304.0	H	85.0	-4.9
3416.283333	55.02	82.23	27.21	5000.0	1000.000	305.0	H	303.0	0.1

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.
The marked emission at ~ 1708 MHz corresponds to the fundamental transmitter emission and is not evaluated against the limits.

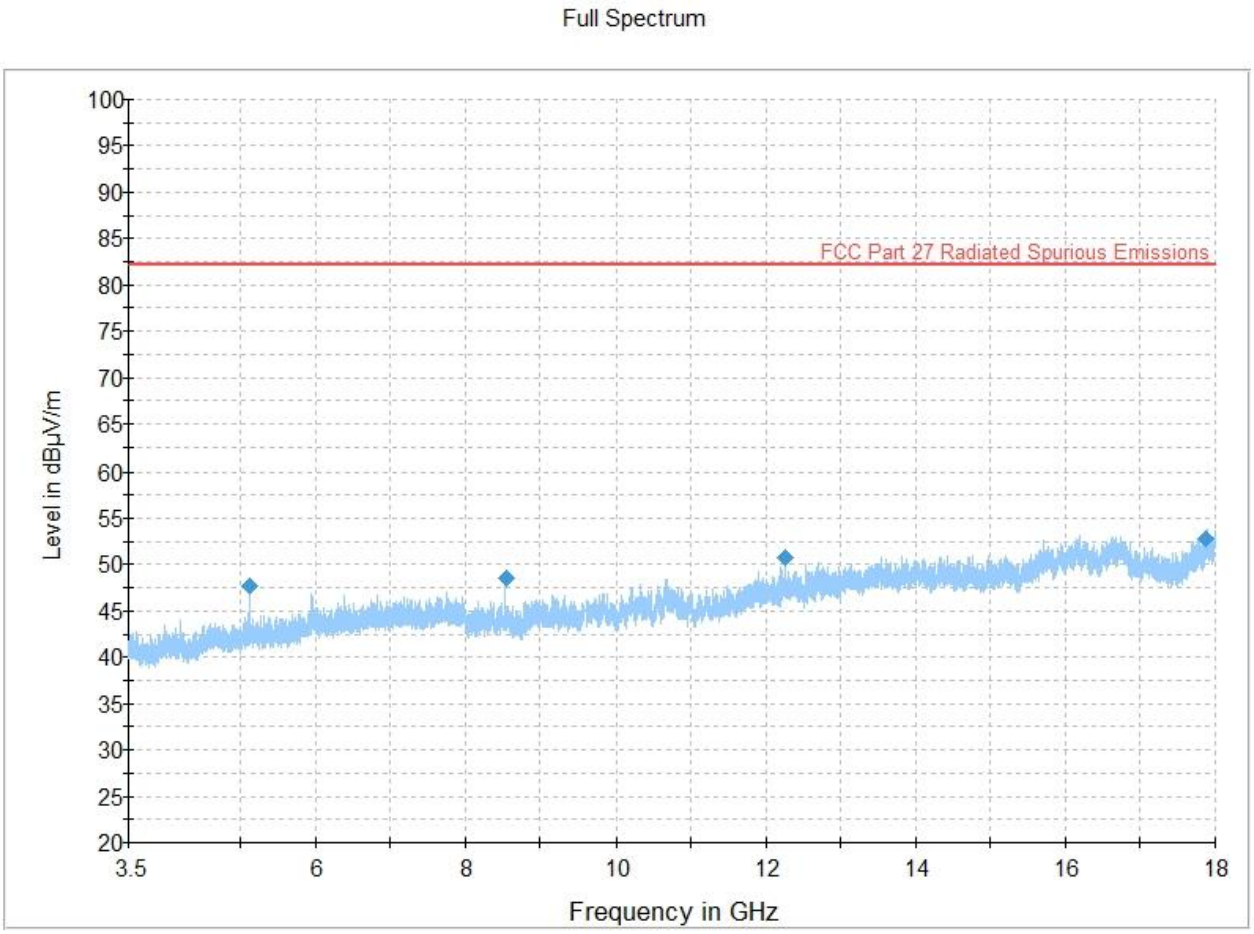

Figure 8.7-36: Radiated emissions spectral plot (3.5 GHz - 18 GHz) - High_1708MHz, 1.2MHz BW

Table 8.7-36: 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)
5124.000000	47.66	82.23	34.57	5000.0	1000.000	225.0	H	200.0	3.4
8540.744445	48.62	82.23	33.61	5000.0	1000.000	99.0	H	0.0	8.6
12257.983333	50.71	82.23	31.52	5000.0	1000.000	305.0	H	191.0	17.1
17879.222222	52.73	82.23	29.50	5000.0	1000.000	387.0	H	52.0	24.6

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.

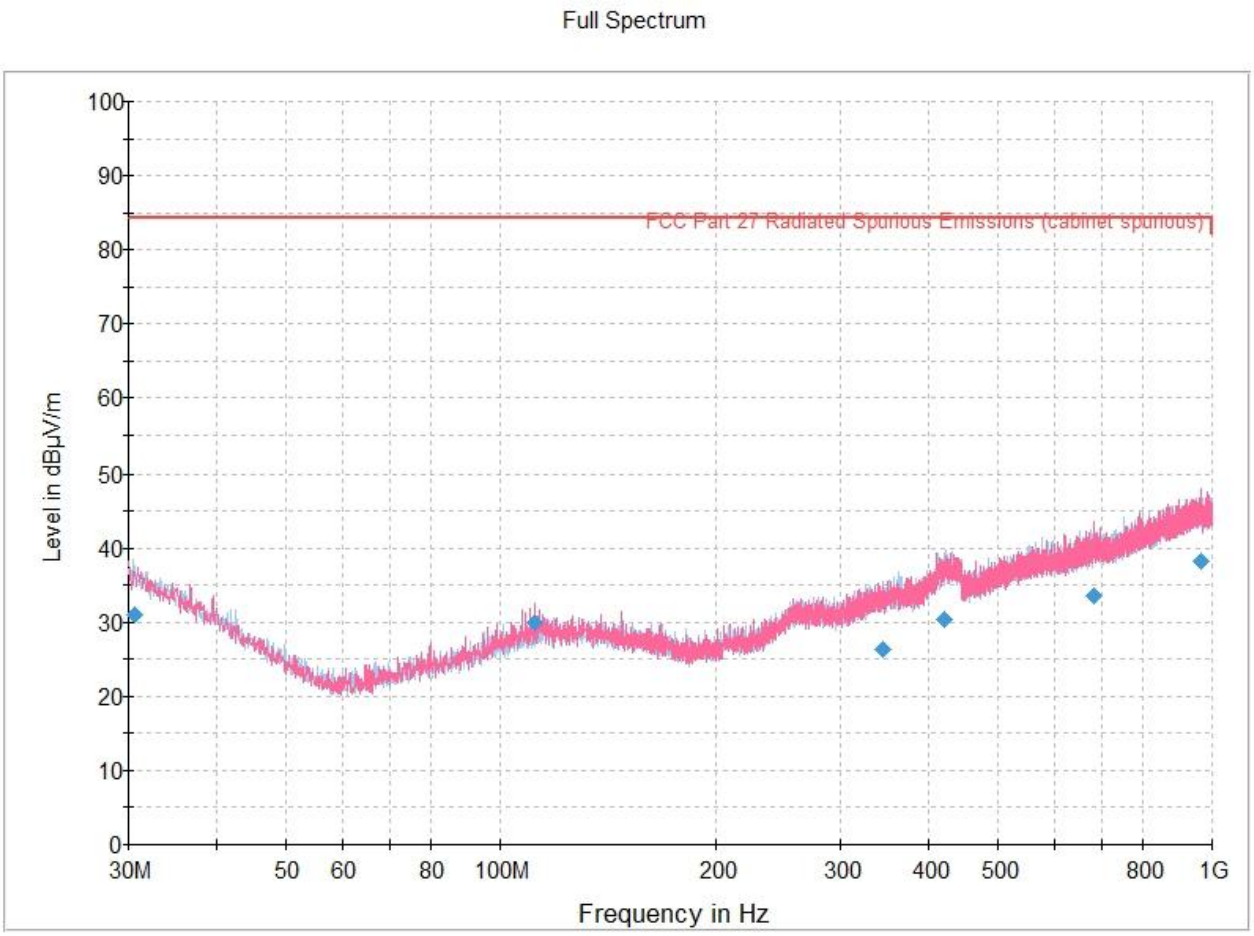

Figure 8.7-37: Radiated emissions spectral plot (30 MHz - 1 GHz) - Low_1699MHz, 3.6MHz BW

Table 8.7-37: 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)
30.680000	31.00	84.38	53.38	5000.0	100.000	374.0	H	129.0	26.3
112.025000	29.85	84.38	54.53	5000.0	100.000	359.0	V	16.0	19.2
344.380833	26.31	84.38	58.07	5000.0	100.000	373.0	H	68.0	23.8
419.971667	30.26	84.38	54.12	5000.0	100.000	212.0	H	10.0	26.5
681.995000	33.59	84.38	50.79	5000.0	100.000	304.0	V	150.0	31.0
965.824167	38.29	84.38	46.09	5000.0	100.000	350.0	V	45.0	35.1

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.

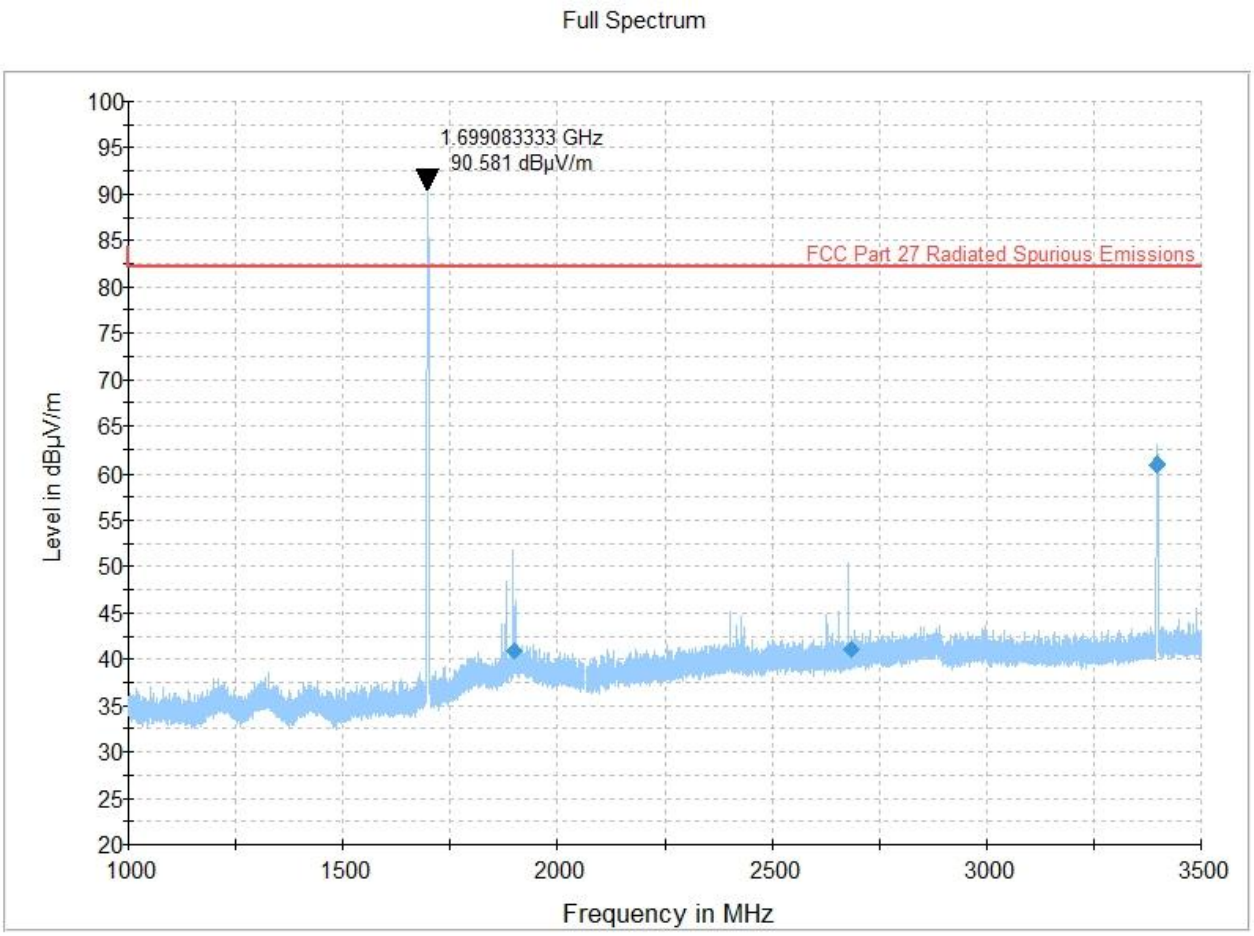

Figure 8.7-38: Radiated emissions spectral plot (1 GHz - 3.5 GHz) - Low_1699MHz, 3.6MHz BW

Table 8.7-38: 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)
1902.566667	40.90	82.23	41.33	5000.0	1000.000	351.0	V	306.0	-4.9
2682.533333	41.06	82.23	41.17	5000.0	1000.000	205.0	H	150.0	-2.5
3396.083333	60.92	82.23	21.31	5000.0	1000.000	377.0	H	10.0	0.0

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.
The marked emission at ~ 1699 MHz corresponds to the fundamental transmitter emission and is not evaluated against the limits.

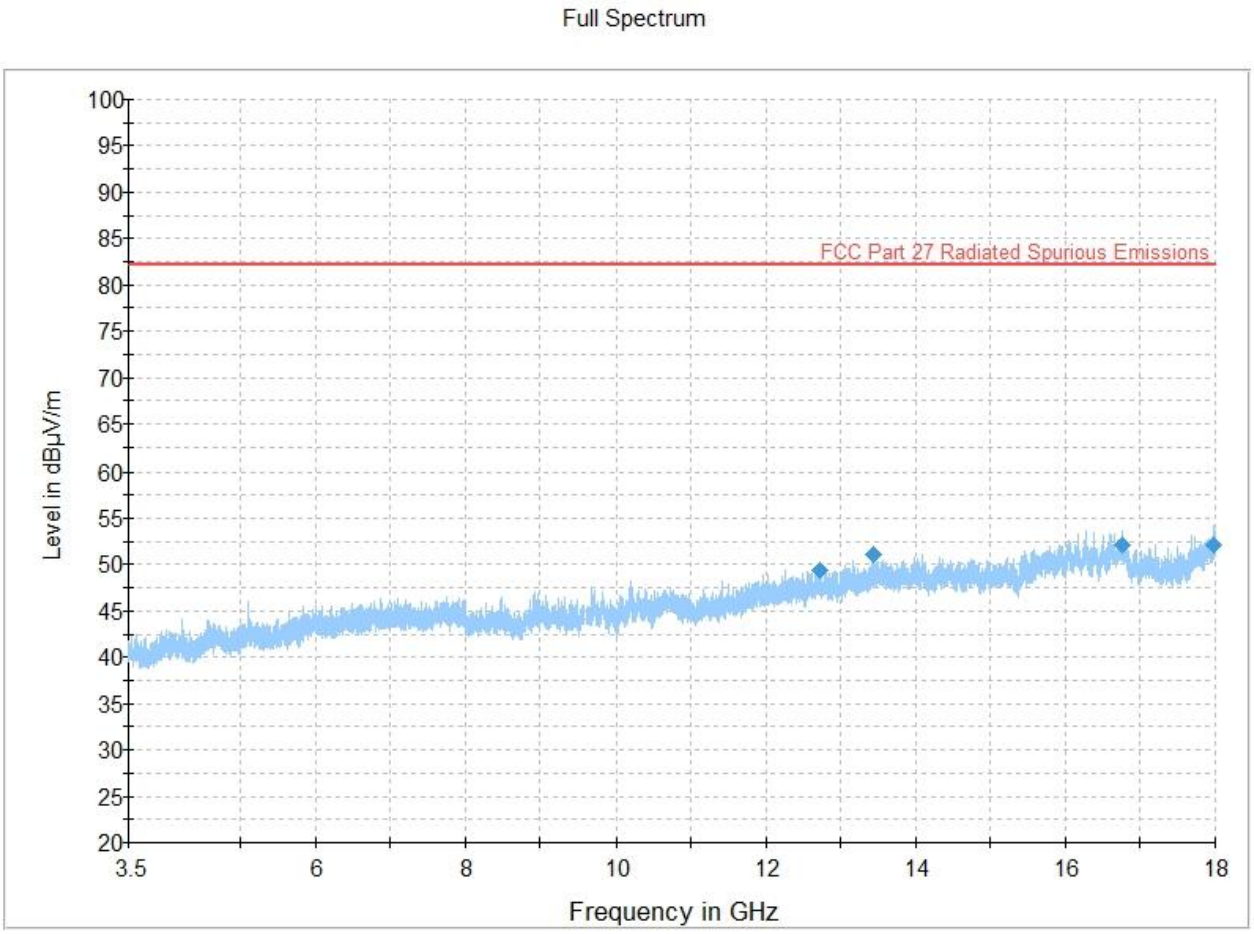

Figure 8.7-39: Radiated emissions spectral plot (3.5 GHz - 18 GHz) - Low_1699MHz, 3.6MHz BW

Table 8.7-39: 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)
12714.350000	49.34	82.23	32.89	5000.0	1000.000	119.0	V	56.0	17.4
13428.866667	51.10	82.23	31.13	5000.0	1000.000	150.0	V	238.0	18.6
16757.861111	52.02	82.23	30.21	5000.0	1000.000	150.0	H	37.0	24.1
17984.288889	52.07	82.23	30.16	5000.0	1000.000	182.0	V	50.0	25.0

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.

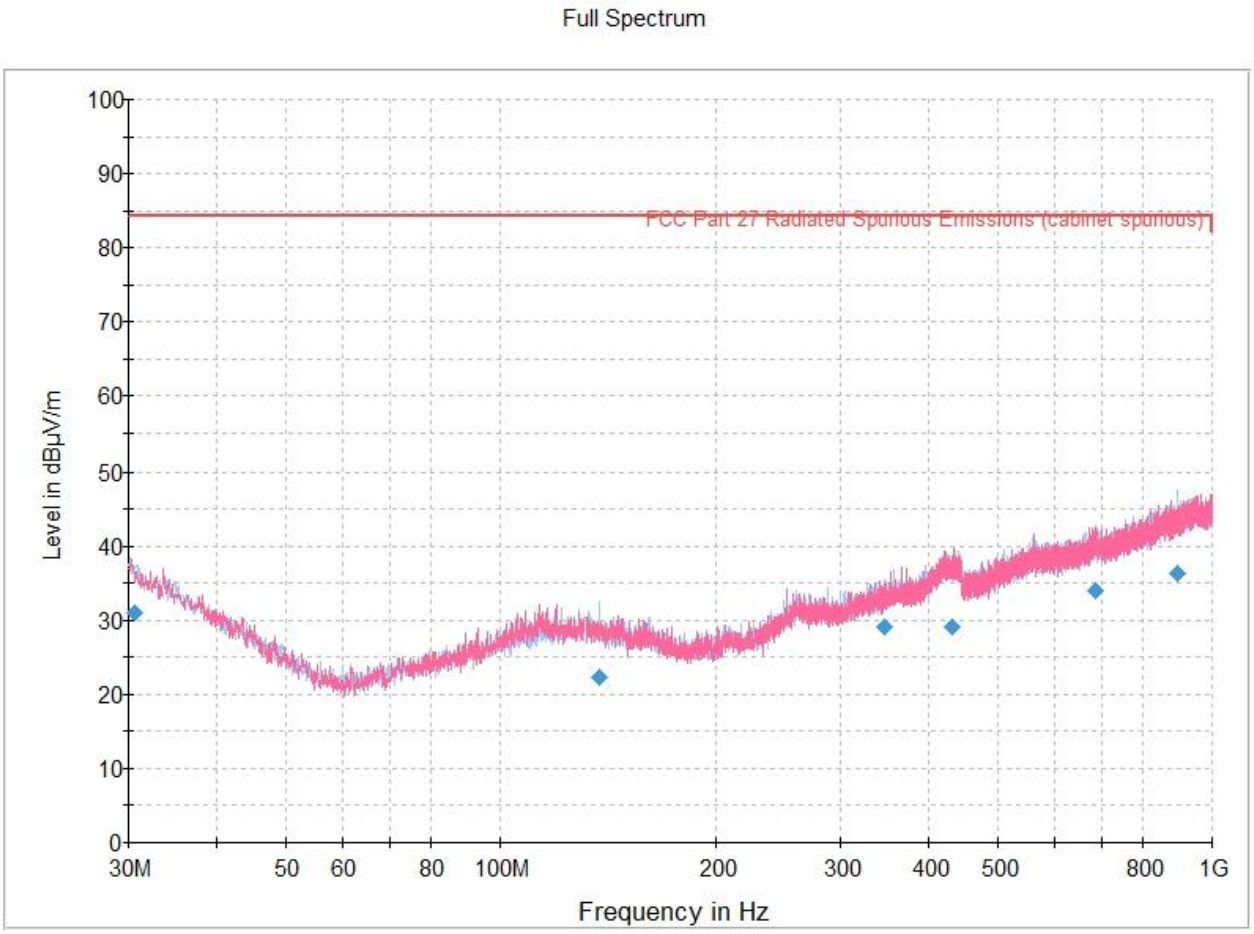

Figure 8.7-40: Radiated emissions spectral plot (30 MHz - 1 GHz) - Mid_1705MHz, 3.6MHz BW

Table 8.7-40: 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)
30.660000	30.97	84.38	53.41	5000.0	100.000	135.0	H	230.0	26.3
137.646667	22.39	84.38	61.99	5000.0	100.000	350.0	H	325.0	19.9
345.111667	29.07	84.38	55.31	5000.0	100.000	103.0	H	320.0	23.8
431.128333	29.01	84.38	55.37	5000.0	100.000	145.0	V	10.0	26.3
684.361667	33.92	84.38	50.46	5000.0	100.000	234.0	H	146.0	31.0
894.694167	36.35	84.38	48.03	5000.0	100.000	340.0	H	72.0	33.7

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.

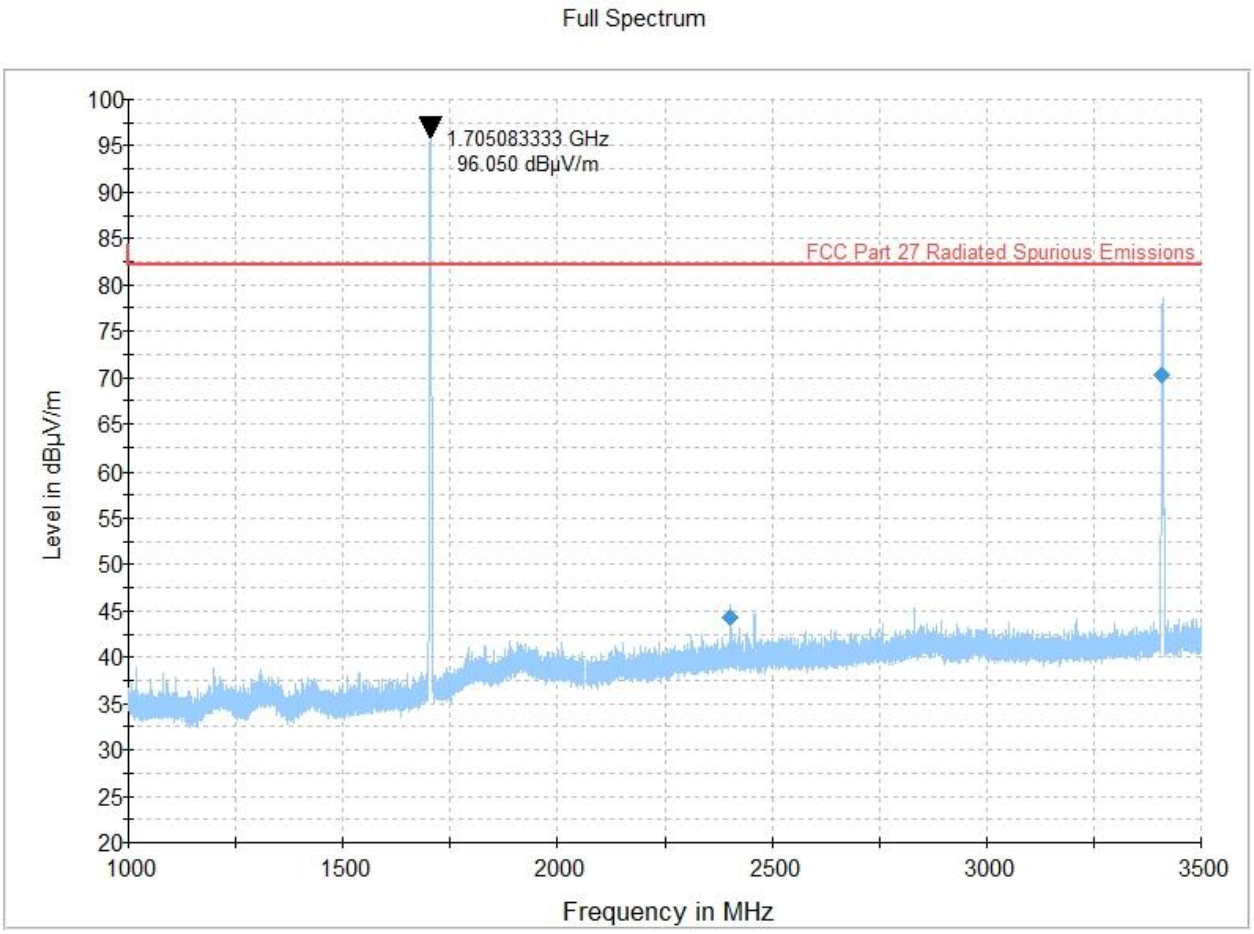

Figure 8.7-41: Radiated emissions spectral plot (1 GHz - 3.5 GHz) - Mid_1705MHz, 3.6MHz BW

Table 8.7-41: 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)
2402.400000	44.32	82.23	37.91	5000.0	1000.000	300.0	V	266.0	-3.3
3408.083333	70.32	82.23	11.91	5000.0	1000.000	345.0	H	164.0	0.0

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.
The marked emission at ~ 1705 MHz corresponds to the fundamental transmitter emission and is not evaluated against the limits.

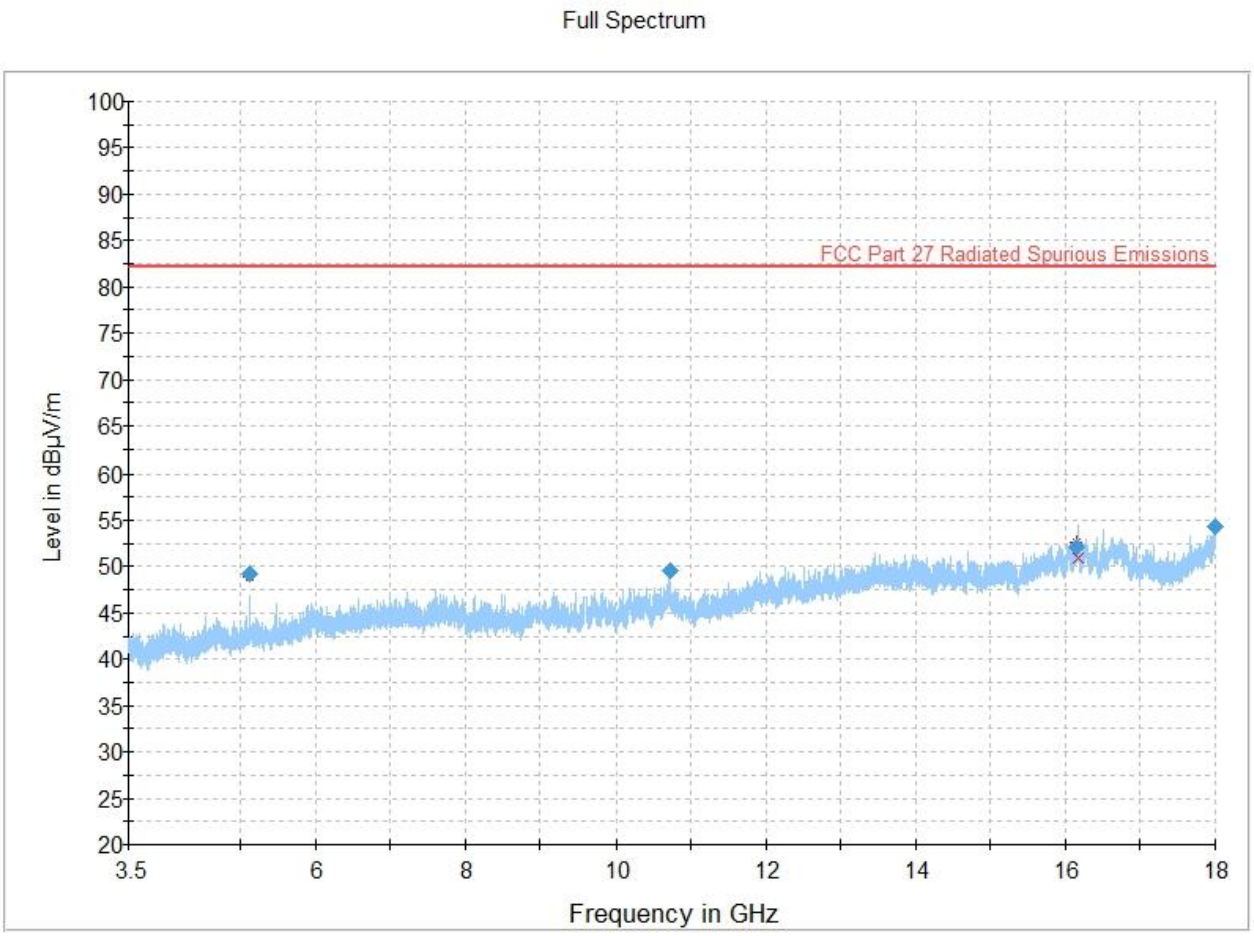

Figure 8.7-42: Radiated emissions spectral plot (3.5 GHz - 18 GHz) - Mid_1705MHz, 3.6MHz BW

Table 8.7-42: 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)
5112.333333	49.15	82.23	33.08	5000.0	1000.000	204.0	H	245.0	3.3
17997.800000	54.33	82.23	27.90	5000.0	1000.000	315.0	H	288.0	25.4
10711.294444	49.52	82.23	32.71	5000.0	1000.000	142.0	H	36.0	12.2
16158.138889	52.17	82.23	30.06	5000.0	1000.000	222.0	V	0.0	23.9

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.

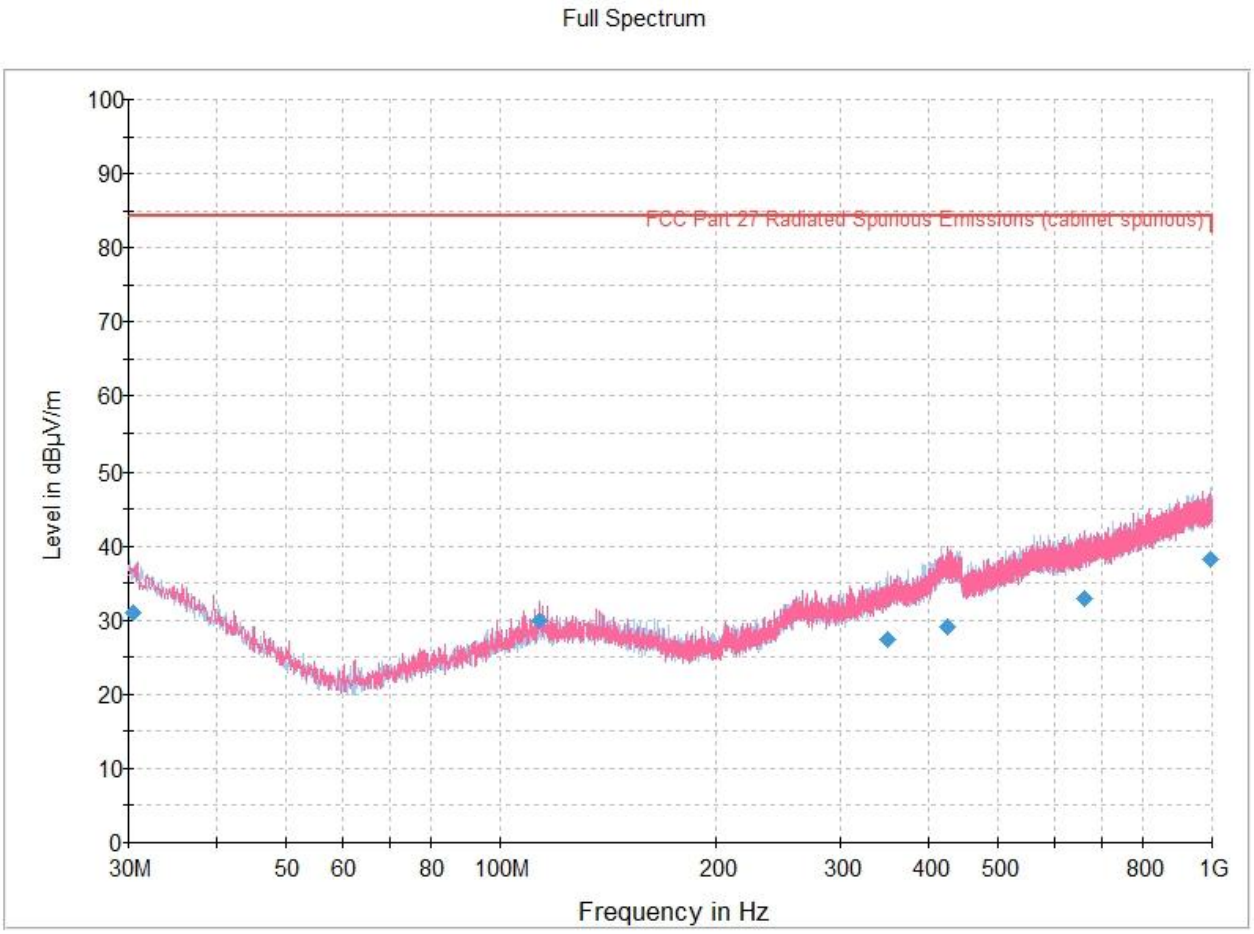

Figure 8.7-43: Radiated emissions spectral plot (30 MHz - 1 GHz) - High_1706MHz, 3.6MHz BW

Table 8.7-43: 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)
30.420000	31.04	84.38	53.34	5000.0	100.000	318.0	H	353.0	26.4
113.641667	29.98	84.38	54.40	5000.0	100.000	397.0	V	178.0	19.4
348.950000	27.41	84.38	56.97	5000.0	100.000	161.0	H	192.0	24.0
425.010000	29.15	84.38	55.23	5000.0	100.000	358.0	V	278.0	26.4
662.941667	32.80	84.38	51.58	5000.0	100.000	235.0	V	355.0	30.3
995.968333	38.23	84.38	46.15	5000.0	100.000	356.0	H	0.0	35.2

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.

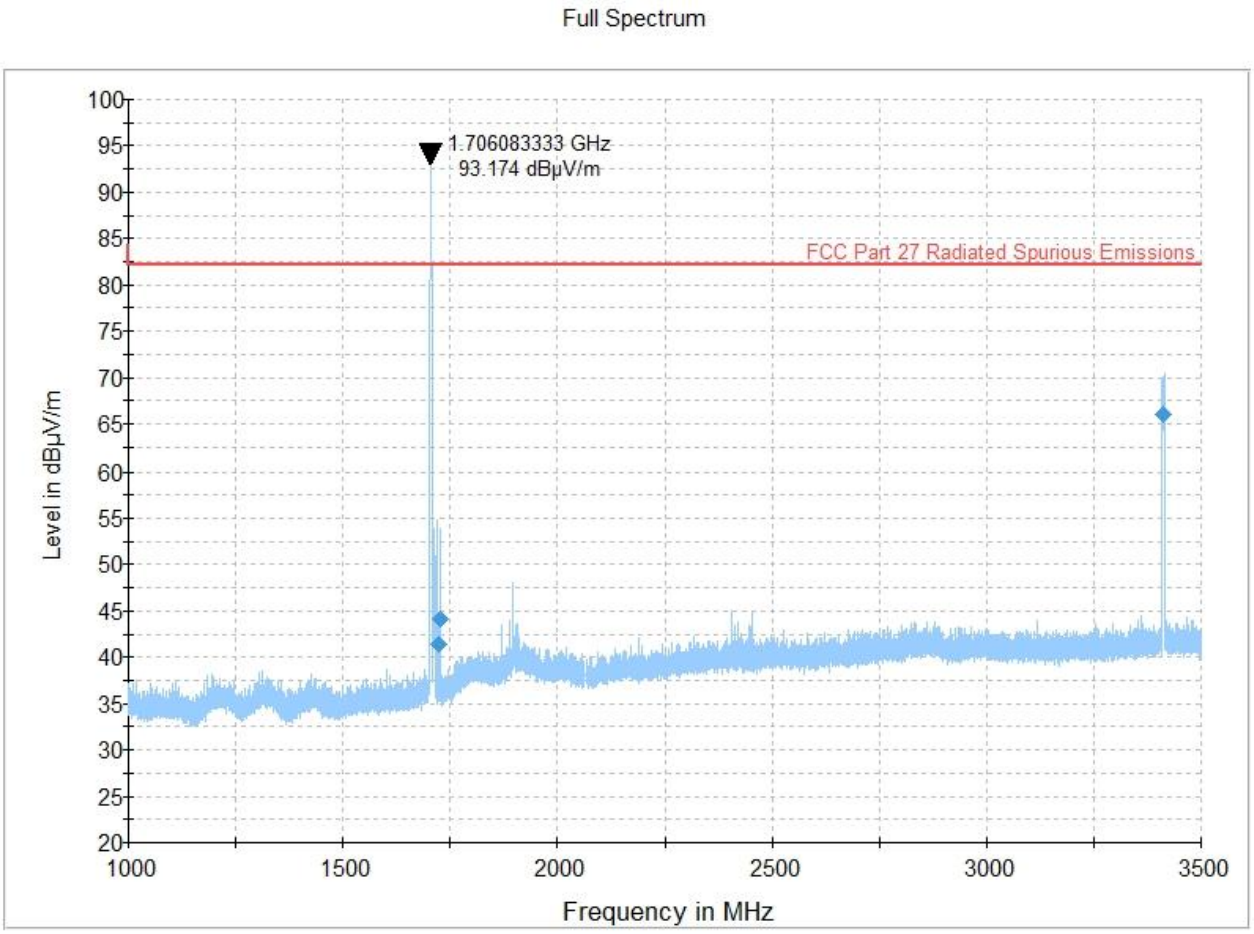

Figure 8.7-44: Radiated emissions spectral plot (1 GHz - 3.5 GHz) - High_1706MHz, 3.6MHz BW

Table 8.7-44: 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)
1725.783333	41.44	82.23	40.79	5000.0	1000.000	361.0	H	309.0	-7.6
1728.633333	44.10	82.23	38.13	5000.0	1000.000	113.0	H	0.0	-7.6
3410.000000	66.02	82.23	16.21	5000.0	1000.000	139.0	V	64.0	0.0

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.
The marked emission at ~ 1706 MHz corresponds to the fundamental transmitter emission and is not evaluated against the limits.

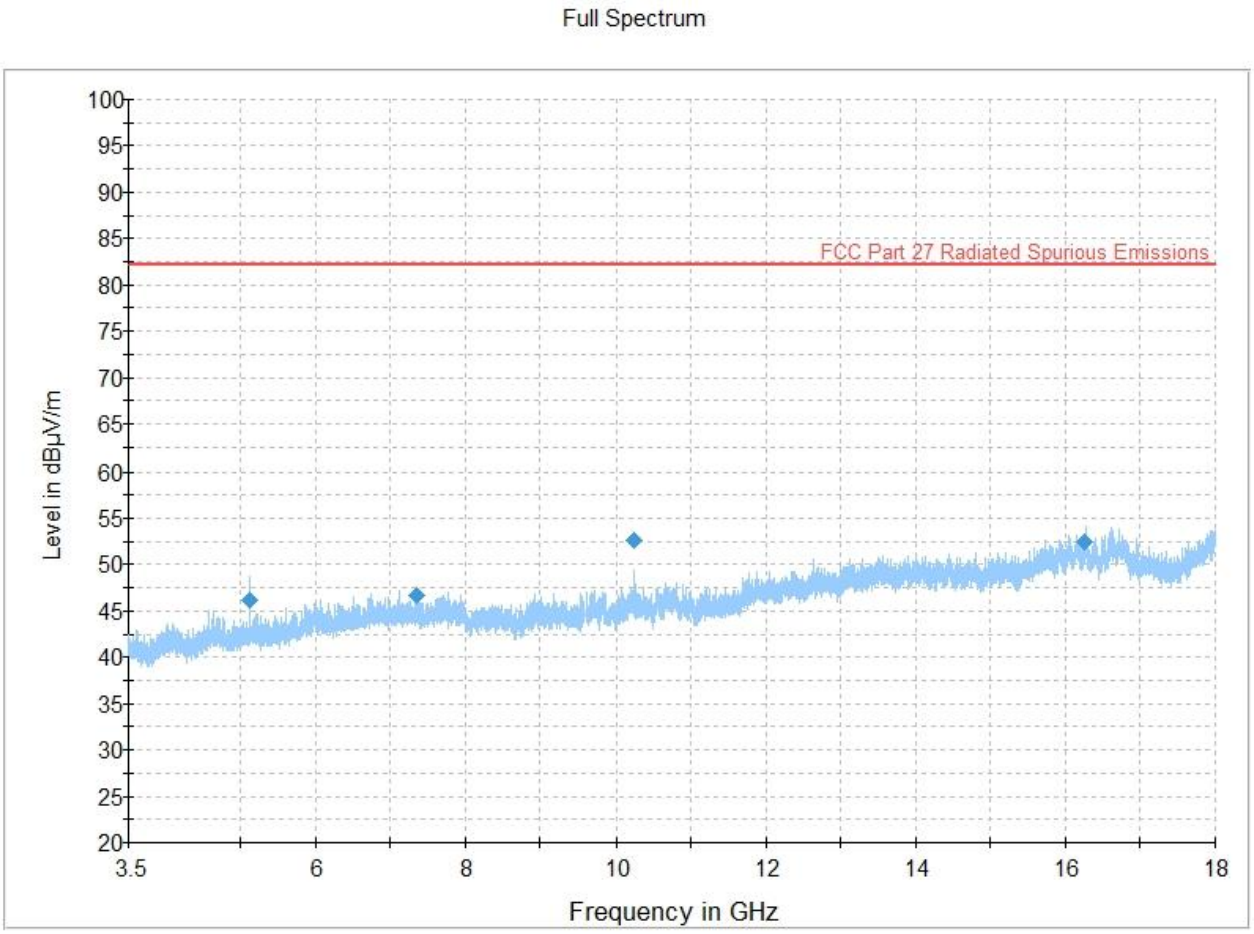

Figure 8.7-45: Radiated emissions spectral plot (3.5 GHz - 18 GHz) - High_1706MHz, 3.6MHz BW

Table 8.7-45: 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)
5121.155556	46.22	82.23	36.01	5000.0	1000.000	283.0	V	142.0	3.3
7353.027778	46.74	82.23	35.49	5000.0	1000.000	292.0	H	204.0	7.4
10241.694444	52.62	82.23	29.61	5000.0	1000.000	129.0	V	318.0	12.2
16258.033333	52.37	82.23	29.86	5000.0	1000.000	111.0	V	81.0	24.0

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.

8.8 Frequency stability

8.8.1 References and limits

- FCC 47 CFR Part 2: §2.1055
- Test method: ANSI C63.26: 2015 §5.6.3

8.8.2 Test summary

Verdict	Pass		
Test date	June 1, 2026	Temperature	21 °C
Test engineer	Lan Sayasane, Sr. EMC Test Engineer	Air pressure	1009 mbar
Test location	☐ Wireless bench (conducted tests) ☐ 10 m semi-anechoic chamber (radiated tests) ☐ 3 m semi-anechoic chamber (radiated tests) ☒ Other: Temperature Chamber	Relative humidity	59 %

8.8.3 Observations, settings and special notes

The signal was exercised in CW mode, using one channel as representative case. The ppm was calculated using the equation:

$$ppm = \left[\frac{(Reference\ Frequency - Tested\ Frequency)}{Reference\ Frequency}\right] * 1000000$$

Based on the measured frequency drift, the fundamental emission is confirmed to be inside the allocated band in all cases and does not result in emissions exceeding the limits defined in §27.53 including band-edge requirements. Frequency drift does not cause operation outside the authorized band.

8.8.4 Setup details

EUT power input during test	Battery 12 Vdc
EUT setup configuration	☒ Table-top ☐ Floor standing ☐ Other:

Spectrum analyzer settings:

Resolution bandwidth	1 kHz
Video bandwidth	3 kHz
Detector mode	Peak
Trace mode	Single sweep
Sweep	Marker function – signal count

8.8.5 Test data

Table 8.8-1: Frequency stability results, 1390-1395 MHz operation

Temperature (°C)	Voltage (V)	Center Frequency (MHz)	Frequency Error			
			ppm	ppm (2 min)	ppm (5 min)	ppm (10 min)
-30	Battery 12 Vdc	1392.5	-29.42	-60.36	-63.18	-69.60
-20	Battery 12 Vdc	1392.5	45.95	50.24	80.37	71.76
-10	Battery 12 Vdc	1392.5	33.69	30.86	32.98	26.55
0	Battery 12 Vdc	1392.5	-28.01	-28.64	-20.13	-27.25
+10	Battery 12 Vdc	1392.5	-43.03	-38.73	-76.83	-63.15
+20	**Battery 12 Vdc**	1392.5	-34.30	-20.77	-70.31	-64.56
+20	**10% Battery**	1392.5	33.03	35.15	86.83	55.92
+30	Battery 12 Vdc	1392.5	25.86	21.57	50.22	53.81
+40	Battery 12 Vdc	1392.5	-28.66	-20.10	-37.28	-31.56
+50	Battery 12 Vdc	1392.5	-38.03	-50.89	-49.46	-39.45

The worst-case frequency error observed is 86.863 ppm, corresponding to a frequency deviation of 120.957 kHz.
Assuming operation at the lowest operating frequency (1392.5 MHz) and the maximum measured occupied bandwidth of 3.578 MHz, then the lower edge of the occupied bandwidth is 1392.5 MHz – (3.578 MHz / 2) = 1390.7110 MHz.

Adding in the worst case frequency error gives the lower edge of the occupied bandwidth as: 1390.7110 – 0.120957 = 1390.59 MHz. This illustrates that the fundamental emission stays within the authorized operational frequency band of 1390 – 1395 MHz. Similar calculations for high channel and other nominal channel bandwidths yield the same conclusion.

Table 8.8-2: Frequency stability results, 1432-1435 MHz operation

Temperature (°C)	Voltage (V)	Center Frequency (MHz)	Frequency Error			
			ppm	ppm (2 min)	ppm (5 min)	ppm (10 min)
-30	Battery 12 Vdc	1433.5	34.83	30.02	62.73	45.29
-20	Battery 12 Vdc	1433.5	29.94	37.61	49.49	46.67
-10	Battery 12 Vdc	1433.5	-29.27	-59.95	-32.72	-68.31
0	Battery 12 Vdc	1433.5	43.20	53.64	70.38	24.38
+10	Battery 12 Vdc	1433.5	53.65	73.86	27.89	51.58
+20	**Battery 12 Vdc**	1433.5	35.55	41.09	66.18	41.80
+20	**10% Battery**	1433.5	-29.28	-35.58	-51.54	-32.05
+30	Battery 12 Vdc	1433.5	31.37	20.88	71.11	36.91
+40	Battery 12 Vdc	1433.5	32.75	56.47	33.39	69.66
+50	Battery 12 Vdc	1433.5	-22.99	-39.68	-31.38	-49.43

The worst-case frequency error observed is 73.86 ppm, corresponding to a frequency deviation of 105.878 kHz.
Assuming operation at the lowest operating frequency (1433.5 MHz) and the maximum measured occupied bandwidth of 1.196 MHz, then the lower edge of the occupied bandwidth is 1433.5 MHz – (1.196 MHz / 2) = 1432.9020 MHz.

Adding in the worst case frequency error gives the lower edge of the occupied bandwidth as: 1432.9020 – 0.105878= 1432.80 MHz. This illustrates that the fundamental emission stays within the authorized operational frequency band of 1432-1435 MHz. Similar calculations for high channel and other nominal channel bandwidths yield the same conclusion.

Table 8.8-3: Frequency stability results, 1695-1710 MHz operation

Temperature (°C)	Voltage (V)	Center Frequency (MHz)	Frequency Error			
			ppm	ppm (2 min)	ppm (5 min)	ppm (10 min)
-30	Battery 12 Vdc	1705	-28.71	-37.47	-21.09	-45.72
-20	Battery 12 Vdc	1705	-32.82	-47.48	-64.45	-39.89
-10	Battery 12 Vdc	1705	-53.93	-52.09	-29.29	-38.09
0	Battery 12 Vdc	1705	-26.99	-17.00	-50.98	-56.24
+10	Battery 12 Vdc	1705	-29.91	-55.06	-74.43	-25.83
+20	**Battery 12 Vdc**	1705	31.03	68.56	36.92	40.96
+20	**10% Battery**	1705	33.39	23.99	41.58	22.83
+30	Battery 12 Vdc	1705	34.02	30.48	48.66	25.17
+40	Battery 12 Vdc	1705	31.66	58.63	29.27	32.24
+50	Battery 12 Vdc	1705	-25.22	-69.68	-37.56	-56.78

The worst-case frequency error observed is -74.43 ppm, corresponding to a frequency deviation of 126.9 kHz.
Assuming operation at the lowest operating frequency (1699 MHz) and the maximum measured occupied bandwidth of 3.587 MHz, then the lower edge of the occupied bandwidth is 1699 MHz – (3.587 MHz / 2) = 1697.210 MHz.

Adding in the worst case frequency error gives the lower edge of the occupied bandwidth as: 1697.210 – 0.1269= 1697.08 MHz. This illustrates that the fundamental emission stays within the authorized operational frequency band of 1695-1710 MHz. Similar calculations for high channel and other nominal channel bandwidths yield the same conclusion.

End of test report