FCC RADIO TEST REPORT

FCC ID	:	NKR-SWA51
Equipment	:	Wireless Audio Module
Brand Name	:	WNC
Model Name	:	SWA51
Applicant	:	Wistron NeWeb Corporation 20 Park Avenue II, Hsinchu Science Park, Hsinchu 308 Taiwan
Manufacturer	:	Wistron NeWeb Corporation 20 Park Avenue II, Hsinchu Science Park, Hsinchu 308 Taiwan
Standard	:	47 CFR FCC Part 15.407

The product was received on Aug. 21, 2018, and testing was started from Aug. 27, 2018 and completed on Sep. 25, 2018. We, SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory, 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 report must not be used by the client to claim product certification, approval, or endorsement by TAF or any agency of government.

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

Approved by: Cliff Chang

SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory
No. 52, Huaya 1st Rd., Guishan Dist., Taoyuan City, Taiwan (R.O.C.)

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History of this test report

Report No.	Version	Description	Issued Date
FR882140	01	Initial issue of report	Oct. 16, 2018

Summary of Test Result

Report Clause	Ref Std. Clause	Test Items	Result (PASS/FAIL)	Remark
1.1.2	15.203	Antenna Requirement	PASS	-
-	15.207	AC Power-line Conducted Emissions	N/A	Note
3.1	15.407(a)	Emission Bandwidth	PASS	-
3.2	15.407(a)	Maximum Conducted Output Power	PASS	-
3.3	15.407(a)	Peak Power Spectral Density	PASS	-
3.4	15.407(b)	Unwanted Emissions	PASS	-
Note: It was supplied power by Battery for EUT; it's not necessary to apply to AC Power Port Conducted Emission.				

Reviewed by: Sam Chen

Report Producer: Sandy Chuang

1 General Description

1.1 Information

1.1.1 RF General Information

Frequency Range (MHz)	Mode	Ch. Frequency (MHz)	Channel Number
5150-5250	pi/4-DQPSK	5161.35MHz to 5245.35MHz	5-47 [43]
5725-5850	pi/4-DQPSK	5736.35MHz to 5820.35MHz	5-47 [43]

Band	Mode	BWch (MHz)	Nant
5.15-5.25GHz	pi/4-DQPSK,2M	2	1TX
5.15-5.25GHz	pi/4-DQPSK,4M	4	1TX
5.725-5.85GHz	pi/4-DQPSK,2M	2	1TX
5.725-5.85GHz	pi/4-DQPSK,4M	4	1TX

Note:
- Use pi/4-DQPSK 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.	Port	Brand	Model Name	Antenna Type	Connector	Gain (dBi)	
						Band 1	Band 4
1	1	WNC	SWA51	Printed Ant.	N/A	4.10	3.39
2	2	WNC	SWA51	Printed Ant.	N/A	2.17	3.50

Note: The EUT supports the antenna with TX and RX diversity functions.
Both Port 1 (Ant. 1) and Port 2 (Ant. 2) support transmit and receive functions, but only one of them will be used at one time.
The Port 1(Ant. 1) generated the worst case, so it was selected to test and record in the report.

1.1.3 Mode Test Duty Cycle

Mode	DC	DCF(dB)	T(s)	VBW(Hz) ≥ 1/T
4-DQPSK,2M	1	0	n/a (DC>=0.98)	n/a (DC>=0.98)
4-DQPSK,4M	1	0	n/a (DC>=0.98)	n/a (DC>=0.98)

Note: The 4-DQPSK means pi/4-DQPSK

1.1.4 EUT Operational Condition

EUT Power Type	From Battery*4			
Function	☐	Outdoor P2M	☐	Indoor P2M
	☐	Fixed P2P	☒	Client
Test Software Version	VMXUI 2.3			

1.1.5 Table for EUT type information

EUT Type	Module	Firmware	Description
EUT 1	TX	3.152.15	The variation of EUT is for different firmware.
EUT 2	RX	3.152.1	

From the above models, model: EUT 1 was selected as representative model for the test and its data was recorded in this report.

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 v02r01
- FCC KDB 412172 D01 v01r01

1.3 Testing Location Information

Testing Location			
☐	HWA YA	ADD :	No. 52, Huaya 1st Rd., Guishan Dist., Taoyuan City, Taiwan (R.O.C.)
		TEL :	886-3-327-3456 FAX : 886-3-327-0973
☒	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	Owen Hsu	23°C / 53%	Sep. 05, 2018~ Sep. 25, 2018
Radiated	03CH01-CB	KJ Chang	22°C / 54%	Aug. 27, 2018~ Sep. 20, 2018

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 (30MHz ~ 1,000MHz)	3.6 dB	Confidence levels of 95%
Radiated Emission (1GHz ~ 18GHz)	3.7 dB	Confidence levels of 95%
Radiated Emission (18GHz ~ 40GHz)	3.5 dB	Confidence levels of 95%
Conducted Emission	1.7 dB	Confidence levels of 95%
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%

2 Test Configuration of EUT

2.1 Test Channel Mode

Mode	PowerSetting
4-DQPSK,2M_Nss1_1TX	-
5161.35MHz	0x06
5201.35MHz	0x06
5245.35MHz	0x06
5736.35MHz	0x06
5776.35MHz	0x06
5820.35MHz	0x06
4-DQPSK,4M_Nss1_1TX	-
5161.35MHz	0x06
5201.35MHz	0x06
5245.35MHz	0x06
5736.35MHz	0x06
5776.35MHz	0x06
5820.35MHz	0x06

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
Test Condition	Conducted measurement at transmit chains
1	EUT 1 + 2MHz Bandwidth
2	EUT 1 + 4MHz Bandwidth

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
Radiated Emissions above 1GHz test was performed at its 3-axis (X-axis, Y-axis and Z-axis). Z-axis was the worst case, so Radiated Emission test below 1GHz will follow this same configuration.	
1	Place EUT 1 in Z axis + 2MHz Bandwidth
2	Place EUT 1 in Z axis + 4MHz Bandwidth
For operating mode 2 is the worst case and it was record in this test report.	
Operating Mode > 1GHz	CTX
The test was performed at its 3-axis (X-axis, Y-axis and Z-axis). Z-axis was the worst case, so test will follow this same configuration.	
1	Place EUT 1 in Z axis + 2MHz Bandwidth
2	Place EUT 1 in Z axis + 4MHz Bandwidth
For operating mode 1 and Mode 2 is the worst case and it was record in this test report.	

Note: The Battery below is for measurement only, would not be marketed.
The Battery information as below:

Support Unit	Brand	Model Number
Battery	NI-MH Rechargeable	VXTRA

2.3 EUT Operation during Test

The EUT was programmed to be in continuously transmitting mode.

2.4 Accessories

N/A

2.5 Support Equipment

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

Support Equipment				
No.	**Equipment**	**Brand Name**	**Model Name**	**FCC ID**
1	TX fixture	WNC	48SWA524.SGB	N/A
2	Battery*4	NI-MH Rechargeable	VXTRA	N/A

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

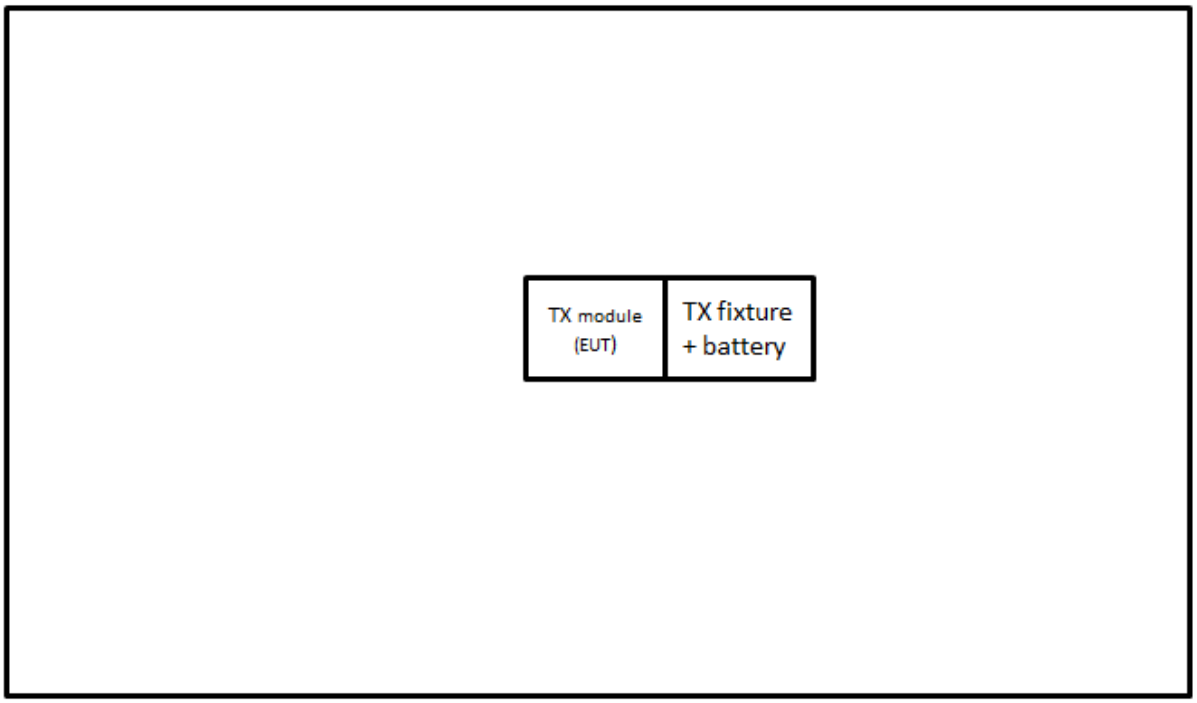
Support Equipment				
No.	**Equipment**	**Brand Name**	**Model Name**	**FCC ID**
1	TX fixture	WNC	48SWA524.SGB	N/A
2	Battery*4	NI-MH Rechargeable	VXTRA	N/A

For Test Site No: TH01-CB

Support Equipment				
No.	**Equipment**	**Brand Name**	**Model Name**	**FCC ID**
1	TX fixture	WNC	48SWA524.SGB	N/A
2	Battery*4	NI-MH Rechargeable	VXTRA	N/A

2.6 Test Setup Diagram

Test Setup Diagram - Radiated Test



3 Transmitter Test Result

3.1 Emission Bandwidth

3.1.1 Emission Bandwidth Limit

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

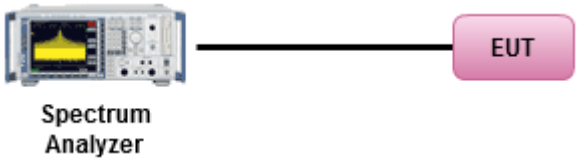
3.1.2 Measuring Instruments

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

3.1.3 Test Procedures

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

3.1.4 Test Setup

Emission Bandwidth


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

3.2.2 Measuring Instruments

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

3.2.3 Test Procedures

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

3.2.4 Test Setup

RF Output Power (Power Meter)


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

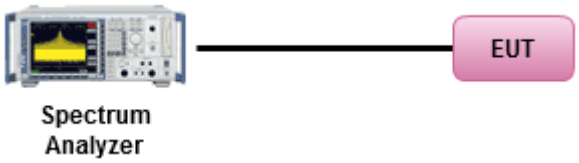
3.3.2 Measuring Instruments

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

3.3.3 Test Procedures

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

3.3.4 Test Setup

Power Spectral Density


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.

Note 3: Using the distance of 1m during the test for above 18 GHz, and the test value to correct for the distance factor at 3m.

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

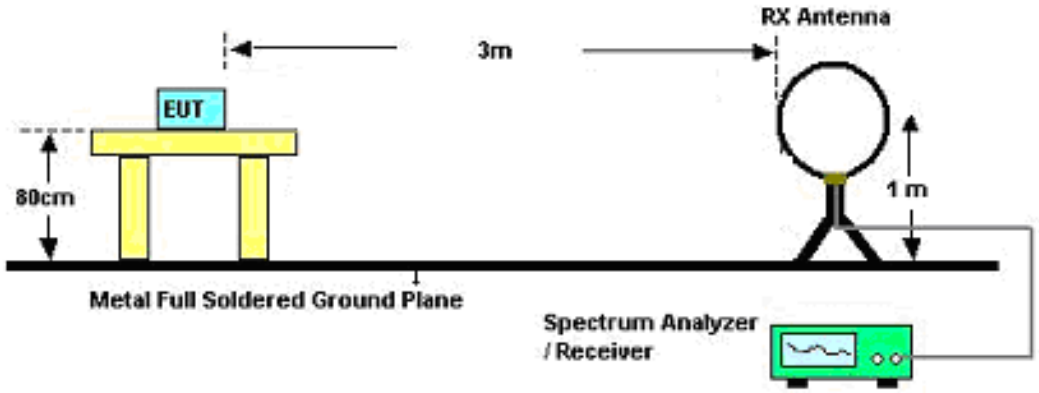
Test Method		
▪ Measurements may be performed at a distance other than the limit distance provided they are not performed in the near field and the emissions to be measured can be detected by the measurement equipment. Measurements shall not be performed at a distance greater than 30 m for frequencies above 30 MHz, unless it can be further demonstrated that measurements at a distance of 30 m or less are impractical. When performing measurements at a distance other than that specified, the results shall be extrapolated to the specified distance using an extrapolation factor of 20 dB/decade (inverse of linear distance for field-strength measurements, inverse of linear distance-squared for power-density measurements).		
▪ The average emission levels shall be measured in [duty cycle ≥ 98 or duty factor].		
▪ For the transmitter unwanted emissions shall be measured using following options below:		
	▪ Refer as FCC KDB 789033, clause H)2) for unwanted emissions into non-restricted bands.	
	▪ Refer as FCC KDB 789033, clause H)1) for unwanted emissions into restricted bands.	
		☐ Refer as FCC KDB 789033, H)6) Method AD (Trace Averaging).
		☒ Refer as FCC KDB 789033, H)6) Method VB (Reduced VBW).
		☐ Refer as ANSI C63.10, clause 4.2.3.2.3 (Reduced VBW). VBW ≥ 1/T, where T is pulse time.
		☐ Refer as ANSI C63.10, clause 4.2.3.2.4 average value of pulsed emissions.
		☒ Refer as FCC KDB 789033, clause H)5) measurement procedure peak limit.
		☐ Refer as ANSI C63.10, clause 4.2.3.2.2 measurement procedure peak limit.
▪ For radiated measurement.		

Test Method	
	▪ Refer as ANSI C63.10, clause 6.4 for radiated emissions below 30 MHz and test distance is 3m.
	▪ Refer as ANSI C63.10, clause 6.5 for radiated emissions 30 MHz to 1 GHz and test distance is 3m.
	▪ Refer as ANSI C63.10, clause 6.6 for radiated emissions above 1GHz.
▪ The any unwanted emissions level shall not exceed the fundamental emission level.	
▪ All amplitude of spurious emissions that are attenuated by more than 20 dB below the permissible value has no need to be reported.	

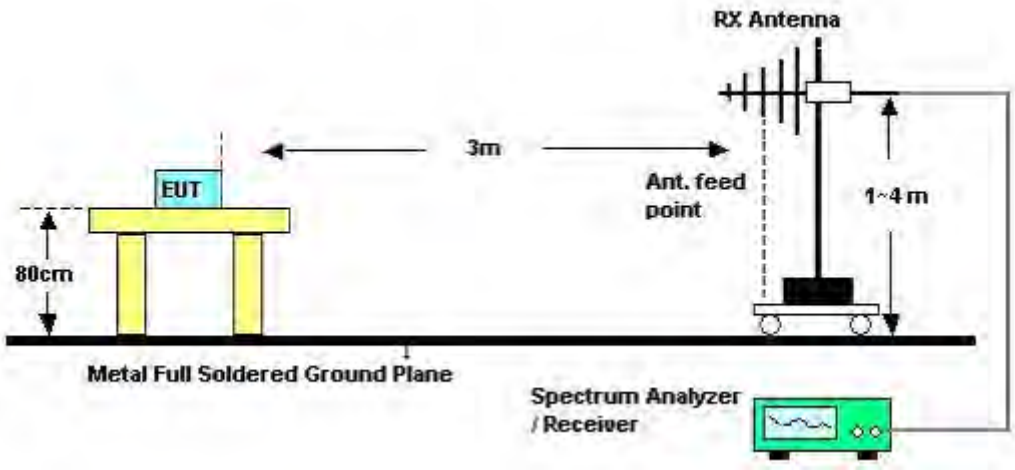
3.4.4 Test Setup

Transmitter Radiated Unwanted Emissions

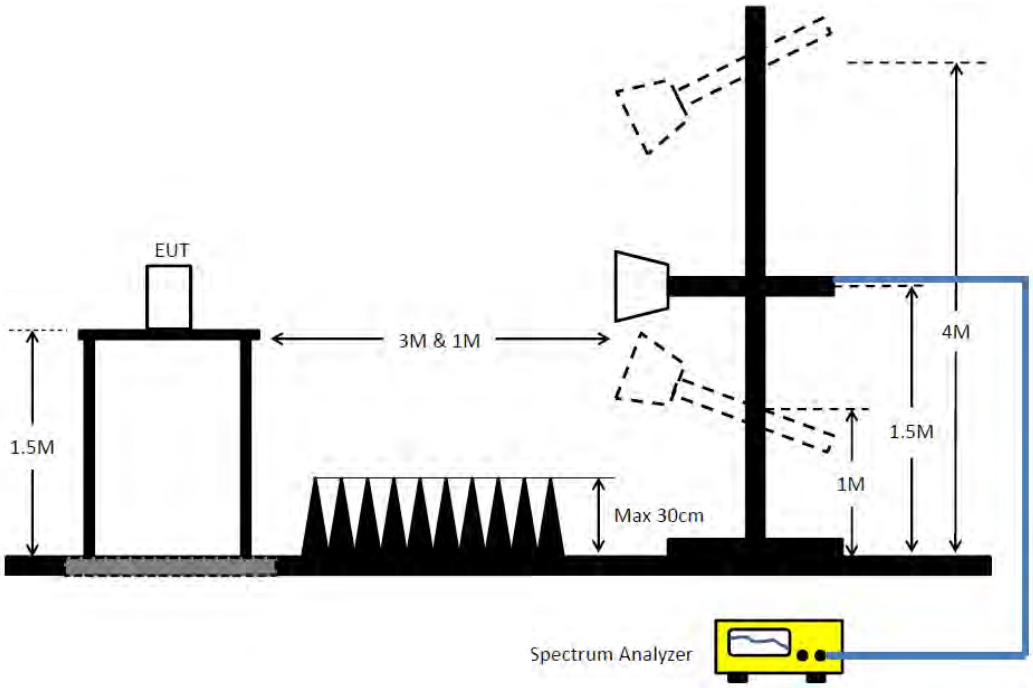
9kHz ~30MHz



30MHz~1GHz



Above 1GHz



3.4.5 Transmitter Unwanted Emissions (Below 30MHz)

All amplitude of spurious emissions that are attenuated by more than 20 dB below the permissible value has no need to be reported.
The radiated emissions were investigated from 9 kHz or the lowest frequency generated within the device, up to the 10 harmonic or 40 GHz, whichever is appropriate.

3.4.6 Test Result of Transmitter Unwanted Emissions

Refer as Appendix D

4 Test Equipment and Calibration Data

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date	Remark
BILOG ANTENNA with 6dB Attenuator	TESEQ & EMCI	CBL6112D & N-6-06	37880 & AT-N0609	20MHz ~ 2GHz	Aug. 27, 2018	Aug. 26, 2019	Radiation (03CH01-CB)
Loop Antenna	Teseq	HLA 6120	24155	9kHz - 30 MHz	Mar. 16, 2018	Mar. 15, 2019	Radiation (03CH01-CB)
Horn Antenna	EMCO	3115	00075790	750MHz ~ 18GHz	Nov. 20, 2017	Nov. 19, 2018	Radiation (03CH01-CB)
Horn Antenna	Schwarzbeck	BBHA 9170	BBHA9170252	15GHz ~ 40GHz	Jun. 28, 2018	Jun. 27, 2019	Radiation (03CH01-CB)
Pre-Amplifier	EMCI	EMC330N	980332	20MHz ~ 3GHz	May 02, 2018	May 01, 2019	Radiation (03CH01-CB)
Pre-Amplifier	Agilent	8449B	3008A02310	1GHz ~ 26.5GHz	Jan. 09, 2018	Jan. 08, 2019	Radiation (03CH01-CB)
Pre-Amplifier	MITEQ	TTA1840-35-HG	1864479	18GHz ~ 40GHz	Jul. 04, 2018	Jul. 03, 2019	Radiation (03CH01-CB)
Spectrum Analyzer	R&S	FSP40	100056	9kHz ~ 40GHz	Nov. 23, 2017	Nov. 22, 2018	Radiation (03CH01-CB)
EMI Test	R&S	ESCS	100354	9kHz ~ 2.75GHz	Dec. 08, 2017	Dec. 07, 2018	Radiation (03CH01-CB)
RF Cable-low	Woken	Low Cable-16+17	N/A	30 MHz ~ 1 GHz	Oct. 11, 2017	Oct. 10, 2018	Radiation (03CH01-CB)
RF Cable-high	Woken	High Cable-16	N/A	1 GHz ~ 18 GHz	Oct. 11, 2017	Oct. 10, 2018	Radiation (03CH01-CB)
RF Cable-high	Woken	High Cable-16+17	N/A	1 GHz ~ 18 GHz	Oct. 11, 2017	Oct. 10, 2018	Radiation (03CH01-CB)
RF Cable-high	Woken	High Cable-40G#1	N/A	18GHz ~ 40 GHz	Jul. 27, 2018	Jul. 26, 2019	Radiation (03CH01-CB)
RF Cable-high	Woken	High Cable-40G#2	N/A	18GHz ~ 40 GHz	Jul. 27, 2018	Jul. 26, 2019	Radiation (03CH01-CB)
Spectrum analyzer	R&S	FSV40	100979	9kHz~40GHz	Dec. 21, 2017	Dec. 20, 2018	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-06	1 GHz – 26.5 GHz	Oct. 11, 2017	Oct. 10, 2018	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-07	1 GHz –26.5 GHz	Oct. 11, 2017	Oct. 10, 2018	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-08	1 GHz –26.5 GHz	Oct. 11, 2017	Oct. 10, 2018	Conducted (TH01-CB)

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date	Remark
RF Cable-high	Woken	RG402	High Cable-09	1 GHz –26.5 GHz	Oct. 11, 2017	Oct. 10, 2018	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-10	1 GHz –26.5 GHz	Oct. 11, 2017	Oct. 10, 2018	Conducted (TH01-CB)
Cable	Marvelous Microwave	n/a	Cable-REF-1	9k-1GHz	Oct. 25, 2017	Oct. 24, 2018	Conducted (TH01-CB)
Power Sensor	Agilent	U2021XA	MY53410001	50MHz~18GHz	Nov. 20, 2017	Nov. 19, 2018	Conducted (TH01-CB)

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

Test Mode: Mode 1 and Mode 2

Summary

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
5.15-5.25GHz	-	-	-	-	-
4-DQPSK,2M_Nss1_1TX	5M	3.626M	3M63G7D	4.998M	3.218M
4-DQPSK,4M_Nss1_1TX	8.63M	4.778M	4M78G7D	7.705M	4.388M
5.725-5.85GHz	-	-	-	-	-
4-DQPSK,2M_Nss1_1TX	1.628M	2.034M	2M03G7D	1.538M	1.997M
4-DQPSK,4M_Nss1_1TX	3.51M	5.412M	5M41G7D	3.445M	5.177M

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

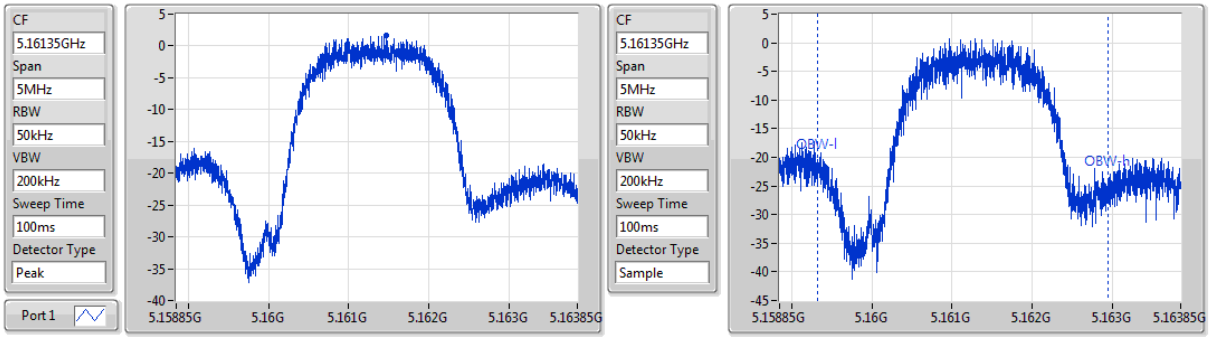
Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)
4-DQPSK,2M_Nss1_1TX	-	-	-	-
5161.35MHz	Pass	Inf	5M	3.626M
5201.35MHz	Pass	Inf	4.998M	3.528M
5245.35MHz	Pass	Inf	5M	3.218M
5736.35MHz	Pass	500k	1.573M	2.034M
5776.35MHz	Pass	500k	1.538M	2.029M
5820.35MHz	Pass	500k	1.628M	1.997M
4-DQPSK,4M_Nss1_1TX	-	-	-	-
5161.35MHz	Pass	Inf	8.63M	4.778M
5201.35MHz	Pass	Inf	8.45M	4.388M
5245.35MHz	Pass	Inf	7.705M	4.638M
5736.35MHz	Pass	500k	3.445M	5.412M
5776.35MHz	Pass	500k	3.51M	5.322M
5820.35MHz	Pass	500k	3.49M	5.177M

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;

4-DQPSK,2M_Nss1_1TX **EBW**

5161.35MHz

20/09/2018

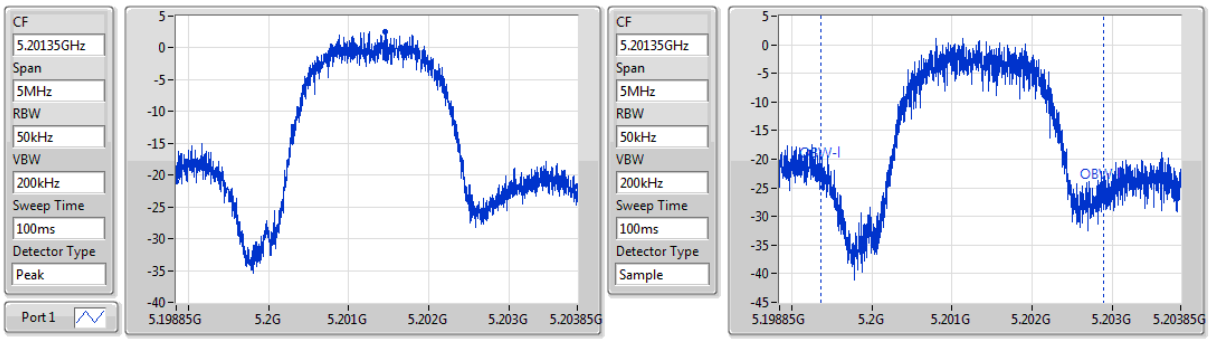


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
5M	5.15885G	5.16385G	3.626M	5.159321G	5.162947G	Inf	1

4-DQPSK,2M_Nss1_1TX **EBW**

5201.35MHz

20/09/2018

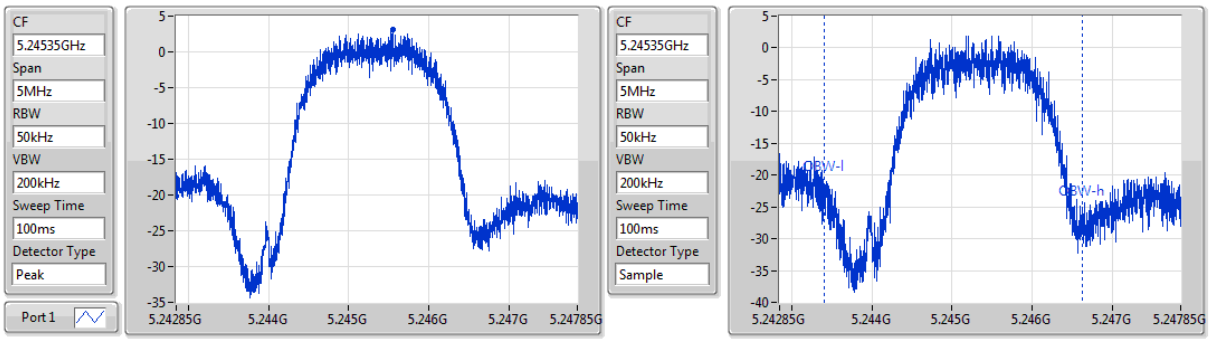


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
4.998M	5.19885G	5.203848G	3.528M	5.199361G	5.202889G	Inf	1

4-DQPSK,2M_Nss1_1TX **EBW**

5245.35MHz

20/09/2018

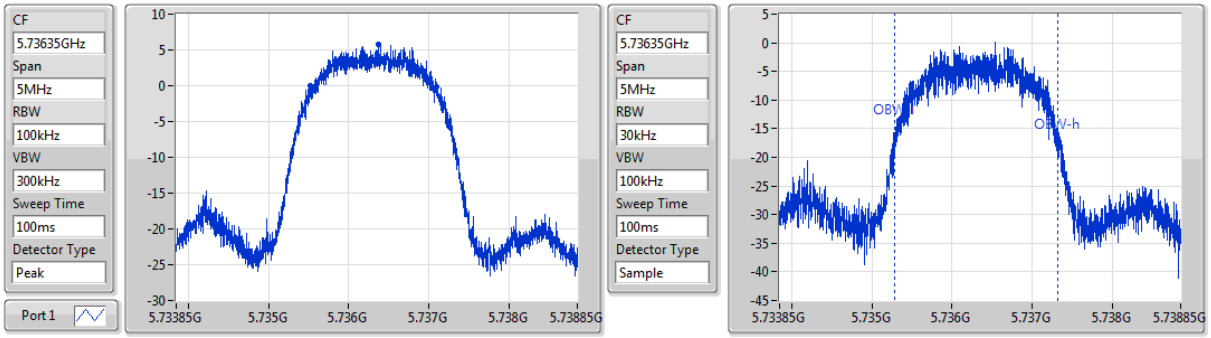


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
5M	5.24285G	5.24785G	3.218M	5.243406G	5.246624G	Inf	1

4-DQPSK,2M_Nss1_1TX **EBW**

5736.35MHz

20/09/2018

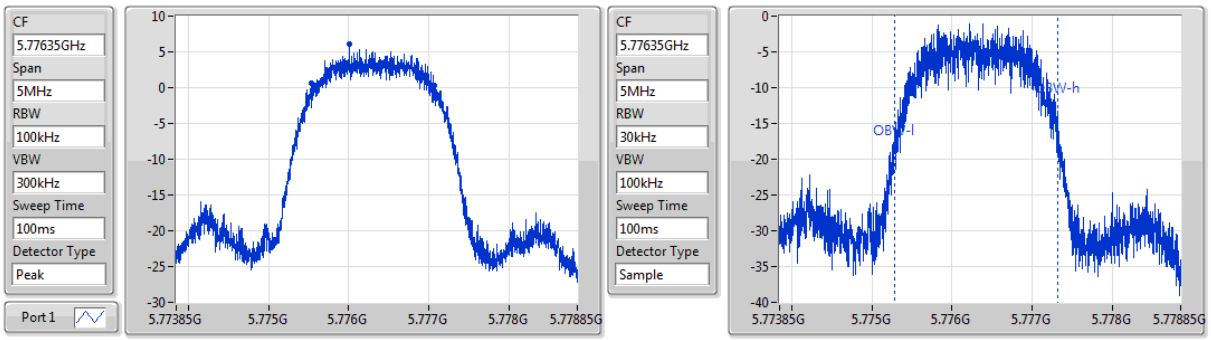


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
1.573M	5.735528G	5.7371G	2.034M	5.735288G	5.737322G	500k	1

4-DQPSK,2M_Nss1_1TX **EBW**

5776.35MHz

20/09/2018

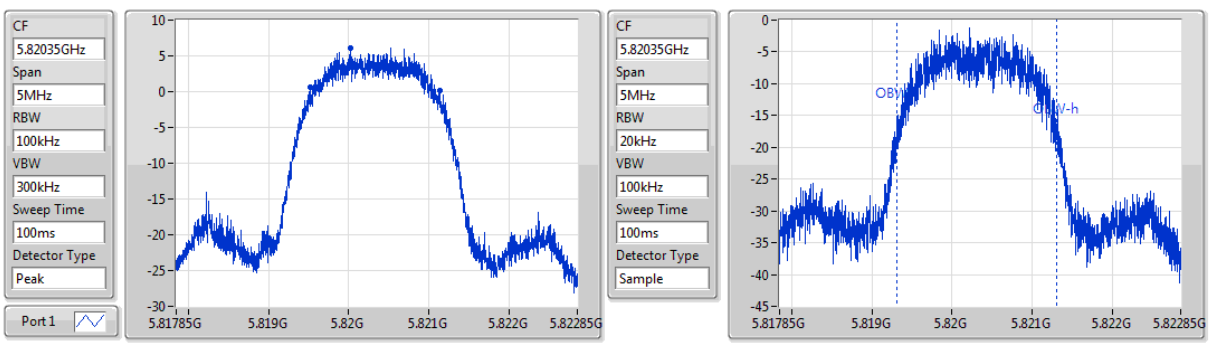


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
1.538M	5.775533G	5.77707G	2.029M	5.775286G	5.777315G	500k	1

4-DQPSK,2M_Nss1_1TX **EBW**

5820.35MHz

20/09/2018

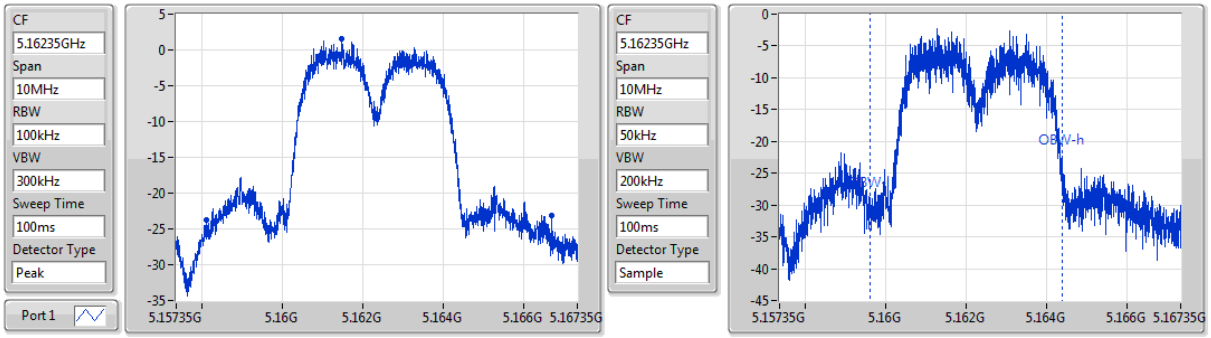


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
1.628M	5.819515G	5.821143G	1.997M	5.819313G	5.82131G	500k	1

4-DQPSK,4M_Nss1_1TX EBW

5161.35MHz

20/09/2018

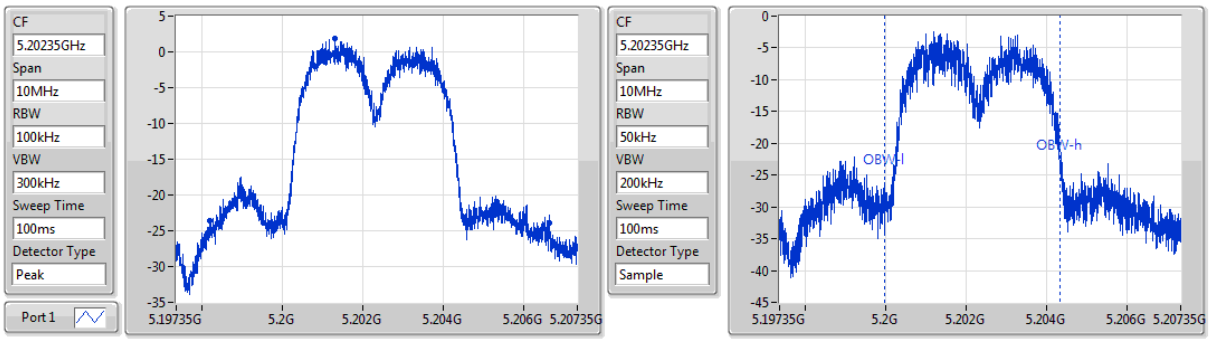


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
8.63M	5.15809G	5.16672G	4.778M	5.159616G	5.164394G	Inf	1

4-DQPSK,4M_Nss1_1TX EBW

5201.35MHz

20/09/2018

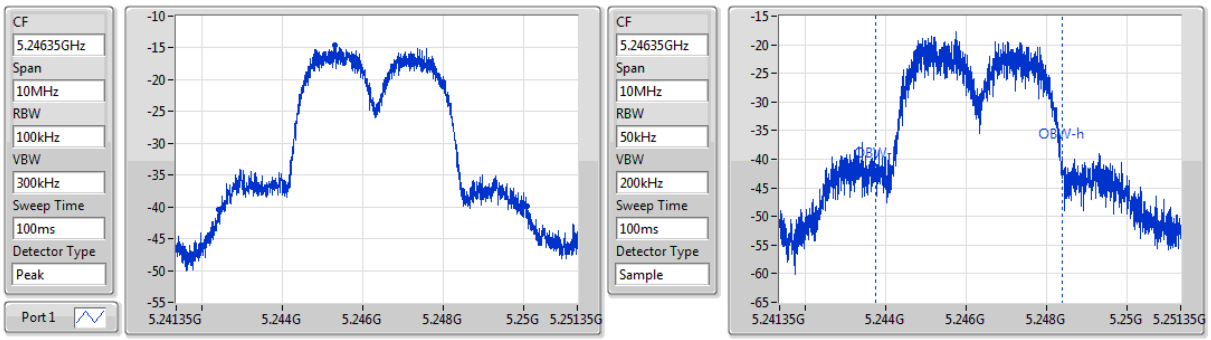


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
8.45M	5.198195G	5.206645G	4.388M	5.199961G	5.204349G	Inf	1

4-DQPSK,4M_Nss1_1TX EBW

5245.35MHz

20/09/2018

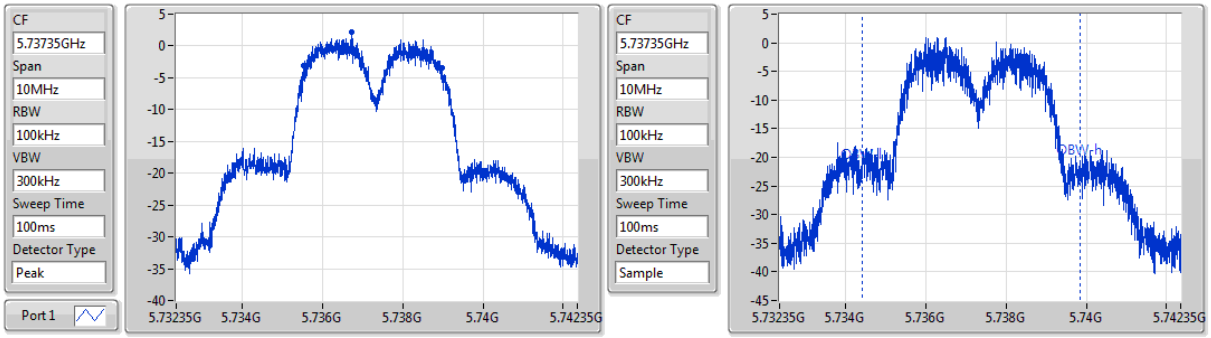


26dB(Hz)	Fl-26dB(Hz)	Fh-26dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
7.705M	5.242405G	5.25011G	4.638M	5.243756G	5.248394G	Inf	1

4-DQPSK,4M_Nss1_1TX **EBW**

5736.35MHz

20/09/2018

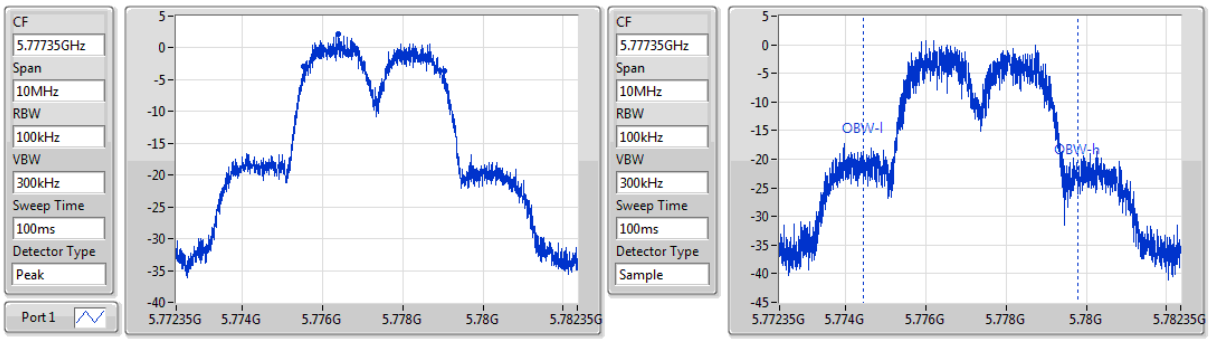


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
3.445M	5.735525G	5.73897G	5.412M	5.734421G	5.739834G	500k	1

4-DQPSK,4M_Nss1_1TX **EBW**

5776.35MHz

20/09/2018

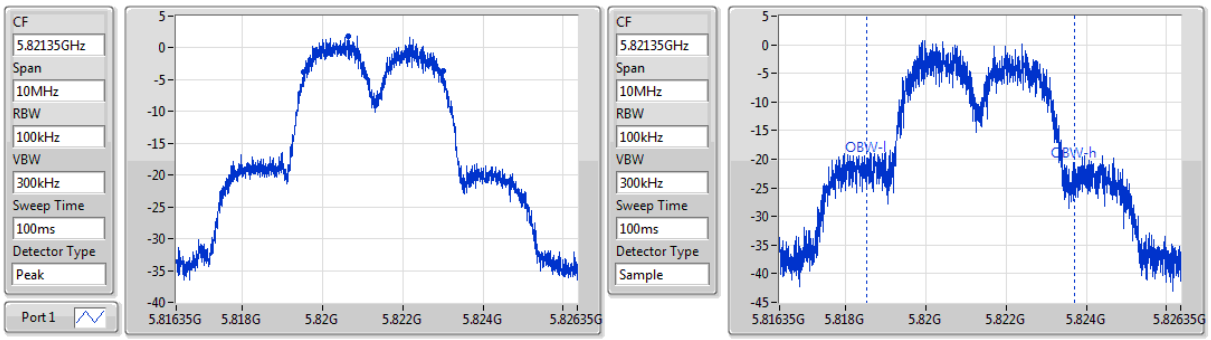


6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
3.51M	5.77552G	5.77903G	5.322M	5.774451G	5.779774G	500k	1

4-DQPSK,4M_Nss1_1TX **EBW**

5820.35MHz

20/09/2018



6dB(Hz)	Fl-6dB(Hz)	Fh-6dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Hz)	Port
3.49M	5.81952G	5.82301G	5.177M	5.818516G	5.823694G	500k	1

Test Mode: Mode 1 and Mode 2

Summary

Mode	Total Power (dBm)	Total Power (W)
5.15-5.25GHz	-	-
4-DQPSK,2M_Nss1_1TX	7.55	0.00569
4-DQPSK,4M_Nss1_1TX	6.46	0.00443
5.725-5.85GHz	-	-
4-DQPSK,2M_Nss1_1TX	7.76	0.00597
4-DQPSK,4M_Nss1_1TX	6.67	0.00465

Result

Mode	Result	DG (dBi)	Port 1 (dBm)	Total Power (dBm)	Power Limit (dBm)
4-DQPSK,2M_Nss1_1TX	-	-	-	-	-
5161.35MHz	Pass	4.10	6.52	6.52	23.98
5201.35MHz	Pass	4.10	7.18	7.18	23.98
5245.35MHz	Pass	4.10	7.55	7.55	23.98
5736.35MHz	Pass	3.39	7.68	7.68	30.00
5776.35MHz	Pass	3.39	7.76	7.76	30.00
5820.35MHz	Pass	3.39	7.66	7.66	30.00
4-DQPSK,4M_Nss1_1TX	-	-	-	-	-
5161.35MHz	Pass	4.10	5.97	5.97	23.98
5201.35MHz	Pass	4.10	6.22	6.22	23.98
5245.35MHz	Pass	4.10	6.46	6.46	23.98
5736.35MHz	Pass	3.39	6.65	6.65	30.00
5776.35MHz	Pass	3.39	6.67	6.67	30.00
5820.35MHz	Pass	3.39	6.52	6.52	30.00

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

Test Mode: Mode 1 and Mode 2

Summary

Mode	PD (dBm/RBW)
5.15-5.25GHz	-
4-DQPSK,2M_Nss1_1TX	4.71
4-DQPSK,4M_Nss1_1TX	1.15
5.725-5.85GHz	-
4-DQPSK,2M_Nss1_1TX	3.58
4-DQPSK,4M_Nss1_1TX	0.02

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

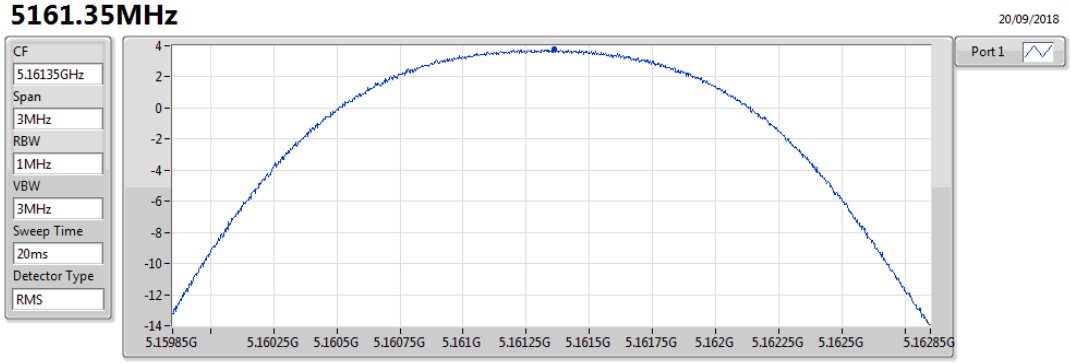
Result

Mode	Result	DG (dBi)	Port 1 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)
4-DQPSK,2M_Nss1_1TX	-	-	-	-	-
5161.35MHz	Pass	4.10	3.82	3.82	11.00
5201.35MHz	Pass	4.10	4.33	4.33	11.00
5245.35MHz	Pass	4.10	4.71	4.71	11.00
5736.35MHz	Pass	3.39	3.50	3.50	30.00
5776.35MHz	Pass	3.39	3.54	3.54	30.00
5820.35MHz	Pass	3.39	3.58	3.58	30.00
4-DQPSK,4M_Nss1_1TX	-	-	-	-	-
5161.35MHz	Pass	4.10	0.45	0.45	11.00
5201.35MHz	Pass	4.10	0.84	0.84	11.00
5245.35MHz	Pass	4.10	1.15	1.15	11.00
5736.35MHz	Pass	3.39	-0.12	-0.12	30.00
5776.35MHz	Pass	3.39	0.02	0.02	30.00
5820.35MHz	Pass	3.39	-0.29	-0.29	30.00

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 Xpower density;

4-DQPSK,2M_Nss1_1TX **PSD**

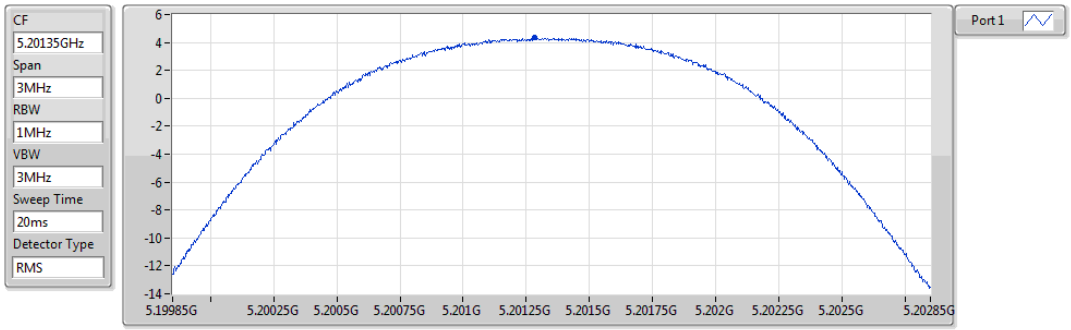
5161.35MHz



Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
3.82	3.82	3.82

4-DQPSK,2M_Nss1_1TX **PSD**

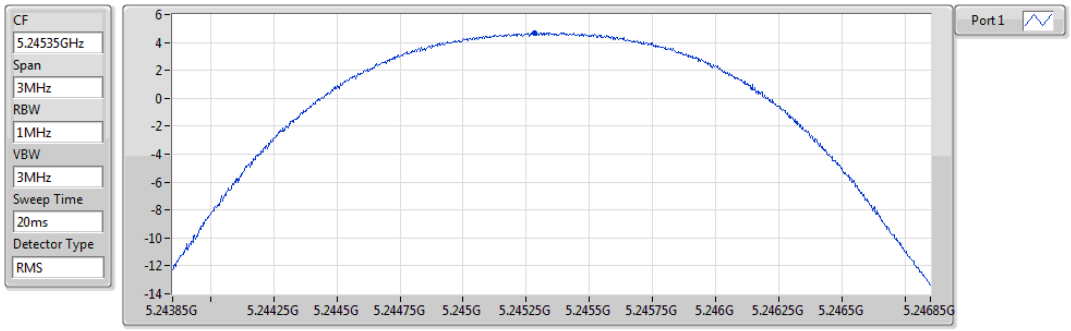
5201.35MHz



Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
4.33	4.33	4.33

4-DQPSK,2M_Nss1_1TX **PSD**

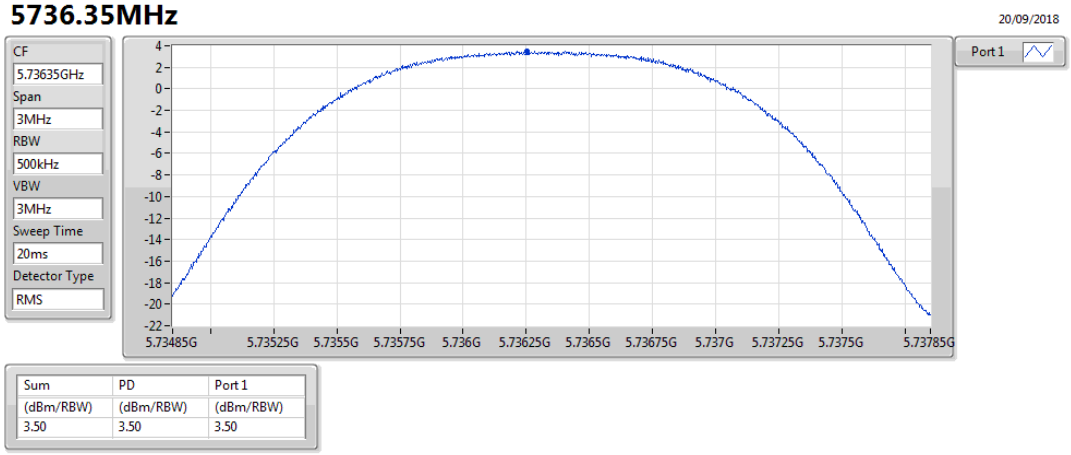
5245.35MHz



Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
4.71	4.71	4.71

4-DQPSK,2M_Nss1_1TX **PSD**

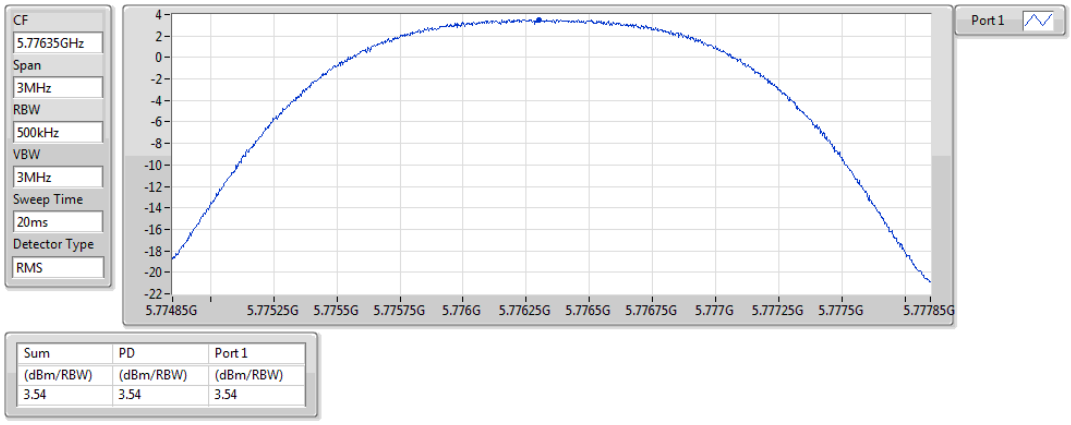
5736.35MHz



Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
3.50	3.50	3.50

4-DQPSK,2M_Nss1_1TX **PSD**

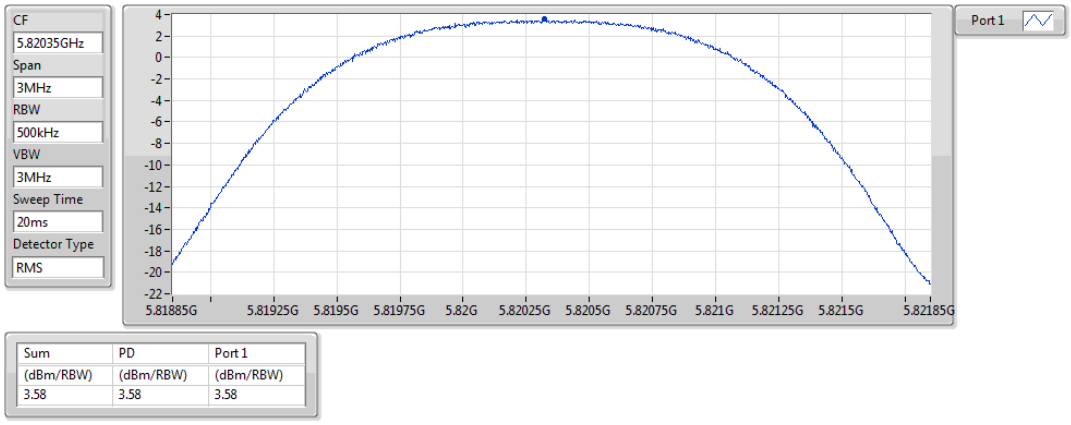
5776.35MHz



Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
3.54	3.54	3.54

4-DQPSK,2M_Nss1_1TX **PSD**

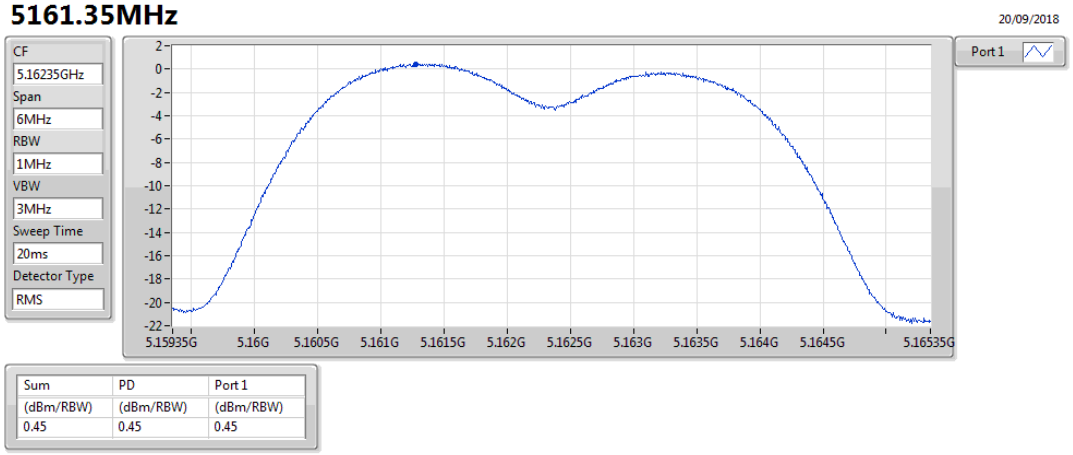
5820.35MHz



Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
3.58	3.58	3.58

4-DQPSK,4M_Nss1_1TX **PSD**

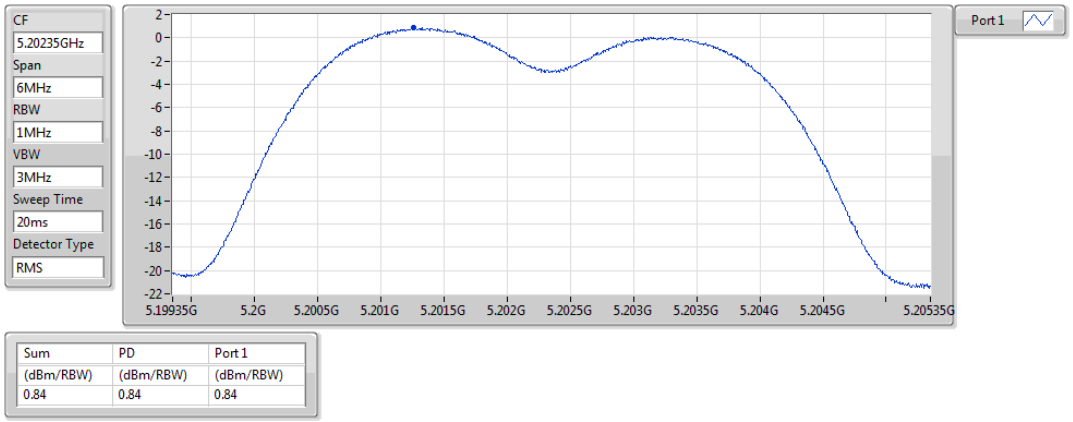
5161.35MHz



Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
0.45	0.45	0.45

4-DQPSK,4M_Nss1_1TX **PSD**

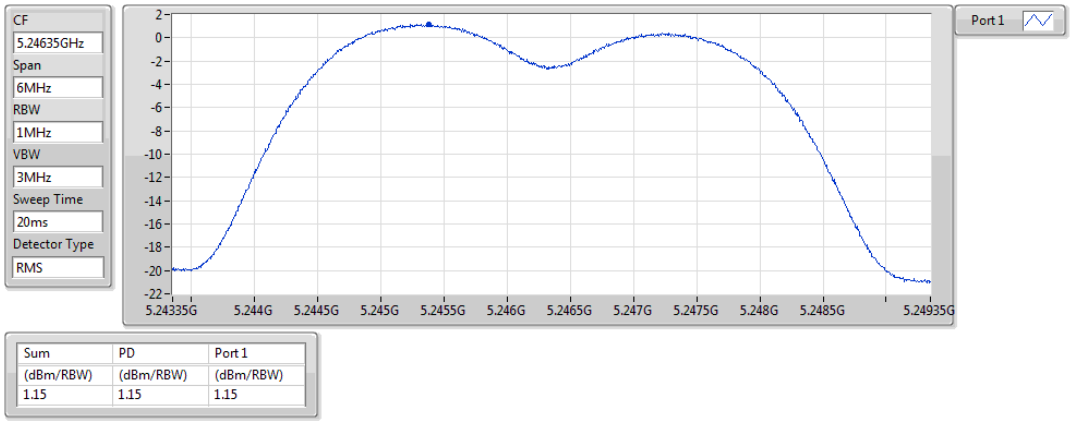
5201.35MHz



Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
0.84	0.84	0.84

4-DQPSK,4M_Nss1_1TX **PSD**

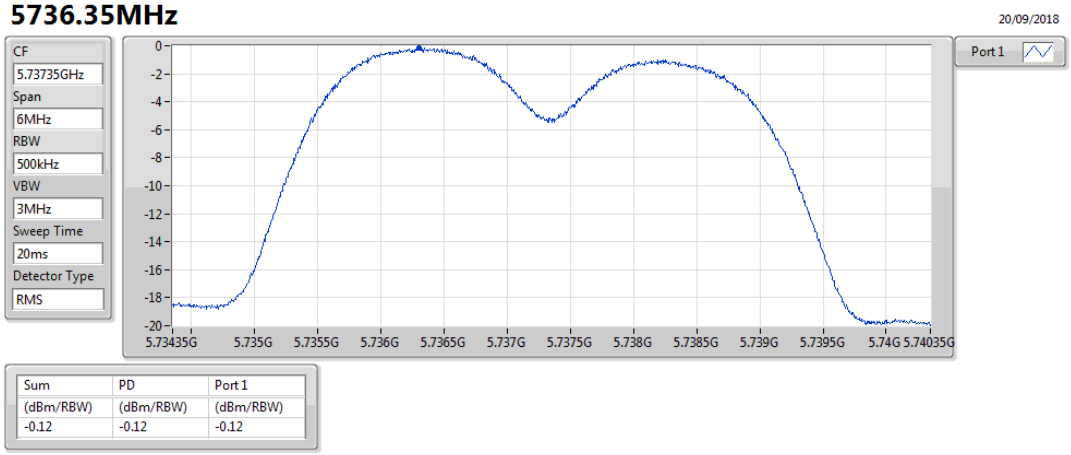
5245.35MHz



Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
1.15	1.15	1.15

4-DQPSK,4M_Nss1_1TX **PSD**

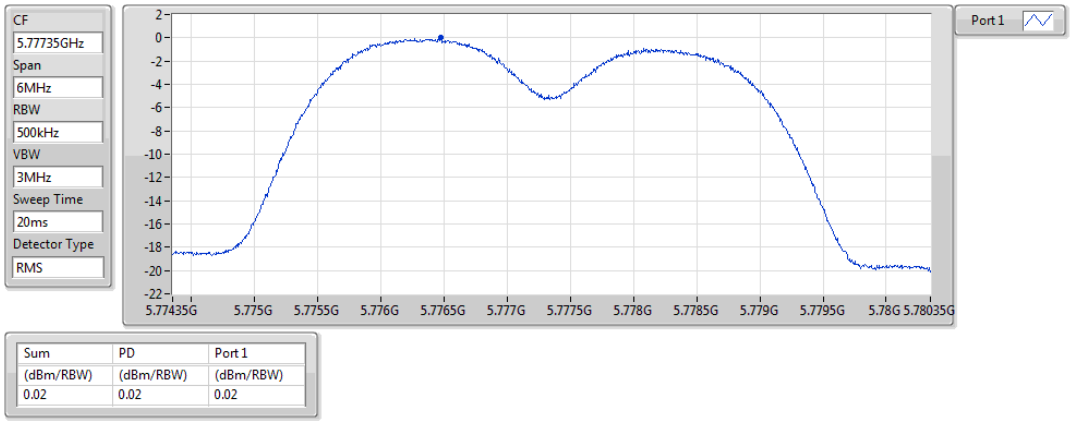
5736.35MHz



Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-0.12	-0.12	-0.12

4-DQPSK,4M_Nss1_1TX **PSD**

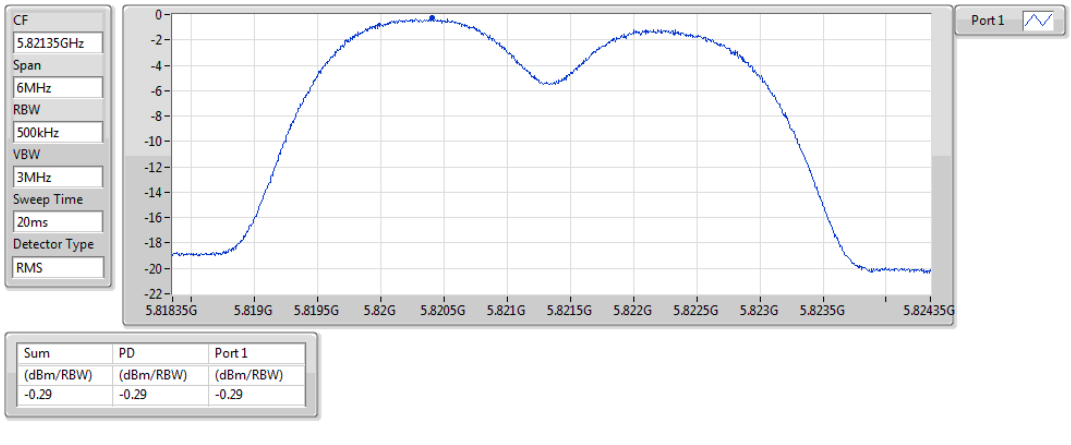
5776.35MHz



Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
0.02	0.02	0.02

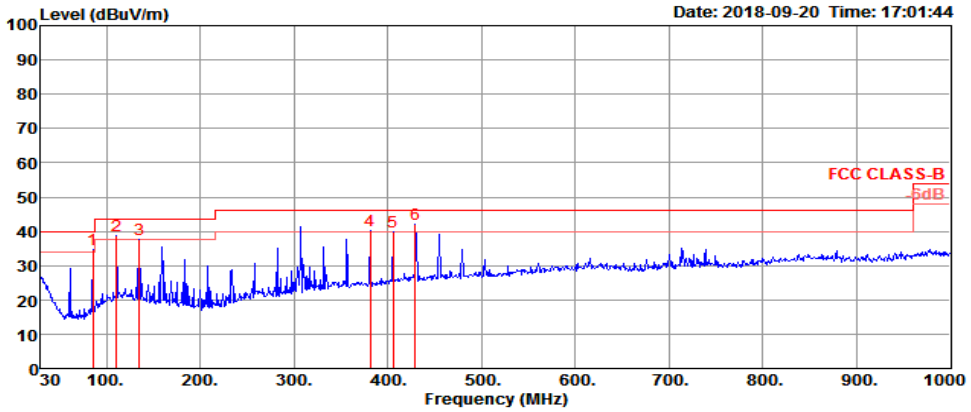
4-DQPSK,4M_Nss1_1TX **PSD**

5820.35MHz



Sum	PD	Port 1
(dBm/RBW)	(dBm/RBW)	(dBm/RBW)
-0.29	-0.29	-0.29

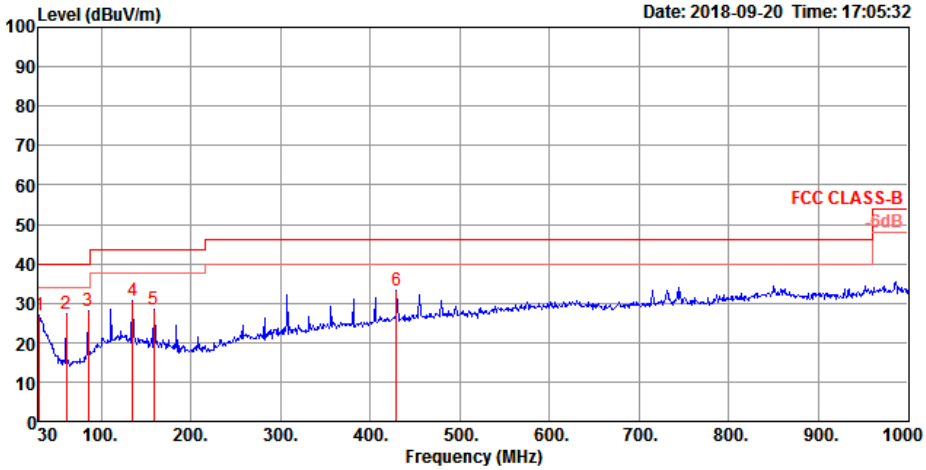
RSE below 1GHz Result			
Operating Mode	2	**Polarization**	Horizontal
Operating Function	CTX		



	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	85.29	34.68	40.00	-5.32	52.03	1.12	13.91	32.38	201	202	Peak	HORIZONTAL
2	110.51	38.87	43.50	-4.63	52.09	1.31	17.83	32.36	288	224	Peak	HORIZONTAL
3	134.76	37.46	43.50	-6.04	50.63	1.44	17.73	32.34	192	193	Peak	HORIZONTAL
4	381.14	40.30	46.00	-5.70	49.53	2.41	20.64	32.28	104	3	Peak	HORIZONTAL
5	405.39	39.98	46.00	-6.02	48.16	2.47	21.63	32.28	100	3	Peak	HORIZONTAL
6	429.64	42.18	46.00	-3.82	49.68	2.56	22.24	32.30	100	1	Peak	HORIZONTAL

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

RSE below 1GHz Result			
Operating Mode	2	**Polarization**	Vertical
Operating Function	CTX		



	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	30.97	26.90	40.00	-13.10	34.82	0.66	23.85	32.43	150	356	Peak	VERTICAL
2	61.04	27.21	40.00	-12.79	46.38	0.96	12.28	32.41	158	294	Peak	VERTICAL
3	85.29	28.14	40.00	-11.86	45.49	1.12	13.91	32.38	289	310	Peak	VERTICAL
4	134.76	30.45	43.50	-13.05	43.62	1.44	17.73	32.34	236	108	Peak	VERTICAL
5	159.01	28.23	43.50	-15.27	42.96	1.54	16.05	32.32	245	318	Peak	VERTICAL
6	429.64	33.10	46.00	-12.90	40.60	2.56	22.24	32.30	291	276	Peak	VERTICAL

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

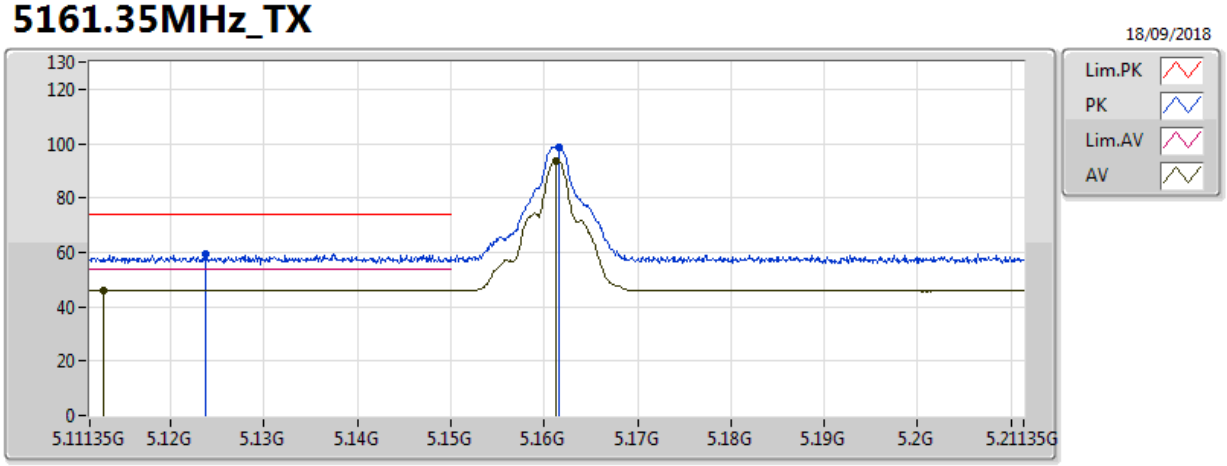
Test Mode: Mode 1 and Mode 2

Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
5.15-5.25GHz	-	-	-	-	-	-	-	-	-	-	-	-
4-DQPSK,2M_Nss1_1TX	Pass	PK	10.40214G	63.29	68.20	-4.91	13.60	3	Vertical	135	1.07	-

4-DQPSK,2M_Nss1_1TX

5161.35MHz_TX

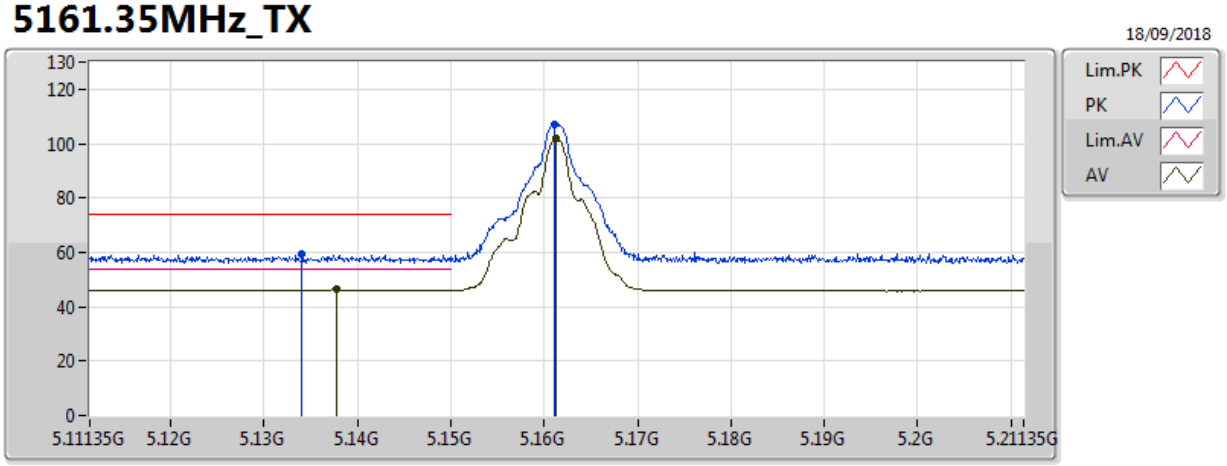


EUT Z_1TX Ant0
Setting Default
03-E-2-10
FSP

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
PK	5.12375G	59.31	74.00	-14.69	6.10	3	Vertical	212	1.54
AV	5.11275G	46.08	54.00	-7.92	6.08	3	Vertical	212	1.54
PK	5.16155G	98.82	Inf	-Inf	6.16	3	Vertical	212	1.54
AV	5.16125G	93.78	Inf	-Inf	6.16	3	Vertical	212	1.54

4-DQPSK,2M_Nss1_1TX

5161.35MHz_TX

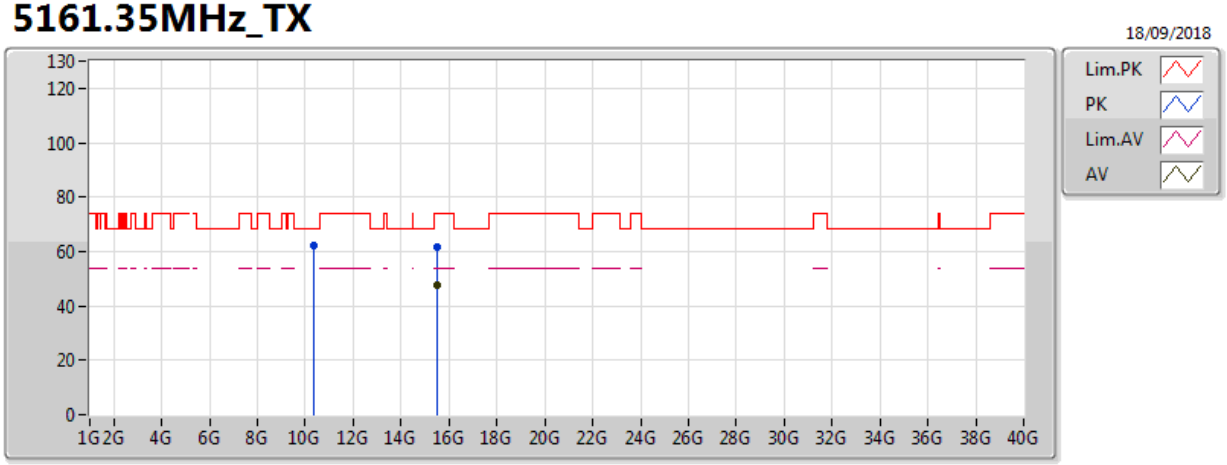


EUT Z_1TX Ant0
Setting Default
03-E-2-10
FSP

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
PK	5.13405G	59.33	74.00	-14.67	6.12	3	Horizontal	64	1.04
AV	5.13785G	46.30	54.00	-7.70	6.13	3	Horizontal	64	1.04
PK	5.16115G	106.85	Inf	-Inf	6.16	3	Horizontal	64	1.04
AV	5.16125G	101.77	Inf	-Inf	6.16	3	Horizontal	64	1.04

4-DQPSK,2M_Nss1_1TX

5161.35MHz_TX

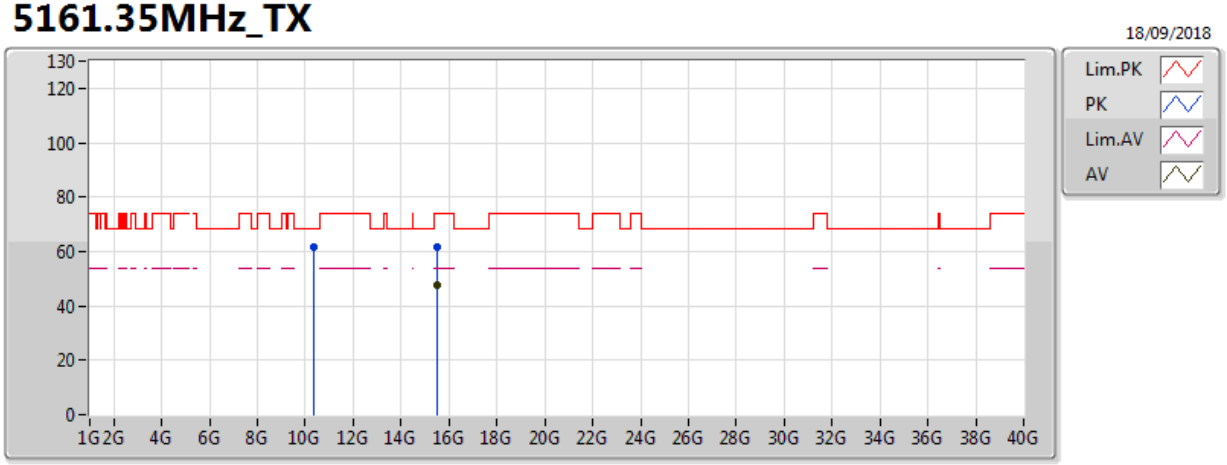


EUT Z_1TX Ant0
Setting Default
03-E-2
FSP

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
PK	10.32309G	62.35	68.20	-5.85	13.54	3	Vertical	341	1.06
PK	15.48049G	61.52	74.00	-12.48	16.44	3	Vertical	246	1.53
AV	15.47932G	47.38	54.00	-6.62	16.44	3	Vertical	246	1.53

4-DQPSK,2M_Nss1_1TX

5161.35MHz_TX

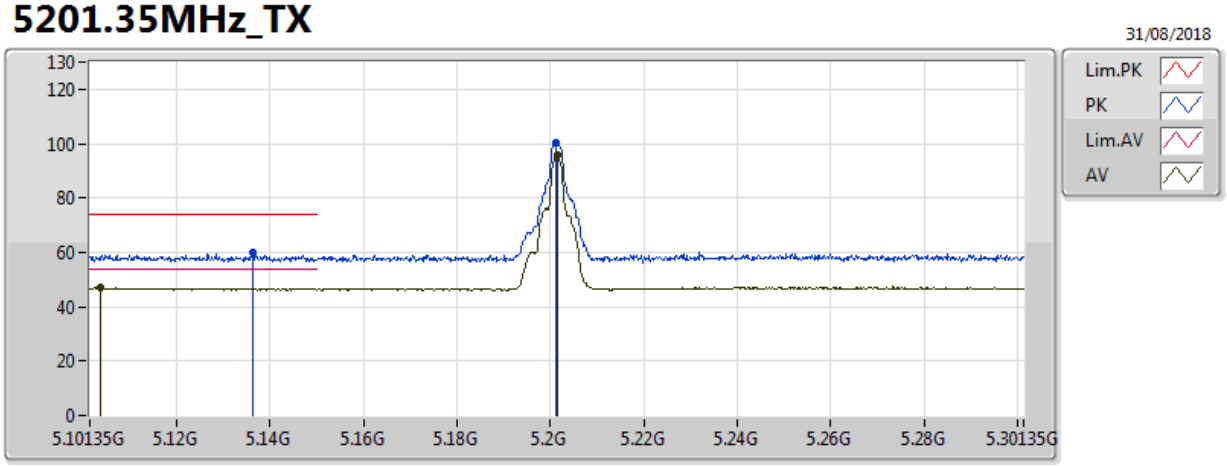


EUT Z_1TX Ant0
Setting Default
03-E-2
FSP

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
PK	10.32301G	61.78	68.20	-6.42	13.54	3	Horizontal	222	1.49
PK	15.47967G	61.71	74.00	-12.29	16.44	3	Horizontal	175	1.11
AV	15.48196G	47.40	54.00	-6.60	16.44	3	Horizontal	175	1.11

4-DQPSK,2M_Nss1_1TX

5201.35MHz_TX

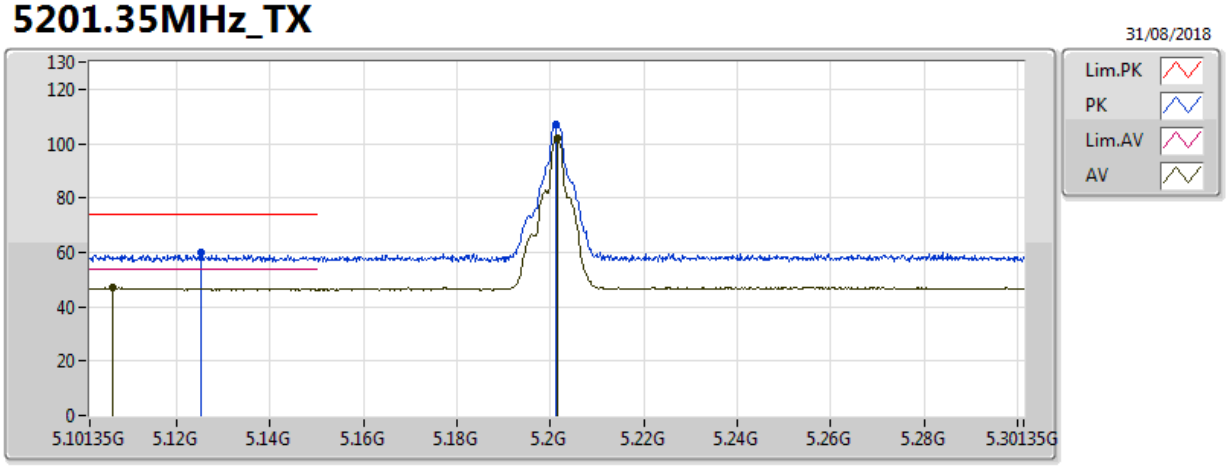


EUT Z_1TX Ant0
Setting Default
03-M-1-10
FSP

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
PK	5.13635G	59.89	74.00	-14.11	6.13	3	Vertical	178	1.03
AV	5.10375G	46.91	54.00	-7.09	6.07	3	Vertical	178	1.03
PK	5.20115G	100.50	Inf	-Inf	6.22	3	Vertical	178	1.03
AV	5.20135G	95.78	Inf	-Inf	6.22	3	Vertical	178	1.03

4-DQPSK,2M_Nss1_1TX

5201.35MHz_TX

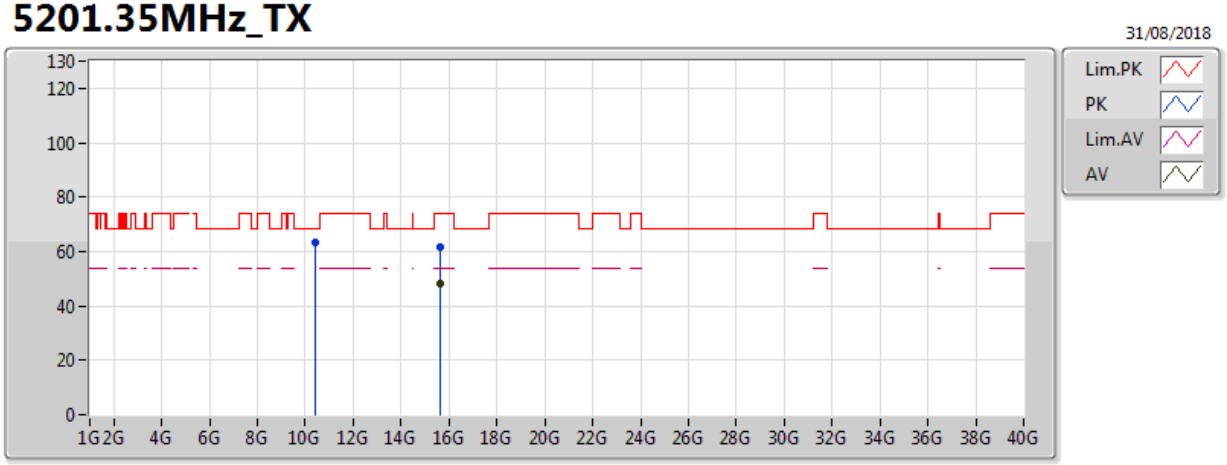


EUT Z_1TX Ant0
Setting Default
03-M-1-10
FSP

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
PK	5.12515G	59.71	74.00	-14.29	6.11	3	Horizontal	136	1.09
AV	5.10615G	47.05	54.00	-6.95	6.07	3	Horizontal	136	1.09
PK	5.20115G	107.00	Inf	-Inf	6.22	3	Horizontal	136	1.09
AV	5.20135G	102.23	Inf	-Inf	6.22	3	Horizontal	136	1.09

4-DQPSK,2M_Nss1_1TX

5201.35MHz_TX

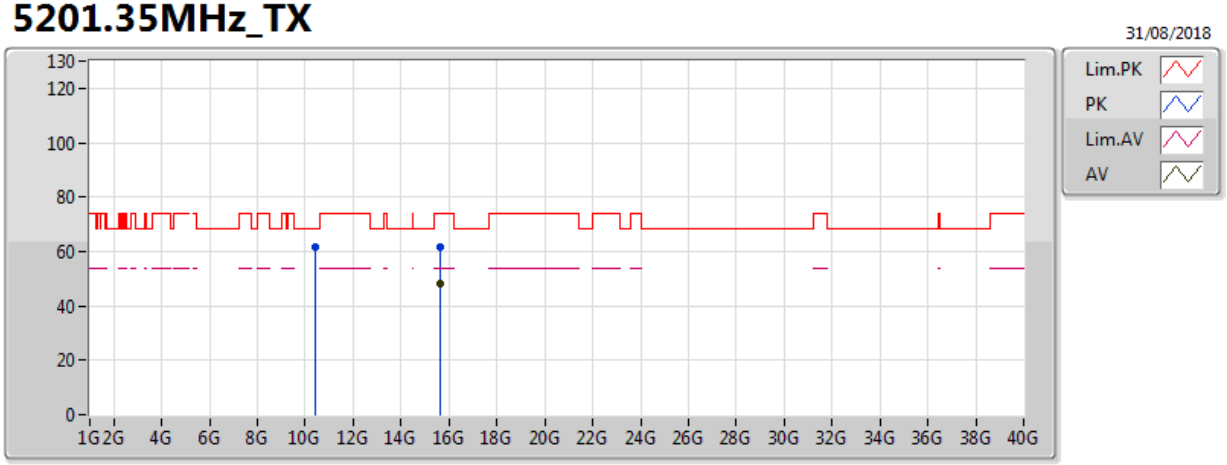


EUT Z_1TX Ant0
Setting Default
03-M-1
FSP

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
PK	10.40214G	63.29	68.20	-4.91	13.60	3	Vertical	135	1.07
PK	15.604105G	61.52	74.00	-12.48	16.03	3	Vertical	334	1.21
AV	15.60394G	48.31	54.00	-5.69	16.03	3	Vertical	334	1.21

4-DQPSK,2M_Nss1_1TX

5201.35MHz_TX

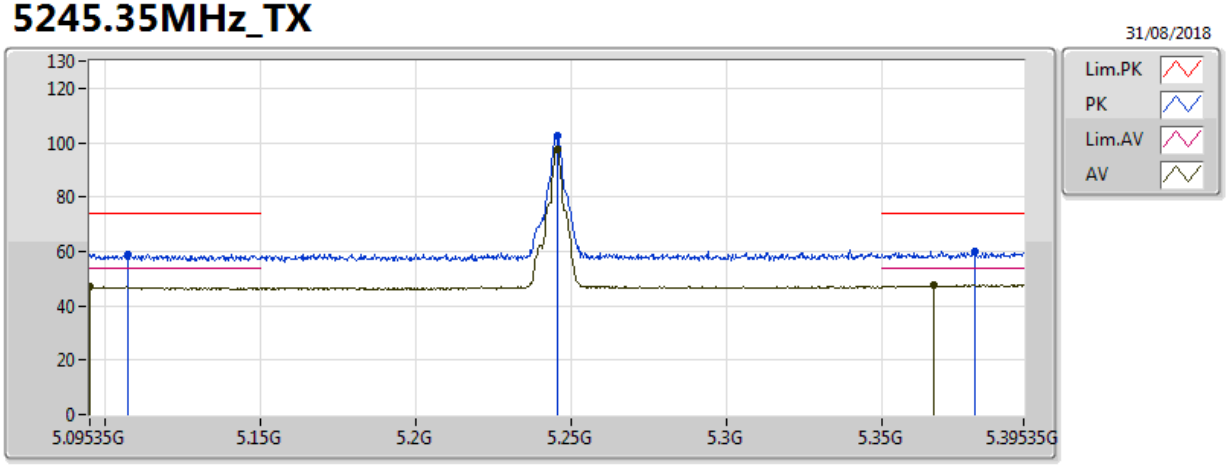


EUT Z_1TX Ant0
Setting Default
03-M-1
FSP

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
PK	10.403075G	61.43	68.20	-6.77	13.60	3	Horizontal	266	1.12
PK	15.60347G	61.54	74.00	-12.46	16.03	3	Horizontal	246	1.50
AV	15.604035G	47.91	54.00	-6.09	16.03	3	Horizontal	246	1.50

4-DQPSK,2M_Nss1_1TX

5245.35MHz_TX

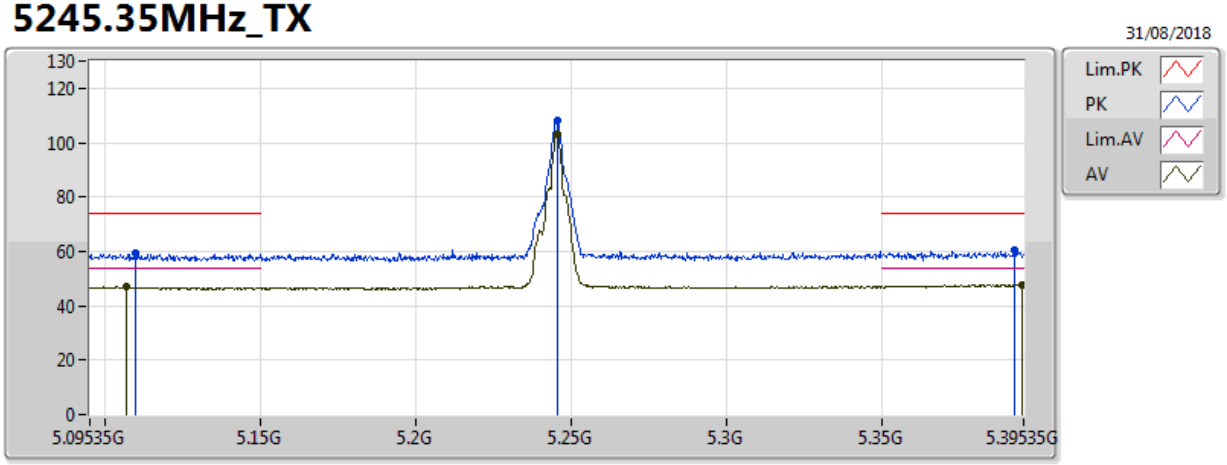


EUT Z_1TX Ant0
Setting Default
03-M-1-10
FSP

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
PK	5.10765G	59.03	74.00	-14.97	6.07	3	Vertical	181	1.03
AV	5.09535G	46.83	54.00	-7.17	6.05	3	Vertical	181	1.03
PK	5.24535G	102.37	Inf	-Inf	6.34	3	Vertical	181	1.03
AV	5.24535G	97.69	Inf	-Inf	6.34	3	Vertical	181	1.03
PK	5.37945G	59.80	74.00	-14.20	6.68	3	Vertical	181	1.03
AV	5.36655G	47.71	54.00	-6.29	6.65	3	Vertical	181	1.03

4-DQPSK,2M_Nss1_1TX

5245.35MHz_TX

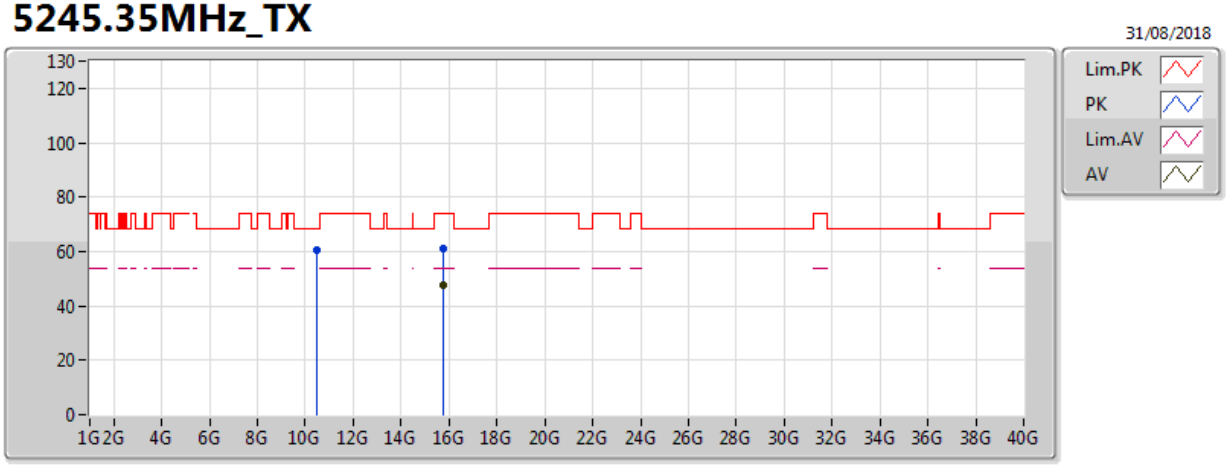


EUT Z_1TX Ant0
Setting Default
03-M-1-10
FSP

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
PK	5.11005G	59.32	74.00	-14.68	6.08	3	Horizontal	139	1.06
AV	5.10705G	47.02	54.00	-6.98	6.07	3	Horizontal	139	1.06
PK	5.24565G	107.92	Inf	-Inf	6.34	3	Horizontal	139	1.06
AV	5.24535G	103.11	Inf	-Inf	6.34	3	Horizontal	139	1.06
PK	5.39265G	60.70	74.00	-13.30	6.71	3	Horizontal	139	1.06
AV	5.39475G	47.83	54.00	-6.17	6.72	3	Horizontal	139	1.06

4-DQPSK,2M_Nss1_1TX

5245.35MHz_TX

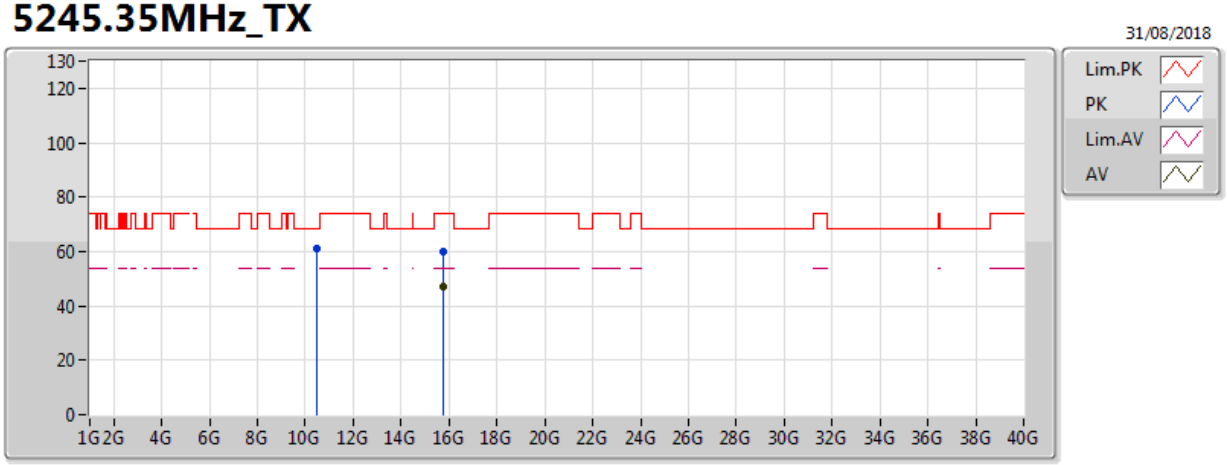


EUT Z_1TX Ant0
Setting Default
03-M-1
FSP

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
PK	10.49036G	60.48	68.20	-7.72	13.66	3	Vertical	183	1.07
PK	15.73551G	60.95	74.00	-13.05	15.59	3	Vertical	329	1.08
AV	15.73622G	47.88	54.00	-6.12	15.58	3	Vertical	329	1.08

4-DQPSK,2M_Nss1_1TX

5245.35MHz_TX

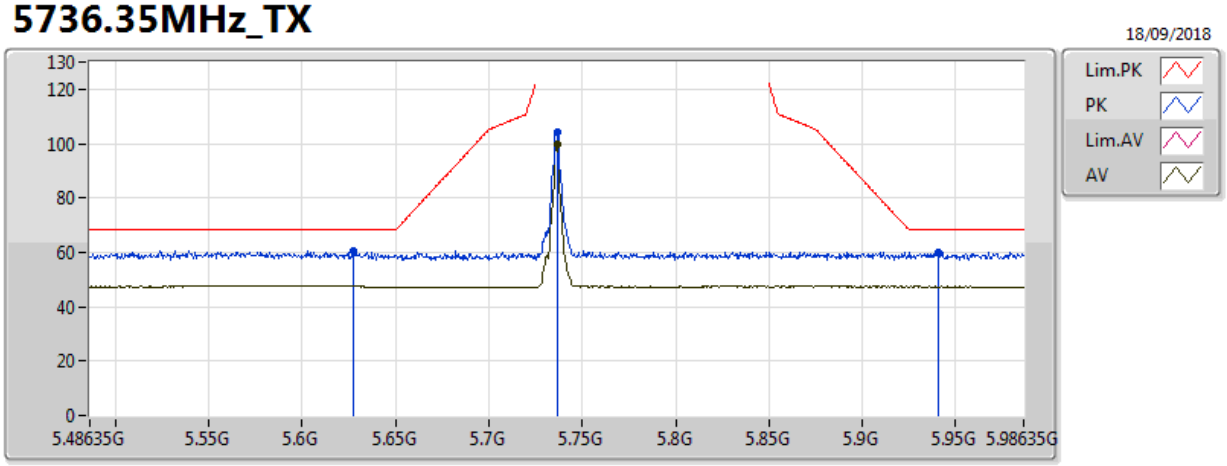


EUT Z_1TX Ant0
Setting Default
03-M-1
FSP

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
PK	10.49093G	61.18	68.20	-7.02	13.66	3	Horizontal	268	1.07
PK	15.735G	60.13	74.00	-13.87	15.59	3	Horizontal	162	1.50
AV	15.73678G	46.84	54.00	-7.16	15.58	3	Horizontal	162	1.50

4-DQPSK,2M_Nss1_1TX

5736.35MHz_TX

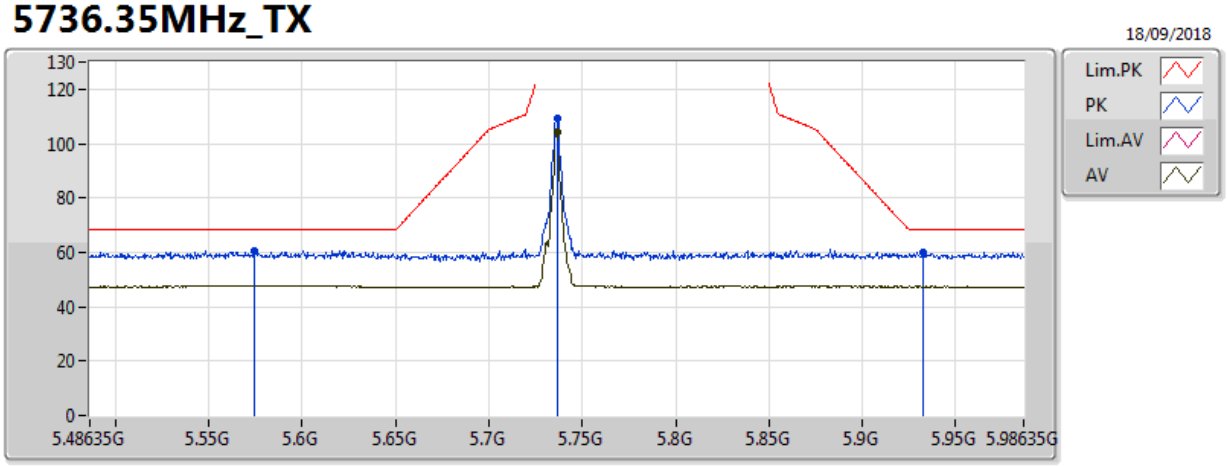


EUT Z_1TX Ant0
Setting Default
03-E-2-10
FSP

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
PK	5.62785G	60.63	68.20	-7.57	7.12	3	Vertical	87	1.01
PK	5.73635G	104.37	Inf	-Inf	7.23	3	Vertical	87	1.01
AV	5.73635G	99.51	Inf	-Inf	7.23	3	Vertical	87	1.01
PK	5.94035G	60.00	68.20	-8.20	7.22	3	Vertical	87	1.01

4-DQPSK,2M_Nss1_1TX

5736.35MHz_TX

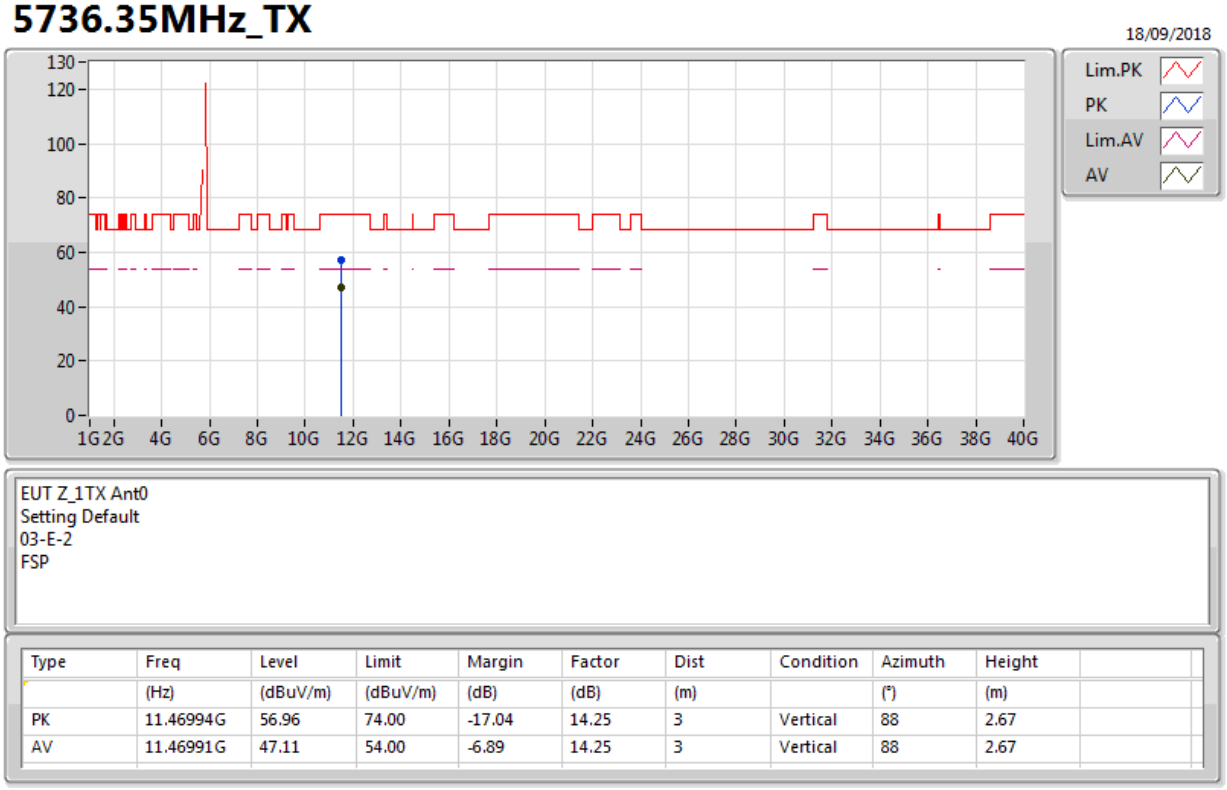


EUT Z_1TX Ant0
Setting Default
03-E-2-10
FSP

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
PK	5.57435G	60.71	68.20	-7.49	7.05	3	Horizontal	61	1.01
PK	5.73635G	109.03	Inf	-Inf	7.23	3	Horizontal	61	1.01
AV	5.73635G	104.06	Inf	-Inf	7.23	3	Horizontal	61	1.01
PK	5.93285G	60.21	68.20	-7.99	7.22	3	Horizontal	61	1.01

4-DQPSK,2M_Nss1_1TX

5736.35MHz_TX

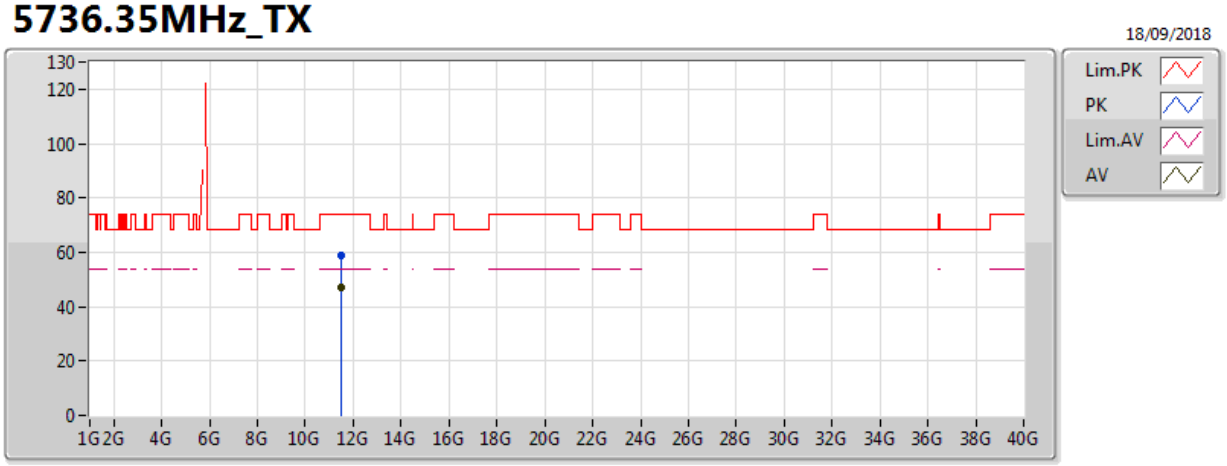


EUT Z_1TX Ant0
Setting Default
03-E-2
FSP

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
PK	11.46994G	56.96	74.00	-17.04	14.25	3	Vertical	88	2.67
AV	11.46991G	47.11	54.00	-6.89	14.25	3	Vertical	88	2.67

4-DQPSK,2M_Nss1_1TX

5736.35MHz_TX

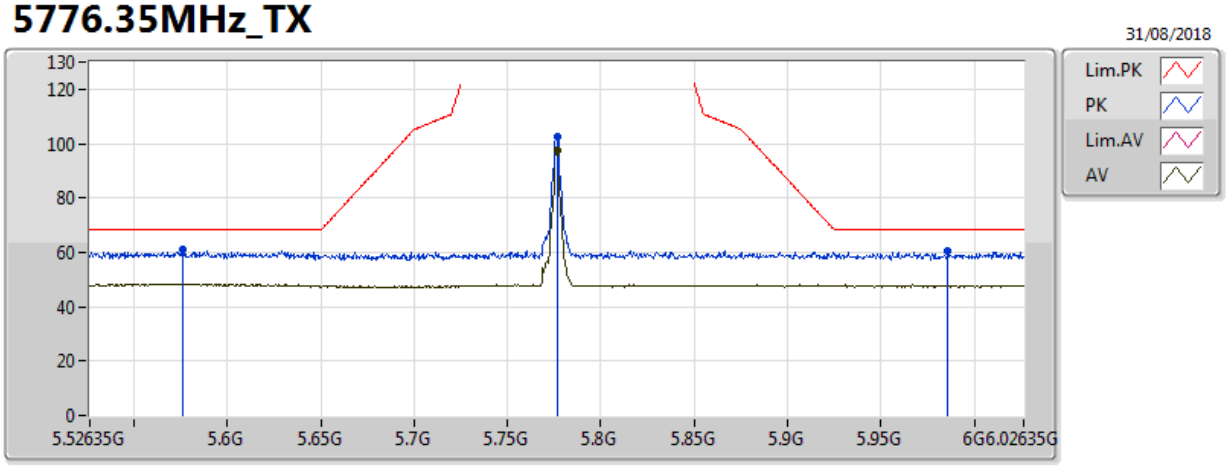


EUT Z_1TX Ant0
Setting Default
03-E-2
FSP

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
PK	11.47228G	58.68	74.00	-15.32	14.25	3	Horizontal	73	1.00
AV	11.47258G	46.86	54.00	-7.14	14.25	3	Horizontal	73	1.00

4-DQPSK,2M_Nss1_1TX

5776.35MHz_TX

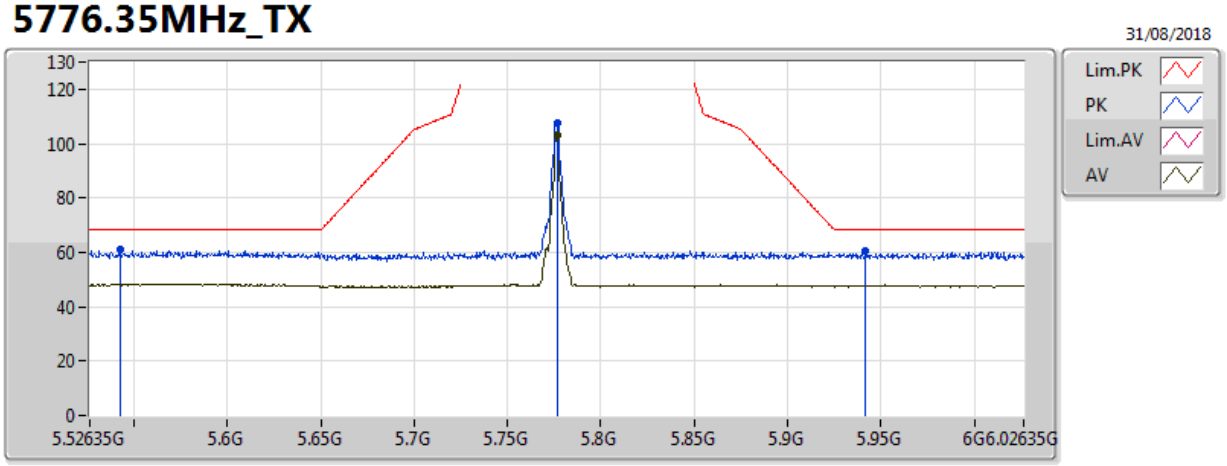


EUT Z_1TX Ant0
Setting Default
03-M-1-10
FSP

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
PK	5.57585G	60.88	68.20	-7.32	7.06	3	Vertical	237	2.96
PK	5.77635G	102.40	Inf	-Inf	7.27	3	Vertical	237	2.96
AV	5.77635G	97.64	Inf	-Inf	7.27	3	Vertical	237	2.96
PK	5.98585G	60.48	68.20	-7.72	7.18	3	Vertical	237	2.96

4-DQPSK,2M_Nss1_1TX

5776.35MHz_TX

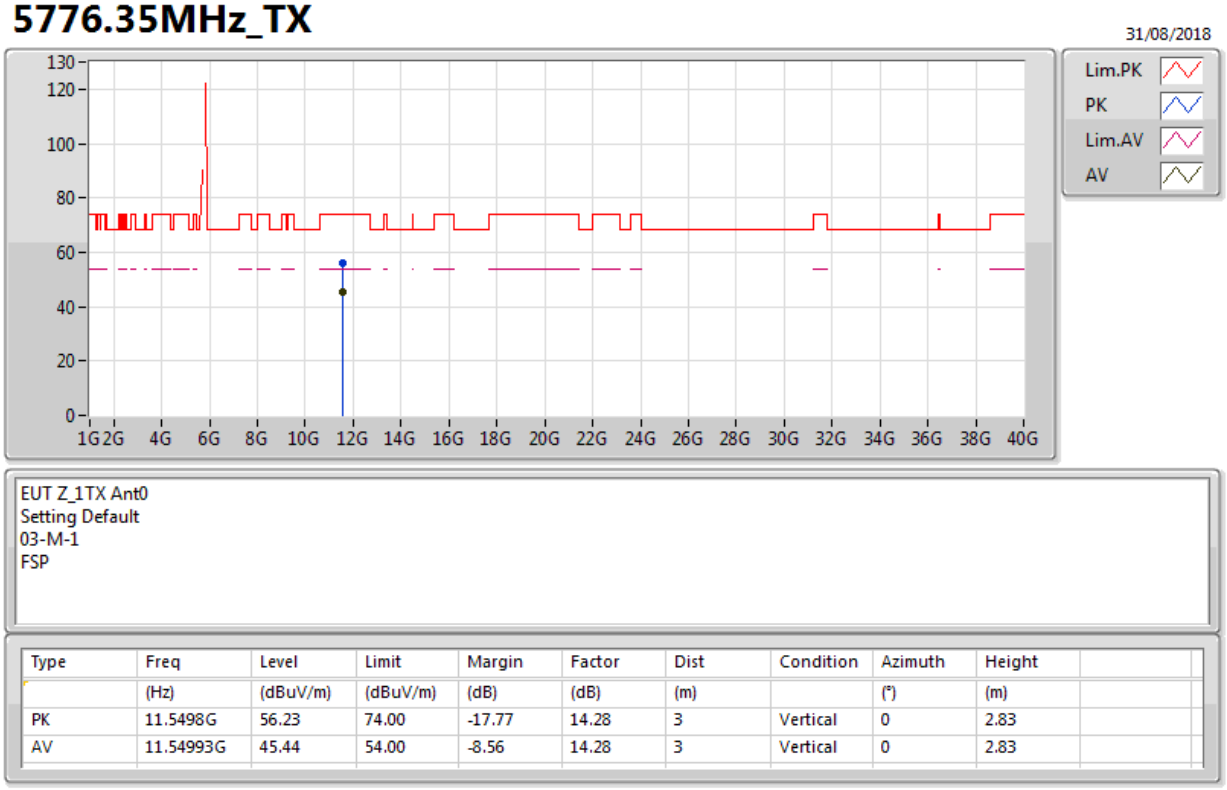


EUT Z_1TX Ant0
Setting Default
03-M-1-10
FSP

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
PK	5.54235G	60.87	68.20	-7.33	7.04	3	Horizontal	158	2.86
PK	5.77635G	107.72	Inf	-Inf	7.27	3	Horizontal	158	2.86
AV	5.77635G	103.24	Inf	-Inf	7.27	3	Horizontal	158	2.86
PK	5.94185G	60.42	68.20	-7.78	7.22	3	Horizontal	158	2.86

4-DQPSK,2M_Nss1_1TX

5776.35MHz_TX

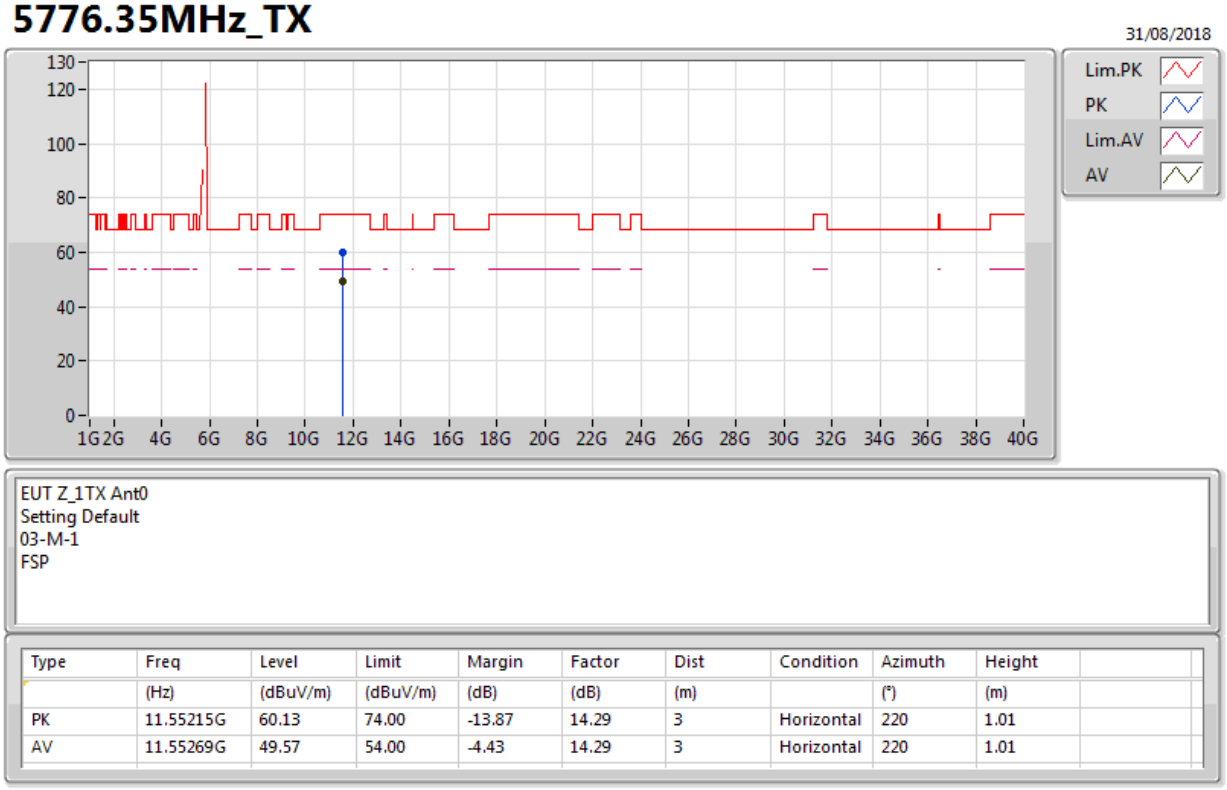


EUT Z_1TX Ant0
Setting Default
03-M-1
FSP

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
PK	11.5498G	56.23	74.00	-17.77	14.28	3	Vertical	0	2.83
AV	11.54993G	45.44	54.00	-8.56	14.28	3	Vertical	0	2.83

4-DQPSK,2M_Nss1_1TX

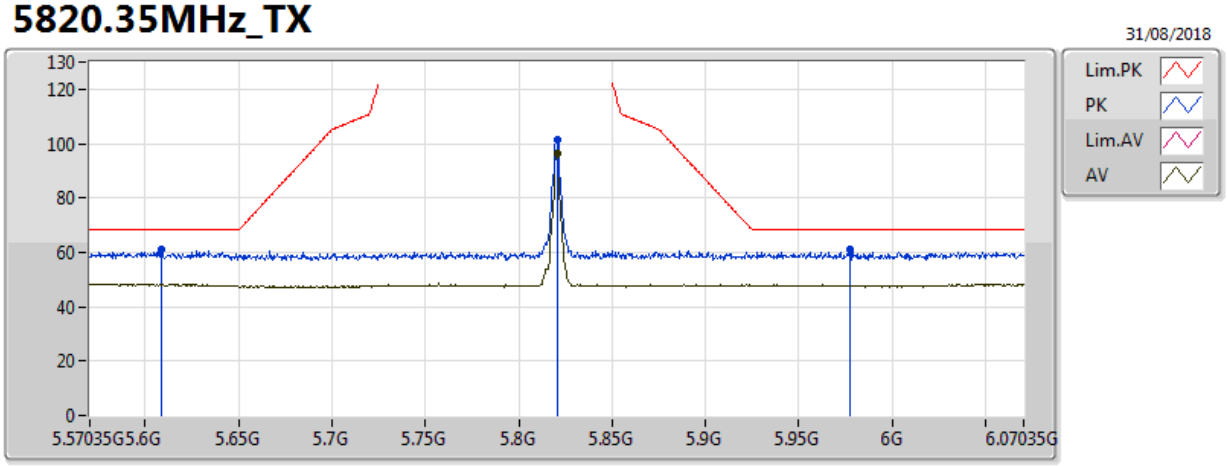
5776.35MHz_TX



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
PK	11.55215G	60.13	74.00	-13.87	14.29	3	Horizontal	220	1.01
AV	11.55269G	49.57	54.00	-4.43	14.29	3	Horizontal	220	1.01

4-DQPSK,2M_Nss1_1TX

5820.35MHz_TX

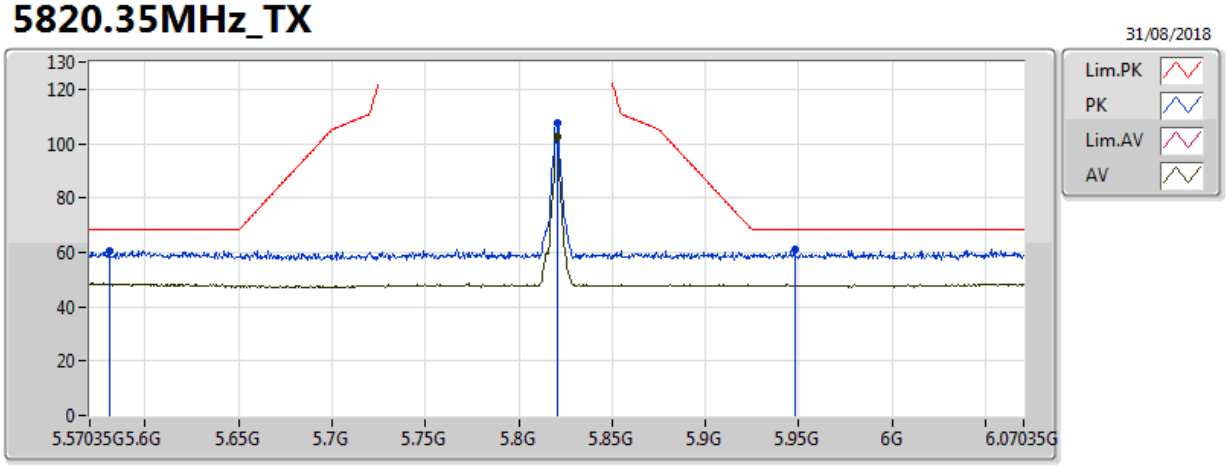


EUT Z_1TX Ant0
Setting Default
03-M-1-10
FSP

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
PK	5.60835G	60.89	68.20	-7.31	7.09	3	Vertical	190	1.01
PK	5.82035G	101.18	Inf	-Inf	7.29	3	Vertical	190	1.01
AV	5.82035G	96.42	Inf	-Inf	7.29	3	Vertical	190	1.01
PK	5.97735G	60.82	68.20	-7.38	7.19	3	Vertical	190	1.01

4-DQPSK,2M_Nss1_1TX

5820.35MHz_TX

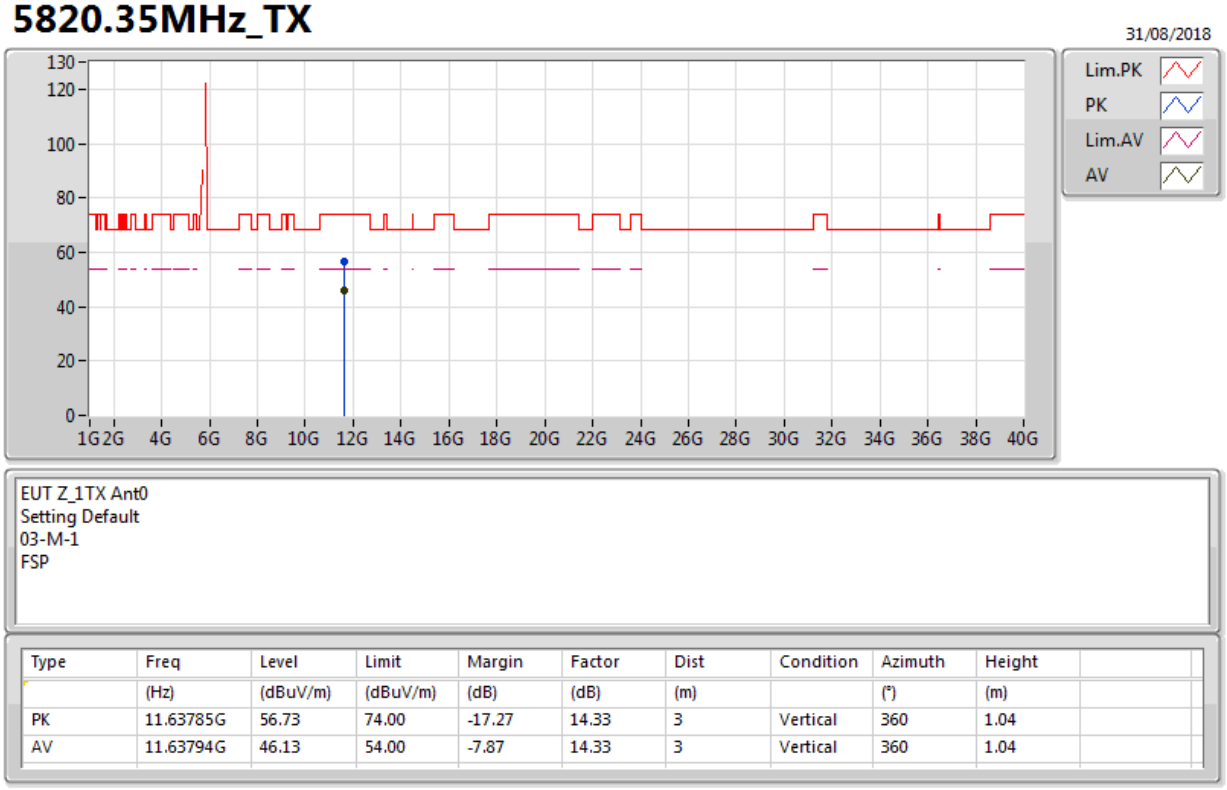


EUT Z_1TX Ant0
Setting Default
03-M-1-10
FSP

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
PK	5.58085G	60.43	68.20	-7.77	7.07	3	Horizontal	156	1.04
PK	5.82035G	107.45	Inf	-Inf	7.29	3	Horizontal	156	1.04
AV	5.82035G	102.72	Inf	-Inf	7.29	3	Horizontal	156	1.04
PK	5.94785G	60.89	68.20	-7.31	7.21	3	Horizontal	156	1.04

4-DQPSK,2M_Nss1_1TX

5820.35MHz_TX

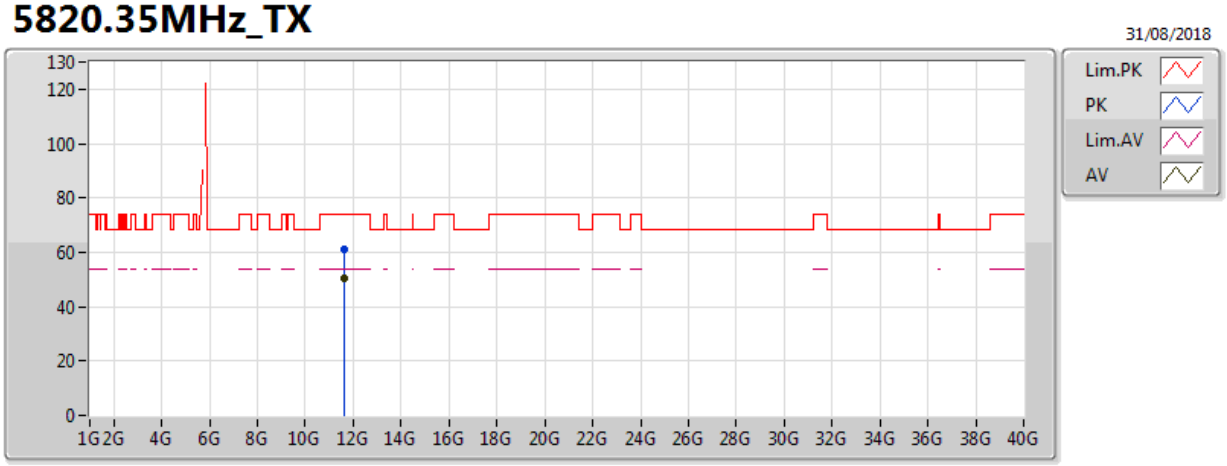


EUT Z_1TX Ant0
Setting Default
03-M-1
FSP

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
PK	11.63785G	56.73	74.00	-17.27	14.33	3	Vertical	360	1.04
AV	11.63794G	46.13	54.00	-7.87	14.33	3	Vertical	360	1.04

4-DQPSK,2M_Nss1_1TX

5820.35MHz_TX

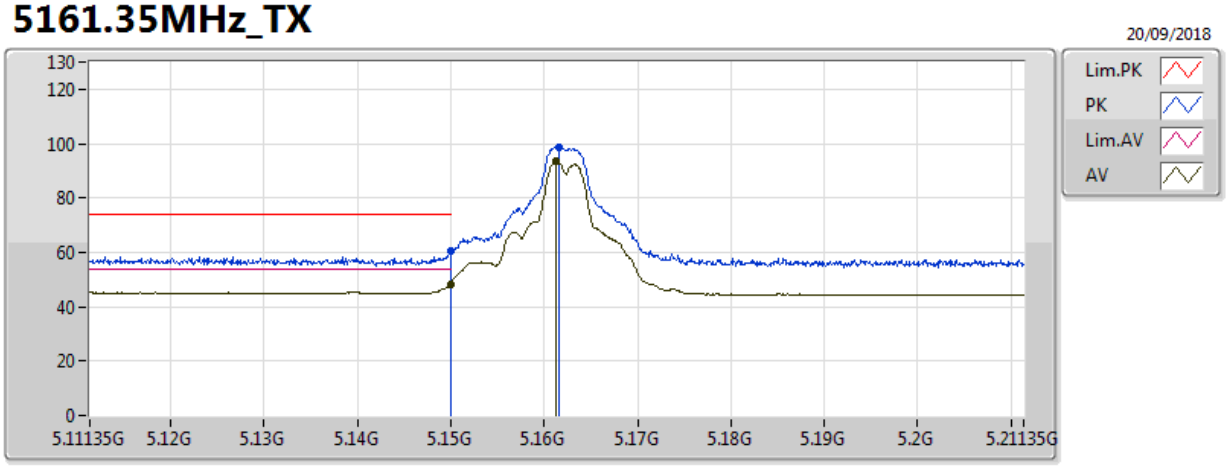


EUT Z_1TX Ant0
Setting Default
03-M-1
FSP

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
PK	11.64108G	60.80	74.00	-13.20	14.33	3	Horizontal	220	1.02
AV	11.64063G	50.70	54.00	-3.30	14.33	3	Horizontal	220	1.02

4-DQPSK,4M_Nss1_1TX

5161.35MHz_TX

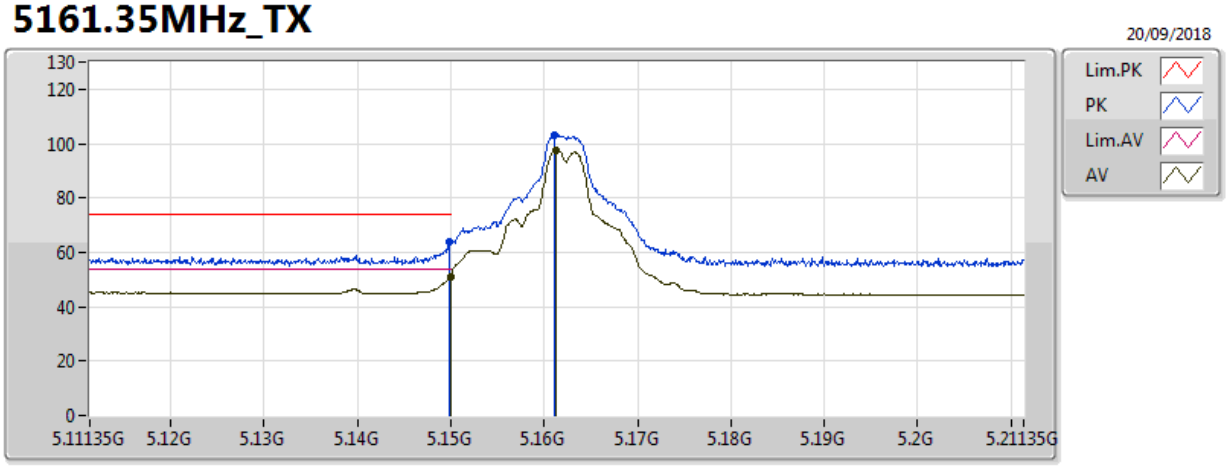


EUT Z_1TX Ant0
Setting 0x06
01-J-5-10
FSP(100019)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
PK	5.14995G	60.74	74.00	-13.26	4.90	3	Vertical	88	1.04
AV	5.14995G	48.37	54.00	-5.63	4.90	3	Vertical	88	1.04
PK	5.16155G	98.56	Inf	-Inf	4.91	3	Vertical	88	1.04
AV	5.16125G	93.31	Inf	-Inf	4.91	3	Vertical	88	1.04

4-DQPSK,4M_Nss1_1TX

5161.35MHz_TX

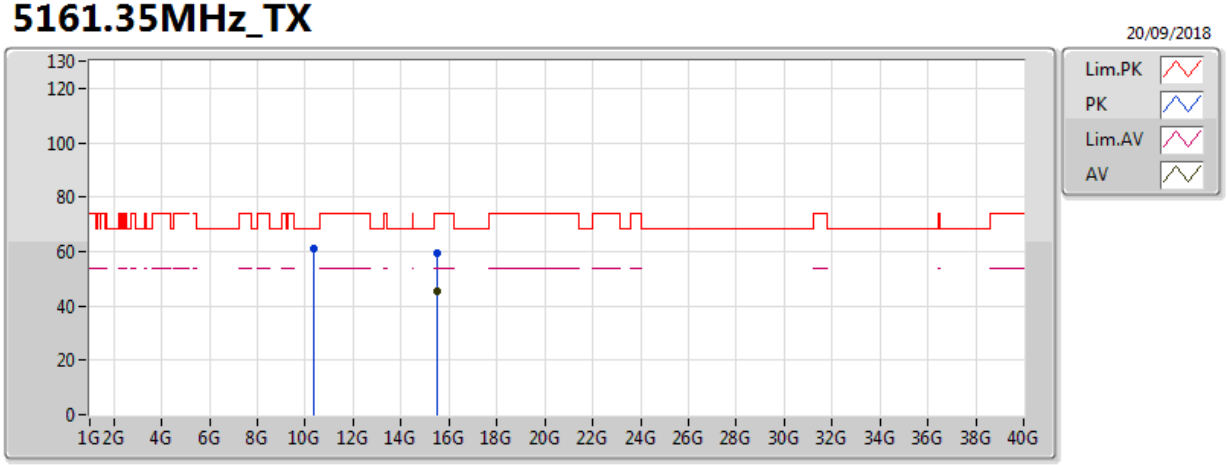


EUT Z_1TX Ant0
Setting 0x06
01-J-5-10
FSP(100019)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
PK	5.14985G	63.66	74.00	-10.34	4.90	3	Horizontal	60	1.02
AV	5.14995G	51.04	54.00	-2.96	4.90	3	Horizontal	60	1.02
PK	5.16115G	103.05	Inf	-Inf	4.91	3	Horizontal	60	1.02
AV	5.16125G	97.65	Inf	-Inf	4.91	3	Horizontal	60	1.02

4-DQPSK,4M_Nss1_1TX

5161.35MHz_TX

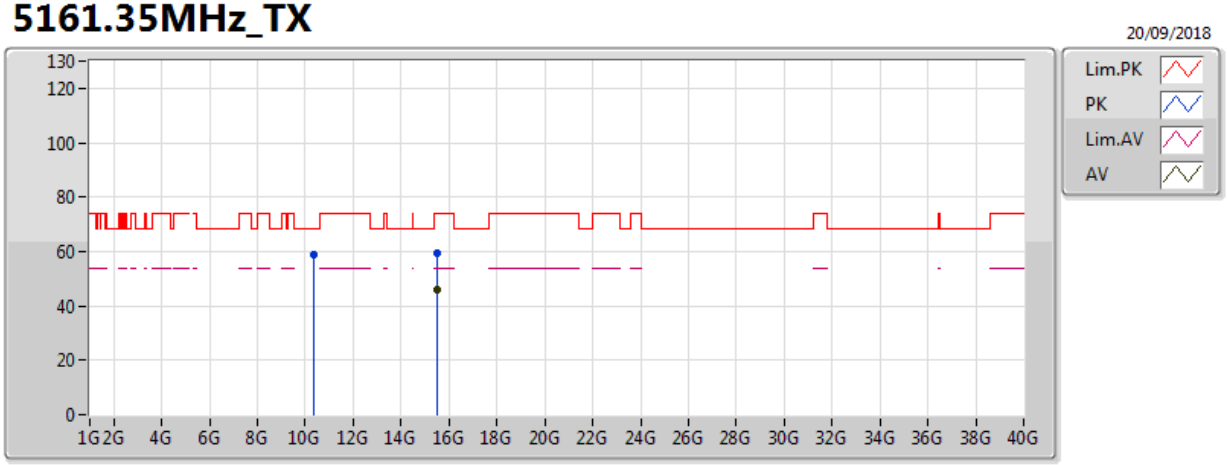


EUT Z_1TX Ant0
Setting 0x06
01-J-5
FSP(100019)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
PK	10.3251G	61.12	68.20	-7.08	12.63	3	Vertical	90	1.26
PK	15.49569G	59.61	74.00	-14.39	16.00	3	Vertical	223	1.64
AV	15.47989G	45.63	54.00	-8.37	16.04	3	Vertical	223	1.64

4-DQPSK,4M_Nss1_1TX

5161.35MHz_TX

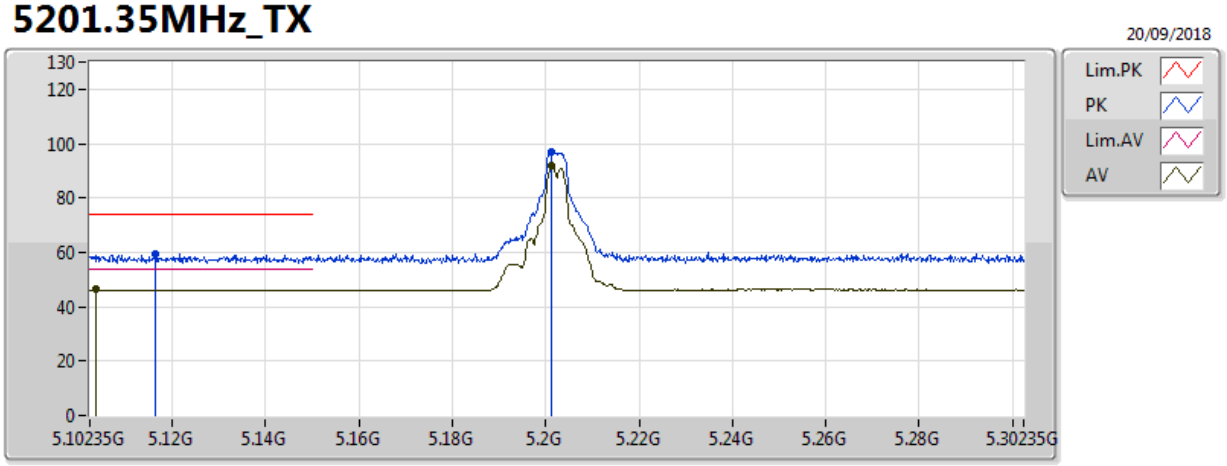


EUT Z_1TX Ant0
Setting 0x06
01-J-5
FSP(100019)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
PK	10.32486G	58.87	68.20	-9.33	12.63	3	Horizontal	173	1.12
PK	15.48246G	59.23	74.00	-14.77	16.02	3	Horizontal	136	1.07
AV	15.49325G	45.69	54.00	-8.31	16.01	3	Horizontal	136	1.07

4-DQPSK,4M_Nss1_1TX

5201.35MHz_TX

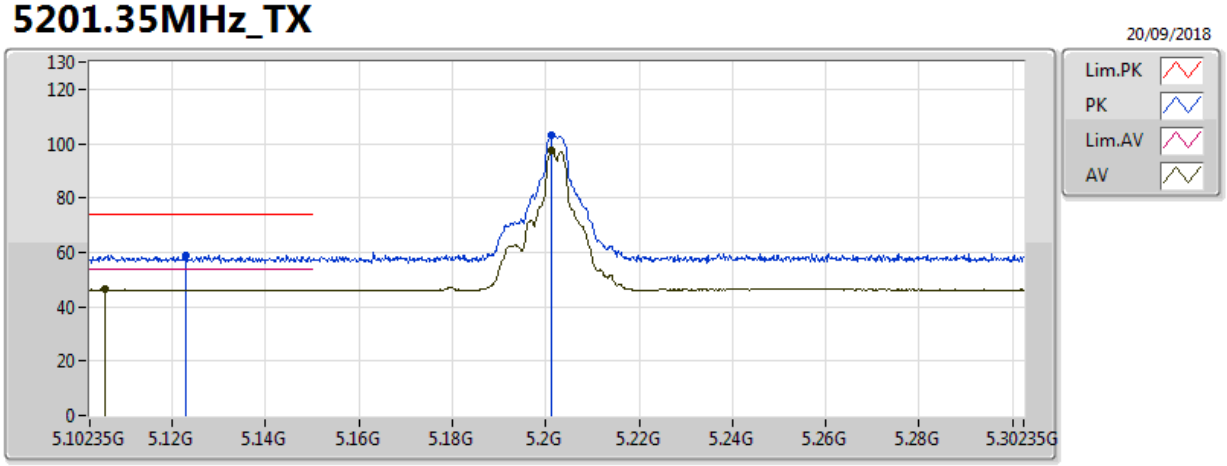


EUT Z_1TX Ant0
Setting Default
03-J-1-10
FSP

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
PK	5.11635G	59.60	74.00	-14.40	6.09	3	Vertical	182	1.05
AV	5.10375G	46.25	54.00	-7.75	6.07	3	Vertical	182	1.05
PK	5.20115G	96.98	Inf	-Inf	6.22	3	Vertical	182	1.05
AV	5.20135G	91.69	Inf	-Inf	6.22	3	Vertical	182	1.05

4-DQPSK,4M_Nss1_1TX

5201.35MHz_TX

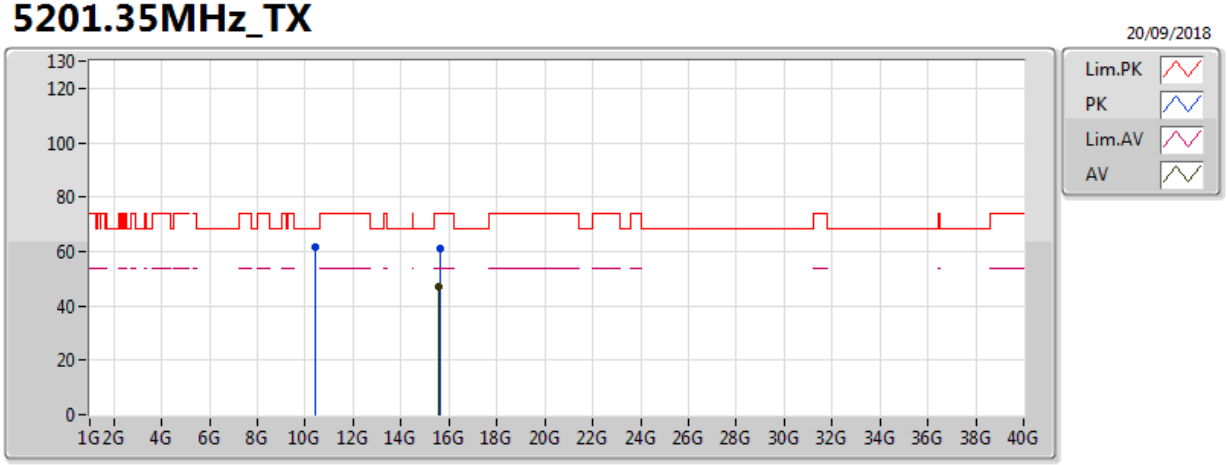


EUT Z_1TX Ant0
Setting Default
03-J-1-10
FSP

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
PK	5.12295G	58.73	74.00	-15.27	6.10	3	Horizontal	138	1.01
AV	5.10575G	46.33	54.00	-7.67	6.07	3	Horizontal	138	1.01
PK	5.20135G	103.02	Inf	-Inf	6.22	3	Horizontal	138	1.01
AV	5.20135G	97.74	Inf	-Inf	6.22	3	Horizontal	138	1.01

4-DQPSK,4M_Nss1_1TX

5201.35MHz_TX

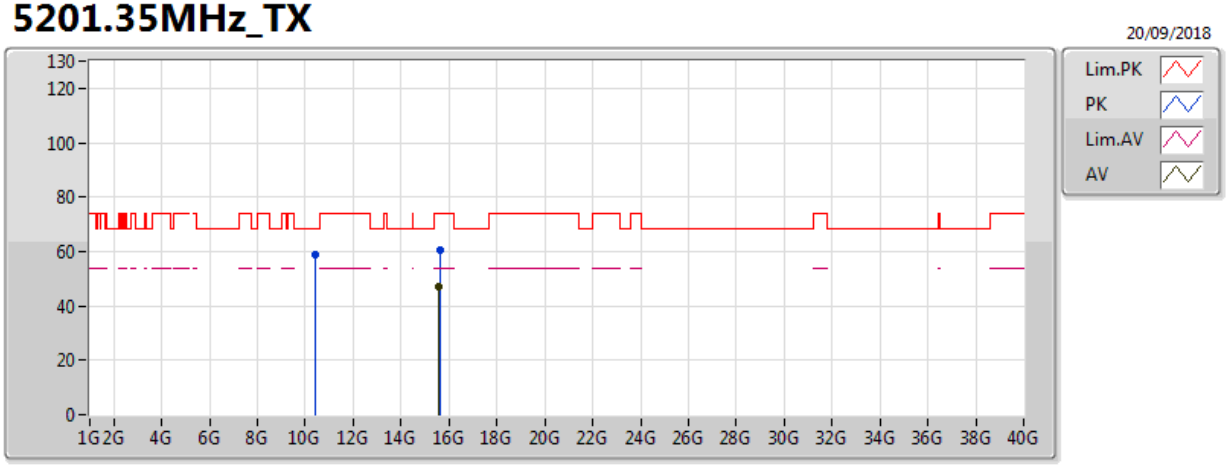


EUT Z_1TX Ant0
Setting Default
03-J-1
FSP

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
PK	10.40414G	61.58	68.20	-6.62	13.60	3	Vertical	131	1.03
PK	15.61703G	61.05	74.00	-12.95	15.98	3	Vertical	327	1.28
AV	15.59753G	47.27	54.00	-6.73	16.05	3	Vertical	327	1.28

4-DQPSK,4M_Nss1_1TX

5201.35MHz_TX

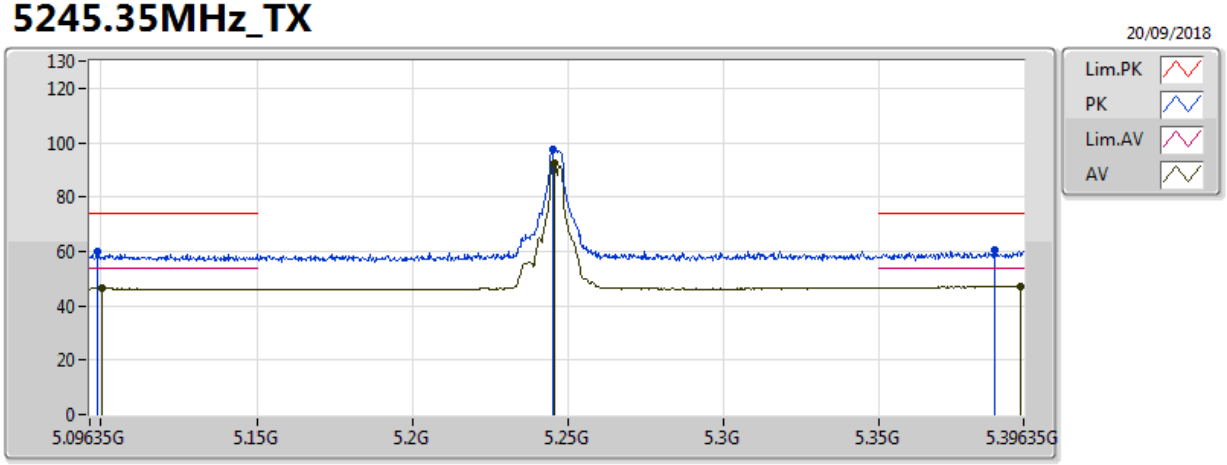


EUT Z_1TX Ant0
Setting Default
03-J-1
FSP

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
PK	10.40432G	58.68	68.20	-9.52	13.60	3	Horizontal	240	1.26
PK	15.60787G	60.75	74.00	-13.25	16.01	3	Horizontal	81	1.13
AV	15.59755G	47.28	54.00	-6.72	16.05	3	Horizontal	81	1.13

4-DQPSK,4M_Nss1_1TX

5245.35MHz_TX

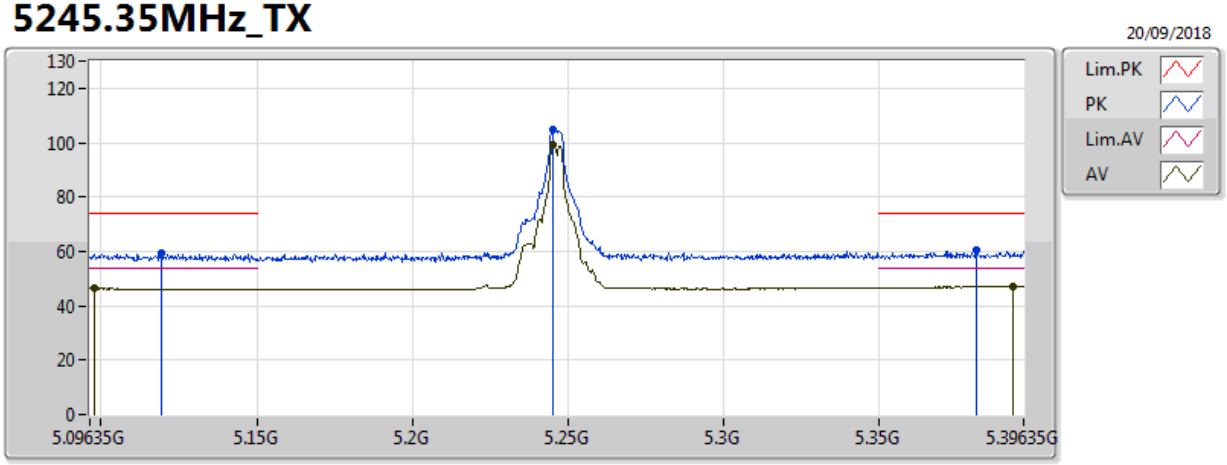


EUT Z_1TX Ant0
Setting Default
03-J-1-10
FSP

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
PK	5.09875G	60.09	74.00	-13.91	6.06	3	Vertical	235	2.62
AV	5.10025G	46.38	54.00	-7.62	6.06	3	Vertical	235	2.62
PK	5.24515G	97.64	Inf	-Inf	6.34	3	Vertical	235	2.62
AV	5.24545G	92.38	Inf	-Inf	6.34	3	Vertical	235	2.62
PK	5.38705G	60.47	74.00	-13.53	6.70	3	Vertical	235	2.62
AV	5.39515G	47.04	54.00	-6.96	6.72	3	Vertical	235	2.62

4-DQPSK,4M_Nss1_1TX

5245.35MHz_TX

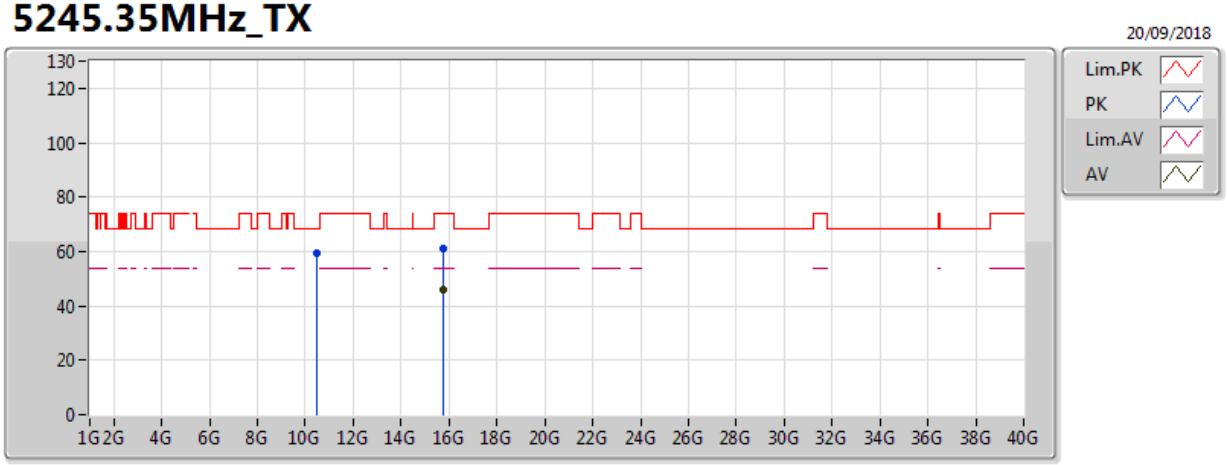


EUT Z_1TX Ant0
Setting Default
03-J-1-10
FSP

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
PK	5.11945G	59.21	74.00	-14.79	6.10	3	Horizontal	136	1.15
AV	5.09785G	46.45	54.00	-7.55	6.06	3	Horizontal	136	1.15
PK	5.24515G	104.81	Inf	-Inf	6.34	3	Horizontal	136	1.15
AV	5.24515G	99.46	Inf	-Inf	6.34	3	Horizontal	136	1.15
PK	5.38105G	60.34	74.00	-13.66	6.69	3	Horizontal	136	1.15
AV	5.39305G	47.13	54.00	-6.87	6.72	3	Horizontal	136	1.15

4-DQPSK,4M_Nss1_1TX

5245.35MHz_TX

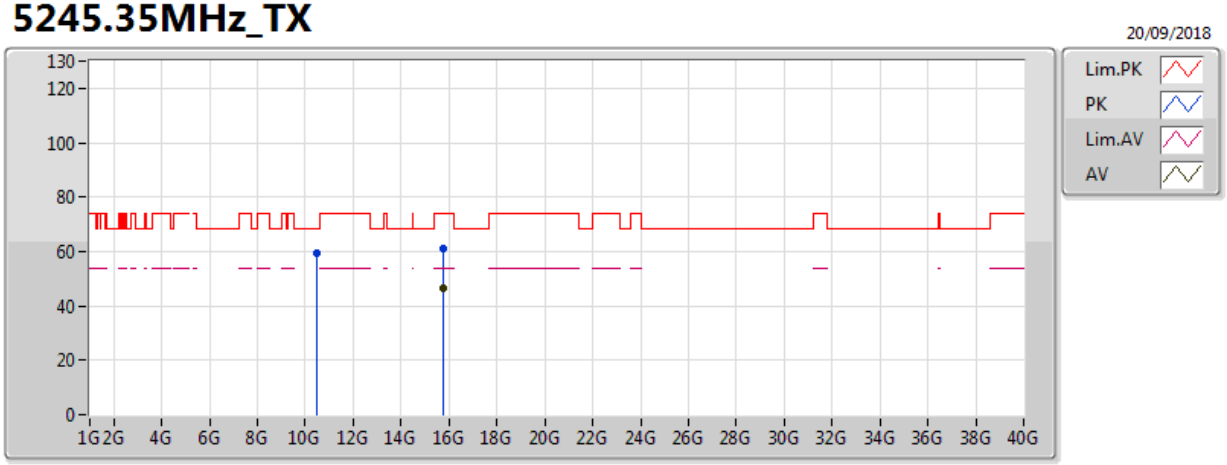


EUT Z_1TX Ant0
Setting Default
03-J-1
FSP

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
PK	10.4921G	59.52	68.20	-8.68	13.66	3	Vertical	64	1.04
PK	15.73729G	60.93	74.00	-13.07	15.58	3	Vertical	111	1.50
AV	15.74253G	46.19	54.00	-7.81	15.56	3	Vertical	111	1.50

4-DQPSK,4M_Nss1_1TX

5245.35MHz_TX

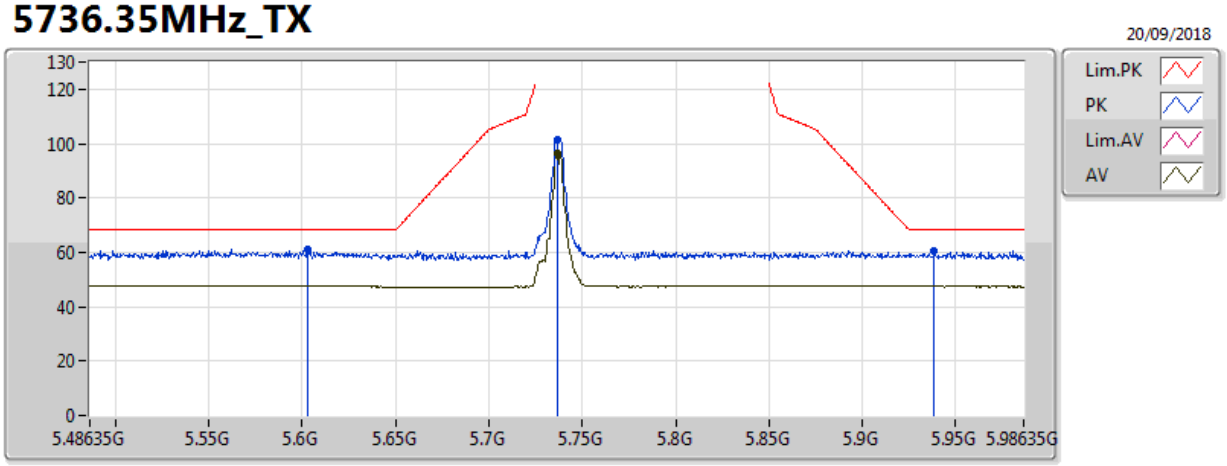


EUT Z_1TX Ant0
Setting Default
03-J-1
FSP

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
PK	10.49226G	59.65	68.20	-8.55	13.66	3	Horizontal	265	1.16
PK	15.73638G	61.33	74.00	-12.67	15.58	3	Horizontal	265	1.52
AV	15.73822G	46.71	54.00	-7.29	15.58	3	Horizontal	265	1.52

4-DQPSK,4M_Nss1_1TX

5736.35MHz_TX

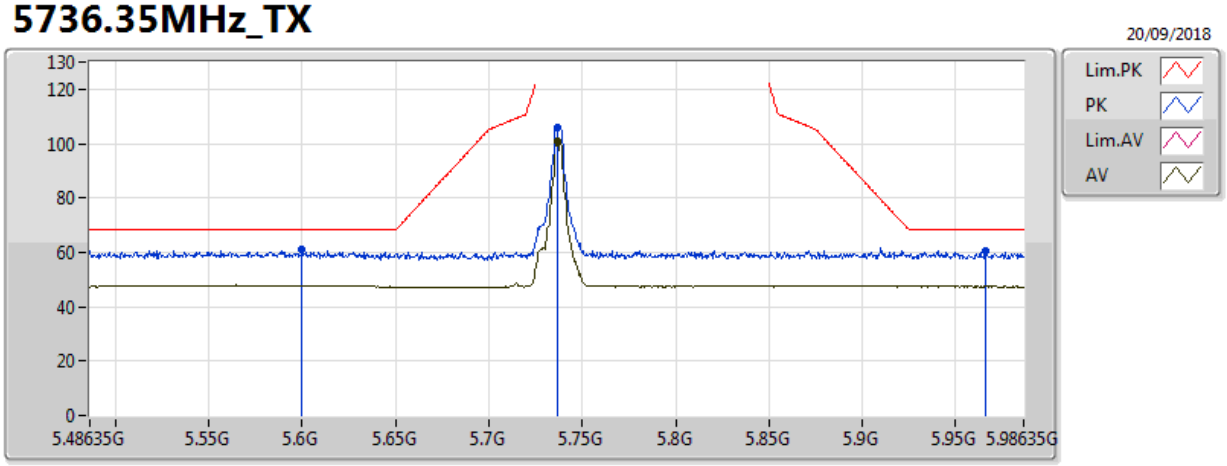


EUT Z_1TX Ant0
Setting Default
03-E-2-10
FSP

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
PK	5.60285G	61.21	68.20	-6.99	7.08	3	Vertical	110	2.93
PK	5.73635G	101.41	Inf	-Inf	7.23	3	Vertical	110	2.93
AV	5.73635G	96.43	Inf	-Inf	7.23	3	Vertical	110	2.93
PK	5.93835G	60.64	68.20	-7.56	7.22	3	Vertical	110	2.93

4-DQPSK,4M_Nss1_1TX

5736.35MHz_TX

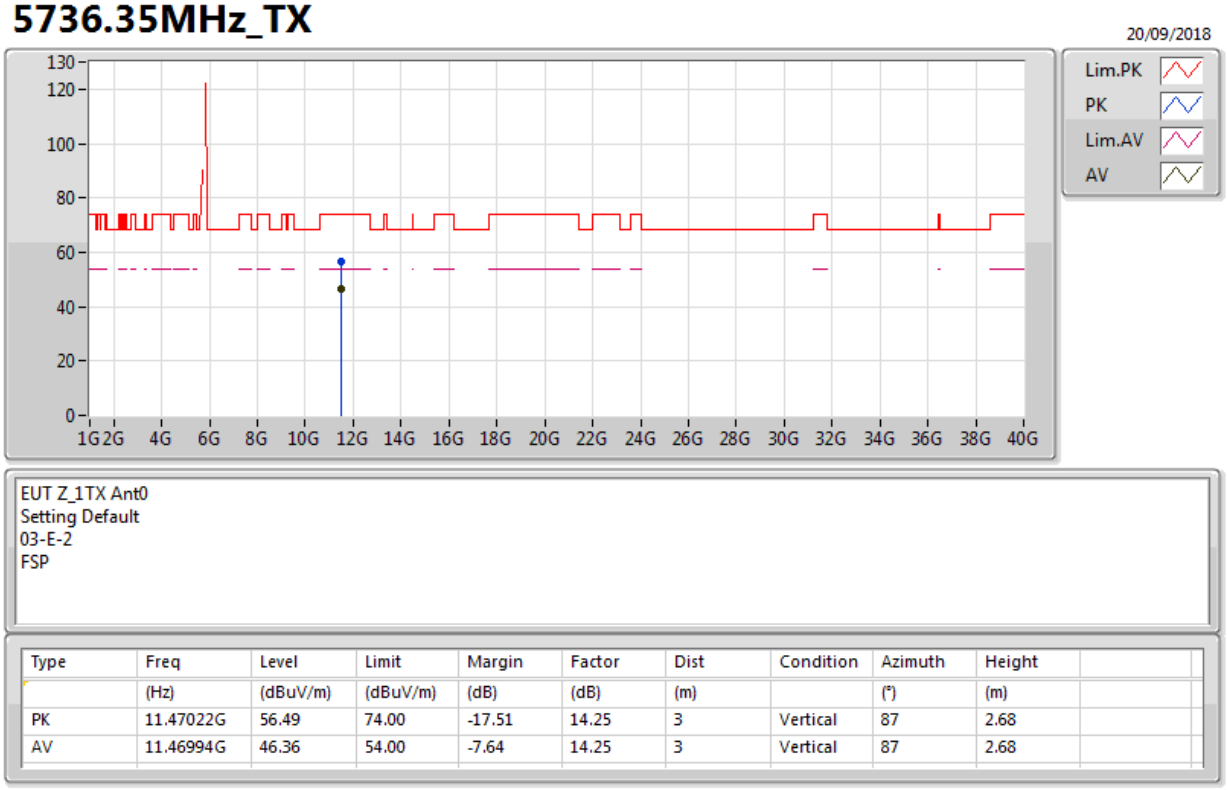


EUT Z_1TX Ant0
Setting Default
03-E-2-10
FSP

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
PK	5.59985G	60.83	68.20	-7.37	7.08	3	Horizontal	53	1.04
PK	5.73635G	106.09	Inf	-Inf	7.23	3	Horizontal	53	1.04
AV	5.73635G	101.07	Inf	-Inf	7.23	3	Horizontal	53	1.04
PK	5.96585G	60.52	68.20	-7.68	7.19	3	Horizontal	53	1.04

4-DQPSK,4M_Nss1_1TX

5736.35MHz_TX

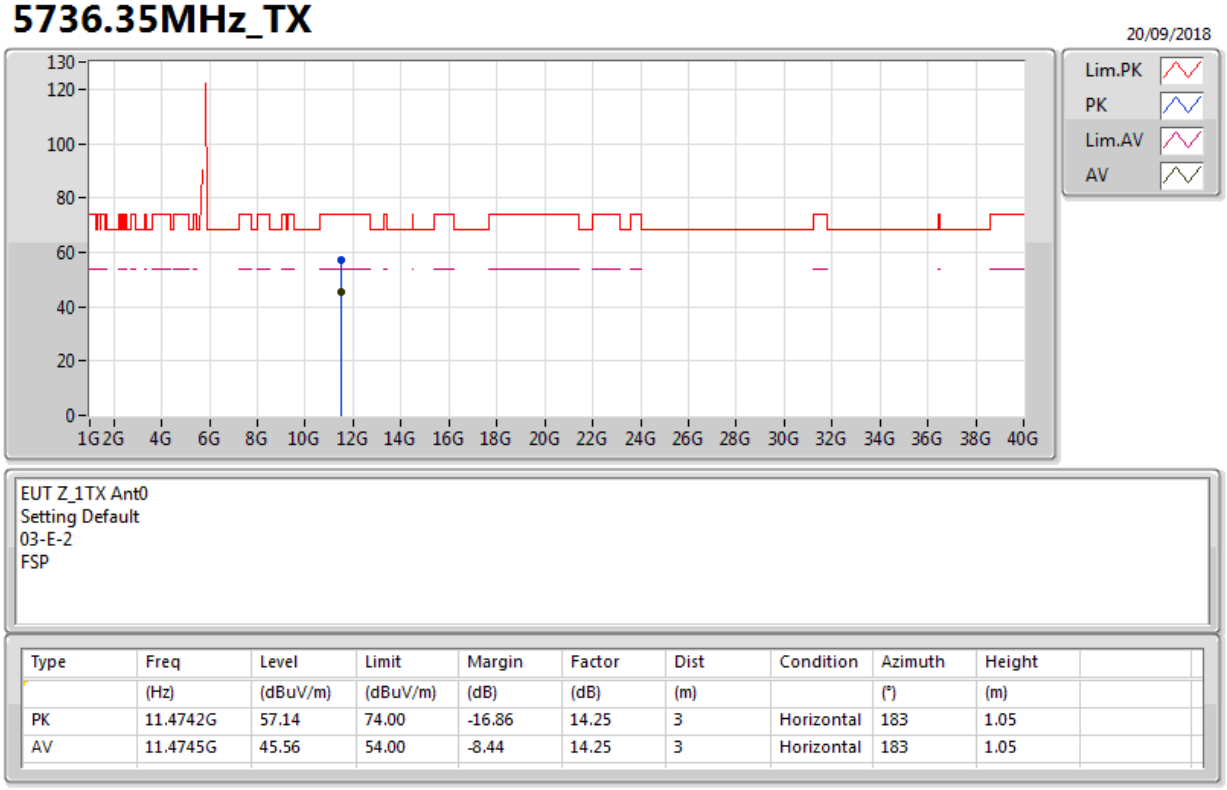


EUT Z_1TX Ant0
Setting Default
03-E-2
FSP

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
PK	11.47022G	56.49	74.00	-17.51	14.25	3	Vertical	87	2.68
AV	11.46994G	46.36	54.00	-7.64	14.25	3	Vertical	87	2.68

4-DQPSK,4M_Nss1_1TX

5736.35MHz_TX

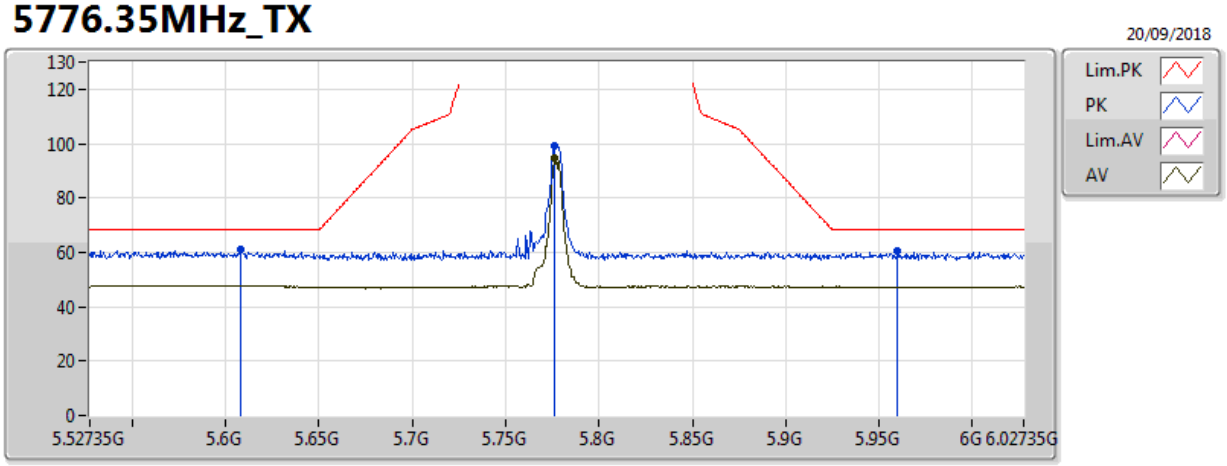


EUT Z_1TX Ant0
Setting Default
03-E-2
FSP

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
PK	11.4742G	57.14	74.00	-16.86	14.25	3	Horizontal	183	1.05
AV	11.4745G	45.56	54.00	-8.44	14.25	3	Horizontal	183	1.05

4-DQPSK,4M_Nss1_1TX

5776.35MHz_TX

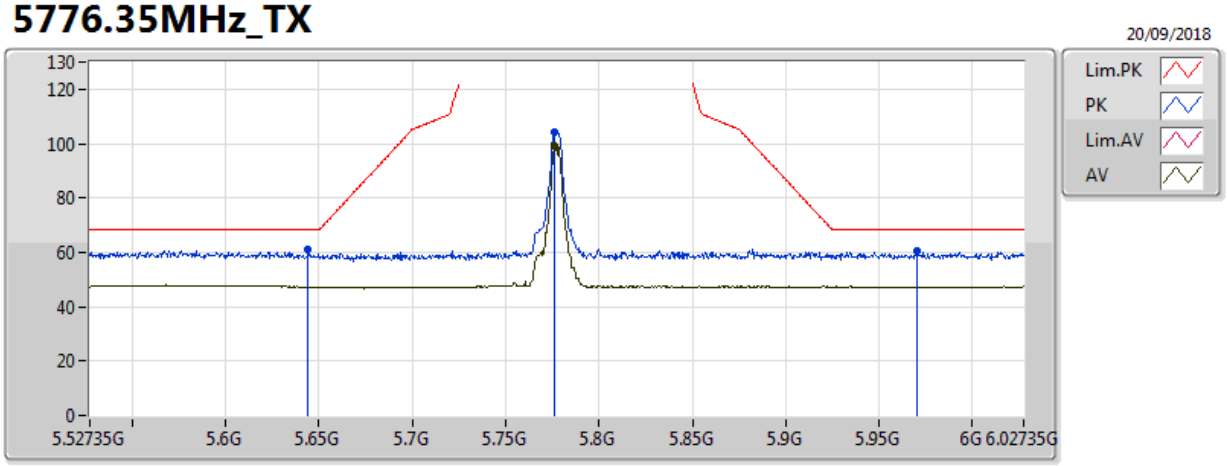


EUT Z_1TX Ant0
Setting Default
03-J-1-10
FSP

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
PK	5.60835G	60.91	68.20	-7.29	7.09	3	Vertical	186	1.02
PK	5.77635G	99.43	Inf	-Inf	7.27	3	Vertical	186	1.02
AV	5.77635G	94.42	Inf	-Inf	7.27	3	Vertical	186	1.02
PK	5.95985G	60.43	68.20	-7.77	7.19	3	Vertical	186	1.02

4-DQPSK,4M_Nss1_1TX

5776.35MHz_TX

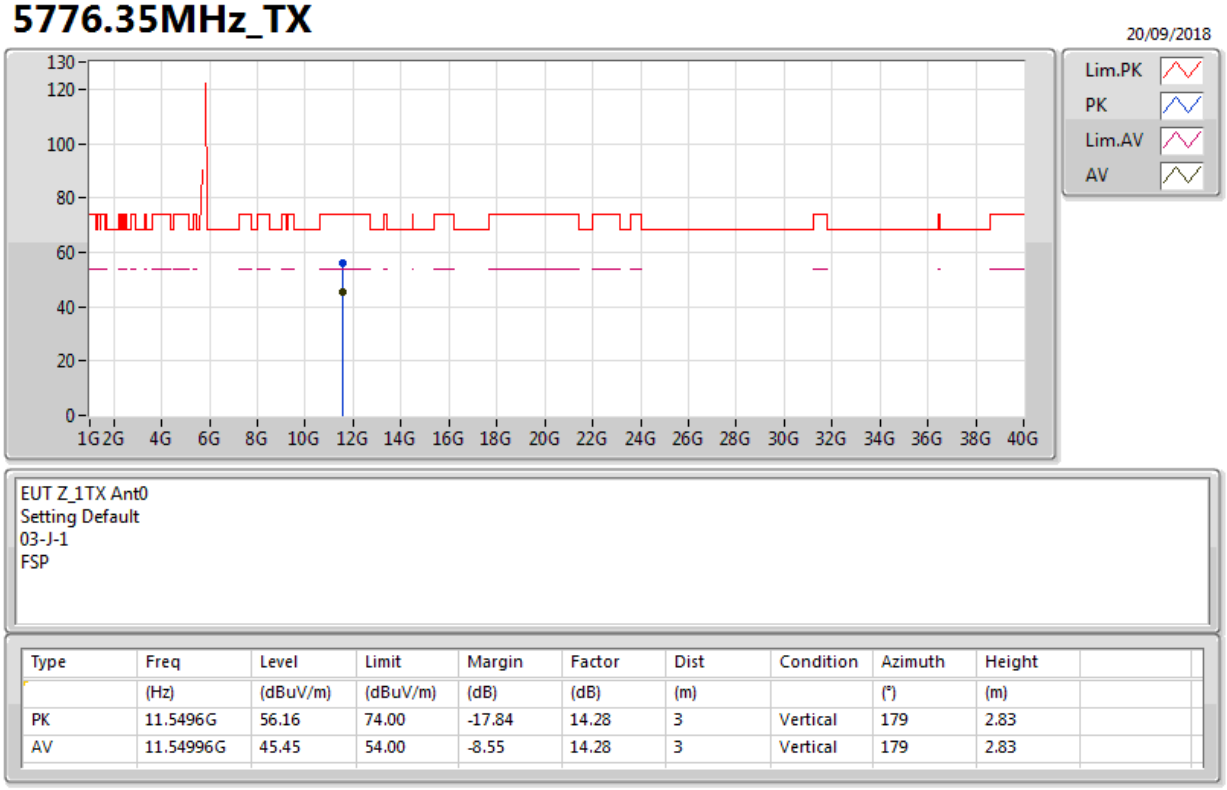


EUT Z_1TX Ant0
Setting Default
03-J-1-10
FSP

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
PK	5.64435G	60.87	68.20	-7.33	7.13	3	Horizontal	152	1.00
PK	5.77635G	104.41	Inf	-Inf	7.27	3	Horizontal	152	1.00
AV	5.77635G	99.40	Inf	-Inf	7.27	3	Horizontal	152	1.00
PK	5.96985G	60.63	68.20	-7.57	7.18	3	Horizontal	152	1.00

4-DQPSK,4M_Nss1_1TX

5776.35MHz_TX

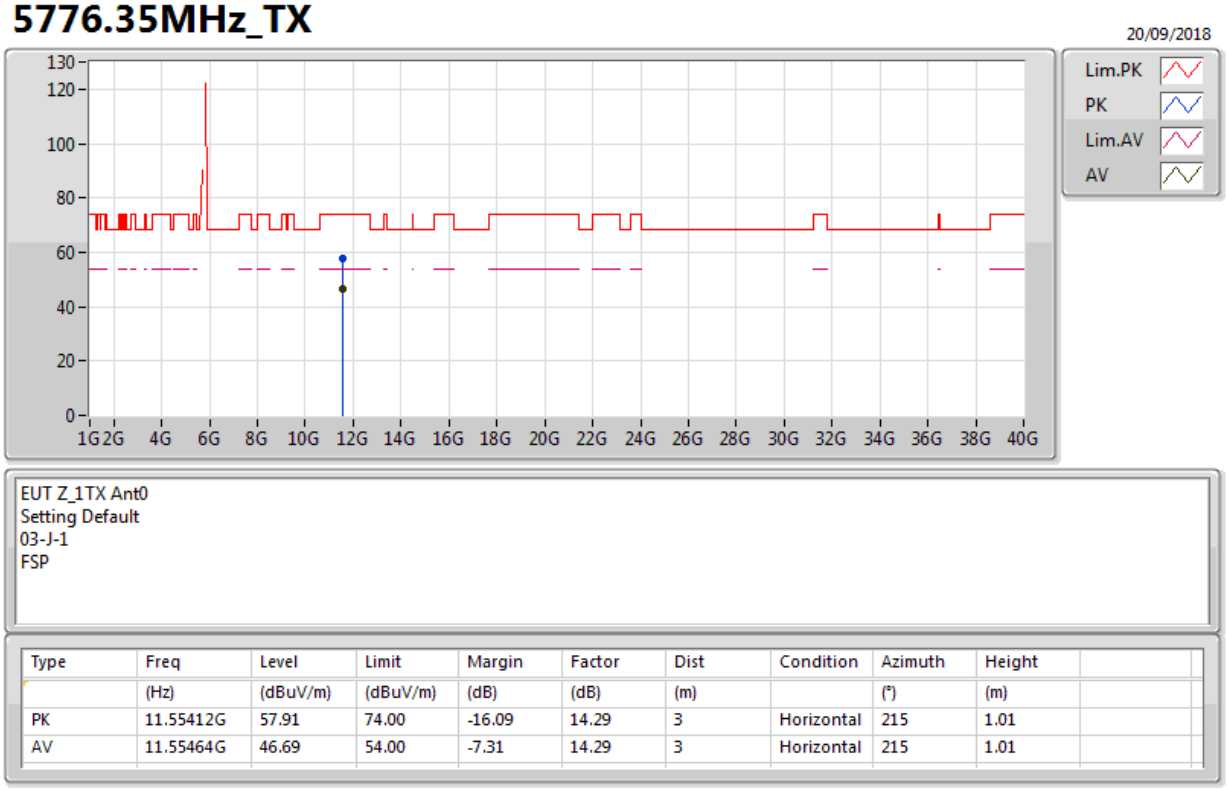


EUT Z_1TX Ant0
Setting Default
03-J-1
FSP

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
PK	11.5496G	56.16	74.00	-17.84	14.28	3	Vertical	179	2.83
AV	11.54996G	45.45	54.00	-8.55	14.28	3	Vertical	179	2.83

4-DQPSK,4M_Nss1_1TX

5776.35MHz_TX

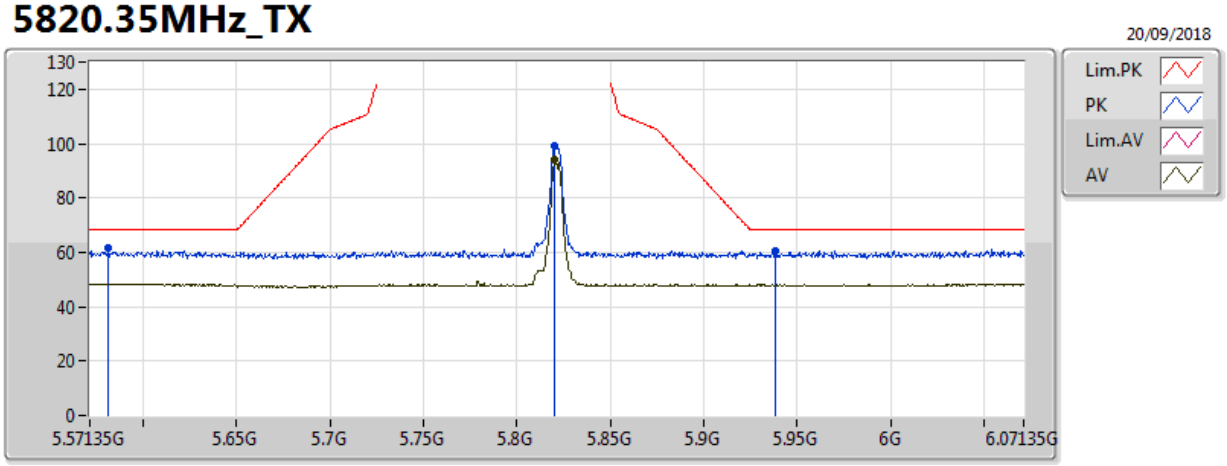


EUT Z_1TX Ant0
Setting Default
03-J-1
FSP

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
PK	11.55412G	57.91	74.00	-16.09	14.29	3	Horizontal	215	1.01
AV	11.55464G	46.69	54.00	-7.31	14.29	3	Horizontal	215	1.01

4-DQPSK,4M_Nss1_1TX

5820.35MHz_TX

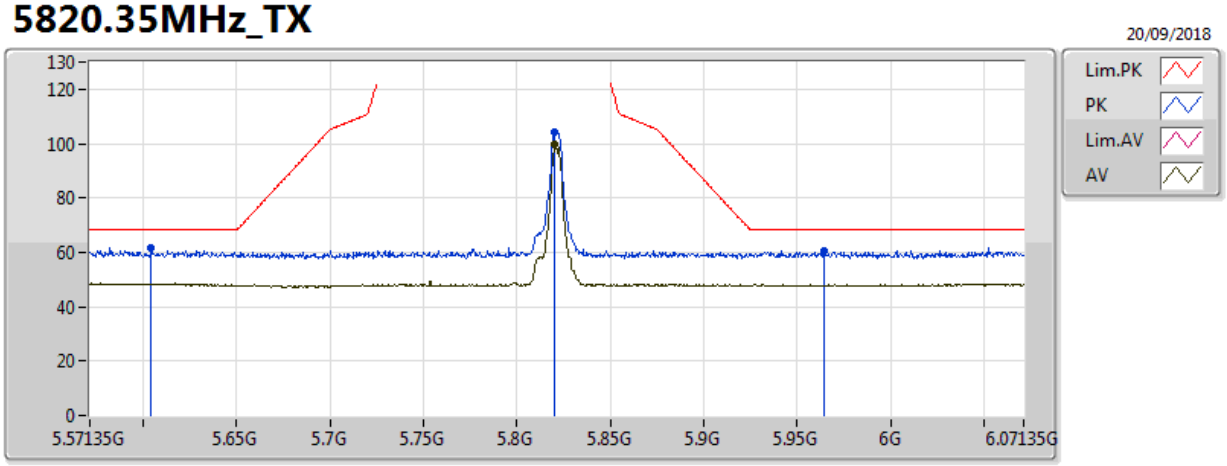


EUT Z_1TX Ant0
Setting Default
03-M-1-10
FSP

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
PK	5.58135G	61.76	68.20	-6.44	7.07	3	Vertical	190	1.01
PK	5.82035G	99.01	Inf	-Inf	7.29	3	Vertical	190	1.01
AV	5.82035G	94.13	Inf	-Inf	7.29	3	Vertical	190	1.01
PK	5.93835G	60.42	68.20	-7.78	7.22	3	Vertical	190	1.01

4-DQPSK,4M_Nss1_1TX

5820.35MHz_TX

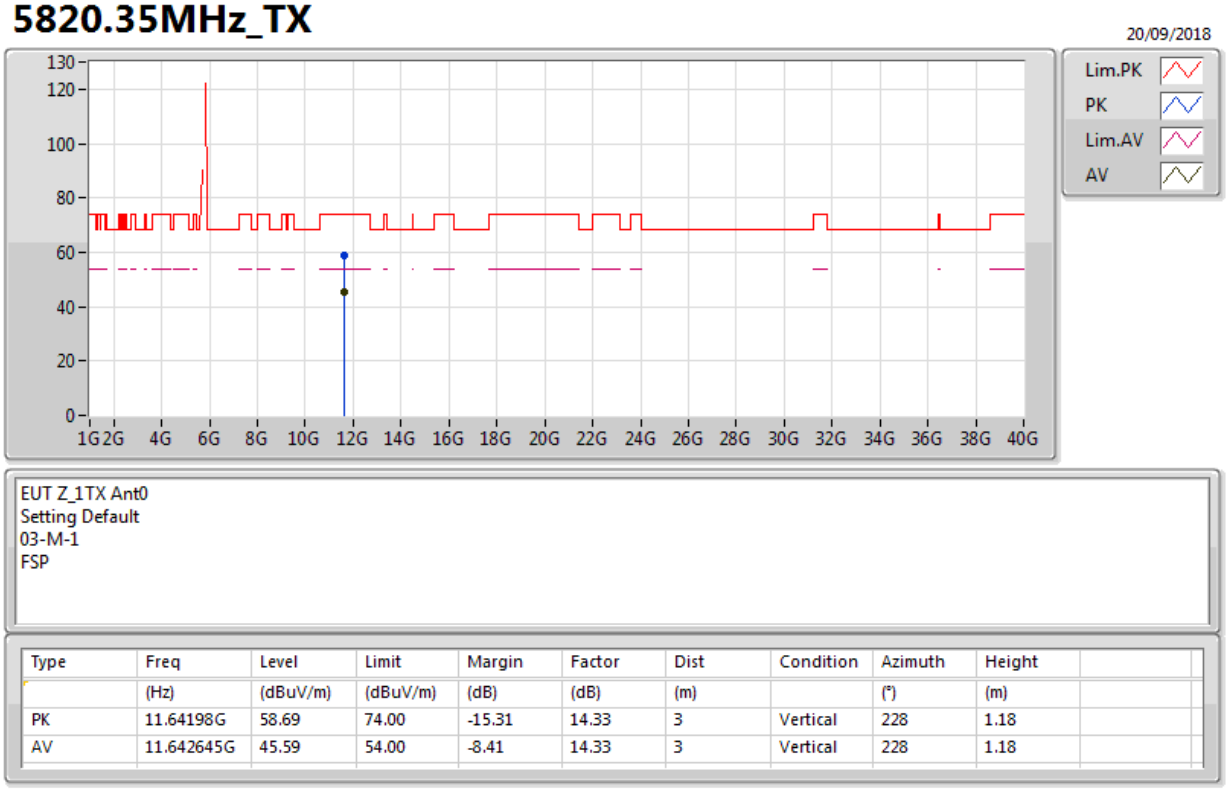


EUT Z_1TX Ant0
Setting Default
03-M-1-10
FSP

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
PK	5.60435G	61.56	68.20	-6.64	7.08	3	Horizontal	155	1.01
PK	5.82035G	104.49	Inf	-Inf	7.29	3	Horizontal	155	1.01
AV	5.82035G	99.68	Inf	-Inf	7.29	3	Horizontal	155	1.01
PK	5.96485G	60.47	68.20	-7.73	7.19	3	Horizontal	155	1.01

4-DQPSK,4M_Nss1_1TX

5820.35MHz_TX

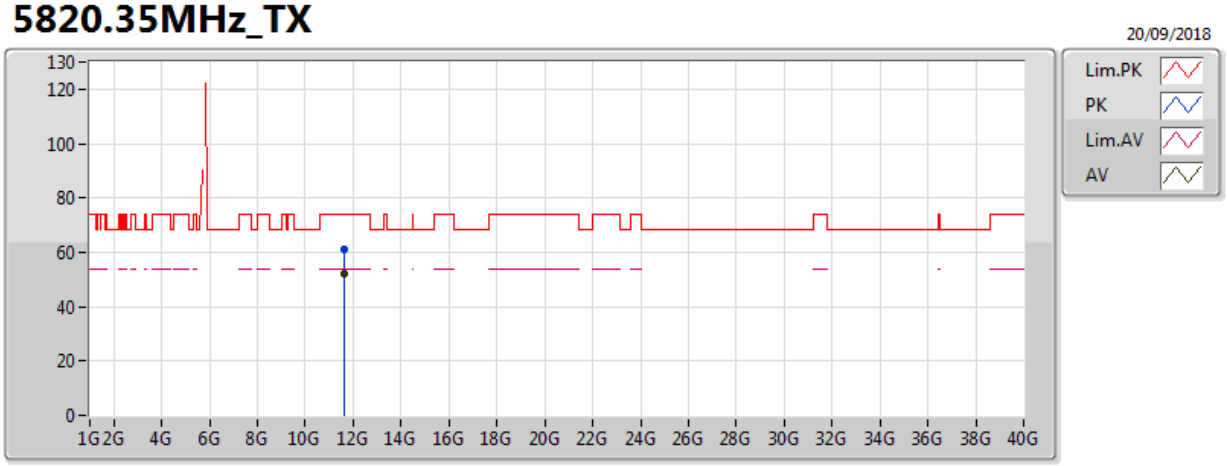


EUT Z_1TX Ant0
Setting Default
03-M-1
FSP

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
PK	11.64198G	58.69	74.00	-15.31	14.33	3	Vertical	228	1.18
AV	11.642645G	45.59	54.00	-8.41	14.33	3	Vertical	228	1.18

4-DQPSK,4M_Nss1_1TX

5820.35MHz_TX



EUT Z_1TX Ant0
Setting Default
03-M-1
FSP

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)
PK	11.642155G	61.31	74.00	-12.69	14.33	3	Horizontal	236	1.01
AV	11.64268G	51.98	54.00	-2.02	14.33	3	Horizontal	236	1.01