

Appendix_to_1-2846/16-02-05-B

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Appendix authorized:

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Radio Communications & EMC

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1 Antenna gain

Antenna 1: M3002-66494

OFDM 5150 MHz to 5850 MHz	Gain					
	5180 MHz	5320 MHz	5500 MHz	5700 MHz	5745 MHz	5825 MHz
Channel						
Radiated power for gain calculation	15.1	16.7	18.4	19.2	14.82	14.32
Conducted power for gain calculation	13.89	15.37	15.53	16.02	13.0	11.5
Gain	1.21	1.33	2.87	3.18	-1.82	-2.82
Measurement uncertainty	± 3 dB					

Antenna 2: 453564154611

OFDM 5150 MHz to 5850 MHz	Gain					
	5180 MHz	5320 MHz	5500 MHz	5700 MHz	5745 MHz	5825 MHz
Channel						
Radiated power for gain calculation	10.6	15.1	17.1	16.1	14.82	14.32
Conducted power for gain calculation	13.89	15.37	15.53	16.02	11.4	10.1
Gain	-3.29	-0.27	1.57	0.08	-3.42	-4.22
Measurement uncertainty	± 3 dB					

Antenna 3: 453564175981

OFDM 5150 MHz to 5850 MHz	Gain					
	5180 MHz	5320 MHz	5500 MHz	5700 MHz	5745 MHz	5825 MHz
Channel						
Radiated power for gain calculation	17.5	20.5	19.9	19.8	14.82	14.32
Conducted power for gain calculation	13.89	15.37	15.53	16.02	17.7	17.6
Gain	3.61	5.13	4.37	3.78	2.88	3.28
Measurement uncertainty	± 3 dB					

Antenna 4: 453564271931

OFDM 5150 MHz to 5850 MHz	Gain					
	5180 MHz	5320 MHz	5500 MHz	5700 MHz	5745 MHz	5825 MHz
Channel						
Radiated power for gain calculation	13.7	13.3	15.9	16.6	14.82	14.32
Conducted power for gain calculation	13.89	15.37	15.53	16.02	14.5	11.9
Gain	-0.19	-2.07	0.37	0.58	-0.32	-2.42
Measurement uncertainty	± 3 dB					

2 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:	10 Hz / 1 MHz
Span:	See plots!
Trace-Mode:	Max Hold

Limits:

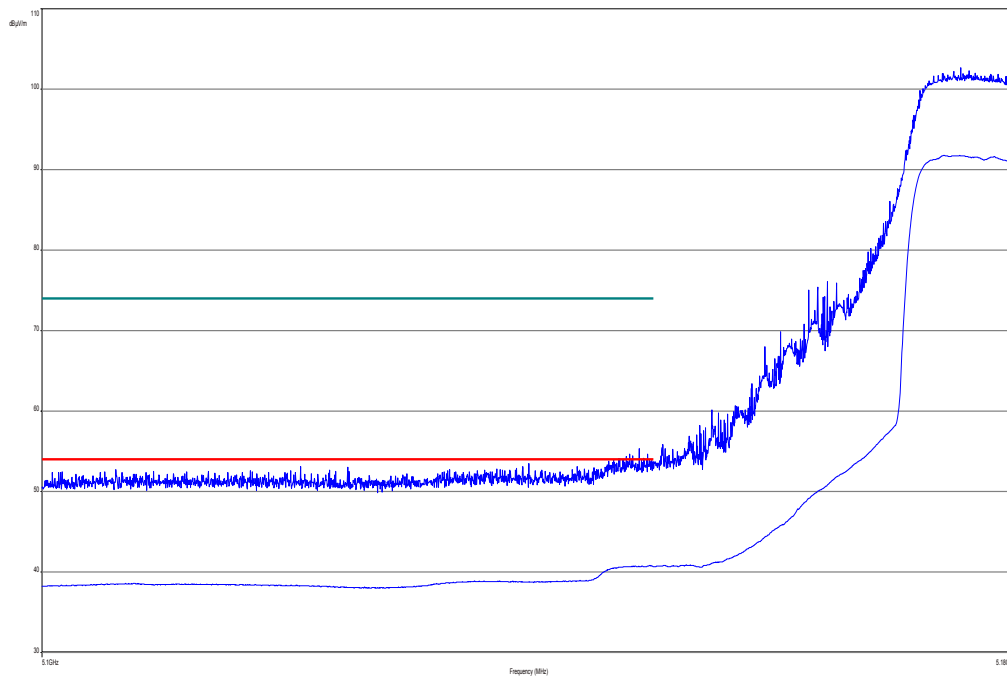
Band Edge Compliance Radiated
In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within 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 dB μ V/m PEAK 54 dB μ V/m AVG

Result:

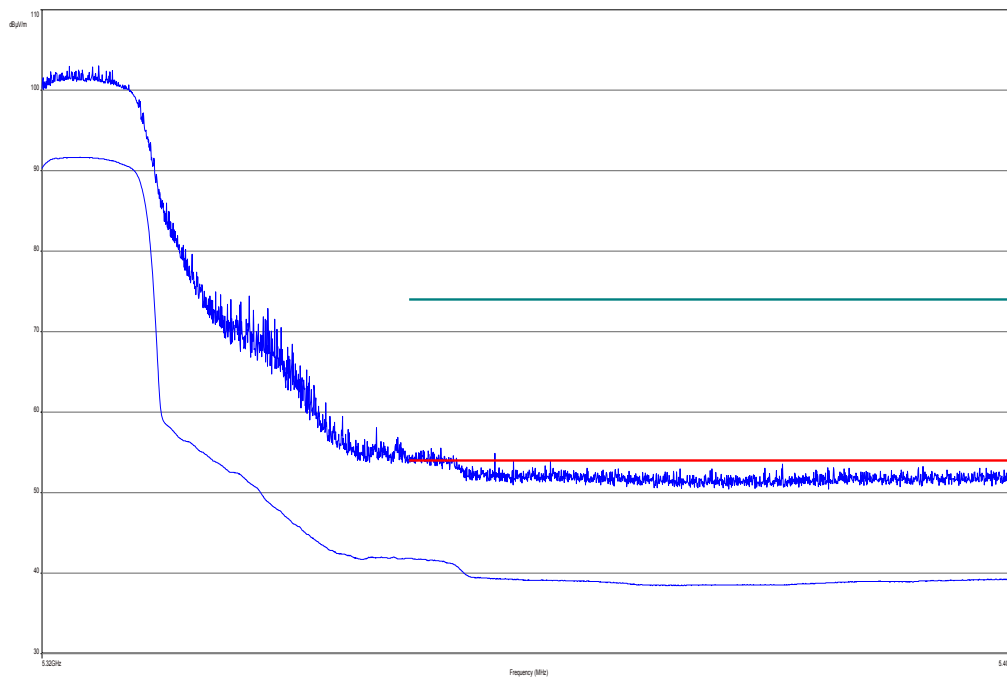
Scenario	Band Edge Compliance Radiated [dB μ V/m]
band edge	< 74 dB μ V/m (AVG) < 54 dB μ V/m (PEAK)
Measurement uncertainty	\pm 3 dB

Plots: Antenna M3002-66494

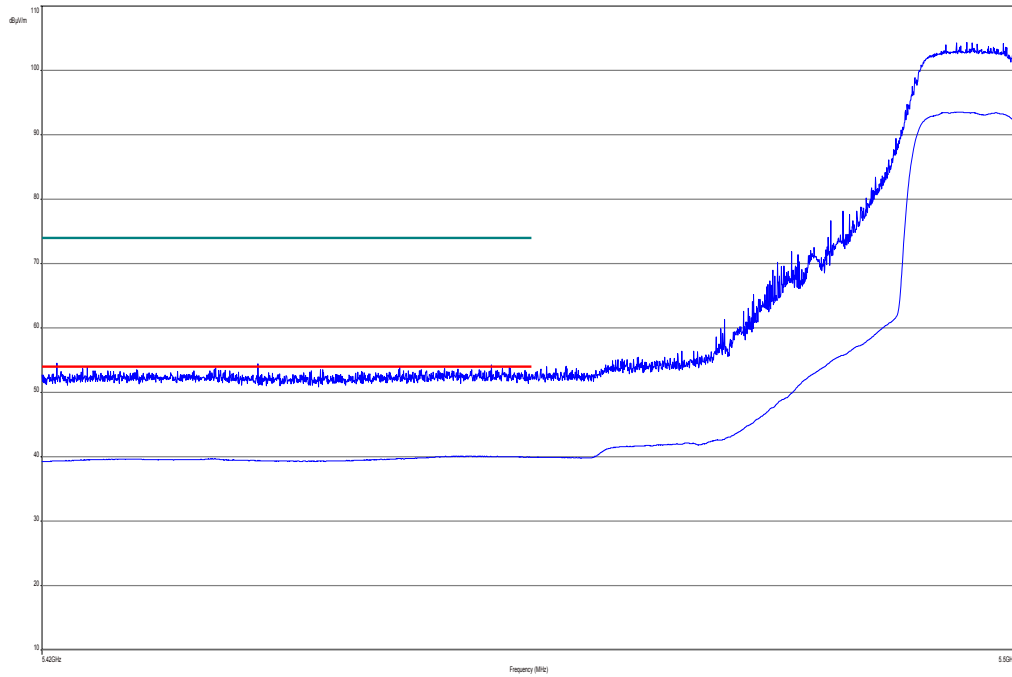
Plot 1: lower band edge, vertical & horizontal polarization (a mode), channel 36



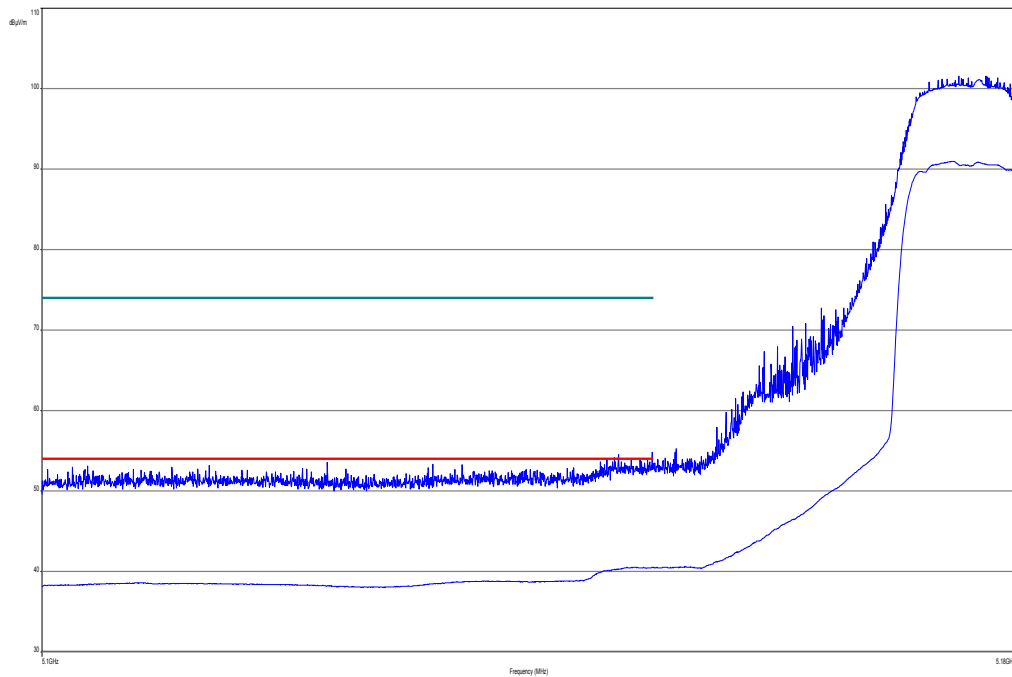
Plot 2: upper band edge, vertical & horizontal polarization (a mode), channel 64



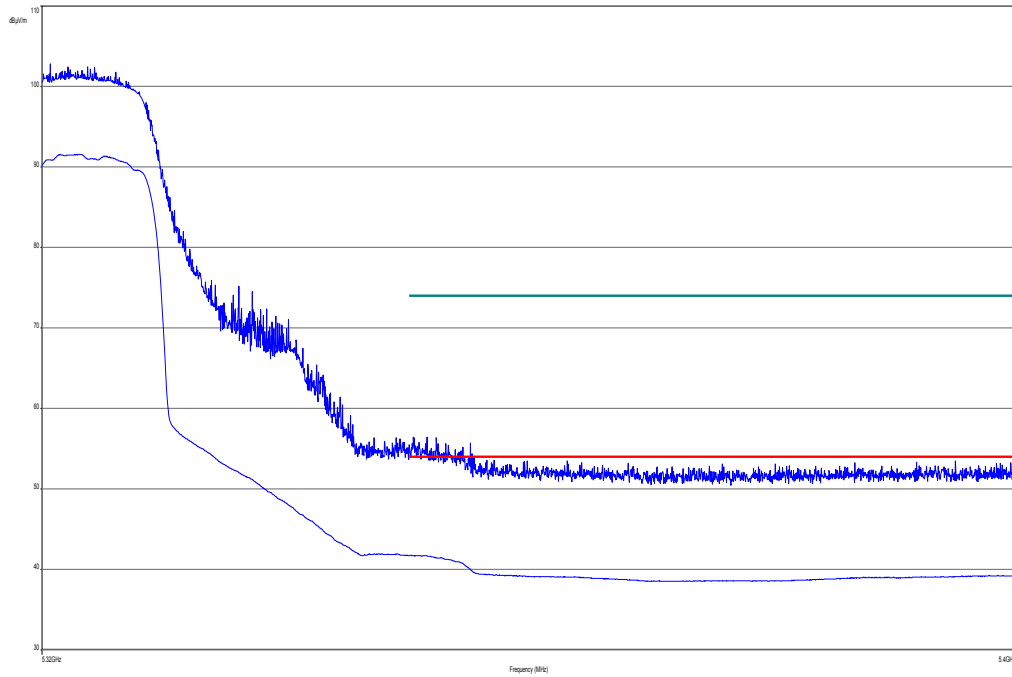
Plot 3: lower band edge, vertical & horizontal polarization (a mode), channel 100



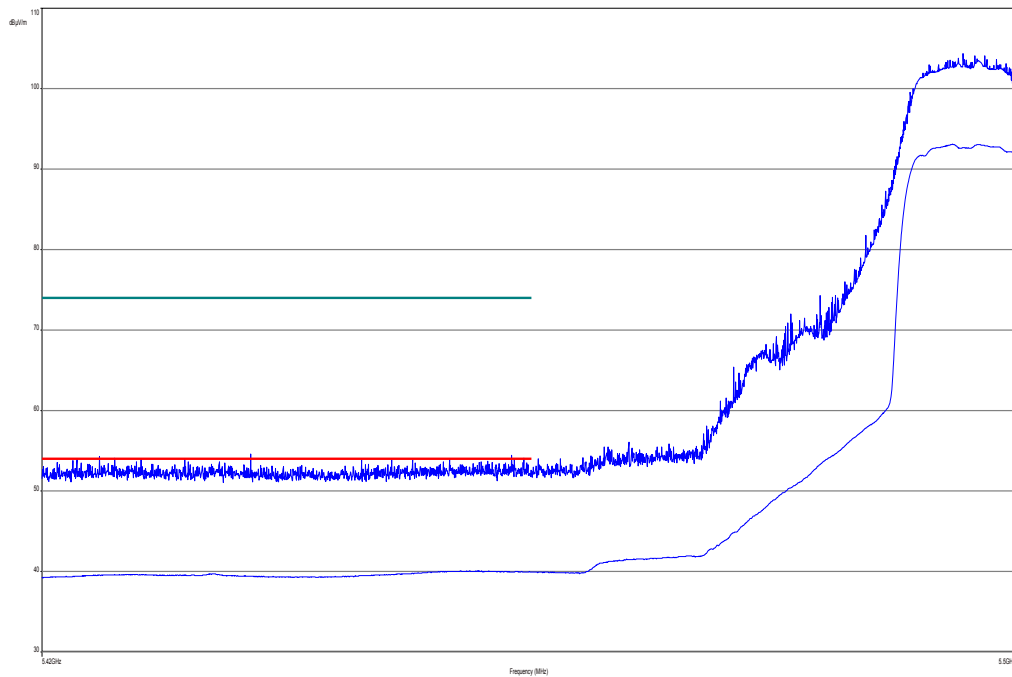
Plot 4: lower band edge, vertical & horizontal polarization (n HT 20 mode), channel 36



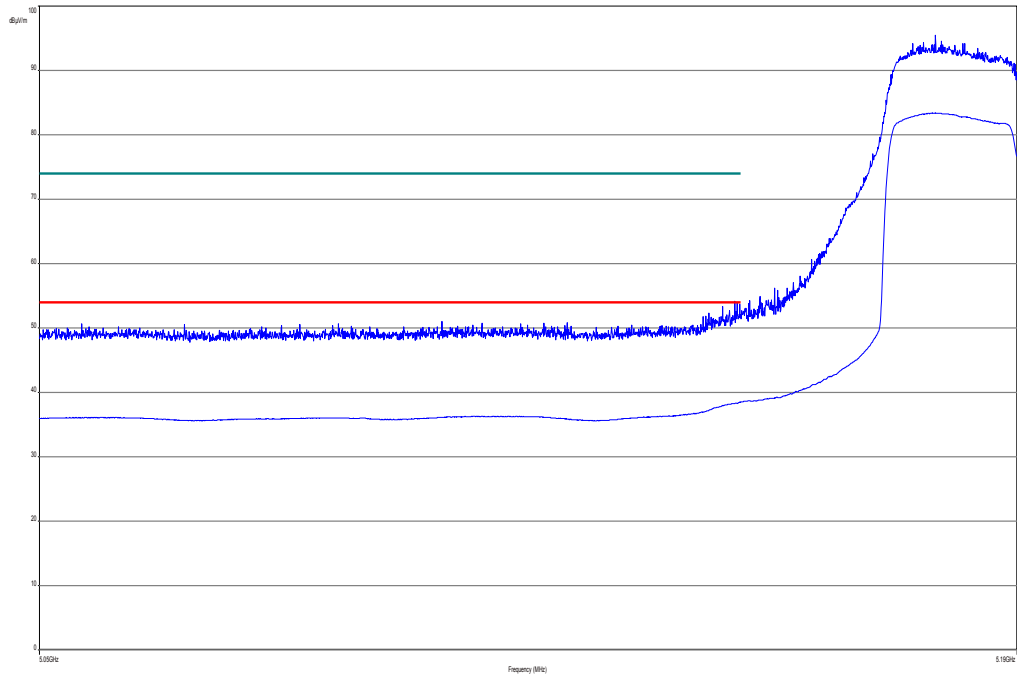
Plot 5: upper band edge, vertical & horizontal polarization (n HT 20 mode), channel 64



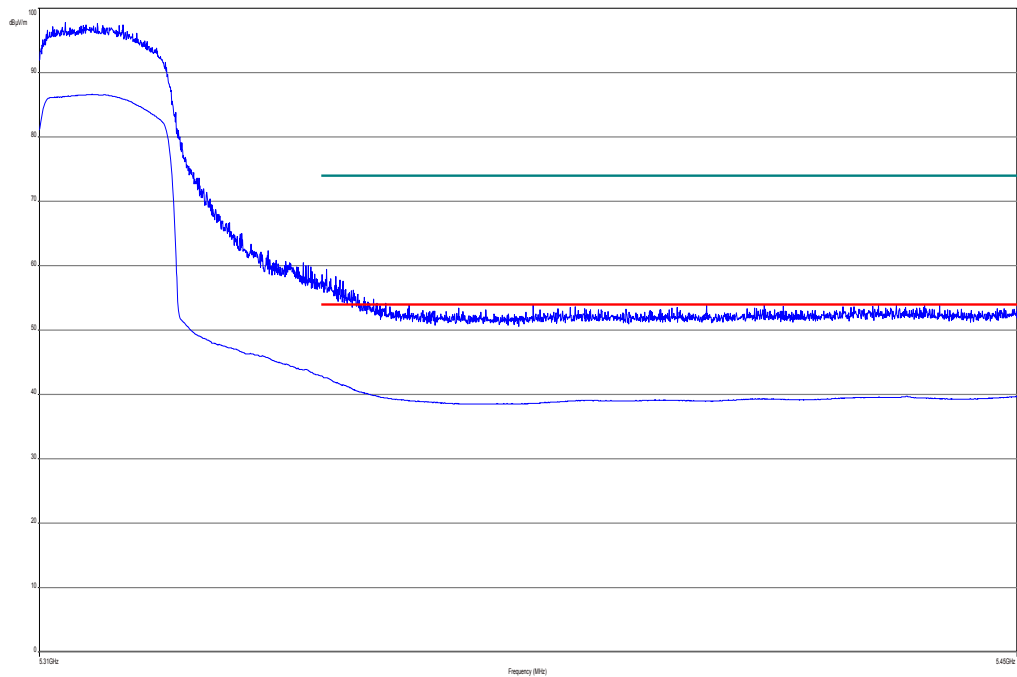
Plot 6: lower band edge, vertical & horizontal polarization (n HT 20 mode), channel 100



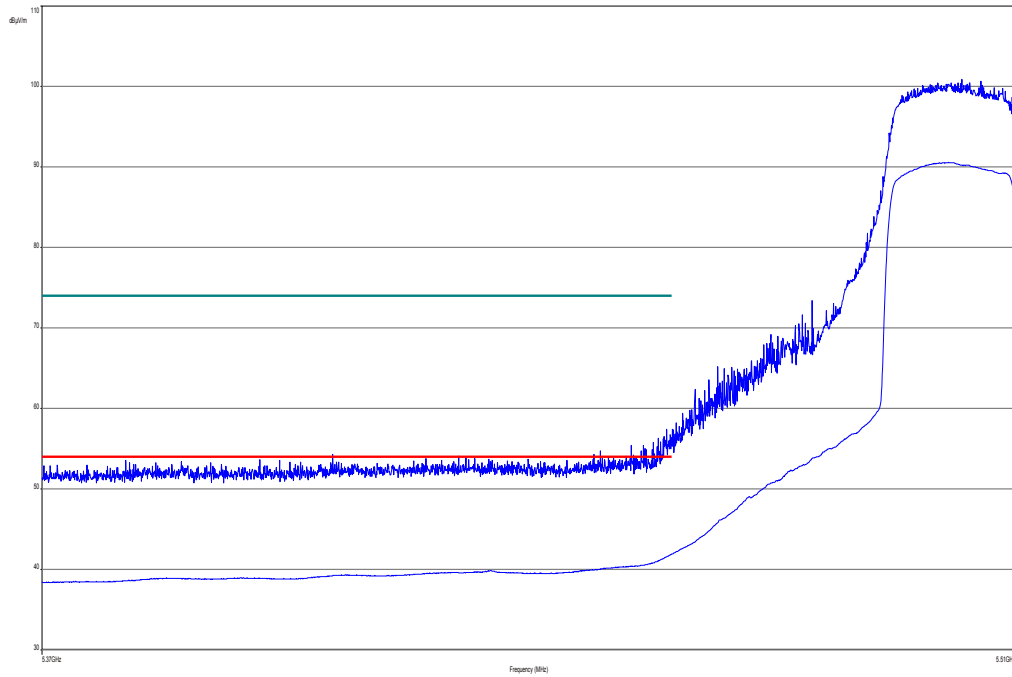
Plot 7: lower band edge, vertical & horizontal polarization (n HT 40 mode), channel 38



Plot 8: upper band edge, vertical & horizontal polarization (n HT 40 mode), channel 62



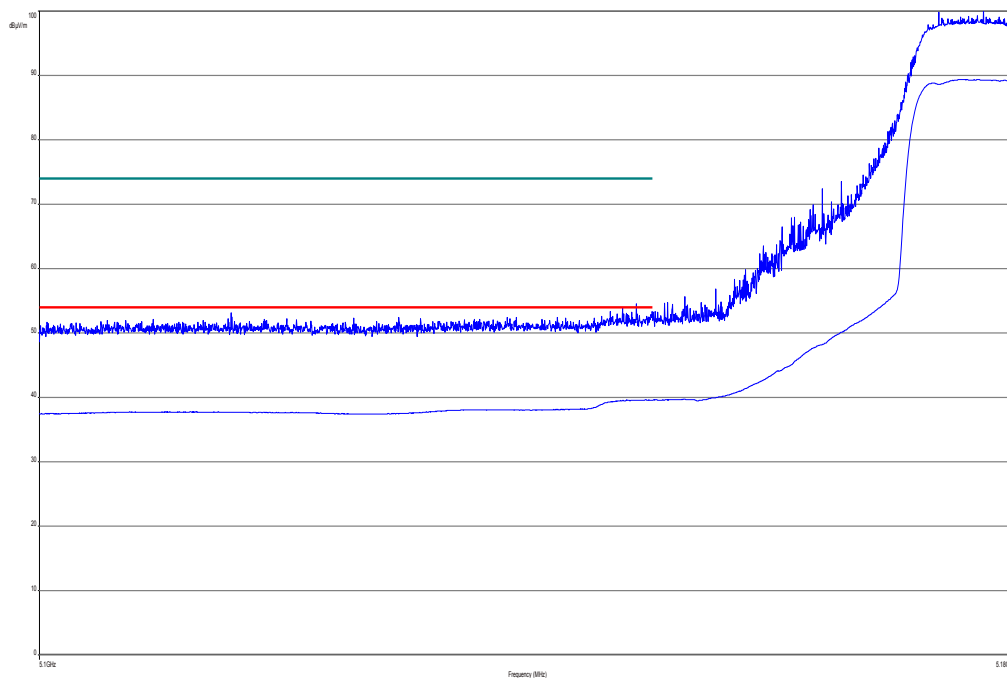
Plot 9: lower band edge, vertical & horizontal polarization (n HT 40 mode), channel 102



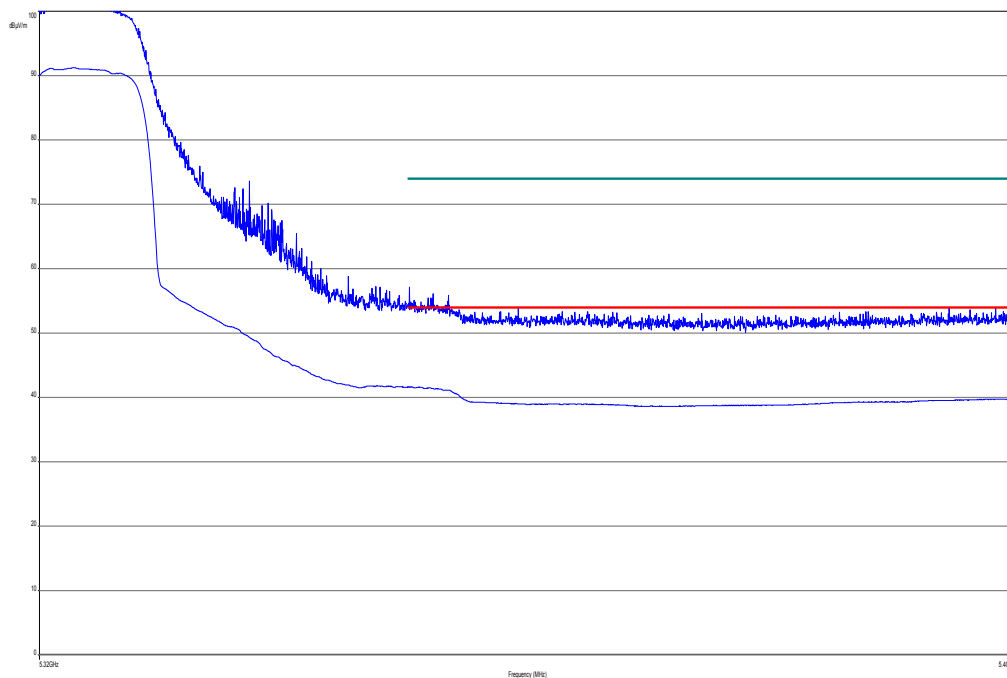
Result: Passed

Plots: Antenna 453564154611

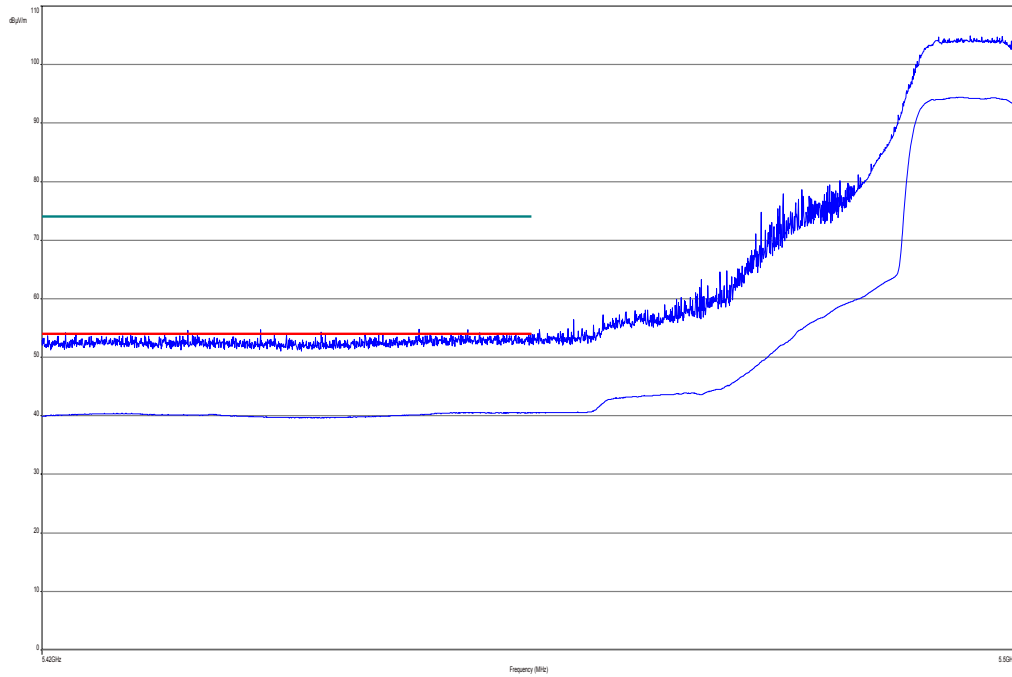
Plot 10: lower band edge, vertical & horizontal polarization (a mode), channel 36



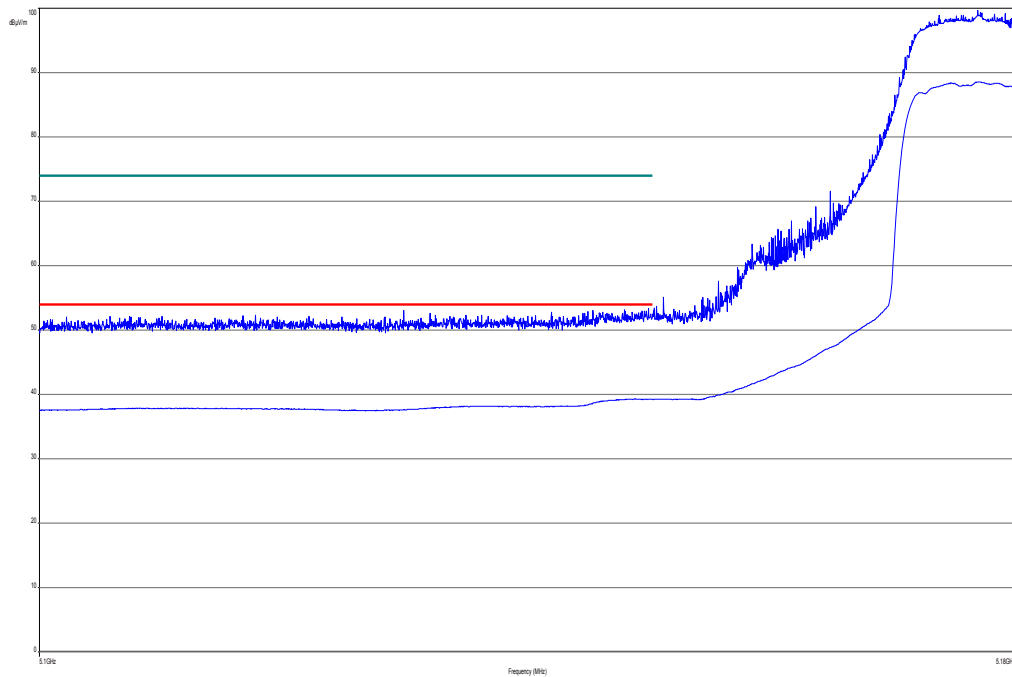
Plot 11: upper band edge, vertical & horizontal polarization (a mode), channel 64



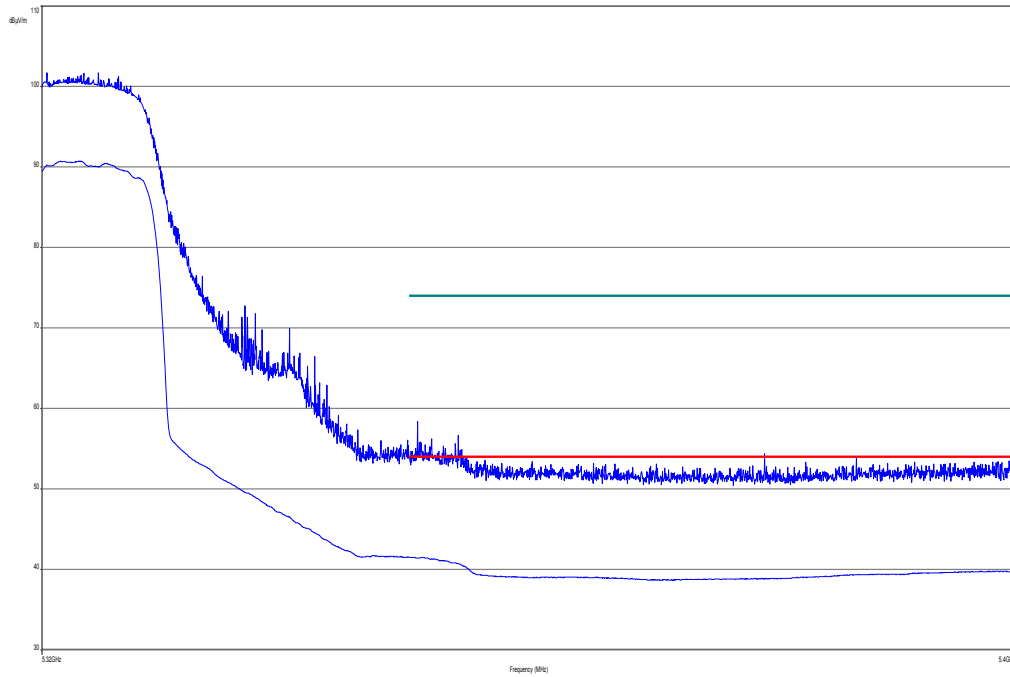
Plot 12: lower band edge, vertical & horizontal polarization (a mode), channel 100



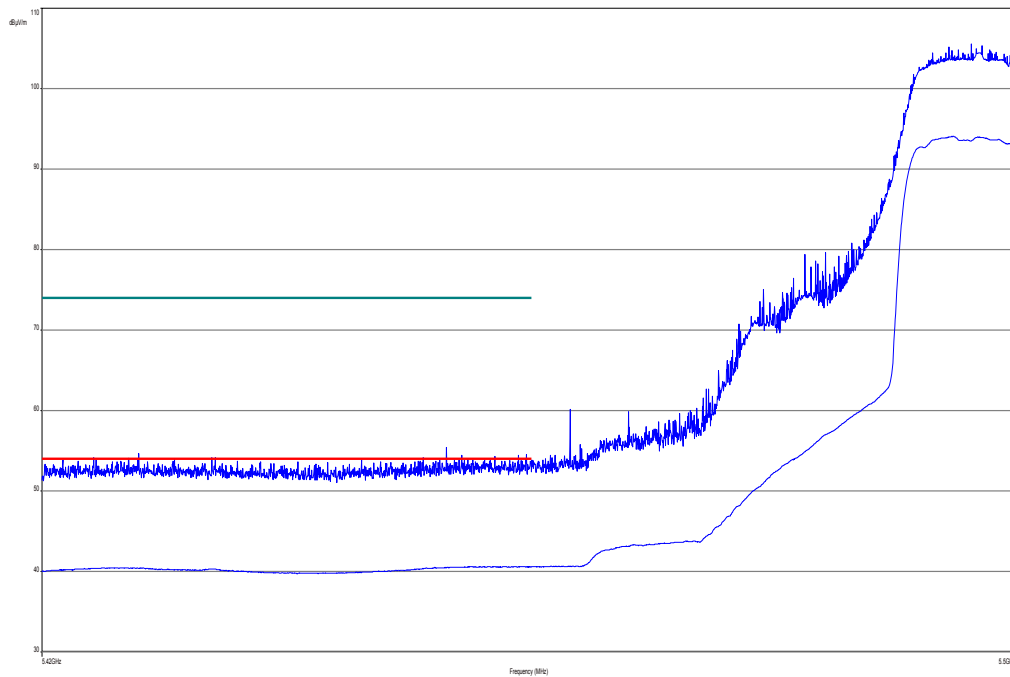
Plot 13: lower band edge, vertical & horizontal polarization (n HT 20 mode), channel 36



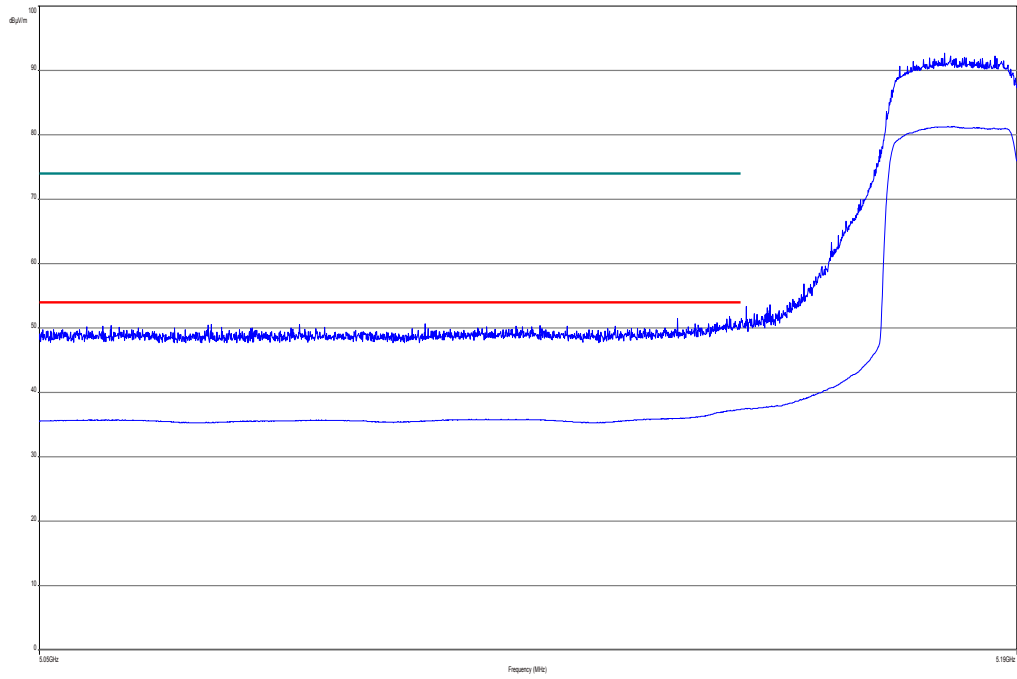
Plot 14: upper band edge, vertical & horizontal polarization (n HT 20 mode), channel 64



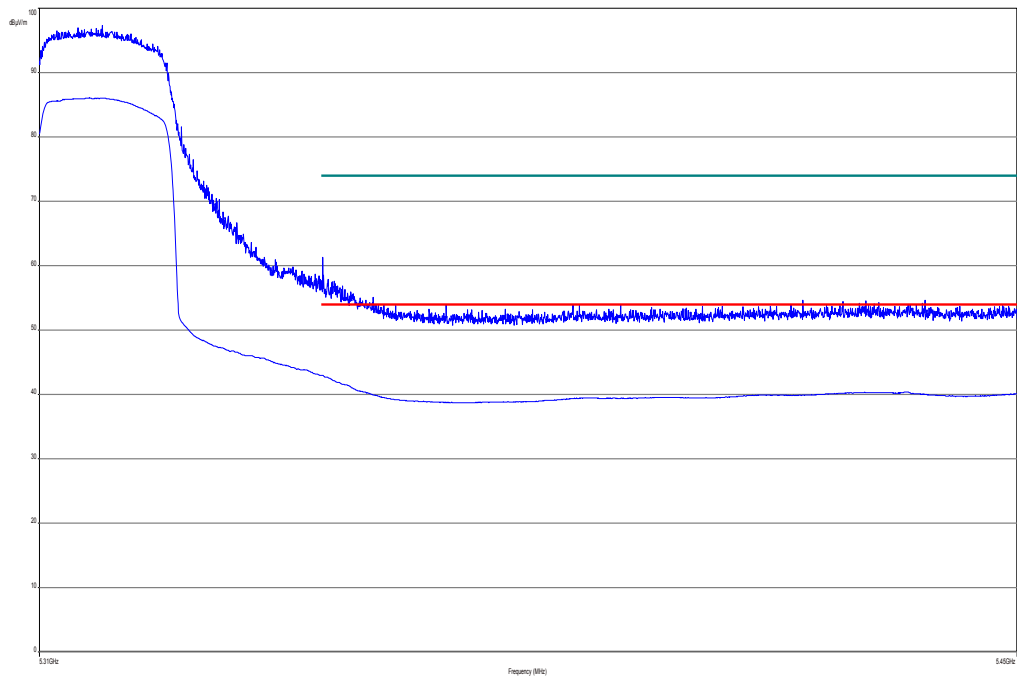
Plot 15: lower band edge, vertical & horizontal polarization (n HT 20 mode), channel 100



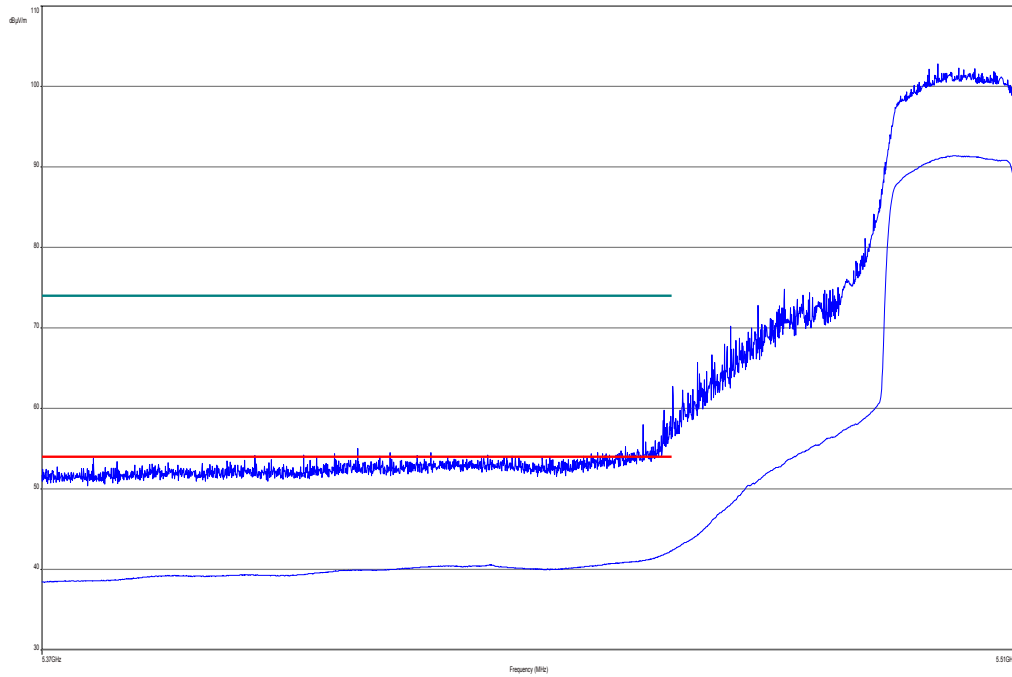
Plot 16: lower band edge, vertical & horizontal polarization (n HT 40 mode), channel 38



Plot 17: upper band edge, vertical & horizontal polarization (n HT 40 mode), channel 62



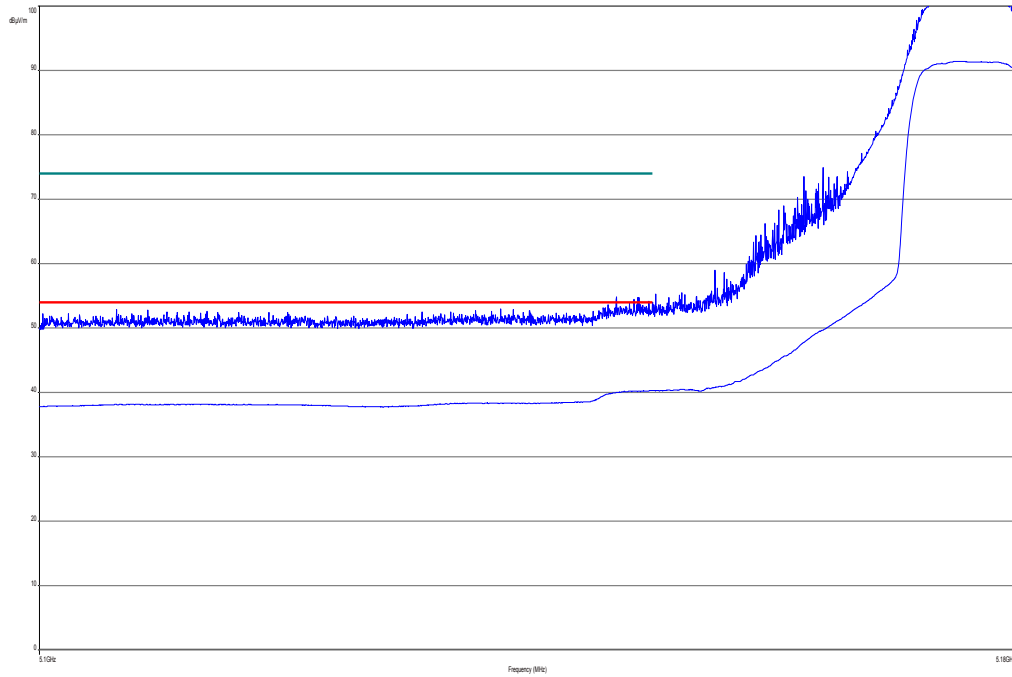
Plot 18: lower band edge, vertical & horizontal polarization (n HT 40 mode), channel 102



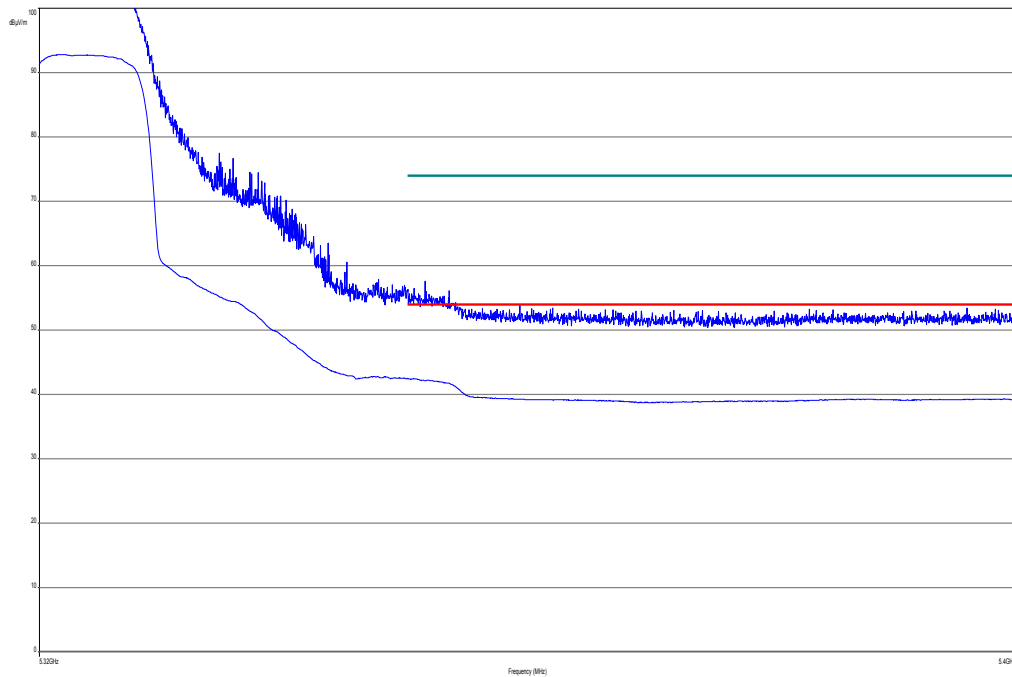
Result: Passed

Plots: Antenna 453564175981

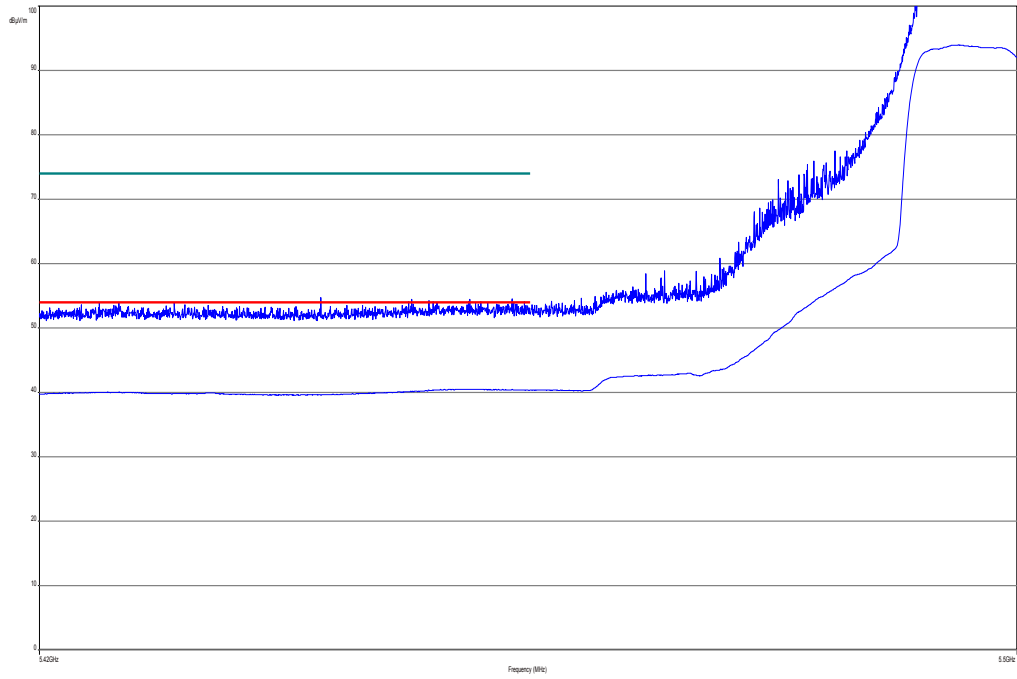
Plot 19: lower band edge, vertical & horizontal polarization (a mode), channel 36



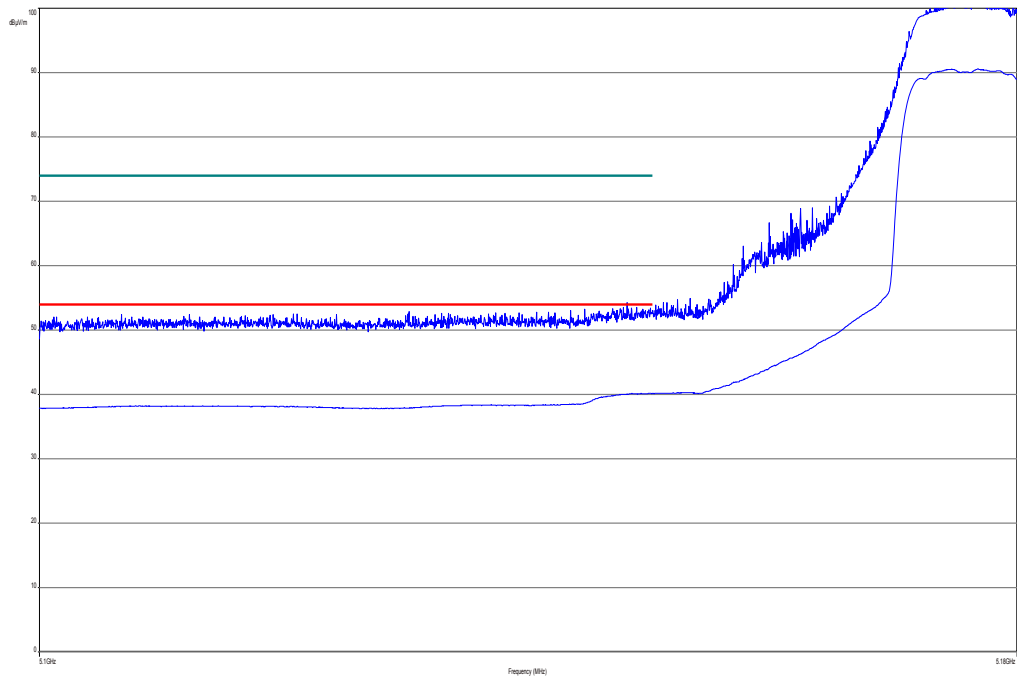
Plot 20: upper band edge, vertical & horizontal polarization (a mode), channel 64



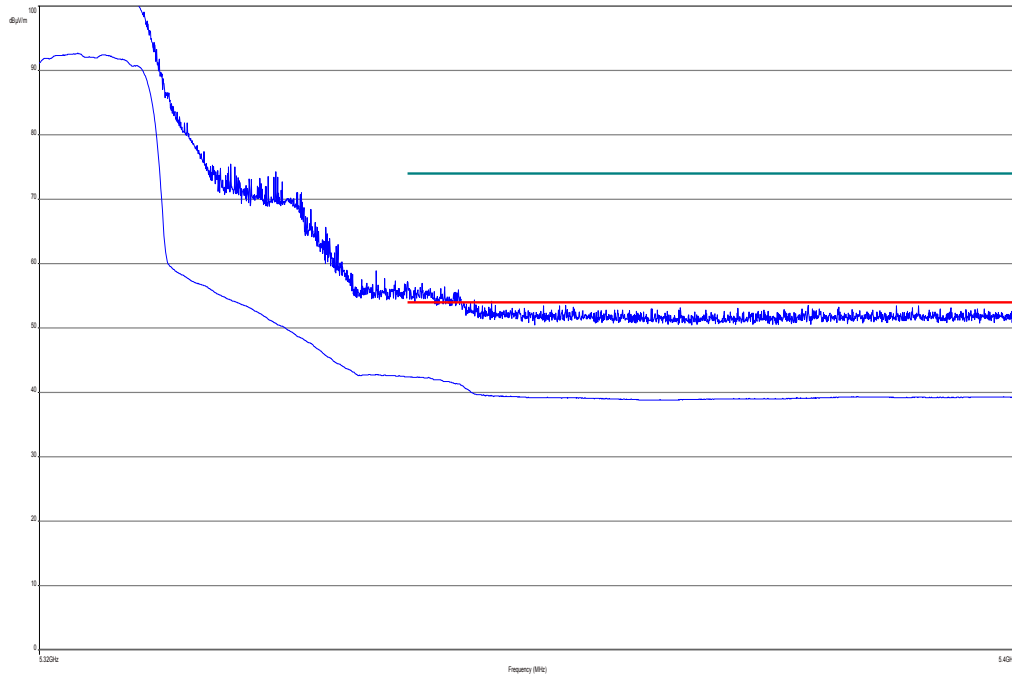
Plot 21: lower band edge, vertical & horizontal polarization (a mode), channel 100



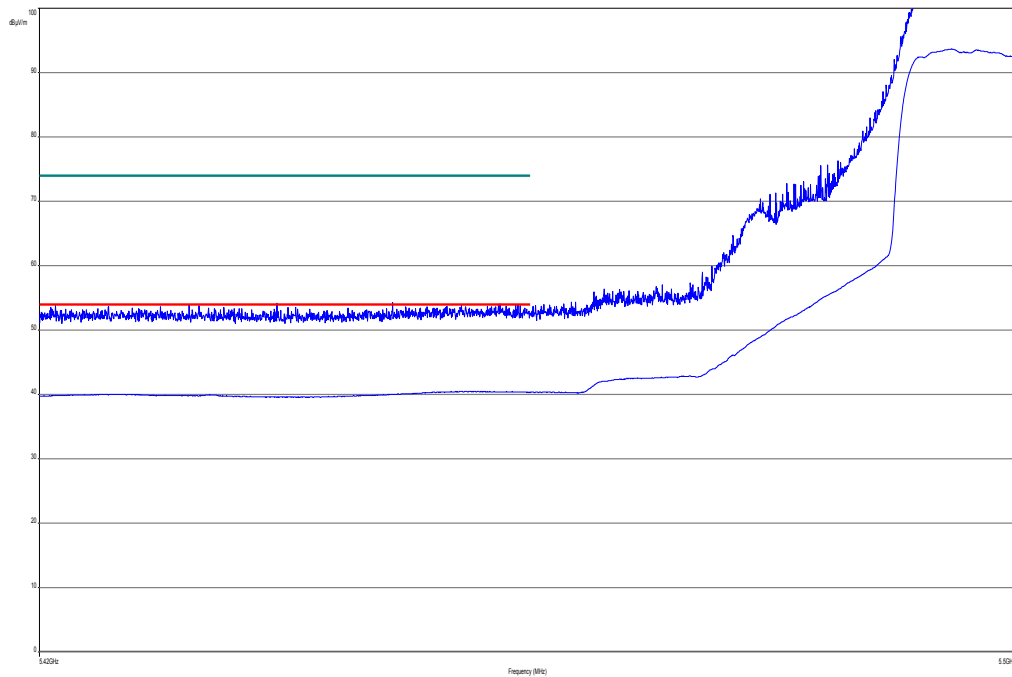
Plot 22: lower band edge, vertical & horizontal polarization (n HT 20 mode), channel 36



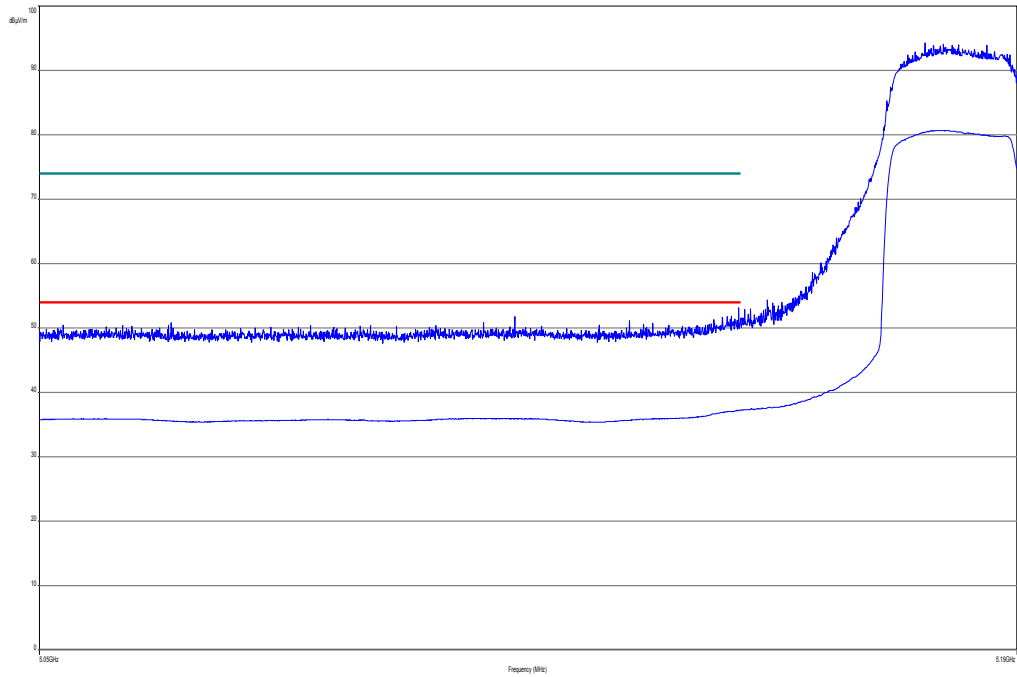
Plot 23: upper band edge, vertical & horizontal polarization (n HT 20 mode), channel 64



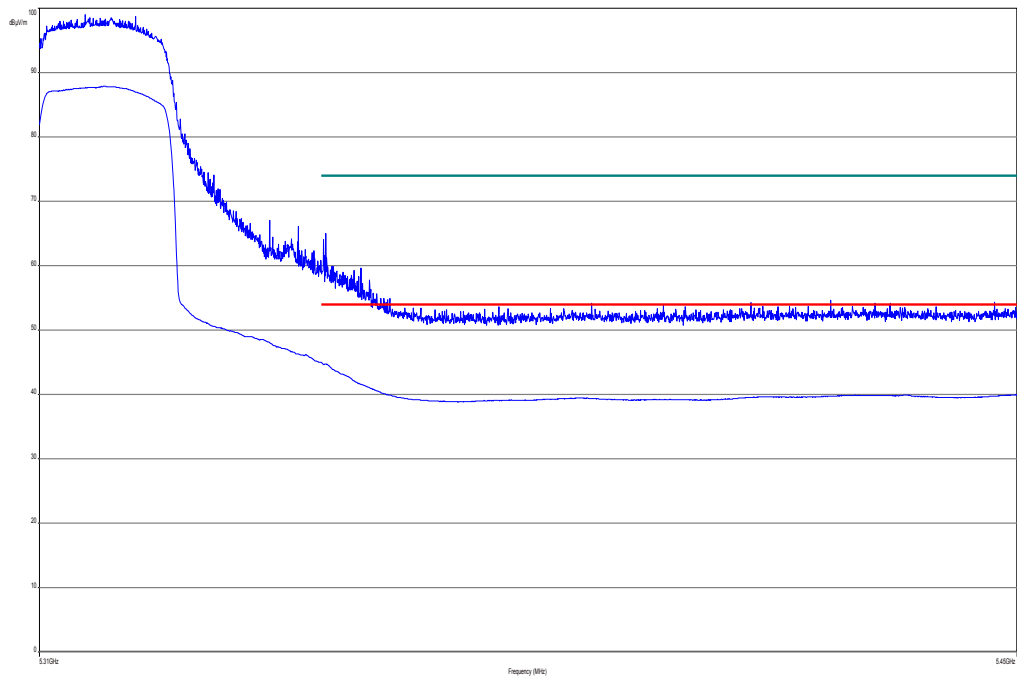
Plot 24: lower band edge, vertical & horizontal polarization (n HT 20 mode), channel 100



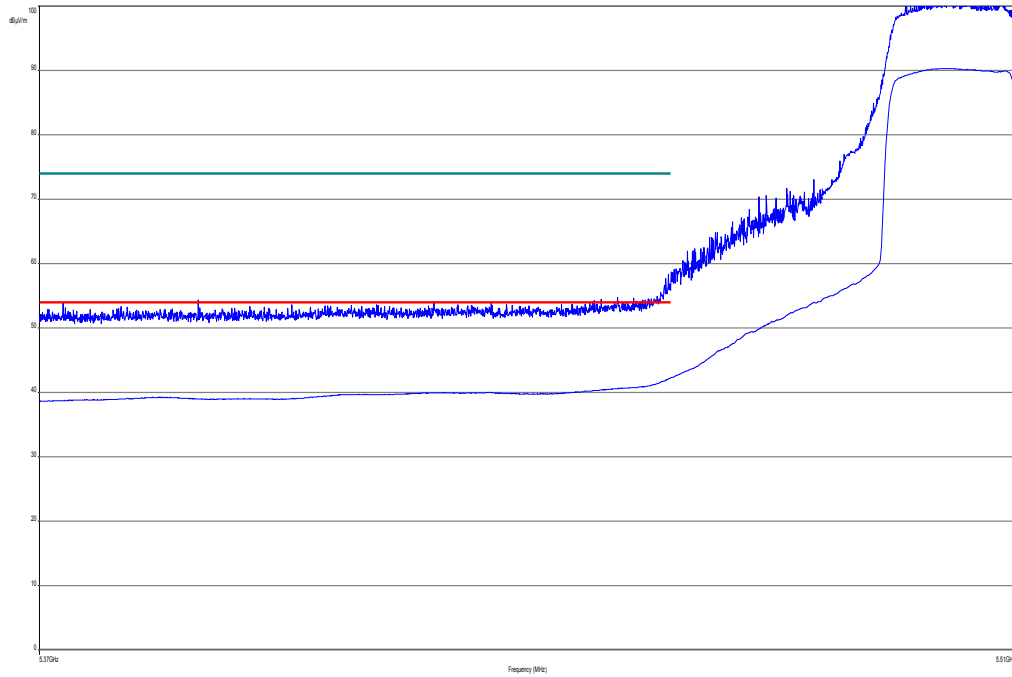
Plot 25: lower band edge, vertical & horizontal polarization (n HT 40 mode), channel 38



Plot 26: upper band edge, vertical & horizontal polarization (n HT 40 mode), channel 62



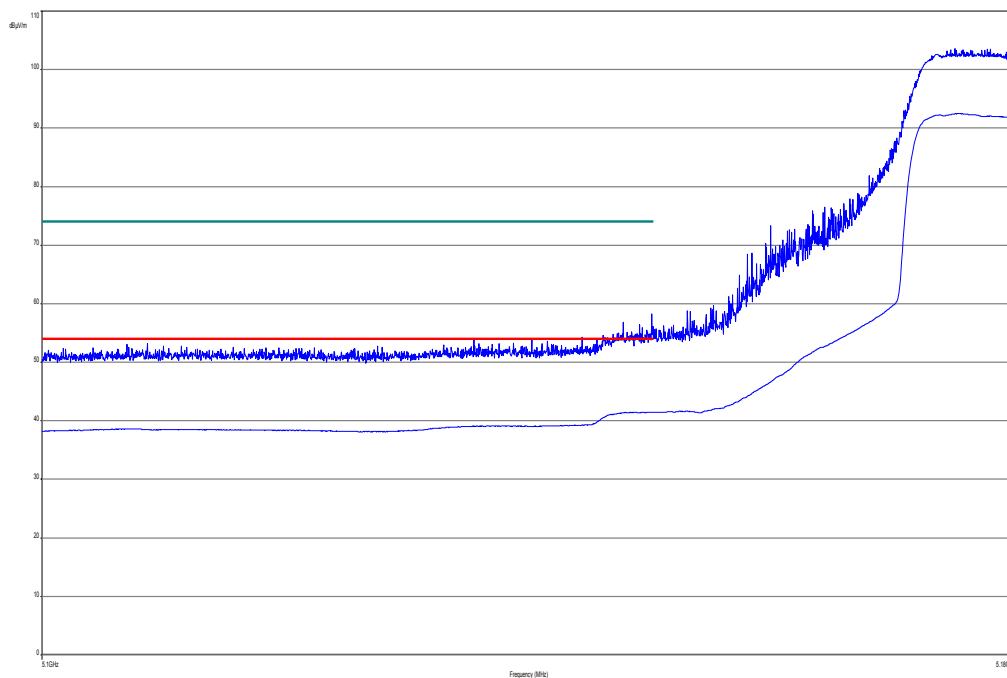
Plot 27: lower band edge, vertical & horizontal polarization (n HT 40 mode), channel 102



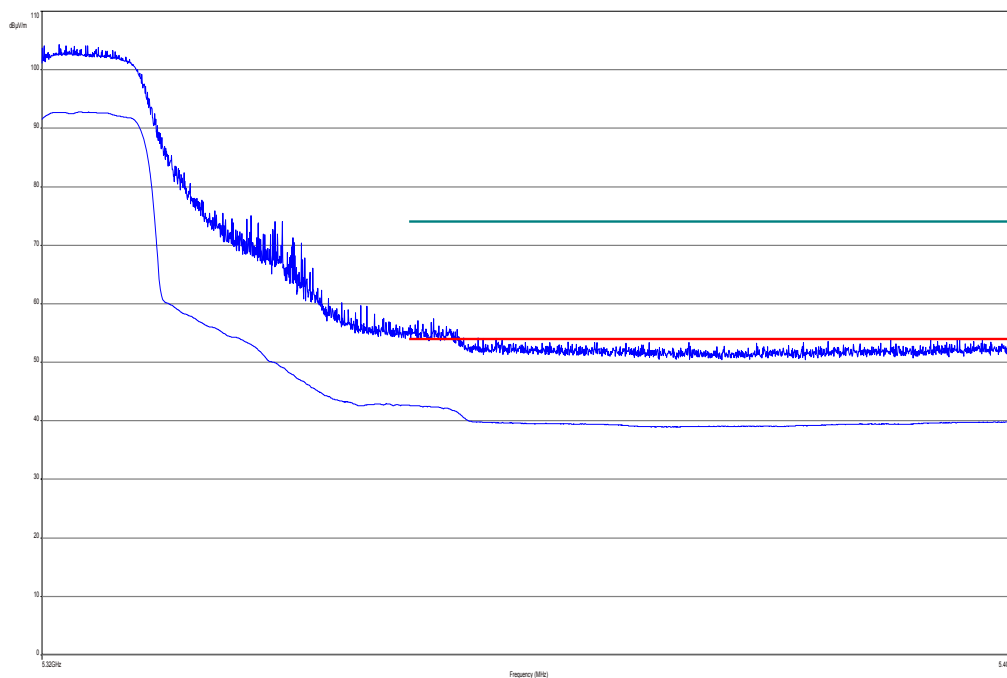
Result: Passed

Plots: Antenna 453564271931

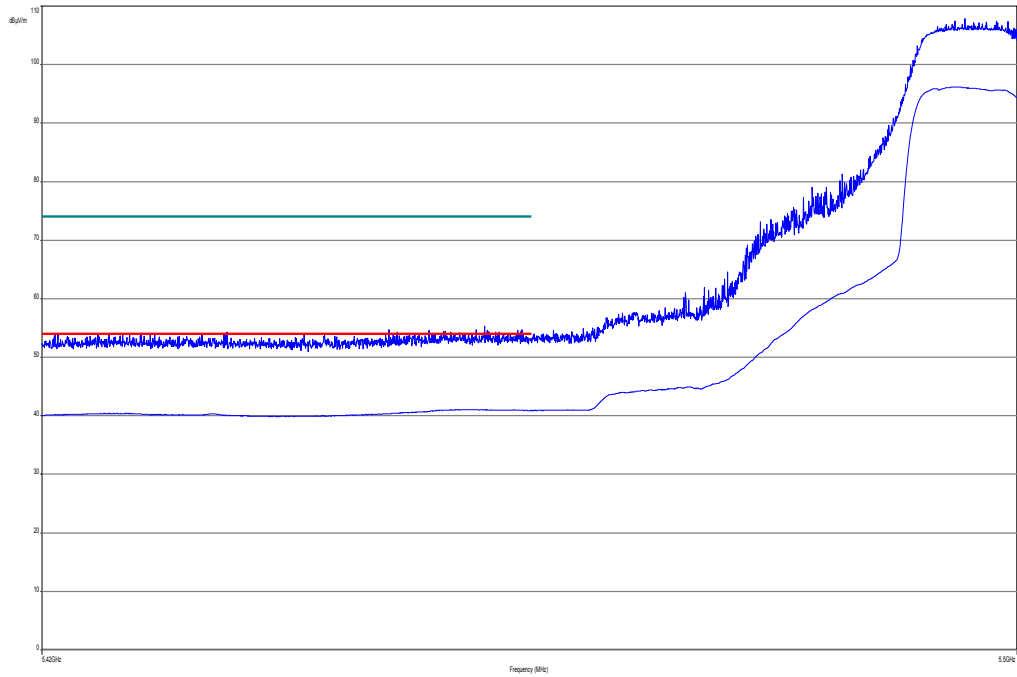
Plot 28: lower band edge, vertical & horizontal polarization (a mode), channel 36



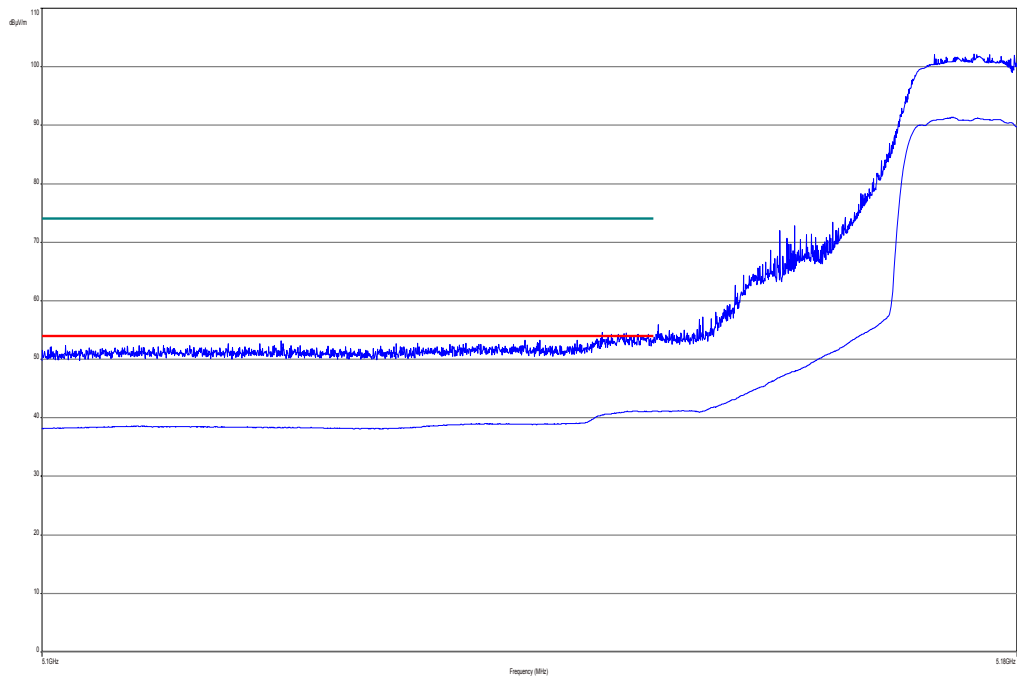
Plot 29: upper band edge, vertical & horizontal polarization (a mode), channel 64



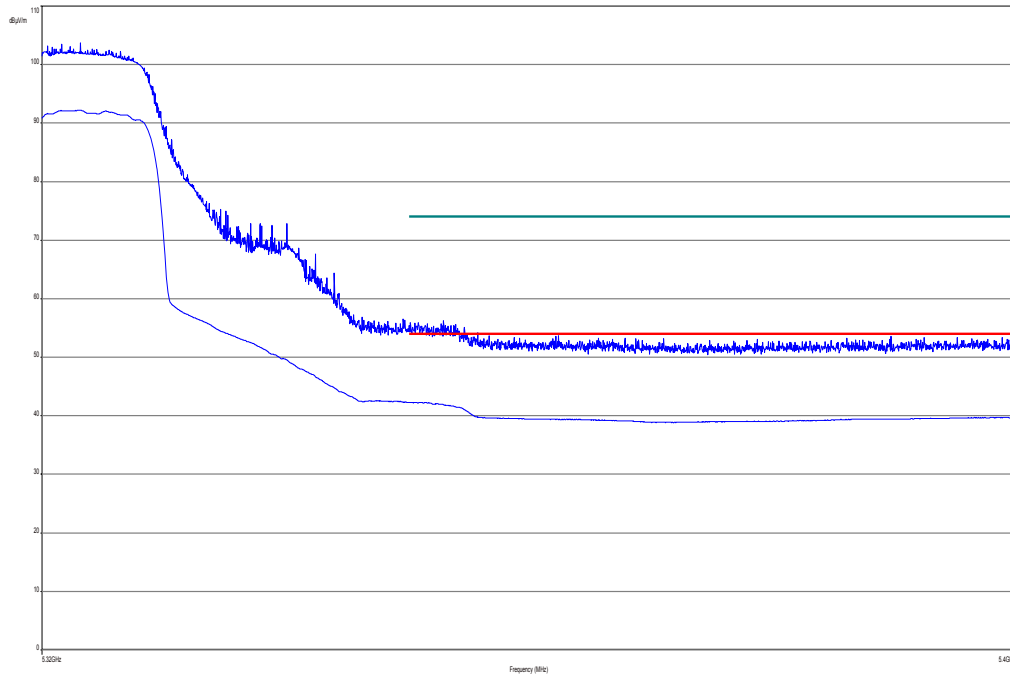
Plot 30: lower band edge, vertical & horizontal polarization (a mode), channel 100



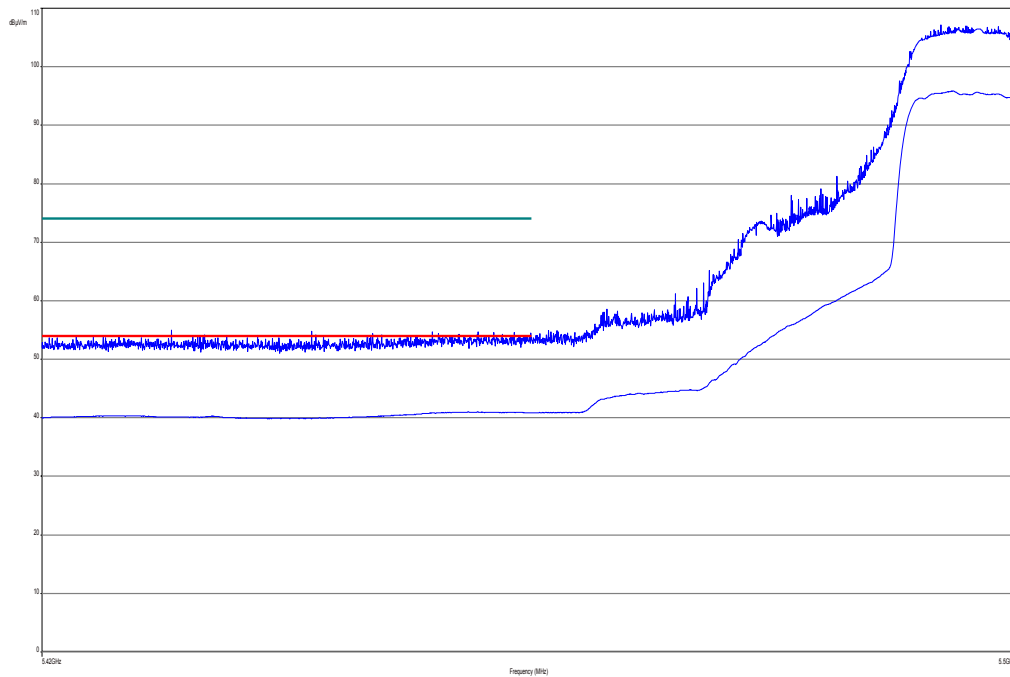
Plot 31: lower band edge, vertical & horizontal polarization (n HT 20 mode), channel 36



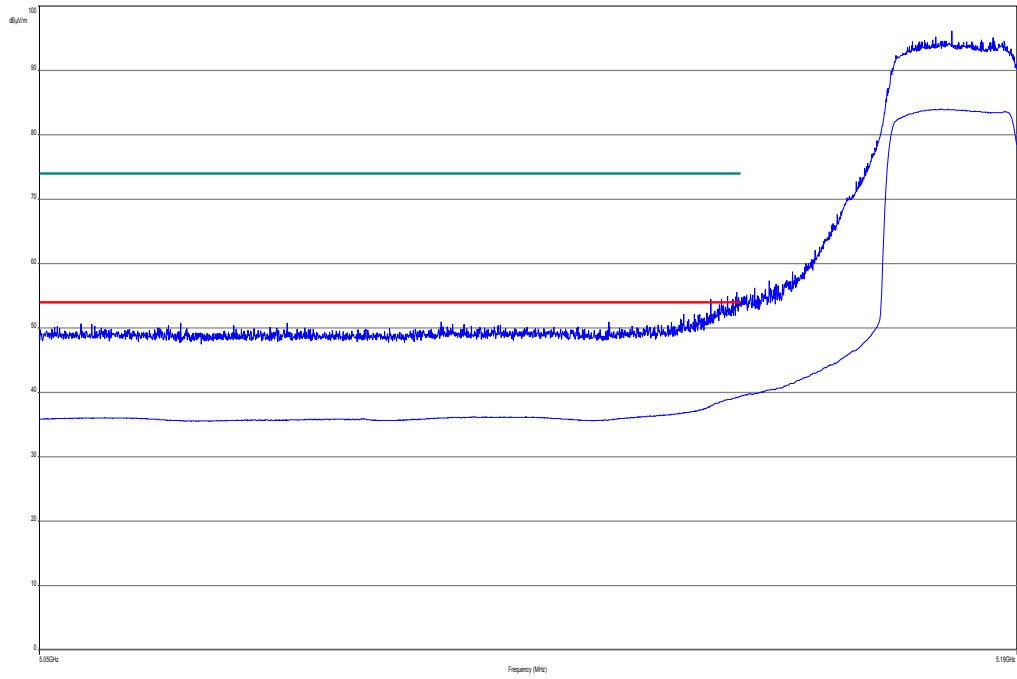
Plot 32: upper band edge, vertical & horizontal polarization (n HT 20 mode), channel 64



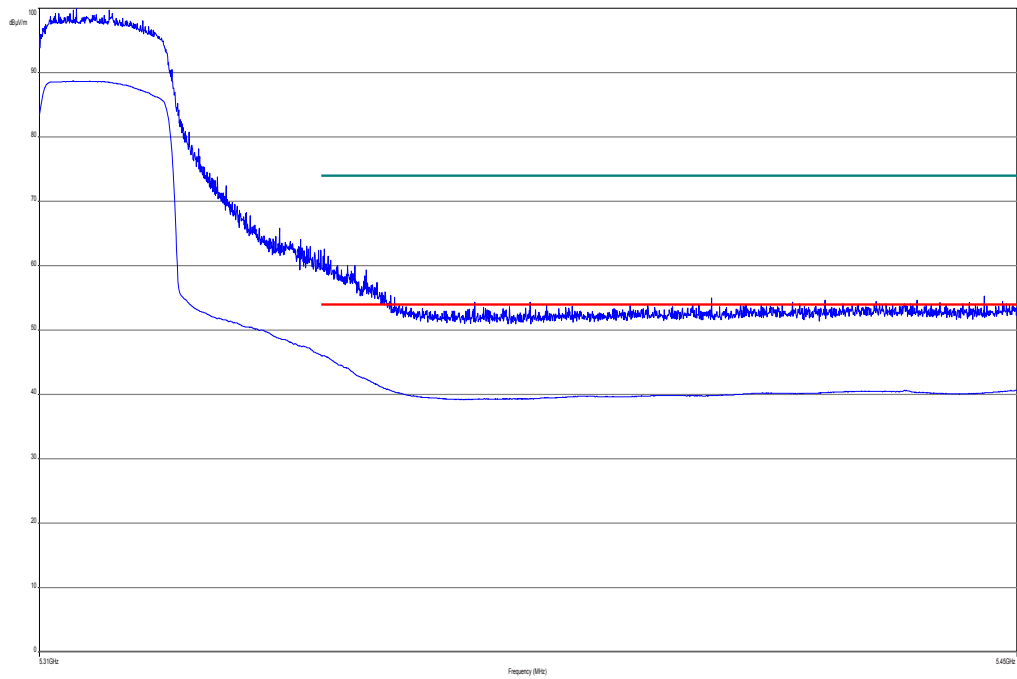
Plot 33: lower band edge, vertical & horizontal polarization (n HT 20 mode), channel 100



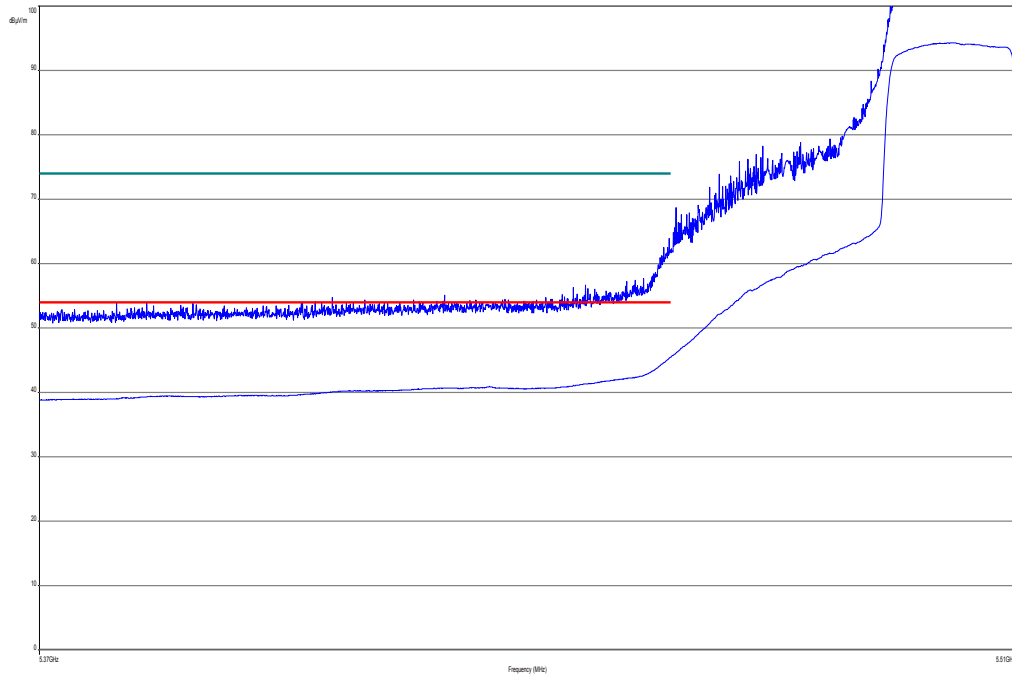
Plot 34: lower band edge, vertical & horizontal polarization (n HT 40 mode), channel 38



Plot 35: upper band edge, vertical & horizontal polarization (n HT 40 mode), channel 62



Plot 36: lower band edge, vertical & horizontal polarization (n HT 40 mode), channel 102



Result: Passed

3 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 / 10 Hz
Span:	30 MHz to 40 GHz
Trace-Mode:	Max Hold / Average with 100 counts + 20 log (1 / X) for duty cycle lower than 100 %

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

TX Spurious Emissions Radiated [dB μ V/m] / dBm								
OFDM a – mode								
Lowest 5180 MHz			Middle 5200 MHz			Highest 5240 MHz		
F [MHz]	Detector	Level [dB μ V/m]	F [MHz]	Detector	Level [dB μ V/m]	F [MHz]	Detector	Level [dB μ V/m]
No peaks found.			No peaks found.			No peaks found.		
Measurement uncertainty			± 3 dB					

TX Spurious Emissions Radiated [dB μ V/m] / dBm								
OFDM a – mode								
Lowest 5260 MHz			Middle 5280 MHz			Highest 5320 MHz		
F [MHz]	Detector	Level [dB μ V/m]	F [MHz]	Detector	Level [dB μ V/m]	F [MHz]	Detector	Level [dB μ V/m]
No peaks found.			No peaks found.			No peaks found.		
Measurement uncertainty			± 3 dB					

TX Spurious Emissions Radiated [dB μ V/m] / dBm								
OFDM a – mode								
Lowest 5500 MHz			Middle 5600 MHz			Highest 5700 MHz		
F [MHz]	Detector	Level [dB μ V/m]	F [MHz]	Detector	Level [dB μ V/m]	F [MHz]	Detector	Level [dB μ V/m]
No peaks found.			No peaks found.			No peaks found.		
Measurement uncertainty			± 3 dB					

TX Spurious Emissions Radiated [dB μ V/m] / dBm								
OFDM a – mode								
Lowest 5745 MHz			Middle 5765 MHz			Highest 5805 MHz		
F [MHz]	Detector	Level [dB μ V/m]	F [MHz]	Detector	Level [dB μ V/m]	F [MHz]	Detector	Level [dB μ V/m]
No peaks found.			No peaks found.			No peaks found.		
Measurement uncertainty			± 3 dB					

Result: Passed

Results: OFDM / n – modeHT20

TX Spurious Emissions Radiated [dB μ V/m] / dBm								
OFDM n – mode HT20								
Lowest 5180 MHz			Middle 5200 MHz			Highest 5240 MHz		
F [MHz]	Detector	Level [dB μ V/m]	F [MHz]	Detector	Level [dB μ V/m]	F [MHz]	Detector	Level [dB μ V/m]
No peaks found.			No peaks found.			No peaks found.		
Measurement uncertainty			± 3 dB					

TX Spurious Emissions Radiated [dB μ V/m] / dBm								
OFDM n – mode HT20								
Lowest 5260 MHz			Middle 5280 MHz			Highest 5320 MHz		
F [MHz]	Detector	Level [dB μ V/m]	F [MHz]	Detector	Level [dB μ V/m]	F [MHz]	Detector	Level [dB μ V/m]
No peaks found.			No peaks found.			No peaks found.		
Measurement uncertainty			± 3 dB					

TX Spurious Emissions Radiated [dB μ V/m] / dBm								
OFDM n – mode HT20								
Lowest 5500 MHz			Middle 5600 MHz			Highest 5700 MHz		
F [MHz]	Detector	Level [dB μ V/m]	F [MHz]	Detector	Level [dB μ V/m]	F [MHz]	Detector	Level [dB μ V/m]
No peaks found.			No peaks found.			No peaks found.		
Measurement uncertainty			± 3 dB					

TX Spurious Emissions Radiated [dB μ V/m] / dBm								
OFDM n – mode HT20								
Lowest 5745 MHz			Middle 5765 MHz			Highest 5805 MHz		
F [MHz]	Detector	Level [dB μ V/m]	F [MHz]	Detector	Level [dB μ V/m]	F [MHz]	Detector	Level [dB μ V/m]
No peaks found.			No peaks found.			No peaks found.		
Measurement uncertainty			± 3 dB					

Result: Passed

Results: OFDM / n – modeHT40

TX Spurious Emissions Radiated [dBµV/m] / dBm								
OFDM n – mode HT40								
Lowest 5190 MHz			Middle 5230 MHz			Highest 5270 MHz		
F [MHz]	Detector	Level [dBµV/m]	F [MHz]	Detector	Level [dBµV/m]	F [MHz]	Detector	Level [dBµV/m]
No peaks found.			No peaks found.			No peaks found.		
Measurement uncertainty			± 3 dB					

TX Spurious Emissions Radiated [dBµV/m] / dBm								
OFDM n – mode HT40								
Lowest 5310 MHz			Middle 5510 MHz			Highest 5590 MHz		
F [MHz]	Detector	Level [dBµV/m]	F [MHz]	Detector	Level [dBµV/m]	F [MHz]	Detector	Level [dBµV/m]
No peaks found.			No peaks found.			No peaks found.		
Measurement uncertainty			± 3 dB					

TX Spurious Emissions Radiated [dBµV/m] / dBm								
OFDM n – mode HT40								
Lowest 5670 MHz			Middle 5765 MHz			Highest 5795 MHz		
F [MHz]	Detector	Level [dBµV/m]	F [MHz]	Detector	Level [dBµV/m]	F [MHz]	Detector	Level [dBµV/m]
No peaks found.			No peaks found.			No peaks found.		
Measurement uncertainty			± 3 dB					

Result: Passed

Note:

Results of the OFDM / n – mode HT20 and HT40 are added to show the behaviour of the EUT.

Antenna M3002-66494

Plots: OFDM / a – mode

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

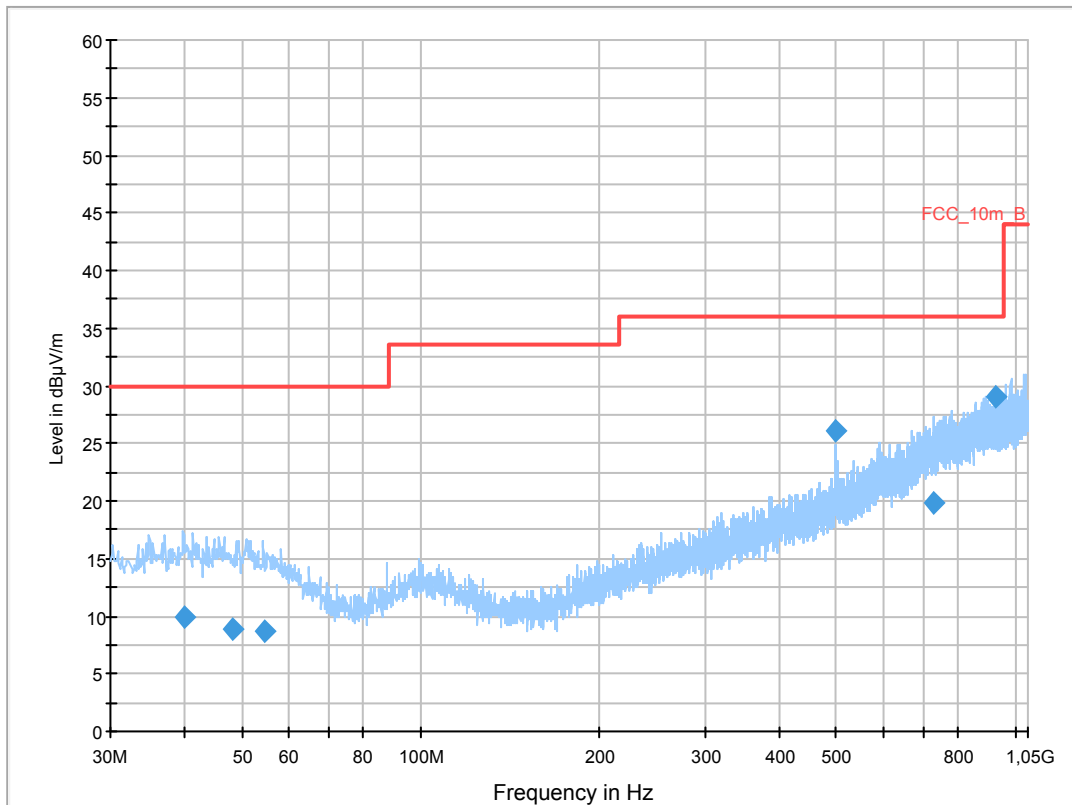
Common Information

EUT: WLANBV2-A + antenna M3002-66494
 Serial Number: eval
 Test Description: FCC part 15 C class B @ 10 m
 Operating Conditions: WLAN a mode tx @ 5180MHz
 Operator Name: Wolsdorfer
 Comment: DC 5V

Scan Setup: STAN_Fin [EMI radiated]

Hardware Setup: Electric Field (NOS)
 Receiver: [ESCI 3]
 Level Unit: dBµV/m

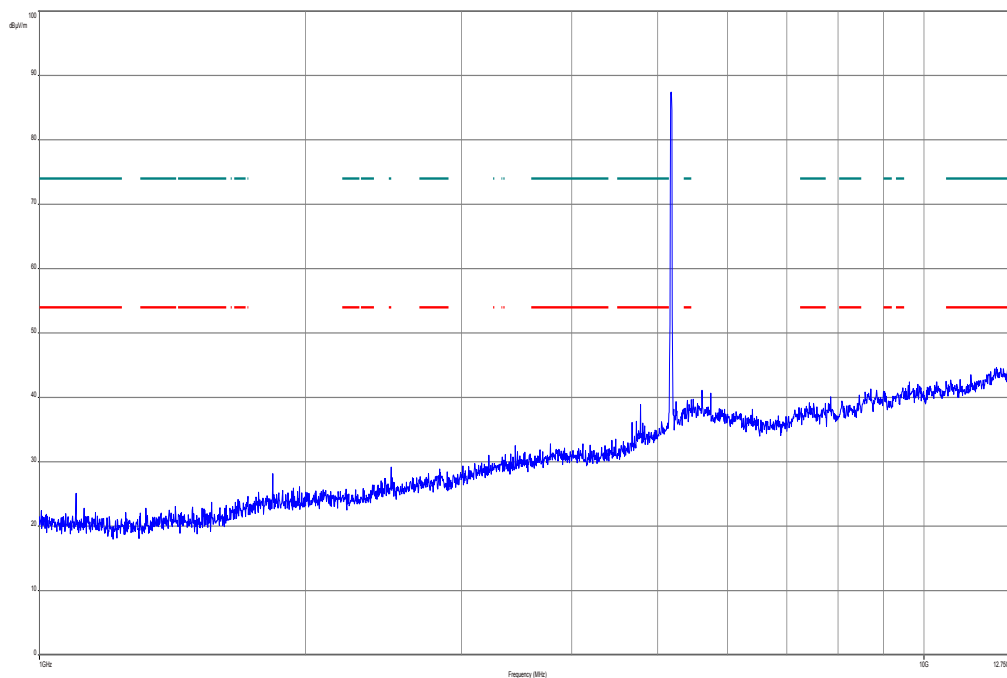
Subrange	Step Size	Detectors	IF BW	Meas. Time	Preamp
30 MHz - 2 GHz	60 kHz	QPK	120 kHz	1 s	20 dB



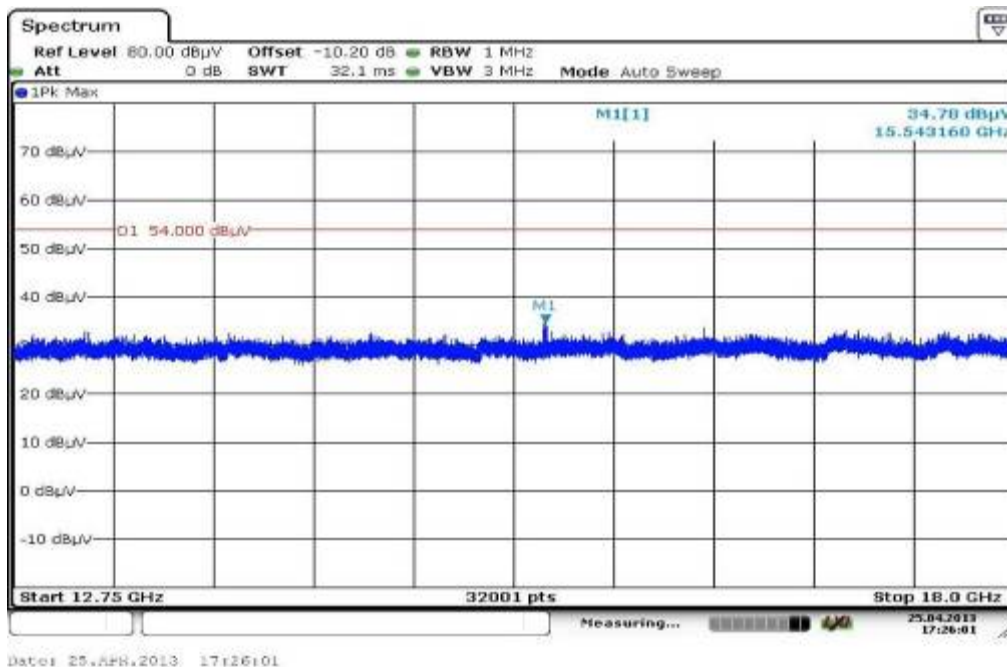
Final Result 1

Frequency (MHz)	QuasiPeak (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Polarization	Azimuth (deg)	Corr. (dB)	Margin (dB)	Limit (dBµV/m)	Comment
39.918150	9.8	1000.0	120.000	132.0	V	265.0	13.4	20.2	30.0	
48.166050	8.9	1000.0	120.000	170.0	V	190.0	13.3	21.1	30.0	
54.664950	8.6	1000.0	120.000	98.0	H	272.0	12.9	21.4	30.0	
500.002050	26.2	1000.0	120.000	170.0	H	81.0	18.7	9.8	36.0	
731.154600	19.8	1000.0	120.000	170.0	H	10.0	23.2	16.2	36.0	
927.360300	29.0	1000.0	120.000	98.0	V	180.0	25.3	7.0	36.0	

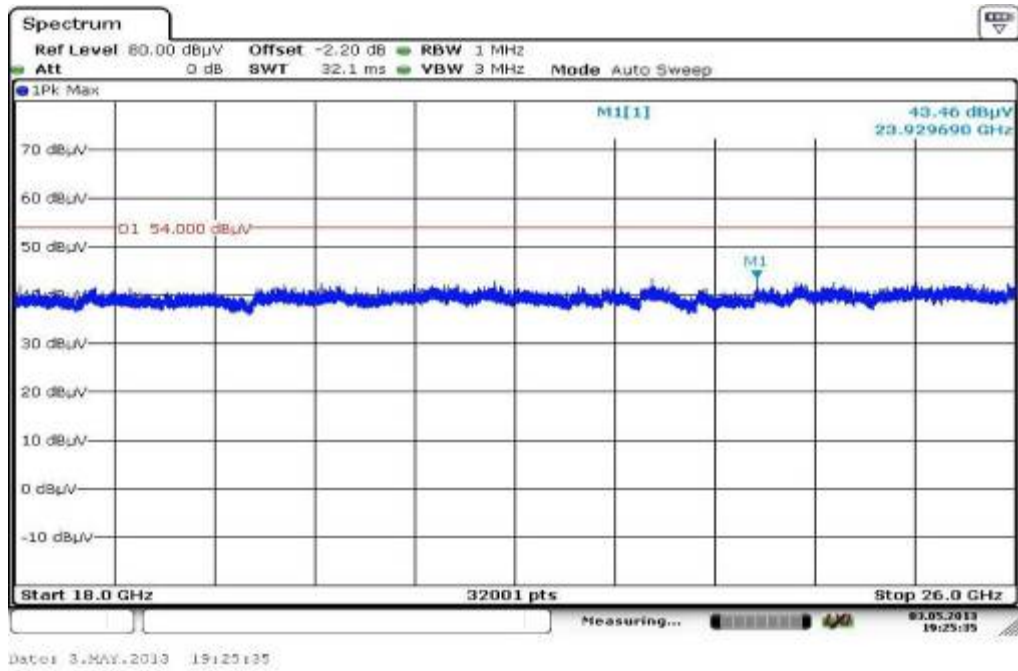
Plot 2: 1 GHz to 12.75 GHz, 5180 MHz, vertical & horizontal polarization



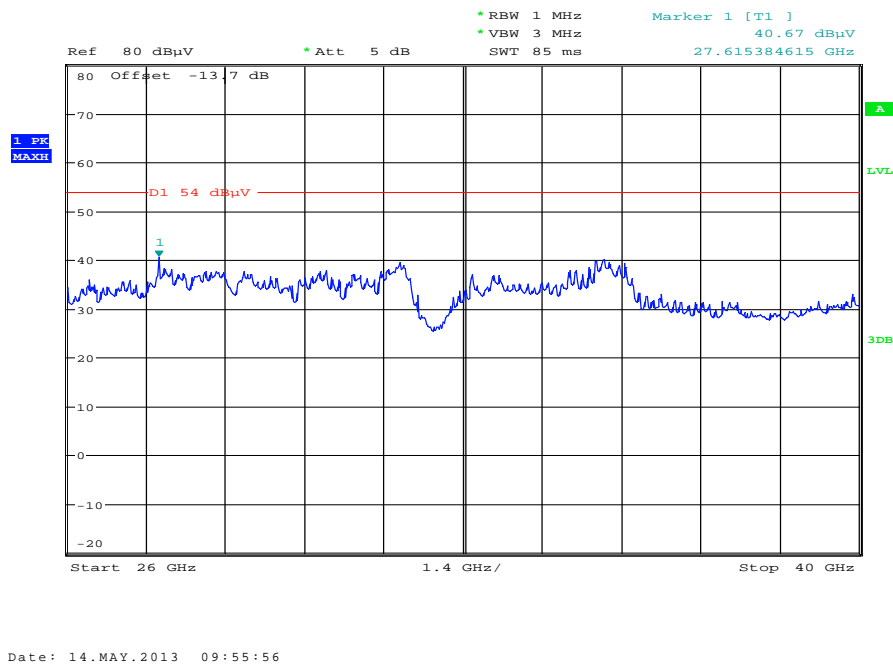
Plot 3: 12 GHz to 18 GHz, 5180 MHz, vertical & horizontal polarization



Plot 4: 18 GHz to 26 GHz, 5180 MHz, vertical & horizontal polarization



Plot 5: 26 GHz to 40 GHz, 5180 MHz, vertical & horizontal polarization



Plot 6: 30 MHz to 1 GHz, 5240 MHz, vertical & horizontal polarization

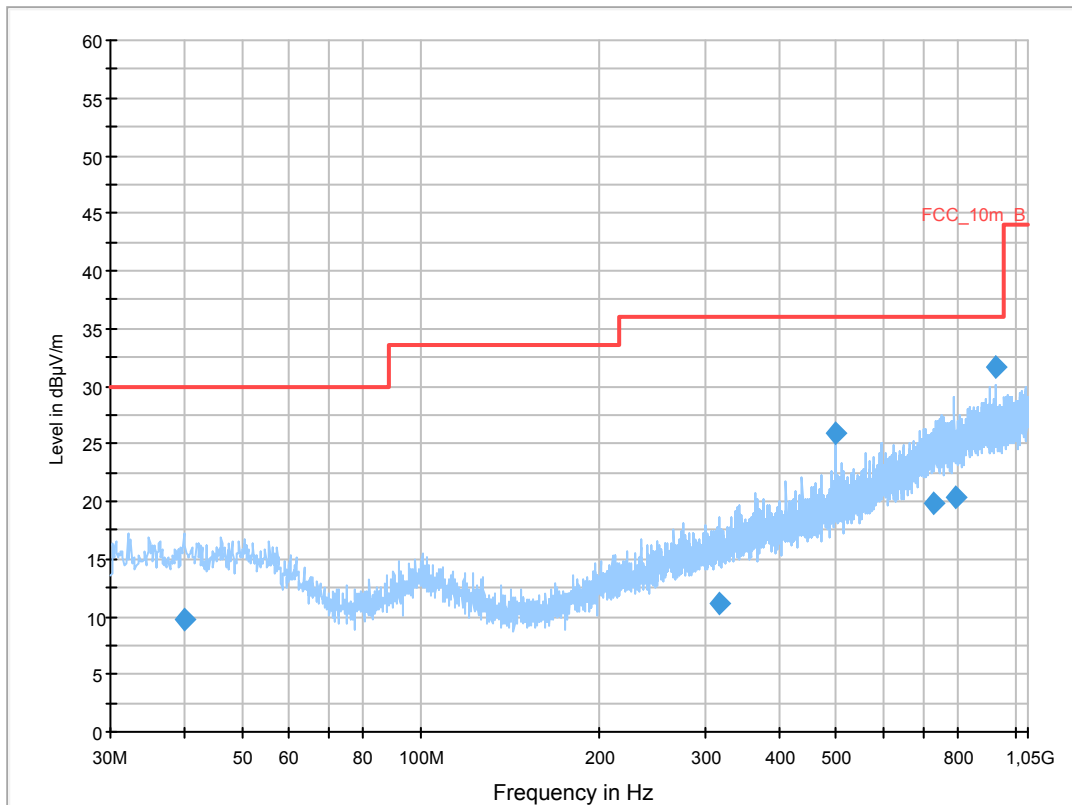
Common Information

EUT: WLANBV2-A + antenna M3002-66494
 Serial Number: eval
 Test Description: FCC part 15 C class B @ 10 m
 Operating Conditions: WLAN a mode tx @ 5240MHz
 Operator Name: Wolsdorfer
 Comment: DC 5V

Scan Setup: STAN_Fin [EMI radiated]

Hardware Setup: Electric Field (NOS)
 Receiver: [ESCI 3]
 Level Unit: dBµV/m

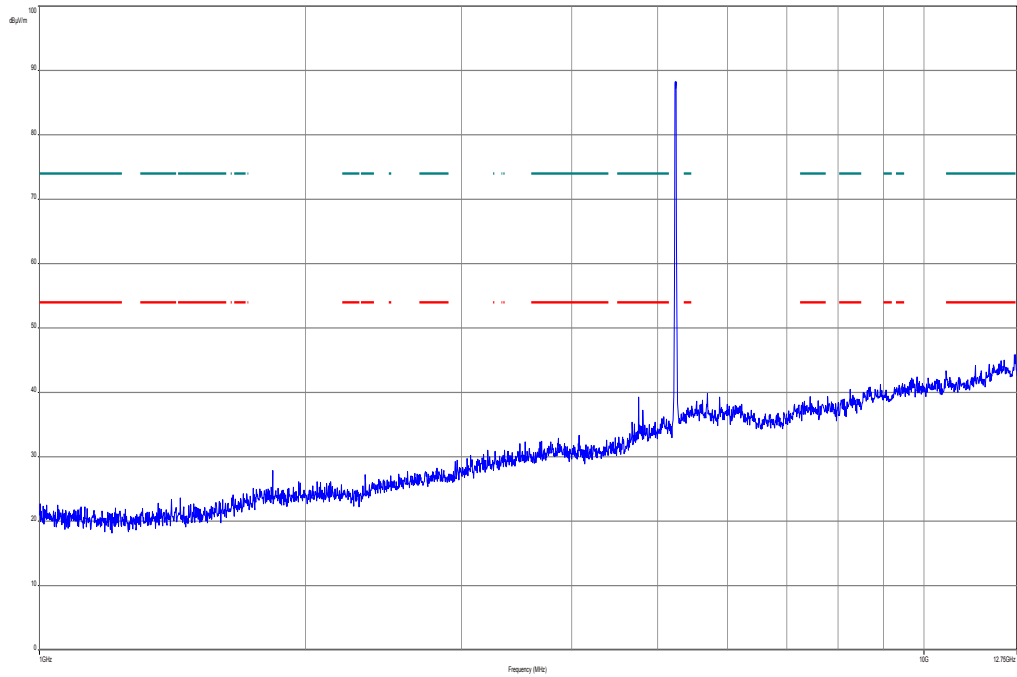
Subrange	Step Size	Detectors	IF BW	Meas. Time	Preamp
30 MHz - 2 GHz	60 kHz	QPK	120 kHz	1 s	20 dB



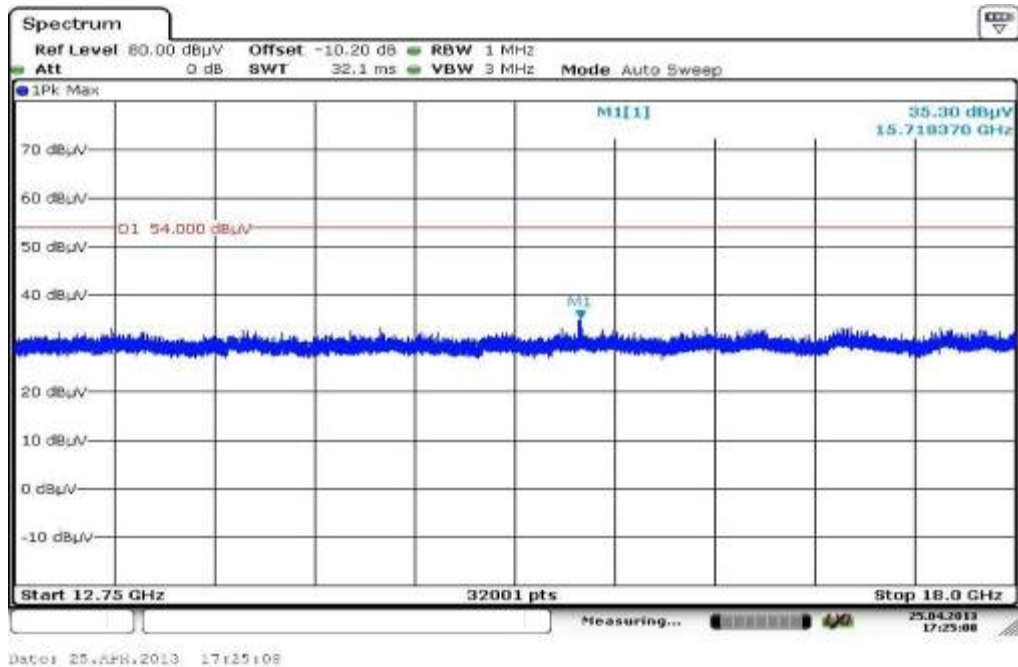
Final Result 1

Frequency (MHz)	QuasiPeak (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Polarization	Azimuth (deg)	Corr. (dB)	Margin (dB)	Limit (dBµV/m)	Comment
39.845700	9.7	1000.0	120.000	170.0	V	0.0	13.4	20.3	30.0	
318.499650	11.1	1000.0	120.000	170.0	V	280.0	15.1	25.0	36.0	
500.016000	25.8	1000.0	120.000	98.0	V	260.0	18.7	10.2	36.0	
727.760250	19.8	1000.0	120.000	170.0	H	260.0	23.1	16.2	36.0	
791.151900	20.3	1000.0	120.000	170.0	H	-9.0	23.8	15.7	36.0	
927.439800	31.6	1000.0	120.000	98.0	V	261.0	25.3	4.4	36.0	

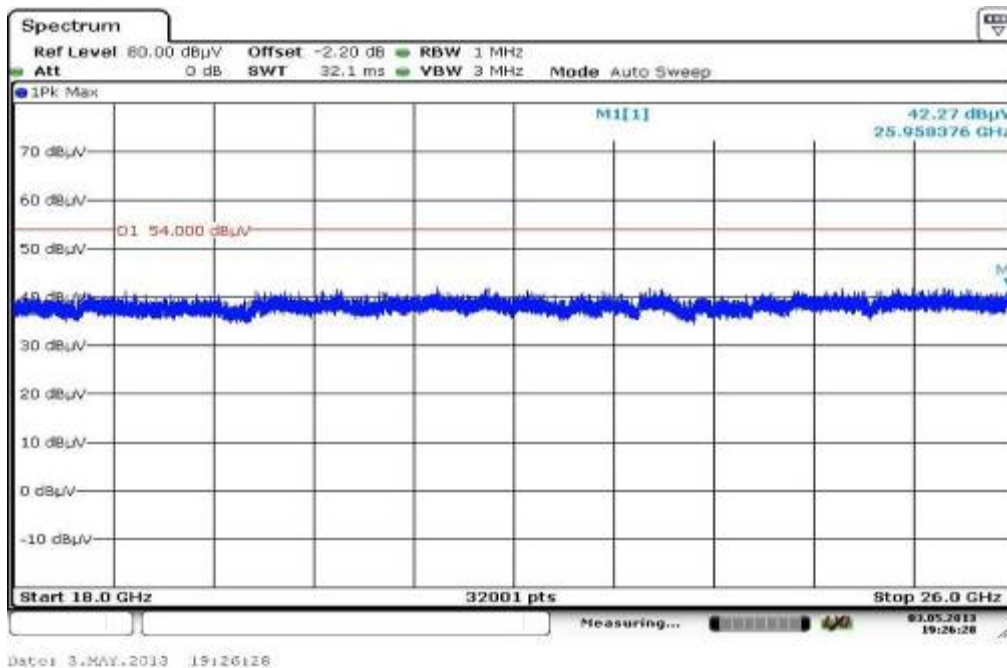
Plot 7: 1 GHz to 12.75 GHz, 5240 MHz, vertical & horizontal polarization



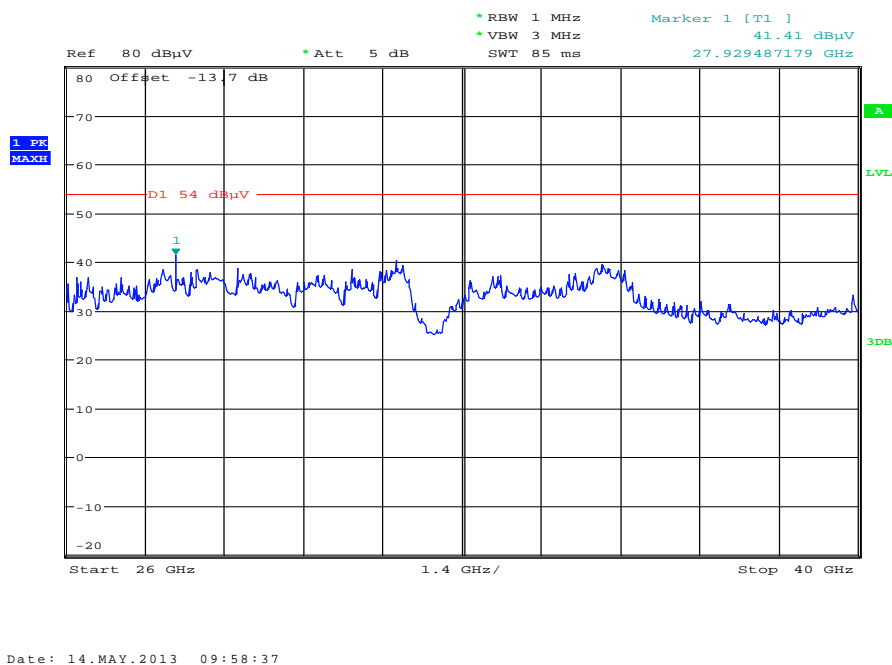
Plot 8: 12 GHz to 18 GHz, 5240 MHz, vertical & horizontal polarization



Plot 9: 18 GHz to 26 GHz, 5240 MHz, vertical & horizontal polarization



Plot 10: 26 GHz to 40 GHz, 5240 MHz, vertical & horizontal polarization



Plot 11: 30 MHz to 1 GHz, 5260 MHz, vertical & horizontal polarization

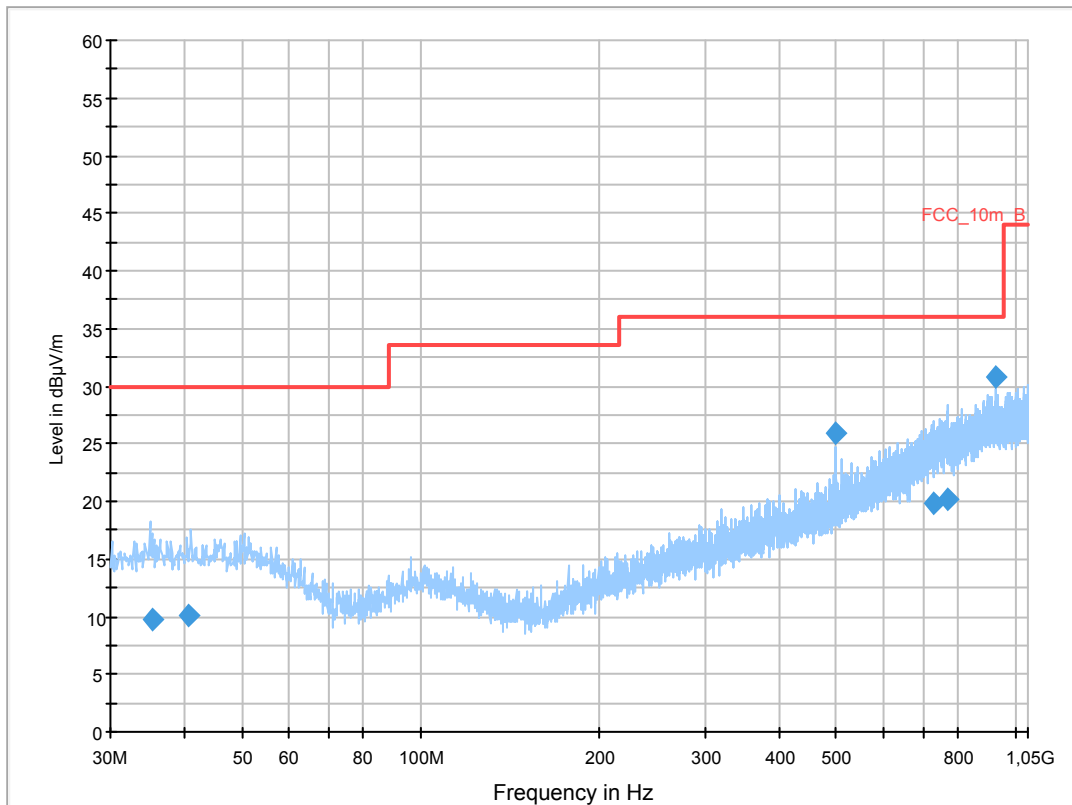
Common Information

EUT: WLANBV2-A + antenna M3002-66494
 Serial Number:
 Test Description: FCC part 15 C class B @ 10 m
 Operating Conditions: WLAN a mode tx @ 5260MHz
 Operator Name: Wolsdorfer
 Comment: DC 5V

Scan Setup: STAN_Fin [EMI radiated]

Hardware Setup: Electric Field (NOS)
 Receiver: [ESCI 3]
 Level Unit: dBµV/m

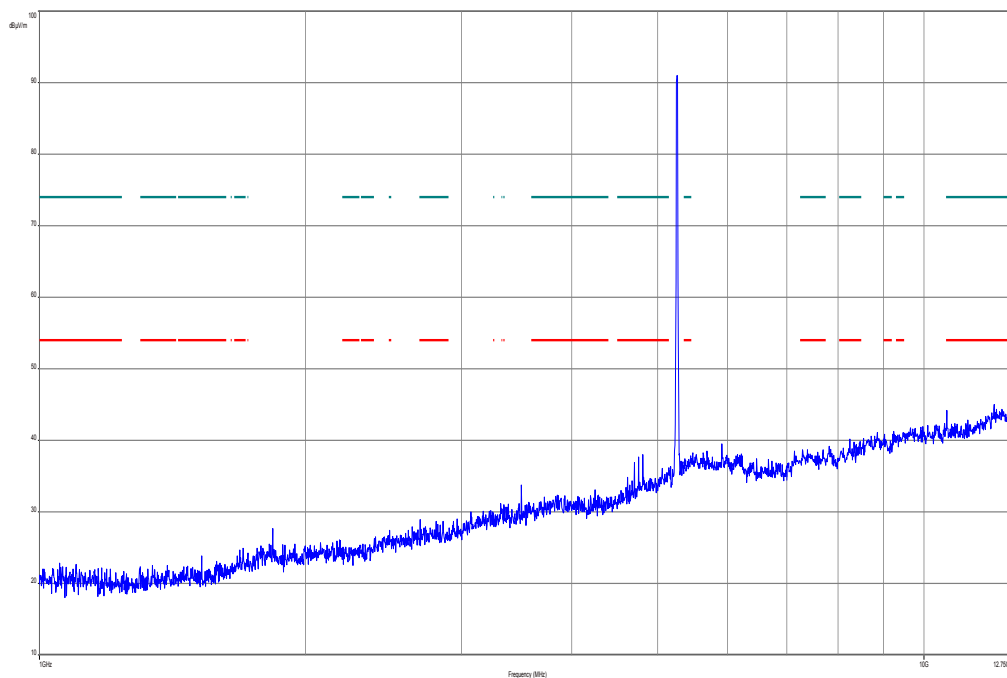
Subrange	Step Size	Detectors	IF BW	Meas. Time	Preamp
30 MHz - 2 GHz	60 kHz	QPK	120 kHz	1 s	20 dB



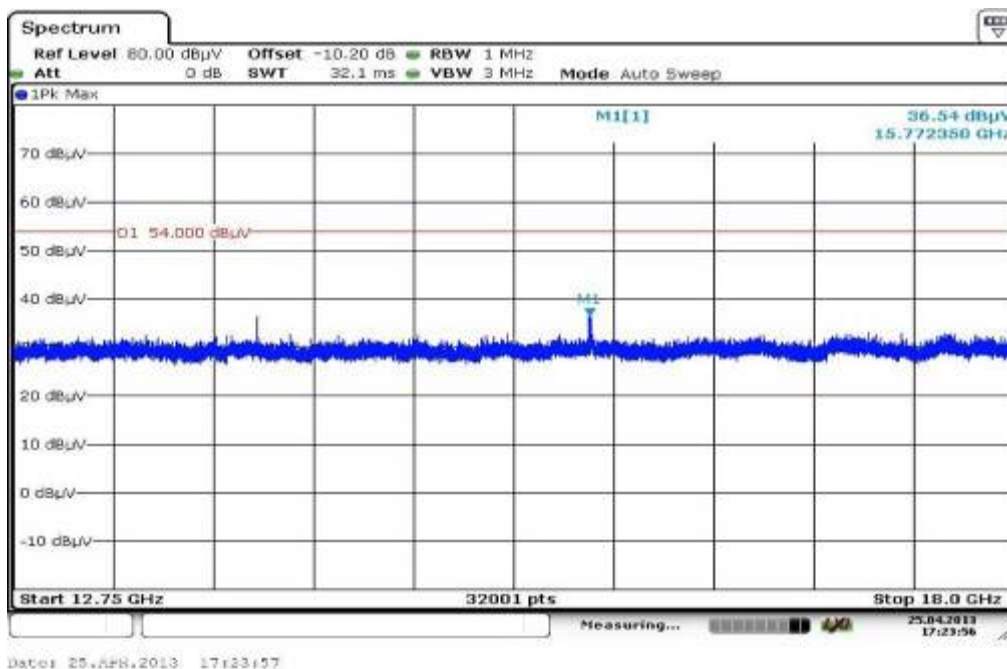
Final Result 1

Frequency (MHz)	QuasiPeak (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Polarization	Azimuth (deg)	Corr. (dB)	Margin (dB)	Limit (dBµV/m)	Comment
35.361600	9.7	1000.0	120.000	170.0	V	190.0	13.1	20.3	30.0	
40.575750	10.1	1000.0	120.000	145.0	V	86.0	13.4	19.9	30.0	
499.999800	25.8	1000.0	120.000	161.0	H	86.0	18.7	10.2	36.0	
731.218050	19.8	1000.0	120.000	98.0	V	100.0	23.2	16.2	36.0	
770.162550	20.1	1000.0	120.000	152.0	H	-2.0	23.7	15.9	36.0	
927.334200	30.8	1000.0	120.000	170.0	V	80.0	25.3	5.2	36.0	

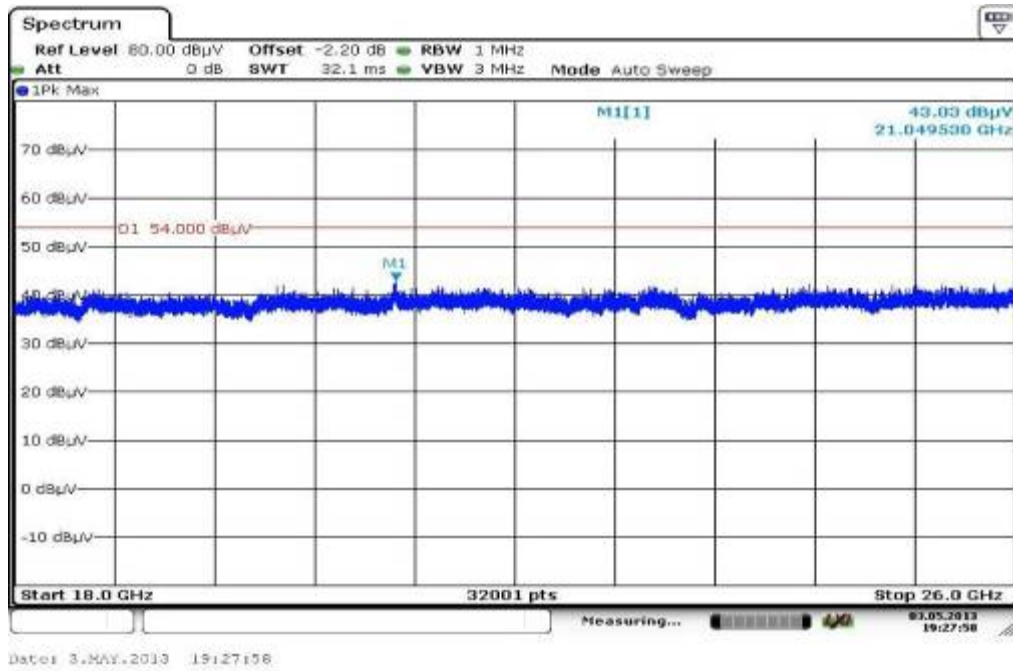
Plot 12: 1 GHz to 12.75 GHz, 5260 MHz, vertical & horizontal polarization



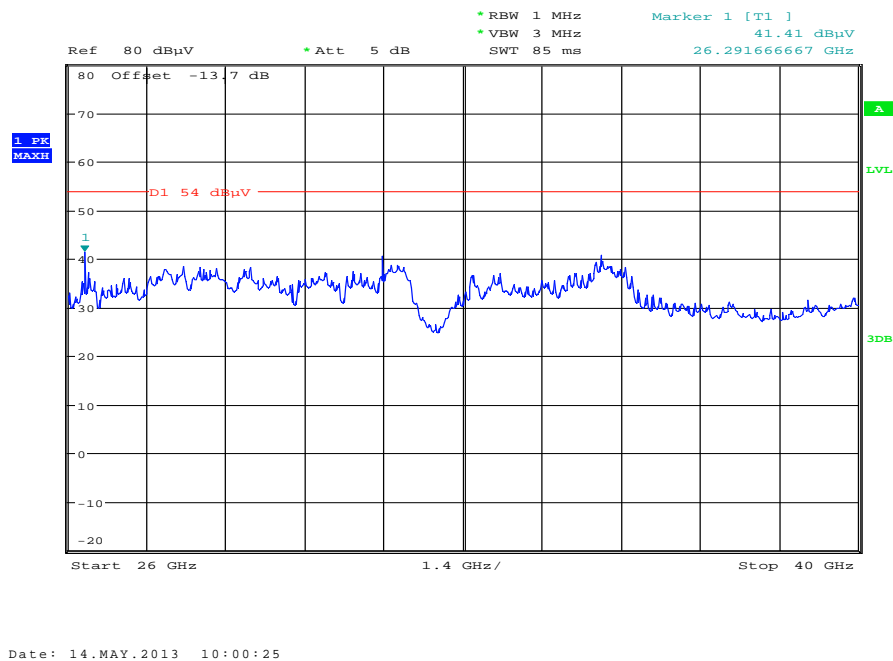
Plot 13: 12 GHz to 18 GHz, 5260 MHz, vertical & horizontal polarization



Plot 14: 18 GHz to 26 GHz, 5260 MHz, vertical & horizontal polarization



Plot 15: 26 GHz to 40 GHz, 5260 MHz, vertical & horizontal polarization



Plot 16: 30 MHz to 1 GHz, 5320 MHz, vertical & horizontal polarization

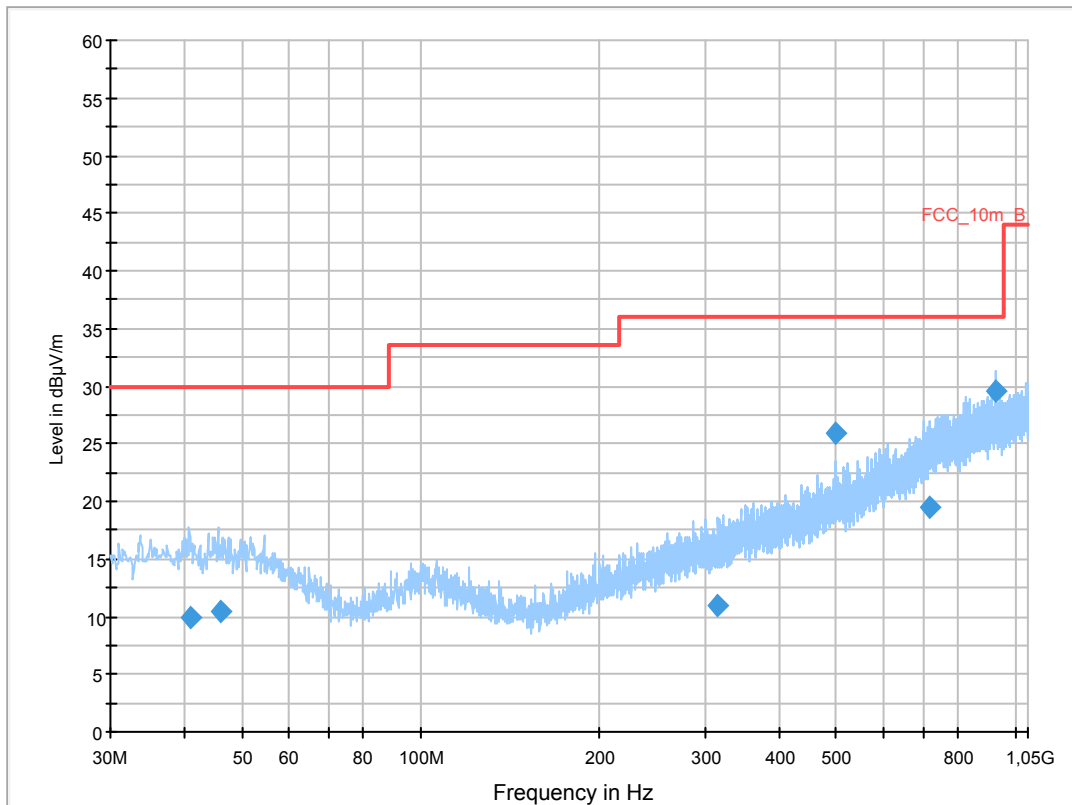
Common Information

EUT: WLANBV2-A + antenna M3002-66494
 Serial Number:
 Test Description: FCC part 15 C class B @ 10 m
 Operating Conditions: WLAN a mode tx @ 5320MHz
 Operator Name: Wolsdorfer
 Comment: DC 5V

Scan Setup: STAN_Fin [EMI radiated]

Hardware Setup: Electric Field (NOS)
 Receiver: [ESCI 3]
 Level Unit: dBµV/m

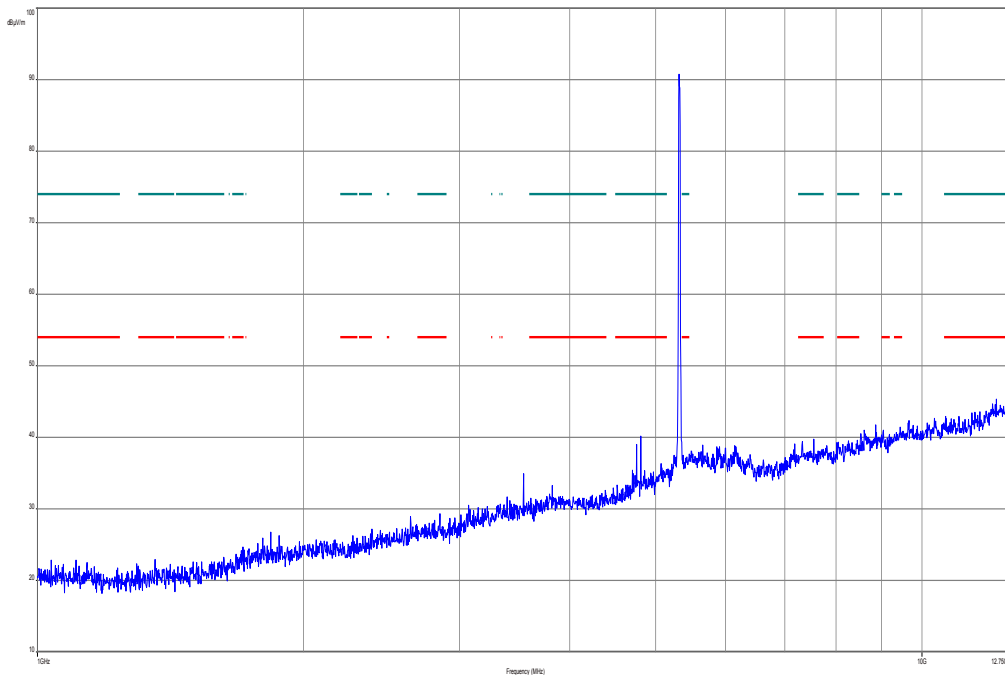
Subrange	Step Size	Detectors	IF BW	Meas. Time	Preamp
30 MHz - 2 GHz	60 kHz	QPK	120 kHz	1 s	20 dB



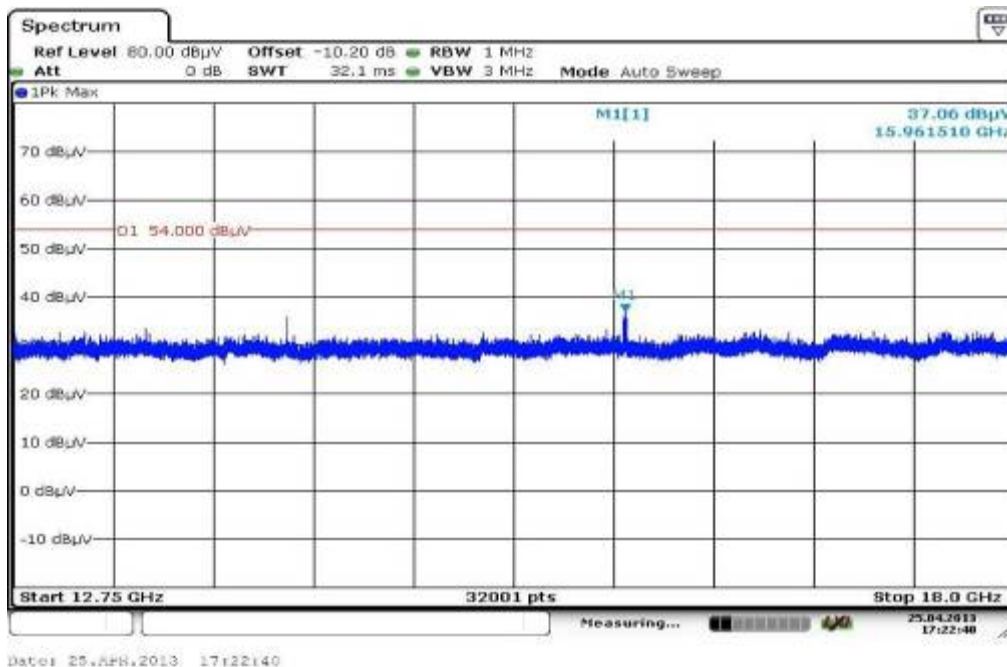
Final Result 1

Frequency (MHz)	QuasiPeak (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Polarization	Azimuth (deg)	Corr. (dB)	Margin (dB)	Limit (dBµV/m)	Comment
40.898850	9.9	1000.0	120.000	105.0	V	280.0	13.4	20.1	30.0	
45.874200	10.4	1000.0	120.000	170.0	V	10.0	13.3	19.6	30.0	
316.357050	11.0	1000.0	120.000	170.0	V	265.0	15.0	25.0	36.0	
500.000250	25.8	1000.0	120.000	98.0	V	265.0	18.7	10.2	36.0	
718.315950	19.6	1000.0	120.000	170.0	H	270.0	22.9	16.4	36.0	
927.490800	29.6	1000.0	120.000	170.0	V	85.0	25.3	6.4	36.0	

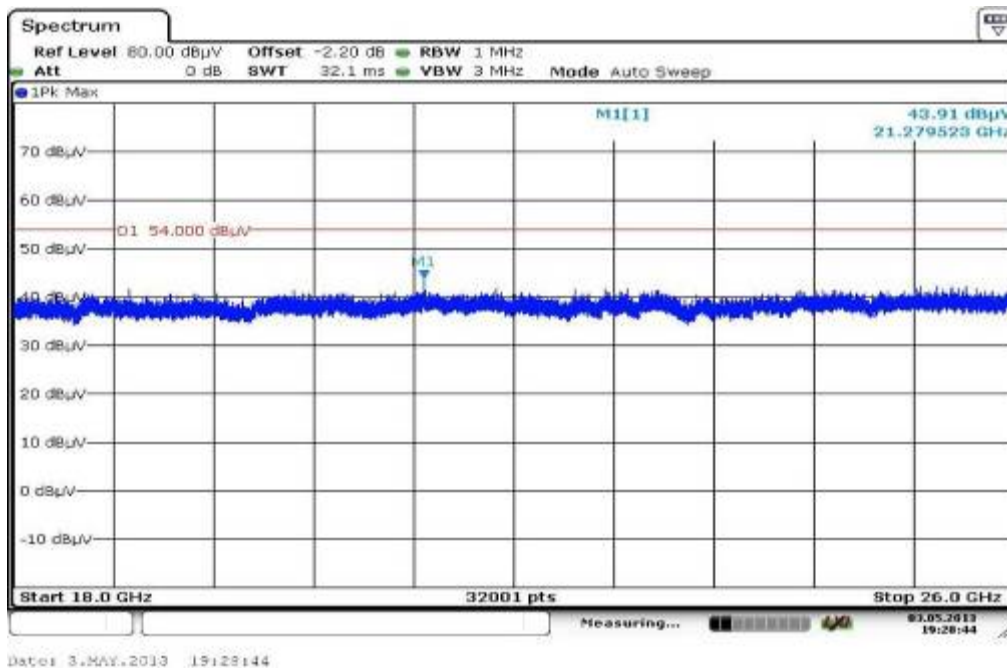
Plot 17: 1 GHz to 12.75 GHz, 5320 MHz, vertical & horizontal polarization



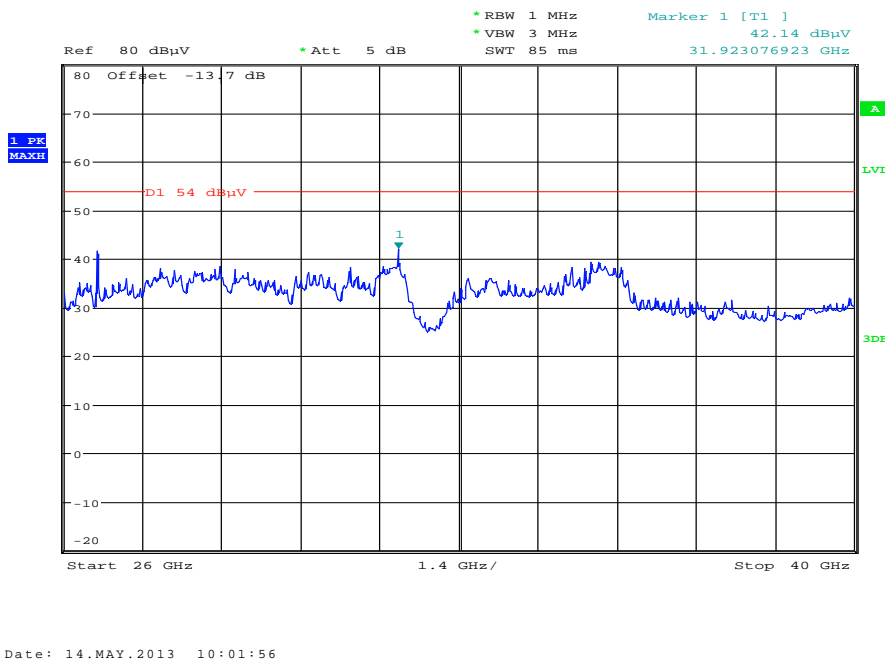
Plot 18: 12 GHz to 18 GHz, 5320 MHz, vertical & horizontal polarization



Plot 19: 18 GHz to 26 GHz, 5320 MHz, vertical & horizontal polarization



Plot 20: 26 GHz to 40 GHz, 5320 MHz, vertical & horizontal polarization



Plot 21: 30 MHz to 1 GHz, 5500 MHz, vertical & horizontal polarization

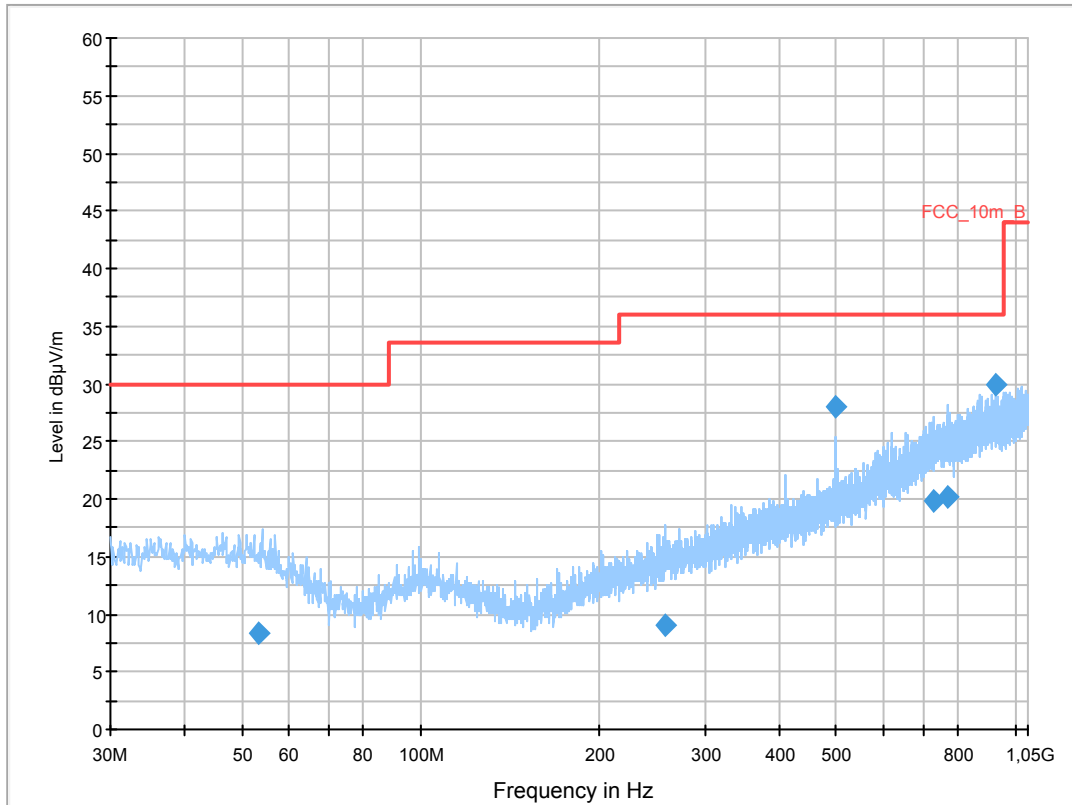
Common Information

EUT: WLANBV2-A + antenna M3002-66494
 Serial Number:
 Test Description: FCC part 15 C class B @ 10 m
 Operating Conditions: WLAN a mode tx @ 5500MHz
 Operator Name: Wolsdorfer
 Comment: DC 5V

Scan Setup: STAN_Fin [EMI radiated]

Hardware Setup: Electric Field (NOS)
 Receiver: [ESCI 3]
 Level Unit: dBµV/m

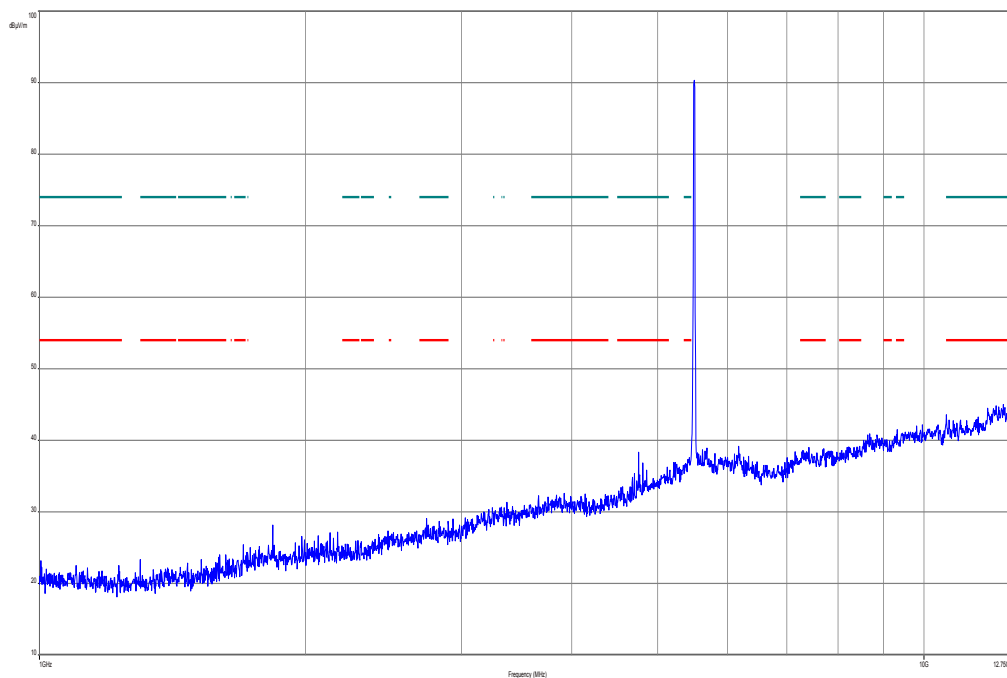
Subrange	Step Size	Detectors	IF BW	Meas. Time	Preamp
30 MHz - 2 GHz	60 kHz	QPK	120 kHz	1 s	20 dB



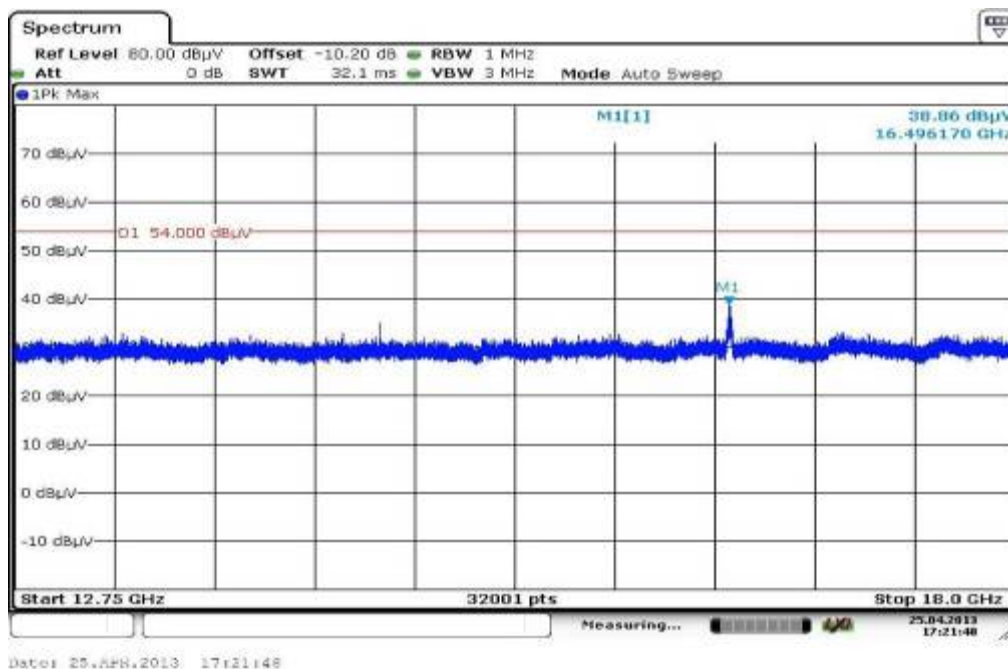
Final Result 1

Frequency (MHz)	QuasiPeak (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Polarization	Azimuth (deg)	Corr. (dB)	Margin (dB)	Limit (dBµV/m)	Comment
53.420250	8.3	1000.0	120.000	170.0	H	92.0	13.0	21.7	30.0	
256.940400	9.0	1000.0	120.000	98.0	V	2.0	13.5	27.0	36.0	
499.984950	27.9	1000.0	120.000	98.0	V	261.0	18.7	8.1	36.0	
730.326000	19.8	1000.0	120.000	170.0	V	190.0	23.2	16.2	36.0	
770.601000	20.1	1000.0	120.000	170.0	H	100.0	23.7	15.9	36.0	
927.404700	29.9	1000.0	120.000	170.0	V	85.0	25.3	6.1	36.0	

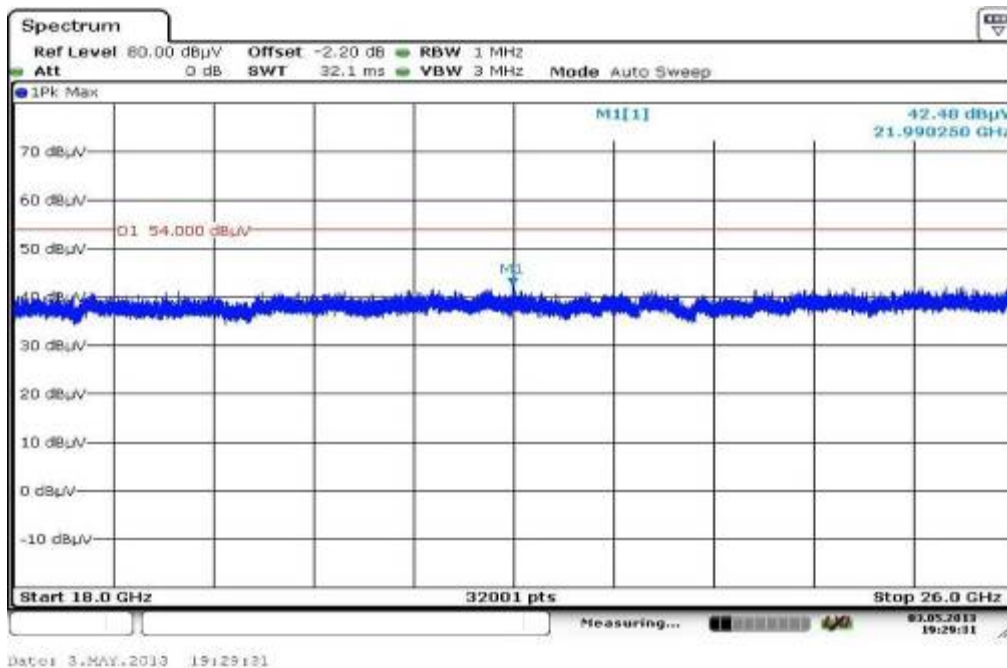
Plot 22: 1 GHz to 12.75 GHz, 5500 MHz, vertical & horizontal polarization



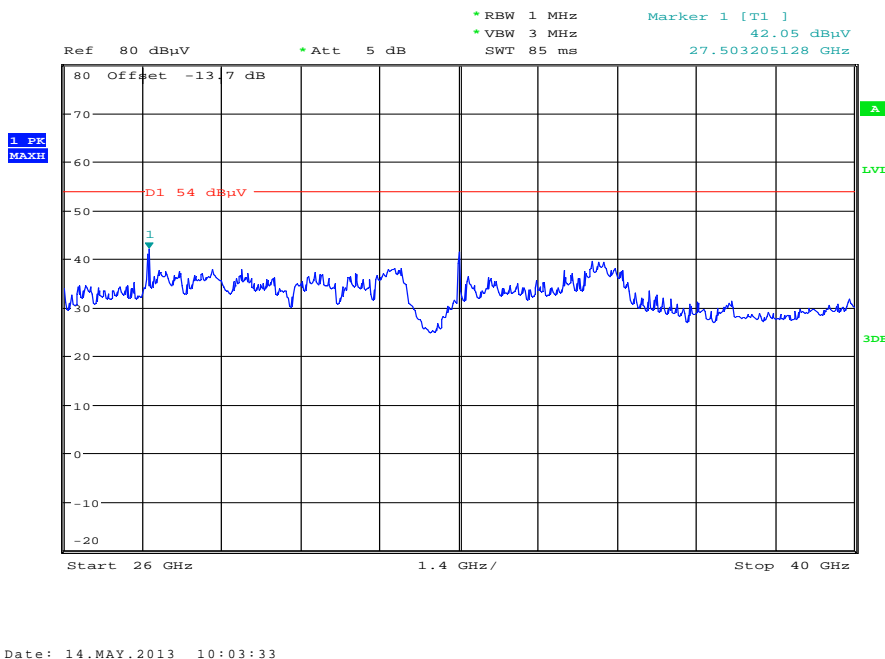
Plot 23: 12 GHz to 18 GHz, 5500 MHz, vertical & horizontal polarization



Plot 24: 18 GHz to 26 GHz, 5500 MHz, vertical & horizontal polarization



Plot 25: 26 GHz to 40 GHz, 5500 MHz, vertical & horizontal polarization



Plot 26: 30 MHz to 1 GHz, 5600 MHz, vertical & horizontal polarization

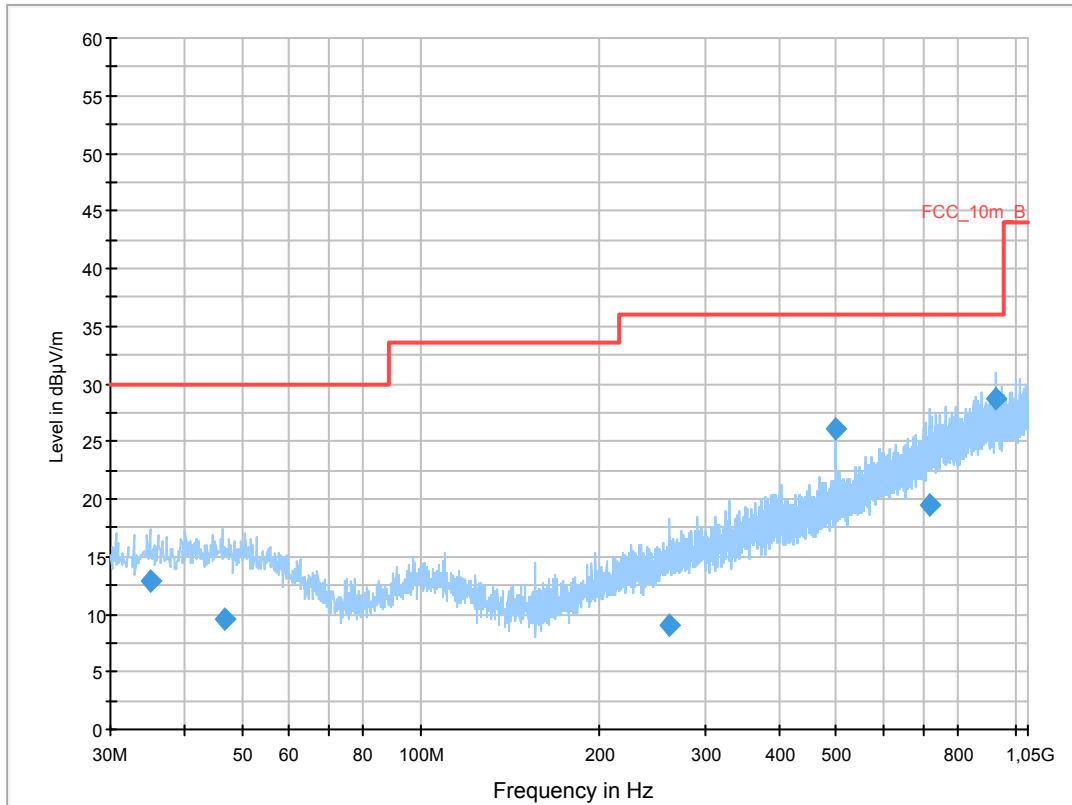
Common Information

EUT: WLANBV2-A + antenna M3002-66494
 Serial Number:
 Test Description: FCC part 15 C class B @ 10 m
 Operating Conditions: WLAN a mode tx @ 5600MHz
 Operator Name: Wolsdorfer
 Comment: DC 5V

Scan Setup: STAN_Fin [EMI radiated]

Hardware Setup: Electric Field (NOS)
 Receiver: [ESCI 3]
 Level Unit: dBµV/m

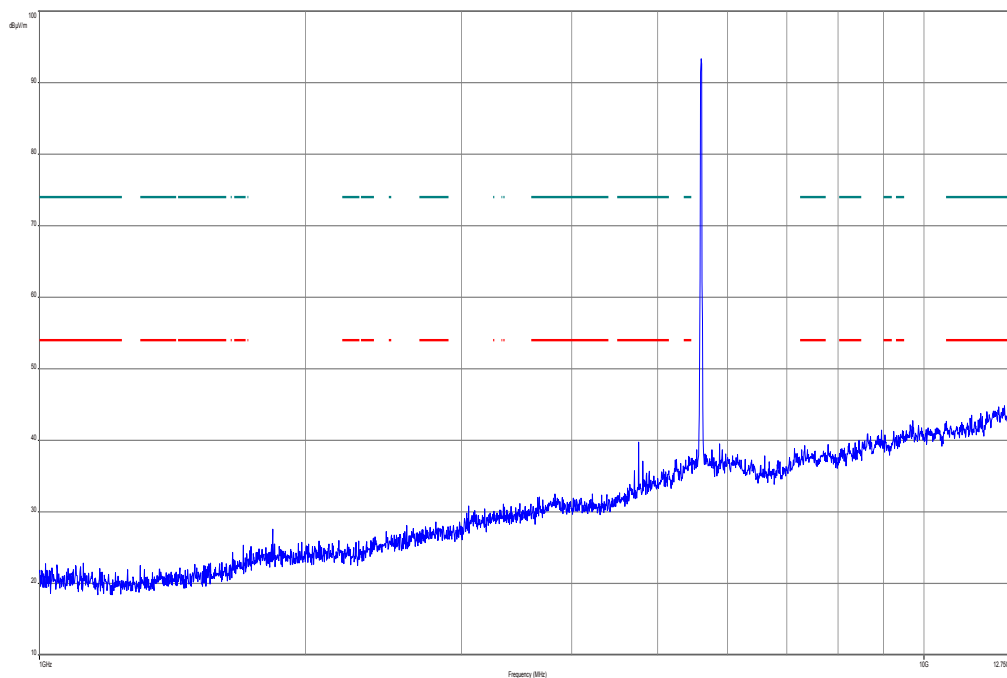
Subrange	Step Size	Detectors	IF BW	Meas. Time	Preamp
30 MHz - 2 GHz	60 kHz	QPK	120 kHz	1 s	20 dB



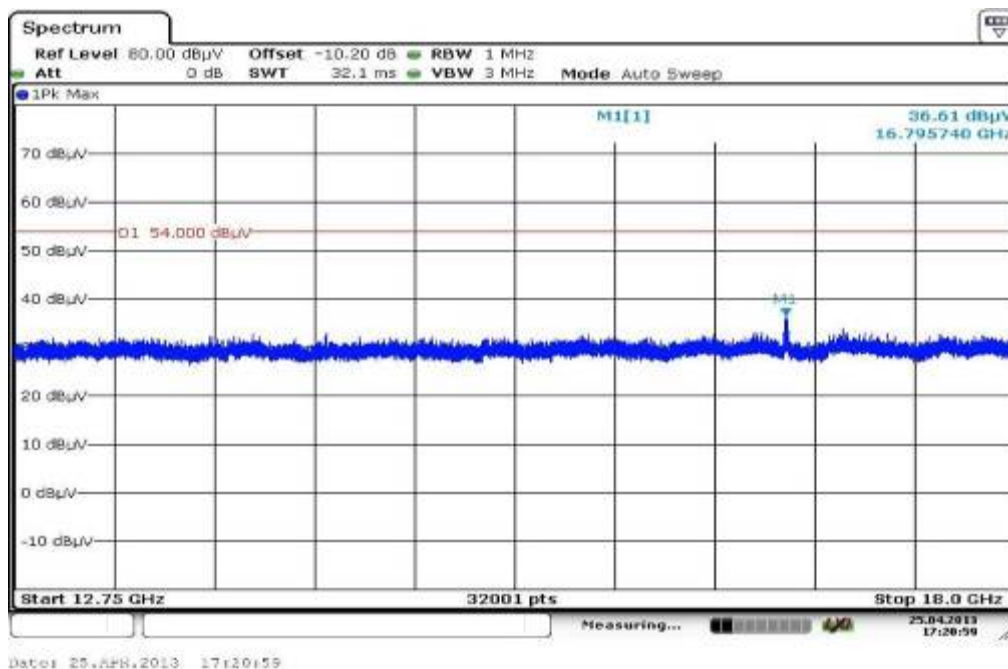
Final Result 1

Frequency (MHz)	QuasiPeak (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Polarization	Azimuth (deg)	Corr. (dB)	Margin (dB)	Limit (dBµV/m)	Comment
35.015250	12.9	1000.0	120.000	130.0	V	81.0	13.0	17.1	30.0	
46.602450	9.6	1000.0	120.000	121.0	V	182.0	13.3	20.4	30.0	
261.436500	9.1	1000.0	120.000	143.0	H	190.0	13.6	26.9	36.0	
499.995300	26.1	1000.0	120.000	98.0	V	261.0	18.7	9.9	36.0	
718.450050	19.5	1000.0	120.000	170.0	V	-5.0	22.9	16.5	36.0	
927.438300	28.7	1000.0	120.000	98.0	V	176.0	25.3	7.3	36.0	

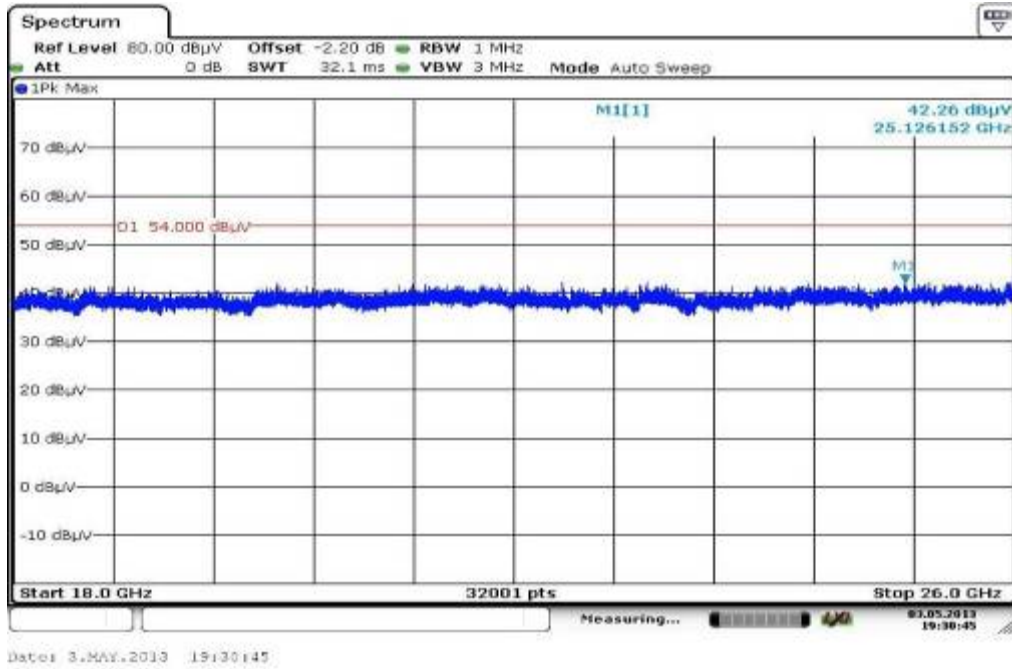
Plot 27: 1 GHz to 12.75 GHz, 5600 MHz, vertical & horizontal polarization



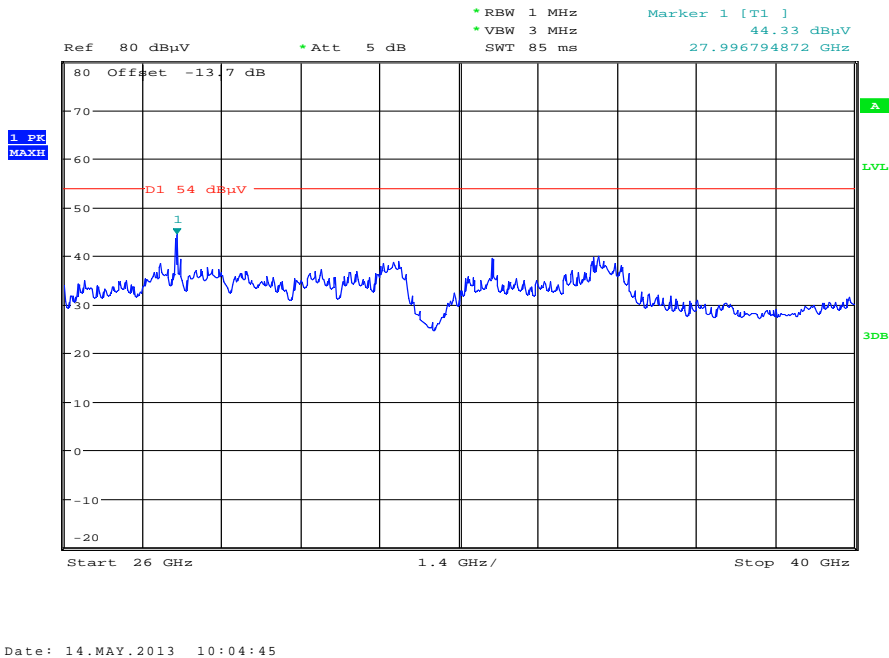
Plot 28: 12 GHz to 18 GHz, 5600 MHz, vertical & horizontal polarization



Plot 29: 18 GHz to 26 GHz, 5600 MHz, vertical & horizontal polarization



Plot 30: 26 GHz to 40 GHz, 5600 MHz, vertical & horizontal polarization



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

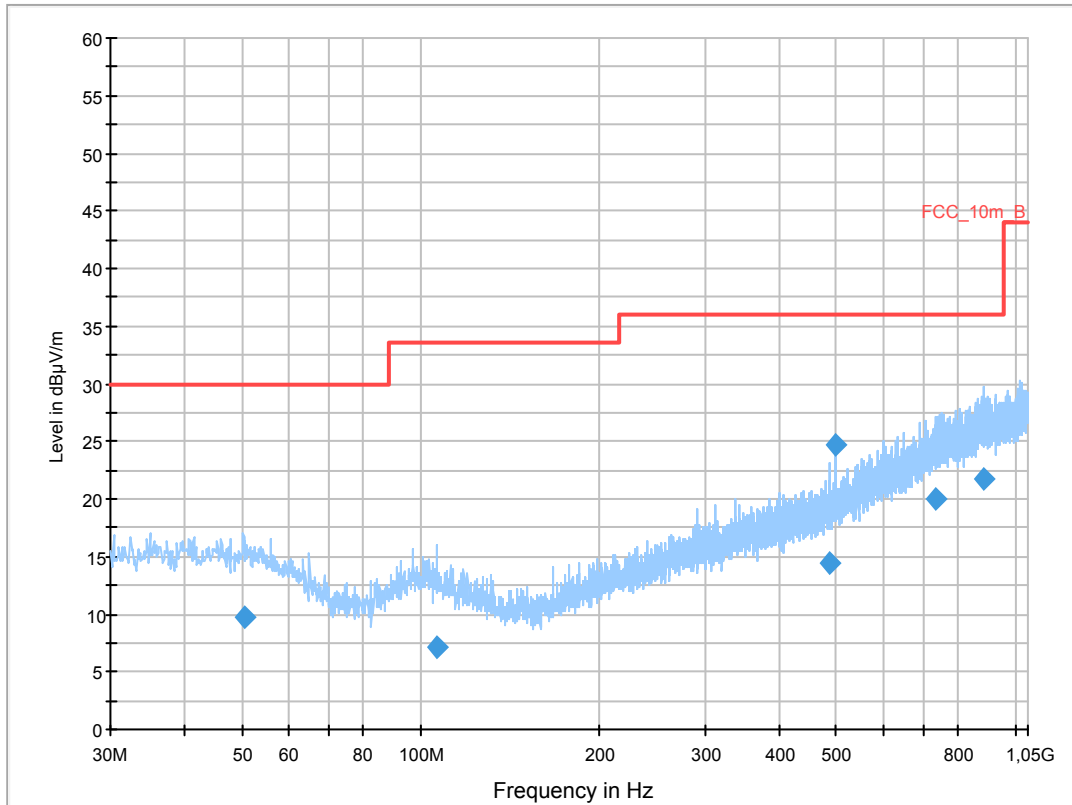
Common Information

EUT: WLANBV2-A + antenna M3002-66494
 Serial Number:
 Test Description: FCC part 15 C class B @ 10 m
 Operating Conditions: WLAN a mode tx @ 5700MHz
 Operator Name: Wolsdorfer
 Comment: DC 5V

Scan Setup: STAN_Fin [EMI radiated]

Hardware Setup: Electric Field (NOS)
 Receiver: [ESCI 3]
 Level Unit: dBµV/m

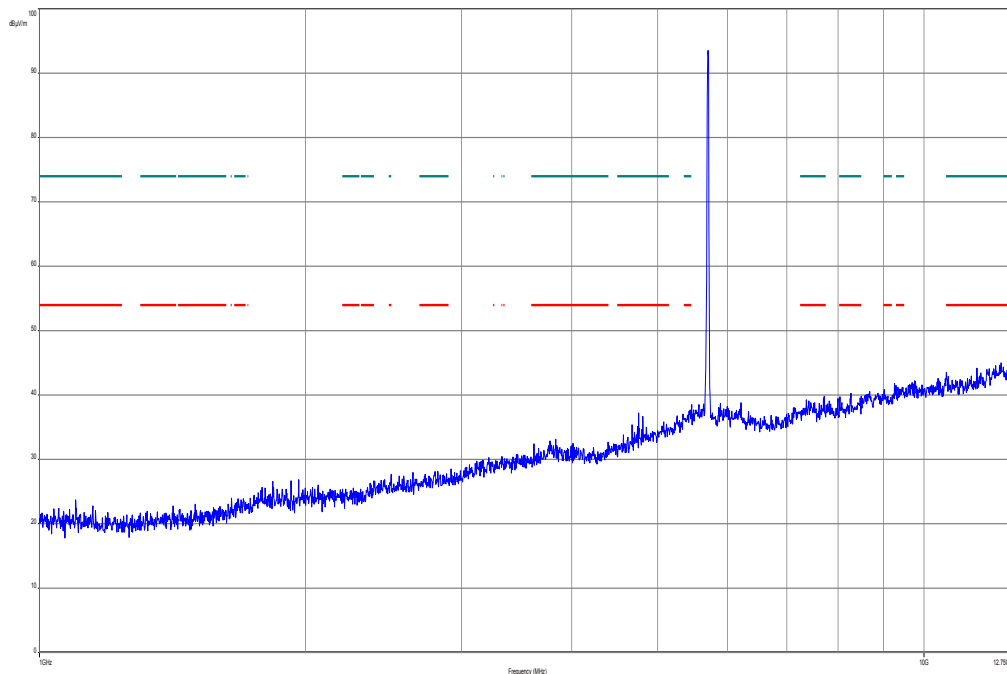
Subrange	Step Size	Detectors	IF BW	Meas. Time	Preamp
30 MHz - 2 GHz	60 kHz	QPK	120 kHz	1 s	20 dB



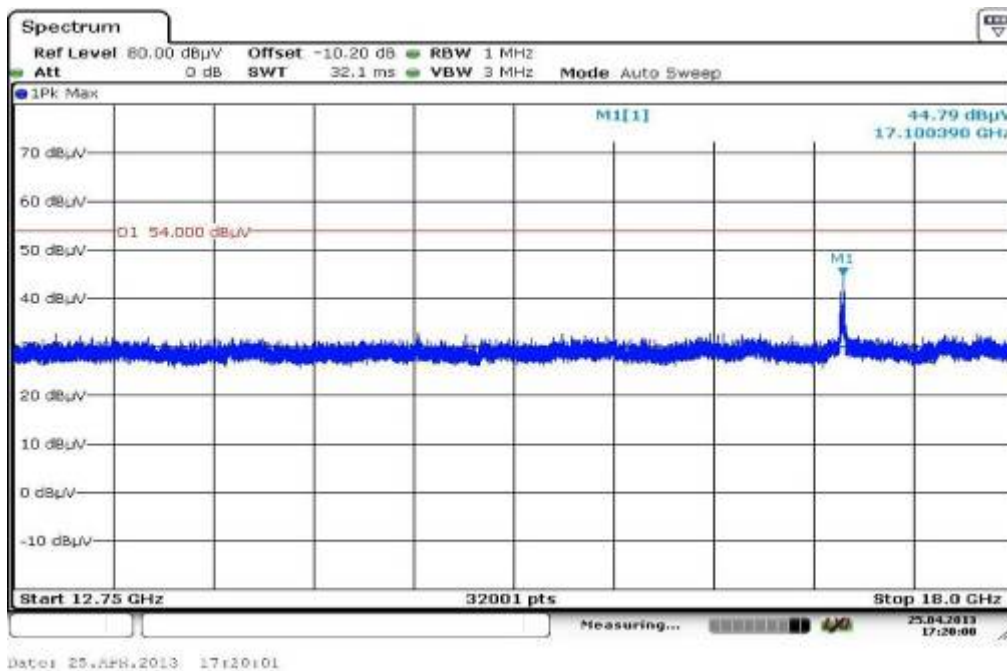
Final Result 1

Frequency (MHz)	QuasiPeak (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Polarization	Azimuth (deg)	Corr. (dB)	Margin (dB)	Limit (dBµV/m)	Comment
50.501250	9.7	1000.0	120.000	170.0	V	190.0	13.3	20.3	30.0	
106.057350	7.1	1000.0	120.000	170.0	V	170.0	11.4	26.4	33.5	
486.894600	14.5	1000.0	120.000	170.0	H	10.0	18.4	21.5	36.0	
499.985250	24.7	1000.0	120.000	98.0	V	280.0	18.7	11.3	36.0	
736.018200	19.9	1000.0	120.000	170.0	V	-10.0	23.3	16.1	36.0	
886.602000	21.7	1000.0	120.000	170.0	V	280.0	25.0	14.3	36.0	

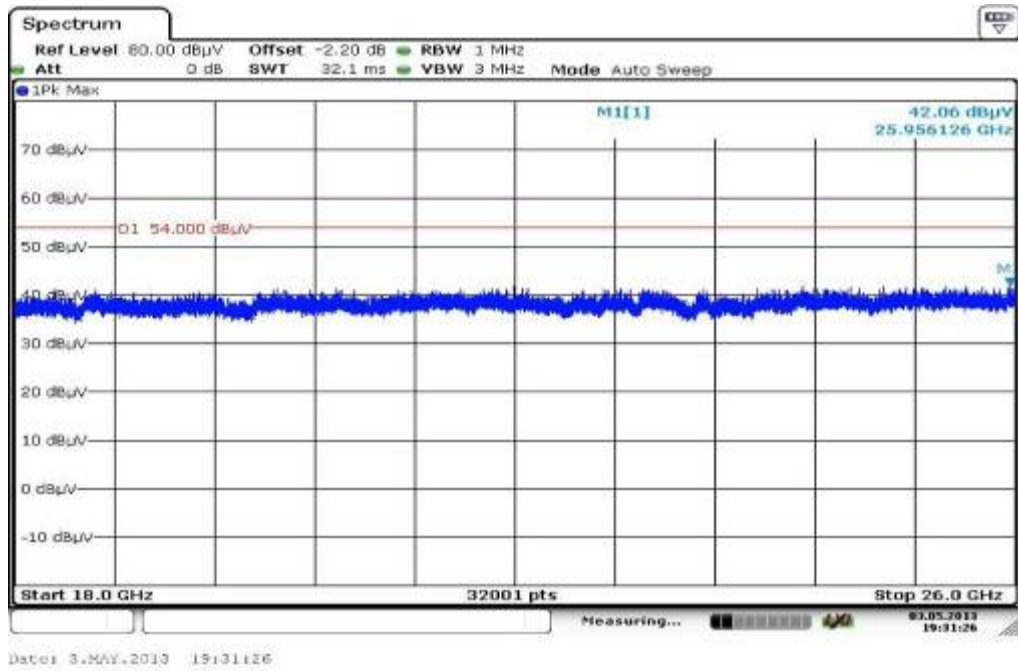
Plot 32: 1 GHz to 12.75 GHz, 5700 MHz, vertical & horizontal polarization



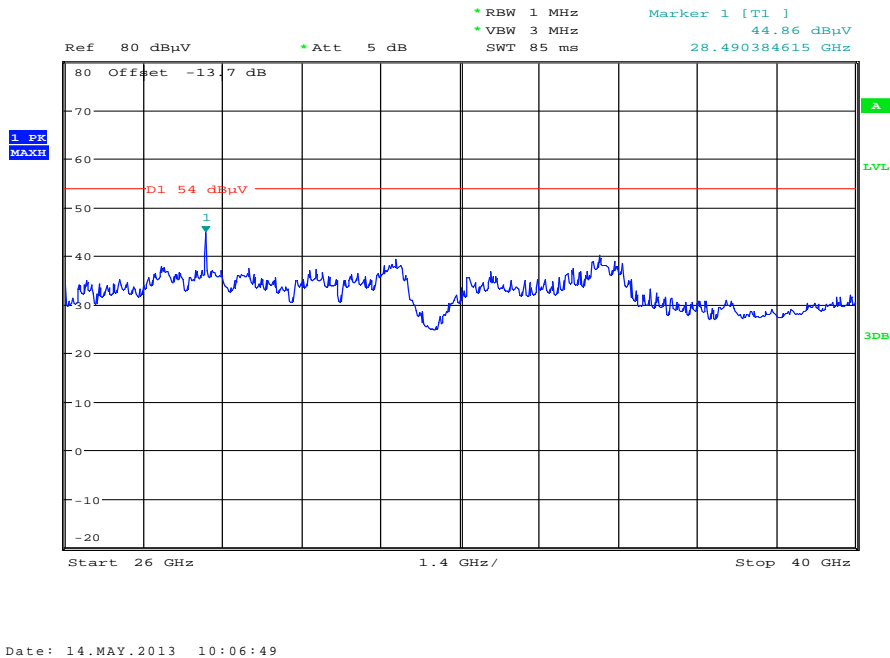
Plot 33: 12 GHz to 18 GHz, 5700 MHz, vertical & horizontal polarization



Plot 34: 18 GHz to 26 GHz, 5700 MHz, vertical & horizontal polarization



Plot 35: 26 GHz to 40 GHz, 5700 MHz, vertical & horizontal polarization



Plots: OFDM / n – mode HT20

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

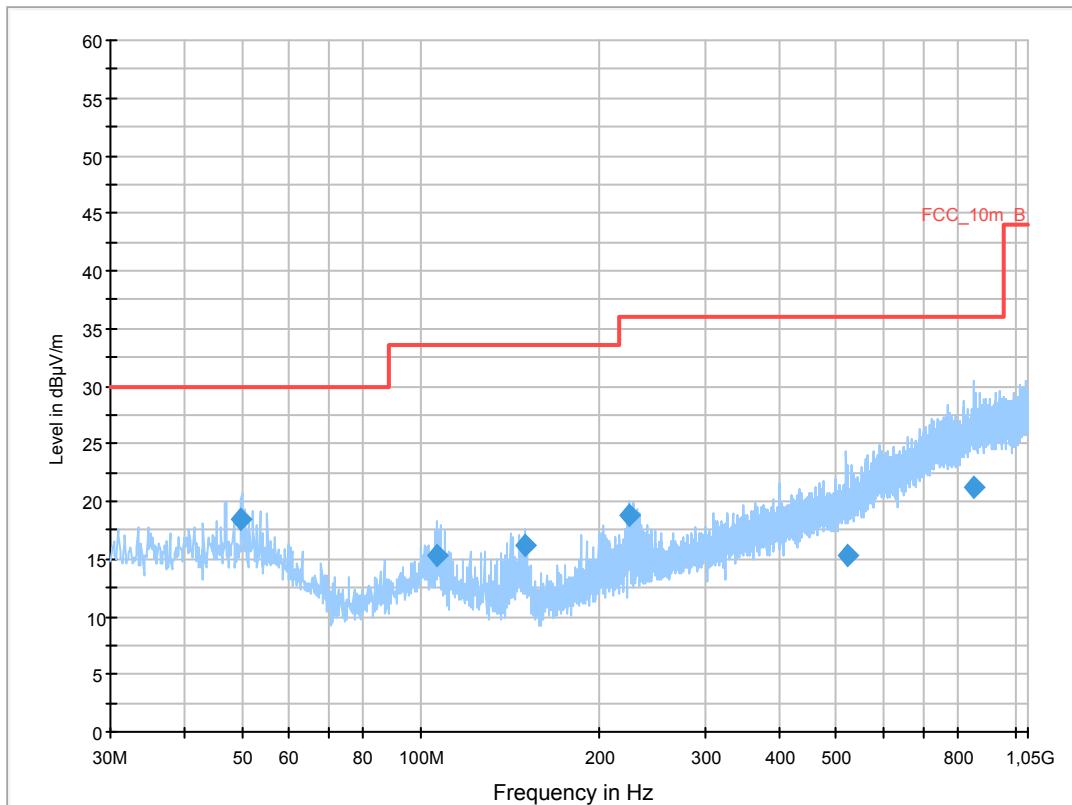
Common Information

EUT: WLANBV2-A + antenna M3002-66494
 Serial Number: eval
 Test Description: FCC part 15 C class B @ 10 m
 Operating Conditions: wlan tx n-mode HT20 ch36
 Operator Name: Wolsdorfer
 Comment: AC: 230 V / 50 Hz; grounded

Scan Setup: STAN_Fin [EMI radiated]

Hardware Setup: Electric Field (NOS)
 Receiver: [ESCI 3]
 Level Unit: dBµV/m

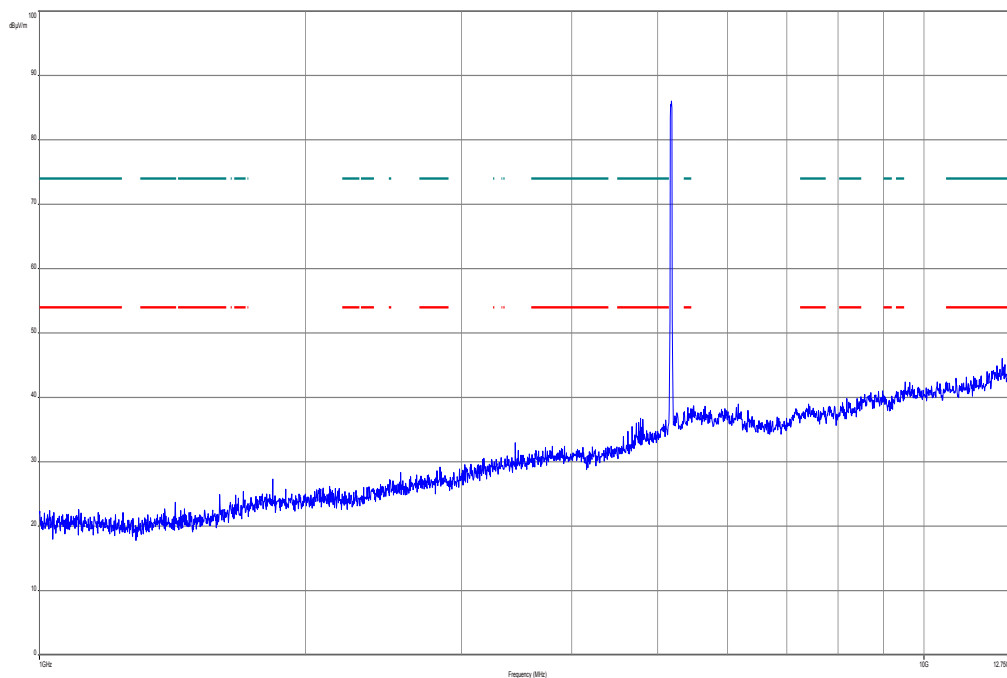
Subrange	Step Size	Detectors	IF BW	Meas. Time	Preamp
30 MHz - 2 GHz	60 kHz	QPK	120 kHz	1 s	20 dB



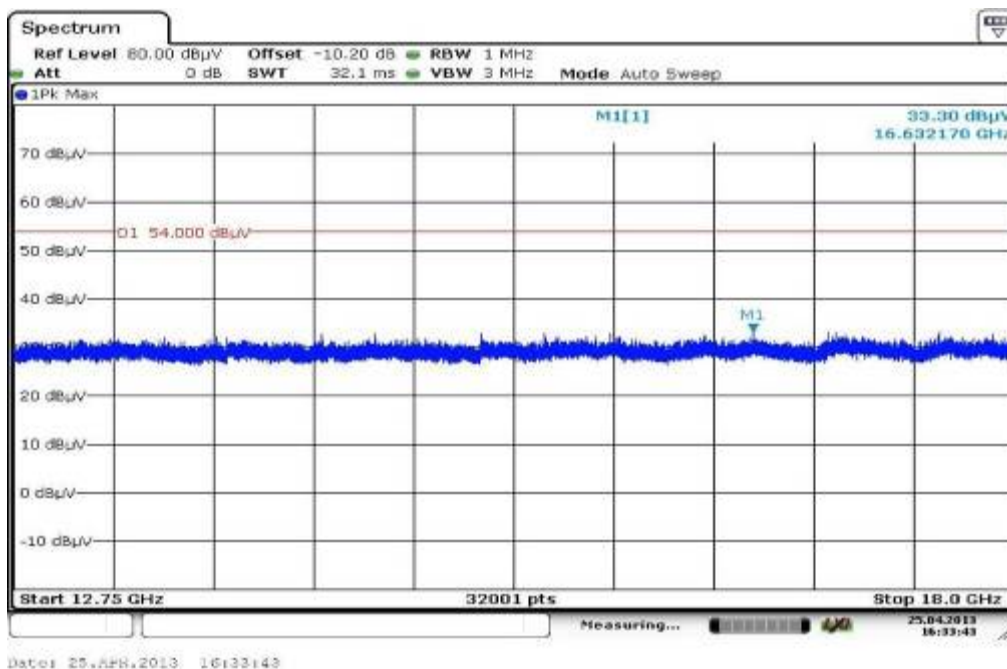
Final Result 1

Frequency (MHz)	QuasiPeak (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Polarization	Azimuth (deg)	Corr. (dB)	Margin (dB)	Limit (dBµV/m)	Comment
49.838100	18.5	1000.0	120.000	98.0	V	2.0	13.4	11.5	30.0	
106.482900	15.2	1000.0	120.000	121.0	V	-5.0	11.3	18.3	33.5	
149.524200	16.2	1000.0	120.000	105.0	V	261.0	8.9	17.3	33.5	
224.276700	18.9	1000.0	120.000	170.0	V	10.0	12.5	17.1	36.0	
520.498950	15.4	1000.0	120.000	170.0	V	280.0	19.0	20.6	36.0	
848.801550	21.3	1000.0	120.000	120.0	H	280.0	24.5	14.7	36.0	

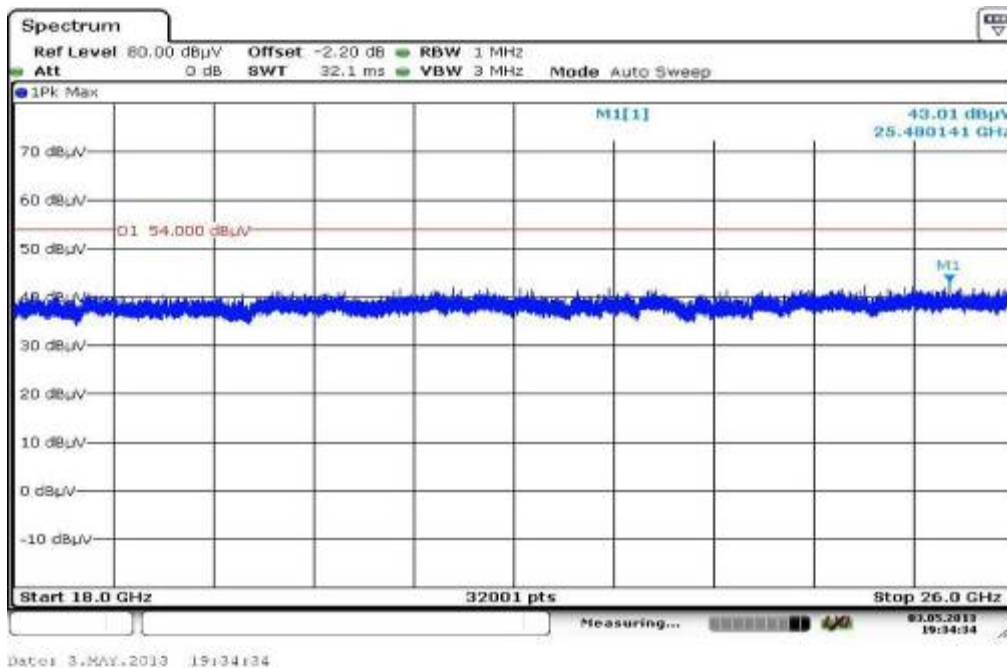
Plot 2: 1 GHz to 12.75 GHz, 5180 MHz, vertical & horizontal polarization



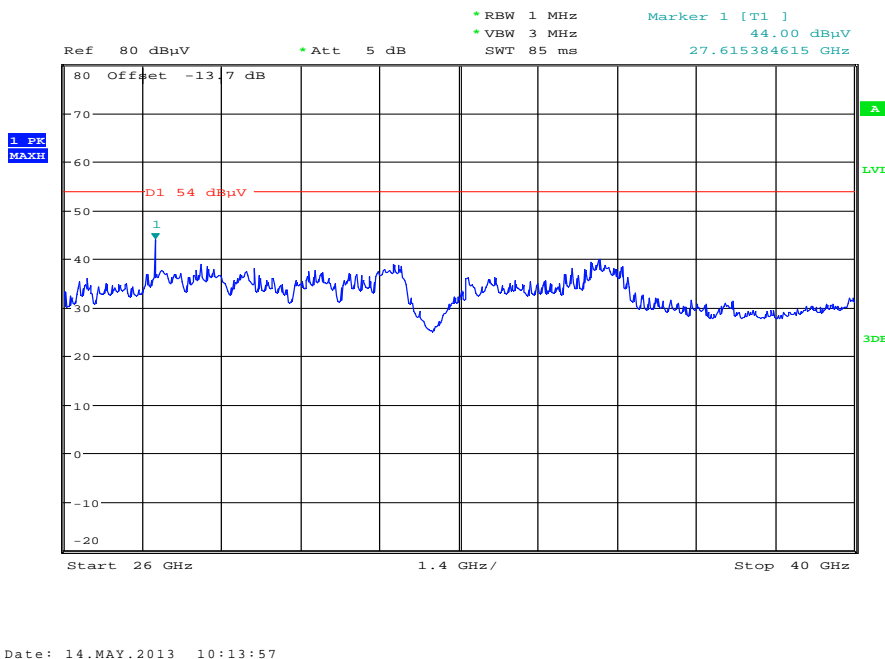
Plot 3: 12 GHz to 18 GHz, 5180 MHz, vertical & horizontal polarization



Plot 4: 18 GHz to 26 GHz, 5180 MHz, vertical & horizontal polarization



Plot 5: 26 GHz to 40 GHz, 5180 MHz, vertical & horizontal polarization



Plot 6: 30 MHz to 1 GHz, 5240 MHz, vertical & horizontal polarization

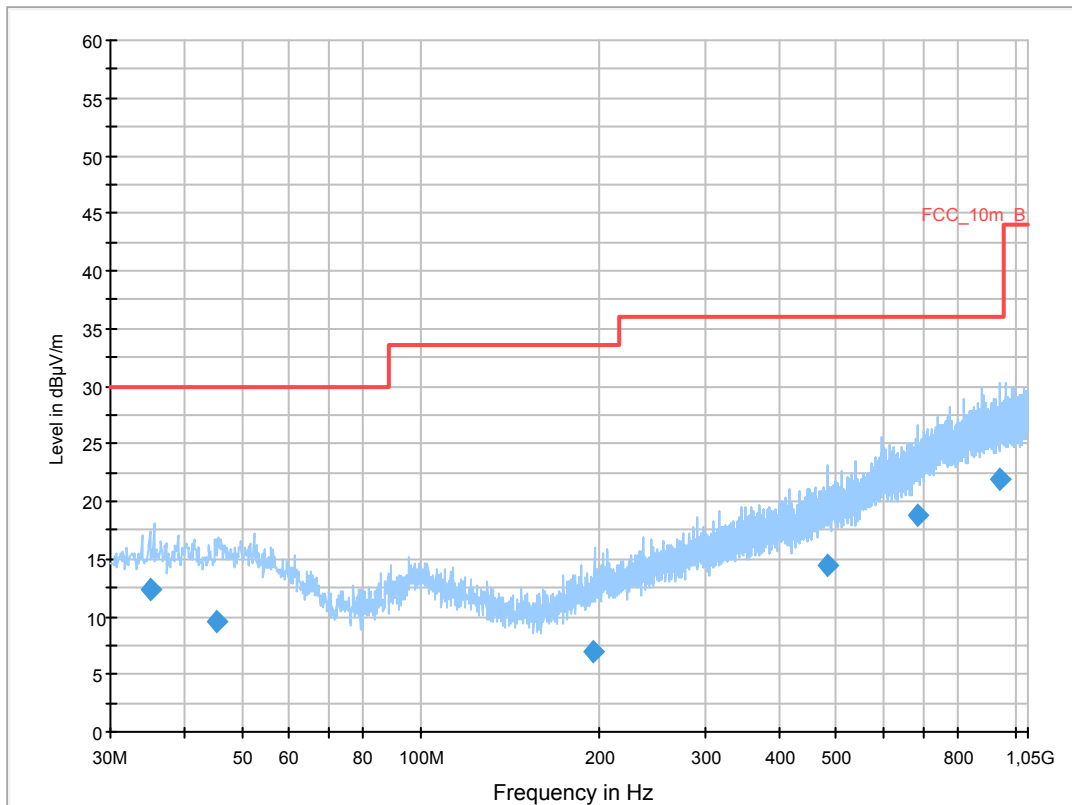
Common Information

EUT: WLANBV2-A + antenna M3002-66494
 Serial Number:
 Test Description: FCC part 15 C class B @ 10 m
 Operating Conditions: wlan n-mode HT20 tx @ 5240MHz
 Operator Name: Wolsdorfer
 Comment: DC 5V

Scan Setup: STAN_Fin [EMI radiated]

Hardware Setup: Electric Field (NOS)
 Receiver: [ESCI 3]
 Level Unit: dBµV/m

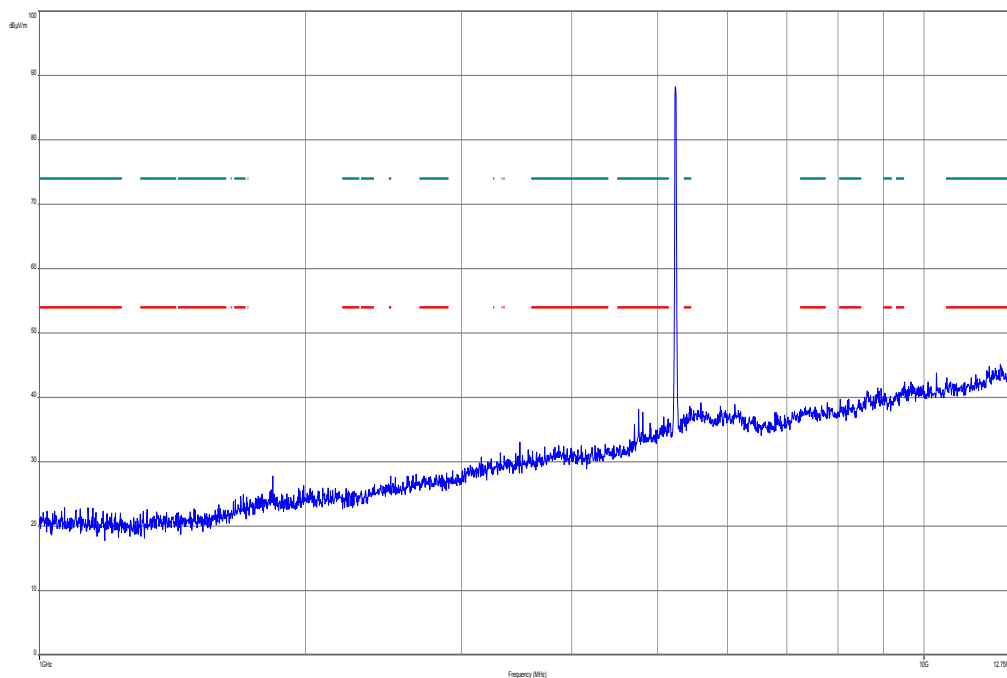
Subrange	Step Size	Detectors	IF BW	Meas. Time	Preamp
30 MHz - 2 GHz	60 kHz	QPK	120 kHz	1 s	20 dB



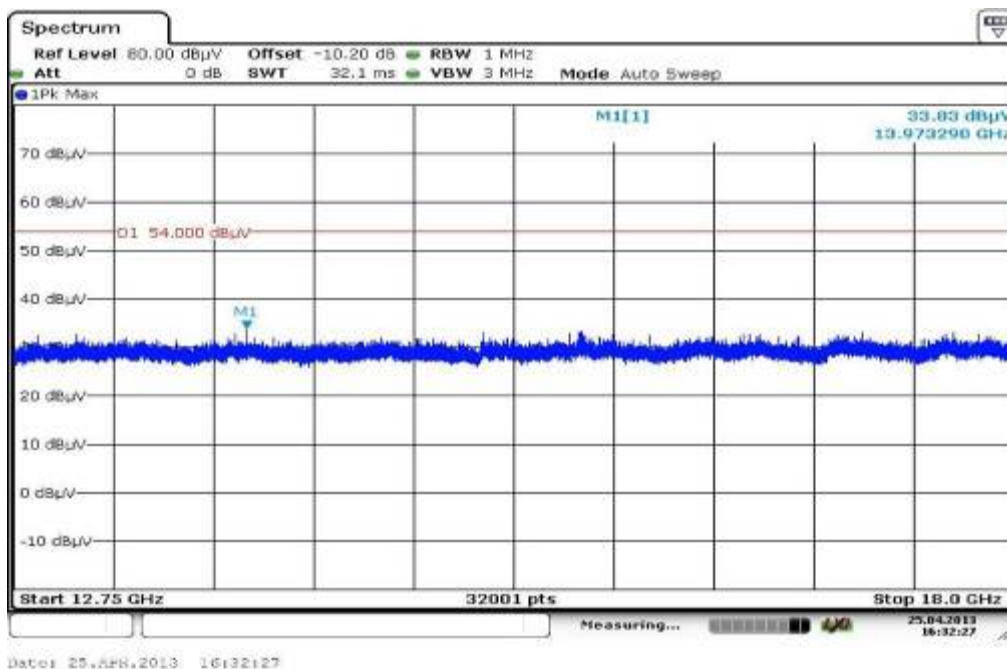
Final Result 1

Frequency (MHz)	QuasiPeak (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Polarization	Azimuth (deg)	Corr. (dB)	Margin (dB)	Limit (dBµV/m)	Comment
35.017950	12.3	1000.0	120.000	154.0	V	171.0	13.0	17.7	30.0	
45.232050	9.6	1000.0	120.000	170.0	H	280.0	13.3	20.4	30.0	
195.321300	6.9	1000.0	120.000	170.0	H	10.0	11.4	26.6	33.5	
482.151150	14.4	1000.0	120.000	111.0	H	171.0	18.3	21.6	36.0	
687.313050	18.8	1000.0	120.000	98.0	V	190.0	22.2	17.2	36.0	
942.930900	21.9	1000.0	120.000	170.0	H	10.0	25.3	14.1	36.0	

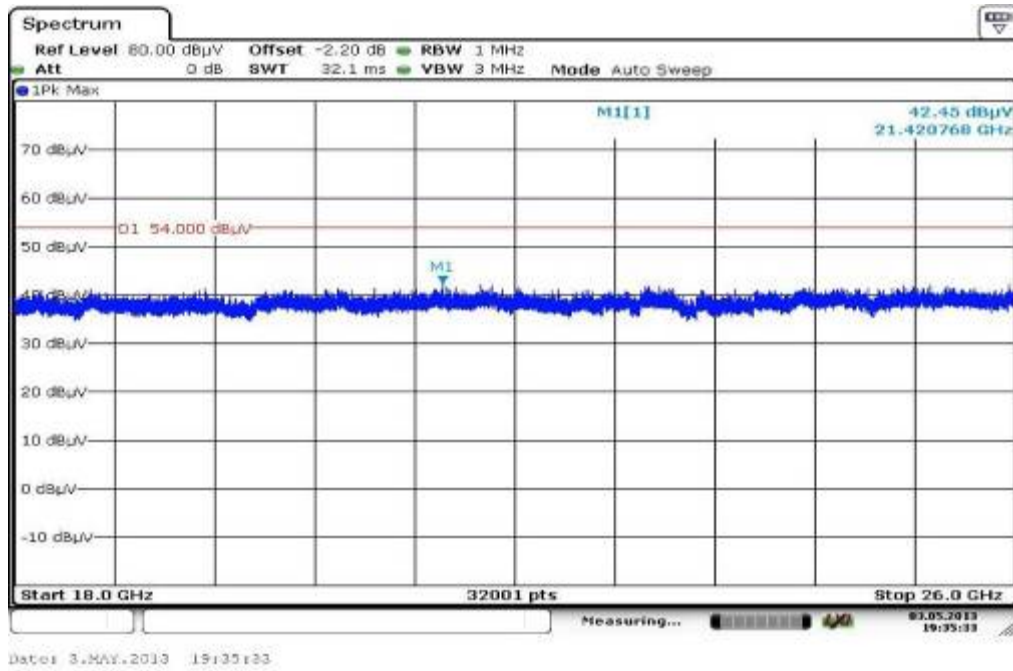
Plot 7: 1 GHz to 12.75 GHz, 5240 MHz, vertical & horizontal polarization



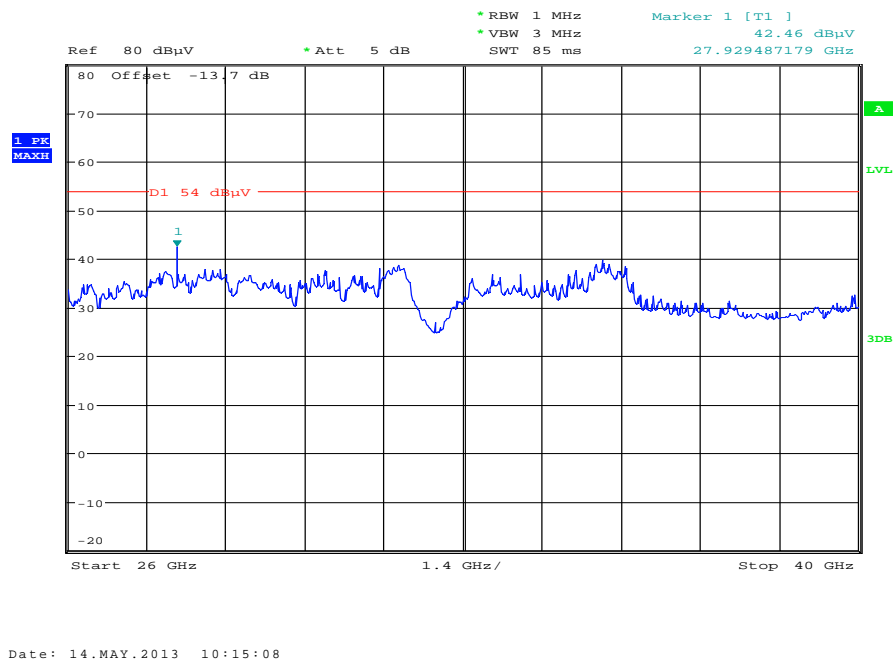
Plot 8: 12 GHz to 18 GHz, 5240 MHz, vertical & horizontal polarization



Plot 9: 18 GHz to 26 GHz, 5240 MHz, vertical & horizontal polarization



Plot 10: 26 GHz to 40 GHz, 5240 MHz, vertical & horizontal polarization



Plot 11: 30 MHz to 1 GHz, 5260 MHz, vertical & horizontal polarization

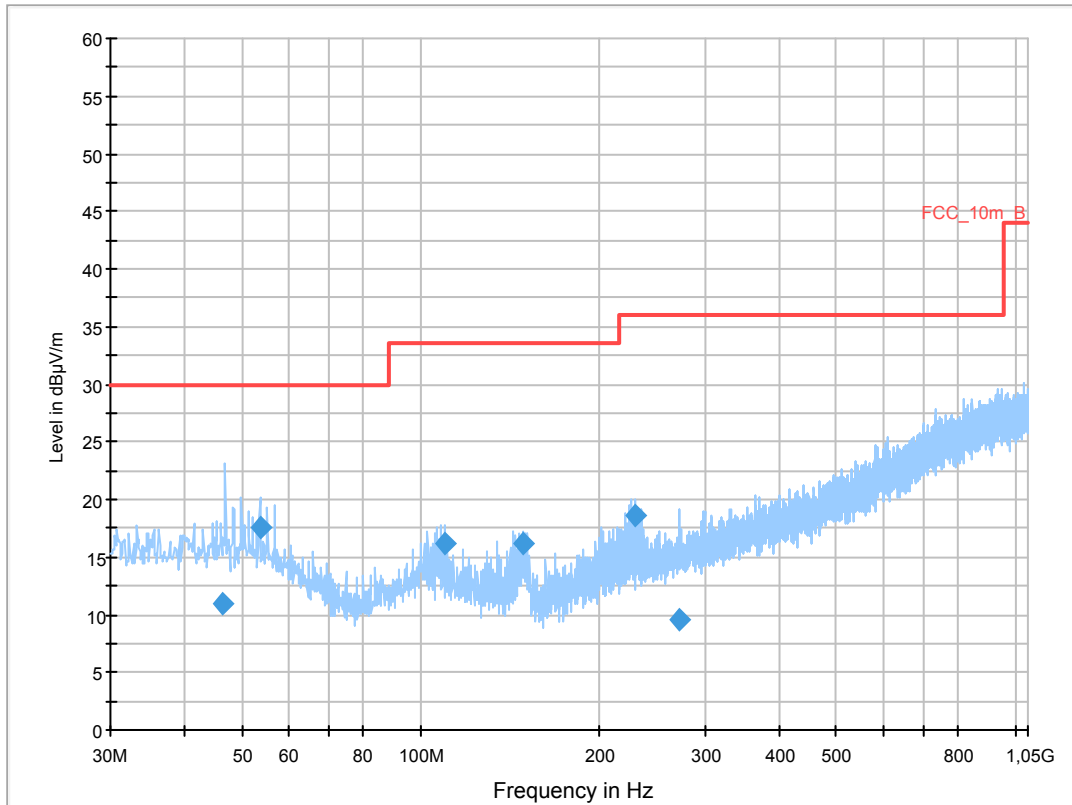
Common Information

EUT: WLANBV2-A + antenna M3002-66494
 Serial Number: eval
 Test Description: FCC part 15 C class B @ 10 m
 Operating Conditions: wlan tx n-mode HT20 5260 MHz
 Operator Name: Wolsdorfer
 Comment: DC 5V

Scan Setup: STAN_Fin [EMI radiated]

Hardware Setup: Electric Field (NOS)
 Receiver: [ESCI 3]
 Level Unit: dBµV/m

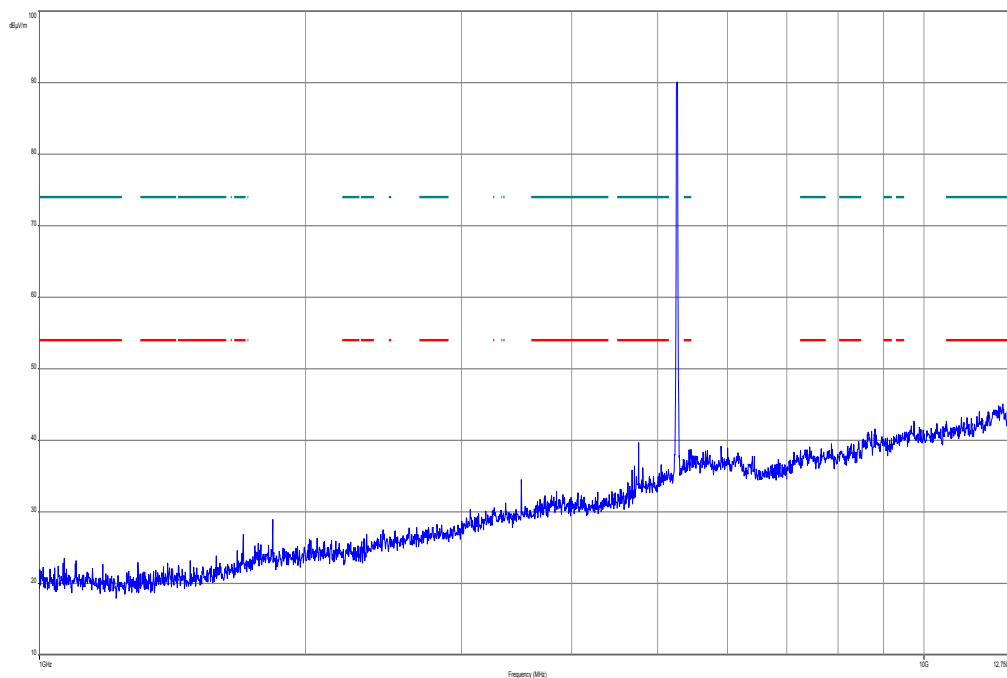
Subrange	Step Size	Detectors	IF BW	Meas. Time	Preamp
30 MHz - 2 GHz	60 kHz	QPK	120 kHz	1 s	20 dB



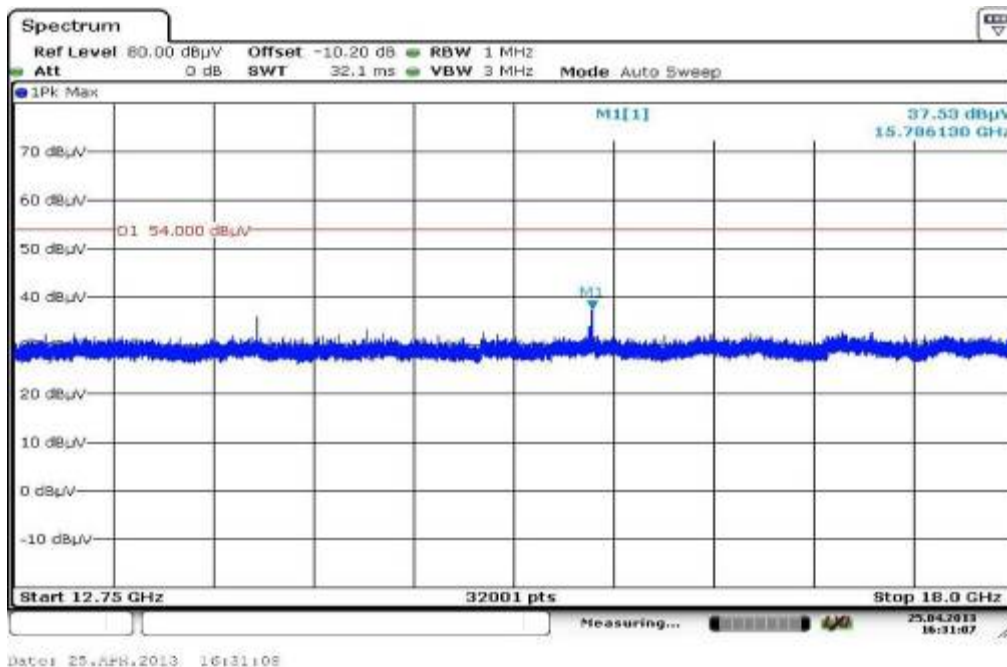
Final Result 1

Frequency (MHz)	QuasiPeak (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Polarization	Azimuth (deg)	Corr. (dB)	Margin (dB)	Limit (dBµV/m)	Comment
46.243650	11.0	1000.0	120.000	98.0	V	182.0	13.3	19.0	30.0	
53.606250	17.6	1000.0	120.000	112.0	V	-10.0	13.0	12.4	30.0	
109.474950	16.2	1000.0	120.000	170.0	V	-10.0	11.1	17.3	33.5	
147.995100	16.2	1000.0	120.000	98.0	V	280.0	8.9	17.3	33.5	
228.788100	18.6	1000.0	120.000	134.0	V	10.0	12.7	17.4	36.0	
271.394550	9.5	1000.0	120.000	170.0	H	280.0	13.8	26.5	36.0	

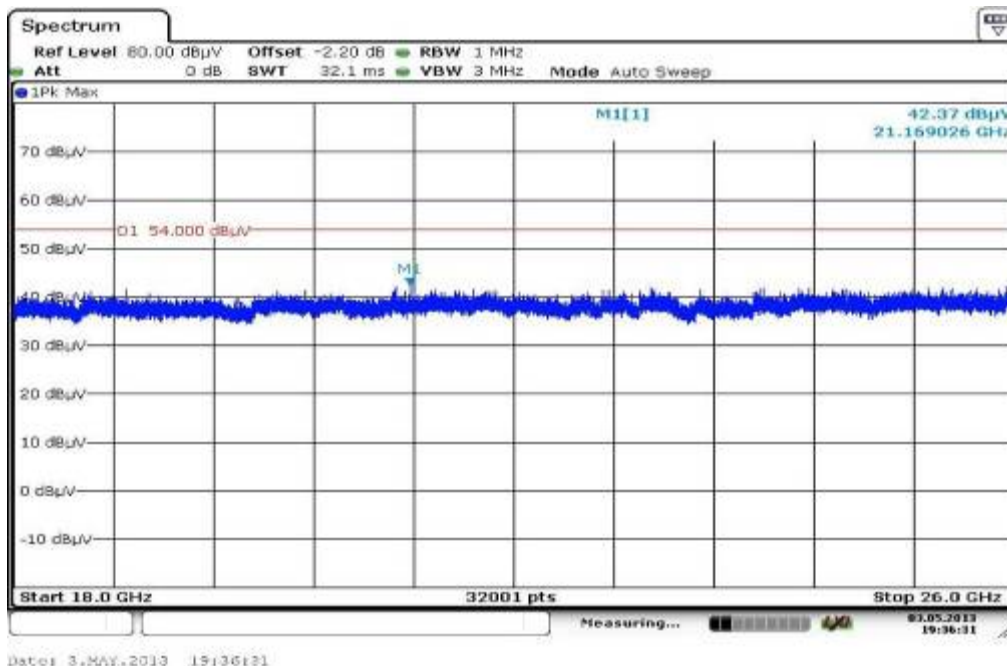
Plot 12: 1 GHz to 12.75 GHz, 5260 MHz, vertical & horizontal polarization



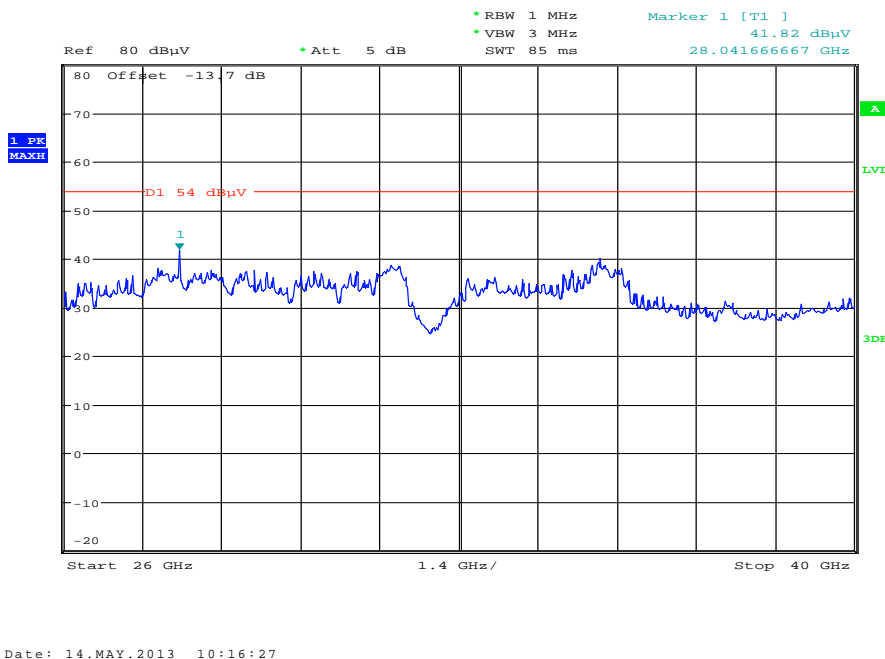
Plot 13: 12 GHz to 18 GHz, 5260 MHz, vertical & horizontal polarization



Plot 14: 18 GHz to 26 GHz, 5260 MHz, vertical & horizontal polarization



Plot 15: 26 GHz to 40 GHz, 5260 MHz, vertical & horizontal polarization



Plot 16: 30 MHz to 1 GHz, 5320 MHz, vertical & horizontal polarization

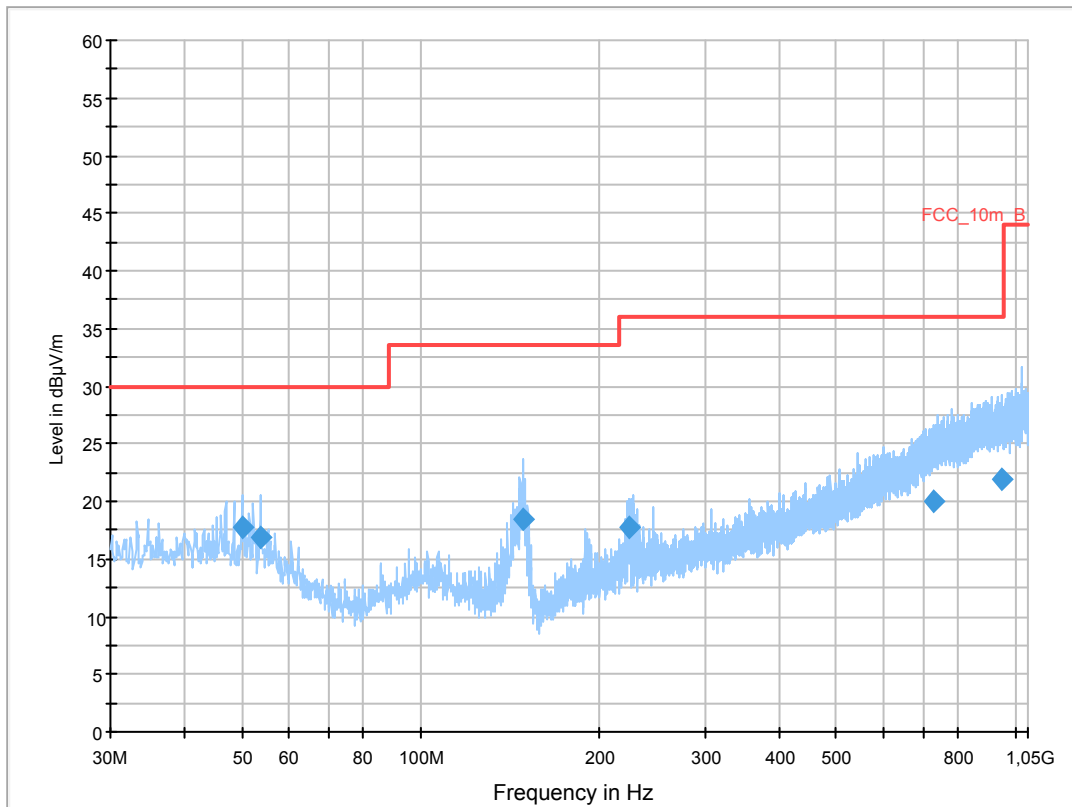
Common Information

EUT: WLANBV2-A + antenna M3002-66494
 Serial Number: eval
 Test Description: FCC part 15 C class B @ 10 m
 Operating Conditions: wlan tx n-mode HT20 5320 MHz
 Operator Name: Wolsdorfer
 Comment: DC 5V

Scan Setup: STAN_Fin [EMI radiated]

Hardware Setup: Electric Field (NOS)
 Receiver: [ESCI 3]
 Level Unit: dBµV/m

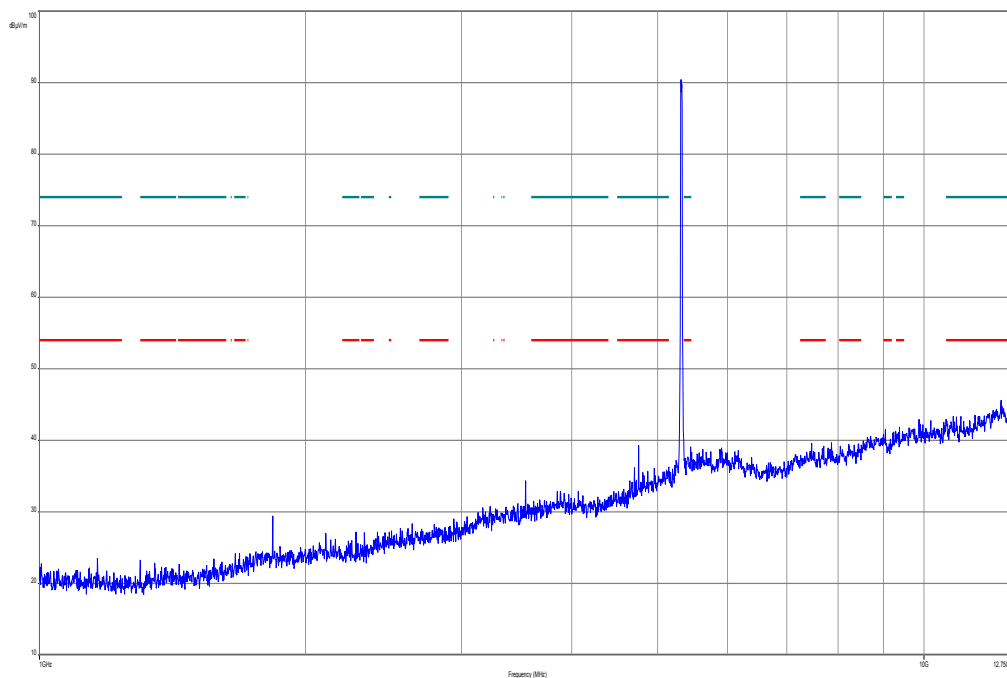
Subrange	Step Size	Detectors	IF BW	Meas. Time	Preamp
30 MHz - 2 GHz	60 kHz	QPK	120 kHz	1 s	20 dB



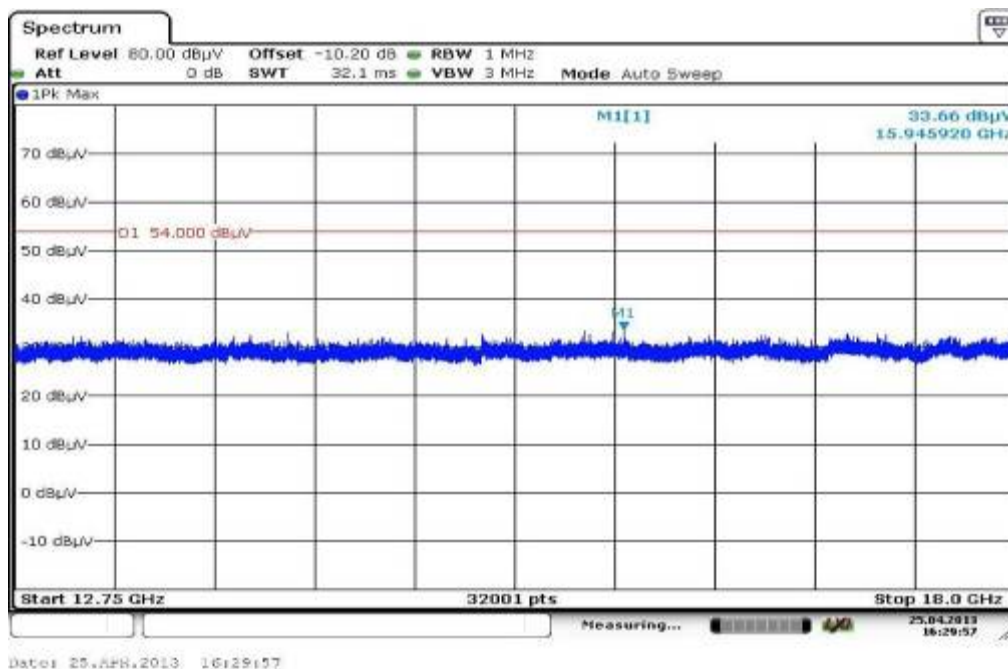
Final Result 1

Frequency (MHz)	QuasiPeak (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Polarization	Azimuth (deg)	Corr. (dB)	Margin (dB)	Limit (dBµV/m)	Comment
49.886100	17.8	1000.0	120.000	98.0	V	-5.0	13.4	12.2	30.0	
53.666700	16.9	1000.0	120.000	170.0	V	100.0	13.0	13.1	30.0	
148.159650	18.5	1000.0	120.000	170.0	V	0.0	8.9	15.0	33.5	
224.514450	17.7	1000.0	120.000	170.0	H	-10.0	12.5	18.3	36.0	
730.710900	19.9	1000.0	120.000	170.0	H	88.0	23.2	16.1	36.0	
947.430900	21.9	1000.0	120.000	120.0	H	-5.0	25.3	14.1	36.0	

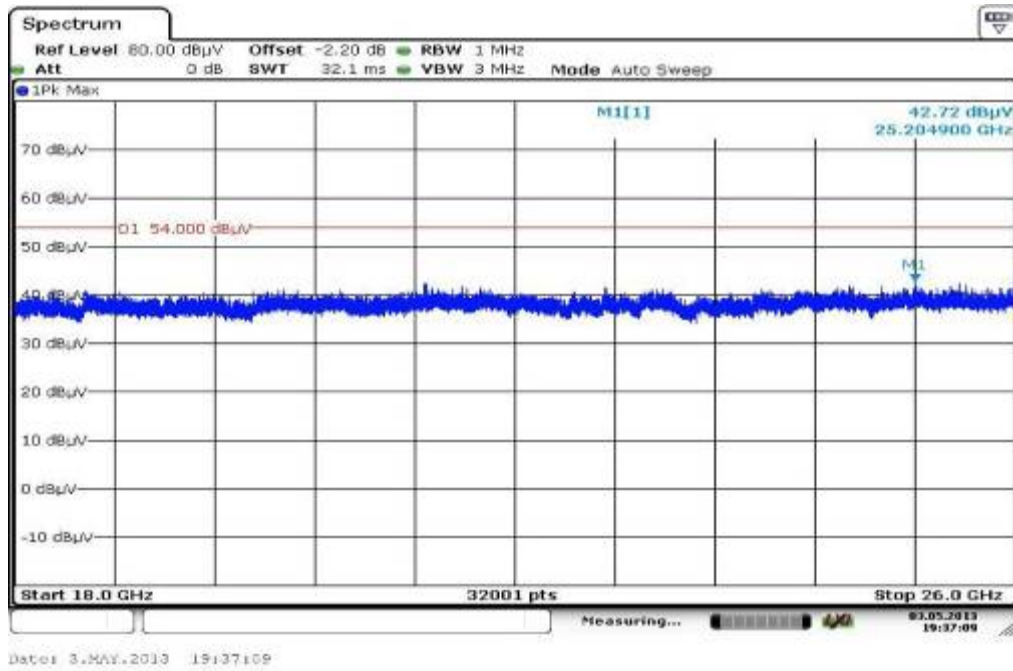
Plot 17: 1 GHz to 12.75 GHz, 5320 MHz, vertical & horizontal polarization



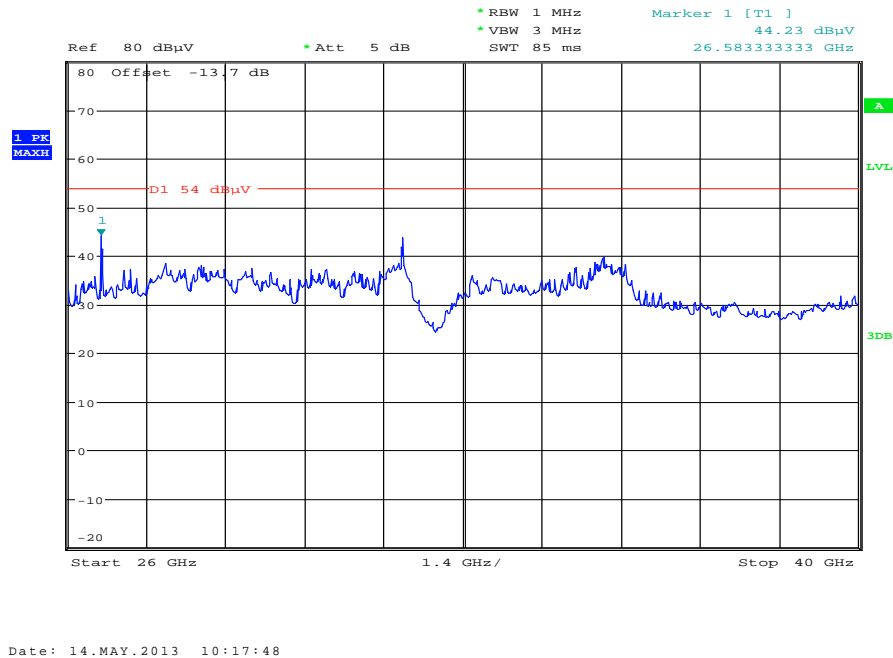
Plot 18: 12 GHz to 18 GHz, 5320 MHz, vertical & horizontal polarization



Plot 19: 18 GHz to 26 GHz, 5320 MHz, vertical & horizontal polarization



Plot 20: 26 GHz to 40 GHz, 5320 MHz, vertical & horizontal polarization



Plot 21: 30 MHz to 1 GHz, 5500 MHz, vertical & horizontal polarization

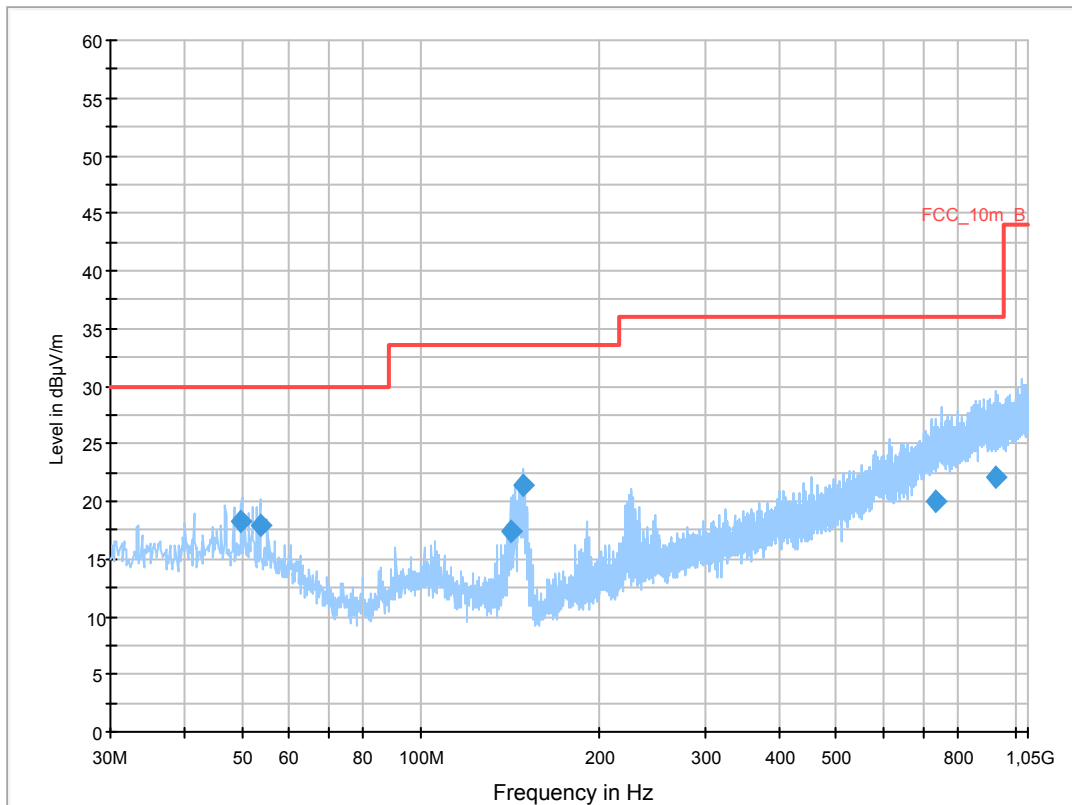
Common Information

EUT: WLANBV2-A + antenna M3002-66494
 Serial Number: eval
 Test Description: FCC part 15 C class B @ 10 m
 Operating Conditions: wlan tx n-mode HT20 5500 MHz
 Operator Name: Wolsdorfer
 Comment: DC 5V

Scan Setup: STAN_Fin [EMI radiated]

Hardware Setup: Electric Field (NOS)
 Receiver: [ESCI 3]
 Level Unit: dBµV/m

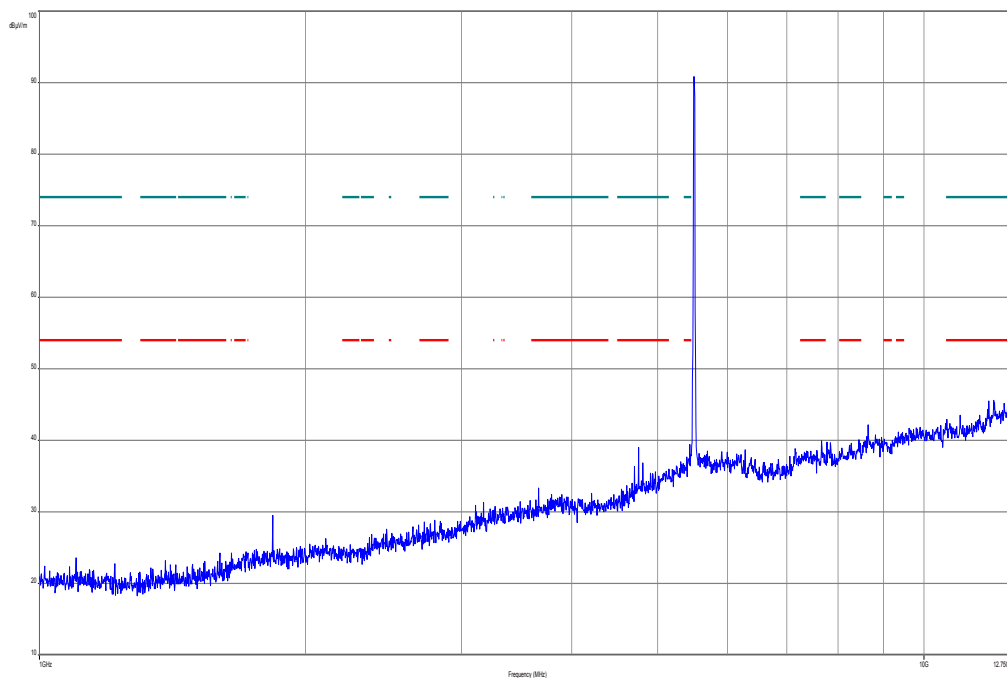
Subrange	Step Size	Detectors	IF BW	Meas. Time	Preamp
30 MHz - 2 GHz	60 kHz	QPK	120 kHz	1 s	20 dB



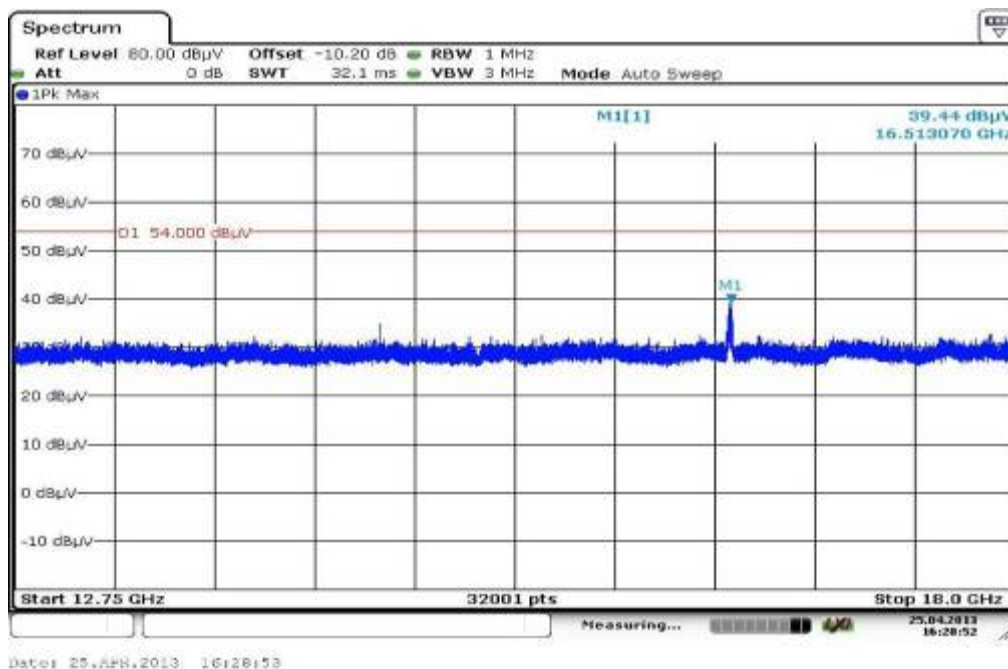
Final Result 1

Frequency (MHz)	QuasiPeak (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Polarization	Azimuth (deg)	Corr. (dB)	Margin (dB)	Limit (dBµV/m)	Comment
49.854300	18.2	1000.0	120.000	104.0	V	10.0	13.4	11.8	30.0	
53.629350	17.9	1000.0	120.000	111.0	V	175.0	13.0	12.1	30.0	
141.260700	17.4	1000.0	120.000	98.0	V	-10.0	8.7	16.1	33.5	
148.045650	21.4	1000.0	120.000	112.0	V	85.0	8.9	12.1	33.5	
735.665250	20.1	1000.0	120.000	170.0	H	190.0	23.3	15.9	36.0	
927.411000	22.2	1000.0	120.000	170.0	H	280.0	25.3	13.8	36.0	

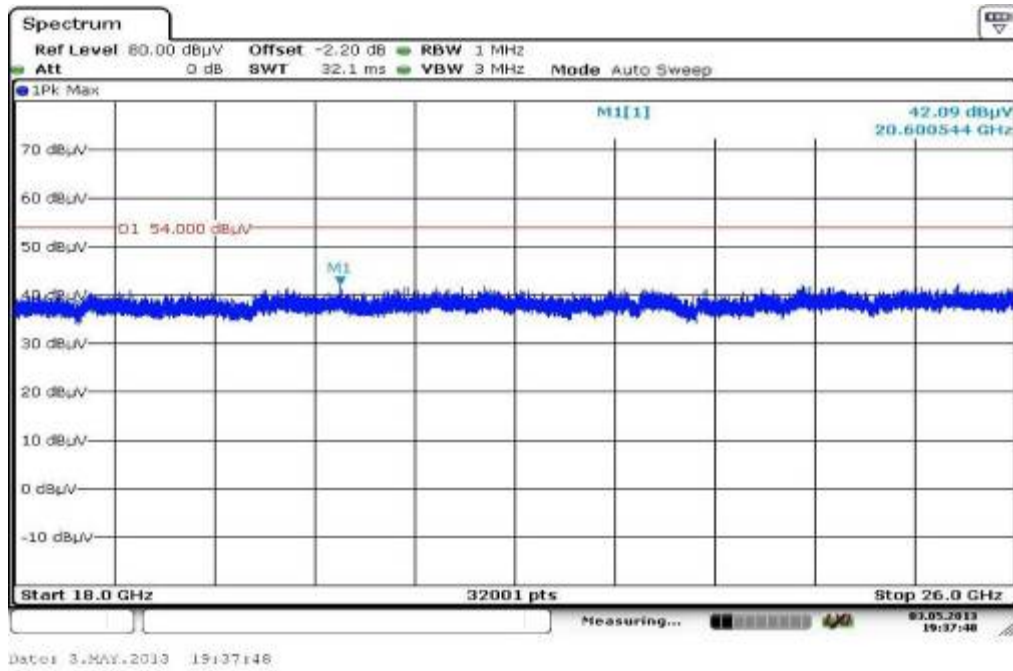
Plot 22: 1 GHz to 12.75 GHz, 5500 MHz, vertical & horizontal polarization



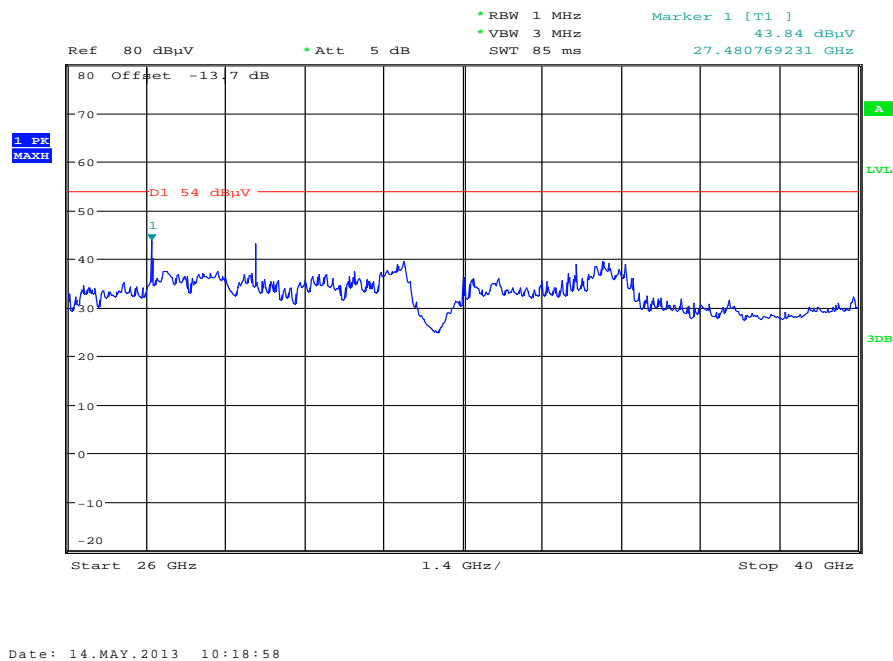
Plot 23: 12 GHz to 18 GHz, 5500 MHz, vertical & horizontal polarization



Plot 24: 18 GHz to 26 GHz, 5500 MHz, vertical & horizontal polarization



Plot 25: 26 GHz to 40 GHz, 5500 MHz, vertical & horizontal polarization



Plot 26: 30 MHz to 1 GHz, 5600 MHz, vertical & horizontal polarization

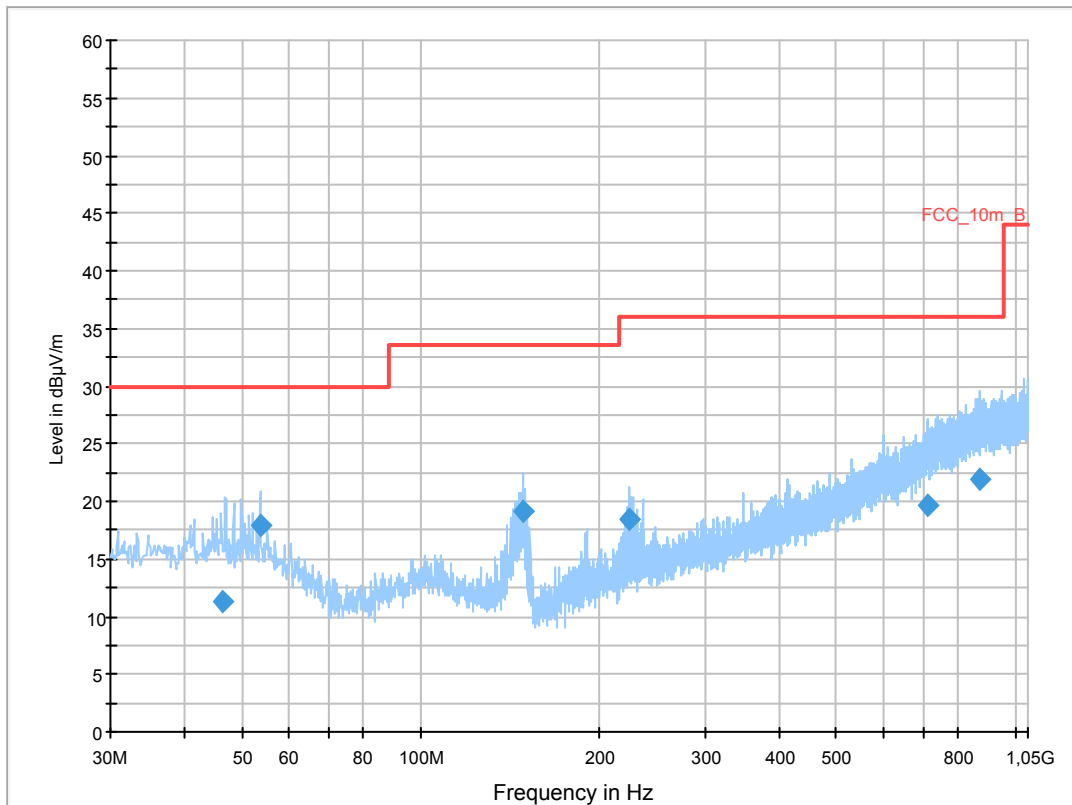
Common Information

EUT: WLANBV2-A + antenna M3002-66494
 Serial Number: eval
 Test Description: FCC part 15 C class B @ 10 m
 Operating Conditions: wlan tx n-mode HT20 5600 MHz
 Operator Name: Wolsdorfer
 Comment: DC 5V

Scan Setup: STAN_Fin [EMI radiated]

Hardware Setup: Electric Field (NOS)
 Receiver: [ESCI 3]
 Level Unit: dBµV/m

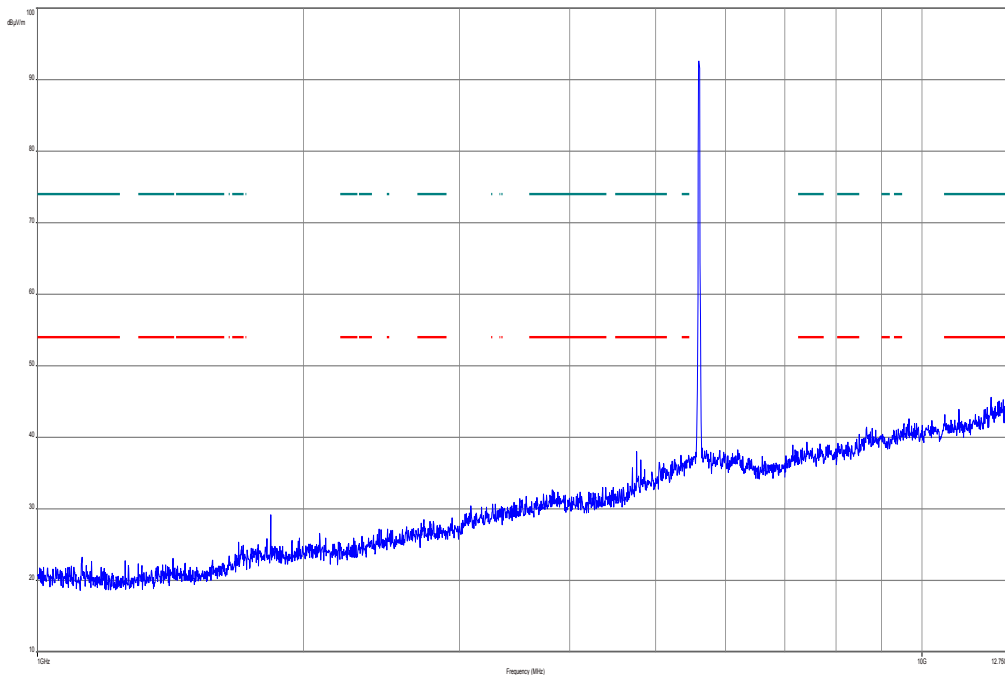
Subrange	Step Size	Detectors	IF BW	Meas. Time	Preamp
30 MHz - 2 GHz	60 kHz	QPK	120 kHz	1 s	20 dB



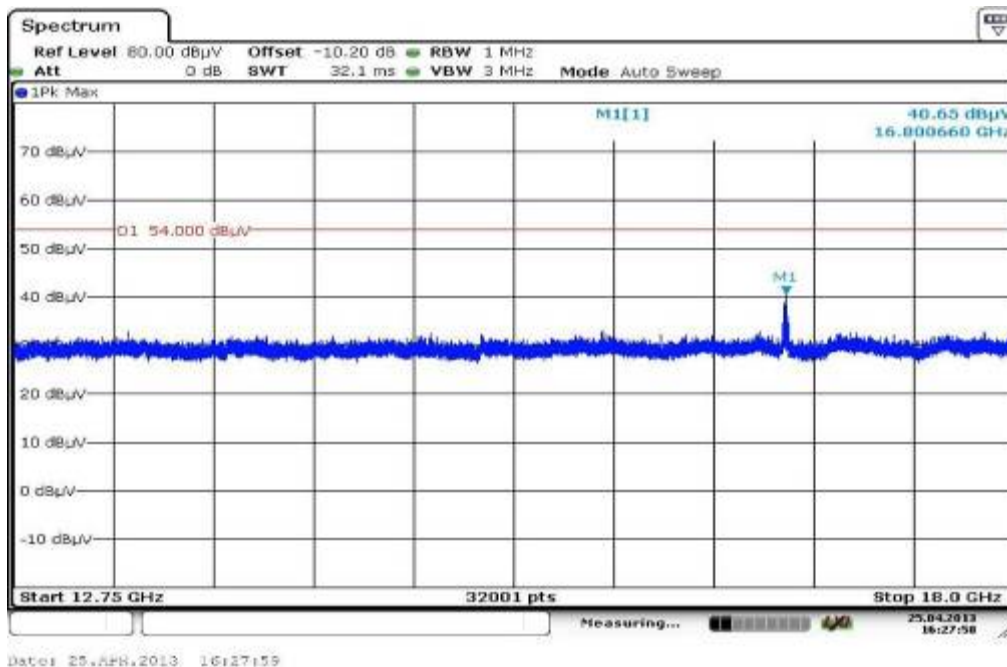
Final Result 1

Frequency (MHz)	QuasiPeak (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Polarization	Azimuth (deg)	Corr. (dB)	Margin (dB)	Limit (dBµV/m)	Comment
46.512450	11.4	1000.0	120.000	98.0	V	0.0	13.3	18.6	30.0	
53.616450	18.0	1000.0	120.000	111.0	V	-1.0	13.0	12.0	30.0	
148.075200	19.1	1000.0	120.000	170.0	V	10.0	8.9	14.4	33.5	
224.306100	18.4	1000.0	120.000	121.0	V	100.0	12.5	17.6	36.0	
714.268200	19.6	1000.0	120.000	121.0	V	-5.0	22.8	16.4	36.0	
873.534900	21.8	1000.0	120.000	98.0	H	0.0	24.9	14.2	36.0	

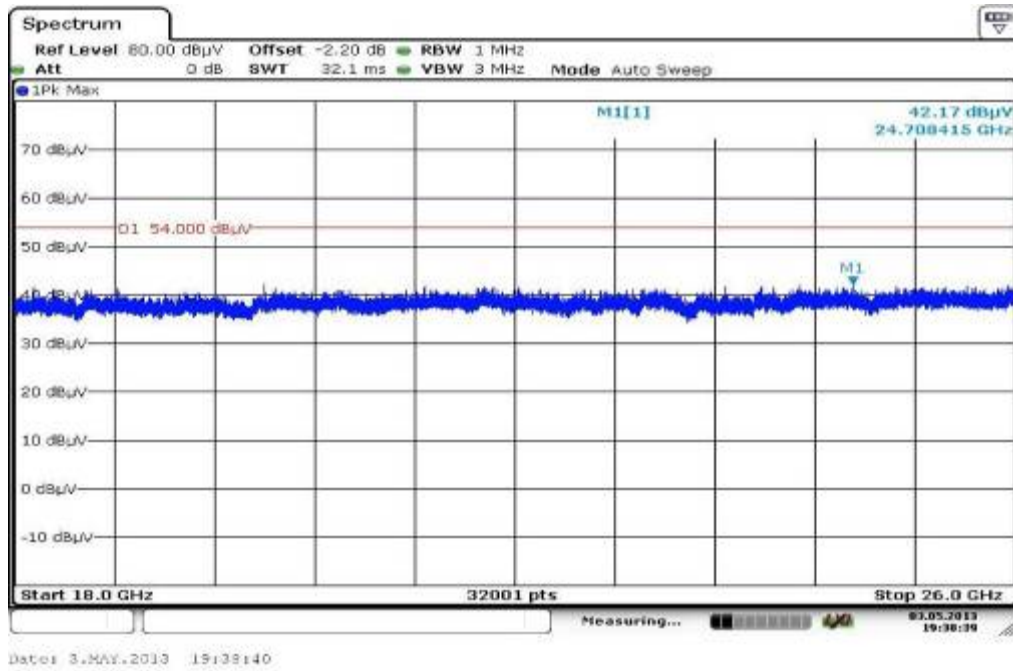
Plot 27: 1 GHz to 12.75 GHz, 5600 MHz, vertical & horizontal polarization



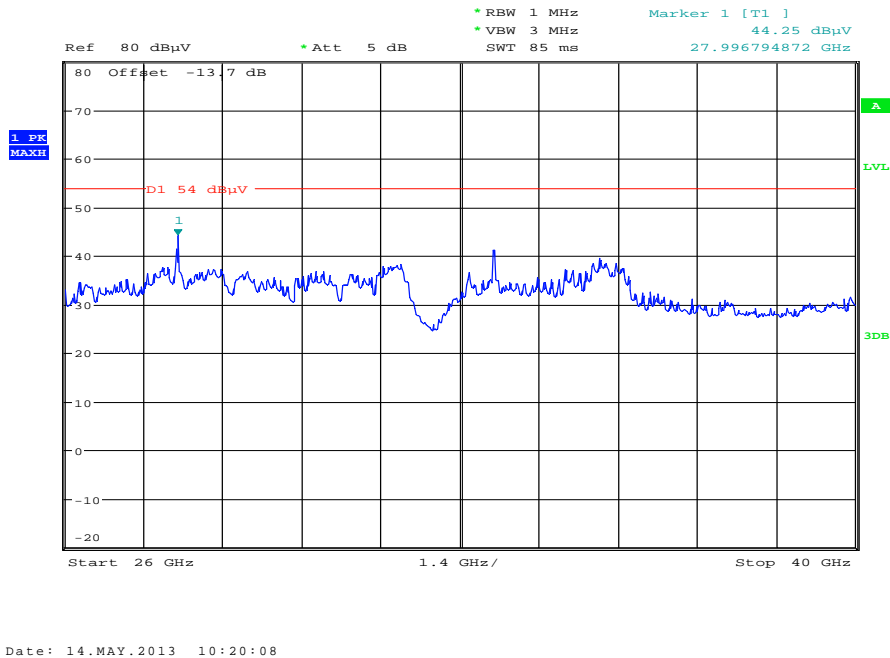
Plot 28: 12 GHz to 18 GHz, 5600 MHz, vertical & horizontal polarization



Plot 29: 18 GHz to 26 GHz, 5600 MHz, vertical & horizontal polarization



Plot 30: 26 GHz to 40 GHz, 5600 MHz, vertical & horizontal polarization



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

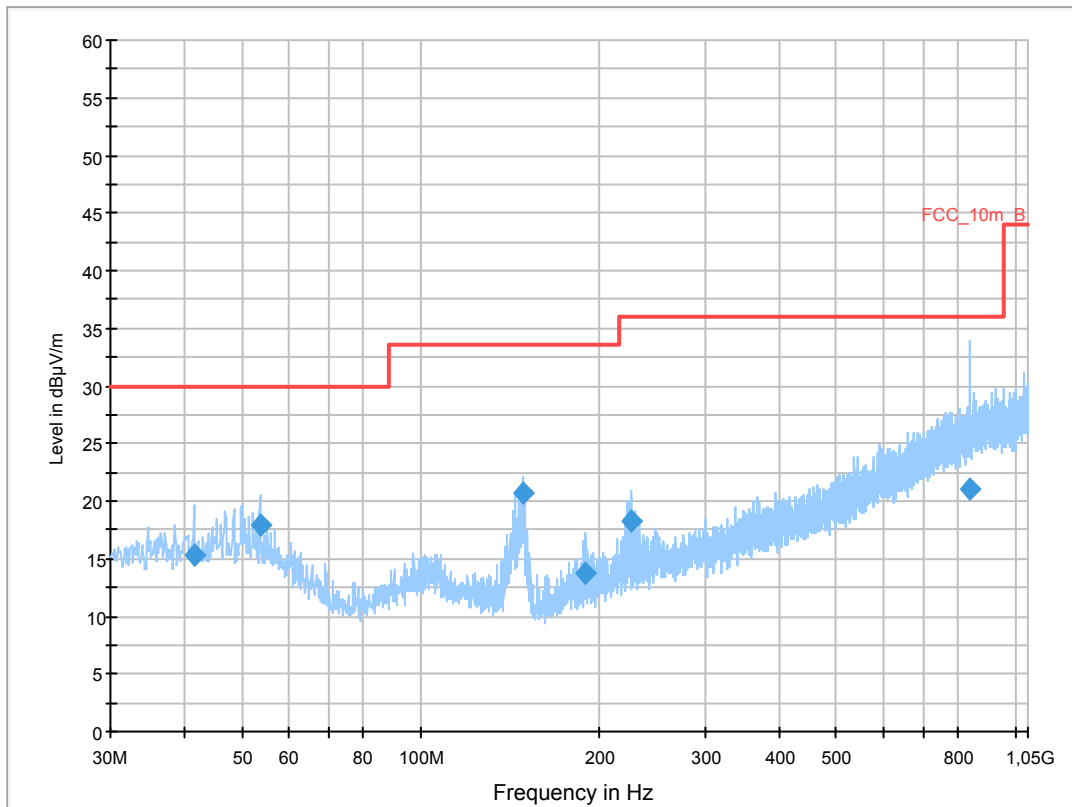
Common Information

EUT: WLANBV2-A + antenna M3002-66494
 Serial Number: eval
 Test Description: FCC part 15 C class B @ 10 m
 Operating Conditions: wlan tx n-mode HT20 5700 MHz
 Operator Name: Wolsdorfer
 Comment: DC 5V

Scan Setup: STAN_Fin [EMI radiated]

Hardware Setup: Electric Field (NOS)
 Receiver: [ESCI 3]
 Level Unit: dBµV/m

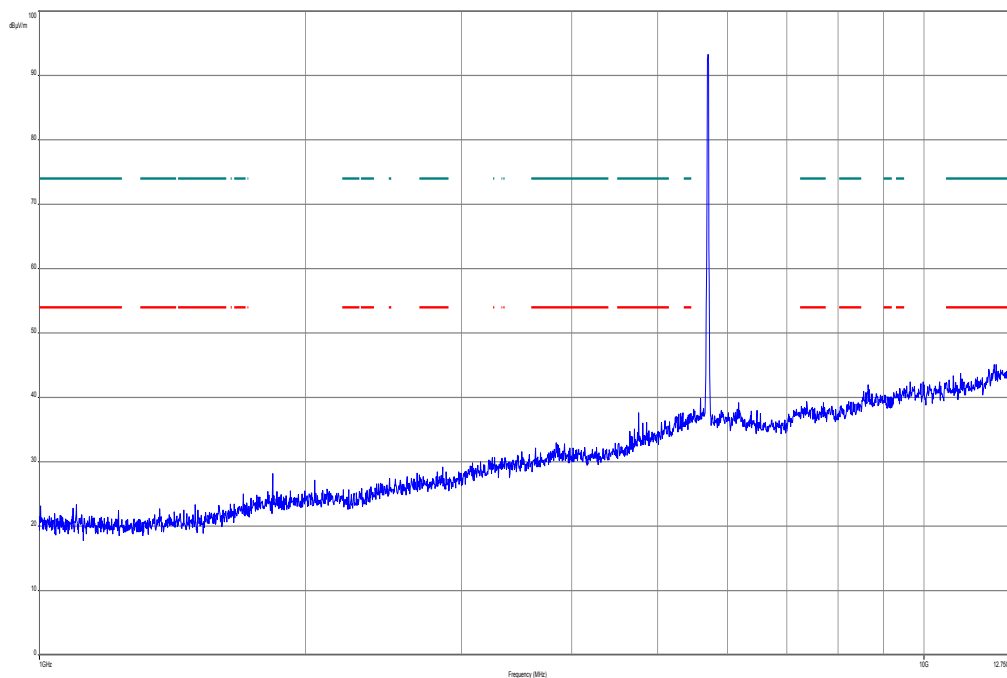
Subrange	Step Size	Detectors	IF BW	Meas. Time	Preamp
30 MHz - 2 GHz	60 kHz	QPK	120 kHz	1 s	20 dB



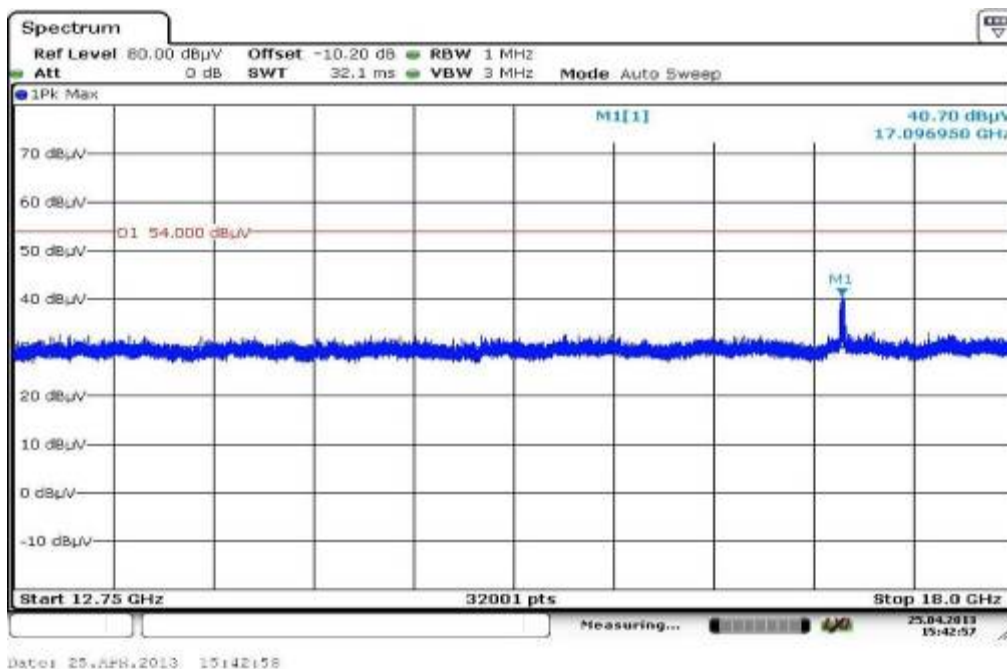
Final Result 1

Frequency (MHz)	QuasiPeak (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Polarization	Azimuth (deg)	Corr. (dB)	Margin (dB)	Limit (dBµV/m)	Comment
41.538750	15.4	1000.0	120.000	98.0	V	100.0	13.4	14.6	30.0	
53.607000	17.9	1000.0	120.000	120.0	V	92.0	13.0	12.1	30.0	
148.041750	20.8	1000.0	120.000	111.0	V	180.0	8.9	12.7	33.5	
188.784150	13.8	1000.0	120.000	170.0	V	272.0	11.0	19.7	33.5	
225.074850	18.3	1000.0	120.000	98.0	V	261.0	12.6	17.7	36.0	
836.746500	21.0	1000.0	120.000	132.0	V	280.0	24.4	15.0	36.0	

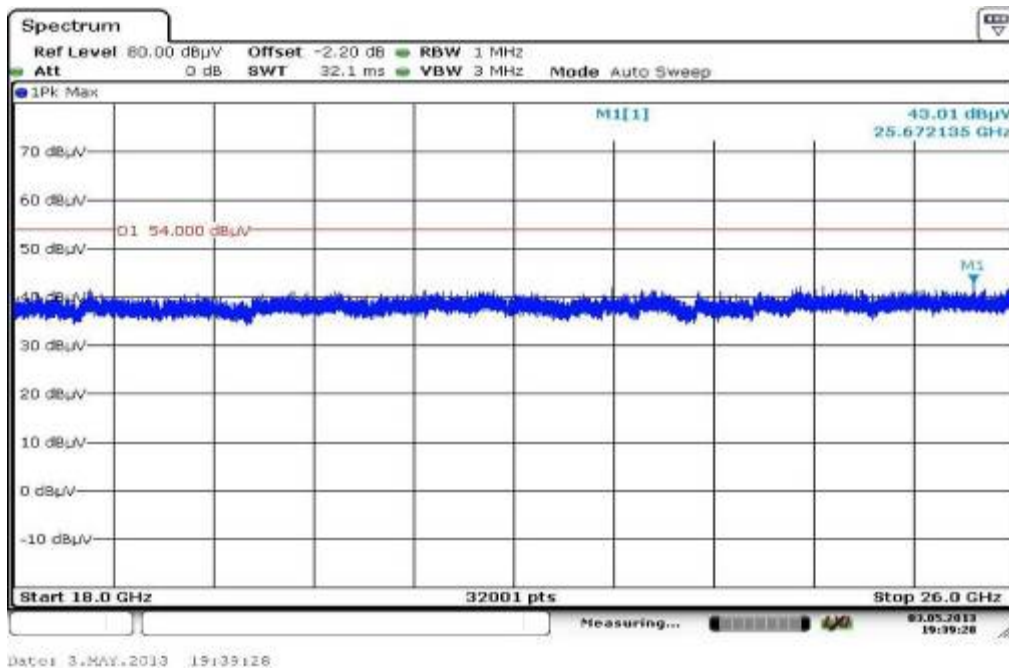
Plot 32: 1 GHz to 12.75 GHz, 5700 MHz, vertical & horizontal polarization



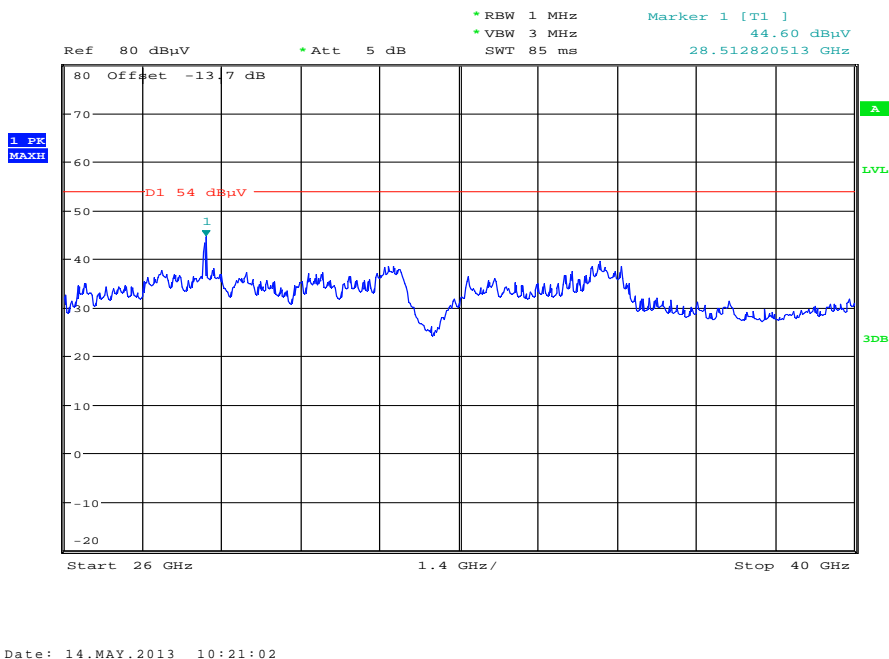
Plot 33: 12 GHz to 18 GHz, 5700 MHz, vertical & horizontal polarization



Plot 34: 18 GHz to 26 GHz, 5700 MHz, vertical & horizontal polarization



Plot 35: 26 GHz to 40 GHz, 5700 MHz, vertical & horizontal polarization



Plots: OFDM / n – mode HT40

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

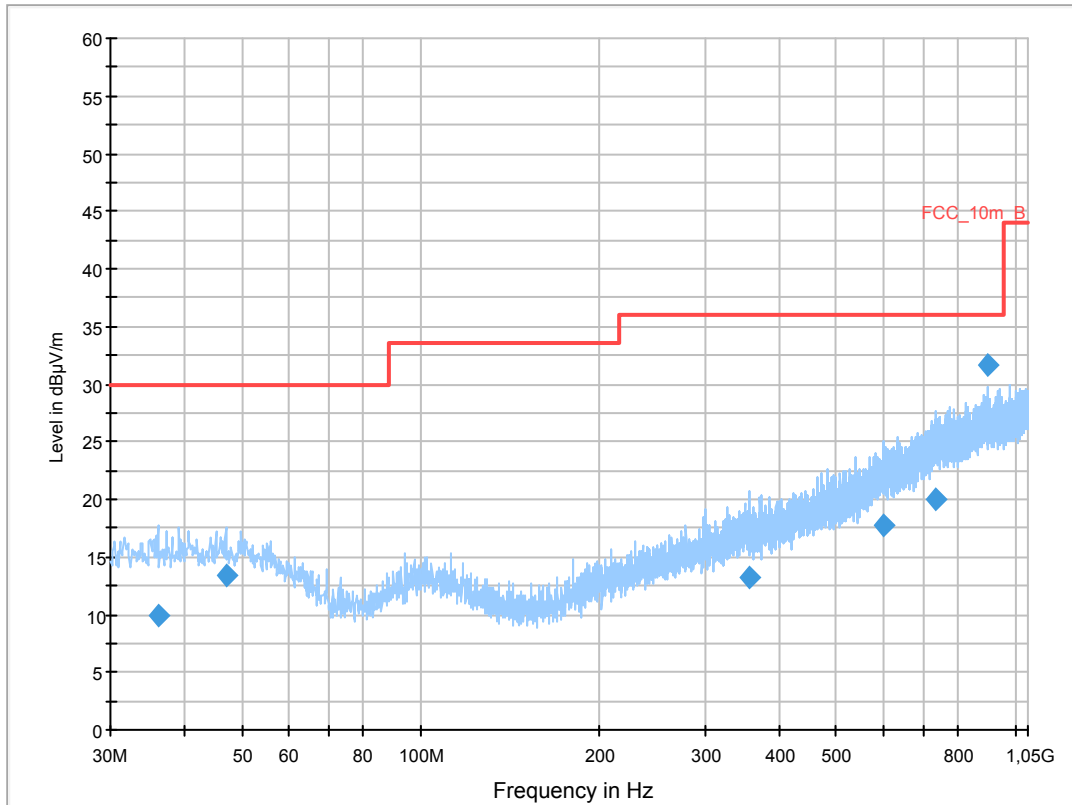
Common Information

EUT: WLANBV2-A + antenna M3002-66494
 Serial Number: eval 2
 Test Description: FCC part 15 C class B @ 10 m
 Operating Conditions: wlan n-mode HT 40 tx @5190MHz
 Operator Name: Wolsdorfer
 Comment: DC 5V

Scan Setup: STAN_Fin [EMI radiated]

Hardware Setup: Electric Field (NOS)
 Receiver: [ESCI 3]
 Level Unit: dBµV/m

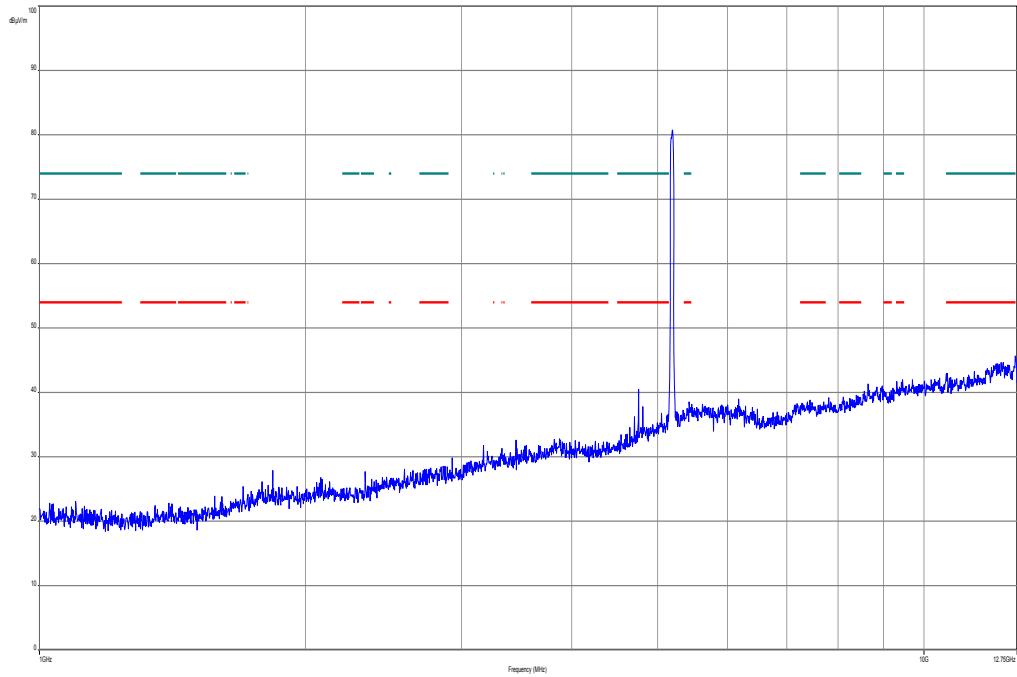
Subrange	Step Size	Detectors	IF BW	Meas. Time	Preamp
30 MHz - 2 GHz	60 kHz	QPK	120 kHz	1 s	20 dB



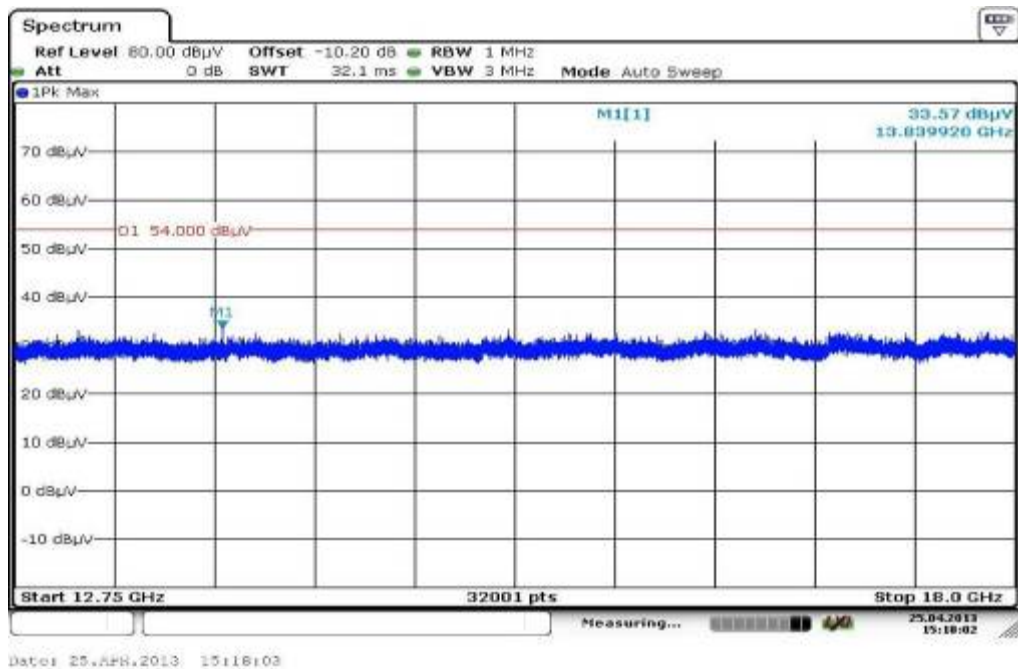
Final Result 1

Frequency (MHz)	QuasiPeak (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Polarization	Azimuth (deg)	Corr. (dB)	Margin (dB)	Limit (dBµV/m)	Comment
36.263250	9.8	1000.0	120.000	132.0	V	175.0	13.1	20.2	30.0	
46.977000	13.4	1000.0	120.000	104.0	V	10.0	13.3	16.6	30.0	
357.922650	13.3	1000.0	120.000	170.0	V	273.0	16.2	22.7	36.0	
599.929050	17.8	1000.0	120.000	105.0	V	100.0	20.8	18.2	36.0	
735.087300	20.1	1000.0	120.000	170.0	V	81.0	23.3	15.9	36.0	
897.426000	31.7	1000.0	120.000	170.0	V	90.0	25.2	4.3	36.0	

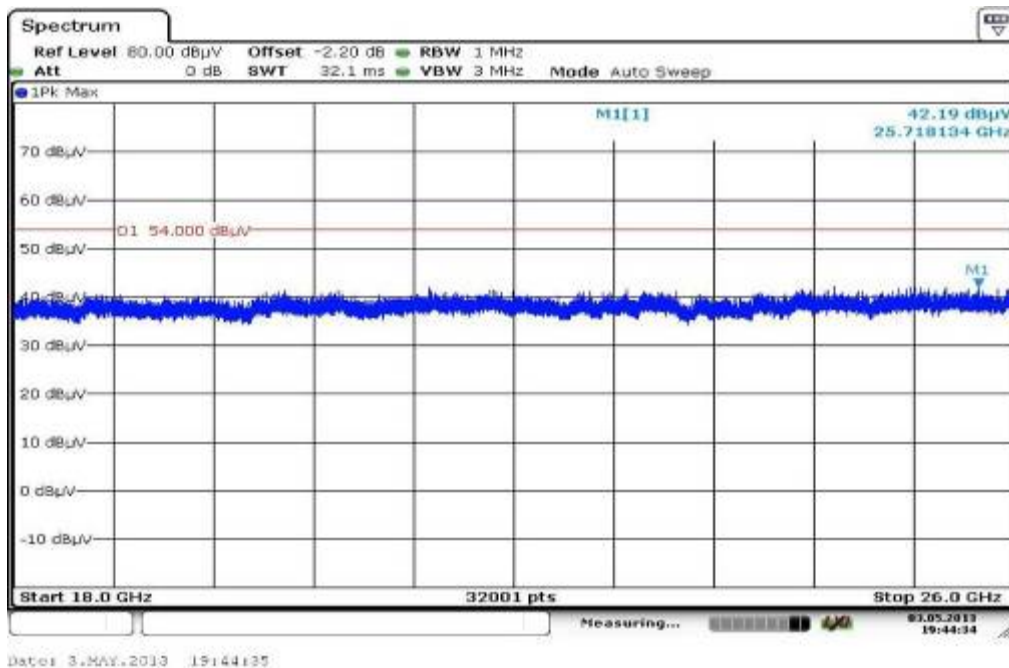
Plot 2: 1 GHz to 12.75 GHz, 5190 MHz, vertical & horizontal polarization



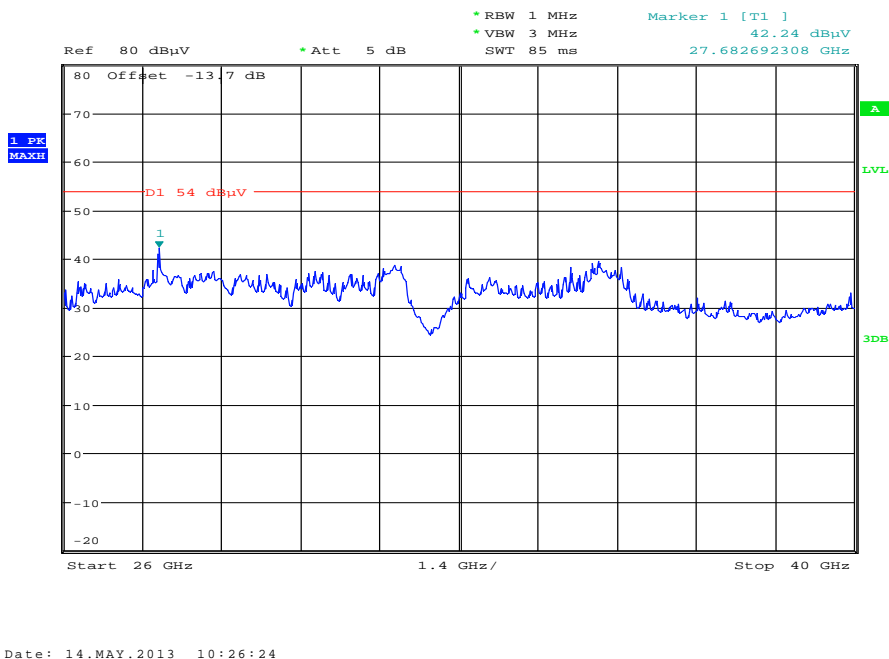
Plot 3: 12 GHz to 18 GHz, 5190 MHz, vertical & horizontal polarization



Plot 4: 18 GHz to 26 GHz, 5190 MHz, vertical & horizontal polarization



Plot 5: 26 GHz to 40 GHz, 5190 MHz, vertical & horizontal polarization



Plot 6: 30 MHz to 1 GHz, 5230 MHz, vertical & horizontal polarization

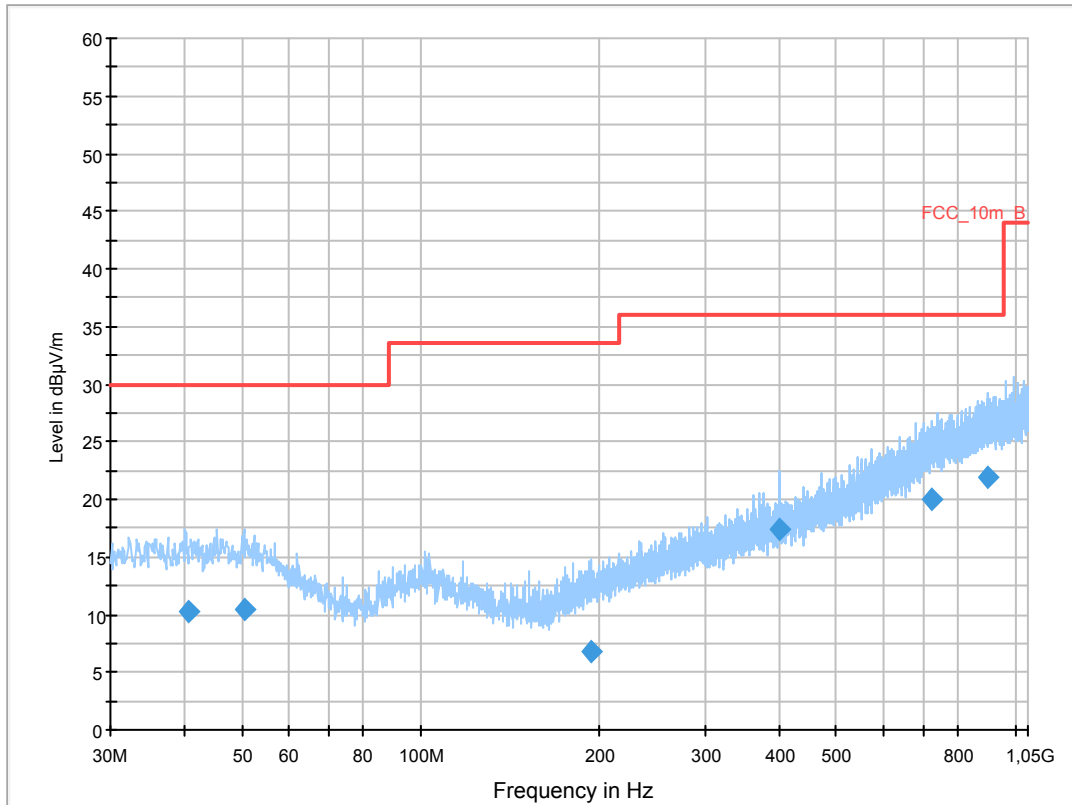
Common Information

EUT: WLANBV2-A + antenna M3002-66494
 Serial Number: eval 2
 Test Description: FCC part 15 C class B @ 10 m
 Operating Conditions: wlan n-mode HT 40 tx @5230MHz
 Operator Name: Wolsdorfer
 Comment: DC 5V

Scan Setup: STAN_Fin [EMI radiated]

Hardware Setup: Electric Field (NOS)
 Receiver: [ESCI 3]
 Level Unit: dBµV/m

Subrange	Step Size	Detectors	IF BW	Meas. Time	Preamp
30 MHz - 2 GHz	60 kHz	QPK	120 kHz	1 s	20 dB



Final Result 1

Frequency (MHz)	QuasiPeak (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Polarization	Azimuth (deg)	Corr. (dB)	Margin (dB)	Limit (dBµV/m)	Comment
40.655550	10.2	1000.0	120.000	170.0	V	-5.0	13.4	19.8	30.0	
50.530800	10.4	1000.0	120.000	123.0	V	182.0	13.3	19.6	30.0	
192.966600	6.8	1000.0	120.000	170.0	V	270.0	11.3	26.7	33.5	
400.002150	17.3	1000.0	120.000	120.0	V	280.0	16.9	18.7	36.0	
720.790050	20.0	1000.0	120.000	170.0	H	-10.0	23.0	16.0	36.0	
897.484350	21.8	1000.0	120.000	144.0	V	-5.0	25.2	14.2	36.0	