FCC RADIO TEST REPORT

FCC ID	:	TX2-RTL8723DE
Equipment	:	802.11 b/g/n RTL8723DE Combo module
Brand Name	:	REALTEK
Model Name	:	RTL8723DE
Applicant	:	Realtek Semiconductor Corp. No. 2,Innovation Road II, Hsinchu Science Park, Hsinchu 300,Taiwan
Manufacturer	:	Realtek Semiconductor Corp. No. 2,Innovation Road II, Hsinchu Science Park, Hsinchu 300,Taiwan
Standard	:	47 CFR FCC Part 15.247

The product was received on Jan. 12, 2018, and testing was started from Jan. 22, 2018 and completed on Apr. 21, 2018. We, SPORTON INTERTIONAL 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 variant report apply exclusively to the tested model / sample. Without written approval of SPORTON INTERTIONAL INC. EMC & Wireless Communications Laboratory, the test report shall not be reproduced except in full.

Approved by: Sam Chen

SPORTON INTERTIONAL 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
FR5D1601-14AC	01	Initial issue of report	Jun. 26, 2018

Summary of Test Result

Report Clause	Ref Std. Clause	Test Items	Result (PASS/FAIL)	Remark
1.1.2	15.203	Antenna Requirement	PASS	-
3.1	15.207	AC Power-line Conducted Emissions	PASS	-
3.2	15.247(d)	Emissions in Restricted Frequency Bands	PASS	-

Reviewed by: Sam Chen
Report Producer: Vicky Huang

1 General Description

1.1 Information

1.1.1 RF General Information

Frequency Range (MHz)	Bluetooth Mode	Ch. Frequency (MHz)	Channel Number
2400-2483.5	LE	2402-2480	0-39 [40]

Band	Mode	BWch (MHz)	Nant
2.4G	BT-LE	1	1

Note:
- 2.4G is the 2.4GHz Band (2.4-2.4835GHz).
- Bluetooth LE uses a GFSK modulation for DSSS.
- 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	P/N	Antenna Type	Connector	Gain (dBi)
1	LYNwave	ALA110-222050-300011	PIFA Antenna	I-PEX MHF4	3.5
2	PSA	RFDPA171320EMLB301	Dipole Antenna	I-PEX MHF4	3.14

Note: The detail antenna information please refer to Antenna List.

Chain 1(Port 1) and Chain 2(Port 2) can connect to Ant. 1 or Ant. 2.

For EUT 1:

The EUT supports the antenna with TX/RX diversity function for WLAN and Bluetooth.

For WLAN 802.11b/g/n (1TX, 1RX) mode:

Both of Chain 1(Port 1) and Chain 2(Port 2) can be used as transmitting/receiving antennas, but only one antenna can be used as transmitting/receiving antenna at the one time.

For Bluetooth mode:

Base on WLAN's operation mode to select the other antenna to work.

(Ex. Assume Main port was selected to conduct transmitting function in WLAN, so AUX port was selected in Bluetooth Mode. Vice versa.)

For EUT 3:

The EUT supports the antenna with TX/RX diversity function for WLAN and Bluetooth.

For WLAN 802.11b/g/n (1TX, 1RX) mode:

Both of Chain 1(Port 1) and Chain 2(Port 2) can be used as transmitting/receiving antennas, but only one antenna can be used as transmitting/receiving antenna at the one time.

Chain 1(Port 1) generated the worst case than Chain 2(Port 2), so it is tested and recorded in the report.

For Bluetooth mode:

Base on WLAN's operation mode to select the other antenna to work.

(Ex. Assume Main port was selected to conduct transmitting function in WLAN,

so AUX port was selected in Bluetooth Mode. Vice versa.)

Chain 2(Port 2) generated the worst case than Chain 1(Port 1), so it is tested and recorded in the report.

For EUT 2、EUT 4 and EUT 5:

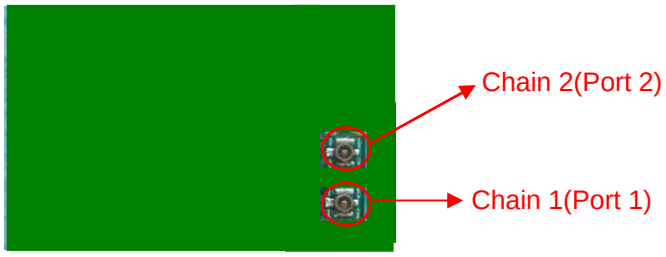
For WLAN 802.11b/g/n (1TX, 1RX) mode:

Chain 1(Port 1) can be used as transmitting/receiving antenna.

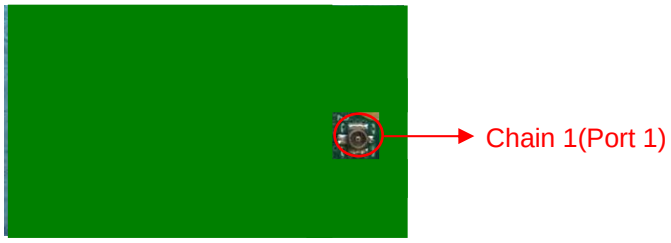
For Bluetooth mode:

Chain 1(Port 1) can be used as transmitting/receiving antenna.

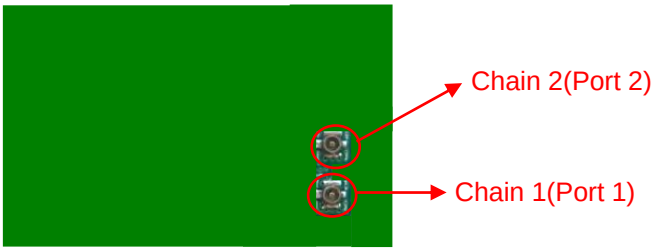
For EUT 1:



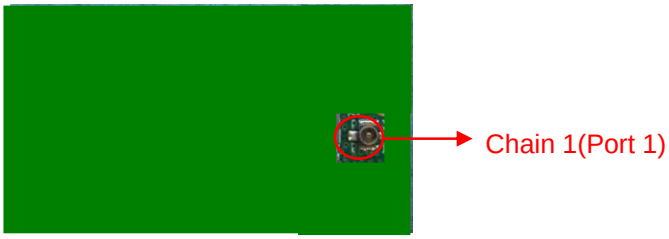
For EUT 2:



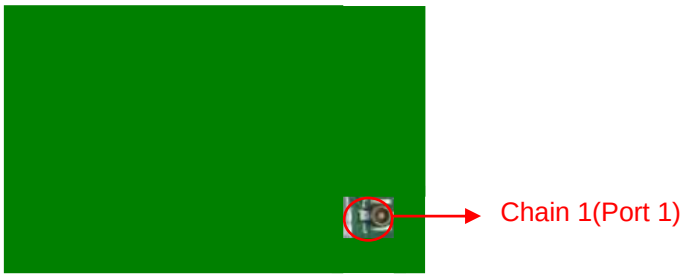
For EUT 3:



For EUT 4:



For EUT 5:



1.1.3 Mode Test Duty Cycle

For EUT 3 and EUT 4:

Mode	On Time (ms)	On+Off Time (ms)	Duty Cycle (%)	Duty Factor (dB)	1/T Minimum VBW (kHz)
BT-LE	0.096	0.632	15.19%	8.18	10.42

For EUT 5:

Mode	On Time (ms)	On+Off Time (ms)	Duty Cycle (%)	Duty Factor (dB)	1/T Minimum VBW (kHz)
BT-LE	0.385	0.625	61.60	2.10	2.60

1.1.4 EUT Operational Condition

EUT Power Type	From host system			
Function	☒	Point-to-multipoint	☐	Point-to-point
Test Software Version	Bluetooth MP Tool			
Support Mode	☒	LE 1M PHY: 1 Mb/s		
	☐	LE Coded PHY (S=2): 500 Kb/s		
	☐	LE Coded PHY (S=8): 125 Kb/s		
	☐	LE 2M PHY: 2 Mb/s		

1.1.5 Table for Multiple Listing

The EUT has five types which are identical to each other in all aspects except for the following table:

Model Name	EUT	Interface		Function	
		E key	A+E key	Diversity	Fixed
RTL8723DE	1	V	-	V	-
	2	V	-	-	V
	3	-	V	V	-
	4	-	V	-	V (fixed to CON2)
	5	-	V	-	V (fixed to CON1)

Interface	Description
E key	There are two interface for different platform connector, all the RF circuit and electric identity are the same.
A+E key	

Note: According to above, there are only EUT 3 ~ EUT 5 were selected to test and record in the report as a result.

1.1.6 Table for Class II Change

This product is an extension of original one reported under Sporton project number: FR5D1601-20AC

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

Modifications	Performance Checking
Updated for A + E Key board (EUT 3~5) (Modify the matching on RF antenna trace and modify power Capacitor to Improve platform interference).	1. AC Power-line Conducted Emissions 2. Emissions in Restricted Frequency Bands 3. Radiated Emission Co-location

Note: The above test items will be based on original output power to re-test.

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 558074 D01 v04

1.3 Testing Location Information

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

Test Condition	Test Site No.	Test Engineer	Test Environment	Test Date
Radiated	03CH01-CB	Lucke Hsieh & Justin Lin	22°C / 57%	Jan. 22, 2018 ~ Apr. 21, 2018
AC Conduction	CO01-CB	Max Lin	18°C / 50%	Feb. 05, 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
Conducted Emission (150kHz ~ 30MHz)	3.2 dB	Confidence levels of 95%
Radiated Emission (30MHz ~ 1,000MHz)	3.6 dB	Confidence levels of 95%
Radiated Emission (1GHz ~ 18GHz)	3.7 dB	Confidence levels of 95%
Radiated Emission (18GHz ~ 40GHz)	3.5 dB	Confidence levels of 95%

2 Test Configuration of EUT

2.1 Test Channel Mode

Band	Mode	BWch (MHz)	Nss-Min	Nant	Ch. (MHz)	Range
2.4G	BT-LE	1	1	1	2402	L
2.4G	BT-LE	1	1	1	2442	M
2.4G	BT-LE	1	1	1	2480	H

2.2 The Worst Case Measurement Configuration

The Worst Case Mode for Following Conformance Tests	
Tests Item	AC power-line conducted emissions
Condition	AC power-line conducted measurement for line and neutral
Operating Mode	Normal Link
1	Place EUT 3-A+E key-Diversity in Z axis + Antenna 1
2	Place EUT 5-A+E key-Fixed in Z axis + Antenna 1
3	Place EUT 4-A+E key-Fixed in Z axis + Antenna 1
4	Place EUT 3-A+E key-Diversity in Z axis + Antenna 2
5	Place EUT 5-A+E key-Fixed in Z axis + Antenna 2
6	Place EUT 4-A+E key-Fixed in Z axis + Antenna 2
For operating mode 3 is the worst case and it was record in this test report.	

The Worst Case Mode for Following Conformance Tests	
Tests Item	Emissions in Restricted Frequency Bands
Test Condition	Radiated measurement If EUT consist of multiple antenna assembly (multiple antenna are used in EUT regardless of spatial multiplexing MIMO configuration), the radiated test should be performed with highest antenna gain of each antenna type.
Operating Mode < 1GHz	Normal Link
1	Place EUT 3-A+E key-Diversity in Z axis + Antenna 1
2	Place EUT 5-A+E key-Fixed in Z axis + Antenna 1
3	Place EUT 4-A+E key-Fixed in Z axis + Antenna 1
4	Place EUT 3-A+E key-Diversity in Z axis + Antenna 2
5	Place EUT 5-A+E key-Fixed in Z axis + Antenna 2
6	Place EUT 4-A+E key-Fixed in Z axis + Antenna 2
For operating mode 1 is the worst case and it was record in this test report.	
Operating Mode > 1GHz	CTX
The EUT can be placed in X axis, Y axis and Z axis. After evaluating, Z axis was the worst case, so it's recorded in this report.	
1	Place EUT 3-A+E key-Diversity in Z axis + Antenna 1
2	Place EUT 5-A+E key-Fixed in Z axis + Antenna 1
3	Place EUT 4-A+E key-Fixed in Z axis + Antenna 1
4	Place EUT 3-A+E key-Diversity in Z axis + Antenna 2
5	Place EUT 5-A+E key-Fixed in Z axis + Antenna 2
6	Place EUT 4-A+E key-Fixed in Z axis + Antenna 2

The Worst Case Mode for Following Conformance Tests	
Tests Item	Simultaneous Transmission Analysis - Radiated Emission Co-location
Test Condition	Radiated measurement
Operating Mode	Normal Link
The EUT can be placed in X axis, Y axis and Z axis. After evaluating, Z axis was the worst case, so it's recorded in this report.	
1	Place EUT 3-A+E key-Diversity in Z axis + Antenna 1
2	Place EUT 5-A+E key-Fixed in Z axis + Antenna 1
3	Place EUT 4-A+E key-Fixed in Z axis + Antenna 1
4	Place EUT 3-A+E key-Diversity in Z axis + Antenna 2
5	Place EUT 5-A+E key-Fixed in Z axis + Antenna 2
6	Place EUT 4-A+E key-Fixed in Z axis + Antenna 2
Refer to Appendix C for Radiated Emission Co-location.	

The Worst Case Mode for Following Conformance Tests	
Tests Item	Simultaneous Transmission Analysis - Co-location RF Exposure Evaluation
Operating Mode	
1	Bluetooth+WLAN 2.4GHz
Refer to Sporton Test Report No.: FA5D1601-14 for Co-location RF Exposure Evaluation.	

2.3 EUT Operation during Test

For CTX Mode:

The EUT was programmed to be in continuously transmitting mode.

For Normal Link:

During the test, the EUT operation to normal function.

2.4 Accessories

N/A

2.5 Support Equipment

For Test Site No: CO01-CB

Support Equipment				
No.	**Equipment**	**Brand Name**	**Model Name**	**FCC ID**
1	NB*2	DELL	E6430	DoC
2	AP	ASUS	RP-N53	MSQ-RPN53
3	Test fixture*2	REALTEK	Ameba adapter	N/A
4	Device	REALTEK	RTL8723DE	TX2-RTL8723DE
5	Earphone	SHYARO CHI	MIC-04	N/A
6	Mouse	HP	FM100	N/A

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

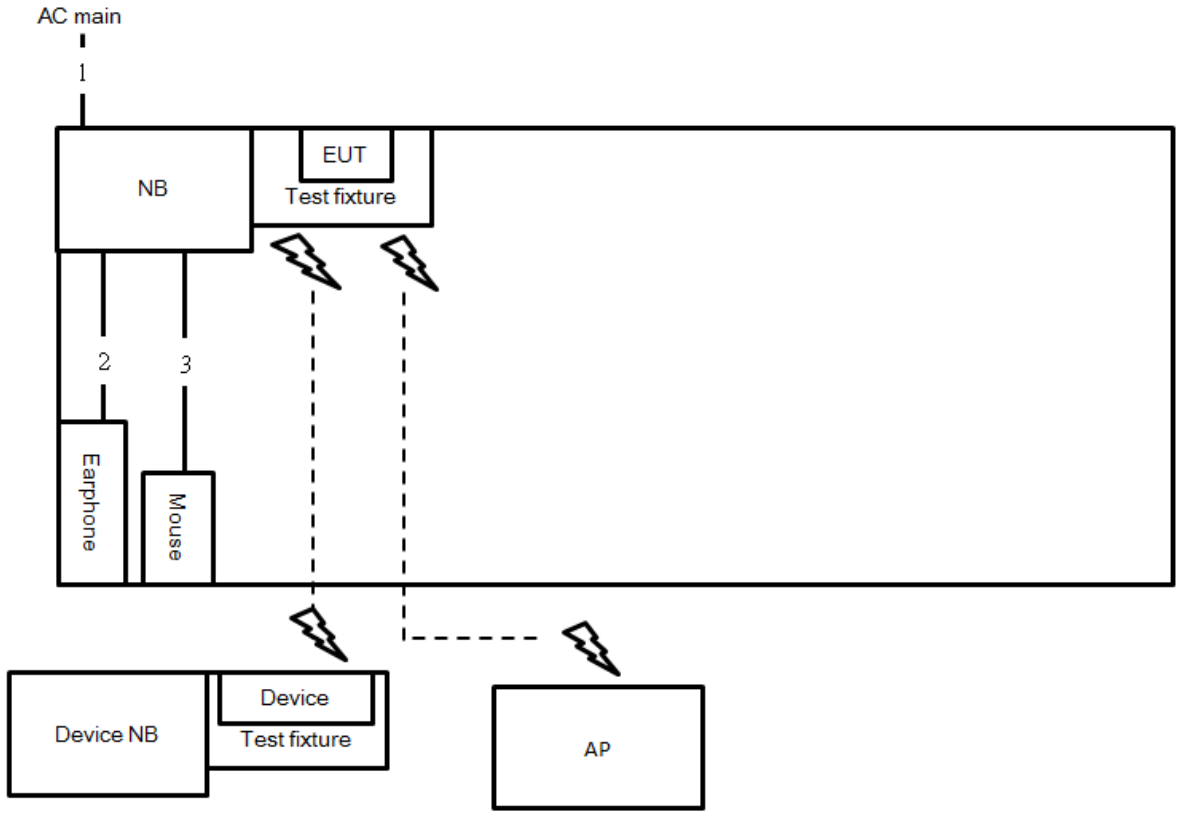
Support Equipment				
No.	**Equipment**	**Brand Name**	**Model Name**	**FCC ID**
1	NB*2	DELL	E4300	DoC
2	AP	Netgear	R6300V2	PY313200227
3	Test fixture*2	REALTEK	Ameba adapter	N/A
4	Device	REALTEK	RTL8723DE	TX2-RTL8723DE
5	Earphone	SHYARO CHI	MIC-04	N/A
6	Mouse	Logitech	M-U0026	N/A

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

Support Equipment				
No.	**Equipment**	**Brand Name**	**Model Name**	**FCC ID**
1	NB	DELL	E4300	DoC
2	Test fixture	REALTEK	Ameba adapter	N/A

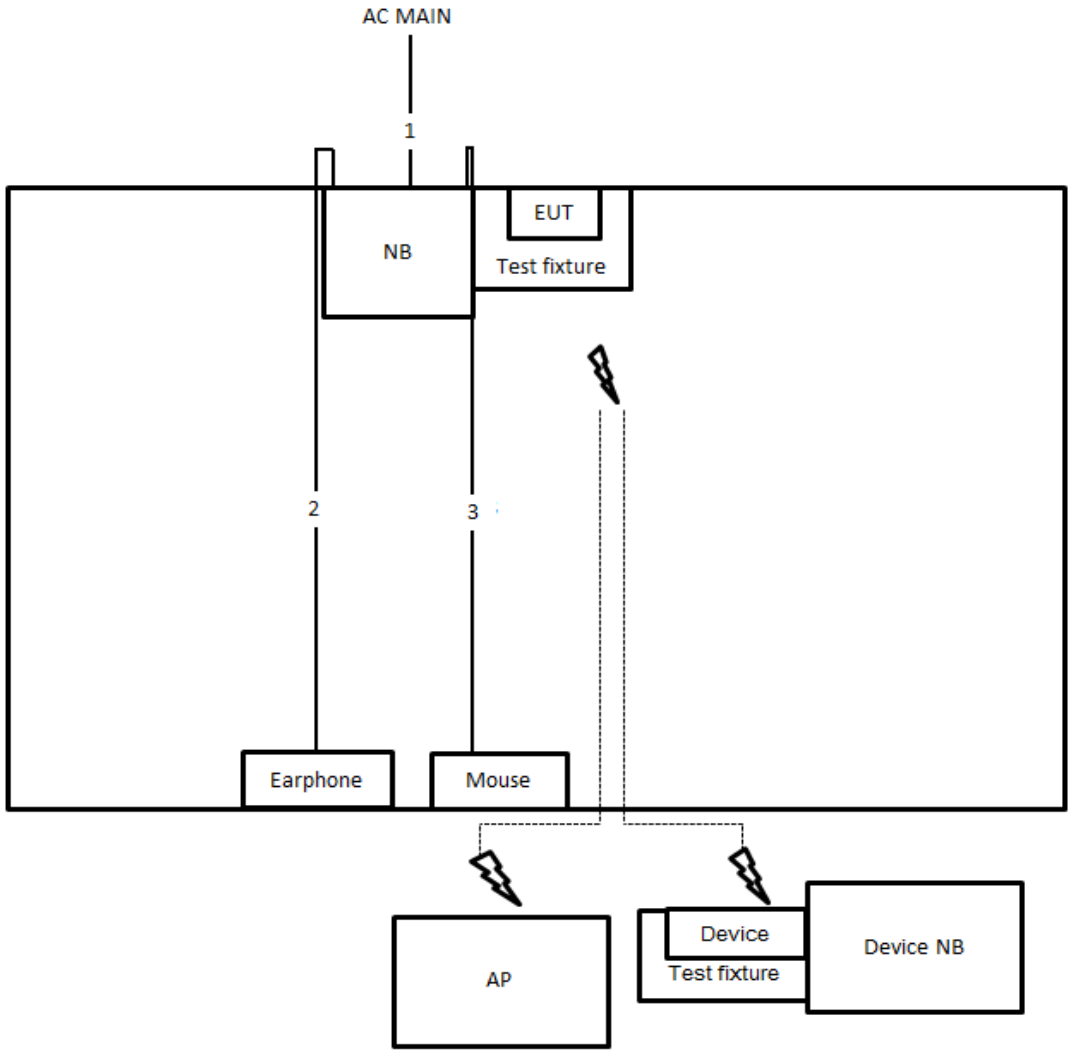
2.6 Test Setup Diagram

Test Setup Diagram – AC Line Conducted Emission Test



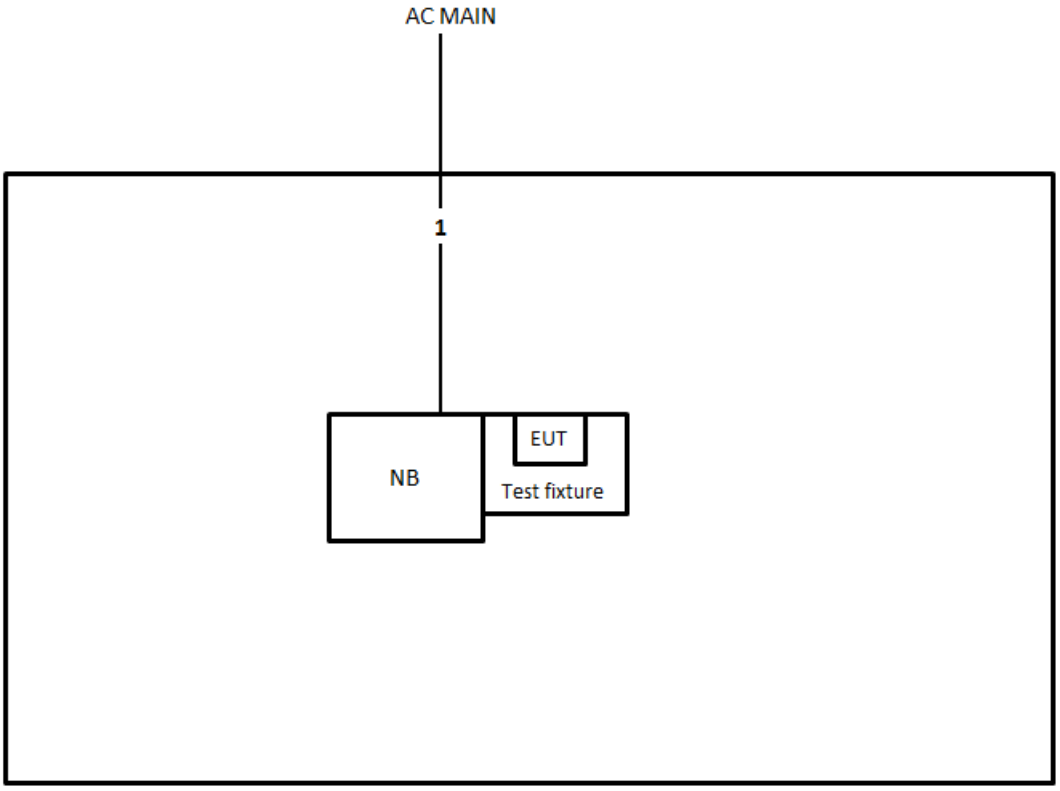
Item	Connection	Shielded	Length
1	Power cable	No	2.6m
2	Audio cable	No	1.8m
3	USB cable	Yes	1m

Test Setup Diagram - Radiated Test < 1GHz



Item	Connection	Shielded	Length
1	Power cable	No	2.6m
2	Audio cable	No	1.1m
3	USB cable	Yes	1.8m

Test Setup Diagram - Radiated Test > 1GHz



Item	Connection	Shielded	Length
1	Power cable	No	2.6m

3 Transmitter Test Result

3.1 AC Power-line Conducted Emissions

3.1.1 AC Power-line Conducted Emissions Limit

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

3.1.2 Measuring Instruments

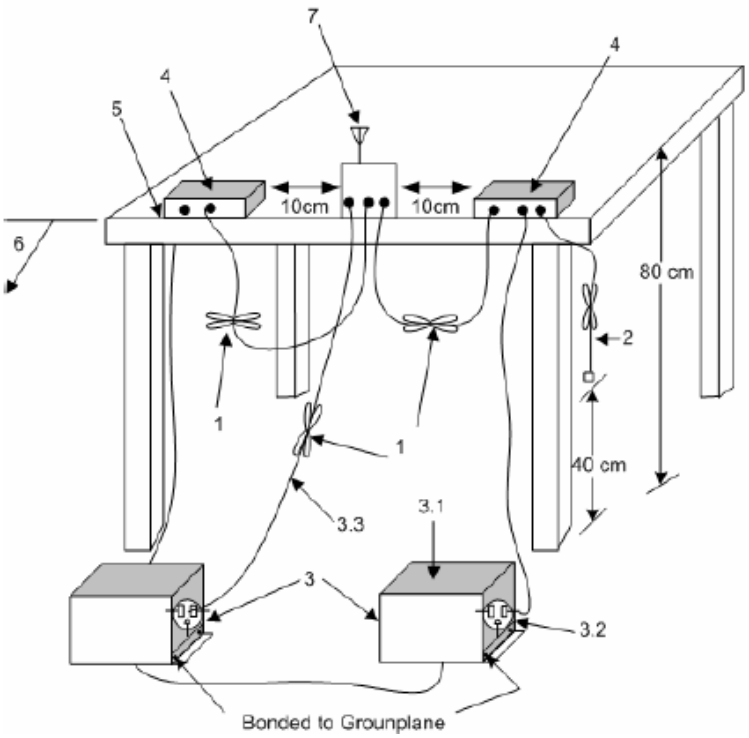
Refer a test equipment and calibration data table in this test report.

3.1.3 Test Procedures

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

3.1.4 Test Setup

AC Power-line Conducted Emissions



1—Interconnecting cables that hang closer than 40 cm to the ground plane shall be folded back and forth in the center forming a bundle 30 cm to 40 cm long.
2—The I/O cables that are not connected to an accessory shall be bundled in the center. The end of the cable may be terminated, if required, using the correct terminating impedance. The overall length shall not exceed 1 m.
3—EUT connected to one LISN. Unused LISN measuring port connectors shall be terminated in 50 Ω loads. LISN may be placed on top of, or immediately beneath, reference ground plane.
3.1—All other equipment powered from additional LISN(s).
3.2—A multiple-outlet strip may be used for multiple power cords of non-EUT equipment.
3.3—LISN at least 80 cm from nearest part of EUT chassis.
4—Non-EUT components of EUT system being tested.
5—Rear of EUT, including peripherals, shall all be aligned and flush with edge of tabletop.
6—Edge of tabletop shall be 40 cm removed from a vertical conducting plane that is bonded to the ground plane.
7—Antenna can be integral or detachable. If detachable, then the antenna shall be attached for this test.

3.1.5 Test Result of AC Power-line Conducted Emissions

Refer as Appendix A

3.2 Emissions in Restricted Frequency Bands

3.2.1 Emissions in Restricted Frequency Bands Limit

Restricted Band Emissions 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 below30 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.

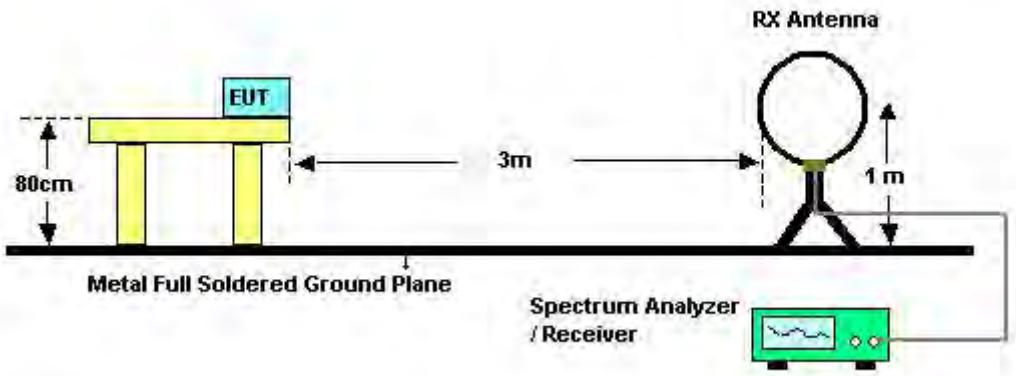
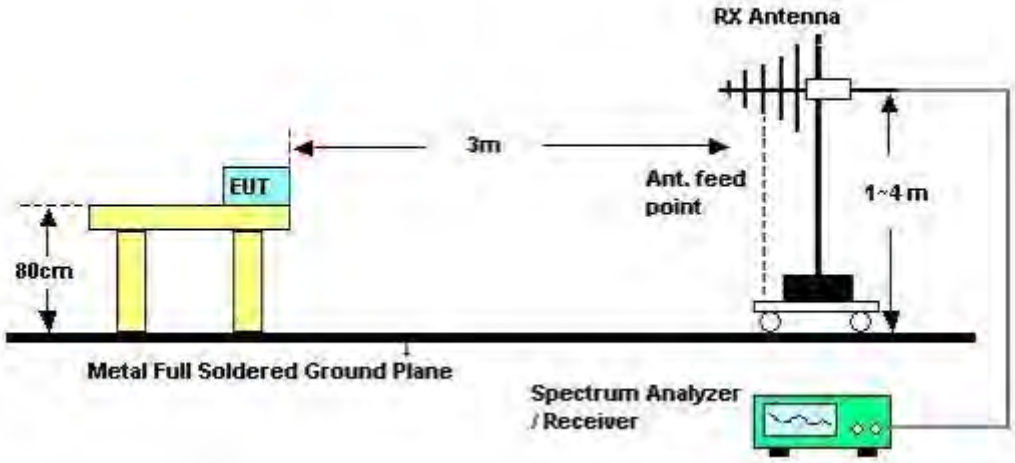
3.2.2 Measuring Instruments

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

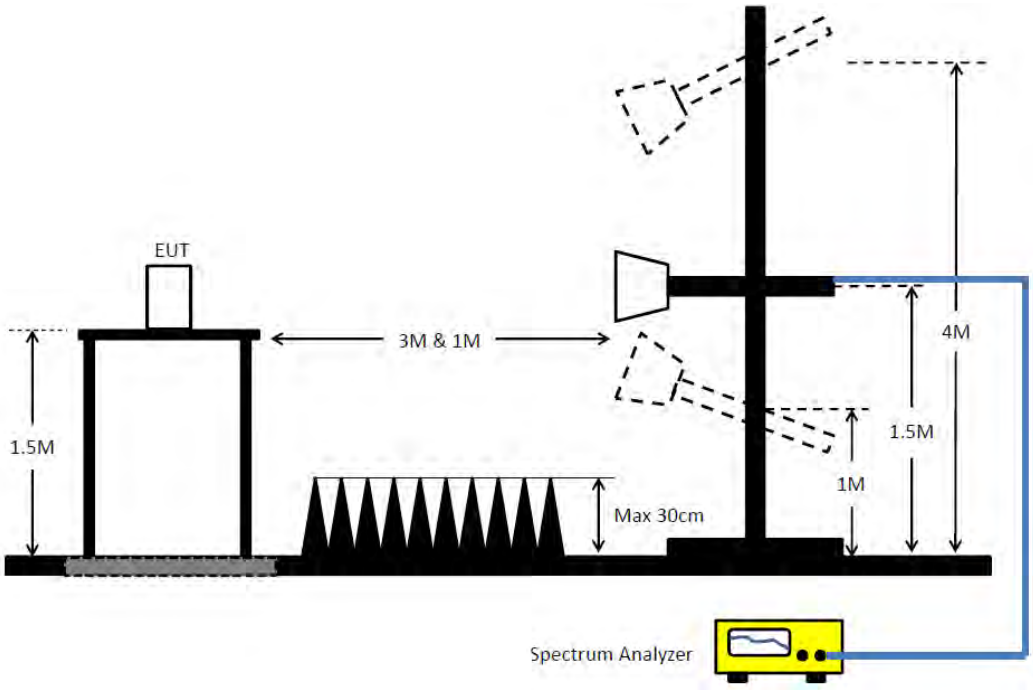
3.2.3 Test Procedures

Test Method			
▪ The average emission levels shall be measured in [duty cycle ≥ 98 or duty factor].			
▪ Refer as ANSI C63.10, clause 6.9.2.2 band-edge testing shall be performed at the lowest frequency channel and highest frequency channel within the allowed operating band.			
▪ For the transmitter unwanted emissions shall be measured using following options below:			
	▪ Refer as FCC KDB 558074, clause 12 for unwanted emissions into restricted bands.		
		☐	Refer as FCC KDB 558074, clause 12.2.5.1 Option 1 (trace averaging for duty cycle ≥98%)
		☐	Refer as FCC KDB 558074, clause 12.2.5.2 Option 2 (trace averaging + duty factor).
		☒	Refer as FCC KDB 558074, clause 12.2.5.3 Option 3 (Reduced VBW≥1/T).
		☐	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 558074, clause 12.2.4 measurement procedure peak limit.
▪ For the transmitter band-edge emissions shall be measured using following options below:			
	▪ Refer as FCC KDB 558074 clause 13.1, When the performing peak or average radiated measurements, emissions within 2 MHz of the authorized band edge may be measured using the marker-delta method described below.		
	▪ Refer as FCC KDB 558074, clause 13.2 (ANSI C63.10, clause 6.9.3) for marker-delta method for band-edge measurements.		
	▪ Refer as FCC KDB 558074, clause 13.3 for narrower resolution bandwidth (100kHz) using the band power and summing the spectral levels (i.e., 1 MHz).		
▪ For conducted and cabinet radiation measurement, refer as FCC KDB 558074, clause 12.2.2.			
	▪ For conducted unwanted emissions into restricted bands (absolute emission limits). Devices with multiple transmit chains using options given below: (1) Measure and sum the spectra across the outputs or (2) Measure and add 10 log(N) dB		
	▪ For FCC KDB 662911 The methodology described here may overestimate array gain, thereby resulting in apparent failures to satisfy the out-of-band limits even if the device is actually compliant. In such cases, compliance may be demonstrated by performing radiated tests around the frequencies at which the apparent failures occurred.		

3.2.4 Test Setup

Transmitter Radiated Emissions
9kHz ~30MHz

30MHz~1GHz


Above 1GHz



3.2.5 Transmitter Radiated 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.

3.2.6 Transmitter Radiated Unwanted Emissions

Refer as Appendix B

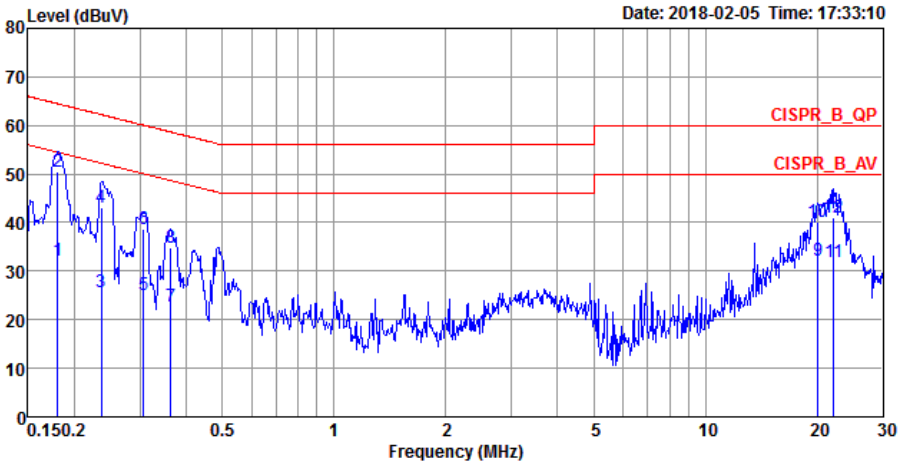
4 Test Equipment and Calibration Data

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date	Remark
EMI Receiver	Agilent	N9038A	My52260123	9kHz ~ 8.45GHz	Jan. 31, 2018	Jan. 30, 2019	Conduction (CO01-CB)
LISN	F.C.C.	FCC-LISN-50-16-2	04083	150kHz ~ 100MHz	Dec. 20, 2017	Dec. 19, 2018	Conduction (CO01-CB)
LISN	Schwarzbeck	NSLK 8127	8127647	9kHz ~ 30MHz	Dec. 29, 2017	Dec. 28, 2018	Conduction (CO01-CB)
COND Cable	Woken	Cable	01	150kHz ~ 30MHz	May 23, 2017	May 22, 2018	Conduction (CO01-CB)
Software	Audix	E3	6.120210n	-	N.C.R.	N.C.R.	Conduction (CO01-CB)
BILOG ANTENNA with 6dB Attenuator	TESEQ & EMCI	CBL6112D & N-6-06	37880 & AT-N0609	20MHz ~ 2GHz	Aug. 30, 2017	Aug. 29, 2018	Radiation (03CH01-CB)
Loop Antenna	Teseq	HLA 6120	24155	9kHz - 30 MHz	Mar. 16, 2016*	Mar. 15, 2018*	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	Jul. 05, 2017	Jul. 04, 2018	Radiation (03CH01-CB)
Pre-Amplifier	EMCI	EMC330N	980332	20MHz ~ 3GHz	May 02, 2017	May 01, 2018	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. 10, 2017	Jul. 09, 2018	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	Oct. 11, 2017	Oct. 10, 2018	Radiation (03CH01-CB)

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date	Remark
RF Cable-high	Woken	High Cable-40G#2	N/A	18GHz ~ 40 GHz	Oct. 11, 2017	Oct. 10, 2018	Radiation (03CH01-CB)

Note: Calibration Interval of instruments listed above is one year.
"*" Calibration Interval of instruments listed above is two years.
NCR means Non-Calibration required.

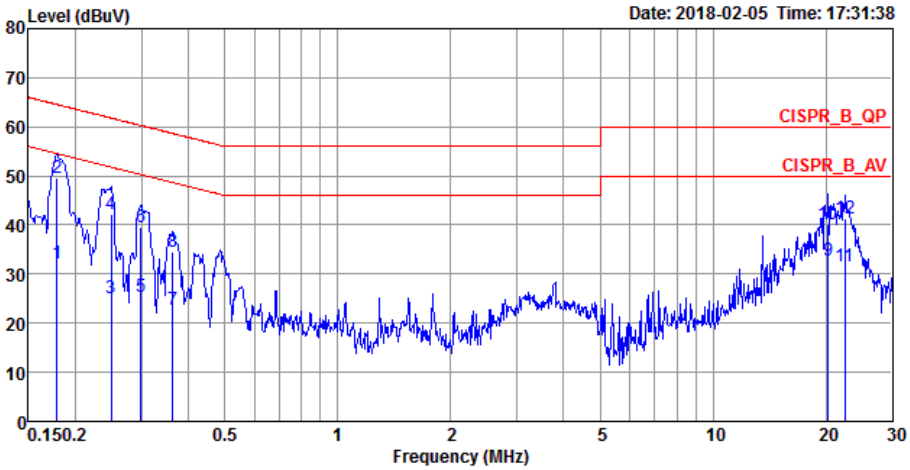
AC Power-line Conducted Emissions Result			
Operating Mode	3	**Power Phase**	Neutral
Operating Function	Normal Link		



	Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark	Pol/Phase
	MHz	dBuV	dB	dBuV	dBuV	dB	dB		
1	0.1806	32.13	-22.33	54.46	22.13	9.99	0.01	Average	NEUTRAL
2	0.1806	50.46	-14.00	64.46	40.46	9.99	0.01	QP	NEUTRAL
3	0.2366	25.61	-26.61	52.22	15.63	9.96	0.02	Average	NEUTRAL
4	0.2366	43.23	-18.99	62.22	33.25	9.96	0.02	QP	NEUTRAL
5	0.3067	25.19	-24.87	50.06	15.22	9.95	0.02	Average	NEUTRAL
6	0.3067	38.72	-21.34	60.06	28.75	9.95	0.02	QP	NEUTRAL
7	0.3634	22.86	-25.79	48.65	12.89	9.94	0.03	Average	NEUTRAL
8	0.3634	34.72	-23.93	58.65	24.75	9.94	0.03	QP	NEUTRAL
9	20.0559	32.27	-17.73	50.00	21.87	10.28	0.12	Average	NEUTRAL
10	20.0559	40.27	-19.73	60.00	29.87	10.28	0.12	QP	NEUTRAL
11	22.1801	31.89	-18.11	50.00	21.45	10.29	0.15	Average	NEUTRAL
12	22.1801	41.11	-18.89	60.00	30.67	10.29	0.15	QP	NEUTRAL

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

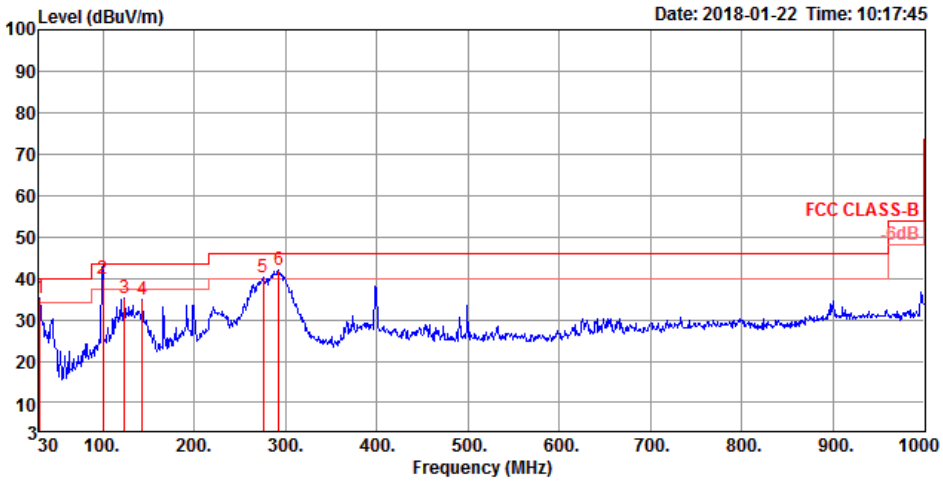
AC Power-line Conducted Emissions Result			
Operating Mode	3	**Power Phase**	Line
Operating Function	Normal Link		



	Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark	Pol/Phase
	MHz	dBuV	dB	dBuV	dBuV	dB	dB		
1	0.1787	32.08	-22.47	54.55	22.13	9.94	0.01	Average	LINE
2	0.1787	49.50	-15.05	64.55	39.55	9.94	0.01	QP	LINE
3	0.2495	25.20	-26.58	51.78	15.28	9.90	0.02	Average	LINE
4	0.2495	42.18	-19.60	61.78	32.26	9.90	0.02	QP	LINE
5	0.2987	25.28	-25.00	50.28	15.37	9.89	0.02	Average	LINE
6	0.2987	39.68	-20.60	60.28	29.77	9.89	0.02	QP	LINE
7	0.3634	22.68	-25.97	48.65	12.77	9.88	0.03	Average	LINE
8	0.3634	34.52	-24.13	58.65	24.61	9.88	0.03	QP	LINE
9	20.2696	32.69	-17.31	50.00	22.35	10.22	0.12	Average	LINE
10	20.2696	40.16	-19.84	60.00	29.82	10.22	0.12	QP	LINE
11	22.4163	31.68	-18.32	50.00	21.27	10.25	0.16	Average	LINE
12	22.4163	41.37	-18.63	60.00	30.96	10.25	0.16	QP	LINE

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

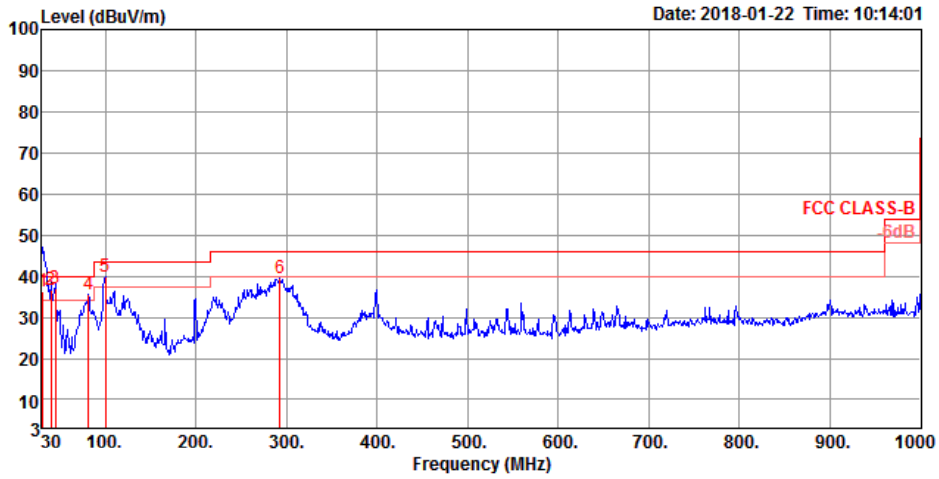
RSE below 1GHz Result			
Operating Mode	1	**Polarization**	Horizontal
Operating Function	Normal Link		



	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	30.97	35.21	40.00	-4.79	41.65	0.98	25.01	32.43	200	276	Peak	HORIZONTAL
2	99.84	39.75	43.50	-3.75	54.20	0.83	17.10	32.38	280	155	QP	HORIZONTAL
3	124.09	35.16	43.50	-8.34	47.76	1.15	18.61	32.36	300	110	Peak	HORIZONTAL
4	143.49	34.97	43.50	-8.53	48.75	1.14	17.42	32.34	200	131	Peak	HORIZONTAL
5	275.41	40.13	46.00	-5.87	50.60	2.51	19.30	32.28	125	214	Peak	HORIZONTAL
6	292.87	41.92	46.00	-4.08	52.03	2.60	19.56	32.27	100	311	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	1	**Polarization**	Vertical
Operating Function	Normal Link		



	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	30.97	36.45	40.00	-3.55	42.89	0.98	25.01	32.43	100	245	QP	VERTICAL
2	39.70	36.68	40.00	-3.32	48.01	1.15	19.95	32.43	100	250	QP	VERTICAL
3	44.55	36.98	40.00	-3.02	50.79	1.36	17.25	32.42	100	247	QP	VERTICAL
4	81.41	35.56	40.00	-4.44	53.40	0.88	13.67	32.39	100	189	Peak	VERTICAL
5	99.84	39.91	43.50	-3.59	54.36	0.83	17.10	32.38	300	73	Peak	VERTICAL
6	292.87	39.55	46.00	-6.45	49.66	2.60	19.56	32.27	100	106	Peak	VERTICAL

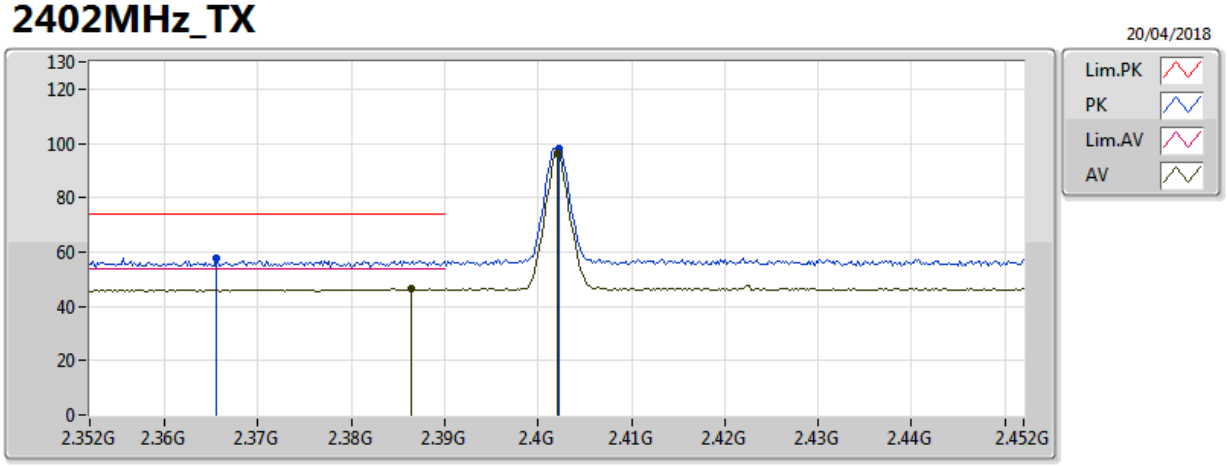
Note 1: ">20dB" means emission levels that exceed the level of 20 dB below the applicable limit.
Note 2: "N/F" means Nothing Found emissions (No emissions were detected.)

Test Mode: Mode 1
Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
2.4-2.4835GHz	-	-	-	-	-	-	-	-	-	-	-	-
BT-LE_Nss1_1TX	Pass	AV	2.483502G	48.44	54.00	-5.56	33.19	3	Horizontal	359	2.74	-

BT-LE_Nss1_1TX

2402MHz_TX

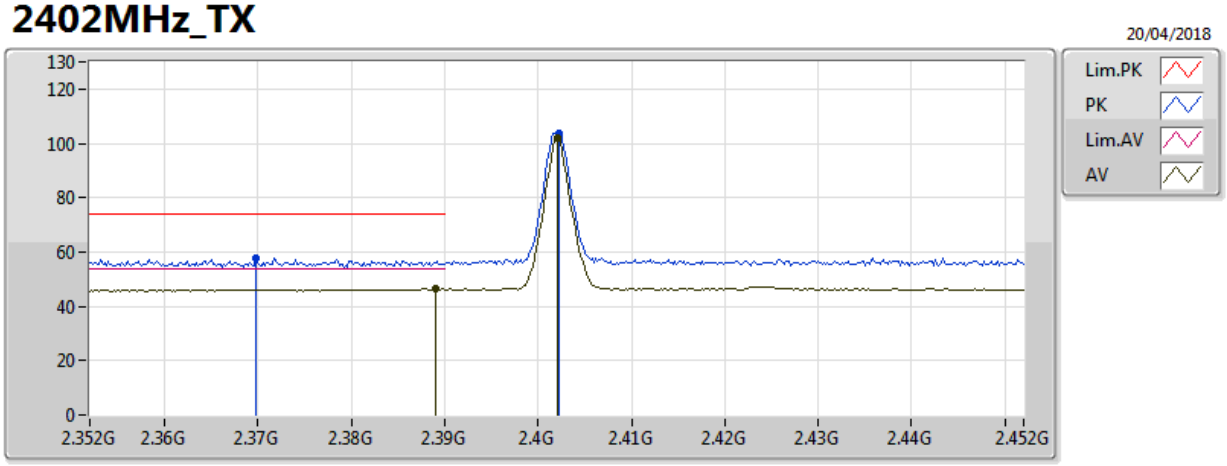


EUT Z_1TX(ANT 1)
Setting 28
04-L-2
FSP(100142)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	2.3864G	46.51	54.00	-7.49	33.16	3	Vertical	285	2.95	-
AV	2.402G	96.52	Inf	-Inf	33.17	3	Vertical	285	2.95	-
PK	2.3656G	57.63	74.00	-16.37	33.15	3	Vertical	285	2.95	-
PK	2.4022G	98.13	Inf	-Inf	33.17	3	Vertical	285	2.95	-

BT-LE_Nss1_1TX

2402MHz_TX

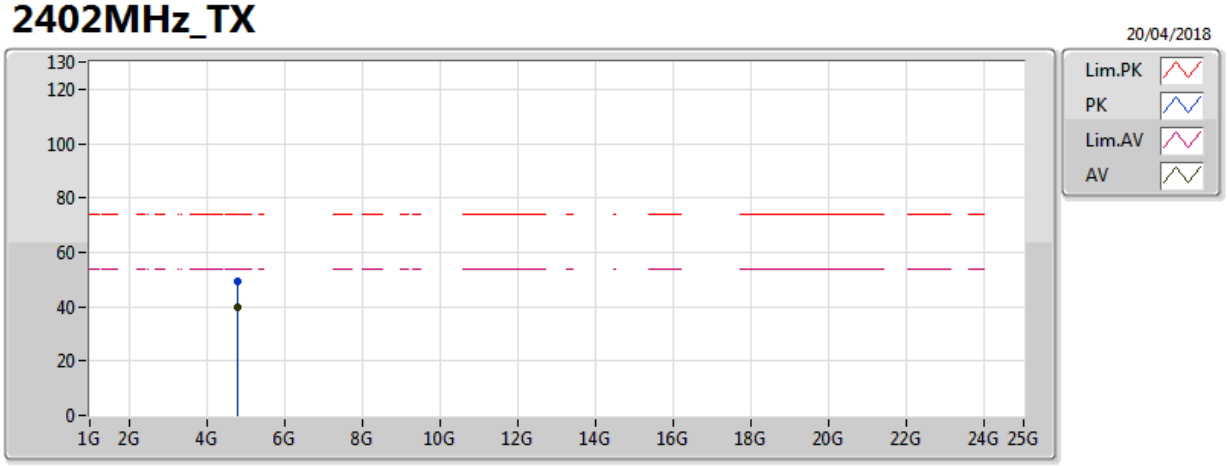


EUT Z_1TX(ANT 1)
Setting 28
04-L-2
FSP(100142)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	2.389G	46.39	54.00	-7.61	33.16	3	Horizontal	184	1.89	-
AV	2.402G	102.07	Inf	-Inf	33.17	3	Horizontal	184	1.89	-
PK	2.3698G	57.64	74.00	-16.36	33.15	3	Horizontal	184	1.89	-
PK	2.4022G	103.73	Inf	-Inf	33.17	3	Horizontal	184	1.89	-

BT-LE_Nss1_1TX

2402MHz_TX

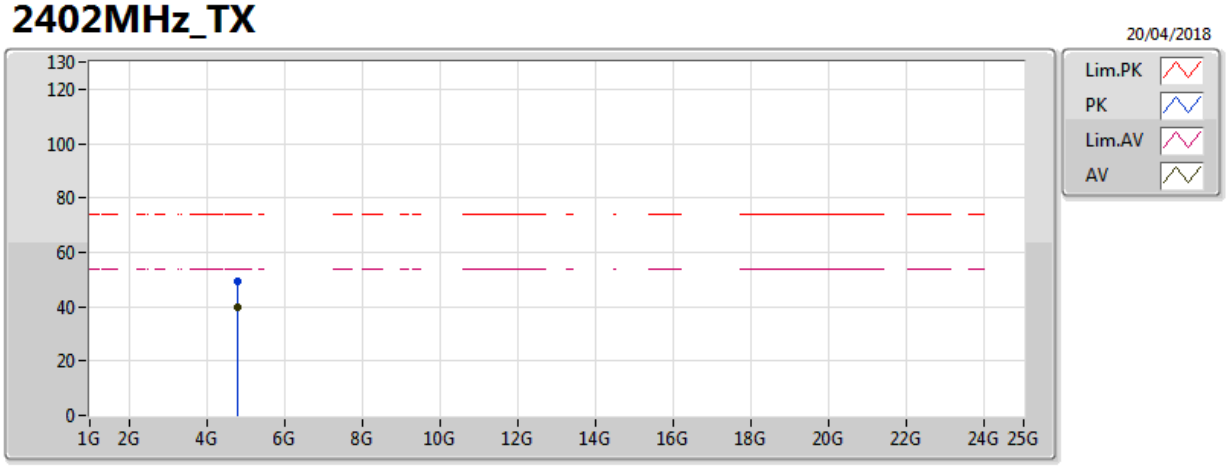


EUT Z_1TX(ANT 1)
Setting 28
04-L-2
FSP(100142)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	4.80523G	39.59	54.00	-14.41	5.93	3	Vertical	4	1.48	-
PK	4.80536G	49.20	74.00	-24.80	5.93	3	Vertical	4	1.48	-

BT-LE_Nss1_1TX

2402MHz_TX

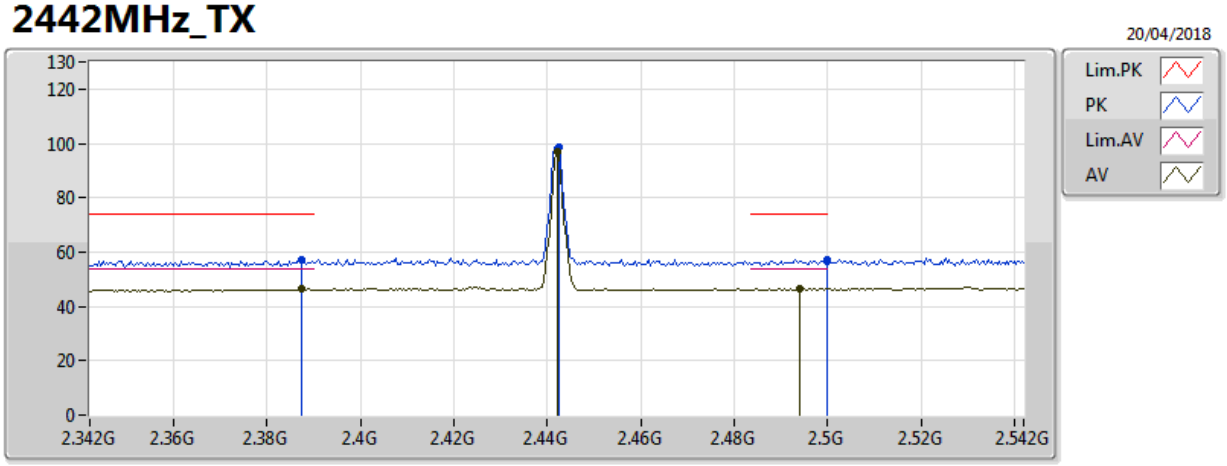


EUT Z_1TX(ANT 1)
Setting 28
04-L-2
FSP(100142)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	4.80505G	39.88	54.00	-14.12	5.93	3	Horizontal	167	2.23	-
PK	4.80427G	49.43	74.00	-24.57	5.93	3	Horizontal	167	2.23	-

BT-LE_Nss1_1TX

2442MHz_TX

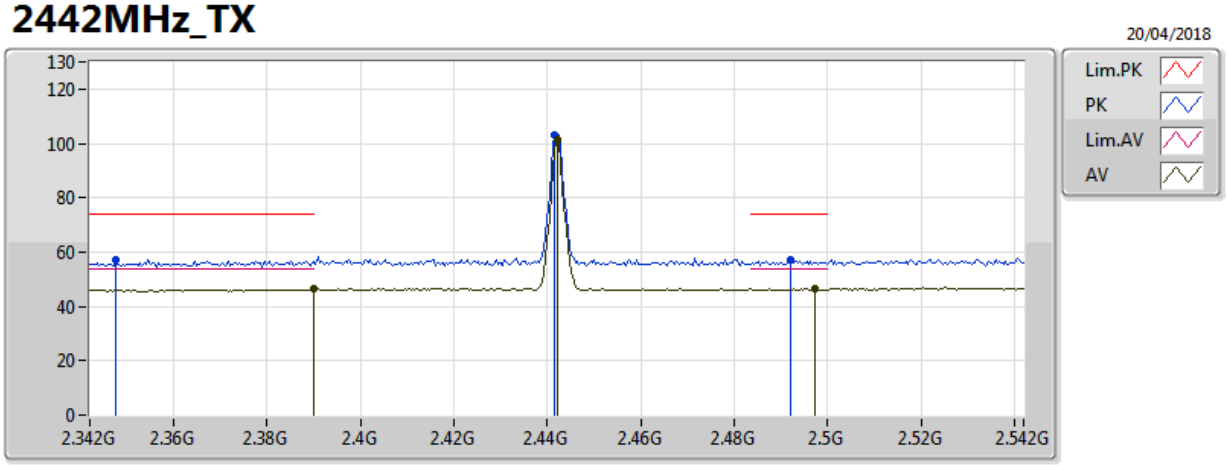


EUT Z_1TX(ANT 1)
Setting 29
04-L-2
FSP(100142)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	2.3872G	46.41	54.00	-7.59	33.16	3	Vertical	275	2.00	-
AV	2.442G	97.02	Inf	-Inf	33.18	3	Vertical	275	2.00	-
AV	2.494G	46.42	54.00	-7.58	33.19	3	Vertical	275	2.00	-
PK	2.3872G	57.26	74.00	-16.74	33.16	3	Vertical	275	2.00	-
PK	2.4424G	98.76	Inf	-Inf	33.18	3	Vertical	275	2.00	-
PK	2.5G	57.11	74.00	-16.89	33.19	3	Vertical	275	2.00	-

BT-LE_Nss1_1TX

2442MHz_TX

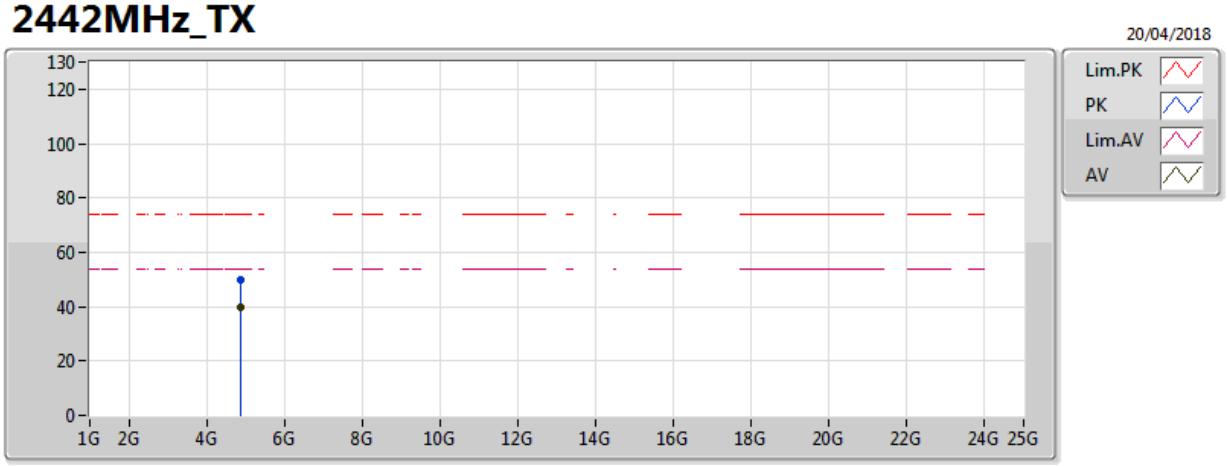


EUT Z_1TX(ANT 1)
Setting 29
04-L-2
FSP(100142)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	2.39G	46.28	54.00	-7.72	33.16	3	Horizontal	184	2.36	-
AV	2.442G	101.51	Inf	-Inf	33.18	3	Horizontal	184	2.36	-
AV	2.4972G	46.37	54.00	-7.63	33.19	3	Horizontal	184	2.36	-
PK	2.3476G	56.96	74.00	-17.04	33.14	3	Horizontal	184	2.36	-
PK	2.4416G	103.20	Inf	-Inf	33.18	3	Horizontal	184	2.36	-
PK	2.492G	57.00	74.00	-17.00	33.19	3	Horizontal	184	2.36	-

BT-LE_Nss1_1TX

2442MHz_TX

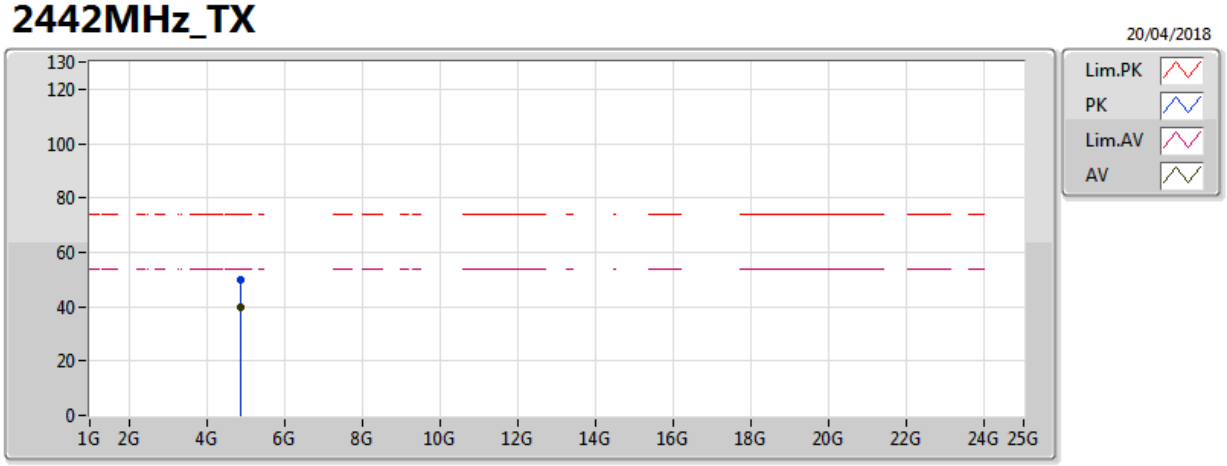


EUT Z_1TX(ANT 1)
Setting 29
04-L-2
FSP(100142)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	4.88236G	39.58	54.00	-14.42	6.10	3	Vertical	85	1.46	-
PK	4.88454G	49.63	74.00	-24.37	6.11	3	Vertical	85	1.46	-

BT-LE_Nss1_1TX

2442MHz_TX

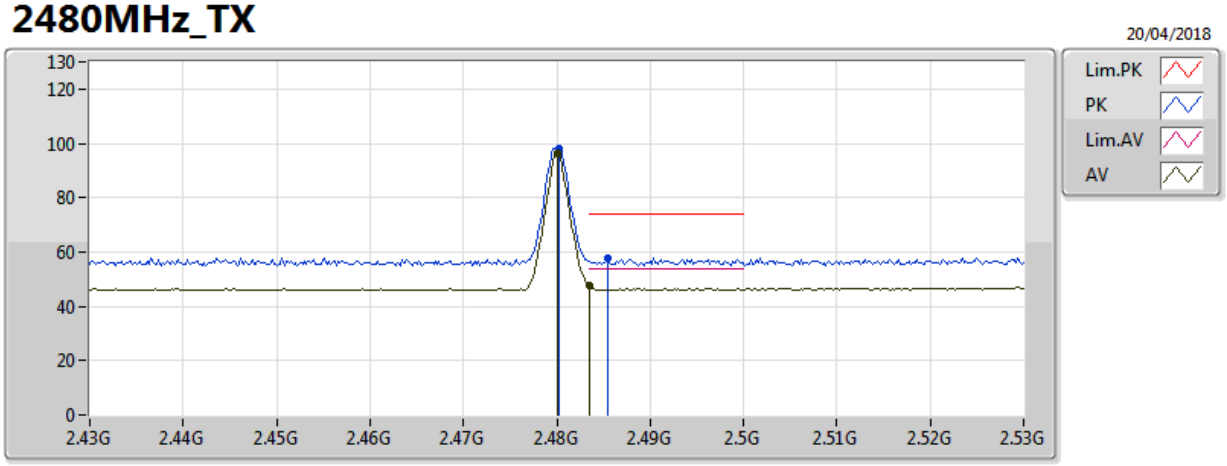


EUT Z_1TX(ANT 1)
Setting 29
04-L-2
FSP(100142)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	4.88544G	39.63	54.00	-14.37	6.11	3	Horizontal	273	2.12	-
PK	4.88241G	49.67	74.00	-24.33	6.10	3	Horizontal	273	2.12	-

BT-LE_Nss1_1TX

2480MHz_TX

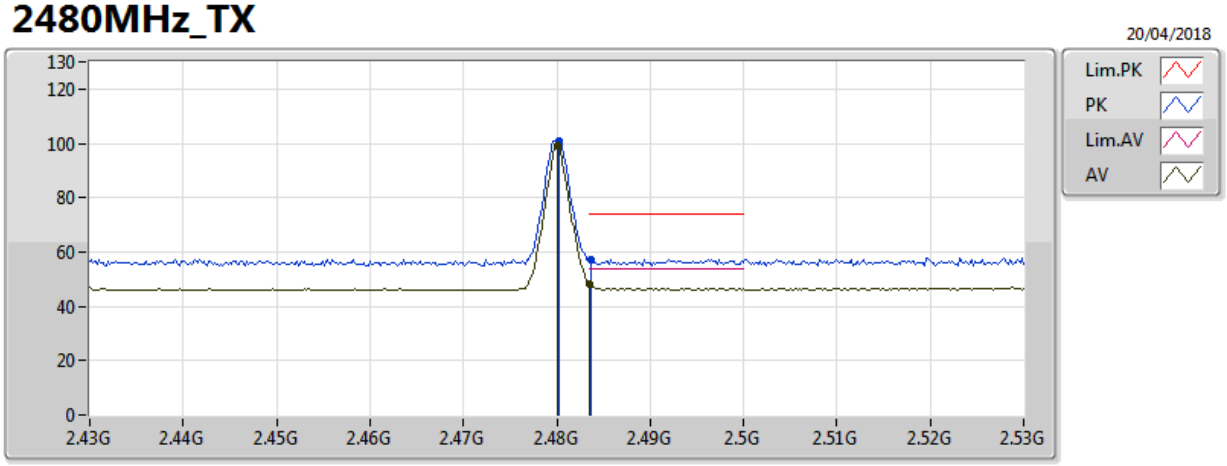


EUT Z_1TX(ANT 1)
Setting 29
04-L-2
FSP(100142)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	2.48G	96.58	Inf	-Inf	33.19	3	Vertical	269	2.11	-
AV	2.483502G	47.57	54.00	-6.43	33.19	3	Vertical	269	2.11	-
PK	2.4802G	98.24	Inf	-Inf	33.19	3	Vertical	269	2.11	-
PK	2.4854G	57.95	74.00	-16.05	33.19	3	Vertical	269	2.11	-

BT-LE_Nss1_1TX

2480MHz_TX

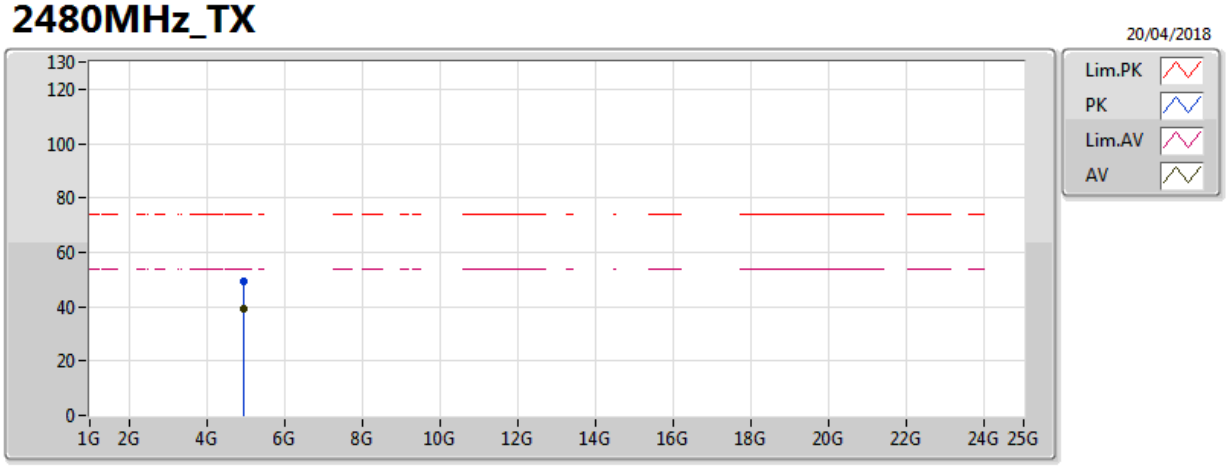


EUT Z_1TX(ANT 1)
Setting 29
04-L-2
FSP(100142)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	2.48G	99.32	Inf	-Inf	33.19	3	Horizontal	359	2.74	-
AV	2.483502G	48.44	54.00	-5.56	33.19	3	Horizontal	359	2.74	-
PK	2.4802G	100.91	Inf	-Inf	33.19	3	Horizontal	359	2.74	-
PK	2.4836G	57.24	74.00	-16.76	33.19	3	Horizontal	359	2.74	-

BT-LE_Nss1_1TX

2480MHz_TX

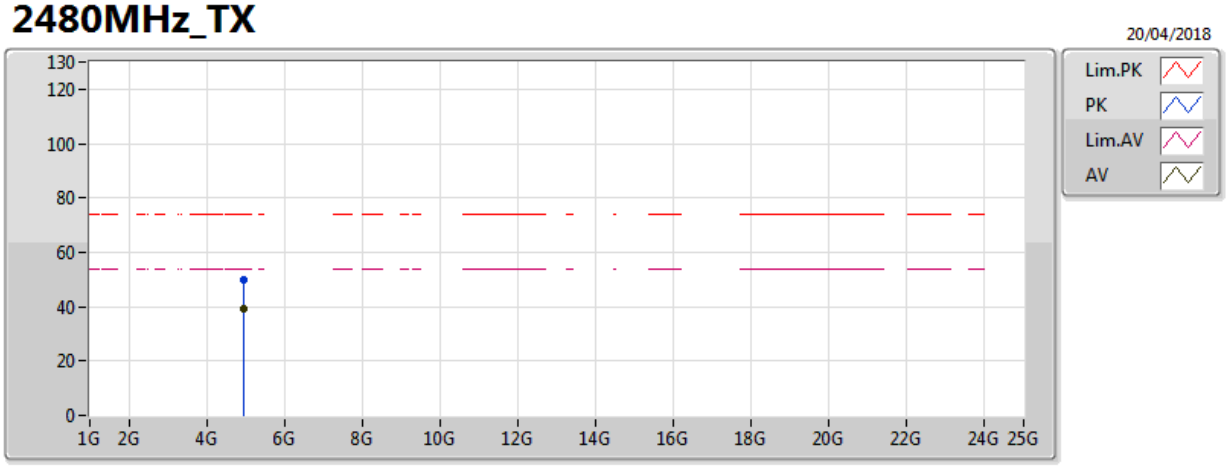


EUT Z_1TX(ANT 1)
Setting 29
04-L-2
FSP(100142)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	4.96045G	39.35	54.00	-14.65	6.27	3	Vertical	288	1.13	-
PK	4.95925G	49.48	74.00	-24.52	6.26	3	Vertical	288	1.13	-

BT-LE_Nss1_1TX

2480MHz_TX



EUT Z_1TX(ANT 1)
Setting 29
04-L-2
FSP(100142)

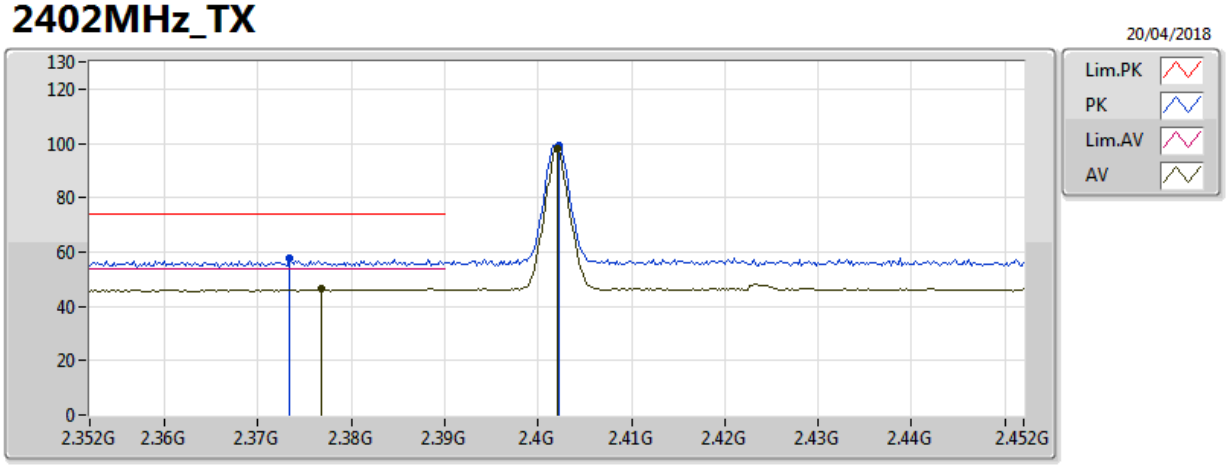
Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	4.96215G	39.39	54.00	-14.61	6.27	3	Horizontal	70	2.29	-
PK	4.96006G	49.85	74.00	-24.15	6.27	3	Horizontal	70	2.29	-

Test Mode: 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
2.4-2.4835GHz	-	-	-	-	-	-	-	-	-	-	-	-
BT-LE_Nss1_1TX	Pass	AV	2.483502G	49.17	54.00	-4.83	33.19	3	Horizontal	189	2.26	-

BT-LE_Nss1_1TX

2402MHz_TX

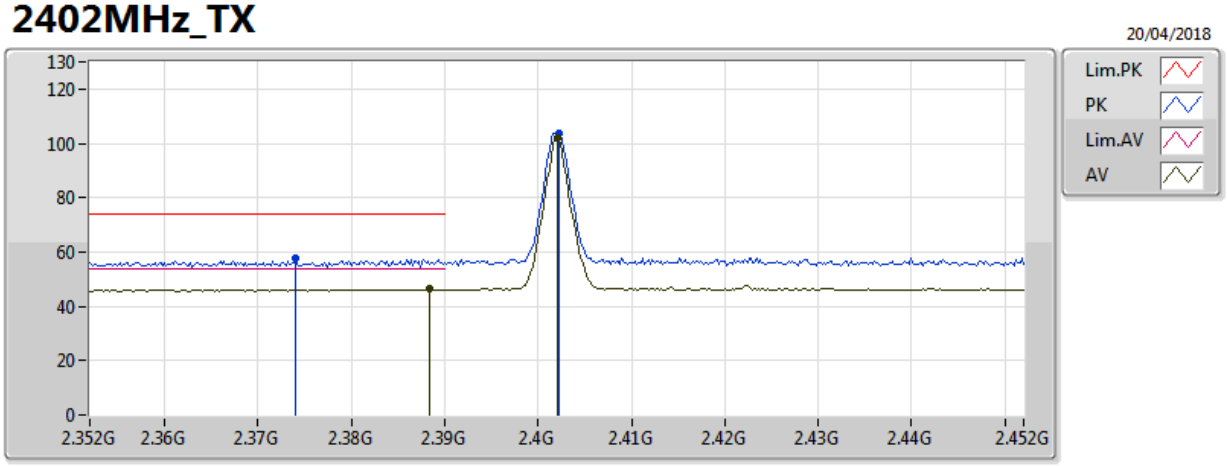


EUT Z_1TX(ANT 1)
Setting 28
04-L-2
FSP(100142)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	2.3768G	46.26	54.00	-7.74	33.16	3	Vertical	253	2.14	-
AV	2.402G	97.83	Inf	-Inf	33.17	3	Vertical	253	2.14	-
PK	2.3734G	57.94	74.00	-16.06	33.15	3	Vertical	253	2.14	-
PK	2.4022G	99.21	Inf	-Inf	33.17	3	Vertical	253	2.14	-

BT-LE_Nss1_1TX

2402MHz_TX

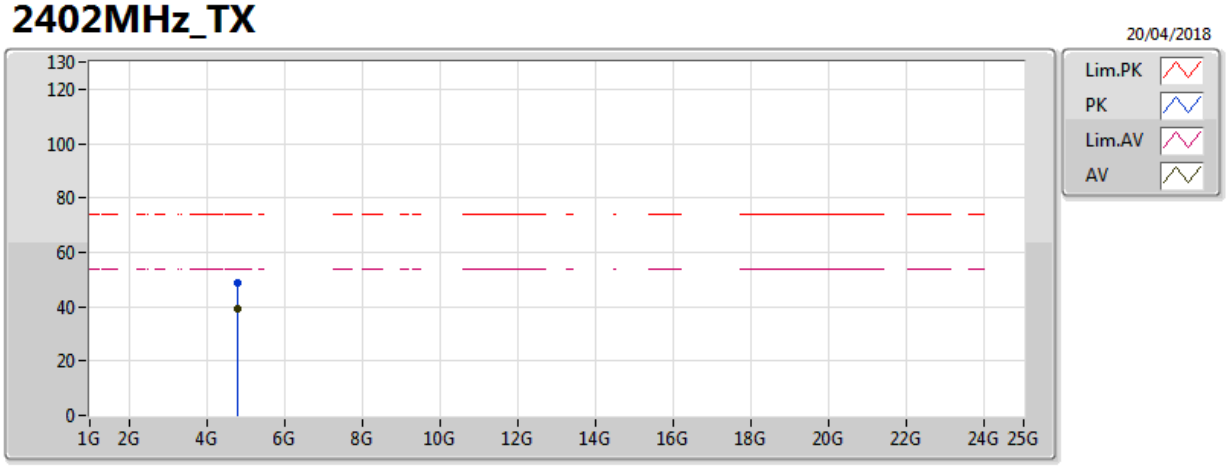


EUT Z_1TX(ANT 1)
Setting 28
04-L-2
FSP(100142)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	2.3884G	46.25	54.00	-7.75	33.16	3	Horizontal	188	2.16	-
AV	2.402G	102.16	Inf	-Inf	33.17	3	Horizontal	188	2.16	-
PK	2.374G	57.64	74.00	-16.36	33.15	3	Horizontal	188	2.16	-
PK	2.4022G	103.63	Inf	-Inf	33.17	3	Horizontal	188	2.16	-

BT-LE_Nss1_1TX

2402MHz_TX

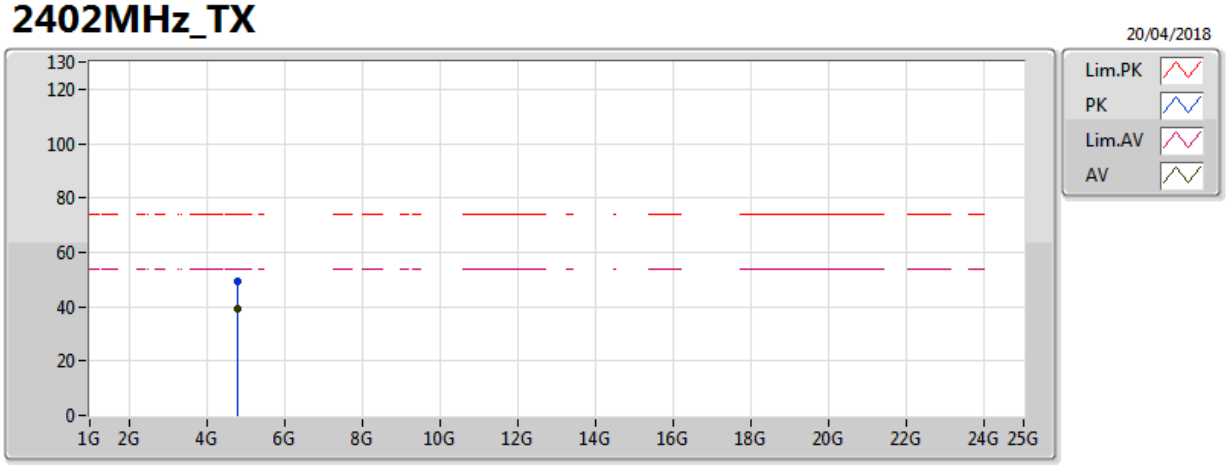


EUT Z_1TX(ANT 1)
Setting 28
04-L-2
FSP(100142)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	4.80211G	39.32	54.00	-14.68	5.92	3	Vertical	106	1.57	-
PK	4.80376G	48.95	74.00	-25.05	5.93	3	Vertical	106	1.57	-

BT-LE_Nss1_1TX

2402MHz_TX

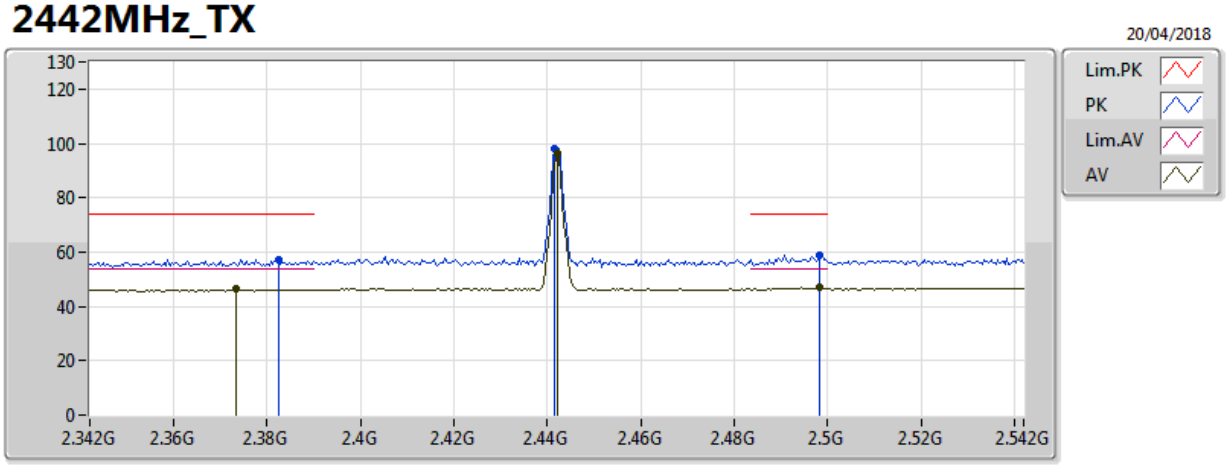


EUT Z_1TX(ANT 1)
Setting 28
04-L-2
FSP(100142)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	4.80388G	39.21	54.00	-14.79	5.93	3	Horizontal	119	2.09	-
PK	4.80331G	49.56	74.00	-24.44	5.93	3	Horizontal	119	2.09	-

BT-LE_Nss1_1TX

2442MHz_TX

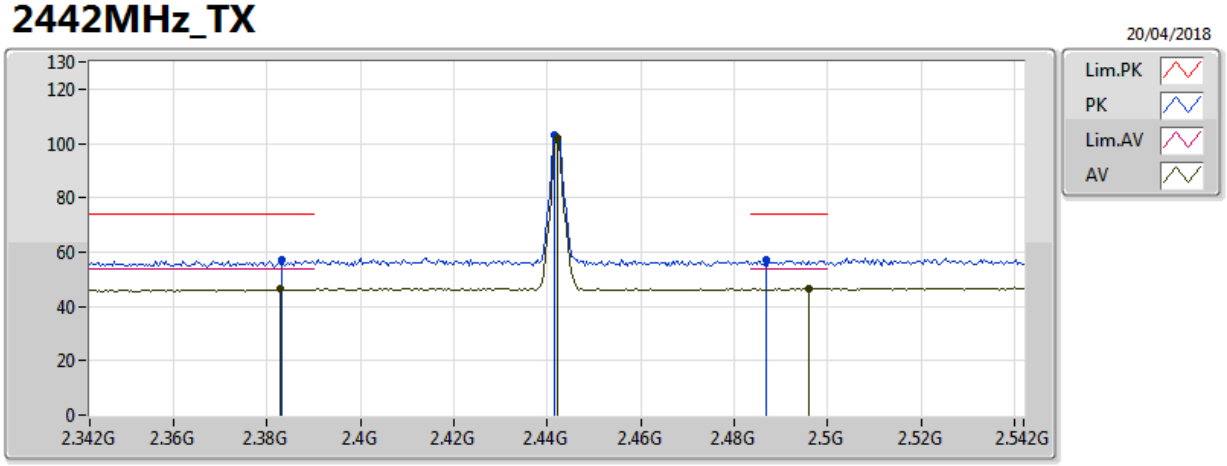


EUT Z_1TX(ANT 1)
Setting 28
04-L-2
FSP(100142)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	2.3732G	46.24	54.00	-7.76	33.15	3	Vertical	294	2.84	-
AV	2.442G	96.54	Inf	-Inf	33.18	3	Vertical	294	2.84	-
AV	2.4984G	46.93	54.00	-7.07	33.19	3	Vertical	294	2.84	-
PK	2.3824G	56.93	74.00	-17.07	33.16	3	Vertical	294	2.84	-
PK	2.4416G	98.06	Inf	-Inf	33.18	3	Vertical	294	2.84	-
PK	2.4984G	58.98	74.00	-15.02	33.19	3	Vertical	294	2.84	-

BT-LE_Nss1_1TX

2442MHz_TX

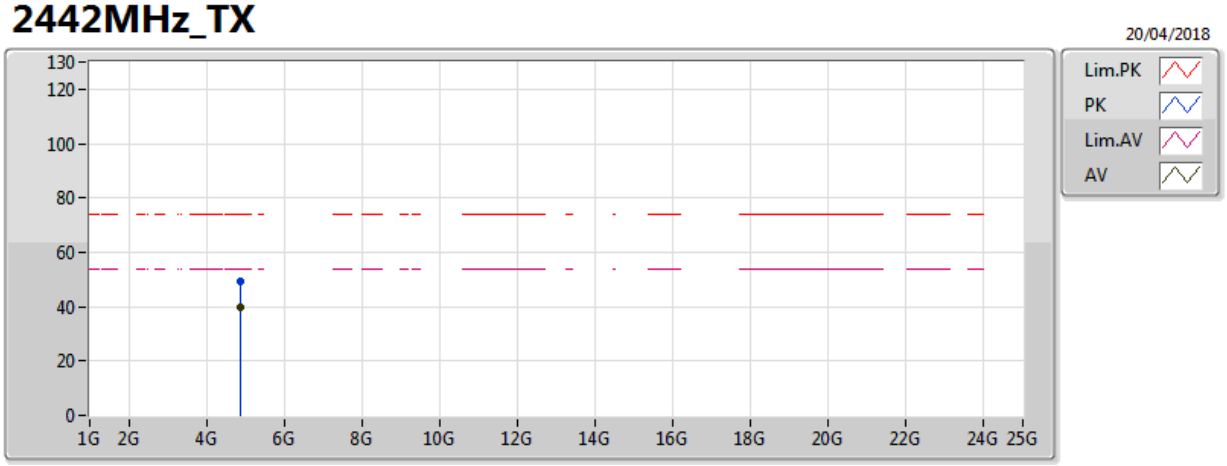


EUT Z_1TX(ANT 1)
Setting 28
04-L-2
FSP(100142)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	2.3828G	46.25	54.00	-7.75	33.16	3	Horizontal	186	2.37	-
AV	2.442G	101.80	Inf	-Inf	33.18	3	Horizontal	186	2.37	-
AV	2.496G	46.73	54.00	-7.27	33.19	3	Horizontal	186	2.37	-
PK	2.3832G	57.08	74.00	-16.92	33.16	3	Horizontal	186	2.37	-
PK	2.4416G	103.38	Inf	-Inf	33.18	3	Horizontal	186	2.37	-
PK	2.4868G	57.40	74.00	-16.60	33.19	3	Horizontal	186	2.37	-

BT-LE_Nss1_1TX

2442MHz_TX

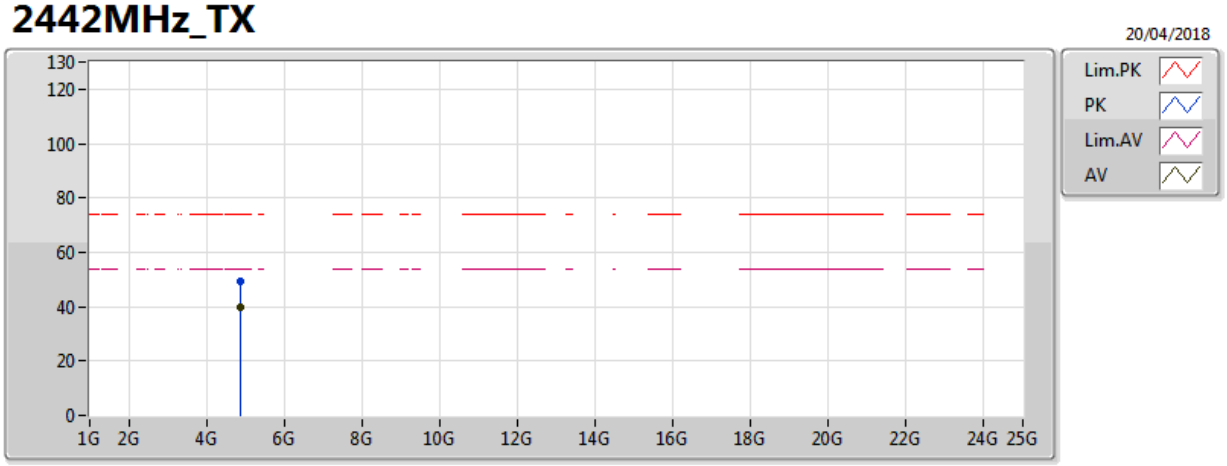


EUT Z_1TX(ANT 1)
Setting 28
04-L-2
FSP(100142)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	4.88236G	39.78	54.00	-14.22	6.10	3	Vertical	345	2.23	-
PK	4.88348G	49.55	74.00	-24.45	6.10	3	Vertical	345	2.23	-

BT-LE_Nss1_1TX

2442MHz_TX

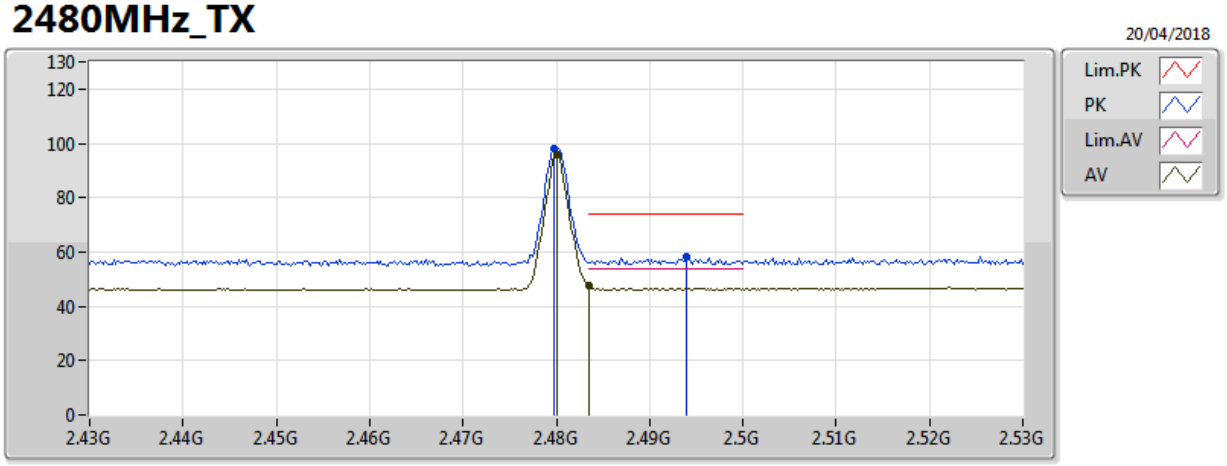


EUT Z_1TX(ANT 1)
Setting 28
04-L-2
FSP(100142)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	4.88152G	39.60	54.00	-14.40	6.10	3	Horizontal	41	1.44	-
PK	4.88593G	49.42	74.00	-24.58	6.11	3	Horizontal	41	1.44	-

BT-LE_Nss1_1TX

2480MHz_TX

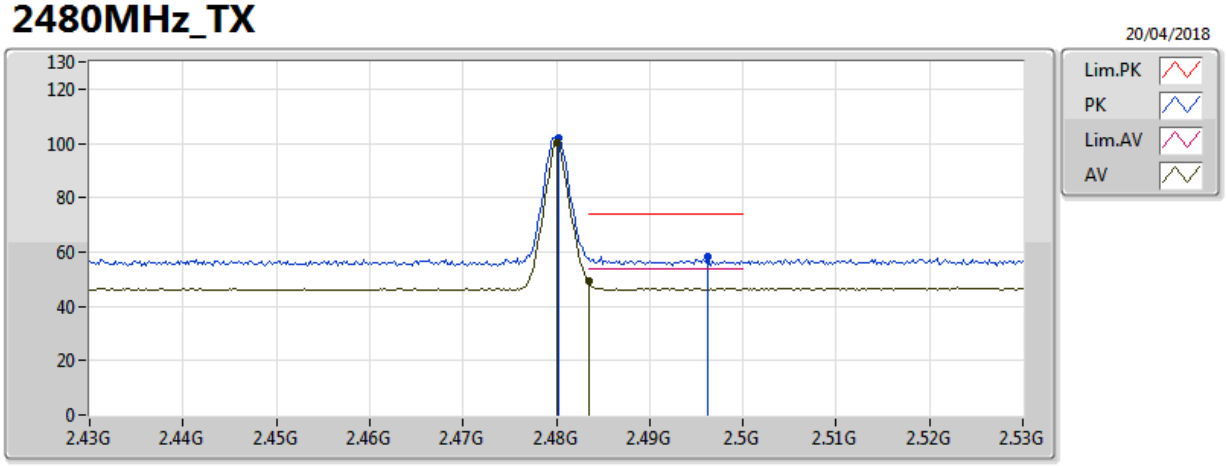


EUT Z_1TX(ANT 1)
Setting 28
04-L-2
FSP(100142)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	2.48G	95.95	Inf	-Inf	33.19	3	Vertical	268	2.10	-
AV	2.483502G	47.36	54.00	-6.64	33.19	3	Vertical	268	2.10	-
PK	2.4798G	97.85	Inf	-Inf	33.19	3	Vertical	268	2.10	-
PK	2.494G	58.09	74.00	-15.91	33.19	3	Vertical	268	2.10	-

BT-LE_Nss1_1TX

2480MHz_TX

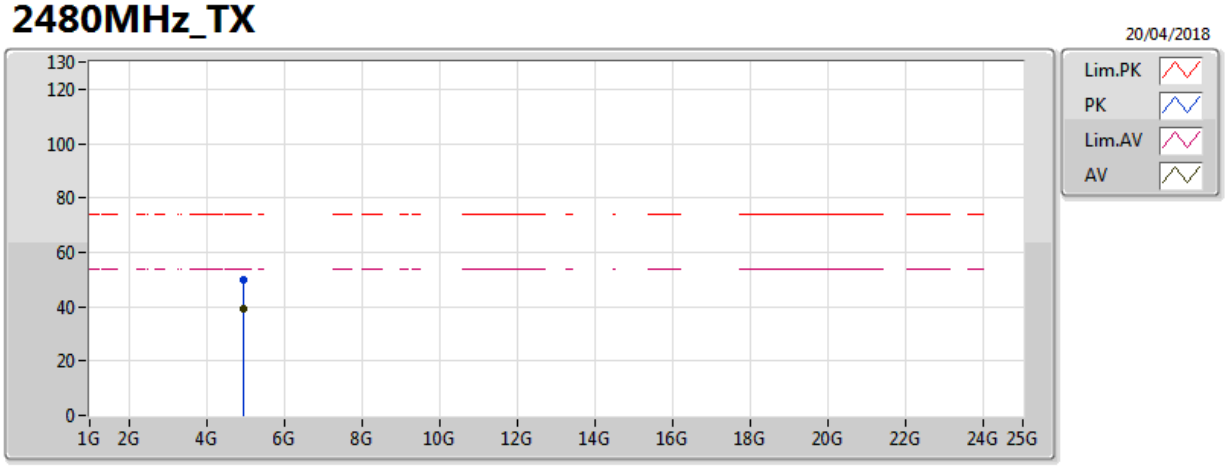


EUT Z_1TX(ANT 1)
Setting 28
04-L-2
FSP(100142)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	2.48G	100.13	Inf	-Inf	33.19	3	Horizontal	189	2.26	-
AV	2.483502G	49.17	54.00	-4.83	33.19	3	Horizontal	189	2.26	-
PK	2.4802G	102.00	Inf	-Inf	33.19	3	Horizontal	189	2.26	-
PK	2.4962G	58.06	74.00	-15.94	33.19	3	Horizontal	189	2.26	-

BT-LE_Nss1_1TX

2480MHz_TX

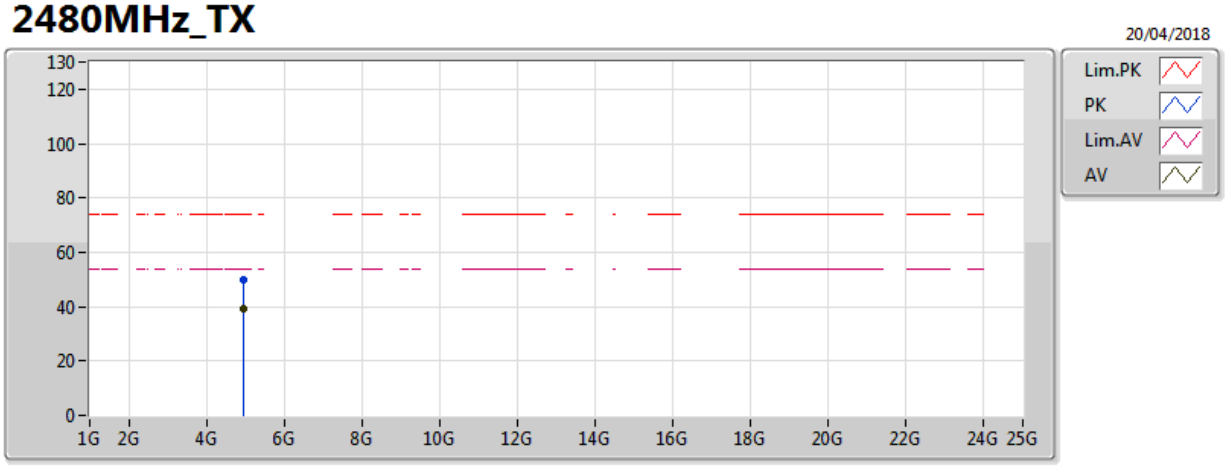


EUT Z_1TX(ANT 1)
Setting 28
04-L-2
FSP(100142)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	4.95945G	39.30	54.00	-14.70	6.26	3	Vertical	204	1.88	-
PK	4.9611G	49.73	74.00	-24.27	6.27	3	Vertical	204	1.88	-

BT-LE_Nss1_1TX

2480MHz_TX



EUT Z_1TX(ANT 1)
Setting 28
04-L-2
FSP(100142)

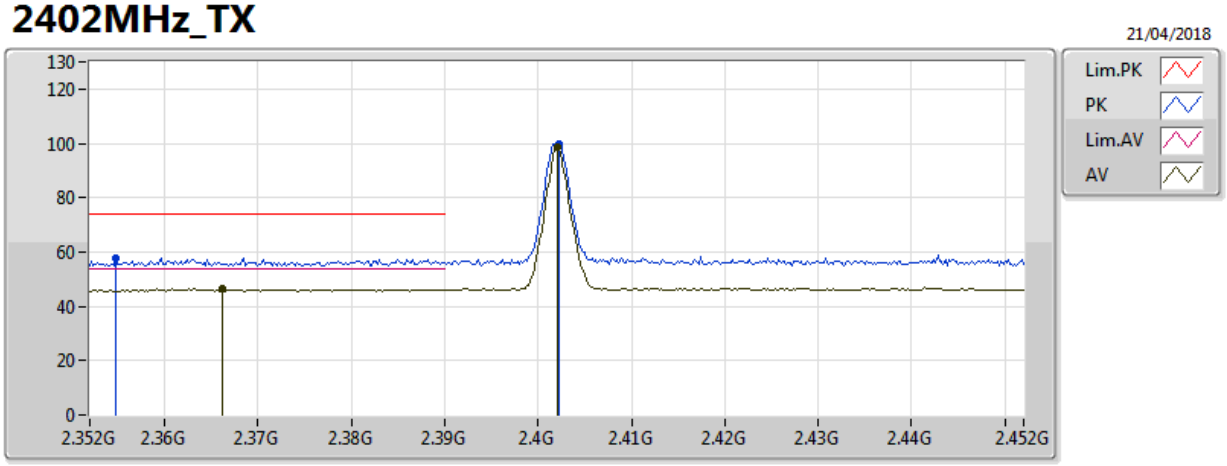
Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	4.95998G	39.35	54.00	-14.65	6.27	3	Horizontal	245	1.19	-
PK	4.9611G	49.75	74.00	-24.25	6.27	3	Horizontal	245	1.19	-

Test Mode: Mode 3
Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
2.4-2.4835GHz	-	-	-	-	-	-	-	-	-	-	-	-
BT-LE_Nss1_1TX	Pass	AV	2.483502G	49.31	54.00	-4.69	33.19	3	Horizotal	187	2.26	-

BT-LE_Nss1_1TX

2402MHz_TX

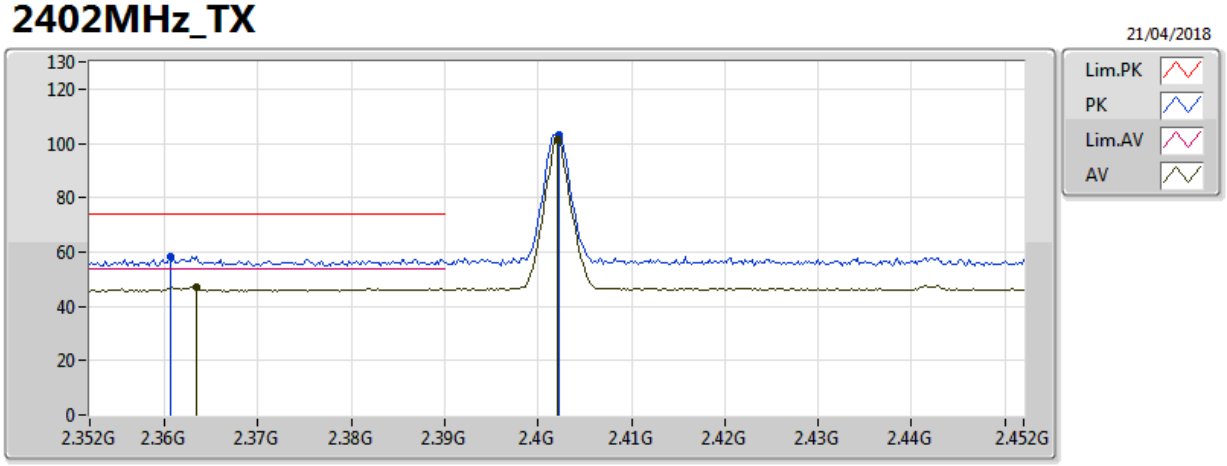


EUT Z_1TX(ANT 2)
Setting 30
04-L-2
FSP(100142)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	2.3662G	46.42	54.00	-7.58	33.15	3	Vertical	255	2.16	-
AV	2.402G	98.58	Inf	-Inf	33.17	3	Vertical	255	2.16	-
PK	2.3548G	57.83	74.00	-16.17	33.14	3	Vertical	255	2.16	-
PK	2.4022G	100.01	Inf	-Inf	33.17	3	Vertical	255	2.16	-

BT-LE_Nss1_1TX

2402MHz_TX

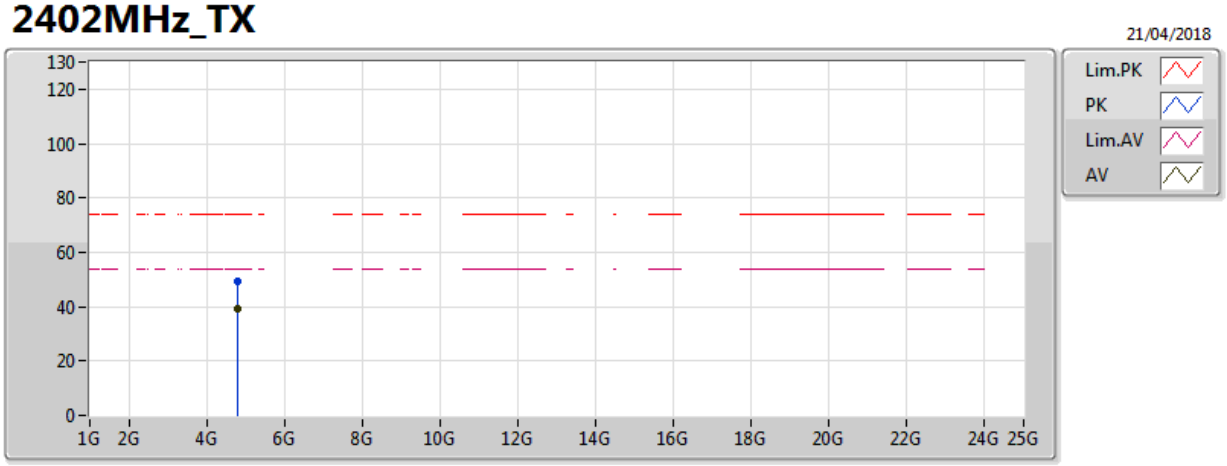


EUT Z_1TX(ANT 2)
Setting 30
04-L-2
FSP(100142)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	2.3634G	47.09	54.00	-6.91	33.15	3	Horizontal	191	2.13	-
AV	2.402G	101.38	Inf	-Inf	33.17	3	Horizontal	191	2.13	-
PK	2.3606G	58.31	74.00	-15.69	33.15	3	Horizontal	191	2.13	-
PK	2.4022G	103.14	Inf	-Inf	33.17	3	Horizontal	191	2.13	-

BT-LE_Nss1_1TX

2402MHz_TX

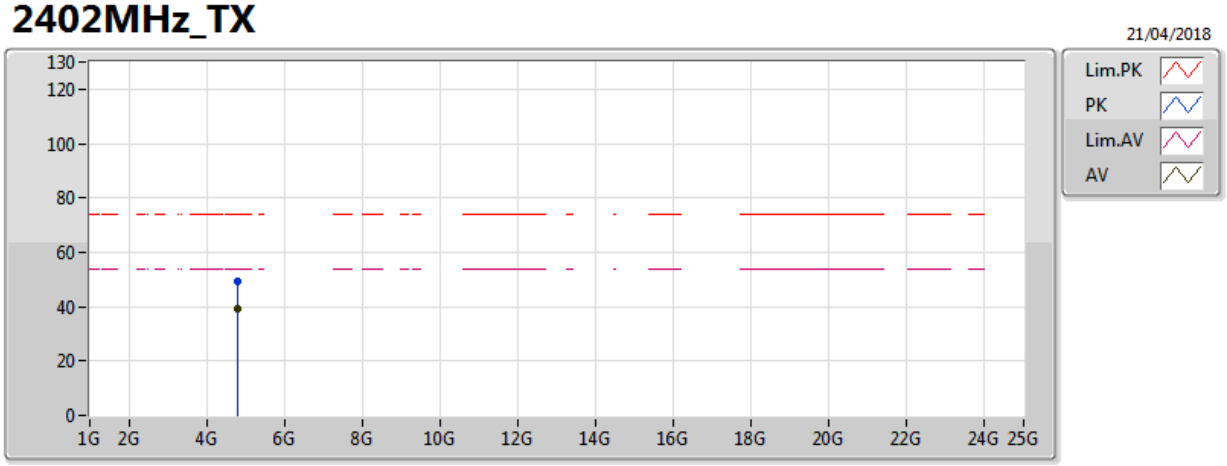


EUT Z_1TX(ANT 2)
Setting 30
04-L-2
FSP(100142)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	4.80183G	39.31	54.00	-14.69	5.92	3	Vertical	175	1.57	-
PK	4.80449G	49.21	74.00	-24.79	5.93	3	Vertical	175	1.57	-

BT-LE_Nss1_1TX

2402MHz_TX

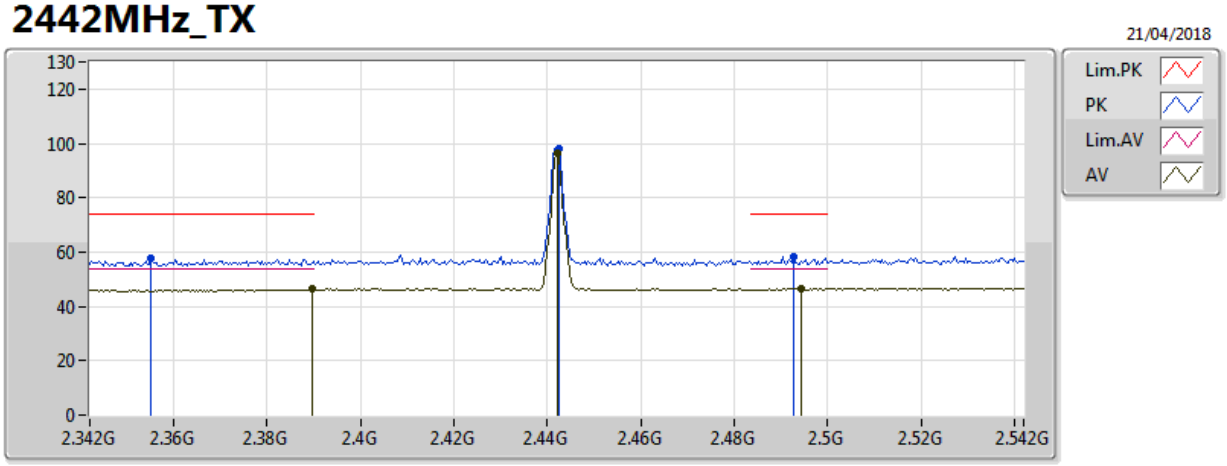


EUT Z_1TX(ANT 2)
Setting 30
04-L-2
FSP(100142)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	4.80187G	39.43	54.00	-14.57	5.92	3	Horizontal	62	1.99	-
PK	4.80269G	49.10	74.00	-24.90	5.93	3	Horizontal	62	1.99	-

BT-LE_Nss1_1TX

2442MHz_TX

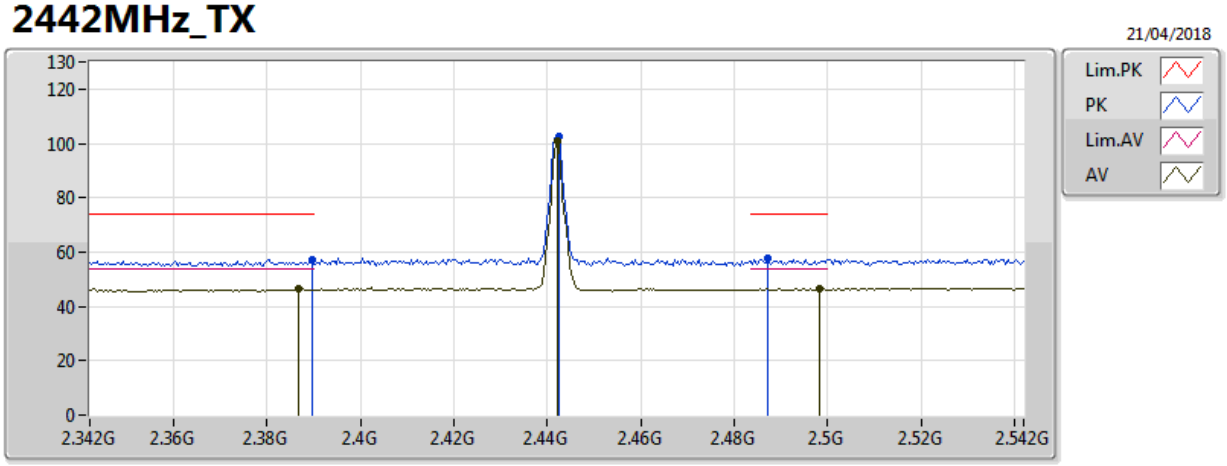


EUT Z_1TX(ANT 2)
Setting 30
04-L-2
FSP(100142)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	2.3896G	46.43	54.00	-7.57	33.16	3	Vertical	253	2.61	-
AV	2.442G	96.49	Inf	-Inf	33.18	3	Vertical	253	2.61	-
AV	2.4944G	46.69	54.00	-7.31	33.19	3	Vertical	253	2.61	-
PK	2.3552G	57.61	74.00	-16.39	33.14	3	Vertical	253	2.61	-
PK	2.4424G	98.14	Inf	-Inf	33.18	3	Vertical	253	2.61	-
PK	2.4928G	58.11	74.00	-15.89	33.19	3	Vertical	253	2.61	-

BT-LE_Nss1_1TX

2442MHz_TX

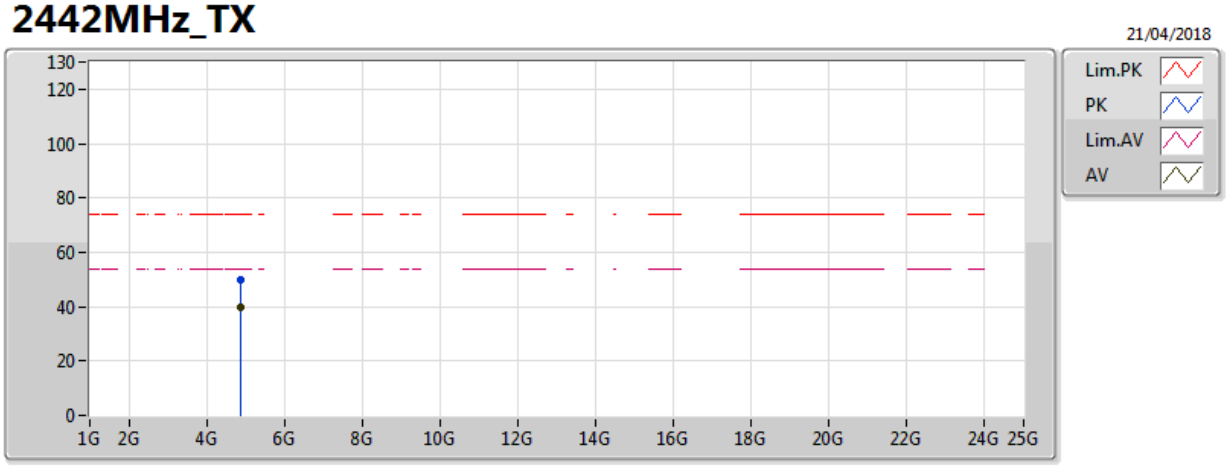


EUT Z_1TX(ANT 2)
Setting 30
04-L-2
FSP(100142)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	2.3868G	46.44	54.00	-7.56	33.16	3	Horizontal	190	2.53	-
AV	2.442G	100.61	Inf	-Inf	33.18	3	Horizontal	190	2.53	-
AV	2.4984G	46.43	54.00	-7.57	33.19	3	Horizontal	190	2.53	-
PK	2.3896G	57.36	74.00	-16.64	33.16	3	Horizontal	190	2.53	-
PK	2.4424G	102.29	Inf	-Inf	33.18	3	Horizontal	190	2.53	-
PK	2.4872G	57.55	74.00	-16.45	33.19	3	Horizontal	190	2.53	-

BT-LE_Nss1_1TX

2442MHz_TX

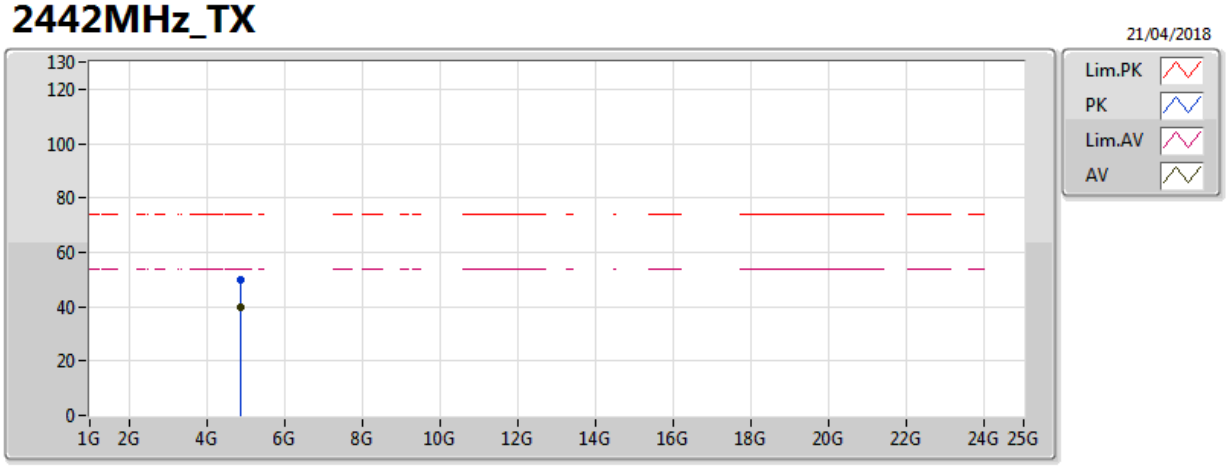


EUT Z_1TX(ANT 2)
Setting 30
04-L-2
FSP(100142)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	4.88532G	39.77	54.00	-14.23	6.11	3	Vertical	146	2.10	-
PK	4.88573G	49.71	74.00	-24.29	6.11	3	Vertical	146	2.10	-

BT-LE_Nss1_1TX

2442MHz_TX

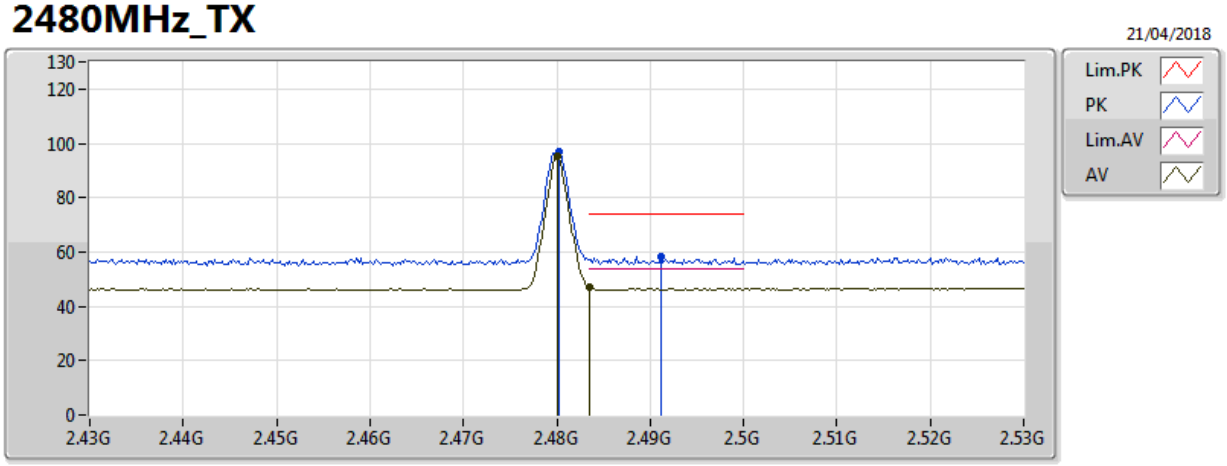


EUT Z_1TX(ANT 2)
Setting 30
04-L-2
FSP(100142)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	4.88592G	39.72	54.00	-14.28	6.11	3	Horizontal	87	2.50	-
PK	4.88478G	49.95	74.00	-24.05	6.11	3	Horizontal	87	2.50	-

BT-LE_Nss1_1TX

2480MHz_TX

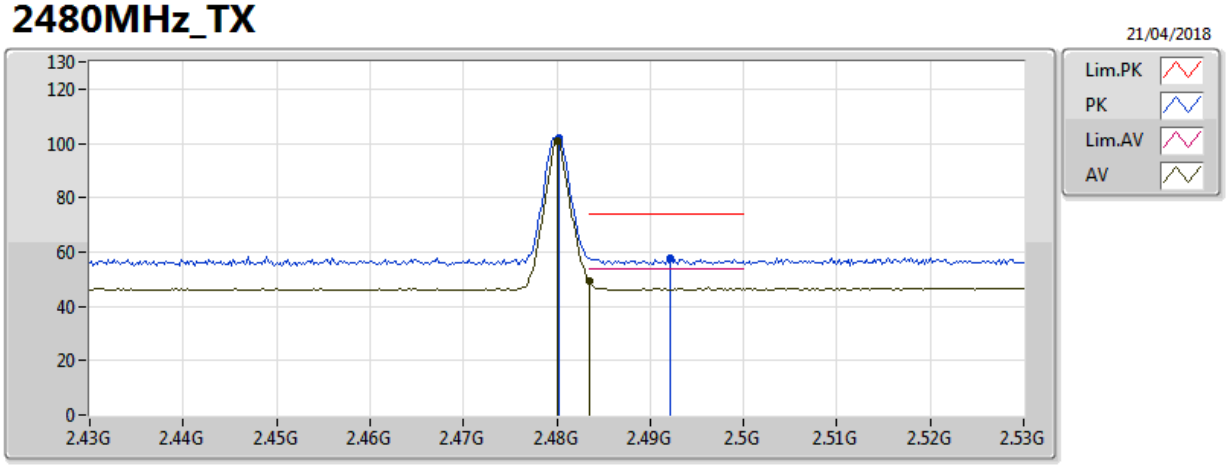


EUT Z_1TX(ANT 2)
Setting 30
04-L-2
FSP(100142)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	2.48G	95.14	Inf	-Inf	33.19	3	Vertical	224	2.93	-
AV	2.483502G	46.94	54.00	-7.06	33.19	3	Vertical	224	2.93	-
PK	2.4802G	96.66	Inf	-Inf	33.19	3	Vertical	224	2.93	-
PK	2.4912G	58.48	74.00	-15.52	33.19	3	Vertical	224	2.93	-

BT-LE_Nss1_1TX

2480MHz_TX

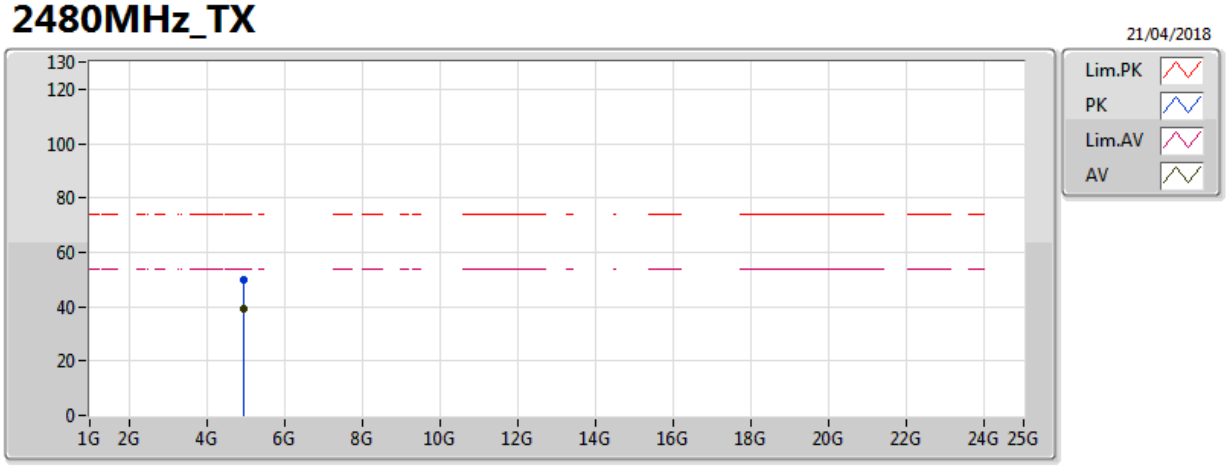


EUT Z_1TX(ANT 2)
Setting 30
04-L-2
FSP(100142)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	2.48G	100.65	Inf	-Inf	33.19	3	Horizontal	187	2.26	-
AV	2.483502G	49.31	54.00	-4.69	33.19	3	Horizontal	187	2.26	-
PK	2.4802G	102.19	Inf	-Inf	33.19	3	Horizontal	187	2.26	-
PK	2.4922G	57.47	74.00	-16.53	33.19	3	Horizontal	187	2.26	-

BT-LE_Nss1_1TX

2480MHz_TX

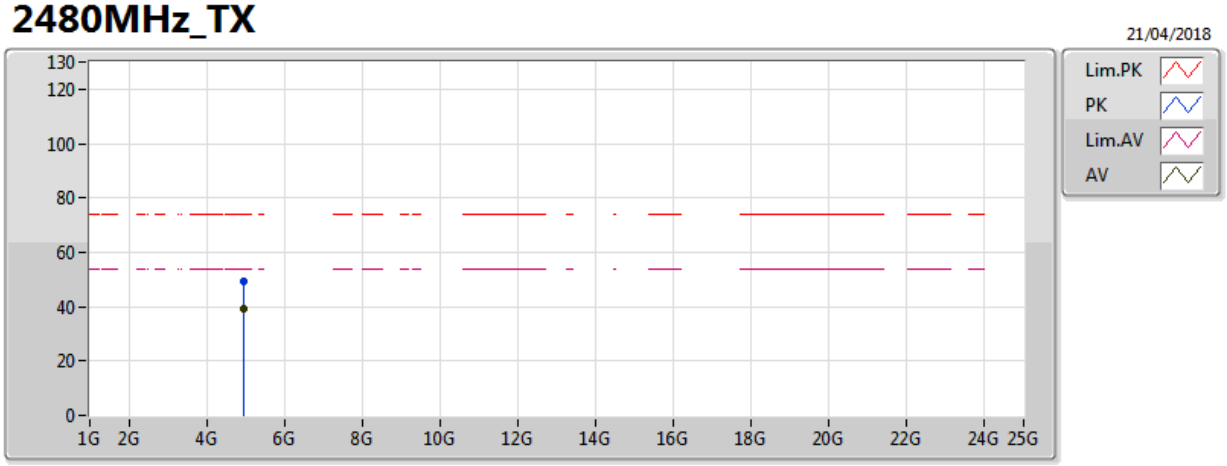


EUT Z_1TX(ANT 2)
Setting 30
04-L-2
FSP(100142)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	4.95899G	39.38	54.00	-14.62	6.26	3	Vertical	49	1.37	-
PK	4.95806G	49.80	74.00	-24.20	6.26	3	Vertical	49	1.37	-

BT-LE_Nss1_1TX

2480MHz_TX



EUT Z_1TX(ANT 2)
Setting 30
04-L-2
FSP(100142)

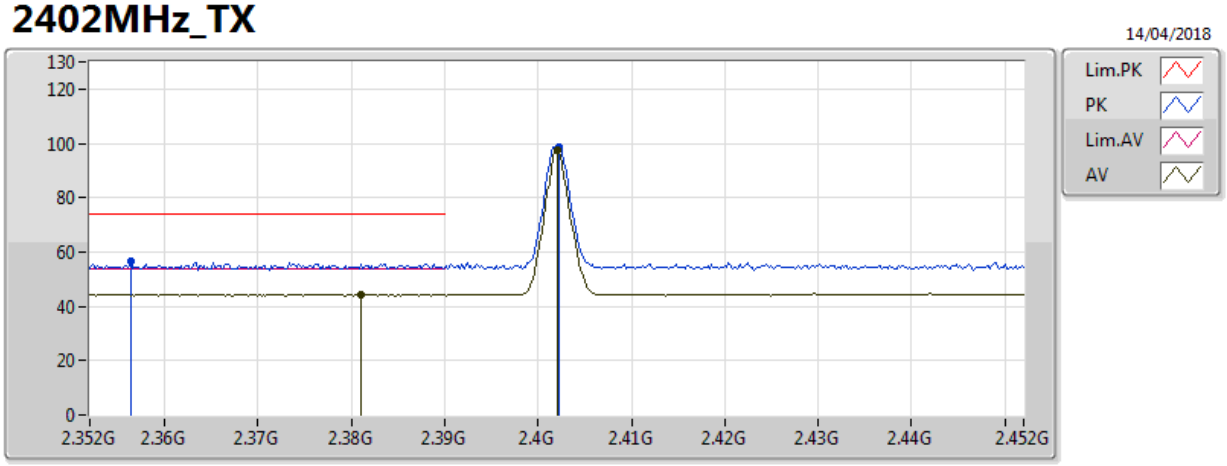
Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	4.9618G	39.37	54.00	-14.63	6.27	3	Horizontal	185	1.17	-
PK	4.9583G	49.40	74.00	-24.60	6.26	3	Horizontal	185	1.17	-

Test Mode: Mode 4
Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
2.4-2.4835GHz	-	-	-	-	-	-	-	-	-	-	-	-
BT-LE_Nss1_1TX	Pass	AV	2.483502G	47.38	54.00	-6.62	32.42	3	Vertical	348	1.29	-

BT-LE_Nss1_1TX

2402MHz_TX

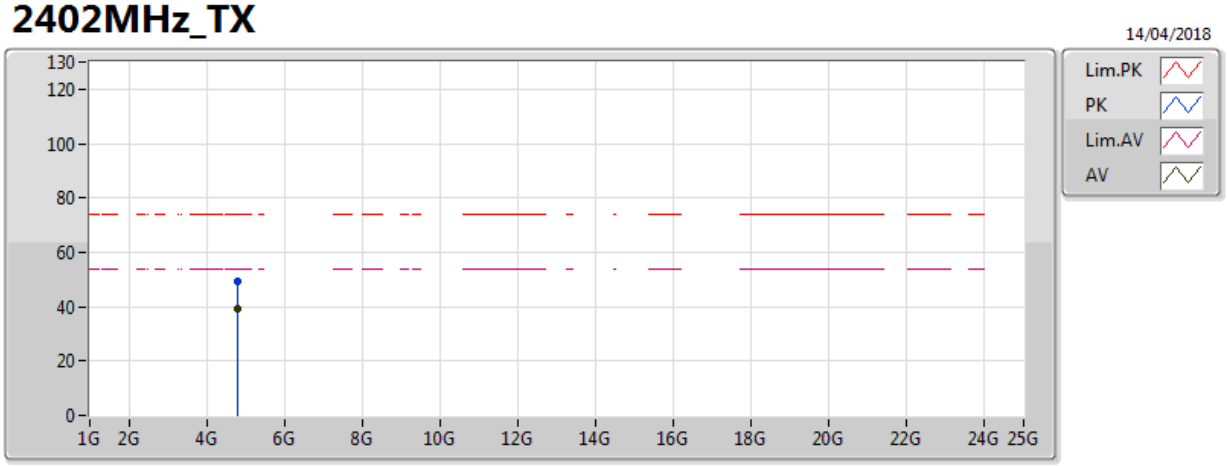


EUT Z_1TX(ANT 1)
Setting 28
03-W-3
FSP(100019)
Diversity Sample

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	2.381G	44.52	54.00	-9.48	32.10	3	Vertical	48	1.46	-
AV	2.402G	97.35	Inf	-Inf	32.17	3	Vertical	48	1.46	-
PK	2.3564G	56.39	74.00	-17.61	32.02	3	Vertical	48	1.46	-
PK	2.4022G	98.74	Inf	-Inf	32.17	3	Vertical	48	1.46	-

BT-LE_Nss1_1TX

2402MHz_TX

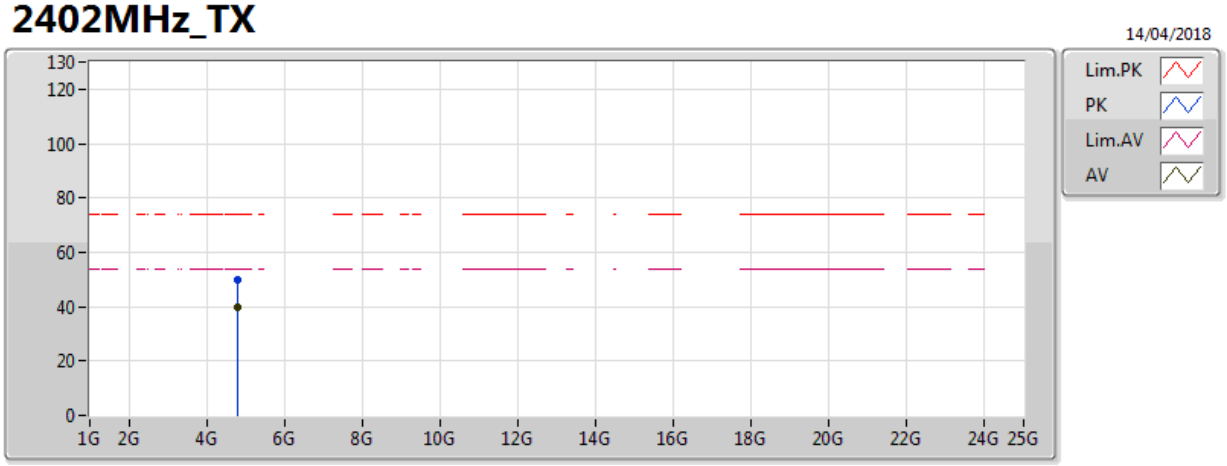


EUT Z_1TX(ANT 1)
Setting 28
03-W-3
FSP(100019)
Diversity Sample

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	4.803884G	39.22	54.00	-14.78	4.83	3	Vertical	42	1.00	-
PK	4.804052G	49.32	74.00	-24.68	4.83	3	Vertical	42	1.00	-

BT-LE_Nss1_1TX

2402MHz_TX

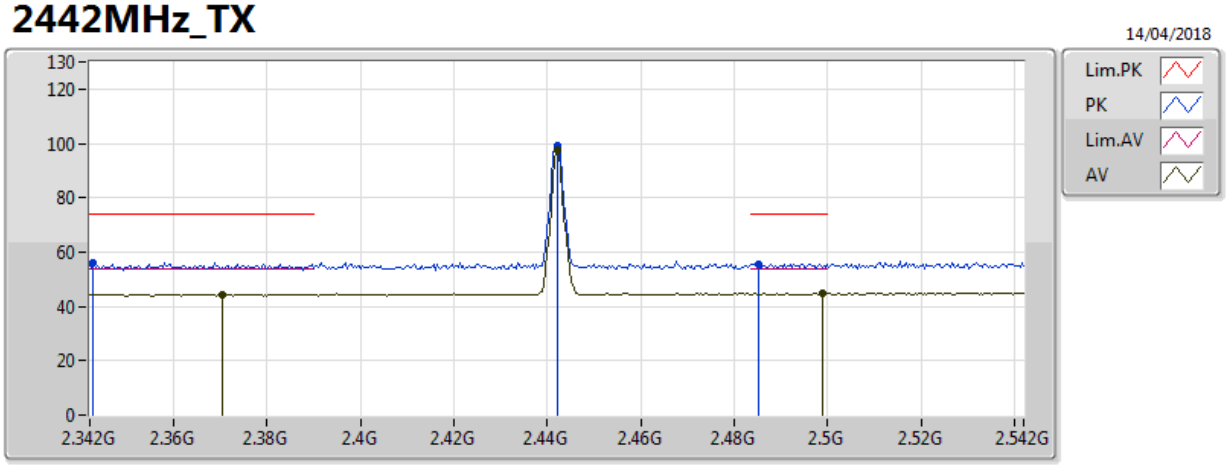


EUT Z_1TX(ANT 1)
Setting 28
03-W-3
FSP(100019)
Diversity Sample

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	4.80414G	39.88	54.00	-14.12	4.83	3	Horizontal	31	2.64	-
PK	4.804464G	49.75	74.00	-24.25	4.83	3	Horizontal	31	2.64	-

BT-LE_Nss1_1TX

2442MHz_TX

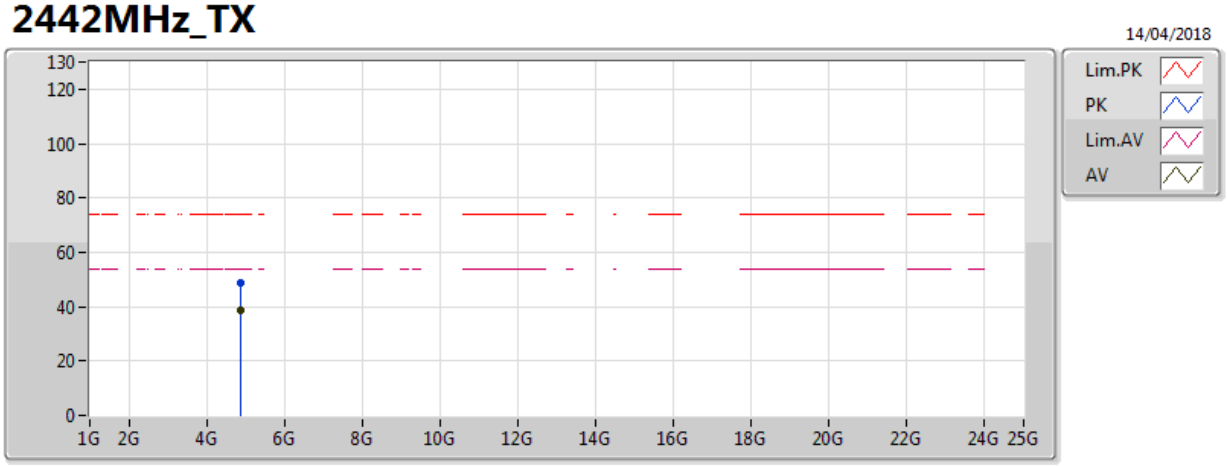


EUT Z_1TX(ANT 1)
Setting 29
03-W-3
FSP(100019)
Diversity Sample

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	2.3704G	44.53	54.00	-9.47	32.07	3	Vertical	347	1.25	-
AV	2.442G	97.70	Inf	-Inf	32.29	3	Vertical	347	1.25	-
AV	2.4988G	44.87	54.00	-9.13	32.46	3	Vertical	347	1.25	-
PK	2.3428G	56.02	74.00	-17.98	31.99	3	Vertical	347	1.25	-
PK	2.442G	99.23	Inf	-Inf	32.29	3	Vertical	347	1.25	-
PK	2.4852G	55.75	74.00	-18.25	32.42	3	Vertical	347	1.25	-

BT-LE_Nss1_1TX

2442MHz_TX

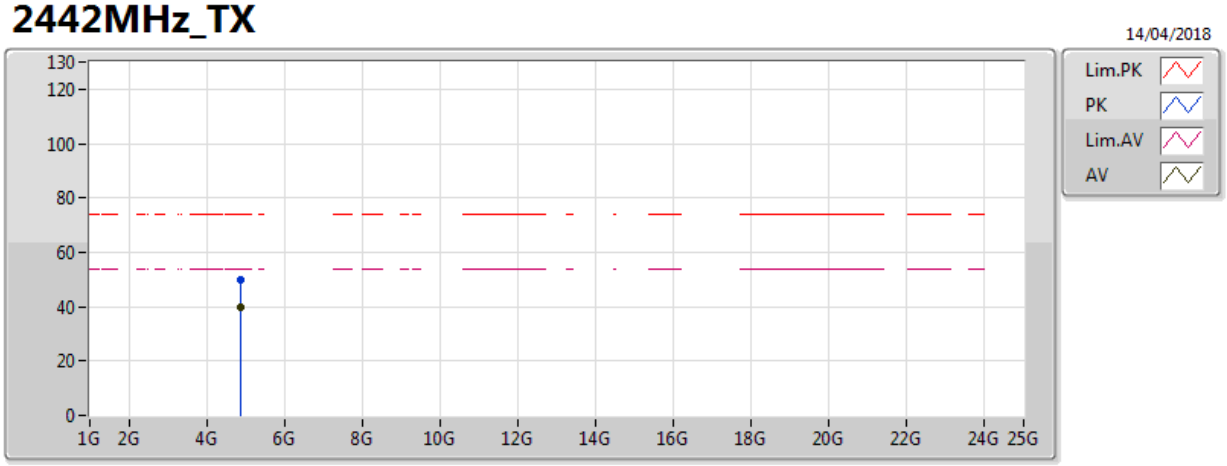


EUT Z_1TX(ANT 1)
Setting 29
03-W-3
FSP(100019)
Diversity Sample

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	4.883436G	38.59	54.00	-15.41	4.92	3	Vertical	47	1.14	-
PK	4.884368G	48.53	74.00	-25.47	4.92	3	Vertical	47	1.14	-

BT-LE_Nss1_1TX

2442MHz_TX

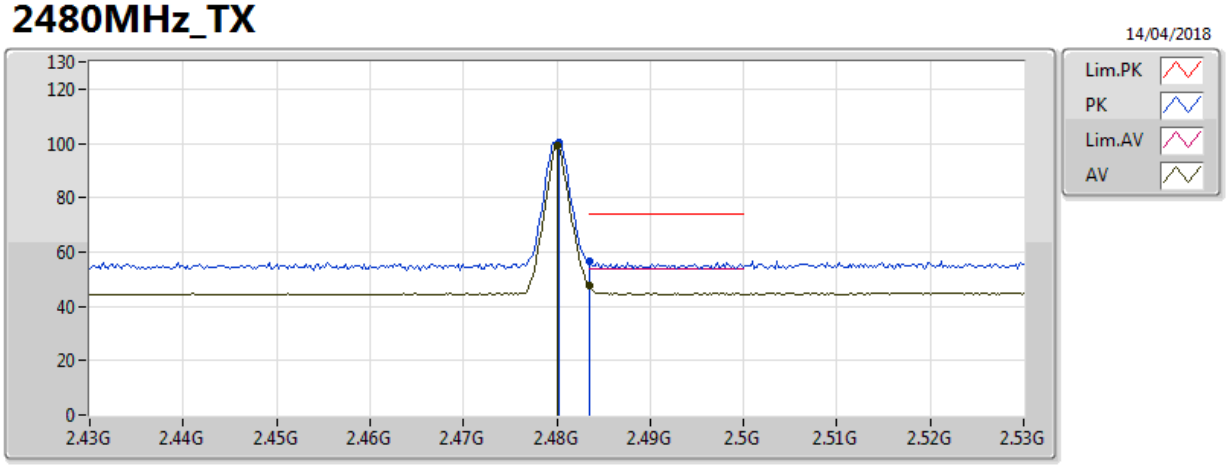


EUT Z_1TX(ANT 1)
Setting 29
03-W-3
FSP(100019)
Diversity Sample

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	4.883888G	39.60	54.00	-14.40	4.92	3	Horizontal	32	2.90	-
PK	4.883836G	49.77	74.00	-24.23	4.92	3	Horizontal	32	2.90	-

BT-LE_Nss1_1TX

2480MHz_TX

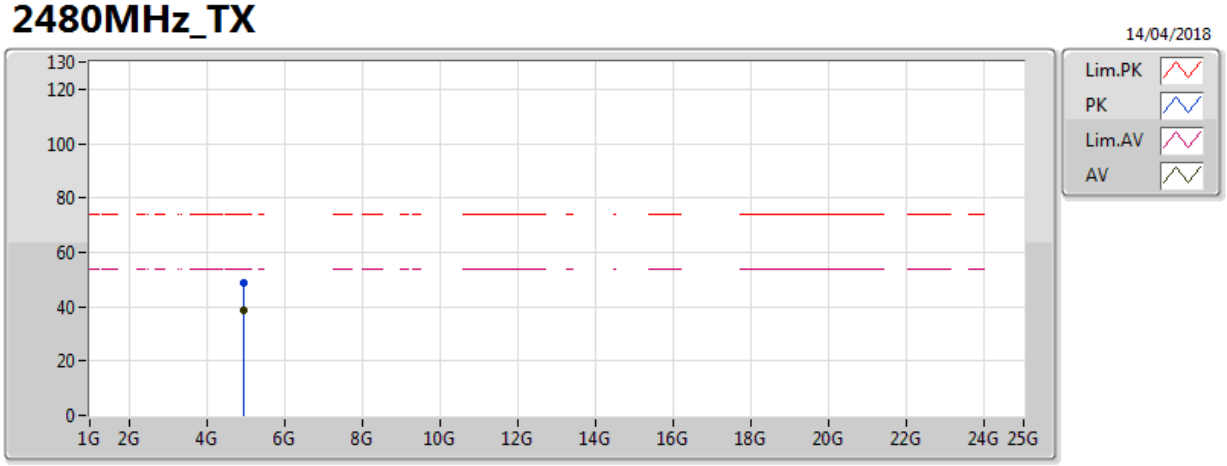


EUT Z_1TX(ANT 1)
Setting 29
03-W-3
FSP(100019)
Diversity Sample

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	2.48G	98.92	Inf	-Inf	32.40	3	Vertical	348	1.29	-
AV	2.483502G	47.38	54.00	-6.62	32.42	3	Vertical	348	1.29	-
PK	2.4802G	100.47	Inf	-Inf	32.40	3	Vertical	348	1.29	-
PK	2.483502G	56.57	74.00	-17.43	32.42	3	Vertical	348	1.29	-

BT-LE_Nss1_1TX

2480MHz_TX

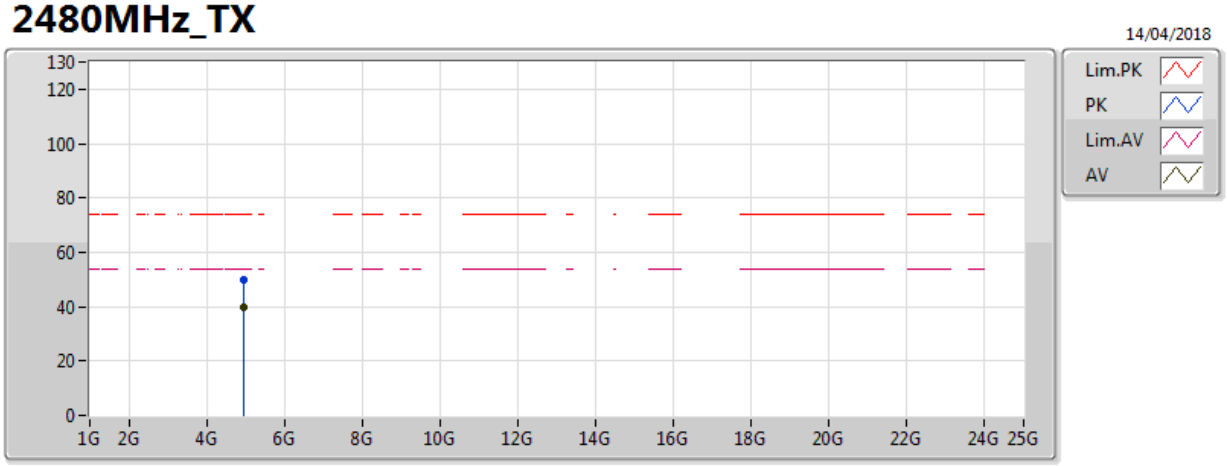


EUT Z_1TX(ANT 1)
Setting 29
03-W-3
FSP(100019)
Diversity Sample

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	4.959728G	38.43	54.00	-15.57	5.03	3	Vertical	243	1.01	-
PK	4.95946G	48.73	74.00	-25.27	5.03	3	Vertical	243	1.01	-

BT-LE_Nss1_1TX

2480MHz_TX



EUT Z_1TX(ANT 1)
Setting 29
03-W-3
FSP(100019)
Diversity Sample

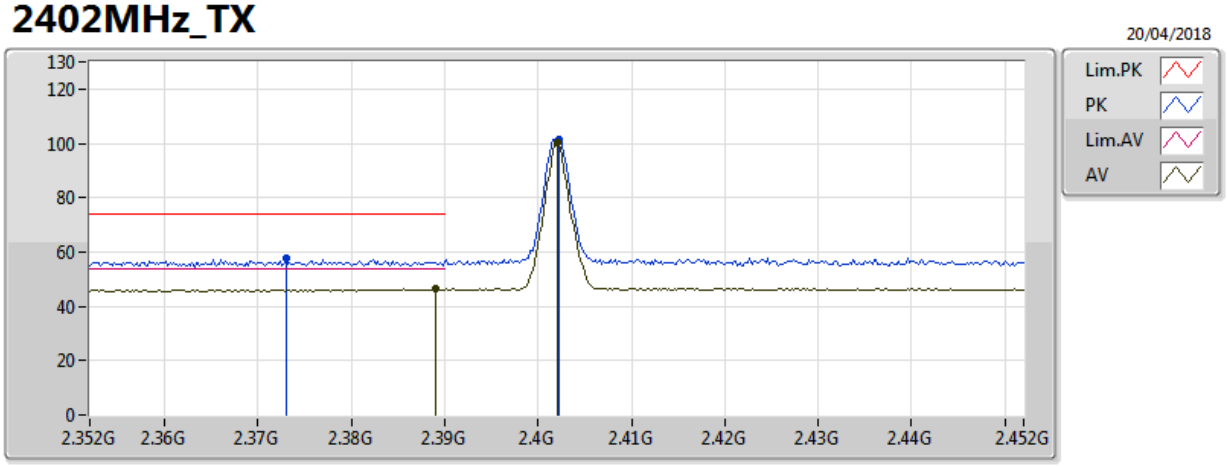
Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	4.95978G	39.94	54.00	-14.06	5.03	3	Horizontal	32	2.51	-
PK	4.95968G	49.73	74.00	-24.27	5.03	3	Horizontal	32	2.51	-

Test Mode: Mode 5
Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
2.4-2.4835GHz	-	-	-	-	-	-	-	-	-	-	-	-
BT-LE_Nss1_1TX	Pass	AV	2.483502G	48.07	54.00	-5.93	33.19	3	Vertical	295	1.02	-

BT-LE_Nss1_1TX

2402MHz_TX

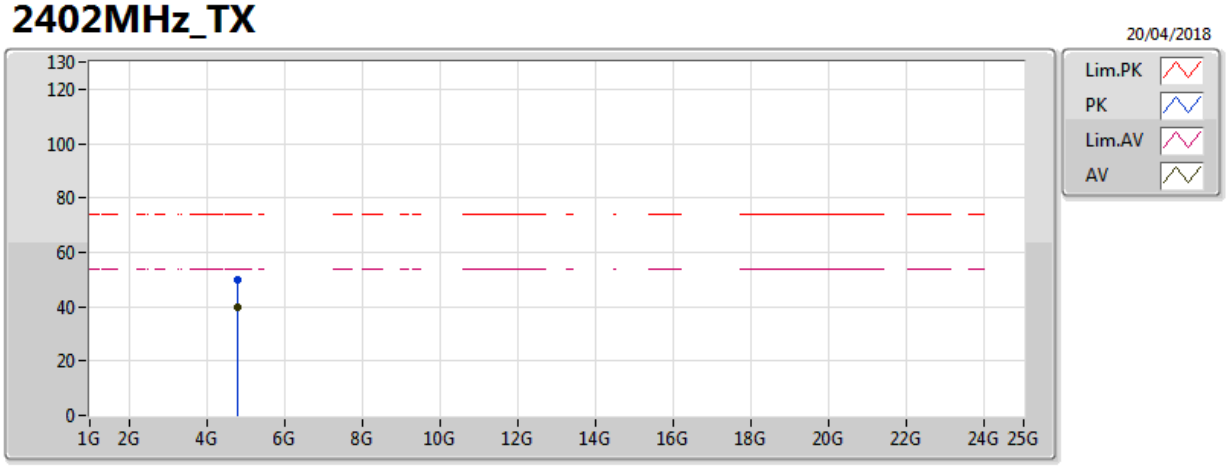


EUT Z_1TX(ANT 1)
Setting 28
04-L-2
FSP(100142)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	2.389G	46.30	54.00	-7.70	33.16	3	Vertical	293	1.12	-
AV	2.402G	100.20	Inf	-Inf	33.17	3	Vertical	293	1.12	-
PK	2.373G	57.63	74.00	-16.37	33.15	3	Vertical	293	1.12	-
PK	2.4022G	101.61	Inf	-Inf	33.17	3	Vertical	293	1.12	-

BT-LE_Nss1_1TX

2402MHz_TX

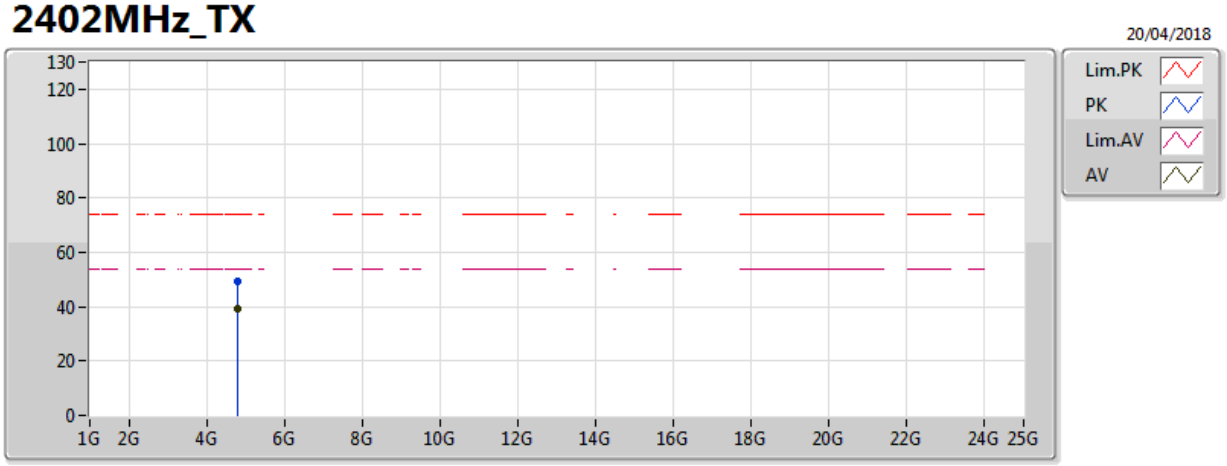


EUT Z_1TX(ANT 1)
Setting 28
04-L-2
FSP(100142)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	4.80235G	39.54	54.00	-14.46	5.93	3	Vertical	20	1.59	-
PK	4.80316G	49.62	74.00	-24.38	5.93	3	Vertical	20	1.59	-

BT-LE_Nss1_1TX

2402MHz_TX

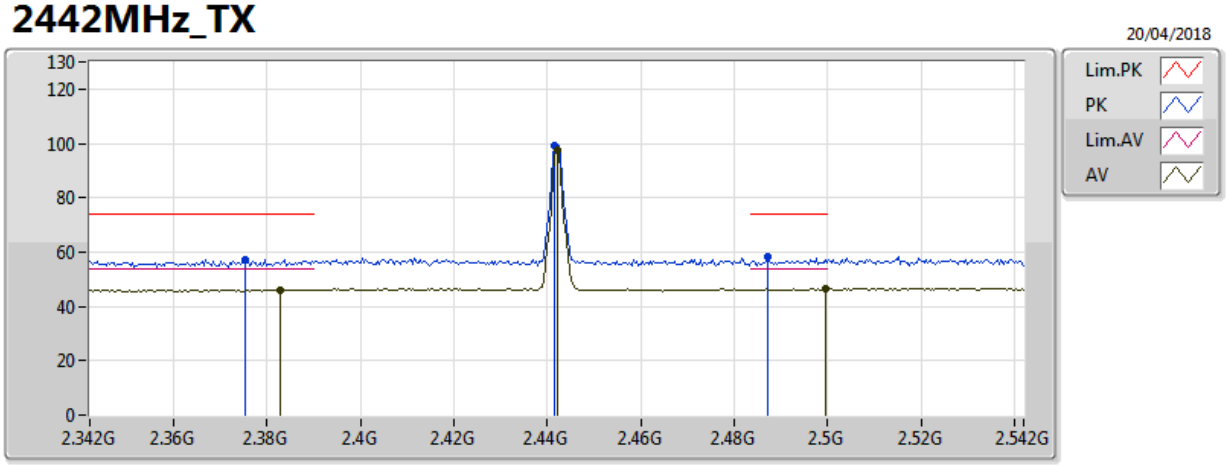


EUT Z_1TX(ANT 1)
Setting 28
04-L-2
FSP(100142)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	4.80257G	39.34	54.00	-14.66	5.93	3	Horizontal	278	1.31	-
PK	4.80336G	49.39	74.00	-24.61	5.93	3	Horizontal	278	1.31	-

BT-LE_Nss1_1TX

2442MHz_TX

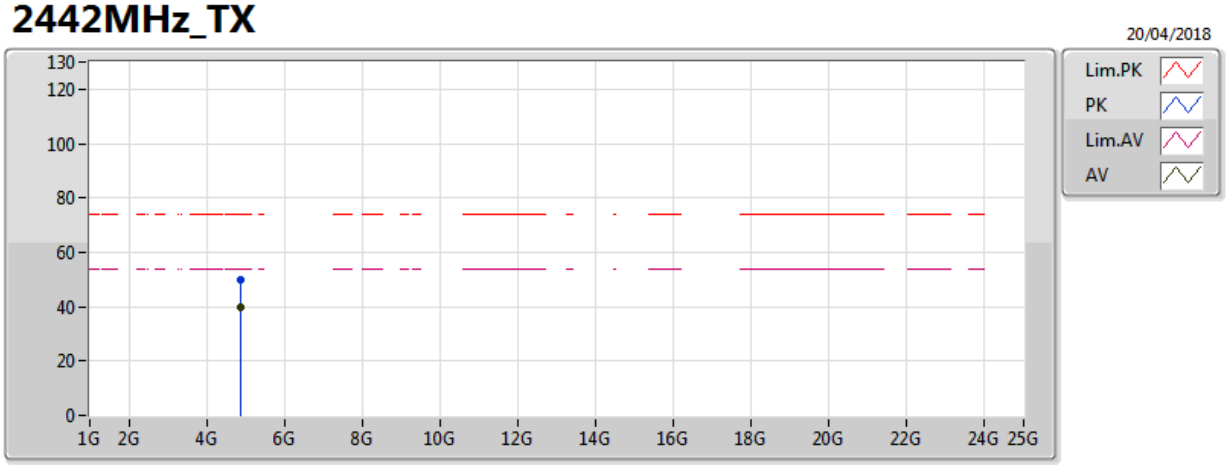


EUT Z_1TX(ANT 1)
Setting 28
04-L-2
FSP(100142)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	2.3828G	46.20	54.00	-7.80	33.16	3	Vertical	298	1.02	-
AV	2.442G	97.43	Inf	-Inf	33.18	3	Vertical	298	1.02	-
AV	2.4996G	46.32	54.00	-7.68	33.19	3	Vertical	298	1.02	-
PK	2.3752G	57.29	74.00	-16.71	33.16	3	Vertical	298	1.02	-
PK	2.4416G	99.11	Inf	-Inf	33.18	3	Vertical	298	1.02	-
PK	2.4872G	58.18	74.00	-15.82	33.19	3	Vertical	298	1.02	-

BT-LE_Nss1_1TX

2442MHz_TX

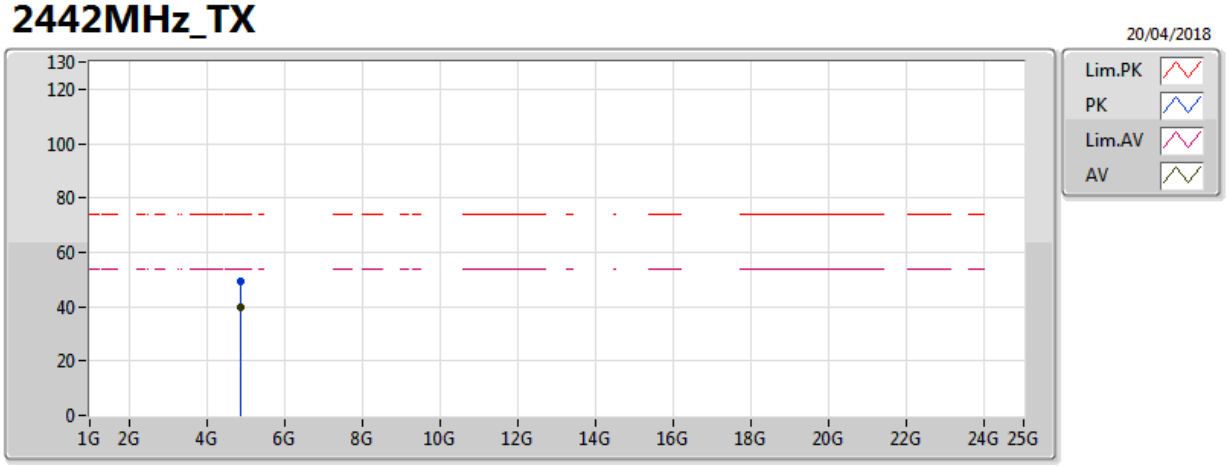


EUT Z_1TX(ANT 1)
Setting 28
04-L-2
FSP(100142)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	4.88569G	39.66	54.00	-14.34	6.11	3	Vertical	251	1.08	-
PK	4.88573G	49.98	74.00	-24.02	6.11	3	Vertical	251	1.08	-

BT-LE_Nss1_1TX

2442MHz_TX

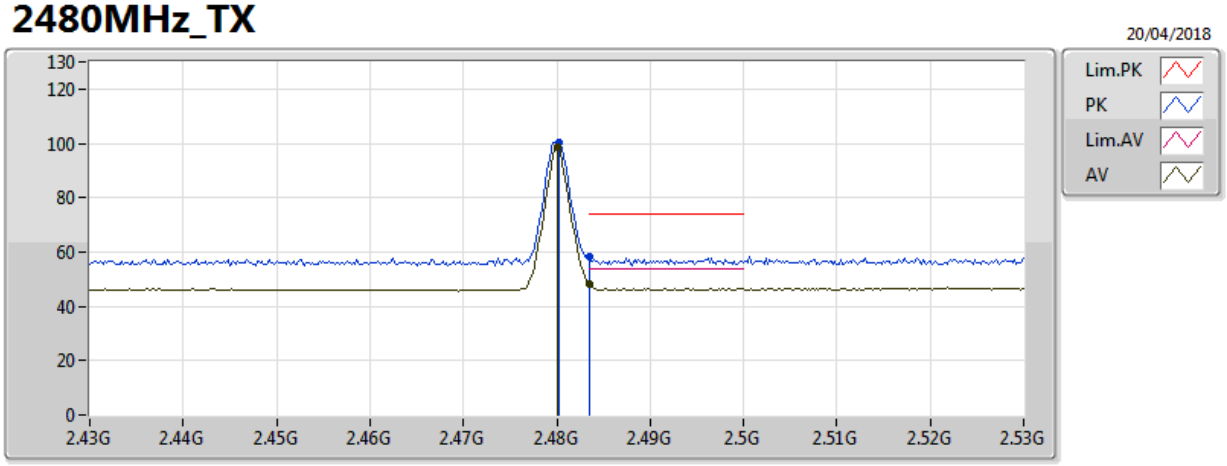


EUT Z_1TX(ANT 1)
Setting 28
04-L-2
FSP(100142)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	4.88334G	39.53	54.00	-14.47	6.10	3	Horizontal	302	1.54	-
PK	4.88331G	49.05	74.00	-24.95	6.10	3	Horizontal	302	1.54	-

BT-LE_Nss1_1TX

2480MHz_TX

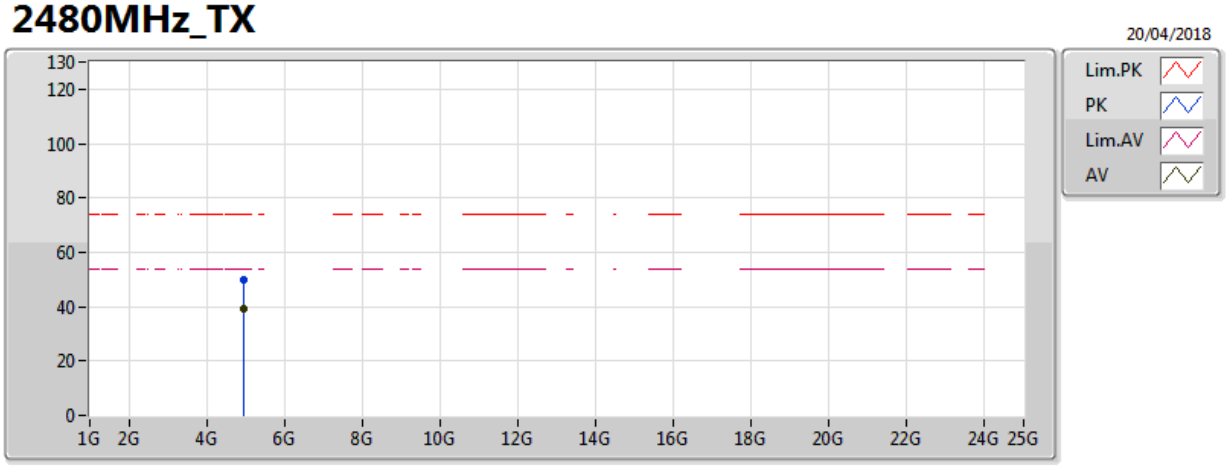


EUT Z_1TX(ANT 1)
Setting 28
04-L-2
FSP(100142)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	2.48G	98.73	Inf	-Inf	33.19	3	Vertical	295	1.02	-
AV	2.483502G	48.07	54.00	-5.93	33.19	3	Vertical	295	1.02	-
PK	2.4802G	100.22	Inf	-Inf	33.19	3	Vertical	295	1.02	-
PK	2.483502G	58.30	74.00	-15.70	33.19	3	Vertical	295	1.02	-

BT-LE_Nss1_1TX

2480MHz_TX

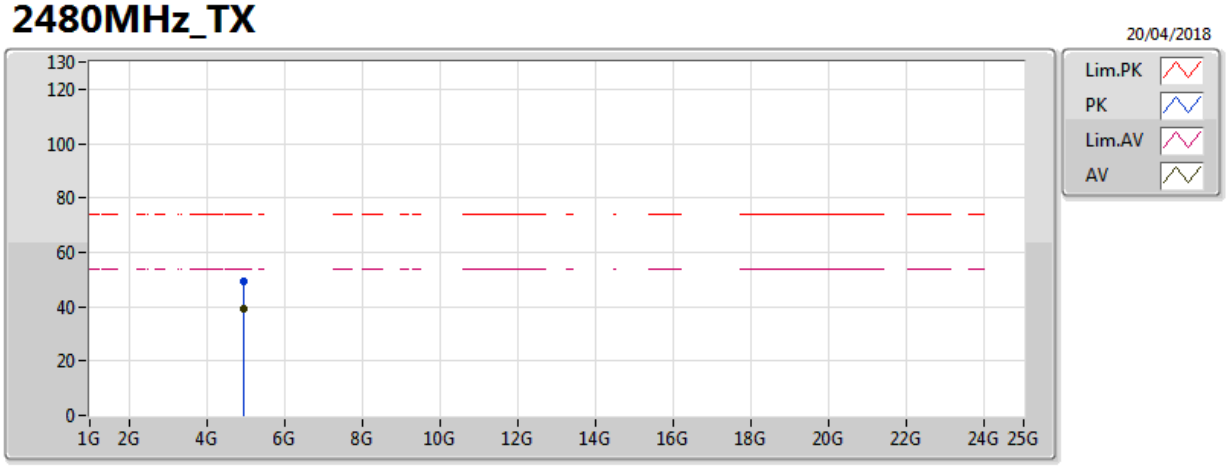


EUT Z_1TX(ANT 1)
Setting 28
04-L-2
FSP(100142)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	4.95825G	39.31	54.00	-14.69	6.26	3	Vertical	259	2.44	-
PK	4.96047G	49.64	74.00	-24.36	6.27	3	Vertical	259	2.44	-

BT-LE_Nss1_1TX

2480MHz_TX



EUT Z_1TX(ANT 1)
Setting 28
04-L-2
FSP(100142)

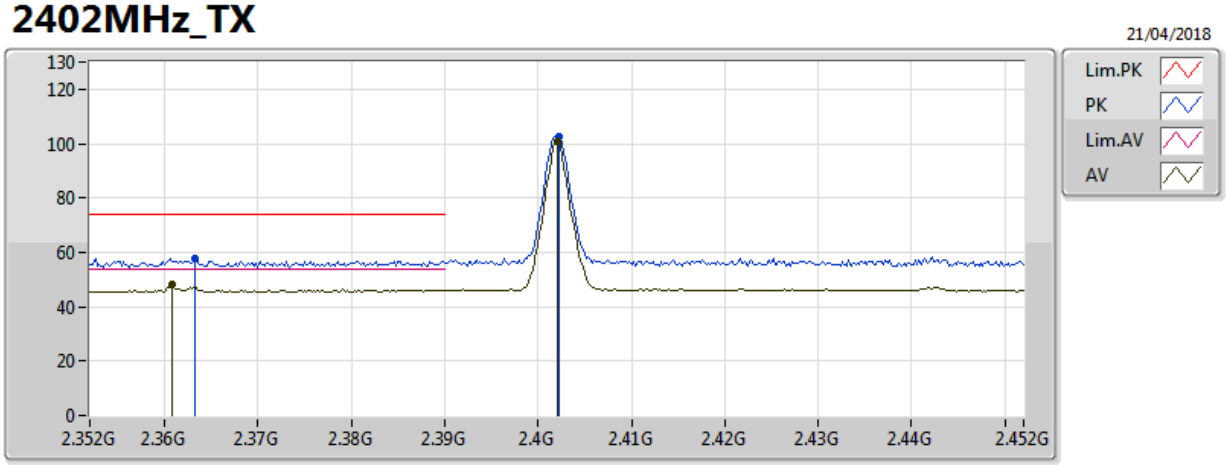
Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	4.95942G	39.39	54.00	-14.61	6.26	3	Horizontal	110	1.94	-
PK	4.95805G	49.55	74.00	-24.45	6.26	3	Horizontal	110	1.94	-

Test Mode: Mode 6
Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
2.4-2.4835GHz	-	-	-	-	-	-	-	-	-	-	-	-
BT-LE_Nss1_1TX	Pass	AV	2.483502G	48.70	54.00	-5.30	33.19	3	Vertical	339	1.03	-

BT-LE_Nss1_1TX

2402MHz_TX

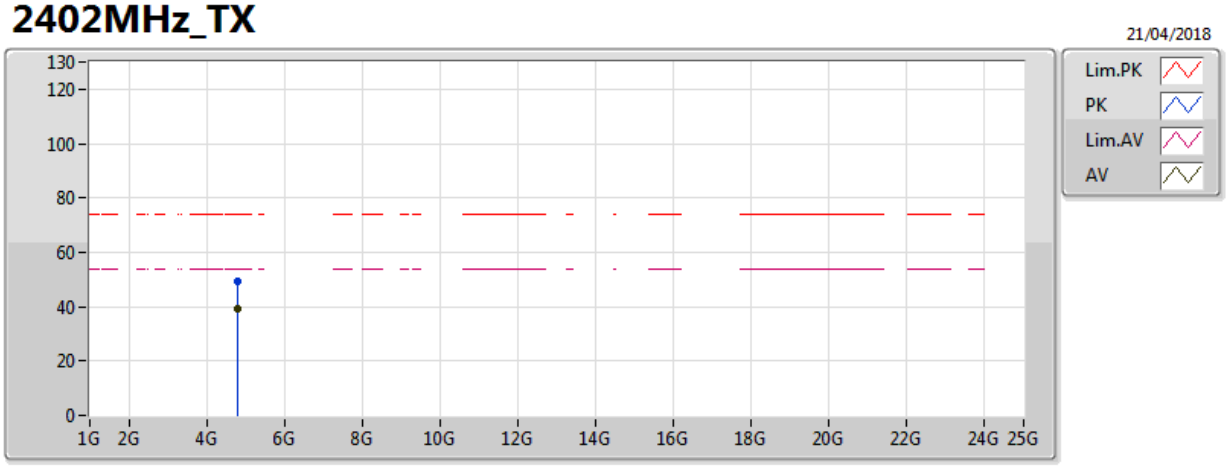


EUT Z_1TX(ANT 2)
Setting 30
04-J-5
FSP(100142)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	2.3608G	47.98	54.00	-6.02	33.15	3	Vertical	297	1.09	-
AV	2.402G	100.83	Inf	-Inf	33.17	3	Vertical	297	1.09	-
PK	2.3632G	57.86	74.00	-16.14	33.15	3	Vertical	297	1.09	-
PK	2.4022G	102.30	Inf	-Inf	33.17	3	Vertical	297	1.09	-

BT-LE_Nss1_1TX

2402MHz_TX

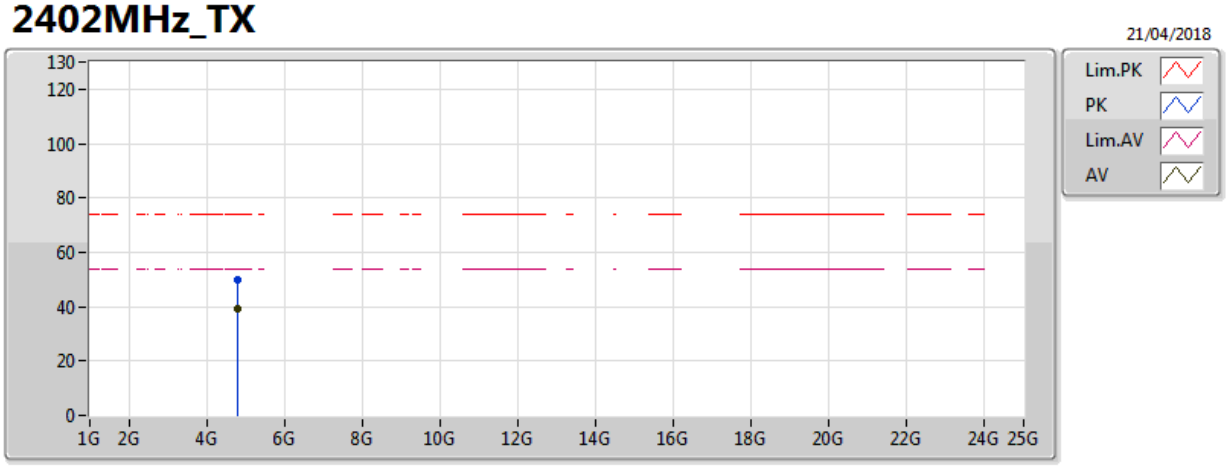


EUT Z_1TX(ANT 2)
Setting 30
04-J-5
FSP(100142)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	4.80646G	39.27	54.00	-14.73	5.93	3	Vertical	227	1.69	-
PK	4.80302G	49.20	74.00	-24.80	5.93	3	Vertical	227	1.69	-

BT-LE_Nss1_1TX

2402MHz_TX

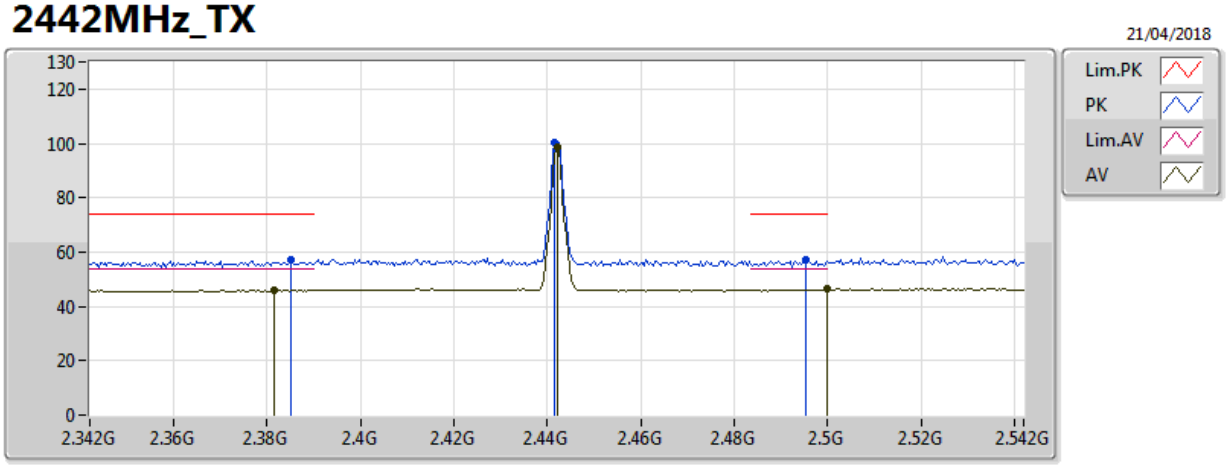


EUT Z_1TX(ANT 2)
Setting 30
04-J-5
FSP(100142)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	4.80448G	39.18	54.00	-14.82	5.93	3	Horizontal	40	1.07	-
PK	4.80413G	49.99	74.00	-24.01	5.93	3	Horizontal	40	1.07	-

BT-LE_Nss1_1TX

2442MHz_TX

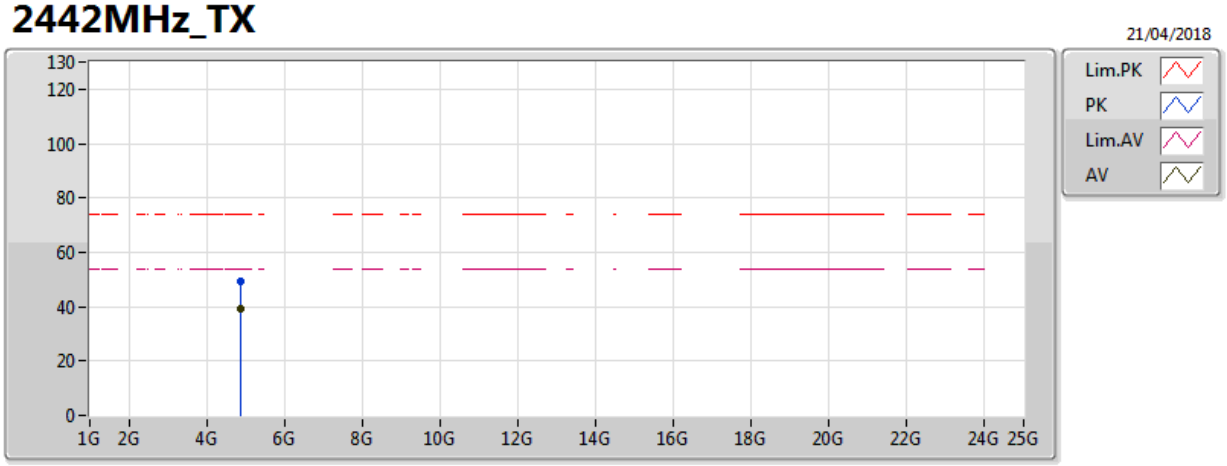


EUT Z_1TX(ANT 2)
Setting 30
04-J-5
FSP(100142)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	2.3816G	46.03	54.00	-7.97	33.16	3	Vertical	297	1.03	-
AV	2.442G	98.70	Inf	-Inf	33.18	3	Vertical	297	1.03	-
AV	2.5G	46.23	54.00	-7.77	33.19	3	Vertical	297	1.03	-
PK	2.3852G	57.12	74.00	-16.88	33.16	3	Vertical	297	1.03	-
PK	2.4416G	100.14	Inf	-Inf	33.18	3	Vertical	297	1.03	-
PK	2.4952G	57.24	74.00	-16.76	33.19	3	Vertical	297	1.03	-

BT-LE_Nss1_1TX

2442MHz_TX

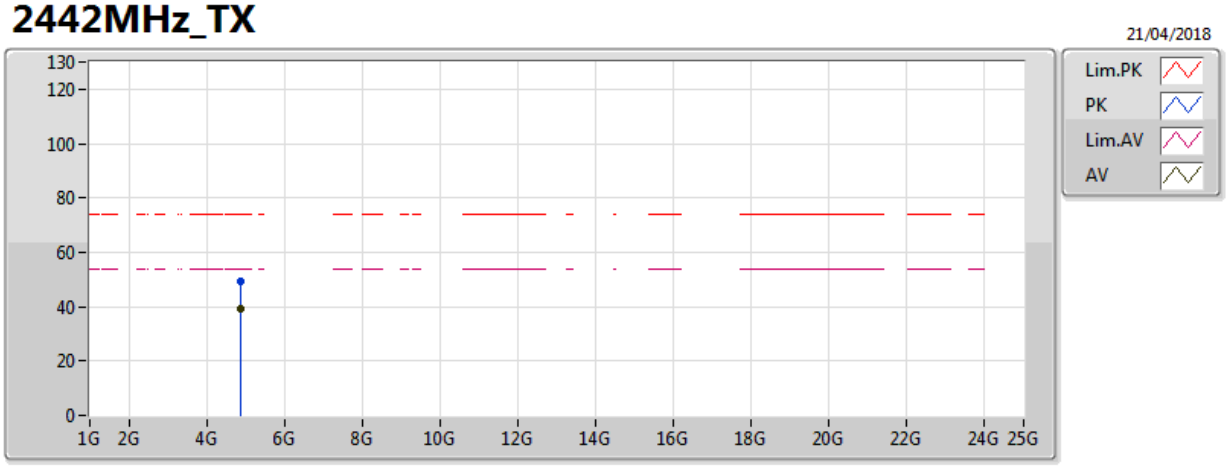


EUT Z_1TX(ANT 2)
Setting 30
04-J-5
FSP(100142)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	4.88295G	39.39	54.00	-14.61	6.10	3	Vertical	37	1.21	-
PK	4.88434G	49.38	74.00	-24.62	6.11	3	Vertical	37	1.21	-

BT-LE_Nss1_1TX

2442MHz_TX

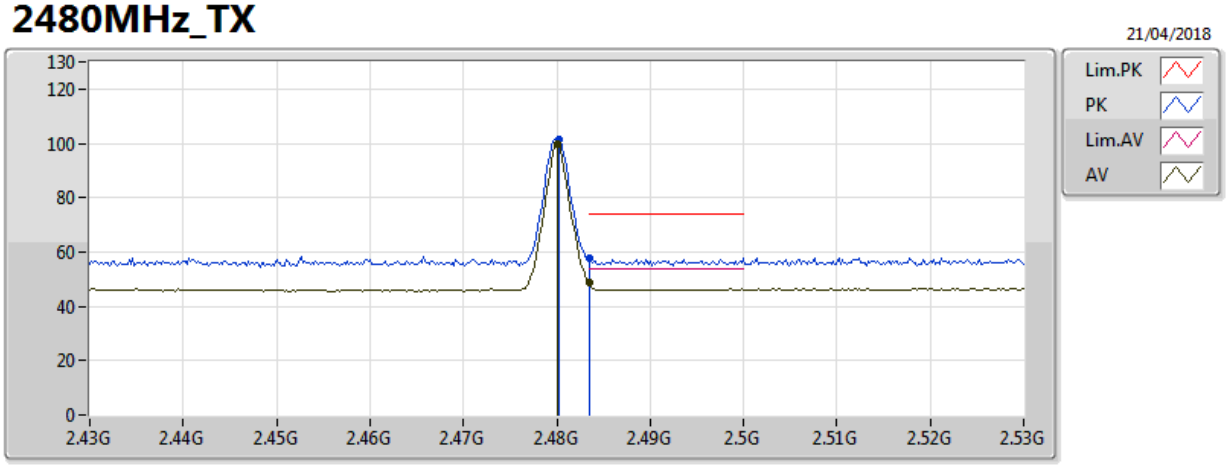


EUT Z_1TX(ANT 2)
Setting 30
04-J-5
FSP(100142)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	4.88459G	39.34	54.00	-14.66	6.11	3	Horizontal	70	1.94	-
PK	4.88245G	49.46	74.00	-24.54	6.10	3	Horizontal	70	1.94	-

BT-LE_Nss1_1TX

2480MHz_TX

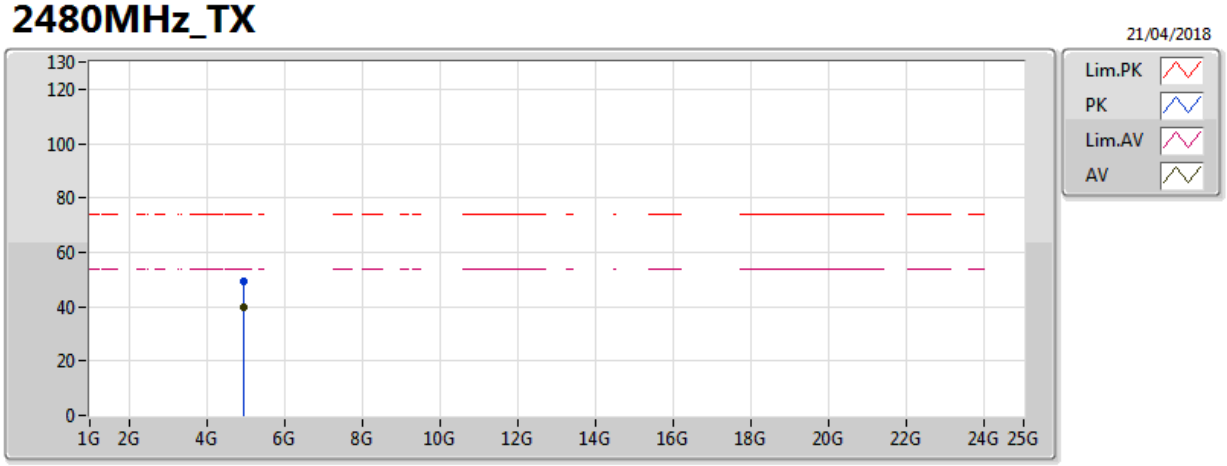


EUT Z_1TX(ANT 2)
Setting 30
04-J-5
FSP(100142)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	2.48G	99.64	Inf	-Inf	33.19	3	Vertical	339	1.03	-
AV	2.483502G	48.70	54.00	-5.30	33.19	3	Vertical	339	1.03	-
PK	2.4802G	101.29	Inf	-Inf	33.19	3	Vertical	339	1.03	-
PK	2.483502G	57.92	74.00	-16.08	33.19	3	Vertical	339	1.03	-

BT-LE_Nss1_1TX

2480MHz_TX

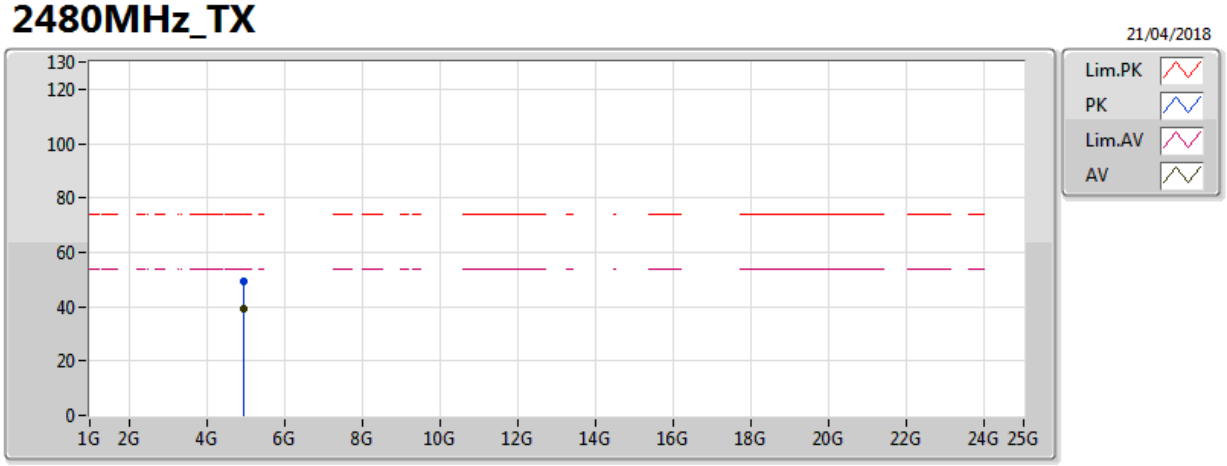


EUT Z_1TX(ANT 2)
Setting 30
04-J-5
FSP(100142)

Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	4.95933G	39.97	54.00	-14.03	6.26	3	Vertical	167	1.62	-
PK	4.96156G	49.39	74.00	-24.61	6.27	3	Vertical	167	1.62	-

BT-LE_Nss1_1TX

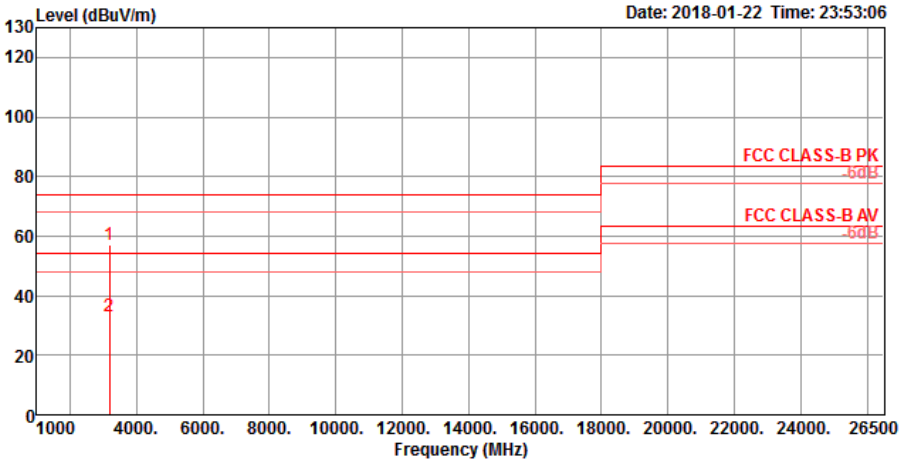
2480MHz_TX



EUT Z_1TX(ANT 2)
Setting 30
04-J-5
FSP(100142)

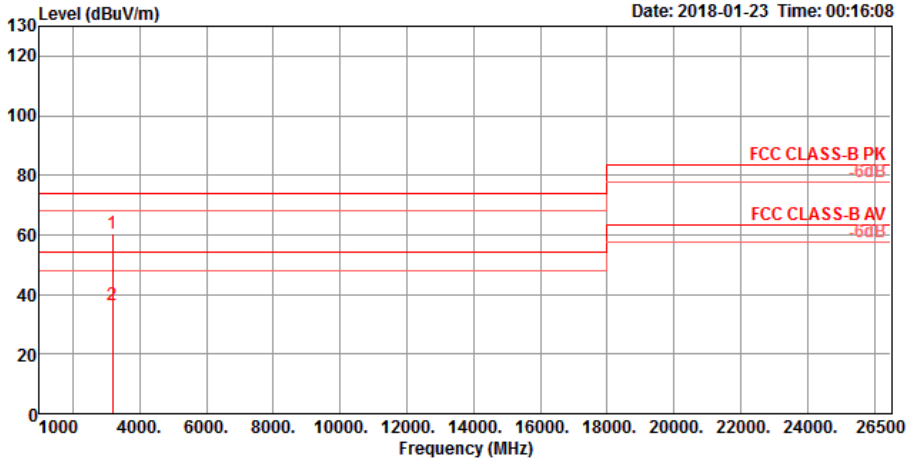
Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comments
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)	
AV	4.95919G	39.25	54.00	-14.75	6.26	3	Horizontal	87	1.52	-
PK	4.95833G	49.41	74.00	-24.59	6.26	3	Horizontal	87	1.52	-

RSE Co-location Result			
Operating Mode	1	**Polarization**	Horizontal
Operating Function	Normal Link		



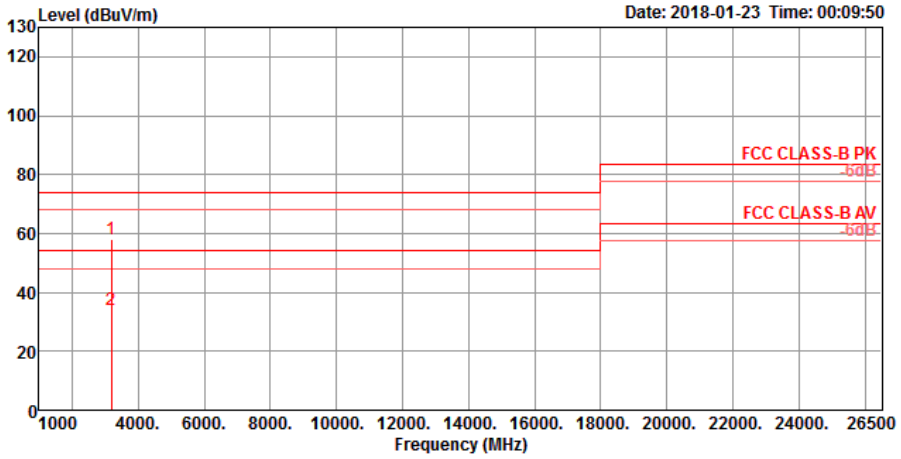
	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	3183.77	57.08	74.00	-16.92	53.21	9.10	28.64	33.87	159	245	Peak	HORIZONTAL
2	3184.93	33.26	54.00	-20.74	29.39	9.10	28.64	33.87	159	245	Average	HORIZONTAL

RSE Co-location Result			
Operating Mode	1	**Polarization**	Vertical
Operating Function	Normal Link		



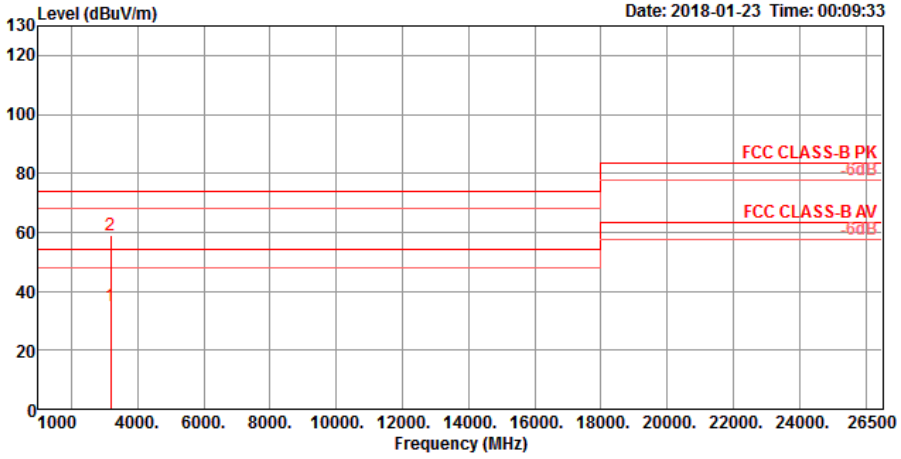
	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	3184.80	60.37	74.00	-13.63	56.50	9.10	28.64	33.87	172	330	Peak	VERTICAL
2	3184.99	36.38	54.00	-17.62	32.51	9.10	28.64	33.87	172	330	Average	VERTICAL

RSE Co-location Result			
Operating Mode	2	**Polarization**	Horizontal
Operating Function	Normal Link		



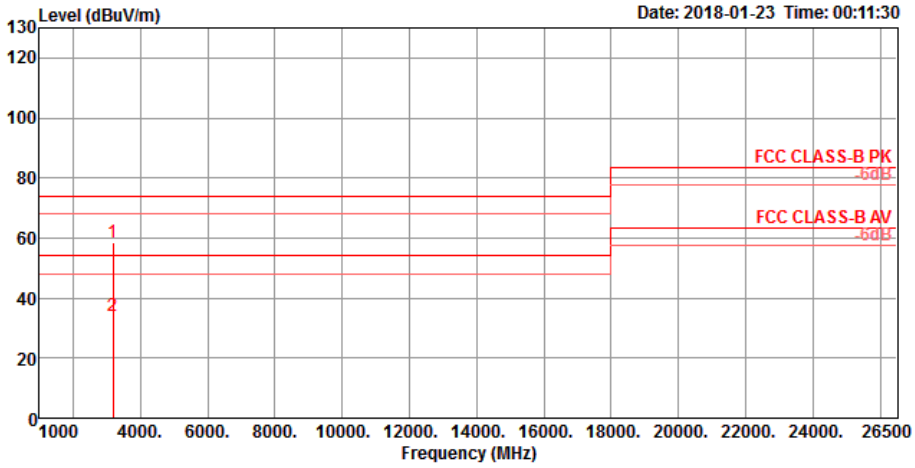
	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	3185.90	58.15	74.00	-15.85	54.27	9.10	28.64	33.86	169	257	Peak	HORIZONTAL
2	3186.10	33.90	54.00	-20.10	30.02	9.10	28.64	33.86	169	257	Average	HORIZONTAL

RSE Co-location Result			
Operating Mode	2	**Polarization**	Vertical
Operating Function	Normal Link		



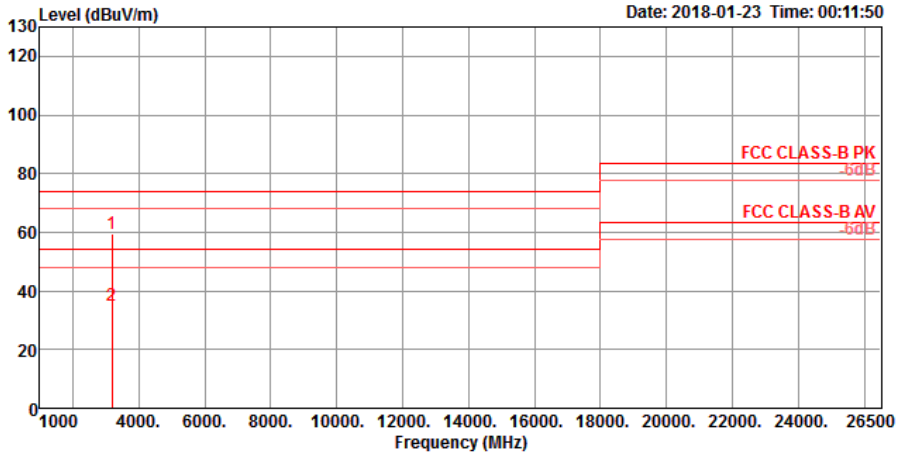
	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	3184.48	34.90	54.00	-19.10	31.03	9.10	28.64	33.87	147	217	Average	VERTICAL
2	3186.99	59.05	74.00	-14.95	55.17	9.10	28.64	33.86	147	217	Peak	VERTICAL

RSE Co-location Result			
Operating Mode	3	**Polarization**	Horizontal
Operating Function	Normal Link		



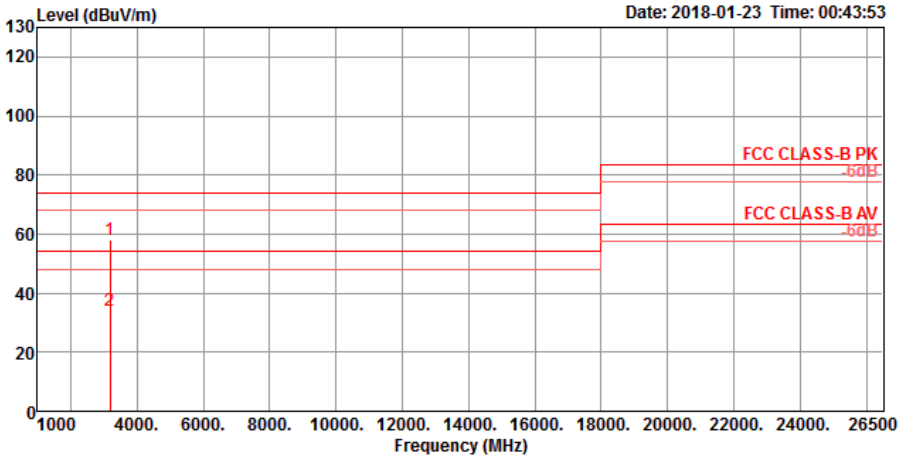
	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	3184.43	58.68	74.00	-15.32	54.81	9.10	28.64	33.87	142	224	Peak	HORIZONTAL
2	3185.79	33.91	54.00	-20.09	30.03	9.10	28.64	33.86	142	224	Average	HORIZONTAL

RSE Co-location Result			
Operating Mode	3	**Polarization**	Vertical
Operating Function	Normal Link		



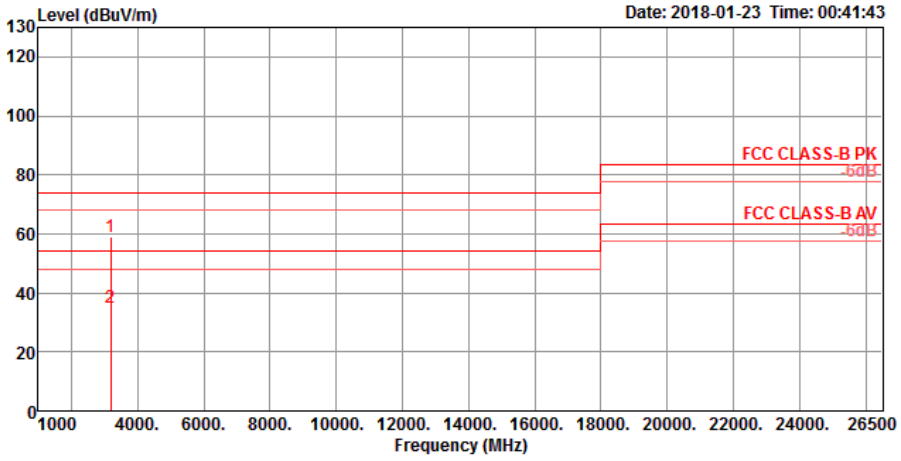
	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	3187.47	59.42	74.00	-14.58	55.54	9.10	28.64	33.86	187	269	Peak	VERTICAL
2	3187.77	35.19	54.00	-18.81	31.31	9.10	28.64	33.86	187	269	Average	VERTICAL

RSE Co-location Result			
Operating Mode	4	**Polarization**	Horizontal
Operating Function	Normal Link		



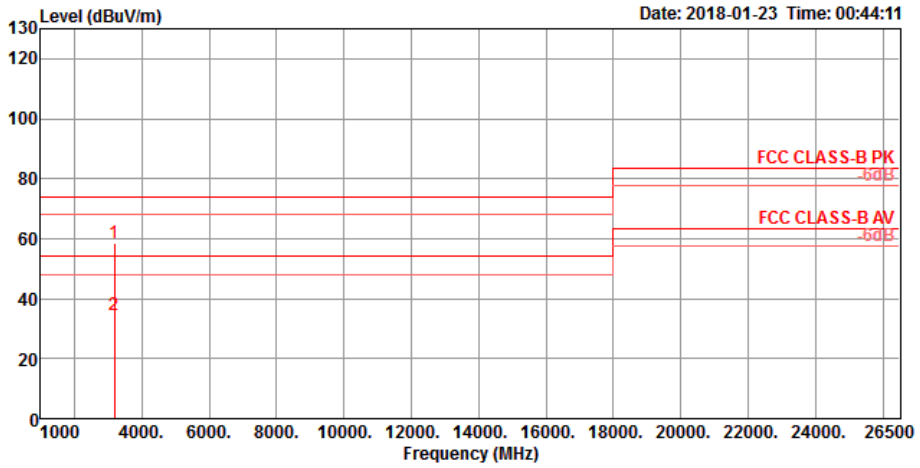
	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	3183.93	58.27	74.00	-15.73	54.40	9.10	28.64	33.87	183	222	Peak	HORIZONTAL
2	3186.54	33.97	54.00	-20.03	30.09	9.10	28.64	33.86	183	222	Average	HORIZONTAL

RSE Co-location Result			
Operating Mode	4	**Polarization**	Vertical
Operating Function	Normal Link		



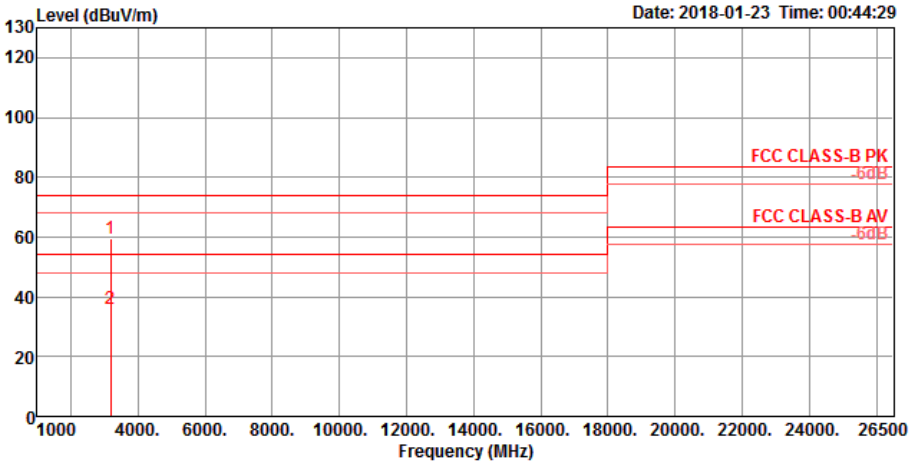
	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	3186.46	58.90	74.00	-15.10	55.02	9.10	28.64	33.86	133	155	Peak	VERTICAL
2	3186.58	34.83	54.00	-19.17	30.95	9.10	28.64	33.86	133	155	Average	VERTICAL

RSE Co-location Result			
Operating Mode	5	**Polarization**	Horizontal
Operating Function	Normal Link		



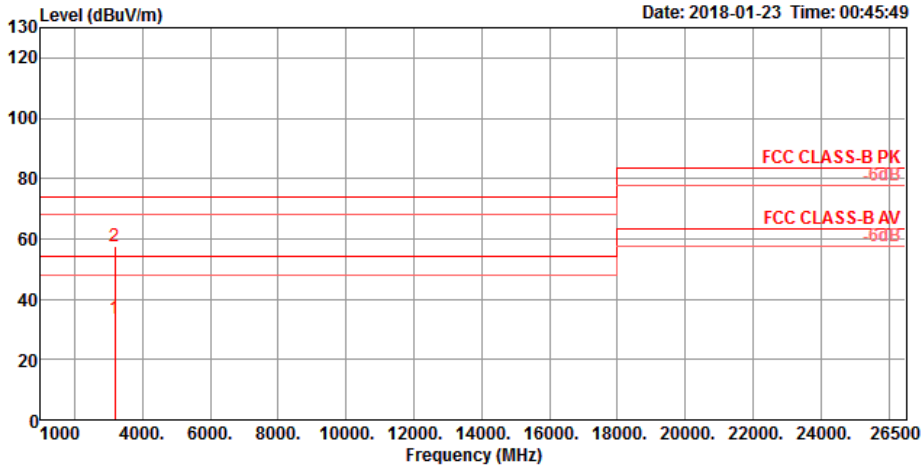
	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	3184.64	58.69	74.00	-15.31	54.82	9.10	28.64	33.87	117	51	Peak	HORIZONTAL
2	3186.98	34.73	54.00	-19.27	30.85	9.10	28.64	33.86	117	51	Average	HORIZONTAL

RSE Co-location Result			
Operating Mode	5	**Polarization**	Vertical
Operating Function	Normal Link		



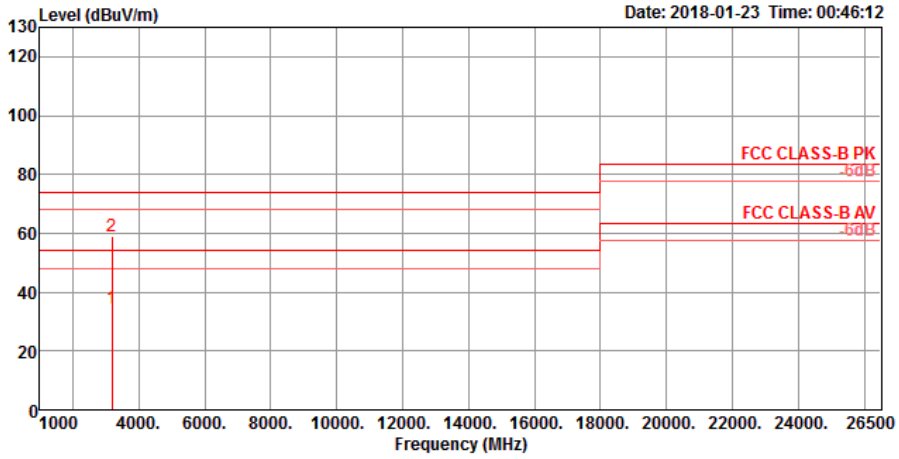
	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	3185.00	59.36	74.00	-14.64	55.49	9.10	28.64	33.87	175	291	Peak	VERTICAL
2	3185.62	35.98	54.00	-18.02	32.10	9.10	28.64	33.86	175	291	Average	VERTICAL

RSE Co-location Result			
Operating Mode	6	**Polarization**	Horizontal
Operating Function	Normal Link		



	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	3185.48	33.78	54.00	-20.22	29.90	9.10	28.64	33.86	168	77	Average	HORIZONTAL
2	3187.71	57.35	74.00	-16.65	53.47	9.10	28.64	33.86	168	77	Peak	HORIZONTAL

RSE Co-location Result			
Operating Mode	6	**Polarization**	Vertical
Operating Function	Normal Link		



	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	3187.30	34.73	54.00	-19.27	30.85	9.10	28.64	33.86	124	238	Average	VERTICAL
2	3187.67	59.01	74.00	-14.99	55.13	9.10	28.64	33.86	124	238	Peak	VERTICAL

Appendix D. Antenna List

Table for Filed Antenna

No.	Brand	Ant. Type	Con. Type	Peak Gain (dBi)	Model No.
1	Walsin	Dipole	IPEX	3.14	RFDPA171320EMLB301
2	LYNwave	PIFA	IPEX	3.5	ALA110-222050-300011
3	ACON	PIFA	IPEX	TX1: 1.94 TX2: -0.22	ANP6Y-100140 ANP6Y-100141
4	SA	PIFA	IPEX	TX1: 0.64 TX2: 1.54	SE-ECS50-001 SE-ECS50-002
5	ACON	PIFA	IPEX	TX1: -0.48 TX2: -0.37	025.9013Y.0011 025.9013Z.0011
6	WNC	PIFA	IPEX	TX1: -0.77 TX2: 0.35	025.9013Y.0001 025.9013Z.0001
7	HONGBO	PIFA	IPEX	TX1: -0.66 TX2: -1.40	DQ602371500 DQ602371500
8	INPAQ	PIFA	IPEX	TX1: -1.57 TX2: -0.90	DQ6LB020204 DQ6LB020204
9	WNC	PIFA	IPEX	TX1: 0.89 TX2: 0.44	DQ6415G8200 DQ6415G8200
10	HONGBO	PIFA	IPEX	-0.66	DQ602371400
11	INPAQ	PIFA	IPEX	-1.74	DQ6LB024100
12	WNC	PIFA	IPEX	1.30	DQ6415G8500
13	High-Tek	PIFA	IPEX	TX1: -0.23 TX2: 0.90	0ACCN016037N 0ACCN016038N
14	Hong-Bo	PIFA	IPEX	TX1: -1.55 TX2: 0.70	ANM6Y-100000 ANM6Y-100001
15	INPAQ	PIFA	IPEX	0.62	DQ6LB024204
16	WNC	PIFA	IPEX	1.33	DQ6415G9700
17	HONGBO	PIFA	IPEX	TX1: -2.04 TX2: 0.58	DQ602368900 DQ602368900
18	INPAQ	PIFA	IPEX	TX1: -1.99 TX2: -1.08	DQ6LB020301 DQ6LB020301
19	HONGBO	PIFA	IPEX	1.50	DQ602368800
20	INPAQ	PIFA	IPEX	0.69	DQ6LB024201
21	WNC	PIFA	IPEX	1.86	DQ6415G9800
22	INPAQ	PIFA	IPEX	TX1: 0.03 TX2: -0.50	WA-P-LB-02-289 WA-P-LB-01-138

23	LUXSHAREICT	PIFA	IPEX	TX1: -2.10 TX2: -1.90	LA05RF838-1H LA05RF836-1H
24	INPAQ	PIFA	IPEX	0.38	DQ6LB024203
25	Hong-Bo	PIFA	IPEX	2.15	DQ602369200
26	INPAQ	PIFA	IPEX	0.28	DQ6LB024205
27	WNC	PIFA	IPEX	0.37	DQ6415G9500
28	SPEED	PIFA	IPEX	TX1: 0.95 TX2: 0.03	025.90133.0001 025.90134.0001
29	Inno Wave	PIFA	IPEX	TX1: 2.66 TX2: 0.71	025.90135.0001 025.90136.0001
30	SPEED	PIFA	IPEX	TX1: 2.35 TX2: -0.45	025.90146.0001 025.900GO.0001
31	Inno Wave	PIFA	IPEX	TX1: 1.16 TX2: 1.29	025.90144.0001 025.90145.0001
32	INPAQ	PIFA	IPEX	TX1: 0.11 TX2: -2.10	025.90131.0001 025.90132.0001
33	Foxconn	PIFA	IPEX	TX1: -0.75 TX2: 0.33	350504E00-600-G 350504F00-600-G
34	WNC	Dipole	IPEX	TX1: -0.45 TX2: 1.26	497317-003 497317-003
35	ACON	Dipole	IPEX	TX1: 0.41 TX2: 0.83	025.90119.0001 025.9011A.0001
36	ACON	PIFA	IPEX	TX1: 1.16 TX2: 0.20	APP6Y-700246 APP6Y-700246
37	JEM	PIFA	IPEX	TX1: 1.45 TX2: 1.51	1510-0119-0258 1510-0119-0258
38	ACON	PIFA	IPEX	TX1: 1.87 TX2: 1.48	APP6Y-700260 APP6Y-700260
39	JEM	PIFA	IPEX	TX1: 1.79 TX2: 2.47	1510-0119-0259 1510-0119-0259
40	SA	PIFA	IPEX	TX1: -0.08 TX2: -1.18	SE-ECM40-001 SE-ECM40-002
41	High-tek	PIFA	IPEX	TX1: -0.92 TX2: -1.89	0ACCN017005N 0ACCN017006N
42	ACON	PIFA	IPEX	TX1: -4.43 TX2: -3.66	025.9010D.0001 025.9010E.0001

43	ACON	PIFA	IPEX	TX1: -4.27 TX2: -3.06	025.9010D.0001 025.9010E.0001
44	ACON	Dipole	IPEX	TX1: 0.28 TX2: 0.58	025.90119.0001 025.9011A.0001
45	ACON	PIFA	IPEX	TX1: -3.50 TX2: -3.88	025.9010D.0001 025.9010E.0001
46	ACON	Dipole	IPEX	TX1: 0.52 TX2: -0.04	025.90119.0001 025.9011A.0001
47	High-tek	PIFA	IPEX	TX1: 2.71 TX2: -1.63	025.90123.0001 025.90124.0001
48	High-tek	PIFA	IPEX	TX1: 2.71 TX2: -1.63	025.90123.0001 025.90124.0001
49	High-tek	PIFA	IPEX	TX1: 2.71 TX2: -1.63	025.90123.0001 025.90124.0001
50	WNC	PIFA	IPEX	TX1: 1.52	DQ6415GCK00
51	Yageo	PIFA	IPEX	TX1:-0.95	DQ612141W00
52	HONGBO	PIFA	IPEX	TX1: 2.32 TX2 : 0.01	260-23717 260-23717
53	HONGBO	PIFA	IPEX	TX1: 0.01	260-23718
54	TONGDA	PIFA	IPEX	TX1: 1.39 TX2: 1.42	T-543-9001133-A T-543-9001133-A
55	TONGDA	PIFA	IPEX	TX1: 1.42 TX2: 2.07	T-543-9001133-3
56	WNC	PIFA	IPEX	TX1:-0.85 TX2:-0.22	81EAA415.GEM 81EAA415.GEN
57	Yageo	PIFA	IPEX	TX1:2.89 TX2:1.83	ANTA0HC12451WLAN1 ANTA0HC12451WLAN2
58	High-Tek	PIFA	IPEX	TX1:-0.73 TX2:-1.58	0ACCN017031N 0ACCN017032N
59	INPAQ	PIFA	IPEX	TX1:0.00 TX2:-0.82	DQ6LB020507 (WA-P-LBLB-02-057)
60	WNC	PIFA	IPEX	TX1:1.67 TX2:1.56	DQ6415GED00 (81EAA415.GED) DQ6415GED00 (81EAA415.GED)
61	INPAQ	PIFA	IPEX	TX1:1.7 TX2:1.93	WA-P-LB-02-508 WA-P-LB-02-509

62	High-Tek	PIFA	IPEX	TX1:1.12 TX2:-2.59	0ACQD017001N 0ACQD017002N
63	WNC	PIFA	IPEX	TX1:2.45 TX2:0.31	81EAA415.GER 81EAA415.GER
64	YAGEO	PIFA	IPEX	TX1:1.40 TX2:-0.50	ANTA0HQ12391WLAN1 ANTA0HQ12391WLAN2
65	WNC	Dipole	IPEX	1.68	9E.XCI15.G05
66	YAGEO	PIFA	IPEX	1.4	ANTA0HQ12391WLAN1
67	High-Tek	PIFA	IPEX	1.12	0ACQD017001N
68	WNC	PIFA	IPEX	2.45	81EAA415.GDZ
69	YAGEO	Dipole	IPEX	TX1:0.15 Tx2:0.15	ANTA0HQ12391WLAN4
70	High-Tek	PIFA	IPEX	TX1:-0.15 TX2:0.96	025.9018H.0001 025.9018I.0001
71	WNC	PIFA	IPEX	TX1:1.00 TX2:1.98	025.90189.0001 025.9018A.0001
72	WNC	PIFA	IPEX	TX1:-0.97 TX2:0.76	57EAA415.050 57EAA415.051
73	WNC	PIFA	IPEX	TX1:-0.50 TX2:-1.01	57EAA415.050 57EAA415.051
74	High-tek	PIFA	IPEX	TX1:-0.73 TX2:1.09	0ACCN016015N 0ACCN016016N
75	High-tek	PIFA	IPEX	TX1:-0.17 TX2:0.50	0ACCN016015N 0ACCN016016N
76	High-Tek	PIFA	IPEX	TX1:1.30 TX2:0.62	0ACCN017029N 0ACCN017024N
77	HONGBO	PIFA	IPEX	TX1:1.47 TX2:-0.34	260-24205 260-24206
78	ACON	PIFA	IPEX	TX1:-0.14 TX2:-2.14	6036B0213401 6036B0213301
79	WNC	PIFA	IPEX	TX1:0.06 TX2:-1.10	6036B0213601 6036B0213501
80	YAGEO	PIFA	IPEX	TX1:-0.34 TX2:-0.55	ANTA0HV12461WLAN1 ANTA0HV12461WLAN2
81	ACON	PIFA	IPEX	TX1:0.55 TX2:1.03	6036B0212301 6036B0212401
82	WNC	PIFA	IPEX	TX1:1.76 TX2:0.02	6036B0212101 6036B0212201

83	YAGEO	PIFA	IPEX	TX1:1.44 TX2:-0.47	ANTA0HV12461WLAN3 ANTA0HV12461WLAN4
84	ACON	PIFA	IPEX	TX1:-1.65 TX2:-0.71	6036B0214201 6036B0214101
85	WNC	PIFA	IPEX	TX1:-0.63 TX2:-0.09	6036B0214401 6036B0214301
86	YAGEO	PIFA	IPEX	TX1:-0.72 TX2:-1.97	ANTA0HV12461WLAN5 ANTA0HV12461WLAN6
87	INPAQ	PIFA	IPEX	TX1:0.76 TX2:-0.01	025.901AM.0011 025.901AN.0011
88	Foxconn	PIFA	IPEX	0.29	ANTP2M2-CNC05-EH
89	High-Tek	PIFA	IPEX	TX1: -1.31 TX2: -1.14	0ACAR017015N 0ACAR017016N
90	High-Tek	PIFA	IPEX	TX1: -0.56 TX2: -1.71	0ACAR017017N 0ACAR017018N
91	High-Tek	PIFA	IPEX	TX1: 0.75 TX2: -0.52	DC33001WO00 DC33001WO10
92	INPAQ	PIFA	IPEX	TX1: 1.7 TX2:1.93	WA-P-LB-02-508 WA-P-LB-02-509
93	INPAQ	PIFA	IPEX	TX1: 2.55 TX2: 1.85	WA-P-LB-02-502 WA-P-LB-02-503
94	INPAQ	PIFA	IPEX	TX1:1.55 TX2:0.22	WA-P-LB-02-502 WA-P-LB-02-503
95	INPAQ	PIFA	IPEX	TX1:1.76 TX2:1.59	WA-P-LBLB-02-055 WA-P-LBLB-02-055
96	INPAQ	PIFA	IPEX	TX1:0.00 TX2:-0.82	WA-P-LBLB-02-057 WA-P-LBLB-02-057
97	WNC	PIFA	IPEX	TX1:1.67 TX2:1.56	DQ6415GED00 DQ6415GED00
98	WNC	PIFA	IPEX	TX1:2.48 TX2:2.47	025.901AH.0001 025.901AI.0001
99	WNC	PIFA	IPEX	TX1:-0.54 TX2:1.58	025.901AH.0001 025.901AI.0001
100	INPAQ	PIFA	IPEX	TX1:-0.76 TX2:0.38	WA-P-LBLB-02-058
101	WNC	PIFA	IPEX	TX1:2.41 TX2:2.44	DQ6415GEB00
102	Tongda	PIFA	IPEX	1.42	T-543-9001133-3

103	HONGBO	PIFA	IPEX	0.01	260-23718
104	Foxconn	PIFA	IPEX	TX1:-0.75 TX2:0.33	350504E00-600-G 350504F00-600-G
105	WNC	PIFA	IPEX	TX1:0.34 TX2:1.21	DQ6415GEW00 DQ6415GEW00
106	YAGEO	PIFA	IPEX	TX1:0.77 TX2:0.76	DQ612552W00 DQ612552W00
107	WNC	PIFA	IPEX	0.34	DQ6415GEV00
108	YAGEO	PIFA	IPEX	-0.83	DQ612551W00
109	WNC	PIFA	IPEX	TX1:2.37 TX2:0.91	DQ6415GEY00 DQ6415GEY00
110	YAGEO	PIFA	IPEX	TX1:1.84 TX2:-1.29	DQ612562W00 DQ612562W00
111	WNC	PIFA	IPEX	2.37	DQ6415GEX00
112	YAGEO	PIFA	IPEX	1.04	DQ612561W00
113	YAGEO	PIFA	IPEX	TX1:0.11 TX2:1.47	DQ601072200 (ANTA0HQ10722WLAN1)
114	Foxconn	PIFA	IPEX	TX1:2.63 TX2:0.67	350505Y00-600-G(ANTS2M6-CZZ52-EH)
115	Foxconn	PIFA	IPEX	TX1:1.62 TX2:0.78	350506100-600-G (ANTS2M1-CZZ49-EH)
116	HIGH-TEK	PIFA	IPEX	TX1:0.80 TX2:0.81	DQ601700400 (0ACQD017004N)
117	INPAQ	PIFA	IPEX	TX1:1.30 TX2:0.98	DQ6LB020508 (WA-P-LBLB-02-056)
118	WNC	PIFA	IPEX	TX1:1.66 TX2:1.82	DQ6415GD500 (81EAA415.GD5)
119	WNC	PIFA	IPEX	TX1:0.10 TX2:0.10	025.90185.0001 025.90186.0001
120	WNC	PIFA	IPEX	TX1:-0.40 TX2:1.11	025.90187.0001 025.90188.0001
121	WNC	PIFA	IPEX	TX1:0.83 TX2:-0.29	025.90183.0001 025.90184.0001
122	WNC	PIFA	IPEX	TX1:0.62 TX2:0.61	025.901AS.0001 025.901AT.0001
123	WNC	PIFA	IPEX	TX1:2.46 TX2:2.44	025.901AS.0001 025.901AT.0001
124	YAGEO	PIFA	IPEX	1.40	ANTA0HQ12571WLAN1

125	WNC	PIFA	IPEX	2.45	81EAA415.GE8
126	HTK	PIFA	IPEX	1.12	0ACQD018004N
127	HTK	PIFA	IPEX	TX1:1.01 TX2:1.63	025.90199.0001 025.9019A.0001
128	WNC	PIFA	IPEX	TX1:1.57 TX2:0.25	025.90197.0001 025.90198.0001
129	HTK	PIFA	IPEX	-0.41	0ACAU017007N
130	ACON	PIFA	IPEX	TX1:1.82 TX2:-0.12	ANP6Y-100208 ANP6Y-100209
131	ICT	PIFA	IPEX	TX1:0.8 TX2:0.1	LA9RF066-CS-H LA9RF067-CS-H
132	ICT	PIFA	IPEX	-2.1	LA9RF076-CS-H