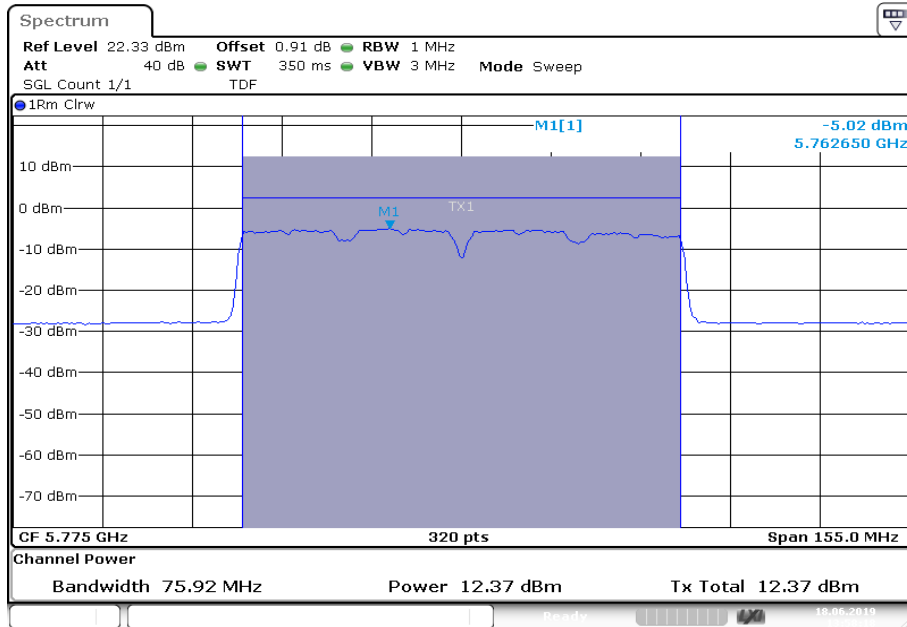


Plot 5: U-NII-3; middle channel



Date: 18.JUN.2019 13:58:18

11.5 Band edge compliance radiated

Description:

Measurement of the radiated band edge compliance. The EUT is turned in the position that results in the maximum level at the band edge. Then a sweep over the corresponding restricted band is performed. The EUT is set to the lowest channel for the lower restricted band and to the highest channel for the upper restricted band. Measurement distance is 3m.

Measurement:

Measurement parameter	
Detector:	Peak / RMS
Sweep time:	Auto
Resolution bandwidth:	1 MHz
Video bandwidth:	≥ 3 x RBW
Span:	See plots!
Trace mode:	Max Hold
Test setup:	See sub clause 6.2 – A
Measurement uncertainty:	See sub clause 8

Limits:

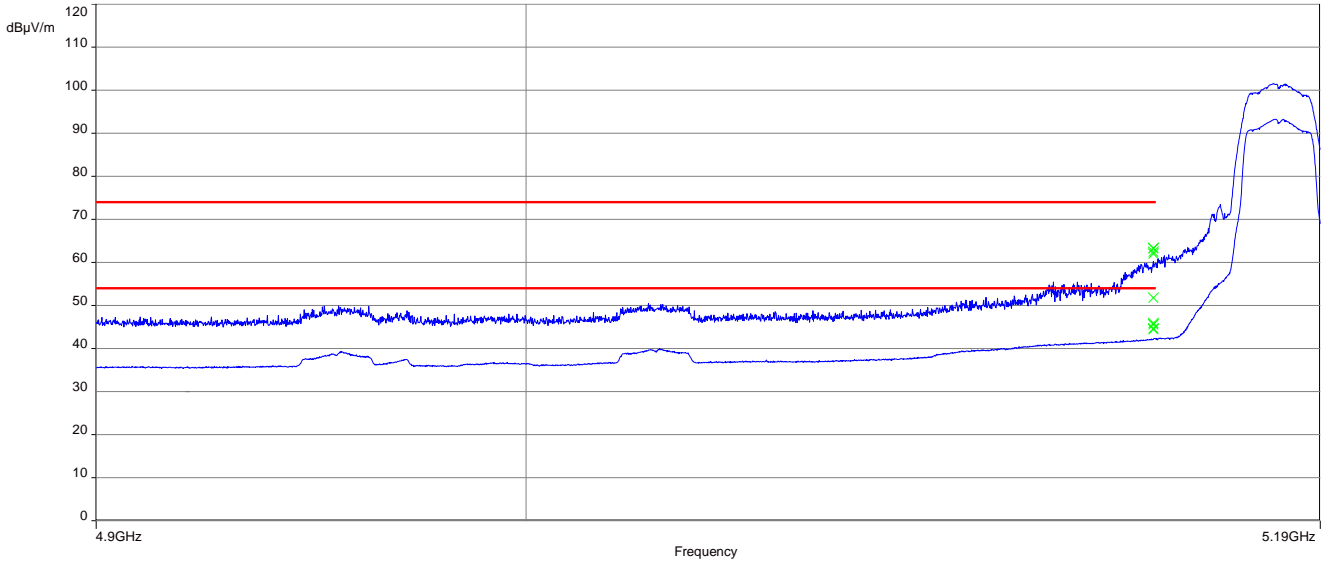
Band Edge Compliance Radiated
<p>In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement. Attenuation below the general limits specified in Section 15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in Section 15.205(a), must also comply with the radiated emission limits specified in Section 15.209(a) (see Section 5.205(c)).</p>
<p style="text-align: center;">74 dBµV/m (peak) 54 dBµV/m (average)</p>

Result:

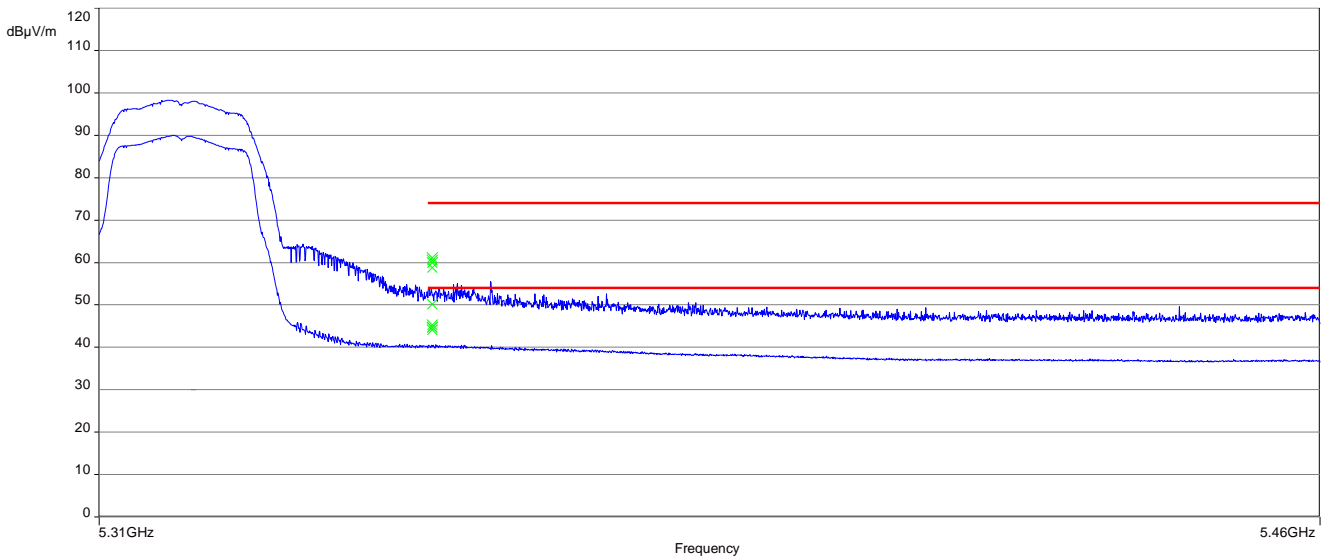
Scenario	Band Edge Compliance Radiated [dB μ V/m]
Antenna 1 / a-mode / Channel 36	63.3 dB μ V/m (peak) 45.9 dB μ V/m (average)
Antenna 1 / a-mode / Channel 64	61.1 dB μ V/m (peak) 44.7 dB μ V/m (average)
Antenna 1 / a-mode / Channel 100	59.5 dB μ V/m (peak) 45.3 dB μ V/m (average)
Antenna 2 / n-mode HT20 / Channel 36	73.8 dB μ V/m (peak) 53.1 dB μ V/m (average)
Antenna 2 / n-mode HT20 / Channel 64	69.6 dB μ V/m (peak) 51.6 dB μ V/m (average)
Antenna 2 / n-mode HT20 / Channel 100	57.6 dB μ V/m (peak) 43.9 dB μ V/m (average)
Antenna 1 + 2 / n-mode HT40 / Channel 38	68.6 dB μ V/m (peak) 51.9 dB μ V/m (average)
Antenna 1 + 2 / n-mode HT40 / Channel 62	69.0 dB μ V/m (peak) 50.9 dB μ V/m (average)
Antenna 1 + 2 / n-mode HT40 / Channel 102	66.9 dB μ V/m (peak) 48.7 dB μ V/m (average)
Antenna 1 + 2 / ac80-mode / Channel 42	68.5 dB μ V/m (peak) 53.0 dB μ V/m (average)
Antenna 1 + 2 / ac80-mode / Channel 58	64.9 dB μ V/m (peak) 50.9 dB μ V/m (average)
Antenna 1 + 2 / ac80-mode / Channel 106	65.1 dB μ V/m (peak) 51.5 dB μ V/m (average)

Plots:

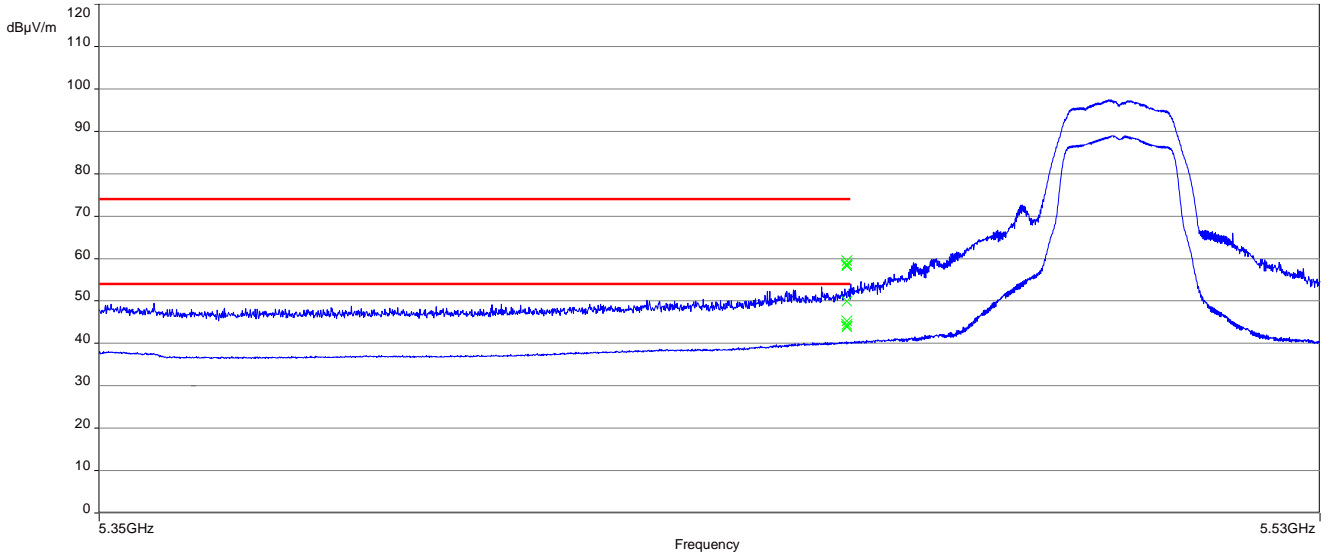
Plot 1: lower band edge; U-NII-1; lowest channel; 20 MHz channel bandwidth, Antenna 1



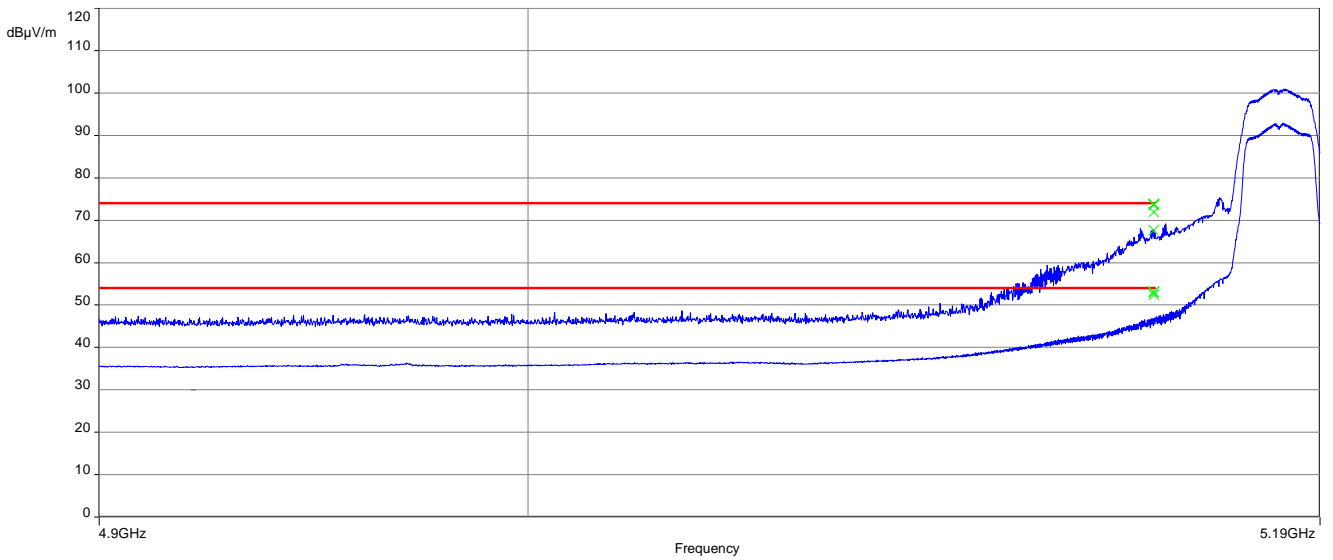
Plot 2: upper band edge; U-NII-2A; highest channel; 20 MHz channel bandwidth, Antenna 1



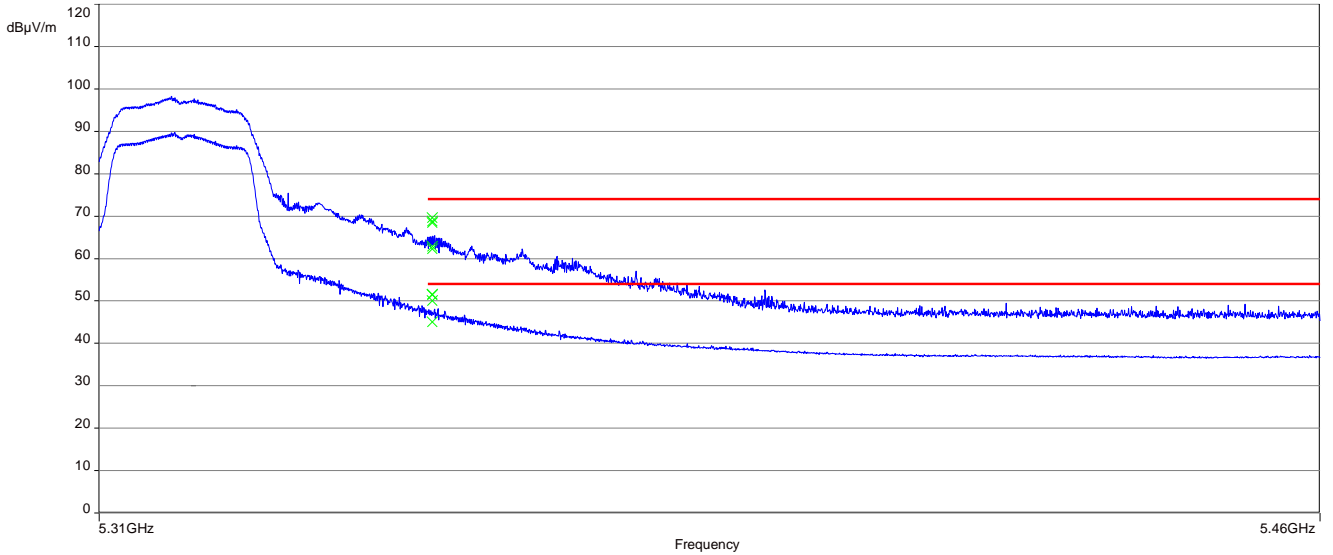
Plot 3: lower band edge; U-NII-2C; lowest channel; 20 MHz channel bandwidth, Antenna 1



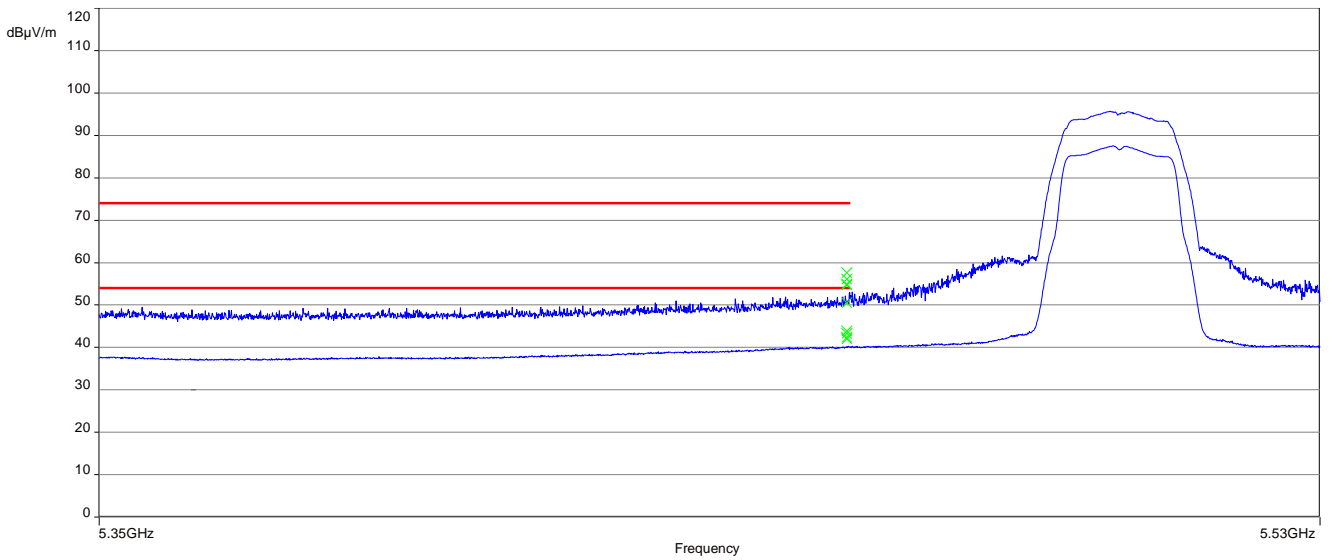
Plot 4: lower band edge; U-NII-1; lowest channel; 20 MHz channel bandwidth, Antenna 2



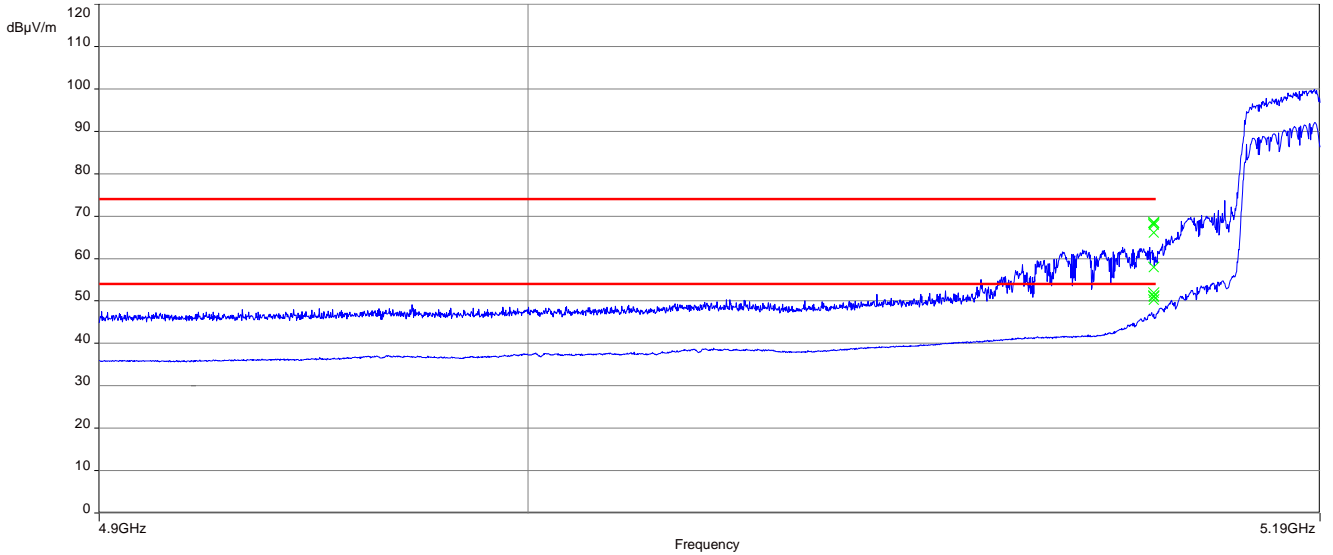
Plot 5: upper band edge; U-NII-2A; highest channel; 20 MHz channel bandwidth, Antenna 2



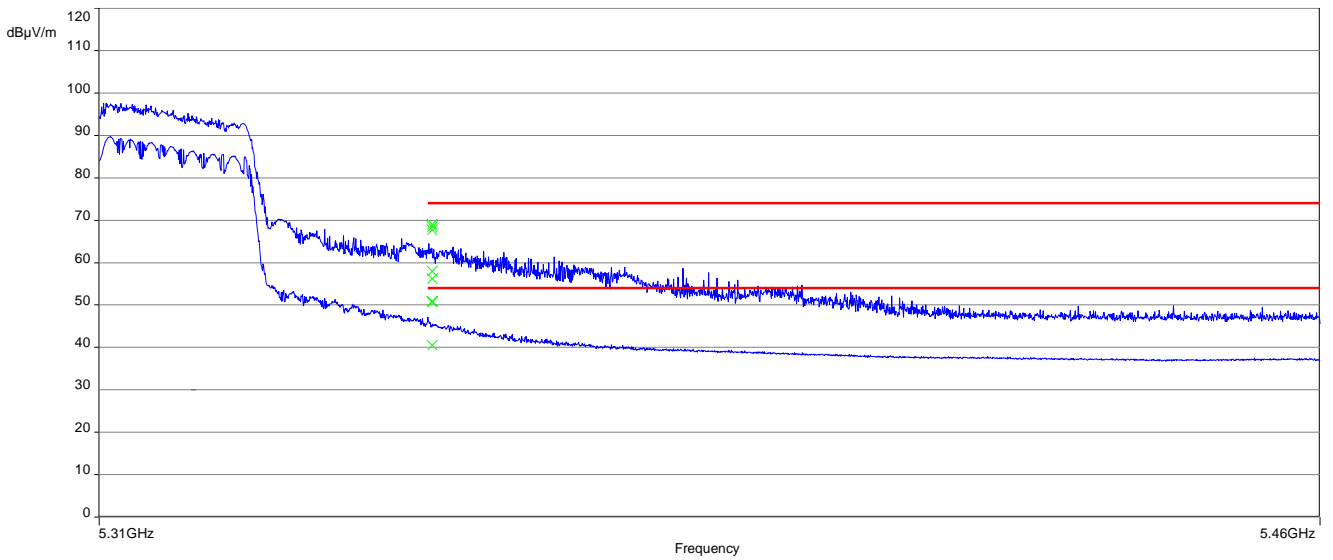
Plot 6: lower band edge; U-NII-2C; lowest channel; 20 MHz channel bandwidth, Antenna 2



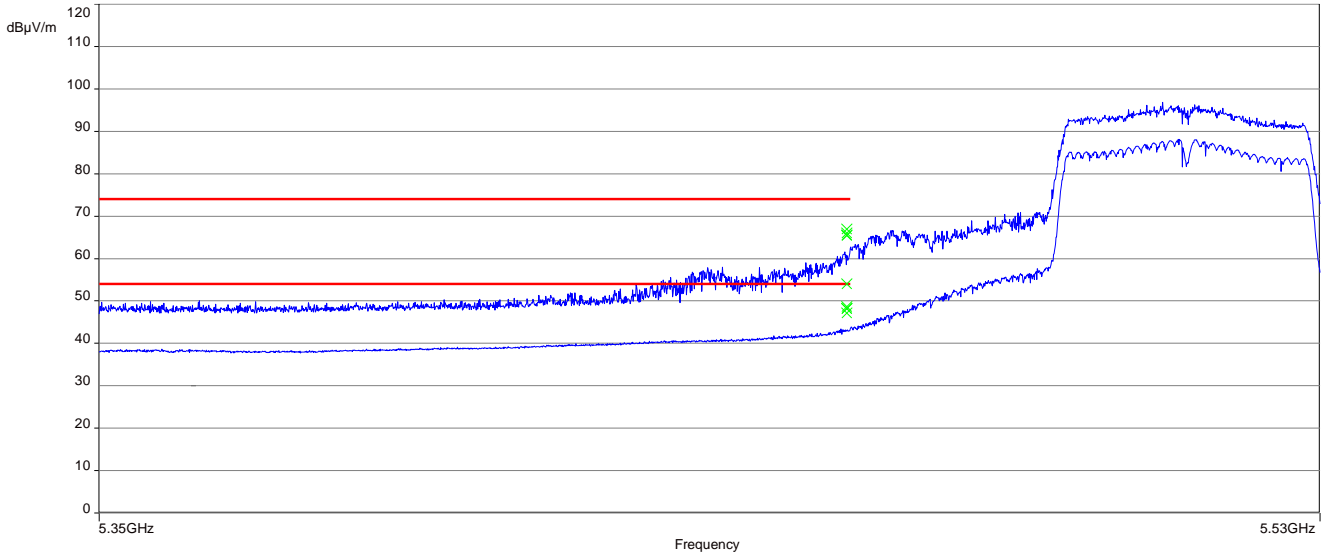
Plot 7: lower band edge; U-NII-1; lowest channel; 40 MHz channel bandwidth, Antenna 1 + 2



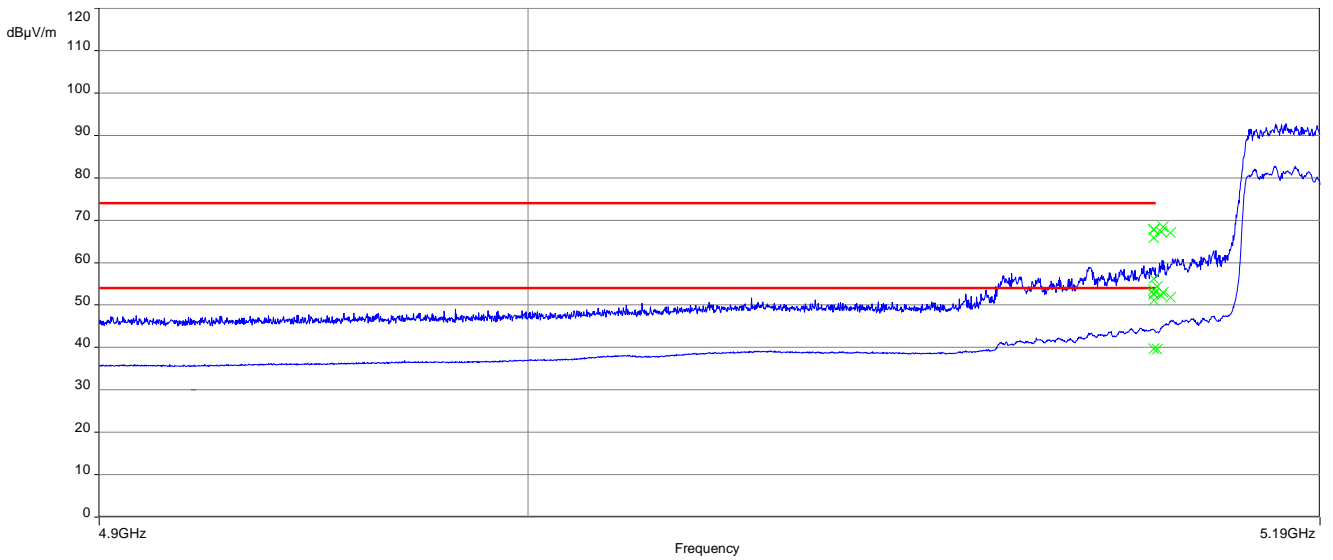
Plot 8: upper band edge; U-NII-2A; highest channel; 40 MHz channel bandwidth, Antenna 1 + 2



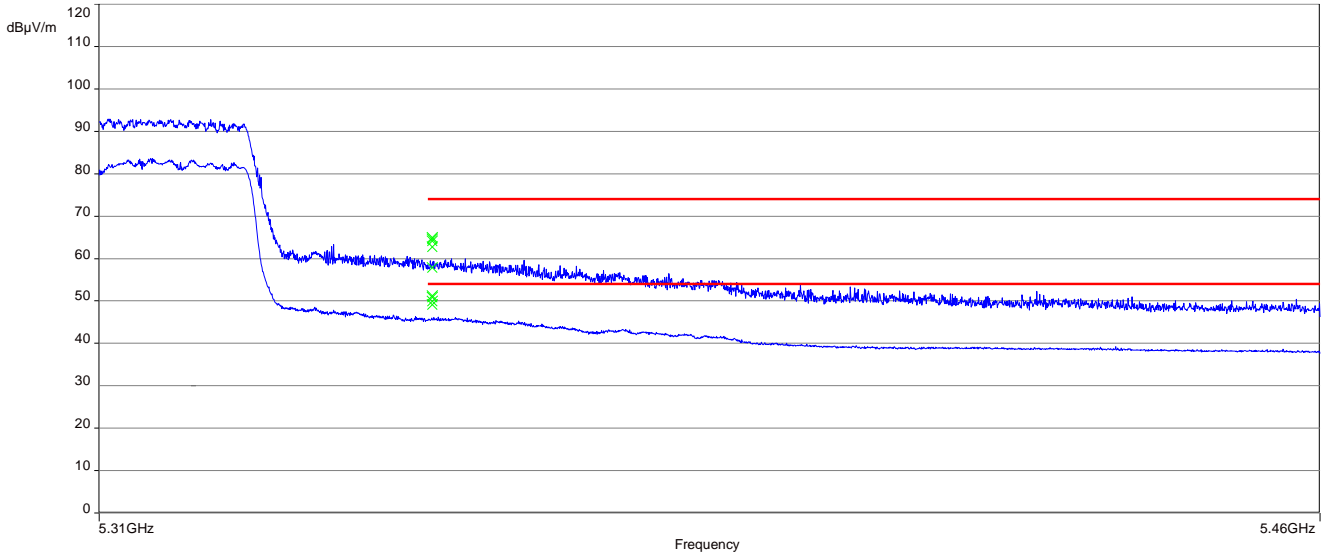
Plot 9: lower band edge; U-NII-2C; lowest channel; 40 MHz channel bandwidth, Antenna 1 + 2



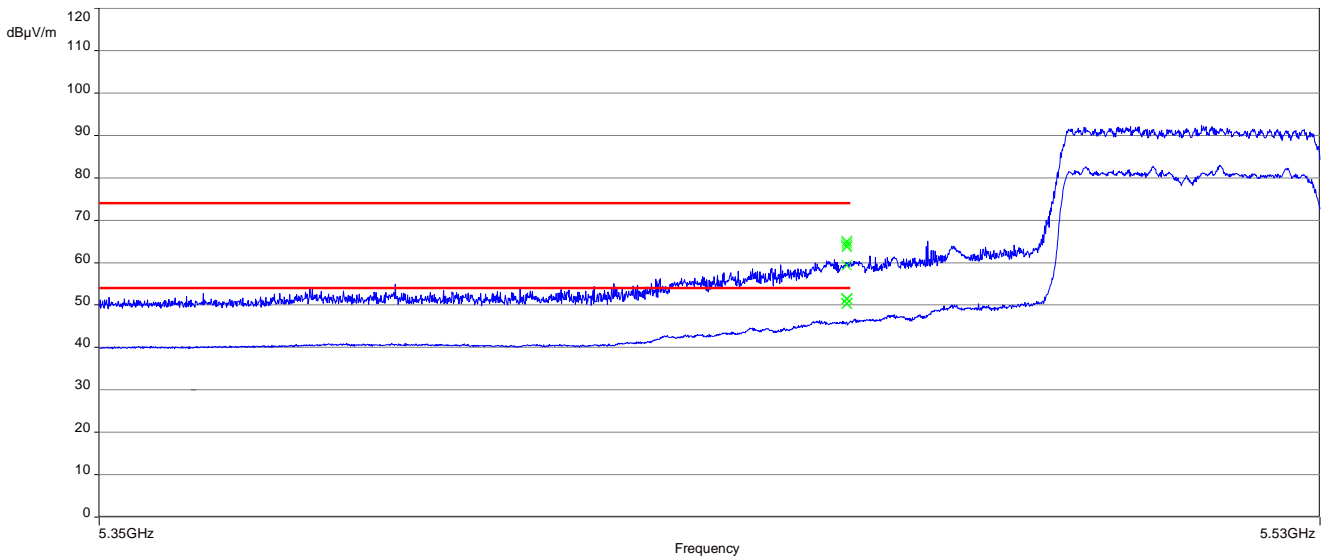
Plot 10: lower band edge; U-NII-1; middle channel; 80 MHz channel bandwidth, Antenna 1 + 2



Plot 11: upper band edge; U-NII-2A; middle channel; 80 MHz channel bandwidth, Antenna 1 + 2



Plot 12: lower band edge; U-NII-2C; lowest channel; 80 MHz channel bandwidth, Antenna 1 + 2



11.6 Spurious emissions radiated < 30 MHz

Description:

Measurement of the radiated spurious emissions in transmit mode and receive mode below 30 MHz. The EUT is set first to middle channel. This measurement is representative for all channels and modes. If critical peaks are found the lowest channel and the highest channel will be measured too. Then the EUT is set to receive or idle mode. The limits are recalculated to a measurement distance of 3 m with 40 dB/decade according CFR Part 2.

Measurement:

Measurement parameter	
Detector:	Peak / Quasi Peak
Sweep time:	Auto
Video bandwidth:	F < 150 kHz: 200 Hz F > 150 kHz: 9 kHz
Resolution bandwidth:	F < 150 kHz: 1 kHz F > 150 kHz: 100 kHz
Span:	9 kHz to 30 MHz
Trace mode:	Max Hold
Test setup:	See sub clause 6.2 – B
Measurement uncertainty:	See sub clause 8

Limits:

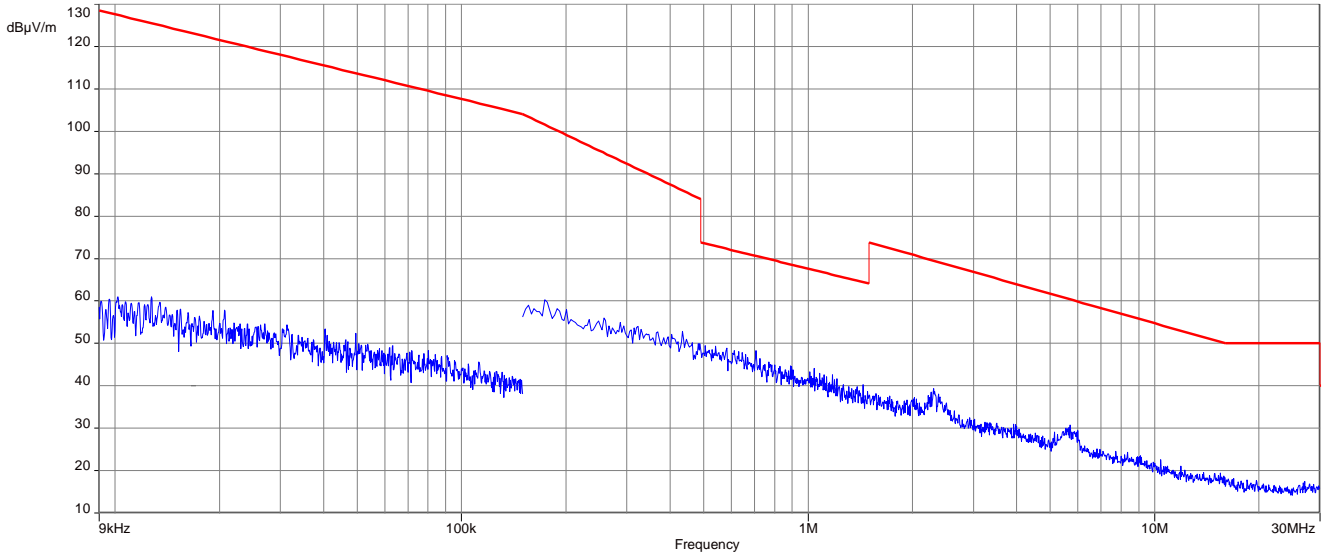
Spurious Emissions Radiated < 30 MHz		
Frequency (MHz)	Field Strength (dBµV/m)	Measurement distance
0.009 – 0.490	2400/F(kHz)	300
0.490 – 1.705	24000/F(kHz)	30
1.705 – 30.0	30	30

Results:

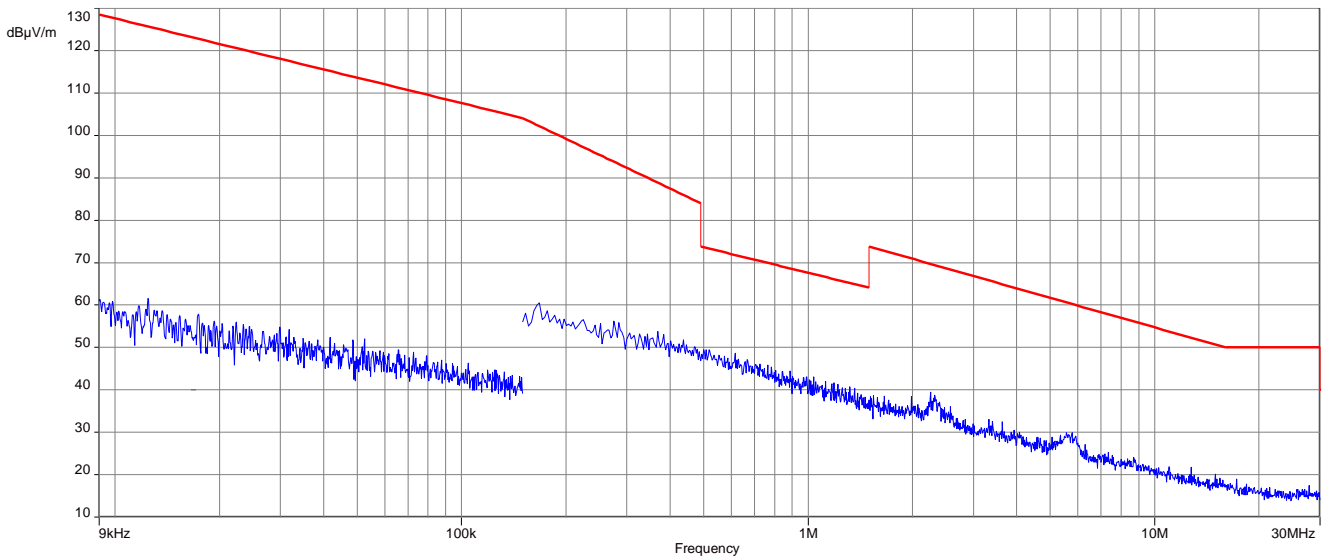
Spurious Emissions Radiated < 30 MHz [dBµV/m]		
F [MHz]	Detector	Level [dBµV/m]
All detected emissions are more than 20 dB below the limit.		

Plots: 20 MHz channel bandwidth

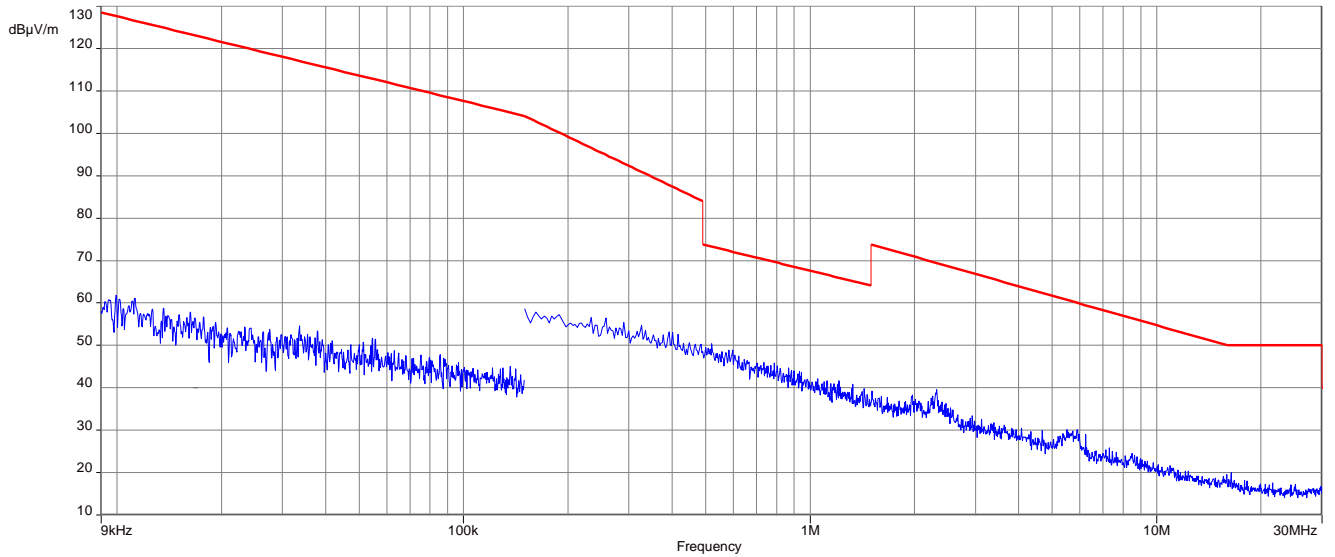
Plot 1: 9 kHz to 30 MHz, U-NII-1; lowest channel



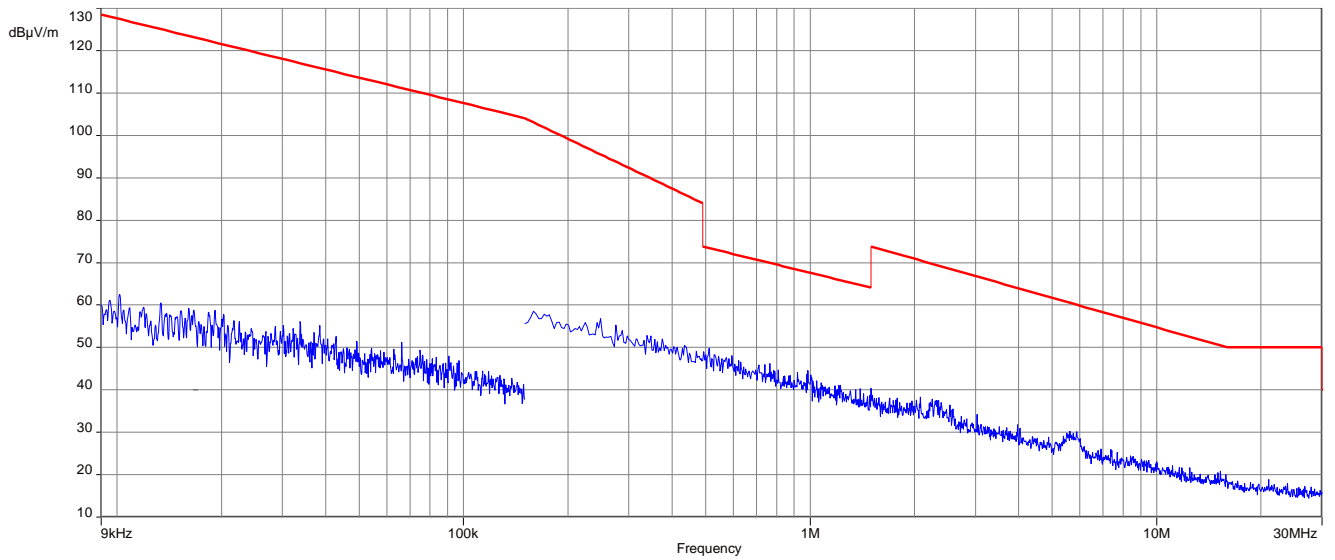
Plot 2: 9 kHz to 30 MHz, U-NII-1; highest channel



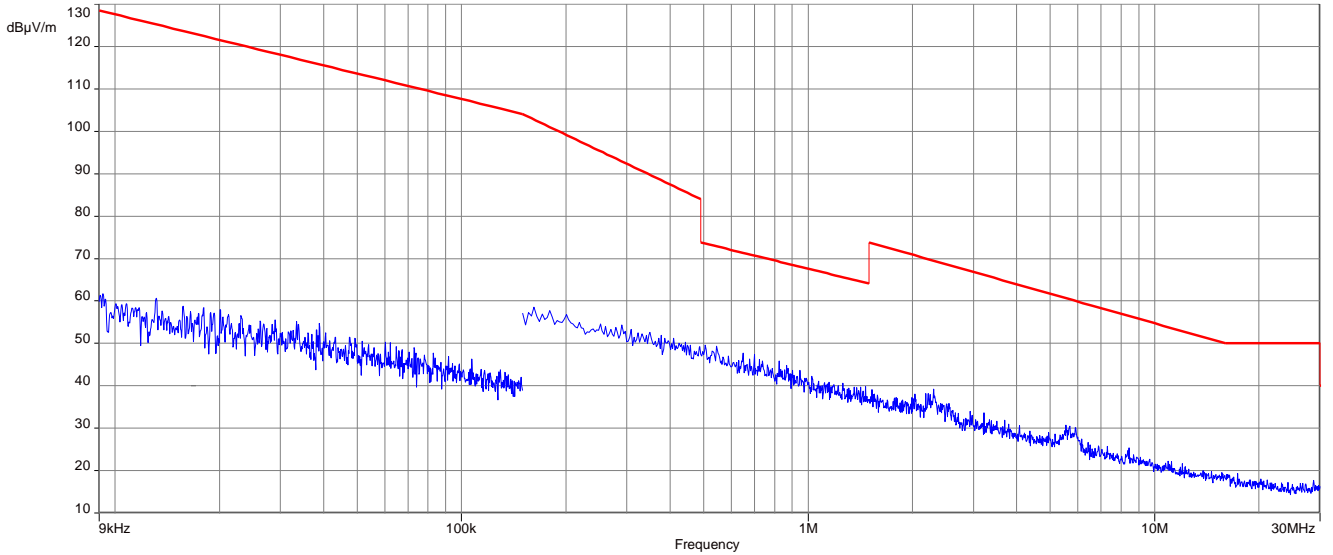
Plot 3: 9 kHz to 30 MHz, U-NII-2A; lowest channel



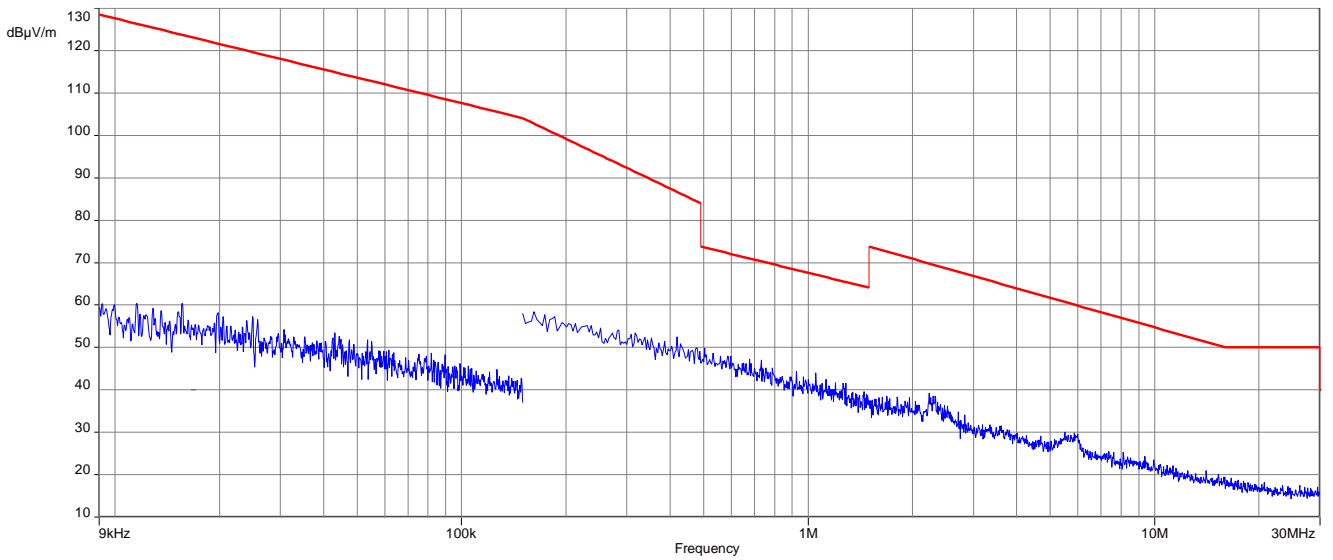
Plot 4: 9 kHz to 30 MHz, U-NII-2A; highest channel



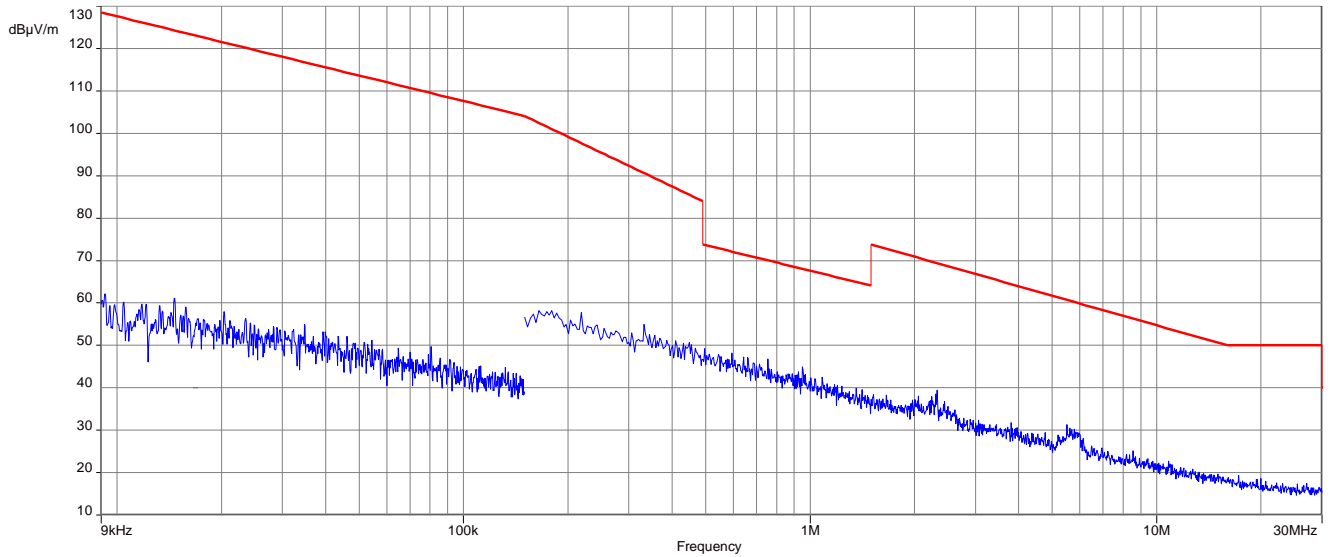
Plot 5: 9 kHz to 30 MHz, U-NII-2C; lowest channel



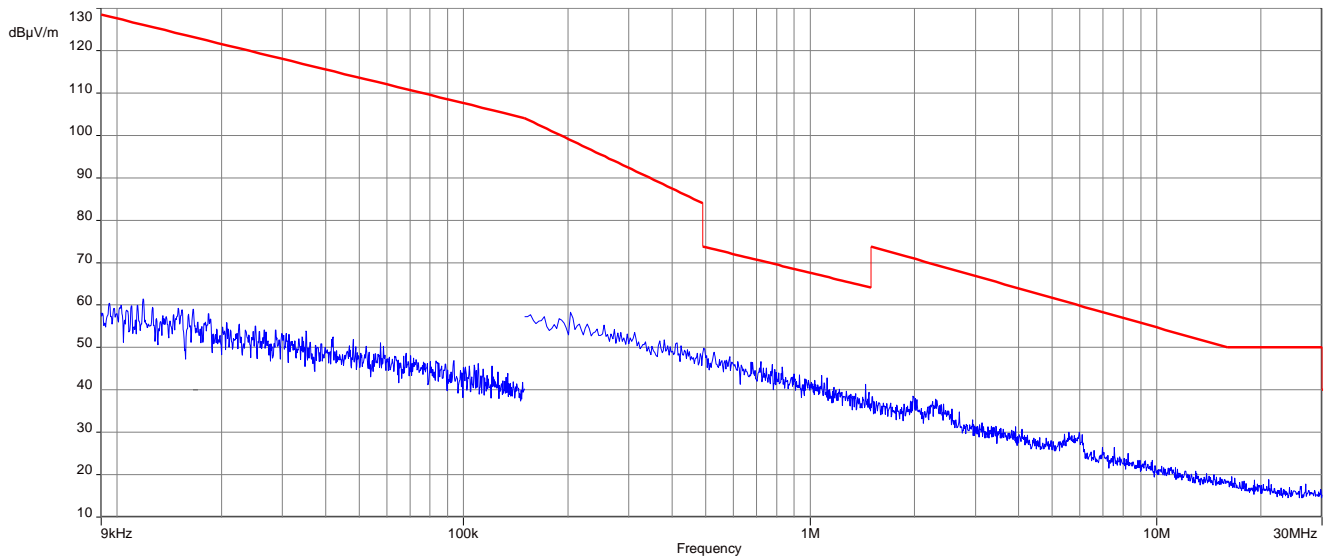
Plot 6: 9 kHz to 30 MHz, U-NII-2C; middle channel



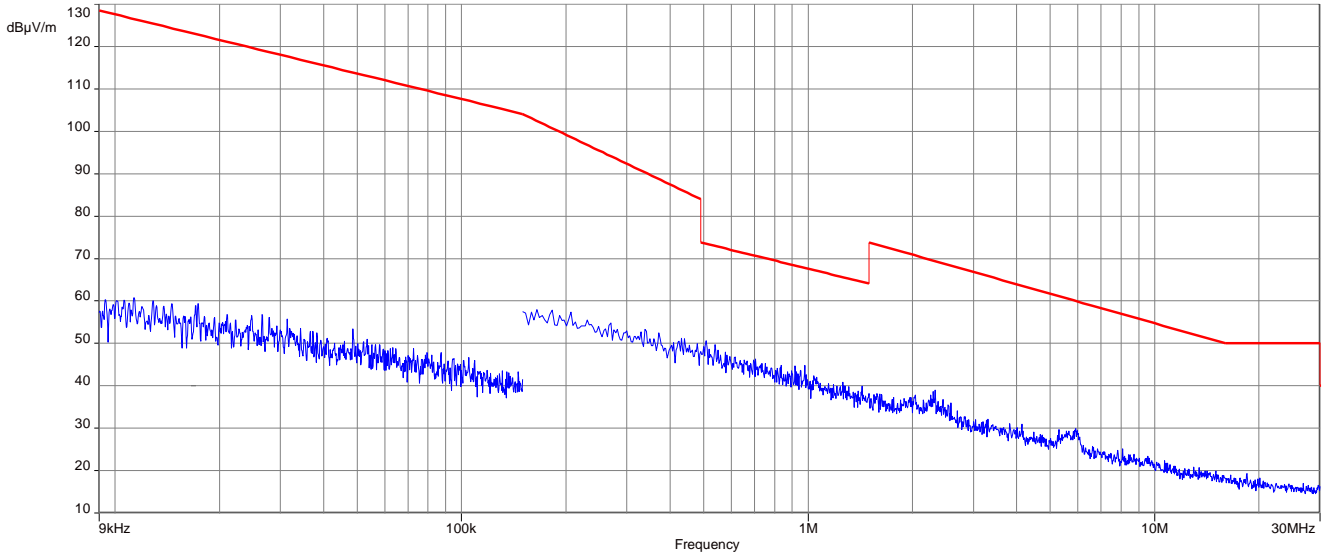
Plot 7: 9 kHz to 30 MHz, U-NII-2C; highest channel



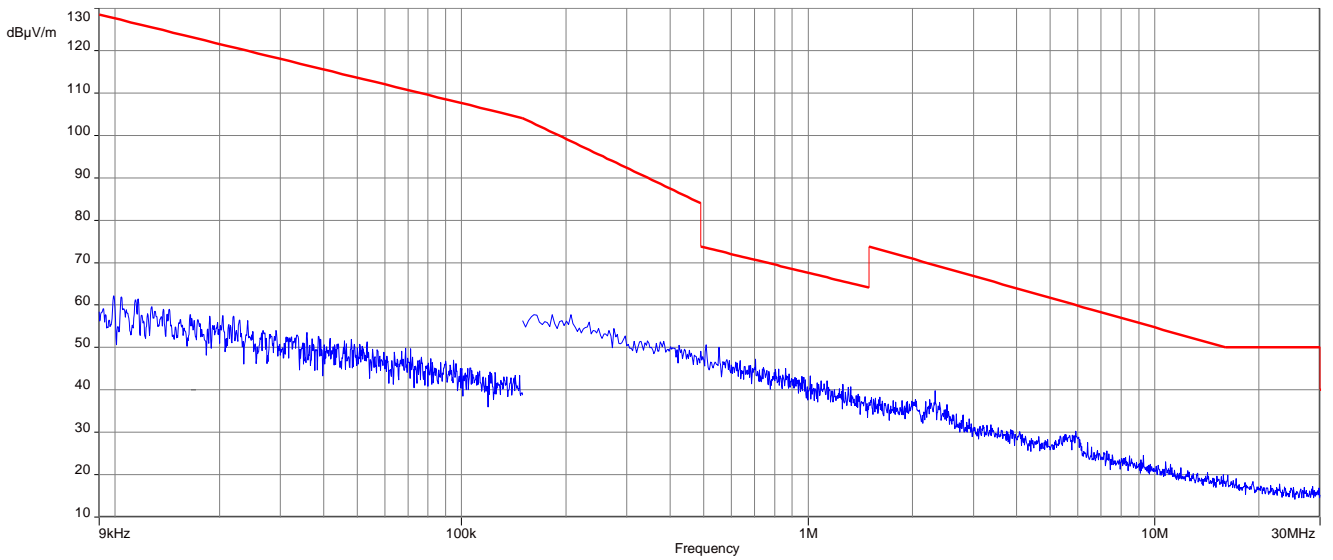
Plot 8: 9 kHz to 30 MHz, U-NII-3; lowest channel



Plot 9: 9 kHz to 30 MHz, U-NII-3; middle channel

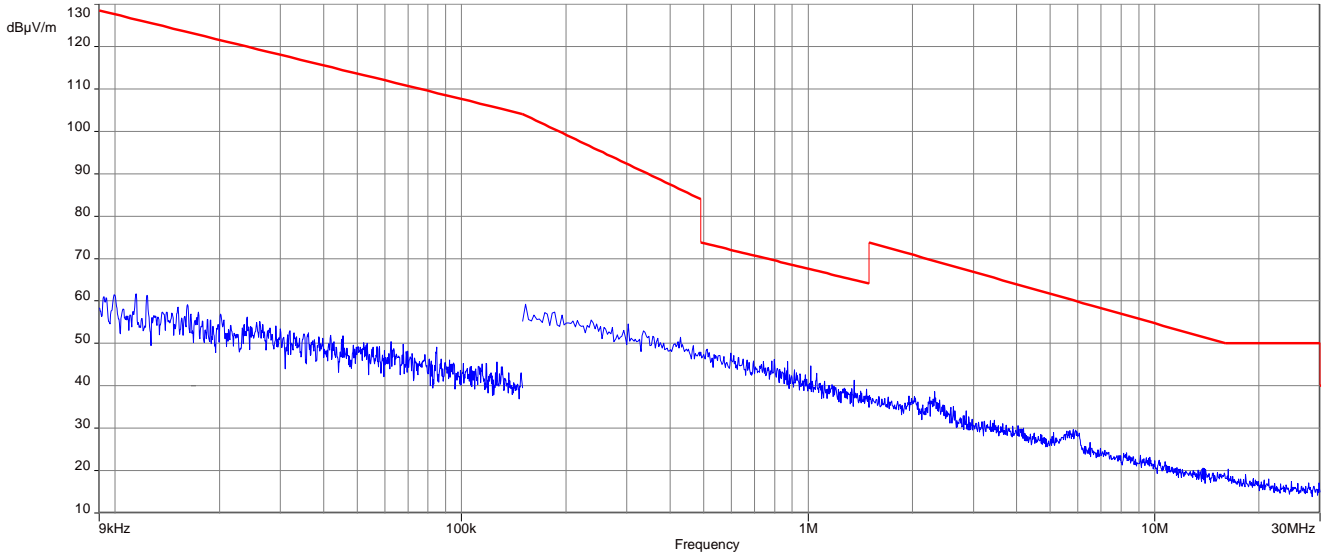


Plot 10: 9 kHz to 30 MHz, U-NII-3; highest channel

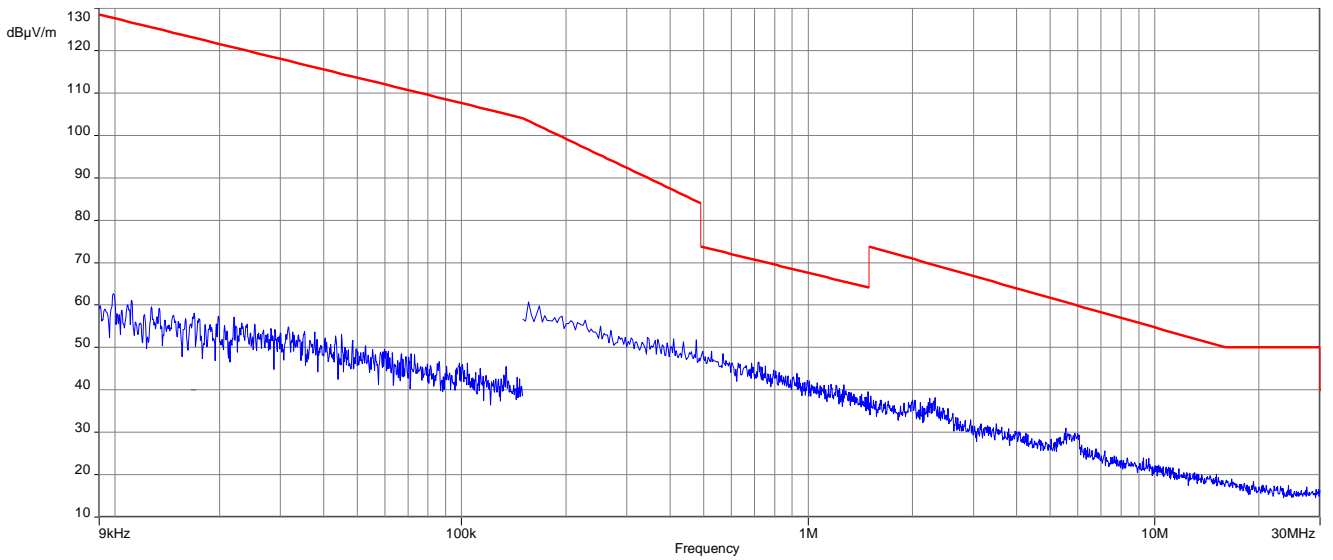


Plots: 40 MHz channel bandwidth

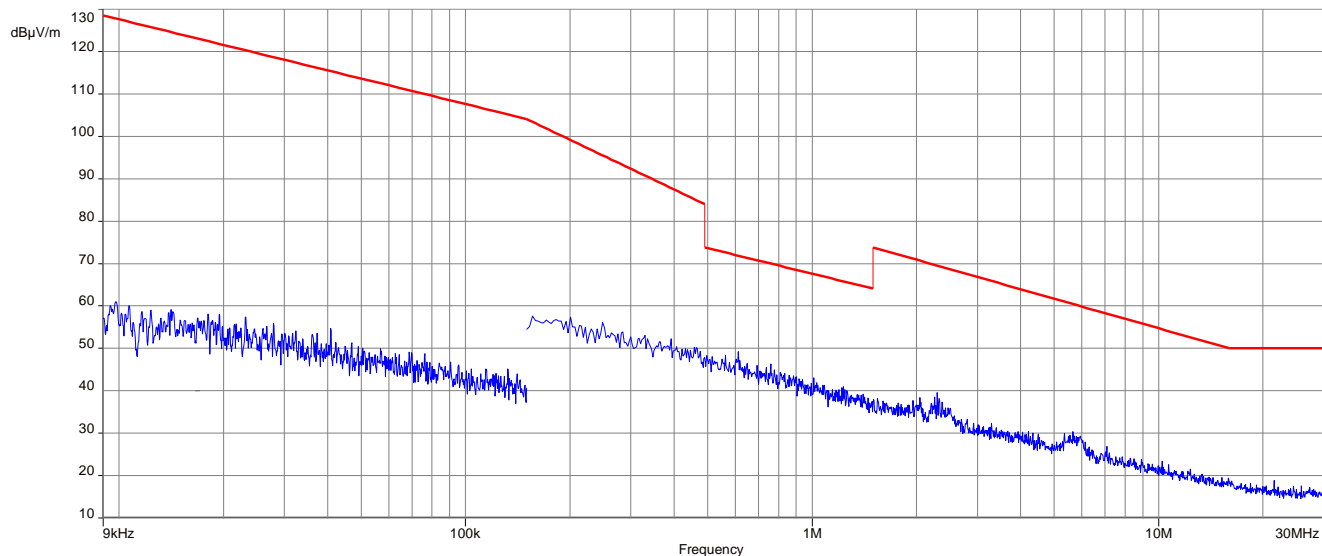
Plot 1: 9 kHz to 30 MHz, U-NII-1; lowest channel



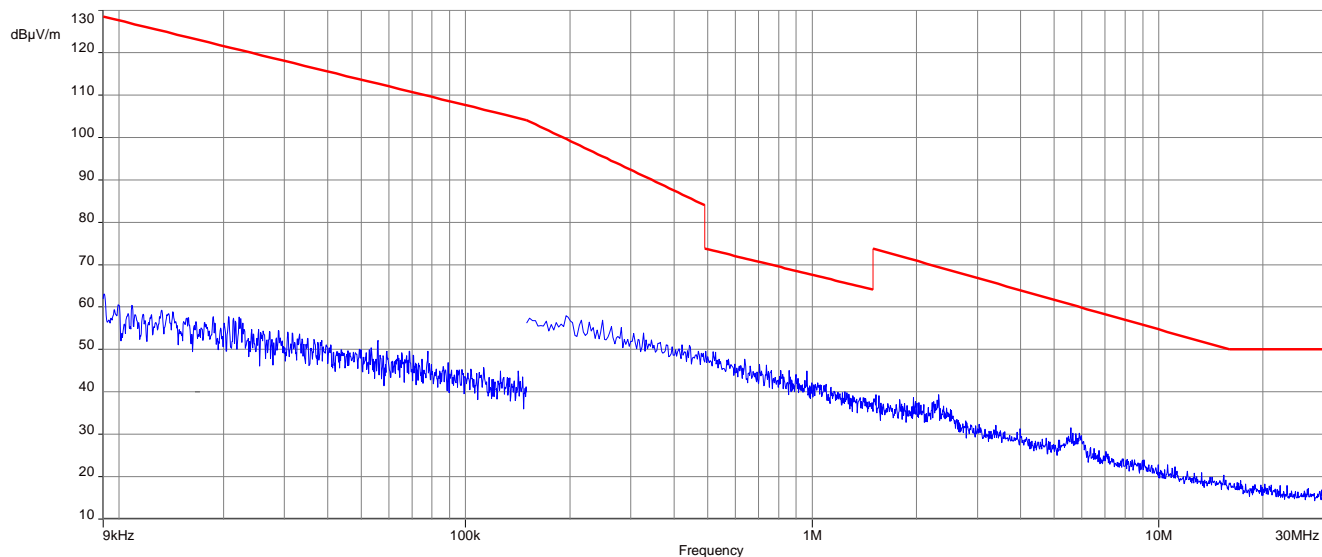
Plot 2: 9 kHz to 30 MHz, U-NII-1; highest channel



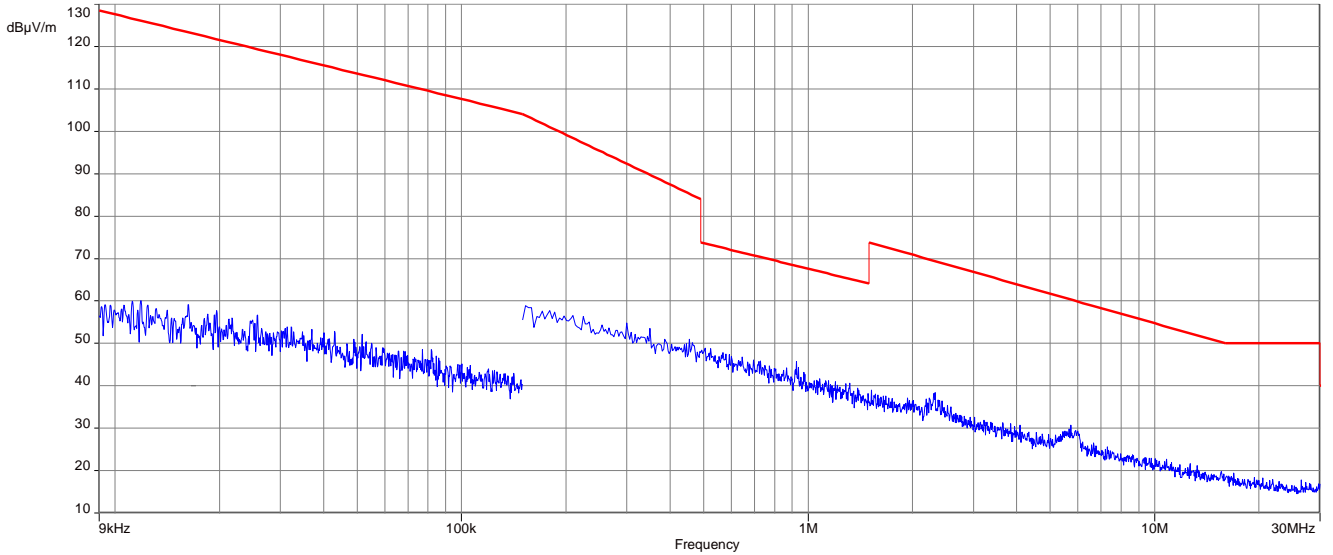
Plot 3: 9 kHz to 30 MHz, U-NII-2A; lowest channel



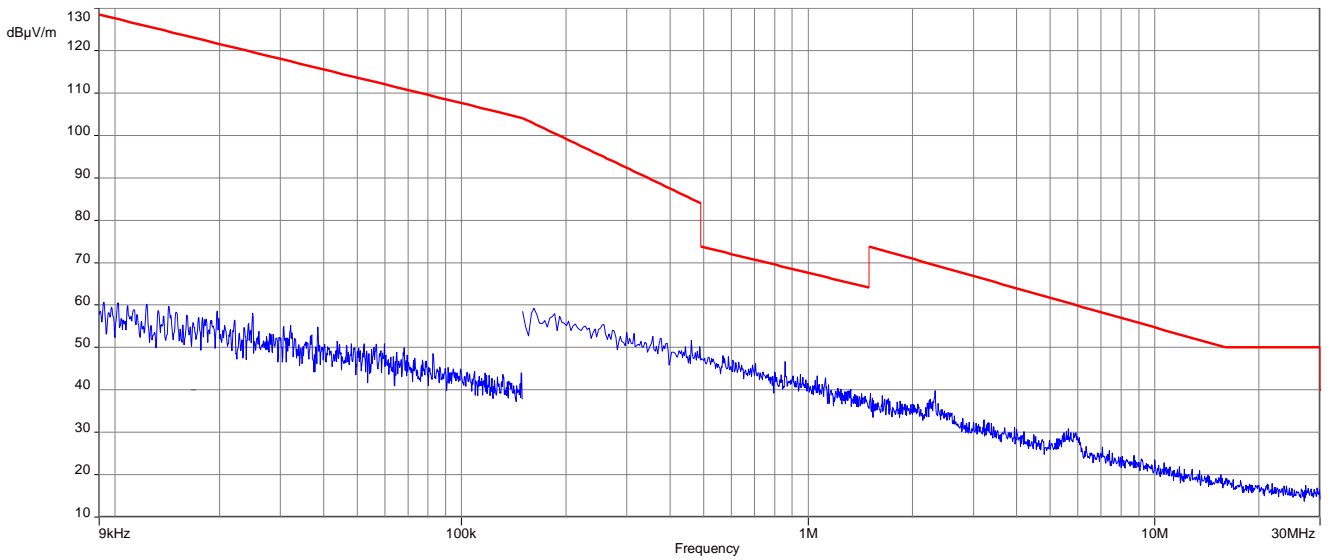
Plot 4: 9 kHz to 30 MHz, U-NII-2A; highest channel



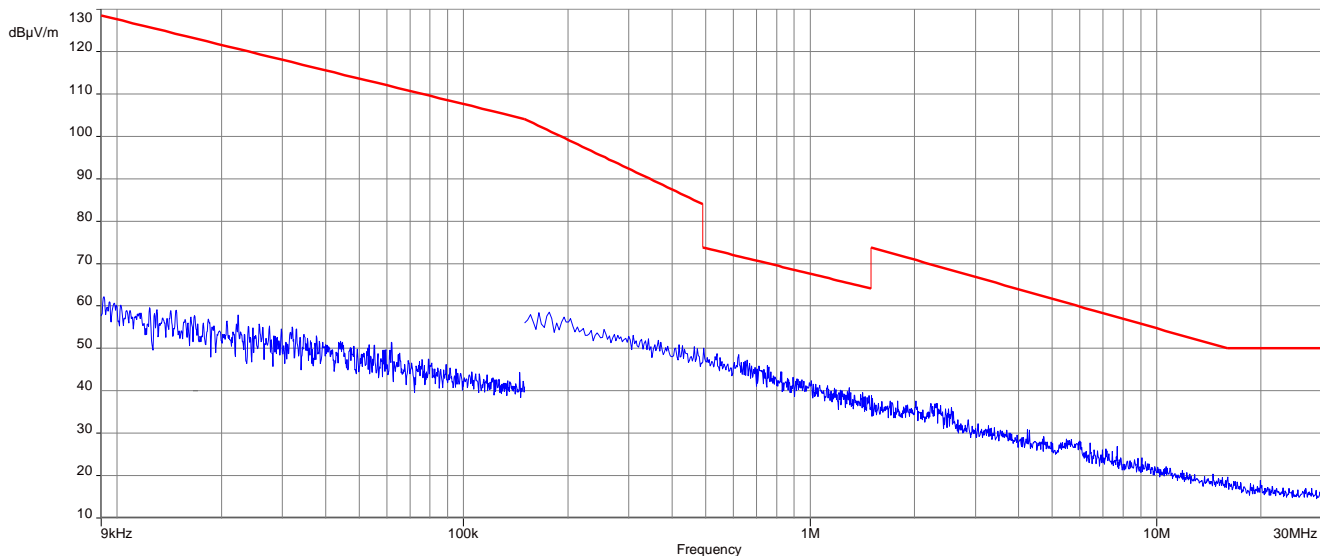
Plot 5: 9 kHz to 30 MHz, U-NII-2C; lowest channel



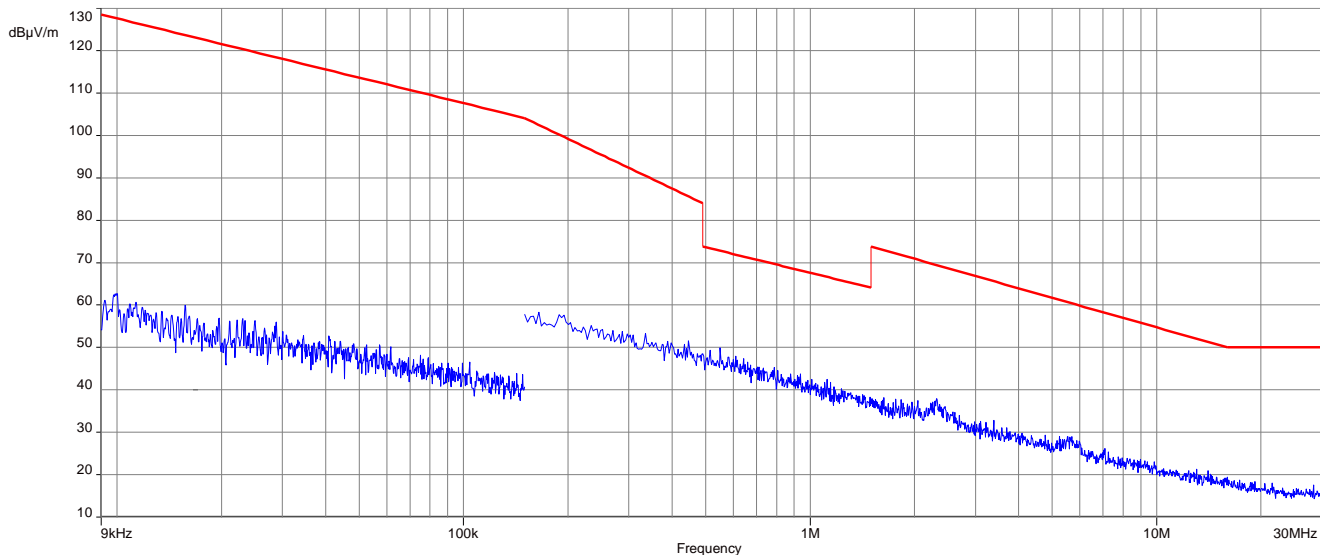
Plot 6: 9 kHz to 30 MHz, U-NII-2C; middle channel



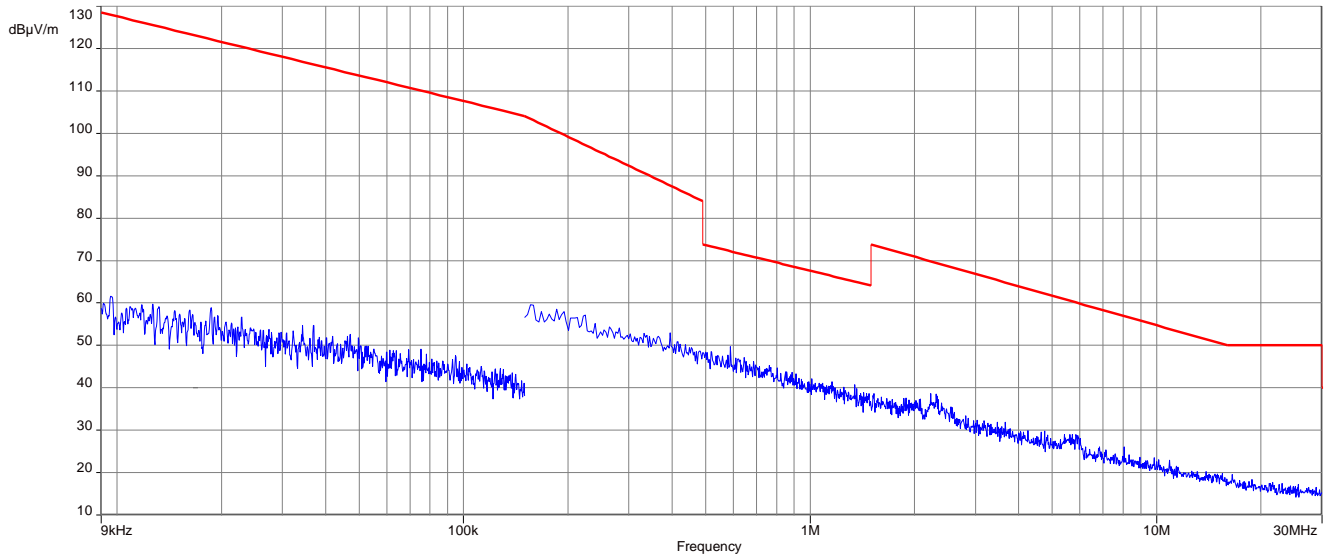
Plot 7: 9 kHz to 30 MHz, U-NII-2C; highest channel



Plot 8: 9 kHz to 30 MHz, U-NII-3; lowest channel

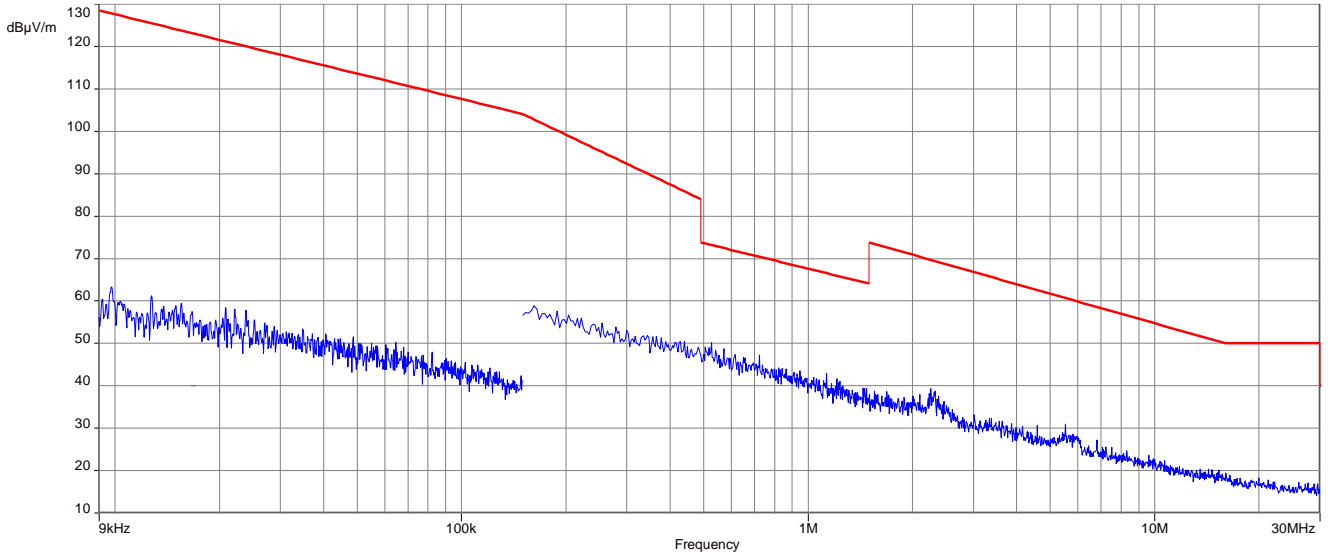


Plot 9: 9 kHz to 30 MHz, U-NII-3; highest channel

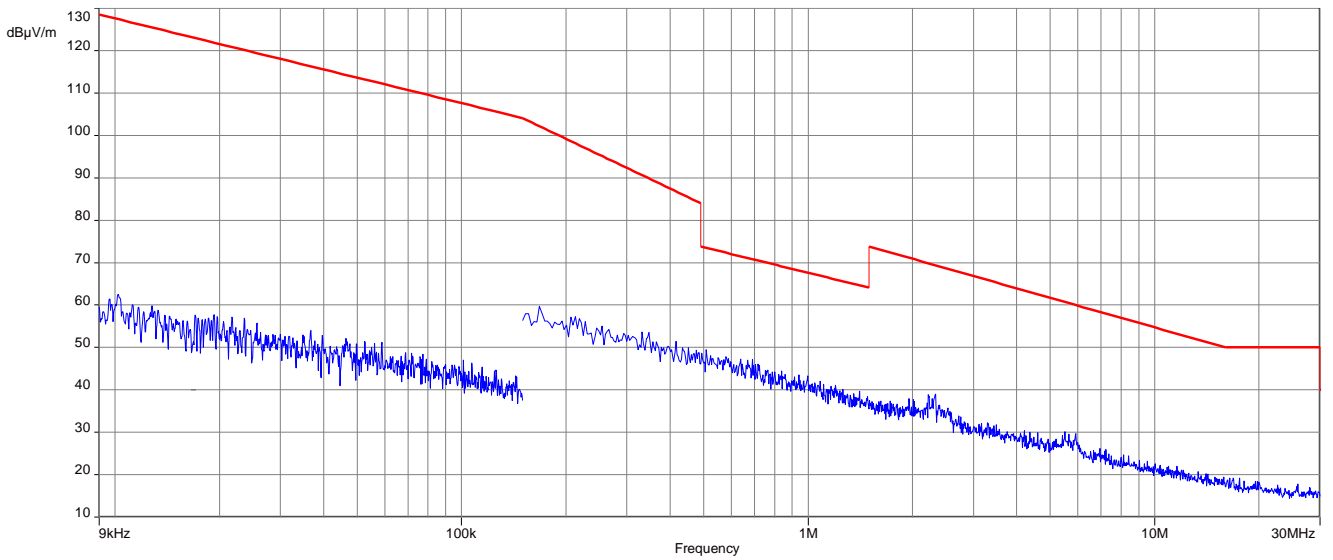


Plots: 80 MHz channel bandwidth

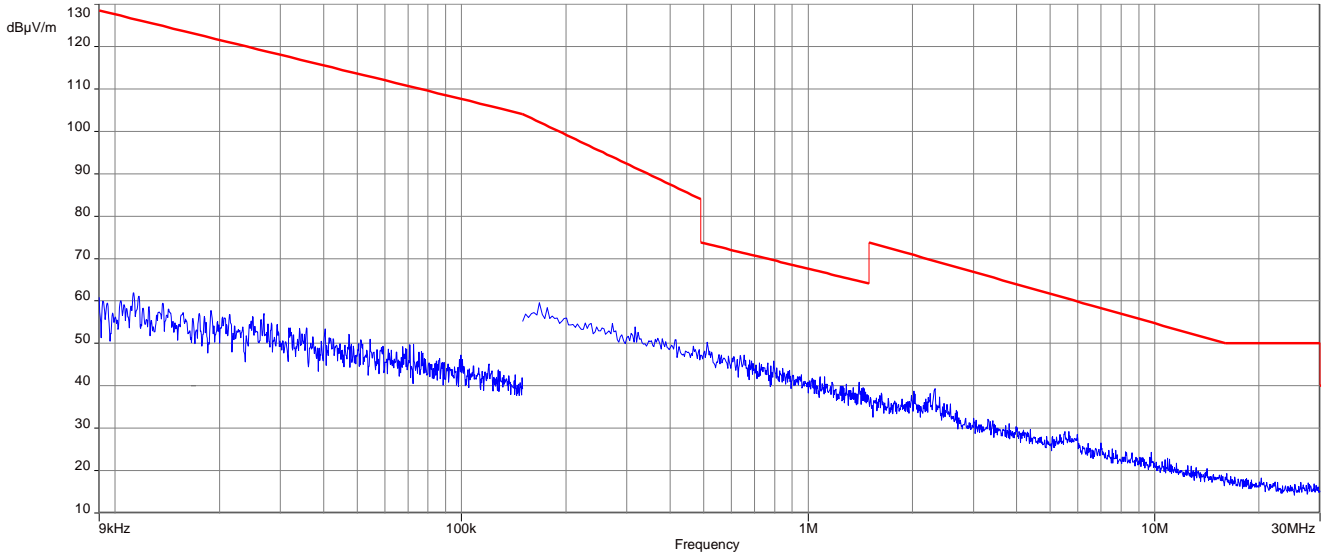
Plot 1: 9 kHz to 30 MHz, U-NII-1; middle channel



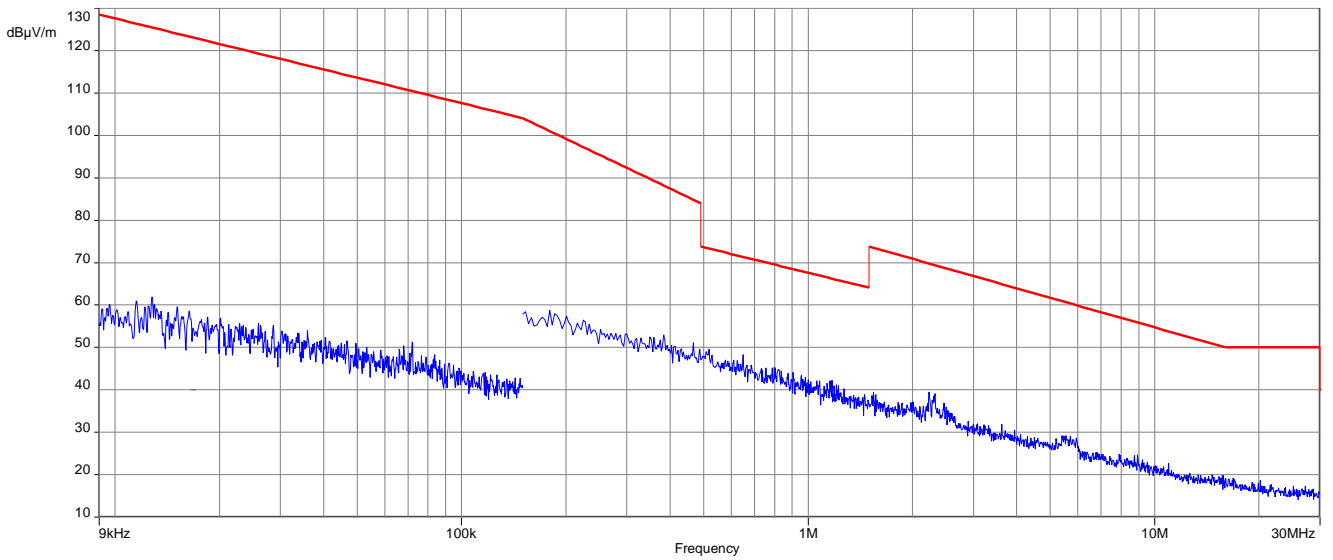
Plot 2: 9 kHz to 30 MHz, U-NII-2A; middle channel



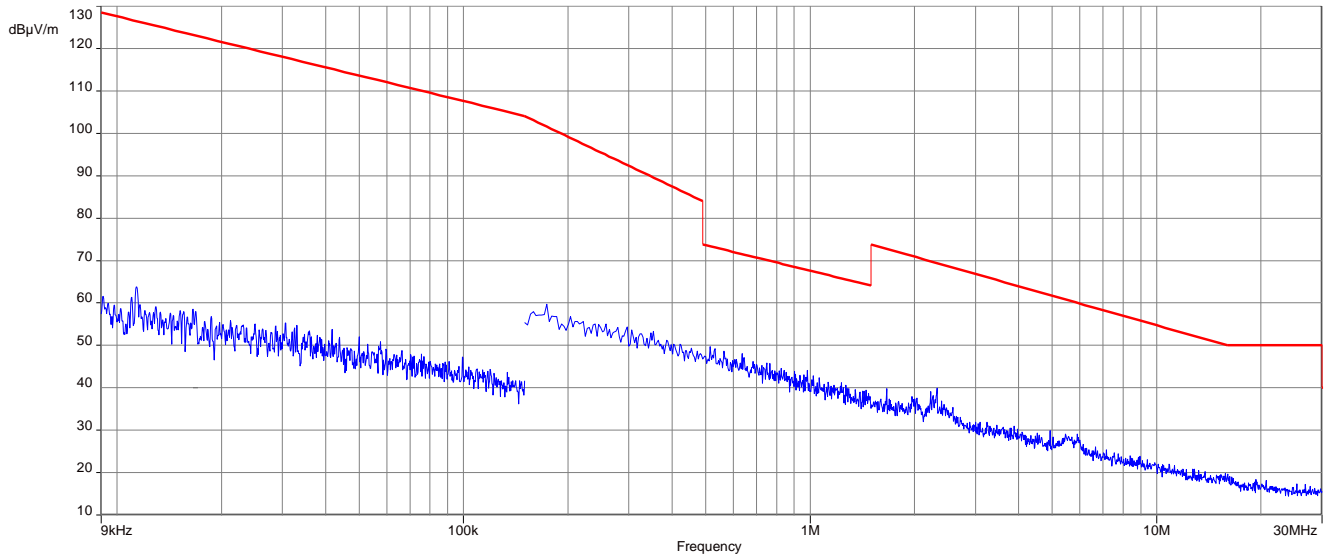
Plot 3: 9 kHz to 30 MHz, U-NII-2C; lowest channel



Plot 4: 9 kHz to 30 MHz, U-NII-2C; highest channel



Plot 5: 9 kHz to 30 MHz, U-NII-3; middle channel



11.7 TX spurious emissions radiated

Description:

Measurement of the radiated spurious emissions in transmit mode. The measurement is performed at lowest, middle and highest channel.

Measurement:

Measurement parameter	
Detector:	Quasi Peak below 1 GHz (alternative Peak) Peak above 1 GHz / RMS
Sweep time:	Auto
Resolution bandwidth:	F < 1 GHz: 100 kHz F > 1 GHz: 1 MHz
Video bandwidth:	F < 1 GHz: 100 kHz F > 1 GHz: ≥ 3 MHz / 1 MHz
Span:	30 MHz to 40 GHz
Trace mode:	Max Hold / Average with 100 counts + 20 log (1 / X) for duty cycle lower than 100 %
Test setup:	See sub clause 6.1 – A See sub clause 6.2 – A See sub clause 6.3 – A
Measurement uncertainty:	See sub clause 8

Limits:

TX Spurious Emissions Radiated		
§15.209		
Frequency (MHz)	Field Strength (dBµV/m)	Measurement distance
30 - 88	30.0	10
88 – 216	33.5	10
216 – 960	36.0	10
Above 960	54.0	3
§15.407		
Outside the restricted bands!	-27 dBm / MHz	

Results: 20 MHz channel bandwidth

TX Spurious Emissions Radiated [dBµV/m] / dBm								
U-NII-1 (5150 MHz to 5250 MHz)								
Lowest channel			Middle channel			Highest channel		
F [MHz]	Detector	Level [dBµV/m]	F [MHz]	Detector	Level [dBµV/m]	F [MHz]	Detector	Level [dBµV/m]
15535	Peak	55.0		Peak		15715	Peak	58.2
	AVG	40.7		AVG			AVG	44.9
	Peak			Peak			Peak	
	AVG			AVG			AVG	
For emissions above 18 GHz please take look at the plots.			For emissions above 18 GHz please take look at the plots.			For emissions above 18 GHz please take look at the plots.		

TX Spurious Emissions Radiated [dBµV/m] / dBm								
U-NII-2A (5250 MHz to 5350 MHz)								
Lowest channel			Middle channel			Highest channel		
F [MHz]	Detector	Level [dBµV/m]	F [MHz]	Detector	Level [dBµV/m]	F [MHz]	Detector	Level [dBµV/m]
15781	Peak	57.8		Peak		10640	Peak	51.6
	AVG	44.1		AVG			AVG	46.9
	Peak			Peak			Peak	
	AVG			AVG			AVG	
For emissions above 18 GHz please take look at the plots.			For emissions above 18 GHz please take look at the plots.			For emissions above 18 GHz please take look at the plots.		

TX Spurious Emissions Radiated [dBµV/m] / dBm								
U-NII-2C (5470 MHz to 5725 MHz)								
Lowest channel			Middle channel			Highest channel		
F [MHz]	Detector	Level [dBµV/m]	F [MHz]	Detector	Level [dBµV/m]	F [MHz]	Detector	Level [dBµV/m]
11000	Peak	52.9	11200	Peak	60.6	11400	Peak	58.5
	AVG	46.3		AVG	47.5		AVG	47.1
	Peak			Peak			Peak	
	AVG			AVG			AVG	
For emissions above 18 GHz please take look at the plots.			For emissions above 18 GHz please take look at the plots.			For emissions above 18 GHz please take look at the plots.		

TX Spurious Emissions Radiated [dBµV/m] / dBm								
U-NII-3 (5725 MHz to 5850 MHz)								
Lowest channel			Middle channel			Highest channel		
F [MHz]	Detector	Level [dBµV/m]	F [MHz]	Detector	Level [dBµV/m]	F [MHz]	Detector	Level [dBµV/m]
11491	Peak	60.6	11570	Peak	61.8	11650	Peak	64.0
	AVG	49.0		AVG	51.3		AVG	52.4
	Peak			Peak			Peak	
	AVG			AVG			AVG	
For emissions above 18 GHz please take look at the plots.			For emissions above 18 GHz please take look at the plots.			For emissions above 18 GHz please take look at the plots.		

Results: 40 MHz channel bandwidth

TX Spurious Emissions Radiated [dBµV/m] / dBm								
U-NII-1 (5150 MHz to 5250 MHz)								
Lowest channel			Middle channel			Highest channel		
F [MHz]	Detector	Level [dBµV/m]	F [MHz]	Detector	Level [dBµV/m]	F [MHz]	Detector	Level [dBµV/m]
	Peak			Peak			Peak	
	AVG			AVG			AVG	
	Peak			Peak			Peak	
	AVG			AVG			AVG	
For emissions above 18 GHz please take look at the plots.			For emissions above 18 GHz please take look at the plots.			For emissions above 18 GHz please take look at the plots.		

TX Spurious Emissions Radiated [dBµV/m] / dBm								
U-NII-2A (5250 MHz to 5350 MHz)								
Lowest channel			Middle channel			Highest channel		
F [MHz]	Detector	Level [dBµV/m]	F [MHz]	Detector	Level [dBµV/m]	F [MHz]	Detector	Level [dBµV/m]
	Peak			Peak		10620	Peak	52.0
	AVG			AVG			AVG	46.7
	Peak			Peak			Peak	
	AVG			AVG			AVG	
For emissions above 18 GHz please take look at the plots.			For emissions above 18 GHz please take look at the plots.			For emissions above 18 GHz please take look at the plots.		

TX Spurious Emissions Radiated [dBµV/m] / dBm								
U-NII-2C (5470 MHz to 5725 MHz)								
Lowest channel			Middle channel			Highest channel		
F [MHz]	Detector	Level [dBµV/m]	F [MHz]	Detector	Level [dBµV/m]	F [MHz]	Detector	Level [dBµV/m]
11019	Peak	52.8	11180	Peak	52.0	11340	Peak	50.7
	AVG	48.8		AVG	44.3		AVG	39.7
	Peak			Peak			Peak	
	AVG			AVG			AVG	
For emissions above 18 GHz please take look at the plots.			For emissions above 18 GHz please take look at the plots.			For emissions above 18 GHz please take look at the plots.		

TX Spurious Emissions Radiated [dBµV/m] / dBm								
U-NII-3 (5725 MHz to 5850 MHz)								
Lowest channel			Middle channel			Highest channel		
F [MHz]	Detector	Level [dBµV/m]	F [MHz]	Detector	Level [dBµV/m]	F [MHz]	Detector	Level [dBµV/m]
11511	Peak	58.2		Peak		11596	Peak	59.1
	AVG	46.2		AVG			AVG	48.4
	Peak			Peak			Peak	
	AVG			AVG			AVG	
For emissions above 18 GHz please take look at the plots.			For emissions above 18 GHz please take look at the plots.			For emissions above 18 GHz please take look at the plots.		

Results: 80 MHz channel bandwidth

TX Spurious Emissions Radiated [dBµV/m] / dBm		
U-NII-1 (5150 MHz to 5250 MHz)		
Middle channel		
F [MHz]	Detector	Level [dBµV/m]
	Peak	
	AVG	
	Peak	
	AVG	
For emissions above 18 GHz please take look at the plots.		

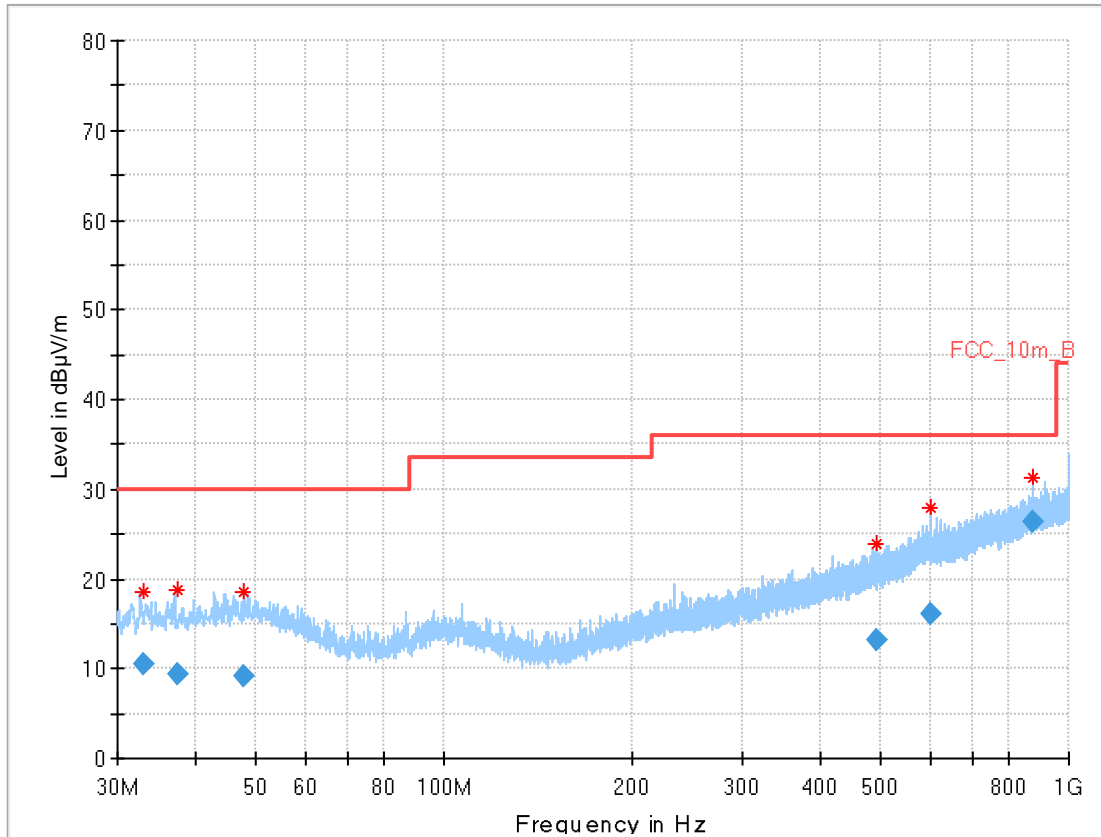
TX Spurious Emissions Radiated [dBµV/m] / dBm		
U-NII-2A (5250 MHz to 5350 MHz)		
Middle channel		
F [MHz]	Detector	Level [dBµV/m]
	Peak	
	AVG	
	Peak	
	AVG	
For emissions above 18 GHz please take look at the plots.		

TX Spurious Emissions Radiated [dBµV/m] / dBm					
U-NII-2C (5470 MHz to 5725 MHz)					
Lowest channel			Highest channel		
	Peak		11220	Peak	49.3
	AVG			AVG	42.6
	Peak			Peak	
	AVG			AVG	
For emissions above 18 GHz please take look at the plots.			For emissions above 18 GHz please take look at the plots.		

TX Spurious Emissions Radiated [dBµV/m] / dBm		
U-NII-3 (5725 MHz to 5850 MHz)		
Middle channel		
F [MHz]	Detector	Level [dBµV/m]
11568	Peak	52.5
	AVG	39.0
	Peak	
	AVG	
For emissions above 18 GHz please take look at the plots.		

Plots: 20 MHz channel bandwidth

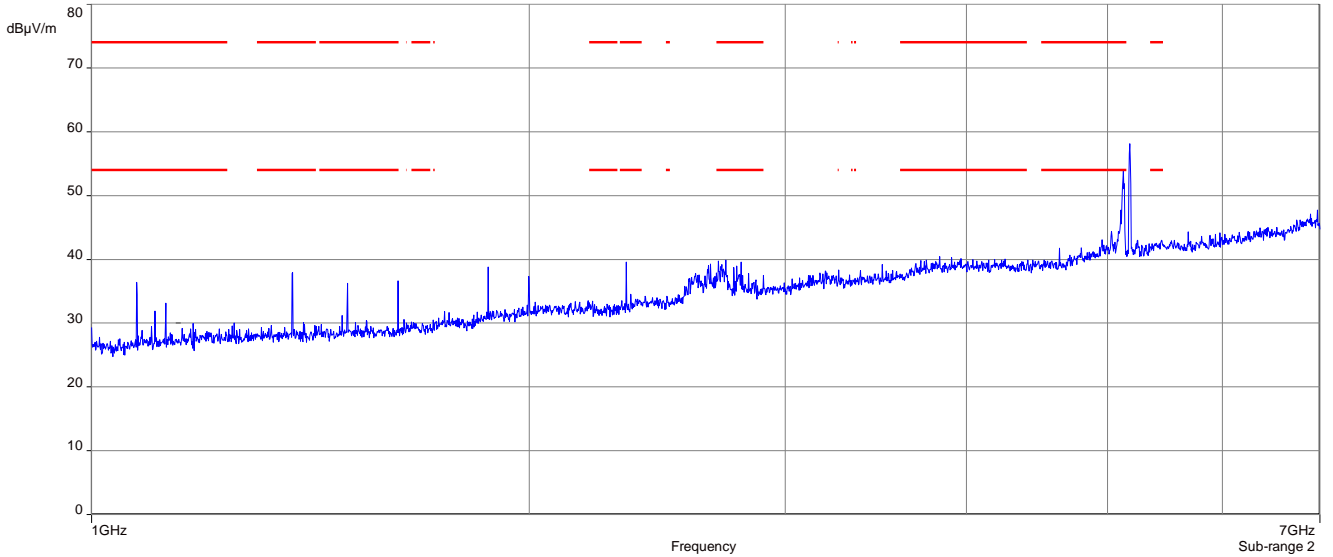
Plot 1: 30 MHz to 1 GHz; vertical & horizontal polarization; U-NII-1; lowest channel



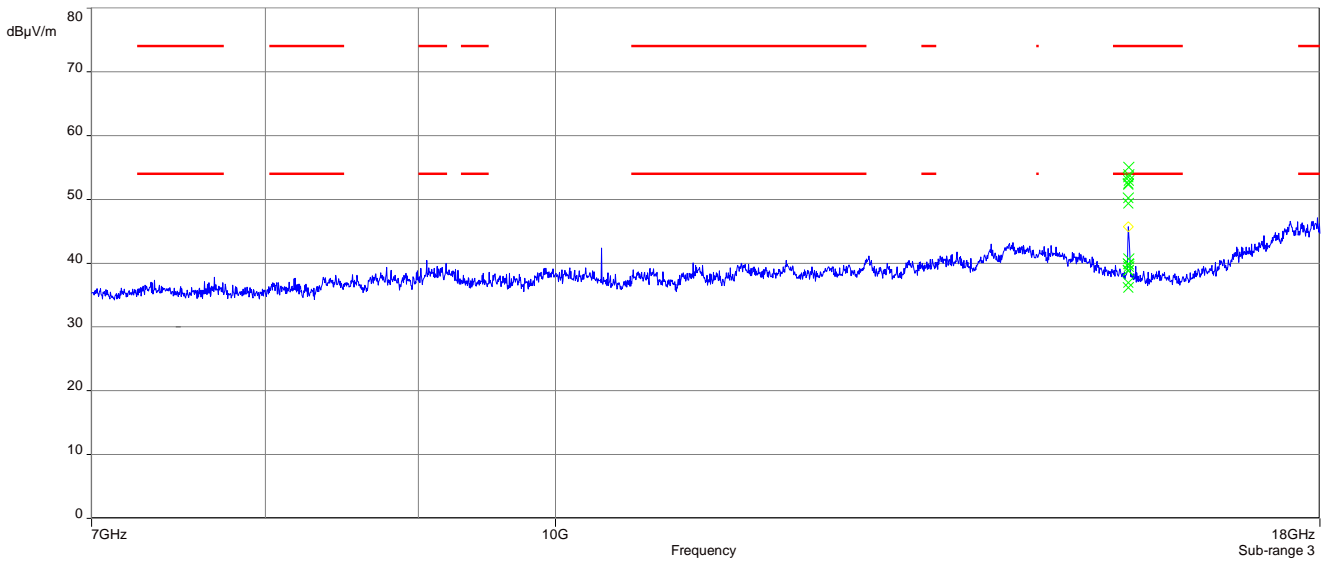
Final results:

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
32.944	10.54	30.0	19.46	1000	120	144.0	H	155.0	13
37.460	9.33	30.0	20.67	1000	120	101.0	H	278.0	14
47.852	9.17	30.0	20.83	1000	120	101.0	H	104.0	15
493.049	13.29	36.0	22.71	1000	120	146.0	V	55.0	18
599.543	16.00	36.0	20.00	1000	120	160.0	V	64.0	20
875.001	26.47	36.0	9.53	1000	120	101.0	H	174.0	24

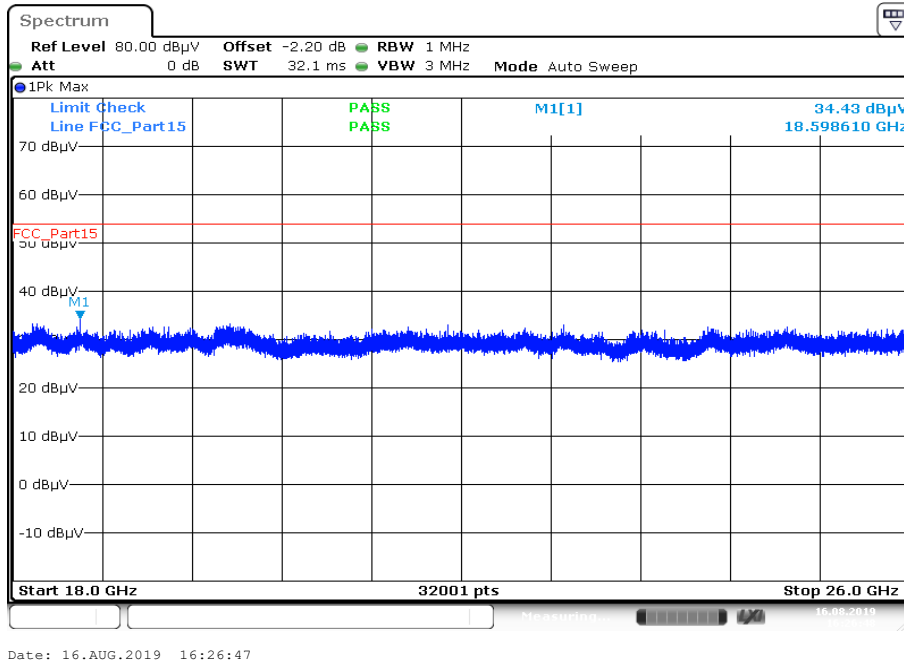
Plot 2: 1 GHz to 7 GHz; vertical & horizontal polarization; U-NII-1; lowest channel



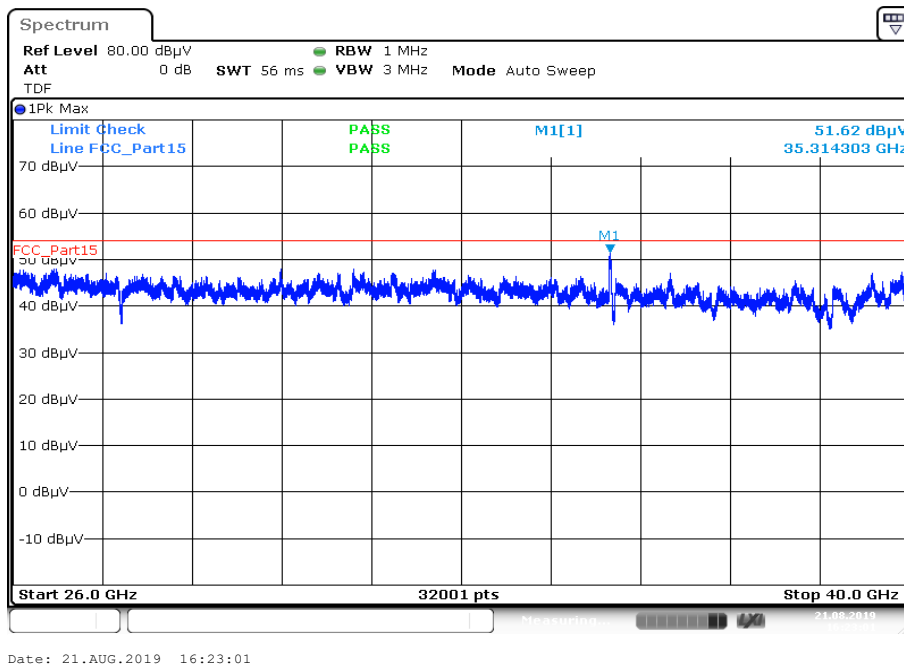
Plot 3: 7 GHz to 18 GHz; vertical & horizontal polarization; U-NII-1; lowest channel



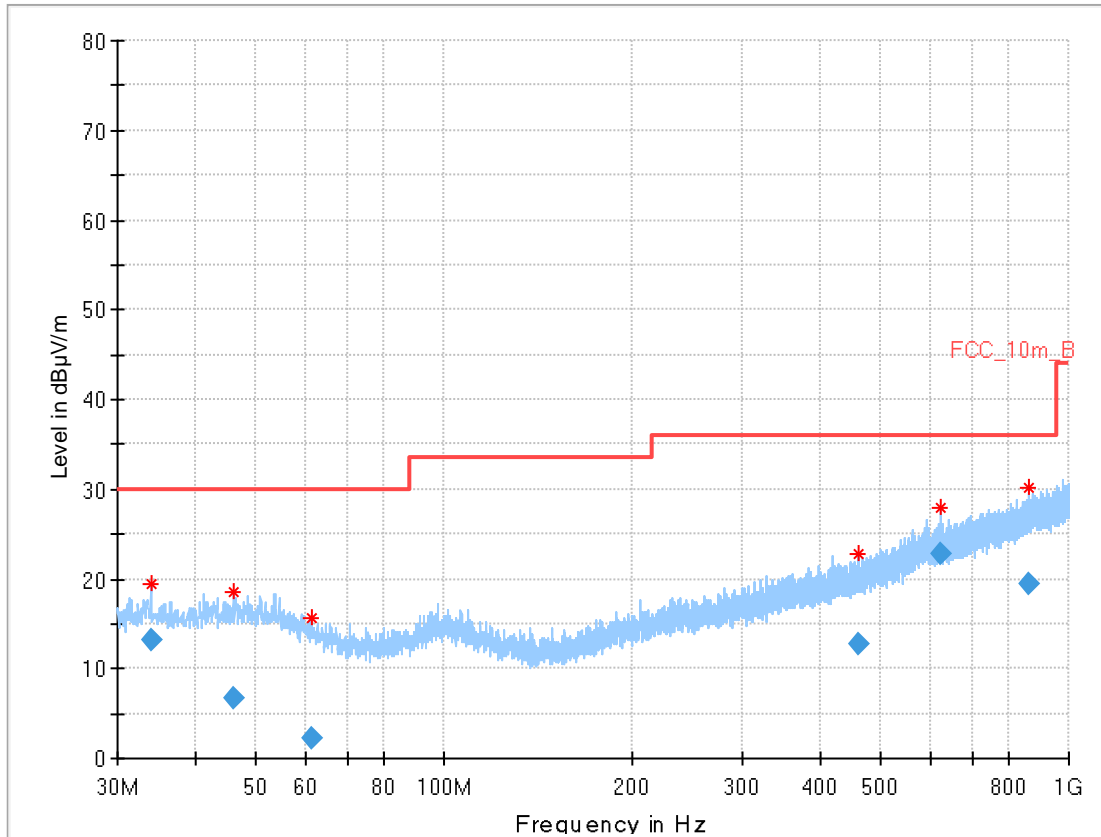
Plot 4: 18 GHz to 26 GHz; vertical & horizontal polarization; U-NII-1; lowest channel



Plot 5: 26 GHz to 40 GHz; vertical & horizontal polarization; U-NII-1; lowest channel



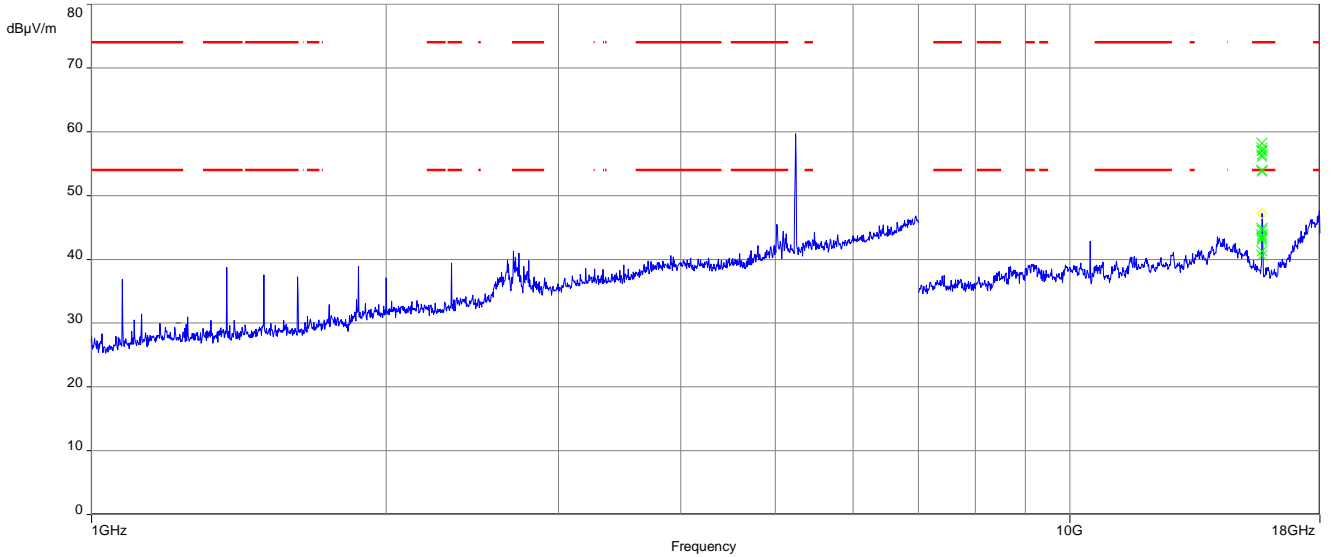
Plot 6: 30 MHz to 1 GHz; vertical & horizontal polarization; U-NII-1; highest channel



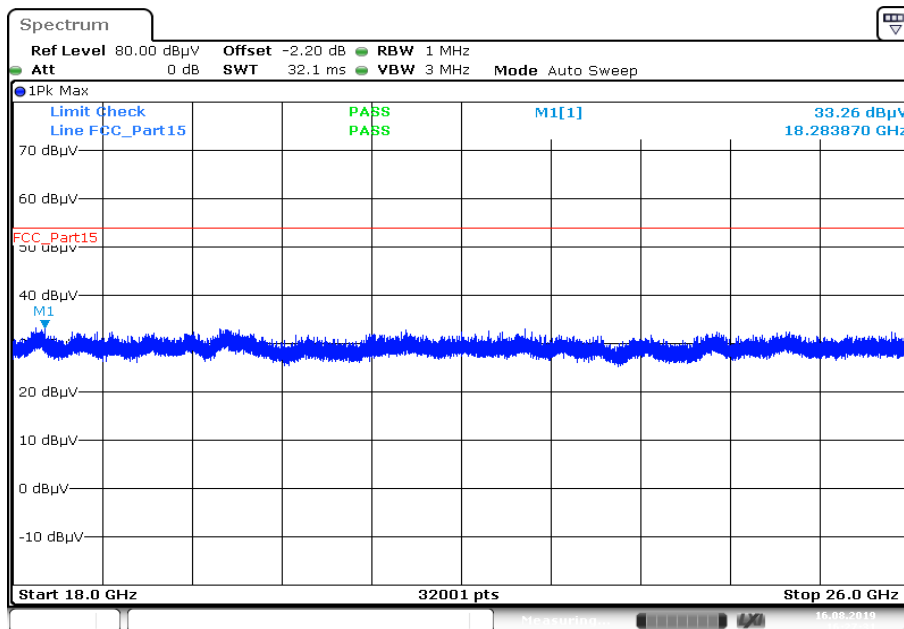
Final results:

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
34.009	13.27	30.0	16.73	1000	120	101.0	H	22.0	14
46.040	6.72	30.0	23.28	1000	120	101.0	V	191.0	15
61.446	2.31	30.0	27.69	1000	120	101.0	V	40.0	13
461.281	12.66	36.0	23.34	1000	120	101.0	H	302.0	18
624.993	22.83	36.0	13.17	1000	120	160.0	H	104.0	21
864.555	19.44	36.0	16.56	1000	120	160.0	V	227.0	23

Plot 7: 1 GHz to 18 GHz; vertical & horizontal polarization; U-NII-1; highest channel

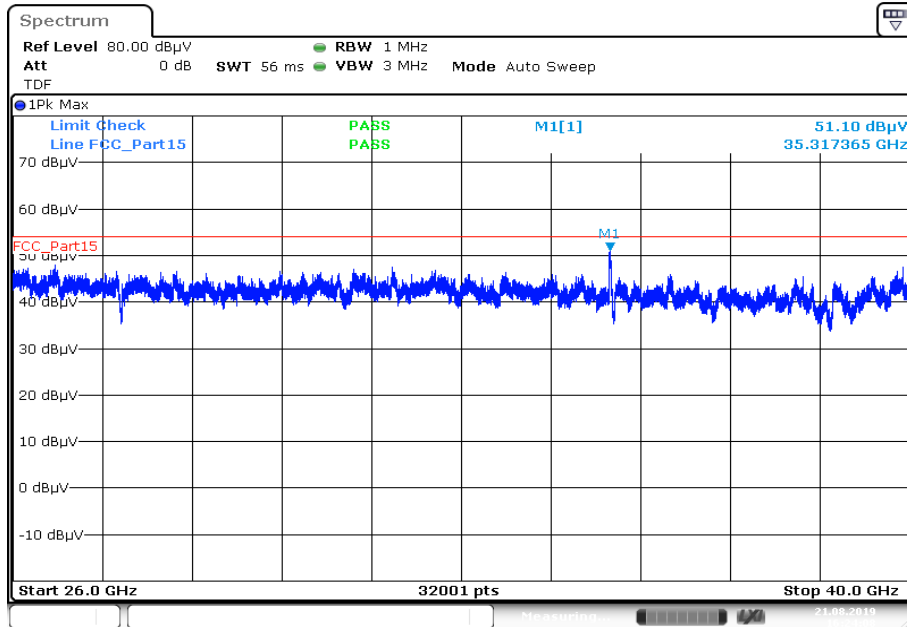


Plot 8: 18 GHz to 26 GHz; vertical & horizontal polarization; U-NII-1; highest channel

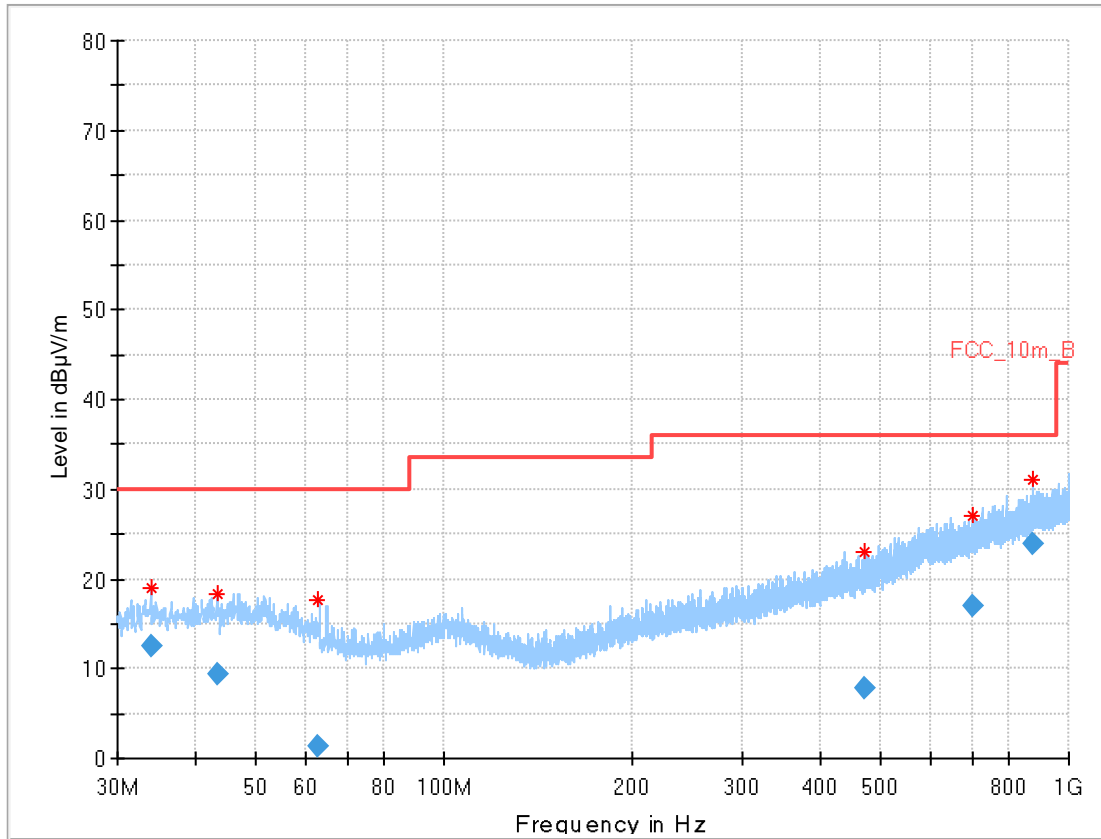


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Plot 9: 26 GHz to 40 GHz; vertical & horizontal polarization; U-NII-1; highest channel



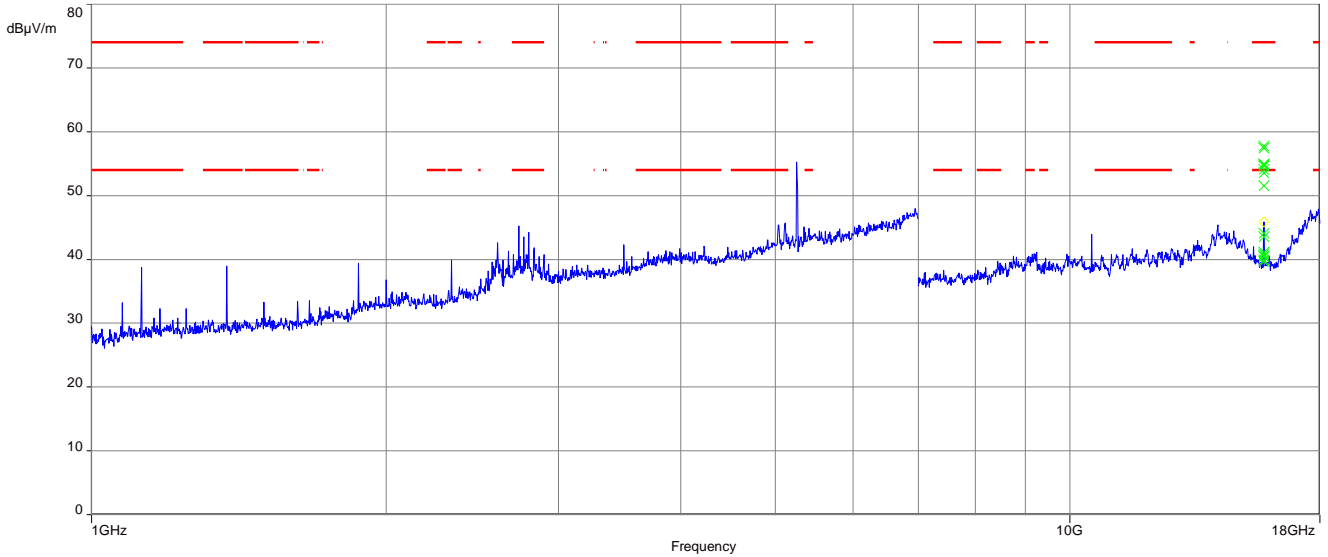
Plot 10: 30 MHz to 1 GHz; vertical & horizontal polarization; U-NII-2A; lowest channel



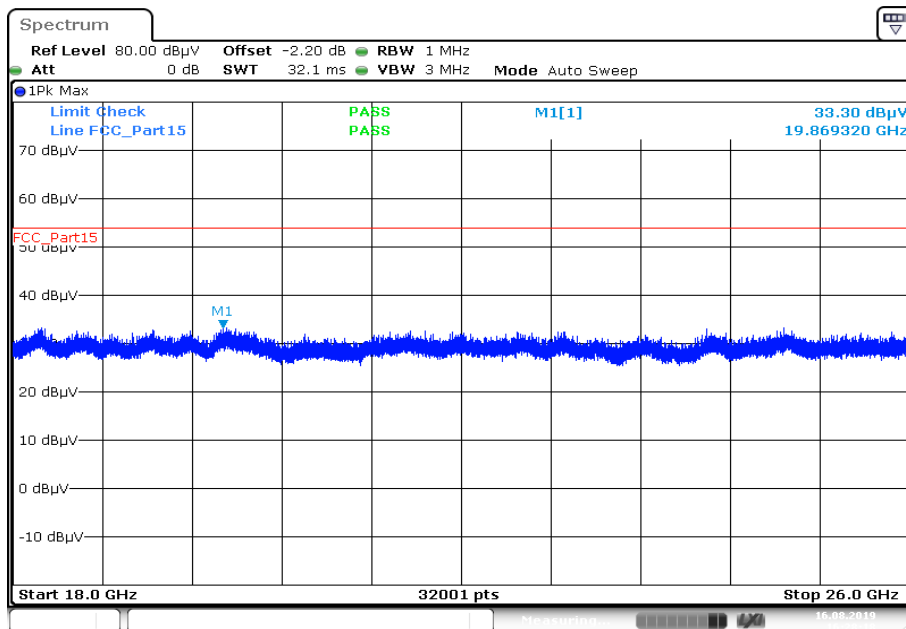
Final results:

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
34.012	12.54	30.0	17.46	1000	120	101.0	H	148.0	14
43.379	9.31	30.0	20.69	1000	120	98.0	V	279.0	15
62.802	1.34	30.0	28.66	1000	120	101.0	H	256.0	12
471.443	7.74	36.0	28.26	1000	120	101.0	H	291.0	18
700.105	17.09	36.0	18.91	1000	120	160.0	V	138.0	21
874.973	23.85	36.0	12.15	1000	120	98.0	H	0.0	24

Plot 11: 1 GHz to 18 GHz; vertical & horizontal polarization; U-NII-2A; lowest channel

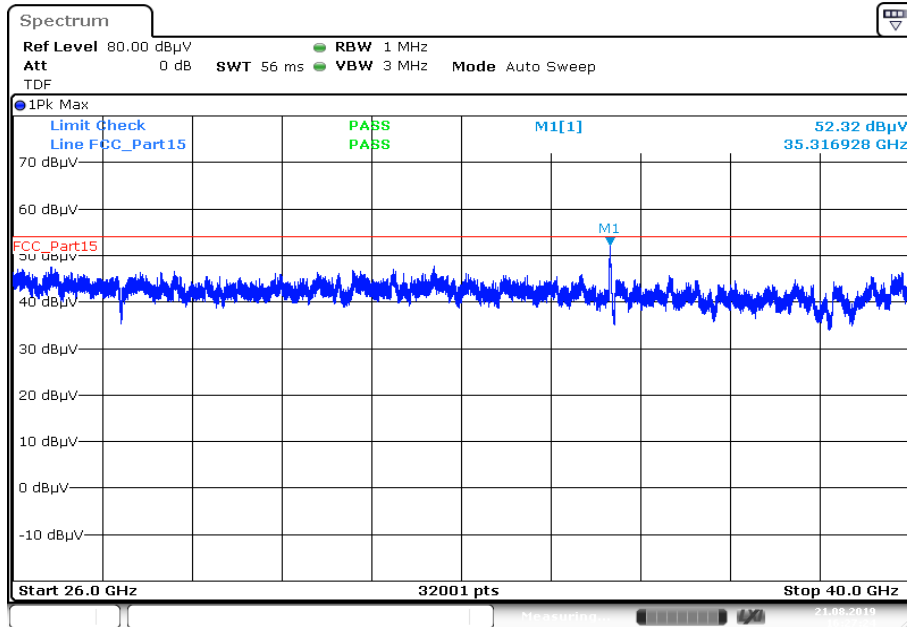


Plot 12: 18 GHz to 26 GHz; vertical & horizontal polarization; U-NII-2A; lowest channel



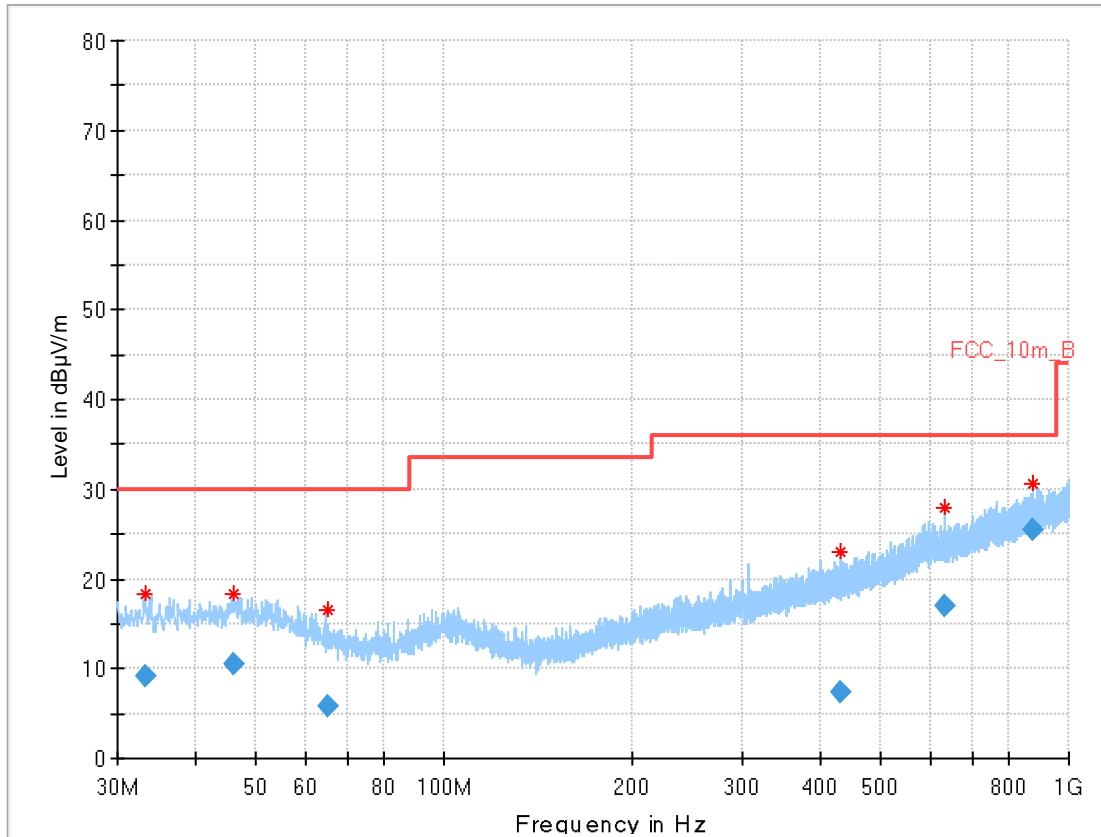
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Plot 13: 26 GHz to 40 GHz; vertical & horizontal polarization; U-NII-2A; lowest channel



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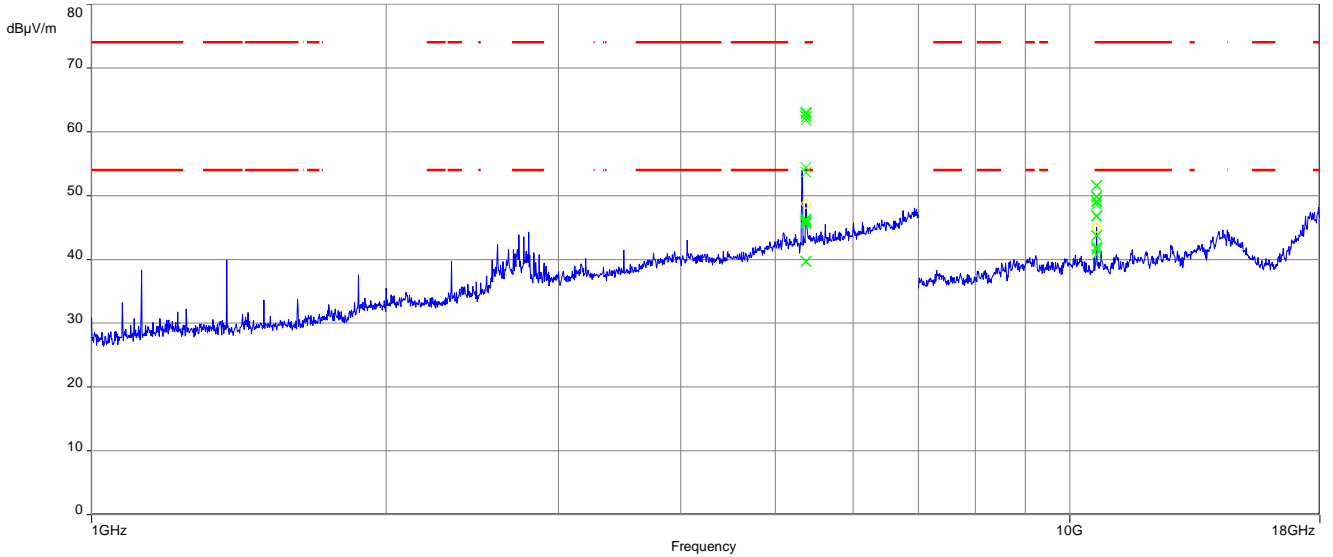
Plot 14: 30 MHz to 1 GHz; vertical & horizontal polarization; U-NII-2A; highest channel



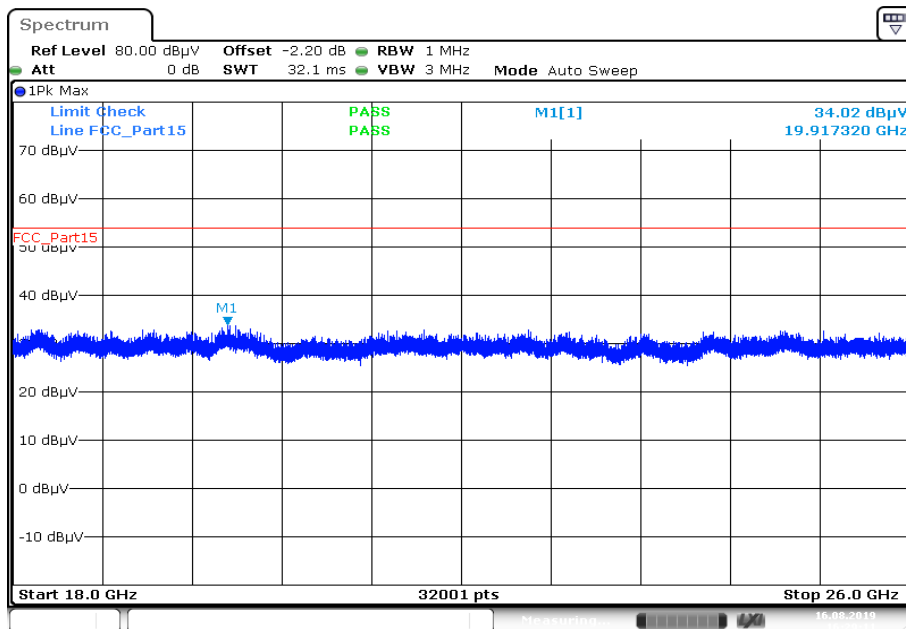
Final results:

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
33.194	9.25	30.0	20.75	1000	120	145.0	V	336.0	14
45.961	10.52	30.0	19.48	1000	120	101.0	V	7.0	15
64.937	5.88	30.0	24.12	1000	120	101.0	H	55.0	12
430.453	7.34	36.0	28.66	1000	120	100.0	H	84.0	17
630.523	17.01	36.0	18.99	1000	120	98.0	V	355.0	21
875.018	25.51	36.0	10.49	1000	120	98.0	H	13.0	24

Plot 15: 1 GHz to 18 GHz; vertical & horizontal polarization; U-NII-2A; highest channel

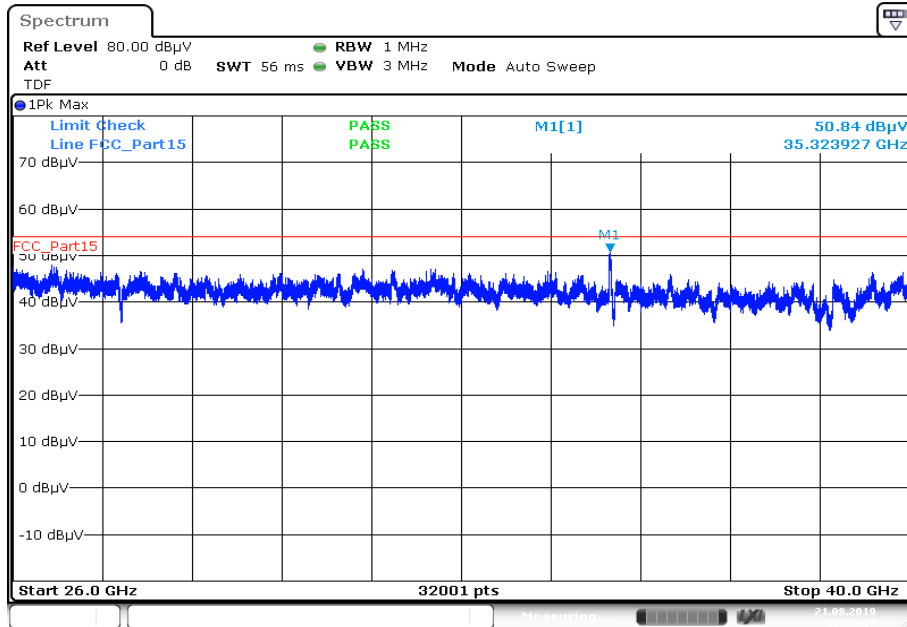


Plot 16: 18 GHz to 26 GHz; vertical & horizontal polarization; U-NII-2A; highest channel

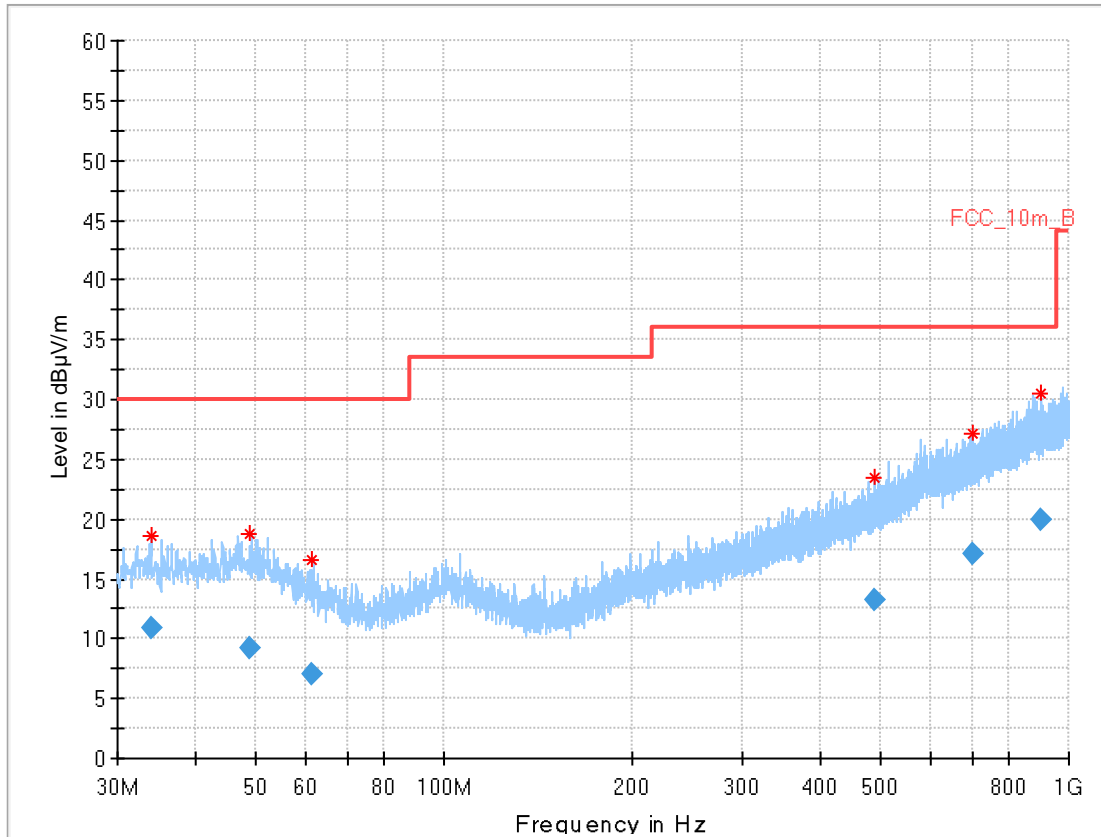


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Plot 17: 26 GHz to 40 GHz; vertical & horizontal polarization; U-NII-2A; highest channel



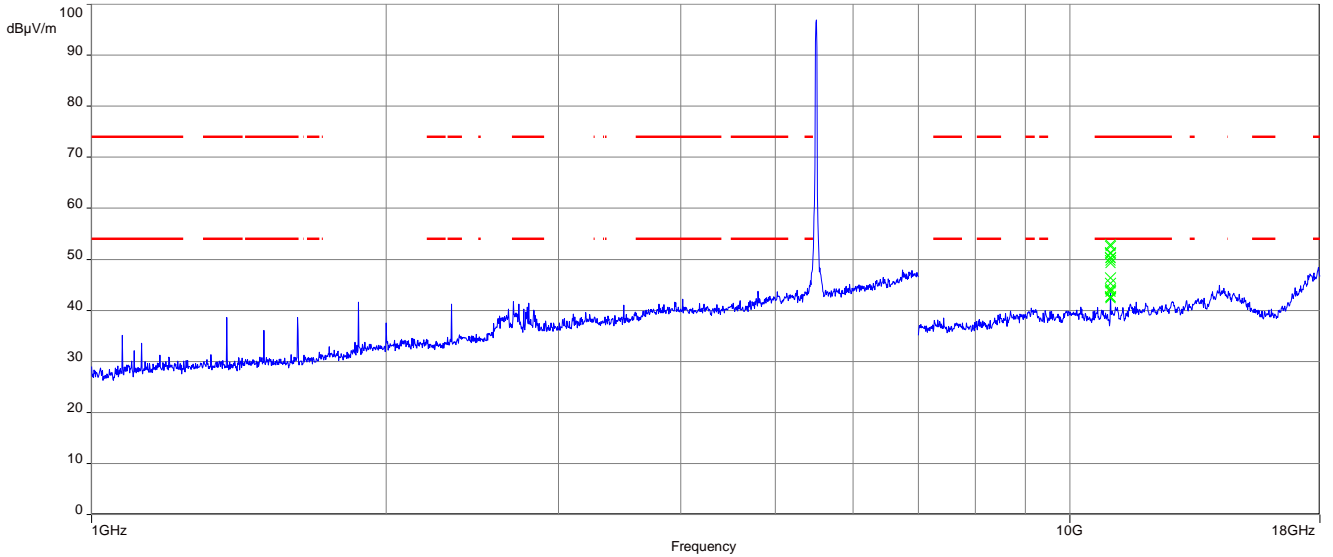
Plot 18: 30 MHz to 1 GHz; vertical & horizontal polarization; U-NII-2C; lowest channel



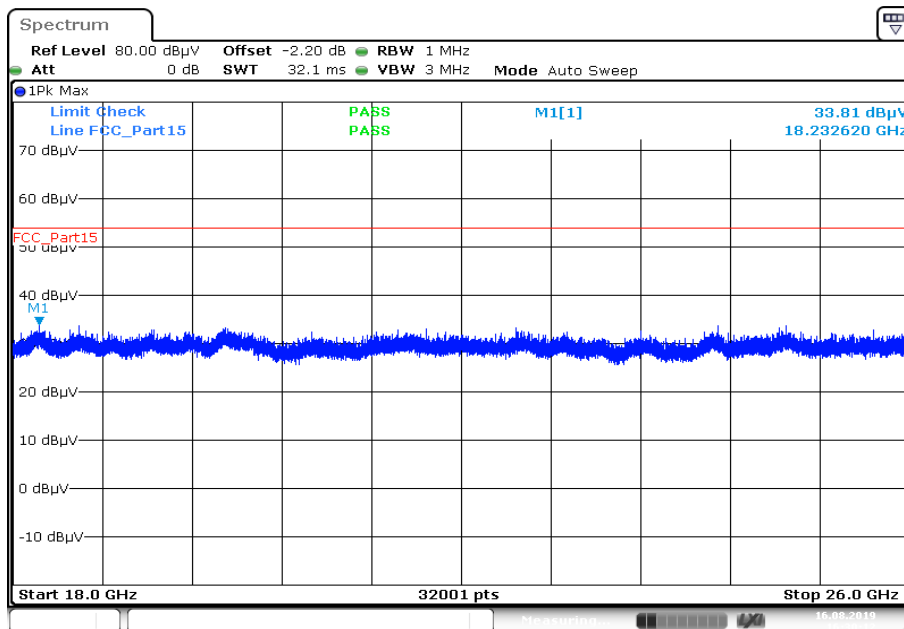
Final results:

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
33.993	10.91	30.0	19.09	1000	120	101.0	H	348.0	14
48.742	9.15	30.0	20.85	1000	120	101.0	V	108.0	15
61.288	7.04	30.0	22.96	1000	120	101.0	H	146.0	13
488.013	13.20	36.0	22.80	1000	120	100.0	H	119.0	18
699.826	17.08	36.0	18.92	1000	120	160.0	V	15.0	21
904.771	19.95	36.0	16.05	1000	120	101.0	H	267.0	24

Plot 19: 1 GHz to 18 GHz; vertical & horizontal polarization; U-NII-2C; lowest channel

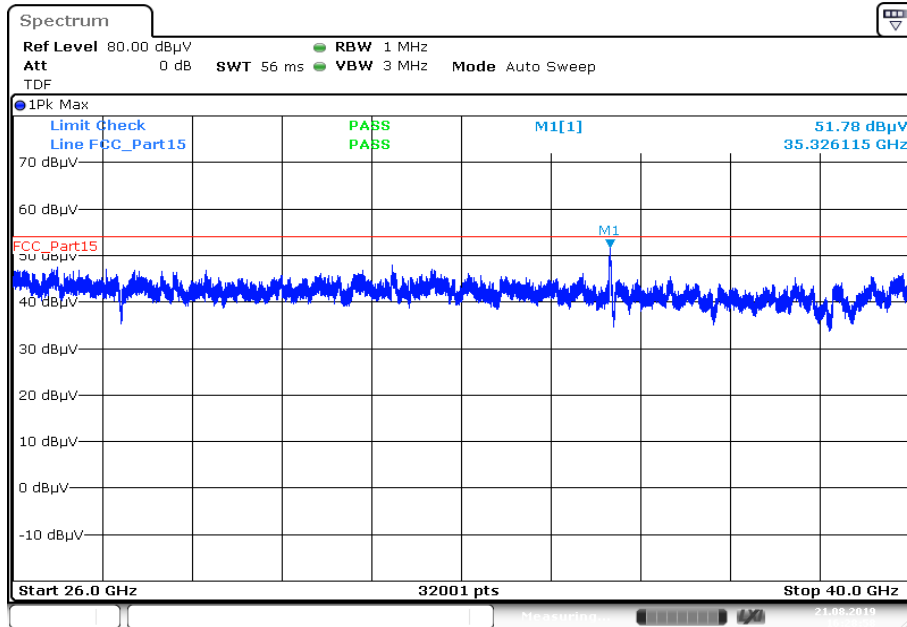


Plot 20: 18 GHz to 26 GHz; vertical & horizontal polarization; U-NII-2C; lowest channel

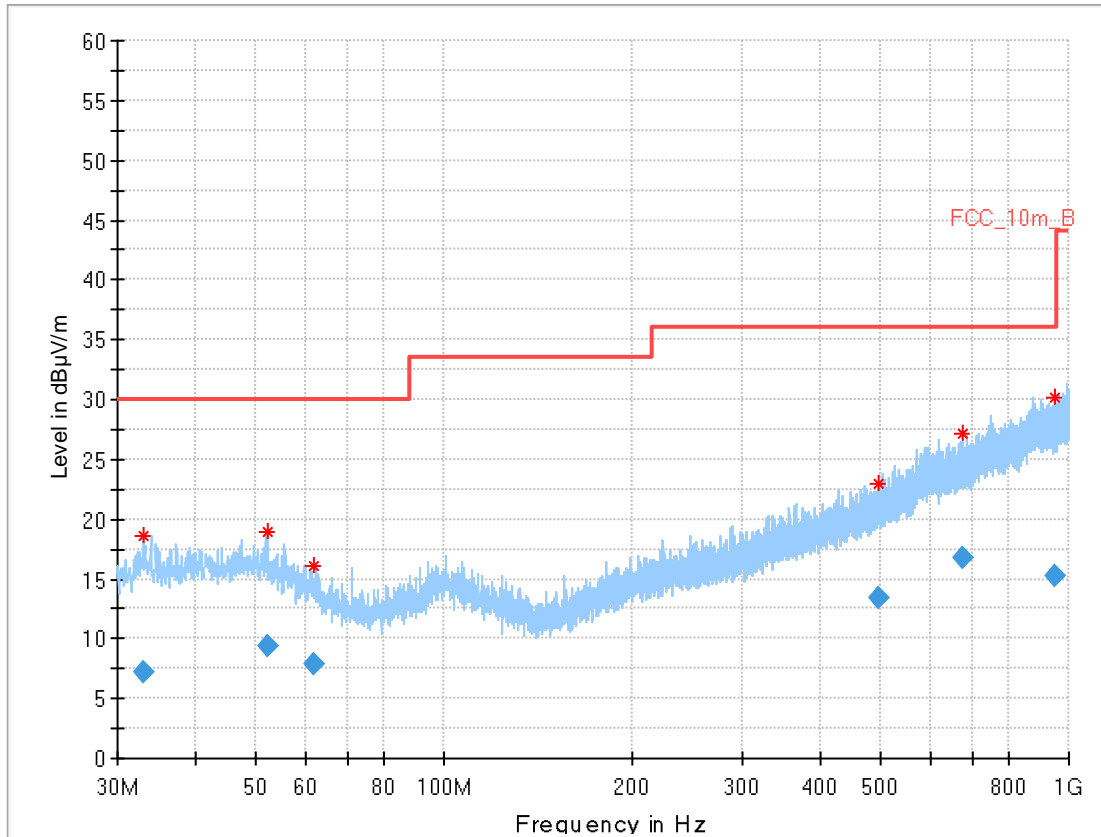


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Plot 21: 26 GHz to 40 GHz; vertical & horizontal polarization; U-NII-2C; lowest channel



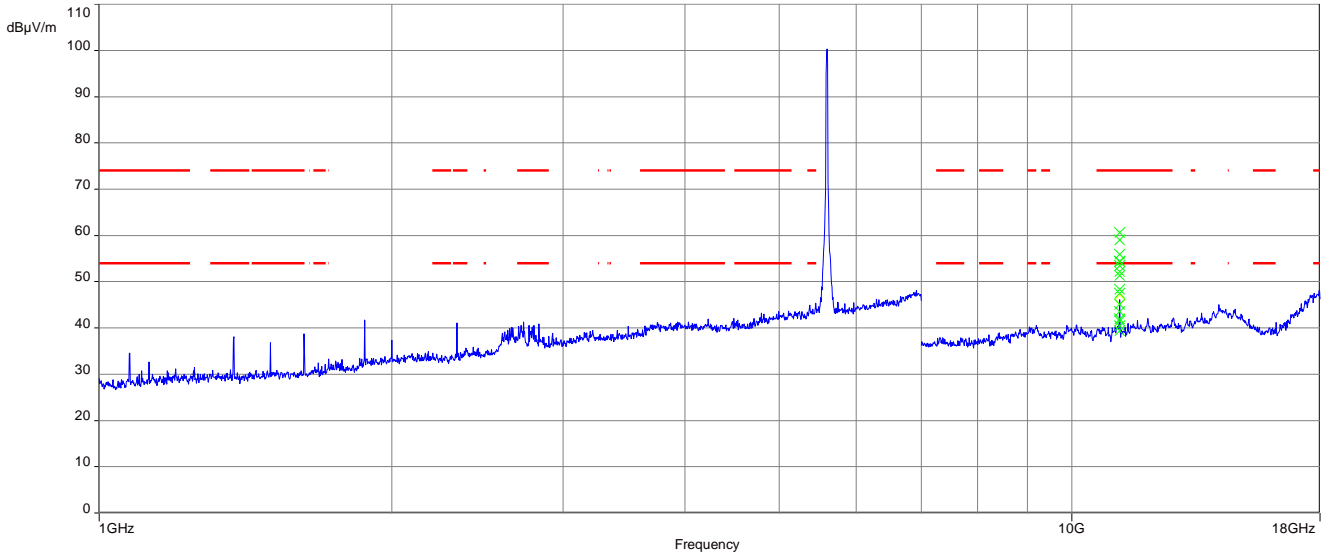
Plot 22: 30 MHz to 1 GHz; vertical & horizontal polarization; U-NII-2C; middle channel



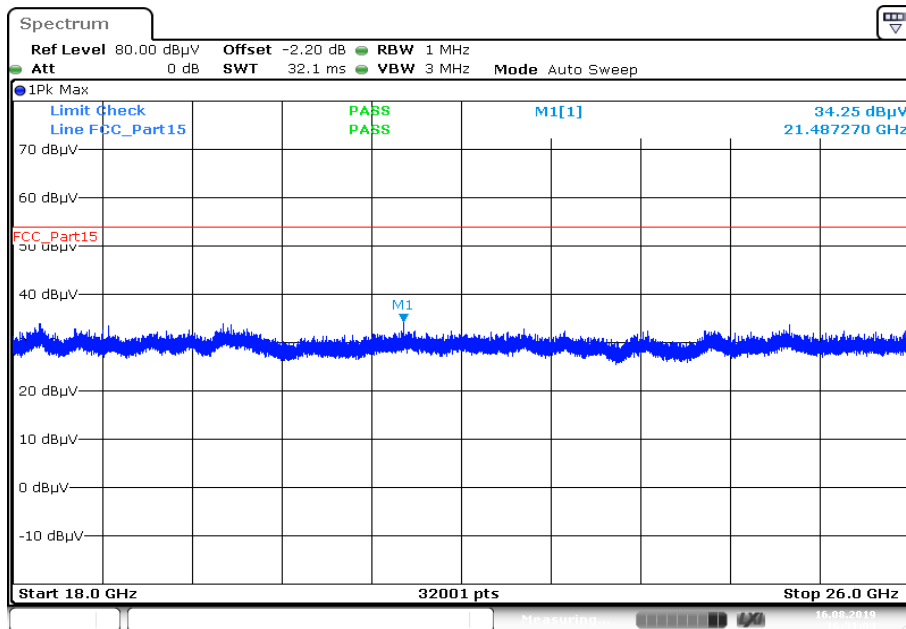
Final results:

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
32.913	7.18	30.0	22.82	1000	120	100.0	H	230.0	13
52.011	9.35	30.0	20.65	1000	120	101.0	V	279.0	15
62.002	7.85	30.0	22.15	1000	120	100.0	V	307.0	13
495.329	13.48	36.0	22.52	1000	120	98.0	H	327.0	18
674.577	16.69	36.0	19.31	1000	120	160.0	H	153.0	21
952.114	15.25	36.0	20.75	1000	120	160.0	V	253.0	24

Plot 23: 1 GHz to 18 GHz; vertical & horizontal polarization; U-NII-2C; middle channel

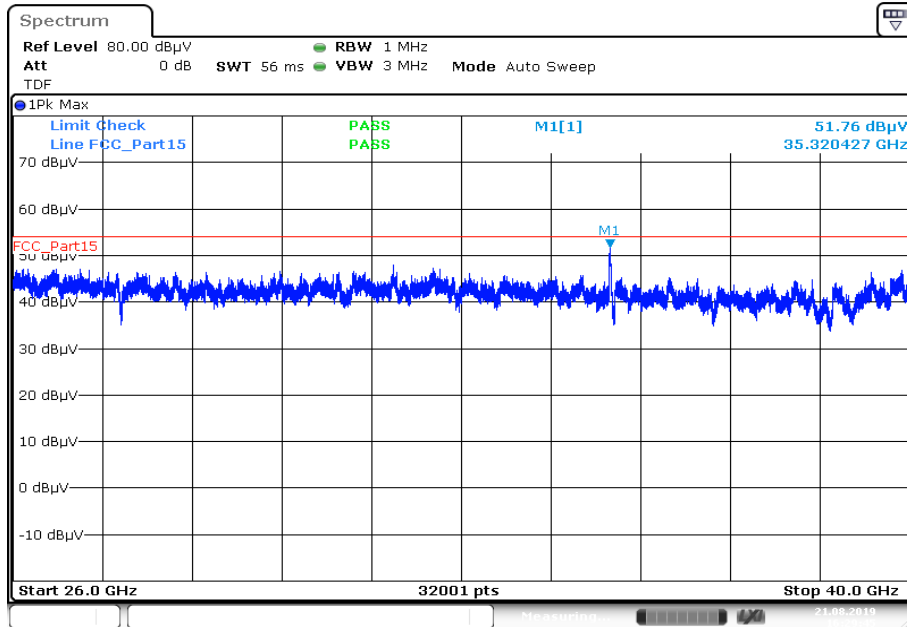


Plot 24: 18 GHz to 26 GHz; vertical & horizontal polarization; U-NII-2C; middle channel

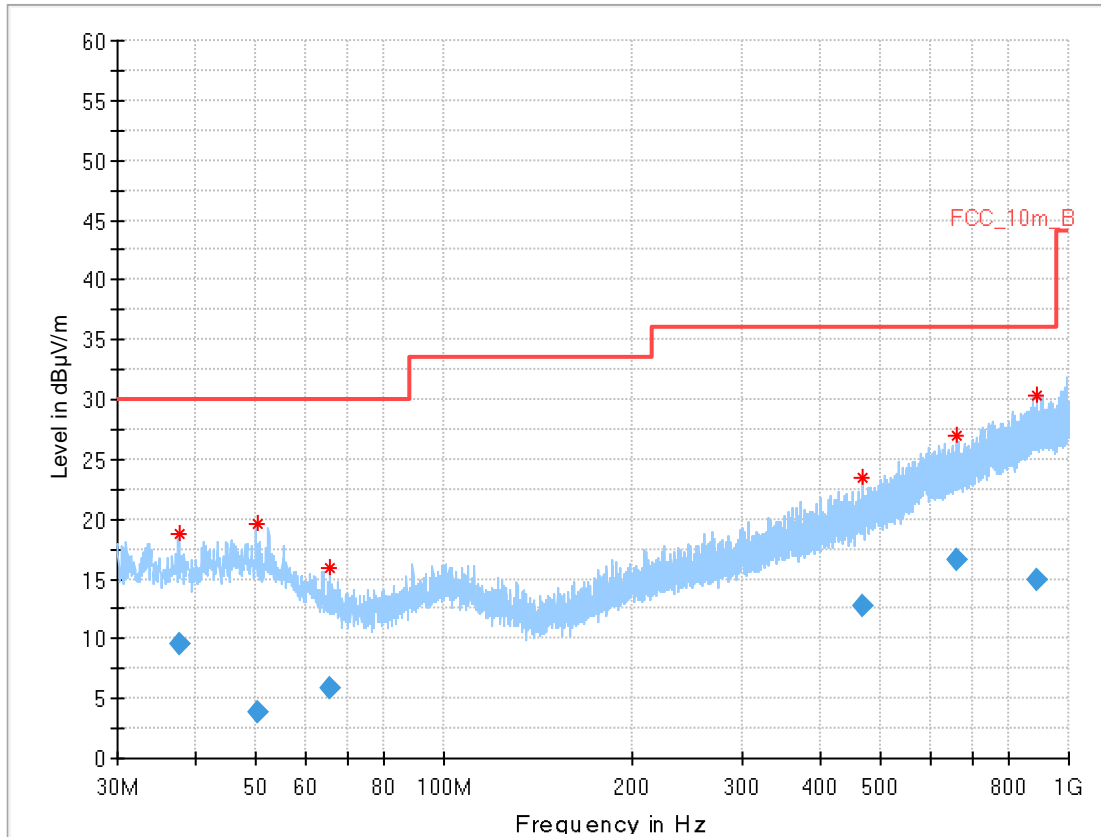


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Plot 25: 26 GHz to 40 GHz; vertical & horizontal polarization; U-NII-2C; middle channel



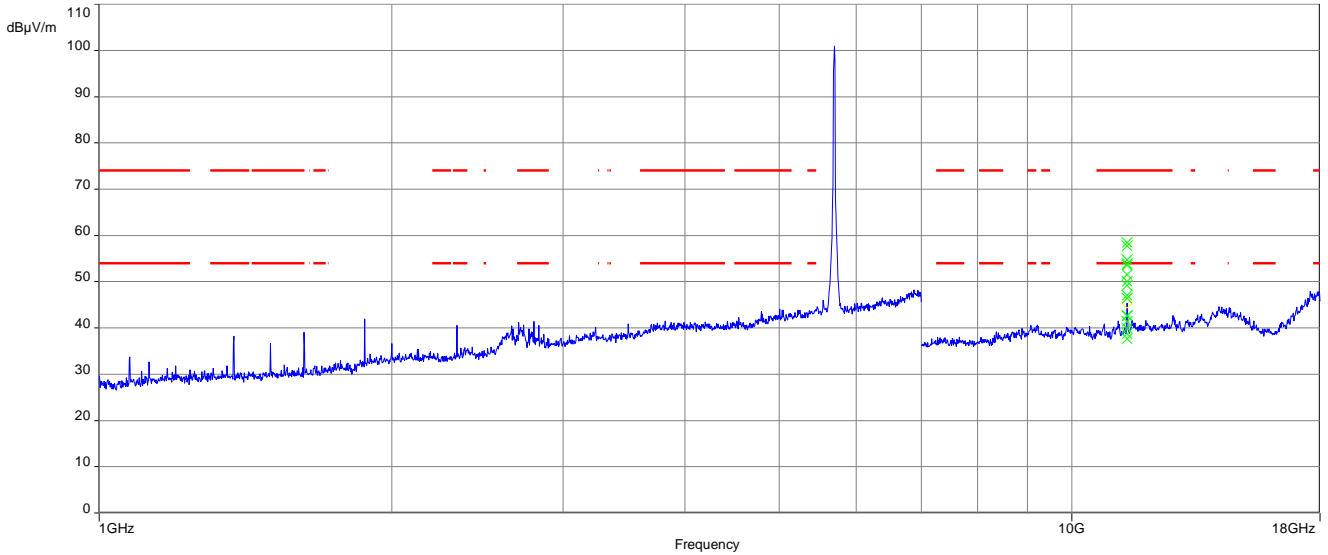
Plot 26: 30 MHz to 1 GHz; vertical & horizontal polarization; U-NII-2C; highest channel



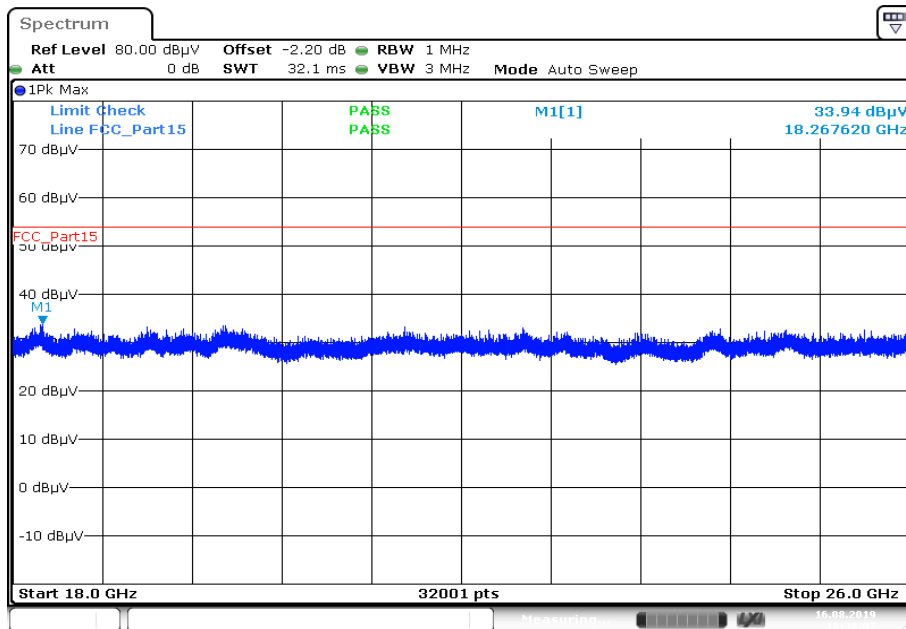
Final results:

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
37.725	9.52	30.0	20.48	1000	120	101.0	V	154.0	14
50.276	3.79	30.0	26.21	1000	120	101.0	H	354.0	15
65.828	5.86	30.0	24.14	1000	120	98.0	V	8.0	12
467.709	12.82	36.0	23.18	1000	120	160.0	H	0.0	18
660.322	16.59	36.0	19.41	1000	120	145.0	H	106.0	21
886.731	14.93	36.0	21.07	1000	120	160.0	V	20.0	24

Plot 27: 1 GHz to 18 GHz; vertical & horizontal polarization; U-NII-2C; highest channel

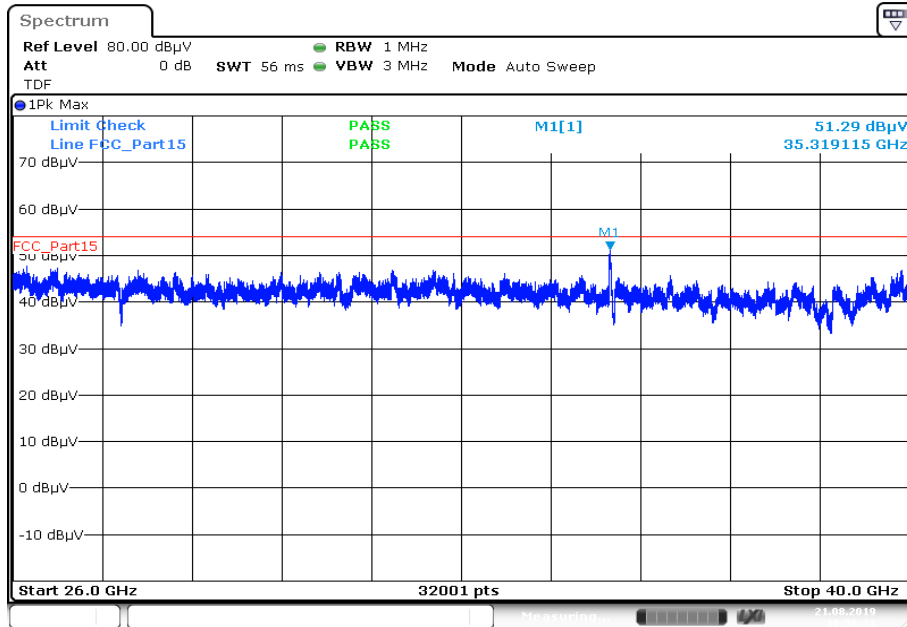


Plot 28: 18 GHz to 26 GHz; vertical & horizontal polarization; U-NII-2C; highest channel

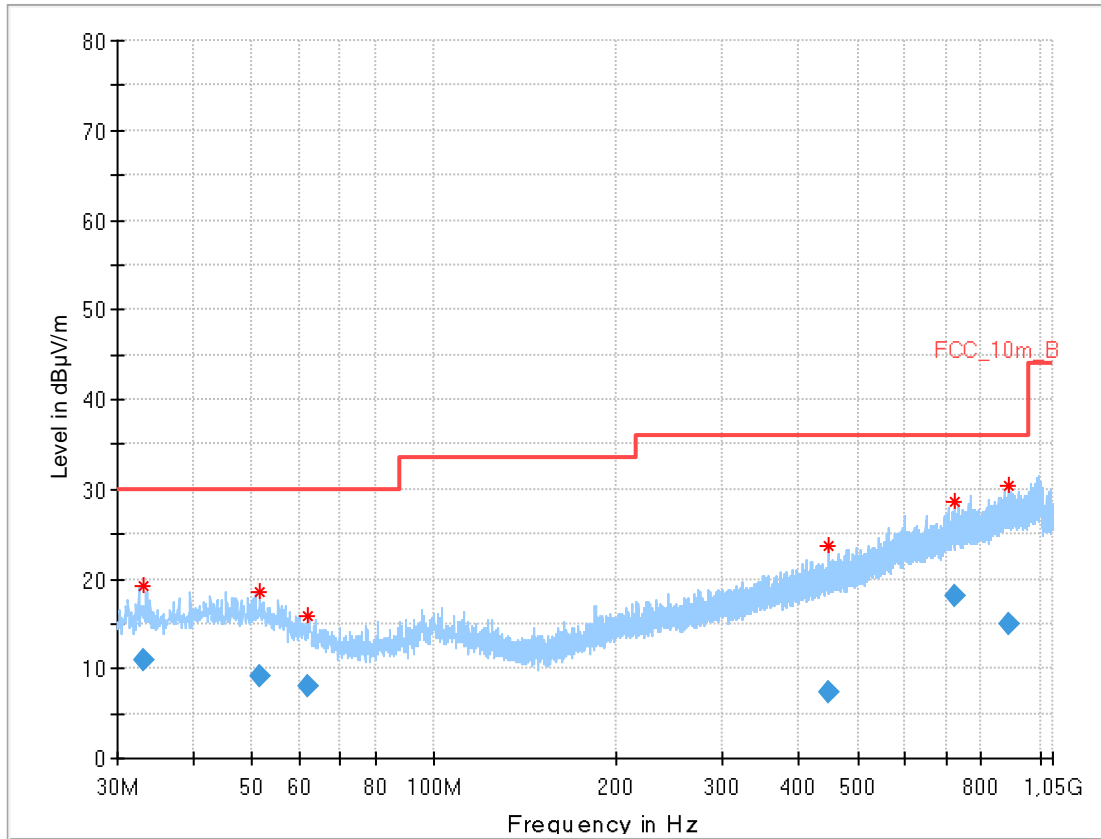


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Plot 29: 26 GHz to 40 GHz; vertical & horizontal polarization; U-NII-2C; highest channel



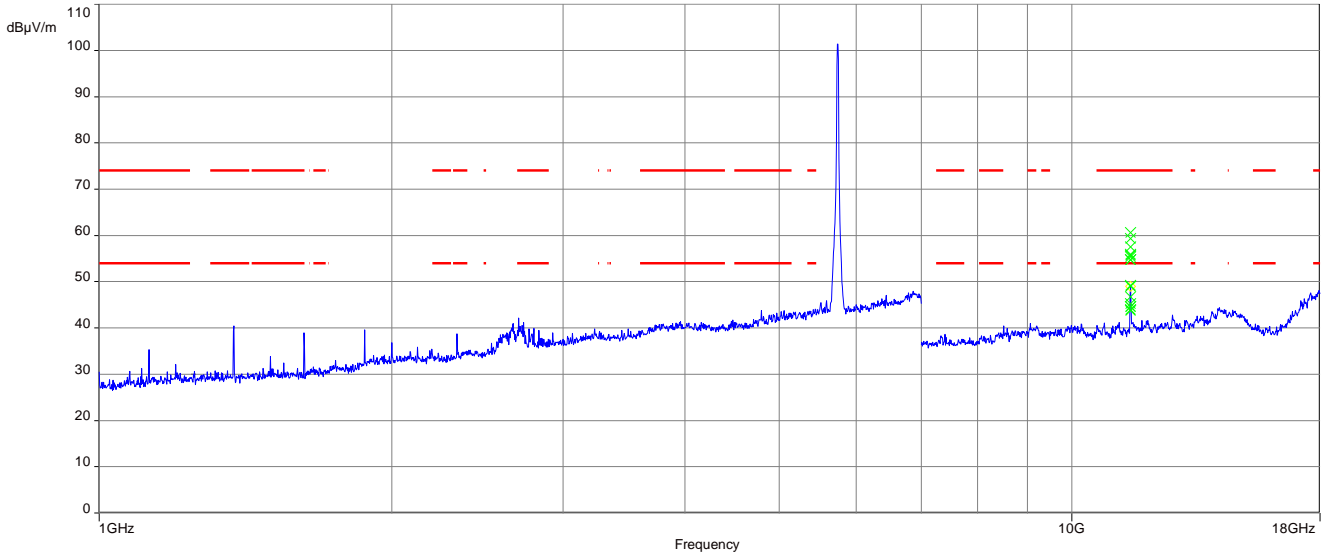
Plot 30: 30 MHz to 1 GHz; vertical & horizontal polarization; U-NII-3; lowest channel



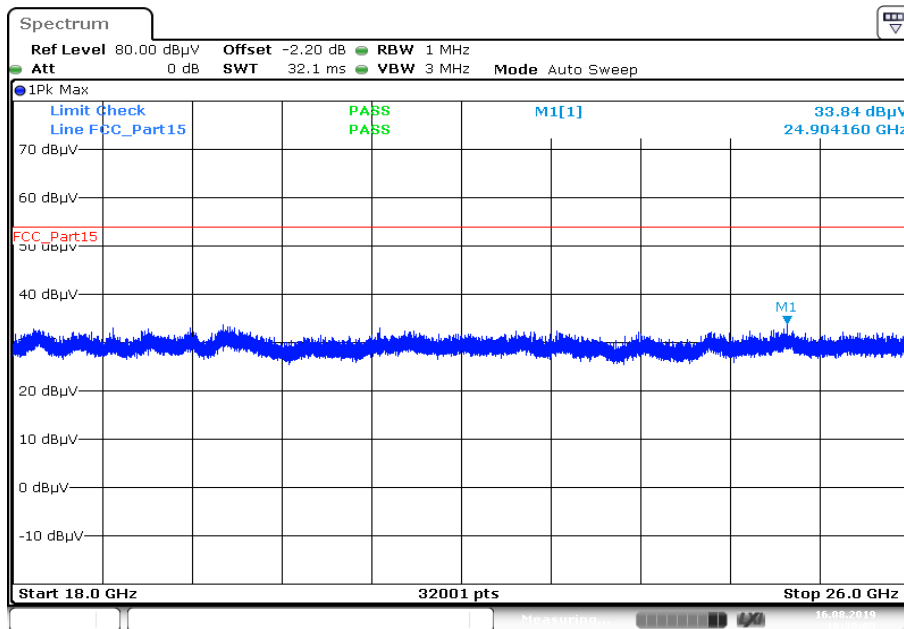
Final results:

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
33.006	10.96	30.0	19.04	1000	120	145.0	V	102.0	13
51.398	9.13	30.0	20.87	1000	120	101.0	H	152.0	15
61.990	8.14	30.0	21.86	1000	120	100.0	V	356.0	13
447.795	7.45	36.0	28.55	1000	120	101.0	V	345.0	17
724.965	18.01	36.0	17.99	1000	120	170.0	H	29.0	22
888.398	14.97	36.0	21.03	1000	120	170.0	H	72.0	24

Plot 31: 1 GHz to 18 GHz; vertical & horizontal polarization; U-NII-3; lowest channel

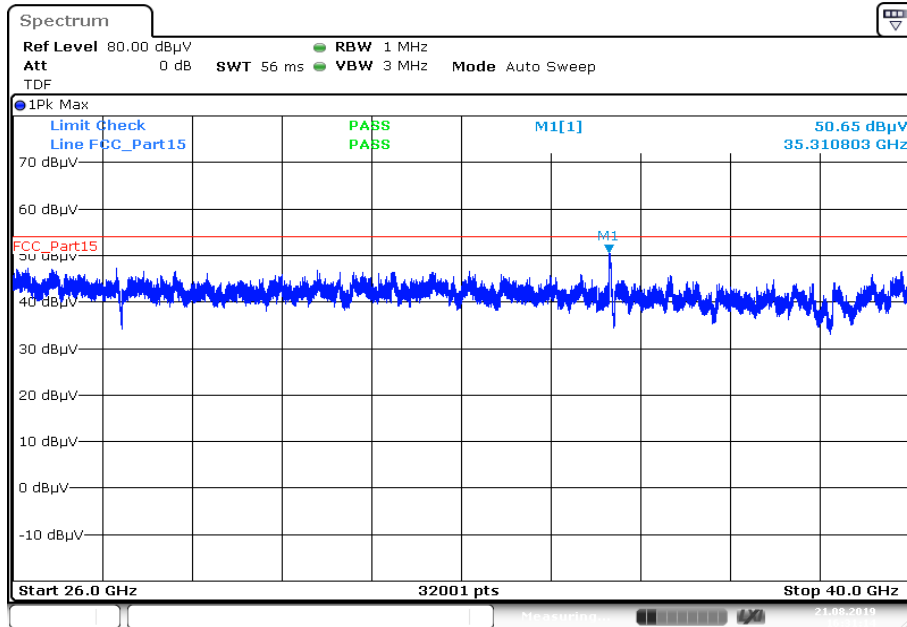


Plot 32: 18 GHz to 26 GHz; vertical & horizontal polarization; U-NII-3; lowest channel



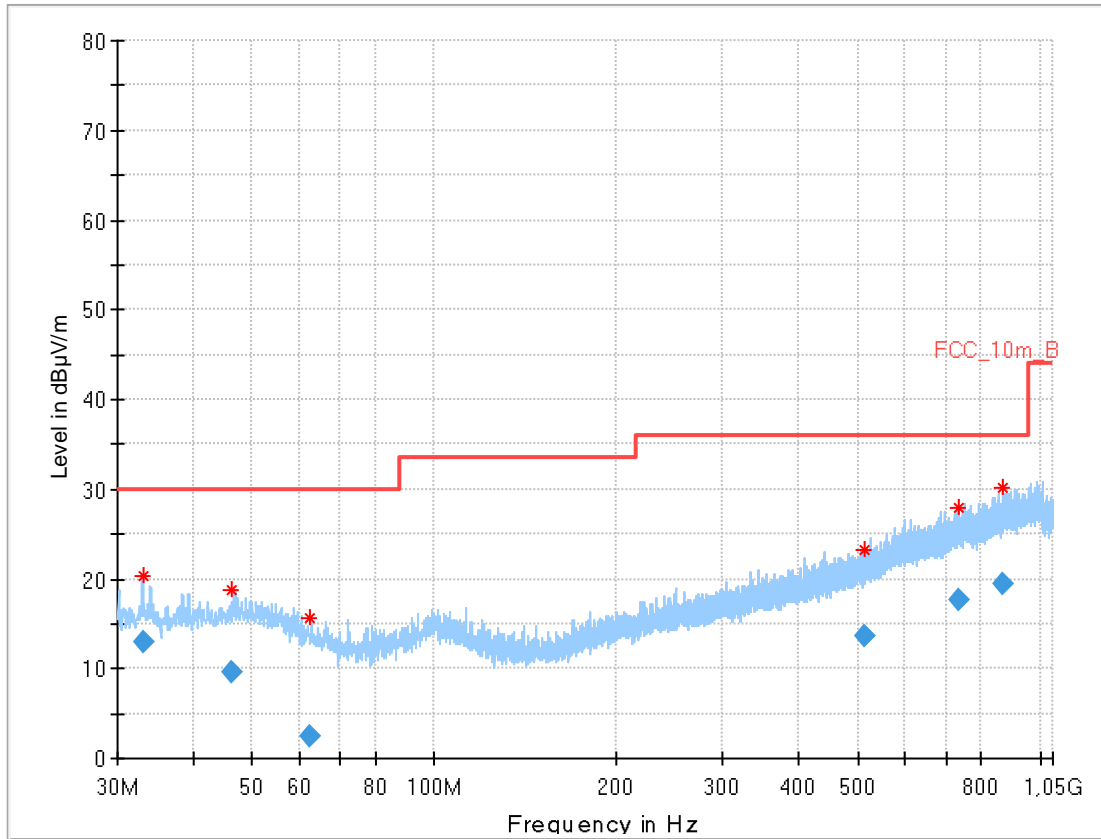
Date: 16.AUG.2019 16:36:05

Plot 33: 26 GHz to 40 GHz; vertical & horizontal polarization; U-NII-3; lowest channel



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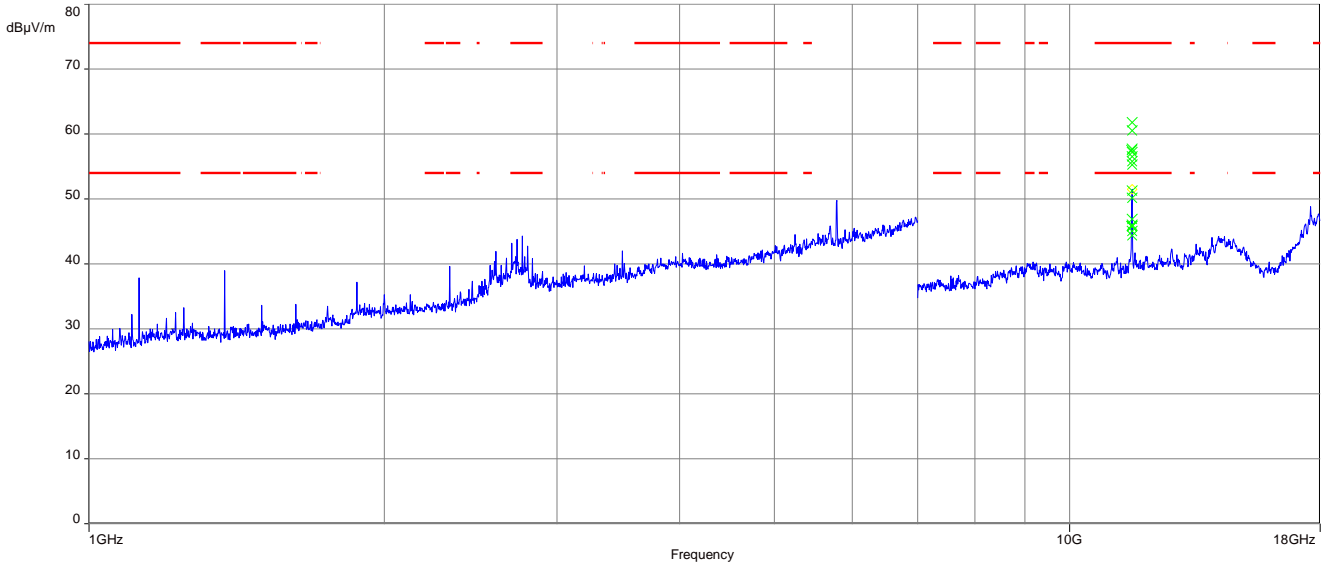
Plot 34: 30 MHz to 1 GHz; vertical & horizontal polarization; U-NII-3; middle channel



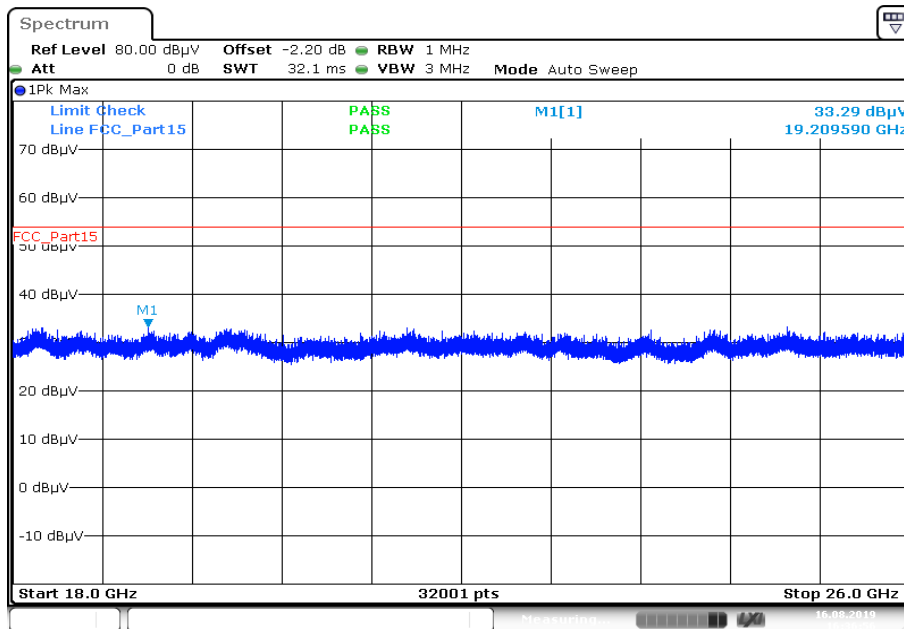
Final results:

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
33.024	12.91	30.0	17.09	1000	120	145.0	V	176.0	13
46.406	9.51	30.0	20.49	1000	120	101.0	H	228.0	15
62.245	2.56	30.0	27.44	1000	120	101.0	V	142.0	12
512.530	13.65	36.0	22.35	1000	120	147.0	V	267.0	18
734.503	17.58	36.0	18.42	1000	120	101.0	H	219.0	22
868.660	19.51	36.0	16.49	1000	120	146.0	V	315.0	23

Plot 35: 1 GHz to 18 GHz; vertical & horizontal polarization; U-NII-3; middle channel

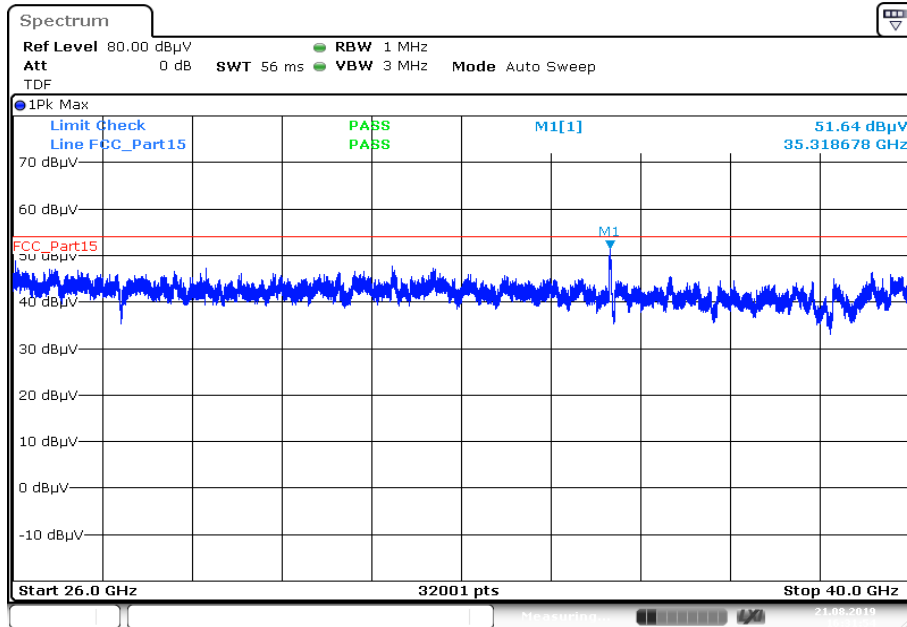


Plot 36: 18 GHz to 26 GHz; vertical & horizontal polarization; U-NII-3; middle channel

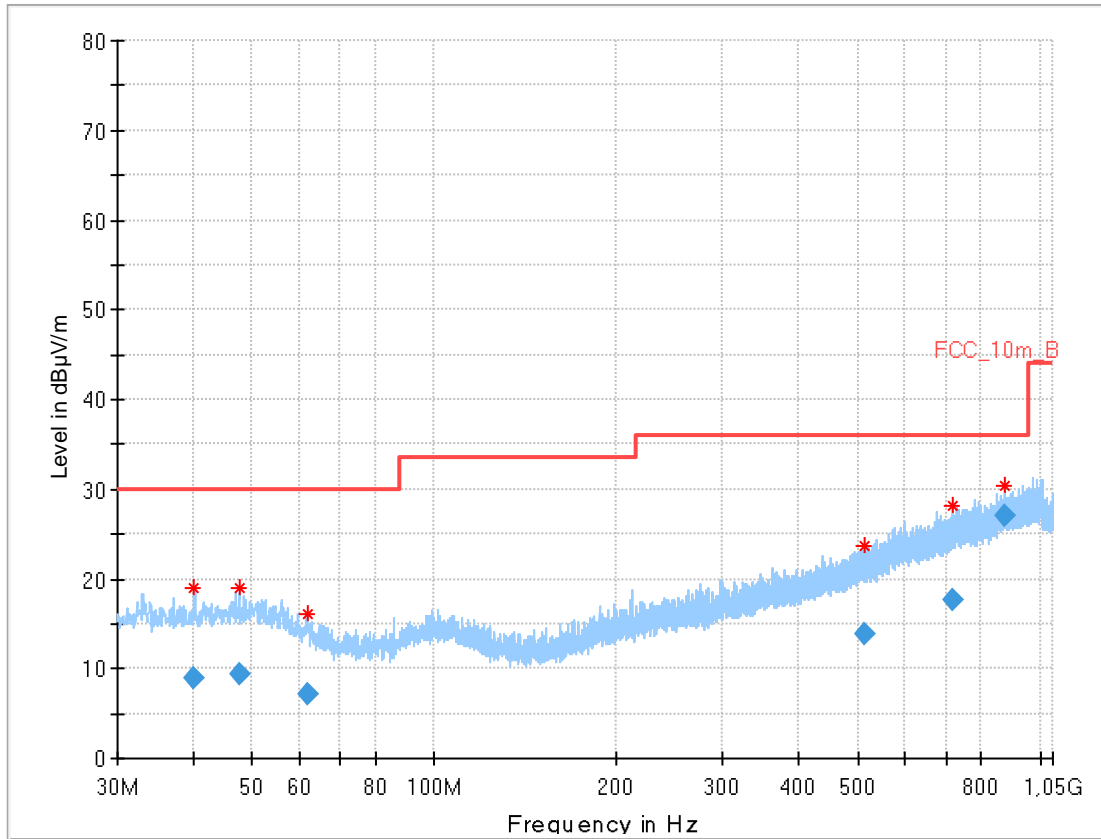


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Plot 37: 26 GHz to 40 GHz; vertical & horizontal polarization; U-NII-3; middle channel



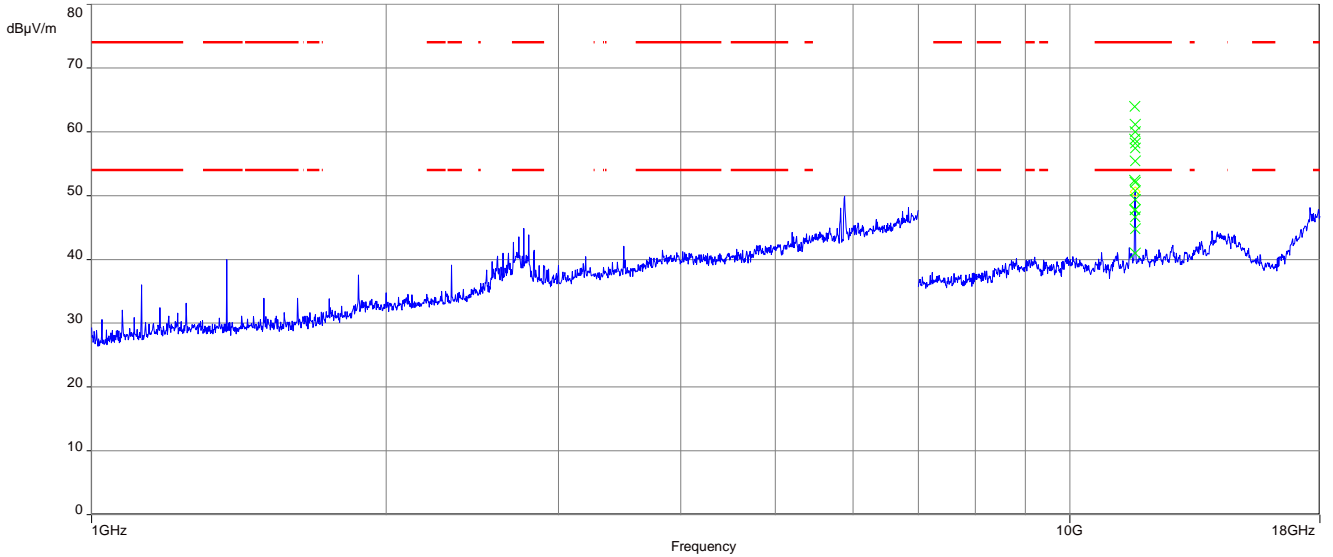
Plot 38: 30 MHz to 1 GHz; vertical & horizontal polarization; U-NII-3; highest channel



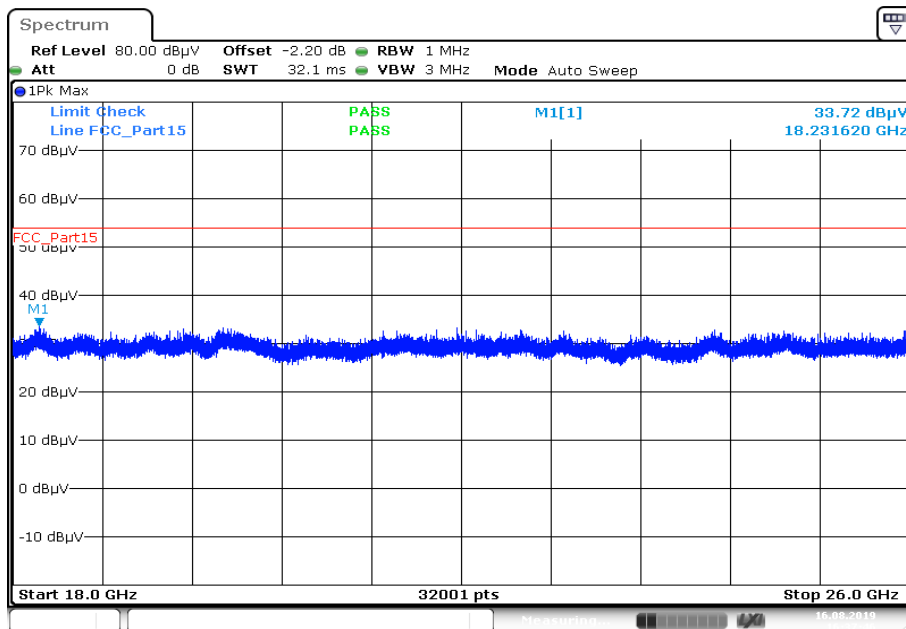
Final results:

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
40.211	8.93	30.0	21.07	1000	120	100.0	H	338.0	14
47.565	9.38	30.0	20.62	1000	120	101.0	V	221.0	15
61.917	7.16	30.0	22.84	1000	120	101.0	V	150.0	13
513.698	13.78	36.0	22.22	1000	120	170.0	H	271.0	18
717.871	17.57	36.0	18.43	1000	120	170.0	V	148.0	22
875.001	27.02	36.0	8.98	1000	120	98.0	H	84.0	24

Plot 39: 1 GHz to 18 GHz; vertical & horizontal polarization; U-NII-3; highest channel

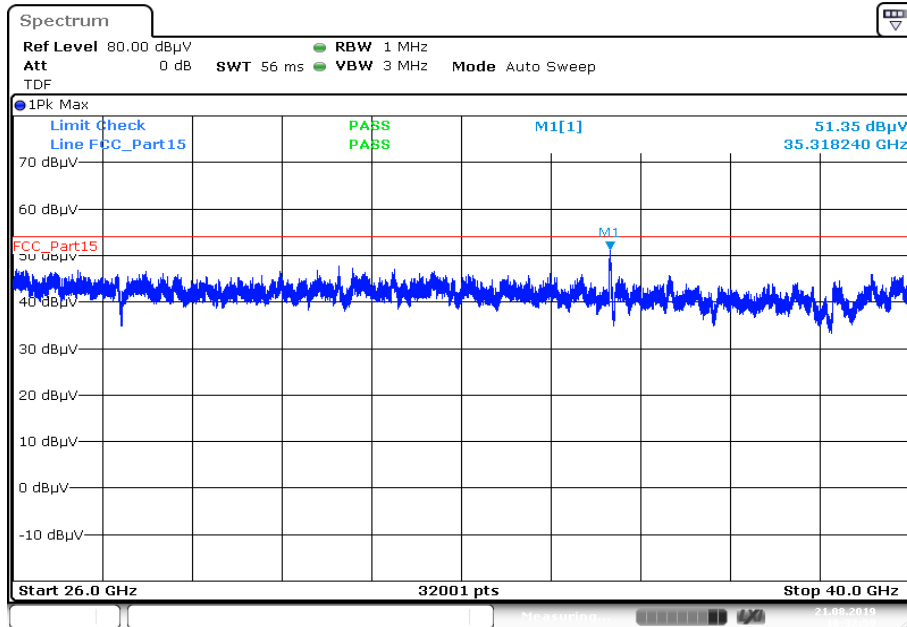


Plot 40: 18 GHz to 26 GHz; vertical & horizontal polarization; U-NII-3; highest channel



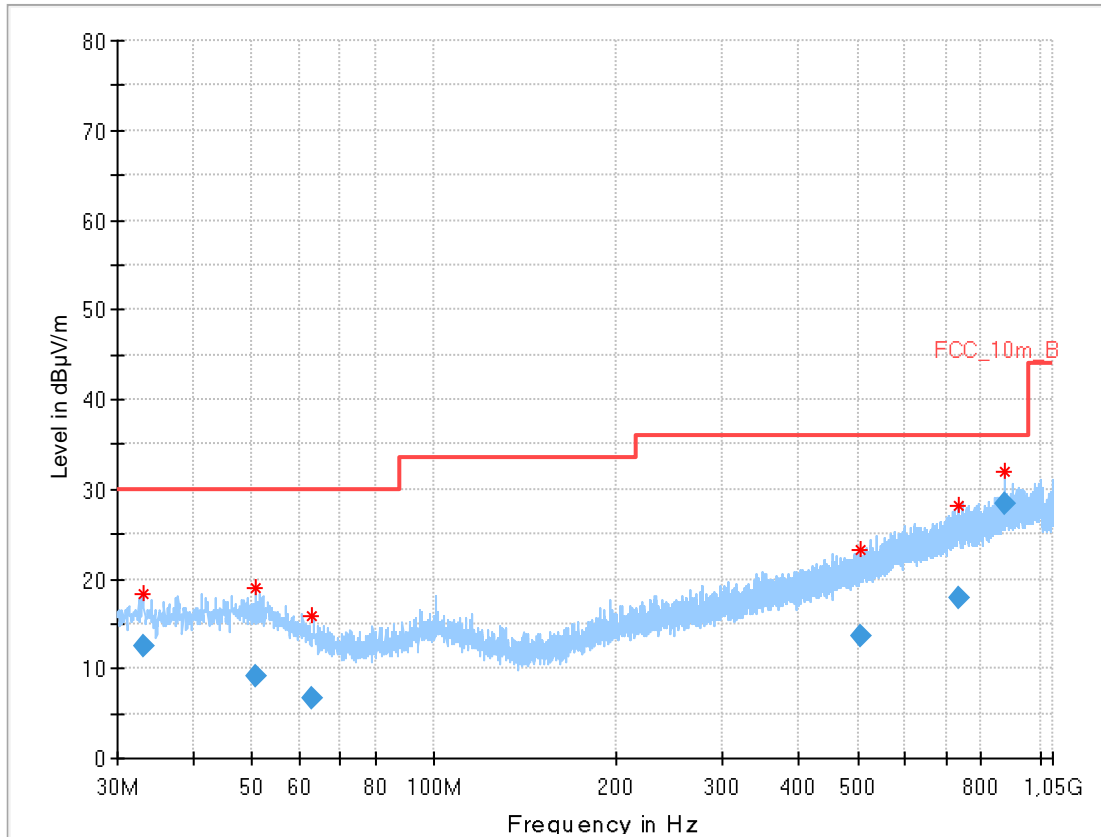
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Plot 41: 26 GHz to 40 GHz; vertical & horizontal polarization; U-NII-3; highest channel



Plots: 40 MHz channel bandwidth

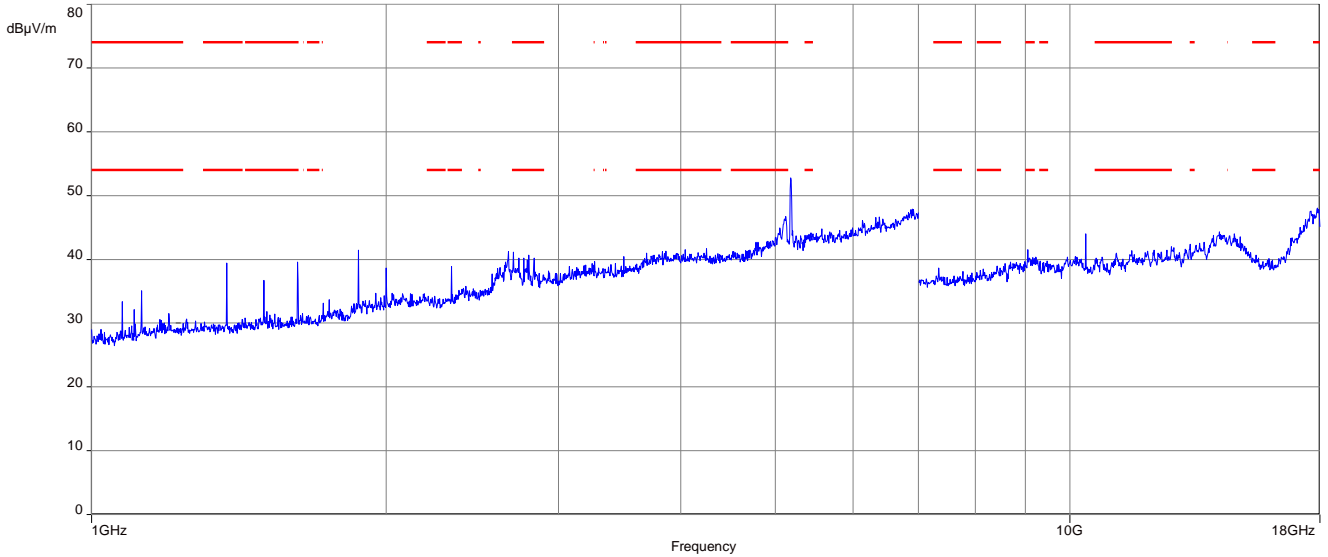
Plot 1: 30 MHz to 1 GHz; vertical & horizontal polarization; U-NII-1; lowest channel



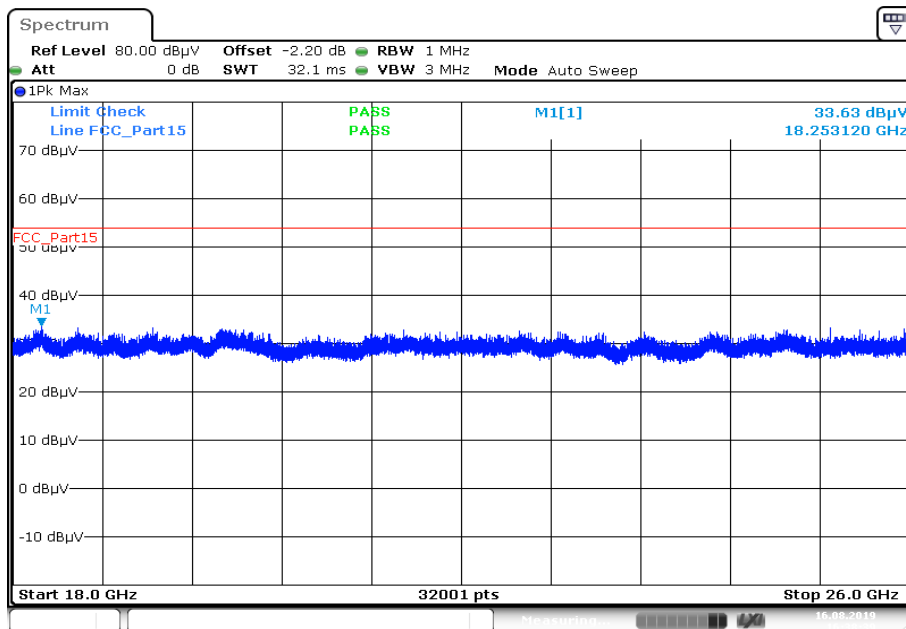
Final results:

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
33.203	12.52	30.0	17.48	1000	120	147.0	V	205.0	14
50.919	9.26	30.0	20.74	1000	120	101.0	H	134.0	15
62.568	6.71	30.0	23.29	1000	120	146.0	V	1.0	12
504.772	13.65	36.0	22.35	1000	120	98.0	V	319.0	18
732.688	17.80	36.0	18.20	1000	120	101.0	H	287.0	22
875.007	28.35	36.0	7.65	1000	120	98.0	H	183.0	24

Plot 2: 1 GHz to 18 GHz; vertical & horizontal polarization; U-NII-1; lowest channel

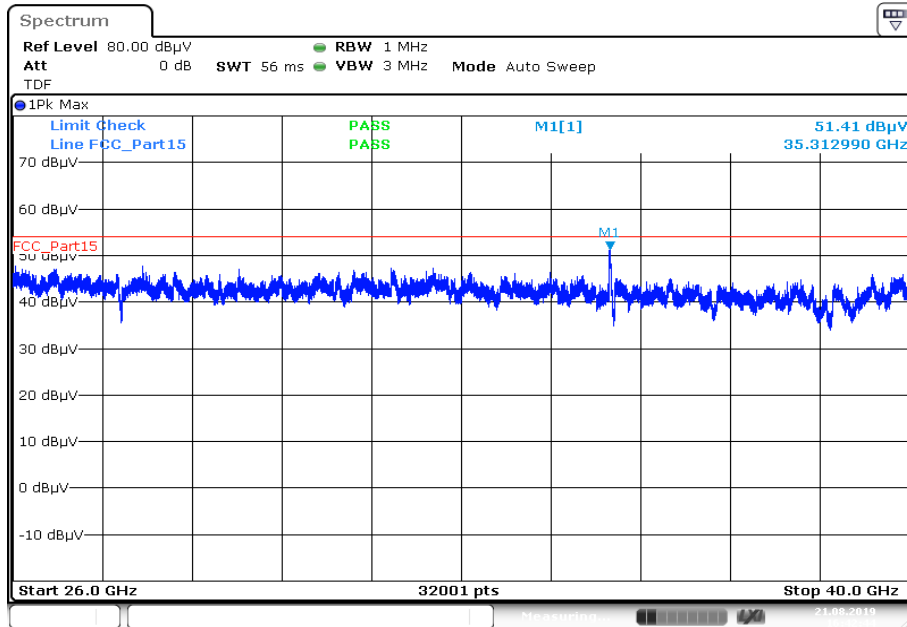


Plot 3: 18 GHz to 26 GHz; vertical & horizontal polarization; U-NII-1; lowest channel



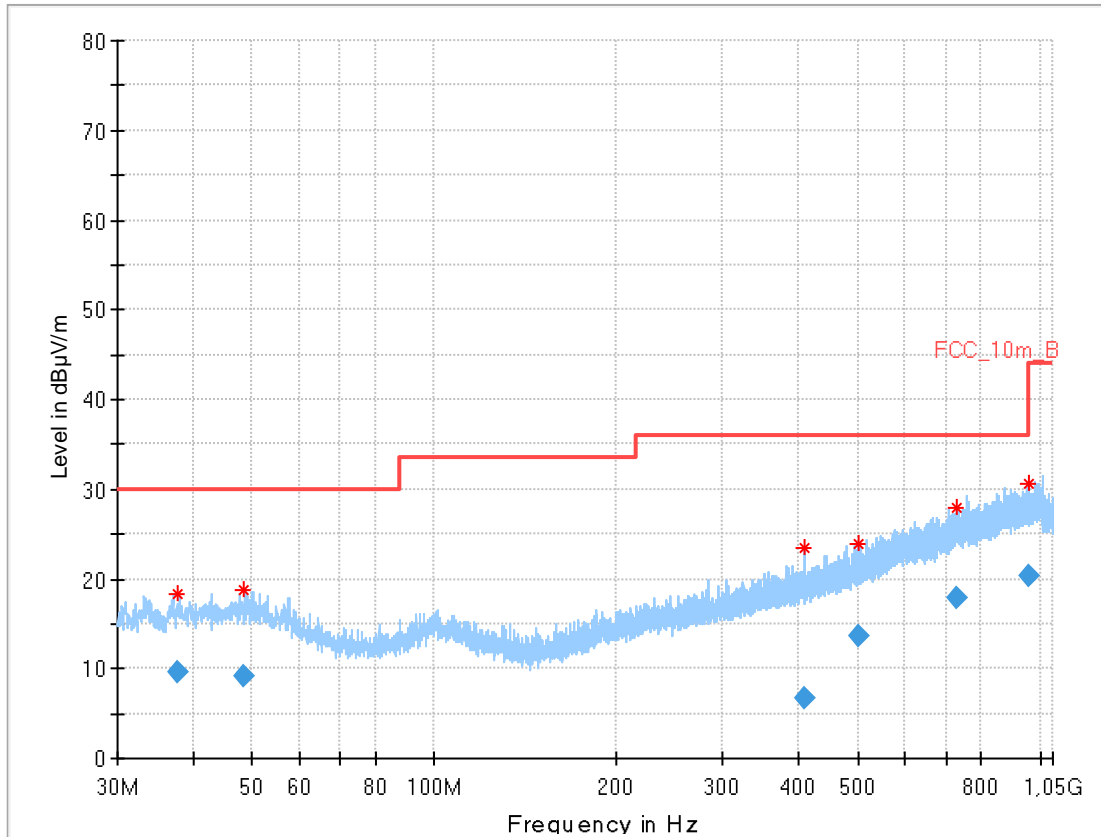
Date: 16.AUG.2019 16:38:39

Plot 4: 26 GHz to 40 GHz; vertical & horizontal polarization; U-NII-1; lowest channel



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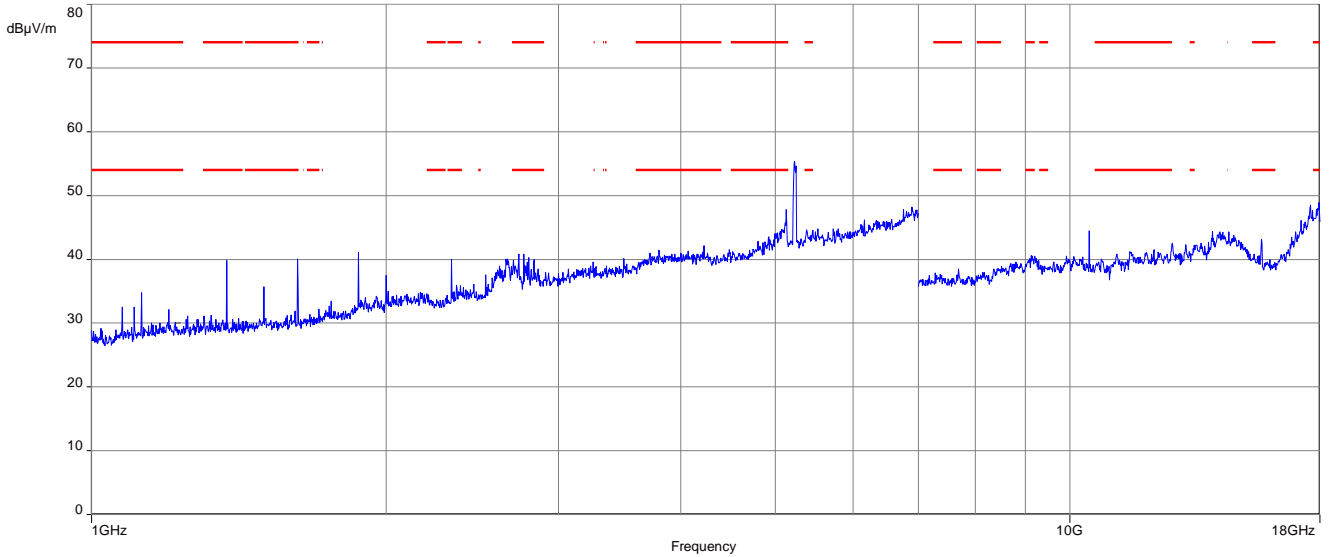
Plot 5: 30 MHz to 1 GHz; vertical & horizontal polarization; U-NII-1; highest channel



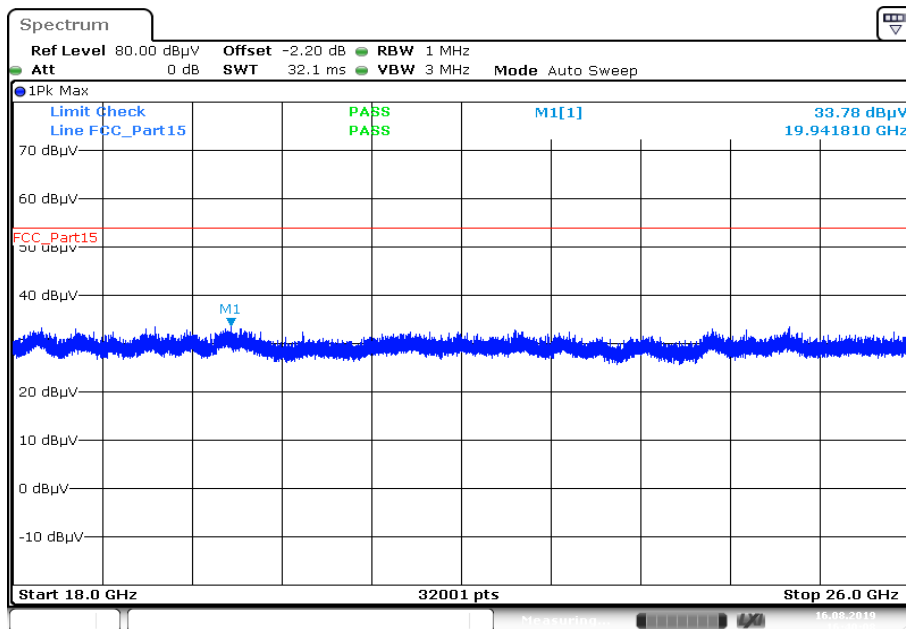
Final results:

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
37.585	9.50	30.0	20.50	1000	120	101.0	V	176.0	14
48.590	9.12	30.0	20.88	1000	120	170.0	V	6.0	15
407.279	6.66	36.0	29.34	1000	120	98.0	H	135.0	17
500.385	13.58	36.0	22.42	1000	120	98.0	H	355.0	18
730.886	17.77	36.0	18.23	1000	120	101.0	H	112.0	22
958.751	20.35	36.0	15.65	1000	120	170.0	V	340.0	24

Plot 6: 1 GHz to 18 GHz; vertical & horizontal polarization; U-NII-1; highest channel

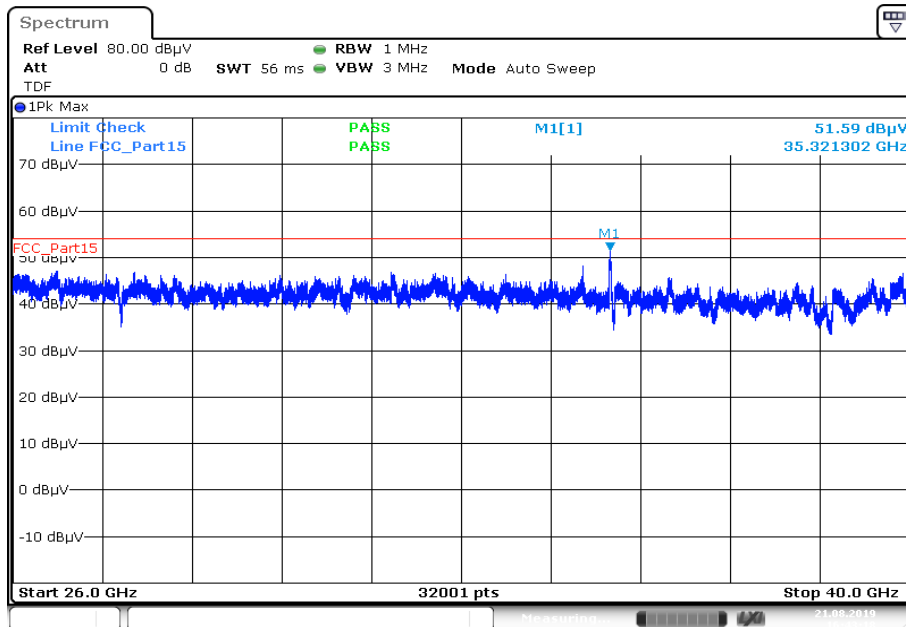


Plot 7: 18 GHz to 26 GHz; vertical & horizontal polarization; U-NII-1; highest channel



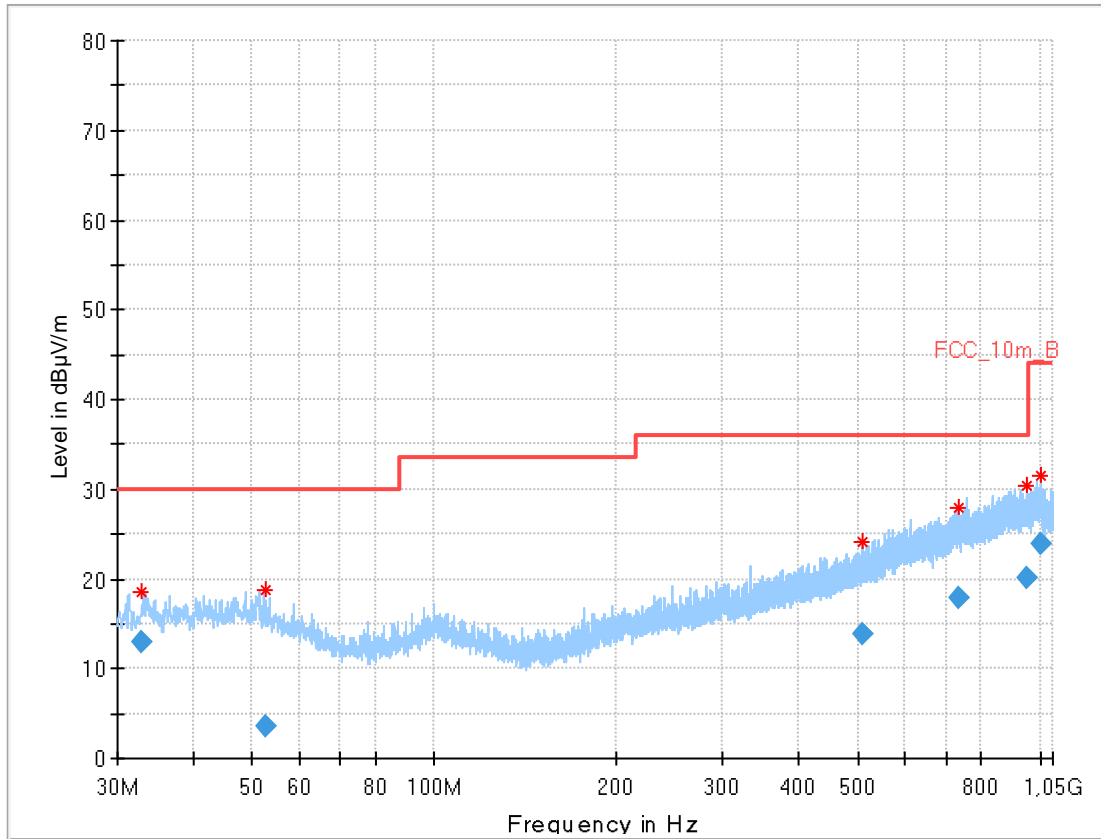
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Plot 8: 26 GHz to 40 GHz; vertical & horizontal polarization; U-NII-1; highest channel



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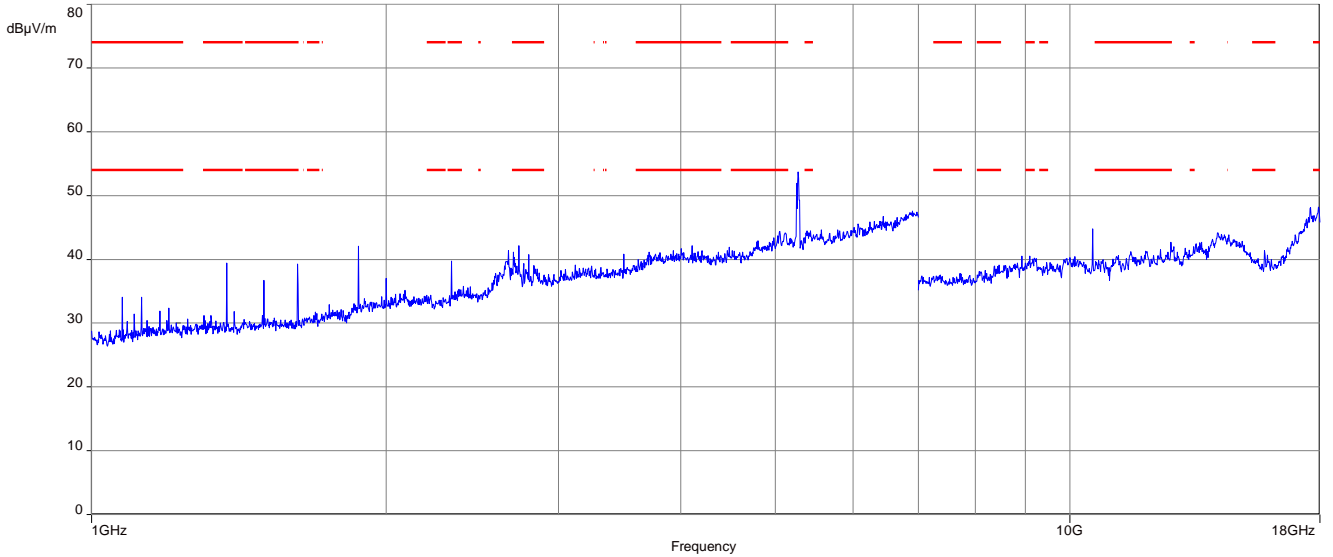
Plot 9: 30 MHz to 1 GHz; vertical & horizontal polarization; U-NII-2A; lowest channel



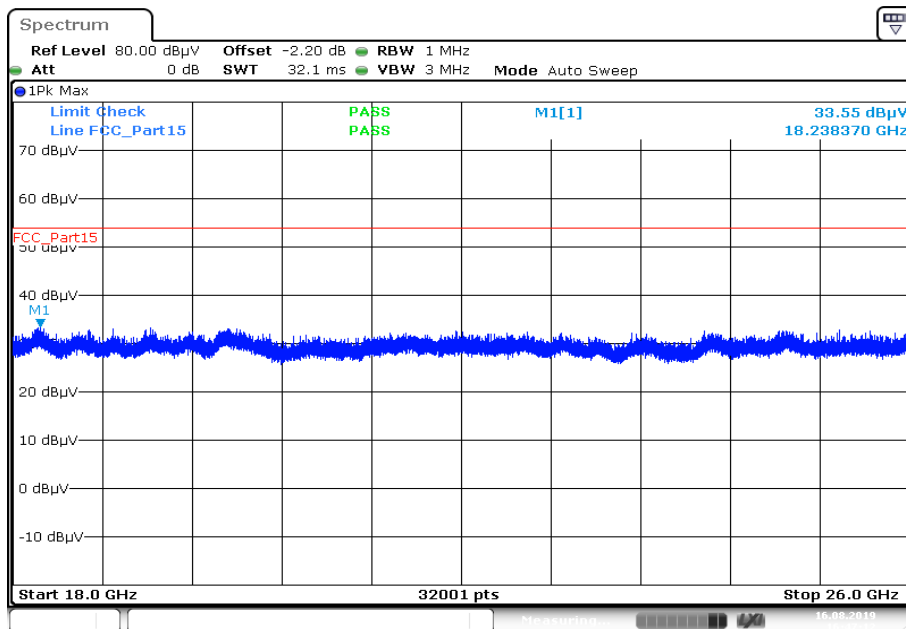
Final results:

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
32.974	12.85	30.0	17.15	1000	120	147.0	V	182.0	13
52.649	3.66	30.0	26.34	1000	120	101.0	H	35.0	15
507.633	13.86	36.0	22.14	1000	120	170.0	V	92.0	18
734.464	17.82	36.0	18.18	1000	120	170.0	V	37.0	22
951.662	20.22	36.0	15.78	1000	120	98.0	H	322.0	24
999.621	23.92	44.0	20.08	1000	120	98.0	H	73.0	25

Plot 10: 1 GHz to 18 GHz; vertical & horizontal polarization; U-NII-2A; lowest channel

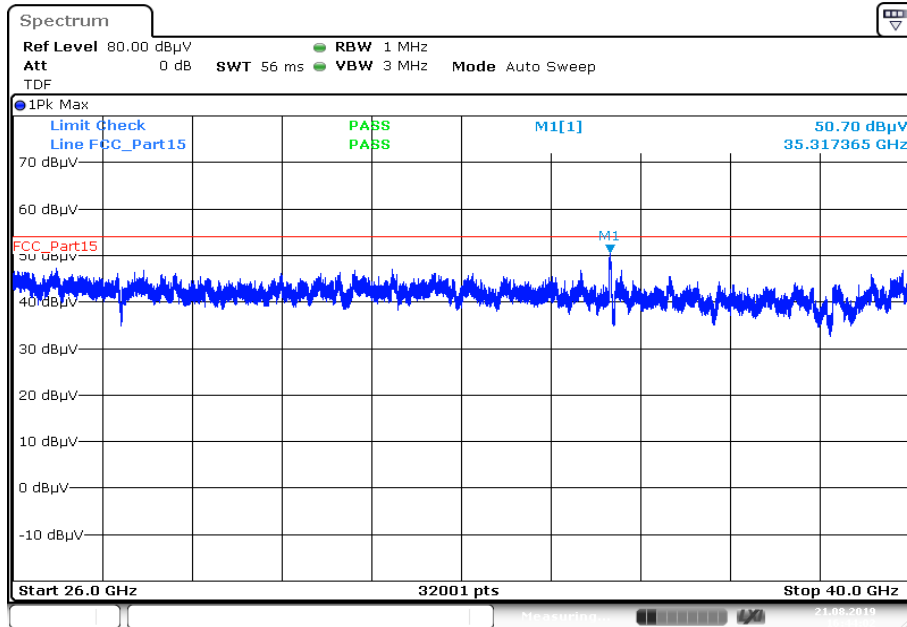


Plot 11: 18 GHz to 26 GHz; vertical & horizontal polarization; U-NII-2A; lowest channel

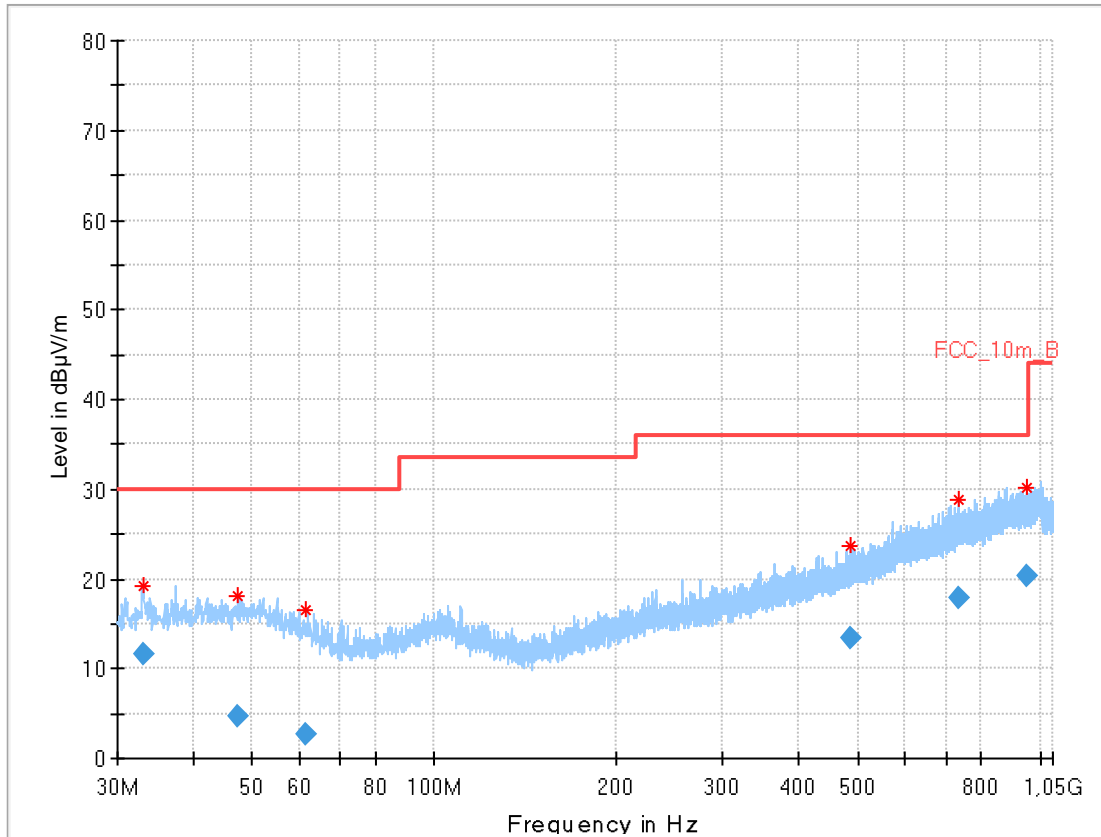


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Plot 12: 26 GHz to 40 GHz; vertical & horizontal polarization; U-NII-2A; lowest channel



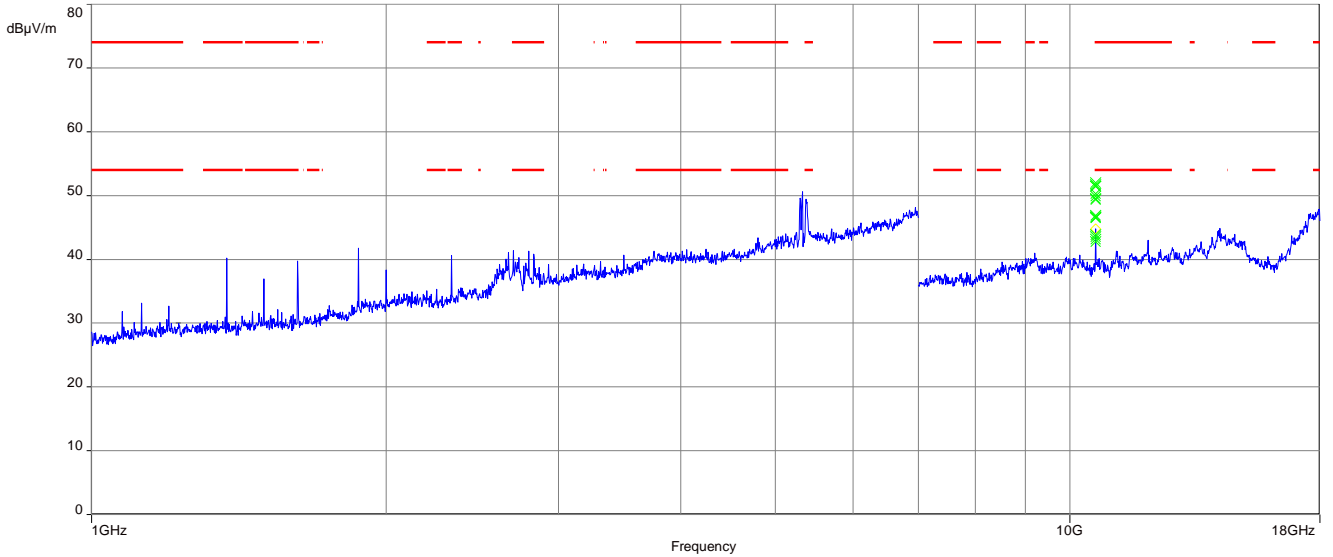
Plot 13: 30 MHz to 1 GHz; vertical & horizontal polarization; U-NII-2A; highest channel



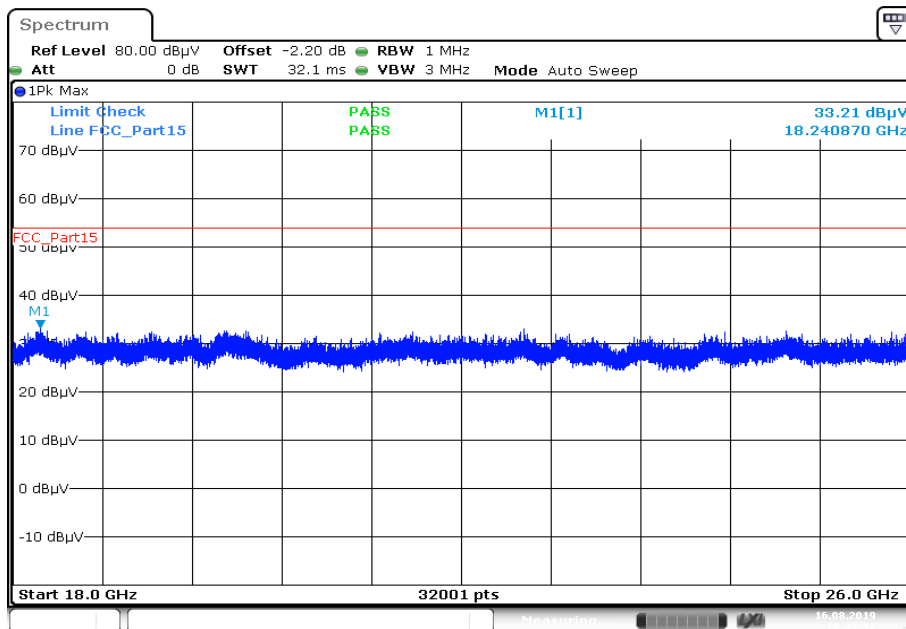
Final results:

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
33.011	11.72	30.0	18.28	1000	120	147.0	V	319.0	13
47.490	4.66	30.0	25.34	1000	120	146.0	V	315.0	15
61.578	2.77	30.0	27.23	1000	120	101.0	V	-9.0	13
488.066	13.34	36.0	22.66	1000	120	170.0	V	345.0	18
735.588	17.79	36.0	18.21	1000	120	98.0	H	6.0	22
950.865	20.23	36.0	15.77	1000	120	170.0	H	274.0	24

Plot 14: 1 GHz to 18 GHz; vertical & horizontal polarization; U-NII-2A; highest channel

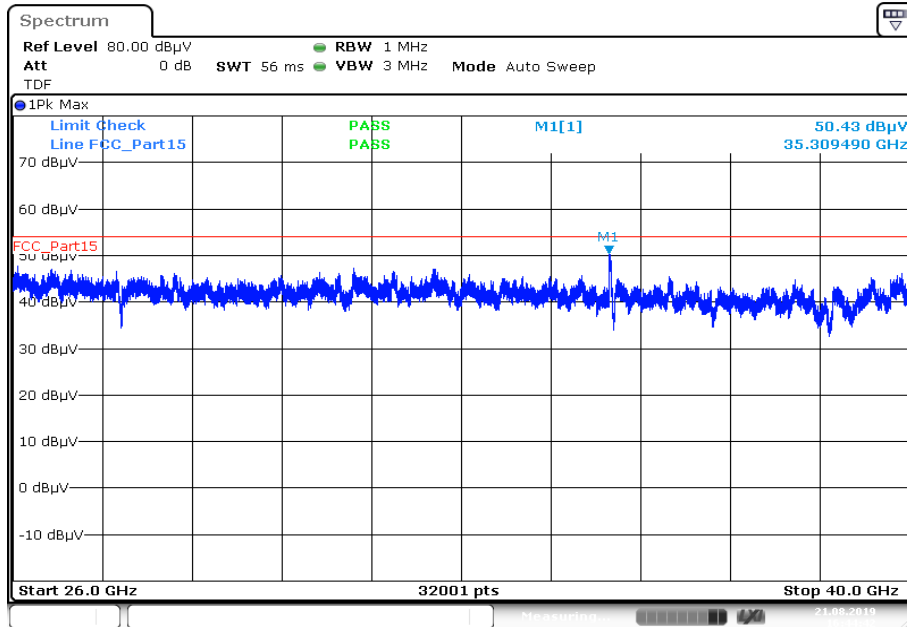


Plot 15: 18 GHz to 26 GHz; vertical & horizontal polarization; U-NII-2A; highest channel

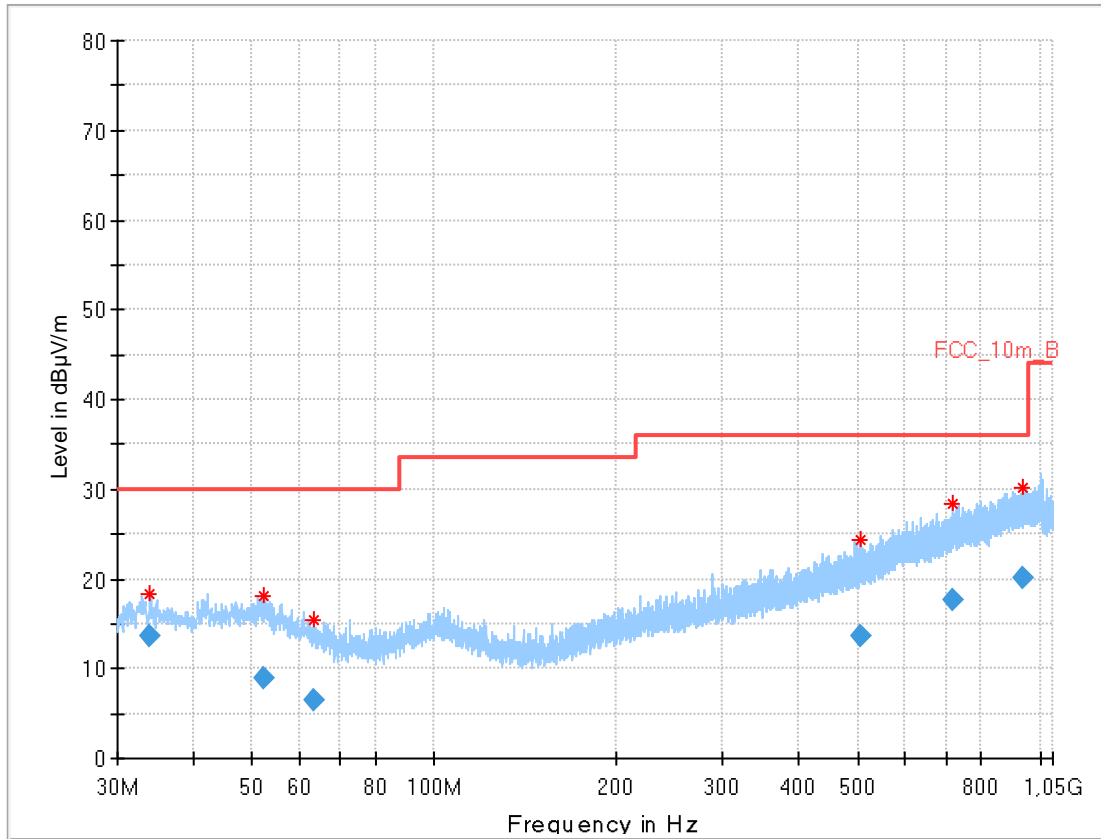


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Plot 16: 26 GHz to 40 GHz; vertical & horizontal polarization; U-NII-2A; highest channel



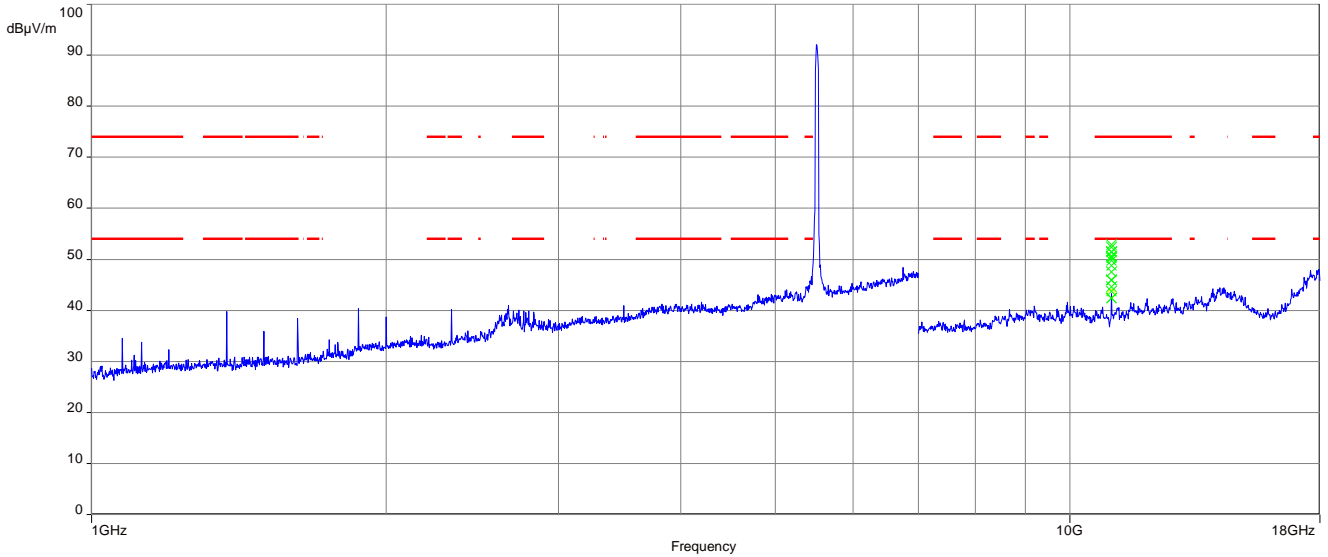
Plot 17: 30 MHz to 1 GHz; vertical & horizontal polarization; U-NII-2C; lowest channel



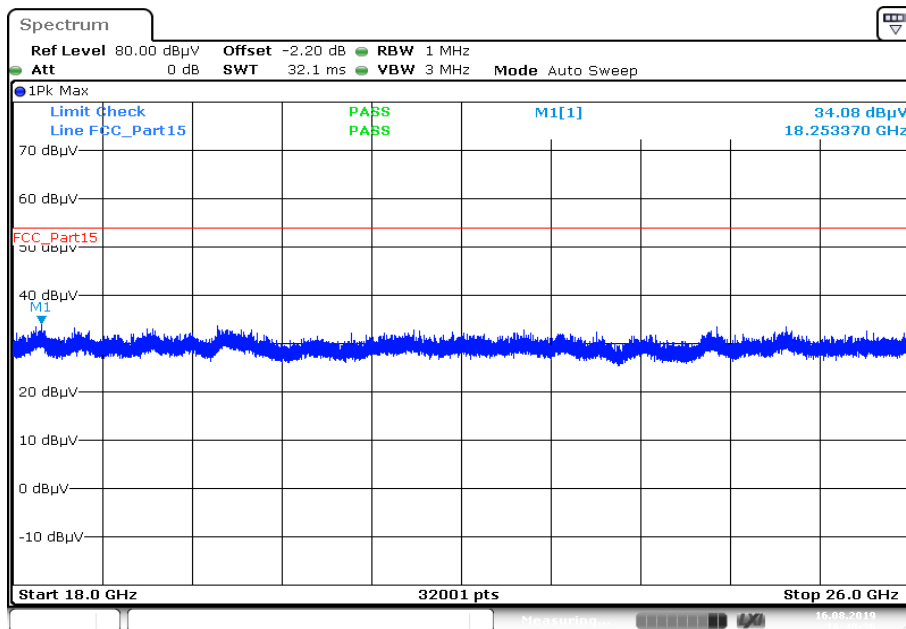
Final results:

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
34.000	13.61	30.0	16.39	1000	120	147.0	H	255.0	14
52.466	9.00	30.0	21.00	1000	120	101.0	V	3.0	15
63.118	6.54	30.0	23.46	1000	120	98.0	V	137.0	12
504.763	13.69	36.0	22.31	1000	120	170.0	H	271.0	18
715.318	17.68	36.0	18.32	1000	120	147.0	H	32.0	22
935.229	20.16	36.0	15.84	1000	120	170.0	H	208.0	24

Plot 18: 1 GHz to 18 GHz; vertical & horizontal polarization; U-NII-2C; lowest channel

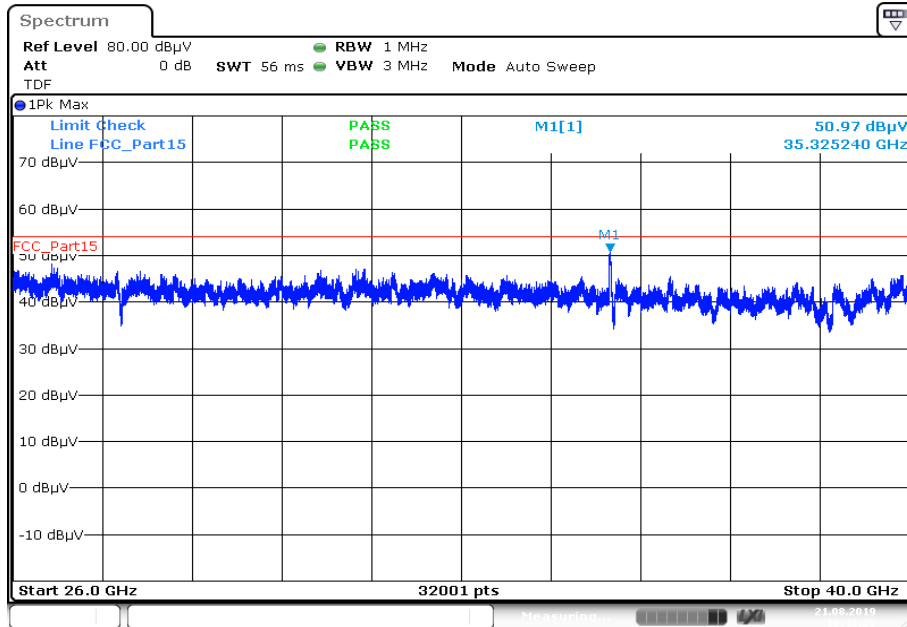


Plot 19: 18 GHz to 26 GHz; vertical & horizontal polarization; U-NII-2C; lowest channel



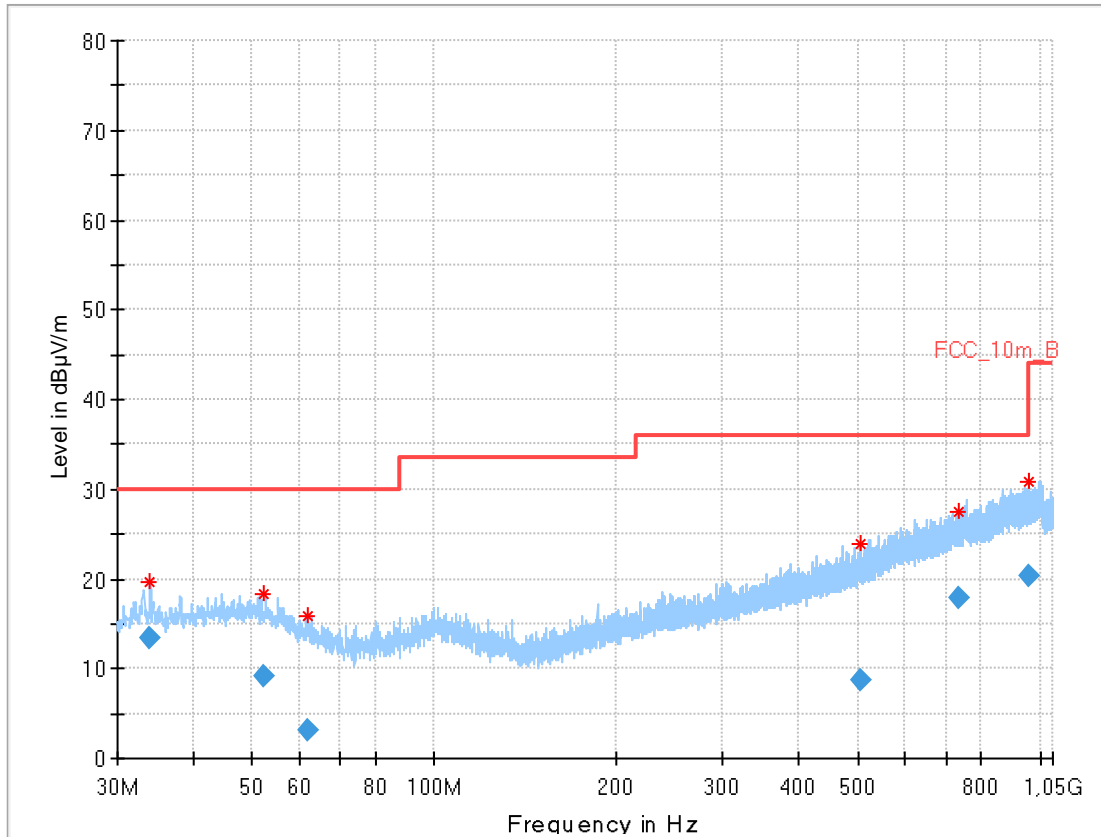
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Plot 20: 26 GHz to 40 GHz; vertical & horizontal polarization; U-NII-2C; lowest channel



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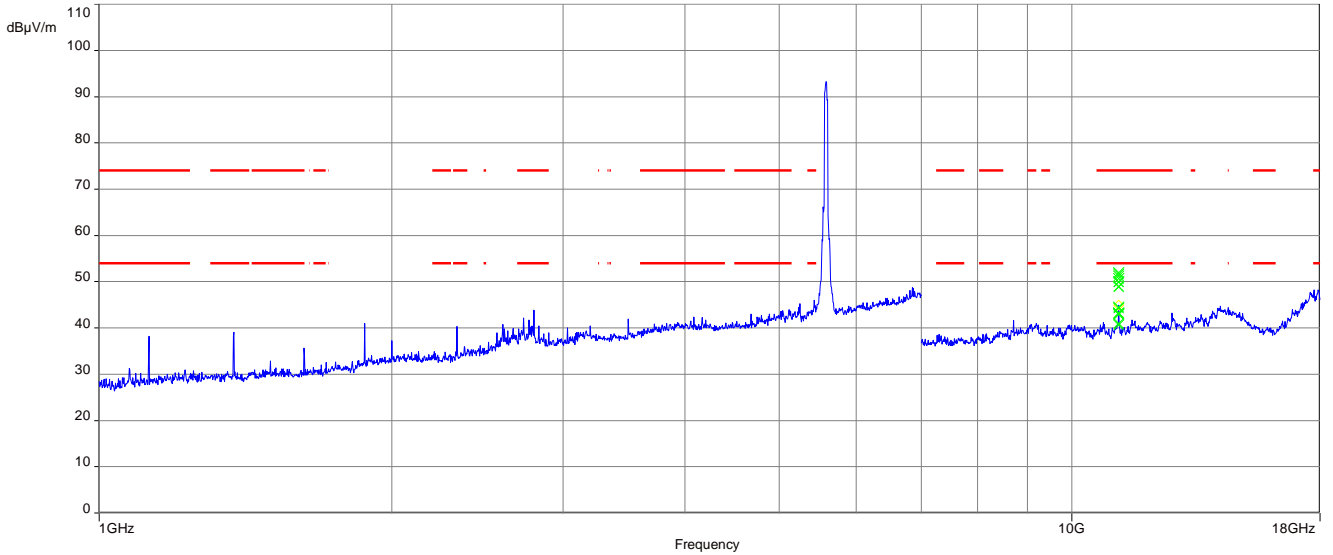
Plot 21: 30 MHz to 1 GHz; vertical & horizontal polarization; U-NII-2C; middle channel



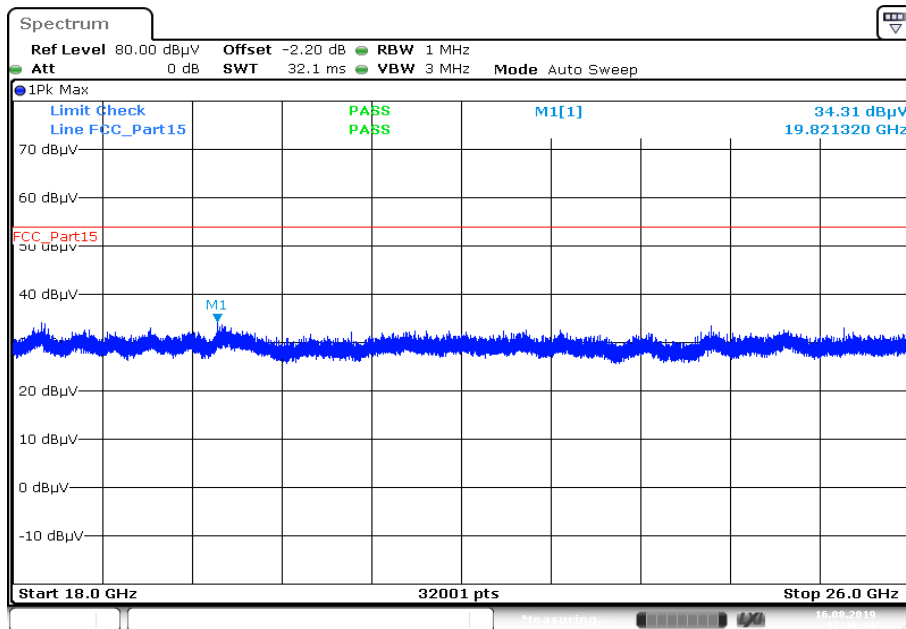
Final results:

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
33.992	13.37	30.0	16.63	1000	120	101.0	V	354.0	14
52.454	9.09	30.0	20.91	1000	120	98.0	H	183.0	15
61.995	3.06	30.0	26.94	1000	120	101.0	H	287.0	13
506.546	8.73	36.0	27.27	1000	120	170.0	V	344.0	18
733.511	17.86	36.0	18.14	1000	120	170.0	V	198.0	22
958.268	20.29	36.0	15.71	1000	120	170.0	V	0.0	24

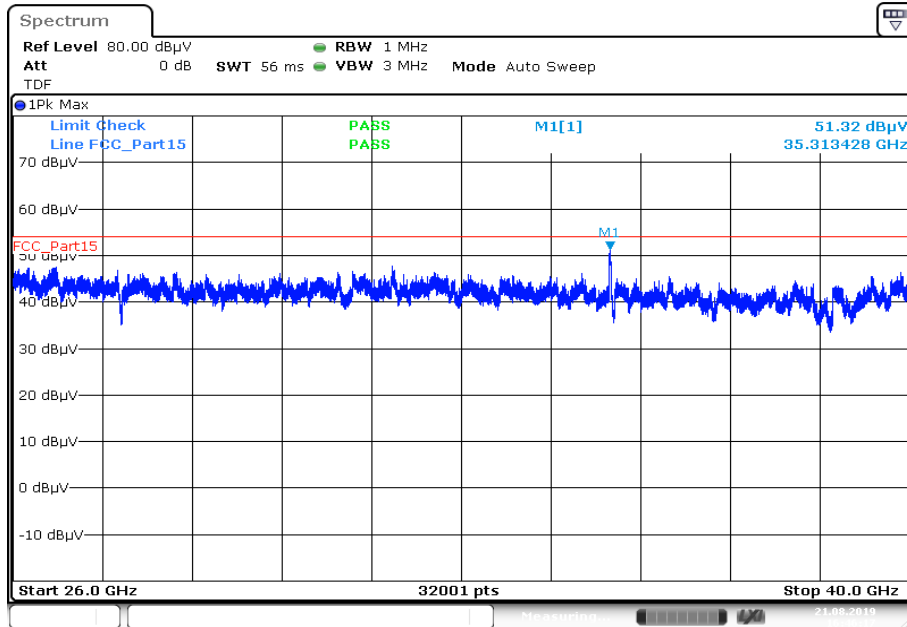
Plot 22: 1 GHz to 18 GHz; vertical & horizontal polarization; U-NII-2C; middle channel



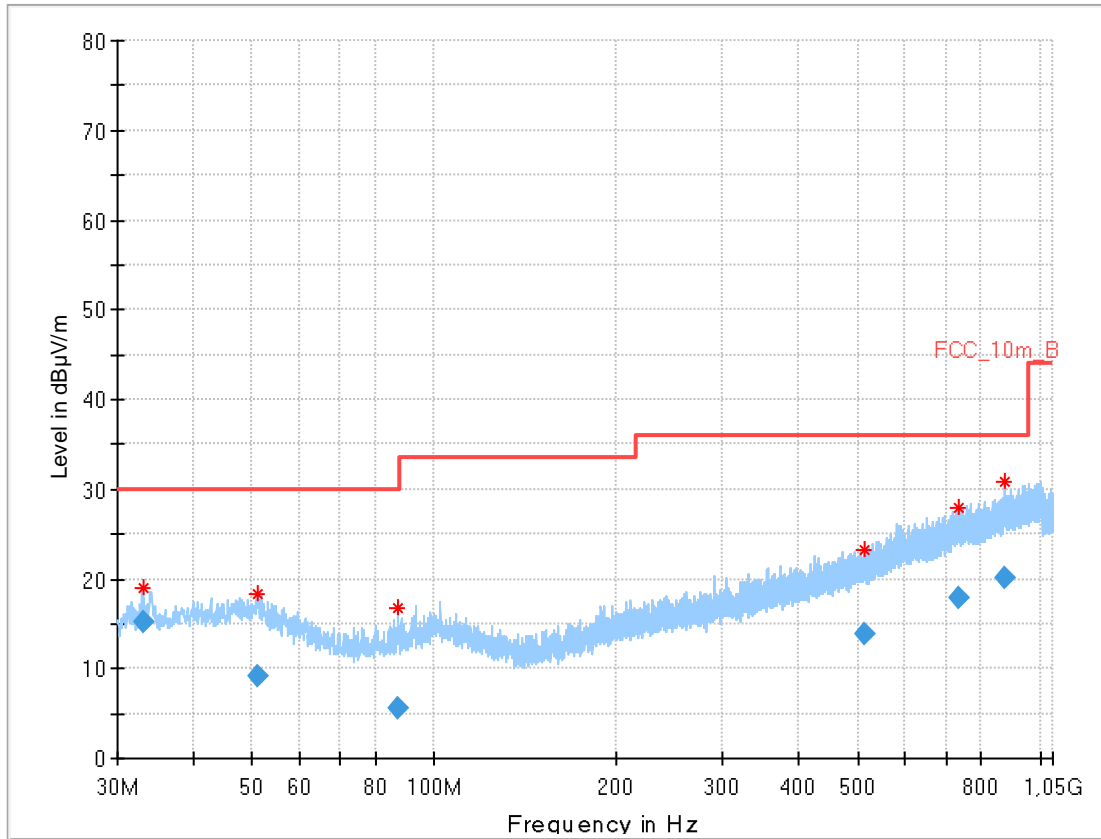
Plot 23: 18 GHz to 26 GHz; vertical & horizontal polarization; U-NII-2C; middle channel



Plot 24: 26 GHz to 40 GHz; vertical & horizontal polarization; U-NII-2C; middle channel



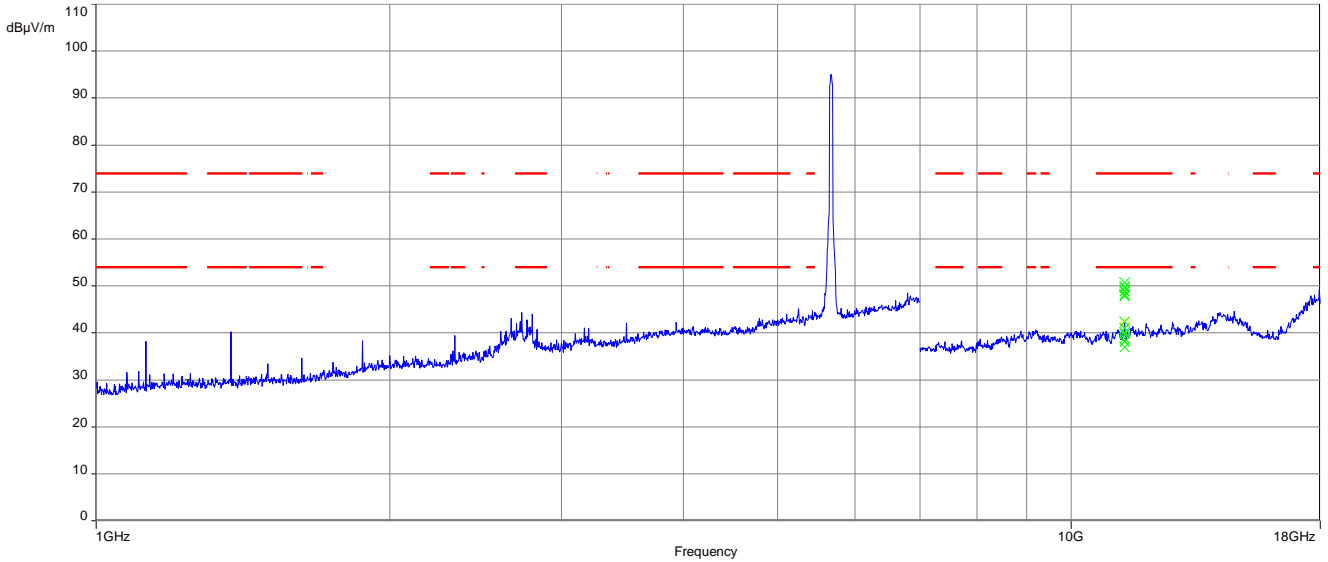
Plot 25: 30 MHz to 1 GHz; vertical & horizontal polarization; U-NII-2C; highest channel



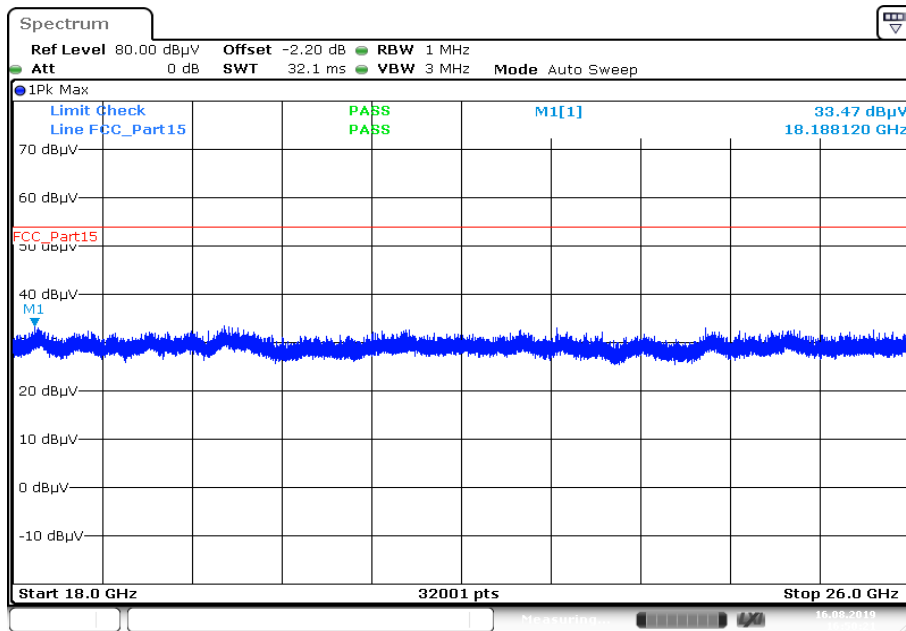
Final results:

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
32.998	15.09	30.0	14.91	1000	120	98.0	V	344.0	13
51.125	9.18	30.0	20.82	1000	120	170.0	H	214.0	15
87.095	5.67	30.0	24.33	1000	120	170.0	V	302.0	11
511.384	13.89	36.0	22.11	1000	120	98.0	V	13.0	18
733.620	17.82	36.0	18.18	1000	120	170.0	H	335.0	22
876.420	20.04	36.0	15.96	1000	120	100.0	V	265.0	24

Plot 26: 1 GHz to 18 GHz; vertical & horizontal polarization; U-NII-2C; highest channel

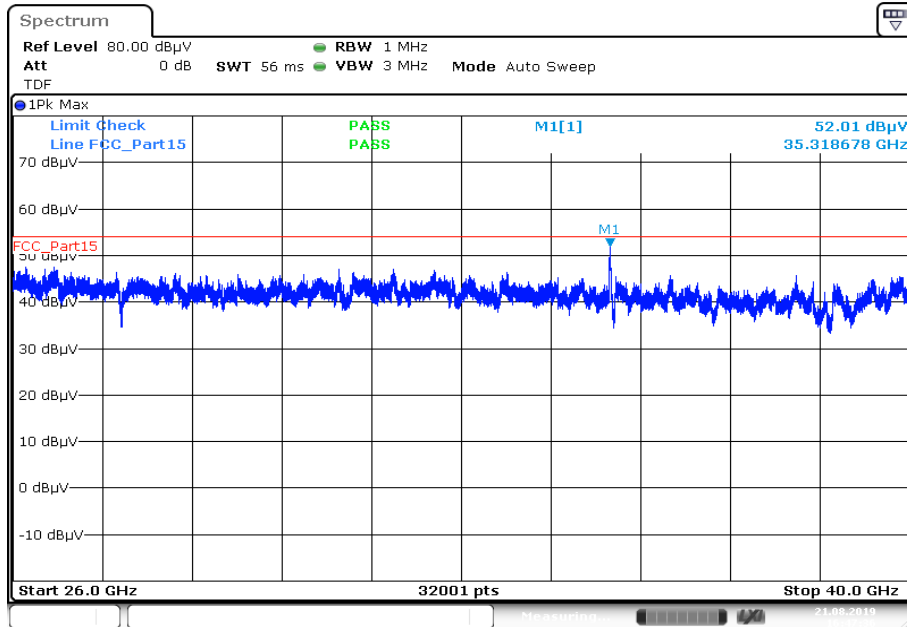


Plot 27: 18 GHz to 26 GHz; vertical & horizontal polarization; U-NII-2C; highest channel

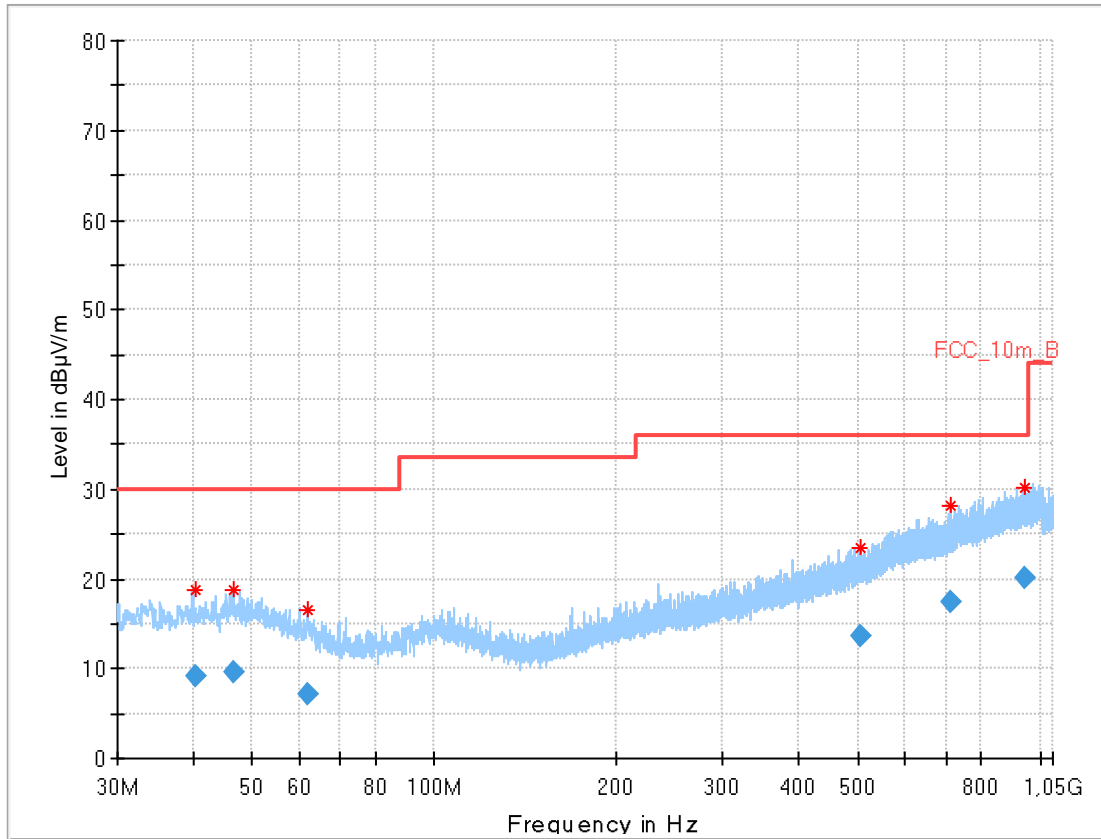


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Plot 28: 26 GHz to 40 GHz; vertical & horizontal polarization; U-NII-2C; highest channel



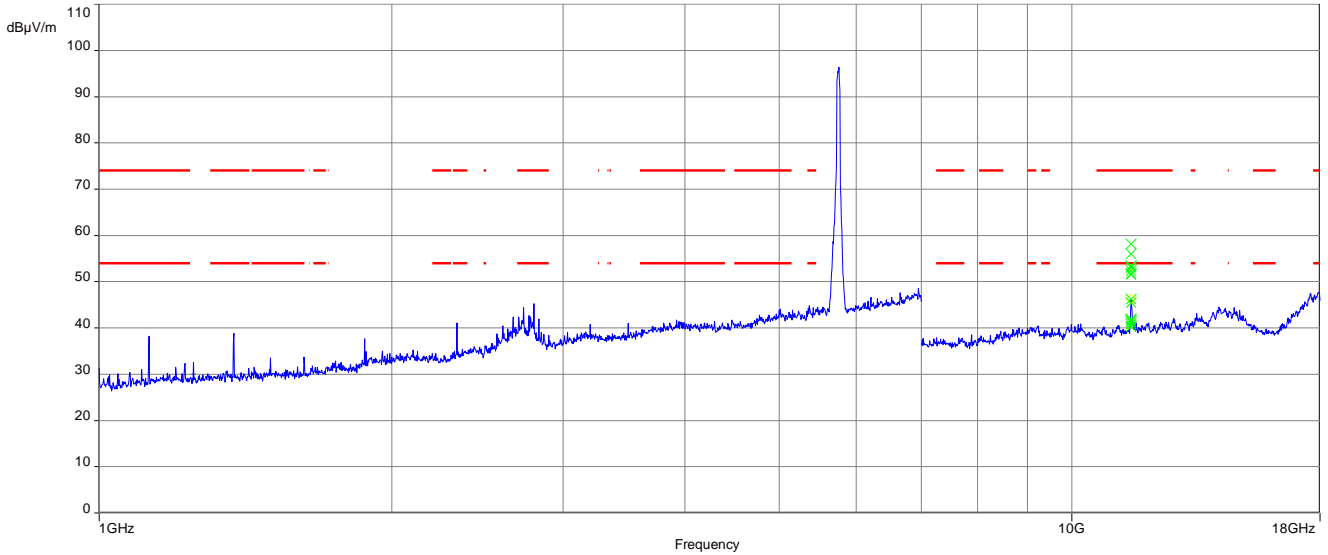
Plot 29: 30 MHz to 1 GHz; vertical & horizontal polarization; U-NII-3; lowest channel



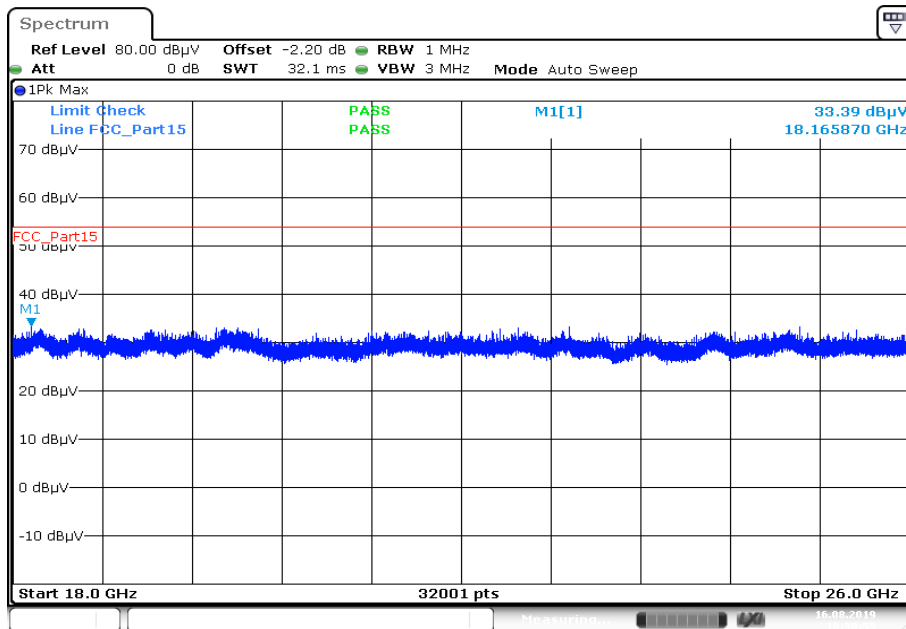
Final results:

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
40.471	9.09	30.0	20.91	1000	120	101.0	H	150.0	14
46.832	9.59	30.0	20.41	1000	120	101.0	V	341.0	15
62.032	7.06	30.0	22.94	1000	120	101.0	H	336.0	13
505.326	13.69	36.0	22.31	1000	120	170.0	V	120.0	18
714.219	17.49	36.0	18.51	1000	120	147.0	H	222.0	21
941.824	20.06	36.0	15.94	1000	120	170.0	V	345.0	24

Plot 30: 1 GHz to 18 GHz; vertical & horizontal polarization; U-NII-3; lowest channel

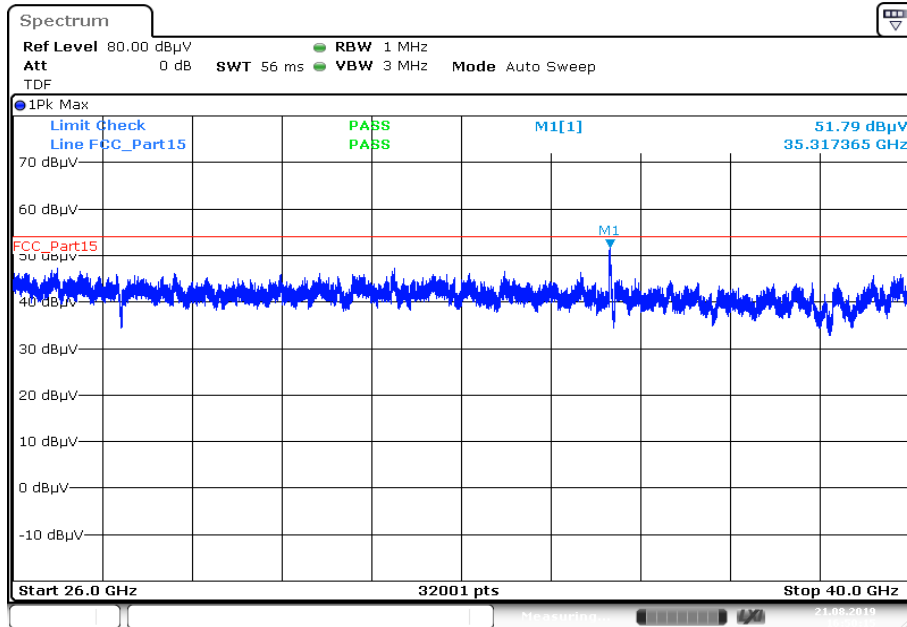


Plot 31: 18 GHz to 26 GHz; vertical & horizontal polarization; U-NII-3; lowest channel

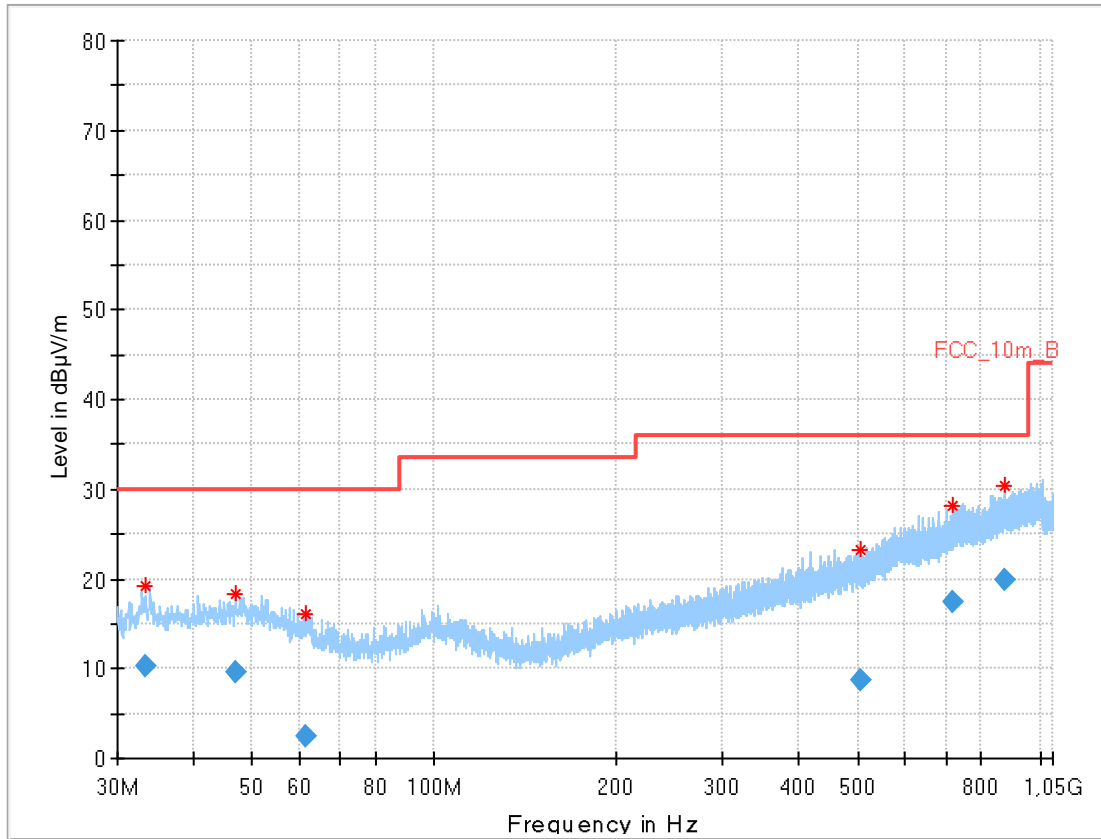


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Plot 32: 26 GHz to 40 GHz; vertical & horizontal polarization; U-NII-3; lowest channel



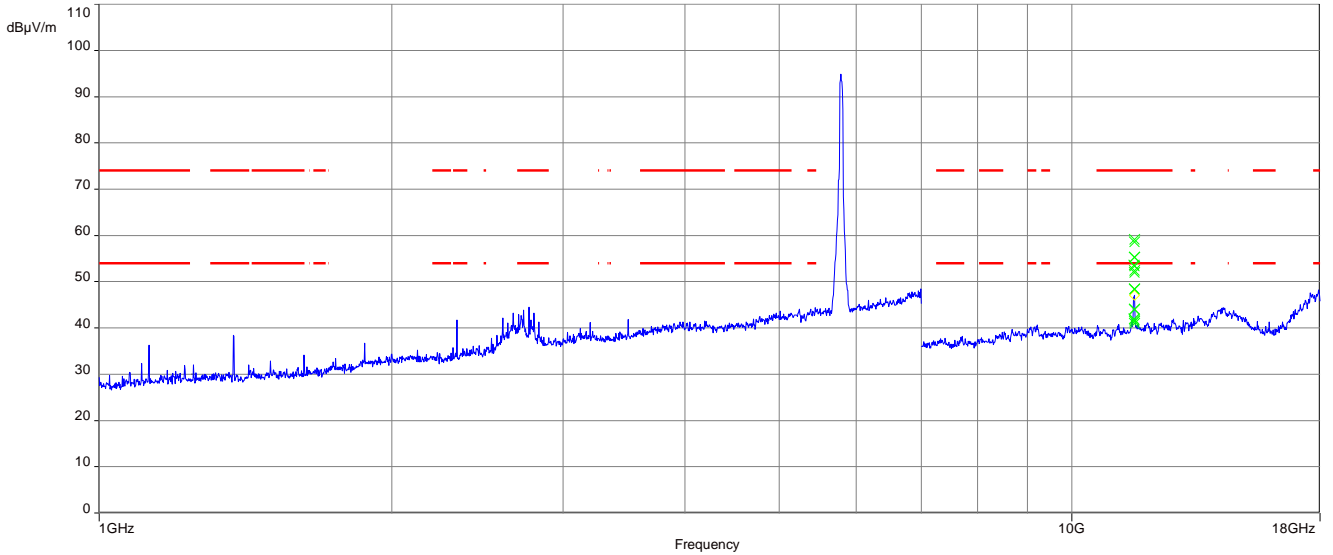
Plot 33: 30 MHz to 1 GHz; vertical & horizontal polarization; U-NII-3; highest channel



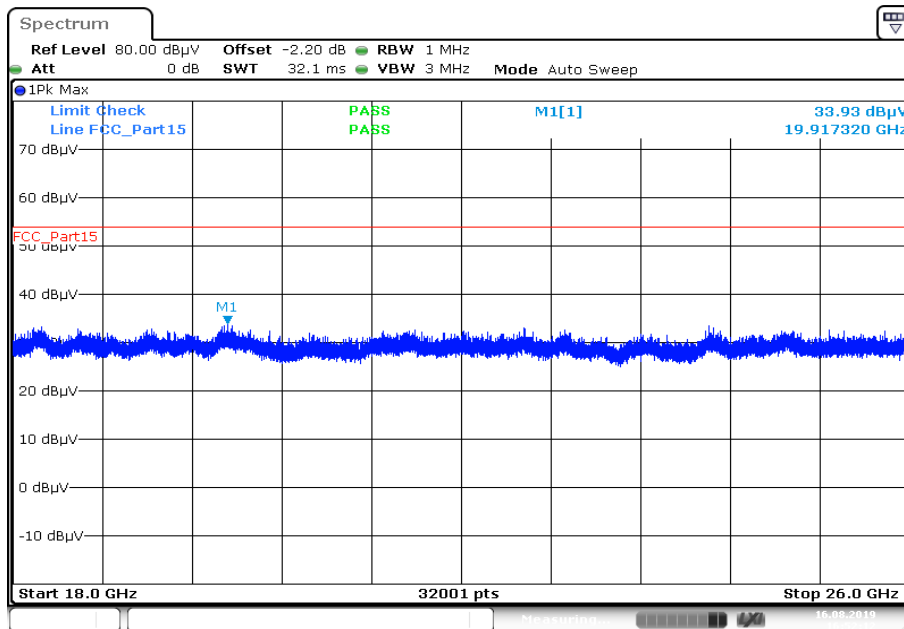
Final results:

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
33.362	10.30	30.0	19.70	1000	120	147.0	V	-10.0	14
47.161	9.50	30.0	20.50	1000	120	101.0	H	10.0	15
61.512	2.55	30.0	27.45	1000	120	101.0	V	61.0	13
504.038	8.73	36.0	27.27	1000	120	170.0	V	20.0	18
715.537	17.47	36.0	18.53	1000	120	147.0	V	65.0	22
875.915	19.81	36.0	16.19	1000	120	150.0	V	125.0	24

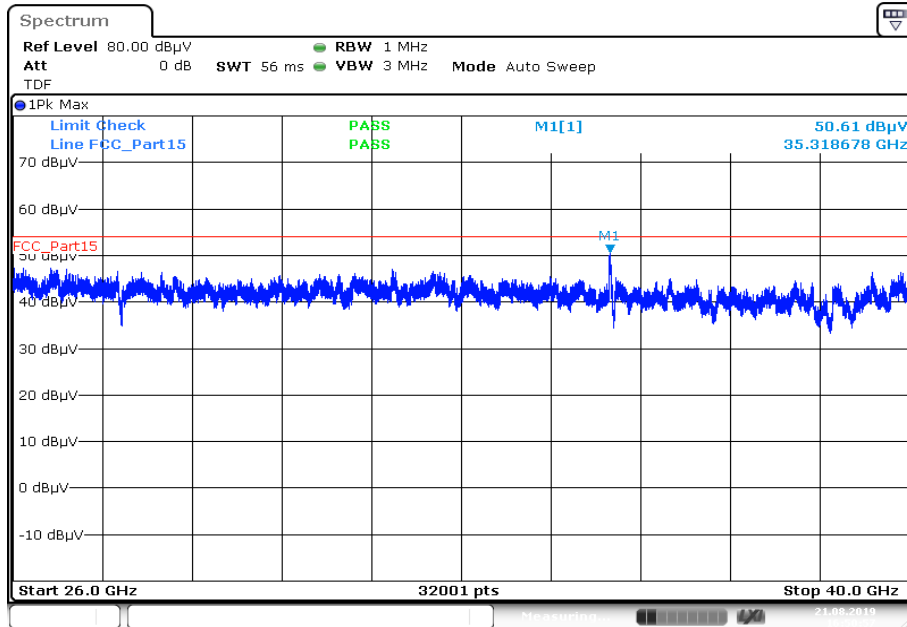
Plot 34: 1 GHz to 18 GHz; vertical & horizontal polarization; U-NII-3; highest channel



Plot 35: 18 GHz to 26 GHz; vertical & horizontal polarization; U-NII-3; highest channel

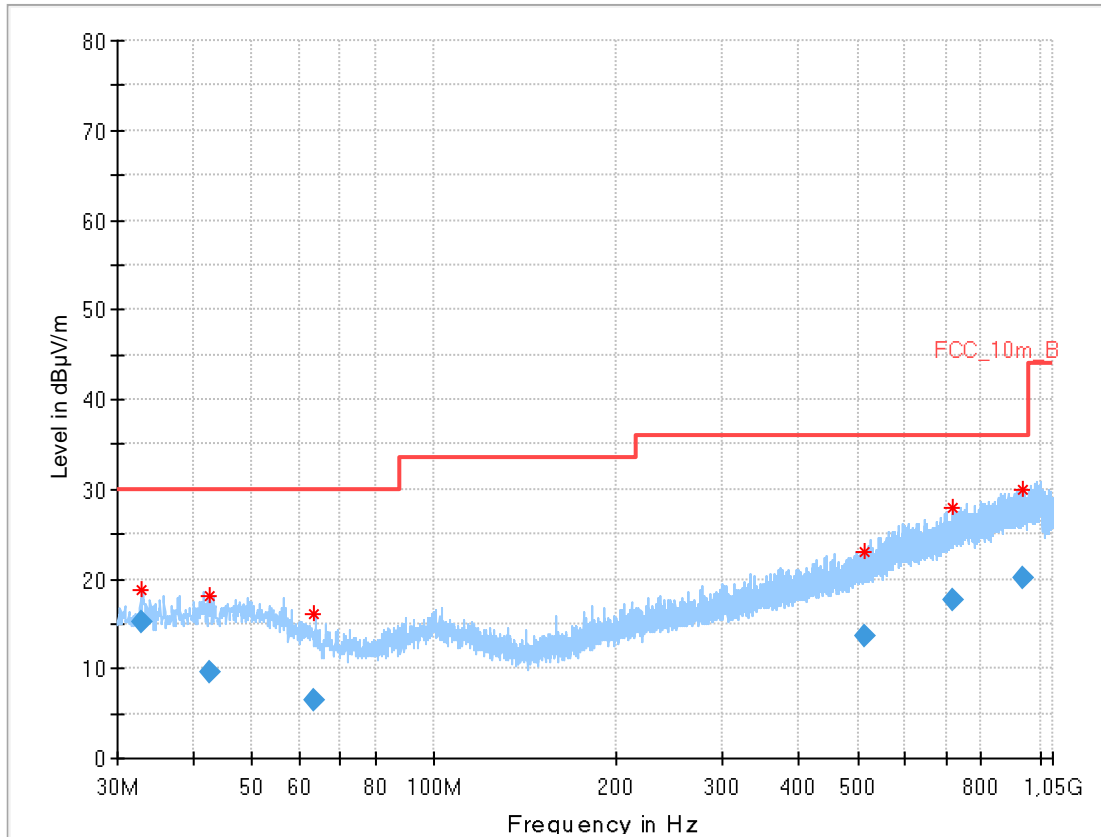


Plot 36: 26 GHz to 40 GHz; vertical & horizontal polarization; U-NII-3; highest channel



Plots: 80 MHz channel bandwidth

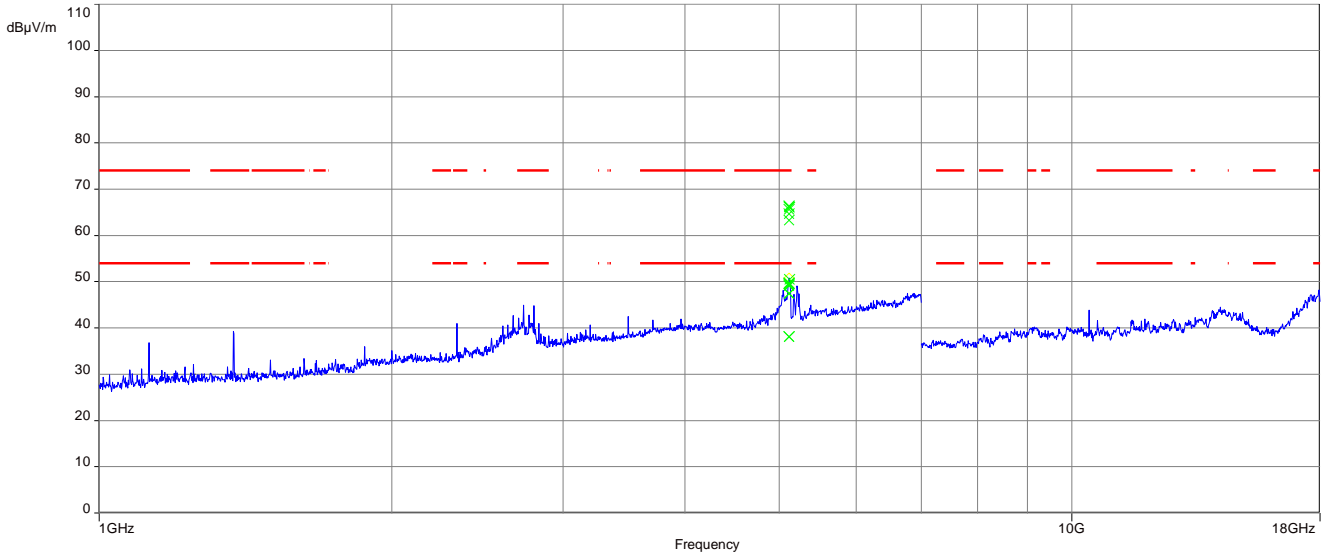
Plot 1: 30 MHz to 1 GHz; vertical & horizontal polarization; U-NII-1; middle channel



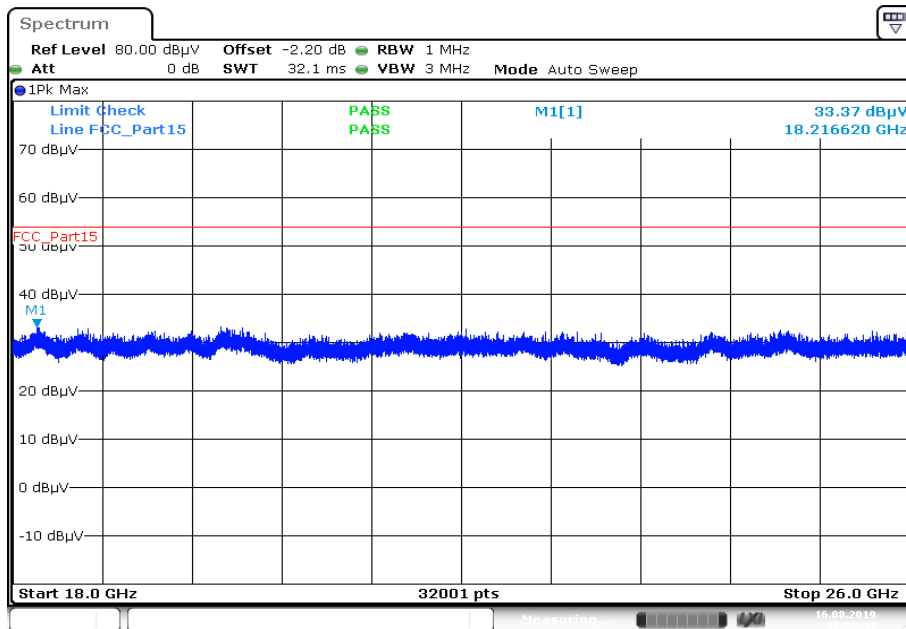
Final results:

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
32.994	15.17	30.0	14.83	1000	120	100.0	V	190.0	13
42.710	9.60	30.0	20.40	1000	120	148.0	V	203.0	15
63.074	6.42	30.0	23.58	1000	120	101.0	V	291.0	12
513.857	13.74	36.0	22.26	1000	120	101.0	V	298.0	18
717.856	17.64	36.0	18.36	1000	120	170.0	V	222.0	22
938.179	20.10	36.0	15.90	1000	120	170.0	H	0.0	24

Plot 2: 1 GHz to 18 GHz; vertical & horizontal polarization; U-NII-1; middle channel

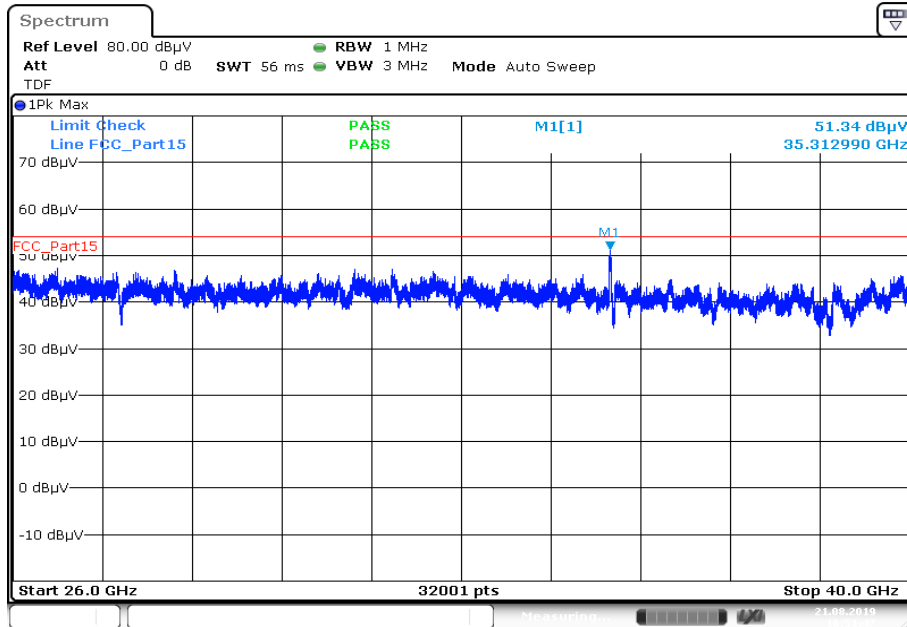


Plot 3: 18 GHz to 26 GHz; vertical & horizontal polarization; U-NII-1; middle channel



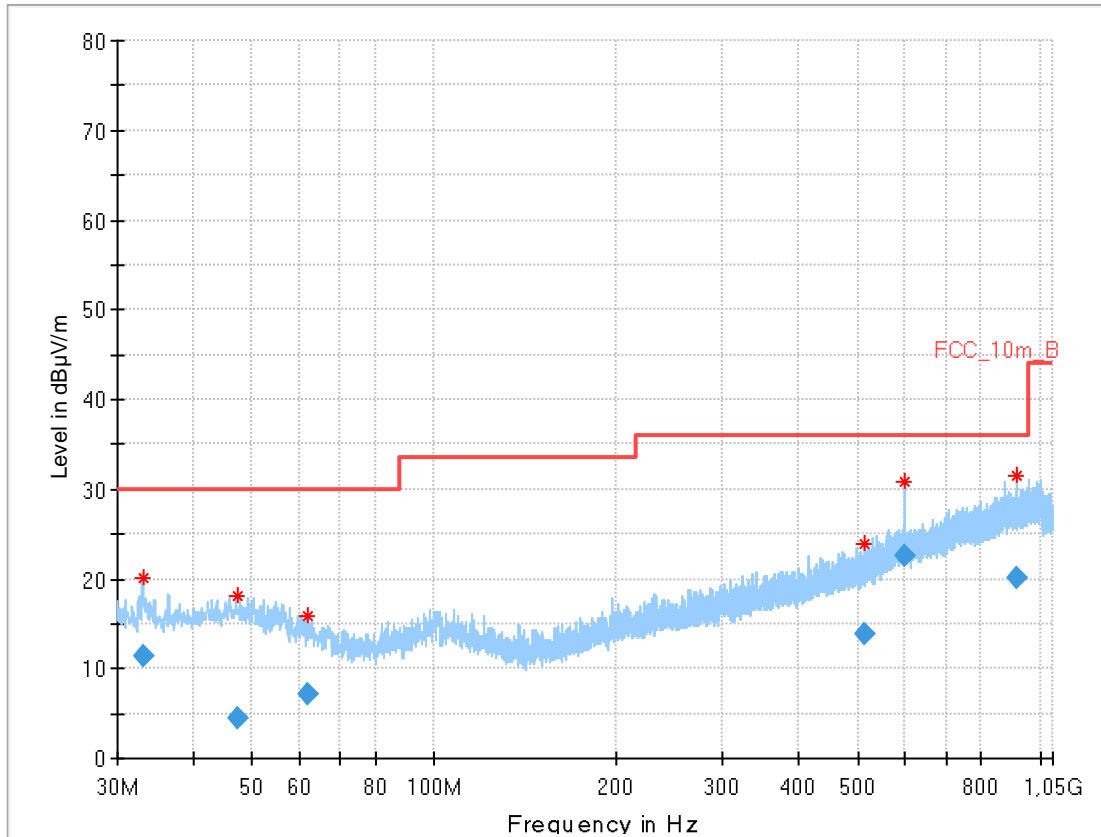
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Plot 4: 26 GHz to 40 GHz; vertical & horizontal polarization; U-NII-1; middle channel



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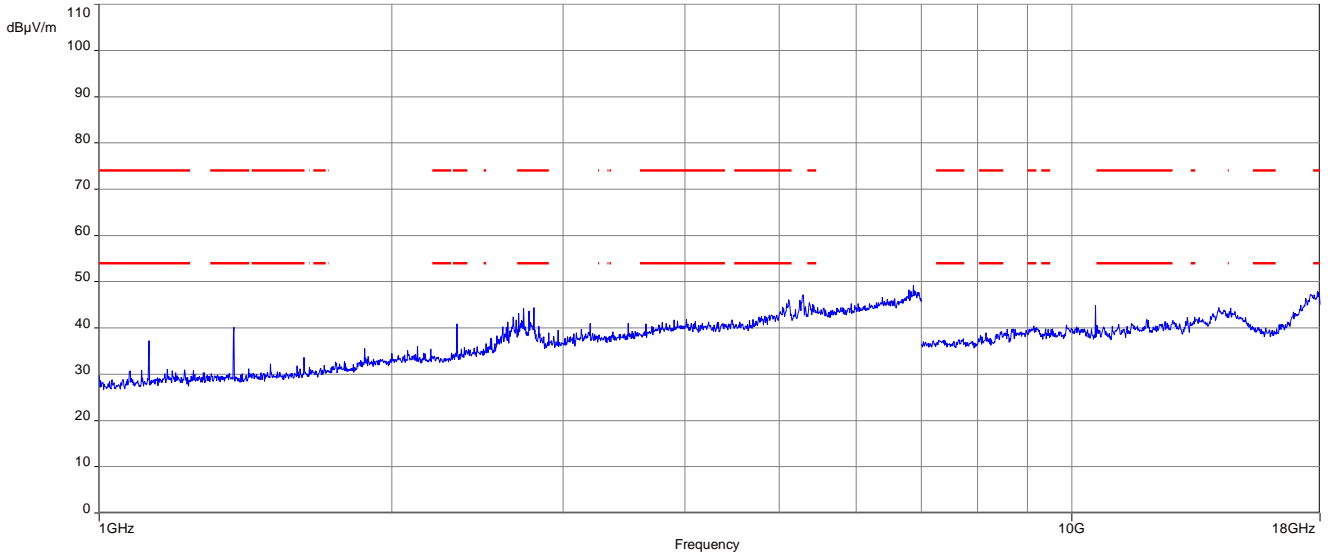
Plot 5: 30 MHz to 1 GHz; vertical & horizontal polarization; U-NII-2A; middle channel



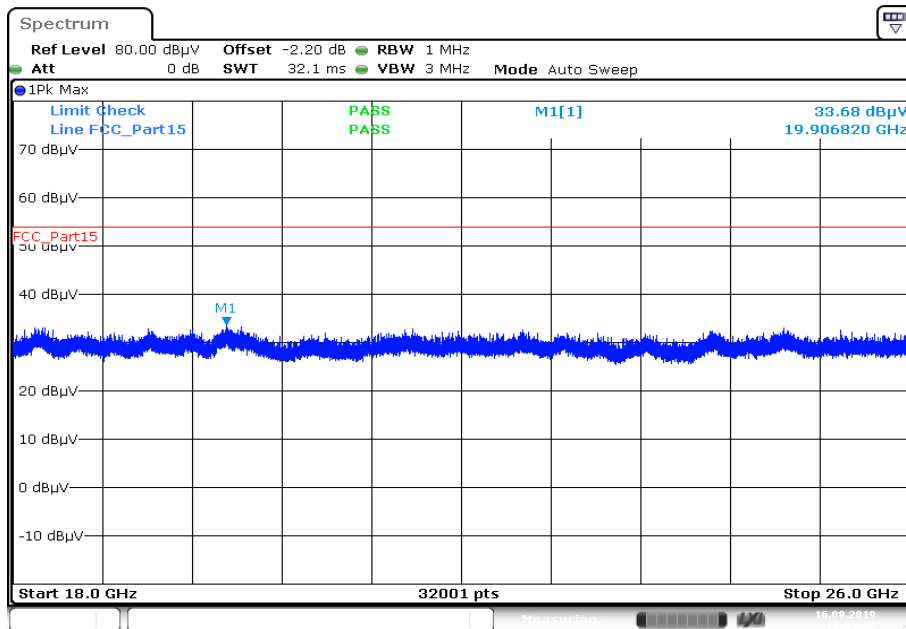
Final results:

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
32.998	11.35	30.0	18.65	1000	120	149.0	H	303.0	13
47.404	4.47	30.0	25.53	1000	120	101.0	H	256.0	15
62.041	7.24	30.0	22.76	1000	120	101.0	V	268.0	13
514.425	13.76	36.0	22.24	1000	120	170.0	H	13.0	18
599.748	22.63	36.0	13.37	1000	120	170.0	H	-1.0	20
914.013	20.05	36.0	15.95	1000	120	147.0	V	-9.0	24

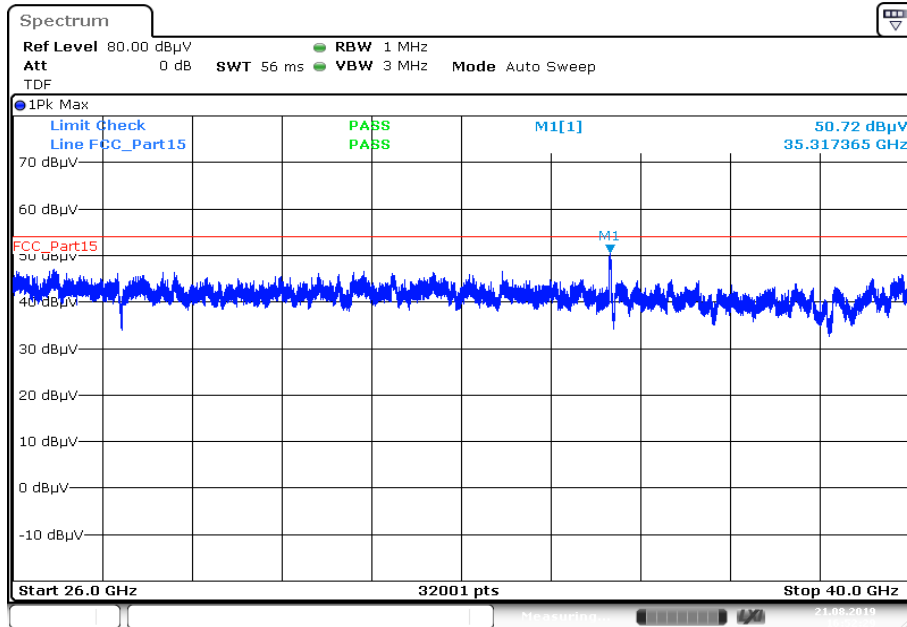
Plot 6: 1 GHz to 18 GHz; vertical & horizontal polarization; U-NII-2A; middle channel



Plot 7: 18 GHz to 26 GHz; vertical & horizontal polarization; U-NII-2A; middle channel

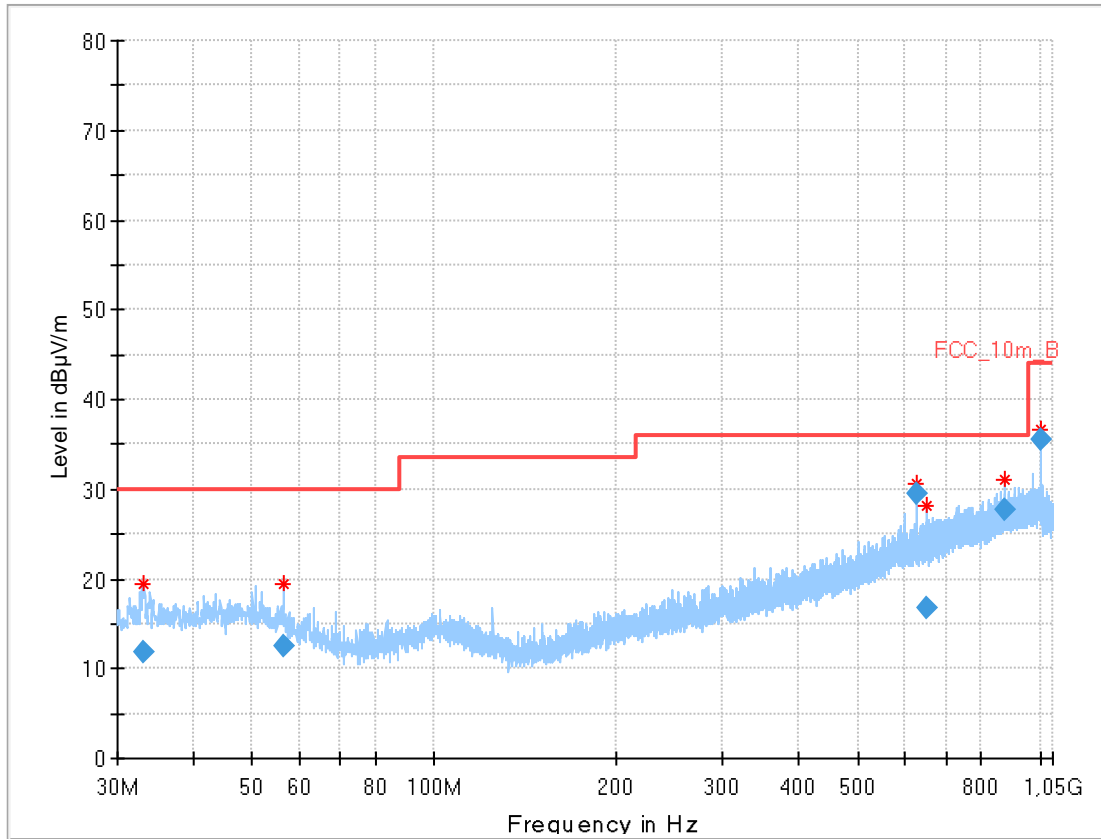


Plot 8: 26 GHz to 40 GHz; vertical & horizontal polarization; U-NII-2A; middle channel



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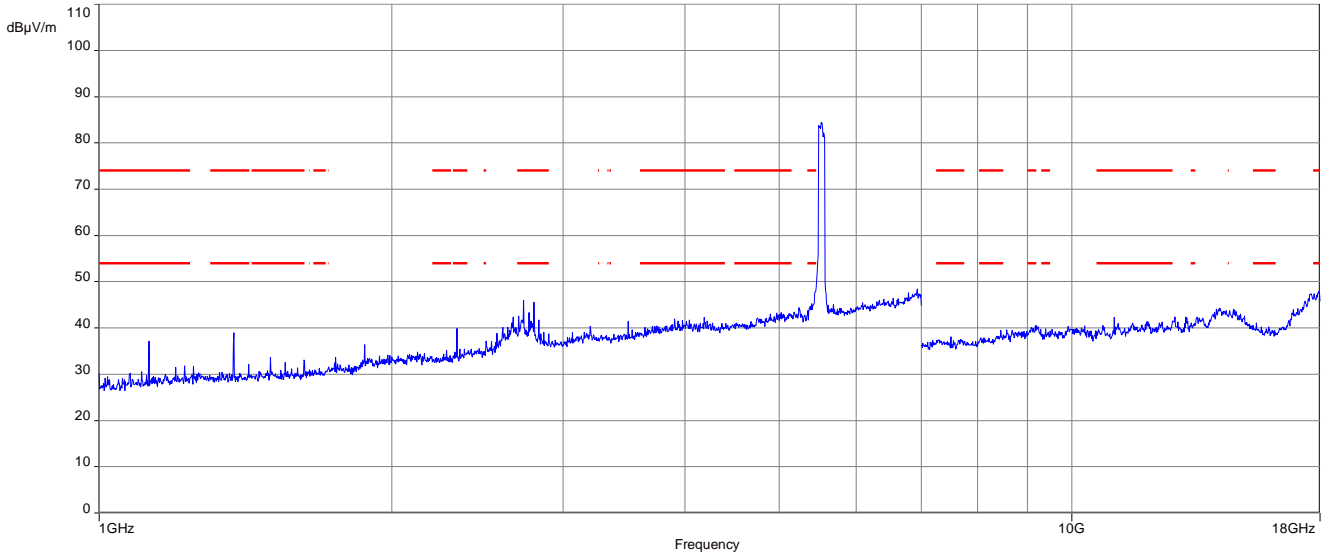
Plot 9: 30 MHz to 1 GHz; vertical & horizontal polarization; U-NII-2C; lowest channel



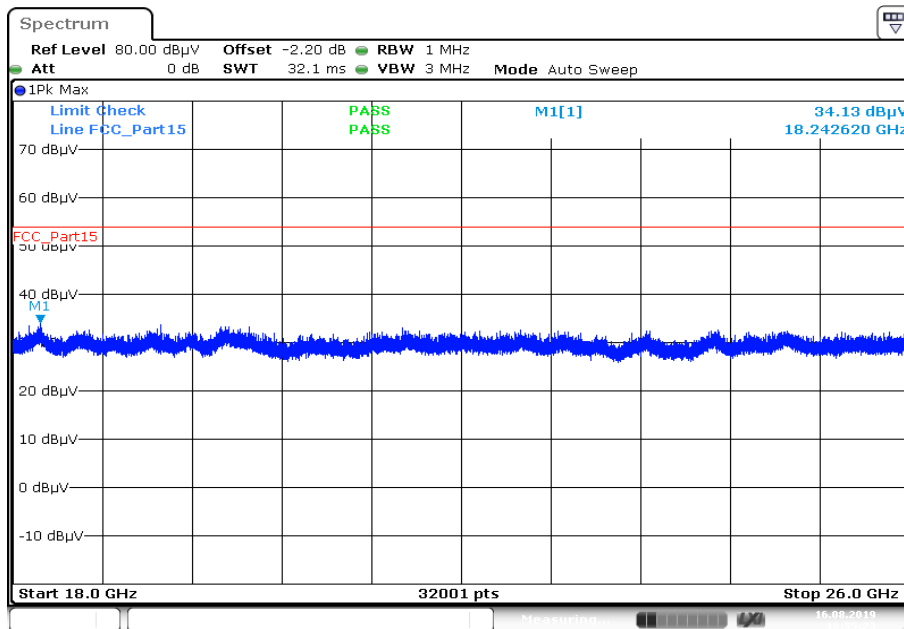
Final results:

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
33.000	11.81	30.0	18.19	1000	120	170.0	V	198.0	13
56.362	12.60	30.0	17.40	1000	120	98.0	V	10.0	14
625.011	29.41	36.0	6.59	1000	120	170.0	H	70.0	21
649.742	16.86	36.0	19.14	1000	120	170.0	H	165.0	21
875.005	27.67	36.0	8.33	1000	120	98.0	H	133.0	24
999.604	35.56	44.0	8.44	1000	120	98.0	H	124.0	25

Plot 10: 1 GHz to 18 GHz; vertical & horizontal polarization; U-NII-2C; lowest channel

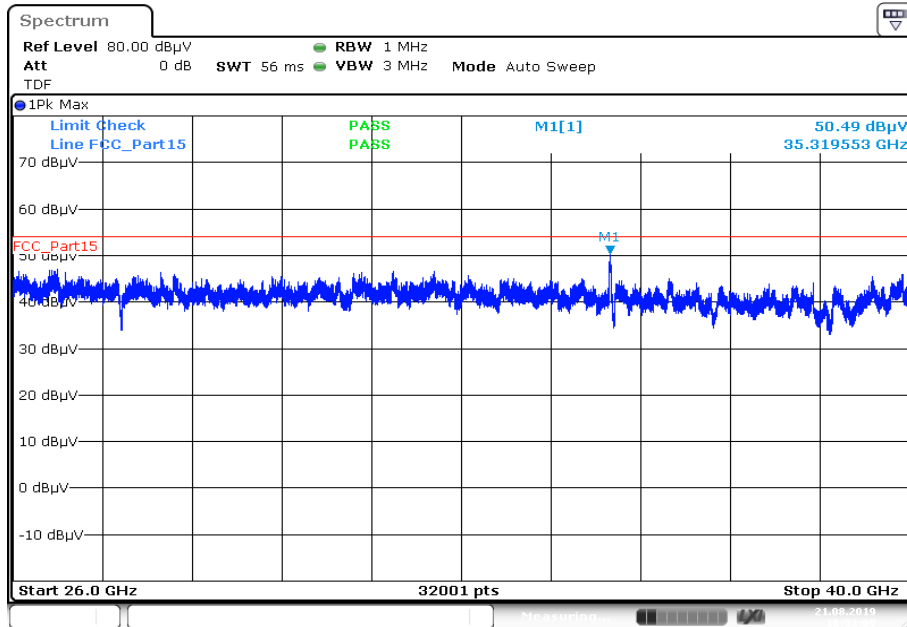


Plot 11: 18 GHz to 26 GHz; vertical & horizontal polarization; U-NII-2C; lowest channel



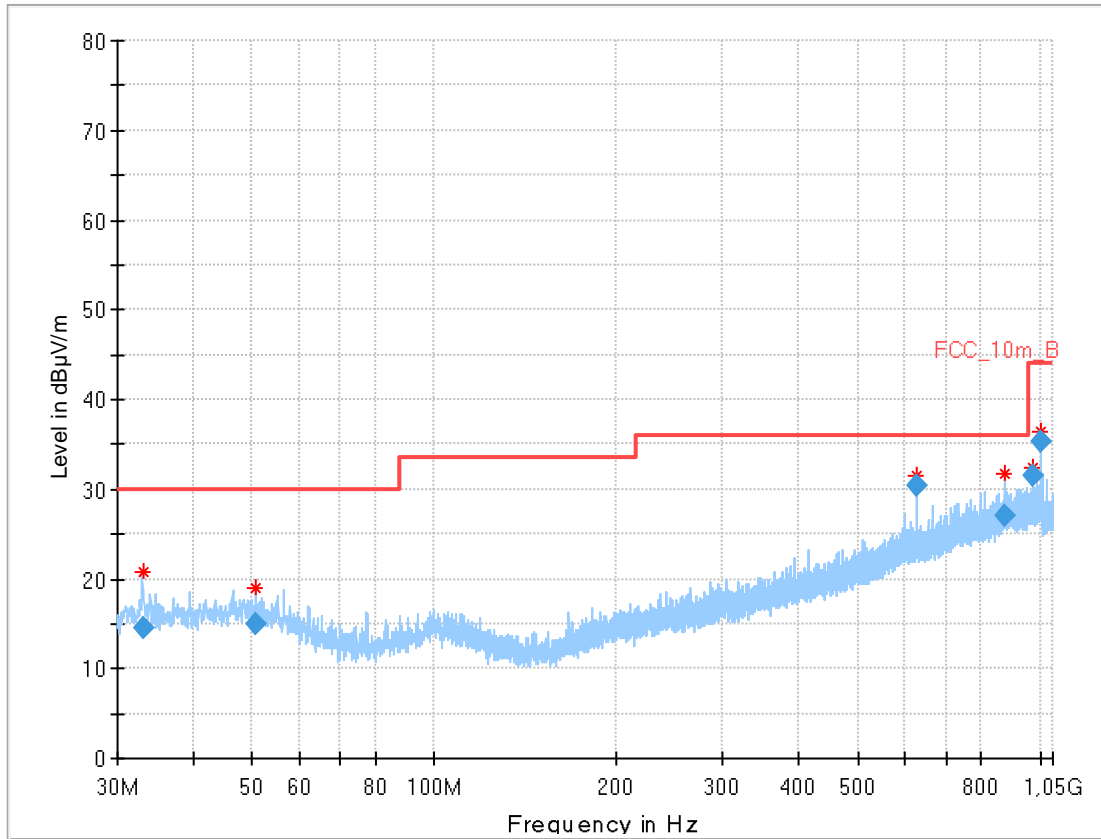
Date: 16.AUG.2019 16:55:23

Plot 12: 26 GHz to 40 GHz; vertical & horizontal polarization; U-NII-2C; lowest channel



Date: 21.AUG.2019 16:53:10

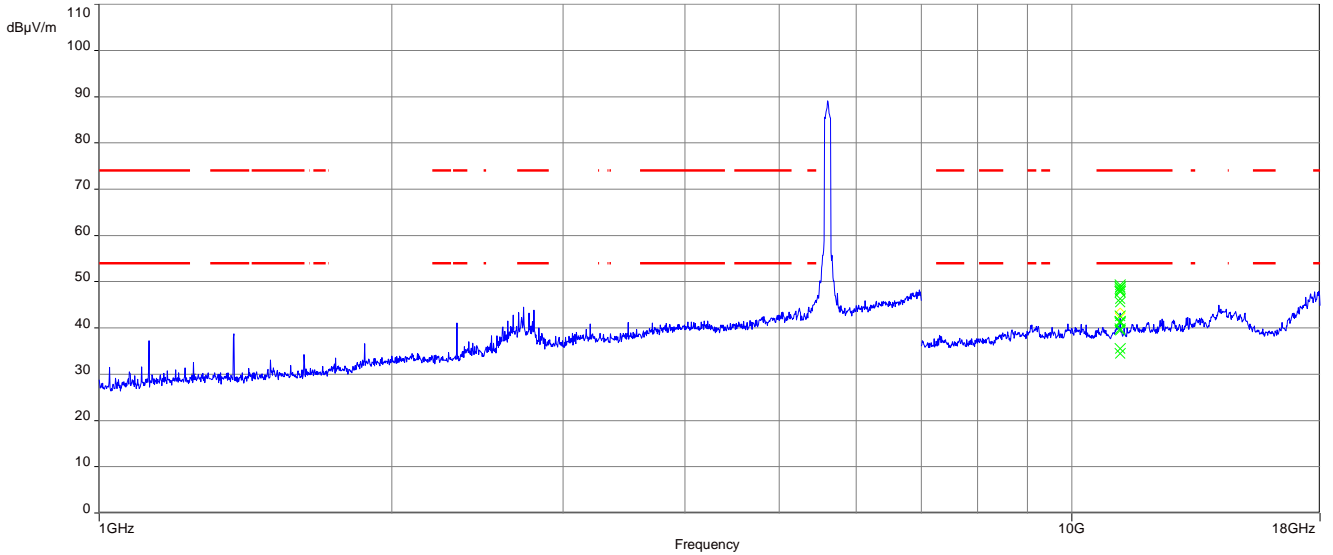
Plot 13: 30 MHz to 1 GHz; vertical & horizontal polarization; U-NII-2C; highest channel



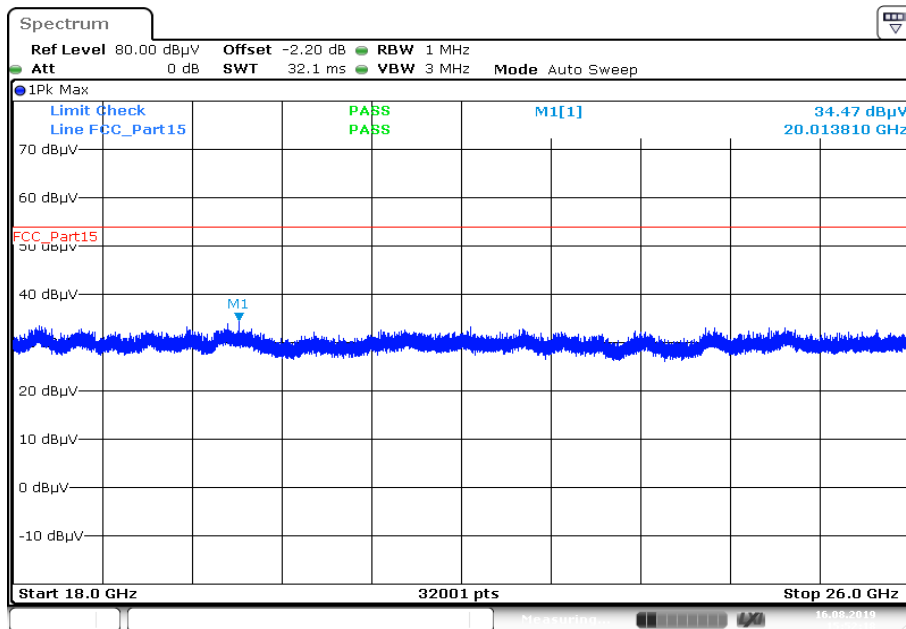
Final results:

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
33.206	14.57	30.0	15.43	1000	120	100.0	V	161.0	14
50.772	14.97	30.0	15.03	1000	120	101.0	V	-6.0	15
624.996	30.50	36.0	5.50	1000	120	170.0	H	50.0	21
875.015	27.03	36.0	8.97	1000	120	101.0	H	189.0	24
975.002	31.45	44.0	12.55	1000	120	100.0	H	128.0	24
999.603	35.40	44.0	8.60	1000	120	98.0	H	131.0	25

Plot 14: 1 GHz to 18 GHz; vertical & horizontal polarization; U-NII-2C; highest channel

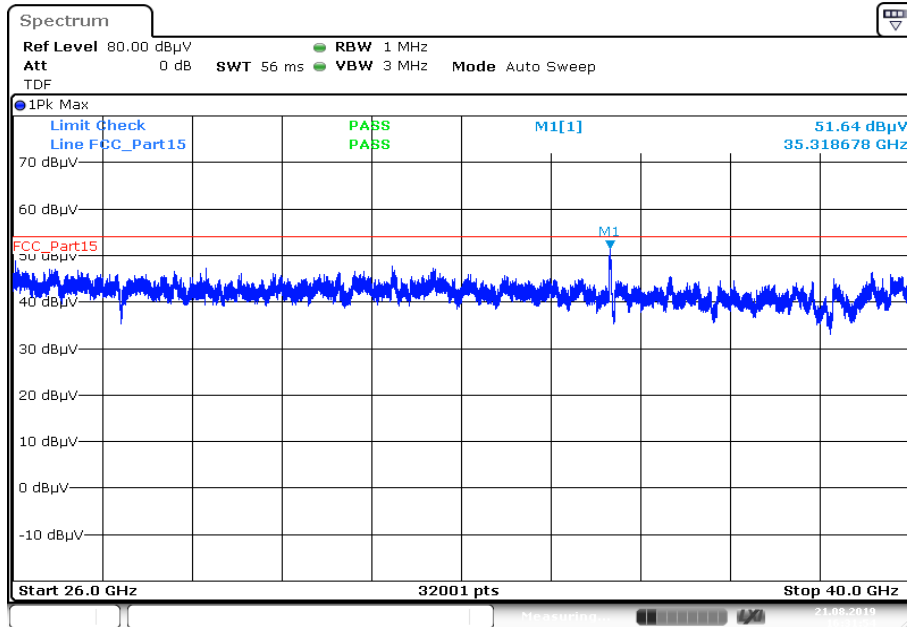


Plot 15: 18 GHz to 26 GHz; vertical & horizontal polarization; U-NII-2C; highest channel

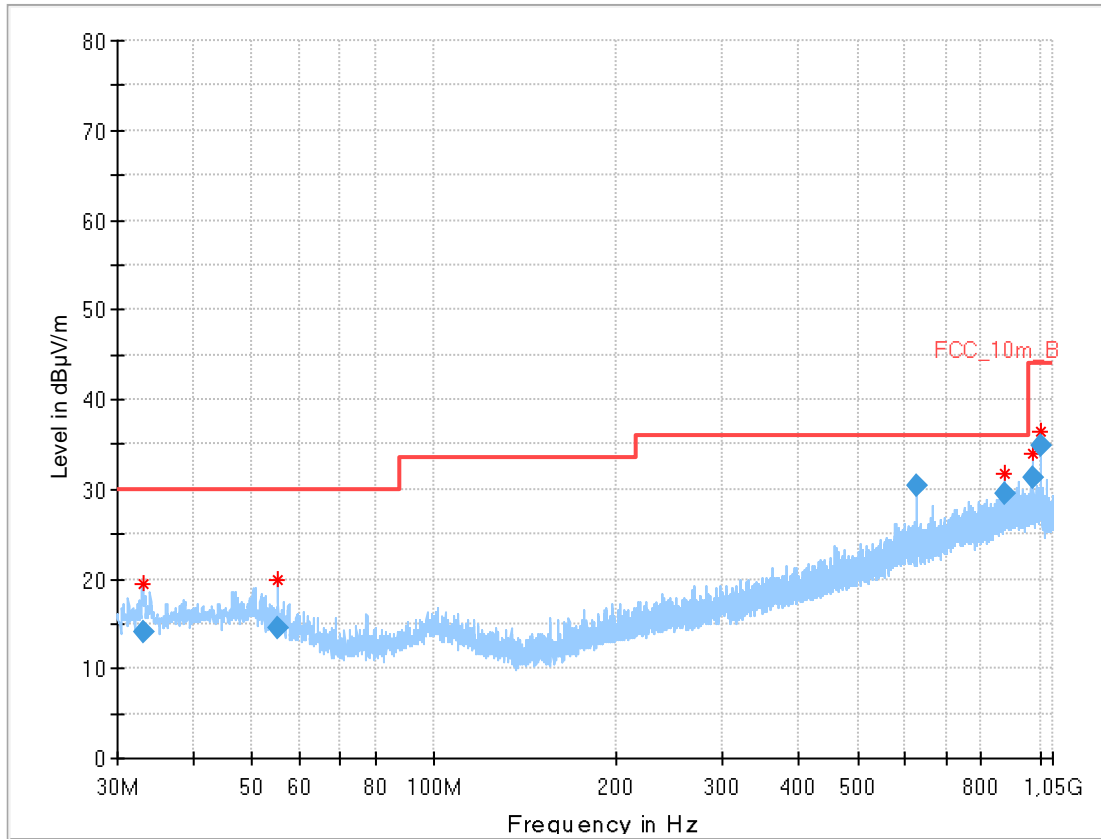


Date: 16.AUG.2019 15:52:19

Plot 16: 26 GHz to 40 GHz; vertical & horizontal polarization; U-NII-2C; highest channel



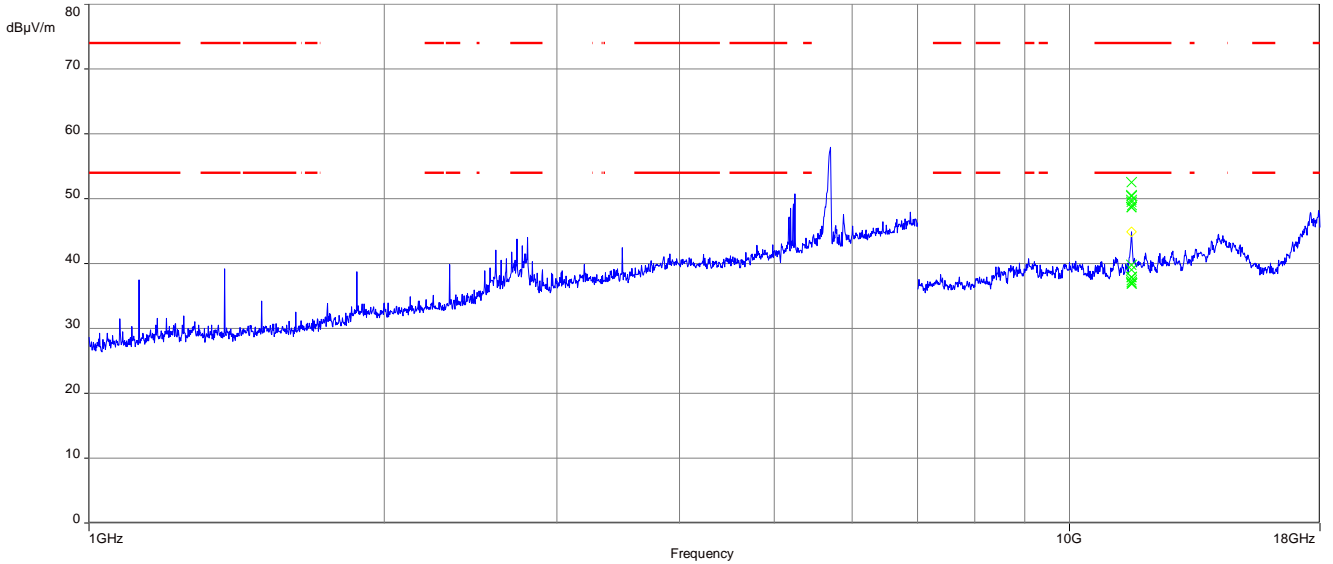
Plot 17: 30 MHz to 1 GHz; vertical & horizontal polarization; U-NII-3; middle channel



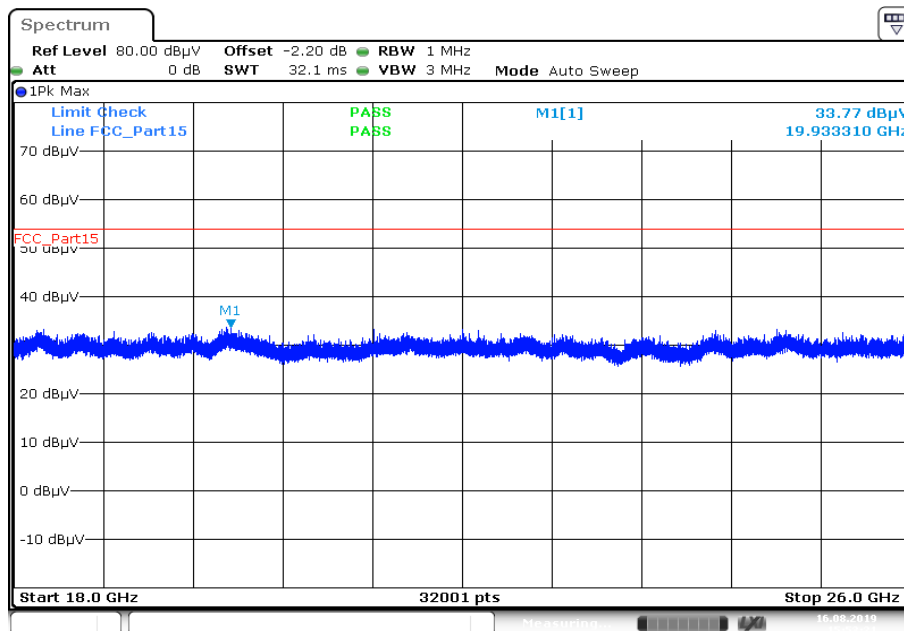
Final results:

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
33.037	14.04	30.0	15.96	1000	120	101.0	V	13.0	13
55.300	14.53	30.0	15.47	1000	120	101.0	V	289.0	14
625.009	30.38	36.0	5.62	1000	120	170.0	H	47.0	21
875.000	29.52	36.0	6.48	1000	120	98.0	H	76.0	24
975.000	31.29	44.0	12.71	1000	120	98.0	H	128.0	24
999.593	34.86	44.0	9.14	1000	120	98.0	H	126.0	25

Plot 18: 1 GHz to 18 GHz; vertical & horizontal polarization; U-NII-3; middle channel

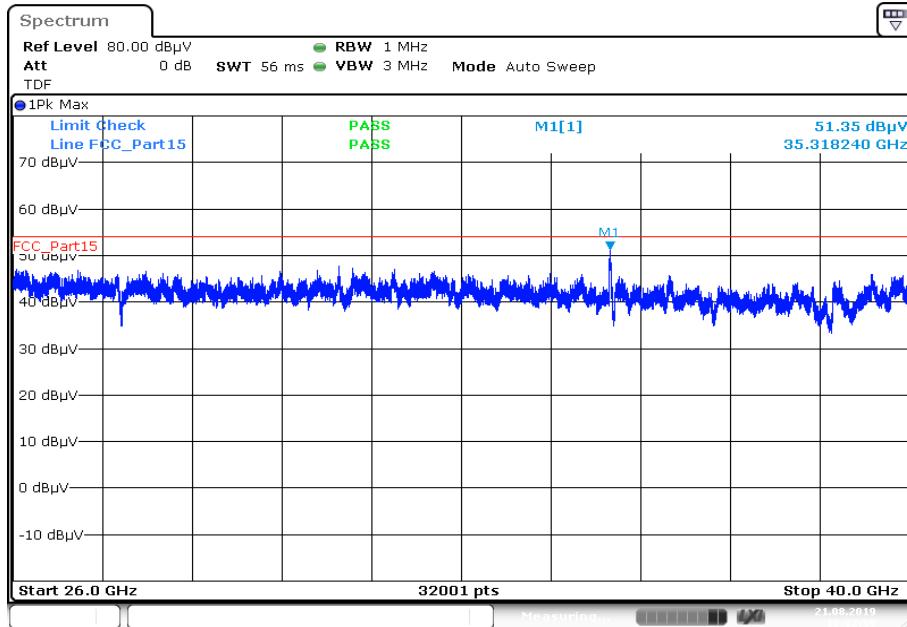


Plot 19: 18 GHz to 26 GHz; vertical & horizontal polarization; U-NII-3; middle channel



Date: 16.AUG.2019 15:53:21

Plot 20: 26 GHz to 40 GHz; vertical & horizontal polarization; U-NII-3; middle channel



11.8 RX spurious emissions radiated

Description:

Measurement of the radiated spurious emissions in idle/receive mode.

Measurement:

Measurement parameter	
Detector:	Quasi Peak below 1 GHz (alternative Peak) Peak above 1 GHz / RMS
Sweep time:	Auto
Resolution bandwidth:	F < 1 GHz: 100 kHz F > 1 GHz: 1 MHz
Video bandwidth:	F < 1 GHz: 100 kHz F > 1 GHz: ≥ 3 MHz
Span:	30 MHz to 40 GHz
Trace mode:	Max Hold / Average with 100 counts + 20 log (1 / X) for duty cycle lower than 100 %
Test setup:	See sub clause 6.1 – A See sub clause 6.2 – A See sub clause 6.3 – A
Measurement uncertainty:	See sub clause 8

Limits:

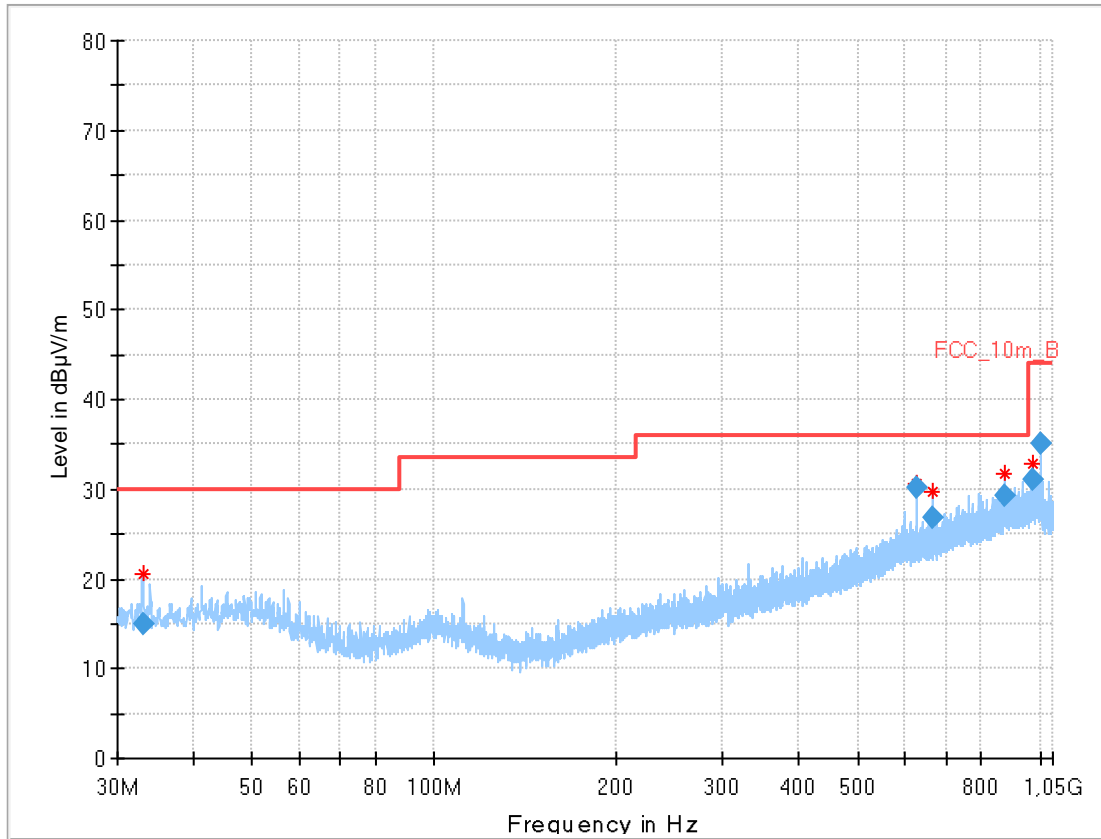
RX Spurious Emissions Radiated		
Frequency (MHz)	Field Strength (dBµV/m)	Measurement distance
30 - 88	30.0	10
88 – 216	33.5	10
216 – 960	36.0	10
Above 960	54.0	3

Results:

TX spurious emissions radiated / dBµV/m @ 3 m		
f / MHz	Detector	Level / dBµV/m
All detected peak emissions are below the average limit.		
-/-	Peak	-/-
	AVG	-/-

Plots:

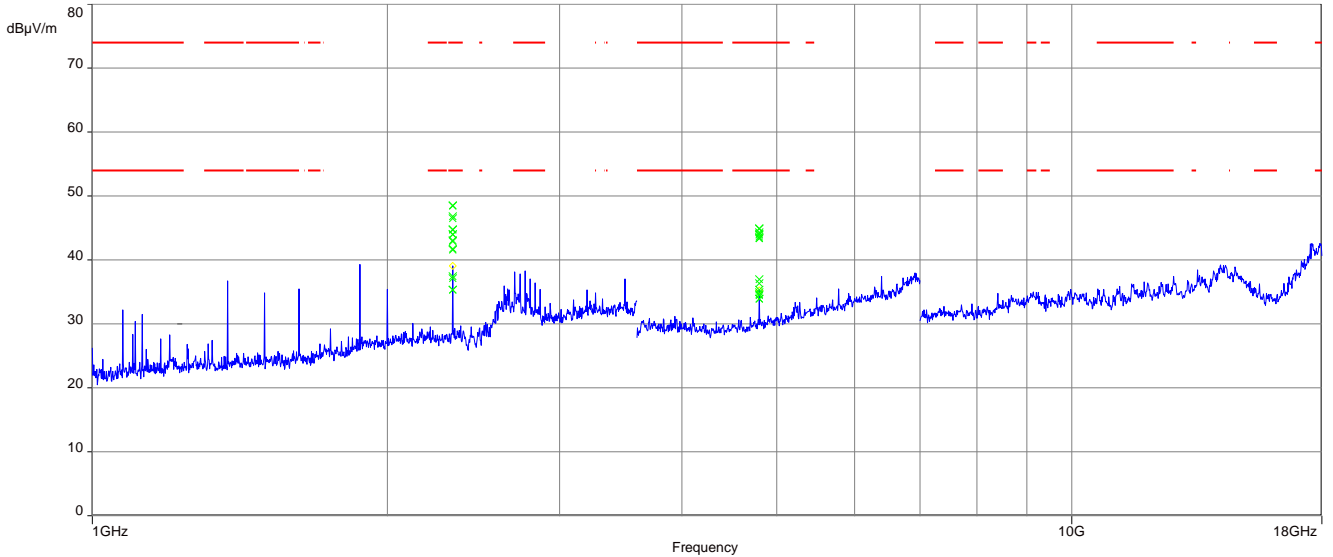
Plot 1: 30 MHz to 1 GHz, vertical & horizontal polarization



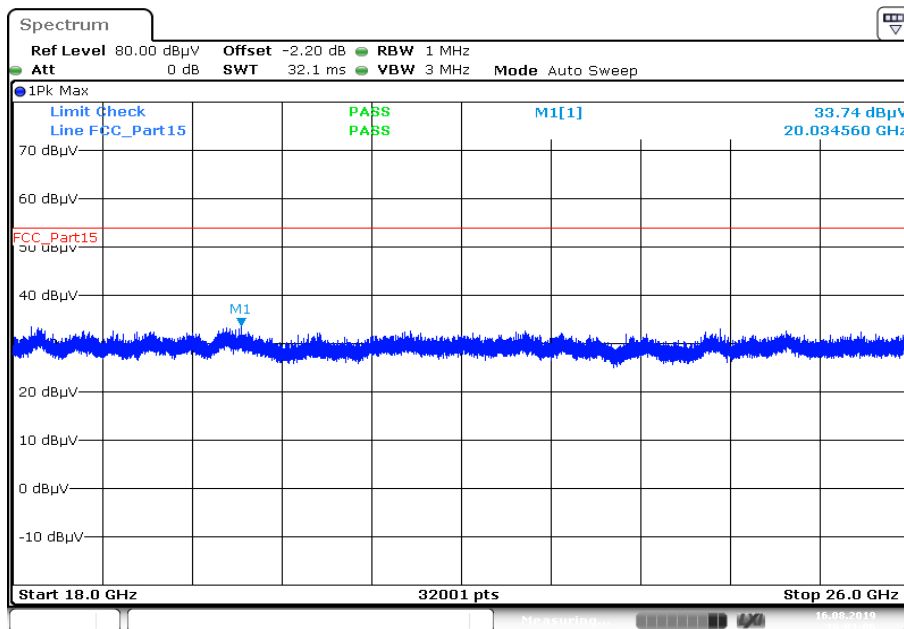
Final results:

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
33.005	15.00	30.0	15.00	1000	120	146.0	H	197.0	13
625.013	30.15	36.0	5.85	1000	120	170.0	H	46.0	21
663.554	26.82	36.0	9.18	1000	120	170.0	H	162.0	21
874.989	29.27	36.0	6.73	1000	120	98.0	H	77.0	24
974.989	31.10	44.0	12.90	1000	120	101.0	H	134.0	24
999.595	35.05	44.0	8.95	1000	120	98.0	H	129.0	25

Plot 2: 1 GHz to 18 GHz, vertical & horizontal polarization

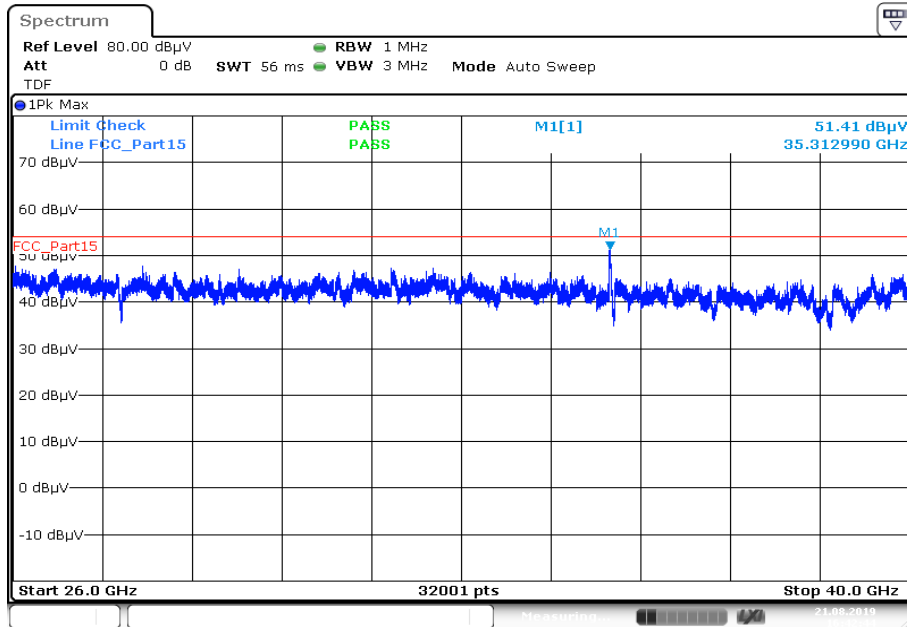


Plot 3: 18 GHz to 26 GHz, vertical & horizontal polarization



Date: 16.AUG.2019 16:01:06

Plot 4: 26 GHz to 40 GHz, vertical & horizontal polarization



Annex A Glossary

EUT	Equipment under test
DUT	Device under test
UUT	Unit under test
GUE	GNSS User Equipment
ETSI	European Telecommunications Standards Institute
EN	European Standard
FCC	Federal Communications Commission
FCC ID	Company Identifier at FCC
IC	Industry Canada
PMN	Product marketing name
HMN	Host marketing name
HVIN	Hardware version identification number
FVIN	Firmware version identification number
EMC	Electromagnetic Compatibility
HW	Hardware
SW	Software
Inv. No.	Inventory number
S/N or SN	Serial number
C	Compliant
NC	Not compliant
NA	Not applicable
NP	Not performed
PP	Positive peak
QP	Quasi peak
AVG	Average
OC	Operating channel
OCW	Operating channel bandwidth
OBW	Occupied bandwidth
OOB	Out of band
DFS	Dynamic frequency selection
CAC	Channel availability check
OP	Occupancy period
NOP	Non occupancy period
DC	Duty cycle
PER	Packet error rate
CW	Clean wave
MC	Modulated carrier
WLAN	Wireless local area network
RLAN	Radio local area network
DSSS	Dynamic sequence spread spectrum
OFDM	Orthogonal frequency division multiplexing
FHSS	Frequency hopping spread spectrum
GNSS	Global Navigation Satellite System
C/N₀	Carrier to noise-density ratio, expressed in dB-Hz

Annex B Document history

Version	Applied changes	Date of release
-/-	Initial release	2019-09-13
A	FVIN and HVIN changed	2019-10-15

Annex C Accreditation Certificate – D-PL-12076-01-04

first page	last page
 <p>Deutsche Akkreditierungsstelle GmbH</p> <p>Entrusted according to Section 8 subsection 1 AkkStelleG in connection with Section 1 subsection 1 AkkStelleGBV Signatory to the Multilateral Agreements of EA, ILAC and IAF for Mutual Recognition</p> <p>Accreditation </p> <p>The Deutsche Akkreditierungsstelle GmbH attests that the testing laboratory CTC advanced GmbH Untertürkheimer Straße 6-10, 66117 Saarbrücken</p> <p>is competent under the terms of DIN EN ISO/IEC 17025:2005 to carry out tests in the following fields: Telecommunication (TC) and Electromagnetic Compatibility (EMC) for Canadian Standards</p> <p>The accreditation certificate shall only apply in connection with the notice of accreditation of 11.01.2019 with the accreditation number D-PL-12076-01 and is valid until 21.04.2021. It comprises the cover sheet, the reverse side of the cover sheet and the following annex with a total of 7 pages.</p> <p>Registration number of the certificate: D-PL-12076-01-04</p> <p>Frankfurt am Main, 11.01.2019  Dipl.-Stat. Uwe Zimmermann Head of Division</p> <p><small>See notes overleaf.</small></p>	<p>Deutsche Akkreditierungsstelle GmbH</p> <p>Office Berlin Sinttelmarkt 10 10117 Berlin</p> <p>Office Frankfurt am Main Europa-Allee 52 60327 Frankfurt am Main</p> <p>Office Braunschweig Bundesallee 100 38116 Braunschweig</p> <p>The publication of extracts of the accreditation certificate is subject to the prior written approval by Deutsche Akkreditierungsstelle GmbH (DAkKS). Exempted is the unchanged form of separate disseminations of the cover sheet by the conformity assessment body mentioned overleaf.</p> <p>No impression shall be made that the accreditation also extends to fields beyond the scope of accreditation attested by DAkKS.</p> <p>The accreditation was granted pursuant to the Act on the Accreditation Body (AkkStelleG) of 31 July 2009 (Federal Law Gazette I p. 2525) and the Regulation (EC) No 765/2008 of the European Parliament and of the Council of 9 July 2008 setting out the requirements for accreditation and market surveillance relating to the marketing of products (Official Journal of the European Union L 218 of 9 July 2008, p. 30). DAkKS is a signatory to the Multilateral Agreements for Mutual Recognition of the European co-operation for Accreditation (EA), International Accreditation Forum (IAF) and International Laboratory Accreditation Cooperation (ILAC). The signatories to these agreements recognise each other's accreditations.</p> <p>The up-to-date state of membership can be retrieved from the following websites: EA: www.european-accreditation.org ILAC: www.ilac.org IAF: www.iaf.eu</p>

Note: The current certificate annex is published on the website (link see below) of the Accreditation Body DAkKS or may be received by CTC advanced GmbH on request

<https://www.dakks.de/as/ast/d/D-PL-12076-01-04.pdf>

Annex D Accreditation Certificate – D-PL-12076-01-05

first page	last page			
 <p>Deutsche Akkreditierungsstelle GmbH</p> <p>Entrusted according to Section 8 subsection 1 AkkStelleG in connection with Section 1 subsection 1 AkkStelleGBV Signatory to the Multilateral Agreements of EA, ILAC and IAF for Mutual Recognition</p> <p>Accreditation </p> <p>The Deutsche Akkreditierungsstelle GmbH attests that the testing laboratory CTC advanced GmbH Untertürkheimer Straße 6-10, 66117 Saarbrücken is competent under the terms of DIN EN ISO/IEC 17025:2005 to carry out tests in the following fields: Telecommunication (FCC Requirements)</p> <p>The accreditation certificate shall only apply in connection with the notice of accreditation of 11.01.2019 with the accreditation number D-PL-12076-01 and is valid until 21.04.2021. It comprises the cover sheet, the reverse side of the cover sheet and the following annex with a total of 5 pages.</p> <p>Registration number of the certificate: D-PL-12076-01-05</p> <p>Frankfurt am Main, 11.01.2019  Dipl.-Biol. Uwe Zimmermann Head of Division</p> <p><small>See notes on back!</small></p>	<p>Deutsche Akkreditierungsstelle GmbH</p> <table border="0"> <tr> <td>Office Berlin Spittelmarkt 10 10117 Berlin</td> <td>Office Frankfurt am Main Europa-Allee 52 60327 Frankfurt am Main</td> <td>Office Braunschweig Bundesallee 100 38116 Braunschweig</td> </tr> </table> <p>The publication of extracts of the accreditation certificate is subject to the prior written approval by Deutsche Akkreditierungsstelle GmbH (DAkKS). Exempted is the unchanged form of separate disseminations of the cover sheet by the conformity assessment body mentioned overleaf.</p> <p>No impression shall be made that the accreditation also extends to fields beyond the scope of accreditation attested by DAkKS.</p> <p>The accreditation was granted pursuant to the Act on the Accreditation Body (AkkStelleG) of 31 July 2009 (Federal Law Gazette I p. 2625) and the Regulation (EC) No 765/2008 of the European Parliament and of the Council of 9 July 2008 setting out the requirements for accreditation and market surveillance relating to the marketing of products (Official Journal of the European Union L 218 of 9 July 2008, p. 30). DAkKS is a signatory to the Multilateral Agreements for Mutual Recognition of the European co-operation for Accreditation (EA), International Accreditation Forum (IAF) and International Laboratory Accreditation Cooperation (ILAC). The signatories to these agreements recognise each other's accreditations.</p> <p>The up-to-date state of membership can be retrieved from the following websites: EA: www.european-accreditation.org ILAC: www.ilac.org IAF: www.iaf.nu</p>	Office Berlin Spittelmarkt 10 10117 Berlin	Office Frankfurt am Main Europa-Allee 52 60327 Frankfurt am Main	Office Braunschweig Bundesallee 100 38116 Braunschweig
Office Berlin Spittelmarkt 10 10117 Berlin	Office Frankfurt am Main Europa-Allee 52 60327 Frankfurt am Main	Office Braunschweig Bundesallee 100 38116 Braunschweig		

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<https://www.dakks.de/as/ast/d/D-PL-12076-01-05.pdf>

END OF TEST REPORT