



FCC Test Report

Equipment : DBDC ROUTER
Brand Name : Charter
Model No. : RAC2V1K
FCC ID : H8NRAC2V1K
Standard : 47 CFR FCC Part 15.407
Operating Band : 5250 MHz – 5350 MHz
5470 MHz – 5725 MHz
Applicant : Askey Computer Corp.
10F, NO.119, JIANKANG RD., ZHONGHE DIST., NEW
TAIPEI CITY 23585, TAIWAN
Manufacturer : Askey Computer Corp.
10F, NO.119, JIANKANG RD., ZHONGHE DIST., NEW
TAIPEI CITY 23585, TAIWAN
Function : Outdoor; Indoor; Fixed P2P
 Client

The product sample received on Feb. 15, 2017 and completely tested on Feb. 27, 2017. 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.

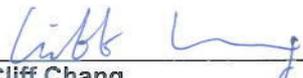

Cliff Chang
SPORTON INTERNATIONAL INC.





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PHOTOGRAPHS OF EUT V01



Summary of Test Result

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



1 General Description

1.1 Information

1.1.1 RF General Information

Frequency Range (MHz)	IEEE Std. 802.11	Ch. Frequency (MHz)	Channel Number
5250-5350	a, n (HT20), ac (VHT20)	5260-5320	52-64 [4]
5470-5725		5500-5720	100-144 [12]
5250-5350	n (HT40), ac (VHT40)	5270-5310	54-62 [2]
5470-5725		5510-5710	102-144 [6]
5250-5350	ac (VHT80)	5290	58 [1]
5470-5725		5530-5690	106-138 [3]

Band	Mode	BWch (MHz)	Nant
5.25-5.35GHz	802.11a	20	4TX
5.25-5.35GHz	802.11n HT20	20	4TX
5.25-5.35GHz	802.11ac VHT20	20	4TX
5.25-5.35GHz	802.11n HT40	40	4TX
5.25-5.35GHz	802.11ac VHT40	40	4TX
5.25-5.35GHz	802.11ac VHT80	80	4TX
5.47-5.725GHz	802.11a	20	4TX
5.47-5.725GHz	802.11n HT20	20	4TX
5.47-5.725GHz	802.11ac VHT20	20	4TX
5.47-5.725GHz	802.11n HT40	40	4TX
5.47-5.725GHz	802.11ac VHT40	40	4TX
5.47-5.725GHz	802.11ac VHT80	80	4TX

Note:

- 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	Part Number	Antenna Type	Connector	Gain (dBi)	Remark
1	Airgain	N2420GS	PCB Antenna	I-PEX	4.30	2.4GHz TX/RX
2	Airgain	N2420GS	PCB Antenna	I-PEX	3.40	2.4GHz TX/RX
3	Airgain	N2420GS	PCB Antenna	I-PEX	3.50	2.4GHz TX/RX
4	Airgain	N2420GS	PCB Antenna	I-PEX	4.20	2.4GHz TX/RX
5	Airgain	M5x05C (Longer)	PCB Antenna	I-PEX	5.00	5GHz TX/RX
6	Airgain	M5x05C	PCB Antenna	I-PEX	5.60	5GHz TX/RX
7	Airgain	M5x05C	PCB Antenna	I-PEX	4.50	5GHz TX/RX
8	Airgain	M5x05C (Longer)	PCB Antenna	I-PEX	4.10	5GHz TX/RX

Note: The EUT has eight antennas.

For 2.4GHz function (4TX/4RX):

Ant. 1 (P1), Ant. 2 (P2), Ant. 3 (P3) and Ant. 4 (P4) could transmit/receive simultaneously.

For 5GHz function (4TX/4RX):

Ant. 5 (P1), Ant. 6 (P2), Ant. 7 (P3) and Ant. 8 (P4) could transmit/receive simultaneously.

1.1.3 Mode Test Duty Cycle

Mode	DC	DCF(dB)	T(s)	VBW(Hz) ≥ 1/T
802.11ac VHT20,TXBF	0.931	0.311	1.823m	1k
802.11ac VHT40,TXBF	0.924	0.343	1.76m	1k
802.11ac VHT80,TXBF	0.94	0.269	2.015m	1k

1.1.4 EUT Operational Condition

EUT Power Type	From power adapter		
Beamforming Function	<input checked="" type="checkbox"/>	With beamforming	<input type="checkbox"/> Without beamforming
	The product has beamforming function for 802.11n/ac.		

Note: There are two functions of EUT, one is beamforming function, and the other is non-beamforming function for 802.11n/ac. The beamforming function was tested and recorded in this report, and the non-beamforming function was tested and recorded in Report No. : FR711935-02AA.



1.1.5 Table for Class II Change

This product is an extension of original one reported under Sporton project number: FR711935-01AD

Below is the table for the change of the product with respect to the original one.

Modifications	Performance Checking
Adding 5GHz band 2 and band 3 (5250~5350 MHz, 5470~5725 MHz) for this device	<ol style="list-style-type: none">1. Emission Bandwidth.2. Maximum Conducted Output Power.3. Peak Power Spectral Density.4. Frequency Stability.5. Unwanted Emissions above 1GHz.

Note: There are two functions of EUT, one is beamforming function, and the other is non-beamforming function for 802.11n/ac. The beamforming function was tested and recorded in this report, and the non-beamforming function was tested and recorded in Report No. : FR711935-02AA.



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		
<input type="checkbox"/>	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
<input checked="" type="checkbox"/>	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	22°C / 55%	Feb. 20, 2017~Feb. 27, 2017
Radiated	03CH01-CB	Jay Luo	22°C / 54%	Feb. 15, 2017~Feb. 24, 2017

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
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%
Output Power Measurement	1.33 dB	Confidence levels of 95%
Power Density Measurement	1.27 dB	Confidence levels of 95%
Bandwidth Measurement	9.74×10^{-8}	Confidence levels of 95%
Frequency Stability	6.06×10^{-8}	Confidence levels of 95%



2 Test Configuration of EUT

2.1 Test Channel Mode

Mode	Power Setting
VHT20, TXBF_Nss1,(MCS0)_4TX	-
5260MHz	17
5300MHz	17
5320MHz	17
5500MHz	18
5580MHz	18
5700MHz	18
5720MHz Straddle 5.47-5.725GHz	19
VHT40, TXBF_Nss1,(MCS0)_4TX	-
5270MHz	17
5310MHz	17
5510MHz	18
5550MHz	18
5670MHz	18
5710MHz Straddle 5.47-5.725GHz	19
VHT80, TXBF_Nss1,(MCS0)_4TX	-
5290MHz	17
5530MHz	18
5610MHz	19
5690MHz Straddle 5.47-5.725GHz	19

Note:

- ♦ 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	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	CTX

The Worst Case Mode for Following Conformance Tests	
Tests Item	Simultaneous Transmission Analysis
Operating Mode	
1	WLAN 2.4GHz+WLAN 5GHz
Refer to Sporton Test Report No.: FA711935-02 for Co-location RF Exposure Evaluation.	

Note: The EUT can only be used at Y axis position.



2.3 EUT Operation during Test

For Conducted Mode:

The EUT was programmed to be in continuously transmitting mode.

For Radiated Mode:

During the test, the following programs under WIN 7 were executed.

The program was executed as follows:

1. During the test, the EUT operation to normal function.
2. Executed command fixed test channel under Telnet.
3. Executed "Lantest.exe" to link with the remote workstation to transmit and receive packet by RX Device and transmit duty cycle no less 98%.

2.4 Accessories

Accessories				
No.	Equipment Name	Brand Name	Model No.	Rating
1	Adapter 1	Sunny	SYS1564-3012-W2	INPUT: 100-240Vac, 50-60Hz, 1.0A MAX. OUTPUT: 12Vdc, 2.5A
2	Adapter 2	Ktec	KSA-36W-120250HU	INPUT: 100-240Vac, 50/60Hz, 1.0A OUTPUT: 12Vdc, 2.5A

2.5 Support Equipment

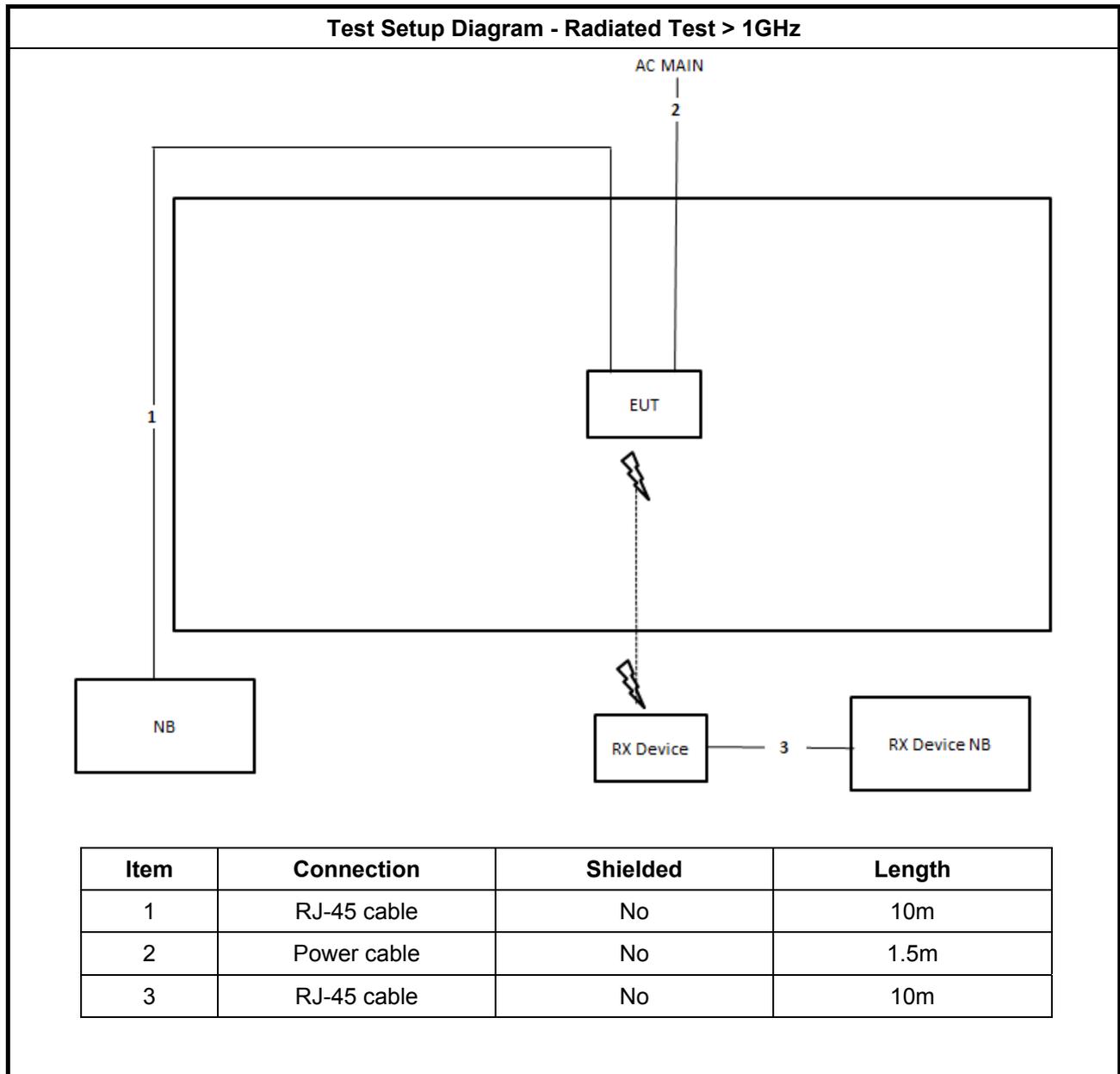
For Test Site No: 03CH01-CB

Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
1	NB*2	DELL	E4300	DoC
2	RX Device (DBDC ROUTER)	Charter	RAC2V1K	H8NRAC2V1K

For Test Site No: TH01-CB

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

2.6 Test Setup Diagram



3 Transmitter Test Result

3.1 Emission Bandwidth

3.1.1 Emission Bandwidth Limit

Emission Bandwidth Limit	
UNII Devices	
<input checked="" type="checkbox"/>	For the 5.15-5.25 GHz band, N/A
<input checked="" type="checkbox"/>	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.
<input checked="" type="checkbox"/>	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.
<input checked="" type="checkbox"/>	For the 5.725-5.85 GHz band, 6 dB emission bandwidth \geq 500kHz.
LE-LAN Devices	
<input type="checkbox"/>	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.
<input type="checkbox"/>	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
<input type="checkbox"/>	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
<input type="checkbox"/>	For the 5.725-5.85 GHz band, 6 dB emission bandwidth \geq 500kHz.

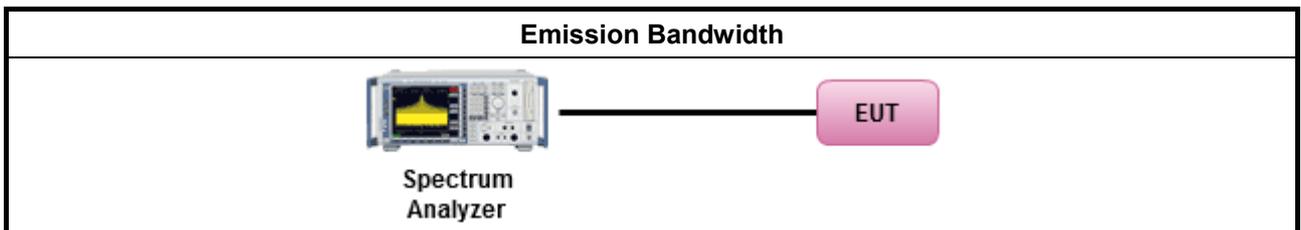
3.1.2 Measuring Instruments

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

3.1.3 Test Procedures

Test Method							
<ul style="list-style-type: none"> For the emission bandwidth shall be measured using one of the options below: <table border="1"> <tr> <td><input checked="" type="checkbox"/></td> <td>Refer as FCC KDB 789033, clause C for EBW and clause D for OBW measurement.</td> </tr> <tr> <td><input type="checkbox"/></td> <td>Refer as ANSI C63.10, clause 6.9.1 for occupied bandwidth testing.</td> </tr> <tr> <td><input checked="" type="checkbox"/></td> <td>Refer as IC RSS-Gen, clause 4.6 for bandwidth testing.</td> </tr> </table> 		<input checked="" type="checkbox"/>	Refer as FCC KDB 789033, clause C for EBW and clause D for OBW measurement.	<input type="checkbox"/>	Refer as ANSI C63.10, clause 6.9.1 for occupied bandwidth testing.	<input checked="" type="checkbox"/>	Refer as IC RSS-Gen, clause 4.6 for bandwidth testing.
<input checked="" type="checkbox"/>	Refer as FCC KDB 789033, clause C for EBW and clause D for OBW measurement.						
<input type="checkbox"/>	Refer as ANSI C63.10, clause 6.9.1 for occupied bandwidth testing.						
<input checked="" type="checkbox"/>	Refer as IC RSS-Gen, clause 4.6 for bandwidth testing.						

3.1.4 Test Setup



3.1.5 Test Result of Emission Bandwidth

Refer as Appendix A



3.2 Maximum Conducted Output Power

3.2.1 Maximum Conducted Output Power Limit

Maximum Conducted Output Power Limit	
UNII Devices	
<input checked="" type="checkbox"/> For the 5.15-5.25 GHz band:	
	<ul style="list-style-type: none"> ▪ 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 $P_{Out} = 24 - (G_{TX} - 6)$.
<input checked="" type="checkbox"/> For the 5.25-5.35 GHz band, the maximum conducted output power (P_{Out}) shall not exceed the lesser of 250 mW or $11 \text{ dBm} + 10 \log B$, where B is the 26 dB emission bandwidth in MHz. If $G_{TX} > 6$ dBi, then $P_{Out} = 24 - (G_{TX} - 6)$.	
<input checked="" type="checkbox"/> For the 5.47-5.725 GHz band, the maximum conducted output power (P_{Out}) shall not exceed the lesser of 250 mW or $11 \text{ dBm} + 10 \log B$, where B is the 26 dB emission bandwidth in MHz. If $G_{TX} > 6$ dBi, then $P_{Out} = 24 - (G_{TX} - 6)$.	
<input checked="" type="checkbox"/> For the 5.725-5.85 GHz band:	
	<ul style="list-style-type: none"> ▪ 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	
<input type="checkbox"/> 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.	
<input type="checkbox"/> 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	
<input type="checkbox"/> 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	
<input type="checkbox"/> For the 5.725-5.85 GHz band:	
	<ul style="list-style-type: none"> ▪ 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.	

3.2.2 Measuring Instruments

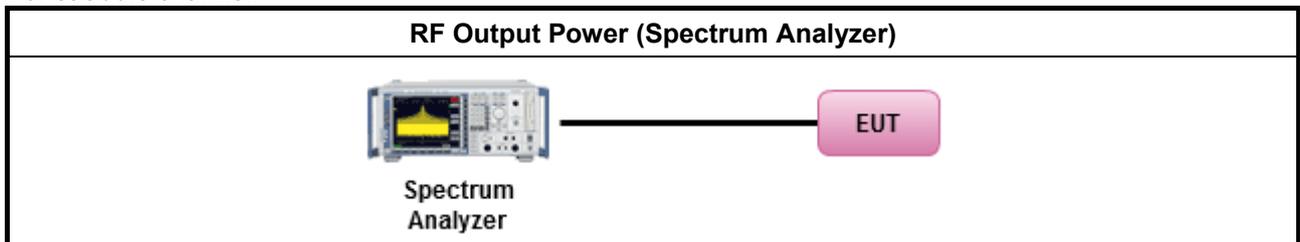
Refer a test equipment and calibration data table in this test report.

3.2.3 Test Procedures

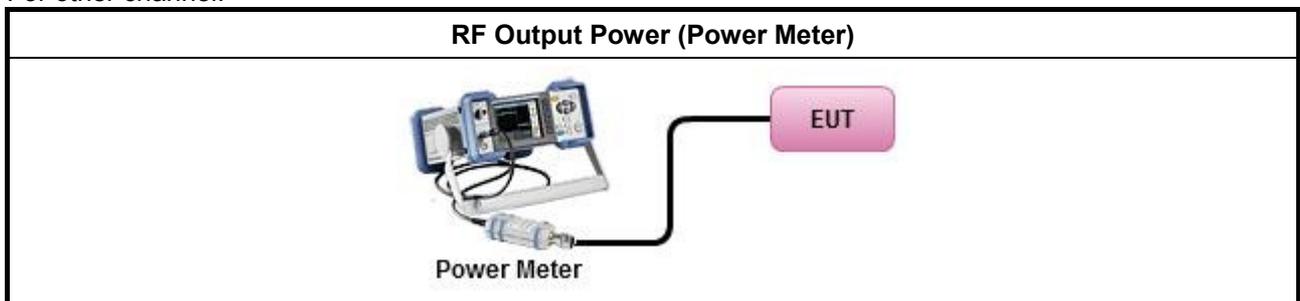
Test Method	
<ul style="list-style-type: none"> Maximum Conducted Output Power 	
Average over on/off periods with duty factor	
<input checked="" type="checkbox"/>	For straddle channel: Refer as FCC KDB 789033, clause E Method SA-2 (spectral trace averaging).
<input type="checkbox"/>	Refer as FCC KDB 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	
<input checked="" type="checkbox"/>	For other channel: Refer as FCC KDB 789033, clause E Method PM-G (using an RF average power meter).
<ul style="list-style-type: none"> For conducted measurement. 	
<ul style="list-style-type: none"> 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. 	
<ul style="list-style-type: none"> If multiple transmit chains, EIRP calculation could be following as methods: $P_{total} = P_1 + P_2 + \dots + P_n$ (calculated in linear unit [mW] and transfer to log unit [dBm]) $EIRP_{total} = P_{total} + DG$ 	

3.2.4 Test Setup

For straddle channel:



For other channel:



3.2.5 Test Result of Maximum Conducted Output Power

Refer as Appendix B

3.3 Peak Power Spectral Density

3.3.1 Peak Power Spectral Density Limit

Peak Power Spectral Density Limit	
UNII Devices	
<input checked="" type="checkbox"/> For the 5.15-5.25 GHz band:	
	<ul style="list-style-type: none"> ▪ 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 $PPSD = 11 - (G_{TX} - 6)$.
<input checked="" type="checkbox"/> For the 5.25-5.35 GHz band, the peak power spectral density (PPSD) ≤ 11 dBm/MHz. If $G_{TX} > 6$ dBi, then $PPSD = 11 - (G_{TX} - 6)$.	
<input checked="" type="checkbox"/> For the 5.47-5.725 GHz band, the peak power spectral density (PPSD) ≤ 11 dBm/MHz. If $G_{TX} > 6$ dBi, then $PPSD = 11 - (G_{TX} - 6)$.	
<input checked="" type="checkbox"/> For the 5.725-5.85 GHz band:	
	<ul style="list-style-type: none"> ▪ 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	
<input type="checkbox"/> 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.	
<input type="checkbox"/> 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.	
	<ul style="list-style-type: none"> ▪ 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 $0^\circ \leq \theta < 8^\circ$; -13 - 0.716 ($\theta-8$) dBW/MHz for $8^\circ \leq \theta < 40^\circ$ -35.9 - 1.22 ($\theta-40$) dBW/MHz for $40^\circ \leq \theta \leq 45^\circ$; -42 dBW/MHz for $\theta > 45^\circ$
<input type="checkbox"/> 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.	
<input type="checkbox"/> For the 5.725-5.85 GHz band:	
	<ul style="list-style-type: none"> ▪ 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.
<p>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.</p>	

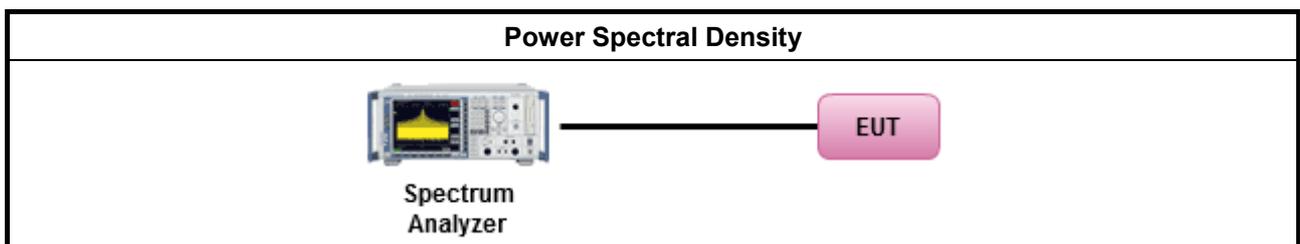
3.3.2 Measuring Instruments

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

3.3.3 Test Procedures

Test Method	
<ul style="list-style-type: none"> ▪ 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: 	
<input type="checkbox"/>	Refer as FCC KDB 789033, F5) 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]	
<input checked="" type="checkbox"/>	Refer as FCC KDB 789033, clause E Method SA-1 (spectral trace averaging).
<input type="checkbox"/>	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	
<input checked="" type="checkbox"/>	Refer as FCC KDB 789033, clause E Method SA-2 (spectral trace averaging).
<input type="checkbox"/>	Refer as FCC KDB 789033, clause E Method SA-2 Alt. (RMS detection with slow sweep speed)
<ul style="list-style-type: none"> ▪ For conducted measurement. 	
<ul style="list-style-type: none"> ▪ If the EUT supports multiple transmit chains using options given below: 	
<input checked="" type="checkbox"/>	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.
<input type="checkbox"/>	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,
<input type="checkbox"/>	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.
<ul style="list-style-type: none"> ▪ If multiple transmit chains, EIRP PPSD calculation could be following as methods: $PPSD_{total} = PPSD_1 + PPSD_2 + \dots + PPSD_n$ (calculated in linear unit [mW] and transfer to log unit [dBm]) $EIRP_{total} = PPSD_{total} + DG$ 	

3.3.4 Test Setup





3.3.5 Test Result of Peak Power Spectral Density

Refer as Appendix C



3.4 Unwanted Emissions

3.4.1 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).



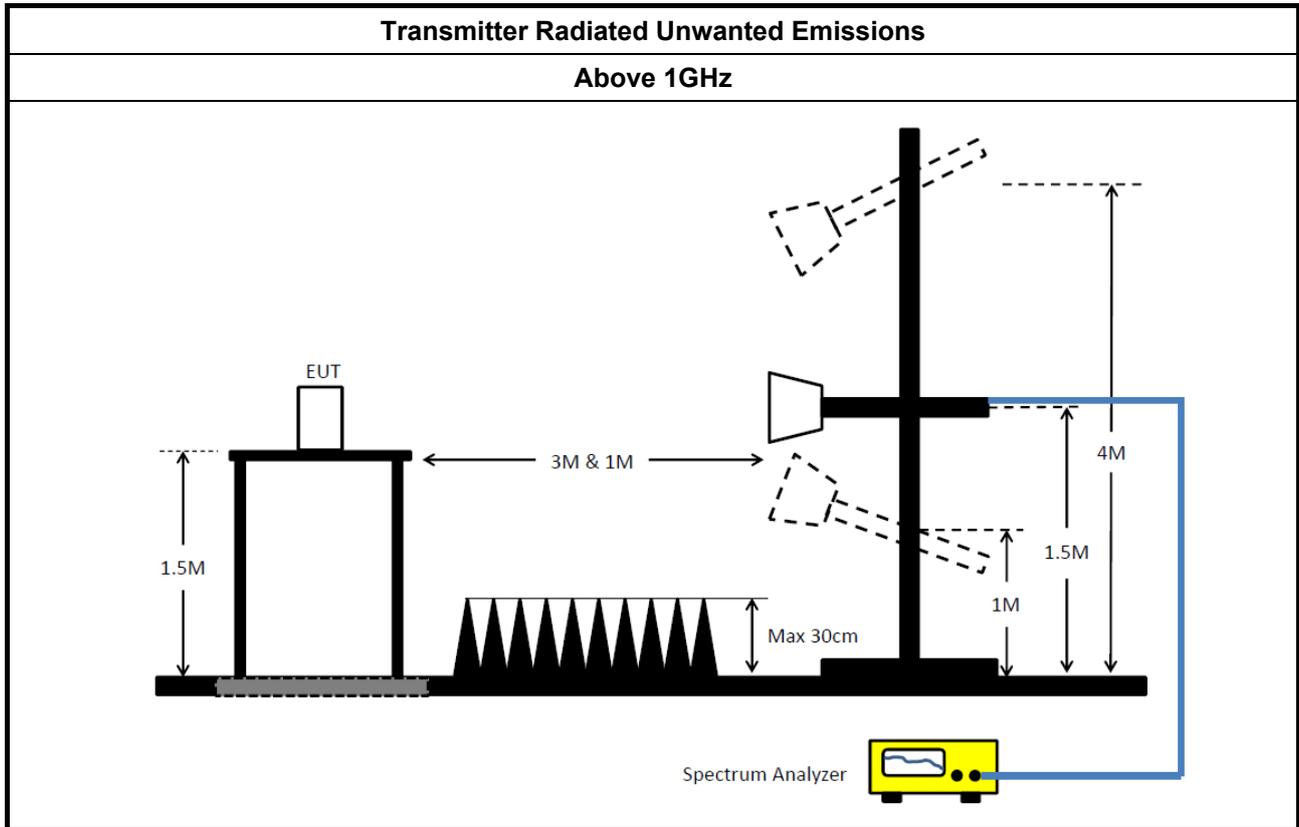
3.4.2 Measuring Instruments

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

3.4.3 Test Procedures

Test Method	
	<ul style="list-style-type: none"> ▪ 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).
	<ul style="list-style-type: none"> ▪ The average emission levels shall be measured in [duty cycle \geq 98 or duty factor].
	<ul style="list-style-type: none"> ▪ For the transmitter unwanted emissions shall be measured using following options below: <ul style="list-style-type: none"> ▪ 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. <ul style="list-style-type: none"> <input type="checkbox"/> Refer as FCC KDB 789033, H)6) Method AD (Trace Averaging). <input checked="" type="checkbox"/> Refer as FCC KDB 789033, H)6) Method VB (Reduced VBW). <input type="checkbox"/> Refer as ANSI C63.10, clause 4.2.3.2.3 (Reduced VBW). VBW \geq 1/T, where T is pulse time. <input type="checkbox"/> Refer as ANSI C63.10, clause 4.2.3.2.4 average value of pulsed emissions. <input checked="" type="checkbox"/> Refer as FCC KDB 789033, clause H)5) measurement procedure peak limit. <input type="checkbox"/> Refer as ANSI C63.10, clause 4.2.3.2.2 measurement procedure peak limit.
	<ul style="list-style-type: none"> ▪ For radiated measurement. <ul style="list-style-type: none"> ▪ 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.
	<ul style="list-style-type: none"> ▪ The any unwanted emissions level shall not exceed the fundamental emission level.
	<ul style="list-style-type: none"> ▪ All amplitude of spurious emissions that are attenuated by more than 20 dB below the permissible value has no need to be reported.

3.4.4 Test Setup



3.4.5 Test Result of Transmitter Unwanted Emissions

Refer as Appendix D

3.5 Frequency Stability

3.5.1 Frequency Stability Limit

Frequency Stability Limit
UNII Devices
<ul style="list-style-type: none"> 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
<ul style="list-style-type: none"> N/A
IEEE Std. 802.11
<ul style="list-style-type: none"> 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.

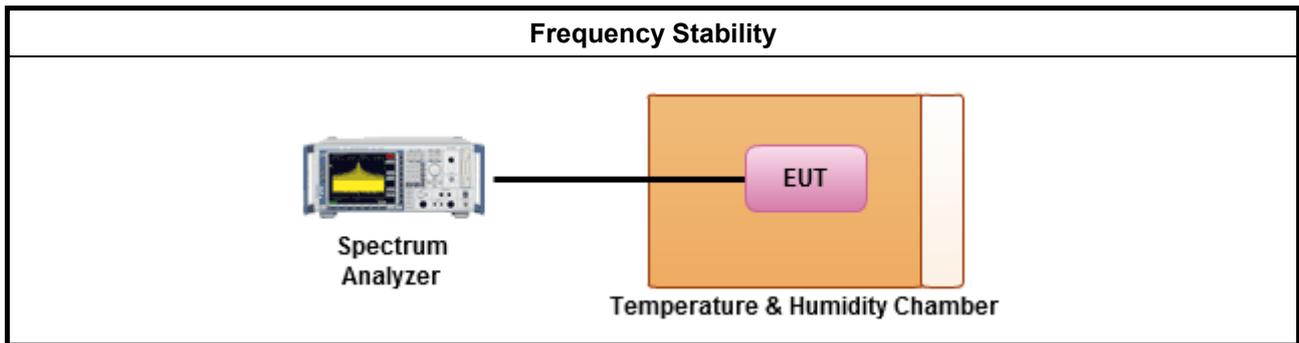
3.5.2 Measuring Instruments

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

3.5.3 Test Procedures

Test Method
<ul style="list-style-type: none"> Refer as ANSI C63.10, clause 6.8 for frequency stability tests
<ul style="list-style-type: none"> Frequency stability with respect to ambient temperature
<ul style="list-style-type: none"> Frequency stability when varying supply voltage
<ul style="list-style-type: none"> Extreme temperature is 0°C~40°C.

3.5.4 Test Setup



3.5.5 Test Result of Frequency Stability

Refer as Appendix E



4 Test Equipment and Calibration Data

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Remark
Horn Antenna	EMCO	3115	00075790	750MHz ~ 18GHz	Nov. 10, 2016	Radiation (03CH01-CB)
Horn Antenna	Schwarzbeck	BBHA 9170	BBHA9170252	15GHz ~ 40GHz	Jul. 25, 2016	Radiation (03CH01-CB)
Pre-Amplifier	Agilent	8449B	3008A02310	1GHz ~ 26.5GHz	Jan. 18, 2016	Radiation (03CH01-CB)
Pre-Amplifier	Agilent	8449B	3008A02310	1GHz ~ 26.5GHz	Jan. 16, 2017	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	Nov. 21, 2016	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-16+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	Oct. 24, 2016	Radiation (03CH01-CB)
RF Cable-high	Woken	High Cable-40G#2	N/A	18GHz ~ 40 GHz	Oct. 24, 2016	Radiation (03CH01-CB)
Test Software	Audix	E3	6.2009-10-7	N/A	N/A	Radiation (03CH01-CB)
Spectrum analyzer	R&S	FSV40	100979	9kHz~40GHz	Dec. 26, 2016	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	Oct. 24, 2016	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-7	1 GHz –26.5 GHz	Oct. 24, 2016	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-8	1 GHz –26.5 GHz	Oct. 24, 2016	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-9	1 GHz –26.5 GHz	Oct. 24, 2016	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-10	1 GHz –26.5 GHz	Oct. 24, 2016	Conducted (TH01-CB)
Power Sensor	Agilent	U2021XA	MY53410001	50MHz~18GHz	Nov. 22, 2016	Conducted (TH01-CB)

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



**11a, VHT20, VHT40 and VHT80
Summary**

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
VHT20, TXBF_Nss1,(MCS0)_4TX	-	-	-	-	-
5.25-5.35GHz	20.725M	17.641M	17M6D1D	20.425M	17.591M
5.47-5.725GHz	20.75M	17.641M	17M6D1D	15.09M	13.793M
5.725-5.85GHz	3.76M	4.058M	4M06D1D	3.72M	3.918M
VHT40, TXBF_Nss1,(MCS0)_4TX	-	-	-	-	-
5.25-5.35GHz	39.85M	36.032M	36M0D1D	39.1M	35.882M
5.47-5.725GHz	40.05M	36.032M	36M0D1D	34.475M	32.569M
5.725-5.85GHz	3.22M	3.958M	3M96D1D	3.12M	3.638M
VHT80, TXBF_Nss1,(MCS0)_4TX	-	-	-	-	-
5.25-5.35GHz	83.4M	75.762M	75M8D1D	82.8M	75.562M
5.47-5.725GHz	83.7M	75.962M	76M0D1D	74.475M	71.439M
5.725-5.85GHz	3.22M	7.576M	7M58D1D	3.02M	4.458M

Max-N dB = Maximum 6dB down bandwidth for 5.725-5.85GHz band / Maximum 26dB down bandwidth for other band;

Max-OBW = Maximum 99% occupied bandwidth;

Min-N dB = Minimum 6dB down bandwidth for 5.725-5.85GHz band / Maximum 26dB down bandwidth for other band;

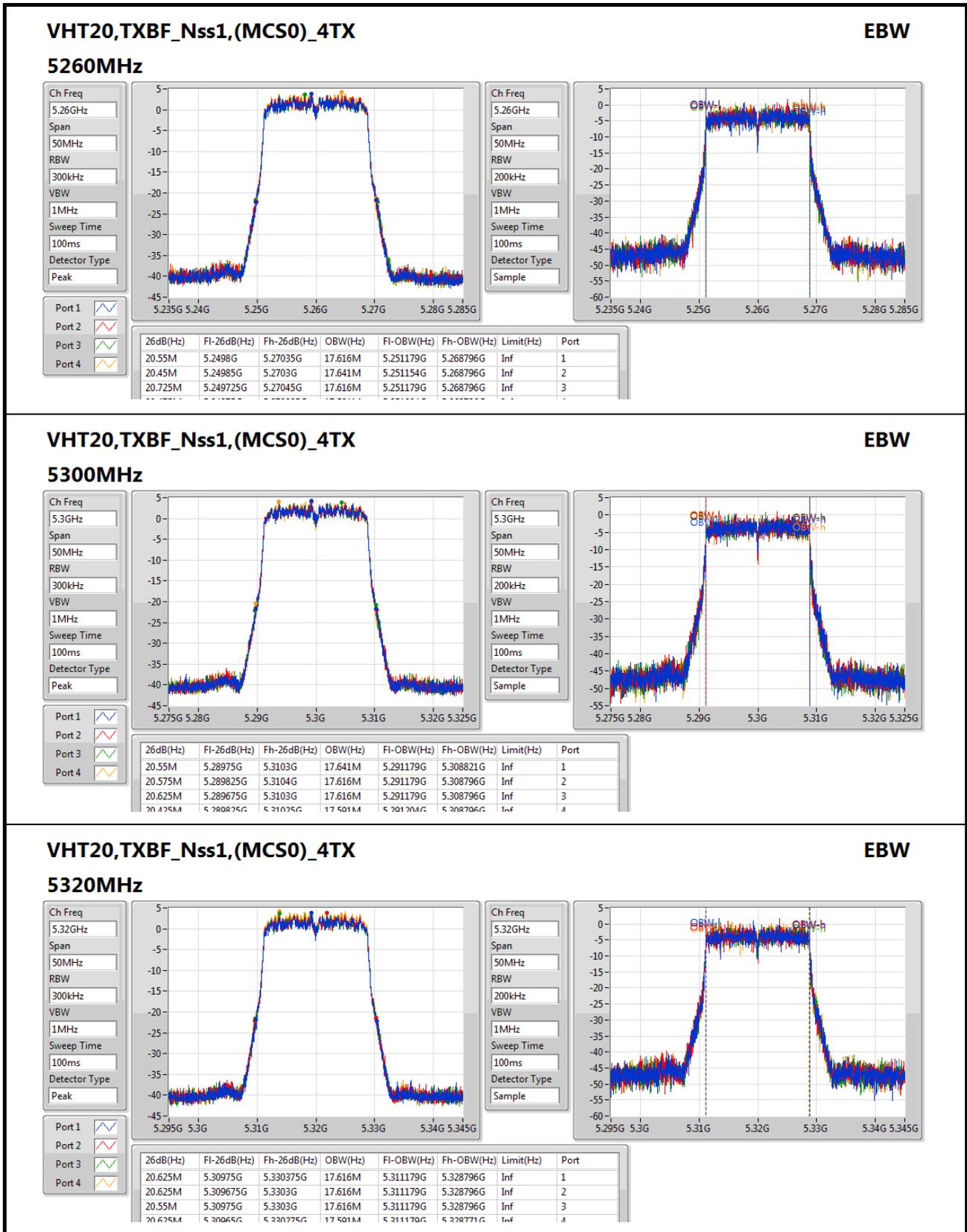
Min-OBW = Minimum 99% occupied bandwidth;

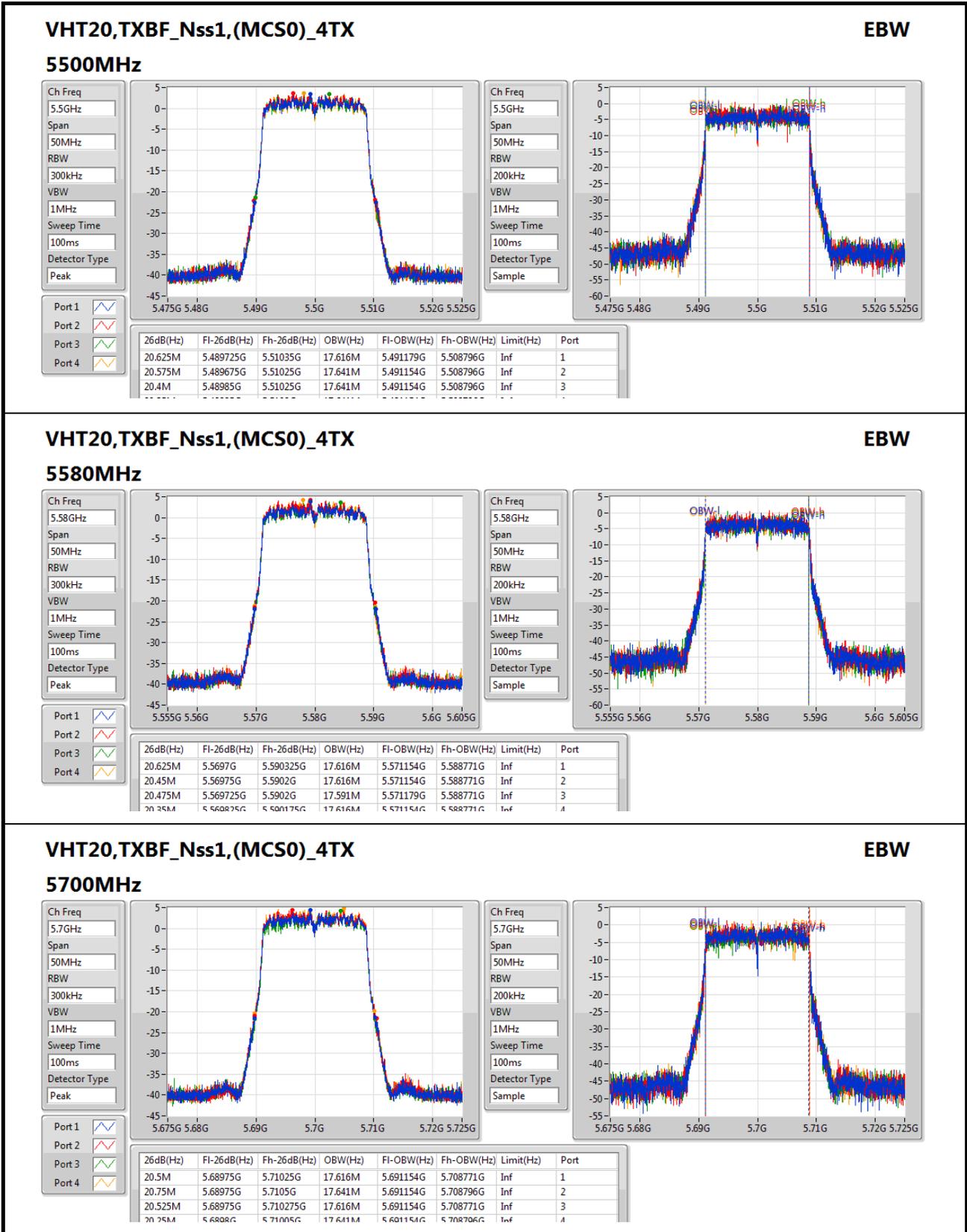
Result

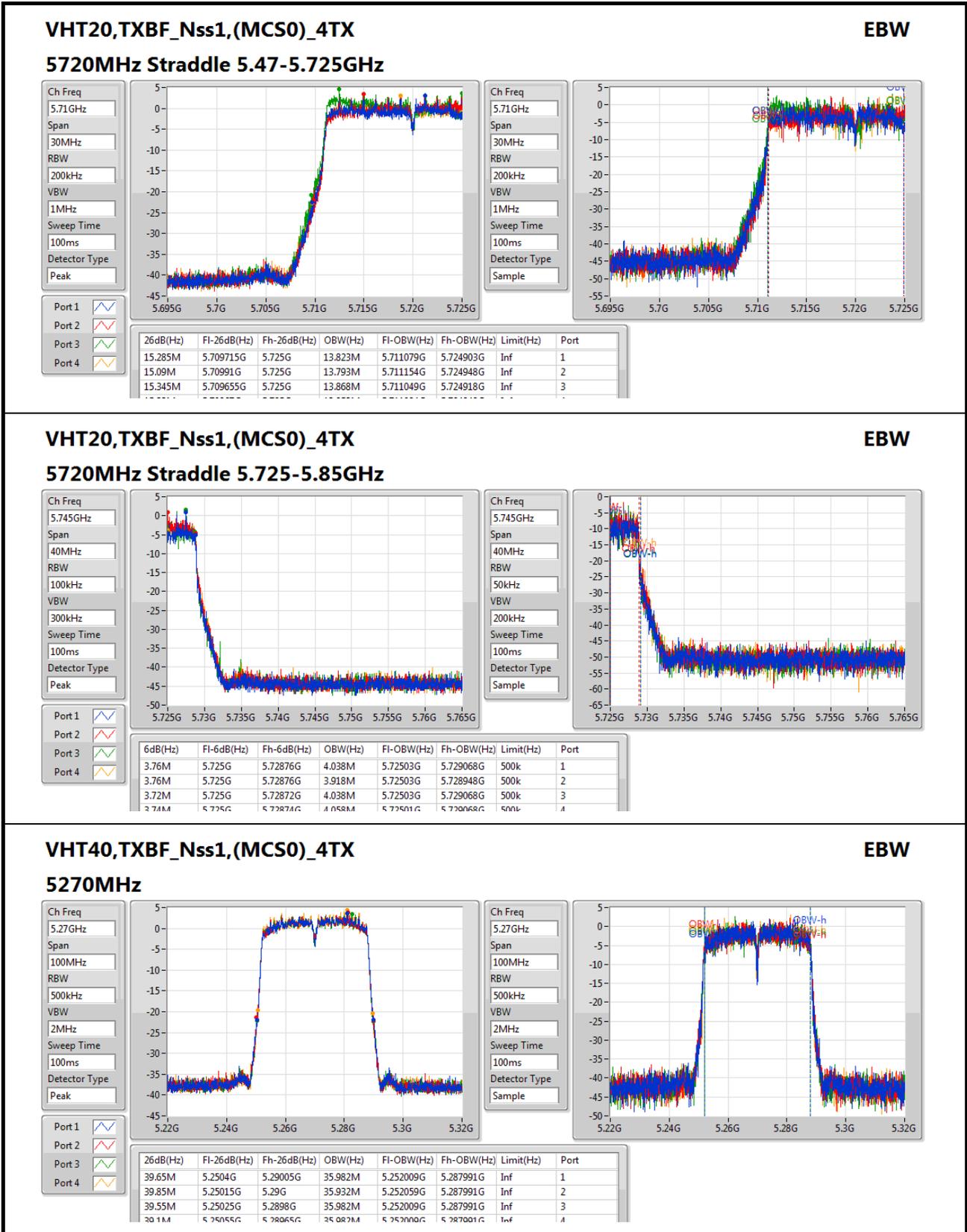
Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)	Port 2-N dB (Hz)	Port 2-OBW (Hz)	Port 3-N dB (Hz)	Port 3-OBW (Hz)	Port 4-N dB (Hz)	Port 4-OBW (Hz)
VHT20,TXBF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5260MHz	Pass	Inf	20.55M	17.616M	20.45M	17.641M	20.725M	17.616M	20.475M	17.591M
5300MHz	Pass	Inf	20.55M	17.641M	20.575M	17.616M	20.625M	17.616M	20.425M	17.591M
5320MHz	Pass	Inf	20.625M	17.616M	20.625M	17.616M	20.55M	17.616M	20.625M	17.591M
5500MHz	Pass	Inf	20.625M	17.616M	20.575M	17.641M	20.4M	17.641M	20.35M	17.641M
5580MHz	Pass	Inf	20.625M	17.616M	20.45M	17.616M	20.475M	17.591M	20.35M	17.616M
5700MHz	Pass	Inf	20.5M	17.616M	20.75M	17.641M	20.525M	17.616M	20.25M	17.641M
5720MHz Straddle 5.47-5.725GHz	Pass	Inf	15.285M	13.823M	15.09M	13.793M	15.345M	13.868M	15.33M	13.853M
5720MHz Straddle 5.725-5.85GHz	Pass	500k	3.76M	4.038M	3.76M	3.918M	3.72M	4.038M	3.74M	4.058M
VHT40,TXBF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5270MHz	Pass	Inf	39.65M	35.982M	39.85M	35.932M	39.55M	35.982M	39.1M	35.982M
5310MHz	Pass	Inf	39.7M	35.882M	39.8M	36.032M	39.65M	35.932M	39.2M	35.932M
5510MHz	Pass	Inf	39.8M	35.982M	40.05M	36.032M	39.65M	35.932M	39.15M	36.032M
5550MHz	Pass	Inf	39.65M	35.982M	39.9M	36.032M	39.3M	35.932M	39.2M	36.032M
5670MHz	Pass	Inf	39.9M	36.032M	40.05M	35.982M	39.6M	35.982M	39.35M	35.982M
5710MHz Straddle 5.47-5.725GHz	Pass	Inf	34.93M	33.058M	34.58M	32.884M	34.545M	32.569M	34.475M	32.814M
5710MHz Straddle 5.725-5.85GHz	Pass	500k	3.12M	3.958M	3.22M	3.638M	3.18M	3.938M	3.18M	3.698M
VHT80,TXBF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5290MHz	Pass	Inf	83.2M	75.662M	83.4M	75.562M	83.3M	75.762M	82.8M	75.762M
5530MHz	Pass	Inf	83.4M	75.762M	83.6M	75.662M	83.5M	75.562M	83M	75.662M
5610MHz	Pass	Inf	83.7M	75.762M	83.3M	75.762M	83.7M	75.962M	82.9M	75.762M
5690MHz Straddle 5.47-5.725GHz	Pass	Inf	76.425M	72.039M	75.75M	71.589M	75.15M	72.639M	74.475M	71.439M
5690MHz Straddle 5.725-5.85GHz	Pass	500k	3.22M	5.697M	3.06M	4.458M	3.02M	5.117M	3.18M	7.576M

Port X-N dB = Port X 6dB down bandwidth for 5.725-5.85GHz band / 26dB down bandwidth for other band

Port X-OBW = Port X 99% occupied bandwidth;





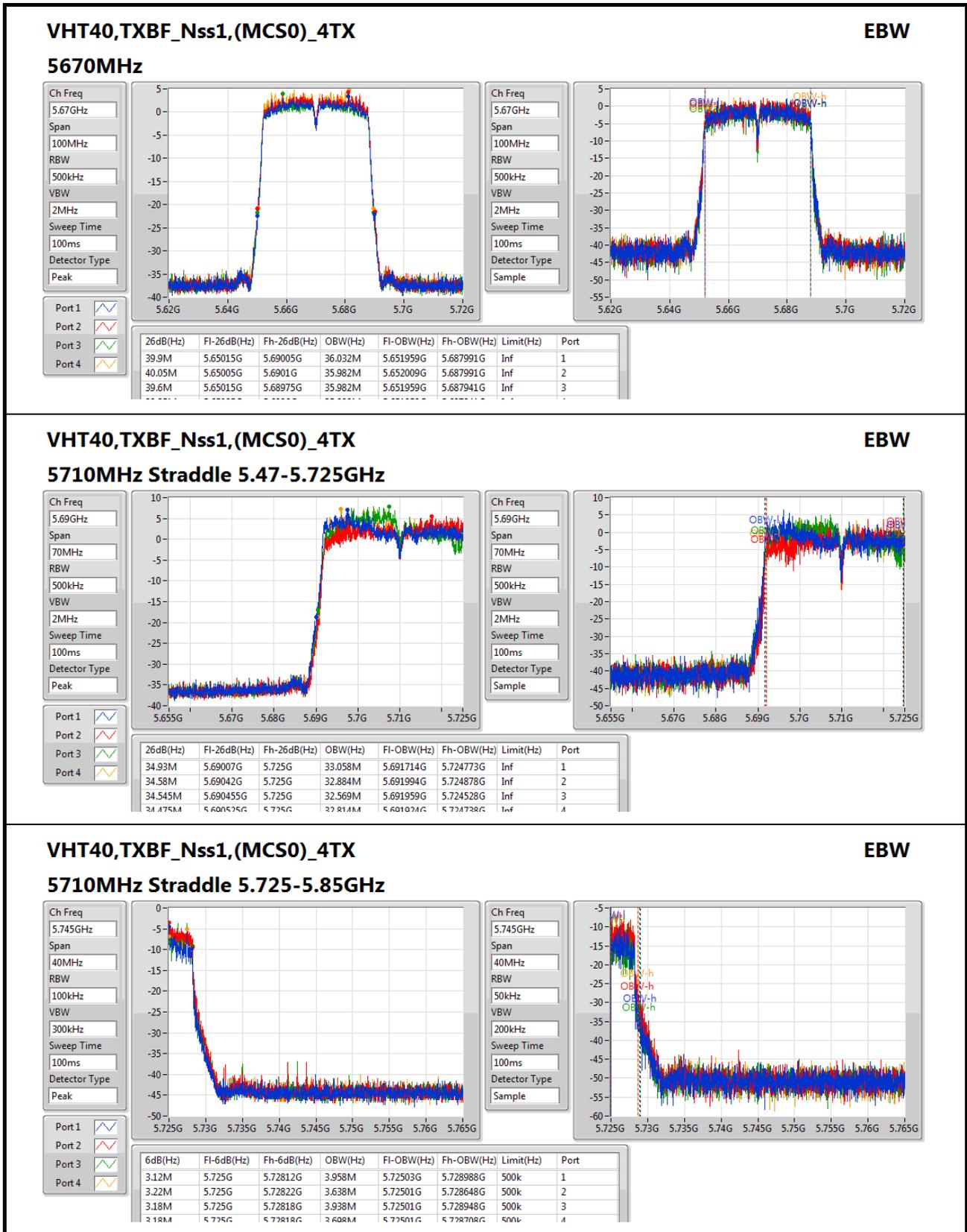


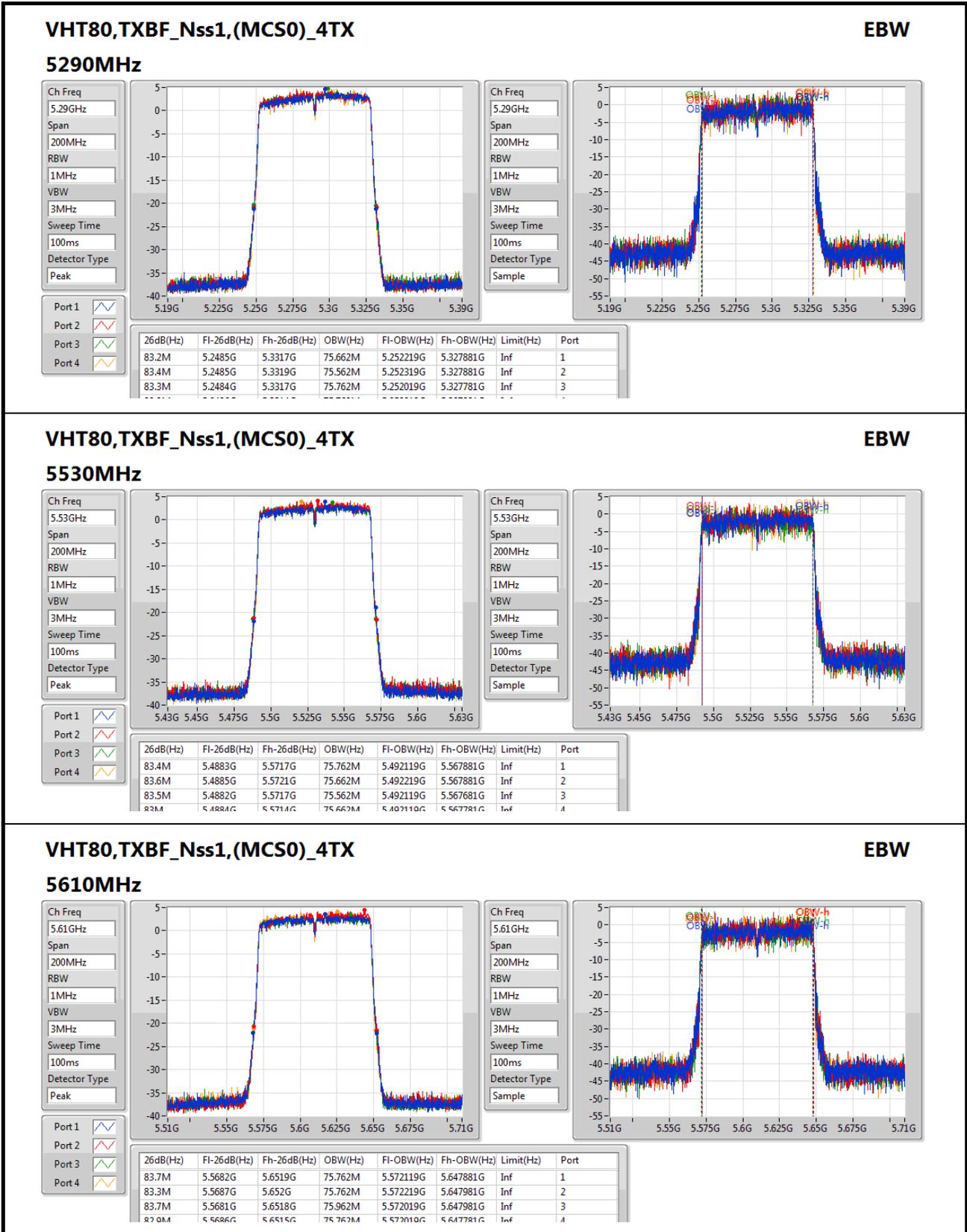

VHT40, TXBF_Nss1, (MCS0)_4TX
EBW

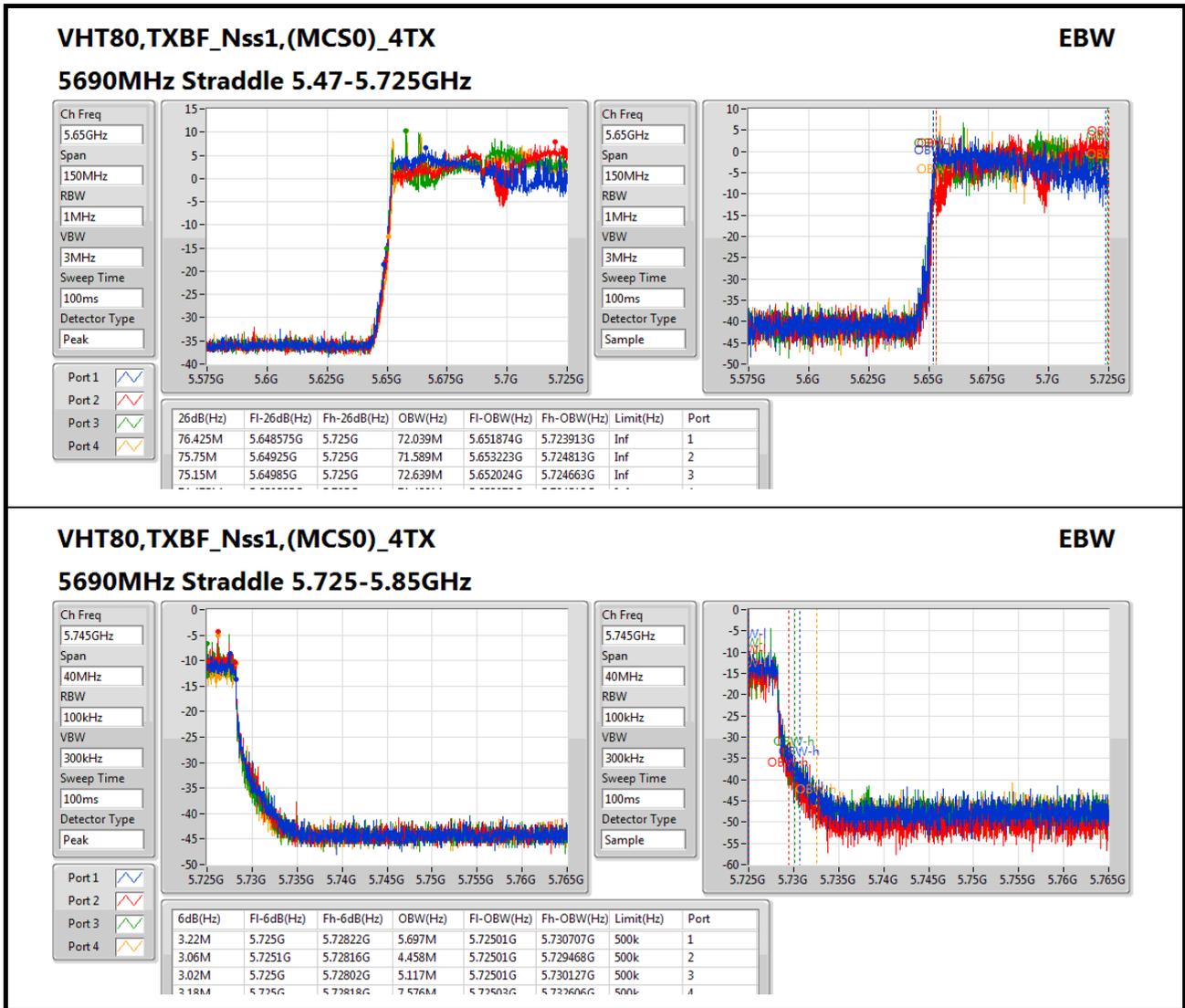
5550MHz

Ch Freq: 5.55GHz
Span: 100MHz
RBW: 500kHz
VBW: 2MHz
Sweep Time: 100ms
Detector Type: Peak

Ch Freq: 5.55GHz
Span: 100MHz
RBW: 500kHz
VBW: 2MHz
Sweep Time: 100ms
Detector Type: Sample









**11a, VHT20, VHT40 and VHT80
Summary**

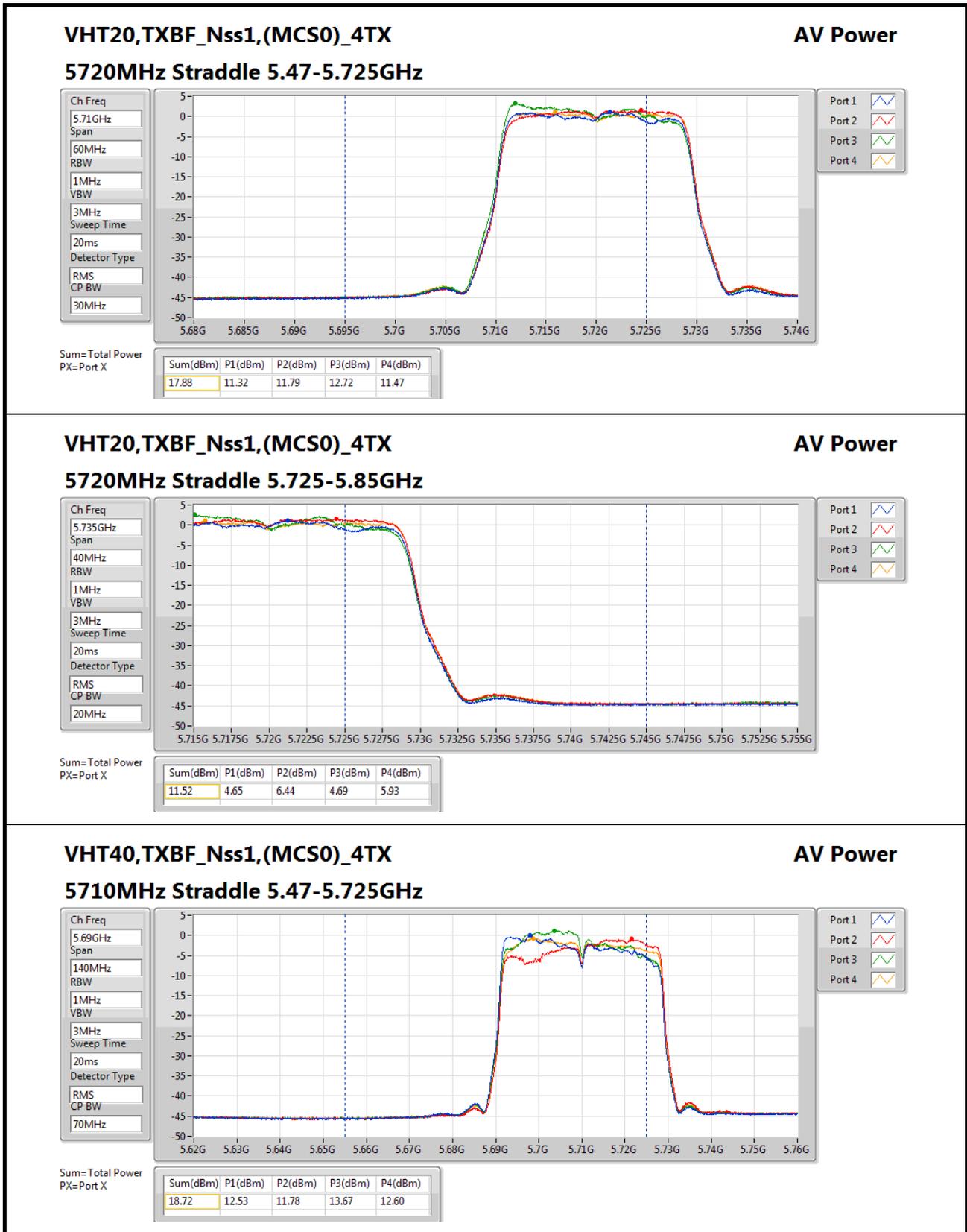
Mode	Total Power (dBm)	Total Power (W)	EIRP (dBm)	EIRP (W)
VHT20, TXBF_Nss1,(MCS0)_4TX	-	-	-	-
5.25-5.35GHz	18.61	0.07261	29.45	0.88105
5.47-5.725GHz	18.66	0.07345	29.50	0.89125
5.725-5.85GHz	11.52	0.01419	22.36	0.17219
VHT40, TXBF_Nss1,(MCS0)_4TX	-	-	-	-
5.25-5.35GHz	18.84	0.07656	29.68	0.92897
5.47-5.725GHz	18.75	0.07499	29.58	0.90782
5.725-5.85GHz	6.12	0.00409	16.96	0.04966
VHT80, TXBF_Nss1,(MCS0)_4TX	-	-	-	-
5.25-5.35GHz	18.66	0.07345	29.50	0.89125
5.47-5.725GHz	19.12	0.08166	29.96	0.99083
5.725-5.85GHz	3.71	0.00235	14.55	0.02851

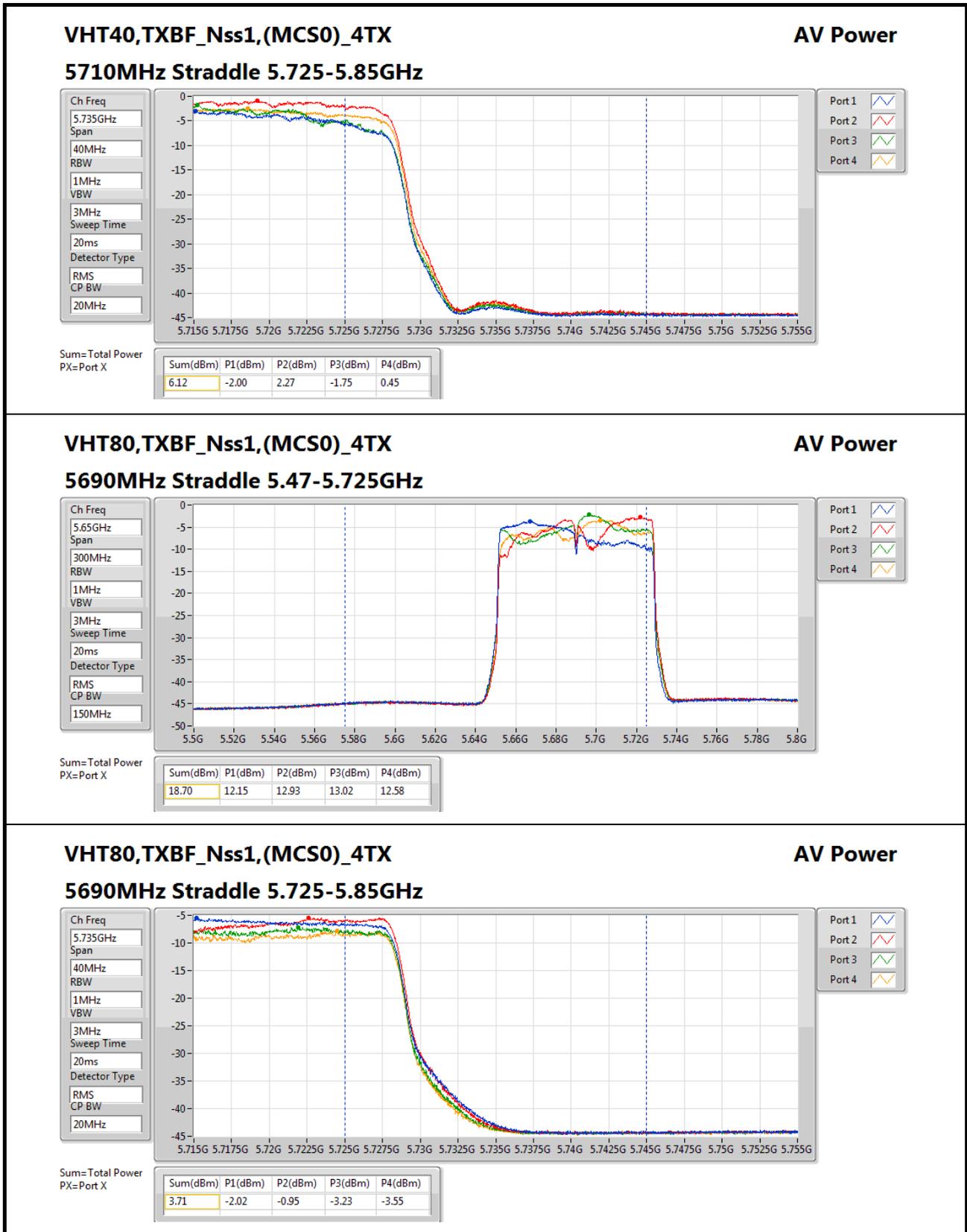


Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Port 2 (dBm)	Port 3 (dBm)	Port 4 (dBm)	Total Power (dBm)	Power Limit (dBm)	EIRP (dBm)	EIRP Limit (dBm)
VHT20,TXBF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5260MHz	Pass	10.84	12.64	12.55	12.74	12.41	18.61	19.14	29.45	30.00
5300MHz	Pass	10.84	12.56	12.37	12.89	12.26	18.55	19.14	29.39	30.00
5320MHz	Pass	10.84	12.38	12.62	12.77	12.43	18.57	19.14	29.41	30.00
5500MHz	Pass	10.84	12.65	12.96	12.68	12.25	18.66	19.14	29.50	30.00
5580MHz	Pass	10.84	12.34	12.98	12.65	12.19	18.57	19.14	29.41	30.00
5700MHz	Pass	10.84	12.17	12.41	12.91	12.06	18.42	19.14	29.26	30.00
5720MHz Straddle 5.47-5.725GHz	Pass	10.84	11.32	11.79	12.72	11.47	17.88	17.95	28.72	28.79
5720MHz Straddle 5.725-5.85GHz	Pass	10.84	4.65	6.44	4.69	5.93	11.52	25.16	22.36	36.00
VHT40,TXBF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5270MHz	Pass	10.84	12.77	12.58	13.03	12.45	18.73	19.14	29.57	30.00
5310MHz	Pass	10.84	13.09	12.72	12.85	12.59	18.84	19.14	29.68	30.00
5510MHz	Pass	10.84	12.58	12.67	12.35	12.27	18.49	19.14	29.33	30.00
5550MHz	Pass	10.84	12.61	12.25	12.84	12.42	18.56	19.14	29.39	30.00
5670MHz	Pass	10.84	12.46	13.06	12.71	12.65	18.75	19.14	29.58	30.00
5710MHz Straddle 5.47-5.725GHz	Pass	10.84	12.53	11.78	13.67	12.60	18.72	19.14	29.56	30.00
5710MHz Straddle 5.725-5.85GHz	Pass	10.84	-2.00	2.27	-1.75	0.45	6.12	25.16	16.96	36.00
VHT80,TXBF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-
5290MHz	Pass	10.84	12.31	12.94	12.85	12.43	18.66	19.14	29.50	30.00
5530MHz	Pass	10.84	12.12	12.89	12.47	12.09	18.43	19.14	29.26	30.00
5610MHz	Pass	10.84	12.77	13.33	13.59	12.65	19.12	19.14	29.96	30.00
5690MHz Straddle 5.47-5.725GHz	Pass	10.84	12.15	12.93	13.02	12.58	18.70	19.14	29.54	30.00
5690MHz Straddle 5.725-5.85GHz	Pass	10.84	-2.02	-0.95	-3.23	-3.55	3.71	25.16	14.55	36.00

DG = Directional Gain; Port X = Port X output power







11a, VHT20, VHT40 and VHT80
Summary

Mode	PD (dBm/RBW)	EIRP PD (dBm/RBW)
VHT20, TXBF_Nss1, (MCS0)_4TX	-	-
5.25-5.35GHz	5.32	16.16
5.47-5.725GHz	5.81	16.64
5.725-5.85GHz	3.30	14.14
VHT40, TXBF_Nss1, (MCS0)_4TX	-	-
5.25-5.35GHz	2.84	13.68
5.47-5.725GHz	3.49	14.33
5.725-5.85GHz	-1.08	9.76
VHT80, TXBF_Nss1, (MCS0)_4TX	-	-
5.25-5.35GHz	0.06	10.90
5.47-5.725GHz	-0.40	10.44
5.725-5.85GHz	-4.01	6.83

RBW = 500kHz for 5.725-5.85GHz band / 1MHz for other band;

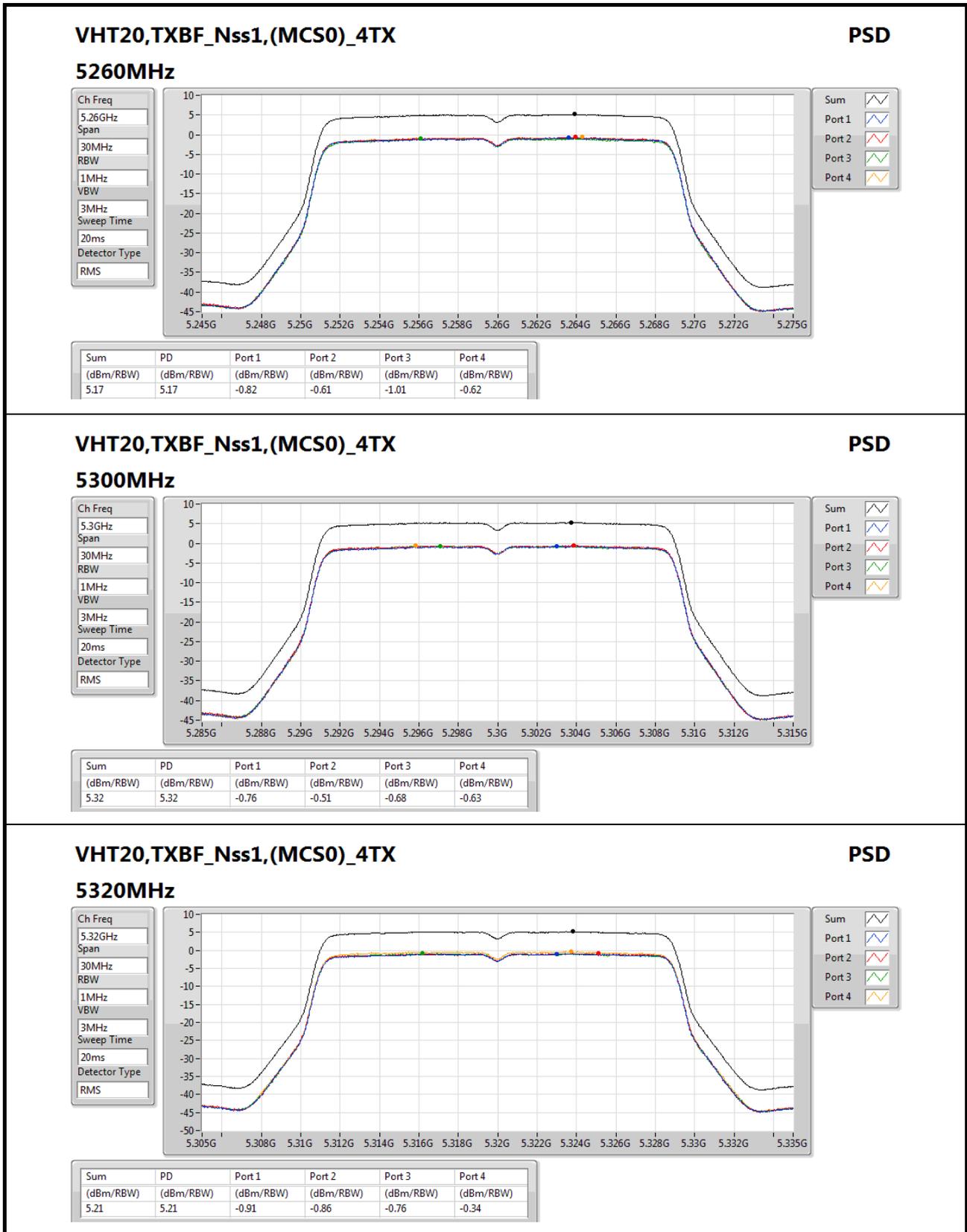


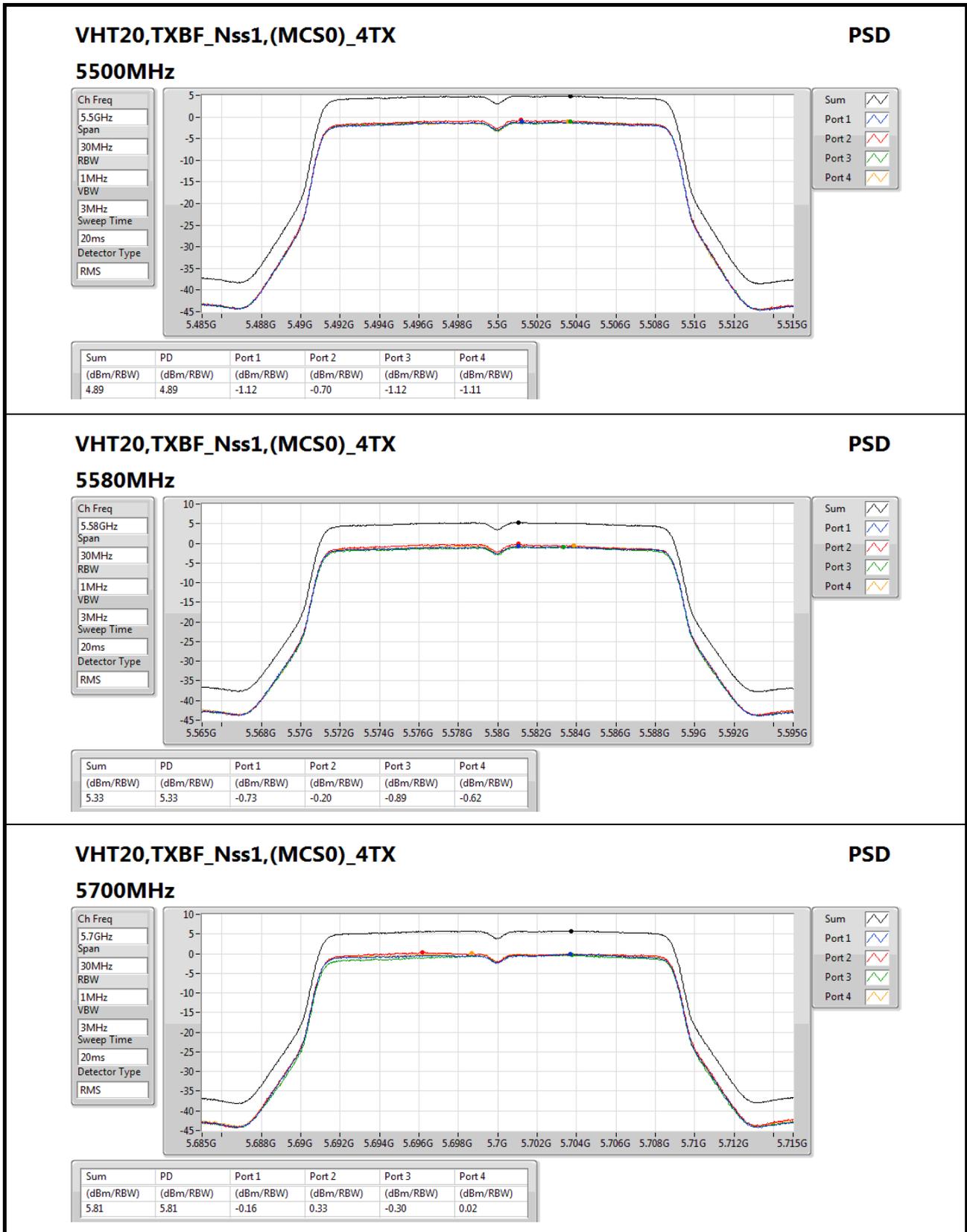
Result

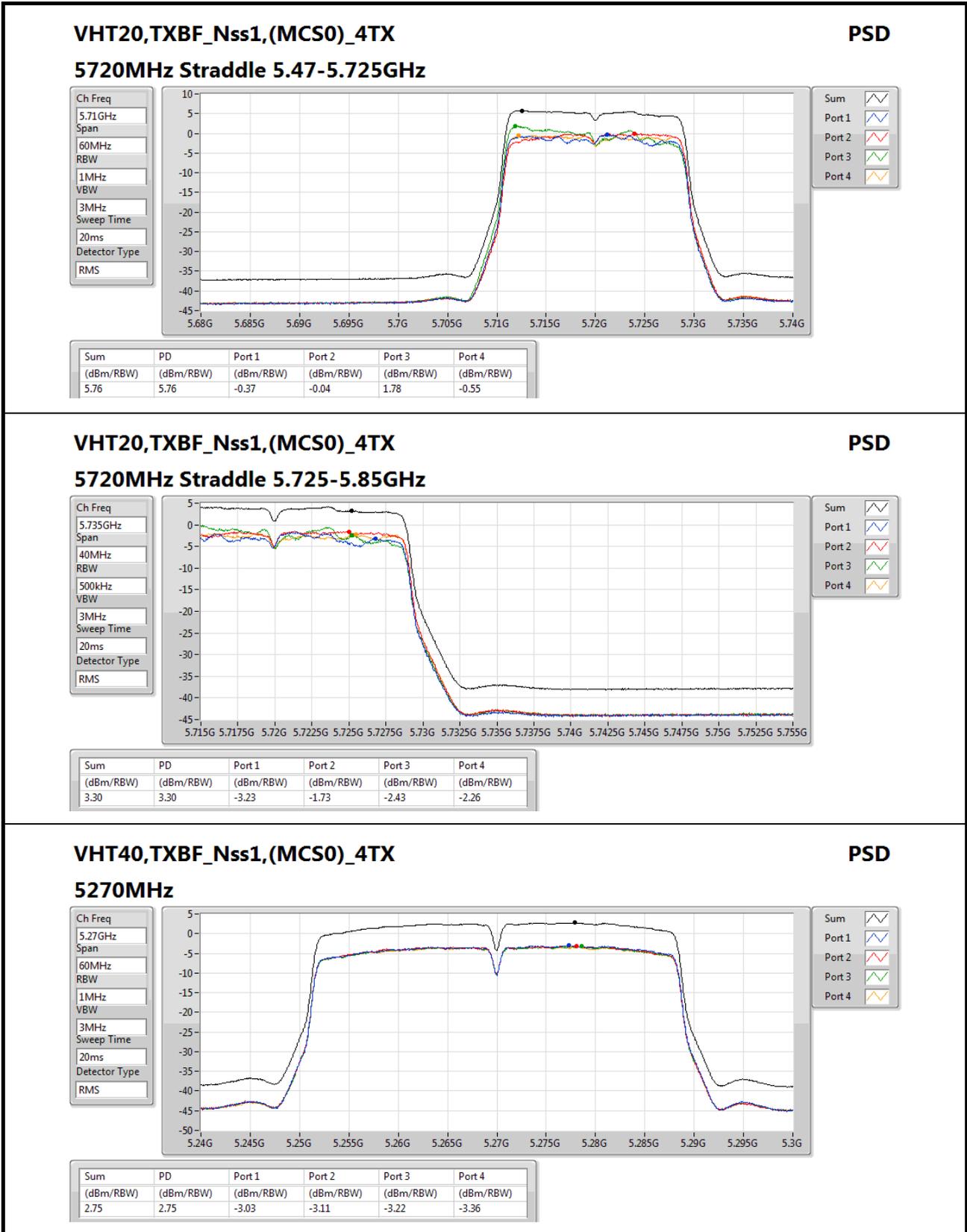
Mode	Result	DG (dBi)	Port 1 (dBm/RBW)	Port 2 (dBm/RBW)	Port 3 (dBm/RBW)	Port 4 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)
VHT20,TXBF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-
5260MHz	Pass	10.84	-0.82	-0.61	-1.01	-0.62	5.17	6.16
5300MHz	Pass	10.84	-0.76	-0.51	-0.68	-0.63	5.32	6.16
5320MHz	Pass	10.84	-0.91	-0.86	-0.76	-0.34	5.21	6.16
5500MHz	Pass	10.84	-1.12	-0.70	-1.12	-1.11	4.89	6.16
5580MHz	Pass	10.84	-0.73	-0.20	-0.89	-0.62	5.33	6.16
5700MHz	Pass	10.84	-0.16	0.33	-0.30	0.02	5.81	6.16
5720MHz Straddle 5.47-5.725GHz	Pass	10.84	-0.37	-0.04	1.78	-0.55	5.76	6.16
5720MHz Straddle 5.725-5.85GHz	Pass	10.84	-3.23	-1.73	-2.43	-2.26	3.30	25.16
VHT40,TXBF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-
5270MHz	Pass	10.84	-3.03	-3.11	-3.22	-3.36	2.75	6.16
5310MHz	Pass	10.84	-2.93	-3.10	-3.26	-3.29	2.84	6.16
5510MHz	Pass	10.84	-3.87	-3.46	-3.99	-3.92	2.08	6.16
5550MHz	Pass	10.84	-3.58	-3.13	-3.92	-3.56	2.33	6.16
5670MHz	Pass	10.84	-3.09	-2.39	-3.27	-2.59	3.02	6.16
5710MHz Straddle 5.47-5.725GHz	Pass	10.84	-1.51	-2.78	-0.23	-2.07	3.49	6.16
5710MHz Straddle 5.725-5.85GHz	Pass	10.84	-8.72	-5.15	-8.27	-6.79	-1.08	25.16
VHT80,TXBF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-
5290MHz	Pass	10.84	-5.81	-5.66	-5.72	-5.77	0.06	6.16
5530MHz	Pass	10.84	-6.61	-6.00	-6.46	-6.59	-0.60	6.16
5610MHz	Pass	10.84	-6.61	-5.74	-6.31	-6.40	-0.46	6.16
5690MHz Straddle 5.47-5.725GHz	Pass	10.84	-5.25	-4.44	-3.84	-5.00	-0.40	6.16
5690MHz Straddle 5.725-5.85GHz	Pass	10.84	-9.42	-8.55	-10.61	-10.99	-4.01	25.16

DG = Directional Gain; RBW = 500kHz for 5.725-5.85GHz band / 1MHz for other band;

PD = trace bin-by-bin of each transmits port summing can be performed maximum power density; Port X = Port X power density;







VHT40, TXBF_Nss1, (MCS0)_4TX

5270MHz

PSD

Ch Freq
5.27GHz

Span
60MHz

RBW
1MHz

VBW
3MHz

Sweep Time
20ms

Detector Type
RMS

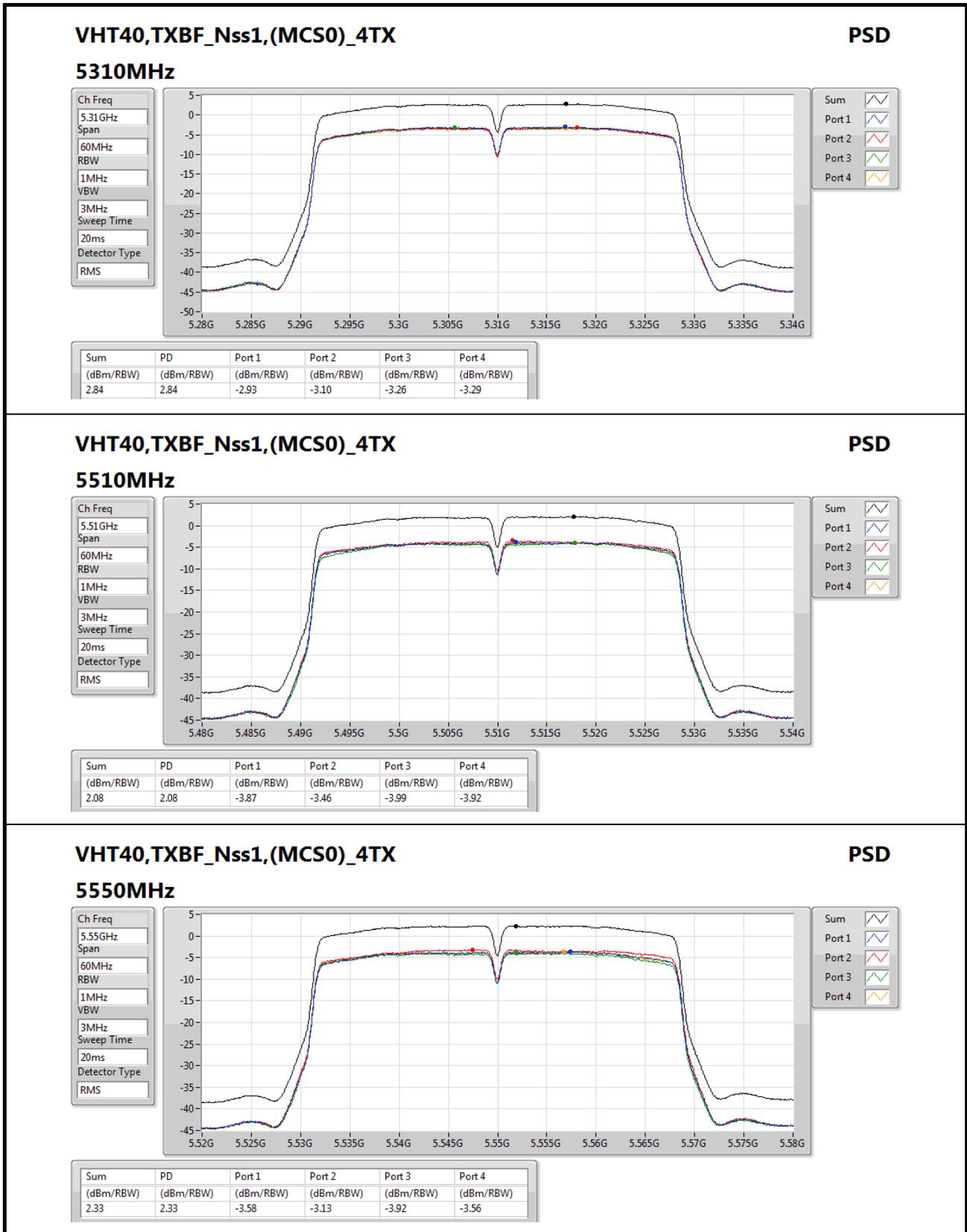
Sum

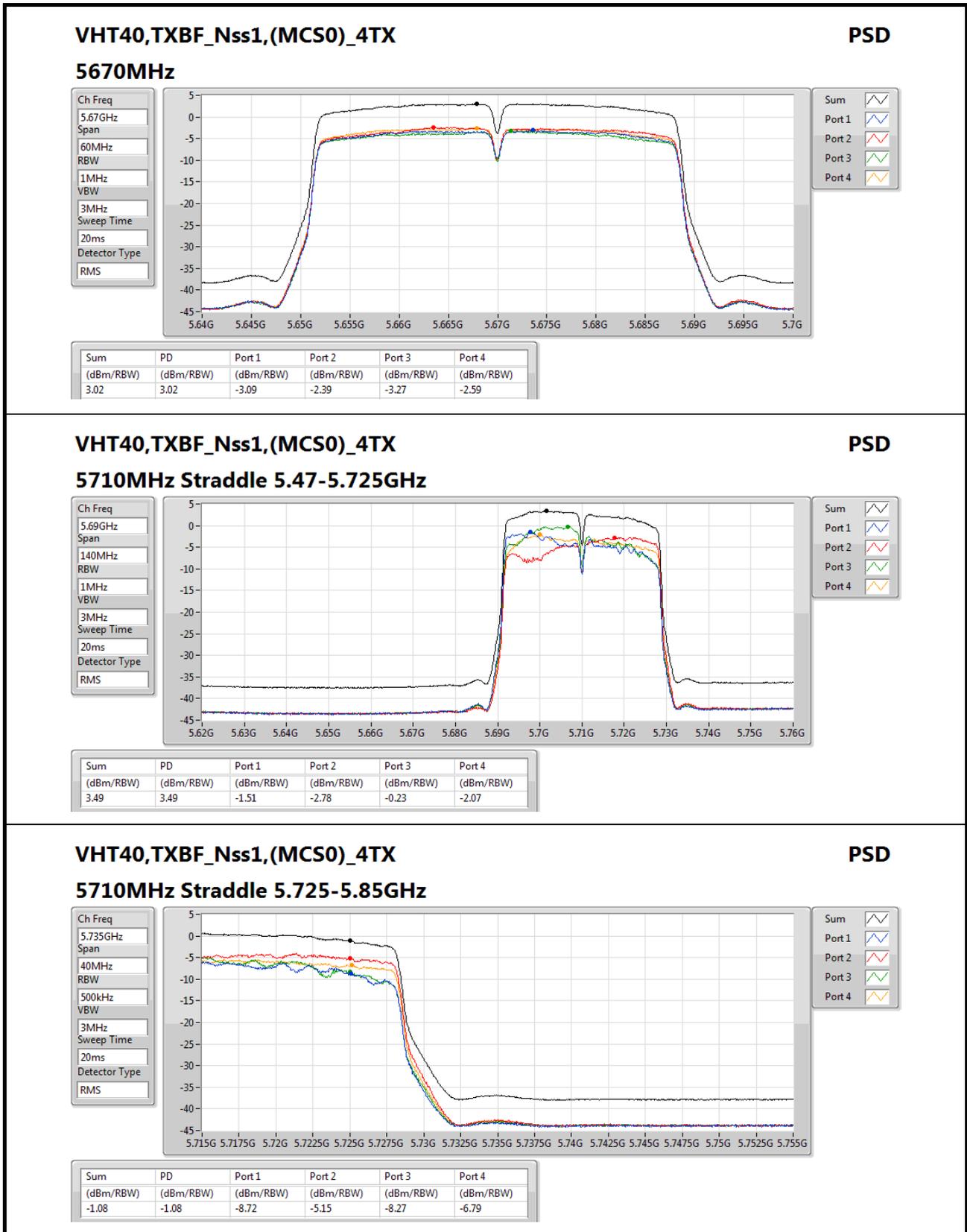
Port 1

Port 2

Port 3

Port 4




VHT40, TXBF_Nss1, (MCS0)_4TX
PSD

5710MHz Straddle 5.725-5.85GHz

Ch Freq
5.735GHz

Span
40MHz

RBW
500kHz

VBW
3MHz

Sweep Time
20ms

Detector Type
RMS

Sum

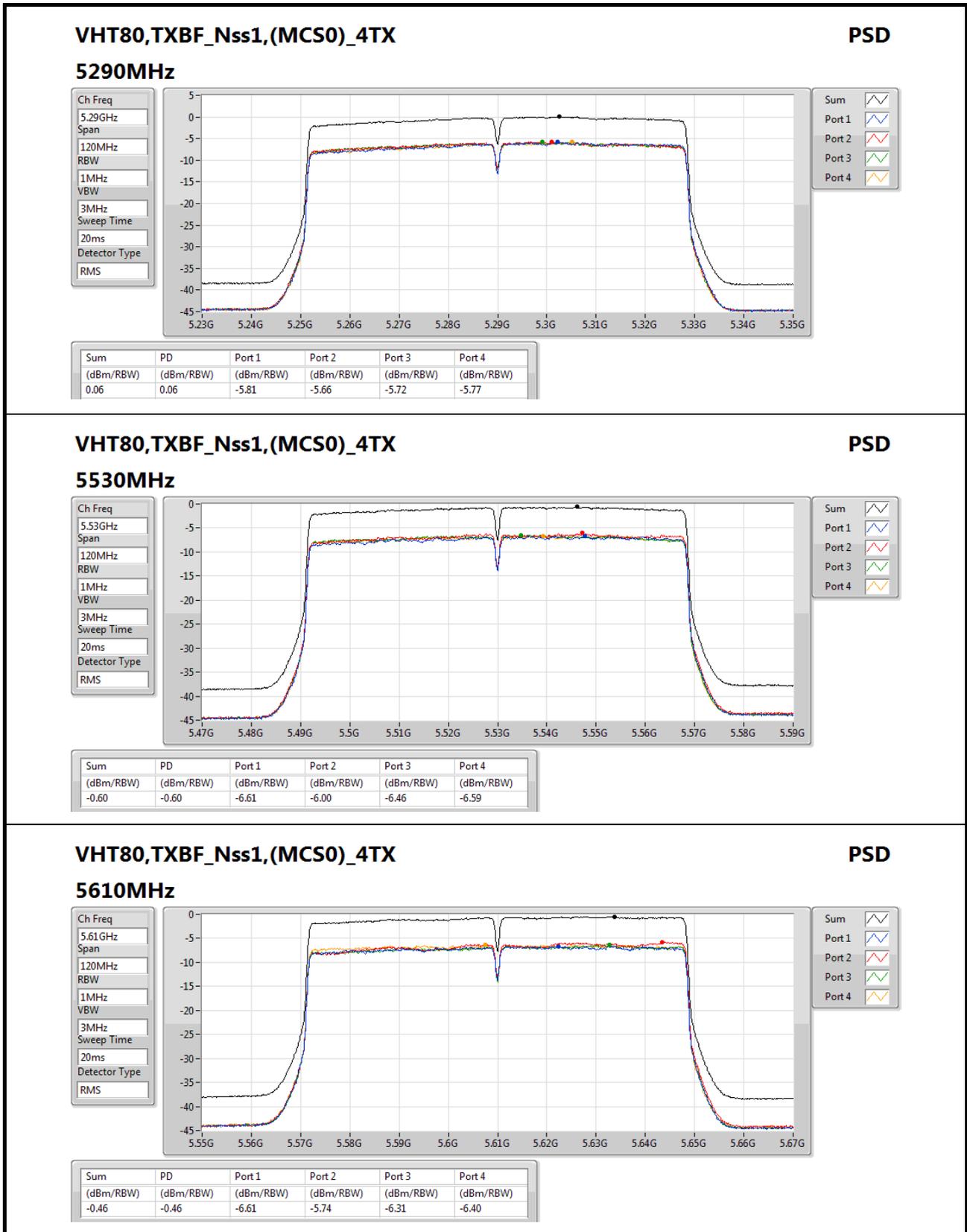
Port 1

Port 2

Port 3

Port 4

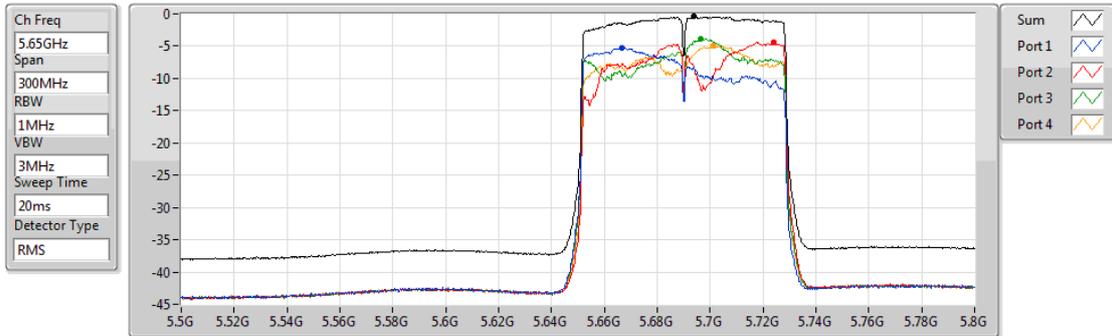
Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-1.08	-1.08	-8.72	-5.15	-8.27	-6.79



VHT80,TXBF_Nss1,(MCS0)_4TX

PSD

5690MHz Straddle 5.47-5.725GHz

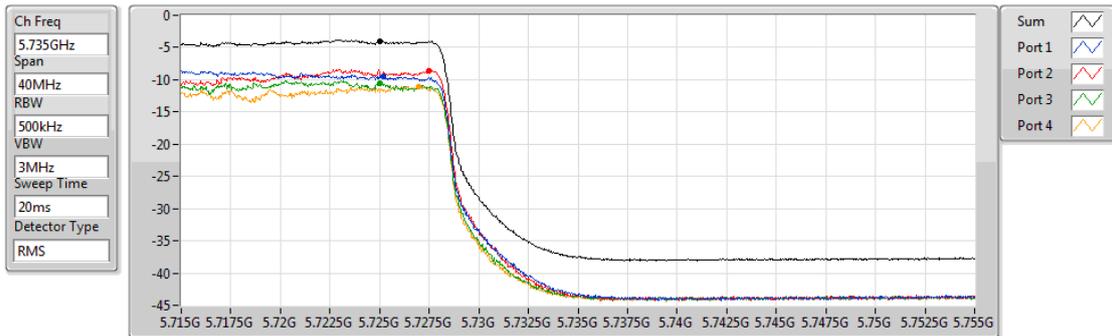


Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-0.40	-0.40	-5.25	-4.44	-3.84	-5.00

VHT80,TXBF_Nss1,(MCS0)_4TX

PSD

5690MHz Straddle 5.725-5.85GHz



Sum	PD	Port 1	Port 2	Port 3	Port 4
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-4.01	-4.01	-9.42	-8.55	-10.61	-10.99

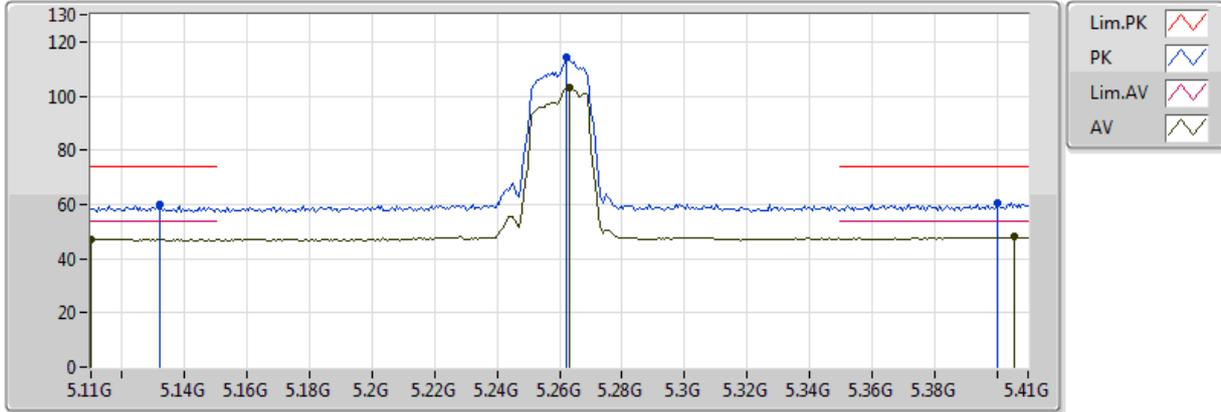


11a, VHT20, VHT40 and VHT80
Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Pol. (H/V)	Azimuth (°)	Height (m)	Comments
VHT80, TXBF_Nss1,(MCS0)_4TX	-	-	-	-	-	-	-	-	-	-	-	-
5.47-5.725GHz	Pass	AV	5.469G	53.58	54.00	-0.42	5.01	3	V	188	1.50	-

VHT20,TXBF_Nss1,(MCS0)_4TX

5260MHz_TX

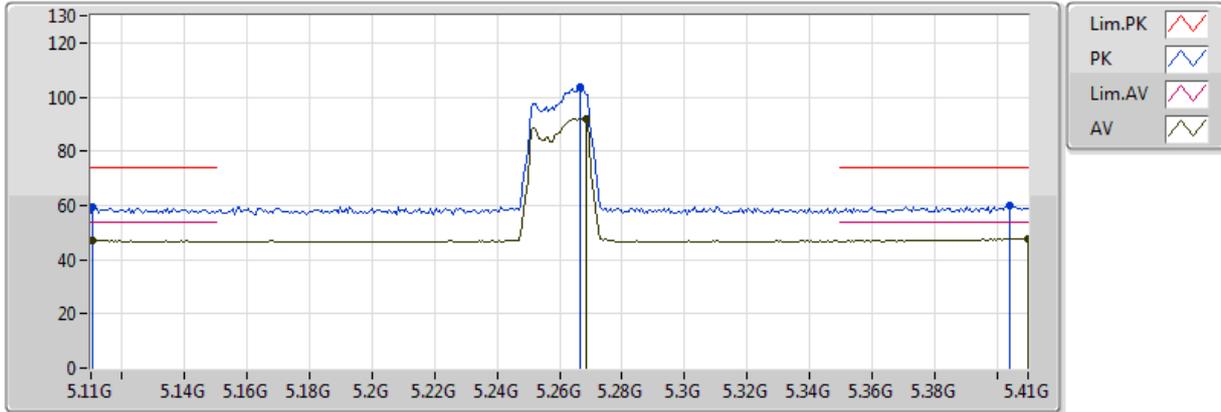


20170221
 EUT Y 4TX TXBF
 Setting 30 Maxsetting
 03-M-01-10
 FSP

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	5.11G	47.18	54.00	-6.82	8.83	3	V	134	1.77	-
AV	5.263G	103.33	Inf	-Inf	9.18	3	V	134	1.77	-
AV	5.4058G	47.91	54.00	-6.09	9.45	3	V	134	1.77	-
PK	5.1322G	59.91	74.00	-14.09	8.88	3	V	134	1.77	-
PK	5.2624G	114.39	Inf	-Inf	9.18	3	V	134	1.77	-
PK	5.4004G	60.45	74.00	-13.55	9.43	3	V	134	1.77	-

VHT20, TXBF_Nss1, (MCS0)_4TX

5260MHz_TX

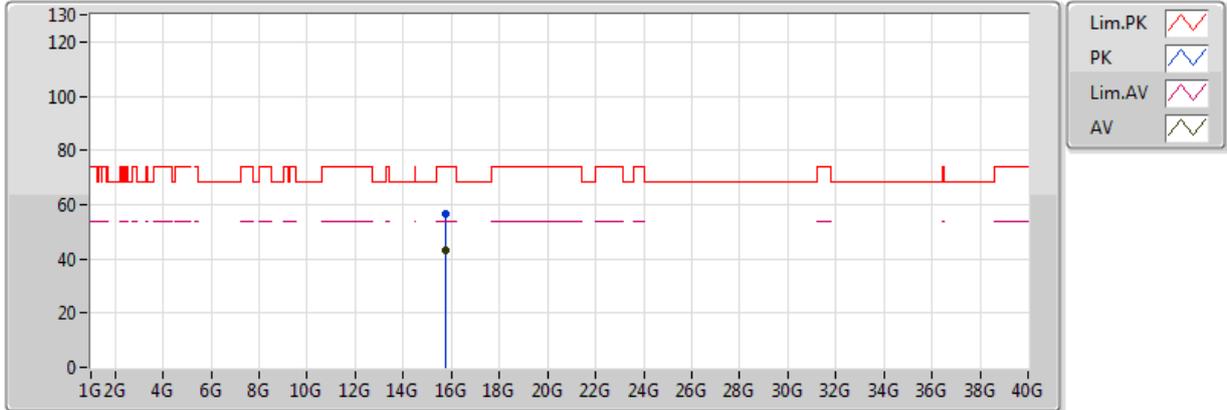


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 EUT Y 4TX TXBF
 Setting 30 Maxsetting
 03-M-01-10
 FSP

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	5.1106G	47.30	54.00	-6.70	8.83	3	H	145	1.94	-
AV	5.2684G	92.09	Inf	-Inf	9.19	3	H	145	1.94	-
AV	5.41G	47.64	54.00	-6.36	9.46	3	H	145	1.94	-
PK	5.1106G	59.15	74.00	-14.85	8.83	3	H	145	1.94	-
PK	5.2666G	103.41	Inf	-Inf	9.19	3	H	145	1.94	-
PK	5.404G	60.20	74.00	-13.80	9.44	3	H	145	1.94	-

VHT20, TXBF_Nss1, (MCS0)_4TX

5260MHz_TX

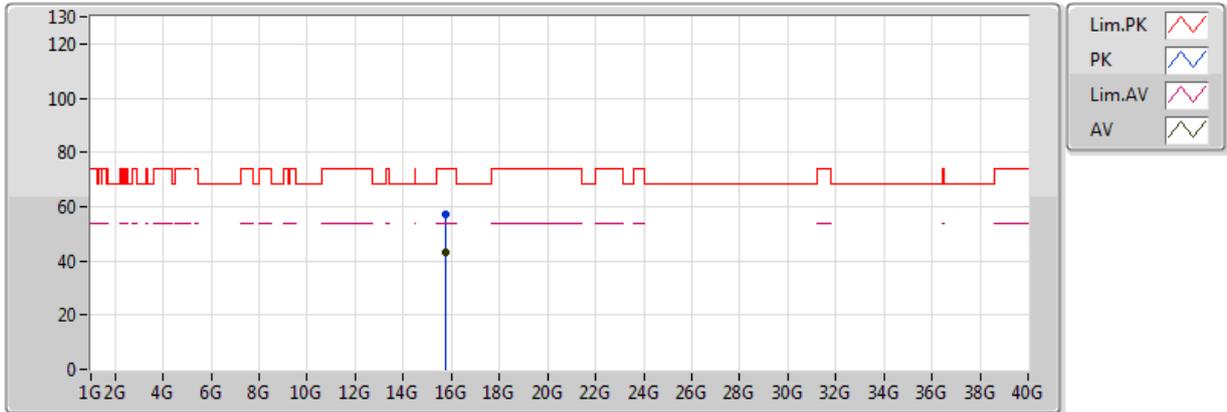


20170221
 EUT Y 4TX TXBF
 Setting 30 Maxsetting
 03-M-01
 FSP

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	15.780924G	42.96	54.00	-11.04	13.62	3	V	31	1.15	-
PK	15.780872G	56.82	74.00	-17.18	13.62	3	V	31	1.15	-

VHT20, TXBF_Nss1, (MCS0)_4TX

5260MHz_TX

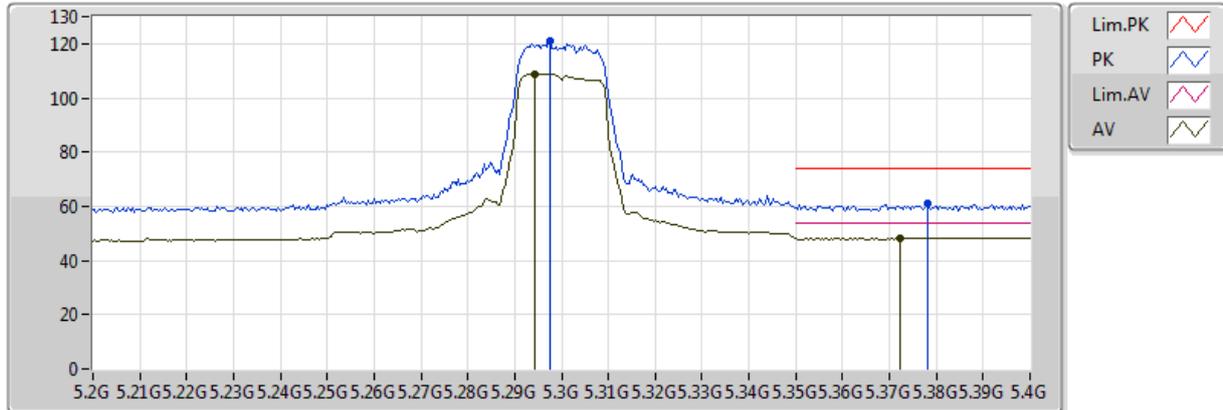


20170221
 EUT Y 4TX TXBF
 Setting 30 Maxsetting
 03-M-01
 FSP

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	15.77918G	43.20	54.00	-10.80	13.62	3	H	166	1.10	-
PK	15.780164G	57.23	74.00	-16.77	13.62	3	H	166	1.10	-

VHT20, TXBF_Nss1, (MCS0)_4TX

5300MHz_TX

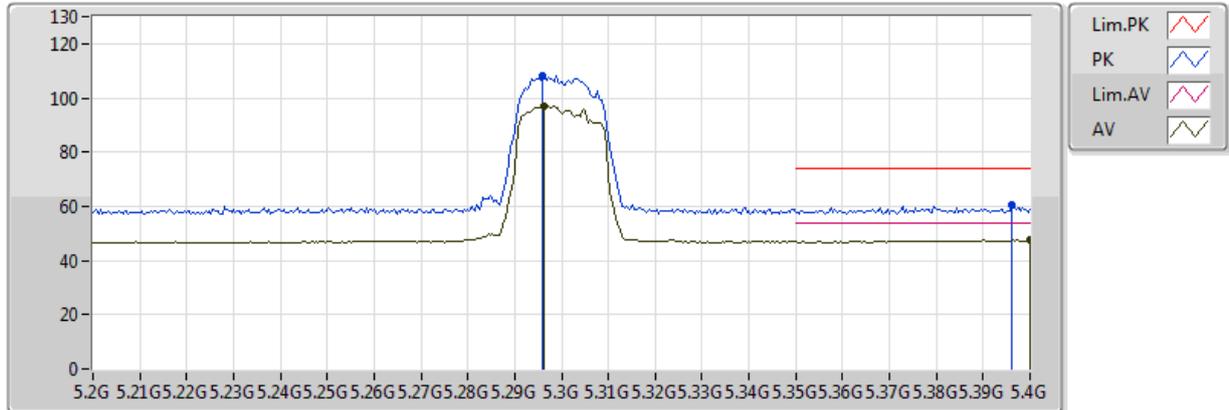


20170221
 EUT Y 4TX TXBF
 Setting 30 Maxsetting
 03-M-01-10
 FSP

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	5.2944G	108.88	Inf	-Inf	9.24	3	V	267	1.32	-
AV	5.3724G	48.34	54.00	-5.66	9.38	3	V	267	1.32	-
PK	5.2976G	121.08	Inf	-Inf	9.25	3	V	267	1.32	-
PK	5.378G	60.80	74.00	-13.20	9.39	3	V	267	1.32	-

VHT20, TXBF_Nss1, (MCS0)_4TX

5300MHz_TX

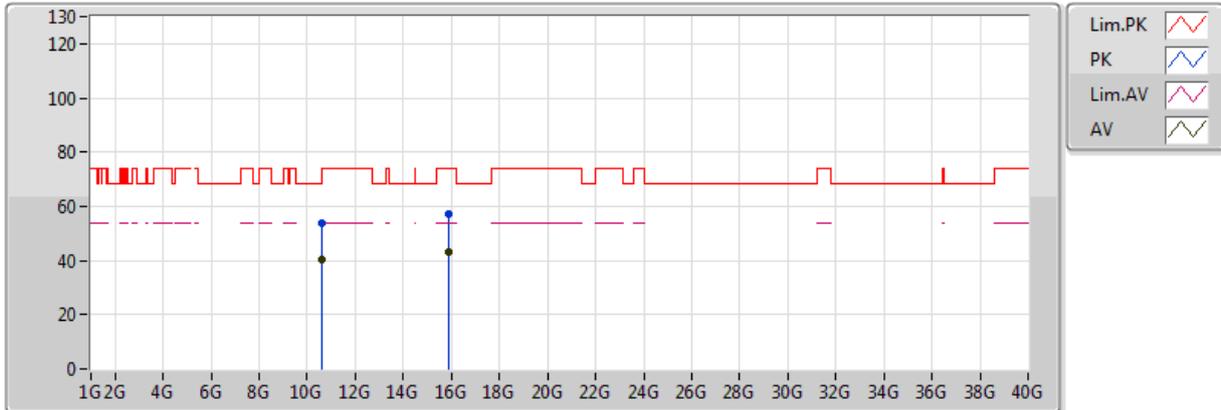


20170221
 EUT Y 4TX TXBF
 Setting 30 Maxsetting
 03-M-01-10
 FSP

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	5.2964G	97.13	Inf	-Inf	9.24	3	H	118	1.08	-
AV	5.4G	47.44	54.00	-6.56	9.43	3	H	118	1.08	-
PK	5.296G	108.16	Inf	-Inf	9.24	3	H	118	1.08	-
PK	5.396G	60.37	74.00	-13.63	9.42	3	H	118	1.08	-

VHT20, TXBF_Nss1, (MCS0)_4TX

5300MHz_TX

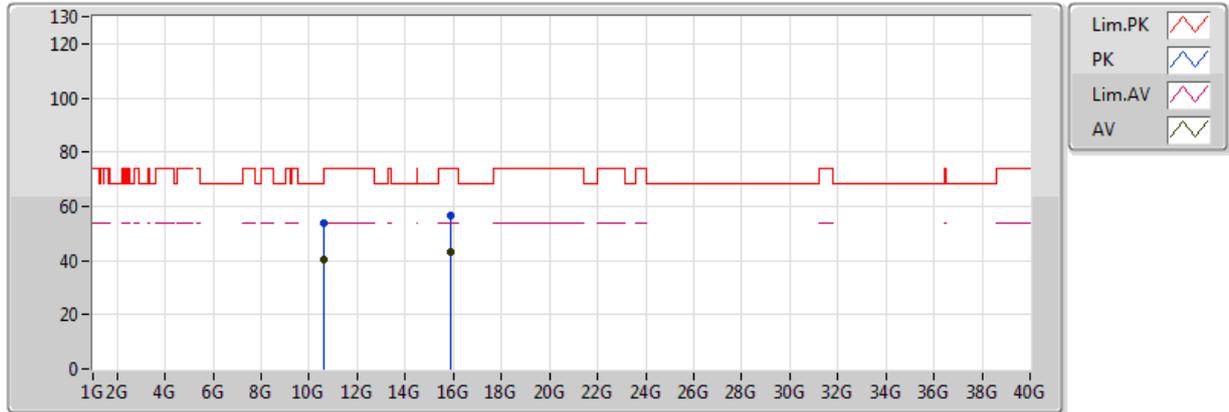


20170221
 EUT Y 4TX TXBF
 Setting 30 Maxsetting
 03-M-01
 FSP

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	10.600068G	40.07	54.00	-13.93	11.41	3	V	56	2.23	-
AV	15.900928G	43.23	54.00	-10.77	13.48	3	V	16	1.90	-
PK	10.600448G	53.72	74.00	-20.28	11.41	3	V	56	2.23	-
PK	15.899256G	56.95	74.00	-17.05	13.48	3	V	16	1.90	-

VHT20, TXBF_Nss1, (MCS0)_4TX

5300MHz_TX

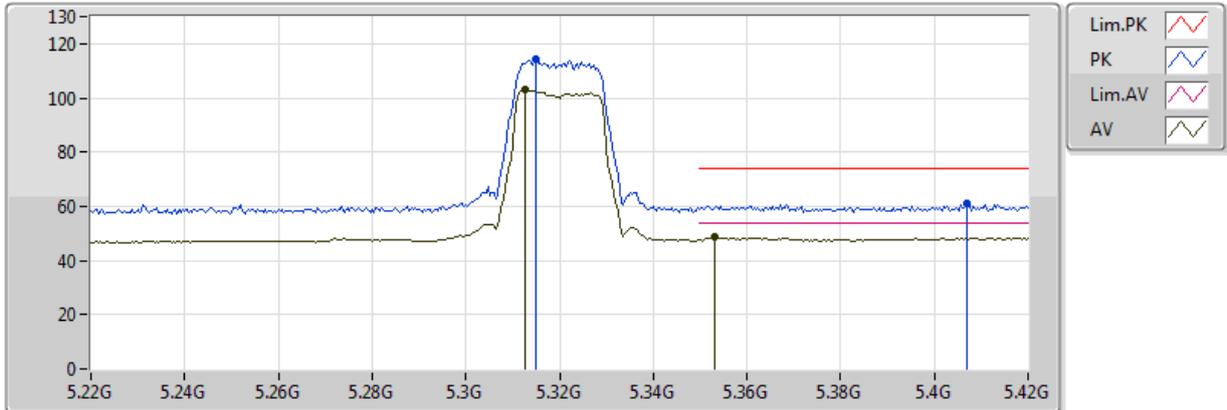


20170221
 EUT Y 4TX TXBF
 Setting 30 Maxsetting
 03-M-01
 FSP

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	10.600524G	40.07	54.00	-13.93	11.41	3	H	236	1.43	-
AV	15.899032G	43.17	54.00	-10.83	13.48	3	H	279	2.03	-
PK	10.600596G	53.71	74.00	-20.29	11.41	3	H	236	1.43	-
PK	15.900552G	56.60	74.00	-17.40	13.48	3	H	279	2.03	-

VHT20, TXBF_Nss1, (MCS0)_4TX

5320MHz_TX

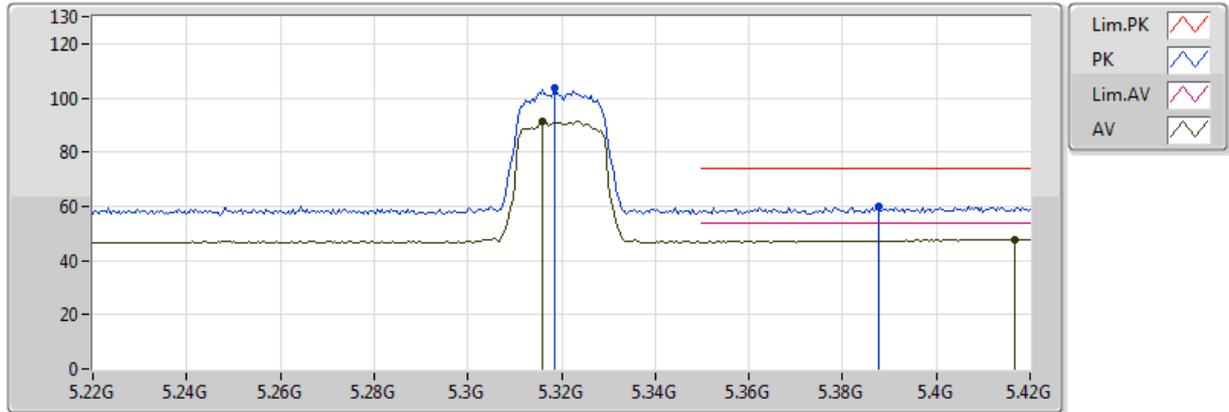


20170221
 EUT Y 4TX TXBF
 Setting 30 Maxsetting
 03-M-01-10
 FSP

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	5.3128G	102.95	Inf	-Inf	9.27	3	V	335	2.33	-
AV	5.3532G	48.49	54.00	-5.51	9.35	3	V	335	2.33	-
PK	5.3148G	114.25	Inf	-Inf	9.28	3	V	335	2.33	-
PK	5.4068G	61.12	74.00	-12.88	9.45	3	V	335	2.33	-

VHT20, TXBF_Nss1, (MCS0)_4TX

5320MHz_TX

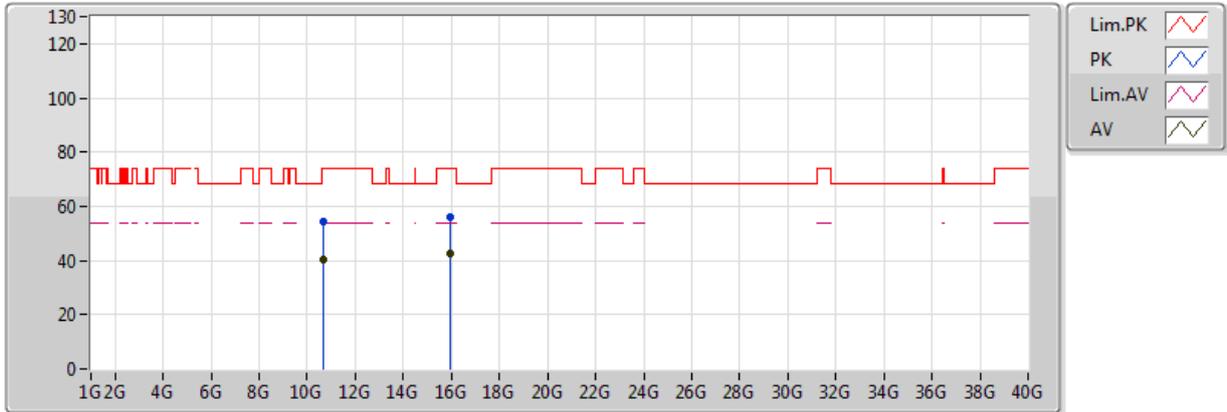


20170221
 EUT Y 4TX TXBF
 Setting 30 Maxsetting
 03-M-01-10
 FSP

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	5.316G	91.59	Inf	-Inf	9.28	3	H	211	1.84	-
AV	5.4168G	47.75	54.00	-6.25	9.47	3	H	211	1.84	-
PK	5.3184G	103.51	Inf	-Inf	9.28	3	H	211	1.84	-
PK	5.3876G	60.16	74.00	-13.84	9.41	3	H	211	1.84	-

VHT20, TXBF_Nss1, (MCS0)_4TX

5320MHz_TX

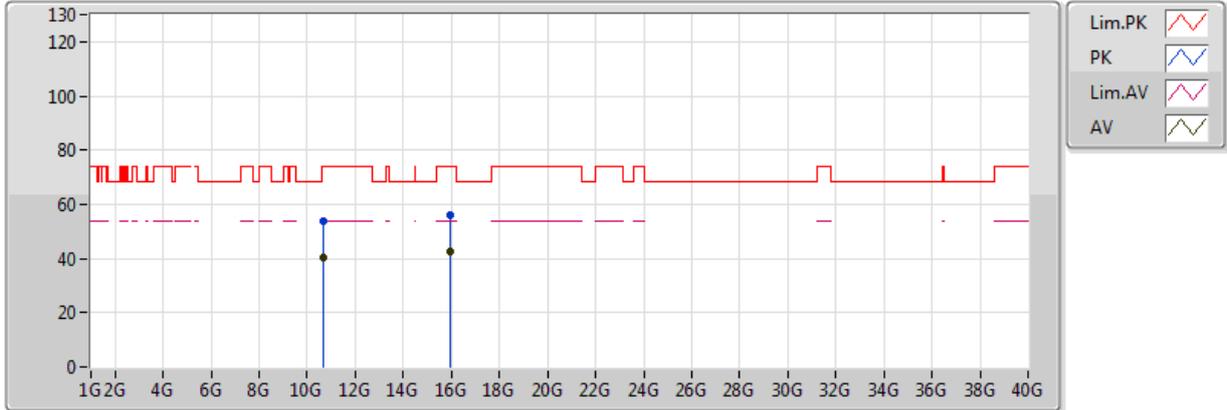


20170221
 EUT Y 4TX TXBF
 Setting 30 Maxsetting
 03-M-01
 FSP

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	10.640384G	40.25	54.00	-13.75	11.46	3	V	357	1.80	-
AV	15.959492G	42.40	54.00	-11.60	13.41	3	V	93	1.01	-
PK	10.640628G	54.53	74.00	-19.47	11.46	3	V	357	1.80	-
PK	15.959792G	55.91	74.00	-18.09	13.41	3	V	93	1.01	-

VHT20, TXBF_Nss1, (MCS0)_4TX

5320MHz_TX

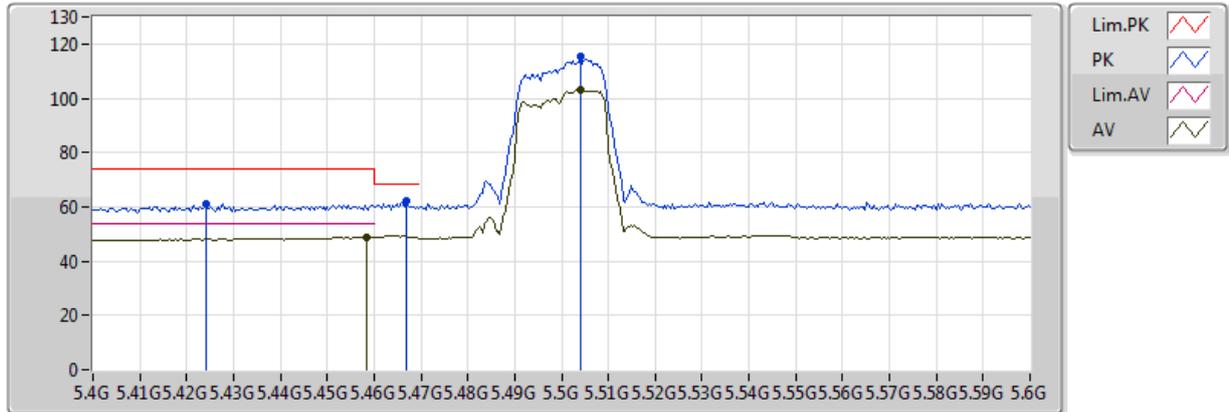


20170221
 EUT Y 4TX TXBF
 Setting 30 Maxsetting
 03-M-01
 FSP

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	10.639592G	40.35	54.00	-13.65	11.46	3	H	32	2.14	-
AV	15.959576G	42.65	54.00	-11.35	13.41	3	H	96	2.43	-
PK	10.639728G	53.63	74.00	-20.37	11.46	3	H	32	2.14	-
PK	15.959312G	56.14	74.00	-17.86	13.41	3	H	96	2.43	-

VHT20, TXBF_Nss1, (MCS0)_4TX

5500MHz_TX

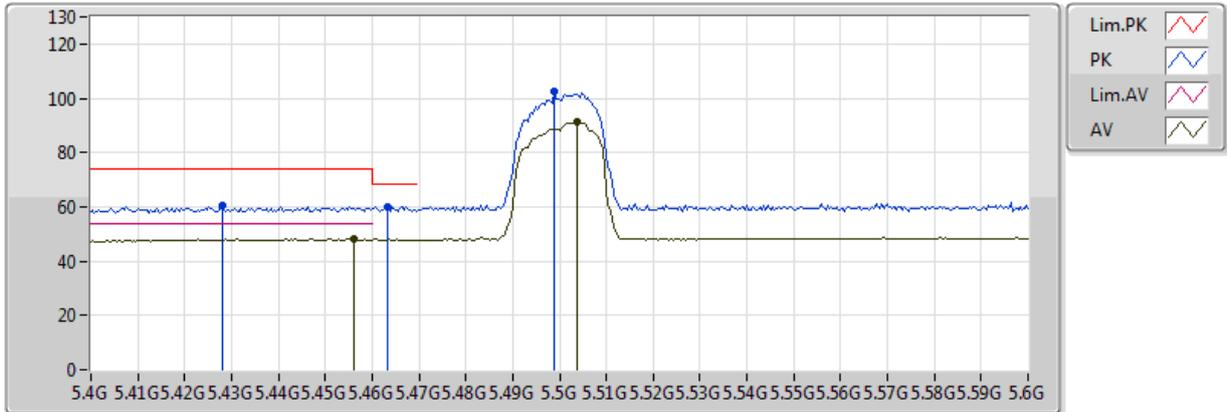


20170221
 EUT Y 4TX TXBF
 Setting 30 Maxsetting
 03-M-01-10
 FSP

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	5.4584G	48.89	54.00	-5.11	9.58	3	V	357	2.40	-
AV	5.504G	103.28	Inf	-Inf	9.69	3	V	357	2.40	-
PK	5.424G	61.11	74.00	-12.89	9.49	3	V	357	2.40	-
PK	5.4668G	61.93	68.20	-6.27	9.60	3	V	357	2.40	-
PK	5.504G	115.22	Inf	-Inf	9.69	3	V	357	2.40	-

VHT20,TXBF_Nss1,(MCS0)_4TX

5500MHz_TX

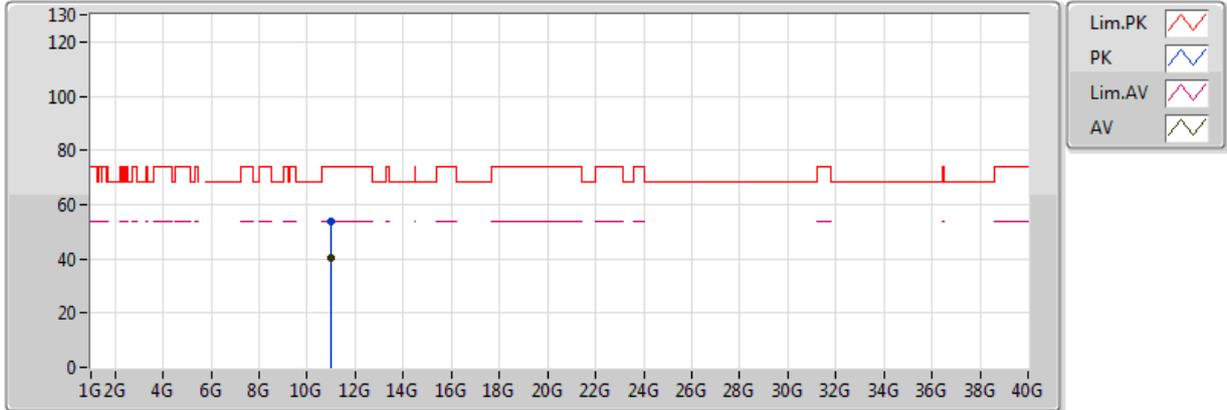


20170221
 EUT Y 4TX TXBF
 Setting 30 Maxsetting
 03-M-01-10
 FSP

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	5.456G	48.10	54.00	-5.90	9.58	3	H	271	1.87	-
AV	5.5036G	91.19	Inf	-Inf	9.69	3	H	271	1.87	-
PK	5.428G	60.25	74.00	-13.75	9.50	3	H	271	1.87	-
PK	5.4632G	59.93	68.20	-8.27	9.59	3	H	271	1.87	-
PK	5.4988G	102.76	Inf	-Inf	9.69	3	H	271	1.87	-

VHT20,TXBF_Nss1,(MCS0)_4TX

5500MHz_TX

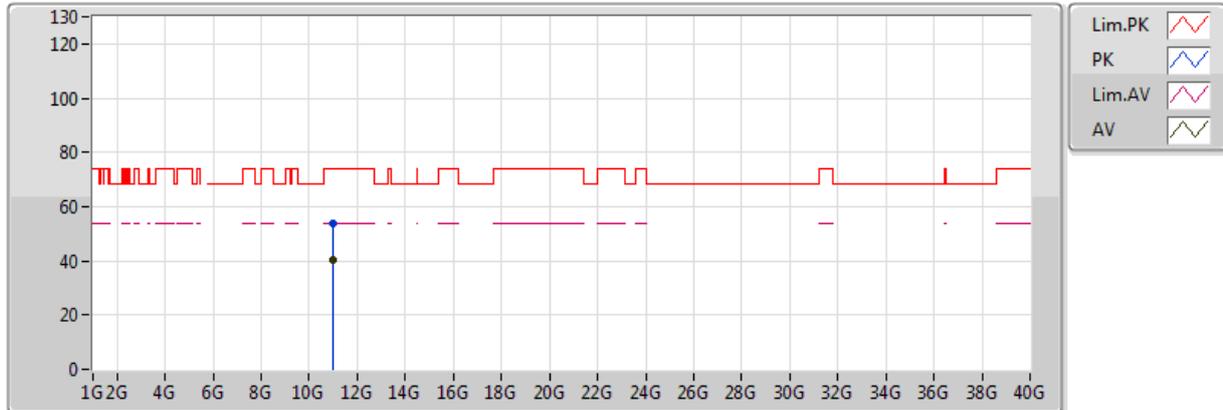


20170221
 EUT Y 4TX TXBF
 Setting 30 Maxsetting
 03-M-01
 FSP

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	10.999564G	40.41	54.00	-13.59	11.87	3	V	236	1.47	-
PK	10.99944G	53.69	74.00	-20.31	11.87	3	V	236	1.47	-

VHT20, TXBF_Nss1, (MCS0)_4TX

5500MHz_TX

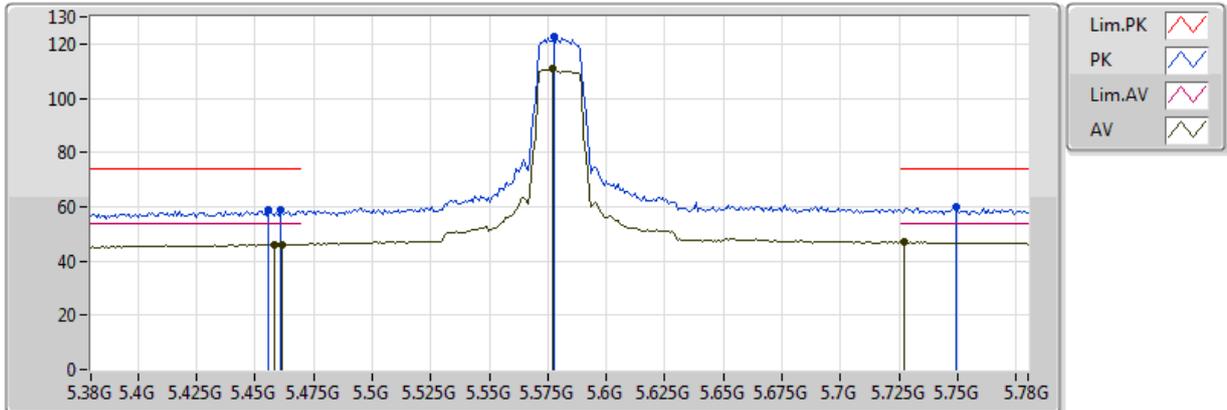


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 EUT Y 4TX TXBF
 Setting 30 Maxsetting
 03-M-01
 FSP

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	10.999516G	40.43	54.00	-13.57	11.87	3	H	188	1.38	-
PK	10.999272G	54.04	74.00	-19.96	11.87	3	H	188	1.38	-

VHT20, TXBF_Nss1, (MCS0)_4TX

5580MHz_TX

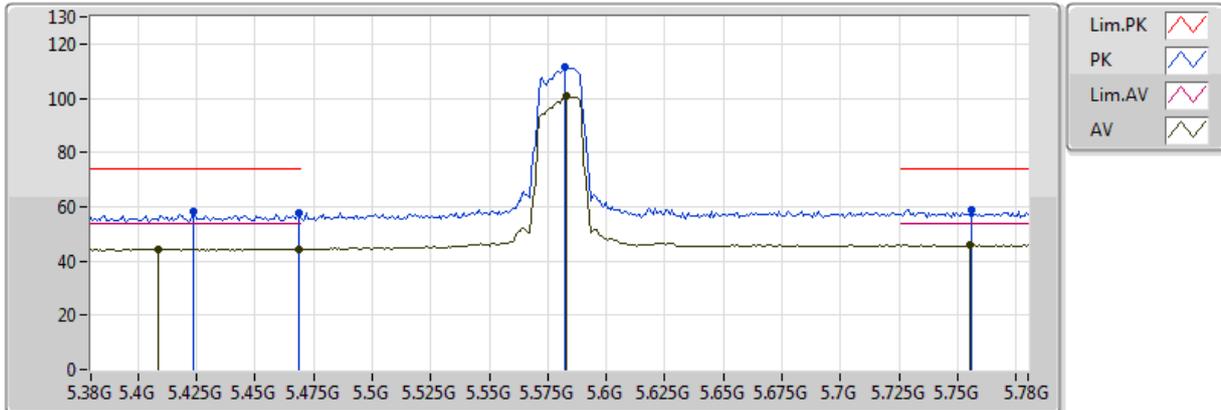


20170222
 EUT Y 4TX TXBF
 Setting 30 Maxsetting
 03-M-01-10
 FSU

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	5.4584G	46.05	54.00	-7.95	4.98	3	V	193	1.50	-
AV	5.4616G	46.22	54.00	-7.78	4.99	3	V	193	1.50	-
AV	5.5768G	110.80	Inf	-Inf	5.36	3	V	193	1.50	-
AV	5.7272G	47.07	54.00	-6.93	5.82	3	V	193	1.50	-
PK	5.456G	59.03	74.00	-14.97	4.97	3	V	193	1.50	-
PK	5.4608G	58.56	74.00	-15.44	4.98	3	V	193	1.50	-
PK	5.5776G	122.51	Inf	-Inf	5.36	3	V	193	1.50	-
PK	5.7496G	60.04	74.00	-13.96	5.88	3	V	193	1.50	-

VHT20,TXBF_Nss1,(MCS0)_4TX

5580MHz_TX

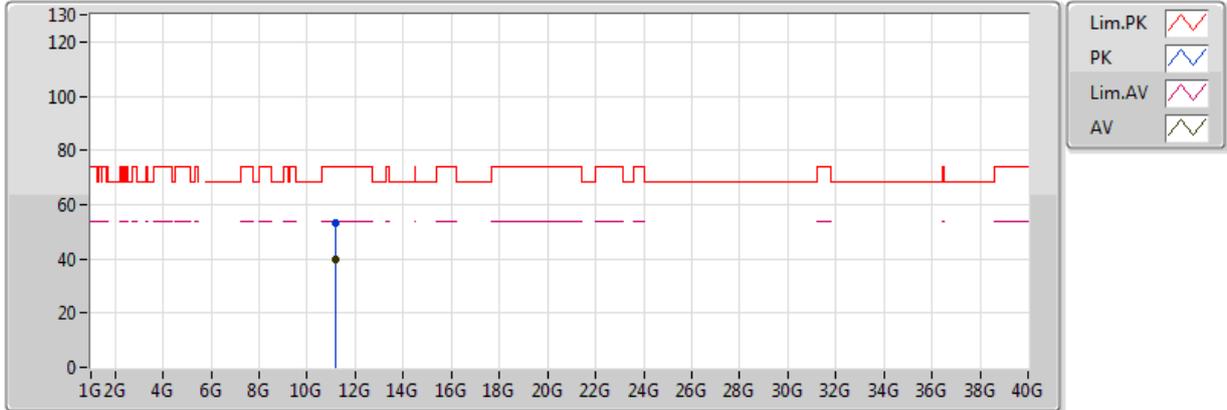


20170222
 EUT Y 4TX TXBF
 Setting 30 Maxsetting
 03-M-01-10
 FSU

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	5.4088G	44.39	54.00	-9.61	4.84	3	H	228	1.75	-
AV	5.4688G	44.44	54.00	-9.56	5.01	3	H	228	1.75	-
AV	5.5832G	100.76	Inf	-Inf	5.38	3	H	228	1.75	-
AV	5.7552G	45.88	54.00	-8.12	5.89	3	H	228	1.75	-
PK	5.424G	58.31	74.00	-15.69	4.88	3	H	228	1.75	-
PK	5.4688G	57.62	74.00	-16.38	5.01	3	H	228	1.75	-
PK	5.5824G	111.70	Inf	-Inf	5.38	3	H	228	1.75	-
PK	5.756G	58.81	74.00	-15.19	5.90	3	H	228	1.75	-

VHT20, TXBF_Nss1, (MCS0)_4TX

5580MHz_TX

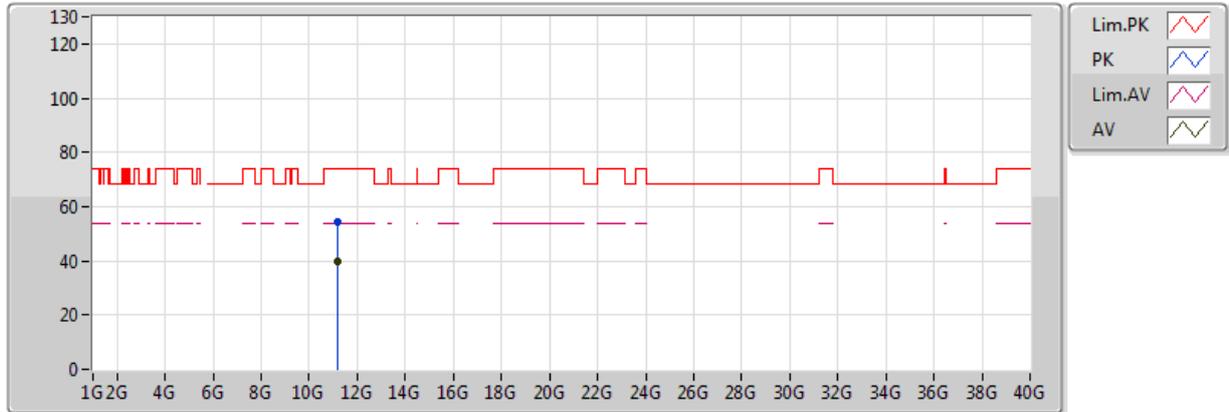


20170222
 EUT Y 4TX TXBF
 Setting 30 Maxsetting
 03-M-01
 FSU

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	11.160008G	39.83	54.00	-14.17	11.95	3	V	124	2.37	-
PK	11.159428G	53.48	74.00	-20.52	11.95	3	V	124	2.37	-

VHT20,TXBF_Nss1,(MCS0)_4TX

5580MHz_TX

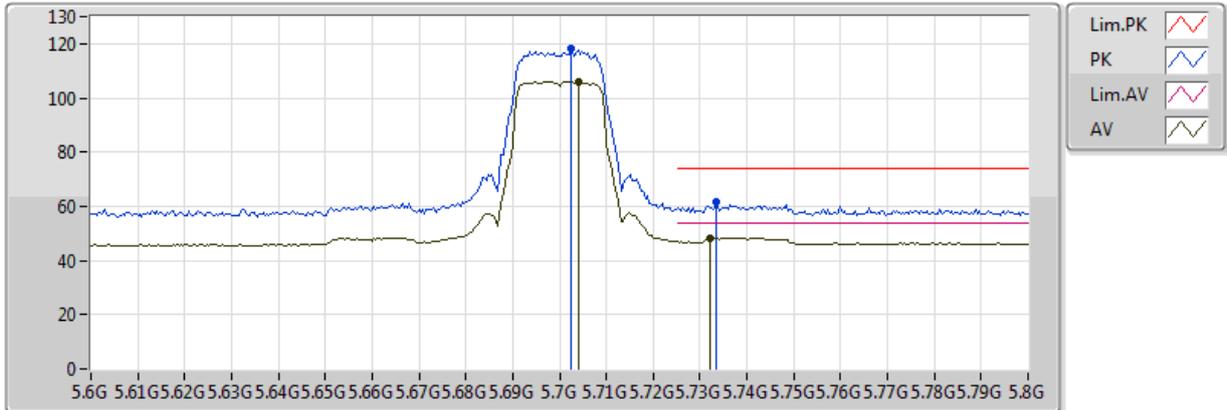


20170222
 EUT Y 4TX TXBF
 Setting 30 Maxsetting
 03-M-01
 FSU

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	11.160688G	39.95	54.00	-14.05	11.95	3	H	287	1.98	-
PK	11.160468G	54.23	74.00	-19.77	11.95	3	H	287	1.98	-

VHT20, TXBF_Nss1, (MCS0)_4TX

5700MHz_TX

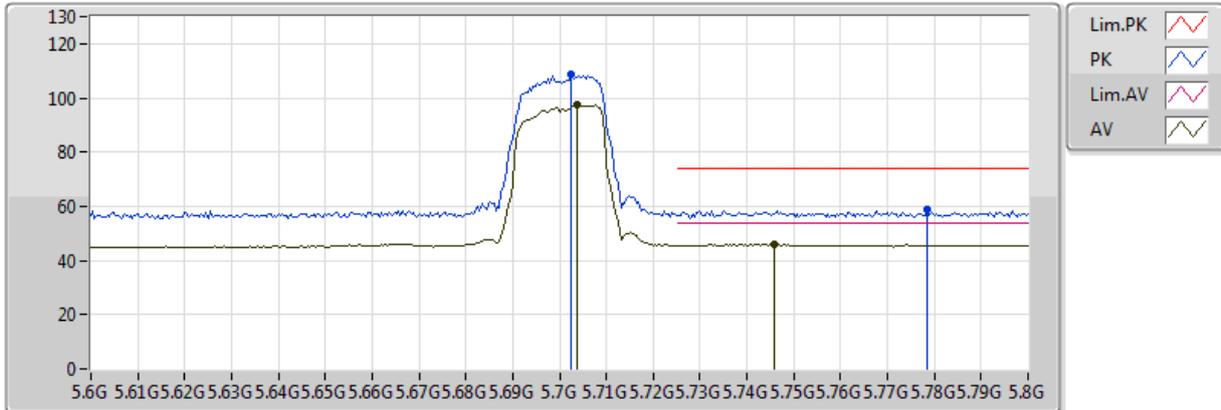


20170222
 EUT Y 4TX TXBF
 Setting 30 Maxsetting
 03-M-01-10
 FSU

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	5.704G	105.91	Inf	-Inf	5.75	3	V	188	1.56	-
AV	5.732G	48.36	54.00	-5.64	5.83	3	V	188	1.56	-
PK	5.7024G	118.17	Inf	-Inf	5.75	3	V	188	1.56	-
PK	5.7336G	61.40	74.00	-12.60	5.83	3	V	188	1.56	-

VHT20,TXBF_Nss1,(MCS0)_4TX

5700MHz_TX

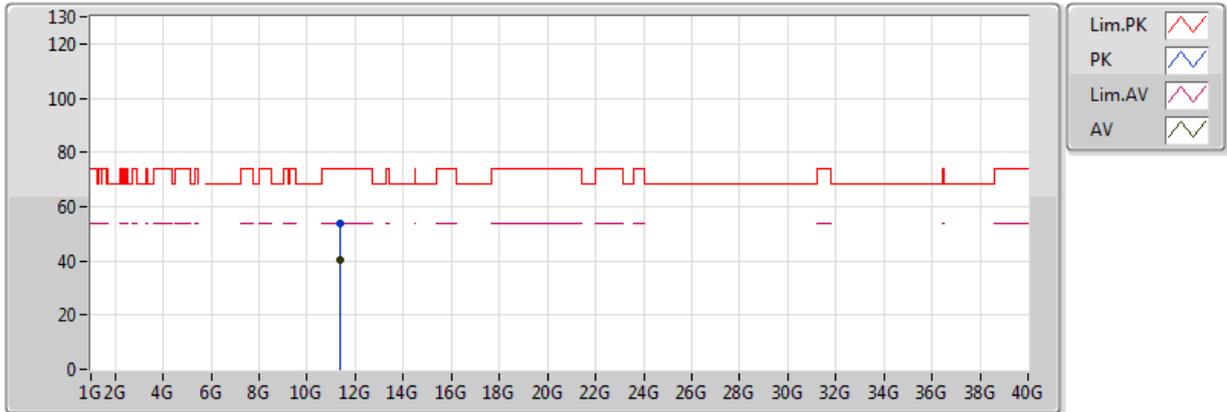


20170222
 EUT Y 4TX TXBF
 Setting 30 Maxsetting
 03-M-01-10
 FSU

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	5.7036G	97.39	Inf	-Inf	5.75	3	H	225	1.63	-
AV	5.746G	45.98	54.00	-8.02	5.87	3	H	225	1.63	-
PK	5.7024G	108.51	Inf	-Inf	5.75	3	H	225	1.63	-
PK	5.7784G	58.78	74.00	-15.22	5.96	3	H	225	1.63	-

VHT20,TXBF_Nss1,(MCS0)_4TX

5700MHz_TX

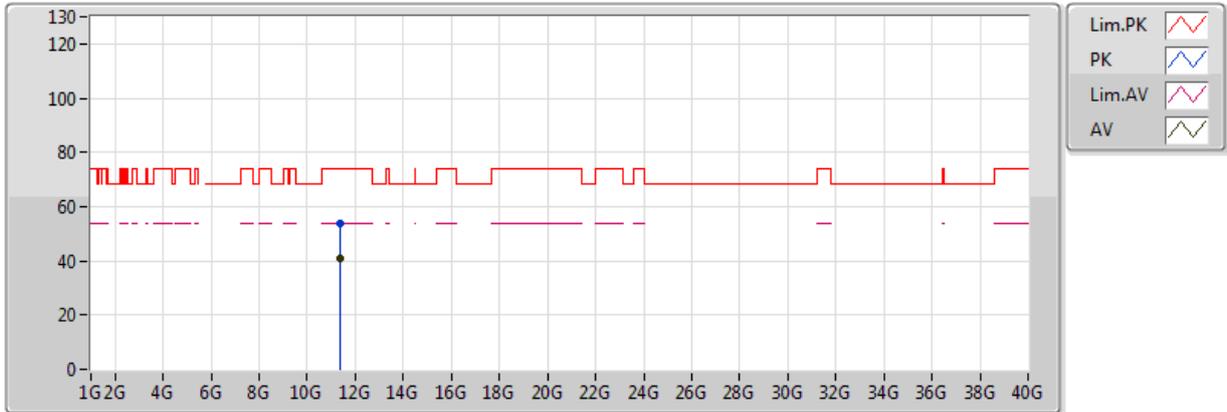


20170222
 EUT Y 4TX TXBF
 Setting 30 Maxsetting
 03-M-01
 FSU

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	11.399416G	40.59	54.00	-13.41	12.08	3	V	109	1.91	-
PK	11.400592G	53.79	74.00	-20.21	12.08	3	V	109	1.91	-

VHT20,TXBF_Nss1,(MCS0)_4TX

5700MHz_TX

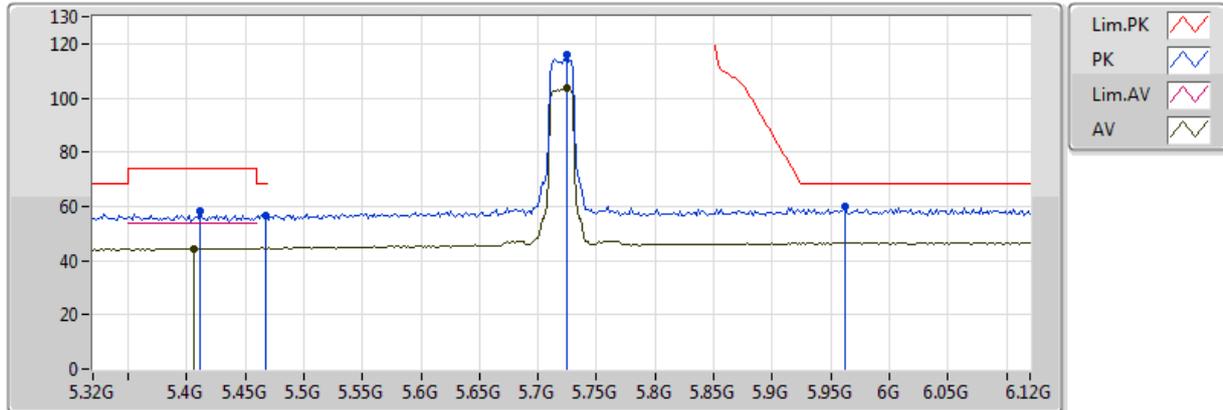


20170222
 EUT Y 4TX TXBF
 Setting 30 Maxsetting
 03-M-01
 FSU

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	11.400824G	40.95	54.00	-13.05	12.08	3	H	306	1.91	-
PK	11.400556G	54.06	74.00	-19.94	12.08	3	H	306	1.91	-

VHT20, TXBF_Nss1, (MCS0)_4TX

5720MHz_TX

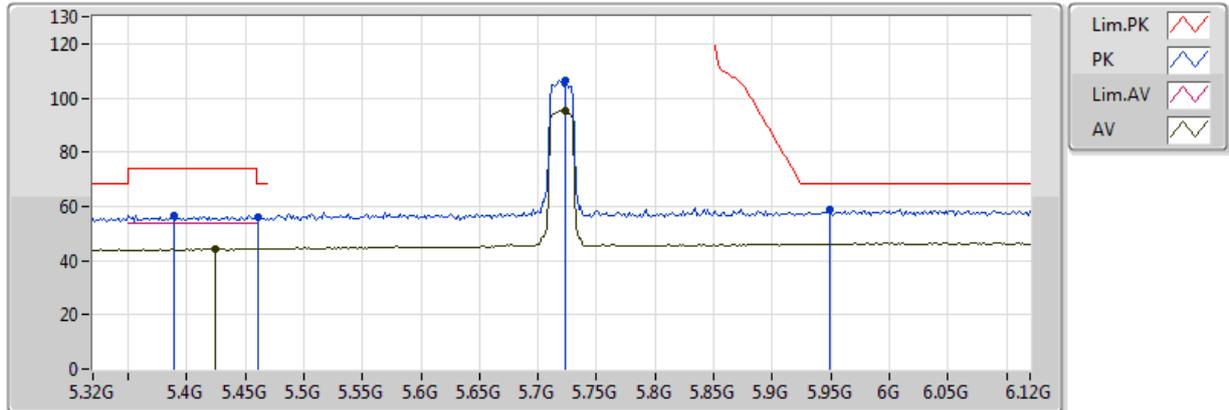


20170222
 EUT Y 4TX TXBF
 Setting 30 Maxsetting
 03-M-01-10
 FSU

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	5.4064G	44.52	54.00	-9.48	4.84	3	V	189	1.63	-
AV	5.7248G	103.50	Inf	-Inf	5.81	3	V	189	1.63	-
PK	5.4112G	58.48	74.00	-15.52	4.85	3	V	189	1.63	-
PK	5.4672G	56.60	68.20	-11.60	5.00	3	V	189	1.63	-
PK	5.7248G	115.76	Inf	-Inf	5.81	3	V	189	1.63	-
PK	5.9616G	59.87	68.20	-8.33	6.64	3	V	189	1.63	-

VHT20, TXBF_Nss1, (MCS0)_4TX

5720MHz_TX

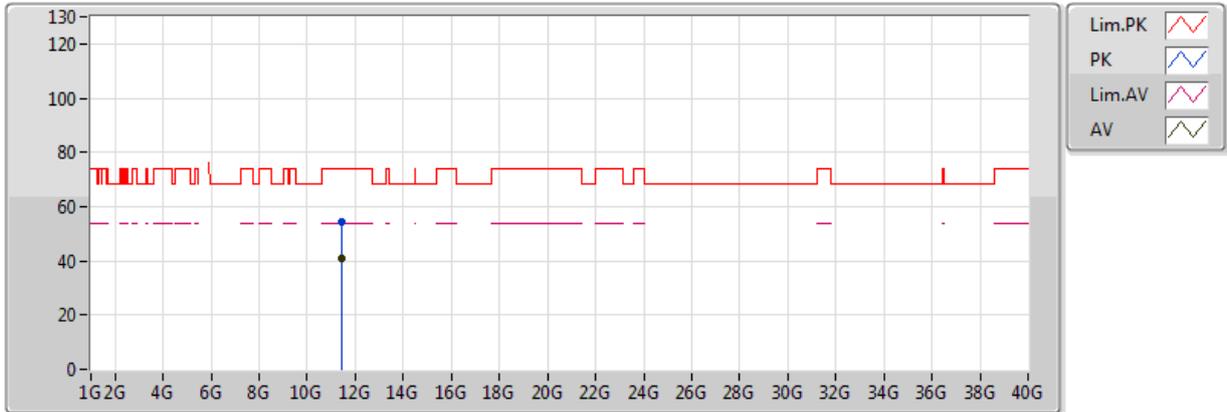


20170222
 EUT Y 4TX TXBF
 Setting 30 Maxsetting
 03-M-01-10
 FSU

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	5.424G	44.33	54.00	-9.67	4.88	3	H	227	1.77	-
AV	5.7232G	95.41	Inf	-Inf	5.80	3	H	227	1.77	-
PK	5.3888G	56.55	74.00	-17.45	4.80	3	H	227	1.77	-
PK	5.4608G	55.82	68.20	-12.38	4.98	3	H	227	1.77	-
PK	5.7232G	106.43	Inf	-Inf	5.80	3	H	227	1.77	-
PK	5.9488G	58.92	68.20	-9.28	6.59	3	H	227	1.77	-

VHT20, TXBF_Nss1, (MCS0)_4TX

5720MHz_TX

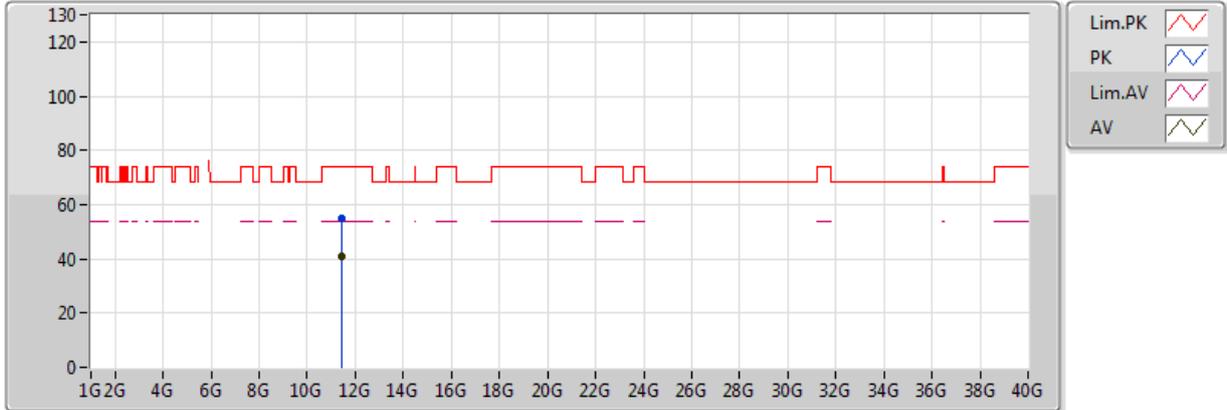


20170222
 EUT Y 4TX TXBF
 Setting 30 Maxsetting
 03-M-01
 FSU

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	11.440168G	40.92	54.00	-13.08	12.10	3	V	281	1.91	-
PK	11.439948G	54.15	74.00	-19.85	12.10	3	V	281	1.91	-

VHT20, TXBF_Nss1, (MCS0)_4TX

5720MHz_TX

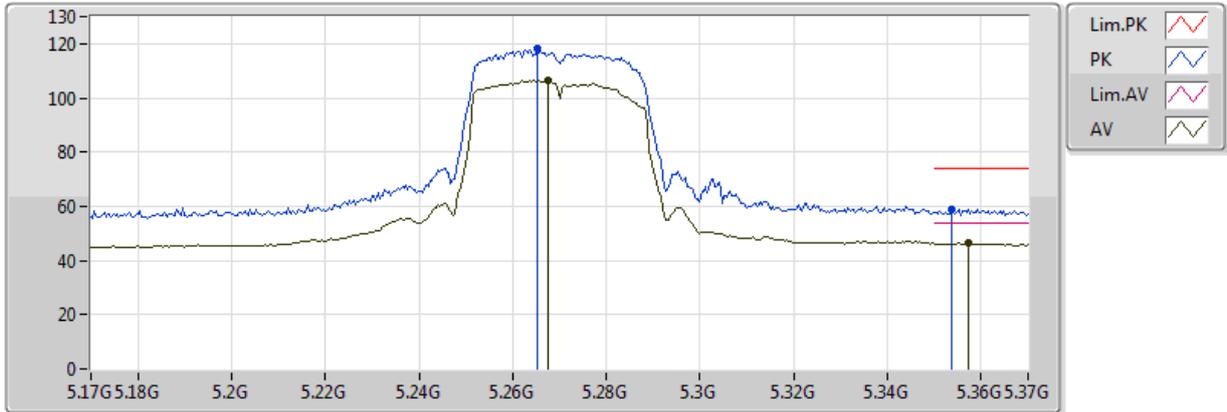


20170222
 EUT Y 4TX TXBF
 Setting 30 Maxsetting
 03-M-01
 FSU

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	11.439676G	41.03	54.00	-12.97	12.10	3	H	114	1.10	-
PK	11.440152G	54.66	74.00	-19.34	12.10	3	H	114	1.10	-

VHT40, TXBF_Nss1,(MCS0)_4TX

5270MHz_TX

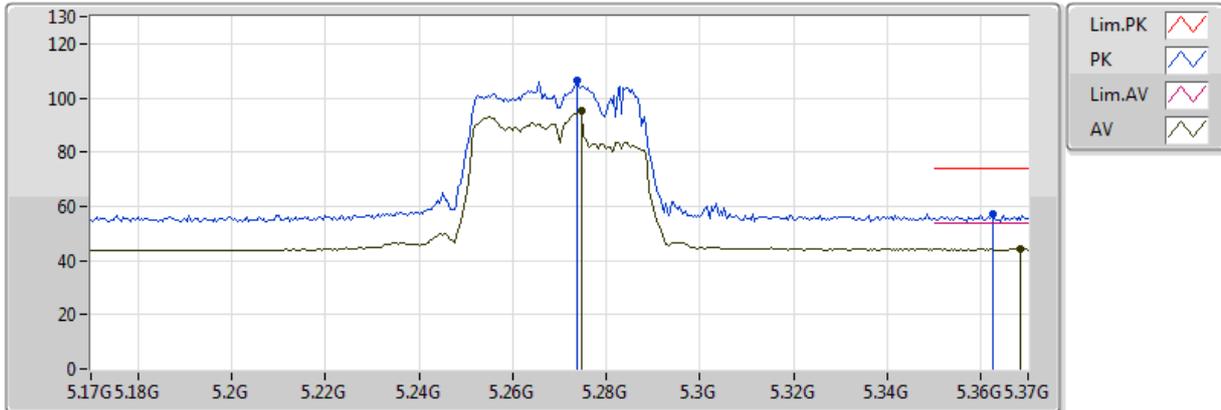


20170222
 EUT Y 4TX TXBF
 Setting 30 Maxsetting
 03-M-01-10
 FSU

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	5.2676G	106.30	Inf	-Inf	4.57	3	V	188	1.50	-
AV	5.3572G	46.33	54.00	-7.67	4.74	3	V	188	1.50	-
PK	5.2652G	118.00	Inf	-Inf	4.57	3	V	188	1.50	-
PK	5.3536G	58.96	74.00	-15.04	4.74	3	V	188	1.50	-

VHT40, TXBF_Nss1, (MCS0)_4TX

5270MHz_TX

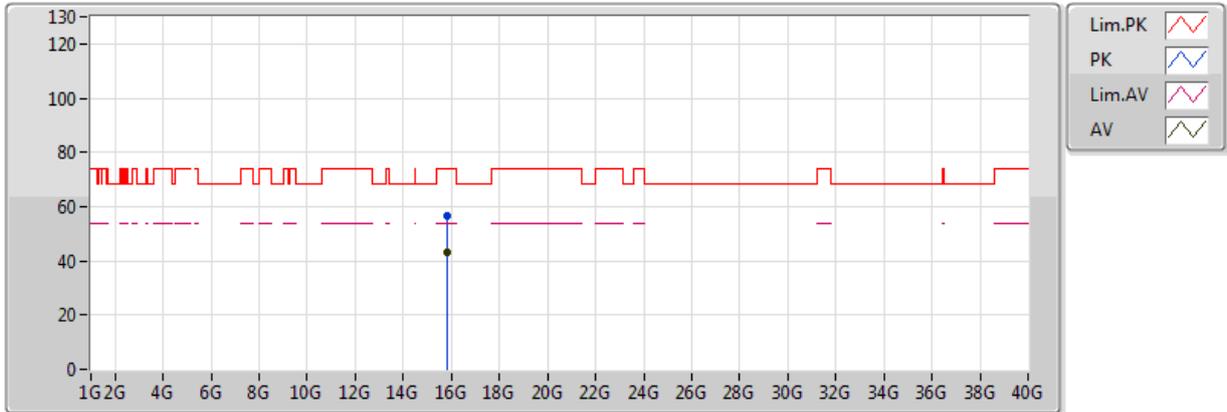


20170222
 EUT Y 4TX TXBF
 Setting 30 Maxsetting
 03-M-01-10
 FSU

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	5.2748G	95.09	Inf	-Inf	4.59	3	H	146	1.50	-
AV	5.3684G	44.27	54.00	-9.73	4.76	3	H	146	1.50	-
PK	5.2736G	106.42	Inf	-Inf	4.58	3	H	146	1.50	-
PK	5.3624G	56.96	74.00	-17.04	4.75	3	H	146	1.50	-

VHT40, TXBF_Nss1, (MCS0)_4TX

5270MHz_TX

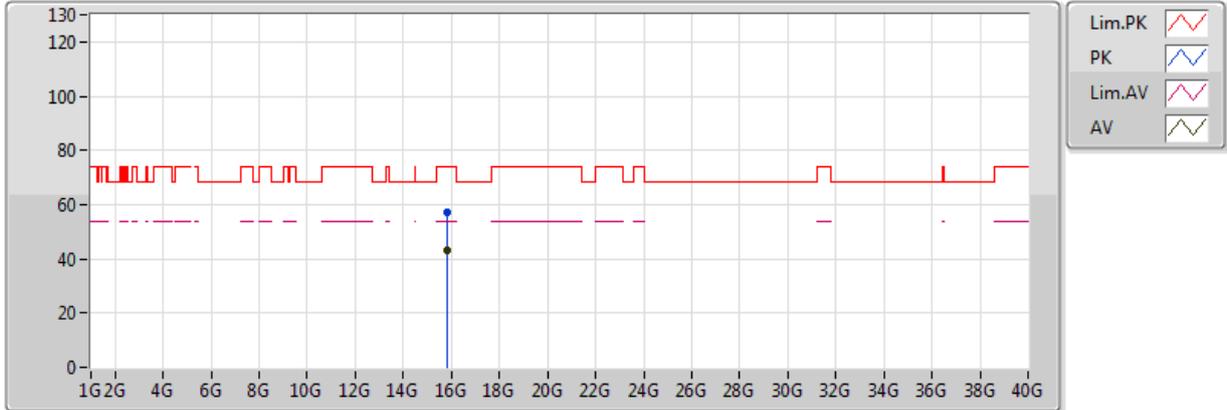


20170222
 EUT Y 4TX TXBF
 Setting 30 Maxsetting
 03-M-01
 FSU

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	15.810704G	43.29	54.00	-10.71	13.59	3	V	347	1.73	-
PK	15.81066G	56.76	74.00	-17.24	13.59	3	V	347	1.73	-

VHT40, TXBF_Nss1, (MCS0)_4TX

5270MHz_TX

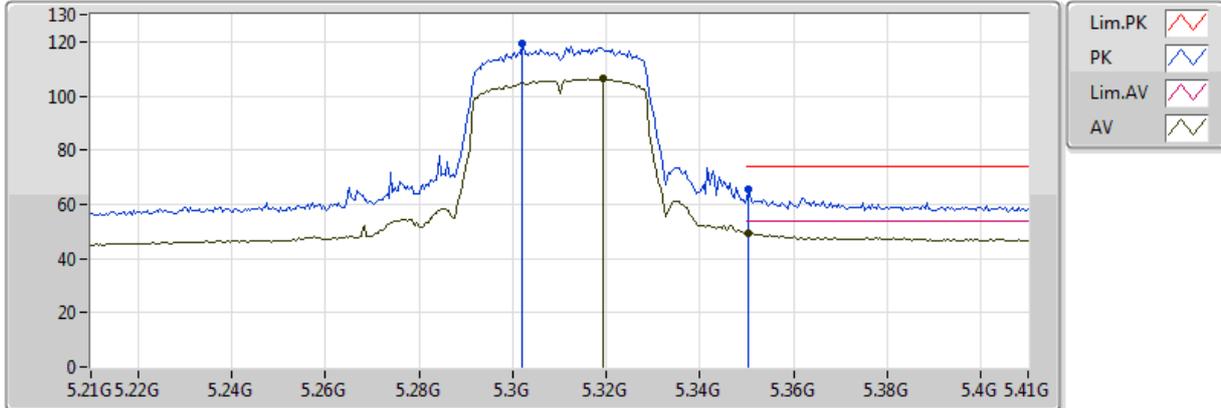


20170222
 EUT Y 4TX TXBF
 Setting 30 Maxsetting
 03-M-01
 FSU

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	15.8108G	43.23	54.00	-10.77	13.59	3	H	188	1.24	-
PK	15.810928G	56.91	74.00	-17.09	13.58	3	H	188	1.24	-

VHT40, TXBF_Nss1, (MCS0)_4TX

5310MHz_TX

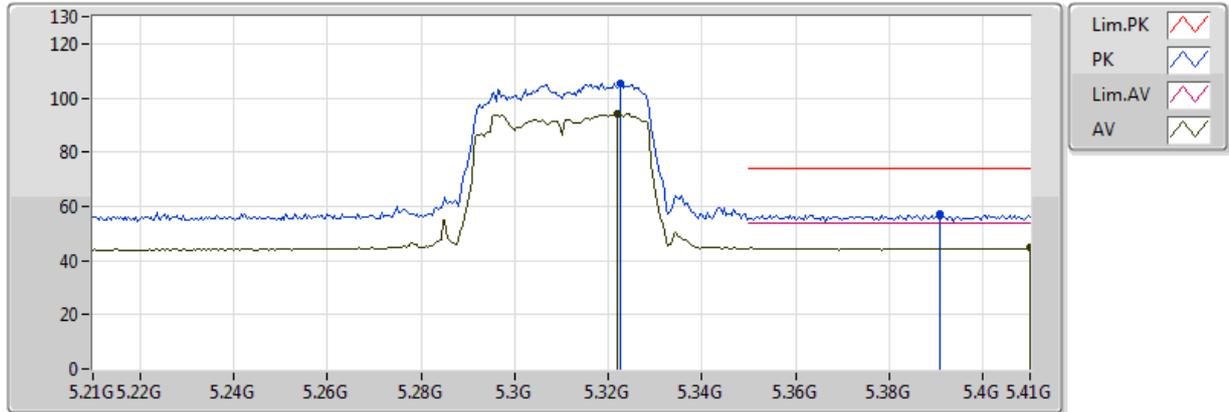


20170222
 EUT Y 4TX TXBF
 Setting 30 Maxsetting
 03-M-01-10
 FSU

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	5.3192G	106.28	Inf	-Inf	4.67	3	V	182	1.39	-
AV	5.3504G	49.30	54.00	-4.70	4.73	3	V	182	1.39	-
PK	5.302G	119.43	Inf	-Inf	4.64	3	V	182	1.39	-
PK	5.3504G	65.73	74.00	-8.27	4.73	3	V	182	1.39	-

VHT40, TXBF_Nss1, (MCS0)_4TX

5310MHz_TX

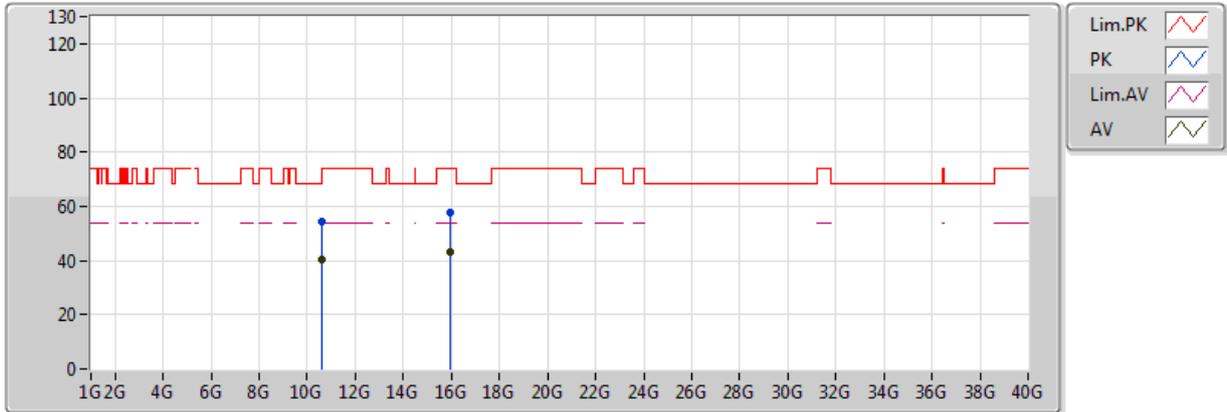


20170222
 EUT Y 4TX TXBF
 Setting 30 Maxsetting
 03-M-01-10
 FSU

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	5.322G	94.29	Inf	-Inf	4.68	3	H	145	1.72	-
AV	5.41G	44.79	54.00	-9.21	4.85	3	H	145	1.72	-
PK	5.3224G	105.37	Inf	-Inf	4.68	3	H	145	1.72	-
PK	5.3908G	57.03	74.00	-16.97	4.80	3	H	145	1.72	-

VHT40, TXBF_Nss1, (MCS0)_4TX

5310MHz_TX

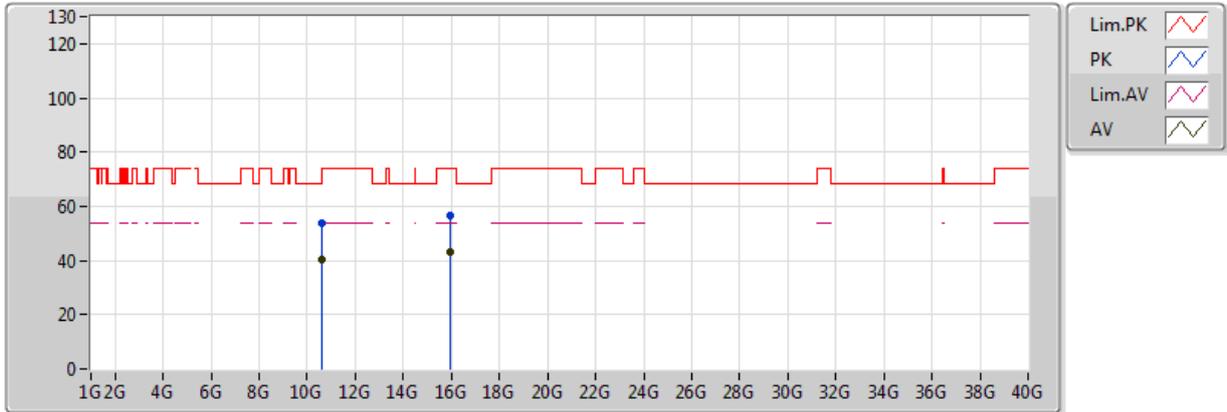


20170222
 EUT Y 4TX TXBF
 Setting 30 Maxsetting
 03-M-01
 FSU

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	10.619708G	40.11	54.00	-13.89	11.43	3	V	301	1.23	-
AV	15.929228G	43.13	54.00	-10.87	13.44	3	V	104	1.21	-
PK	10.619876G	54.42	74.00	-19.58	11.43	3	V	301	1.23	-
PK	15.930792G	57.50	74.00	-16.50	13.44	3	V	104	1.21	-

VHT40, TXBF_Nss1, (MCS0)_4TX

5310MHz_TX

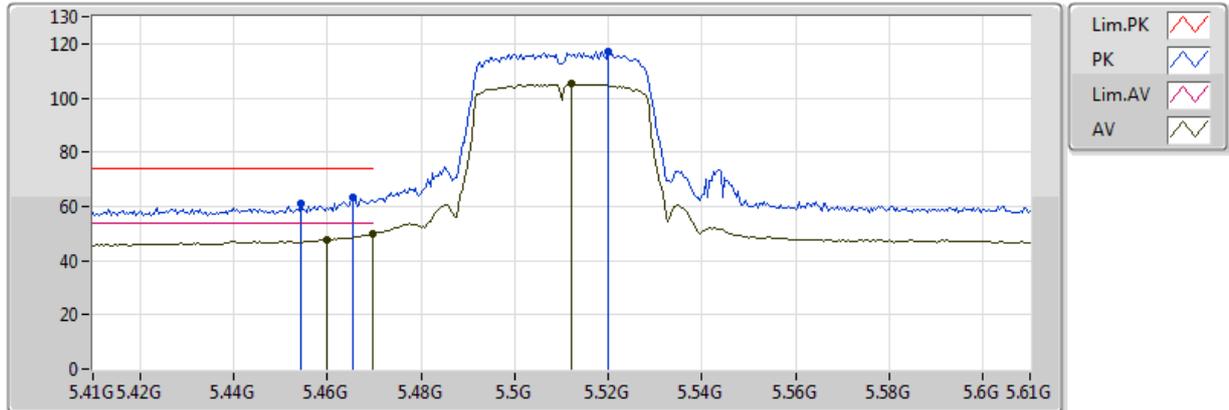


20170222
 EUT Y 4TX TXBF
 Setting 30 Maxsetting
 03-M-01
 FSU

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	10.620796G	40.09	54.00	-13.91	11.43	3	H	201	1.95	-
AV	15.930496G	43.19	54.00	-10.81	13.44	3	H	321	1.07	-
PK	10.620004G	53.70	74.00	-20.30	11.43	3	H	201	1.95	-
PK	15.929072G	56.41	74.00	-17.59	13.44	3	H	321	1.07	-

VHT40, TXBF_Nss1, (MCS0)_4TX

5510MHz_TX

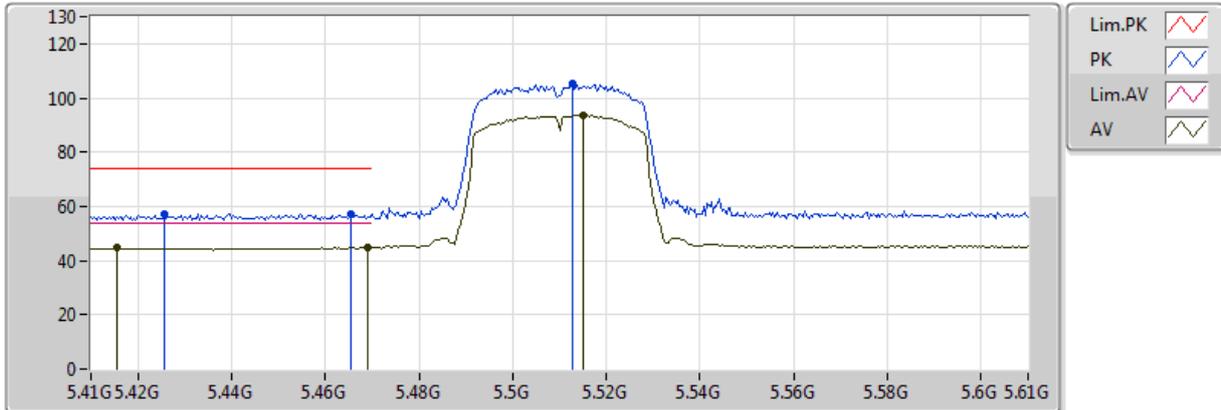


20170222
 EUT Y 4TX TXBF
 Setting 30 Maxsetting
 03-M-01-10
 FSU

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	5.46G	47.74	54.00	-6.26	4.98	3	V	201	1.50	-
AV	5.4696G	49.76	54.00	-4.24	5.01	3	V	201	1.50	-
AV	5.512G	105.28	Inf	-Inf	5.13	3	V	201	1.50	-
PK	5.4544G	60.86	74.00	-13.14	4.97	3	V	201	1.50	-
PK	5.4656G	63.59	74.00	-10.41	5.00	3	V	201	1.50	-
PK	5.52G	117.25	Inf	-Inf	5.16	3	V	201	1.50	-

VHT40, TXBF_Nss1, (MCS0)_4TX

5510MHz_TX

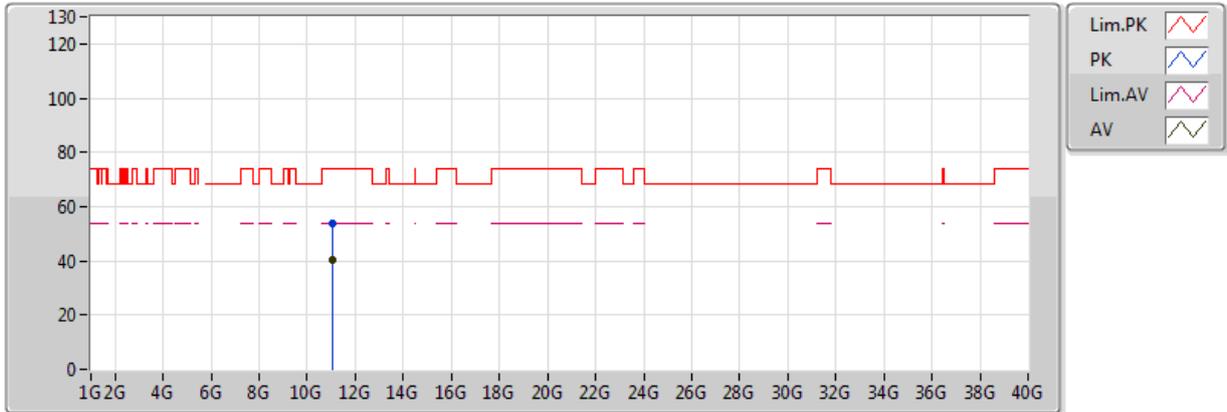


20170222
 EUT Y 4TX TXBF
 Setting 30 Maxsetting
 03-M-01-10
 FSU

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	5.4156G	44.63	54.00	-9.37	4.86	3	H	262	1.75	-
AV	5.4692G	44.73	54.00	-9.27	5.01	3	H	262	1.75	-
AV	5.5152G	93.62	Inf	-Inf	5.14	3	H	262	1.75	-
PK	5.4256G	57.31	74.00	-16.69	4.89	3	H	262	1.75	-
PK	5.4656G	57.02	74.00	-16.98	5.00	3	H	262	1.75	-
PK	5.5128G	105.59	Inf	-Inf	5.13	3	H	262	1.75	-

VHT40, TXBF_Nss1, (MCS0)_4TX

5510MHz_TX

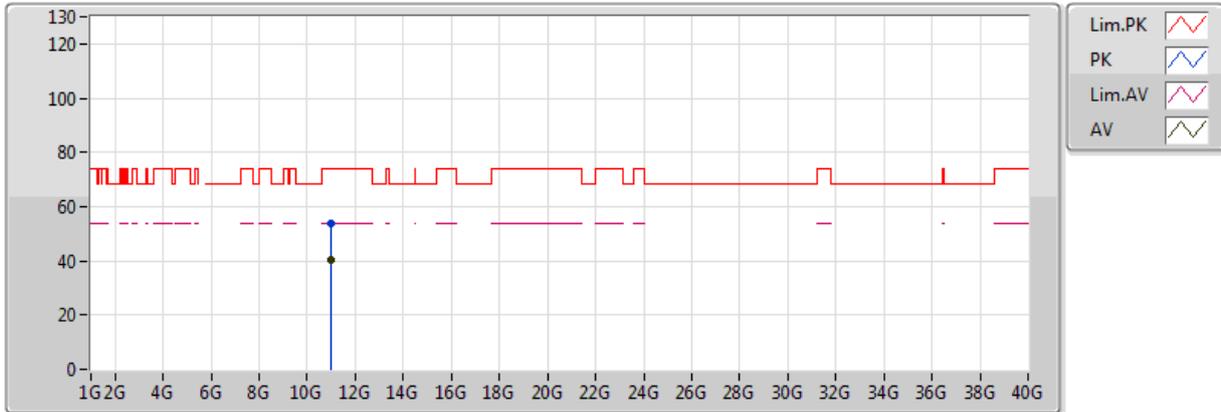


20170222
 EUT Y 4TX TXBF
 Setting 30 Maxsetting
 03-M-01
 FSU

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	11.020496G	40.44	54.00	-13.56	11.88	3	V	150	1.10	-
PK	11.020608G	54.06	74.00	-19.94	11.88	3	V	150	1.10	-

VHT40, TXBF_Nss1, (MCS0)_4TX

5510MHz_TX

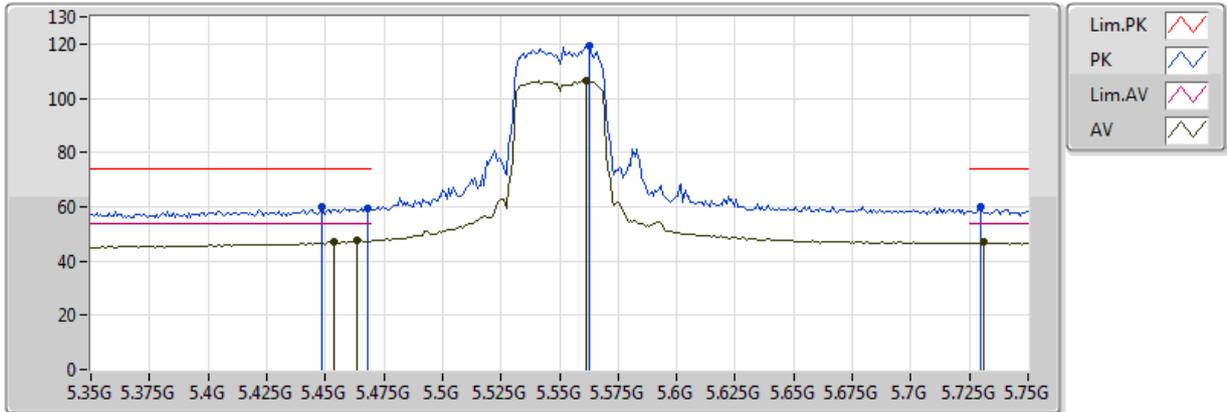


20170222
 EUT Y 4TX TXBF
 Setting 30 Maxsetting
 03-M-01
 FSU

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	11.019072G	40.40	54.00	-13.60	11.88	3	H	172	1.90	-
PK	11.019164G	54.05	74.00	-19.95	11.88	3	H	172	1.90	-

VHT40, TXBF_Nss1, (MCS0)_4TX

5550MHz_TX

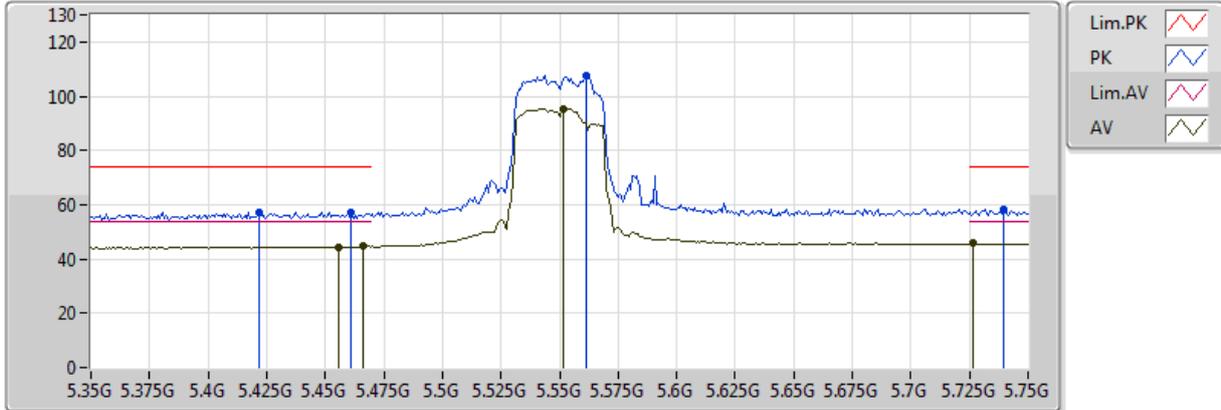


20170222
 EUT Y 4TX TXBF
 Setting 30 Maxsetting
 03-M-01-10
 FSU

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	5.454G	47.01	54.00	-6.99	4.97	3	V	196	1.50	-
AV	5.4636G	47.44	54.00	-6.56	4.99	3	V	196	1.50	-
AV	5.5612G	106.42	Inf	-Inf	5.30	3	V	196	1.50	-
AV	5.7308G	47.02	54.00	-6.98	5.83	3	V	196	1.50	-
PK	5.4484G	59.72	74.00	-14.28	4.95	3	V	196	1.50	-
PK	5.4684G	59.53	74.00	-14.47	5.00	3	V	196	1.50	-
PK	5.5628G	119.43	Inf	-Inf	5.31	3	V	196	1.50	-
PK	5.73G	59.77	74.00	-14.23	5.82	3	V	196	1.50	-

VHT40, TXBF_Nss1, (MCS0)_4TX

5550MHz_TX

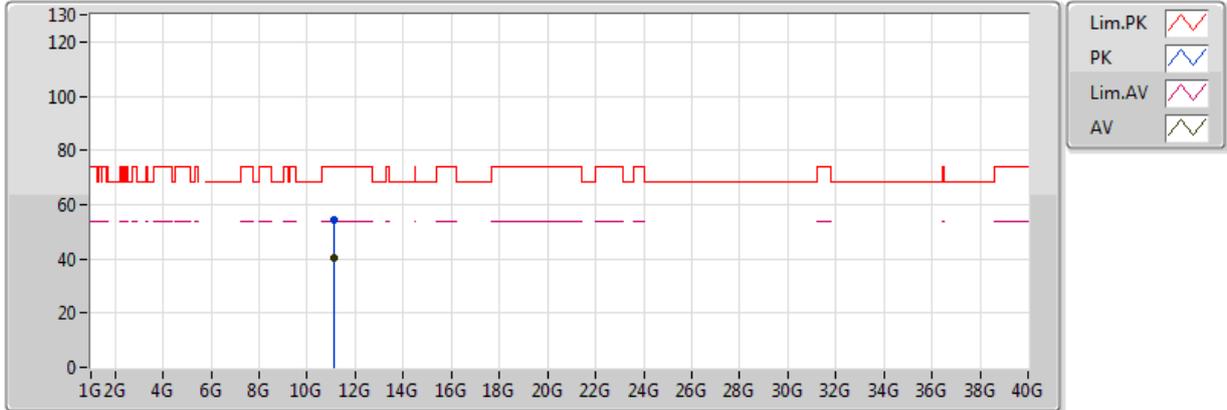


20170222
 EUT Y 4TX TXBF
 Setting 30 Maxsetting
 03-M-01-10
 FSU

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	5.4556G	44.48	54.00	-9.52	4.97	3	H	219	1.48	-
AV	5.466G	44.64	54.00	-9.36	5.00	3	H	219	1.48	-
AV	5.5516G	95.48	Inf	-Inf	5.27	3	H	219	1.48	-
AV	5.7268G	45.70	54.00	-8.30	5.82	3	H	219	1.48	-
PK	5.422G	57.42	74.00	-16.58	4.88	3	H	219	1.48	-
PK	5.4612G	56.89	74.00	-17.11	4.99	3	H	219	1.48	-
PK	5.5612G	107.59	Inf	-Inf	5.30	3	H	219	1.48	-
PK	5.7396G	58.06	74.00	-15.94	5.85	3	H	219	1.48	-

VHT40, TXBF_Nss1, (MCS0)_4TX

5550MHz_TX

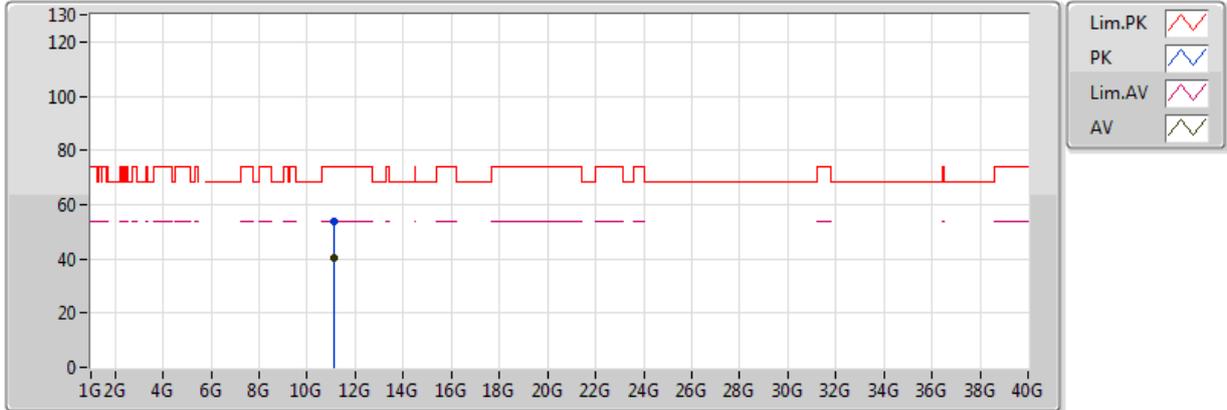


20170222
 EUT Y 4TX TXBF
 Setting 30 Maxsetting
 03-M-01
 FSU

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	11.10044G	40.18	54.00	-13.82	11.92	3	V	96	1.57	-
PK	11.099276G	54.48	74.00	-19.52	11.92	3	V	96	1.57	-

VHT40, TXBF_Nss1, (MCS0)_4TX

5550MHz_TX

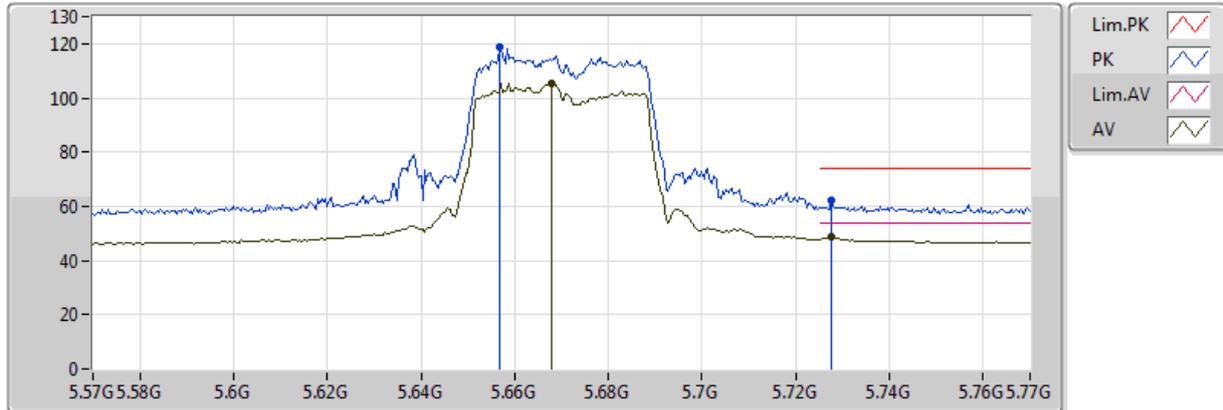


20170222
 EUT Y 4TX TXBF
 Setting 30 Maxsetting
 03-M-01
 FSU

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	11.099316G	40.28	54.00	-13.72	11.92	3	H	318	1.35	-
PK	11.100124G	53.98	74.00	-20.02	11.92	3	H	318	1.35	-

VHT40, TXBF_Nss1,(MCS0)_4TX

5670MHz_TX

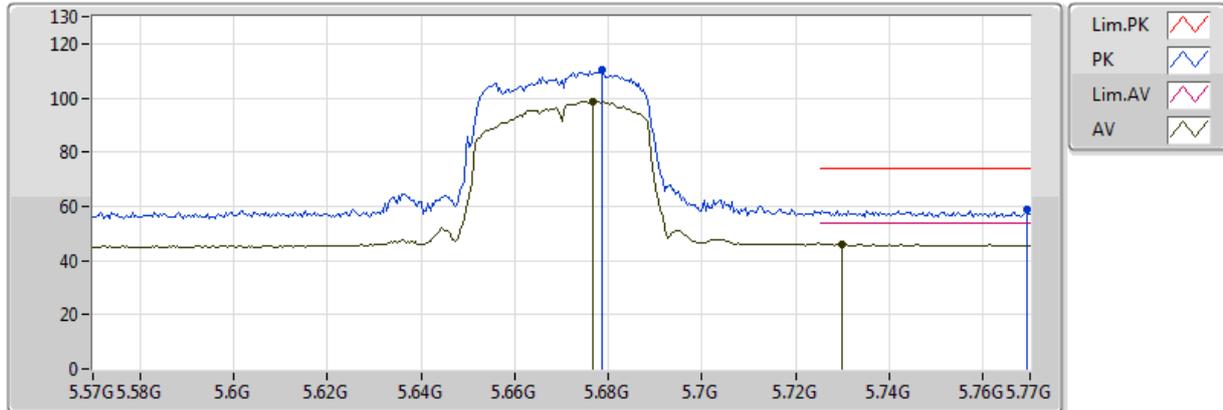


20170222
 EUT Y 4TX TXBF
 Setting 30 Maxsetting
 03-M-01-10
 FSU

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	5.668G	105.35	Inf	-Inf	5.64	3	V	161	2.58	-
AV	5.7276G	48.72	54.00	-5.28	5.82	3	V	161	2.58	-
PK	5.6568G	118.87	Inf	-Inf	5.61	3	V	161	2.58	-
PK	5.7276G	61.98	74.00	-12.02	5.82	3	V	161	2.58	-

VHT40, TXBF_Nss1, (MCS0)_4TX

5670MHz_TX



20170222
 EUT Y 4TX TXBF
 Setting 30 Maxsetting
 03-M-01-10
 FSU

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	5.6768G	98.82	Inf	-Inf	5.67	3	H	1	1.67	-
AV	5.73G	45.96	54.00	-8.04	5.82	3	H	1	1.67	-
PK	5.6788G	110.43	Inf	-Inf	5.68	3	H	1	1.67	-
PK	5.7692G	58.62	74.00	-15.38	5.93	3	H	1	1.67	-

VHT40, TXBF_Nss1, (MCS0)_4TX

5670MHz_TX

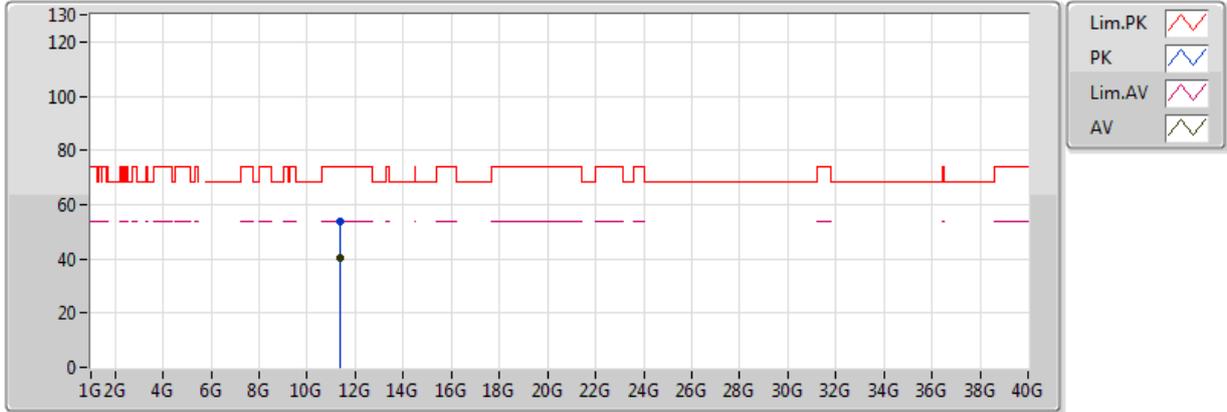


20170222
 EUT Y 4TX TXBF
 Setting 30 Maxsetting
 03-M-01
 FSU

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	11.34016G	40.47	54.00	-13.53	12.05	3	V	130	1.10	-
PK	11.339044G	54.01	74.00	-19.99	12.05	3	V	130	1.10	-

VHT40, TXBF_Nss1, (MCS0)_4TX

5670MHz_TX

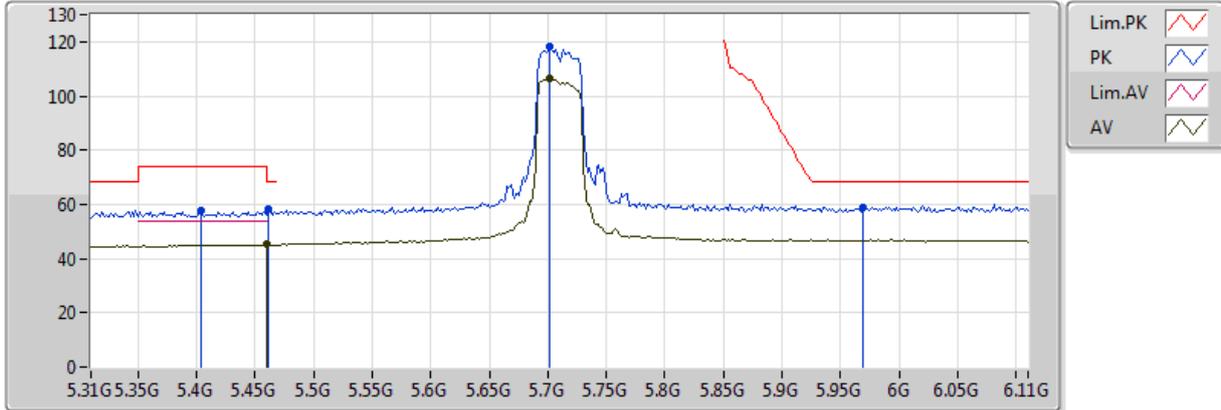


20170222
 EUT Y 4TX TXBF
 Setting 30 Maxsetting
 03-M-01
 FSU

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	11.339556G	40.54	54.00	-13.46	12.05	3	H	47	2.03	-
PK	11.340176G	53.81	74.00	-20.19	12.05	3	H	47	2.03	-

VHT40, TXBF_Nss1, (MCS0)_4TX

5710MHz_TX

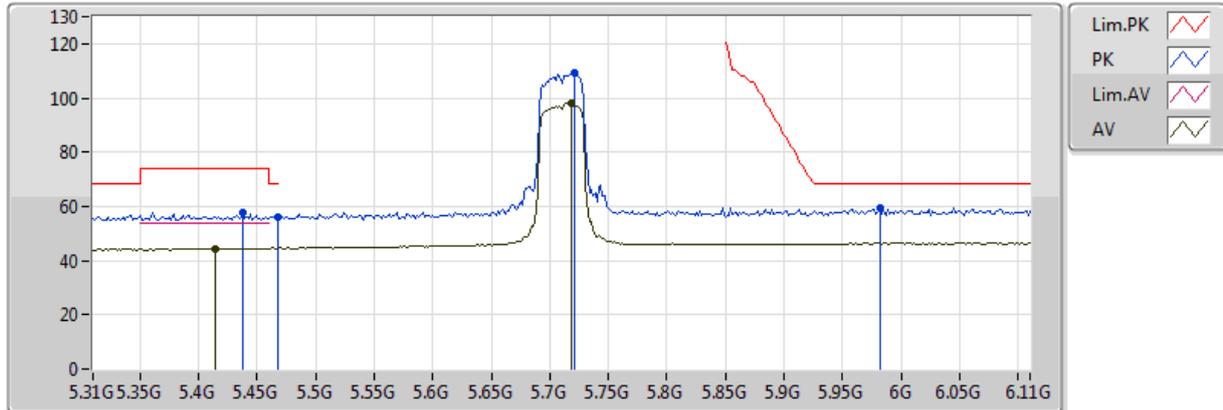


20170222
 EUT Y 4TX TXBF
 Setting 30 Maxsetting
 03-M-01-10
 FSU

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	5.459995G	45.22	54.00	-8.78	4.98	3	V	174	1.50	-
AV	5.702G	106.22	Inf	-Inf	5.75	3	V	174	1.50	-
PK	5.4044G	57.62	74.00	-16.38	4.83	3	V	174	1.50	-
PK	5.462G	58.03	68.20	-10.17	4.99	3	V	174	1.50	-
PK	5.702G	118.14	Inf	-Inf	5.75	3	V	174	1.50	-
PK	5.9692G	58.76	68.20	-9.44	6.67	3	V	174	1.50	-

VHT40, TXBF_Nss1, (MCS0)_4TX

5710MHz_TX

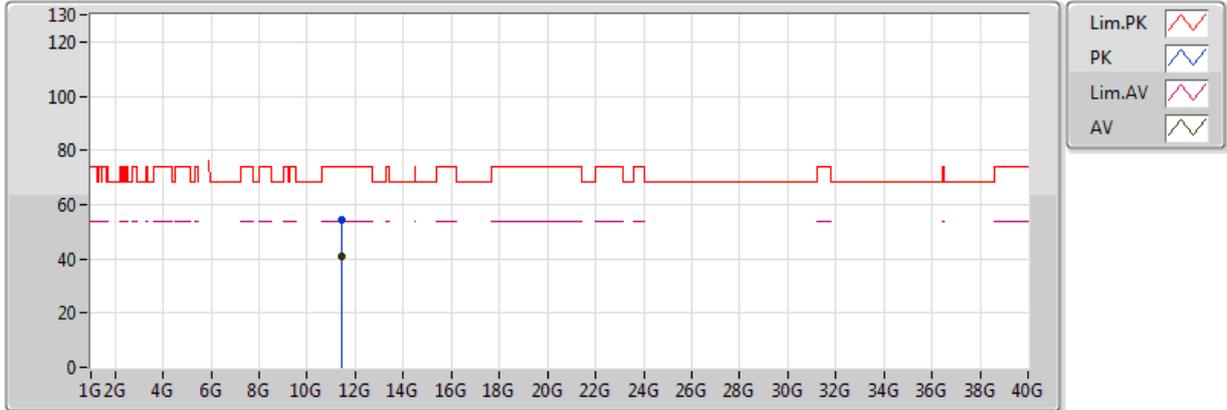


20170222
 EUT Y 4TX TXBF
 Setting 30 Maxsetting
 03-M-01-10
 FSU

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	5.414G	44.44	54.00	-9.56	4.86	3	H	219	1.52	-
AV	5.718G	98.22	Inf	-Inf	5.79	3	H	219	1.52	-
PK	5.438G	57.59	74.00	-16.41	4.92	3	H	219	1.52	-
PK	5.4684G	56.00	68.20	-12.20	5.00	3	H	219	1.52	-
PK	5.7212G	109.17	Inf	-Inf	5.80	3	H	219	1.52	-
PK	5.982G	59.33	68.20	-8.87	6.71	3	H	219	1.52	-

VHT40, TXBF_Nss1, (MCS0)_4TX

5710MHz_TX

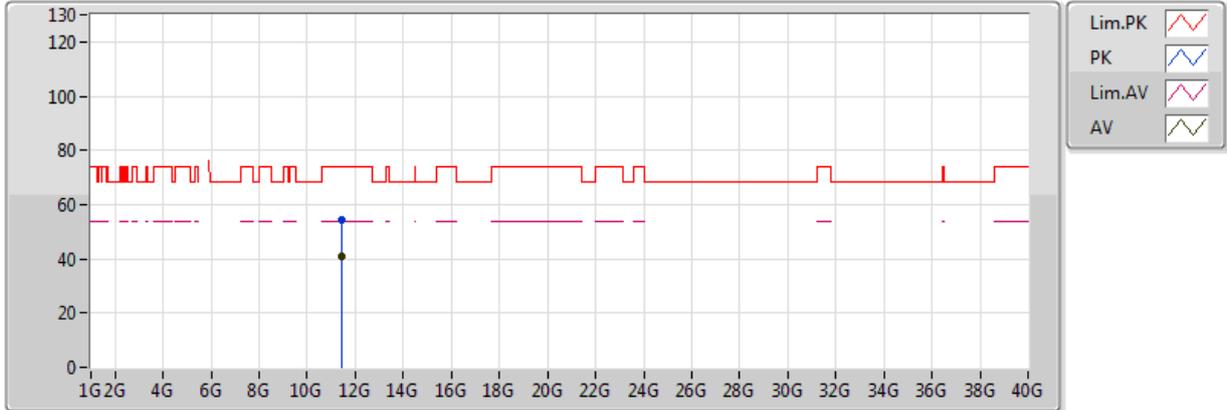


20170222
 EUT Y 4TX TXBF
 Setting 30 Maxsetting
 03-M-01
 FSU

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	11.420464G	40.88	54.00	-13.12	12.09	3	V	168	1.28	-
PK	11.419092G	54.56	74.00	-19.44	12.09	3	V	168	1.28	-

VHT40, TXBF_Nss1, (MCS0)_4TX

5710MHz_TX

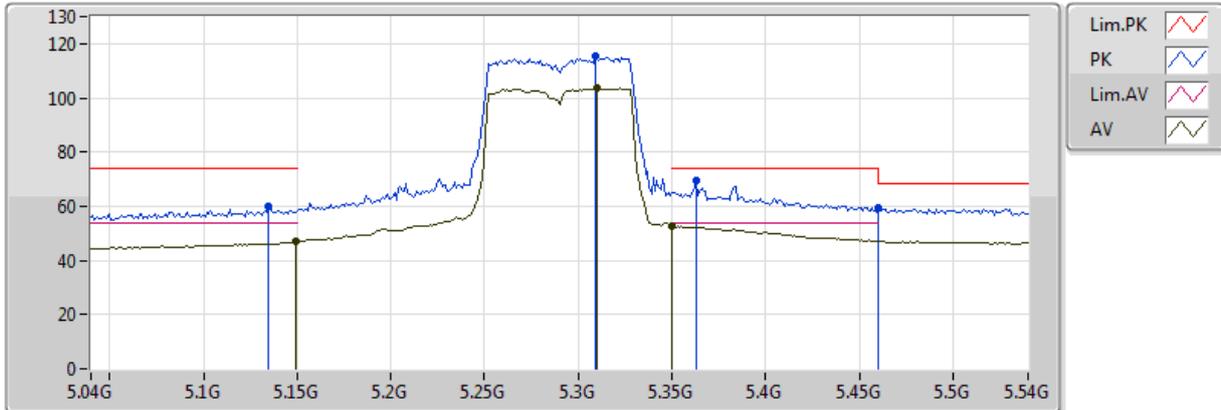


20170222
 EUT Y 4TX TXBF
 Setting 30 Maxsetting
 03-M-01
 FSU

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	11.419832G	40.79	54.00	-13.21	12.09	3	H	310	1.36	-
PK	11.420276G	54.20	74.00	-19.80	12.09	3	H	310	1.36	-

VHT80, TXBF_Nss1, (MCS0)_4TX

5290MHz_TX

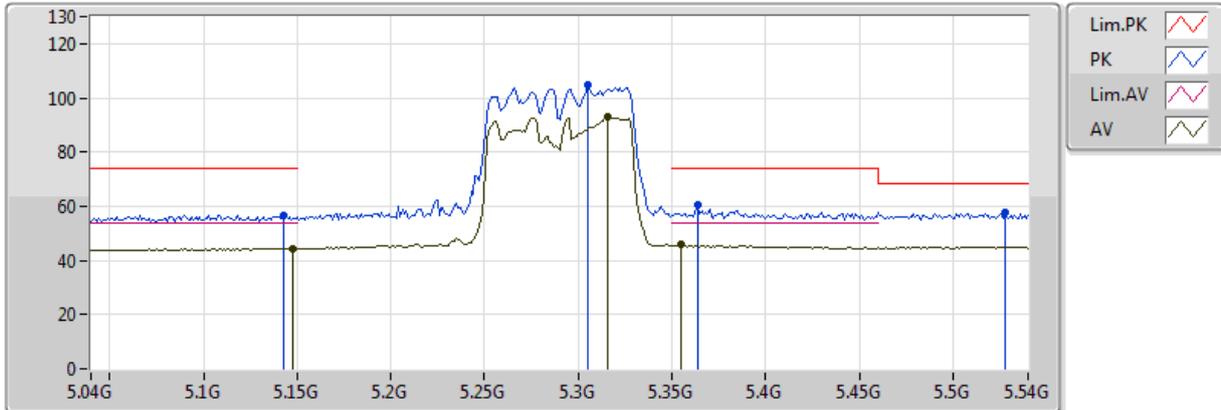


20170222
 EUT Y 4TX TXBF
 Setting 30 Maxsetting
 03-M-01-10
 FSU

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	5.149G	47.05	54.00	-6.95	4.32	3	V	188	1.54	-
AV	5.31G	103.54	Inf	-Inf	4.66	3	V	188	1.54	-
AV	5.350005G	52.78	54.00	-1.22	4.73	3	V	188	1.54	-
PK	5.135G	59.88	74.00	-14.12	4.29	3	V	188	1.54	-
PK	5.309G	115.24	Inf	-Inf	4.66	3	V	188	1.54	-
PK	5.363G	69.27	74.00	-4.73	4.75	3	V	188	1.54	-
PK	5.460005G	59.26	68.20	-8.94	4.98	3	V	188	1.54	-

VHT80, TXBF_Nss1, (MCS0)_4TX

5290MHz_TX

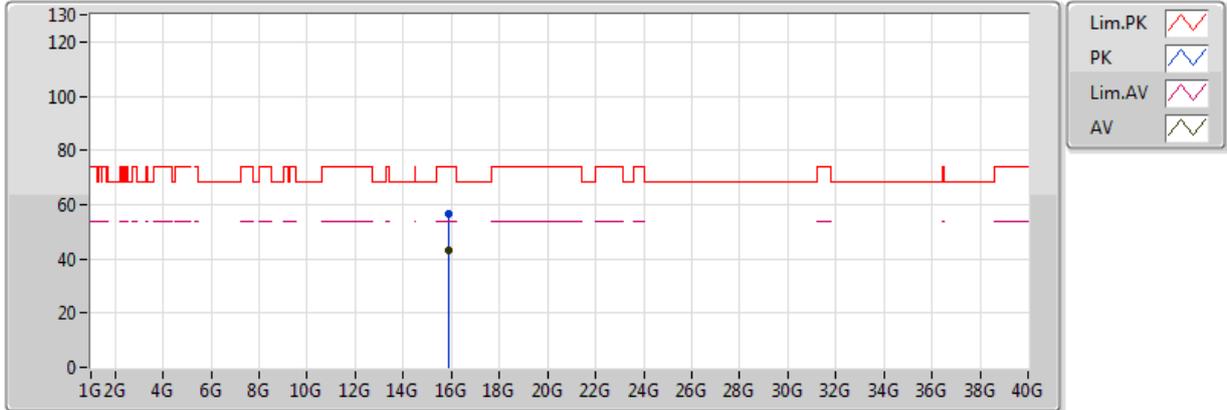


20170222
 EUT Y 4TX TXBF
 Setting 30 Maxsetting
 03-M-01-10
 FSU

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	44.52	54.00	-9.48	4.32	3	H	145	1.58	-
AV	5.316G	93.14	Inf	-Inf	4.67	3	H	145	1.58	-
AV	5.355G	45.86	54.00	-8.14	4.74	3	H	145	1.58	-
PK	5.143G	56.60	74.00	-17.40	4.30	3	H	145	1.58	-
PK	5.305G	104.75	Inf	-Inf	4.65	3	H	145	1.58	-
PK	5.528G	57.93	68.20	-10.27	5.19	3	H	145	1.58	-
PK	5.364G	60.24	74.00	-13.76	4.76	3	H	145	1.58	-

VHT80, TXBF_Nss1, (MCS0)_4TX

5290MHz_TX

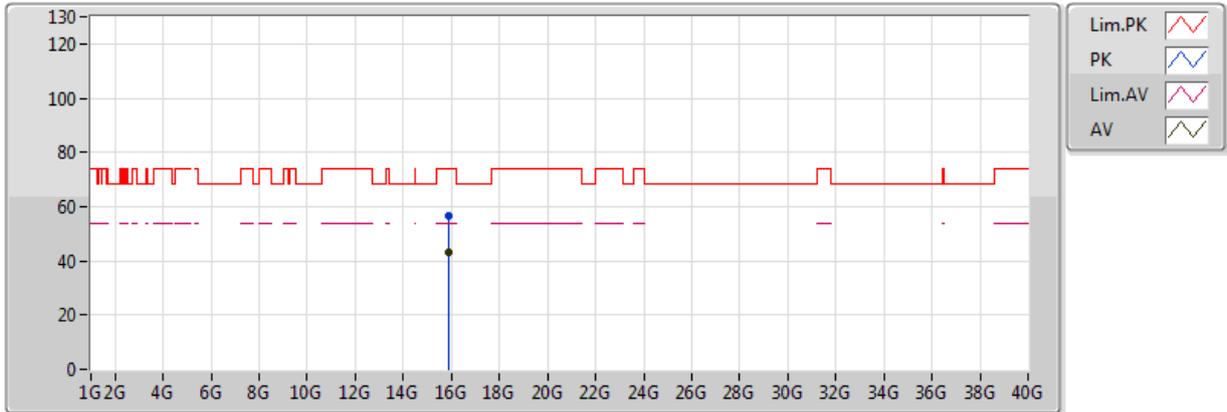


20170222
 EUT Y 4TX TXBF
 Setting 30 Maxsetting
 03-M-01
 FSU

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	15.870804G	43.26	54.00	-10.74	13.51	3	V	201	2.06	-
PK	15.869752G	56.70	74.00	-17.30	13.51	3	V	201	2.06	-

VHT80, TXBF_Nss1, (MCS0)_4TX

5290MHz_TX

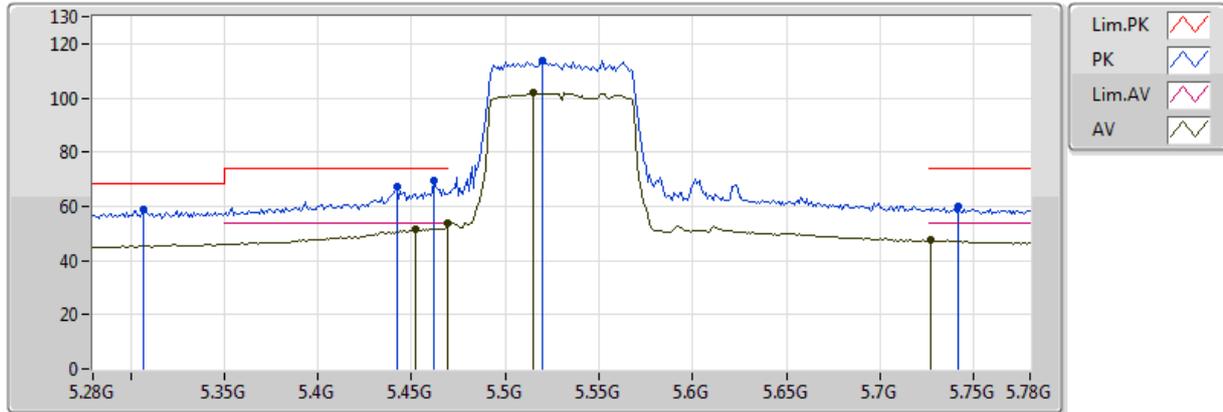


20170222
 EUT Y 4TX TXBF
 Setting 30 Maxsetting
 03-M-01
 FSU

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	15.870328G	43.13	54.00	-10.87	13.51	3	H	5	2.47	-
PK	15.870988G	56.64	74.00	-17.36	13.51	3	H	5	2.47	-

VHT80, TXBF_Nss1, (MCS0)_4TX

5530MHz_TX

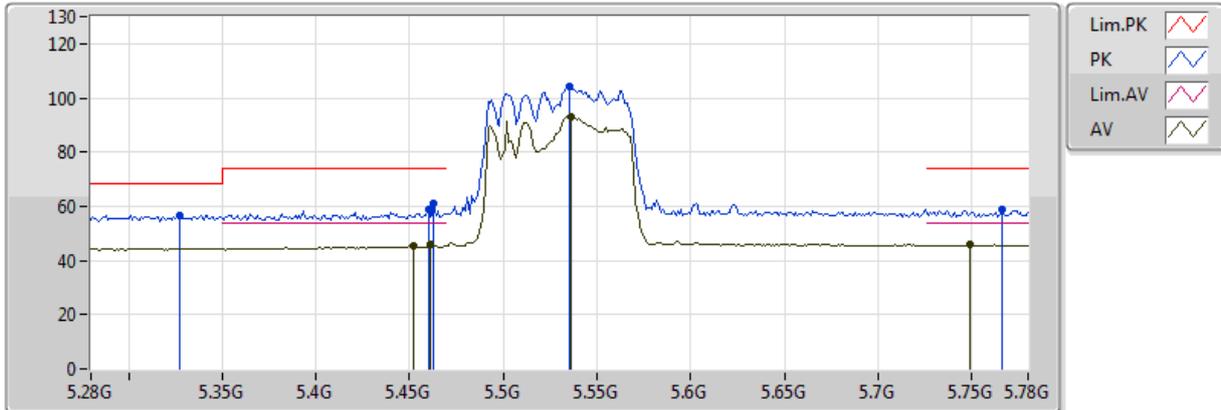


20170222
 EUT Y 4TX TXBF
 Setting 22
 03-M-01-10
 FSU

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	5.452G	51.44	54.00	-2.56	4.96	3	V	188	1.50	-
AV	5.515G	101.83	Inf	-Inf	5.14	3	V	188	1.50	-
AV	5.727G	47.44	54.00	-6.56	5.82	3	V	188	1.50	-
PK	5.442G	67.00	74.00	-7.00	4.93	3	V	188	1.50	-
PK	5.462G	69.38	74.00	-4.62	4.99	3	V	188	1.50	-
PK	5.52G	113.51	Inf	-Inf	5.16	3	V	188	1.50	-
PK	5.742G	59.83	74.00	-14.17	5.86	3	V	188	1.50	-
PK	5.307G	58.93	68.20	-9.27	4.65	3	V	188	1.50	-
AV	5.469G	53.58	54.00	-0.42	5.01	3	V	188	1.50	-

VHT80, TXBF_Nss1, (MCS0)_4TX

5530MHz_TX



20170222
 EUT Y 4TX TXBF
 Setting 22
 03-M-01-10
 FSU

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	5.452G	45.51	54.00	-8.49	4.96	3	H	326	1.53	-
AV	5.461G	45.75	54.00	-8.25	4.98	3	H	326	1.53	-
AV	5.536G	93.02	Inf	-Inf	5.22	3	H	326	1.53	-
AV	5.749G	45.76	54.00	-8.24	5.88	3	H	326	1.53	-
PK	5.327G	56.59	68.20	-11.61	4.69	3	H	326	1.53	-
PK	5.463G	61.33	74.00	-12.67	4.99	3	H	326	1.53	-
PK	5.535G	104.17	Inf	-Inf	5.21	3	H	326	1.53	-
PK	5.766G	58.84	74.00	-15.16	5.92	3	H	326	1.53	-
PK	5.46G	58.57	74.00	-15.43	4.98	3	H	326	1.53	-

VHT80, TXBF_Nss1, (MCS0)_4TX

5530MHz_TX

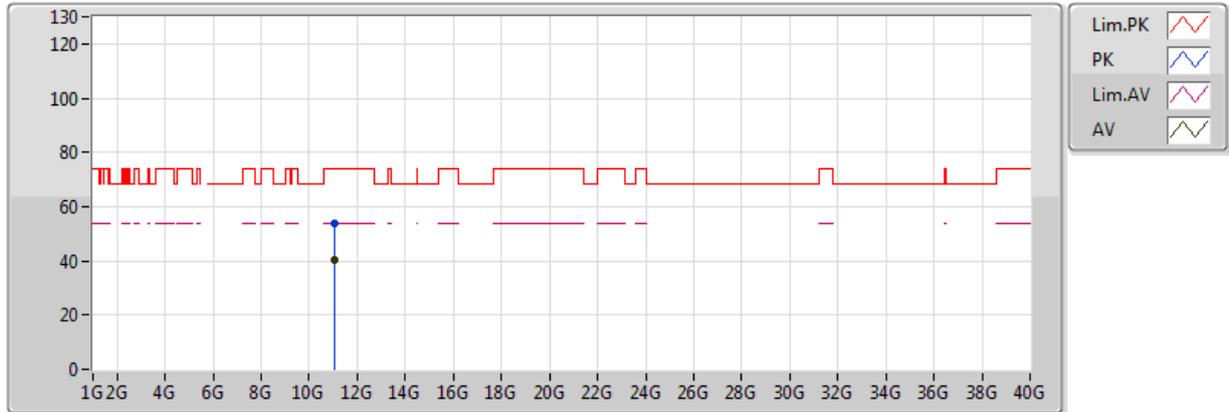


20170222
 EUT Y 4TX TXBF
 Setting 22
 03-M-01
 FSU

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	11.059132G	40.22	54.00	-13.78	11.90	3	V	357	2.04	-
PK	11.059088G	54.34	74.00	-19.66	11.90	3	V	357	2.04	-

VHT80, TXBF_Nss1, (MCS0)_4TX

5530MHz_TX

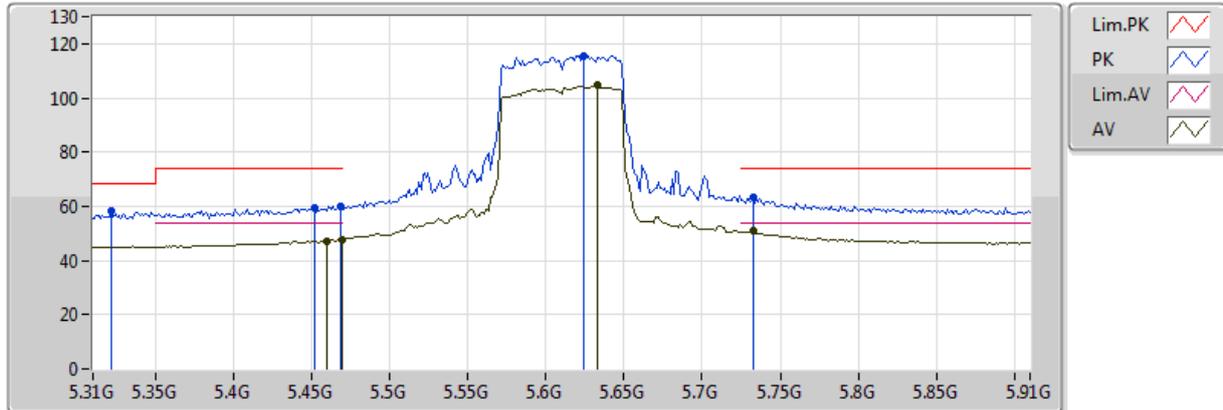


20170222
 EUT Y 4TX TXBF
 Setting 22
 03-M-01
 FSU

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	11.060788G	40.27	54.00	-13.73	11.90	3	H	13	2.01	-
PK	11.059072G	54.04	74.00	-19.96	11.90	3	H	13	2.01	-

VHT80, TXBF_Nss1, (MCS0)_4TX

5610MHz_TX

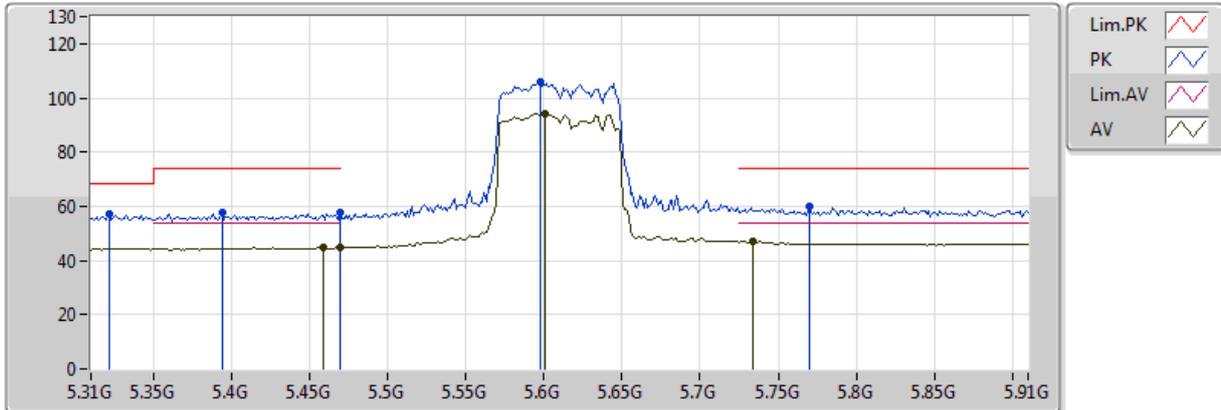


20170222
 EUT Y 4TX TXBF
 Setting 30 Maxsetting
 03-M-01-10
 FSU

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	5.46G	47.18	54.00	-6.82	4.98	3	V	194	1.47	-
AV	5.4696G	47.86	54.00	-6.14	5.01	3	V	194	1.47	-
AV	5.6328G	104.54	Inf	-Inf	5.54	3	V	194	1.47	-
AV	5.7324G	51.18	54.00	-2.82	5.83	3	V	194	1.47	-
PK	5.322G	58.18	68.20	-10.02	4.68	3	V	194	1.47	-
PK	5.4684G	59.99	74.00	-14.01	5.00	3	V	194	1.47	-
PK	5.6244G	115.66	Inf	-Inf	5.51	3	V	194	1.47	-
PK	5.7324G	63.25	74.00	-10.75	5.83	3	V	194	1.47	-
PK	5.4516G	59.18	74.00	-14.82	4.96	3	V	194	1.47	-

VHT80, TXBF_Nss1, (MCS0)_4TX

5610MHz_TX

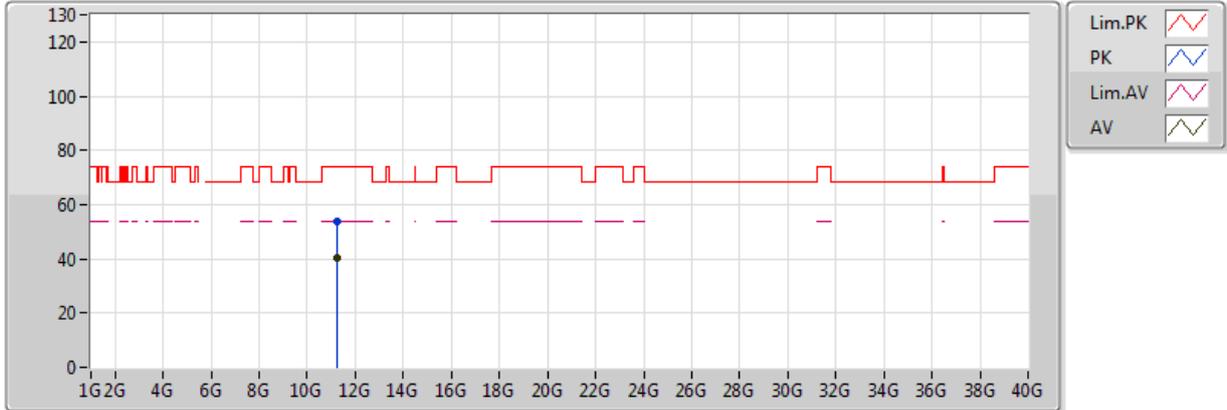


20170222
 EUT Y 4TX TXBF
 Setting 30 Maxsetting
 03-M-01-10
 FSU

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	5.4588G	44.61	54.00	-9.39	4.98	3	H	236	1.77	-
AV	5.4696G	44.82	54.00	-9.18	5.01	3	H	236	1.77	-
AV	5.6004G	94.22	Inf	-Inf	5.44	3	H	236	1.77	-
AV	5.7336G	47.03	54.00	-6.97	5.83	3	H	236	1.77	-
PK	5.322G	56.96	68.20	-11.24	4.68	3	H	236	1.77	-
PK	5.4696G	57.53	74.00	-16.47	5.01	3	H	236	1.77	-
PK	5.598G	105.82	Inf	-Inf	5.43	3	H	236	1.77	-
PK	5.7696G	59.82	74.00	-14.18	5.93	3	H	236	1.77	-
PK	5.394G	57.44	74.00	-16.56	4.81	3	H	236	1.77	-

VHT80, TXBF_Nss1, (MCS0)_4TX

5610MHz_TX

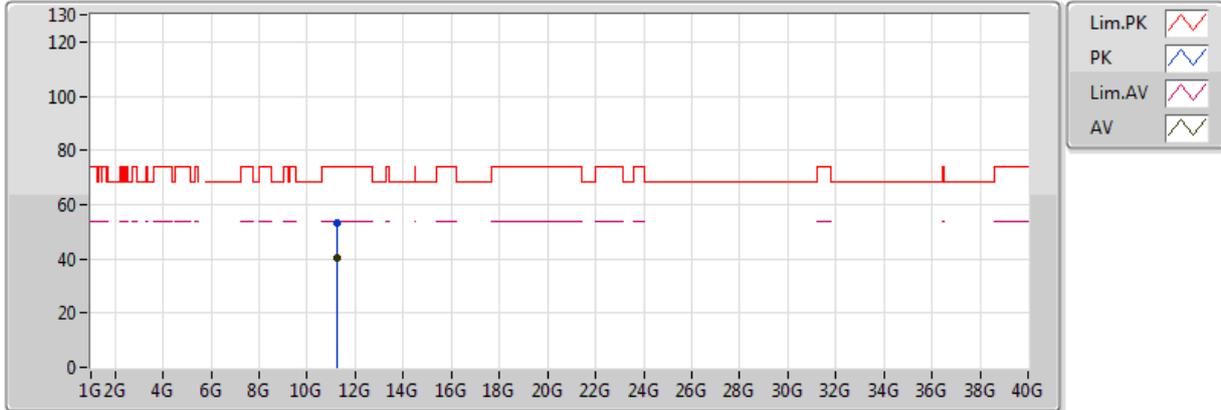


20170222
 EUT Y 4TX TXBF
 Setting 30 Maxsetting
 03-M-01
 FSU

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	11.22094G	40.23	54.00	-13.77	11.98	3	V	43	1.33	-
PK	11.220996G	54.05	74.00	-19.95	11.98	3	V	43	1.33	-

VHT80, TXBF_Nss1, (MCS0)_4TX

5610MHz_TX

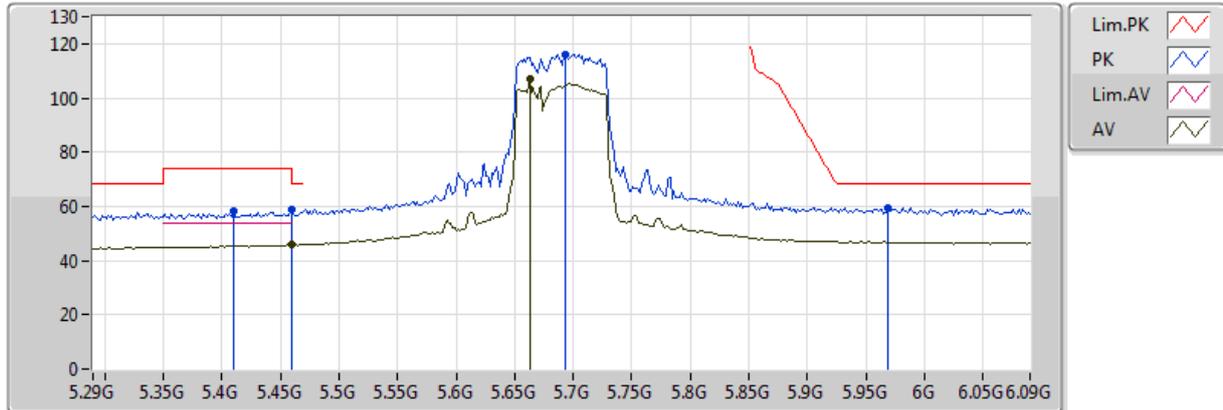


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 EUT Y 4TX TXBF
 Setting 30 Maxsetting
 03-M-01
 FSU

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	11.219864G	40.11	54.00	-13.89	11.98	3	H	50	1.70	-
PK	11.219388G	53.39	74.00	-20.61	11.98	3	H	50	1.70	-

VHT80, TXBF_Nss1, (MCS0)_4TX

5690MHz_TX

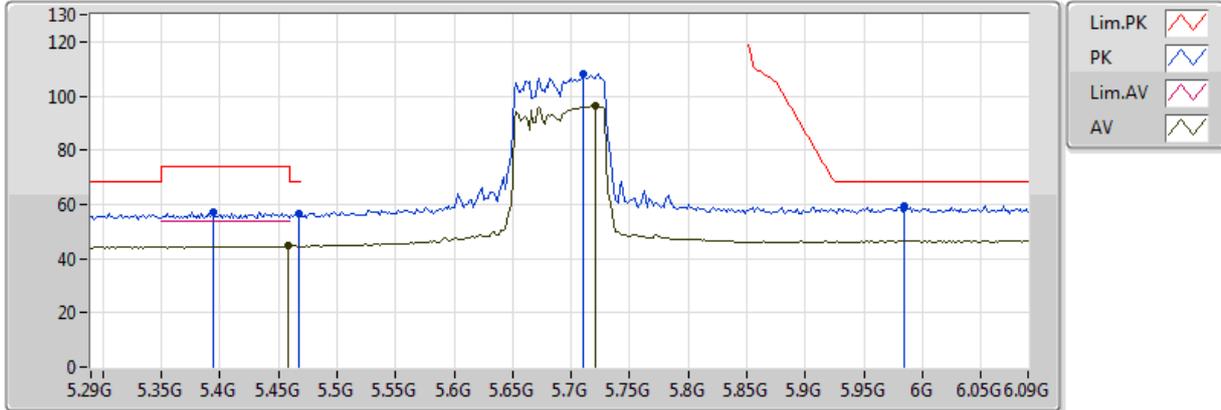


20170222
 EUT Y 4TX TXBF
 Setting 30 Maxsetting
 03-M-01-10
 FSU

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	5.459995G	45.78	54.00	-8.22	4.98	3	V	190	1.45	-
AV	5.6628G	107.12	Inf	-Inf	5.63	3	V	190	1.45	-
PK	5.460005G	58.80	68.20	-9.40	4.98	3	V	190	1.45	-
PK	5.6932G	116.19	Inf	-Inf	5.72	3	V	190	1.45	-
PK	5.9684G	59.48	68.20	-8.72	6.66	3	V	190	1.45	-
PK	5.41G	58.37	74.00	-15.63	4.85	3	V	190	1.45	-

VHT80, TXBF_Nss1, (MCS0)_4TX

5690MHz_TX

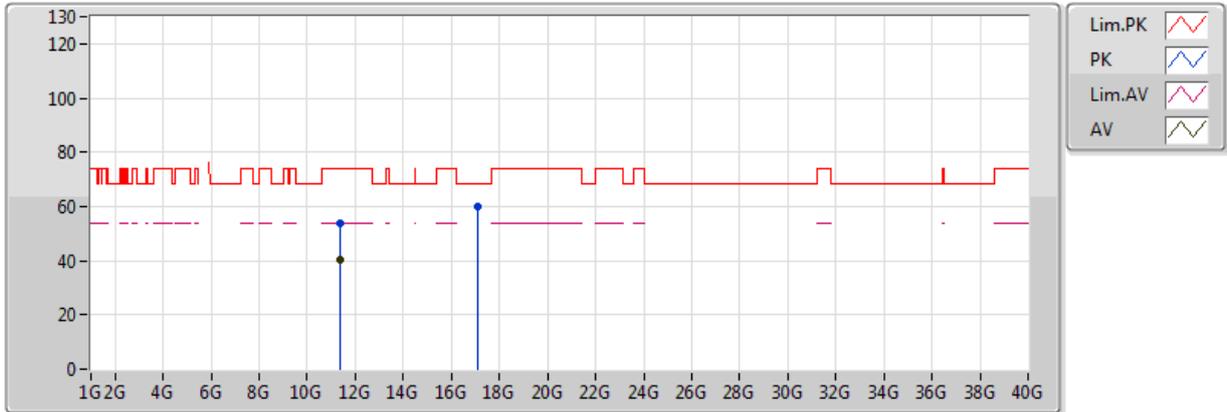


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 EUT Y 4TX TXBF
 Setting 30 Maxsetting
 03-M-01-10
 FSU

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	5.458G	44.58	54.00	-9.42	4.98	3	H	223	1.53	-
AV	5.7204G	96.42	Inf	-Inf	5.80	3	H	223	1.53	-
PK	5.394G	57.28	74.00	-16.72	4.81	3	H	223	1.53	-
PK	5.4676G	56.34	68.20	-11.86	5.00	3	H	223	1.53	-
PK	5.7108G	108.29	Inf	-Inf	5.77	3	H	223	1.53	-
PK	5.9844G	59.56	68.20	-8.64	6.72	3	H	223	1.53	-

VHT80, TXBF_Nss1, (MCS0)_4TX

5690MHz_TX

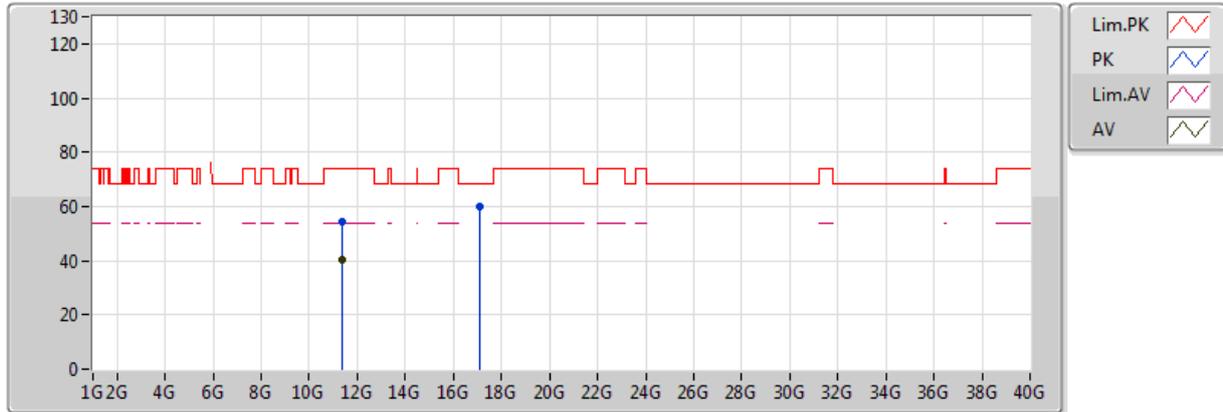


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 EUT Y 4TX TXBF
 Setting 30 Maxsetting
 03-M-01
 FSU

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	11.380584G	40.47	54.00	-13.53	12.07	3	V	266	2.25	-
PK	11.38012G	53.92	74.00	-20.08	12.07	3	V	266	2.25	-
PK	17.070324G	60.17	68.20	-8.03	17.72	3	V	156	1.94	-

VHT80, TXBF_Nss1, (MCS0)_4TX

5690MHz_TX



20170222
 EUT Y 4TX TXBF
 Setting 30 Maxsetting
 03-M-01
 FSU

Type	Freq(Hz)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Factor(dB)	Dist(m)	Pol.(H/V)	Azimuth(°)	Height(m)	Comments
AV	11.380532G	40.43	54.00	-13.57	12.07	3	H	193	2.27	-
PK	11.379232G	54.26	74.00	-19.74	12.07	3	H	193	2.27	-
PK	17.069612G	59.74	68.20	-8.46	17.72	3	H	10	1.52	-



Mode: 20 MHz / Ant. 6

Voltage vs. Frequency Stability

Voltage (V)	Measurement Frequency (MHz)			
	5300 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
126.50	5299.9797	5299.9792	5299.9784	5299.9777
110.00	5299.9791	5299.9781	5299.9777	5299.9774
93.50	5299.9783	5299.9779	5299.9771	5299.9766
Max. Deviation (MHz)	0.0217	0.0221	0.0229	0.0234
Max. Deviation (ppm)	4.09	4.17	4.32	4.42
Result	Pass			

Temperature vs. Frequency Stability

Temperature (°C)	Measurement Frequency (MHz)			
	5300 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
0	5299.9821	5299.9814	5299.9808	5299.9801
10	5299.9810	5299.9805	5299.9795	5299.9787
20	5299.9791	5299.9781	5299.9778	5299.9777
30	5299.9787	5299.9780	5299.9772	5299.9766
40	5299.9782	5299.9773	5299.9764	5299.9757
Max. Deviation (MHz)	0.0218	0.0227	0.0236	0.0243
Max. Deviation (ppm)	4.11	4.28	4.45	4.58
Result	Pass			

Voltage vs. Frequency Stability

Voltage (V)	Measurement Frequency (MHz)			
	5580 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
126.50	5579.9800	5579.9792	5579.9788	5579.9783
110.00	5579.9791	5579.9781	5579.9779	5579.9771
93.50	5579.9790	5579.9781	5579.9771	5579.9764
Max. Deviation (MHz)	0.0210	0.0219	0.0229	0.0236
Max. Deviation (ppm)	3.76	3.92	4.10	4.23
Result	Pass			

Temperature vs. Frequency Stability

Temperature (°C)	Measurement Frequency (MHz)			
	5580 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
0	5579.9813	5579.9805	5579.9799	5579.9790
10	5579.9797	5579.9795	5579.9791	5579.9789
20	5579.9791	5579.9785	5579.9782	5579.9777
30	5579.9787	5579.9777	5579.9775	5579.9770
40	5579.9769	5579.9759	5579.9750	5579.9742
Max. Deviation (MHz)	0.0231	0.0241	0.0250	0.0258
Max. Deviation (ppm)	4.14	4.32	4.48	4.62
Result	Pass			



Mode: 40 MHz / Ant. 6

Voltage vs. Frequency Stability

Voltage (V)	Measurement Frequency (MHz)			
	5310 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
126.50	5309.9797	5309.9792	5309.9785	5309.9779
110.00	5309.9791	5309.9786	5309.9777	5309.9774
93.50	5309.9788	5309.9778	5309.9773	5309.9772
Max. Deviation (MHz)	0.0212	0.0222	0.0227	0.0228
Max. Deviation (ppm)	3.99	4.18	4.27	4.29
Result	Pass			

Temperature vs. Frequency Stability

Temperature (°C)	Measurement Frequency (MHz)			
	5310 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
0	5309.9813	5309.9807	5309.9802	5309.9795
10	5309.9806	5309.9805	5309.9796	5309.9793
20	5309.9791	5309.9781	5309.9773	5309.9771
30	5309.9787	5309.9777	5309.9769	5309.9760
40	5309.9776	5309.9770	5309.9762	5309.9752
Max. Deviation (MHz)	0.0224	0.0230	0.0238	0.0248
Max. Deviation (ppm)	4.22	4.33	4.48	4.67
Result	Pass			

Voltage vs. Frequency Stability

Voltage (V)	Measurement Frequency (MHz)			
	5550 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
126.50	5549.9794	5549.9786	5549.9780	5549.9772
110.00	5549.9791	5549.9789	5549.9782	5549.9776
93.50	5549.9781	5549.9777	5549.9767	5549.9761
Max. Deviation (MHz)	0.0219	0.0223	0.0233	0.0239
Max. Deviation (ppm)	3.95	4.02	4.20	4.31
Result	Pass			

Temperature vs. Frequency Stability

Temperature (°C)	Measurement Frequency (MHz)			
	5550 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
0	5549.9799	5549.9796	5549.9795	5549.9792
10	5549.9793	5549.9786	5549.9778	5549.9768
20	5549.9791	5549.9788	5549.9785	5549.9778
30	5549.9787	5549.9782	5549.9772	5549.9769
40	5549.9783	5549.9780	5549.9774	5549.9771
Max. Deviation (MHz)	0.0217	0.0220	0.0228	0.0232
Max. Deviation (ppm)	3.91	3.96	4.11	4.18
Result	Pass			



Mode: 80 MHz / Ant. 6

Voltage vs. Frequency Stability

Voltage (V)	Measurement Frequency (MHz)			
	5290 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
126.50	5289.9797	5289.9792	5289.9784	5289.9776
110.00	5289.9791	5289.9785	5289.9782	5289.9779
93.50	5289.9790	5289.9783	5289.9778	5289.9772
Max. Deviation (MHz)	0.0210	0.0217	0.0222	0.0228
Max. Deviation (ppm)	3.97	4.10	4.20	4.31
Result	Pass			

Temperature vs. Frequency Stability

Temperature (°C)	Measurement Frequency (MHz)			
	5290 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
0	5289.9819	5289.9812	5289.9807	5289.9806
10	5289.9802	5289.9796	5289.9792	5289.9783
20	5289.9791	5289.9782	5289.9778	5289.9777
30	5289.9787	5289.9784	5289.9774	5289.9771
40	5289.9769	5289.9764	5289.9761	5289.9752
Max. Deviation (MHz)	0.0231	0.0236	0.0239	0.0248
Max. Deviation (ppm)	4.37	4.46	4.52	4.69
Result	Pass			

Voltage vs. Frequency Stability

Voltage (V)	Measurement Frequency (MHz)			
	5530 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
126.50	5529.9798	5529.9794	5529.9791	5529.9786
110.00	5529.9791	5529.9782	5529.9781	5529.9779
93.50	5529.9787	5529.9777	5529.9769	5529.9767
Max. Deviation (MHz)	0.0213	0.0223	0.0231	0.0233
Max. Deviation (ppm)	3.85	4.03	4.18	4.21
Result	Pass			

Temperature vs. Frequency Stability

Temperature (°C)	Measurement Frequency (MHz)			
	5530 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
0	5529.9817	5529.9815	5529.9811	5529.9805
10	5529.9806	5529.9805	5529.9798	5529.9790
20	5529.9791	5529.9784	5529.9783	5529.9780
30	5529.9787	5529.9782	5529.9780	5529.9777
40	5529.9775	5529.9767	5529.9760	5529.9759
Max. Deviation (MHz)	0.0225	0.0233	0.0240	0.0241
Max. Deviation (ppm)	4.07	4.21	4.34	4.36
Result	Pass			