FCC Radio Test Report

FCC ID: ARA-BAXE6X

This report concerns: Original Grant

Project No.	:	2403H049
Equipment	:	BreezeAir AXE 6X
Brand Name	:	Telrad Networks
Test Model	:	BreezeAir AXE 6X
Series Model	:	PN BX6XYYYYYYY(YYYYYYY stands for different variants sub products.)
Applicant	:	Telrad Networks Ltd
Address	:	1 Bat Sheva streetLod711600Israel
Manufacturer	:	Telrad Networks Ltd
Address	:	1 Bat Sheva streetLod711600Israel
Factory	:	Telrad Networks Ltd
Address	:	1 Bat Sheva streetLod711600Israel
Date of Receipt	:	Aug. 14, 2024
Date of Test	:	Aug. 30, 2024 ~ Oct. 21, 2024 Mar. 04, 2025
Issued Date	:	Mar. 04, 2025
Report Version	:	R02
Test Sample	:	Engineering Sample No.: SH20240814268 and SH20240814268-11 for radiated, SH20240814268 for AC Power Line Conducted Emissions, SH20240814268-11 for conducted.
Standard(s)	:	FCC CFR Title 47, Part 15, Subpart E

The above equipment has been tested and found compliance with the requirement of the relative standards by BTL Inc.

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Declaration

BTL represents to the client that testing is done in accordance with standard procedures as applicable and that test instruments used has been calibrated with standards traceable to international standard(s) and/or national standard(s).

BTL's reports apply only to the specific samples tested under conditions. It is manufacture's responsibility to ensure that additional production units of this model are manufactured with the identical electrical and mechanical components. BTL assumes no responsibility for the data provided by the customer, any statements, inferences or generalizations drawn by the customer or others from the reports issued by BTL.

The report must not be used by the client to claim product certification, approval, or endorsement by A2LA or any agency of the U.S. Government.

This report is the confidential property of the client. As a mutual protection to the clients, the public and ourselves, the test report shall not be reproduced, except in full, without our written approval.

BTL's laboratory quality assurance procedures are in compliance with the ISO/IEC 17025: 2017 requirements, and accredited by the conformity assessment authorities listed in this test report.

BTL is not responsible for the sampling stage, so the results only apply to the sample as received.

The information, data and test plan are provided by manufacturer which may affect the validity of results, so it is manufacturer's responsibility to ensure that the apparatus meets the essential requirements of applied standards and in all the possible configurations as representative of its intended use.

Limitation

For the use of the authority's logo is limited unless the Test Standard(s)/Scope(s)/Item(s) mentioned in this test report is (are) included in the conformity assessment authorities acceptance respective.
Please note that the measurement uncertainty is provided for informational purpose only and are not use in determining the Pass/Fail results.

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REPORT ISSUED HISTORY

Report No.	Version	Description	Issued Date	Note
BTL-FCCP-1-2403H049	R00	Original Report.	Nov. 28, 2024	Invalid
BTL-FCCP-1-2403H049	R01	Modified the comments.	Jan. 07, 2025	Invalid
BTL-FCCP-1-2403H049	R02	Modified the comments.	Mar. 04, 2025	Valid

1. APPLICABLE STANDARDS

According to the specifications of the manufacturer, the EUT must comply with the requirements of the following standards:
ANSI C63.10-2013
The following reference test guidance is not within the scope of accreditation of A2LA:
KDB 987594 D02 U-NII 6GHz EMC Measurement v02r01
KDB 789033 D02 General UNII Test Procedures New Rules v02r01
KDB 662911 D01 Multiple Transmitter Output v02r01

2. SUMMARY OF TEST RESULTS

Test procedures according to the technical standard(s):

FCC CFR Title 47, Part 15, Subpart E				
Standard(s) Section	**Test Item**	**Test Result**	**Judgment**	**Remark**
15.207 15.407(b)	AC Power Line Conducted Emissions	APPENDIX A	PASS	------
15.407(b) 15.205(a) 15.209(a)	Radiated Emissions	APPENDIX B APPENDIX C APPENDIX D	PASS	------
15.407(a)	Bandwidth	APPENDIX E	PASS	------
15.407(a)	Maximum e.i.r.p.	APPENDIX F	PASS	------
15.407(a)	Maximum Power Spectral Density (e.i.r.p.)	APPENDIX G	PASS	------
15.407(b)	In-Band Emission (Mask)	APPENDIX H	PASS	------
15.407(d)	Contention Based Protocol	------	N/A	------
15.407(g)	Frequency Stability	APPENDIX J	PASS	------
15.203	Antenna Requirements	------	PASS	**NOTE (2)**

Note:
(1) "N/A" denotes test is not applicable in this test report.
(2) The device what use a permanently attached antenna were considered sufficient to comply with the provisions of 15.203.
(3) Device Type:
☐ Indoor access point
☐ Subordinate device (operating under control of a low-power indoor access point)
☐ Indoor client (operating under control of a low-power indoor access point)
☐ Dual client (operating under control of either a low-power indoor access point or standard power access point)
☒ Standard power access point
☐ Standard client (operating under control of a Standard power access point)
☒ Fixed client (operating under control of a Standard power access point)
(4) The device does not use channel puncturing or bandwidth reduction for the purpose of incumbent avoidance.

2.1 TEST FACILITY

For Radiated Emissions 1GHz to 18GHz:
The test facilities used to collect the test data in this report is at the location of Room 102 & Room 702, Building 3, No.9, Jinshagang 1st Road, Dalang Town, Dongguan City, Guangdong People's Republic of China.

For others:
The test facilities used to collect the test data in this report is at the location of 1-2/F, 4/F, Building A, 1-2/F, Building B, 3/F, Building C, No.3, Jinshagang 1st Road, Dalang Town, Dongguan City, Guangdong People's Republic of China.
BTL's Registration Number for FCC: 747969
BTL's Designation Number for FCC: CN1377

2.2 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))
The BTL measurement uncertainty as below table:

A. AC power line conducted emissions test:

Test Site	Method	Measurement Frequency Range	*U*,(dB)
DG-C02	CISPR	150kHz ~ 30MHz	2.88

B. Radiated emissions test:

Test Site	Method	Measurement Frequency Range	*U*,(dB)
DG-CB01	CISPR	9kHz ~ 30MHz	2.36

Test Site	Method	Measurement Frequency Range	Ant. H / V	*U*,(dB)
DG-CB03 (3m)	CISPR	30MHz ~ 200MHz	V	4.40
		30MHz ~ 200MHz	H	3.62
		200MHz ~ 1,000MHz	V	4.58
		200MHz ~ 1,000MHz	H	3.98

Test Site	Method	Measurement Frequency Range	*U*,(dB)
DG-CB18 (3m)	CISPR	1GHz ~ 6GHz	4.48
		6GHz ~ 18GHz	3.88

Test Site	Method	Measurement Frequency Range	*U*,(dB)
DG-CB03 (1m)	CISPR	18 ~ 26.5 GHz	3.36
		26.5 ~ 40 GHz	3.58

C. Other Measurement test:

Test Item	Uncertainty
Bandwidth	0.90 %
Maximum e.i.r.p.	1.3 dB
Maximum Power Spectral Density (e.i.r.p.)	1.4 dB
Frequency Stability	2.7 ppm
Temperature	0.8 °C
Humidity	2.2 %

Note: Unless specifically mentioned, the uncertainty of measurement has not been taken into account to declare the compliance or non-compliance to the specification.

2.3 TEST ENVIRONMENT CONDITIONS

Test Item	Temperature	Humidity	Test Voltage	Tested By	Test Date
AC Power Line Conducted Emissions	25°C	55%	AC 120V/60Hz	Hayden Chen	Sep. 10, 2024
Radiated Emissions-9kHz to 30MHz	27°C	46%	AC 120V/60Hz	Hayden Chen	Sep. 11, 2024
Radiated Emissions-30MHz to 1000MHz	23°C	53%	AC 120V/60Hz	Calvin Wen	Sep. 18, 2024
Radiated Emissions-Above 1000 MHz	25°C	41%	AC 120V/60Hz	Jensen Zhou	Sep. 14, 2024
	23°C	53%	AC 120V/60Hz	Allen Tong	Sep. 19, 2024
	24°C	45%	AC 120V/60Hz	Jensen Zhou	Sep. 28, 2024
	25°C	47%	AC 120V/60Hz	Jensen Zhou	Sep. 30, 2024
Bandwidth	22-24°C	50-57%	PoE 48V	Ilya Zhang	Sep. 18, 2024~ Sep. 29, 2024
	22°C	48%	PoE 48V	Ilya Zhang	Mar. 04, 2025
Maximum e.i.r.p.	23-25°C	46-60%	PoE 48V	Steve Zhou Alex Yin	Sep. 11, 2024~ Oct. 09, 2024
Maximum Power Spectral Density (e.i.r.p.)	22-24°C	50-57%	PoE 48V	Ilya Zhang	Sep. 18, 2024~ Sep. 29, 2024
In-Band Emission (Mask)	22°C	48%	PoE 48V	Ilya Zhang	Mar. 04, 2025
Frequency Stability	Normal & Extreme	50-57%	Normal & Extreme	Ilya Zhang	Sep. 18, 2024~ Sep. 29, 2024

3. GENERAL INFORMATION

3.1 GENERAL DESCRIPTION OF EUT

Equipment		BreezeAir AXE 6X
Brand Name		Telrad Networks
Test Model		BreezeAir AXE 6X
Series Model		PN BX6XYYYYYYY(YYYYYYY stands for different variants sub products.)
Model Difference(s)		Only differ in model name.
Hardware Version		RDPC9009
Software Version		17.0XXX
Power Source		DC Voltage supplied from PoE adapter. Model: G0720-480-050
Power Rating		I/P: 100-240 V~ 50/60Hz 0.75A MAX O/P: 48.0V ⎓ 0.5A 24.0W –(4.5)pins, -(7.8)pins
Operation Frequency Band(s)		UNII-5: 5925 MHz ~ 6425 MHz UNII-7: 6525 MHz ~ 6875 MHz
Modulation Type		IEEE 802.11ax: OFDM
Bit Rate of Transmitter		IEEE 802.11ax: up to 2402 Mbps
For Antenna Configuration 1	Maximum e.i.r.p. _UNII-5	IEEE 802.11ax(HE160): 35.99 dBm (3.9719 W)
	Maximum e.i.r.p. _UNII-7	IEEE 802.11ax(HE160): 35.53 dBm (3.5727 W)
For Antenna Configuration 2	Maximum e.i.r.p. _UNII-5	IEEE 802.11ax(HE80): 35.83 dBm (3.8282 W)
	Maximum e.i.r.p. _UNII-7	IEEE 802.11ax(HE80): 35.85 dBm (3.8459 W)

Note:

1. For a more detailed features description, please refer to the manufacturer’s specifications or the user's manual.

2. Channel List:

UNII-5					
IEEE 802.11ax(HE20)					
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
1	5955	33	6115	65	6275
5	5975	37	6135	69	6295
9	5995	41	6155	73	6315
13	6015	45	6175	77	6335
17	6035	49	6195	81	6355
21	6055	53	6215	85	6375
25	6075	57	6235	89	6395
29	6095	61	6255	93	6415

UNII-5					
IEEE 802.11ax(HE40)					
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
3	5965	35	6125	67	6285
11	6005	43	6165	75	6325
19	6045	51	6205	83	6365
27	6085	59	6245	91	6405

UNII-5					
IEEE 802.11ax(HE80)					
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
7	5985	39	6145	71	6305
23	6065	55	6225	87	6385

UNII-5					
IEEE 802.11ax(HE160)					
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
15	6025	47	6185	79	6345

UNII-7					
IEEE 802.11ax(HE20)					
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
117	6535	141	6655	165	6775
121	6555	145	6675	169	6795
125	6575	149	6695	173	6815
129	6595	153	6715	177	6835
133	6615	157	6735	181	6855
137	6635	161	6755	185	6875

UNII-7					
IEEE 802.11ax(HE40)					
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
123	6565	147	6685	171	6805
131	6605	155	6725	179	6845
139	6645	163	6765		

UNII-7					
IEEE 802.11ax(HE80)					
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
135	6625	151	6705	167	6785
183	6865				

UNII-7					
IEEE 802.11ax(HE160)					
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
143	6665	175	6825		

3. Antenna Specification:

For Antenna Configuration 1:

Ant.	Brand	P/N	Antenna Type	Connector	Gain (dBi)
1	MARS ANTENNAS & RF SYSTEMS LTD.	RDAN9040	Dual Polarized Subscriber Antenna	2 x Pigtail 12 cm with MMCX Male	24
2	MARS ANTENNAS & RF SYSTEMS LTD.	RDAN9040	Dual Polarized Subscriber Antenna	2 x Pigtail 12 cm with MMCX Male	24

Note:

1) This EUT supports CDD, and all antennas have the same gain, Directional gain = G_{ANT}+Array Gain.
For power measurements, Array Gain=0dB ($N_{ANT} \leqslant 4$), so the Directional gain=24.
For power spectral density measurements, N_{ANT}=2, N_{SS} = 1.
So the Directional gain=G_{ANT}+Array Gain=G_{ANT}+10log(N_{ANT}/ N_{SS})dBi=24+10log(2/1)dBi=27.01.

For Antenna Configuration 2:

Ant.	Brand	P/N	Anten a Type	onnector	Gain dBi)
1	Telrad Get more from wireless.	B-6X32S003P	Dish Antenna	N Female (2x)	32
2	Telrad Get more from wireless.	B-6X32S003P	Dish Antenna	N Female (2x)	32

Note:

1) This EUT supports CDD, and all antennas have the same gain, Directional gain = G_{ANT}+Array Gain.
For power measurements, Array Gain=0dB ($N_{ANT} \leqslant 4$), so the Directional gain=32.
For power spectral density measurements, N_{ANT}=2, N_{SS} = 1.
So the Directional gain=G_{ANT}+Array Gain=G_{ANT}+10log(N_{ANT}/ N_{SS})dBi=32+10log(2/1)dBi=35.01.

4. When elevation angle above 30 degrees of antenna specification:

For Antenna Configuration 1:

Ant.	Brand	P/N	Antenna Type	Connector	Gain (dBi)
1	MARS ANTENNAS & RF SYSTEMS LTD.	RDAN9040	Dual Polarized Subscriber Antenna	2 x Pigtail 12 cm with MMCX Male	9
2	MARS ANTENNAS & RF SYSTEMS LTD.	RDAN9040	Dual Polarized Subscriber Antenna	2 x Pigtail 12 cm with MMCX Male	9

Note:

1) This EUT supports CDD, and all antennas have the same gain, Directional gain = G_{ANT}+Array Gain.
For power measurements, Array Gain=0dB ($N_{ANT} \leqslant 4$), so the Directional gain=9.

For Antenna Configuration 2:

Ant.	Brand	P/N	Antenna Type	Connector	Gain (dBi)
1	Telrad Get more from wireless.	B-6X32S003P	Dish Antenna	N Female (2x)	7
2	Telrad Get more from wireless.	B-6X32S003P	Dish Antenna	N Female (2x)	7

Note:

1) This EUT supports CDD, and all antennas have the same gain, Directional gain = G_{ANT}+Array Gain.
For power measurements, Array Gain=0dB ($N_{ANT} \leqslant 4$), so the Directional gain=7.

5. Table for Antenna Configuration:

Operating Mode / TX Mode	2TX
IEEE 802.11ax(HE20)	V (Antenna Configuration 1 or Antenna Configuration 2)
IEEE 802.11ax(HE40)	V (Antenna Configuration 1 or Antenna Configuration 2)
IEEE 802.11ax(HE80)	V (Antenna Configuration 1 or Antenna Configuration 2)
IEEE 802.11ax(HE160)	V (Antenna Configuration 1 or Antenna Configuration 2)

3.2 TEST MODES

The test system was pre-tested based on the consideration of all possible combinations of EUT operation mode.

Pretest Mode	Description
Mode 1	TX AX(HE20) Mode Channel 01/45/93 (UNII-5)
Mode 2	TX AX(HE40) Mode Channel 03/43/91 (UNII-5)
Mode 3	TX AX(HE80) Mode Channel 07/39/87 (UNII-5)
Mode 4	TX AX(HE160) Mode Channel 15/47/79 (UNII-5)
Mode 5	TX AX(HE20) Mode Channel 117/149/181 (UNII-7)
Mode 6	TX AX(HE40) Mode Channel 123/147/179 (UNII-7)
Mode 7	TX AX(HE80) Mode Channel 135/151/167 (UNII-7)
Mode 8	TX AX(HE160) Mode Channel 143 (UNII-7)
Mode 9	TX AX(HE160) Mode Channel 47 (UNII-5)

Following mode(s) was (were) found to be the worst case(s) and selected for the final test.

AC power line conducted emissions test	
Final Test Mode	Description
Mode 9	TX AX(HE160) Mode Channel 47 (UNII-5)

Radiated Emissions Test - Below 1GHz	
Final Test Mode	Description
Mode 9	TX AX(HE160) Mode Channel 47 (UNII-5)

Radiated Emissions Test - Above 1GHz	
Final Test Mode	Description
Mode 1	TX AX(HE20) Mode Channel 01/45/93 (UNII-5)
Mode 2	TX AX(HE40) Mode Channel 03/43/91 (UNII-5)
Mode 3	TX AX(HE80) Mode Channel 07/39/87 (UNII-5)
Mode 4	TX AX(HE160) Mode Channel 15/47/79 (UNII-5)
Mode 5	TX AX(HE20) Mode Channel 117/149/181 (UNII-7)
Mode 6	TX AX(HE40) Mode Channel 123/147/179 (UNII-7)
Mode 7	TX AX(HE80) Mode Channel 135/151/167 (UNII-7)
Mode 8	TX AX(HE160) Mode Channel 143 (UNII-7)

Maximum e.i.r.p. Test	
Final Test Mode	Description
Mode 1	TX AX(HE20) Mode Channel 01/45/93 (UNII-5)
Mode 2	TX AX(HE40) Mode Channel 03/43/91 (UNII-5)
Mode 3	TX AX(HE80) Mode Channel 07/39/87 (UNII-5)
Mode 4	TX AX(HE160) Mode Channel 15/47/79 (UNII-5)
Mode 5	TX AX(HE20) Mode Channel 117/149/181 (UNII-7)
Mode 6	TX AX(HE40) Mode Channel 123/147/179 (UNII-7)
Mode 7	TX AX(HE80) Mode Channel 135/151/167 (UNII-7)
Mode 8	TX AX(HE160) Mode Channel 143 (UNII-7)

Other Conducted Test	
Final Test Mode	Description
Mode 1	TX AX(HE20) Mode Channel 01/45/93 (UNII-5)
Mode 2	TX AX(HE40) Mode Channel 03/43/91 (UNII-5)
Mode 3	TX AX(HE80) Mode Channel 07/39/87 (UNII-5)
Mode 4	TX AX(HE160) Mode Channel 15/47/79 (UNII-5)
Mode 5	TX AX(HE20) Mode Channel 117/149/181 (UNII-7)
Mode 6	TX AX(HE40) Mode Channel 123/147/179 (UNII-7)
Mode 7	TX AX(HE80) Mode Channel 135/151/167 (UNII-7)
Mode 8	TX AX(HE160) Mode Channel 143 (UNII-7)

Note:
(1) For AC power line conducted emissions and radiated emission below 1 GHz test, the IEEE 802.11AX(HE160) channel 47 (UNII-5) is found to be the worst case and recorded.
(2) For radiated emission Harmonic 18-40GHz test, only tested the worst case and recorded.
(3) All the bit rate of transmitter have been tested and found the lowest rate is found to be the worst case and recorded.
(4) IEEE 802.11ax mode only supports full RU, so only the full RU is evaluated and measured inside report.
(5) For radiated emission above 1 GHz test, the polarization of Vertical and Horizontal are evaluated, the worst case is recorded in this report..

3.3 PARAMETERS OF TEST SOFTWARE

For Antenna Configuration 1

UNII-5			
Test Software Version	web V1.0		
Frequency (MHz)	5955	6175	6415
IEEE 802.11ax(HE20)	7	6	6
Frequency (MHz)	5965	6165	6405
IEEE 802.11ax(HE40)	9	10	10
Frequency (MHz)	5985	6145	6385
IEEE 802.11ax(HE80)	12	11	12
Frequency (MHz)	6025	6185	6345
IEEE 802.11ax(HE160)	12	13	12

UNII-7			
Test Software Version	web V1.0		
Frequency (MHz)	6535	6695	6855
IEEE 802.11ax(HE20)	5	5	6
Frequency (MHz)	6565	6725	6845
IEEE 802.11ax(HE40)	10	9	9
Frequency (MHz)	6625	6705	6785
IEEE 802.11ax(HE80)	12	12	11
Frequency (MHz)	6665		
IEEE 802.11ax(HE160)	12		

For Antenna Configuration 2

UNII-5			
Test Software Version	web V1.0		
Frequency (MHz)	5955	6175	6415
IEEE 802.11ax(HE20)	-1	-1	-1
Frequency (MHz)	5965	6165	6405
IEEE 802.11ax(HE40)	2	2	4
Frequency (MHz)	5985	6145	6385
IEEE 802.11ax(HE80)	4	4	4
Frequency (MHz)	6025	6185	6345
IEEE 802.11ax(HE160)	4	5	4

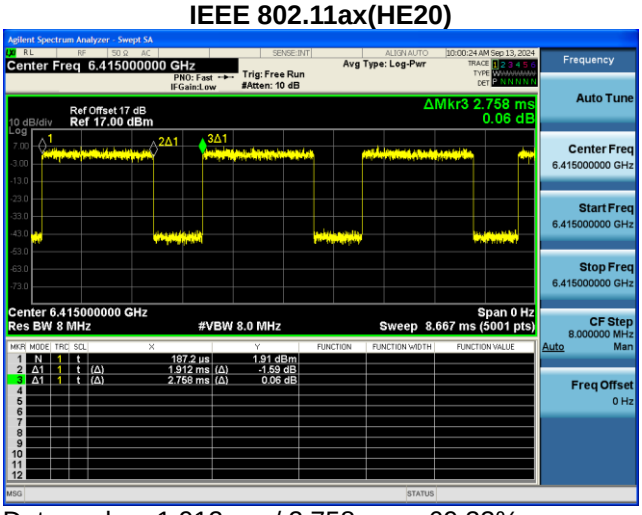
UNII-7			
Test Software Version	web V1.0		
Frequency (MHz)	6535	6695	6855
IEEE 802.11ax(HE20)	-2	-2	-1
Frequency (MHz)	6565	6725	6845
IEEE 802.11ax(HE40)	2	1	2
Frequency (MHz)	6625	6705	6785
IEEE 802.11ax(HE80)	5	4	4
Frequency (MHz)	6665		
IEEE 802.11ax(HE160)	4		

3.4 DUTY CYCLE

If duty cycle is ≥ 98 %, duty factor is not required.
If duty cycle is < 98 %, duty factor shall be considered.
The output power = measured power + duty factor.
The power spectral density = measured power spectral density + duty factor.

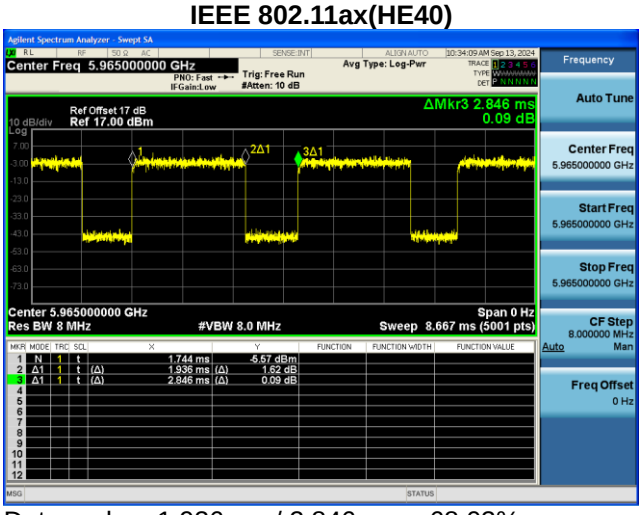
For Antenna Configuration 1

IEEE 802.11ax(HE20)



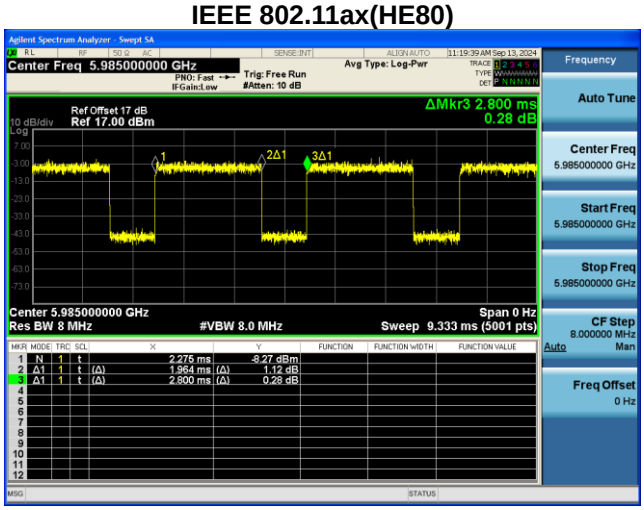
Duty cycle = 1.912 ms / 2.758 ms = 69.33%
Duty Factor = 10 log(1 / Duty cycle) = 1.59

IEEE 802.11ax(HE40)



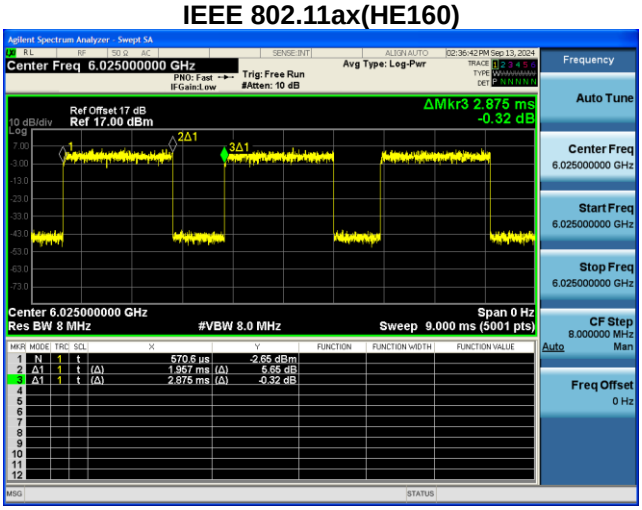
Duty cycle = 1.936 ms / 2.846 ms = 68.03%
Duty Factor = 10 log(1 / Duty cycle) = 1.67

IEEE 802.11ax(HE80)



Duty cycle = 1.964 ms / 2.800 ms = 70.14%
Duty Factor = 10 log(1 / Duty cycle) = 1.54

IEEE 802.11ax(HE160)



Duty cycle = 1.957 ms / 2.875 ms = 68.07%
Duty Factor = 10 log(1 / Duty cycle) = 1.67

NOTE:
For IEEE 802.11ax(HE20):
For radiated emissions frequency above 1 GHz, the resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 523 Hz (Duty cycle < 98%).

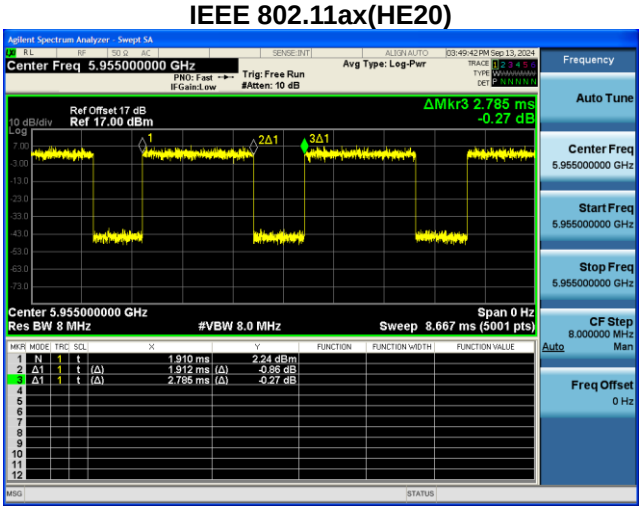
For IEEE 802.11ax(HE40) and:
For radiated emissions frequency above 1 GHz, the resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 517 Hz (Duty cycle < 98%).

For and IEEE 802.11ax(HE80):
For radiated emissions frequency above 1 GHz, the resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 509 Hz (Duty cycle < 98%).

For IEEE 802.11ax(HE160):
For radiated emissions frequency above 1 GHz, the resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 511 Hz (Duty cycle < 98%).

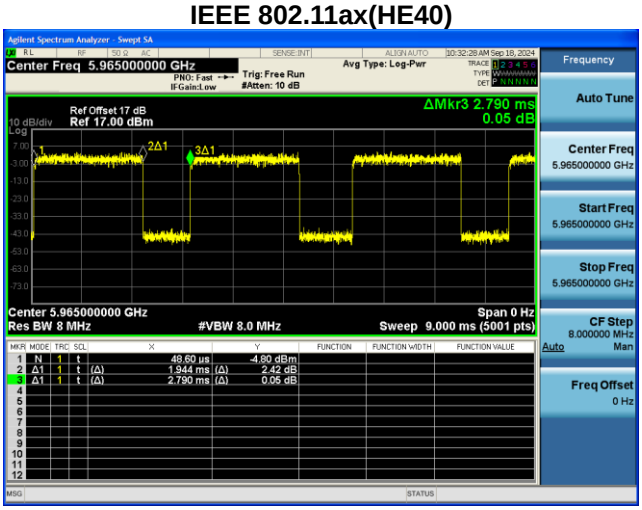
For Antenna Configuration 2

IEEE 802.11ax(HE20)



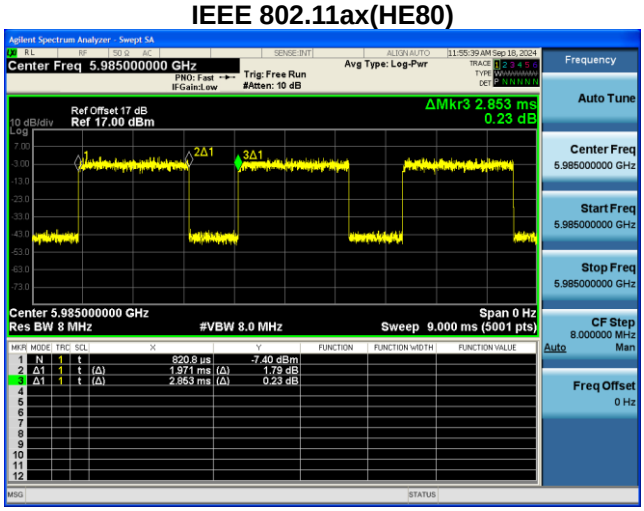
Duty cycle = 1.912 ms / 2.785 ms = 68.65%
Duty Factor = 10 log(1 / Duty cycle) = 1.63

IEEE 802.11ax(HE40)



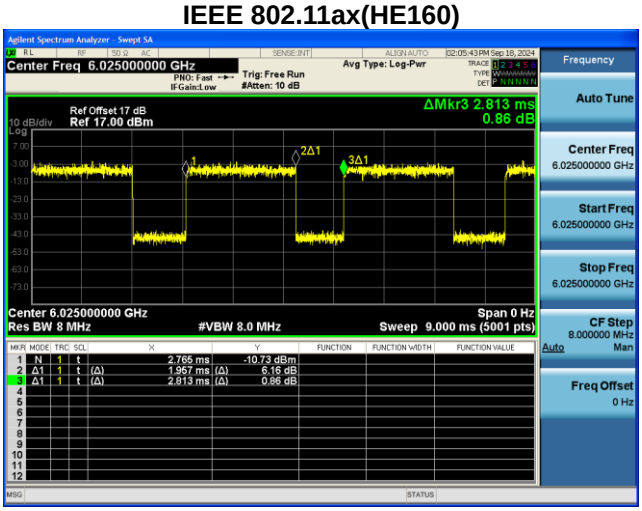
Duty cycle = 1.944 ms / 2.790 ms = 69.68%
Duty Factor = 10 log(1 / Duty cycle) = 1.57

IEEE 802.11ax(HE80)



Duty cycle = 1.971 ms / 2.853 ms = 69.09%
Duty Factor = 10 log(1 / Duty cycle) = 1.61

IEEE 802.11ax(HE160)



Duty cycle = 1.957 ms / 2.813 ms = 69.57%
Duty Factor = 10 log(1 / Duty cycle) = 1.58

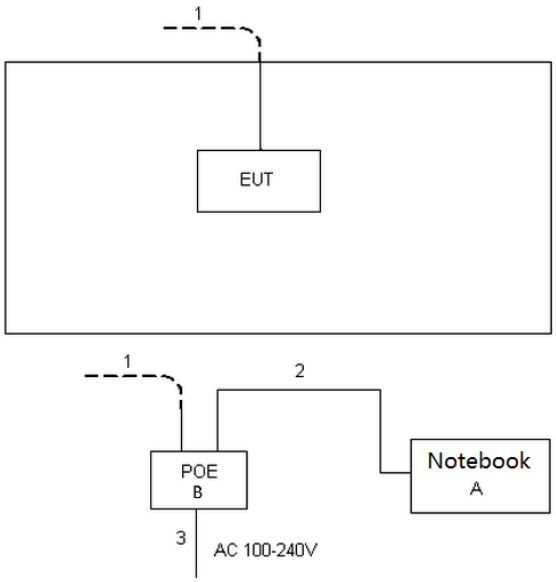
NOTE:
For IEEE 802.11ax(HE20):
For radiated emissions frequency above 1 GHz, the resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 523 Hz (Duty cycle < 98%).

For IEEE 802.11ax(HE40) and:
For radiated emissions frequency above 1 GHz, the resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 514 Hz (Duty cycle < 98%).

For and IEEE 802.11ax(HE80):
For radiated emissions frequency above 1 GHz, the resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 507 Hz (Duty cycle < 98%).

For IEEE 802.11ax(HE160):
For radiated emissions frequency above 1 GHz, the resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 511 Hz (Duty cycle < 98%).

3.5 BLOCK DIAGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED



3.6 SUPPORT UNITS

Item	Equipment	Brand	Model No.	Series No.
A	Notebook	Dell	Inspiron 15-7559	N/A
B	PoE	GOSPELL	G-0720-480-050	N/A

Item	Cable Type	Shielded Type	Ferrite Core	Length
1	RJ45 Cable	NO	NO	10m
2	RJ45 Cable	NO	NO	1m
3	AC Cable	NO	NO	1.5m

3.7 CUSTOMER INFORMATION DESCRIPTION

1) The antenna gain is provided by the manufacturer.
2) Except for AC power line conducted emissions and radiated emissions, the results of all test items include cable losses. Part of the cable losses (1.5dB) are provided by the manufacturer, while the other parts of the cable losses are provided by the testing laboratory.

4. AC POWER LINE CONDUCTED EMISSIONS

4.1 LIMIT

Frequency (MHz)	Limit (dBμV)	
	Quasi-peak	Average
0.15 - 0.5	66 to 56*	56 to 46*
0.5 - 5.0	56	46
5.0 - 30.0	60	50

NOTE:
(1) The tighter limit applies at the band edges.
(2) The limit of " * " marked band means the limitation decreases linearly with the logarithm of the frequency in the range.

4.2 TEST PROCEDURE

a. The EUT was placed 0.8 meters from the horizontal ground plane with EUT being connected to the power mains through a line impedance stabilization network (LISN). All other support equipment powered from additional LISN(s). The LISN provide 50 Ohm/ 50uH of coupling impedance for the measuring instrument.
b. Interconnecting cables that hang closer than 40 cm to the ground plane shall be folded back and forth in the center forming a bundle 30 to 40 cm long.
c. I/O cables that are not connected to a peripheral shall be bundled in the center. The end of the cable may be terminated, if required, using the correct terminating impedance. The overall length shall not exceed 1 m.
d. LISN at least 80 cm from nearest part of EUT chassis.
e. For the actual test configuration, please refer to the related Item -EUT Test Photos.

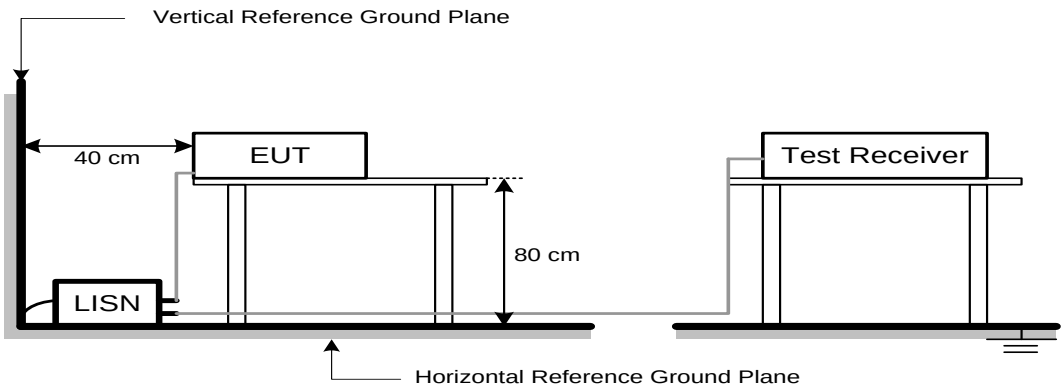
The following table is the setting of the receiver:

Receiver Parameter	Setting
Start Frequency	0.15 MHz
Stop Frequency	30 MHz
IF Bandwidth	9 kHz

4.3 DEVIATION FROM TEST STANDARD

No deviation

4.4 TEST SETUP



4.5 EUT OPERATION CONDITIONS

The EUT was configured for testing in a typical fashion (as a customer would normally use it). The EUT has been programmed to continuously transmit during test. This operating condition was tested and used to collect the included data.
The EUT was programmed to be in continuously transmitting/TX mode.

4.6 TEST RESULTS

Please refer to the APPENDIX A.

5. RADIATED EMISSIONS

5.1 LIMIT

In case the emission fall within the restricted band specified on 15.205(a), then the 15.209(a) limit in the table below has to be followed.

LIMITS OF RADIATED EMISSIONS MEASUREMENT (9 kHz to 1000 MHz)

Frequency (MHz)	Field Strength (microvolts/meter)	Measurement Distance (meters)
0.009-0.490	2400/F(kHz)	300
0.490-1.705	24000/F(kHz)	30
1.705-30.0	30	30
30-88	100	3
88-216	150	3
216-960	200	3
Above 960	500	3

LIMITS OF UNWANTED EMISSION OUT OF THE RESTRICTED BANDS (Above 1000 MHz)

Frequency (MHz)	EIRP Limit (dBm/MHz)	Band edge at 3m (dBμV/m)	Harmonic at 1m (dBμV/m)
5925-7125	Average: -27	68.2	77.7 (Note 2)

NOTE:

(1) The following formula is used to convert the equipment isotropic radiated power (eirp) to field strength:

$$E = \frac{1000000\sqrt{30P}}{3}$$ μV/m, where P is the eirp (Watts)

(2)

$$FS_{\text{limit}} = FS_{\text{max}} - 20\log\left(\frac{d_{\text{limit}}}{d_{\text{measure}}}\right)$$

$20\log (d_{limit}/d_{measure})=20\log (3/1)=9.5$ dB.

FSlimit: Harmonic at 3m Peak and Average limit.

FSmax: Harmonic at 1m Peak and Average Maximum value.

dlimit: Harmonic at 3m test distance.

dmeasure: Harmonic Actual test distance.

5.2 TEST PROCEDURE

a. The measuring distance of 3 m shall be used for measurements. The EUT was placed on the top of a rotating table 0.8 meter above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.(below 1GHz)
b. The measuring distance of 3 m or 1m shall be used for measurements. The EUT was placed on the top of a rotating table 1.5 meter above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.(above 1GHz)
c. The height of the equipment or of the substitution antenna shall be 0.8m or 1.5m; the height of the test antenna shall vary between 1 m to 4 m. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights find the maximum reading (used Bore sight function).
e. The receiver system was set to peak and average detect function and specified bandwidth with maximum hold mode when the test frequency is above 1 GHz.
f. The initial step in collecting radiated emission data is a receiver peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak detector mode re-measured.
g. All readings are Peak unless otherwise stated QP in column of Note. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn‘t perform. (below 1 GHz)
h. All readings are Peak Mode value unless otherwise stated AVG in column of Note. If the Peak Mode Measured value compliance with the Peak Limits and lower than AVG Limits, the EUT shall be deemed to meet both Peak & AVG Limits and then only Peak Mode was measured, but AVG Mode didn‘t perform. (above 1 GHz)
i. For the actual test configuration, please refer to the related Item –EUT Test Photos.

The following table is the setting of the receiver:

Spectrum Parameters	Setting
Start ~ Stop Frequency	9 kHz~150 kHz for RBW 200 Hz
Start ~ Stop Frequency	0.15 MHz~30 MHz for RBW 9 kHz
Start ~ Stop Frequency	30 MHz~1000 MHz for RBW 100 kHz

Spectrum Parameters	Setting
Start Frequency	1000 MHz
Stop Frequency	10th carrier harmonic or 40 GHz, whichever is lower
RBW / VBW (Emission in restricted band)	1 MHz / 3 MHz for PK value 1 MHz / 1/T Hz for AVG value

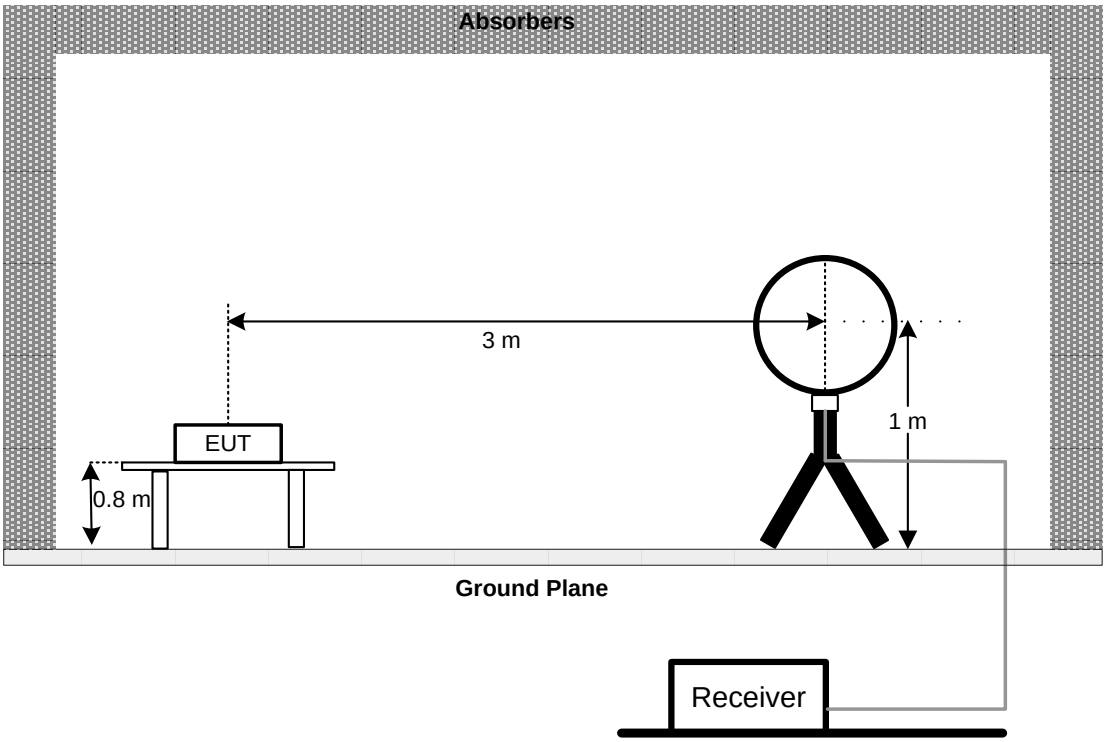
Receiver Parameters	Setting
Start ~ Stop Frequency	9 kHz~90 kHz for PK/AVG detector
Start ~ Stop Frequency	90 kHz~110 kHz for QP detector
Start ~ Stop Frequency	110 kHz~490 kHz for PK/AVG detector
Start ~ Stop Frequency	490 kHz~30 MHz for QP detector
Start ~ Stop Frequency	30 MHz~1000 MHz for QP detector
Start ~ Stop Frequency	1 GHz~40 GHz for PK/AVG detector

5.3 DEVIATION FROM TEST STANDARD

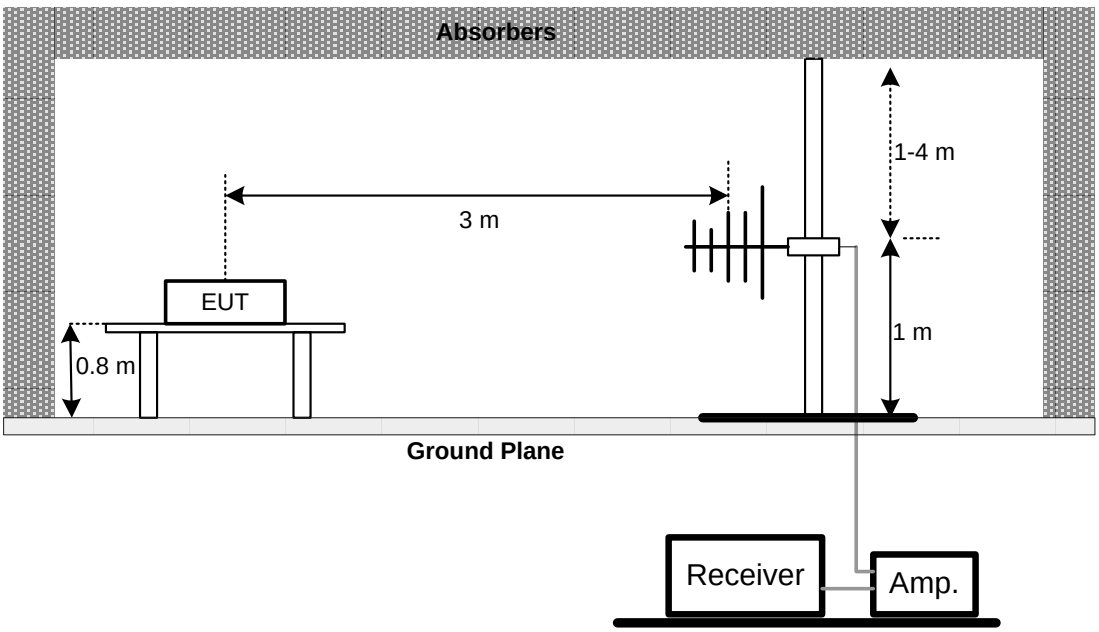
No deviation.

5.4 TEST SETUP

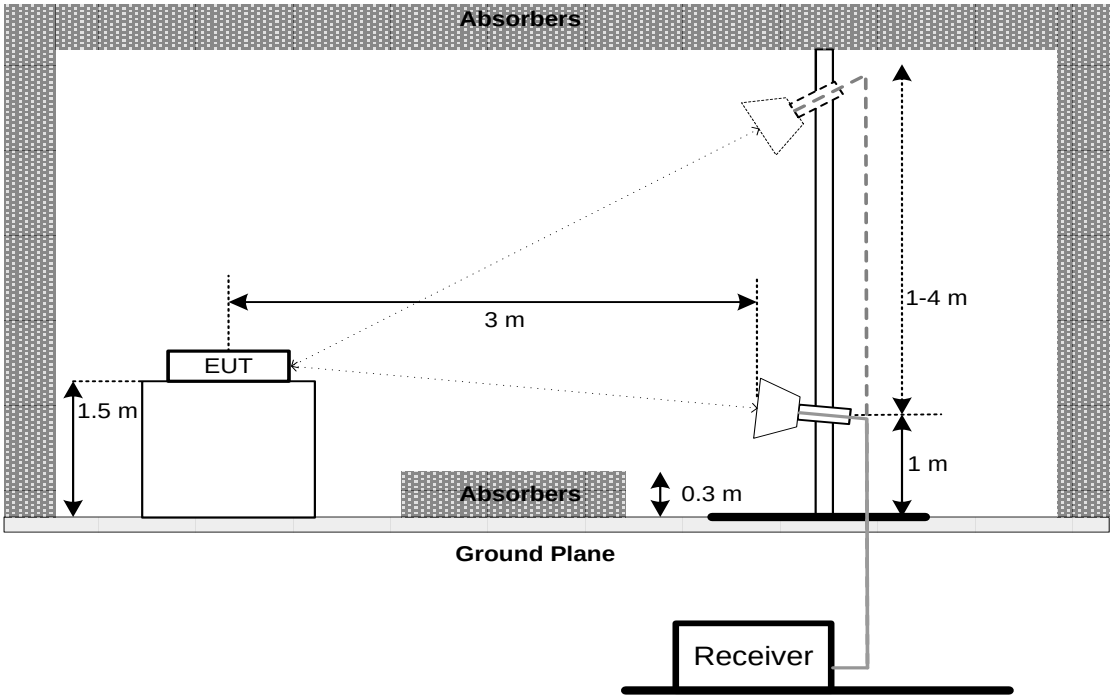
9 kHz to 30 MHz



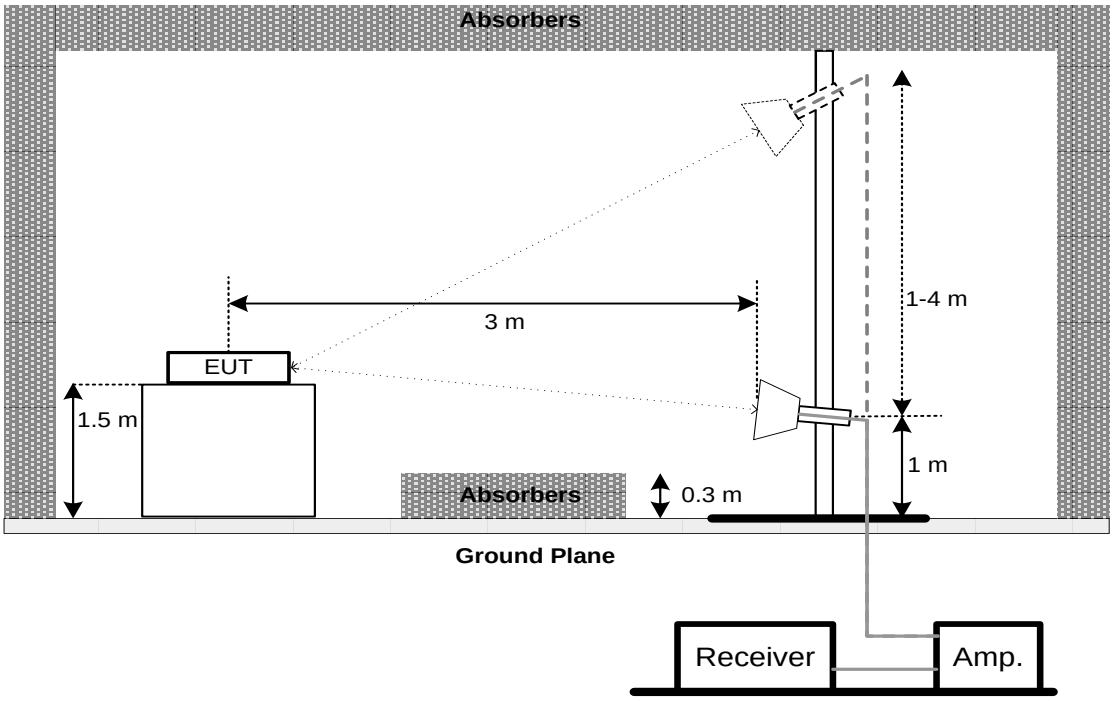
30 MHz to 1 GHz



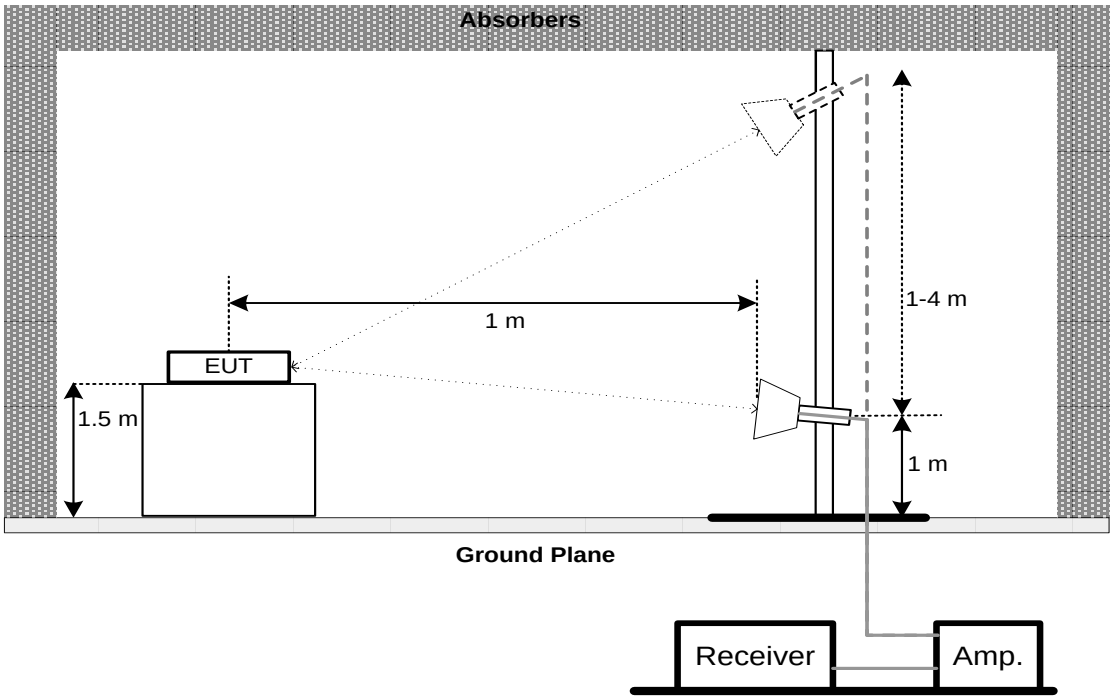
Above 1 GHz
Band edge



Harmonic (1 GHz to 18 GHz)



Harmonic (18 GHz to 40 GHz)



5.5 EUT OPERATION CONDITIONS

The EUT tested system was configured as the statements of 3.5 unless otherwise a special operating condition is specified in the follows during the testing.

5.6 TEST RESULTS - 9 KHZ TO 30 MHZ

Please refer to the APPENDIX B.

Remark:

(1) Distance extrapolation factor = 40 log (specific distance / test distance) (dB).
(2) Limit line = specific limits (dBuV) + distance extrapolation factor.

5.7 TEST RESULTS - 30 MHZ TO 1000 MHZ

Please refer to the APPENDIX C.

5.8 TEST RESULTS - ABOVE 1000 MHZ

Please refer to the APPENDIX D.

Remark:

(1) No limit: This is fundamental signal, the judgment is not applicable.
For fundamental signal judgment was referred to Peak output test.

6. BANDWIDTH

6.1 LIMIT

Section	Test Item	Limit	Frequency Range (MHz)
FCC 15.407(a)	26 dB Bandwidth	Maximum 320 MHz	5925-7125

6.2 TEST PROCEDURE

a. The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram below.

b. Spectrum Setting:

For 26 dB Bandwidth:

Spectrum Parameter	Setting
Span Frequency	> 26 dB Bandwidth
RBW	Appromiximately 1% of the emission bandwidth
VBW	> RBW
Detector	Peak
Trace	Max Hold
Sweep Time	Auto

For 99% Occupied Bandwidth:

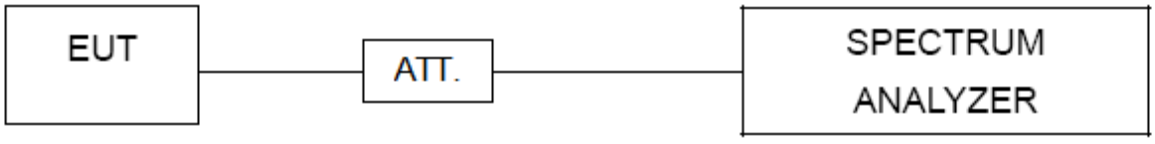
Spectrum Parameter	Setting
Span Frequency	1.5 times to 5 times the OBW
RBW	1% to 5% of the OBW
VBW	≥ 3*RBW
Detector	Peak
Trace	Max Hold
Sweep Time	Auto

c. Measured the spectrum width with power higher than 26 dB below carrier.

6.3 DEVIATION FROM STANDARD

No deviation.

6.4 TEST SETUP



6.5 EUT OPERATION CONDITIONS

The EUT was programmed to be in continuously transmitting mode.

6.6 TEST RESULTS

Please refer to the APPENDIX E.

7. MAXIMUM E.I.R.P.

7.1 LIMIT

Section	Test Item	Limit	Frequency Range (MHz)
FCC 15.407(a)	Maximum e.i.r.p.	Standard power access point and fixed client device 36 dBm	5925-6425 6525-6875
		Indoor access point 30 dBm	
		Subordinate device operating under the control of an indoor access point 30 dBm	
		Client devices operating under the control of a standard power access point 30 dBm	
		Client devices operating under the control of an indoor access point 24 dBm	
		Indoor access point 30 dBm	6425-6525 6875-7125
		Subordinate device operating under the control of an indoor access point 30 dBm	
		Client devices operating under the control of an indoor access point 24 dBm	

Note:

1) For standard power access point and fixed client device, the maximum e.i.r.p. for a device not enclosed by walls and a ceiling, measured at any elevation angle greater than 30 degrees above the horizon, shall not exceed 21 dBm.
2) For client devices operating under the control of a standard-power access point, the maximum power limits shall remain at least 6 dB below the power levels authorized for the associated standard-power access point.

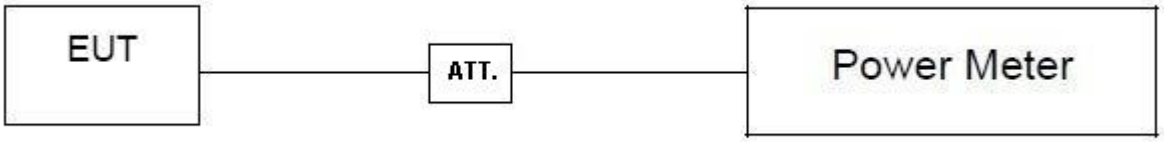
7.2 TEST PROCEDURE

a. The EUT was directly connected to the power meter and antenna output port as show in the block diagram below.
b. Test test was performed in accordance with method of FCC KDB 789033 D02 General UNII Test Procedures New Rules v02r01.

7.3 DEVIATION FROM STANDARD

No deviation.

7.4 TEST SETUP



7.5 EUT OPERATION CONDITIONS

The EUT was programmed to be in continuously transmitting mode.

7.6 TEST RESULTS

Please refer to the APPENDIX F.

8. MAXIMUM POWER SPECTRAL DENSITY (E.I.R.P.)

8.1 LIMIT

Section	Test Item	Limit	Frequency Range (MHz)
FCC 15.407(a)	Maximum Power Spectral Density (e.i.r.p.)	Standard power access point and fixed client device 23 dBm/MHz	5925-6425 6525-6875
		Indoor access point 5 dBm/MHz	
		Subordinate device operating under the control of an indoor access point 5 dBm/MHz	
		Client devices operating under the control of a standard power access point 17 dBm/MHz	
		Client devices operating under the control of an indoor access point -1 dBm/MHz	
		Indoor access point 5 dBm/MHz	6425-6525 6875-7125
		Subordinate device operating under the control of an indoor access point 5 dBm/MHz	
		Client devices operating under the control of an indoor access point -1 dBm/MHz	

Note:
For outdoor devices, the maximum e.i.r.p. at any elevation angle above 30 degrees as measured from the horizon must not exceed 125 mW (21 dBm).

8.2 TEST PROCEDURE

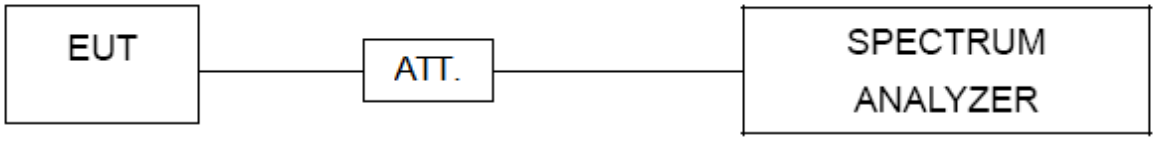
a. The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram below.
b. Spectrum Setting:

Spectrum Parameter	Setting
Span Frequency	Encompass the entire emissions bandwidth (EBW) of the signal
RBW	1 MHz
VBW	3 MHz
Detector	RMS
Trace average	100 trace
Sweep Time	Auto

8.3 DEVIATION FROM STANDARD

No deviation.

8.4 TEST SETUP



8.5 EUT OPERATION CONDITIONS

The EUT was programmed to be in continuously transmitting mode.

8.6 TEST RESULTS

Please refer to the APPENDIX G.

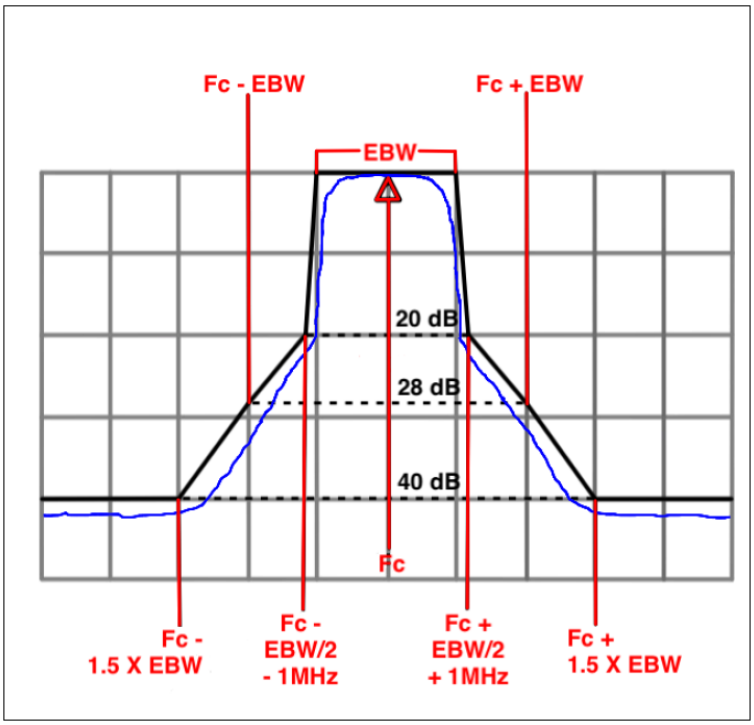
9. IN-BAND EMISSION (MASK)

9.1 LIMIT

Section	Test Item	Frequency Range (MHz)	(X) dBc **(Note 1)**
FCC 15.407(b)	In-Band Emission (Mask)	At 1MHz outside of channel edge	20
		At one channel bandwidth from the channel center **(Note 2)**	28
		At one- and one-half times the channel bandwidth away from channel center **(Note 3)**	40
		More than one- and one-half times the channel bandwidth	40

Note:

1. The power spectral density must be suppressed by “X” dB.
2. 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.
3. 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.



9.2 TEST PROCEDURE

a. The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram below.

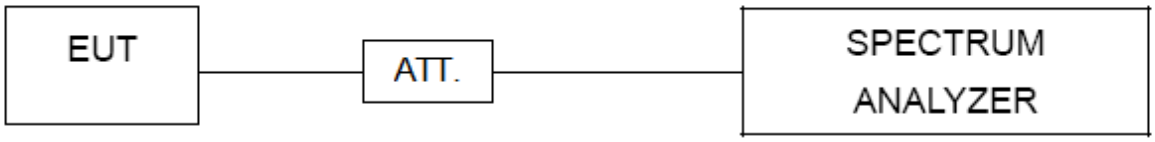
b. Spectrum Setting:

Spectrum Parameter	Setting
Span Frequency	> 26 dB Bandwidth
RBW	Appromiximately 1% of the emission bandwidth
VBW	≥3xRBW
Detector	RMS
Trace average	100 trace
Sweep Time	Auto

9.3 DEVIATION FROM STANDARD

No deviation.

9.4 TEST SETUP



9.5 EUT OPERATION CONDITIONS

The EUT was programmed to be in continuously transmitting mode.

9.6 TEST RESULTS

Please refer to the APPENDIX H.

10. CONTENTION BASED PROTOCOL

10.1 LIMIT

Indoor access points, subordinate devices, all client devices (except for Fixed clients), and VLP devices operating in the 5.925-7.125 GHz band (herein referred to as unlicensed devices) must use a contention-based protocol to avoid co-channel interference with incumbent devices sharing the band. To ensure incumbent co-channel operations are technology-agnostic, unlicensed devices are required to detect co-channel radio frequency energy (energy detection) and avoid simultaneous transmission. Unlicensed low-power indoor devices must detect co-channel radio frequency power that is at least -62 dBm or lower. Upon detection of energy in the band, unlicensed low power indoor devices must vacate the channel and stay off the channel as long as detected radio frequency power is equal to or greater than the threshold (-62 dBm). The -62 dBm (or lower) threshold is referenced to a 0 dBi antenna gain. (See note)
To ensure incumbent operations are reliably detected in the band, low power indoor devices must detect RF energy throughout their intended operating channel. For example, an 802.11 device that plans to transmit a 40 MHz- wide signal (on a primary 20 MHz channel and a secondary 20 MHz channel) must detect energy throughout the entire 40 MHz channel. Additionally, low-power indoor devices must detect co-channel energy with 90% or greater certainty.

10.2 TEST PROCEDURE

Number of times detection threshold:

If	Number of Tests	Placement of Incumbent Transmission
$BW_{EUT} \leq BW_{Inc}$	Once	Tune incumbent and EUT transmissions ($f_{c1}=f_{c2}$)
$BW_{Inc} < BW_{EUT} \leq 2BW_{Inc}$	Once	Incumbent transmission is contained within BW_{EUT}
$2BW_{Inc} < BW_{EUT} \leq 4BW_{Inc}$	Twice. Incumbent transmission is contained within BW_{EUT}	Incumbent transmission is located as closely as possible to the lower edge and upper edge, respectively, of the EUT channel
$BW_{EUT} > 4BW_{Inc}$	Three times	Incumbent transmission is located as closely as possible to the lower edge of the EUT channel, in the middle of EUT channel, and as closely as possible to the upper edge of the EUT channel

Where:
BW_{EUT}: Transmission bandwidth of EUT signal.
BW_{Inc}: Transmission bandwidth of the simulated incumbent signal (10 MHz wide AWGN signal).
f_{c1}: Center frequency of EUT transmission.
f_{c2}: Center frequency of simulated incumbent signal.

For Conducted measurement:

a. Configure the EUT to transmit with a constant duty cycle.
b. Set the operating parameters of the EUT including power level, operating frequency, modulation and bandwidth.
c. Set the signal analyzer center frequency to the nominal EUT channel center frequency. The span range of the signal analyzer shall be between two times and five times the OBW of the EUT. Connect the output port of the EUT to the signal analyzer 2. Ensure that the attenuator 2 provides enough attenuation to not overload the signal analyzer 2 receiver.
d. Monitoring the signal analyzer 2, verify the EUT is operating and transmitting with the parameters set at step b.
e. Using an AWGN signal source, generate (but do not transmit, i.e., RF OFF) a 10 MHz-wide AWGN signal. Use Table 1 to determine the center frequency of the 10 MHz AWGN signal relative to the EUT's channel bandwidth and center frequency.
f. Set the AWGN signal power to an extremely low level (more than 20 dB below the -62 dBm threshold). Connect the AWGN signal source, via a 3-dB splitter, to the signal analyzer 1 and the EUT.
g. Transmit the AWGN signal (RF ON) and verify its characteristics on the signal analyzer 1.
h. Monitor the signal analyzer 2 to verify if the AWGN signal has been detected and the EUT has ceased transmission. If the EUT continues to transmit, then incrementally increase the AWGN signal power level until the EUT stops transmitting.
i. (Including all losses in the RF paths) Determine and record the AWGN signal power level (at the EUT's antenna port) at which the EUT ceased transmission. Repeat the procedure at least 10 times to verify the EUT can detect an AWGN signal with 90% (or better) level of certainty.
j. Refer to Table 1 to determine number of times the detection threshold testing needs to be repeated. If testing is required more than once, then go back to step e, choose a different center frequency for the AWGN signal and repeat the process.

For Radiated measurement:

a. Using the AWGN signal source, generate (but do not transmit, i.e., RF OFF) a 10 MHz-wide AWGN signal. Use Table 1 to determine the center frequency of the 10 MHz AWGN signal relative to the EUT's channel bandwidth and center frequency.
b. Connect the AWGN signal source to antenna 1 and transmit the signal (RF ON).
c. Using signal analyzer 1 and antenna 2, measure the AWGN signal power level. Align antenna 2 and antenna 1 to maximize emission.
d. Using equation $P_2 = P_{meas} + L - G_2$, correct the measured power P_{meas} by the gain of antenna 2, G_2 and all cable losses and attenuations L to obtain the AWGN signal power level at antenna 2, P_2.
e. Set the corrected power P_2 to an extremely low level (more than 20 dB below the -62 dBm threshold).
f. Place the EUT exactly where antenna 2 was. Configure the EUT to transmit a constant duty cycle.
g. Set the operating parameters of the EUT including power level, operating frequency, modulation and bandwidth.
h. Set the signal analyzer 1 center frequency to the nominal EUT channel center frequency. The span range of the signal analyzer shall be between two times and five times the OBW of EUT.
i. Monitor the signal analyzer 1 to verify if AWGN signal has been detected and EUT has ceased transmission. If the EUT continues to transmit, then incrementally increase the AWGN signal power level until the EUT stops transmitting.
j. Determine and record the AWGN signal power level at which the EUT ceased transmission. Repeat the procedure at least 10 times to verify the EUT can detect the AWGN signal with 90% (or better) level of certainty.
k. Refer to Table 1 to determine number of times the detection threshold testing needs to be repeated. If testing is required more than once, then go back to step a, choose a different center frequency for the AWGN signal and repeat the process.

10.3 DEVIATION FROM STANDARD

No deviation.

10.4 TEST SETUP

For Conducted measurement:

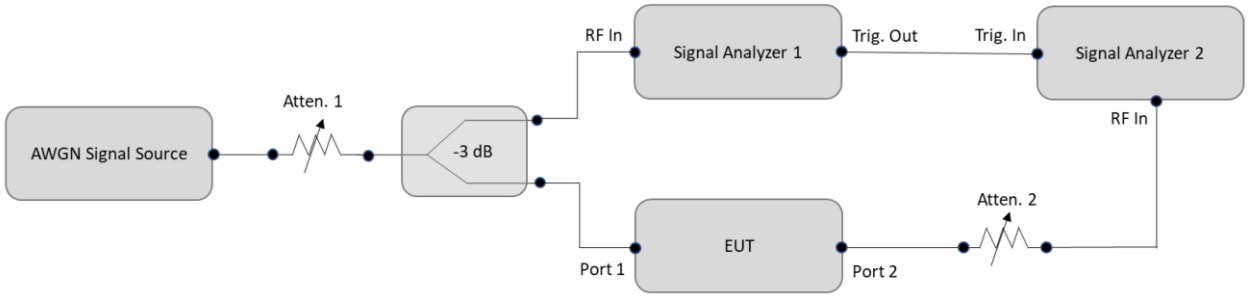


Figure 2. Contention-based protocol test setup, conducted method Step-by-Step Procedure, Conducted Setup

For Radiated measurement:

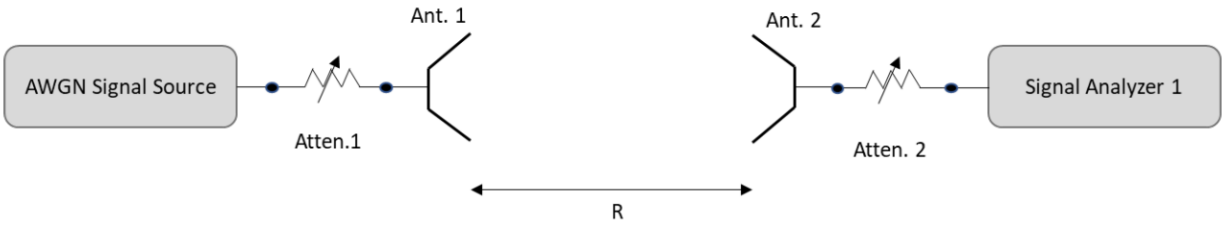


Figure 3. Contention-based protocol test setup, radiated method, power measurement

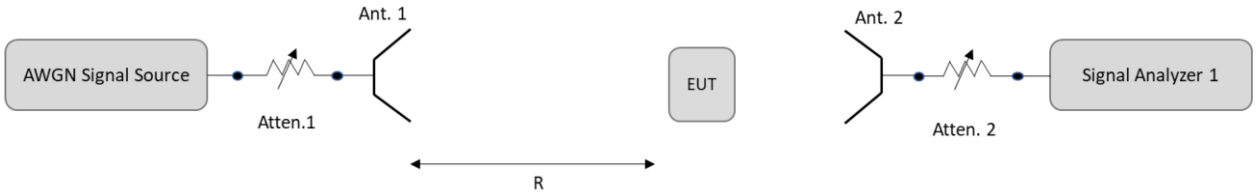


Figure 4. Contention-based protocol test setup, radiated method, detection threshold measurement

10.5 EUT OPERATION CONDITIONS

The EUT was Configured to be in normally transmitting mode with a constant duty cycle.

10.6 TEST RESULTS

Please refer to the APPENDIX I.

11. FREQUENCY STABILITY

11.1 LIMIT

Section	Test Item	Limit	Frequency Range (MHz)
FCC 15.407(g)	Frequency Stability	An emission is maintained within the band of operation under all conditions of normal operation as specified in the users manual.	5925-6425
			6425-6525
			6525-6875
			6875-7125

11.2 TEST PROCEDURE

a. The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram below.

b. Spectrum Setting:

Spectrum Parameter	Setting
Span Frequency	Entire absence of modulation emissions bandwidth
RBW	10 kHz
VBW	10 kHz
Detector	Peak
Trace	Max Hold
Sweep Time	Auto

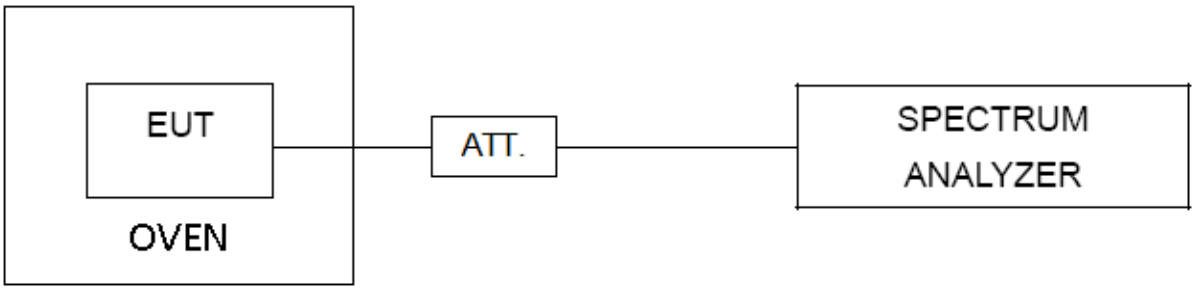
c. The test extreme voltage is to change the primary supply voltage from 85 to 115 percent of the nominal value.

d. User manual temperature is -40°C~60°C.

11.3 DEVIATION FROM STANDARD

No deviation.

11.4 TEST SETUP



11.5 EUT OPERATION CONDITIONS

The EUT was programmed to be in continuously transmitting mode.

11.6 TEST RESULTS

Please refer to the APPENDIX J.

12. MEASUREMENT INSTRUMENTS LIST

AC Power Line Conducted Emissions					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	EMI TEST RECEIVER	R&S	ESCI	100382	Dec. 22, 2024
2	TWO-LINE V-NETWORK	R&S	ENV216	101447	Dec. 22, 2024
3	Measurement Software	Farad	EZ-EMC Ver.NB-03A1-01	N/A	N/A
4	Cable	N/A	SFT205-NMNM-9M -001	9M	Nov. 27, 2024
5	643 Shield Room	ETS	6*4*3	N/A	N/A

Radiated Emissions - 9 kHz to 30 MHz					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Active Loop Antenna	Schwarzbeck	FMZB 1513-60B	1513-60 B-034	Mar. 30, 2025
2	MXE EMI Receiver	Keysight	N9038A	MY56400091	Dec. 22, 2024
3	Cable	N/A	RW2350-3.8A-NMB M-1.5M	N/A	Jun. 09, 2025
4	Cable	N/A	LMR400-NMNM-8 M	N/A	Sep. 09, 2025
5	Measurement Software	Farad	EZ-EMC Ver.NB-03A1-01	N/A	N/A
6	966 Chamber room	ETS	9*6*6	N/A	May 16, 2025

Radiated Emissions - 30 MHz to 1 GHz					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Trilog-Broadband Antenna	Schwarzbeck	VULB 9168	1462	Dec. 13, 2024
2	Attenuator	EMC INSTRUMENT	EMCI-N-6-06	AT-06009	Dec. 13, 2024
3	Preamplifier	EMC INSTRUMENT	EMC001330	980998	Nov. 17, 2024
4	Cable	RegalWay	LMR400-NMNM-12 .5m	N/A	Jun. 06, 2025
5	Cable	RegalWay	LMR400-NMNM-3 m	N/A	Jun. 06, 2025
6	Cable	RegalWay	LMR400-NMNM-0. 5m	N/A	Jun. 06, 2025
7	Receiver	Agilent	N9038A	MY52130039	Dec. 22, 2024
8	Positioning Controller	MF	MF-7802	N/A	N/A
9	Measurement Software	Farad	EZ-EMC Ver.NB-03A1-01	N/A	N/A
10	966 Chamber room	CM	9*6*6	N/A	May 16, 2025

Radiated Emissions - 1 GHz to 18GHz					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Multi-Device Controller	ETS-Lindgren	N/A	N/A	N/A
2	Measurement Software	Farad	EZ-EMC Ver.NB-03A1-01	N/A	N/A
3	MXA Signal Analyzer	KEYSIGHT	N9020B	MY63380204	Nov. 17, 2024
4	Cable	RegalWay	RWLP50-4.0A-SMSM-1.3M	N/A	Jan. 09, 2025
5	Cable	RegalWay	RWLP50-2.6A-3.5M2.92MRA-3M	N/A	Jan. 09, 2025
6	Cable	RegalWay	RWLP50-4.0A-SMSM-9M	N/A	Jan. 09, 2025
7	966 Chamber room	ETS	RFD-100（SVSWR）	Q2179	Jan. 09, 2025
8	Preamplifier	EMC INSTRUMENT	EMC118A45SE	981001	May 31, 2025
9	Attenuator	Talent Microwave	TA10A2-S-18	N/A	N/A
10	Filter	COM-MW	ZHPF6-M8000 18000-1331	N/A	Nov. 17, 2024
11	Double Ridged Guide Antenna	ETS	3115	75846	Mar 20, 2025

Radiated Emissions - Above 18 GHz					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	MXA Signal Analyzer	KEYSIGHT	N9020B	MY63380204	Nov. 17, 2024
2	Low Noise Amplifier	CONNPHY	CLN-18G40G-4330-K	619413	Jul. 17, 2025
3	Cable	RegalWay	RWLP50-2.6A-2.92M2.92M-1.1M	N/A	Jul. 25, 2025
4	Cable	Tonscend	HF160-KMKM-3M	N/A	Jul. 25, 2025
5	Broad-Band Horn Antenna	Schwarzbeck	BBHA9170(3m)	9170-319	Jun.16, 2025
6	966 Chamber room	CM	9*6*6	N/A	May 19, 2025
7	Positioning Controller	MF	MF-7802	N/A	N/A
8	Measurement Software	Farad	EZ-EMC Ver.NB-03A1-01	N/A	N/A

Bandwidth (99%)					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	EXA Spectrum Analyzer	Agilent	N9010A	MY50520044	Dec. 22, 2024
2	Isolation attenuator	Z-Link	ASMA-16-18-2W	N/A	N/A
3	Cable	RegalWay	20210802 015	RWP50-402-SMSM-1M	N/A
4	Measurement Software	BTL	WIFI6E TestSystem	N/A	N/A

Frequency Stability					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	EXA Spectrum Analyzer	Agilent	N9010A	MY50520044	Dec. 22, 2024
2	Cable	RegalWay	20210802 016	RWP50-402-SMSM-1M	N/A
3	Measurement Software	BTL	WIFI6E TestSystem	N/A	N/A
4	Isolation attenuator	Z-Link	ASMA-16-18-2W	N/A	N/A
5	Desktop Constant Temperature Chamber	BELL	BTH-50C	20170306001	Jan. 19, 2025
6	AC power source	Preen	AFC-S-1250	F123080107	May 06, 2025

Maximum Output Power					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Peak Power Analyzer	Keysight	8990B	MY51000506	May 31, 2025
2	Wideband power sensor	Keysight	N1923A	MY58310004	May 31, 2025
3	Isolation attenuator	Z-Link	ASMA-10-18-2W	N/A	N/A

Bandwidth (26dB) & In-Band Emission (Mask)					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	EXA Spectrum Analyzer	Agilent	N9010A	MY50520044	Dec. 06, 2025
2	Isolation attenuator	Z-Link	ASMA-16-18-2W	N/A	N/A
3	Measurement Software	BTL	WIFI6E TestSystem	N/A	N/A

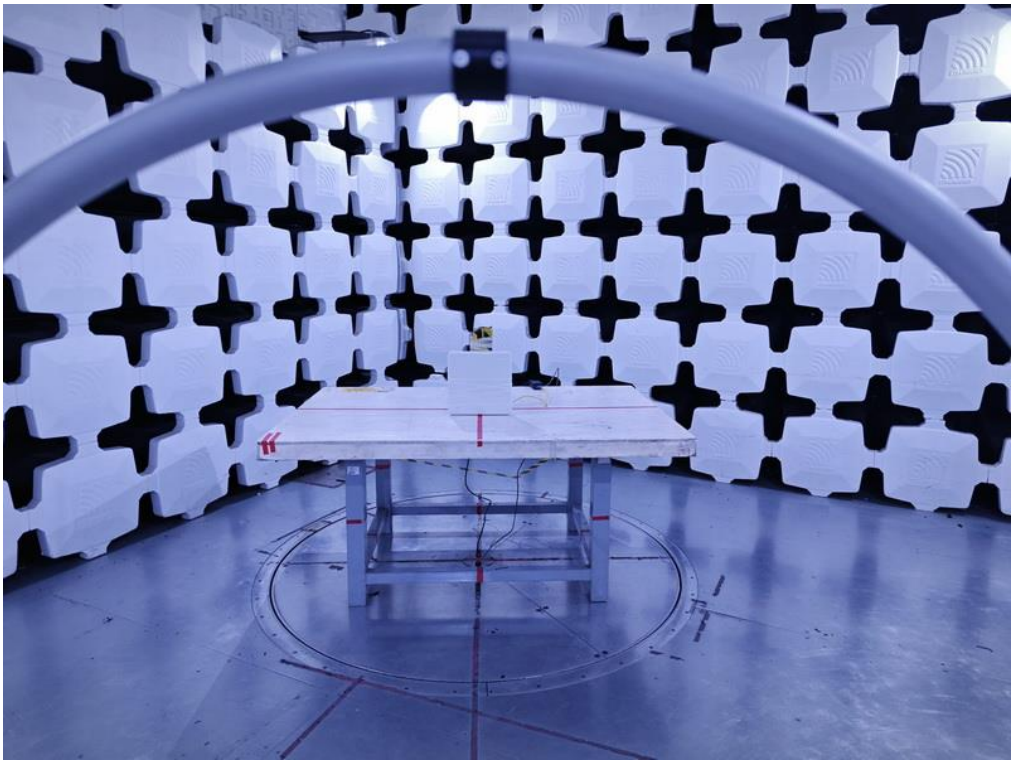
Remark: “N/A” denotes no model name, serial no. or calibration specified.
All calibration period of equipment list is one year.

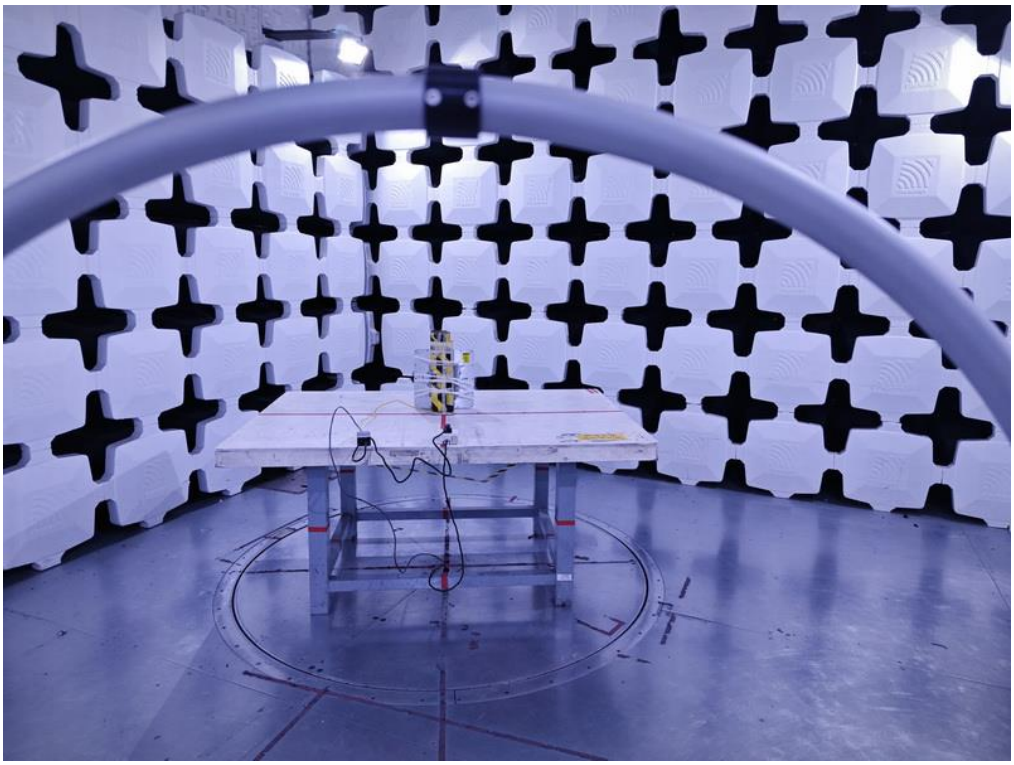
13. EUT TEST PHOTOS

AC Power Line Conducted Emissions Test Photos

Radiated Emissions Test Photos

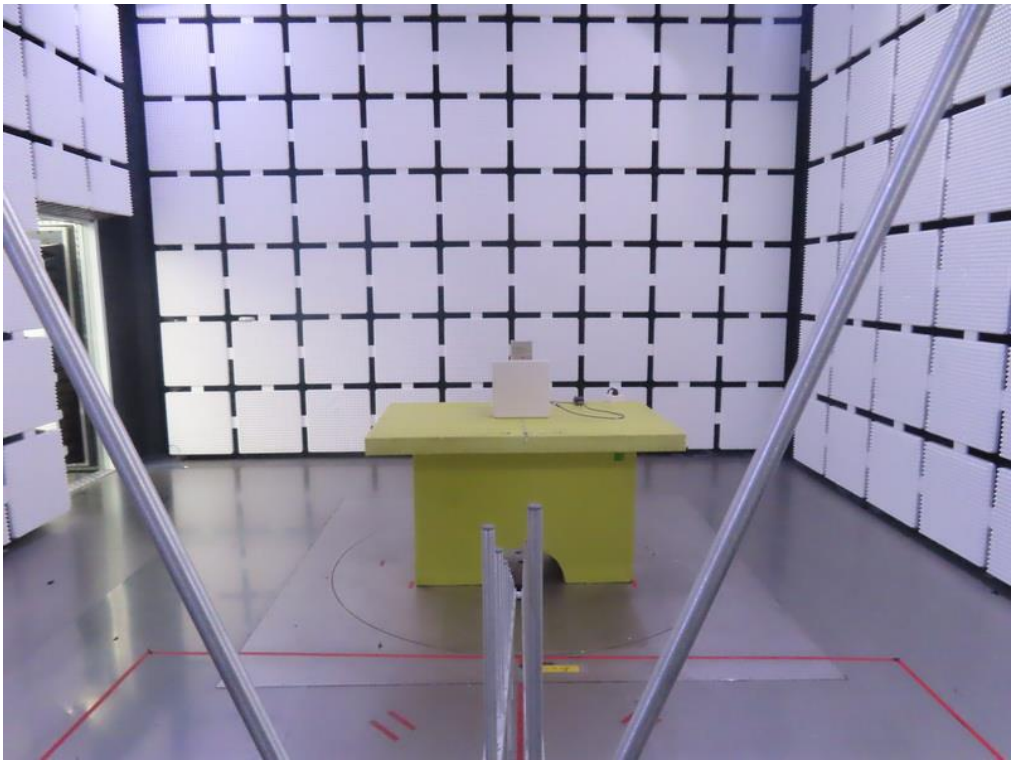
9 kHz to 30 MHz

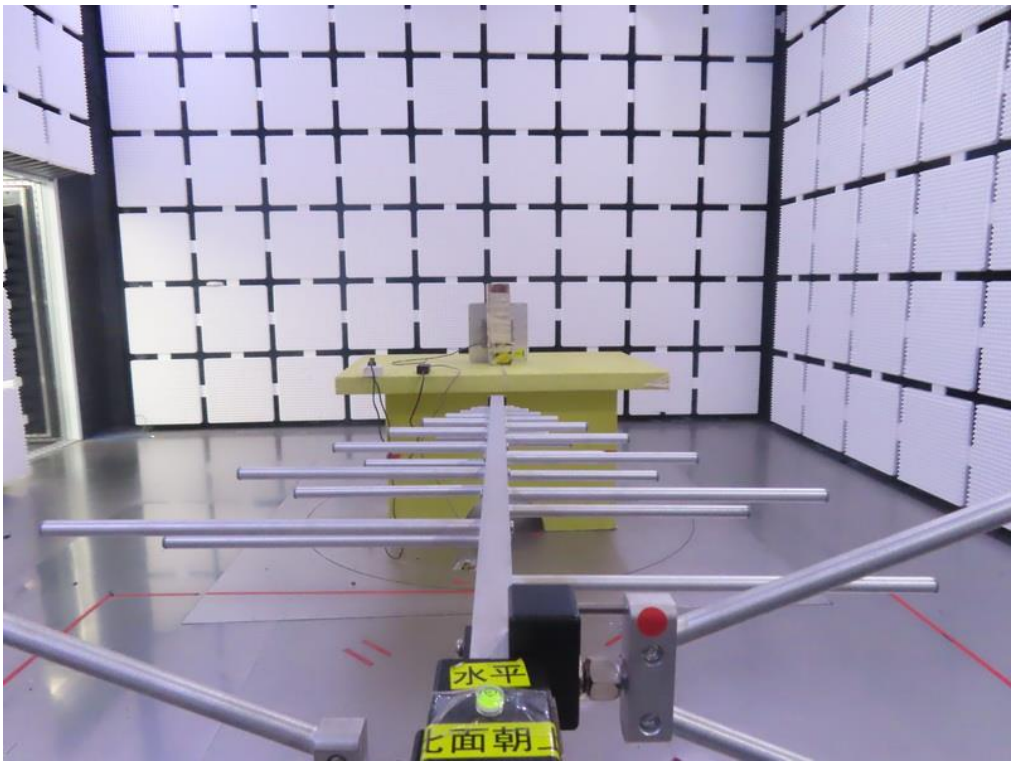




Radiated Emissions Test Photos

30 MHz to 1 GHz

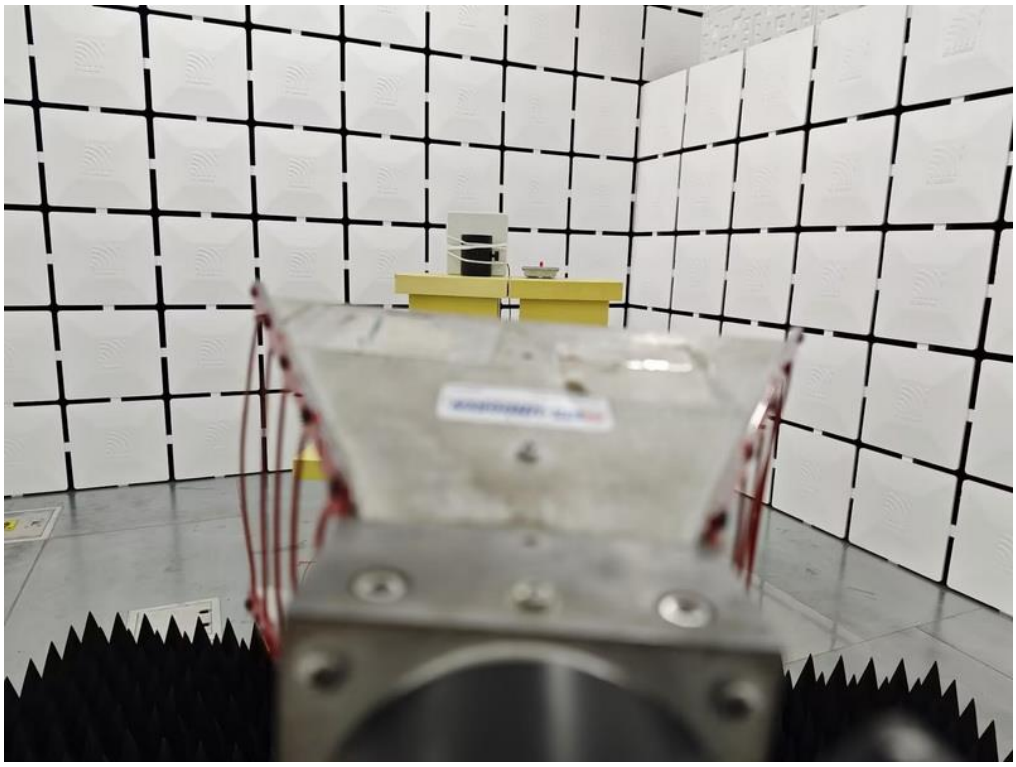


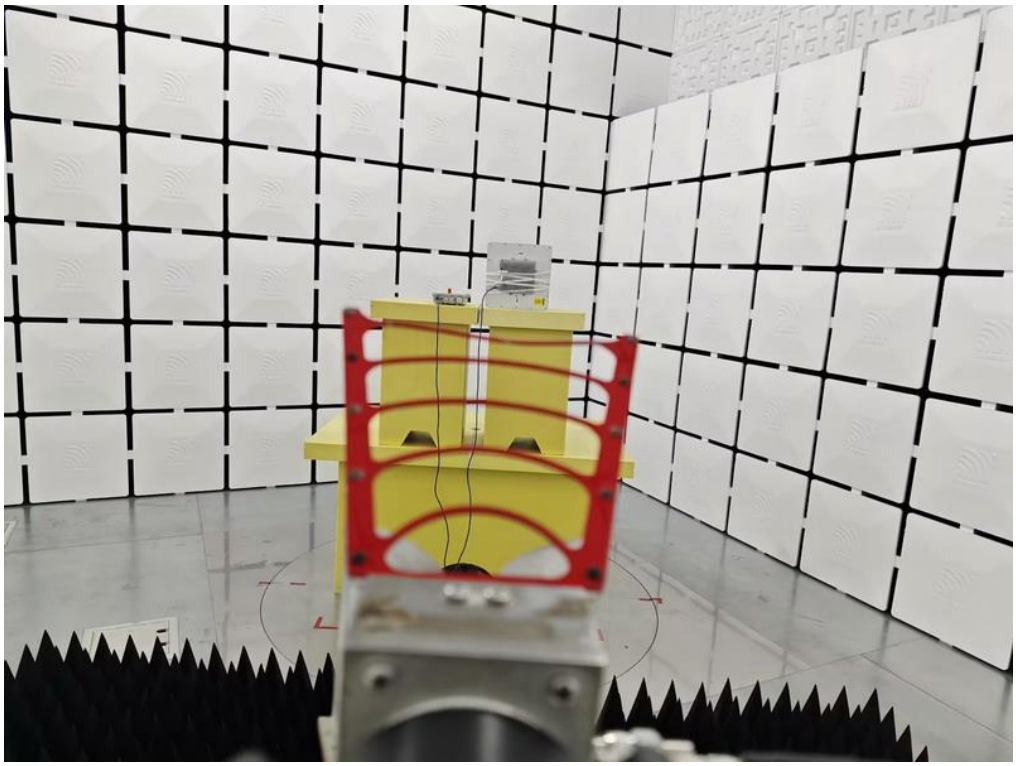


For Antenna Configuration 1

Radiated Emissions Test Photos

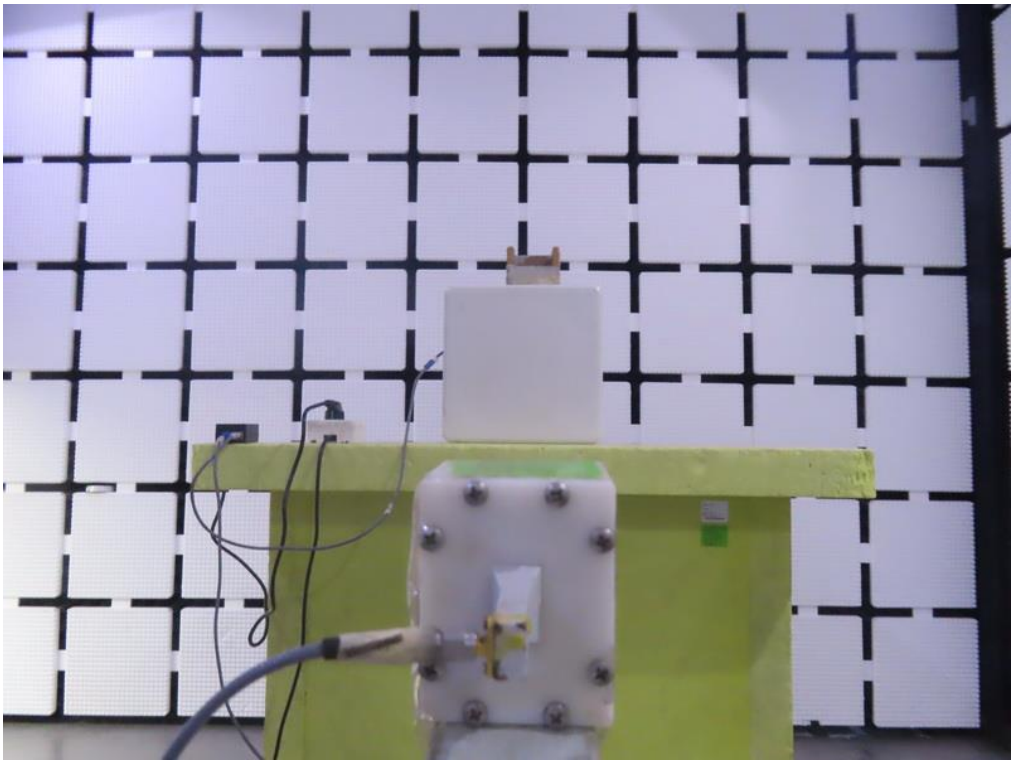
Band edge & Harmonic (1 GHz to 18 GHz)

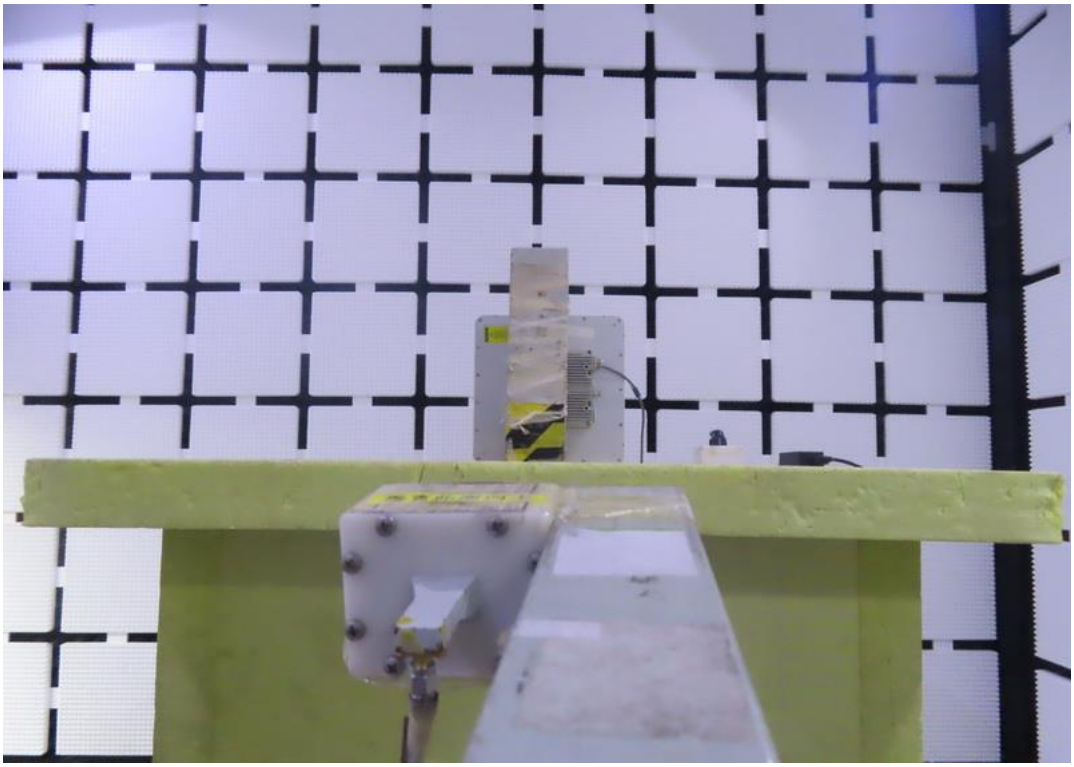




Radiated Emissions Test Photos

Harmonic (18 GHz to 40 GHz)

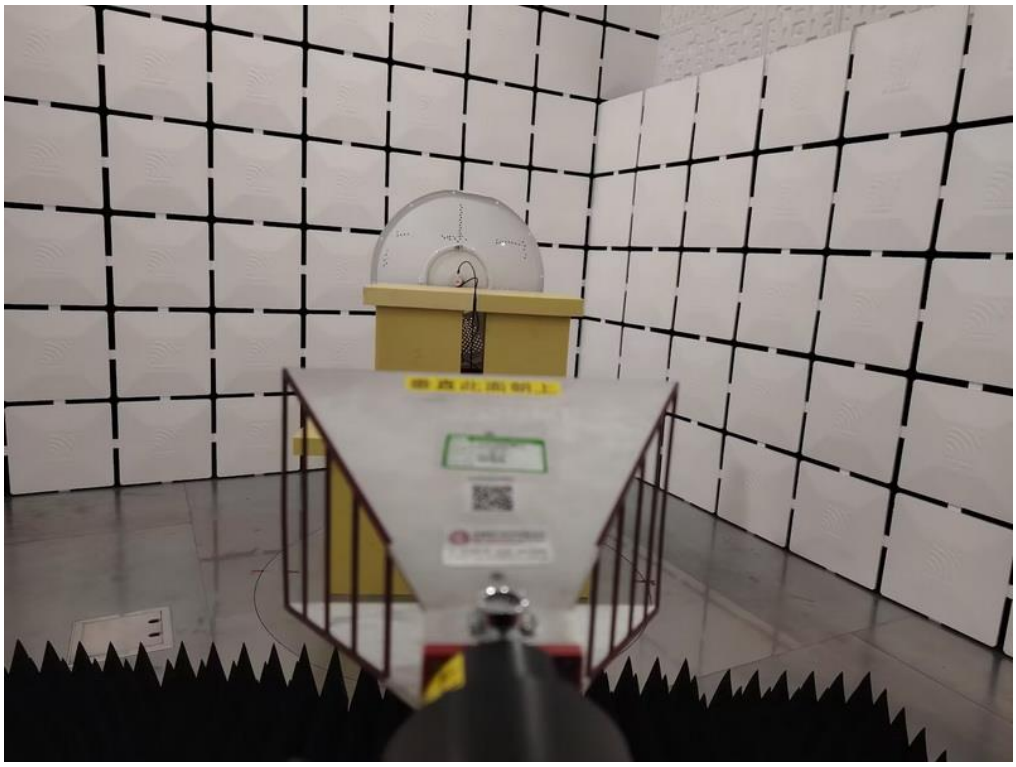


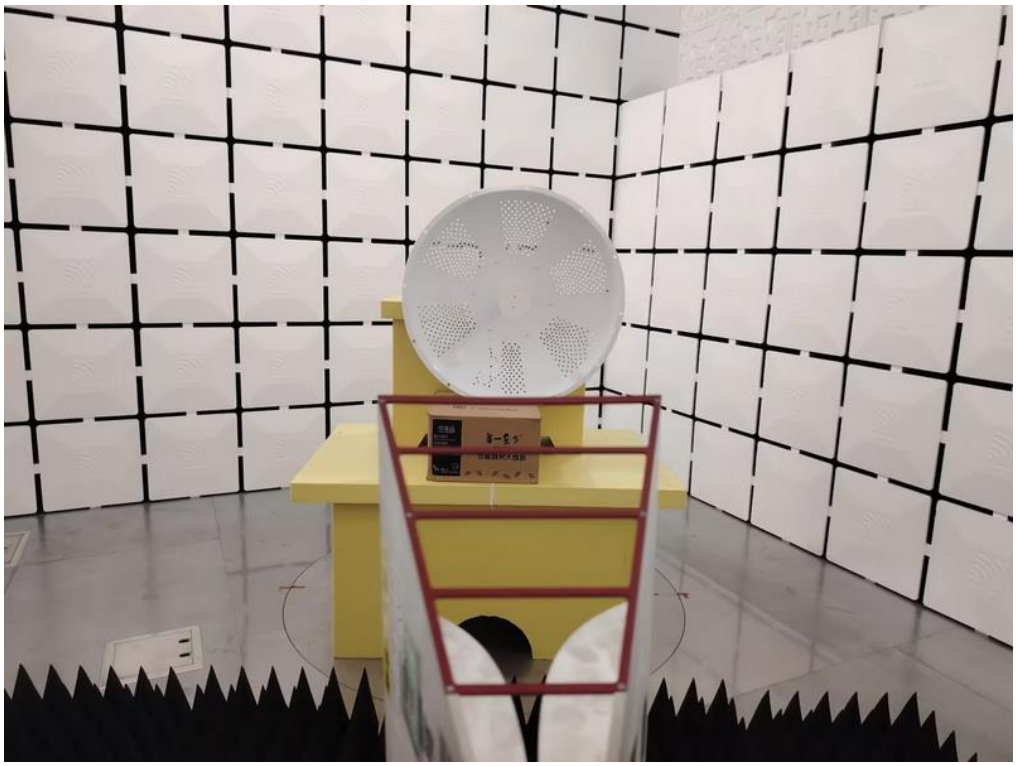


For Antenna Configuration 2

Radiated Emissions Test Photos

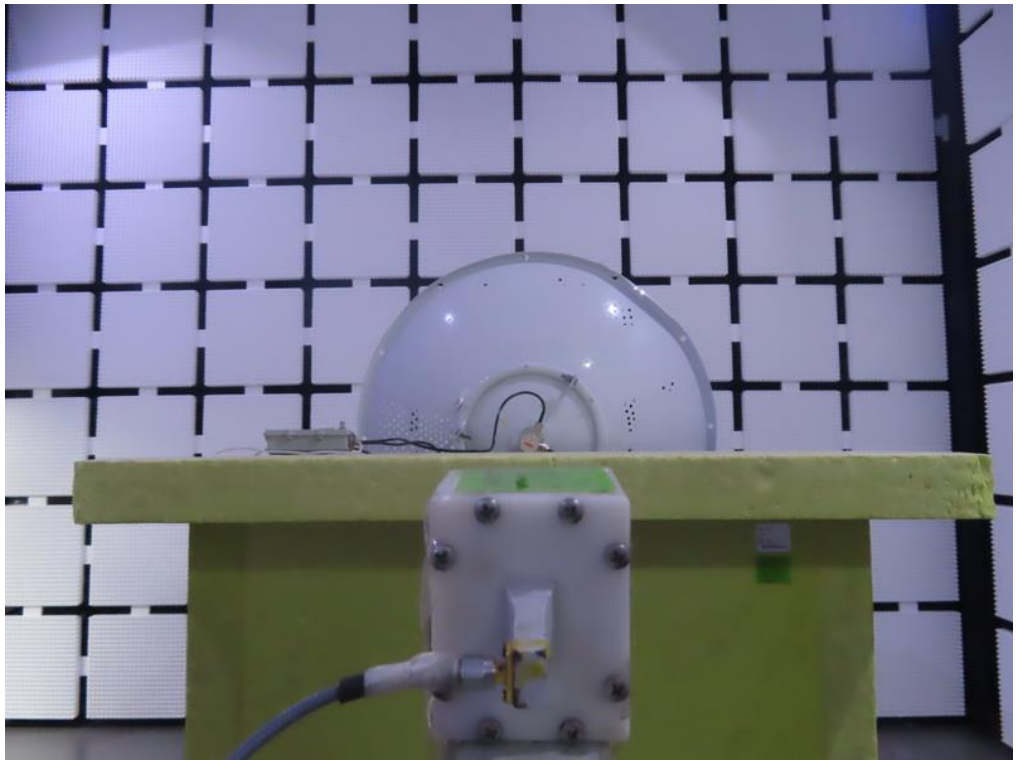
Band edge & Harmonic (1 GHz to 18 GHz)

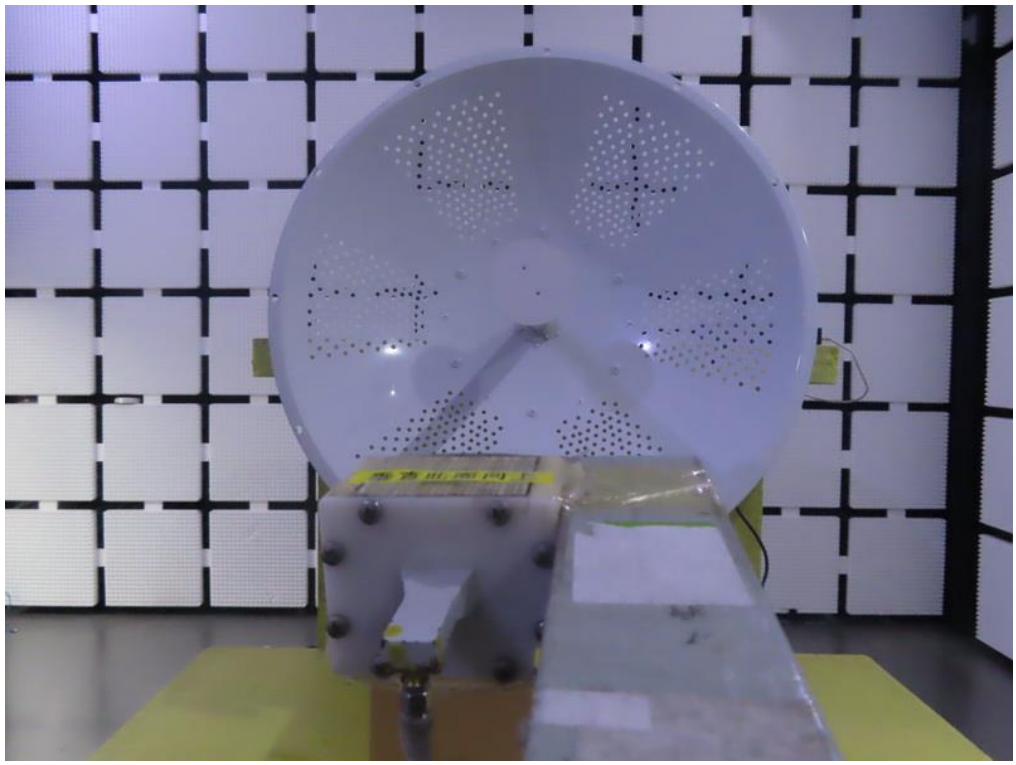




Radiated Emissions Test Photos

Harmonic (18 GHz to 40 GHz)

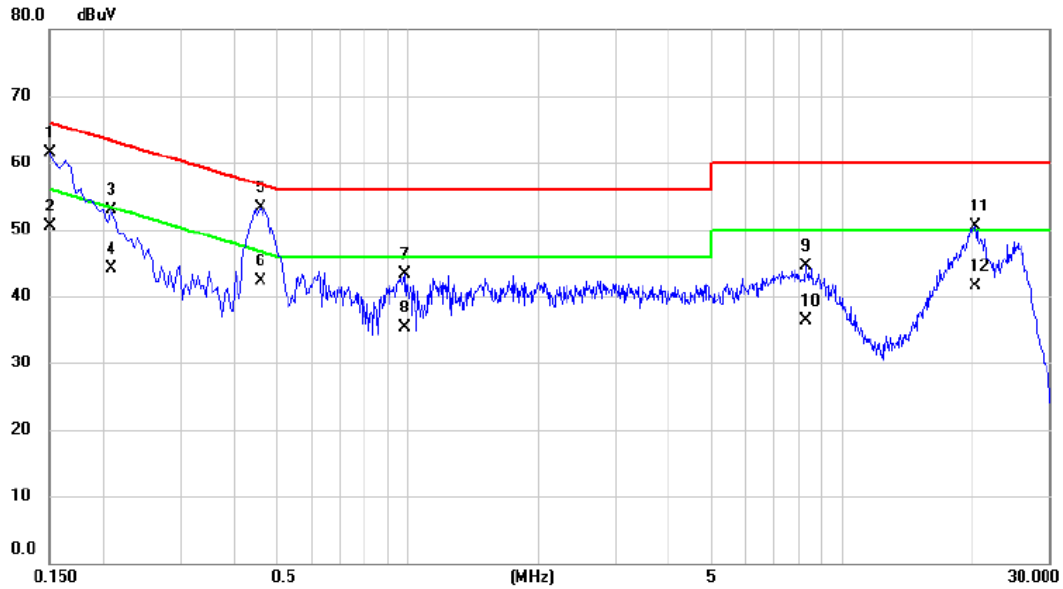




Conducted Test Photos

APPENDIX A - AC POWER LINE CONDUCTED EMISSIONS

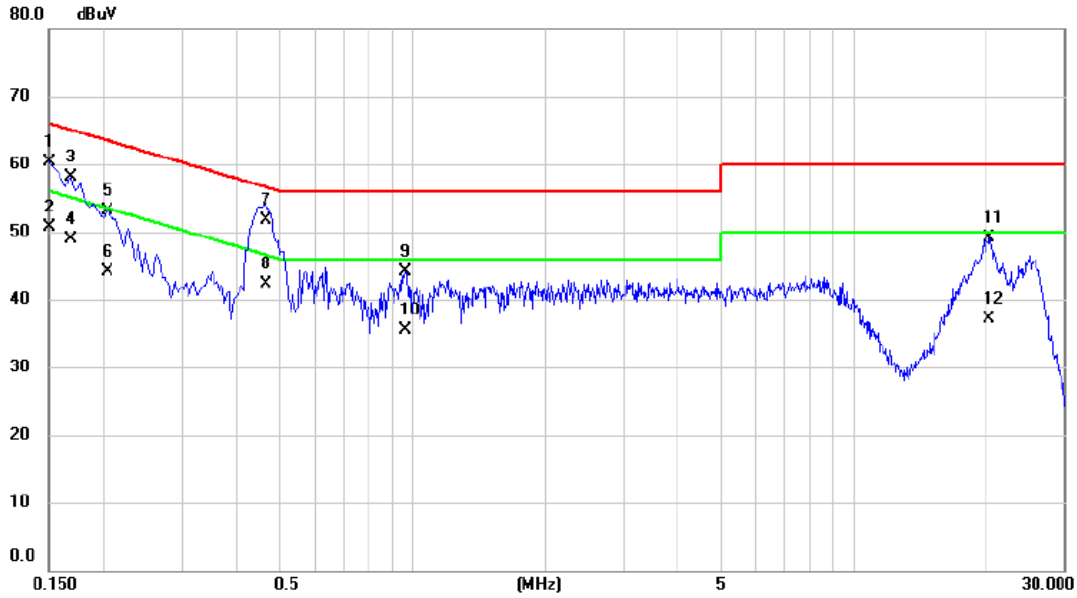
Test Mode	UNII-5_TX AX(HE160) Mode 6185 MHz	Phase	Line



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.1500	51.94	9.53	61.47	66.00	-4.53	QP	
2		0.1500	40.90	9.53	50.43	56.00	-5.57	AVG	
3		0.2085	43.29	9.56	52.85	63.26	-10.41	QP	
4		0.2085	34.50	9.56	44.06	53.26	-9.20	AVG	
5	*	0.4605	43.72	9.62	53.34	56.68	-3.34	QP	
6		0.4605	32.60	9.62	42.22	46.68	-4.46	AVG	
7		0.9825	33.62	9.65	43.27	56.00	-12.73	QP	
8		0.9825	25.60	9.65	35.25	46.00	-10.75	AVG	
9		8.2455	34.45	9.98	44.43	60.00	-15.57	QP	
10		8.2455	26.30	9.98	36.28	50.00	-13.72	AVG	
11		20.2380	40.43	10.15	50.58	60.00	-9.42	QP	
12		20.2380	31.40	10.15	41.55	50.00	-8.45	AVG	

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

Test Mode	UNII-5_TX AX(HE160) Mode 6185 MHz	Phase	Neutral

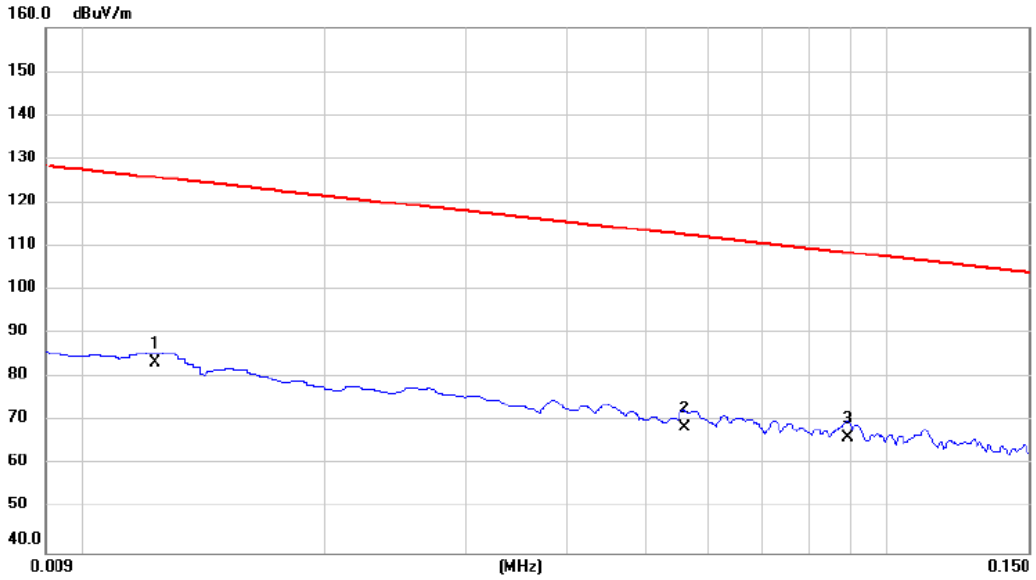


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.1500	50.67	9.57	60.24	66.00	-5.76	QP	
2		0.1500	41.20	9.57	50.77	56.00	-5.23	AVG	
3		0.1680	48.48	9.60	58.08	65.06	-6.98	QP	
4		0.1680	39.40	9.60	49.00	55.06	-6.06	AVG	
5		0.2040	43.51	9.60	53.11	63.45	-10.34	QP	
6		0.2040	34.50	9.60	44.10	53.45	-9.35	AVG	
7		0.4650	42.10	9.65	51.75	56.60	-4.85	QP	
8	*	0.4650	32.60	9.65	42.25	46.60	-4.35	AVG	
9		0.9645	34.47	9.67	44.14	56.00	-11.86	QP	
10		0.9645	25.90	9.67	35.57	46.00	-10.43	AVG	
11		20.2740	38.84	10.21	49.05	60.00	-10.95	QP	
12		20.2740	26.80	10.21	37.01	50.00	-12.99	AVG	

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

APPENDIX B - RADIATED EMISSION - 9 KHZ TO 30 MHZ

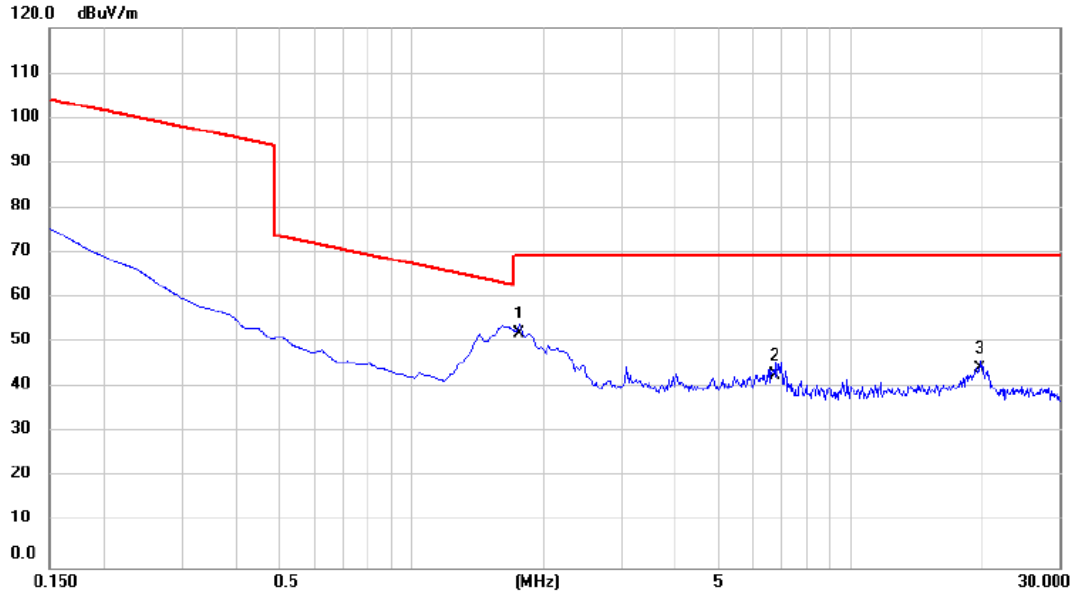
Test Mode	UNII-5_TX AX(HE160) Mode 6185 MHz	Polarization	Ant 0°



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		0.0123	62.84	20.57	83.41	125.81	-42.40	AVG	
2		0.0560	47.39	21.22	68.61	112.64	-44.03	AVG	
3	*	0.0891	45.03	21.30	66.33	108.61	-42.28	AVG	

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

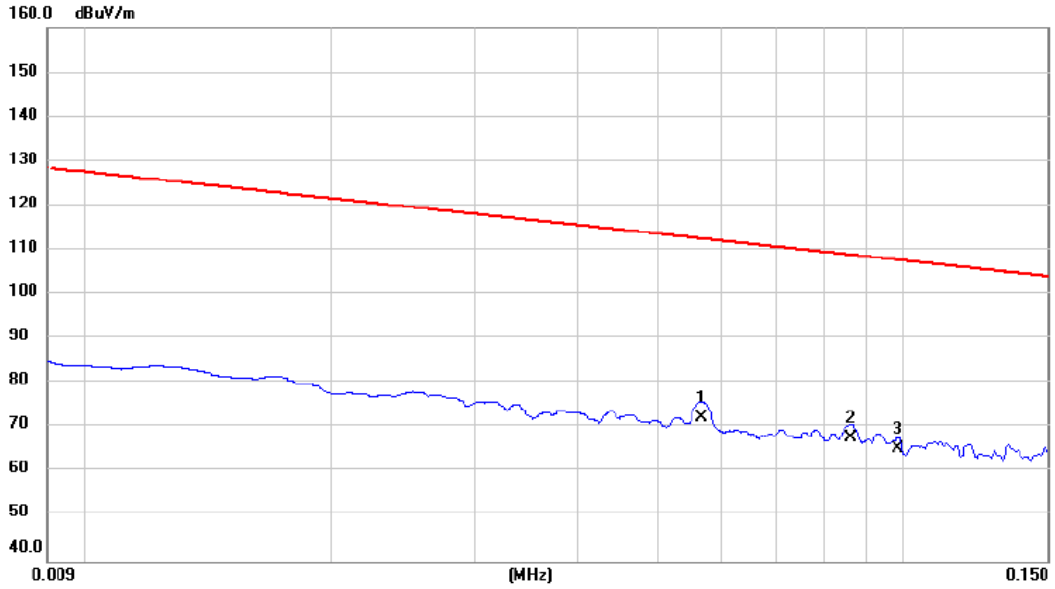
Test Mode	UNII-5_TX AX(HE160) Mode 6185 MHz	Polarization	Ant 0°



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	1.7620	31.06	21.02	52.08	69.54	-17.46	QP	
2		6.7470	21.84	21.00	42.84	69.54	-26.70	QP	
3		19.7615	23.11	21.01	44.12	69.54	-25.42	QP	

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

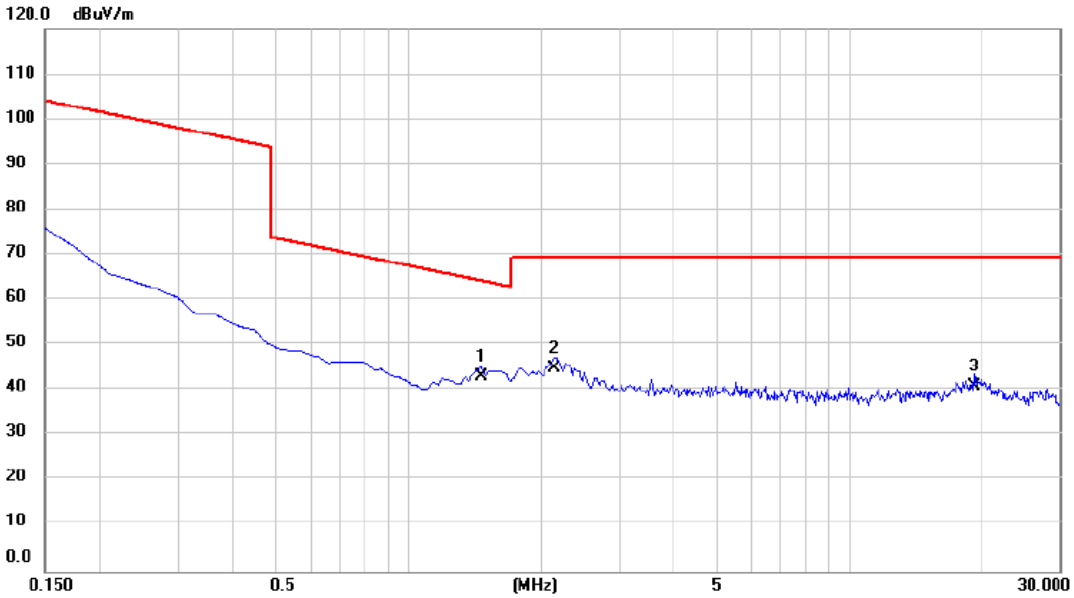
Test Mode	UNII-5_TX AX(HE160) Mode 6185 MHz	Polarization	Ant 90°



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	0.0567	51.03	21.22	72.25	112.53	-40.28	AVG	
2		0.0861	46.58	21.30	67.88	108.90	-41.02	AVG	
3		0.0985	43.96	21.30	65.26	107.74	-42.48	QP	

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

Test Mode	UNII-5_TX AX(HE160) Mode 6185 MHz	Polarization	Ant 90°

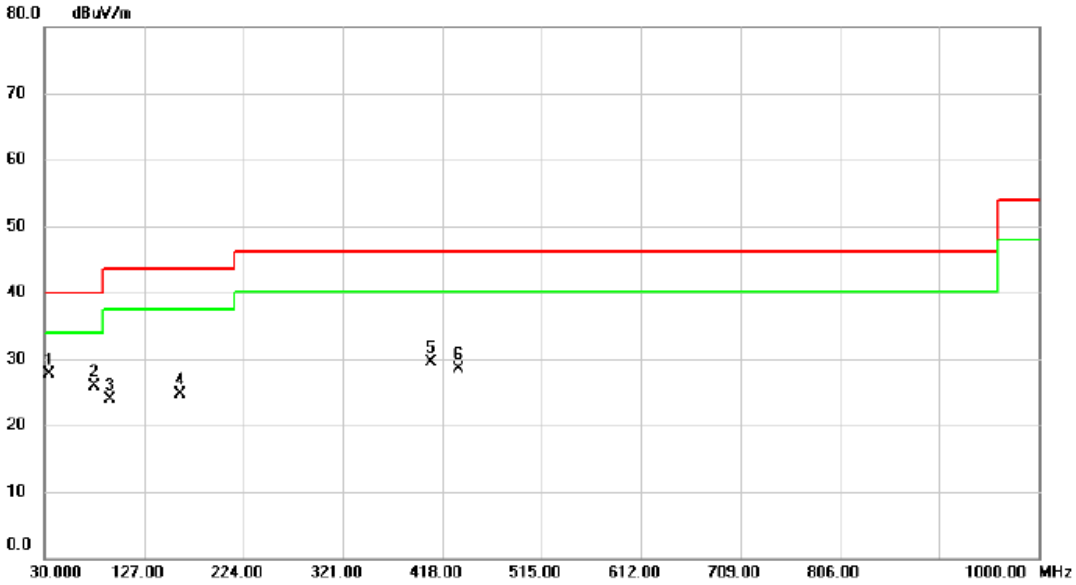


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	1.4633	21.86	21.05	42.91	64.30	-21.39	QP	
2		2.1500	23.87	21.00	44.87	69.54	-24.67	QP	
3		19.1047	19.96	21.04	41.00	69.54	-28.54	QP	

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

APPENDIX C - RADIATED EMISSION - 30 MHZ TO 1000 MHZ

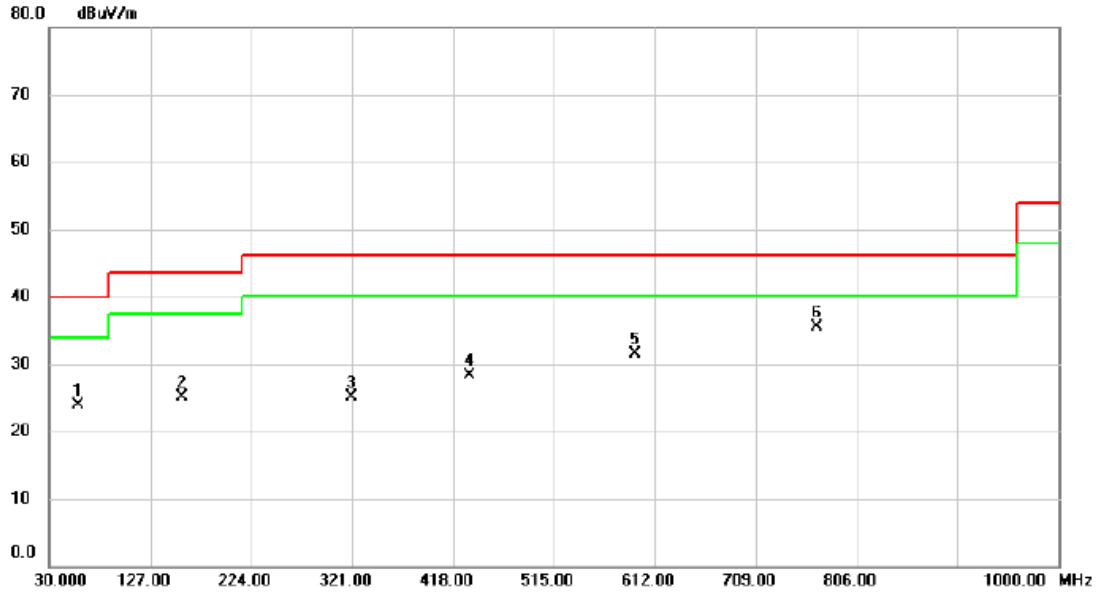
Test Mode	UNII-5_TX AX(HE160) Mode 6185 MHz	Polarization	Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	33.880	40.07	-12.39	27.68	40.00	-12.32	peak	
2		78.985	41.09	-15.23	25.86	40.00	-14.14	peak	
3		94.505	40.68	-16.79	23.89	43.52	-19.63	peak	
4		162.405	35.72	-10.94	24.78	43.52	-18.74	peak	
5		406.360	37.45	-7.88	29.57	46.02	-16.45	peak	
6		434.490	35.60	-7.17	28.43	46.02	-17.59	peak	

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

Test Mode	UNII-5_TX AX(HE160) Mode 6185 MHz	Polarization	Horizontal



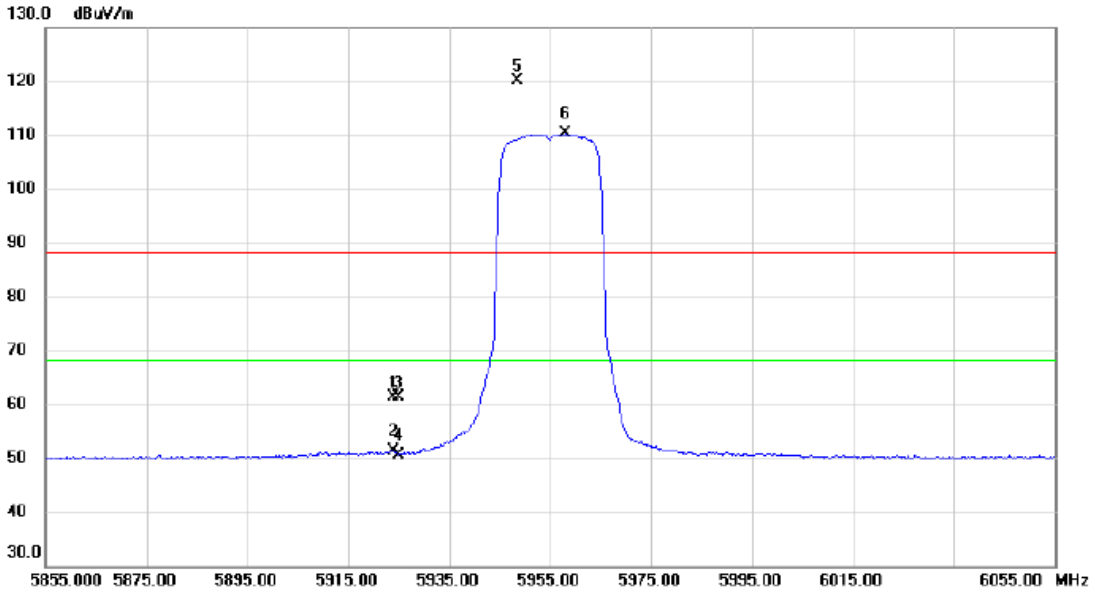
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		58.130	35.63	-11.74	23.89	40.00	-16.11	peak	
2		157.555	36.02	-10.93	25.09	43.52	-18.43	peak	
3		320.515	35.11	-9.96	25.15	46.02	-20.87	peak	
4		434.005	35.52	-7.18	28.34	46.02	-17.68	peak	
5		593.085	35.31	-3.79	31.52	46.02	-14.50	peak	
6	*	767.200	36.55	-1.12	35.43	46.02	-10.59	peak	

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

APPENDIX D - RADIATED EMISSION - ABOVE 1000 MHZ

For Antenna Configuration 1

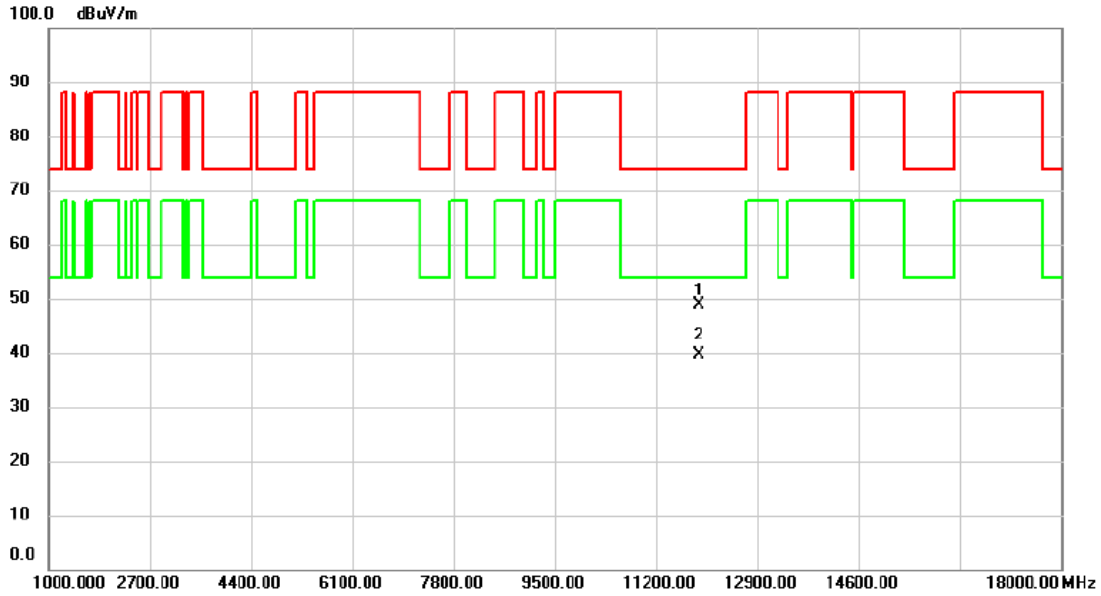
Test Mode	UNII-5_TX AX(HE20) Mode 5955 MHz	Polarization	Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		5924.000	45.30	16.16	61.46	88.20	-26.74	peak	
2		5924.000	35.24	16.16	51.40	68.20	-16.80	AVG	
3		5925.000	45.34	16.16	61.50	88.20	-26.70	peak	
4		5925.000	34.59	16.16	50.75	68.20	-17.45	AVG	
5	X	5948.400	103.94	16.19	120.13	88.20	31.93	peak	No Limit
6	*	5958.000	94.08	16.20	110.28	68.20	42.08	AVG	No Limit

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

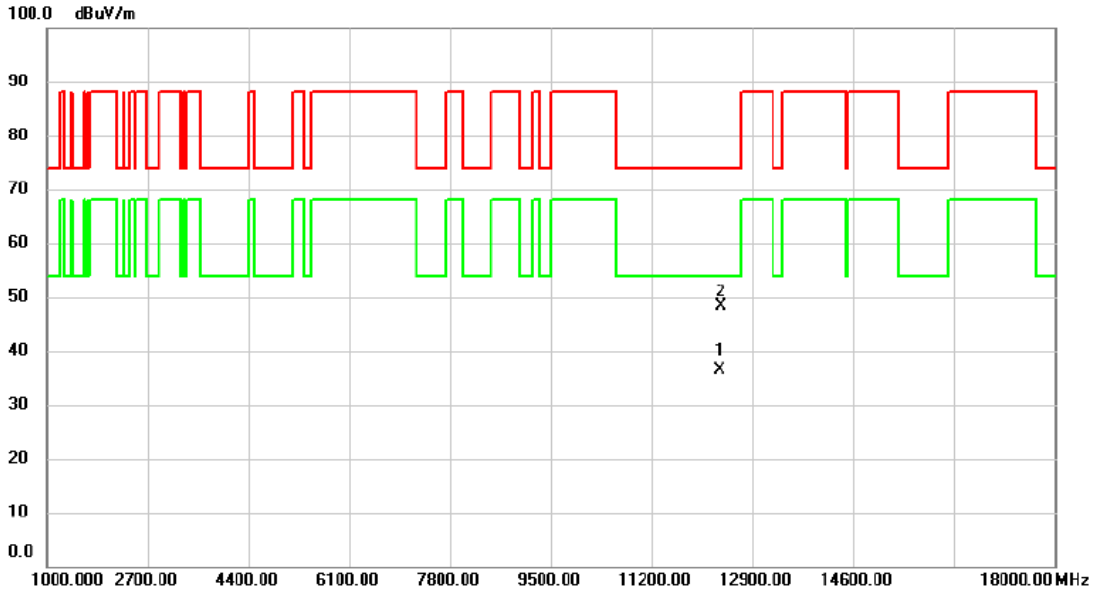
Test Mode	UNII-5_TX AX(HE20) Mode 5955 MHz	Polarization	Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		11909.920	37.62	11.22	48.84	74.00	-25.16	peak	
2	*	11910.160	28.30	11.22	39.52	54.00	-14.48	AVG	

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

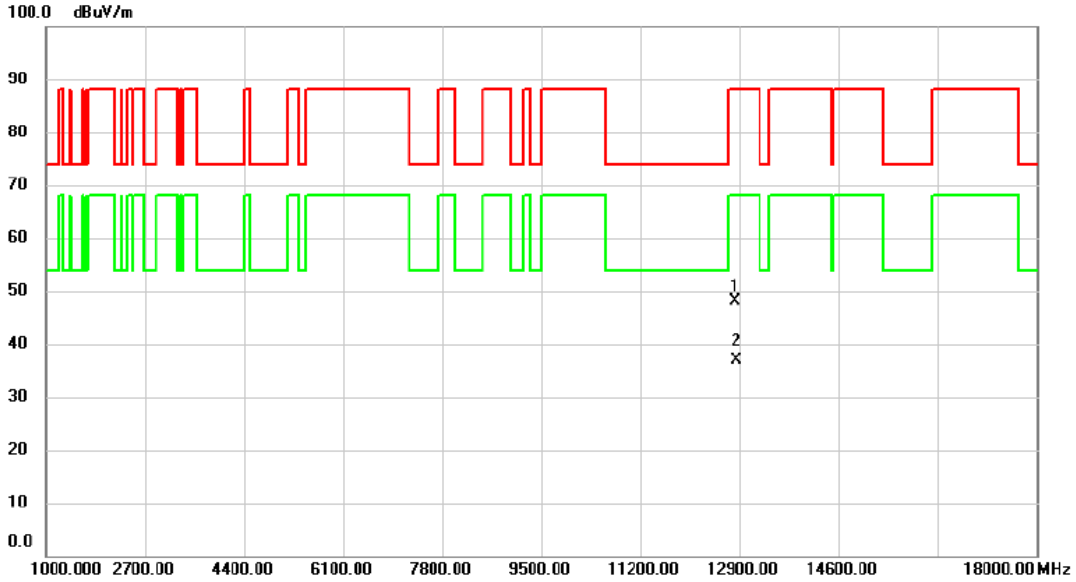
Test Mode	UNII-5_TX AX(HE20) Mode 6175 MHz	Polarization	Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	12341.860	25.50	10.83	36.33	54.00	-17.67	AVG	
2		12356.700	37.63	10.82	48.45	74.00	-25.55	peak	

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

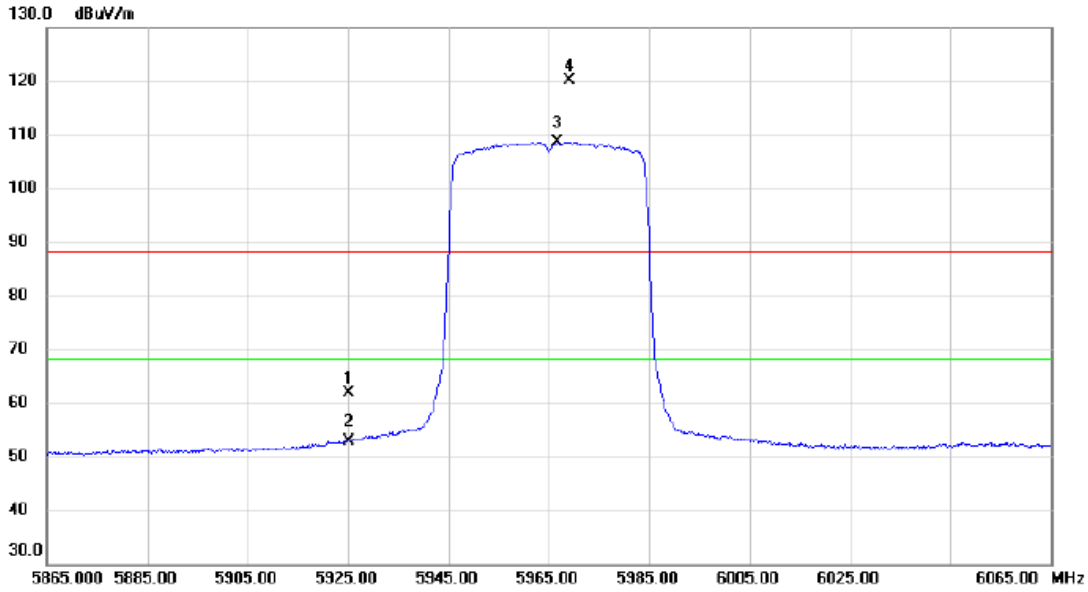
Test Mode	UNII-5_TX AX(HE20) Mode 6415 MHz	Polarization	Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		12821.720	37.08	11.17	48.25	88.20	-39.95	peak	
2	*	12838.760	25.75	11.19	36.94	68.20	-31.26	AVG	

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

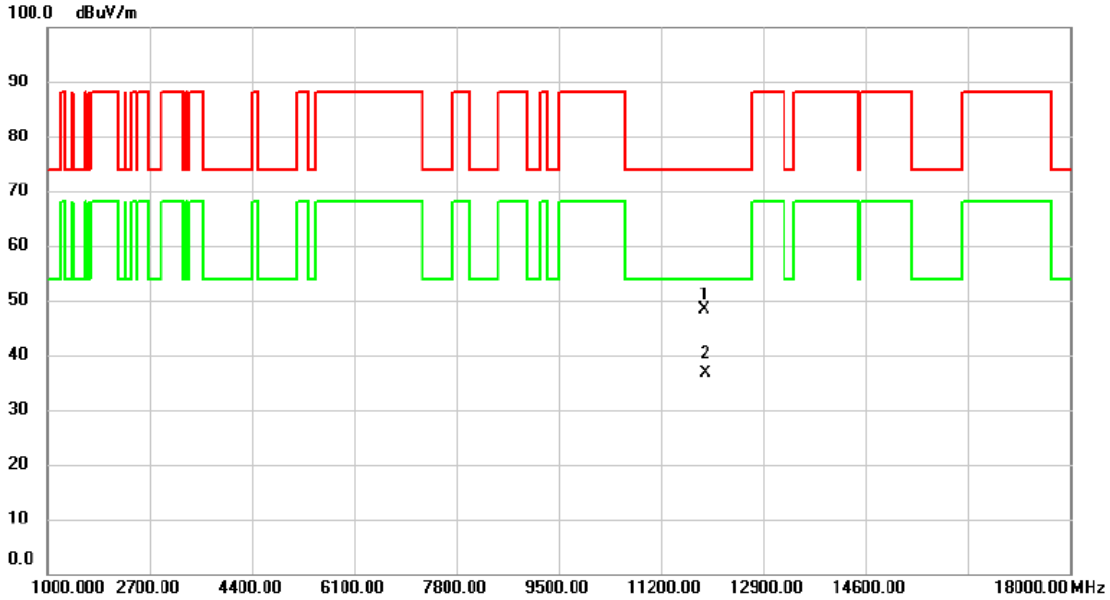
Test Mode	UNII-5_TX AX(HE40) Mode 5965 MHz	Polarization	Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		5925.000	45.61	16.16	61.77	88.20	-26.43	peak	
2		5925.000	36.84	16.16	53.00	68.20	-15.20	AVG	
3	*	5966.800	92.53	16.20	108.73	68.20	40.53	AVG	No Limit
4	X	5969.000	104.03	16.20	120.23	88.20	32.03	peak	No Limit

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

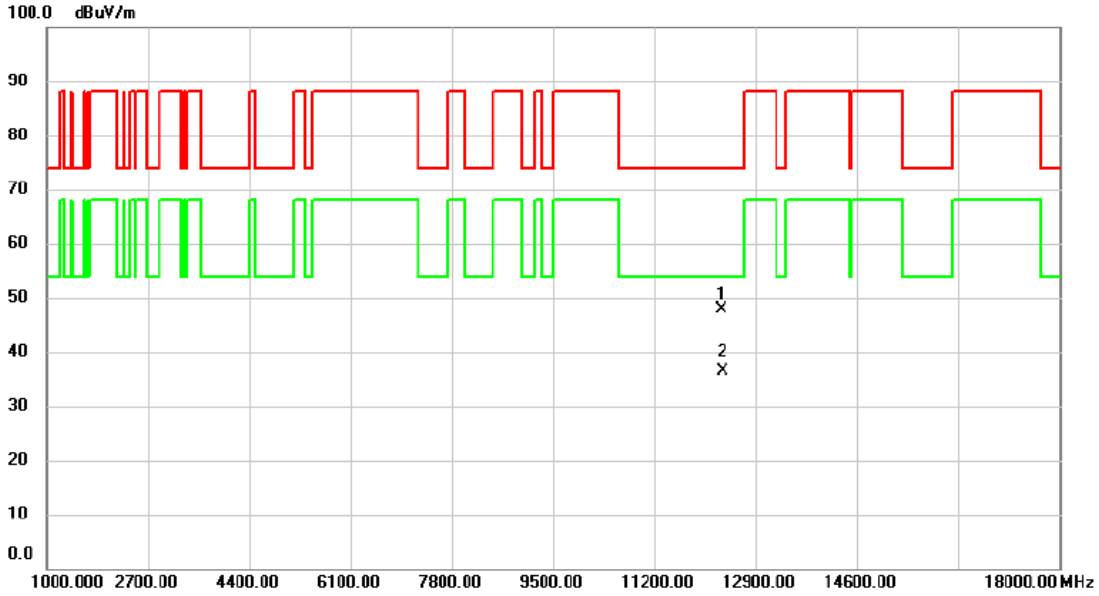
Test Mode	UNII-5_TX AX(HE40) Mode 5965 MHz	Polarization	Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		11924.560	37.18	11.22	48.40	74.00	-25.60	peak	
2	*	11930.300	25.33	11.21	36.54	54.00	-17.46	AVG	

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

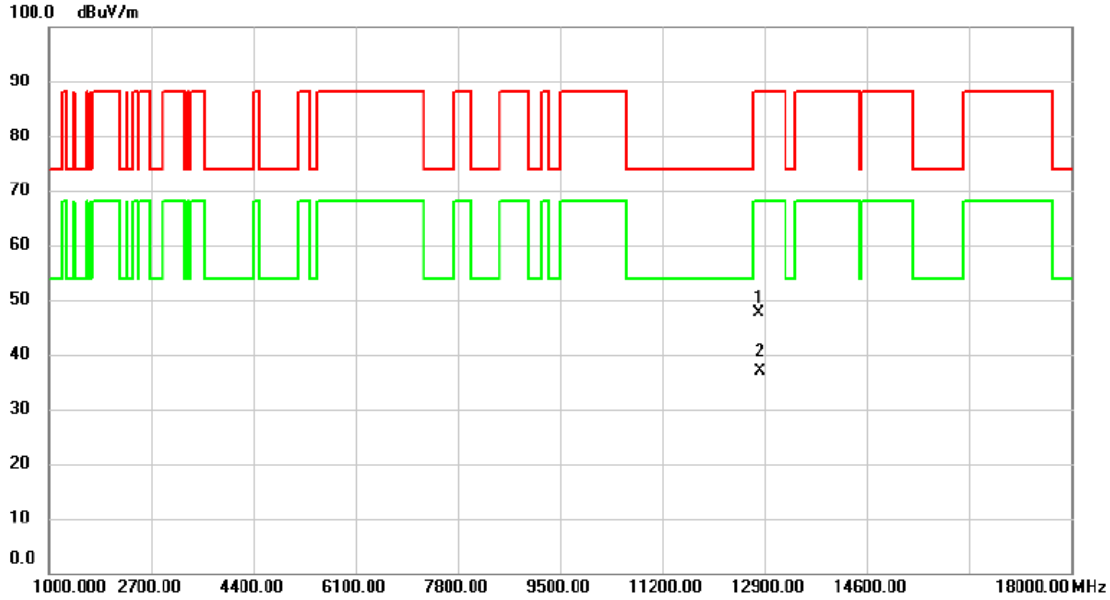
Test Mode	UNII-5_TX AX(HE40) Mode 6165 MHz	Polarization	Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		12327.040	36.97	10.85	47.82	74.00	-26.18	peak	
2	*	12335.200	25.58	10.84	36.42	54.00	-17.58	AVG	

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

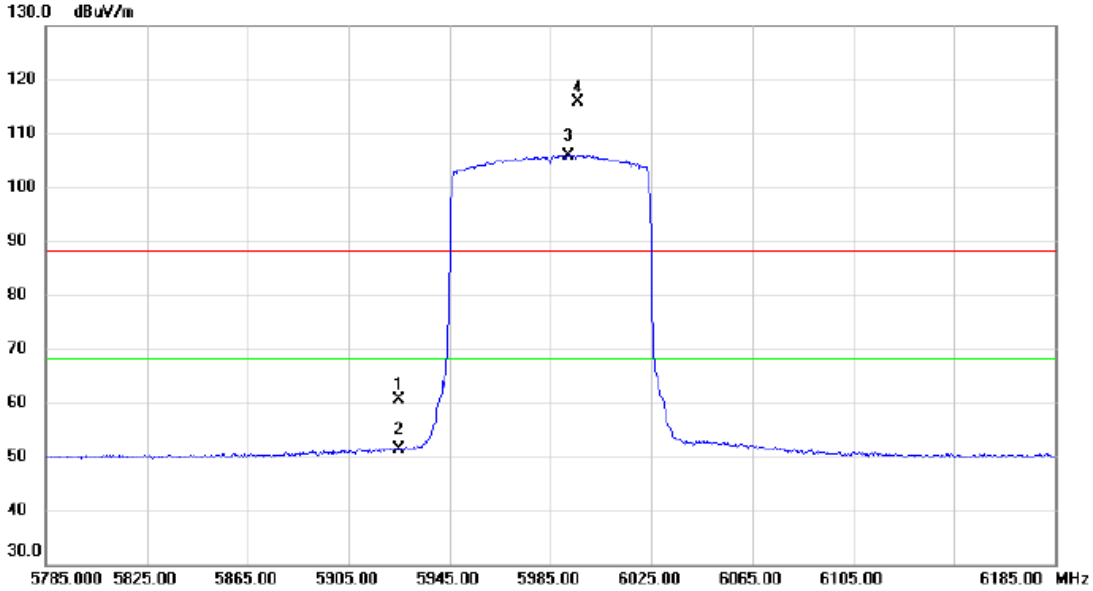
Test Mode	UNII-5_TX AX(HE40) Mode 6405 MHz	Polarization	Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		12807.080	36.50	11.14	47.64	88.20	-40.56	peak	
2	*	12811.540	25.75	11.15	36.90	68.20	-31.30	AVG	

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

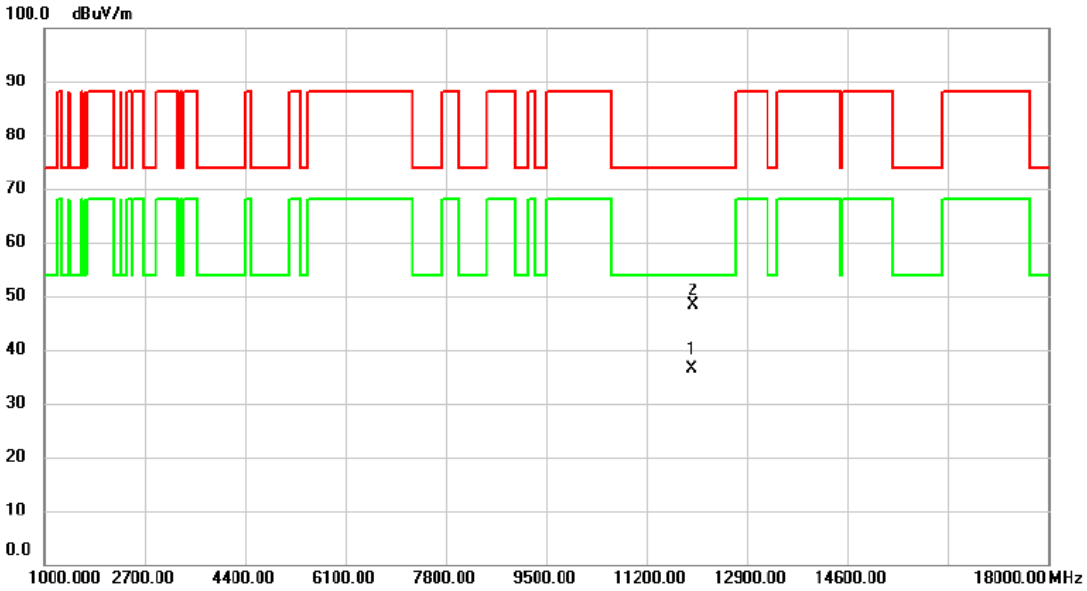
Test Mode	UNII-5_TX AX(HE80) Mode 5985 MHz	Polarization	Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		5925.000	44.51	16.16	60.67	88.20	-27.53	peak	
2		5925.000	35.27	16.16	51.43	68.20	-16.77	AVG	
3	*	5992.200	89.74	16.24	105.98	68.20	37.78	AVG	No Limit
4	X	5996.200	99.52	16.24	115.76	88.20	27.56	peak	No Limit

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

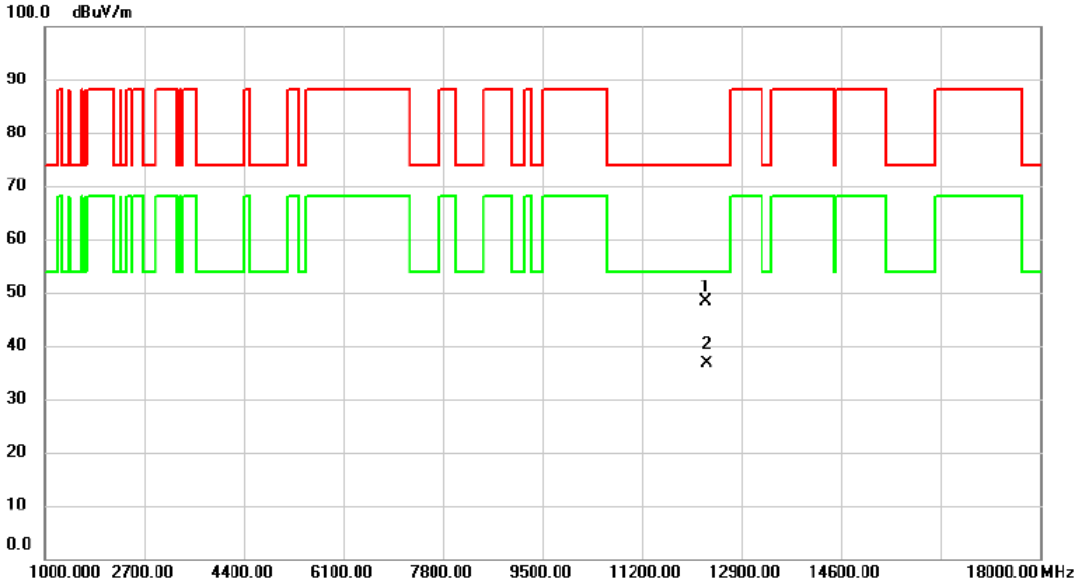
Test Mode	UNII-5_TX AX(HE80) Mode 5985 MHz	Polarization	Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	11969.120	25.22	11.19	36.41	54.00	-17.59	AVG	
2		11971.060	37.26	11.19	48.45	74.00	-25.55	peak	

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

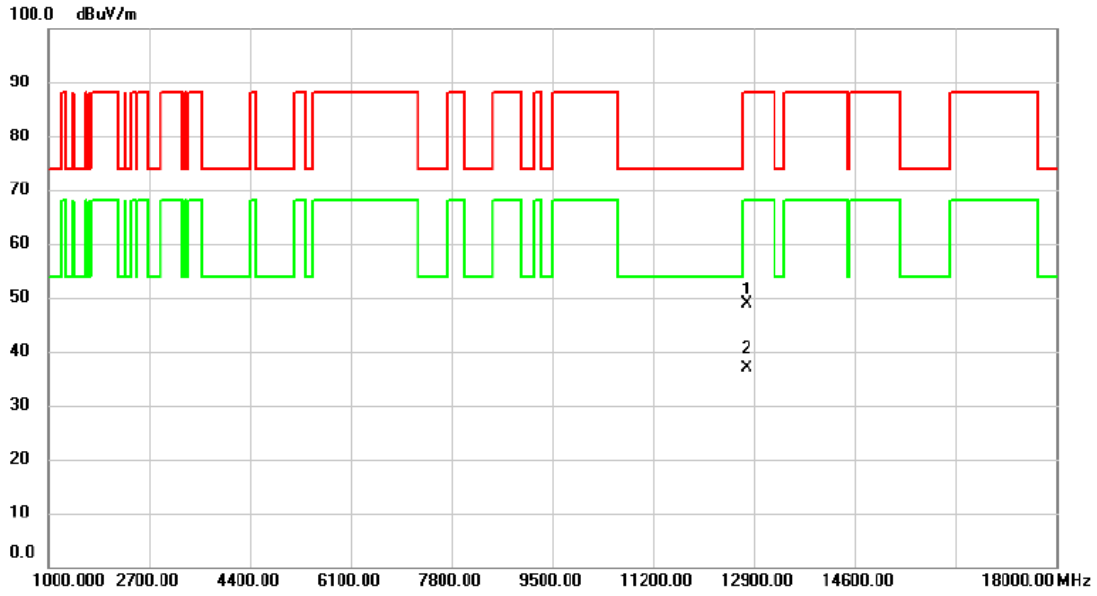
Test Mode	UNII-5_TX AX(HE80) Mode 6145 MHz	Polarization	Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		12285.740	37.56	10.89	48.45	74.00	-25.55	peak	
2	*	12289.840	25.75	10.88	36.63	54.00	-17.37	AVG	

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

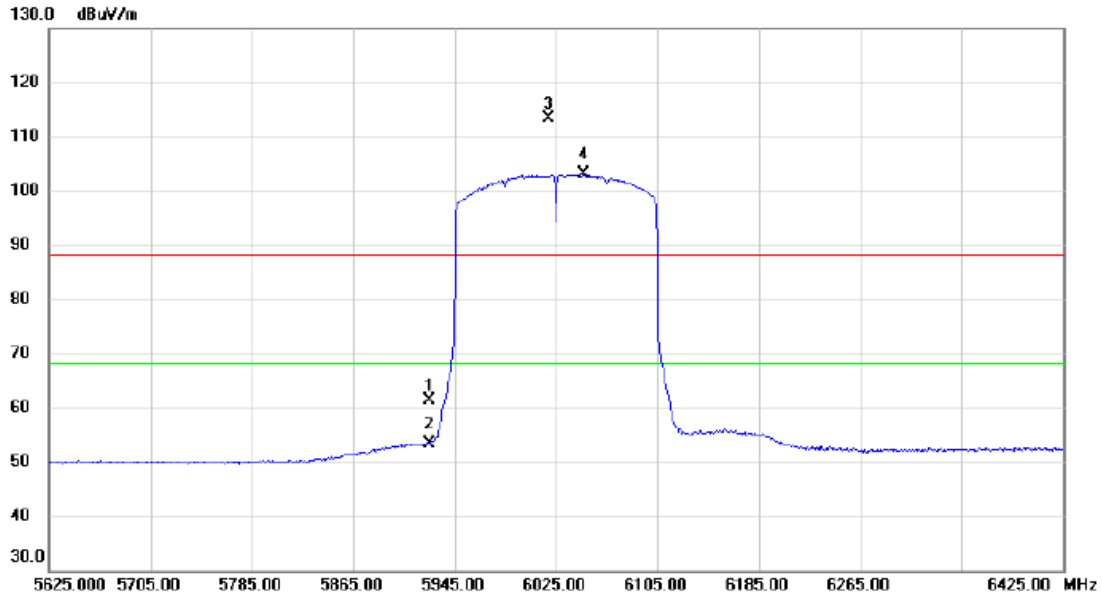
Test Mode	UNII-5_TX AX(HE80) Mode 6385 MHz	Polarization	Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		12765.240	37.73	11.07	48.80	88.20	-39.40	peak	
2	*	12779.420	25.85	11.10	36.95	68.20	-31.25	AVG	

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

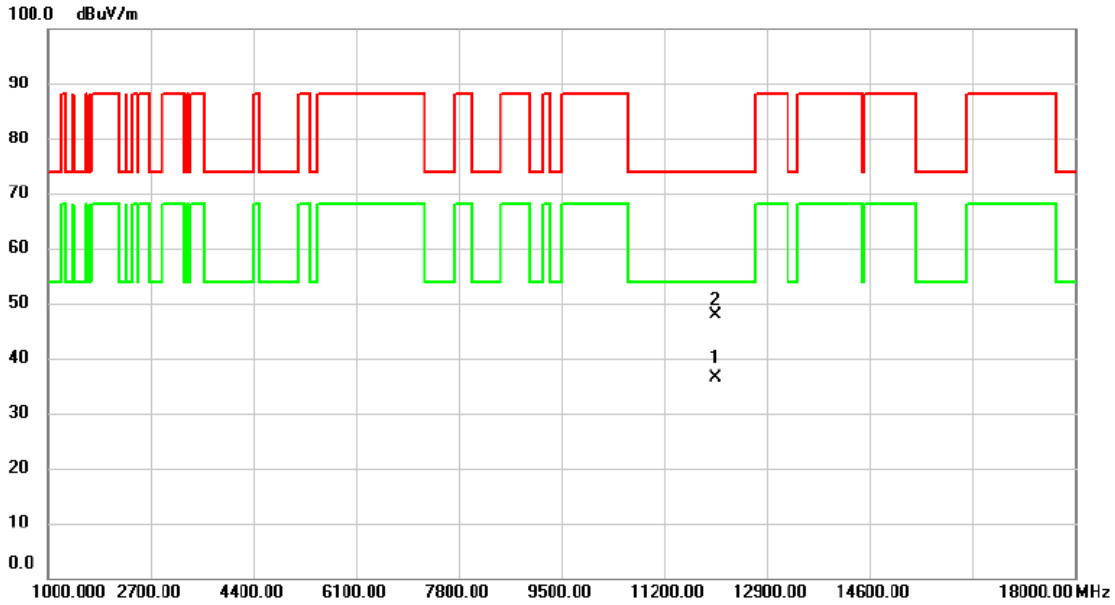
Test Mode	UNII-5_TX AX(HE160) Mode 6025 MHz	Polarization	Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		5925.000	45.15	16.16	61.31	88.20	-26.89	peak	
2		5925.000	37.29	16.16	53.45	68.20	-14.75	AVG	
3	X	6018.600	97.11	16.29	113.40	88.20	25.20	peak	No Limit
4	*	6046.600	86.67	16.36	103.03	68.20	34.83	AVG	No Limit

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

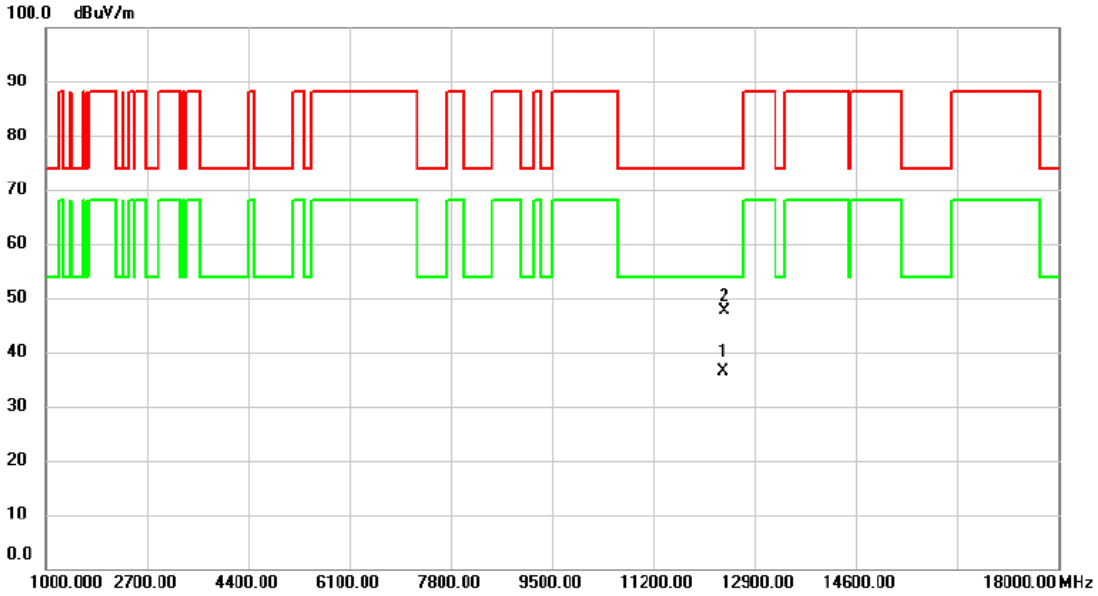
Test Mode	UNII-5_TX AX(HE160) Mode 6025 MHz	Polarization	Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	12049.760	25.20	11.13	36.33	54.00	-17.67	AVG	
2		12056.620	36.84	11.12	47.96	74.00	-26.04	peak	

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

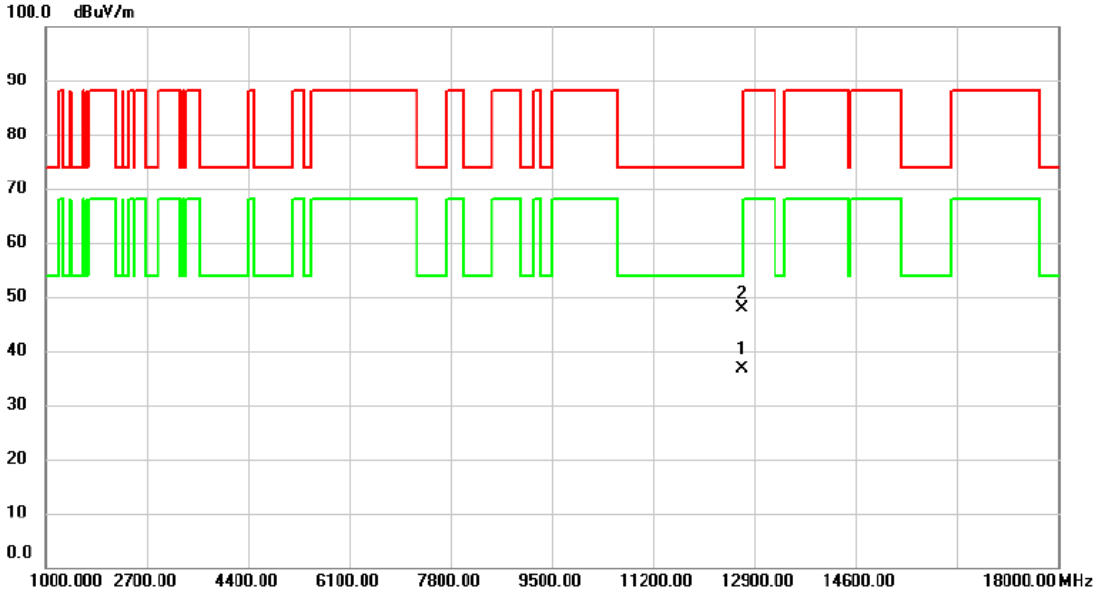
Test Mode	UNII-5_TX AX(HE160) Mode 6185 MHz	Polarization	Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	12361.620	25.62	10.81	36.43	54.00	-17.57	AVG	
2		12378.960	36.93	10.79	47.72	74.00	-26.28	peak	

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

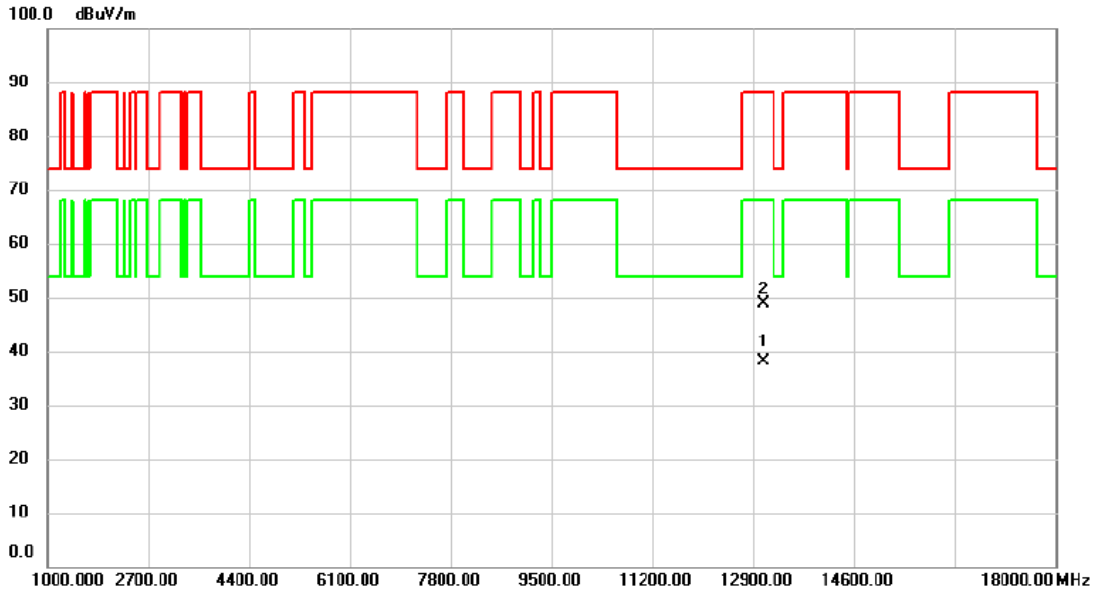
Test Mode	UNII-5_TX AX(HE160) Mode 6345 MHz	Polarization	Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	12681.580	25.76	10.95	36.71	54.00	-17.29	AVG	
2		12683.840	36.93	10.95	47.88	74.00	-26.12	peak	

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

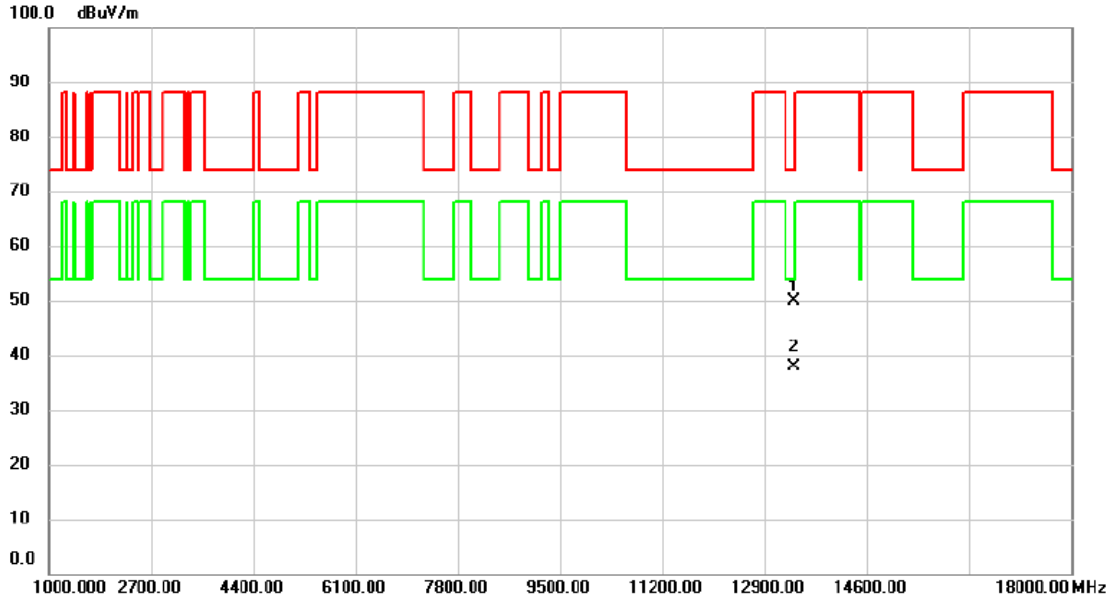
Test Mode	UNII-7_TX AX(HE20) Mode 6535 MHz	Polarization	Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	13070.200	26.68	11.42	38.10	68.20	-30.10	AVG	
2		13070.960	37.38	11.42	48.80	88.20	-39.40	peak	

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

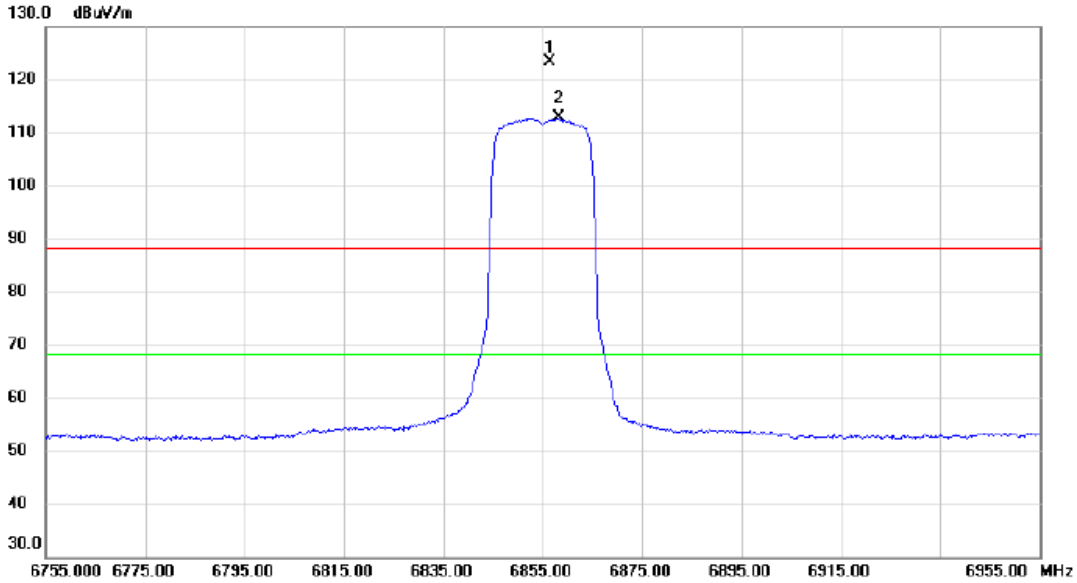
Test Mode	UNII-7_TX AX(HE20) Mode 6695 MHz	Polarization	Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		13380.180	38.52	11.34	49.86	74.00	-24.14	peak	
2	*	13396.300	26.44	11.33	37.77	54.00	-16.23	AVG	

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

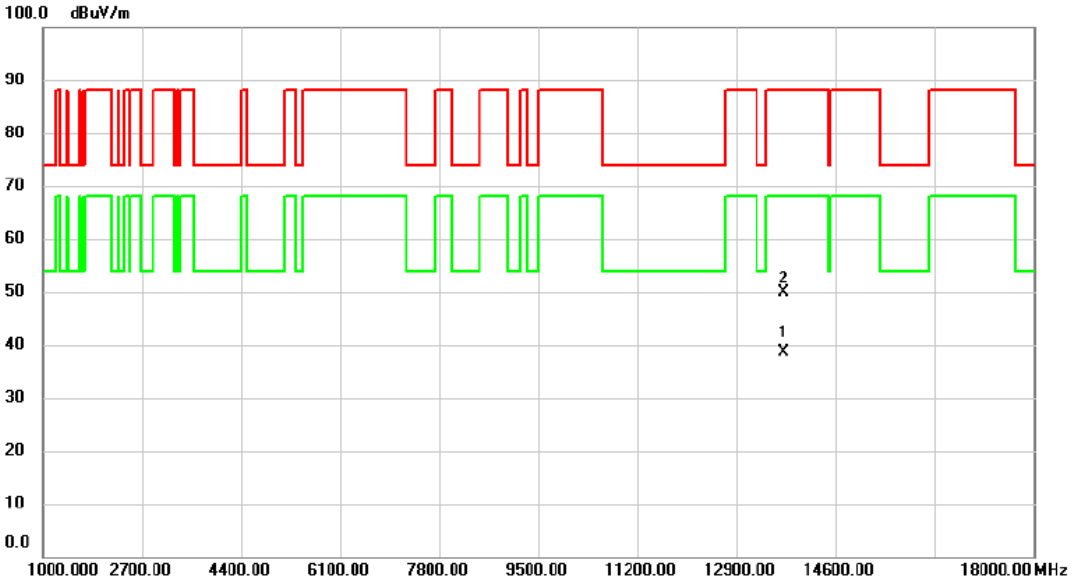
Test Mode	UNII-7_TX AX(HE20) Mode 6855 MHz	Polarization	Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	X	6856.400	105.63	17.80	123.43	88.20	35.23	peak	No Limit
2	*	6858.400	94.96	17.80	112.76	68.20	44.56	AVG	No Limit

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

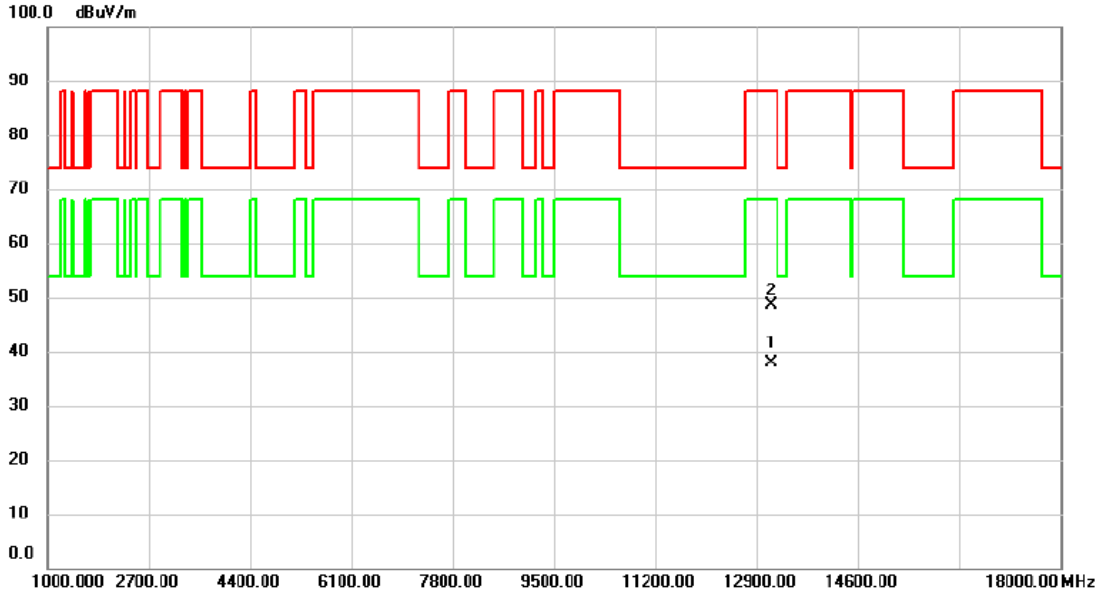
Test Mode	UNII-7_TX AX(HE20) Mode 6855 MHz	Polarization	Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	13709.820	27.31	11.26	38.57	68.20	-29.63	AVG	
2		13710.120	38.72	11.26	49.98	88.20	-38.22	peak	

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

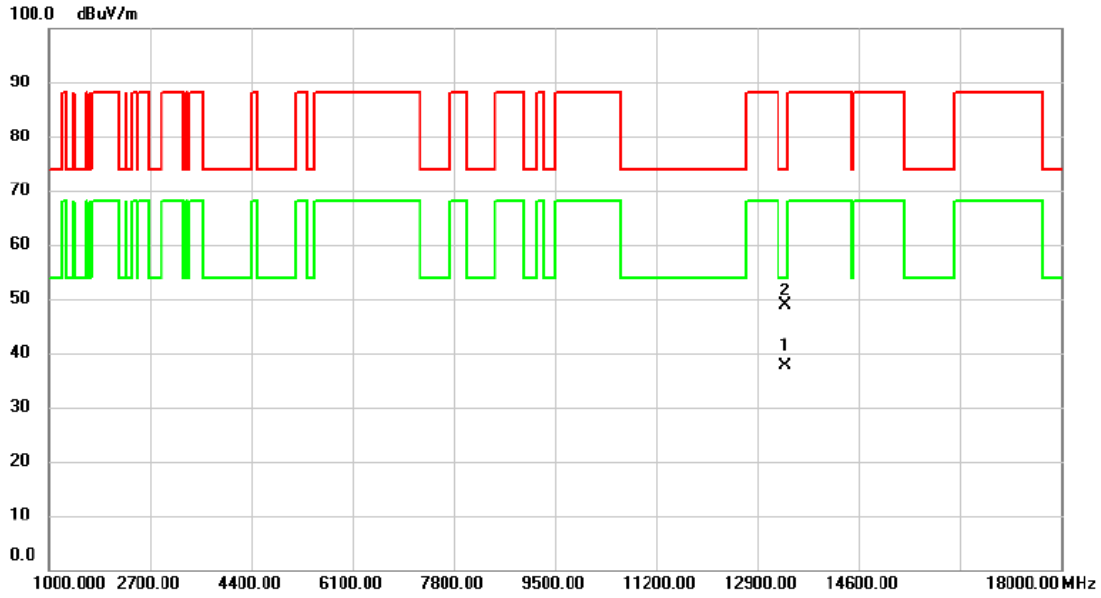
Test Mode	UNII-7_TX AX(HE40) Mode 6565 MHz	Polarization	Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	13130.240	26.39	11.41	37.80	68.20	-30.40	AVG	
2		13139.400	37.27	11.40	48.67	88.20	-39.53	peak	

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

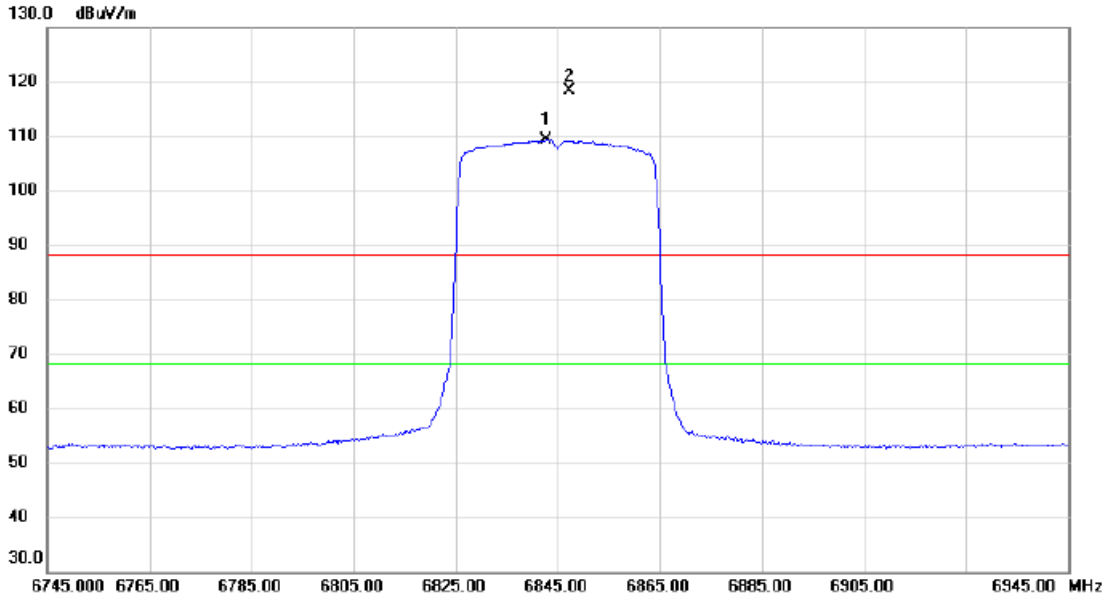
Test Mode	UNII-7_TX AX(HE40) Mode 6685 MHz	Polarization	Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	13361.600	26.39	11.34	37.73	54.00	-16.27	AVG	
2		13369.000	37.51	11.33	48.84	74.00	-25.16	peak	

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

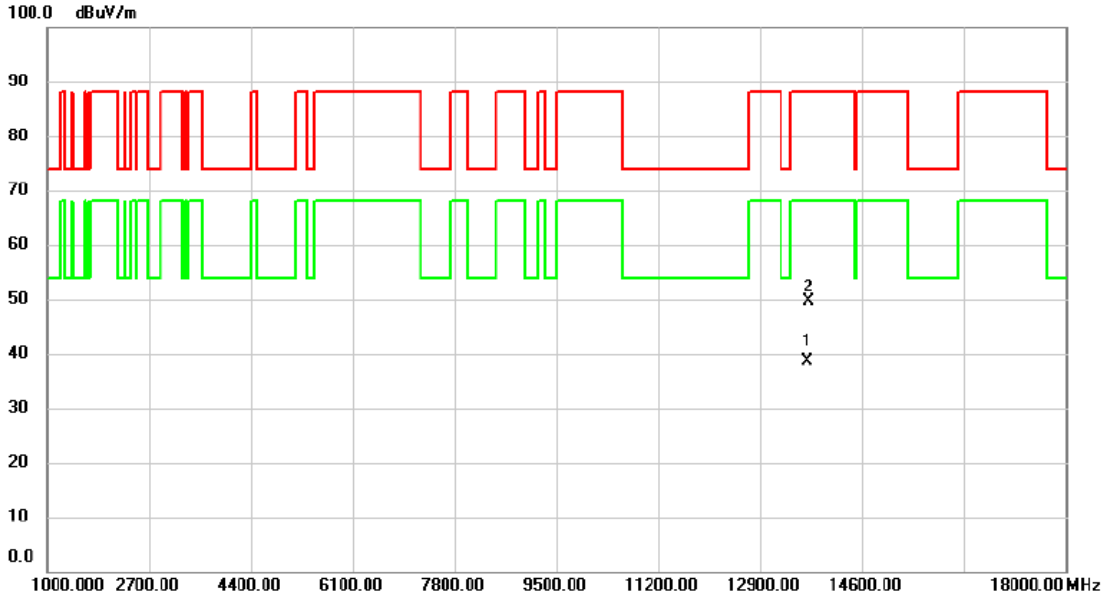
Test Mode	UNII-7_TX AX(HE40) Mode 6845 MHz	Polarization	Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	6842.800	91.60	17.79	109.39	68.20	41.19	AVG	No Limit
2	X	6847.400	100.55	17.79	118.34	88.20	30.14	peak	No Limit

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

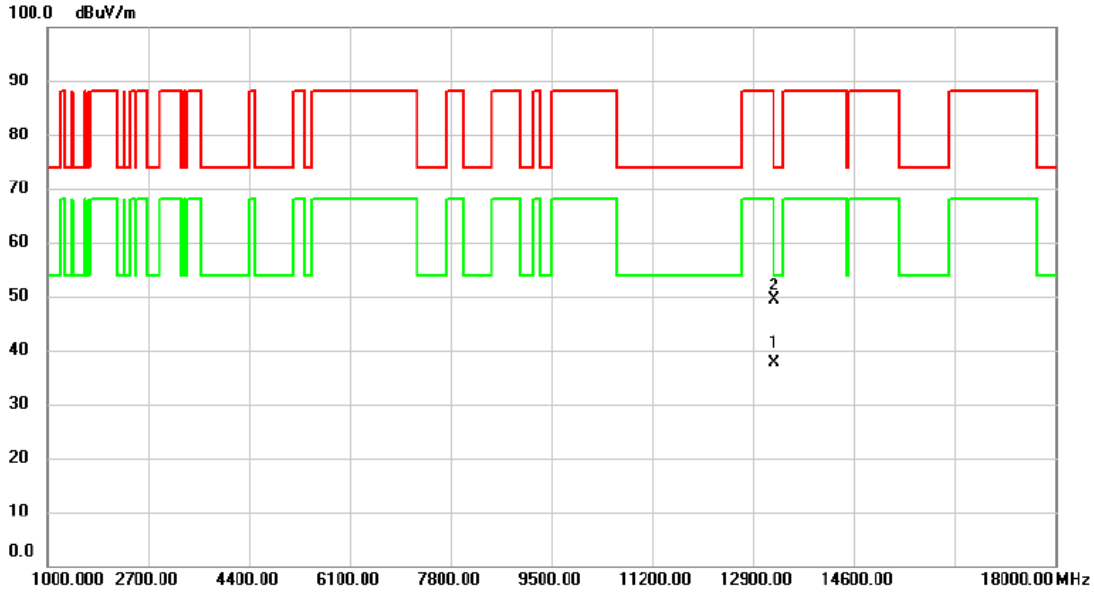
Test Mode	UNII-7_TX AX(HE40) Mode 6845 MHz	Polarization	Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	13689.460	27.38	11.26	38.64	68.20	-29.56	AVG	
2		13699.620	38.40	11.26	49.66	88.20	-38.54	peak	

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

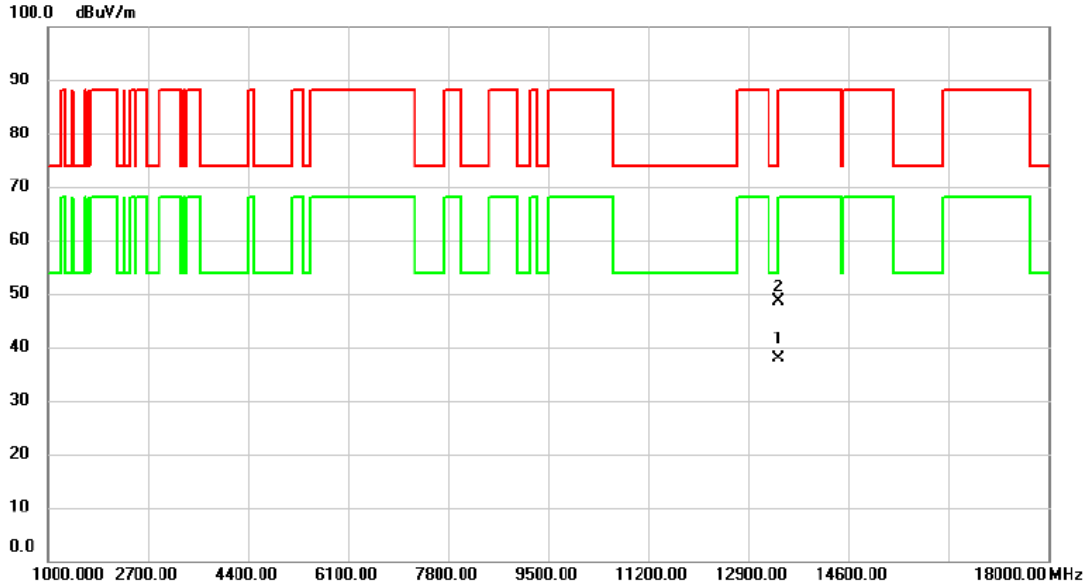
Test Mode	UNII-7_TX AX(HE80) Mode 6625 MHz	Polarization	Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		13249.500	26.32	11.37	37.69	68.20	-30.51	AVG	
2	*	13252.980	37.95	11.37	49.32	74.00	-24.68	peak	

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

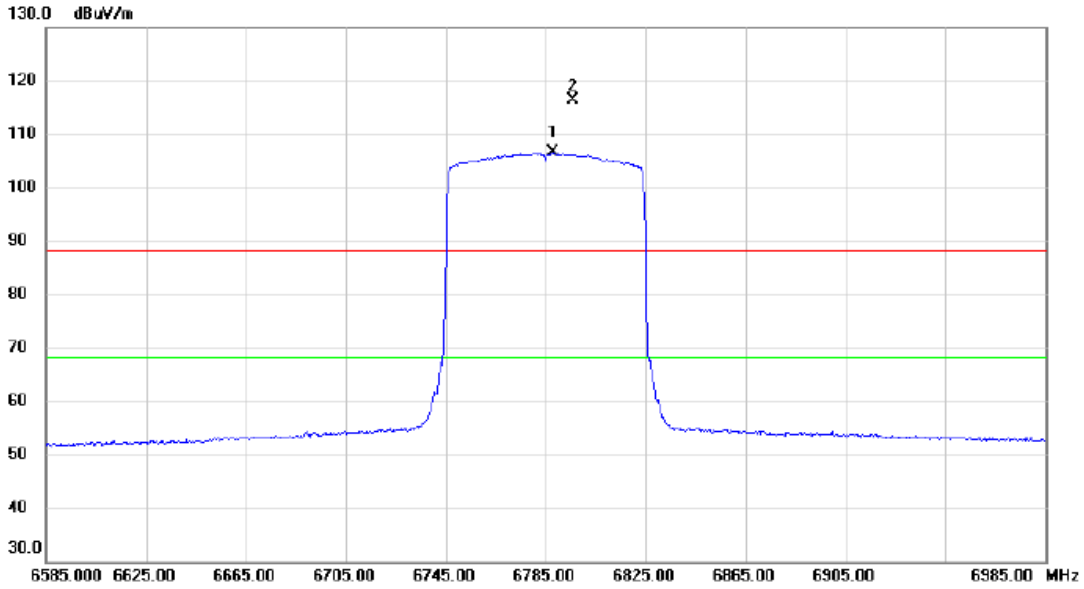
Test Mode	UNII-7_TX AX(HE80) Mode 6705 MHz	Polarization	Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	13402.020	26.44	11.33	37.77	68.20	-30.43	AVG	
2		13418.380	37.36	11.33	48.69	88.20	-39.51	peak	

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

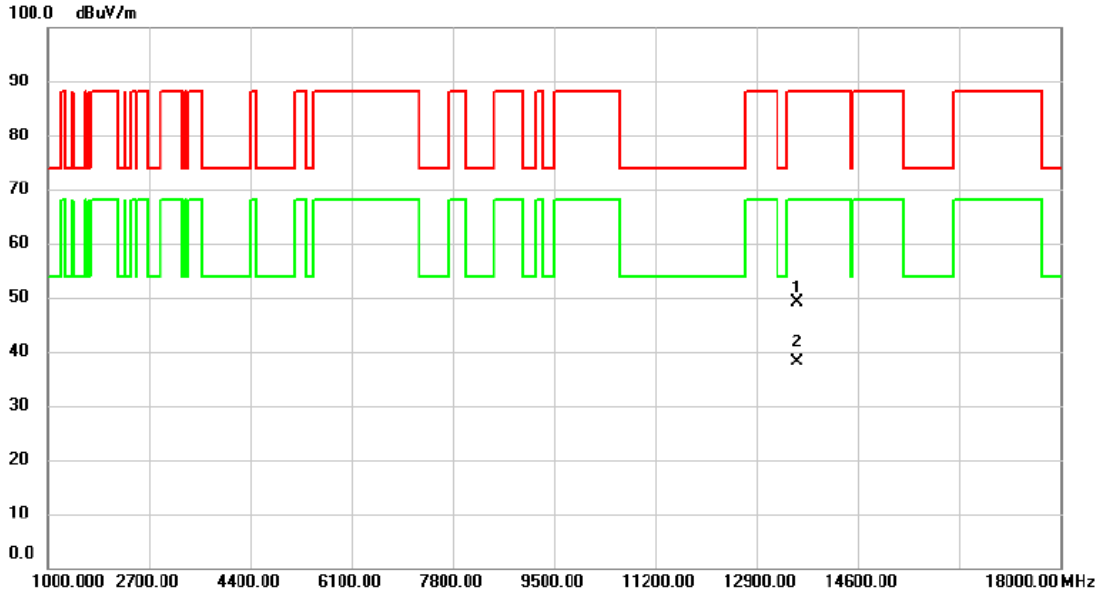
Test Mode	UNII-7_TX AX(HE80) Mode 6785 MHz	Polarization	Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	6788.200	88.79	17.74	106.53	68.20	38.33	AVG	No Limit
2	X	6796.200	98.70	17.75	116.45	88.20	28.25	peak	No Limit

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

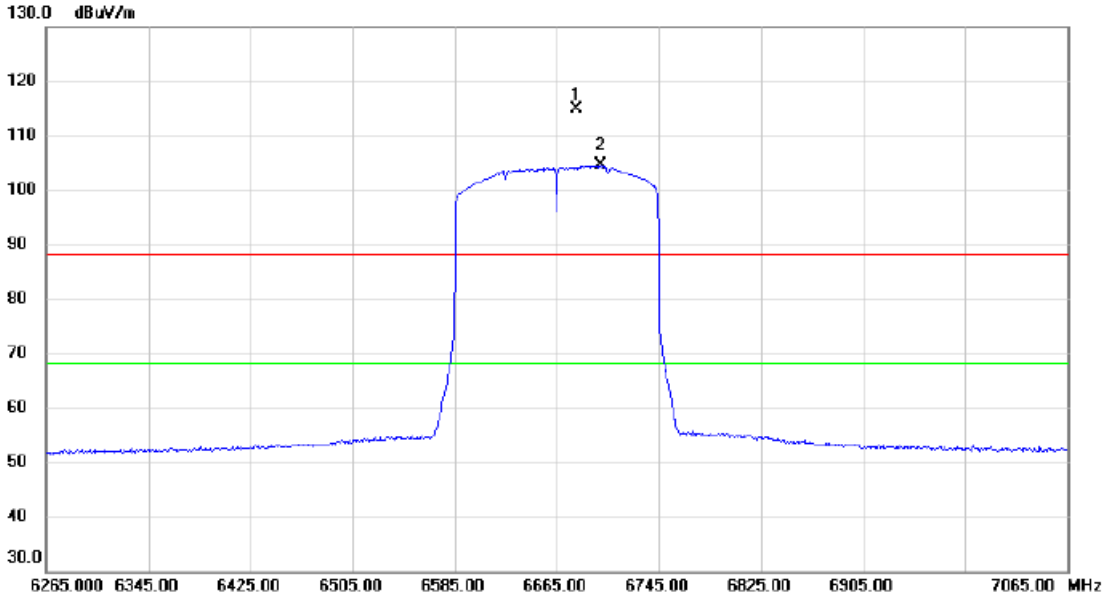
Test Mode	UNII-7_TX AX(HE80) Mode 6785 MHz	Polarization	Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		13563.780	37.87	11.28	49.15	88.20	-39.05	peak	
2	*	13568.120	26.79	11.29	38.08	68.20	-30.12	AVG	

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

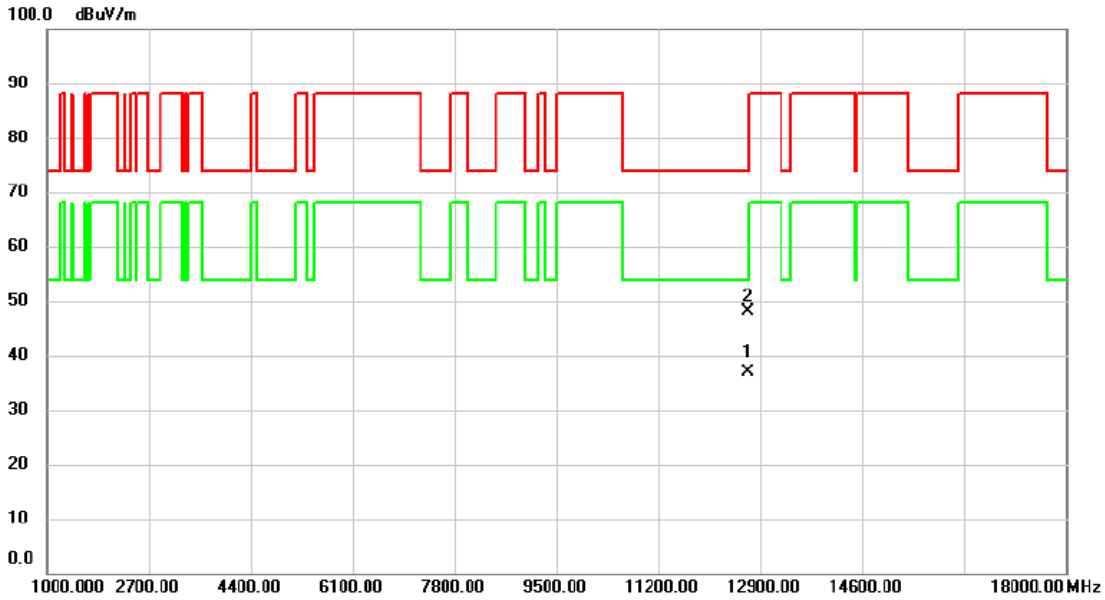
Test Mode	UNII-7_TX AX(HE160) Mode 6665 MHz	Polarization	Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	X	6680.200	97.15	17.67	114.82	88.20	26.62	peak	No Limit
2	*	6699.400	86.86	17.69	104.55	68.20	36.35	AVG	No Limit

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

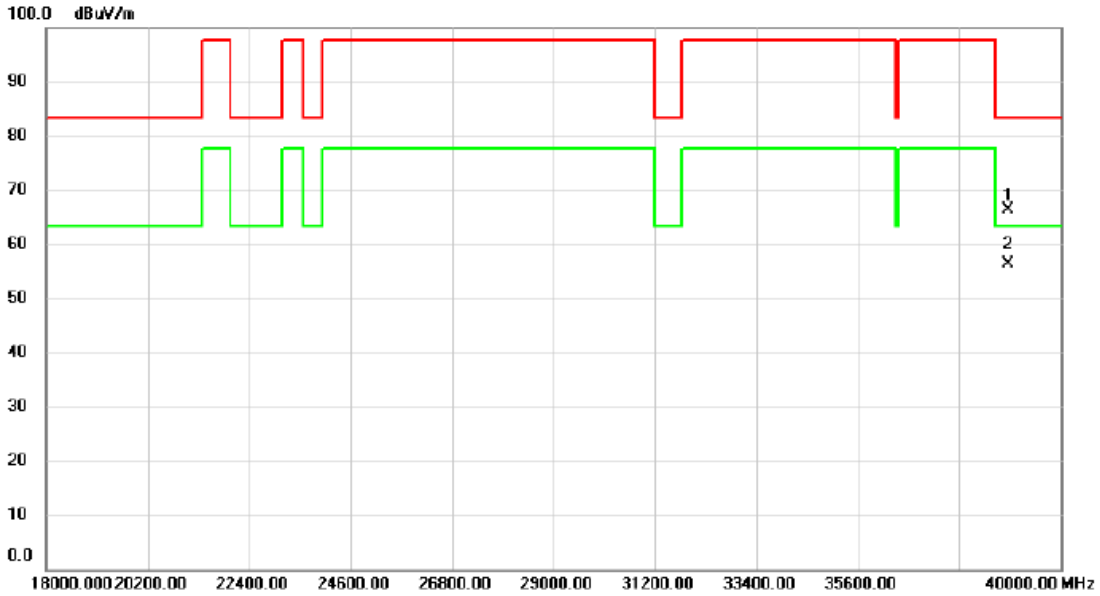
Test Mode	UNII-7_TX AX(HE160) Mode 6665 MHz	Polarization	Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	12683.800	25.86	10.95	36.81	54.00	-17.19	AVG	
2		12693.260	37.28	10.97	48.25	74.00	-25.75	peak	

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

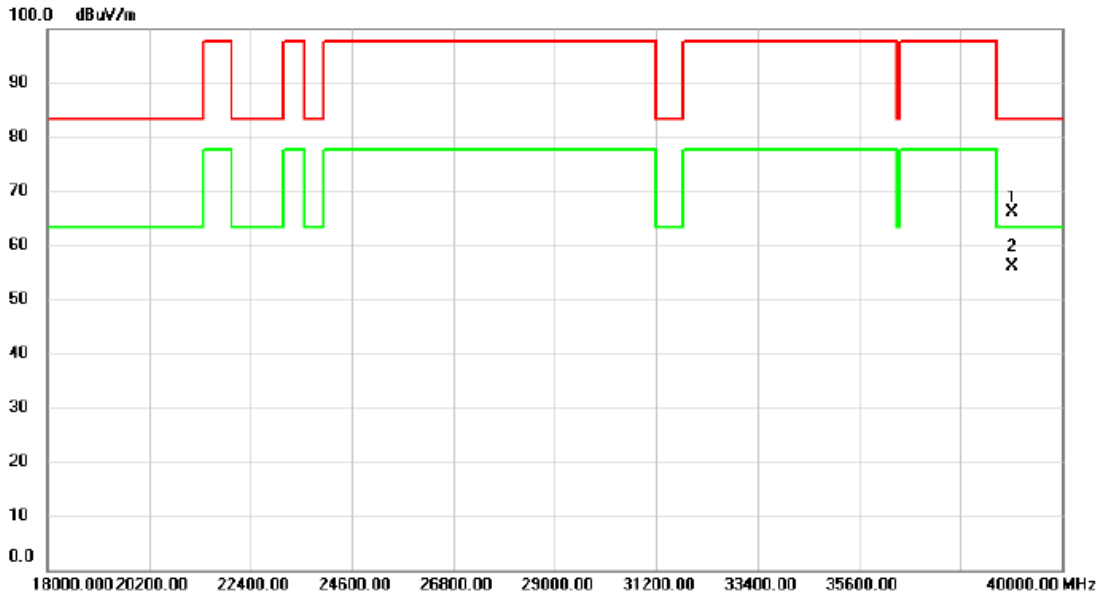
Test Mode	UNII-5_TX AX(HE160) Mode 6185 MHz	Polarization	Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		38867.000	52.76	13.63	66.39	83.50	-17.11	peak	
2	*	38867.000	42.80	13.63	56.43	63.50	-7.07	AVG	

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

Test Mode	UNII-5_TX AX(HE160) Mode 6185 MHz	Polarization	Horizontal

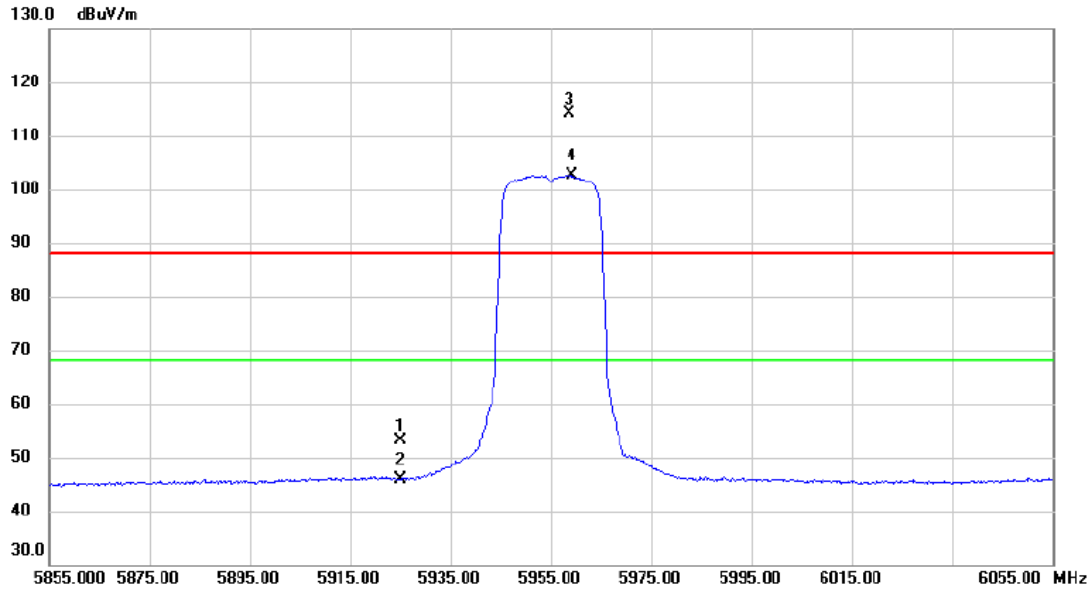


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		38922.000	52.22	13.80	66.02	83.50	-17.48	peak	
2	*	38922.000	42.25	13.80	56.05	63.50	-7.45	AVG	

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

For Antenna Configuration 2

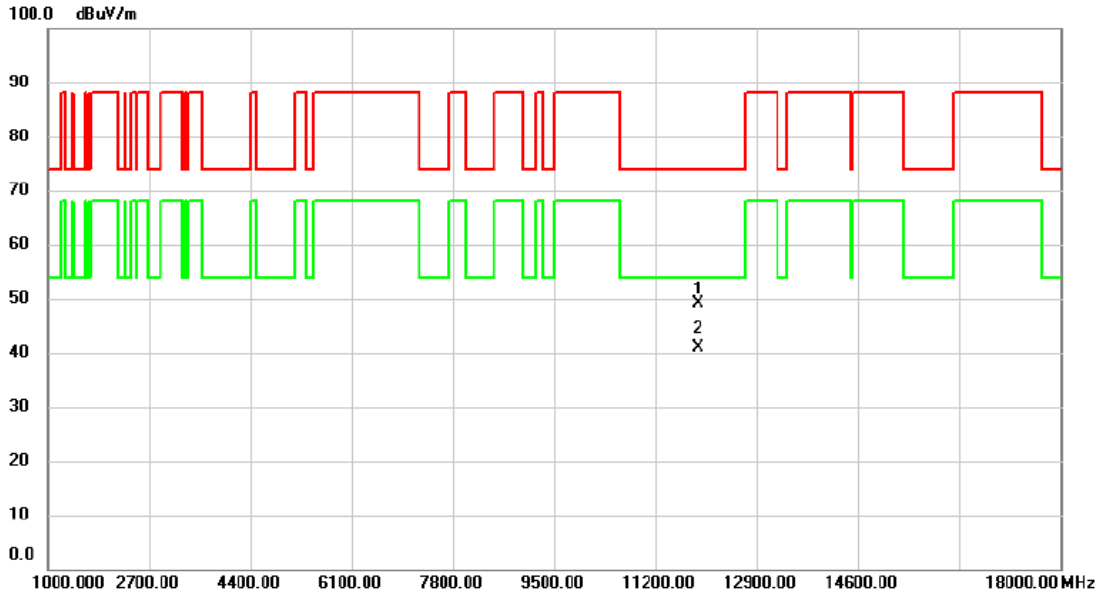
Test Mode	UNII-5_TX AX(HE20) Mode 5955 MHz	Polarization	Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		5925.000	38.40	14.73	53.13	88.20	-35.07	peak	
2		5925.000	31.03	14.73	45.76	68.20	-22.44	AVG	
3	X	5958.600	99.39	14.80	114.19	88.20	25.99	peak	No Limit
4	*	5959.000	87.79	14.80	102.59	68.20	34.39	AVG	No Limit

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

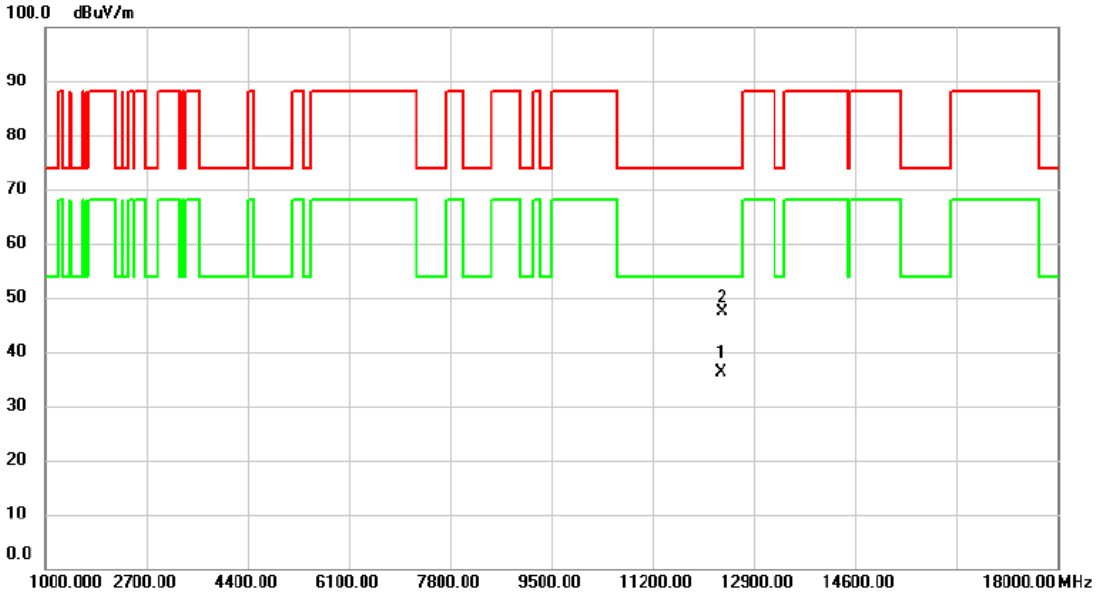
Test Mode	UNII-5_TX AX(HE20) Mode 5955 MHz	Polarization	Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		11909.860	38.24	10.82	49.06	74.00	-24.94	peak	
2	*	11910.000	30.11	10.82	40.93	54.00	-13.07	AVG	

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

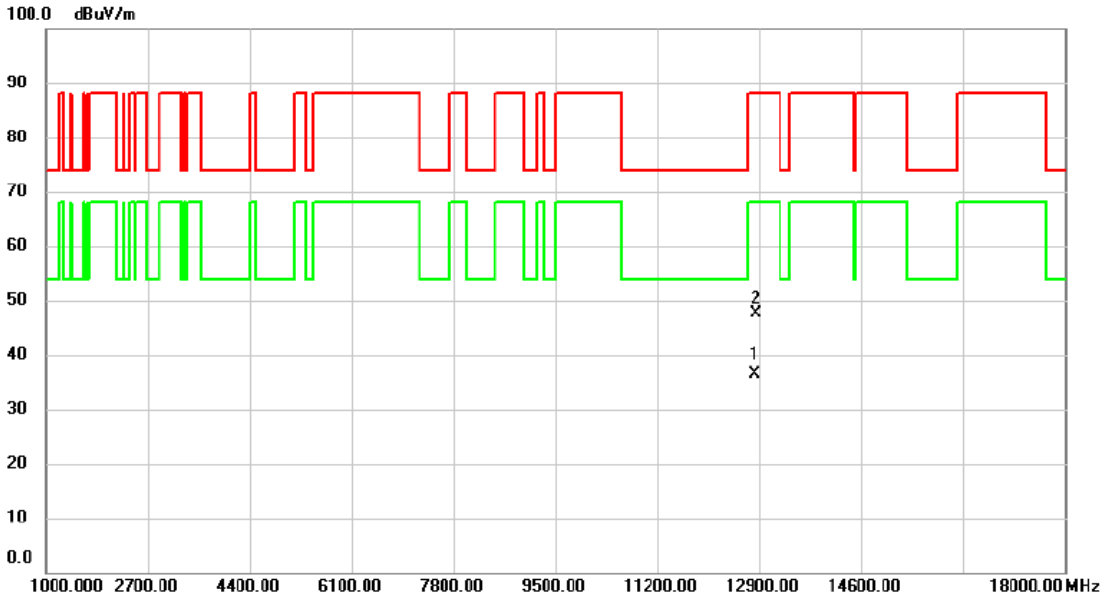
Test Mode	UNII-5_TX AX(HE20) Mode 6175 MHz	Polarization	Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	12345.760	25.31	10.80	36.11	54.00	-17.89	AVG	
2		12358.560	36.57	10.80	47.37	74.00	-26.63	peak	

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

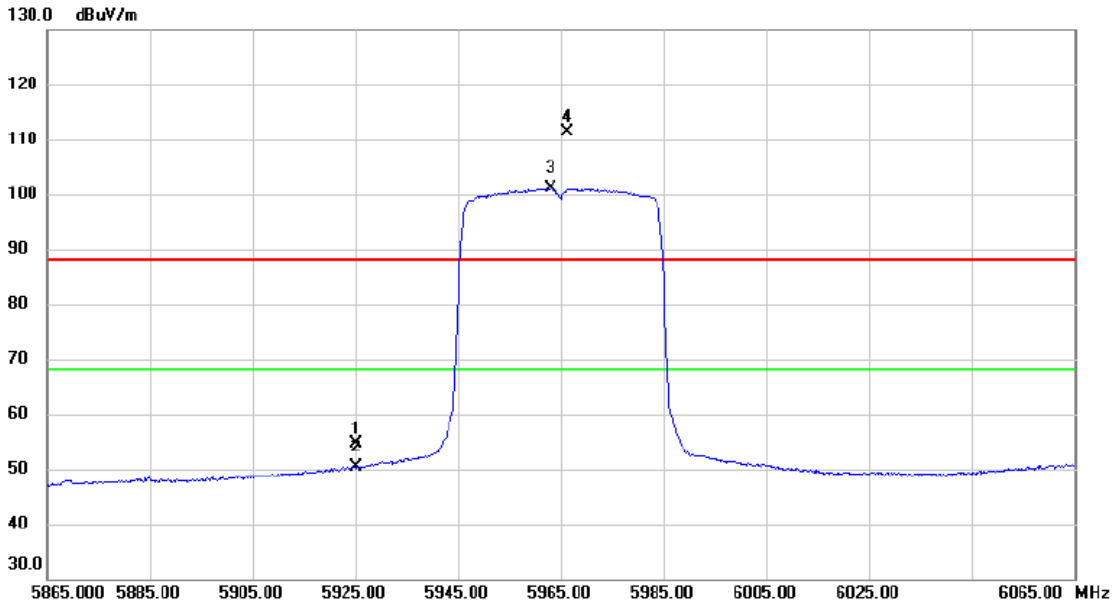
Test Mode	UNII-5_TX AX(HE20) Mode 6415 MHz	Polarization	Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	12826.980	25.37	11.03	36.40	68.20	-31.80	AVG	
2		12837.900	36.69	11.04	47.73	88.20	-40.47	peak	

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

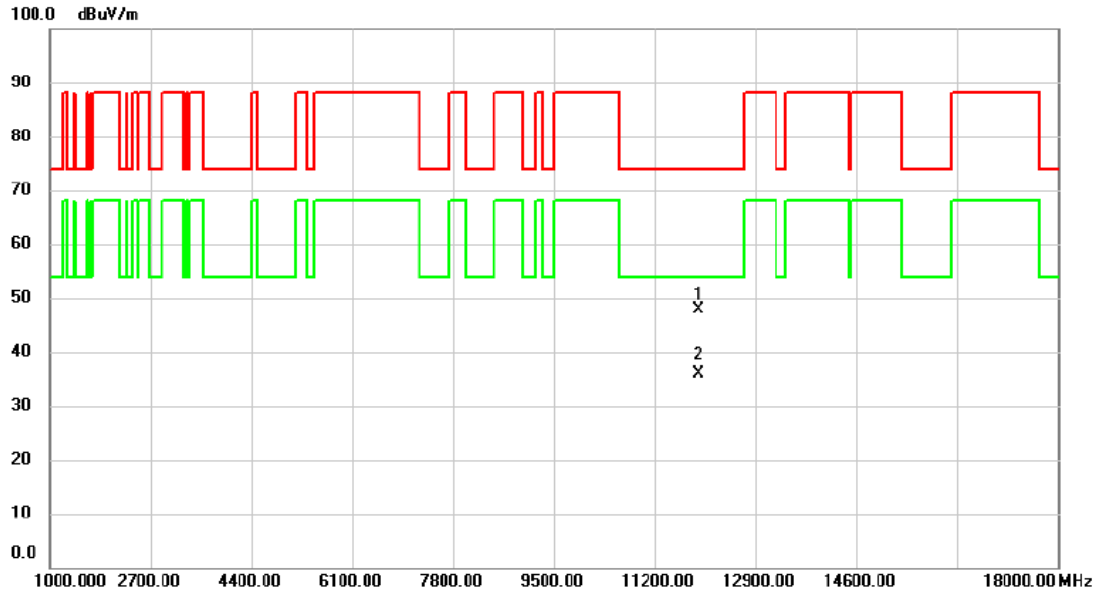
Test Mode	UNII-5_TX AX(HE40) Mode 5965 MHz	Polarization	Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		5925.000	40.01	14.73	54.74	88.20	-33.46	peak	
2		5925.000	35.61	14.73	50.34	68.20	-17.86	AVG	
3	*	5963.000	86.20	14.81	101.01	68.20	32.81	AVG	No Limit
4	X	5966.200	96.69	14.81	111.50	88.20	23.30	peak	No Limit

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

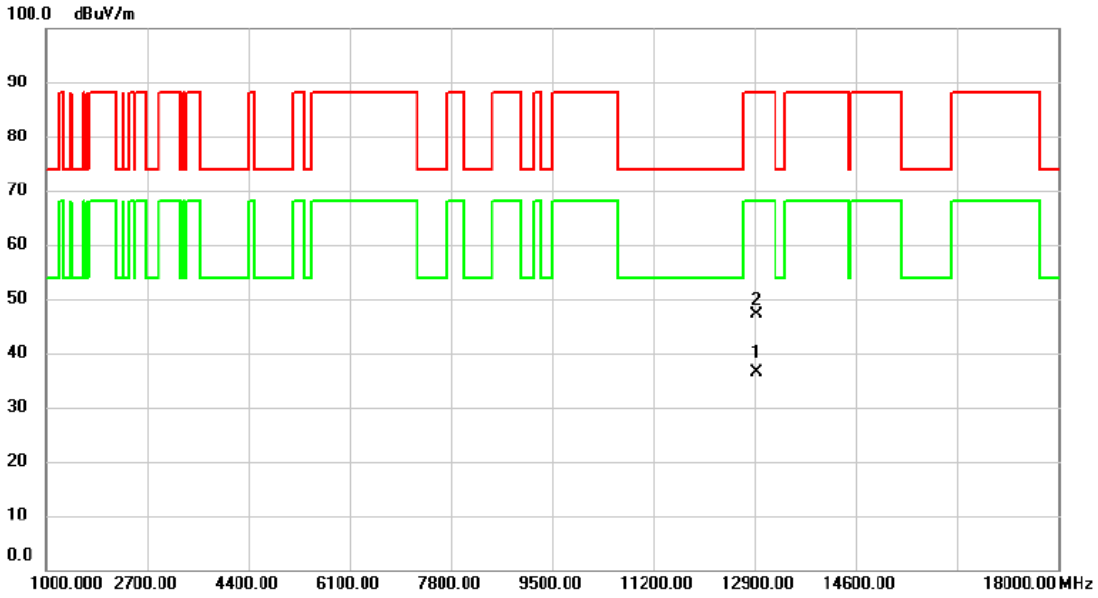
Test Mode	UNII-5_TX AX(HE40) Mode 5965 MHz	Polarization	Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		11926.920	36.94	10.82	47.76	74.00	-26.24	peak	
2	*	11929.680	25.11	10.81	35.92	54.00	-18.08	AVG	

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

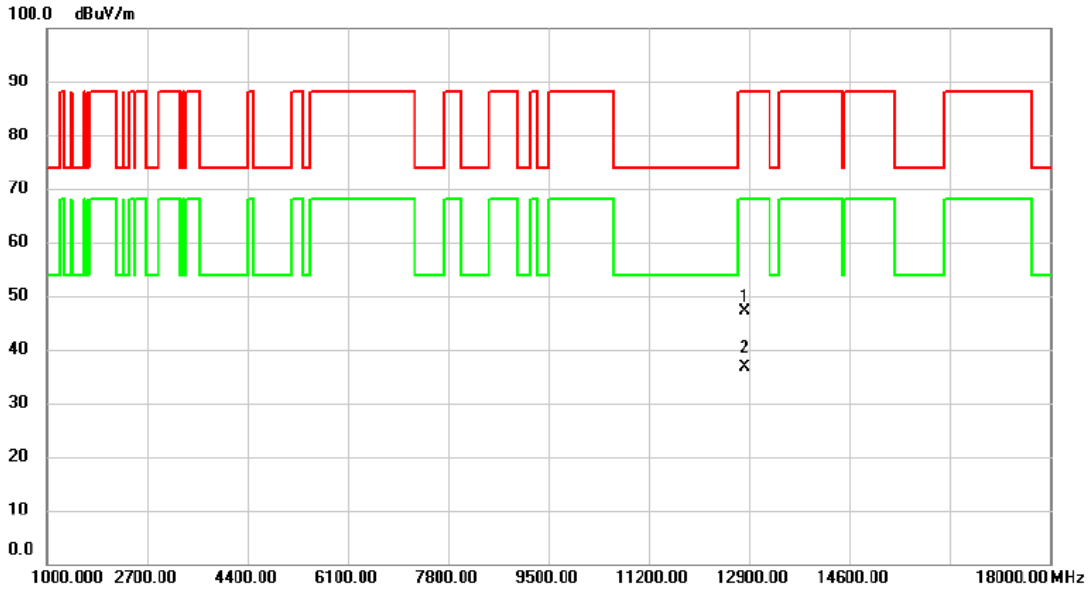
Test Mode	UNII-5_TX AX(HE40) Mode 6165 MHz	Polarization	Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	12939.460	25.35	11.11	36.46	68.20	-31.74	AVG	
2		12939.540	36.13	11.11	47.24	88.20	-40.96	peak	

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

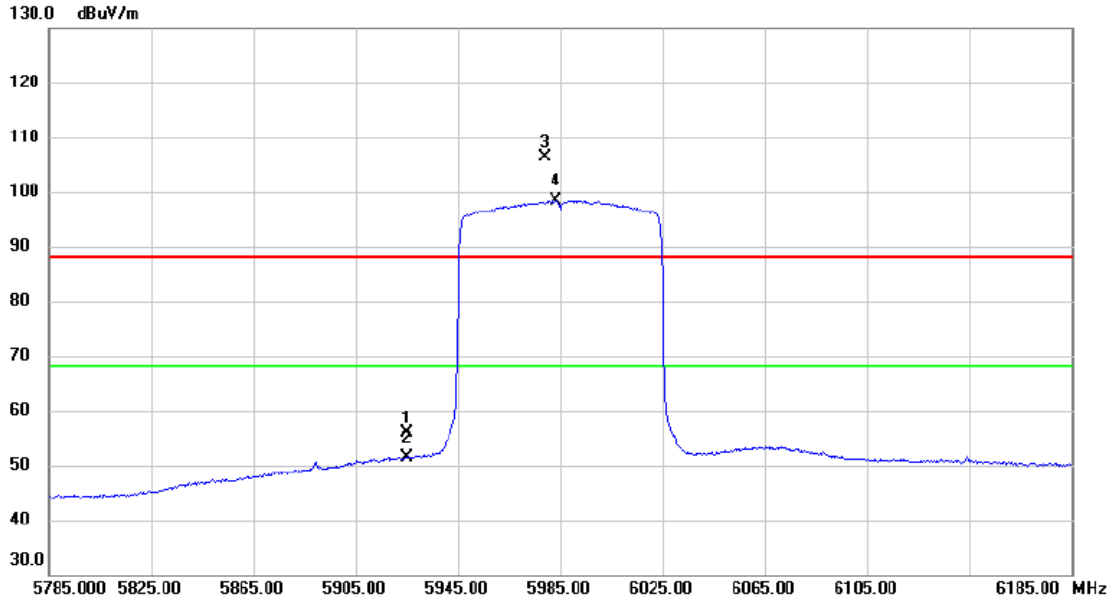
Test Mode	UNII-5_TX AX(HE40) Mode 6405 MHz	Polarization	Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		12810.000	36.10	11.02	47.12	88.20	-41.08	peak	
2	*	12810.120	25.52	11.02	36.54	68.20	-31.66	AVG	

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

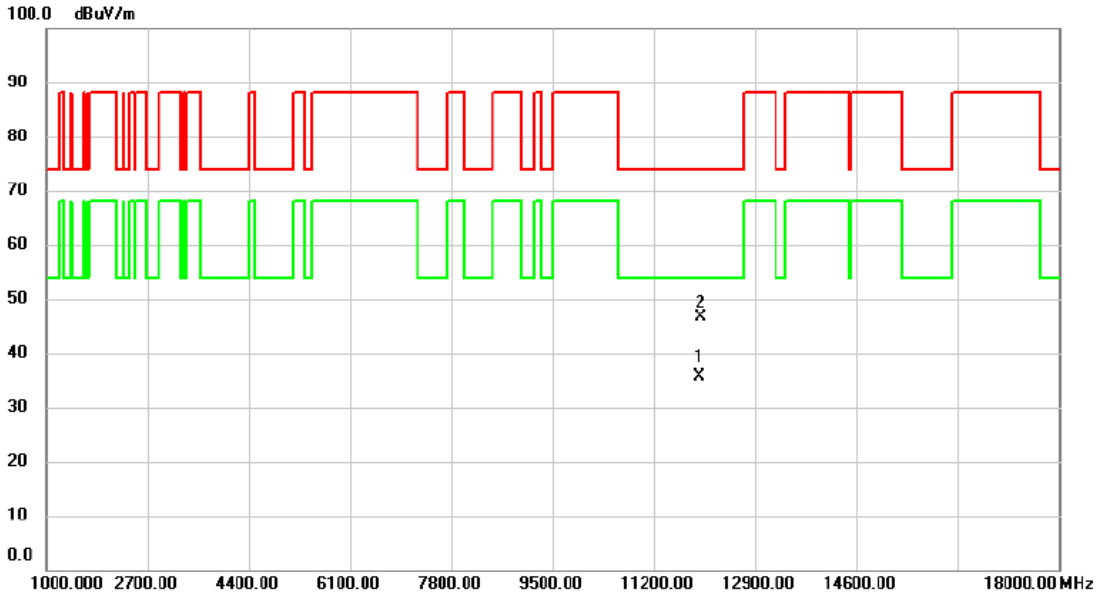
Test Mode	UNII-5_TX AX(HE80) Mode 5985 MHz	Polarization	Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		5925.000	41.26	14.73	55.99	88.20	-32.21	peak	
2		5925.000	36.70	14.73	51.43	68.20	-16.77	AVG	
3	X	5978.600	91.56	14.84	106.40	88.20	18.20	peak	No Limit
4	*	5983.000	83.61	14.84	98.45	68.20	30.25	AVG	No Limit

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

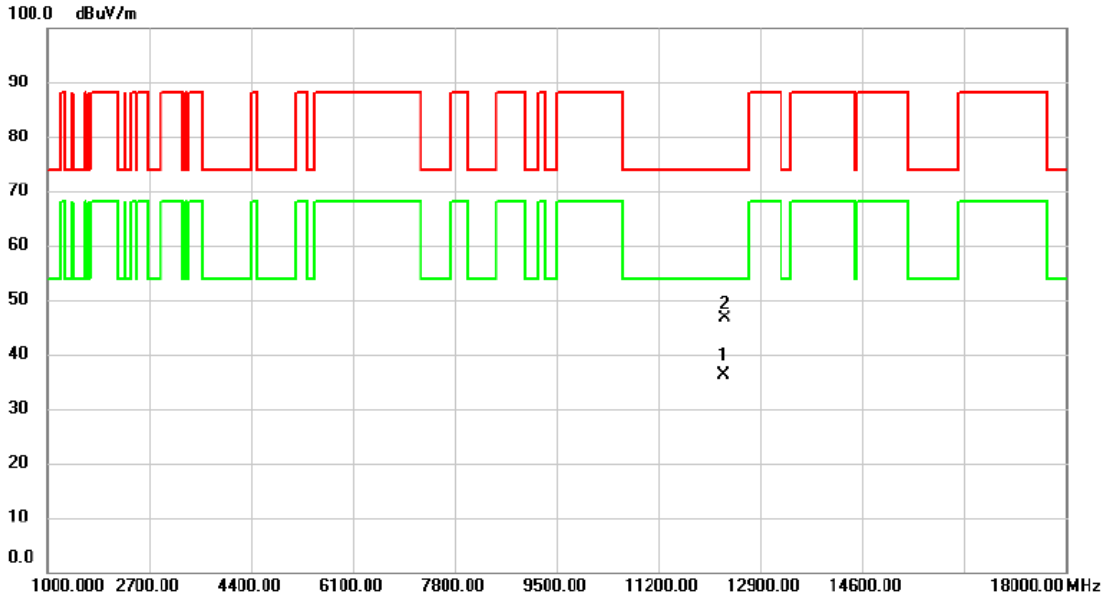
Test Mode	UNII-5_TX AX(HE80) Mode 5985 MHz	Polarization	Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	11965.840	24.81	10.82	35.63	54.00	-18.37	AVG	
2		11979.480	35.81	10.82	46.63	74.00	-27.37	peak	

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

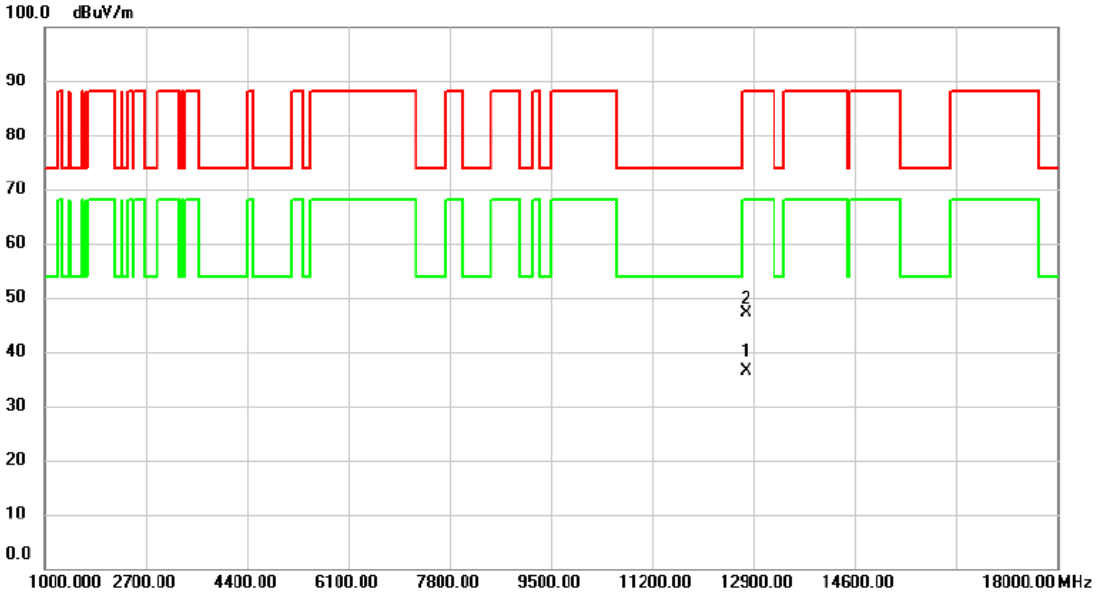
Test Mode	UNII-5_TX AX(HE80) Mode 6145 MHz	Polarization	Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	12282.520	25.26	10.80	36.06	54.00	-17.94	AVG	
2		12288.200	35.75	10.80	46.55	74.00	-27.45	peak	

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

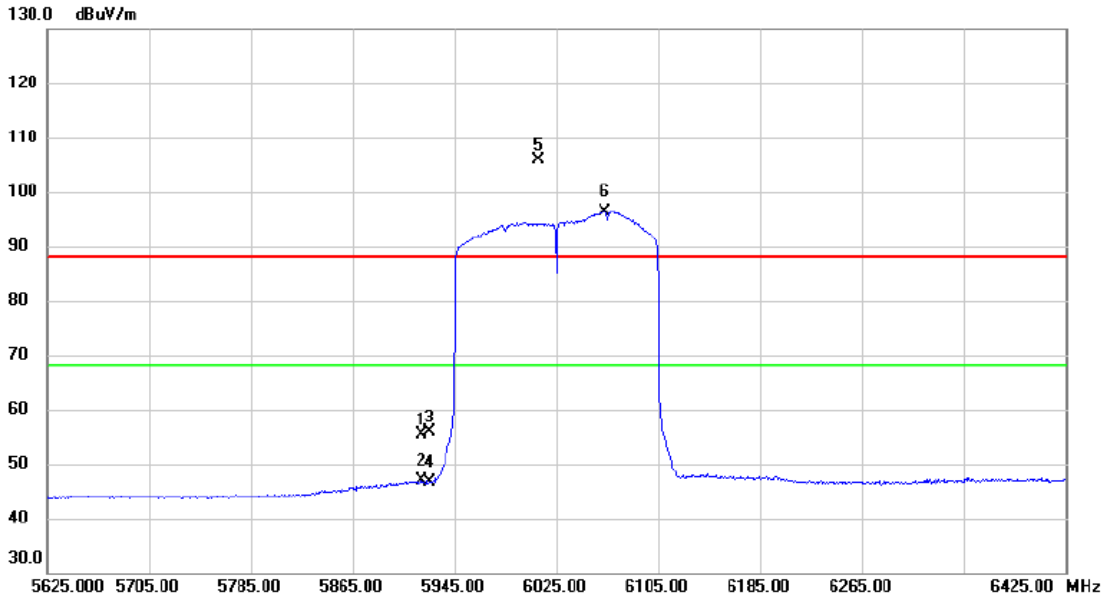
Test Mode	UNII-5_TX AX(HE80) Mode 6385 MHz	Polarization	Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	12764.940	25.30	10.99	36.29	68.20	-31.91	AVG	
2		12767.380	36.04	10.99	47.03	88.20	-41.17	peak	

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

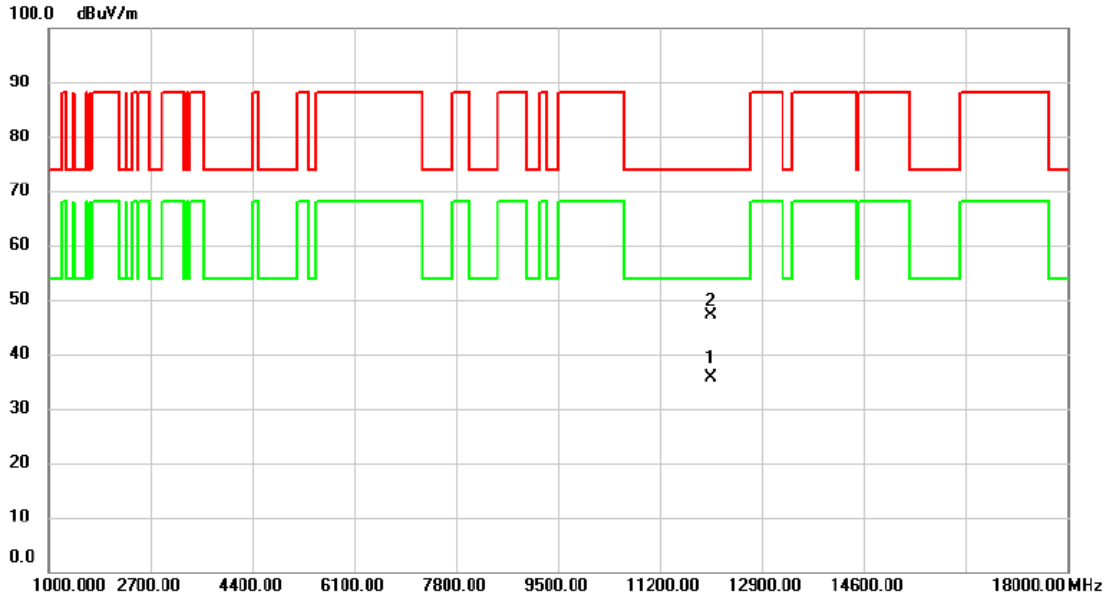
Test Mode	UNII-5_TX AX(HE160) Mode 6025 MHz	Polarization	Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		5919.400	40.74	14.72	55.46	88.20	-32.74	peak	
2		5919.400	32.06	14.72	46.78	68.20	-21.42	AVG	
3		5925.000	41.10	14.73	55.83	88.20	-32.37	peak	
4		5925.000	32.01	14.73	46.74	68.20	-21.46	AVG	
5	X	6010.600	91.08	14.92	106.00	88.20	17.80	peak	No Limit
6	*	6062.600	81.31	15.14	96.45	68.20	28.25	AVG	No Limit

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

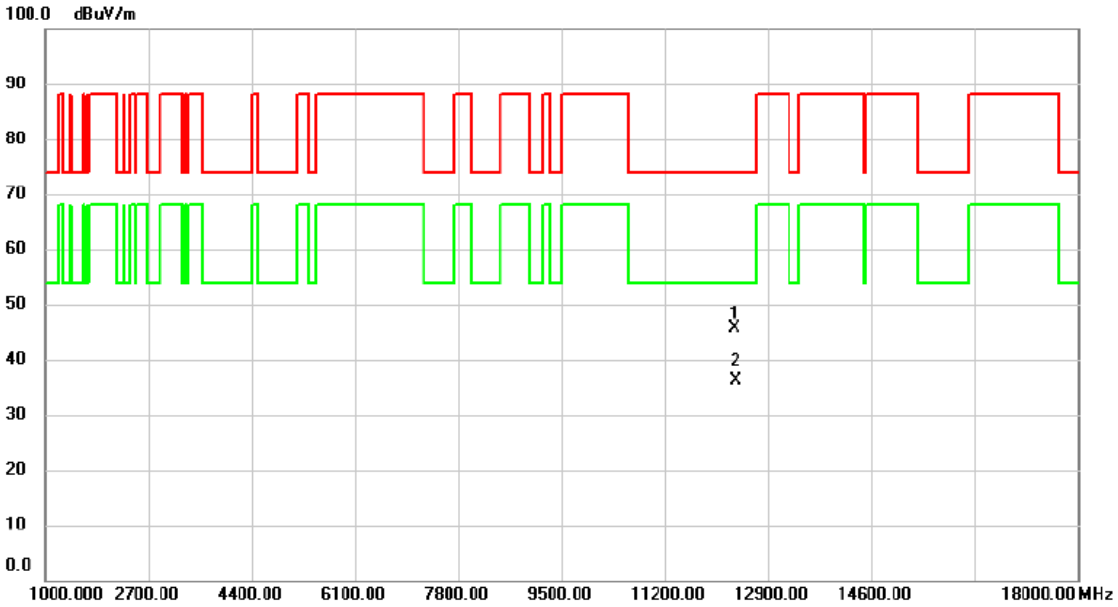
Test Mode	UNII-5_TX AX(HE160) Mode 6025 MHz	Polarization	Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	12056.100	24.80	10.81	35.61	54.00	-18.39	AVG	
2		12057.520	36.38	10.81	47.19	74.00	-26.81	peak	

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

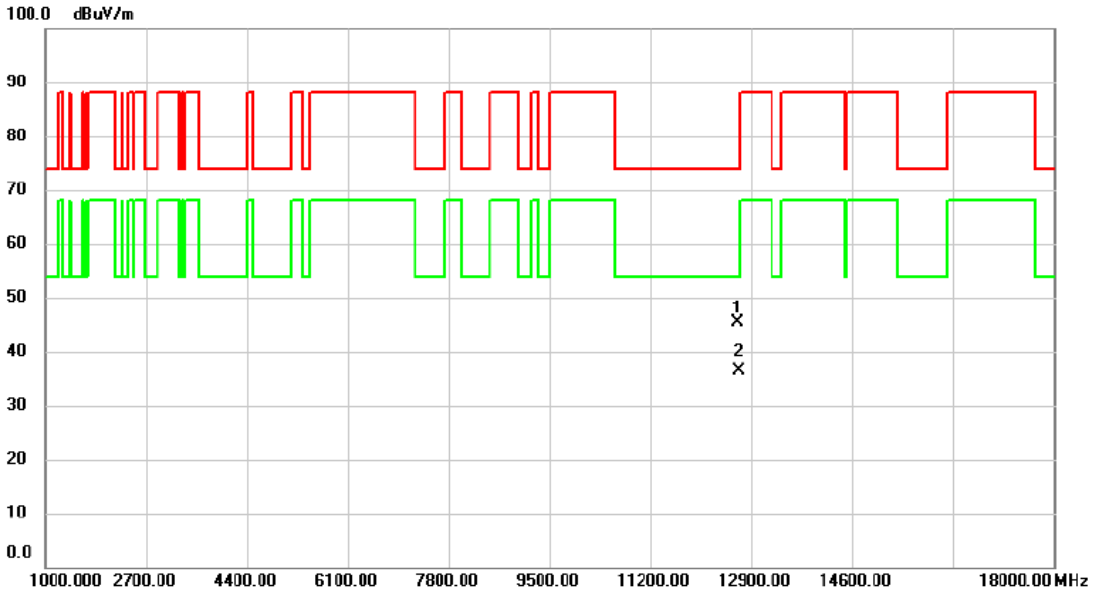
Test Mode	UNII-5_TX AX(HE160) Mode 6185 MHz	Polarization	Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		12345.200	34.75	10.80	45.55	74.00	-28.45	peak	
2	*	12356.550	25.32	10.81	36.13	54.00	-17.87	AVG	

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

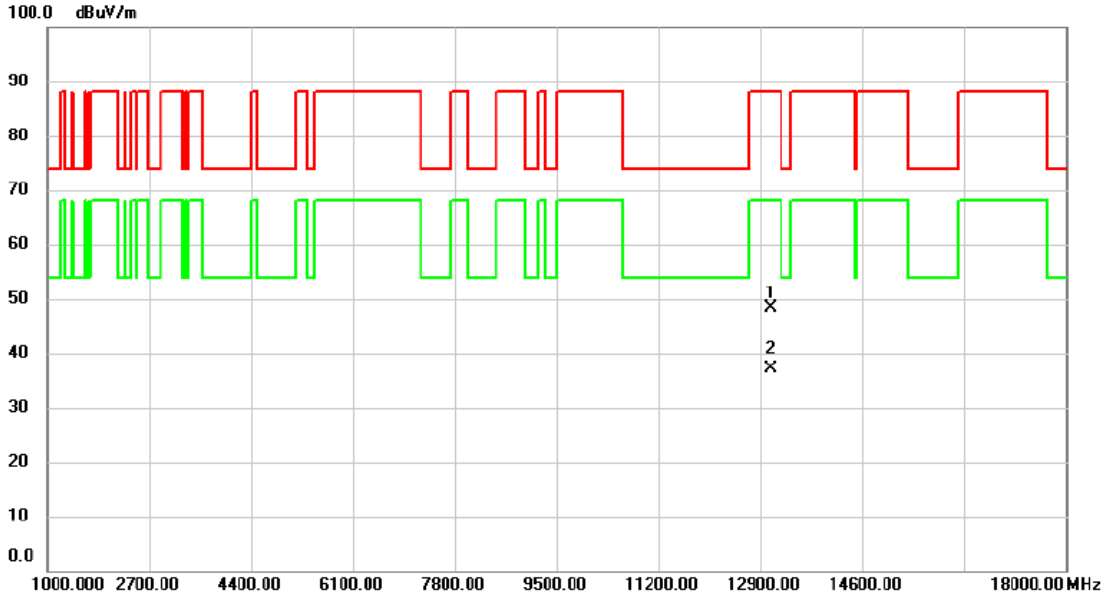
Test Mode	UNII-5_TX AX(HE160) Mode 6345 MHz	Polarization	Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		12665.250	34.51	10.91	45.42	74.00	-28.58	peak	
2	*	12689.800	25.46	10.93	36.39	54.00	-17.61	AVG	

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

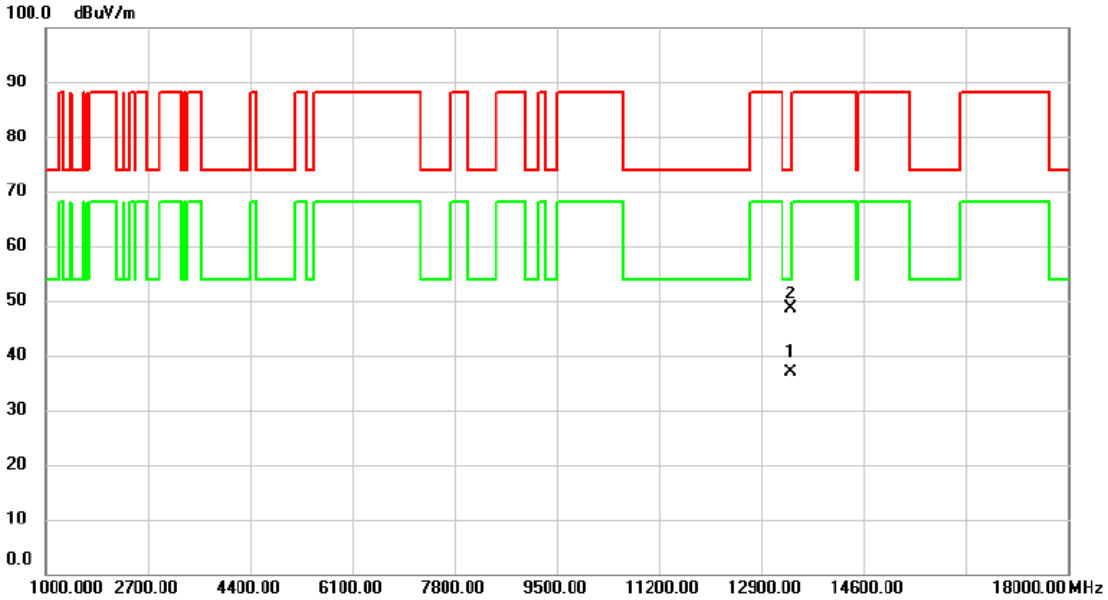
Test Mode	UNII-7_TX AX(HE20) Mode 6535 MHz	Polarization	Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		13063.740	37.21	11.14	48.35	88.20	-39.85	peak	
2	*	13069.700	25.98	11.13	37.11	68.20	-31.09	AVG	

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

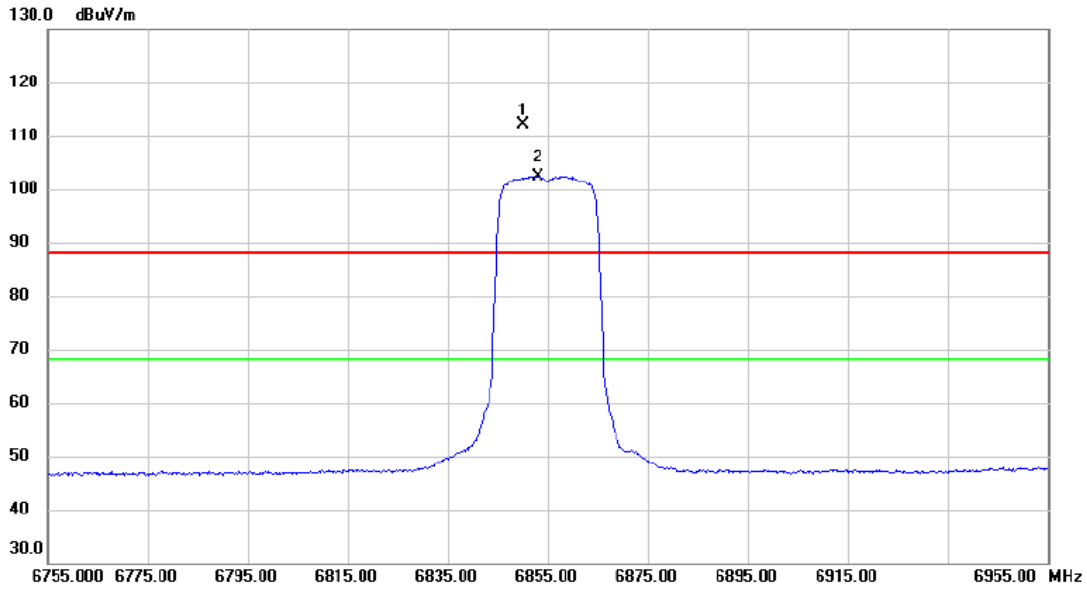
Test Mode	UNII-7_TX AX(HE20) Mode 6695 MHz	Polarization	Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	13394.600	25.90	11.03	36.93	54.00	-17.07	AVG	
2		13397.540	37.62	11.03	48.65	74.00	-25.35	peak	

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

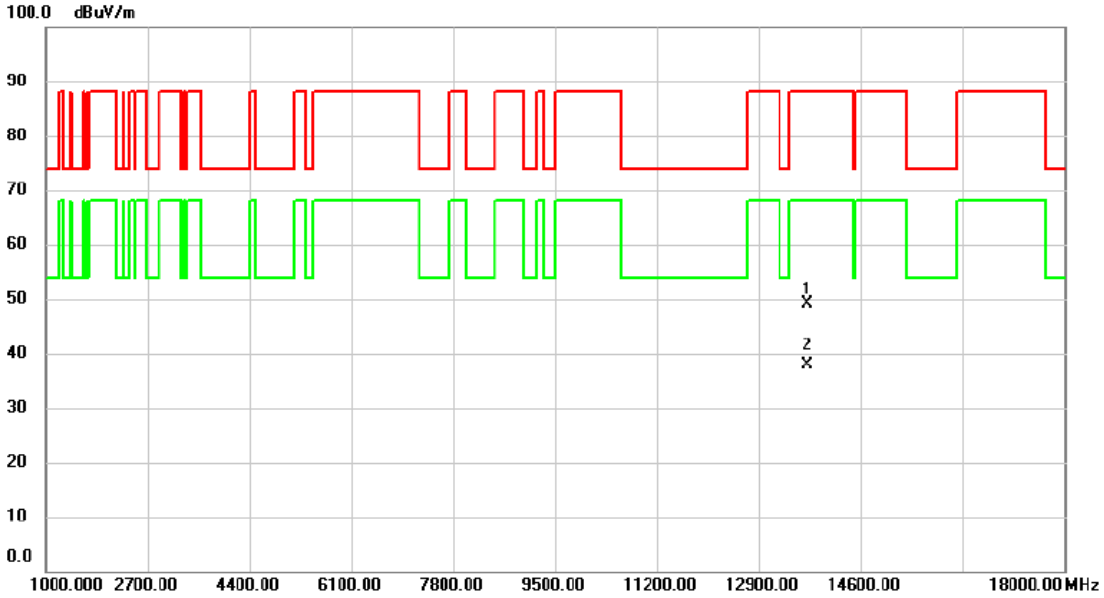
Test Mode	UNII-7_TX AX(HE20) Mode 6855 MHz	Polarization	Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	X	6850.200	94.73	17.39	112.12	88.20	23.92	peak	No Limit
2	*	6853.000	85.09	17.40	102.49	68.20	34.29	AVG	No Limit

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

Test Mode	UNII-7_TX AX(HE20) Mode 6855 MHz	Polarization	Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		13705.420	37.89	11.13	49.02	88.20	-39.18	peak	
2	*	13714.800	26.75	11.12	37.87	68.20	-30.33	AVG	

REMARKS:
(1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.