FCC Test Report

Equipment	:	AC1350 High Power Wireless Dual Band Router
Brand Name	:	TP-Link
Model No.	:	Archer C58HP
FCC ID	:	TE7C58HP
Standard	:	47 CFR FCC Part 15.407
Operating Band	:	5150 MHz – 5250 MHz 5725 MHz – 5850 MHz
Applicant	:	TP-Link Technologies Co., Ltd. Building 24 (floors 1,3,4,5) and 28 (floors1-4) Central Science and Technology Park,Shennan Rd, Nanshan, Shenzhen,China
Manufacturer	:	TP-Link Technologies Co., Ltd. Building 24 (floors 1,3,4,5) and 28 (floors1-4) Central Science and Technology Park,Shennan Rd, Nanshan, Shenzhen,China
Function	:	☐ Outdoor; ☒ Indoor; ☐ Fixed P2P ☐ Client

The product sample received on Aug. 22, 2016 and completely tested on Jan. 05, 2016. We, SPORTON, would like to declare that the tested sample has been evaluated in accordance with the procedures given in ANSI C63.10-2013 and shown compliance with the applicable technical standards.

The test results in this report apply exclusively to the tested model / sample. Without written approval of SPORTON INTERNATIONAL INC., the test report shall not be reproduced except in full.

Sam Chen
SPORTON INTERNATIONAL INC.

Testing Laboratory
1190

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Summary of Test Result

Conformance Test Specifications			
Report Clause	**Ref. Std. Clause**	**Description**	**Result**
1.1.2	15.203	Antenna Requirement	Complied
3.1	15.207	AC Power-line Conducted Emissions	Complied
3.2	15.407(a)	Emission Bandwidth	Complied
3.3	15.407(a)	Maximum Conducted Output Power	Complied
3.4	15.407(a)	Peak Power Spectral Density	Complied
3.5	15.407(b)	Unwanted Emissions	Complied
3.6	15.407(g)	Frequency Stability	Complied

Revision History

Report No.	Version	Description	Issued Date
FR681501AB	Rev. 01	Initial issue of report.	Nov. 09, 2016
FR681501AB	Rev. 02	Adding the band edge emissions test of 802.11a/ac (VHT20) 5220 MHz	Jan. 06, 2017

1 General Description

1.1 Information

1.1.1 RF General Information

Frequency Range (MHz)	IEEE Std. 802.11	Ch. Frequency (MHz)	Channel Number
5150-5250	a, n (HT20), ac (VHT20)	5180-5240	36-48 [4]
5725-5850		5745-5825	149-165 [5]
5150-5250	n (HT40), ac (VHT40)	5190-5230	38-46 [2]
5725-5850		5755-5795	151-159 [2]
5150-5250	ac (VHT80)	5210	42 [1]
5725-5850		5775	155 [1]

Band	Mode	BWch (MHz)	Nant
5.2G	11a	20	2
5.8G	11a	20	2
5.2G	HT20	20	2
5.8G	HT20	20	2
5.2G	VHT20	20	2
5.8G	VHT20	20	2
5.2G	HT40	40	2
5.8G	HT40	40	2
5.2G	VHT40	40	2
5.8G	VHT40	40	2
5.2G	VHT80	80	2
5.8G	VHT80	80	2

Note:
- 5.2G/5.2G-I(IC) is the 5.2GHz Band (5.15-5.25GHz).
- 5.8G/5.8G-I(IC) is the 5.8GHz Band (5.725-5.850GHz).
- 5.3G-T(Taiwan) is the 5.3GHz TW Band (5.25-5.35GHz).
- 11a, HT20 and HT40 use a combination of OFDM-BPSK, QPSK, 16QAM, 64QAM modulation.
- VHT20, VHT40 and VHT80 use a combination of OFDM-BPSK, QPSK, 16QAM, 64QAM, 256QAM modulation.
- BWch is the nominal channel bandwidth.
- Nss-Min is the minimum number of spatial streams.
- Nant is the number of outputs. e.g., 2(2,3) means have 2 outputs for port 2 and port 3. 2 means have 2 outputs for port 1 and port 2.

1.1.2 Antenna Information

Ant.	Brand	Product Number	Type	Connector	Antenna Gain (dBi)		
					2.4GHz	5GHz Band 1	5GHz Band 4
1	TP-LINK	3101500905	Dipole	RP-SMA-F	6.45	4.54	3.34
2	TP-LINK	3101500905	Dipole	RP-SMA-F	6.45	4.54	3.34
3	TP-LINK	3101500905	Dipole	RP-SMA-F	6.45	-	-

Ant.	Loss of Cable (dB)			True Gain (dBi)		
	2.4GHz	5GHz Band 1	5GHz Band 4	2.4GHz	5GHz Band 1	5GHz Band 4
1	1.20	1.50	1.50	5.25	3.04	1.84
2	0.80	1.80	1.80	5.65	2.74	1.54
3	1.00	-	-	5.45	-	-

Note: The EUT has three antennas.

For 2.4GHz WLAN function (3TX/3RX):

Ant. 1, Ant. 2 and Ant. 3 could transmit/receive simultaneously.

For 5GHz WLAN function (2TX/2RX):

Ant. 1 and Ant. 2 could transmit/receive simultaneously.

1.1.3 Mode Test Duty Cycle

Mode	DC	T(s)	VBW(Hz) ≥ 1/T
11a	0.973	2.068m	1k
VHT20	0.988	n/a (DC>=0.98)	n/a (DC>=0.98)
VHT40	0.975	2.44m	1k
VHT80	0.953	1.153m	1k

1.1.4 EUT Operational Condition

EUT Power Type	From power adapter			
Beamforming Function	☐	With beamforming	☒	Without beamforming

1.2 Testing Applied Standards

According to the specifications of the manufacturer, the EUT must comply with the requirements of the following standards:

- 47 CFR FCC Part 15
- ANSI C63.10-2013
- FCC KDB 789033 D02 v01r03
- FCC KDB 644545 D03 v01
- FCC KDB 662911 D01 v02r01

1.3 Testing Location Information

Testing Location							
☐	HWA YA	ADD	:	No. 52, Hwa Ya 1st Rd., Kwei-Shan Hsiang, Tao Yuan Hsien, Taiwan, R.O.C.			
		TEL	:	886-3-327-3456	FAX	:	886-3-318-0055
☒	JHUBEI	ADD	:	No.8, Lane 724, Bo-ai St., Jhubei City, HsinChu County 302, Taiwan, R.O.C.			
		TEL	:	886-3-656-9065	FAX	:	886-3-656-9085

Test Condition	Test Site No.	Test Engineer	Test Environment	Test Date
RF Conducted	TH01-CB	Serway Li	24°C / 50%	Oct. 26, 2016
Radiated	03CH01-CB	Jay Luo	22°C / 54%	Sep. 12, 2016~Jan. 05, 2017
AC Conduction	CO01-CB	Hank Yang	22°C / 59%	Sep. 06, 2016

Test site Designation No. TW0006 with FCC
Test site registered number IC 4086D with Industry Canada.

1.4 Measurement Uncertainty

ISO/IEC 17025 requires that an estimate of the measurement uncertainties associated with the emissions test results be included in the report. The measurement uncertainties given below are based on a 95% confidence level (based on a coverage factor (k=2)

Test Items	Uncertainty	Remark
Conducted Emission (150kHz ~ 30MHz)	3.2 dB	Confidence levels of 95%
Radiated Emission (30MHz ~ 1,000MHz)	3.6 dB	Confidence levels of 95%
Radiated Emission (1GHz ~ 18GHz)	3.7 dB	Confidence levels of 95%
Radiated Emission (18GHz ~ 40GHz)	3.5 dB	Confidence levels of 95%
Conducted Emission	1.7 dB	Confidence levels of 95%

2 Test Configuration of EUT

2.1 Test Channel Mode

Band	Mode	BWch (MHz)	Nss-Min	Nant	Ch. (MHz)	Range	Power Setting
5.2G	11a	20	1	2	5180	L	20.5
5.2G	11a	20	1	2	5200	M	26
5.2G	11a	20	1	2	5220	M	27
5.2G	11a	20	1	2	5240	H	26
5.2G	VHT20	20	1,(M0)	2	5180	L	21.5
5.2G	VHT20	20	1,(M0)	2	5200	M	26
5.2G	VHT20	20	1,(M0)	2	5220	M	27
5.2G	VHT20	20	1,(M0)	2	5240	H	26.5
5.2G	VHT40	40	1,(M0)	2	5190	L	17.5
5.2G	VHT40	40	1,(M0)	2	5230	H	23.5
5.2G	VHT80	80	1,(M0)	2	5210	S	16.5
5.8G	11a	20	1	2	5745	L	23
5.8G	11a	20	1	2	5785	M	24
5.8G	11a	20	1	2	5825	H	27
5.8G	VHT20	20	1,(M0)	2	5745	L	23
5.8G	VHT20	20	1,(M0)	2	5785	M	24
5.8G	VHT20	20	1,(M0)	2	5825	H	27
5.8G	VHT40	40	1,(M0)	2	5755	L	27
5.8G	VHT40	40	1,(M0)	2	5795	H	27
5.8G	VHT80	80	1,(M0)	2	5775	S	21.5

Note:
- Test range channel consist of L (Low Ch.), M (Middle Ch.), H (High Ch.), S (Single Ch.) and C (Straddle Band Ch.).
- VHT20/VHT40 covers HT20/HT40, due to same modulation. The power setting for 802.11n HT20 and HT40 are the same or lower than 802.11ac VHT20 and VHT40.

2.2 The Worst Case Measurement Configuration

The Worst Case Mode for Following Conformance Tests	
Tests Item	AC power-line conducted emissions
Condition	AC power-line conducted measurement for line and neutral
Operating Mode	Normal Link

The Worst Case Mode for Following Conformance Tests	
Tests Item	Emission Bandwidth Maximum Conducted Output Power Peak Power Spectral Density Frequency Stability
Test Condition	Conducted measurement at transmit chains

The Worst Case Mode for Following Conformance Tests	
Tests Item	Unwanted Emissions
Test Condition	Radiated measurement If EUT consist of multiple antenna assembly (multiple antenna are used in EUT regardless of spatial multiplexing MIMO configuration), the radiated test should be performed with highest antenna gain of each antenna type.
Operating Mode < 1GHz	Normal Link
1	EUT Y axis
2	EUT Z axis
For operating mode 2 is the worst case and it was record in this test report.	
Operating Mode > 1GHz	CTX
1	EUT Y axis
2	EUT Z axis
Mode 1 has been evaluated to be the worst case after evaluating. Consequently, measurement will follow this same test mode.	

The Worst Case Mode for Following Conformance Tests	
Tests Item	Simultaneous Transmission Analysis
Test Condition	Radiated measurement
Operating Mode	Normal Link
1	EUT Y axis-WLAN 2.4GHz + WLAN 5GHz
2	EUT Z axis-WLAN 2.4GHz + WLAN 5GHz
For operating mode 2 is the worst case and it was record in this test report.	
Refer to Sporton Test Report No.: FA681501 for Co-location RF Exposure Evaluation and Appendix G for Radiated Emission Co-location.	

2.3 EUT Operation during Test

For CTX Mode:

The EUT was programmed to be in continuously transmitting mode.

For Normal Link:

During the test, the EUT operation to normal function.

2.4 Accessories

Accessories				
No.	**Equipment Name**	**Brand Name**	**Model No.**	**Rating**
1	Adapter	TP-LINK	T120150-2B1	Input: 100-240V~50/60Hz 0.6A Output: 12V, 1.5A
No.	**Description**			
2	Antenna mount*3			

2.5 Support Equipment

For Test Site No: CO01-CB

Support Equipment				
No.	**Equipment**	**Brand Name**	**Model Name**	**FCC ID**
1	NB*4	DELL	E6430	DoC
2	AP Router	Planex	GW-AP54SGX	KA220030603014-1

For Test Site No: 03CH01-CB (below 1GHz)

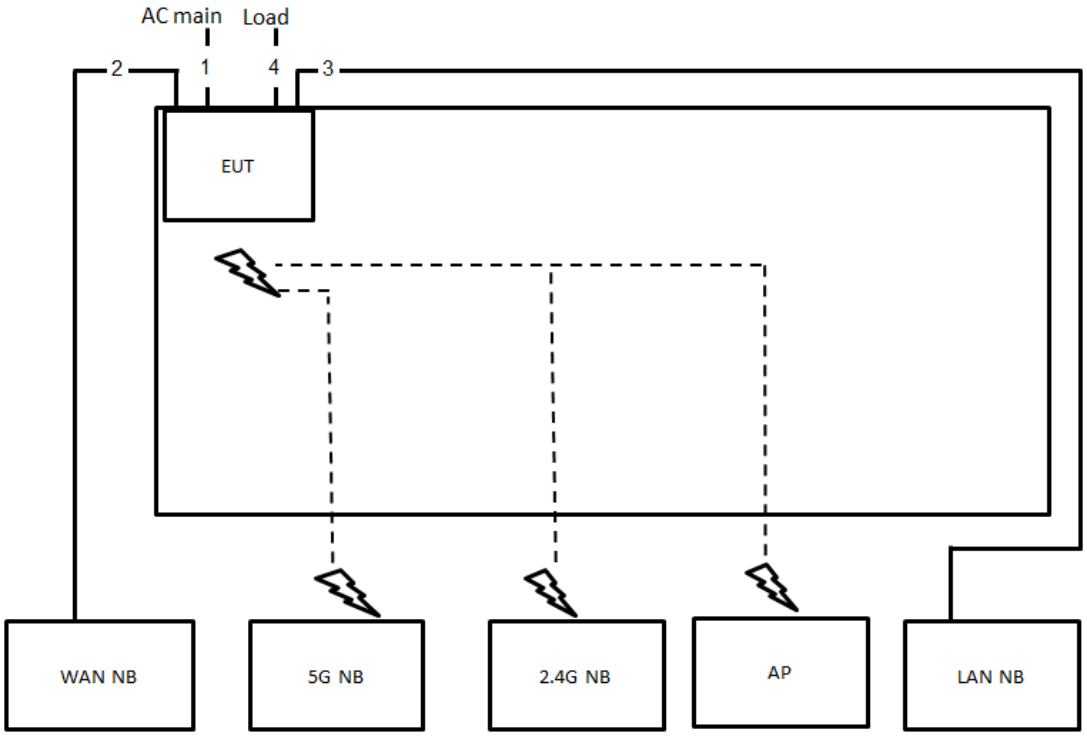
Support Equipment				
No.	**Equipment**	**Brand Name**	**Model Name**	**FCC ID**
1	NB*2	DELL	E4300	DoC
2	NB*2	Apple	Mac Book	DoC
3	Wireless ac AP	Netgear	R6300V2	PY313200227

For Test Site No: 03CH01-CB (above 1GHz) and TH01-CB

Support Equipment				
No.	**Equipment**	**Brand Name**	**Model Name**	**FCC ID**
1	NB	DELL	E4300	DoC

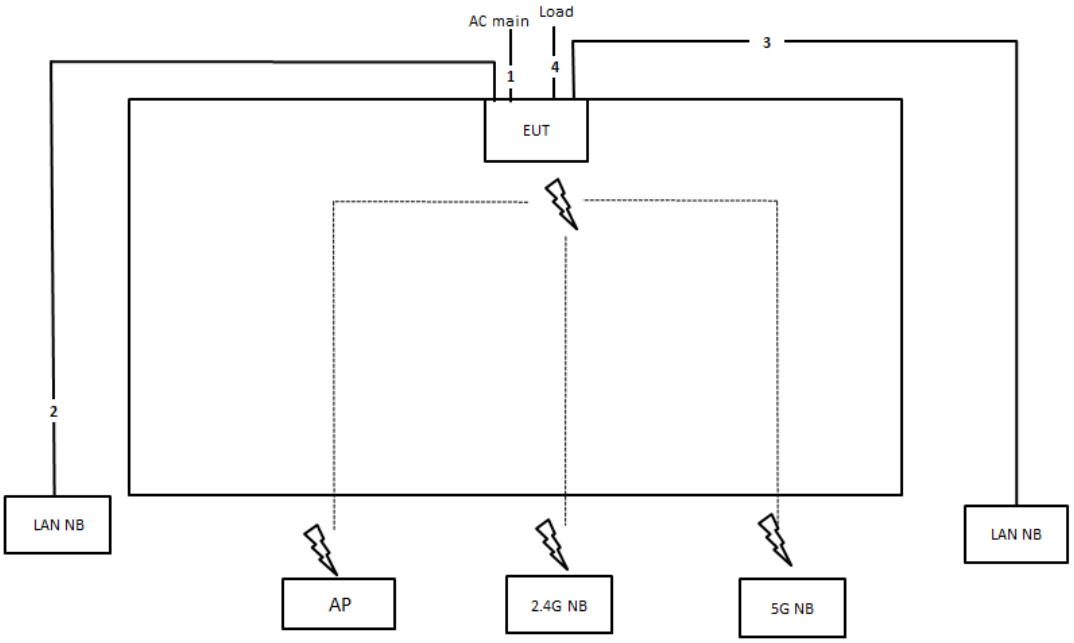
2.6 Test Setup Diagram

Test Setup Diagram – AC Line Conducted Emission Test



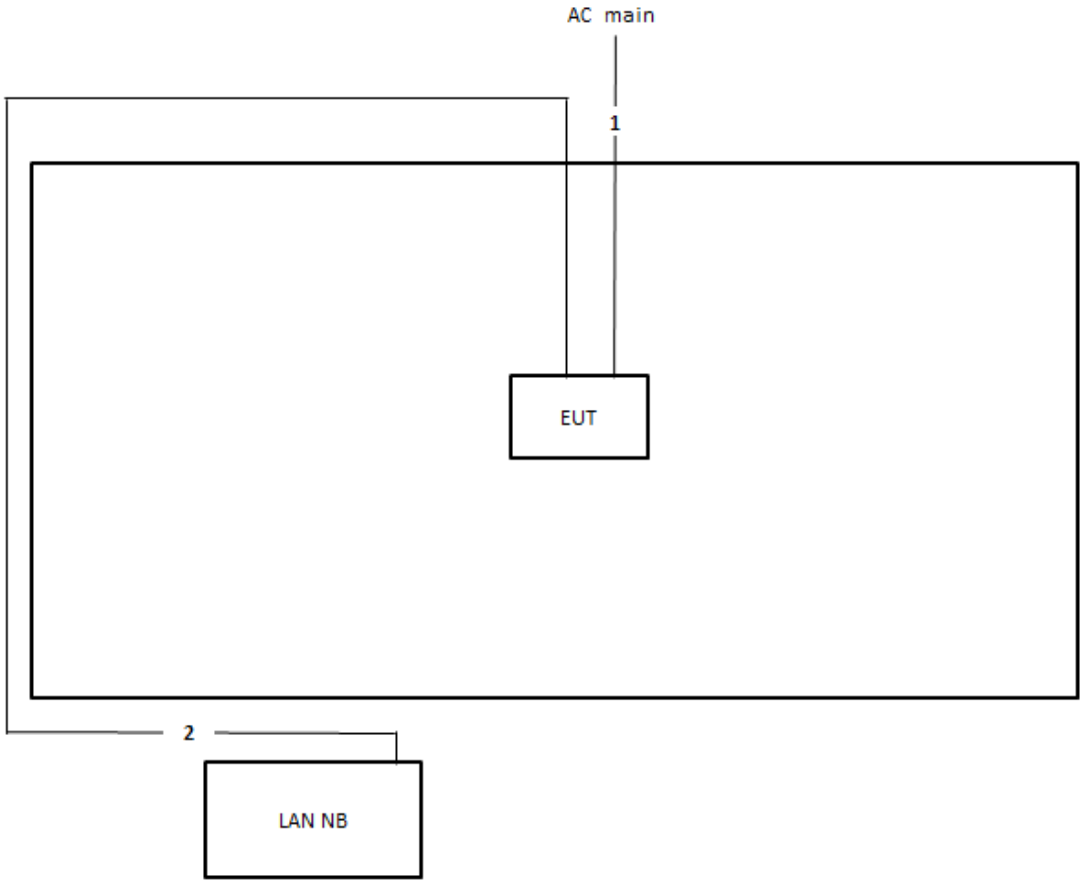
Item	Connection	Shielded	Length
1	Power cable	No	1.5m
2	RJ-45 cable	No	10m
3	RJ-45 cable	No	10m
4	RJ-45 cable*3	No	1.5m

Test Setup Diagram - Radiated Test < 1GHz



Item	Connection	Shielded	Length
1	Power cable	No	1.5m
2	RJ-45 cable	No	10m
3	RJ-45 cable	No	10m
4	RJ-45 cable*3	No	1.5m

Test Setup Diagram - Radiated Test > 1GHz



Item	Connection	Shielded	Length
1	Power cable	No	1.5m
2	RJ-45 cable	No	10m

3 Transmitter Test Result

3.1 AC Power-line Conducted Emissions

3.1.1 AC Power-line Conducted Emissions Limit

AC Power-line Conducted Emissions Limit		
Frequency Emission (MHz)	**Quasi-Peak**	**Average**
0.15-0.5	66 - 56 *	56 - 46 *
0.5-5	56	46
5-30	60	50
Note 1: * Decreases with the logarithm of the frequency.		

3.1.2 Measuring Instruments

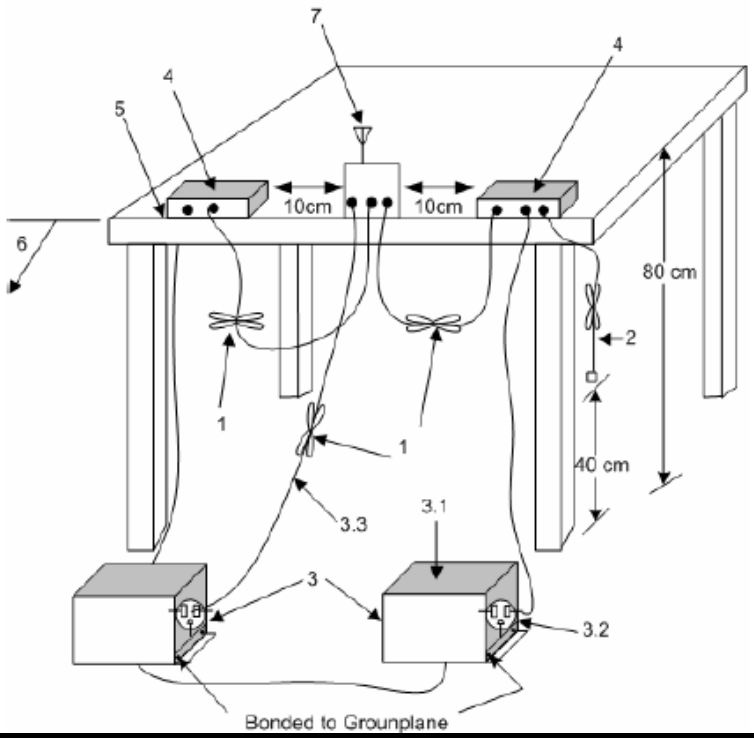
Refer a test equipment and calibration data table in this test report.

3.1.3 Test Procedures

Test Method
☒ Refer as ANSI C63.10-2013, clause 6.2 for AC power-line conducted emissions.

3.1.4 Test Setup

AC Power-line Conducted Emissions



3.1.5 Test Result of AC Power-line Conducted Emissions

Refer as Appendix A

3.2 Emission Bandwidth

3.2.1 Emission Bandwidth Limit

Emission Bandwidth Limit	
UNII Devices	
☒	For the 5.15-5.25 GHz band, N/A
☐	For the 5.25-5.35 GHz band, the maximum conducted output power shall not exceed the lesser of 250 mW or 11 dBm + 10 log B, where B is the 26 dB emission bandwidth in MHz.
☐	For the 5.47-5.725 GHz band, the maximum conducted output power shall not exceed the lesser of 250 mW or 11 dBm + 10 log B, where B is the 26 dB emission bandwidth in MHz.
☒	For the 5.725-5.85 GHz band, 6 dB emission bandwidth ≥ 500kHz.
LE-LAN Devices	
☐	For the band 5.15-5.25 GHz, the maximum e.i.r.p. shall not exceed 200 mW or 10 + 10 log B, dBm, whichever power is less. B is the 99% emission bandwidth in MHz.
☐	For the 5.25-5.35 GHz band, the maximum e.i.r.p. shall not exceed 1.0 W or 17 + 10 log B, dBm, whichever power is less. B is the 99% emission bandwidth in MHz
☐	For the 5.47-5.6 GHz band and 5.65-5.725 GHz band, the maximum e.i.r.p. shall not exceed 1.0 W or 17 + 10 log B, dBm, whichever power is less. B is the 99% emission bandwidth in MHz
☐	For the 5.725-5.85 GHz band, 6 dB emission bandwidth ≥ 500kHz.

3.2.2 Measuring Instruments

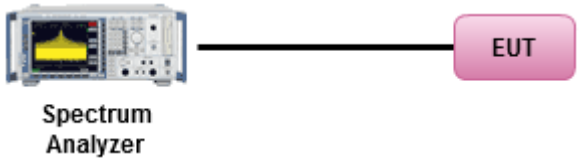
Refer a test equipment and calibration data table in this test report.

3.2.3 Test Procedures

Test Method		
▪	For the emission bandwidth shall be measured using one of the options below:	
	☒	Refer as FCC KDB 789033, clause C for EBW and clause D for OBW measurement.
	☐	Refer as ANSI C63.10, clause 6.9.1 for occupied bandwidth testing.
	☐	Refer as IC RSS-Gen, clause 4.6 for bandwidth testing.

3.2.4 Test Setup

Emission Bandwidth



3.2.5 Test Result of Emission Bandwidth

Refer as Appendix B

3.3 Maximum Conducted Output Power

3.3.1 Maximum Conducted Output Power Limit

Maximum Conducted Output Power Limit	
UNII Devices	
☒	For the 5.15-5.25 GHz band:
	▪ Outdoor AP: the maximum conducted output power (P_{Out}) shall not exceed the lesser of 1 W. If G_{TX} > 6 dBi, then P_{Out} = 30 – (G_{TX} – 6). e.i.r.p. at any elevation angle above 30 degrees ≤ 125mW [21dBm]
	▪ Indoor AP: the maximum conducted output power (P_{Out}) shall not exceed the lesser of 1 W. If G_{TX} > 6 dBi, then P_{Out} = 30 – (G_{TX} – 6)
	▪ Point-to-point AP: the maximum conducted output power (P_{Out}) shall not exceed the lesser of 1 W If G_{TX} > 23 dBi, then P_{Out} = 30 – (G_{TX} – 23).
	▪ Mobile or Portable Client: the maximum conducted output power (P_{Out}) shall not exceed the lesser of 250 mW. If G_{TX} > 6 dBi, then P_{Out} = 24 – (G_{TX} – 6).
☐	For the 5.25-5.35 GHz band, the maximum conducted output power (P_{Out}) shall not exceed the lesser of 250 mW or 11 dBm + 10 log B, where B is the 26 dB emission bandwidth in MHz. If G_{TX} > 6 dBi, then P_{Out} = 24 – (G_{TX} – 6).
☐	For the 5.47-5.725 GHz band, the maximum conducted output power (P_{Out}) shall not exceed the lesser of 250 mW or 11 dBm + 10 log B, where B is the 26 dB emission bandwidth in MHz. If G_{TX} > 6 dBi, then P_{Out} = 24 – (G_{TX} – 6).
☒	For the 5.725-5.85 GHz band:
	▪ Point-to-multipoint systems (P2M): the maximum conducted output power (P_{Out}) shall not exceed the lesser of 1 W. If G_{TX} > 6 dBi, then P_{Out} = 30 – (G_{TX} – 6).
	▪ Point-to-point systems (P2P): the maximum conducted output power (P_{Out}) shall not exceed the lesser of 1 W.
LE-LAN Devices	
☐	For the 5.15-5.25 GHz band, the maximum e.i.r.p. shall not exceed 200 mW or 10 + 10 log B, dBm, whichever power is less. B is the 99% emission bandwidth in MHz.
☐	For the 5.25-5.35 GHz band, the maximum e.i.r.p. shall not exceed 1.0 W or 17 + 10 log B, dBm, whichever power is less. B is the 99% emission bandwidth in MHz
☐	For the 5.47-5.6 GHz band and 5.65-5.725 GHz band, the maximum e.i.r.p. shall not exceed 1.0 W or 17 + 10 log B, dBm, whichever power is less. B is the 99% emission bandwidth in MHz
☐	For the 5.725-5.85 GHz band:
	▪ Point-to-multipoint systems (P2M): the maximum conducted output power (P_{Out}) shall not exceed the lesser of 1 W. If G_{TX} > 6 dBi, then P_{Out} = 30 – (G_{TX} – 6).
	▪ Point-to-point systems (P2P): the maximum conducted output power (P_{Out}) shall not exceed the lesser of 1 W.
P_{Out} = maximum conducted output power in dBm, **G_{TX}** = the maximum transmitting antenna directional gain in dBi.	

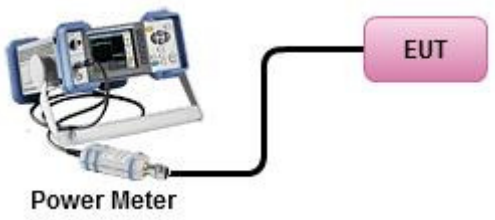
3.3.2 Measuring Instruments

Refer a test equipment and calibration data table in this test report.

3.3.3 Test Procedures

Test Method	
▪ Maximum Conducted Output Power	
	[duty cycle ≥ 98% or external video / power trigger]
	☐ Refer as FCC KDB 789033, clause E Method SA-1 (spectral trace averaging).
	☐ Refer as FCC KDB 789033, clause E Method SA-1 Alt. (RMS detection with slow sweep speed)
	duty cycle < 98% and average over on/off periods with duty factor
	☐ Refer as FCC KDB 789033, clause E Method SA-2 (spectral trace averaging).
	☐ Refer as FCC KDB 789033, clause E Method SA-2 Alt. (RMS detection with slow sweep speed)
	Wideband RF power meter and average over on/off periods with duty factor
	☒ Refer as FCC KDB 789033, clause E Method PM-G (using an RF average power meter).
▪ For conducted measurement.	
	▪ If the EUT supports multiple transmit chains using options given below: Refer as FCC KDB 662911, In-band power measurements. Using the measure-and-sum approach, measured all transmit ports individually. Sum the power (in linear power units e.g., mW) of all ports for each individual sample and save them.
	▪ If multiple transmit chains, EIRP calculation could be following as methods: $P_{total} = P_1 + P_2 + \ldots + P_n$ (calculated in linear unit [mW] and transfer to log unit [dBm]) $EIRP_{total} = P_{total} + DG$

3.3.4 Test Setup

RF Output Power (Power Meter)


3.3.5 Test Result of Maximum Conducted Output Power

Refer as Appendix C

3.4 Peak Power Spectral Density

3.4.1 Peak Power Spectral Density Limit

Peak Power Spectral Density Limit	
UNII Devices	
☒	For the 5.15-5.25 GHz band:
	▪ Outdoor AP: the peak power spectral density (PPSD) shall not exceed the lesser of 17dBm/MHz. If G_{TX} > 6 dBi, then P_{Out} = 17 – (G_{TX} – 6).
	▪ Indoor AP: the peak power spectral density (PPSD) shall not exceed the lesser of 17dBm/MHz. If G_{TX} > 6 dBi, then P_{Out} = 17 – (G_{TX} – 6).
	▪ Point-to-point AP: the peak power spectral density (PPSD) shall not exceed the lesser of 17dBm/MHz. If G_{TX} > 23 dBi, then P_{Out} = 17 – (G_{TX} – 23).
	▪ Mobile or Portable Client: the peak power spectral density (PPSD) ≤ 11 dBm/MHz. If G_{TX} > 6 dBi, then PPSD= 11 – (G_{TX} – 6)..
☐	For the 5.25-5.35 GHz band, the peak power spectral density (PPSD) ≤ 11 dBm/MHz. If G_{TX} > 6 dBi, then PPSD= 11 – (G_{TX} – 6).
☐	For the 5.47-5.725 GHz band, the peak power spectral density (PPSD) ≤ 11 dBm/MHz. If G_{TX} > 6 dBi, then PPSD= 11 – (G_{TX} – 6).
☒	For the 5.725-5.85 GHz band:
	▪ Point-to-multipoint systems (P2M): the peak power spectral density (PPSD) ≤ 30 dBm/500kHz. If G_{TX} > 6 dBi, then PPSD= 30 – (G_{TX} – 6).
	▪ Point-to-point systems (P2P): the peak power spectral density (PPSD) ≤ 30 dBm/500kHz.
LE-LAN Devices	
☐	For the 5.15-5.25 GHz band, the peak power spectral density (PPSD) ≤ 4 dBm/MHz and the e.i.r.p. peak power spectral density (PPSD) ≤ 10 dBm/MHz.
☐	For the 5.25-5.35 GHz band, the peak power spectral density (PPSD) ≤ 11 dBm/MHz and the e.i.r.p. peak power spectral density (PPSD) ≤ 17 dBm/MHz.
	▪ e.i.r.p. greater than 200 mW shall comply with the following e.i.r.p. at different elevations, where θ is the angle above the local horizontal plane (of the Earth) as shown below: -13 dBW/MHz for 0° ≤ θ < 8° ; -13 − 0.716 (θ-8) dBW/MHz for 8° ≤ θ < 40° -35.9 − 1.22 (θ-40) dBW/MHz for 40° ≤ θ ≤ 45° ; -42 dBW/MHz for θ > 45°
☐	For the 5.47-5.6 GHz band and 5.65-5.725 GHz band, the peak power spectral density (PPSD) ≤ 11 dBm/MHz and the e.i.r.p. peak power spectral density (PPSD) ≤ 17 dBm/MHz.
☐	For the 5.725-5.85 GHz band:
	▪ Point-to-multipoint systems (P2M): the peak power spectral density (PPSD) ≤ 30 dBm/500kHz. If G_{TX} > 6 dBi, then PPSD= 30 – (G_{TX} – 6).
	▪ Point-to-point systems (P2P): the peak power spectral density (PPSD) ≤ 30 dBm/500kHz.
PPSD = peak power spectral density that he same method as used to determine the conducted output power shall be used to determine the power spectral density. And power spectral density in dBm/MHz **G_{TX}** = the maximum transmitting antenna directional gain in dBi.	

3.4.2 Measuring Instruments

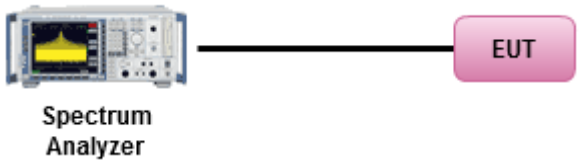
Refer a test equipment and calibration data table in this test report.

3.4.3 Test Procedures

Test Method			
▪ Peak power spectral density procedures that the same method as used to determine the conducted output power shall be used to determine the peak power spectral density and use the peak search function on the spectrum analyzer to find the peak of the spectrum. For the peak power spectral density shall be measured using below options:			
	☐ Refer as FCC KDB 789033, F)5) power spectral density can be measured using resolution bandwidths < 1 MHz provided that the results are integrated over 1 MHz bandwidth		
	[duty cycle ≥ 98% or external video / power trigger]		
	☒ Refer as FCC KDB 789033, clause E Method SA-1 (spectral trace averaging).		
	☐ Refer as FCC KDB 789033, clause E Method SA-1 Alt. (RMS detection with slow sweep speed)		
	duty cycle < 98% and average over on/off periods with duty factor		
	☒ Refer as FCC KDB 789033, clause E Method SA-2 (spectral trace averaging).		
	☐ Refer as FCC KDB 789033, clause E Method SA-2 Alt. (RMS detection with slow sweep speed)		
▪ For conducted measurement.			
	▪ If the EUT supports multiple transmit chains using options given below:		
		☒ Option 1: Measure and sum the spectra across the outputs. Refer as FCC KDB 662911, In-band power spectral density (PSD). Sample all transmit ports simultaneously using a spectrum analyzer for each transmit port. Where the trace bin-by-bin of each transmit port summing can be performed. (i.e., in the first spectral bin of output 1 is summed with that in the first spectral bin of output 2 and that from the first spectral bin of output 3, and so on up to the NTX output to obtain the value for the first frequency bin of the summed spectrum.). Add up the amplitude (power) values for the different transmit chains and use this as the new data trace.	
		☐ Option 2: Measure and sum spectral maxima across the outputs. With this technique, spectra are measured at each output of the device at the required resolution bandwidth. The maximum value (peak) of each spectrum is determined. These maximum values are then summed mathematically in linear power units across the outputs. These operations shall be performed separately over frequency spans that have different out-of-band or spurious emission limits,	
		☐ Option 3: Measure and add 10 log(N) dB, where N is the number of transmit chains. Refer as FCC KDB 662911, In-band power spectral density (PSD). Performed at each transmit chains and each transmit chains shall be compared with the limit have been reduced with 10 log(N). Or each transmit chains shall be add 10 log(N) to compared with the limit.	
	▪	If multiple transmit chains, EIRP PPSD calculation could be following as methods: $PPSD_{total} = PPSD_1 + PPSD_2 + \ldots + PPSD_n$ (calculated in linear unit [mW] and transfer to log unit [dBm]) $EIRP_{total} = PPSD_{total} + DG$	

3.4.4 Test Setup

Power Spectral Density



3.4.5 Test Result of Peak Power Spectral Density

Refer as Appendix D

3.5 Unwanted Emissions

3.5.1 Transmitter Radiated Unwanted Emissions Limit

Unwanted emissions below 1 GHz and restricted band emissions above 1GHz limit			
Frequency Range (MHz)	**Field Strength (uV/m)**	**Field Strength (dBuV/m)**	**Measure Distance (m)**
0.009~0.490	2400/F(kHz)	48.5 - 13.8	300
0.490~1.705	24000/F(kHz)	33.8 - 23	30
1.705~30.0	30	29	30
30~88	100	40	3
88~216	150	43.5	3
216~960	200	46	3
Above 960	500	54	3

Note 1: Test distance for frequencies at or above 30 MHz, measurements may be performed at a distance other than the limit distance provided they are not performed in the near field and the emissions to be measured can be detected by the measurement equipment. When performing measurements at a distance other than that specified, the results shall be extrapolated to the specified distance using an extrapolation factor of 20 dB/decade (inverse of linear distance for field-strength measurements, inverse of linear distance-squared for power-density measurements).

Note 2: Test distance for frequencies at below 30 MHz, measurements may be performed at a distance closer than the EUT limit distance; however, an attempt should be made to avoid making measurements in the near field. When performing measurements below 30 MHz at a closer distance than the limit distance, the results shall be extrapolated to the specified distance by either making measurements at a minimum of two or more distances on at least one radial to determine the proper extrapolation factor or by using the square of an inverse linear distance extrapolation factor (40 dB/decade). The test report shall specify the extrapolation method used to determine compliance of the EUT.

Un-restricted band emissions above 1GHz Limit	
Operating Band	**Limit**
5.15 - 5.25 GHz	e.i.r.p. -27 dBm [68.2 dBuV/m@3m]
5.25 - 5.35 GHz	e.i.r.p. -27 dBm [68.2 dBuV/m@3m]
5.47 - 5.725 GHz	e.i.r.p. -27 dBm [68.2 dBuV/m@3m]
5.725 - 5.85 GHz	all emissions shall be limited to a level of -27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.

Note 1: Measurements may be performed at a distance other than the limit distance provided they are not performed in the near field and the emissions to be measured can be detected by the measurement equipment. When performing measurements at a distance other than that specified, the results shall be extrapolated to the specified distance using an extrapolation factor of 20 dB/decade (inverse of linear distance for field-strength measurements, inverse of linear distance-squared for power-density measurements).

3.5.2 Measuring Instruments

Refer a test equipment and calibration data table in this test report.

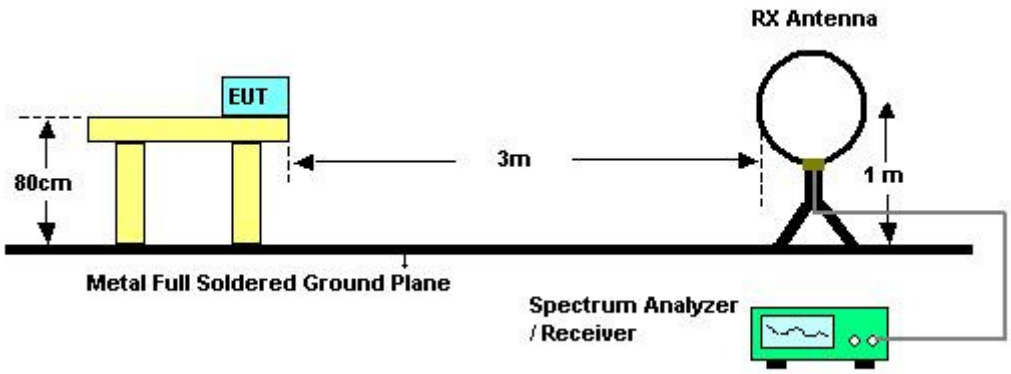
3.5.3 Test Procedures

Test Method			
▪ Measurements may be performed at a distance other than the limit distance provided they are not performed in the near field and the emissions to be measured can be detected by the measurement equipment. Measurements shall not be performed at a distance greater than 30 m for frequencies above 30 MHz, unless it can be further demonstrated that measurements at a distance of 30 m or less are impractical. When performing measurements at a distance other than that specified, the results shall be extrapolated to the specified distance using an extrapolation factor of 20 dB/decade (inverse of linear distance for field-strength measurements, inverse of linear distance-squared for power-density measurements).			
▪ The average emission levels shall be measured in [duty cycle ≥ 98 or duty factor].			
▪ For the transmitter unwanted emissions shall be measured using following options below:			
	▪ Refer as FCC KDB 789033, clause H)2) for unwanted emissions into non-restricted bands.		
	▪ Refer as FCC KDB 789033, clause H)1) for unwanted emissions into restricted bands.		
		☐ Refer as FCC KDB 789033, H)6) Method AD (Trace Averaging).	
		☒ Refer as FCC KDB 789033, H)6) Method VB (Reduced VBW).	
		☐ Refer as ANSI C63.10, clause 4.2.3.2.3 (Reduced VBW). VBW ≥ 1/T, where T is pulse time.	
		☐ Refer as ANSI C63.10, clause 4.2.3.2.4 average value of pulsed emissions.	
		☒ Refer as FCC KDB 789033, clause H)5) measurement procedure peak limit.	
		☐ Refer as ANSI C63.10, clause 4.2.3.2.2 measurement procedure peak limit.	
▪ For radiated measurement.			
	▪ Refer as ANSI C63.10, clause 6.4 for radiated emissions below 30 MHz and test distance is 3m.		
	▪ Refer as ANSI C63.10, clause 6.5 for radiated emissions 30 MHz to 1 GHz and test distance is 3m.		
	▪ Refer as ANSI C63.10, clause 6.6 for radiated emissions above 1GHz.		
▪ The any unwanted emissions level shall not exceed the fundamental emission level.			
▪ All amplitude of spurious emissions that are attenuated by more than 20 dB below the permissible value has no need to be reported.			

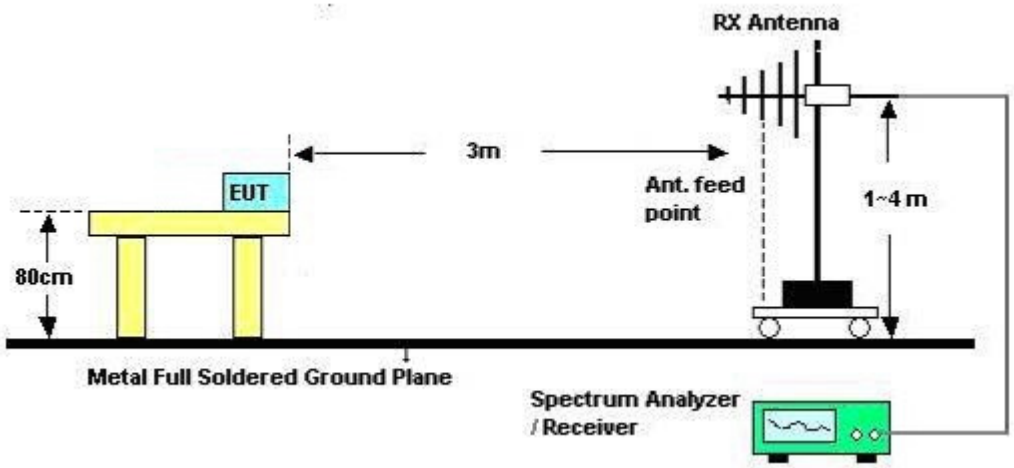
3.5.4 Test Setup

Transmitter Radiated Unwanted Emissions

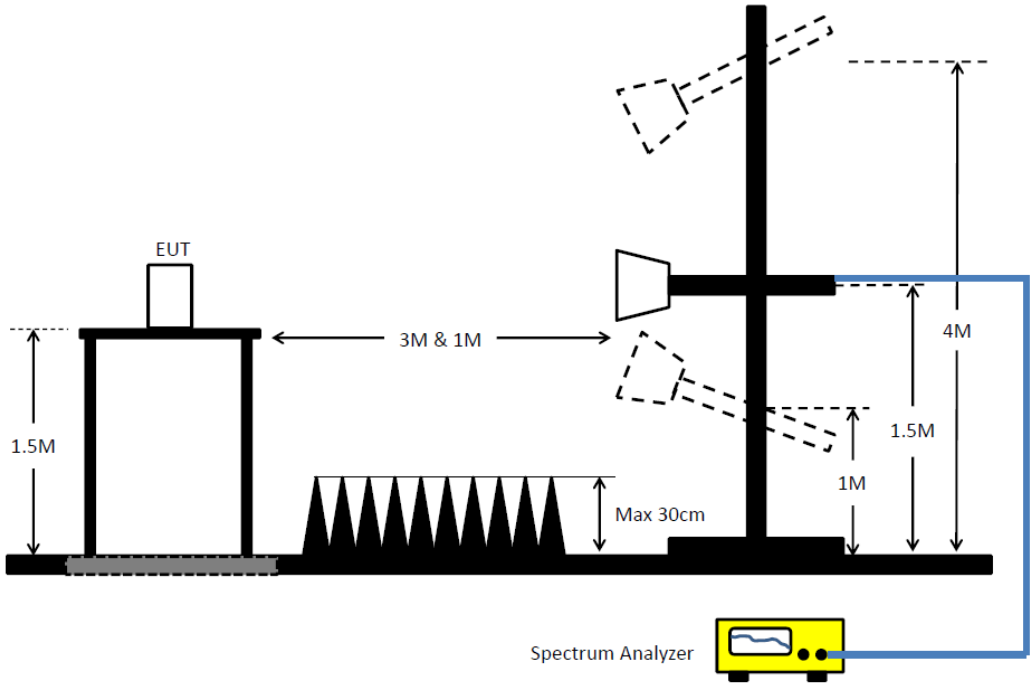
9kHz ~30MHz



30MHz~1GHz



Above 1GHz



3.5.5 Transmitter Unwanted Emissions (Below 30MHz)

All amplitude of spurious emissions that are attenuated by more than 20 dB below the permissible value has no need to be reported.

3.5.6 Test Result of Transmitter Unwanted Emissions

Refer as Appendix E

3.6 Frequency Stability

3.6.1 Frequency Stability Limit

Frequency Stability Limit
UNII Devices
▪ In-band emission is maintained within the band of operation under all conditions of normal operation as specified in the user's manual.
LE-LAN Devices
▪ N/A
IEEE Std. 802.11
▪ The transmitter center frequency tolerance shall be ± 20 ppm maximum for the 5 GHz band and ± 25 ppm maximum for the 2.4 GHz band.

3.6.2 Measuring Instruments

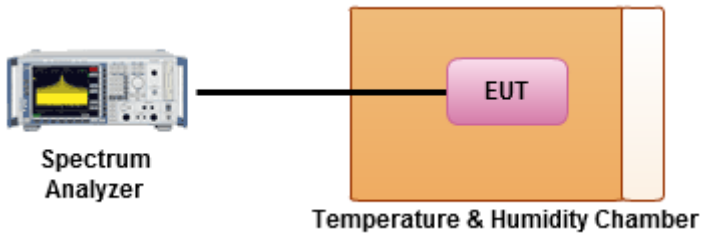
Refer a test equipment and calibration data table in this test report.

3.6.3 Test Procedures

Test Method	
▪ Refer as ANSI C63.10, clause 6.8 for frequency stability tests	
	▪ Frequency stability with respect to ambient temperature
	▪ Frequency stability when varying supply voltage
	▪ Extreme temperature is 0˚C~40˚C.

3.6.4 Test Setup

Frequency Stability



3.6.5 Test Result of Frequency Stability

Refer as Appendix F

4 Test Equipment and Calibration Data

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Remark
EMI Receiver	Agilent	N9038A	My52260123	9kHz ~ 8.45GHz	Jan. 27, 2016	Conduction (CO01-CB)
LISN	F.C.C.	FCC-LISN-50-16-2	04083	150kHz ~ 100MHz	Dec. 08, 2015	Conduction (CO01-CB)
LISN	Schwarzbeck	NSLK 8127	8127647	9kHz ~ 30MHz	Dec. 23, 2015	Conduction (CO01-CB)
COND Cable	Woken	Cable	01	150kHz ~ 30MHz	May 24, 2016	Conduction (CO01-CB)
Software	Audix	E3	6.120210n	-	N.C.R.	Conduction (CO01-CB)
BILOG ANTENNA	TESEQ	CBL6112D	37880	20MHz ~ 2GHz	Aug. 30, 2016	Radiation (03CH01-CB)
Horn Antenna	SCHWARZBECK	BBHA 9120 D	BBHA 9120 D 1370	1GHz~18GHz	Jul. 07, 2016	Radiation (03CH01-CB)
Horn Antenna	Schwarzbeck	BBHA 9170	BBHA9170252	15GHz ~ 40GHz	Jul. 25, 2016	Radiation (03CH01-CB)
Pre-Amplifier	Agilent	8447D	2944A10991	0.1MHz ~ 1.3GHz	Mar. 15, 2016	Radiation (03CH01-CB)
Pre-Amplifier	Agilent	8449B	3008A02310	1GHz ~ 26.5GHz	Jan. 18, 2016	Radiation (03CH01-CB)
Pre-Amplifier	WM	TF-130N-R1	923365	26GHz ~ 40GHz	Nov. 13, 2015	Radiation (03CH01-CB)
Pre-Amplifier	MITEQ	TTA1840-35-HG	1864479	18GHz ~ 40GHz	Jun. 28, 2016	Radiation (03CH01-CB)
Spectrum Analyzer	R&S	FSP40	100056	9kHz ~ 40GHz	Oct. 27, 2015	Radiation (03CH01-CB)
Spectrum Analyzer	R&S	FSP40	100056	9kHz ~ 40GHz	Nov. 21, 2016	Radiation (03CH01-CB)
EMI Test	R&S	ESCS	100355	9kHz ~ 2.75GHz	May 16, 2016	Radiation (03CH01-CB)
RF Cable-low	Woken	Low Cable-1	N/A	30 MHz ~ 1 GHz	Nov. 02, 2015	Radiation (03CH01-CB)
RF Cable-high	Woken	High Cable-16	N/A	1 GHz ~ 18 GHz	Nov. 02, 2015	Radiation (03CH01-CB)
RF Cable-high	Woken	High Cable-16	N/A	1 GHz ~ 18 GHz	Oct. 24, 2016	Radiation (03CH01-CB)
RF Cable-high	Woken	High Cable-17	N/A	1 GHz ~ 18 GHz	Nov. 02, 2015	Radiation (03CH01-CB)
RF Cable-high	Woken	High Cable-17	N/A	1 GHz ~ 18 GHz	Oct. 24, 2016	Radiation (03CH01-CB)
RF Cable-high	Woken	High Cable-40G-1	N/A	18GHz ~ 40 GHz	Nov. 02, 2015	Radiation (03CH01-CB)
RF Cable-high	Woken	High Cable-40G-1	N/A	18GHz ~ 40 GHz	Oct. 24, 2016	Radiation (03CH01-CB)
RF Cable-high	Woken	High Cable-40G-2	N/A	18GHz ~ 40 GHz	Nov. 02, 2015	Radiation (03CH01-CB)
RF Cable-high	Woken	High Cable-40G-2	N/A	18GHz ~ 40 GHz	Oct. 24, 2016	Radiation (03CH01-CB)

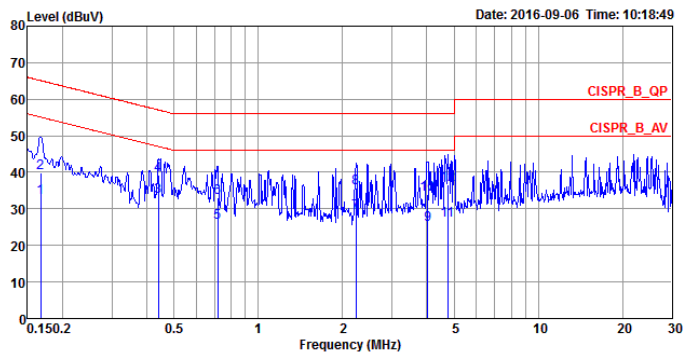
Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Remark
Test Software	Audix	E3	6.2009-I0-7	N/A	N/A	Radiation (03CH01-CB)
Loop Antenna	Teseq	HLA 6120	24155	9kHz - 30 MHz	Mar. 16, 2016*	Radiation (03CH01-CB)
Spectrum analyzer	R&S	FSV40	100979	9kHz~40GHz	Dec. 09, 2015	Conducted (TH01-CB)
Temp. and Humidity Chamber	Ten Billion	TTH-D3SP	TBN-931011	-30~100 degree	Jun. 03, 2016	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-6	1 GHz – 26.5 GHz	Nov. 02, 2015	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-7	1 GHz – 26.5 GHz	Nov. 02, 2015	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-8	1 GHz – 26.5 GHz	Nov. 02, 2015	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-9	1 GHz – 26.5 GHz	Nov. 02, 2015	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-10	1 GHz – 26.5 GHz	Nov. 02, 2015	Conducted (TH01-CB)
Power Sensor	Agilent	U2021XA	MY53410001	50MHz~18GHz	Nov. 02, 2015	Conducted (TH01-CB)

Note: Calibration Interval of instruments listed above is one year.

"*" Calibration Interval of instruments listed above is two years.

N.C.R. means Non-Calibration required.

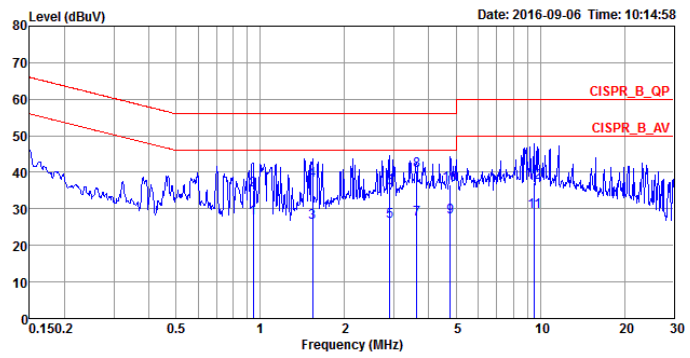
AC Power-line Conducted Emissions Result			
Operating Mode	1	**Power Phase**	Neutral
Operating Function	Normal Link		



	Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark	Pol/Phase
	MHz	dBuV	dB	dBuV	dBuV	dB	dB		
1	0.1668	33.05	-22.07	55.12	22.93	9.96	0.16	Average	NEUTRAL
2	0.1668	39.79	-25.33	65.12	29.67	9.96	0.16	QP	NEUTRAL
3	0.4397	33.29	-13.78	47.07	23.12	9.97	0.20	Average	NEUTRAL
4	0.4397	39.16	-17.91	57.07	28.99	9.97	0.20	QP	NEUTRAL
5	0.7160	26.14	-19.86	46.00	15.98	9.97	0.19	Average	NEUTRAL
6	0.7160	32.92	-23.08	56.00	22.76	9.97	0.19	QP	NEUTRAL
7	2.2367	29.04	-16.96	46.00	18.78	9.99	0.27	Average	NEUTRAL
8	2.2367	35.75	-20.25	56.00	25.49	9.99	0.27	QP	NEUTRAL
9	4.0275	25.68	-20.32	46.00	15.33	10.02	0.33	Average	NEUTRAL
10	4.0275	34.09	-21.91	56.00	23.74	10.02	0.33	QP	NEUTRAL
11	4.7464	26.74	-19.26	46.00	16.36	10.04	0.34	Average	NEUTRAL
12	4.7464	36.52	-19.48	56.00	26.14	10.04	0.34	QP	NEUTRAL

Note 1: “>20dB” means emission levels that exceed the level of 20 dB below the applicable limit.
Note 2: “N/F” means Nothing Found emissions (No emissions were detected.)

AC Power-line Conducted Emissions Result			
Operating Mode	1	**Power Phase**	Line
Operating Function	Normal Link		



	Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark	Pol/Phase
	MHz	dBuV	dB	dBuV	dBuV	dB	dB		
1	0.9431	27.50	-18.50	46.00	17.26	10.05	0.19	Average	LINE
2	0.9431	35.09	-20.91	56.00	24.85	10.05	0.19	QP	LINE
3	1.5355	26.39	-19.61	46.00	16.09	10.07	0.23	Average	LINE
4	1.5355	37.69	-18.31	56.00	27.39	10.07	0.23	QP	LINE
5	2.9050	26.42	-19.58	46.00	16.03	10.10	0.29	Average	LINE
6	2.9050	35.84	-20.16	56.00	25.45	10.10	0.29	QP	LINE
7	3.6225	27.06	-18.94	46.00	16.63	10.11	0.32	Average	LINE
8	3.6225	40.37	-15.63	56.00	29.94	10.11	0.32	QP	LINE
9	4.7716	27.75	-18.25	46.00	17.29	10.12	0.34	Average	LINE
10	4.7716	36.56	-19.44	56.00	26.10	10.12	0.34	QP	LINE
11	9.5521	29.28	-20.72	50.00	18.75	10.15	0.38	Average	LINE
12	9.5521	37.18	-22.82	60.00	26.65	10.15	0.38	QP	LINE

Note 1: “>20dB” means emission levels that exceed the level of 20 dB below the applicable limit.
Note 2: “N/F” means Nothing Found emissions (No emissions were detected.)

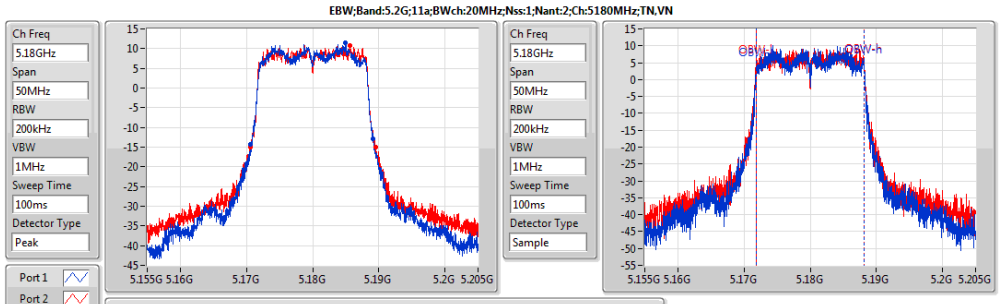
Summary

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
5.2G;11a;Nss1;Ntx2	41.4M	23.613M	23M6D1D	18.575M	16.317M
5.2G;VHT20;Nss1,(M0);Ntx2	46.1M	25.112M	25M1D1D	19.725M	17.516M
5.2G;VHT40;Nss1,(M0);Ntx2	66.85M	36.182M	36M2D1D	39.1M	35.782M
5.2G;VHT80;Nss1,(M0);Ntx2	83.3M	75.762M	75M8D1D	83.1M	75.262M
5.8G;11a;Nss1;Ntx2	16.325M	19.44M	19M4D1D	16.05M	16.417M
5.8G;VHT20;Nss1,(M0);Ntx2	17.6M	19.09M	19M1D1D	17.15M	17.641M
5.8G;VHT40;Nss1,(M0);Ntx2	35.3M	36.682M	36M7D1D	34M	36.132M
5.8G;VHT80;Nss1,(M0);Ntx2	75.9M	75.962M	76M0D1D	75.7M	75.862M

Result

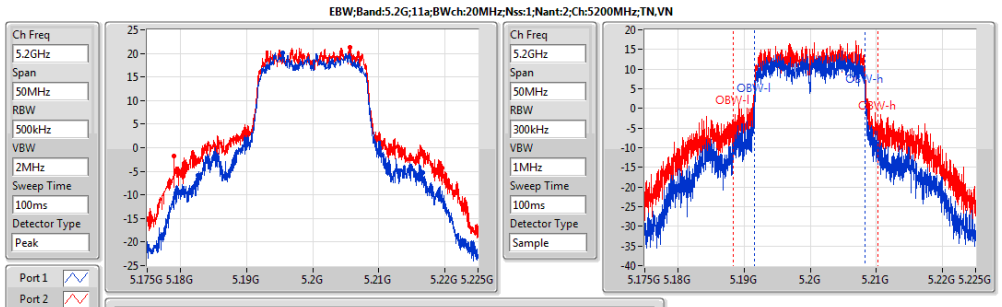
Mode	Result	Limit	P1-N dB (Hz)	P1-OBW (Hz)	P2-N dB (Hz)	P2-OBW (Hz)
5.2G;11a;Nss1;Ntx2;5180	Pass	Inf	18.575M	16.317M	18.925M	16.392M
5.2G;11a;Nss1;Ntx2;5200	Pass	Inf	33.95M	16.792M	40.575M	21.914M
5.2G;11a;Nss1;Ntx2;5240	Pass	Inf	33M	16.642M	41.4M	23.613M
5.2G;VHT20;Nss1,(M0);Ntx2;5180	Pass	Inf	19.725M	17.516M	20.275M	17.591M
5.2G;VHT20;Nss1,(M0);Ntx2;5200	Pass	Inf	35.625M	17.766M	43.175M	22.389M
5.2G;VHT20;Nss1,(M0);Ntx2;5240	Pass	Inf	31.675M	17.866M	46.1M	25.112M
5.2G;VHT40;Nss1,(M0);Ntx2;5190	Pass	Inf	39.1M	35.782M	39.4M	35.932M
5.2G;VHT40;Nss1,(M0);Ntx2;5230	Pass	Inf	39.55M	35.782M	66.85M	36.182M
5.2G;VHT80;Nss1,(M0);Ntx2;5210	Pass	Inf	83.1M	75.262M	83.3M	75.762M
5.8G;11a;Nss1;Ntx2;5745	Pass	500k	16.05M	16.417M	16.325M	16.442M
5.8G;11a;Nss1;Ntx2;5785	Pass	500k	16.275M	16.467M	16.325M	16.492M
5.8G;11a;Nss1;Ntx2;5825	Pass	500k	16.275M	19.44M	16.325M	16.542M
5.8G;VHT20;Nss1,(M0);Ntx2;5745	Pass	500k	17.575M	17.666M	17.575M	17.641M
5.8G;VHT20;Nss1,(M0);Ntx2;5785	Pass	500k	17.55M	17.741M	17.6M	17.691M
5.8G;VHT20;Nss1,(M0);Ntx2;5825	Pass	500k	17.55M	19.09M	17.15M	17.716M
5.8G;VHT40;Nss1,(M0);Ntx2;5755	Pass	500k	34M	36.582M	35.3M	36.182M
5.8G;VHT40;Nss1,(M0);Ntx2;5795	Pass	500k	35M	36.682M	35.3M	36.132M
5.8G;VHT80;Nss1,(M0);Ntx2;5775	Pass	500k	75.9M	75.962M	75.7M	75.862M

EBW;Band:5.2G;11a;BWch:20MHz;Nss:1;Nant:2;Ch:5180MHz;TN,VN



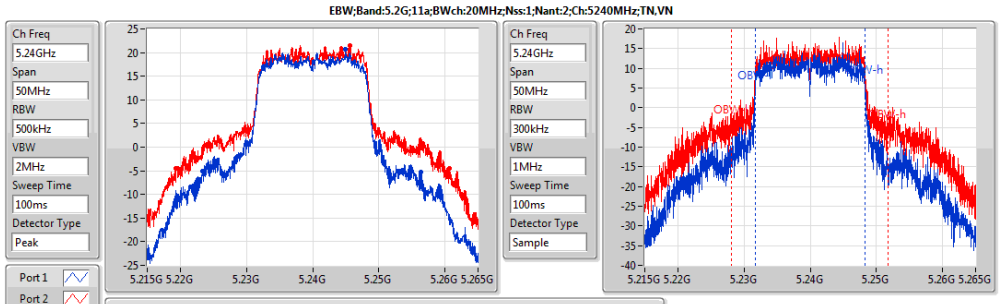
26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
18.575M	5.1706G	5.189175G	16.317M	5.171854G	5.188171G	Inf	1
18.925M	5.1706G	5.189525G	16.392M	5.171804G	5.188196G	Inf	2

EBW;Band:5.2G;11a;BWch:20MHz;Nss:1;Nant:2;Ch:5200MHz;TN,VN



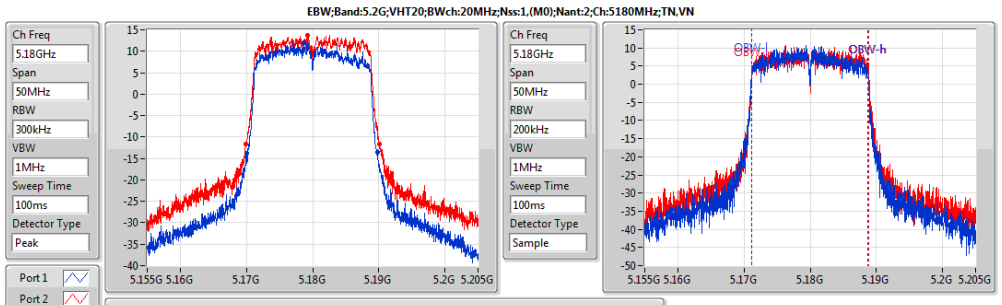
26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
33.95M	5.18265G	5.2166G	16.792M	5.191504G	5.208296G	Inf	1
40.575M	5.179025G	5.2196G	21.914M	5.188331G	5.210245G	Inf	2

EBW;Band:5.2G;11a;BWch:20MHz;Nss:1;Nant:2;Ch:5240MHz;TN,VN



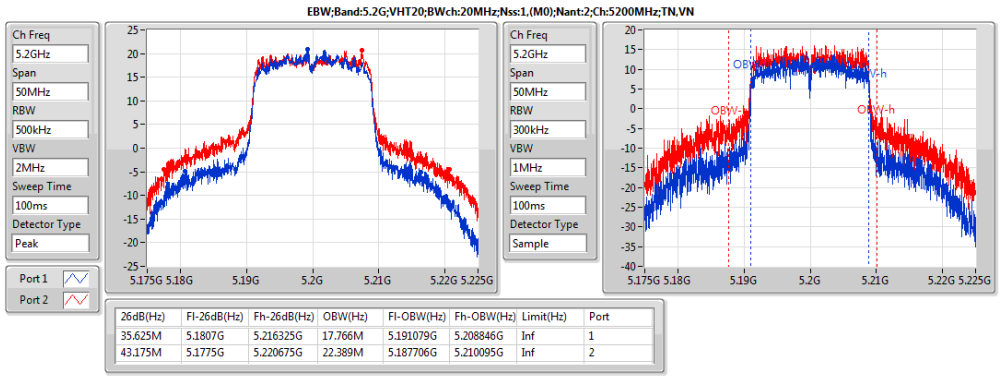
26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
33M	5.22335G	5.25635G	16.642M	5.231654G	5.248296G	Inf	1
41.4M	5.219275G	5.260675G	23.613M	5.228131G	5.251744G	Inf	2

EBW;Band:5.2G;VHT20;BWch:20MHz;Nss:1,(M0);Nant:2;Ch:5180MHz;TN,VN



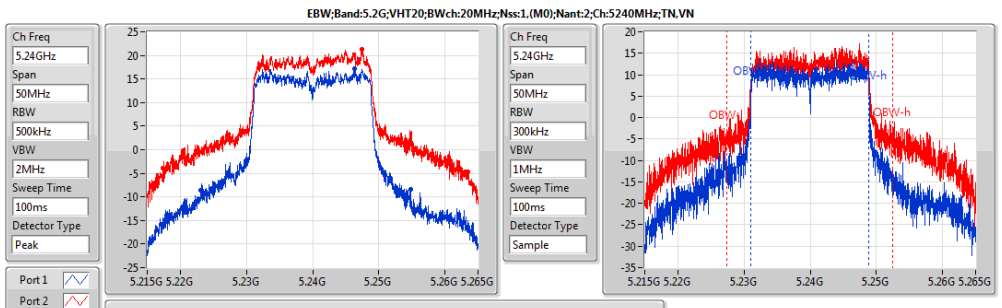
26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
19.725M	5.1701G	5.189825G	17.516M	5.171204G	5.188721G	Inf	1
20.275M	5.169875G	5.19015G	17.591M	5.171204G	5.188796G	Inf	2

EBW;Band:5.2G;VHT20;BWch:20MHz;Nss:1,(M0);Nant:2;Ch:5200MHz;TN,VN



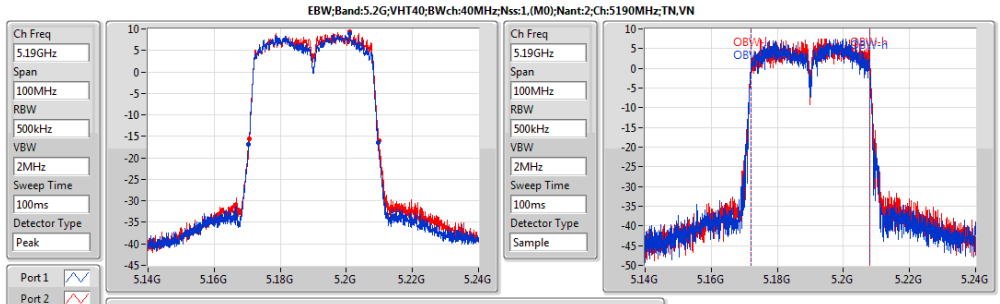
26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
35.625M	5.1807G	5.216325G	17.766M	5.191079G	5.208846G	Inf	1
43.175M	5.1775G	5.220675G	22.389M	5.187706G	5.210095G	Inf	2

EBW;Band:5.2G;VHT20;BWch:20MHz;Nss:1,(M0);Nant:2;Ch:5240MHz;TN,VN



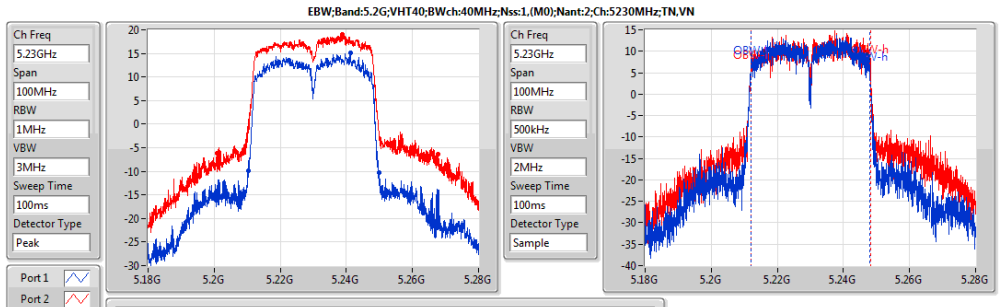
26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
31.675M	5.2231G	5.254775G	17.866M	5.231029G	5.248896G	Inf	1
46.1M	5.217325G	5.263425G	25.112M	5.227381G	5.252494G	Inf	2

EBW;Band:5.2G;VHT40;BWch:40MHz;Nss:1,(M0);Nant:2;Ch:5190MHz;TN,VN



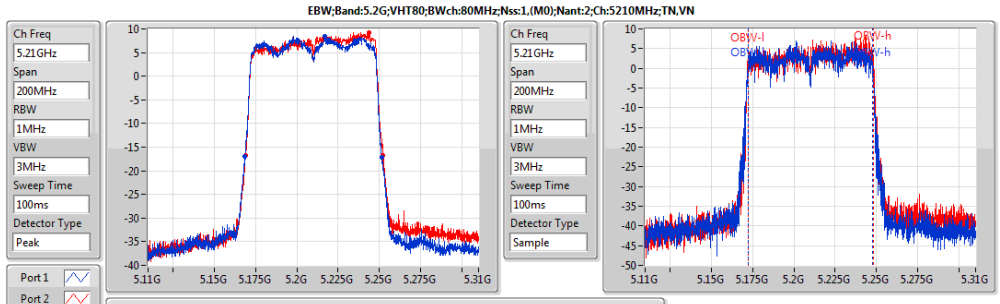
26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
39.1M	5.1705G	5.2096G	35.782M	5.172059G	5.207841G	Inf	1
39.4M	5.17055G	5.20995G	35.932M	5.172059G	5.207991G	Inf	2

EBW;Band:5.2G;VHT40;BWch:40MHz;Nss:1,(M0);Nant:2;Ch:5230MHz;TN,VN



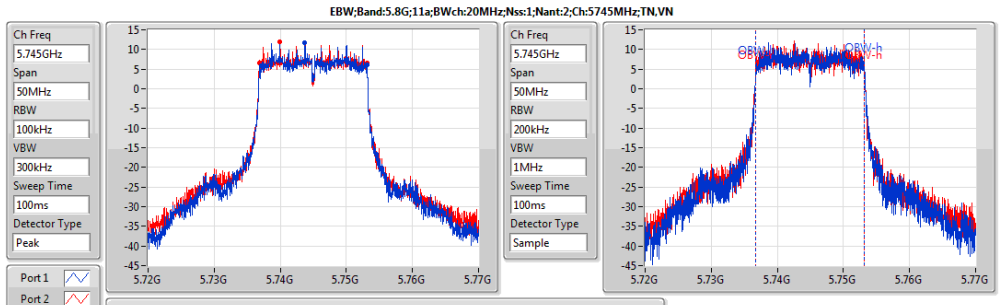
26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
39.55M	5.21025G	5.2498G	35.782M	5.212059G	5.247841G	Inf	1
66.85M	5.20095G	5.2678G	36.182M	5.212009G	5.248191G	Inf	2

EBW;Band:5.2G;VHT80;BWch:80MHz;Nss:1,(M0);Nant:2;Ch:5210MHz;TN,VN



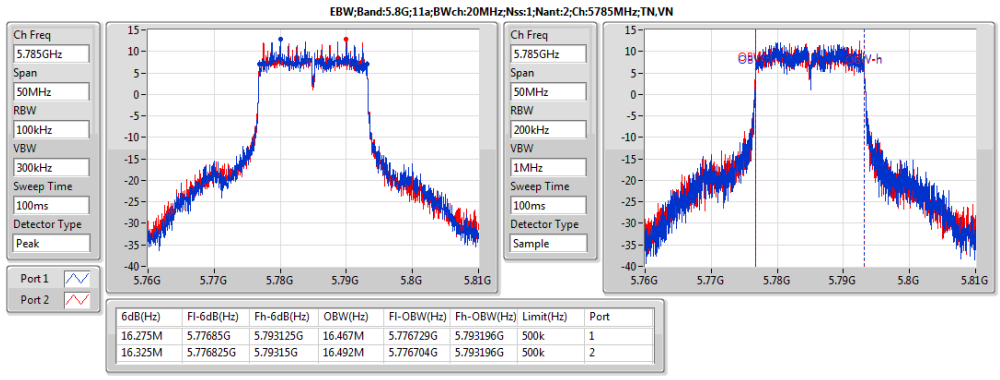
26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
83.1M	5.1685G	5.2516G	75.262M	5.172319G	5.247581G	Inf	1
83.3M	5.169G	5.2523G	75.762M	5.172219G	5.247981G	Inf	2

EBW;Band:5.8G;11a;BWch:20MHz;Nss:1;Nant:2;Ch:5745MHz;TN,VN



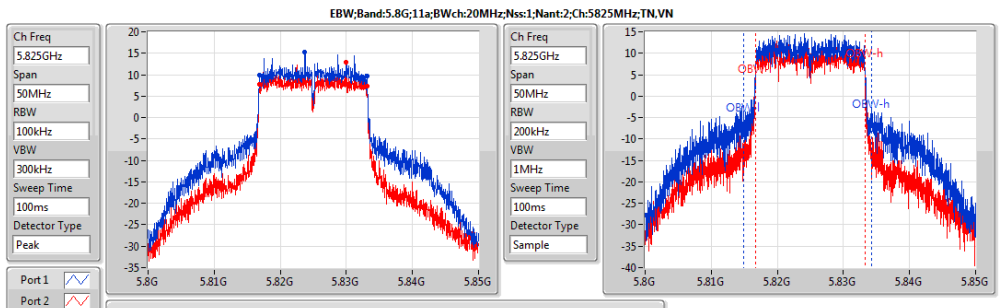
6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
16.05M	5.7371G	5.75315G	16.417M	5.736779G	5.753196G	500k	1
16.325M	5.736825G	5.75315G	16.442M	5.736754G	5.753196G	500k	2

EBW;Band:5.8G;11a;BWch:20MHz;Nss:1;Nant:2;Ch:5785MHz;TN,VN



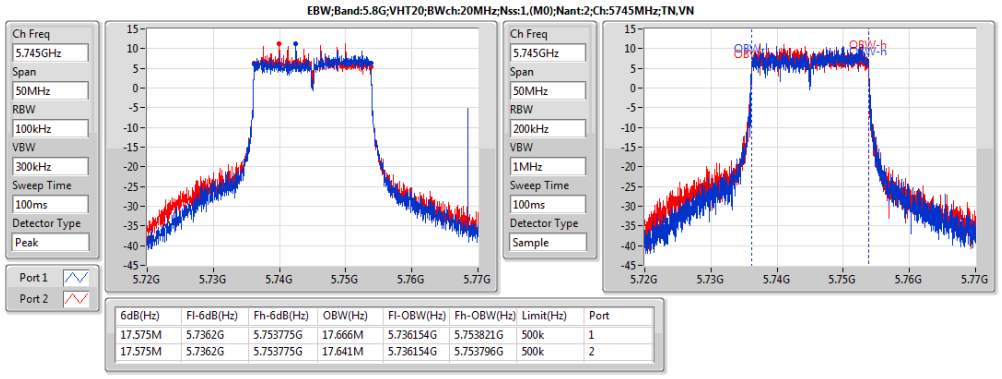
6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
16.275M	5.77685G	5.793125G	16.467M	5.776729G	5.793196G	500k	1
16.325M	5.776825G	5.79315G	16.492M	5.776704G	5.793196G	500k	2

EBW;Band:5.8G;11a;BWch:20MHz;Nss:1;Nant:2;Ch:5825MHz;TN,VN



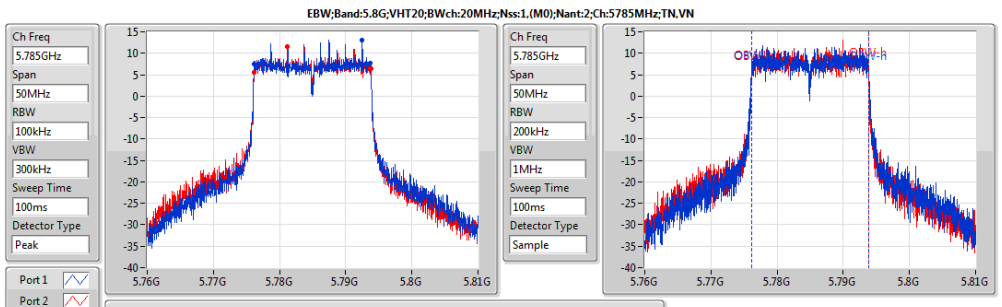
6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
16.275M	5.81685G	5.833125G	19.44M	5.814855G	5.834295G	500k	1
16.325M	5.816825G	5.83315G	16.542M	5.816679G	5.833221G	500k	2

EBW;Band:5.8G;VHT20;BWch:20MHz;Nss:1,(M0);Nant:2;Ch:5745MHz;TN,VN



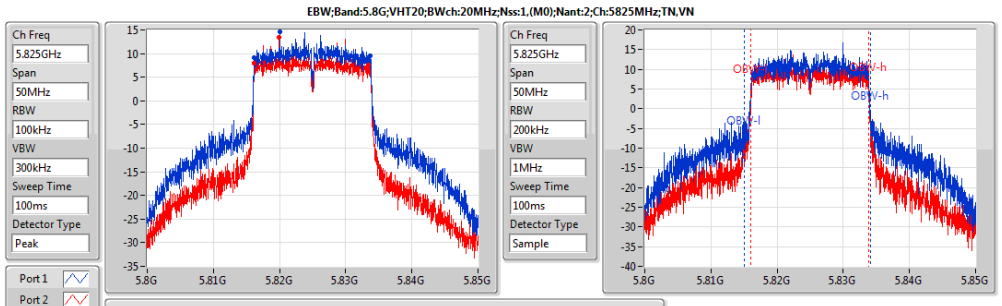
6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
17.575M	5.7362G	5.753775G	17.666M	5.736154G	5.753821G	500k	1
17.575M	5.7362G	5.753775G	17.641M	5.736154G	5.753796G	500k	2

EBW;Band:5.8G;VHT20;BWch:20MHz;Nss:1,(M0);Nant:2;Ch:5785MHz;TN,VN



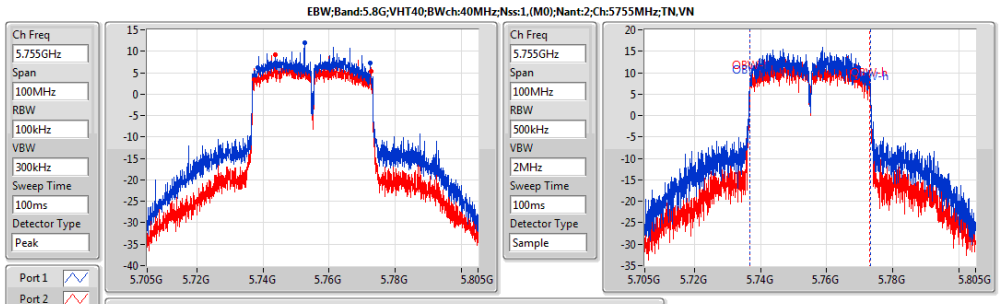
6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
17.55M	5.7762G	5.79375G	17.741M	5.776104G	5.793846G	500k	1
17.6M	5.776175G	5.793775G	17.691M	5.776129G	5.793821G	500k	2

EBW;Band:5.8G;VHT20;BWch:20MHz;Nss:1,(M0);Nant:2;Ch:5825MHz;TN,VN



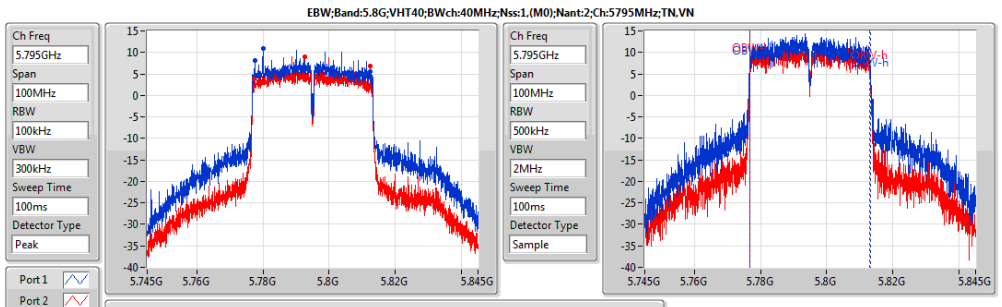
6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
17.55M	5.8162G	5.83375G	19.09M	5.81498G	5.83407G	500k	1
17.15M	5.816225G	5.833375G	17.716M	5.816079G	5.833796G	500k	2

EBW;Band:5.8G;VHT40;BWch:40MHz;Nss:1,(M0);Nant:2;Ch:5755MHz;TN,VN



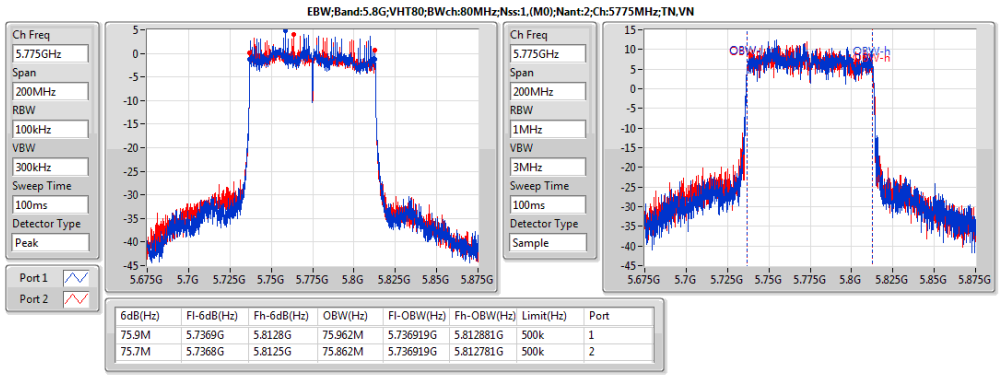
6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
34M	5.73845G	5.77245G	36.582M	5.736659G	5.773241G	500k	1
35.3M	5.73725G	5.77255G	36.182M	5.736859G	5.773041G	500k	2

EBW;Band:5.8G;VHT40;BWch:40MHz;Nss:1,(M0);Nant:2;Ch:5795MHz;TN,VN



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
35M	5.7775G	5.8125G	36.682M	5.776659G	5.813341G	500k	1
35.3M	5.7772G	5.8125G	36.132M	5.776859G	5.812991G	500k	2

EBW;Band:5.8G;VHT80;BWch:80MHz;Nss:1,(M0);Nant:2;Ch:5775MHz;TN,VN



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
75.9M	5.7369G	5.8128G	75.962M	5.736919G	5.812881G	500k	1
75.7M	5.7368G	5.8125G	75.862M	5.736919G	5.812781G	500k	2

Summary

Mode	Sum (dBm)	Sum (W)	EIRP (dBm)	EIRP (W)
5.2G;11a;Nss1;Ntx2	28.86	0.76913	31.90	1.54882
5.2G;VHT20;Nss1,(M0);Ntx2	28.91	0.77804	31.95	1.56675
5.2G;VHT40;Nss1,(M0);Ntx2	27.00	0.50119	30.04	1.00925
5.2G;VHT80;Nss1,(M0);Ntx2	20.05	0.10116	23.09	0.2037
5.8G;11a;Nss1;Ntx2	27.50	0.56234	29.34	0.85901
5.8G;VHT20;Nss1,(M0);Ntx2	28.17	0.65615	30.01	1.00231
5.8G;VHT40;Nss1,(M0);Ntx2	27.95	0.62373	29.79	0.9528
5.8G;VHT80;Nss1,(M0);Ntx2	24.18	0.26182	26.02	0.39994

Result

Mode	Result	DG (dBi)	EIRP (dBm)	EIRP Lim. (dBm)	Sum (dBm)	Sum Lim. (dBm)	P1 (dBm)	P2 (dBm)
5.2G;11a;Nss1;Ntx2;5180	Pass	3.04	27.23	36.00	24.19	30.00	21.05	21.30
5.2G;11a;Nss1;Ntx2;5200	Pass	3.04	31.81	36.00	28.77	30.00	25.53	25.98
5.2G;11a;Nss1;Ntx2;5240	Pass	3.04	31.90	36.00	28.86	30.00	25.41	26.25
5.2G;VHT20;Nss1,(M0);Ntx2;5180	Pass	3.04	28.46	36.00	25.42	30.00	22.40	22.41
5.2G;VHT20;Nss1,(M0);Ntx2;5200	Pass	3.04	31.20	36.00	28.16	30.00	25.76	24.45
5.2G;VHT20;Nss1,(M0);Ntx2;5240	Pass	3.04	31.95	36.00	28.91	30.00	25.44	26.31
5.2G;VHT40;Nss1,(M0);Ntx2;5190	Pass	3.04	24.06	36.00	21.02	30.00	17.88	18.13
5.2G;VHT40;Nss1,(M0);Ntx2;5230	Pass	3.04	30.04	36.00	27.00	30.00	24.00	23.98
5.2G;VHT80;Nss1,(M0);Ntx2;5210	Pass	3.04	23.09	36.00	20.05	30.00	16.79	17.27
5.8G;11a;Nss1;Ntx2;5745	Pass	1.84	27.82	36.00	25.98	30.00	22.88	23.05
5.8G;11a;Nss1;Ntx2;5785	Pass	1.84	28.65	36.00	26.81	30.00	23.81	23.79
5.8G;11a;Nss1;Ntx2;5825	Pass	1.84	29.34	36.00	27.50	30.00	24.88	24.05
5.8G;VHT20;Nss1,(M0);Ntx2;5745	Pass	1.84	27.67	36.00	25.83	30.00	22.65	22.98
5.8G;VHT20;Nss1,(M0);Ntx2;5785	Pass	1.84	28.54	36.00	26.70	30.00	23.62	23.75
5.8G;VHT20;Nss1,(M0);Ntx2;5825	Pass	1.84	30.01	36.00	28.17	30.00	25.99	24.13
5.8G;VHT40;Nss1,(M0);Ntx2;5755	Pass	1.84	29.79	36.00	27.95	30.00	25.66	24.08
5.8G;VHT40;Nss1,(M0);Ntx2;5795	Pass	1.84	28.73	36.00	26.89	30.00	24.52	23.14
5.8G;VHT80;Nss1,(M0);Ntx2;5775	Pass	1.84	26.02	36.00	24.18	30.00	21.25	21.08

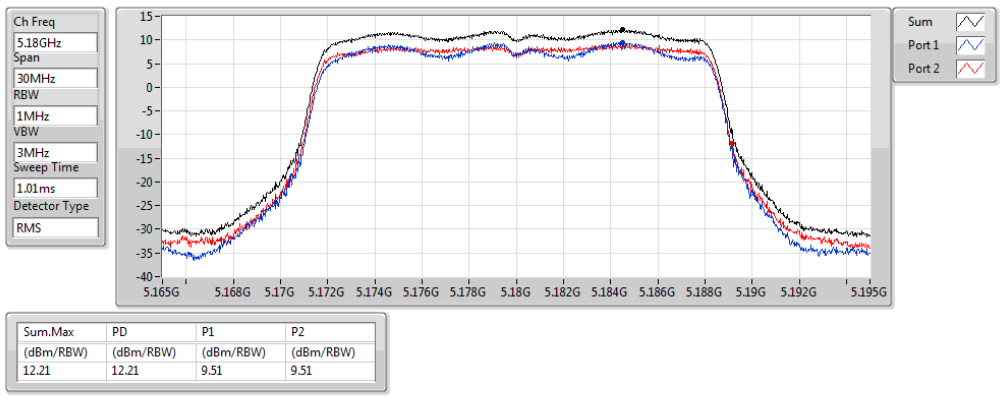
Summary

Mode	PD (dBm/RBW)	EIRP.PD (dBm/RBW)
5.2G;11a;Nss1;Ntx2	16.71	22.61
5.2G;VHT20;Nss1,(M0);Ntx2	16.89	22.79
5.2G;VHT40;Nss1,(M0);Ntx2	12.00	17.90
5.2G;VHT80;Nss1,(M0);Ntx2	1.52	7.42
5.8G;11a;Nss1;Ntx2	14.03	18.73
5.8G;VHT20;Nss1,(M0);Ntx2	13.75	18.45
5.8G;VHT40;Nss1,(M0);Ntx2	10.94	15.64
5.8G;VHT80;Nss1,(M0);Ntx2	4.39	9.09

Result

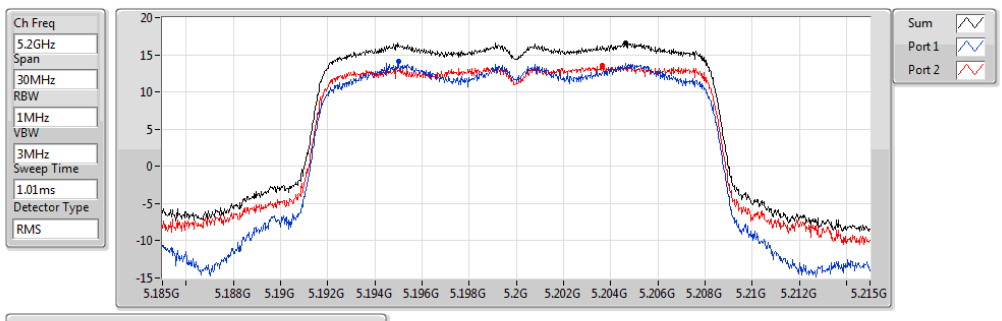
Mode	Result	Meas.RBW (Hz)	Lim.RBW (Hz)	BWCF (dB)	DG (dBi)	PD (dBm/RBW)	PD.Limit (dBm/RBW)	EIRP.PD (dBm/RBW)	EIRP.PD.Lim (dBm/RBW)	P1 (dBm/RBW)	P2 (dBm/RBW)
5.2G;11a;Nss1;Ntx2;5180	Pass	1M	1M	0.00	5.90	12.21	17.00	18.11	Inf	9.51	9.51
5.2G;11a;Nss1;Ntx2;5200	Pass	1M	1M	0.00	5.90	16.57	17.00	22.47	Inf	14.15	13.57
5.2G;11a;Nss1;Ntx2;5240	Pass	1M	1M	0.00	5.90	16.71	17.00	22.61	Inf	13.54	14.16
5.2G;VHT20;Nss1,(M0);Ntx2;5180	Pass	1M	1M	0.00	5.90	13.32	17.00	19.22	Inf	10.69	9.90
5.2G;VHT20;Nss1,(M0);Ntx2;5200	Pass	1M	1M	0.00	5.90	16.33	17.00	22.23	Inf	13.77	13.45
5.2G;VHT20;Nss1,(M0);Ntx2;5240	Pass	1M	1M	0.00	5.90	16.89	17.00	22.79	Inf	13.55	14.22
5.2G;VHT40;Nss1,(M0);Ntx2;5190	Pass	1M	1M	0.00	5.90	6.18	17.00	12.08	Inf	3.42	3.15
5.2G;VHT40;Nss1,(M0);Ntx2;5230	Pass	1M	1M	0.00	5.90	12.00	17.00	17.90	Inf	9.10	9.27
5.2G;VHT80;Nss1,(M0);Ntx2;5210	Pass	1M	1M	0.00	5.90	1.52	17.00	7.42	Inf	-1.49	-0.74
5.8G;11a;Nss1;Ntx2;5745	Pass	500k	500k	0.00	4.70	12.03	30.00	16.73	Inf	9.63	9.20
5.8G;11a;Nss1;Ntx2;5785	Pass	500k	500k	0.00	4.70	12.82	30.00	17.52	Inf	10.20	10.17
5.8G;11a;Nss1;Ntx2;5825	Pass	500k	500k	0.00	4.70	14.03	30.00	18.73	Inf	12.27	10.12
5.8G;VHT20;Nss1,(M0);Ntx2;5745	Pass	500k	500k	0.00	4.70	11.73	30.00	16.43	Inf	8.98	8.91
5.8G;VHT20;Nss1,(M0);Ntx2;5785	Pass	500k	500k	0.00	4.70	12.50	30.00	17.20	Inf	9.55	9.72
5.8G;VHT20;Nss1,(M0);Ntx2;5825	Pass	500k	500k	0.00	4.70	13.75	30.00	18.45	Inf	11.97	9.87
5.8G;VHT40;Nss1,(M0);Ntx2;5755	Pass	500k	500k	0.00	4.70	10.94	30.00	15.64	Inf	8.81	7.07
5.8G;VHT40;Nss1,(M0);Ntx2;5795	Pass	500k	500k	0.00	4.70	10.14	30.00	14.84	Inf	8.26	6.34
5.8G;VHT80;Nss1,(M0);Ntx2;5775	Pass	500k	500k	0.00	4.70	4.39	30.00	9.09	Inf	1.90	1.25

PSD;Band:5.2G;11a;BWch:20MHz;Nss:1;Nant:2;Ch:5180MHz;TN,VN



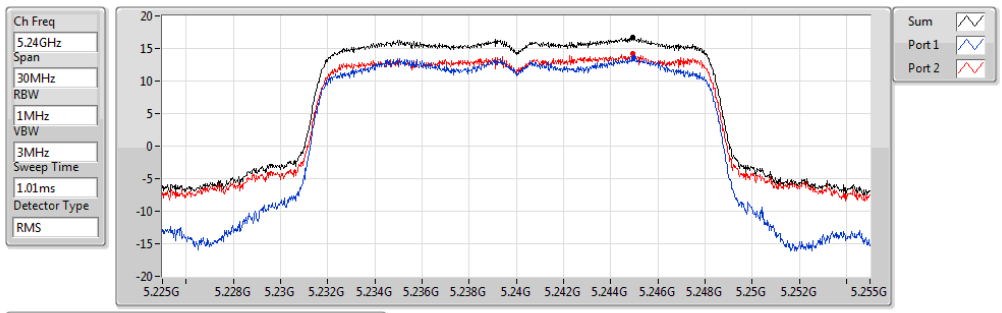
Sum.Max	PD	P1	P2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
12.21	12.21	9.51	9.51

PSD;Band:5.2G;11a;BWch:20MHz;Nss:1;Nant:2;Ch:5200MHz;TN,VN



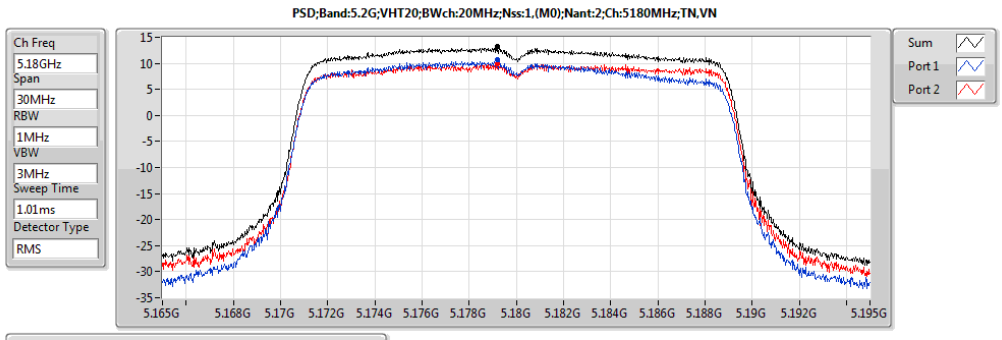
Sum.Max	PD	P1	P2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
16.57	16.57	14.15	13.57

PSD;Band:5.2G;11a;BWch:20MHz;Nss:1;Nant:2;Ch:5240MHz;TN,VN



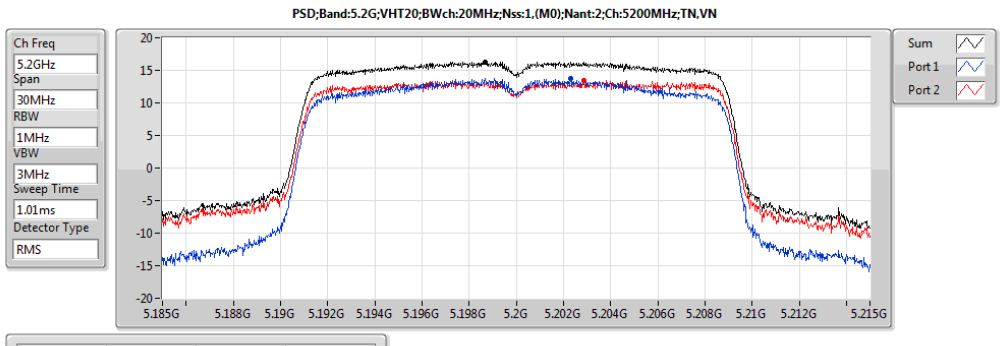
Sum.Max	PD	P1	P2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
16.71	16.71	13.54	14.16

PSD;Band:5.2G;VHT20;BWch:20MHz;Nss:1,(M0);Nant:2;Ch:5180MHz;TN,VN



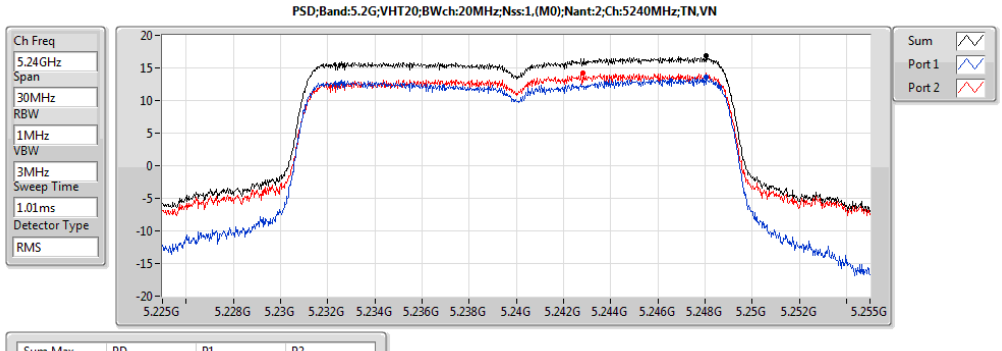
Sum.Max	PD	P1	P2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
13.32	13.32	10.69	9.90

PSD;Band:5.2G;VHT20;BWch:20MHz;Nss:1,(M0);Nant:2;Ch:5200MHz;TN,VN



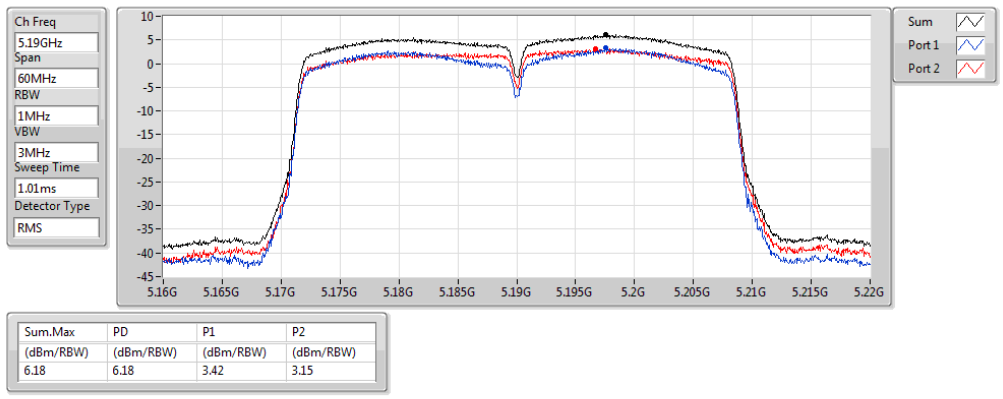
Sum.Max	PD	P1	P2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
16.33	16.33	13.77	13.45

PSD;Band:5.2G;VHT20;BWch:20MHz;Nss:1,(M0);Nant:2;Ch:5240MHz;TN,VN



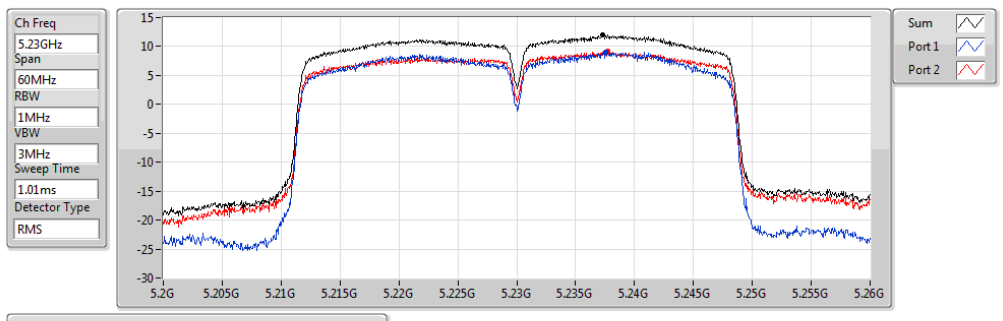
Sum.Max	PD	P1	P2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
16.89	16.89	13.55	14.22

PSD;Band:5.2G;VHT40;BWch:40MHz;Nss:1,(M0);Nant:2;Ch:5190MHz;TN,VN



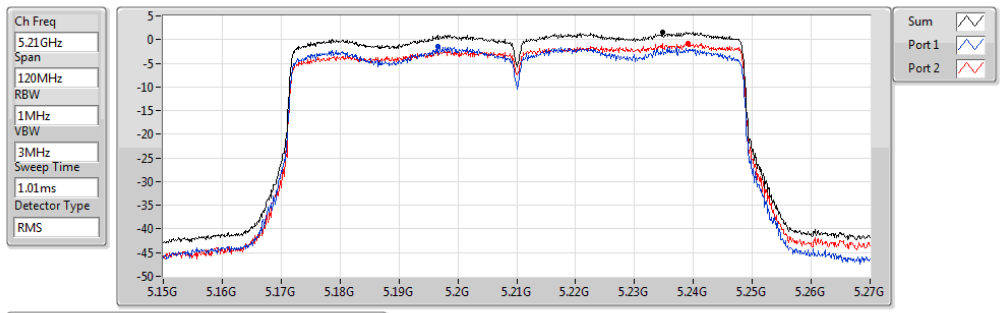
Sum.Max	PD	P1	P2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
6.18	6.18	3.42	3.15

PSD;Band:5.2G;VHT40;BWch:40MHz;Nss:1,(M0);Nant:2;Ch:5230MHz;TN,VN



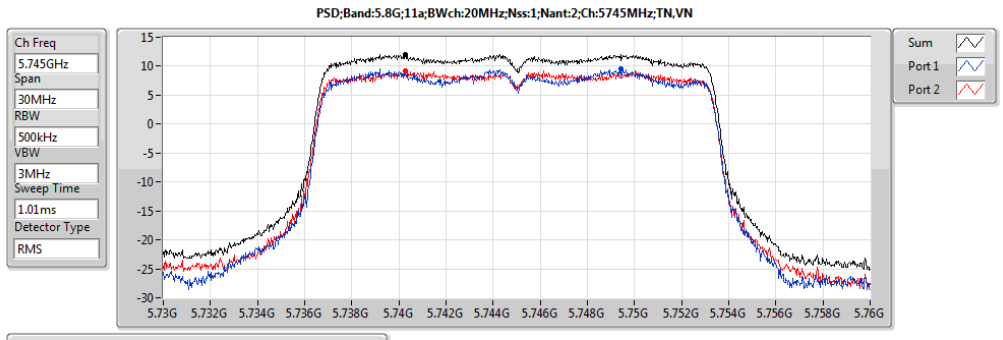
Sum.Max	PD	P1	P2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
12.00	12.00	9.10	9.27

PSD;Band:5.2G;VHT80;BWch:80MHz;Nss:1,(M0);Nant:2;Ch:5210MHz;TN,VN



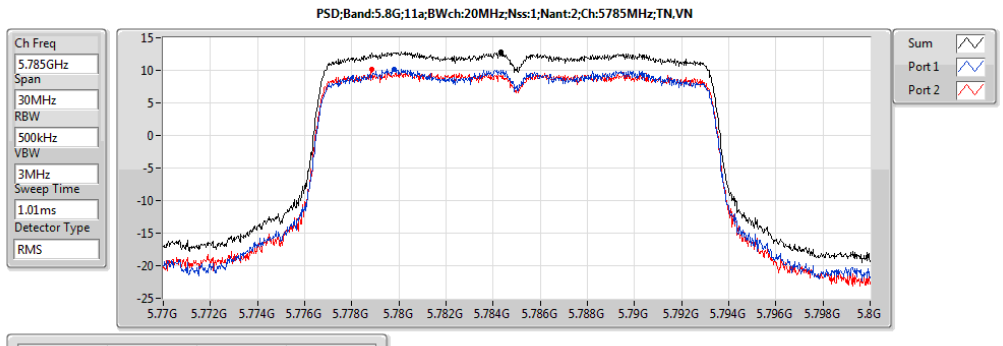
Sum.Max	PD	P1	P2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
1.52	1.52	-1.49	-0.74

PSD;Band:5.8G;11a;BWch:20MHz;Nss:1;Nant:2;Ch:5745MHz;TN,VN



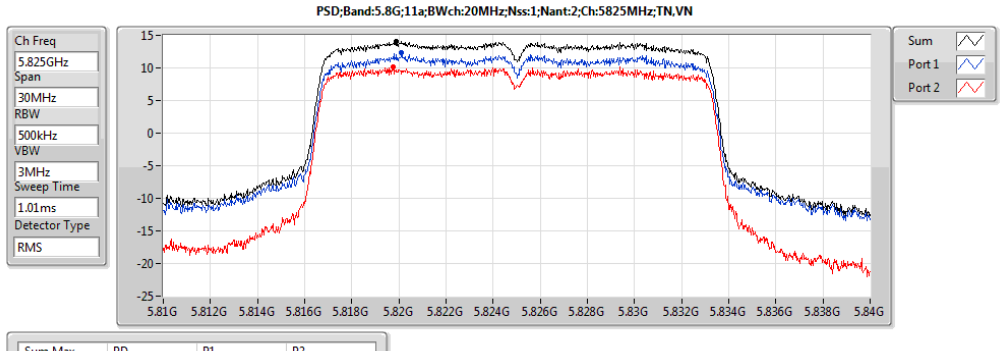
Sum.Max	PD	P1	P2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
12.03	12.03	9.63	9.20

PSD;Band:5.8G;11a;BWch:20MHz;Nss:1;Nant:2;Ch:5785MHz;TN,VN



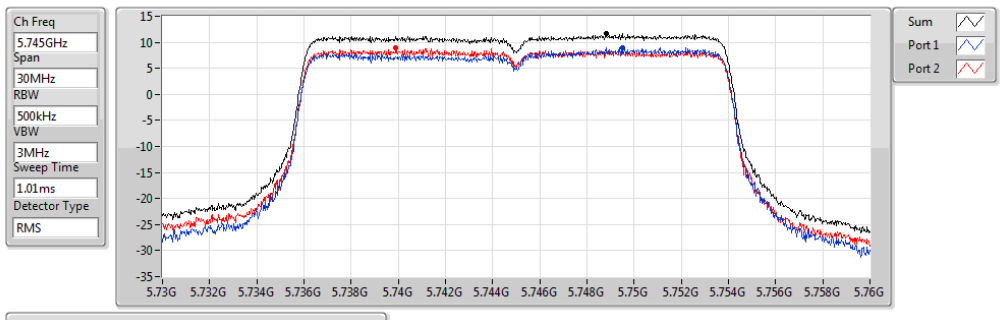
Sum.Max	PD	P1	P2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
12.82	12.82	10.20	10.17

PSD;Band:5.8G;11a;BWch:20MHz;Nss:1;Nant:2;Ch:5825MHz;TN,VN



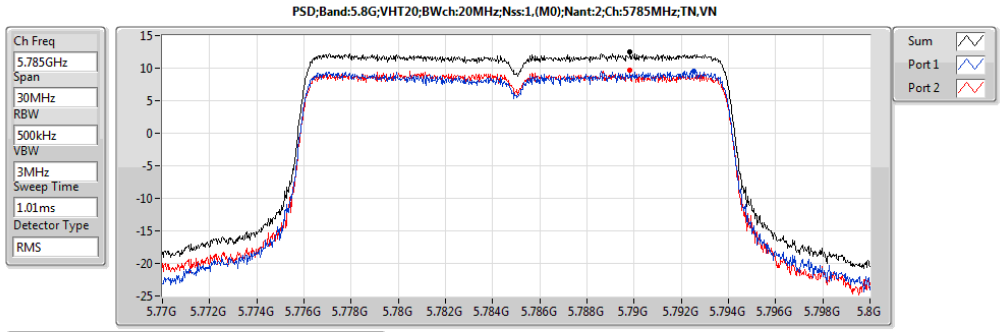
Sum.Max	PD	P1	P2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
14.03	14.03	12.27	10.12

PSD;Band:5.8G;VHT20;BWch:20MHz;Nss:1,(M0);Nant:2;Ch:5745MHz;TN,VN



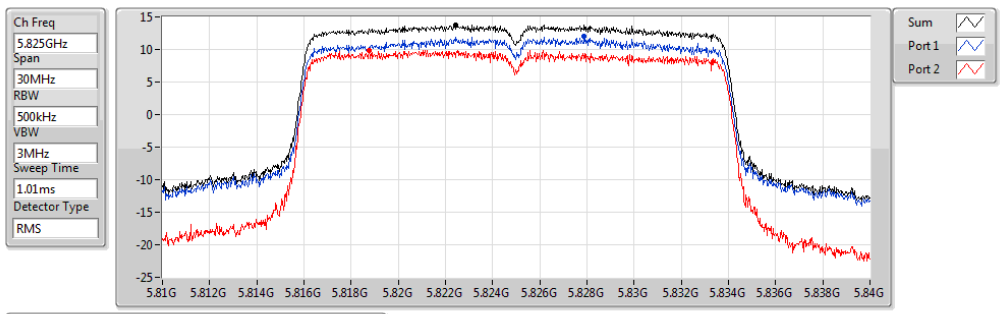
Sum.Max	PD	P1	P2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
11.73	11.73	8.98	8.91

PSD;Band:5.8G;VHT20;BWch:20MHz;Nss:1,(M0);Nant:2;Ch:5785MHz;TN,VN



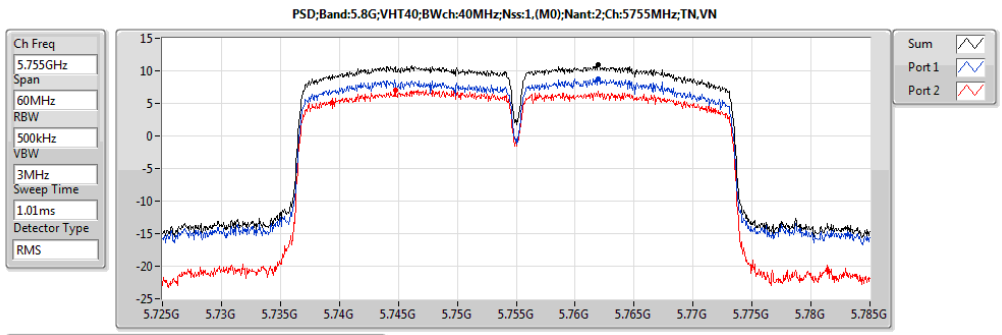
Sum.Max	PD	P1	P2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
12.50	12.50	9.55	9.72

PSD;Band:5.8G;VHT20;BWch:20MHz;Nss:1,(M0);Nant:2;Ch:5825MHz;TN,VN



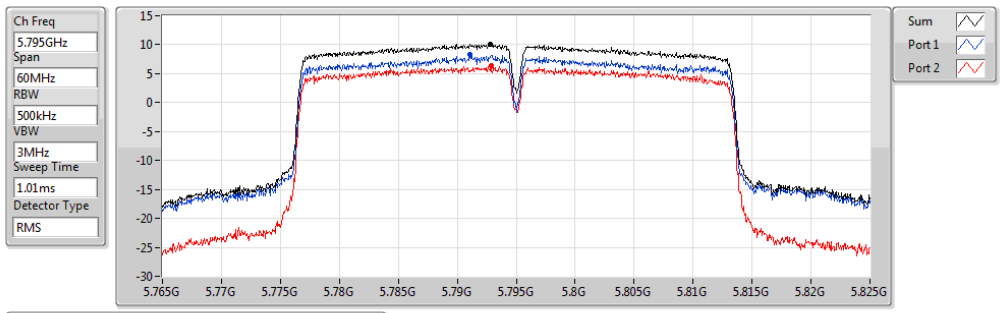
Sum.Max	PD	P1	P2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
13.75	13.75	11.97	9.87

PSD;Band:5.8G;VHT40;BWch:40MHz;Nss:1,(M0);Nant:2;Ch:5755MHz;TN,VN



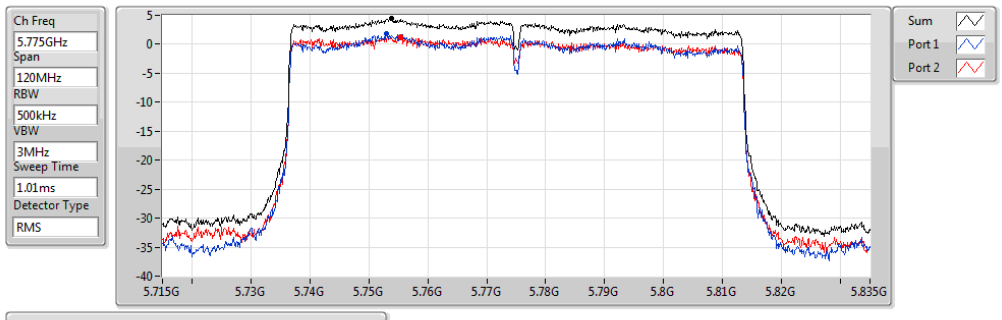
Sum.Max	PD	P1	P2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
10.94	10.94	8.81	7.07

PSD;Band:5.8G;VHT40;BWch:40MHz;Nss:1,(M0);Nant:2;Ch:5795MHz;TN,VN



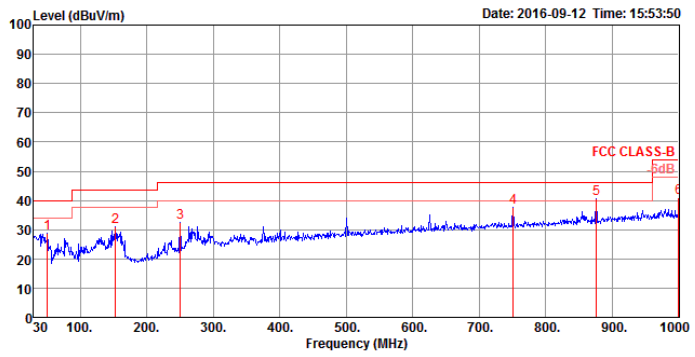
Sum.Max	PD	P1	P2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
10.14	10.14	8.26	6.34

PSD;Band:5.8G;VHT80;BWch:80MHz;Nss:1,(M0);Nant:2;Ch:5775MHz;TN,VN



Sum.Max	PD	P1	P2
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
4.39	4.39	1.90	1.25

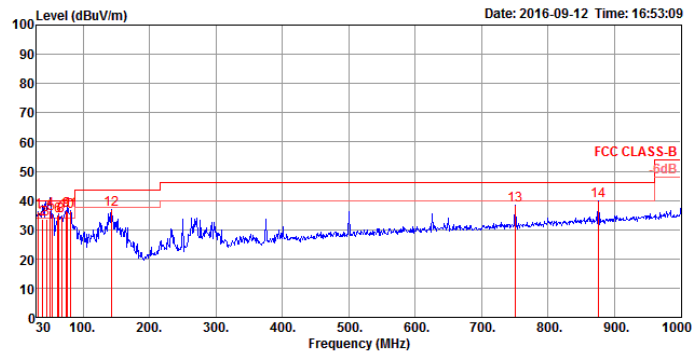
RSE below 1GHz Result			
Operating Mode	2	**Polarization**	Horizontal
Operating Function	Normal Link		



	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	50.37	28.68	40.00	-11.32	45.53	0.68	14.85	32.38	125	103	Peak	HORIZONTAL
2	153.19	30.96	43.50	-12.54	44.99	1.18	17.17	32.38	200	259	Peak	HORIZONTAL
3	250.19	32.29	46.00	-13.71	44.02	1.50	19.10	32.33	125	306	Peak	HORIZONTAL
4	750.71	37.50	46.00	-8.50	40.65	2.73	26.40	32.28	125	103	Peak	HORIZONTAL
5	875.84	40.52	46.00	-5.48	41.88	2.90	27.55	31.81	200	123	Peak	HORIZONTAL
6	1000.00	40.96	54.00	-13.04	39.94	3.18	28.60	30.76	100	160	Peak	HORIZONTAL

Note 1: “>20dB” means emission levels that exceed the level of 20 dB below the applicable limit.
Note 2: “N/F” means Nothing Found emissions (No emissions were detected.)

RSE below 1GHz Result			
Operating Mode	2	**Power Phase**	Vertical
Operating Function	Normal Link		



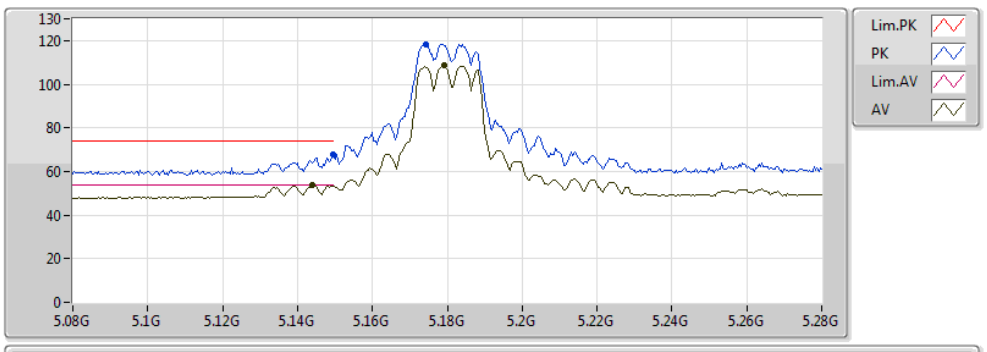
	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	32.91	36.28	40.00	-3.72	44.41	0.54	24.24	32.91	100	226	Peak	VERTICAL
2	39.55	33.76	40.00	-6.24	45.40	0.59	20.44	32.67	100	76	QP	VERTICAL
3	45.23	33.46	40.00	-6.54	48.30	0.63	17.03	32.50	100	169	QP	VERTICAL
4	50.37	36.55	40.00	-3.45	53.40	0.68	14.85	32.38	100	19	QP	VERTICAL
5	53.28	35.45	40.00	-4.55	52.65	0.71	14.48	32.39	100	2	Peak	VERTICAL
6	62.01	34.74	40.00	-5.26	52.85	0.75	13.54	32.40	100	29	Peak	VERTICAL
7	63.95	35.29	40.00	-4.71	53.57	0.76	13.37	32.41	125	2	Peak	VERTICAL
8	67.83	34.57	40.00	-5.43	53.13	0.79	13.06	32.41	200	67	Peak	VERTICAL
9	74.62	36.59	40.00	-3.41	54.96	0.82	13.23	32.42	125	195	Peak	VERTICAL
10	76.56	36.27	40.00	-3.73	54.50	0.83	13.36	32.42	125	195	QP	VERTICAL
11	81.41	36.55	40.00	-3.45	54.21	0.88	13.89	32.43	150	104	Peak	VERTICAL
12	143.49	36.93	43.50	-6.57	50.29	1.14	17.89	32.39	125	217	Peak	VERTICAL
13	750.71	38.44	46.00	-7.56	41.59	2.73	26.40	32.28	100	221	Peak	VERTICAL
14	875.84	39.74	46.00	-6.26	41.10	2.90	27.55	31.81	125	193	Peak	VERTICAL

Note 1: “>20dB” means emission levels that exceed the level of 20 dB below the applicable limit.
Note 2: “N/F” means Nothing Found emissions (No emissions were detected.)

Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Pol. (H/V)	Azimuth (°)	Height (m)	Comments
5.8G;VHT20;Nss1,(M0);Ntx2;5745;TX	Pass	AV	5.423G	53.96	54.00	-0.04	8.14	3	V	49	1.50	-

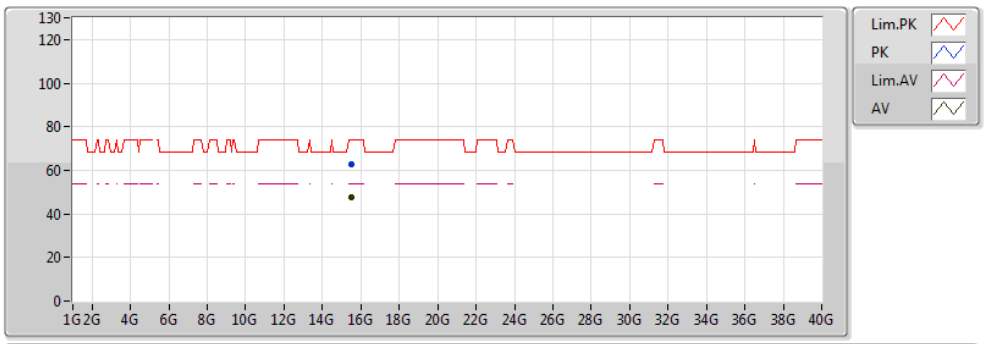
RE above 1GHz;Band:5.2G;11a;BWch:20MHz;Nss:1;Nant:2;Ch:5180MHz;TX



20160926
EUT Y ANT 2TX
Setting 20.5
03-L-2-10

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	5.144G	53.62	54.00	-0.38	7.70	3	V	163	1.50	-
AV	5.1792G	108.47	Inf	-Inf	7.77	3	V	163	1.50	-
PK	5.1496G	67.54	74.00	-6.46	7.71	3	V	163	1.50	-
PK	5.1744G	118.16	Inf	-Inf	7.76	3	V	163	1.50	-

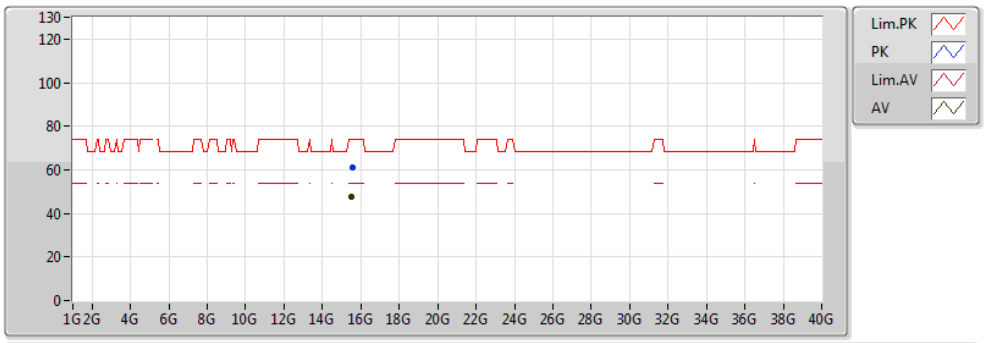
RE above 1GHz;Band:5.2G;11a;BWch:20MHz;Nss:1;Nant:2;Ch:5180MHz;TX



20160926
EUT Y ANT 2TX
Setting 20.5
03-L-2

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	15.5353G	47.79	54.00	-6.21	17.34	3	V	280	2.87	-
PK	15.53506G	62.63	74.00	-11.37	17.34	3	V	280	2.87	-

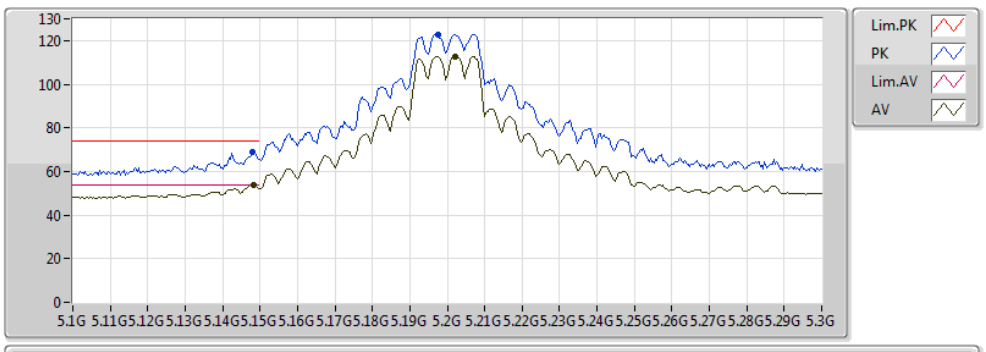
RE above 1GHz;Band:5.2G;11a;BWch:20MHz;Nss:1;Nant:2;Ch:5180MHz;TX



20160926
EUT Y ANT 2TX
Setting 20.5
03-L-2

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	15.53646G	47.80	54.00	-6.20	17.34	3	H	313	1.97	-
PK	15.5399G	61.23	74.00	-12.77	17.33	3	H	313	1.97	-

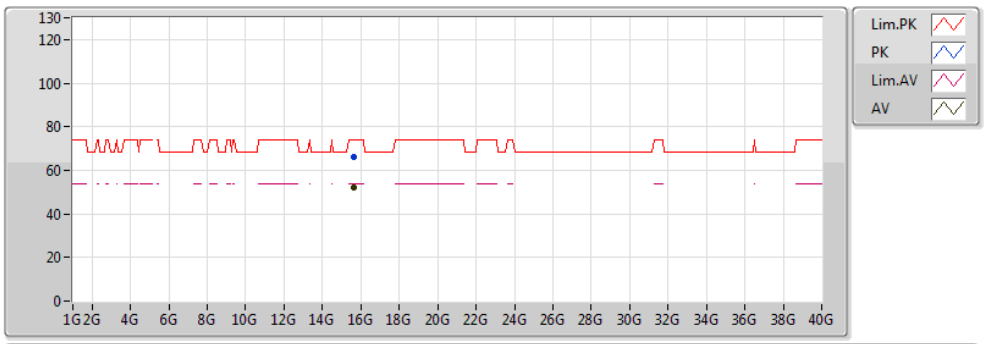
RE above 1GHz;Band:5.2G;11a;BWch:20MHz;Nss:1;Nant:2;Ch:5200MHz;TX



20160926
EUT Y ANT 2TX
Setting 26
03-L-2-10

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	5.1484G	53.95	54.00	-0.05	7.71	3	V	167	1.50	-
AV	5.202G	112.90	Inf	-Inf	7.82	3	V	167	1.50	-
PK	5.148G	68.75	74.00	-5.25	7.70	3	V	167	1.50	-
PK	5.1976G	122.94	Inf	-Inf	7.82	3	V	167	1.50	-

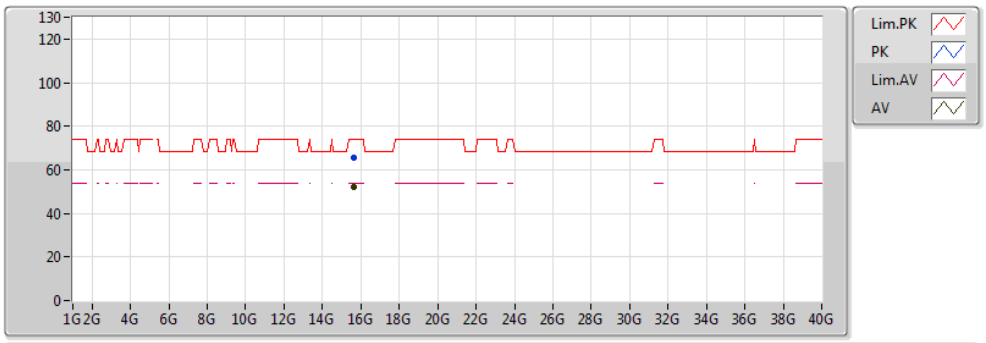
RE above 1GHz;Band:5.2G;11a;BWch:20MHz;Nss:1;Nant:2;Ch:5200MHz;TX



20160926
EUT Y ANT 2TX
Setting 26
03-L-2

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	15.60152G	52.30	54.00	-1.70	17.19	3	V	14	1.78	-
PK	15.60156G	66.30	74.00	-7.70	17.19	3	V	14	1.78	-

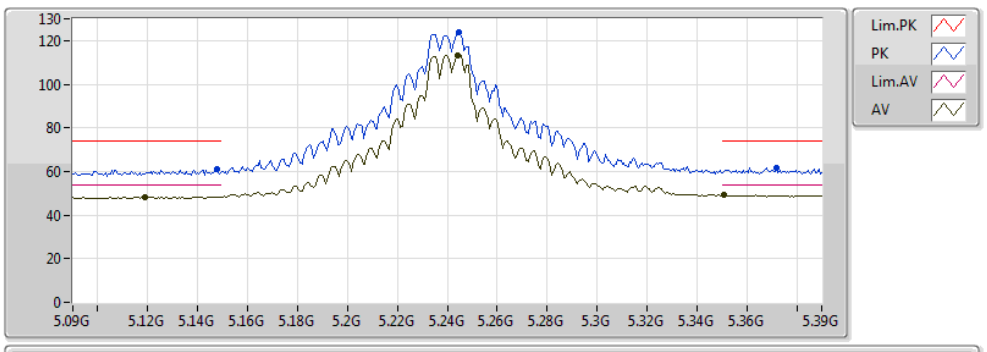
RE above 1GHz;Band:5.2G;11a;BWch:20MHz;Nss:1;Nant:2;Ch:5200MHz;TX



20160926
EUT Y ANT 2TX
Setting 26
03-L-2

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	15.60186G	52.24	54.00	-1.76	17.19	3	H	307	2.35	-
PK	15.6019G	65.64	74.00	-8.36	17.19	3	H	307	2.35	-

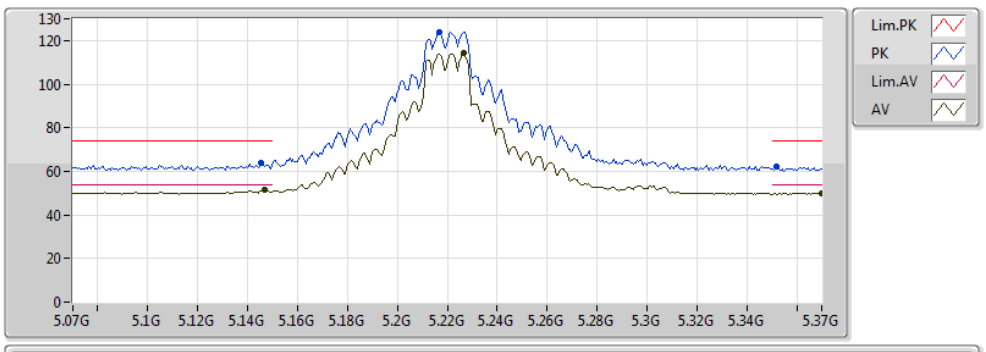
RE above 1GHz;Band:5.2G;11a;BWch:20MHz;Nss:1;Nant:2;Ch:5240MHz;TX



20160926
EUT Y ANT 2TX
Setting 27
03-L-2-10

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	5.1188G	48.42	54.00	-5.58	7.64	3	V	165	1.50	-
AV	5.2442G	113.38	Inf	-Inf	7.88	3	V	165	1.50	-
AV	5.351G	49.16	54.00	-4.84	8.03	3	V	165	1.50	-
PK	5.1476G	60.93	74.00	-13.07	7.70	3	V	165	1.50	-
PK	5.2448G	123.59	Inf	-Inf	7.89	3	V	165	1.50	-
PK	5.372G	61.71	74.00	-12.29	8.05	3	V	165	1.50	-

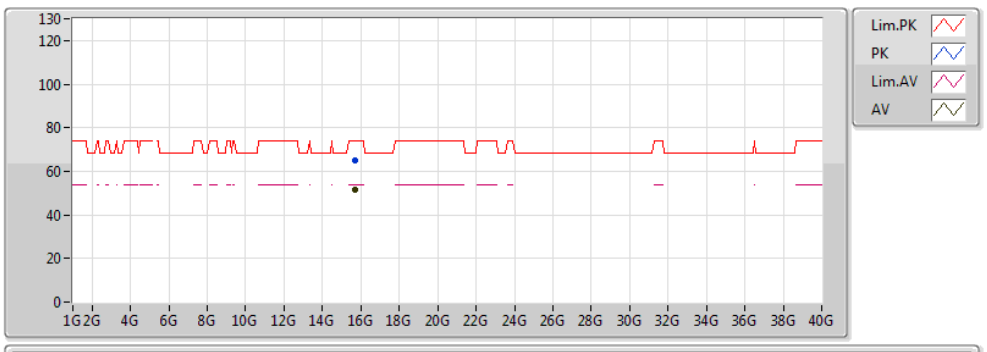
RE TX above 1GHz;Band:5.2G;11a;BWch:20MHz;Nss:1;Nant:2;Ch:5220MHz;TX



20170105
EUT Y ANT 2TX
Setting 27
03-M-1-10

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	5.1468G	51.34	54.00	-2.66	9.41	3	V	44	1.50	-
AV	5.2266G	114.06	Inf	-Inf	9.56	3	V	44	1.50	-
AV	5.37G	50.05	54.00	-3.95	9.77	3	V	44	1.50	-
PK	5.1456G	63.77	74.00	-10.23	9.41	3	V	44	1.50	-
PK	5.217G	124.11	Inf	-Inf	9.55	3	V	44	1.50	-
PK	5.352G	62.36	74.00	-11.64	9.75	3	V	44	1.50	-

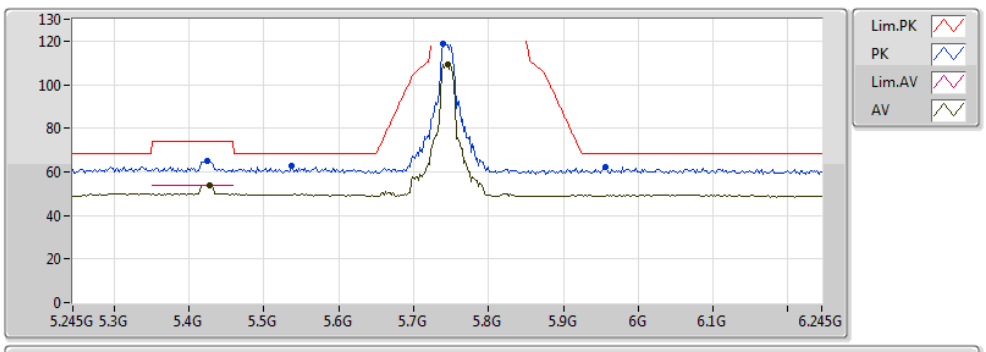
RE above 1GHz;Band:5.2G;11a;BWch:20MHz;Nss:1;Nant:2;Ch:5240MHz;TX



20160926
EUT Y ANT 2TX
Setting 27
03-L-2

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	15.7212G	51.45	54.00	-2.55	16.92	3	V	21	1.60	-
PK	15.72054G	65.12	74.00	-8.88	16.92	3	V	21	1.60	-

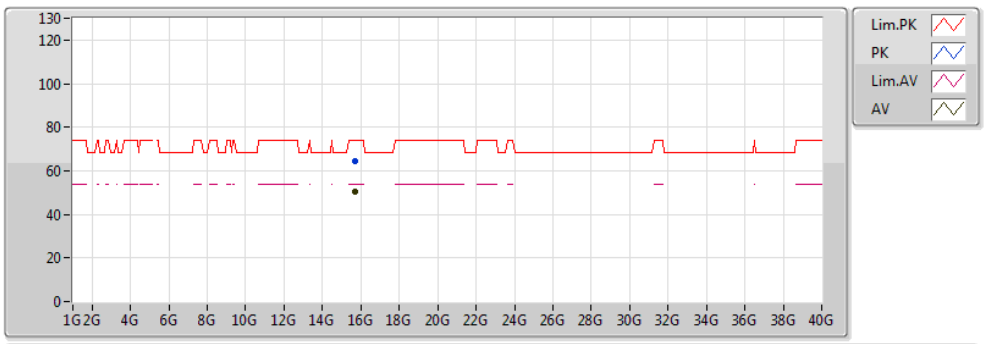
RE above 1GHz;Band:5.8G;11a;BWch:20MHz;Nss:1;Nant:2;Ch:5745MHz;TX



20160926
EUT Y ANT 2TX
Setting 23
03-L-2-10

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	5.427G	53.92	54.00	-0.08	8.14	3	V	50	1.50	-
AV	5.745G	109.30	Inf	-Inf	8.48	3	V	50	1.50	-
PK	5.537G	62.55	68.20	-5.65	8.36	3	V	50	1.50	-
PK	5.739G	118.82	Inf	-Inf	8.48	3	V	50	1.50	-
PK	5.957G	61.97	68.20	-6.23	8.72	3	V	50	1.50	-
PK	5.425G	64.87	74.00	-9.13	8.13	3	V	50	1.50	-

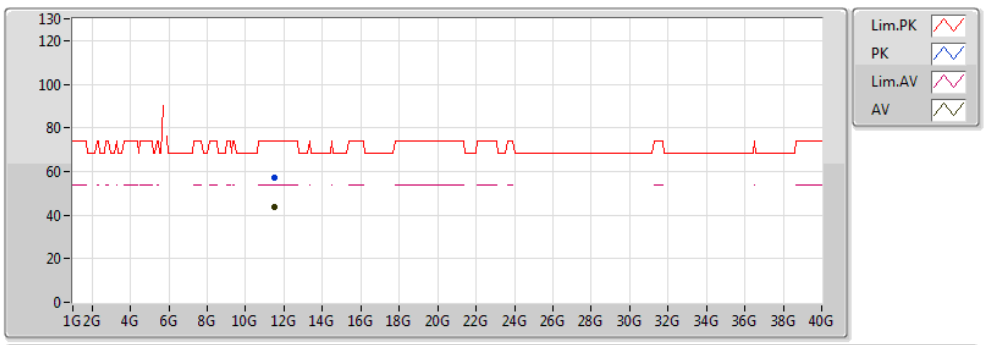
RE above 1GHz;Band:5.2G;11a;BWch:20MHz;Nss:1;Nant:2;Ch:5240MHz;TX



20160926
EUT Y ANT 2TX
Setting 27
03-L-2

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	15.72108G	50.35	54.00	-3.65	16.92	3	H	299	1.90	-
PK	15.71504G	64.34	74.00	-9.66	16.93	3	H	299	1.90	-

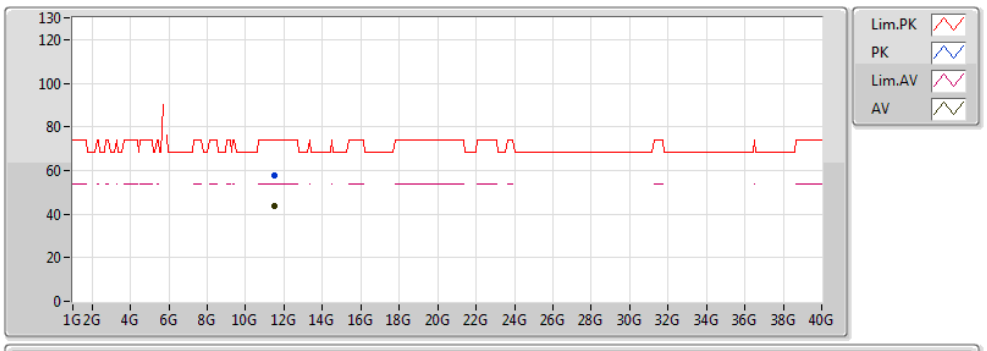
RE above 1GHz;Band:5.8G;11a;BWch:20MHz;Nss:1;Nant:2;Ch:5745MHz;TX



20160926
EUT Y ANT 2TX
Setting 23
03-L-2

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	11.48824G	43.97	54.00	-10.03	16.30	3	V	340	2.42	-
PK	11.49362G	56.98	74.00	-17.02	16.30	3	V	340	2.42	-

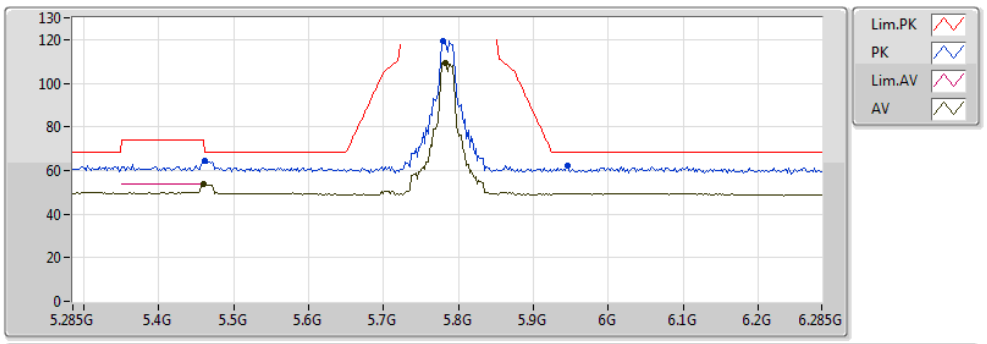
RE above 1GHz;Band:5.8G;11a;BWch:20MHz;Nss:1;Nant:2;Ch:5745MHz;TX



20160926
EUT Y ANT 2TX
Setting 23
03-L-2

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	11.48858G	43.74	54.00	-10.26	16.30	3	H	343	1.50	-
PK	11.49002G	57.51	74.00	-16.49	16.30	3	H	343	1.50	-

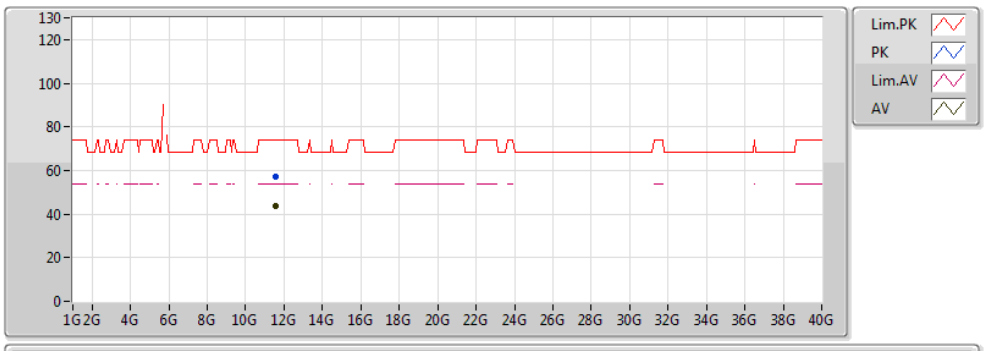
RE above 1GHz;Band:5.8G;11a;BWch:20MHz;Nss:1;Nant:2;Ch:5785MHz;TX



20160926
EUT Y ANT 2TX
Setting 24
03-L-2-10

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	5.459G	53.68	54.00	-0.32	8.22	3	V	43	1.50	-
AV	5.783G	109.34	Inf	-Inf	8.49	3	V	43	1.50	-
PK	5.461G	64.60	68.20	-3.60	8.23	3	V	43	1.50	-
PK	5.779G	119.23	Inf	-Inf	8.49	3	V	43	1.50	-
PK	5.945G	62.41	68.20	-5.79	8.70	3	V	43	1.50	-

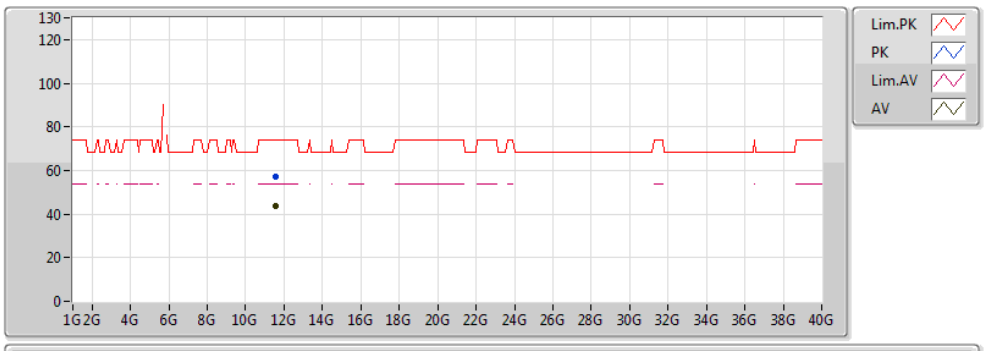
RE above 1GHz;Band:5.8G;11a;BWch:20MHz;Nss:1;Nant:2;Ch:5785MHz;TX



20160926
EUT Y ANT 2TX
Setting 24
03-L-2

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	11.57118G	43.57	54.00	-10.43	16.33	3	V	75	2.22	-
PK	11.5673G	57.24	74.00	-16.76	16.33	3	V	75	2.22	-

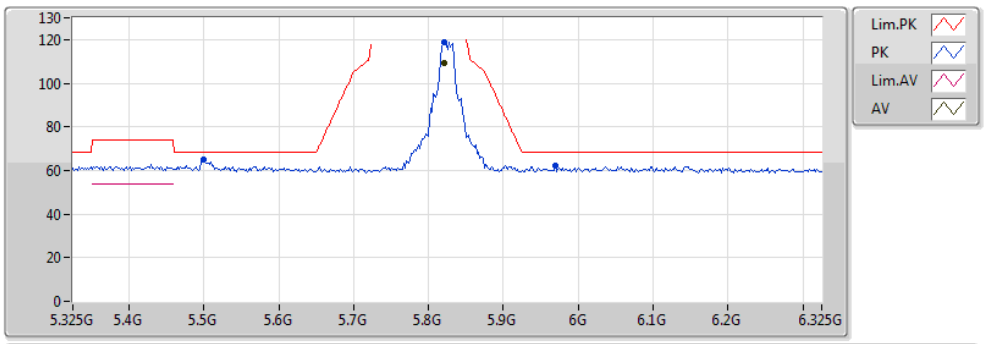
RE above 1GHz;Band:5.8G;11a;BWch:20MHz;Nss:1;Nant:2;Ch:5785MHz;TX



20160926
EUT Y ANT 2TX
Setting 24
03-L-2

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	11.56576G	43.73	54.00	-10.27	16.33	3	H	4	1.50	-
PK	11.57108G	57.17	74.00	-16.83	16.33	3	H	4	1.50	-

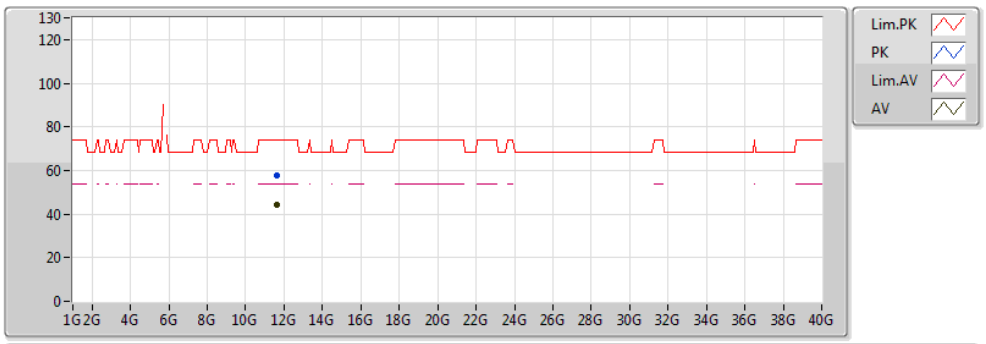
RE above 1GHz;Band:5.8G;11a;BWch:20MHz;Nss:1;Nant:2;Ch:5825MHz;TX



20160926
EUT Y ANT 2TX
Setting 27
03-L-2-10

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	5.821G	109.02	Inf	-Inf	8.52	3	V	48	1.61	-
PK	5.499G	64.99	68.20	-3.21	8.31	3	V	48	1.61	-
PK	5.821G	119.04	Inf	-Inf	8.52	3	V	48	1.61	-
PK	5.969G	62.14	68.20	-6.06	8.74	3	V	48	1.61	-

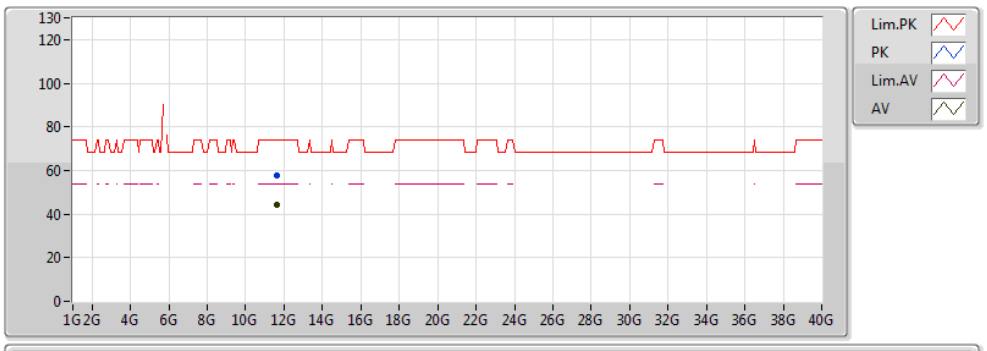
RE above 1GHz;Band:5.8G;11a;BWch:20MHz;Nss:1;Nant:2;Ch:5825MHz;TX



20160926
EUT Y ANT 2TX
Setting 27
03-L-2

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	11.64958G	44.38	54.00	-9.62	16.37	3	V	224	1.50	-
PK	11.64942G	57.80	74.00	-16.20	16.37	3	V	224	1.50	-

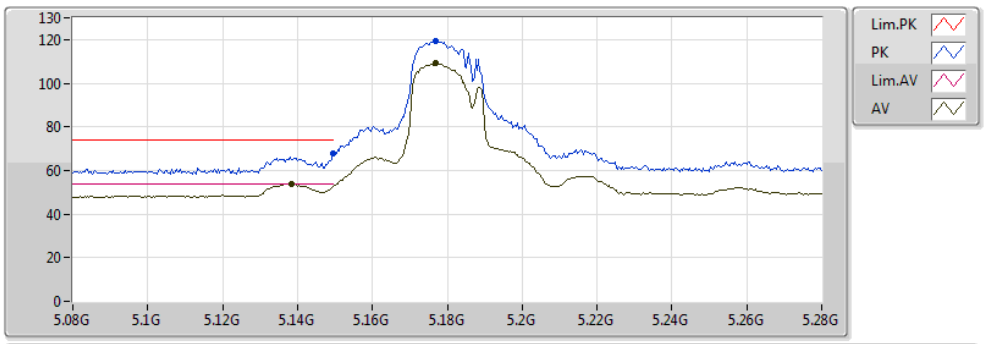
RE above 1GHz;Band:5.8G;11a;BWch:20MHz;Nss:1;Nant:2;Ch:5825MHz;TX



20160926
EUT Y ANT 2TX
Setting 27
03-L-2

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	11.64554G	44.31	54.00	-9.69	16.36	3	H	194	1.50	-
PK	11.65048G	57.48	74.00	-16.52	16.37	3	H	194	1.50	-

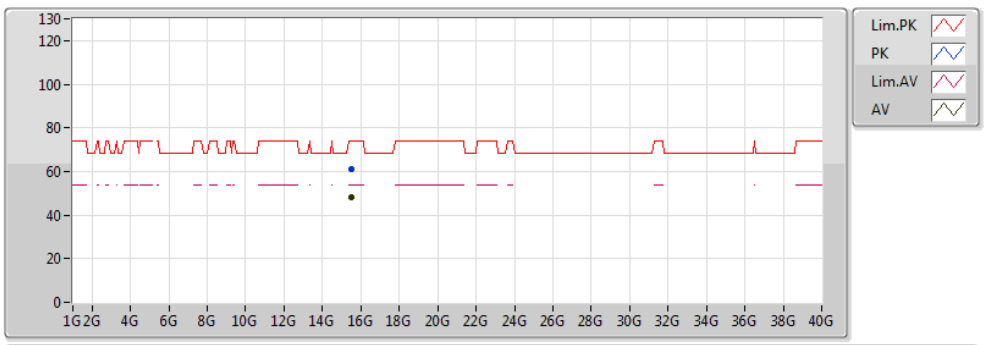
RE above 1GHz;Band:5.2G;VHT20;BWch:20MHz;Nss:1,(M0);Nant:2;Ch:5180MHz;TX



20160926
EUT Y ANT 2TX
Setting 21.5
03-L-2-10

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	5.1384G	53.93	54.00	-0.07	7.68	3	V	165	1.50	-
AV	5.1768G	109.13	Inf	-Inf	7.77	3	V	165	1.50	-
PK	5.1496G	67.62	74.00	-6.38	7.71	3	V	165	1.50	-
PK	5.1768G	119.40	Inf	-Inf	7.77	3	V	165	1.50	-

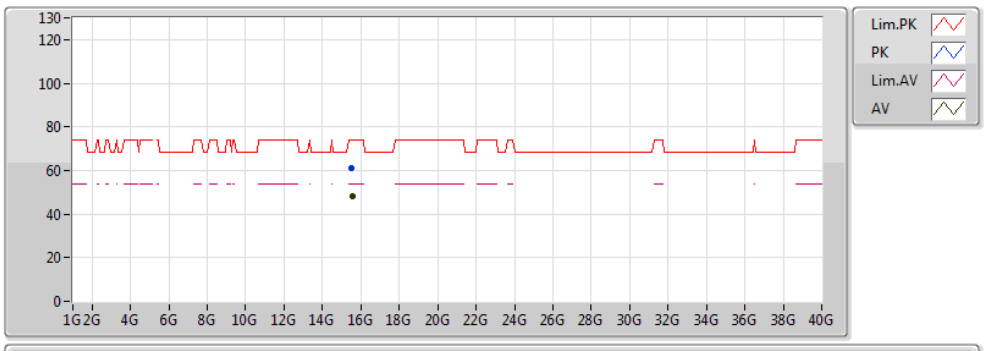
RE above 1GHz;Band:5.2G;VHT20;BWch:20MHz;Nss:1,(M0);Nant:2;Ch:5180MHz;TX



20160926
EUT Y ANT 2TX
Setting 21.5
03-L-2

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	15.53562G	47.93	54.00	-6.07	17.34	3	V	360	1.61	-
PK	15.53746G	61.34	74.00	-12.66	17.34	3	V	360	1.61	-

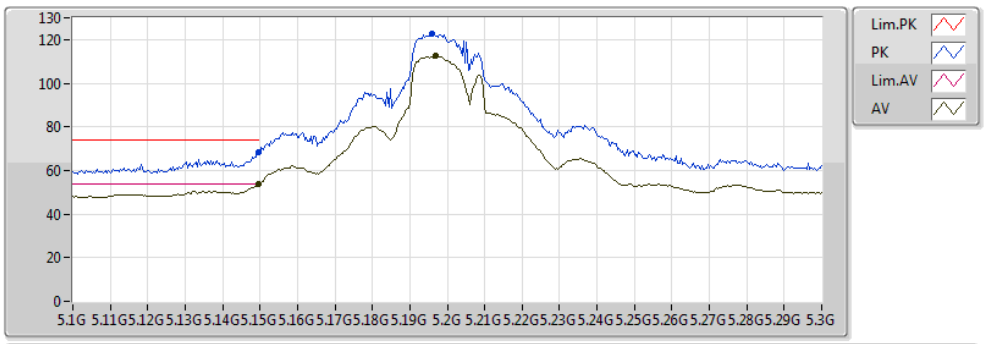
RE above 1GHz;Band:5.2G;VHT20;BWch:20MHz;Nss:1,(M0);Nant:2;Ch:5180MHz;TX



20160926
EUT Y ANT 2TX
Setting 21.5
03-L-2

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	15.54198G	47.93	54.00	-6.07	17.33	3	H	3	1.26	-
PK	15.5356G	61.23	74.00	-12.77	17.34	3	H	3	1.26	-

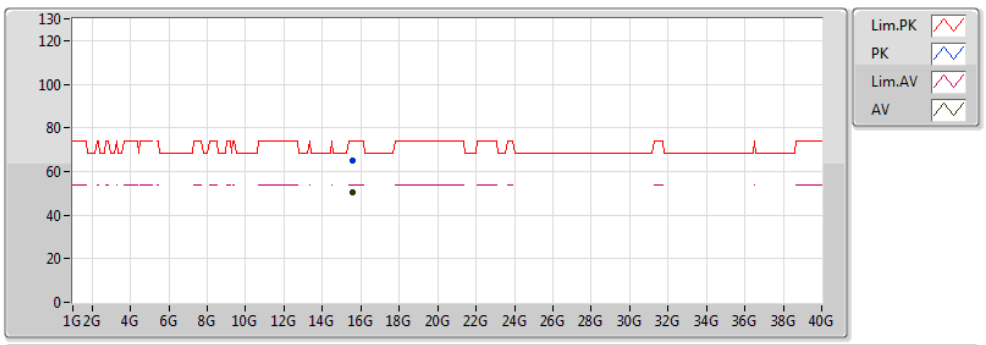
RE above 1GHz;Band:5.2G;VHT20;BWch:20MHz;Nss:1,(M0);Nant:2;Ch:5200MHz;TX



20160926
EUT Y ANT 2TX
Setting 26
03-L-2-10

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	5.1496G	53.81	54.00	-0.19	7.71	3	V	163	1.50	-
AV	5.1968G	112.53	Inf	-Inf	7.81	3	V	163	1.50	-
PK	5.1496G	68.52	74.00	-5.48	7.71	3	V	163	1.50	-
PK	5.196G	122.83	Inf	-Inf	7.81	3	V	163	1.50	-

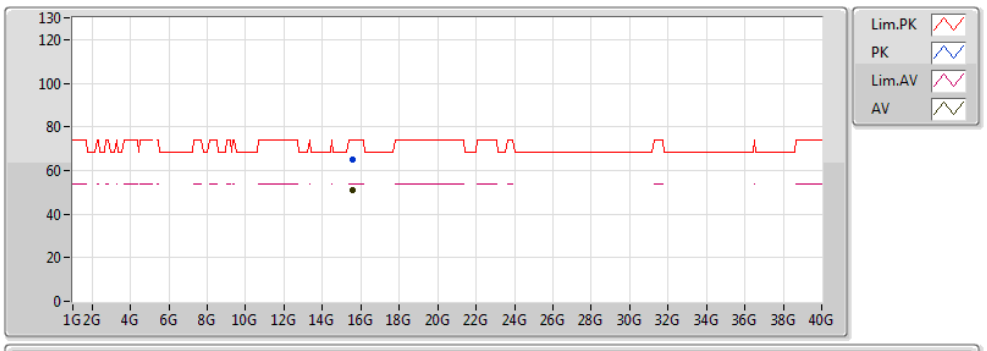
RE above 1GHz;Band:5.2G;VHT20;BWch:20MHz;Nss:1,(M0);Nant:2;Ch:5200MHz;TX



20160926
EUT Y ANT 2TX
Setting 26
03-L-2

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	15.59814G	50.63	54.00	-3.37	17.20	3	V	5	2.61	-
PK	15.598G	64.79	74.00	-9.21	17.20	3	V	5	2.61	-

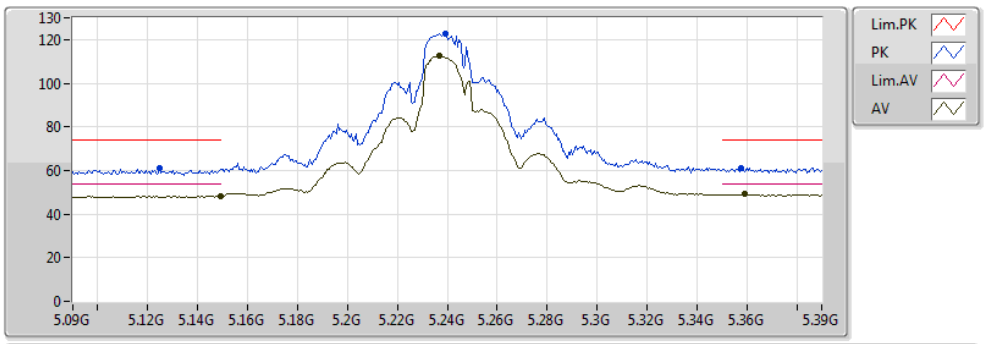
RE above 1GHz;Band:5.2G;VHT20;BWch:20MHz;Nss:1,(M0);Nant:2;Ch:5200MHz;TX



20160926
EUT Y ANT 2TX
Setting 26
03-L-2

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	15.59894G	50.98	54.00	-3.02	17.20	3	H	306	2.38	-
PK	15.59618G	65.24	74.00	-8.76	17.20	3	H	306	2.38	-

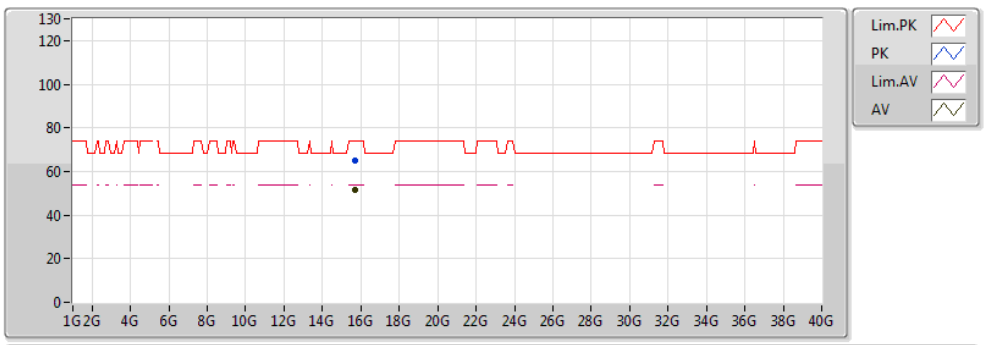
RE above 1GHz;Band:5.2G;VHT20;BWch:20MHz;Nss:1,(M0);Nant:2;Ch:5240MHz;TX



20160926
EUT Y ANT 2TX
Setting 27
03-L-2-10

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	5.1494G	48.30	54.00	-5.70	7.71	3	V	164	1.50	-
AV	5.237G	112.82	Inf	-Inf	7.87	3	V	164	1.50	-
AV	5.3594G	49.07	54.00	-4.93	8.04	3	V	164	1.50	-
PK	5.1248G	61.05	74.00	-12.95	7.65	3	V	164	1.50	-
PK	5.2394G	122.75	Inf	-Inf	7.88	3	V	164	1.50	-
PK	5.3576G	61.21	74.00	-12.79	8.04	3	V	164	1.50	-

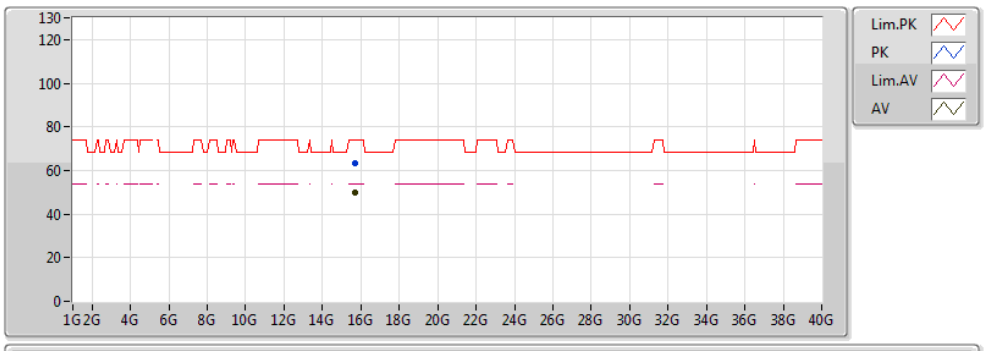
RE above 1GHz;Band:5.2G;VHT20;BWch:20MHz;Nss:1,(M0);Nant:2;Ch:5240MHz;TX



20160926
EUT Y ANT 2TX
Setting 27
03-L-2

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	15.72426G	51.44	54.00	-2.56	16.91	3	V	14	1.79	-
PK	15.72168G	64.86	74.00	-9.14	16.91	3	V	14	1.79	-

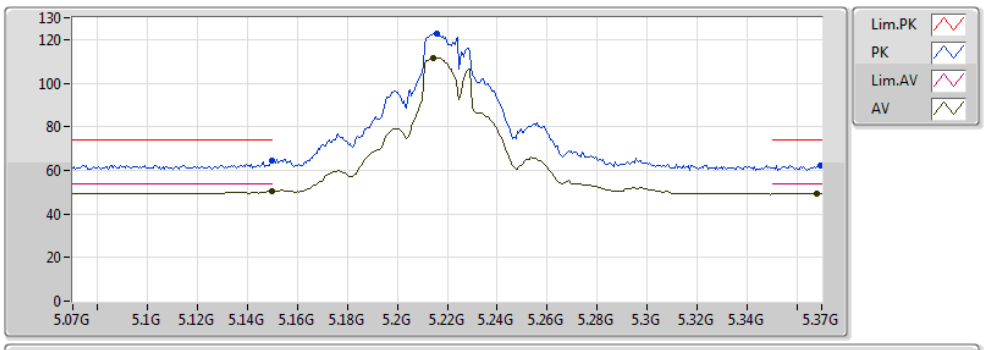
RE above 1GHz;Band:5.2G;VHT20;BWch:20MHz;Nss:1,(M0);Nant:2;Ch:5240MHz;TX



20160926
EUT Y ANT 2TX
Setting 27
03-L-2

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	15.72346G	50.13	54.00	-3.87	16.91	3	H	298	1.93	-
PK	15.7207G	63.53	74.00	-10.47	16.92	3	H	298	1.93	-

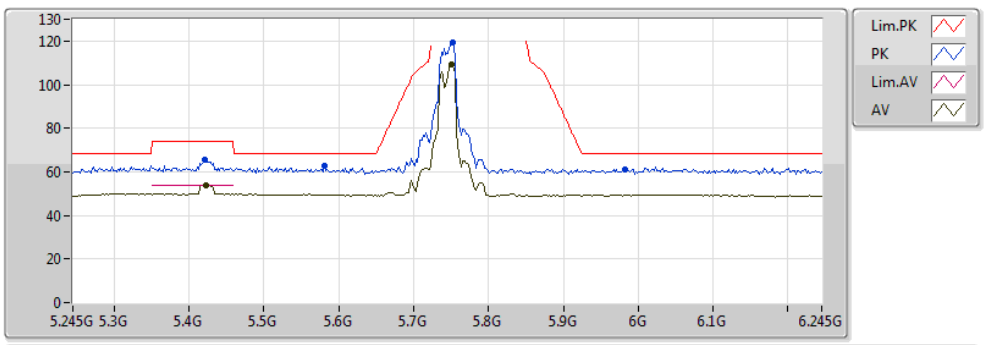
RE TX above 1GHz;Band:5.2G;VHT20;BWch:20MHz;Nss:1,(M0);Nant:2;Ch:5220MHz;TX



20170105
EUT Y ANT 2TX
Setting 27
03-M-1-10

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	5.1498G	50.23	54.00	-3.77	9.41	3	V	43	1.50	-
AV	5.2146G	111.78	Inf	-Inf	9.54	3	V	43	1.50	-
AV	5.3682G	49.29	54.00	-4.71	9.77	3	V	43	1.50	-
PK	5.1498G	64.63	74.00	-9.37	9.41	3	V	43	1.50	-
PK	5.2158G	122.69	Inf	-Inf	9.55	3	V	43	1.50	-
PK	5.3694G	62.46	74.00	-11.54	9.77	3	V	43	1.50	-

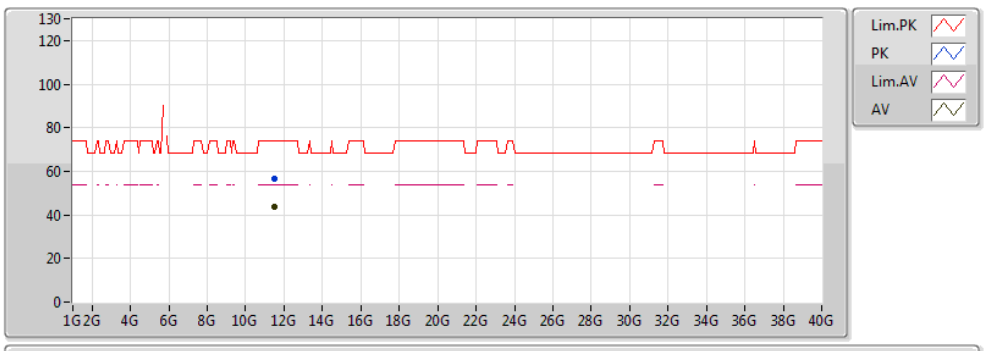
RE above 1GHz;Band:5.8G;VHT20;BWch:20MHz;Nss:1,(M0);Nant:2;Ch:5745MHz;TX



20160926
EUT Y ANT 2TX
Setting 23
03-L-2-10

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	5.423G	53.96	54.00	-0.04	8.14	3	V	49	1.50	-
AV	5.751G	109.19	Inf	-Inf	8.48	3	V	49	1.50	-
PK	5.581G	62.69	68.20	-5.51	8.42	3	V	49	1.50	-
PK	5.753G	119.29	Inf	-Inf	8.48	3	V	49	1.50	-
PK	5.983G	61.26	68.20	-6.94	8.76	3	V	49	1.50	-
PK	5.421G	65.39	74.00	-8.61	8.13	3	V	49	1.50	-

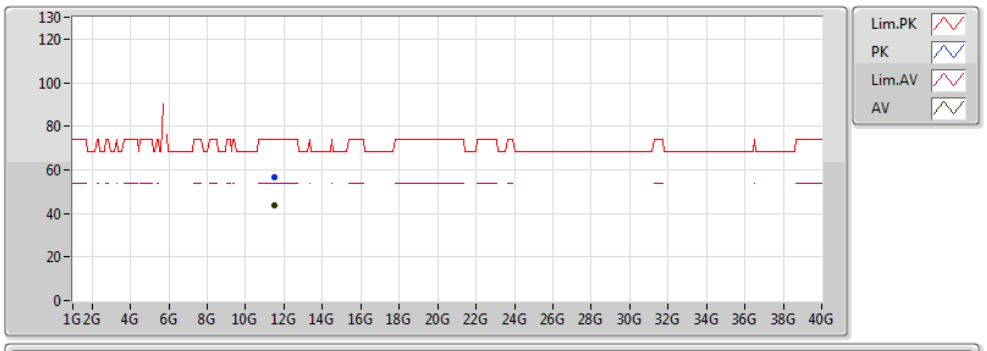
RE above 1GHz;Band:5.8G;VHT20;BWch:20MHz;Nss:1,(M0);Nant:2;Ch:5745MHz;TX



20160926
EUT Y ANT 2TX
Setting 23
03-L-2

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	11.48836G	43.73	54.00	-10.27	16.30	3	V	347	2.29	-
PK	11.489G	56.79	74.00	-17.21	16.30	3	V	347	2.29	-

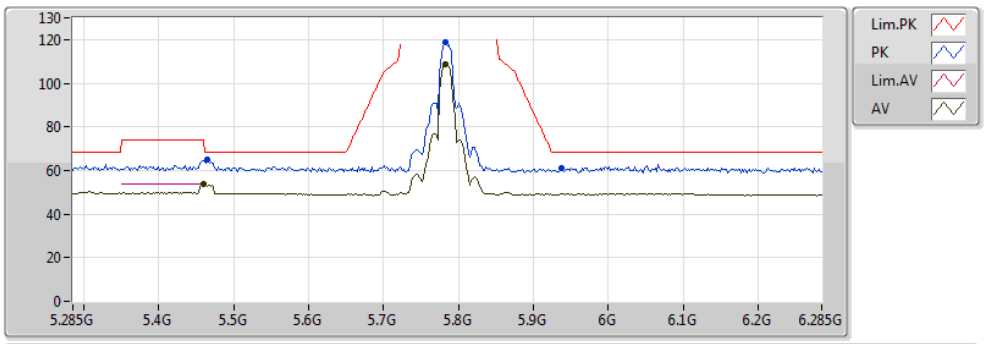
RE above 1GHz;Band:5.8G;VHT20;BWch:20MHz;Nss:1,(M0);Nant:2;Ch:5745MHz;TX



20160926
EUT Y ANT 2TX
Setting 23
03-L-2

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	11.48652G	43.61	54.00	-10.39	16.29	3	H	250	1.16	-
PK	11.49384G	56.53	74.00	-17.47	16.30	3	H	250	1.16	-

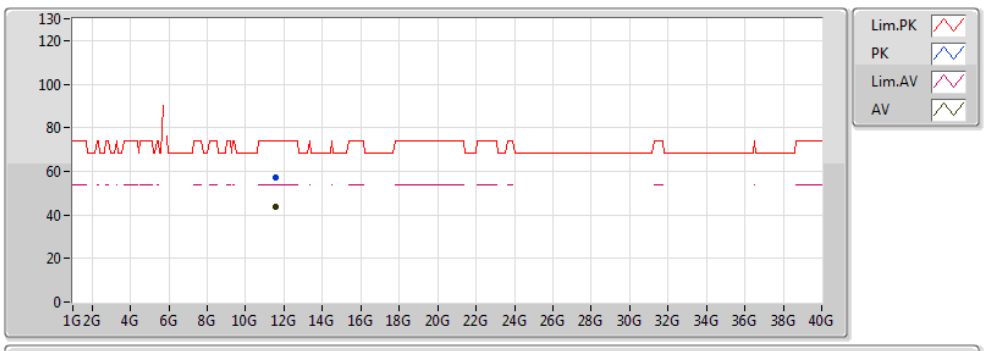
RE above 1GHz;Band:5.8G;VHT20;BWch:20MHz;Nss:1,(M0);Nant:2;Ch:5785MHz;TX



20160926
EUT Y ANT 2TX
Setting 24
03-L-2-10

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	5.459G	53.74	54.00	-0.26	8.22	3	V	47	1.50	-
AV	5.783G	108.74	Inf	-Inf	8.49	3	V	47	1.50	-
PK	5.465G	64.78	68.20	-3.42	8.24	3	V	47	1.50	-
PK	5.783G	118.69	Inf	-Inf	8.49	3	V	47	1.50	-
PK	5.937G	61.35	68.20	-6.85	8.69	3	V	47	1.50	-

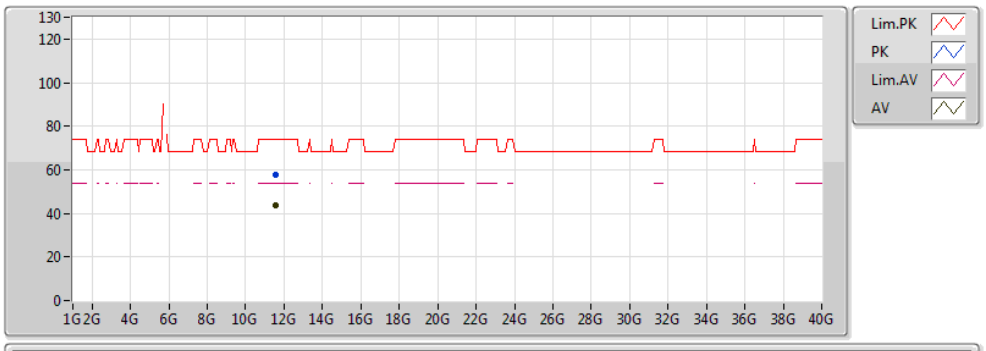
RE above 1GHz;Band:5.8G;VHT20;BWch:20MHz;Nss:1,(M0);Nant:2;Ch:5785MHz;TX



20160926
EUT Y ANT 2TX
Setting 24
03-L-2

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	11.56796G	43.72	54.00	-10.28	16.33	3	V	220	2.10	-
PK	11.57462G	56.95	74.00	-17.05	16.33	3	V	220	2.10	-

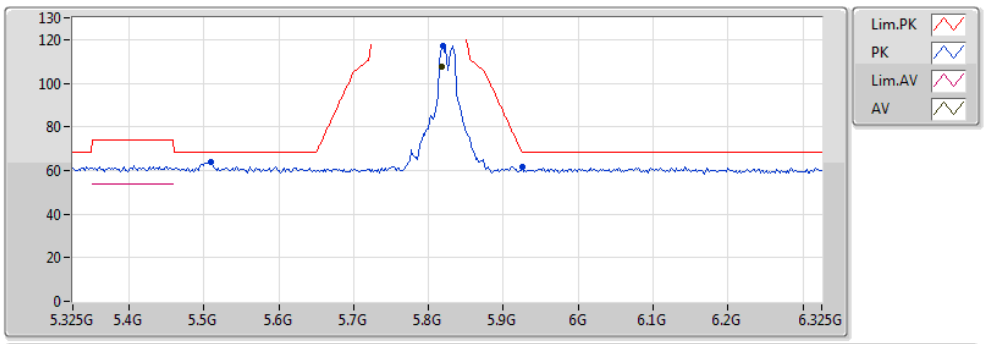
RE above 1GHz;Band:5.8G;VHT20;BWch:20MHz;Nss:1,(M0);Nant:2;Ch:5785MHz;TX



20160926
EUT Y ANT 2TX
Setting 24
03-L-2

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	11.56566G	43.82	54.00	-10.18	16.33	3	H	16	2.32	-
PK	11.56762G	57.44	74.00	-16.56	16.33	3	H	16	2.32	-

RE above 1GHz;Band:5.8G;VHT20;BWch:20MHz;Nss:1,(M0);Nant:2;Ch:5825MHz;TX



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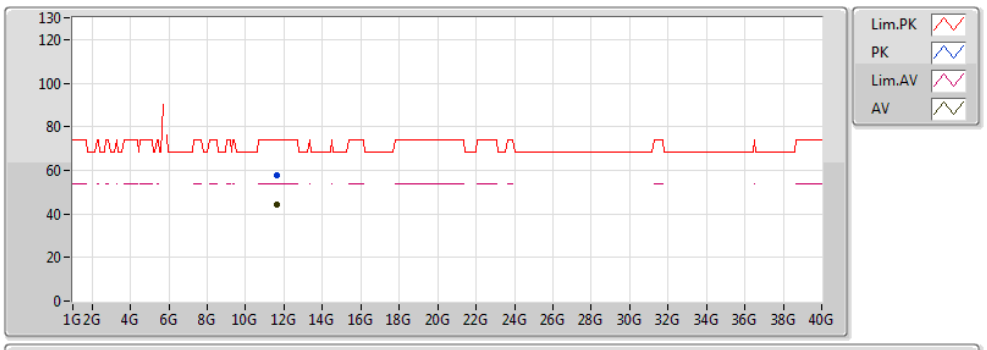
EUT Y ANT 2TX
Setting 27
03-L-2-10

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	5.817G	107.47	Inf	-Inf	8.52	3	V	44	1.50	-
PK	5.509G	63.87	68.20	-4.33	8.33	3	V	44	1.50	-
PK	5.819G	117.00	Inf	-Inf	8.52	3	V	44	1.50	-
PK	5.925G	61.53	68.20	-6.67	8.67	3	V	44	1.50	-

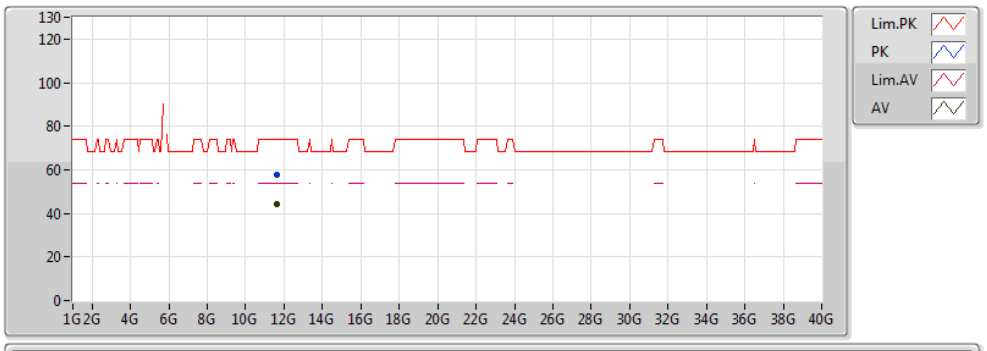
RE above 1GHz;Band:5.8G;VHT20;BWch:20MHz;Nss:1,(M0);Nant:2;Ch:5825MHz;TX



20160926
EUT Y ANT 2TX
Setting 27
03-L-2

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	11.64772G	44.34	54.00	-9.66	16.36	3	V	280	1.50	-
PK	11.65134G	57.60	74.00	-16.40	16.37	3	V	280	1.50	-

RE above 1GHz;Band:5.8G;VHT20;BWch:20MHz;Nss:1,(M0);Nant:2;Ch:5825MHz;TX



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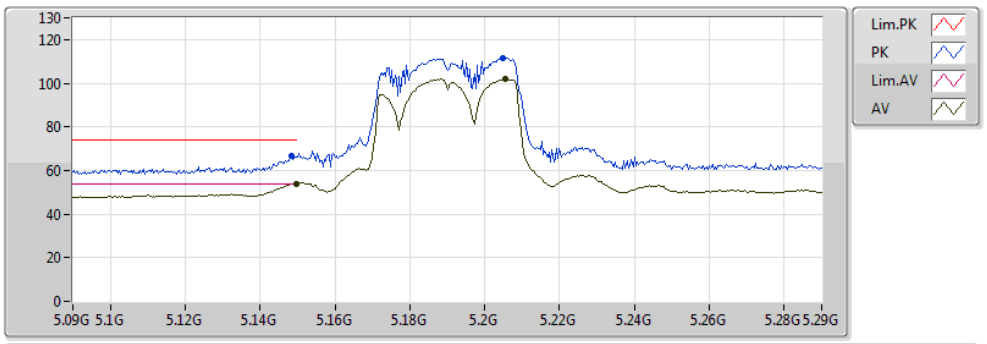
EUT Y ANT 2TX
Setting 27
03-L-2

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	11.6509G	44.47	54.00	-9.53	16.37	3	H	104	2.65	-
PK	11.647G	57.53	74.00	-16.47	16.36	3	H	104	2.65	-

RE above 1GHz;Band:5.2G;VHT40;BWch:40MHz;Nss:1,(M0);Nant:2;Ch:5190MHz;TX



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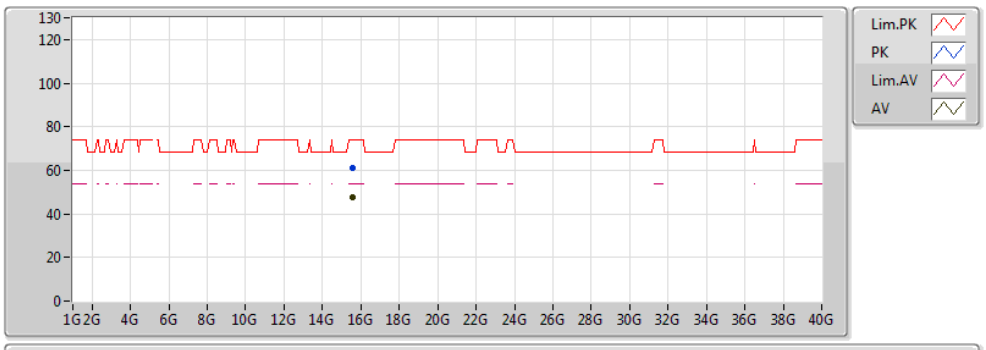
EUT Y ANT 2TX
Setting 17.5
03-L-2-10

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	5.1496G	53.82	54.00	-0.18	7.71	3	V	165	1.26	-
AV	5.2056G	101.89	Inf	-Inf	7.83	3	V	165	1.26	-
PK	5.1484G	66.60	74.00	-7.40	7.71	3	V	165	1.26	-
PK	5.2048G	111.65	Inf	-Inf	7.83	3	V	165	1.26	-

RE above 1GHz;Band:5.2G;VHT40;BWch:40MHz;Nss:1,(M0);Nant:2;Ch:5190MHz;TX



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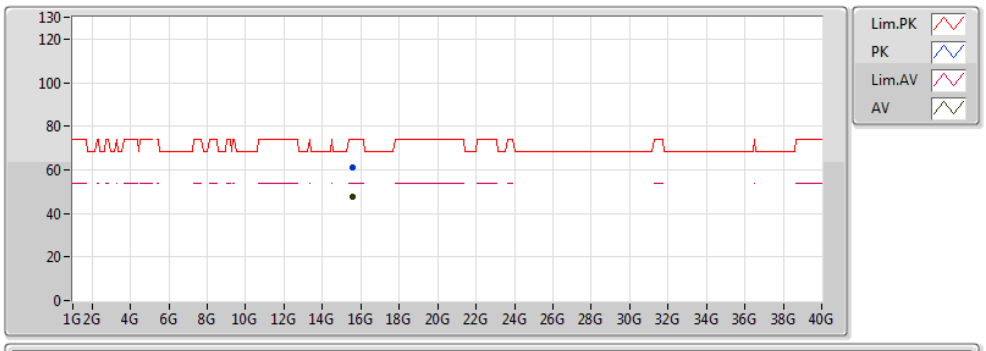
EUT Y ANT 2TX
Setting 17.5
03-L-2

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	15.5742G	47.70	54.00	-6.30	17.25	3	V	68	2.32	-
PK	15.56874G	61.14	74.00	-12.86	17.27	3	V	68	2.32	-

RE above 1GHz;Band:5.2G;VHT40;BWch:40MHz;Nss:1,(M0);Nant:2;Ch:5190MHz;TX



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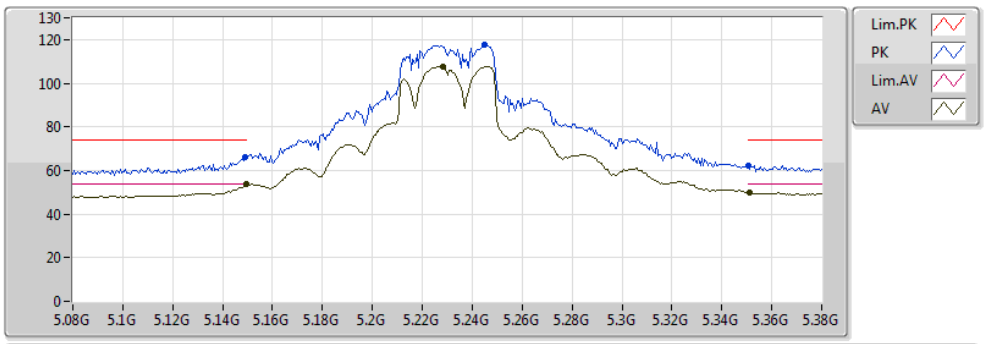
EUT Y ANT 2TX
Setting 17.5
03-L-2

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	15.5693G	47.70	54.00	-6.30	17.27	3	H	304	1.72	-
PK	15.56786G	61.35	74.00	-12.65	17.27	3	H	304	1.72	-

RE above 1GHz;Band:5.2G;VHT40;BWch:40MHz;Nss:1,(M0);Nant:2;Ch:5230MHz;TX



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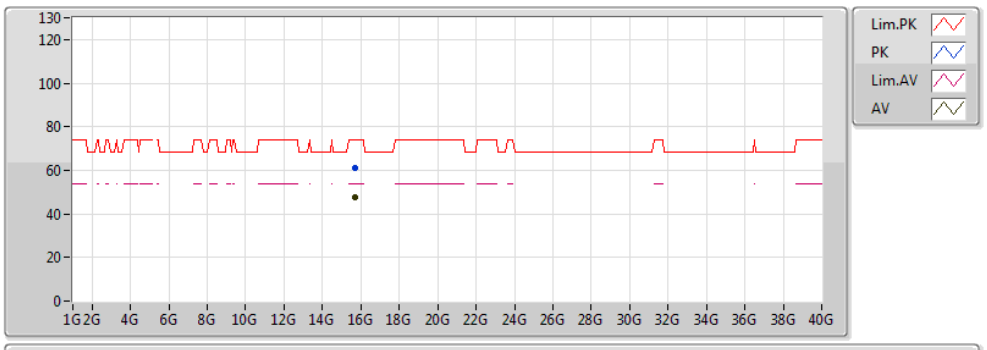
EUT Y ANT 2TX
Setting 23.5
03-L-2-10

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	5.1496G	53.66	54.00	-0.34	7.71	3	V	164	1.50	-
AV	5.2282G	107.77	Inf	-Inf	7.86	3	V	164	1.50	-
AV	5.3512G	49.83	54.00	-4.17	8.03	3	V	164	1.50	-
PK	5.149G	66.07	74.00	-7.93	7.71	3	V	164	1.50	-
PK	5.245G	117.51	Inf	-Inf	7.89	3	V	164	1.50	-
PK	5.3506G	62.18	74.00	-11.82	8.03	3	V	164	1.50	-

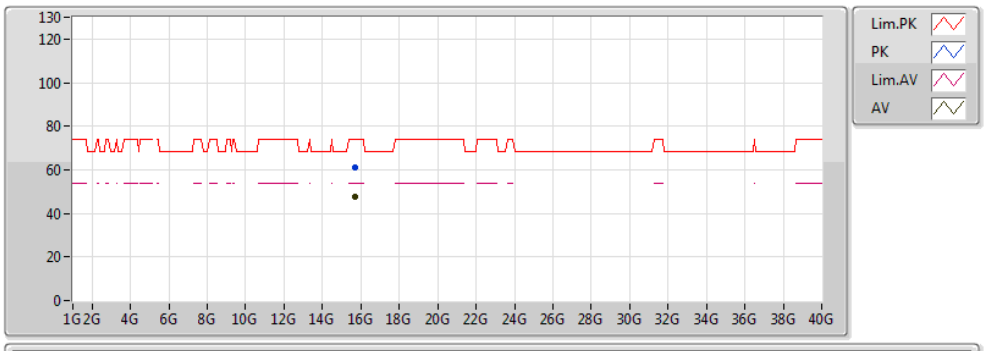
RE above 1GHz;Band:5.2G;VHT40;BWch:40MHz;Nss:1,(M0);Nant:2;Ch:5230MHz;TX



20160926
EUT Y ANT 2TX
Setting 23.5
03-L-2

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	15.69188G	47.41	54.00	-6.59	16.98	3	V	75	1.99	-
PK	15.693G	60.81	74.00	-13.19	16.98	3	V	75	1.99	-

RE above 1GHz;Band:5.2G;VHT40;BWch:40MHz;Nss:1,(M0);Nant:2;Ch:5230MHz;TX



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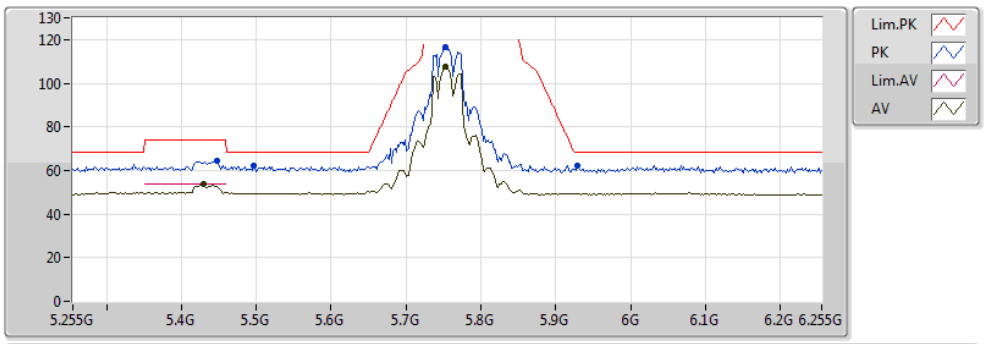
EUT Y ANT 2TX
Setting 23.5
03-L-2

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	15.6879G	47.52	54.00	-6.48	16.99	3	H	212	2.42	-
PK	15.69196G	61.18	74.00	-12.82	16.98	3	H	212	2.42	-

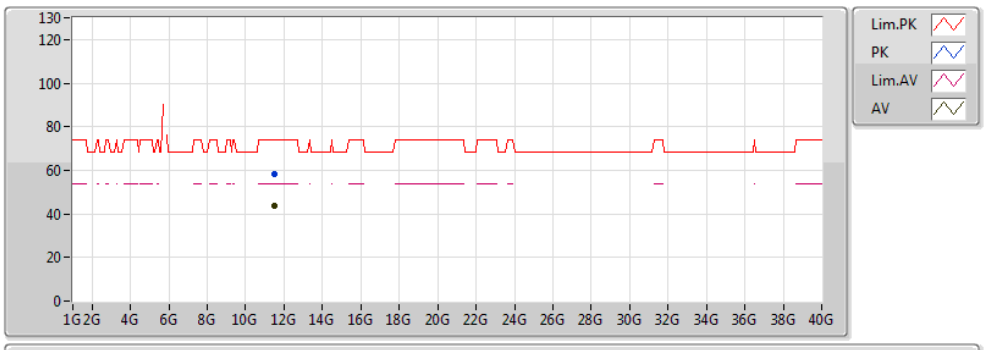
RE above 1GHz;Band:5.8G;VHT40;BWch:40MHz;Nss:1,(M0);Nant:2;Ch:5755MHz;TX



20160926
EUT Y ANT 2TX
Setting 27
03-L-2-10

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	5.429G	53.64	54.00	-0.36	8.15	3	V	46	1.50	-
AV	5.753G	107.42	Inf	-Inf	8.48	3	V	46	1.50	-
PK	5.497G	62.23	68.20	-5.97	8.31	3	V	46	1.50	-
PK	5.753G	116.81	Inf	-Inf	8.48	3	V	46	1.50	-
PK	5.929G	62.02	68.20	-6.18	8.68	3	V	46	1.50	-
PK	5.447G	64.19	74.00	-9.81	8.21	3	V	46	1.50	-

RE above 1GHz;Band:5.8G;VHT40;BWch:40MHz;Nss:1,(M0);Nant:2;Ch:5755MHz;TX



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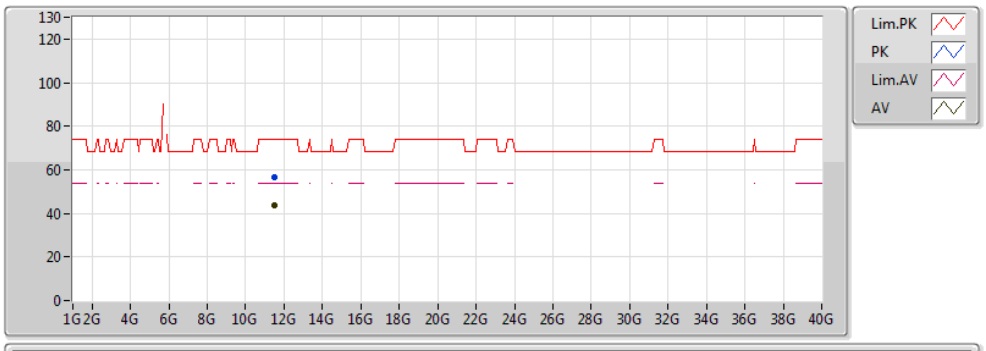
EUT Y ANT 2TX
Setting 27
03-L-2

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	11.51204G	43.81	54.00	-10.19	16.31	3	V	18	1.47	-
PK	11.50818G	58.03	74.00	-15.97	16.30	3	V	18	1.47	-

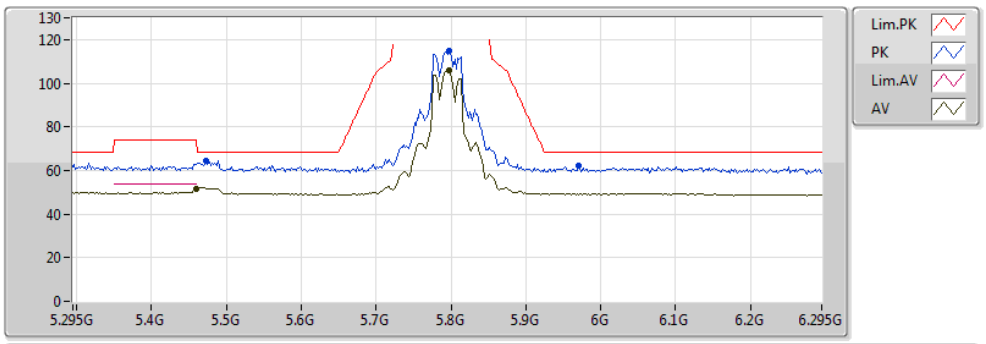
RE above 1GHz;Band:5.8G;VHT40;BWch:40MHz;Nss:1,(M0);Nant:2;Ch:5755MHz;TX



20160926
EUT Y ANT 2TX
Setting 27
03-L-2

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	11.50972G	43.85	54.00	-10.15	16.30	3	H	321	1.95	-
PK	11.51482G	56.72	74.00	-17.28	16.31	3	H	321	1.95	-

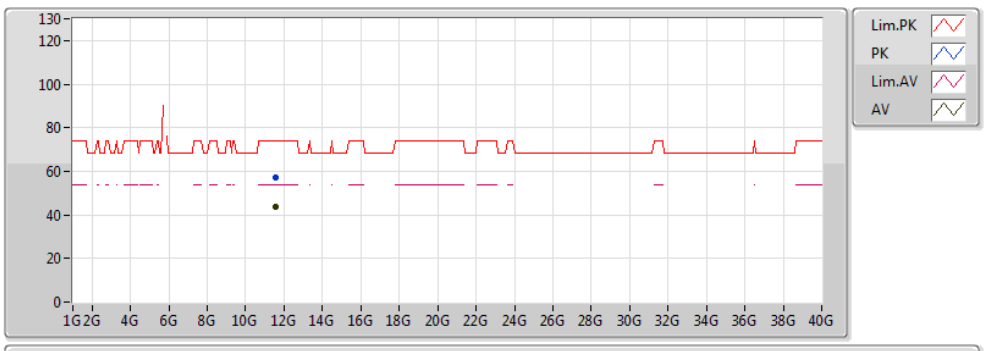
RE above 1GHz;Band:5.8G;VHT40;BWch:40MHz;Nss:1,(M0);Nant:2;Ch:5795MHz;TX



20160926
EUT Y ANT 2TX
Setting 27
03-L-2-10

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	5.459G	51.47	54.00	-2.53	8.22	3	V	43	1.50	-
AV	5.797G	105.64	Inf	-Inf	8.49	3	V	43	1.50	-
PK	5.473G	64.67	68.20	-3.53	8.25	3	V	43	1.50	-
PK	5.797G	114.62	Inf	-Inf	8.49	3	V	43	1.50	-
PK	5.971G	61.95	68.20	-6.25	8.74	3	V	43	1.50	-

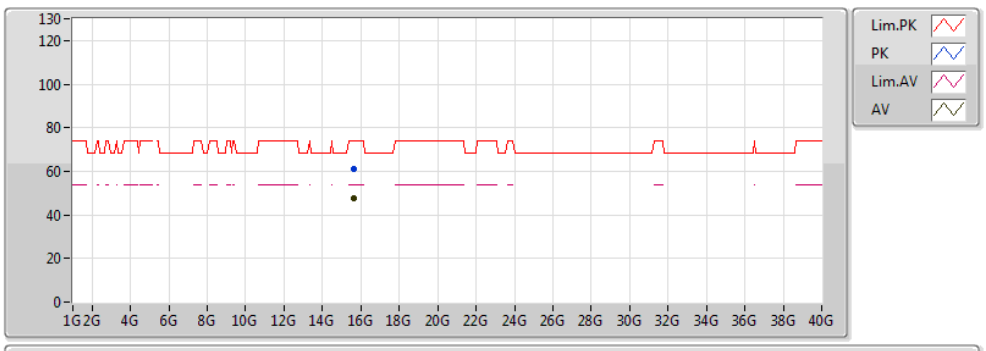
RE above 1GHz;Band:5.8G;VHT40;BWch:40MHz;Nss:1,(M0);Nant:2;Ch:5795MHz;TX



20160926
EUT Y ANT 2TX
Setting 27
03-L-2

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	11.59092G	43.92	54.00	-10.08	16.34	3	V	34	2.15	-
PK	11.58584G	57.02	74.00	-16.98	16.34	3	V	34	2.15	-

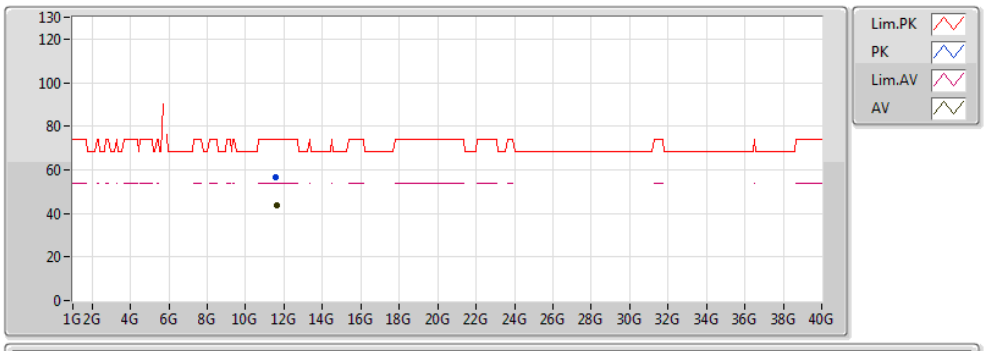
RE above 1GHz;Band:5.2G;VHT80;BWch:80MHz;Nss:1,(M0);Nant:2;Ch:5210MHz;TX



20160926
EUT Y ANT 2TX
Setting 16.5
03-L-2

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	15.62974G	47.84	54.00	-6.16	17.13	3	V	354	1.55	-
PK	15.6305G	61.28	74.00	-12.72	17.12	3	V	354	1.55	-

RE above 1GHz;Band:5.8G;VHT40;BWch:40MHz;Nss:1,(M0);Nant:2;Ch:5795MHz;TX



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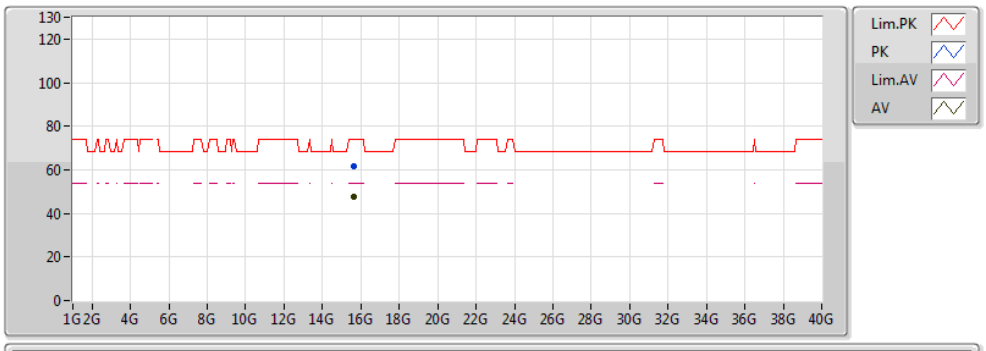
EUT Y ANT 2TX
Setting 27
03-L-2

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	11.59404G	43.81	54.00	-10.19	16.34	3	H	172	1.40	-
PK	11.58842G	56.77	74.00	-17.23	16.34	3	H	172	1.40	-

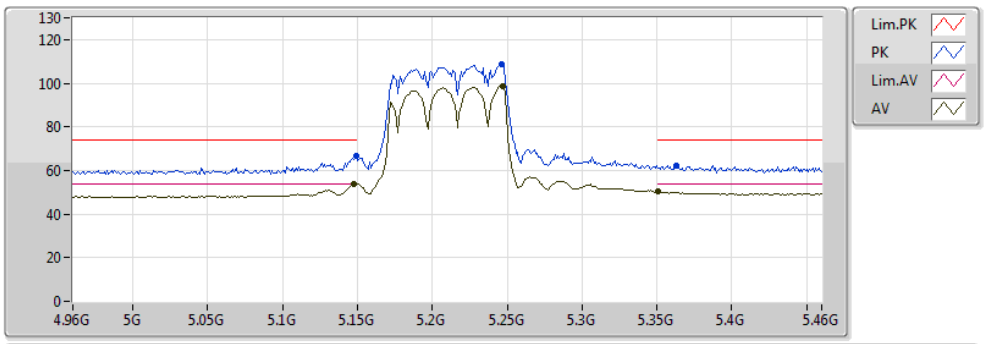
RE above 1GHz;Band:5.2G;VHT80;BWch:80MHz;Nss:1,(M0);Nant:2;Ch:5210MHz;TX



20160926
EUT Y ANT 2TX
Setting 16.5
03-L-2

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	15.6272G	47.82	54.00	-6.18	17.13	3	H	213	2.04	-
PK	15.62544G	61.38	74.00	-12.62	17.14	3	H	213	2.04	-

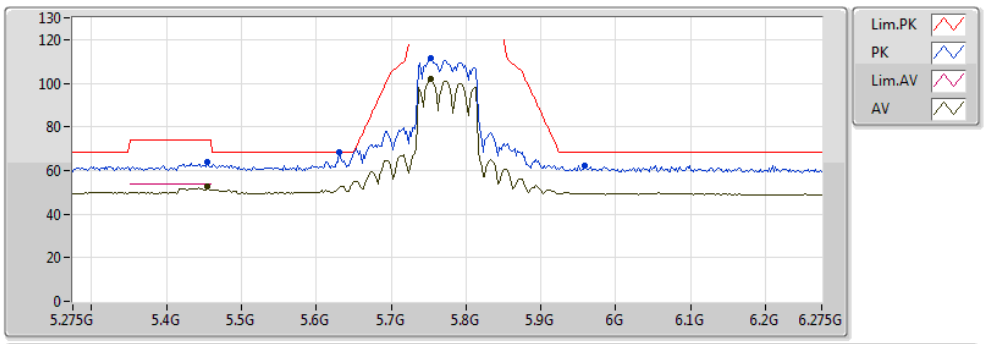
RE above 1GHz;Band:5.2G;VHT80;BWch:80MHz;Nss:1,(M0);Nant:2;Ch:5210MHz;TX



20160926
EUT Y ANT 2TX
Setting 16.5
03-L-2-10

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	5.148G	53.62	54.00	-0.38	7.70	3	V	165	1.50	-
AV	5.247G	98.66	Inf	-Inf	7.89	3	V	165	1.50	-
AV	5.351G	50.60	54.00	-3.40	8.03	3	V	165	1.50	-
PK	5.149G	66.46	74.00	-7.54	7.71	3	V	165	1.50	-
PK	5.246G	108.46	Inf	-Inf	7.89	3	V	165	1.50	-
PK	5.363G	62.20	74.00	-11.80	8.04	3	V	165	1.50	-

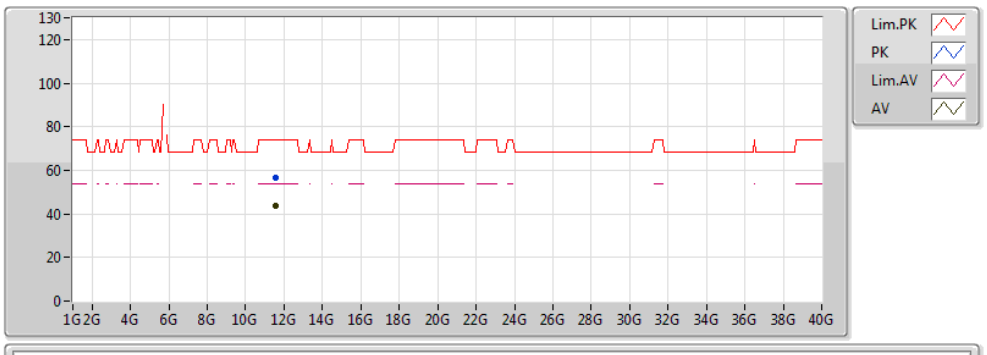
RE above 1GHz;Band:5.8G;VHT80;BWch:80MHz;Nss:1,(M0);Nant:2;Ch:5775MHz;TX



20160926
EUT Y ANT 2TX
Setting 21.5
03-L-2-10

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	5.455G	52.41	54.00	-1.59	8.21	3	V	48	1.50	-
AV	5.753G	101.72	Inf	-Inf	8.48	3	V	48	1.50	-
PK	5.631G	68.11	68.20	-0.09	8.45	3	V	48	1.50	-
PK	5.753G	111.59	Inf	-Inf	8.48	3	V	48	1.50	-
PK	5.959G	62.45	68.20	-5.75	8.72	3	V	48	1.50	-
PK	5.455G	63.78	74.00	-10.22	8.20	3	V	48	1.50	-

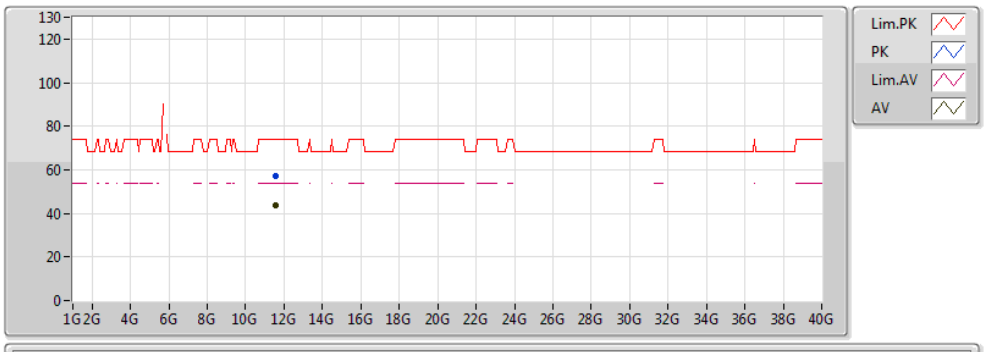
RE above 1GHz;Band:5.8G;VHT80;BWch:80MHz;Nss:1,(M0);Nant:2;Ch:5775MHz;TX



20160926
EUT Y ANT 2TX
Setting 21.5
03-L-2

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	11.55214G	43.91	54.00	-10.09	16.32	3	V	325	1.12	-
PK	11.5474G	56.67	74.00	-17.33	16.32	3	V	325	1.12	-

RE above 1GHz;Band:5.8G;VHT80;BWch:80MHz;Nss:1,(M0);Nant:2;Ch:5775MHz;TX



20160926
EUT Y ANT 2TX
Setting 21.5
03-L-2

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	11.55022G	43.90	54.00	-10.10	16.32	3	H	75	1.52	-
PK	11.5464G	57.01	74.00	-16.99	16.32	3	H	75	1.52	-

Mode: 20 MHz / Ant. 2

Voltage vs. Frequency Stability

Voltage	Measurement Frequency (MHz)			
(V)	5200 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
126.50	5199.9951	5199.9949	5199.9945	5199.9942
110.00	5199.9943	5199.9935	5199.9930	5199.9925
93.50	5199.9934	5199.9929	5199.9926	5199.9919
Max. Deviation (MHz)	0.0066	0.0071	0.0074	0.0081
Max. Deviation (ppm)	1.27	1.37	1.42	1.56
Result	Pass			

Temperature vs. Frequency Stability

Temperature	Measurement Frequency (MHz)			
(℃)	5200 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
0	5199.9920	5199.9914	5199.9906	5199.9896
10	5199.9926	5199.9918	5199.9910	5199.9907
20	5199.9943	5199.9939	5199.9930	5199.9922
30	5199.9958	5199.9951	5199.9941	5199.9931
40	5199.9971	5199.9965	5199.9960	5199.9950
Max. Deviation (MHz)	0.0080	0.0086	0.0094	0.0104
Max. Deviation (ppm)	1.54	1.65	1.81	2.00
Result	Pass			

Voltage vs. Frequency Stability

Voltage	Measurement Frequency (MHz)			
(V)	5785 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
126.50	5784.9950	5784.9948	5784.9939	5784.9938
110.00	5784.9943	5784.9939	5784.9932	5784.9930
93.50	5784.9935	5784.9931	5784.9921	5784.9920
Max. Deviation (MHz)	0.0065	0.0069	0.0079	0.0080
Max. Deviation (ppm)	1.12	1.19	1.37	1.38
Result	Pass			

Temperature vs. Frequency Stability

Temperature	Measurement Frequency (MHz)			
(℃)	5785 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
0	5784.9933	5784.9930	5784.9921	5784.9917
10	5784.9941	5784.9934	5784.9924	5784.9923
20	5784.9943	5784.9940	5784.9934	5784.9930
30	5784.9958	5784.9957	5784.9948	5784.9942
40	5784.9961	5784.9957	5784.9953	5784.9946
Max. Deviation (MHz)	0.0067	0.0070	0.0079	0.0083
Max. Deviation (ppm)	1.16	1.21	1.37	1.43
Result	Pass			

Mode: 40 MHz / Ant. 2

Voltage vs. Frequency Stability

Voltage	Measurement Frequency (MHz)			
(V)	5190 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
126.50	5189.9946	5189.9938	5189.9936	5189.9930
110.00	5189.9943	5189.9933	5189.9924	5189.9916
93.50	5189.9933	5189.9927	5189.9926	5189.9919
Max. Deviation (MHz)	0.0067	0.0073	0.0076	0.0084
Max. Deviation (ppm)	1.29	1.41	1.46	1.62
Result	Pass			

Temperature vs. Frequency Stability

Temperature	Measurement Frequency (MHz)			
(℃)	5190 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
0	5189.9926	5189.9924	5189.9918	5189.9914
10	5189.9932	5189.9925	5189.9917	5189.9912
20	5189.9943	5189.9935	5189.9928	5189.9920
30	5189.9958	5189.9950	5189.9946	5189.9939
40	5189.9966	5189.9956	5189.9953	5189.9948
Max. Deviation (MHz)	0.0074	0.0076	0.0083	0.0088
Max. Deviation (ppm)	1.43	1.46	1.60	1.70
Result	Pass			

Voltage vs. Frequency Stability

Voltage	Measurement Frequency (MHz)			
(V)	5755 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
126.50	5754.9949	5754.9945	5754.9935	5754.9931
110.00	5754.9943	5754.9939	5754.9931	5754.9930
93.50	5754.9936	5754.9929	5754.9924	5754.9915
Max. Deviation (MHz)	0.0064	0.0071	0.0076	0.0085
Max. Deviation (ppm)	1.11	1.23	1.32	1.48
Result	Pass			

Temperature vs. Frequency Stability

Temperature	Measurement Frequency (MHz)			
(℃)	5755 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
0	5754.9926	5754.9917	5754.9909	5754.9907
10	5754.9932	5754.9928	5754.9923	5754.9916
20	5754.9943	5754.9935	5754.9927	5754.9925
30	5754.9958	5754.9954	5754.9953	5754.9951
40	5754.9978	5754.9972	5754.9966	5754.9959
Max. Deviation (MHz)	0.0074	0.0083	0.0091	0.0093
Max. Deviation (ppm)	1.29	1.44	1.58	1.62
Result	Pass			

Mode: 80 MHz / Ant. 2

Voltage vs. Frequency Stability

Voltage	Measurement Frequency (MHz)			
(V)	5210 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
126.50	5209.9949	5209.9948	5209.9944	5209.9942
110.00	5209.9943	5209.9941	5209.9933	5209.9923
93.50	5209.9934	5209.9933	5209.9932	5209.9923
Max. Deviation (MHz)	0.0066	0.0067	0.0068	0.0077
Max. Deviation (ppm)	1.27	1.29	1.31	1.48
Result	Pass			

Temperature vs. Frequency Stability

Temperature	Measurement Frequency (MHz)			
(℃)	5210 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
0	5209.9922	5209.9912	5209.9904	5209.9901
10	5209.9942	5209.9936	5209.9935	5209.9933
20	5209.9943	5209.9937	5209.9936	5209.9934
30	5209.9958	5209.9950	5209.9943	5209.9933
40	5209.9973	5209.9966	5209.9964	5209.9962
Max. Deviation (MHz)	0.0078	0.0088	0.0096	0.0099
Max. Deviation (ppm)	1.50	1.69	1.84	1.90
Result	Pass			

Voltage vs. Frequency Stability

Voltage	Measurement Frequency (MHz)			
(V)	5775 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
126.50	5774.9952	5774.9948	5774.9939	5774.9937
110.00	5774.9943	5774.9938	5774.9928	5774.9919
93.50	5774.9940	5774.9935	5774.9931	5774.9926
Max. Deviation (MHz)	0.0060	0.0065	0.0072	0.0081
Max. Deviation (ppm)	1.04	1.13	1.25	1.40
Result	Pass			

Temperature vs. Frequency Stability

Temperature	Measurement Frequency (MHz)			
(℃)	5775 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
0	5774.9937	5774.9935	5774.9927	5775.0000
10	5774.9938	5774.9936	5774.9934	5774.9929
20	5774.9943	5774.9940	5774.9937	5774.9928
30	5774.9958	5774.9956	5774.9950	5774.9945
40	5774.9965	5774.9958	5774.9950	5774.9948
Max. Deviation (MHz)	0.0063	0.0065	0.0073	0.0072
Max. Deviation (ppm)	1.09	1.13	1.26	1.25
Result	Pass			