

FCC RADIO TEST REPORT

FCC ID : TLZ-CU640

Equipment : IEEE802.11 a/b/g/n/ac/ax and Bluetooth LE 5.4 LGA Module

Brand Name : AzureWave

Model Name : AW-CU640-P , AW-CU642-P , AW-CU699-P ,
AW-CU640-E , AW-CU642-E , AW-CU699-E

Applicant : AzureWave Technologies, Inc.
8F., No.94, Baozhong Rd. , Xindian Dist., New
Taipei City , Taiwan 231

Manufacturer : AzureWave Technologies, Inc.
8F., No.94, Baozhong Rd. , Xindian Dist., New
Taipei City , Taiwan 231

Standard : 47 CFR FCC Part 15.407

The product was received on Jul. 14, 2025, and testing was started from Jul. 18, 2025 and completed on Aug. 20, 2025. We, SPORTON INTERNATIONAL INC. Hsinhua Laboratory, would like to declare that the tested sample has been evaluated in accordance with the procedures given in ANSIC63.10-2020 + Cor.1-2023 + C63.10a-2024 and shown compliance with the applicable technical standards.

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


Approved by: Jackson Tsai

SPORTON INTERNATIONAL INC. Hsinhua Laboratory

No.52, Huaya 1st Rd., Guishan Dist., Taoyuan City 333411, Taiwan (R.O.C.)



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TEL : 886-3-656-9065
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Report Template No.: HE1-D1-1 Ver2.8
FCC ID: TLZ-CU640



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(a)	Emission Bandwidth	PASS	-
3.3	15.407(a)	Maximum Equivalent Isotropically Radiated Power (E.I.R.P.)	PASS	-
3.4	15.407(a)	Peak Power Spectral Density (E.I.R.P.)	PASS	-
3.5	15.407(b)	Unwanted Emissions	PASS	-
3.6	15.407(d)	Contention-Based Protocol	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:

None

Reviewed by: Ben Tseng

Report Producer: Debby Hung



1 General Description

1.1 Information

1.1.1 RF General Information

Frequency Range (MHz)	IEEE Std. 802.11	Ch. Frequency (MHz)	Channel Number
5925 ~ 7125	ax (HEW20)	5935 ~ 7115	1 ~ 233 [60]

Band	Mode	BWch	Nant
5.925-6.425GHz	802.11ax HEW20	20	1TX
6.425-6.525GHz	802.11ax HEW20	20	1TX
6.525-6.875GHz	802.11ax HEW20	20	1TX
6.875-7.125GHz	802.11ax HEW20	20	1TX

Note:

- HEW20 use a combination of OFDMA-BPSK, QPSK, 16QAM, 64QAM, 256QAM, 1024QAM modulation.
- BWch is the nominal channel bandwidth.
- The channel defined in the IEEE Standard P802.11ax™/D6.1.

1.1.2 Antenna Information

Ant.	Brand	Model Name	Antenna Type	Connector
1	ARISTOTLE	RFA-27-JP326MHF4C198	PIFA	I-Pex
2	ARISTOTLE	RFA-27-JP326-C198	PIFA	I-Pex
3	AzureWave	AW-CU640	PCB	N/A

Ant.	Port	Gain (dBi)									BT
		2.4G	5G				6G				
			UNII-1	UNII-2A	UNII-2C	UNII-3	UNII-5	UNII-6	UNII-7	UNII-8	
1	1	3.5	5	5	5	5	5	5	5	3.5	
2	1	3.5	5	5	5	5	5	5	5	3.5	
3	1	2.75	2.34	2.34	3.34	3.34	2.09	1.99	2.05	2.17	2.75

Note 1: The EUT has three antennas.

Note 2: EUT can match with above antennas for using. The highest gain of antenna was used to perform the worst configuration and result of that was recorded as the final test result.

For 2.4GHz function:

For IEEE 802.11 b/g/n/VHT/ax mode (1TX/1RX)

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

For BT function:

For IEEE 802.15.1 Bluetooth mode (1TX/1RX)

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

**For 5GHz function:**

For IEEE 802.11 a/n/ac/ax mode (1TX/1RX)

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

For 6GHz function:

For IEEE 802.11 ax mode (1TX/1RX)

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

1.1.3 EUT Information

Operational Condition				
EUT Power Type	From Test Fixture			
EUT Function	☐	Indoor Access Point	☐	Dual Client
	☒	Indoor Client	☐	Fixed Client
	☐	Subordinate	☐	Standard Client
	☐	Very Low Power	☐	Standard Power Access Point
			☐	Indoor use
			☐	Outdoor use
Beamforming Function	☐	With beamforming	☒	Without beamforming
Resource Unit	☒	Full RU	☐	Partial RU
	☐	MRU (static preamble puncturing)	☐	MRU (dynamic preamble puncturing)
Software / Firmware Version for CBP			28.10.400.1	
Type of EUT				
☒	Stand-alone			
☐	Combined (EUT where the radio part is fully integrated within another device)			
	Combined Equipment - Brand Name / Model No.: ...			
☐	Plug-in radio (EUT intended for a variety of host systems)			
	Host System - Brand Name / Model No.:			
☐	Other:			

Note: The above information was declared by manufacturer.

1.1.4 Mode Test Duty Cycle

Mode	DC	DCF (dB)	T (s)	VBW (Hz)_1/T
802.11ax HEW20_Nss1,(MCS0)_1TX	0.98	0.09	1.489m	10Hz (DC>=0.98)

Note. If DC < 0.98, the DCF was added while measuring Output power and PSD.

**1.1.5 Table for Multiple Listing**

Model	Antenna Type	Chipset	WLAN 2.4G	WLAN 5G	WLAN 6G	Bluetooth	Description
AW-CU640-P	PCB	CYW55913	V	V	V	V	The EUT has six model names that are identical in all aspects except for the supported wireless functionalities and antenna type. The wireless differences are implemented solely through software configuration, with the firmware being the same and requiring no hardware changes.
AW-CU642-P		CYW55912	V	V	X	V	
AW-CU699-P		CYW55911	V	X	X	V	
AW-CU640-E	PIFA	CYW55913	V	V	V	V	
AW-CU642-E		CYW55912	V	V	X	V	
AW-CU699-E		CYW55911	V	X	X	V	

Note : The above information was declared by manufacturer.



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 C63.10-2020 + Cor.1-2023 + C63.10a-2024
- ♦ FCC KDB 789033 D02 v02r01

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

- ♦ KDB 987594 D01 v03r01
- ♦ KDB 987594 D02 v03
- ♦ KDB 412172 D01 v01r01
- ♦ KDB 414788 D01 v01r01

1.3 Testing Location Information

Test Lab. : Sporton International Inc. Hsinhua Laboratory				
☒ Hsinhua (TAF: 3785)	ADD: No.52, Huaya 1st Rd., Guishan Dist., Taoyuan City 333411, Taiwan (R.O.C.)			
	TEL: 886-3-327-3456		FAX: 886-3-327-0973	
Test site Designation No. TW3785 with FCC.				
Test Condition	Test Site No.	Test Engineer	Test Environment	Test Date
AC Conduction	CO04-HY	Lego Lin	23.2~23.8℃ / 58~64%	25/Jul/2025
RF Conducted	TH01-HY	Jin Jing	22.8~23.8℃ / 53~61%	23/Jul/2025~01/Aug/2025
Contention-Based Protocol	DFS03-HY	CHUN-YI WU	23.4~24.6℃ / 56~62%	20/Aug/2025
☒ Wenhua 3rd. (TAF: 3785)	ADD: No. 58, Aly. 75, Ln. 564, Wenhua 3rd Rd., Guishan Dist. Taoyuan City 333, Taiwan (R.O.C.)			
	TEL: 886-3-327-0868			
Test site Designation No. TW0036 with FCC.				
Test Condition	Test Site No.	Test Engineer	Test Environment	Test Date
Radiated	03CH24-HY	Jack Tang	20.5~22.1℃ / 57~61%	18/Jul/2025~29/Jul/2025

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
AC Power-line Conducted Emissions	3.44 dB	Confidence levels of 95%
Emission Bandwidth	0.05 MHz	Confidence levels of 95%
Maximum Equivalent Isotopically Radiated Power (E.I.R.P.)	1.48 dB	Confidence levels of 95%
Peak Power Spectral Density (E.I.R.P.)	1.48 dB	Confidence levels of 95%
Contention-Based Protocol	0.94 dB	Confidence levels of 95%
Radiated Emission (9 kHz ~ 30 MHz)	2.9 dB	Confidence levels of 95%
Radiated Emission (30 MHz ~ 1 GHz)	5.64 dB	Confidence levels of 95%
Radiated Emission (1 GHz ~ 18 GHz)	5.02 dB	Confidence levels of 95%
Radiated Emission (18 GHz ~ 40 GHz)	5.28 dB	Confidence levels of 95%



2 Test Configuration of EUT

2.1 Test Channel Mode

Test Software Version	Terminal version 28.10.400.1
------------------------------	------------------------------

Mode	Power Setting
802.11ax HEW20_Nss1,(MCS0)_1TX	-
5955MHz	23
6195MHz	28
6415MHz	30
6435MHz	33
6475MHz	33
6515MHz	33
6535MHz	32
6695MHz	33
6875MHz	33
6895MHz	32
6995MHz	36
7095MHz	37
7115MHz	37

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	CTX
1	Test Fixture Mode

The Worst Case Mode for Following Conformance Tests	
Tests Item	Emission Bandwidth Maximum Equivalent Isotropically Radiated Power (E.I.R.P.) Peak Power Spectral Density (E.I.R.P.) Unwanted Emissions Contention Based Protocol Frequency Stability
Test Condition	Conducted measurement at transmit chains

The Worst Case Mode for Following Conformance Tests			
Tests Item	Unwanted Emissions		
Test Condition	Radiated measurement If EUT consist of multiple antenna assembly (multiple antenna are used in EUT regardless of spatial multiplexing MIMO configuration), the radiated test should be performed with highest antenna gain of each antenna type.		
Operating Mode < 1GHz	CTX		
1	Test Fixture Mode_PIFA Antenna		
2	Test Fixture Mode_PCB Antenna		
Operating Mode > 1GHz	CTX		
Orthogonal Planes of EUT	X Plane	Y Plane	Z Plane
			
Worst Planes of EUT PIFA Antenna			V
Worst Planes of EUT PCB Antenna		V	



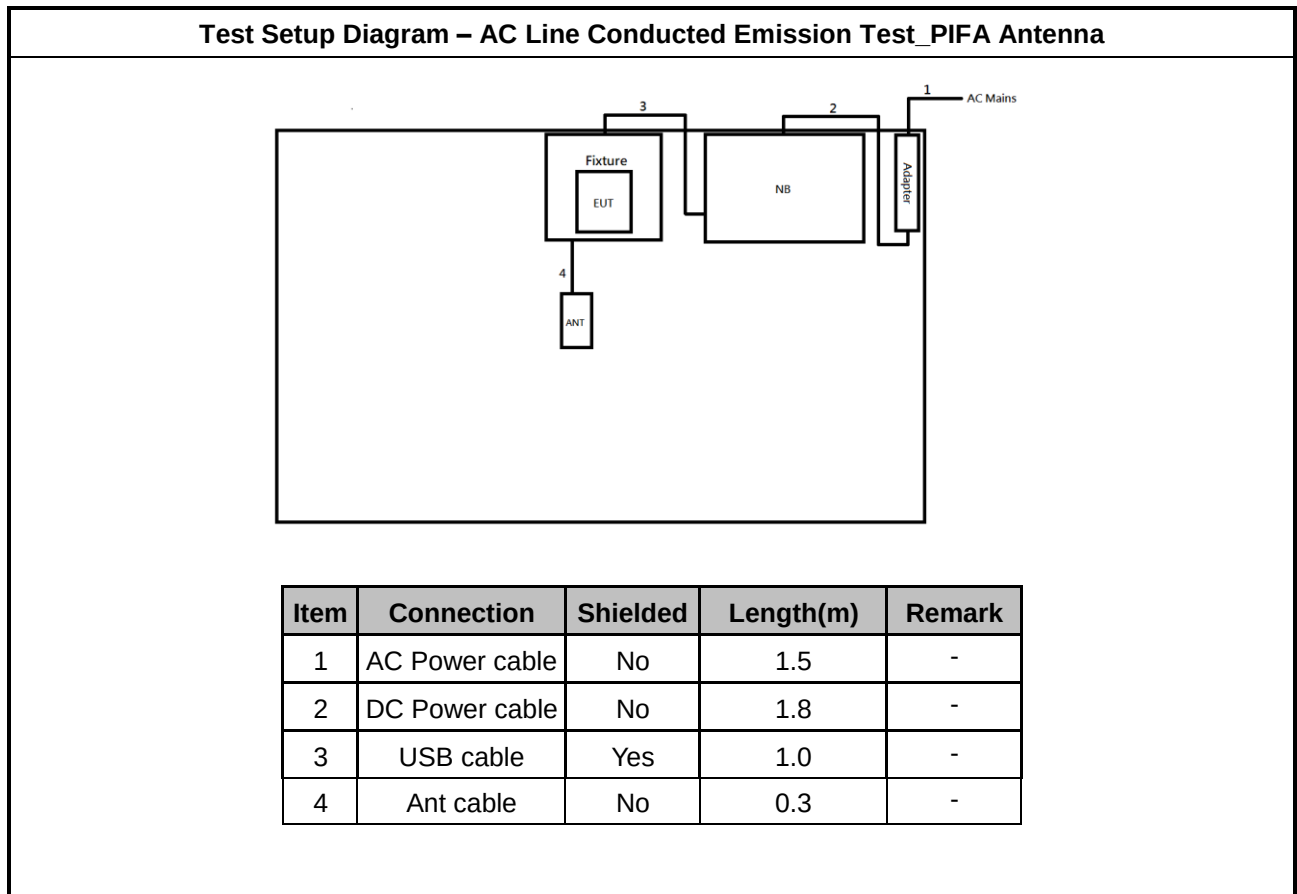
2.3 Support Equipment

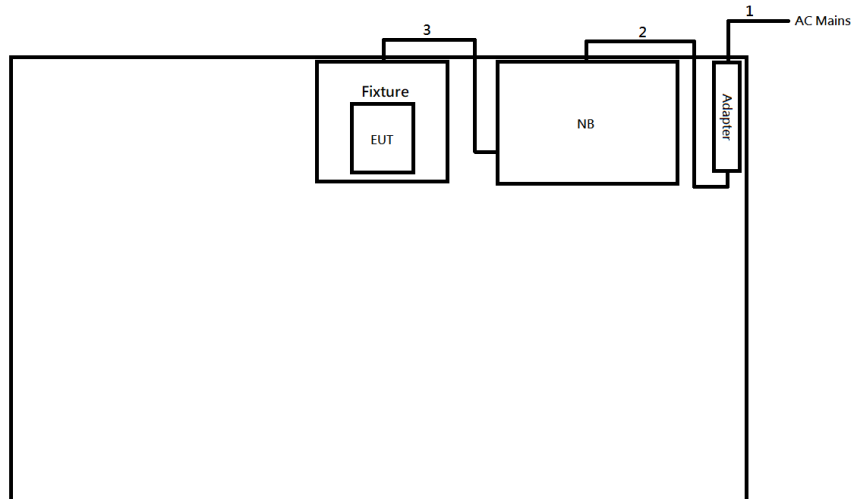
Support Equipment – AC Conduction & Radiated					
No.	Equipment	Brand Name	Model Name	FCC ID	Remark
1	Fixture	Azurewave	2640-I2	-	Provided by Customer
2	USB cable	Sporton	Sporton	-	-
3	NB	Lenovo	A19HTW	-	-
4	NB Adapter	Lenovo	ADLX45NDC3A	-	-

Support Equipment – Conducted					
No.	Equipment	Brand Name	Model Name	FCC ID	Remark
1	Notebook	DELL	E5410	-	-
2	Adapter for NB	DELL	HA65NM130	-	-
3	Fixture	Azurewave	2640-I2	-	Provided by Customer

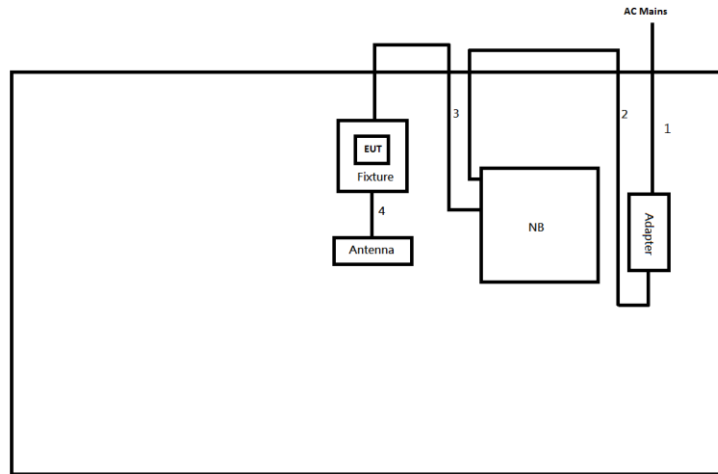
Support Equipment –Contention-Based Protocol					
No.	Equipment	Brand Name	Model Name	FCC ID	Remark
1	Notebook	DELL	Latitude E5550	-	-
2	AP (Master)	NETGEAR	RAXE500	PY320300508	-
3	Shielding Box	EMEC	EM-SHB-650550300-M	-	-

2.4 Test Setup Diagram

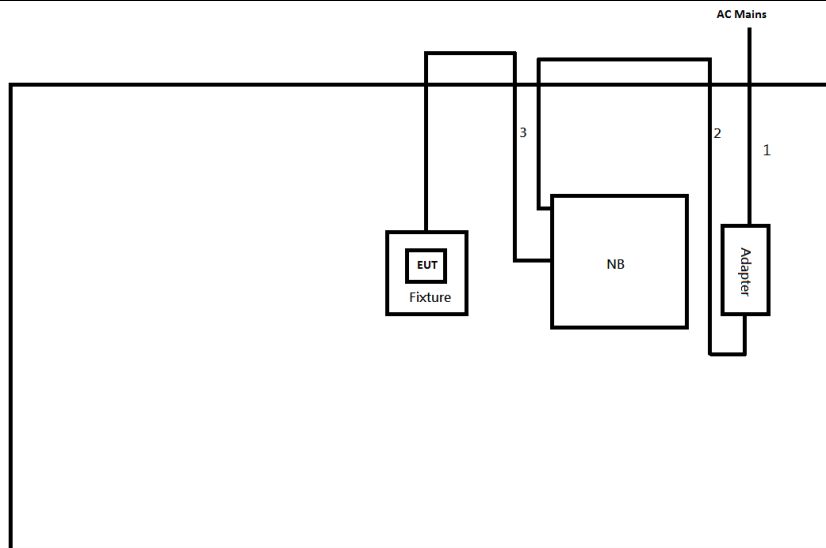


Test Setup Diagram – AC Line Conducted Emission Test_PCB Antenna


Item	Connection	Shielded	Length(m)	Remark
1	AC Power cable	No	1.5	-
2	DC Power cable	No	1.8	-
3	USB cable	Yes	1.0	-

Test Setup Diagram - Radiated Test_PIFA Antenna


Item	Connection	Shielded	Length(m)	Remark
1	AC Power cable	No	1.8	-
2	DC Power cable	No	1.8	-
3	USB cable	Yes	1.0	-
4	Antenna Cable	No	0.3	-

Test Setup Diagram - Radiated Test_PCB Antenna


Item	Connection	Shielded	Length(m)	Remark
1	AC Power cable	No	1.8	-
2	DC Power cable	No	1.8	-
3	USB cable	Yes	1.0	-



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

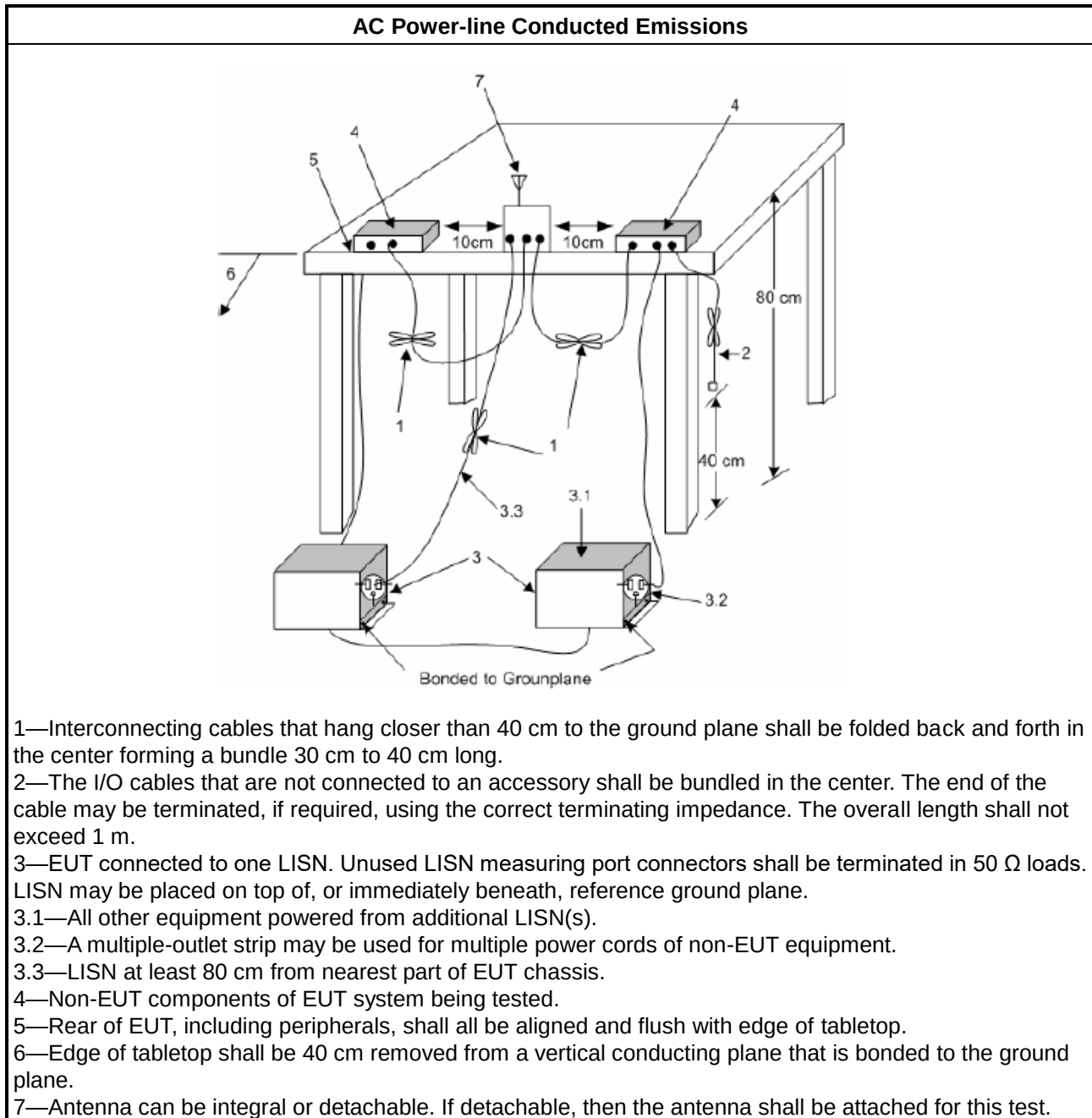
Test Method
☒ Refer as ANSI C63.10, clause 6.2 for AC power-line conducted emissions.

3.1.4 Measurement Results Calculation

The measured Level is calculated using:

Corrected Reading: Raw(Read Level) + LISN(LISN Factor) + CL(Cable Loss) + AT(Attenuator).

3.1.5 Test Setup



3.1.6 Test Result of AC Power-line Conducted Emissions

Refer as Appendix A

3.2 Emission Bandwidth

3.2.1 Emission Bandwidth Limit

Emission Bandwidth Limit	
UNII Devices	
☒	For the 5925-6425 GHz band, N/A
☒	For the 6425-6525 GHz band, N/A
☒	For the 6525-6875 GHz band, N/A
☒	For the 6875-7125 GHz band, N/A

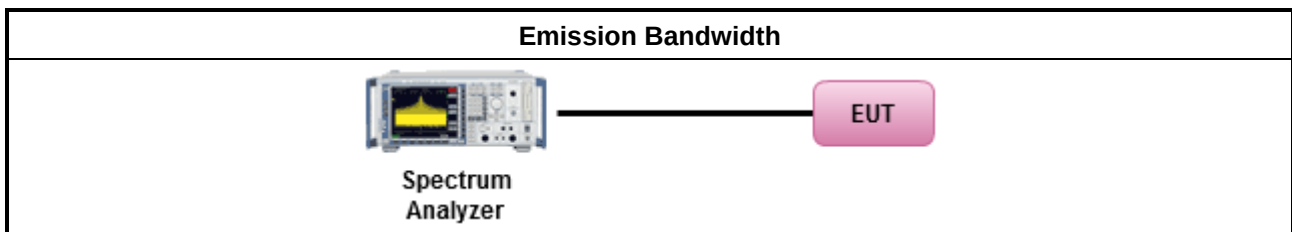
3.2.2 Measuring Instruments

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

3.2.3 Test Procedures

Test Method	
For the emission bandwidth shall be measured using one of the options below:	
☒	Refer as FCC KDB 789033, clause C for EBW and clause D for OBW measurement.
☐	Refer as ANSI C63.10, clause 6.9.3 for occupied bandwidth testing.
☐	Refer as IC RSS-Gen, clause 6.7 for bandwidth testing.

3.2.4 Test Setup



3.2.5 Test Result of Emission Bandwidth

Refer as Appendix B



3.3 Maximum Equivalent Isotropically Radiated Power (E.I.R.P.)

3.3.1 Maximum Equivalent Isotropically Radiated Power (E.I.R.P.) Limit

Maximum Equivalent Isotropically Radiated Power (E.I.R.P.) Limit	
UNII Devices	
☒ For the 5.925 ~ 6.425 GHz band:	
	■ For standard power access point and fixed client device : e.i.r.p < 36 dBm , For outdoor devices, the maximum e.i.r.p. at any elevation angle above 30 degrees not exceed 125 mW (21 dBm).
	■ For indoor access point : e.i.r.p < 30 dBm.
	■ For subordinate device control of an indoor access point : e.i.r.p < 30 dBm.
	■ For client device control of a standard power access point : e.i.r.p < 30 dBm.
	■ For client device control of an indoor access point : e.i.r.p < 24 dBm.
	■ For very low power device : e.i.r.p < 14 dBm.
☒ For the 6.425 ~ 6.525 GHz band:	
	■ For indoor access point : e.i.r.p < 30 dBm.
	■ For subordinate device control of an indoor access point : e.i.r.p < 30 dBm.
	■ For client device control of an indoor access point : e.i.r.p < 24 dBm.
	■ For very low power device : e.i.r.p < 14 dBm.
☒ For the 6.525 ~ 6.875 GHz band:	
	■ For standard power access point and fixed client device : e.i.r.p < 36 dBm , For outdoor devices, the maximum e.i.r.p. at any elevation angle above 30 degrees not exceed 125 mW (21 dBm).
	■ For indoor access point : e.i.r.p < 30 dBm.
	■ For subordinate device control of an indoor access point : e.i.r.p < 30 dBm.
	■ For client device control of a standard power access point : e.i.r.p < 30 dBm.
	■ For client device control of an indoor access point : e.i.r.p < 24 dBm.
	■ For very low power device : e.i.r.p < 14 dBm.
☒ For the 6.875 ~ 7.125 GHz band:	
	■ For indoor access point : e.i.r.p < 30 dBm.
	■ For subordinate device control of an indoor access point : e.i.r.p < 30 dBm.
	■ For client device control of an indoor access point : e.i.r.p < 24 dBm.
	■ For very low power device : e.i.r.p < 14 dBm.

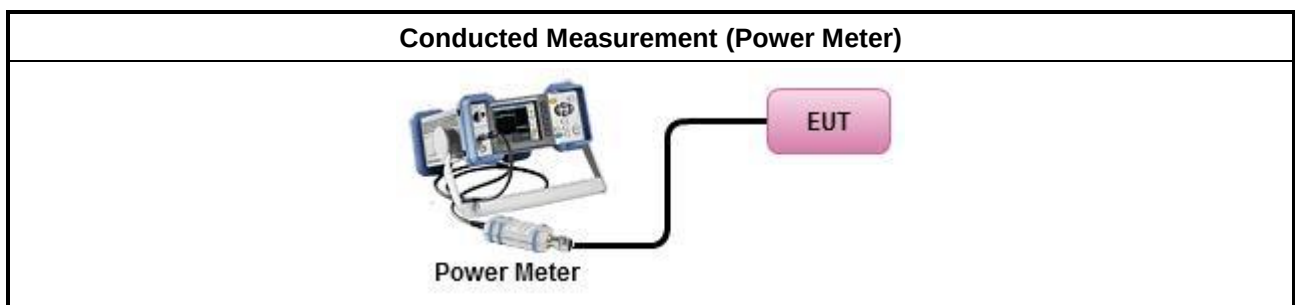
3.3.2 Measuring Instruments

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

3.3.3 Test Procedures

Test Method	
Maximum Output Power Setting	
	Duty cycle $\geq 98\%$
☐	Refer as FCC KDB 789033, clause E Method SA-2 (spectral trace averaging).
	Duty cycle $< 98\%$
☐	Refer as FCC KDB 789033, clause E Method SA-2 Alt. (RMS detection with slow sweep speed)
	Wideband RF power meter and average over on/off periods with duty factor
☒	Refer as FCC KDB 789033, clause E Method PM-G (using an RF average power meter).
☒	For conducted measurement.
	If the EUT supports multiple transmit chains using options given below: Refer as FCC KDB 662911, In-band power measurements. Using the measure-and-sum approach, measured all transmit ports individually. Sum the power (in linear power units e.g., mW) of all ports for each individual sample and save them.
	If multiple transmit chains, EIRP calculation could be following as methods: $P_{\text{total}} = P_1 + P_2 + \dots + P_n$ (calculated in linear unit [mW] and transfer to log unit [dBm]) $\text{EIRP}_{\text{total}} = P_{\text{total}} + \text{DG}$
☐	For radiated measurement.
	- Refer as ANSI C63.10, clause 6.6 for radiated emissions above 1GHz. - Refer as FCC KDB 789033, clause II A.1.F "Antenna-port Conducted versus Radiated Testing" - Refer as KDB 412172, clause 2.2 for EIRP calculation.

3.3.4 Test Setup



3.3.5 Test Result of Maximum Equivalent Isotropically Radiated Power (E.I.R.P)

Refer as Appendix C



3.4 Peak Power Spectral Density (E.I.R.P.)

3.4.1 Peak Power Spectral Density (E.I.R.P.) Limit

Peak Power Spectral Density (E.I.R.P.) Limit	
UNII Devices	
☒	For the 5.925 ~ 6.425 GHz band:
☐	For standard power access point and fixed client device : e.i.r.p PSD < 23 dBm/MHz.
☐	For indoor access point : e.i.r.p PSD < 5 dBm/MHz.
☐	For subordinate device control of an indoor access point : e.i.r.p PSD < 5 dBm/MHz.
☐	For client device control of a standard power access point : e.i.r.p PSD < 17 dBm/MHz.
☐	For client device control of an indoor access point : e.i.r.p PSD < -1 dBm/MHz.
☐	For very low power device : e.i.r.p < -5 dBm.
☒	For the 6.425 ~ 6.525 GHz band:
☐	For indoor access point : e.i.r.p PSD < 5 dBm/MHz.
☐	For subordinate device control of an indoor access point : e.i.r.p PSD < 5 dBm/MHz.
☐	For client device control of an indoor access point : e.i.r.p PSD < -1 dBm/MHz.
☐	For very low power device : e.i.r.p < -5 dBm.
☒	For the 6.525 ~ 6.875 GHz band:
☐	For standard power access point and fixed client device : e.i.r.p PSD < 23 dBm/MHz.
☐	For indoor access point : e.i.r.p PSD < 5 dBm/MHz.
☐	For subordinate device control of an indoor access point : e.i.r.p PSD < 5 dBm/MHz.
☐	For client device control of a standard power access point : e.i.r.p PSD < 17 dBm/MHz.
☐	For client device control of an indoor access point : e.i.r.p PSD < -1 dBm/MHz.
☐	For very low power device : e.i.r.p < -5 dBm.
☒	For the 6.875 ~ 7.125 GHz band:
☐	For indoor access point : e.i.r.p PSD < 5 dBm/MHz.
☐	For subordinate device control of an indoor access point : e.i.r.p PSD < 5 dBm/MHz.
☐	For client device control of an indoor access point : e.i.r.p PSD < -1 dBm/MHz.
☐	For very low power device : e.i.r.p < -5 dBm.

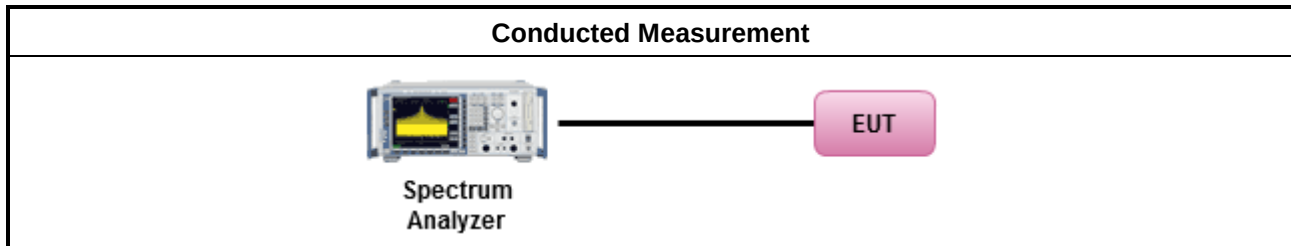
3.4.2 Measuring Instruments

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

**3.4.3 Test Procedures**

Test Method	
Peak power spectral density procedures that the same method as used to determine the conducted output power shall be used to determine the peak power spectral density and use the peak search function on the spectrum analyzer to find the peak of the spectrum. For the peak power spectral density shall be measured using below options:	
☐	Refer as FCC KDB 789033, F)5) power spectral density can be measured using resolution bandwidths < 1 MHz provided that the results are integrated over 1 MHz bandwidth
☒	Refer as FCC KDB 789033, clause E Method SA-2. (spectral trace averaging)
☐	Refer as FCC KDB 789033, clause E Method SA-2 Alt. (RMS detection with slow sweep speed)
☒ For conducted measurement.	
If the EUT supports multiple transmit chains using options given below:	
☐	Option 1: Measure and sum the spectra across the outputs. Refer as FCC KDB 662911, In-band power spectral density (PSD). Sample all transmit ports simultaneously using a spectrum analyzer for each transmit port. Where the trace bin-by-bin of each transmit port summing can be performed. (i.e., in the first spectral bin of output 1 is summed with that in the first spectral bin of output 2 and that from the first spectral bin of output 3, and so on up to the NTX output to obtain the value for the first frequency bin of the summed spectrum.). Add up the amplitude (power) values for the different transmit chains and use this as the new data trace.
☒	Option 2: Measure and sum spectral maxima across the outputs. With this technique, spectra are measured at each output of the device at the required resolution bandwidth. The maximum value (peak) of each spectrum is determined. These maximum values are then summed mathematically in linear power units across the outputs. These operations shall be performed separately over frequency spans that have different out-of-band or spurious emission limits,
☒	Option 3: Measure and add 10 log(N) dB, where N is the number of transmit chains. Refer as FCC KDB 662911, In-band power spectral density (PSD). Performed at each transmit chains and each transmit chains shall be compared with the limit have been reduced with 10 log(N). Or each transmit chains shall be add 10 log(N) to compared with the limit.
If multiple transmit chains, EIRP PPSD calculation could be following as methods: $PPSD_{total} = PPSD_1 + PPSD_2 + \dots + PPSD_n$ (calculated in linear unit [mW] and transfer to log unit [dBm]) $EIRP_{total} = PPSD_{total} + DG$	
☐ For radiated measurement.	
Refer as ANSI C63.10, clause 6.6 for radiated emissions above 1GHz.	
Refer as KDB 789033, clause II A.1.F "Antenna-port Conducted versus Radiated Testing"	
Refer as KDB 412172, clause 2.2 for EIRP calculation.	

3.4.4 Test Setup



3.4.5 Test Result of Peak Power Spectral Density (E.I.R.P.)

Refer as Appendix D



3.5 Unwanted Emissions

3.5.1 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

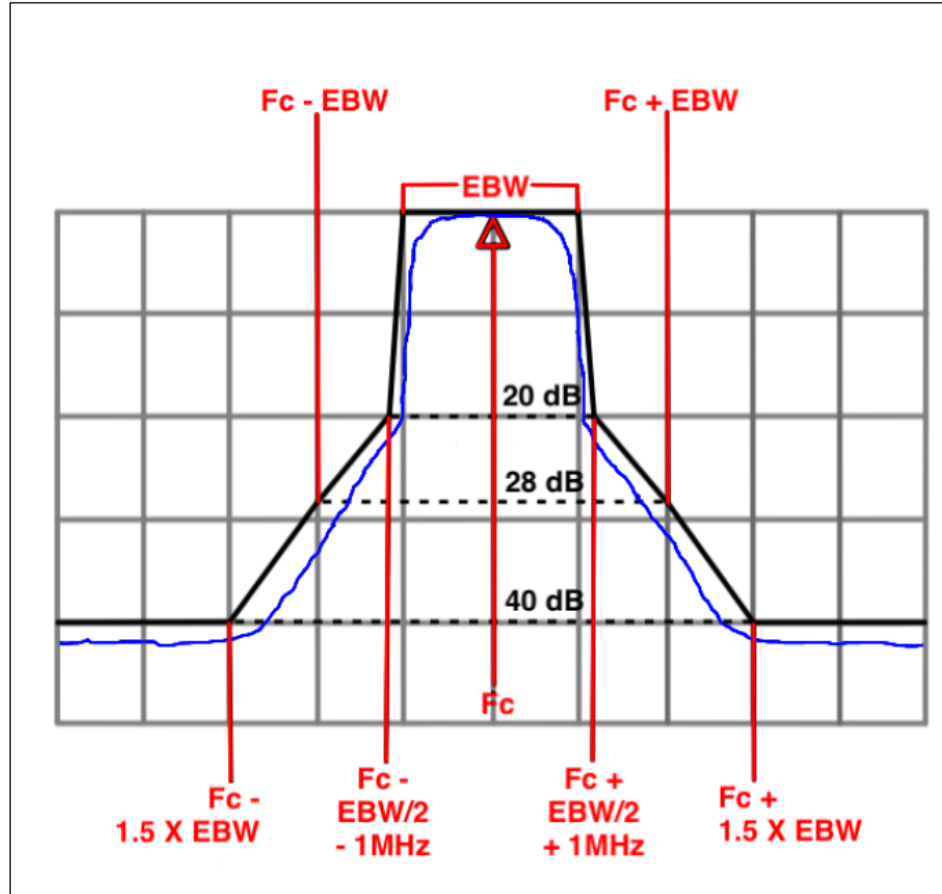
Note 1: Test distance for frequencies at or above 30 MHz, measurements may be performed at a distance other than the limit distance provided they are not performed in the near field and the emissions to be measured can be detected by the measurement equipment. When performing measurements at a distance 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($20 \times \log(\text{standard distance}/\text{test distance}) = 20\log(3/1) = 9.54\text{dB}$).
EX. Above 18GHz emission limit calculation (3m to 1m) = 54dBuV/m at 3m + 9.54dB = 63.54 dBuV/m at 1m.

Un-restricted band emissions above 1GHz Limit	
Frequency	Limit
Any outside the 5.945 – 7.125 GHz emission	e.i.r.p. -27 dBm [68.2 dBuV/m@3m] Note 1: Using the distance of 1m during the test for above 18 GHz, and the test value to correct for the distance factor at 3m($20 \times \log(\text{standard distance}/\text{test distance}) = 20\log(3/1) = 9.54\text{dB}$). EX. Above 18GHz emission limit calculation (3m to 1m) = 68.2dBuV/m at 3m + 9.54dB = 77.74 dBuV/m at 1m.
Frequency	Emission MASK Limit
5.945 – 7.125 GHz	Power spectral density must be suppressed by 20 dB at 1 MHz outside of channel edge, by 28 dB at one channel bandwidth from the channel center, and by 40 dB at one- and one-half times the channel bandwidth away from channel center. At frequencies between one megahertz outside an unlicensed device's channel edge and one channel bandwidth from the center of the channel, the

limits must be linearly interpolated between 20 dB and 28 dB suppression, and at frequencies between one and one- and one-half times an unlicensed device's channel bandwidth, the limits must be linearly interpolated between 28 dB and 40 dB suppression. Emissions removed from the channel center by more than one- and one-half times the channel bandwidth must be suppressed by at least 40 dB. The channel bandwidth is defined as 26 dB EBW.





3.5.2 Measuring Instruments

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

3.5.3 Test Procedures

Test Method	
Measurements may be performed at a distance other than the limit distance provided they are not performed in the near field and the emissions to be measured can be detected by the measurement equipment. Measurements shall not be performed at a distance greater than 30 m for frequencies above 30 MHz, unless it can be further demonstrated that measurements at a distance of 30 m or less are impractical. When performing measurements at a distance other than that specified, the results shall be extrapolated to the specified distance using an extrapolation factor of 20 dB/decade (inverse of linear distance for field-strength measurements, inverse of linear distance-squared for power-density measurements).	
The average emission levels shall be measured in [duty cycle $\geq$ 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). (For unrestricted band measurement)
	☐ Refer as FCC KDB 789033, G)6) Method VB (Reduced VBW).
	☒ Refer as ANSI C63.10, clause 11.12.2.5.2.3 (Reduced VBW). VBW $\geq$ 1/T, where T is pulse time.(For restricted band average measurement)
	☐ 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 4.1.5.2.2 measurement procedure peak limit.
	☒ Refer as FCC KDB 789033, clause G)3)d)ii) for Band edge Integration measurements.
For emission MASK shall be measured using following options below:	
	☒ Refer as KDB 987594 D02, J) In-Band Emissions

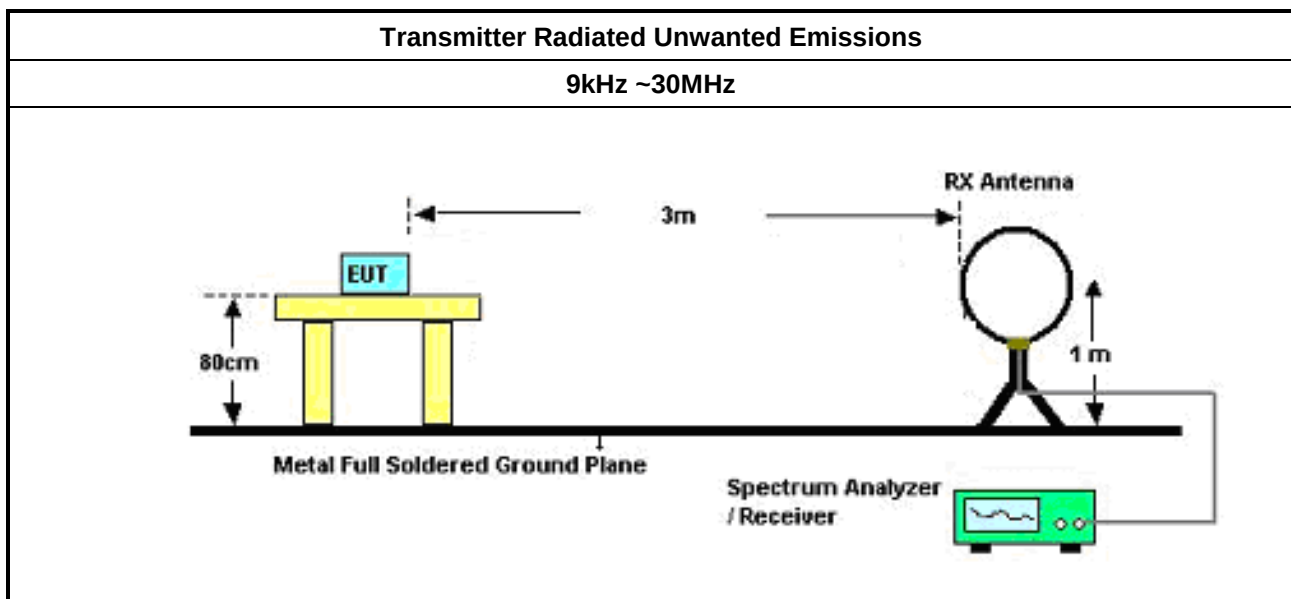
Use the following spectrum analyzer settings:	
	Set RBW=100 kHz for $f < 1$ GHz; VBW=3 * RBW; Sweep = auto; Detector function = peak; Trace = max hold.
	Set RBW = 1 MHz, VBW= 3MHz for $f \geq 1$ GHz for peak measurement. For average measurement, refer as 1.1.4.
KDB 414788 Open-Field Test Sites and Chamber Correlation Justification.	
	Based on FCC 15.31 (f) (2): measurements may be performed at a distance closer than that specified in regulations; however, an attempt should be made to avoid making measurements in the near field.
	Open-field site and chamber correlation testing had been performed and chamber measured test result is the worst case test result.

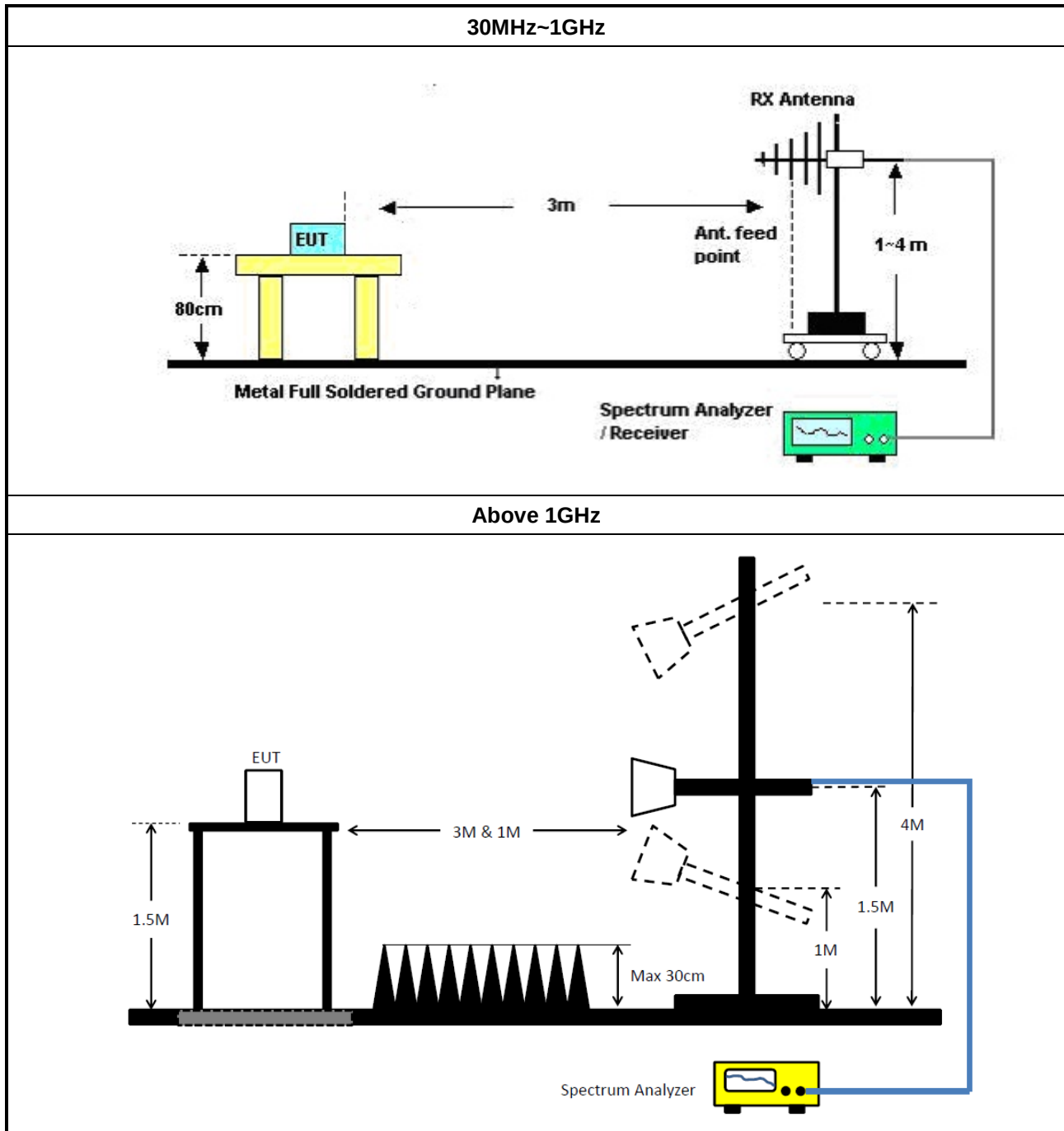
3.5.4 Measurement Results Calculation

The measured Level is calculated using:

Corrected Reading: Raw(Read Level) + AF(Antenna Factor) + CL(Cable Loss) - PA(Preamp Factor)

3.5.5 Test Setup





3.5.6 Transmitter Unwanted Emissions (Below 30MHz)

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

3.5.7 Test Result of Transmitter Unwanted Emissions

Refer as Appendix E

3.6 Contention Based Protocol

3.6.1 Contention Based Protocol Limit

EUT can detect an AWGN signal with 90% (or better) level of certainty.

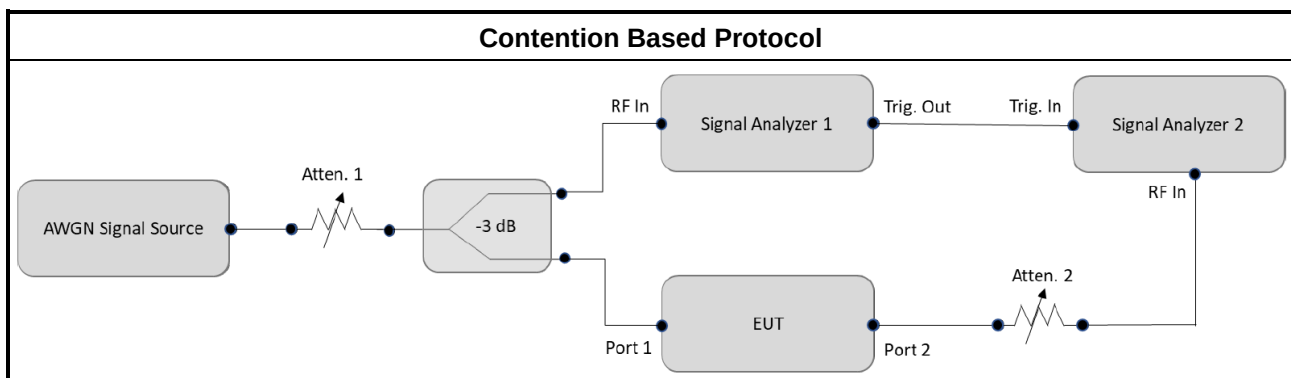
3.6.2 Measuring Instruments

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

3.6.3 Test Procedures

Test Method	
■	For Contention Based Protocol shall be measured using following options below:
☒	Refer as KDB 987594 D02, I) Contention Based Protocol.

3.6.4 Test Setup



3.6.5 Test Result of Contention Based Protocol

Refer as Appendix F



4 Test Equipment and Calibration Data

Instrument for AC Conduction

Instrument	Manufacturer /Brand	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
EMI Test Receiver	ROHDE & SCHWARZ	ESR3	102051	9kHz ~ 3.6GHz	21/May/2025	20/May/2026
Two-Line V-Network	ROHDE & SCHWARZ	ENV 216	100003	9kHz ~ 30MHz	18/Apr/2025	17/Apr/2026
RF Cable 5m	TITAN	TITAN	CO04-cable-01	9 kHz~200MHz	26/Feb/2025	25/Feb/2026
Impuls Begrenzer Pulse Limiter	SCHWARZBECK	VTSD 9561-F	9561-F041	9kHz ~ 30MHz	17/Oct/2024	16/Oct/2025
Software	Sporton	SENSE-EMI	V5.11.6	-	NCR	NCR

NCR: No Calibration Required

Instrument for Conducted Test

Instrument	Manufacturer /Brand	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
Signal Analyzer	R&S	FSV3044	101438	10Hz~44GHz	01/Nov/2024	30/Oct/2025
SMB100A Signal Generator	R&S	SMB100A	181147	100kHz~40GHz	16/Oct/2024	15/Oct/2025
Power Meter	Anritsu	ML2495A	949003	300MHz~40GHz	13/Feb/2025	12/Feb/2026
Pulse Sensor	Anritsu	MA2411B	917017	300MHz~40GHz	13/Feb/2025	12/Feb/2026
SENSE-15407_NII	Sporton	V5.11.25	N/A	N/A	N/A	N/A

Instrument for Contention-Based Protocol Test

Instrument	Manufacturer /Brand	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
Signal Analyzer	R&S	FSP 40	100305	9kHz~40GHz	18/Mar/2025	17/Mar/2026
Vector Signal Generator	R&S	SMW200A	111529	100kHz~7.5GHz	20/Mar/2025	19/Mar/2026
DFS-Adaptivity	Sporton	Ver 2.10	N/A	N/A	N/A	N/A
Adaptivity Analysis-5G	Sporton	Ver 2.10	N/A	N/A	N/A	N/A

**Instrument for Radiated Test**

Instrument	Manufacturer /Brand	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
3m Semi Anechoic Chamber	TDK	SAC-3M	03CH24-HY	30MHz~1GHz 3m	16/Aug/2024	15/Aug/2025
3m Semi Anechoic Chamber	TDK	SAC-3M	03CH24-HY	1GHz~18GHz 3m	30/Jul/2024	29/Jul/2025
EMI Test Receiver	ROHDE & SCHWARZ	ESR	102318	9kHz~3.6GHz	06/Dec/2024	05/Dec/2025
Signal Analyzer	ROHDE&SCHWARZ	FSV3044	101345	10Hz~44GHz	27/Aug/2024	26/Aug/2025
Loop Antenna	TESEQ	HLA 6120	31244	9kHz~30MHz	20/Mar/2025	19/Mar/2026
Bilog Antenna & 6dB Attenuator	TESEQ / Woken	CBL 6112D / 00800N1D01N-06	35376 / 02	30MHz~1GHz	13/Apr/2025	12/Apr/2026
Double Ridged Guide Horn Antenna	SCHWARZBECK	BBHA 9120 D	02744	1GHz~18GHz	15/Aug/2024	14/Aug/2025
Broadband Horn Antenna	SCHWARZBECK	BBHA 9170	01248	18GHz~40GHz	04/Oct/2024	03/Oct/2025
RF Cable	HUBER+SUHNER	SUOFLEX 104	03CH24-cable-01	9kHz~40GHz	01/Oct/2024	30/Sep/2025
Pre-Amplifier	Aglient	8447D	2944A06292	30MHz~1GHz	08/Apr/2025	07/Apr/2026
Amplifier	EM	EM01G18G	060870	1GHz ~18GHz	12/Aug/2024	11/Aug/2025
Amplifier	EM	EM18G40GA	060874	18GHz ~40GHz	18/Apr/2025	17/Apr/2026
SENSE-15407-NII	Sporton	V5.11.24	NA	NA	NA	NA



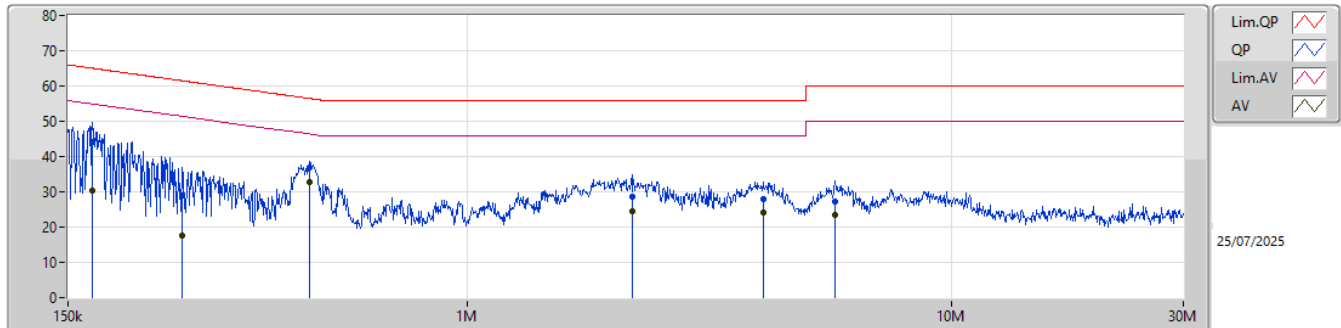
Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Condition
Mode 1	Pass	AV	473.59k	32.76	46.46	-13.70	Line

Result

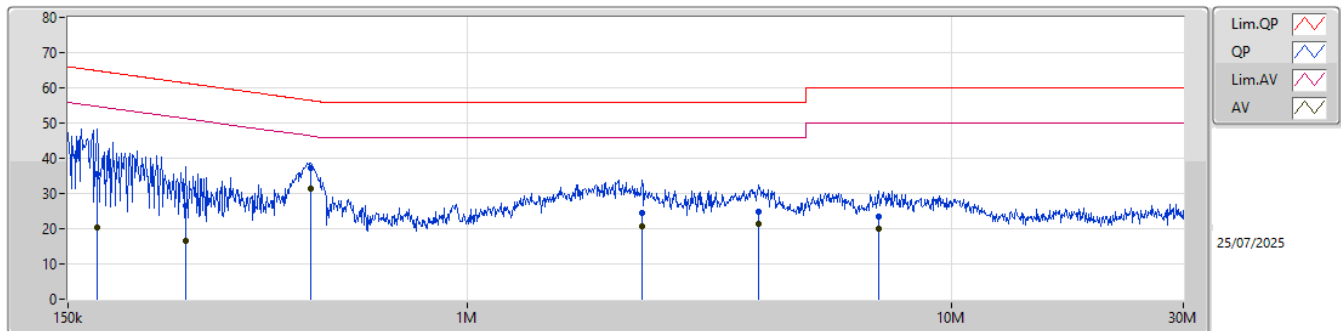
Mode	Result	Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Condition
Mode 1	Pass	QP	168.41k	44.15	65.04	-20.89	Line
Mode 1	Pass	AV	168.41k	30.36	55.04	-24.68	Line
Mode 1	Pass	QP	258.15k	29.10	61.49	-32.39	Line
Mode 1	Pass	AV	258.15k	17.72	51.49	-33.77	Line
Mode 1	Pass	QP	473.59k	36.97	56.46	-19.49	Line
Mode 1	Pass	AV	473.59k	32.76	46.46	-13.70	Line
Mode 1	Pass	QP	2.19M	28.64	56.00	-27.36	Line
Mode 1	Pass	AV	2.19M	24.53	46.00	-21.47	Line
Mode 1	Pass	QP	4.07M	27.96	56.00	-28.04	Line
Mode 1	Pass	AV	4.07M	23.99	46.00	-22.01	Line
Mode 1	Pass	QP	5.74M	27.17	60.00	-32.83	Line
Mode 1	Pass	AV	5.74M	23.38	50.00	-26.62	Line
Mode 1	Pass	QP	172.49k	35.59	64.83	-29.24	Neutral
Mode 1	Pass	AV	172.49k	20.32	54.83	-34.51	Neutral
Mode 1	Pass	QP	262.31k	26.48	61.35	-34.87	Neutral
Mode 1	Pass	AV	262.31k	16.68	51.35	-34.67	Neutral
Mode 1	Pass	QP	475.48k	37.10	56.42	-19.32	Neutral
Mode 1	Pass	AV	475.48k	31.32	46.42	-15.10	Neutral
Mode 1	Pass	QP	2.29M	24.50	56.00	-31.50	Neutral
Mode 1	Pass	AV	2.29M	20.82	46.00	-25.18	Neutral
Mode 1	Pass	QP	3.99M	24.81	56.00	-31.19	Neutral
Mode 1	Pass	AV	3.99M	21.27	46.00	-24.73	Neutral
Mode 1	Pass	QP	7.07M	23.33	60.00	-36.67	Neutral
Mode 1	Pass	AV	7.07M	19.94	50.00	-30.06	Neutral

Conducted Emissions at Powerline_Mode 1



Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Factor (dB)	Condition	Comment	Raw (dBuV)	LISN (dB)	CL (dB)	AT (dB)						
QP	168.41k	44.15	65.04	-20.89	19.61	Line	-	24.54	9.63	0.01	9.97						
AV	168.41k	30.36	55.04	-24.68	19.61	Line	-	10.75	9.63	0.01	9.97						
QP	258.15k	29.10	61.49	-32.39	19.62	Line	-	9.48	9.63	0.02	9.97						
AV	258.15k	17.72	51.49	-33.77	19.62	Line	-	-1.90	9.63	0.02	9.97						
QP	473.59k	36.97	56.46	-19.49	19.64	Line	-	17.33	9.63	0.03	9.98						
AV	473.59k	32.76	46.46	-13.70	19.64	Line	-	13.12	9.63	0.03	9.98						
QP	2.19M	28.64	56.00	-27.36	19.66	Line	-	8.98	9.66	0.03	9.97						
AV	2.19M	24.53	46.00	-21.47	19.66	Line	-	4.87	9.66	0.03	9.97						
QP	4.07M	27.96	56.00	-28.04	19.70	Line	-	8.26	9.67	0.05	9.98						
AV	4.07M	23.99	46.00	-22.01	19.70	Line	-	4.29	9.67	0.05	9.98						
QP	5.74M	27.17	60.00	-32.83	19.81	Line	-	7.36	9.71	0.12	9.98						
AV	5.74M	23.38	50.00	-26.62	19.81	Line	-	3.57	9.71	0.12	9.98						

Conducted Emissions at Powerline_Mode 1



Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Factor (dB)	Condition	Comment	Raw (dBuV)	LISN (dB)	CL (dB)	AT (dB)						
QP	172.49k	35.59	64.83	-29.24	19.71	Neutral	-	15.88	9.73	0.01	9.97						
AV	172.49k	20.32	54.83	-34.51	19.71	Neutral	-	0.61	9.73	0.01	9.97						
QP	262.31k	26.48	61.35	-34.87	19.71	Neutral	-	6.77	9.72	0.02	9.97						
AV	262.31k	16.68	51.35	-34.67	19.71	Neutral	-	-3.03	9.72	0.02	9.97						
QP	475.48k	37.10	56.42	-19.32	19.72	Neutral	-	17.38	9.71	0.03	9.98						
AV	475.48k	31.32	46.42	-15.10	19.72	Neutral	-	11.60	9.71	0.03	9.98						
QP	2.29M	24.50	56.00	-31.50	19.75	Neutral	-	4.75	9.75	0.03	9.97						
AV	2.29M	20.82	46.00	-25.18	19.75	Neutral	-	1.07	9.75	0.03	9.97						
QP	3.99M	24.81	56.00	-31.19	19.82	Neutral	-	4.99	9.79	0.05	9.98						
AV	3.99M	21.27	46.00	-24.73	19.82	Neutral	-	1.45	9.79	0.05	9.98						
QP	7.07M	23.33	60.00	-36.67	20.05	Neutral	-	3.28	9.90	0.17	9.98						
AV	7.07M	19.94	50.00	-30.06	20.05	Neutral	-	-0.11	9.90	0.17	9.98						



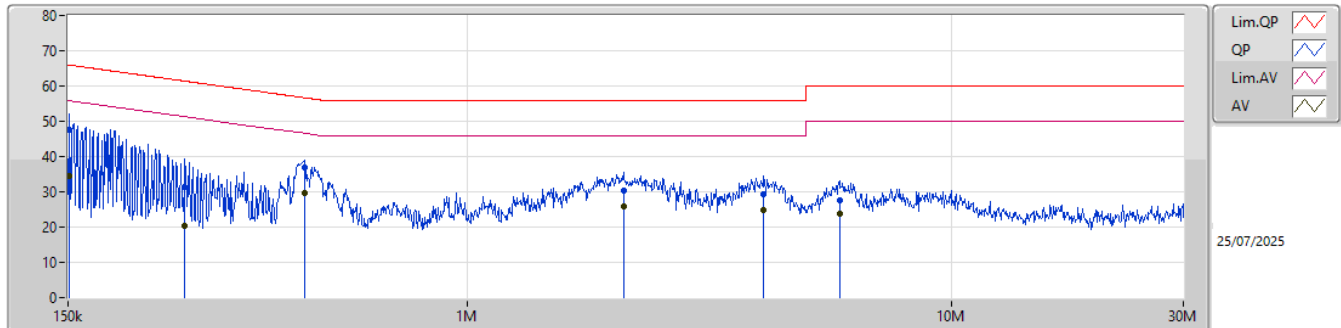
Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Condition
Mode 1	Pass	AV	460.54k	29.64	46.69	-17.05	Line

Result

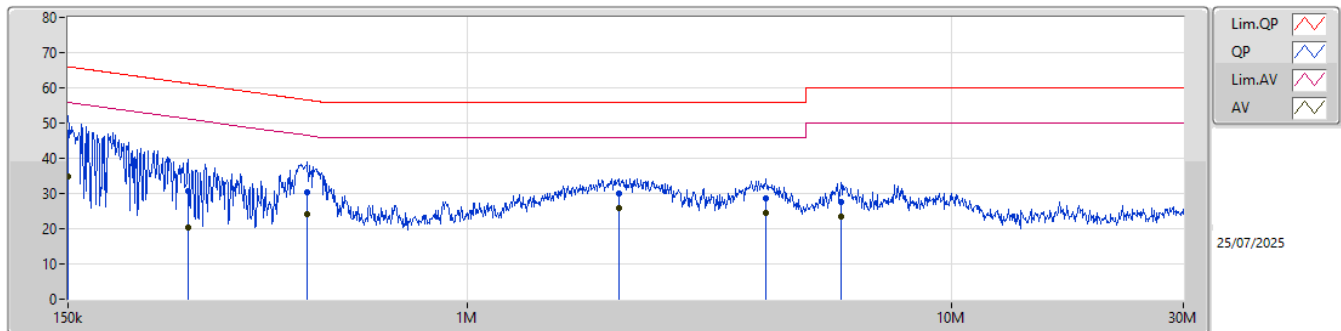
Mode	Result	Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Condition
Mode 1	Pass	QP	151.2k	47.68	65.92	-18.24	Line
Mode 1	Pass	AV	151.2k	34.48	55.92	-21.44	Line
Mode 1	Pass	QP	261.26k	31.27	61.39	-30.12	Line
Mode 1	Pass	AV	261.26k	20.46	51.39	-30.93	Line
Mode 1	Pass	QP	460.54k	36.89	56.69	-19.80	Line
Mode 1	Pass	AV	460.54k	29.64	46.69	-17.05	Line
Mode 1	Pass	QP	2.1M	30.26	56.00	-25.74	Line
Mode 1	Pass	AV	2.1M	25.99	46.00	-20.01	Line
Mode 1	Pass	QP	4.09M	29.24	56.00	-26.76	Line
Mode 1	Pass	AV	4.09M	24.95	46.00	-21.05	Line
Mode 1	Pass	QP	5.86M	27.75	60.00	-32.25	Line
Mode 1	Pass	AV	5.86M	23.69	50.00	-26.31	Line
Mode 1	Pass	QP	150k	47.31	66.00	-18.69	Neutral
Mode 1	Pass	AV	150k	34.96	56.00	-21.04	Neutral
Mode 1	Pass	QP	265.47k	30.71	61.26	-30.55	Neutral
Mode 1	Pass	AV	265.47k	20.28	51.26	-30.98	Neutral
Mode 1	Pass	QP	467.95k	30.40	56.55	-26.15	Neutral
Mode 1	Pass	AV	467.95k	24.07	46.55	-22.48	Neutral
Mode 1	Pass	QP	2.05M	30.13	56.00	-25.87	Neutral
Mode 1	Pass	AV	2.05M	25.99	46.00	-20.01	Neutral
Mode 1	Pass	QP	4.14M	28.75	56.00	-27.25	Neutral
Mode 1	Pass	AV	4.14M	24.47	46.00	-21.53	Neutral
Mode 1	Pass	QP	5.9M	27.55	60.00	-32.45	Neutral
Mode 1	Pass	AV	5.9M	23.51	50.00	-26.49	Neutral

Conducted Emissions at Powerline_Mode 1



Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Factor (dB)	Condition	Comment	Raw (dBuV)	LISN (dB)	CL (dB)	AT (dB)						
QP	151.2k	47.68	65.92	-18.24	19.61	Line	-	28.07	9.63	0.01	9.97						
AV	151.2k	34.48	55.92	-21.44	19.61	Line	-	14.87	9.63	0.01	9.97						
QP	261.26k	31.27	61.39	-30.12	19.62	Line	-	11.65	9.63	0.02	9.97						
AV	261.26k	20.46	51.39	-30.93	19.62	Line	-	0.84	9.63	0.02	9.97						
QP	460.54k	36.89	56.69	-19.80	19.64	Line	-	17.25	9.63	0.03	9.98						
AV	460.54k	29.64	46.69	-17.05	19.64	Line	-	10.00	9.63	0.03	9.98						
QP	2.1M	30.26	56.00	-25.74	19.66	Line	-	10.60	9.66	0.03	9.97						
AV	2.1M	25.99	46.00	-20.01	19.66	Line	-	6.33	9.66	0.03	9.97						
QP	4.09M	29.24	56.00	-26.76	19.70	Line	-	9.54	9.67	0.05	9.98						
AV	4.09M	24.95	46.00	-21.05	19.70	Line	-	5.25	9.67	0.05	9.98						
QP	5.86M	27.75	60.00	-32.25	19.83	Line	-	7.92	9.72	0.13	9.98						
AV	5.86M	23.69	50.00	-26.31	19.83	Line	-	3.86	9.72	0.13	9.98						

Conducted Emissions at Powerline_Mode 1



Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Factor (dB)	Condition	Comment	Raw (dBuV)	LISN (dB)	CL (dB)	AT (dB)						
QP	150k	47.31	66.00	-18.69	19.71	Neutral	-	27.60	9.73	0.01	9.97						
AV	150k	34.96	56.00	-21.04	19.71	Neutral	-	15.25	9.73	0.01	9.97						
QP	265.47k	30.71	61.26	-30.55	19.71	Neutral	-	11.00	9.72	0.02	9.97						
AV	265.47k	20.28	51.26	-30.98	19.71	Neutral	-	0.57	9.72	0.02	9.97						
QP	467.95k	30.40	56.55	-26.15	19.72	Neutral	-	10.68	9.71	0.03	9.98						
AV	467.95k	24.07	46.55	-22.48	19.72	Neutral	-	4.35	9.71	0.03	9.98						
QP	2.05M	30.13	56.00	-25.87	19.74	Neutral	-	10.39	9.74	0.03	9.97						
AV	2.05M	25.99	46.00	-20.01	19.74	Neutral	-	6.25	9.74	0.03	9.97						
QP	4.14M	28.75	56.00	-27.25	19.84	Neutral	-	8.91	9.80	0.06	9.98						
AV	4.14M	24.47	46.00	-21.53	19.84	Neutral	-	4.63	9.80	0.06	9.98						
QP	5.9M	27.55	60.00	-32.45	19.97	Neutral	-	7.58	9.86	0.13	9.98						
AV	5.9M	23.51	50.00	-26.49	19.97	Neutral	-	3.54	9.86	0.13	9.98						

Summary

Mode	Max-N dB (Hz)	Max-OBW (Hz)	ITU-Code	Min-N dB (Hz)	Min-OBW (Hz)
5.925-6.425GHz	-	-	-	-	-
802.11ax HEW20_Nss1,(MCS0)_1TX	20.955M	18.987M	19MOD1D	20.515M	18.965M
6.425-6.525GHz	-	-	-	-	-
802.11ax HEW20_Nss1,(MCS0)_1TX	20.9M	19.045M	19MOD1D	20.68M	18.964M
6.525-6.875GHz	-	-	-	-	-
802.11ax HEW20_Nss1,(MCS0)_1TX	21.175M	18.991M	19MOD1D	20.845M	18.972M
6.875-7.125GHz	-	-	-	-	-
802.11ax HEW20_Nss1,(MCS0)_1TX	20.79M	19.043M	19MOD1D	20.515M	18.955M

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

Max-OBW = Maximum 99% occupied bandwidth;

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

Min-OBW = Minimum 99% occupied bandwidth

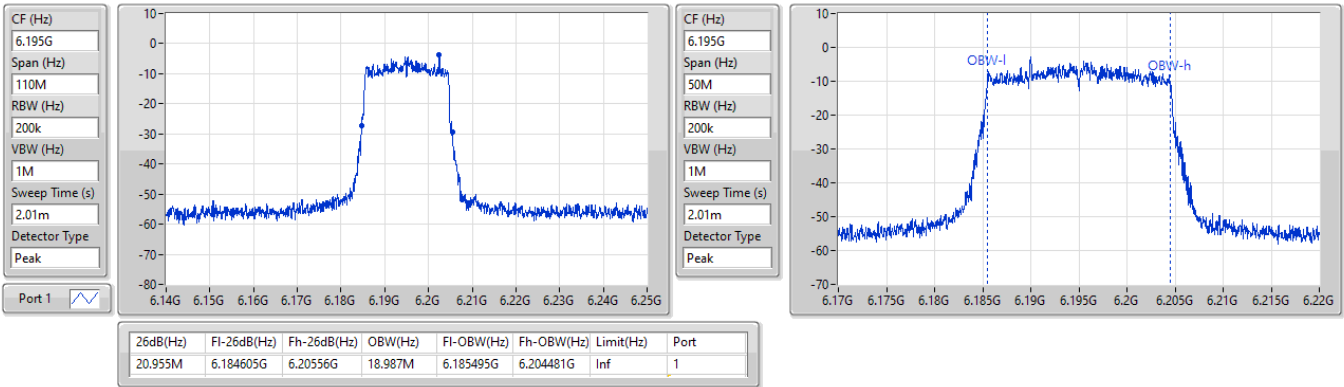
Result

Mode	Result	Limit (Hz)	Port 1-N dB (Hz)	Port 1-OBW (Hz)
802.11ax HEW20_Nss1,(MCS0)_1TX	-	-	-	-
5955MHz	Pass	Inf	20.68M	18.986M
6195MHz	Pass	Inf	20.955M	18.987M
6415MHz	Pass	Inf	20.515M	18.965M
6435MHz	Pass	Inf	20.68M	19M
6475MHz	Pass	Inf	20.845M	19.045M
6515MHz	Pass	Inf	20.9M	18.964M
6535MHz	Pass	Inf	20.955M	18.972M
6695MHz	Pass	Inf	20.845M	18.972M
6875MHz	Pass	Inf	21.175M	18.991M
6895MHz	Pass	Inf	20.735M	19.027M
6995MHz	Pass	Inf	20.515M	18.955M
7095MHz	Pass	Inf	20.79M	19.043M
7115MHz	Pass	Inf	20.57M	18.973M

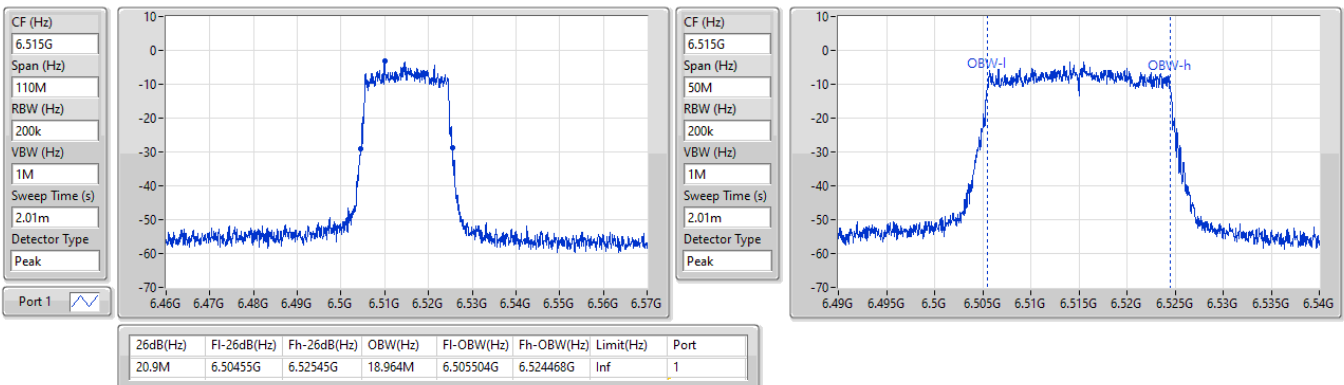
Port X-N dB = Port X 6dB down bandwidth for 5.725-5.85GHz band / 26dB down bandwidth for other band
Port X-OBW = Port X 99% occupied bandwidth

5.925-6.425GHz_802.11ax HEW20_Nss1,(MCS0)_1TX
EBW
6195MHz

23/07/2025


6.425-6.525GHz_802.11ax HEW20_Nss1,(MCS0)_1TX
EBW
6515MHz

23/07/2025

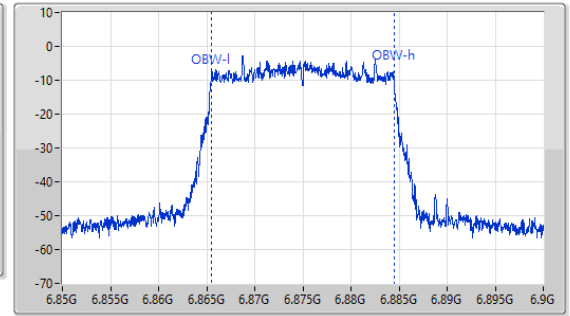
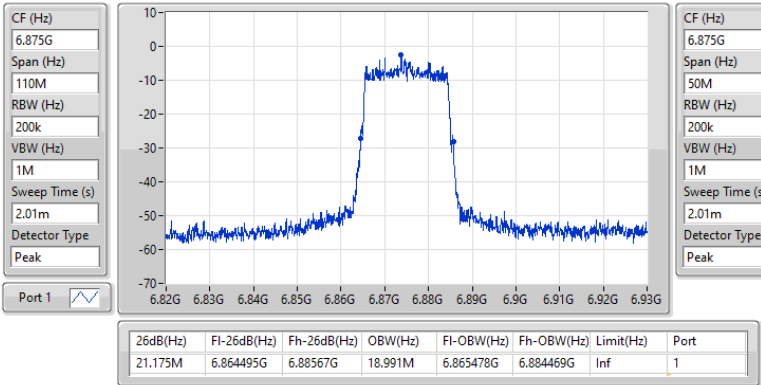


6.525-6.875GHz_802.11ax HEW20_Nss1,(MCS0)_1TX

EBW

6875MHz

23/07/2025

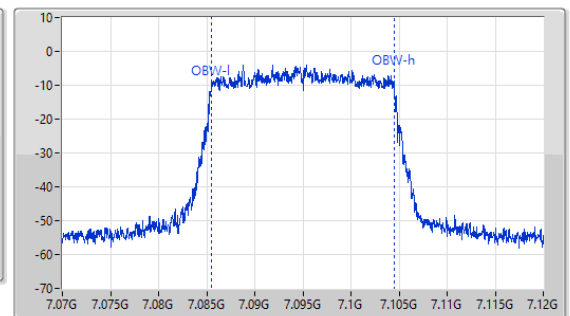
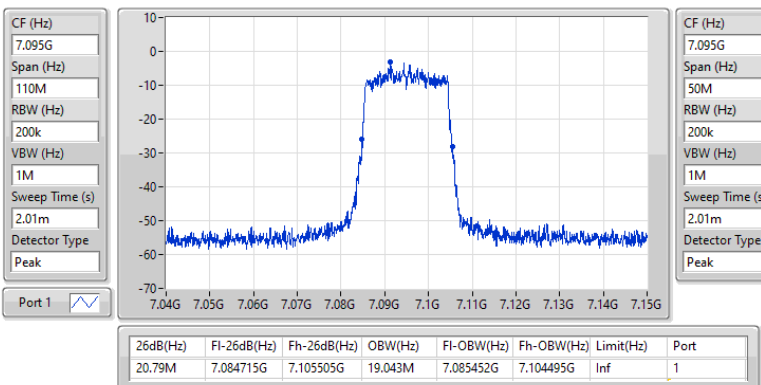


6.875-7.125GHz_802.11ax HEW20_Nss1,(MCS0)_1TX

EBW

7095MHz

23/07/2025





Summary

Mode	Total Power (dBm)	Total Power (W)	EIRP (dBm)	EIRP (W)
5.925-6.425GHz	-	-	-	-
802.11ax HEW20_Nss1,(MCS0)_1TX	6.55	0.00452	11.55	0.01429
6.425-6.525GHz	-	-	-	-
802.11ax HEW20_Nss1,(MCS0)_1TX	6.60	0.00457	11.60	0.01445
6.525-6.875GHz	-	-	-	-
802.11ax HEW20_Nss1,(MCS0)_1TX	6.77	0.00475	11.77	0.01503
6.875-7.125GHz	-	-	-	-
802.11ax HEW20_Nss1,(MCS0)_1TX	6.76	0.00474	11.76	0.01500

**Result**

Mode	Result	DG (dBi)	Port 1 (dBm)	Total Power (dBm)	Power Limit (dBm)	EIRP (dBm)	EIRP Limit (dBm)
802.11ax HEW20_Nss1,(MCS0)_1TX	-	-	-	-	-	-	-
5955MHz	Pass	5.00	6.55	6.55	Inf	11.55	24.00
6195MHz	Pass	5.00	6.38	6.38	Inf	11.38	24.00
6415MHz	Pass	5.00	6.33	6.33	Inf	11.33	24.00
6435MHz	Pass	5.00	6.51	6.51	Inf	11.51	24.00
6475MHz	Pass	5.00	6.58	6.58	Inf	11.58	24.00
6515MHz	Pass	5.00	6.60	6.60	Inf	11.60	24.00
6535MHz	Pass	5.00	6.49	6.49	Inf	11.49	24.00
6695MHz	Pass	5.00	6.68	6.68	Inf	11.68	24.00
6875MHz	Pass	5.00	6.77	6.77	Inf	11.77	24.00
6895MHz	Pass	5.00	6.66	6.66	Inf	11.66	24.00
6995MHz	Pass	5.00	6.64	6.64	Inf	11.64	24.00
7095MHz	Pass	5.00	6.69	6.69	Inf	11.69	24.00
7115MHz	Pass	5.00	6.76	6.76	Inf	11.76	24.00

DG = Directional Gain; Port X = Port X output power
Inf = There's no restriction for the limit.

Summary

Mode	PD (dBm/RBW)	EIRP PD (dBm/RBW)
5.925-6.425GHz	-	-
802.11ax HEW20_Nss1,(MCS0)_1TX	-6.10	-1.10
6.425-6.525GHz	-	-
802.11ax HEW20_Nss1,(MCS0)_1TX	-6.07	-1.07
6.525-6.875GHz	-	-
802.11ax HEW20_Nss1,(MCS0)_1TX	-6.16	-1.16
6.875-7.125GHz	-	-
802.11ax HEW20_Nss1,(MCS0)_1TX	-6.20	-1.20

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

Result

Mode	Result	DG (dBi)	Port 1 (dBm/RBW)	PD (dBm/RBW)	PD Limit (dBm/RBW)	EIRP PD (dBm/RBW)	EIRP PD Limit (dBm/RBW)
802.11ax HEW20_Nss1,(MCS0)_1TX	-	-	-	-	-	-	-
5955MHz	Pass	5.00	-6.10	-6.10	Inf	-1.10	-1.00
6195MHz	Pass	5.00	-6.28	-6.28	Inf	-1.28	-1.00
6415MHz	Pass	5.00	-6.40	-6.40	Inf	-1.40	-1.00
6435MHz	Pass	5.00	-6.34	-6.34	Inf	-1.34	-1.00
6475MHz	Pass	5.00	-6.07	-6.07	Inf	-1.07	-1.00
6515MHz	Pass	5.00	-6.23	-6.23	Inf	-1.23	-1.00
6535MHz	Pass	5.00	-6.35	-6.35	Inf	-1.35	-1.00
6695MHz	Pass	5.00	-6.16	-6.16	Inf	-1.16	-1.00
6875MHz	Pass	5.00	-6.16	-6.16	Inf	-1.16	-1.00
6895MHz	Pass	5.00	-6.20	-6.20	Inf	-1.20	-1.00
6995MHz	Pass	5.00	-6.20	-6.20	Inf	-1.20	-1.00
7095MHz	Pass	5.00	-6.25	-6.25	Inf	-1.25	-1.00
7115MHz	Pass	5.00	-6.22	-6.22	Inf	-1.22	-1.00

DG = Directional Gain; RBW = 500kHz for 5.725-5.85GHz band / 1MHz for other band;
 PD = trace bin-by-bin of each transmits port summing can be performed maximum power density; Port X = Port X Power Density;
 Inf = There's no restriction for the limit.

5.925-6.425GHz_802.11ax HEW20_Nss1,(MCS0)_1TX

PSD

5955MHz

23/07/2025

CF (Hz)
5.955G

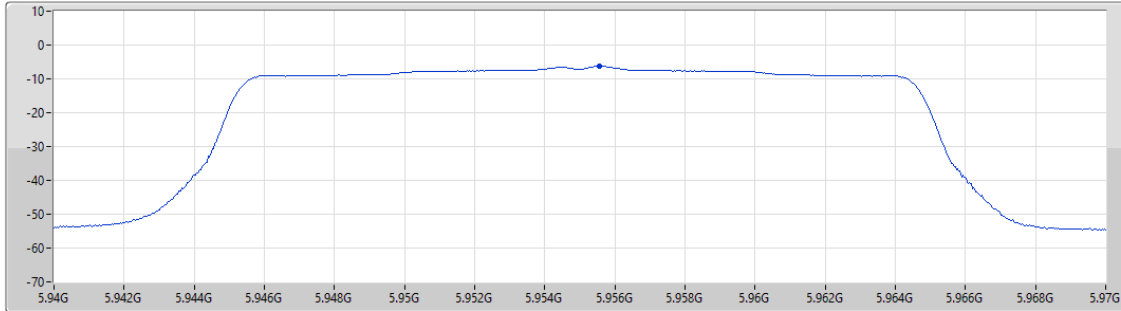
Span (Hz)
30M

RBW (Hz)
1M

VBW (Hz)
3M

Sweep Time (s)
15.195

Detector Type
RMS



Port 1

Sum	PD	Port 1
(dBm/Hz)	(dBm/Hz)	(dBm/Hz)
-6.10	-6.10	-6.10

6.425-6.525GHz_802.11ax HEW20_Nss1,(MCS0)_1TX

PSD

6475MHz

23/07/2025

CF (Hz)
6.475G

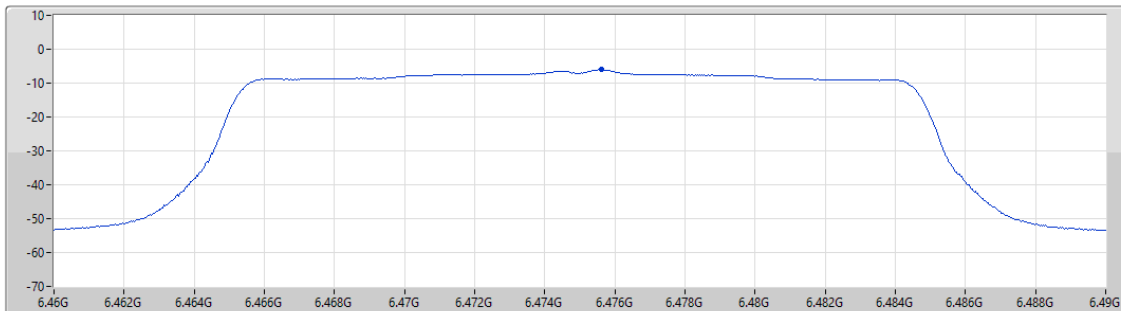
Span (Hz)
30M

RBW (Hz)
1M

VBW (Hz)
3M

Sweep Time (s)
15.195

Detector Type
RMS



Port 1

Sum	PD	Port 1
(dBm/Hz)	(dBm/Hz)	(dBm/Hz)
-6.07	-6.07	-6.07

6.525-6.875GHz_802.11ax_HEW20_Nss1,(MCS0)_1TX

PSD

6695MHz

23/07/2025

CF (Hz)
6.695G

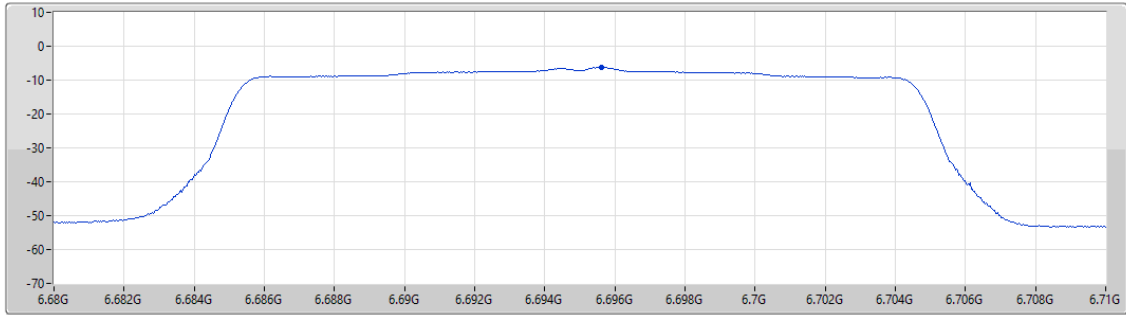
Span (Hz)
30M

RBW (Hz)
1M

VBW (Hz)
3M

Sweep Time (s)
15.195

Detector Type
RMS



Sum	PD	Port 1
(dBm/Hz)	(dBm/Hz)	(dBm/Hz)
-6.16	-6.16	-6.16

6.875-7.125GHz_802.11ax_HEW20_Nss1,(MCS0)_1TX

PSD

6895MHz

23/07/2025

CF (Hz)
6.895G

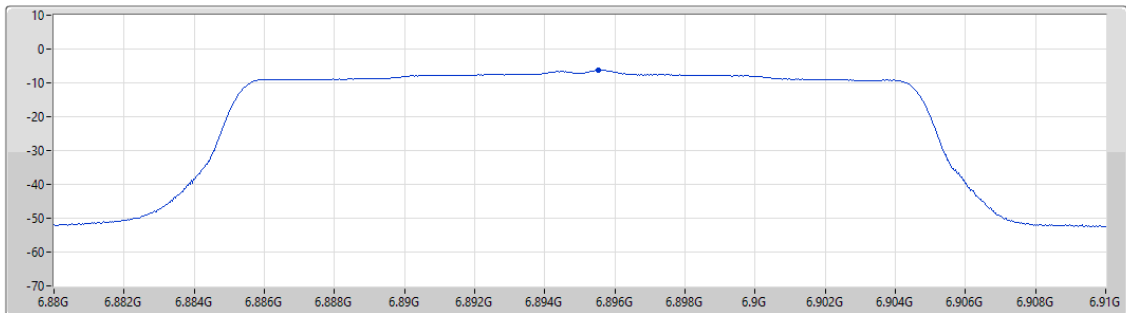
Span (Hz)
30M

RBW (Hz)
1M

VBW (Hz)
3M

Sweep Time (s)
15.195

Detector Type
RMS



Sum	PD	Port 1
(dBm/Hz)	(dBm/Hz)	(dBm/Hz)
-6.20	-6.20	-6.20

Summary

Mode	Result	Ref (Hz)	Ref (dBm)	Freq (Hz)	Level (dBm)	Limit (dBm)	Margin (dB)	Port
5.925-6.425GHz	-	-	-	-	-	-	-	-
802.11ax HEW20_Nss1,(MCS0)_1TX	Pass	6.4157G	-10.93	6.44635G	-64.03	-50.93	-13.10	1
6.425-6.525GHz	-	-	-	-	-	-	-	-
802.11ax HEW20_Nss1,(MCS0)_1TX	Pass	6.435475G	-10.96	6.466275G	-64.23	-50.96	-13.27	1
6.525-6.875GHz	-	-	-	-	-	-	-	-
802.11ax HEW20_Nss1,(MCS0)_1TX	Pass	6.875375G	-10.92	6.906625G	-63.37	-50.76	-12.61	1
6.875-7.125GHz	-	-	-	-	-	-	-	-
802.11ax HEW20_Nss1,(MCS0)_1TX	Pass	6.995775G	-10.38	6.96415G	-63.24	-50.38	-12.86	1

Result

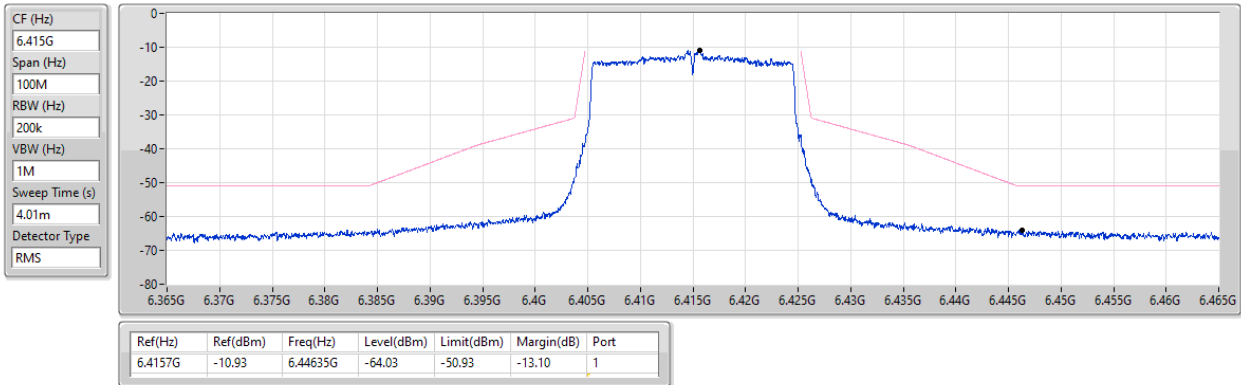
Mode	Result	Ref (Hz)	Ref (dBm)	Freq (Hz)	Level (dBm)	Limit (dBm)	Margin (dB)	Port
802.11ax HEW20_Nss1,(MCS0)_1TX	-	-	-	-	-	-	-	-
5955MHz	Pass	5.954625G	-10.71	5.985825G	-64.44	-50.48	-13.96	1
6195MHz	Pass	6.194625G	-11.02	6.22765G	-64.39	-51.02	-13.37	1
6415MHz	Pass	6.4157G	-10.93	6.44635G	-64.03	-50.93	-13.10	1
6435MHz	Pass	6.435475G	-10.96	6.466275G	-64.23	-50.96	-13.27	1
6475MHz	Pass	6.4757G	-10.24	6.508525G	-64.09	-50.24	-13.85	1
6515MHz	Pass	6.5147G	-10.18	6.483025G	-64.16	-50.18	-13.98	1
6535MHz	Pass	6.53455G	-11.03	6.50305G	-63.91	-51.03	-12.88	1
6695MHz	Pass	6.695625G	-10.95	6.661275G	-64.43	-50.95	-13.48	1
6875MHz	Pass	6.875375G	-10.92	6.906625G	-63.37	-50.76	-12.61	1
6895MHz	Pass	6.8955G	-10.54	6.863G	-63.58	-50.54	-13.04	1
6995MHz	Pass	6.995775G	-10.38	6.96415G	-63.24	-50.38	-12.86	1
7095MHz	Pass	7.095725G	-10.75	7.059525G	-64.17	-50.75	-13.42	1
7115MHz	Pass	7.115475G	-10.50	7.0814G	-64.30	-50.50	-13.80	1

5.925-6.425GHz_802.11ax HEW20_Nss1,(MCS0)_1TX

MASK

6415MHz_TX

23/07/2025

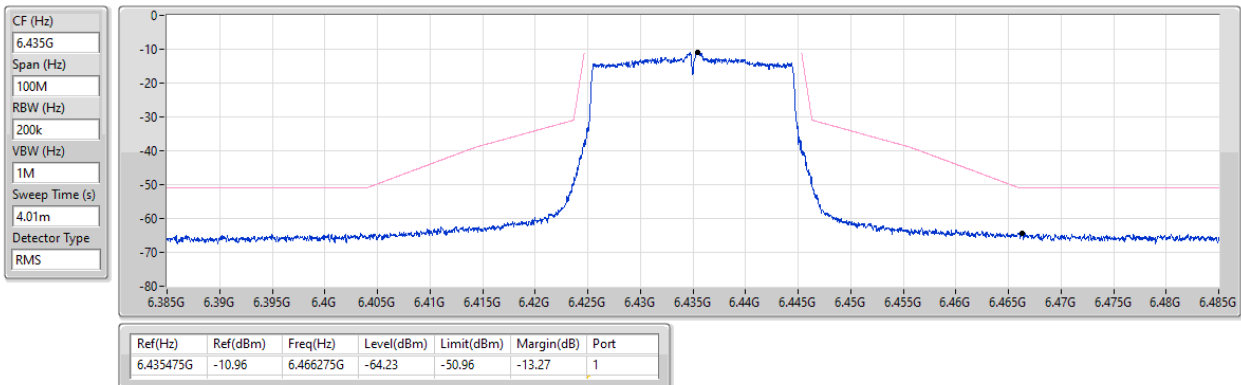


6.425-6.525GHz_802.11ax HEW20_Nss1,(MCS0)_1TX

MASK

6435MHz_TX

23/07/2025

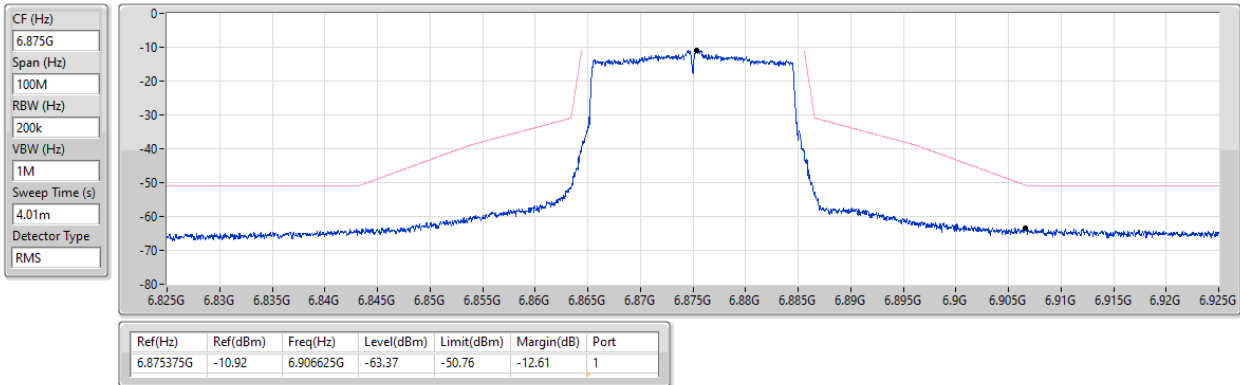


6.525-6.875GHz_802.11ax HEW20_Nss1,(MCS0)_1TX

MASK

6875MHz_TX

23/07/2025

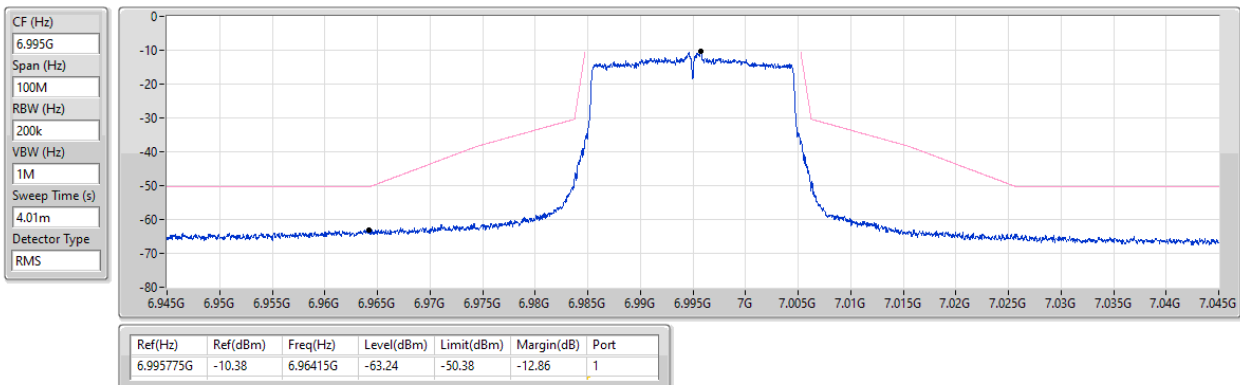


6.875-7.125GHz_802.11ax HEW20_Nss1,(MCS0)_1TX

MASK

6995MHz_TX

23/07/2025





Summary

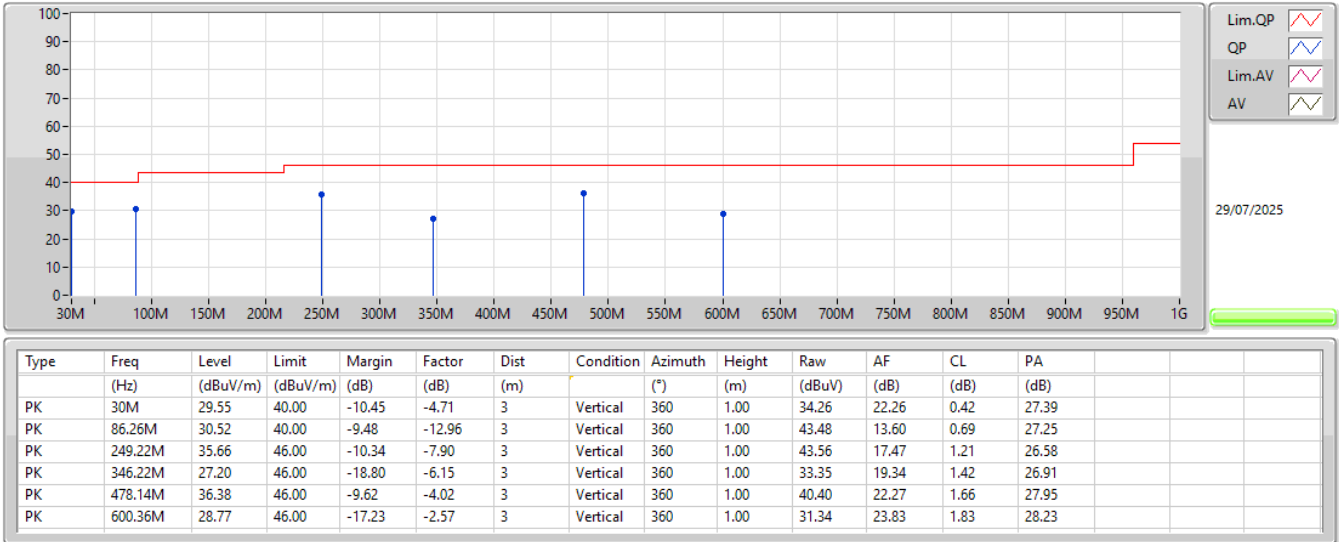
Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)
6.875-7.125GHz	-	-	-	-	-	-	-	-	-	-
802.11ax HEW20_Nss1,(MCS0)_1TX	Pass	PK	30M	36.97	40.00	-3.03	3	Horizontal	0	1.00

Result

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)
802.11ax HEW20_Nss1,(MCS0)_1TX	-	-	-	-	-	-	-	-	-	-
6995MHz_test fixture	Pass	PK	30M	29.55	40.00	-10.45	3	Vertical	360	1.00
6995MHz_test fixture	Pass	PK	86.26M	30.52	40.00	-9.48	3	Vertical	360	1.00
6995MHz_test fixture	Pass	PK	249.22M	35.66	46.00	-10.34	3	Vertical	360	1.00
6995MHz_test fixture	Pass	PK	346.22M	27.20	46.00	-18.80	3	Vertical	360	1.00
6995MHz_test fixture	Pass	PK	478.14M	36.38	46.00	-9.62	3	Vertical	360	1.00
6995MHz_test fixture	Pass	PK	600.36M	28.77	46.00	-17.23	3	Vertical	360	1.00
6995MHz_test fixture	Pass	PK	30M	36.97	40.00	-3.03	3	Horizontal	0	1.00
6995MHz_test fixture	Pass	PK	88.2M	35.40	43.50	-8.10	3	Horizontal	0	1.00
6995MHz_test fixture	Pass	PK	189.08M	29.47	43.50	-14.03	3	Horizontal	0	1.00
6995MHz_test fixture	Pass	PK	245.34M	32.94	46.00	-13.06	3	Horizontal	0	1.00
6995MHz_test fixture	Pass	PK	346.22M	36.46	46.00	-9.54	3	Horizontal	0	1.00
6995MHz_test fixture	Pass	PK	478.14M	42.53	46.00	-3.47	3	Horizontal	0	1.00

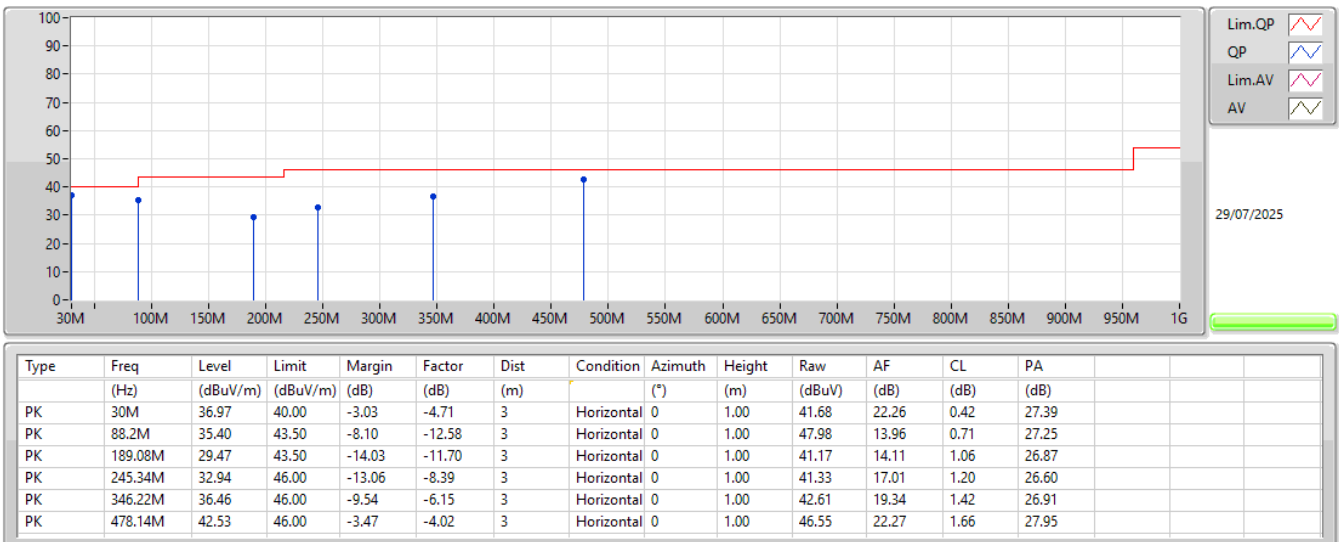
6.875-7.125GHz_802.11ax HEW20_Nss1,(MCS0)_1TX

6995MHz_test fixture



6.875-7.125GHz_802.11ax HEW20_Nss1,(MCS0)_1TX

6995MHz_test fixture



Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)
5.925-6.425GHz	-	-	-	-	-	-	-	-	-	-
802.11ax HEW20_Nss1,(MCS0)_1TX	Pass	AV	12.38136G	38.51	54.00	-15.49	3	Horizontal	18	1.11
6.425-6.525GHz	-	-	-	-	-	-	-	-	-	-
802.11ax HEW20_Nss1,(MCS0)_1TX	Pass	AV	12.86632G	39.66	68.20	-28.54	3	Vertical	309	1.50
6.525-6.875GHz	-	-	-	-	-	-	-	-	-	-
802.11ax HEW20_Nss1,(MCS0)_1TX	Pass	AV	13.38168G	40.19	54.00	-13.81	3	Vertical	92	1.50
6.875-7.125GHz	-	-	-	-	-	-	-	-	-	-
802.11ax HEW20_Nss1,(MCS0)_1TX	Pass	AV	7.1255G	65.77	68.20	-2.43	3	Horizontal	280	1.03

Result

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)
802.11ax HEW20_Nss1,(MCS0)_1TX	-	-	-	-	-	-	-	-	-	-
5955MHz	Pass	AV	5.925G	42.81	68.20	-25.39	3	Horizontal	289	1.04
5955MHz	Pass	AV	5.9556G	87.88	Inf	-Inf	3	Horizontal	289	1.04
5955MHz	Pass	PK	5.9112G	56.78	88.20	-31.42	3	Horizontal	289	1.04
5955MHz	Pass	PK	5.9526G	99.42	Inf	-Inf	3	Horizontal	289	1.04
5955MHz	Pass	AV	11.90788G	38.38	54.00	-15.62	3	Vertical	360	2.52
5955MHz	Pass	PK	11.9072G	51.90	74.00	-22.10	3	Vertical	360	2.52
5955MHz	Pass	AV	11.90912G	38.36	54.00	-15.64	3	Horizontal	31	1.63
5955MHz	Pass	PK	11.90108G	51.35	74.00	-22.65	3	Horizontal	31	1.63
6195MHz	Pass	AV	12.38172G	38.50	54.00	-15.50	3	Vertical	360	1.50
6195MHz	Pass	PK	12.38036G	51.63	74.00	-22.37	3	Vertical	360	1.50
6195MHz	Pass	AV	12.38136G	38.51	54.00	-15.49	3	Horizontal	18	1.11
6195MHz	Pass	PK	12.38464G	51.59	74.00	-22.41	3	Horizontal	18	1.11
6415MHz	Pass	AV	12.83528G	39.66	68.20	-28.54	3	Vertical	37	2.91
6415MHz	Pass	PK	12.83052G	53.31	88.20	-34.89	3	Vertical	37	2.91
6415MHz	Pass	AV	12.83544G	39.61	68.20	-28.59	3	Horizontal	153	1.38
6415MHz	Pass	PK	12.8392G	53.09	88.20	-35.11	3	Horizontal	153	1.38
6435MHz	Pass	AV	12.86632G	39.66	68.20	-28.54	3	Vertical	309	1.50
6435MHz	Pass	PK	12.86288G	52.57	88.20	-35.63	3	Vertical	309	1.50
6435MHz	Pass	AV	12.86676G	39.65	68.20	-28.55	3	Horizontal	182	1.75
6435MHz	Pass	PK	12.86296G	53.20	88.20	-35.00	3	Horizontal	182	1.75
6475MHz	Pass	AV	12.94396G	39.59	68.20	-28.61	3	Vertical	53	1.50
6475MHz	Pass	PK	12.94576G	52.58	88.20	-35.62	3	Vertical	53	1.50
6475MHz	Pass	AV	12.94156G	39.60	68.20	-28.60	3	Horizontal	248	2.90
6475MHz	Pass	PK	12.94032G	52.42	88.20	-35.78	3	Horizontal	248	2.90
6515MHz	Pass	AV	13.02264G	39.39	68.20	-28.81	3	Vertical	194	1.50
6515MHz	Pass	PK	13.03636G	52.55	88.20	-35.65	3	Vertical	194	1.50
6515MHz	Pass	AV	13.0214G	39.38	68.20	-28.82	3	Horizontal	158	1.50
6515MHz	Pass	PK	13.02152G	52.99	88.20	-35.21	3	Horizontal	158	1.50
6535MHz	Pass	AV	13.07548G	39.47	68.20	-28.73	3	Vertical	212	2.06
6535MHz	Pass	PK	13.077G	52.66	88.20	-35.54	3	Vertical	212	2.06
6535MHz	Pass	AV	13.07536G	39.45	68.20	-28.75	3	Horizontal	145	1.81
6535MHz	Pass	PK	13.06788G	52.75	88.20	-35.45	3	Horizontal	145	1.81
6695MHz	Pass	AV	13.38168G	40.19	54.00	-13.81	3	Vertical	92	1.50
6695MHz	Pass	PK	13.3906G	54.16	74.00	-19.84	3	Vertical	92	1.50
6695MHz	Pass	AV	13.38148G	40.18	54.00	-13.82	3	Horizontal	357	1.50
6695MHz	Pass	PK	13.38804G	53.00	74.00	-21.00	3	Horizontal	357	1.50
6875MHz	Pass	AV	13.74352G	40.60	68.20	-27.60	3	Vertical	71	1.50
6875MHz	Pass	PK	13.74168G	53.76	88.20	-34.44	3	Vertical	71	1.50
6875MHz	Pass	AV	13.74368G	40.62	68.20	-27.58	3	Horizontal	116	1.50
6875MHz	Pass	PK	13.74148G	54.21	88.20	-33.99	3	Horizontal	116	1.50
6895MHz	Pass	AV	13.79612G	40.72	68.20	-27.48	3	Vertical	351	2.00
6895MHz	Pass	PK	13.78896G	54.25	88.20	-33.95	3	Vertical	351	2.00
6895MHz	Pass	AV	13.7958G	40.73	68.20	-27.47	3	Horizontal	151	1.20
6895MHz	Pass	PK	13.79544G	54.11	88.20	-34.09	3	Horizontal	151	1.20
6995MHz	Pass	AV	13.98456G	41.46	68.20	-26.74	3	Vertical	118	1.50
6995MHz	Pass	PK	13.99732G	55.65	88.20	-32.55	3	Vertical	118	1.50
6995MHz	Pass	AV	13.9832G	41.45	68.20	-26.75	3	Horizontal	310	1.50
6995MHz	Pass	PK	13.9928G	54.49	88.20	-33.71	3	Horizontal	310	1.50
7095MHz	Pass	AV	7.0956G	88.30	Inf	-Inf	3	Horizontal	299	1.07
7095MHz	Pass	AV	7.2426G	47.55	68.20	-20.65	3	Horizontal	299	1.07
7095MHz	Pass	PK	7.0968G	101.43	Inf	-Inf	3	Horizontal	299	1.07
7095MHz	Pass	PK	7.2162G	61.56	88.20	-26.64	3	Horizontal	299	1.07
7095MHz	Pass	AV	14.18048G	41.93	68.20	-26.27	3	Vertical	36	1.50
7095MHz	Pass	PK	14.195G	55.34	88.20	-32.86	3	Vertical	36	1.50
7095MHz	Pass	AV	14.18036G	41.92	68.20	-26.28	3	Horizontal	110	1.50
7095MHz	Pass	PK	14.18192G	55.13	88.20	-33.07	3	Horizontal	110	1.50
7115MHz	Pass	AV	7.1155G	92.72	Inf	-Inf	3	Horizontal	280	1.03
7115MHz	Pass	AV	7.1255G	65.77	68.20	-2.43	3	Horizontal	280	1.03
7115MHz	Pass	PK	7.1135G	99.00	Inf	-Inf	3	Horizontal	280	1.03
7115MHz	Pass	PK	7.1255G	75.50	88.20	-12.70	3	Horizontal	280	1.03



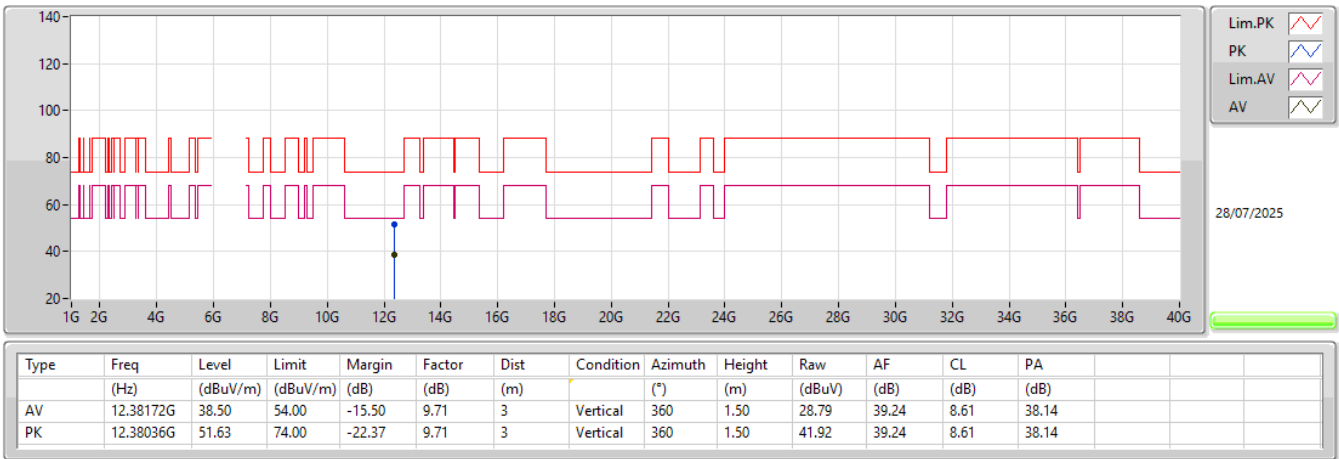
RSE TX above 1GHz_PIFA Antenna

Appendix E.3

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)
7115MHz	Pass	AV	14.2254G	41.80	68.20	-26.40	3	Vertical	166	2.87
7115MHz	Pass	PK	14.22712G	55.25	88.20	-32.95	3	Vertical	166	2.87
7115MHz	Pass	AV	14.2224G	53.66	68.20	-14.54	3	Horizontal	60	2.63
7115MHz	Pass	PK	14.23224G	66.49	88.20	-21.71	3	Horizontal	60	2.63

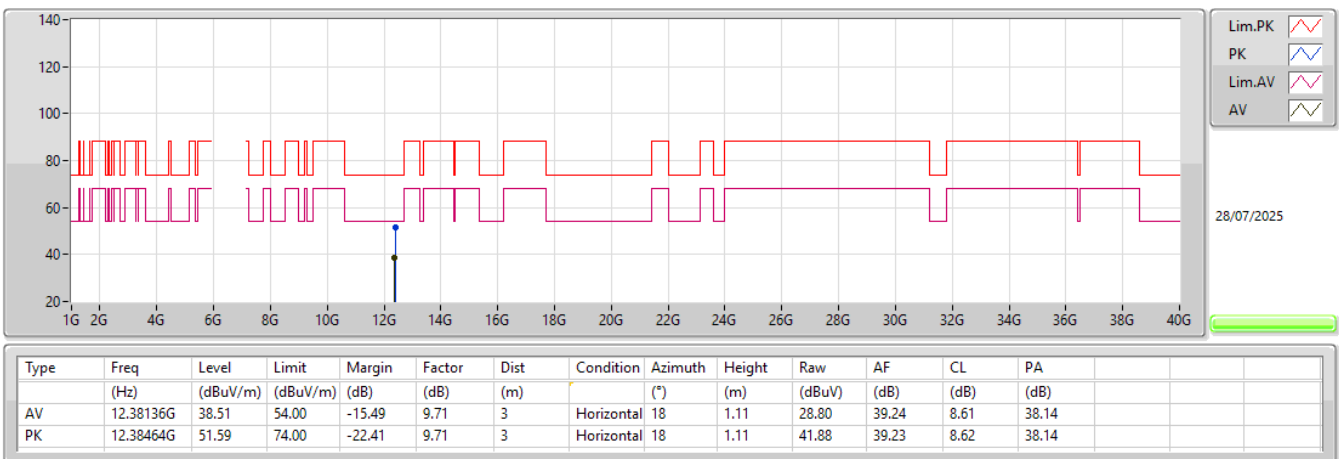
5.925-6.425GHz_802.11ax HEW20_Nss1,(MCS0)_1TX

6195MHz_TX



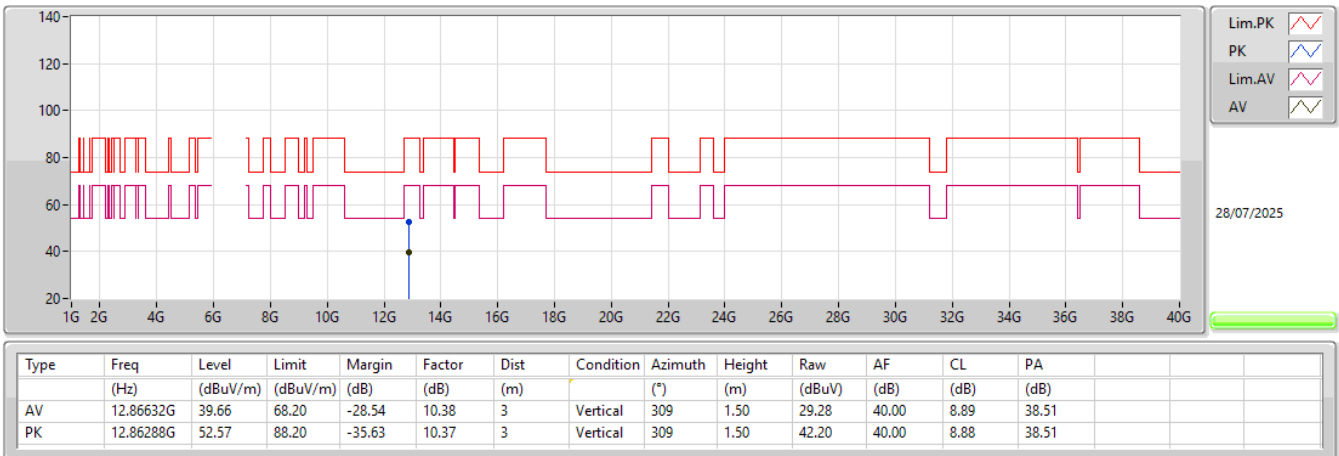
5.925-6.425GHz_802.11ax HEW20_Nss1,(MCS0)_1TX

6195MHz_TX



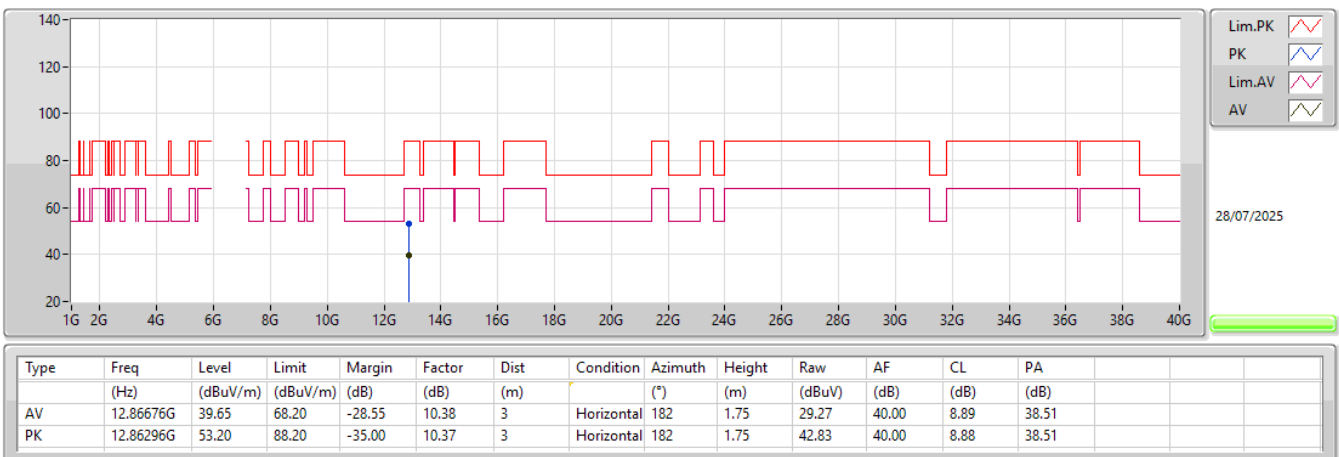
6.425-6.525GHz_802.11ax HEW20_Nss1,(MCS0)_1TX

6435MHz_TX



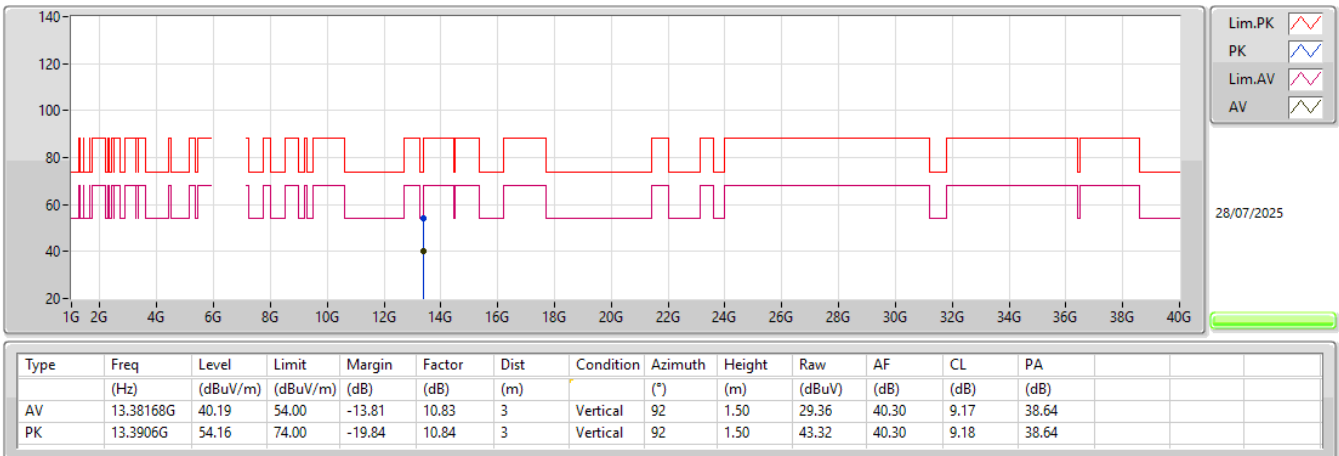
6.425-6.525GHz_802.11ax HEW20_Nss1,(MCS0)_1TX

6435MHz_TX



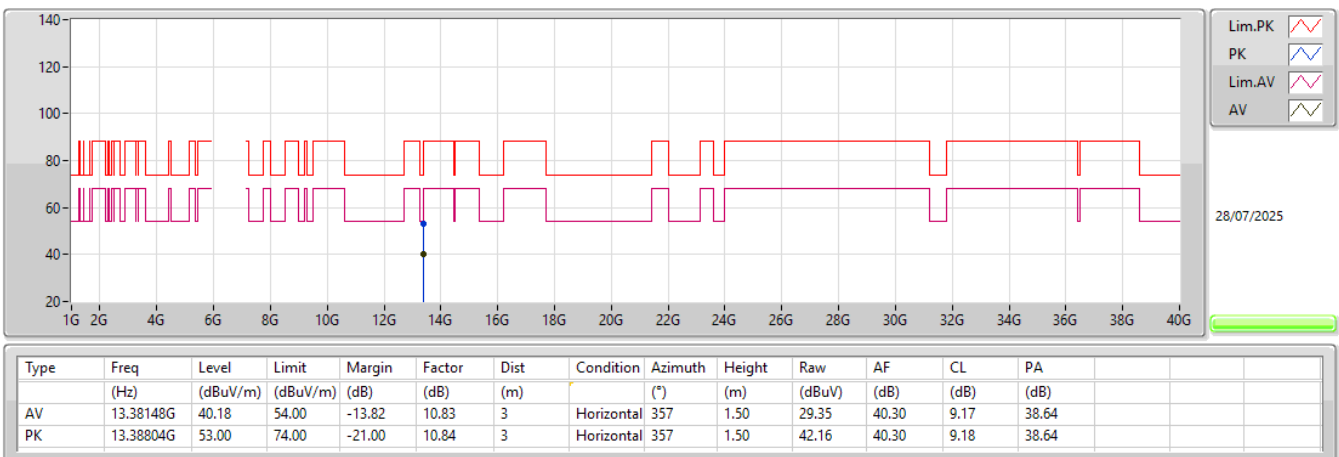
6.525-6.875GHz_802.11ax HEW20_Nss1,(MCS0)_1TX

6695MHz_TX



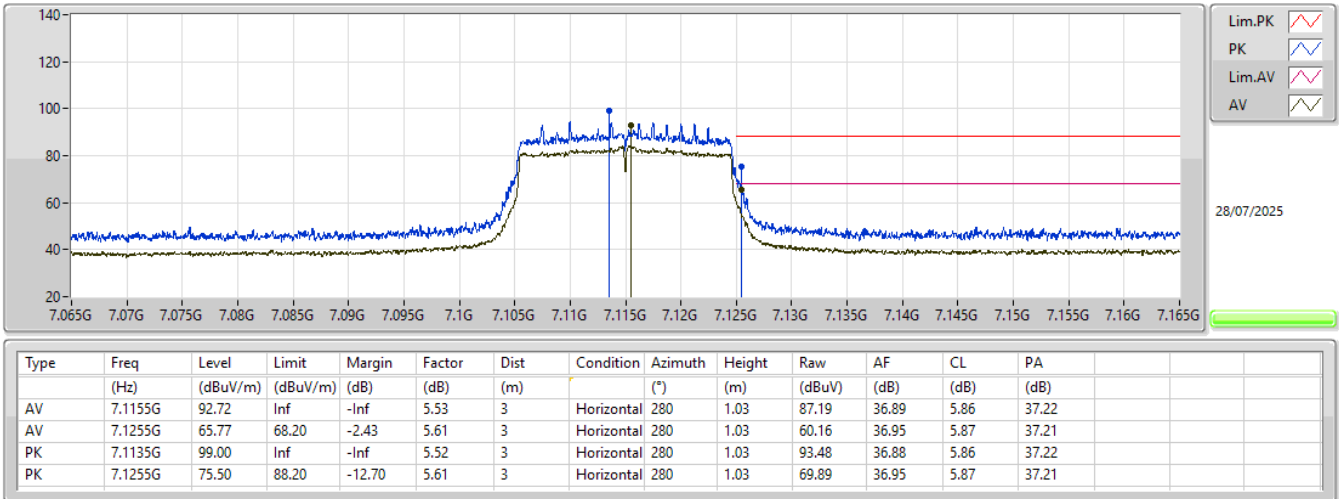
6.525-6.875GHz_802.11ax HEW20_Nss1,(MCS0)_1TX

6695MHz_TX



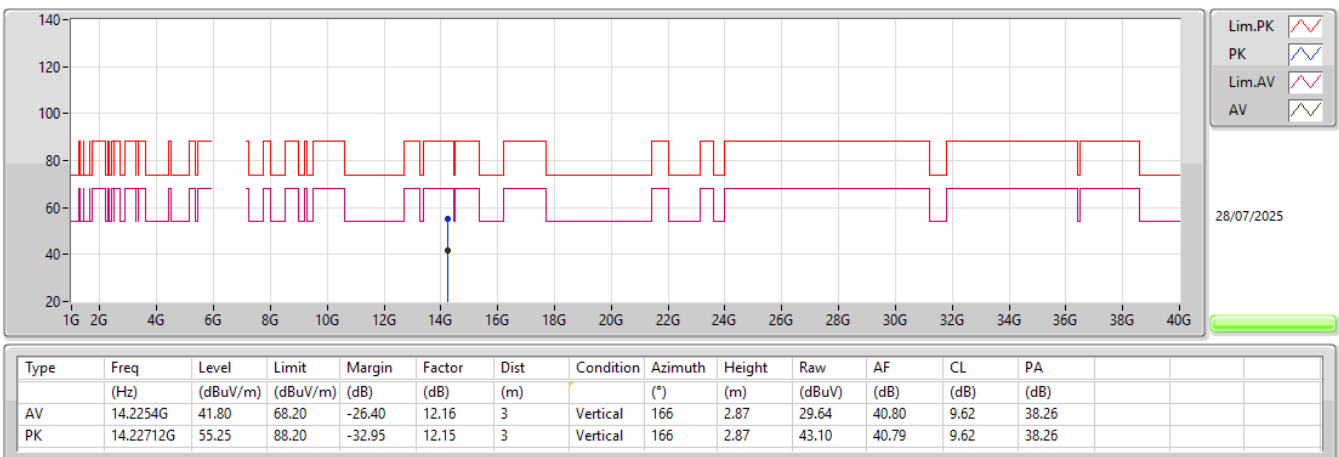
6.875-7.125GHz_802.11ax HEW20_Nss1,(MCS0)_1TX

7115MHz_TX



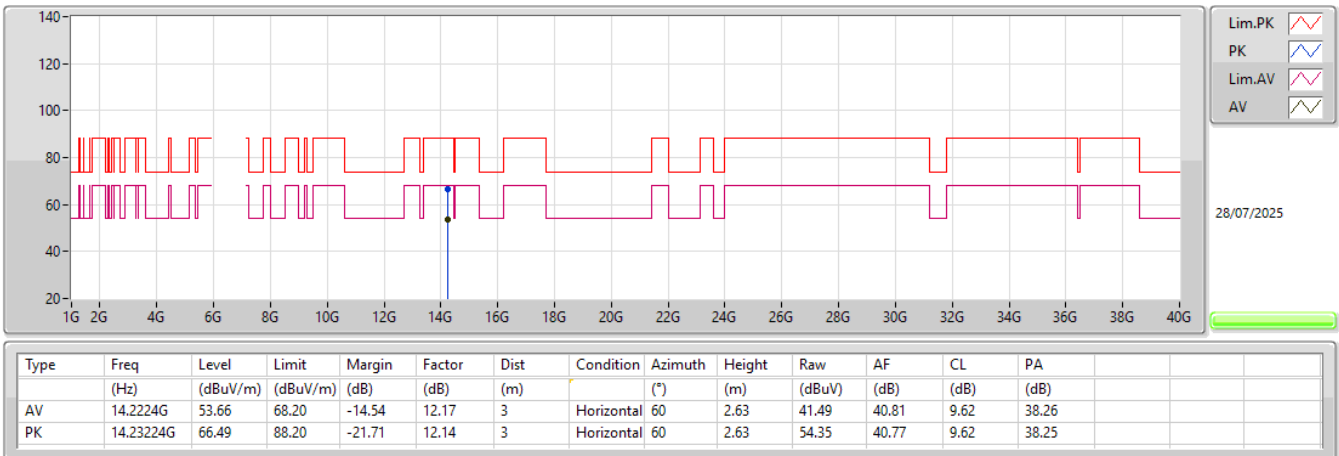
6.875-7.125GHz_802.11ax HEW20_Nss1,(MCS0)_1TX

7115MHz_TX



6.875-7.125GHz_802.11ax HEW20_Nss1,(MCS0)_1TX

7115MHz_TX





Summary

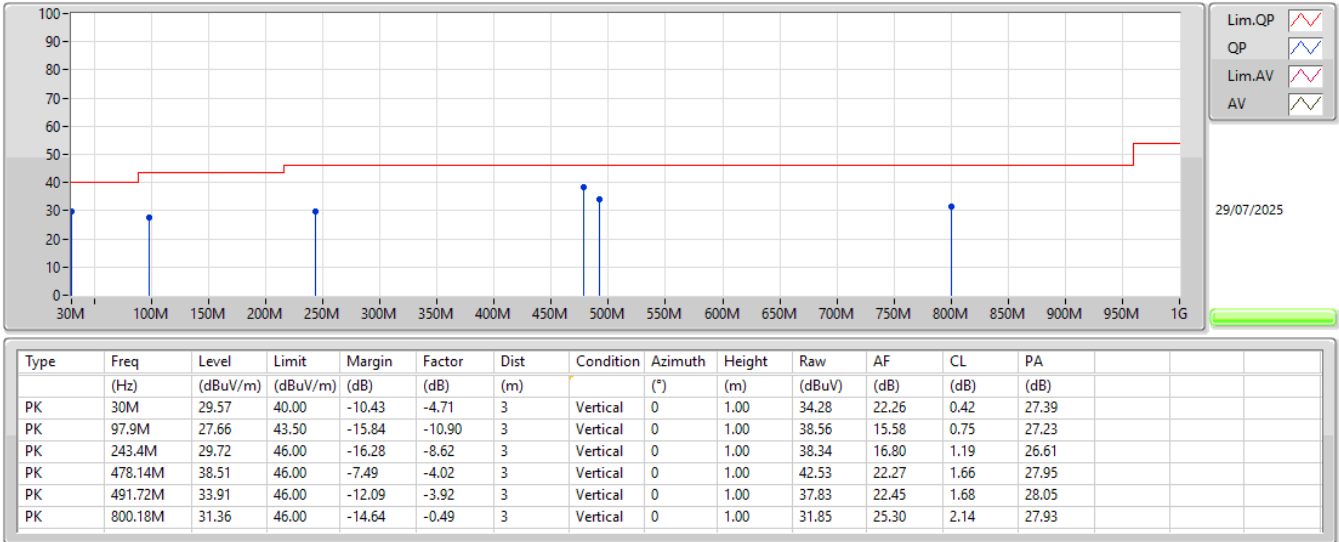
Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)
6.875-7.125GHz	-	-	-	-	-	-	-	-	-	-
802.11ax HEW20_Nss1,(MCS0)_1TX	Pass	PK	478.14M	40.76	46.00	-5.24	3	Horizontal	360	1.00

Result

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)
802.11ax HEW20_Nss1,(MCS0)_1TX	-	-	-	-	-	-	-	-	-	-
6995MHz_test fixture	Pass	PK	30M	29.57	40.00	-10.43	3	Vertical	0	1.00
6995MHz_test fixture	Pass	PK	97.9M	27.66	43.50	-15.84	3	Vertical	0	1.00
6995MHz_test fixture	Pass	PK	243.4M	29.72	46.00	-16.28	3	Vertical	0	1.00
6995MHz_test fixture	Pass	PK	478.14M	38.51	46.00	-7.49	3	Vertical	0	1.00
6995MHz_test fixture	Pass	PK	491.72M	33.91	46.00	-12.09	3	Vertical	0	1.00
6995MHz_test fixture	Pass	PK	800.18M	31.36	46.00	-14.64	3	Vertical	0	1.00
6995MHz_test fixture	Pass	PK	30M	31.88	40.00	-8.12	3	Horizontal	360	1.00
6995MHz_test fixture	Pass	PK	97.9M	35.17	43.50	-8.33	3	Horizontal	360	1.00
6995MHz_test fixture	Pass	PK	243.4M	32.30	46.00	-13.70	3	Horizontal	360	1.00
6995MHz_test fixture	Pass	PK	297.72M	31.75	46.00	-14.25	3	Horizontal	360	1.00
6995MHz_test fixture	Pass	PK	478.14M	40.76	46.00	-5.24	3	Horizontal	360	1.00
6995MHz_test fixture	Pass	PK	515M	36.23	46.00	-9.77	3	Horizontal	360	1.00

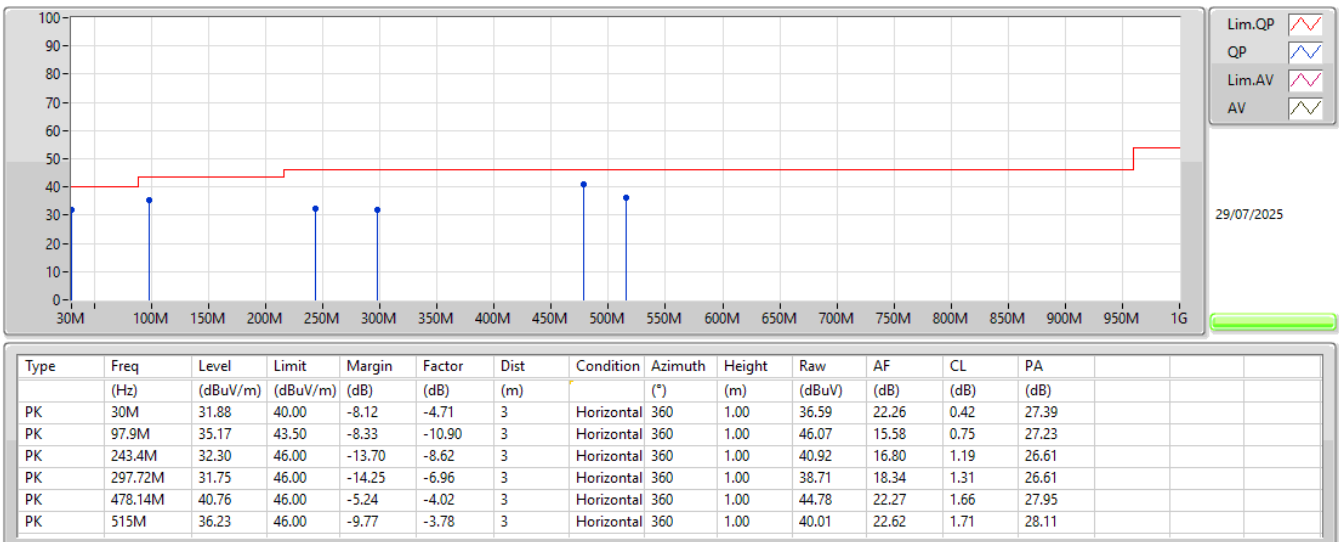
6.875-7.125GHz_802.11ax HEW20_Nss1,(MCS0)_1TX

6995MHz_test fixture



6.875-7.125GHz_802.11ax HEW20_Nss1,(MCS0)_1TX

6995MHz_test fixture



Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)
5.925-6.425GHz	-	-	-	-	-	-	-	-	-	-
802.11ax HEW20_Nss1,(MCS0)_1TX	Pass	AV	12.382G	38.63	54.00	-15.37	3	Vertical	360	1.50
6.425-6.525GHz	-	-	-	-	-	-	-	-	-	-
802.11ax HEW20_Nss1,(MCS0)_1TX	Pass	AV	12.86688G	39.90	68.20	-28.30	3	Vertical	313	1.50
6.525-6.875GHz	-	-	-	-	-	-	-	-	-	-
802.11ax HEW20_Nss1,(MCS0)_1TX	Pass	AV	13.38012G	40.34	54.00	-13.66	3	Vertical	172	1.33
6.875-7.125GHz	-	-	-	-	-	-	-	-	-	-
802.11ax HEW20_Nss1,(MCS0)_1TX	Pass	AV	7.1255G	63.43	68.20	-4.77	3	Horizontal	195	1.00

Result

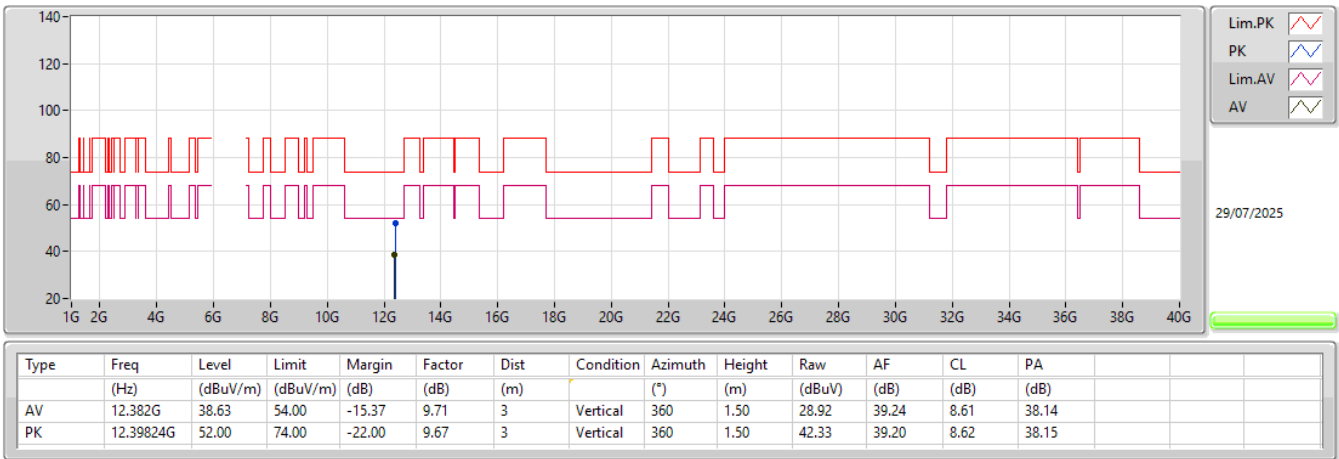
Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)
802.11ax HEW20_Nss1.(MCS0)_1TX	-	-	-	-	-	-	-	-	-	-
5955MHz	Pass	AV	5.9214G	42.76	68.20	-25.44	3	Horizontal	338	1.71
5955MHz	Pass	AV	5.9556G	86.51	Inf	-Inf	3	Horizontal	338	1.71
5955MHz	Pass	PK	5.925G	56.41	88.20	-31.79	3	Horizontal	338	1.71
5955MHz	Pass	PK	5.9574G	99.05	Inf	-Inf	3	Horizontal	338	1.71
5955MHz	Pass	AV	11.90716G	38.37	54.00	-15.63	3	Vertical	141	2.16
5955MHz	Pass	PK	11.90556G	51.75	74.00	-22.25	3	Vertical	141	2.16
5955MHz	Pass	AV	11.907G	38.35	54.00	-15.65	3	Horizontal	207	2.72
5955MHz	Pass	PK	11.91996G	52.57	74.00	-21.43	3	Horizontal	207	2.72
6195MHz	Pass	AV	12.382G	38.63	54.00	-15.37	3	Vertical	360	1.50
6195MHz	Pass	PK	12.39824G	52.00	74.00	-22.00	3	Vertical	360	1.50
6195MHz	Pass	AV	12.382G	38.62	54.00	-15.38	3	Horizontal	40	2.55
6195MHz	Pass	PK	12.38324G	51.85	74.00	-22.15	3	Horizontal	40	2.55
6415MHz	Pass	AV	12.8376G	39.80	68.20	-28.40	3	Vertical	72	1.50
6415MHz	Pass	PK	12.83968G	53.59	88.20	-34.61	3	Vertical	72	1.50
6415MHz	Pass	AV	12.83768G	39.78	68.20	-28.42	3	Horizontal	287	1.50
6415MHz	Pass	PK	12.83696G	52.65	88.20	-35.55	3	Horizontal	287	1.50
6435MHz	Pass	AV	12.86688G	39.90	68.20	-28.30	3	Vertical	313	1.50
6435MHz	Pass	PK	12.87068G	52.57	88.20	-35.63	3	Vertical	313	1.50
6435MHz	Pass	AV	12.8658G	39.85	68.20	-28.35	3	Horizontal	296	1.50
6435MHz	Pass	PK	12.8768G	53.04	88.20	-35.16	3	Horizontal	296	1.50
6475MHz	Pass	AV	12.9448G	39.86	68.20	-28.34	3	Vertical	315	1.50
6475MHz	Pass	PK	12.94068G	52.55	88.20	-35.65	3	Vertical	315	1.50
6475MHz	Pass	AV	12.94424G	39.86	68.20	-28.34	3	Horizontal	142	2.66
6475MHz	Pass	PK	12.95448G	53.08	88.20	-35.12	3	Horizontal	142	2.66
6515MHz	Pass	AV	13.02176G	39.54	68.20	-28.66	3	Vertical	166	2.62
6515MHz	Pass	PK	13.02108G	52.28	88.20	-35.92	3	Vertical	166	2.62
6515MHz	Pass	AV	13.02032G	39.55	68.20	-28.65	3	Horizontal	277	2.60
6515MHz	Pass	PK	13.0266G	52.65	88.20	-35.55	3	Horizontal	277	2.60
6535MHz	Pass	AV	13.07084G	39.53	68.20	-28.67	3	Vertical	100	1.50
6535MHz	Pass	PK	13.07328G	52.73	88.20	-35.47	3	Vertical	100	1.50
6535MHz	Pass	AV	13.06684G	39.55	68.20	-28.65	3	Horizontal	327	2.41
6535MHz	Pass	PK	13.06192G	53.07	88.20	-35.13	3	Horizontal	327	2.41
6695MHz	Pass	AV	13.38012G	40.34	54.00	-13.66	3	Vertical	172	1.33
6695MHz	Pass	PK	13.38212G	53.86	74.00	-20.14	3	Vertical	172	1.33
6695MHz	Pass	AV	13.38424G	40.33	54.00	-13.67	3	Horizontal	76	1.50
6695MHz	Pass	PK	13.39552G	54.02	74.00	-19.98	3	Horizontal	76	1.50
6875MHz	Pass	AV	13.74208G	40.75	68.20	-27.45	3	Vertical	45	2.39
6875MHz	Pass	PK	13.74548G	54.68	88.20	-33.52	3	Vertical	45	2.39
6875MHz	Pass	AV	13.7412G	40.73	68.20	-27.47	3	Horizontal	143	2.15
6875MHz	Pass	PK	13.75256G	53.97	88.20	-34.23	3	Horizontal	143	2.15
6895MHz	Pass	AV	13.79572G	40.86	68.20	-27.34	3	Vertical	348	1.50
6895MHz	Pass	PK	13.79268G	53.85	88.20	-34.35	3	Vertical	348	1.50
6895MHz	Pass	AV	13.79628G	40.85	68.20	-27.35	3	Horizontal	355	1.56
6895MHz	Pass	PK	13.7938G	54.47	88.20	-33.73	3	Horizontal	355	1.56
6995MHz	Pass	AV	13.98336G	41.40	68.20	-26.80	3	Vertical	211	1.50
6995MHz	Pass	PK	13.99936G	54.38	88.20	-33.82	3	Vertical	211	1.50
6995MHz	Pass	AV	13.9832G	41.42	68.20	-26.78	3	Horizontal	34	1.50
6995MHz	Pass	PK	13.98032G	54.48	88.20	-33.72	3	Horizontal	34	1.50
7095MHz	Pass	AV	7.0956G	85.40	Inf	-Inf	3	Horizontal	51	1.50
7095MHz	Pass	AV	7.2378G	47.77	68.20	-20.43	3	Horizontal	51	1.50
7095MHz	Pass	PK	7.0956G	98.12	Inf	-Inf	3	Horizontal	51	1.50
7095MHz	Pass	PK	7.2432G	61.67	88.20	-26.53	3	Horizontal	51	1.50
7095MHz	Pass	AV	14.18244G	42.47	68.20	-25.73	3	Vertical	141	3.00
7095MHz	Pass	PK	14.1828G	55.31	88.20	-32.89	3	Vertical	141	3.00
7095MHz	Pass	AV	14.18364G	42.43	68.20	-25.77	3	Horizontal	219	1.50
7095MHz	Pass	PK	14.18704G	55.29	88.20	-32.91	3	Horizontal	219	1.50
7115MHz	Pass	AV	7.1155G	90.28	Inf	-Inf	3	Horizontal	195	1.00
7115MHz	Pass	AV	7.1255G	63.43	68.20	-4.77	3	Horizontal	195	1.00
7115MHz	Pass	PK	7.1165G	97.05	Inf	-Inf	3	Horizontal	195	1.00
7115MHz	Pass	PK	7.1255G	74.13	88.20	-14.07	3	Horizontal	195	1.00



Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)
7115MHz	Pass	AV	14.22388G	42.28	68.20	-25.92	3	Vertical	22	1.50
7115MHz	Pass	PK	14.22072G	55.35	88.20	-32.85	3	Vertical	22	1.50
7115MHz	Pass	AV	14.22464G	42.25	68.20	-25.95	3	Horizontal	285	1.50
7115MHz	Pass	PK	14.23156G	55.37	88.20	-32.83	3	Horizontal	285	1.50

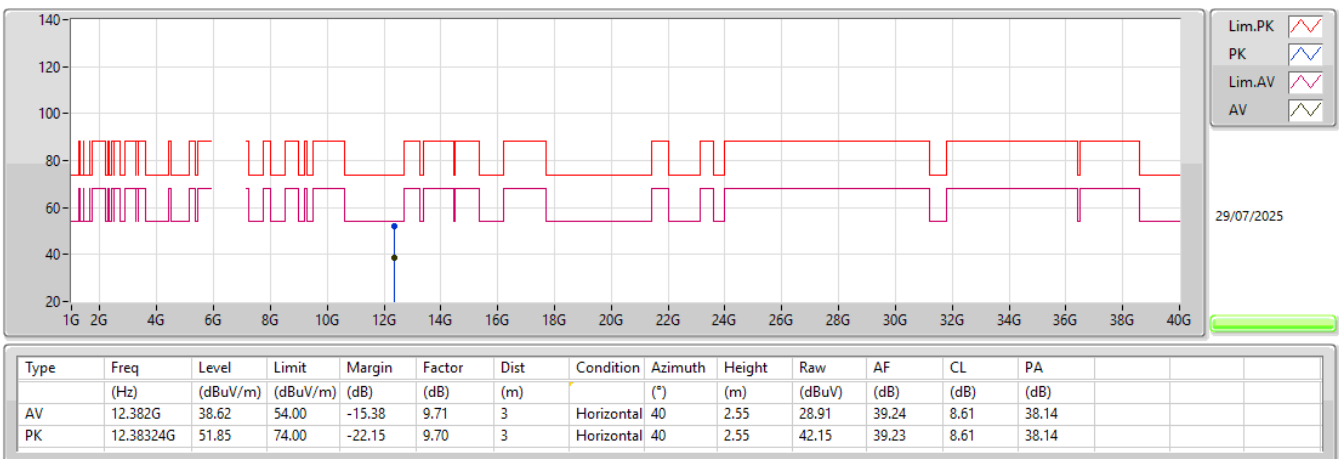
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6195MHz_TX



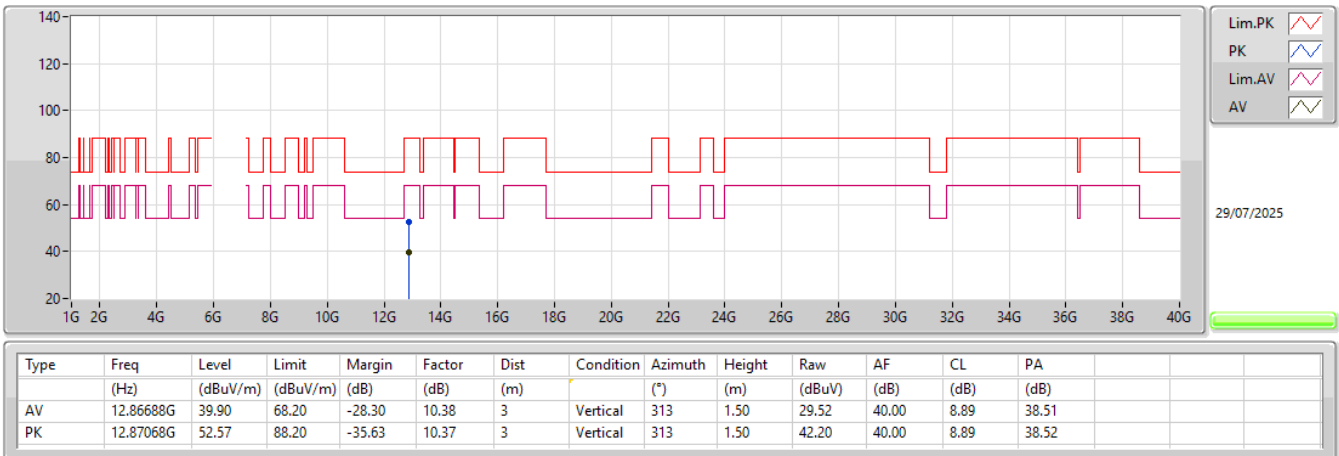
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6195MHz_TX



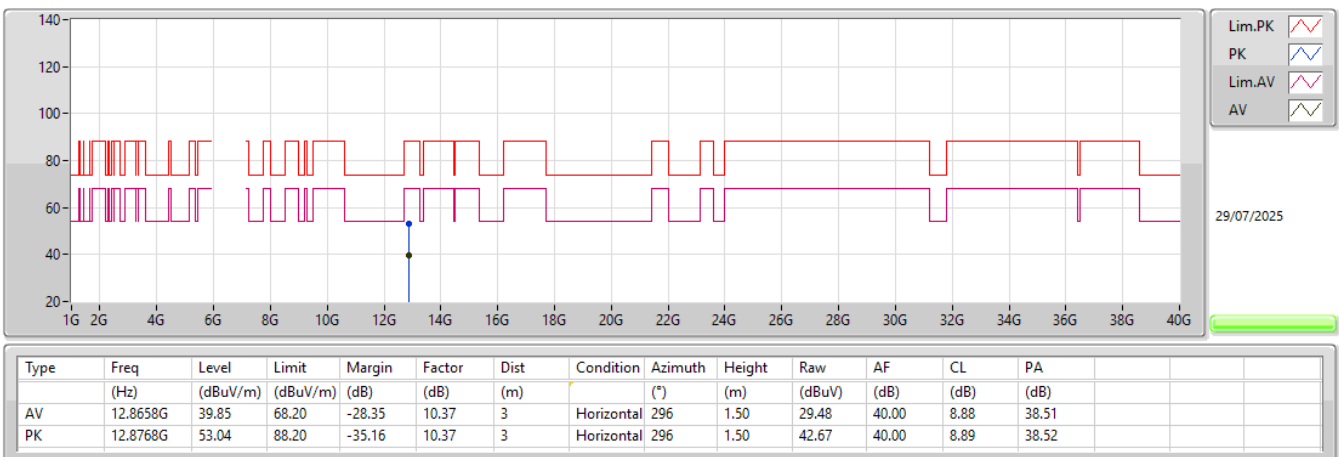
6.425-6.525GHz_802.11ax HEW20_Nss1,(MCS0)_1TX

6435MHz_TX



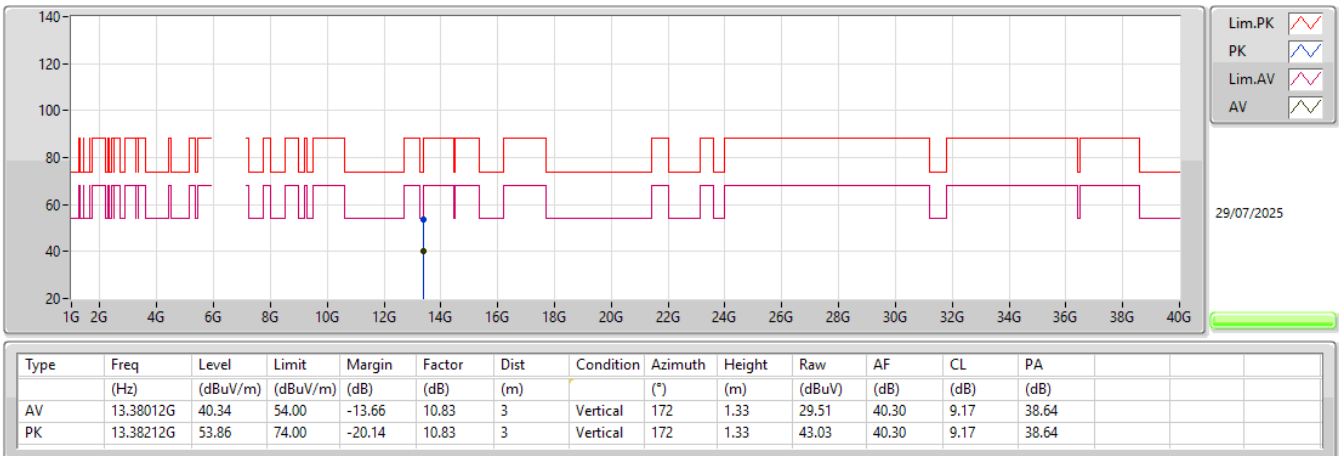
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6435MHz_TX



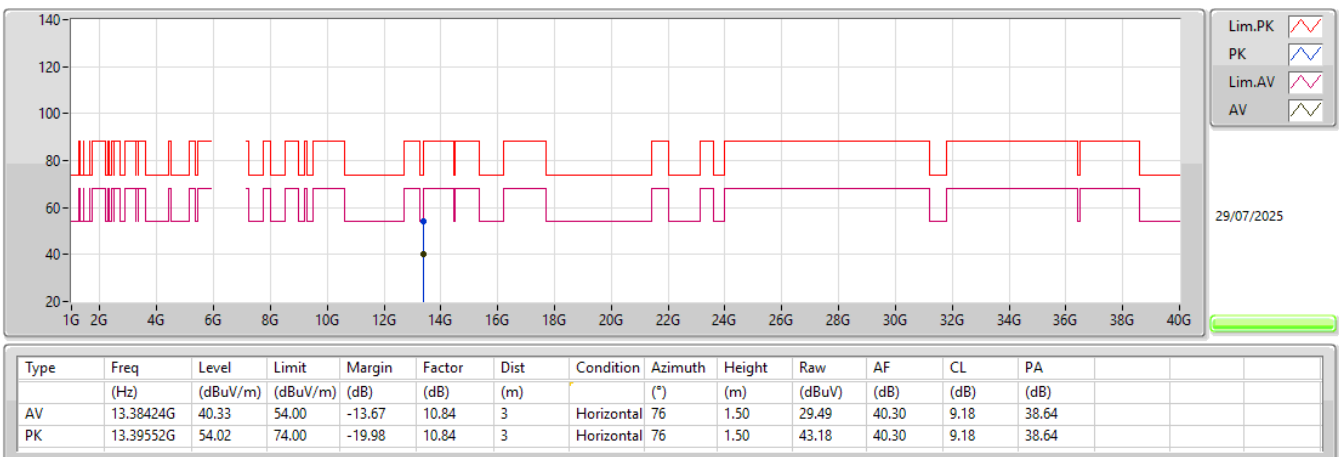
6.525-6.875GHz_802.11ax HEW20_Nss1,(MCS0)_1TX

6695MHz_TX



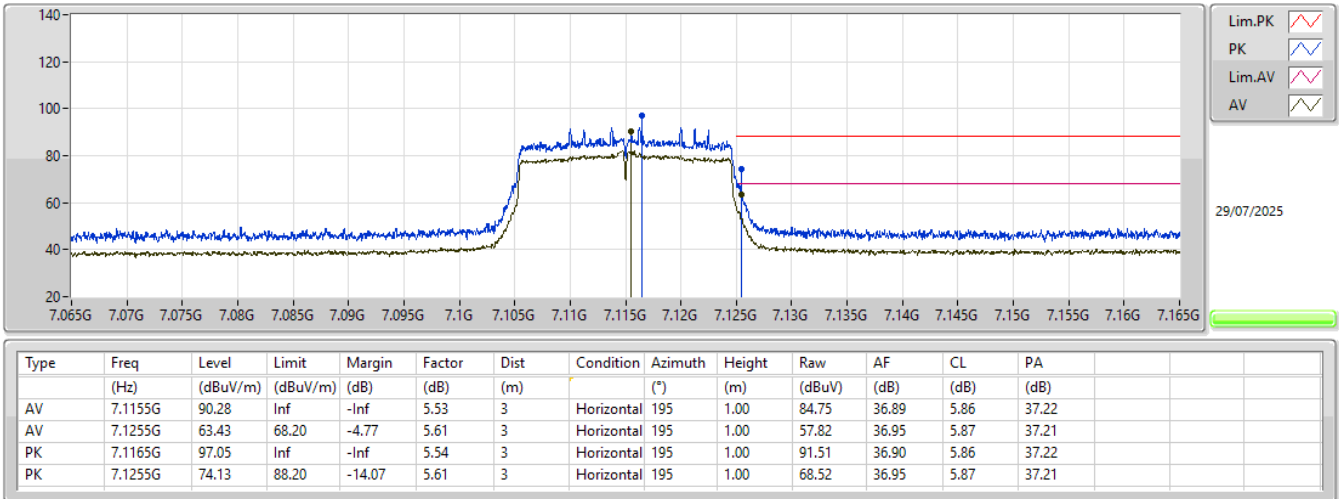
6.525-6.875GHz_802.11ax HEW20_Nss1,(MCS0)_1TX

6695MHz_TX



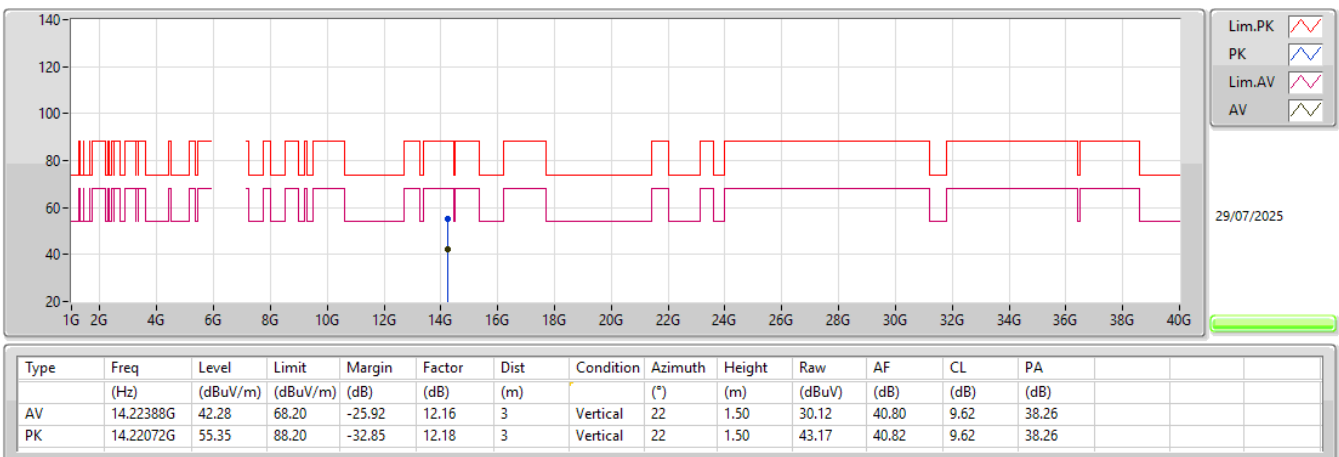
6.875-7.125GHz_802.11ax HEW20_Nss1,(MCS0)_1TX

7115MHz_TX



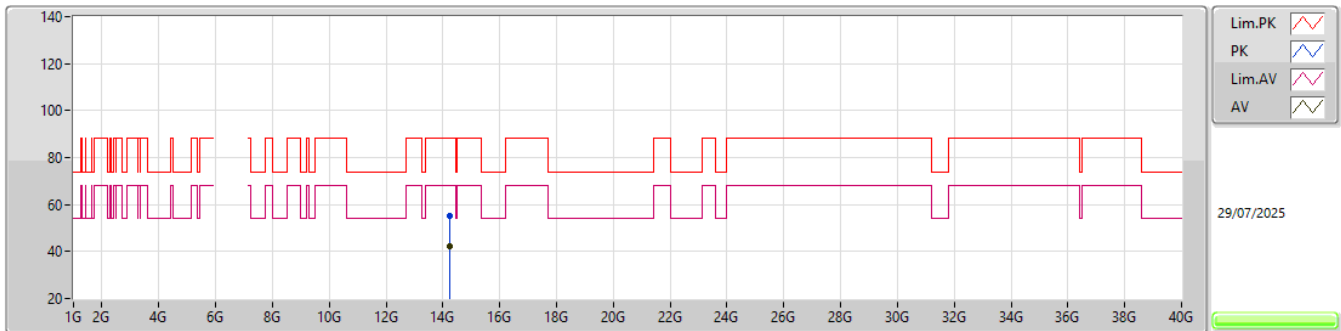
6.875-7.125GHz_802.11ax HEW20_Nss1,(MCS0)_1TX

7115MHz_TX



6.875-7.125GHz_802.11ax HEW20_Nss1,(MCS0)_1TX

7115MHz_TX



Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Raw (dBuV)	AF (dB)	CL (dB)	PA (dB)			
AV	14.22464G	42.25	68.20	-25.95	12.16	3	Horizontal	285	1.50	30.09	40.80	9.62	38.26			
PK	14.23156G	55.37	88.20	-32.83	12.14	3	Horizontal	285	1.50	43.23	40.77	9.62	38.25			

Antenna Gain(dBi)			
UNII5	UNII6	UNII7	UNII8
1.72	1.99	2.05	2.17

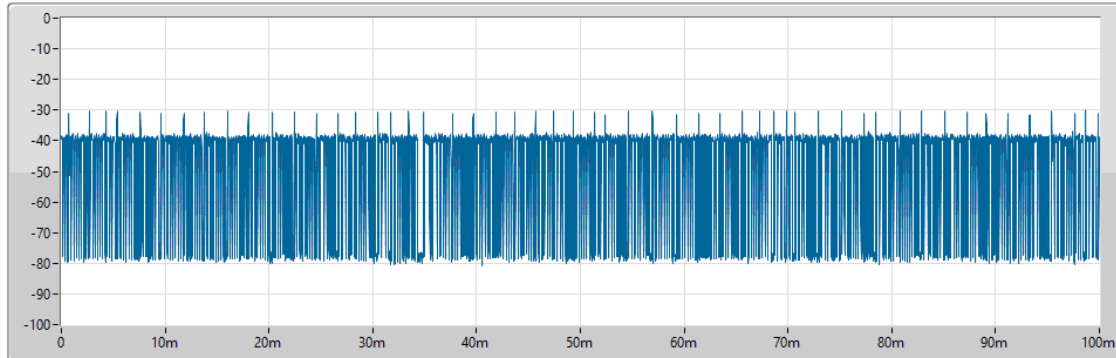
Contention Based protocol 802.11ax HEW20											
UNII Band	Test Channel	Bandwidth (MHz)	Frequency (MHz)	Interference frequency (MHz)		AWGN Threshold Level (dBm)	EUT Status	Number of Detected (out of 10 times)	Detection Probability (%)	Limit (%)	Test Result
5	53	20	6215	Center	6215	-67.72	OFF	10	100	90	Pass
6	101	20	6455	Center	6455	-66.99	OFF	10	100	90	Pass
7	149	20	6695	Center	6695	-66.05	OFF	10	100	90	Pass
8	213	20	7015	Center	7015	-68.17	OFF	10	100	90	Pass

Contention Based protocol 802.11ax HEW20										
UNII Band	Test Channel	Bandwidth (MHz)	Frequency (MHz)	Intetference frequency (MHz)		EUT Status	Injected AWGN Power (dBm)	Ant Gain (dBi)	Detection Power(dBm)	Detection Limit (dBm)
5	53	20	6215	Center	6215	OFF	-66.00	1.72	-67.72	≤ -62
						Minimal	-67.00	1.72	-68.72	≤ -62
						ON	-68.00	1.72	-69.72	≤ -62
6	101	20	6455	Center	6455	OFF	-65.00	1.99	-66.99	≤ -62
						Minimal	-66.00	1.99	-67.99	≤ -62
						ON	-67.00	1.99	-68.99	≤ -62
7	149	20	6695	Center	6695	OFF	-64.00	2.05	-66.05	≤ -62
						Minimal	-65.00	2.05	-67.05	≤ -62
						ON	-66.00	2.05	-68.05	≤ -62
8	213	20	7015	Center	7015	OFF	-66.00	2.17	-68.17	≤ -62
						Minimal	-67.00	2.17	-69.17	≤ -62
						ON	-68.00	2.17	-70.17	≤ -62

Bandwidth 20MHz: Traffic Loading Plot - 6215MHz

Time Analysis

Main



20/08/2025

Sample Time

12.5us

All TX Time

71.2875ms

All TX Sample

5703

Duty Cycle

0.712786

T1[s] T2[s]

NaNs NaNs

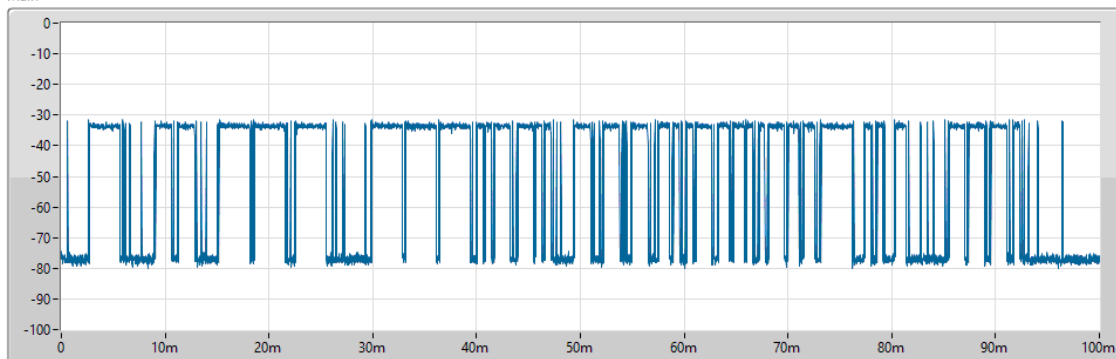
T3[s] T4[s]

NaNs NaNs

Bandwidth 20MHz: Traffic Loading Plot - 6455MHz

Time Analysis

Main



20/08/2025

Sample Time

12.5us

All TX Time

60.1ms

All TX Sample

4808

Duty Cycle

0.600925

T1[s] T2[s]

NaNs NaNs

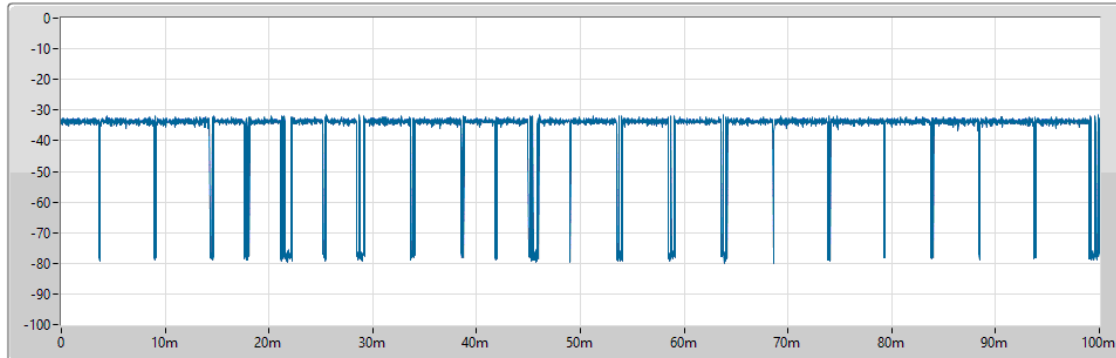
T3[s] T4[s]

NaNs NaNs

Bandwidth 20MHz: Traffic Loading Plot - 6695MHz

Time Analysis

Main



20/08/2025

Sample Time

12.5us

All TX Time

92.325ms

All TX Sample

7386

Duty Cycle

0.923135

T1[s] T2[s]

NaNs NaNs

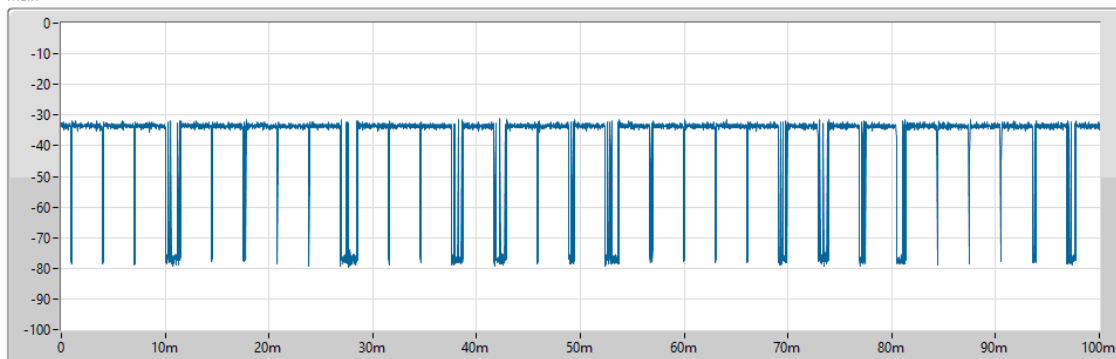
T3[s] T4[s]

NaNs NaNs

Bandwidth 20MHz: Traffic Loading Plot - 7015MHz

Time Analysis

Main



20/08/2025

Sample Time

12.5us

All TX Time

88.2625ms

All TX Sample

7061

Duty Cycle

0.882515

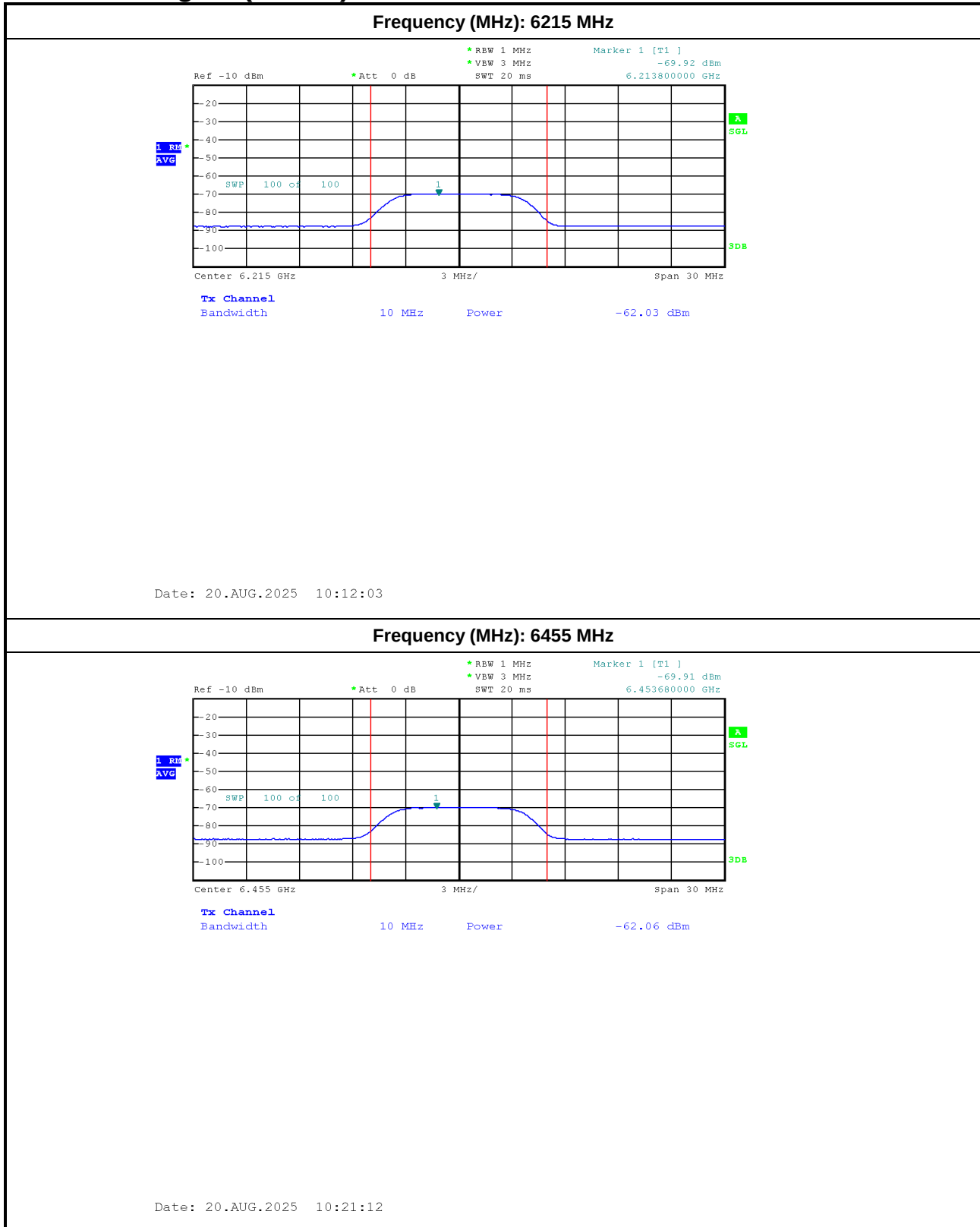
T1[s] T2[s]

NaNs NaNs

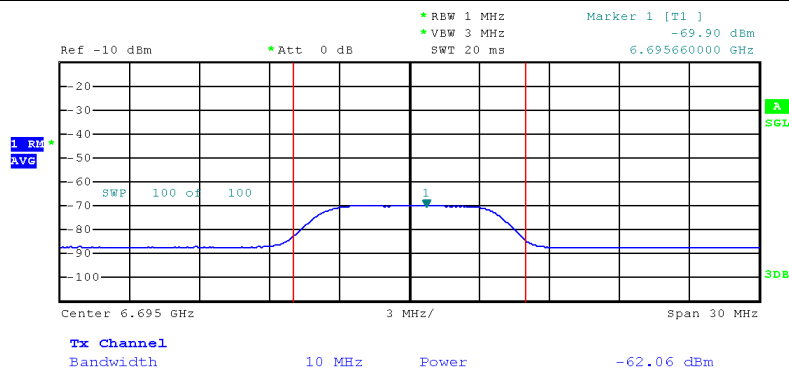
T3[s] T4[s]

NaNs NaNs

1. Incumbent signal (AWGN) Plot

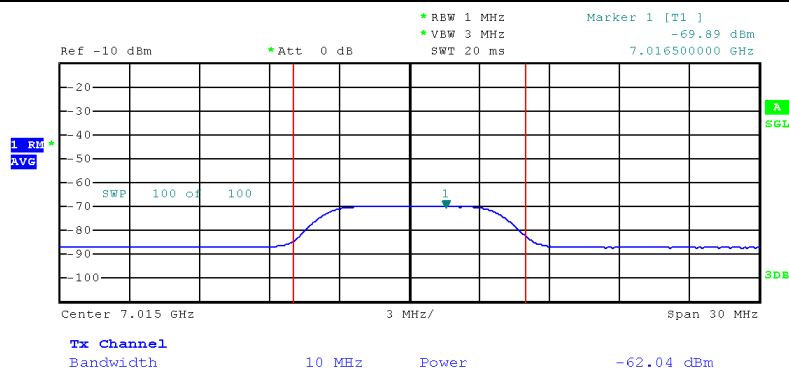


Frequency (MHz): 6695 MHz



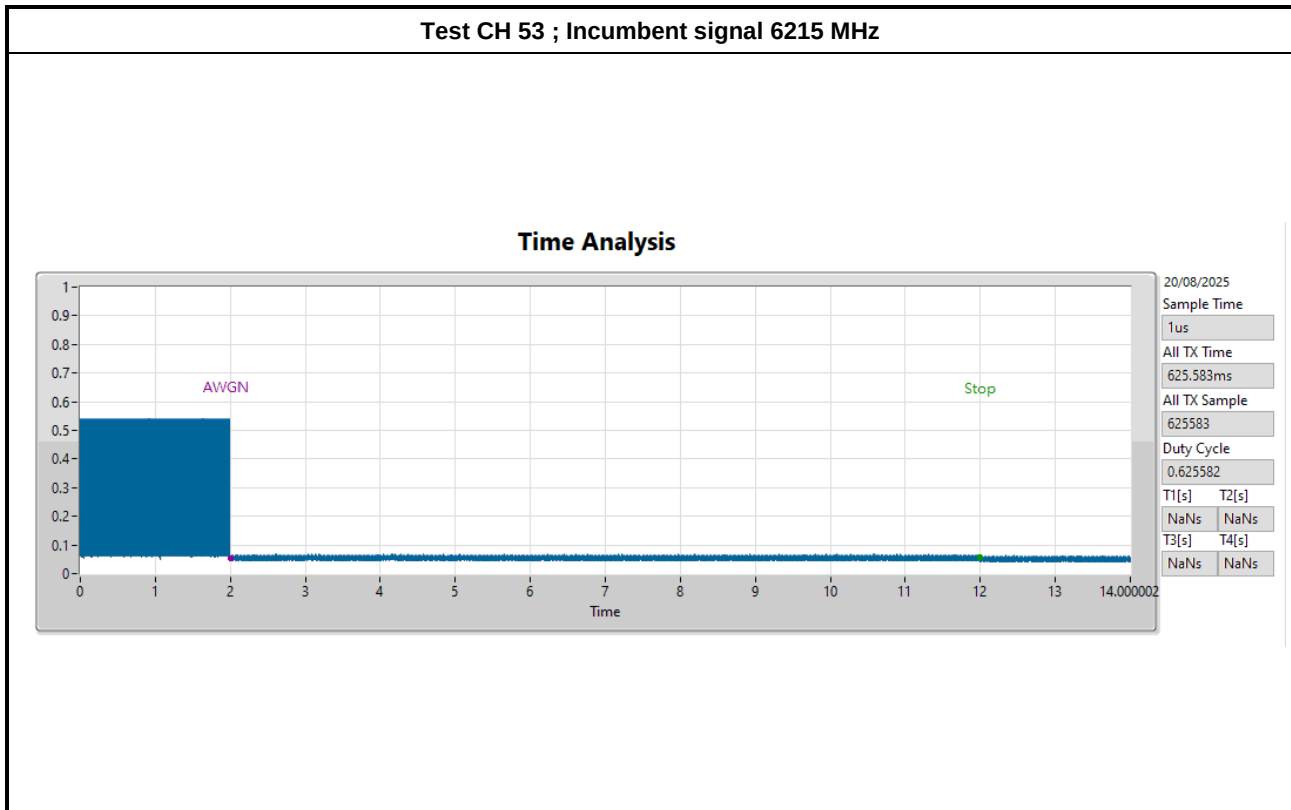
Date: 20.AUG.2025 10:21:53

Frequency (MHz): 7015 MHz

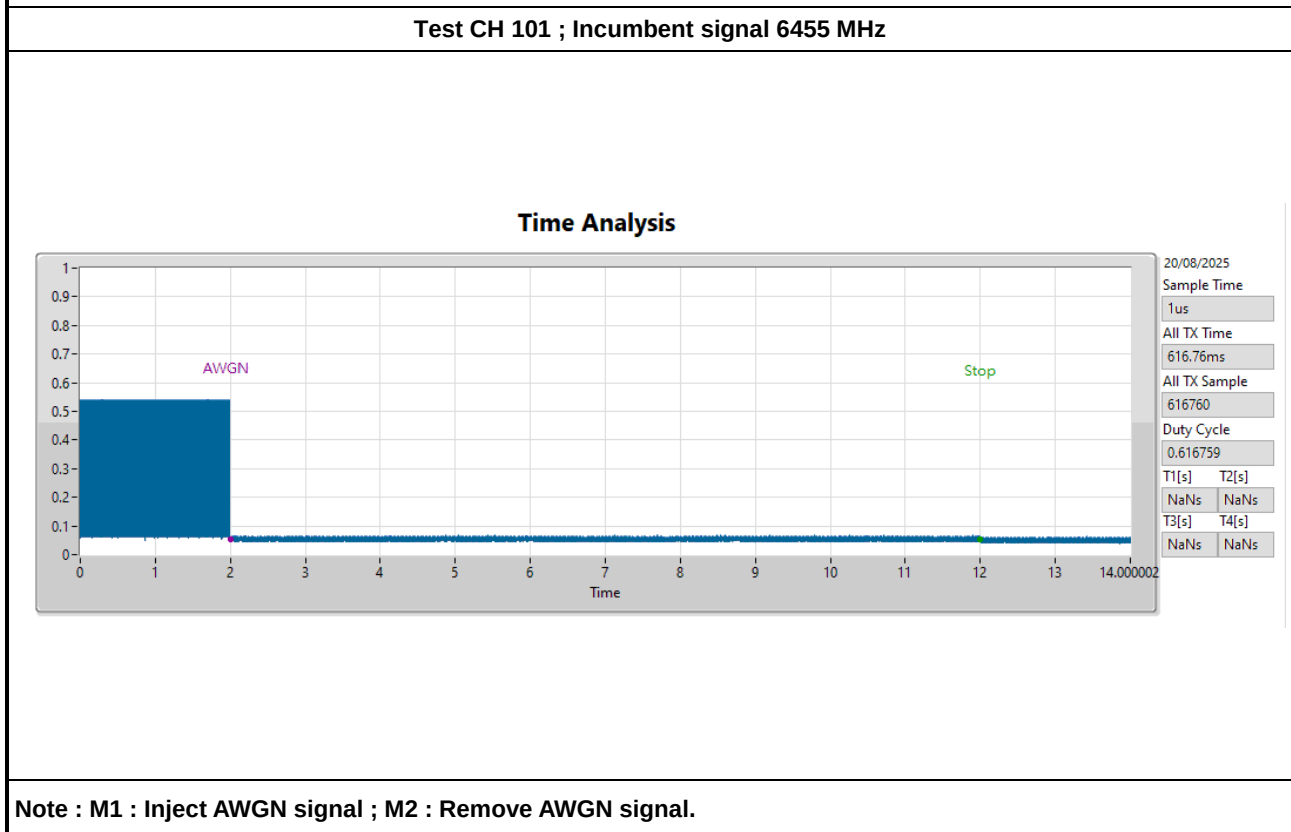


Date: 20.AUG.2025 10:22:53

2. Contention-Based Protocol Plot



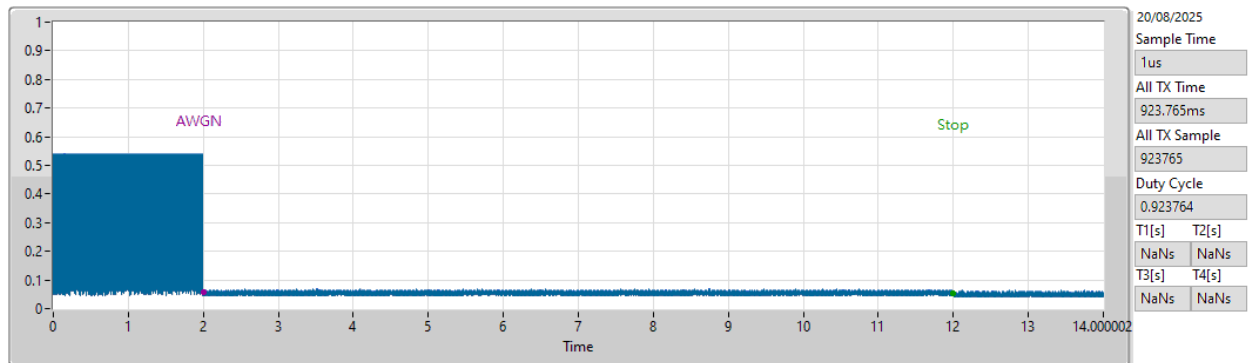
Note : M1 : Inject AWGN signal ; M2 : Remove AWGN signal.



Note : M1 : Inject AWGN signal ; M2 : Remove AWGN signal.

Test CH 149 ; Incumbent signal 6695 MHz

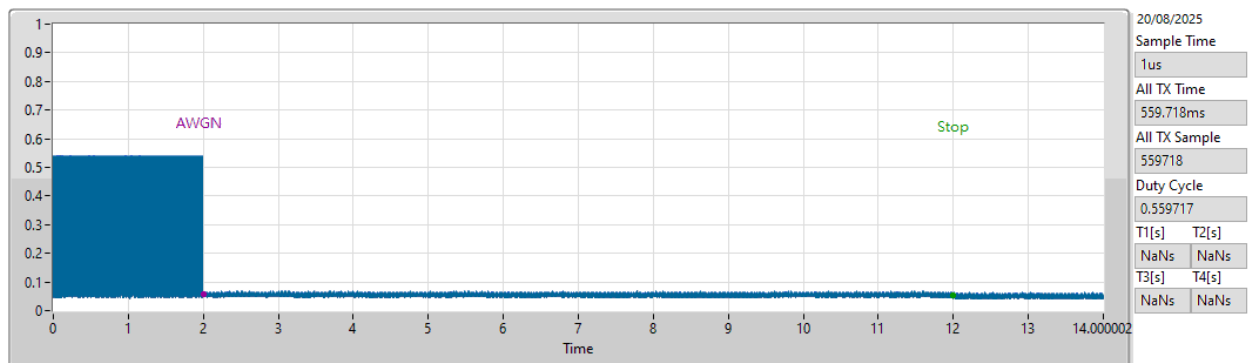
Time Analysis



Note : M1 : Inject AWGN signal ; M2 : Remove AWGN signal.

Test CH 213 ; Incumbent signal 7015 MHz

Time Analysis



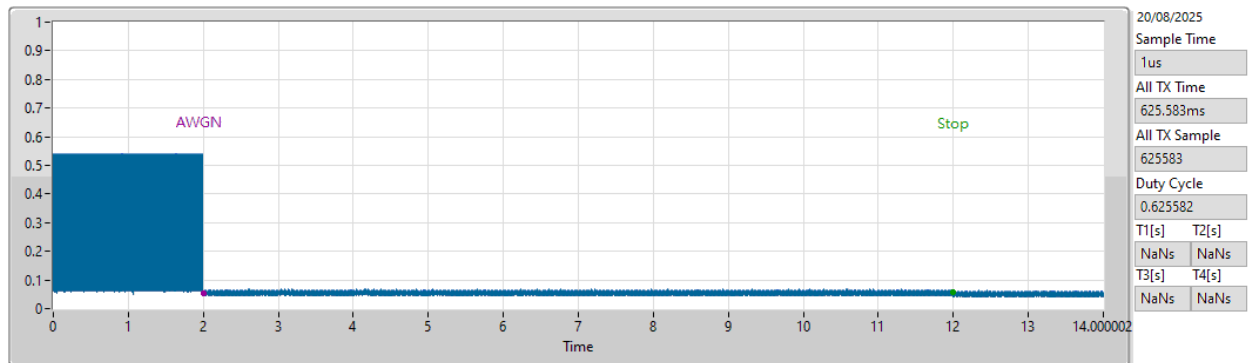
Note : M1 : Inject AWGN signal ; M2 : Remove AWGN signal.

Contention Based Protocol Threshold Level Verify Plot

Bandwidth (MHz): 20

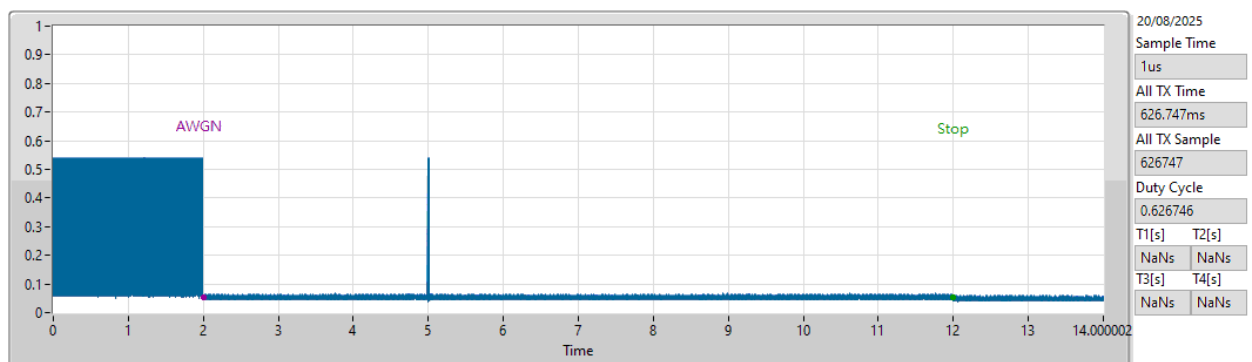
Frequency (MHz): 6215 MHz (Threshold Level: -66 dBm)

Time Analysis



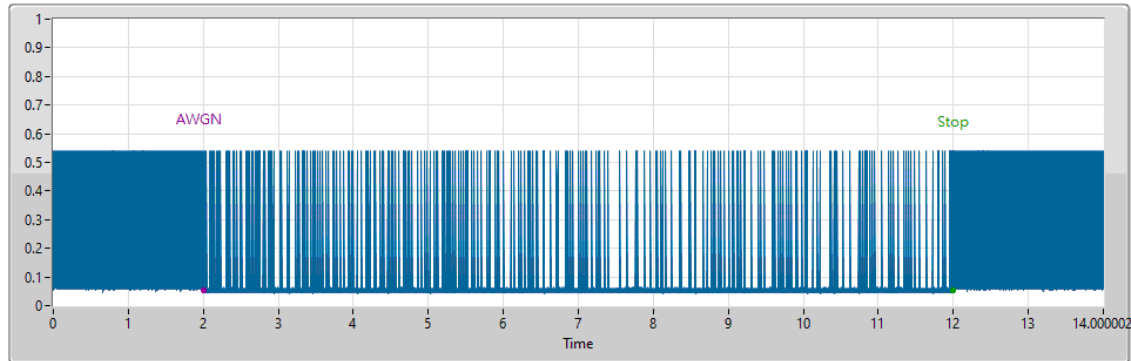
Frequency (MHz): 6215 MHz (Threshold Level: -67dBm)

Time Analysis



Frequency (MHz): 6215 MHz (Threshold Level: -68 dBm)

Time Analysis



20/08/2025	
Sample Time	
1us	
All TX Time	
626.134ms	
All TX Sample	
626134	
Duty Cycle	
0.626133	
T1[s]	T2[s]
NaNs	NaNs
T3[s]	T4[s]
NaNs	NaNs