REV	Δ	DESCRIPTION	SHEET EFFECTED	DATE	DRAWN	CHECKED
A				18.05.2015	M. Reuben	S. Cohen
B		Revised tables		25.06.2015	M. Reuben	S. Cohen

EMC Laboratory

WipAir 8000 5X

Manufactured by
WaveIP LTD.

FCC ID QQ2-WA8K 5X

EMC Test Report - Part 2

According to FCC Part 15.247

	Fonction/Title	Name	Signature	Date
Prepared by:	Technical Writer	M. Reuben		05.01.2015
Checked by:	Test Engineer	I. Arbitman		14.04.2015
Approved By:	EMC Lab. Manager	S. Cohen		19-May-15

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1. ADMINISTRATIVE DATA

1.1. Scope

This document describes the measurement procedures and tests for Radiated emission testing of the WipAir 8000 5X manufactured by WaveIP Ltd.

2. GENERAL INFORMATION

2.1. Description of equipment Under Test

Equipment Under Test	WipAir 8000 5X
FCCID	QQ2-WA8K5X
Manufacturer	WaveIP Ltd.
Serial Numbers	041A04000100
Mode of Operation	Tranceiver MODE
Receiver operating frequency	5725 MHz – 5850 MHz
Year of Manufacture	2014

2.2. Applicant Information:

Applicant	WaveIP Ltd
Applicant Address	Teradion Indistrial park, Misgav 20179, Israel
Telephone	+972-4-9027000
FAX	+972-4-9990324
The testing was observed by	AMIT ARAZI

2.3. Test Performance:

Dates of testing	January 2015
Test Laboratory Location	Elbit Systems Land and C4I Ltd., EMC LAB, Hashoftim 26 Holon 58102 ISRAEL Tel: 972-3-5574476 Fax: 972-3-5575320
Applicable EMC Specification	Federal Communication Commission (FCC), FCC Part 15: Radio Frequency Devices, Sections, 15.209, 15.207 & 15.247

3. TEST SUMMARY AND SIGNATURES.

Elbit Systems Land and C4I Ltd., EMC Laboratory has completed testing of E.U.T in accordance with the requirements of the FCC Part 15 Regulations for Class B equipment.

The E.U.T was found to comply with the requirements of the FCC Part 15 Regulations given below

Test	Test Description	Section	PASS/FAIL
1	6 dB Bandwidth	15.247 (a)(2), RSS-210 section A8.2(a)	PASS
2	Peak Output Power	15.247 (b)(3), RSS-210 section A8.4(4)	PASS
3	Conducted Spurious Emissions	15.247 (d), RSS-210 section A8.5	PASS
4	Radiation Spurious Emission	15.247 (d), RSS-210 section A8.5	PASS
5	Peak Power Density	15.247 (e), RSS-210 section A8.2(b)	PASS
6	Conducted Emission	15.247 (a), RSS-210 section 7.2.2	PASS
7	RF Exposure	15.247 (i), RSS-General section 5.5	PASS
8	Antenna Requirement	15.203, RSS-210 section 7.1.4	PASS

3.1. Test performed by:

I. Arbitman 

3.2. Test Report prepared by:

M. Reuben 

3.3. Test Report Approved by:

Mr. Samuel Cohen EMC Lab. Manager 

4. RADIATED EMISSION

Equipment Under Test	WipAir 8000
Test Method	FCC New Guidance on Measurements for DTS in section 15.247(d) section 8.5.
Date	15.04.2015
Relative Humidity	40%
Ambient Temperature	25^0 C
Air Pressure	1010 hPa
Test Setup	Figure 1

Testing Engineer: I. Arbitman **Date** 15.04.2015

4.1. Test Results Summary & Conclusions

The E.U.T was found in compliance with 15.247 (d) requirements

4.2. Limits of Radiated Interference Field Strength according 15.247

The test unit shall meet the limits of Table 1.

Table 1: Limits For 15.247

Frequency, MHz	Field strength at 3 m within restricted bands, dB (μV/m)*			Attenuation of field strength of spurious versus carrier outside restricted bands, dBc***
	Peak	Quasi Peak	Average	
0.009 – 0.090	148.5	NA	128.5 – 108.5	20.0
0.09 – 0.110	NA	108.5 – 106.8**	NA	
0.110 – 0.490	126.8 – 113.8	NA	106.8 – 93.8	
0.490 – 1.705	NA	73.8 – 63.0**		
1.705 – 30.0		69.5		
30 – 88		40.0		
88 - 216		43.5		
216 – 960		46.0		
960 - 1000		54.0		
1000 – 10^{th} harmonic	74.0	NA		

*: The limit for 3 m test distance was calculated using the inverse square distance extrapolation factor as follows:

$$Lim_{S2} = Lim_{S1} + 40 \log (S_1/S_2),$$

Where S_1 and S_2 are the standard defined and test distance respectively (in meters)

**: The limit decreases linearly with the logarithm of frequency.

***: The field strength limits applied from the lowest radio frequency generated in the device, without going below 9 kHz up to the tenth harmonic of the highest fundamental frequency.

4.3. Test Instrumentation and Equipment

Table 2: Test Instrumentation and Equipment

Item	Model	P/N	Manufacturer	Next Date Calibration
Spectrum Analyzer	E7405A		Agilent	14.04.2015
Spectrum Analyzer	N9020	20041738908	Agilent	04.04.2016
Broadband Antenna	BTA-L		Frankonia	28.07.2015
Loop Antenna	HFH2-Z2		R&S	21.07.2016
Double Ridged Guide Antenna (1 - 18) GHz	DRG-118/A	20043115301	ARA	21.07.2016
Double Ridge Guide Antenna(18-40GHz)	DRG-1840/A		ARA	09.12.2015
Low Noise Amplifier (1-18GHz)	PE 2-38		Planner	07.08.2015
Low Noise Amplifier (18-26 5GHz)	PTB-33-18G-26G		Planar	07.08.2015
Low Noise Amplifier (26-40GHz)	SLKa-35-4		Spacek	21.07.2016
Preselected RF section 26.5-40GHz	11974A		HP	08.06.2015
Preselect or Power supply	11974-60028		HP	28.07.2015

4.4. Test Procedure

Preliminary Test Procedure

4.4.1. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a chamber shielded

4.4.2. The E.U.T was set 3 meters away from the receiving antenna, which was mounted on the top of a variable-height antenna tower.

4.4.3. The Antenna height varied from one meter to 1.8 meters above the ground and the table was rotated 360°to determine the maximum value of the field strength

4.4.4. The antenna was set both horizontal and vertical polarization.

Final Test Procedure

4.4.5. The EUT was tested at open area for each suspected emission,

4.4.6. The test procedure was performed according paragraph d. but the Antenna height varied from one meter to four meters above the ground

4.5. Final Test Setup

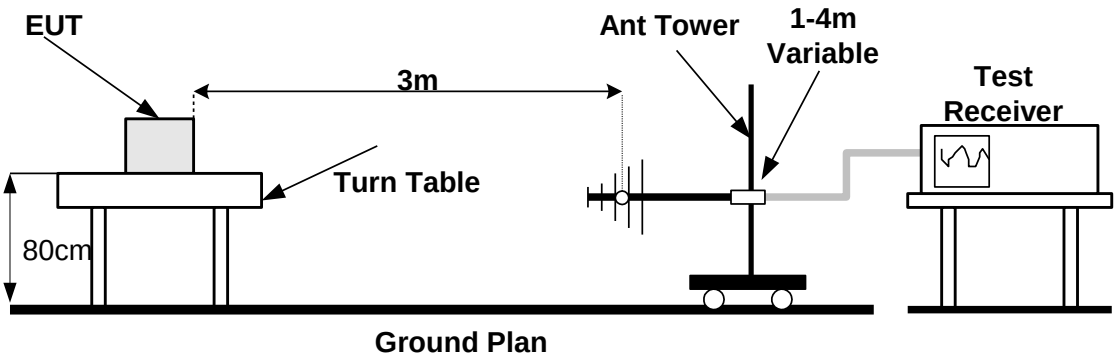


Figure 1: Radiated Emission Test Configuration

4.6. Test Results for Flat Antenna

4.6.1. Flat_23dBi_9K-150K

Table 3: 5 MHz Bandwidth Test Result

Frequency (MHz)	Res. BW (kHz)	Plot No.	PASS/FAIL
Low - 5730	1	*1*	Pass
Middle - 5785		*2*	Pass
High - 5845		*3*	Pass

Table 4: 10 MHz Bandwidth Test Result

Frequency (MHz)	Res. BW (kHz)	Plot No.	PASS/FAIL
Low - 5735	1	*4*	Pass
Middle - 5785		*5*	Pass
High - 5840		*6*	Pass

Table 5: 20 MHz Bandwidth Test Result

Frequency (MHz)	Res. BW (kHz)	Plot No.	PASS/FAIL
Low - 5735	1	*7*	Pass
Middle - 5785		*8*	Pass
High - 5840		*9*	Pass

Table 6: 40 MHz Bandwidth Test Result

Frequency (MHz)	Res. BW (kHz)	Plot No.	PASS/FAIL
Low - 5745	1	*10*	Pass
Middle - 5785		*11*	Pass
High - 5830		*12*	Pass

4.6.2. Flat_23dBi_150 kHz-30MHz

Table 7: 5 MHz Bandwidth Test Result

Frequency (MHz)	Res. BW (kHz)	Plot No.	PASS/FAIL
Low - 5730	9	*13*	Pass
Middle - 5785		*14*	Pass
High - 5845		*15*	Pass

Table 8: 10 MHz Bandwidth Test Result

Frequency (MHz)	Res. BW (kHz)	Plot No.	PASS/FAIL
Low - 5735	9	*16*	Pass
Middle - 5785		*17*	Pass
High - 5840		*18*	Pass

Table 9: 20 MHz Bandwidth Test Result

Frequency (MHz)	Res. BW (kHz)	Plot No.	PASS/FAIL
Low - 5735	9	*19*	Pass
Middle - 5785		*20*	Pass
High - 5840		*21*	Pass

Table 10: 40 MHz Bandwidth Test Result

Frequency (MHz)	Res. BW (kHz)	Plot No.	PASS/FAIL
Low - 5745	9	*22*	Pass
Middle - 5785		*23*	Pass
High - 5830		*24*	Pass

4.6.3. Flat_23dBi_30 MHz-1 GHz

Table 11: 5 MHz Bandwidth Test Result

Frequency (MHz)	Res. BW (kHz)	Plot No.	PASS/FAIL
Low - 5730	120	*25*	Pass
Middle - 5785		*26*	Pass
High - 5845		*27*	Pass

Table 12: 10 MHz Bandwidth Test Result

Frequency (MHz)	Res. BW (kHz)	Plot No.	PASS/FAIL
Low - 5730	120	*28*	Pass
Middle - 5785		*29*	Pass
High - 5845		*30*	Pass

Table 13: 20 MHz Bandwidth Test Result

Frequency (MHz)	Res. BW (kHz)	Plot No.	PASS/FAIL
Low - 5735	120	*31*	Pass
Middle - 5785		*32*	Pass
High - 5840		*33*	Pass

Table 14: 40 MHz Bandwidth Test Result

Frequency (MHz)	Res. BW (kHz)	Plot No.	PASS/FAIL
Low - 5745	120	*34*	Pass
Middle - 5785		*35*	Pass
High - 5830		*36*	Pass

4.6.4. Flat_23dBi_Antenna_1-18 GHz

Table 15: 5 MHz Bandwidth Test Result

Frequency (MHz)	Res. BW (kHz)	Plot No.	PASS/FAIL
Rx mode	1000	*37*	Pass
Low – 5730		*38*	Pass
Middle - 5785		*39*	Pass
High – 5845		*40*	Pass

Table 16: 10 MHz Bandwidth Test Result

Frequency (MHz)	Res. BW (kHz)	Plot No.	PASS/FAIL
Low – 5730	1000	*41*	Pass
Middle - 5785		*42*	Pass
High – 5845		*43*	Pass

Table 17: 20 MHz Bandwidth Test Result

Frequency (MHz)	Res. BW (kHz)	Plot No.	PASS/FAIL
Low – 5735	1000	*44*	Pass
Middle - 5785		*45*	Pass
High – 5840		*46*	Pass

Table 18: 40 MHz Bandwidth Test Result

Frequency (MHz)	Res. BW (kHz)	Plot No.	PASS/FAIL
Low – 5745	1000	*47*	Pass
Middle - 5785		*48*	Pass
High – 5830		*49*	Pass

4.6.5. Flat_23dBi_Antenna_5.35-5.46 GHz

Table 19: 5 MHz Bandwidth Test Result

Frequency (MHz)	Res. BW (kHz)	Plot No.	PASS/FAIL
Low – 5730	1000	*50*	Pass
Middle - 5785		*51*	Pass
High – 5845		*52*	Pass

Table 20: 10 MHz Bandwidth Test Result

Frequency (MHz)	Res. BW (kHz)	Plot No.	PASS/FAIL
Low – 5730	1000	*53*	Pass
Middle - 5785		*54*	Pass
High – 5845		*55*	Pass

Table 21: 20 MHz Bandwidth Test Result

Frequency (MHz)	Res. BW (kHz)	Plot No.	PASS/FAIL
Low – 5735	1000	*56*	Pass
Middle - 5785		*57*	Pass
High – 5840		*58*	Pass

Table 22: 40 MHz Bandwidth Test Result

Frequency (MHz)	Res. BW (kHz)	Plot No.	PASS/FAIL
Low – 5745	1000	*59*	Pass
Middle - 5785		*60*	Pass
High – 5830		*61*	Pass

4.6.6. Flat_23dBi_18 - 26.5 GHz

Table 23: 5 MHz Bandwidth Test Result

Frequency (MHz)	Res. BW (kHz)	Plot No.	PASS/FAIL
Low – 5730	1000	*62*	Pass
Middle – 5785		*63*	Pass
High – 5845		*64*	Pass

Table 24: 10 MHz Bandwidth Test Result

Frequency (MHz)	Res. BW (kHz)	Plot No.	PASS/FAIL
Low – 5730	1000	*65*	Pass
Middle – 5785		*66*	Pass
High – 5845		*67*	Pass

Table 25: 20 MHz Bandwidth Test Result

Frequency (MHz)	Res. BW (kHz)	Plot No.	PASS/FAIL
Low – 5735	1000	*68*	Pass
Middle – 5785		*69*	Pass
High – 5840		*70*	Pass

Table 26: 40 MHz Bandwidth Test Result

Frequency (MHz)	Res. BW (kHz)	Plot No.	PASS/FAIL
Low – 5745	1000	*71*	Pass
Middle – 5785		*72*	Pass
High – 5830		*73*	Pass

4.6.7. Flat_23dBi_Antenna 26.5 – 40 GHz

Table 27: 5 MHz Bandwidth Test Result

Frequency (MHz)	Res. BW (kHz)	Plot No.	PASS/FAIL
Low – 5730	1000	*74*	Pass
Middle – 5785		*75*	Pass
High – 5845		*76*	Pass

Table 28: 10 MHz Bandwidth Test Result

Frequency (MHz)	Res. BW (kHz)	Plot No.	PASS/FAIL
Low – 5730	1000	*77*	Pass
Middle – 5785		*78*	Pass
High – 5845		*79*	Pass

Table 29: 20 MHz Bandwidth Test Result

Frequency (MHz)	Res. BW (kHz)	Plot No.	PASS/FAIL
Low – 5735	1000	*80-*	Pass
Middle – 5785		*81*	Pass
High – 5840		*82*	Pass

Table 30: 40 MHz Bandwidth Test Result

Frequency (MHz)	Res. BW (kHz)	Plot No.	PASS/FAIL
Low – 5745	1000	*83*	Pass
Middle – 5785		*84*	Pass
High – 5830		*85*	Pass
Rx mode		*86*	Pass

4.7. Test Results for Dish Antenna with 28.5dBi.

4.7.1. Dish Antenna_28.5dBi _9K-150K

Table 31: 5 MHz Bandwidth Test Result

Frequency (MHz)	Res. BW (kHz)	Plot No.	PASS/FAIL
Low - 5730	1	*87*	Pass
Middle - 5785		*88*	Pass
High - 5845		*89*	Pass

Table 32: 10 MHz Bandwidth Test Result

Frequency (MHz)	Res. BW (kHz)	Plot No.	PASS/FAIL
Low - 5735	1	*90*	Pass
Middle - 5785		*91*	Pass
High - 5840		*92*	Pass

Table 33: 20 MHz Bandwidth Test Result

Frequency (MHz)	Res. BW (kHz)	Plot No.	PASS/FAIL
Low - 5735	1	*93*	Pass
Middle - 5785		*94*	Pass
High - 5840		*95*	Pass

Table 34: 40 MHz Bandwidth Test Result

Frequency (MHz)	Res. BW (kHz)	Plot No.	PASS/FAIL
Low - 5745	1	*96*	Pass
Middle - 5785		*97*	Pass
High - 5830		*98*	Pass

4.7.2. Dish Antenna_28.5dBi_150K- 30 MHz

Table 35: 5 MHz Bandwidth Test Result

Frequency (MHz)	Res. BW (kHz)	Plot No.	PASS/FAIL
Low - 5730	9	*99*	Pass
Middle - 5785		*100*	Pass
High - 5845		*101*	Pass

Table 36: 10 MHz Bandwidth Test Result

Frequency (MHz)	Res. BW (kHz)	Plot No.	PASS/FAIL
Low - 5735	9	*102*	Pass
Middle - 5785		*103*	Pass
High - 5840		*104*	Pass

Table 37: 20 MHz Bandwidth Test Result

Frequency (MHz)	Res. BW (kHz)	Plot No.	PASS/FAIL
Low - 5735	9	*105*	Pass
Middle - 5785		*106*	Pass
High - 5840		*107*	Pass

Table 38: 40 MHz Bandwidth Test Result

Frequency (MHz)	Res. BW (kHz)	Plot No.	PASS/FAIL
Low - 5745	9	*108*	Pass
Middle - 5785		*109*	Pass
High - 5830		*110*	Pass

4.7.3. Dish Antenna_30 MHz – 1 GHz

Table 39: 5 MHz Bandwidth Test Result

Frequency (MHz)	Res. BW (kHz)	Plot No.	PASS/FAIL
Low - 5730	100	*111*	Pass
Middle - 5785		*112*	Pass
High - 5845		*113*	Pass

Table 40: 10 MHz Bandwidth Test Result

Frequency (MHz)	Res. BW (kHz)	Plot No.	PASS/FAIL
Low - 5730	100	*114*	Pass
Middle - 5785		*115*	Pass
High - 5845		*116*	Pass

Table 41: 20 MHz Bandwidth Test Result

Frequency (MHz)	Res. BW (kHz)	Plot No.	PASS/FAIL
Low - 5735	100	*117*	Pass
Middle - 5785		*118*	Pass
High - 5830		*119*	Pass

Table 42: 40 MHz Bandwidth Test Result

Frequency (MHz)	Res. BW (kHz)	Plot No.	PASS/FAIL
Low - 5745	100	*120*	Pass
Middle - 5785		*121*	Pass
High - 5830		*122*	Pass

4.7.4. Dish Antenna_1 – 18 GHz

Table 43: 5 MHz Bandwidth Test Result

Frequency (MHz)	Res. BW (kHz)	Plot No.	PASS/FAIL
Rx Mode	1000	*123*	Pass
Low – 5730		*124*	Pass
Middle – 5785		*125*	Pass
High – 5845		*126*	Pass

Table 44: 10 MHz Bandwidth Test Result

Frequency (MHz)	Res. BW (kHz)	Plot No.	PASS/FAIL
Low – 5730	1000	*127*	Pass
Middle – 5785		*128*	Pass
High – 5845		*129*	Pass

Table 45: 20 MHz Bandwidth Test Result

Frequency (MHz)	Res. BW (kHz)	Plot No.	PASS/FAIL
Low – 5735	1000	*130*	Pass
Middle – 5785		*131*	Pass
High – 5840		*132*	Pass

Table 46: 40 MHz Bandwidth Test Result

Frequency (MHz)	Res. BW (kHz)	Plot No.	PASS/FAIL
Low – 5745	1000	*133*	Pass
Middle – 5785		*134*	Pass
High – 5830		*135*	Pass

4.7.5. Dish Antenna_5.35 – 5.46 GHz GHz

Table 47: 5 MHz Bandwidth Test Result

Frequency (MHz)	Res. BW (kHz)	Plot No.	PASS/FAIL
Low – 5730	1000	*136*	Pass
Middle – 5785		*137*	Pass
High – 5845		*138*	Pass

Table 48: 10 MHz Bandwidth Test Result

Frequency (MHz)	Res. BW (kHz)	Plot No.	PASS/FAIL
Low – 5730	1000	*139*	Pass
Middle – 5785		*140*	Pass
High – 5845		*141*	Pass

Table 49: 20 MHz Bandwidth Test Result

Frequency (MHz)	Res. BW (kHz)	Plot No.	PASS/FAIL
Low – 5735	1000	*142*	Pass
Middle – 5785		*143*	Pass
High – 5840		*144*	Pass

Table 50: 40 MHz Bandwidth Test Result

Frequency (MHz)	Res. BW (kHz)	Plot No.	PASS/FAIL
Low – 5745	1000	*145*	Pass
Middle – 5785		*146*	Pass
High – 5830		*147*	Pass

4.7.6. 18 GHz – 26.5 GHz - Dish Antenna

Table 51: 5 MHz Bandwidth Test Result

Frequency (MHz)	Res. BW (kHz)	Plot No.	PASS/FAIL
Low – 5730	1000	*148*	Pass
Middle – 5785		*149*	Pass
High – 5845		*150*	Pass

Table 52: 10 MHz Bandwidth Test Result

Frequency (MHz)	Res. BW (kHz)	Plot No.	PASS/FAIL
Low – 5730	1000	*151*	Pass
Middle – 5785		*152*	Pass
High – 5845		*153*	Pass

Table 53: 20 MHz Bandwidth Test Result

Frequency (MHz)	Res. BW (kHz)	Plot No.	PASS/FAIL
Low – 5735	1000	*154-*	Pass
Middle – 5785		*155*	Pass
High – 5840		*156*	Pass

Table 54: 40 MHz Bandwidth Test Result

Frequency (MHz)	Res. BW (kHz)	Plot No.	PASS/FAIL
Low – 5745	1000	*157*	Pass
Middle – 5785		*158*	Pass
High – 5830		*159*	Pass

4.7.7. 26.5 GHz – 40 GHz - Dish Antenna

Table 55: 5 MHz Bandwidth Test Result

Frequency (MHz)	Res. BW (kHz)	Plot No.	PASS/FAIL
Low – 5730	1000	*160*	Pass
Middle – 5785		*161*	Pass
High – 5845		*162*	Pass

Table 56: 10 MHz Bandwidth Test Result

Frequency (MHz)	Res. BW (kHz)	Plot No.	PASS/FAIL
Low – 5730	1000	*163*	Pass
Middle – 5785		*164*	Pass
High – 5845		*165*	Pass

Table 57: 20 MHz Bandwidth Test Result

Frequency (MHz)	Res. BW (kHz)	Plot No.	PASS/FAIL
Low – 5735	1000	*166-*	Pass
Middle – 5785		*167*	Pass
High – 5840		*168*	Pass

Table 58: 40 MHz Bandwidth Test Result

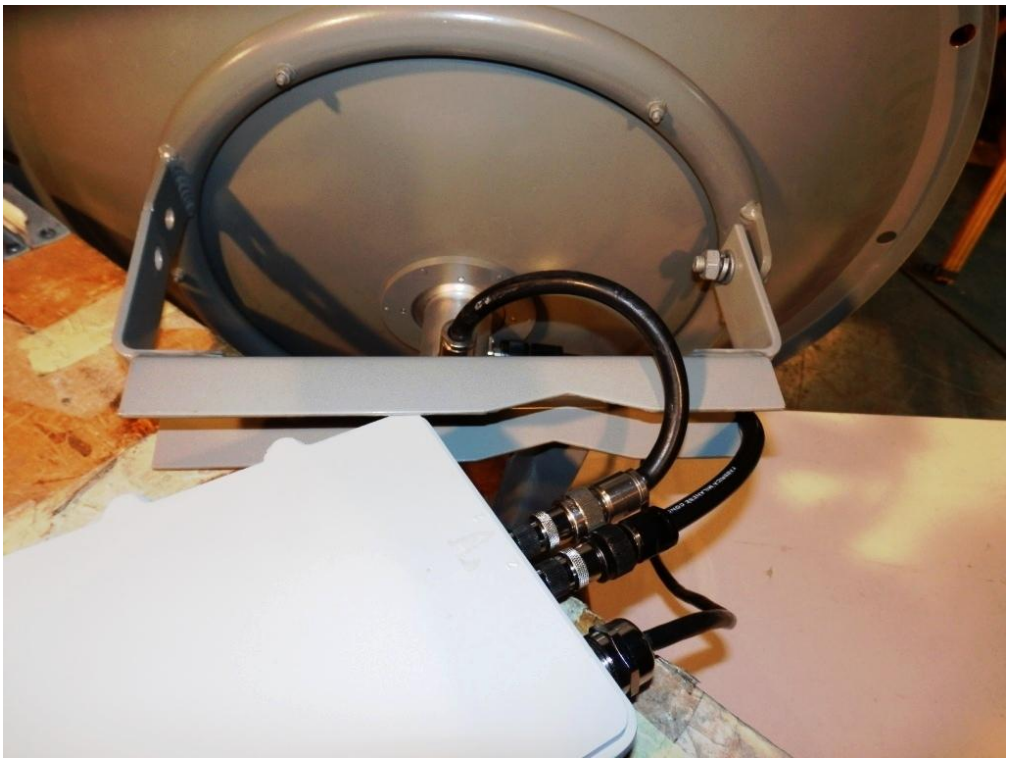
Frequency (MHz)	Res. BW (kHz)	Plot No.	PASS/FAIL
Low – 5745	1000	*169*	Pass
Middle – 5785		*170*	Pass
High – 5830		*171*	Pass
Rx mode		*172*	Pass

4.8. Photographs of Radiated Emission Test Setup

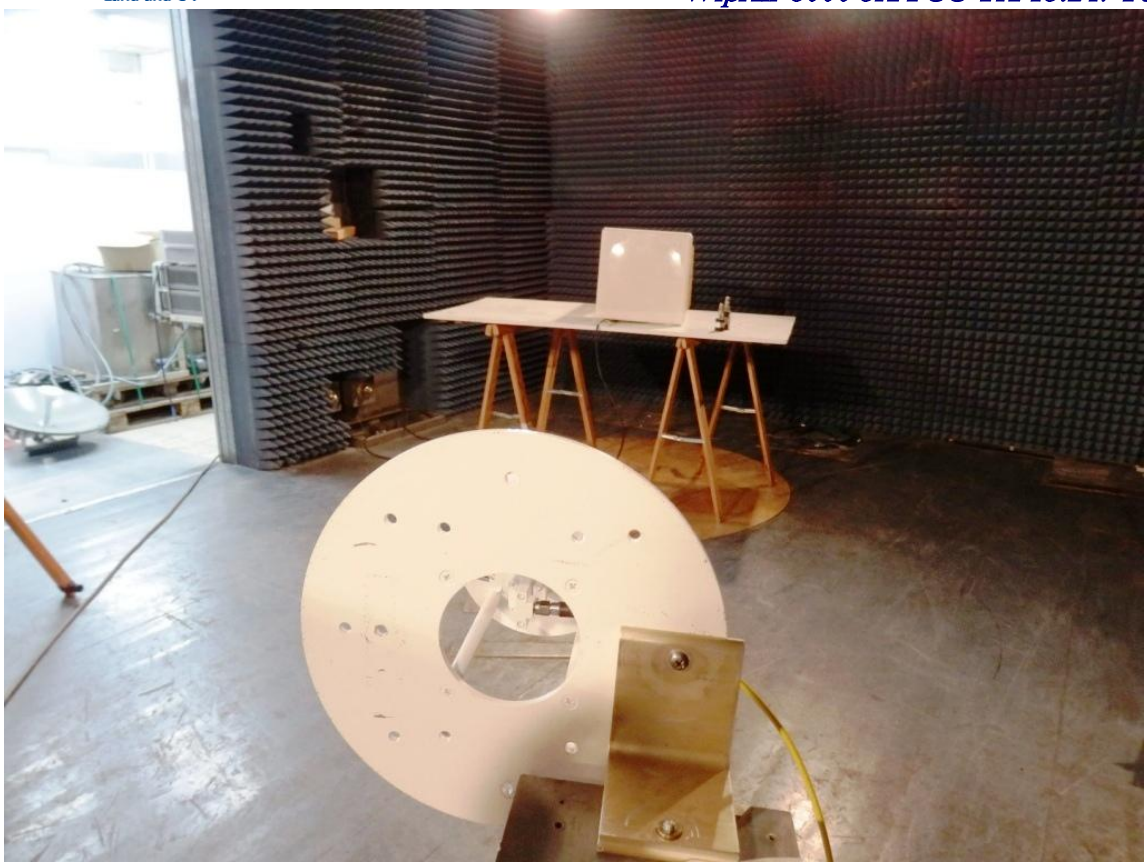
Photograph for Radiated Emission Test Setup/ 1

Photograph for Radiated Emission Test Setup/ 2

Photograph for Radiated Emission Test Setup/ 3



Photograph for Radiated Emission Test Setup/ 4



Photograph for Radiated Emission Test Setup/ 5

Photograph for Radiated Emission Test Setup/ 6

4.9. 23dBi_Flat_Antenna – Test Data

4.9.1. Flat_23dBi_9K-150K

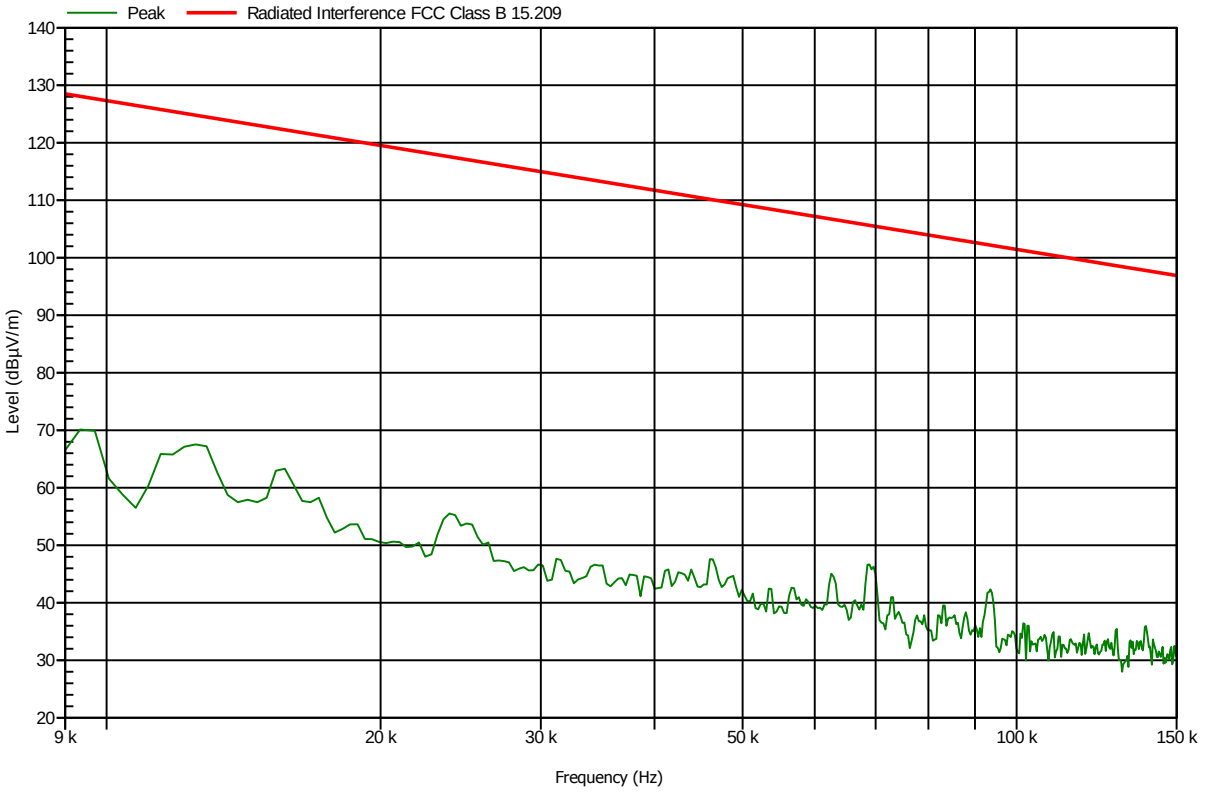
Test Results Plot No 1

9 kHz-150 kHz Spurious Emission

Test & EUT General Information		Receiver Setting	
EUT Name:	WipAir8000 5X	Spect Analyzer	Hewlett Packard 7405A DC Coupling
S/N:	041A04000100	Ref. Level:	Auto [90 dBµV]
Date of Test:	15.04.2015	RBW:	1000 Hz
Test Engineer:	Ilya Arbitman	VBW:	3 kHz
Antenna:	E-Field R&S 9 K-30 M Antenna	Sweep Time:	Auto [146.08 ms]
Polarization:	Horizontal and Vertical	Pre Amplifier	LNA MITEQ 0.01-1GHz No-2

TEST REMARKS: Wednesday, April 15, 2015 3:31:15 PM

BW=5MHz; Low 5730MHz; Flat 23dBi Antenna; Loop Antenna-Vertical



MAXIMUM RESULT DEVIATION:

Detect all peaks above 6 dB below the limit line with a maximum of 6 peaks.

None

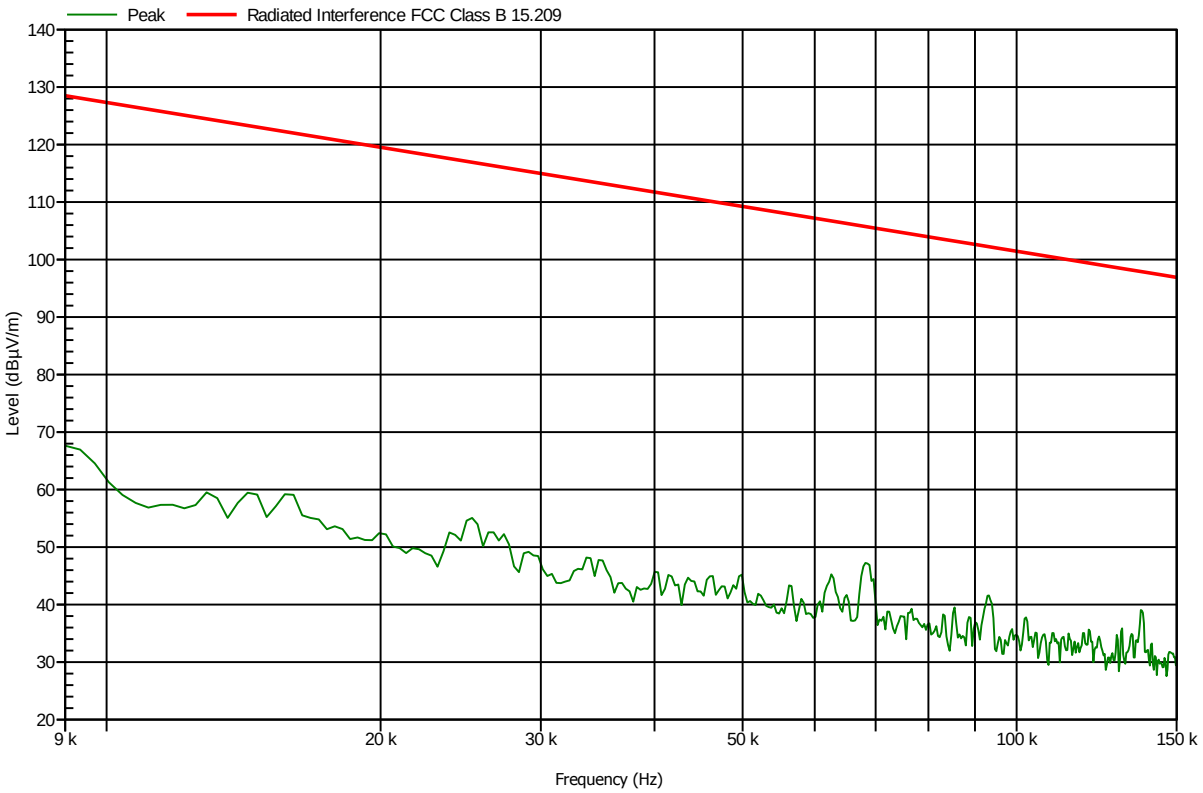
Test Results Plot No 2

9 kHz-150 kHz Spurious Emission

Test & EUT General Information		Receiver Setting	
EUT Name:	WipAir8000 5X	Spect Analyzer	Hewlett Packard 7405A DC Coupling
S/N:	041A04000100	Ref. Level:	Auto [90 dBµV]
Date of Test:	15.04.2015	RBW:	1000 Hz
Test Engineer:	Ilya Arbitman	VBW:	3 kHz
Antenna:	E-Field R&S 9 K-30 M Antenna	Sweep Time:	Auto [146.08 ms]
Polarization:	Horizontal and Vertical	Pre Amplifier	LNA MITEQ 0.01-1GHz No-2

TEST REMARKS: Wednesday, April 15, 2015 3:48:22 PM

BW=5MHz; Mid 5785MHz; Flat 23dBi Antenna; Loop Antenna-Vertical



MAXIMUM RESULT DEVIATION:

Detect all peaks above 6 dB below the limit line with a maximum of 6 peaks.

None

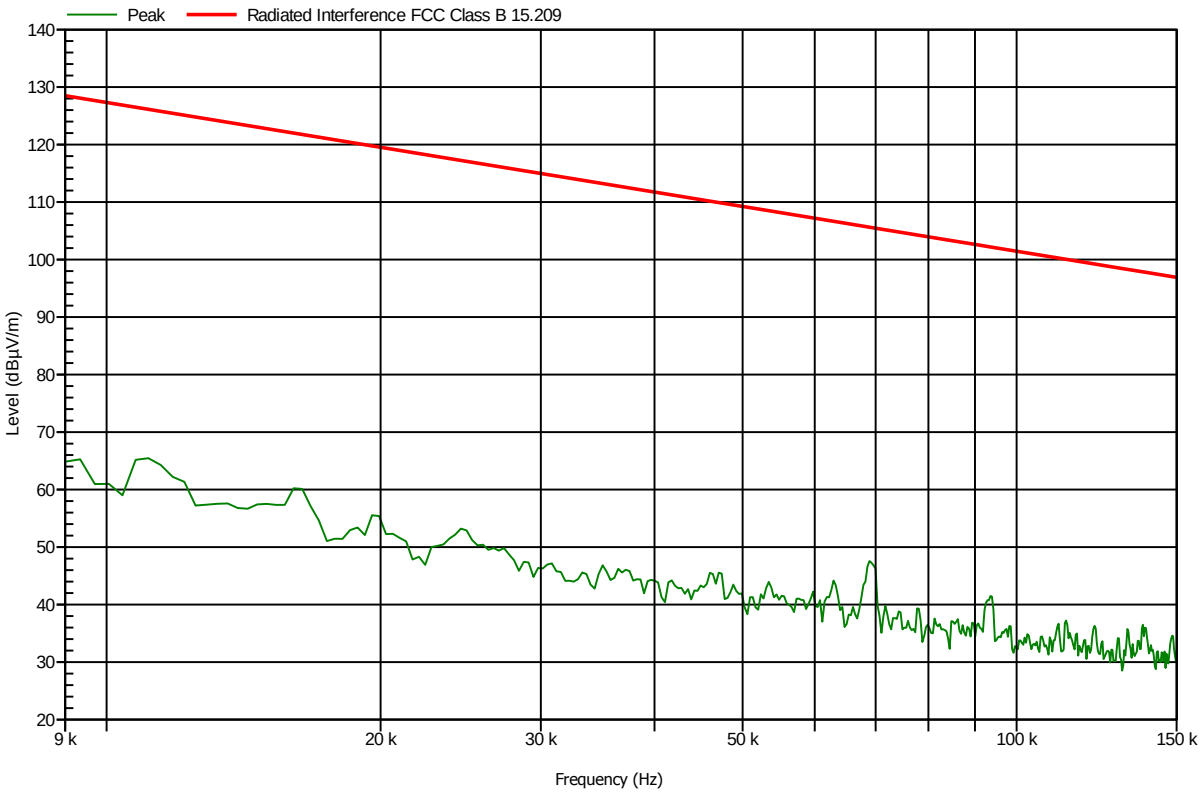
Test Results Plot No 3

9 kHz-150 kHz Spurious Emission

Test & EUT General Information		Receiver Setting	
EUT Name:	WipAir8000 5X	Spect Analyzer	Hewlett Packard 7405A DC Coupling
S/N:	041A04000100	Ref. Level:	Auto [90 dBµV]
Date of Test:	15.04.2015	RBW:	1000 Hz
Test Engineer:	Ilya Arbitman	VBW:	3 kHz
Antenna:	E-Field R&S 9 K-30 M Antenna	Sweep Time:	Auto [146.08 ms]
Polarization:	Horizontal and Vertical	Pre Amplifier	LNA MITEQ 0.01-1GHz No-2

TEST REMARKS: Wednesday, April 15, 2015 4:05:01 PM

BW=5MHz; High 5845MHz; Flat 23dBi Antenna; Loop Antenna-Vertical



MAXIMUM RESULT DEVIATION:

Detect all peaks above 6 dB below the limit line with a maximum of 6 peaks.

None

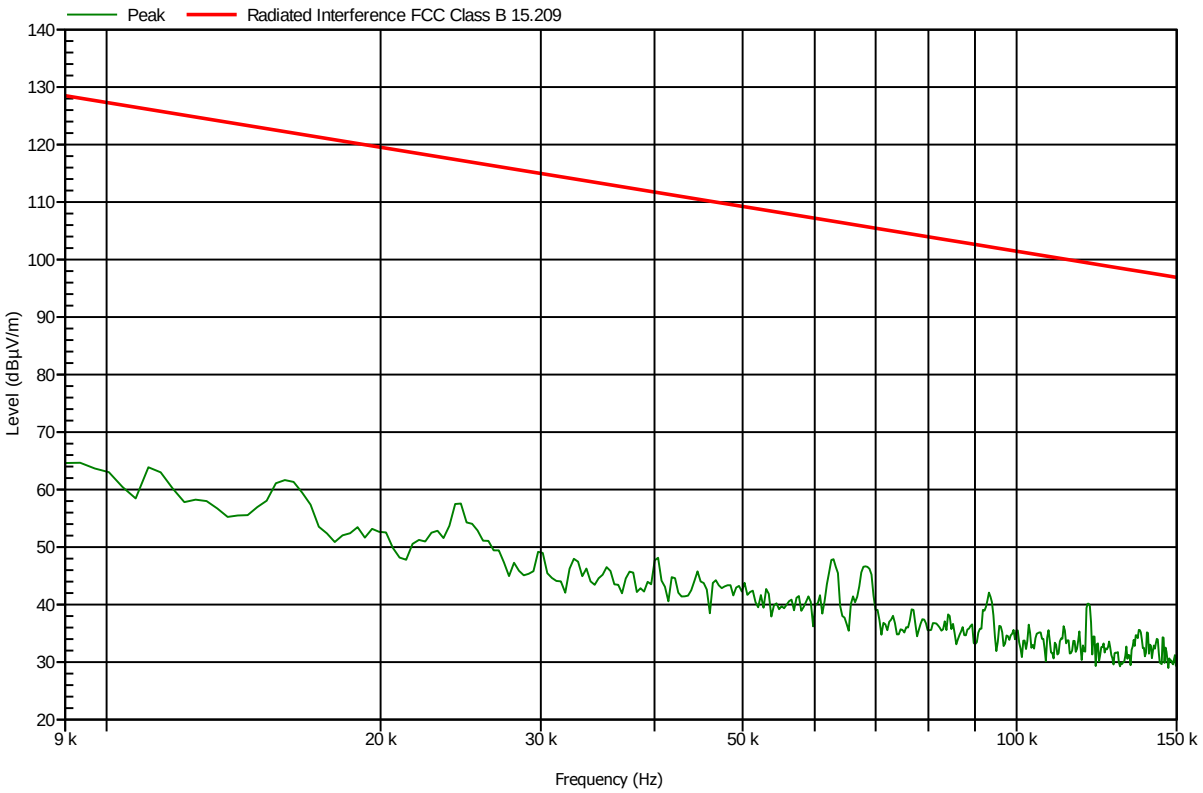
Test Results Plot No 4

9 kHz-150 kHz Spurious Emission

Test & EUT General Information		Receiver Setting	
EUT Name:	WipAir8000 5X	Spect Analyzer	Hewlett Packard 7405A DC Coupling
S/N:	041A04000100	Ref. Level:	Auto [90 dBµV]
Date of Test:	15.04.2015	RBW:	1000 Hz
Test Engineer:	Ilya Arbitman	VBW:	3 kHz
Antenna:	E-Field R&S 9 K-30 M Antenna	Sweep Time:	Auto [146.08 ms]
Polarization:	Horizontal and Vertical	Pre Amplifier	LNA MITEQ 0.01-1GHz No-2

TEST REMARKS: Wednesday, April 15, 2015 4:21:51 PM

BW=10MHz; Low 5735MHz; Flat 23dBi Antenna; Loop Antenna-Vertical



MAXIMUM RESULT DEVIATION:

Detect all peaks above 6 dB below the limit line with a maximum of 6 peaks.

None

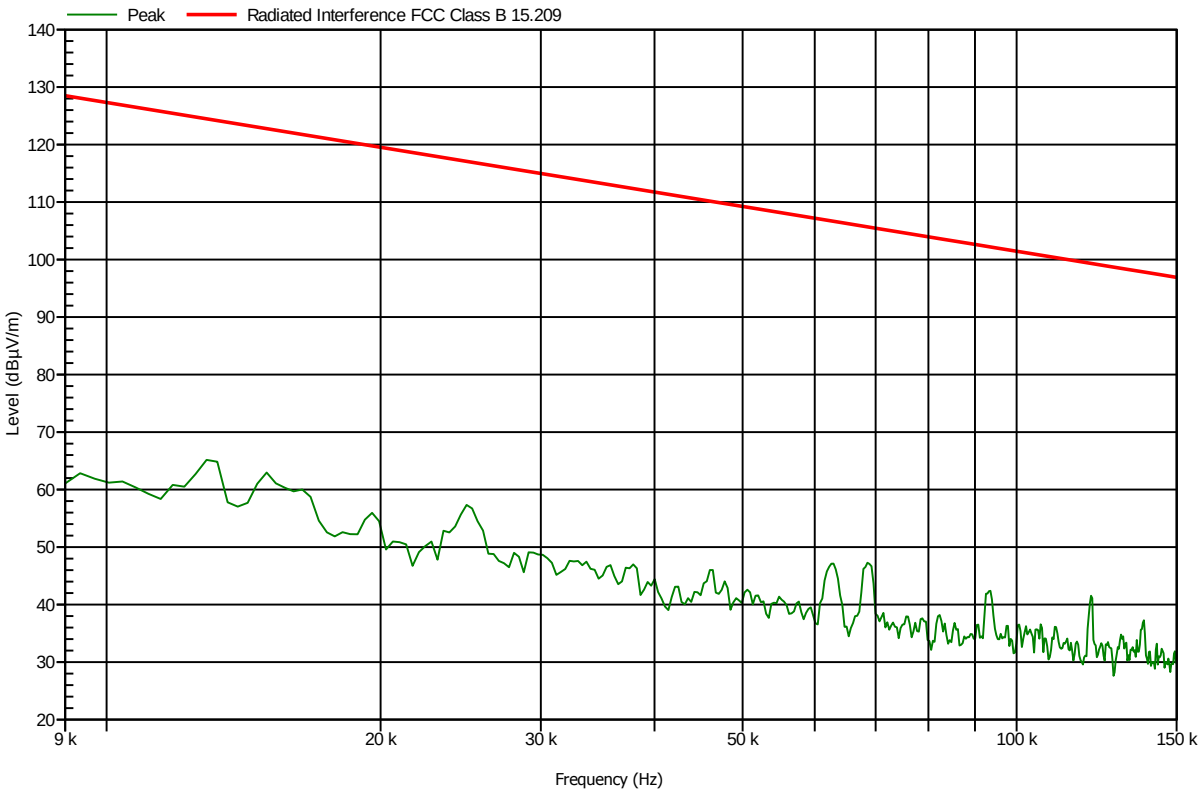
Test Results Plot No 5

9 kHz-150 kHz Spurious Emission

Test & EUT General Information		Receiver Setting	
EUT Name:	WipAir8000 5X	Spect Analyzer	Hewlett Packard 7405A DC Coupling
S/N:	041A04000100	Ref. Level:	Auto [90 dBµV]
Date of Test:	15.04.2015	RBW:	1000 Hz
Test Engineer:	Ilya Arbitman	VBW:	3 kHz
Antenna:	E-Field R&S 9 K-30 M Antenna	Sweep Time:	Auto [146.08 ms]
Polarization:	Horizontal and Vertical	Pre Amplifier	LNA MITEQ 0.01-1GHz No-2

TEST REMARKS: Wednesday, April 15, 2015 4:37:12 PM

BW=10MHz; Mid 5785MHz; Flat 23dBi Antenna; Loop Antenna-Vertical



MAXIMUM RESULT DEVIATION:

Detect all peaks above 6 dB below the limit line with a maximum of 6 peaks.

None

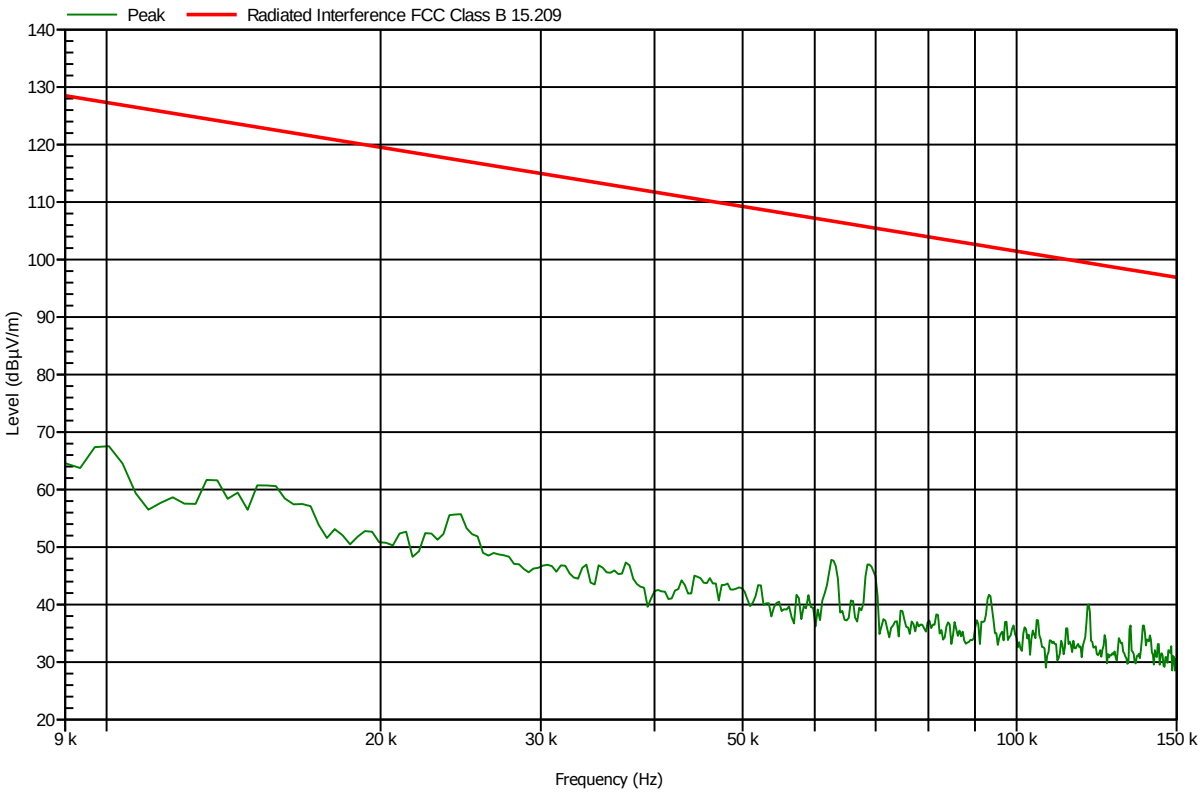
Test Results Plot No 6

9 kHz-150 kHz Spurious Emission

Test & EUT General Information		Receiver Setting	
EUT Name:	WipAir8000 5X	Spect Analyzer	Hewlett Packard 7405A DC Coupling
S/N:	041A04000100	Ref. Level:	Auto [90 dBµV]
Date of Test:	15.04.2015	RBW:	1000 Hz
Test Engineer:	Ilya Arbitman	VBW:	3 kHz
Antenna:	E-Field R&S 9 K-30 M Antenna	Sweep Time:	Auto [146.08 ms]
Polarization:	Horizontal and Vertical	Pre Amplifier	LNA MITEQ 0.01-1GHz No-2

TEST REMARKS: Wednesday, April 15, 2015 4:53:16 PM

BW=10MHz; High 5840MHz; Flat 23dBi Antenna; Loop Antenna-Vertical



MAXIMUM RESULT DEVIATION:

Detect all peaks above 6 dB below the limit line with a maximum of 6 peaks.

None

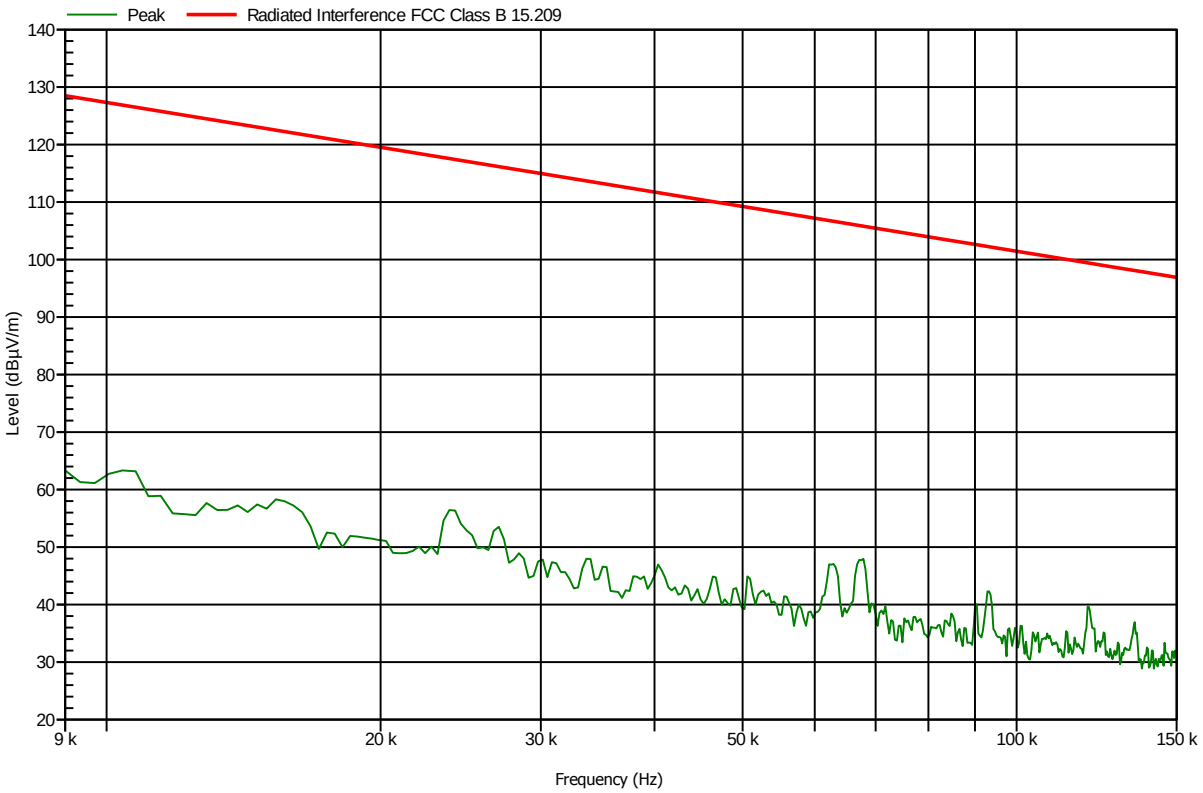
Test Results Plot No 7

9 kHz-150 kHz Spurious Emission

Test & EUT General Information		Receiver Setting	
EUT Name:	WipAir8000 5X	Spect Analyzer	Hewlett Packard 7405A DC Coupling
S/N:	041A04000100	Ref. Level:	Auto [90 dBµV]
Date of Test:	15.04.2015	RBW:	1000 Hz
Test Engineer:	Ilya Arbitman	VBW:	3 kHz
Antenna:	E-Field R&S 9 K-30 M Antenna	Sweep Time:	Auto [146.08 ms]
Polarization:	Horizontal and Vertical	Pre Amplifier	LNA MITEQ 0.01-1GHz No-2

TEST REMARKS: Wednesday, April 15, 2015 5:55:29 PM

BW=20MHz; Low 5735MHz; Flat 23dBi Antenna; Loop Antenna-Vertical



MAXIMUM RESULT DEVIATION:

Detect all peaks above 6 dB below the limit line with a maximum of 6 peaks.

None

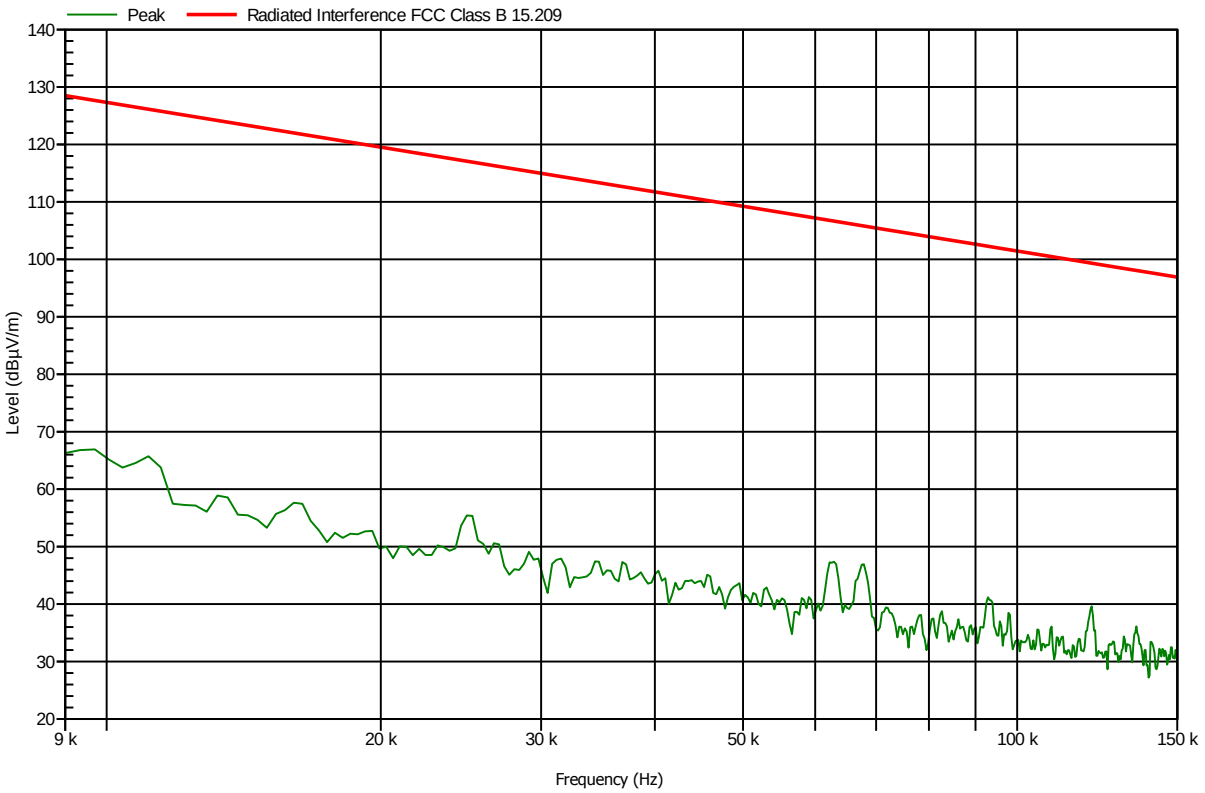
Test Results Plot No 8

9 kHz-150 kHz Spurious Emission

Test & EUT General Information		Receiver Setting	
EUT Name:	WipAir8000 5X	Spect Analyzer	Hewlett Packard 7405A DC Coupling
S/N:	041A04000100	Ref. Level:	Auto [90 dBµV]
Date of Test:	15.04.2015	RBW:	1000 Hz
Test Engineer:	Ilya Arbitman	VBW:	3 kHz
Antenna:	E-Field R&S 9 K-30 M Antenna	Sweep Time:	Auto [146.08 ms]
Polarization:	Horizontal and Vertical	Pre Amplifier	LNA MITEQ 0.01-1GHz No-2

TEST REMARKS: Wednesday, April 15, 2015 6:11:01 PM

BW=20MHz; Mid 5785MHz; Flat 23dBi Antenna; Loop Antenna-Vertical



MAXIMUM RESULT DEVIATION:

Detect all peaks above 6 dB below the limit line with a maximum of 6 peaks.

None

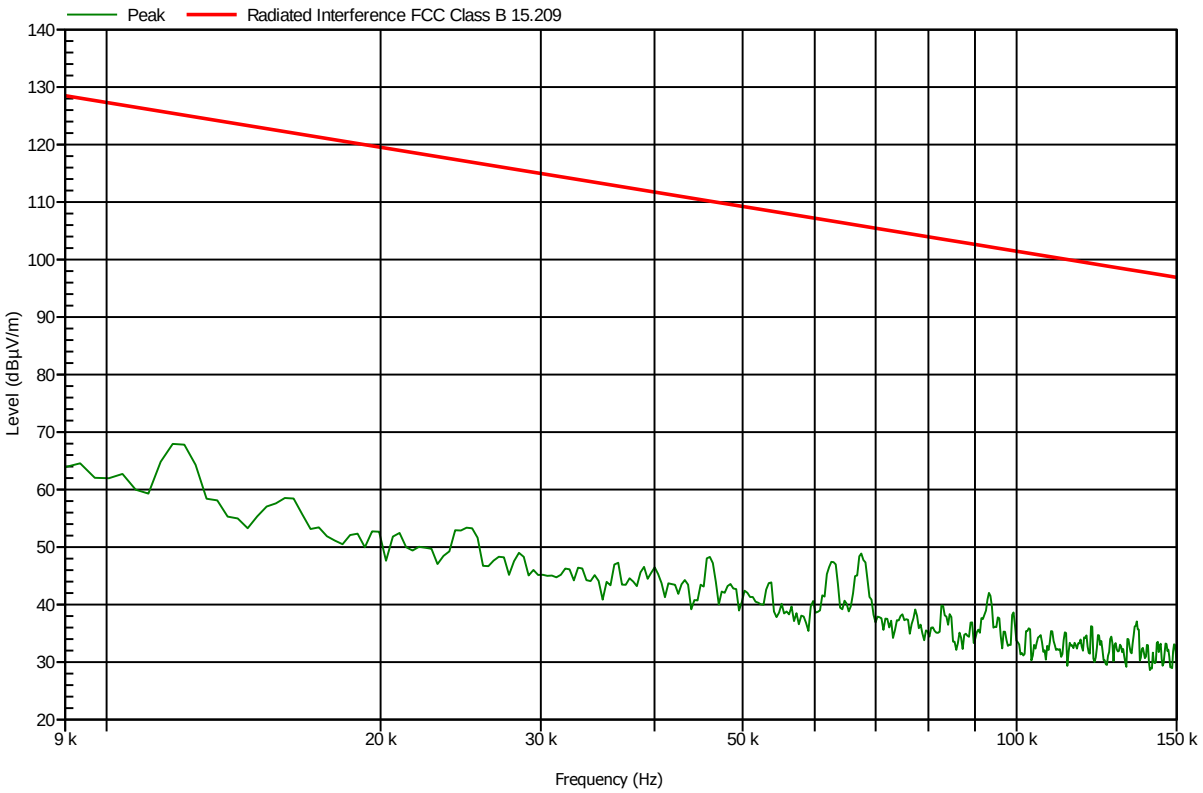
Test Results Plot No 9

9 kHz-150 kHz Spurious Emission

Test & EUT General Information		Receiver Setting	
EUT Name:	WipAir8000 5X	Spect Analyzer	Hewlett Packard 7405A DC Coupling
S/N:	041A04000100	Ref. Level:	Auto [90 dBµV]
Date of Test:	15.04.2015	RBW:	1000 Hz
Test Engineer:	Ilya Arbitman	VBW:	3 kHz
Antenna:	E-Field R&S 9 K-30 M Antenna	Sweep Time:	Auto [146.08 ms]
Polarization:	Horizontal and Vertical	Pre Amplifier	LNA MITEQ 0.01-1GHz No-2

TEST REMARKS: Wednesday, April 15, 2015 6:23:15 PM

BW=20MHz; High 5840MHz; Flat 23dBi Antenna; Loop Antenna-Vertical



MAXIMUM RESULT DEVIATION:

Detect all peaks above 6 dB below the limit line with a maximum of 6 peaks.

None

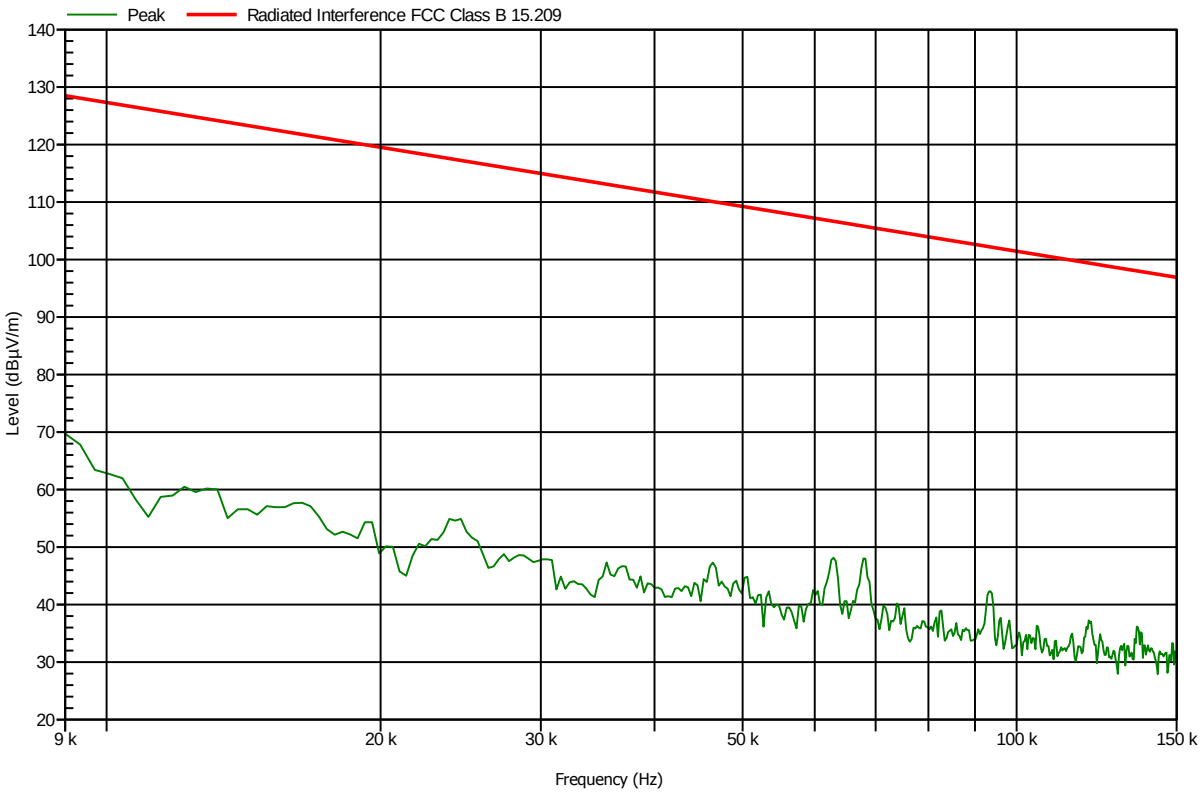
Test Results Plot No 10

9 kHz-150 kHz Spurious Emission

Test & EUT General Information		Receiver Setting	
EUT Name:	WipAir8000 5X	Spect Analyzer	Hewlett Packard 7405A DC Coupling
S/N:	041A04000100	Ref. Level:	Auto [90 dBµV]
Date of Test:	15.04.2015	RBW:	1000 Hz
Test Engineer:	Ilya Arbitman	VBW:	3 kHz
Antenna:	E-Field R&S 9 K-30 M Antenna	Sweep Time:	Auto [146.08 ms]
Polarization:	Horizontal and Vertical	Pre Amplifier	LNA MITEQ 0.01-1GHz No-2

TEST REMARKS: Wednesday, April 15, 2015 5:06:13 PM

BW=40MHz; Low 5745MHz; Flat 23dBi Antenna; Loop Antenna-Vertical



MAXIMUM RESULT DEVIATION:

Detect all peaks above 6 dB below the limit line with a maximum of 6 peaks.

None

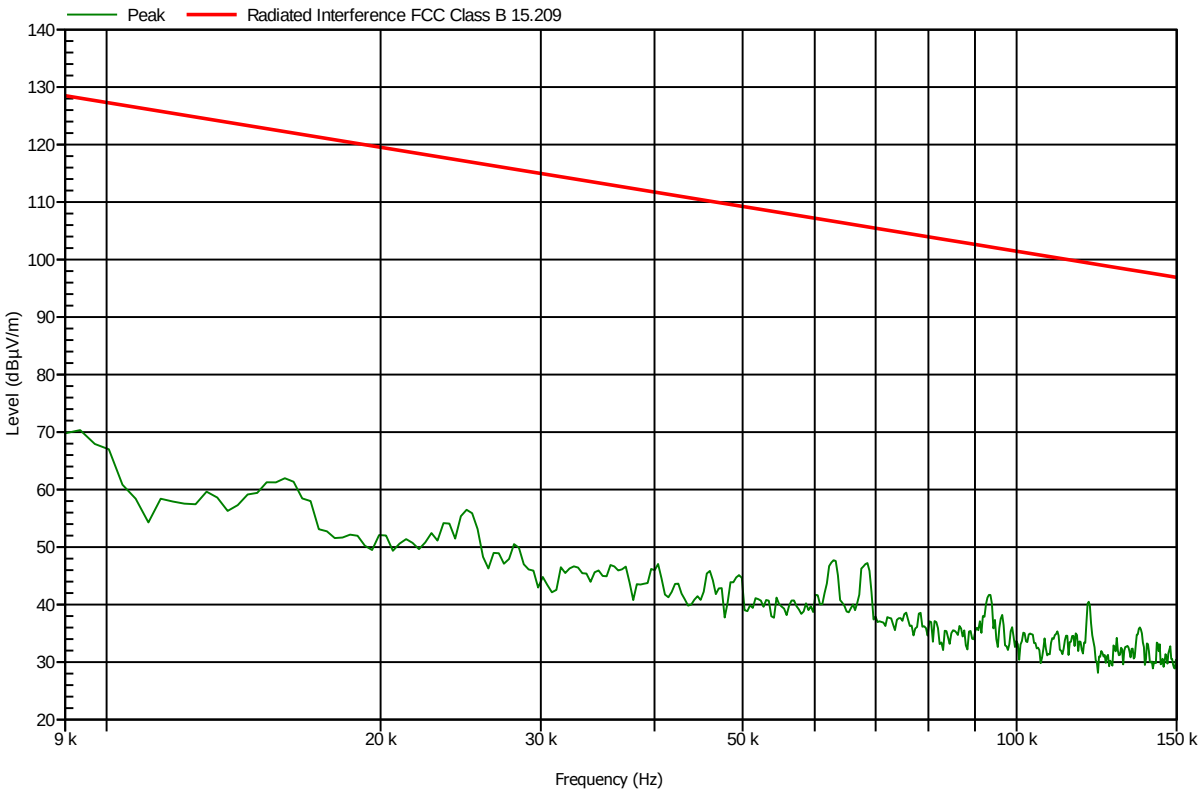
Test Results Plot No 11

9 kHz-150 kHz Spurious Emission

Test & EUT General Information		Receiver Setting	
EUT Name:	WipAir8000 5X	Spect Analyzer	Hewlett Packard 7405A DC Coupling
S/N:	041A04000100	Ref. Level:	Auto [90 dBµV]
Date of Test:	15.04.2015	RBW:	1000 Hz
Test Engineer:	Ilya Arbitman	VBW:	3 kHz
Antenna:	E-Field R&S 9 K-30 M Antenna	Sweep Time:	Auto [146.08 ms]
Polarization:	Horizontal and Vertical	Pre Amplifier	LNA MITEQ 0.01-1GHz No-2

TEST REMARKS: Wednesday, April 15, 2015 5:21:21 PM

BW=40MHz; Mid 5785MHz; Flat 23dBi Antenna; Loop Antenna-Vertical



MAXIMUM RESULT DEVIATION:

Detect all peaks above 6 dB below the limit line with a maximum of 6 peaks.

None

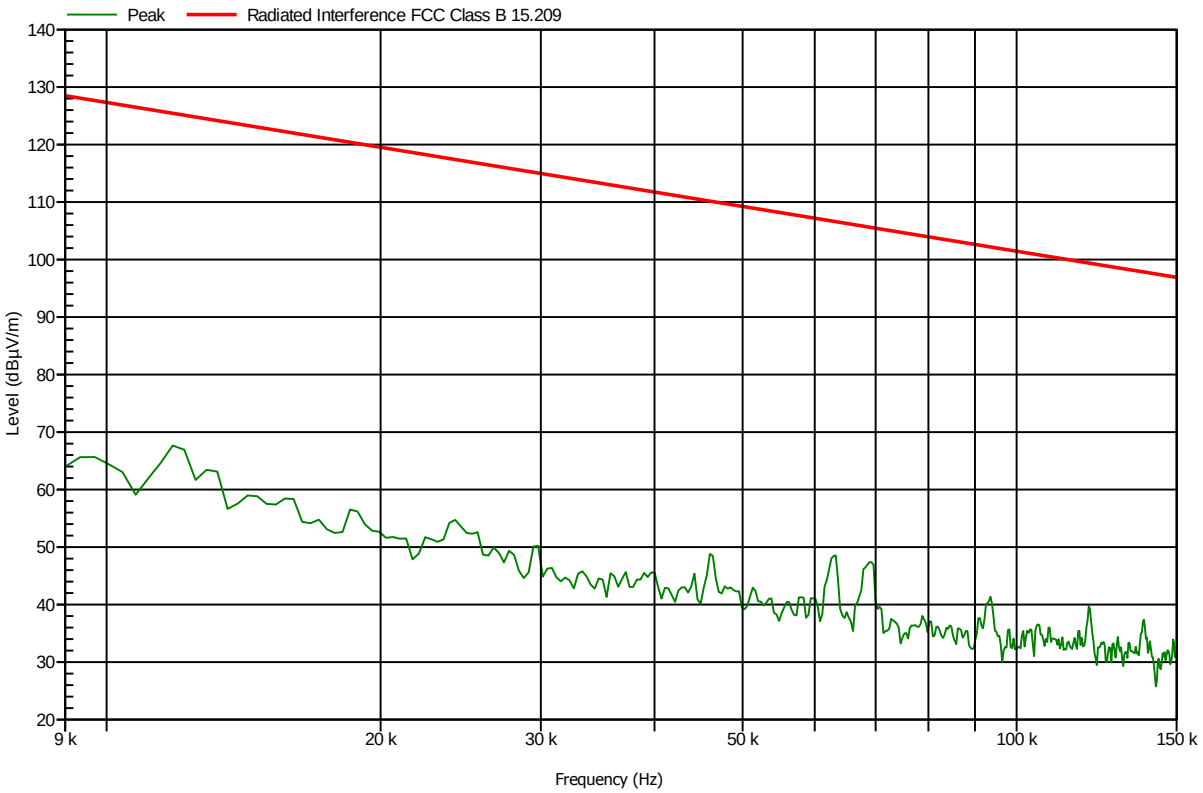
Test Results Plot No 12

9 kHz-150 kHz Spurious Emission

Test & EUT General Information		Receiver Setting	
EUT Name:	WipAir8000 5X	Spect Analyzer	Hewlett Packard 7405A DC Coupling
S/N:	041A04000100	Ref. Level:	Auto [90 dBµV]
Date of Test:	15.04.2015	RBW:	1000 Hz
Test Engineer:	Ilya Arbitman	VBW:	3 kHz
Antenna:	E-Field R&S 9 K-30 M Antenna	Sweep Time:	Auto [146.08 ms]
Polarization:	Horizontal and Vertical	Pre Amplifier	LNA MITEQ 0.01-1GHz No-2

TEST REMARKS: Wednesday, April 15, 2015 5:37:36 PM

BW=40MHz; High 5830MHz; Flat 23dBi Antenna; Loop Antenna-Vertical



MAXIMUM RESULT DEVIATION:

Detect all peaks above 6 dB below the limit line with a maximum of 6 peaks.

None

4.9.2. Flat_23dBi_150K-30M

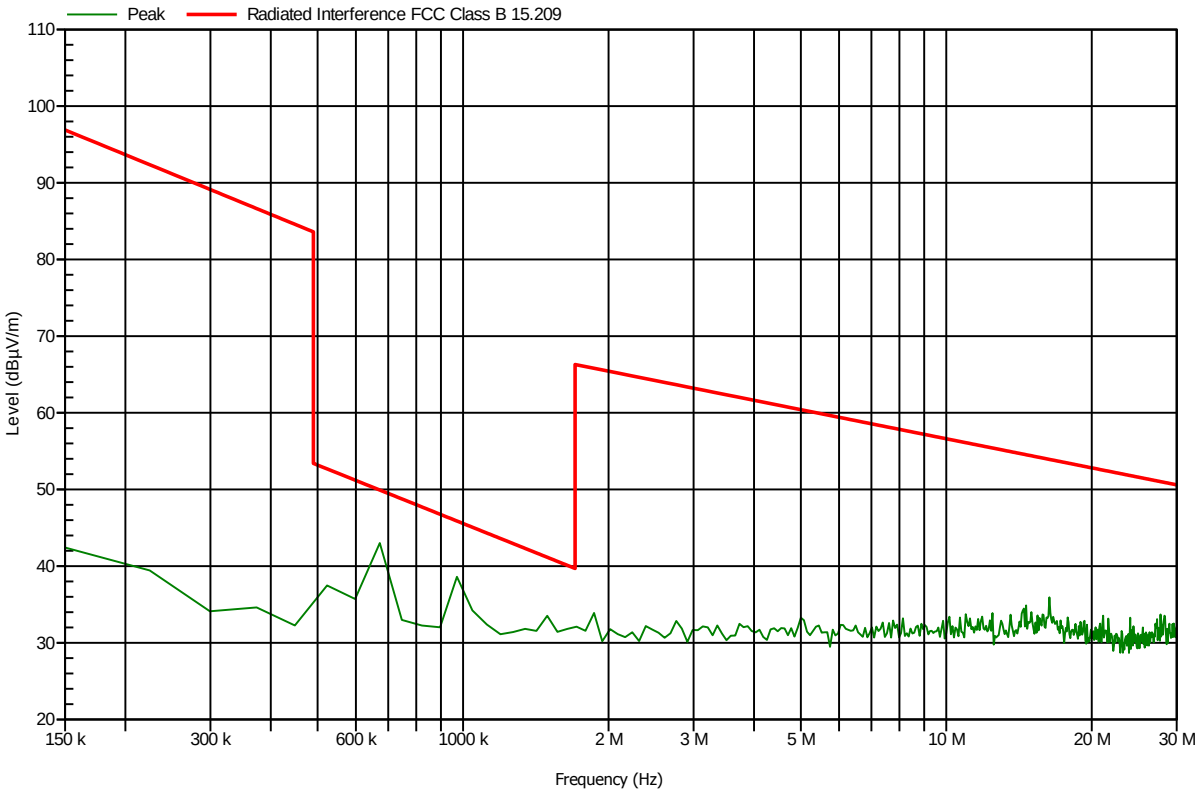
Test Results Plot No 13

150 kHz-30 MHz Spurious Emission

Test & EUT General Information		Receiver Setting	
EUT Name:	WipAir8000 5X	Spect Analyzer	Hewlett Packard 7405A DC Coupling
S/N:	041A04000100	Ref. Level:	Auto [90 dBµV]
Date of Test:	15.04.2015	RBW:	9 kHz
Test Engineer:	Ilya Arbitman	VBW:	30 kHz
Antenna:	E-Field R&S 9 K-30 M Antenna	Sweep Time:	Auto [840.04 ms]
Polarization:	Horizontal and Vertical	Pre Amplifier	LNA MITEQ 0.01-1GHz No-2

TEST REMARKS: Wednesday, April 15, 2015 3:25:15 PM

BW=5MHz; Low 5730MHz; Flat 23dBi Antenna; Loop Antenna-Vertical



MAXIMUM RESULT DEVIATION:

Detect all peaks above 6 dB below the limit line with a maximum of 6 peaks.

None

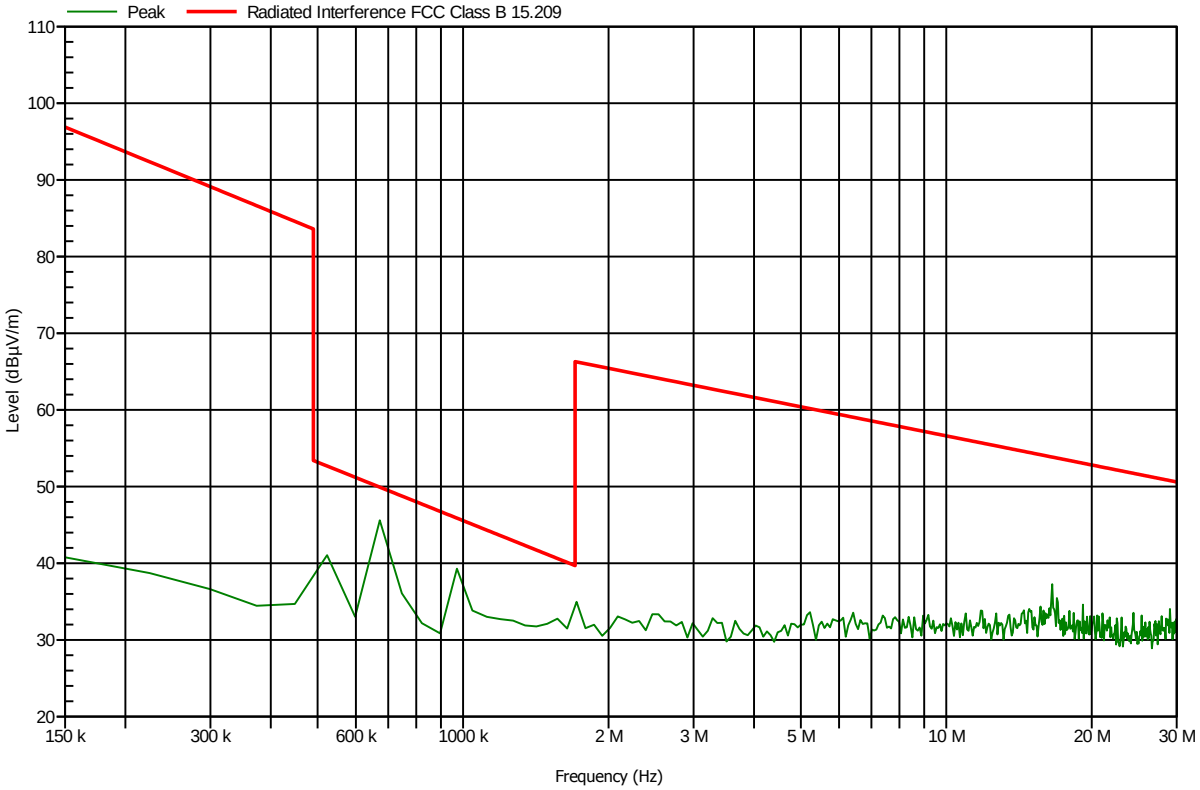
Test Results Plot No 14

150 kHz-30 MHz Spurious Emission

Test & EUT General Information		Receiver Setting	
EUT Name:	WipAir8000 5X	Spect Analyzer	Hewlett Packard 7405A DC Coupling
S/N:	041A04000100	Ref. Level:	Auto [90 dBµV]
Date of Test:	15.04.2015	RBW:	9 kHz
Test Engineer:	Ilya Arbitman	VBW:	30 kHz
Antenna:	E-Field R&S 9 K-30 M Antenna	Sweep Time:	Auto [840.04 ms]
Polarization:	Horizontal and Vertical	Pre Amplifier	LNA MITEQ 0.01-1GHz No-2

TEST REMARKS: Wednesday, April 15, 2015 3:39:57 PM

BW=5MHz; Mid 5785MHz; Flat 23dBi Antenna; Loop Antenna-Vertical



MAXIMUM RESULT DEVIATION:

Detect all peaks above 6 dB below the limit line with a maximum of 6 peaks.

Nr	Frequency (MHz)	PK MaxHold (dBµV/m)	AVG Value (dBµV/m)	PK Limit (dBµV/m)	Result	Angle (degrees)	Height (m)	H/V
1	0.658	46.9	41	50.2	Pass	0	1	V

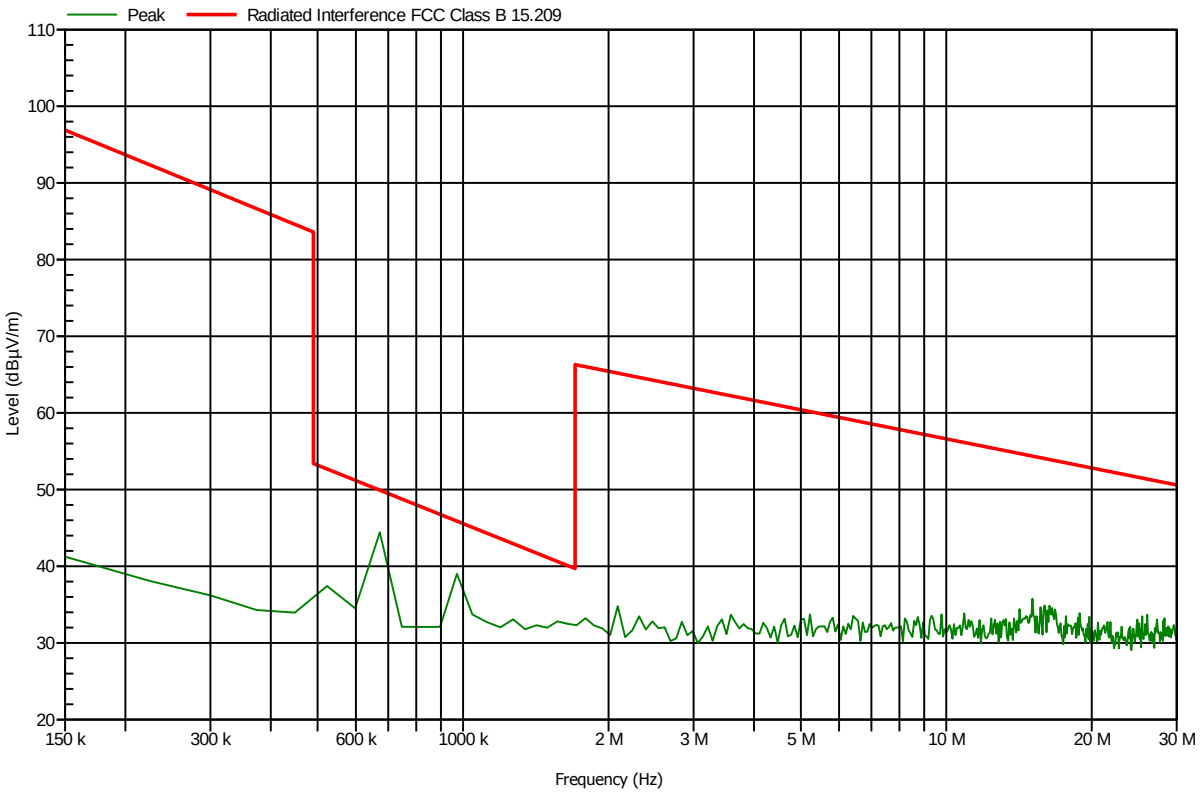
Test Results Plot No 15

150 kHz-30 MHz Spurious Emission

Test & EUT General Information		Receiver Setting	
EUT Name:	WipAir8000 5X	Spect Analyzer	Hewlett Packard 7405A DC Coupling
S/N:	041A04000100	Ref. Level:	Auto [90 dBµV]
Date of Test:	15.04.2015	RBW:	9 kHz
Test Engineer:	Ilya Arbitman	VBW:	30 kHz
Antenna:	E-Field R&S 9 K-30 M Antenna	Sweep Time:	Auto [840.04 ms]
Polarization:	Horizontal and Vertical	Pre Amplifier	LNA MITEQ 0.01-1GHz No-2

TEST REMARKS: Wednesday, April 15, 2015 3:57:12 PM

BW=5MHz; High 5845MHz; Flat 23dBi Antenna; Loop Antenna-Vertical



MAXIMUM RESULT DEVIATION:

Detect all peaks above 6 dB below the limit line with a maximum of 6 peaks.

Nr	Frequency (MHz)	PK MaxHold (dBµV/m)	AVG Value (dBµV/m)	PK Limit (dBµV/m)	Result	Angle (degrees)	Height (m)	H/V
1	0.946	42.2	35.5	46.2	Pass	0	1	V

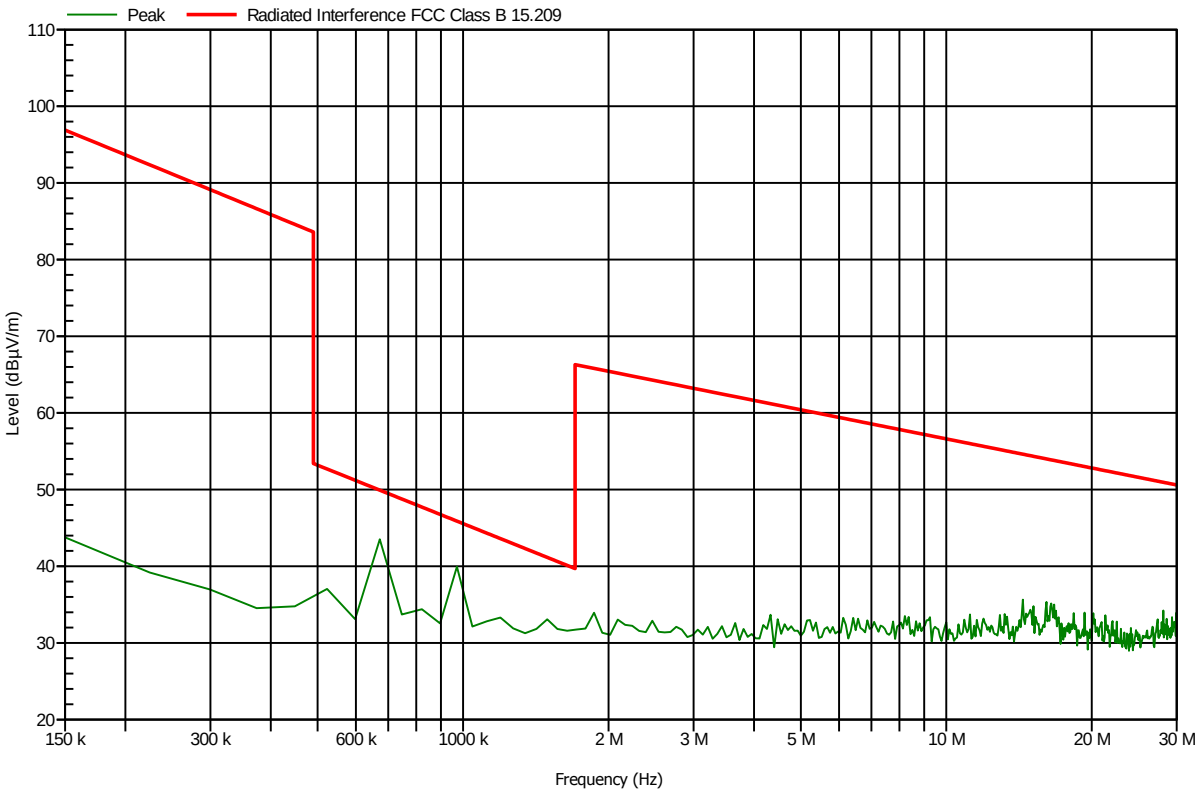
Test Results Plot No 16

150 kHz-30 MHz Spurious Emission

Test & EUT General Information		Receiver Setting	
EUT Name:	WipAir8000 5X	Spect Analyzer	Hewlett Packard 7405A DC Coupling
S/N:	041A04000100	Ref. Level:	Auto [90 dBµV]
Date of Test:	15.04.2015	RBW:	9 kHz
Test Engineer:	Ilya Arbitman	VBW:	30 kHz
Antenna:	E-Field R&S 9 K-30 M Antenna	Sweep Time:	Auto [840.04 ms]
Polarization:	Horizontal and Vertical	Pre Amplifier	LNA MITEQ 0.01-1GHz No-2

TEST REMARKS: Wednesday, April 15, 2015 4:13:01 PM

BW=10MHz; Low 5735MHz; Flat 23dBi Antenna; Loop Antenna-Vertical



MAXIMUM RESULT DEVIATION:

Detect all peaks above 6 dB below the limit line with a maximum of 6 peaks.

Nr	Frequency (MHz)	PK MaxHold (dBµV/m)	AVG Value (dBµV/m)	PK Limit (dBµV/m)	Result	Angle (degrees)	Height (m)	H/V
1	0.971	39.9	22.9	45.9	Pass	0	1	V

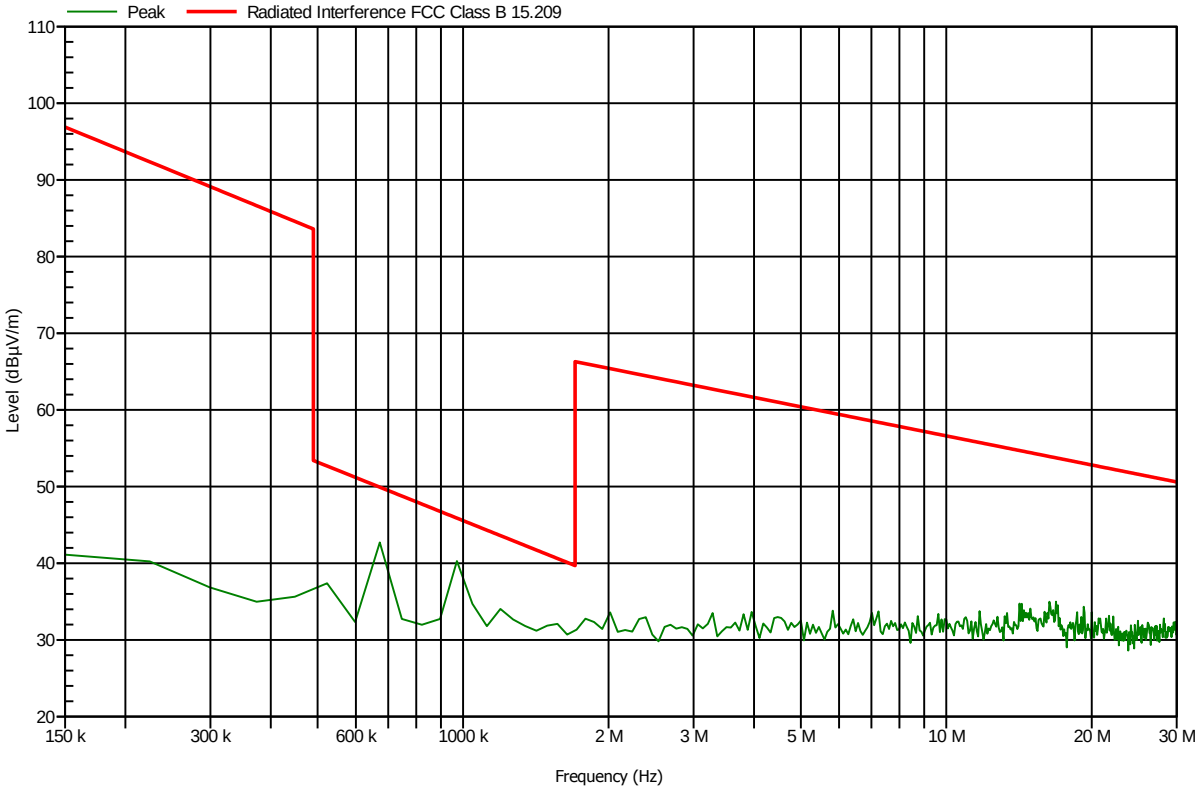
Test Results Plot No 17

150 kHz-30 MHz Spurious Emission

Test & EUT General Information		Receiver Setting	
EUT Name:	WipAir8000 5X	Spect Analyzer	Hewlett Packard 7405A DC Coupling
S/N:	041A04000100	Ref. Level:	Auto [90 dBµV]
Date of Test:	15.04.2015	RBW:	9 kHz
Test Engineer:	Ilya Arbitman	VBW:	30 kHz
Antenna:	E-Field R&S 9 K-30 M Antenna	Sweep Time:	Auto [840.04 ms]
Polarization:	Horizontal and Vertical	Pre Amplifier	LNA MITEQ 0.01-1GHz No-2

TEST REMARKS: Wednesday, April 15, 2015 4:29:23 PM

BW=10MHz; Mid 5785MHz; Flat 23dBi Antenna; Loop Antenna-Vertical



MAXIMUM RESULT DEVIATION:

Detect all peaks above 6 dB below the limit line with a maximum of 6 peaks.

Nr	Frequency (MHz)	PK MaxHold (dBµV/m)	AVG Value (dBµV/m)	PK Limit (dBµV/m)	Result	Angle (degrees)	Height (m)	H/V
1	0.971	40.3	22.7	45.9	Pass	0	1	V

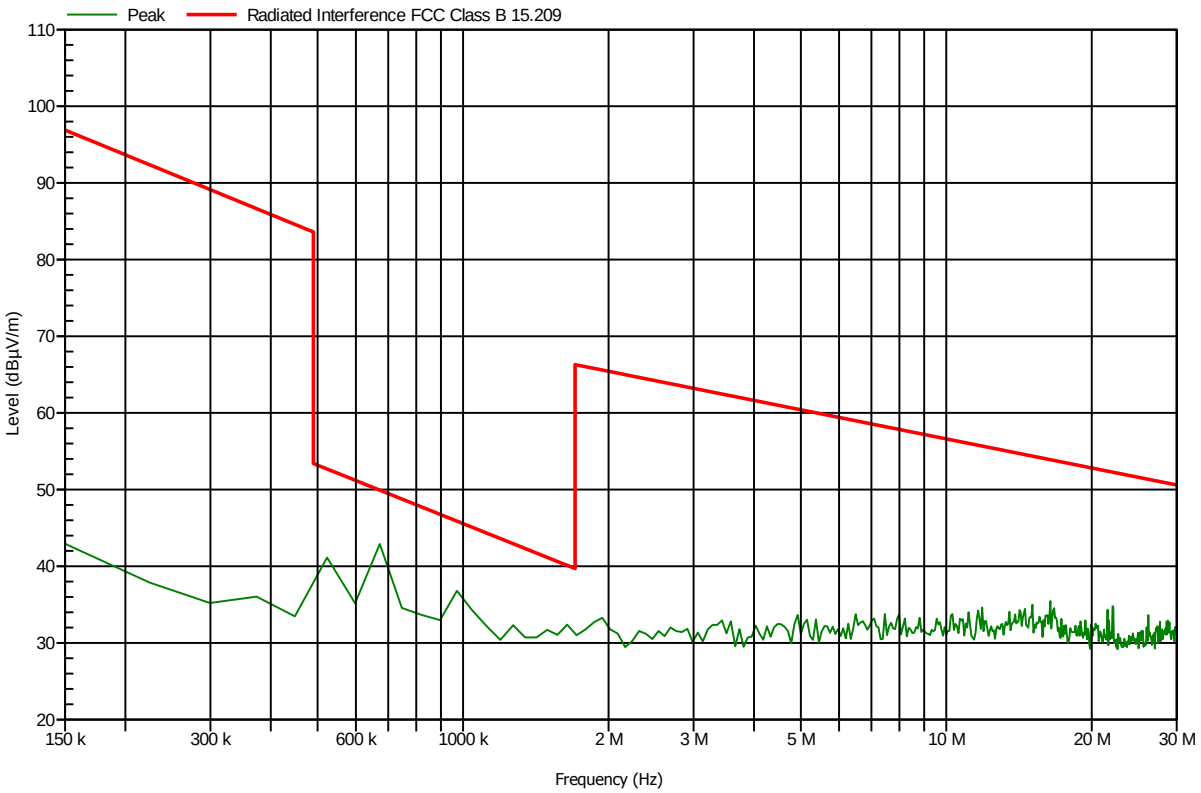
Test Results Plot No 18

150 kHz-30 MHz Spurious Emission

Test & EUT General Information		Receiver Setting	
EUT Name:	WipAir8000 5X	Spect Analyzer	Hewlett Packard 7405A DC Coupling
S/N:	041A04000100	Ref. Level:	Auto [90 dBµV]
Date of Test:	15.04.2015	RBW:	9 kHz
Test Engineer:	Ilya Arbitman	VBW:	30 kHz
Antenna:	E-Field R&S 9 K-30 M Antenna	Sweep Time:	Auto [840.04 ms]
Polarization:	Horizontal and Vertical	Pre Amplifier	LNA MITEQ 0.01-1GHz No-2

TEST REMARKS: Wednesday, April 15, 2015 4:46:42 PM

BW=10MHz; High 5840MHz; Flat 23dBi Antenna; Loop Antenna-Vertical



MAXIMUM RESULT DEVIATION:

Detect all peaks above 6 dB below the limit line with a maximum of 6 peaks.

None

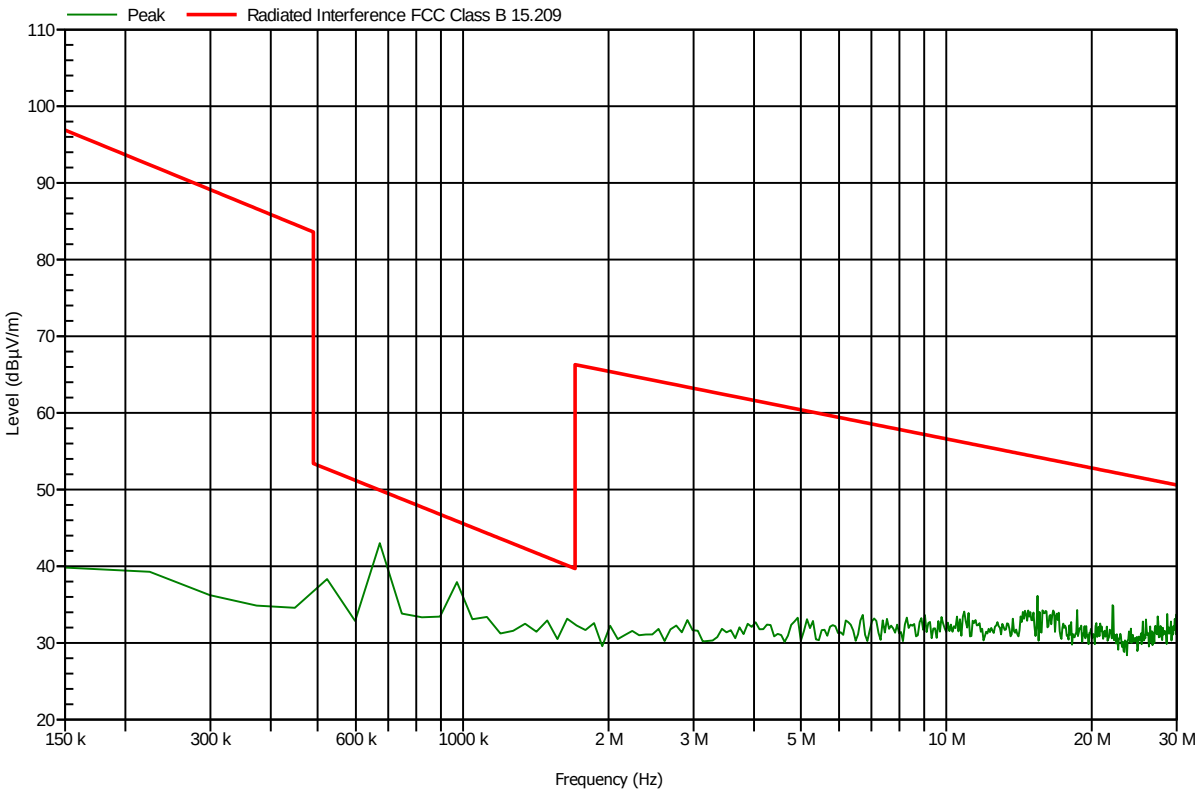
Test Results Plot No 19

150 kHz-30 MHz Spurious Emission

Test & EUT General Information		Receiver Setting	
EUT Name:	WipAir8000 5X	Spect Analyzer	Hewlett Packard 7405A DC Coupling
S/N:	041A04000100	Ref. Level:	Auto [90 dBµV]
Date of Test:	15.04.2015	RBW:	9 kHz
Test Engineer:	Ilya Arbitman	VBW:	30 kHz
Antenna:	E-Field R&S 9 K-30 M Antenna	Sweep Time:	Auto [840.04 ms]
Polarization:	Horizontal and Vertical	Pre Amplifier	LNA MITEQ 0.01-1GHz No-2

TEST REMARKS: Wednesday, April 15, 2015 5:44:29 PM

BW=20MHz; Low 5735MHz; Flat 23dBi Antenna; Loop Antenna-Vertical



MAXIMUM RESULT DEVIATION:

Detect all peaks above 6 dB below the limit line with a maximum of 6 peaks.

None

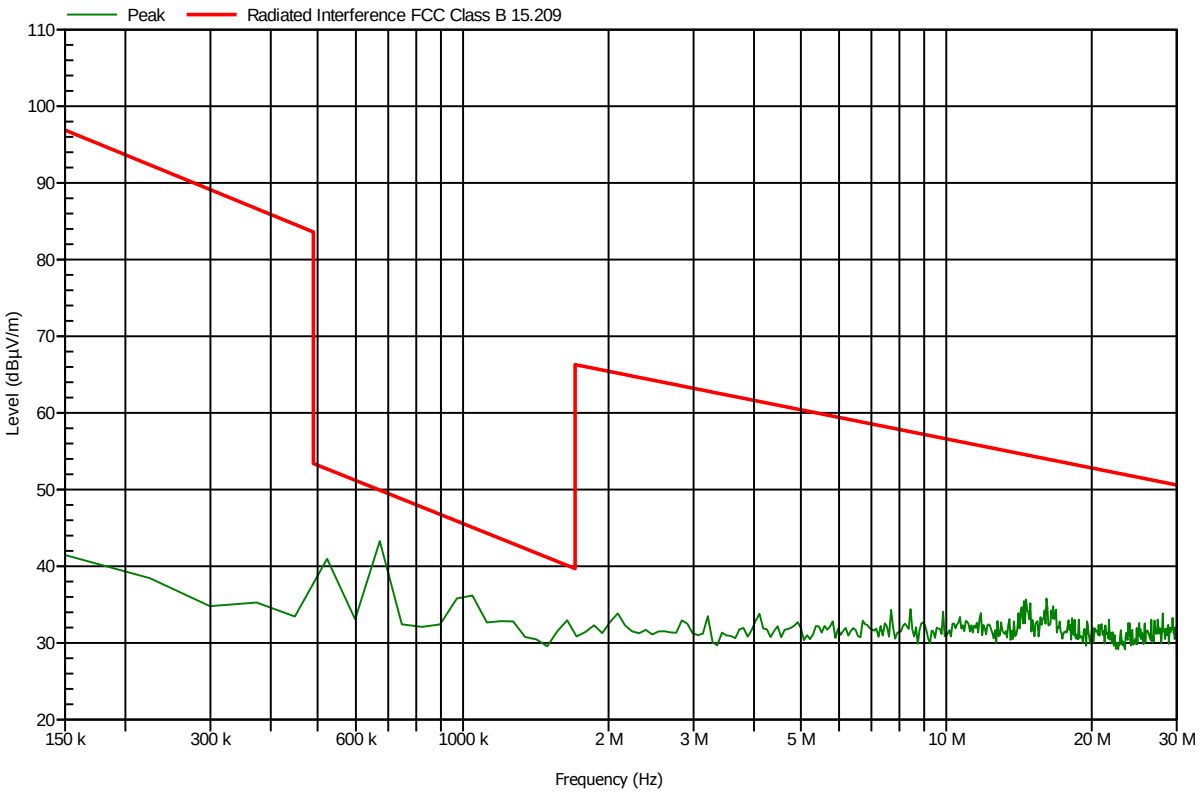
Test Results Plot No 20

150 kHz-30 MHz Spurious Emission

Test & EUT General Information		Receiver Setting	
EUT Name:	WipAir8000 5X	Spect Analyzer	Hewlett Packard 7405A DC Coupling
S/N:	041A04000100	Ref. Level:	Auto [90 dBµV]
Date of Test:	15.04.2015	RBW:	9 kHz
Test Engineer:	Ilya Arbitman	VBW:	30 kHz
Antenna:	E-Field R&S 9 K-30 M Antenna	Sweep Time:	Auto [840.04 ms]
Polarization:	Horizontal and Vertical	Pre Amplifier	LNA MITEQ 0.01-1GHz No-2

TEST REMARKS: Wednesday, April 15, 2015 6:03:09 PM

BW=20MHz; Mid 5785MHz; Flat 23dBi Antenna; Loop Antenna-Vertical



MAXIMUM RESULT DEVIATION:

Detect all peaks above 6 dB below the limit line with a maximum of 6 peaks.

None

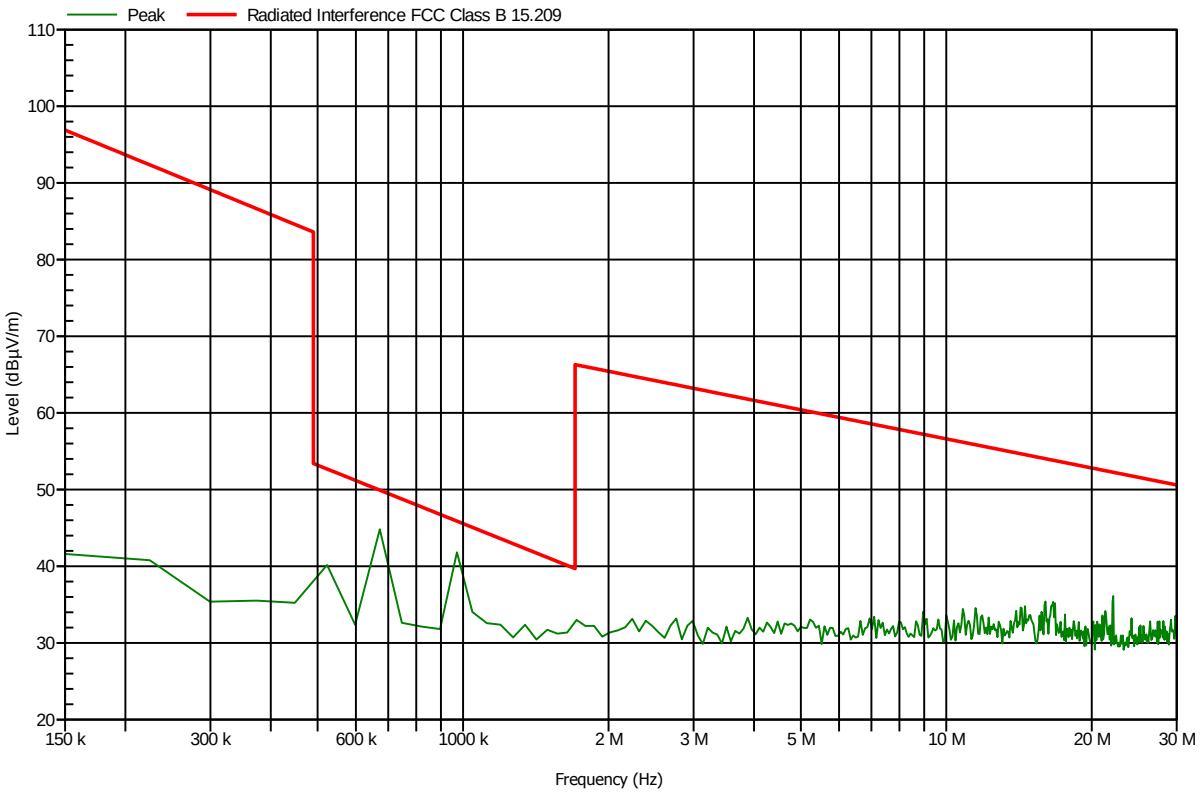
Test Results Plot No 21

150 kHz-30 MHz Spurious Emission

Test & EUT General Information		Receiver Setting	
EUT Name:	WipAir8000 5X	Spect Analyzer	Hewlett Packard 7405A DC Coupling
S/N:	041A04000100	Ref. Level:	Auto [90 dBµV]
Date of Test:	15.04.2015	RBW:	9 kHz
Test Engineer:	Ilya Arbitman	VBW:	30 kHz
Antenna:	E-Field R&S 9 k-30 M Antenna	Sweep Time:	Auto [840.04 ms]
Polarization:	Horizontal and Vertical	Pre Amplifier	LNA MITEQ 0.01-1GHz No-2

TEST REMARKS: Wednesday, April 15, 2015 6:17:05 PM

BW=20MHz; High 5840MHz; Flat 23dBi Antenna; Loop Antenna-Vertical



MAXIMUM RESULT DEVIATION:

Detect all peaks above 6 dB below the limit line with a maximum of 6 peaks.

Nr	Frequency (MHz)	PK MaxHold (dBµV/m)	AVG Value (dBµV/m)	PK Limit (dBµV/m)	Result	Angle (degrees)	Height (m)	H/V
1	0.658	46.2	40.4	50.2	Pass	0	1	V
2	0.945	40.4	35.1	46.2	Pass	0	1	V

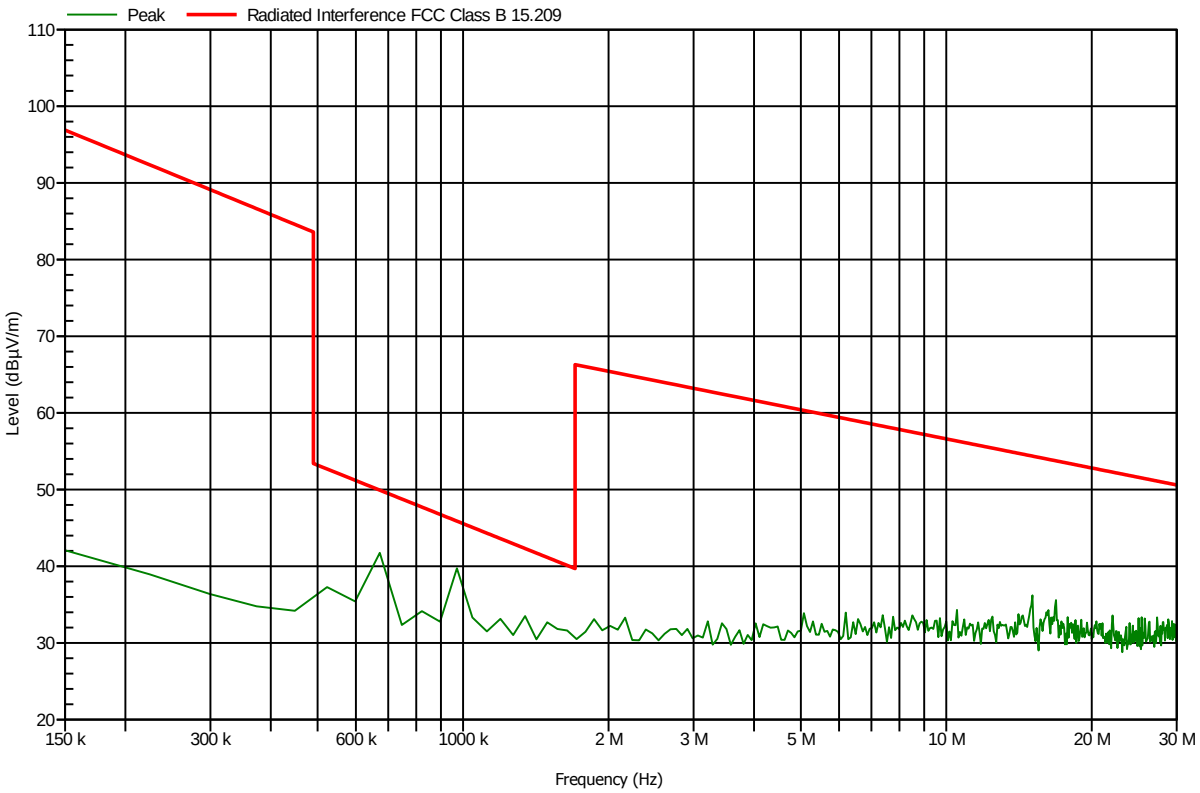
Test Results Plot No 22

150 kHz-30 MHz Spurious Emission

Test & EUT General Information		Receiver Setting	
EUT Name:	WipAir8000 5X	Spect Analyzer	Hewlett Packard 7405A DC Coupling
S/N:	041A04000100	Ref. Level:	Auto [90 dBµV]
Date of Test:	15.04.2015	RBW:	9 kHz
Test Engineer:	Ilya Arbitman	VBW:	30 kHz
Antenna:	E-Field R&S 9 K-30 M Antenna	Sweep Time:	Auto [840.04 ms]
Polarization:	Horizontal and Vertical	Pre Amplifier	LNA MITEQ 0.01-1GHz No-2

TEST REMARKS: Wednesday, April 15, 2015 4:59:56 PM

BW=40MHz; Low 5745MHz; Flat 23dBi Antenna; Loop Antenna-Vertical



MAXIMUM RESULT DEVIATION:

Detect all peaks above 6 dB below the limit line with a maximum of 6 peaks.

None

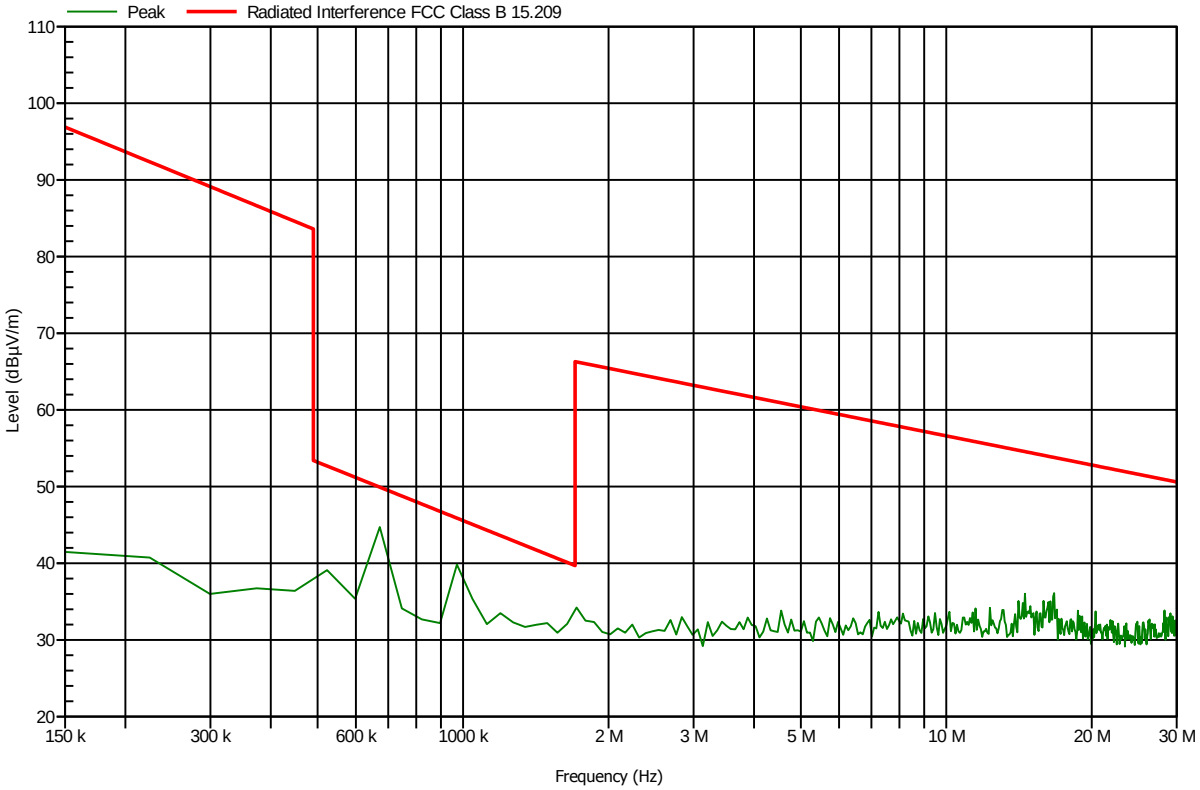
Test Results Plot No 23

150 kHz-30 MHz Spurious Emission

Test & EUT General Information		Receiver Setting	
EUT Name:	WipAir8000 5X	Spect Analyzer	Hewlett Packard 7405A DC Coupling
S/N:	041A04000100	Ref. Level:	Auto [90 dBµV]
Date of Test:	15.04.2015	RBW:	9 kHz
Test Engineer:	Ilya Arbitman	VBW:	30 kHz
Antenna:	E-Field R&S 9 K-30 M Antenna	Sweep Time:	Auto [840.04 ms]
Polarization:	Horizontal and Vertical	Pre Amplifier	LNA MITEQ 0.01-1GHz No-2

TEST REMARKS: Wednesday, April 15, 2015 5:13:26 PM

BW=40MHz; Mid 5785MHz; Flat 23dBi Antenna; Loop Antenna-Vertical



MAXIMUM RESULT DEVIATION:

Detect all peaks above 6 dB below the limit line with a maximum of 6 peaks.

Nr	Frequency (MHz)	PK MaxHold (dBµV/m)	AVG Value (dBµV/m)	PK Limit (dBµV/m)	Result	Angle (degrees)	Height (m)	H/V
1	0.672	44.7	23.7	49.9	Pass	0	1	V

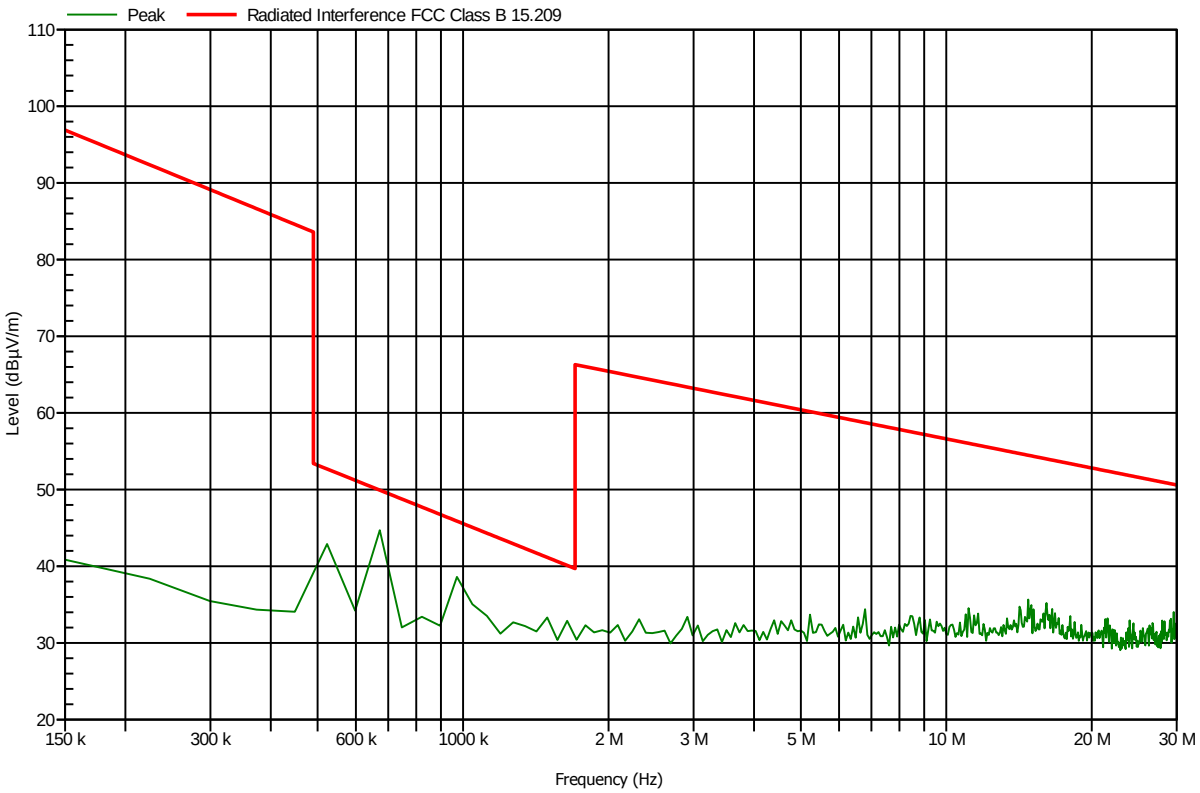
Test Results Plot No 24

150 kHz-30 MHz Spurious Emission

Test & EUT General Information		Receiver Setting	
EUT Name:	WipAir8000 5X	Spect Analyzer	Hewlett Packard 7405A DC Coupling
S/N:	041A04000100	Ref. Level:	Auto [90 dBµV]
Date of Test:	15.04.2015	RBW:	9 kHz
Test Engineer:	Ilya Arbitman	VBW:	30 kHz
Antenna:	E-Field R&S 9 K-30 M Antenna	Sweep Time:	Auto [840.04 ms]
Polarization:	Horizontal and Vertical	Pre Amplifier	LNA MITEQ 0.01-1GHz No-2

TEST REMARKS: Wednesday, April 15, 2015 5:29:27 PM

BW=40MHz; High 5830MHz; Flat 23dBi Antenna; Loop Antenna-Vertical



MAXIMUM RESULT DEVIATION:

Detect all peaks above 6 dB below the limit line with a maximum of 6 peaks.

Nr	Frequency (MHz)	PK MaxHold (dBµV/m)	AVG Value (dBµV/m)	PK Limit (dBµV/m)	Result	Angle (degrees)	Height (m)	H/V
1	0.665	44.6	27.4	50	Pass	0	1	V

4.9.3. Flat_23dBi_Antenna_30 MHz - 1 GHz

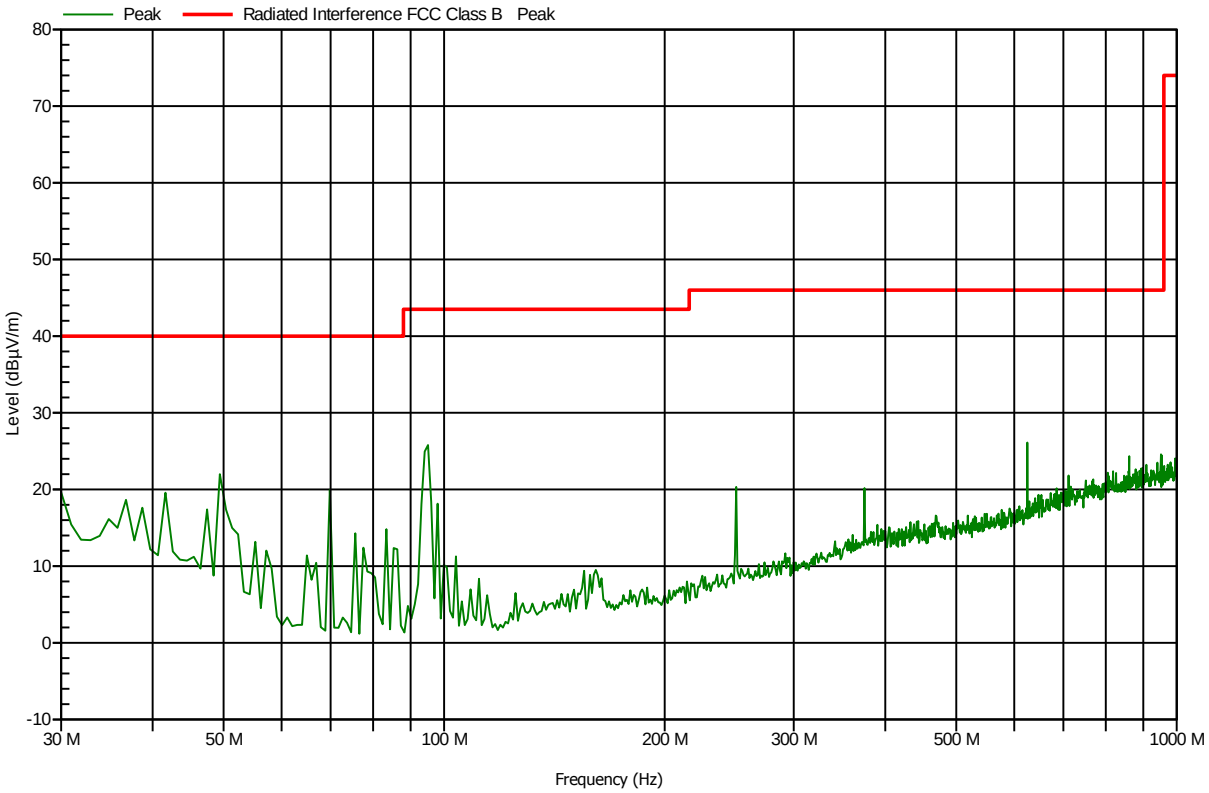
Test Results Plot No 25

30 Mhz-1 GHz Quasi_Peak Spurious Emission

Test & EUT General Information		Receiver Setting	
EUT Name:	WipAir8000 5X	Spect Analyzer	Agilent Technologies N9020A
S/N:	041A04000100	Ref. Level:	70 dBµV
Date of Test:	13.04.2015	RBW:	100 kHz
Test Engineer:	Ilya Arbitman	VBW:	300 kHz
Antenna:	Frankonia gray BTA-L_B 3m	Sweep Time:	Auto [694.64 ms]
Polarization:	Horizontal and Vertical	Pre Amplifier	LNA 10k-1GHz 30dB

TEST REMARKS: Monday, April 13, 2015 1:44:33 PM

BW 5MHz Low 5730MHz; 23dBi Flat Antenna



MAXIMUM RESULT DEVIATION:

Detect all peaks above 6 dB below the limit line with a maximum of 6 peaks.

None

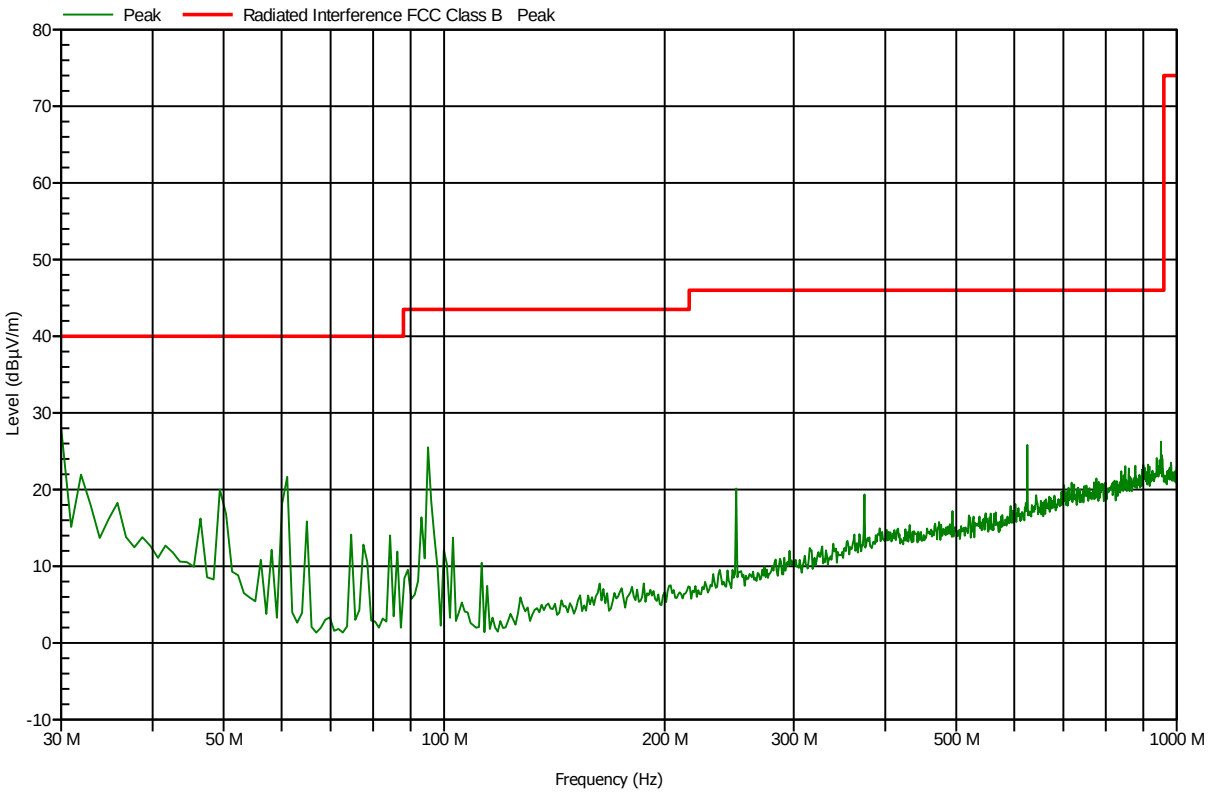
Test Results Plot No 26

30 Mhz-1 GHz Quasi_Peak Spurious Emission

Test & EUT General Information		Receiver Setting	
EUT Name:	WipAir8000 5X	Spect Analyzer	Agilent Technologies N9020A
S/N:	041A04000100	Ref. Level:	70 dBµV
Date of Test:	13.04.2015	RBW:	100 kHz
Test Engineer:	Ilya Arbitman	VBW:	300 kHz
Antenna:	Frankonia gray BTA-L_B 3m	Sweep Time:	Auto [694.64 ms]
Polarization:	Horizontal and Vertical	Pre Amplifier	LNA 10k-1GHz 30dB

TEST REMARKS: Monday, April 13, 2015 1:49:39 PM

BW 5MHz MID 5785MHz; 23dBi Flat Antenna



MAXIMUM RESULT DEVIATION:

Detect all peaks above 6 dB below the limit line with a maximum of 6 peaks.

None

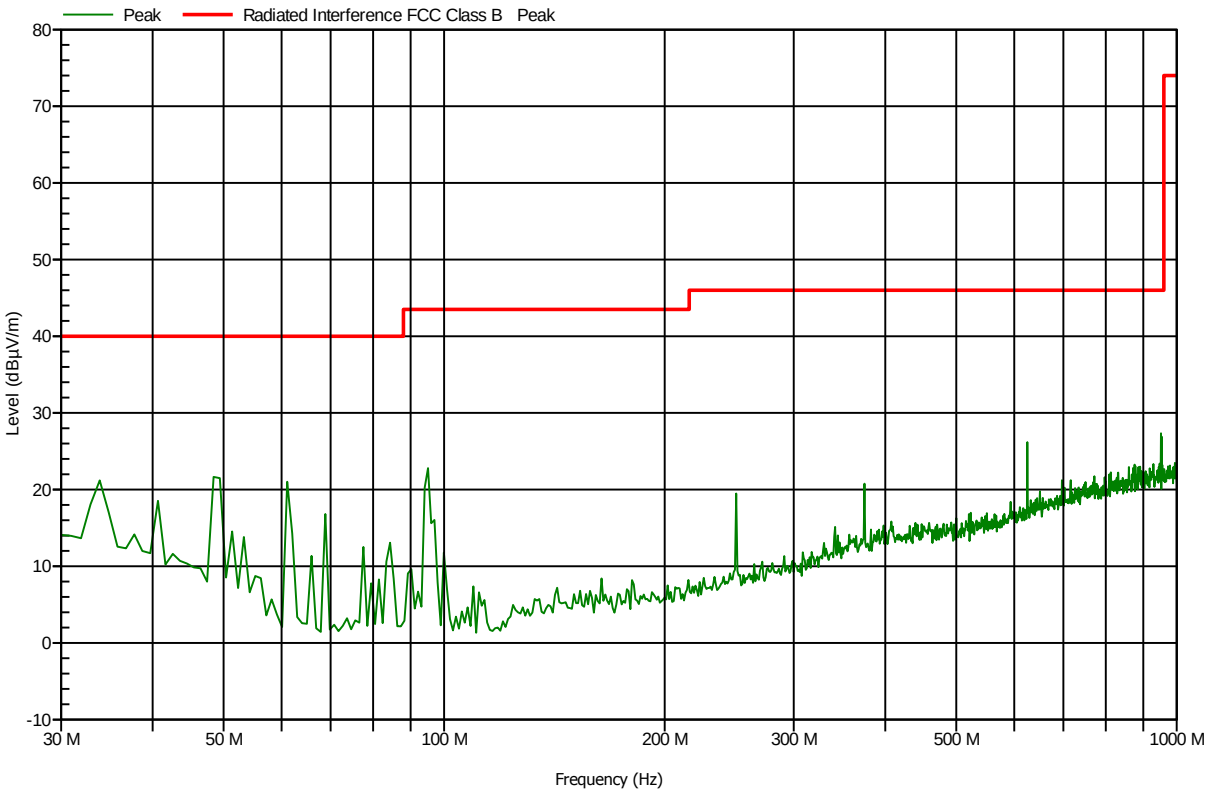
Test Results Plot No 27

30 Mhz-1 GHz Quasi_Peak Spurious Emission

Test & EUT General Information		Receiver Setting	
EUT Name:	WipAir8000 5X	Spect Analyzer	Agilent Technologies N9020A
S/N:	041A04000100	Ref. Level:	70 dBµV
Date of Test:	13.04.2015	RBW:	100 kHz
Test Engineer:	Ilya Arbitman	VBW:	300 kHz
Antenna:	Frankonia gray BTA-L_B 3m	Sweep Time:	Auto [694.64 ms]
Polarization:	Horizontal and Vertical	Pre Amplifier	LNA 10k-1GHz 30dB

TEST REMARKS: Monday, April 13, 2015 1:54:07 PM

BW 5MHz High 5845MHz; 23dBi Flat Antenna



MAXIMUM RESULT DEVIATION:

Detect all peaks above 6 dB below the limit line with a maximum of 6 peaks.

None

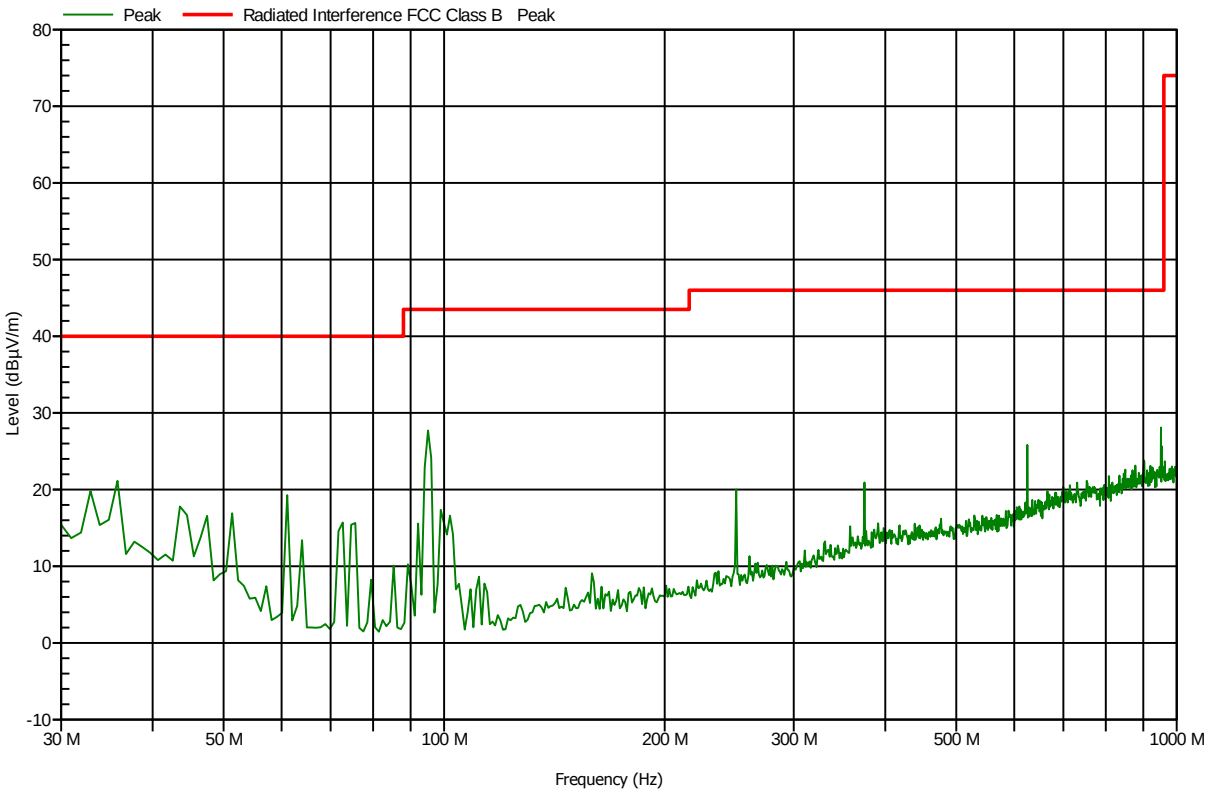
Test Results Plot No 28

30 Mhz-1 GHz Quasi_Peak Spurious Emission

Test & EUT General Information		Receiver Setting	
EUT Name:	WipAir8000 5X	Spect Analyzer	Agilent Technologies N9020A
S/N:	041A04000100	Ref. Level:	70 dBµV
Date of Test:	13.04.2015	RBW:	100 kHz
Test Engineer:	Ilya Arbitman	VBW:	300 kHz
Antenna:	Frankonia gray BTA-L_B 3m	Sweep Time:	Auto [694.64 ms]
Polarization:	Horizontal and Vertical	Pre Amplifier	LNA 10k-1GHz 30dB

TEST REMARKS: Monday, April 13, 2015 1:59:51 PM

BW 10MHz Low 5730MHz; 23dBi Flat Antenna



MAXIMUM RESULT DEVIATION:

Detect all peaks above 6 dB below the limit line with a maximum of 6 peaks.

None

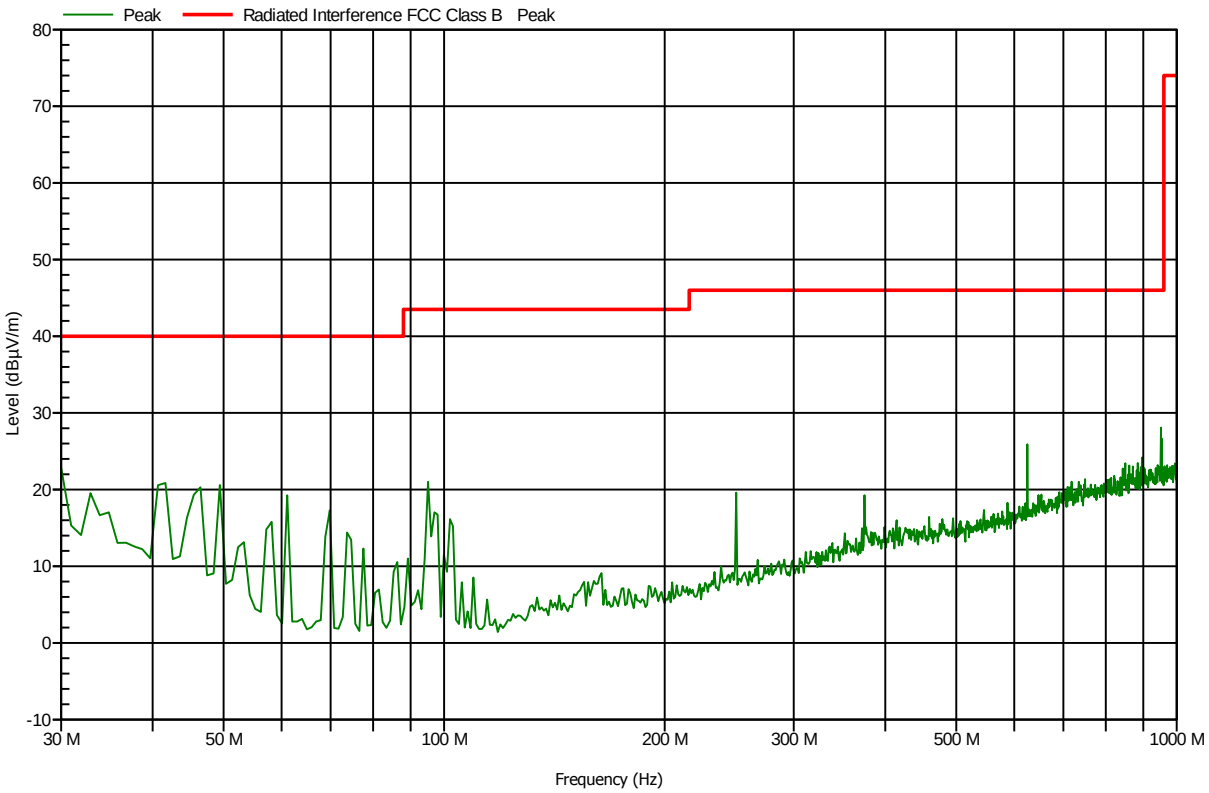
Test Results Plot No 29

30 Mhz-1 GHz Quasi_Peak Spurious Emission

Test & EUT General Information		Receiver Setting	
EUT Name:	WipAir8000 5X	Spect Analyzer	Agilent Technologies N9020A
S/N:	041A04000100	Ref. Level:	70 dBµV
Date of Test:	13.04.2015	RBW:	100 kHz
Test Engineer:	Ilya Arbitman	VBW:	300 kHz
Antenna:	Frankonia gray BTA-L_B 3m	Sweep Time:	Auto [694.64 ms]
Polarization:	Horizontal and Vertical	Pre Amplifier	LNA 10k-1GHz 30dB

TEST REMARKS: Monday, April 13, 2015 2:05:20 PM

BW 10MHz Mid 5785MHz; 23dBi Flat Antenna



MAXIMUM RESULT DEVIATION:

Detect all peaks above 6 dB below the limit line with a maximum of 6 peaks.

None

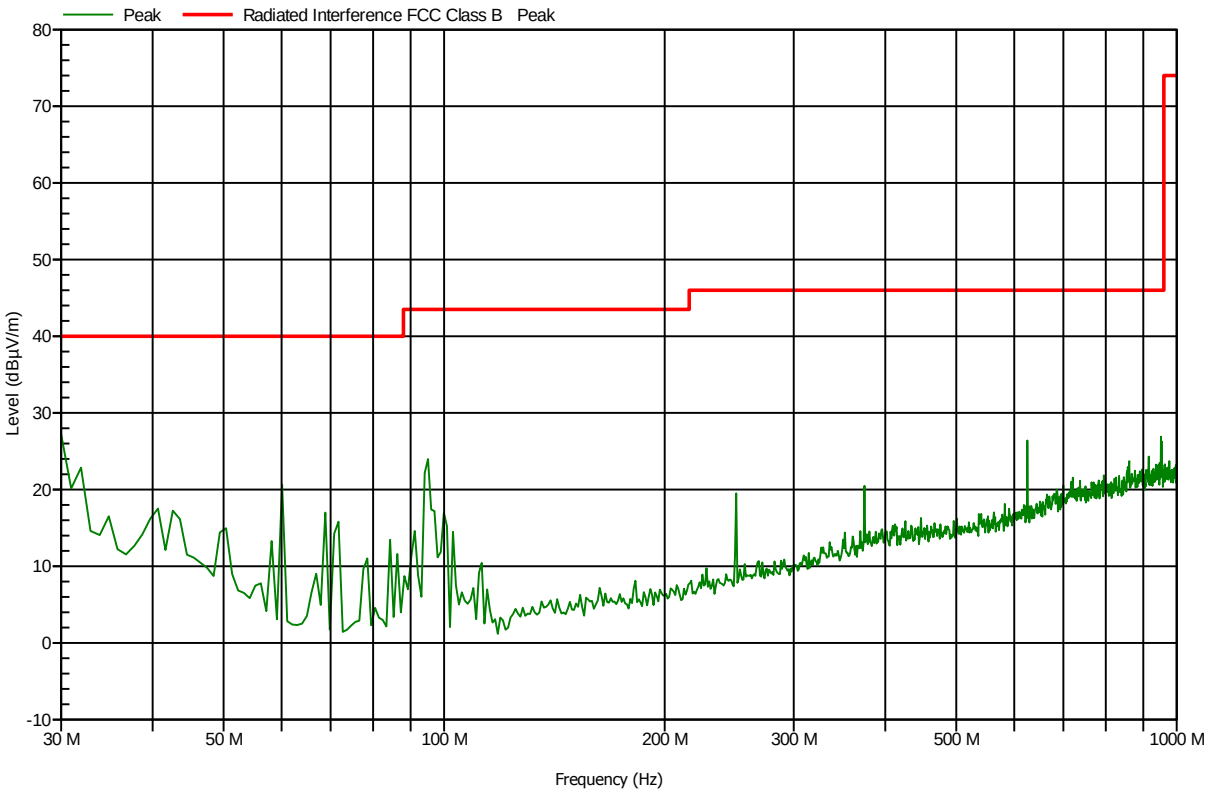
Test Results Plot No 30

30 Mhz-1 GHz Quasi_Peak Spurious Emission

Test & EUT General Information		Receiver Setting	
EUT Name:	WipAir8000 5X	Spect Analyzer	Agilent Technologies N9020A
S/N:	041A04000100	Ref. Level:	70 dBµV
Date of Test:	13.04.2015	RBW:	100 kHz
Test Engineer:	Ilya Arbitman	VBW:	300 kHz
Antenna:	Frankonia gray BTA-L_B 3m	Sweep Time:	Auto [694.64 ms]
Polarization:	Horizontal and Vertical	Pre Amplifier	LNA 10k-1GHz 30dB

TEST REMARKS: Monday, April 13, 2015 2:12:38 PM

BW 10MHz High 5845MHz; 23dBi Flat Antenna



MAXIMUM RESULT DEVIATION:

Detect all peaks above 6 dB below the limit line with a maximum of 6 peaks.

None

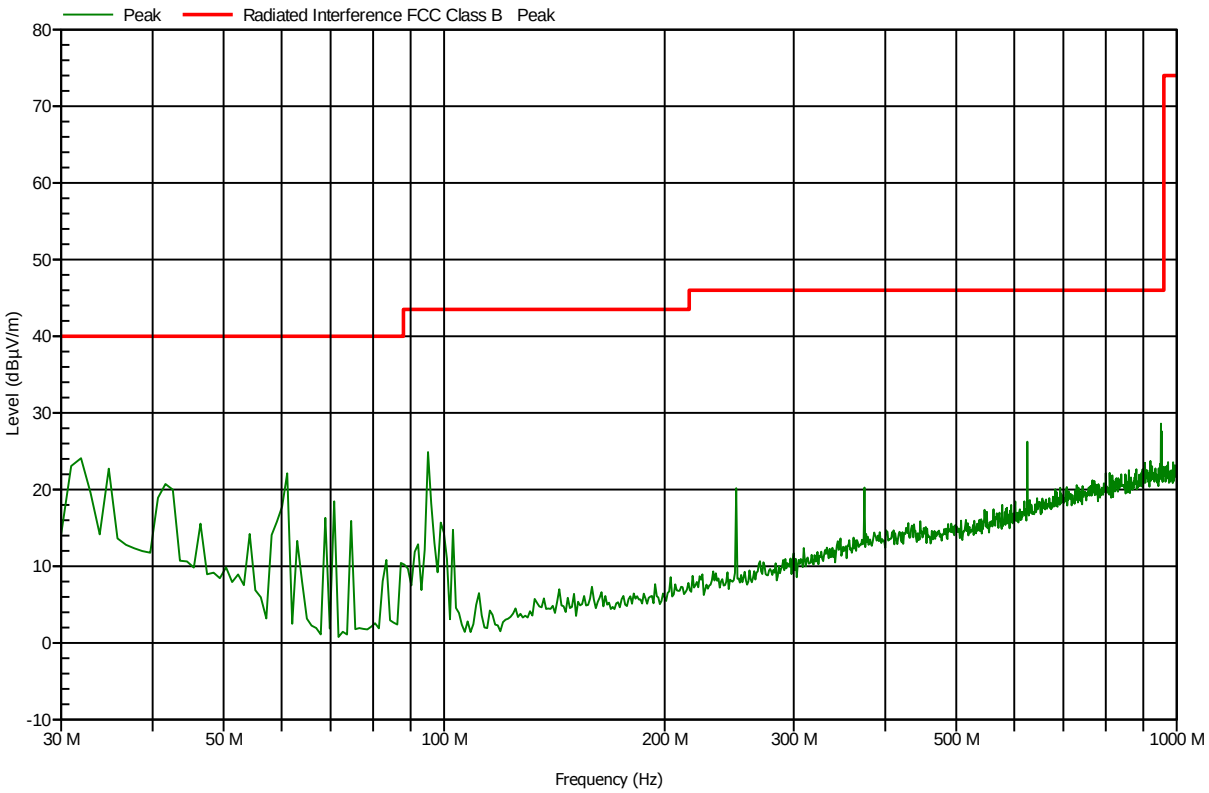
Test Results Plot No 31

30 Mhz-1 GHz Quasi_Peak Spurious Emission

Test & EUT General Information		Receiver Setting	
EUT Name:	WipAir8000 5X	Spect Analyzer	Agilent Technologies N9020A
S/N:	041A04000100	Ref. Level:	70 dBµV
Date of Test:	13.04.2015	RBW:	100 kHz
Test Engineer:	Ilya Arbitman	VBW:	300 kHz
Antenna:	Frankonia gray BTA-L_B 3m	Sweep Time:	Auto [694.64 ms]
Polarization:	Horizontal and Vertical	Pre Amplifier	LNA 10k-1GHz 30dB

TEST REMARKS: Monday, April 13, 2015 2:17:25 PM

BW 20MHz Low 5735MHz; 23dBi Flat Antenna



MAXIMUM RESULT DEVIATION:

Detect all peaks above 6 dB below the limit line with a maximum of 6 peaks.

None

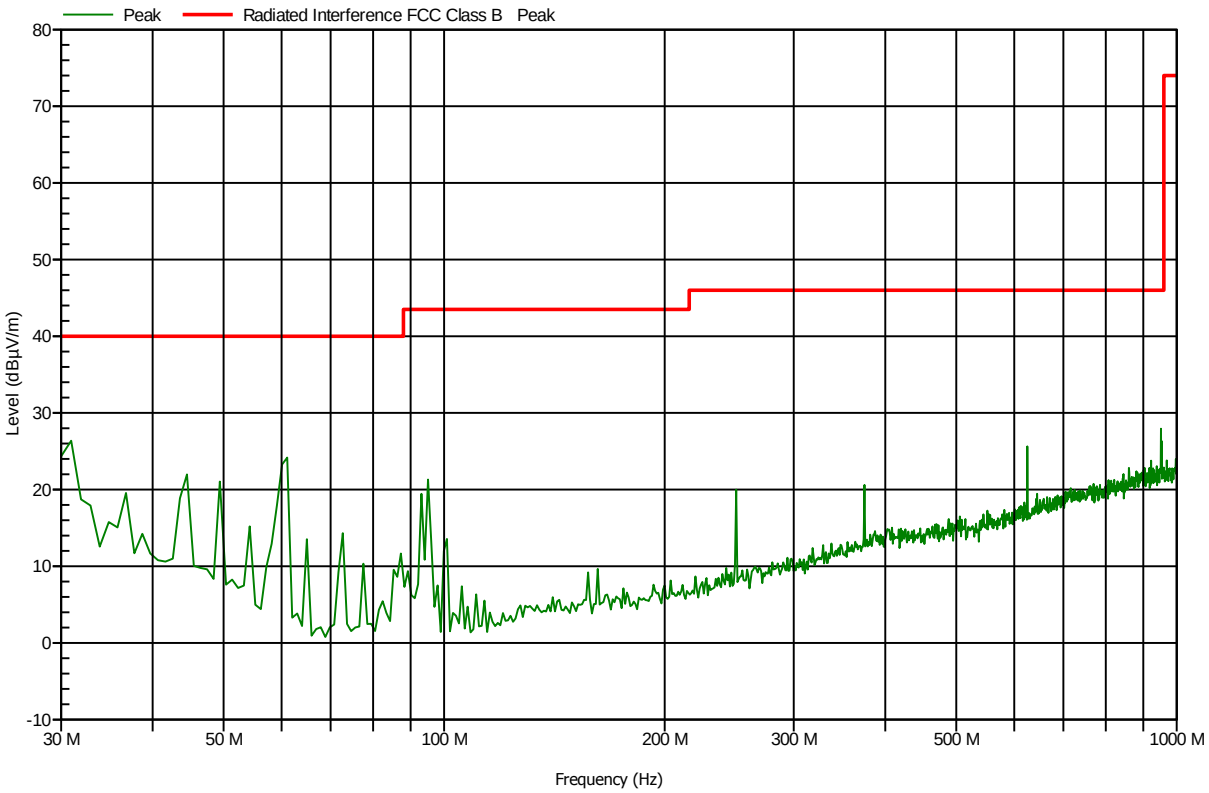
Test Results Plot No 32

30 Mhz-1 GHz Quasi_Peak Spurious Emission

Test & EUT General Information		Receiver Setting	
EUT Name:	WipAir8000 5X	Spect Analyzer	Agilent Technologies N9020A
S/N:	041A04000100	Ref. Level:	70 dBµV
Date of Test:	13.04.2015	RBW:	100 kHz
Test Engineer:	Ilya Arbitman	VBW:	300 kHz
Antenna:	Frankonia gray BTA-L_B 3m	Sweep Time:	Auto [694.64 ms]
Polarization:	Horizontal and Vertical	Pre Amplifier	LNA 10k-1GHz 30dB

TEST REMARKS: Monday, April 13, 2015 2:22:50 PM

BW 20MHz Mid 5785MHz; 23dBi Flat Antenna



MAXIMUM RESULT DEVIATION:

Detect all peaks above 6 dB below the limit line with a maximum of 6 peaks.

None

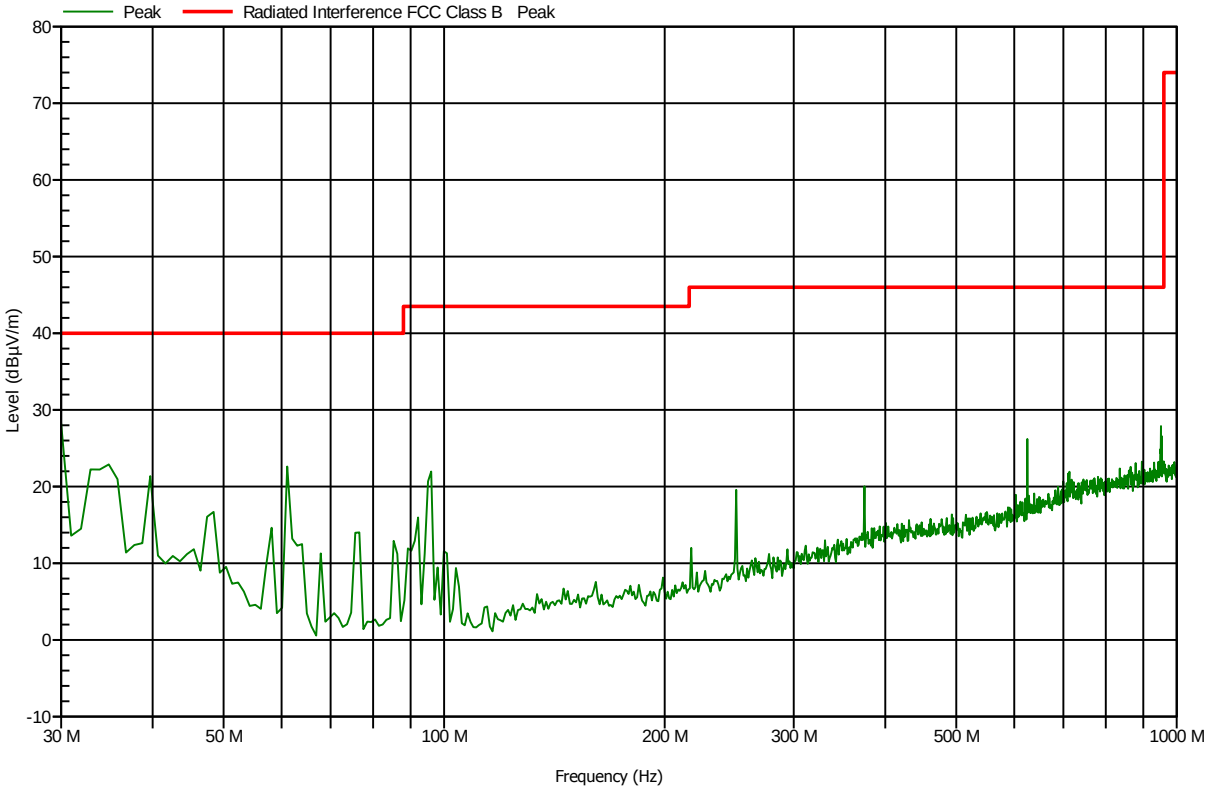
Test Results Plot No 33

30 Mhz-1 GHz Quasi_Peak Spurious Emission

Test & EUT General Information		Receiver Setting	
EUT Name:	WipAir8000 5X	Spect Analyzer	Agilent Technologies N9020A
S/N:	041A04000100	Ref. Level:	70 dBµV
Date of Test:	13.04.2015	RBW:	100 kHz
Test Engineer:	Ilya Arbitman	VBW:	300 kHz
Antenna:	Frankonia gray BTA-L_B 3m	Sweep Time:	Auto [694.64 ms]
Polarization:	Horizontal and Vertical	Pre Amplifier	LNA 10k-1GHz 30dB

TEST REMARKS: Monday, April 13, 2015

BW 20MHz High 5840MHz; 23dBi Flat Antenna



MAXIMUM RESULT DEVIATION:

Detect all peaks above 6 dB below the limit line with a maximum of 6 peaks.

None

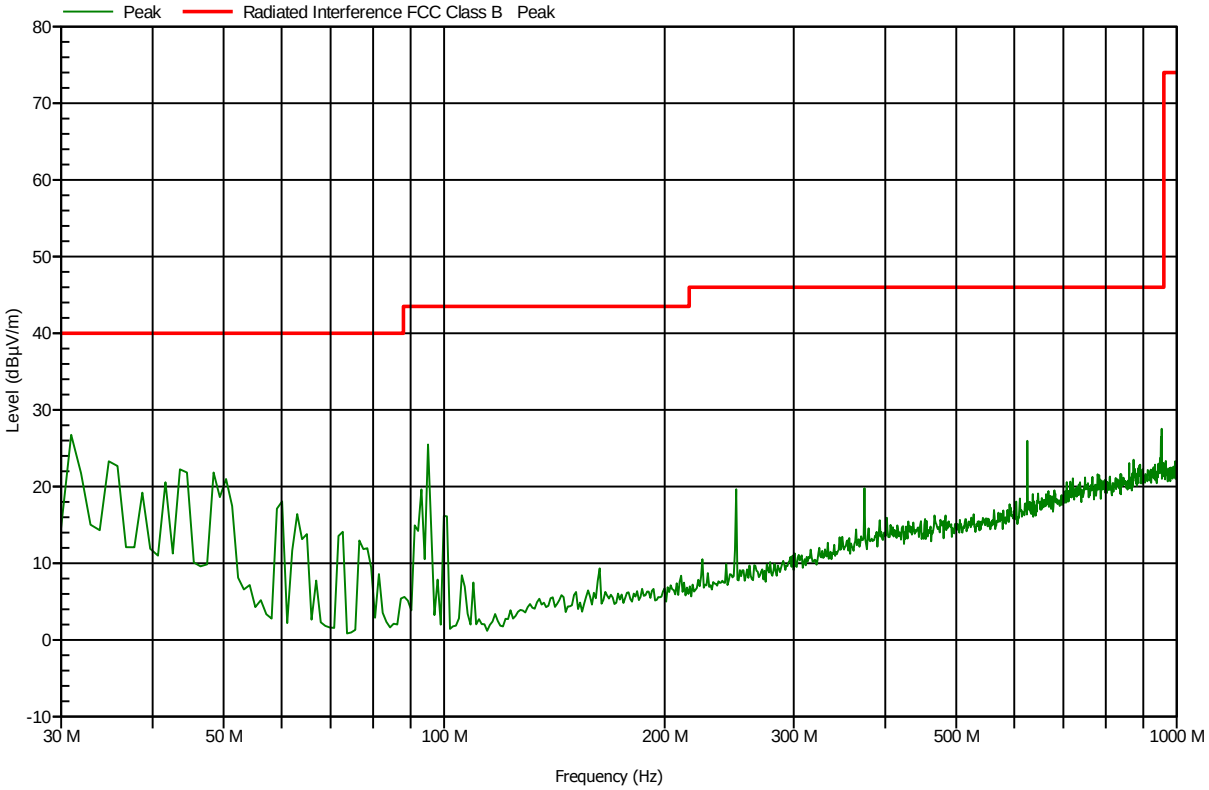
Test Results Plot No 34

30 Mhz-1 GHz Quasi_Peak Spurious Emission

Test & EUT General Information		Receiver Setting	
EUT Name:	WipAir8000 5X	Spect Analyzer	Agilent Technologies N9020A
S/N:	041A04000100	Ref. Level:	70 dBµV
Date of Test:	13.04.2015	RBW:	100 kHz
Test Engineer:	Ilya Arbitman	VBW:	300 kHz
Antenna:	Frankonia gray BTA-L_B 3m	Sweep Time:	Auto [694.64 ms]
Polarization:	Horizontal and Vertical	Pre Amplifier	LNA 10k-1GHz 30dB

TEST REMARKS: Monday, April 13, 2015

BW 40MHz Low 5745MHz; 23dBi Flat Antenna



MAXIMUM RESULT DEVIATION:

Detect all peaks above 6 dB below the limit line with a maximum of 6 peaks.

None

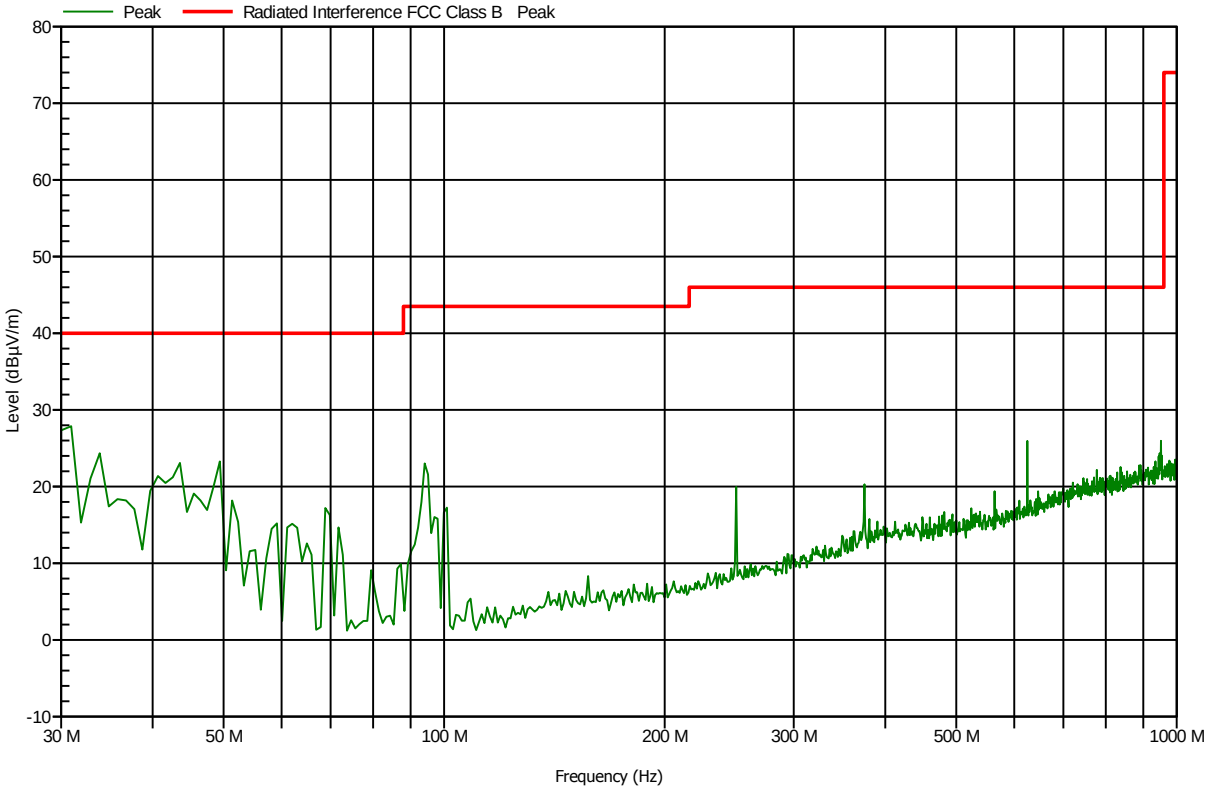
Test Results Plot No 35

30 Mhz-1 GHz Quasi_Peak Spurious Emission

Test & EUT General Information		Receiver Setting	
EUT Name:	WipAir8000 5X	Spect Analyzer	Agilent Technologies N9020A
S/N:	041A04000100	Ref. Level:	70 dBµV
Date of Test:	13.04.2015	RBW:	100 kHz
Test Engineer:	Ilya Arbitman	VBW:	300 kHz
Antenna:	Frankonia gray BTA-L_B 3m	Sweep Time:	Auto [694.64 ms]
Polarization:	Horizontal and Vertical	Pre Amplifier	LNA 10k-1GHz 30dB

TEST REMARKS: Monday, April 13, 2015

BW 40MHz Mid 5785MHz; 23dBi Flat Antenna



MAXIMUM RESULT DEVIATION:

Detect all peaks above 6 dB below the limit line with a maximum of 6 peaks.

None

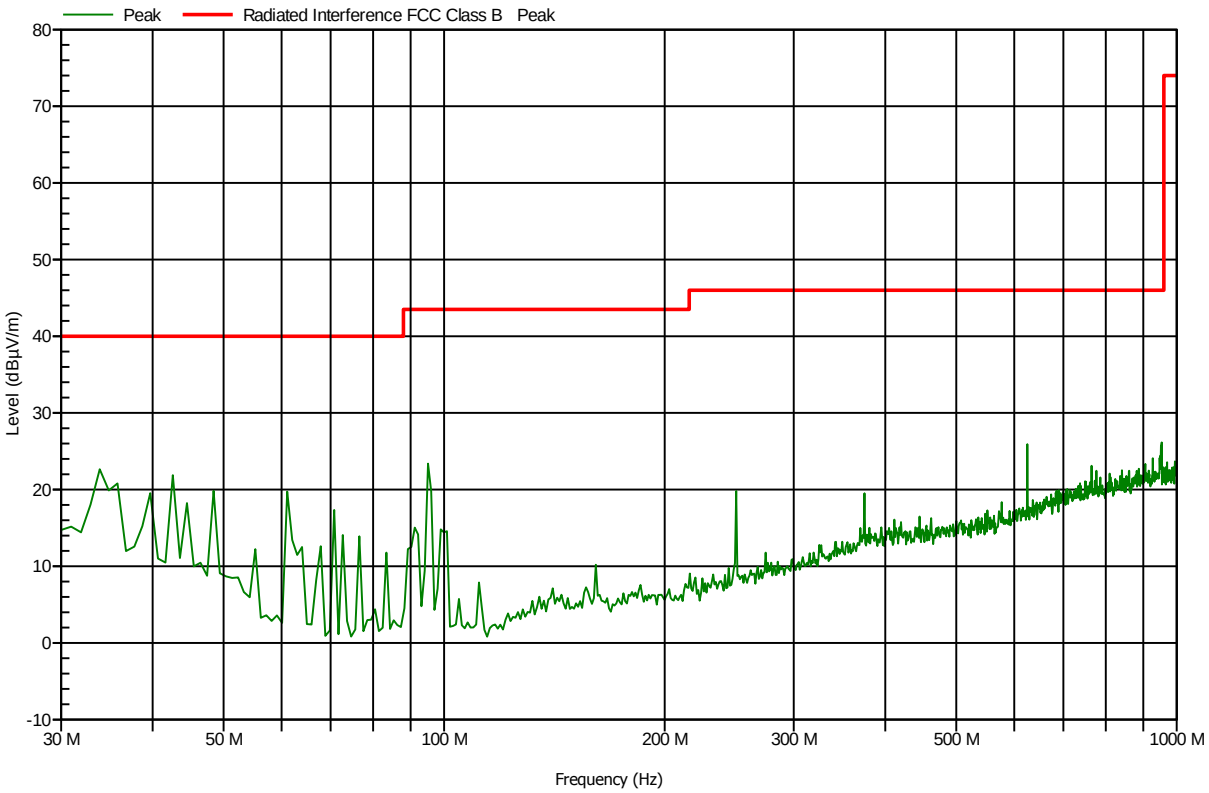
Test Results Plot No 36

30 Mhz-1 GHz Quasi_Peak Spurious Emission

Test & EUT General Information		Receiver Setting	
EUT Name:	WipAir8000 5X	Spect Analyzer	Agilent Technologies N9020A
S/N:	041A04000100	Ref. Level:	70 dBµV
Date of Test:	13.04.2015	RBW:	100 kHz
Test Engineer:	Ilya Arbitman	VBW:	300 kHz
Antenna:	Frankonia gray BTA-L_B 3m	Sweep Time:	Auto [694.64 ms]
Polarization:	Horizontal and Vertical	Pre Amplifier	LNA 10k-1GHz 30dB

TEST REMARKS: Monday, April 13, 2015

BW 40MHz High 5830MHz; 23dBi Flat Antenna



MAXIMUM RESULT DEVIATION:

Detect all peaks above 6 dB below the limit line with a maximum of 6 peaks.

None

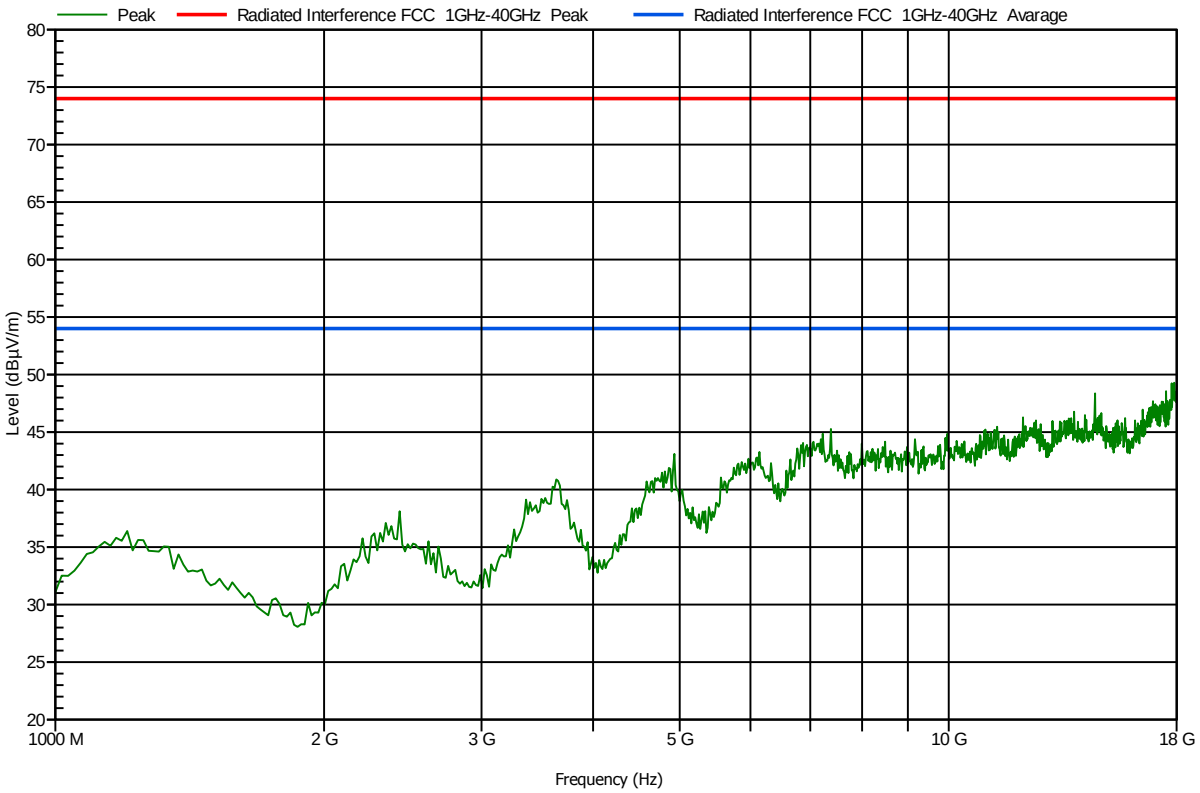
Test Results Plot No 37

1-18 GHz RX Mode Spurious Emission

Test & EUT General Information		Receiver Setting	
EUT Name:	WipAir8000 5X	Spect Analyzer	Agilent Technologies N9020A
S/N:	041A04000100	Ref. Level:	Auto [90 dBµV]
Date of Test:	14.04.2015	RBW:	1000 kHz
Test Engineer:	Ilya Arbitman	VBW:	1000 kHz
Antenna:	ARA DRG-118/A 1-18GHz 1319	Sweep Time:	Auto [170.03 ms]
Polarization:	Horizontal and Vertical	Pre Amplifier	pre amp 1 GHz-18 GHz

TEST REMARKS: Tuesday, April 14, 2015

RX Mode; 23dBi dish antenna



MAXIMUM RESULT DEVIATION:

Detect all peaks above 6 dB below the limit line with a maximum of 6 peaks.

Nr	Frequency (MHz)	PK MaxHold (dBµV/m)	AVG Value (dBµV/m)	PK Limit (dBµV/m)	AVG Limit (dBµV/m)	Result	Angle (degrees)	Height (m)	H/V
1	17883.178	48.1	37.9	74	54	Pass	0	1	V
2	17988.947	49	38.1	74	54	Pass	0	1	V

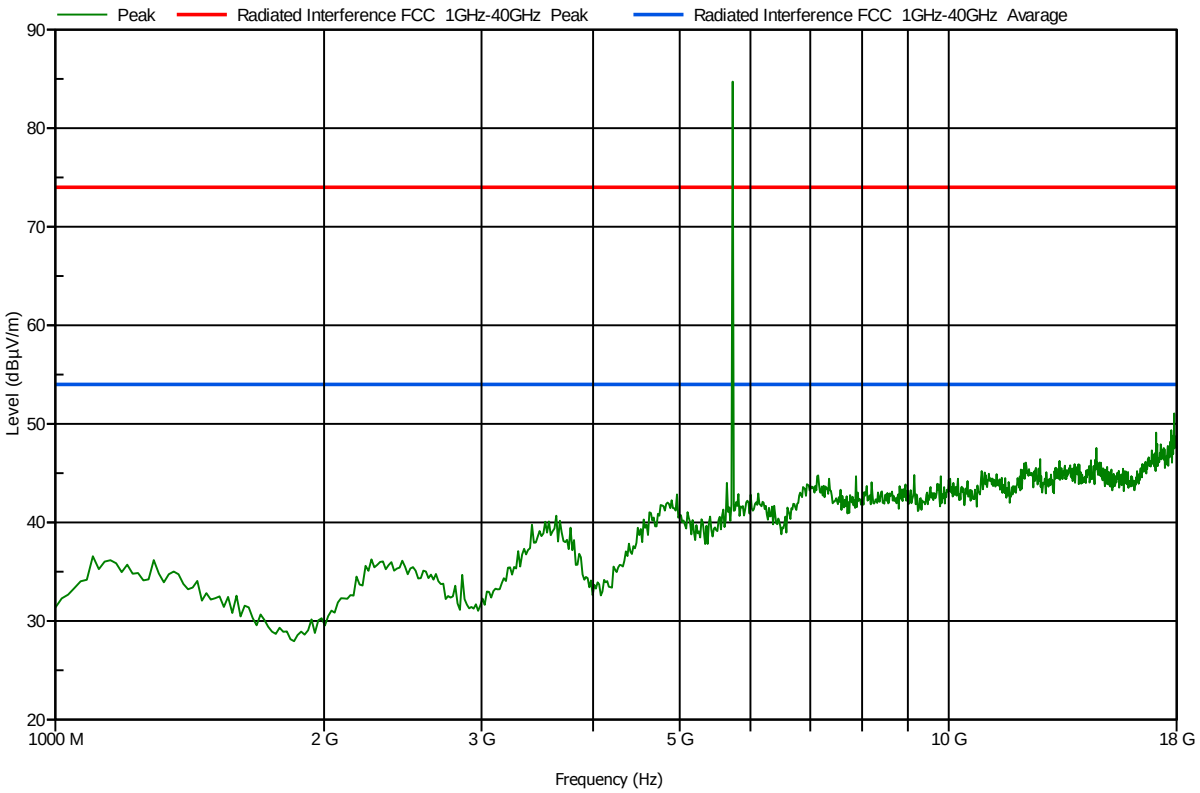
Test Results Plot No 38

1-18 GHz TX Mode Spurious Emission

Test & EUT General Information		Receiver Setting	
EUT Name:	WipAir8000 5X	Spect Analyzer	Agilent Technologies N9020A
S/N:	041A04000100	Ref. Level:	90 dBµV
Date of Test:	14.04.2015	RBW:	1000 kHz
Test Engineer:	Ilya Arbitman	VBW:	1000 kHz
Antenna:	ARA DRG-118/A 1-18GHz 1319	Sweep Time:	Auto [170.03 ms]
Polarization:	Horizontal and Vertical	Pre Amplifier	pre amp 1 GHz-18 GHz

TEST REMARKS: Tuesday, April 14, 2015

BW 5MHz Low 5730MHz; 23dBi dish antenna



MAXIMUM RESULT DEVIATION:

Detect all peaks above 6 dB below the limit line with a maximum of 6 peaks.

Nr	Frequency (MHz)	PK MaxHold (dBµV/m)	AVG Value (dBµV/m)	PK Limit (dBµV/m)	AVG Limit (dBµV/m)	Result	Angle (degrees)	Height (m)	H/V
1	5731.235	87.3	75.5	74	54	Fail	0	1	V
2	17919.169	48.2	37.9	74	54	Pass	0	1	V

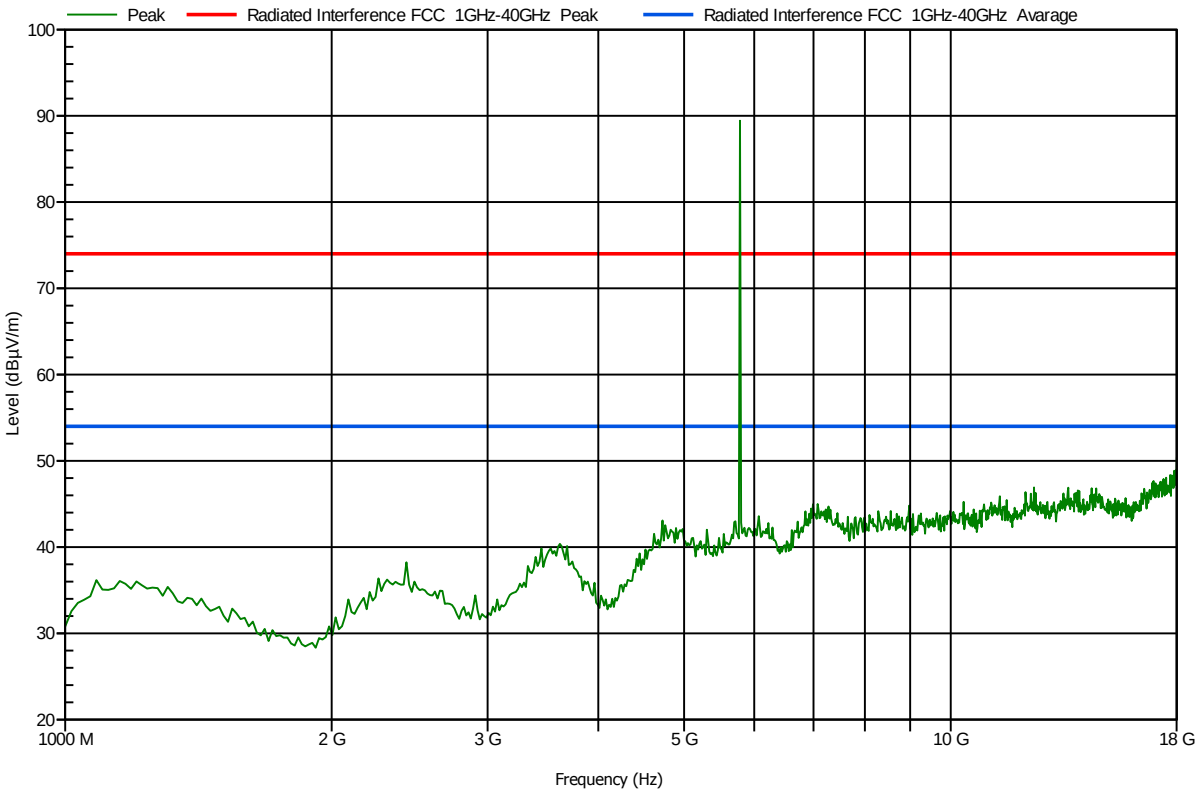
Test Results Plot No 39

1-18 GHz TX Mode Spurious Emission

Test & EUT General Information		Receiver Setting	
EUT Name:	WipAir8000 5X	Spect Analyzer	Agilent Technologies N9020A
S/N:	041A04000100	Ref. Level:	Auto [90 dBµV]
Date of Test:	14.04.2015	RBW:	1000 kHz
Test Engineer:	Ilya Arbitman	VBW:	1000 kHz
Antenna:	ARA DRG-118/A 1-18GHz 1319	Sweep Time:	Auto [170.03 ms]
Polarization:	Horizontal and Vertical	Pre Amplifier	pre amp 1 GHz-18 GHz

TEST REMARKS: Tuesday, April 14, 2015

BW 5MHz Mid 5785MHz; 23dBi dish antenna



MAXIMUM RESULT DEVIATION:

Detect all peaks above 6 dB below the limit line with a maximum of 6 peaks.

Nr	Frequency (MHz)	PK MaxHold (dBµV/m)	AVG Value (dBµV/m)	PK Limit (dBµV/m)	AVG Limit (dBµV/m)	Result	Angle (degrees)	Height (m)	H/V
1	5781.782	89.4	54.9	74	54	Fail	0	1	V
2	17937.037	48.2	37.9	74	54	Pass	0	1	H

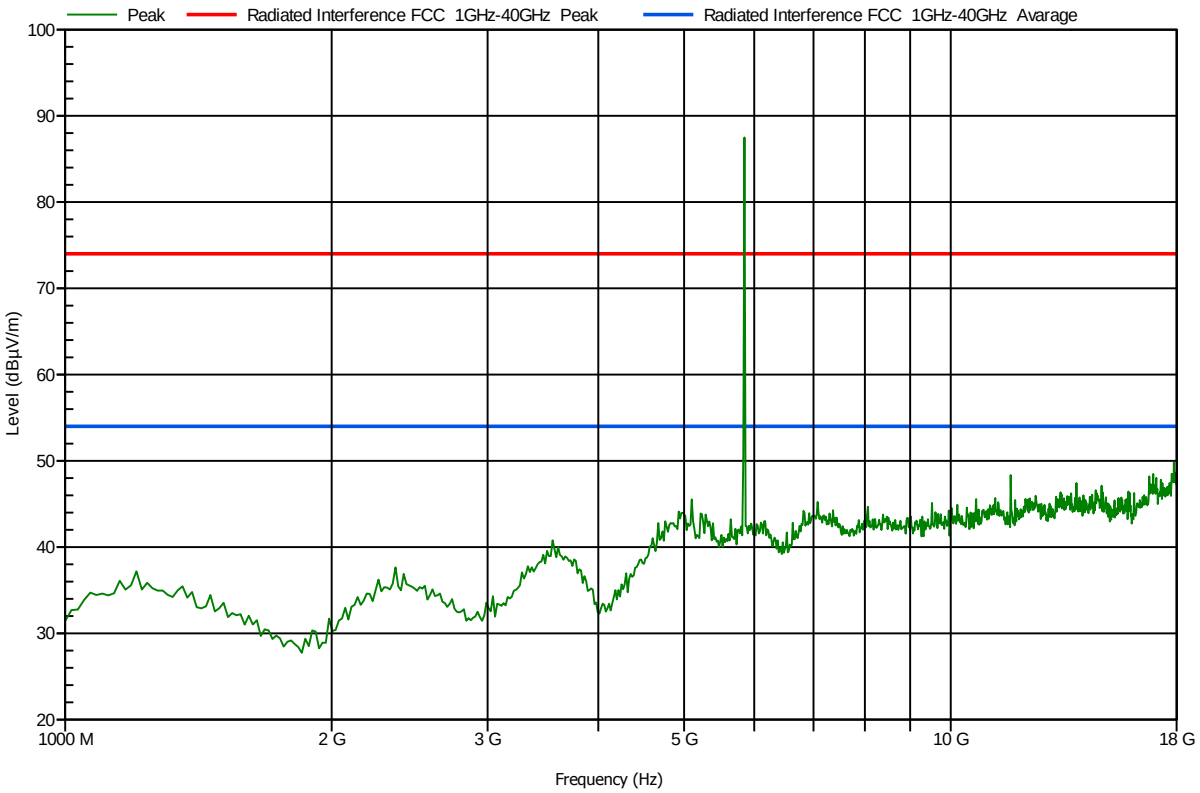
Test Results Plot No 40

1-18 GHz TX Mode Spurious Emission

Test & EUT General Information		Receiver Setting	
EUT Name:	WipAir8000 5X	Spect Analyzer	Agilent Technologies N9020A
S/N:	041A04000100	Ref. Level:	Auto [90 dBµV]
Date of Test:	14.04.2015	RBW:	1000 kHz
Test Engineer:	Ilya Arbitman	VBW:	1000 kHz
Antenna:	ARA DRG-118/A 1-18GHz 1319	Sweep Time:	Auto [170.03 ms]
Polarization:	Horizontal and Vertical	Pre Amplifier	pre amp 1 GHz-18 GHz

TEST REMARKS: Tuesday, April 14, 2015

BW 5MHz High 5845MHz; 23dBi dish antenna



MAXIMUM RESULT DEVIATION:

Detect all peaks above 6 dB below the limit line with a maximum of 6 peaks.

Nr	Frequency (MHz)	PK MaxHold (dBµV/m)	AVG Value (dBµV/m)	PK Limit (dBµV/m)	AVG Limit (dBµV/m)	Result	Angle (degrees)	Height (m)	H/V
1	5849.85	87.5	36	74	54	Fail	0	1	H
2	17857.653	48.7	37.7	74	54	Pass	0	1	H

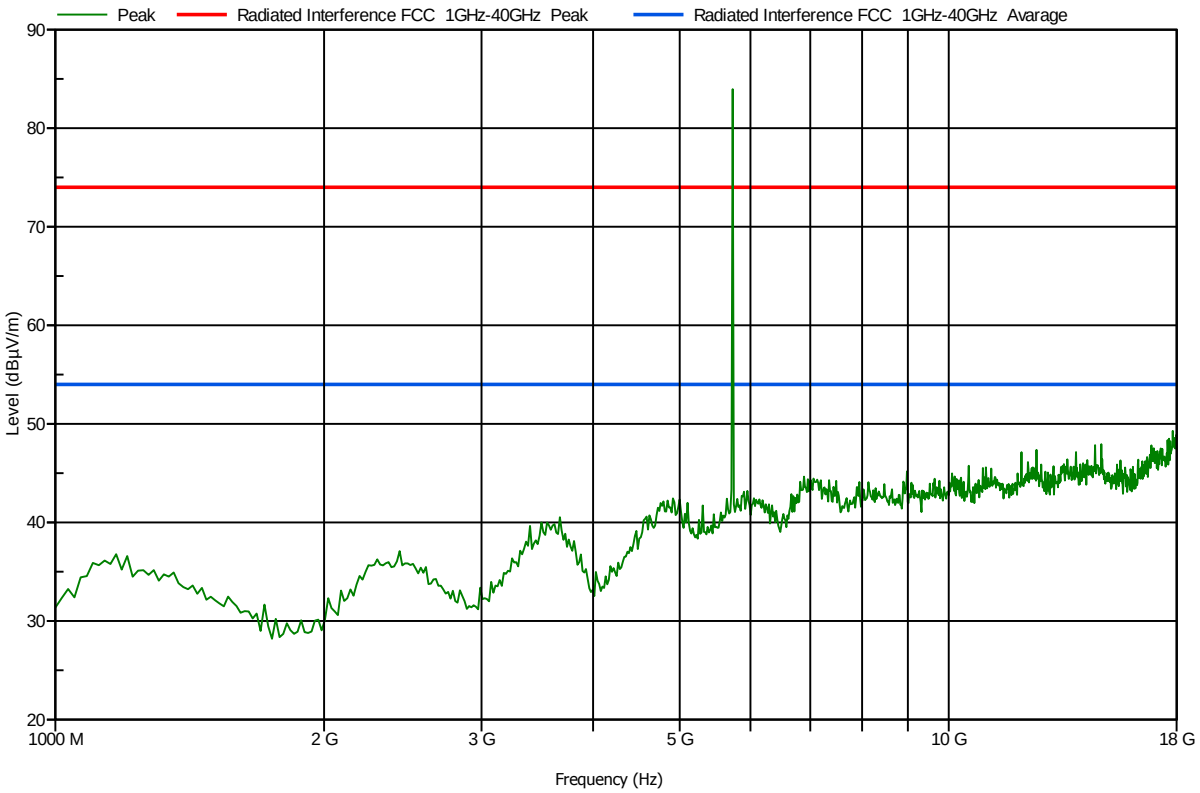
Test Results Plot No 41

1-18 GHz TX Mode Spurious Emission

Test & EUT General Information		Receiver Setting	
EUT Name:	WipAir8000 5X	Spect Analyzer	Agilent Technologies N9020A
S/N:	041A04000100	Ref. Level:	Auto [90 dBµV]
Date of Test:	14.04.2015	RBW:	1000 kHz
Test Engineer:	Ilya Arbitman	VBW:	1000 kHz
Antenna:	ARA DRG-118/A 1-18GHz 1319	Sweep Time:	Auto [170.03 ms]
Polarization:	Horizontal and Vertical	Pre Amplifier	pre amp 1 GHz-18 GHz

TEST REMARKS: Tuesday, April 14, 2015

BW 10MHz Low 5730MHz; 23dBi dish antenna



MAXIMUM RESULT DEVIATION:

Detect all peaks above 6 dB below the limit line with a maximum of 6 peaks.

Nr	Frequency (MHz)	PK MaxHold (dBµV/m)	AVG Value (dBµV/m)	PK Limit (dBµV/m)	AVG Limit (dBµV/m)	Result	Angle (degrees)	Height (m)	H/V
1	5726.156	84.9	74.7	74	54	Fail	0	1	H
2	17814.194	49.2	37.5	74	54	Pass	0	1	H

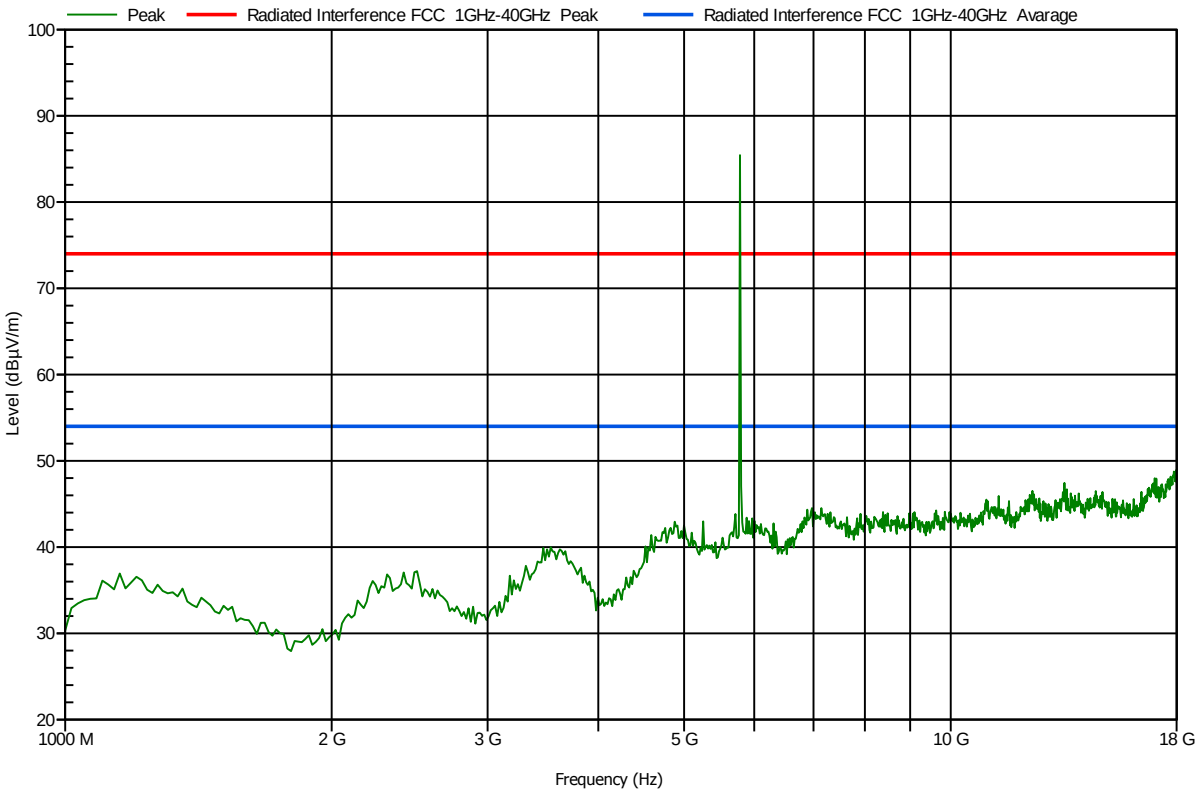
Test Results Plot No 42

1-18 GHz TX Mode Spurious Emission

Test & EUT General Information		Receiver Setting	
EUT Name:	WipAir8000 5X	Spect Analyzer	Agilent Technologies N9020A
S/N:	041A04000100	Ref. Level:	Auto [90 dBµV]
Date of Test:	14.04.2015	RBW:	1000 kHz
Test Engineer:	Ilya Arbitman	VBW:	1000 kHz
Antenna:	ARA DRG-118/A 1-18GHz 1319	Sweep Time:	Auto [170.03 ms]
Polarization:	Horizontal and Vertical	Pre Amplifier	pre amp 1 GHz-18 GHz

TEST REMARKS: Tuesday, April 14, 2015

BW 10MHz Mid 5785MHz; 23dBi dish antenna



MAXIMUM RESULT DEVIATION:

Detect all peaks above 6 dB below the limit line with a maximum of 6 peaks.

Nr	Frequency (MHz)	PK MaxHold (dBµV/m)	AVG Value (dBµV/m)	PK Limit (dBµV/m)	AVG Limit (dBµV/m)	Result	Angle (degrees)	Height (m)	H/V
1	5785.951	85.7	75.9	74	54	Fail	0	1	H
2	17951.153	48.7	37.5	74	54	Pass	0	1	H

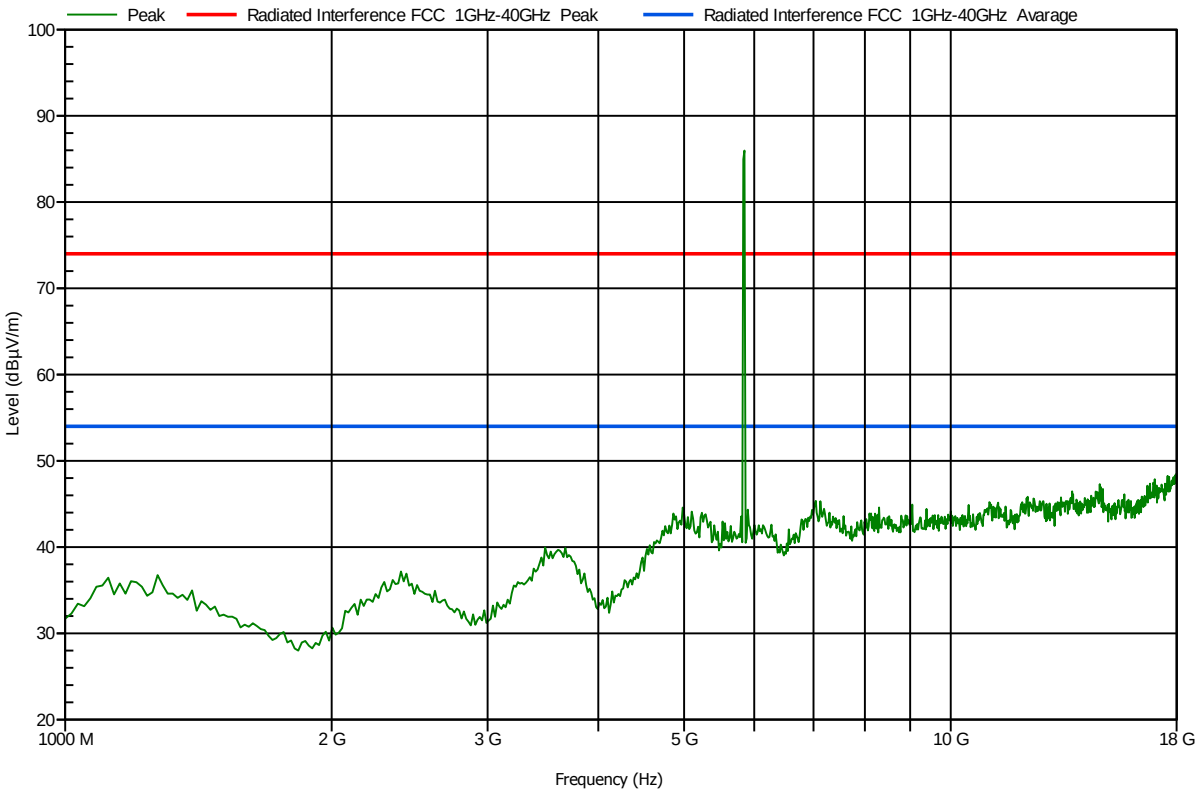
Test Results Plot No 43

1-18 GHz TX Mode Spurious Emission

Test & EUT General Information		Receiver Setting	
EUT Name:	WipAir8000 5X	Spect Analyzer	Agilent Technologies N9020A
S/N:	041A04000100	Ref. Level:	Auto [90 dBµV]
Date of Test:	14.04.2015	RBW:	1000 kHz
Test Engineer:	Ilya Arbitman	VBW:	1000 kHz
Antenna:	ARA DRG-118/A 1-18GHz 1319	Sweep Time:	Auto [170.03 ms]
Polarization:	Horizontal and Vertical	Pre Amplifier	pre amp 1 GHz-18 GHz

TEST REMARKS: Tuesday, April 14, 2015

BW 10MHz High 5845MHz; 23dBi dish antenna



MAXIMUM RESULT DEVIATION:

Detect all peaks above 6 dB below the limit line with a maximum of 6 peaks.

Nr	Frequency (MHz)	PK MaxHold (dBµV/m)	AVG Value (dBµV/m)	PK Limit (dBµV/m)	AVG Limit (dBµV/m)	Result	Angle (degrees)	Height (m)	H/V
1	5849.85	86	57	74	54	Fail	0	1	V
2	17919.032	50.3	37.8	74	54	Pass	0	1	H

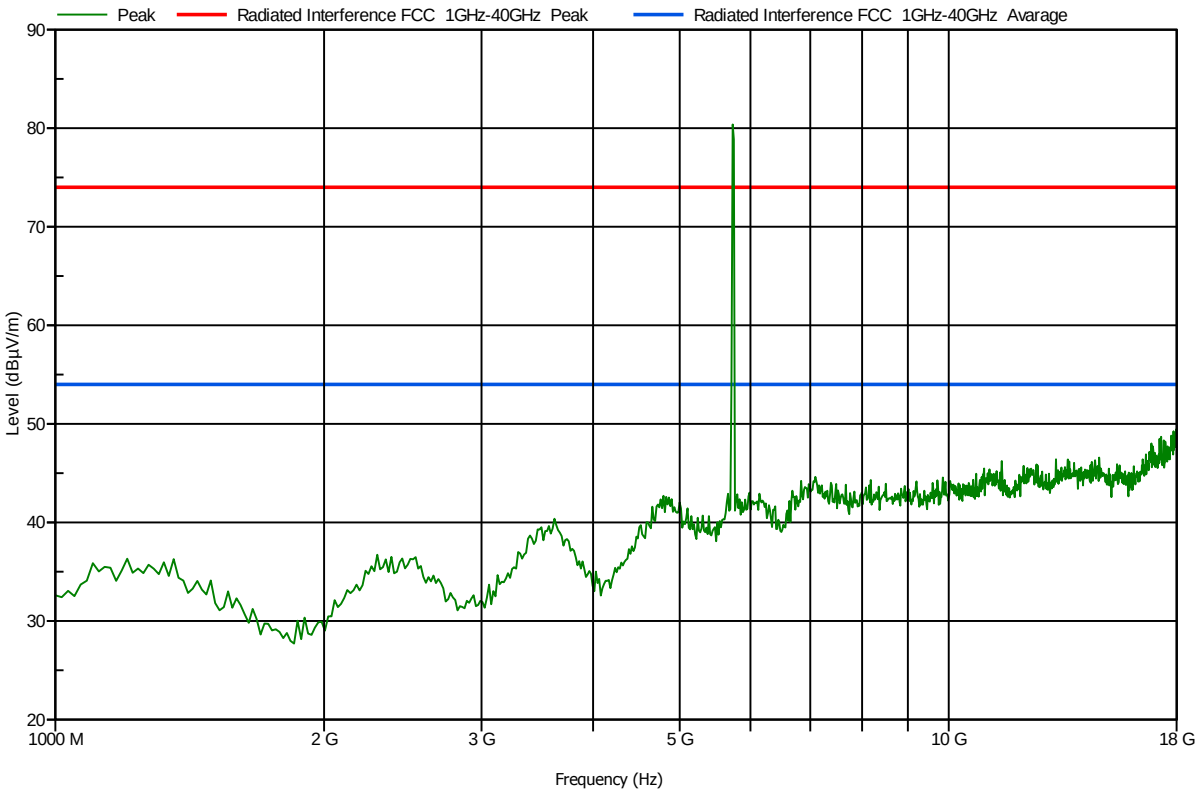
Test Results Plot No 44

1-18 GHz TX Mode Spurious Emission

Test & EUT General Information		Receiver Setting	
EUT Name:	WipAir8000 5X	Spect Analyzer	Agilent Technologies N9020A
S/N:	041A04000100	Ref. Level:	Auto [90 dBµV]
Date of Test:	14.04.2015	RBW:	1000 kHz
Test Engineer:	Ilya Arbitman	VBW:	1000 kHz
Antenna:	ARA DRG-118/A 1-18GHz 1319	Sweep Time:	Auto [170.03 ms]
Polarization:	Horizontal and Vertical	Pre Amplifier	pre amp 1 GHz-18 GHz

TEST REMARKS: Tuesday, April 14, 2015

BW 20MHz Low 5735MHz; 23dBi dish antenna



MAXIMUM RESULT DEVIATION:

Detect all peaks above 6 dB below the limit line with a maximum of 6 peaks.

Nr	Frequency (MHz)	PK MaxHold (dBµV/m)	AVG Value (dBµV/m)	PK Limit (dBµV/m)	AVG Limit (dBµV/m)	Result	Angle (degrees)	Height (m)	H/V
1	5736.538	81.2	72.5	74	54	Fail	0	1	H
2	17965.966	48.4	37.6	74	54	Pass	0	1	H

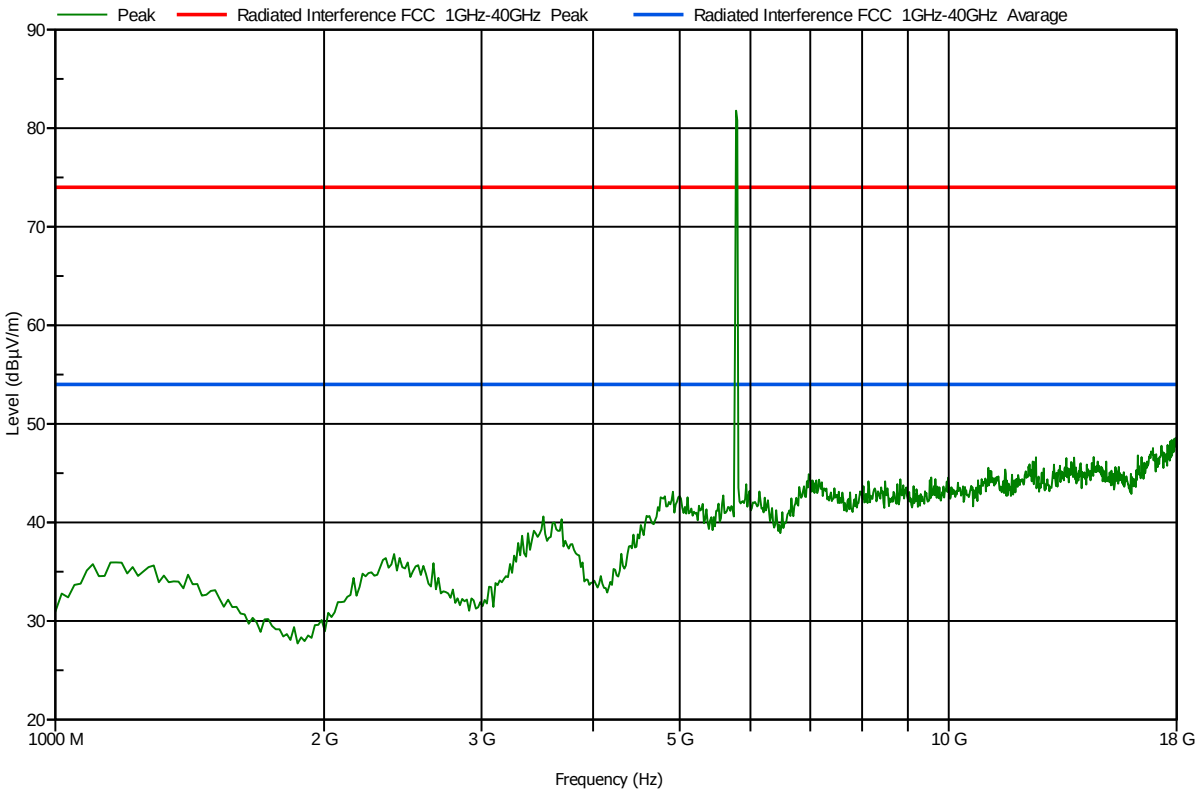
Test Results Plot No 45

1-18 GHz TX Mode Spurious Emission

Test & EUT General Information		Receiver Setting	
EUT Name:	WipAir8000 5X	Spect Analyzer	Agilent Technologies N9020A
S/N:	041A04000100	Ref. Level:	Auto [90 dBµV]
Date of Test:	14.04.2015	RBW:	1000 kHz
Test Engineer:	Ilya Arbitman	VBW:	1000 kHz
Antenna:	ARA DRG-118/A 1-18GHz 1319	Sweep Time:	Auto [170.03 ms]
Polarization:	Horizontal and Vertical	Pre Amplifier	pre amp 1 GHz-18 GHz

TEST REMARKS: Tuesday, April 14, 2015

BW 20MHz Mid 5785MHz; 23dBi dish antenna



MAXIMUM RESULT DEVIATION:

Detect all peaks above 6 dB below the limit line with a maximum of 6 peaks.

Nr	Frequency (MHz)	PK MaxHold (dBµV/m)	AVG Value (dBµV/m)	PK Limit (dBµV/m)	AVG Limit (dBµV/m)	Result	Angle (degrees)	Height (m)	H/V
1	5781.192	83.2	73.8	74	54	Fail	0	1	H
2	17895.771	48.8	37.7	74	54	Pass	0	1	H

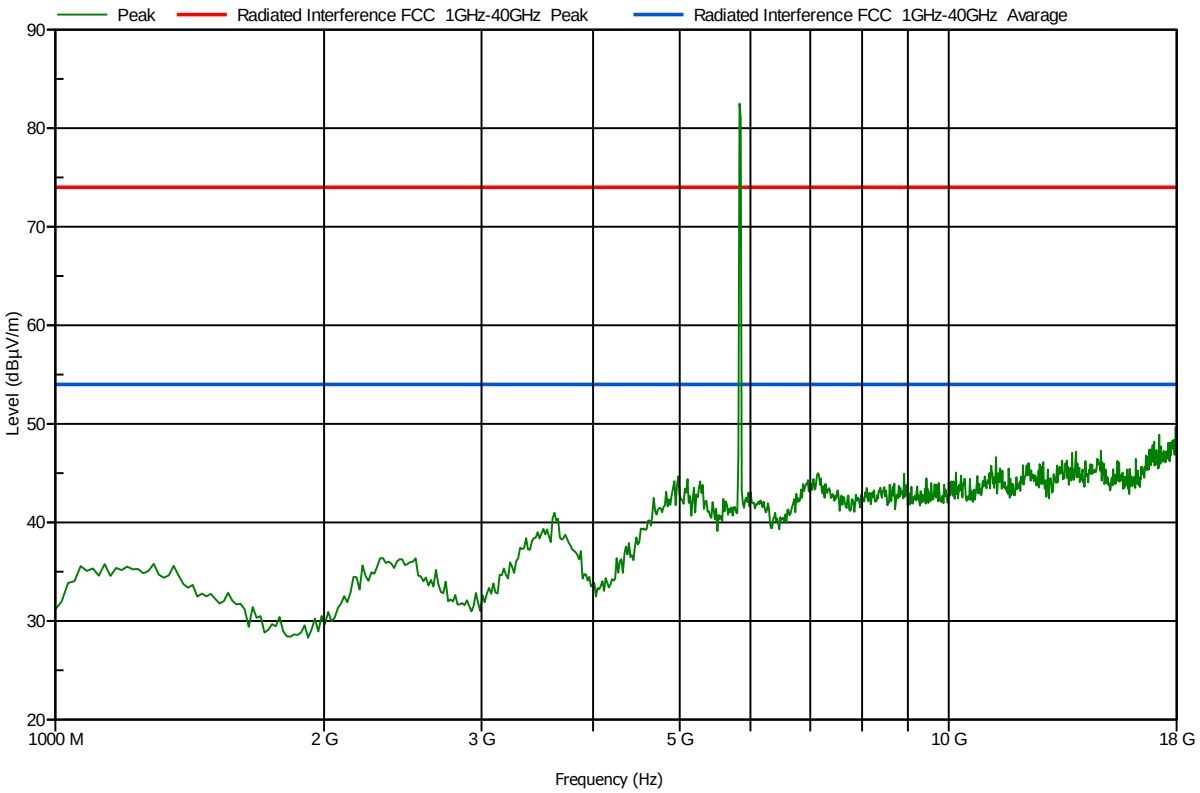
Test Results Plot No 46

1-18 GHz TX Mode Spurious Emission

Test & EUT General Information		Receiver Setting	
EUT Name:	WipAir8000 5X	Spect Analyzer	Agilent Technologies N9020A
S/N:	041A04000100	Ref. Level:	Auto [90 dBµV]
Date of Test:	14.04.2015	RBW:	1000 kHz
Test Engineer:	Ilya Arbitman	VBW:	1000 kHz
Antenna:	ARA DRG-118/A 1-18GHz 1319	Sweep Time:	Auto [170.03 ms]
Polarization:	Horizontal and Vertical	Pre Amplifier	pre amp 1 GHz-18 GHz

TEST REMARKS: Tuesday, April 14, 2015

BW 20MHz High 5840MHz; 23dBi dish antenna



MAXIMUM RESULT DEVIATION:

Detect all peaks above 6 dB below the limit line with a maximum of 6 peaks.

Nr	Frequency (MHz)	PK MaxHold (dBµV/m)	AVG Value (dBµV/m)	PK Limit (dBµV/m)	AVG Limit (dBµV/m)	Result	Angle (degrees)	Height (m)	H/V
1	5836.394	84	74.2	74	54	Fail	0	1	V
2	17932.988	49.5	38	74	54	Pass	0	1	H

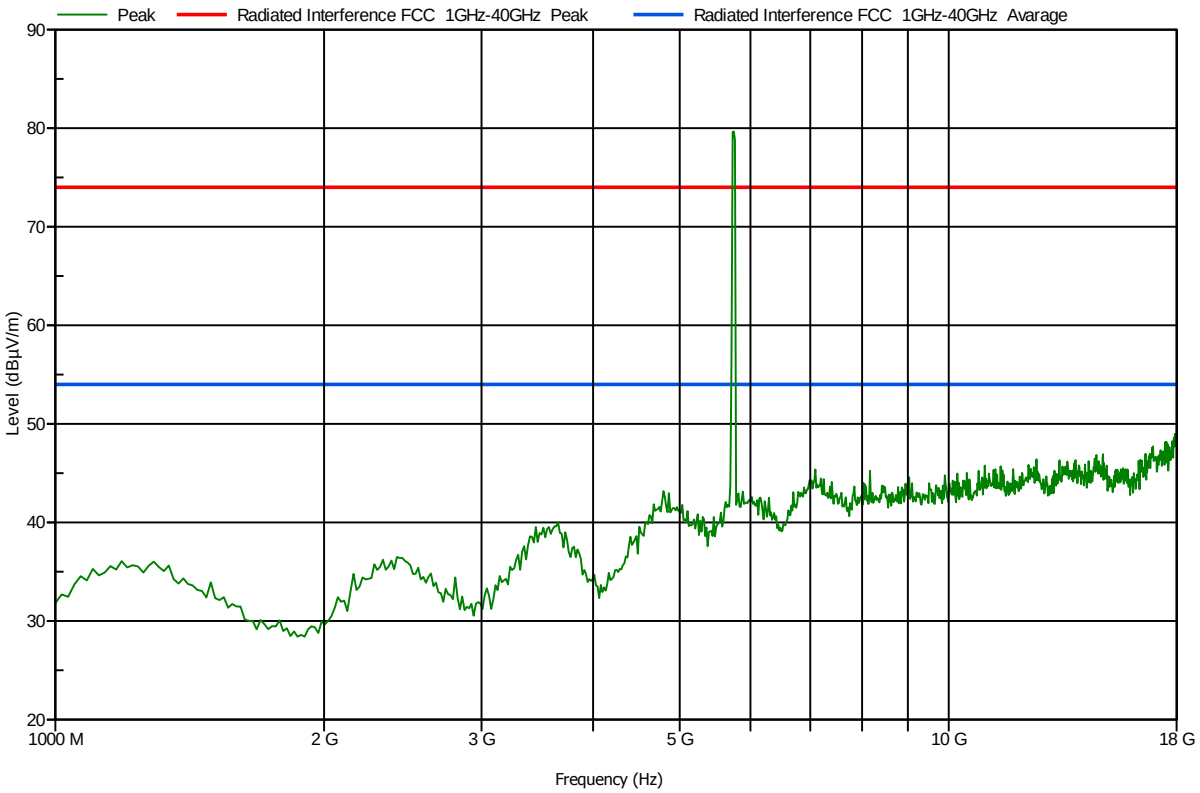
Test Results Plot No 47

1-18 GHz TX Mode Spurious Emission

Test & EUT General Information		Receiver Setting	
EUT Name:	WipAir8000 5X	Spect Analyzer	Agilent Technologies N9020A
S/N:	041A04000100	Ref. Level:	Auto [90 dBµV]
Date of Test:	14.04.2015	RBW:	1000 kHz
Test Engineer:	Ilya Arbitman	VBW:	1000 kHz
Antenna:	ARA DRG-118/A 1-18GHz 1319	Sweep Time:	Auto [170.03 ms]
Polarization:	Horizontal and Vertical	Pre Amplifier	pre amp 1 GHz-18 GHz

TEST REMARKS: Tuesday, April 14, 2015

BW 40MHz Low 5745MHz; 23dBi dish antenna



MAXIMUM RESULT DEVIATION:

Detect all peaks above 6 dB below the limit line with a maximum of 6 peaks.

Nr	Frequency (MHz)	PK MaxHold (dBµV/m)	AVG Value (dBµV/m)	PK Limit (dBµV/m)	AVG Limit (dBµV/m)	Result	Angle (degrees)	Height (m)	H/V
1	5752.338	82.6	72.2	74	54	Fail	0	1	V
2	17998.877	48.8	37.9	74	54	Pass	0	1	V

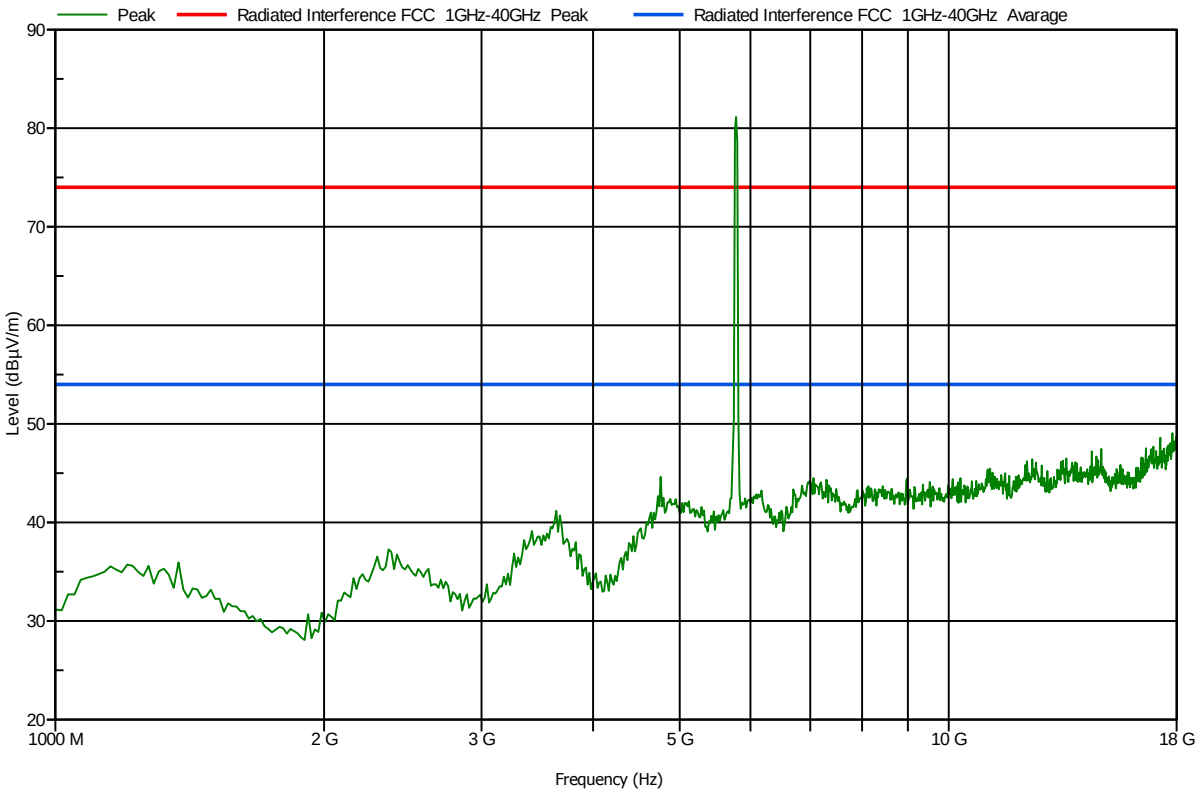
Test Results Plot No 48

1-18 GHz TX Mode Spurious Emission

Test & EUT General Information		Receiver Setting	
EUT Name:	WipAir8000 5X	Spect Analyzer	Agilent Technologies N9020A
S/N:	041A04000100	Ref. Level:	Auto [90 dBµV]
Date of Test:	14.04.2015	RBW:	1000 kHz
Test Engineer:	Ilya Arbitman	VBW:	1000 kHz
Antenna:	ARA DRG-118/A 1-18GHz 1319	Sweep Time:	Auto [170.03 ms]
Polarization:	Horizontal and Vertical	Pre Amplifier	pre amp 1 GHz-18 GHz

TEST REMARKS: Tuesday, April 14, 2015

BW 40MHz Mid 5785MHz; 23dBi dish antenna



MAXIMUM RESULT DEVIATION:

Detect all peaks above 6 dB below the limit line with a maximum of 6 peaks.

Nr	Frequency (MHz)	PK MaxHold (dBµV/m)	AVG Value (dBµV/m)	PK Limit (dBµV/m)	AVG Limit (dBµV/m)	Result	Angle (degrees)	Height (m)	H/V
1	5775.619	81.7	71.1	74	54	Fail	0	1	H
2	17813.978	48.8	37.6	74	54	Pass	0	1	V

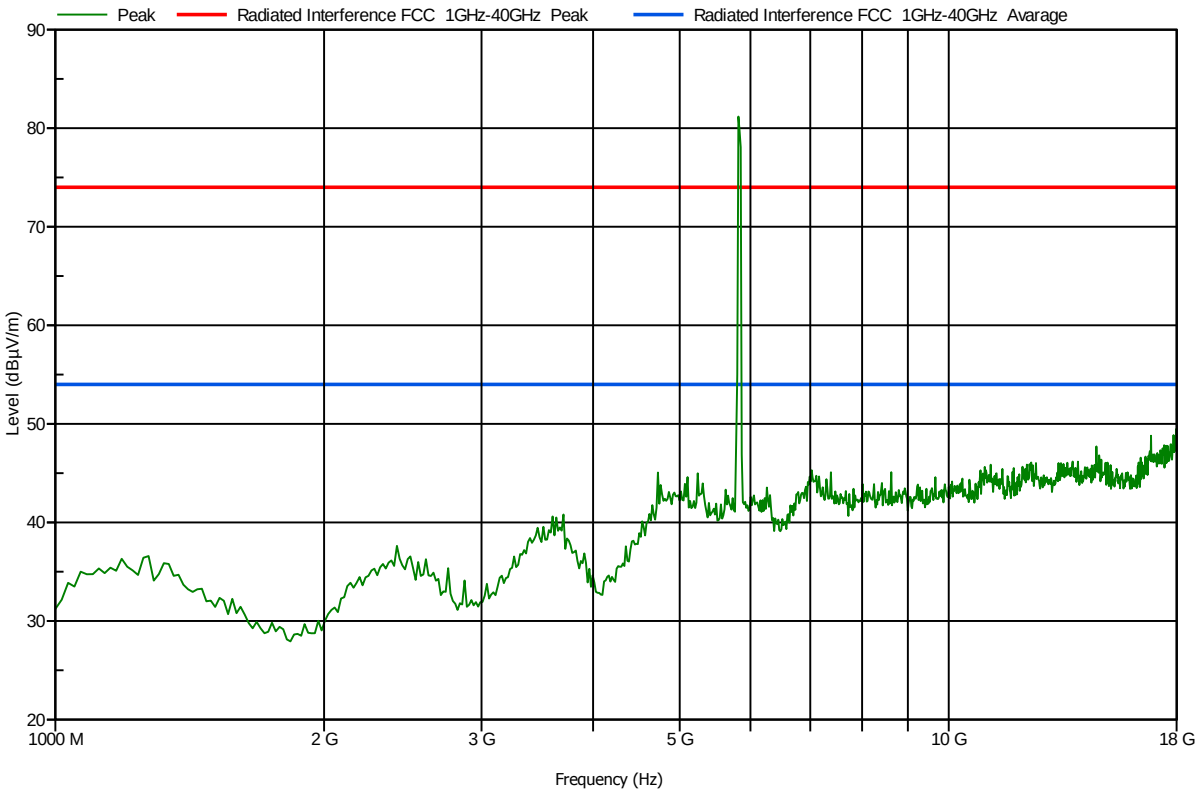
Test Results Plot No 49

1-18 GHz TX Mode Spurious Emission

Test & EUT General Information		Receiver Setting	
EUT Name:	WipAir8000 5X	Spect Analyzer	Agilent Technologies N9020A
S/N:	041A04000100	Ref. Level:	Auto [90 dBµV]
Date of Test:	14.04.2015	RBW:	1000 kHz
Test Engineer:	Ilya Arbitman	VBW:	1000 kHz
Antenna:	ARA DRG-118/A 1-18GHz 1319	Sweep Time:	Auto [170.03 ms]
Polarization:	Horizontal and Vertical	Pre Amplifier	pre amp 1 GHz-18 GHz

TEST REMARKS: Tuesday, April 14, 2015

BW 40MHz High 5830MHz; 23dBi dish antenna



MAXIMUM RESULT DEVIATION:

Detect all peaks above 6 dB below the limit line with a maximum of 6 peaks.

Nr	Frequency (MHz)	PK MaxHold (dBµV/m)	AVG Value (dBµV/m)	PK Limit (dBµV/m)	AVG Limit (dBµV/m)	Result	Angle (degrees)	Height (m)	H/V
1	5821.109	82.2	71.6	74	54	Fail	0	1	V
2	17983.664	48.2	38	74	54	Pass	0	1	H

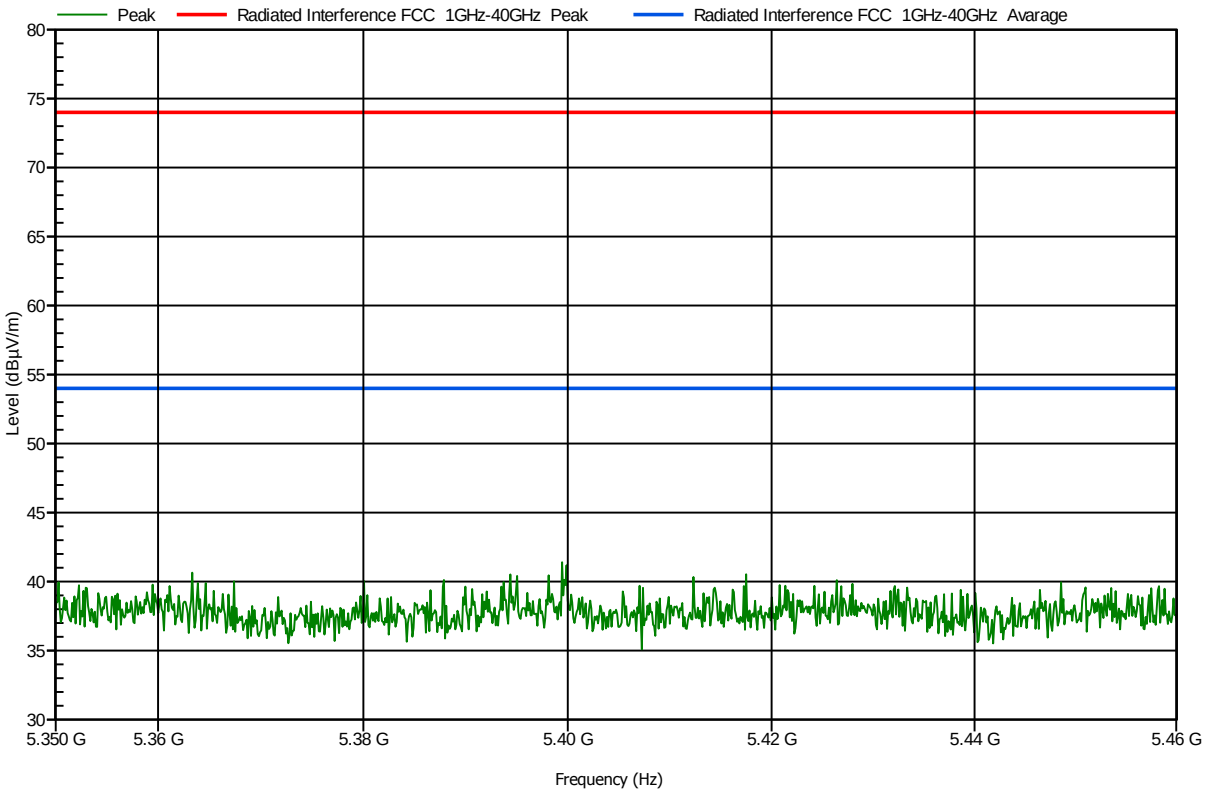
Test Results Plot No 50

5.35-5.46 GHz TX Mode Spurious Emission

Test & EUT General Information		Receiver Setting	
EUT Name:	WipAir8000 5X	Spect Analyzer	Agilent Technologies N9020A
S/N:	041A04000100	Ref. Level:	Auto [90 dBµV]
Date of Test:	14.04.2015	RBW:	1000 kHz
Test Engineer:	Ilya Arbitman	VBW:	1000 kHz
Antenna:	ARA DRG-118/A 1-18GHz 1319	Sweep Time:	Auto [20.05 ms]
Polarization:	Horizontal and Vertical	Pre Amplifier	pre amp 1 GHz-18 GHz

TEST REMARKS: Tuesday, April 14, 2015

BW 5MHz Low 5730MHz; 23dBi dish antenna



MAXIMUM RESULT DEVIATION:

Detect all peaks above 6 dB below the limit line with a maximum of 6 peaks.

None

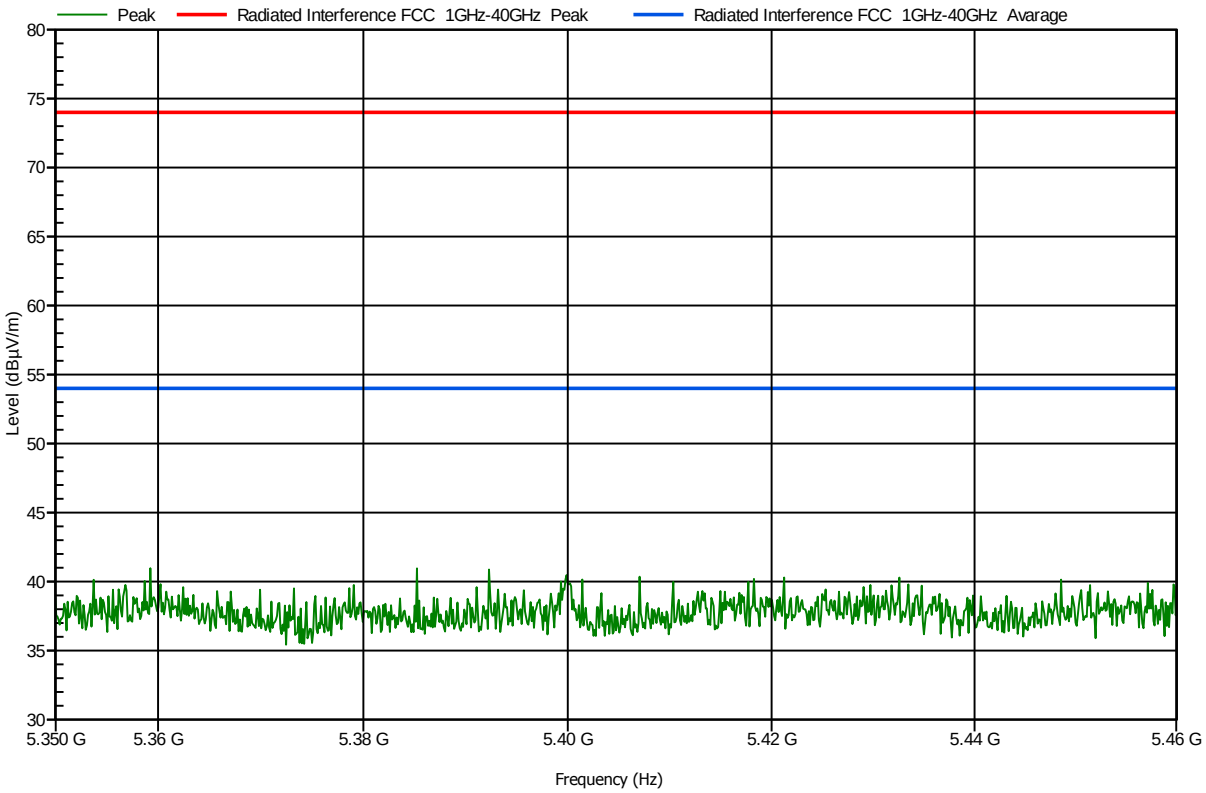
Test Results Plot No 51

5.35-5.46 GHz TX Mode Spurious Emission

Test & EUT General Information		Receiver Setting	
EUT Name:	WipAir8000 5X	Spect Analyzer	Agilent Technologies N9020A
S/N:	041A04000100	Ref. Level:	Auto [90 dBµV]
Date of Test:	14.04.2015	RBW:	1000 kHz
Test Engineer:	Ilya Arbitman	VBW:	1000 kHz
Antenna:	ARA DRG-118/A 1-18GHz 1319	Sweep Time:	Auto [20.05 ms]
Polarization:	Horizontal and Vertical	Pre Amplifier	pre amp 1 GHz-18 GHz

TEST REMARKS: Tuesday, April 14, 2015

BW 5MHz Mid 5785MHz; 23dBi dish antenna



MAXIMUM RESULT DEVIATION:

Detect all peaks above 6 dB below the limit line with a maximum of 6 peaks.

None

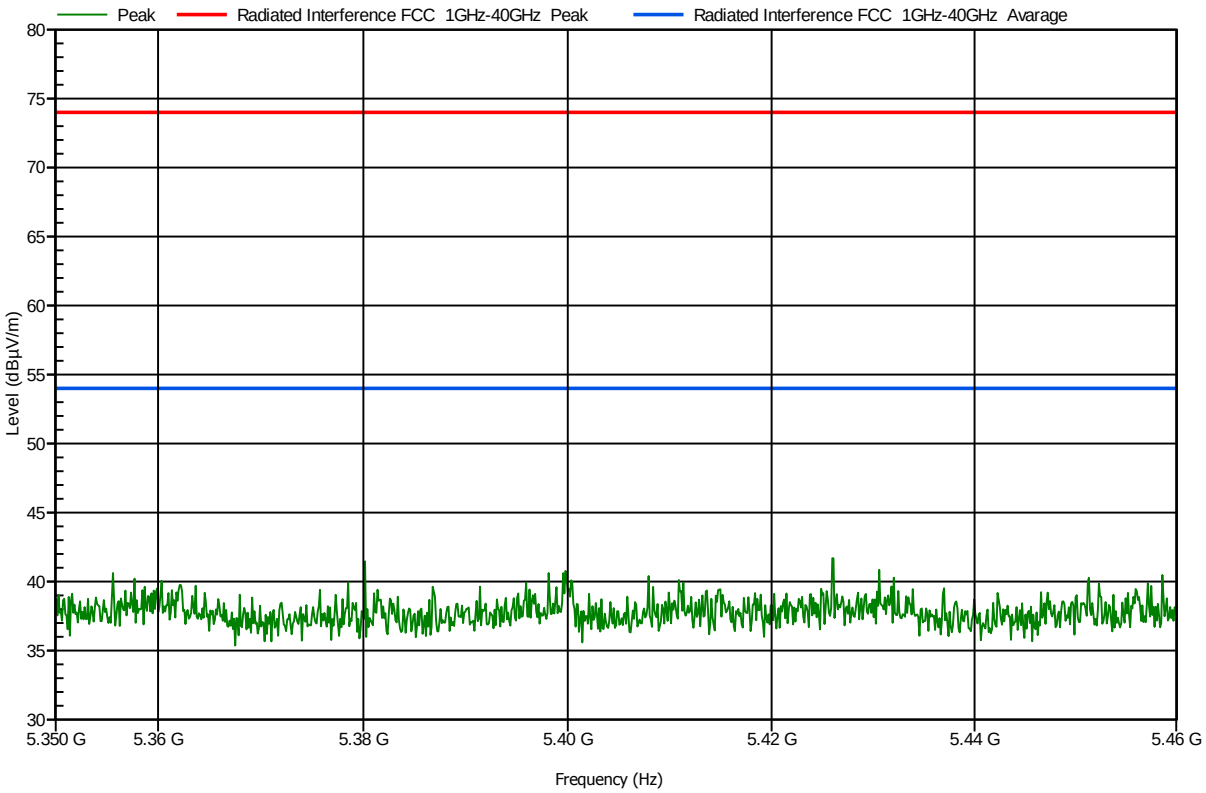
Test Results Plot No 52

5.35-5.46 GHz TX Mode Spurious Emission

Test & EUT General Information		Receiver Setting	
EUT Name:	WipAir8000 5X	Spect Analyzer	Agilent Technologies N9020A
S/N:	041A04000100	Ref. Level:	Auto [90 dBµV]
Date of Test:	14.04.2015	RBW:	1000 kHz
Test Engineer:	Ilya Arbitman	VBW:	1000 kHz
Antenna:	ARA DRG-118/A 1-18GHz 1319	Sweep Time:	Auto [20.05 ms]
Polarization:	Horizontal and Vertical	Pre Amplifier	pre amp 1 GHz-18 GHz

TEST REMARKS: Tuesday, April 14, 2015

BW 5MHz High 5845MHz; 23dBi dish antenna



MAXIMUM RESULT DEVIATION:

Detect all peaks above 6 dB below the limit line with a maximum of 6 peaks.

None

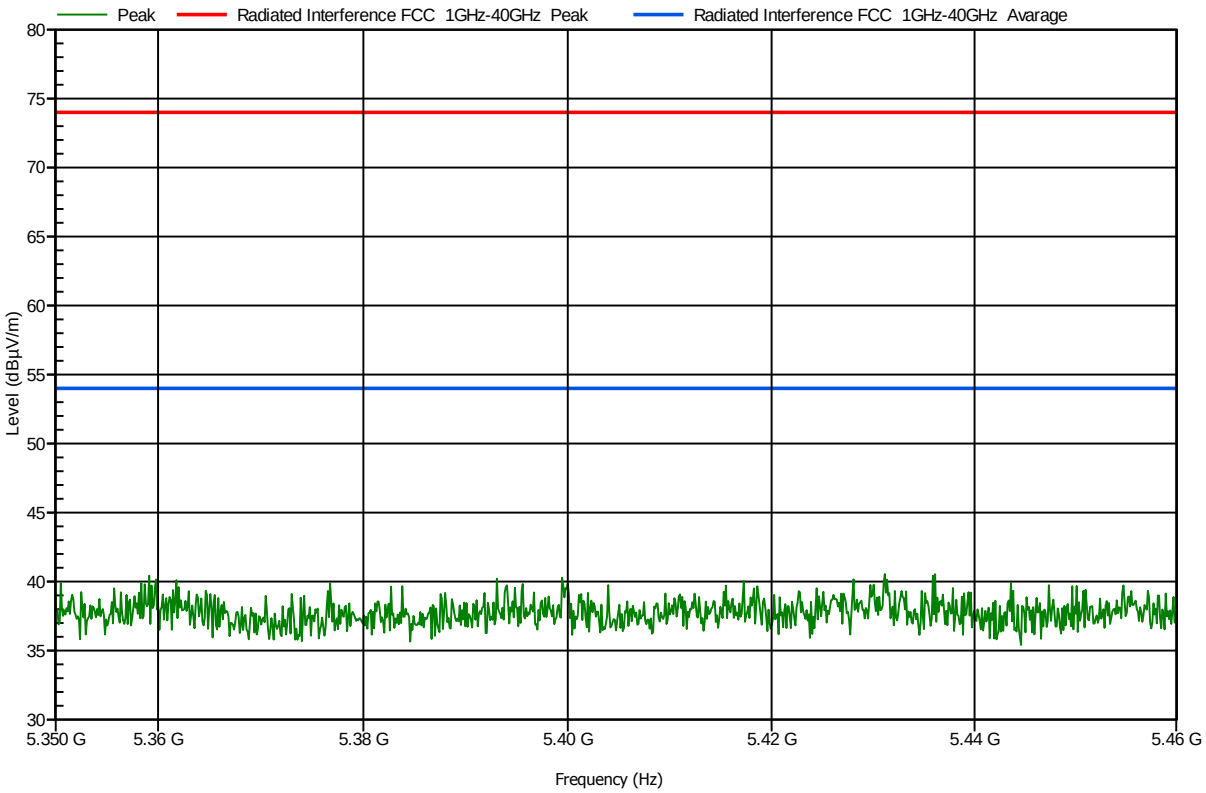
Test Results Plot No 53

5.35-5.46 GHz TX Mode Spurious Emission

Test & EUT General Information		Receiver Setting	
EUT Name:	WipAir8000 5X	Spect Analyzer	Agilent Technologies N9020A
S/N:	041A04000100	Ref. Level:	Auto [90 dBµV]
Date of Test:	14.04.2015	RBW:	1000 kHz
Test Engineer:	Ilya Arbitman	VBW:	1000 kHz
Antenna:	ARA DRG-118/A 1-18GHz 1319	Sweep Time:	Auto [20.05 ms]
Polarization:	Horizontal and Vertical	Pre Amplifier	pre amp 1 GHz-18 GHz

TEST REMARKS: Tuesday, April 14, 2015

BW 10MHz Low 5730MHz; 23dBi dish antenna



MAXIMUM RESULT DEVIATION:

Detect all peaks above 6 dB below the limit line with a maximum of 6 peaks.

None

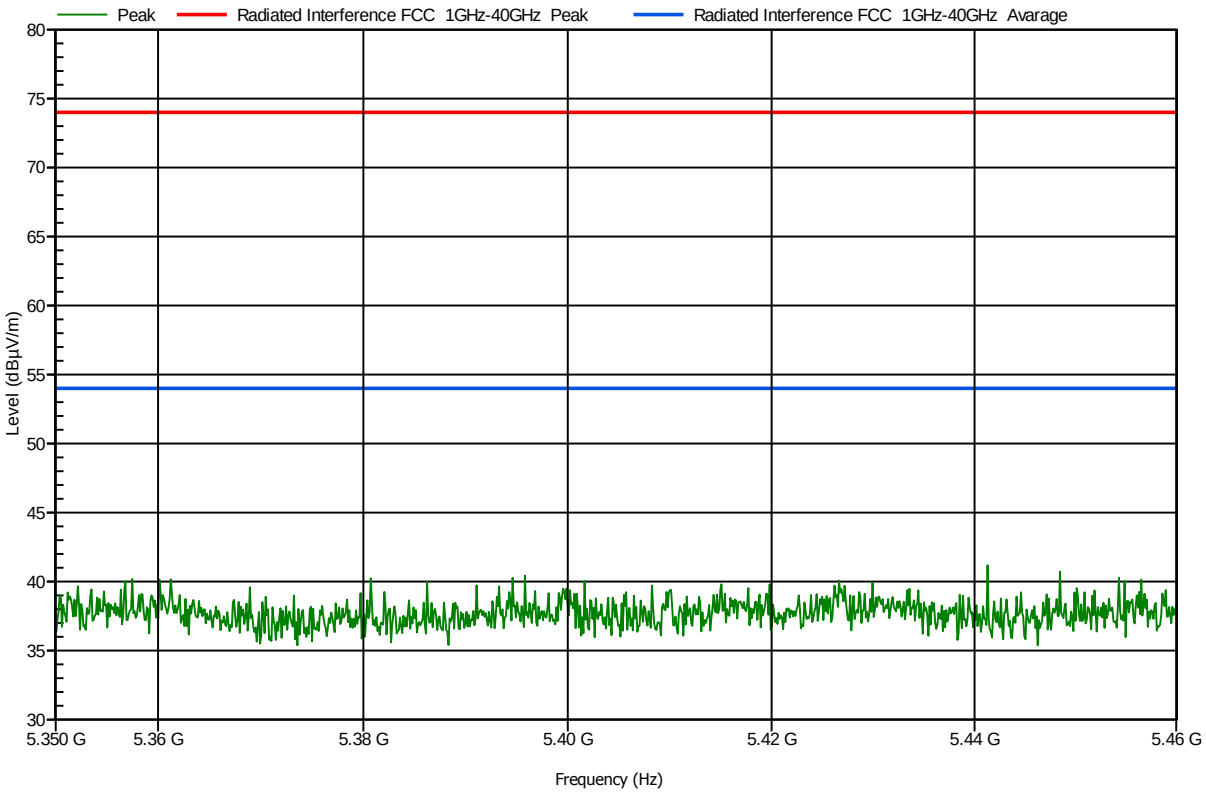
Test Results Plot No 54

5.35-5.46 GHz TX Mode Spurious Emission

Test & EUT General Information		Receiver Setting	
EUT Name:	WipAir8000 5X	Spect Analyzer	Agilent Technologies N9020A
S/N:	041A04000100	Ref. Level:	Auto [90 dBµV]
Date of Test:	14.04.2015	RBW:	1000 kHz
Test Engineer:	Ilya Arbitman	VBW:	1000 kHz
Antenna:	ARA DRG-118/A 1-18GHz 1319	Sweep Time:	Auto [20.05 ms]
Polarization:	Horizontal and Vertical	Pre Amplifier	pre amp 1 GHz-18 GHz

TEST REMARKS: Tuesday, April 14, 2015

BW 10MHz Mid 5785MHz; 23dBi dish antenna



MAXIMUM RESULT DEVIATION:

Detect all peaks above 6 dB below the limit line with a maximum of 6 peaks.

None

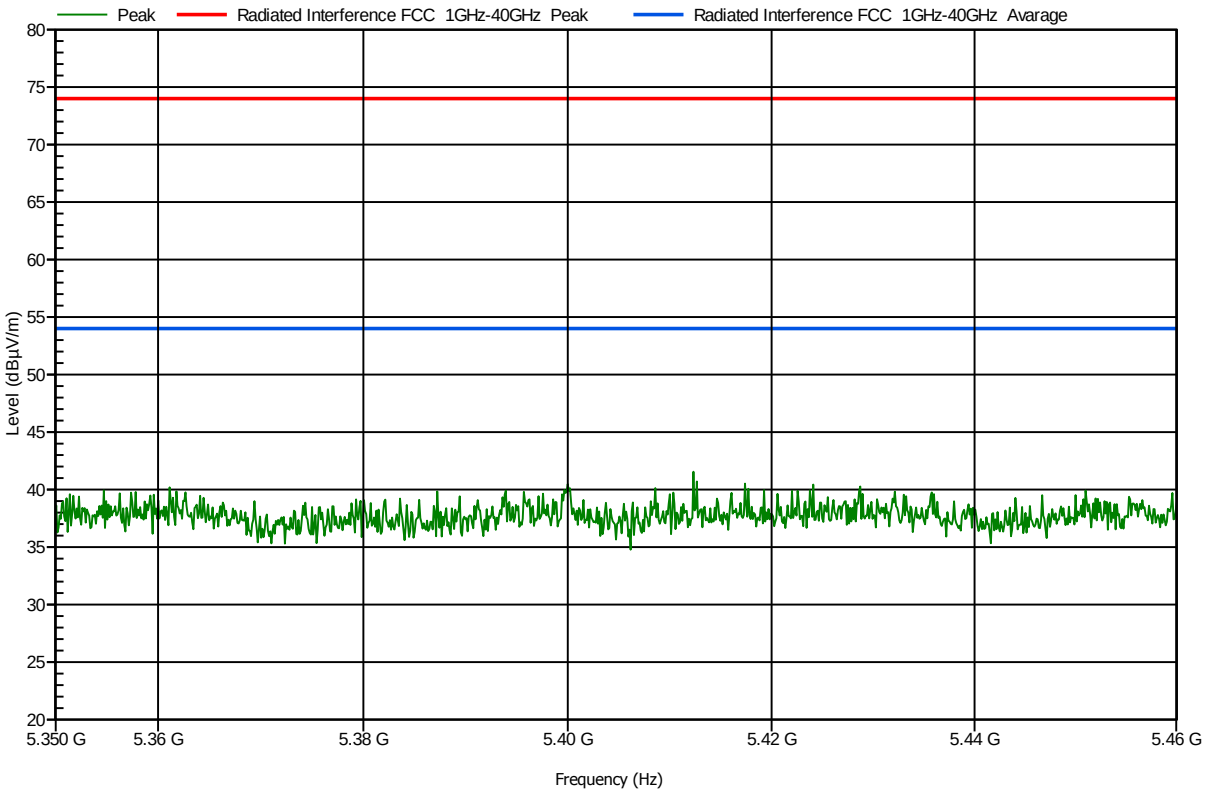
Test Results Plot No 55

5.35-5.46 GHz TX Mode Spurious Emission

Test & EUT General Information		Receiver Setting	
EUT Name:	WipAir8000 5X	Spect Analyzer	Agilent Technologies N9020A
S/N:	041A04000100	Ref. Level:	Auto [90 dBµV]
Date of Test:	14.04.2015	RBW:	1000 kHz
Test Engineer:	Ilya Arbitman	VBW:	1000 kHz
Antenna:	ARA DRG-118/A 1-18GHz 1319	Sweep Time:	Auto [20.05 ms]
Polarization:	Horizontal and Vertical	Pre Amplifier	pre amp 1 GHz-18 GHz

TEST REMARKS: Tuesday, April 14, 2015

BW 10MHz High 5845MHz; 23dBi dish antenna



MAXIMUM RESULT DEVIATION:

Detect all peaks above 6 dB below the limit line with a maximum of 6 peaks.

None

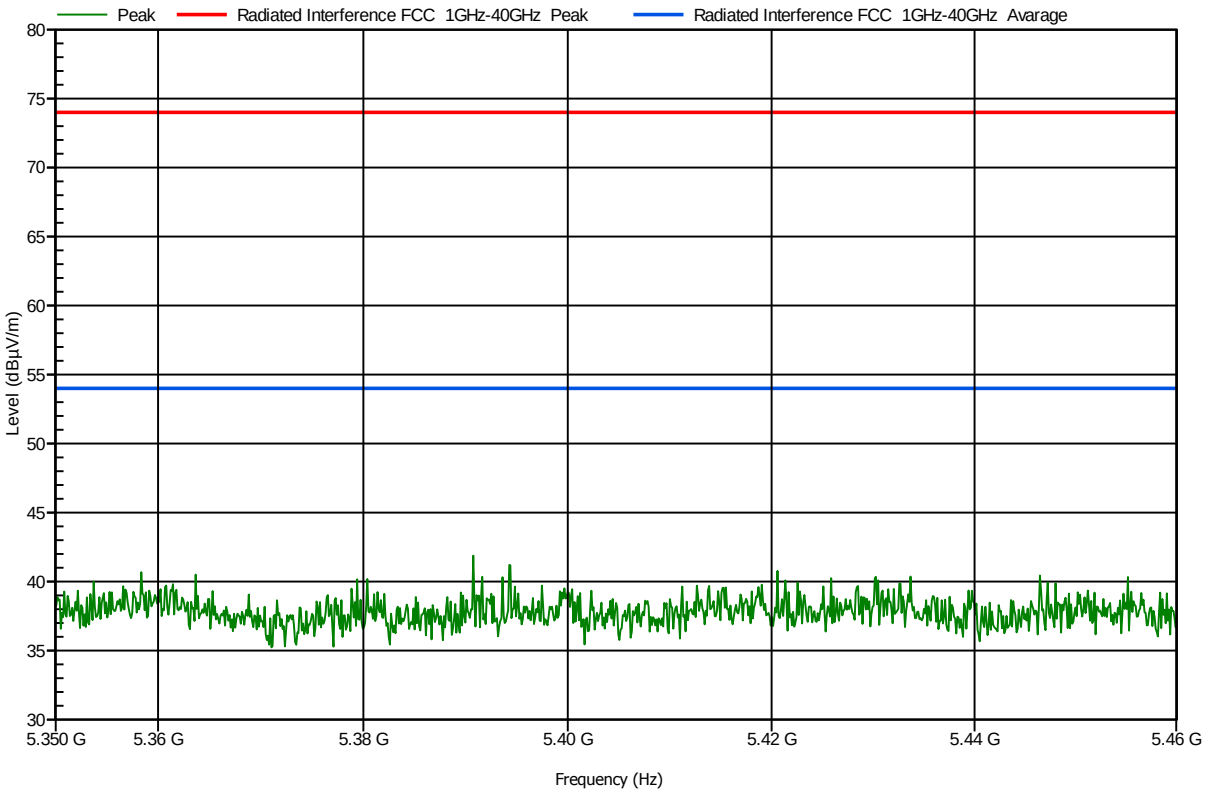
Test Results Plot No 56

5.35-5.46 GHz TX Mode Spurious Emission

Test & EUT General Information		Receiver Setting	
EUT Name:	WipAir8000 5X	Spect Analyzer	Agilent Technologies N9020A
S/N:	041A04000100	Ref. Level:	Auto [90 dBµV]
Date of Test:	14.04.2015	RBW:	1000 kHz
Test Engineer:	Ilya Arbitman	VBW:	1000 kHz
Antenna:	ARA DRG-118/A 1-18GHz 1319	Sweep Time:	Auto [20.05 ms]
Polarization:	Horizontal and Vertical	Pre Amplifier	pre amp 1 GHz-18 GHz

TEST REMARKS: Tuesday, April 14, 2015

BW 20MHz Low 5735MHz; 23dBi dish antenna



MAXIMUM RESULT DEVIATION:

Detect all peaks above 6 dB below the limit line with a maximum of 6 peaks.

None

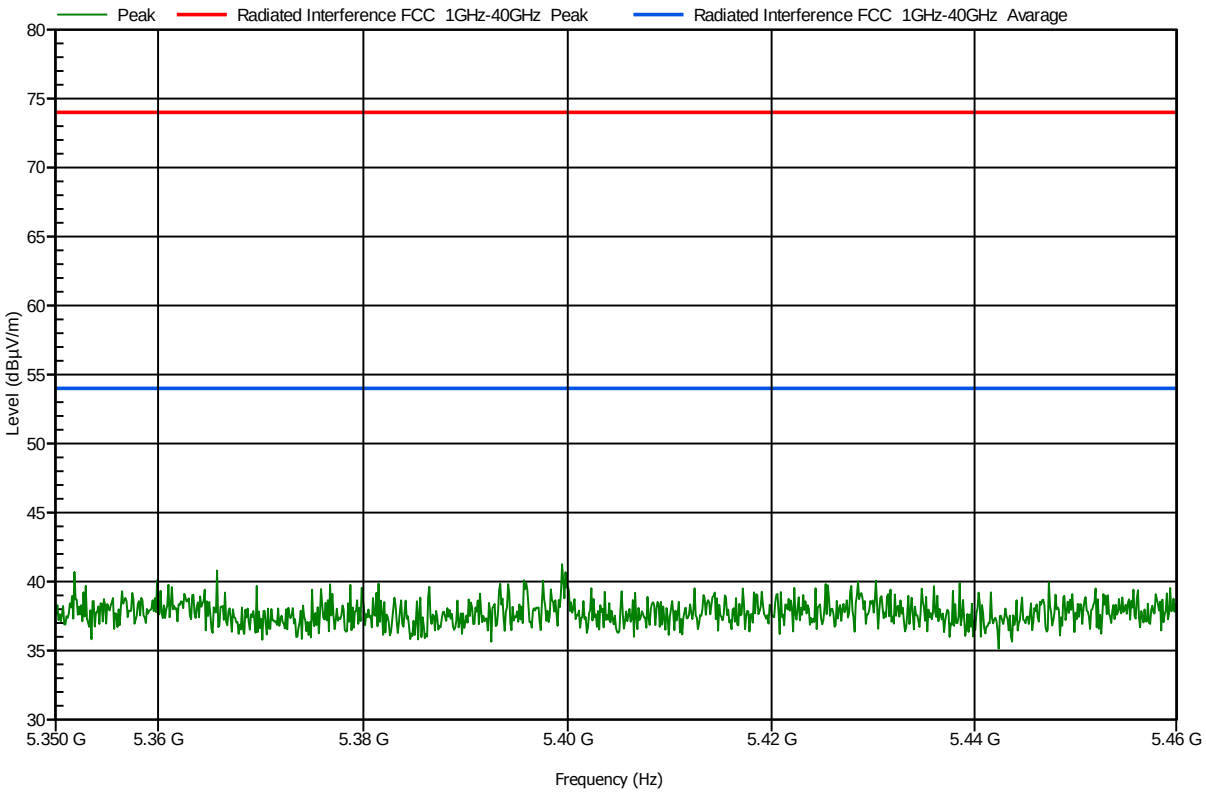
Test Results Plot No 57

5.35-5.46 GHz TX Mode Spurious Emission

Test & EUT General Information		Receiver Setting	
EUT Name:	WipAir8000 5X	Spect Analyzer	Agilent Technologies N9020A
S/N:	041A04000100	Ref. Level:	Auto [90 dBµV]
Date of Test:	14.04.2015	RBW:	1000 kHz
Test Engineer:	Ilya Arbitman	VBW:	1000 kHz
Antenna:	ARA DRG-118/A 1-18GHz 1319	Sweep Time:	Auto [20.05 ms]
Polarization:	Horizontal and Vertical	Pre Amplifier	pre amp 1 GHz-18 GHz

TEST REMARKS: Tuesday, April 14, 2015

BW 20MHz Mid 5785MHz; 23dBi dish antenna



MAXIMUM RESULT DEVIATION:

Detect all peaks above 6 dB below the limit line with a maximum of 6 peaks.

None

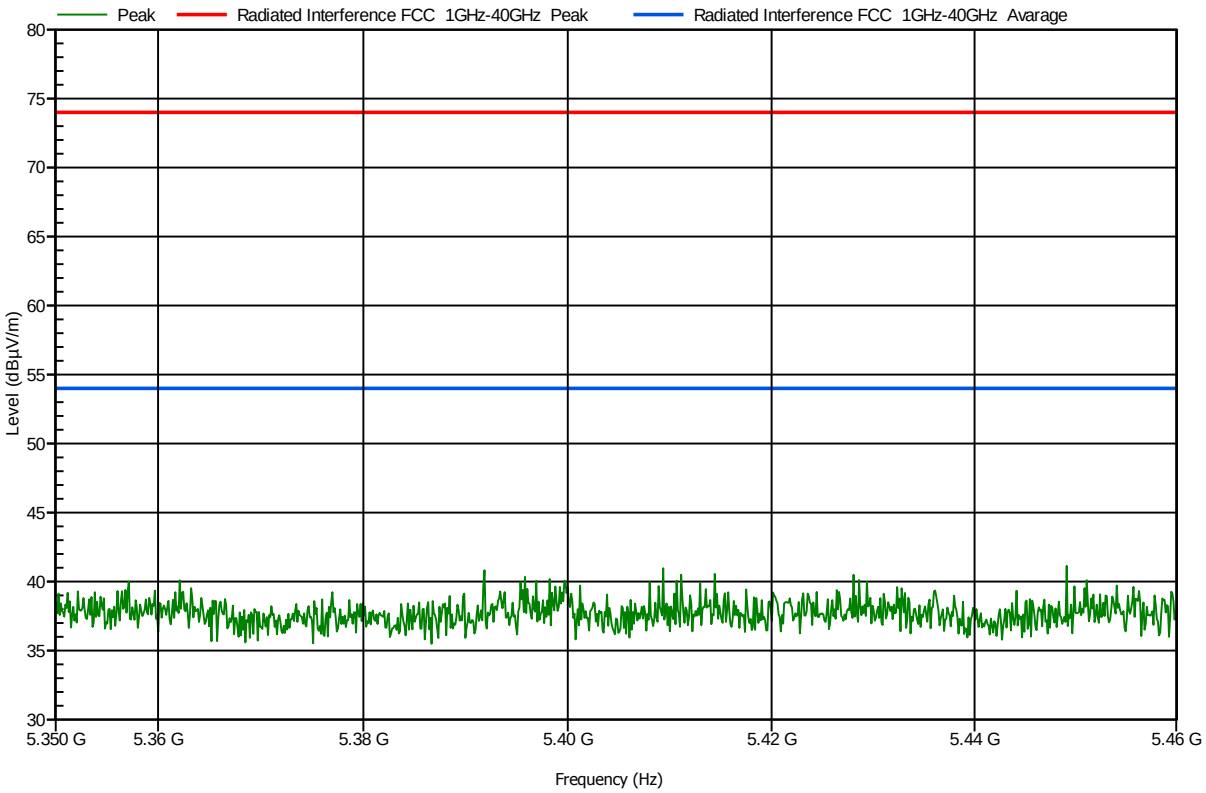
Test Results Plot No 58

5.35-5.46 GHz TX Mode Spurious Emission

Test & EUT General Information		Receiver Setting	
EUT Name:	WipAir8000 5X	Spect Analyzer	Agilent Technologies N9020A
S/N:	041A04000100	Ref. Level:	Auto [90 dBµV]
Date of Test:	14.04.2015	RBW:	1000 kHz
Test Engineer:	Ilya Arbitman	VBW:	1000 kHz
Antenna:	ARA DRG-118/A 1-18GHz 1319	Sweep Time:	Auto [20.05 ms]
Polarization:	Horizontal and Vertical	Pre Amplifier	pre amp 1 GHz-18 GHz

TEST REMARKS: Tuesday, April 14, 2015

BW 20MHz High 5840MHz; 23dBi dish antenna



MAXIMUM RESULT DEVIATION:

Detect all peaks above 6 dB below the limit line with a maximum of 6 peaks.

None

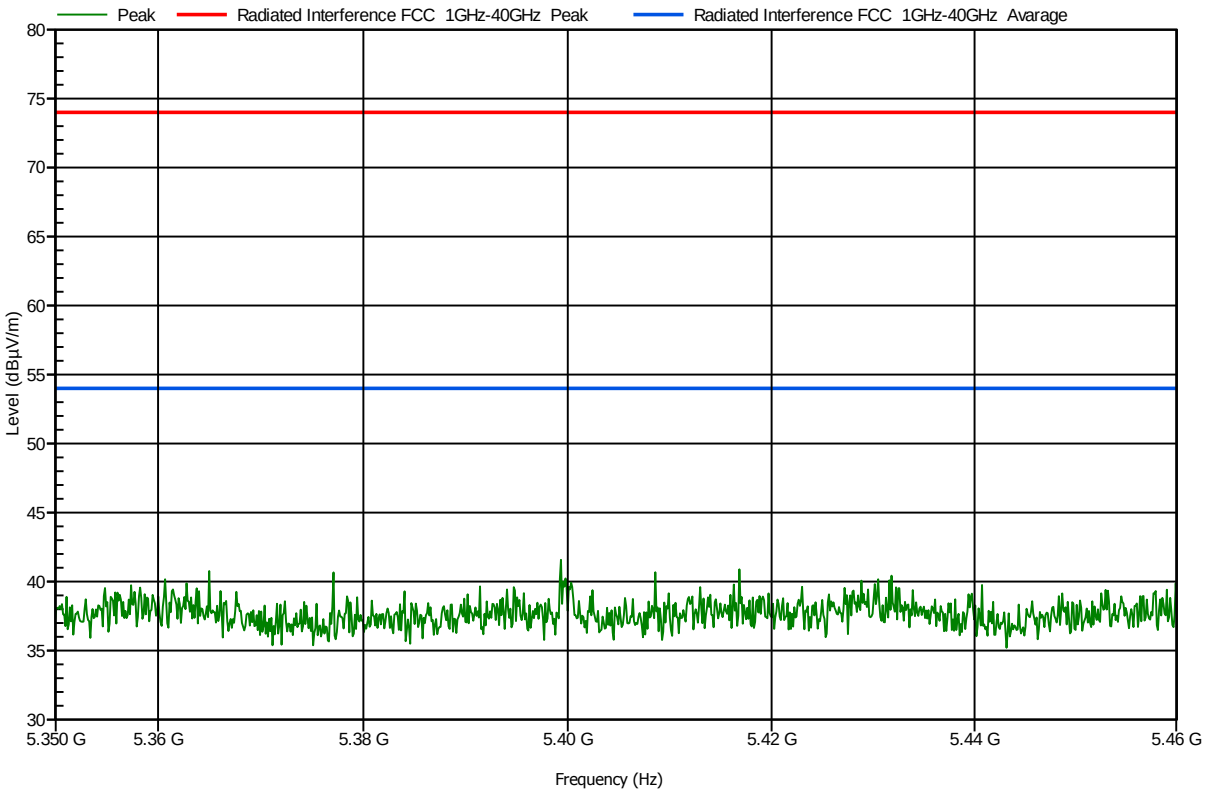
Test Results Plot No 59

5.35-5.46 GHz TX Mode Spurious Emission

Test & EUT General Information		Receiver Setting	
EUT Name:	WipAir8000 5X	Spect Analyzer	Agilent Technologies N9020A
S/N:	041A04000100	Ref. Level:	Auto [90 dBµV]
Date of Test:	14.04.2015	RBW:	1000 kHz
Test Engineer:	Ilya Arbitman	VBW:	1000 kHz
Antenna:	ARA DRG-118/A 1-18GHz 1319	Sweep Time:	Auto [20.05 ms]
Polarization:	Horizontal and Vertical	Pre Amplifier	pre amp 1 GHz-18 GHz

TEST REMARKS: Tuesday, April 14, 2015

BW 40MHz Low 5745MHz; 23dBi dish antenna



MAXIMUM RESULT DEVIATION:

Detect all peaks above 6 dB below the limit line with a maximum of 6 peaks.

None

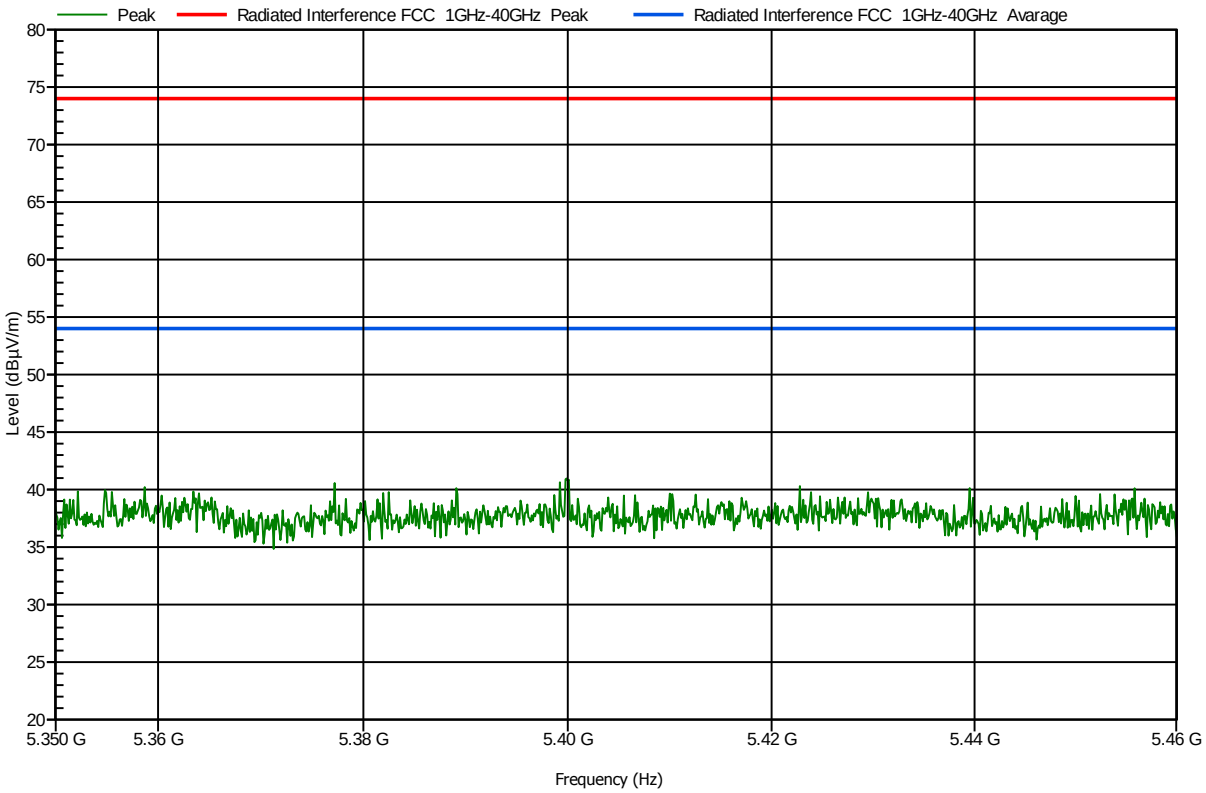
Test Results Plot No 60

5.35-5.46 GHz TX Mode Spurious Emission

Test & EUT General Information		Receiver Setting	
EUT Name:	WipAir8000 5X	Spect Analyzer	Agilent Technologies N9020A
S/N:	041A04000100	Ref. Level:	Auto [90 dBµV]
Date of Test:	14.04.2015	RBW:	1000 kHz
Test Engineer:	Ilya Arbitman	VBW:	1000 kHz
Antenna:	ARA DRG-118/A 1-18GHz 1319	Sweep Time:	Auto [20.05 ms]
Polarization:	Horizontal and Vertical	Pre Amplifier	pre amp 1 GHz-18 GHz

TEST REMARKS: Tuesday, April 14, 2015

BW 40MHz Mid 5785MHz; 23 dBi dish antenna



MAXIMUM RESULT DEVIATION:

Detect all peaks above 6 dB below the limit line with a maximum of 6 peaks.

None

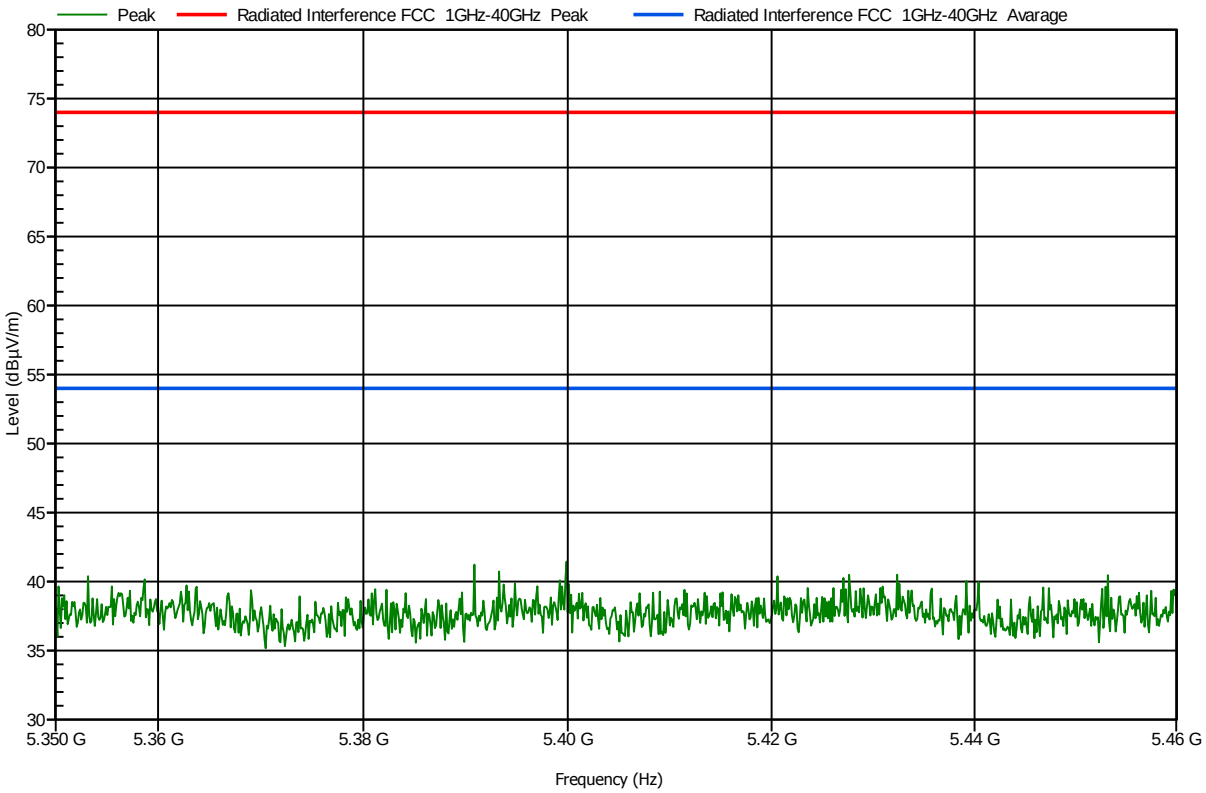
Test Results Plot No 61

5.35-5.46 GHz TX Mode Spurious Emission

Test & EUT General Information		Receiver Setting	
EUT Name:	WipAir8000 5X	Spect Analyzer	Agilent Technologies N9020A
S/N:	041A04000100	Ref. Level:	Auto [90 dBµV]
Date of Test:	14.04.2015	RBW:	1000 kHz
Test Engineer:	Ilya Arbitman	VBW:	1000 kHz
Antenna:	ARA DRG-118/A 1-18GHz 1319	Sweep Time:	Auto [20.05 ms]
Polarization:	Horizontal and Vertical	Pre Amplifier	pre amp 1 GHz-18 GHz

TEST REMARKS: Tuesday, April 14, 2015

BW 40MHz High 5830MHz; 23 dBi dish antenna



MAXIMUM RESULT DEVIATION:

Detect all peaks above 6 dB below the limit line with a maximum of 6 peaks.

None

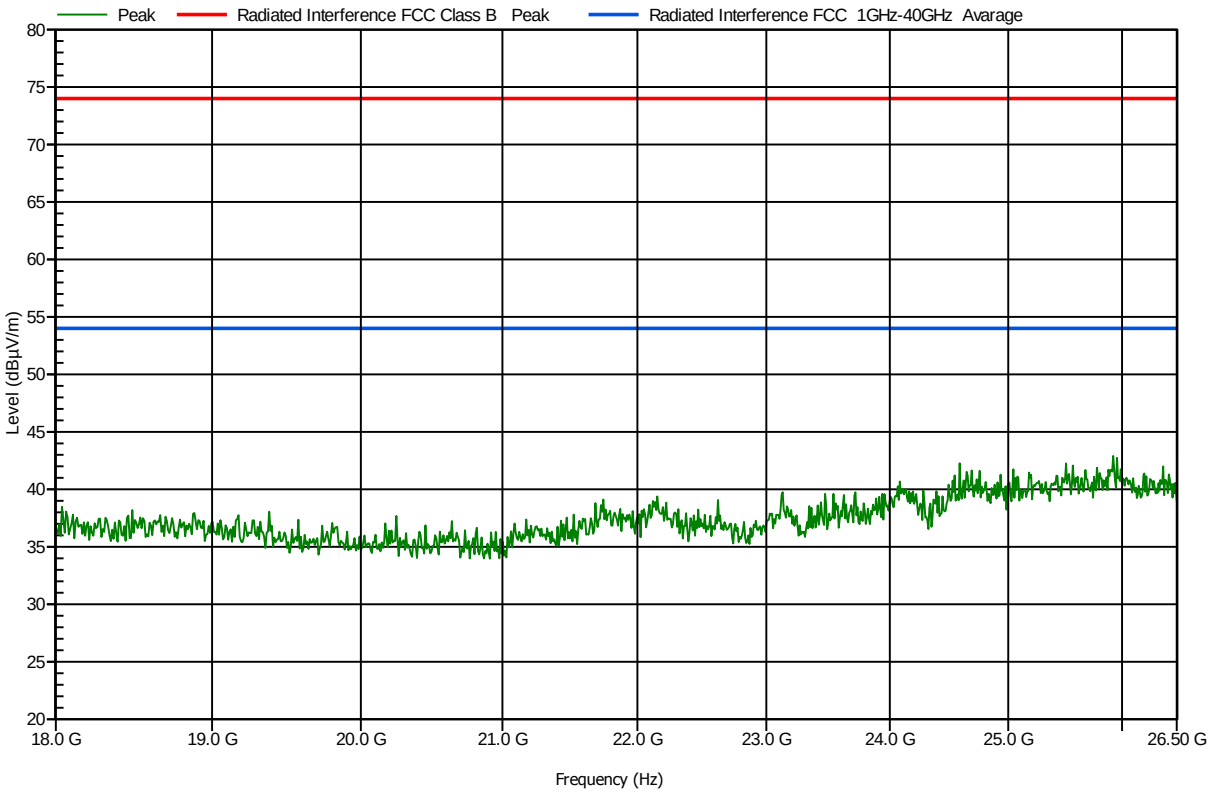
Test Results Plot No 62

18-26.5 GHz TX Mode Spurious Emission

Test & EUT General Information		Receiver Setting	
EUT Name:	WipAir8000 5X	Spect Analyzer	Agilent Technologies N9020A
S/N:	041A04000100	Ref. Level:	80 dBµV
Date of Test:	13.04.2015	RBW:	1000 kHz
Test Engineer:	Ilya Arbitman	VBW:	3 MHz
Antenna:	ARA DRG1840 18-40 GHz SER-1058	Sweep Time:	Auto [85.05 ms]
Polarization:	Horizontal and Vertical	Pre Amplifier	18-26.5GHz Pre Amplifier

TEST REMARKS: Monday, April 13, 2015

BW 5MHz Low 5730 MHz; 23 dBi dish Antenna



MAXIMUM RESULT DEVIATION:

Detect all peaks above 6 dB below the limit line with a maximum of 6 peaks.

None

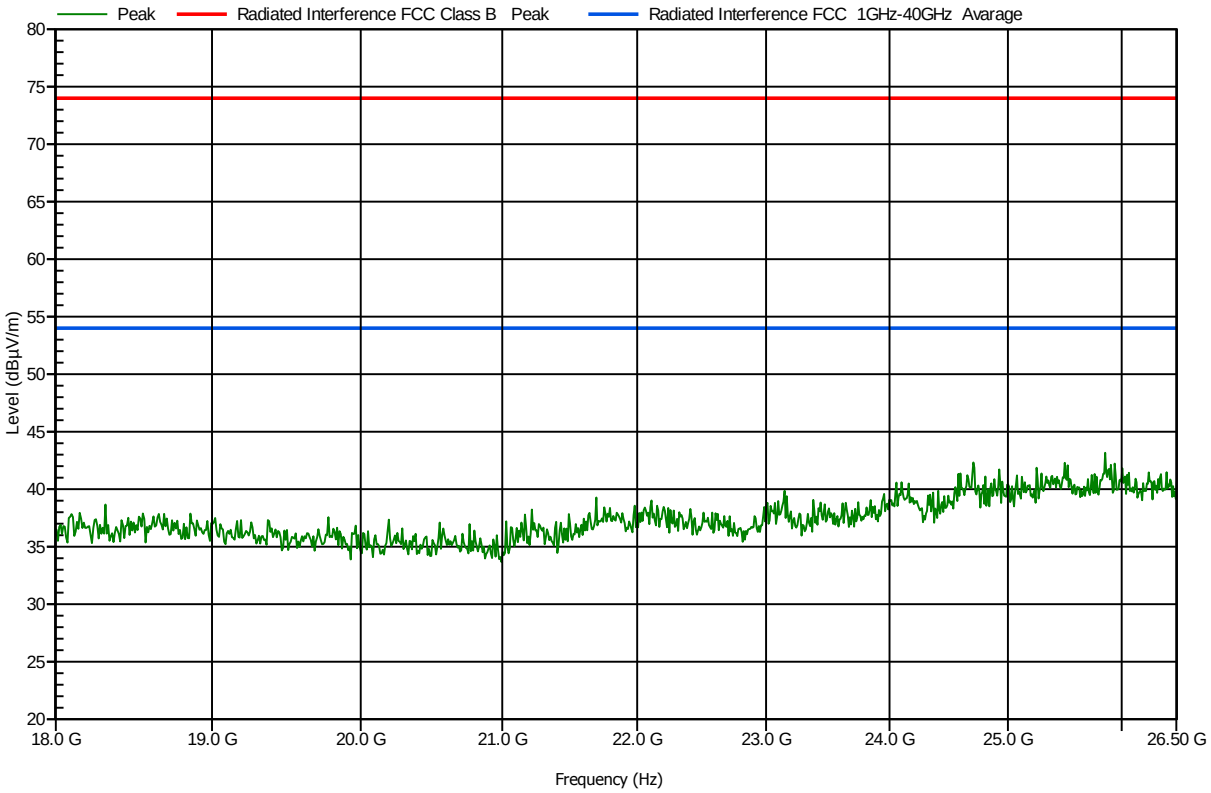
Test Results Plot No 63

18-26.5 GHz TX Mode Spurious Emission

Test & EUT General Information		Receiver Setting	
EUT Name:	WipAir8000 5X	Spect Analyzer	Agilent Technologies N9020A
S/N:	041A04000100	Ref. Level:	80 dBµV
Date of Test:	13.04.2015	RBW:	1000 kHz
Test Engineer:	Ilya Arbitman	VBW:	3 MHz
Antenna:	ARA DRG1840 18-40GHz SER-1058	Sweep Time:	Auto [85.05 ms]
Polarization:	Horizontal and Vertical	Pre Amplifier	18-26.5GHz Pre Amplifier

TEST REMARKS: Monday, April 13, 2015

BW 5MHz Mid 5785MHz; 23dBi Flat Antenna



MAXIMUM RESULT DEVIATION:

Detect all peaks above 6 dB below the limit line with a maximum of 6 peaks.

None

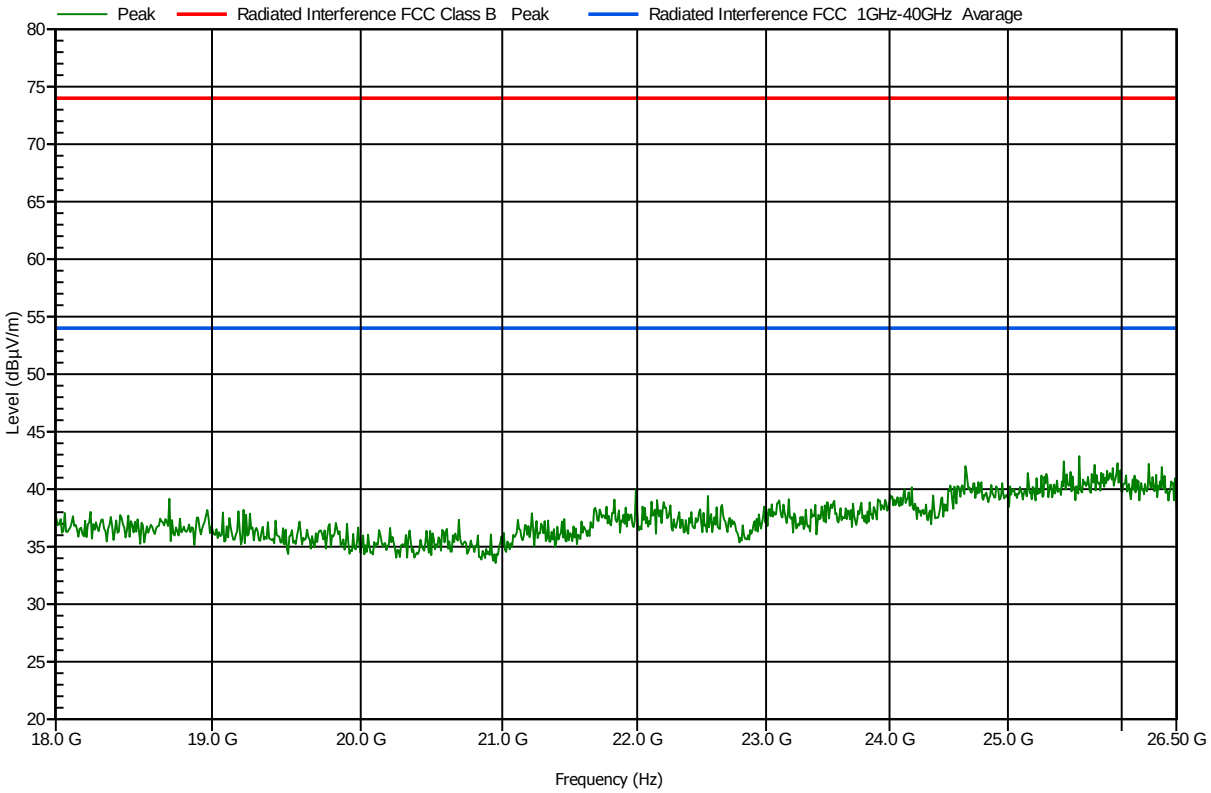
Test Results Plot No 64

18-26.5 GHz TX Mode Spurious Emission

Test & EUT General Information		Receiver Setting	
EUT Name:	WipAir8000 5X	Spect Analyzer	Agilent Technologies N9020A
S/N:	041A04000100	Ref. Level:	80 dBµV
Date of Test:	13.04.2015	RBW:	1000 kHz
Test Engineer:	Ilya Arbitman	VBW:	3 MHz
Antenna:	ARA DRG1840 18-40GHz SER-1058	Sweep Time:	Auto [85.05 ms]
Polarization:	Horizontal and Vertical	Pre Amplifier	18-26.5GHz Pre Amplifier

TEST REMARKS: Monday, April 13, 2015

BW 5MHz High 5845MHz; 23dBi Flat Antenna



MAXIMUM RESULT DEVIATION:

Detect all peaks above 6 dB below the limit line with a maximum of 6 peaks.

None

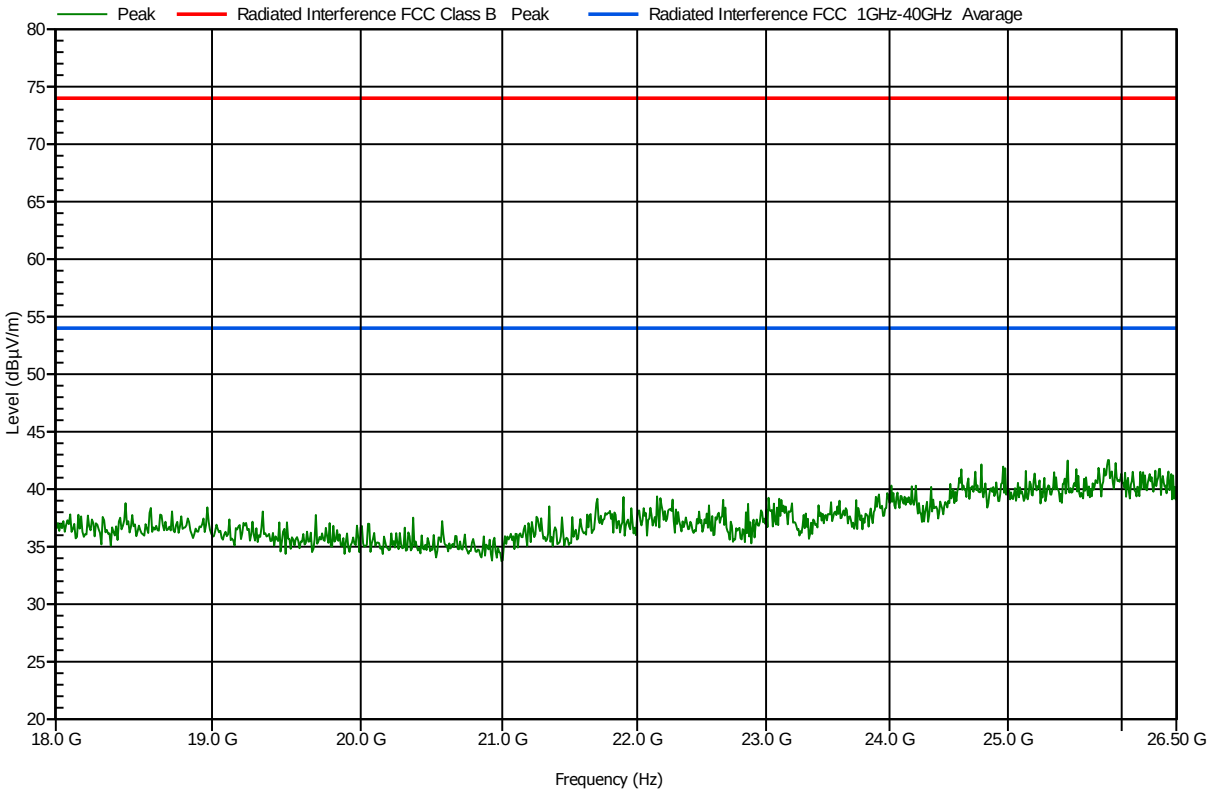
Test Results Plot No 65

18-26.5 GHz TX Mode Spurious Emission

Test & EUT General Information		Receiver Setting	
EUT Name:	WipAir8000 5X	Spect Analyzer	Agilent Technologies N9020A
S/N:	041A04000100	Ref. Level:	80 dBµV
Date of Test:	13.04.2015	RBW:	1000 kHz
Test Engineer:	Ilya Arbitman	VBW:	3 MHz
Antenna:	ARA DRG1840 18-40GHz SER-1058	Sweep Time:	Auto [85.05 ms]
Polarization:	Horizontal and Vertical	Pre Amplifier	18-26.5GHz Pre Amplifier

TEST REMARKS: Monday, April 13, 2015

BW 10MHz Low 5730MHz; 23dBi Flat Antenna



MAXIMUM RESULT DEVIATION:

Detect all peaks above 6 dB below the limit line with a maximum of 6 peaks.

None

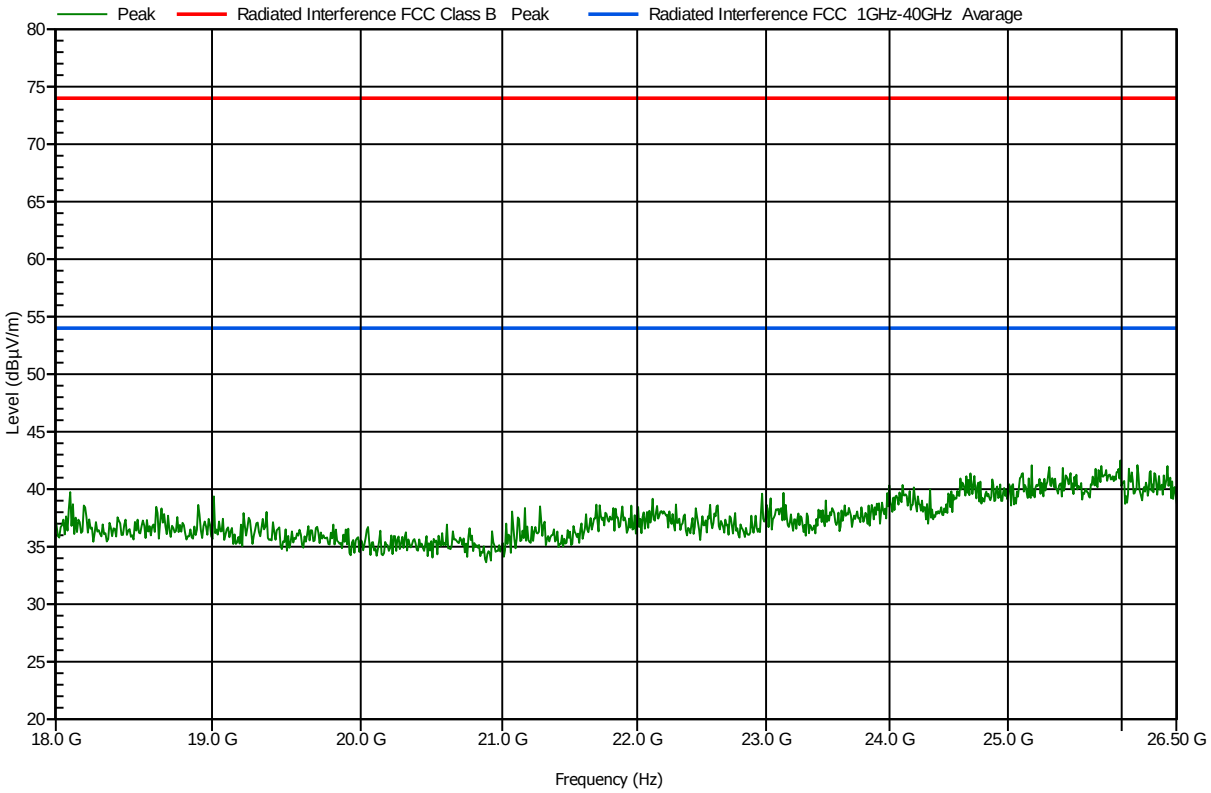
Test Results Plot No 66

18-26.5 GHz TX Mode Spurious Emission

Test & EUT General Information		Receiver Setting	
EUT Name:	WipAir8000 5X	Spect Analyzer	Agilent Technologies N9020A
S/N:	041A04000100	Ref. Level:	80 dBµV
Date of Test:	13.04.2015	RBW:	1000 kHz
Test Engineer:	Ilya Arbitman	VBW:	3 MHz
Antenna:	ARA DRG1840 18-40GHz SER-1058	Sweep Time:	Auto [85.05 ms]
Polarization:	Horizontal and Vertical	Pre Amplifier	18-26.5GHz Pre Amplifier

TEST REMARKS: Monday, April 13, 2015

BW 10MHz Mid 5785MHz; 23dBi Flat Antenna



MAXIMUM RESULT DEVIATION:

Detect all peaks above 6 dB below the limit line with a maximum of 6 peaks.

None

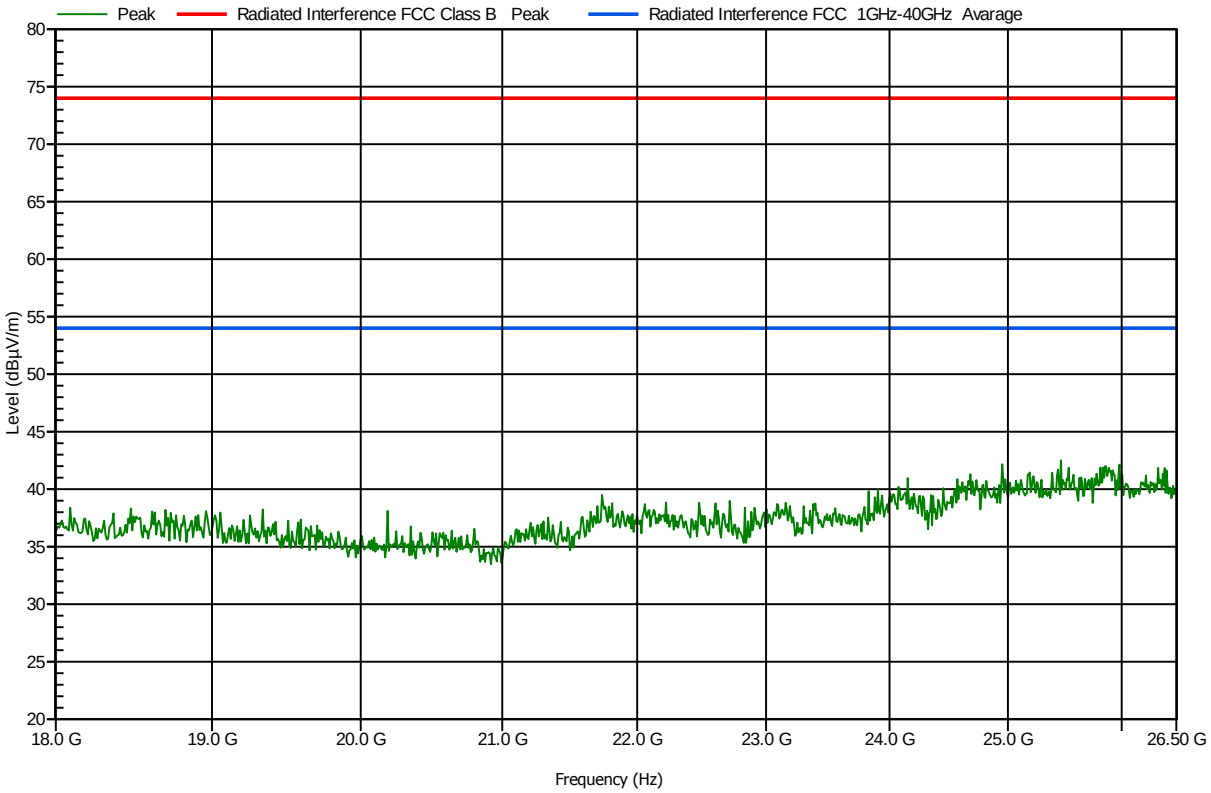
Test Results Plot No 67

18-26.5 GHz TX Mode Spurious Emission

Test & EUT General Information		Receiver Setting	
EUT Name:	WipAir8000 5X	Spect Analyzer	Agilent Technologies N9020A
S/N:	041A04000100	Ref. Level:	80 dBµV
Date of Test:	13.04.2015	RBW:	1000 kHz
Test Engineer:	Ilya Arbitman	VBW:	3 MHz
Antenna:	ARA DRG1840 18-40GHz SER-1058	Sweep Time:	Auto [85.05 ms]
Polarization:	Horizontal and Vertical	Pre Amplifier	18-26.5GHz Pre Amplifier

TEST REMARKS: Monday, April 13, 2015

BW 10MHz High 5845 MHz; 23dBi Flat Antenna



MAXIMUM RESULT DEVIATION:

Detect all peaks above 6 dB below the limit line with a maximum of 6 peaks.

None

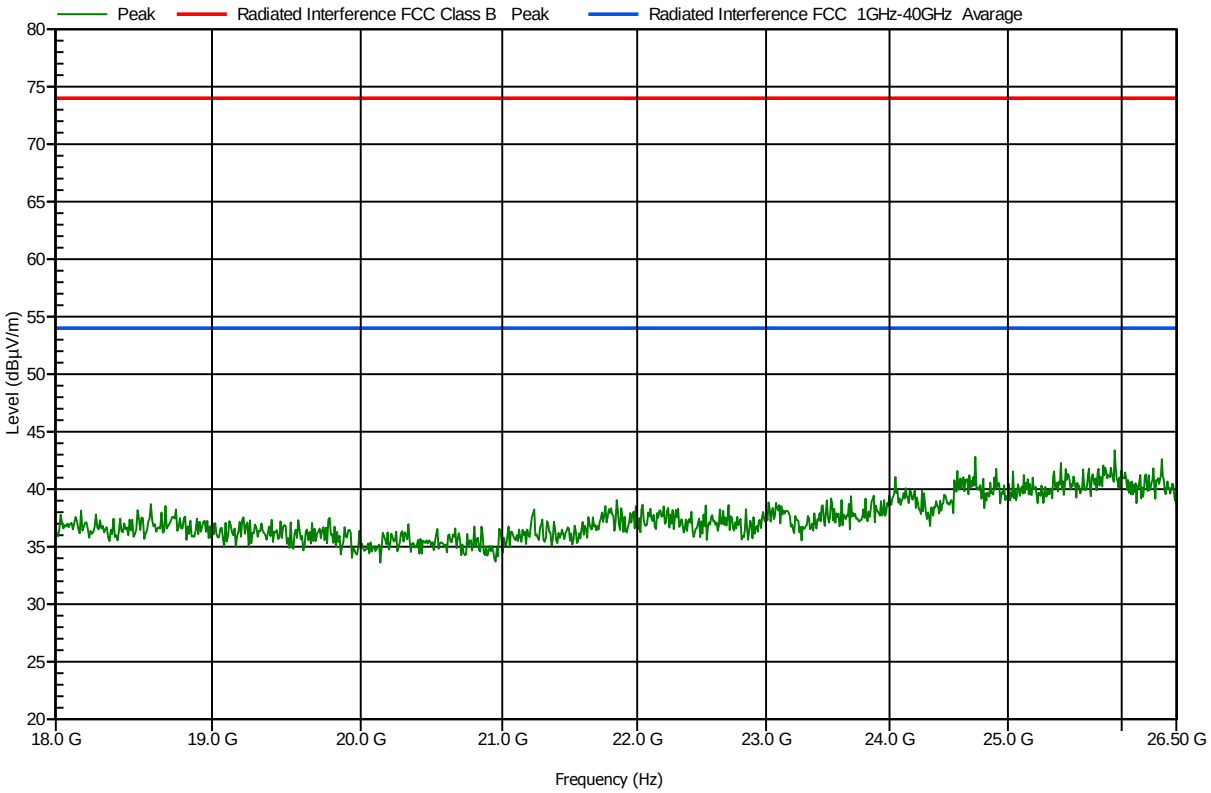
Test Results Plot No 68

18-26.5 GHz TX Mode Spurious Emission

Test & EUT General Information		Receiver Setting	
EUT Name:	WipAir8000 5X	Spect Analyzer	Agilent Technologies N9020A
S/N:	041A04000100	Ref. Level:	80 dBµV
Date of Test:	13.04.2015	RBW:	1000 kHz
Test Engineer:	Ilya Arbitman	VBW:	3 MHz
Antenna:	ARA DRG1840 18-40GHz SER-1058	Sweep Time:	Auto [85.05 ms]
Polarization:	Horizontal and Vertical	Pre Amplifier	18-26.5GHz Pre Amplifier

TEST REMARKS: Monday, April 13, 2015

BW 20MHz Low 5735MHz; 23dBi Flat Antenna



MAXIMUM RESULT DEVIATION:

Detect all peaks above 6 dB below the limit line with a maximum of 6 peaks.

None

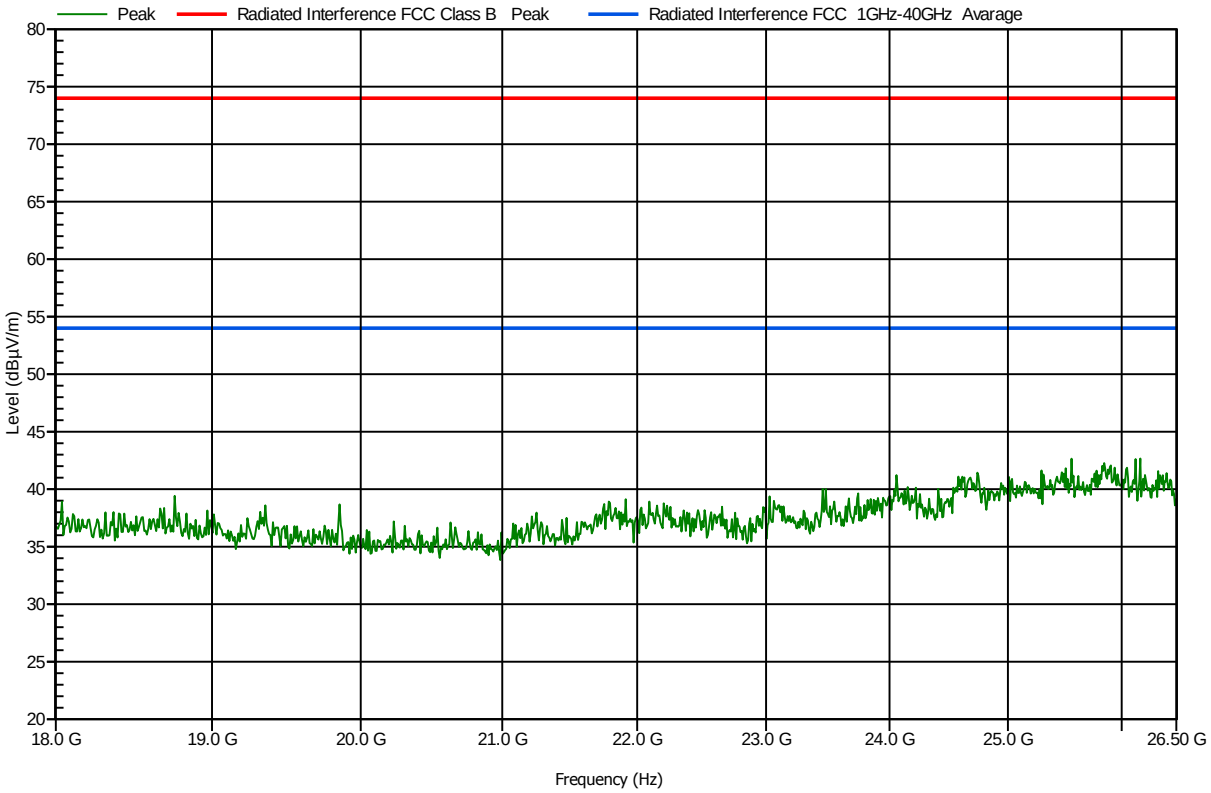
Test Results Plot No 69

18-26.5 GHz TX Mode Spurious Emission

Test & EUT General Information		Receiver Setting	
EUT Name:	WipAir8000 5X	Spect Analyzer	Agilent Technologies N9020A
S/N:	041A04000100	Ref. Level:	80 dBµV
Date of Test:	13.04.2015	RBW:	1000 kHz
Test Engineer:	Ilya Arbitman	VBW:	3 MHz
Antenna:	ARA DRG1840 18-40GHz SER-1058	Sweep Time:	Auto [85.05 ms]
Polarization:	Horizontal and Vertical	Pre Amplifier	18-26.5GHz Pre Amplifier

TEST REMARKS: Monday, April 13, 2015

BW 20MHz Mid 5785MHz; 23dBi Flat Antenna



MAXIMUM RESULT DEVIATION:

Detect all peaks above 6 dB below the limit line with a maximum of 6 peaks.

None

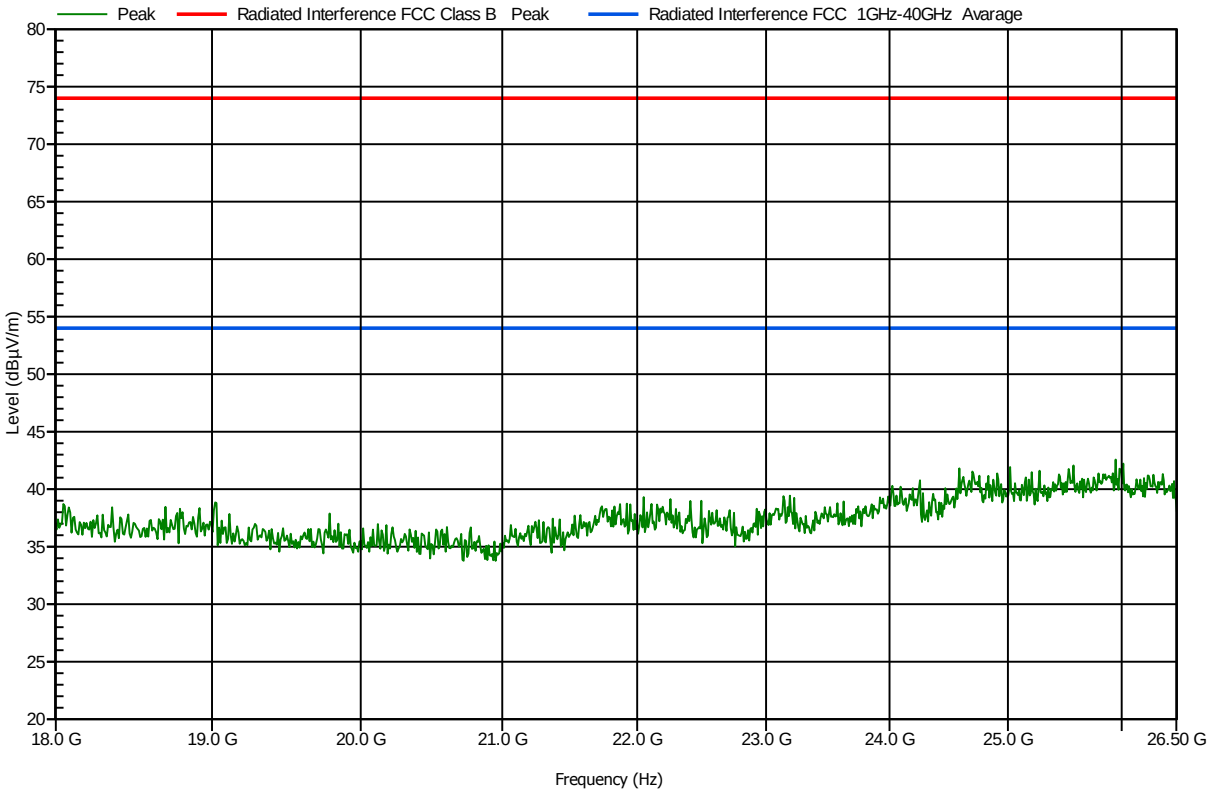
Test Results Plot No 70

18-26.5 GHz PEAK TX Mode Spurious Emission

Test & EUT General Information		Receiver Setting	
EUT Name:	WipAir8000 5X	Spect Analyzer	Agilent Technologies N9020A
S/N:	041A04000100	Ref. Level:	80 dBµV
Date of Test:	13.04.2015	RBW:	1000 kHz
Test Engineer:	Ilya Arbitman	VBW:	3 MHz
Antenna:	ARA DRG1840 18-40GHz SER-1058	Sweep Time:	Auto [85.05 ms]
Polarization:	Horizontal and Vertical	Pre Amplifier	18-26.5GHz Pre Amplifier

TEST REMARKS: Monday, April 13, 2015

BW 20MHz High 5840MHz; 23dBi Flat Antenna



MAXIMUM RESULT DEVIATION:

Detect all peaks above 6 dB below the limit line with a maximum of 6 peaks.

None

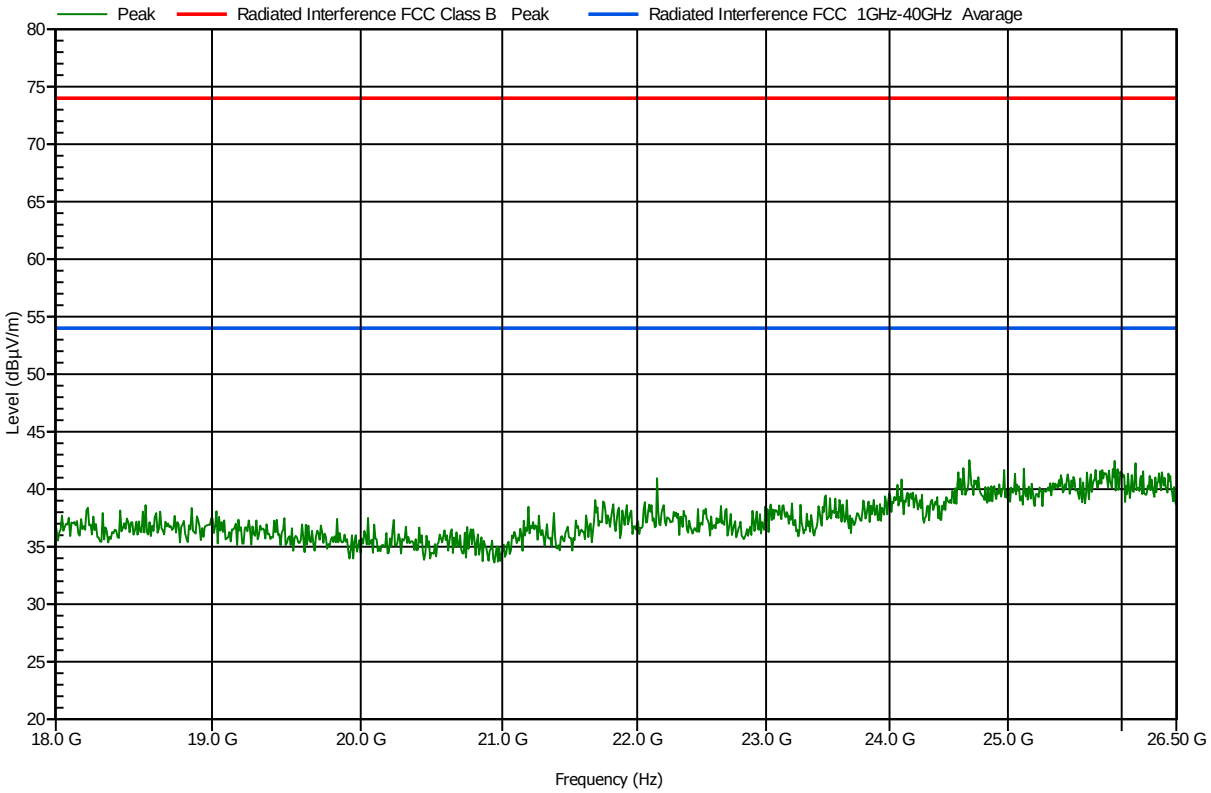
Test Results Plot No 71

18-26.5 GHz PEAK TX Mode Spurious Emission

Test & EUT General Information		Receiver Setting	
EUT Name:	WipAir8000 5X	Spect Analyzer	Agilent Technologies N9020A
S/N:	041A04000100	Ref. Level:	80 dBµV
Date of Test:	13.04.2015	RBW:	1000 kHz
Test Engineer:	Ilya Arbitman	VBW:	3 MHz
Antenna:	ARA DRG1840 18-40GHz SER-1058	Sweep Time:	Auto [85.05 ms]
Polarization:	Horizontal and Vertical	Pre Amplifier	18-26.5GHz Pre Amplifier

TEST REMARKS: Monday, April 13, 2015

BW 40MHz Low 5745MHz; 23dBi Flat Antenna



MAXIMUM RESULT DEVIATION:

Detect all peaks above 6 dB below the limit line with a maximum of 6 peaks.

None

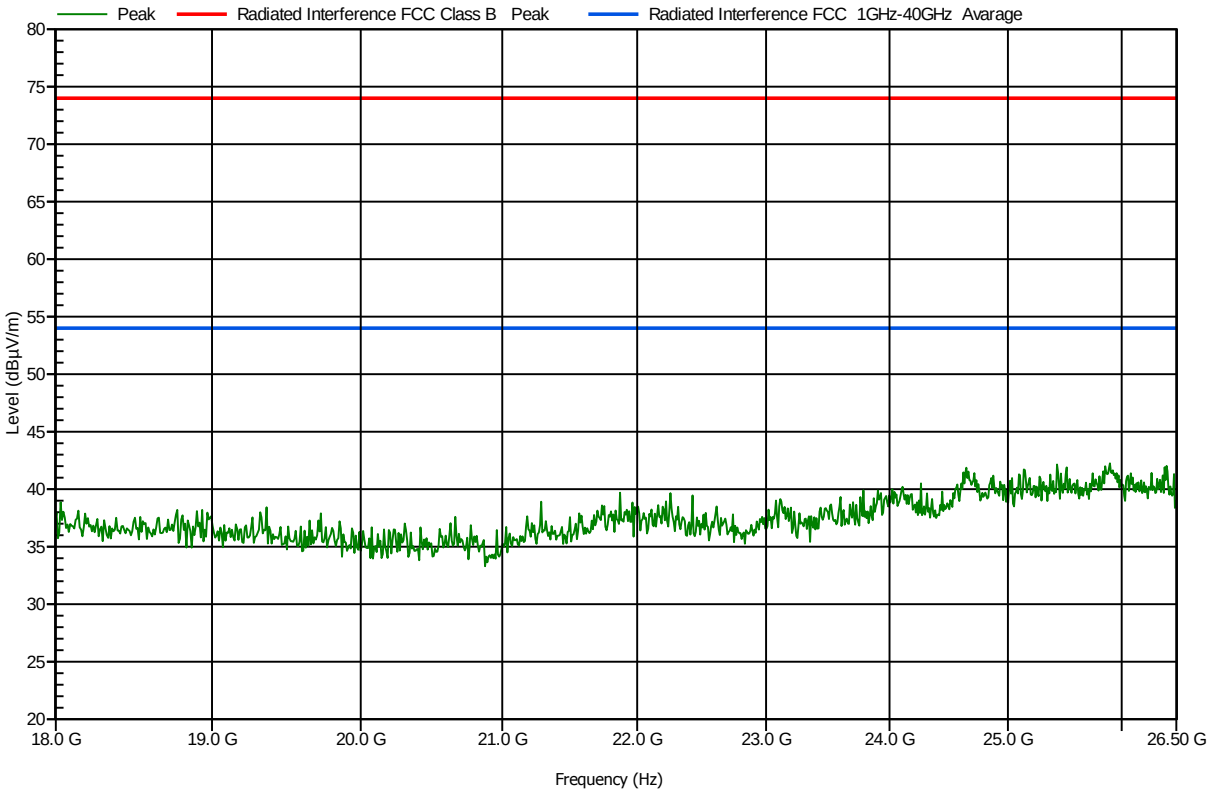
Test Results Plot No 72

18-26.5 GHz PEAK TX Mode Spurious Emission

Test & EUT General Information		Receiver Setting	
EUT Name:	WipAir8000 5X	Spect Analyzer	Agilent Technologies N9020A
S/N:	041A04000100	Ref. Level:	80 dBµV
Date of Test:	13.04.2015	RBW:	1000 kHz
Test Engineer:	Ilya Arbitman	VBW:	3 MHz
Antenna:	ARA DRG1840 18-40GHz SER-1058	Sweep Time:	Auto [85.05 ms]
Polarization:	Horizontal and Vertical	Pre Amplifier	18-26.5GHz Pre Amplifier

TEST REMARKS: Monday, April 13, 2015

BW 40MHz Mid 5785MHz; 23dBi Flat Antenna



MAXIMUM RESULT DEVIATION:

Detect all peaks above 6 dB below the limit line with a maximum of 6 peaks.

None

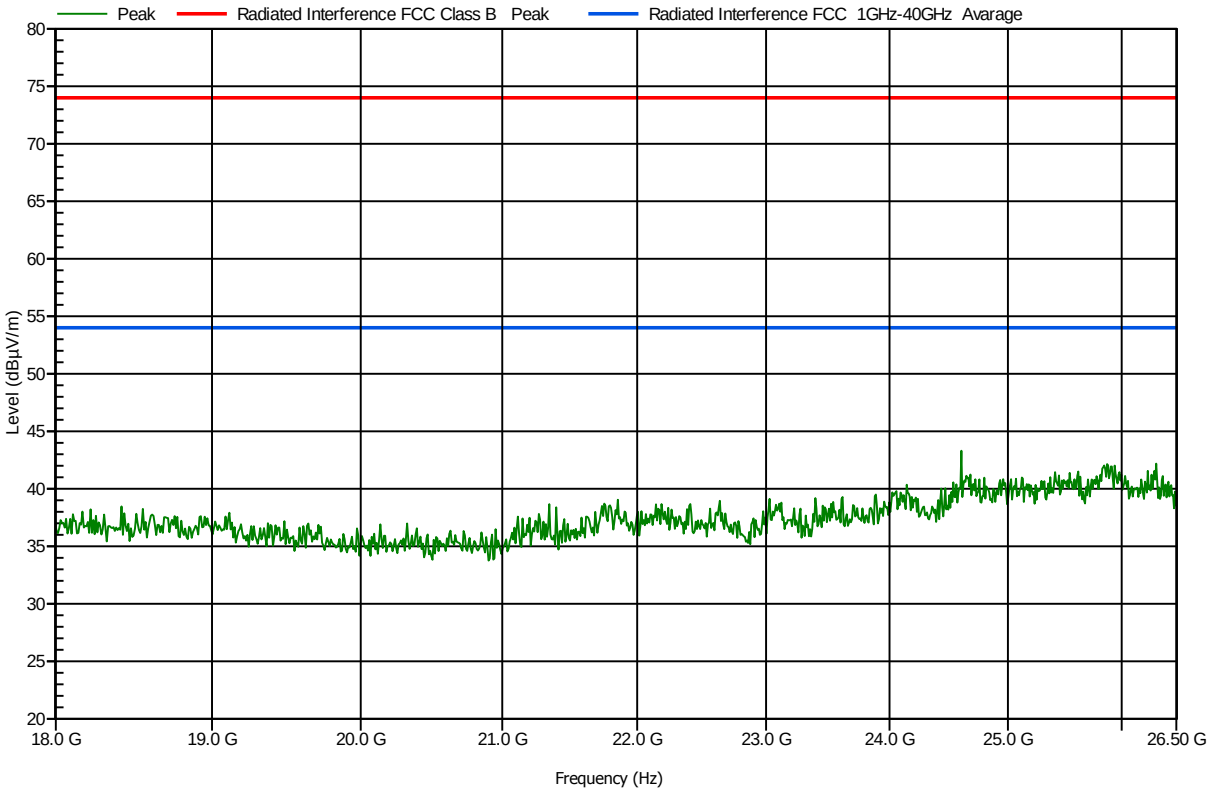
Test Results Plot No 73

18-26.5 GHz PEAK TX Mode Spurious Emission

Test & EUT General Information		Receiver Setting	
EUT Name:	WipAir8000 5X	Spect Analyzer	Agilent Technologies N9020A
S/N:	041A04000100	Ref. Level:	80 dBµV
Date of Test:	13.04.2015	RBW:	1000 kHz
Test Engineer:	Ilya Arbitman	VBW:	3 MHz
Antenna:	ARA DRG1840 18-40GHz SER-1058	Sweep Time:	Auto [85.05 ms]
Polarization:	Horizontal and Vertical	Pre Amplifier	18-26.5GHz Pre Amplifier

TEST REMARKS: Monday, April 13, 2015

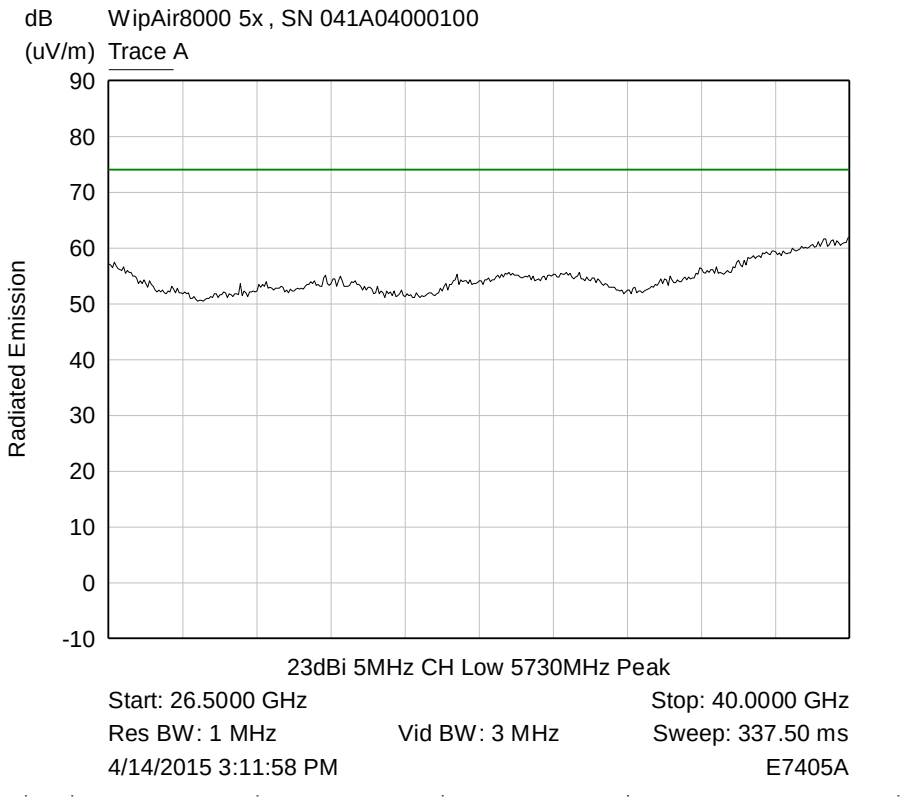
BW 40MHz High 5830MHz; 23dBi Flat Antenna



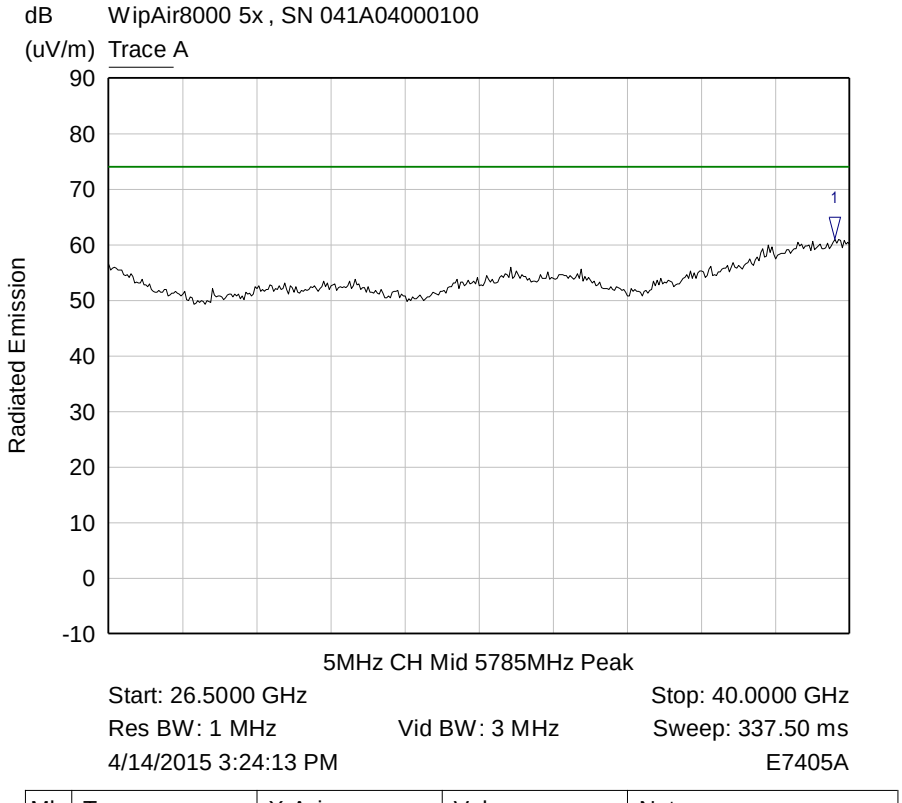
MAXIMUM RESULT DEVIATION:

Detect all peaks above 6 dB below the limit line with a maximum of 6 peaks.

None

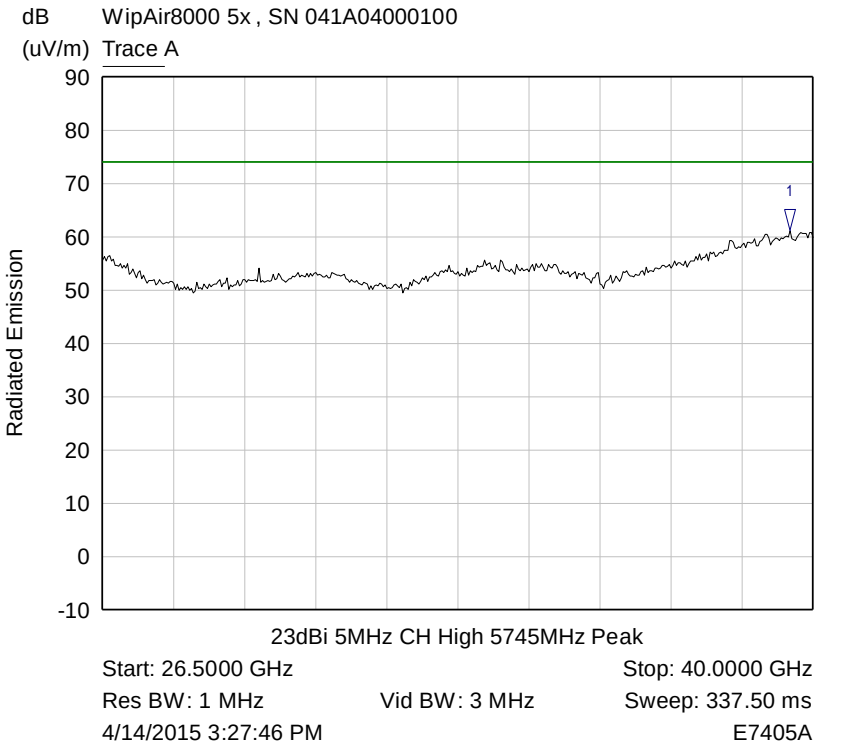


Plot Radiated Emission/ 74



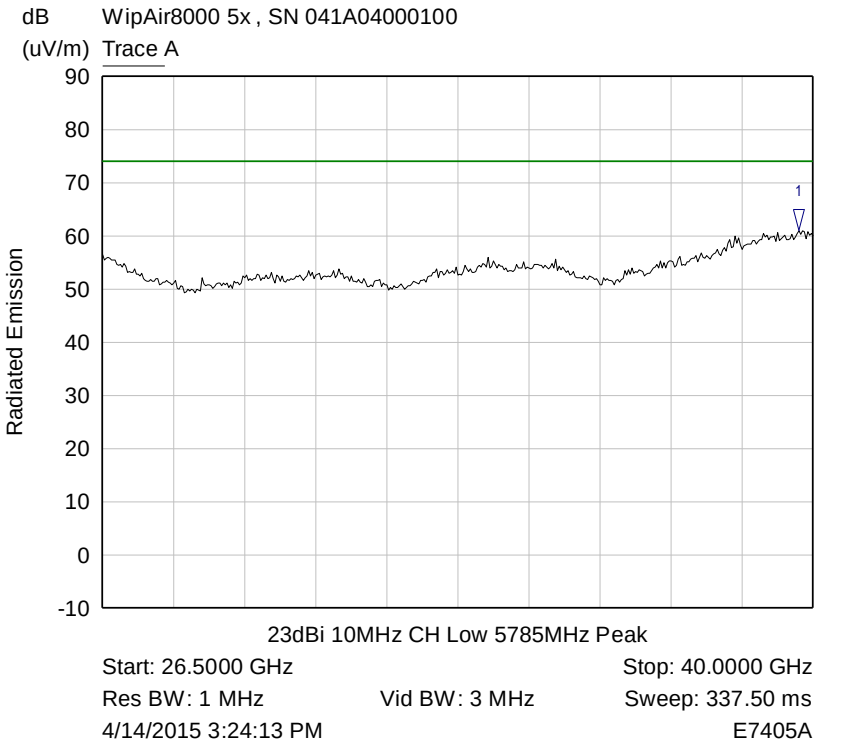
Mkr	Trace	X-Axis	Value	Notes
1 ▽	Trace A	39.7300 GHz	61.05 dB(uV/m)	

Plot Radiated Emission/ 75



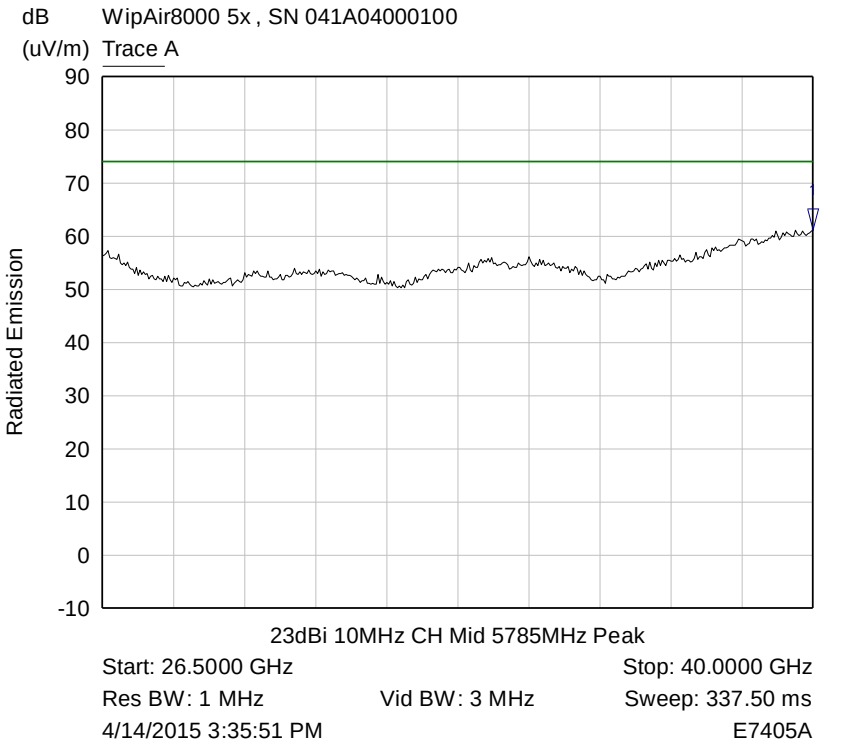
Mkr	Trace	X-Axis	Value	Notes
1	Trace A	39.5613 GHz	61.10 dB(uV/m)	

Plot Radiated Emission/ 76



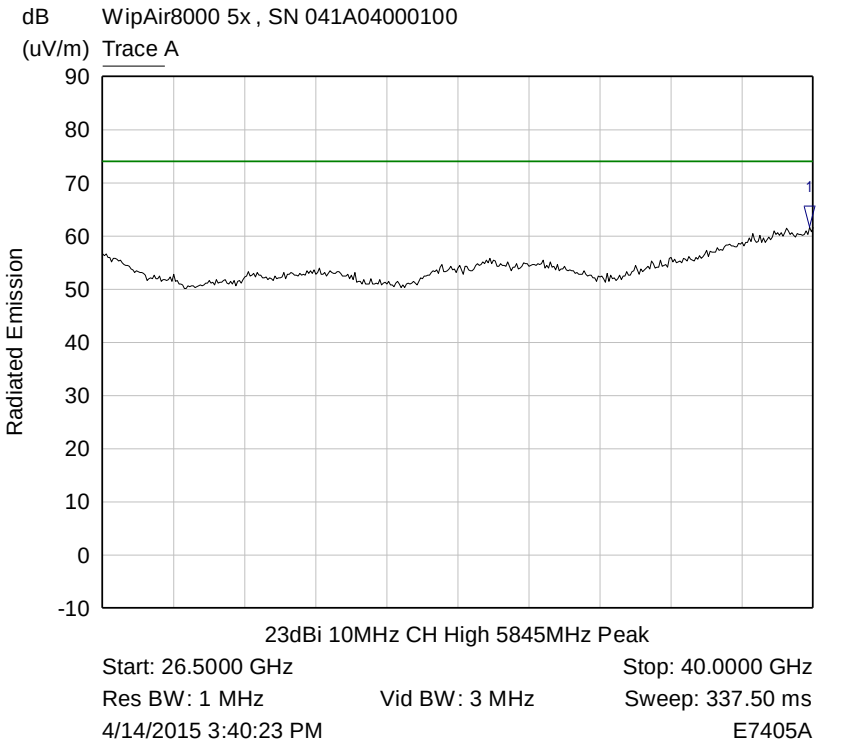
Mkr	Trace	X-Axis	Value	Notes
1	Trace A	39.7300 GHz	61.05 dB(uV/m)	

Plot Radiated Emission/ 77



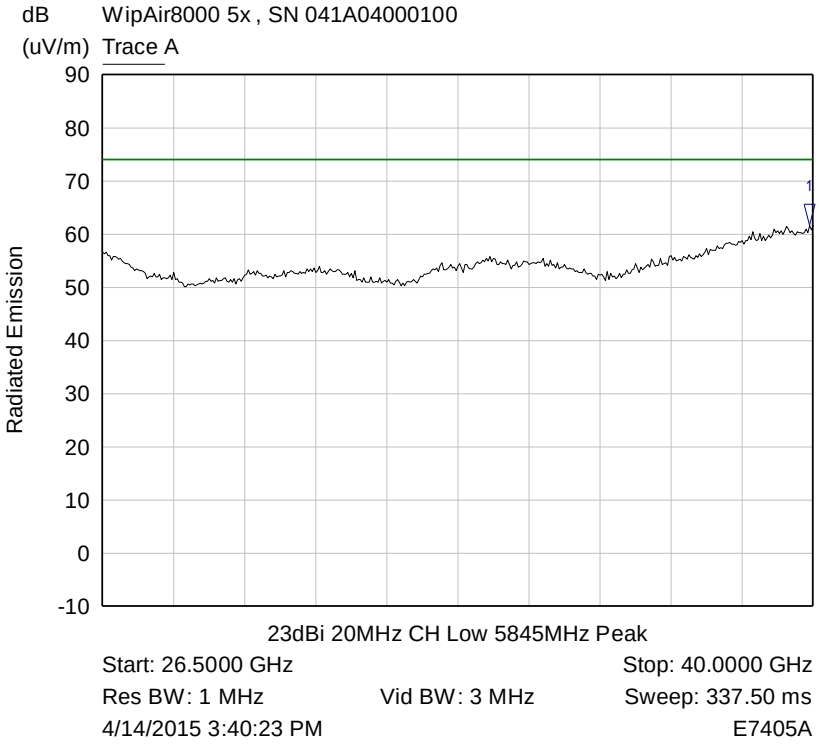
Mkr	Trace	X-Axis	Value	Notes
1 ▽	Trace A	40.0000 GHz	61.22 dB(uV/m)	

Plot Radiated Emission/ 78



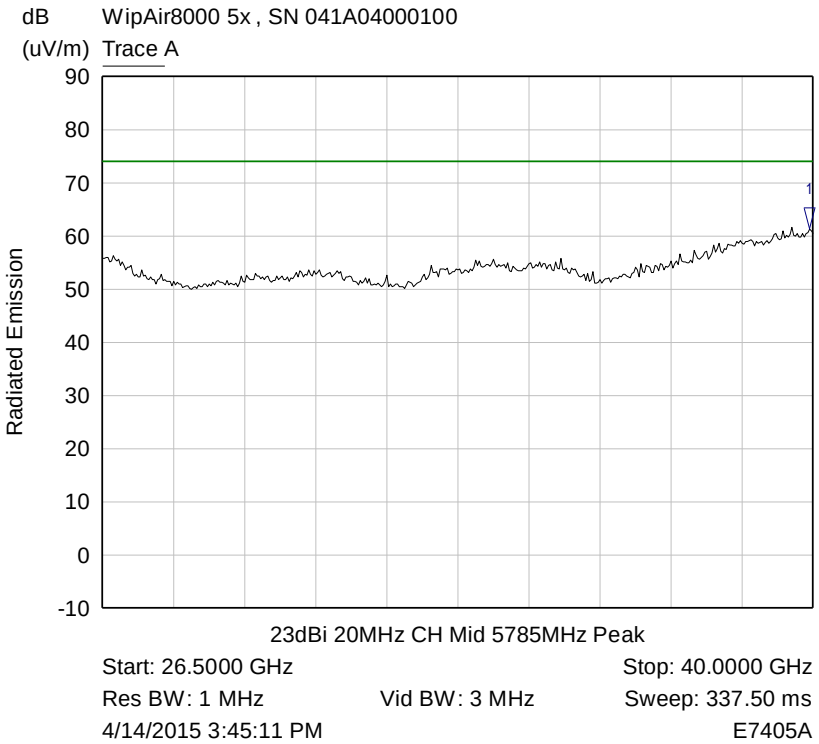
Mkr	Trace	X-Axis	Value	Notes
1 ▽	Trace A	39.9325 GHz	61.68 dB(uV/m)	

Plot Radiated Emission/ 79



Mkr	Trace	X-Axis	Value	Notes
1 ▽	Trace A	39.9325 GHz	61.68 dB(uV/m)	

Plot Radiated Emission/ 80

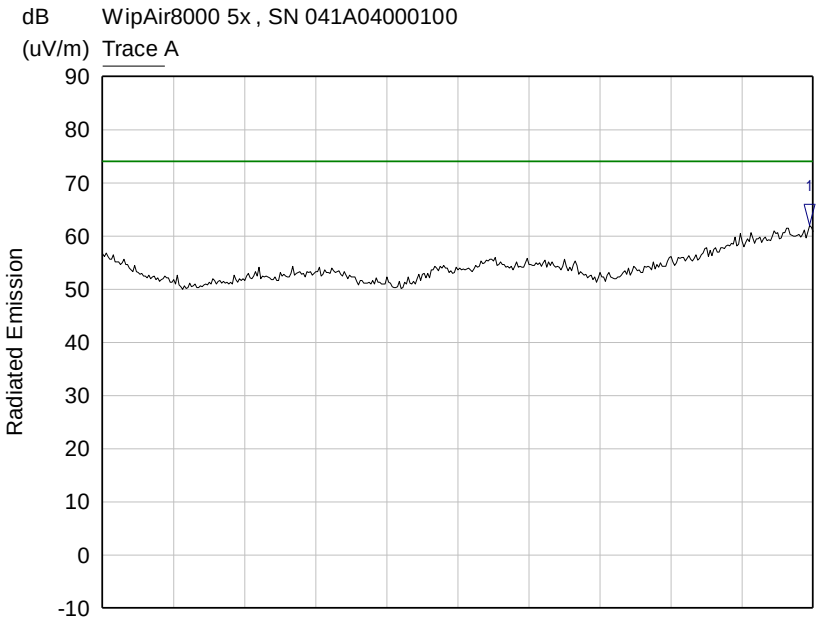


Mkr	Trace	X-Axis	Value	Notes
1 ▽	Trace A	39.9325 GHz	61.36 dB(uV/m)	

Plot Radiated Emission/ 81

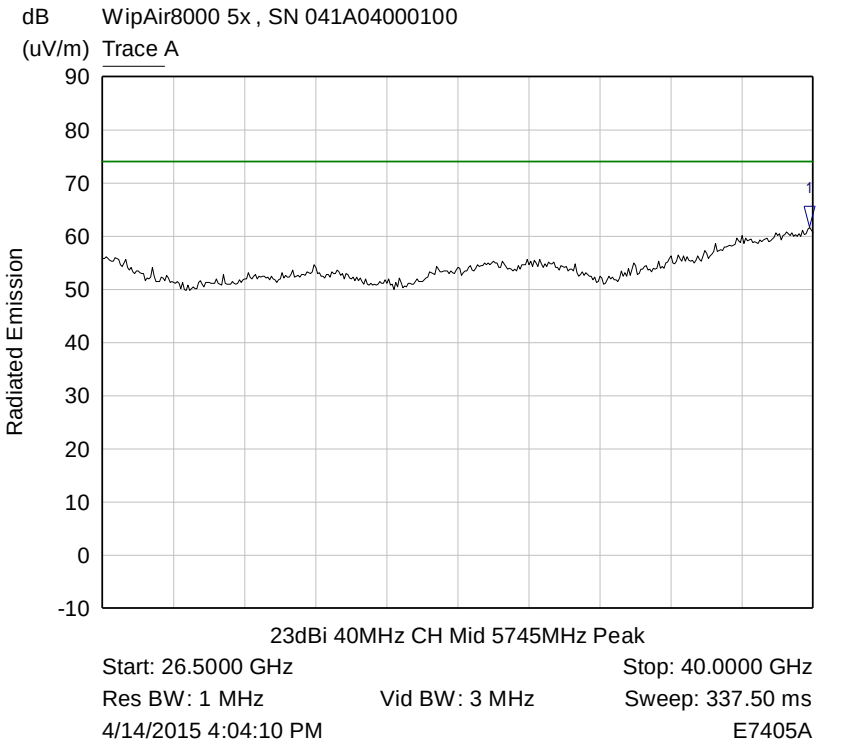
Mkr	Trace	X-Axis	Value	Notes
1 ▽	Trace A	39.9325 GHz	61.36 dB(uV/m)	

Plot Radiated Emission/ 82



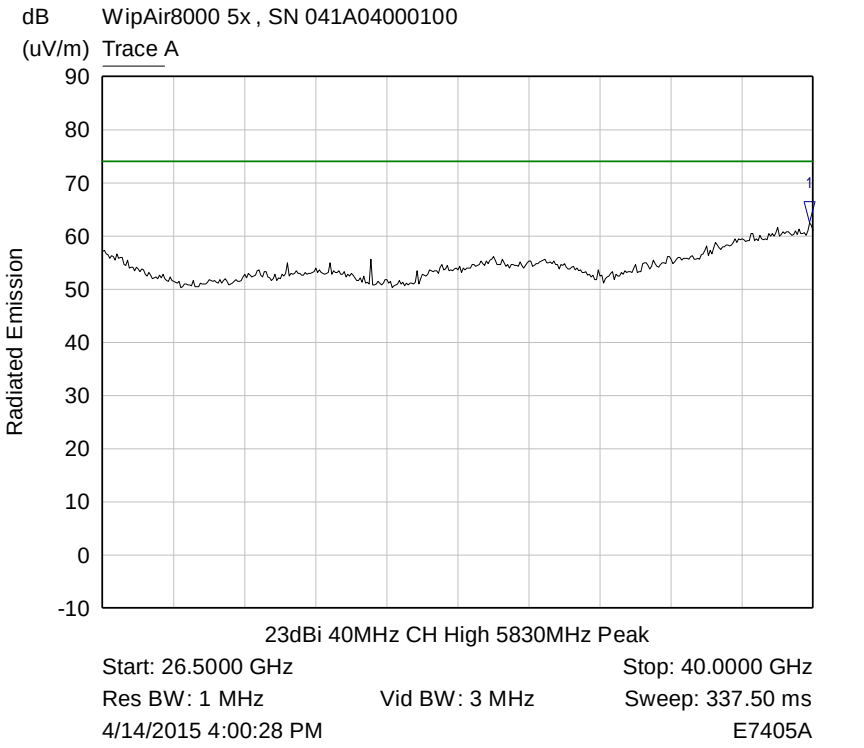
Mkr	Trace	X-Axis	Value	Notes
1 ▽	Trace A	39.9325 GHz	61.95 dB(uV/m)	

Plot Radiated Emission/ 83



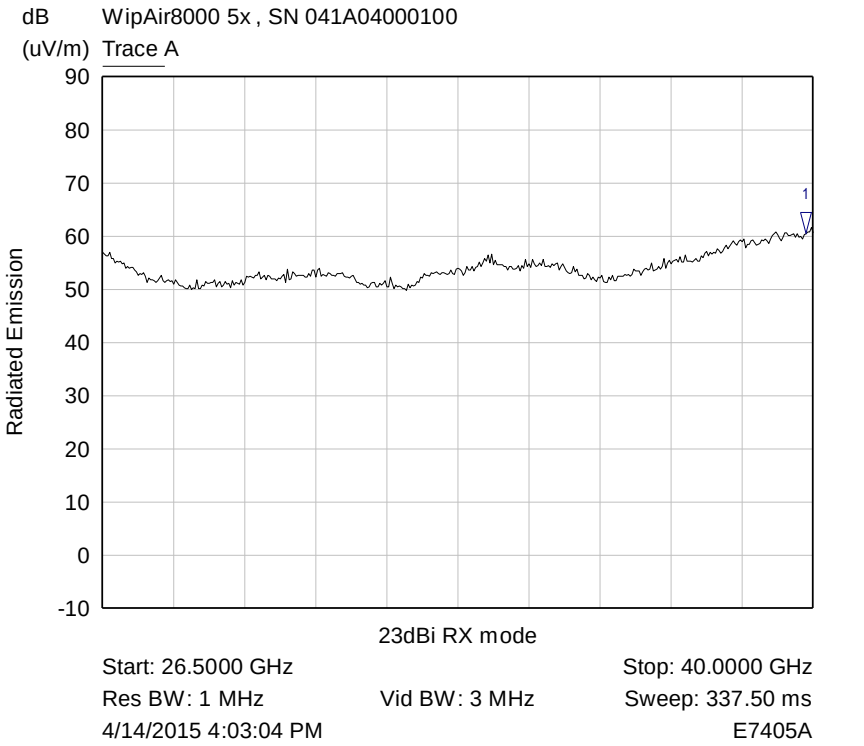
Mkr	Trace	X-Axis	Value	Notes
1 ▽	Trace A	39.9325 GHz	61.63 dB(uV/m)	

Plot Radiated Emission/ 84



Mkr	Trace	X-Axis	Value	Notes
1 ▽	Trace A	39.9325 GHz	62.48 dB(uV/m)	

Plot Radiated Emission/ 85



Mkr	Trace	X-Axis	Value	Notes
1 ▽	Trace A	39.8650 GHz	60.46 dB(uV/m)	

Plot Radiated Emission/ 86

4.10. Dish_Antenna – Test Data

4.10.1. 9 kHz-150 kHz

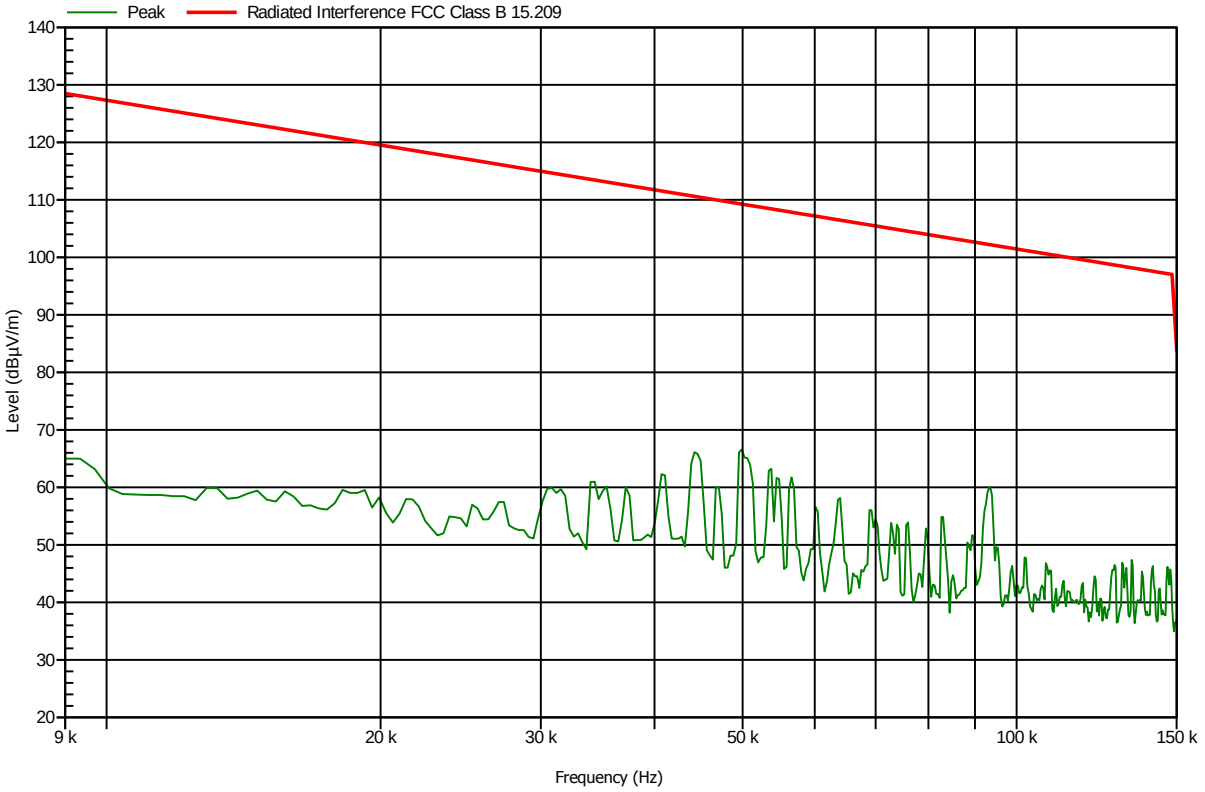
Test Results Plot No 87

9 kHz-150 kHz Spurious Emission

Test & EUT General Information		Receiver Setting	
EUT Name:	WipAir8000 5X	Spect Analyzer	Hewlett Packard 7405A DC Coupling
S/N:	041A04000100	Ref. Level:	Auto [90 dBµV]
Date of Test:	15.04.2015	RBW:	1000 Hz
Test Engineer:	Ilya Arbitman	VBW:	3 kHz
Antenna:	E-Field R&S 9K-30 M Antenna	Sweep Time:	Auto [146.08 ms]
Polarization:	Horizontal and Vertical	Pre Amplifier	LNA MITEQ 0.01-1GHz No-2

TEST REMARKS: Wednesday, April 15, 2015

Dish 28.5dBi; BW=5MHz; Low 5730MHz



MAXIMUM RESULT DEVIATION:

Detect all peaks above 6 dB below the limit line with a maximum of 6 peaks.

None

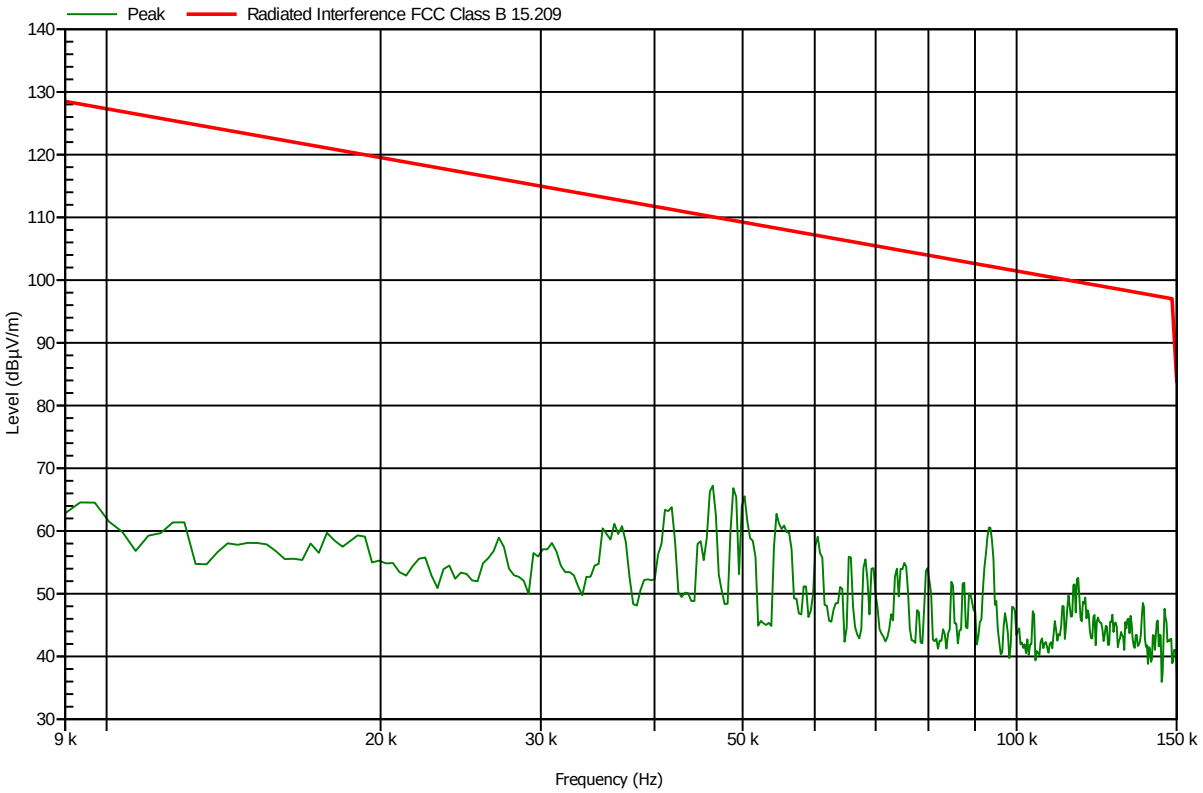
Test Results Plot No 88

9 kHz-150 KHz Spurious Emission

Test & EUT General Information		Receiver Setting	
EUT Name:	WipAir8000 5X	Spect Analyzer	Hewlett Packard 7405A DC Coupling
S/N:	041A04000100	Ref. Level:	Auto [90 dBµV]
Date of Test:	15.04.2015	RBW:	1000 Hz
Test Engineer:	Ilya Arbitman	VBW:	3 kHz
Antenna:	E-Field R&S 9K-30 M Antenna	Sweep Time:	Auto [146.08 ms]
Polarization:	Horizontal and Vertical	Pre Amplifier	LNA MITEQ 0.01-1GHz No-2

TEST REMARKS: Wednesday, April 15, 2015

Dish 28.5dBi; BW=5MHz; Mid 5785MHz



MAXIMUM RESULT DEVIATION:

Detect all peaks above 6 dB below the limit line with a maximum of 6 peaks.

None

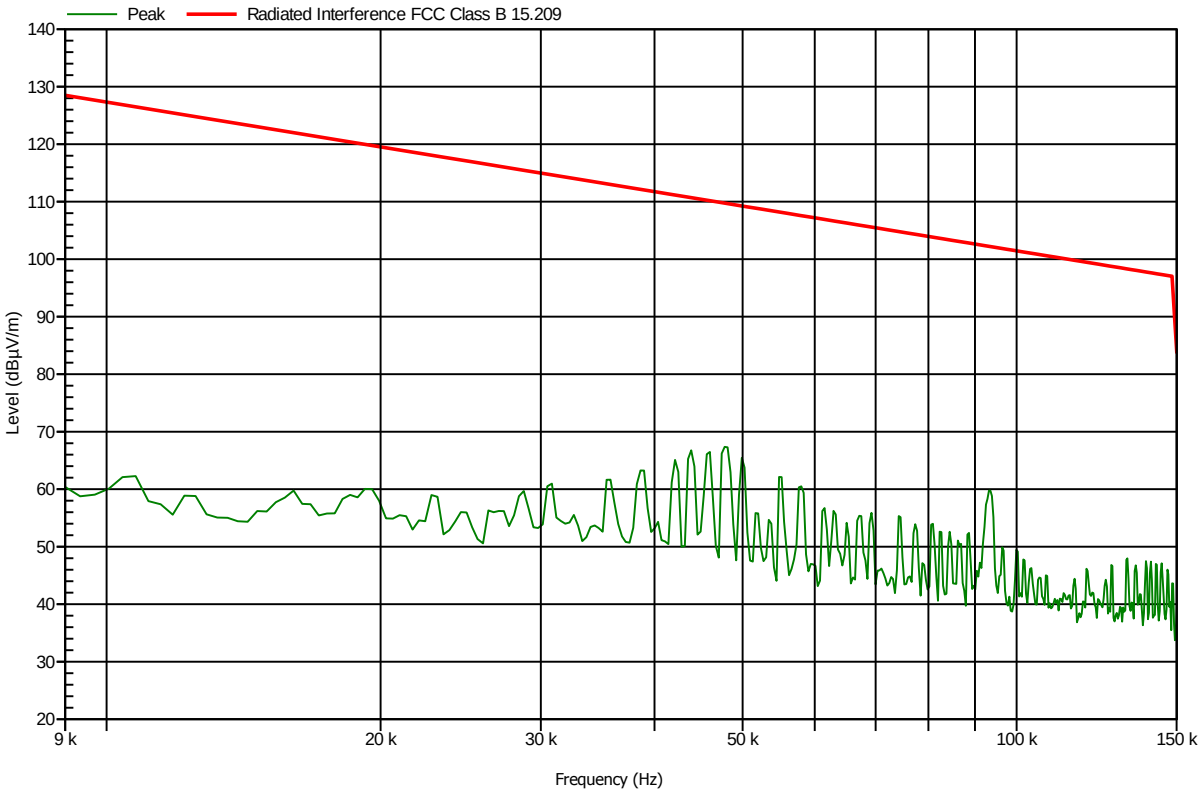
Test Results Plot No 89

9 kHz-150 kHz Spurious Emission

Test & EUT General Information		Receiver Setting	
EUT Name:	WipAir8000 5X	Spect Analyzer	Hewlett Packard 7405A DC Coupling
S/N:	041A04000100	Ref. Level:	Auto [90 dBµV]
Date of Test:	15.04.2015	RBW:	1000 Hz
Test Engineer:	Ilya Arbitman	VBW:	3 kHz
Antenna:	E-Field R&S 9K-30 M Antenna	Sweep Time:	Auto [146.08 ms]
Polarization:	Horizontal and Vertical	Pre Amplifier	LNA MITEQ 0.01-1GHz No-2

TEST REMARKS: Wednesday, April 15, 2015

Dish 28.5dBi; BW=5MHz; High 5845MHz



MAXIMUM RESULT DEVIATION:

Detect all peaks above 6 dB below the limit line with a maximum of 6 peaks.

None

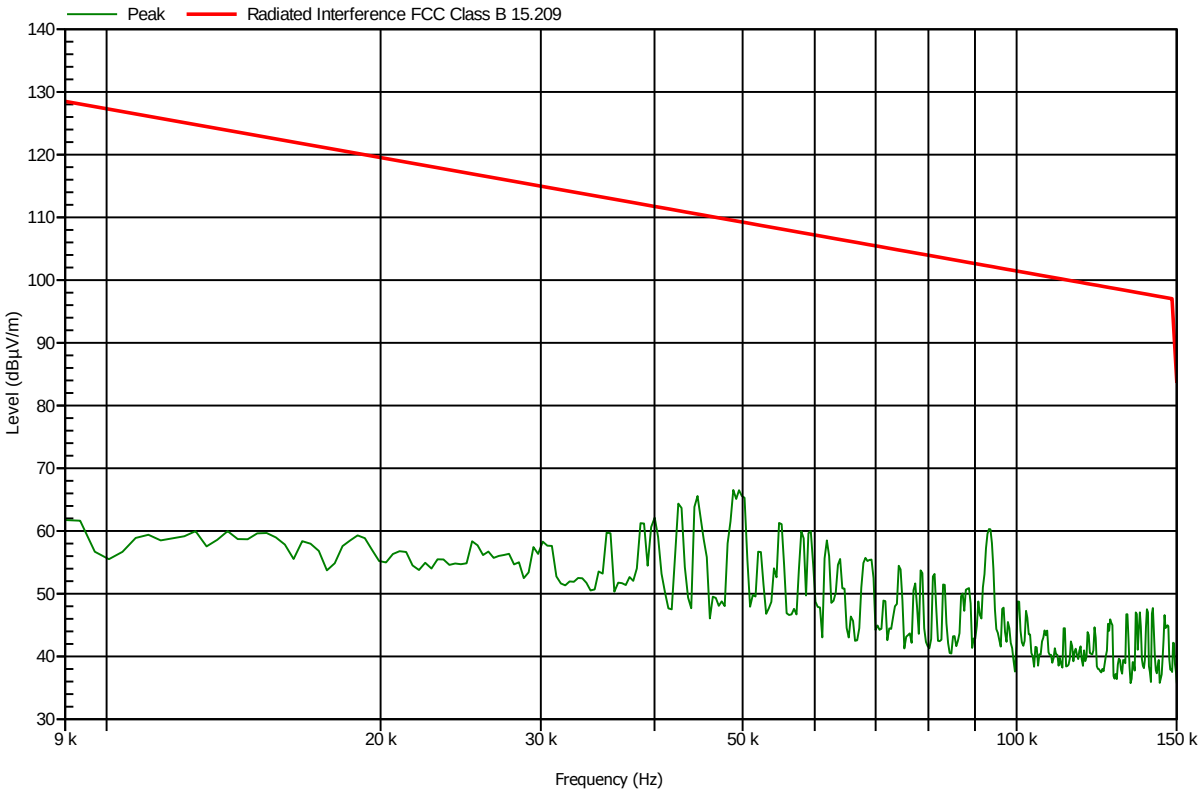
Test Results Plot No 90

9 kHz-150 kHz Spurious Emission

Test & EUT General Information		Receiver Setting	
EUT Name:	WipAir8000 5X	Spect Analyzer	Hewlett Packard 7405A DC Coupling
S/N:	041A04000100	Ref. Level:	Auto [90 dBµV]
Date of Test:	15.04.2015	RBW:	1000 Hz
Test Engineer:	Ilya Arbitman	VBW:	3 kHz
Antenna:	E-Field R&S 9K-30 M Antenna	Sweep Time:	Auto [146.08 ms]
Polarization:	Horizontal and Vertical	Pre Amplifier	LNA MITEQ 0.01-1GHz No-2

TEST REMARKS: Wednesday, April 15, 2015

Dish 28.5dBi; BW=10MHz; Low 5735MHz



MAXIMUM RESULT DEVIATION:

Detect all peaks above 6 dB below the limit line with a maximum of 6 peaks.

None

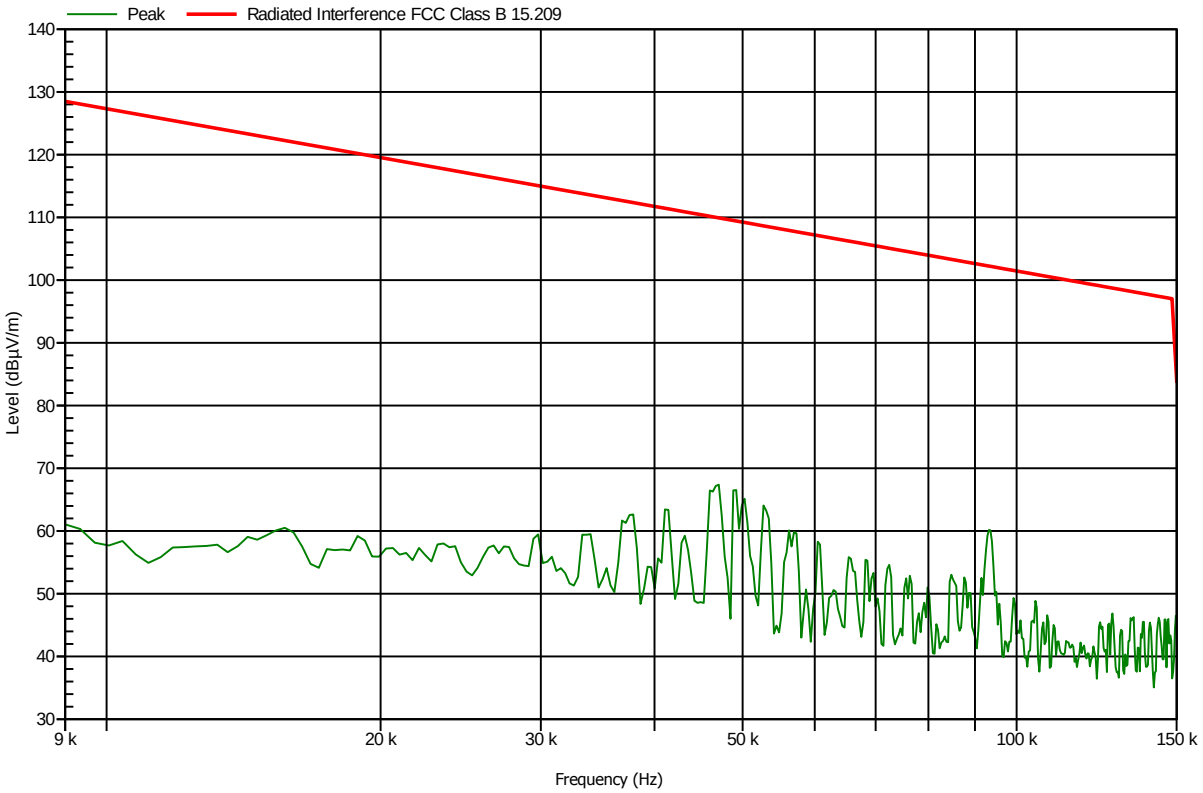
Test Results Plot No 91

9 kHz-150 kHz Spurious Emission

Test & EUT General Information		Receiver Setting	
EUT Name:	WipAir8000 5X	Spect Analyzer	Hewlett Packard 7405A DC Coupling
S/N:	041A04000100	Ref. Level:	Auto [90 dBµV]
Date of Test:	15.04.2015	RBW:	1000 Hz
Test Engineer:	Ilya Arbitman	VBW:	3 kHz
Antenna:	E-Field R&S 9K-30 M Antenna	Sweep Time:	Auto [146.08 ms]
Polarization:	Horizontal and Vertical	Pre Amplifier	LNA MITEQ 0.01-1GHz No-2

TEST REMARKS: Wednesday, April 15, 2015

Dish 28.5dBi; BW=10MHz; Mid 5785MHz



MAXIMUM RESULT DEVIATION:

Detect all peaks above 6 dB below the limit line with a maximum of 6 peaks.

None

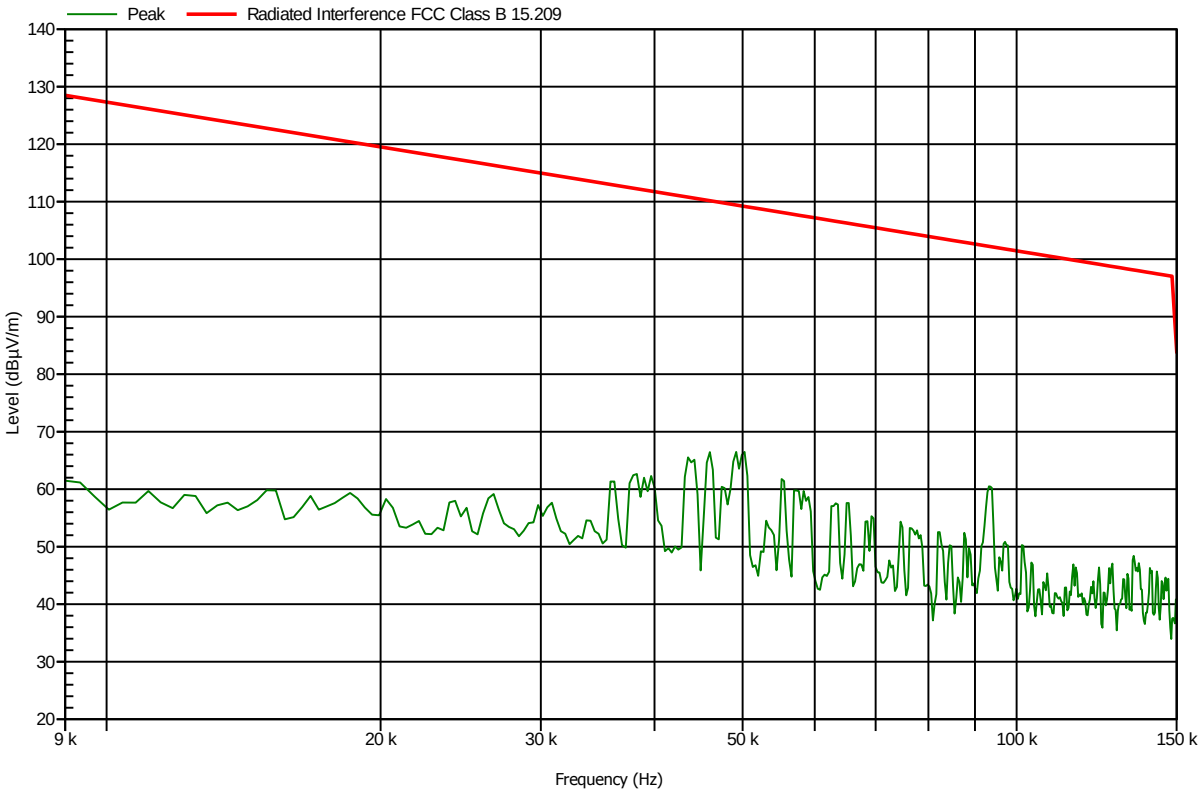
Test Results Plot No 92

9 kHz-150 kHz Spurious Emission

Test & EUT General Information		Receiver Setting	
EUT Name:	WipAir8000 5X	Spect Analyzer	Hewlett Packard 7405A DC Coupling
S/N:	041A04000100	Ref. Level:	Auto [90 dBµV]
Date of Test:	15.04.2015	RBW:	1000 Hz
Test Engineer:	Ilya Arbitman	VBW:	3 kHz
Antenna:	E-Field R&S 9K-30 M Antenna	Sweep Time:	Auto [146.08 ms]
Polarization:	Horizontal and Vertical	Pre Amplifier	LNA MITEQ 0.01-1GHz No-2

TEST REMARKS: Wednesday, April 15, 2015

Dish 28.5dBi; BW=10MHz; High 5840MHz



MAXIMUM RESULT DEVIATION:

Detect all peaks above 6 dB below the limit line with a maximum of 6 peaks.

None

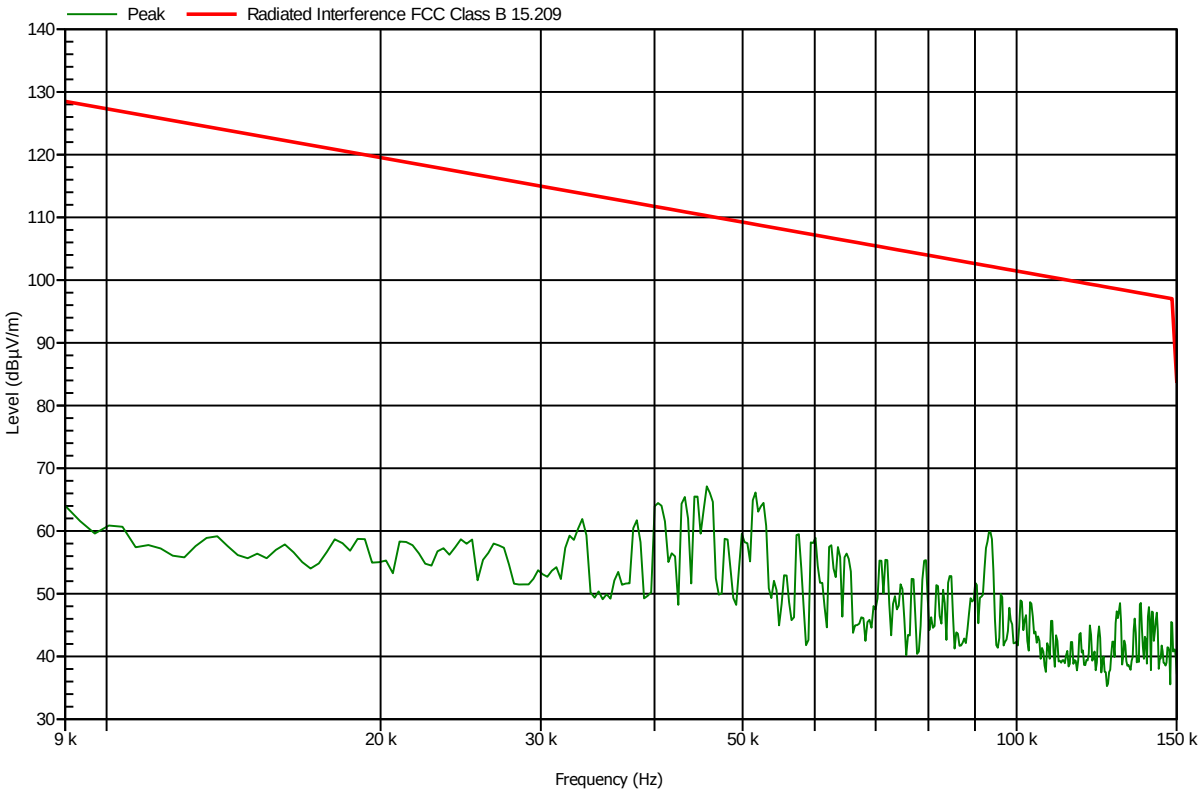
Test Results Plot No 93

9 kHz-150 kHz Spurious Emission

Test & EUT General Information		Receiver Setting	
EUT Name:	WipAir8000 5X	Spect Analyzer	Hewlett Packard 7405A DC Coupling
S/N:	041A04000100	Ref. Level:	Auto [90 dBµV]
Date of Test:	15.04.2015	RBW:	1000 Hz
Test Engineer:	Ilya Arbitman	VBW:	3 kHz
Antenna:	E-Field R&S 9K-30 M Antenna	Sweep Time:	Auto [146.08 ms]
Polarization:	Horizontal and Vertical	Pre Amplifier	LNA MITEQ 0.01-1GHz No-2

TEST REMARKS: Wednesday, April 15, 2015

Dish 28.5dBi; BW=20MHz; Low 5735MHz



MAXIMUM RESULT DEVIATION:

Detect all peaks above 6 dB below the limit line with a maximum of 6 peaks.

None

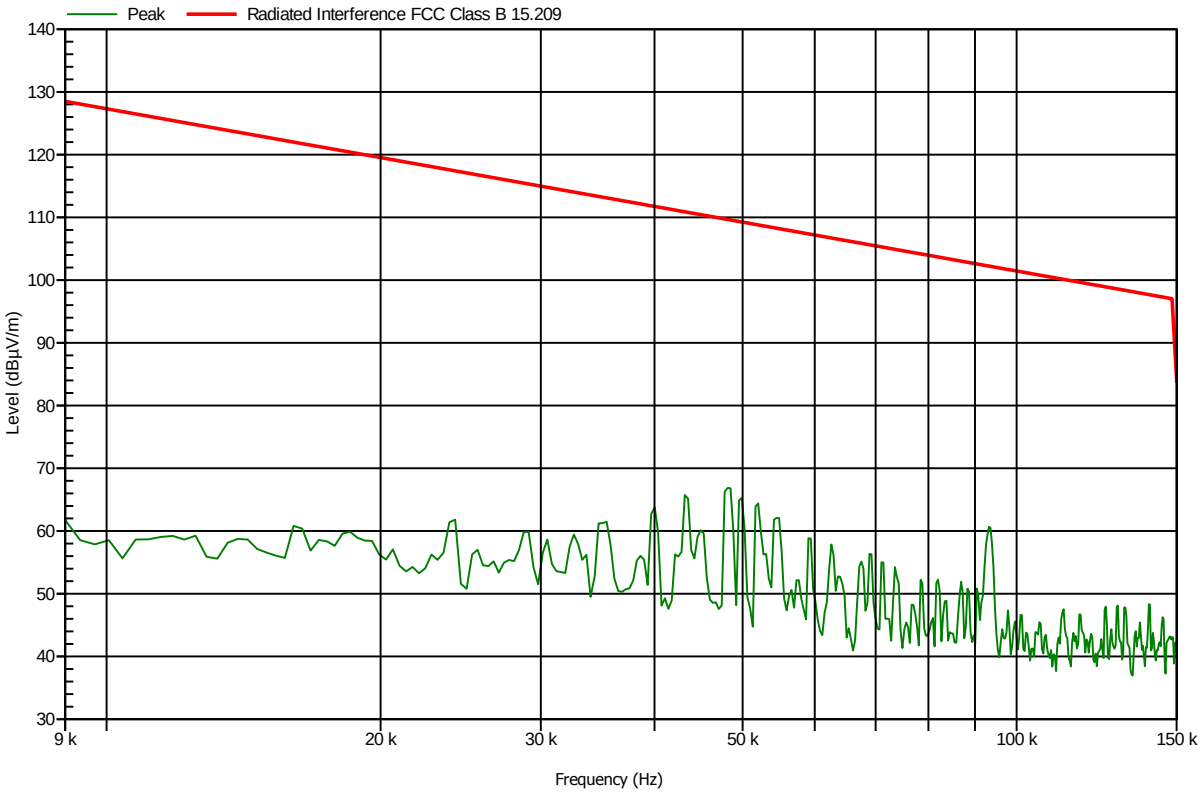
Test Results Plot No 94

9 kHz-150 kHz Spurious Emission

Test & EUT General Information		Receiver Setting	
EUT Name:	WipAir8000 5X	Spect Analyzer	Hewlett Packard 7405A DC Coupling
S/N:	041A04000100	Ref. Level:	Auto [90 dBµV]
Date of Test:	15.04.2015	RBW:	1000 Hz
Test Engineer:	Ilya Arbitman	VBW:	3 kHz
Antenna:	E-Field R&S 9K-30 M Antenna	Sweep Time:	Auto [146.08 ms]
Polarization:	Horizontal and Vertical	Pre Amplifier	LNA MITEQ 0.01-1GHz No-2

TEST REMARKS: Wednesday, April 15, 2015

Dish 28.5dBi; BW=20MHz; Mid 5785MHz



MAXIMUM RESULT DEVIATION:

Detect all peaks above 6 dB below the limit line with a maximum of 6 peaks.

None

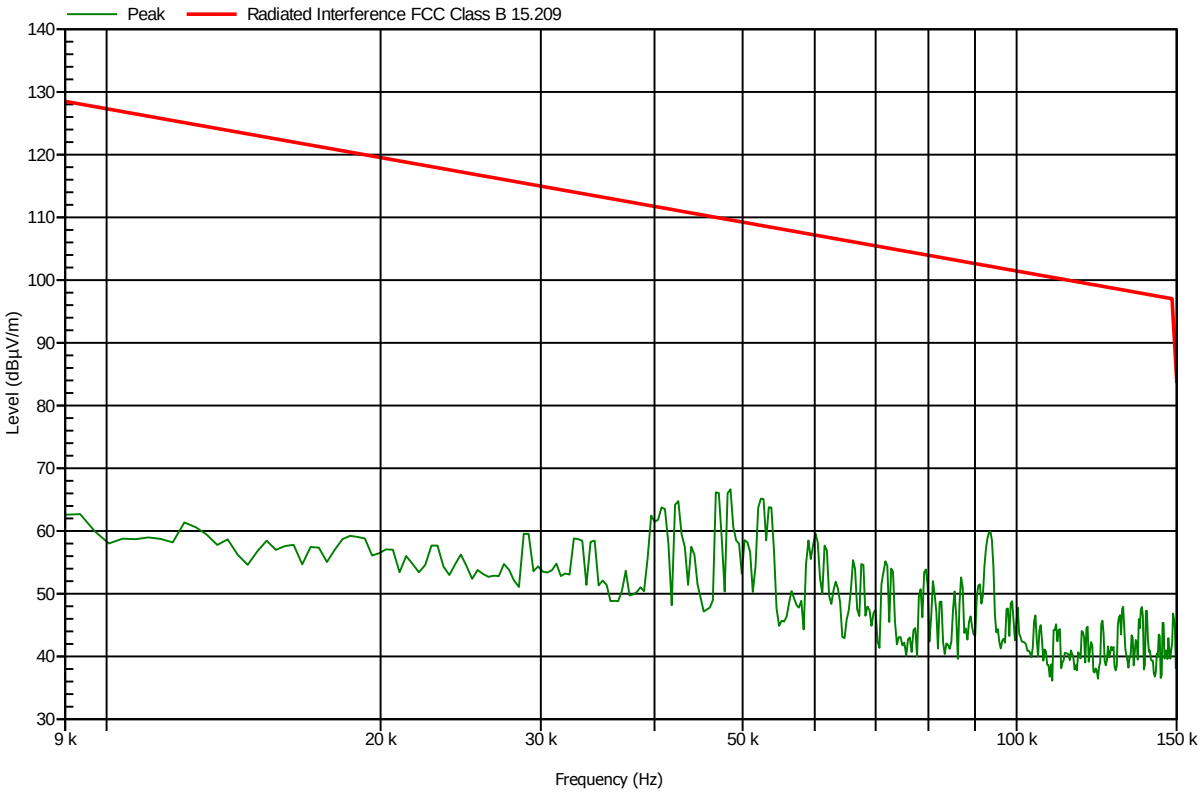
Test Results Plot No 95

9 kHz-150 kHz Spurious Emission

Test & EUT General Information		Receiver Setting	
EUT Name:	WipAir8000 5X	Spect Analyzer	Hewlett Packard 7405A DC Coupling
S/N:	041A04000100	Ref. Level:	Auto [90 dBµV]
Date of Test:	15.04.2015	RBW:	1000 Hz
Test Engineer:	Ilya Arbitman	VBW:	3 kHz
Antenna:	E-Field R&S 9K-30 M Antenna	Sweep Time:	Auto [146.08 ms]
Polarization:	Horizontal and Vertical	Pre Amplifier	LNA MITEQ 0.01-1GHz No-2

TEST REMARKS: Wednesday, April 15, 2015

Dish 28.5dBi; BW=20MHz; High 5840MHz



MAXIMUM RESULT DEVIATION:

Detect all peaks above 6 dB below the limit line with a maximum of 6 peaks.

None

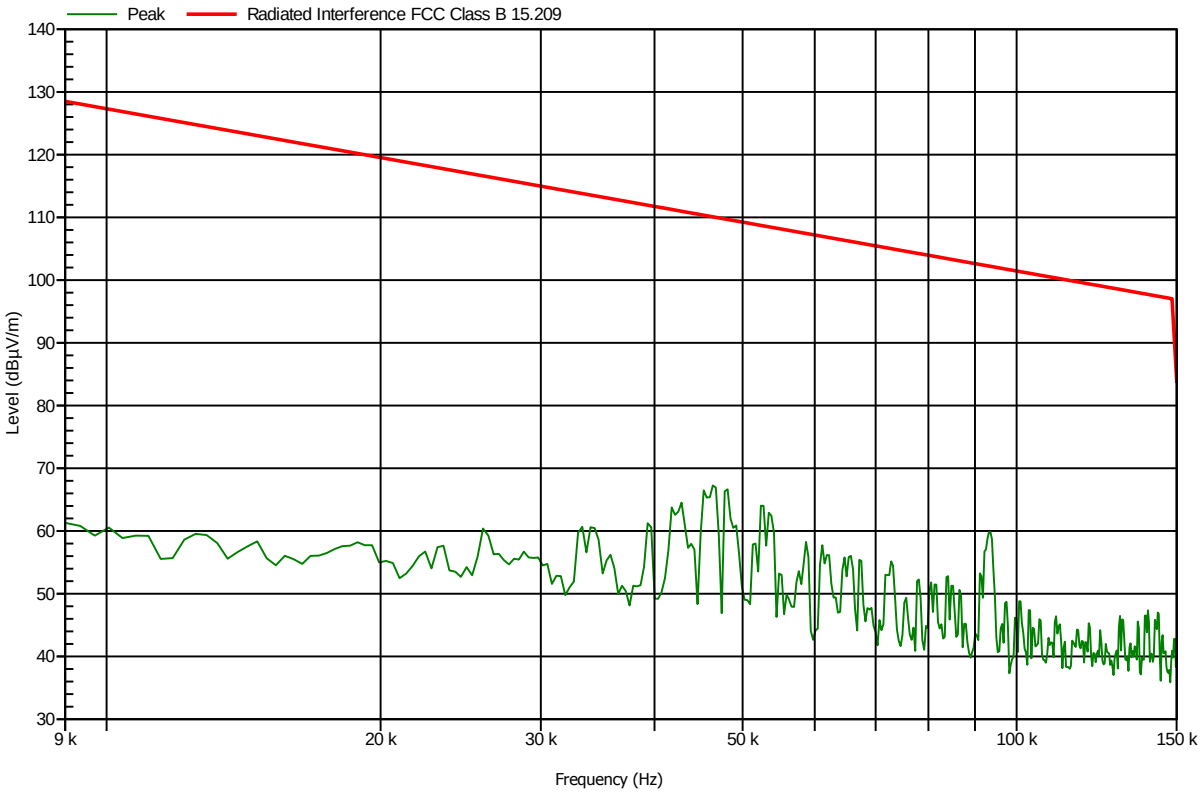
Test Results Plot No 96

9 kHz-150 kHz Spurious Emission

Test & EUT General Information		Receiver Setting	
EUT Name:	WipAir8000 5X	Spect Analyzer	Hewlett Packard 7405A DC Coupling
S/N:	041A04000100	Ref. Level:	Auto [90 dBµV]
Date of Test:	15.04.2015	RBW:	1000 Hz
Test Engineer:	Ilya Arbitman	VBW:	3 kHz
Antenna:	E-Field R&S 9K-30 M Antenna	Sweep Time:	Auto [146.08 ms]
Polarization:	Horizontal and Vertical	Pre Amplifier	LNA MITEQ 0.01-1GHz No-2

TEST REMARKS: Wednesday, April 15, 2015

Dish 28.5dBi; BW=40MHz; Low 5745MHz



MAXIMUM RESULT DEVIATION:

Detect all peaks above 6 dB below the limit line with a maximum of 6 peaks.

None

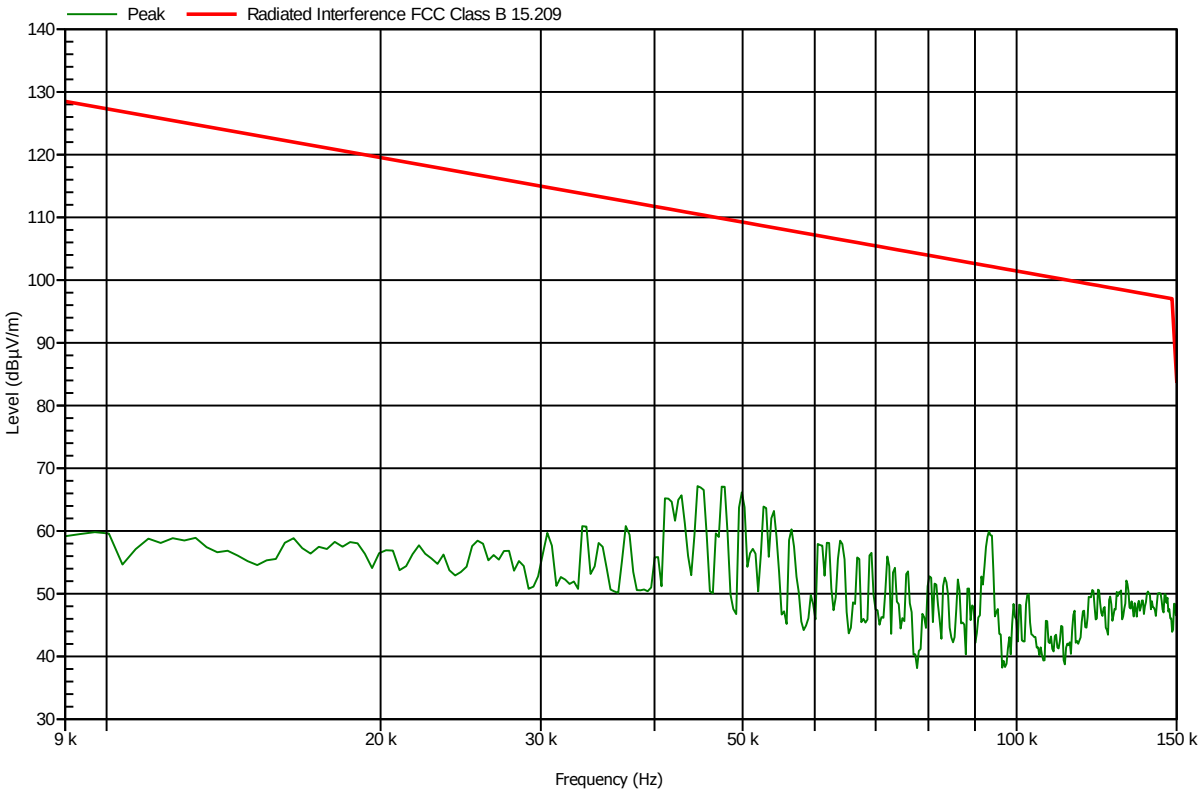
Test Results Plot No 97

9 kHz-150 kHz Spurious Emission

Test & EUT General Information		Receiver Setting	
EUT Name:	WipAir8000 5X	Spect Analyzer	Hewlett Packard 7405A DC Coupling
S/N:	041A04000100	Ref. Level:	Auto [90 dBµV]
Date of Test:	15.04.2015	RBW:	1000 Hz
Test Engineer:	Ilya Arbitman	VBW:	3 kHz
Antenna:	E-Field R&S 9K-30 M Antenna	Sweep Time:	Auto [146.08 ms]
Polarization:	Horizontal and Vertical	Pre Amplifier	LNA MITEQ 0.01-1GHz No-2

TEST REMARKS: Wednesday, April 15, 2015

Dish 28.5dBi; BW=40MHz; Mid 5785MHz



MAXIMUM RESULT DEVIATION:

Detect all peaks above 6 dB below the limit line with a maximum of 6 peaks.

None

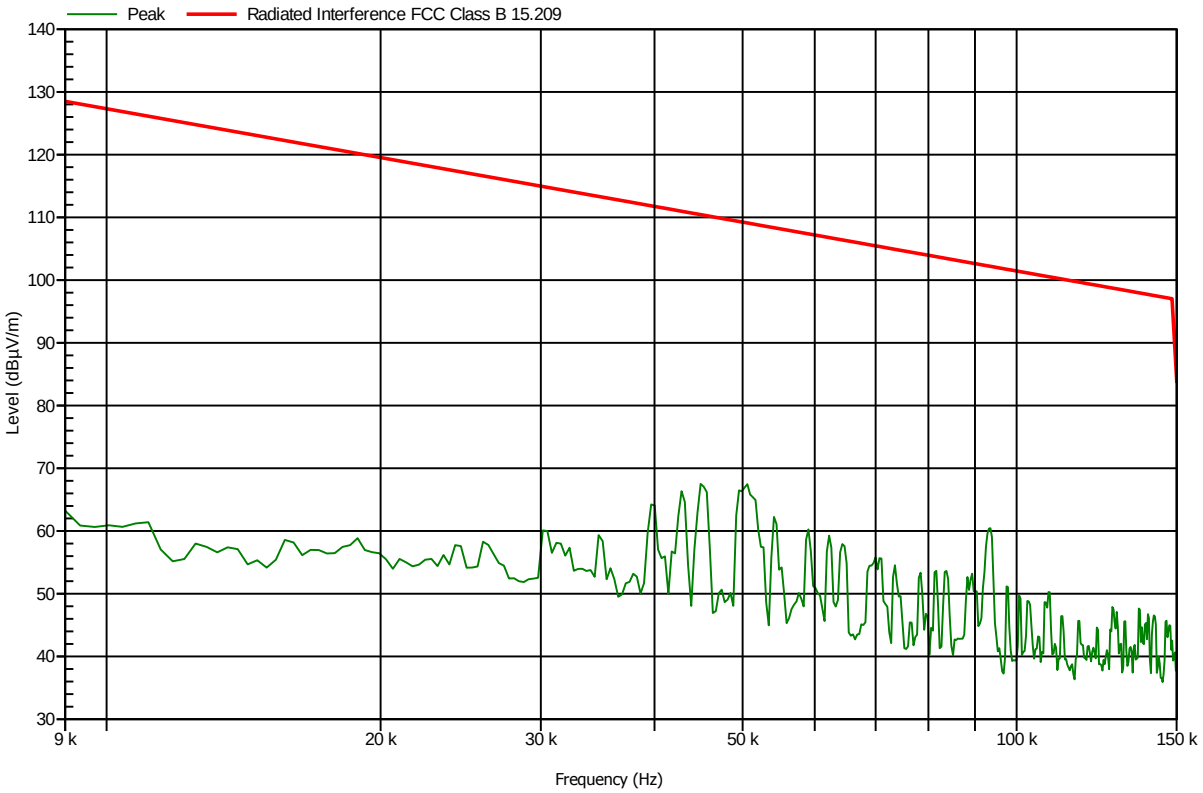
Test Results Plot No 98

9 kHz-150 kHz Spurious Emission

Test & EUT General Information		Receiver Setting	
EUT Name:	WipAir8000 5X	Spect Analyzer	Hewlett Packard 7405A DC Coupling
S/N:	041A04000100	Ref. Level:	Auto [90 dBµV]
Date of Test:	15.04.2015	RBW:	1000 Hz
Test Engineer:	Ilya Arbitman	VBW:	3 kHz
Antenna:	E-Field R&S 9K-30 M Antenna	Sweep Time:	Auto [146.08 ms]
Polarization:	Horizontal and Vertical	Pre Amplifier	LNA MITEQ 0.01-1GHz No-2

TEST REMARKS: Wednesday, April 15, 2015

Dish 28.5dBi; BW=40MHz; High 5830MHz



MAXIMUM RESULT DEVIATION:

Detect all peaks above 6 dB below the limit line with a maximum of 6 peaks.

None

4.10.2. 150 kHz-30 MHz-Dish

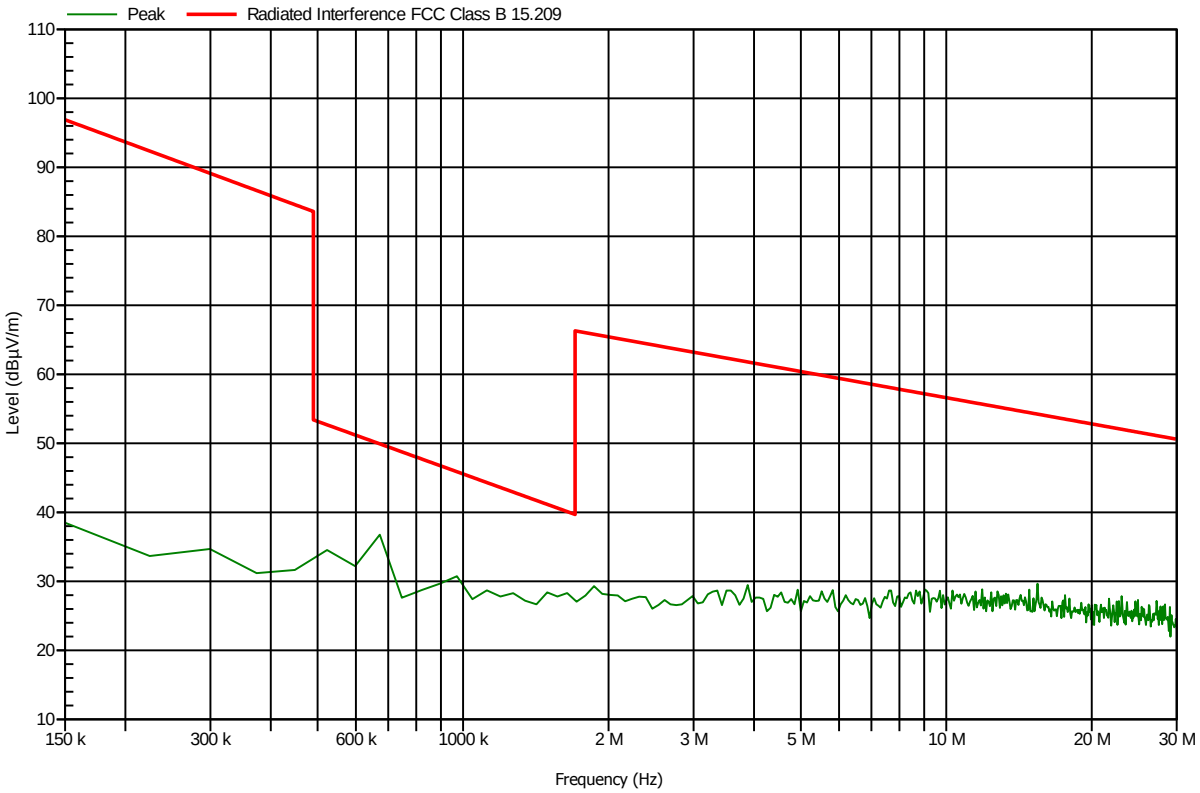
Test Results Plot No 99

150 kHz-30 MHz Spurious Emission

Test & EUT General Information		Receiver Setting	
EUT Name:	WipAir8000 5X	Spect Analyzer	Hewlett Packard 7405A DC Coupling
S/N:	041A04000100	Ref. Level:	Auto [90 dBµV]
Date of Test:	15.04.2015	RBW:	9 kHz
Test Engineer:	Ilya Arbitman	VBW:	30 kHz
Antenna:	E-Field R&S 9K-30 M Antenna	Sweep Time:	Auto [840.04 ms]
Polarization:	Vertical	Pre Amplifier	LNA MITEQ 0.01-1GHz No-2

TEST REMARKS: Wednesday, April 15, 2015

Dish 28.5-dBi; BW=5MHz; Low 5730MHz



MAXIMUM RESULT DEVIATION:

Detect all peaks above 6 dB below the limit line with a maximum of 6 peaks.

None

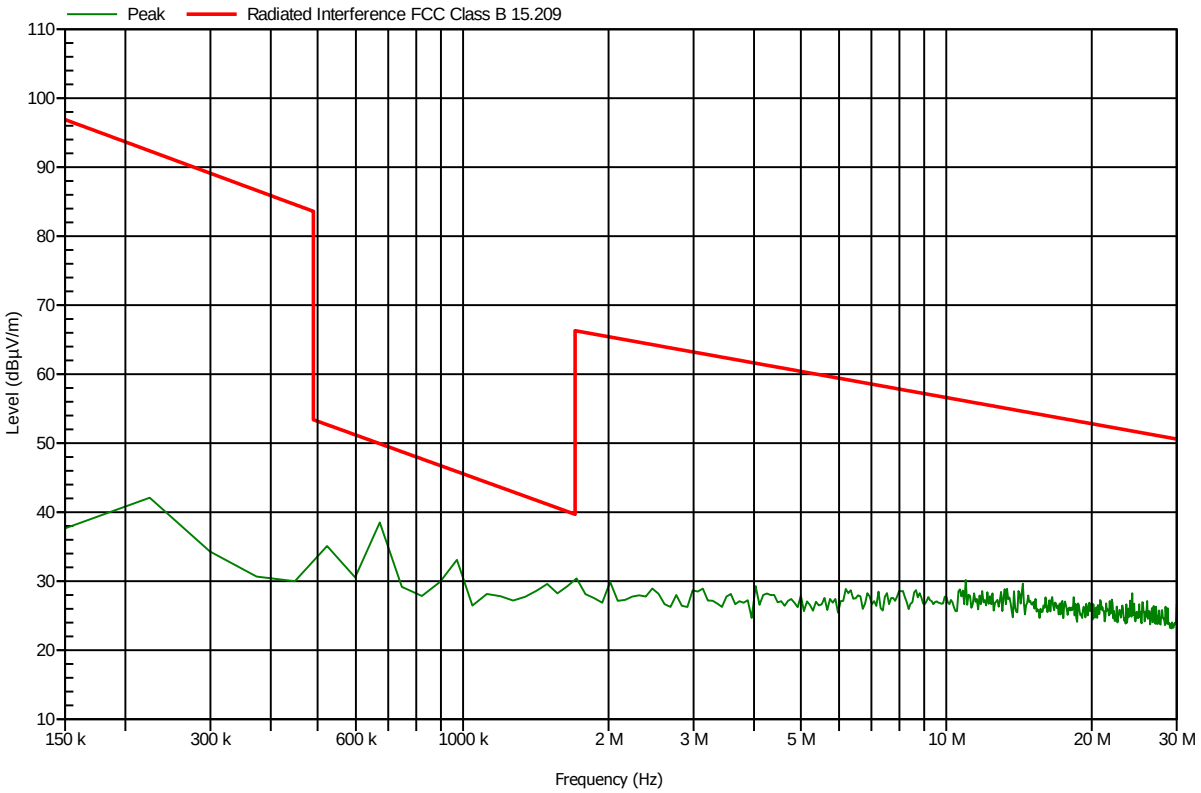
Test Results Plot No 100

150 kHz-30 MHz Spurious Emission

Test & EUT General Information		Receiver Setting	
EUT Name:	WipAir8000 5X	Spect Analyzer	Hewlett Packard 7405A DC Coupling
S/N:	041A04000100	Ref. Level:	Auto [90 dBµV]
Date of Test:	15.04.2015	RBW:	9 kHz
Test Engineer:	Ilya Arbitman	VBW:	30 kHz
Antenna:	E-Field R&S 9K-30 M Antenna	Sweep Time:	Auto [840.04 ms]
Polarization:	Vertical	Pre Amplifier	LNA MITEQ 0.01-1GHz No-2

TEST REMARKS: Wednesday, April 15, 2015

Dish 28.5-dBi; BW=5MHz; Mid 5785MHz



MAXIMUM RESULT DEVIATION:

Detect all peaks above 6 dB below the limit line with a maximum of 6 peaks.

None

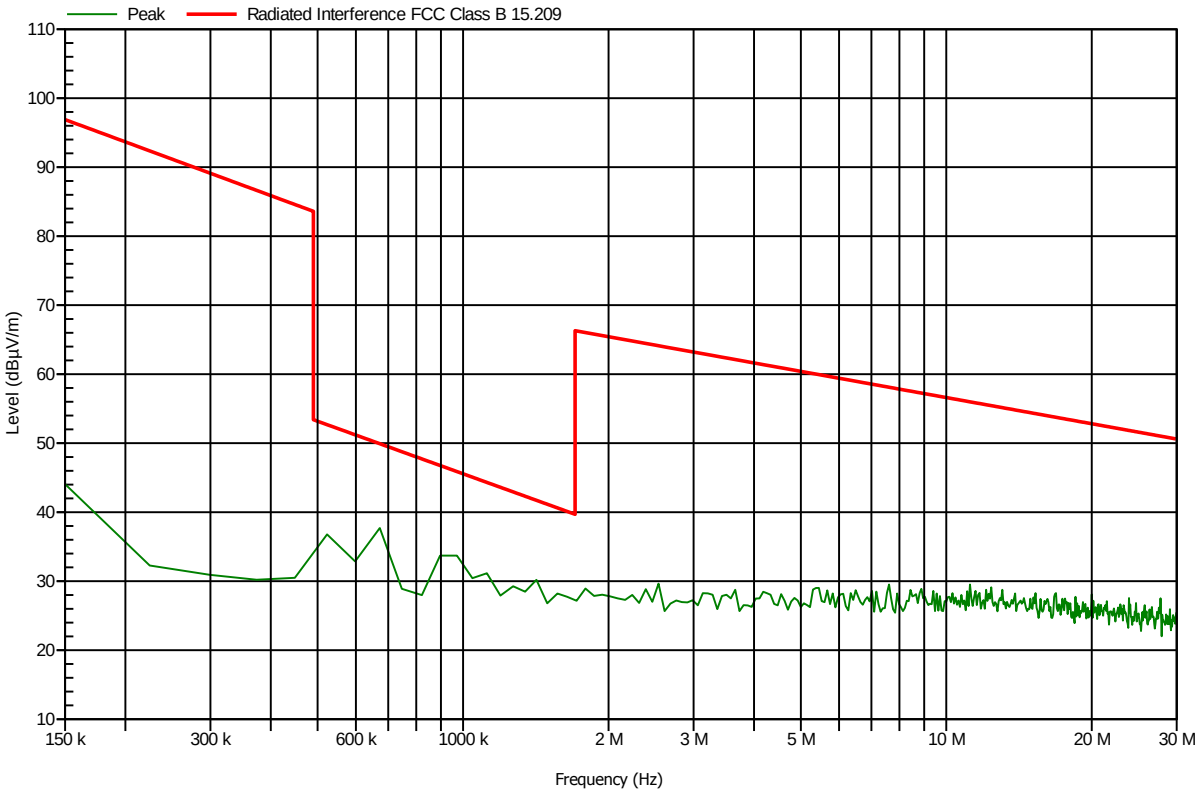
Test Results Plot No 101

150 kHz-30 MHz Spurious Emission

Test & EUT General Information		Receiver Setting	
EUT Name:	WipAir8000 5X	Spect Analyzer	Hewlett Packard 7405A DC Coupling
S/N:	041A04000100	Ref. Level:	Auto [90 dBµV]
Date of Test:	15.04.2015	RBW:	9 kHz
Test Engineer:	Ilya Arbitman	VBW:	30 kHz
Antenna:	E-Field R&S 9K-30 M Antenna	Sweep Time:	Auto [840.04 ms]
Polarization:	Vertical	Pre Amplifier	LNA MITEQ 0.01-1GHz No-2

TEST REMARKS: Wednesday, April 15, 2015

Dish 28.5-dBi; BW=5MHz; High 5845MHz



MAXIMUM RESULT DEVIATION:

Detect all peaks above 6 dB below the limit line with a maximum of 6 peaks.

None

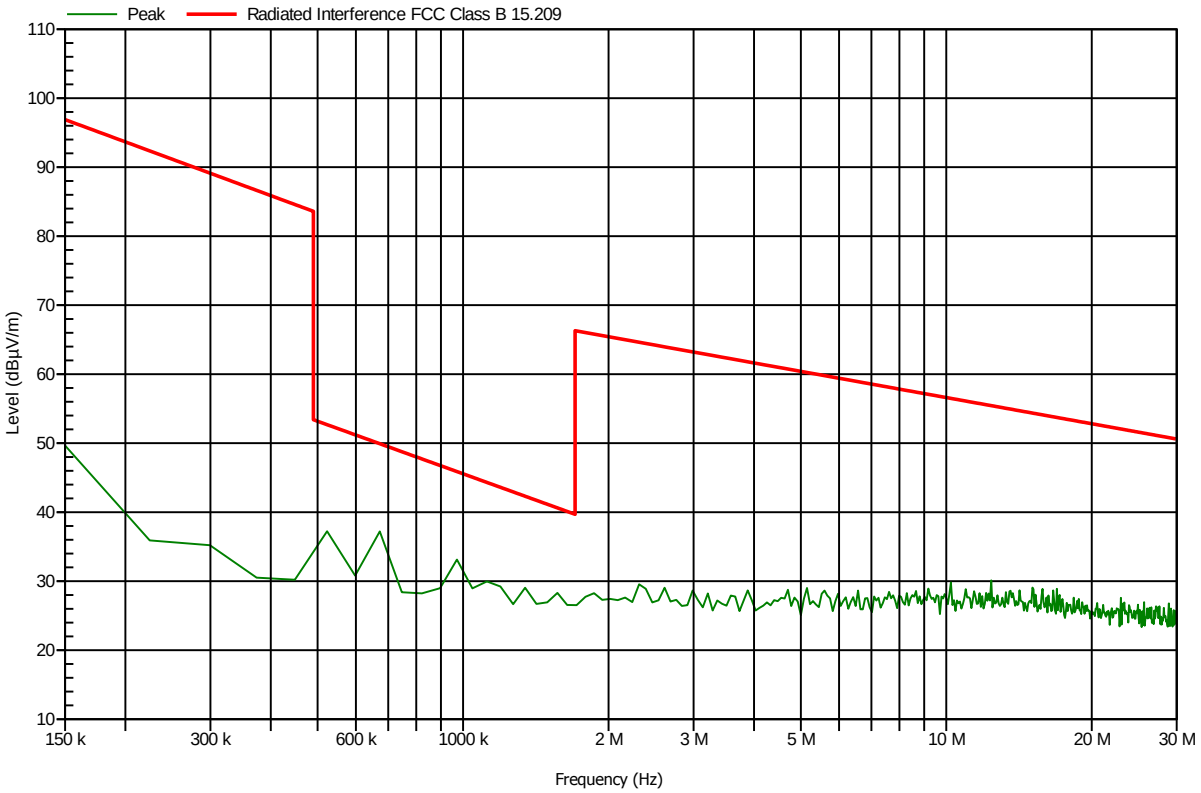
Test Results Plot No 102

150 kHz-30 MHz Spurious Emission

Test & EUT General Information		Receiver Setting	
EUT Name:	WipAir8000 5X	Spect Analyzer	Hewlett Packard 7405A DC Coupling
S/N:	041A04000100	Ref. Level:	Auto [90 dBµV]
Date of Test:	15.04.2015	RBW:	9 kHz
Test Engineer:	Ilya Arbitman	VBW:	30 kHz
Antenna:	E-Field R&S 9K-30 M Antenna	Sweep Time:	Auto [840.04 ms]
Polarization:	Vertical	Pre Amplifier	LNA MITEQ 0.01-1GHz No-2

TEST REMARKS: Wednesday, April 15, 2015

Dish 28.5-dBi; BW=10MHz; Low 5735MHz



MAXIMUM RESULT DEVIATION:

Detect all peaks above 6 dB below the limit line with a maximum of 6 peaks.

None

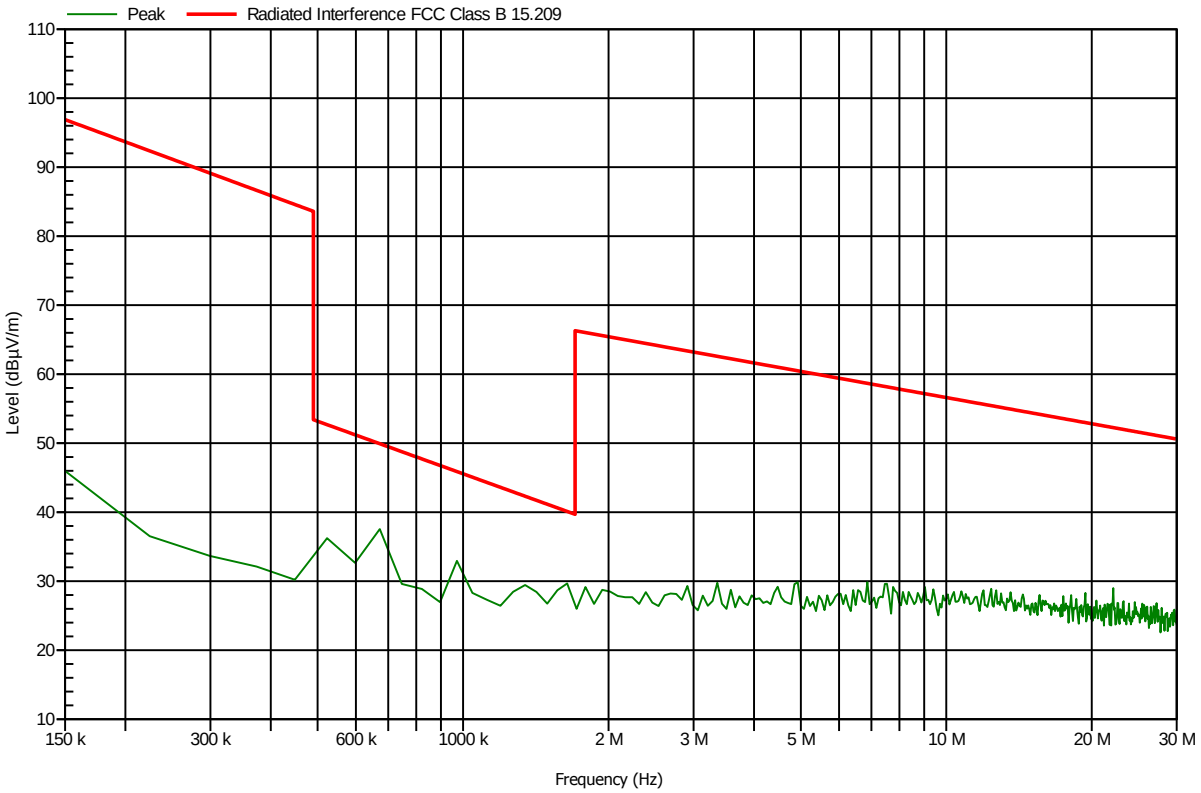
Test Results Plot No 103

150 kHz-30 MHz Spurious Emission

Test & EUT General Information		Receiver Setting	
EUT Name:	WipAir8000 5X	Spect Analyzer	Hewlett Packard 7405A DC Coupling
S/N:	041A04000100	Ref. Level:	Auto [90 dBµV]
Date of Test:	15.04.2015	RBW:	9 kHz
Test Engineer:	Ilya Arbitman	VBW:	30 kHz
Antenna:	E-Field R&S 9K-30 M Antenna	Sweep Time:	Auto [840.04 ms]
Polarization:	Vertical	Pre Amplifier	LNA MITEQ 0.01-1GHz No-2

TEST REMARKS: Wednesday, April 15, 2015

Dish 28.5-dBi; BW=10MHz; Mid 5785MHz



MAXIMUM RESULT DEVIATION:

Detect all peaks above 6 dB below the limit line with a maximum of 6 peaks.

None

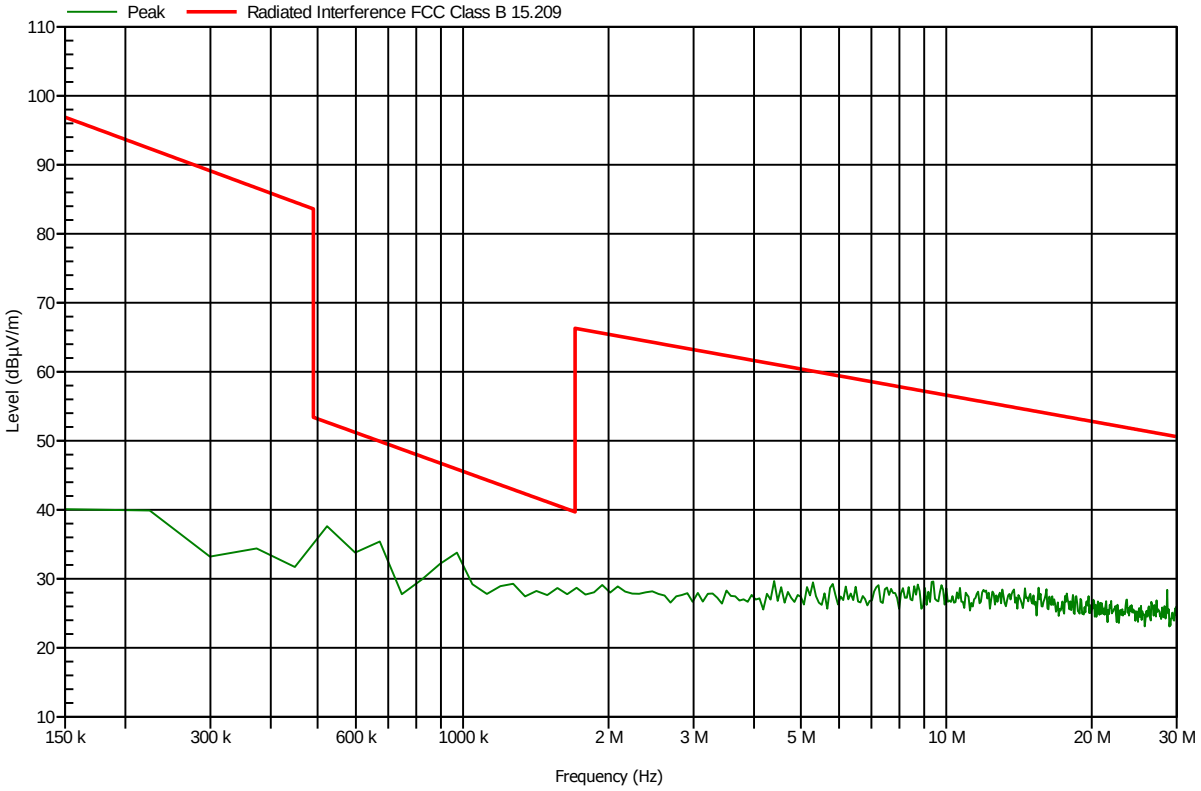
Test Results Plot No 104

150 kHz-30 MHz Spurious Emission

Test & EUT General Information		Receiver Setting	
EUT Name:	WipAir8000 5X	Spect Analyzer	Hewlett Packard 7405A DC Coupling
S/N:	041A04000100	Ref. Level:	Auto [90 dBµV]
Date of Test:	15.04.2015	RBW:	9 kHz
Test Engineer:	Ilya Arbitman	VBW:	30 kHz
Antenna:	E-Field R&S 9K-30 M Antenna	Sweep Time:	Auto [840.04 ms]
Polarization:	Vertical	Pre Amplifier	LNA MITEQ 0.01-1GHz No-2

TEST REMARKS: Wednesday, April 15, 2015

Dish 28.5-dBi; BW=10MHz; High 5840MHz



MAXIMUM RESULT DEVIATION:

Detect all peaks above 6 dB below the limit line with a maximum of 6 peaks.

None

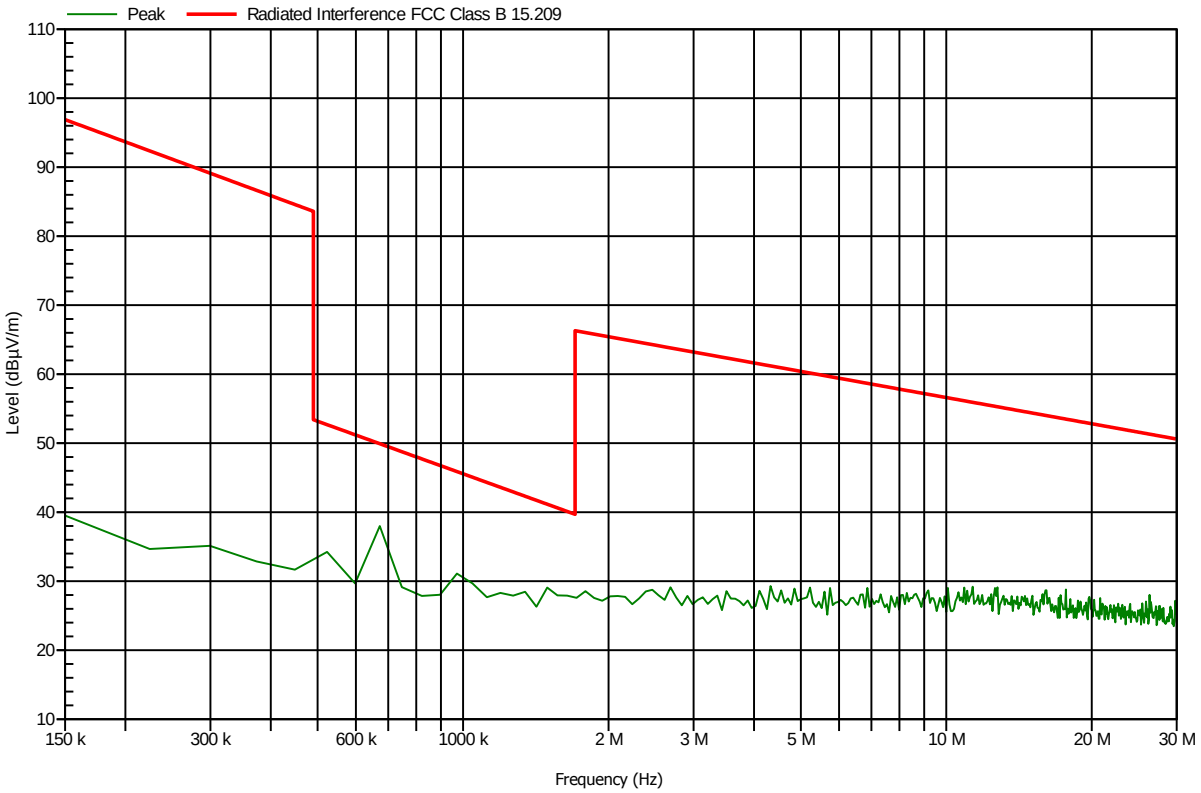
Test Results Plot No 105

150 kHz-30 MHz Spurious Emission

Test & EUT General Information		Receiver Setting	
EUT Name:	WipAir8000 5X	Spect Analyzer	Hewlett Packard 7405A DC Coupling
S/N:	041A04000100	Ref. Level:	Auto [90 dBµV]
Date of Test:	15.04.2015	RBW:	9 kHz
Test Engineer:	Ilya Arbitman	VBW:	30 kHz
Antenna:	E-Field R&S 9K-30 M Antenna	Sweep Time:	Auto [840.04 ms]
Polarization:	Vertical	Pre Amplifier	LNA MITEQ 0.01-1GHz No-2

TEST REMARKS: Wednesday, April 15, 2015

Dish 28.5-dBi; BW=20MHz; Low 5735MHz



MAXIMUM RESULT DEVIATION:

Detect all peaks above 6 dB below the limit line with a maximum of 6 peaks.

None

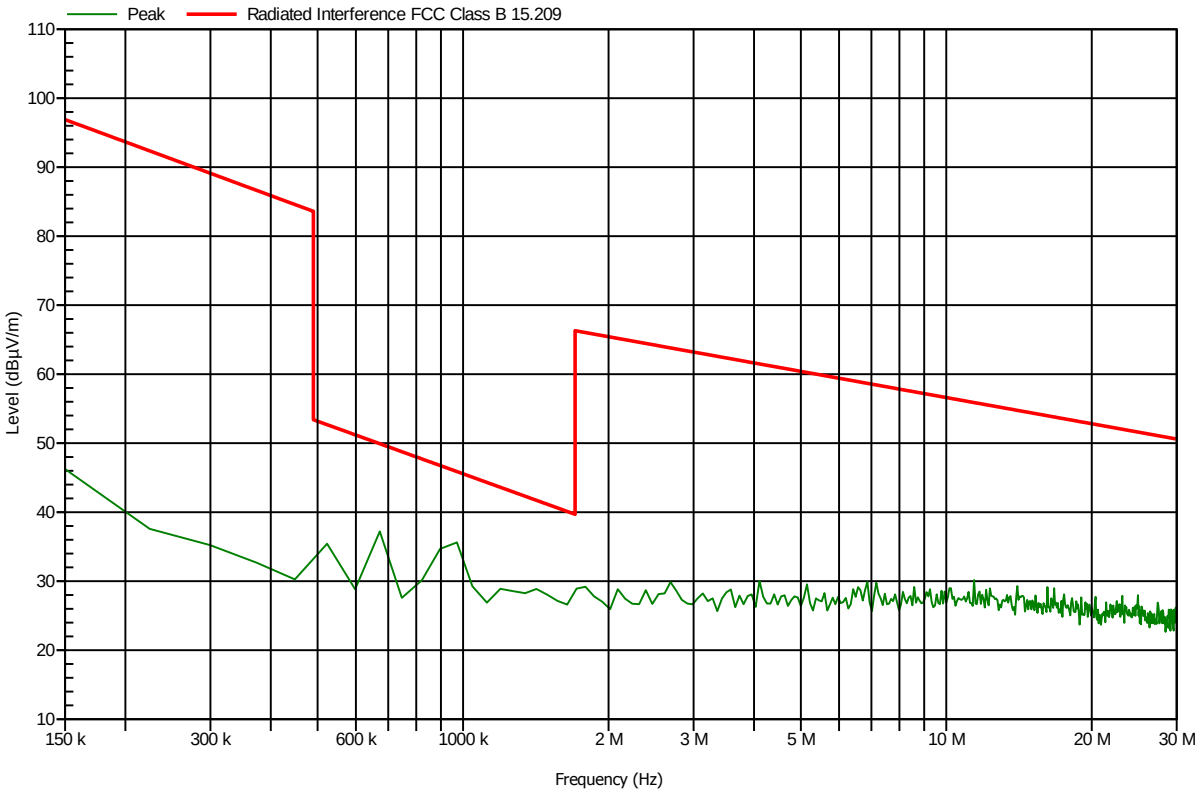
Test Results Plot No 106

150 kHz-30 MHz Spurious Emission

Test & EUT General Information		Receiver Setting	
EUT Name:	WipAir8000 5X	Spect Analyzer	Hewlett Packard 7405A DC Coupling
S/N:	041A04000100	Ref. Level:	Auto [90 dBµV]
Date of Test:	15.04.2015	RBW:	9 kHz
Test Engineer:	Ilya Arbitman	VBW:	30 kHz
Antenna:	E-Field R&S 9K-30 M Antenna	Sweep Time:	Auto [840.04 ms]
Polarization:	Vertical	Pre Amplifier	LNA MITEQ 0.01-1GHz No-2

TEST REMARKS: Wednesday, April 15, 2015

Dish 28.5-dBi; BW=20MHz; Mid 5785MHz



MAXIMUM RESULT DEVIATION:

Detect all peaks above 6 dB below the limit line with a maximum of 6 peaks.

None

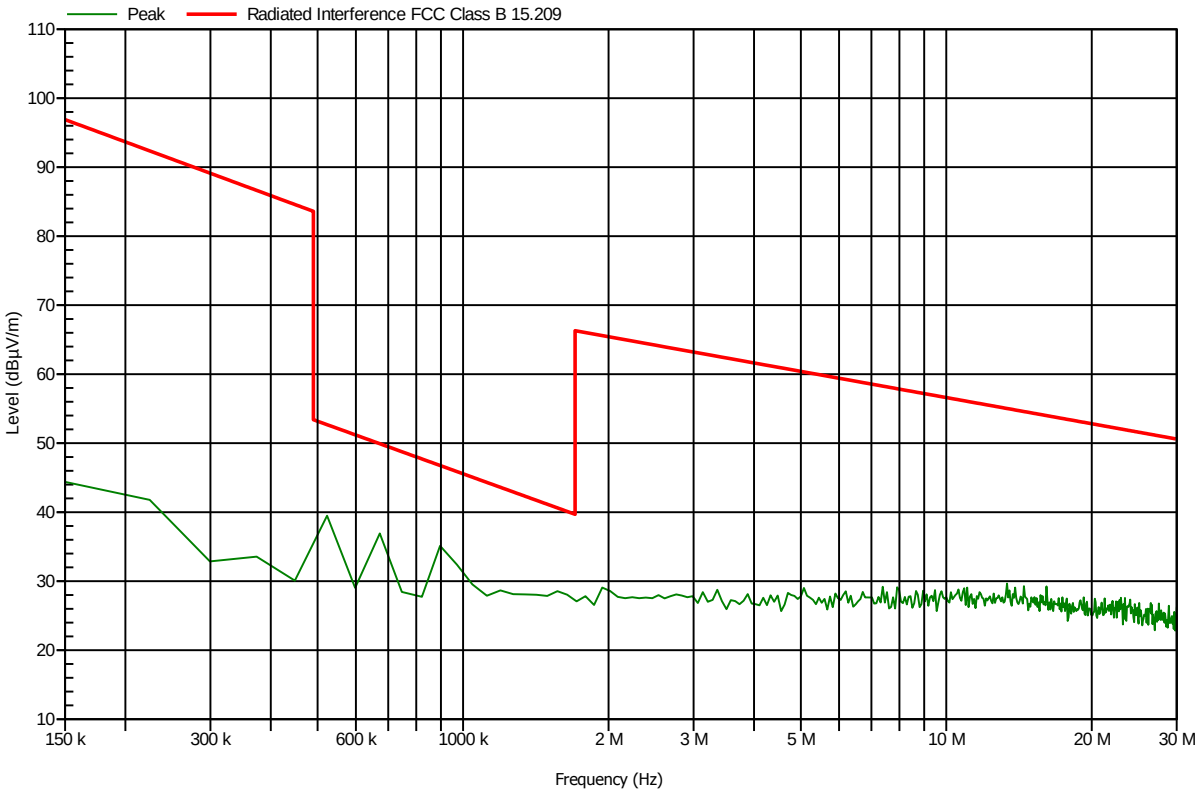
Test Results Plot No 107

150 kHz-30 MHz Spurious Emission

Test & EUT General Information		Receiver Setting	
EUT Name:	WipAir8000 5X	Spect Analyzer	Hewlett Packard 7405A DC Coupling
S/N:	041A04000100	Ref. Level:	Auto [90 dBµV]
Date of Test:	15.04.2015	RBW:	9 kHz
Test Engineer:	Ilya Arbitman	VBW:	30 kHz
Antenna:	E-Field R&S 9K-30 M Antenna	Sweep Time:	Auto [840.04 ms]
Polarization:	Vertical	Pre Amplifier	LNA MITEQ 0.01-1GHz No-2

TEST REMARKS: Wednesday, April 15, 2015

Dish 28.5-dBi; BW=20MHz; High 5840MHz



MAXIMUM RESULT DEVIATION:

Detect all peaks above 6 dB below the limit line with a maximum of 6 peaks.

None

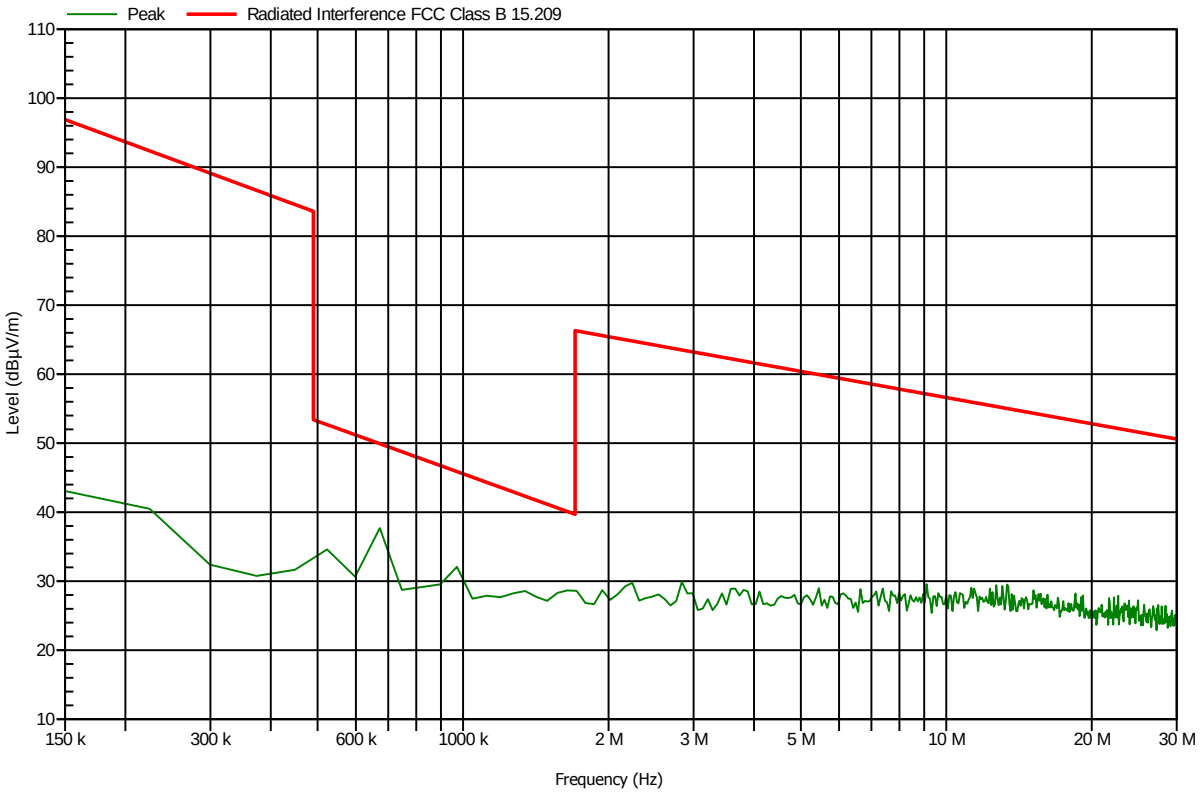
Test Results Plot No 108

150 kHz-30 MHz Spurious Emission

Test & EUT General Information		Receiver Setting	
EUT Name:	WipAir8000 5X	Spect Analyzer	Hewlett Packard 7405A DC Coupling
S/N:	041A04000100	Ref. Level:	Auto [90 dBµV]
Date of Test:	15.04.2015	RBW:	9 kHz
Test Engineer:	Ilya Arbitman	VBW:	30 kHz
Antenna:	E-Field R&S 9K-30 M Antenna	Sweep Time:	Auto [840.04 ms]
Polarization:	Vertical	Pre Amplifier	LNA MITEQ 0.01-1GHz No-2

TEST REMARKS: Wednesday, April 15, 2015

Dish 28.5-dBi; BW=40MHz; Low 5745MHz



MAXIMUM RESULT DEVIATION:

Detect all peaks above 6 dB below the limit line with a maximum of 6 peaks.

None

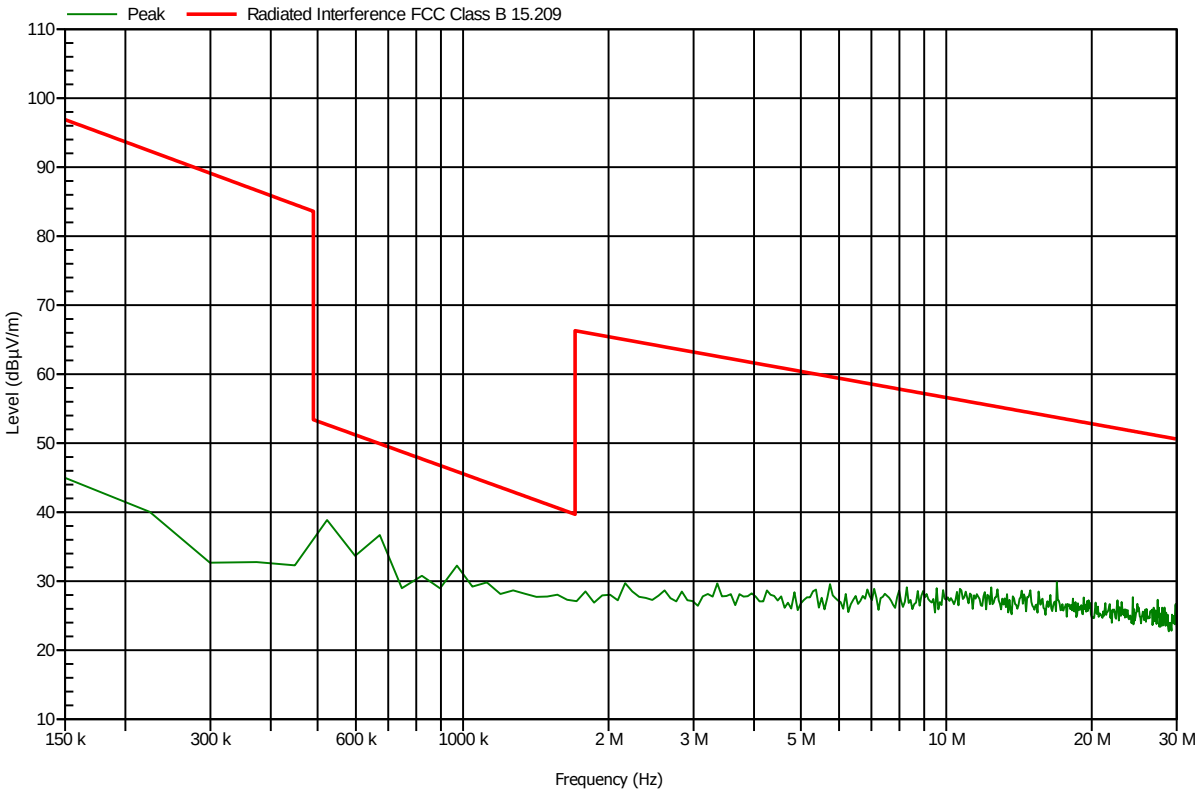
Test Results Plot No 109

150 kHz-30 MHz Spurious Emission

Test & EUT General Information		Receiver Setting	
EUT Name:	WipAir8000 5X	Spect Analyzer	Hewlett Packard 7405A DC Coupling
S/N:	041A04000100	Ref. Level:	Auto [90 dBµV]
Date of Test:	15.04.2015	RBW:	9 kHz
Test Engineer:	Ilya Arbitman	VBW:	30 kHz
Antenna:	E-Field R&S 9K-30 M Antenna	Sweep Time:	Auto [840.04 ms]
Polarization:	Vertical	Pre Amplifier	LNA MITEQ 0.01-1GHz No-2

TEST REMARKS: Wednesday, April 15, 2015

Dish 28.5-dBi; BW=40MHz; Mid 5785MHz



MAXIMUM RESULT DEVIATION:

Detect all peaks above 6 dB below the limit line with a maximum of 6 peaks.

None

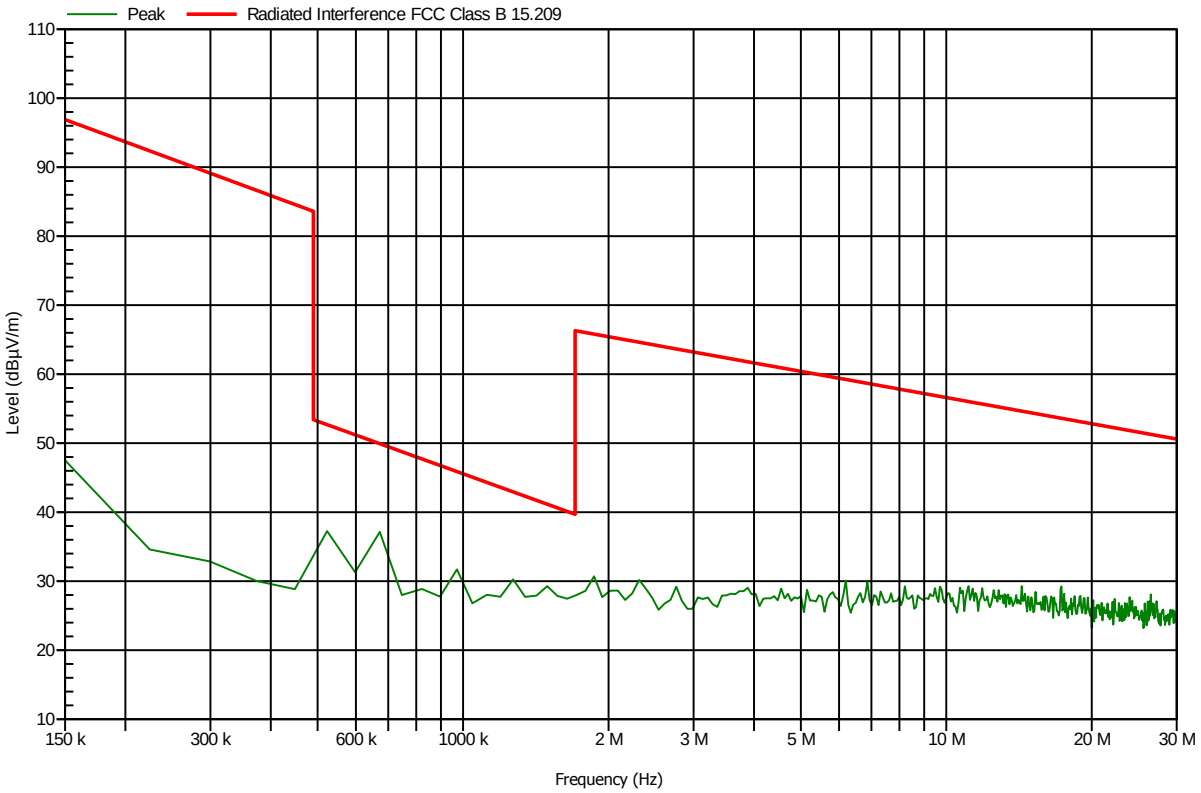
Test Results Plot No 110

150 kHz-30 MHz Spurious Emission

Test & EUT General Information		Receiver Setting	
EUT Name:	WipAir8000 5X	Spect Analyzer	Hewlett Packard 7405A DC Coupling
S/N:	041A04000100	Ref. Level:	Auto [90 dBµV]
Date of Test:	15.04.2015	RBW:	9 kHz
Test Engineer:	Ilya Arbitman	VBW:	30 kHz
Antenna:	E-Field R&S 9K-30 M Antenna	Sweep Time:	Auto [840.04 ms]
Polarization:	Vertical	Pre Amplifier	LNA MITEQ 0.01-1GHz No-2

TEST REMARKS: Wednesday, April 15, 2015

Dish 28.5-dBi; BW=40MHz; High 5830MHz



MAXIMUM RESULT DEVIATION:

Detect all peaks above 6 dB below the limit line with a maximum of 6 peaks.

None

4.10.3. 30 MHz-1 GHz-Dish

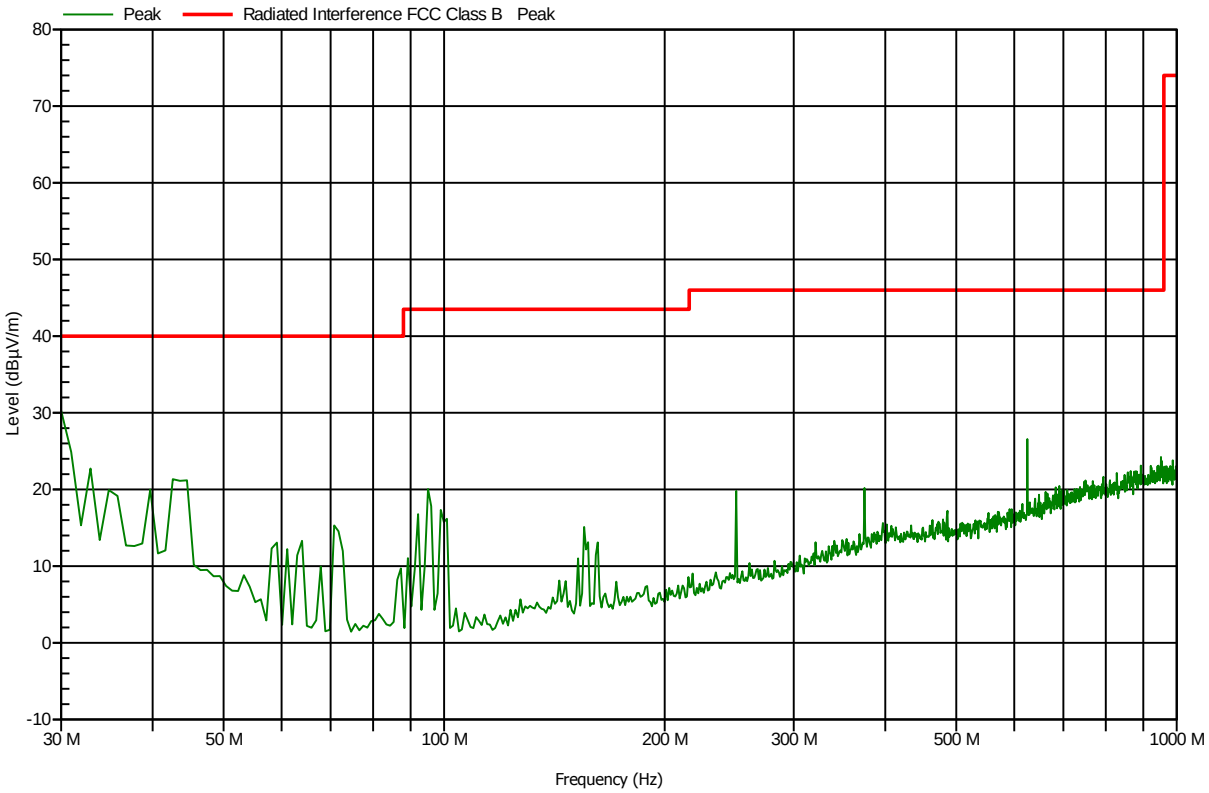
Test Results Plot No 111

30 Mhz-1 GHz Quasi_Peak Spurious Emission

Test & EUT General Information		Receiver Setting	
EUT Name:	WipAir8000 5X	Spect Analyzer	Agilent Technologies N9020A
S/N:	041A04000100	Ref. Level:	70 dBµV
Date of Test:	13.04.2015	RBW:	100 kHz
Test Engineer:	Ilya Arbitman	VBW:	300 kHz
Antenna:	Frankonia gray BTA-L_B 3m	Sweep Time:	Auto [694.64 ms]
Polarization:	Horizontal and Vertical	Pre Amplifier	LNA 10k-1GHz 30dB

TEST REMARKS: Monday, April 13, 2015

BW 5MHz Low 5730MHz; 28.5dBi Dish Antenna



MAXIMUM RESULT DEVIATION:

Detect all peaks above 6 dB below the limit line with a maximum of 6 peaks.

None

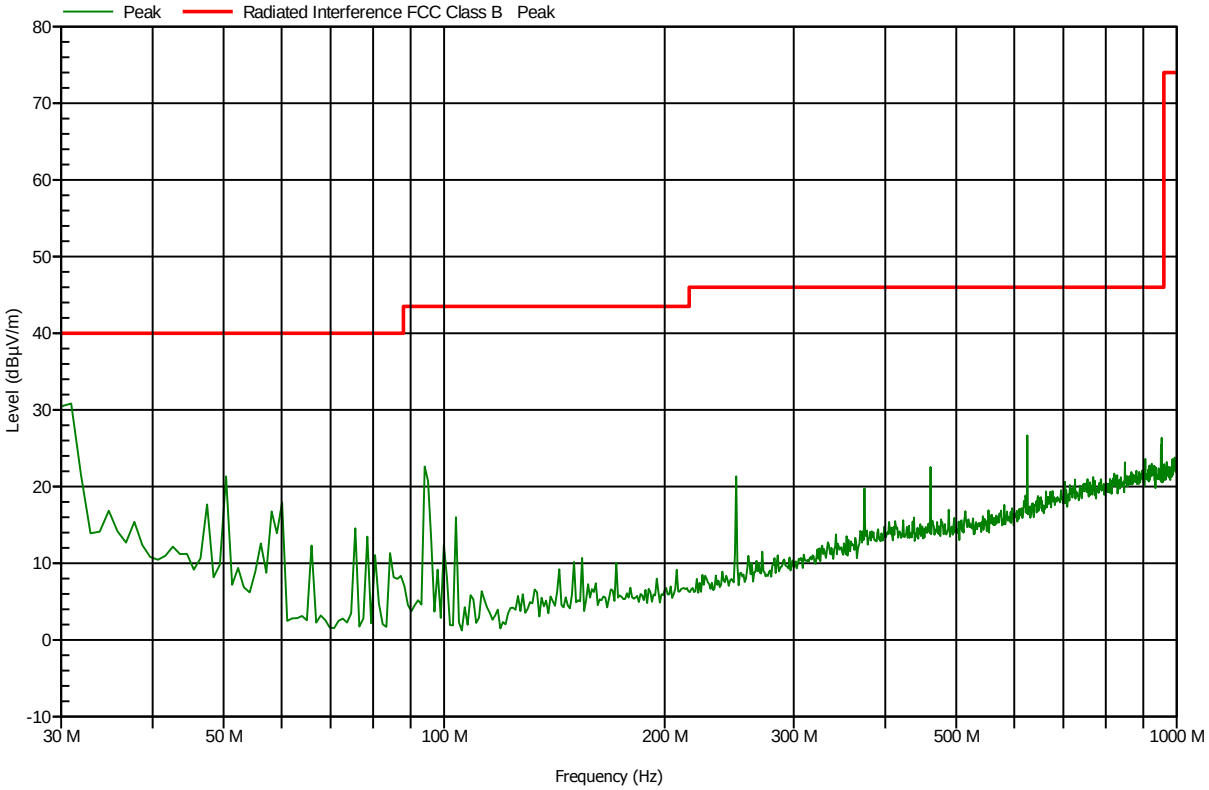
Test Results Plot No 112

30 Mhz-1 GHz Quasi_Peak Spurious Emission

Test & EUT General Information		Receiver Setting	
EUT Name:	WipAir8000 5X	Spect Analyzer	Agilent Technologies N9020A
S/N:	041A04000100	Ref. Level:	70 dBµV
Date of Test:	13.04.2015	RBW:	100 kHz
Test Engineer:	Ilya Arbitman	VBW:	300 kHz
Antenna:	Frankonia gray BTA-L_B 3m	Sweep Time:	Auto [694.64 ms]
Polarization:	Horizontal and Vertical	Pre Amplifier	LNA 10k-1GHz 30dB

TEST REMARKS: Monday, April 13, 2015

BW 5MHz Mid 5785MHz; 28.5dBi Dish Antenna



MAXIMUM RESULT DEVIATION:

Detect all peaks above 6 dB below the limit line with a maximum of 6 peaks.

None

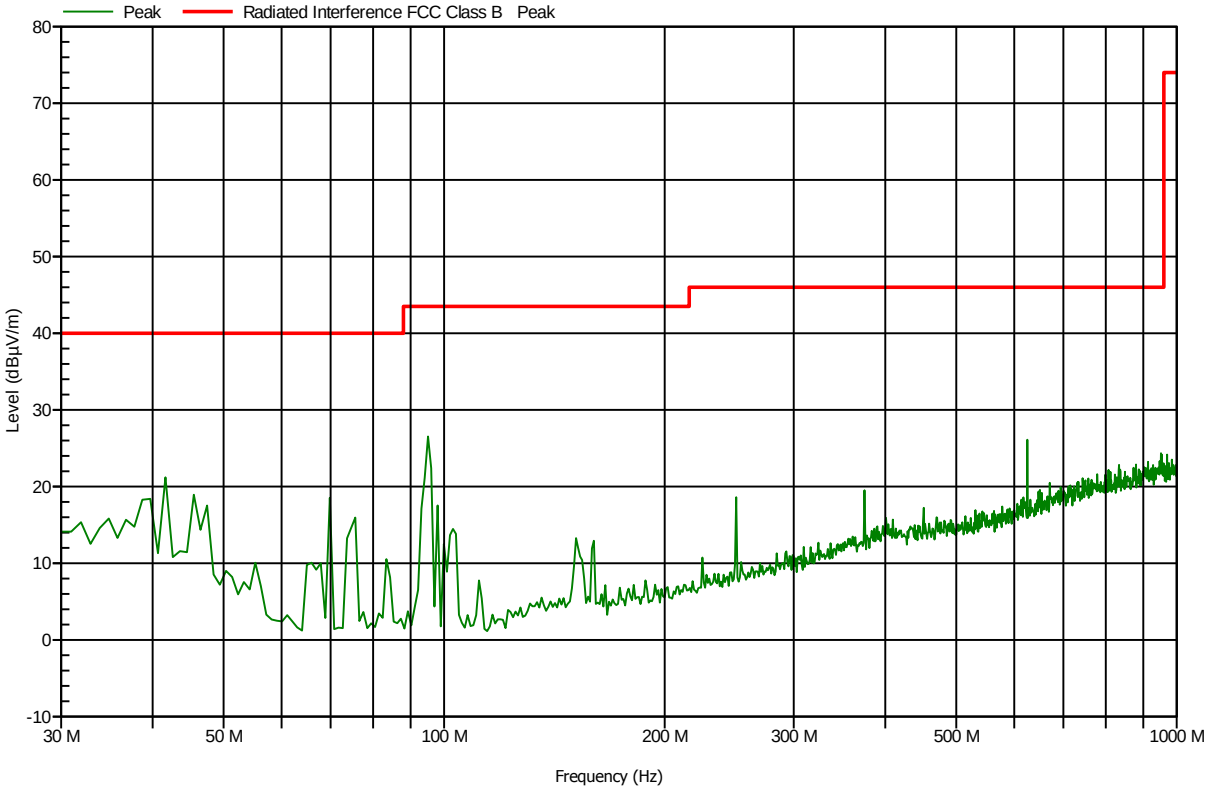
Test Results Plot No 113

30 Mhz-1 GHz Quasi_Peak Spurious Emission

Test & EUT General Information		Receiver Setting	
EUT Name:	WipAir8000 5X	Spect Analyzer	Agilent Technologies N9020A
S/N:	041A04000100	Ref. Level:	70 dBµV
Date of Test:	13.04.2015	RBW:	100 kHz
Test Engineer:	Ilya Arbitman	VBW:	300 kHz
Antenna:	Frankonia gray BTA-L_B 3m	Sweep Time:	Auto [694.64 ms]
Polarization:	Horizontal and Vertical	Pre Amplifier	LNA 10k-1GHz 30dB

TEST REMARKS: Monday, April 13, 2015

BW 5MHz High 5845MHz; 28.5dBi Dish Antenna



MAXIMUM RESULT DEVIATION:

Detect all peaks above 6 dB below the limit line with a maximum of 6 peaks.

None

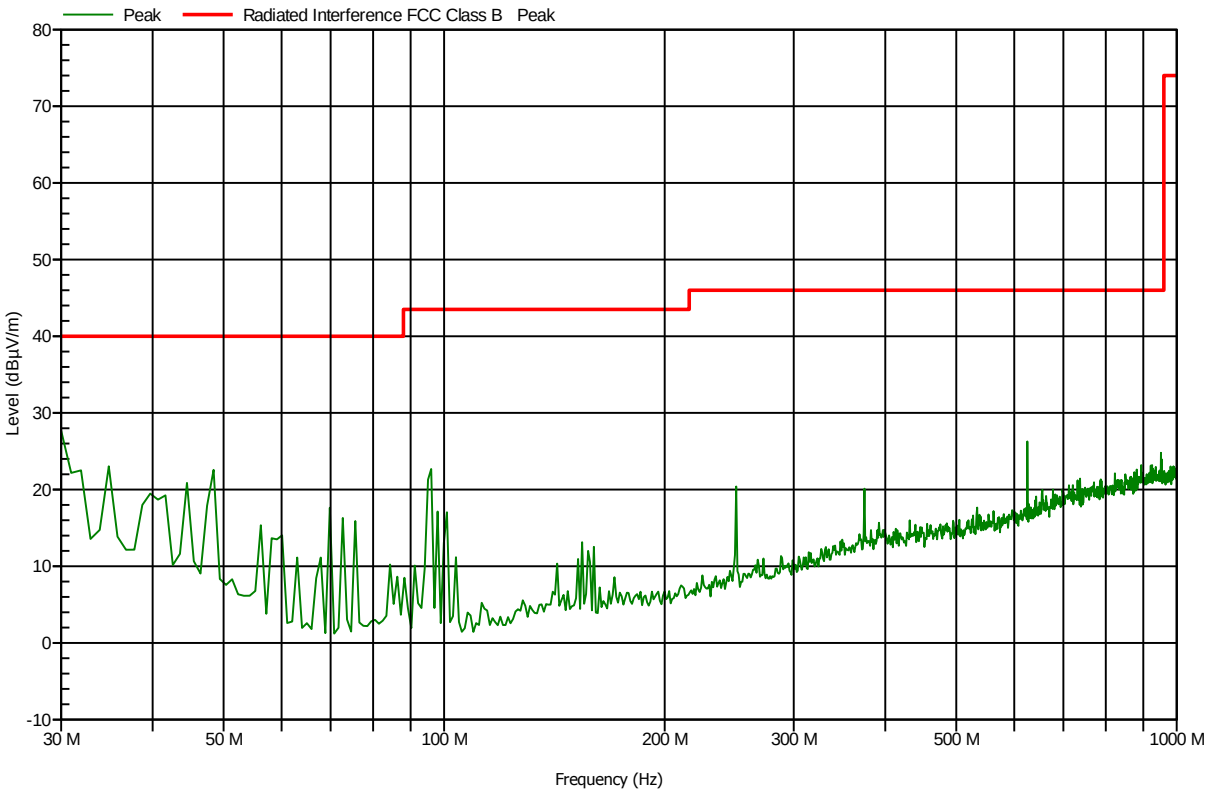
Test Results Plot No 114

30 Mhz-1 GHz Quasi_Peak Spurious Emission

Test & EUT General Information		Receiver Setting	
EUT Name:	WipAir8000 5X	Spect Analyzer	Agilent Technologies N9020A
S/N:	041A04000100	Ref. Level:	70 dBµV
Date of Test:	13.04.2015	RBW:	100 kHz
Test Engineer:	Ilya Arbitman	VBW:	300 kHz
Antenna:	Frankonia gray BTA-L_B 3m	Sweep Time:	Auto [694.64 ms]
Polarization:	Horizontal and Vertical	Pre Amplifier	LNA 10k-1GHz 30dB

TEST REMARKS: Monday, April 13, 2015

BW 10MHz Low 5730MHz; 28.5dBi Dish Antenna



MAXIMUM RESULT DEVIATION:

Detect all peaks above 6 dB below the limit line with a maximum of 6 peaks.

None

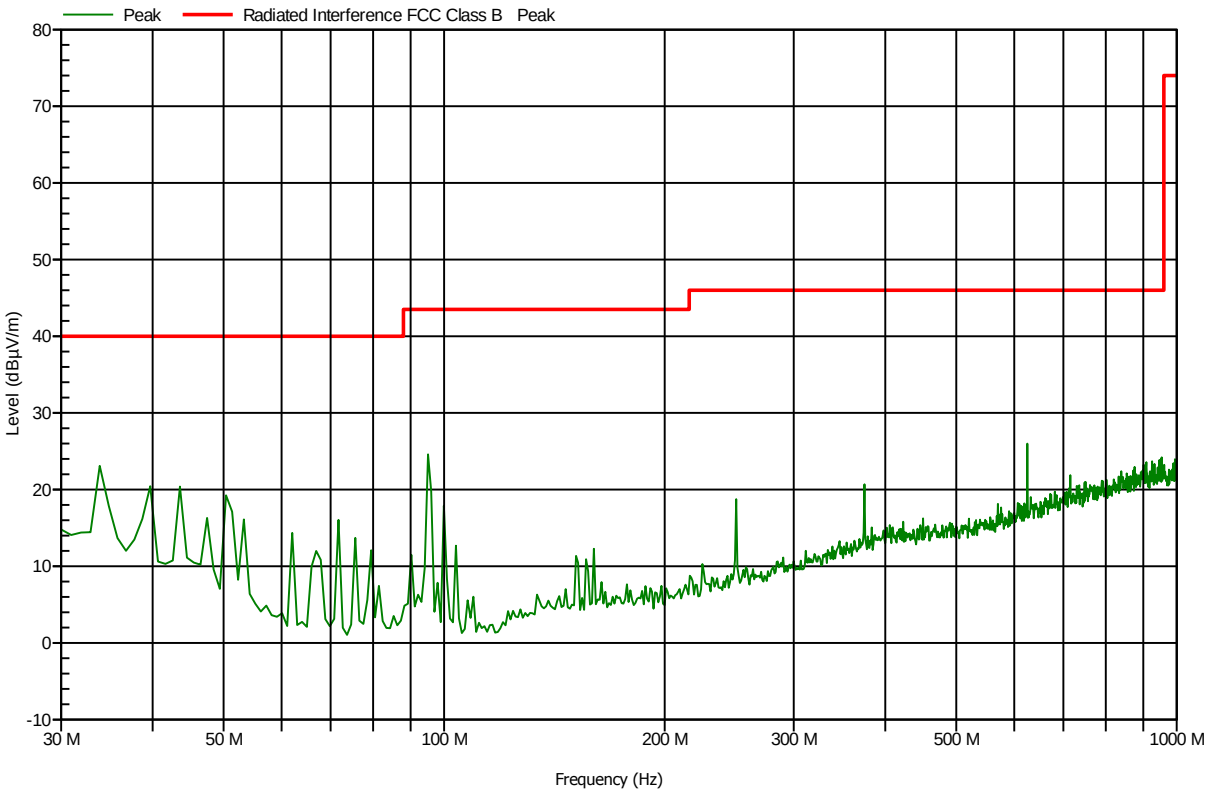
Test Results Plot No 115

30 Mhz-1 GHz Quasi_Peak Spurious Emission

Test & EUT General Information		Receiver Setting	
EUT Name:	WipAir8000 5X	Spect Analyzer	Agilent Technologies N9020A
S/N:	041A04000100	Ref. Level:	70 dBµV
Date of Test:	13.04.2015	RBW:	100 kHz
Test Engineer:	Ilya Arbitman	VBW:	300 kHz
Antenna:	Frankonia gray BTA-L_B 3m	Sweep Time:	Auto [694.64 ms]
Polarization:	Horizontal and Vertical	Pre Amplifier	LNA 10k-1GHz 30dB

TEST REMARKS: Monday, April 13, 2015

BW 10MHz Mid 5785MHz; 28.5dBi Dish Antenna



MAXIMUM RESULT DEVIATION:

Detect all peaks above 6 dB below the limit line with a maximum of 6 peaks.

None

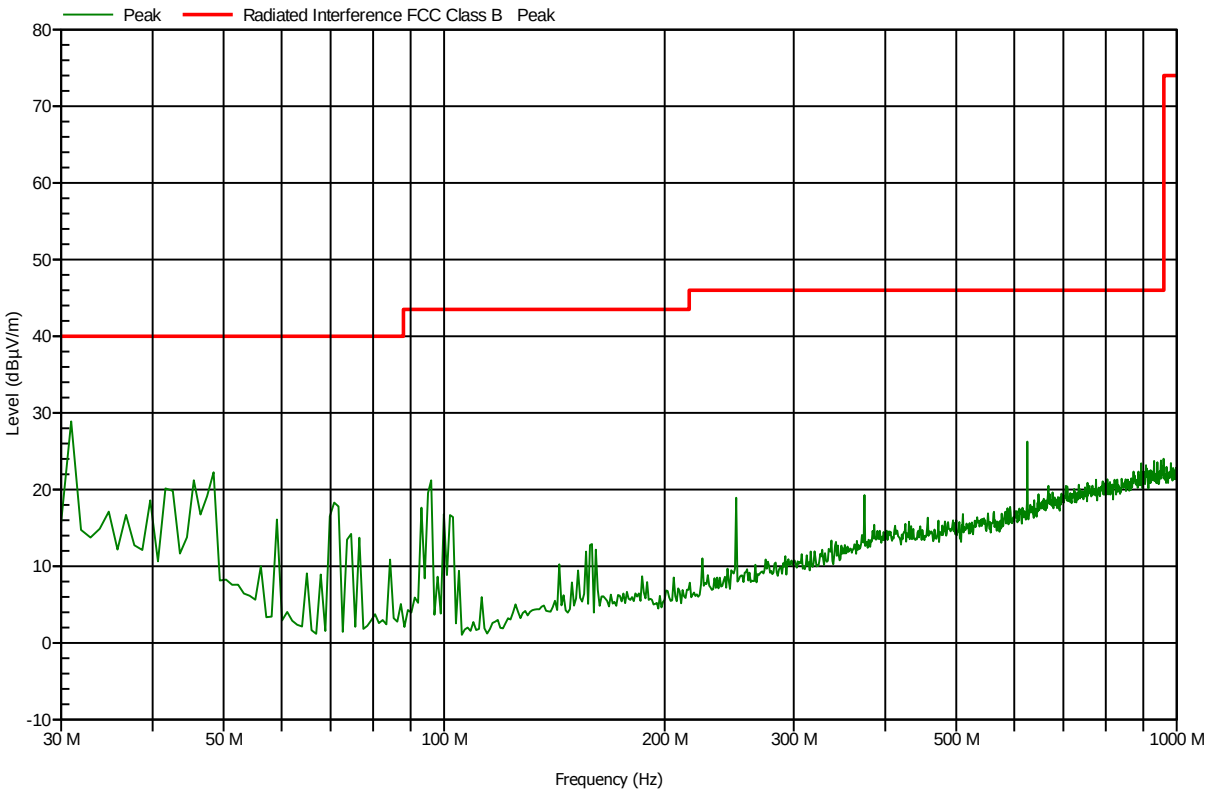
Test Results Plot No 116

30 Mhz-1 GHz Quasi_Peak Spurious Emission

Test & EUT General Information		Receiver Setting	
EUT Name:	WipAir8000 5X	Spect Analyzer	Agilent Technologies N9020A
S/N:	041A04000100	Ref. Level:	70 dBµV
Date of Test:	13.04.2015	RBW:	100 kHz
Test Engineer:	Ilya Arbitman	VBW:	300 kHz
Antenna:	Frankonia gray BTA-L_B 3m	Sweep Time:	Auto [694.64 ms]
Polarization:	Horizontal and Vertical	Pre Amplifier	LNA 10k-1GHz 30dB

TEST REMARKS: Monday, April 13, 2015

BW 10MHz High 5845MHz; 28.5dBi Dish Antenna



MAXIMUM RESULT DEVIATION:

Detect all peaks above 6 dB below the limit line with a maximum of 6 peaks.

None

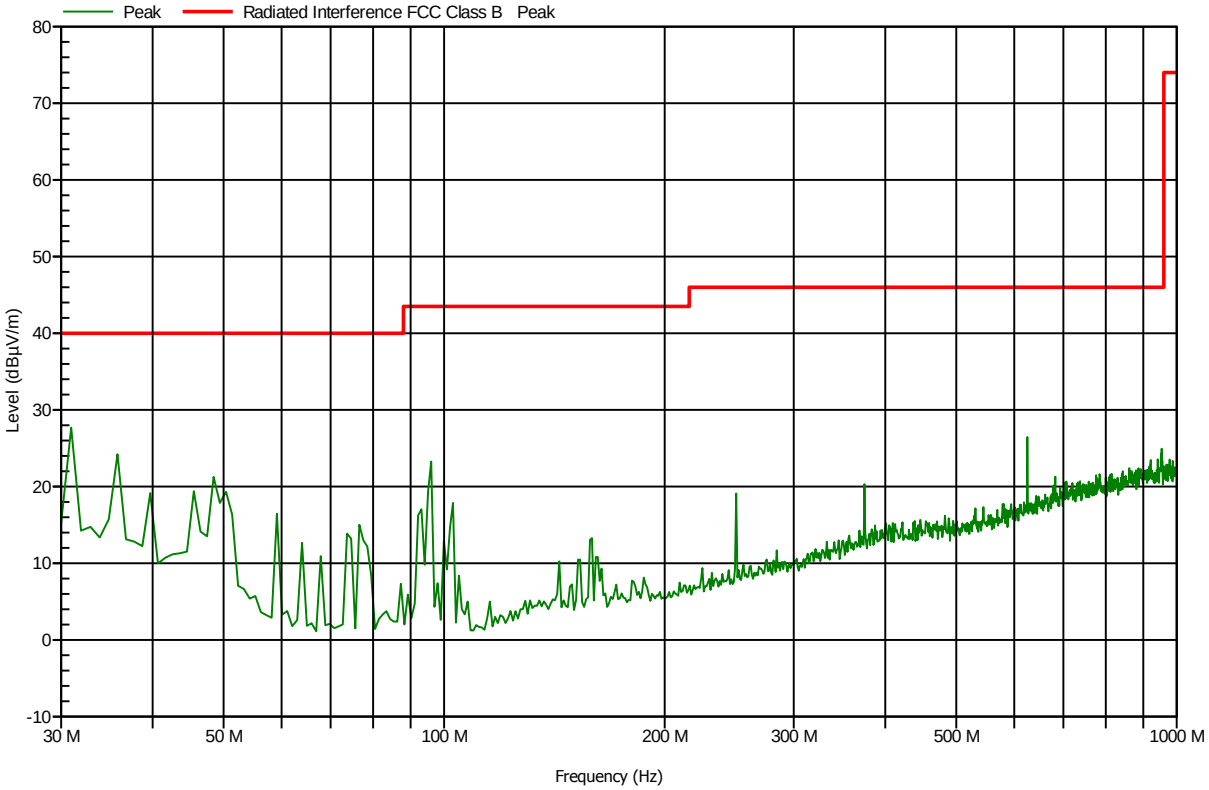
Test Results Plot No 117

30 Mhz-1 GHz Quasi_Peak Spurious Emission

Test & EUT General Information		Receiver Setting	
EUT Name:	WipAir8000 5X	Spect Analyzer	Agilent Technologies N9020A
S/N:	041A04000100	Ref. Level:	70 dBµV
Date of Test:	13.04.2015	RBW:	100 kHz
Test Engineer:	Ilya Arbitman	VBW:	300 kHz
Antenna:	Frankonia gray BTA-L_B 3m	Sweep Time:	Auto [694.64 ms]
Polarization:	Horizontal and Vertical	Pre Amplifier	LNA 10k-1GHz 30dB

TEST REMARKS: Monday, April 13, 2015

BW 20MHz Low 5735MHz; 28.5dBi Dish Antenna



MAXIMUM RESULT DEVIATION:

Detect all peaks above 6 dB below the limit line with a maximum of 6 peaks.

None

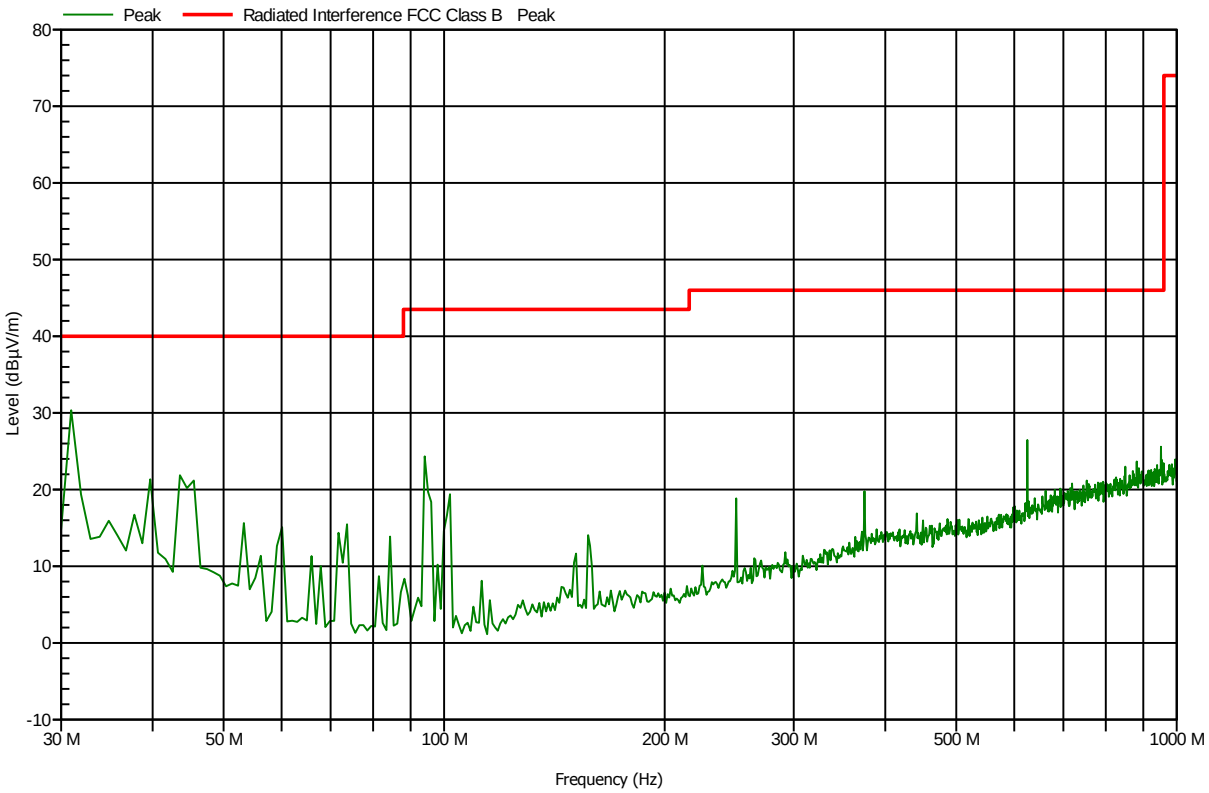
Test Results Plot No 118

30 Mhz-1 GHz Quasi_Peak Spurious Emission

Test & EUT General Information		Receiver Setting	
EUT Name:	WipAir8000 5X	Spect Analyzer	Agilent Technologies N9020A
S/N:	041A04000100	Ref. Level:	70 dBµV
Date of Test:	13.04.2015	RBW:	100 kHz
Test Engineer:	Ilya Arbitman	VBW:	300 kHz
Antenna:	Frankonia gray BTA-L_B 3m	Sweep Time:	Auto [694.64 ms]
Polarization:	Horizontal and Vertical	Pre Amplifier	LNA 10k-1GHz 30dB

TEST REMARKS: Monday, April 13, 2015

BW 20MHz Mid 5785MHz; 28.5dBi Dish Antenna



MAXIMUM RESULT DEVIATION:

Detect all peaks above 6 dB below the limit line with a maximum of 6 peaks.

None

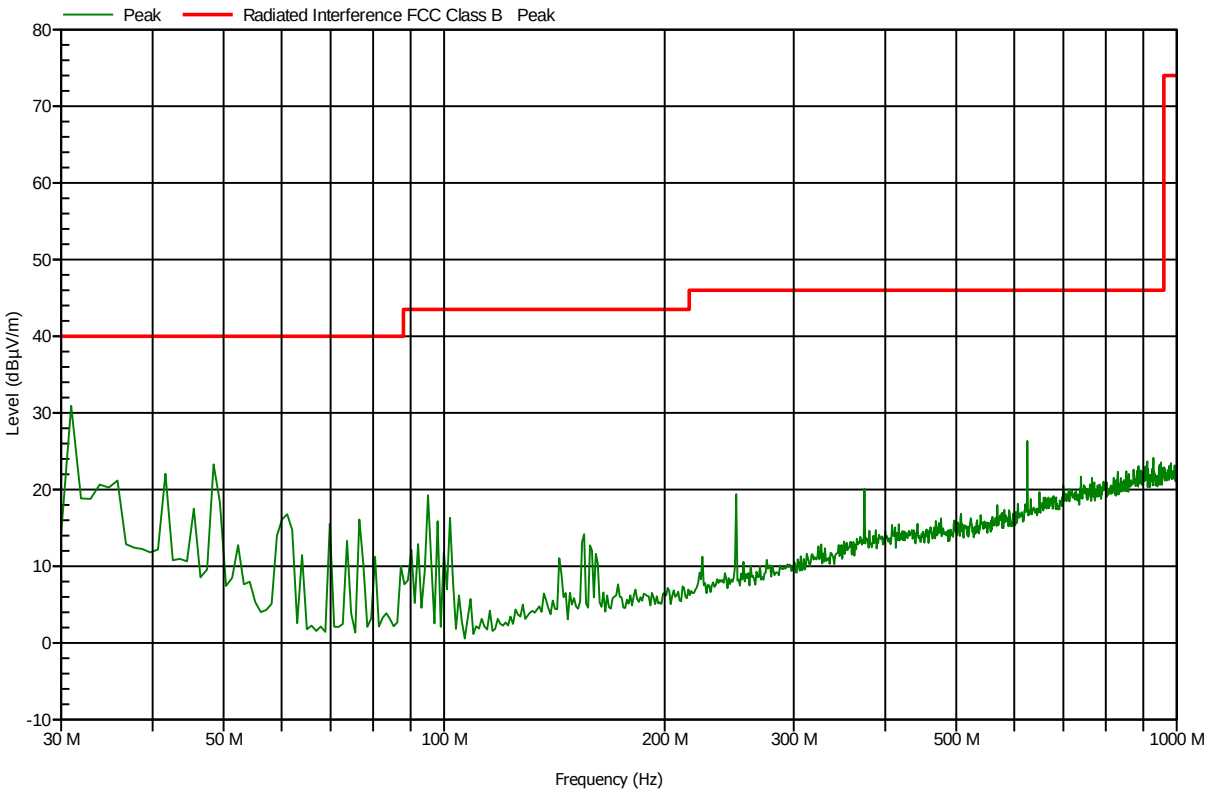
Test Results Plot No 119

30 Mhz-1 GHz Quasi_Peak Spurious Emission

Test & EUT General Information		Receiver Setting	
EUT Name:	WipAir8000 5X	Spect Analyzer	Agilent Technologies N9020A
S/N:	041A04000100	Ref. Level:	70 dBµV
Date of Test:	13.04.2015	RBW:	100 kHz
Test Engineer:	Ilya Arbitman	VBW:	300 kHz
Antenna:	Frankonia gray BTA-L_B 3m	Sweep Time:	Auto [694.64 ms]
Polarization:	Horizontal and Vertical	Pre Amplifier	LNA 10k-1GHz 30dB

TEST REMARKS: Monday, April 13, 2015

BW 20MHz High 5730MHz; 28.5dBi Dish Antenna



MAXIMUM RESULT DEVIATION:

Detect all peaks above 6 dB below the limit line with a maximum of 6 peaks.

None

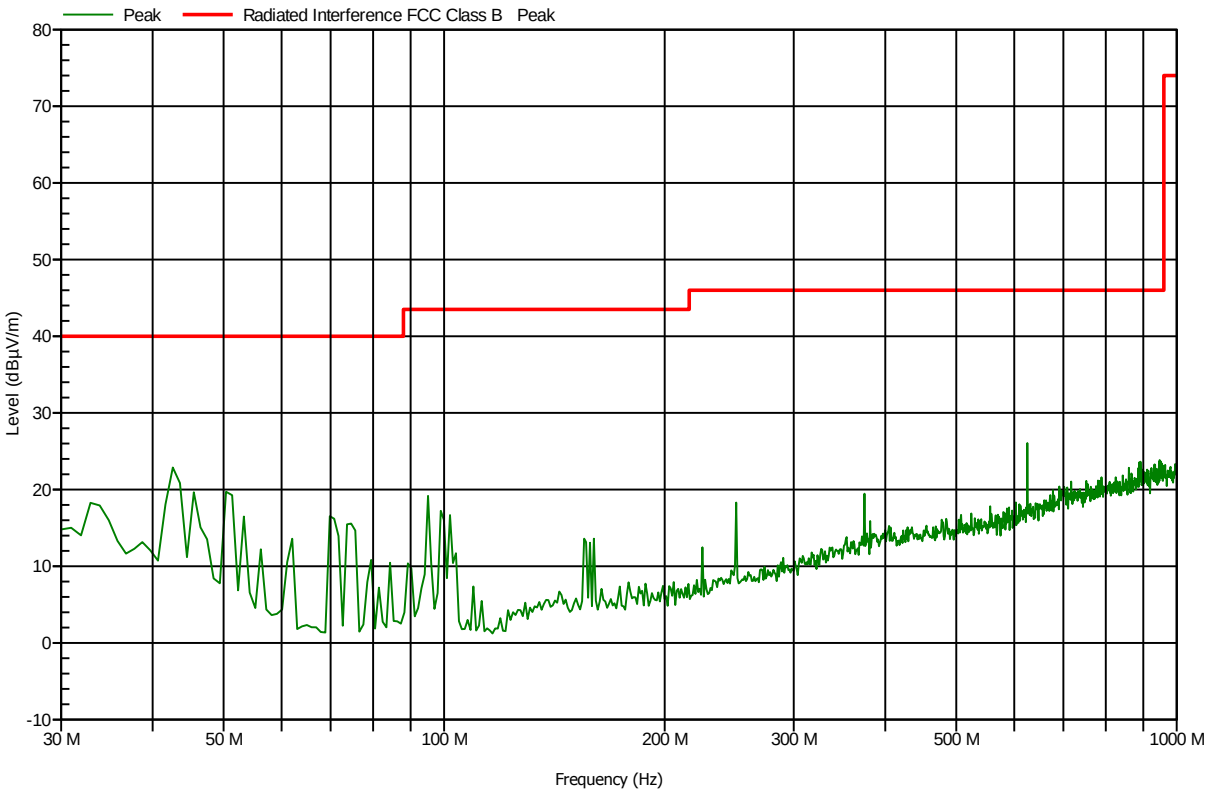
Test Results Plot No 120

30 Mhz-1 GHz Quasi_Peak Spurious Emission

Test & EUT General Information		Receiver Setting	
EUT Name:	WipAir8000 5X	Spect Analyzer	Agilent Technologies N9020A
S/N:	041A04000100	Ref. Level:	70 dBµV
Date of Test:	13.04.2015	RBW:	100 kHz
Test Engineer:	Ilya Arbitman	VBW:	300 kHz
Antenna:	Frankonia gray BTA-L_B 3m	Sweep Time:	Auto [694.64 ms]
Polarization:	Horizontal and Vertical	Pre Amplifier	LNA 10k-1GHz 30dB

TEST REMARKS: Monday, April 13, 2015

BW 40MHz Low 5745MHz; 28.5dBi Dish Antenna



MAXIMUM RESULT DEVIATION:

Detect all peaks above 6 dB below the limit line with a maximum of 6 peaks.

None

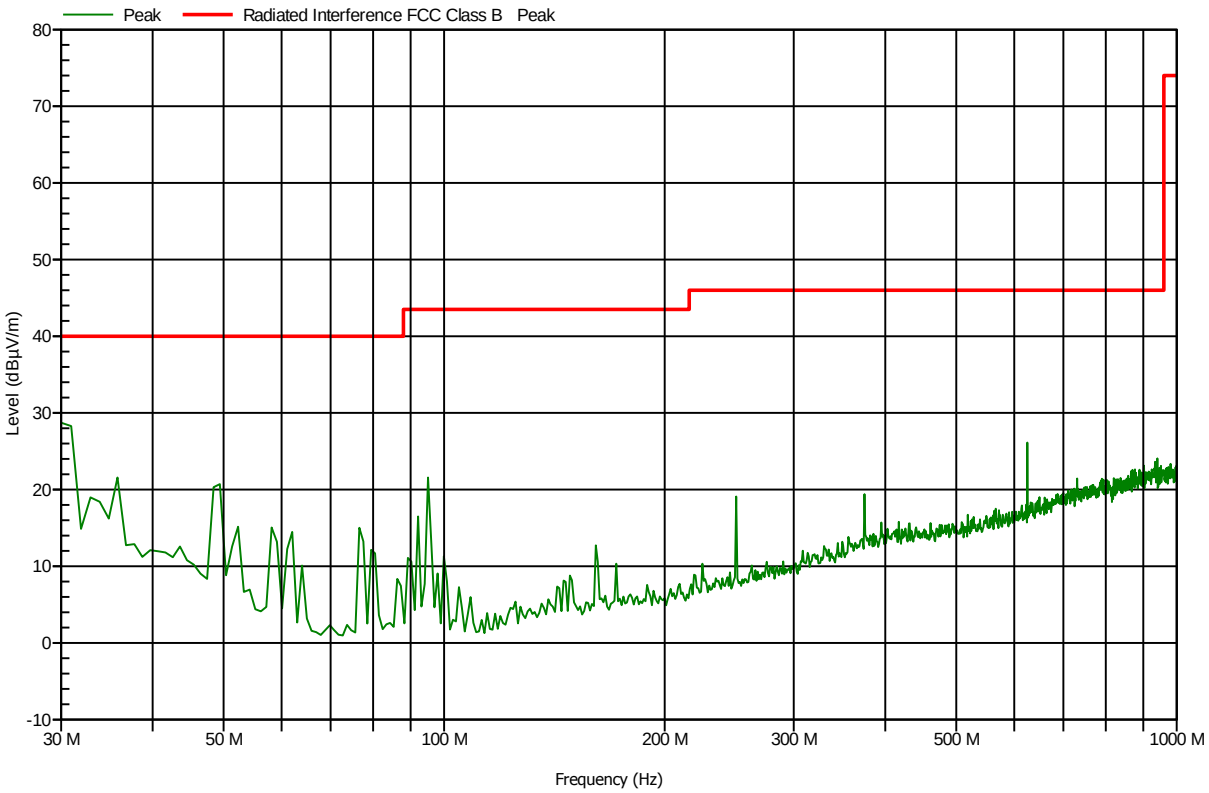
Test Results Plot No 121

30 Mhz-1 GHz Quasi_Peak Spurious Emission

Test & EUT General Information		Receiver Setting	
EUT Name:	WipAir8000 5X	Spect Analyzer	Agilent Technologies N9020A
S/N:	041A04000100	Ref. Level:	70 dBµV
Date of Test:	13.04.2015	RBW:	100 kHz
Test Engineer:	Ilya Arbitman	VBW:	300 kHz
Antenna:	Frankonia gray BTA-L_B 3m	Sweep Time:	Auto [694.64 ms]
Polarization:	Horizontal and Vertical	Pre Amplifier	LNA 10k-1GHz 30dB

TEST REMARKS: Monday, April 13, 2015

BW 40MHz Mid 5785MHz; 28.5dBi Dish Antenna



MAXIMUM RESULT DEVIATION:

Detect all peaks above 6 dB below the limit line with a maximum of 6 peaks.

None

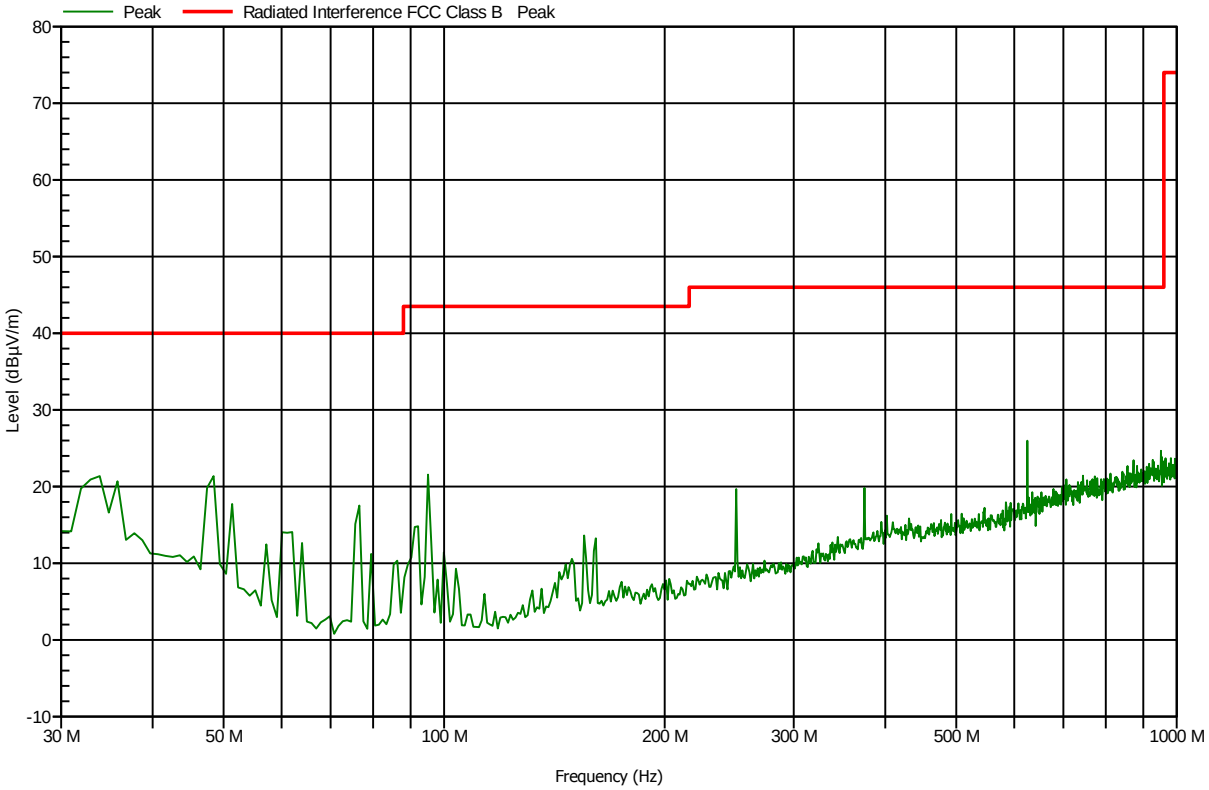
Test Results Plot No 122

30 Mhz-1 GHz Quasi_Peak Spurious Emission

Test & EUT General Information		Receiver Setting	
EUT Name:	WipAir8000 5X	Spect Analyzer	Agilent Technologies N9020A
S/N:	041A04000100	Ref. Level:	70 dBµV
Date of Test:	13.04.2015	RBW:	100 kHz
Test Engineer:	Ilya Arbitman	VBW:	300 kHz
Antenna:	Frankonia gray BTA-L_B 3m	Sweep Time:	Auto [694.64 ms]
Polarization:	Horizontal and Vertical	Pre Amplifier	LNA 10k-1GHz 30dB

TEST REMARKS: Monday, April 13, 2015

BW 40MHz High 5830MHz; 28.5dBi Dish Antenna



MAXIMUM RESULT DEVIATION:

Detect all peaks above 6 dB below the limit line with a maximum of 6 peaks.

None

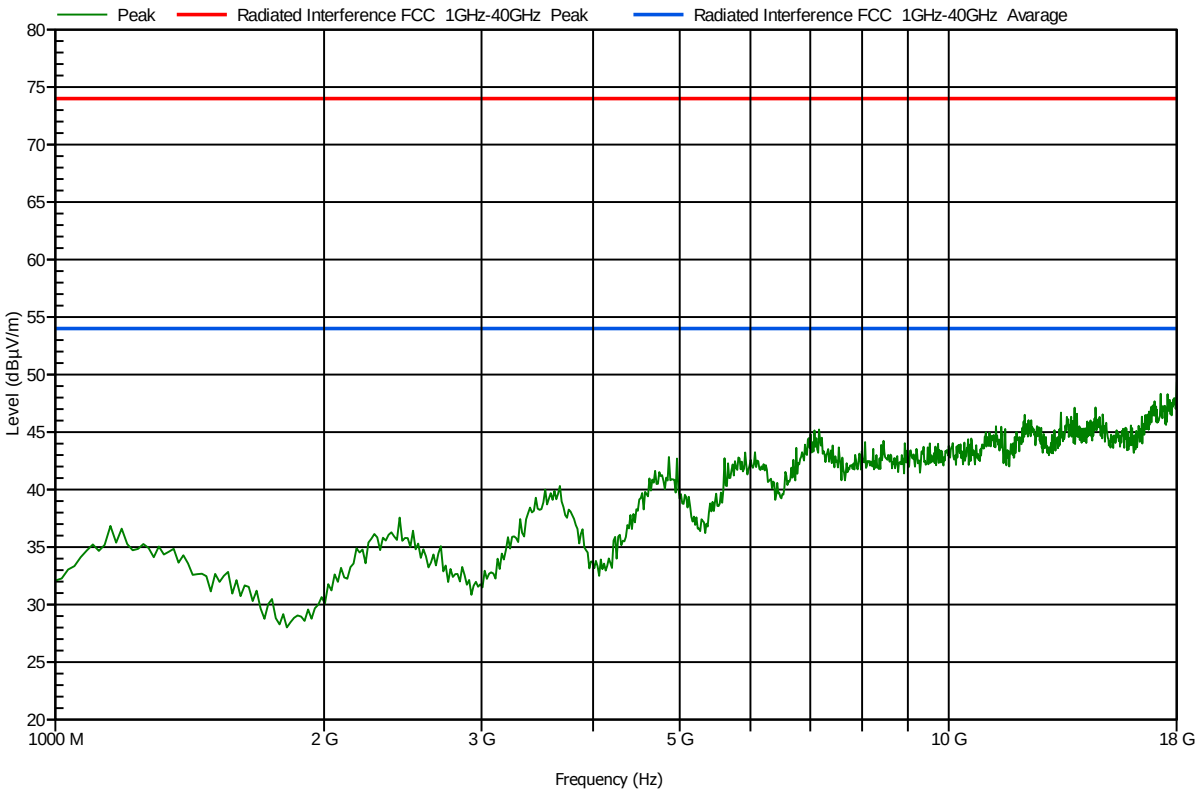
Test Results Plot No 123

1-18 GHz RX Mode Spurious Emission

Test & EUT General Information		Receiver Setting	
EUT Name:	WipAir8000 5X	Spect Analyzer	Agilent Technologies N9020A
S/N:	041A04000100	Ref. Level:	Auto [90 dBµV]
Date of Test:	14.04.2015	RBW:	1000 kHz
Test Engineer:	Ilya Arbitman	VBW:	1000 kHz
Antenna:	ARA DRG-118/A 1-18GHz 1319	Sweep Time:	Auto [170.03 ms]
Polarization:	Horizontal and Vertical	Pre Amplifier	pre amp 1 GHz-18 GHz

TEST REMARKS: Tuesday, April 14, 2015

RX Mode; 28.5dBi dish antenna



MAXIMUM RESULT DEVIATION:

Detect all peaks above 6 dB below the limit line with a maximum of 6 peaks.

Nr	Frequency (MHz)	PK MaxHold (dBµV/m)	AVG Value (dBµV/m)	PK Limit (dBµV/m)	AVG Limit (dBµV/m)	Result	Angle (degrees)	Height (m)	H/V
1	17977.878	48.3	38	74	54	Pass	0	1	H
2	17994.358	50	38	74	54	Pass	0	1	H

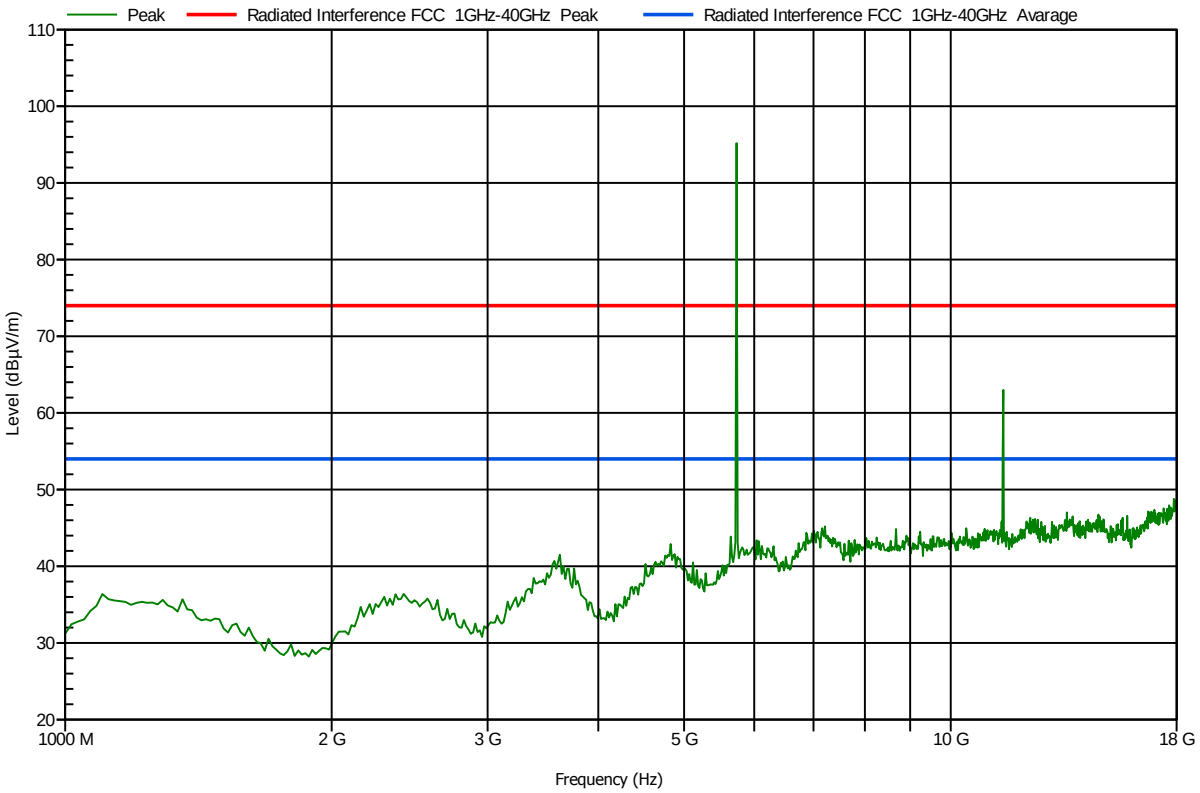
Test Results Plot No 124

1-18 GHz TX Mode Spurious Emission

Test & EUT General Information		Receiver Setting	
EUT Name:	WipAir8000 5X	Spect Analyzer	Agilent Technologies N9020A
S/N:	041A04000100	Ref. Level:	Auto [90 dBµV]
Date of Test:	14.04.2015	RBW:	1000 kHz
Test Engineer:	Ilya Arbitman	VBW:	1000 kHz
Antenna:	ARA DRG-118/A 1-18GHz 1319	Sweep Time:	Auto [170.03 ms]
Polarization:	Horizontal and Vertical	Pre Amplifier	pre amp 1 GHz-18 GHz

TEST REMARKS: Tuesday, April 14, 2015

BW 5MHz Low 5730MHz; 28.5dBi dish antenna



MAXIMUM RESULT DEVIATION:

Detect all peaks above 6 dB below the limit line with a maximum of 6 peaks.

Nr	Frequency (MHz)	PK MaxHold (dBµV/m)	AVG Value (dBµV/m)	PK Limit (dBµV/m)	AVG Limit (dBµV/m)	Result	Angle (degrees)	Height (m)	H/V
1	5730.731	95.2	86.8	74	54	Fail	0	1	V
2	11461.117	66.6	49	74	54	Pass	0	1	H

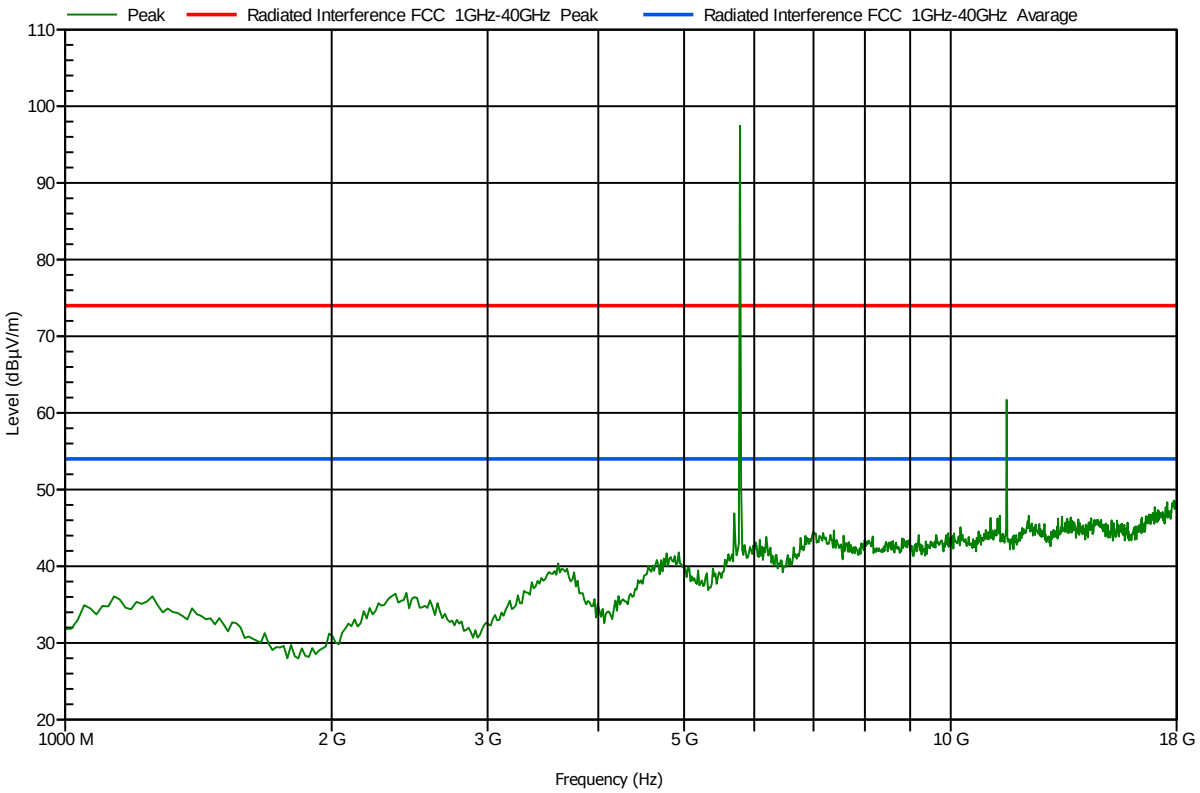
Test Results Plot No 125

1-18 GHz TX Mode Spurious Emission

Test & EUT General Information		Receiver Setting	
EUT Name:	WipAir8000 5X	Spect Analyzer	Agilent Technologies N9020A
S/N:	041A04000100	Ref. Level:	Auto [90 dBµV]
Date of Test:	14.04.2015	RBW:	1000 kHz
Test Engineer:	Ilya Arbitman	VBW:	1000 kHz
Antenna:	ARA DRG-118/A 1-18GHz 1319	Sweep Time:	Auto [170.03 ms]
Polarization:	Horizontal and Vertical	Pre Amplifier	pre amp 1 GHz-18 GHz

TEST REMARKS: Tuesday, April 14, 2015

BW 5MHz Mid 5785MHz; 28.5dBi dish antenna



MAXIMUM RESULT DEVIATION:

Detect all peaks above 6 dB below the limit line with a maximum of 6 peaks.

Nr	Frequency (MHz)	PK MaxHold (dBµV/m)	AVG Value (dBµV/m)	PK Limit (dBµV/m)	AVG Limit (dBµV/m)	Result	Angle (degrees)	Height (m)	H/V
1	5781.782	97.4	63.4	74	54	Fail	0	1	V
2	11572.518	67.9	45.6	74	54	Pass	0	1	H

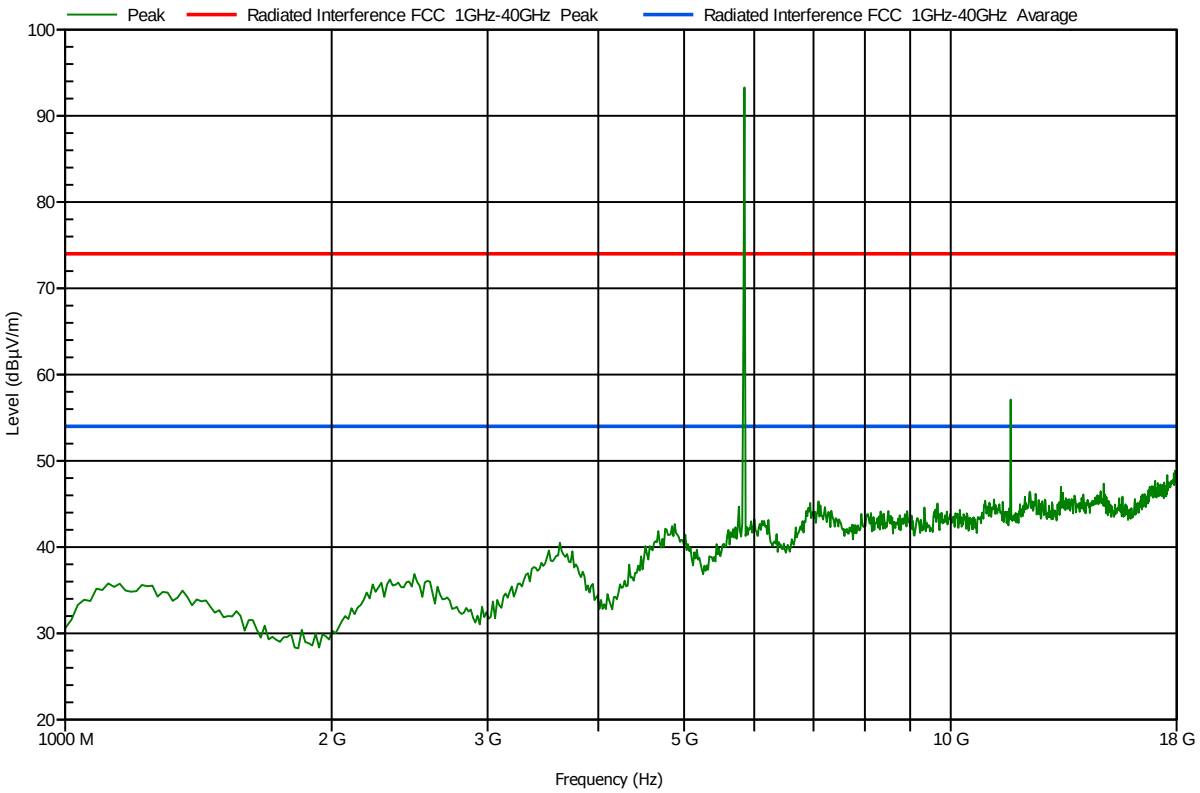
Test Results Plot No 126

1-18 GHz TX Mode Spurious Emission

Test & EUT General Information		Receiver Setting	
EUT Name:	WipAir8000 5X	Spect Analyzer	Agilent Technologies N9020A
S/N:	041A04000100	Ref. Level:	Auto [90 dBµV]
Date of Test:	14.04.2015	RBW:	1000 kHz
Test Engineer:	Ilya Arbitman	VBW:	1000 kHz
Antenna:	ARA DRG-118/A 1-18GHz 1319	Sweep Time:	Auto [170.03 ms]
Polarization:	Horizontal and Vertical	Pre Amplifier	pre amp 1 GHz-18 GHz

TEST REMARKS: Tuesday, April 14, 2015

BW 5MHz High 5845MHz; 28.5dBi dish antenna



MAXIMUM RESULT DEVIATION:

Detect all peaks above 6 dB below the limit line with a maximum of 6 peaks.

Nr	Frequency (MHz)	PK MaxHold (dBµV/m)	AVG Value (dBµV/m)	PK Limit (dBµV/m)	AVG Limit (dBµV/m)	Result	Angle (degrees)	Height (m)	H/V
1	5849.85	93.3	40.8	74	54	Fail	0	1	H
2	11689.355	61.6	45.7	74	54	Pass	0	1	H

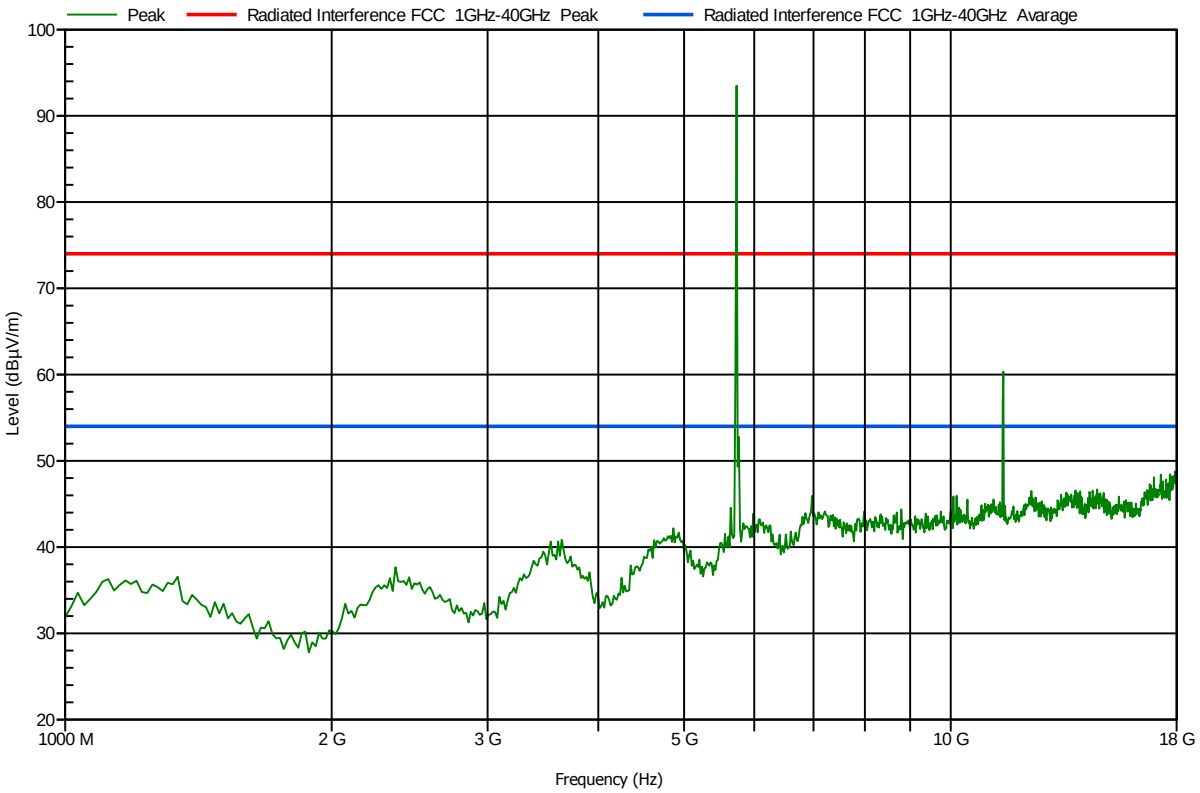
Test Results Plot No 127

1-18 GHz TX Mode Spurious Emission

Test & EUT General Information		Receiver Setting	
EUT Name:	WipAir8000 5X	Spect Analyzer	Agilent Technologies N9020A
S/N:	041A04000100	Ref. Level:	Auto [90 dBµV]
Date of Test:	14.04.2015	RBW:	1000 kHz
Test Engineer:	Ilya Arbitman	VBW:	1000 kHz
Antenna:	ARA DRG-118/A 1-18GHz 1319	Sweep Time:	Auto [170.03 ms]
Polarization:	Horizontal and Vertical	Pre Amplifier	pre amp 1 GHz-18 GHz

TEST REMARKS: Tuesday, April 14, 2015

BW 10MHz Low 5730MHz; 28.5dBi dish antenna



MAXIMUM RESULT DEVIATION:

Detect all peaks above 6 dB below the limit line with a maximum of 6 peaks.

Nr	Frequency (MHz)	PK MaxHold (dBµV/m)	AVG Value (dBµV/m)	PK Limit (dBµV/m)	AVG Limit (dBµV/m)	Result	Angle (degrees)	Height (m)	H/V
1	5730.731	93.5	82.6	74	54	Fail	0	1	H
2	11464.217	62.1	44.3	74	54	Pass	0	1	V

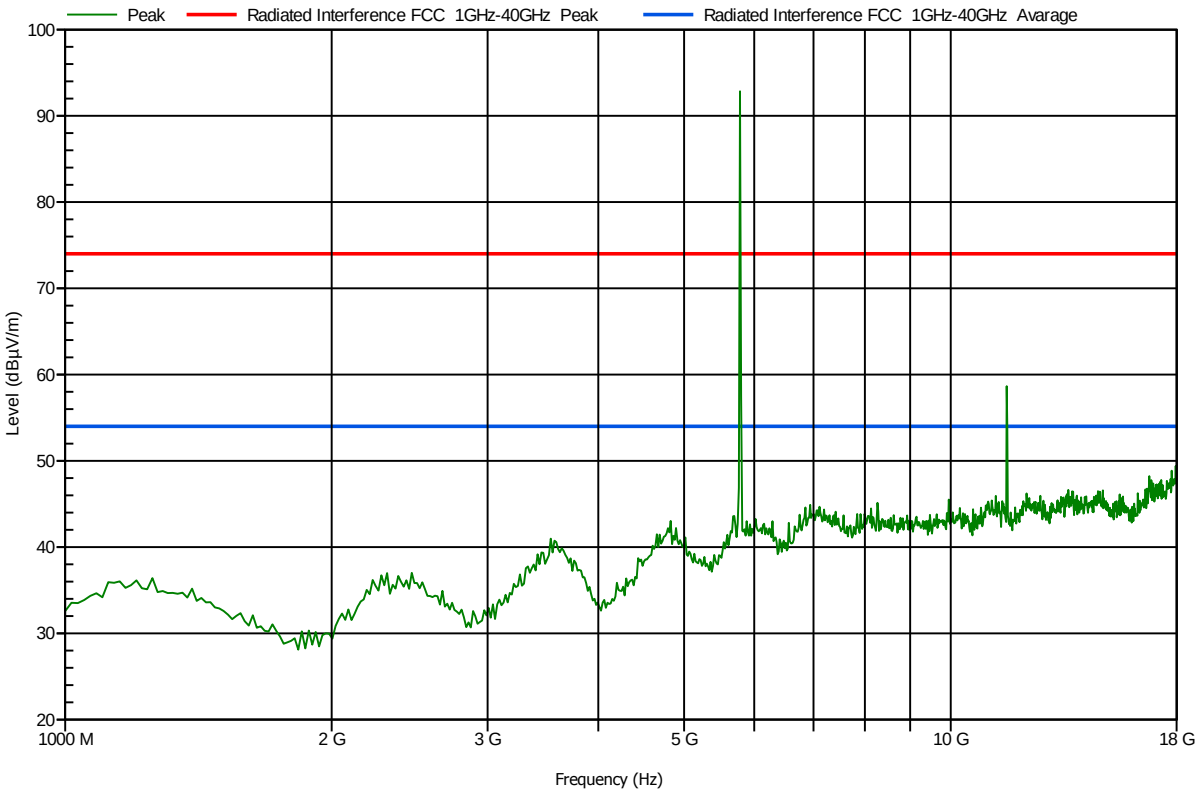
Test Results Plot No 128

1-18 GHz TX Mode Spurious Emission

Test & EUT General Information		Receiver Setting	
EUT Name:	WipAir8000 5X	Spect Analyzer	Agilent Technologies N9020A
S/N:	041A04000100	Ref. Level:	Auto [90 dBµV]
Date of Test:	14.04.2015	RBW:	1000 kHz
Test Engineer:	Ilya Arbitman	VBW:	1000 kHz
Antenna:	ARA DRG-118/A 1-18GHz 1319	Sweep Time:	Auto [170.03 ms]
Polarization:	Horizontal and Vertical	Pre Amplifier	pre amp 1 GHz-18 GHz

TEST REMARKS: Tuesday, April 14, 2015

BW 10MHz Mid 5785MHz; 28.5dBi dish antenna



MAXIMUM RESULT DEVIATION:

Detect all peaks above 6 dB below the limit line with a maximum of 6 peaks.

Nr	Frequency (MHz)	PK MaxHold (dBµV/m)	AVG Value (dBµV/m)	PK Limit (dBµV/m)	AVG Limit (dBµV/m)	Result	Angle (degrees)	Height (m)	H/V
1	5781.782	92.8	84.8	74	54	Fail	0	1	V
2	11568.421	62.9	47	74	54	Pass	0	1	H

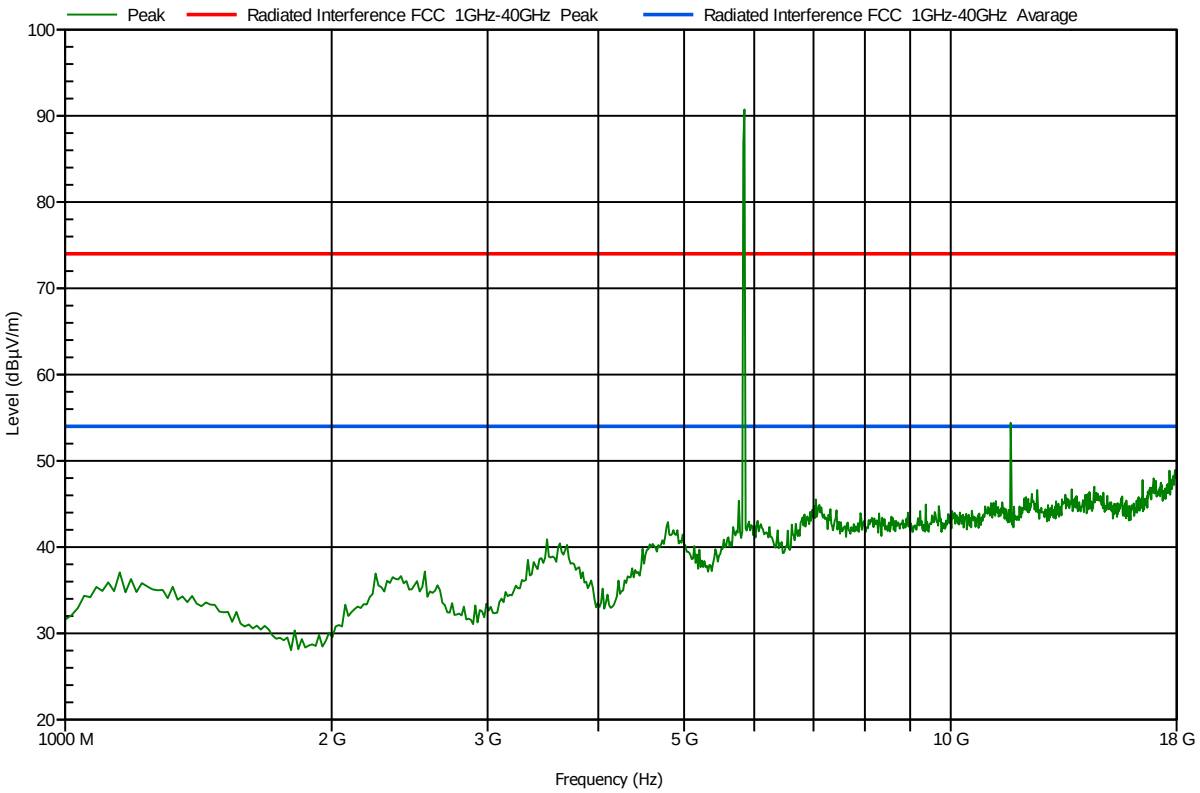
Test Results Plot No 129

1-18 GHz TX Mode Spurious Emission

Test & EUT General Information		Receiver Setting	
EUT Name:	WipAir8000 5X	Spect Analyzer	Agilent Technologies N9020A
S/N:	041A04000100	Ref. Level:	Auto [90 dBµV]
Date of Test:	14.04.2015	RBW:	1000 kHz
Test Engineer:	Ilya Arbitman	VBW:	1000 kHz
Antenna:	ARA DRG-118/A 1-18GHz 1319	Sweep Time:	Auto [170.03 ms]
Polarization:	Horizontal and Vertical	Pre Amplifier	pre amp 1 GHz-18 GHz

TEST REMARKS: Tuesday, April 14, 2015

BW 10MHz High 5845MHz; 28.5dBi dish antenna



MAXIMUM RESULT DEVIATION:

Detect all peaks above 6 dB below the limit line with a maximum of 6 peaks.

Nr	Frequency (MHz)	PK MaxHold (dBµV/m)	AVG Value (dBµV/m)	PK Limit (dBµV/m)	AVG Limit (dBµV/m)	Result	Angle (degrees)	Height (m)	H/V
1	5849.85	90.7	61.3	74	54	Fail	0	1	H
2	11689.625	60	43.2	74	54	Pass	0	1	H

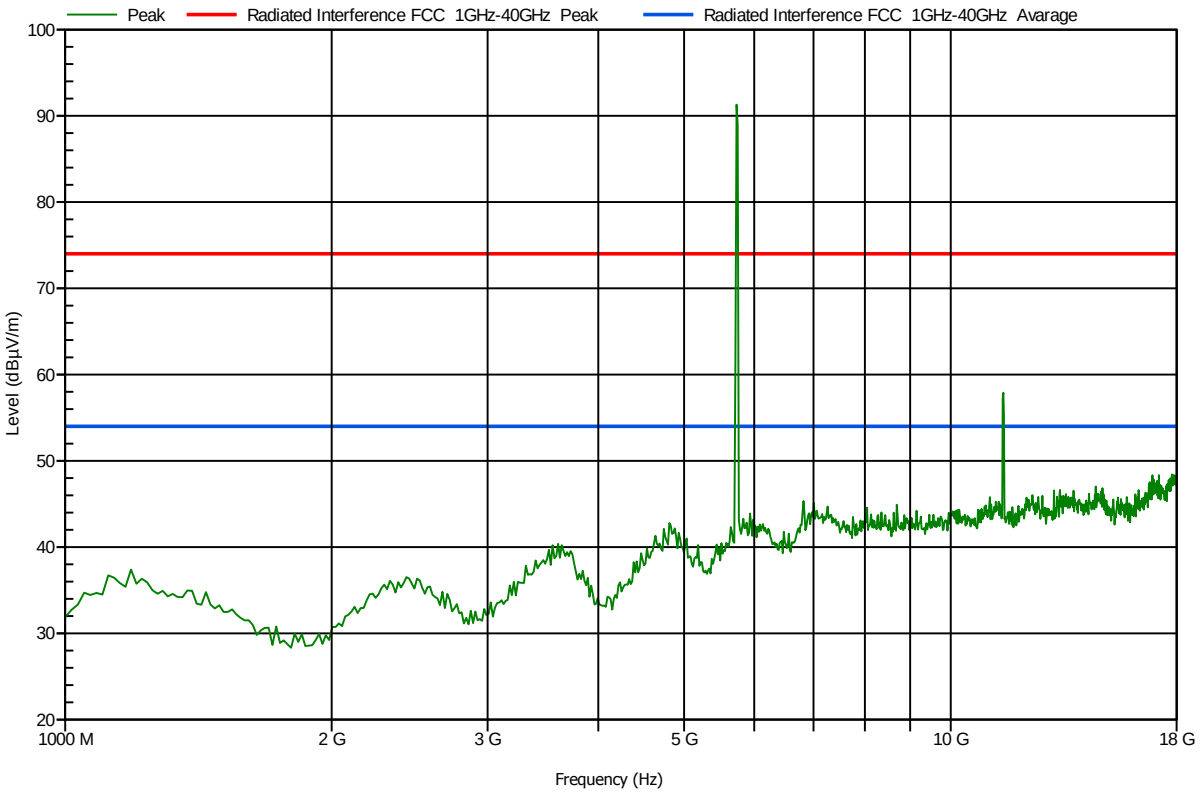
Test Results Plot No 130

1-18 GHz TX Mode Spurious Emission

Test & EUT General Information		Receiver Setting	
EUT Name:	WipAir8000 5X	Spect Analyzer	Agilent Technologies N9020A
S/N:	041A04000100	Ref. Level:	Auto [90 dBµV]
Date of Test:	14.04.2015	RBW:	1000 kHz
Test Engineer:	Ilya Arbitman	VBW:	1000 kHz
Antenna:	ARA DRG-118/A 1-18GHz 1319	Sweep Time:	Auto [170.03 ms]
Polarization:	Horizontal and Vertical	Pre Amplifier	pre amp 1 GHz-18 GHz

TEST REMARKS: Tuesday, April 14, 2015

BW 20MHz Low 5735MHz; 28.5dBi dish antenna



MAXIMUM RESULT DEVIATION:

Detect all peaks above 6 dB below the limit line with a maximum of 6 peaks.

Nr	Frequency (MHz)	PK MaxHold (dBµV/m)	AVG Value (dBµV/m)	PK Limit (dBµV/m)	AVG Limit (dBµV/m)	Result	Angle (degrees)	Height (m)	H/V
1	5730.731	91.3	81.9	74	54	Fail	0	1	V
2	11469.46	60.6	46.5	74	54	Pass	0	1	H

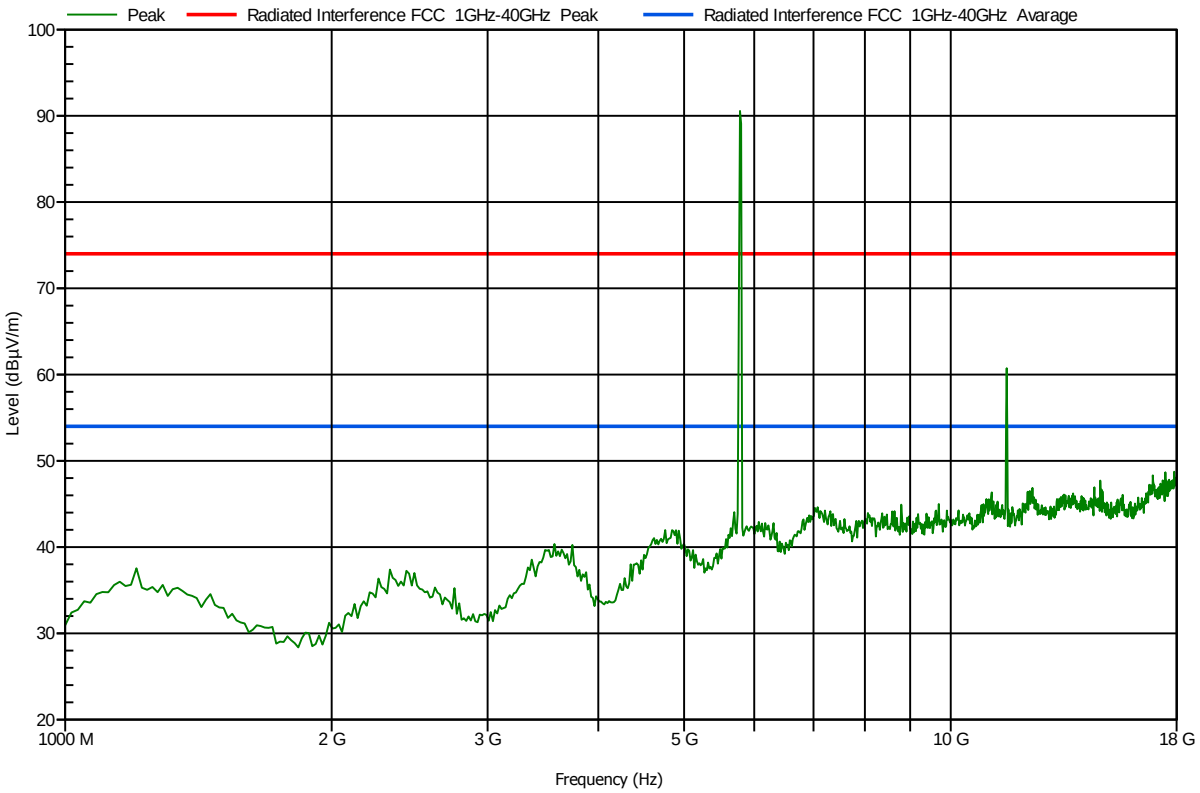
Test Results Plot No 131

1-18 GHz TX Mode Spurious Emission

Test & EUT General Information		Receiver Setting	
EUT Name:	WipAir8000 5X	Spect Analyzer	Agilent Technologies N9020A
S/N:	041A04000100	Ref. Level:	Auto [90 dBµV]
Date of Test:	14.04.2015	RBW:	1000 kHz
Test Engineer:	Ilya Arbitman	VBW:	1000 kHz
Antenna:	ARA DRG-118/A 1-18GHz 1319	Sweep Time:	Auto [170.03 ms]
Polarization:	Horizontal and Vertical	Pre Amplifier	pre amp 1 GHz-18 GHz

TEST REMARKS: Tuesday, April 14, 2015

BW 20MHz Mid 5785MHz; 28.5dBi dish antenna



MAXIMUM RESULT DEVIATION:

Detect all peaks above 6 dB below the limit line with a maximum of 6 peaks.

Nr	Frequency (MHz)	PK MaxHold (dBµV/m)	AVG Value (dBµV/m)	PK Limit (dBµV/m)	AVG Limit (dBµV/m)	Result	Angle (degrees)	Height (m)	H/V
1	5781.782	90.6	81.8	74	54	Fail	0	1	H
2	11577.092	60.2	43.4	74	54	Pass	0	1	V

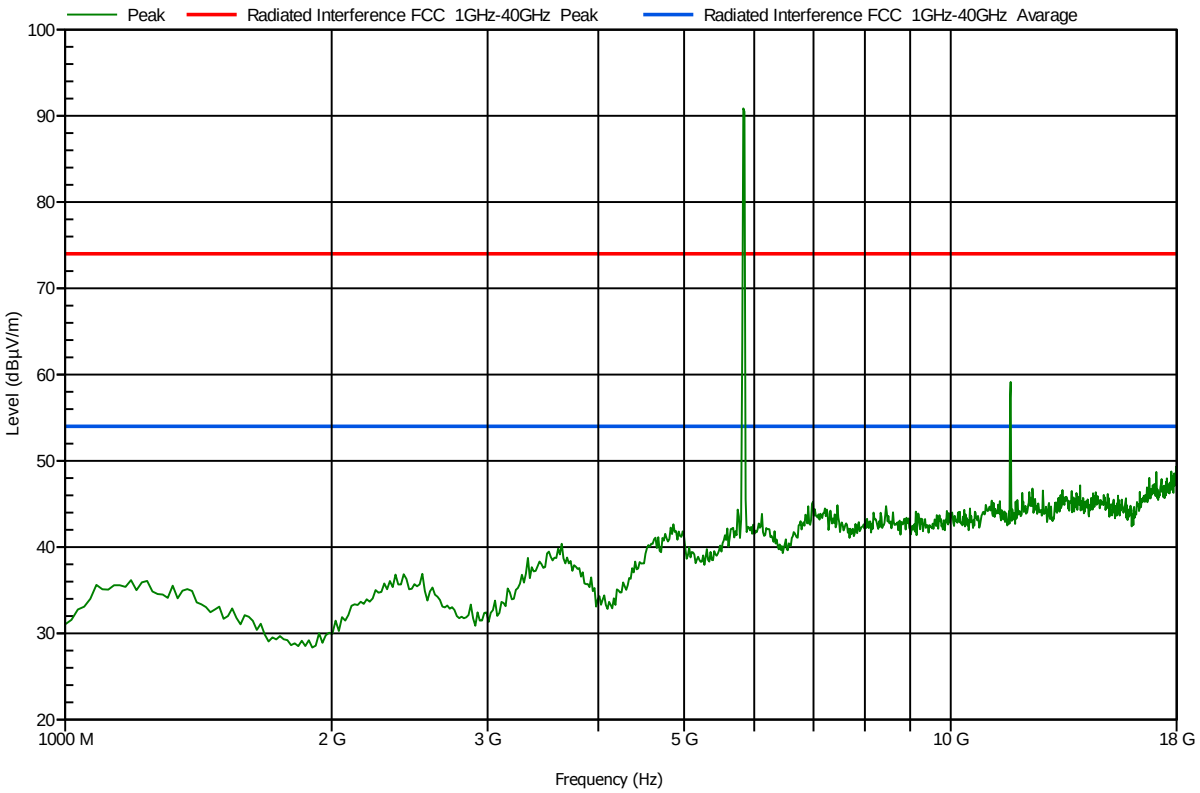
Test Results Plot No 132

1-18 GHz TX Mode Spurious Emission

Test & EUT General Information		Receiver Setting	
EUT Name:	WipAir8000 5X	Spect Analyzer	Agilent Technologies N9020A
S/N:	041A04000100	Ref. Level:	Auto [90 dBµV]
Date of Test:	14.04.2015	RBW:	1000 kHz
Test Engineer:	Ilya Arbitman	VBW:	1000 kHz
Antenna:	ARA DRG-118/A 1-18GHz 1319	Sweep Time:	Auto [170.03 ms]
Polarization:	Horizontal and Vertical	Pre Amplifier	pre amp 1 GHz-18 GHz

TEST REMARKS: Tuesday, April 14, 2015

BW 20MHz High 5840MHz; 28.5dBi dish antenna



MAXIMUM RESULT DEVIATION:

Detect all peaks above 6 dB below the limit line with a maximum of 6 peaks.

Nr	Frequency (MHz)	PK MaxHold (dBµV/m)	AVG Value (dBµV/m)	PK Limit (dBµV/m)	AVG Limit (dBµV/m)	Result	Angle (degrees)	Height (m)	H/V
1	5832.833	90.9	82.3	74	54	Fail	0	1	H
2	11668.714	58.6	43.4	74	54	Pass	0	1	H

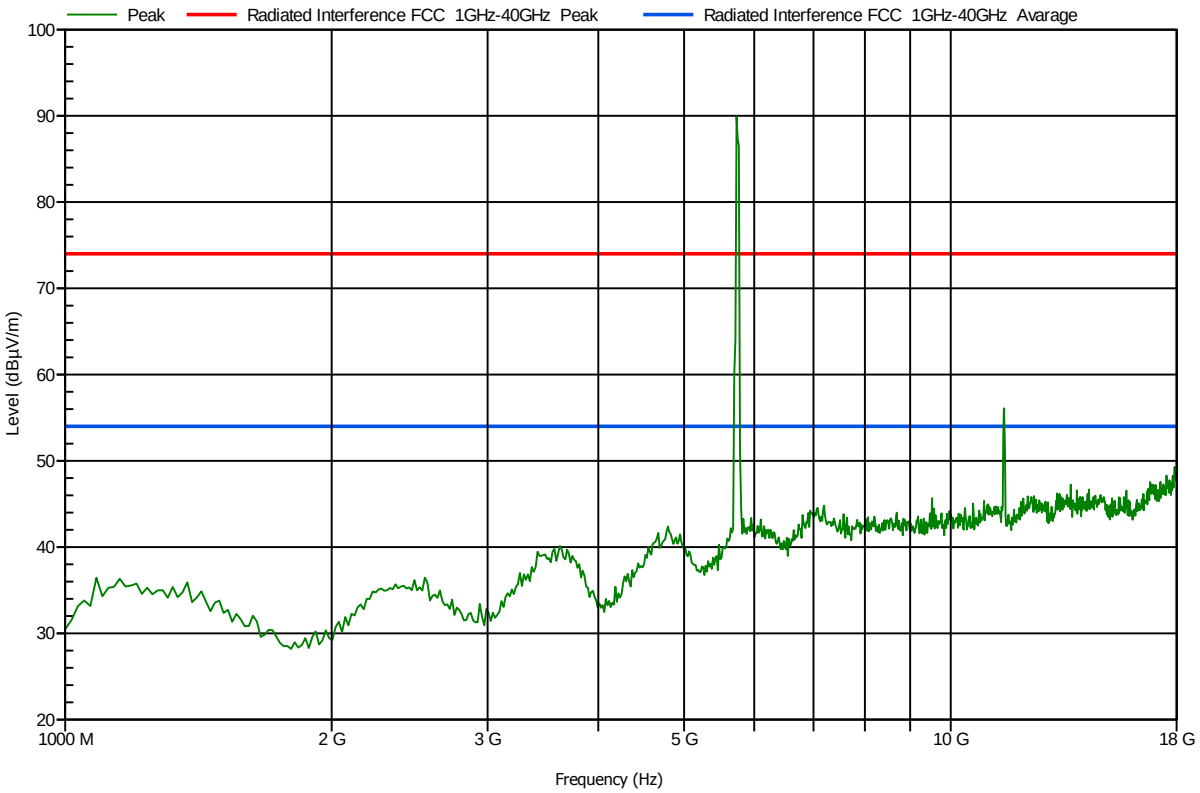
Test Results Plot No 133

1-18 GHz TX Mode Spurious Emission

Test & EUT General Information		Receiver Setting	
EUT Name:	WipAir8000 5X	Spect Analyzer	Agilent Technologies N9020A
S/N:	041A04000100	Ref. Level:	Auto [90 dBµV]
Date of Test:	14.04.2015	RBW:	1000 kHz
Test Engineer:	Ilya Arbitman	VBW:	1000 kHz
Antenna:	ARA DRG-118/A 1-18GHz 1319	Sweep Time:	Auto [170.03 ms]
Polarization:	Horizontal and Vertical	Pre Amplifier	pre amp 1 GHz-18 GHz

TEST REMARKS: Tuesday, April 14, 2015

BW 40MHz Low 5745MHz; 28.5dBi dish antenna



MAXIMUM RESULT DEVIATION:

Detect all peaks above 6 dB below the limit line with a maximum of 6 peaks.

Nr	Frequency (MHz)	PK MaxHold (dBµV/m)	AVG Value (dBµV/m)	PK Limit (dBµV/m)	AVG Limit (dBµV/m)	Result	Angle (degrees)	Height (m)	H/V
1	5730.731	89.9	78.3	74	54	Fail	0	1	V
2	11495.647	58.9	43.9	74	54	Pass	0	1	H

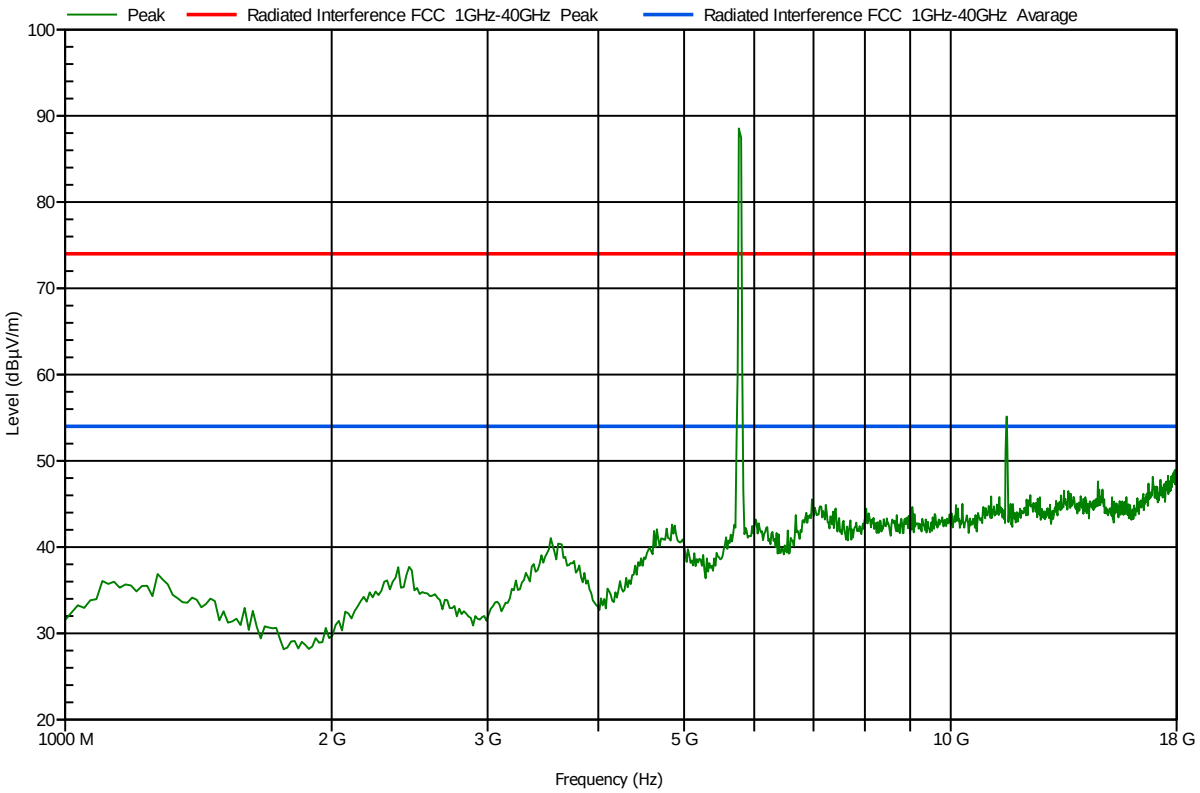
Test Results Plot No 134

1-18 GHz TX Mode Spurious Emission

Test & EUT General Information		Receiver Setting	
EUT Name:	WipAir8000 5X	Spect Analyzer	Agilent Technologies N9020A
S/N:	041A04000100	Ref. Level:	Auto [90 dBµV]
Date of Test:	14.04.2015	RBW:	1000 kHz
Test Engineer:	Ilya Arbitman	VBW:	1000 kHz
Antenna:	ARA DRG-118/A 1-18GHz 1319	Sweep Time:	Auto [170.03 ms]
Polarization:	Horizontal and Vertical	Pre Amplifier	pre amp 1 GHz-18 GHz

TEST REMARKS: Tuesday, April 14, 2015

BW 40MHz Mid 5785MHz; 28.5dBi dish antenna



MAXIMUM RESULT DEVIATION:

Detect all peaks above 6 dB below the limit line with a maximum of 6 peaks.

Nr	Frequency (MHz)	PK MaxHold (dBµV/m)	AVG Value (dBµV/m)	PK Limit (dBµV/m)	AVG Limit (dBµV/m)	Result	Angle (degrees)	Height (m)	H/V
1	5764.765	88.5	55.3	74	54	Fail	0	1	V
2	11553.159	56	42.3	74	54	Pass	0	1	V

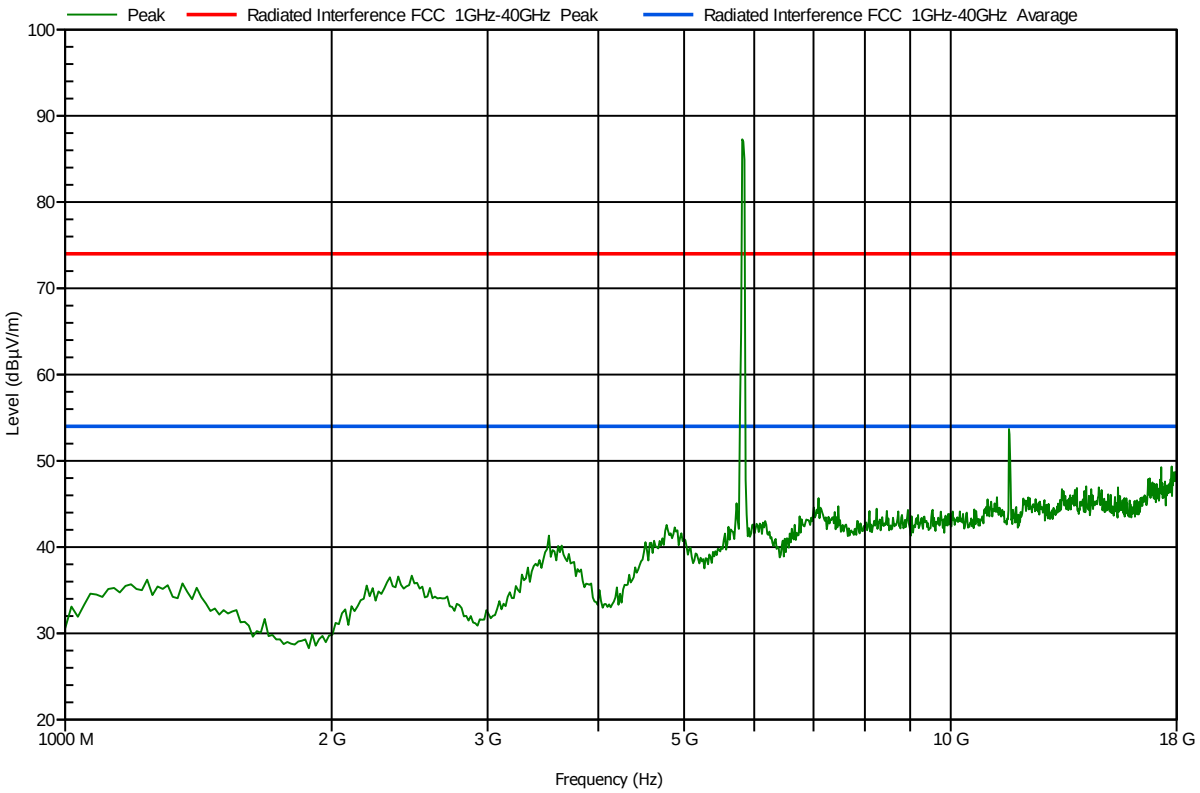
Test Results Plot No 135

1-18 GHz TX Mode Spurious Emission

Test & EUT General Information		Receiver Setting	
EUT Name:	WipAir8000 5X	Spect Analyzer	Agilent Technologies N9020A
S/N:	041A04000100	Ref. Level:	Auto [90 dBµV]
Date of Test:	14.04.2015	RBW:	1000 kHz
Test Engineer:	Ilya Arbitman	VBW:	1000 kHz
Antenna:	ARA DRG-118/A 1-18GHz 1319	Sweep Time:	Auto [170.03 ms]
Polarization:	Horizontal and Vertical	Pre Amplifier	pre amp 1 GHz-18 GHz

TEST REMARKS: Tuesday, April 14, 2015

BW 40MHz High 5830MHz; 28.5dBi dish antenna



MAXIMUM RESULT DEVIATION:

Detect all peaks above 6 dB below the limit line with a maximum of 6 peaks.

Nr	Frequency (MHz)	PK MaxHold (dBµV/m)	AVG Value (dBµV/m)	PK Limit (dBµV/m)	AVG Limit (dBµV/m)	Result	Angle (degrees)	Height (m)	H/V
1	5815.816	87.3	78.5	74	54	Fail	0	1	V
2	11657.945	55.9	41.7	74	54	Pass	0	1	V

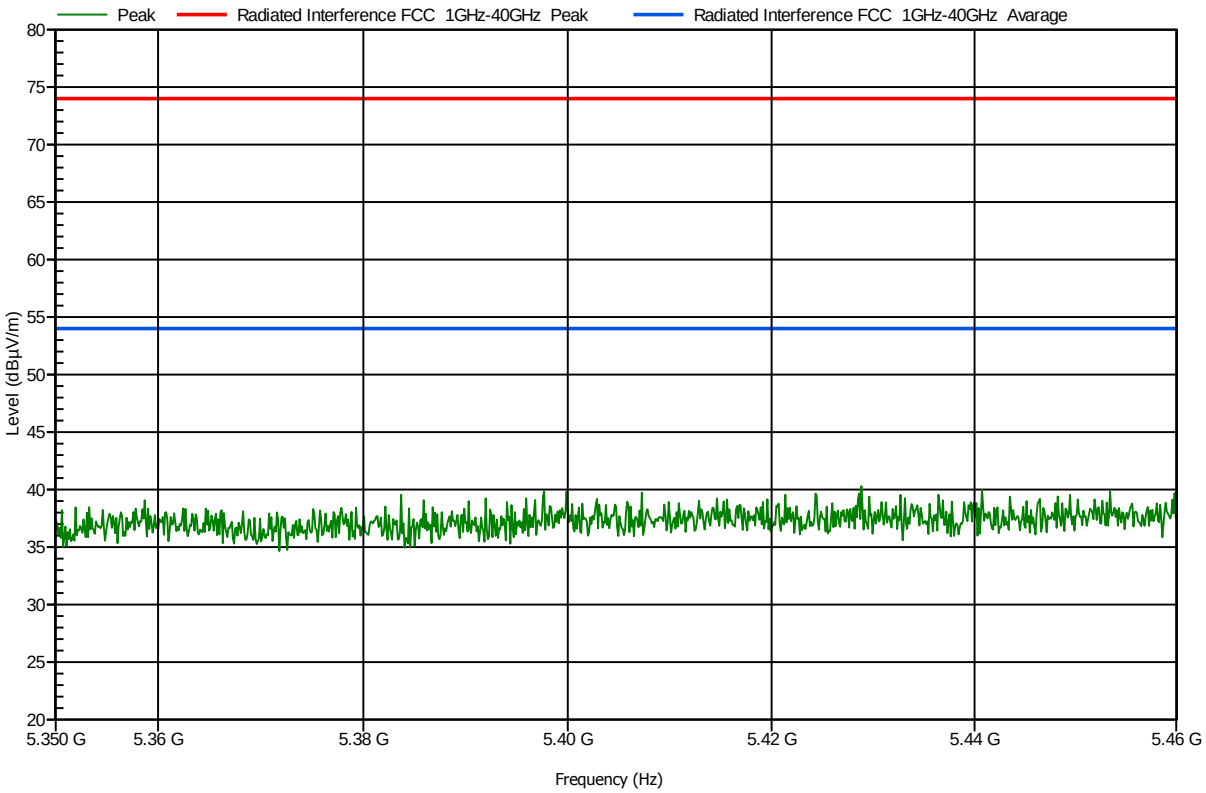
Test Results Plot No 136

5.35-5.46 GHz TX Mode Spurious Emission

Test & EUT General Information		Receiver Setting	
EUT Name:	WipAir8000 5X	Spect Analyzer	Agilent Technologies N9020A
S/N:	041A04000100	Ref. Level:	Auto [90 dBµV]
Date of Test:	14.04.2015	RBW:	1000 kHz
Test Engineer:	Ilya Arbitman	VBW:	1000 kHz
Antenna:	ARA DRG-118/A 1-18GHz 1319	Sweep Time:	Auto [20.05 ms]
Polarization:	Horizontal and Vertical	Pre Amplifier	pre amp 1 GHz-18 GHz

TEST REMARKS: Tuesday, April 14, 2015

BW 5MHz Low 5730MHz; 28.5dBi dish antenna



MAXIMUM RESULT DEVIATION:

Detect all peaks above 6 dB below the limit line with a maximum of 6 peaks.

None

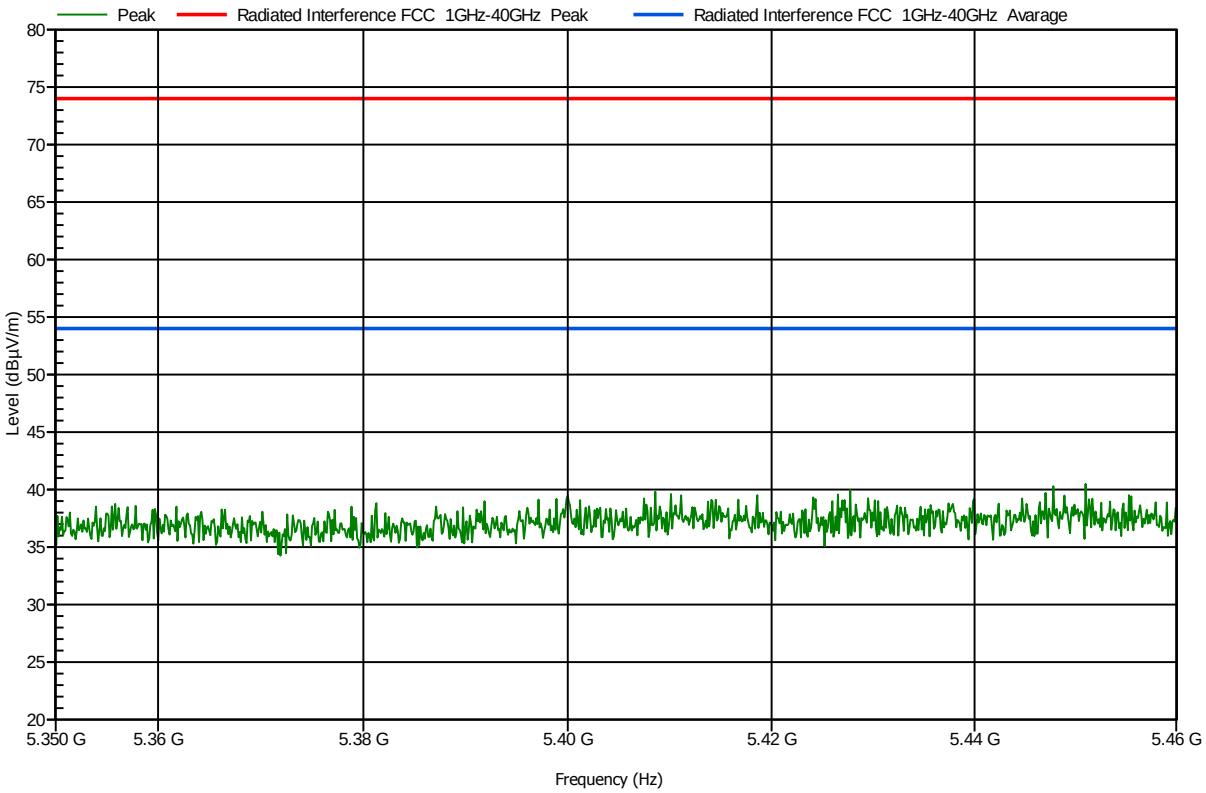
Test Results Plot No 137

5.35-5.46 GHz TX Mode Spurious Emission

Test & EUT General Information		Receiver Setting	
EUT Name:	WipAir8000 5X	Spect Analyzer	Agilent Technologies N9020A
S/N:	041A04000100	Ref. Level:	Auto [90 dBµV]
Date of Test:	14.04.2015	RBW:	1000 kHz
Test Engineer:	Ilya Arbitman	VBW:	1000 kHz
Antenna:	ARA DRG-118/A 1-18GHz 1319	Sweep Time:	Auto [20.05 ms]
Polarization:	Horizontal and Vertical	Pre Amplifier	pre amp 1 GHz-18 GHz

TEST REMARKS: Tuesday, April 14, 2015

BW 5MHz mid 5785MHz; 28.5dBi dish antenna



MAXIMUM RESULT DEVIATION:

Detect all peaks above 6 dB below the limit line with a maximum of 6 peaks.

None

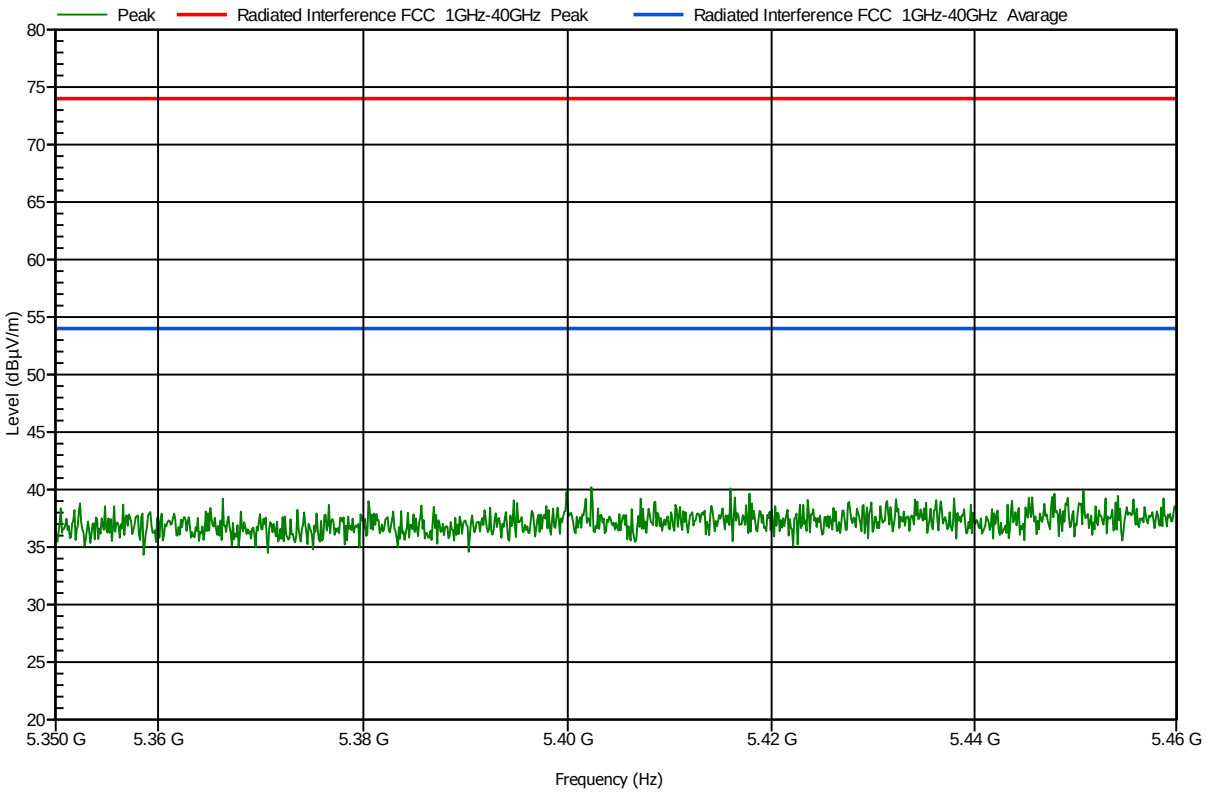
Test Results Plot No 138

5.35-5.46 GHz TX Mode Spurious Emission

Test & EUT General Information		Receiver Setting	
EUT Name:	WipAir8000 5X	Spect Analyzer	Agilent Technologies N9020A
S/N:	041A04000100	Ref. Level:	Auto [90 dBµV]
Date of Test:	14.04.2015	RBW:	1000 kHz
Test Engineer:	Ilya Arbitman	VBW:	1000 kHz
Antenna:	ARA DRG-118/A 1-18GHz 1319	Sweep Time:	Auto [20.05 ms]
Polarization:	Horizontal and Vertical	Pre Amplifier	pre amp 1 GHz-18 GHz

TEST REMARKS: Tuesday, April 14, 2015

BW 5MHz High 5845MHz; 28.5dBi dish antenna



MAXIMUM RESULT DEVIATION:

Detect all peaks above 6 dB below the limit line with a maximum of 6 peaks.

None

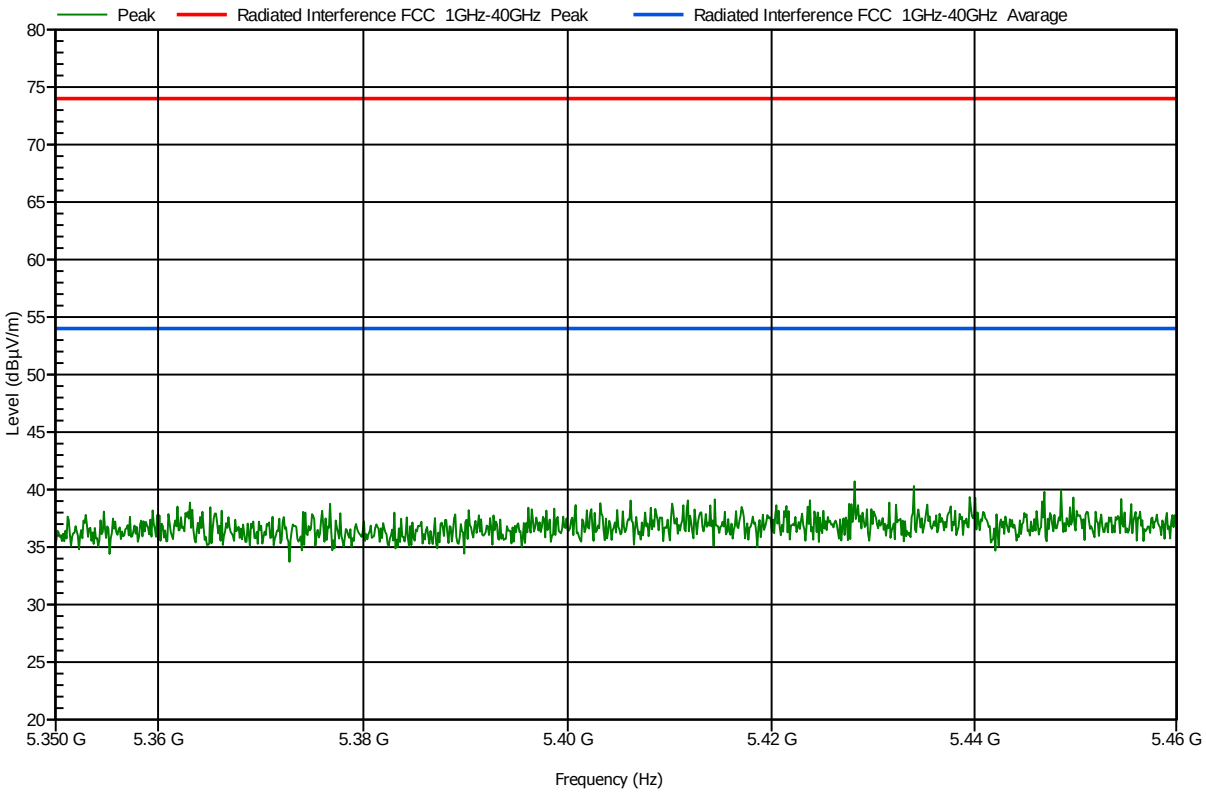
Test Results Plot No 139

5.35-5.46 GHz TX Mode Spurious Emission

Test & EUT General Information		Receiver Setting	
EUT Name:	WipAir8000 5X	Spect Analyzer	Agilent Technologies N9020A
S/N:	041A04000100	Ref. Level:	Auto [90 dBµV]
Date of Test:	14.04.2015	RBW:	1000 kHz
Test Engineer:	Ilya Arbitman	VBW:	1000 kHz
Antenna:	ARA DRG-118/A 1-18GHz 1319	Sweep Time:	Auto [20.05 ms]
Polarization:	Horizontal and Vertical	Pre Amplifier	pre amp 1 GHz-18 GHz

TEST REMARKS: Tuesday, April 14, 2015

BW 10MHz Low 5730MHz; 28.5dBi dish antenna



MAXIMUM RESULT DEVIATION:

Detect all peaks above 6 dB below the limit line with a maximum of 6 peaks.

None

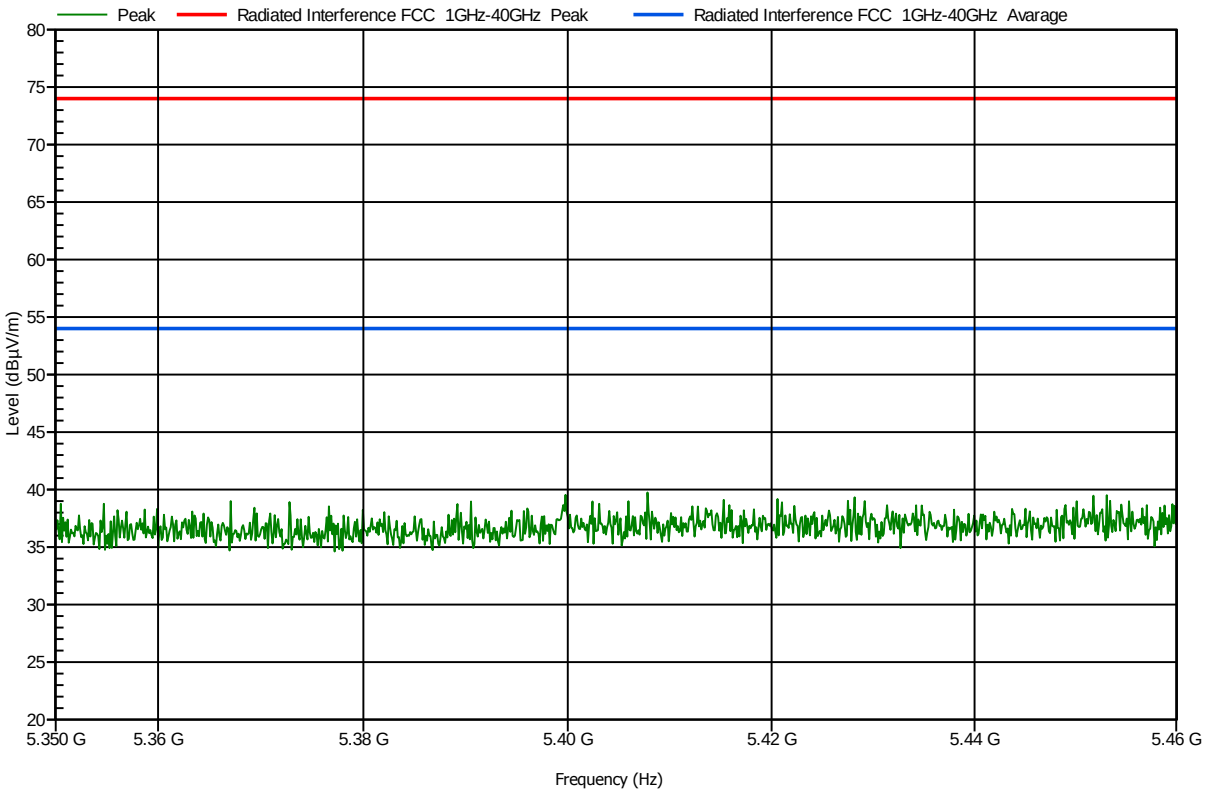
Test Results Plot No 140

5.35-5.46 GHz TX Mode Spurious Emission

Test & EUT General Information		Receiver Setting	
EUT Name:	WipAir8000 5X	Spect Analyzer	Agilent Technologies N9020A
S/N:	041A04000100	Ref. Level:	Auto [90 dBµV]
Date of Test:	14.04.2015	RBW:	1000 kHz
Test Engineer:	Ilya Arbitman	VBW:	1000 kHz
Antenna:	ARA DRG-118/A 1-18GHz 1319	Sweep Time:	Auto [20.05 ms]
Polarization:	Horizontal and Vertical	Pre Amplifier	pre amp 1 GHz-18 GHz

TEST REMARKS: Tuesday, April 14, 2015

BW 10MHz Mid 5785MHz; 28.5dBi dish antenna



MAXIMUM RESULT DEVIATION:

Detect all peaks above 6 dB below the limit line with a maximum of 6 peaks.

None

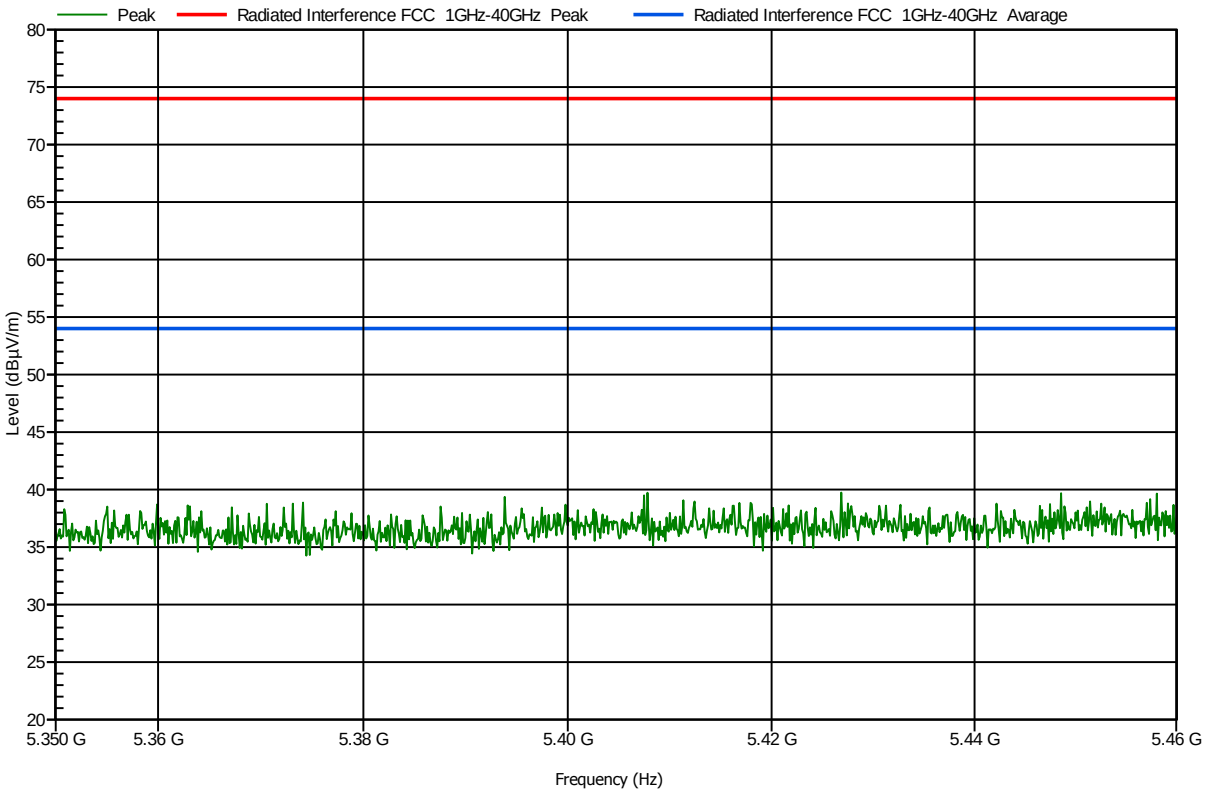
Test Results Plot No 141

5.35-5.46 GHz TX Mode Spurious Emission

Test & EUT General Information		Receiver Setting	
EUT Name:	WipAir8000 5X	Spect Analyzer	Agilent Technologies N9020A
S/N:	041A04000100	Ref. Level:	Auto [90 dBµV]
Date of Test:	14.04.2015	RBW:	1000 kHz
Test Engineer:	Ilya Arbitman	VBW:	1000 kHz
Antenna:	ARA DRG-118/A 1-18GHz 1319	Sweep Time:	Auto [20.05 ms]
Polarization:	Horizontal and Vertical	Pre Amplifier	pre amp 1 GHz-18 GHz

TEST REMARKS: Tuesday, April 14, 2015

BW 10MHz High 5845MHz; 28.5dBi dish antenna



MAXIMUM RESULT DEVIATION:

Detect all peaks above 6 dB below the limit line with a maximum of 6 peaks.

None

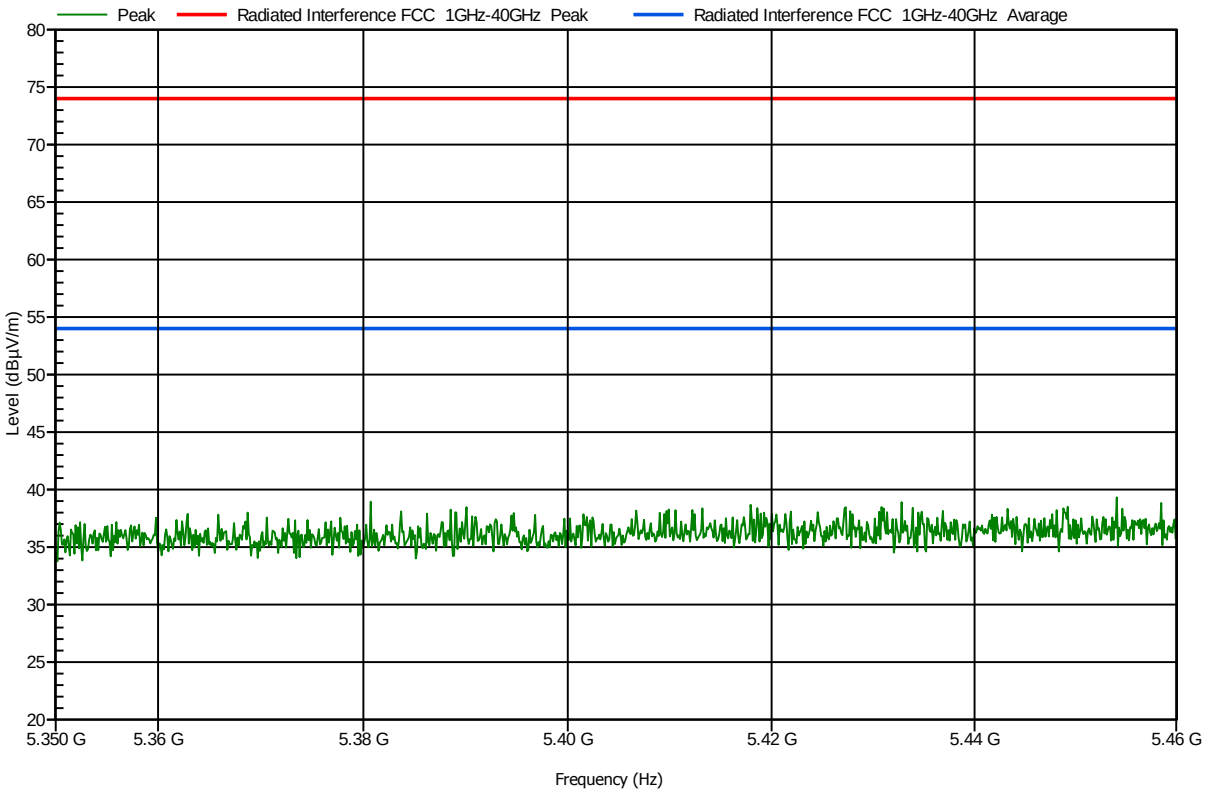
Test Results Plot No 142

5.35-5.46 GHz TX Mode Spurious Emission

Test & EUT General Information		Receiver Setting	
EUT Name:	WipAir8000 5X	Spect Analyzer	Agilent Technologies N9020A
S/N:	041A04000100	Ref. Level:	Auto [90 dBµV]
Date of Test:	14.04.2015	RBW:	1000 kHz
Test Engineer:	Ilya Arbitman	VBW:	1000 kHz
Antenna:	ARA DRG-118/A 1-18GHz 1319	Sweep Time:	Auto [20.05 ms]
Polarization:	Horizontal and Vertical	Pre Amplifier	pre amp 1 GHz-18 GHz

TEST REMARKS: Tuesday, April 14, 2015

BW 20MHz Low 5735MHz; 28.5dBi dish antenna



MAXIMUM RESULT DEVIATION:

Detect all peaks above 6 dB below the limit line with a maximum of 6 peaks.

None

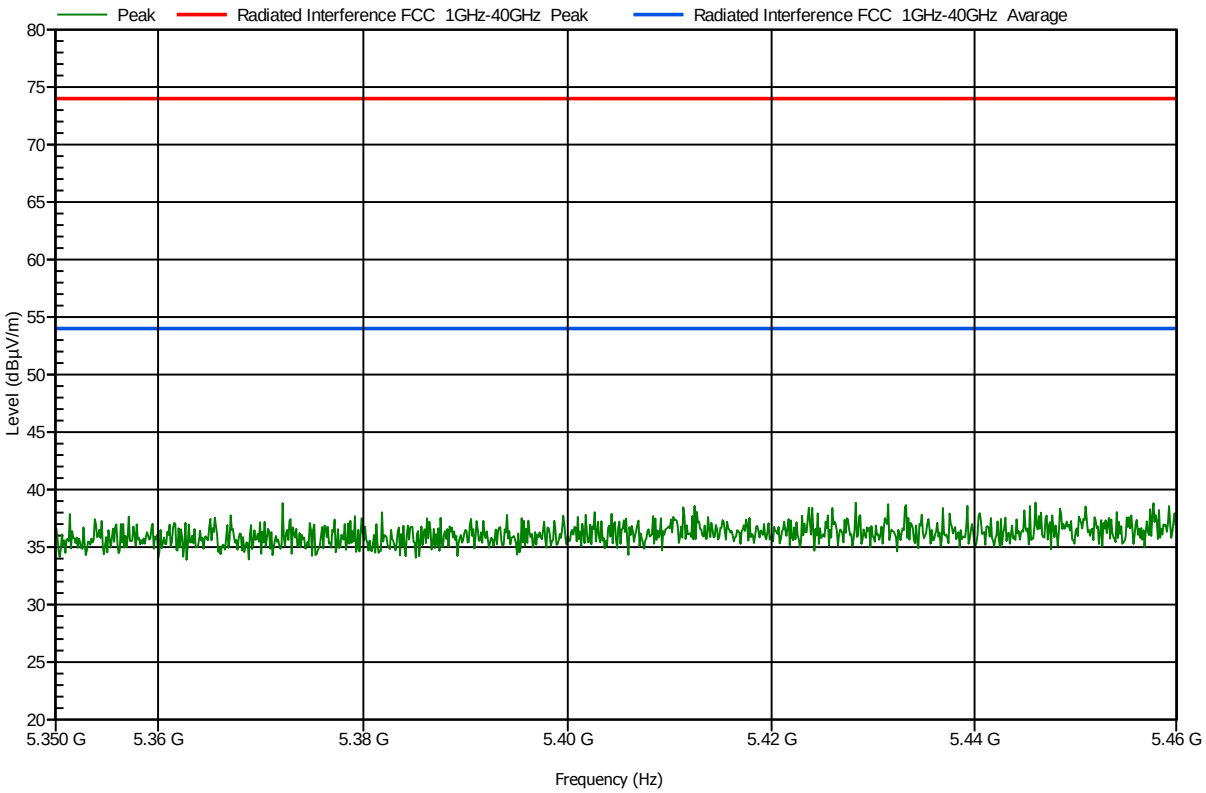
Test Results Plot No 143

5.35-5.46 GHz TX Mode Spurious Emission

Test & EUT General Information		Receiver Setting	
EUT Name:	WipAir8000 5X	Spect Analyzer	Agilent Technologies N9020A
S/N:	041A04000100	Ref. Level:	Auto [90 dBµV]
Date of Test:	14.04.2015	RBW:	1000 kHz
Test Engineer:	Ilya Arbitman	VBW:	1000 kHz
Antenna:	ARA DRG-118/A 1-18GHz 1319	Sweep Time:	Auto [20.05 ms]
Polarization:	Horizontal and Vertical	Pre Amplifier	pre amp 1 GHz-18 GHz

TEST REMARKS: Tuesday, April 14, 2015

BW 20MHz Mid 5785MHz; 28.5dBi dish antenna



MAXIMUM RESULT DEVIATION:

Detect all peaks above 6 dB below the limit line with a maximum of 6 peaks.

None

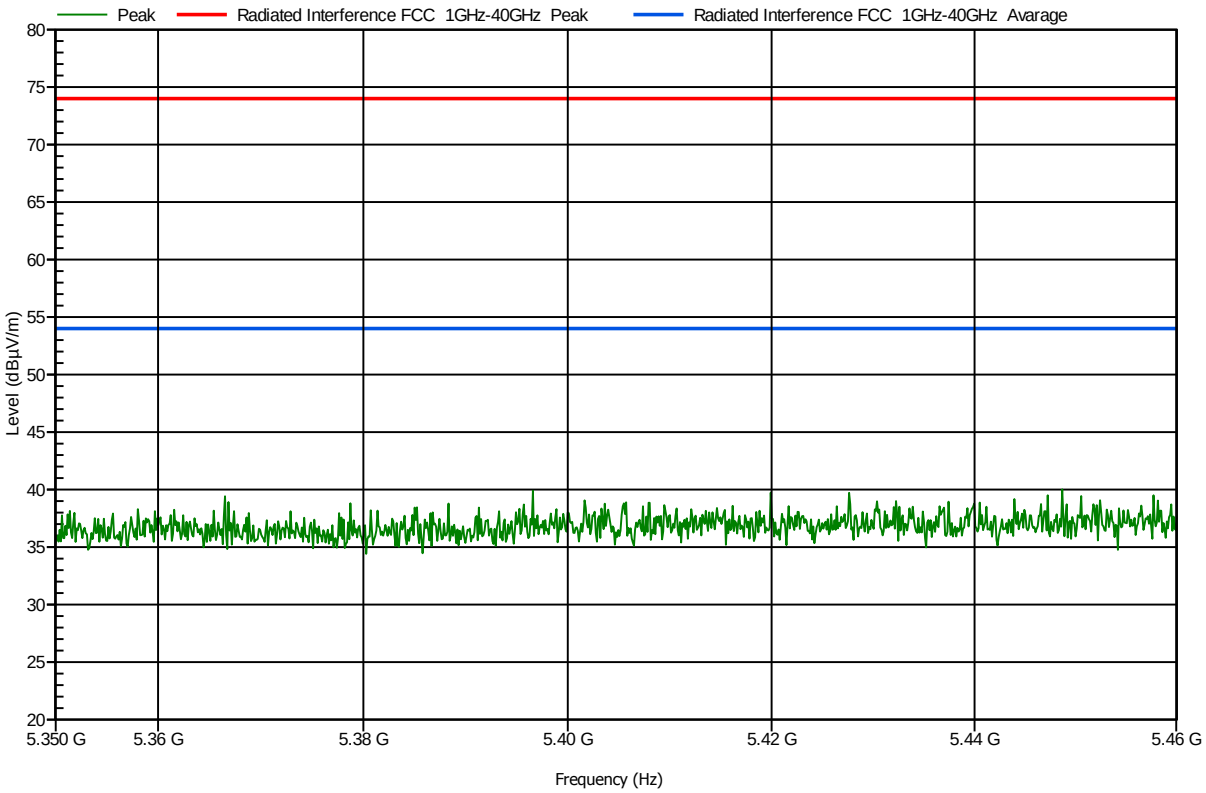
Test Results Plot No 144

5.35-5.46 GHz TX Mode Spurious Emission

Test & EUT General Information		Receiver Setting	
EUT Name:	WipAir8000 5X	Spect Analyzer	Agilent Technologies N9020A
S/N:	041A04000100	Ref. Level:	Auto [90 dBµV]
Date of Test:	14.04.2015	RBW:	1000 kHz
Test Engineer:	Ilya Arbitman	VBW:	1000 kHz
Antenna:	ARA DRG-118/A 1-18GHz 1319	Sweep Time:	Auto [20.05 ms]
Polarization:	Horizontal and Vertical	Pre Amplifier	pre amp 1 GHz-18 GHz

TEST REMARKS: Tuesday, April 14, 2015

BW 20MHz High 5840MHz; 28.5dBi dish antenna



MAXIMUM RESULT DEVIATION:

Detect all peaks above 6 dB below the limit line with a maximum of 6 peaks.

None

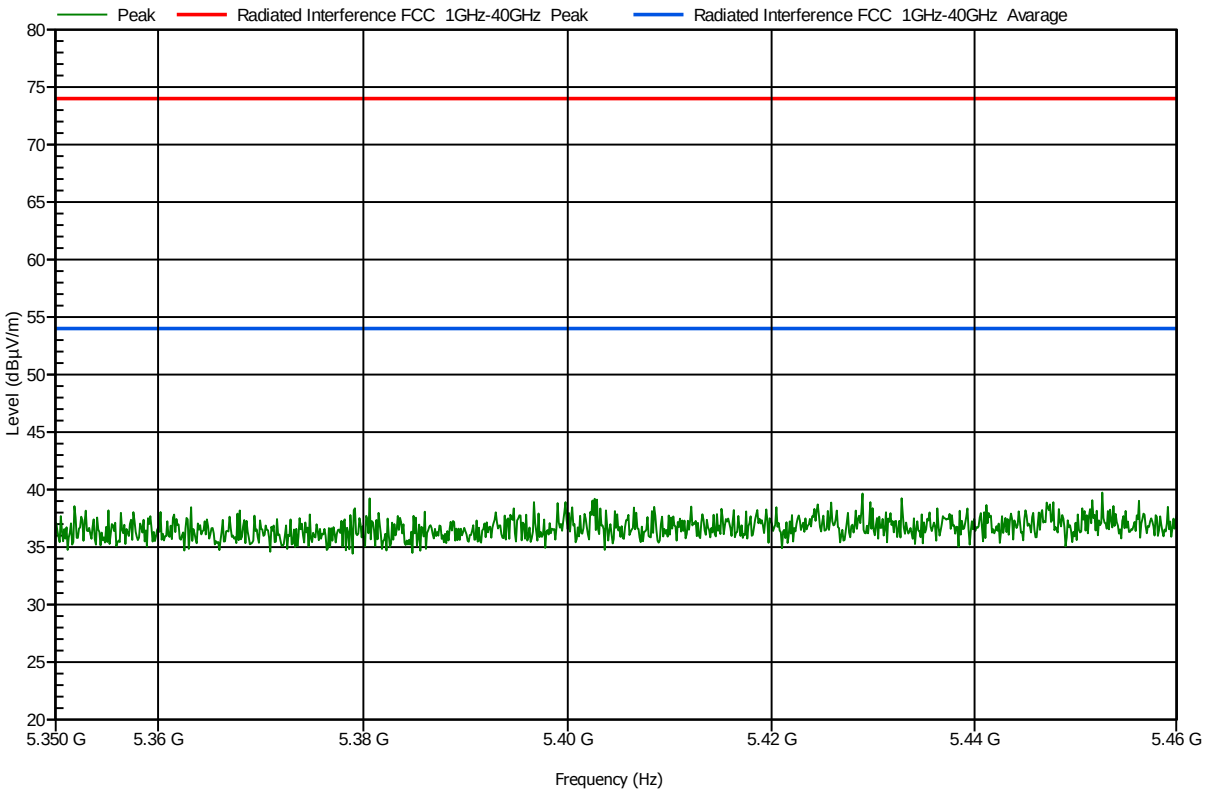
Test Results Plot No 145

5.35-5.46 GHz TX Mode Spurious Emission

Test & EUT General Information		Receiver Setting	
EUT Name:	WipAir8000 5X	Spect Analyzer	Agilent Technologies N9020A
S/N:	041A04000100	Ref. Level:	Auto [90 dBµV]
Date of Test:	14.04.2015	RBW:	1000 kHz
Test Engineer:	Ilya Arbitman	VBW:	1000 kHz
Antenna:	ARA DRG-118/A 1-18GHz 1319	Sweep Time:	Auto [20.05 ms]
Polarization:	Horizontal and Vertical	Pre Amplifier	pre amp 1 GHz-18 GHz

TEST REMARKS: Tuesday, April 14, 2015

BW 40MHz Low 5745MHz; 28.5dBi dish antenna



MAXIMUM RESULT DEVIATION:

Detect all peaks above 6 dB below the limit line with a maximum of 6 peaks.

None

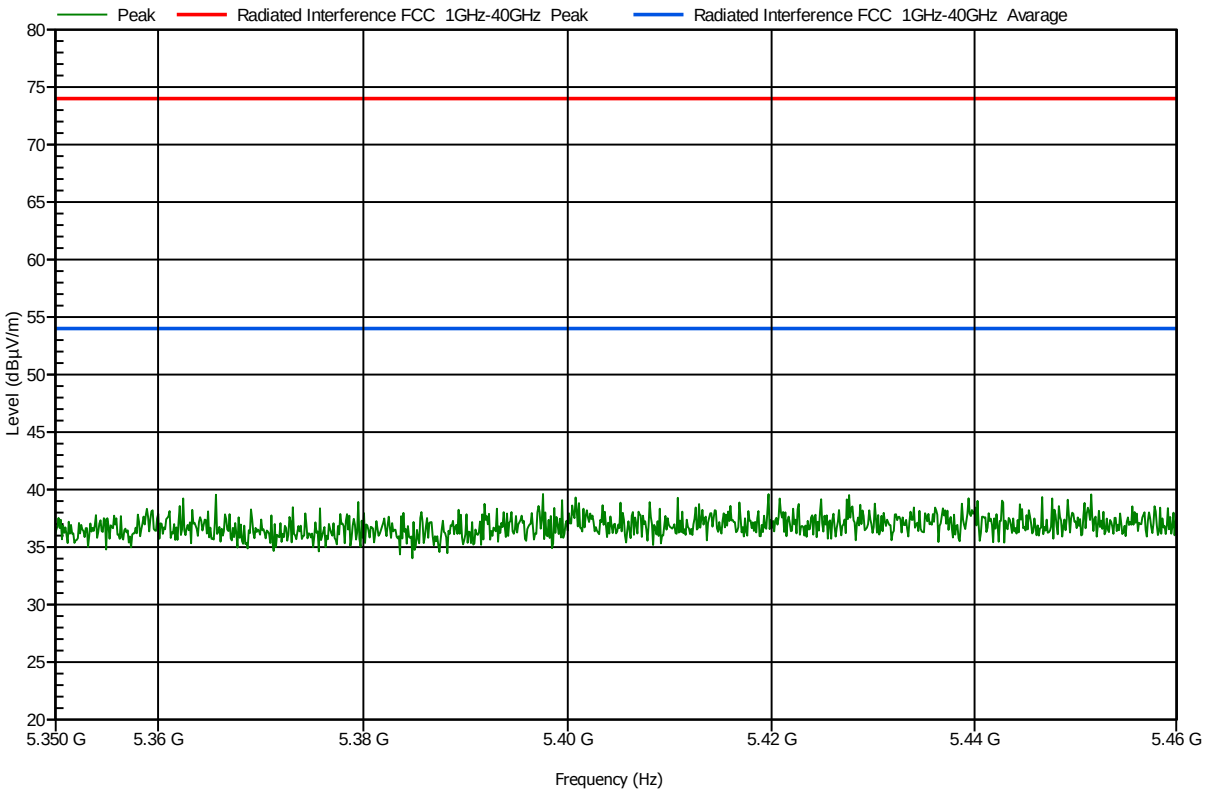
Test Results Plot No 146

5.35-5.46 GHz TX Mode Spurious Emission

Test & EUT General Information		Receiver Setting	
EUT Name:	WipAir8000 5X	Spect Analyzer	Agilent Technologies N9020A
S/N:	041A04000100	Ref. Level:	Auto [90 dBµV]
Date of Test:	14.04.2015	RBW:	1000 kHz
Test Engineer:	Ilya Arbitman	VBW:	1000 kHz
Antenna:	ARA DRG-118/A 1-18GHz 1319	Sweep Time:	Auto [20.05 ms]
Polarization:	Horizontal and Vertical	Pre Amplifier	pre amp 1 GHz-18 GHz

TEST REMARKS: Tuesday, April 14, 2015

BW 40MHz Mid 5785MHz; 28.5dBi dish antenna



MAXIMUM RESULT DEVIATION:

Detect all peaks above 6 dB below the limit line with a maximum of 6 peaks.

None

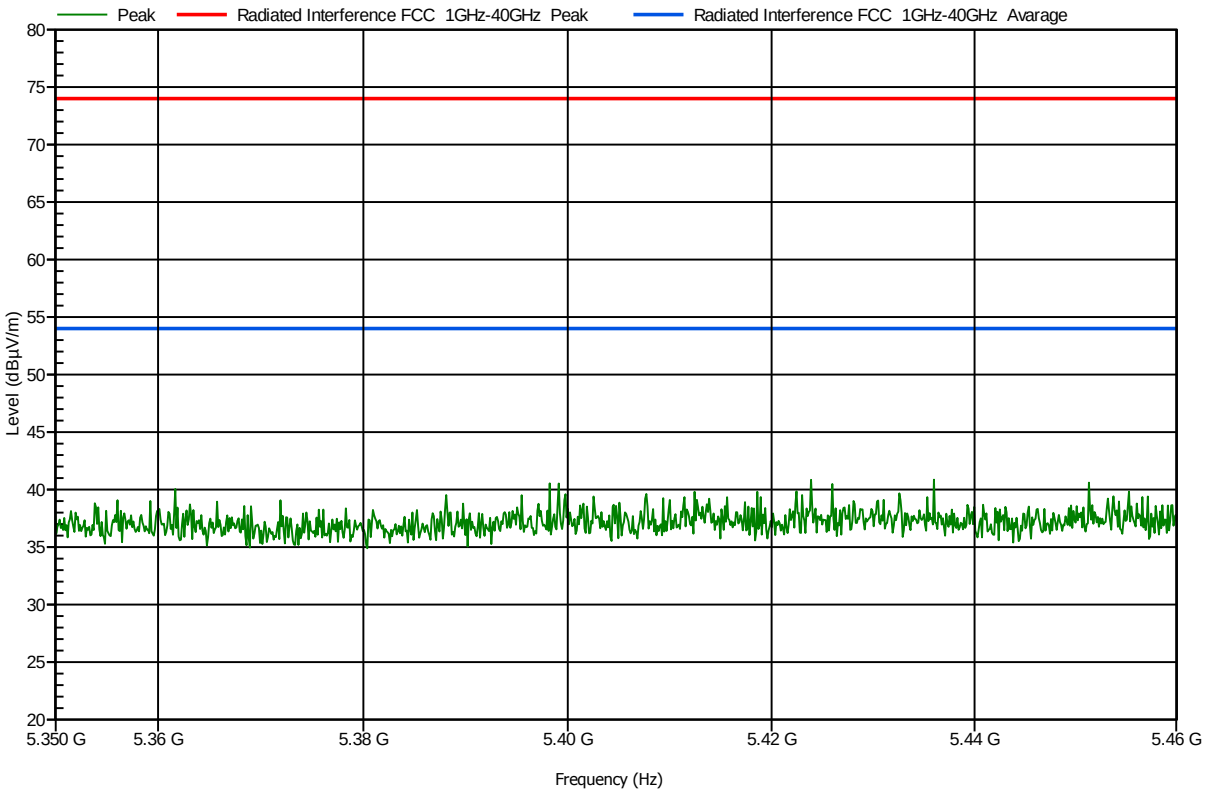
Test Results Plot No 147

5.35-5.46 GHz TX Mode Spurious Emission

Test & EUT General Information		Receiver Setting	
EUT Name:	WipAir8000 5X	Spect Analyzer	Agilent Technologies N9020A
S/N:	041A04000100	Ref. Level:	Auto [90 dBµV]
Date of Test:	14.04.2015	RBW:	1000 kHz
Test Engineer:	Ilya Arbitman	VBW:	1000 kHz
Antenna:	ARA DRG-118/A 1-18GHz 1319	Sweep Time:	Auto [20.05 ms]
Polarization:	Horizontal and Vertical	Pre Amplifier	pre amp 1 GHz-18 GHz

TEST REMARKS: Tuesday, April 14, 2015

BW 40MHz High 5830MHz; 28.5dBi dish antenna



MAXIMUM RESULT DEVIATION:

Detect all peaks above 6 dB below the limit line with a maximum of 6 peaks.

None

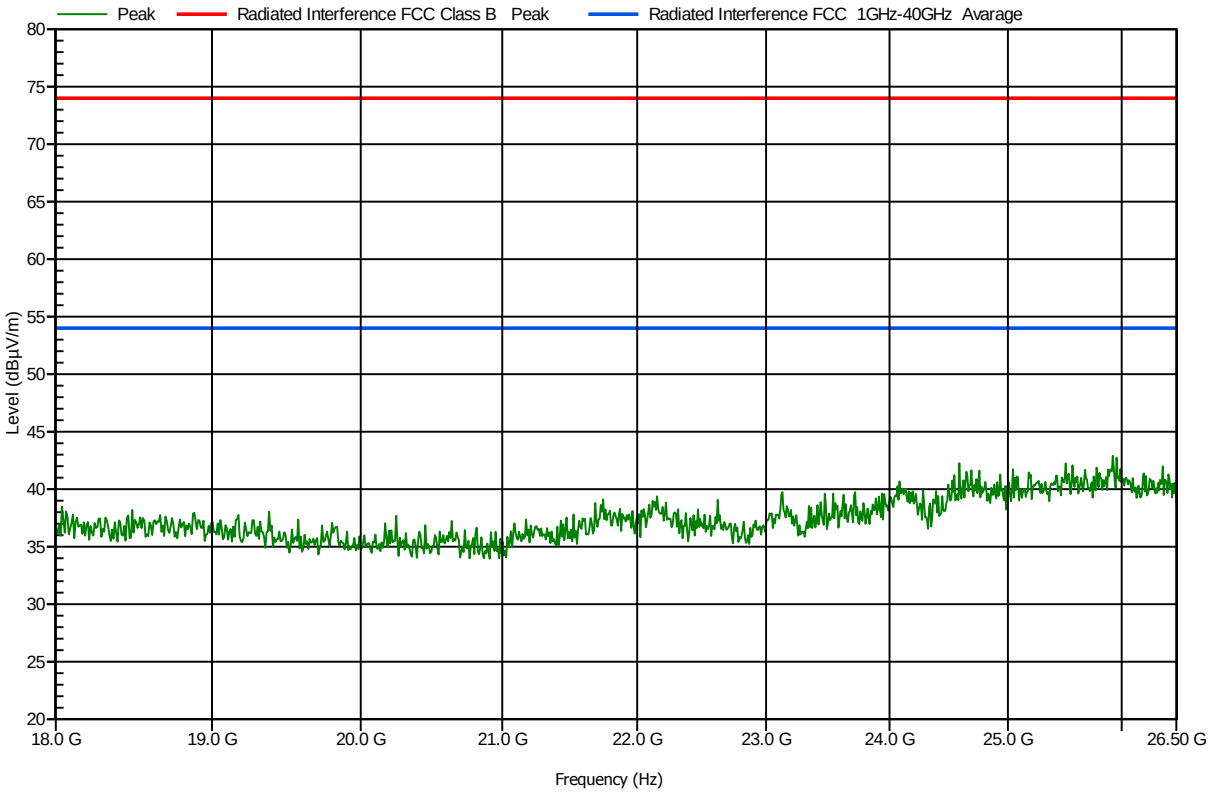
Test Results Plot No 148

18-26.5 GHz TX Mode Spurious Emission

Test & EUT General Information		Receiver Setting	
EUT Name:	WipAir8000 5X	Spect Analyzer	Agilent Technologies N9020A
S/N:	041A04000100	Ref. Level:	80 dBµV
Date of Test:	13.04.2015	RBW:	1000 kHz
Test Engineer:	Ilya Arbitman	VBW:	3 MHz
Antenna:	ARA DRG1840 18-40GHz SER-1058	Sweep Time:	Auto [85.05 ms]
Polarization:	Horizontal and Vertical	Pre Amplifier	18-26.5 GHz Pre Amplifier

TEST REMARKS: Monday, April 13, 2015

BW 5MHz Low 5730MHz; 28.5dBi dish Antenna



MAXIMUM RESULT DEVIATION:

Detect all peaks above 6 dB below the limit line with a maximum of 6 peaks.

None

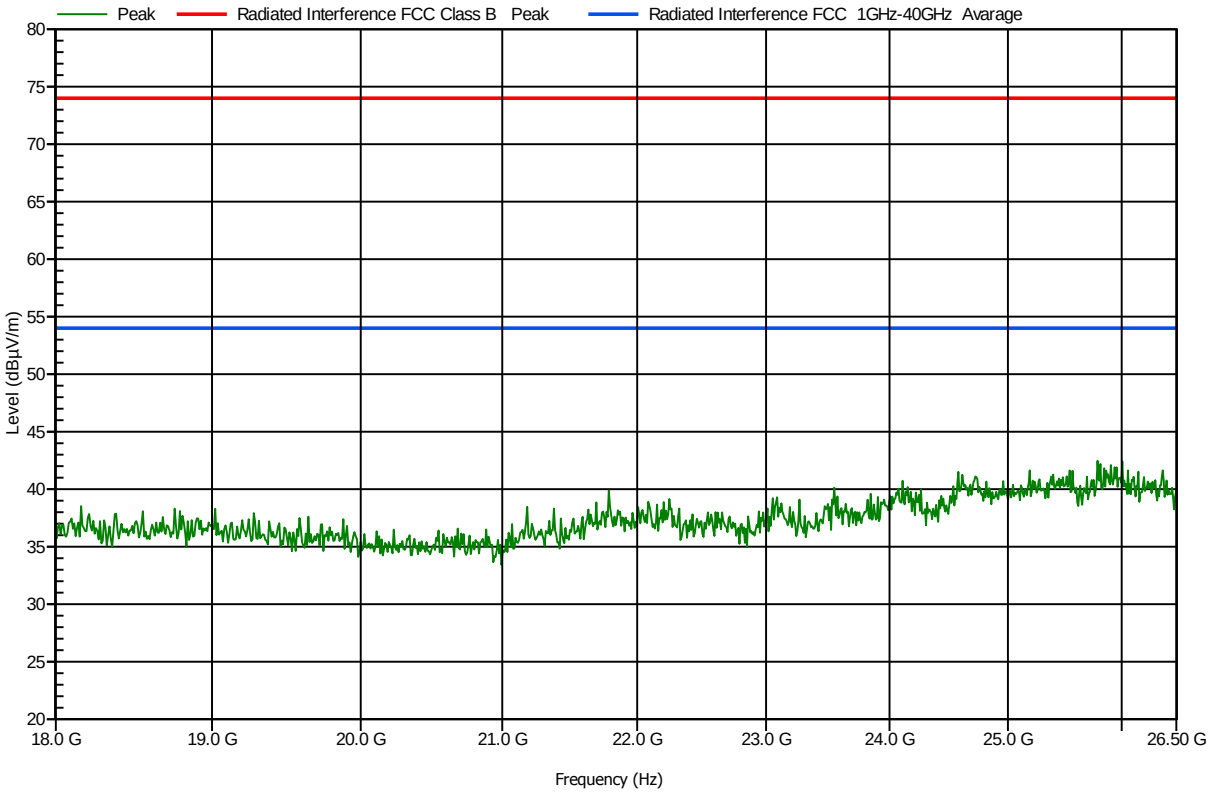
Test Results Plot No 149

18-26.5 GHz TX Mode Spurious Emission

Test & EUT General Information		Receiver Setting	
EUT Name:	WipAir8000 5X	Spect Analyzer	Agilent Technologies N9020A
S/N:	041A04000100	Ref. Level:	80 dBµV
Date of Test:	13.04.2015	RBW:	1000 kHz
Test Engineer:	Ilya Arbitman	VBW:	3 MHz
Antenna:	ARA DRG1840 18-40GHz SER-1058	Sweep Time:	Auto [85.05 ms]
Polarization:	Horizontal and Vertical	Pre Amplifier	18-26.5 GHz Pre Amplifier

TEST REMARKS: Monday, April 13, 2015

BW 5MHz Mid 5785MHz; 28.5dBi dish Antenna



MAXIMUM RESULT DEVIATION:

Detect all peaks above 6 dB below the limit line with a maximum of 6 peaks.

None

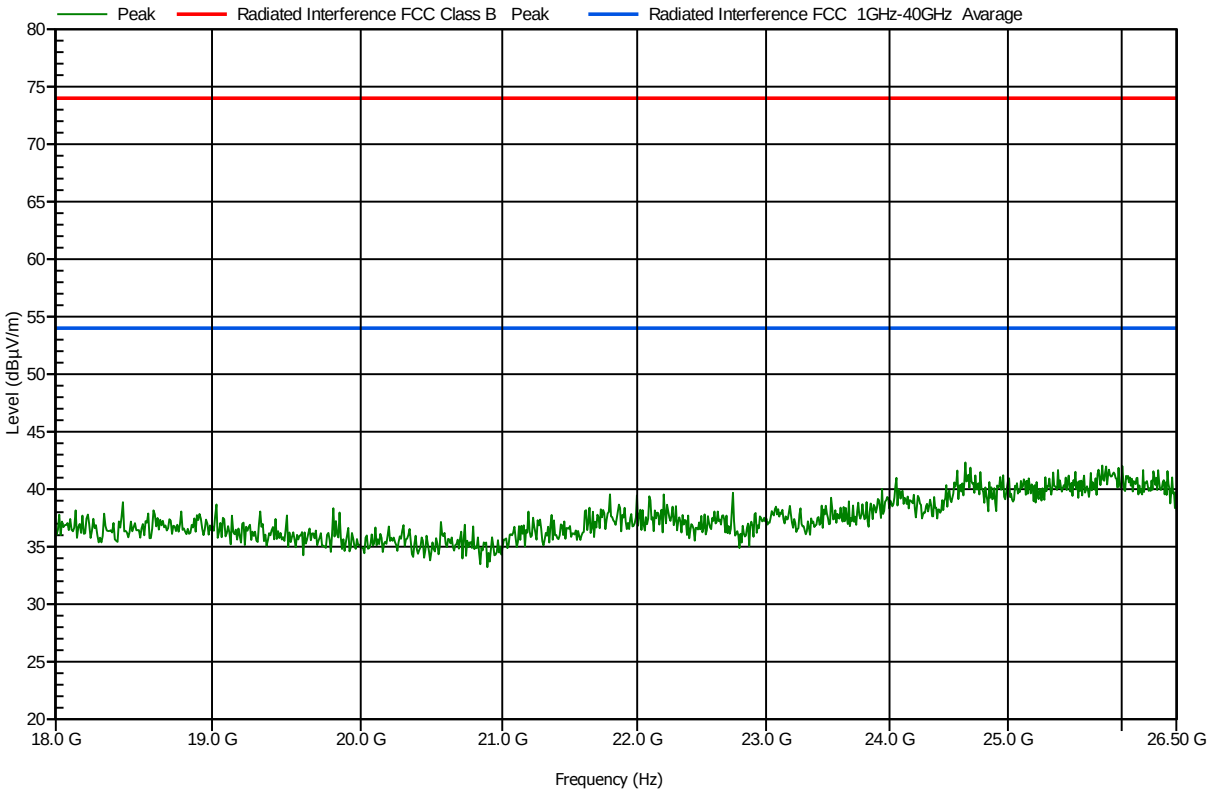
Test Results Plot No 150

18-26.5 GHz TX Mode Spurious Emission

Test & EUT General Information		Receiver Setting	
EUT Name:	WipAir8000 5X	Spect Analyzer	Agilent Technologies N9020A
S/N:	041A04000100	Ref. Level:	80 dBµV
Date of Test:	13.04.2015	RBW:	1000 kHz
Test Engineer:	Ilya Arbitman	VBW:	3 MHz
Antenna:	ARA DRG1840 18-40GHz SER-1058	Sweep Time:	Auto [85.05 ms]
Polarization:	Horizontal and Vertical	Pre Amplifier	18-26.5 GHz Pre Amplifier

TEST REMARKS: Monday, April 13, 2015

BW 5MHz High 5845MHz; 28.5dBi dish Antenna



MAXIMUM RESULT DEVIATION:

Detect all peaks above 6 dB below the limit line with a maximum of 6 peaks.

None

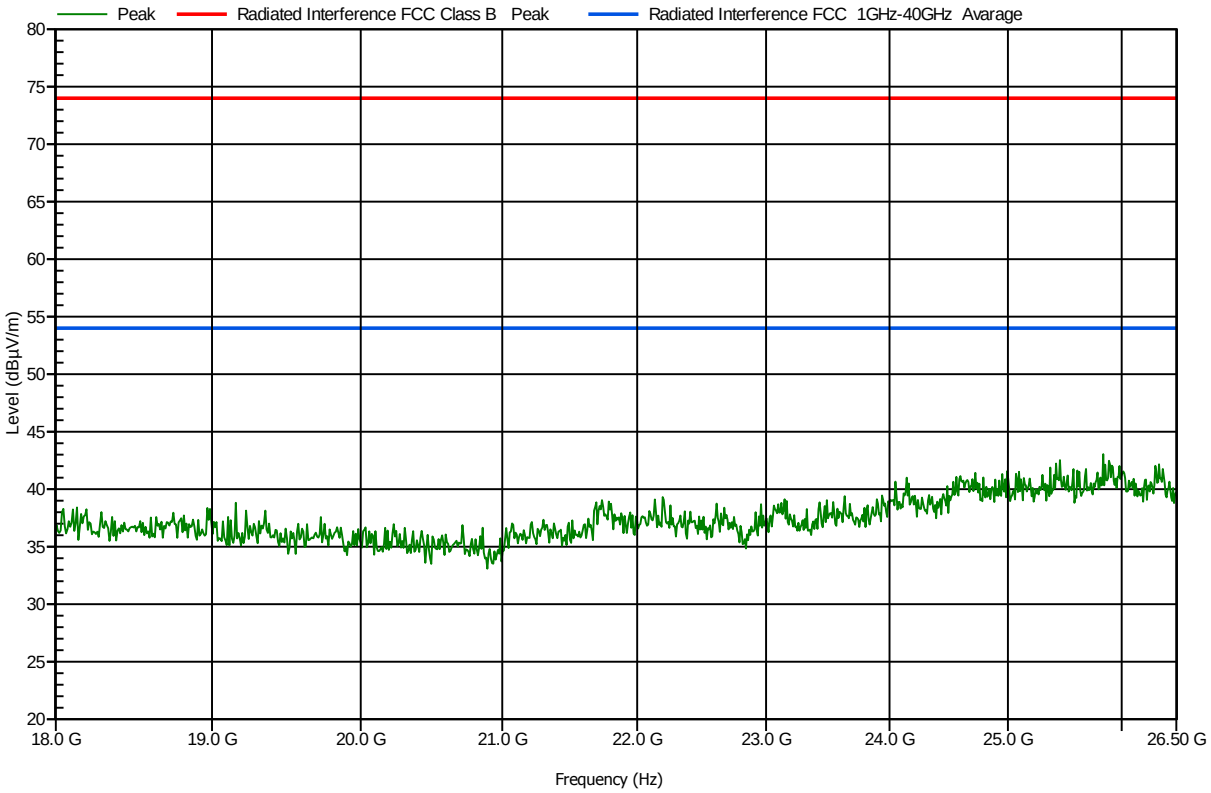
Test Results Plot No 151

18-26.5 GHz TX Mode Spurious Emission

Test & EUT General Information		Receiver Setting	
EUT Name:	WipAir8000 5X	Spect Analyzer	Agilent Technologies N9020A
S/N:	041A04000100	Ref. Level:	80 dBµV
Date of Test:	13.04.2015	RBW:	1000 kHz
Test Engineer:	Ilya Arbitman	VBW:	3 MHz
Antenna:	ARA DRG1840 18-40GHz SER-1058	Sweep Time:	Auto [85.05 ms]
Polarization:	Horizontal and Vertical	Pre Amplifier	18-26.5 GHz Pre Amplifier

TEST REMARKS: Monday, April 13, 2015

BW 10MHz Low 5730MHz; 28.5dBi dish Antenna



MAXIMUM RESULT DEVIATION:

Detect all peaks above 6 dB below the limit line with a maximum of 6 peaks.

None

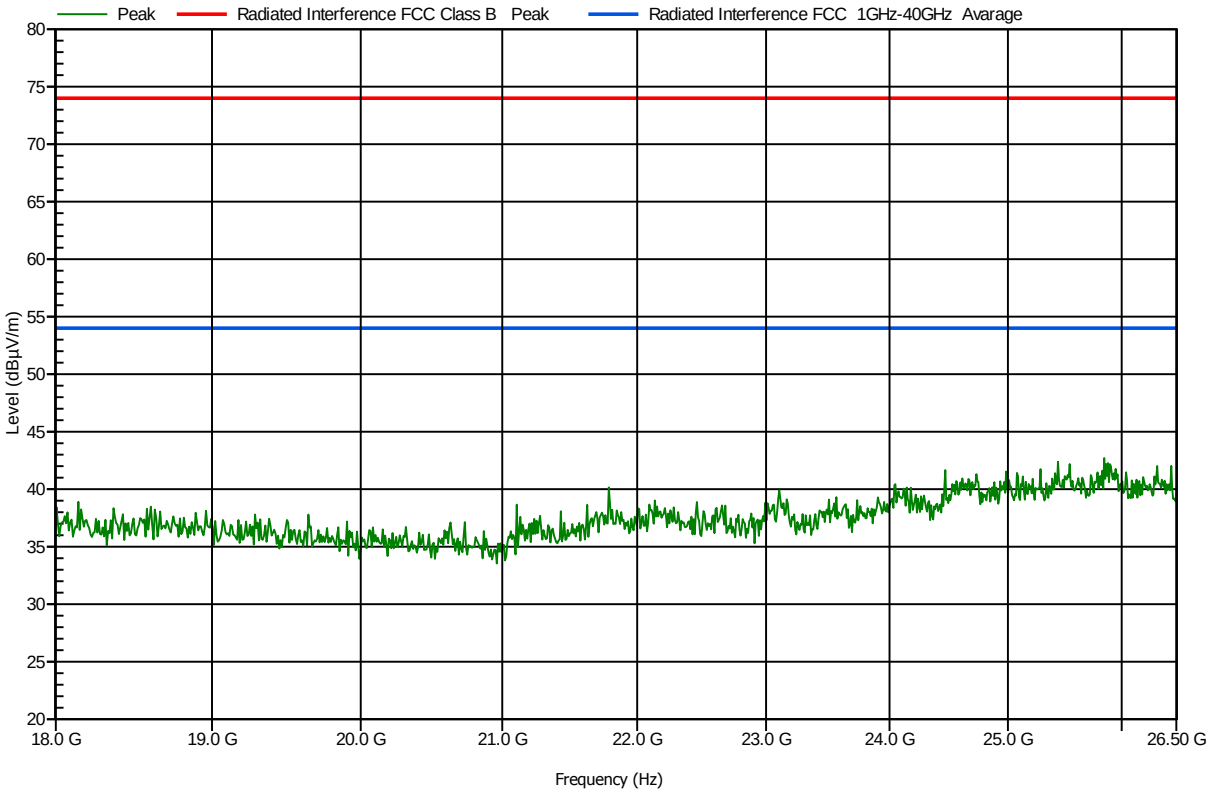
Test Results Plot No 152

18-26.5 GHz TX Mode Spurious Emission

Test & EUT General Information		Receiver Setting	
EUT Name:	WipAir8000 5X	Spect Analyzer	Agilent Technologies N9020A
S/N:	041A04000100	Ref. Level:	80 dBµV
Date of Test:	13.04.2015	RBW:	1000 kHz
Test Engineer:	Ilya Arbitman	VBW:	3 MHz
Antenna:	ARA DRG1840 18-40GHz SER-1058	Sweep Time:	Auto [85.05 ms]
Polarization:	Horizontal and Vertical	Pre Amplifier	18-26.5 GHz Pre Amplifier

TEST REMARKS: Monday, April 13, 2015

BW 10MHz Mid 5785MHz; 28.5dBi dish Antenna



MAXIMUM RESULT DEVIATION:

Detect all peaks above 6 dB below the limit line with a maximum of 6 peaks.

None

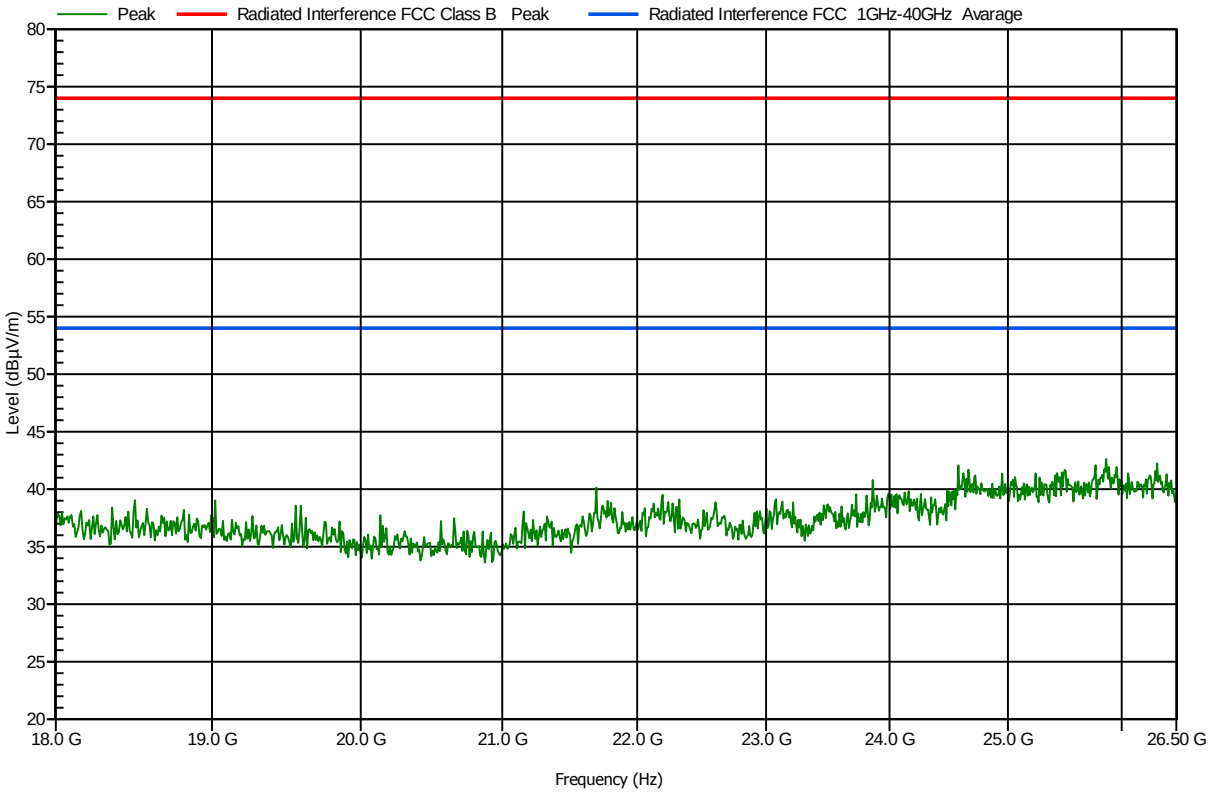
Test Results Plot No 153

18-26.5 GHz TX Mode Spurious Emission

Test & EUT General Information		Receiver Setting	
EUT Name:	WipAir8000 5X	Spect Analyzer	Agilent Technologies N9020A
S/N:	041A04000100	Ref. Level:	80 dBµV
Date of Test:	13.04.2015	RBW:	1000 kHz
Test Engineer:	Ilya Arbitman	VBW:	3 MHz
Antenna:	ARA DRG1840 18-40GHz SER-1058	Sweep Time:	Auto [85.05 ms]
Polarization:	Horizontal and Vertical	Pre Amplifier	18-26.5 GHz Pre Amplifier

TEST REMARKS: Monday, April 13, 2015

BW 10MHz High 5845MHz; 28.5dBi dish Antenna



MAXIMUM RESULT DEVIATION:

Detect all peaks above 6 dB below the limit line with a maximum of 6 peaks.

None

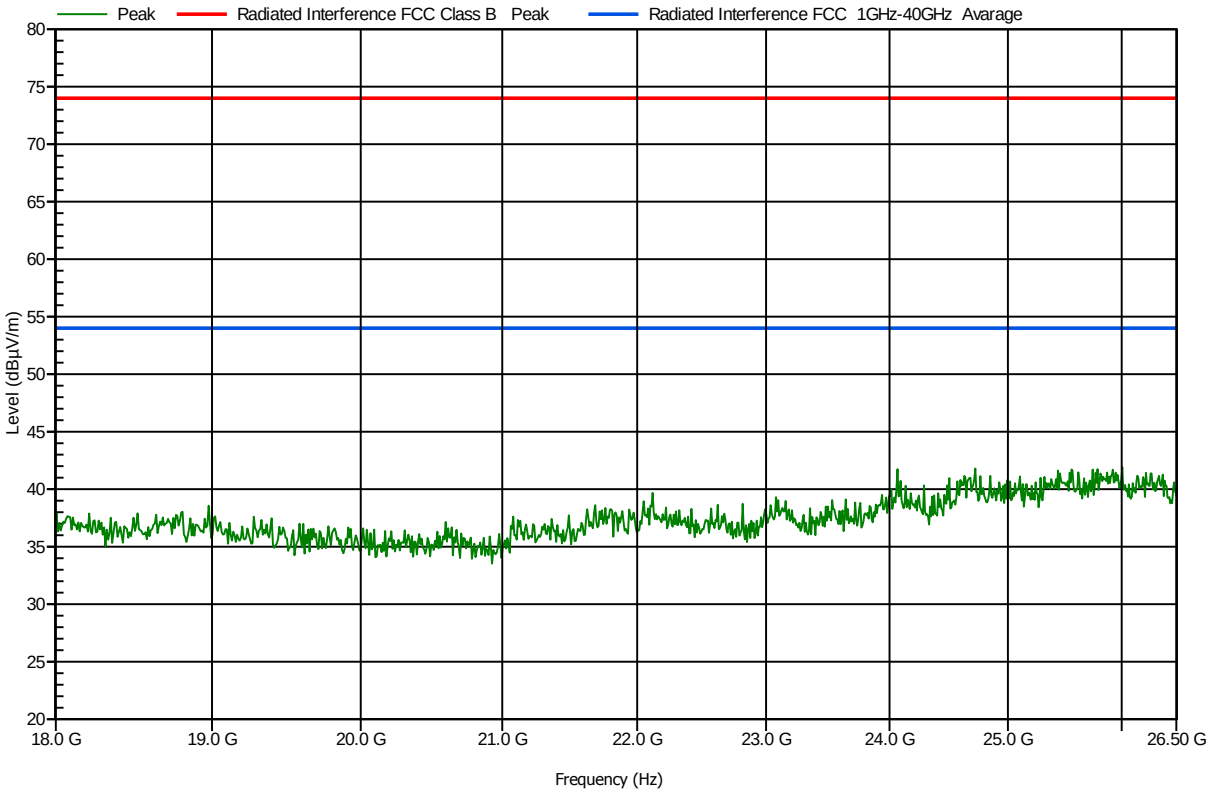
Test Results Plot No 154

18-26.5 GHz TX Mode Spurious Emission

Test & EUT General Information		Receiver Setting	
EUT Name:	WipAir8000 5X	Spect Analyzer	Agilent Technologies N9020A
S/N:	041A04000100	Ref. Level:	80 dBµV
Date of Test:	13.04.2015	RBW:	1000 kHz
Test Engineer:	Ilya Arbitman	VBW:	3 MHz
Antenna:	ARA DRG1840 18-40GHz SER-1058	Sweep Time:	Auto [85.05 ms]
Polarization:	Horizontal and Vertical	Pre Amplifier	18-26.5 GHz Pre Amplifier

TEST REMARKS: Monday, April 13, 2015

BW 20MHz Low 5735MHz; 28.5dBi dish Antenna



MAXIMUM RESULT DEVIATION:

Detect all peaks above 6 dB below the limit line with a maximum of 6 peaks.

None

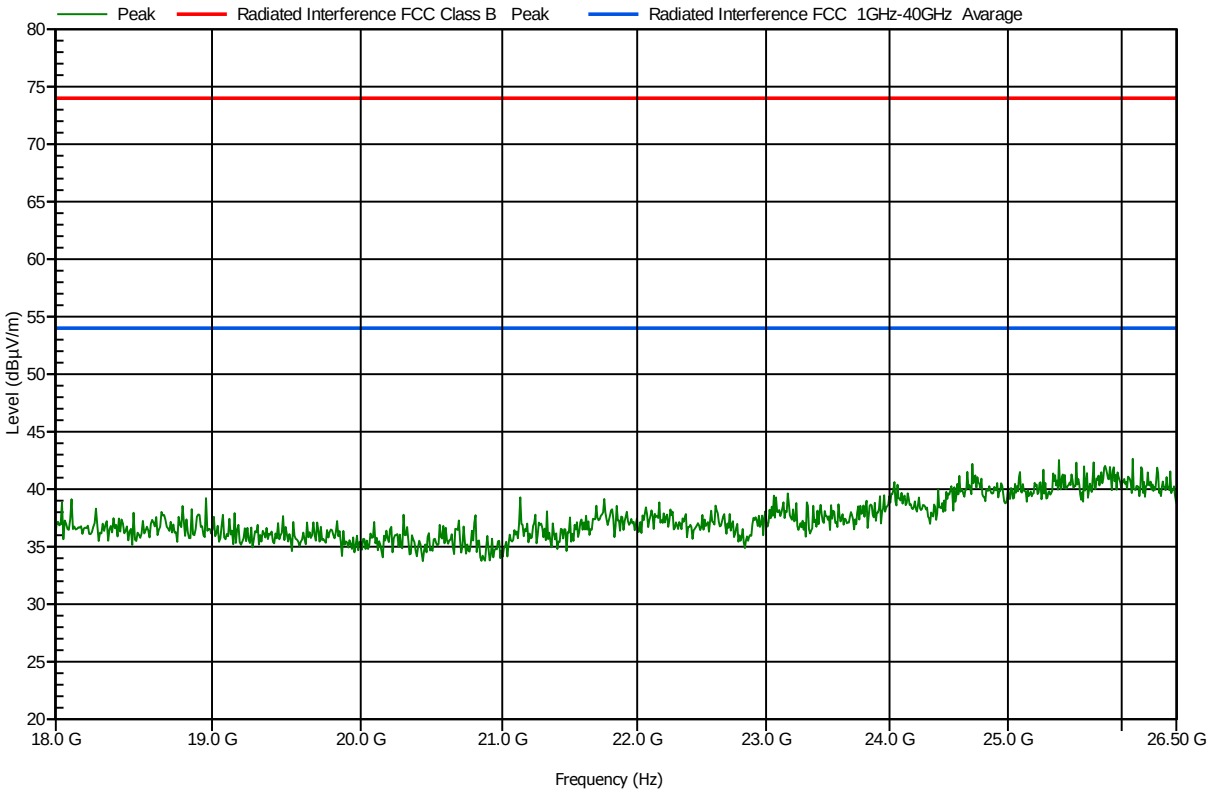
Test Results Plot No 155

18-26.5 GHz TX Mode Spurious Emission

Test & EUT General Information		Receiver Setting	
EUT Name:	WipAir8000 5X	Spect Analyzer	Agilent Technologies N9020A
S/N:	041A04000100	Ref. Level:	80 dBµV
Date of Test:	13.04.2015	RBW:	1000 kHz
Test Engineer:	Ilya Arbitman	VBW:	3 MHz
Antenna:	ARA DRG1840 18-40GHz SER-1058	Sweep Time:	Auto [85.05 ms]
Polarization:	Horizontal and Vertical	Pre Amplifier	18-26.5 GHz Pre Amplifier

TEST REMARKS: Monday, April 13, 2015

BW 20MHz Mid 5785MHz; 28.5dBi dish Antenna



MAXIMUM RESULT DEVIATION:

Detect all peaks above 6 dB below the limit line with a maximum of 6 peaks.

None

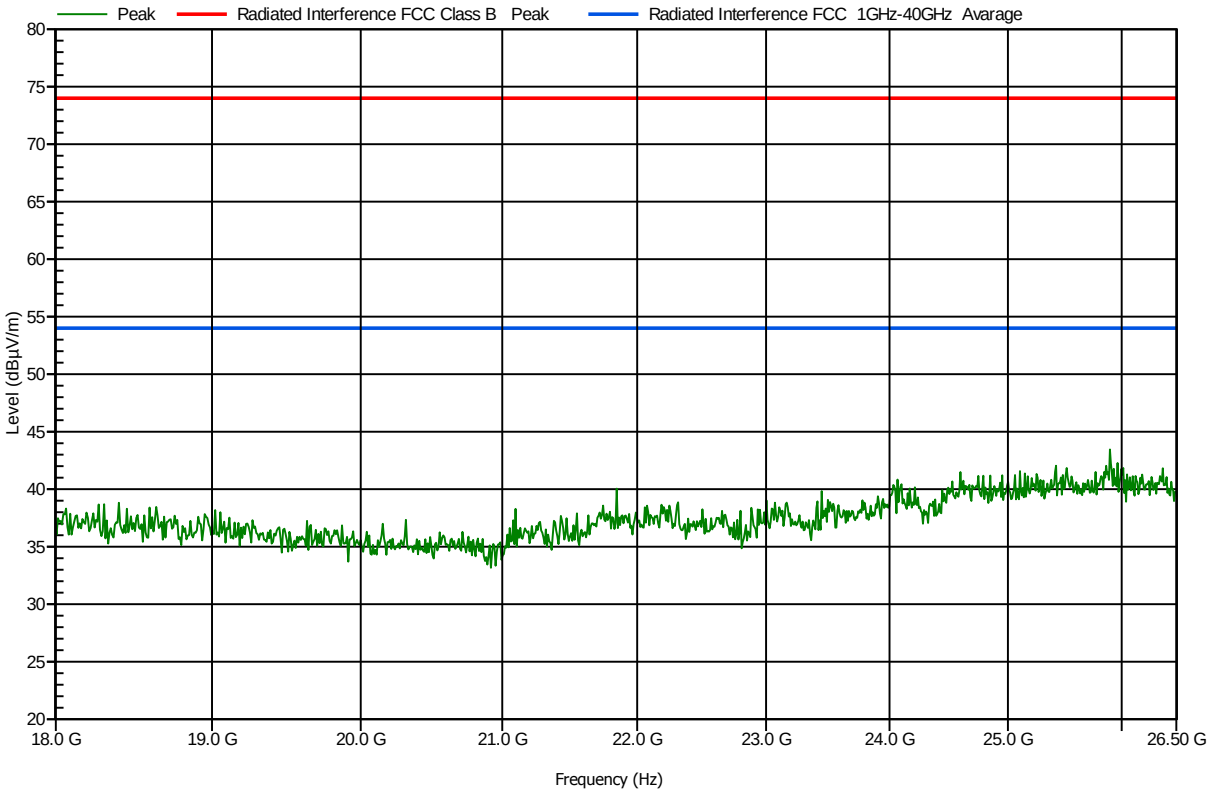
Test Results Plot No 156

18-26.5 GHz TX Mode Spurious Emission

Test & EUT General Information		Receiver Setting	
EUT Name:	WipAir8000 5X	Spect Analyzer	Agilent Technologies N9020A
S/N:	041A04000100	Ref. Level:	80 dBµV
Date of Test:	13.04.2015	RBW:	1000 kHz
Test Engineer:	Ilya Arbitman	VBW:	3 MHz
Antenna:	ARA DRG1840 18-40GHz SER-1058	Sweep Time:	Auto [85.05 ms]
Polarization:	Horizontal and Vertical	Pre Amplifier	18-26.5 GHz Pre Amplifier

TEST REMARKS: Monday, April 13, 2015

BW 20MHz High 5840MHz; 28.5dBi dish Antenna



MAXIMUM RESULT DEVIATION:

Detect all peaks above 6 dB below the limit line with a maximum of 6 peaks.

None

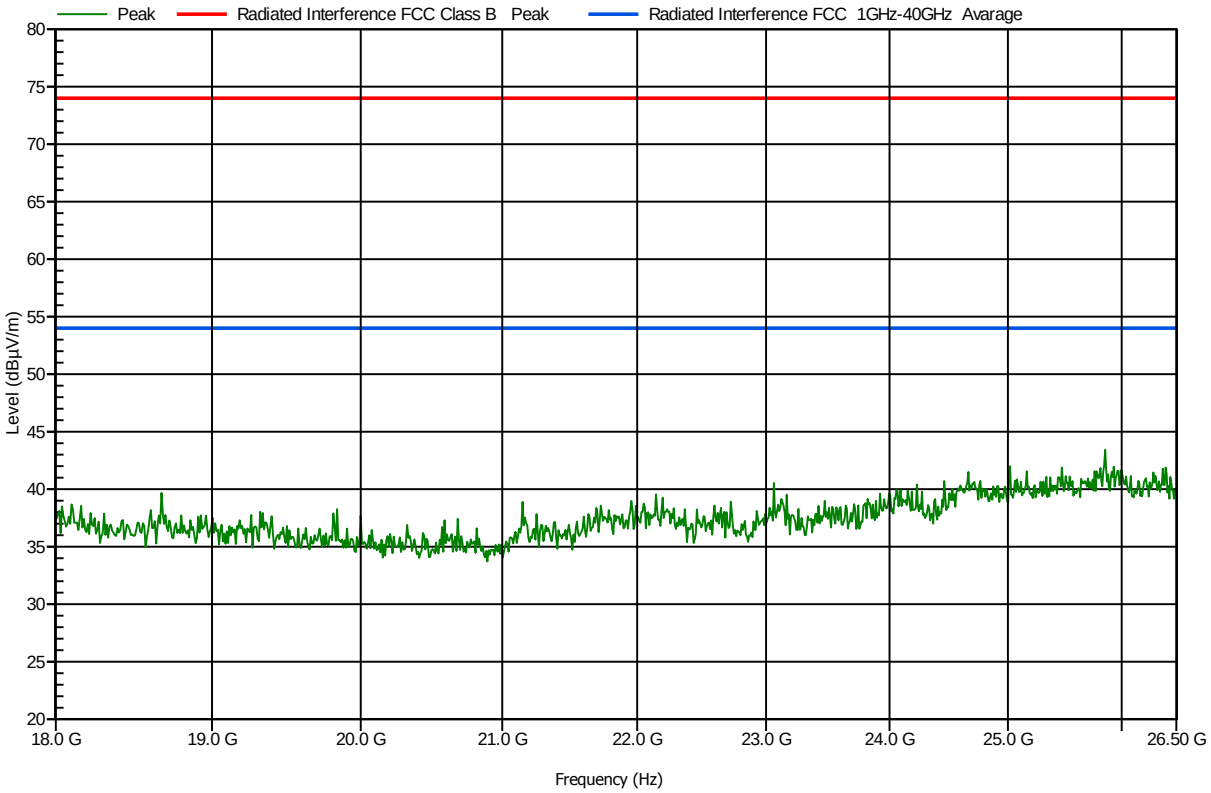
Test Results Plot No 157

18-26.5 GHz TX Mode Spurious Emission

Test & EUT General Information		Receiver Setting	
EUT Name:	WipAir8000 5X	Spect Analyzer	Agilent Technologies N9020A
S/N:	041A04000100	Ref. Level:	80 dBµV
Date of Test:	13.04.2015	RBW:	1000 kHz
Test Engineer:	Ilya Arbitman	VBW:	3 MHz
Antenna:	ARA DRG1840 18-40GHz SER-1058	Sweep Time:	Auto [85.05 ms]
Polarization:	Horizontal and Vertical	Pre Amplifier	18-26.5 GHz Pre Amplifier

TEST REMARKS: Monday, April 13, 2015

BW 40MHz Low 5745MHz; 28.5dBi dish Antenna



MAXIMUM RESULT DEVIATION:

Detect all peaks above 6 dB below the limit line with a maximum of 6 peaks.

None

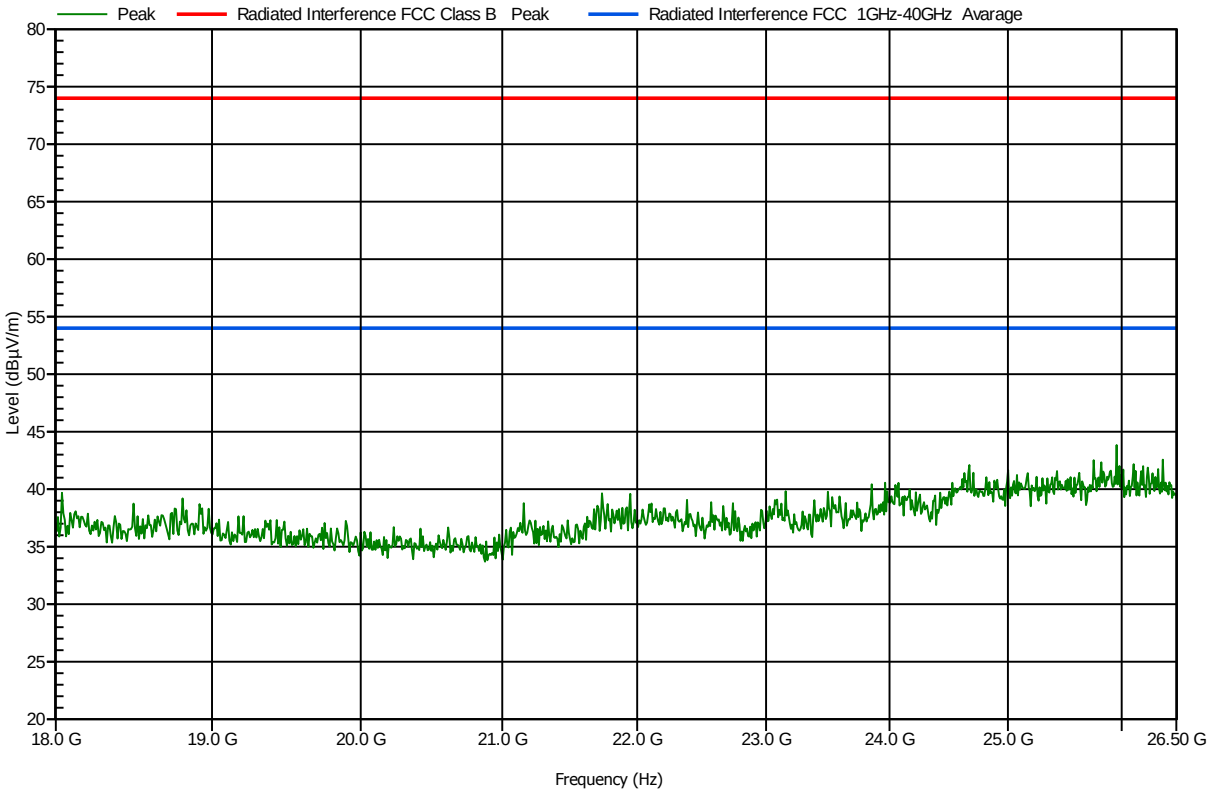
Test Results Plot No 158

18-26.5 GHz TX Mode Spurious Emission

Test & EUT General Information		Receiver Setting	
EUT Name:	WipAir8000 5X	Spect Analyzer	Agilent Technologies N9020A
S/N:	041A04000100	Ref. Level:	80 dBµV
Date of Test:	13.04.2015	RBW:	1000 kHz
Test Engineer:	Ilya Arbitman	VBW:	3 MHz
Antenna:	ARA DRG1840 18-40GHz SER-1058	Sweep Time:	Auto [85.05 ms]
Polarization:	Horizontal and Vertical	Pre Amplifier	18-26.5 GHz Pre Amplifier

TEST REMARKS: Monday, April 13, 2015

BW 40MHz Mid 5785MHz; 28.5dBi dish Antenna



MAXIMUM RESULT DEVIATION:

Detect all peaks above 6 dB below the limit line with a maximum of 6 peaks.

None

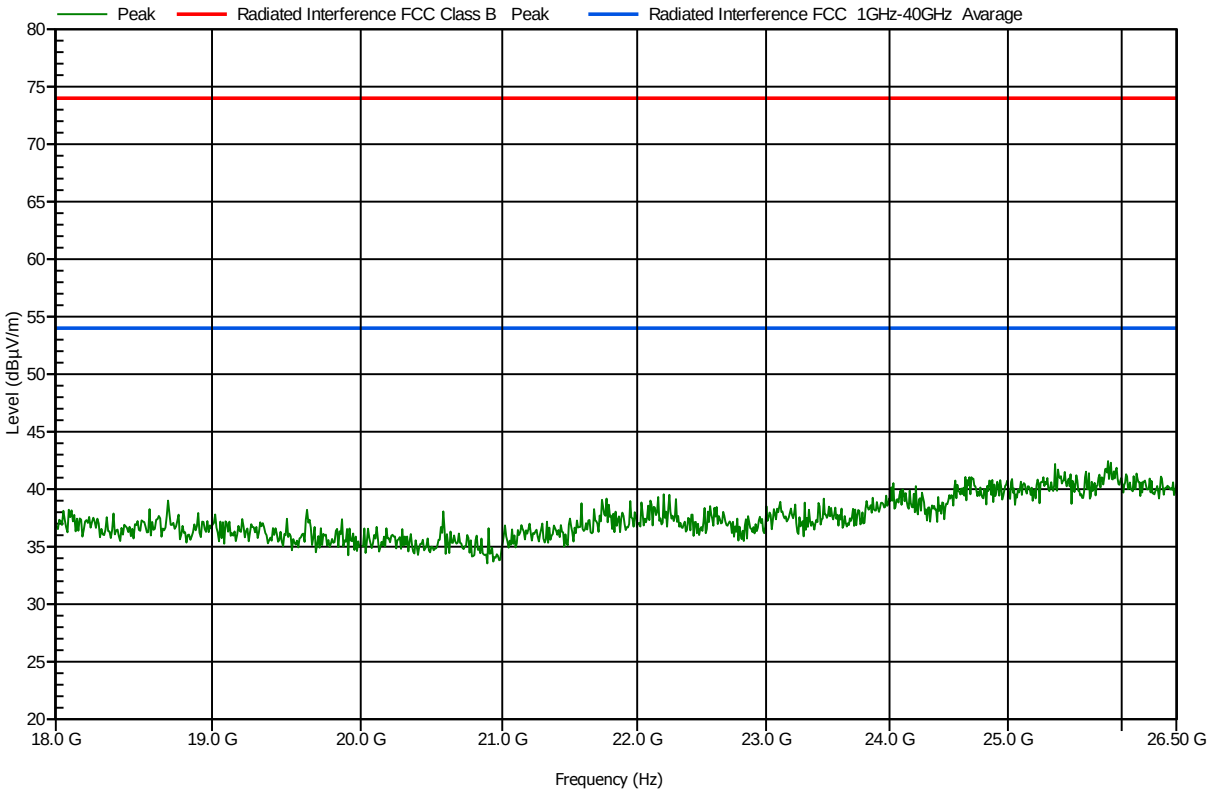
Test Results Plot No 159

18-26.5 GHz TX Mode Spurious Emission

Test & EUT General Information		Receiver Setting	
EUT Name:	WipAir8000 5X	Spect Analyzer	Agilent Technologies N9020A
S/N:	041A04000100	Ref. Level:	80 dBµV
Date of Test:	13.04.2015	RBW:	1000 kHz
Test Engineer:	Ilya Arbitman	VBW:	3 MHz
Antenna:	ARA DRG1840 18-40GHz SER-1058	Sweep Time:	Auto [85.05 ms]
Polarization:	Horizontal and Vertical	Pre Amplifier	18-26.5 GHz Pre Amplifier

TEST REMARKS: Monday, April 13, 2015

BW 40MHz High 5830MHz; 28.5dBi dish Antenna



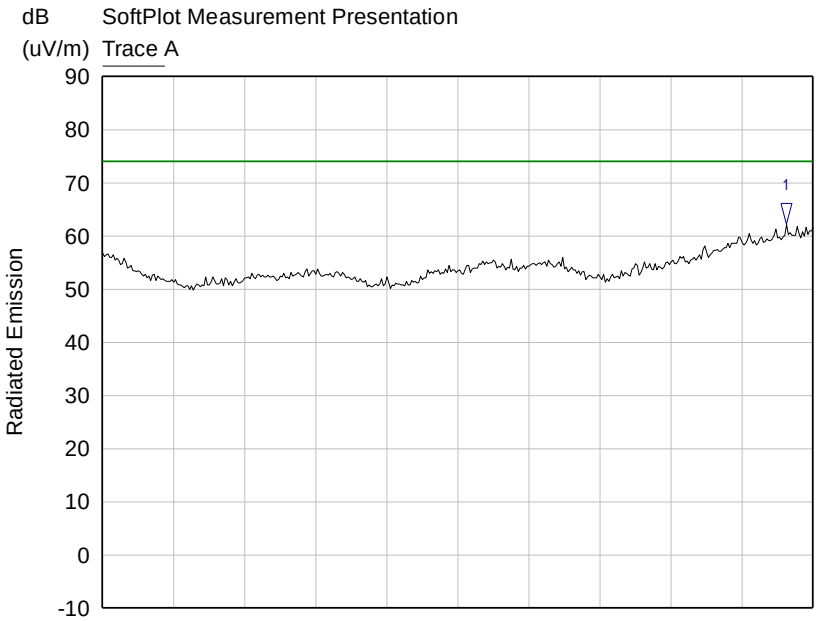
MAXIMUM RESULT DEVIATION:

Detect all peaks above 6 dB below the limit line with a maximum of 6 peaks.

None

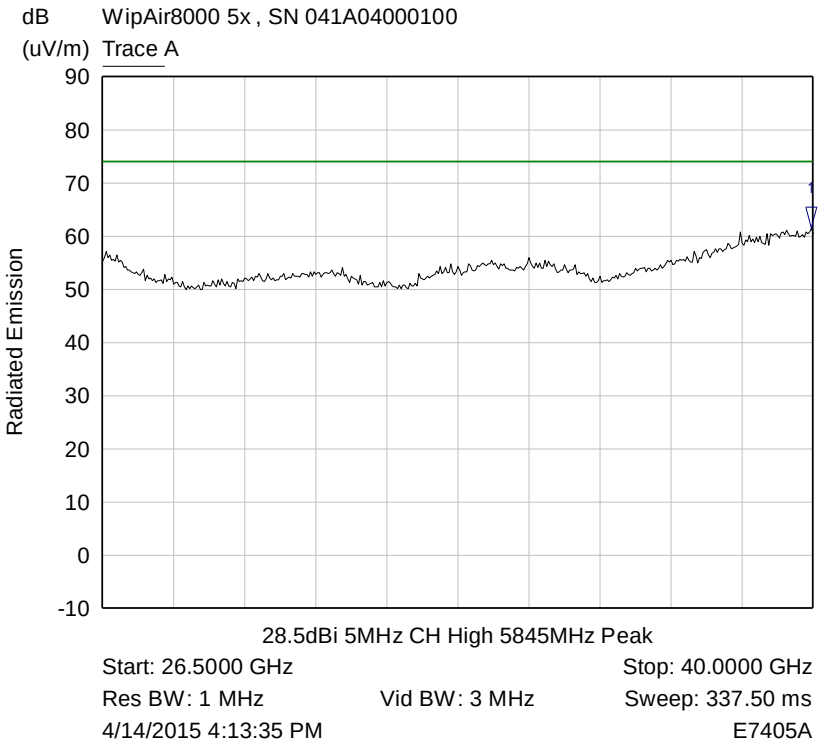
Mkr	Trace	X-Axis	Value	Notes
1 ▽	Trace A	39.4938 GHz	62.12 dB(uV/m)	

Plot Radiated Emission/ 160



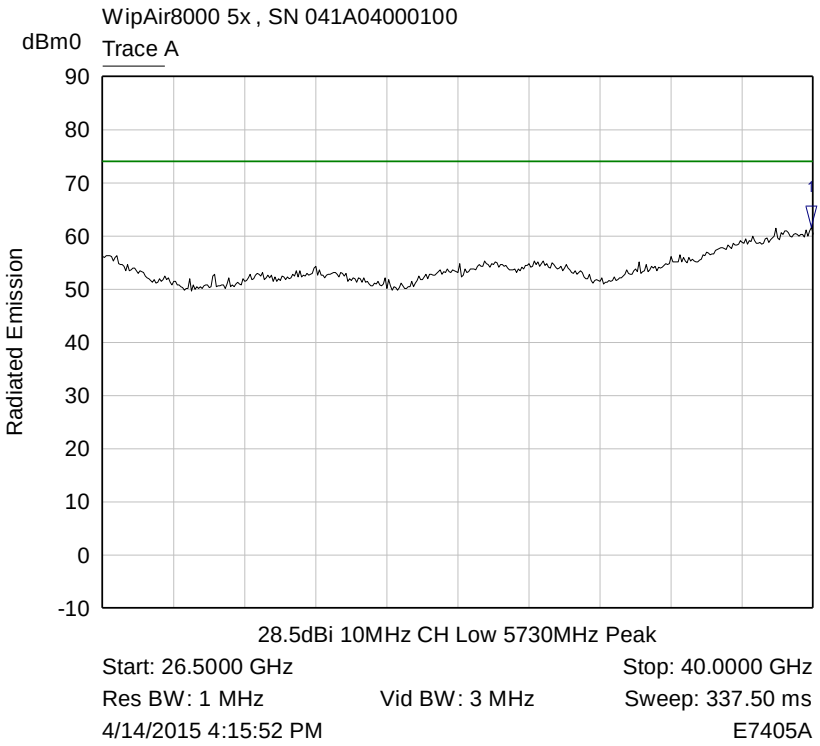
Mkr	Trace	X-Axis	Value	Notes
1 ▽	Trace A	39.4938 GHz	62.12 dB(uV/m)	

Plot Radiated Emission/ 161



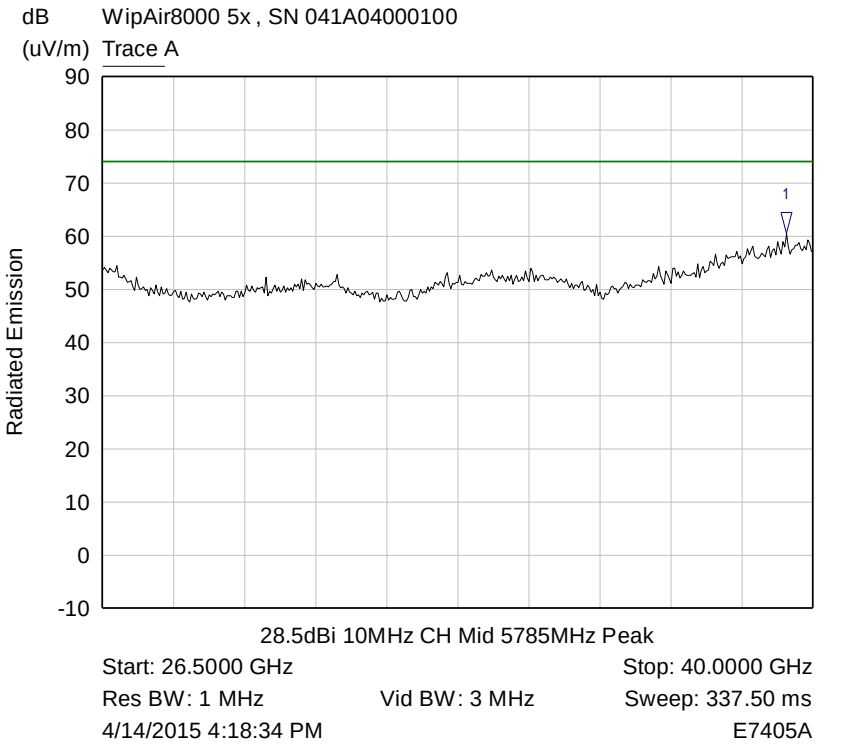
Mkr	Trace	X-Axis	Value	Notes
1	Trace A	39.9663 GHz	61.49 dB(uV/m)	

Plot Radiated Emission/ 162



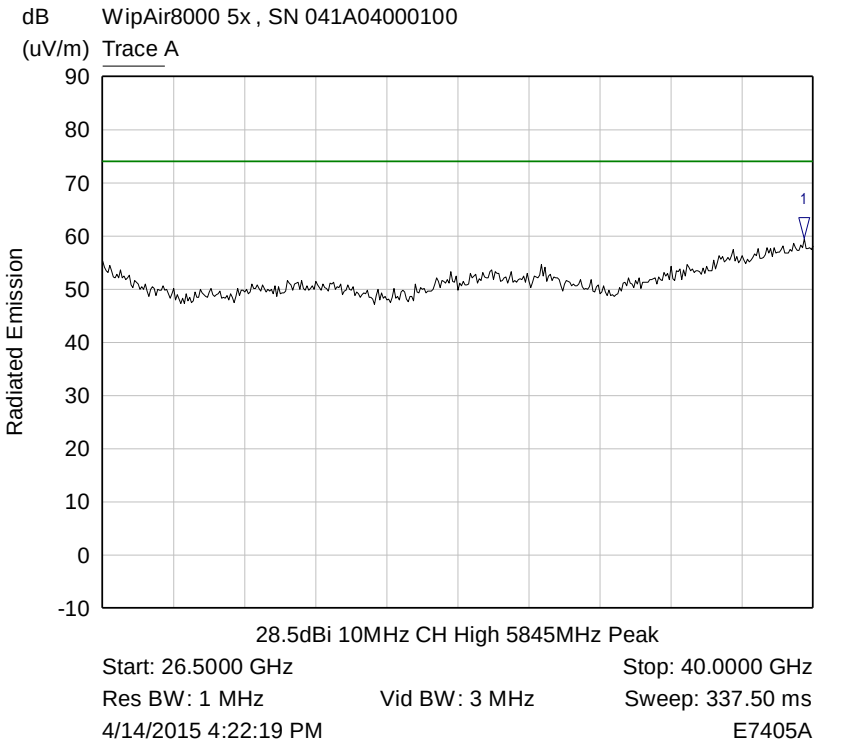
Mkr	Trace	X-Axis	Value	Notes
1	Trace A	39.9663 GHz	61.63 dBm0	

Plot Radiated Emission/ 163



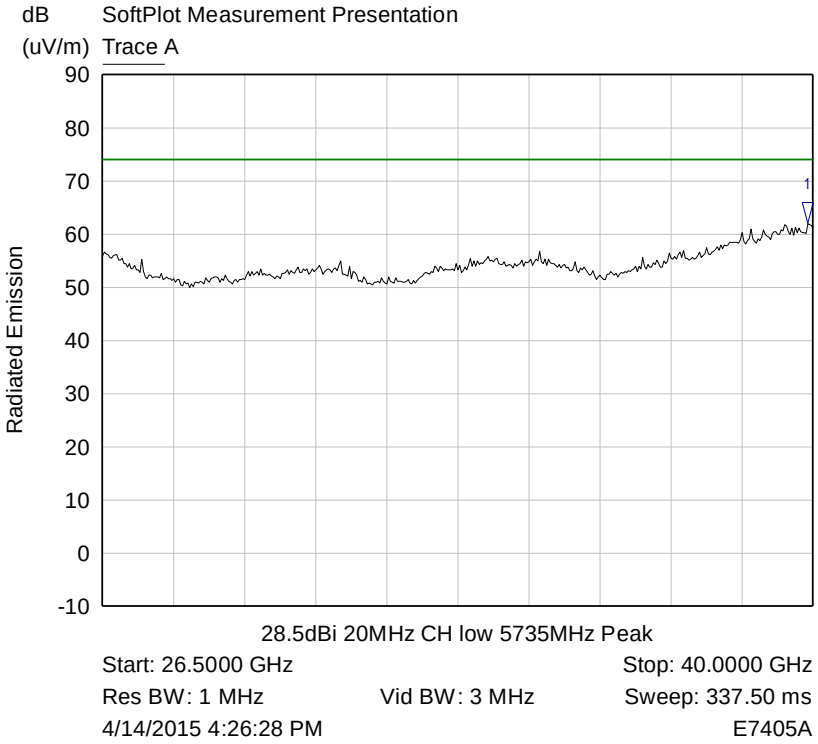
Mkr	Trace	X-Axis	Value	Notes
1	Trace A	39.4938 GHz	60.55 dB(uV/m)	

Plot Radiated Emission/ 164



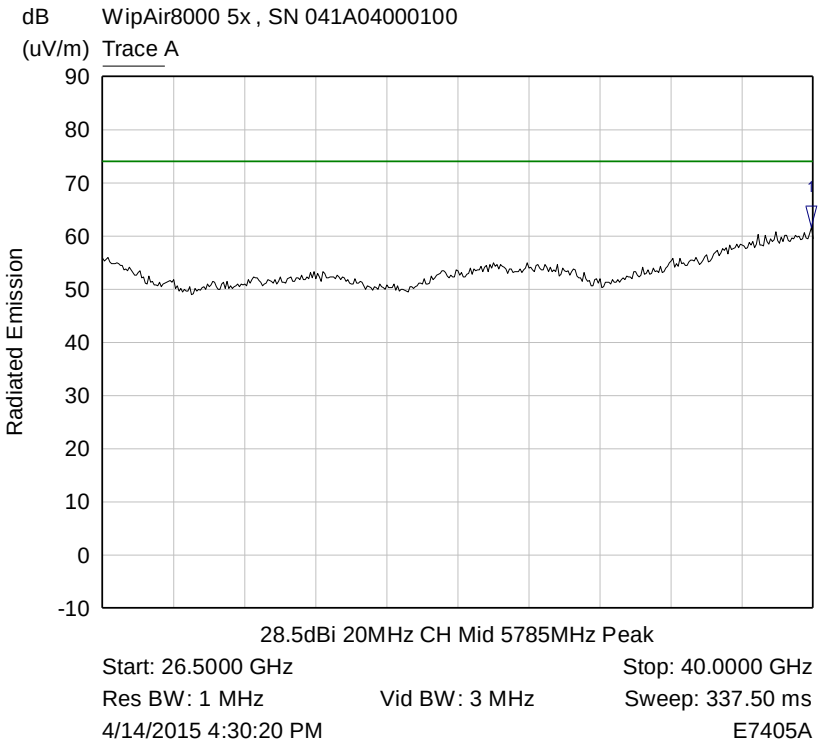
Mkr	Trace	X-Axis	Value	Notes
1	Trace A	39.8313 GHz	59.46 dB(uV/m)	

Plot Radiated Emission/ 165



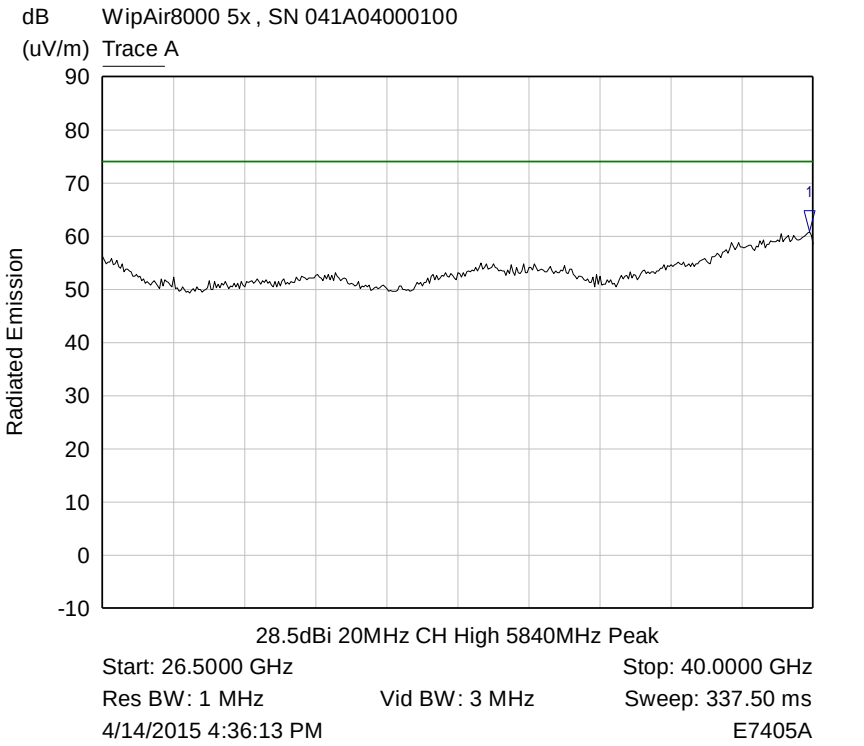
Mkr	Trace	X-Axis	Value	Notes
1 ▽	Trace A	39.8988 GHz	61.97 dB(uV/m)	

Plot Radiated Emission/ 166



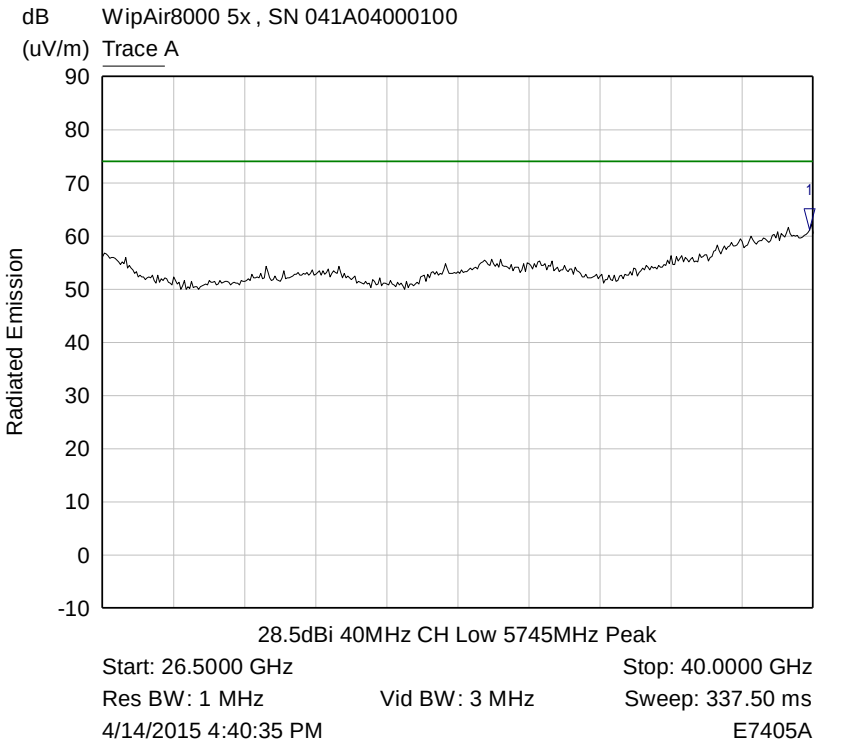
Mkr	Trace	X-Axis	Value	Notes
1 ▽	Trace A	39.9663 GHz	61.70 dB(uV/m)	

Plot Radiated Emission/ 167



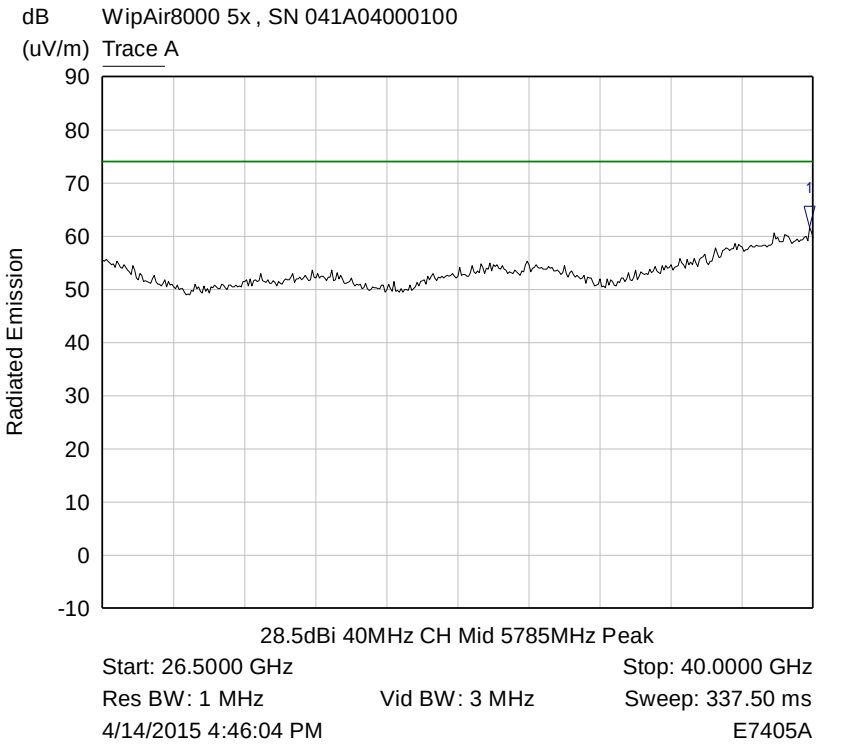
Mkr	Trace	X-Axis	Value	Notes
1 ▽	Trace A	39.9325 GHz	60.86 dB(uV/m)	

Plot Radiated Emission/ 168



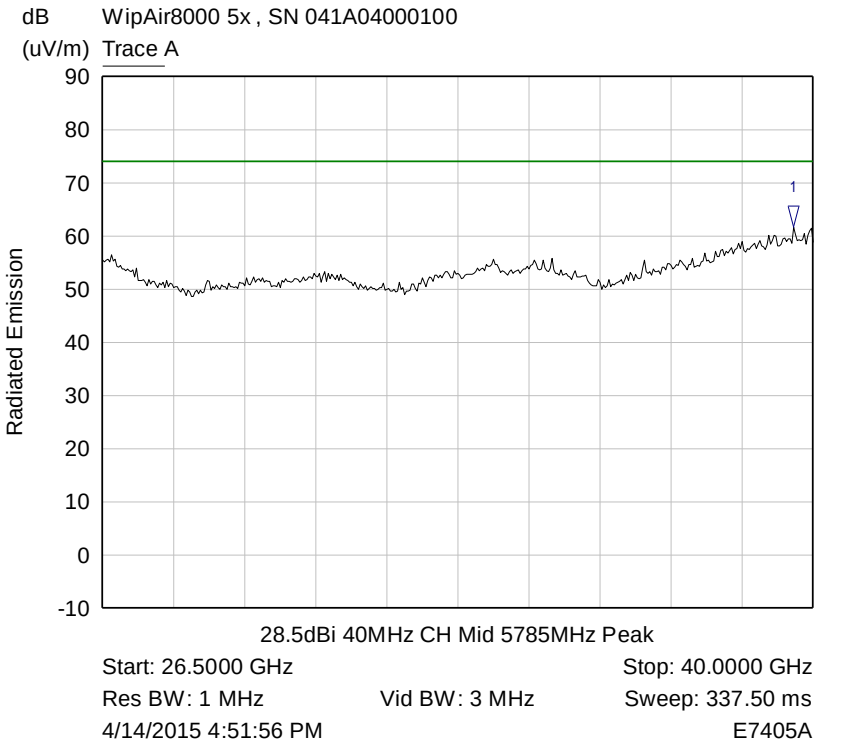
Mkr	Trace	X-Axis	Value	Notes
1 ▽	Trace A	39.9325 GHz	61.23 dB(uV/m)	

Plot Radiated Emission/ 169



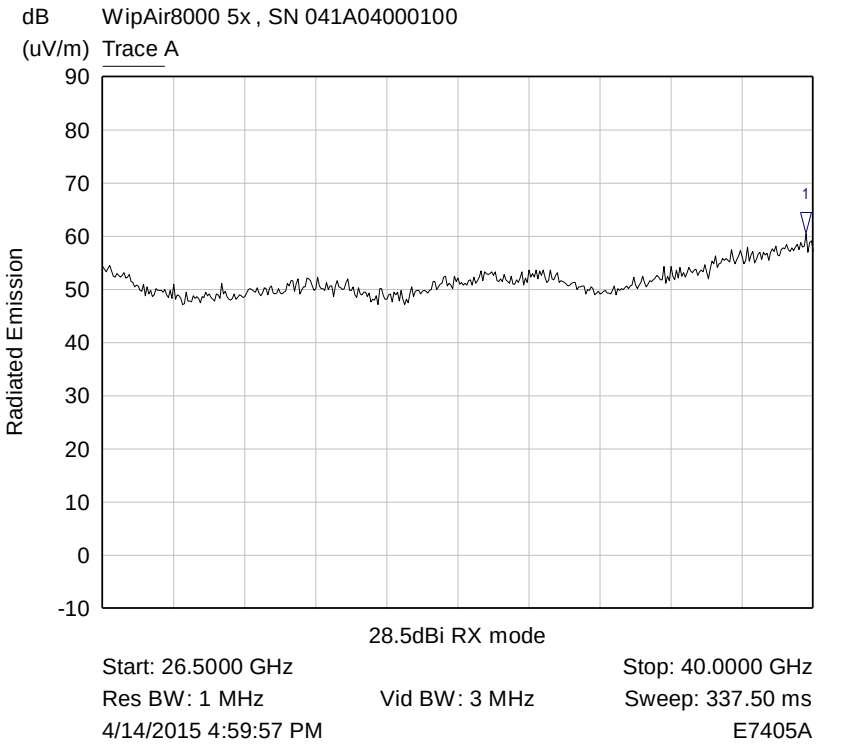
Mkr	Trace	X-Axis	Value	Notes
1 ▽	Trace A	39.9325 GHz	61.64 dB(uV/m)	

Plot Radiated Emission/ 170



Mkr	Trace	X-Axis	Value	Notes
1 ▽	Trace A	39.6288 GHz	61.60 dB(uV/m)	

Plot Radiated Emission/ 171



Mkr	Trace	X-Axis	Value	Notes
1 ▽	Trace A	39.8650 GHz	60.48 dB(uV/m)	

Plot Radiated Emission/ 172

5. MAXIMUM PEAK POWER DENSITY TEST

Equipment Under Test	WipAir 8000 5X
Test Method	FCC New Guidance on measurements for DTS in section 15.247(e) section 8.2 (b).
Date	01.01.2015
Relative Humidity	40%
Ambient Temperature	25^0 C
Air Pressure	1010 hPa
Test Setup	Figure 5.a

Testing Engineer: I.Arbitman **Date** 01.01.2015

5.1. Test Results Summary & Conclusions

The E.U.T was found in compliance with peak power density test requirement

5.2. Limits

Systems operating in the 5725-5850 MHz band that are used exclusively for fixed, point-to-point operations may employ transmitting antennas with directional gain greater than 6 dBi without any corresponding reduction in transmitter peak output power.

The test unit shall meet the limits of Table 59.

Table 59: Limits

Operating frequency range (MHz)	Limits (dBm)
5725 - 5850	8

5.3. Test Instrumentation and Equipment

Table 60: Test Instrumentation and Equipment

Item	Model	Manufacturer	P/N	Next Date of Calibration
Spectrum Analyzer	N9020A	Agilent	20041738908	04.04.2015
20 dB Attenuator	8343-206	TENULINE		13.03.2016

5.4. Test Procedure

The EUT was set to transmit at 100% duty cycle, at highest transmitting power.

Peak power spectral density measurements were performed for top, middle and bottom frequencies, for each channel, BW 5, 10, 20 and 40 MHz.

The EUT was connected to the spectrum analyzer through an appropriate attenuator and accounted for cable loss in the settings.

PSD measurements were performed for each RF channel The test set up is shown in Figure 5 below.

5.5. Test Method

Method PKPSD (peak PSD)

1) Set analyzer center frequency to DTS channel center frequency.
2) Set the span to 1.5 times the DTS bandwidth.
3) Set the RBW to: 3 kHz ≤ RBW ≤ 100 kHz.
4) Set the VBW ≥ 3 ' RBW.
5) Detector = peak.
6) Sweep time = auto couple.
7) Trace mode = max hold.
8) Allow trace to fully stabilize.
9) Use the peak marker function to determine the maximum amplitude level within the RBW.
10) If measured value exceeds limit, reduce RBW (not less than 3 kHz) and repeat.

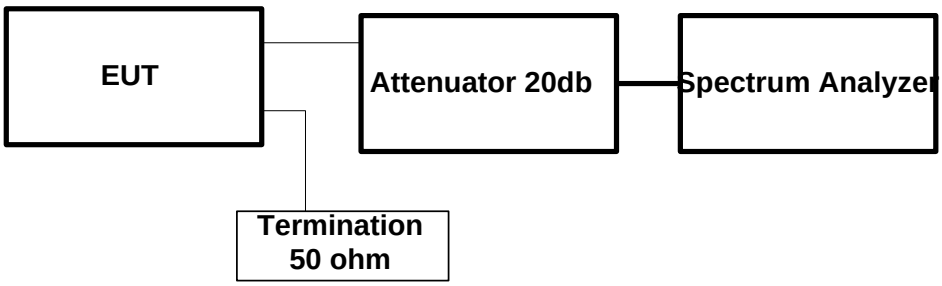
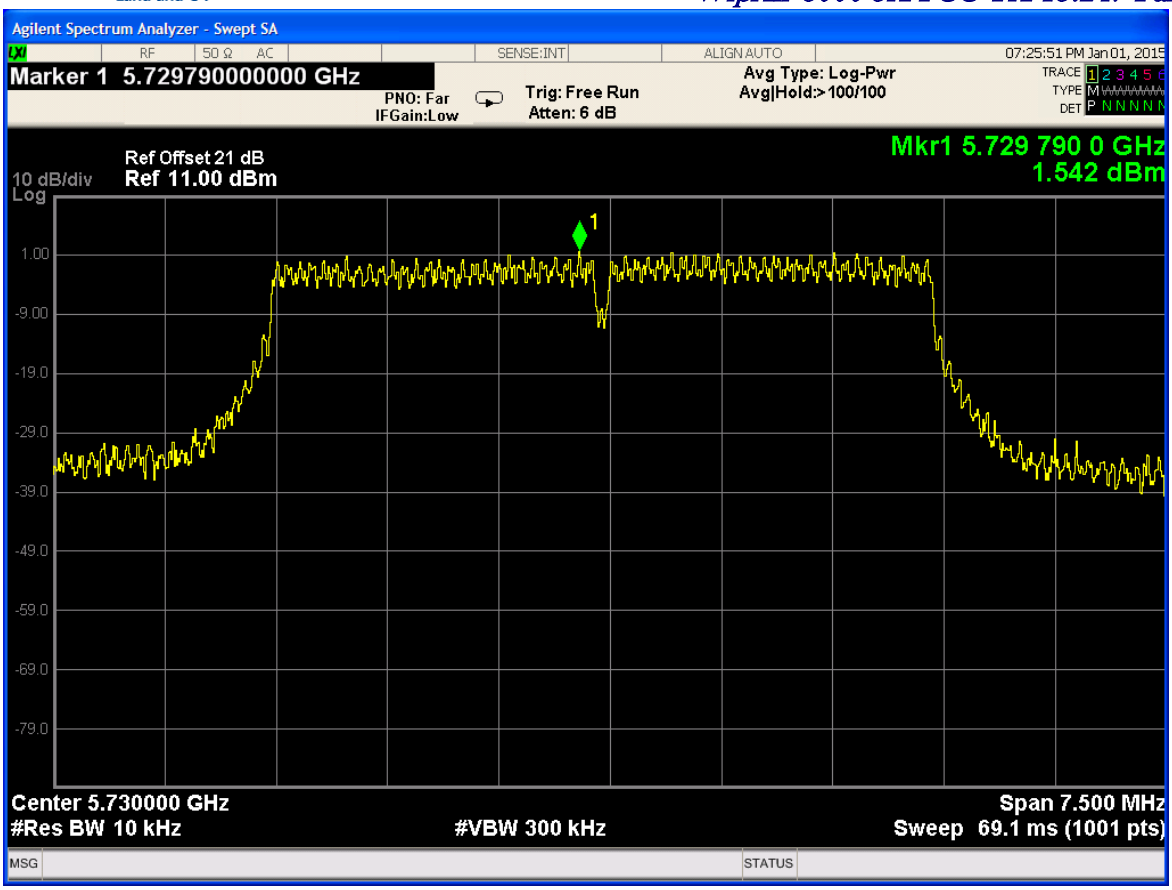


Figure 2: Test Setup for Peak power density

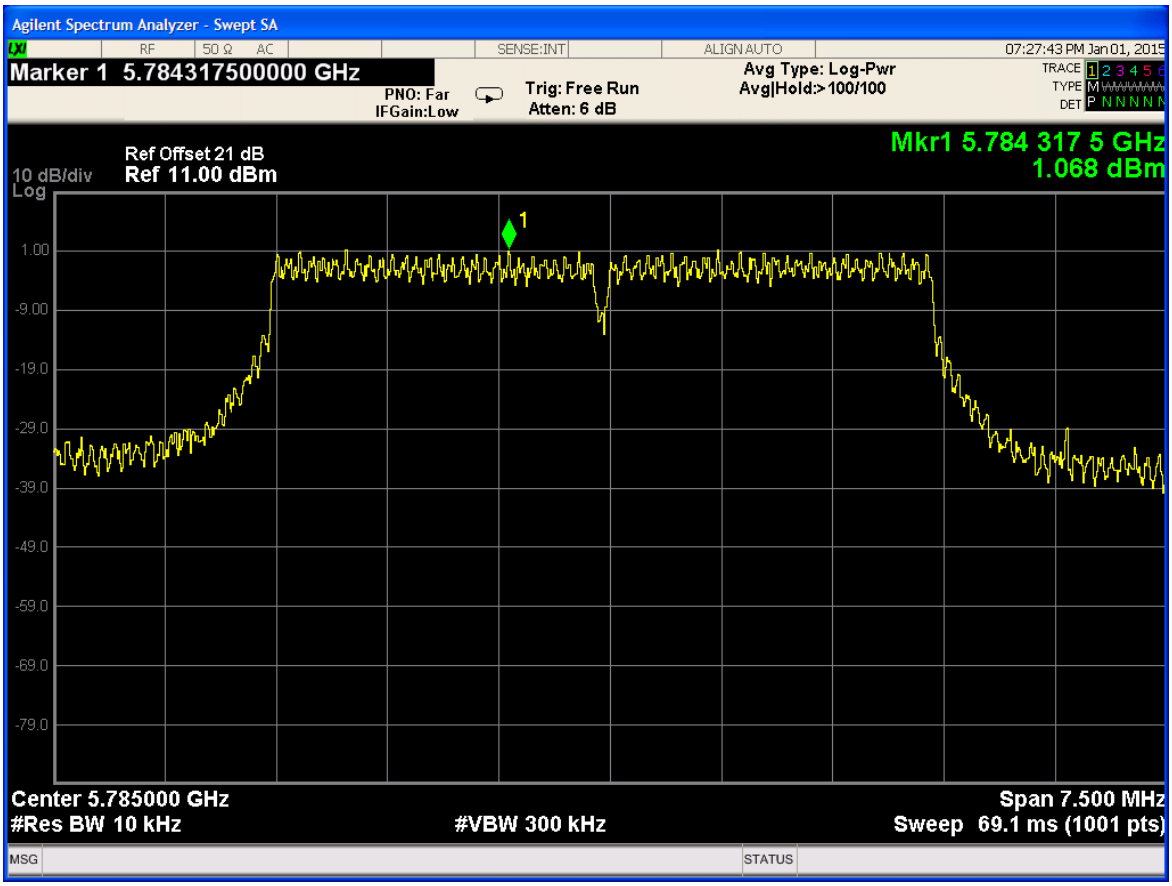
5.6. Test Results

Table 61: 5 MHz Peak Power Density Test Result

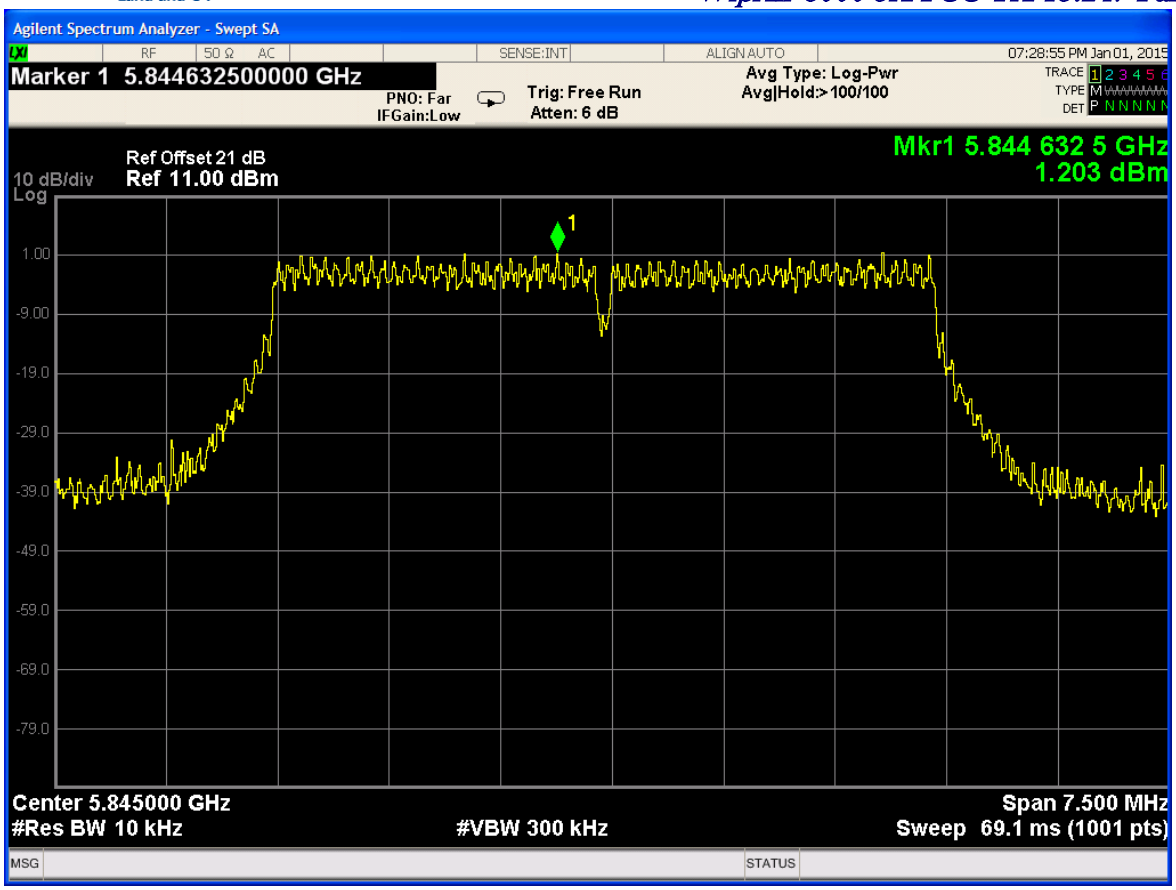
Frequency/BW (MHz)	Port A	Port B	Calculated A +B	Limit (dBm)	Margin (dBm)	Plot No.	Pass/Fail
5730/5	1.542	1.886	4.73	8	3.27	1, 13	Pass
5785/5	1.068	1.197	4.14	8	3.86	2, 14	Pass
5845/5	1.203	0.644	3.94	8	4.06	3, 15	Pass
5735/10	0.822	-0.339	3.29	8	4.71	4, 16	Pass
5785/10	0.083	-0.312	2.90	8	5.10	5, 17	Pass
5840/10	-1.101	-1.170	1.87	8	6.13	6, 18	Pass
5735/20	1.239	1.109	4.18	8	3.82	7, 19	Pass
5785/20	1.156	0.310	3.76	8	4.24	8, 20	Pass
5840/20	0.647	0.522	3.60	8	4.40	9, 21	Pass
5745/40	-1.591	-0.955	1.75	8	6.25	10, 22	Pass
5785/40	-1.135	-0.733	2.08	8	5.92	11, 23	Pass
5830/40	-2.204	-1.385	1.24	8	6.76	12, 24	Pass



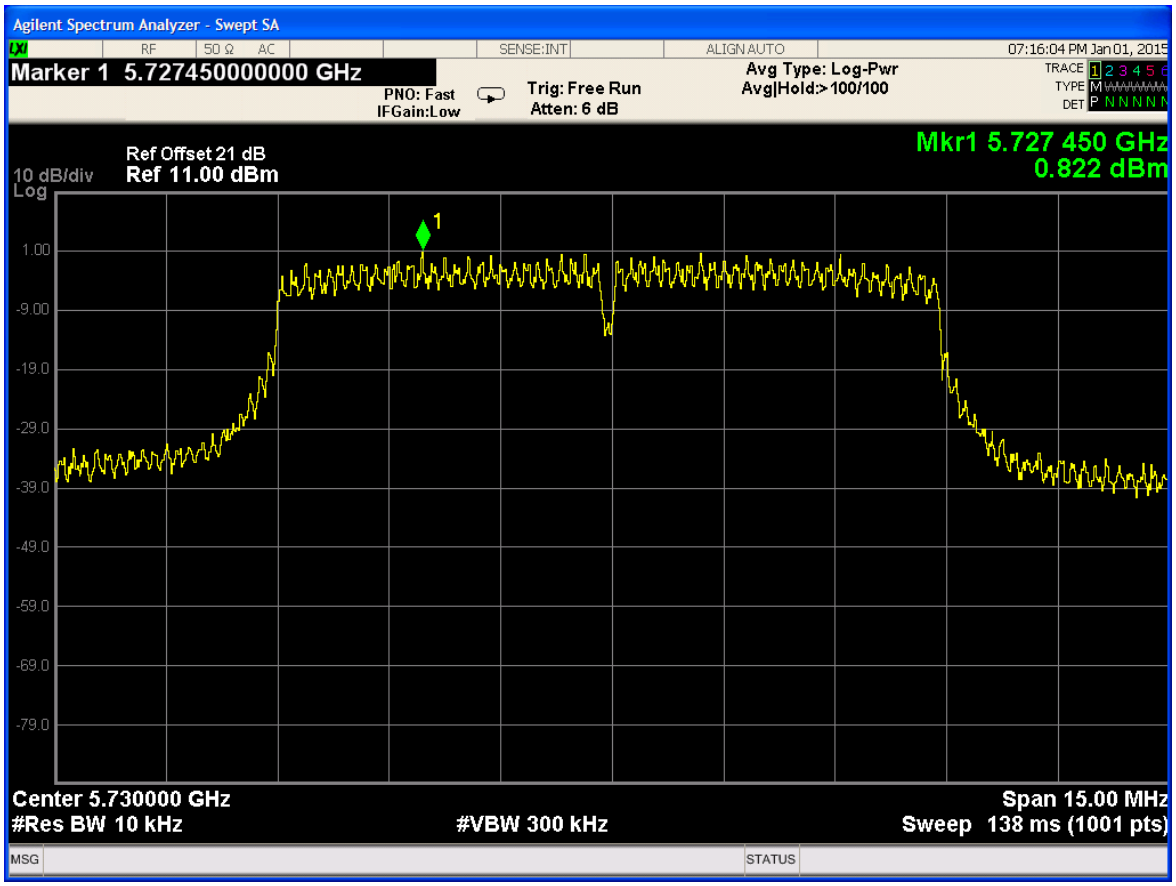
Plot Peak Power Density/ 1



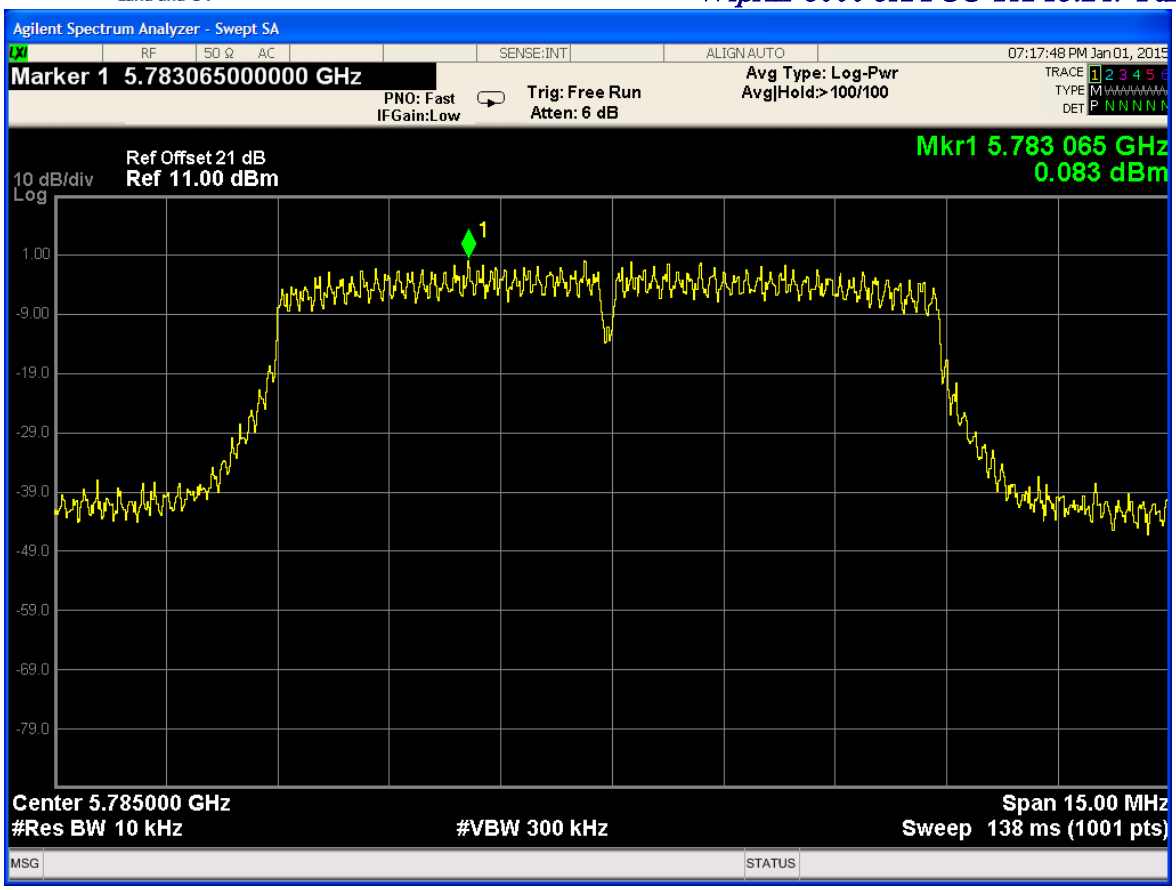
Plot Peak Power Density/ 2



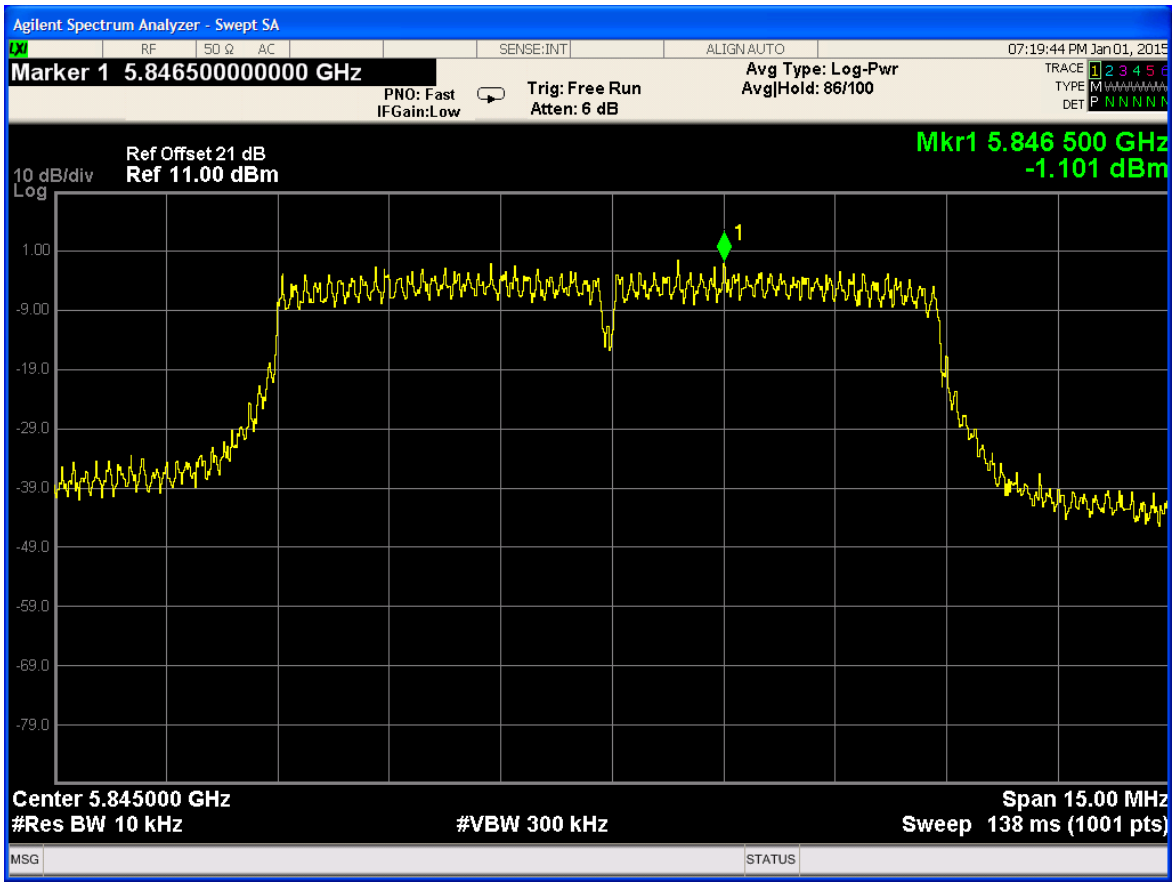
Plot Peak Power Density/ 3



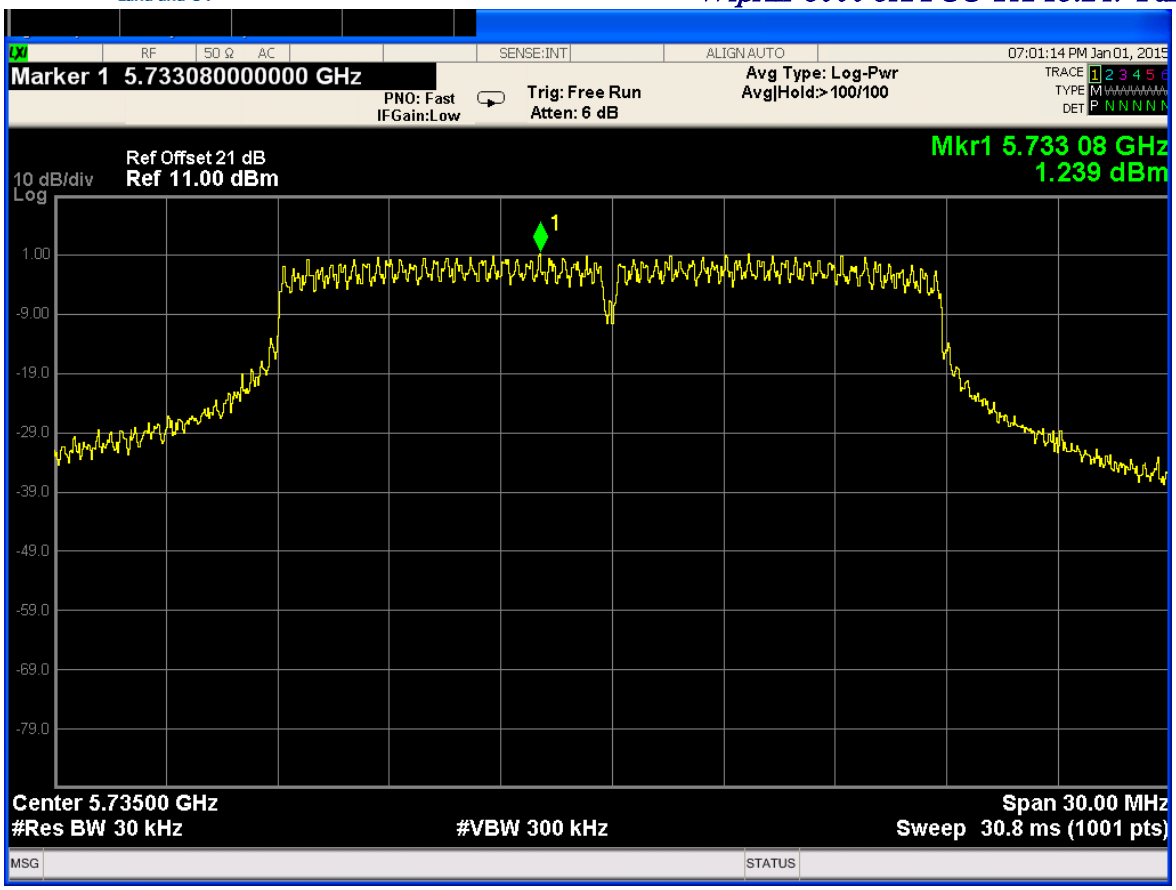
Plot Peak Power Density/ 4



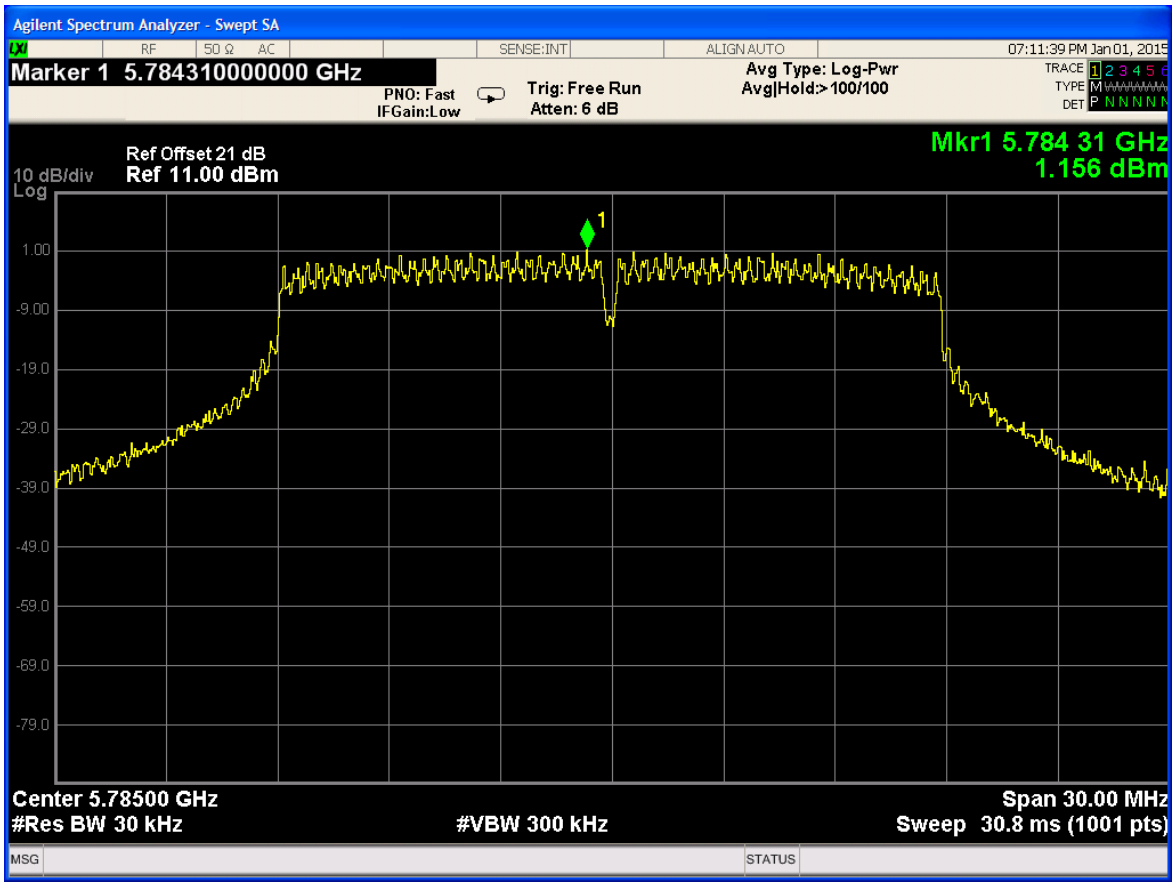
Plot Peak Power Density/ 5



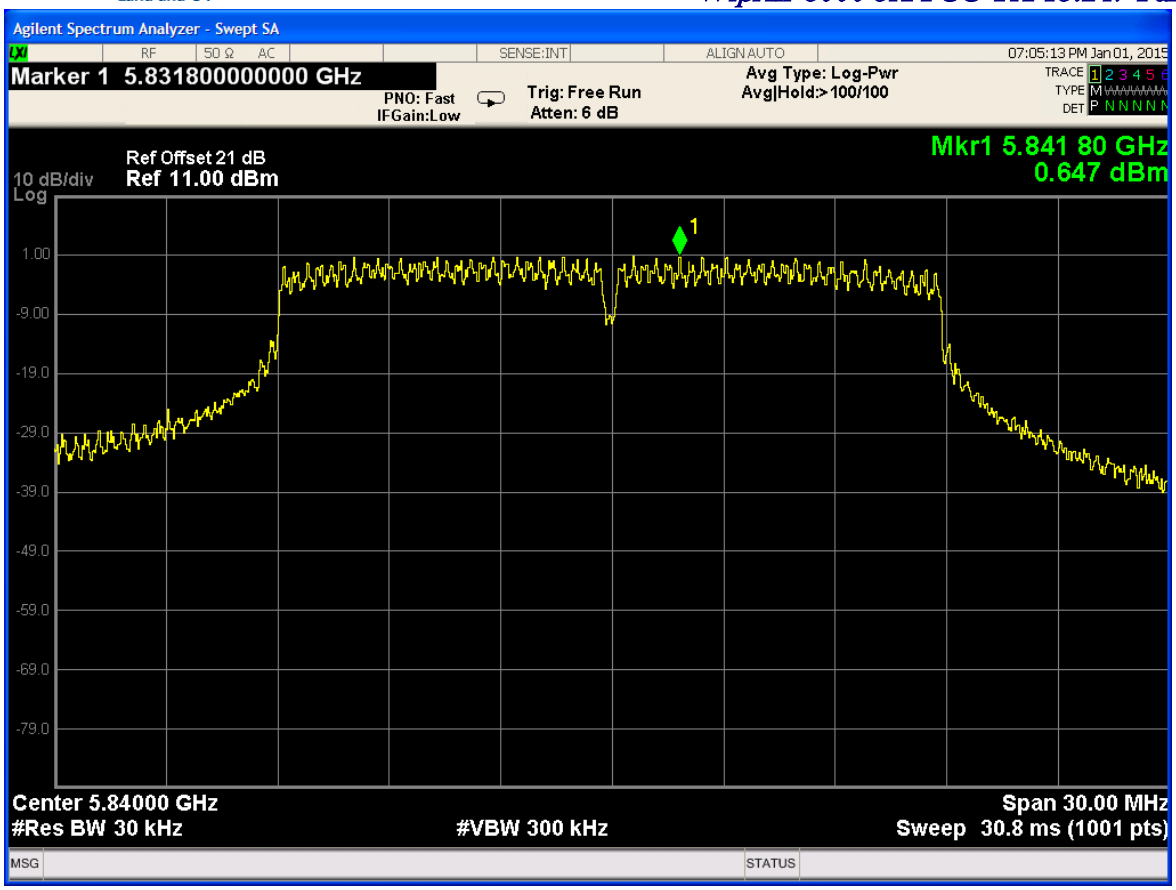
Plot Peak Power Density/ 6



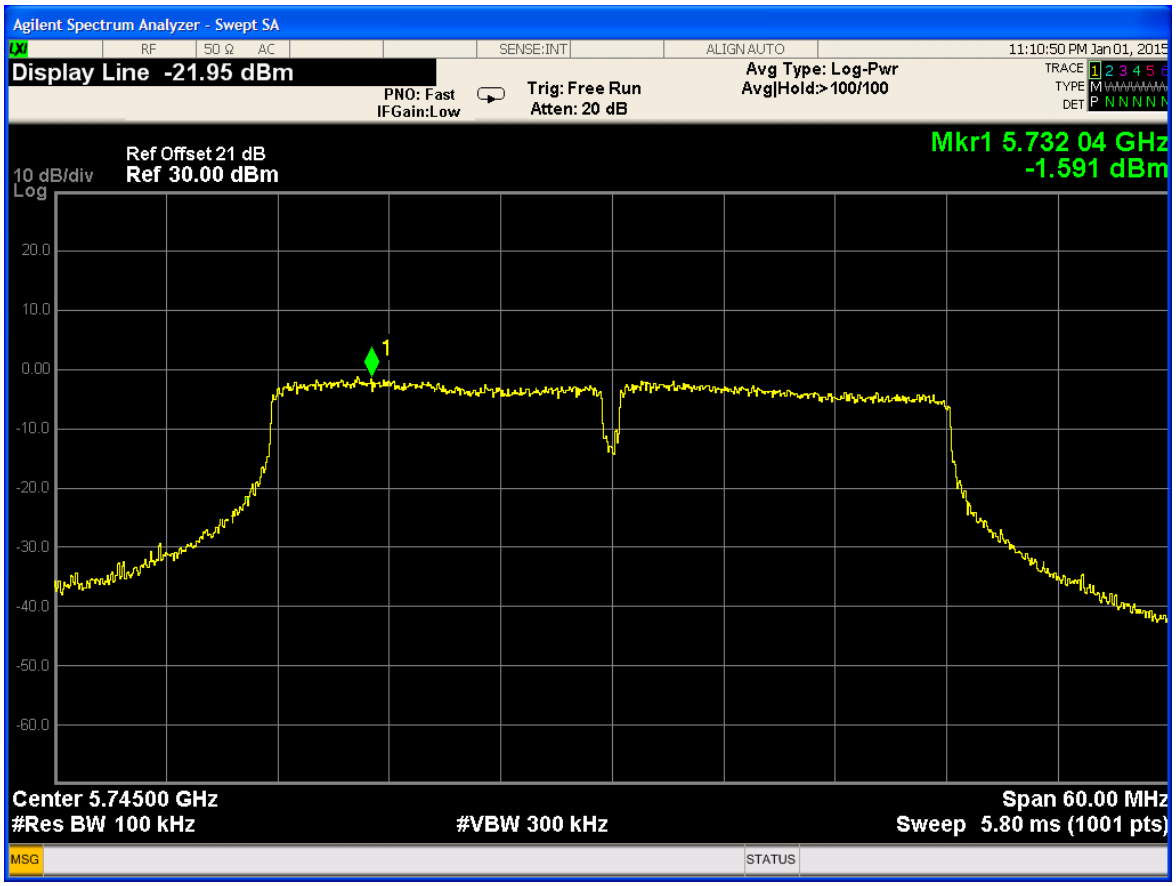
Plot Peak Power Density/ 7



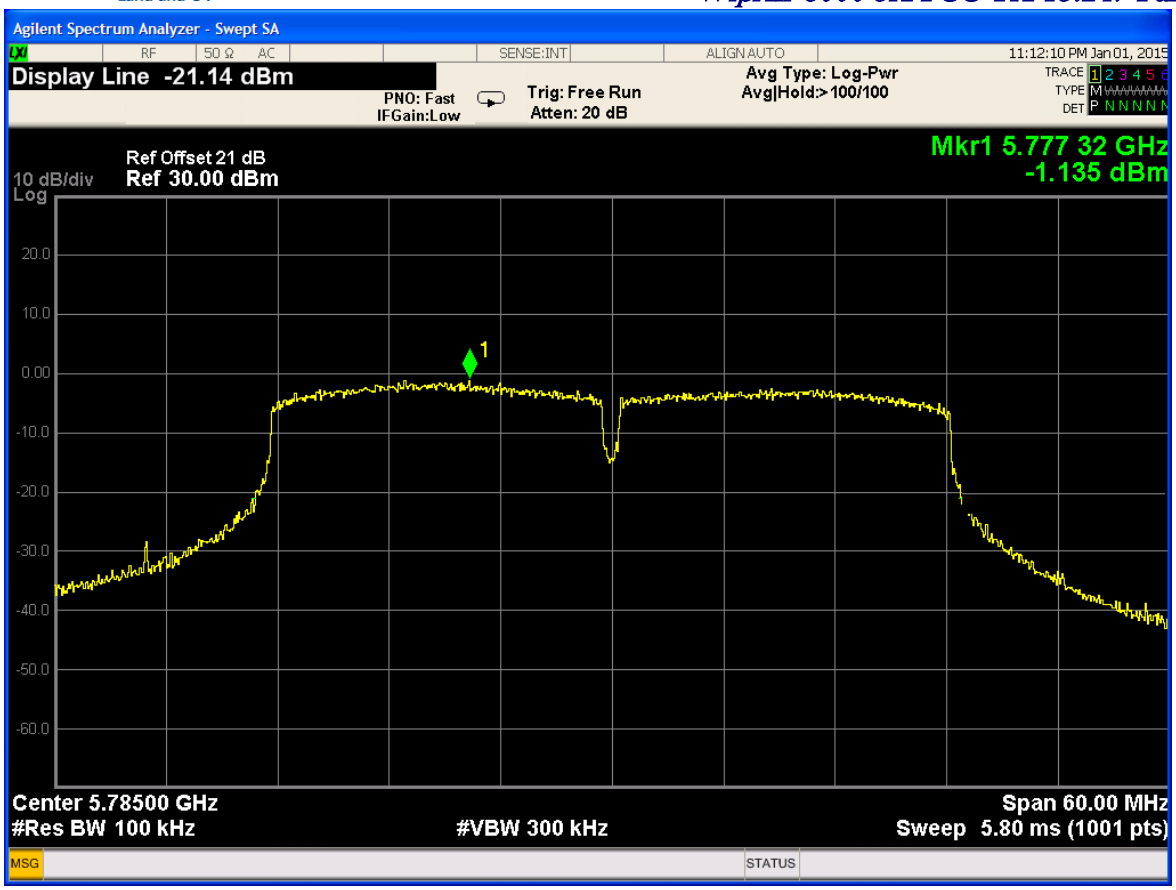
Plot Peak Power Density/ 8



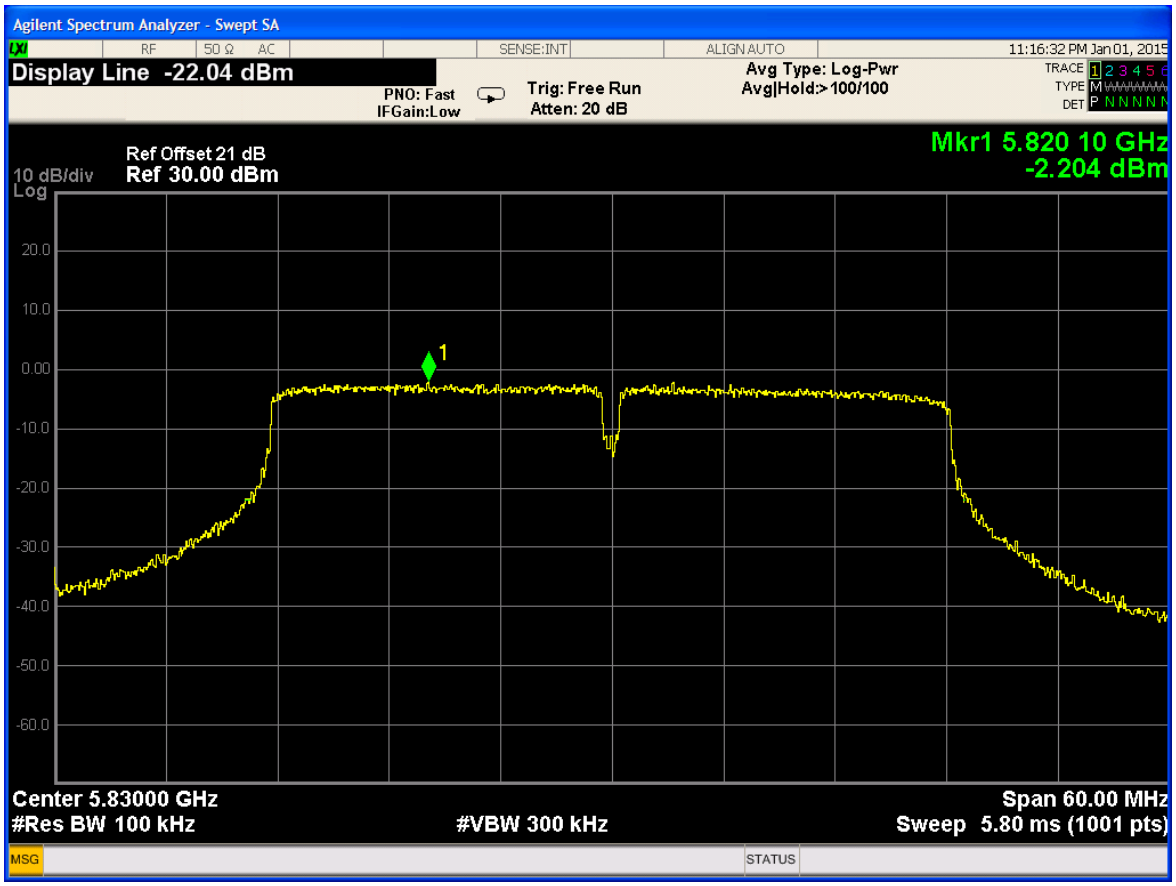
Plot Peak Power Density/ 9



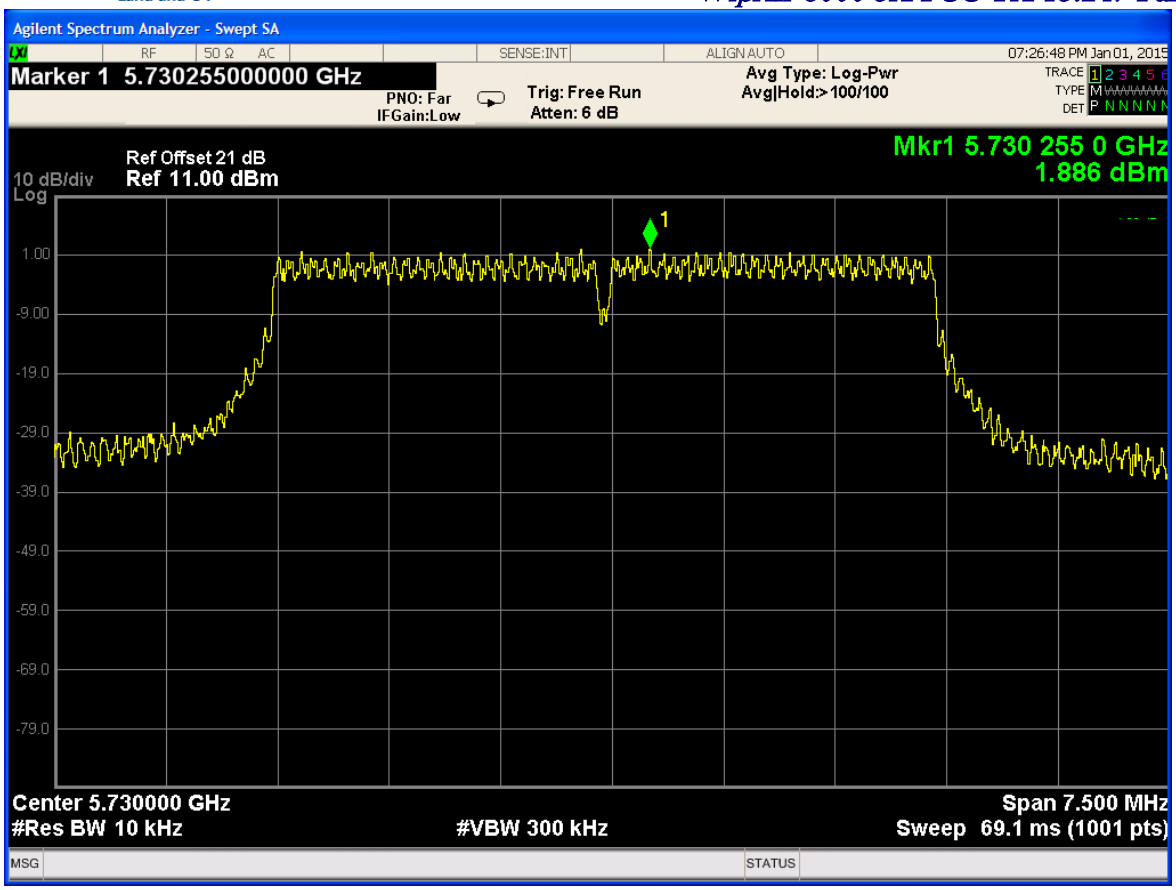
Plot Peak Power Density/ 10



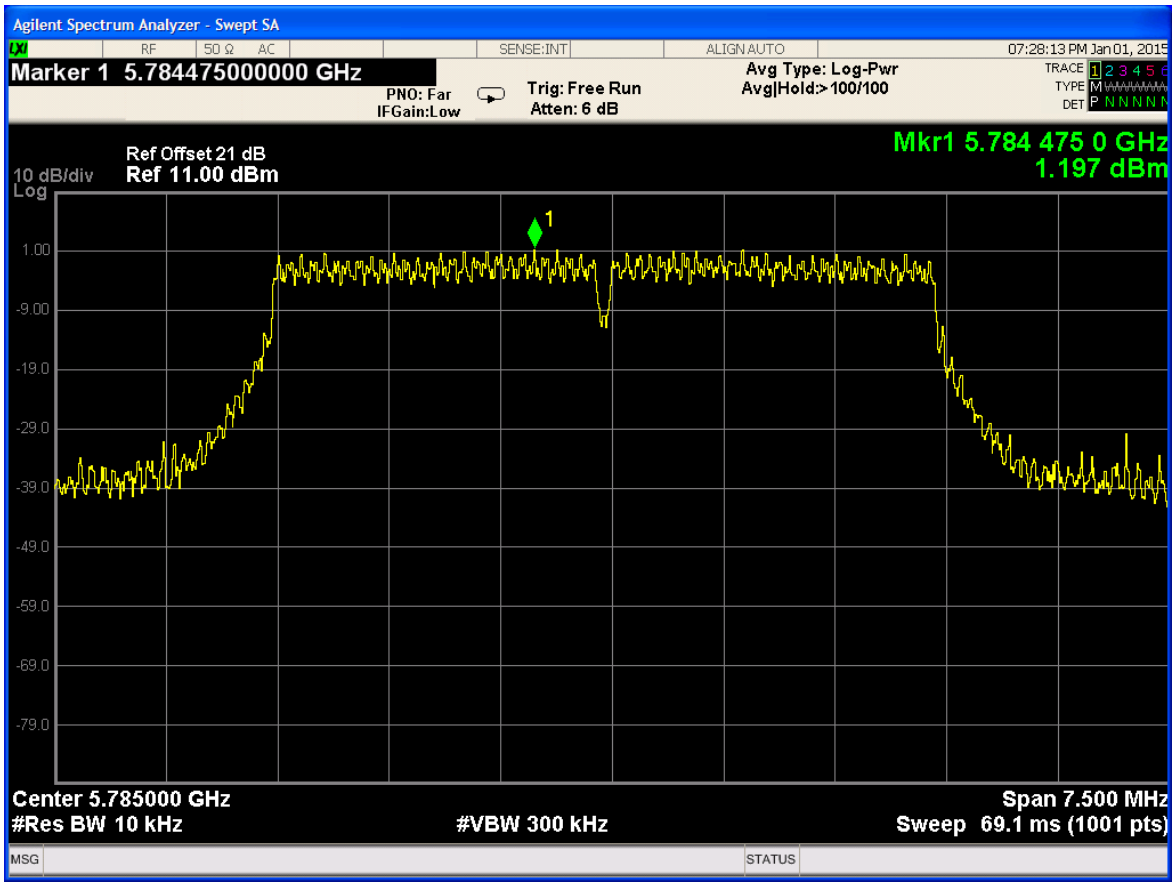
Plot Peak Power Density/ 11



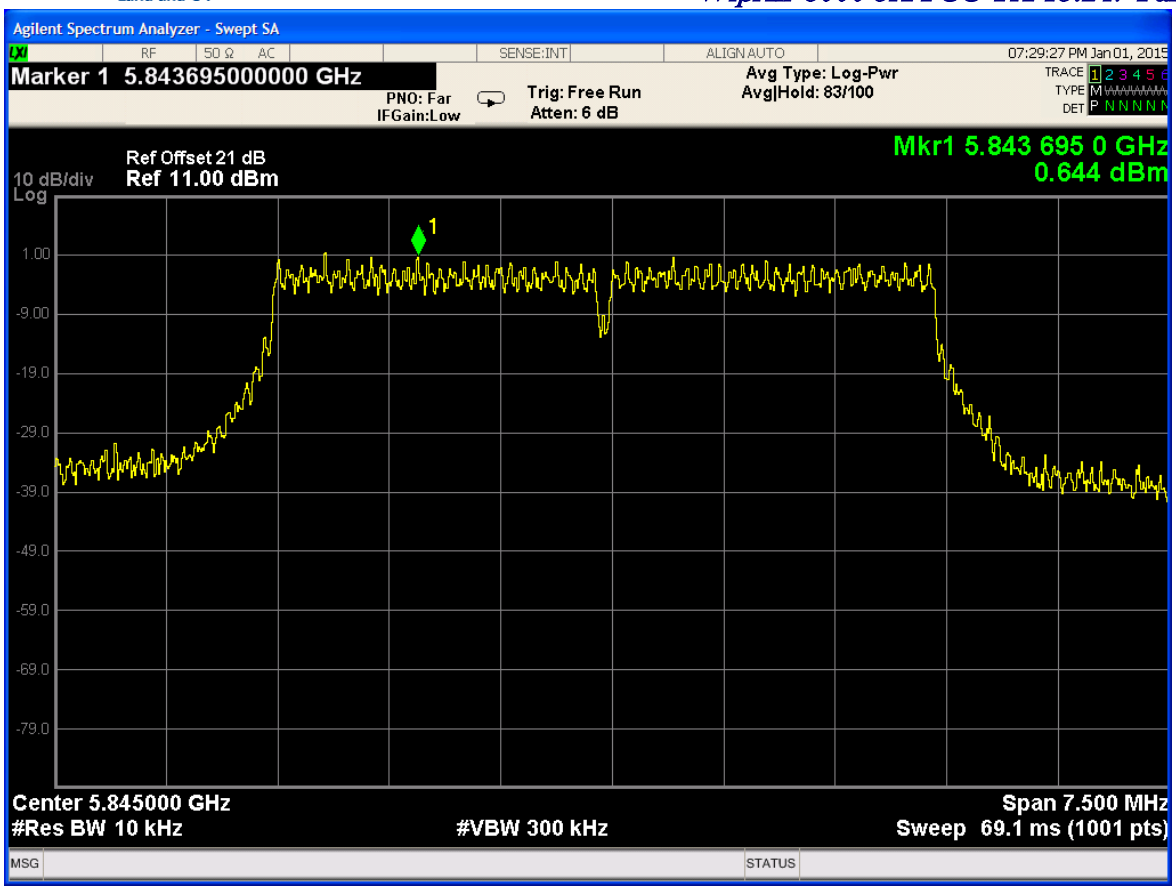
Plot Peak Power Density/ 12



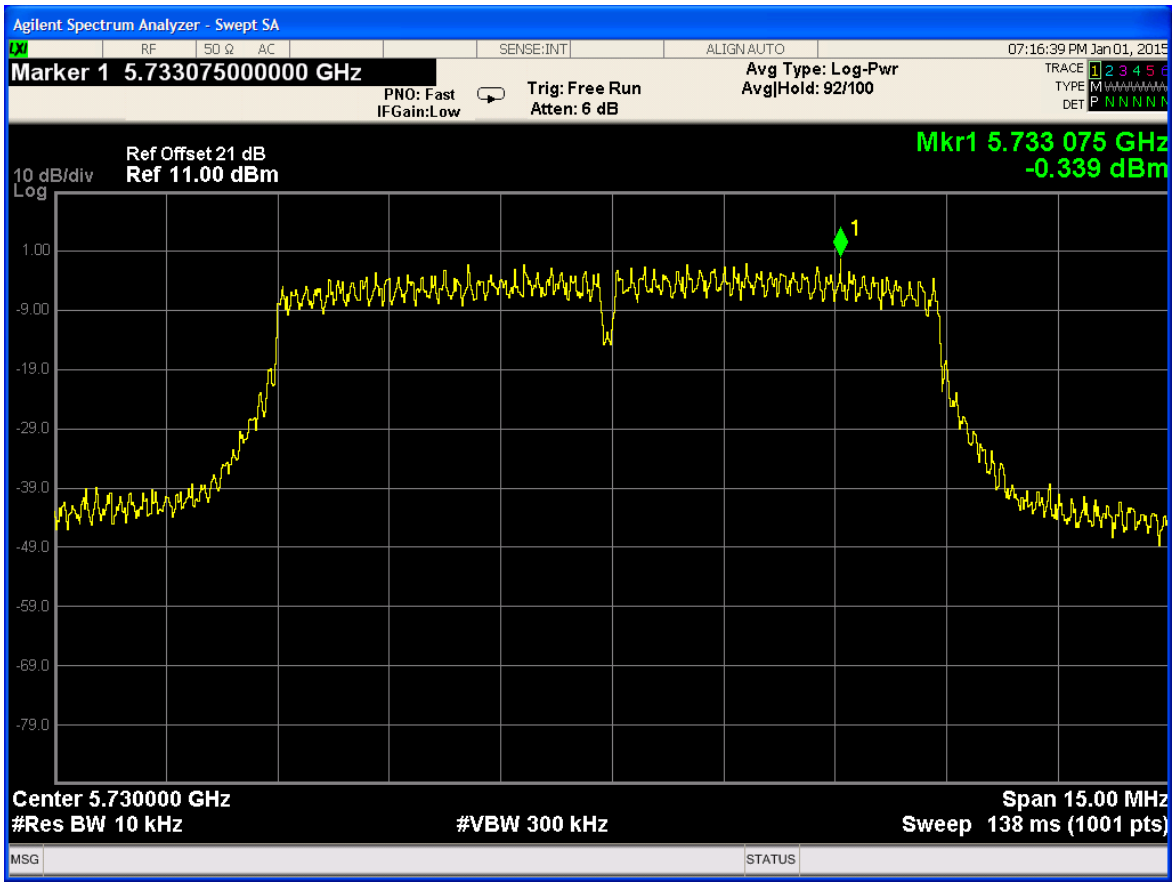
Plot Peak Power Density/ 13



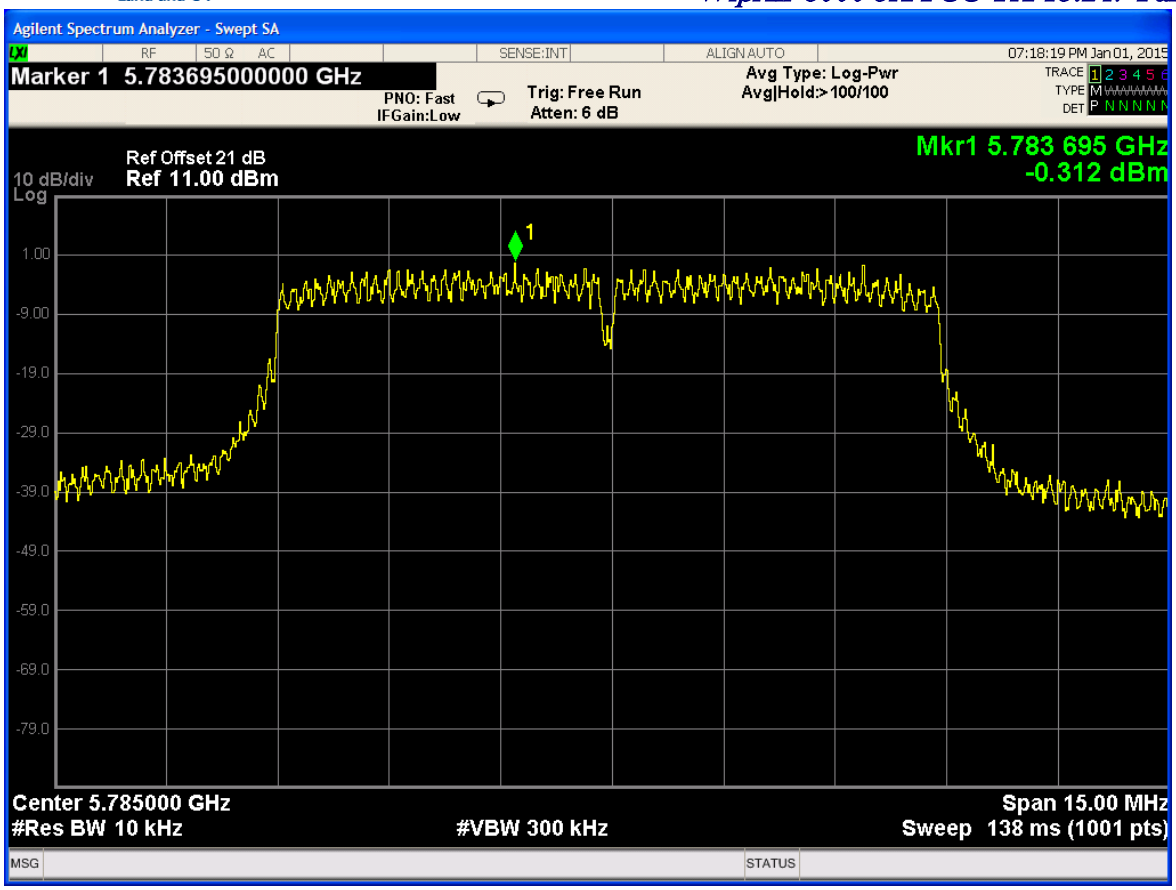
Plot Peak Power Density/ 14



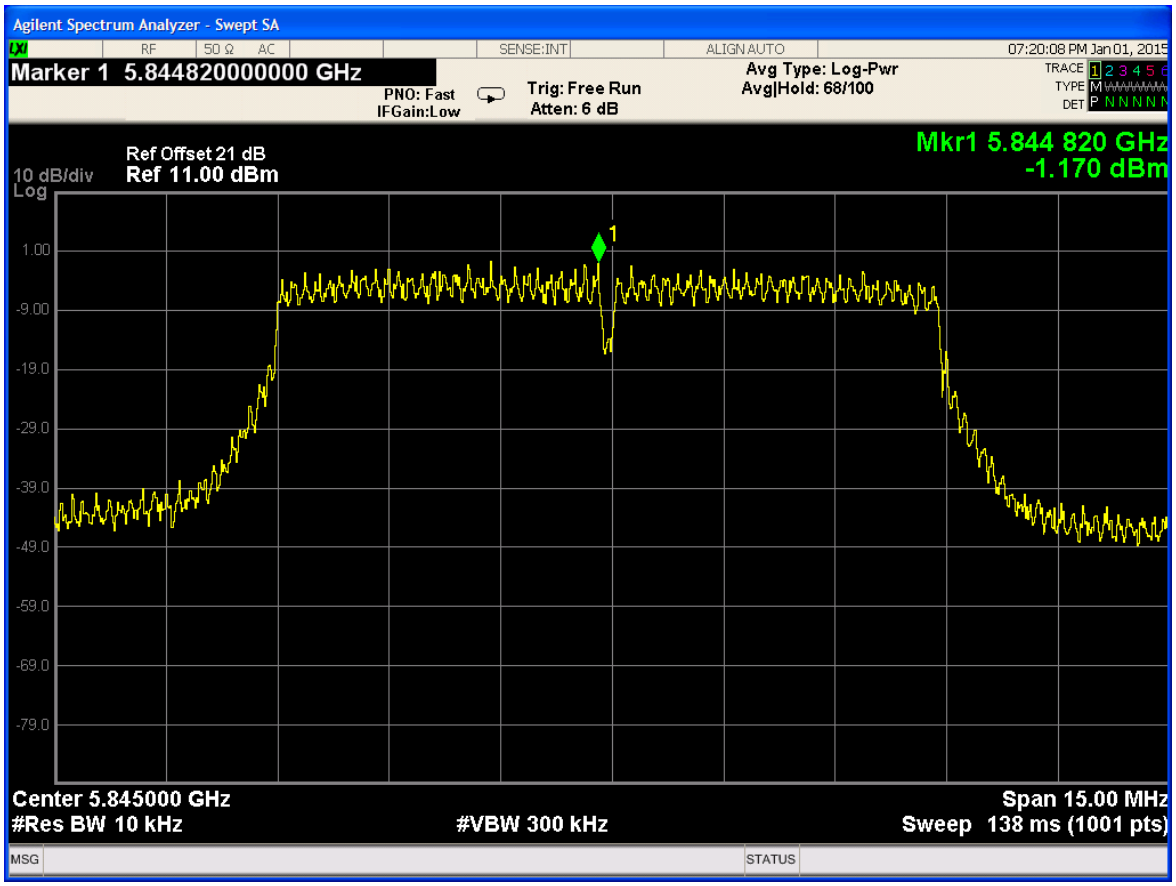
Plot Peak Power Density/ 15



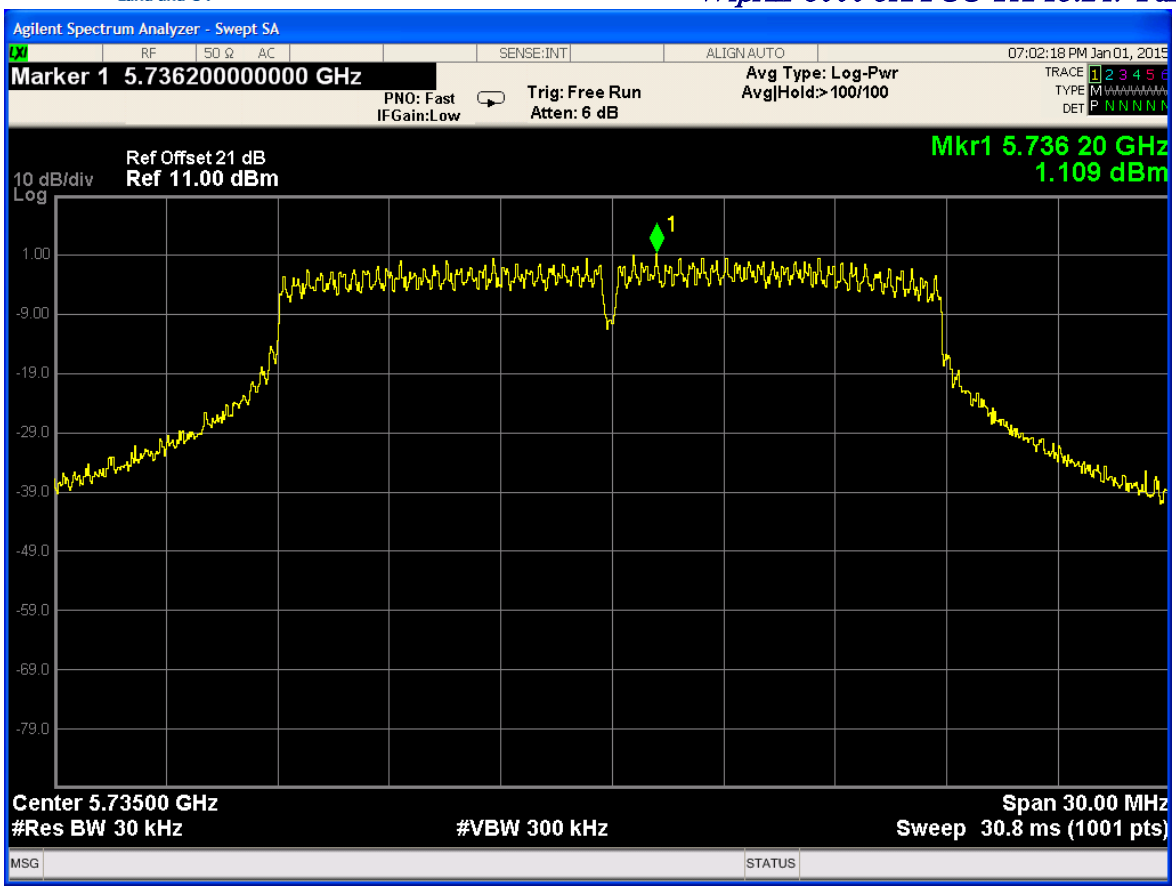
Plot Peak Power Density/ 16



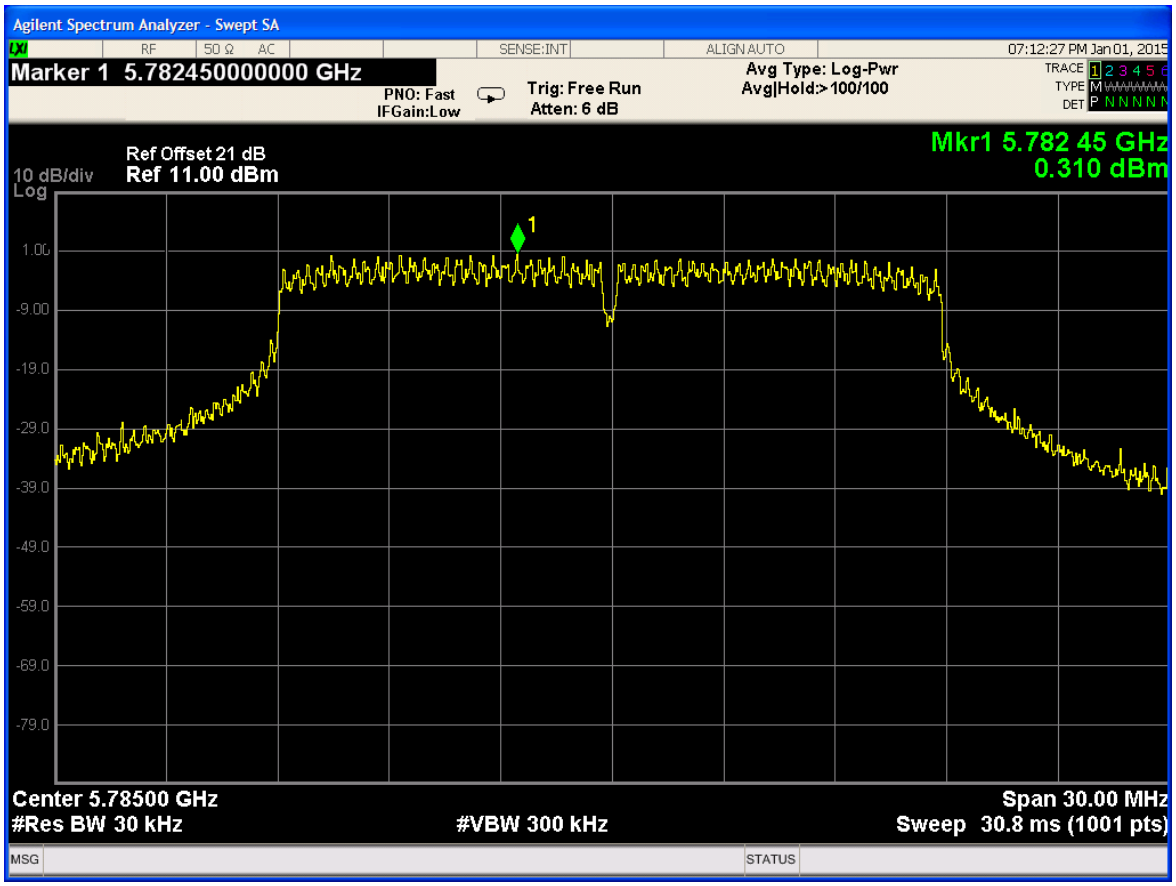
Plot Peak Power Density/ 17



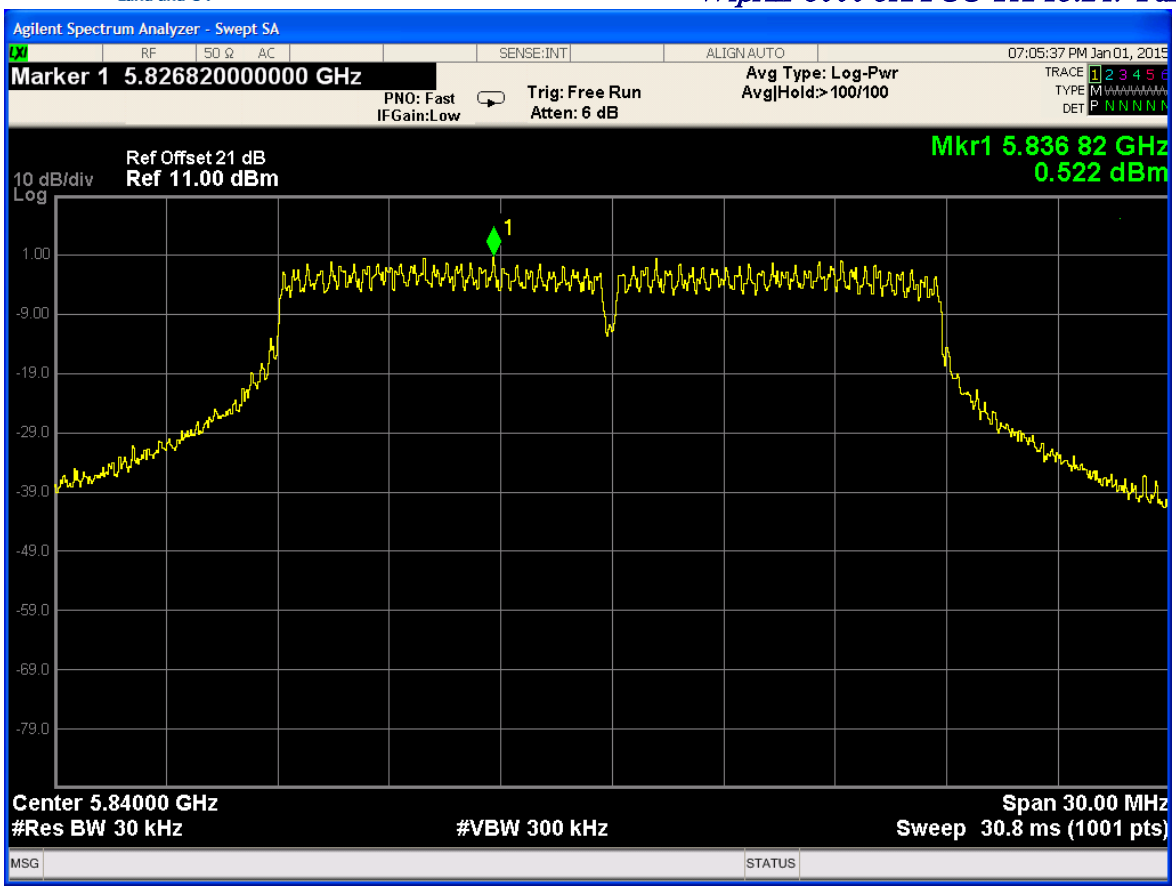
Plot Peak Power Density/ 18



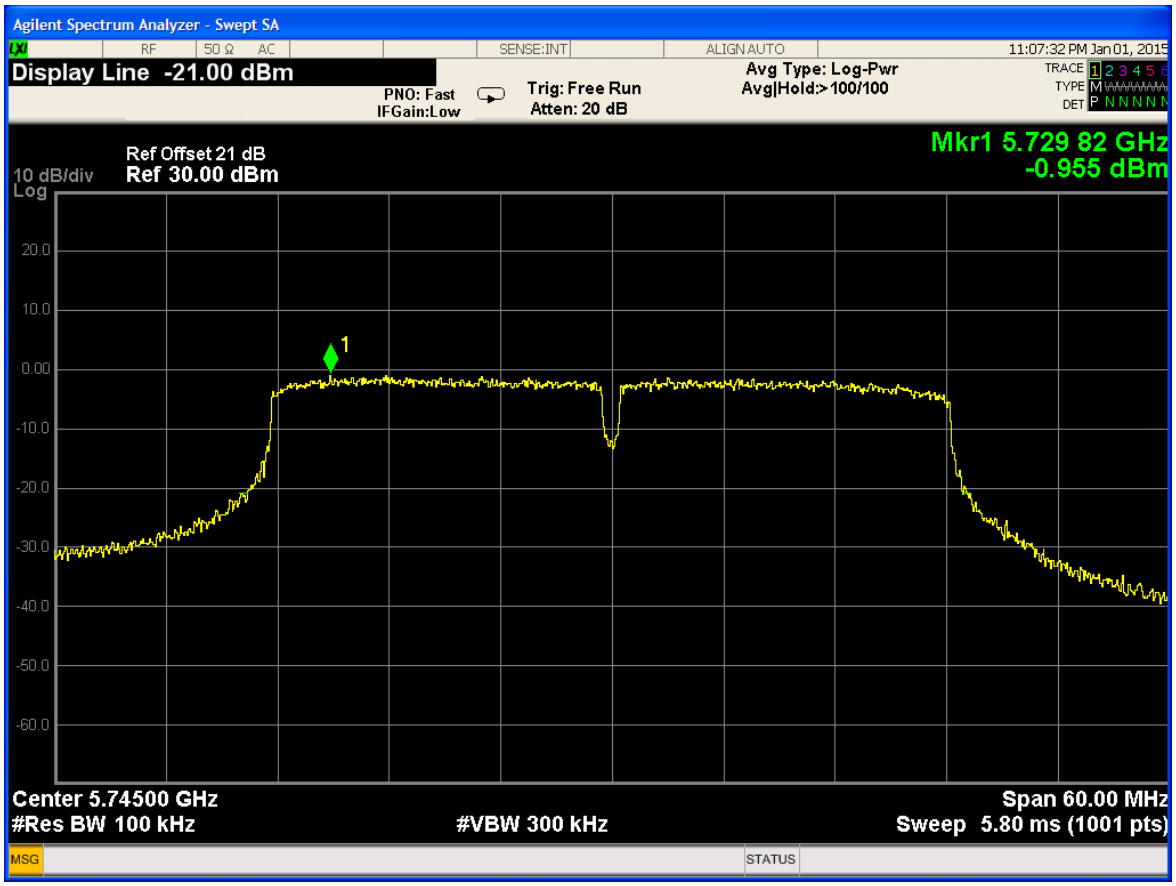
Plot Peak Power Density/ 19



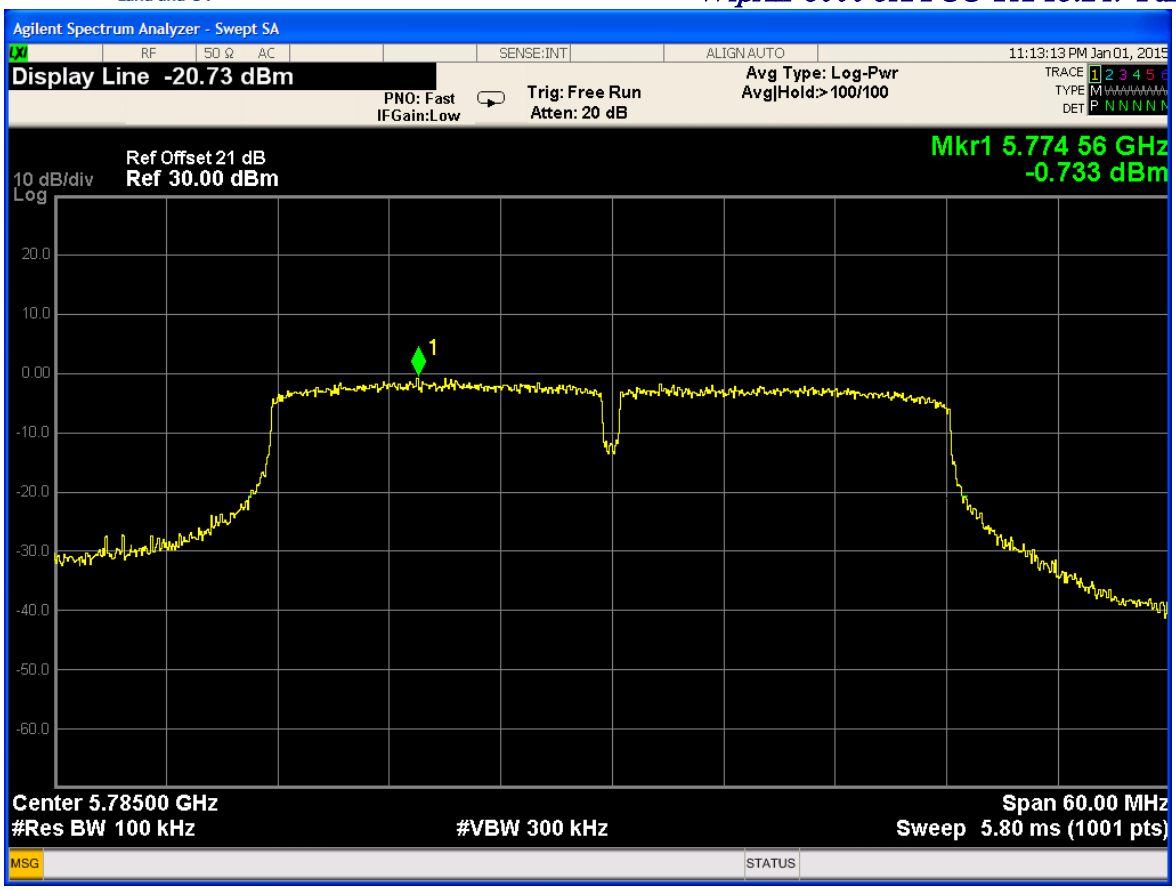
Plot Peak Power Density/ 20



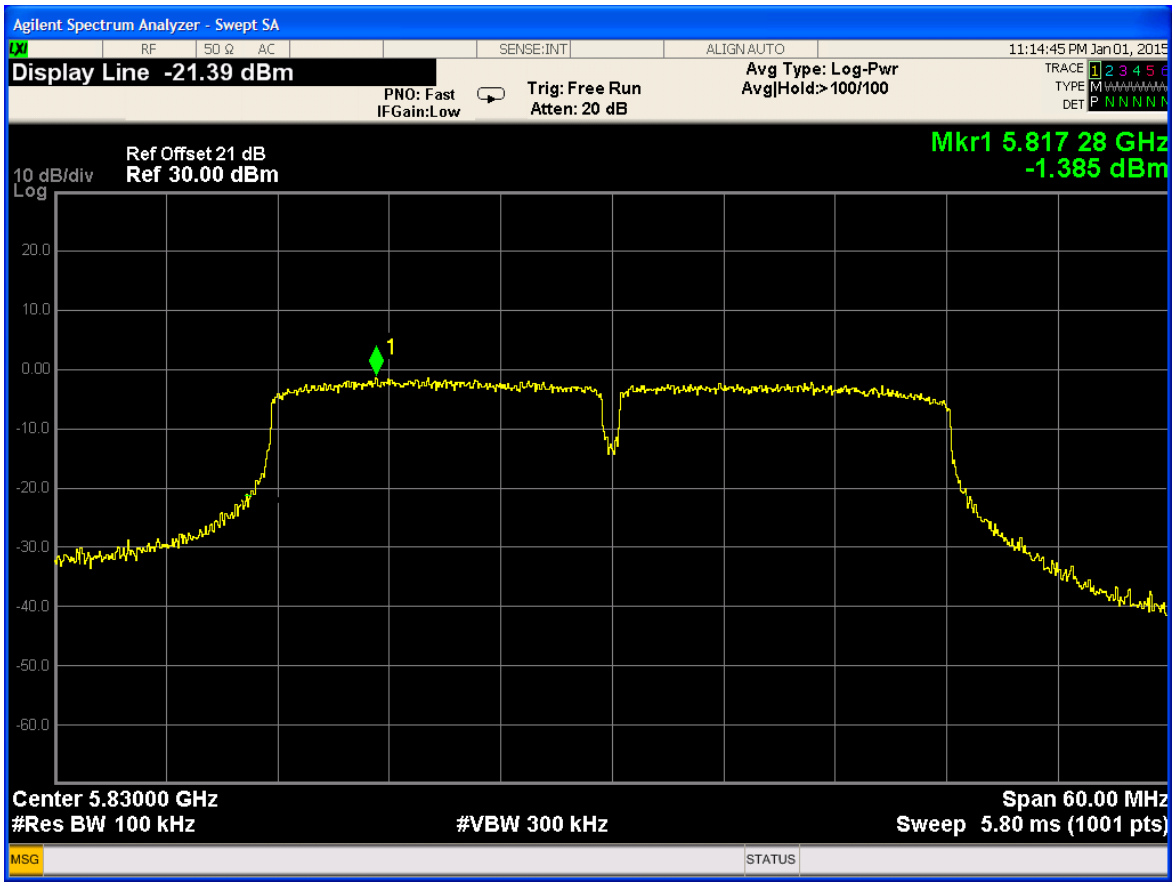
Plot Peak Power Density/ 21



Plot Peak Power Density/ 22



Plot Peak Power Density/ 23



Plot Peak Power Density/ 24

6. CONDUCTED EMISSION TEST ACCORDING TO 15.207.15.107

Equipment Under Test	WipAir 8000 5X
Test Method	FCC New Guidance on Measurements for DTS in section 15.207(a) section 7.2 2.
Date	15.04.2015
Relative Humidity	40%
Ambient Temperature	25^0 C
Air Pressure	1010 hPa
Test Setup	Figure 5.a

Testing Engineer: I.Arbitman **Date** 15.04.2015

6.1. Test Results Summary & Conclusions

The E.U.T was found in compliance with conducted emission power leads requirements.

6.2. Limit:

Conducted emission must comply with 15.207 Limits. See limits in table 62 below.

Table 62: Limits For 15.207 Class B equipment

Frequency (MHz)	Quasi-peak Limits (dBμV)
0.15 – 0.5	66-56
0.5 - 5	56
5 - 30	60

6.3. Test Instrumentation and Equipment

Table 63: Test Instrumentation and Equipment

Item	Model	Manufacturer	P/N	Next Date of Calibration
Spectrum Analyzer	N9020A	Agilent	20041738908	04.04.2015
20 dB Attenuator	8343-206	TENULINE		13.03.2016

6.4. Test Procedure

The EUT was placed on the top of table 1m by 1.5m, raised 0.8 meters above the conducting ground plane

The rear panel of the EUT was located 40cm to the vertical wall of the screen room

Each EUT power leads were individually connected through an LISN to the input power source. Unused 50 ohm connector of the LISN was terminated in 50ohm and other was connected to the spectrum analyzer through 20db attenuator for maximum conducted interference

6.5. Test setup

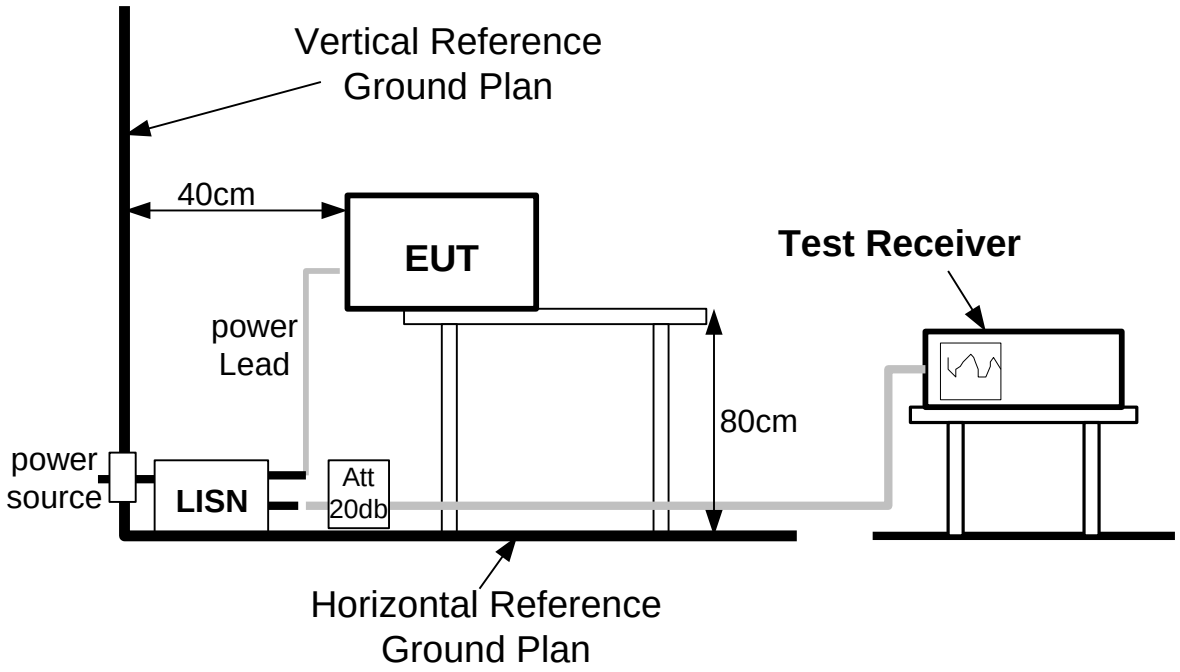


Figure- 3: Conducted emission Test Configuration

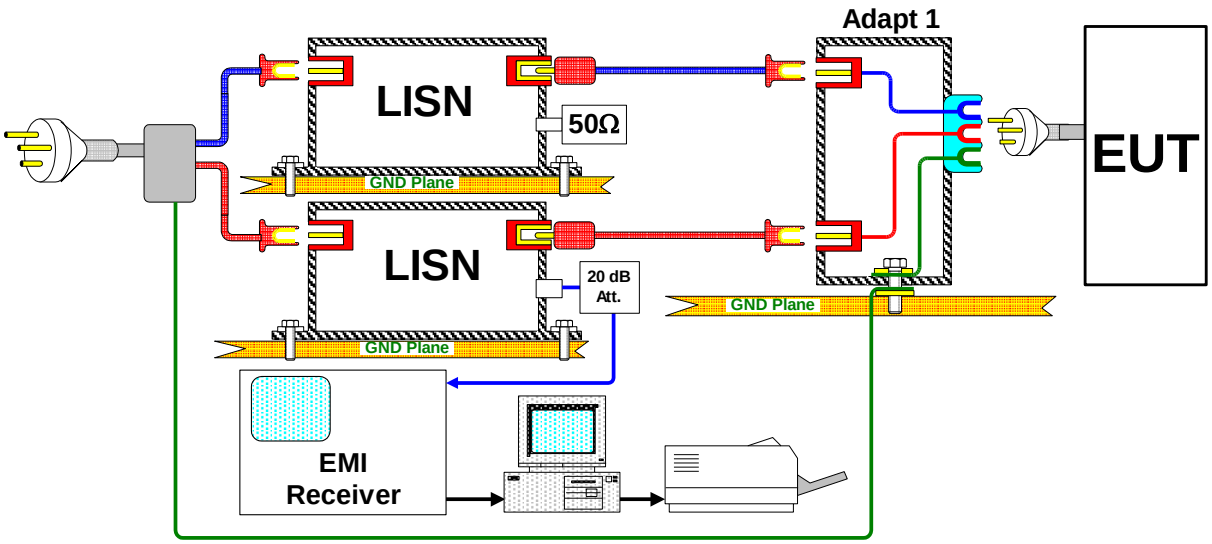
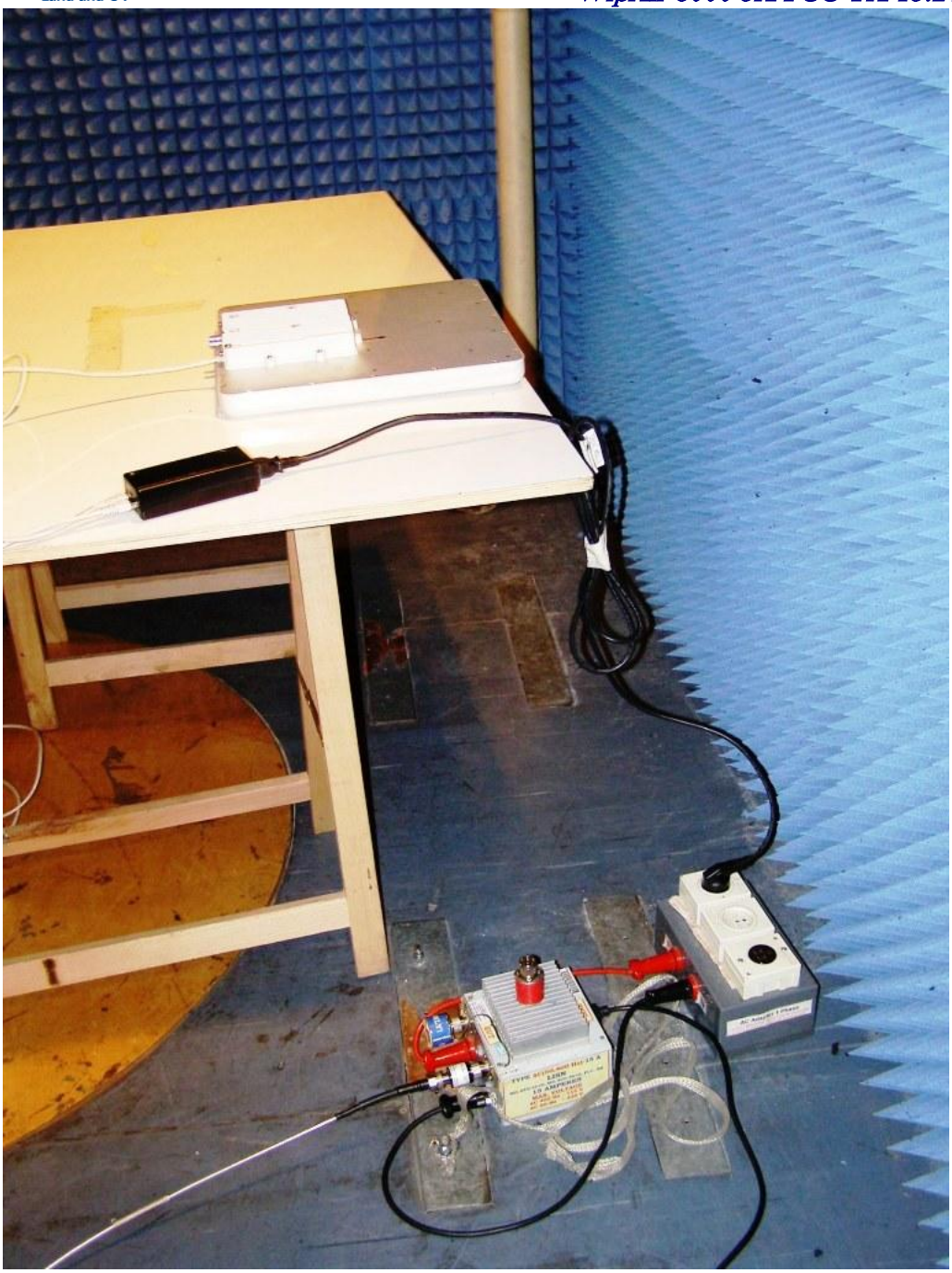


Figure 4: Conducted emission Test setup

6.6. Test Results

Table 64: Test results

Frequency Range (MHz)	Tested Line	Test Plots Numbers	PASS/FAIL
0.15 - 1	Neutral 110V AC	*1*	Pass
1 - 30		*2*	Pass
0.15 - 1	Phase 110V AC	*3*	Pass
1 - 30		*4*	Pass



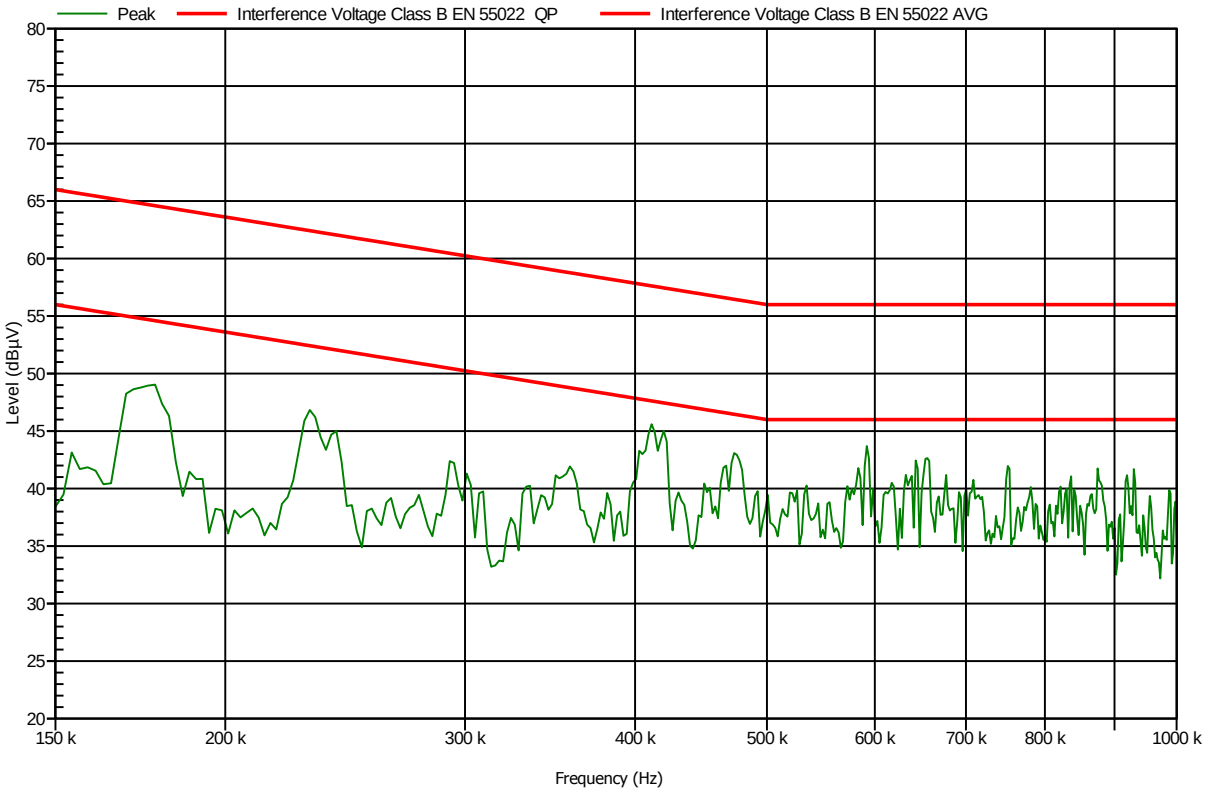
Photograph of Conducted Emission Test Setup/ 1

Test Results Plot No 1

CE EN 55022 CLASS B: 0.15-1 MHz NEUTRAL

Test & EUT General Information		Receiver Setting	
EUT Name:	WipAir8000 5X	Spect Analyzer	Hewlett Packard 7405A DC Coupling
S/N:	041A04000100	Ref. Level:	80 dBµV
Date of Test:	15.04.2015	RBW:	9 kHz
Test Engineer:	Ilya Arbitman	VBW:	1000 kHz
Antenna:		Sweep Time:	Auto [23.61 ms]
Polarization:		Pre Amplifier	Attenuator 20db

TEST REMARKS: Wednesday, April 15, 2015 6:45:15 PM



MAXIMUM RESULT DEVIATION:

Detect all peaks above 6 dB below the limit line with a maximum of 6 peaks.

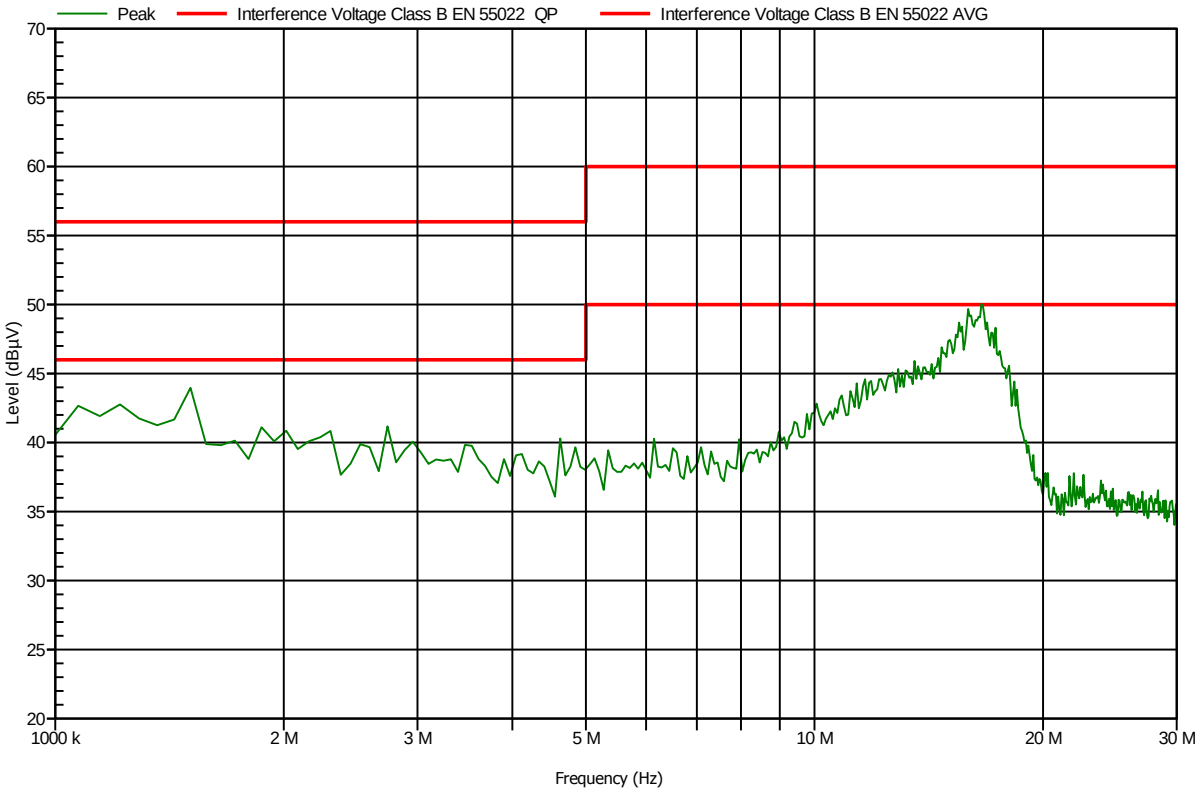
Nr	Frequency (MHz)	PK MaxHold (dBµV)	AVG Value (dBµV)	QP Value (dBµV)	AVG Limit (dBµV)	QP Limit (dBµV)	Result	Line
1	0.413	45.8	37	42.9	47.6	57.6	Pass	Line 1
2	0.463	46	32.5	40.1	46.6	56.6	Pass	Line 1
3	0.583	43.8	30.5	38.9	46	56	Pass	Line 1
4	0.65	45.3	32	39.6	46	56	Pass	Line 1
5	0.758	42.8	28.3	36.8	46	56	Pass	Line 1
6	0.872	41.6	28.2	36.7	46	56	Pass	Line 1

Test Results Plot No 2

CE EN 55022 CLASS B: 1-30 MHz NEUTRAL

Test & EUT General Information		Receiver Setting	
EUT Name:	WipAir8000 5X	Spect Analyzer	Hewlett Packard 7405A DC Coupling
S/N:	041A04000100	Ref. Level:	80 dBµV
Date of Test:	15.04.2015	RBW:	9 kHz
Test Engineer:	Ilya Arbitman	VBW:	1000 kHz
Antenna:		Sweep Time:	Auto [805.57 ms]
Polarization:		Pre Amplifier	Attenuator 20db

TEST REMARKS: Wednesday, April 15, 2015 6:50:15 PM



MAXIMUM RESULT DEVIATION:

Detect all peaks above 6 dB below the limit line with a maximum of 6 peaks.

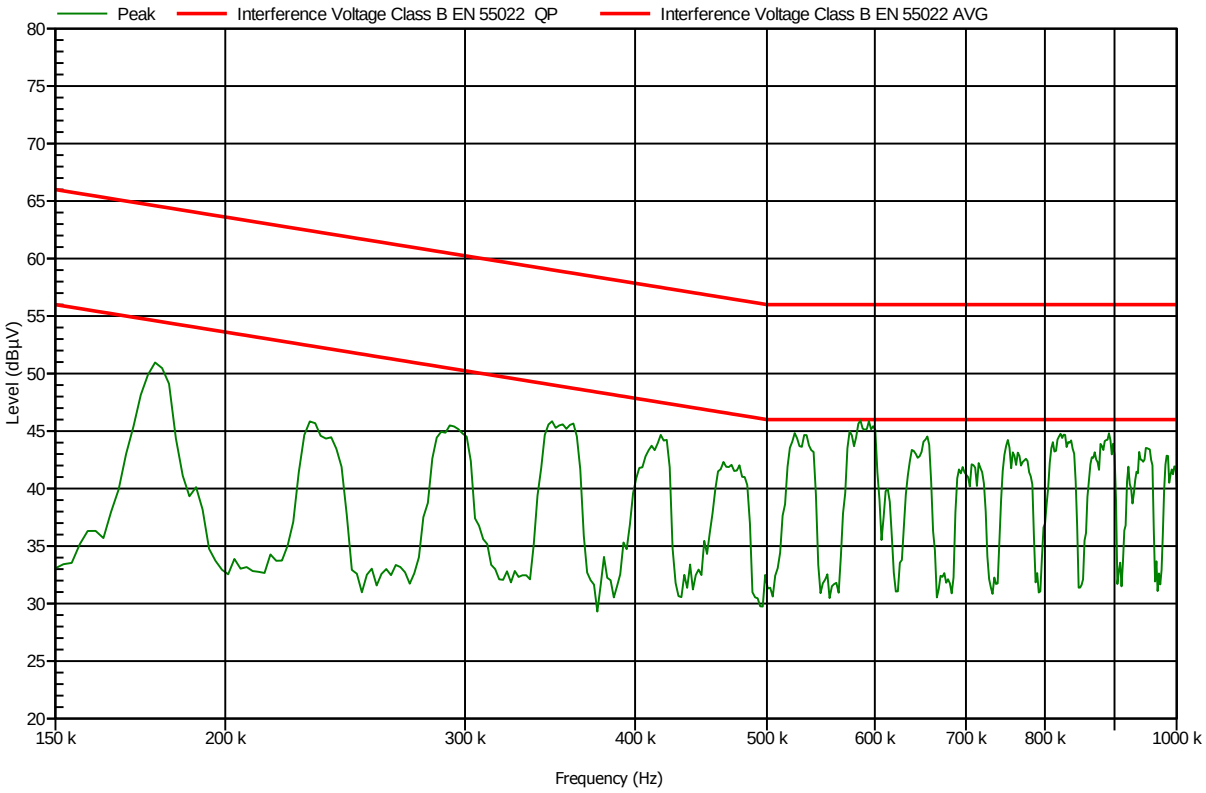
Nr	Frequency (MHz)	PK MaxHold (dBµV)	AVG Value (dBµV)	QP Value (dBµV)	AVG Limit (dBµV)	QP Limit (dBµV)	Result	Line
1	1.202	41.3	26.4	34.2	46	56	Pass	Line 1
2	1.532	44.7	37.8	40.7	46	56	Pass	Line 1
3	15.437	51	38.6	45.5	50	60	Pass	Line 1
4	15.909	48.5	33.8	44.2	50	60	Pass	Line 1
5	16.561	49	34.2	44.3	50	60	Pass	Line 1
6	17.381	47.6	33	42.8	50	60	Pass	Line 1

Test Results Plot No 3

CE EN 55022 CLASS B: 0.15-1 MHz PHASE

Test & EUT General Information		Receiver Setting	
EUT Name:	WipAir8000 5X	Spect Analyzer	Hewlett Packard 7405A DC Coupling
S/N:	041A04000100	Ref. Level:	80 dBµV
Date of Test:	15.04.2015	RBW:	9 kHz
Test Engineer:	Ilya Arbitman	VBW:	1000 kHz
Antenna:		Sweep Time:	Auto [23.61 ms]
Polarization:		Pre Amplifier	Attenuator 20db

TEST REMARKS: Wednesday, April 15, 2015 6:57:15 PM



MAXIMUM RESULT DEVIATION:

Detect all peaks above 6 dB below the limit line with a maximum of 6 peaks.

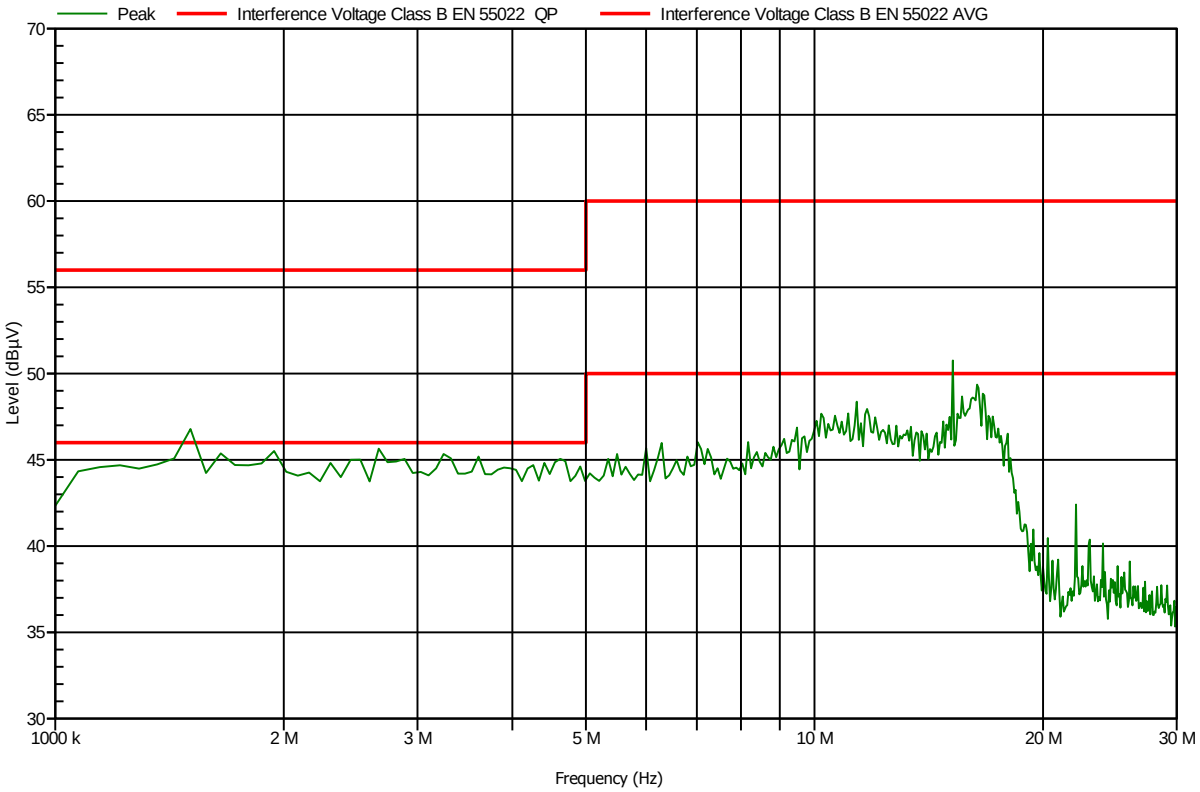
Nr	Frequency (MHz)	PK MaxHold (dBµV)	AVG Value (dBµV)	QP Value (dBµV)	AVG Limit (dBµV)	QP Limit (dBµV)	Result	Line
1	0.521	45.6	34.6	43.2	46	56	Pass	Line 1
2	0.598	46.2	34.9	43.9	46	56	Pass	Line 1
3	0.659	45.6	32.3	43	46	56	Pass	Line 1
4	0.749	44.9	30.1	42.2	46	56	Pass	Line 1
5	0.817	45.2	32	42.6	46	56	Pass	Line 1
6	0.893	45.4	33	42.9	46	56	Pass	Line 1

Test Results Plot No 4

CE EN 55022 CLASS B: 1-30 MHz PHASE

Test & EUT General Information		Receiver Setting	
EUT Name:	WipAir8000 5X	Spect Analyzer	Hewlett Packard 7405A DC Coupling
S/N:	041A04000100	Ref. Level:	80 dBµV
Date of Test:	15.04.2015	RBW:	9 kHz
Test Engineer:	Ilya Arbitman	VBW:	1000 kHz
Antenna:		Sweep Time:	Auto [805.57 ms]
Polarization:		Pre Amplifier	Attenuator 20db

TEST REMARKS: Wednesday, April 15, 2015 7:10:15 PM



MAXIMUM RESULT DEVIATION:

Detect all peaks above 6 dB below the limit line with a maximum of 6 peaks.

Nr	Frequency (MHz)	PK MaxHold (dBµV)	AVG Value (dBµV)	QP Value (dBµV)	AVG Limit (dBµV)	QP Limit (dBµV)	Result	Line
1	1.494	45.3	31.4	42	46	56	Pass	Line 1
2	1.974	45.6	29.7	43	46	56	Pass	Line 1
3	2.642	45.5	26.7	42.3	46	56	Pass	Line 1
4	3.274	45.3	28.4	42.1	46	56	Pass	Line 1
5	15.224	49.6	39.3	47.4	50	60	Pass	Line 1
6	16.427	48.9	33.7	44.4	50	60	Pass	Line 1