

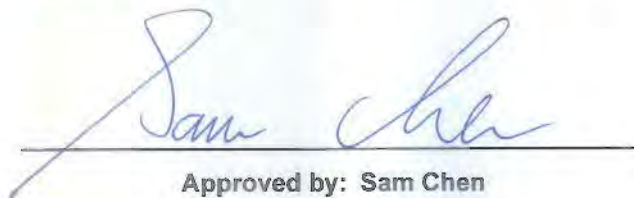


RADIO TEST REPORT

FCC ID : MSQ-RTAXJG00
Equipment : AX5400 Dual Band WiFi Router
Brand Name : ASUS
Model Name : ZenWiFi XD6/ASUS ZenWiFi
XD6/RT-AX5400/XD6/XD6S/ZenWiFi XD6S/ASUS ZenWiFi XD6S
Applicant : ASUSTeK COMPUTER INC.
1F., No. 15, Lide Rd., Beitou Dist., Taipei City 112, Taiwan
Manufacturer (1) : Datamax Electronics (DongGuan) Co., Ltd.
Niu Shan Foreign Economic Industrial Park, Dong Cheng
District, Dong Guan City, Guang Dong, China
Manufacturer (2) : Lukisen Electronic Corp.
3F.,No.236,Boai St., Shulin Dist.,New Taipei City 23845, Taiwan
Manufacturer (3) : Lih Rong Electronic Enterprise Co.,Ltd.
No. 486, Sec. 1, Wanshou Road, Guishan District, Taoyuan
City, Taiwan
Standard : 47 CFR FCC Part 15.407

The product was received on Oct. 06, 2021, and testing was started from Oct. 06, 2021 and completed on Nov. 05, 2021. We, Sporton International Inc. Hsinchu 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 test results in this variant report apply exclusively to the tested model / sample. Without written approval of Sporton International Inc. Hsinchu Laboratory, the test report shall not be reproduced except in full.



Approved by: Sam Chen

Sporton International Inc. Hsinchu Laboratory

No.8, Ln. 724, Bo'ai St., Zhubei City, Hsinchu County 302010, Taiwan (R.O.C.)



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History of this test report

TEL : 886-3-656-9065
FAX : 886-3-656-9085
Report Template No.: CB-A12_1 Ver1.4

Page Number : 3 of 28
Issued Date : Nov. 16, 2021
Report Version : 01



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	15.407(b)	Unwanted Emissions	PASS	-

Declaration of Conformity:

The test results with all measurement uncertainty excluded are presented in accordance with the regulation limits or requirements declared by manufacturers.

Comments and Explanations:

The declared of product specification for EUT presented in the report are provided by the manufacturer, and the manufacturer takes all the responsibilities for the accuracy of product specification.

Reviewed by: Sam Chen

Report Producer: Jessie Wei

1 General Description

1.1 Information

1.1.1 RF General Information

Frequency Range (MHz)	IEEE Std. 802.11	Ch. Frequency (MHz)	Channel Number
5150-5250	a, n (HT20), ac (VHT20), ax (HEW20)	5180-5240	36-48 [4]
5250-5350		5260-5320	52-64 [4]
5470-5725		5500-5720	100-144 [12]
5725-5850		5745-5825	149-165 [5]
5150-5250	n (HT40), ac (VHT40), ax (HEW40)	5190-5230	38-46 [2]
5250-5350		5270-5310	54-62 [2]
5470-5725		5510-5710	102-142 [6]
5725-5850		5755-5795	151-159 [2]
5150-5250	ac (VHT80), ax (HEW80)	5210	42 [1]
5250-5350		5290	58 [1]
5470-5725		5530-5690	106-138 [3]
5725-5850		5775	155 [1]
5150-5350	ac (VHT160), ax (HEW160)	5250	50 [1]
5470-5725		5570	114 [1]

Band	Mode	BWch (MHz)	Nant
5.15-5.25GHz	802.11a	20	4
5.15-5.25GHz	802.11n HT20	20	4
5.15-5.25GHz	802.11n HT20-BF	20	4
5.15-5.25GHz	802.11ac VHT20	20	4
5.15-5.25GHz	802.11ac VHT20-BF	20	4
5.15-5.25GHz	802.11ax HEW20	20	4
5.15-5.25GHz	802.11ax HEW20-BF	20	4
5.15-5.25GHz	802.11n HT40	40	4
5.15-5.25GHz	802.11n HT40-BF	40	4
5.15-5.25GHz	802.11ac VHT40	40	4
5.15-5.25GHz	802.11ac VHT40-BF	40	4
5.15-5.25GHz	802.11ax HEW40	40	4
5.15-5.25GHz	802.11ax HEW40-BF	40	4
5.15-5.25GHz	802.11ac VHT80	80	4
5.15-5.25GHz	802.11ac VHT80-BF	80	4
5.15-5.25GHz	802.11ax HEW80	80	4



Band	Mode	BWch (MHz)	Nant
5.15-5.25GHz	802.11ax HEW80-BF	80	4
5.15-5.25GHz	802.11ac VHT160	160	4
5.15-5.25GHz	802.11ac VHT160-BF	160	4
5.15-5.25GHz	802.11ax HEW160	160	4
5.15-5.25GHz	802.11ax HEW160-BF	160	4
5.25-5.35GHz	802.11a	20	4
5.25-5.35GHz	802.11n HT20	20	4
5.25-5.35GHz	802.11n HT20-BF	20	4
5.25-5.35GHz	802.11ac VHT20	20	4
5.25-5.35GHz	802.11ac VHT20-BF	20	4
5.25-5.35GHz	802.11ax HEW20	20	4
5.25-5.35GHz	802.11ax HEW20-BF	20	4
5.25-5.35GHz	802.11n HT40	40	4
5.25-5.35GHz	802.11n HT40-BF	40	4
5.25-5.35GHz	802.11ac VHT40	40	4
5.25-5.35GHz	802.11ac VHT40-BF	40	4
5.25-5.35GHz	802.11ax HEW40	40	4
5.25-5.35GHz	802.11ax HEW40-BF	40	4
5.25-5.35GHz	802.11ac VHT80	80	4
5.25-5.35GHz	802.11ac VHT80-BF	80	4
5.25-5.35GHz	802.11ax HEW80	80	4
5.25-5.35GHz	802.11ax HEW80-BF	80	4
5.25-5.35GHz	802.11ac VHT160	160	4
5.25-5.35GHz	802.11ac VHT160-BF	160	4
5.25-5.35GHz	802.11ax HEW160	160	4
5.25-5.35GHz	802.11ax HEW160-BF	160	4
5.47-5.725GHz	802.11a	20	4
5.47-5.725GHz	802.11n HT20	20	4
5.47-5.725GHz	802.11n HT20-BF	20	4
5.47-5.725GHz	802.11ac VHT20	20	4
5.47-5.725GHz	802.11ac VHT20-BF	20	4
5.47-5.725GHz	802.11ax HEW20	20	4
5.47-5.725GHz	802.11ax HEW20-BF	20	4
5.47-5.725GHz	802.11n HT40	40	4
5.47-5.725GHz	802.11n HT40-BF	40	4
5.47-5.725GHz	802.11ac VHT40	40	4
5.47-5.725GHz	802.11ac VHT40-BF	40	4
5.47-5.725GHz	802.11ax HEW40	40	4
5.47-5.725GHz	802.11ax HEW40-BF	40	4
5.47-5.725GHz	802.11ac VHT80	80	4



Band	Mode	BWch (MHz)	Nant
5.47-5.725GHz	802.11ac VHT80-BF	80	4
5.47-5.725GHz	802.11ax HEW80	80	4
5.47-5.725GHz	802.11ax HEW80-BF	80	4
5.47-5.725GHz	802.11ac VHT160	160	4
5.47-5.725GHz	802.11ac VHT160-BF	160	4
5.47-5.725GHz	802.11ax HEW160	160	4
5.47-5.725GHz	802.11ax HEW160-BF	160	4
5.725-5.85GHz	802.11a	20	4
5.725-5.85GHz	802.11n HT20	20	4
5.725-5.85GHz	802.11n HT20-BF	20	4
5.725-5.85GHz	802.11ac VHT20	20	4
5.725-5.85GHz	802.11ac VHT20-BF	20	4
5.725-5.85GHz	802.11ax HEW20	20	4
5.725-5.85GHz	802.11ax HEW20-BF	20	4
5.725-5.85GHz	802.11n HT40	40	4
5.725-5.85GHz	802.11n HT40-BF	40	4
5.725-5.85GHz	802.11ac VHT40	40	4
5.725-5.85GHz	802.11ac VHT40-BF	40	4
5.725-5.85GHz	802.11ax HEW40	40	4
5.725-5.85GHz	802.11ax HEW40-BF	40	4
5.725-5.85GHz	802.11ac VHT80	80	4
5.725-5.85GHz	802.11ac VHT80-BF	80	4
5.725-5.85GHz	802.11ax HEW80	80	4
5.725-5.85GHz	802.11ax HEW80-BF	80	4

Note:

- ♦ 11a, HT20 and HT40 use a combination of OFDM-BPSK, QPSK, 16QAM, 64QAM modulation.
- ♦ VHT20, VHT40, VHT80 and VHT160 use a combination of OFDM-BPSK, QPSK, 16QAM, 64QAM, 256QAM, 1024QAM modulation.
- ♦ HEW20, HEW40, HEW80 and HEW160 use a combination of OFDMA-BPSK, QPSK, 16QAM, 64QAM, 256QAM, 1024QAM modulation.
- ♦ BWch is the nominal channel bandwidth.

1.1.2 Antenna Information

Set	Ant.	2.4GHz Port	5GHz Port	Bluetooth	Brand	Model Name	Antenna Type	Connector	Gain (dBi)
1	1	2	-	-	M.gear	C660-510545-A (SRF20201842)	PCB Antenna	I-PEX	Note 1
	2	-	2	-	M.gear	C660-510545-A (SRF20201842)	Dipole Antenna	I-PEX	
	3	-	4	-	M.gear	C660-510545-A (SRF20201842)	Dipole Antenna	I-PEX	
	4	1	-	-	M.gear	C660-510545-A (SRF20201842)	PCB Antenna	I-PEX	
	5	-	3	-	M.gear	C660-510545-A (SRF20201842)	Dipole Antenna	I-PEX	
	6	-	1	-	M.gear	C660-510545-A (SRF20201842)	Dipole Antenna	I-PEX	
2	1	2	-	-	PSA	RFPCA351314 IMAB702	PCB Antenna	I-PEX	
	2	-	2	-	PSA	RFPCA351314 IMAB702	Dipole Antenna	I-PEX	
	3	-	4	-	PSA	RFPCA351314 IMAB702	Dipole Antenna	I-PEX	
	4	1	-	-	PSA	RFPCA351314 IMAB702	PCB Antenna	I-PEX	
	5	-	3	-	PSA	RFPCA351314 IMAB702	Dipole Antenna	I-PEX	
	6	-	1	-	PSA	RFPCA351314 IMAB702	Dipole Antenna	I-PEX	
3	1	-	-	1	YAGEO	ANT3216A063R 2400A	Chip Antenna	N/A	

Note 1:

Set	Ant.	Gain (dBi)															Bluetooth
		2.4GHz			5GHz Band 1			5GHz Band 2			5GHz Band 3			5GHz Band 4			
		CDD	DG (Nss1)	DG (Nss2)	CDD	DG (Nss1)	DG (Nss2)	CDD	DG (Nss1)	DG (Nss2)	CDD	DG (Nss1)	DG (Nss2)	CDD	DG (Nss1)	DG (Nss2)	
1	1~6	1.21	4.16	-	1.21	6.96	4.14	1.39	7.19	4.37	0.99	6.75	3.93	1.24	7.00	4.25	-
2	1~6	1.21	4.16	-	1.21	6.96	4.14	1.39	7.19	4.37	0.99	6.75	3.93	1.24	7.00	4.25	-
3	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.69

Note 2: The above information was declared by manufacturer.

Note 3: The EUT has two set of antenna and each set has six antennas for WALN. There are the same type, so only the set 1 antenna was selected to test and record in this report.

For 2.4GHz function:

IEEE 802.11b/g/n/VHT/ax (2TX/2RX):

Port 1 and Port 2 can be used as transmitting/receiving antenna.

Port 1 and Port 2 could transmit/receive simultaneously.

For 5GHz function:

IEEE 802.11a/n/ac/ax (4TX/4RX):

Port 1, Port 2, Port 3 and Port 4 can be used as transmitting/receiving antenna.

Port 1, Port 2, Port 3 and Port 4 could transmit/receive simultaneously.

For Bluetooth Function (1TX/1RX):

Only Port 1 can be used as transmitting/receiving antenna.

1.1.3 Mode Test Duty Cycle

Mode	DC	DCF(dB)	T(s)	VBW(Hz) $\geq 1/T$
802.11ax HEW20-BF_Nss2,(MCS0)_4TX	0.931	0.31	4.372m	300
802.11ax HEW40-BF_Nss2,(MCS0)_4TX	0.946	0.24	5.085m	300
802.11ax HEW80-BF_Nss2,(MCS0)_4TX	0.96	0.18	4.837m	300
802.11ax HEW160-BF_Nss2,(MCS0)_4TX	0.967	0.15	5.175m	300

Note:

- ♦ DC is Duty Cycle.
- ♦ DCF is Duty Cycle Factor.

1.1.4 EUT Operational Condition

EUT Power Type	From Power Adapter			
Beamforming Function	☒	With beamforming	☐	Without beamforming
	The product has beamforming function for n/VHT/ax in 2.4GHz and n/ac/ax in 5GHz.			
Weather Band	☒	With 5600~5650MHz	☐	Without 5600~5650MHz
Function	☐	Outdoor P2M	☒	Indoor P2M
	☐	Fixed P2P	☐	Client
TPC Function	☒	With TPC	☐	Without TPC
Test Software Version	Mtool_v3.2.1.1			

Note: The above information was declared by manufacturer.

1.1.5 Table for EUT supports functions

Function	Support Type
AP Router	Master
Bridge	Slave without radar detection
Repeater	Master
Mesh	Master

Note: After evaluating, only AP Router was selected to test and record in the report.

1.1.6 Table for Multiple Listing

The model names in the following table are all refer to the identical product.

Model Name	Description
ZenWiFi XD6	All the models are identical, the different model names served as marketing strategy.
ASUS ZenWiFi XD6	
RT-AX5400	
XD6	
XD6S	
ZenWiFi XD6S	
ASUS ZenWiFi XD6S	

Note 1: From the above models, model: XD6 was selected to test all items, and model: XD6S has been selected to test AC Power-line Conducted Emissions and Unwanted Emissions only.

Note 2: The above information was declared by manufacturer.

1.1.7 Table for SKU Information

EUT	2.4GHz Chipset	Memory Size	LAN Ethernet port
SKU 1	BCM6750	RAM 512MB; Flash 256MB	RJ-45 for Gigabits / BaseT for LAN x 3
SKU 2	BCM6752	RAM 512MB; Flash 128MB	RJ-45 for Gigabits / BaseT for LAN x 1

Note1: There is only SKU 2 tested and recorded in this report.

Note2: The above information was declared by manufacturer.

1.1.8 Table for Permissive Change

This product is an extension of original one reported under Sporton project number: FR0D0706AB

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

Modifications	Performance Checking
1. Adding a new model name: XD6S.	After evaluating, it doesn't affect the test results.
2. Adding SKU 2, the difference from SKU 1 is only the 2.4G RF Chipset/Flash/quantity of LAN port, other parts and layout are the same.	1. AC Power-line Conducted Emissions 2. Unwanted Emissions (For above 1GHz: After evaluating, the worst case is found at 802.11ax 20MHz 4T2S BF 5240MHz, 802.11ax 40MHz 4T2S BF 5755MHz, 802.11ax 80MHz 4T2S BF 5610MHz, 802.11ax 160MHz 4T2S BF 5250MHz, and retested these channel only.)



1.2 Applicable 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

The following reference test guidance is not within the scope of accreditation of TAF.

- ♦ FCC KDB 412172 D01 v01r01
- ♦ FCC KDB 414788 D01 v01r01

1.3 Testing Location Information

Testing Location Information	
Test Lab. : Sporton International Inc. Hsinchu Laboratory	
Hsinchu (TAF: 3787)	ADD: No.8, Ln. 724, Bo'ai St., Zhubei City, Hsinchu County 302010, Taiwan (R.O.C.) TEL: 886-3-656-9065 FAX: 886-3-656-9085 Test site Designation No. TW3787 with FCC. Conformity Assessment Body Identifier (CABID) TW3787 with ISCED.

Test Condition	Test Site No.	Test Engineer	Test Environment (°C / %)	Test Date
Radiated below 1GHz	03CH05-CB	Stim Sung	24.3~25.4 / 55~58	Oct. 06, 2021~ Oct. 27, 2021
Radiated above 1GHz	03CH06-CB	Stim Sung	23.9~24.8 / 55~58	
AC Conduction	CO01-CB	Peter Wu	22~23 / 61~62	Nov. 05, 2021

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)	2.0 dB	Confidence levels of 95%
Radiated Emission (9kHz ~ 30MHz)	4.2 dB	Confidence levels of 95%
Radiated Emission (30MHz ~ 1,000MHz)	5.5 dB	Confidence levels of 95%
Radiated Emission (1GHz ~ 18GHz)	4.7 dB	Confidence levels of 95%
Radiated Emission (18GHz ~ 40GHz)	4.2 dB	Confidence levels of 95%



2 Test Configuration of EUT

2.1 Test Channel Mode

Mode	Power Setting
802.11ax HEW20-BF_Nss2,(MCS0)_4TX	-
5240MHz	108
802.11ax HEW40-BF_Nss2,(MCS0)_4TX	-
5755MHz	99
802.11ax HEW80-BF_Nss2,(MCS0)_4TX	-
5610MHz	87
802.11ax HEW160-BF_Nss2,(MCS0)_4TX	-
5250MHz Straddle 5.15-5.25GHz	77
5250MHz Straddle 5.25-5.35GHz	77

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 Test Voltage: 120Vac / 60Hz
Operating Mode	Normal Link
The EUT performed testing at power adapter 1 and power adapter 2. After evaluating, power adapter 1 has been evaluated to be the worst case, thus the measurement will follow same test configuration.	
1	AP router – EUT (SKU 2) + Adapter 1

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
1	EUT (SKU 2)_WLAN 2.4GHz + Adapter 1
2	EUT (SKU 2)_WLAN 2.4GHz + Adapter 2
Mode 1 has been evaluated to be the worst case among Mode 1~2, thus measurement for Mode 3~4 will follow this same test mode.	
3	EUT (SKU 2)_WLAN 5GHz + Adapter 1
4	EUT (SKU 2)_Bluetooth + Adapter 1
For operating mode 1 is the worst case and it was record in this test report.	
Operating Mode > 1GHz	CTX
1	EUT (SKU 2)

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



2.3 EUT Operation during Test

For CTX Mode:

non-beamforming mode:

The EUT was programmed to be in continuously transmitting mode.

beamforming mode:

For Radiated Mode:

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

The program was executed as follows:

1. During the test, the EUT operation to normal function.
2. Executed command fixed test channel under DOS [ver 17.10.157.23].
3. Executed "LanTest20" to link with the remote workstation to transmit and receive packet by WLAN AP and transmit duty cycle no less than 98%.

For Normal Link:

During the test, the EUT operation to normal function.

2.4 Accessories

Accessories			
Equipment Name	Brand Name	Model Name	Rating
Adapter 1	LEI	MU24D1120200-A1	INPUT: 100-240V ~ 50/60Hz, 0.7A OUTPUT: 12V, 2A
Adapter 2	DVE	DSA-24PFS-12 FUS 120200	INPUT: 100-240V ~ 50/60Hz, 0.8A OUTPUT: 12.0V, 2.0A, 24.0W
Others			
RJ-45 cable 1: Non-shielded, 2m			
Wall-mounted rack*1			



2.5 Support Equipment

For AC Conduction:

Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
A	LAN NB	DELL	E6430	N/A
B	2.4G NB	DELL	E6430	N/A
C	5G NB	DELL	E6430	N/A
D	WAN NB	DELL	E6430	N/A

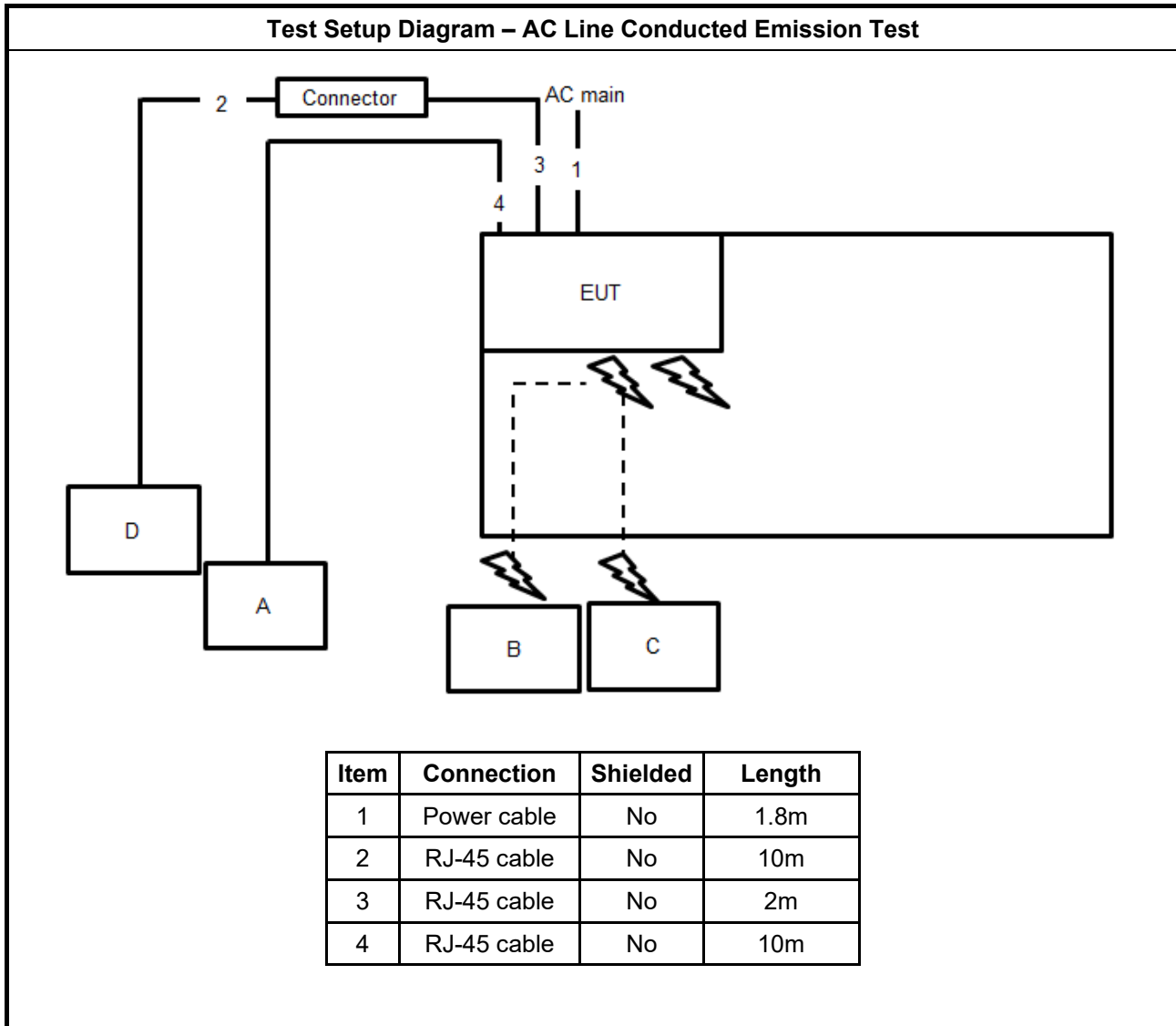
For Radiated (below 1GHz):

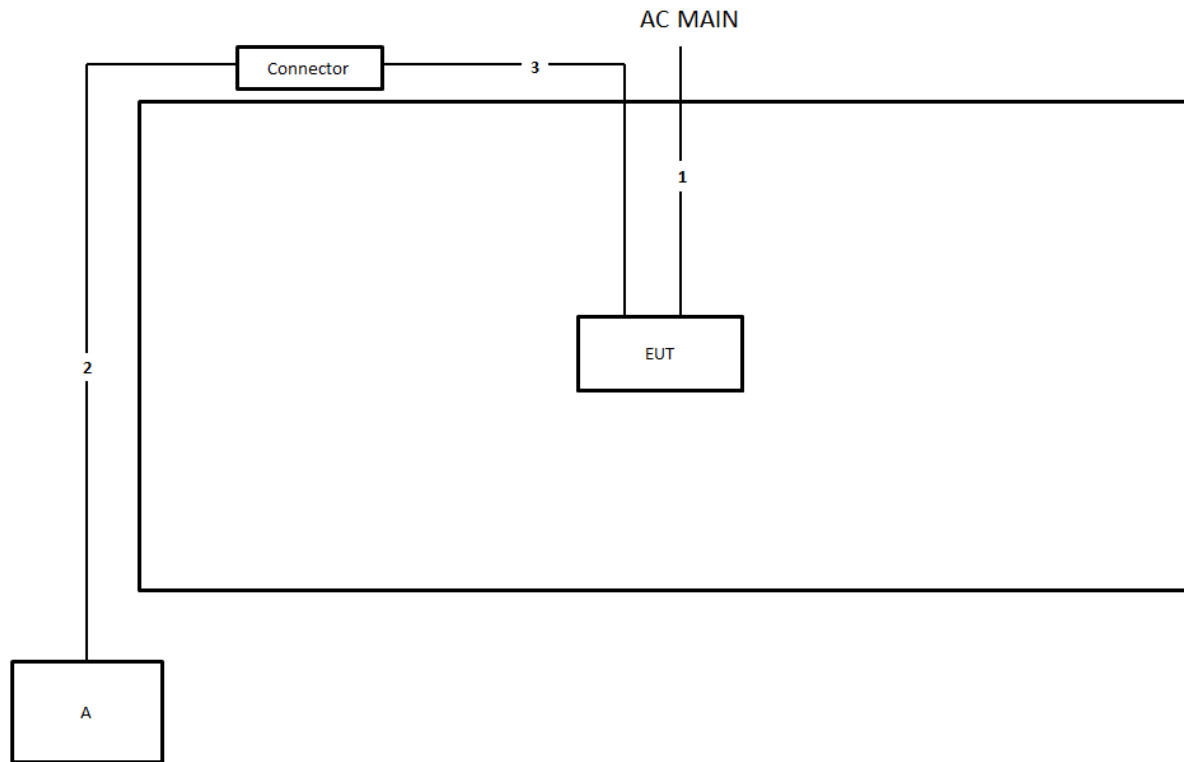
Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
A	Notebook	DELL	E4300	N/A

For Radiated (above 1GHz):

Support Equipment				
No.	Equipment	Brand Name	Model Name	FCC ID
A	Notebook	DELL	E4300	N/A
B	WLAN AP (for 2.4G+5G)	ASUS	RT-AX88U	MSQ-RTAXHP00
C	Notebook	DELL	E4300	N/A

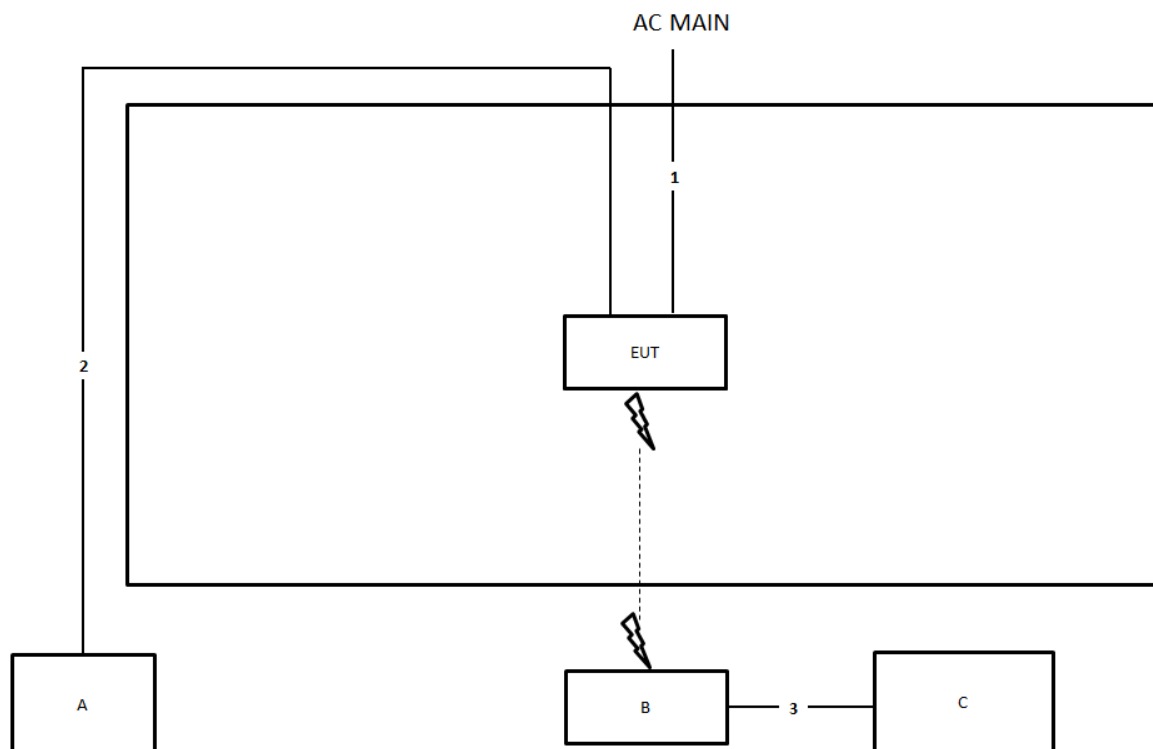
2.6 Test Setup Diagram



Test Setup Diagram - Radiated Test < 1GHz


Item	Connection	Shielded	Length
1	Power cable	No	1.8m
2	RJ-45 cable	No	10m
3	RJ-45 cable	No	2m

Test Setup Diagram - Radiated Test > 1GHz



Item	Connection	Shielded	Length
1	Power cable	No	1.8m
2	RJ-45 cable	No	10m
3	RJ-45 cable	No	1.5m

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.

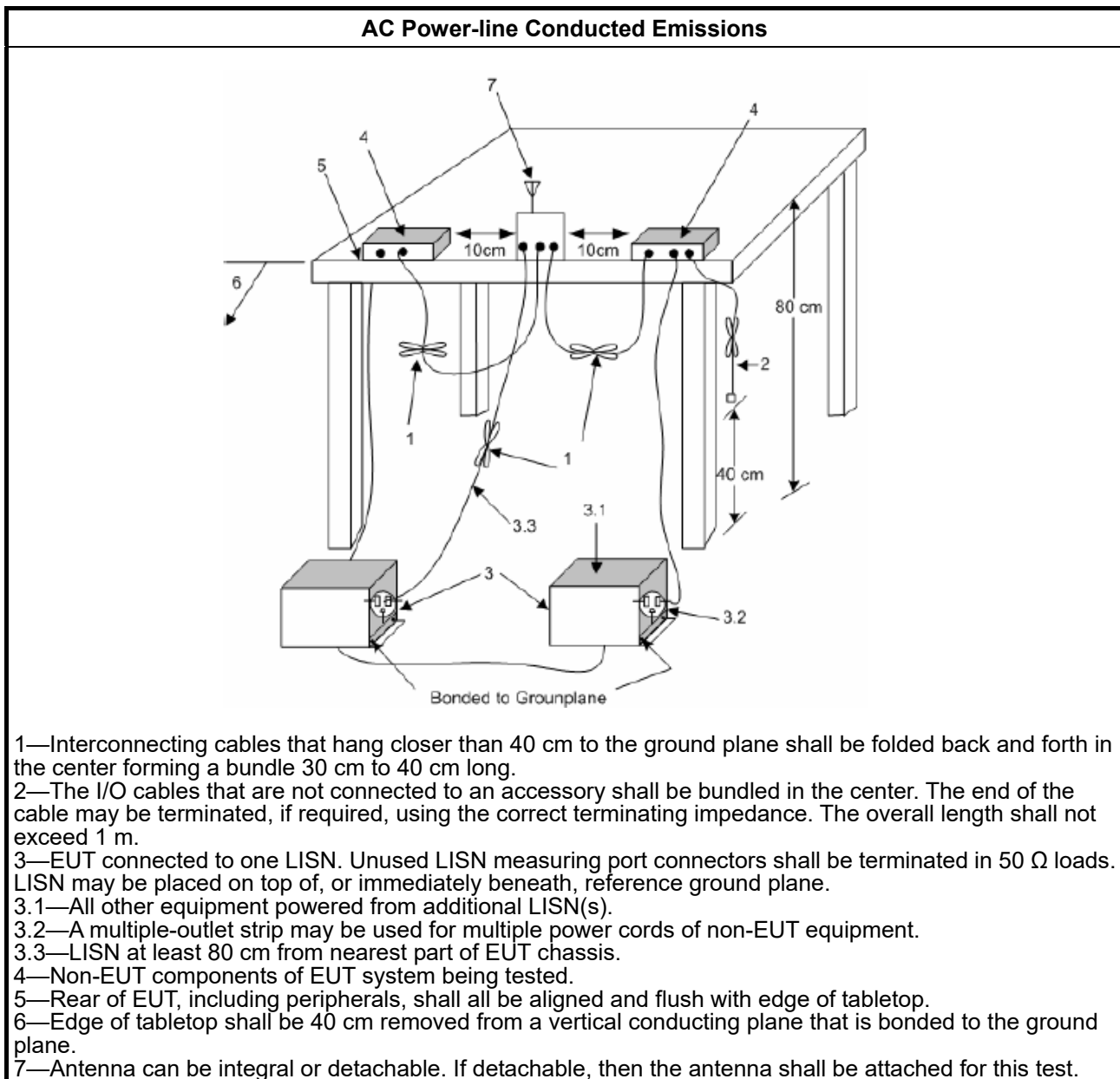
3.1.2 Measuring Instruments

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



3.1.5 Measurement Results Calculation

The measured Level is calculated using:

- Corrected Reading: LISN Factor (LISN) + Attenuator (AT/AUX) + Cable Loss (CL) + Read Level (Raw) = Level
- Margin = -Limit + Level

3.1.6 Test Result of AC Power-line Conducted Emissions

Refer as Appendix A



3.2 Unwanted Emissions

3.2.1 Transmitter 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.
☐ 5.85 - 5.895 GHz	(i) For an indoor access point or subordinate device, all emissions at or above 5.895 GHz shall not exceed an e.i.r.p. of 15 dBm/MHz and shall decrease linearly to an e.i.r.p. of -7 dBm/MHz at or above 5.925 GHz. (ii) For a client device, all emissions at or above 5.895 GHz shall not exceed an e.i.r.p. of -5 dBm/MHz and shall decrease linearly to an e.i.r.p. of -27 dBm/MHz at or above 5.925 GHz. (iii) For a client device or indoor access point or subordinate device, all emissions below 5.725 GHz shall not exceed an e.i.r.p. of -27 dBm/MHz at 5.65 GHz increasing linearly to 10 dBm/ MHz at 5.7 GHz, and from 5.7 GHz increasing linearly to a level of 15.6 dBm/MHz at 5.72 GHz, and from 5.72 GHz increasing linearly to a level of 27 dBm/MHz at 5.725 GHz.
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).	

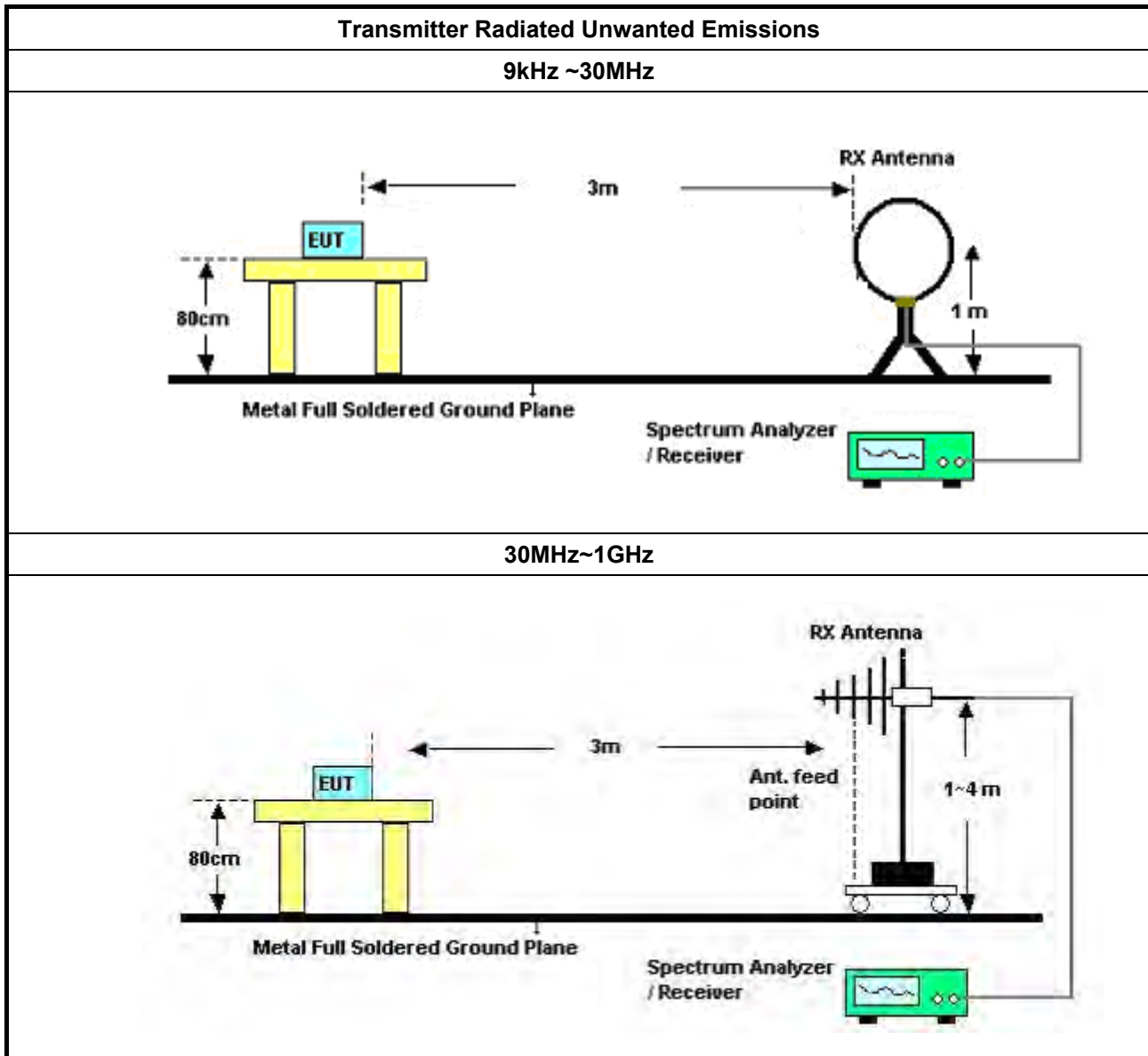
3.2.2 Measuring Instruments

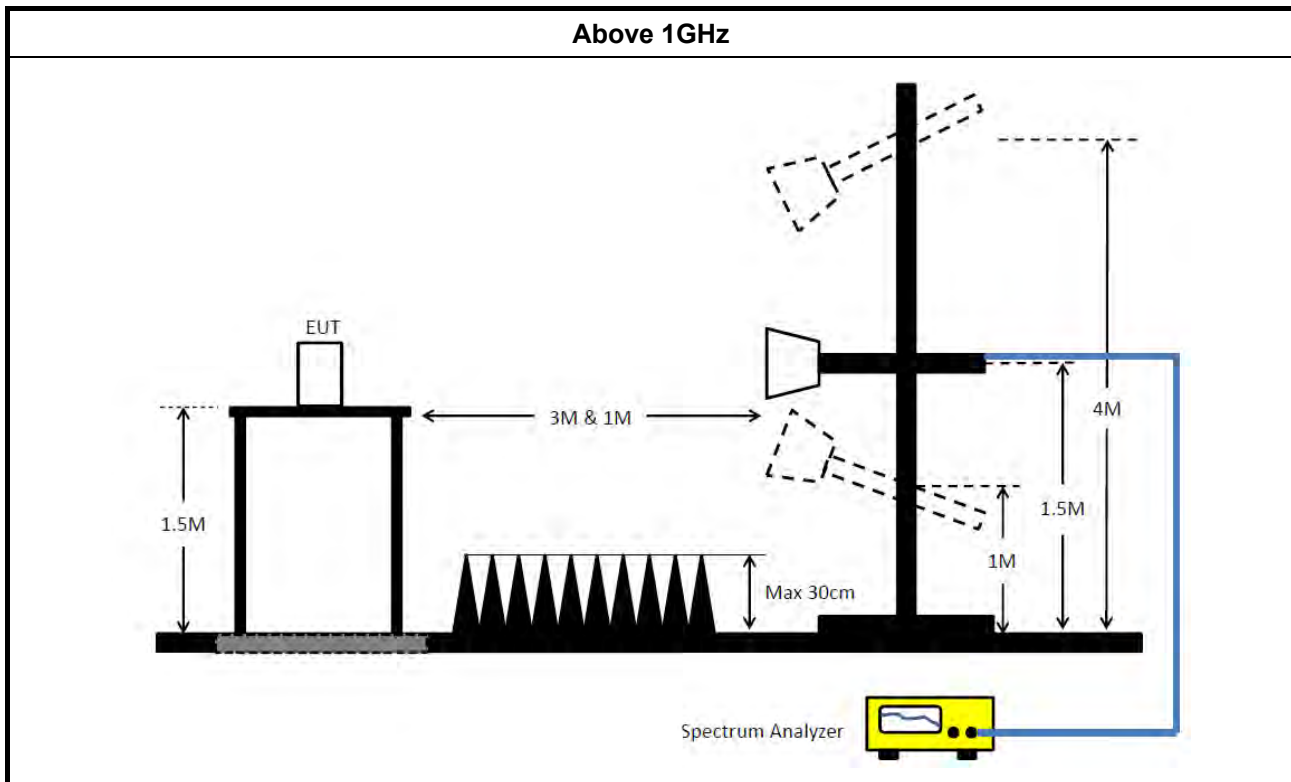
Refer a test equipment and calibration data table in this test report.

3.2.3 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 $\geq$ 98 or duty factor].	
For the transmitter unwanted emissions shall be measured using following options below:	
	Refer as FCC KDB 789033, clause G)2) for unwanted emissions into non-restricted bands.
	Refer as FCC KDB 789033, clause G)1) for unwanted emissions into restricted bands.
	☐ Refer as FCC KDB 789033, G)6) Method AD (Trace Averaging).
	☒ Refer as FCC KDB 789033, G)6) Method VB (Reduced VBW).
	☐ Refer as ANSI C63.10, clause 11.12.2.5.3 (Reduced VBW). VBW $\geq$ 1/T, where T is pulse time.
	☐ Refer as ANSI C63.10, clause 7.5 average value of pulsed emissions.
	☒ Refer as FCC KDB 789033, clause G)5) measurement procedure peak limit.
☐ Refer as ANSI C63.10, clause 4.1.4.2.2 measurement procedure peak limit.	
For radiated measurement.	
	Refer as ANSI C63.10, clause 6.4 for radiated emissions below 30 MHz and test distance is 3m.
	Refer as ANSI C63.10, clause 6.5 for radiated emissions 30 MHz to 1 GHz and test distance is 3m.
	Refer as ANSI C63.10, clause 6.6 for radiated emissions above 1GHz.
The any unwanted emissions level shall not exceed the fundamental emission level.	
All amplitude of spurious emissions that are attenuated by more than 20 dB below the permissible value has no need to be reported.	

3.2.4 Test Setup





3.2.5 Measurement Results Calculation

The measured Level is calculated using:

Corrected Reading: Antenna factor (AF) + Cable loss (CL) + Read level (Raw) - Preamp factor (PA)(if applicable) = Level.

3.2.6 Transmitter Unwanted Emissions (Below 30MHz)

There is a comparison data of both open-field test site and alternative test site - semi-Anechoic chamber according to KDB414788 Radiated Test Site, and the result came out very similar.

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 10th harmonic or 40 GHz, whichever is appropriate.

3.2.7 Test Result of Transmitter Unwanted Emissions

Refer as Appendix B



4 Test Equipment and Calibration Data

Instrument	Brand	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date	Remark
EMI Receiver	Agilent	N9038A	My52260123	9kHz ~ 8.4GHz	Mar. 03, 2021	Mar. 02, 2022	Conduction (CO01-CB)
LISN	F.C.C.	FCC-LISN-50-1 6-2	04083	150kHz ~ 100MHz	Jan. 06, 2021	Jan. 05, 2022	Conduction (CO01-CB)
LISN	Schwarzbeck	NSLK 8127	8127647	9kHz ~ 30MHz	Mar. 07, 2021	Mar. 06, 2022	Conduction (CO01-CB)
Pulse Limiter	Rohde&Schwarz	ESH3-Z2	100430	9kHz ~ 30MHz	Jan. 30, 2021	Jan. 29, 2022	Conduction (CO01-CB)
COND Cable	Woken	Cable	Low cable-CO01	9kHz ~ 30MHz	May 19, 2021	May 18, 2022	Conduction (CO01-CB)
Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Conduction (CO01-CB)
3m Semi Anechoic Chamber NSA	TDK	SAC-3M	03CH05-CB	30 MHz ~ 1 GHz	Aug. 09, 2021	Aug. 08, 2022	Radiation (03CH05-CB)
Bilog Antenna with 6dB Attenuator	TESEQ & EMCI	CBL 6112D & N-6-06	35236 & AT-N0610	30MHz ~ 2GHz	Mar. 26, 2021	Mar. 25, 2022	Radiation (03CH05-CB)
Pre-Amplifier	EMCI	EMC330N	980331	20MHz ~ 3GHz	Apr. 27, 2021	Apr. 26, 2022	Radiation (03CH05-CB)
Spectrum Analyzer	R&S	FSP40	100304	9kHz ~ 40GHz	Nov. 10, 2020	Nov. 09, 2021	Radiation (03CH05-CB)
EMI Test Receiver	R&S	ESCS	826547/017	9kHz ~ 2.75GHz	Jun. 21, 2021	Jun. 20, 2022	Radiation (03CH05-CB)
RF Cable-low	Woken	RG402	Low Cable-04+23	30MHz~1GHz	Oct. 04, 2021	Oct. 03, 2022	Radiation (03CH05-CB)
Loop Antenna	Teseq	HLA 6120	24155	9kHz - 30 MHz	Apr. 14, 2021	Apr. 13, 2022	Radiation (03CH05-CB)
Test Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Radiation (03CH05-CB)
3m Semi Anechoic Chamber VSWR	TDK	SAC-3M	03CH06-CB	1GHz ~18GHz 3m	Oct. 01, 2021	Sep. 30, 2022	Radiation (03CH06-CB)
Horn Antenna	SCHWARZBECK	BBHA9120D	BBHA 9120D-1292	1GHz~18GHz	Aug. 04, 2021	Aug. 03, 2022	Radiation (03CH06-CB)
Horn Antenna	Schwarzbeck	BBHA 9170	BBHA9170252	15GHz ~ 40GHz	Aug. 05, 2021	Aug. 04, 2022	Radiation (03CH06-CB)
Pre-Amplifier	Agilent	83017A	MY53270064	0.5GHz ~ 26.5GHz	May 06, 2021	May 05, 2022	Radiation (03CH06-CB)
Pre-Amplifier	MITEQ	TTA1840-35-HG	1864479	18GHz ~ 40GHz	Jul. 13, 2021	Jul. 12, 2022	Radiation (03CH06-CB)
Spectrum analyzer	R&S	FSP40	100080	9kHz~40GHz	Dec. 15, 2020	Dec. 14, 2021	Radiation (03CH06-CB)
RF Cable-high	Woken	RG402	High Cable-05	1GHz~18GHz	Oct. 04, 2021	Oct. 03, 2022	Radiation (03CH06-CB)



Instrument	Brand	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date	Remark
RF Cable-high	Woken	RG402	High Cable-05+24	1GHz~18GHz	Oct. 04, 2021	Oct. 03, 2022	Radiation (03CH06-CB)
RF Cable-high	Woken	RG402	High Cable-40G#1	18GHz ~ 40 GHz	Jul. 15, 2021	Jul. 14, 2022	Radiation (03CH06-CB)
RF Cable-high	Woken	RG402	High Cable-40G#2	18GHz ~ 40 GHz	Jul. 15, 2021	Jul. 14, 2022	Radiation (03CH06-CB)
Test Software	SPORTON	SENSE	V5.10	-	N.C.R.	N.C.R.	Radiation (03CH06-CB)

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

NCR means Non-Calibration required.



Conducted Emissions at Powerline

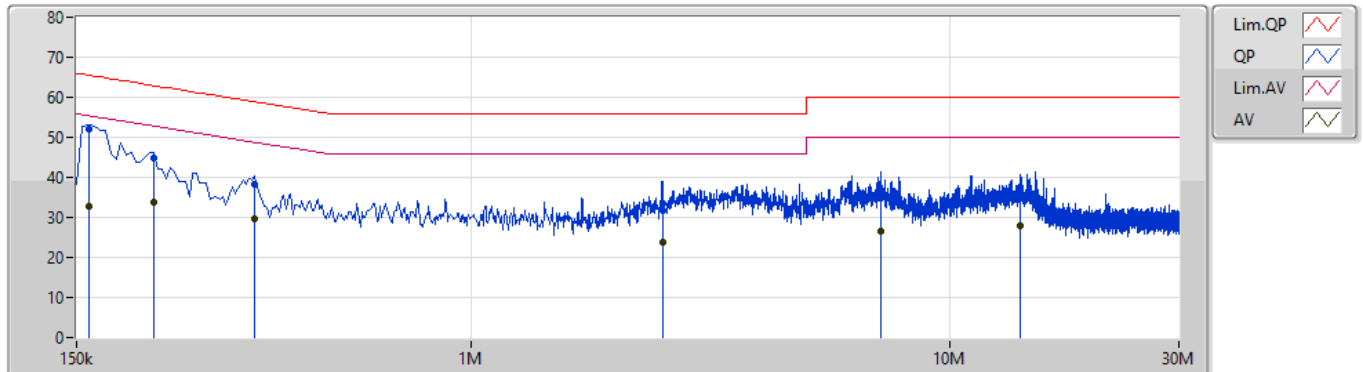
Appendix A

Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Condition
Mode 1	Pass	QP	150k	53.29	66.00	-12.71	Neutral

Mode 1

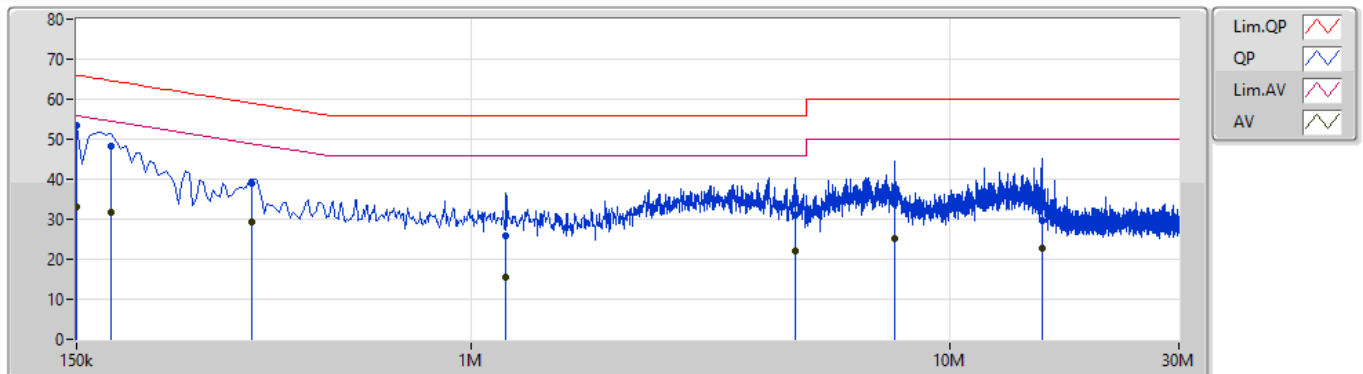
05/11/2021



Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Factor (dB)	Condition	Comment	Raw (dBuV)	LISN (dB)	CL (dB)	AT (dB)			
QP	159k	51.93	65.52	-13.59	9.89	Line	"Worst"	42.04	0.04	0.04	9.81			
AV	159k	32.91	55.52	-22.61	9.89	Line	-	23.02	0.04	0.04	9.81			
QP	217.5k	44.86	62.92	-18.06	9.89	Line	-	34.97	0.04	0.04	9.81			
AV	217.5k	33.80	52.92	-19.12	9.89	Line	-	23.91	0.04	0.04	9.81			
QP	352.5k	38.38	58.91	-20.53	9.90	Line	-	28.48	0.04	0.04	9.82			
AV	352.5k	29.57	48.91	-19.34	9.90	Line	-	19.67	0.04	0.04	9.82			
QP	2.504M	31.71	56.00	-24.29	10.03	Line	-	21.68	0.10	0.09	9.84			
AV	2.504M	23.65	46.00	-22.35	10.03	Line	-	13.62	0.10	0.09	9.84			
QP	7.148M	34.91	60.00	-25.09	10.23	Line	-	24.68	0.19	0.15	9.89			
AV	7.148M	26.53	50.00	-23.47	10.23	Line	-	16.30	0.19	0.15	9.89			
QP	13.983M	37.50	60.00	-22.50	10.35	Line	-	27.15	0.27	0.17	9.91			
AV	13.983M	27.77	50.00	-22.23	10.35	Line	-	17.42	0.27	0.17	9.91			

Mode 1

05/11/2021



Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Factor (dB)	Condition	Comment	Raw (dBuV)	LISN (dB)	CL (dB)	AT (dB)			
QP	150k	53.29	66.00	-12.71	9.88	Neutral	"Worst"	43.41	0.03	0.04	9.81			
AV	150k	33.20	56.00	-22.80	9.88	Neutral	-	23.32	0.03	0.04	9.81			
QP	348k	38.90	59.00	-20.10	9.89	Neutral	-	29.01	0.03	0.04	9.82			
AV	348k	29.43	49.00	-19.57	9.89	Neutral	-	19.54	0.03	0.04	9.82			
QP	177k	48.11	64.62	-16.51	9.88	Neutral	-	38.23	0.03	0.04	9.81			
AV	177k	31.73	54.62	-22.89	9.88	Neutral	-	21.85	0.03	0.04	9.81			
QP	1.181M	25.91	56.00	-30.09	9.93	Neutral	-	15.98	0.05	0.05	9.83			
AV	1.181M	15.59	46.00	-30.41	9.93	Neutral	-	5.66	0.05	0.05	9.83			
QP	4.749M	31.14	56.00	-24.86	10.13	Neutral	-	21.01	0.12	0.13	9.88			
AV	4.749M	22.16	46.00	-23.84	10.13	Neutral	-	12.03	0.12	0.13	9.88			
QP	7.674M	33.78	60.00	-26.22	10.21	Neutral	-	23.57	0.17	0.15	9.89			
AV	7.674M	25.20	50.00	-24.80	10.21	Neutral	-	14.99	0.17	0.15	9.89			
QP	15.581M	29.63	60.00	-30.37	10.36	Neutral	-	19.27	0.26	0.18	9.92			
AV	15.581M	22.77	50.00	-27.23	10.36	Neutral	-	12.41	0.26	0.18	9.92			



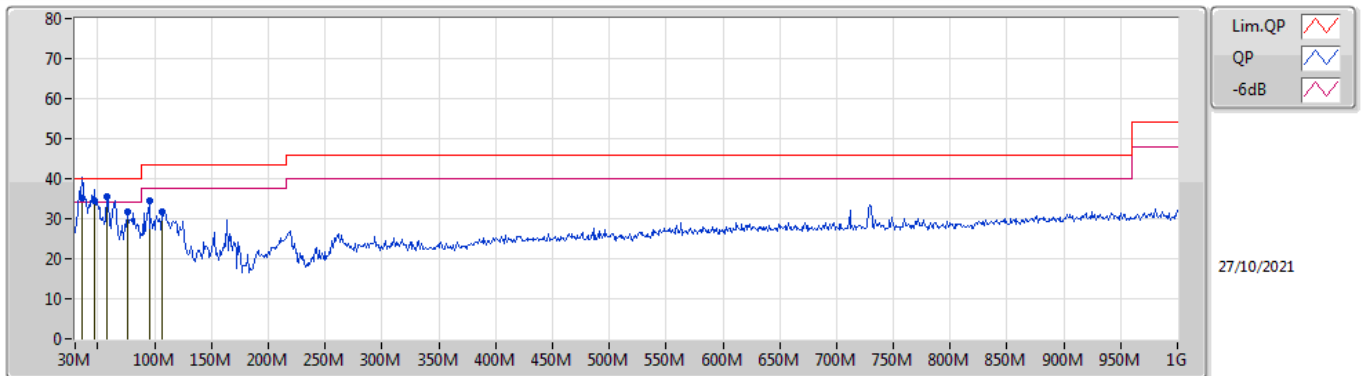
Radiated Emissions below 1GHz

Appendix B.1

Summary

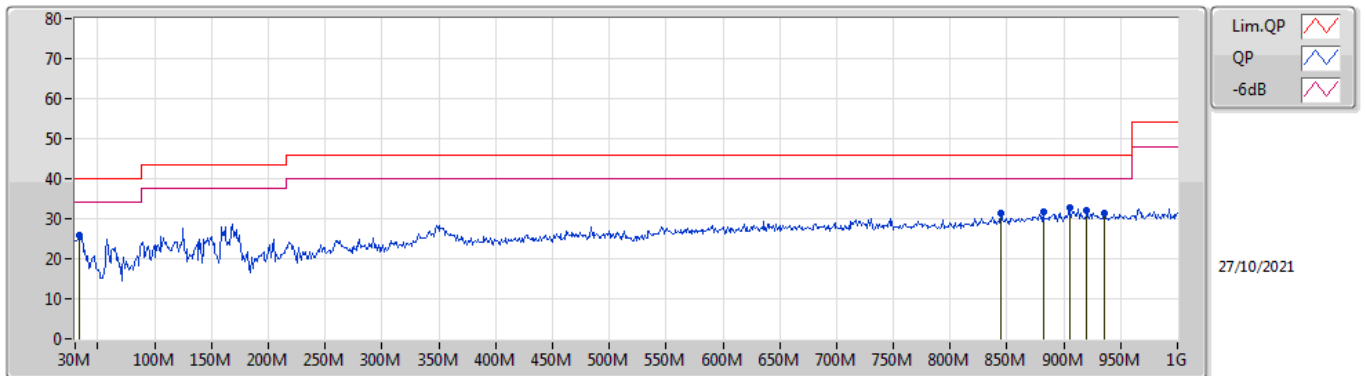
Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Condition
Mode 1	Pass	PK	58.13M	35.64	40.00	-4.36	Vertical

Mode 1



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB/m)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV/m)	AF (dB/m)	CL (dB)	PA (dB)
QP	35.82M	35.29	40.00	-4.71	-9.71	3	Vertical	113	1.00	-	45.00	20.99	0.90	31.60
QP	46.49M	34.62	40.00	-5.38	-15.38	3	Vertical	139	1.00	-	50.00	15.35	1.00	31.73
PK	58.13M	35.64	40.00	-4.36	-18.34	3	Vertical	314	1.00	"Worst"	53.98	12.33	1.16	31.83
PK	75.59M	31.82	40.00	-8.18	-18.28	3	Vertical	70	1.00	-	50.10	12.32	1.30	31.90
PK	94.99M	34.39	43.50	-9.11	-14.60	3	Vertical	220	1.25	-	48.99	15.79	1.50	31.89
PK	106.63M	31.75	43.50	-11.75	-12.95	3	Vertical	183	1.00	-	44.70	17.41	1.53	31.89

Mode 1



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB/m)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	Raw (dBuV/m)	AF (dB/m)	CL (dB)	PA (dB)
PK	33.88M	25.70	40.00	-14.30	-8.58	3	Horizontal	174	2.00	-	34.28	22.11	0.88	31.57
PK	844.8M	31.42	46.00	-14.58	-2.17	3	Horizontal	140	1.00	-	33.59	25.78	4.68	32.63
PK	881.66M	31.69	46.00	-14.31	-1.61	3	Horizontal	349	1.00	-	33.30	26.15	4.89	32.65
PK	904.94M	32.69	46.00	-13.31	-1.47	3	Horizontal	193	3.00	"Worst"	34.16	26.18	5.00	32.65
PK	920.46M	31.96	46.00	-14.04	-1.45	3	Horizontal	350	3.00	-	33.41	26.17	5.00	32.62
PK	935.98M	31.31	46.00	-14.69	-1.32	3	Horizontal	166	1.50	-	32.63	26.28	5.00	32.60

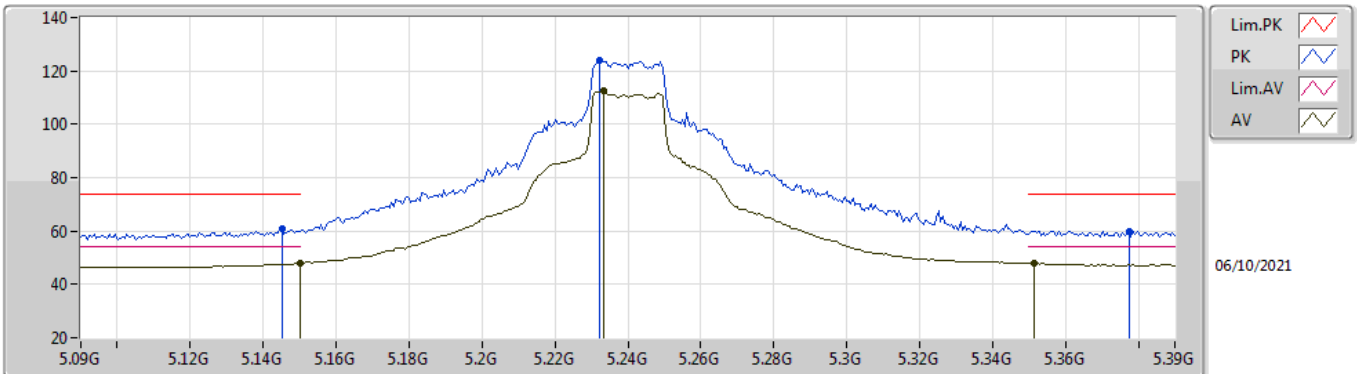


Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
5.47-5.725GHz	-	-	-	-	-	-	-	-	-	-	-
802.11ax HEW80-BF_Nss2,(MCS0)_4TX	Pass	PK	5.741G	67.92	68.20	-0.28	3	Vertical	4.1	1.80	-

802.11ax HEW20-BF_Nss2,(MCS0)_4TX

5240MHz_TnomVnom

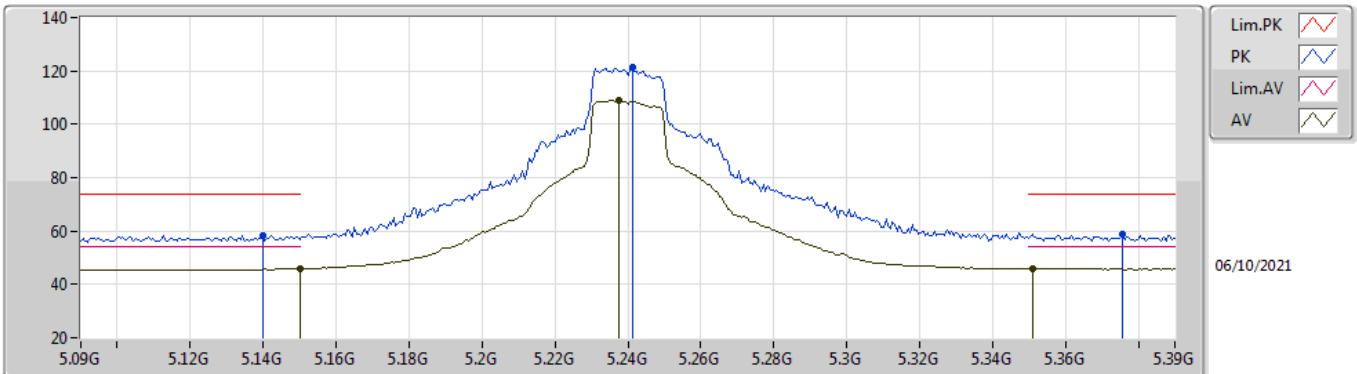


EUT V_4TX
Setting 108
06-F-S-5-10

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	5.1452G	60.62	74.00	-13.38	55.86	3	Vertical	184	1.88	-	31.73	5.00	31.97
AV	5.15G	47.85	54.00	-6.15	43.13	3	Vertical	184	1.88	-	31.70	5.00	31.98
PK	5.2322G	123.72	Inf	-Inf	119.52	3	Vertical	184	1.88	-	31.21	5.00	32.01
AV	5.2334G	112.58	Inf	-Inf	108.39	3	Vertical	184	1.88	-	31.20	5.00	32.01
PK	5.3774G	60.08	74.00	-13.92	55.90	3	Vertical	184	1.88	-	31.26	5.00	32.08
AV	5.3516G	48.02	54.00	-5.98	43.97	3	Vertical	184	1.88	-	31.11	5.00	32.06

802.11ax HEW20-BF_Nss2,(MCS0)_4TX

5240MHz_TnomVnom

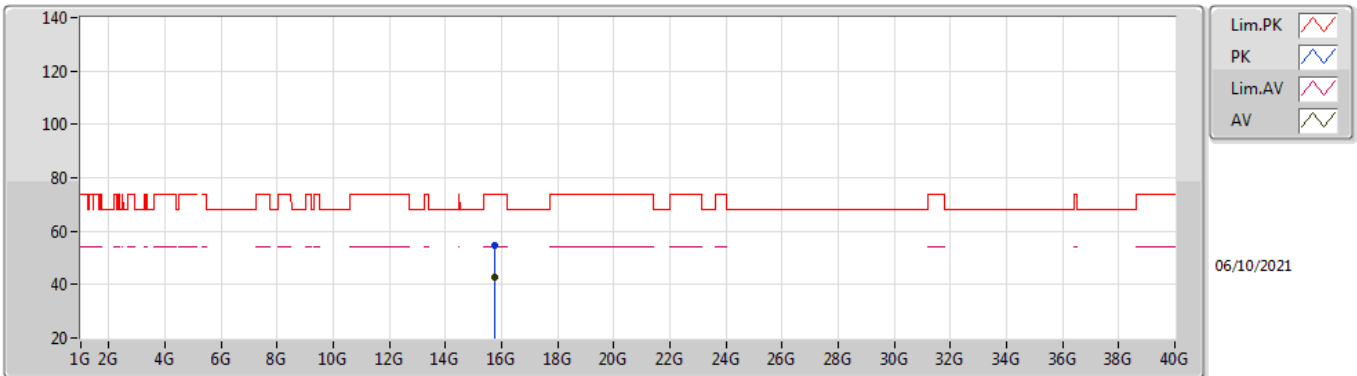


EUT V_4TX
Setting 108
06-F-S-5-10

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	5.1398G	58.45	74.00	-15.55	53.66	3	Horizontal	190	2.66	-	31.76	5.00	31.97
AV	5.15G	45.84	54.00	-8.16	41.12	3	Horizontal	190	2.66	-	31.70	5.00	31.98
PK	5.2412G	121.35	Inf	-Inf	117.22	3	Horizontal	190	2.66	-	31.15	5.00	32.02
AV	5.2376G	108.81	Inf	-Inf	104.65	3	Horizontal	190	2.66	-	31.17	5.00	32.01
PK	5.3756G	58.84	74.00	-15.16	54.67	3	Horizontal	190	2.66	-	31.25	5.00	32.08
AV	5.351G	46.04	54.00	-7.96	41.99	3	Horizontal	190	2.66	-	31.11	5.00	32.06

802.11ax HEW20-BF_Nss2,(MCS0)_4TX

5240MHz_TnomVnom

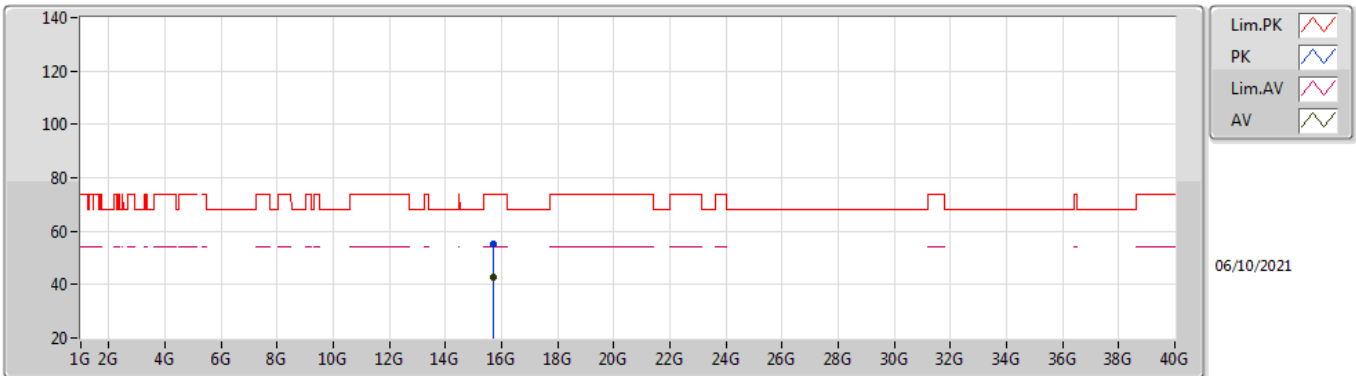


EUT Y_4TX
Setting 108
06-F-E-2

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	15.73032G	54.55	74.00	-19.45	40.59	3	Vertical	87	1.01	-	37.80	10.47	34.31
AV	15.7296G	42.68	54.00	-11.32	28.73	3	Vertical	87	1.01	-	37.80	10.46	34.31

802.11ax HEW20-BF_Nss2,(MCS0)_4TX

5240MHz_TnomVnom

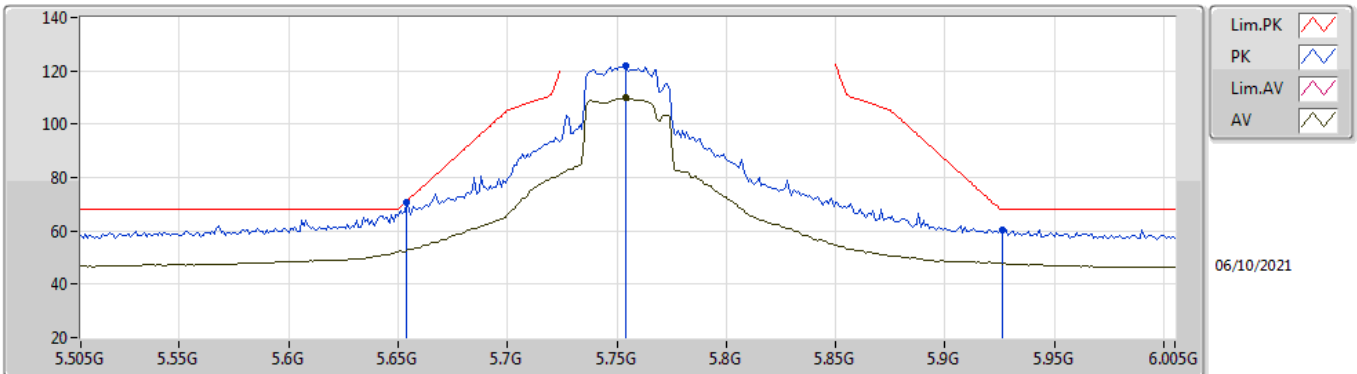


EUT Y_4TX
Setting 108
06-F-E-2

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	15.7248G	54.97	74.00	-19.03	41.02	3	Horizontal	301	1.22	-	37.80	10.46	34.31
AV	15.71868G	42.70	54.00	-11.30	28.75	3	Horizontal	301	1.22	-	37.80	10.46	34.31

802.11ax HEW40-BF_Nss2,(MCS0)_4TX

5755MHz_TnomVnom

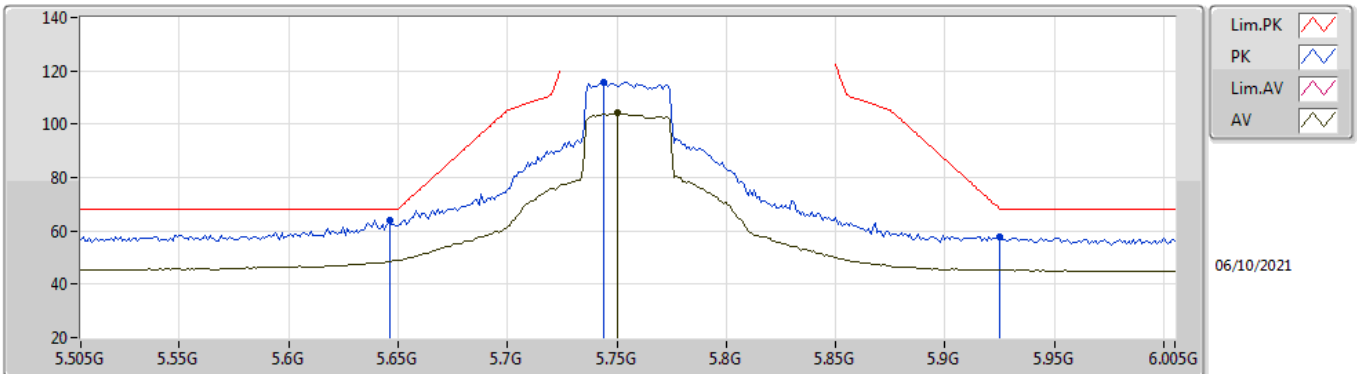


EUT Y_4TX
Setting 99
06-F-S-5-10

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)	
PK	5.654G	70.82	71.16	-0.34	66.19	3	Vertical	10.9	1.79	-	31.62	5.23	32.22	
PK	5.754G	121.87	Inf	-Inf	116.87	3	Vertical	10.9	1.79	-	32.00	5.28	32.28	
AV	5.754G	109.90	Inf	-Inf	104.90	3	Vertical	10.9	1.79	-	32.00	5.28	32.28	
PK	5.926G	60.45	68.20	-7.75	55.26	3	Vertical	10.9	1.79	-	32.15	5.43	32.39	

802.11ax HEW40-BF_Nss2,(MCS0)_4TX

5755MHz_TnomVnom

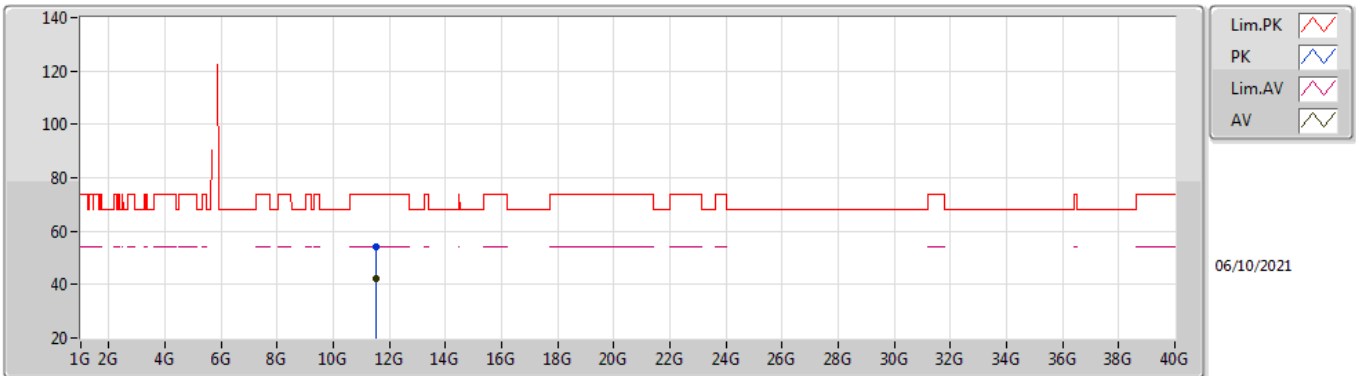


EUT Y_4TX
Setting 99
06-F-S-5-10

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)	
PK	5.646G	63.85	68.20	-4.35	59.25	3	Horizontal	228	1.78	-	31.60	5.22	32.22	
PK	5.744G	115.46	Inf	-Inf	110.49	3	Horizontal	228	1.78	-	31.98	5.27	32.28	
AV	5.75G	104.07	Inf	-Inf	99.07	3	Horizontal	228	1.78	-	32.00	5.28	32.28	
PK	5.925G	57.68	68.20	-10.52	52.49	3	Horizontal	228	1.78	-	32.15	5.42	32.38	

802.11ax HEW40-BF_Nss2,(MCS0)_4TX

5755MHz_TnomVnom

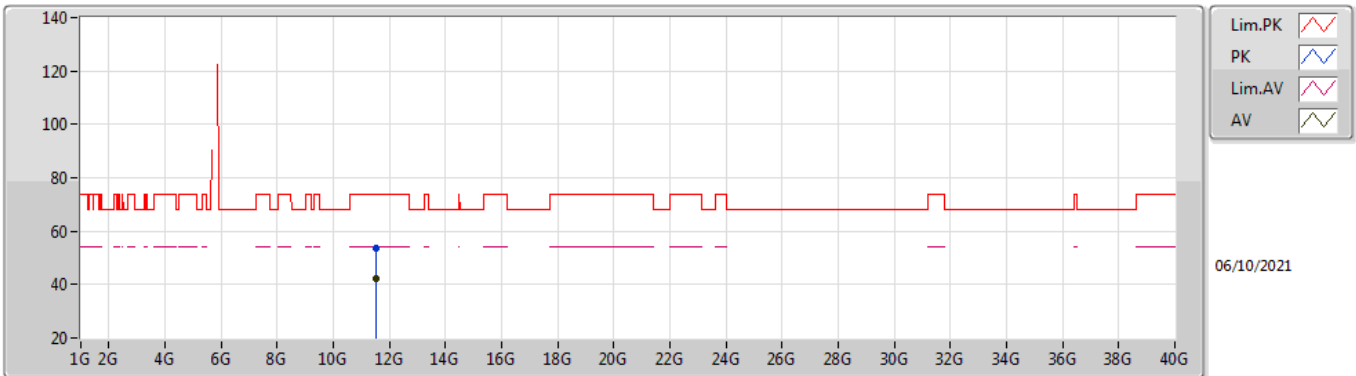


EUT Y_4TX
Setting 99
06-F-E-2

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	11.5229G	54.30	74.00	-19.70	40.72	3	Vertical	165	1.81	-	39.58	8.31	34.31
AV	11.5136G	42.03	54.00	-11.97	28.44	3	Vertical	165	1.81	-	39.59	8.31	34.31

802.11ax HEW40-BF_Nss2,(MCS0)_4TX

5755MHz_TnomVnom

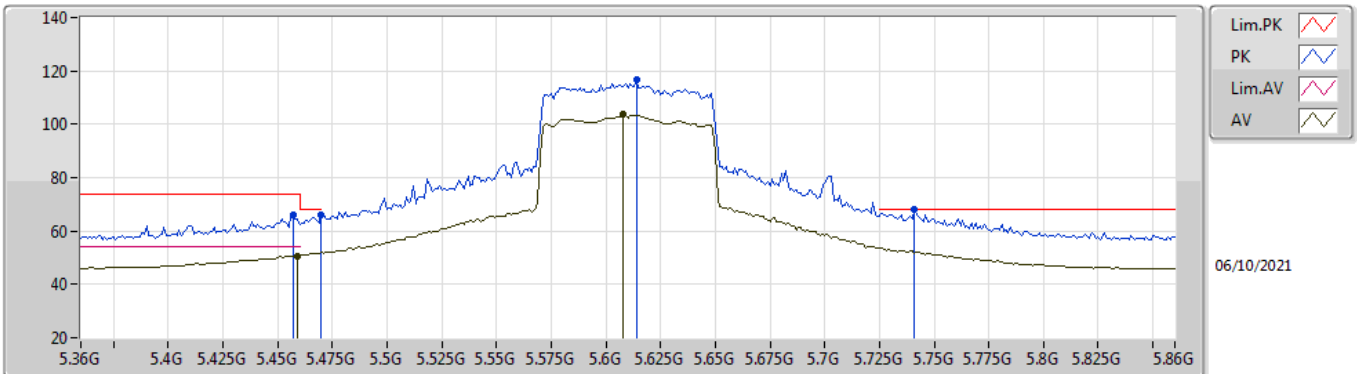


EUT Y_4TX
Setting 99
06-F-E-2

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	11.51582G	53.86	74.00	-20.14	40.28	3	Horizontal	179	1.62	-	39.58	8.31	34.31
AV	11.52404G	42.00	54.00	-12.00	28.42	3	Horizontal	179	1.62	-	39.58	8.31	34.31

802.11ax HEW80-BF_Nss2,(MCS0)_4TX

5610MHz_TnomVnom

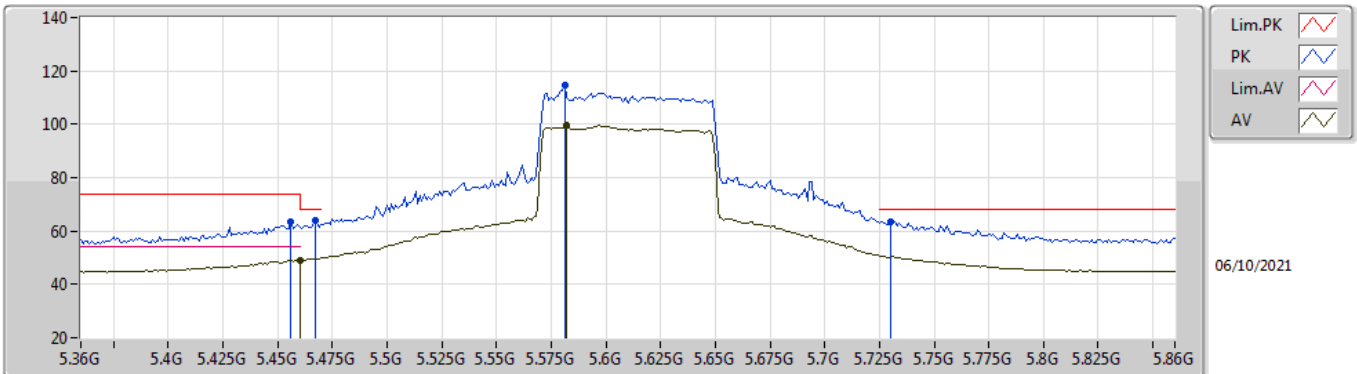


EUT Y_4TX
Setting 87
06-F-S-5-10

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	5.457G	66.12	74.00	-7.88	61.67	3	Vertical	4.1	1.80	-	31.50	5.06	32.11
AV	5.459G	50.74	54.00	-3.26	46.29	3	Vertical	4.1	1.80	-	31.50	5.06	32.11
PK	5.47G	66.28	68.20	-1.92	61.83	3	Vertical	4.1	1.80	-	31.50	5.07	32.12
PK	5.614G	116.76	Inf	-Inf	112.15	3	Vertical	4.1	1.80	-	31.60	5.21	32.20
AV	5.608G	103.82	Inf	-Inf	99.21	3	Vertical	4.1	1.80	-	31.60	5.20	32.19
PK	5.741G	67.92	68.20	-0.28	62.96	3	Vertical	4.1	1.80	-	31.96	5.27	32.27

802.11ax HEW80-BF_Nss2,(MCS0)_4TX

5610MHz_TnomVnom

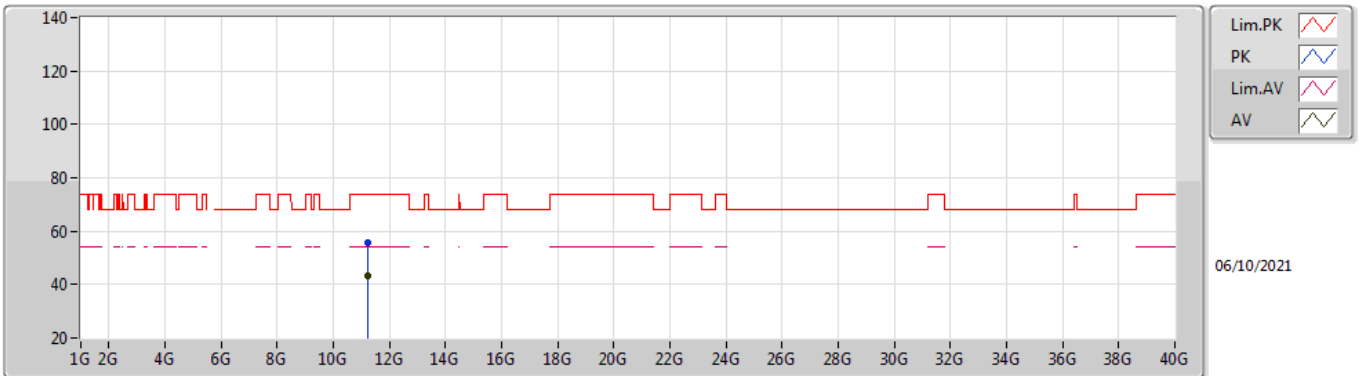


EUT Y_4TX
Setting 87
06-F-S-5-10

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	5.456G	63.53	74.00	-10.47	59.08	3	Horizontal	186	1.83	-	31.50	5.06	32.11
AV	5.46G	48.96	54.00	-5.04	44.51	3	Horizontal	186	1.83	-	31.50	5.06	32.11
PK	5.467G	63.75	68.20	-4.45	59.30	3	Horizontal	186	1.83	-	31.50	5.07	32.12
PK	5.581G	114.65	Inf	-Inf	110.09	3	Horizontal	186	1.83	-	31.56	5.18	32.18
AV	5.582G	99.82	Inf	-Inf	95.26	3	Horizontal	186	1.83	-	31.56	5.18	32.18
PK	5.73G	63.37	68.20	-4.83	58.46	3	Horizontal	186	1.83	-	31.92	5.26	32.27

802.11ax HEW80-BF_Nss2,(MCS0)_4TX

5610MHz_TnomVnom

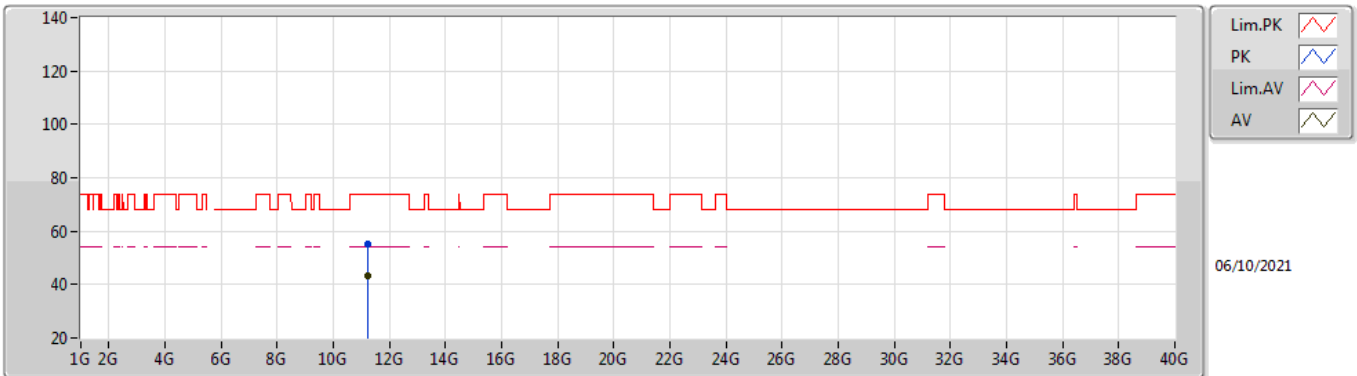


EUT Y_4TX
Setting 87
06-F-E-2

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	11.20848G	55.77	74.00	-18.23	42.25	3	Vertical	58	2.04	-	39.60	8.18	34.26
AV	11.20638G	43.15	54.00	-10.85	29.63	3	Vertical	58	2.04	-	39.60	8.18	34.26

802.11ax HEW80-BF_Nss2,(MCS0)_4TX

5610MHz_TnomVnom

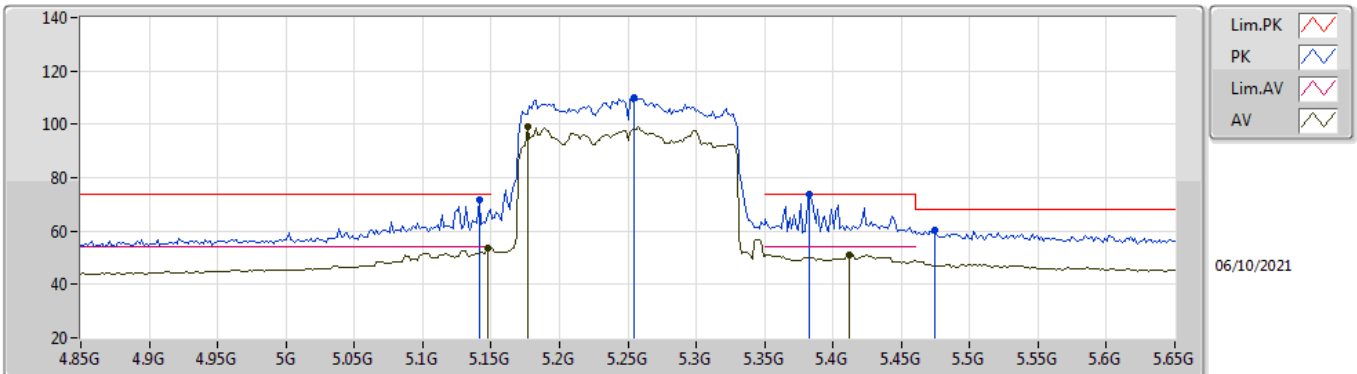


EUT Y_4TX
Setting 87
06-F-E-2

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	11.2185G	55.24	74.00	-18.76	41.71	3	Horizontal	225	1.27	-	39.60	8.19	34.26
AV	11.2065G	43.25	54.00	-10.75	29.73	3	Horizontal	225	1.27	-	39.60	8.18	34.26

802.11ax HEW160-BF_Nss2,(MCS0)_4TX

5250MHz Straddle 5.25-5.35GHz_TnomVnom

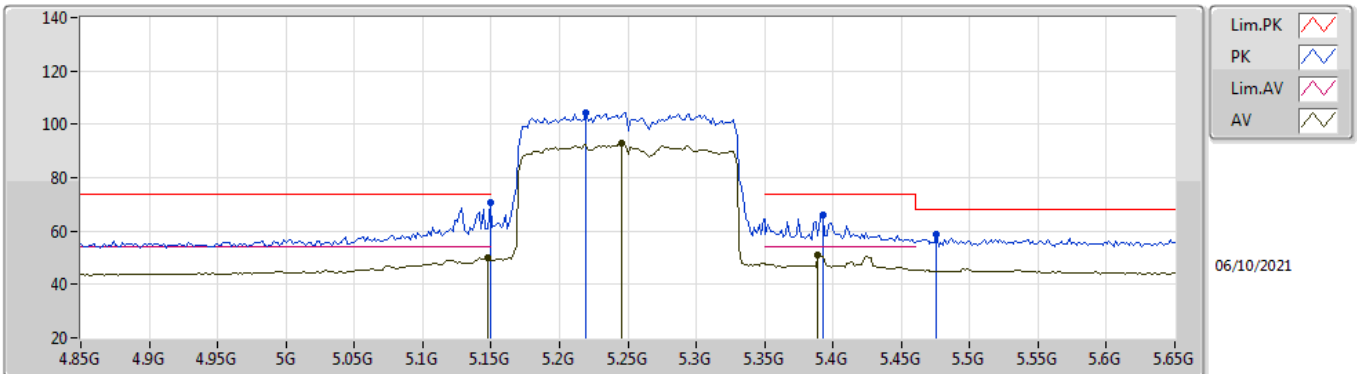


EUT V_4TX
Setting 77
06-F-S-5-10

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	5.1412G	71.89	74.00	-2.11	67.11	3	Vertical	10.6	1.86	-	31.75	5.00	31.97
AV	5.1476G	53.72	54.00	-0.28	48.98	3	Vertical	10.6	1.86	-	31.71	5.00	31.97
AV	5.1764G	99.30	Inf	-Inf	94.75	3	Vertical	10.6	1.86	-	31.54	5.00	31.99
PK	5.2548G	110.09	Inf	-Inf	106.01	3	Vertical	10.6	1.86	-	31.10	5.00	32.02
PK	5.3828G	73.63	74.00	-0.37	69.41	3	Vertical	10.6	1.86	-	31.30	5.00	32.08
AV	5.4116G	51.20	54.00	-2.80	46.86	3	Vertical	10.6	1.86	-	31.42	5.01	32.09
PK	5.474G	60.12	68.20	-8.08	55.67	3	Vertical	10.6	1.86	-	31.50	5.07	32.12

802.11ax HEW160-BF_Nss2,(MCS0)_4TX

5250MHz Straddle 5.25-5.35GHz_TnomVnom

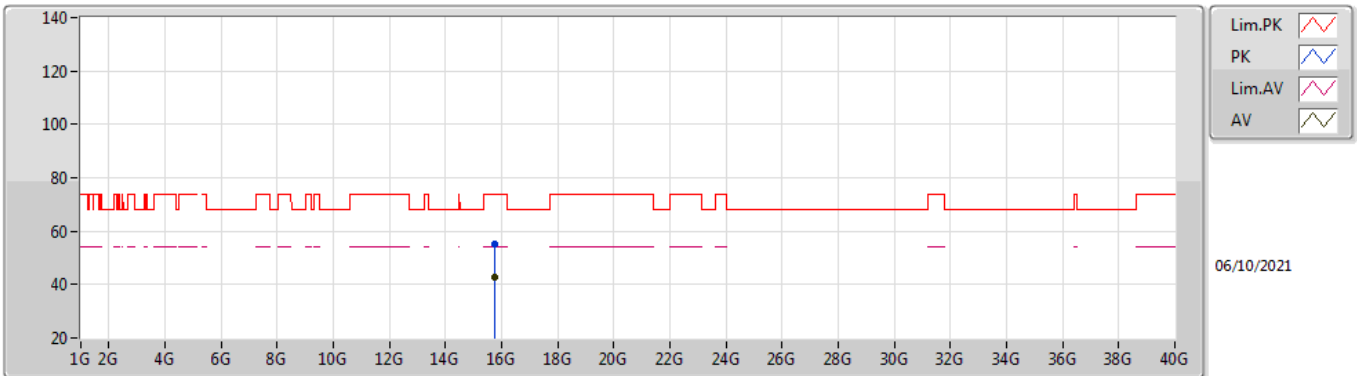


EUT_V_4TX
Setting 77
06-F-S-5-10

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	5.1492G	70.84	74.00	-3.16	66.12	3	Horizontal	12	1.80	-	31.70	5.00	31.98
AV	5.1476G	50.02	54.00	-3.98	45.28	3	Horizontal	12	1.80	-	31.71	5.00	31.97
PK	5.2196G	104.09	Inf	-Inf	99.82	3	Horizontal	12	1.80	-	31.28	5.00	32.01
AV	5.2452G	93.02	Inf	-Inf	88.91	3	Horizontal	12	1.80	-	31.13	5.00	32.02
PK	5.3924G	65.88	74.00	-8.12	61.61	3	Horizontal	12	1.80	-	31.35	5.00	32.08
AV	5.3892G	50.84	54.00	-3.16	46.58	3	Horizontal	12	1.80	-	31.34	5.00	32.08
PK	5.4756G	58.56	68.20	-9.64	54.10	3	Horizontal	12	1.80	-	31.50	5.08	32.12

802.11ax HEW160-BF_Nss2,(MCS0)_4TX

5250MHz Straddle 5.25-5.35GHz_TnomVnom

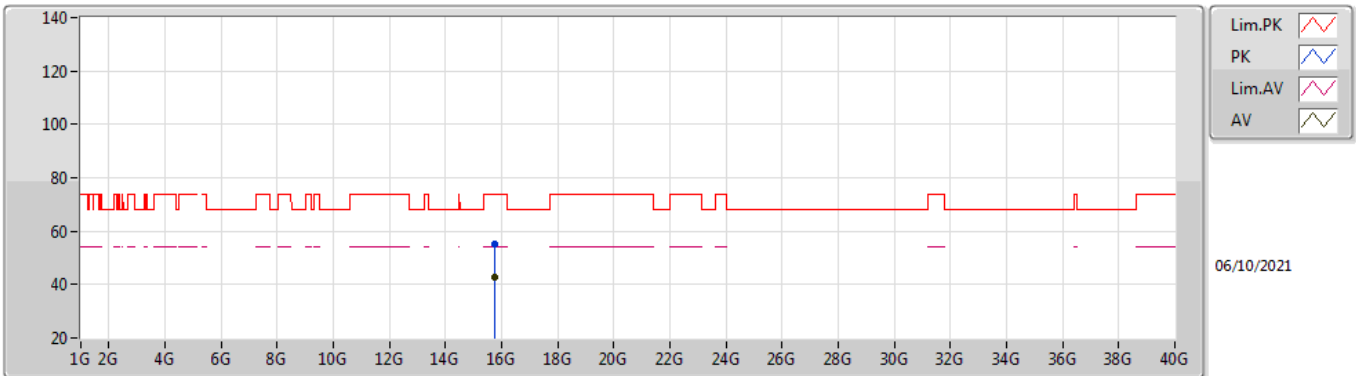


EUT Y_4TX
Setting 77
06-F-E-2

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	15.7623G	55.10	74.00	-18.90	41.14	3	Vertical	242	2.64	-	37.80	10.48	34.32
AV	15.75084G	42.86	54.00	-11.14	28.90	3	Vertical	242	2.64	-	37.80	10.48	34.32

802.11ax HEW160-BF_Nss2,(MCS0)_4TX

5250MHz Straddle 5.25-5.35GHz_TnomVnom



EUT Y_4TX
Setting 77
06-F-E-2

Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Raw (dBuV)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comment	AF (dB)	CL (dB)	PA (dB)
PK	15.7353G	54.93	74.00	-19.07	40.97	3	Horizontal	253	2.25	-	37.80	10.47	34.31
AV	15.76086G	42.85	54.00	-11.15	28.89	3	Horizontal	253	2.25	-	37.80	10.48	34.32