12.9 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 MHz
Span:	See plots!
Trace mode:	Max Hold
Used test setup:	see chapter 7.2 – A
Measurement uncertainty:	see chapter 9

Limits:

Band Edge Compliance Radiated
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)).
74 dBµV/m PEAK 54 dBµV/m AVG

Result:

Scenario	Band Edge Compliance Radiated [dBµV/m]
band edge	See TX spurious emissions radiated!

12.10 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	
According to: KDB789033 D02, G.	
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: 300 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 %
Used test setup:	see chapter 7.1, 7.2, 7.3
Measurement uncertainty:	see chapter 9

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: OFDM / a – mode, antenna 1 + 2 + 3 active

TX Spurious Emissions Radiated [dBµV/m] / dBm								
5180 MHz			5240 MHz			5260 MHz		
F [MHz]	Detector	Level [dBµV/m]	F [MHz]	Detector	Level [dBµV/m]	F [MHz]	Detector	Level [dBµV/m]
5040	Peak	59.3	5040	Peak	59.2	5040	Peak	60.4
	AVG	52.3		AVG	51.9		AVG	52.5
5360	Peak	62.7						
	AVG	52.9						
5320 MHz			5500 MHz			5700 MHz		
F [MHz]	Detector	Level [dBµV/m]	F [MHz]	Detector	Level [dBµV/m]	F [MHz]	Detector	Level [dBµV/m]
5040	Peak	57.8	5040	Peak	60.1	5040	Peak	60.3
	AVG	46.2		AVG	53.1		AVG	51.5
5745 MHz			5785 MHz			5825 MHz		
F [MHz]	Detector	Level [dBµV/m]	F [MHz]	Detector	Level [dBµV/m]	F [MHz]	Detector	Level [dBµV/m]
5080	Peak	61.0	5401	Peak	61.8	5040	Peak	59.3
	AVG	53.1		AVG	53.1		AVG	53.4
			5440	Peak	63.0			
				AVG	53.3			

Results: OFDM / n HT20 – mode, antenna 1 + 2 + 3 active

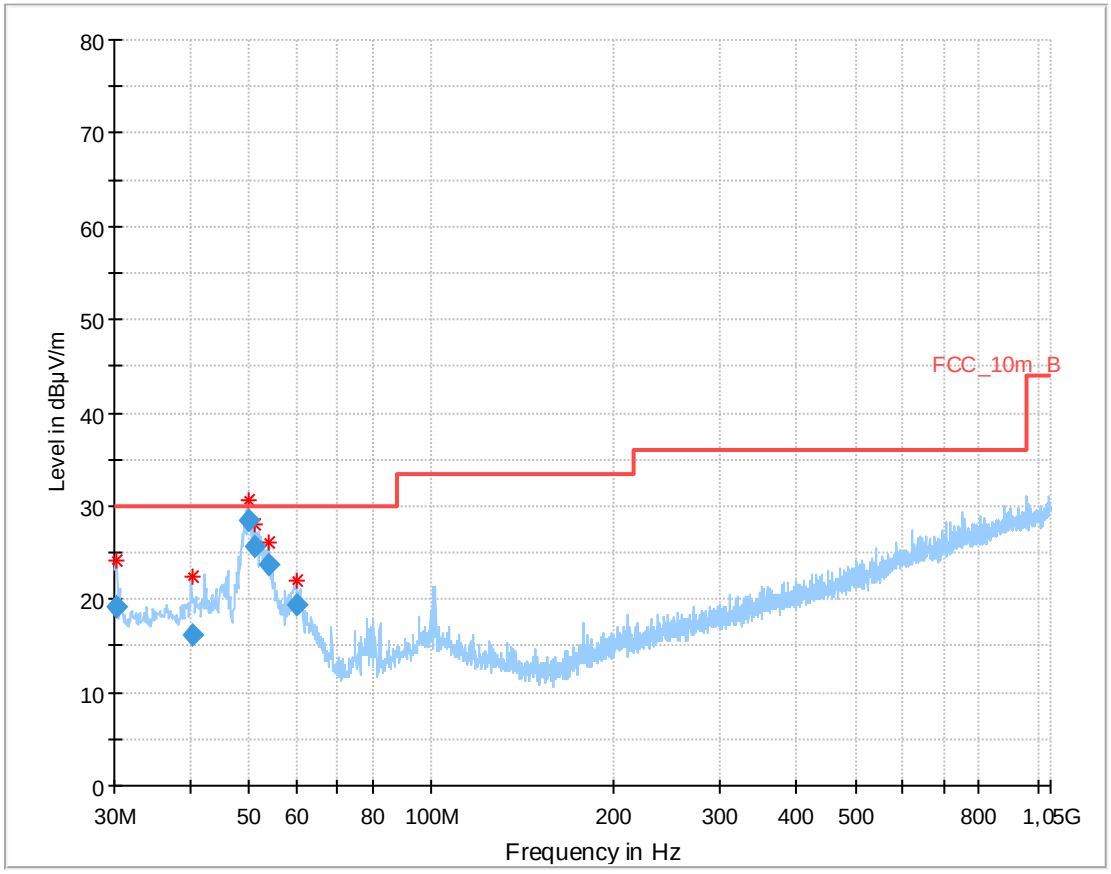
TX Spurious Emissions Radiated [dBµV/m] / dBm								
5180 MHz			5240 MHz			5260 MHz		
F [MHz]	Detector	Level [dBµV/m]	F [MHz]	Detector	Level [dBµV/m]	F [MHz]	Detector	Level [dBµV/m]
5040	Peak	58.2	5400	Peak	62.6	5400	Peak	62.9
	AVG	50.9		AVG	53.1		AVG	53.7
5400	Peak	62.2						
	AVG	53.5						
5320 MHz			5500 MHz			5700 MHz		
F [MHz]	Detector	Level [dBµV/m]	F [MHz]	Detector	Level [dBµV/m]	F [MHz]	Detector	Level [dBµV/m]
5400	Peak	60.6	5400	Peak	62.1	5400	Peak	64.3
	AVG	50.2		AVG	52.5		AVG	54.0
5745 MHz			5785 MHz			5825 MHz		
F [MHz]	Detector	Level [dBµV/m]	F [MHz]	Detector	Level [dBµV/m]	F [MHz]	Detector	Level [dBµV/m]
5400	Peak	62.7	5400	Peak	62.2	5400	Peak	63.4
	AVG	52.8		AVG	54.0		AVG	53.7

Results: OFDM / n HT40 – mode, antenna 1 + 2 + 3 active

TX Spurious Emissions Radiated [dBµV/m] / dBm								
5190 MHz			5270 MHz			5310 MHz		
F [MHz]	Detector	Level [dBµV/m]	F [MHz]	Detector	Level [dBµV/m]	F [MHz]	Detector	Level [dBµV/m]
4960	PEAK	55.2	5040	PEAK	56.5	5040	PEAK	55.7
	AVG	47.9		AVG	48.4		AVG	48.4
5040	PEAK	56.3	5400	PEAK	61.3	5353	PEAK	64.9
	AVG	48.5		AVG	52.2		AVG	51.7
5120	PEAK	56.9				5400	PEAK	61.5
	AVG	47.0					AVG	52.4
5360	PEAK	61.7						
	AVG	53.0						
5400	PEAK	60.9						
	AVG	50.6						
5510 MHz			5670 MHz			5755 MHz		
F [MHz]	Detector	Level [dBµV/m]	F [MHz]	Detector	Level [dBµV/m]	F [MHz]	Detector	Level [dBµV/m]
4997	PEAK	60.8	5000	PEAK	57.8	5400	PEAK	62.7
	AVG	46.2		AVG	46.1		AVG	53.9
5040	PEAK	58.3	5360	PEAK	62.6	5440	PEAK	63.0
	AVG	52.3		AVG	51.8		AVG	53.4
5120	PEAK	58.4	5400	PEAK	62.1			
	AVG	50.5		AVG	53.8			
5400	PEAK	62.2						
	AVG	53.7						
5459	PEAK	65.5						
	AVG	53.0						
5795 MHz			-/-			-/-		
F [MHz]	Detector	Level [dBµV/m]	F [MHz]	Detector	Level [dBµV/m]	F [MHz]	Detector	Level [dBµV/m]
5400	PEAK	62.3	-/-			-/-		
	AVG	54.0						

Plots: OFDM / a – mode

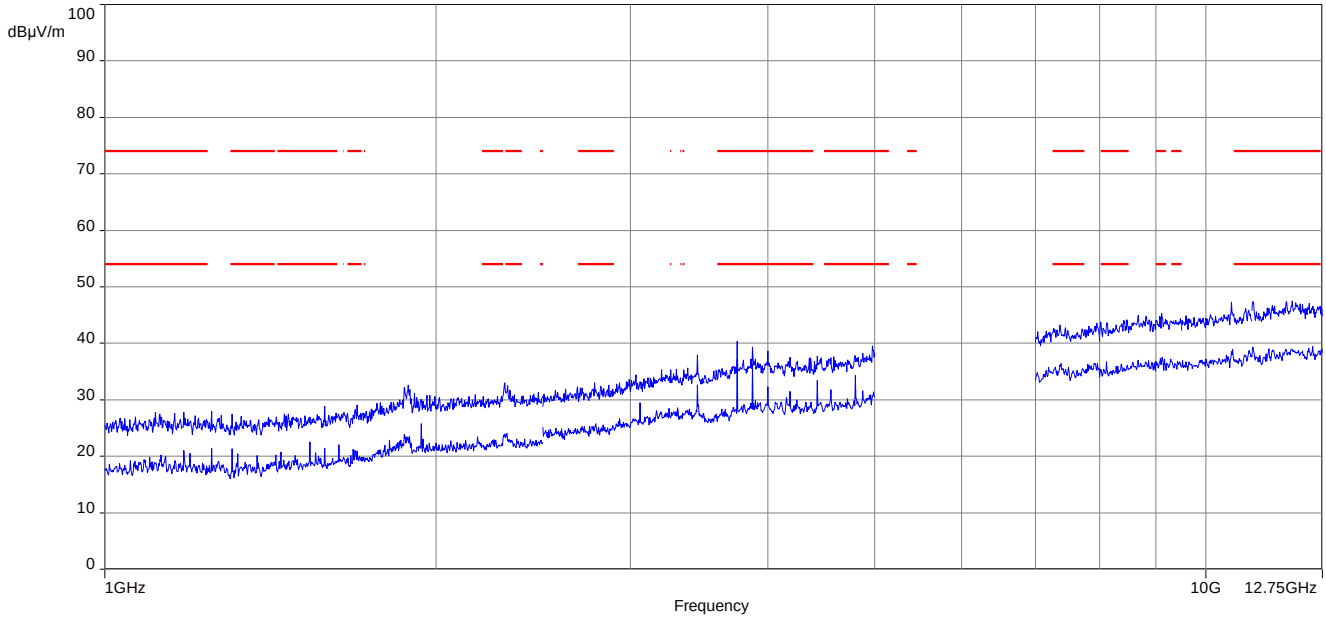
Plot 1: 30 MHz to 1 GHz, 5180 MHz, vertical & horizontal polarization



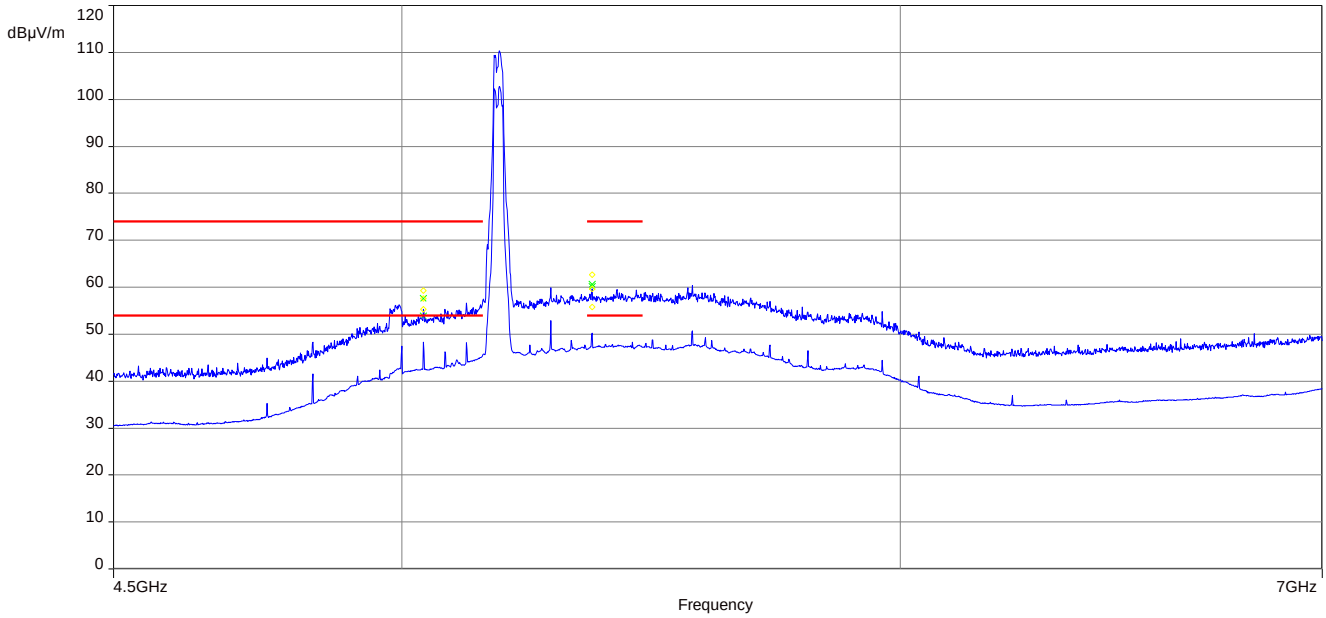
Final_Result

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
30.236801	19.14	30.00	10.86	1000.0	120.000	170.0	V	328	13.4
40.316550	16.18	30.00	13.82	1000.0	120.000	101.0	V	328	14.0
49.840050	28.40	30.00	1.60	1000.0	120.000	98.0	V	50	12.7
51.196050	25.61	30.00	4.39	1000.0	120.000	98.0	V	93	12.4
53.822700	23.63	30.00	6.37	1000.0	120.000	98.0	V	14	12.0
59.760750	19.35	30.00	10.65	1000.0	120.000	98.0	V	69	10.6

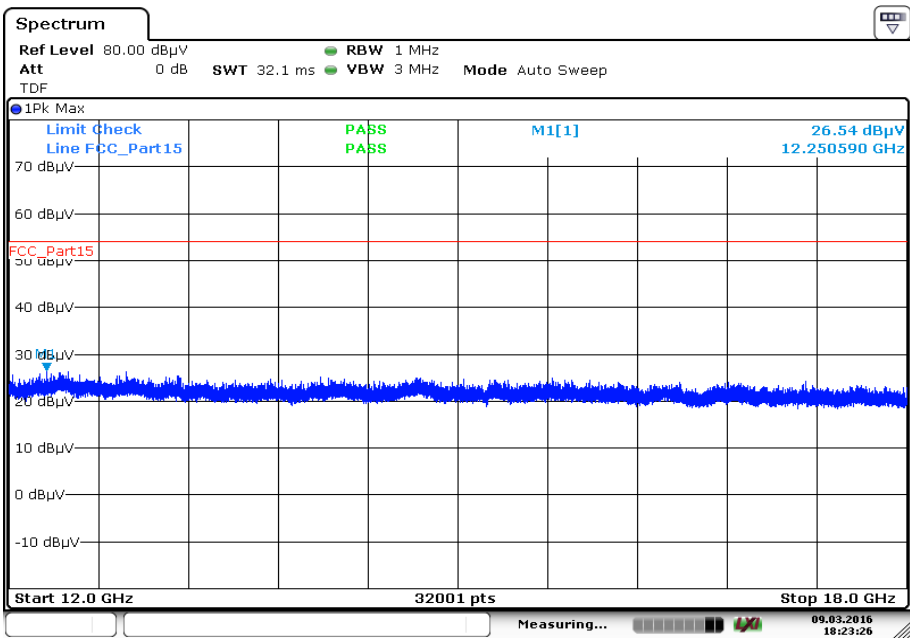
Plot 2: 1 GHz to 12.75 GHz, 5180 MHz, vertical & horizontal polarization



Plot 3: 4.5 GHz to 7 GHz, 5180 MHz, vertical & horizontal polarization

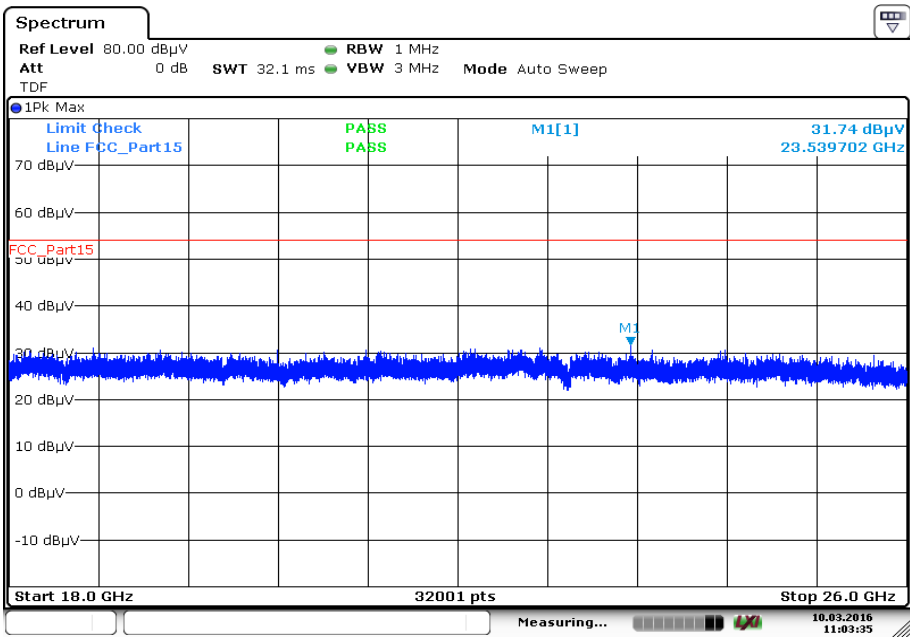


Plot 4: 12 GHz to 18 GHz, 5180 MHz, vertical & horizontal polarization



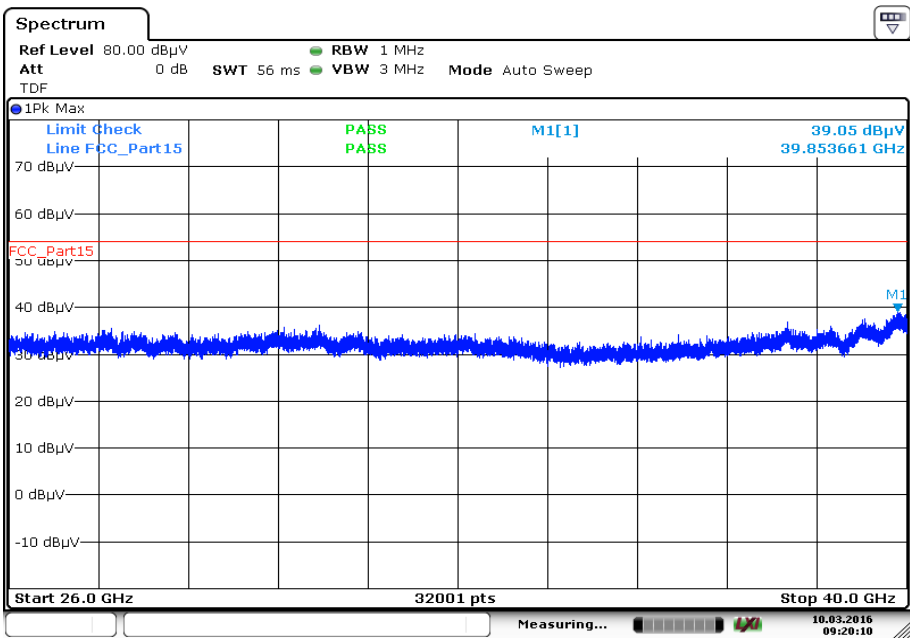
Date: 9.MAR.2016 18:23:26

Plot 5: 18 GHz to 26 GHz, 5180 MHz, vertical & horizontal polarization



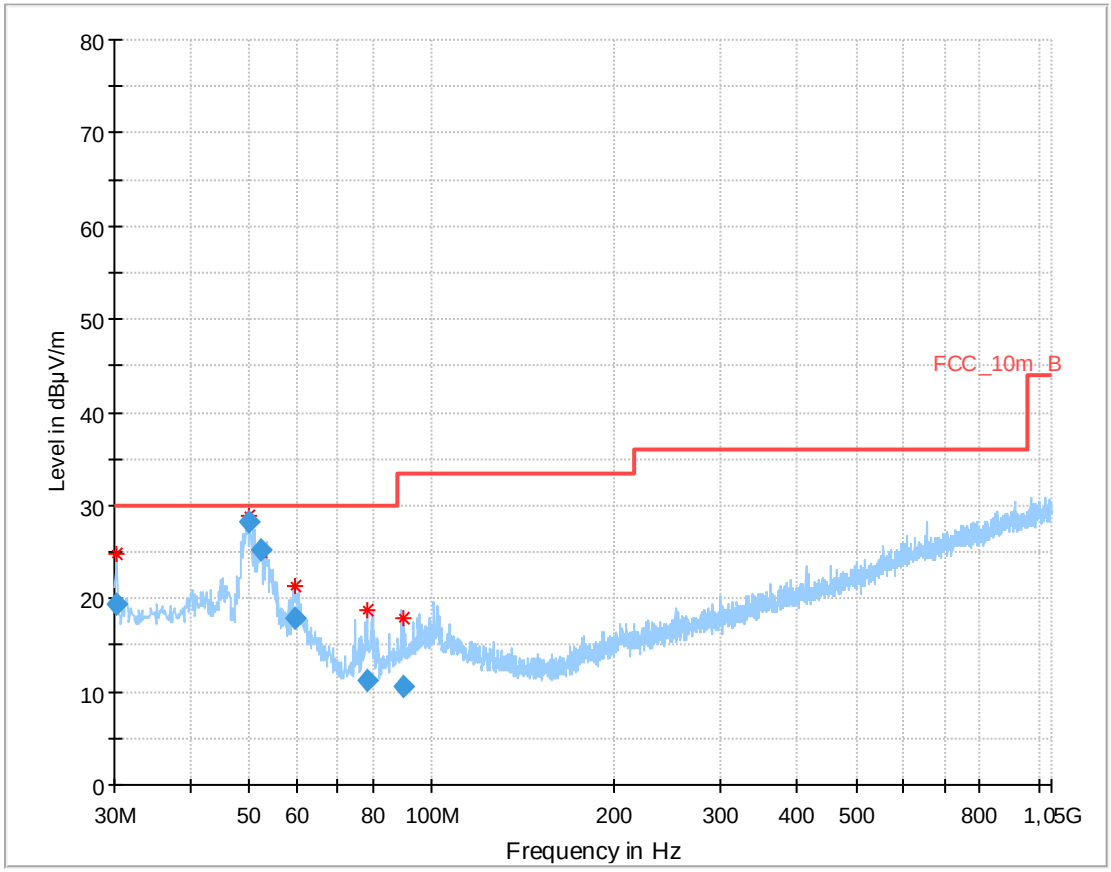
Date: 10.MAR.2016 11:03:35

Plot 6: 26 GHz to 40 GHz, 5180 MHz, vertical & horizontal polarization



Date: 10.MAR.2016 09:20:10

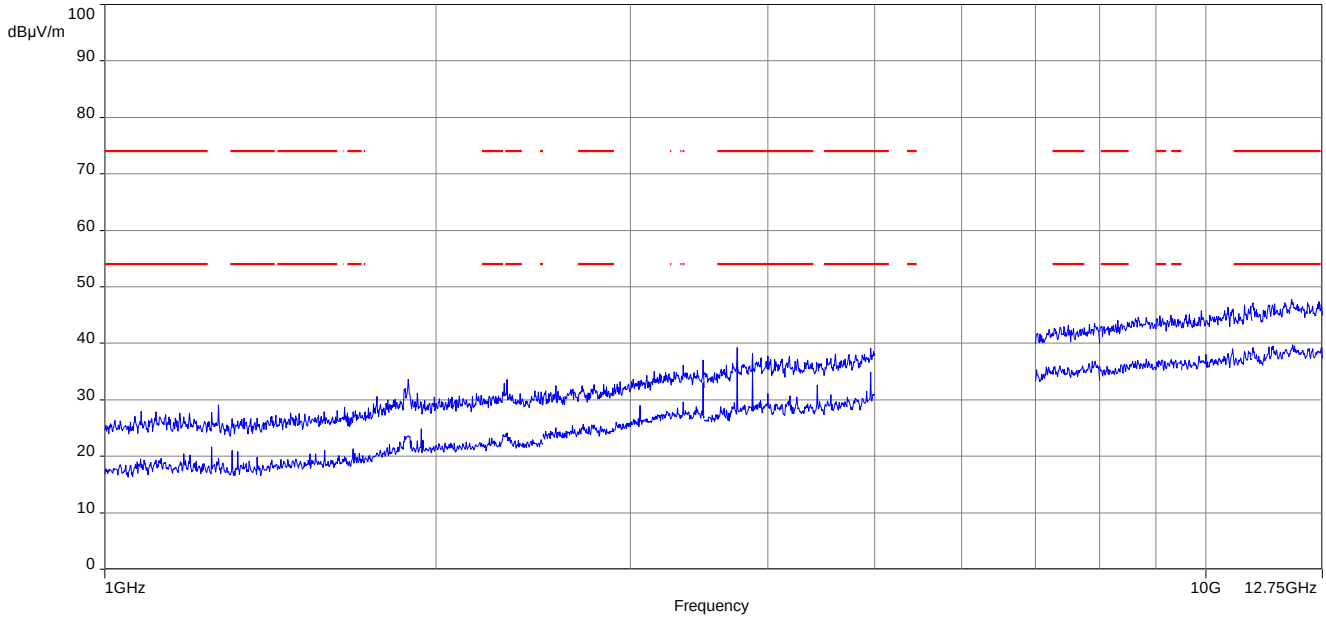
Plot 7: 30 MHz to 1 GHz, 5240 MHz, vertical & horizontal polarization



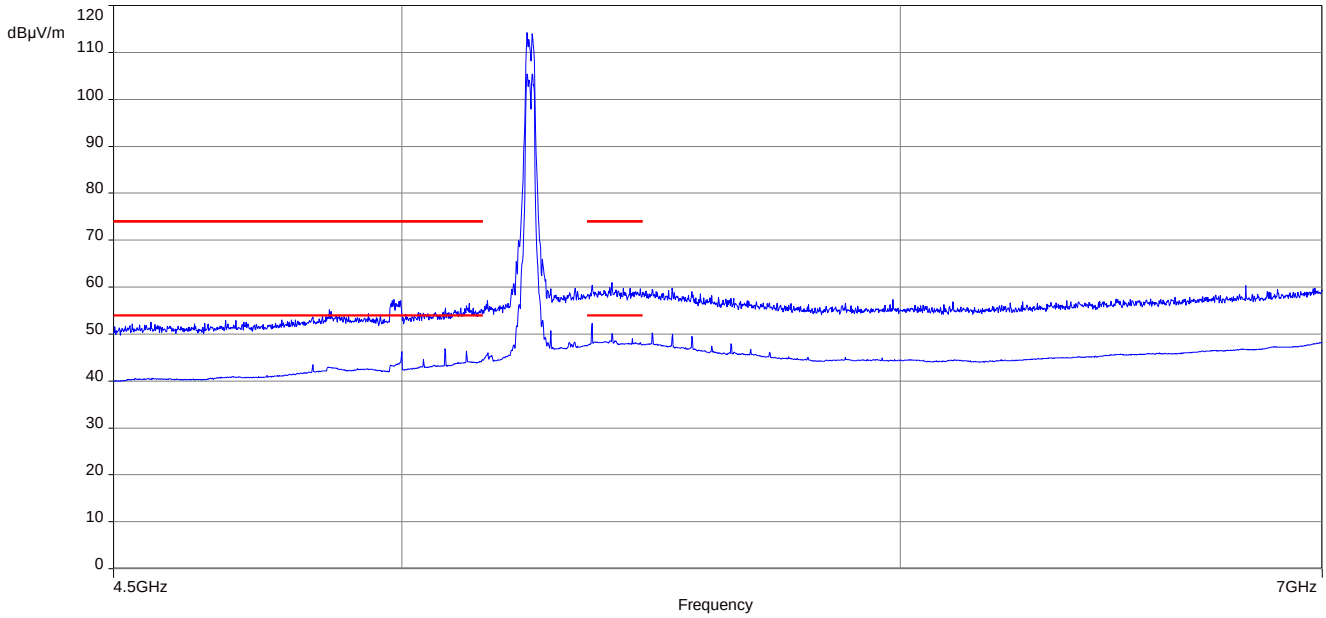
Final_Result:

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
30.221659	19.49	30.00	10.51	1000.0	120.000	101.0	V	289	13.4
49.843800	28.26	30.00	1.74	1000.0	120.000	98.0	V	13	12.7
52.170750	25.29	30.00	4.71	1000.0	120.000	98.0	V	1	12.3
59.471700	17.83	30.00	12.17	1000.0	120.000	170.0	V	1	10.7
78.249600	11.11	30.00	18.89	1000.0	120.000	101.0	V	353	8.1
89.895750	10.65	33.50	22.85	1000.0	120.000	101.0	V	28	10.4

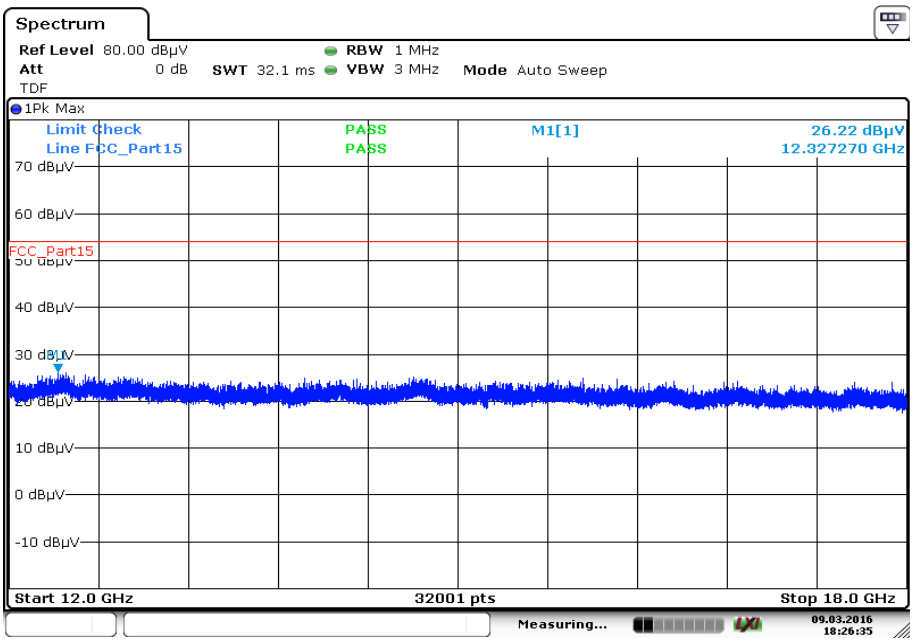
Plot 8: 1 GHz to 12.75 GHz, 5240 MHz, vertical & horizontal polarization



Plot 9: 4.5 GHz to 7 GHz, 5240 MHz, vertical & horizontal polarization

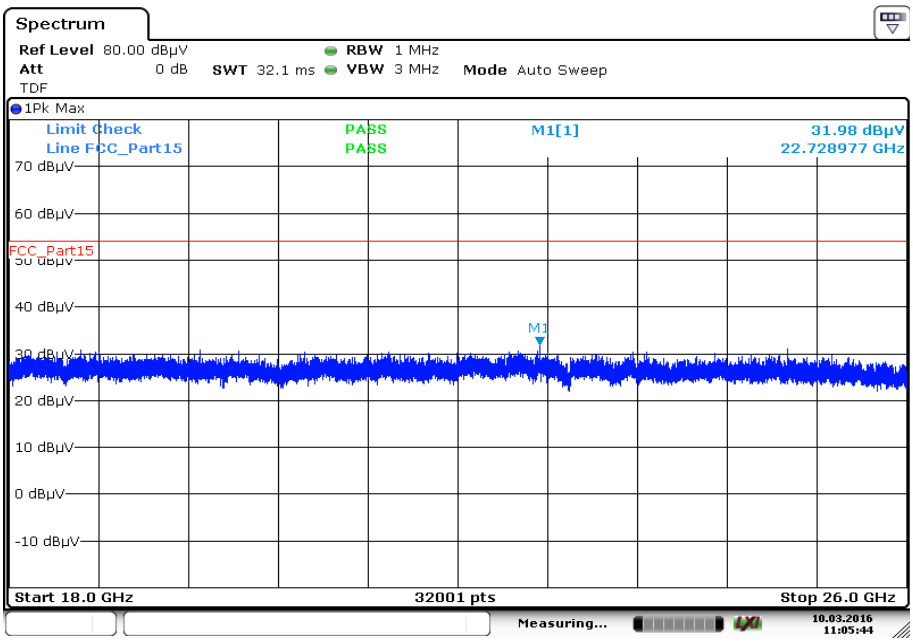


Plot 10: 12 GHz to 18 GHz, 5240 MHz, vertical & horizontal polarization



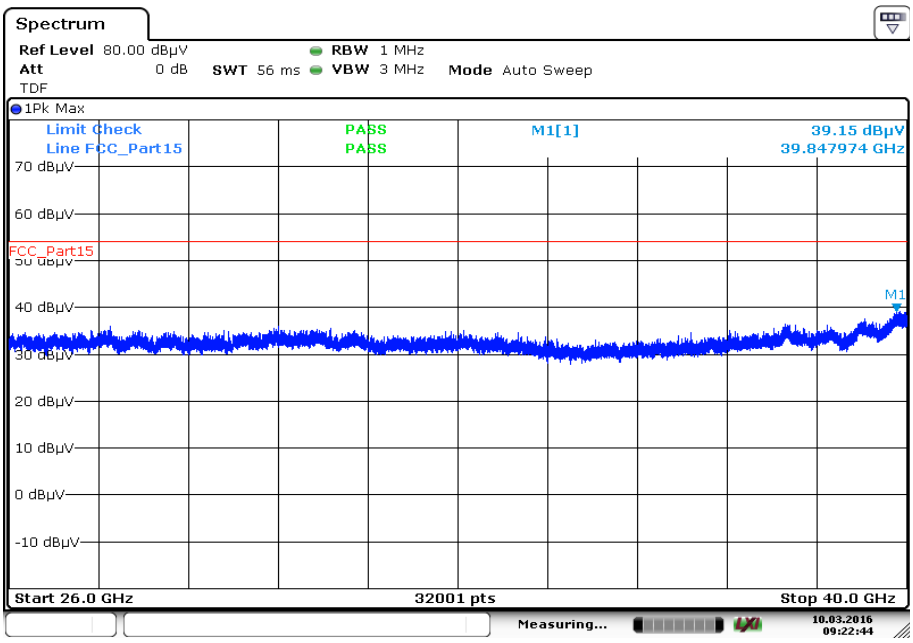
Date: 9.MAR.2016 18:26:35

Plot 11: 18 GHz to 26 GHz, 5240 MHz, vertical & horizontal polarization



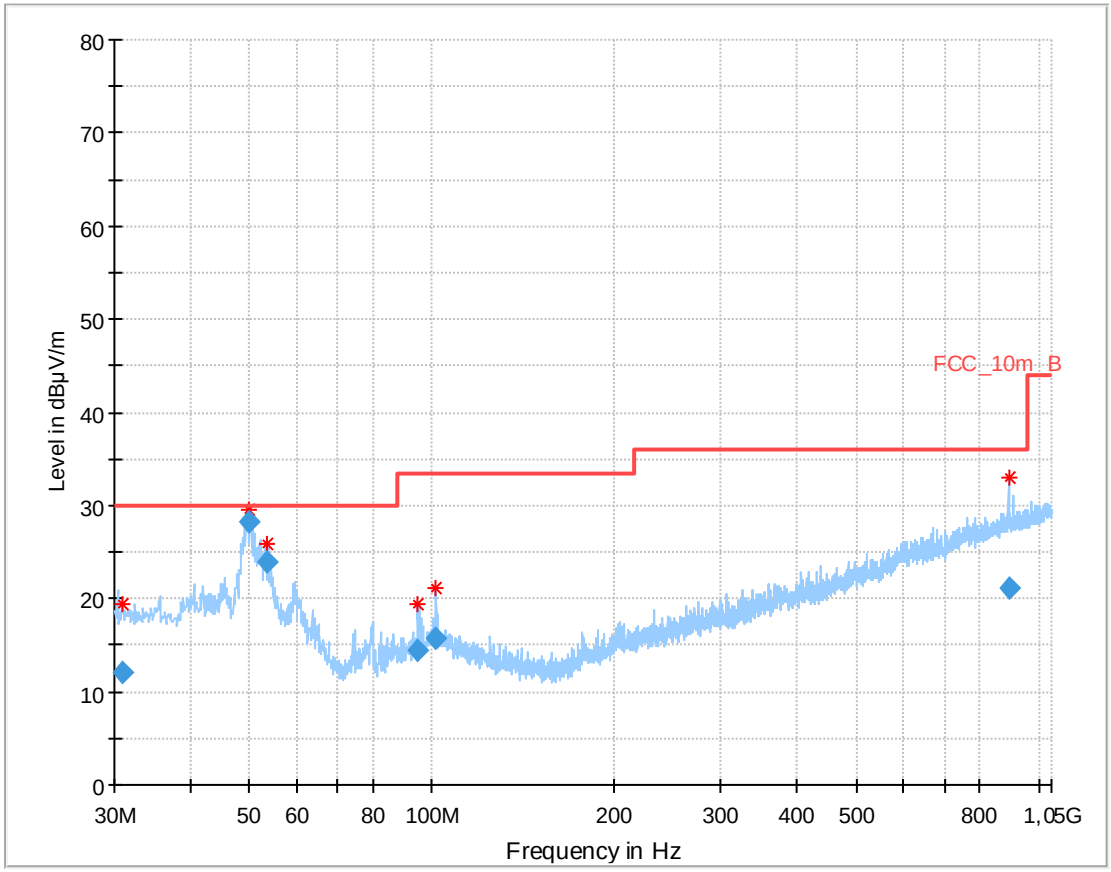
Date: 10.MAR.2016 11:05:44

Plot 12: 26 GHz to 40 GHz, 5240 MHz, vertical & horizontal polarization



Date: 10.MAR.2016 09:22:44

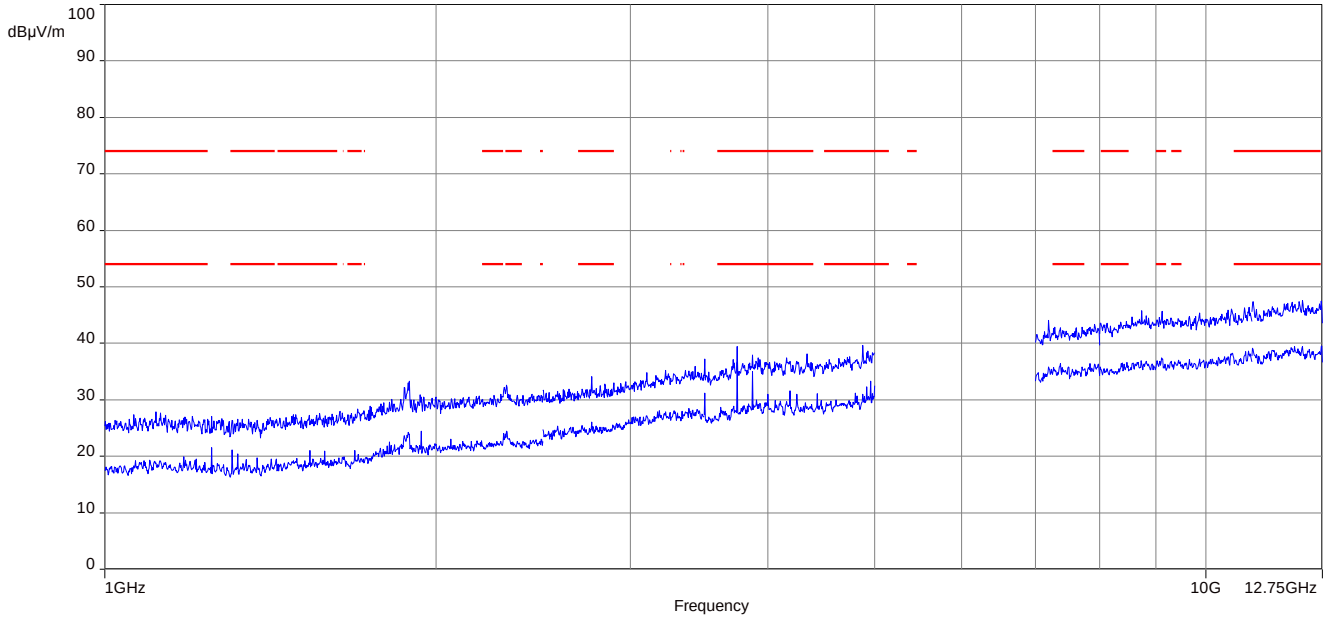
Plot 13: 30 MHz to 1 GHz, 5260 MHz, vertical & horizontal polarization



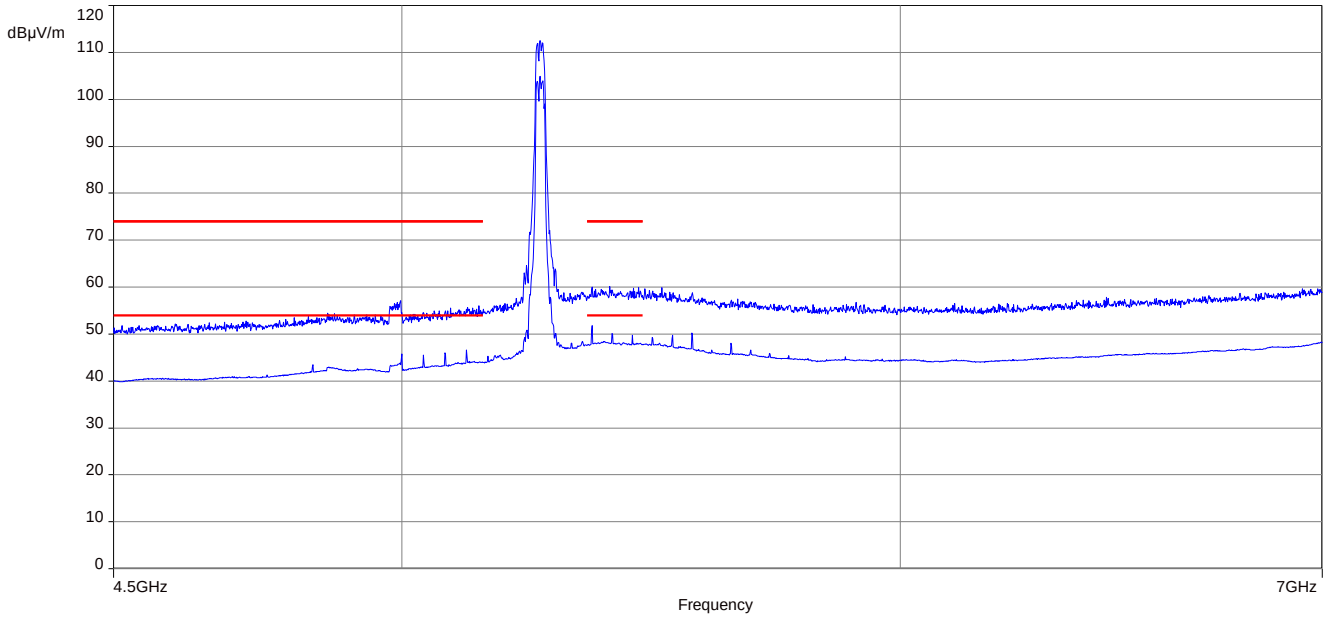
Final_Result:

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
30.911550	12.05	30.00	17.95	1000.0	120.000	101.0	V	6	13.4
49.878000	28.19	30.00	1.81	1000.0	120.000	98.0	V	47	12.7
53.526150	24.02	30.00	5.98	1000.0	120.000	98.0	V	74	12.1
94.761600	14.46	33.50	19.04	1000.0	120.000	101.0	V	296	11.3
101.667450	15.70	33.50	17.80	1000.0	120.000	98.0	V	311	12.0
891.737700	21.08	36.00	14.92	1000.0	120.000	170.0	H	179	24.0

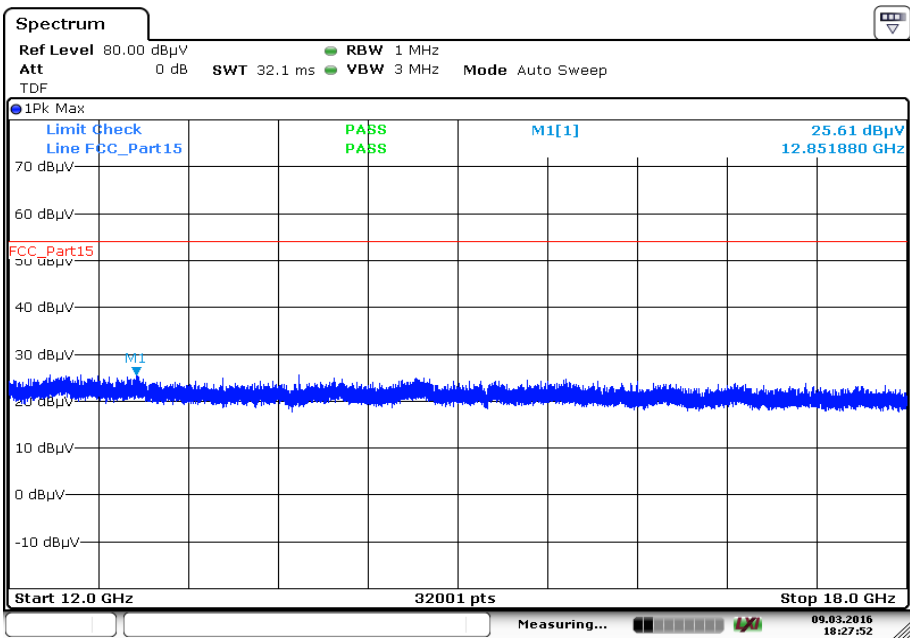
Plot 14: 1 GHz to 12.75 GHz, 5260 MHz, vertical & horizontal polarization



Plot 15: 4.5 GHz to 7 GHz, 5260 MHz, vertical & horizontal polarization

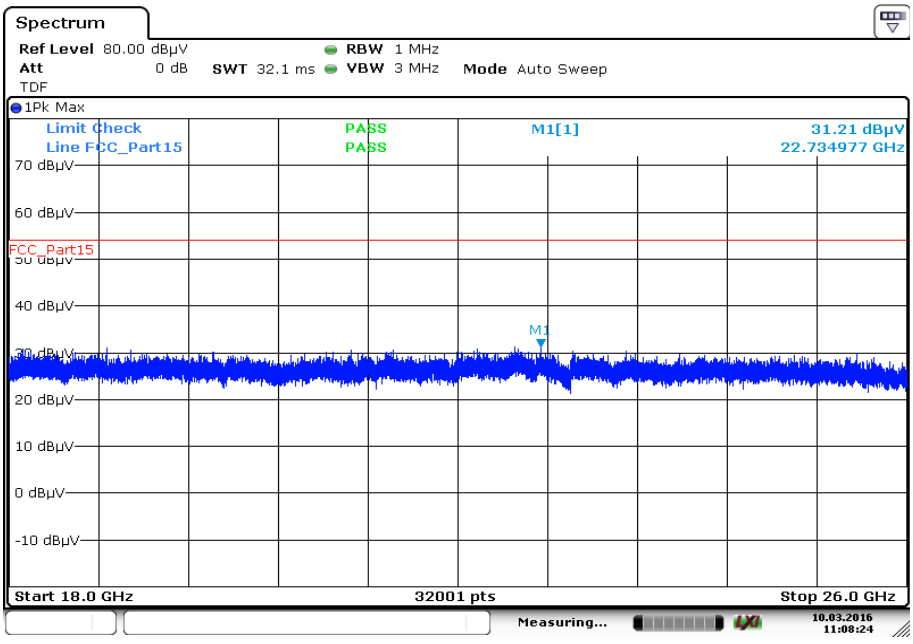


Plot 16: 12 GHz to 18 GHz, 5260 MHz, vertical & horizontal polarization



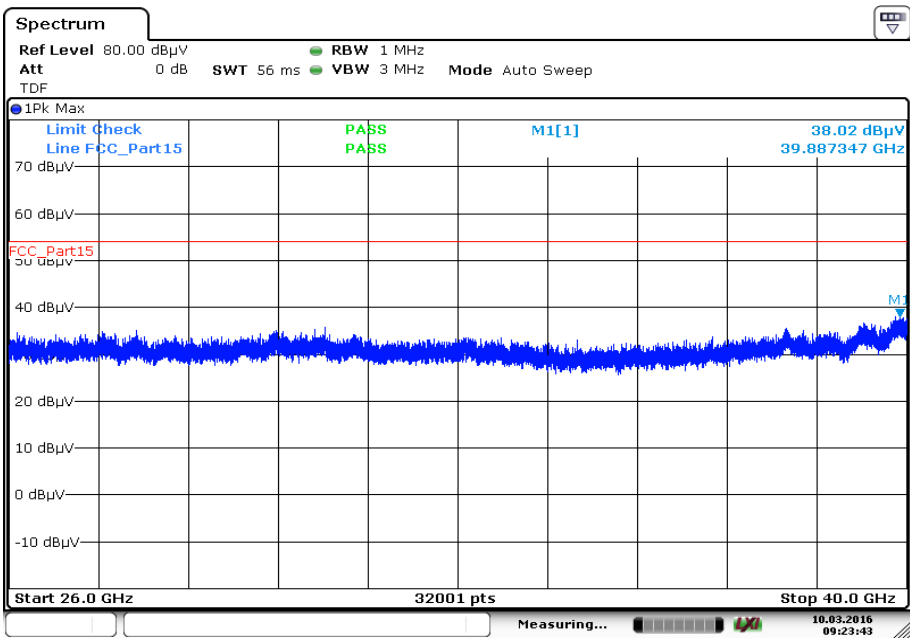
Date: 9.MAR.2016 18:27:52

Plot 17: 18 GHz to 26 GHz, 5260 MHz, vertical & horizontal polarization



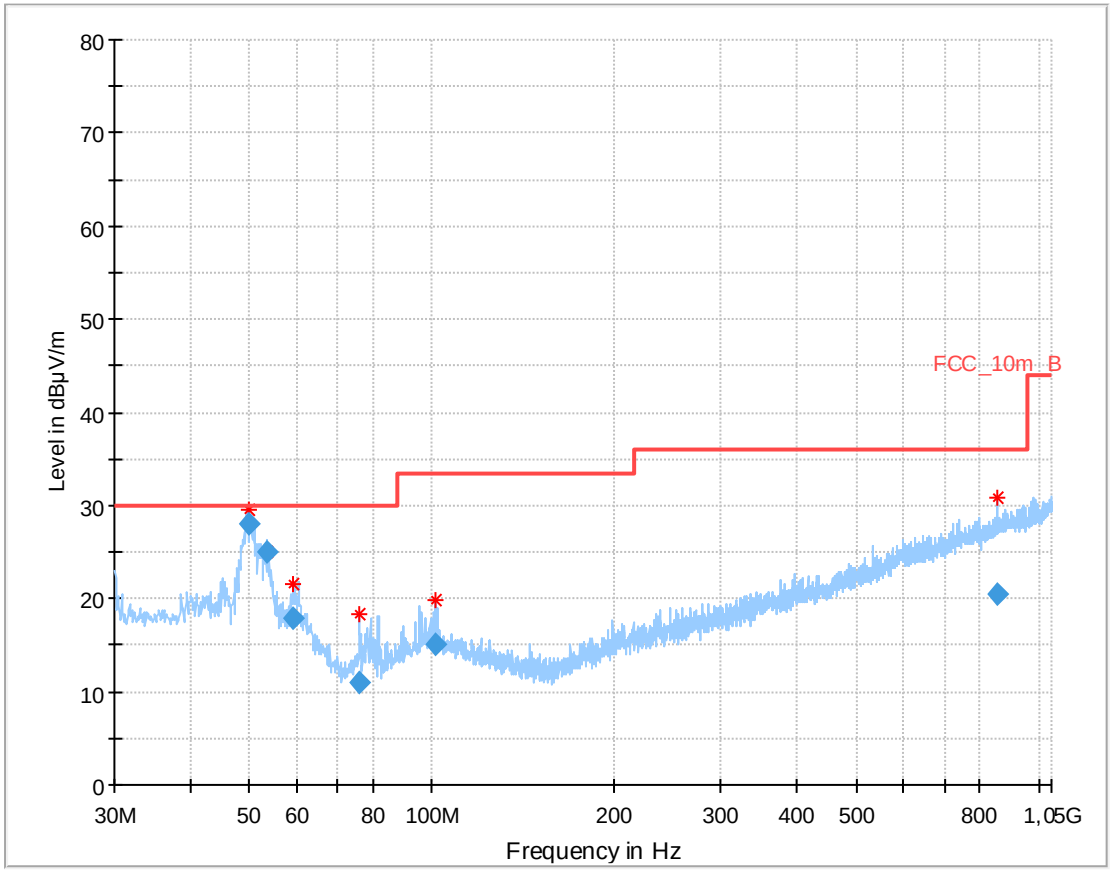
Date: 10.MAR.2016 11:08:24

Plot 18: 26 GHz to 40 GHz, 5260 MHz, vertical & horizontal polarization



Date: 10.MAR.2016 09:23:43

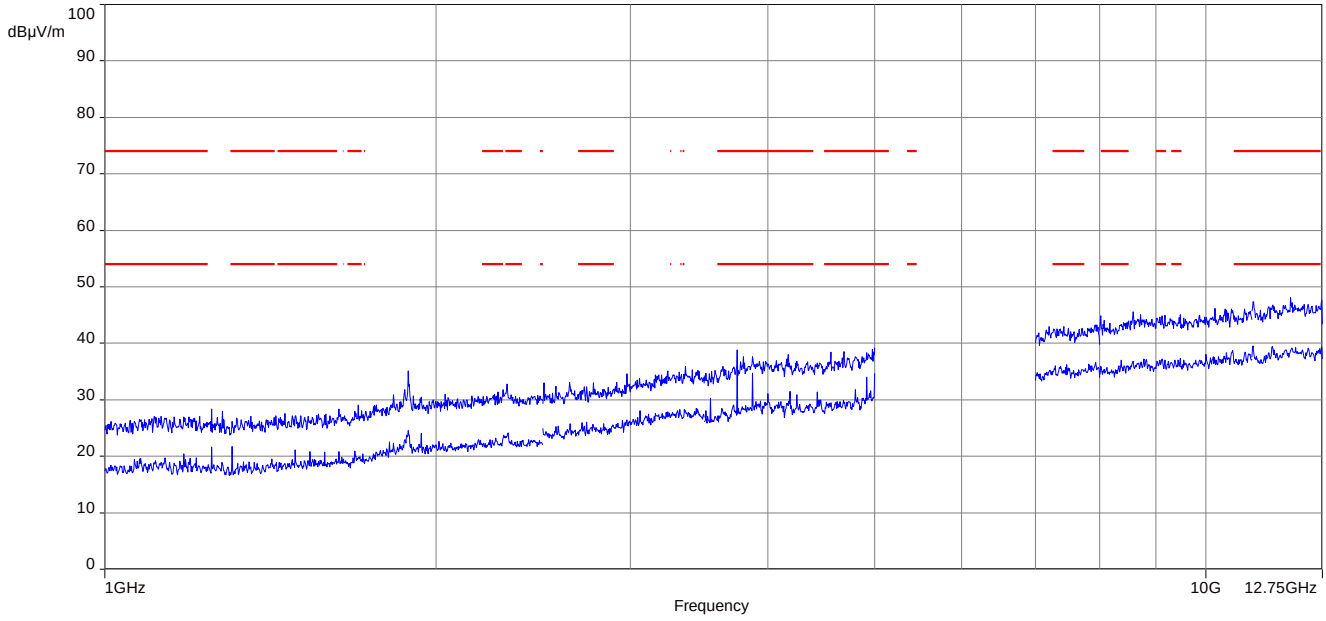
Plot 19: 30 MHz to 1 GHz, 5320 MHz, vertical & horizontal polarization



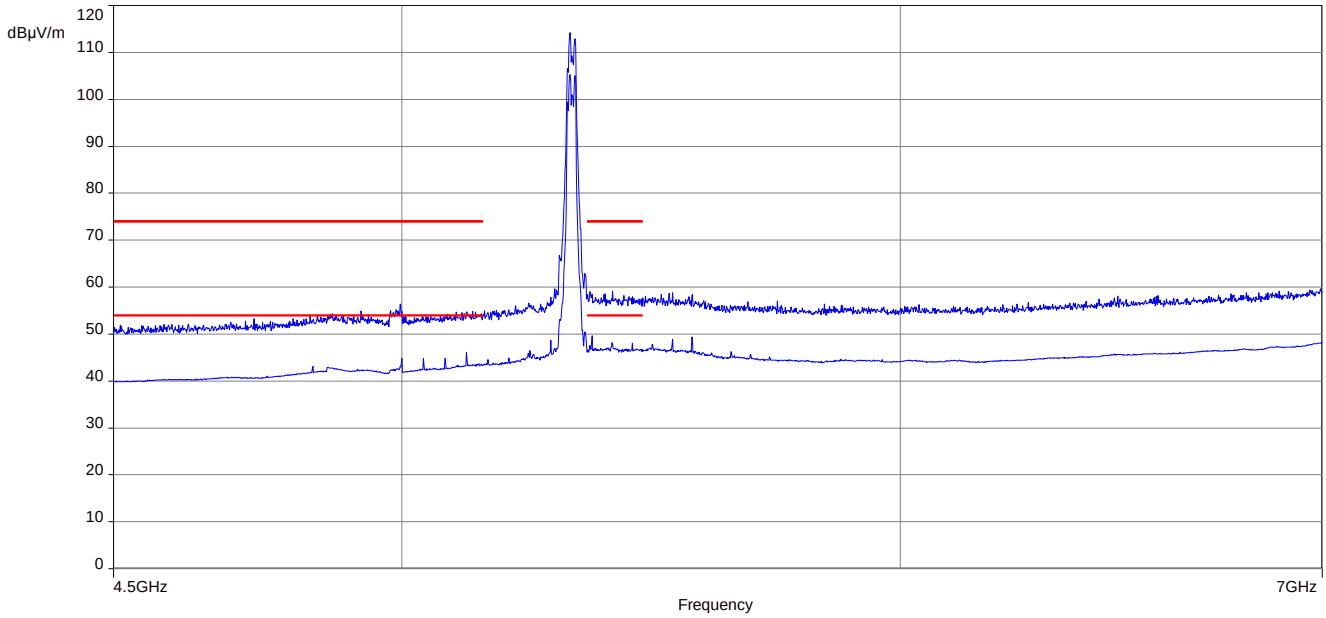
Final_Result:

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
49.857450	27.97	30.00	2.03	1000.0	120.000	98.0	V	59	12.7
53.488200	24.95	30.00	5.05	1000.0	120.000	98.0	V	16	12.1
59.135850	17.99	30.00	12.01	1000.0	120.000	98.0	V	0	10.8
76.030800	11.05	30.00	18.95	1000.0	120.000	170.0	V	230	8.2
101.655300	15.15	33.50	18.35	1000.0	120.000	101.0	V	237	12.0
856.693200	20.52	36.00	15.48	1000.0	120.000	170.0	H	96	23.5

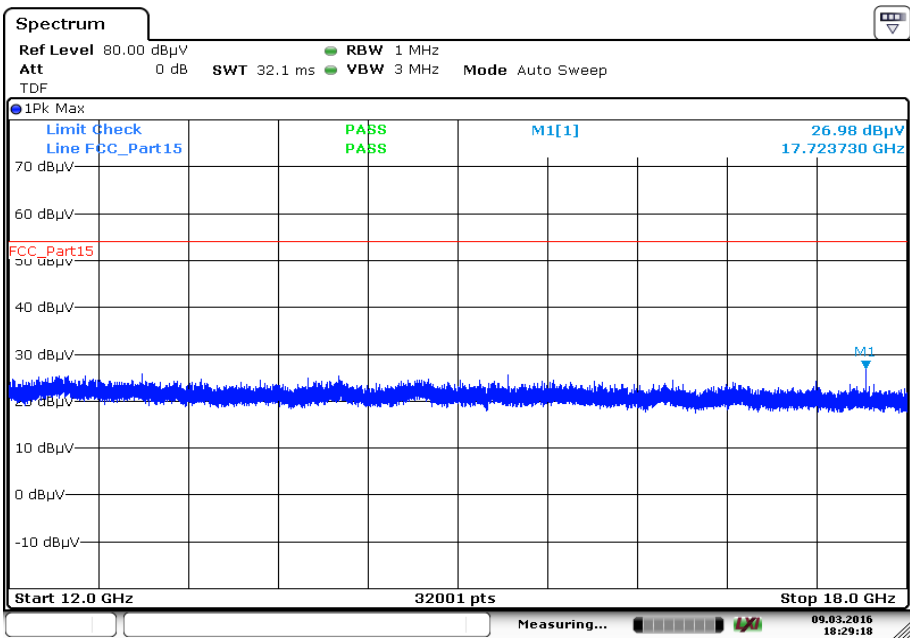
Plot 20: 1 GHz to 12.75 GHz, 5320 MHz, vertical & horizontal polarization



Plot 21: 4.5 GHz to 7 GHz, 5320 MHz, vertical & horizontal polarization

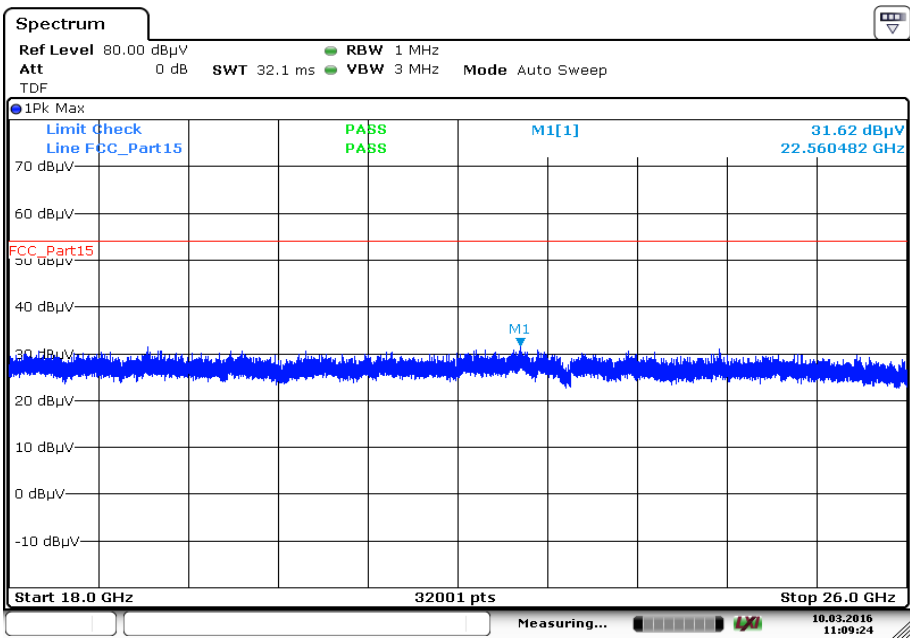


Plot 22: 12 GHz to 18 GHz, 5320 MHz, vertical & horizontal polarization



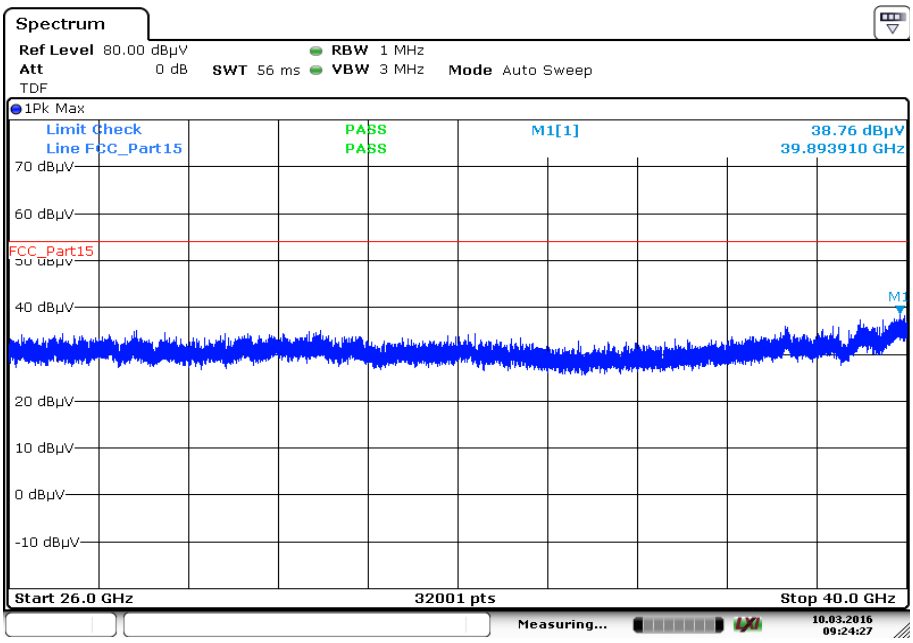
Date: 9.MAR.2016 18:29:18

Plot 23: 18 GHz to 26 GHz, 5320 MHz, vertical & horizontal polarization



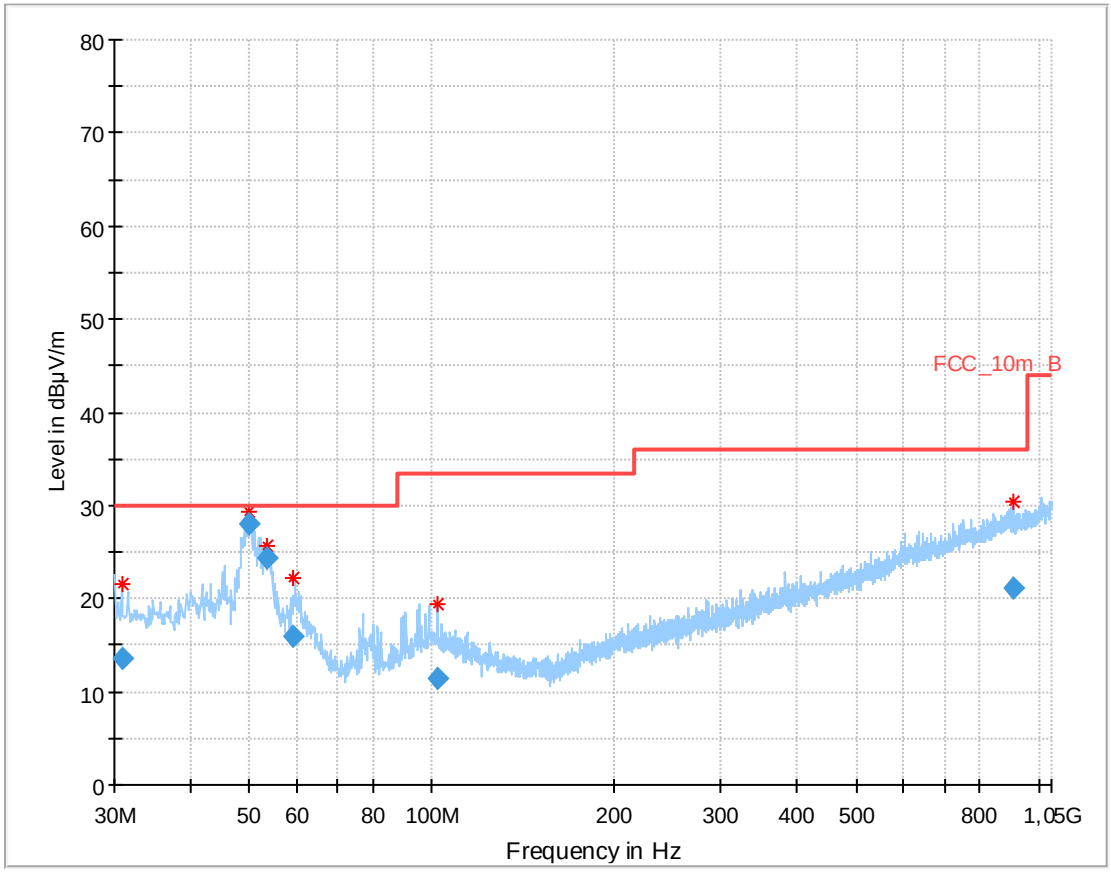
Date: 10.MAR.2016 11:09:24

Plot 24: 26 GHz to 40 GHz, 5320 MHz, vertical & horizontal polarization



Date: 10.MAR.2016 09:24:27

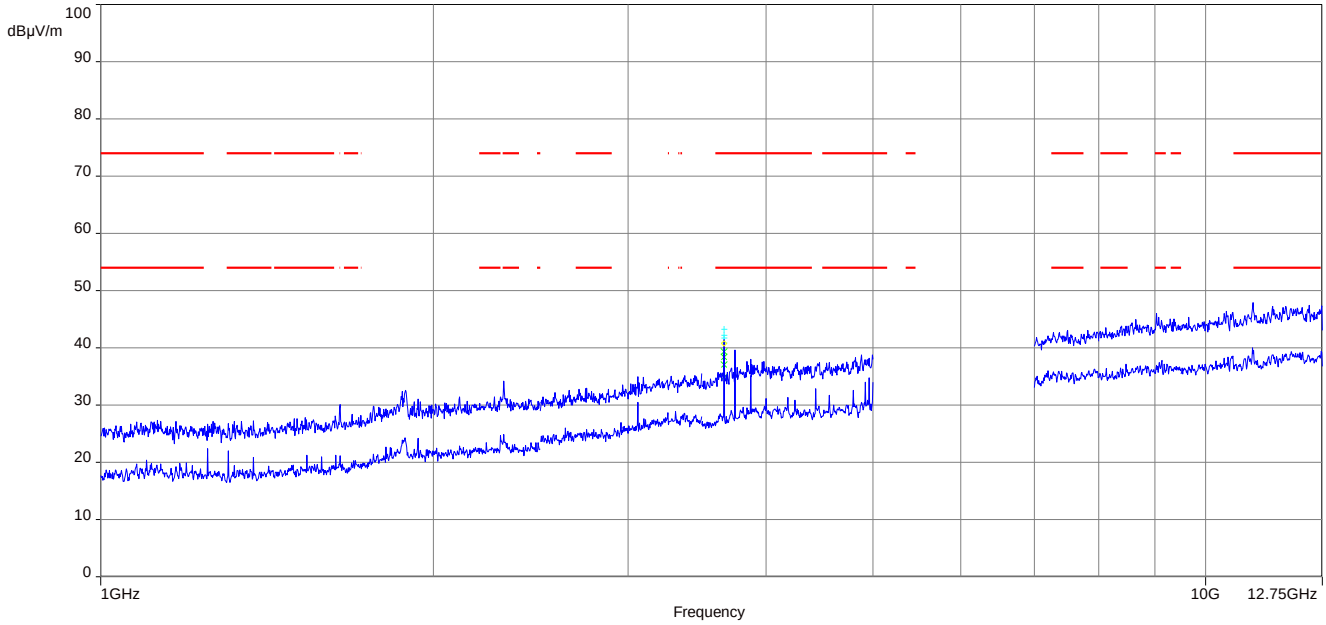
Plot 25: 30 MHz to 1 GHz, 5500 MHz, vertical & horizontal polarization



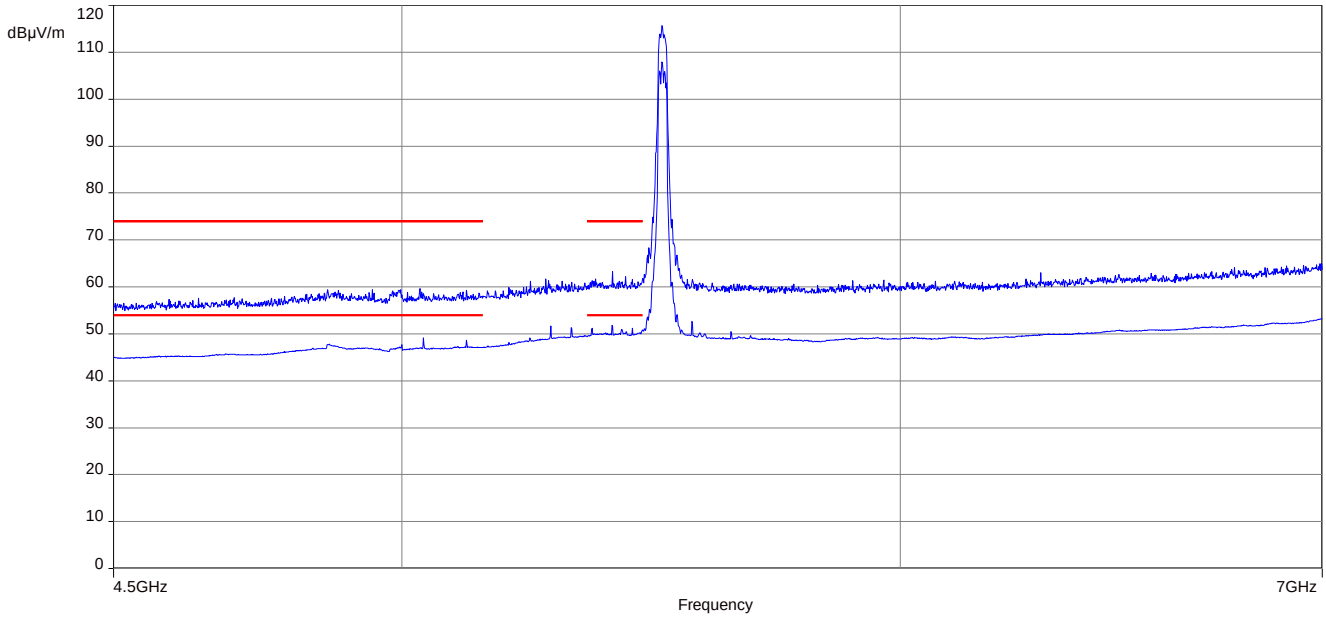
Final_Result:

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
30.895950	13.68	30.00	16.32	1000.0	120.000	101.0	V	322	13.4
49.879650	28.14	30.00	1.86	1000.0	120.000	98.0	V	12	12.7
53.519250	24.34	30.00	5.66	1000.0	120.000	98.0	V	12	12.1
59.267250	16.04	30.00	13.96	1000.0	120.000	98.0	V	48	10.8
102.413850	11.34	33.50	22.16	1000.0	120.000	100.0	V	265	11.9
908.428050	21.14	36.00	14.86	1000.0	120.000	98.0	V	322	24.1

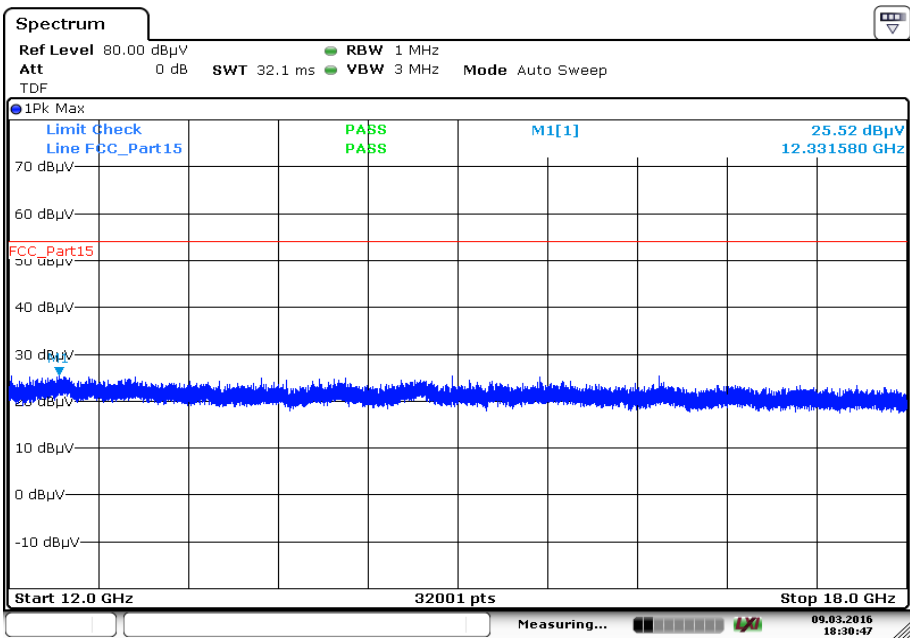
Plot 26: 1 GHz to 12.75 GHz, 5500 MHz, vertical & horizontal polarization



Plot 27: 4.5 GHz to 7 GHz, 5500 MHz, vertical & horizontal polarization



Plot 28: 12 GHz to 18 GHz, 5500 MHz, vertical & horizontal polarization



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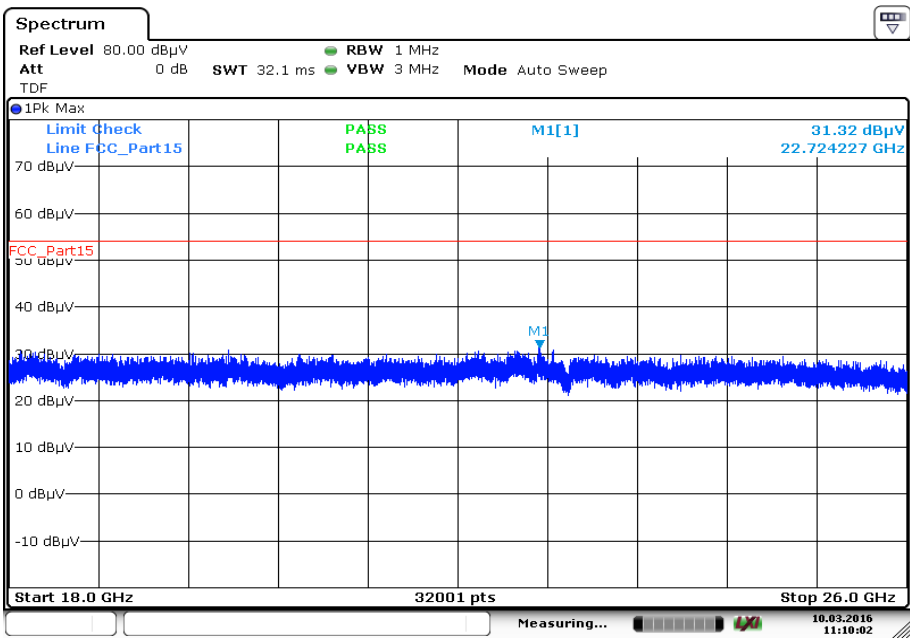
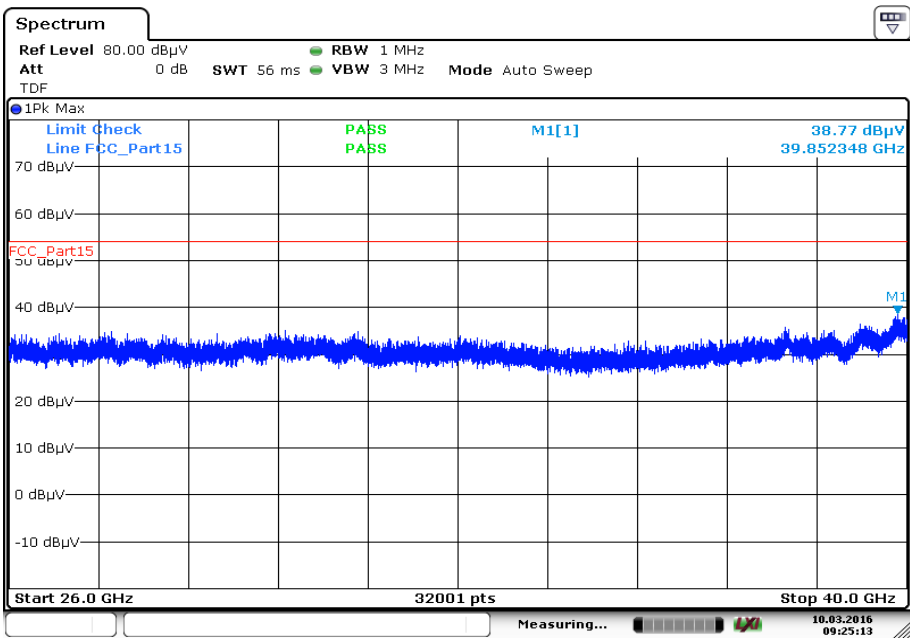
Plot 29: 18 GHz to 26 GHz, 5500 MHz, vertical & horizontal polarization



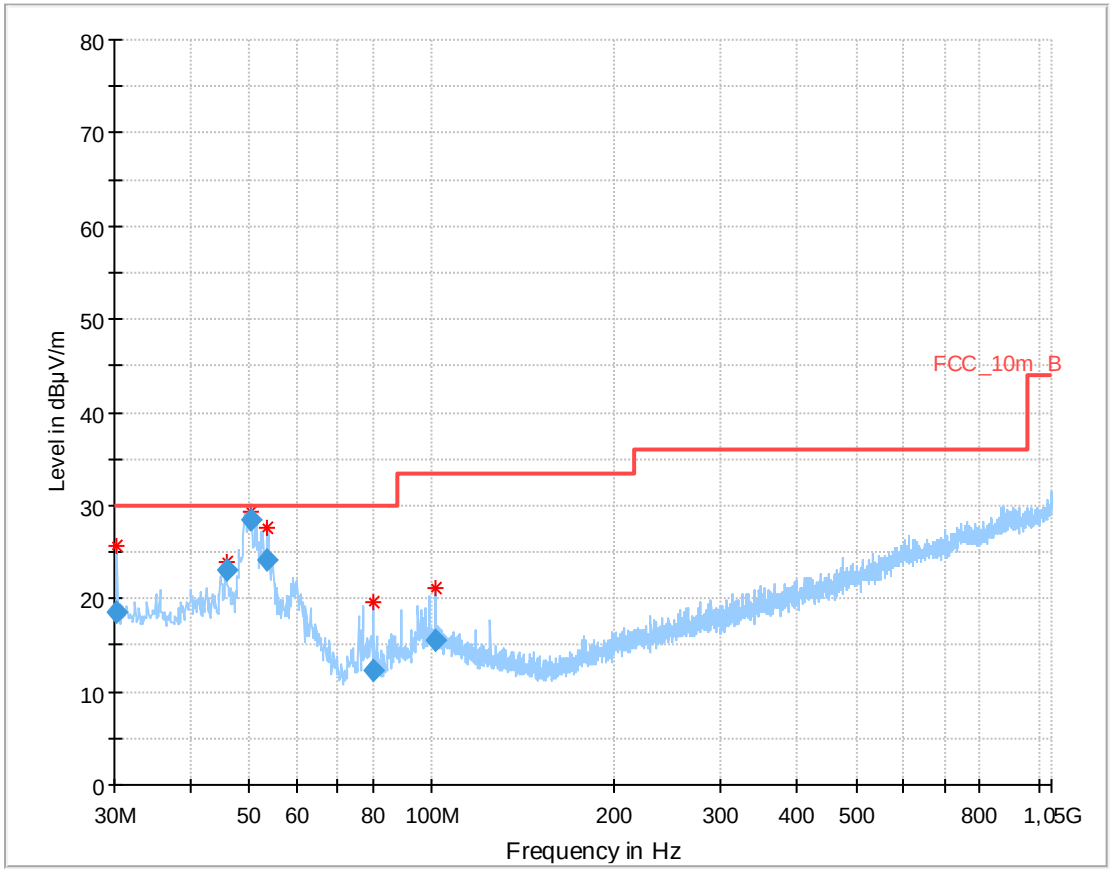
Date: 10.MAR.2016 11:10:02

Plot 30: 26 GHz to 40 GHz, 5500 MHz, vertical & horizontal polarization



Date: 10.MAR.2016 09:25:12

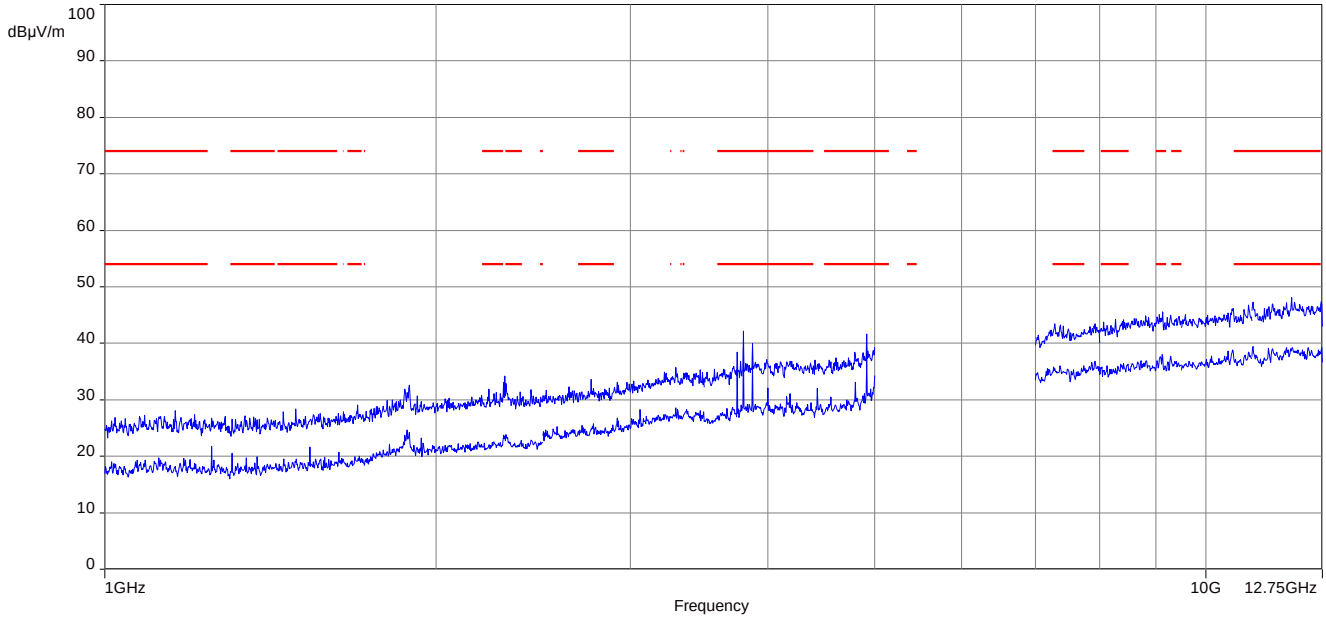
Plot 31: 30 MHz to 1 GHz, 5700 MHz, vertical & horizontal polarization



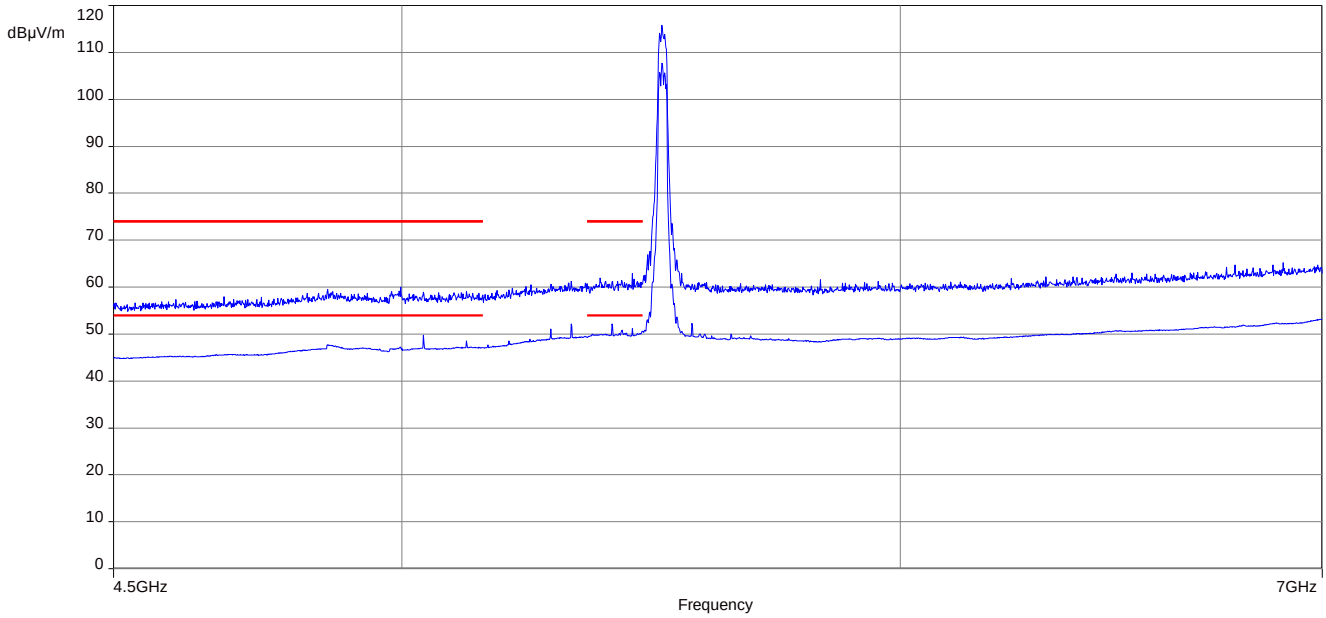
Final_Result:

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
30.256607	18.53	30.00	11.47	1000.0	120.000	100.0	V	277	13.4
45.925050	23.00	30.00	7.00	1000.0	120.000	98.0	V	353	13.6
50.235900	28.42	30.00	1.58	1000.0	120.000	98.0	V	24	12.6
53.554500	24.20	30.00	5.80	1000.0	120.000	98.0	V	60	12.1
80.400150	12.31	30.00	17.69	1000.0	120.000	170.0	V	308	8.2
101.673000	15.49	33.50	18.01	1000.0	120.000	170.0	V	327	12.0

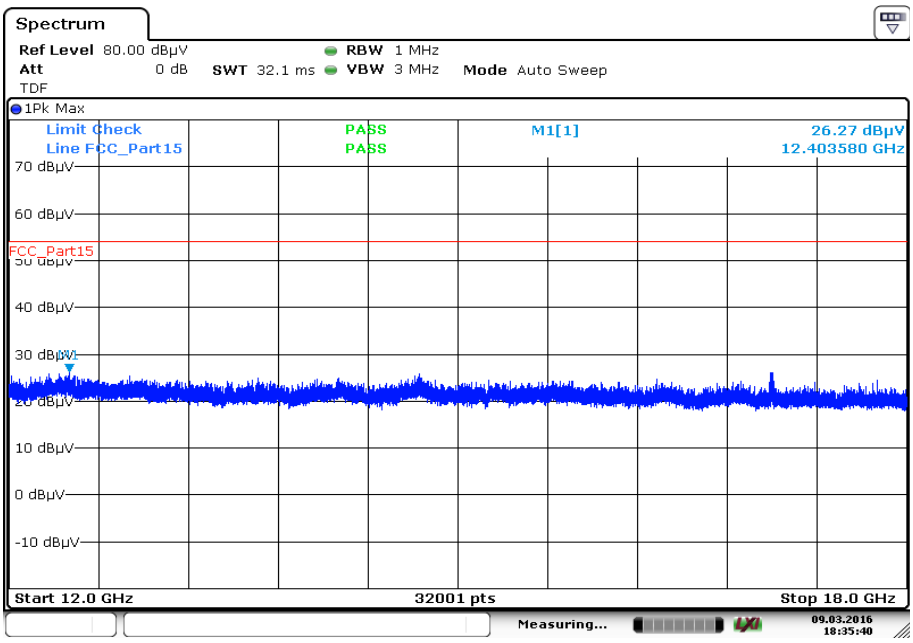
Plot 32: 1 GHz to 12.75 GHz, 5700 MHz, vertical & horizontal polarization



Plot 33: 4.5 GHz to 7 GHz, 5700 MHz, vertical & horizontal polarization

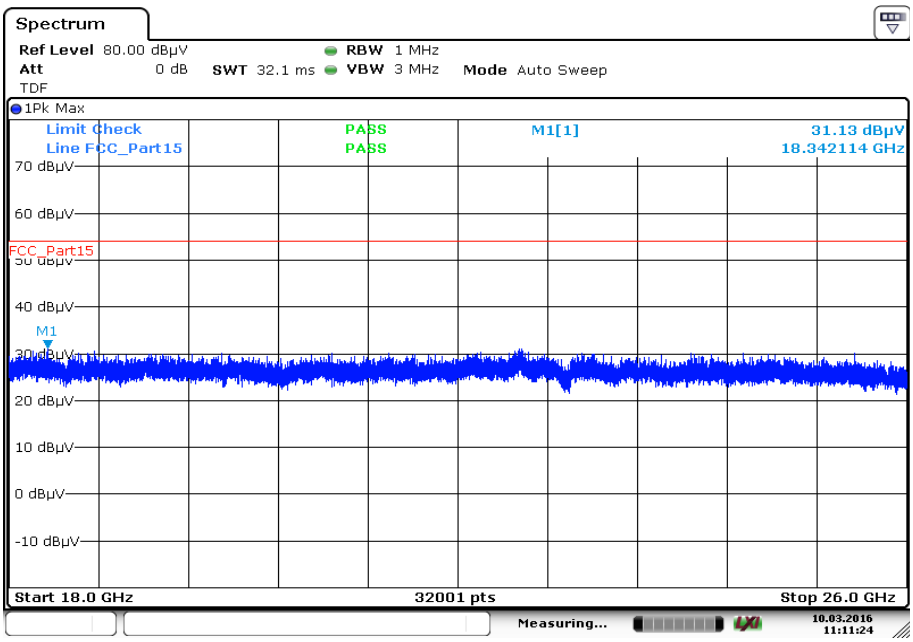


Plot 34: 12 GHz to 18 GHz, 5700 MHz, vertical & horizontal polarization



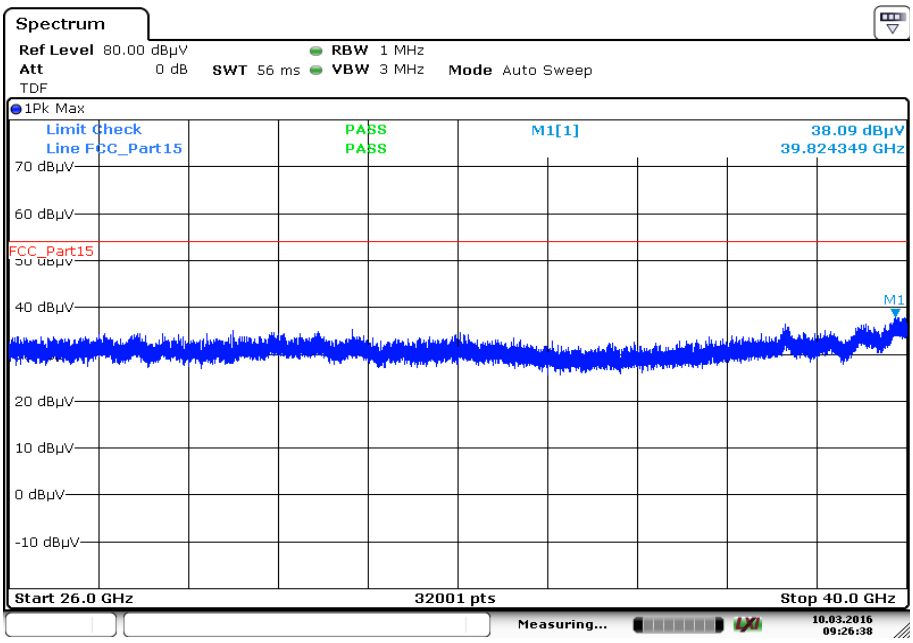
Date: 9.MAR.2016 18:35:39

Plot 35: 18 GHz to 26 GHz, 5700 MHz, vertical & horizontal polarization



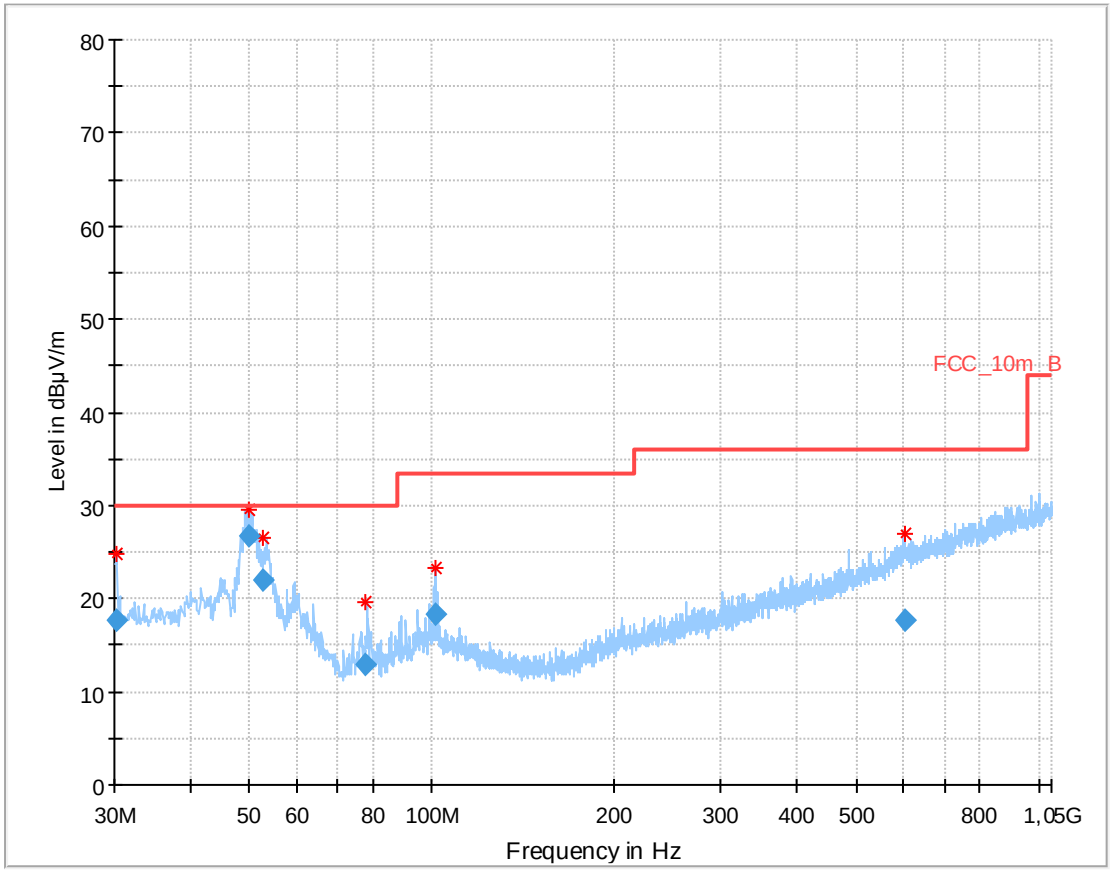
Date: 10.MAR.2016 11:11:24

Plot 36: 26 GHz to 40 GHz, 5700 MHz, vertical & horizontal polarization



Date: 10.MAR.2016 09:26:38

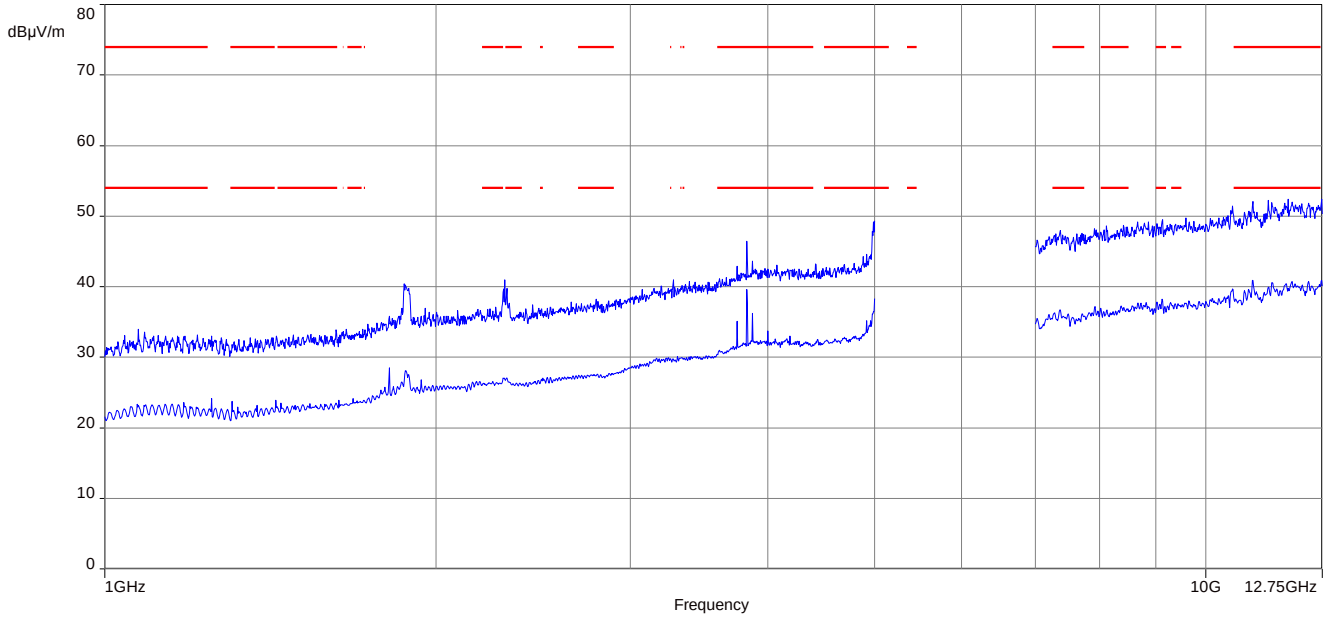
Plot 37: 30 MHz to 1 GHz, 5745 MHz, vertical & horizontal polarization



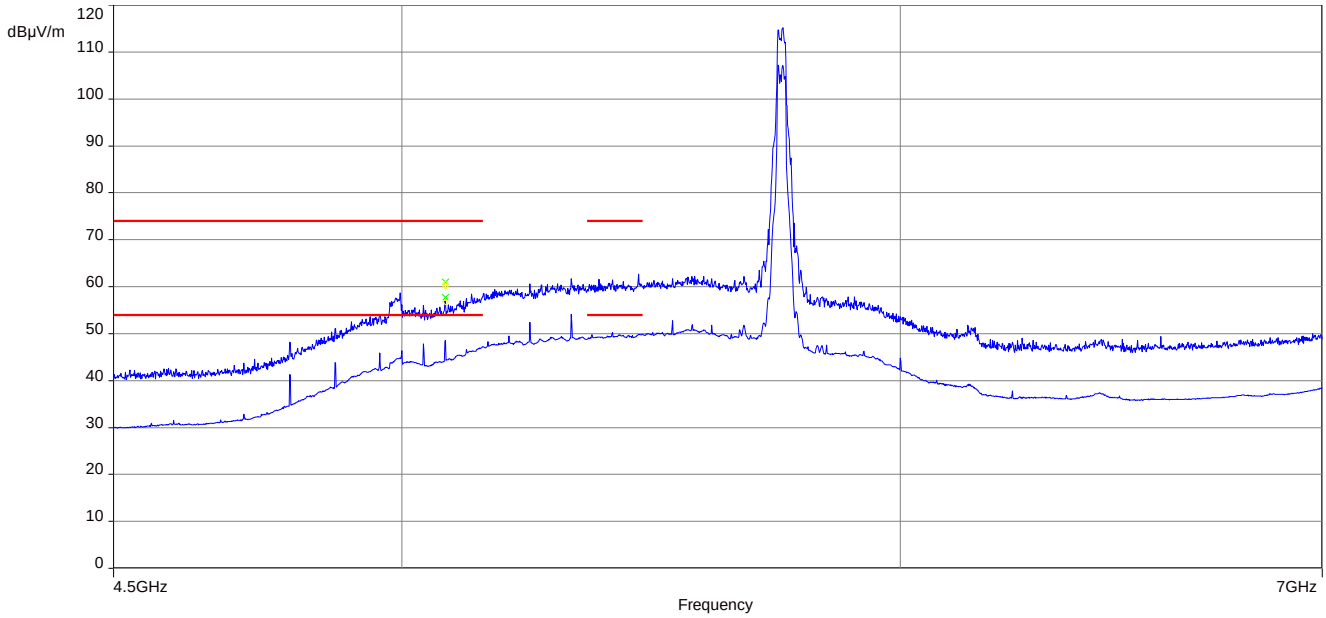
Final_Result:

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
30.262271	17.58	30.00	12.42	1000.0	120.000	101.0	V	320	13.4
49.821150	26.70	30.00	3.30	1000.0	120.000	98.0	V	83	12.7
52.752150	21.96	30.00	8.04	1000.0	120.000	98.0	V	55	12.2
77.986650	13.03	30.00	16.97	1000.0	120.000	170.0	V	274	8.1
101.688150	18.26	33.50	15.24	1000.0	120.000	101.0	V	44	12.0
602.948700	17.73	36.00	18.27	1000.0	120.000	101.0	V	146	20.7

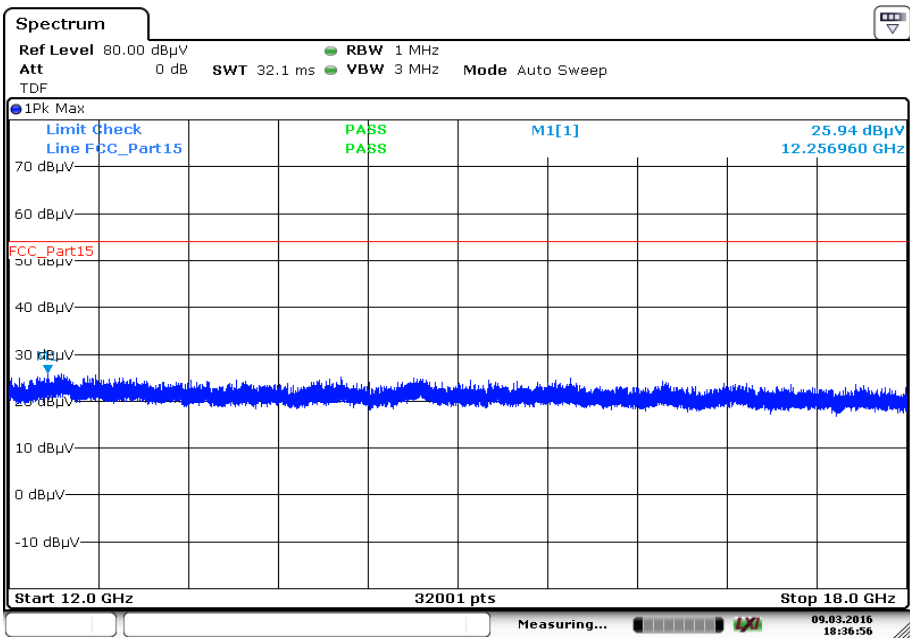
Plot 38: 1 GHz to 12.75 GHz, 5745 MHz, vertical & horizontal polarization



Plot 39: 4.5 GHz to 7 GHz, 5745 MHz, vertical & horizontal polarization

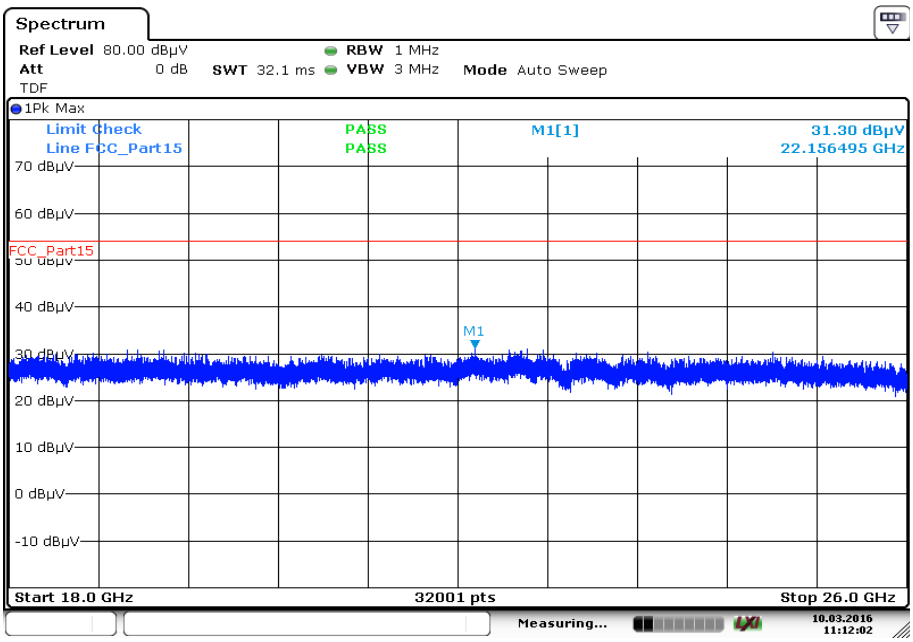


Plot 40: 12 GHz to 18 GHz, 5745 MHz, vertical & horizontal polarization



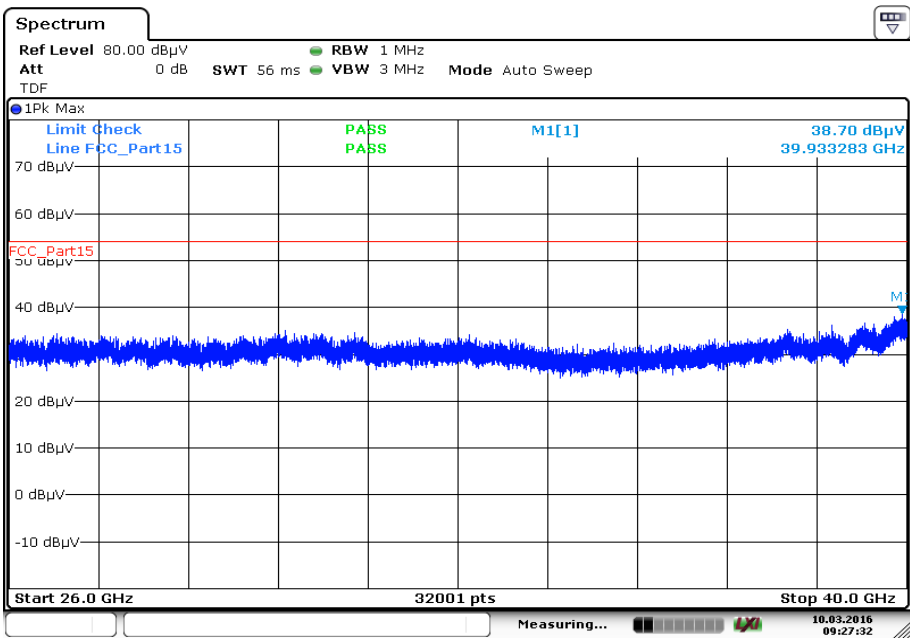
Date: 9.MAR.2016 18:36:56

Plot 41: 18 GHz to 26 GHz, 5745 MHz, vertical & horizontal polarization



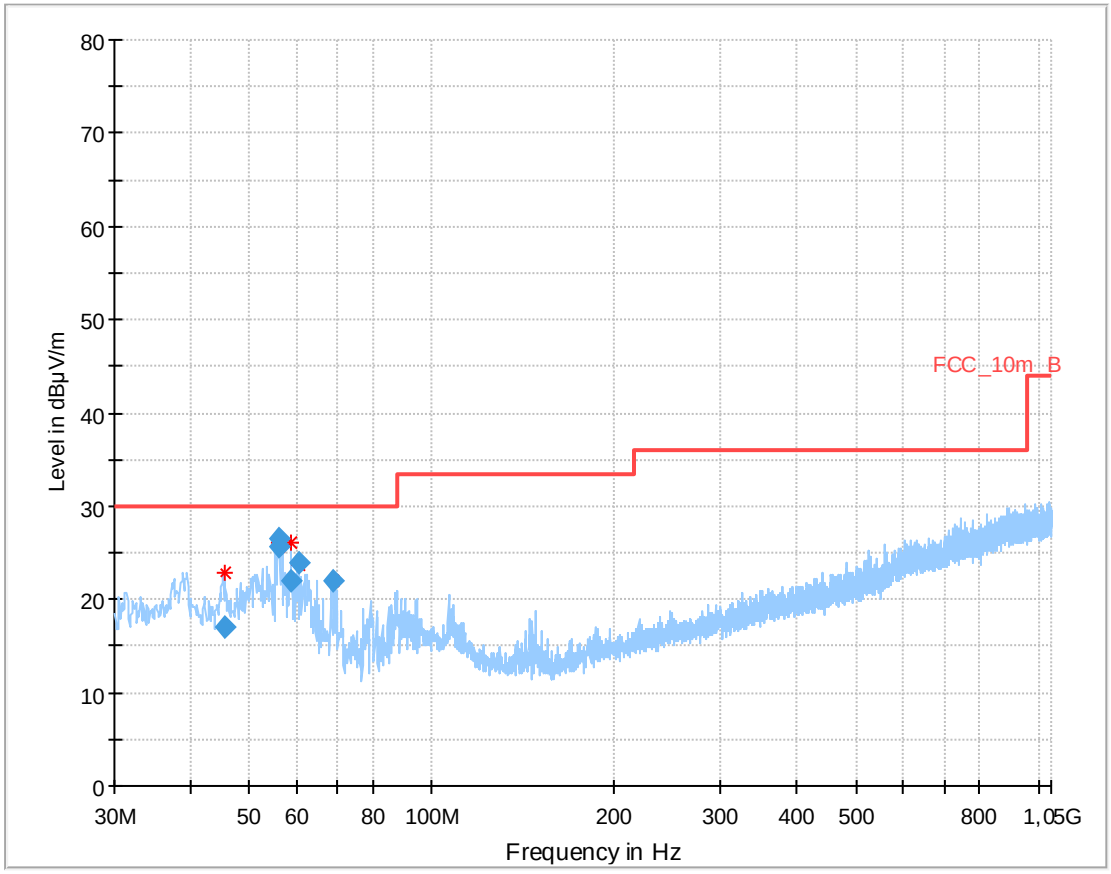
Date: 10.MAR.2016 11:12:02

Plot 42: 26 GHz to 40 GHz, 5745 MHz, vertical & horizontal polarization



Date: 10.MAR.2016 09:27:32

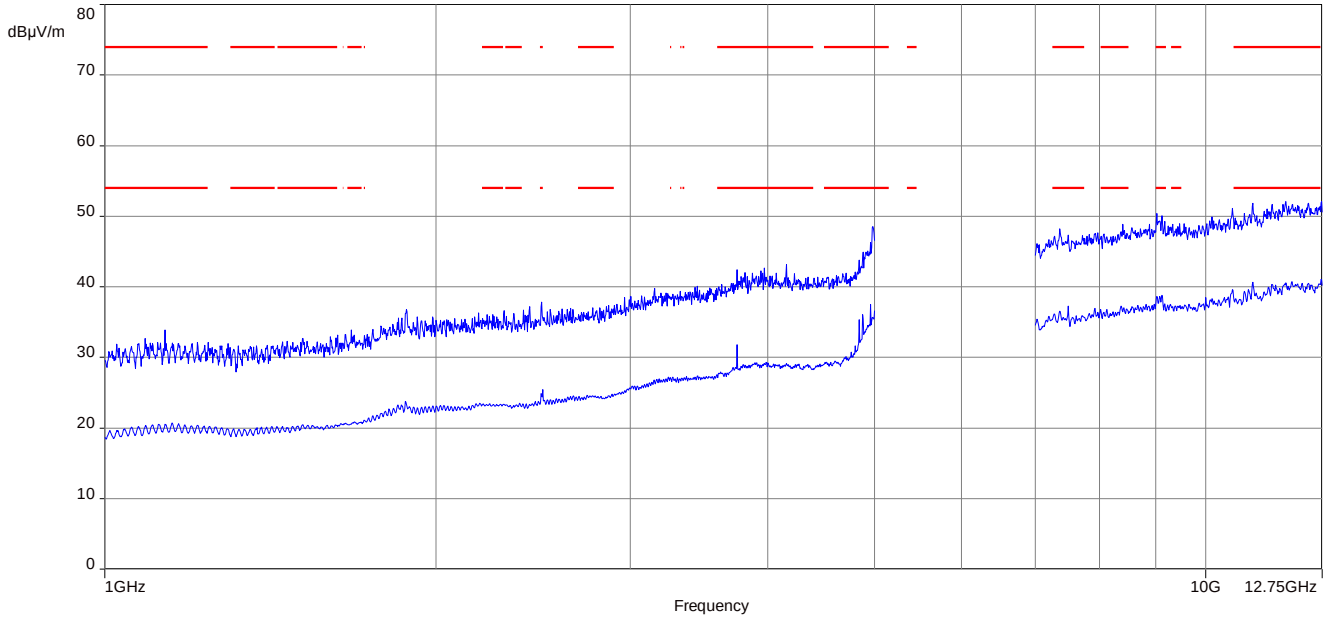
Plot 43: 30 MHz to 1 GHz, 5785 MHz, vertical & horizontal polarization



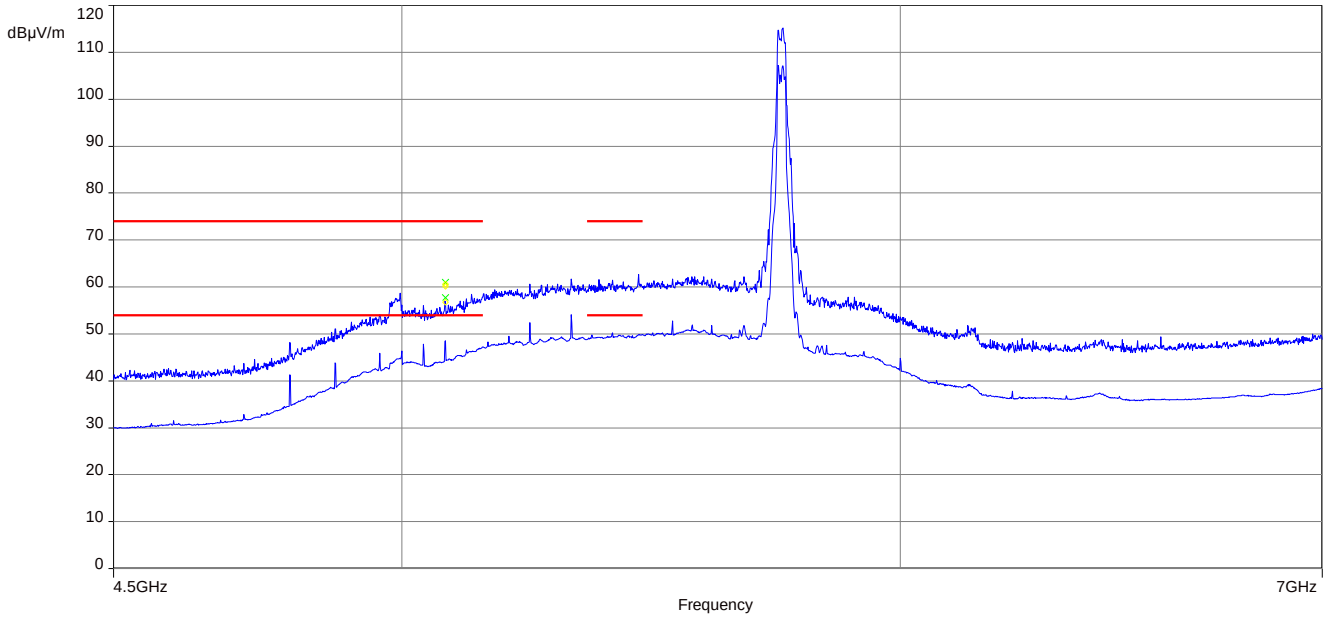
Final_Result

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
45.721950	16.99	30.00	13.01	1000.0	120.000	170.0	V	31.0	13.7
55.869600	25.73	30.00	4.27	1000.0	120.000	170.0	V	347.0	11.6
55.990350	26.62	30.00	3.38	1000.0	120.000	170.0	V	319.0	11.6
58.733550	22.04	30.00	7.96	1000.0	120.000	101.0	V	272.0	10.9
60.212550	23.84	30.00	6.16	1000.0	120.000	98.0	V	223.0	10.5
68.992350	22.03	30.00	7.97	1000.0	120.000	170.0	V	303.0	8.6

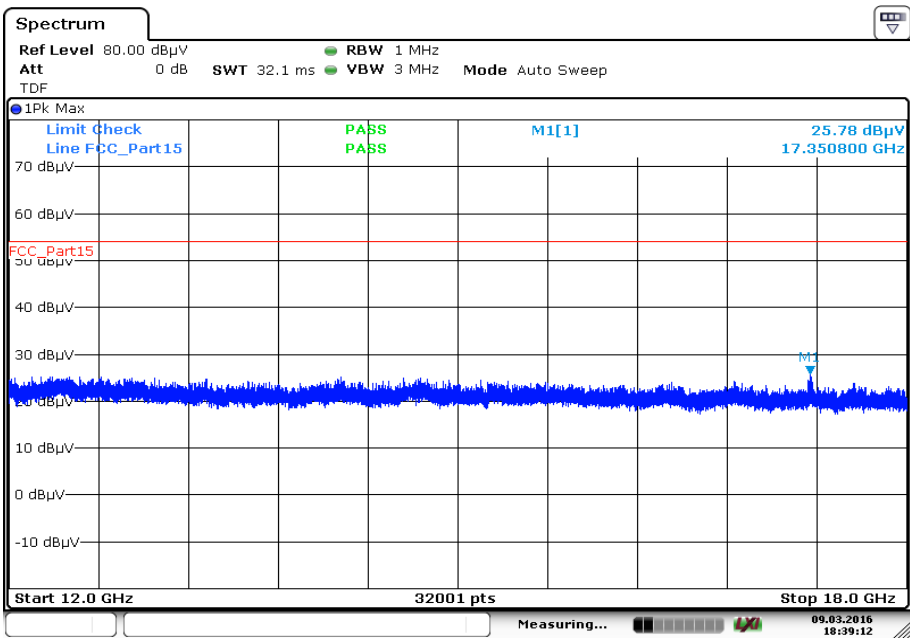
Plot 44: 1 GHz to 12.75 GHz, 5785 MHz, vertical & horizontal polarization



Plot 45: 4.5 GHz to 7 GHz, 5785 MHz, vertical & horizontal polarization



Plot 46: 12 GHz to 18 GHz, 5785 MHz, vertical & horizontal polarization



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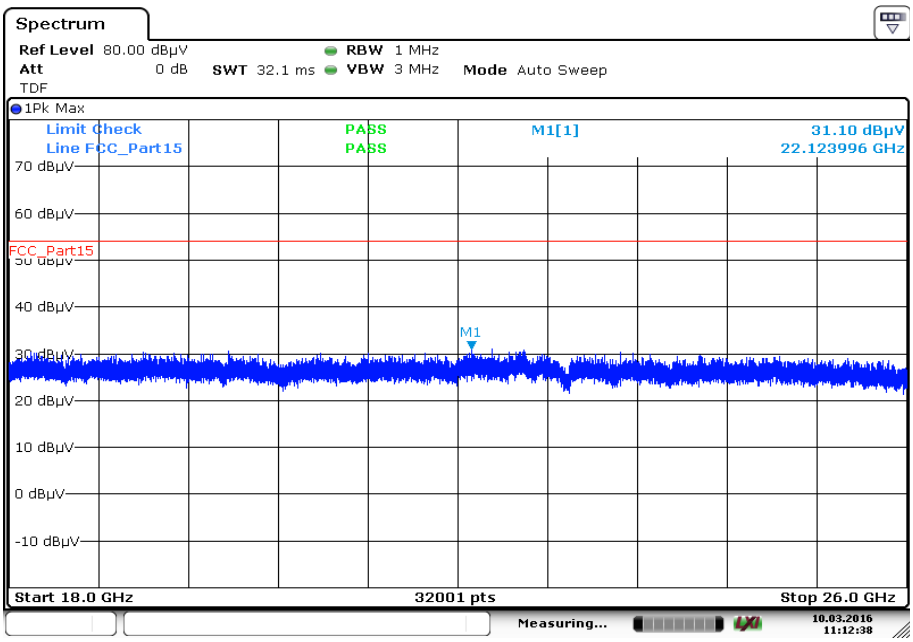
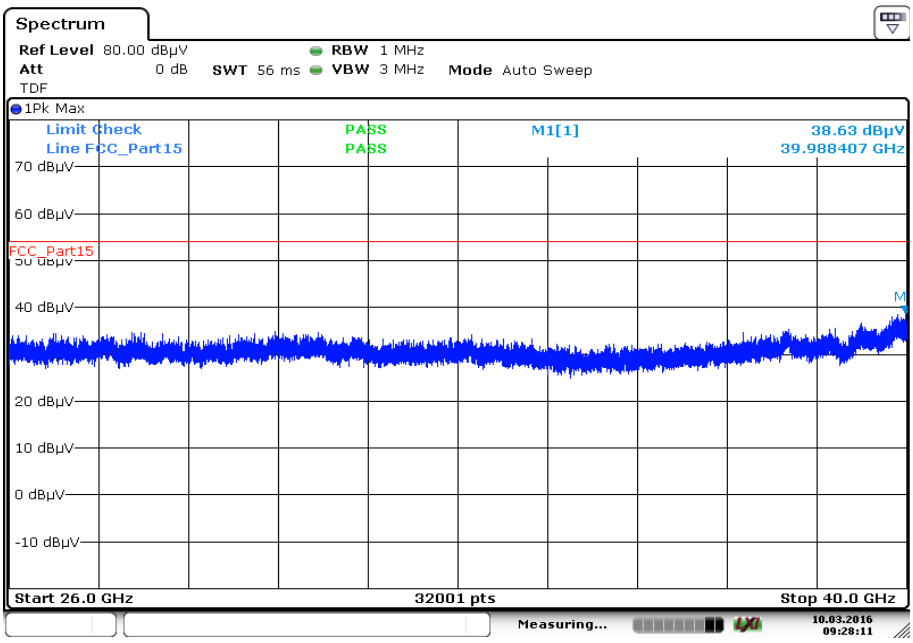
Plot 47: 18 GHz to 26 GHz, 5785 MHz, vertical & horizontal polarization



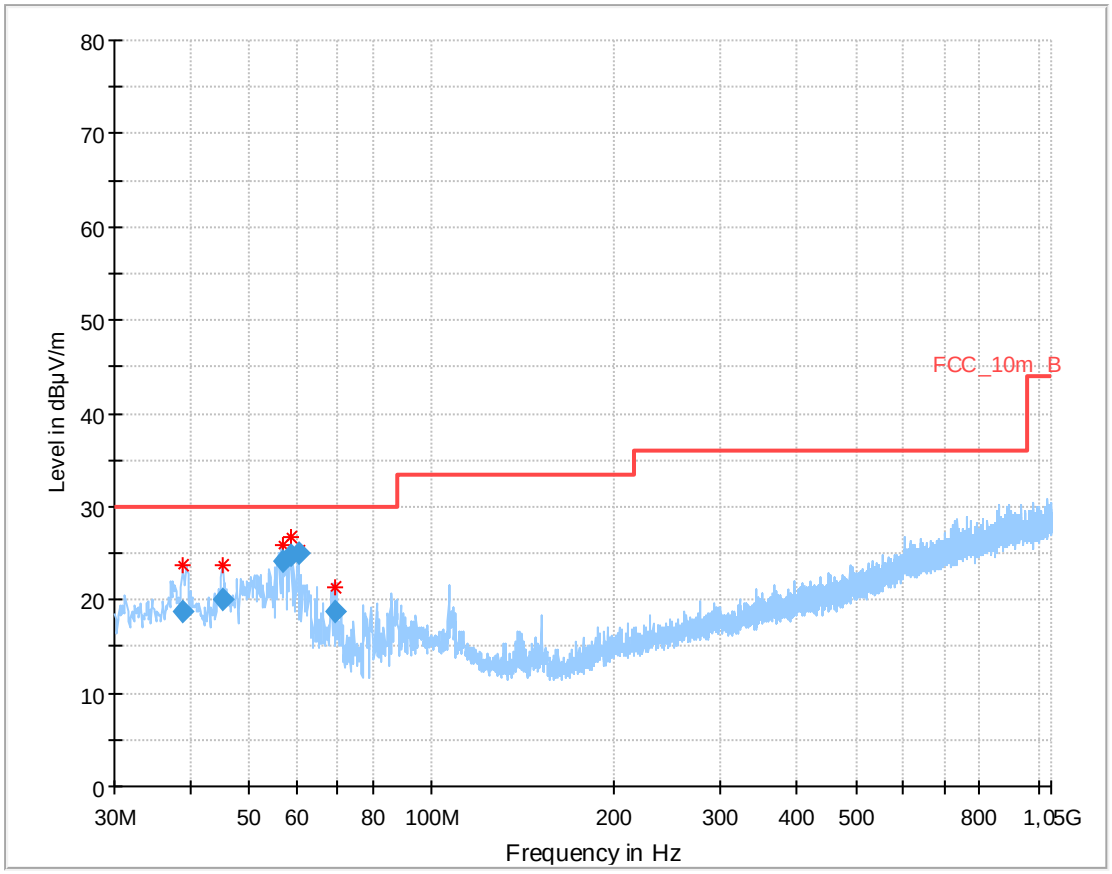
Date: 10.MAR.2016 11:12:38

Plot 48: 26 GHz to 40 GHz, 5785 MHz, vertical & horizontal polarization



Date: 10.MAR.2016 09:28:11

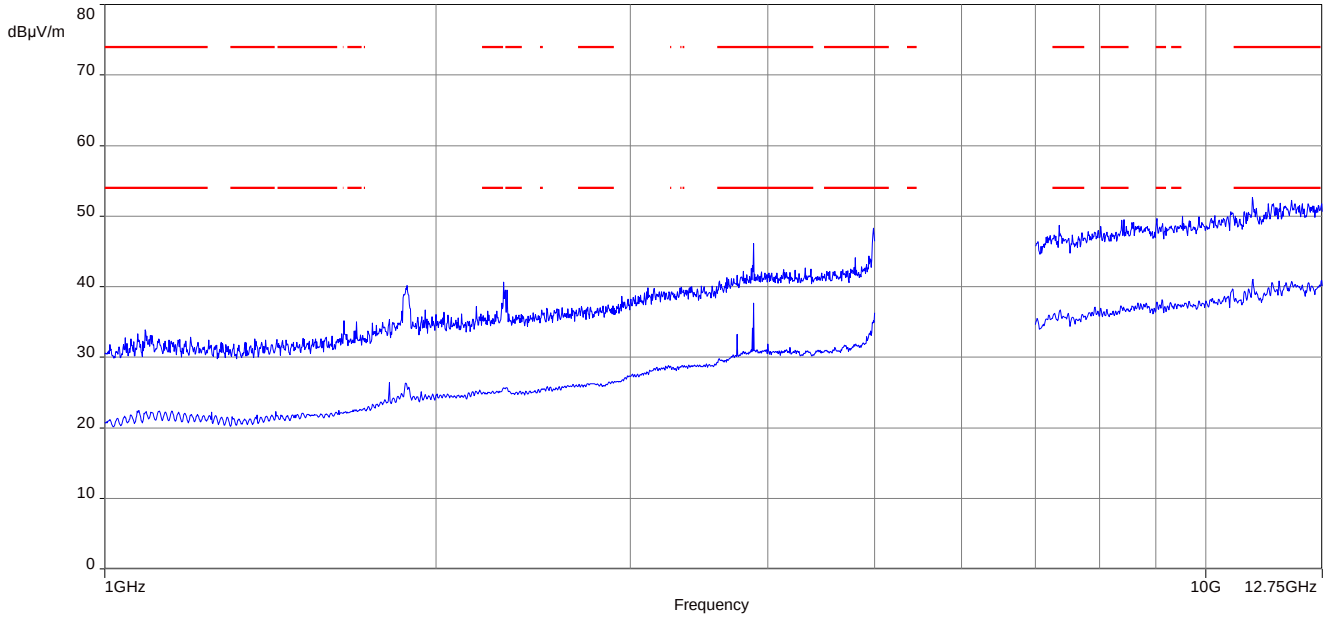
Plot 49: 30 MHz to 1 GHz, 5825 MHz, vertical & horizontal polarization



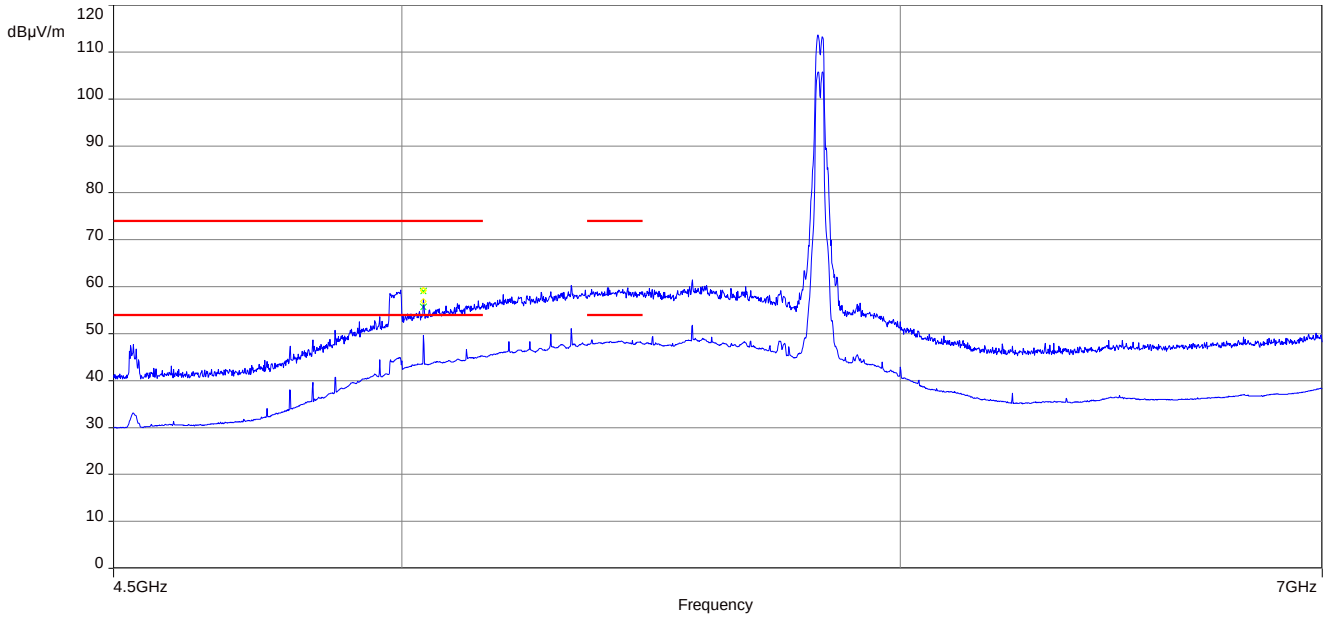
Final_Result

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
38.959800	18.81	30.00	11.19	1000.0	120.000	170.0	V	154.0	14.0
45.226350	20.14	30.00	9.86	1000.0	120.000	101.0	V	210.0	13.8
56.767650	24.15	30.00	5.85	1000.0	120.000	101.0	V	301.0	11.4
58.696350	24.86	30.00	5.14	1000.0	120.000	98.0	V	266.0	10.9
60.221250	25.07	30.00	4.93	1000.0	120.000	101.0	V	69.0	10.5
69.093750	18.84	30.00	11.16	1000.0	120.000	170.0	V	274.0	8.6

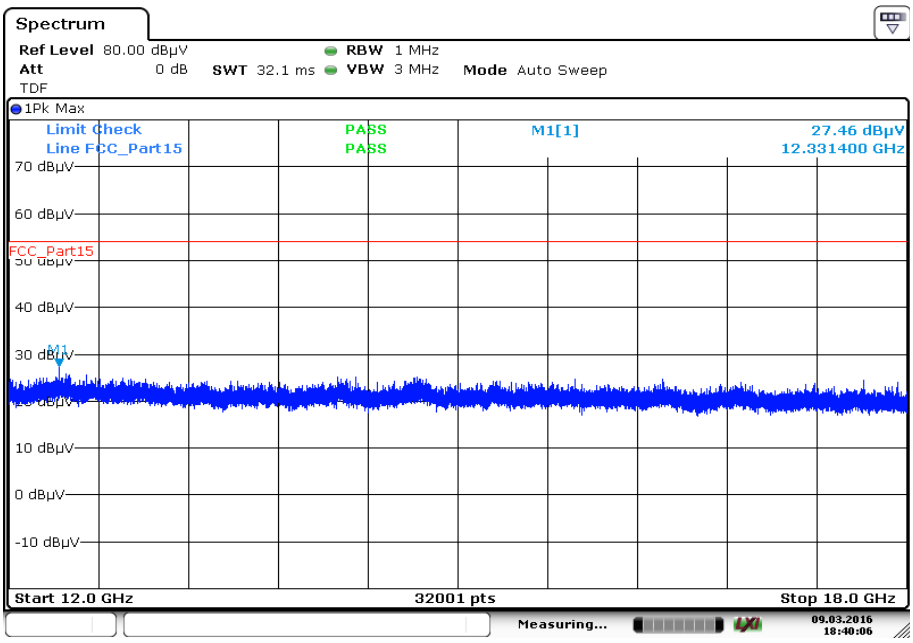
Plot 50: 1 GHz to 12.75 GHz, 5825 MHz, vertical & horizontal polarization



Plot 51: 4.5 GHz to 7 GHz, 5825 MHz, vertical & horizontal polarization



Plot 52: 12 GHz to 18 GHz, 5825 MHz, vertical & horizontal polarization



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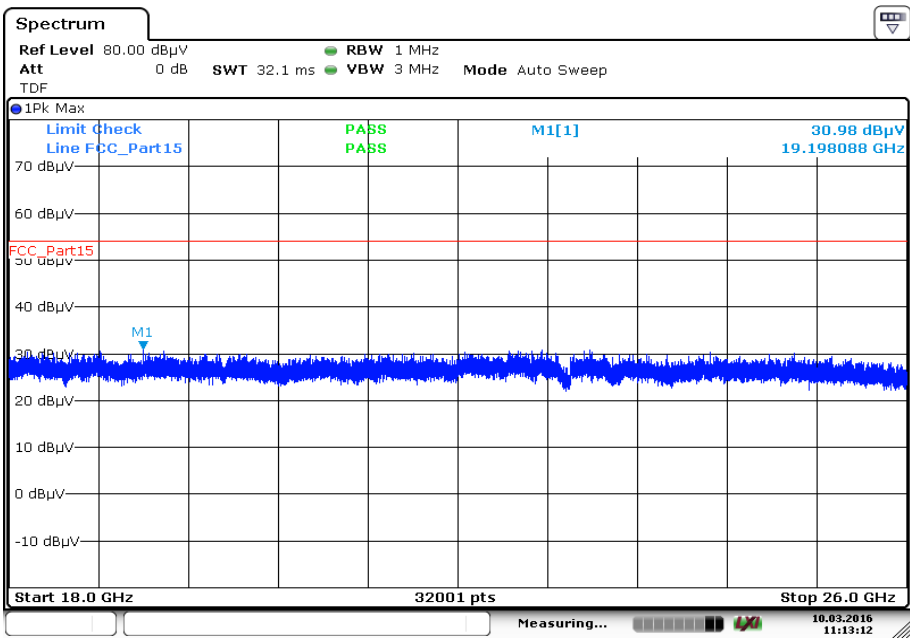
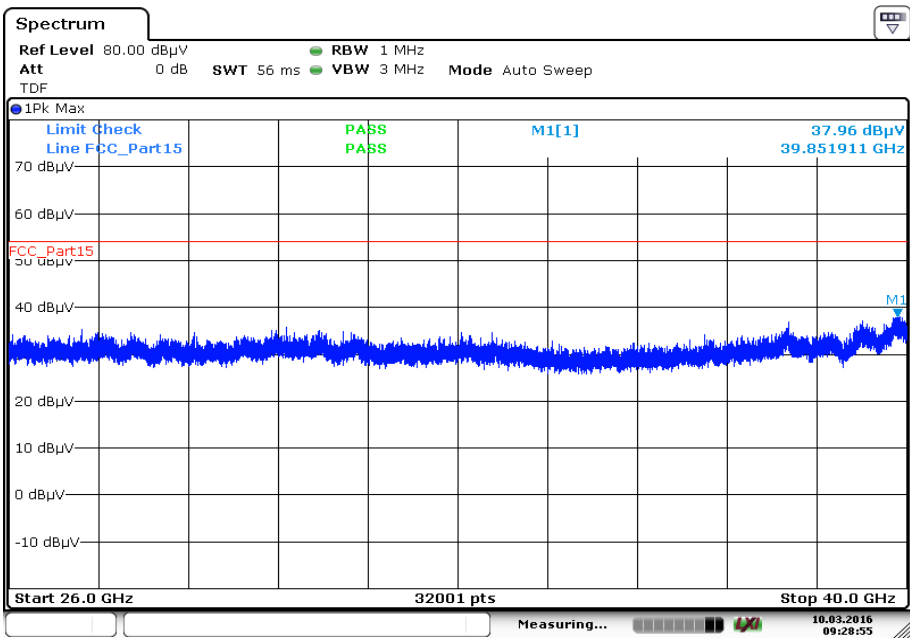
Plot 53: 18 GHz to 26 GHz, 5825 MHz, vertical & horizontal polarization



Date: 10.MAR.2016 11:13:12

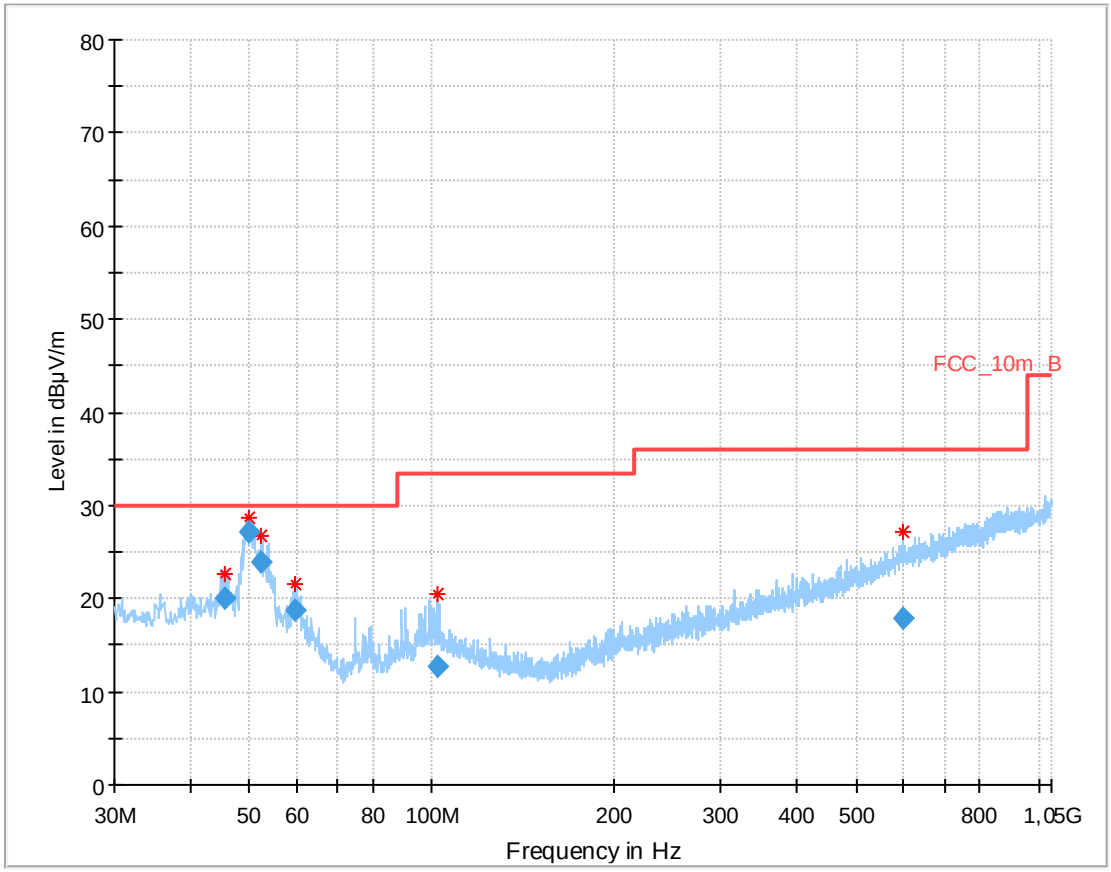
Plot 54: 26 GHz to 40 GHz, 5825 MHz, vertical & horizontal polarization



Date: 10.MAR.2016 09:28:54

Plots: OFDM / n HT20 – mode

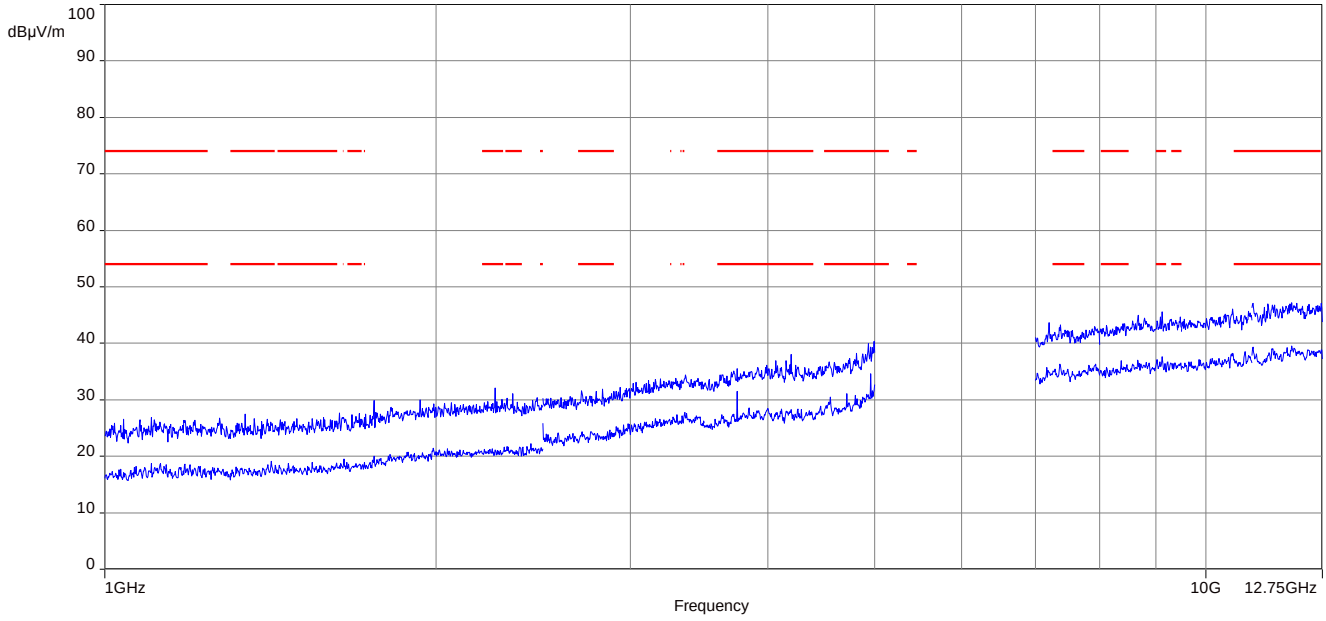
Plot 1: 30 MHz to 1 GHz, 5180 MHz, vertical & horizontal polarization



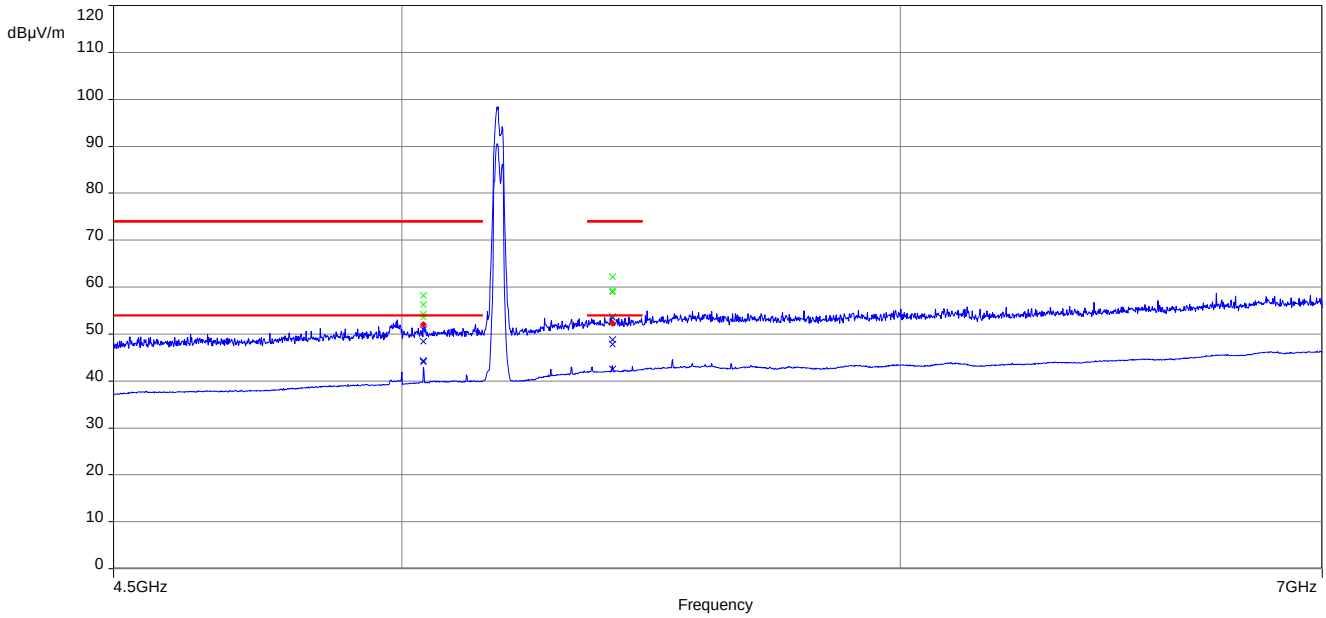
Final_Result:

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
45.580050	20.06	30.00	9.94	1000.0	120.000	101.0	V	318	13.7
49.877850	27.20	30.00	2.80	1000.0	120.000	98.0	V	75	12.7
52.170450	23.83	30.00	6.17	1000.0	120.000	98.0	V	39	12.3
59.451000	18.85	30.00	11.15	1000.0	120.000	98.0	V	55	10.7
102.447750	12.77	33.50	20.73	1000.0	120.000	98.0	V	199	11.9
599.183850	17.81	36.00	18.19	1000.0	120.000	98.0	V	100	20.7

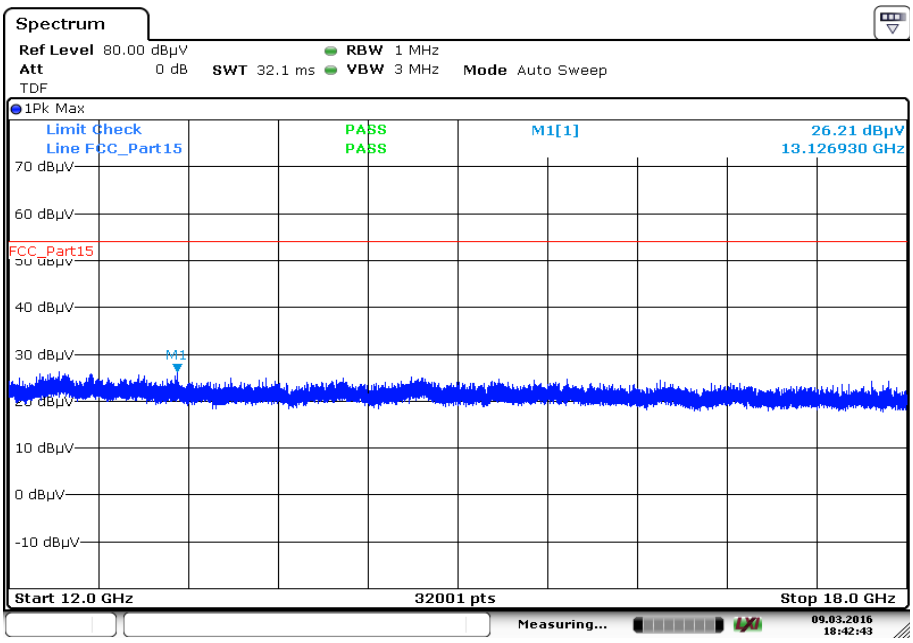
Plot 2: 1 GHz to 12.75 GHz, 5180 MHz, vertical & horizontal polarization



Plot 3: 4.5 GHz to 7 GHz, 5180 MHz, vertical & horizontal polarization

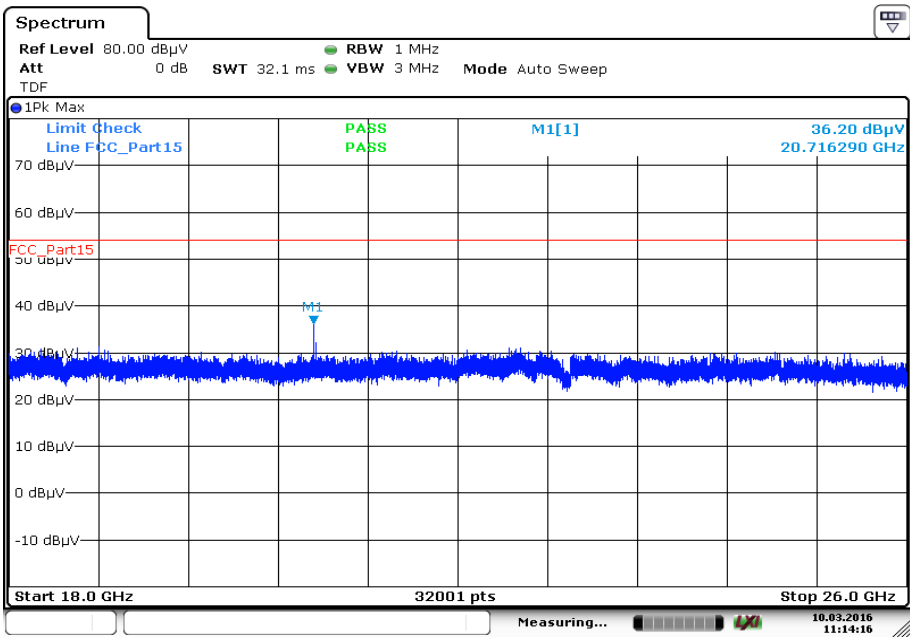


Plot 4: 12 GHz to 18 GHz, 5180 MHz, vertical & horizontal polarization



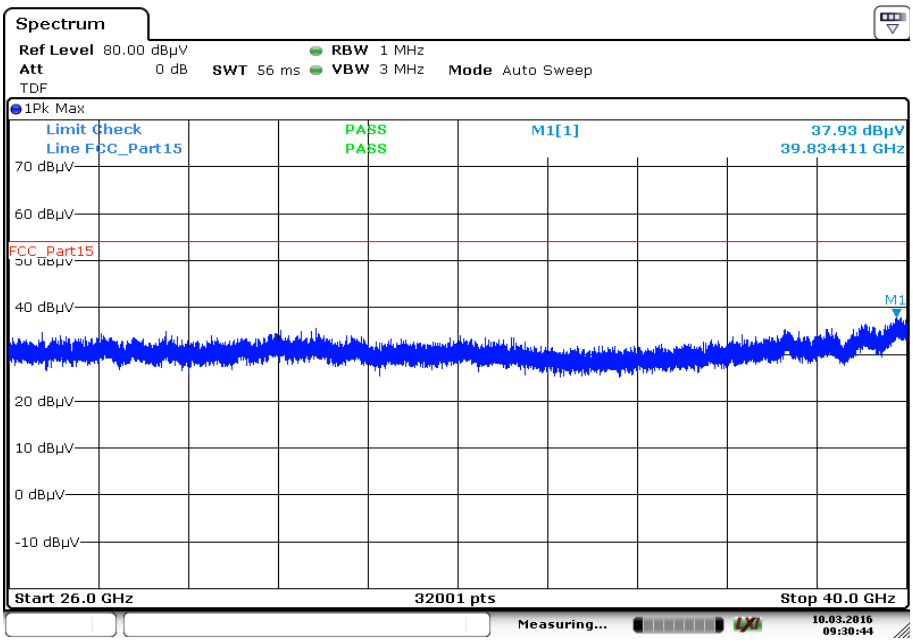
Date: 9.MAR.2016 18:42:43

Plot 5: 18 GHz to 26 GHz, 5180 MHz, vertical & horizontal polarization



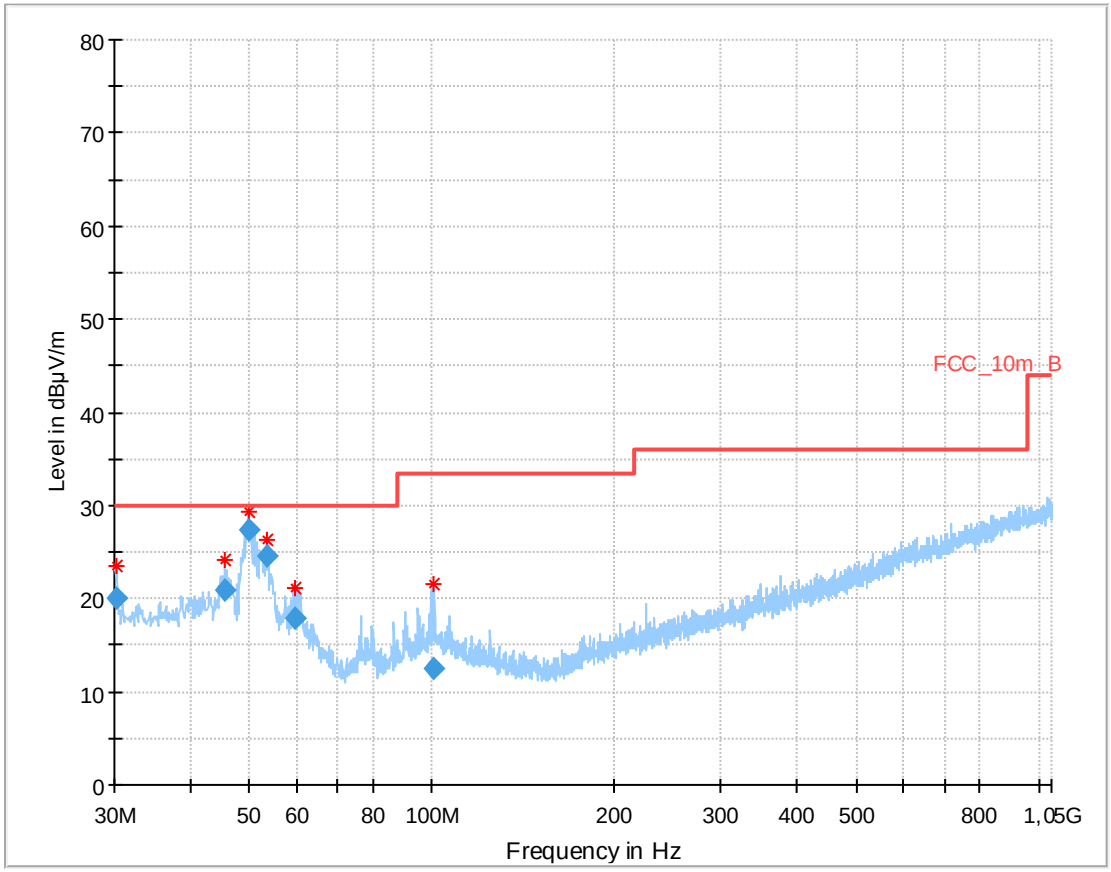
Date: 10.MAR.2016 11:14:16

Plot 6: 26 GHz to 40 GHz, 5180 MHz, vertical & horizontal polarization



Date: 10.MAR.2016 09:30:44

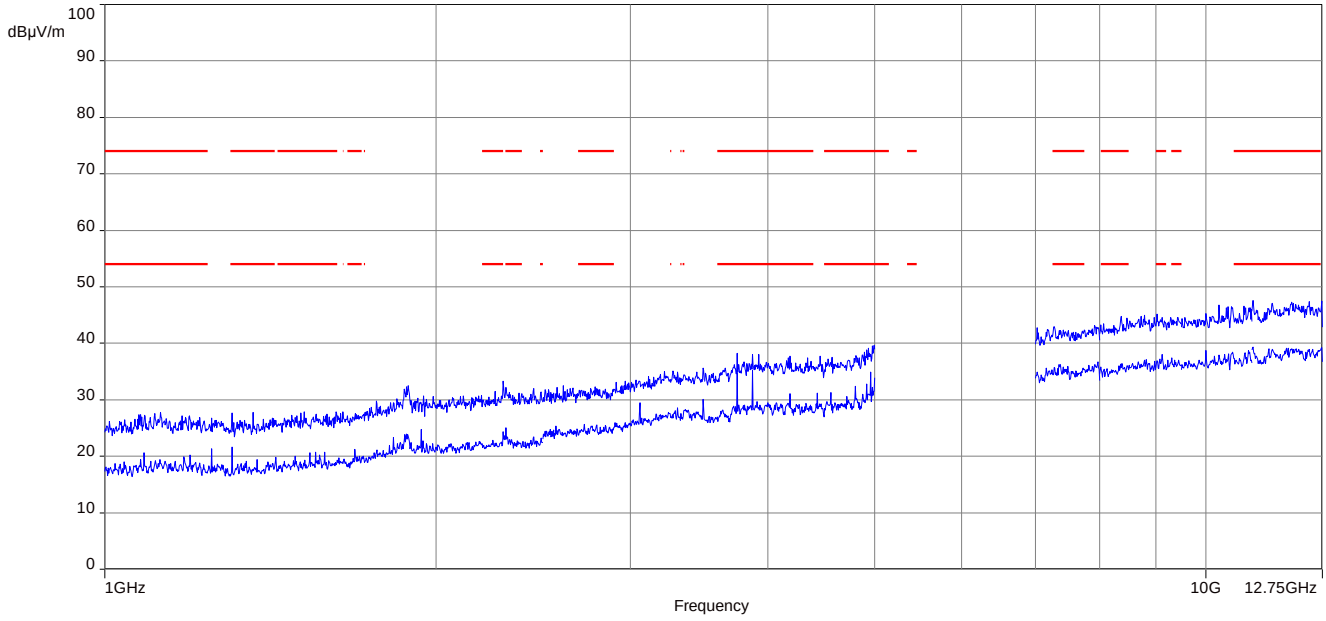
Plot 7: 30 MHz to 1 GHz, 5240 MHz, vertical & horizontal polarization



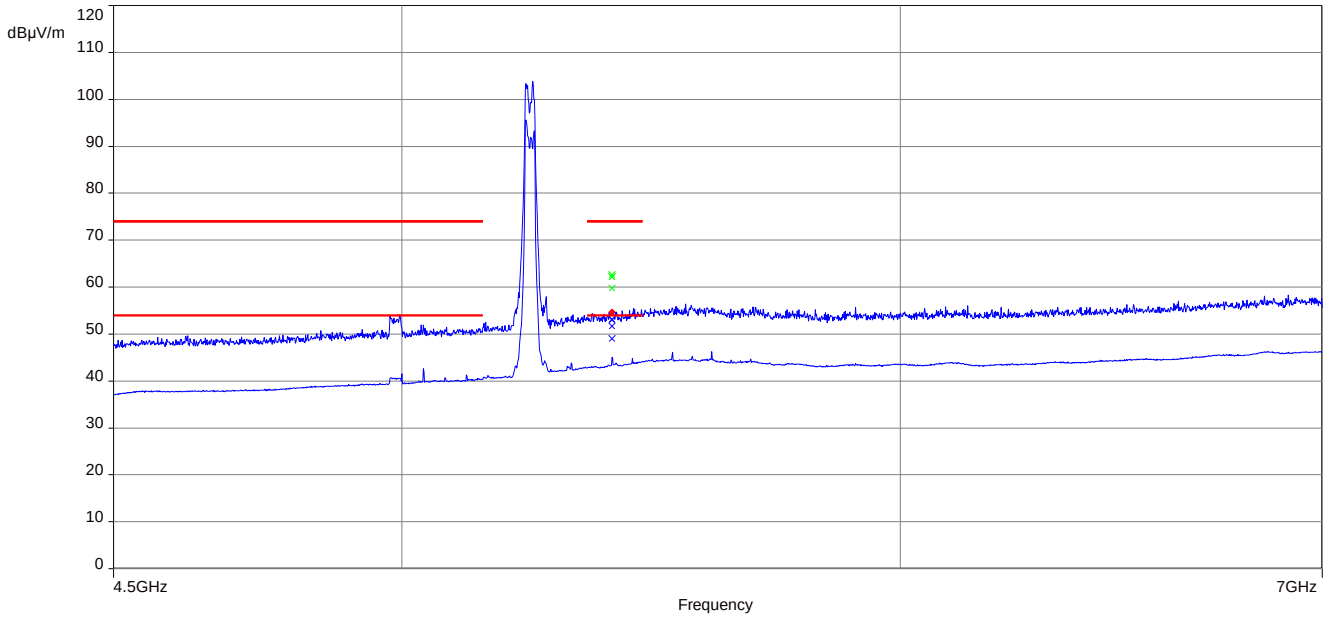
Final_Result:

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
30.239100	20.08	30.00	9.92	1000.0	120.000	101.0	V	353	13.4
45.578400	21.02	30.00	8.98	1000.0	120.000	170.0	V	353	13.7
49.874400	27.30	30.00	2.70	1000.0	120.000	98.0	V	27	12.7
53.526450	24.48	30.00	5.52	1000.0	120.000	98.0	V	8	12.1
59.446500	17.80	30.00	12.20	1000.0	120.000	101.0	V	168	10.7
100.482450	12.42	33.50	21.08	1000.0	120.000	170.0	V	19	12.1

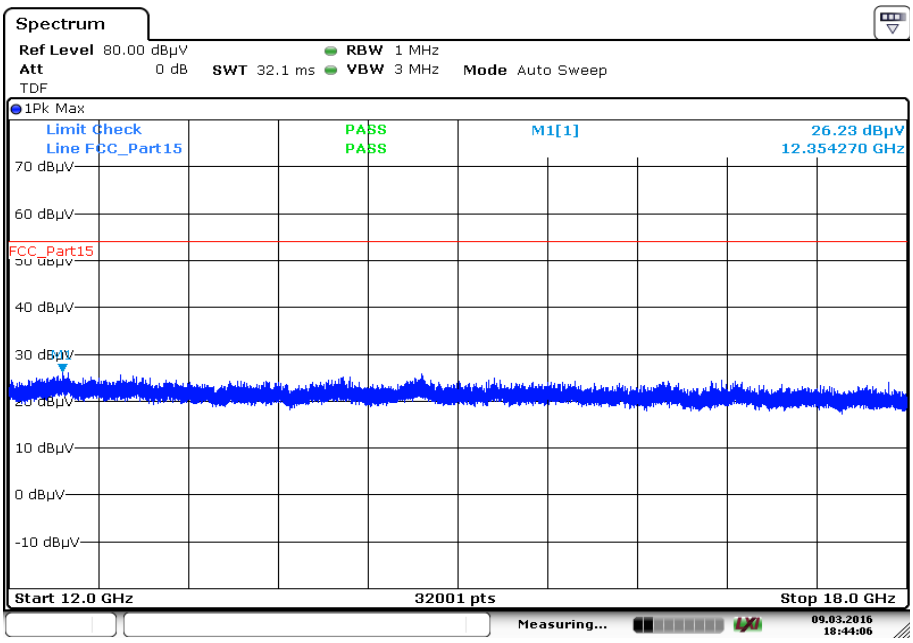
Plot 8: 1 GHz to 12.75 GHz, 5240 MHz, vertical & horizontal polarization



Plot 9: 4.5 GHz to 7 GHz, 5240 MHz, vertical & horizontal polarization

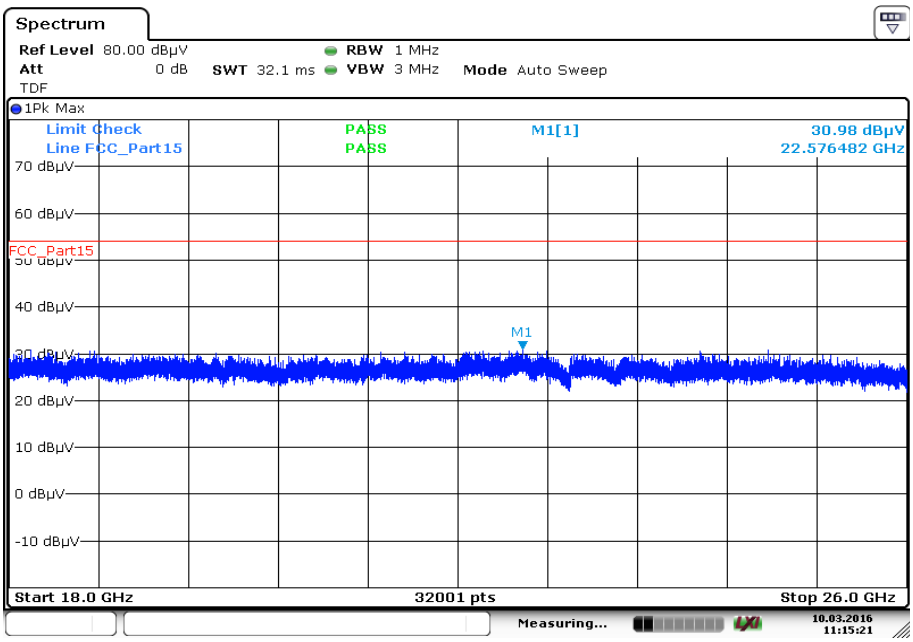


Plot 10: 12 GHz to 18 GHz, 5240 MHz, vertical & horizontal polarization



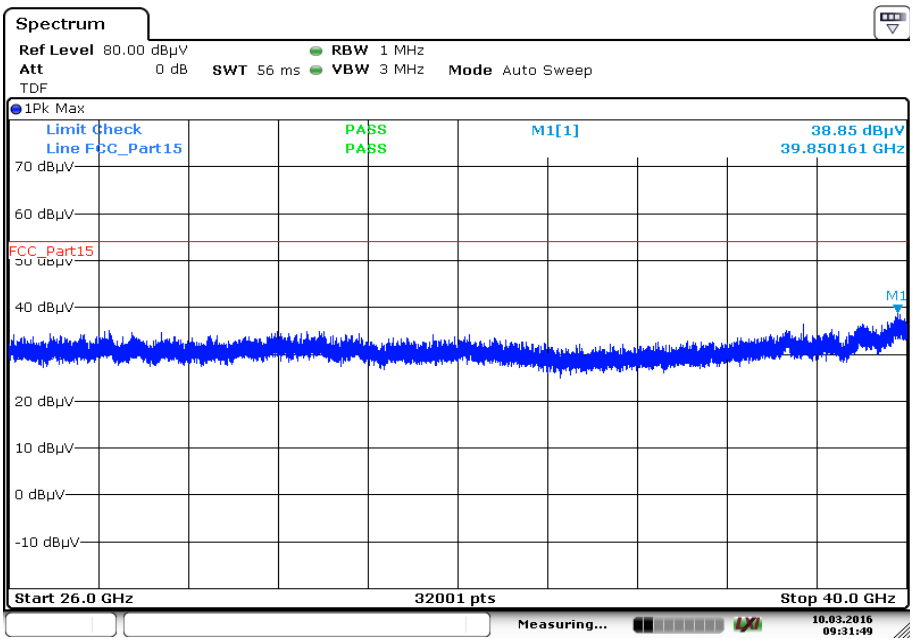
Date: 9.MAR.2016 18:44:06

Plot 11: 18 GHz to 26 GHz, 5240 MHz, vertical & horizontal polarization



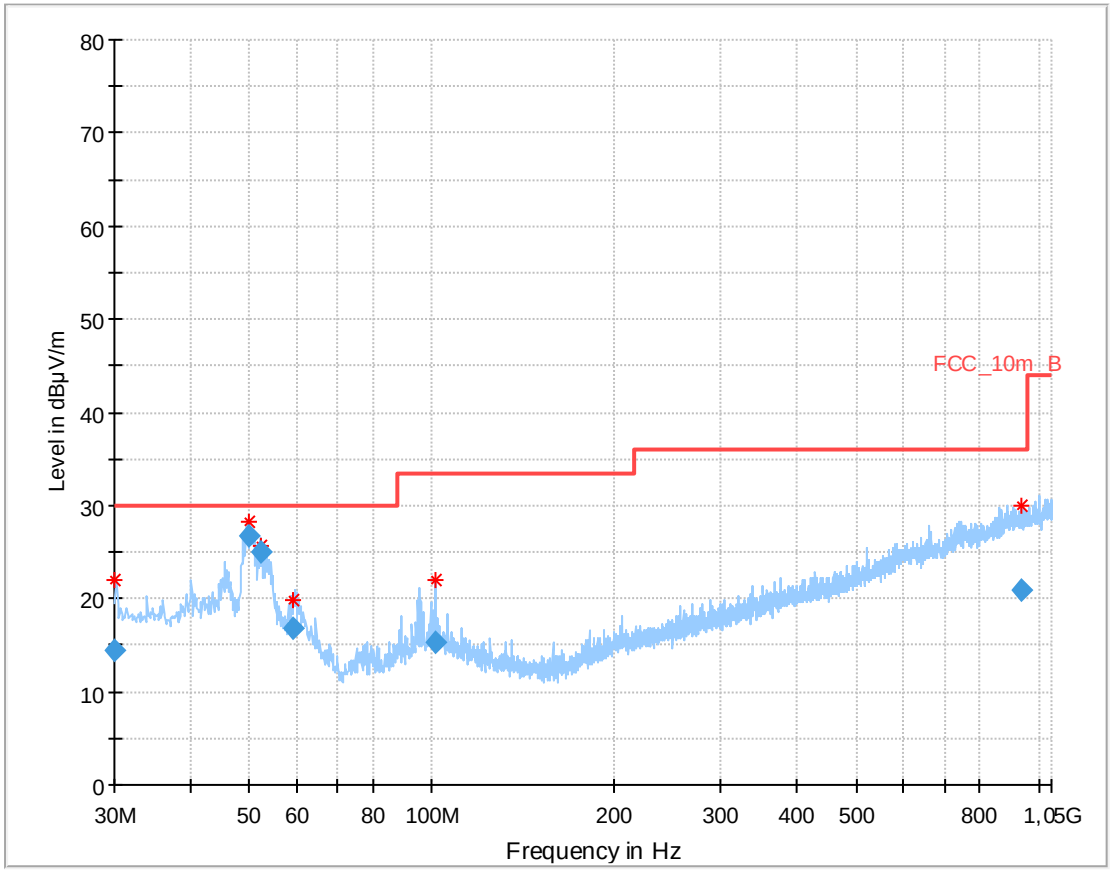
Date: 10.MAR.2016 11:15:21

Plot 12: 26 GHz to 40 GHz, 5240 MHz, vertical & horizontal polarization



Date: 10.MAR.2016 09:31:49

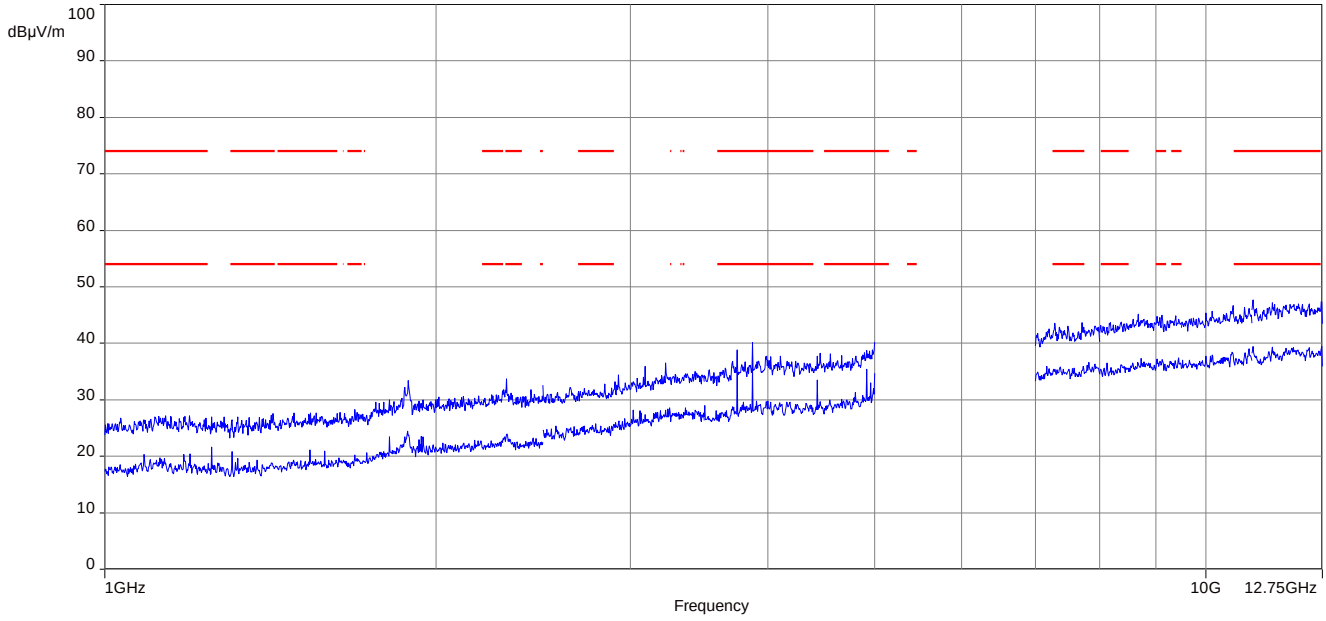
Plot 13: 30 MHz to 1 GHz, 5260 MHz, vertical & horizontal polarization



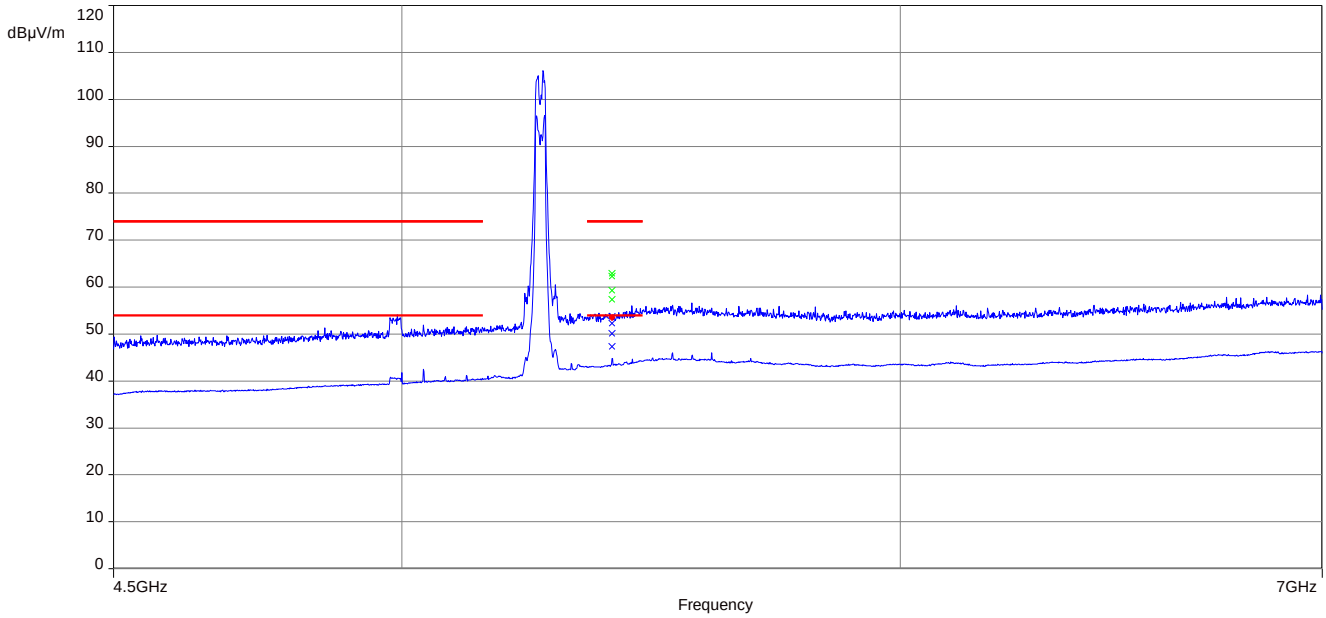
Final_Result:

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
30.071477	14.51	30.00	15.49	1000.0	120.000	101.0	V	1	13.3
49.865850	26.83	30.00	3.17	1000.0	120.000	98.0	V	44	12.7
52.177950	25.05	30.00	4.95	1000.0	120.000	98.0	V	21	12.3
59.109900	16.83	30.00	13.17	1000.0	120.000	101.0	V	147	10.8
101.713950	15.39	33.50	18.11	1000.0	120.000	101.0	V	132	12.0
934.764750	21.02	36.00	14.98	1000.0	120.000	98.0	V	32	24.2

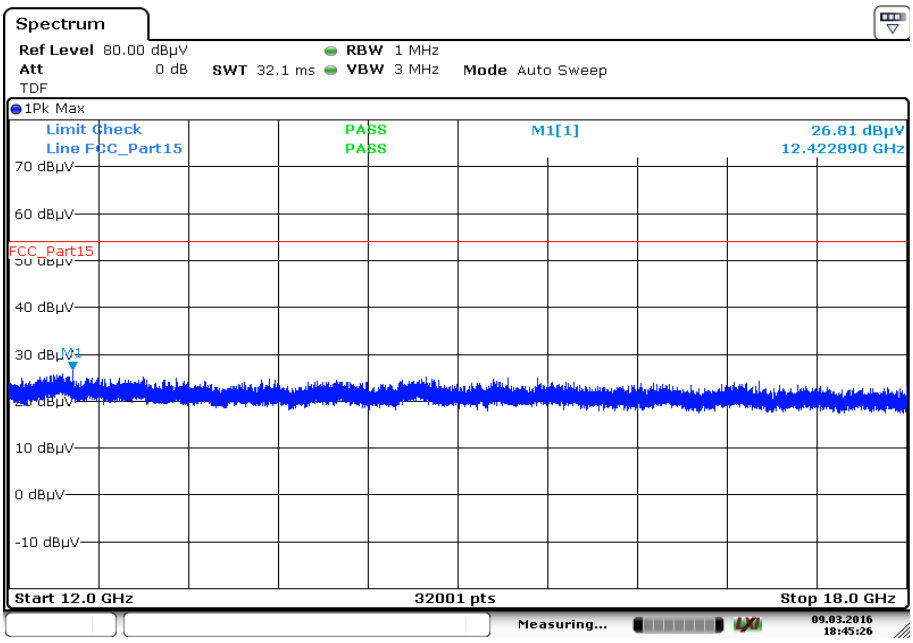
Plot 14: 1 GHz to 12.75 GHz, 5260 MHz, vertical & horizontal polarization



Plot 15: 4.5 GHz to 7 GHz, 5260 MHz, vertical & horizontal polarization

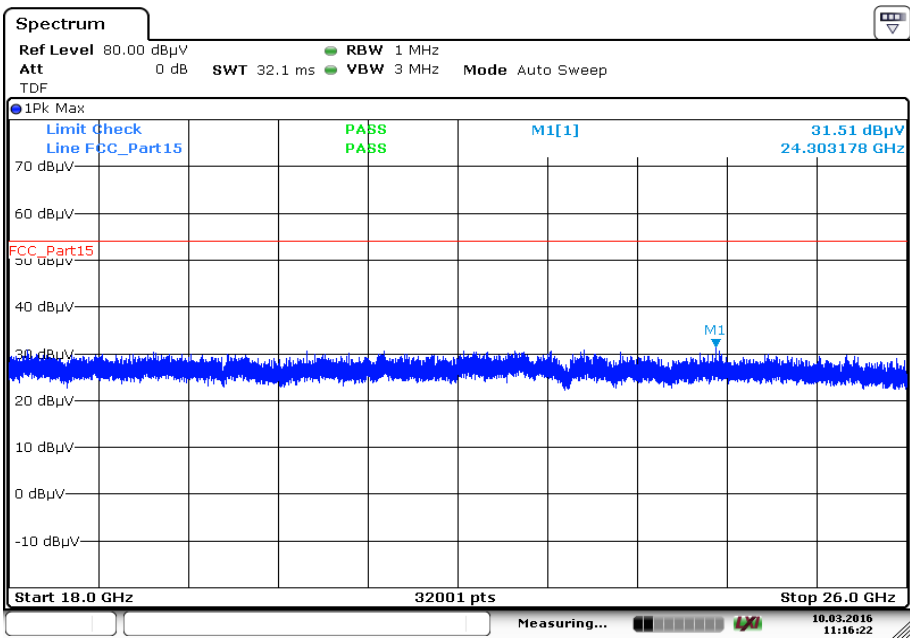


Plot 16: 12 GHz to 18 GHz, 5260 MHz, vertical & horizontal polarization



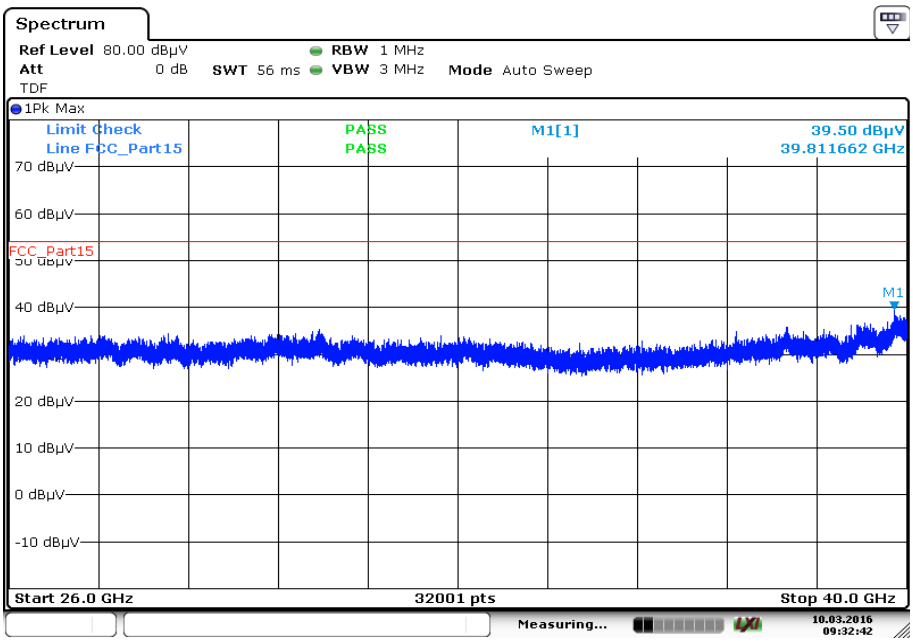
Date: 9.MAR.2016 18:45:26

Plot 17: 18 GHz to 26 GHz, 5260 MHz, vertical & horizontal polarization



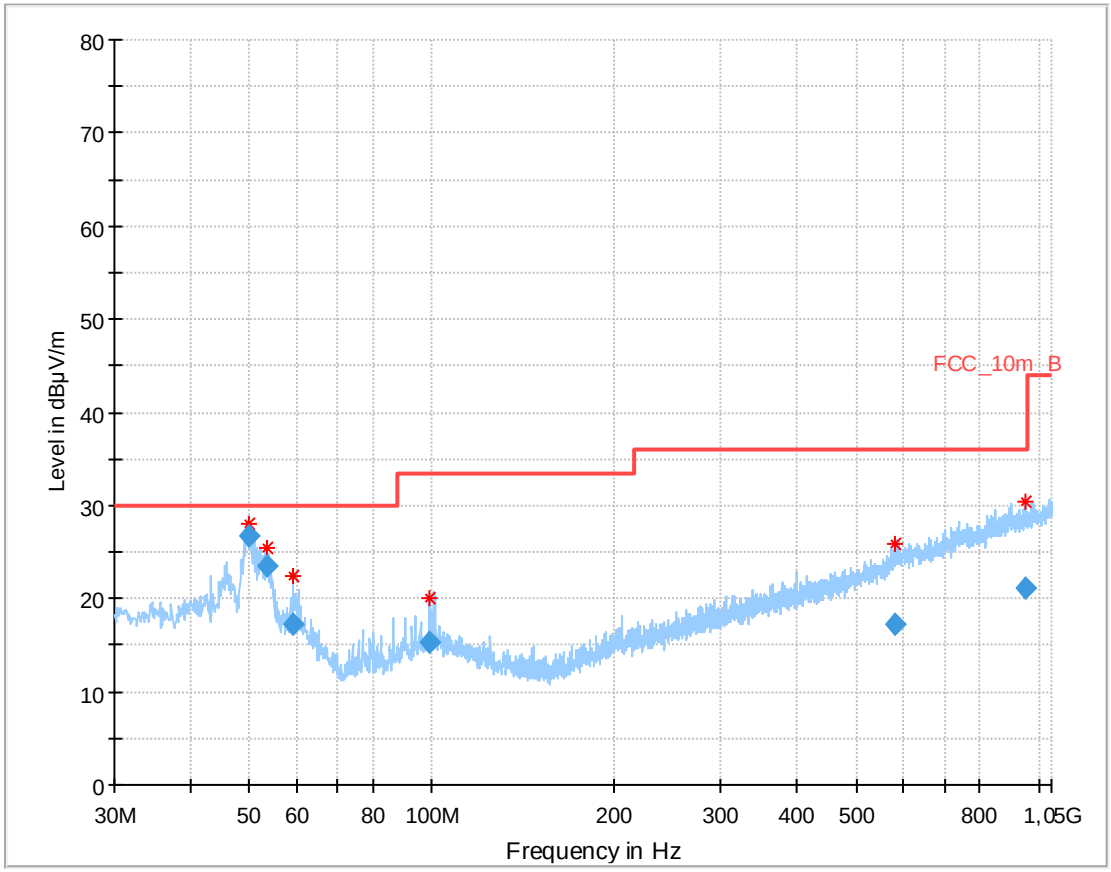
Date: 10.MAR.2016 11:16:22

Plot 18: 26 GHz to 40 GHz, 5260 MHz, vertical & horizontal polarization



Date: 10.MAR.2016 09:32:42

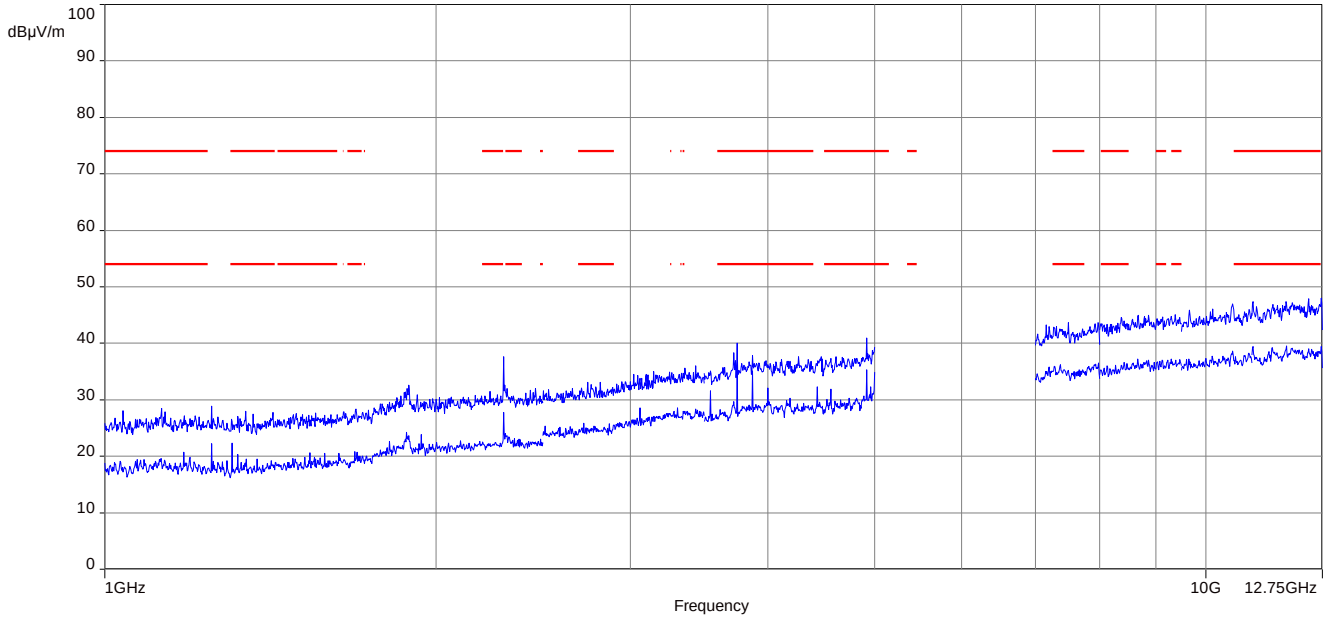
Plot 19: 30 MHz to 1 GHz, 5320 MHz, vertical & horizontal polarization



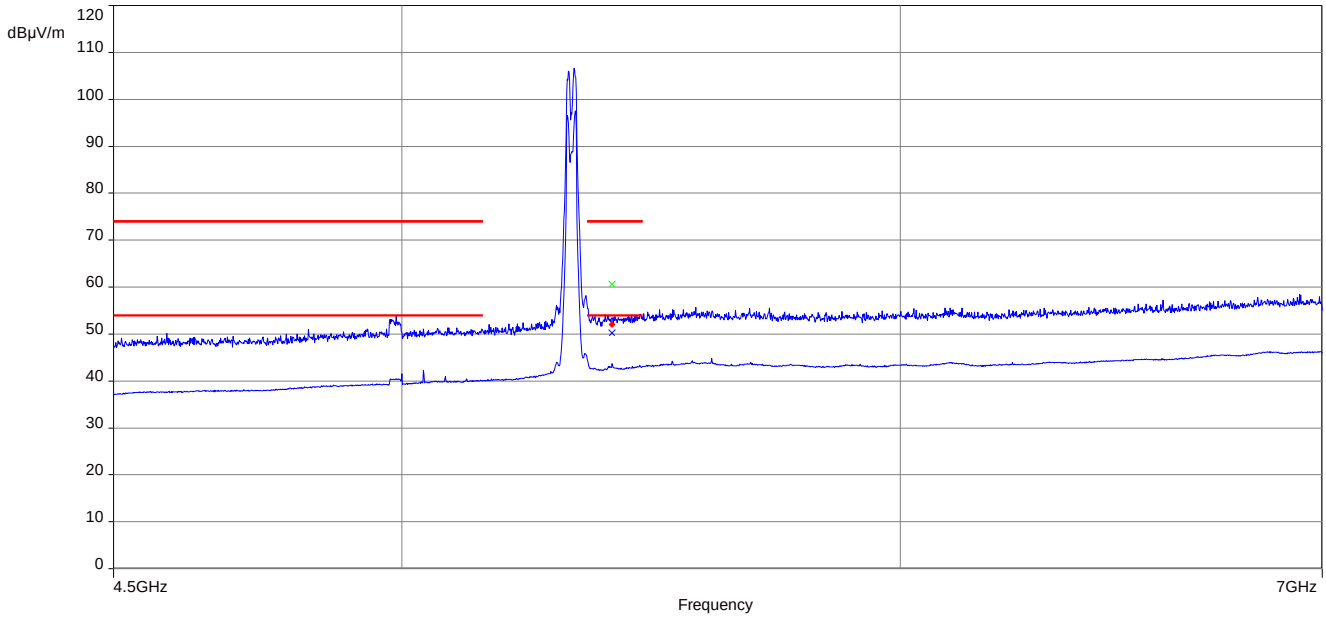
Final_Result:

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
49.880700	26.64	30.00	3.36	1000.0	120.000	98.0	V	53	12.7
53.531100	23.42	30.00	6.58	1000.0	120.000	101.0	V	65	12.1
59.151000	17.30	30.00	12.70	1000.0	120.000	98.0	V	14	10.8
99.016650	15.32	33.50	18.18	1000.0	120.000	101.0	V	5	12.0
582.004650	17.22	36.00	18.78	1000.0	120.000	170.0	V	321	20.2
953.851200	21.14	36.00	14.86	1000.0	120.000	170.0	V	92	24.3

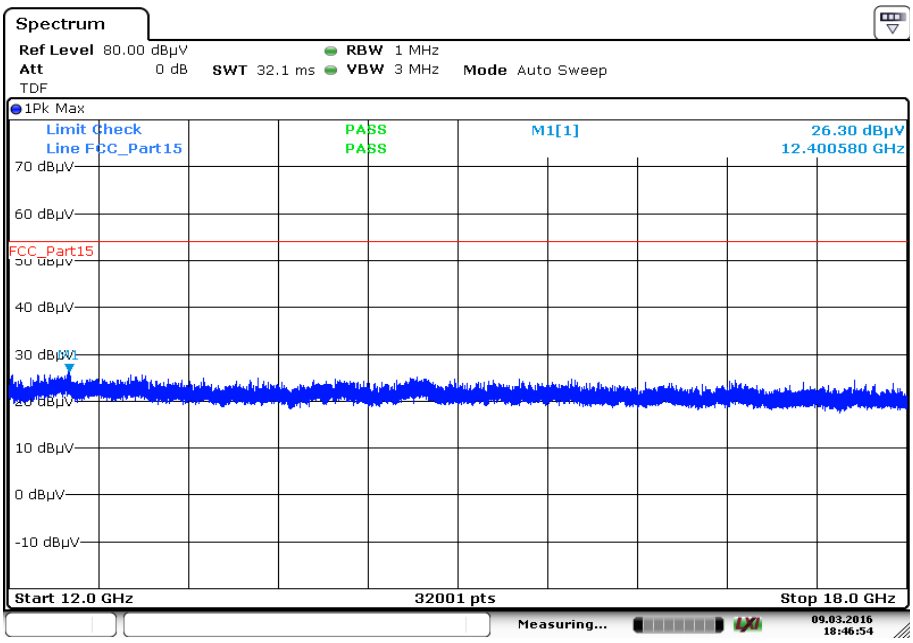
Plot 20: 1 GHz to 12.75 GHz, 5320 MHz, vertical & horizontal polarization



Plot 21: 4.5 GHz to 7 GHz, 5320 MHz, vertical & horizontal polarization

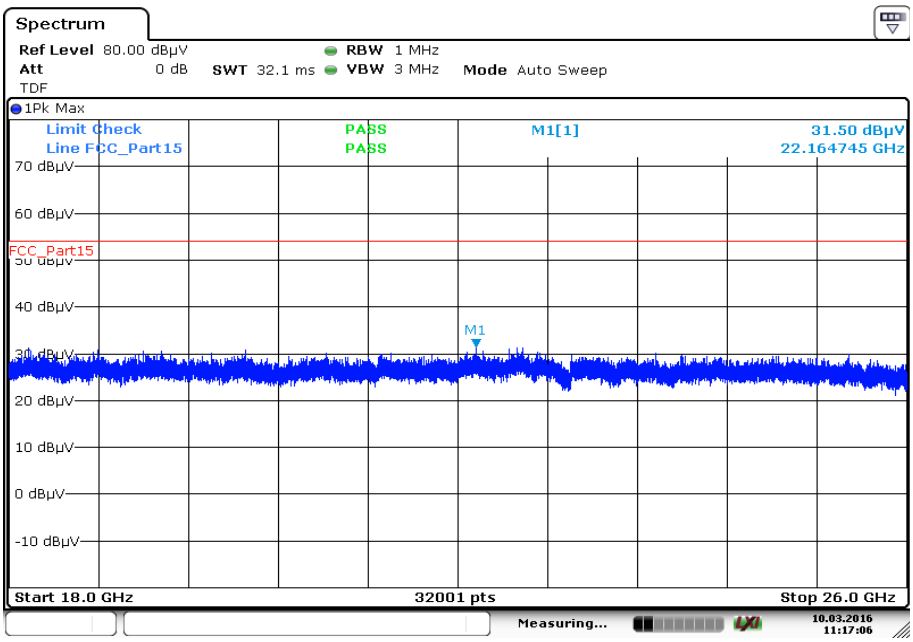


Plot 22: 12 GHz to 18 GHz, 5320 MHz, vertical & horizontal polarization



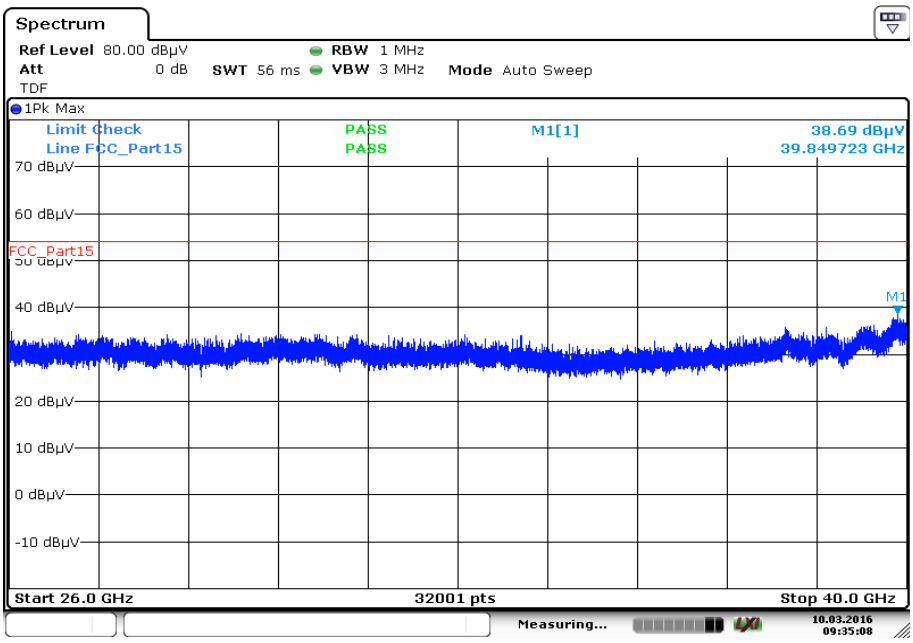
Date: 9.MAR.2016 18:46:54

Plot 23: 18 GHz to 26 GHz, 5320 MHz, vertical & horizontal polarization



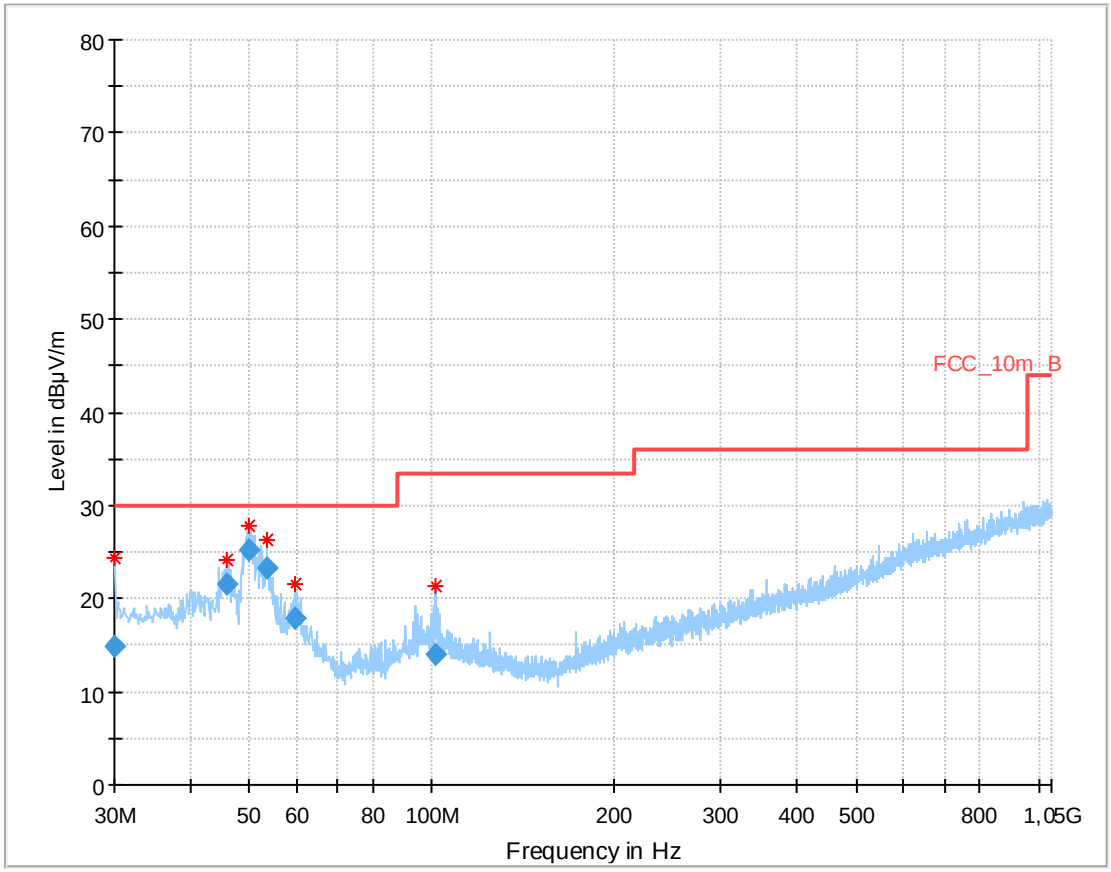
Date: 10.MAR.2016 11:17:06

Plot 24: 26 GHz to 40 GHz, 5320 MHz, vertical & horizontal polarization



Date: 10.MAR.2016 09:35:07

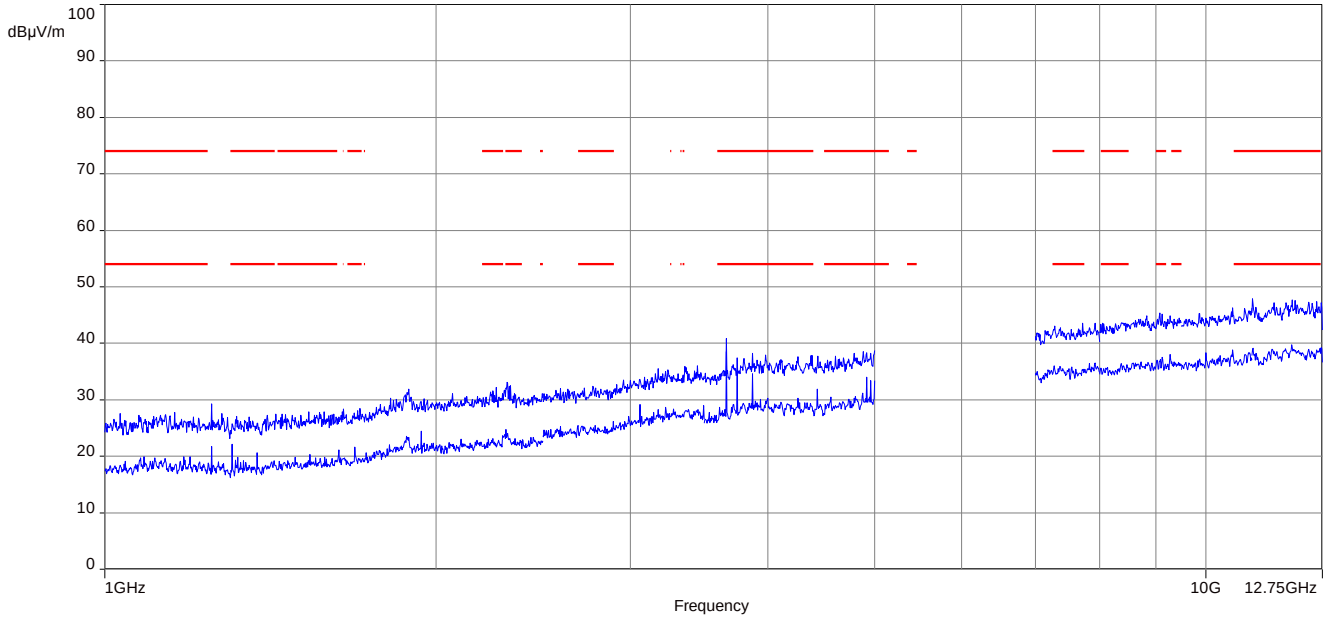
Plot 25: 30 MHz to 1 GHz, 5500 MHz, vertical & horizontal polarization



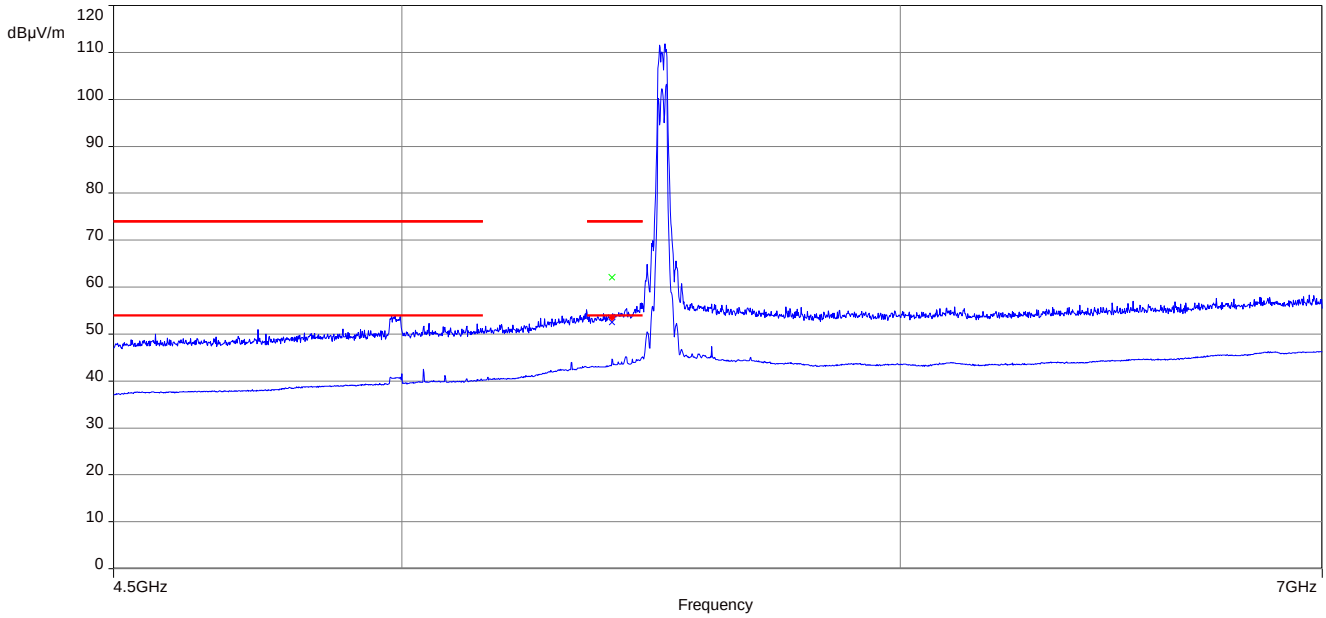
Final_Result:

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
30.052125	14.91	30.00	15.09	1000.0	120.000	170.0	V	137	13.3
45.917850	21.58	30.00	8.42	1000.0	120.000	170.0	V	349	13.6
49.863000	25.20	30.00	4.80	1000.0	120.000	98.0	V	98	12.7
53.539050	23.27	30.00	6.73	1000.0	120.000	98.0	V	59	12.1
59.471250	17.87	30.00	12.13	1000.0	120.000	98.0	V	59	10.7
101.091900	13.94	33.50	19.56	1000.0	120.000	101.0	V	106	12.1

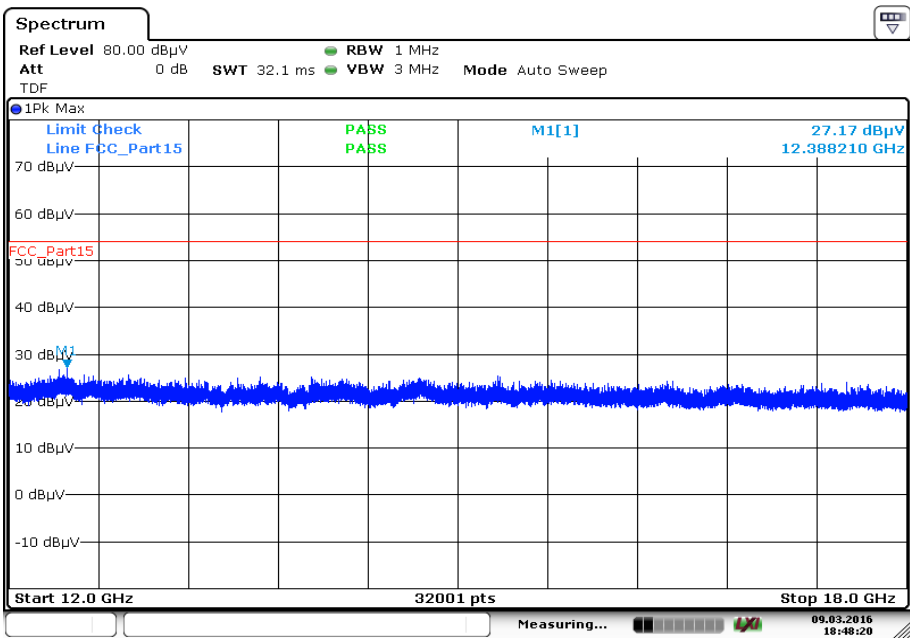
Plot 26: 1 GHz to 12.75 GHz, 5500 MHz, vertical & horizontal polarization



Plot 27: 4.5 GHz to 7 GHz, 5500 MHz, vertical & horizontal polarization

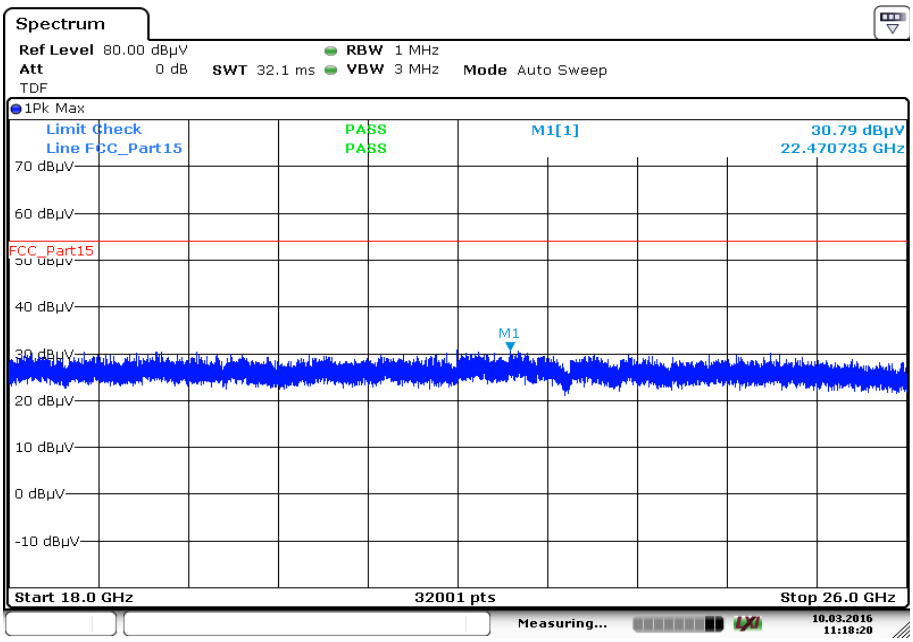


Plot 28: 12 GHz to 18 GHz, 5500 MHz, vertical & horizontal polarization



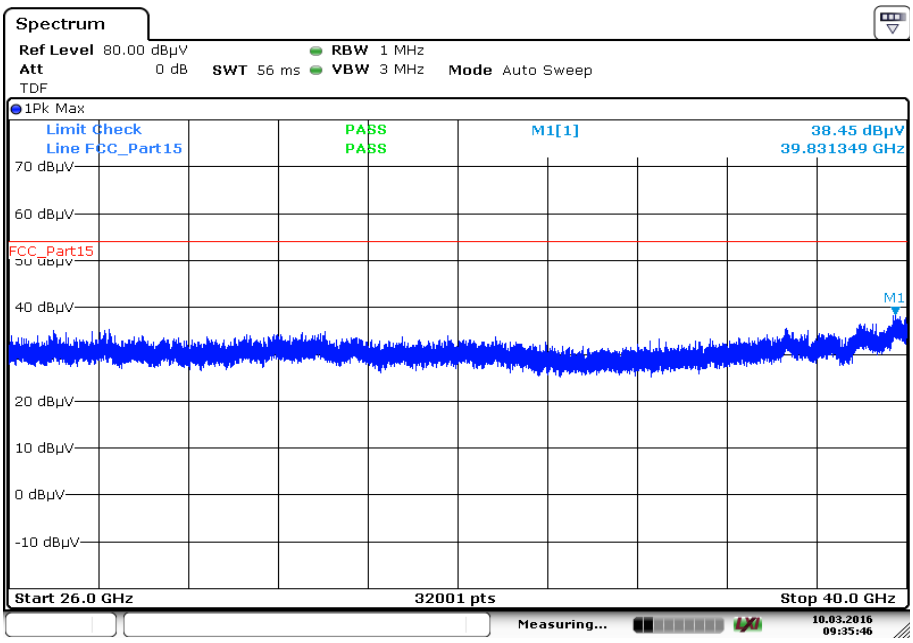
Date: 9.MAR.2016 18:48:20

Plot 29: 18 GHz to 26 GHz, 5500 MHz, vertical & horizontal polarization



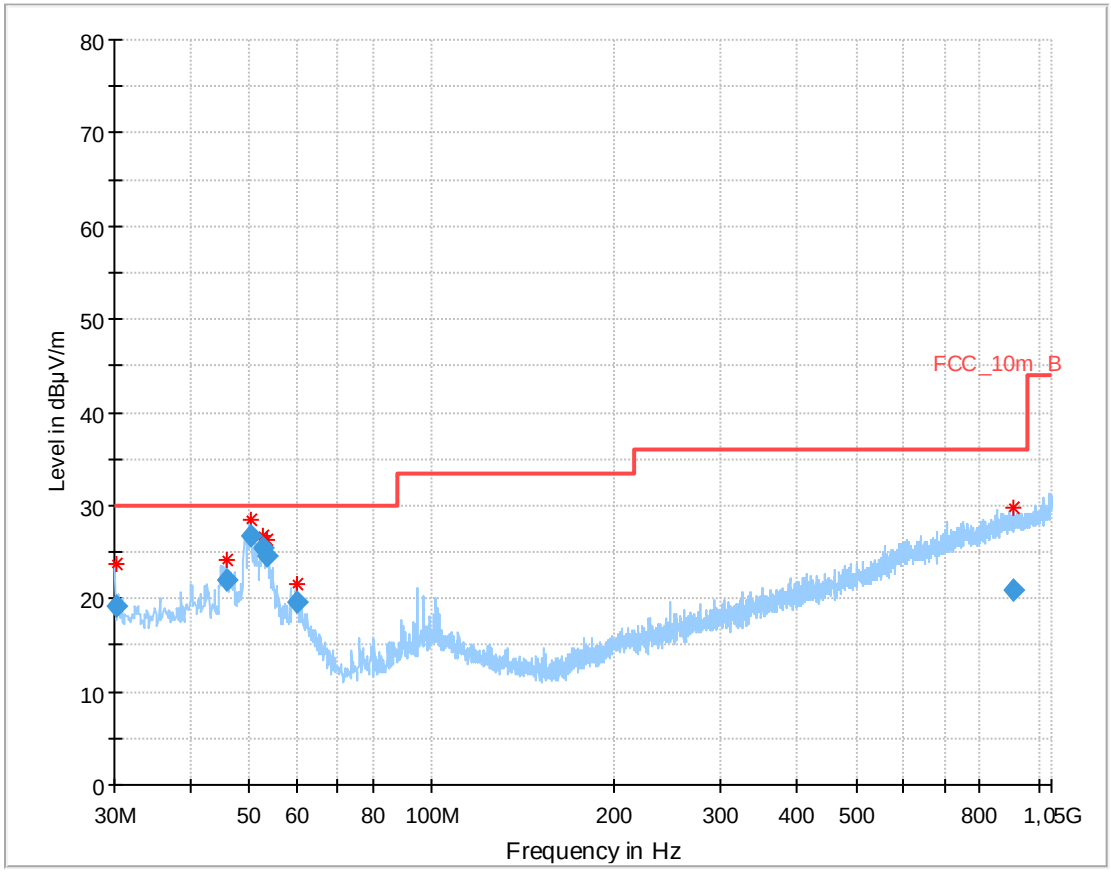
Date: 10.MAR.2016 11:18:19

Plot 30: 26 GHz to 40 GHz, 5500 MHz, vertical & horizontal polarization



Date: 10.MAR.2016 09:35:46

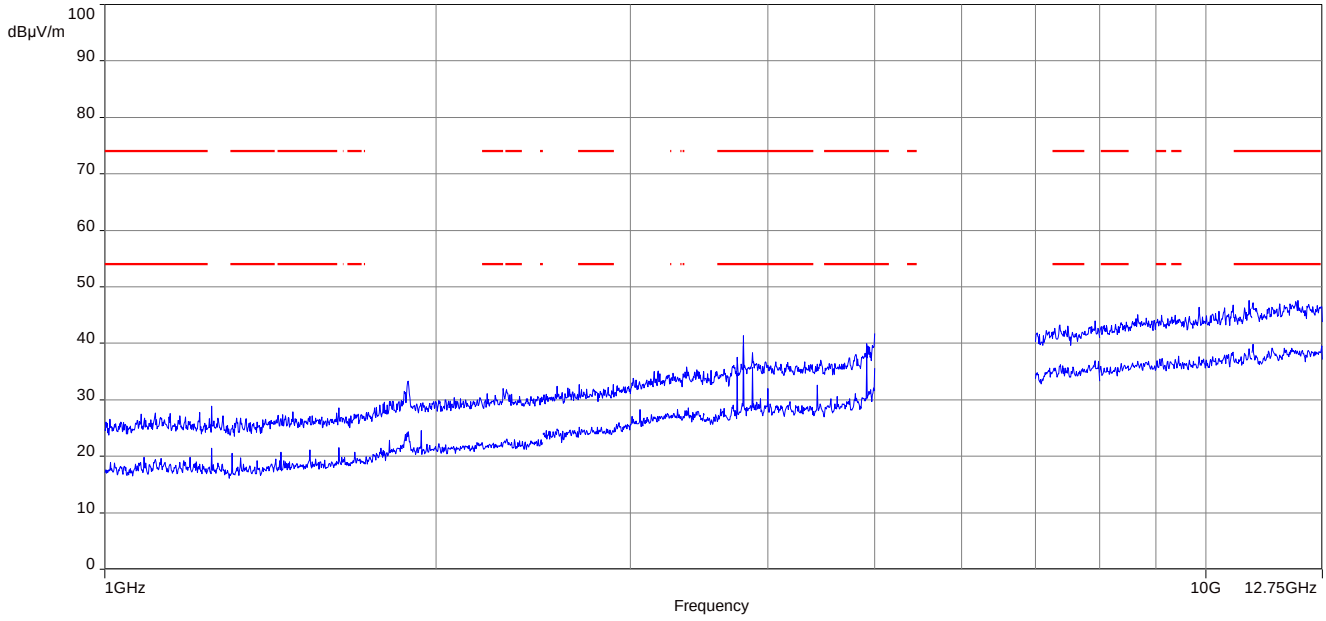
Plot 31: 30 MHz to 1 GHz, 5700 MHz, vertical & horizontal polarization



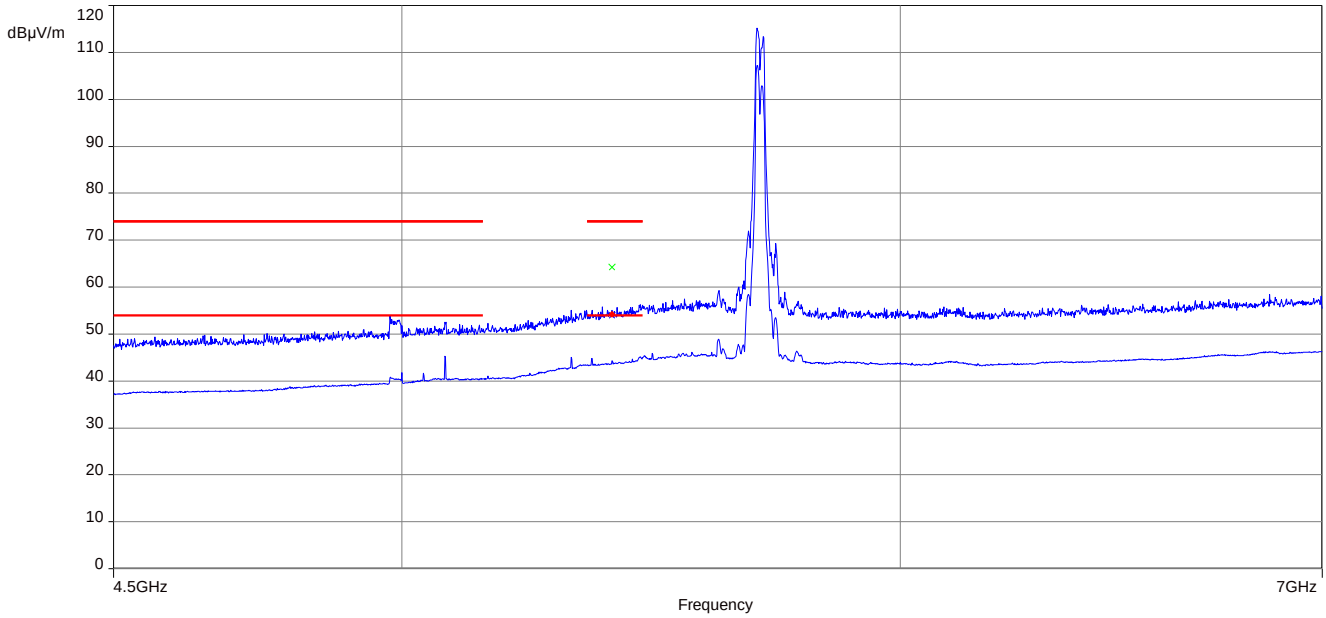
Final_Result:

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
30.224400	19.10	30.00	10.90	1000.0	120.000	101.0	V	198	13.4
45.886650	21.91	30.00	8.09	1000.0	120.000	98.0	V	170	13.6
50.244750	26.64	30.00	3.36	1000.0	120.000	98.0	V	21	12.6
52.554900	25.38	30.00	4.62	1000.0	120.000	98.0	V	0	12.2
53.552400	24.65	30.00	5.35	1000.0	120.000	98.0	V	0	12.1
59.801850	19.58	30.00	10.42	1000.0	120.000	170.0	V	0	10.6
907.902150	20.98	36.00	15.02	1000.0	120.000	170.0	H	287	24.1

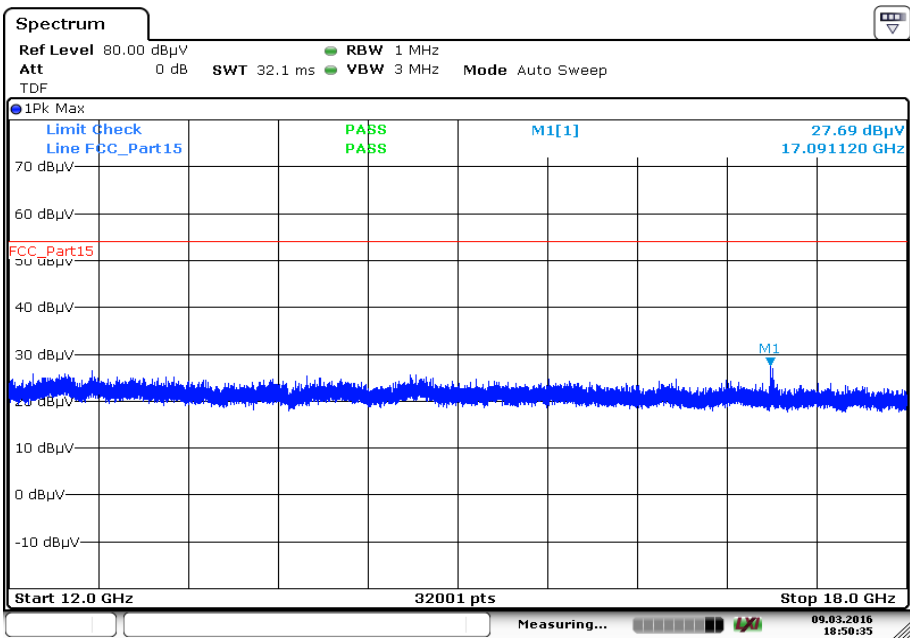
Plot 32: 1 GHz to 12.75 GHz, 5700 MHz, vertical & horizontal polarization



Plot 33: 4.5 GHz to 7 GHz, 5700 MHz, vertical & horizontal polarization

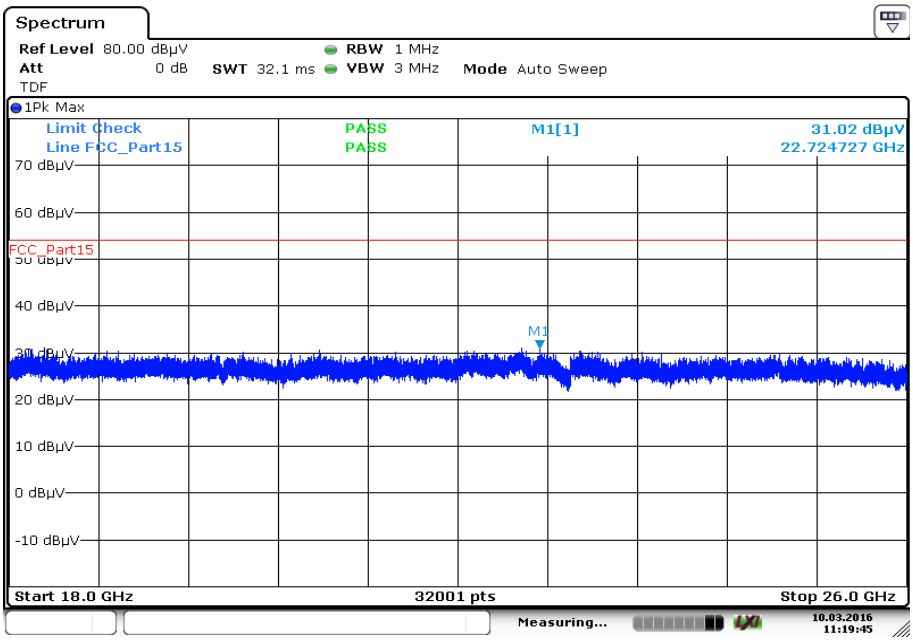


Plot 34: 12 GHz to 18 GHz, 5700 MHz, vertical & horizontal polarization



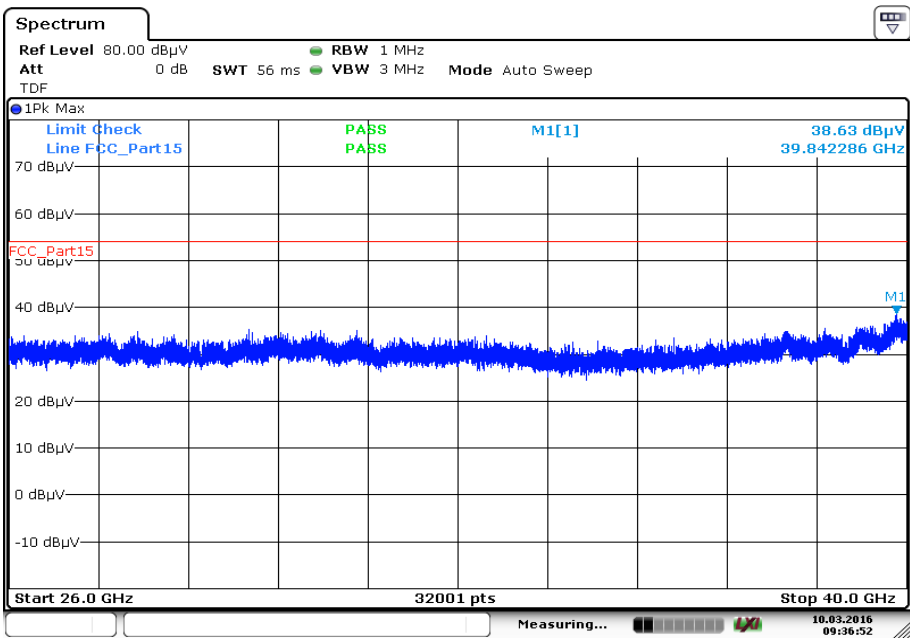
Date: 9.MAR.2016 18:50:35

Plot 35: 18 GHz to 26 GHz, 5700 MHz, vertical & horizontal polarization



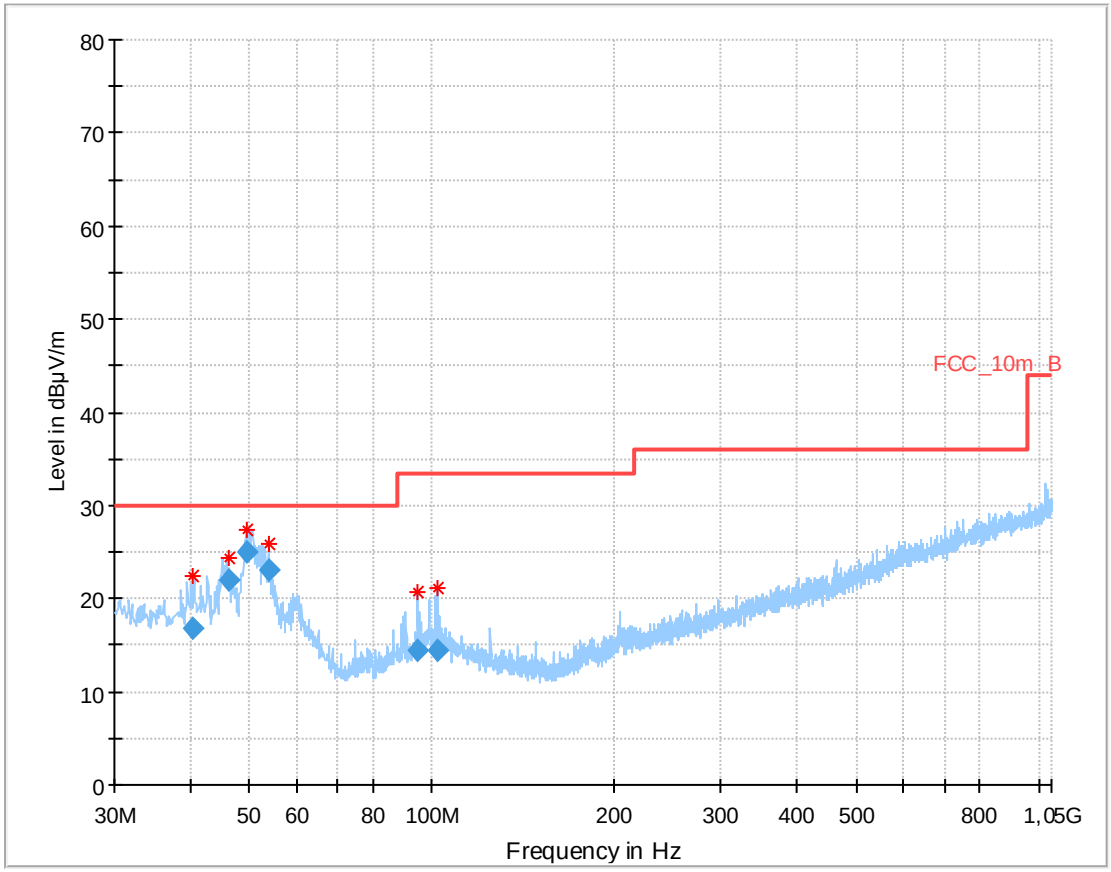
Date: 10.MAR.2016 11:19:45

Plot 36: 26 GHz to 40 GHz, 5700 MHz, vertical & horizontal polarization



Date: 10.MAR.2016 09:36:51

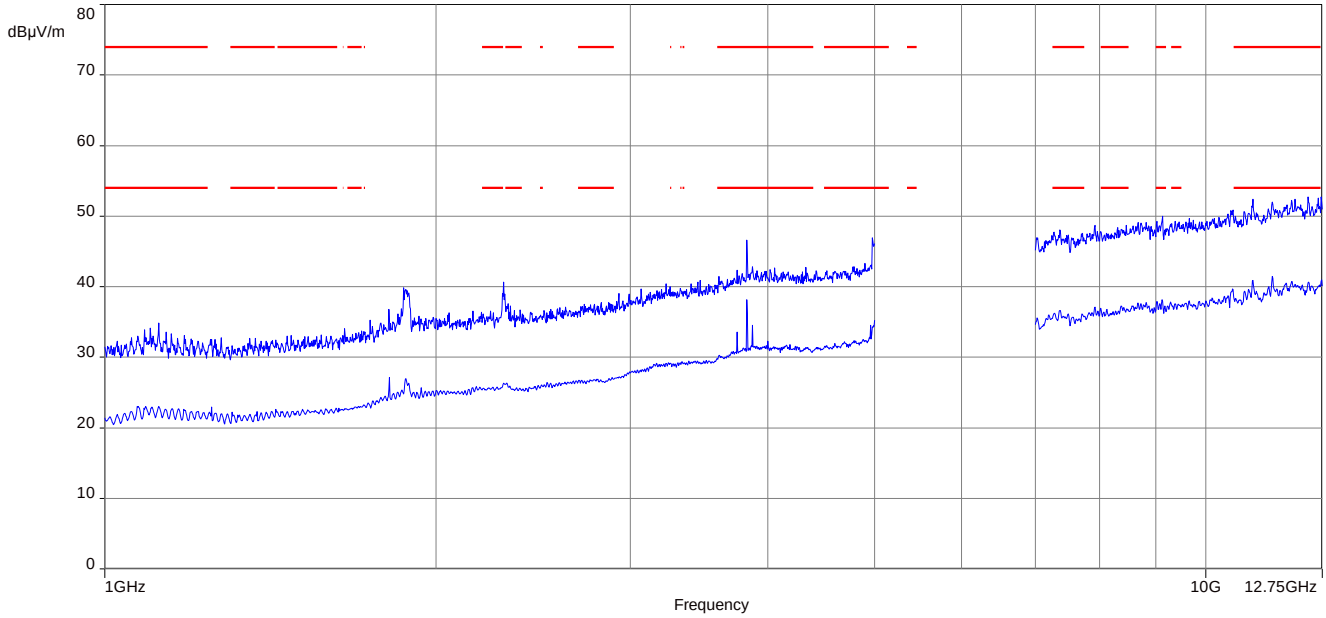
Plot 37: 30 MHz to 1 GHz, 5745 MHz, vertical & horizontal polarization



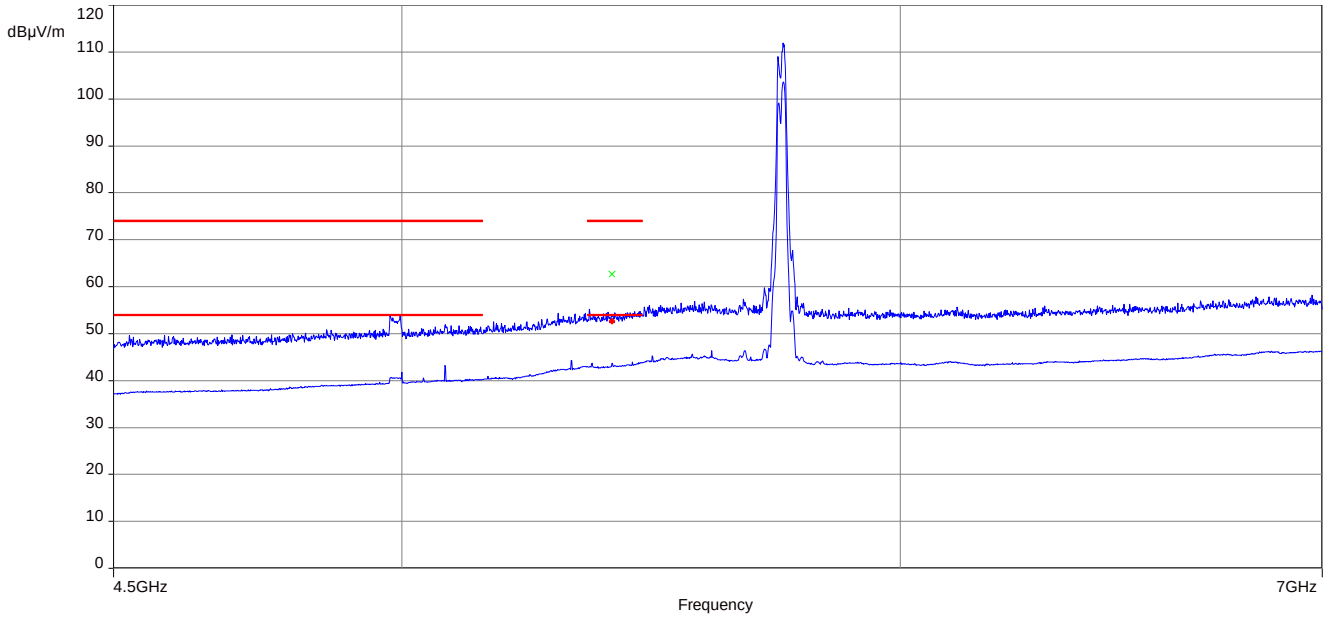
Final_Result:

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
40.340850	16.72	30.00	13.28	1000.0	120.000	98.0	V	309	14.0
46.218450	21.98	30.00	8.02	1000.0	120.000	98.0	V	120	13.6
49.519050	24.99	30.00	5.01	1000.0	120.000	101.0	V	36	12.8
53.858550	23.08	30.00	6.92	1000.0	120.000	101.0	V	88	12.0
94.998300	14.43	33.50	19.07	1000.0	120.000	98.0	V	353	11.3
102.461100	14.51	33.50	18.99	1000.0	120.000	101.0	V	353	11.9

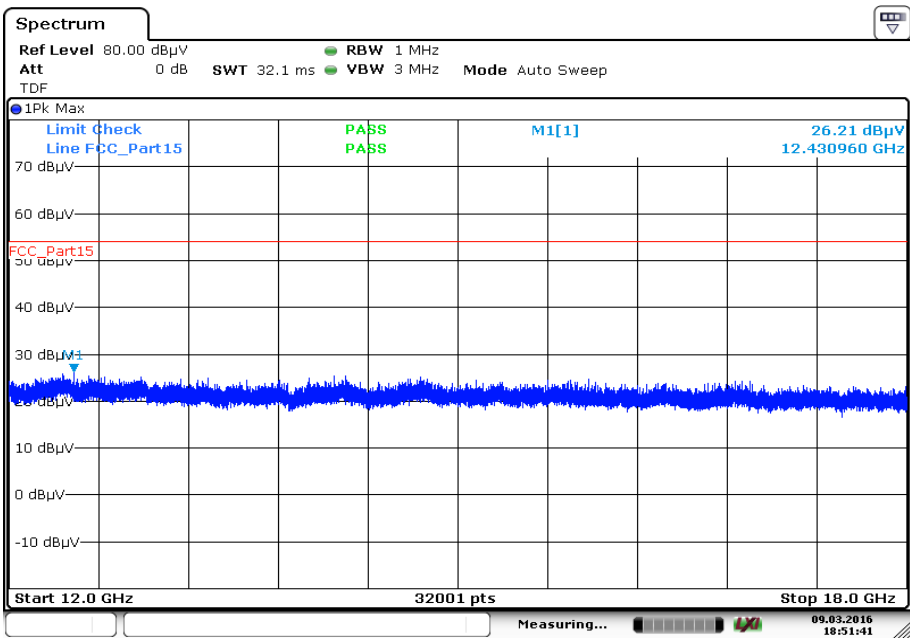
Plot 38: 1 GHz to 12.75 GHz, 5745 MHz, vertical & horizontal polarization



Plot 39: 4.5 GHz to 7 GHz, 5745 MHz, vertical & horizontal polarization

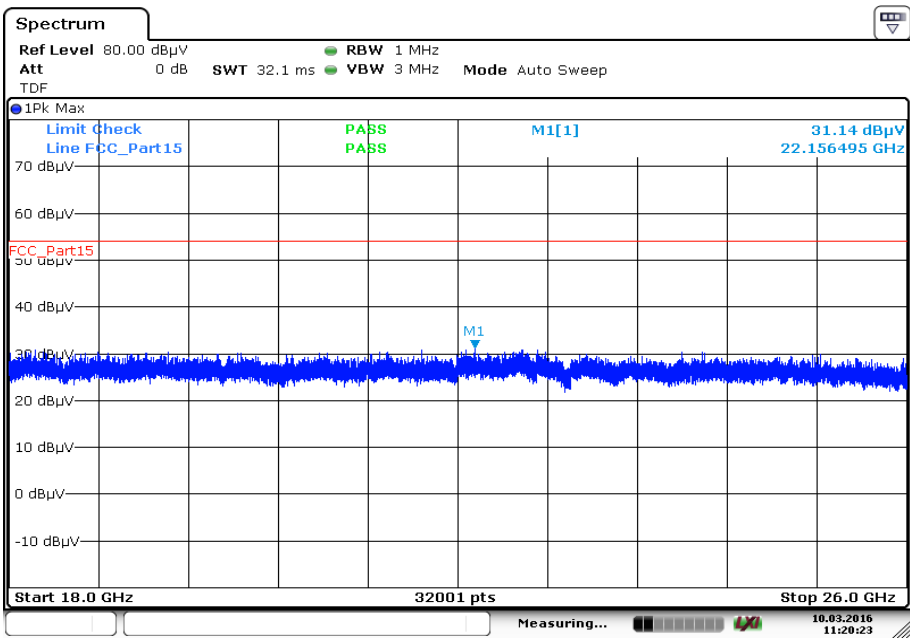


Plot 40: 12 GHz to 18 GHz, 5745 MHz, vertical & horizontal polarization



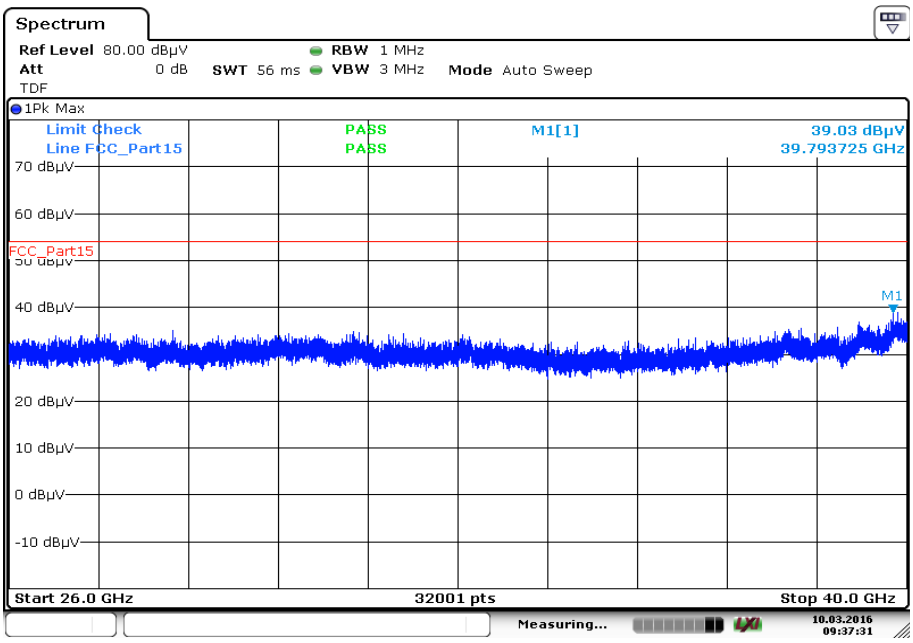
Date: 9.MAR.2016 18:51:40

Plot 41: 18 GHz to 26 GHz, 5745 MHz, vertical & horizontal polarization



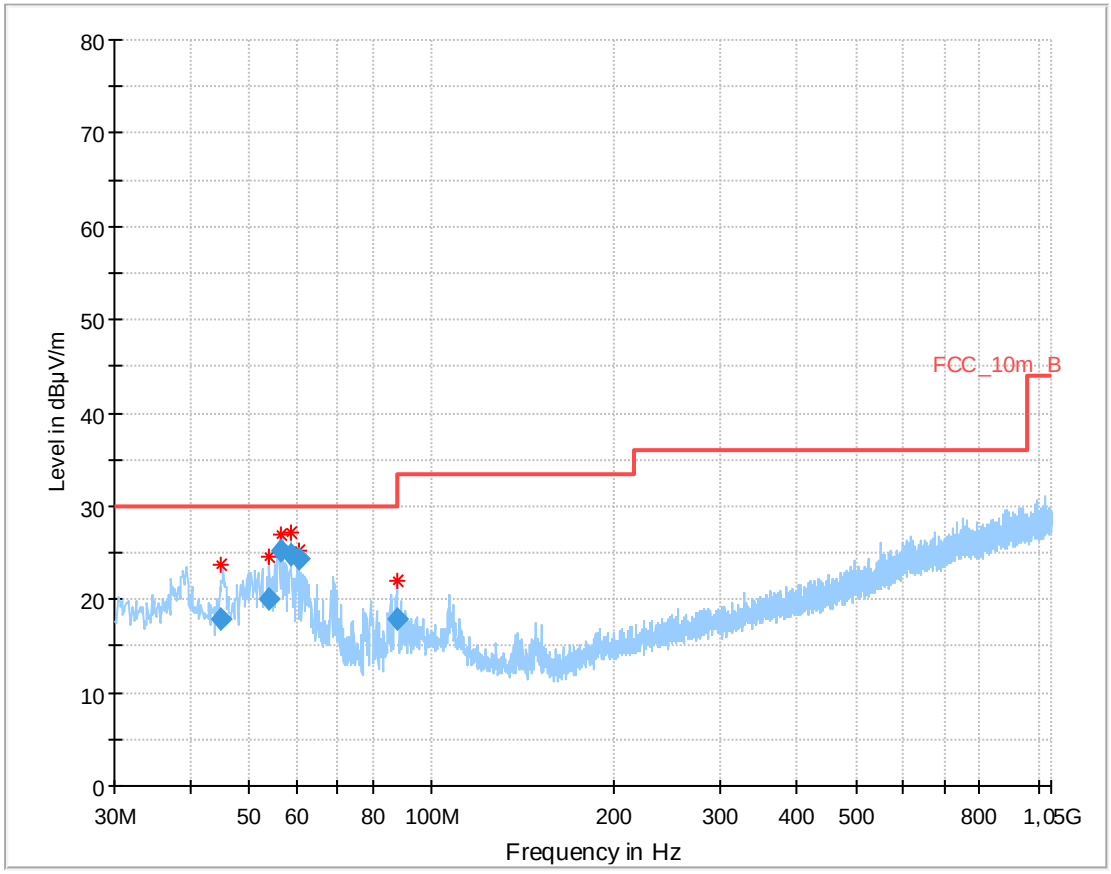
Date: 10.MAR.2016 11:20:23

Plot 42: 26 GHz to 40 GHz, 5745 MHz, vertical & horizontal polarization



Date: 10.MAR.2016 09:37:31

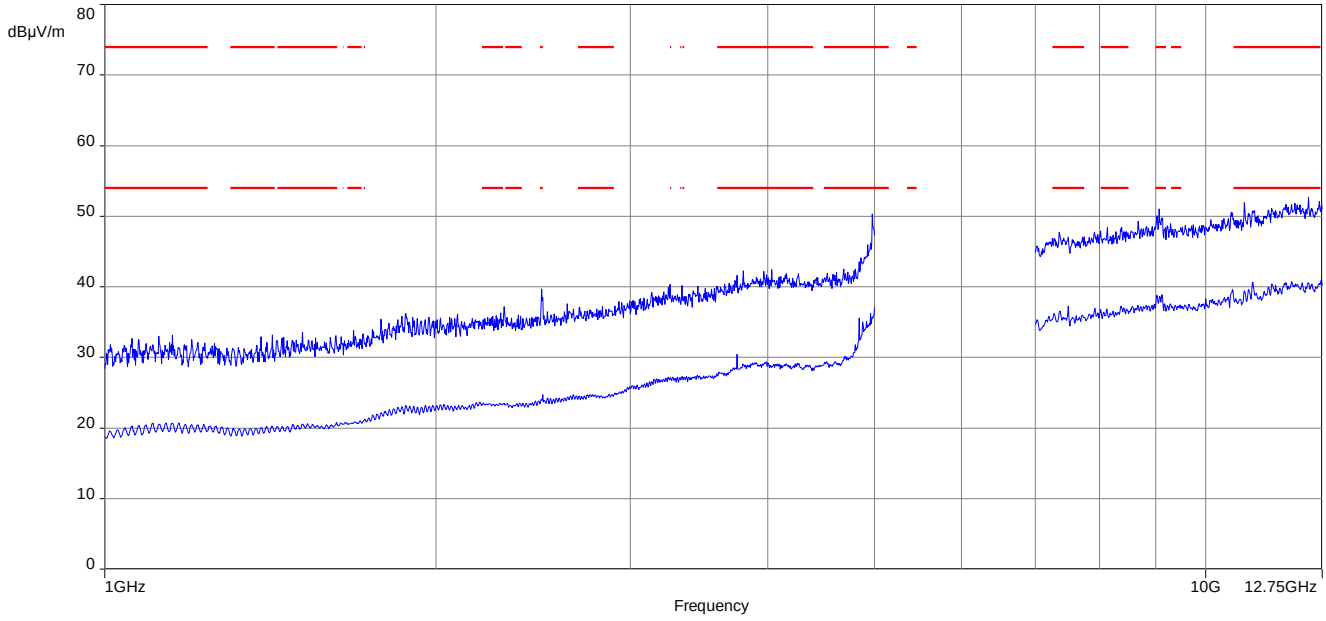
Plot 43: 30 MHz to 1 GHz, 5785 MHz, vertical & horizontal polarization



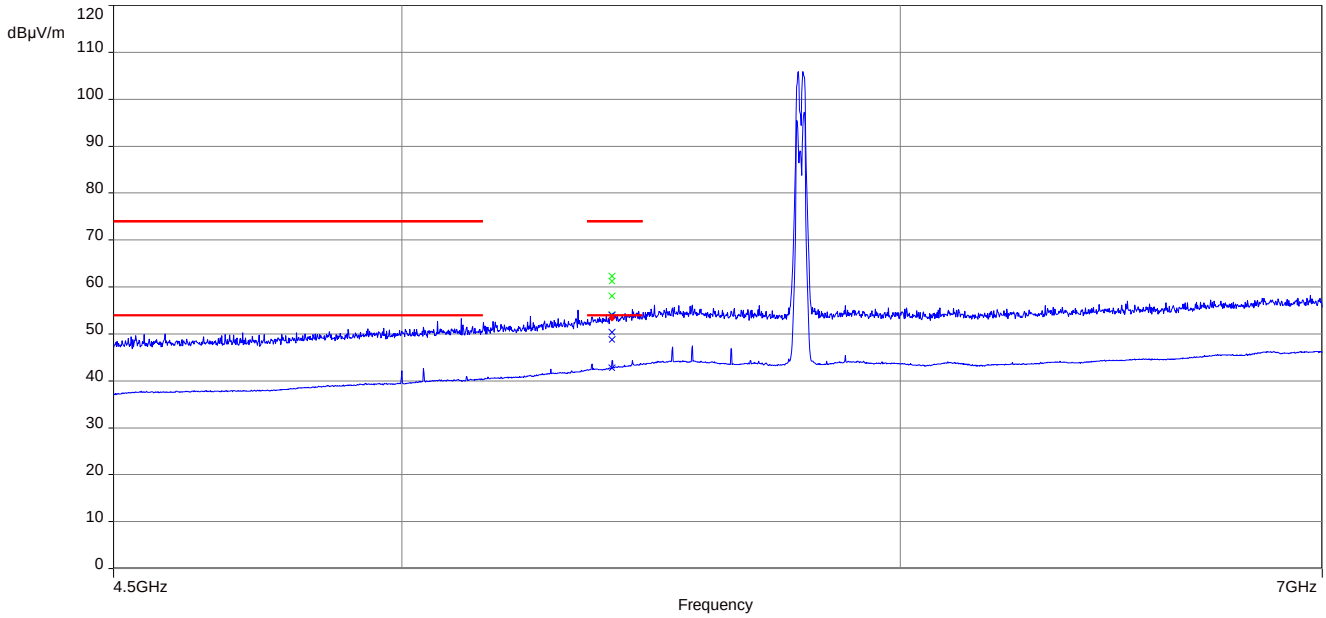
Final_Result

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
45.075300	18.00	30.00	12.00	1000.0	120.000	98.0	V	95.0	13.8
53.897100	20.04	30.00	9.96	1000.0	120.000	101.0	V	318.0	12.0
56.514750	25.31	30.00	4.69	1000.0	120.000	170.0	V	351.0	11.4
58.714050	24.84	30.00	5.16	1000.0	120.000	98.0	V	245.0	10.9
60.214950	24.38	30.00	5.62	1000.0	120.000	98.0	V	95.0	10.5
87.663750	17.99	30.00	12.01	1000.0	120.000	101.0	V	0.0	9.9

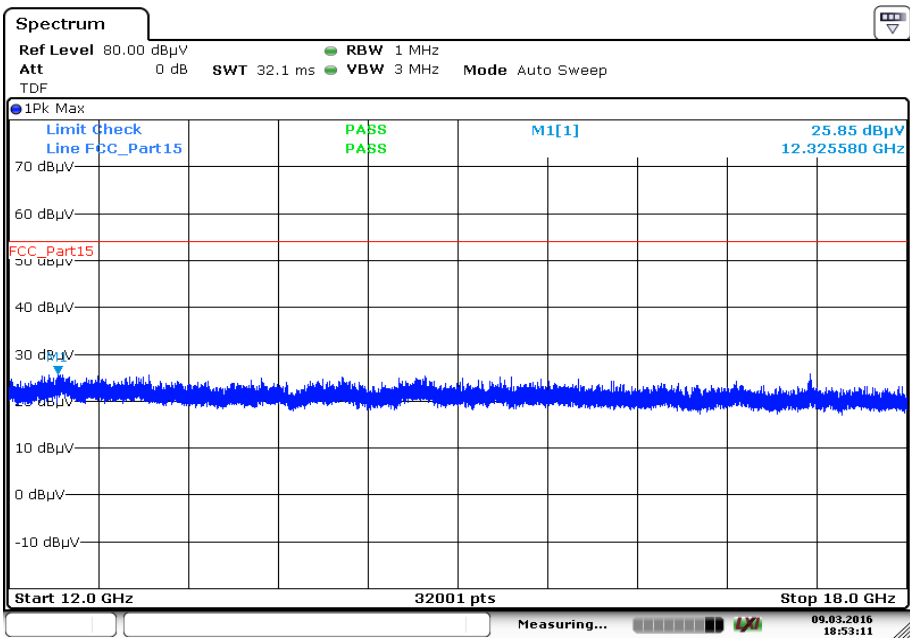
Plot 44: 1 GHz to 12.75 GHz, 5785 MHz, vertical & horizontal polarization



Plot 45: 4.5 GHz to 7 GHz, 5785 MHz, vertical & horizontal polarization

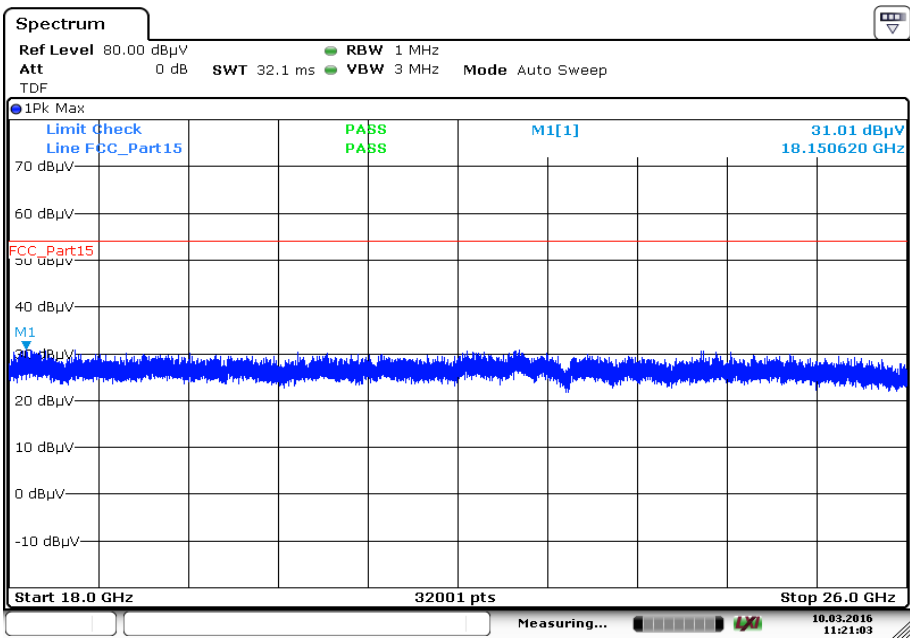


Plot 46: 12 GHz to 18 GHz, 5785 MHz, vertical & horizontal polarization



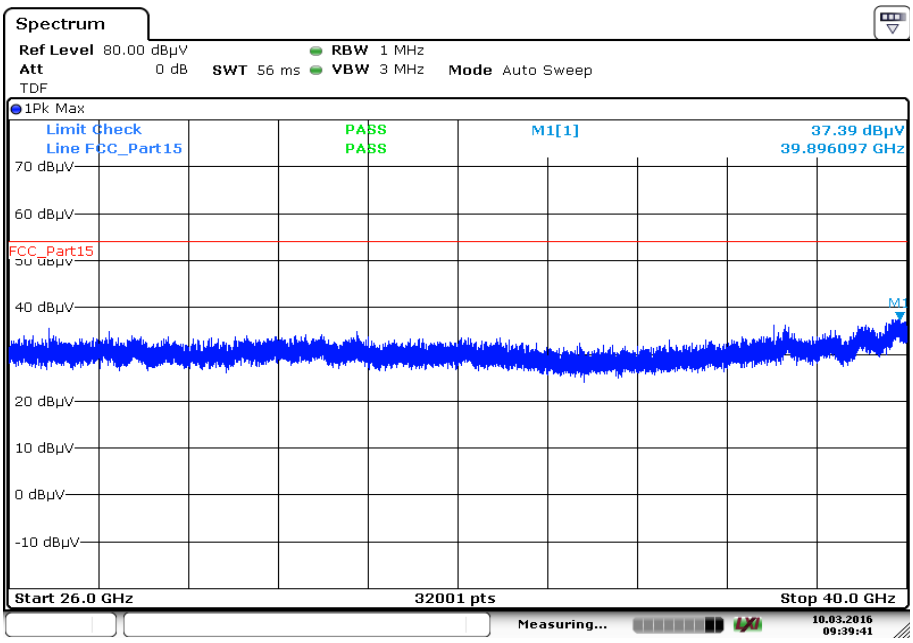
Date: 9.MAR.2016 18:53:11

Plot 47: 18 GHz to 26 GHz, 5785 MHz, vertical & horizontal polarization



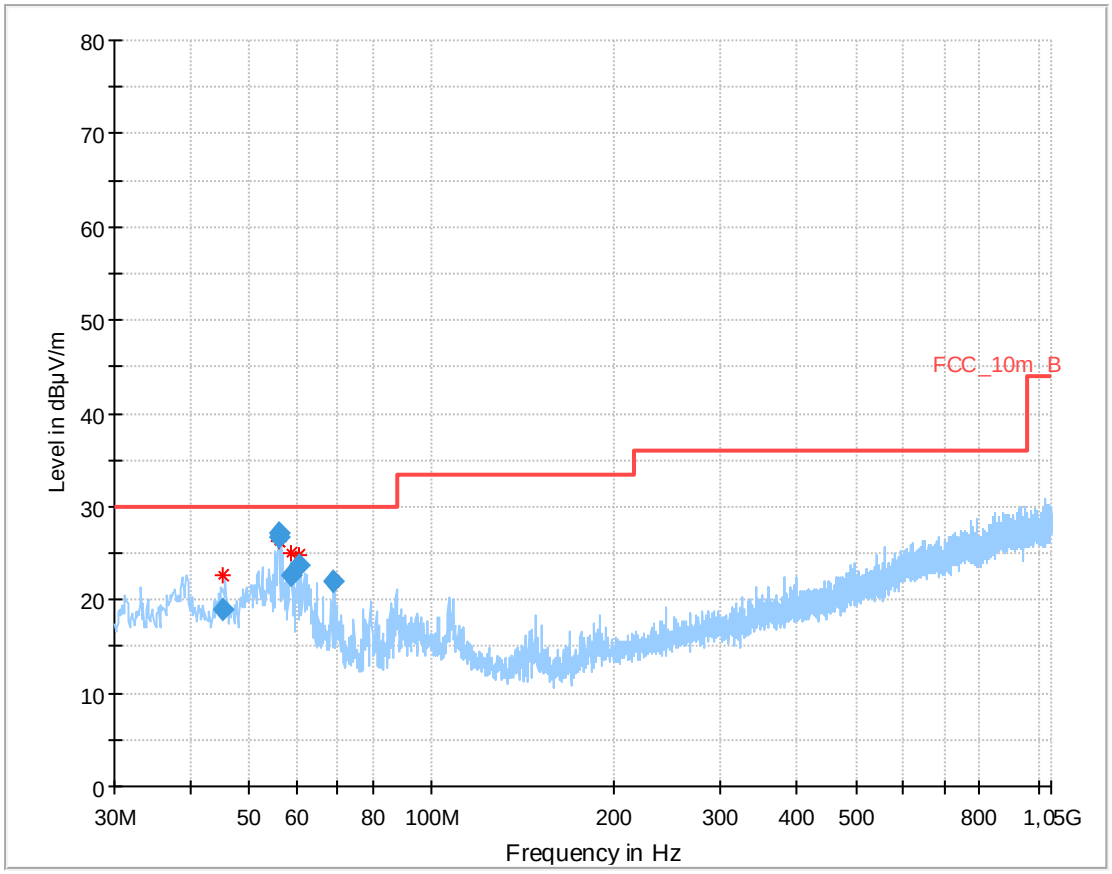
Date: 10.MAR.2016 11:21:03

Plot 48: 26 GHz to 40 GHz, 5785 MHz, vertical & horizontal polarization



Date: 10.MAR.2016 09:39:41

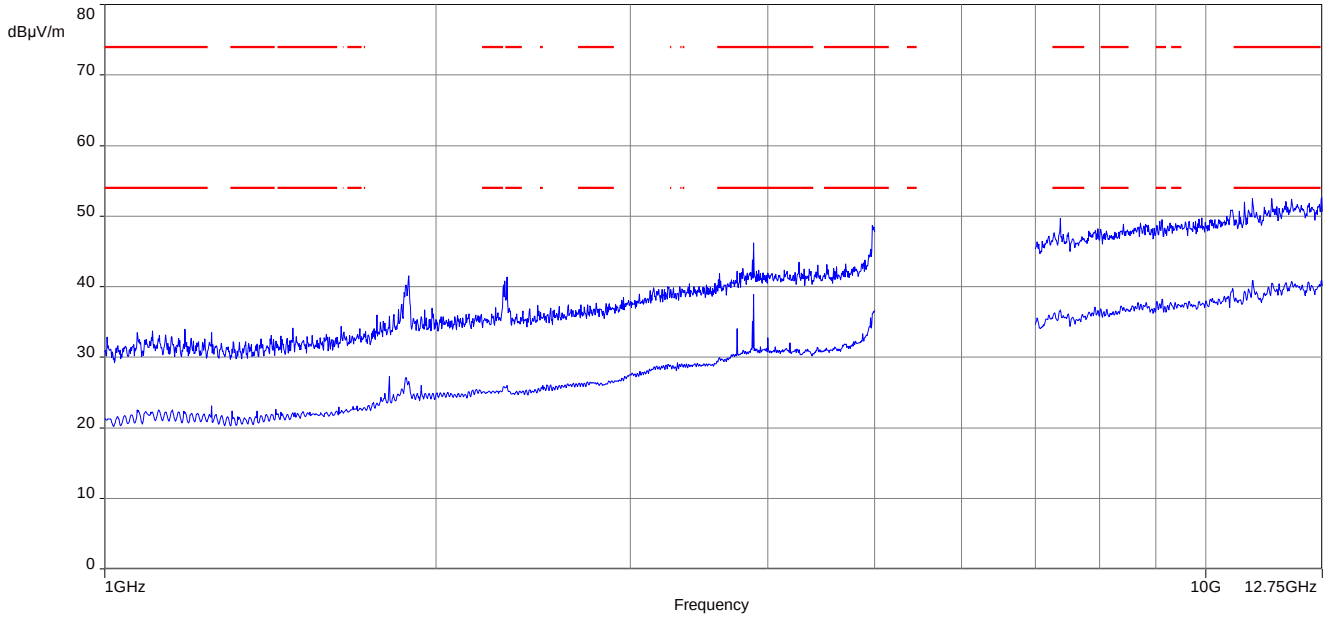
Plot 49: 30 MHz to 1 GHz, 5825 MHz, vertical & horizontal polarization



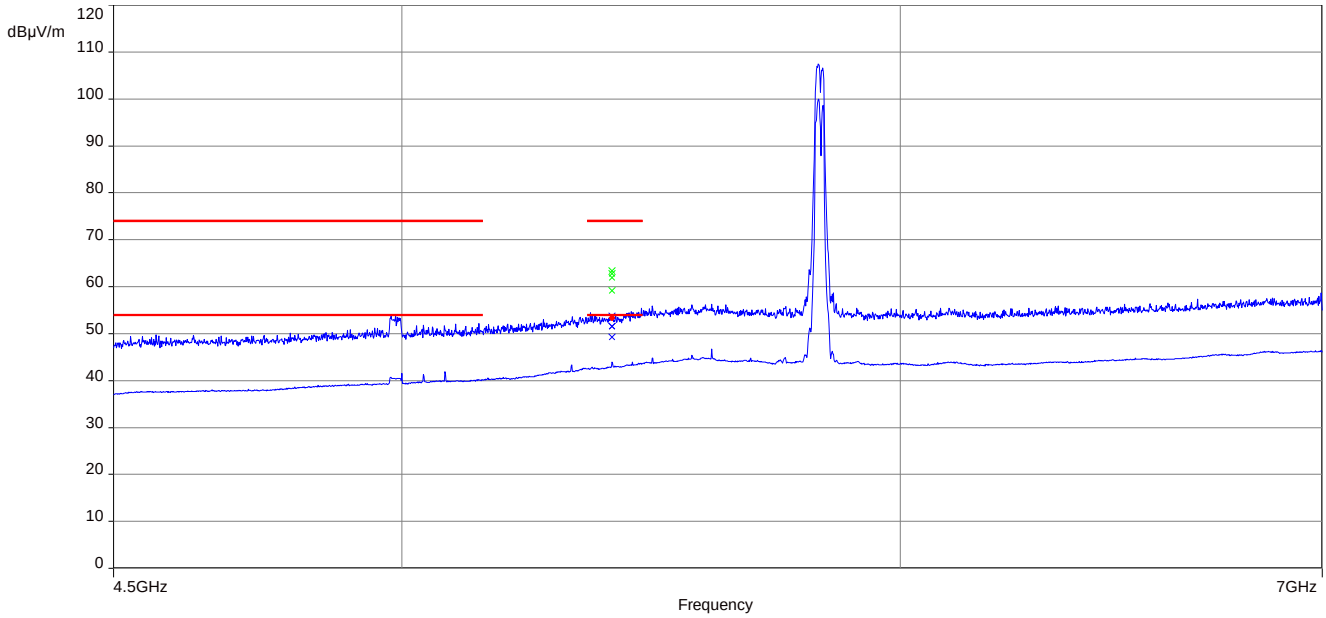
Final_Result

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
45.284700	19.02	30.00	10.98	1000.0	120.000	98.0	V	105.0	13.8
56.020950	27.12	30.00	2.88	1000.0	120.000	185.0	V	336.0	11.6
56.023500	26.78	30.00	3.22	1000.0	120.000	180.0	V	324.0	11.6
58.718700	22.57	30.00	7.43	1000.0	120.000	101.0	V	286.0	10.9
60.228600	23.68	30.00	6.32	1000.0	120.000	98.0	V	215.0	10.5
68.987550	22.01	30.00	7.99	1000.0	120.000	179.0	V	316.0	8.6

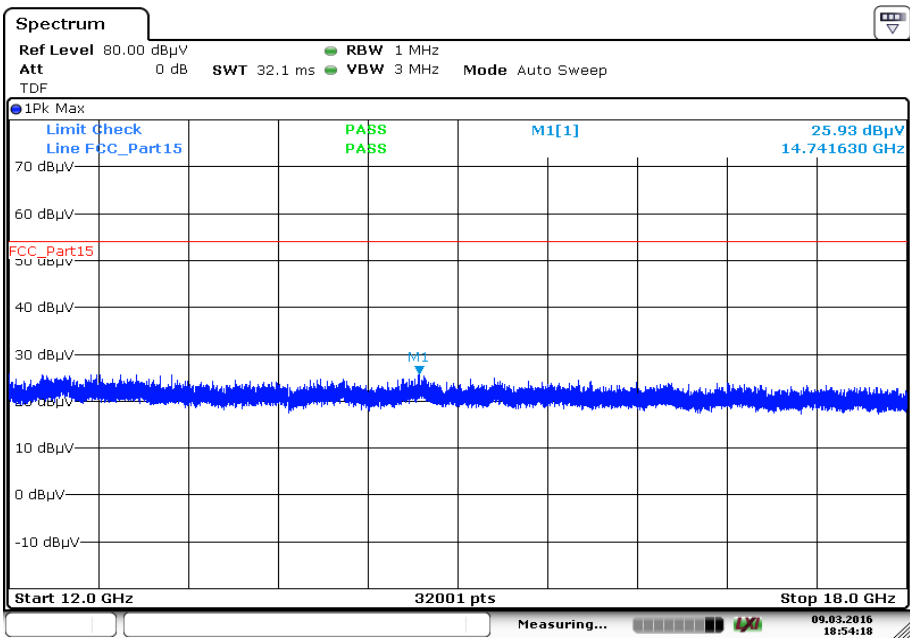
Plot 50: 1 GHz to 12.75 GHz, 5825 MHz, vertical & horizontal polarization



Plot 51: 4.5 GHz to 7 GHz, 5825 MHz, vertical & horizontal polarization

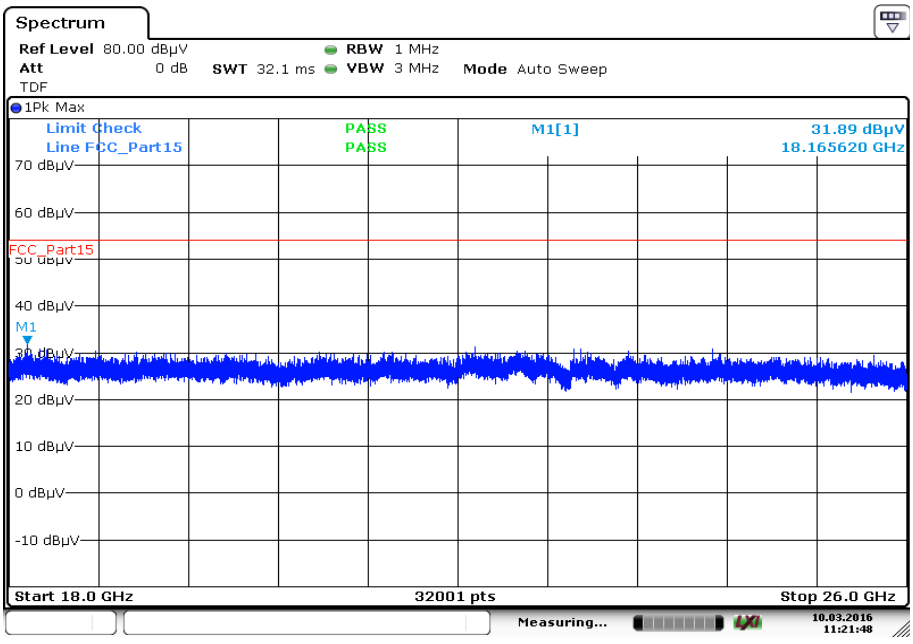


Plot 52: 12 GHz to 18 GHz, 5825 MHz, vertical & horizontal polarization



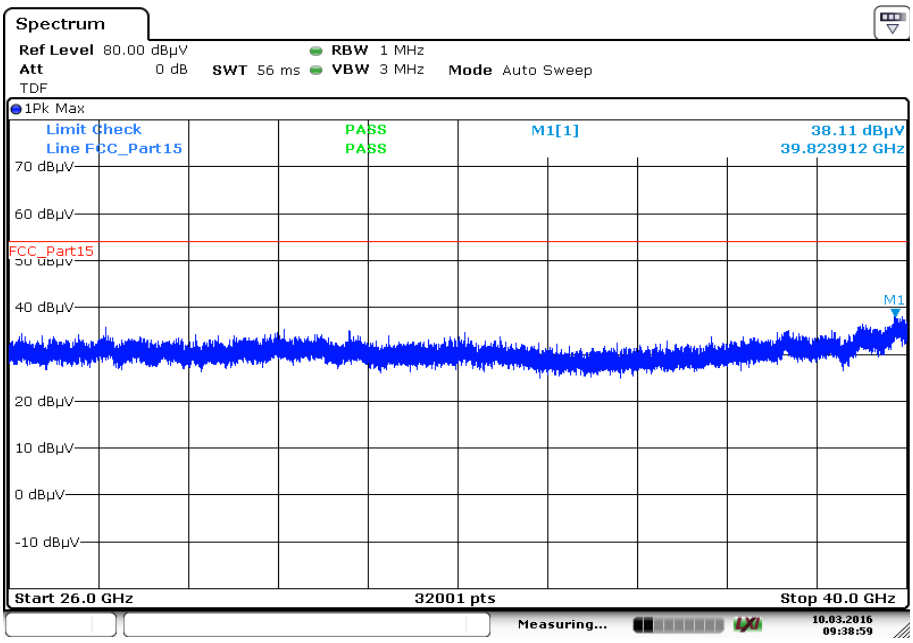
Date: 9.MAR.2016 18:54:18

Plot 53: 18 GHz to 26 GHz, 5825 MHz, vertical & horizontal polarization



Date: 10.MAR.2016 11:21:48

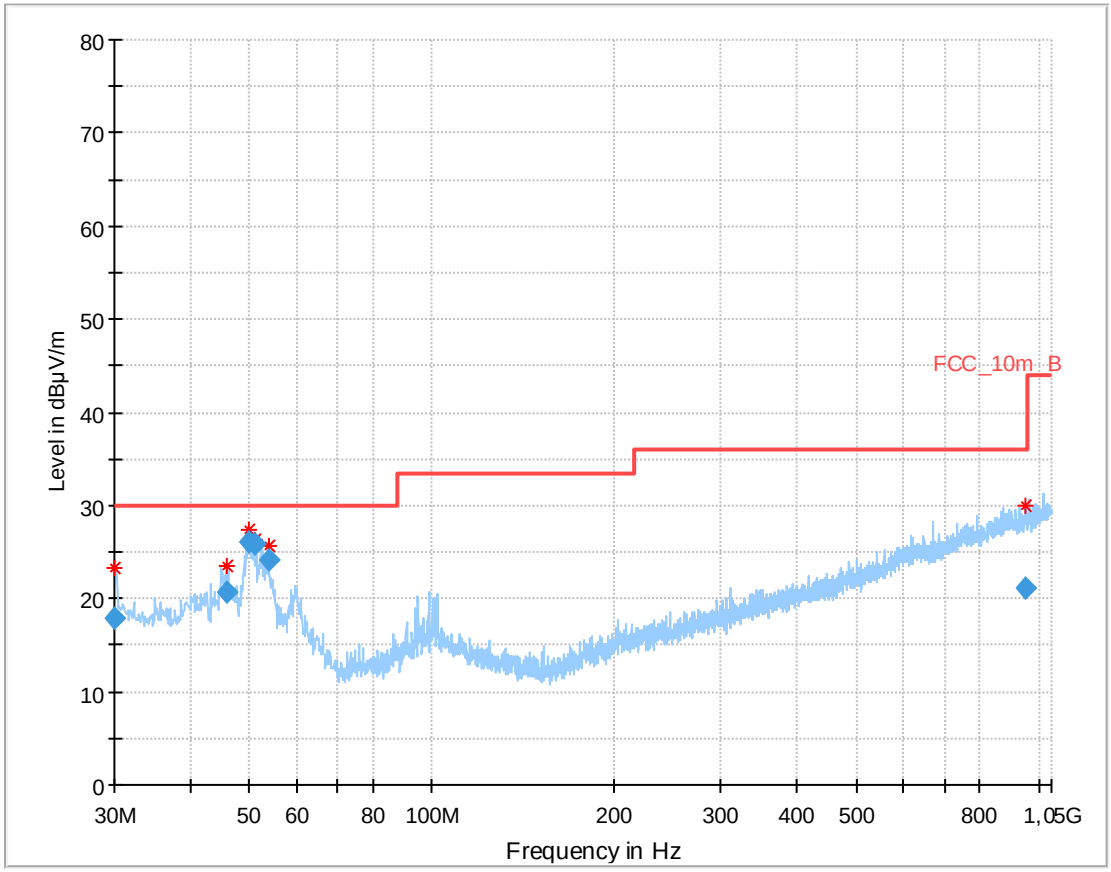
Plot 54: 26 GHz to 40 GHz, 5825 MHz, vertical & horizontal polarization



Date: 10.MAR.2016 09:38:59

Plots: OFDM / n HT40 – mode

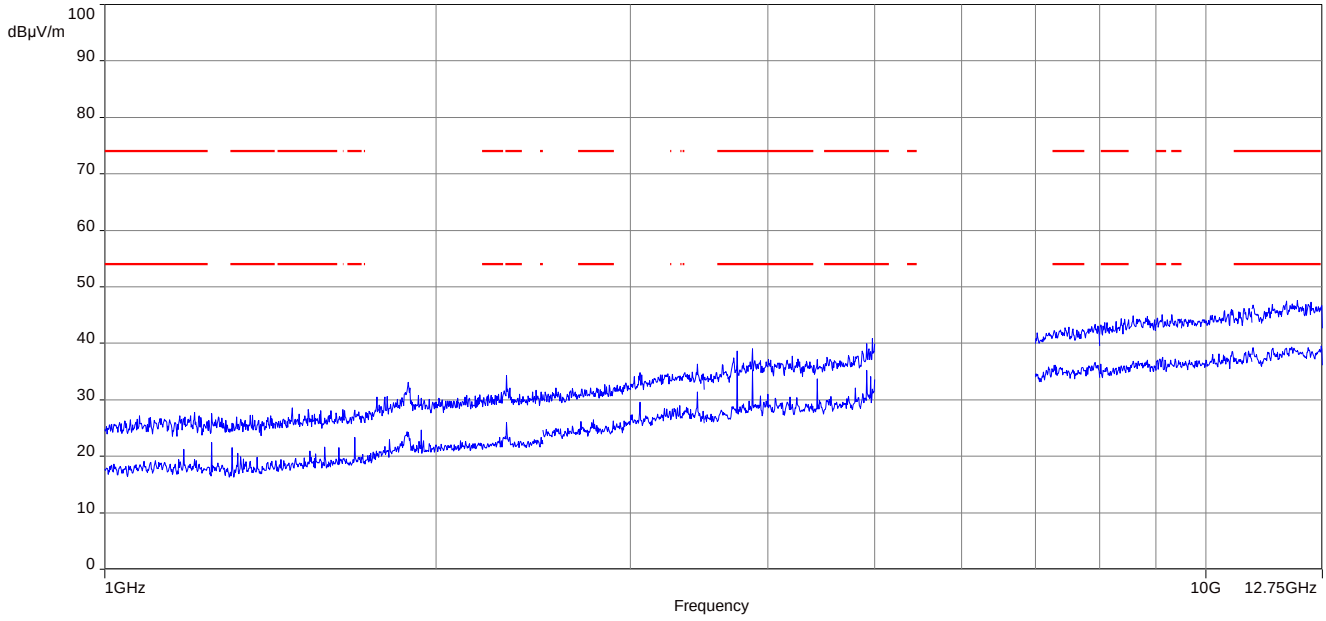
Plot 1: 30 MHz to 1 GHz, 5190 MHz, vertical & horizontal polarization



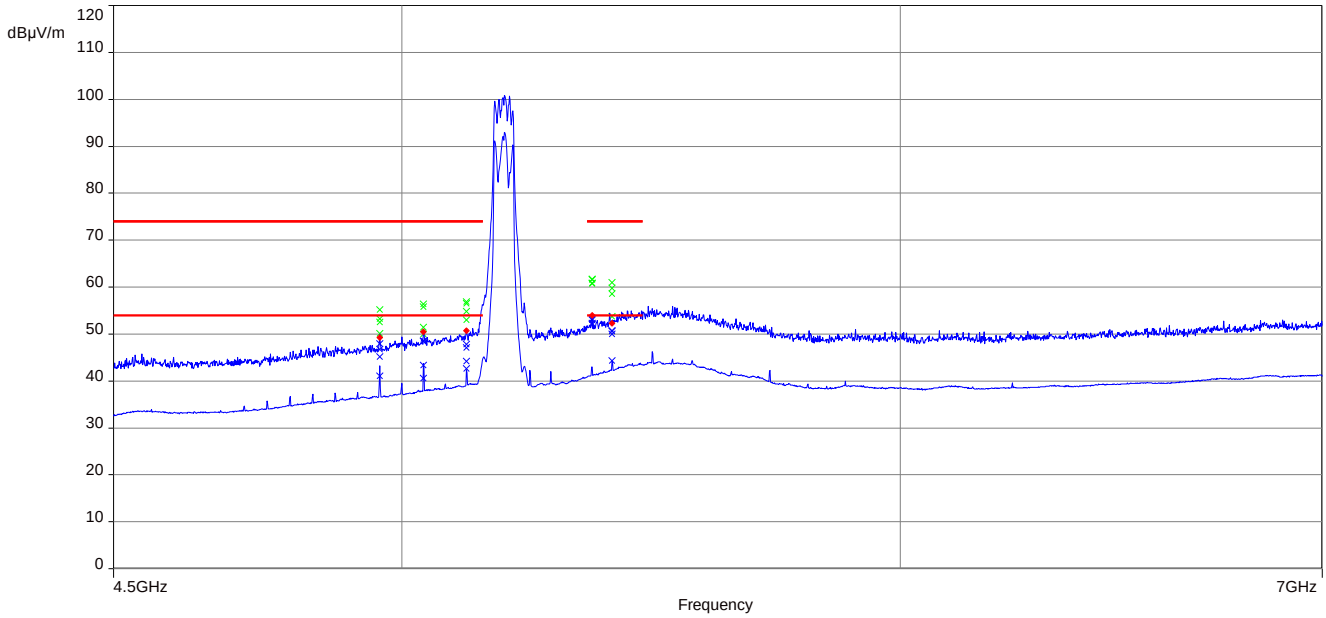
Final_Result:

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
30.024795	17.83	30.00	12.17	1000.0	120.000	101.0	V	273	13.3
45.946650	20.62	30.00	9.38	1000.0	120.000	101.0	V	163	13.6
49.881750	26.16	30.00	3.84	1000.0	120.000	98.0	V	60	12.7
51.189150	25.98	30.00	4.02	1000.0	120.000	98.0	V	14	12.4
53.826600	24.18	30.00	5.82	1000.0	120.000	98.0	V	14	12.0
951.943800	21.08	36.00	14.92	1000.0	120.000	101.0	H	285	24.3

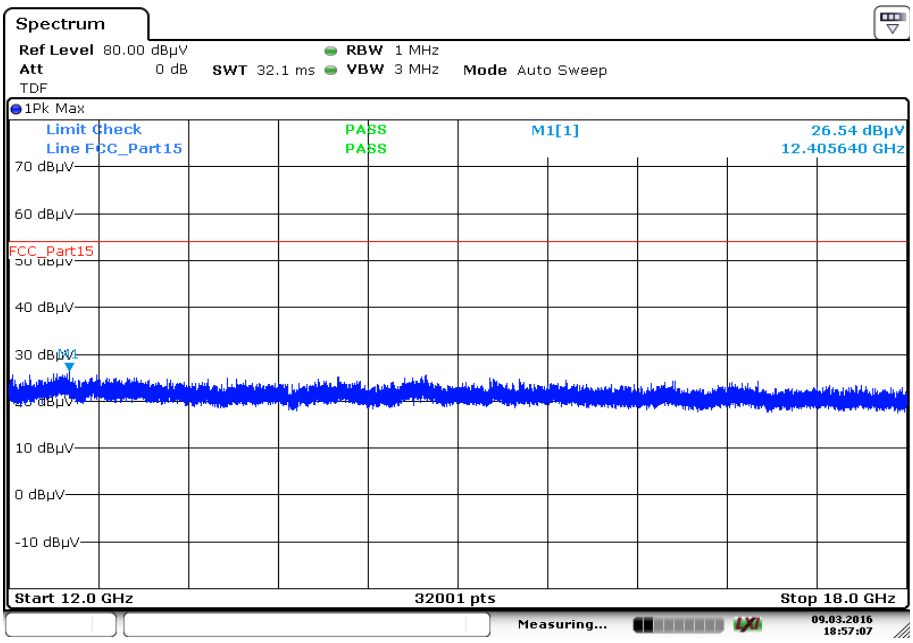
Plot 2: 1 GHz to 12.75 GHz, 5190 MHz, vertical & horizontal polarization



Plot 3: 4.5 GHz to 7 GHz, 5190 MHz, vertical & horizontal polarization

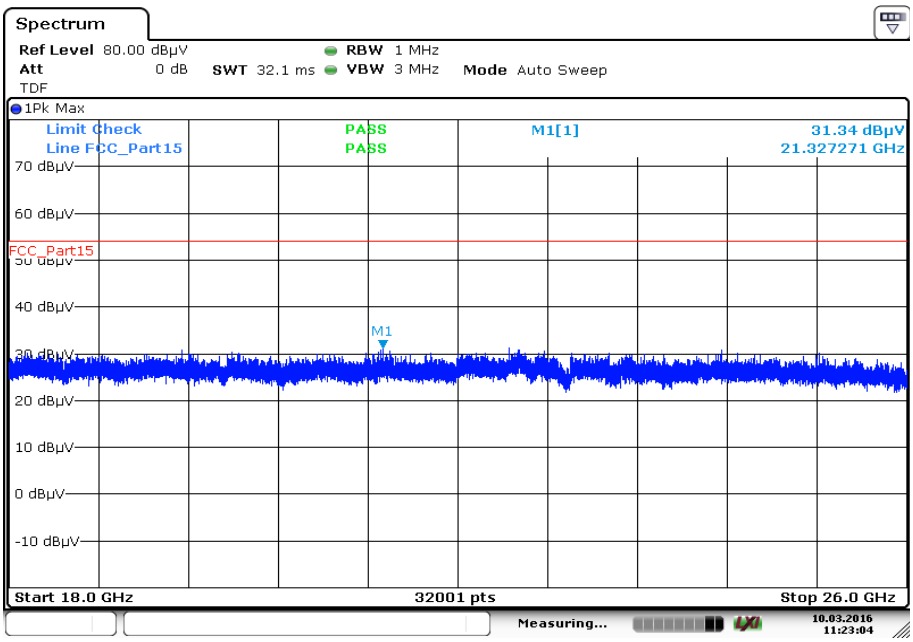


Plot 4: 12 GHz to 18 GHz, 5190 MHz, vertical & horizontal polarization



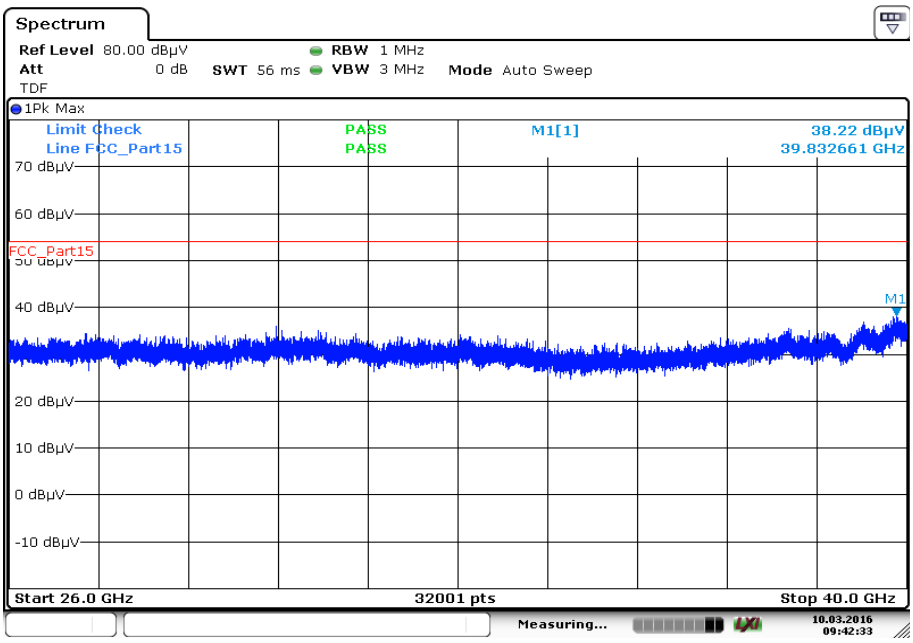
Date: 9.MAR.2016 18:57:07

Plot 5: 18 GHz to 26 GHz, 5190 MHz, vertical & horizontal polarization



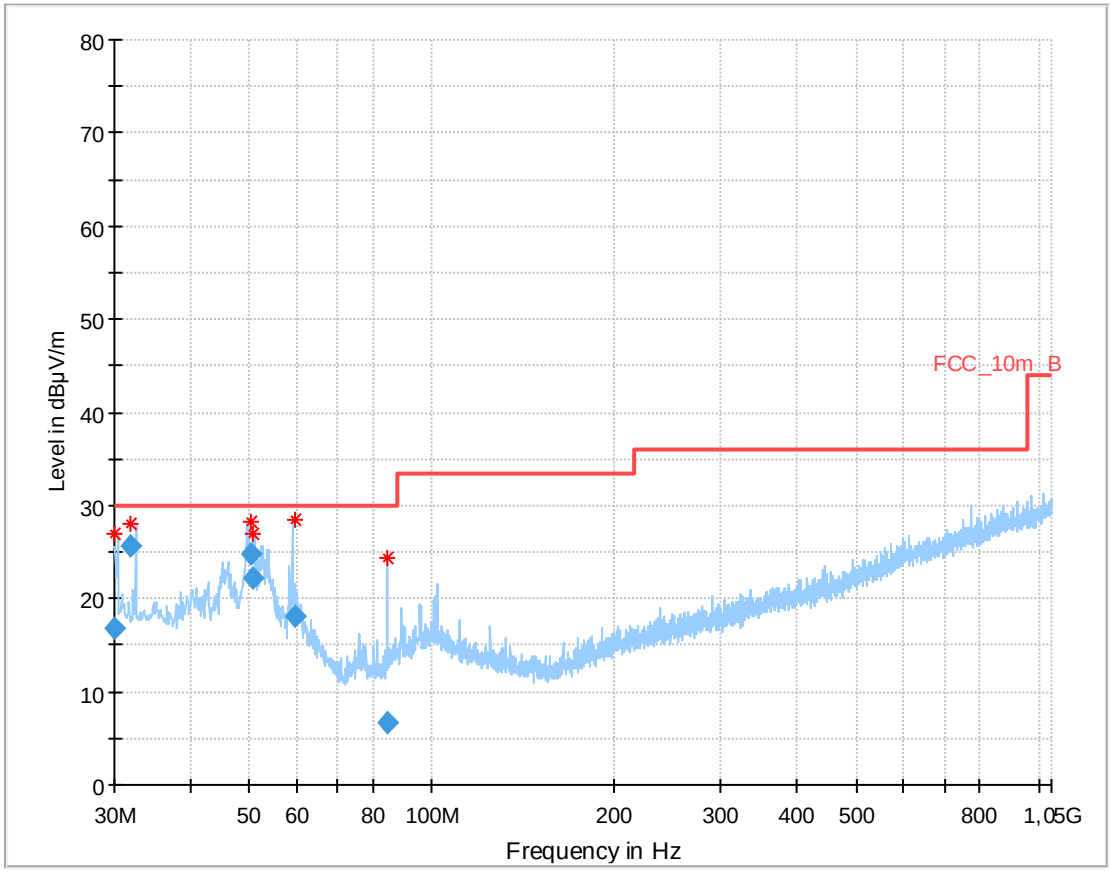
Date: 10.MAR.2016 11:23:04

Plot 6: 26 GHz to 40 GHz, 5190 MHz, vertical & horizontal polarization



Date: 10.MAR.2016 09:42:33

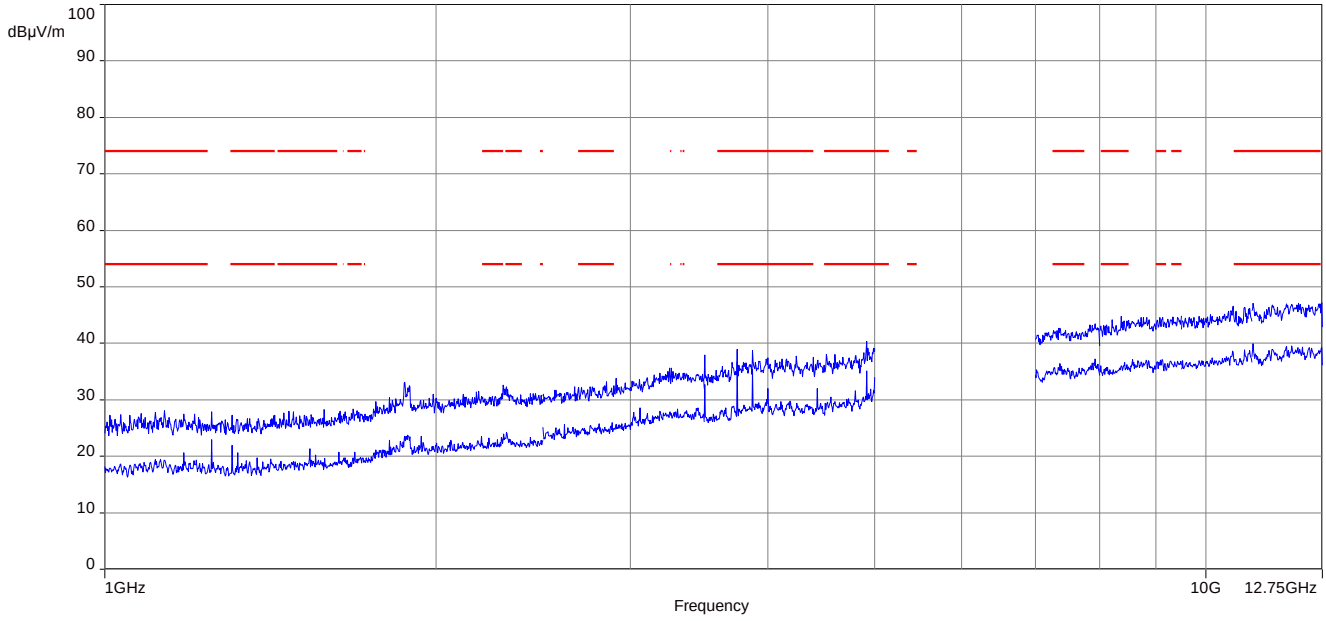
Plot 7: 30 MHz to 1 GHz, 5270 MHz, vertical & horizontal polarization



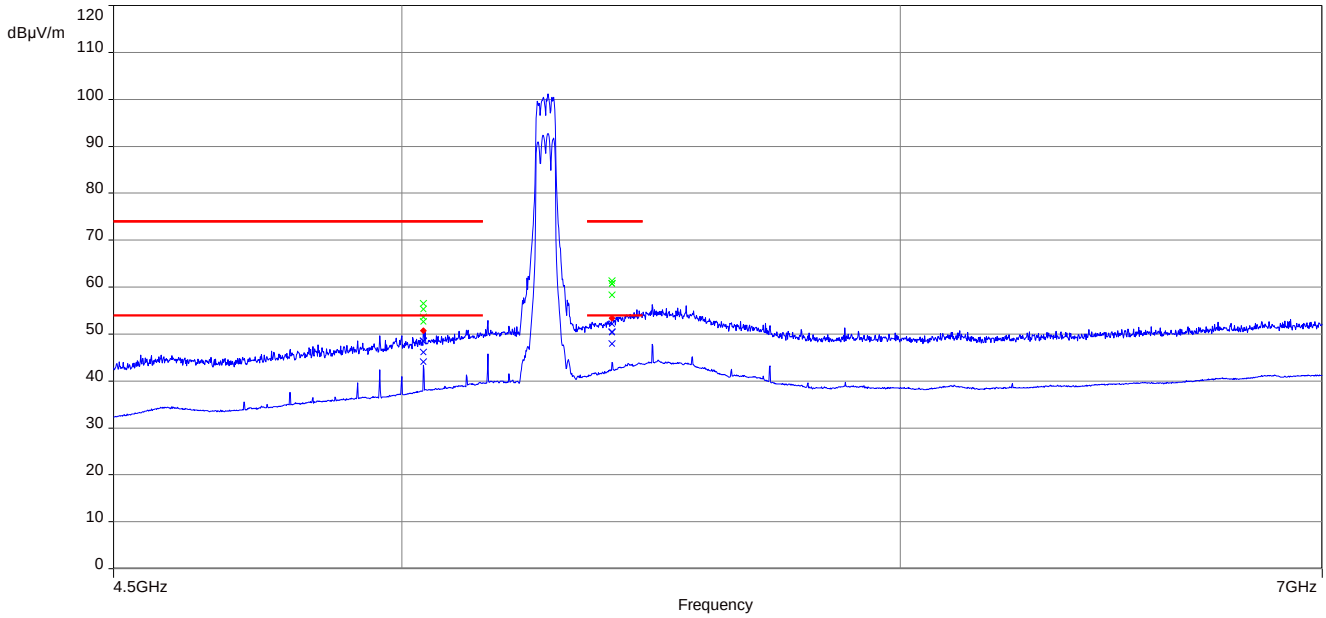
Final_Result:

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
30.044581	16.87	30.00	13.13	1000.0	120.000	101.0	V	184	13.3
31.992300	25.58	30.00	4.42	1000.0	120.000	101.0	V	22	13.5
50.241450	24.70	30.00	5.30	1000.0	120.000	98.0	V	11	12.6
50.914500	22.20	30.00	7.80	1000.0	120.000	170.0	V	26	12.5
59.424450	18.15	30.00	11.85	1000.0	120.000	170.0	V	34	10.7
84.620850	6.60	30.00	23.40	1000.0	120.000	101.0	V	181	9.2

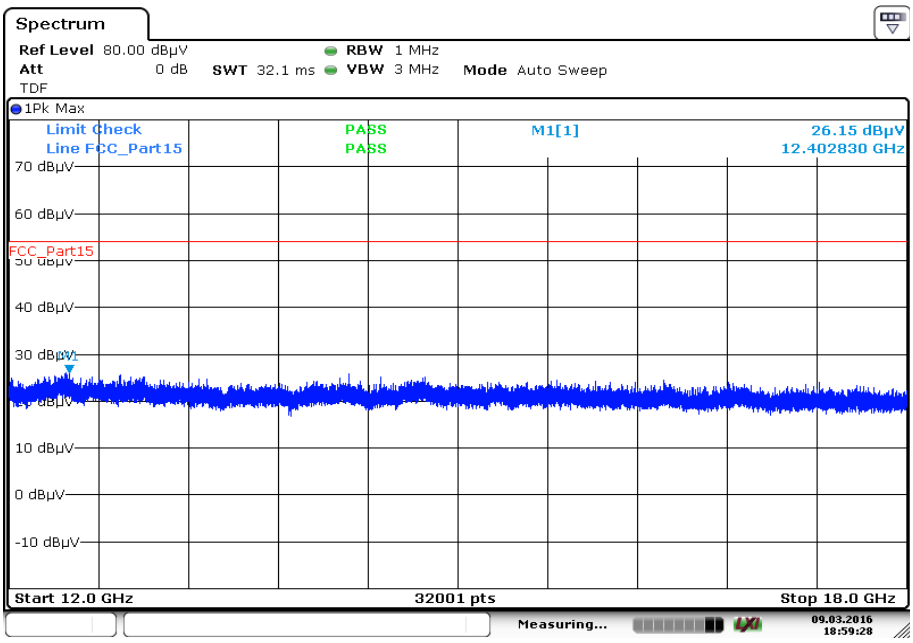
Plot 8: 1 GHz to 12.75 GHz, 5270 MHz, vertical & horizontal polarization



Plot 9: 4.5 GHz to 7 GHz, 5270 MHz, vertical & horizontal polarization

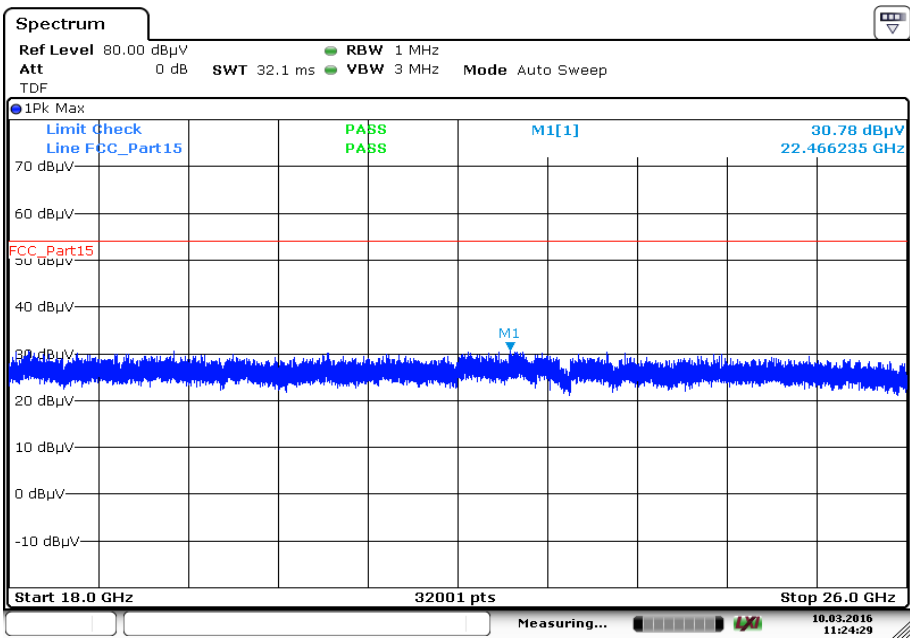


Plot 10: 12 GHz to 18 GHz, 5270 MHz, vertical & horizontal polarization



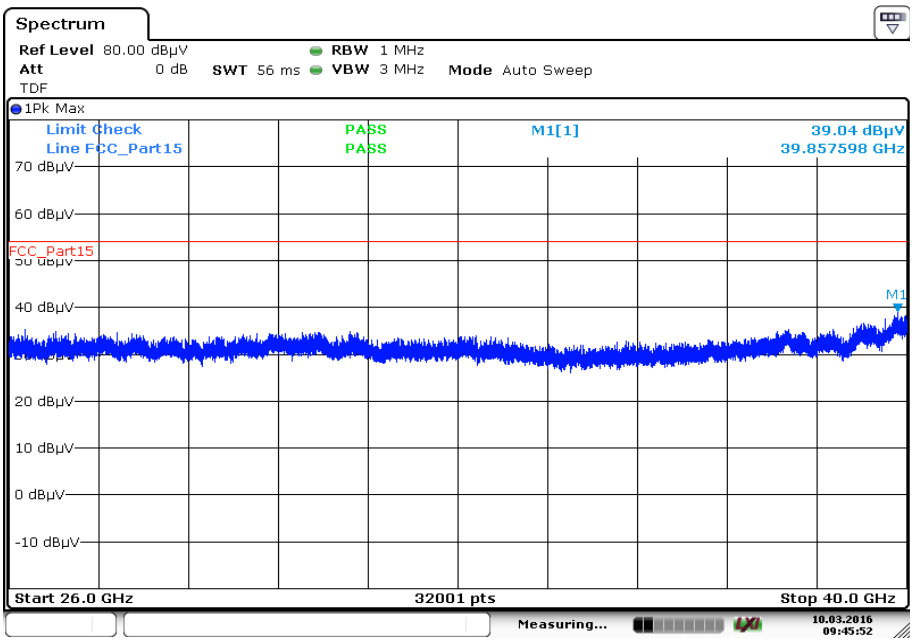
Date: 9.MAR.2016 18:59:28

Plot 11: 18 GHz to 26 GHz, 5270 MHz, vertical & horizontal polarization



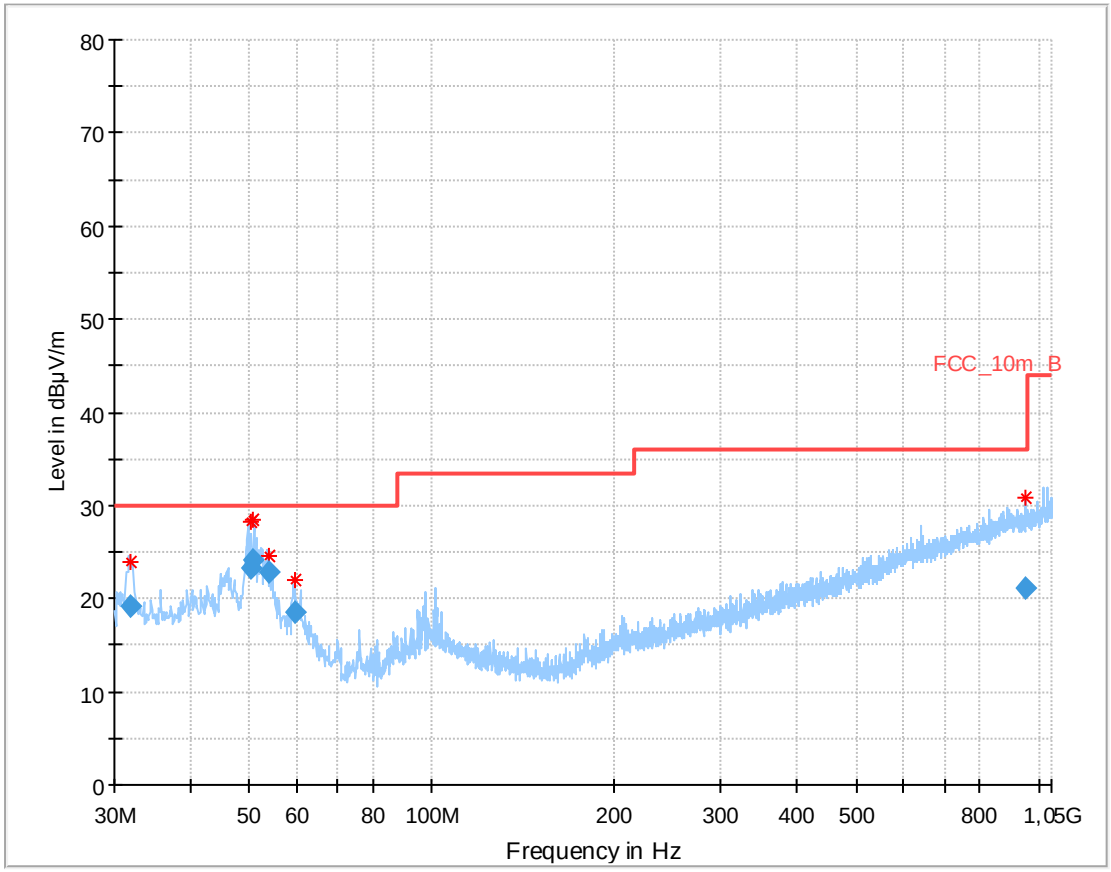
Date: 10.MAR.2016 11:24:29

Plot 12: 26 GHz to 40 GHz, 5270 MHz, vertical & horizontal polarization



Date: 10.MAR.2016 09:45:52

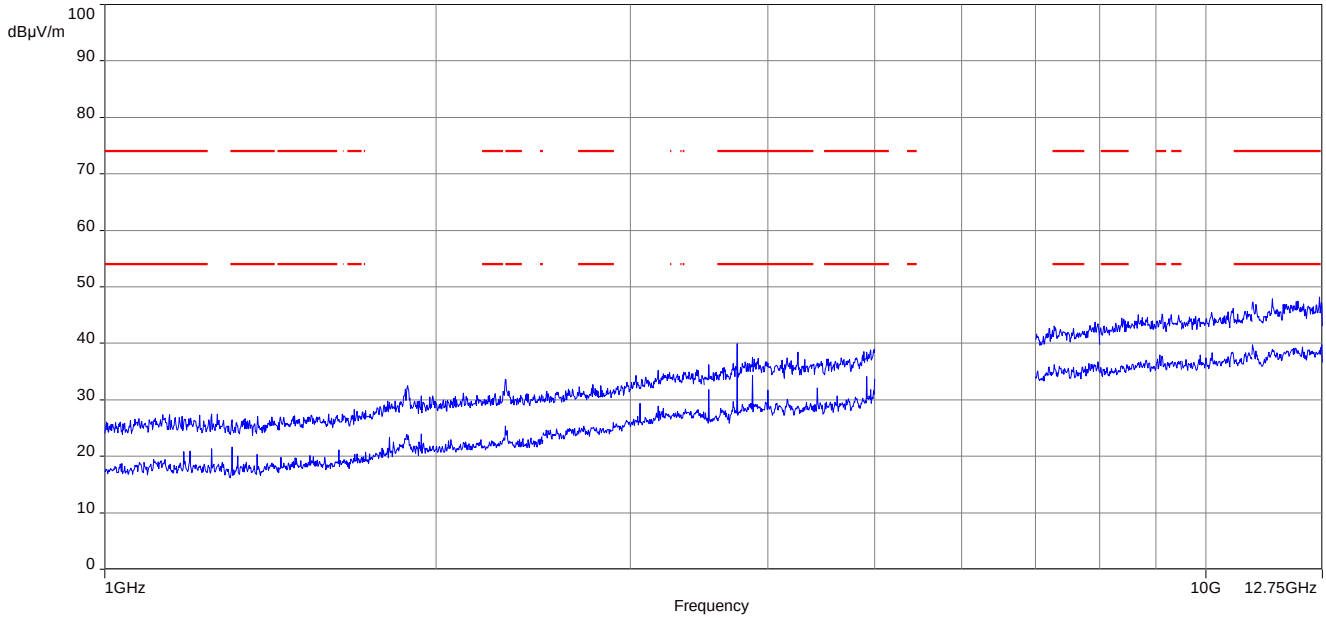
Plot 13: 30 MHz to 1 GHz, 5310 MHz, vertical & horizontal polarization



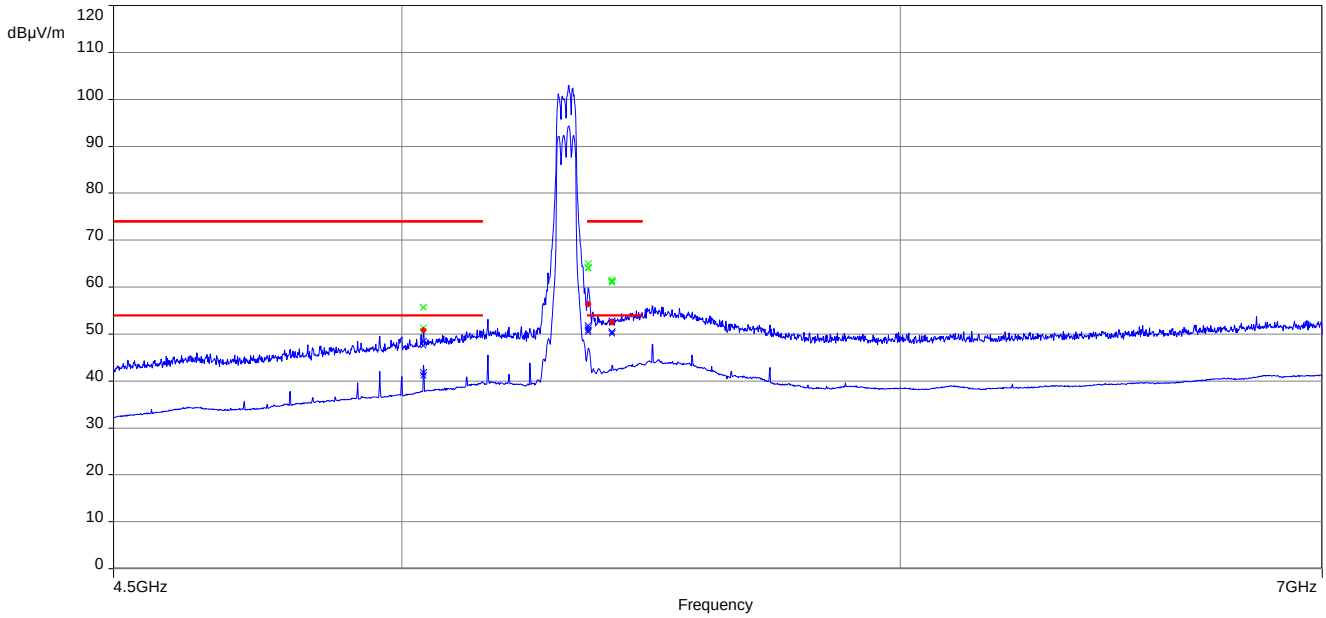
Final_Result:

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
31.940550	19.09	30.00	10.91	1000.0	120.000	170.0	V	25	13.5
50.196000	23.32	30.00	6.68	1000.0	120.000	170.0	V	10	12.6
50.545200	24.23	30.00	5.77	1000.0	120.000	98.0	V	10	12.6
53.849850	22.80	30.00	7.20	1000.0	120.000	98.0	V	52	12.0
59.461950	18.44	30.00	11.56	1000.0	120.000	170.0	V	52	10.7
950.748600	21.15	36.00	14.85	1000.0	120.000	170.0	V	189	24.3

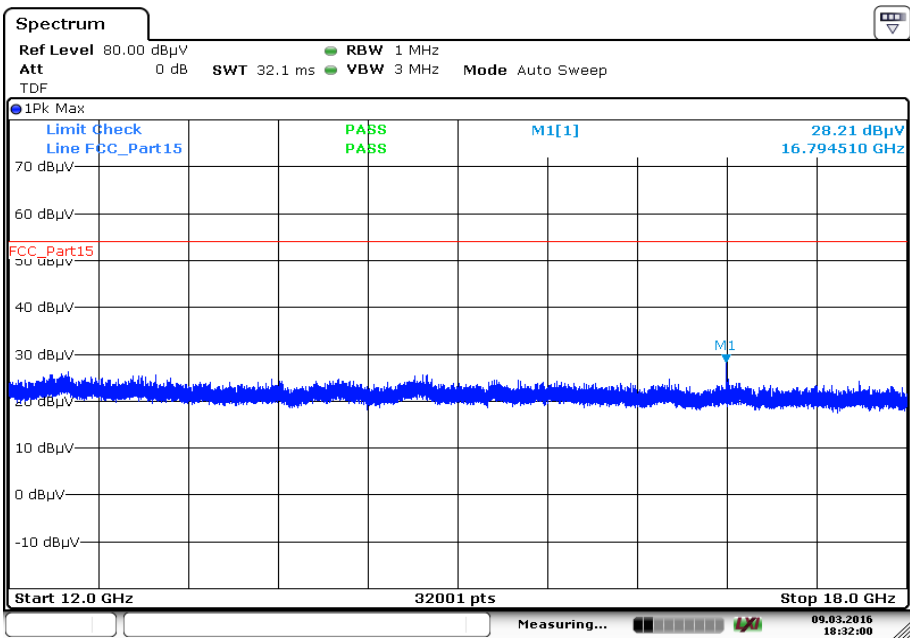
Plot 14: 1 GHz to 12.75 GHz, 5310 MHz, vertical & horizontal polarization



Plot 15: 4.5 GHz to 7 GHz, 5310 MHz, vertical & horizontal polarization

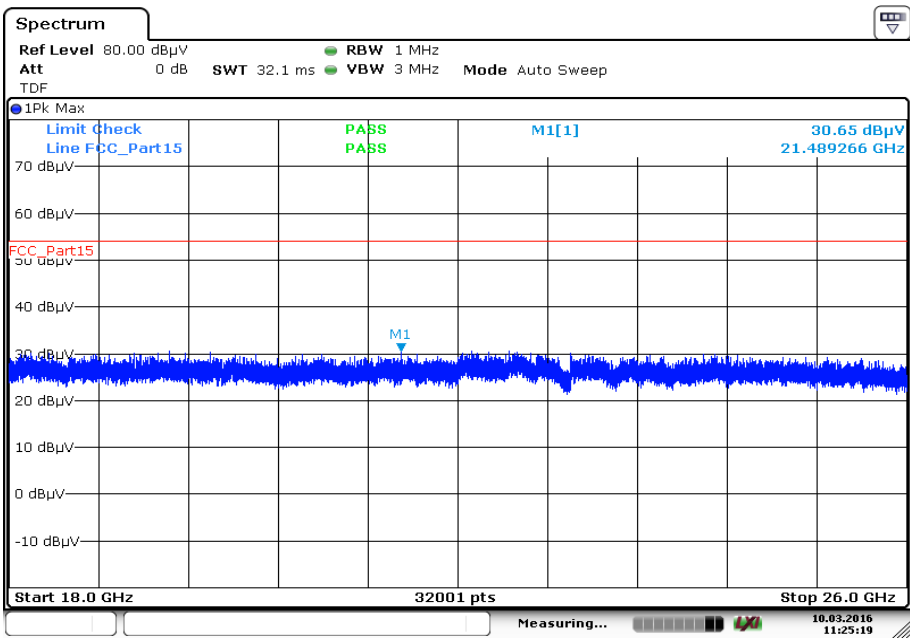


Plot 16: 12 GHz to 18 GHz, 5310 MHz, vertical & horizontal polarization



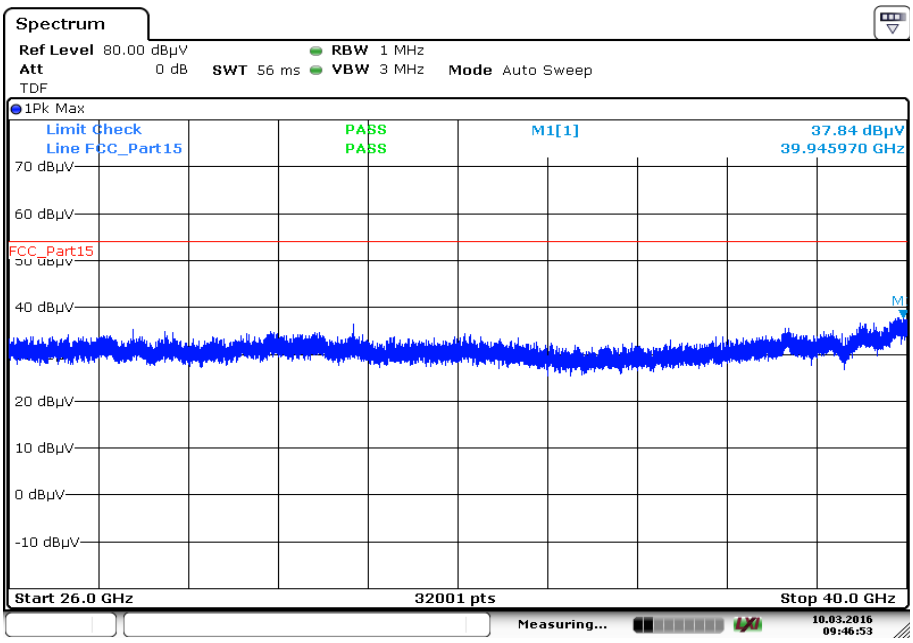
Date: 9.MAR.2016 18:32:00

Plot 17: 18 GHz to 26 GHz, 5310 MHz, vertical & horizontal polarization



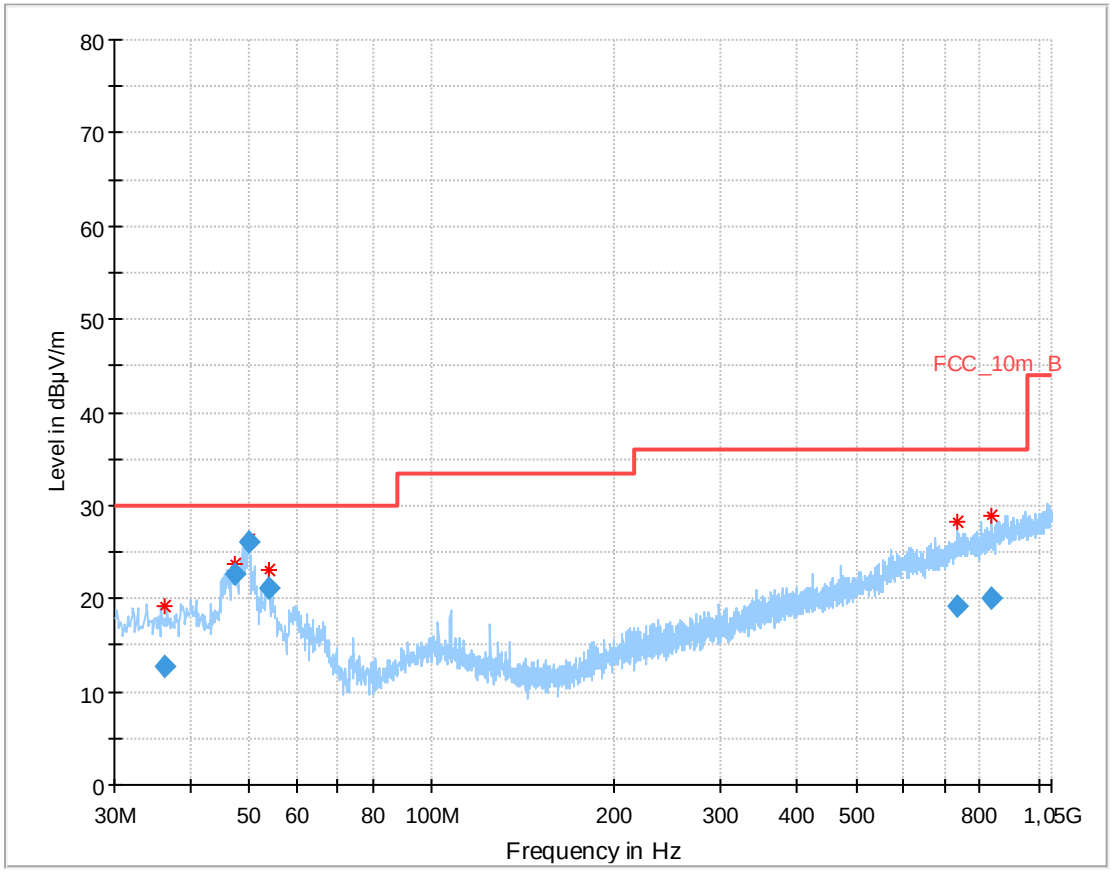
Date: 10.MAR.2016 11:25:19

Plot 18: 26 GHz to 40 GHz, 5310 MHz, vertical & horizontal polarization



Date: 10.MAR.2016 09:46:53

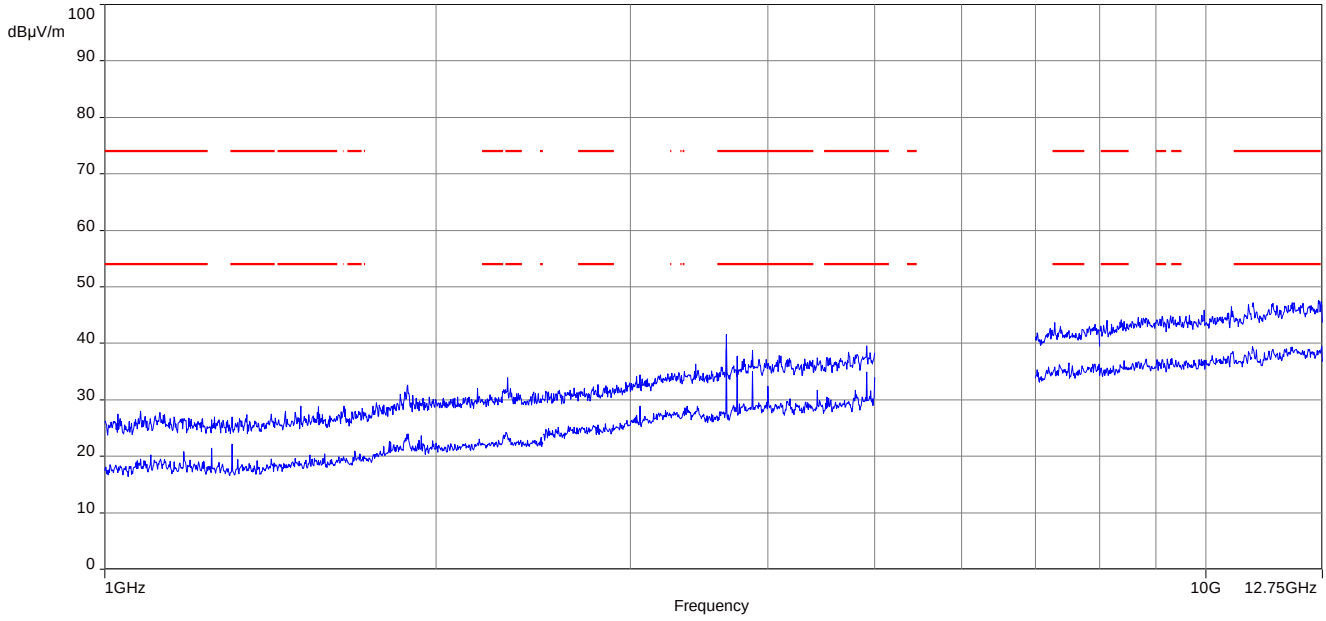
Plot 19: 30 MHz to 1 GHz, 5510 MHz, vertical & horizontal polarization



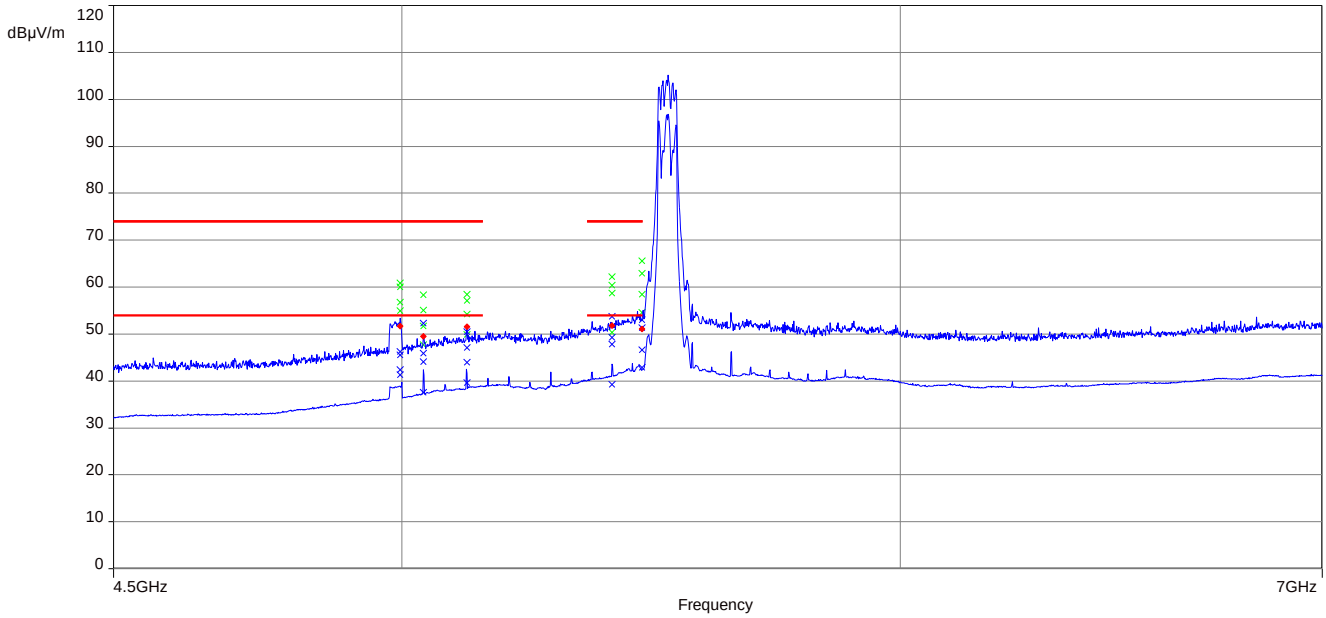
Final_Result:

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
36.276750	12.62	30.00	17.38	1000.0	120.000	101.0	V	-9	13.9
47.501850	22.59	30.00	7.41	1000.0	120.000	101.0	V	280	13.2
49.838550	26.04	30.00	3.96	1000.0	120.000	98.0	V	-9	12.7
53.776950	21.06	30.00	8.94	1000.0	120.000	101.0	V	10	12.0
736.400550	19.24	36.00	16.76	1000.0	120.000	98.0	H	280	22.4
836.701950	20.11	36.00	15.89	1000.0	120.000	98.0	H	100	23.3

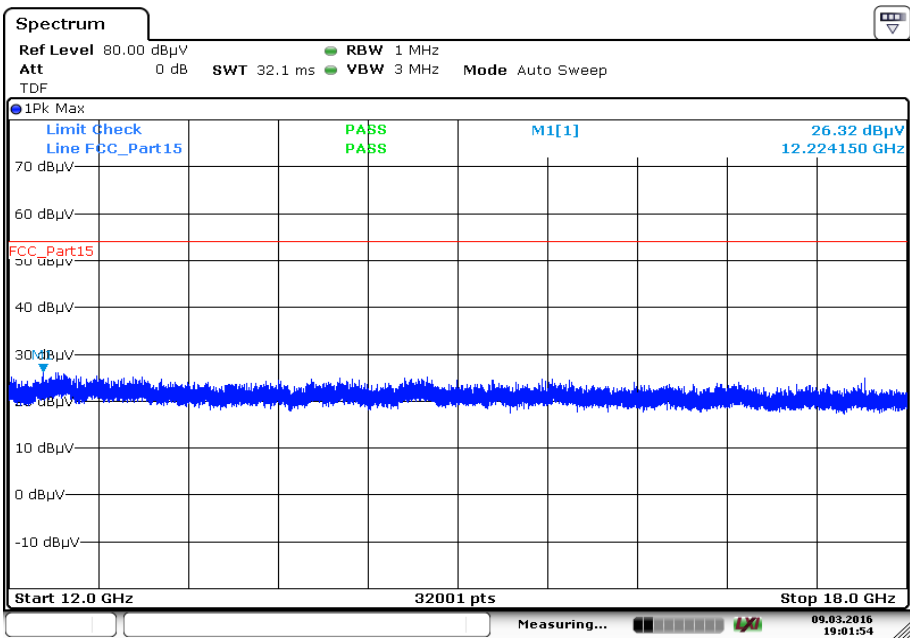
Plot 20: 1 GHz to 12.75 GHz, 5510 MHz, vertical & horizontal polarization



Plot 21: 4.5 GHz to 7 GHz, 5510 MHz, vertical & horizontal polarization

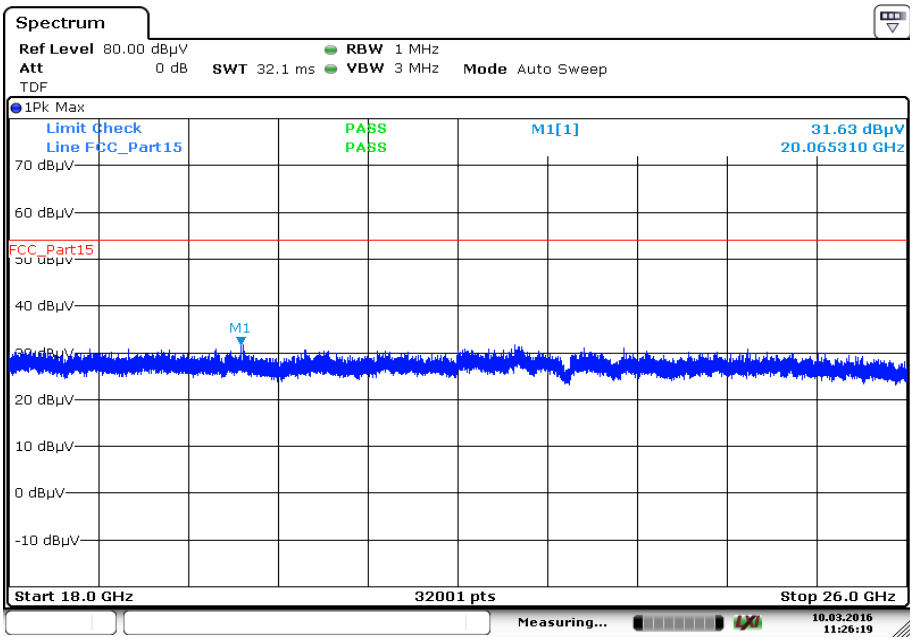


Plot 22: 12 GHz to 18 GHz, 5510 MHz, vertical & horizontal polarization



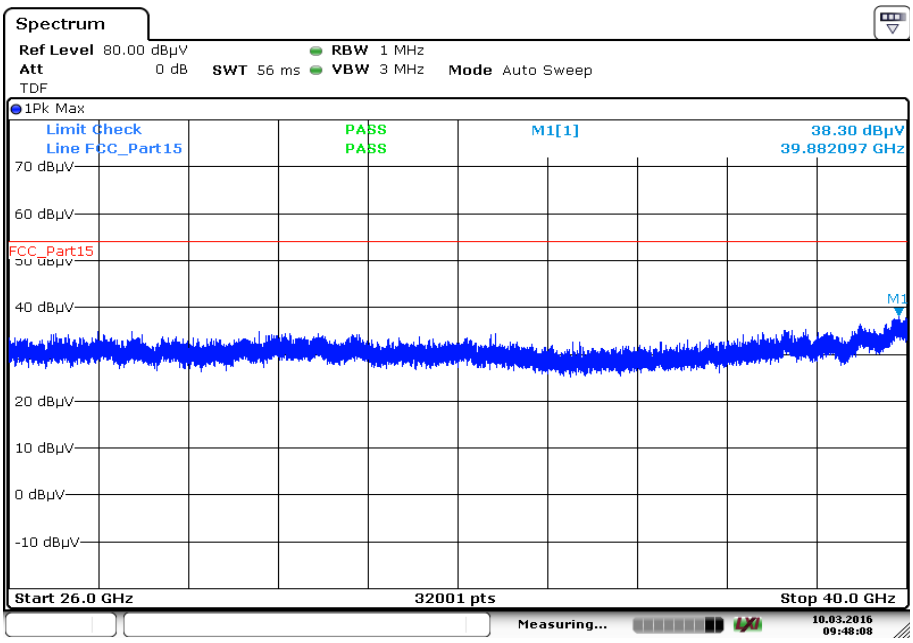
Date: 9.MAR.2016 19:01:54

Plot 23: 18 GHz to 26 GHz, 5510 MHz, vertical & horizontal polarization



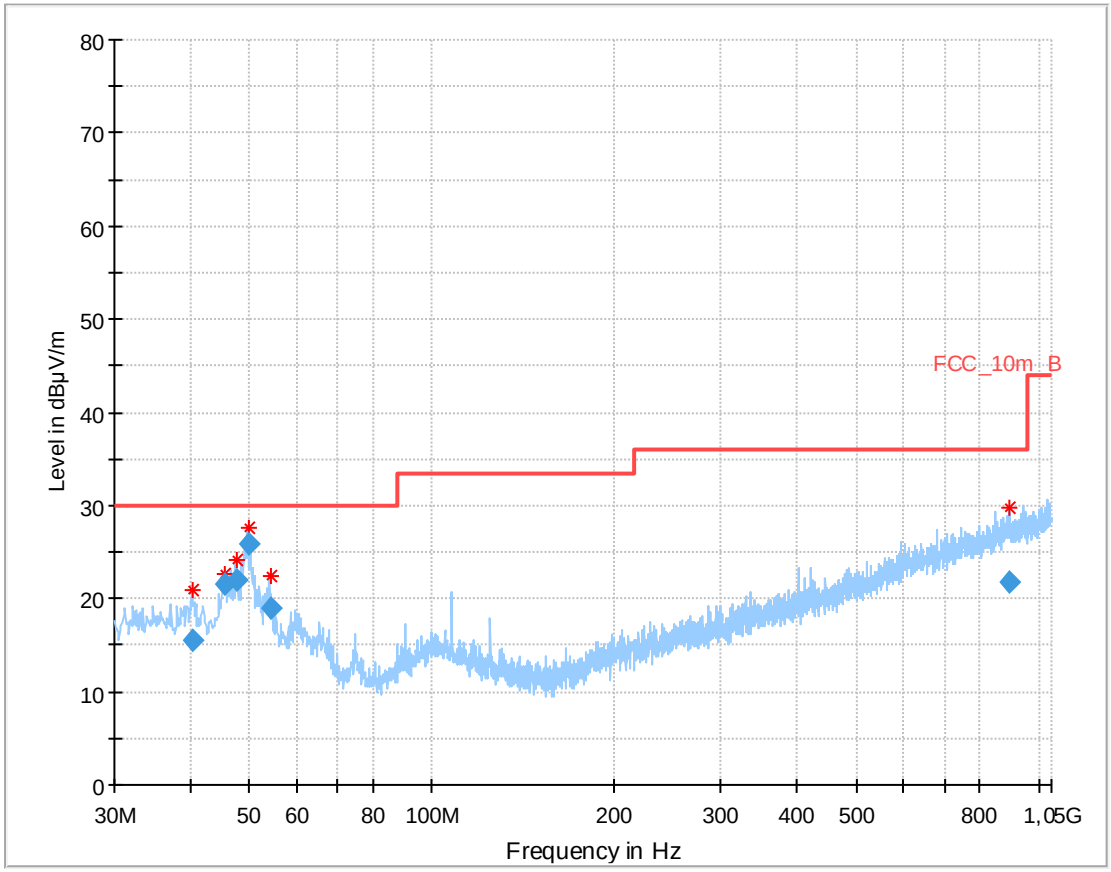
Date: 10.MAR.2016 11:26:19

Plot 24: 26 GHz to 40 GHz, 5510 MHz, vertical & horizontal polarization



Date: 10.MAR.2016 09:48:08

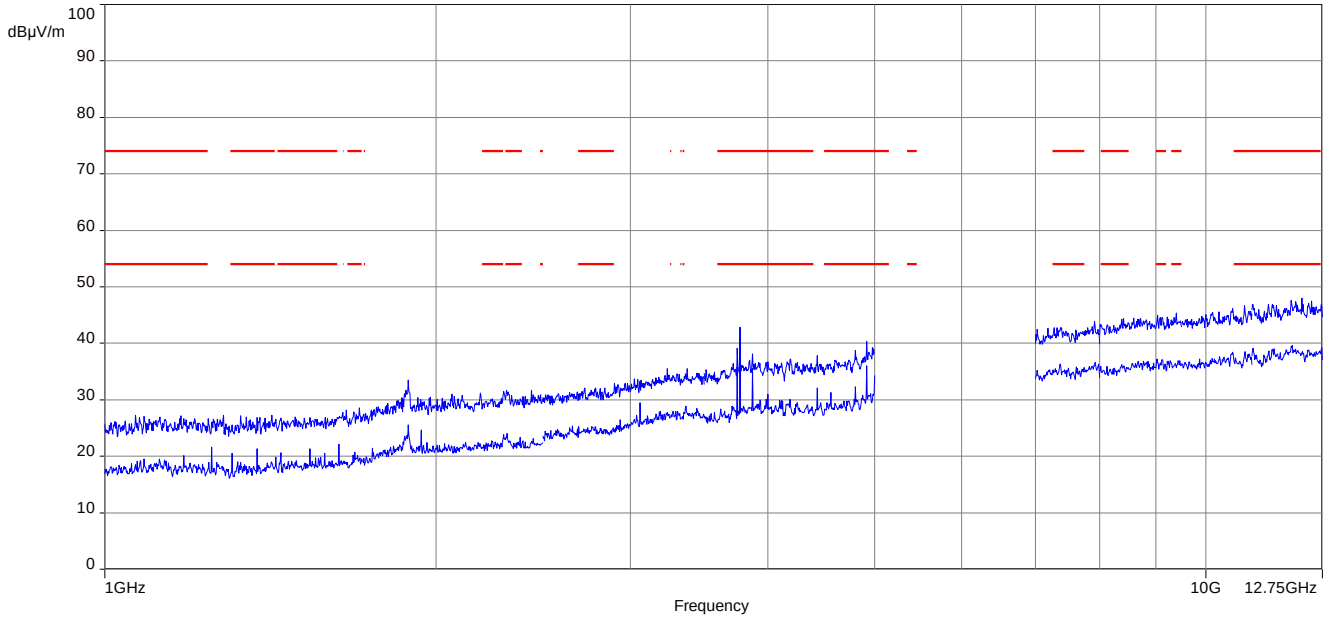
Plot 25: 30 MHz to 1 GHz, 5670 MHz, vertical & horizontal polarization



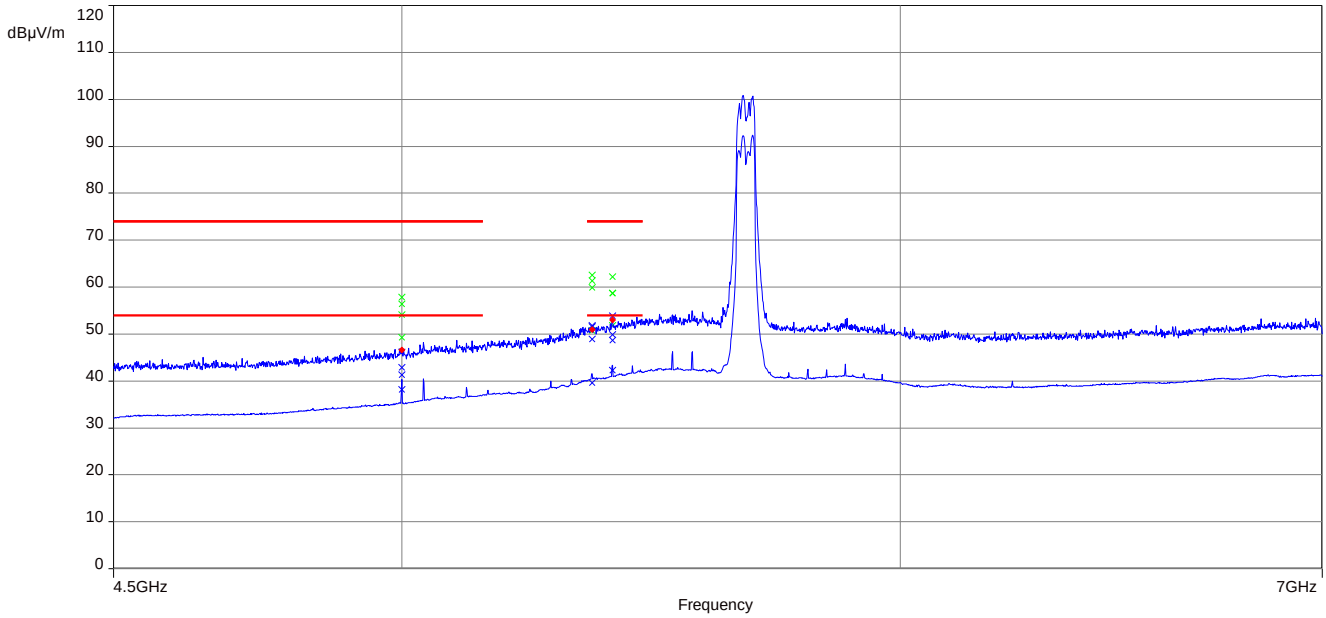
Final_Result:

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
40.236150	15.49	30.00	14.51	1000.0	120.000	98.0	V	190	14.0
45.580050	21.66	30.00	8.34	1000.0	120.000	98.0	V	81	13.7
47.580450	21.89	30.00	8.11	1000.0	120.000	101.0	V	190	13.2
49.881150	25.89	30.00	4.11	1000.0	120.000	98.0	V	280	12.7
54.148350	19.07	30.00	10.93	1000.0	120.000	170.0	V	260	12.0
894.772950	21.85	36.00	14.15	1000.0	120.000	170.0	V	10	24.0

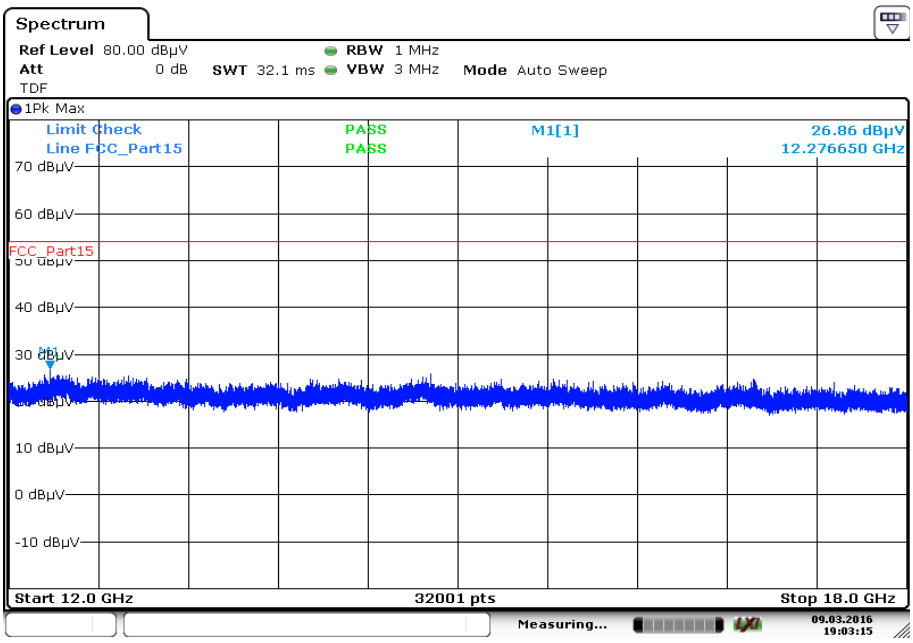
Plot 26: 1 GHz to 12.75 GHz, 5670 MHz, vertical & horizontal polarization



Plot 27: 4.5 GHz to 7 GHz, 5670 MHz, vertical & horizontal polarization

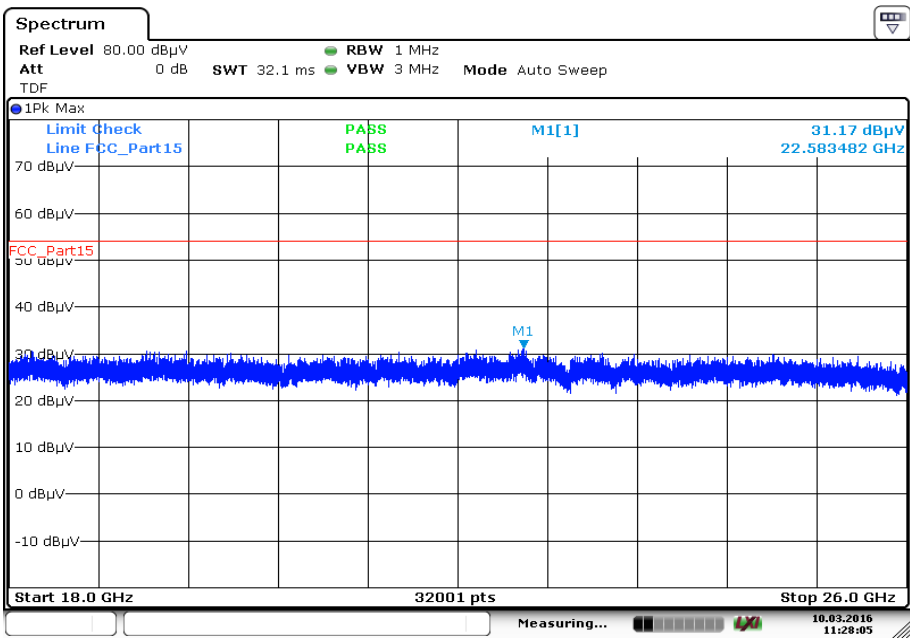


Plot 28: 12 GHz to 18 GHz, 5670 MHz, vertical & horizontal polarization



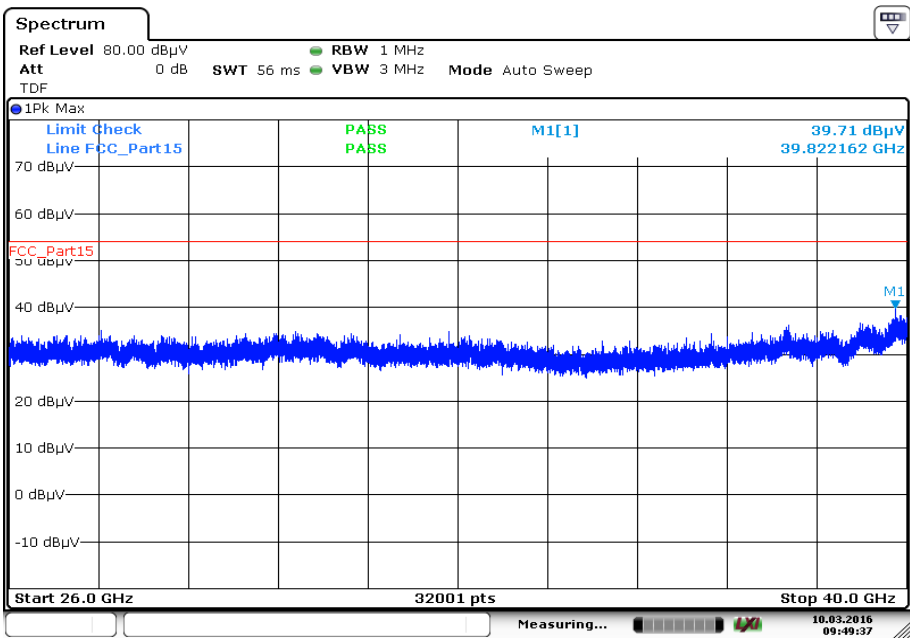
Date: 9.MAR.2016 19:03:15

Plot 29: 18 GHz to 26 GHz, 5670 MHz, vertical & horizontal polarization



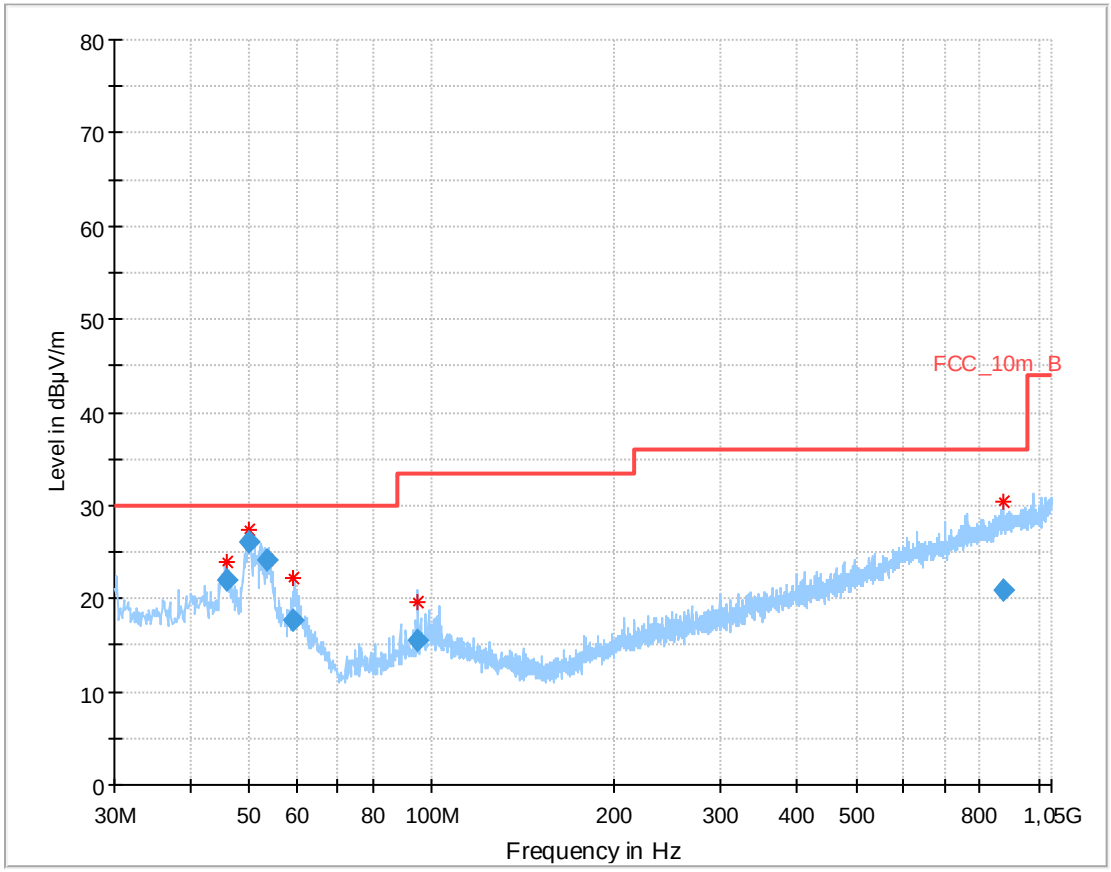
Date: 10.MAR.2016 11:28:05

Plot 30: 26 GHz to 40 GHz, 5670 MHz, vertical & horizontal polarization



Date: 10.MAR.2016 09:49:36

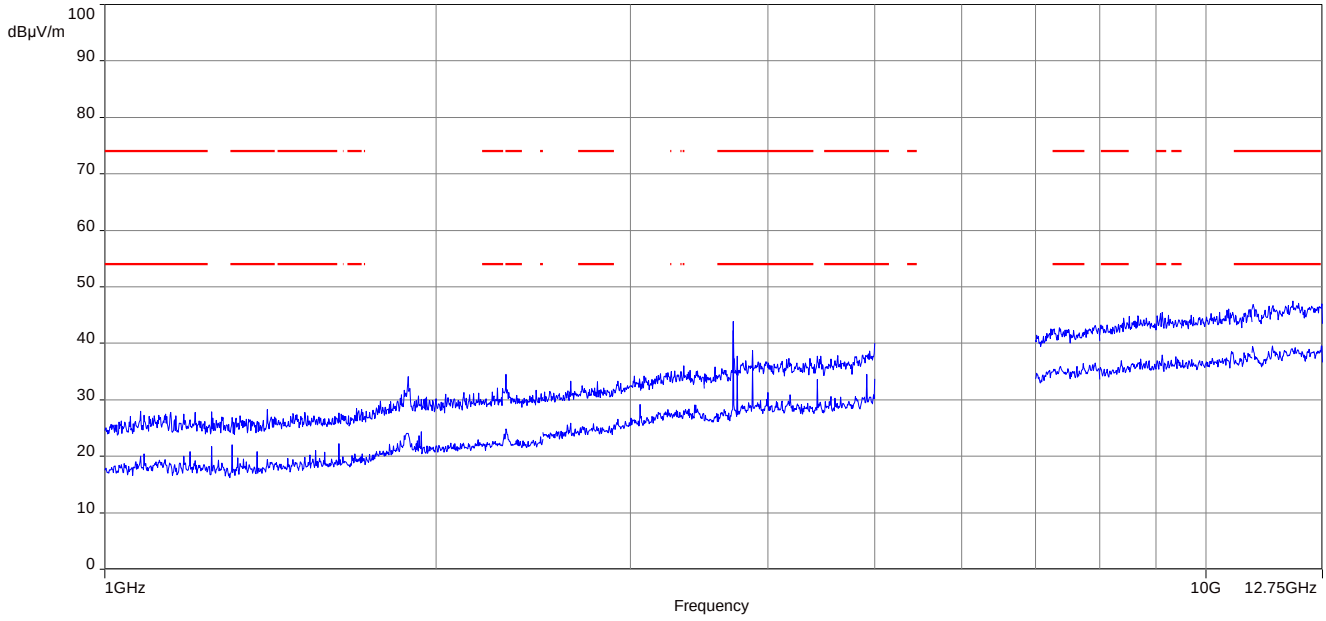
Plot 31: 30 MHz to 1 GHz, 5755 MHz, vertical & horizontal polarization



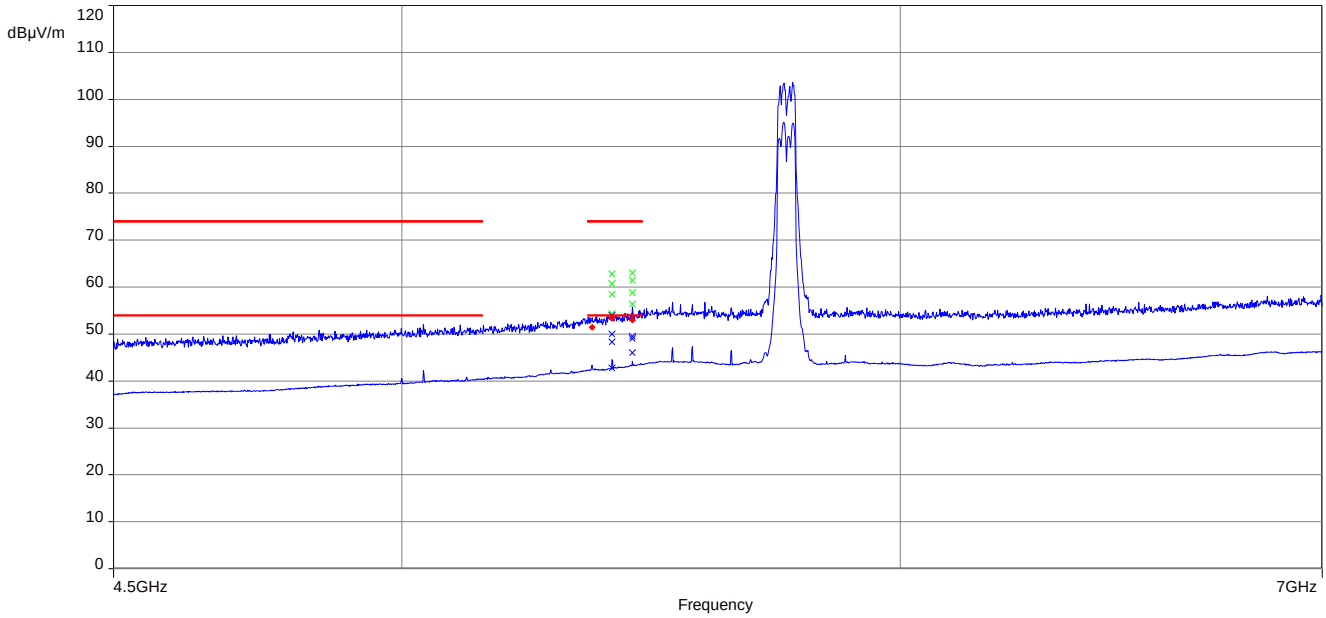
Final_Result:

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
45.910050	22.10	30.00	7.90	1000.0	120.000	98.0	V	353	13.6
49.881300	26.14	30.00	3.86	1000.0	120.000	98.0	V	45	12.7
53.511900	24.07	30.00	5.93	1000.0	120.000	98.0	V	3	12.1
59.122500	17.68	30.00	12.32	1000.0	120.000	98.0	V	3	10.8
94.766100	15.57	33.50	17.93	1000.0	120.000	98.0	V	259	11.3
873.754800	20.84	36.00	15.16	1000.0	120.000	101.0	H	212	23.8

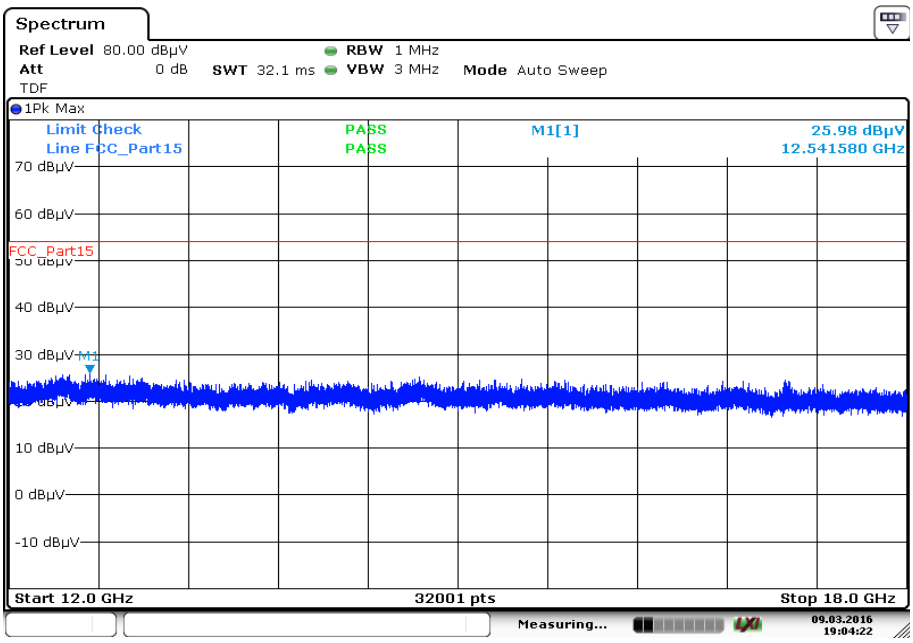
Plot 32: 1 GHz to 12.75 GHz, 5755 MHz, vertical & horizontal polarization



Plot 33: 4.5 GHz to 7 GHz, 5755 MHz, vertical & horizontal polarization

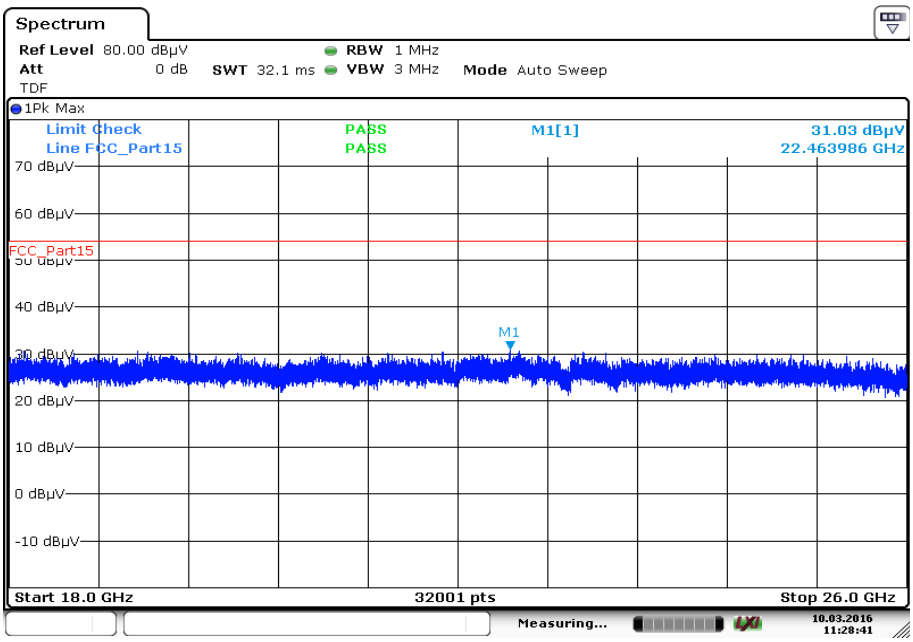


Plot 34: 12 GHz to 18 GHz, 5755 MHz, vertical & horizontal polarization



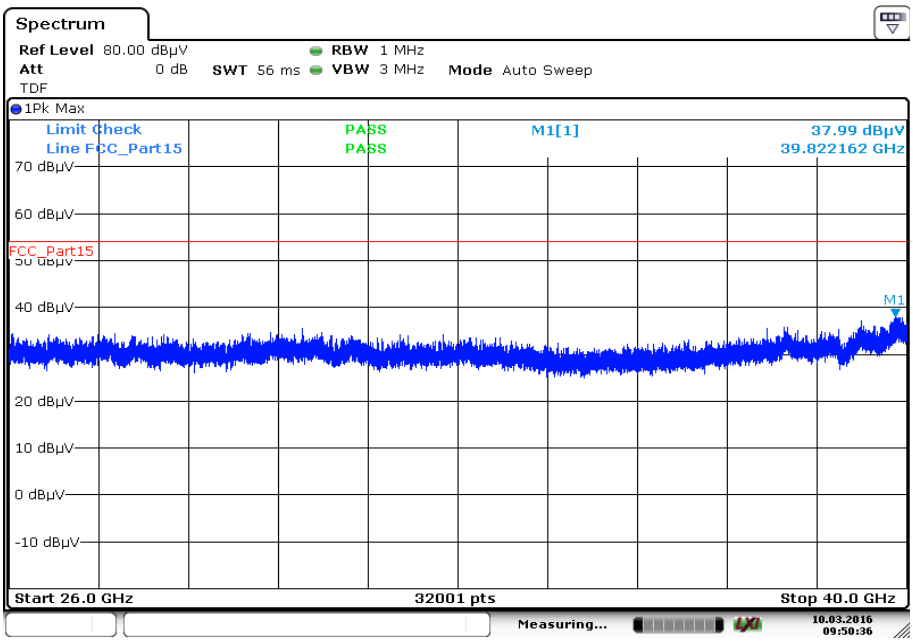
Date: 9.MAR.2016 19:04:22

Plot 35: 18 GHz to 26 GHz, 5755 MHz, vertical & horizontal polarization



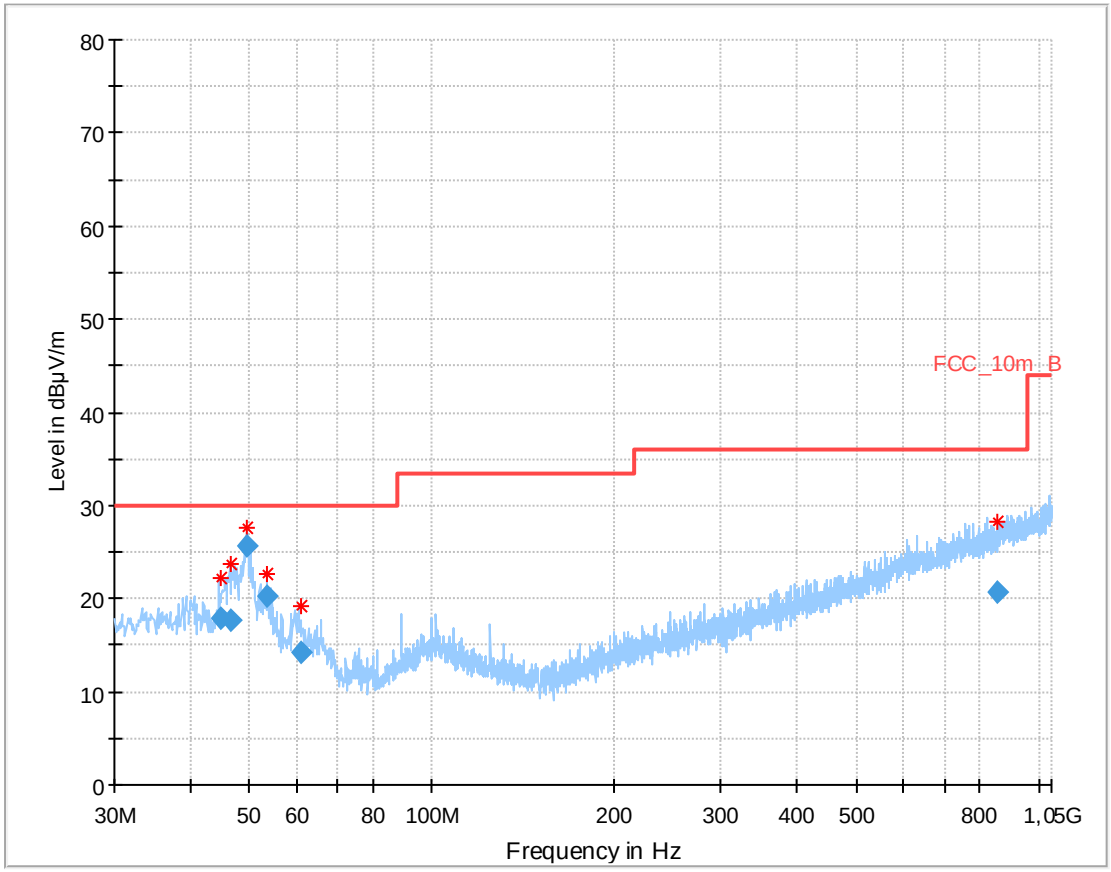
Date: 10.MAR.2016 11:28:41

Plot 36: 26 GHz to 40 GHz, 5755 MHz, vertical & horizontal polarization



Date: 10.MAR.2016 09:50:36

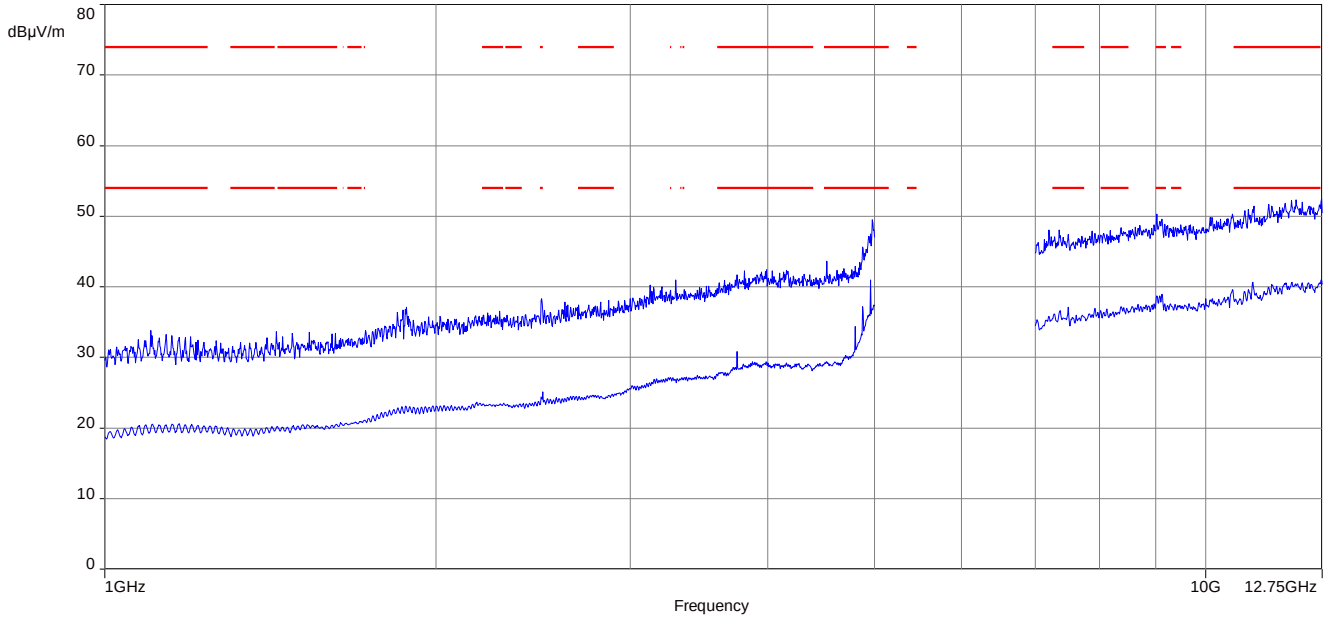
Plot 37: 30 MHz to 1 GHz, 5795 MHz, vertical & horizontal polarization



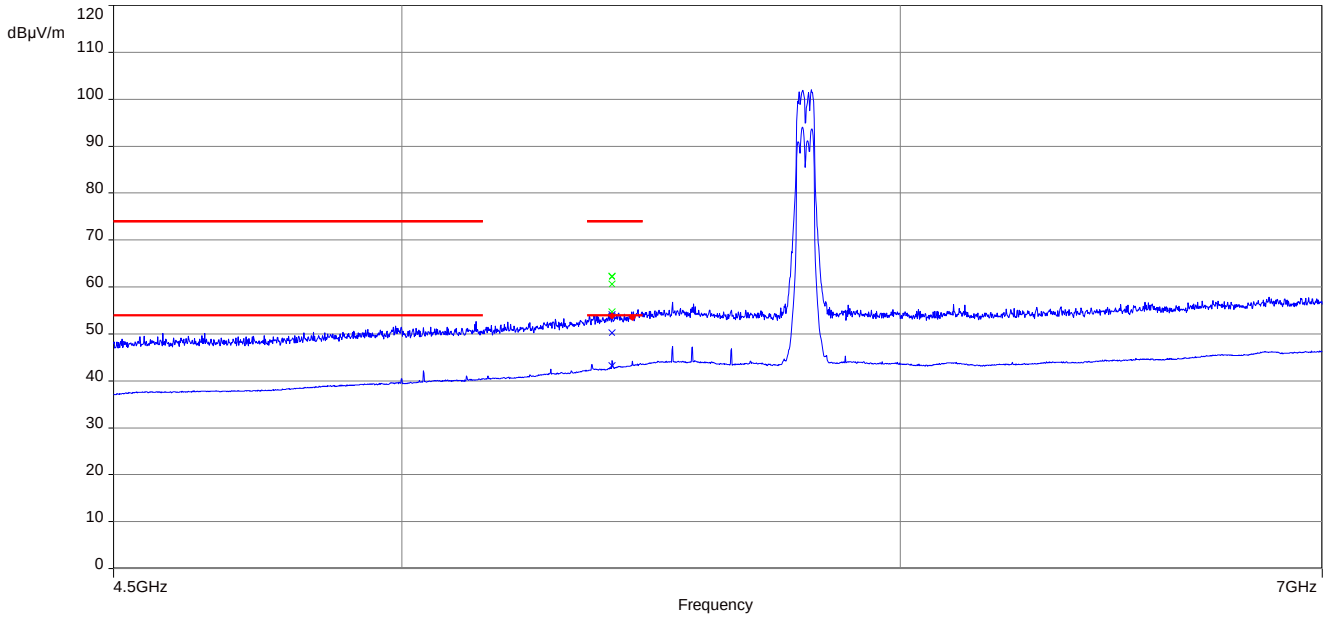
Final_Result:

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB)
44.868300	17.89	30.00	12.11	1000.0	120.000	101.0	V	-9	13.9
46.659600	17.59	30.00	12.41	1000.0	120.000	98.0	V	-9	13.4
49.540800	25.64	30.00	4.36	1000.0	120.000	98.0	V	280	12.8
53.478750	20.35	30.00	9.65	1000.0	120.000	98.0	V	280	12.1
60.783750	14.15	30.00	15.85	1000.0	120.000	101.0	V	260	10.4
857.912400	20.61	36.00	15.39	1000.0	120.000	98.0	H	280	23.6

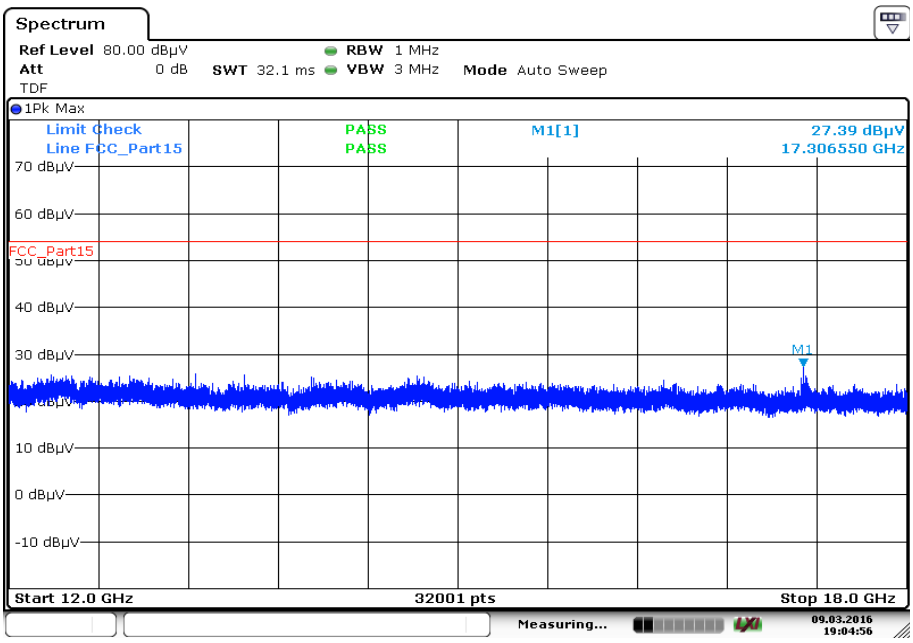
Plot 38: 1 GHz to 12.75 GHz, 5795 MHz, vertical & horizontal polarization



Plot 39: 4.5 GHz to 7 GHz, 5795 MHz, vertical & horizontal polarization

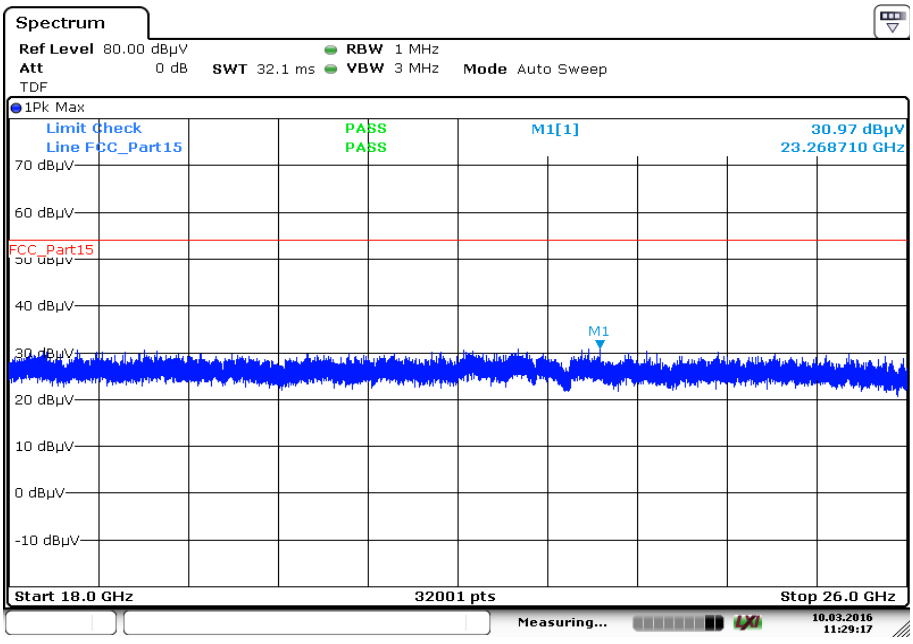


Plot 40: 12 GHz to 18 GHz, 5795 MHz, vertical & horizontal polarization



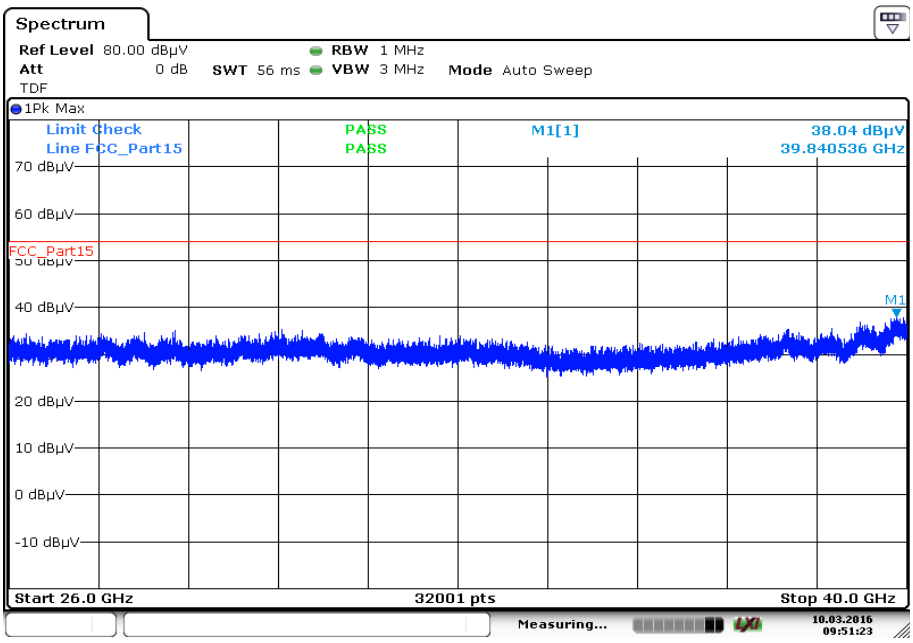
Date: 9.MAR.2016 19:04:56

Plot 41: 18 GHz to 26 GHz, 5795 MHz, vertical & horizontal polarization



Date: 10.MAR.2016 11:29:17

Plot 42: 26 GHz to 40 GHz, 5795 MHz, vertical & horizontal polarization



Date: 10.MAR.2016 09:51:23

12.11 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	
According to: KDB789033 D02, G.	
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
Used test setup:	see chapter 7.2 – B
Measurement uncertainty:	see chapter 9

Limits:

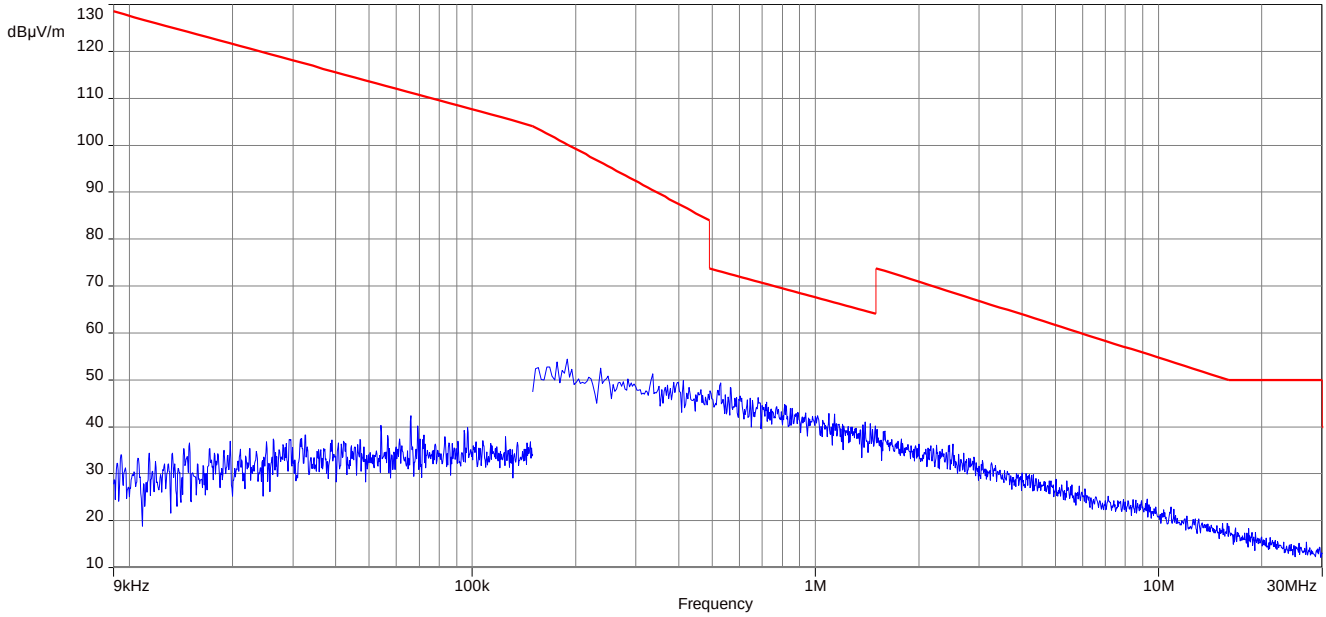
Spurious Emissions Radiated < 30 MHz		
Frequency (MHz)	Field Strength (dBµV/m)	Measurement distance
0.009 – 0.490	2400/F(kHz)	300
0.490 – 1.705	24000/F(kHz)	30
1.705 – 30.0	30	30

Results:

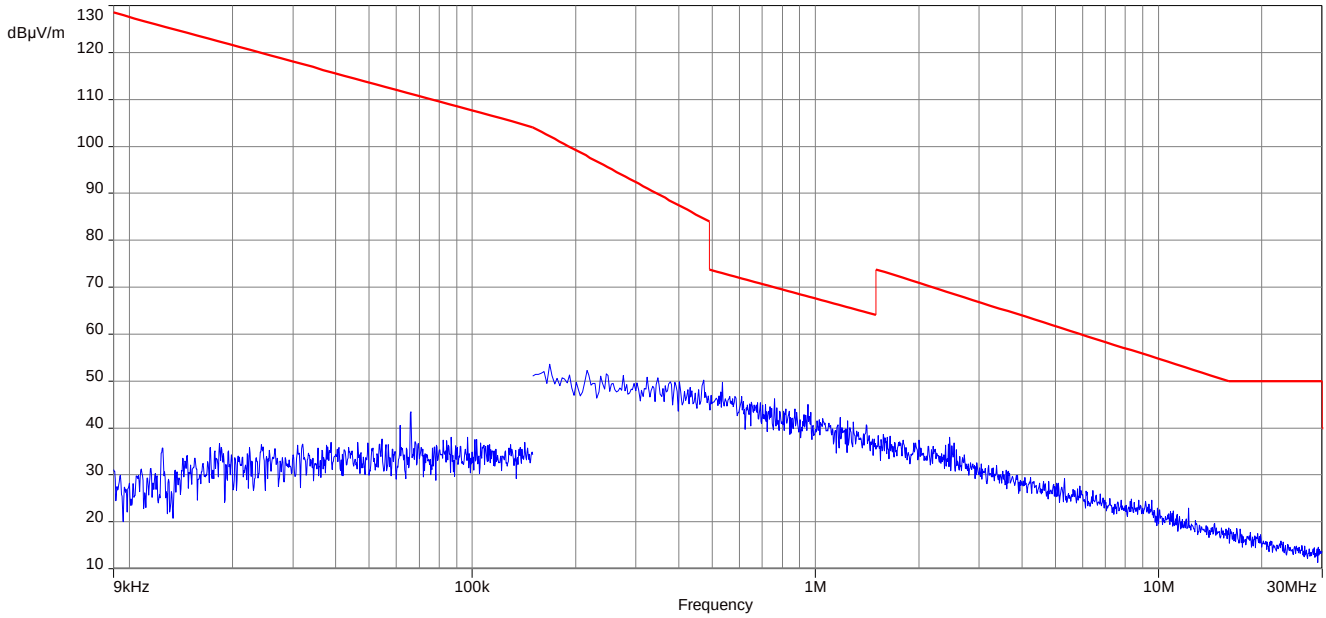
Spurious Emissions Radiated < 30 MHz [dBµV/m]		
F [MHz]	Detector	Level [dBµV/m]
All detected peaks are more than 10 dB below the limit.		

Plots:

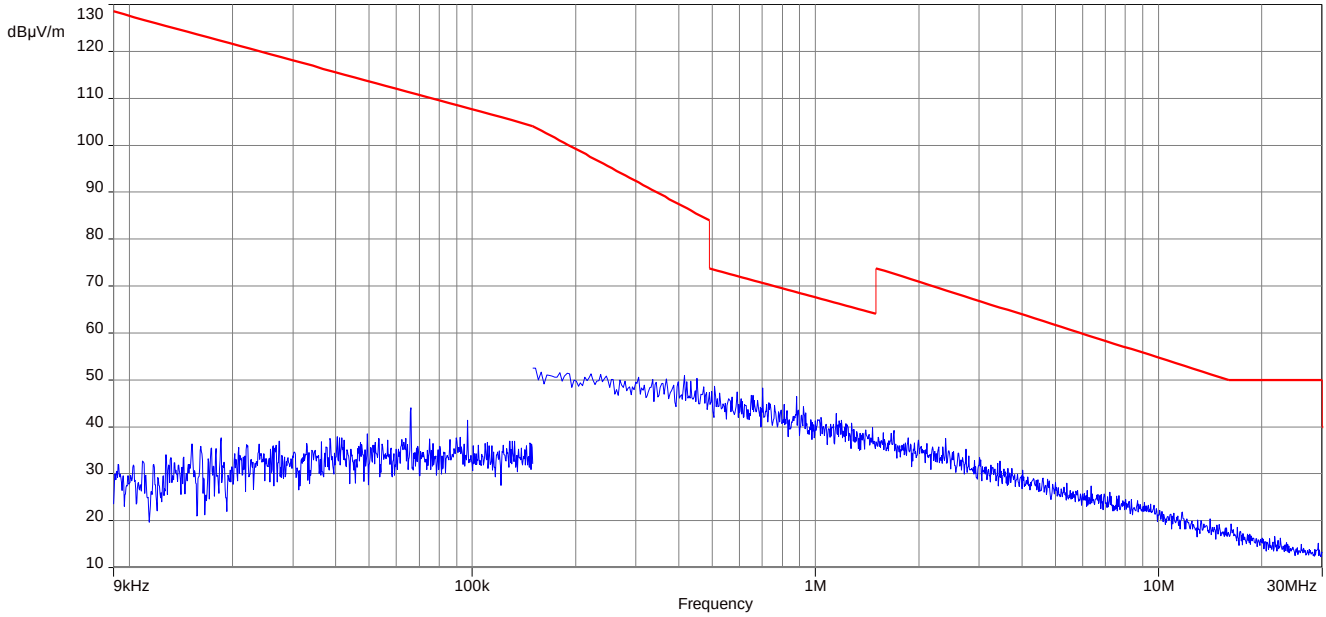
Plot 1: 9 kHz to 30 MHz, antenna 1 + 2 + 3 active, 5180 MHz, OFDM / a – mode



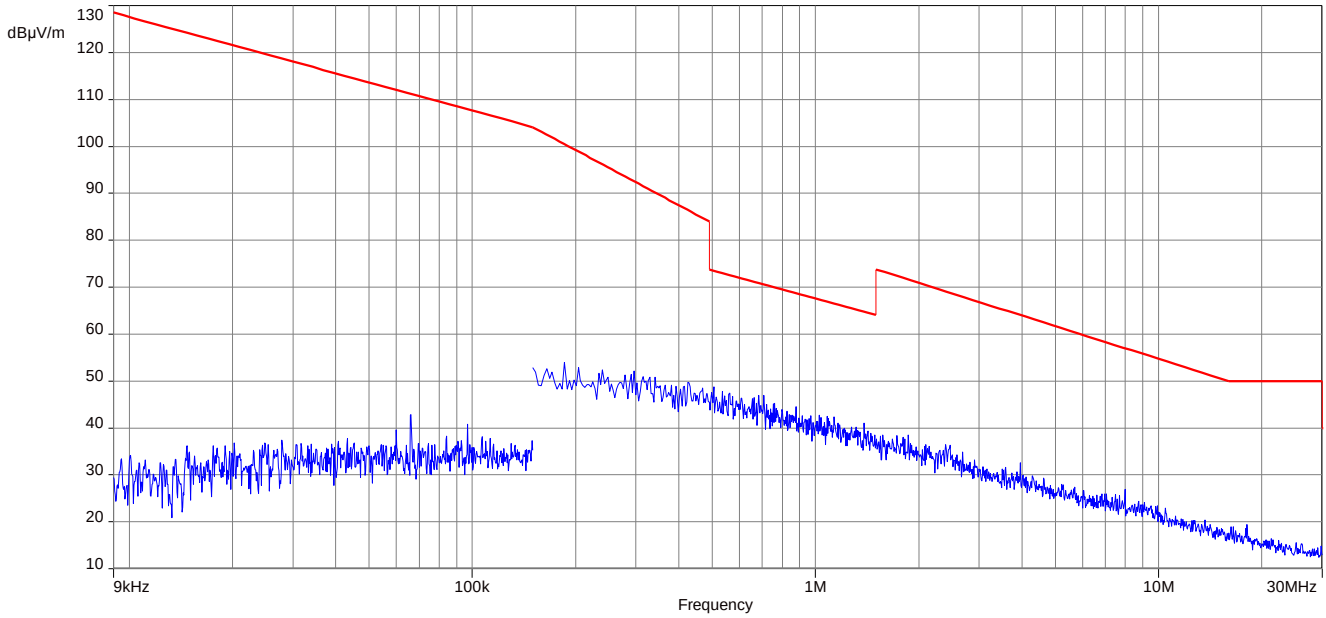
Plot 2: 9 kHz to 30 MHz, antenna 1 + 2 + 3 active, 5200 MHz, OFDM / a – mode



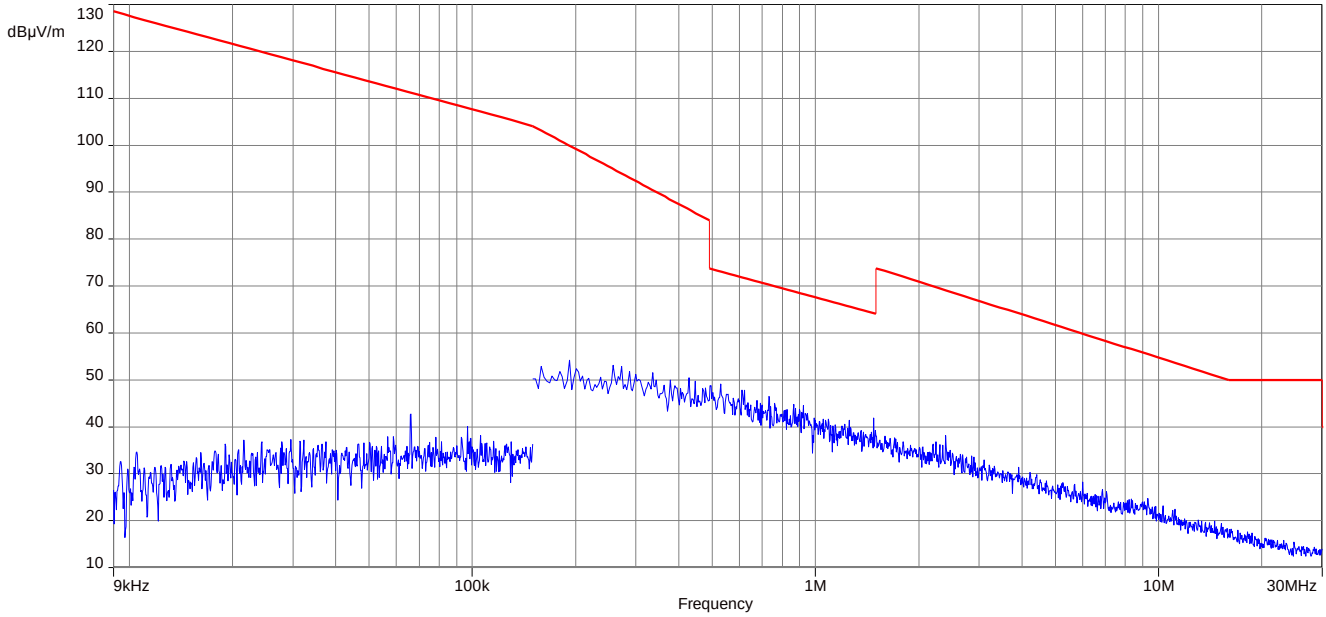
Plot 3: 9 kHz to 30 MHz, antenna 1 + 2 + 3 active, 5300 MHz, OFDM / a – mode



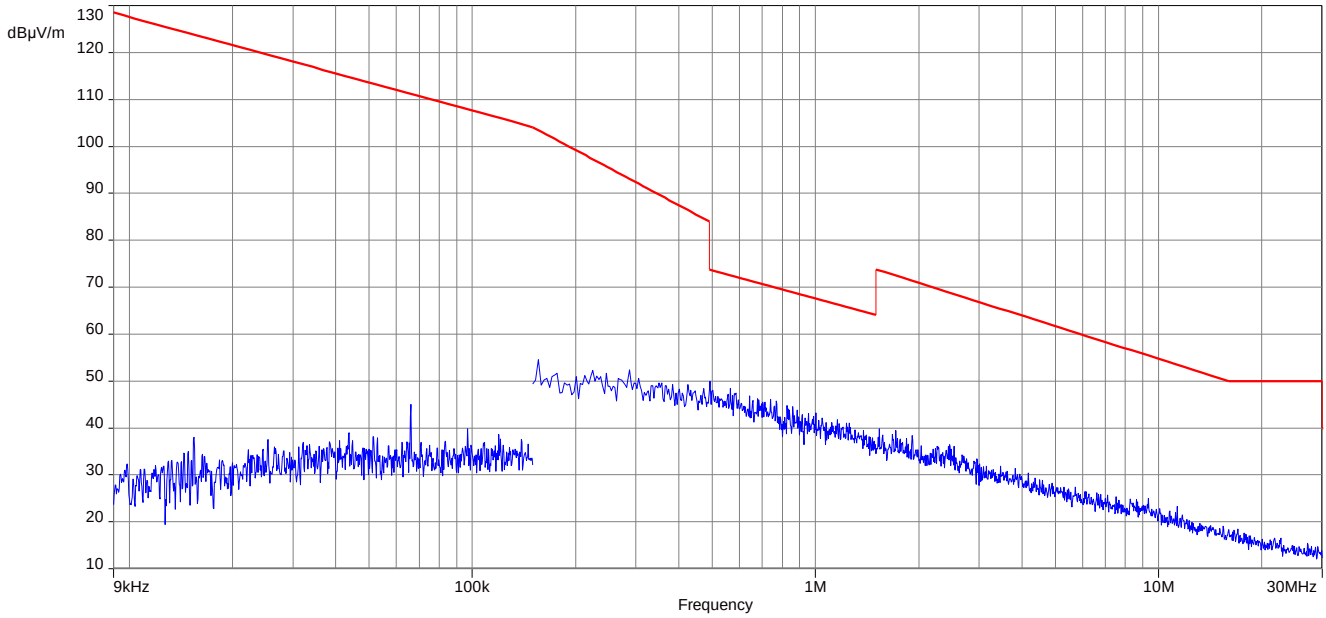
Plot 4: 9 kHz to 30 MHz, antenna 1 + 2 + 3 active, 5320 MHz, OFDM / a – mode



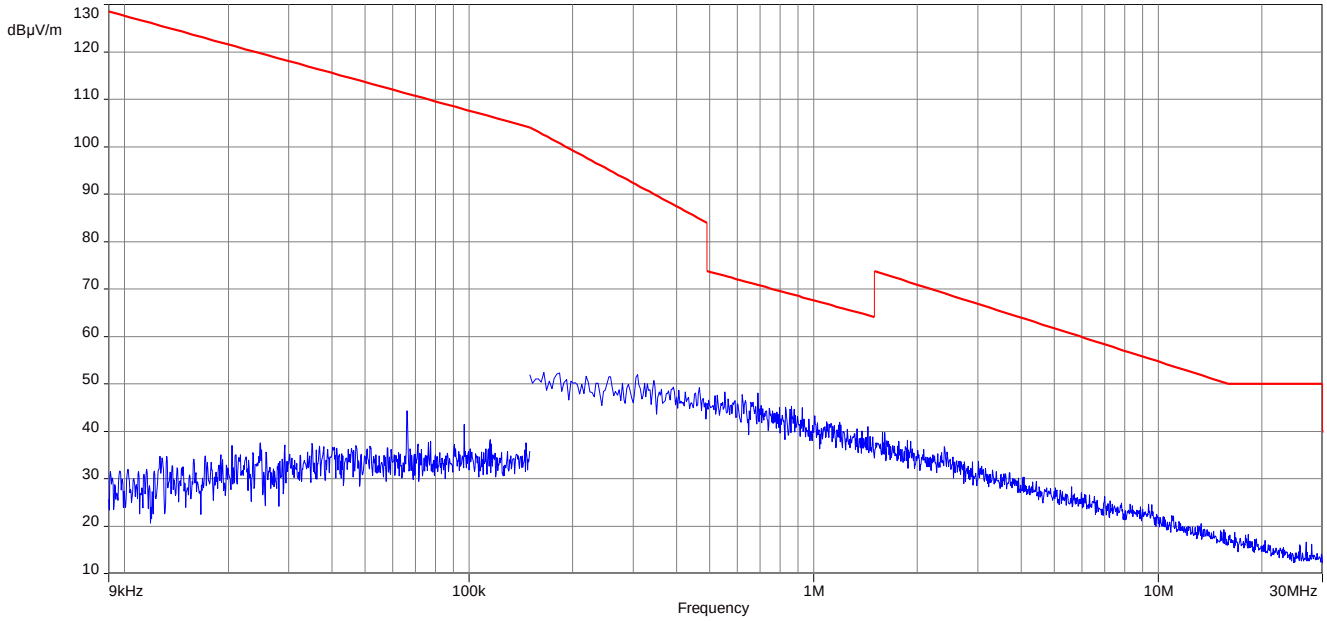
Plot 5: 9 kHz to 30 MHz, antenna 1 + 2 + 3 active, 5500 MHz, OFDM / a – mode



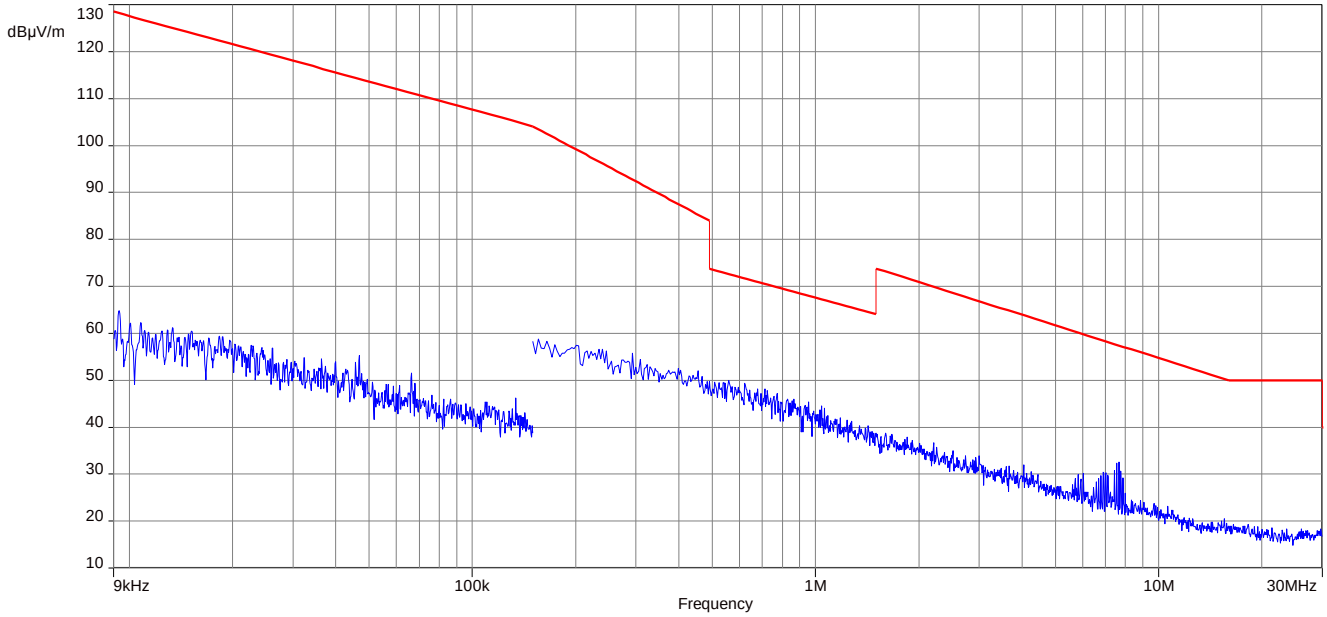
Plot 6: 9 kHz to 30 MHz, antenna 1 + 2 + 3 active, 5600 MHz, OFDM / a – mode



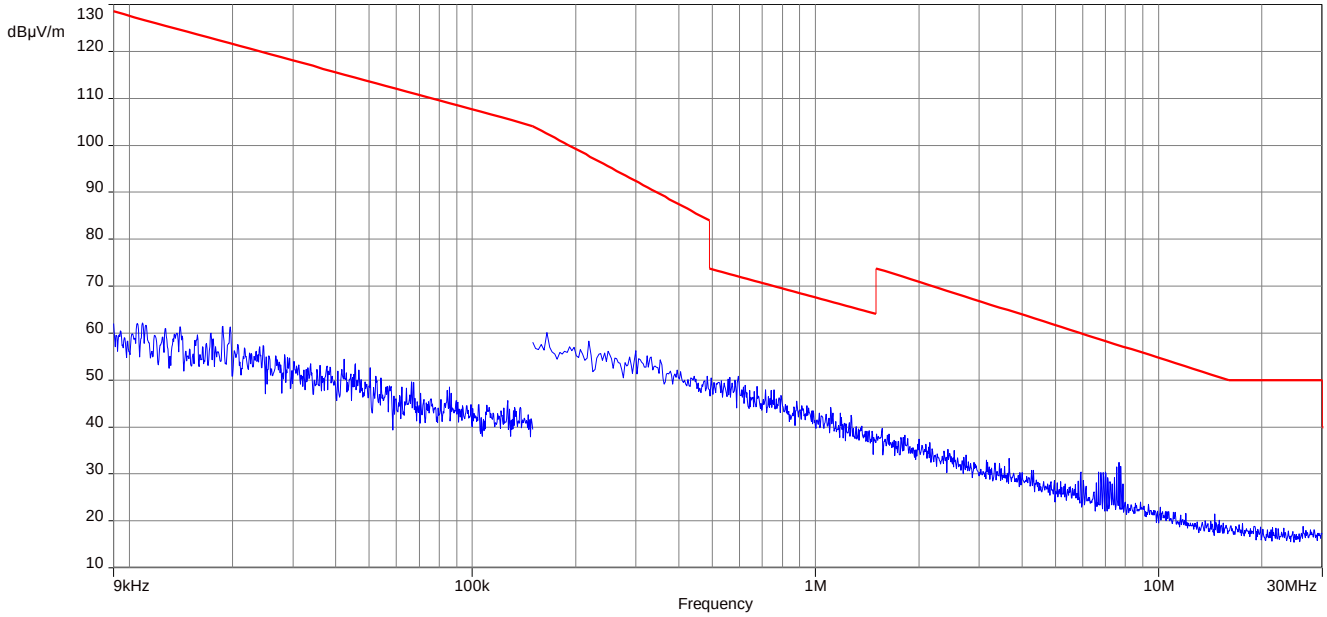
Plot 7: 9 kHz to 30 MHz, antenna 1 + 2 + 3 active, 5700 MHz, OFDM / a – mode



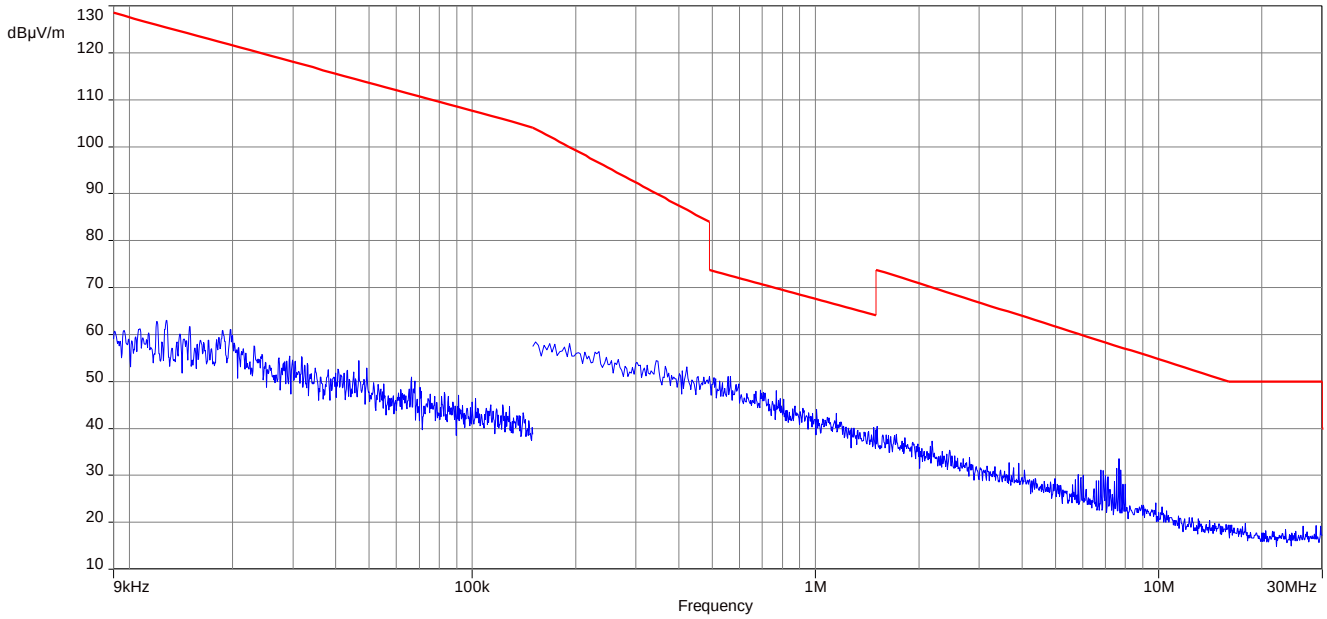
Plot 8: 9 kHz to 30 MHz, antenna 1 + 2 + 3 active, 5745 MHz, OFDM / a – mode



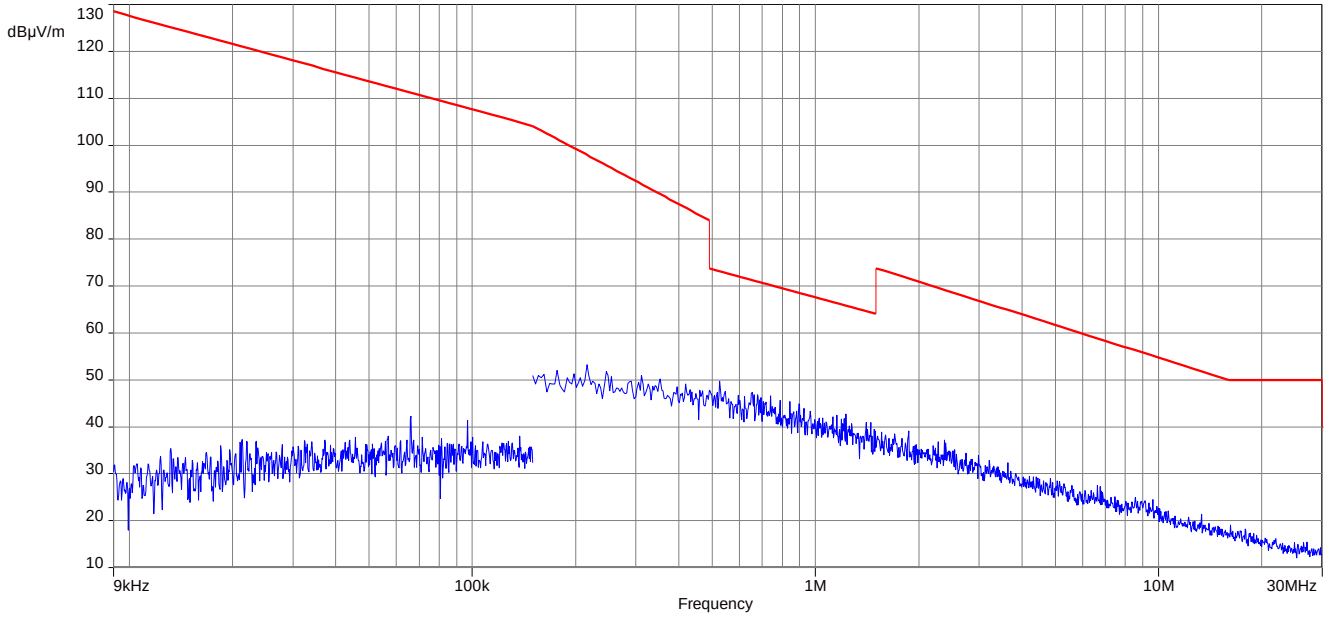
Plot 9: 9 kHz to 30 MHz, antenna 1 + 2 + 3 active, 5785 MHz, OFDM / a – mode



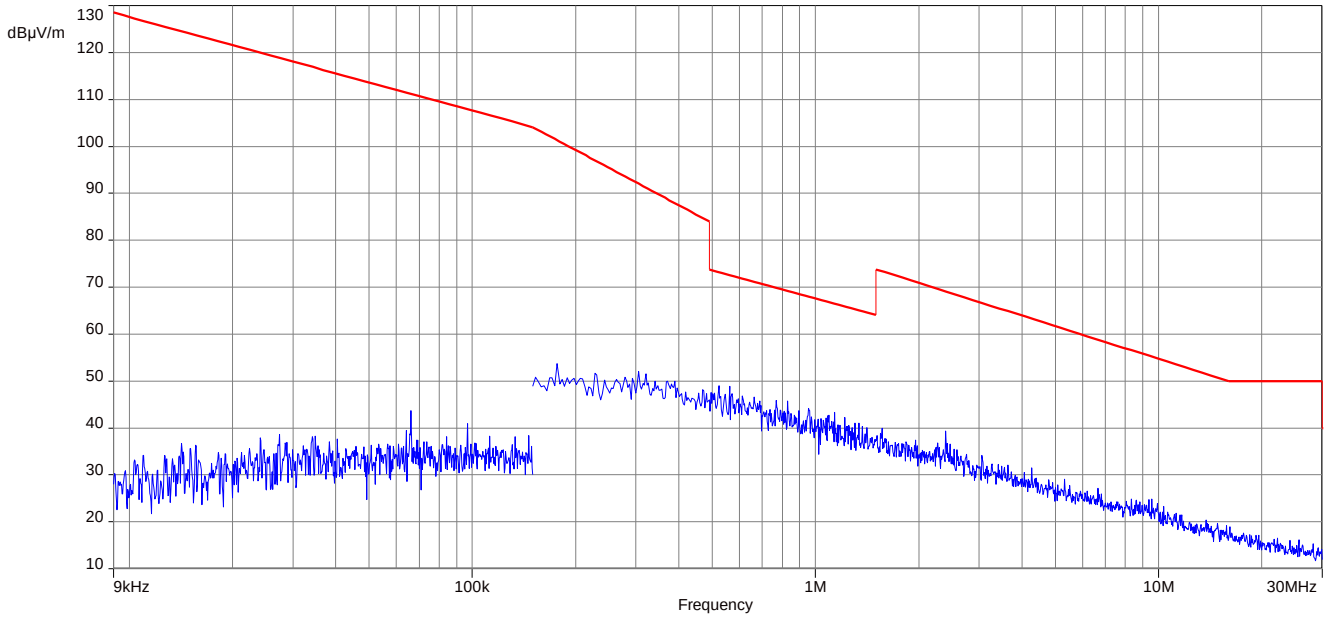
Plot 10: 9 kHz to 30 MHz, antenna 1 + 2 + 3 active, 5825 MHz, OFDM / a – mode



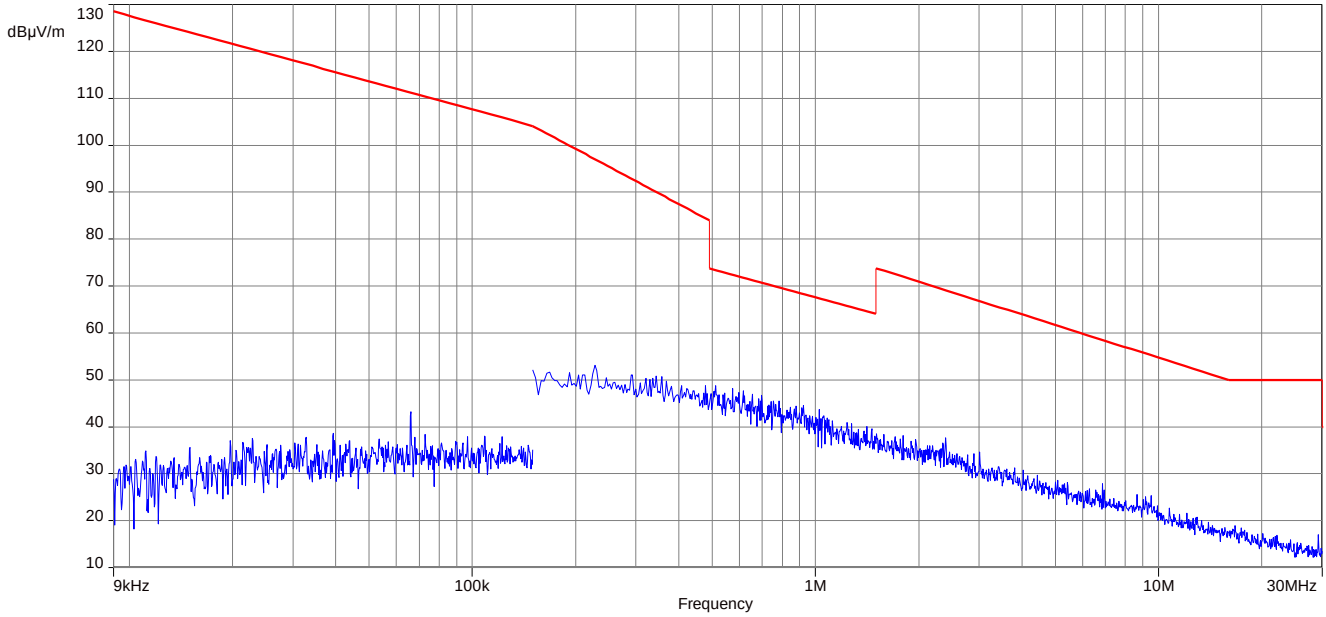
Plot 11: 9 kHz to 30 MHz, antenna 1 + 2 + 3 active, 5180 MHz, OFDM / n/ac HT20 – mode



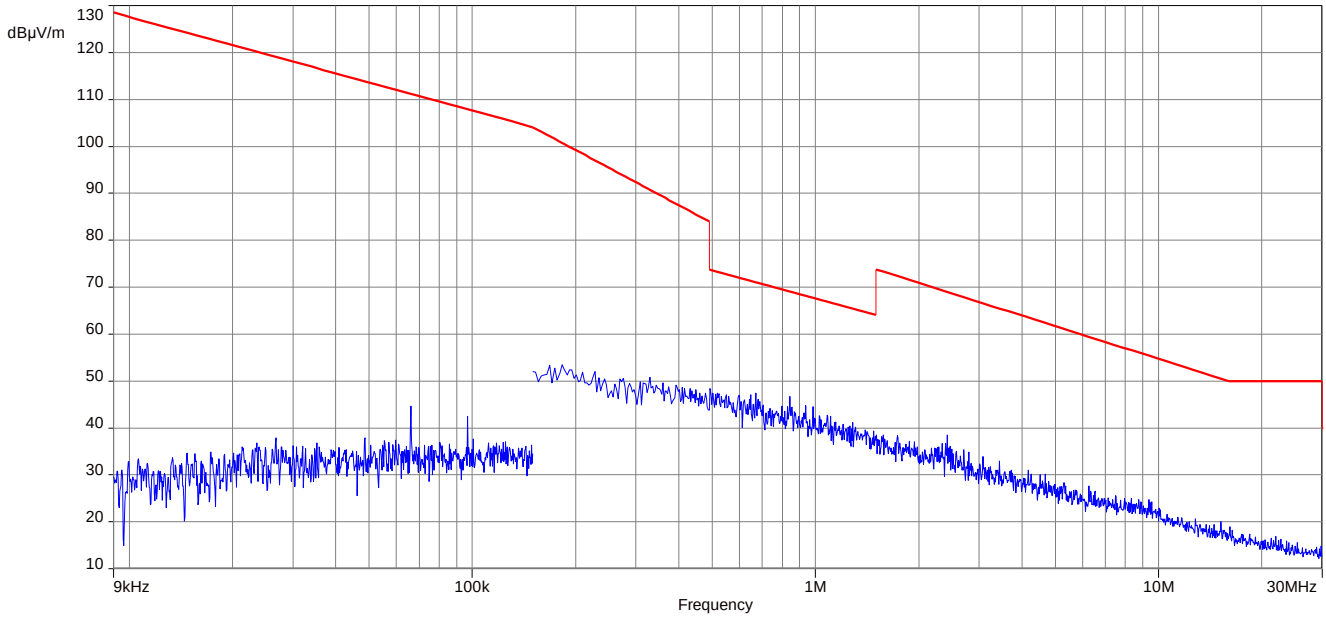
Plot 12: 9 kHz to 30 MHz, antenna 1 + 2 + 3 active, 5200 MHz, OFDM / n/ac HT20 – mode



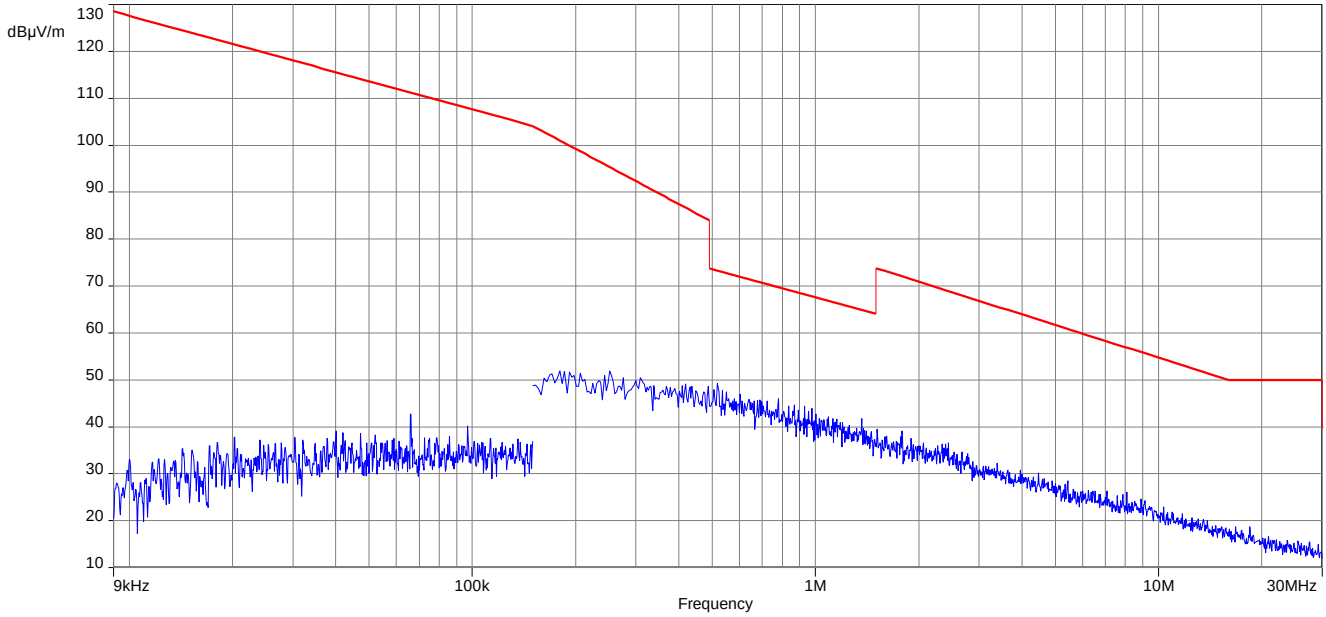
Plot 13: 9 kHz to 30 MHz, antenna 1 + 2 + 3 active, 5300 MHz, OFDM / n/ac HT20 – mode



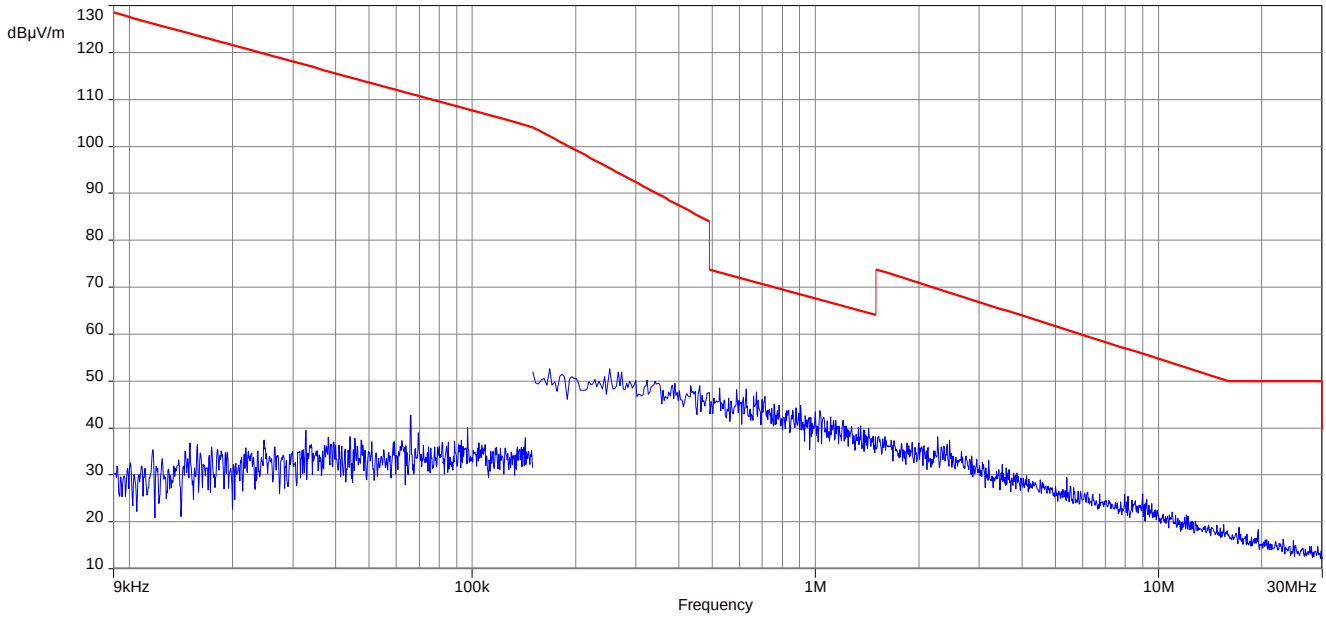
Plot 14: 9 kHz to 30 MHz, antenna 1 + 2 + 3 active, 5320 MHz, OFDM / n/ac HT20 – mode



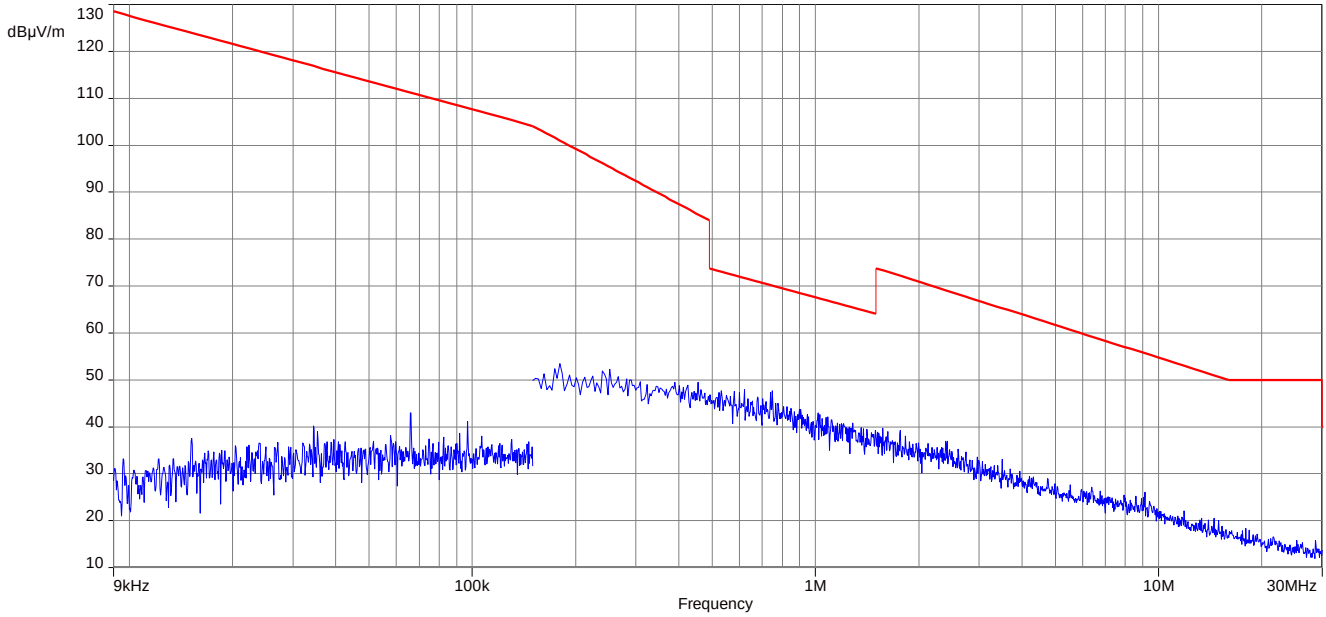
Plot 15: 9 kHz to 30 MHz, antenna 1 + 2 + 3 active, 5500 MHz, OFDM / n/ac HT20 – mode



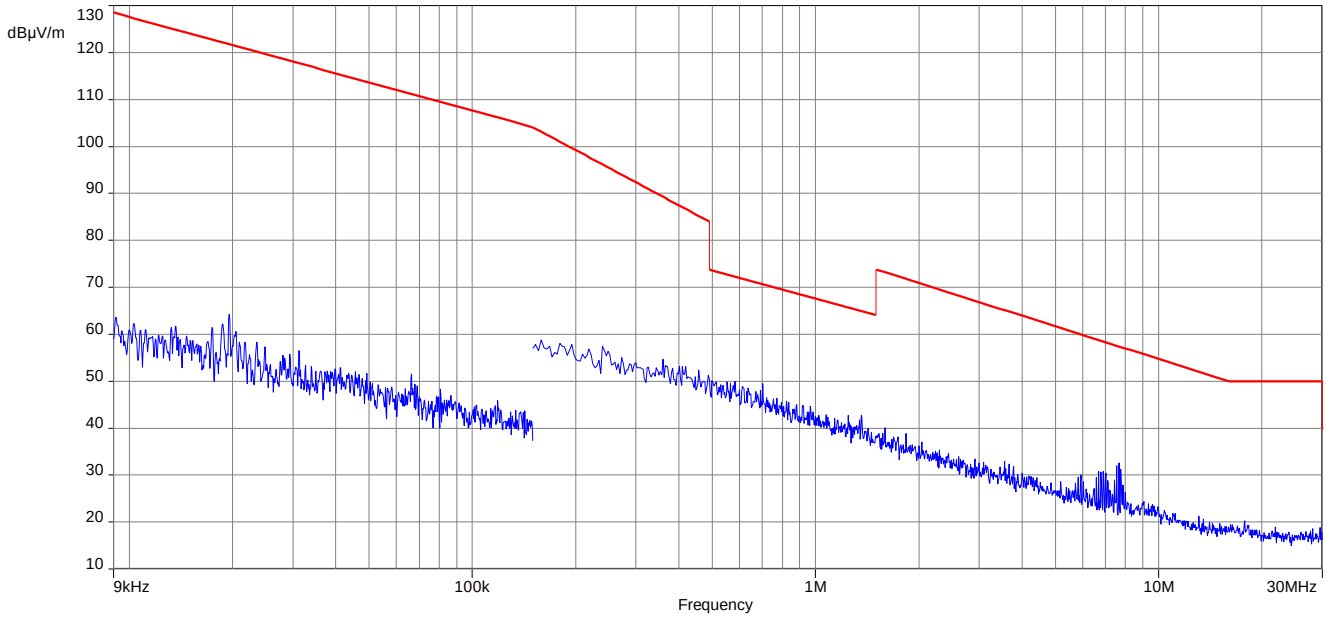
Plot 16: 9 kHz to 30 MHz, antenna 1 + 2 + 3 active, 5600 MHz, OFDM / n/ac HT20 – mode



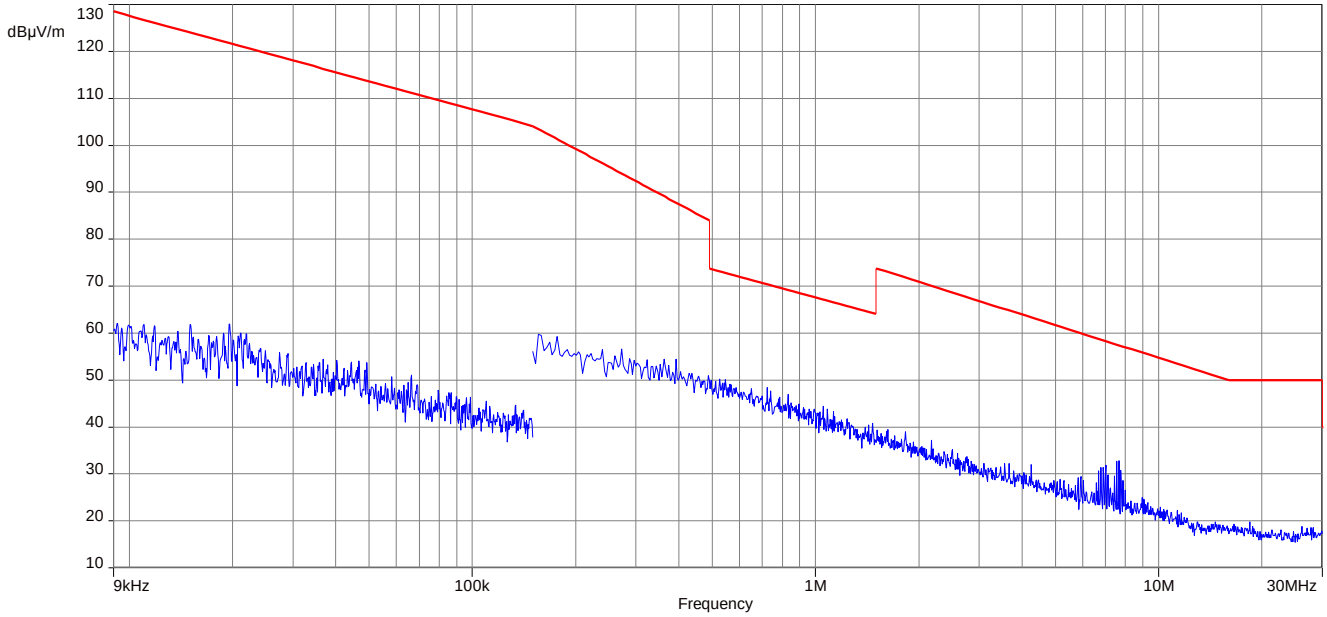
Plot 17: 9 kHz to 30 MHz, antenna 1 + 2 + 3 active, 5700 MHz, OFDM / n/ac HT20 – mode



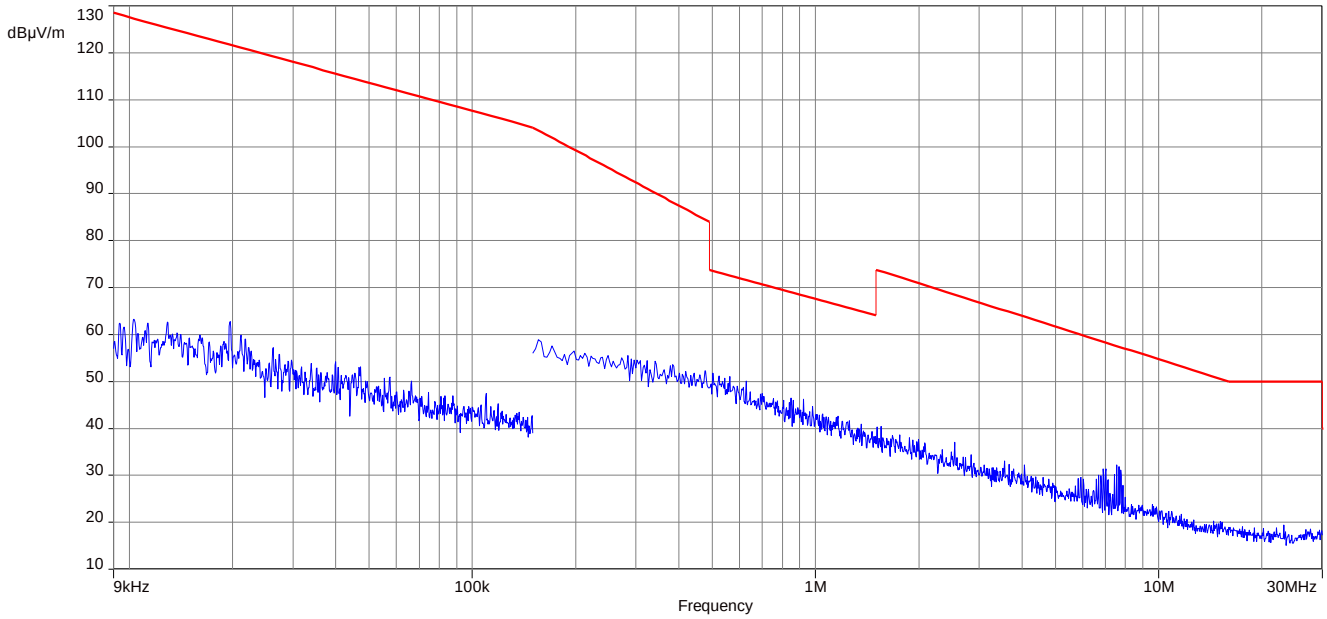
Plot 18: 9 kHz to 30 MHz, antenna 1 + 2 + 3 active, 5745 MHz, OFDM / n/ac HT20 – mode



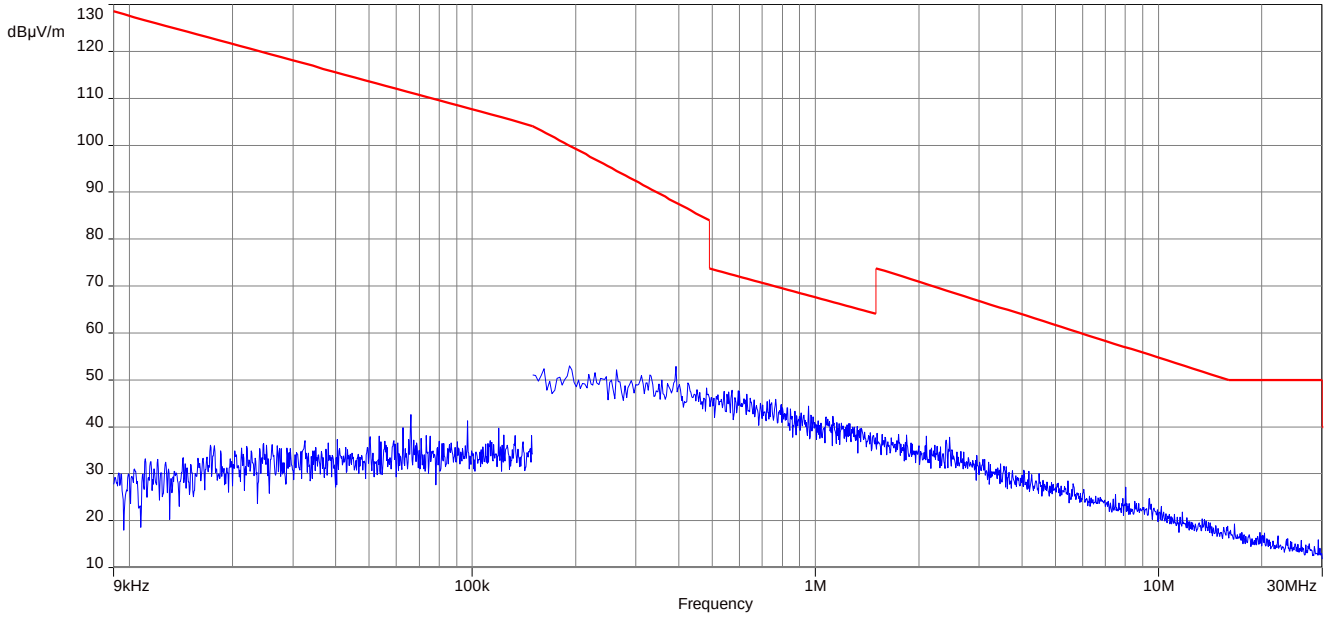
Plot 19: 9 kHz to 30 MHz, antenna 1 + 2 + 3 active, 5785 MHz, OFDM / n/ac HT20 – mode



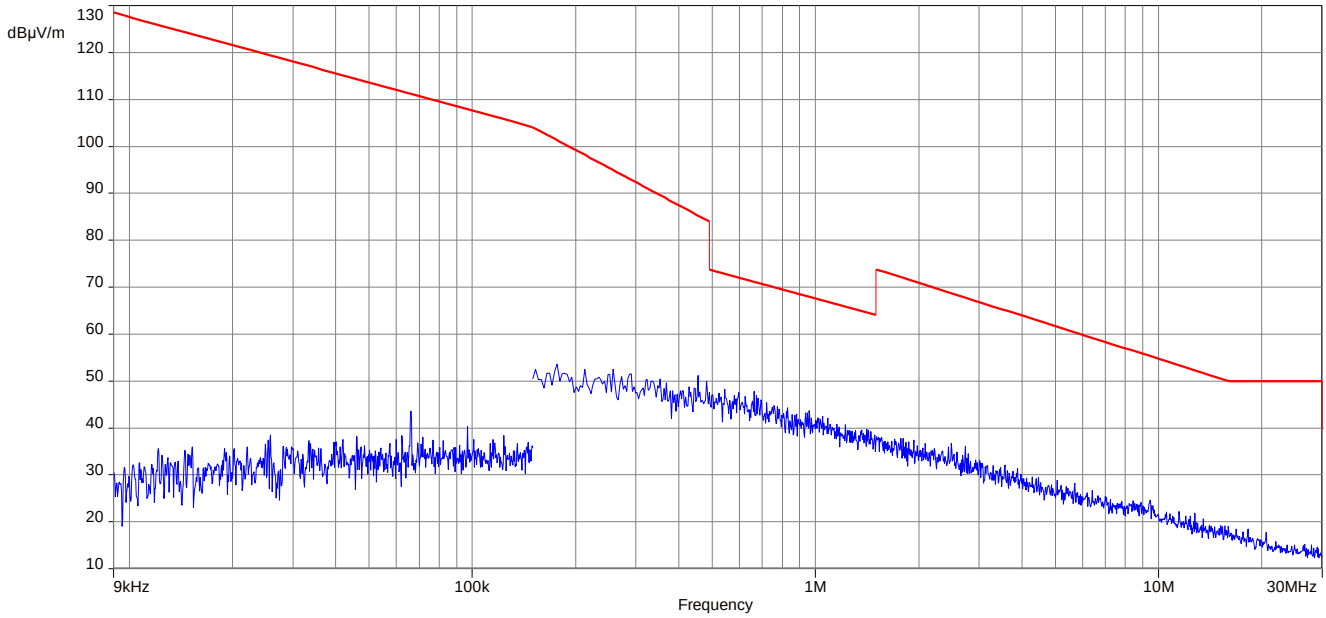
Plot 20: 9 kHz to 30 MHz, antenna 1 + 2 + 3 active, 5825 MHz, OFDM / n/ac HT20 – mode



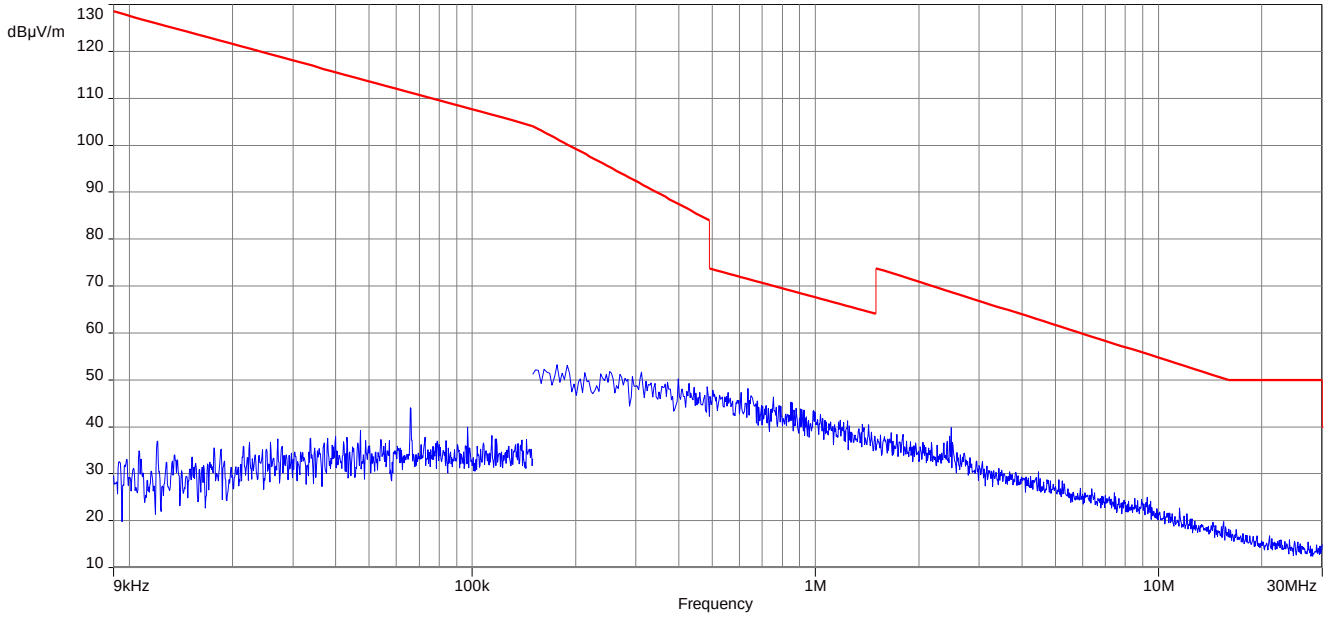
Plot 21: 9 kHz to 30 MHz, antenna 1 + 2 + 3 active, 5190 MHz, OFDM / n/ac HT40 – mode



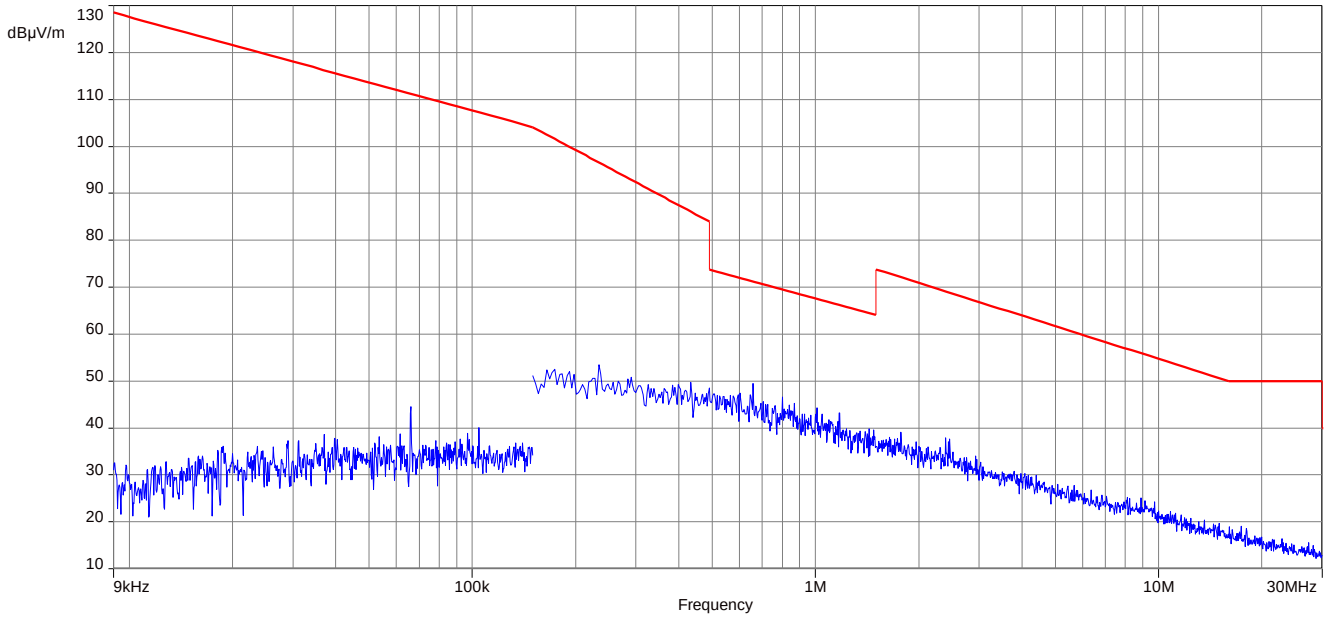
Plot 22: 9 kHz to 30 MHz, antenna 1 + 2 + 3 active, 5230 MHz, OFDM / n/ac HT40 – mode



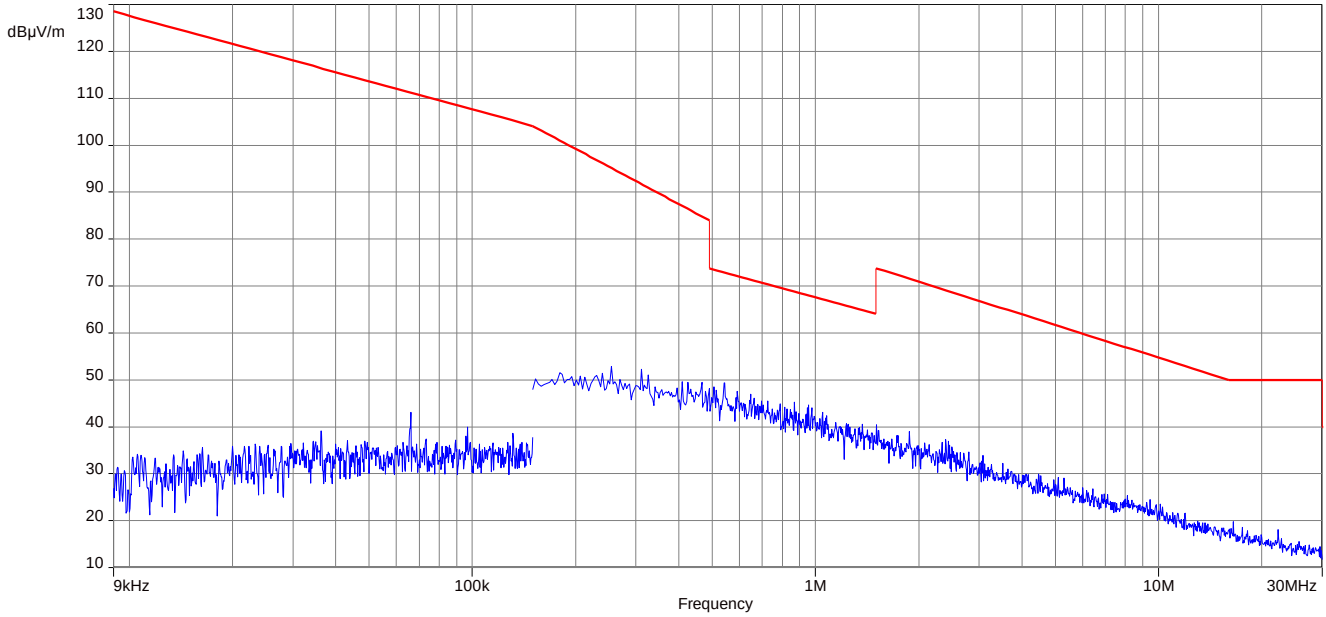
Plot 23: 9 kHz to 30 MHz, antenna 1 + 2 + 3 active, 5270 MHz, OFDM / n/ac HT40 – mode



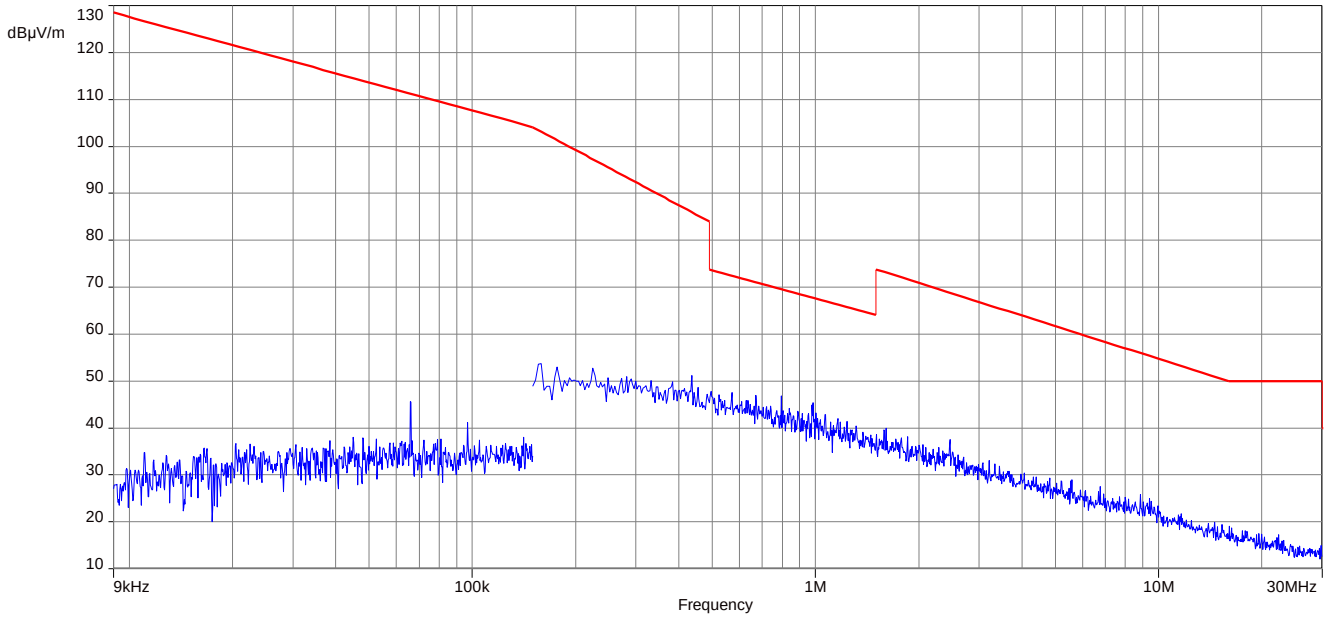
Plot 24: 9 kHz to 30 MHz, antenna 1 + 2 + 3 active, 5310 MHz, OFDM / n/ac HT40 – mode



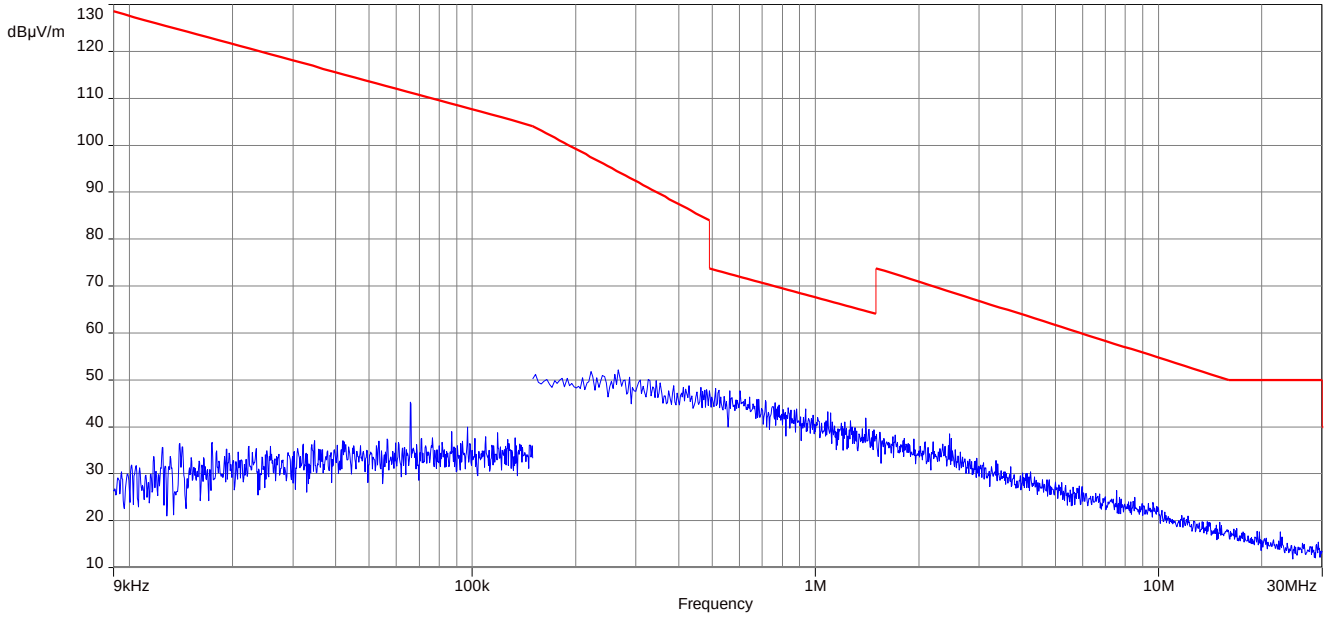
Plot 25: 9 kHz to 30 MHz, antenna 1 + 2 + 3 active, 5510 MHz, OFDM / n/ac HT40 – mode



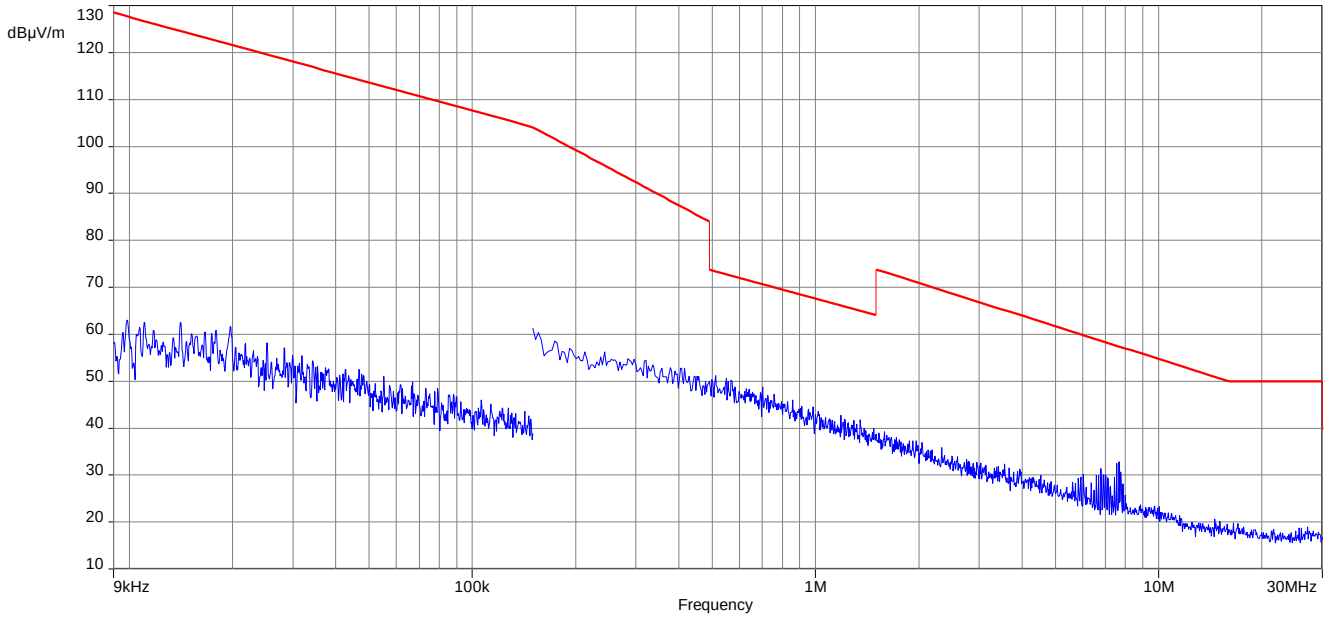
Plot 26: 9 kHz to 30 MHz, antenna 1 + 2 + 3 active, 5550 MHz, OFDM / n/ac HT40 – mode



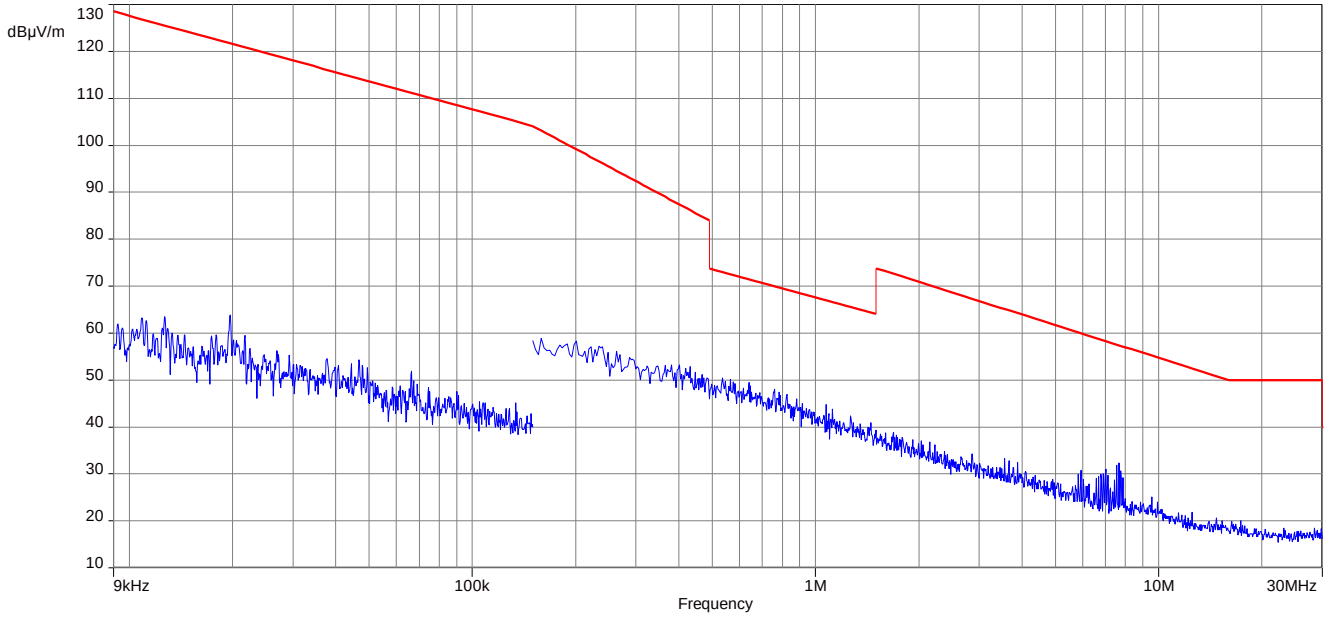
Plot 27: 9 kHz to 30 MHz, antenna 1 + 2 + 3 active, 5670 MHz, OFDM / n/ac HT40 – mode



Plot 28: 9 kHz to 30 MHz, antenna 1 + 2 + 3 active, 5755 MHz, OFDM / n/ac HT40 – mode



Plot 29: 9 kHz to 30 MHz, antenna 1 + 2 + 3 active, 5795 MHz, OFDM / n/ac HT40 – mode



13 Observations

No observations except those reported with the single test cases have been made.

Annex A Document history

Version	Applied changes	Date of release
	Initial release	2016-04-12

Annex B Further information

Glossary

AVG - Average
DUT - Device under test
EMC - Electromagnetic Compatibility
EN - European Standard
EUT - Equipment under test
ETSI - European Telecommunications Standard Institute
FCC - Federal Communication Commission
FCC ID - Company Identifier at FCC
HW - Hardware
IC - Industry Canada
Inv. No. - Inventory number
N/A - Not applicable
PP - Positive peak
QP - Quasi peak
S/N - Serial number
SW - Software
PMN - Product marketing name
HMN - Host marketing name
HVIN - Hardware version identification number
FVIN - Firmware version identification number

Annex C Accreditation Certificate

Front side of certificate

DAkkS Deutsche Akkreditierungsstelle

Deutsche Akkreditierungsstelle GmbH

Beliehene gemäß § 8 Absatz 1 AkkStelleG i.V.m. § 1 Absatz 1 AkkStelleGBV
Unterzeichnerin der Multilateralen Abkommen
von EA, ILAC und IAF zur gegenseitigen Anerkennung

Akkreditierung

Die Deutsche Akkreditierungsstelle GmbH bestätigt hiermit, dass das Prüflaboratorium

CETECOM ICT Services GmbH
Untertürkheimer Straße 6-10, 66117 Saarbrücken

die Kompetenz nach DIN EN ISO/IEC 17025:2005 besitzt, Prüfungen in folgenden Bereichen durchzuführen:

Drahtgebundene Kommunikation einschließlich xDSL
VoIP und DECT
Akustik
Funk einschließlich WLAN
Short Range Devices (SRD)
RFID
WiMax und Richtfunk
Mobilfunk (GSM / DCS, Over the Air (OTA) Performance)
Elektromagnetische Verträglichkeit (EMV) einschließlich Automotive
Produktsicherheit
SAR und Hearing Aid Compatibility (HAC)
Umweltsimulation
Smart Card Terminals
Bluetooth
Wi-Fi- Services

Die Akkreditierungsurkunde gilt nur in Verbindung mit dem Bescheid vom 07.03.2014 mit der Akkreditierungsnummer D-PL-12076-01 und ist gültig 17.01.2018. Sie besteht aus diesem Deckblatt, der Rückseite des Deckblatts und der folgenden Anlage mit insgesamt 77 Seiten.

Registrierungsnummer der Urkunde: **D-PL-12076-01-00**

Frankfurt am Main, 07.03.2014

Im Auftrag Dipl.-Ing. (FH) Ralf Egner
Abteilungsleiter

Siehe Rückseite der Urkunde

Back side of certificate

Deutsche Akkreditierungsstelle GmbH

Standort Berlin Spittelmarkt 10 10117 Berlin	Standort Frankfurt am Main Gartenstraße 6 60594 Frankfurt am Main	Standort Braunschweig Bundesallee 100 38116 Braunschweig

Die auszugsweise Veröffentlichung der Akkreditierungsurkunde bedarf der vorherigen schriftlichen Zustimmung der Deutsche Akkreditierungsstelle GmbH (DAkkS). Ausgenommen davon ist die separate Weiterverbreitung des Deckblattes durch die umseitig genannte Konformitätsbewertungsstelle in unveränderter Form.

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Die Akkreditierung erfolgte gemäß des Gesetzes über die Akkreditierungsstelle (AkkStelleG) vom 31. Juli 2009 (BGBl. I S. 2625) sowie der Verordnung (EG) Nr. 765/2008 des Europäischen Parlaments und des Rates vom 9. Juli 2008 über die Vorschriften für die Akkreditierung und Marktüberwachung im Zusammenhang mit der Vermarktung von Produkten (Abl. L 218 vom 9. Juli 2008, S. 30).
Die DAkkS ist Unterzeichnerin der Multilateralen Abkommen zur gegenseitigen Anerkennung der European co-operation for Accreditation (EA), des International Accreditation Forum (IAF) und der International Laboratory Accreditation Cooperation (ILAC). Die Unterzeichner dieser Abkommen erkennen ihre Akkreditierungen gegenseitig an.

Der aktuelle Stand der Mitgliedschaft kann folgenden Webseiten entnommen werden:
EA: www.european-accreditation.org
ILAC: www.ilac.org
IAF: www.iaf.nu

Note:
The current certificate including annex may be received from CETECOM ICT Services GmbH on request.