



FCC Radio Test Report

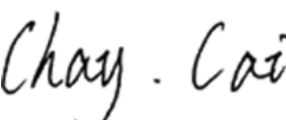
FCC ID: 2BFMH-KN-1012

This report concerns: Original Grant

Project No. : 2406E004
Equipment : Keenetic Hero
Brand Name : KEENETIC
Test Model : KN-1012
Series Model : N/A
Applicant : Keenetic Limited.
Address : Office 2307A,27/F., 148 Electric Road, North Point, Hong Kong
Manufacturer : Keenetic Limited.
Address : Office 2307A,27/F., 148 Electric Road, North Point, Hong Kong
Date of Receipt : Jun. 25, 2024
Date of Test : Jun. 26, 2024 ~ Sep. 18, 2024
Issued Date : Nov. 18, 2024
Report Version : R01
Test Sample : Engineering Sample No.: DG2024070820 for Radiated Emissions- 1GHz to 18GHz, DG2024062544 for others.
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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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**.

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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-4-2406E004	R00	Original Report.	Nov. 11, 2024	Invalid
BTL-FCCP-4-2406E004	R01	Updated the applicant and manufacturer information.	Nov. 18, 2024	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 291074 D02 EMC Measurement v01

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(e)	Bandwidth	APPENDIX E	PASS	-----
15.407(a)	Maximum e.i.r.p.	APPENDIX F	PASS	-----
15.407(a)	Power Spectral Density (e.i.r.p.)	APPENDIX G	PASS	-----
15.407(g)	Frequency Stability	APPENDIX H	PASS	-----
15.203	Antenna Requirements	-----	PASS	NOTE (2)
15.407(c)	Automatically Discontinue Transmission	-----	PASS	NOTE (3)

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) During no any information transmission, the EUT can automatically discontinue transmission and become standby mode for power saving. the EUT can detect the controlling signal of ACK message transmitting from remote device and verify whether it shall resend or discontinue transmission.
- (4) Device Type:
 - ☒ Indoor access point
 - ☐ Subordinate device (operating under the control of an indoor access point)
 - ☐ Client device (operating under the control of an indoor access point)

2.1 TEST FACILITY

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 95.45% 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-CB03 (3m)	CISPR	1GHz ~ 6GHz	4.08
		6GHz ~ 18GHz	4.62

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
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	20°C	42%	AC 120V/60Hz	Hayden Chen	Jul. 04, 2024
Radiated Emissions-9kHz to 30MHz	23°C	46%	AC 120V/60Hz	Hayden Chen	Aug. 09, 2024
Radiated Emissions-30MHz to 1000MHz	24°C	55%	AC 120V/60Hz	Chen Mo	Aug. 08, 2024
Radiated Emissions-Above 1000 MHz	26°C	55%	AC 120V/60Hz	Allen Tong	Aug. 27, 2024
	24°C	55%	AC 120V/60Hz	Chen Mo	Aug. 08, 2024
Bandwidth	23°C	55%	AC 120V/60Hz	Jaylan Li	Aug. 28, 2024
Maximum e.i.r.p.	23°C	55%	AC 120V/60Hz	Jaylan Li	Aug. 28, 2024
Power Spectral Density (e.i.r.p.)	23°C	55%	AC 120V/60Hz	Jaylan Li	Aug. 28, 2024
Frequency Stability	Normal & Extreme	55%	Normal & Extreme	Jaylan Li	Aug. 28, 2024

3. GENERAL INFORMATION

3.1 GENERAL DESCRIPTION OF EUT

Equipment	Keenetic Hero
Brand Name	KEENETIC
Test Model	KN-1012
Series Model	N/A
Model Difference(s)	N/A
Power Source	DC Voltage supplied from AC adapter. Model: DSA-30PFL-12 FCA 120250
Power Rating	I/P: 100-240V~ 50/60Hz 0.8A O/P: +12.0V  2.5A
Operation Frequency Band(s)	UNII-4: 5850 MHz ~ 5895 MHz
Modulation Type	IEEE 802.11a/n/ac: OFDM IEEE 802.11ax: OFDMA
Bit Rate of Transmitter	IEEE 802.11a: 54/48/36/24/18/12/9/6 Mbps IEEE 802.11n: up to 300 Mbps IEEE 802.11ac: up to 1733.4 Mbps IEEE 802.11ax: up to 2402 Mbps
Maximum e.i.r.p	IEEE 802.11ax(HE80): 35.23 dBm (3.3343 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-3+UNII-4	
IEEE 802.11a / IEEE 802.11n(HT20) / IEEE 802.11ac(VHT20) / IEEE 802.11ax(HE20)	
Channel	Frequency (MHz)
169	5845

UNII-4	
IEEE 802.11a / IEEE 802.11n(HT20) / IEEE 802.11ac(VHT20) / IEEE 802.11ax(HE20)	
Channel	Frequency (MHz)
173	5865
177	5885

UNII-3+UNII-4	
IEEE 802.11n(HT40) / IEEE 802.11ac(VHT40) / IEEE 802.11ax(HE40)	
Channel	Frequency (MHz)
167	5835

UNII-4	
IEEE 802.11n(HT40) / IEEE 802.11ac(VHT40) / IEEE 802.11ax(HE40)	
Channel	Frequency (MHz)
175	5875

UNII-3+UNII-4	
IEEE 802.11ac(VHT80) / IEEE 802.11ax(HE80)	
Channel	Frequency (MHz)
171	5855

UNII-3+UNII-4	
IEEE 802.11ac(VHT160) / IEEE 802.11ax(HE160)	
Channel	Frequency (MHz)
163	5815

3. Antenna Specification:

Antenna Information										
Antenna-1			Antenna-2			Antenna-3			Beamforming Gain	
Antenna Type	Frequency (MHz)	Total Gain (dBi)	Antenna Type	Frequency (MHz)	Total Gain (dBi)	Antenna Type	Frequency (MHz)	Total Gain (dBi)	Frequency (MHz)	Peak Gain (dBi)
External PCB Antenna	5850~5895	2.79	External PCB Antenna	5850~5895	2.46	External PCB Antenna	5850~5895	1.89	5850~5895	1.44

Note:

- 1) The EUT supports CDD. Physically, and all antenna gains are not equal, so Directional gain= $10\log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})/N]$ dBi, that is Directional gain= $10\log[(10^{3.37/20} + 10^{3.21/20} + 10^{2.19/20})/3]$ dBi = 7.16 dBi.
- 2) The EUT is 3T3R 2SS, the bit rate should be calculated according to 2x2 products.

4. The worst case for 3TX as follow:

For Non Beamforming:

Operating Mode	TX Mode	3TX
IEEE 802.11a		V (Ant. 1+Ant. 2+Ant. 3)
IEEE 802.11n(HT20)		V (Ant. 1+Ant. 2+Ant. 3)
IEEE 802.11n(HT40)		V (Ant. 1+Ant. 2+Ant. 3)
IEEE 802.11ac(VHT20)		V (Ant. 1+Ant. 2+Ant. 3)
IEEE 802.11ac(VHT40)		V (Ant. 1+Ant. 2+Ant. 3)
IEEE 802.11ac(VHT80)		V (Ant. 1+Ant. 2+Ant. 3)
IEEE 802.11ac(VHT160)		V (Ant. 1+Ant. 2+Ant. 3)
IEEE 802.11ax(HE20)		V (Ant. 1+Ant. 2+Ant. 3)
IEEE 802.11ax(HE40)		V (Ant. 1+Ant. 2+Ant. 3)
IEEE 802.11ax(HE80)		V (Ant. 1+Ant. 2+Ant. 3)
IEEE 802.11ax(HE160)		V (Ant. 1+Ant. 2+Ant. 3)

For Beamforming:

Operating Mode	TX Mode	3TX
IEEE 802.11n(HT20)		V (Ant. 1+Ant. 2+Ant. 3)
IEEE 802.11n(HT40)		V (Ant. 1+Ant. 2+Ant. 3)
IEEE 802.11ac(VHT20)		V (Ant. 1+Ant. 2+Ant. 3)
IEEE 802.11ac(VHT40)		V (Ant. 1+Ant. 2+Ant. 3)
IEEE 802.11ac(VHT80)		V (Ant. 1+Ant. 2+Ant. 3)
IEEE 802.11ac(VHT160)		V (Ant. 1+Ant. 2+Ant. 3)
IEEE 802.11ax(HE20)		V (Ant. 1+Ant. 2+Ant. 3)
IEEE 802.11ax(HE40)		V (Ant. 1+Ant. 2+Ant. 3)
IEEE 802.11ax(HE80)		V (Ant. 1+Ant. 2+Ant. 3)
IEEE 802.11ax(HE160)		V (Ant. 1+Ant. 2+Ant. 3)

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 A Mode Channel 169/173/177
Mode 2	TX AX(HE20) Mode Channel 169/173/177
Mode 3	TX AX(HE40) Mode Channel 167/175
Mode 4	TX AX(HE80) Mode Channel 171
Mode 5	TX AX(HE160) Mode Channel 163

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 4	TX AX(HE80) Mode Channel 171

Radiated Emissions Test - Below 1GHz	
Final Test Mode	Description
Mode 4	TX AX(HE80) Mode Channel 171

Radiated Emissions Test - Above 1GHz	
Final Test Mode	Description
Mode 1	TX A Mode Channel 169/173/177
Mode 2	TX AX(HE20) Mode Channel 169/173/177
Mode 3	TX AX(HE40) Mode Channel 167/175
Mode 4	TX AX(HE80) Mode Channel 171
Mode 5	TX AX(HE160) Mode Channel 163

Conducted Test	
Final Test Mode	Description
Mode 1	TX A Mode Channel 169/173/177
Mode 2	TX AX(HE20) Mode Channel 169/173/177
Mode 3	TX AX(HE40) Mode Channel 167/175
Mode 4	TX AX(HE80) Mode Channel 171
Mode 5	TX AX(HE160) Mode Channel 163

Note:

- (1) For AC power line conducted emissions and radiated emission below 1 GHz test, the IEEE 802.11 ax(HE80) Mode Channel 171 is found to be the worst case and recorded.
- (2) For radiated emission above 1 GHz test, the spurious points of 1GHz~26.5GHz and 26.5GHz~40GHz have been pre-tested and in this report only recorded the worst case. The remaining spurious points are all below the limit value of 20dB.
- (3) For radiated emission Harmonic 18-40GHz test, only tested the worst case and recorded.
- (4) All the bit rate of transmitter have been tested and found the lowest rate is found to be the worst case and recorded.
- (5) For radiated emission above 1GHz test, both Vertical and Horizontal are evaluated, only the worst case is recorded
- (6) For power limitation beamforming operation, the software automatically backs power down based on CDD power. Therefore, only the CDD mode was evaluated in this report.
- (7) HE20/HE40/HE80/HE160 covers HT20/HT40 and VHT20/VHT40/VHT80/VHT160, due to same modulation. The power setting for 802.11n HT20/HT40 and 802.11ac VHT20/VHT40/VHT80/VHT160 are the same 802.11ax HE20/HE40/HE80/HE160.
- (8) When testing AX mode, RU Configuration is full RU, so only the full RU is evaluated and measured inside report.

3.3 PARAMETERS OF TEST SOFTWARE

UNII-4			
Test Software Version	QATool_UIv2.78_DLLv6.83		
Frequency (MHz)	5845	5865	5885
IEEE 802.11a	18	18.5	18
IEEE 802.11ax(HE20)	19	19	19
Frequency (MHz)	5835	5875	
IEEE 802.11ax(HE40)	21	21.5	
Frequency (MHz)	5855		
IEEE 802.11ax(HE80)	23		
Frequency (MHz)	5815		
IEEE 802.11ax(HE160)	21		

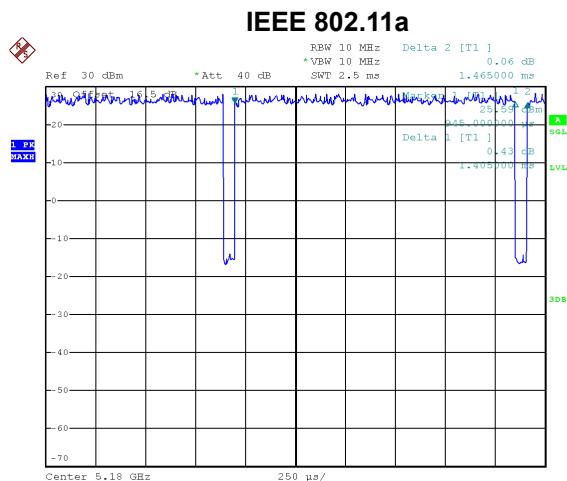
3.4 DUTY CYCLE

If duty cycle is $\geq 98\%$, duty factor is not required.

If duty cycle is $< 98\%$, duty factor shall be considered.

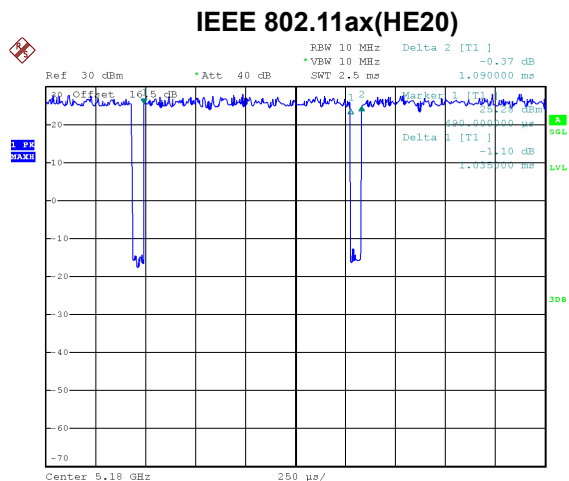
The output power = measured power + duty factor.

The power spectral density = measured power spectral density + duty factor.



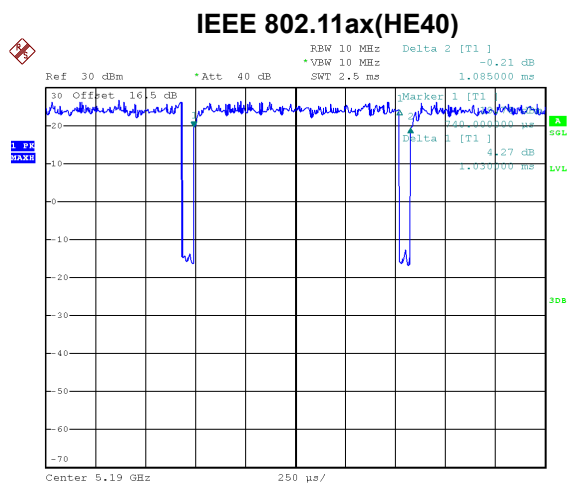
Date: 22.JUL.2024 17:00:58

Duty cycle = $1.405 \text{ ms} / 1.465 \text{ ms} = 95.90\%$
Duty Factor = $10 \log(1 / \text{Duty cycle}) = 0.18$



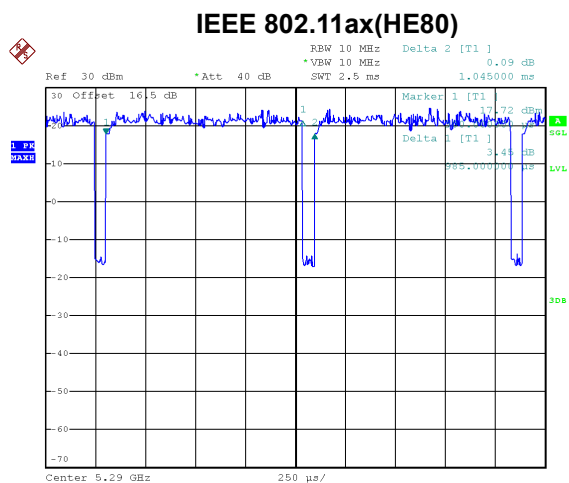
Date: 22.JUL.2024 17:11:56

Duty cycle = $1.035 \text{ ms} / 1.090 \text{ ms} = 94.95\%$
Duty Factor = $10 \log(1 / \text{Duty cycle}) = 0.22$



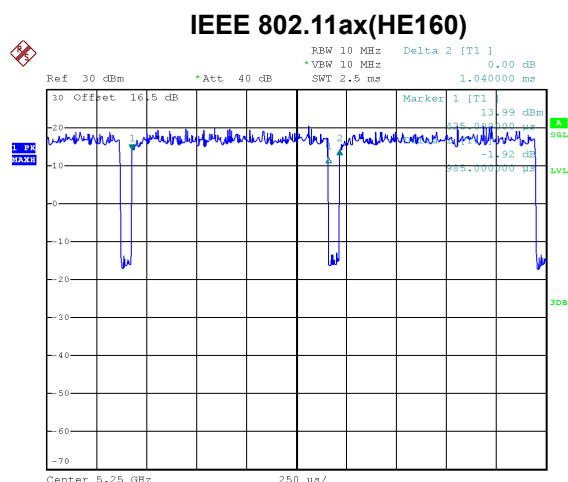
Date: 22.JUL.2024 17:12:50

Duty cycle = $1.030 \text{ ms} / 1.085 \text{ ms} = 94.93\%$
Duty Factor = $10 \log(1 / \text{Duty cycle}) = 0.23$



Date: 22.JUL.2024 17:14:19

Duty cycle = $0.985 \text{ ms} / 1.045 \text{ ms} = 94.26\%$
Duty Factor = $10 \log(1 / \text{Duty cycle}) = 0.26$



Date: 22.JUL.2024 17:17:32

Duty cycle = 0.985 ms / 1.040 ms = 94.71%
 Duty Factor = 10 log(1 / Duty cycle) = 0.24

NOTE:

For IEEE 802.11a:

For radiated emissions frequency above 1 GHz, the resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 1 kHz (Duty cycle < 98%).

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 1 kHz (Duty cycle < 98%).

For IEEE 802.11ax(HE40):

For radiated emissions frequency above 1 GHz, the resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 2 kHz (Duty cycle < 98%).

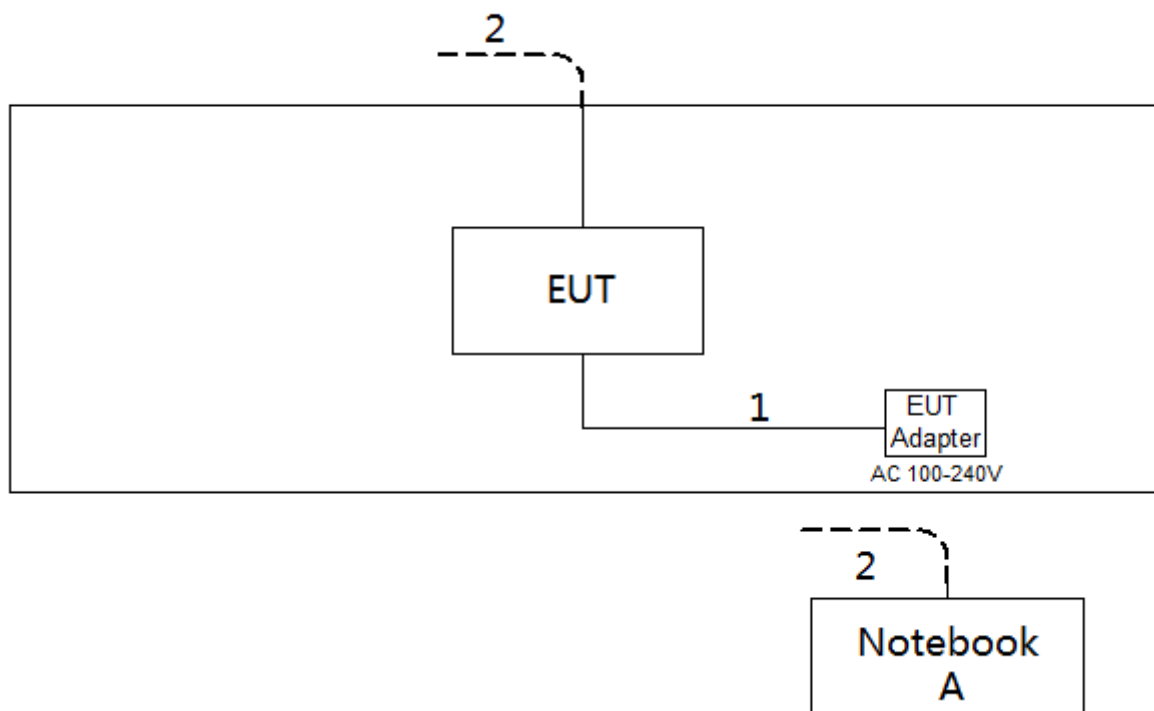
For IEEE 802.11ax(HE80):

For radiated emissions frequency above 1 GHz, the resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 3 kHz (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 3 kHz (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	Honor	Nbl-WAQ9HNRP	N/A

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

3.7 CUSTOMER INFORMATION DESCRIPTION

- 1) The antenna gain, beamforming gain and directional gain are provided by the manufacturer.
- 2) Except for AC power line conducted emissions test and Radiated spurious emissions, the results of all test items include cable losses. All cable losses are provided by the testing laboratory.

4. AC POWER LINE CONDUCTED EMISSIONS

4.1 LIMIT

Frequency (MHz)	Limit (dB μ V)	
	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.

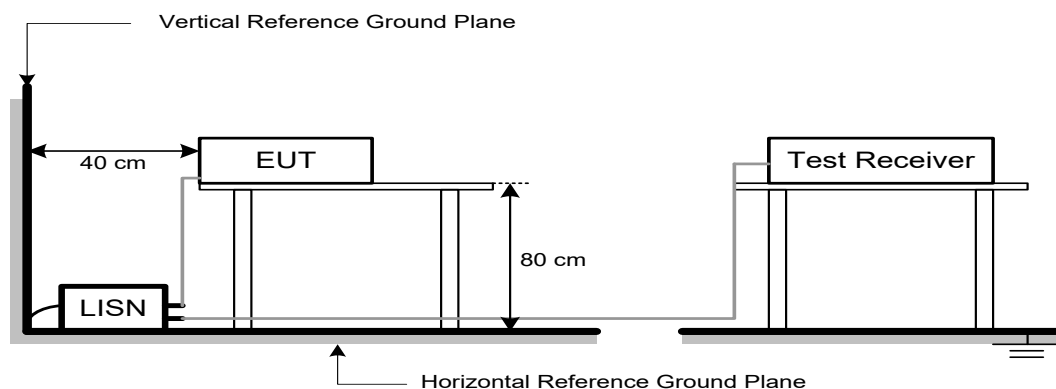
The following table is the setting of the receiver:

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)
5725-5850 NOTE (2)	15	110.2	119.7(Notes 5)
	-7	88.2	97.7(Notes 5)
	-5	90.2	99.7(Notes 5)
	-27	68.2	77.7(Notes 5)
	10	105.2	114.7(Notes 5)
	15.6	110.8	120.3(Notes 5)
	27	122.2	131.7(Notes 5)

NOTE:

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

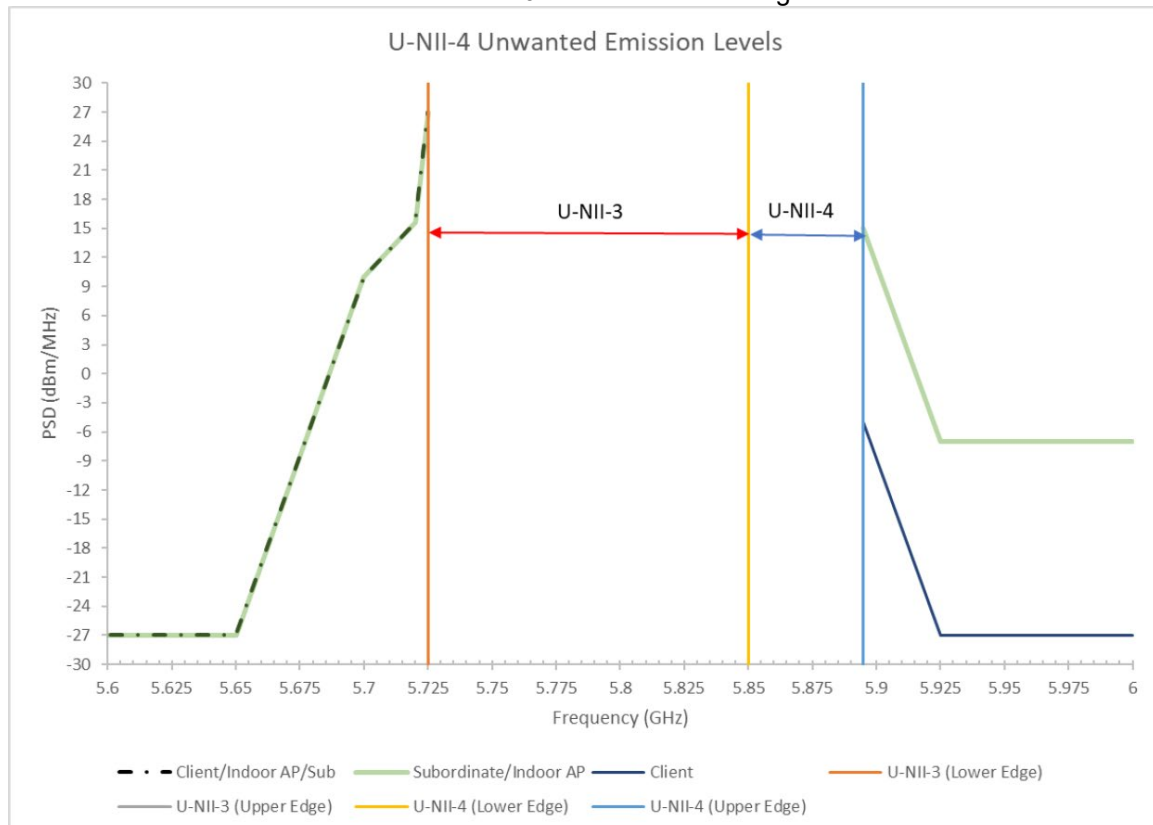
$$E = \frac{1000000\sqrt{30P}}{3} \mu\text{V/m, where P is the eirp (Watts)}$$

- (2) According to 15.407(b)(5)(i), for an indoor access point or subordinate device, all emissions at or above 5.895 GHz shall not exceed an e.i.r.p. of 15 dBm/MHz and shall decrease linearly to an e.i.r.p. of -7 dBm/MHz at or above 5.925 GHz.

According to 15.407(b)(5)(ii), for a client device, all emissions at or above 5.895 GHz shall not exceed an e.i.r.p. of -5 dBm/MHz and shall decrease linearly to an e.i.r.p. of -27 dBm/MHz at or above 5.925 GHz.

According to 15.407(b)(5)(iii), for a client device or indoor access point or subordinate device, all emissions below 5.725 GHz shall not exceed an e.i.r.p. of -27 dBm/MHz at 5.65 GHz increasing linearly to 10 dBm/MHz at 5.7 GHz, and from 5.7 GHz increasing linearly to a level of 15.6 dBm/MHz at 5.72 GHz, and from 5.72 GHz increasing linearly to a level of 27 dBm/MHz at 5.725 GHz.

- (3) Unwanted emissions outside of restricted bands are measured with a RMS detector.
- (4) Band Edge measurements made below 5725 MHz are to be made with a Peak detector. Band Edge measurements above 5895 MHz are to be made with a RMS detector. Band Edge measurements above 5895 MHz should also include Peak plots to show compliance with 15.35(b) where the peak emissions must be limited to no more than 20 dB above the average limit.



- (5)

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

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

FS_{limit} : Harmonic at 3m Peak and Average limit.

FS_{max} : Harmonic at 1m Peak and Average Maximum value.

d_{limit} : Harmonic at 3m test distance.

d_{measure} : 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

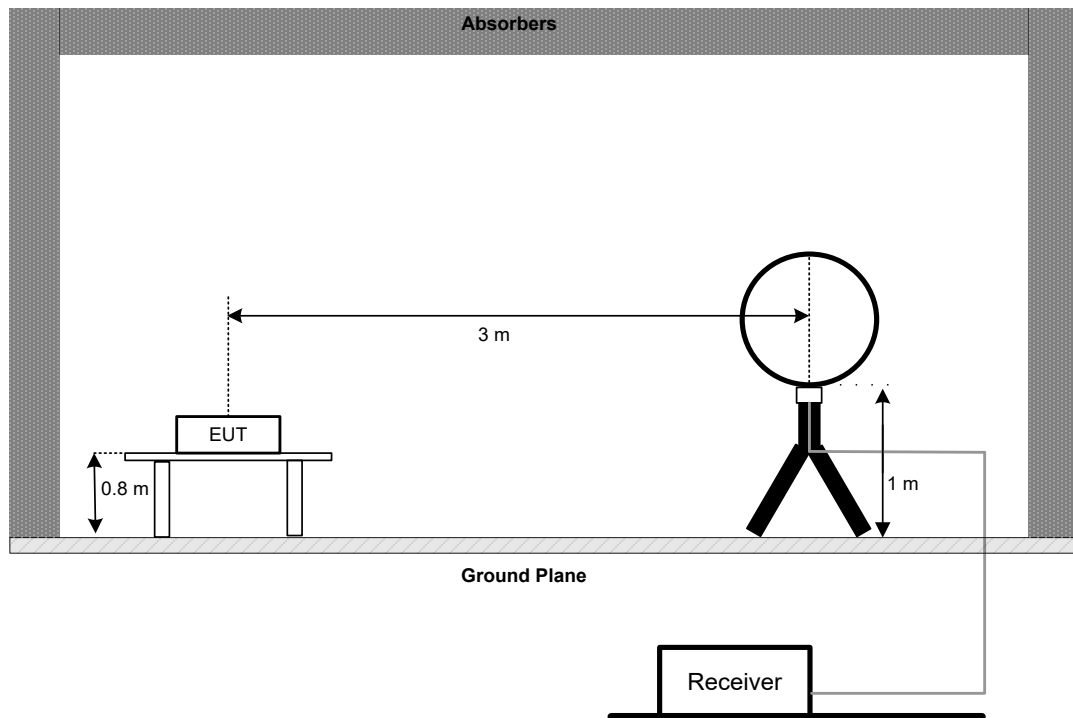
Receiver Parameters	Setting
Start ~ Stop Frequency	9 kHz~90 kHz for PK/AVG detector
Start ~ Stop Frequency	90 kHz~110 kHz for QP detector
Start ~ Stop Frequency	110 kHz~490 kHz for PK/AVG detector
Start ~ Stop Frequency	490 kHz~30 MHz for QP detector
Start ~ Stop Frequency	30 MHz~1000 MHz for QP detector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

5.3 DEVIATION FROM TEST STANDARD

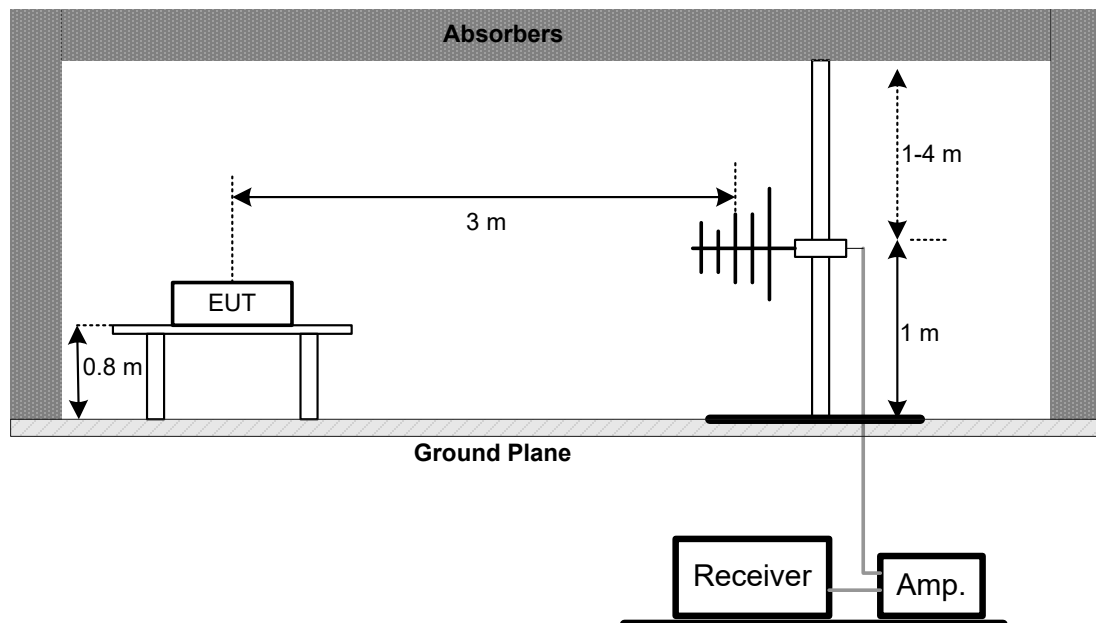
No deviation.

5.4 TEST SETUP

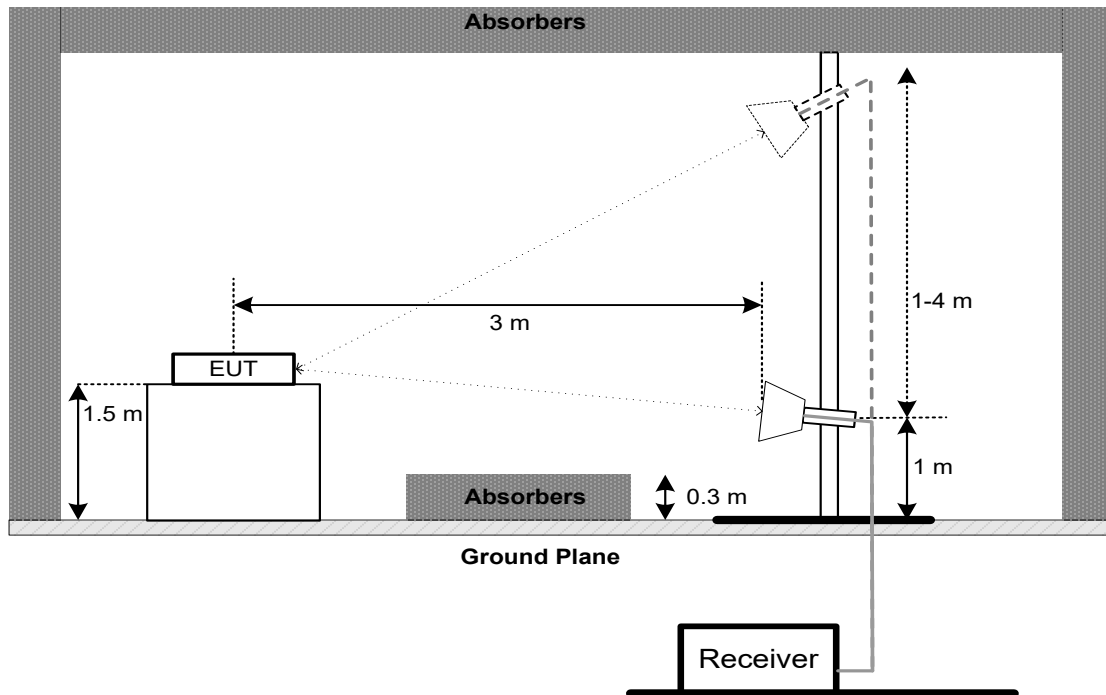
9 kHz to 30 MHz



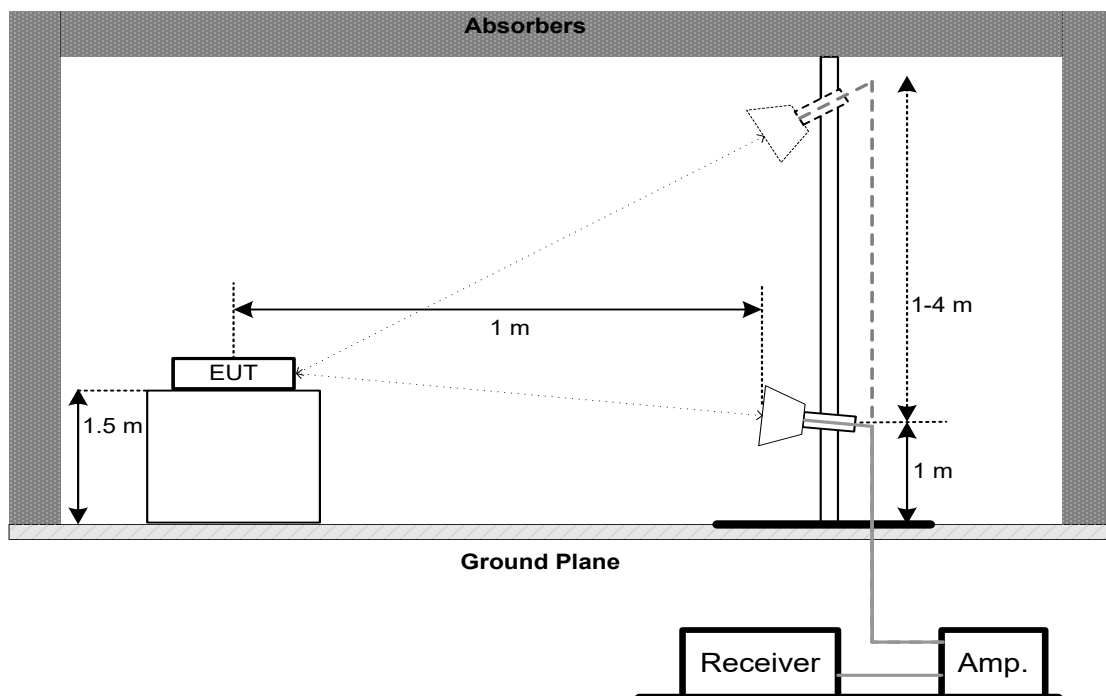
30 MHz to 1 GHz



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 = $40 \log (\text{specific distance} / \text{test distance})$ (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(e)	6 dB Bandwidth	Minimum 500 kHz	5850-5895

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:

Spectrum Parameter	Setting
Span Frequency	> 6 dB Bandwidth
RBW	100 kHz
VBW	300 kHz
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	$\geq 3 \times \text{RBW}$
Detector	Peak
Trace	Max Hold
Sweep Time	Auto

- c. Measured the spectrum width with power higher than 6 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.	Indoor Access Point 36 dBm	5850-5895
		Subordinate device operating under the control of an indoor access point 36 dBm	
		Client devices operating under the control of an indoor access point 30 dBm	

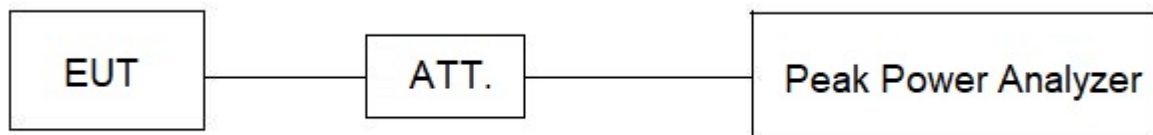
7.2 TEST PROCEDURE

- The EUT was directly connected to the peak power analyzer and antenna output port as show in the block diagram below.
- 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. POWER SPECTRAL DENSITY (E.I.R.P.)

8.1 LIMIT

Section	Test Item	Limit	Frequency Range (MHz)
FCC 15.407(a)	Power Spectral Density (e.i.r.p.)	Indoor Access Point 20 dBm/MHz	5850-5895
		Subordinate device operating under the control of an indoor access point 20 dBm/MHz	
		Client devices operating under the control of an indoor access point 14 dBm/MHz	

8.2 TEST PROCEDURE

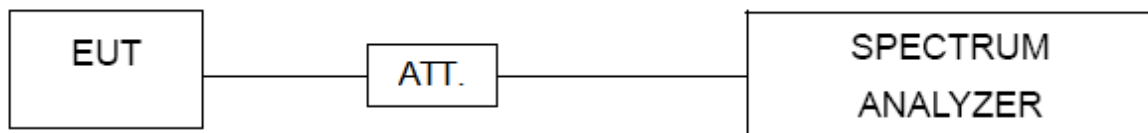
- The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram below.
- Spectrum Setting:

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. FREQUENCY STABILITY

9.1 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.	5850-5895

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	Entire absence of modulation emissions bandwidth
RBW	10 kHz
VBW	10 kHz
Detector	Peak
Trace	Max Hold
Sweep Time	Auto

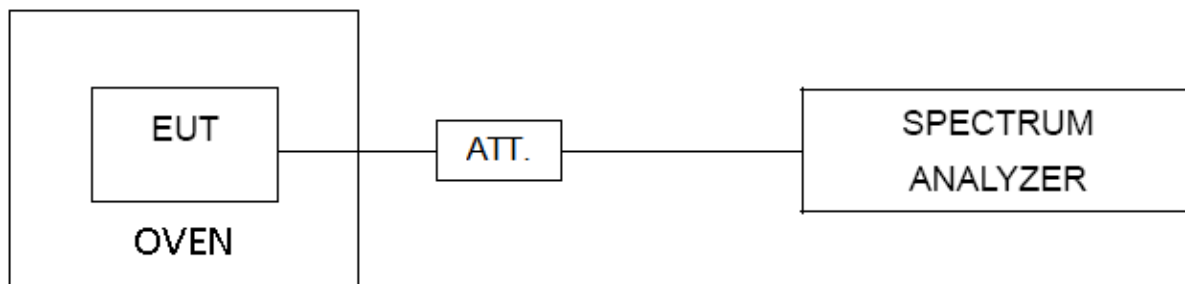
c. The test extreme voltage is to change the primary supply voltage from 85 to 115 percent of the nominal value.

d. User manual temperature is 0°C~50°C.

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. 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	RG 213/U	N/A	Jun. 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-3m	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 18 GHz					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Receiver	Agilent	N9038A	MY52130039	Dec. 22, 2024
2	Preamplifier	EMC INSTRUMENT	EMC118A45SE	981001	May 31, 2025
3	Double Ridged Guide Antenna	ETS	3115	75789	Jun. 15, 2025
4	Cable	RegalWay	RWLP50-4.0A-SMS M-12.5M	N/A	Jul. 03, 2025
5	Cable	RegalWay	RWLP50-4.0A-NM RASM-2.5M	N/A	Jul. 03, 2025
6	Cable	RegalWay	RWLP50-4.0A-NM RASMR-0.8M	N/A	Jul. 03, 2025
7	966 Chamber room	CM	9*6*6	N/A	May 19, 2025
8	Attenuator	Talent Microwave	TA10A2-S-18	N/A	N/A
9	Filter	STI	STI15-9969	N/A	May 31, 2025
10	Positioning Controller	MF	MF-7802	N/A	N/A
11	Measurement Software	Farad	EZ-EMC Ver.NB-03A1-01	N/A	N/A

Radiated Emissions - Above 18 GHz					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	EXA Signal Analyzer	Keysight	N9010A	MY56480488	Dec. 22, 2024
2	Low Noise Amplifier	CONNPHY	CLN-18G40G-4330-K	619413	Jul. 17, 2025
3	Cable	RegalWay	RWLP50-2.6A-2.92M 2.92M-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	Positioning Controller	MF	MF-7802	N/A	N/A
7	Measurement Software	Farad	EZ-EMC Ver.NB-03A1-01	N/A	N/A
8	966 Chamber room	CM	9*6*6	N/A	May 16, 2025

Bandwidth & Power Spectral Density (e.i.r.p.)					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Spectrum Analyzer	R&S	FSP38	100852	May 31, 2025
2	Measurement Software	BTL	BTL Conducted Test	N/A	N/A
3	Isolation attenuator	Z-Link	ASMA-16-18-2W	N/A	N/A

Maximum e.i.r.p.					
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

Frequency Stability					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Spectrum Analyzer	R&S	FSP38	100852	May 31, 2025
2	Measurement Software	BTL	BTL Conducted Test	N/A	N/A
3	Isolation attenuator	Z-Link	ASMA-16-18-2W	N/A	N/A
4	Multimeter	FLUKE	15B+(TR13)	45123773WS	May 31, 2025
5	Desktop Constant Temperature Chamber	BELL	BTH-50C	20170306001	Jan. 19, 2025
6	DC power supply	UNI-T	UDP6721	AWP7224050031	Mar. 20, 2025
7	Cable	Woke	S02-190515-03	N/A	N/A

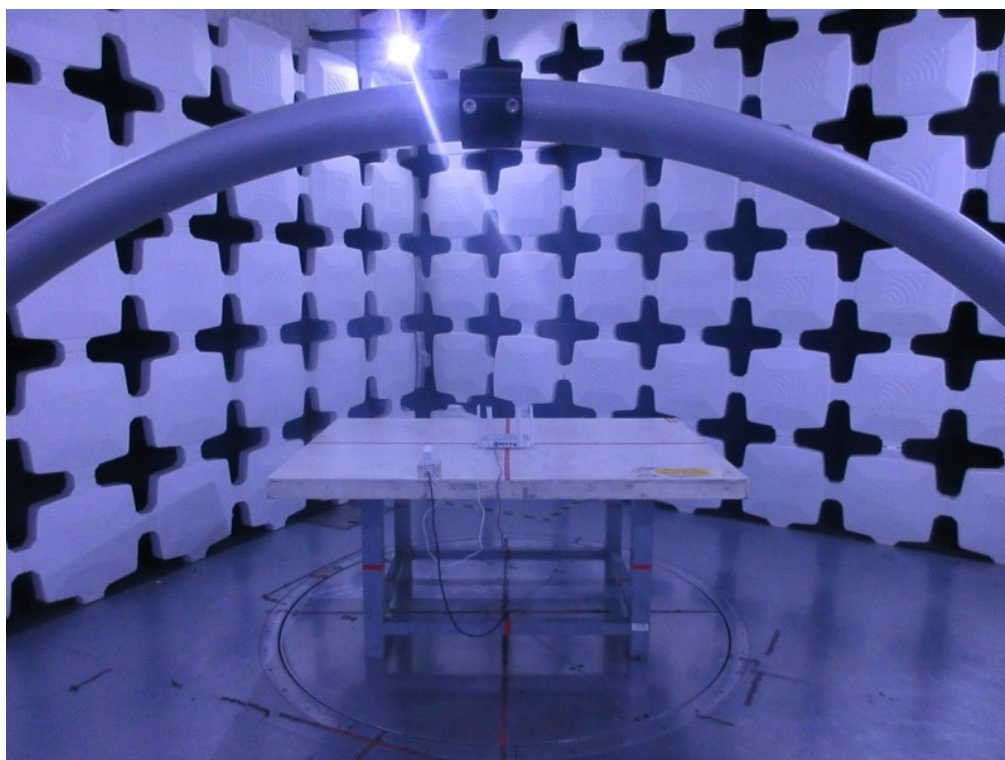
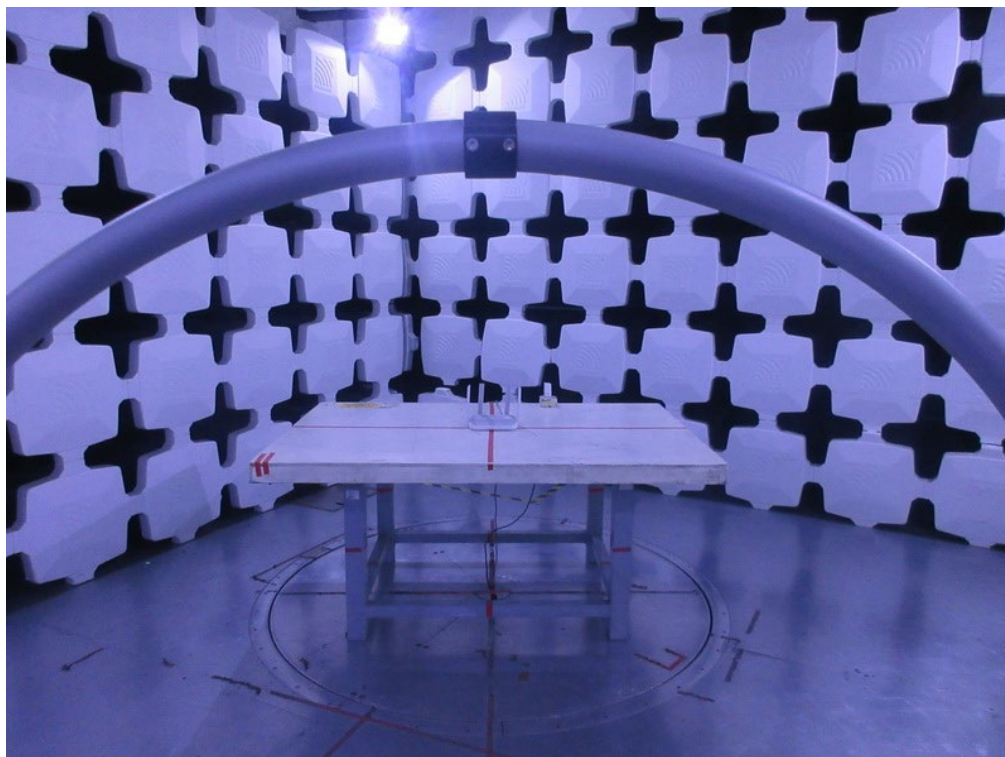
Remark: "N/A" denotes no model name, serial no. or calibration specified.

All calibration period of equipment list is one year.

11. EUT TEST PHOTOS**AC Power Line Conducted Emissions Test Photos**

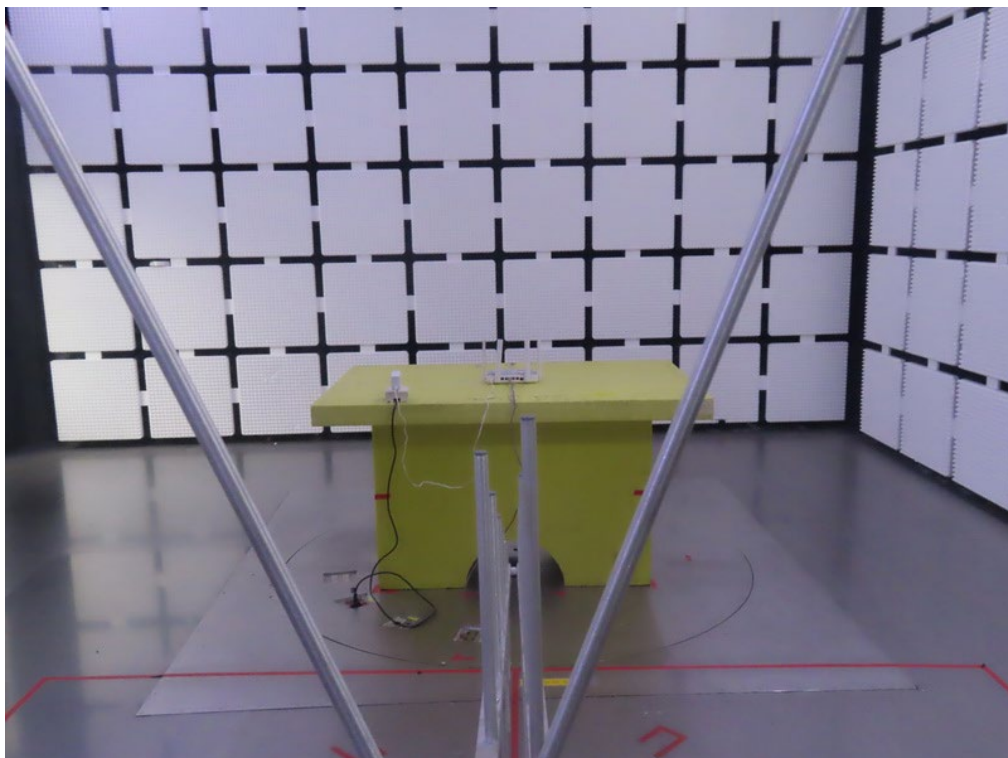
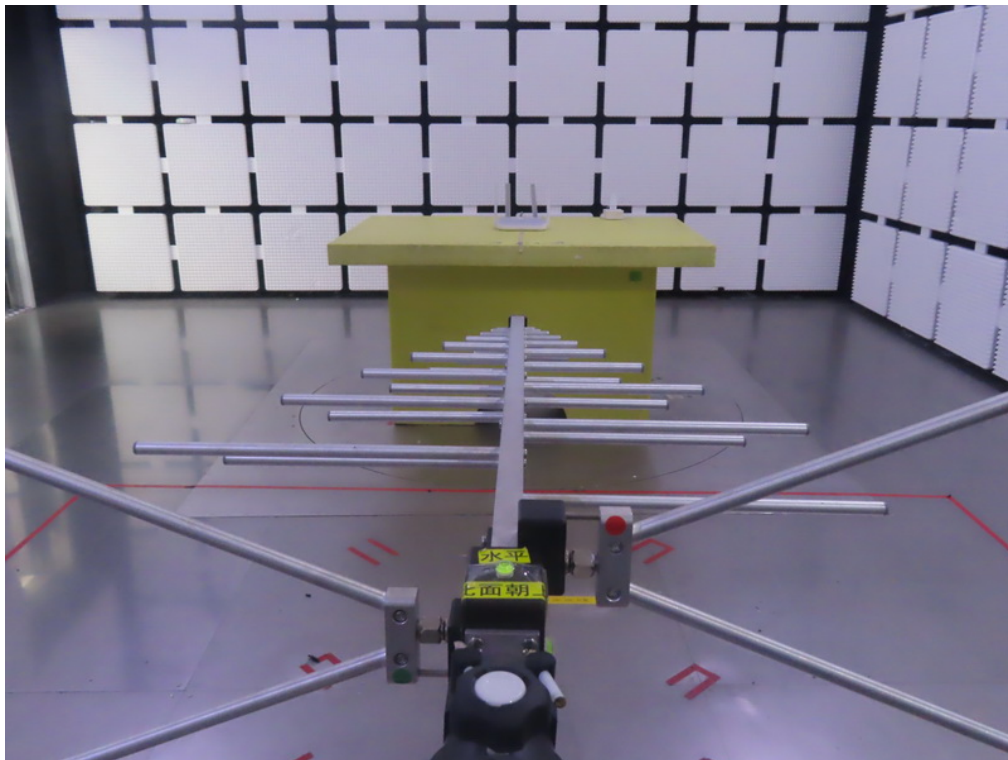
Radiated Emissions Test Photos

9 kHz to 30 MHz

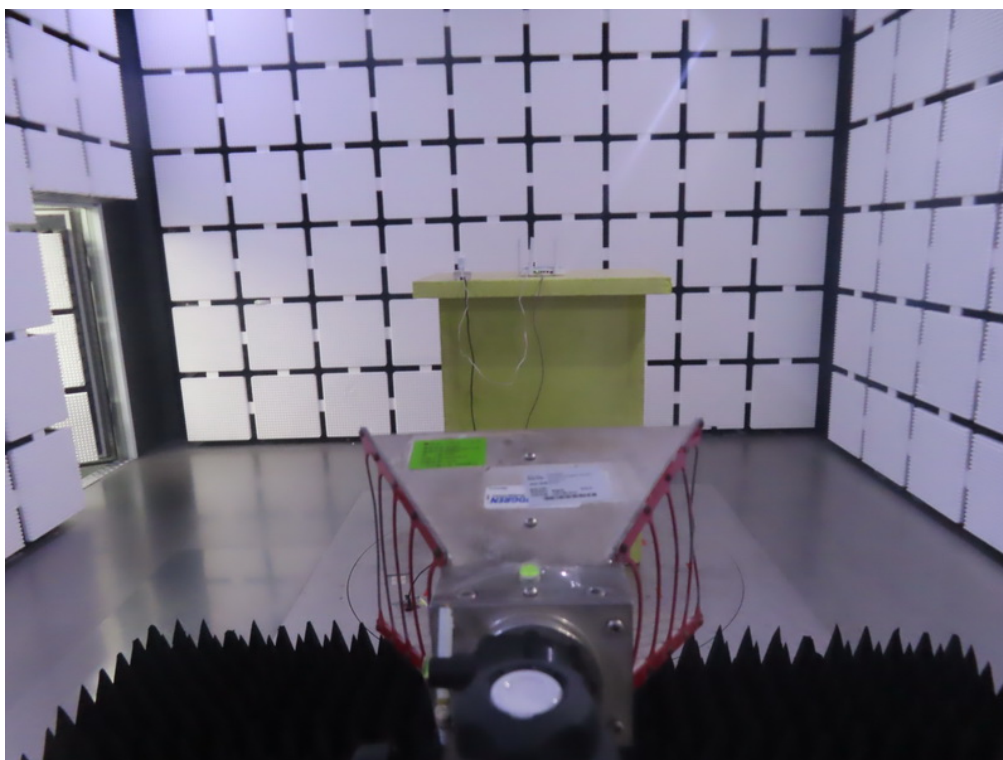
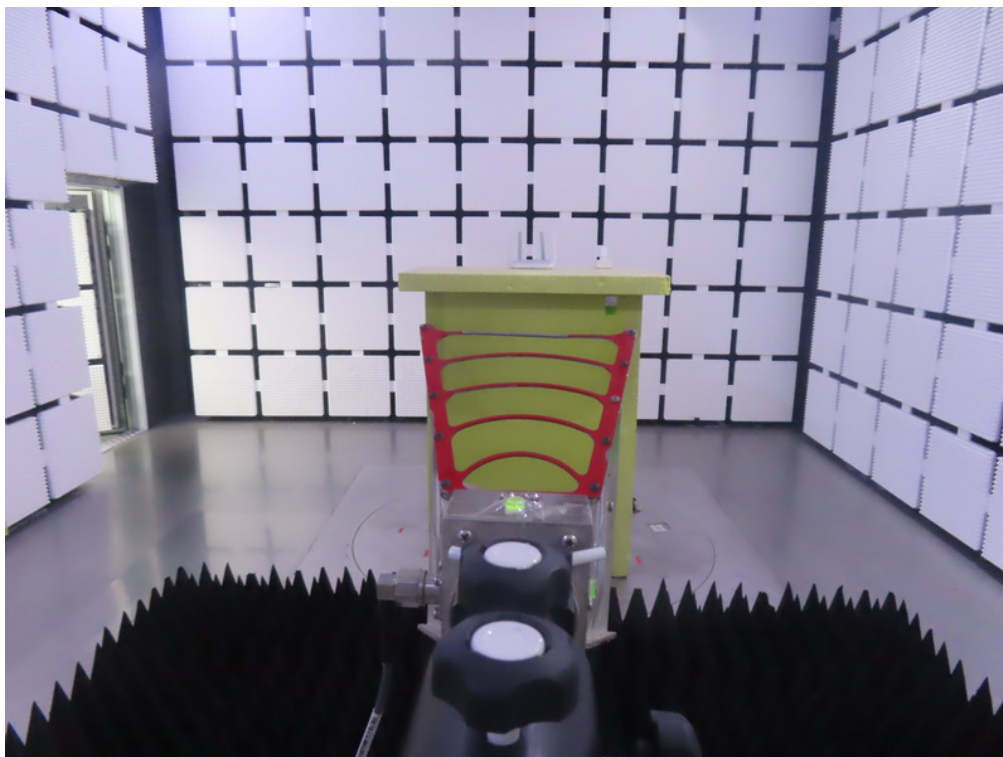


Radiated Emissions Test Photos

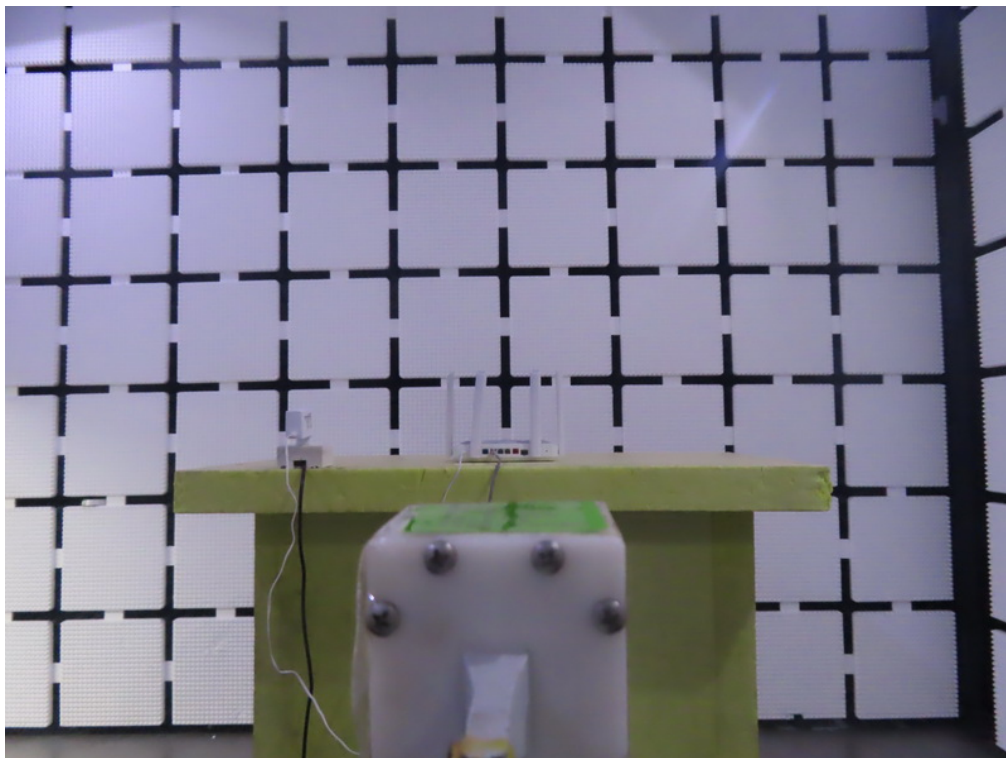
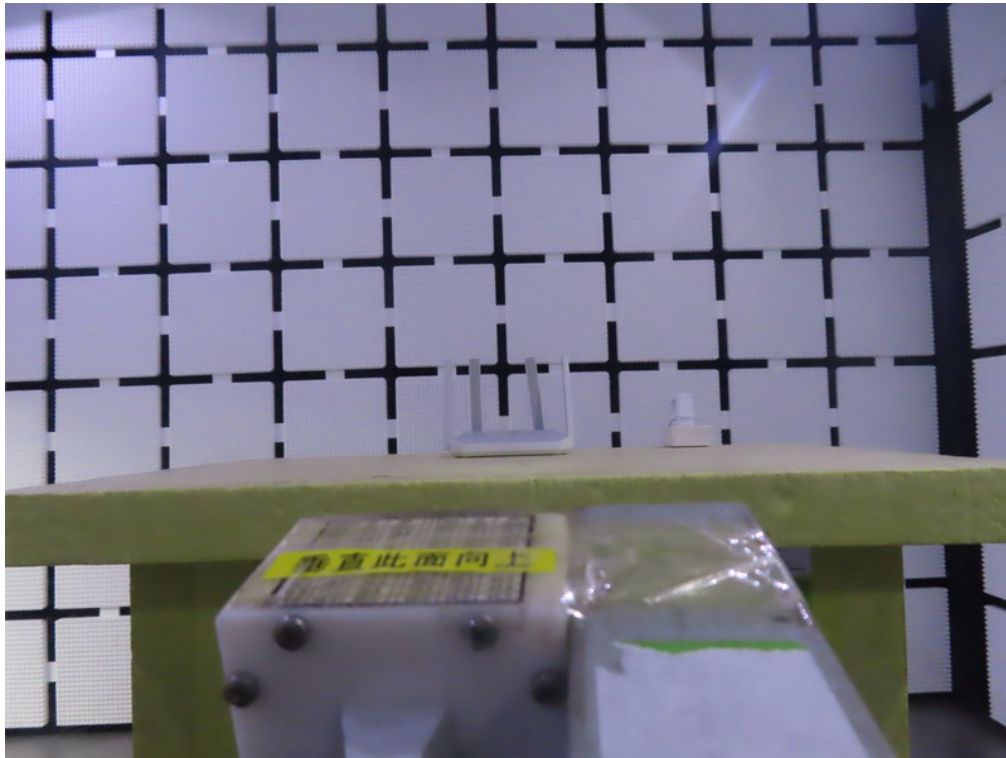
30 MHz to 1 GHz



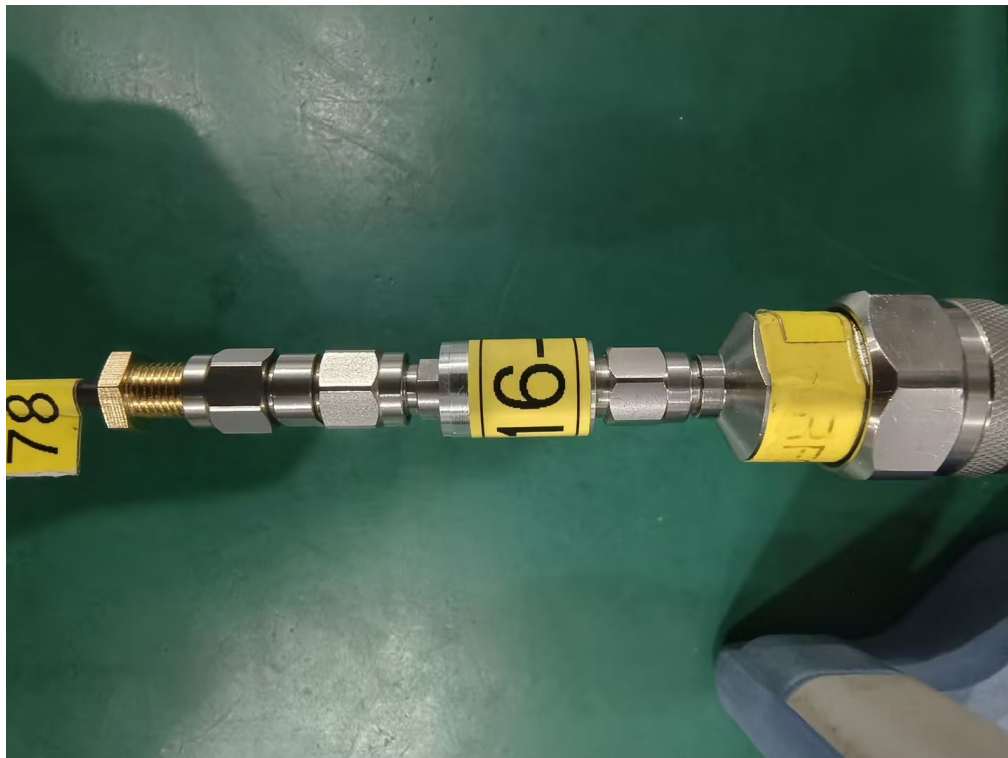
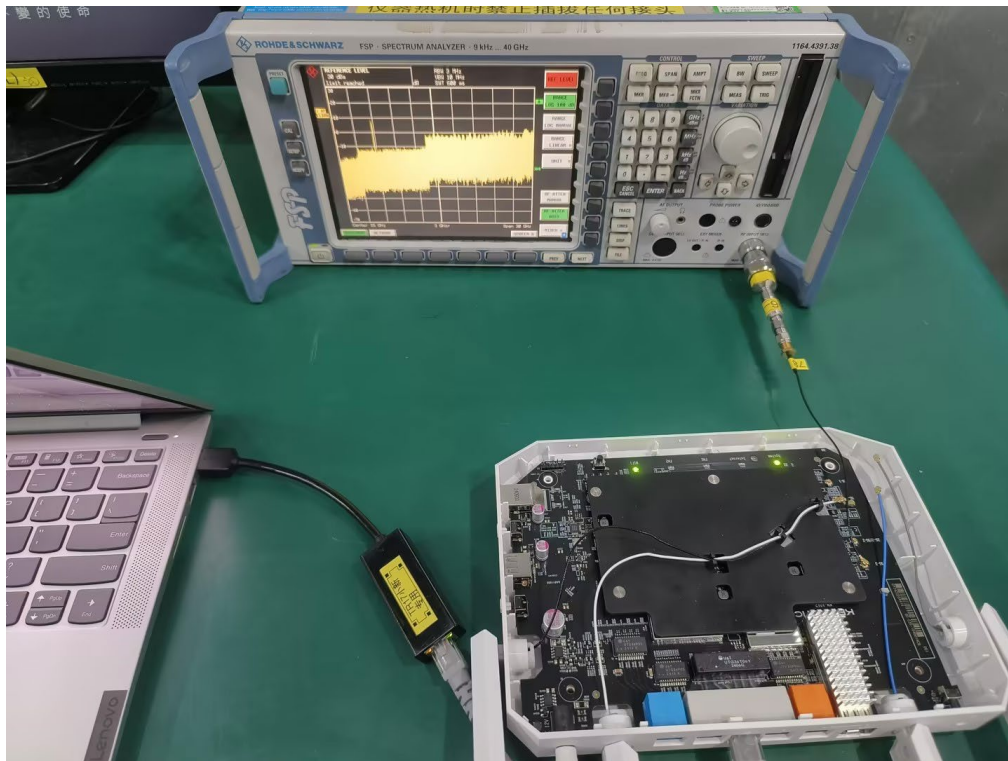
Radiated Emissions Test Photos
Above 1 GHz
Band edge & Harmonic(1 GHz to 18 GHz)



Radiated Emissions Test Photos
Above 1 GHz
Band edge & Harmonic(18 GHz to 26.5 GHz)

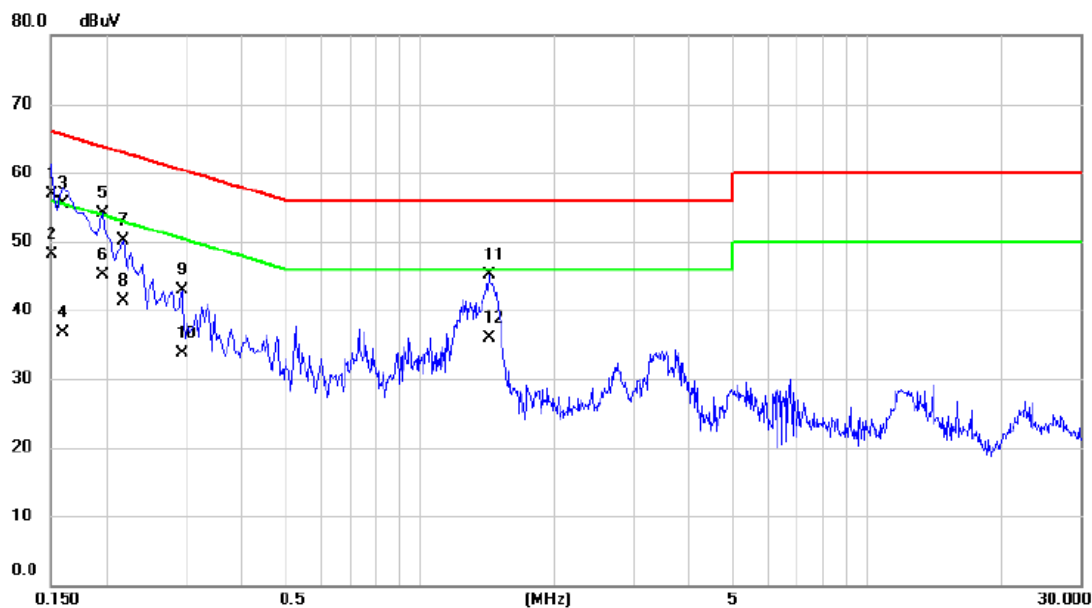


Conducted Test Photos



APPENDIX A - AC POWER LINE CONDUCTED EMISSIONS

Test Mode	TX AX(HE80) Mode Channel 171	Phase	Line
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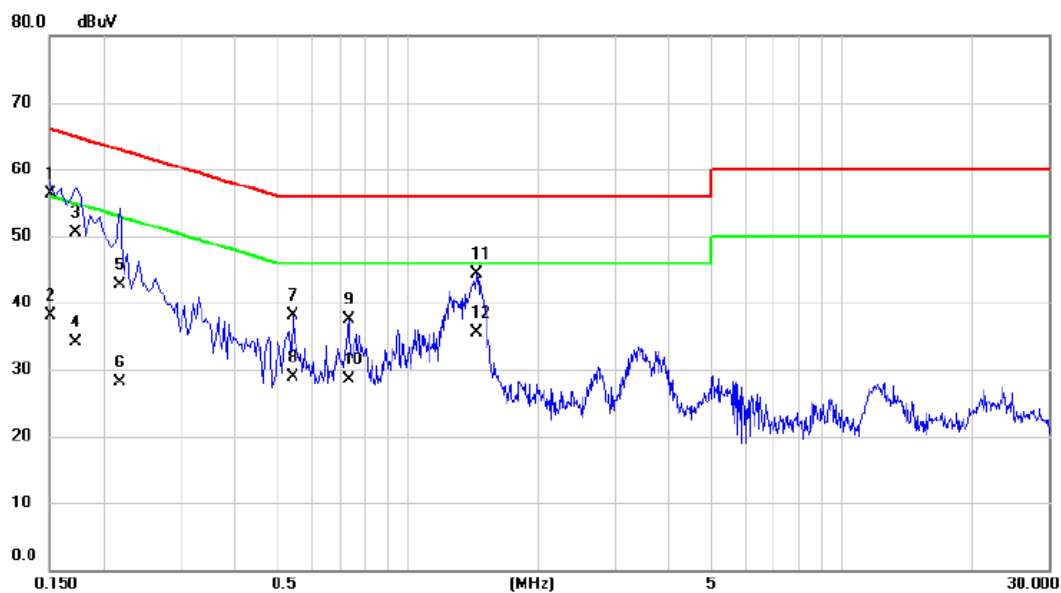
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Margin dB	Detector	Comment
1		0.1500	47.00	9.96	56.96	66.00	-9.04	QP	
2	*	0.1500	38.10	9.96	48.06	56.00	-7.94	AVG	
3		0.1590	45.60	9.97	55.57	65.52	-9.95	QP	
4		0.1590	26.80	9.97	36.77	55.52	-18.75	AVG	
5		0.1950	44.10	9.98	54.08	63.82	-9.74	QP	
6		0.1950	35.20	9.98	45.18	53.82	-8.64	AVG	
7		0.2175	40.03	10.01	50.04	62.91	-12.87	QP	
8		0.2175	31.30	10.01	41.31	52.91	-11.60	AVG	
9		0.2940	32.78	10.16	42.94	60.41	-17.47	QP	
10		0.2940	23.50	10.16	33.66	50.41	-16.75	AVG	
11		1.4325	33.81	11.27	45.08	56.00	-10.92	QP	
12		1.4325	24.60	11.27	35.87	46.00	-10.13	AVG	

REMARKS:

(1) Measurement Value = Reading Level + Correct Factor.

(2) Margin Level = Measurement Value - Limit Value.

Test Mode	TX AX(HE80) Mode Channel 171	Phase	Neutral
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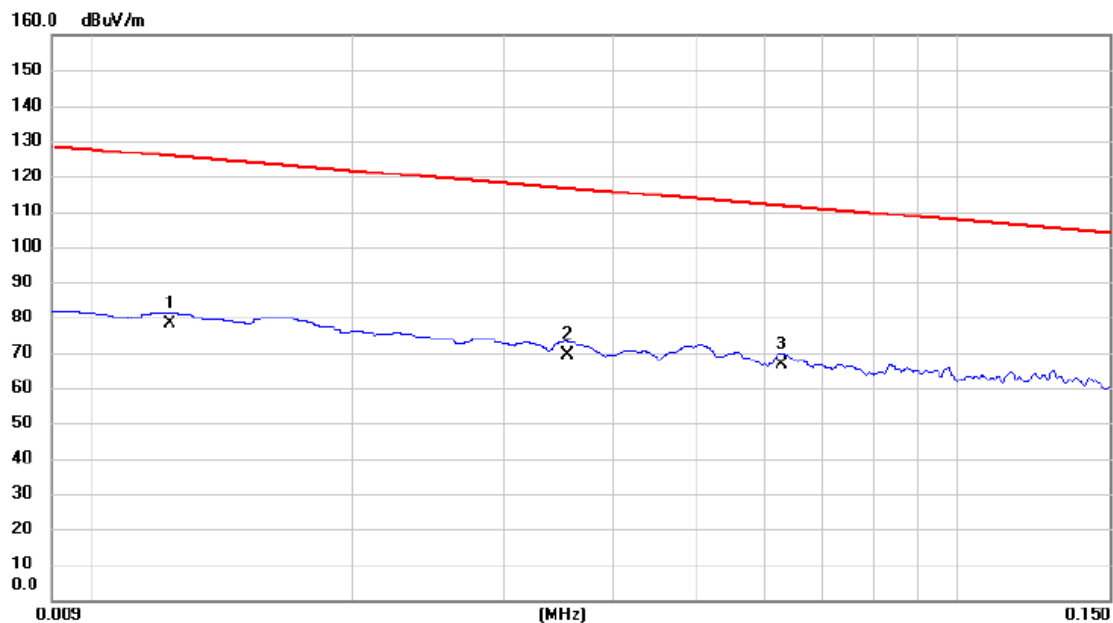
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Margin dB	Detector	Comment
1	*	0.1500	46.30	9.93	56.23	66.00	-9.77	QP	
2		0.1500	28.10	9.93	38.03	56.00	-17.97	AVG	
3		0.1725	40.50	9.93	50.43	64.84	-14.41	QP	
4		0.1725	24.20	9.93	34.13	54.84	-20.71	AVG	
5		0.2175	32.70	9.97	42.67	62.91	-20.24	QP	
6		0.2175	18.10	9.97	28.07	52.91	-24.84	AVG	
7		0.5460	27.45	10.68	38.13	56.00	-17.87	QP	
8		0.5460	18.30	10.68	28.98	46.00	-17.02	AVG	
9		0.7304	26.58	10.98	37.56	56.00	-18.44	QP	
10		0.7304	17.50	10.98	28.48	46.00	-17.52	AVG	
11		1.4460	33.00	11.22	44.22	56.00	-11.78	QP	
12		1.4460	24.20	11.22	35.42	46.00	-10.58	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	TX AX(HE80) Mode Channel 171	Polarization	Ant 0°
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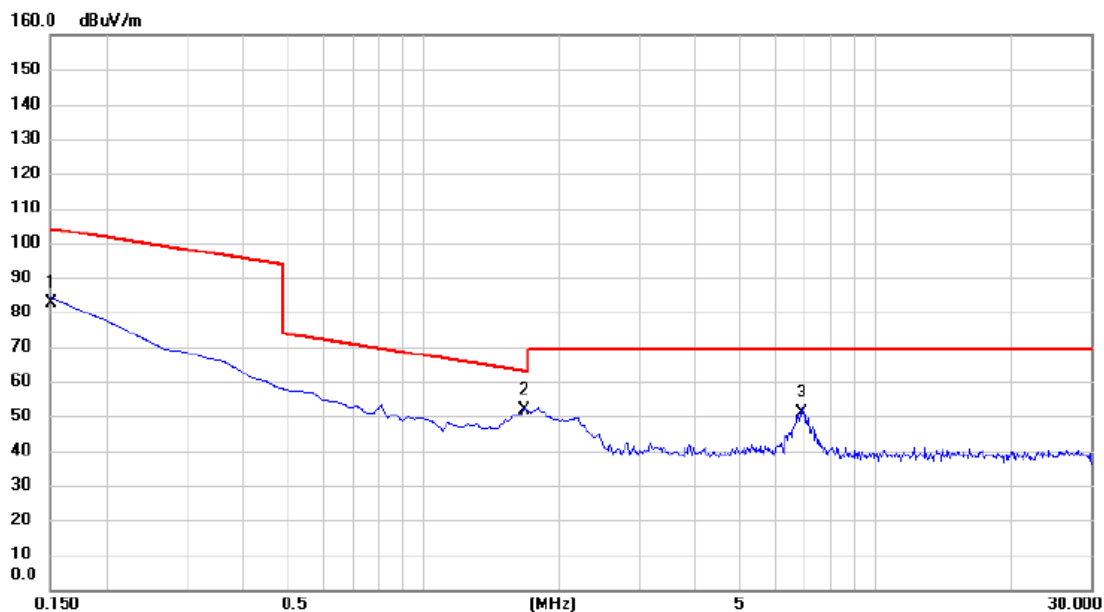
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		0.0123	57.65	20.57	78.22	125.81	-47.59	AVG	
2		0.0354	48.11	21.13	69.24	116.62	-47.38	AVG	
3	*	0.0627	45.36	21.24	66.60	111.66	-45.06	AVG	

REMARKS:

(1) Measurement Value = Reading Level + Correct Factor.

(2) Margin Level = Measurement Value - Limit Value.

Test Mode	TX AX(HE80) Mode Channel 171	Polarization	Ant 0°
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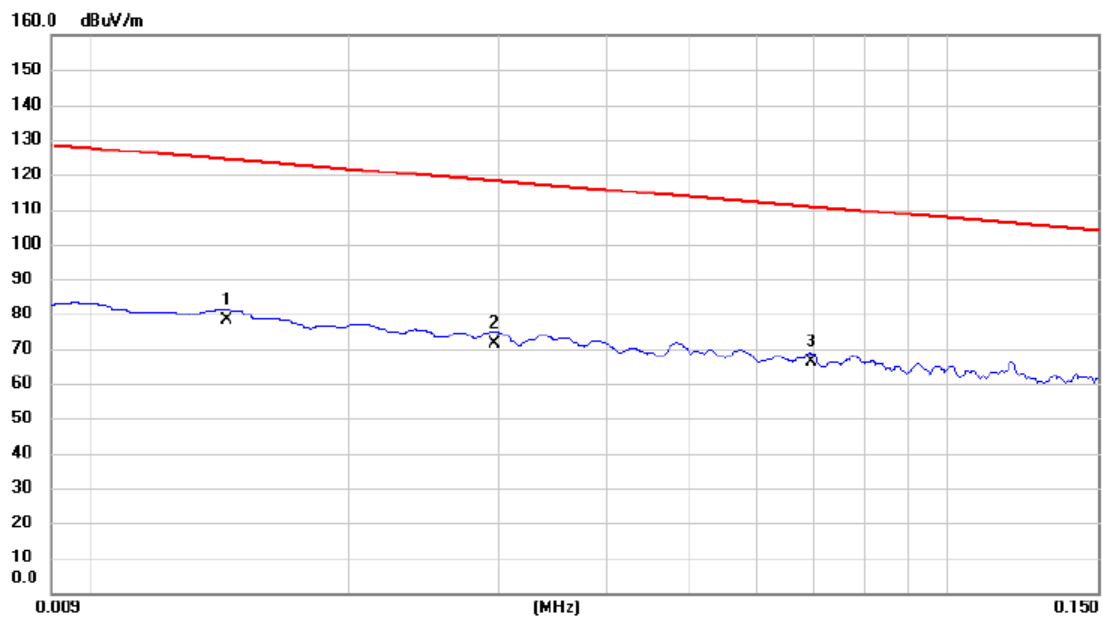


No. Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	0.1500	61.36	21.30	82.66	104.09	-21.43	AVG	
2 *	1.6724	30.52	21.18	51.70	63.14	-11.44	QP	
3	6.8662	29.54	21.30	50.84	69.54	-18.70	QP	

REMARKS:

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

Test Mode	TX AX(HE80) Mode Channel 171	Polarization	Ant 90°
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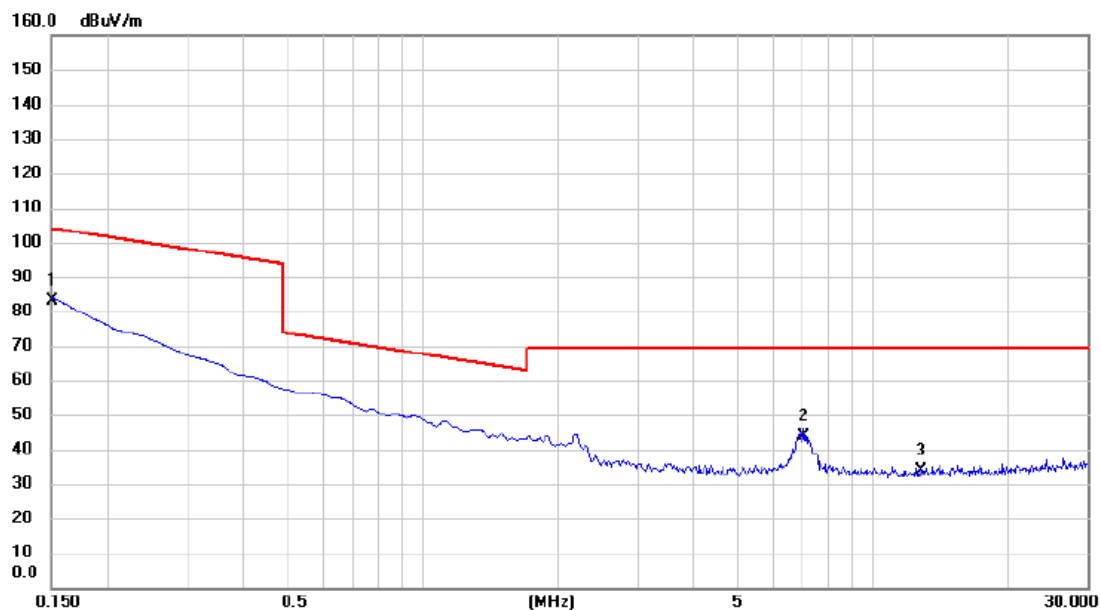


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		0.0144	57.45	20.63	78.08	124.44	-46.36	AVG	
2		0.0296	50.36	21.09	71.45	118.18	-46.73	AVG	
3	*	0.0693	44.75	21.26	66.01	110.79	-44.78	AVG	

REMARKS:

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

Test Mode	TX AX(HE80) Mode Channel 171	Polarization	Ant 90°
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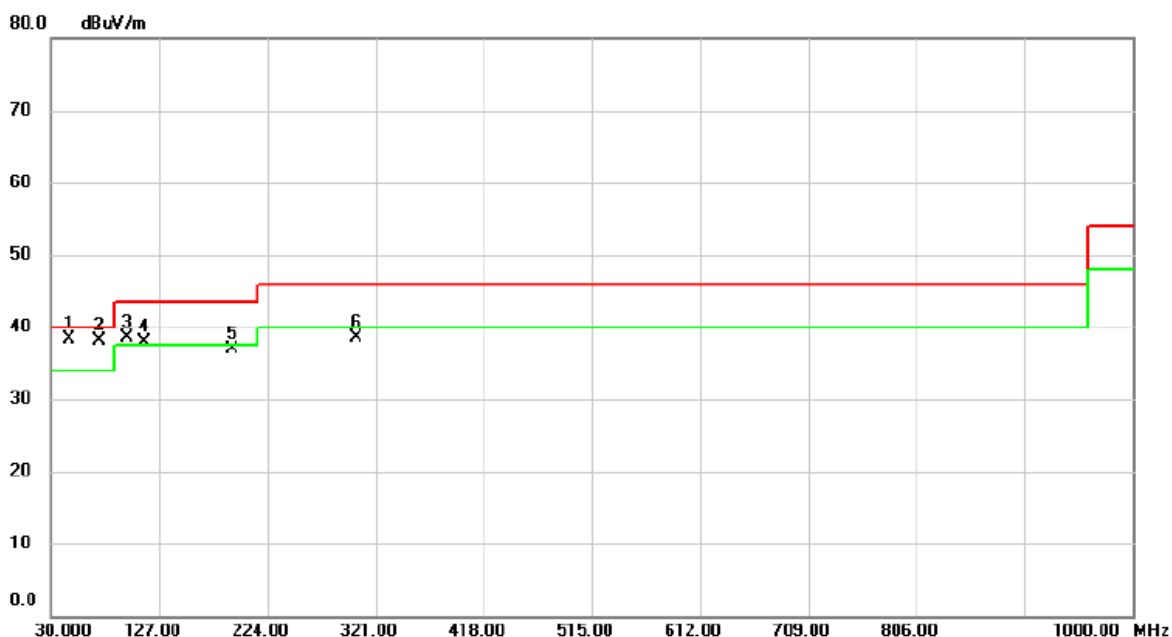
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	*	0.1500	61.82	21.30	83.12	104.09	-20.97	AVG	
2		7.0454	22.31	21.30	43.61	69.54	-25.93	QP	
3		12.8362	12.46	21.37	33.83	69.54	-35.71	QP	

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	TX AX(HE80) Mode Channel 171	Polarization	Vertical
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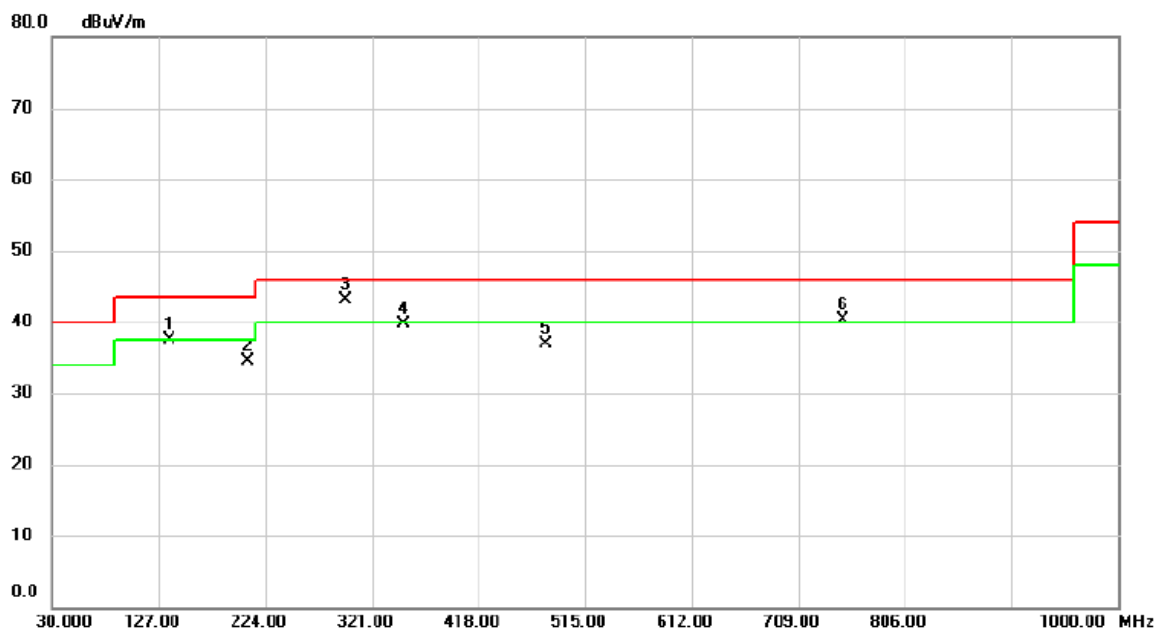
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	*	45.5200	49.71	-11.34	38.37	40.00	-1.63	peak	
2	!	73.1650	52.09	-14.05	38.04	40.00	-1.96	peak	
3	!	98.3850	54.63	-16.19	38.44	43.50	-5.06	peak	
4	!	113.4200	51.71	-13.88	37.83	43.50	-5.67	peak	
5		191.9900	50.92	-13.99	36.93	43.50	-6.57	peak	
6		303.5400	48.99	-10.50	38.49	46.00	-7.51	peak	

REMARKS:

(1) Measurement Value = Reading Level + Correct Factor.

(2) Margin Level = Measurement Value - Limit Value.

Test Mode	TX AX(HE80) Mode Channel 171	Polarization	Horizontal
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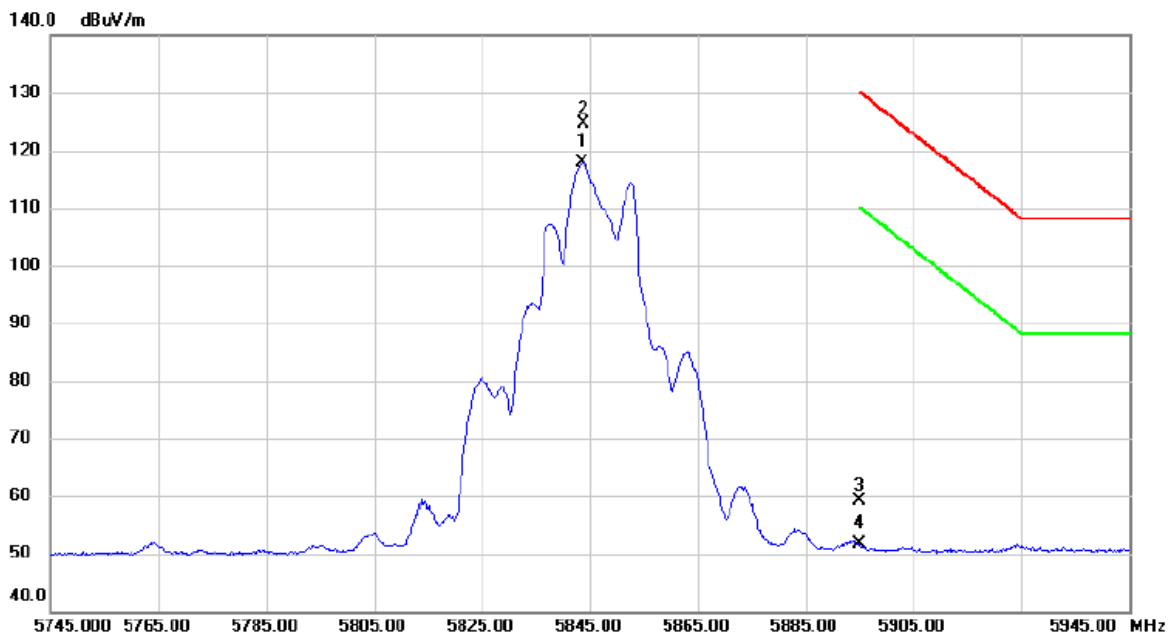
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		136.2150	49.45	-11.96	37.49	43.50	-6.01	peak	
2		207.5100	48.85	-14.43	34.42	43.50	-9.08	peak	
3	*	297.2350	53.78	-10.64	43.14	46.00	-2.86	peak	
4		349.6150	49.09	-9.44	39.65	46.00	-6.35	peak	
5		479.1100	43.15	-6.33	36.82	46.00	-9.18	peak	
6	!	750.2250	41.45	-1.06	40.39	46.00	-5.61	peak	

REMARKS:

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

APPENDIX D - RADIATED EMISSION - ABOVE 1000 MHZ

Test Mode	UNII-3+UNII-4_TX A Mode 5845 MHz	Polarization	Vertical
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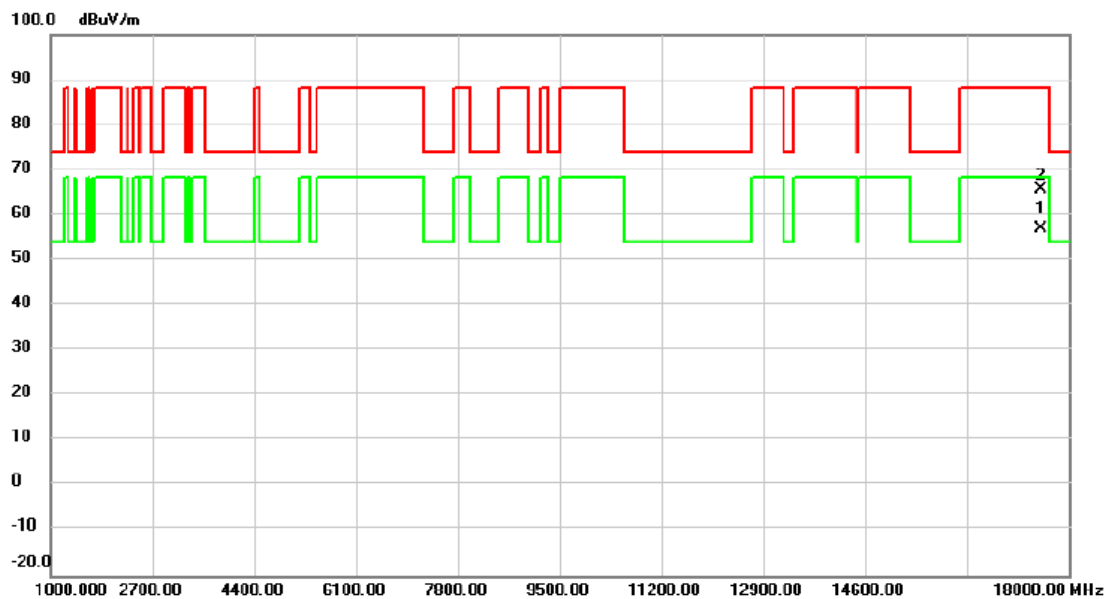


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	*	5843.600	101.0	16.79	117.88			AVG	No Limit
2		5843.900	107.9	16.79	124.69			peak	No Limit
3		5895.000	42.10	16.92	59.02	130.20	-71.18	peak	
4		5895.000	34.73	16.92	51.65	110.20	-58.55	AVG	

REMARKS:

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

Test Mode	UNII-3+UNII-4_TX A Mode 5845 MHz	Polarization	Vertical
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No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	*	17533.150	44.09	12.88	56.97	68.20	-11.23	AVG	
2		17542.850	52.68	12.87	65.55	88.20	-22.65	peak	

REMARKS:

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

Test Mode	UNII-4_TX A Mode 5865 MHz	Polarization	Vertical
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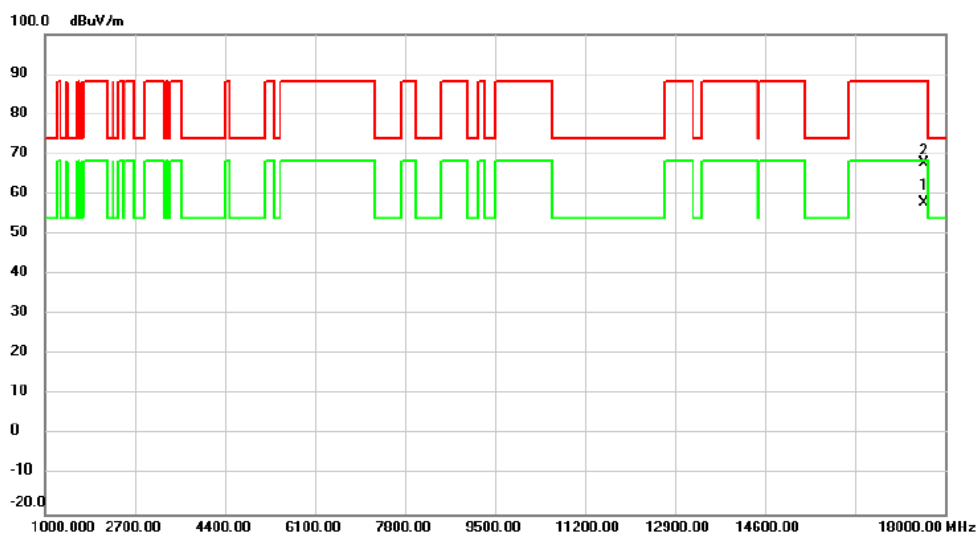


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	*	5863.700	100.4	16.84	117.25			AVG	No Limit
2		5864.000	106.9	16.84	123.83			peak	No Limit
3		5895.000	53.97	16.92	70.89	130.20	-59.31	peak	
4		5895.000	42.82	16.92	59.74	110.20	-50.46	AVG	

REMARKS:

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

Test Mode	UNII-4_TX A Mode 5865 MHz	Polarization	Vertical
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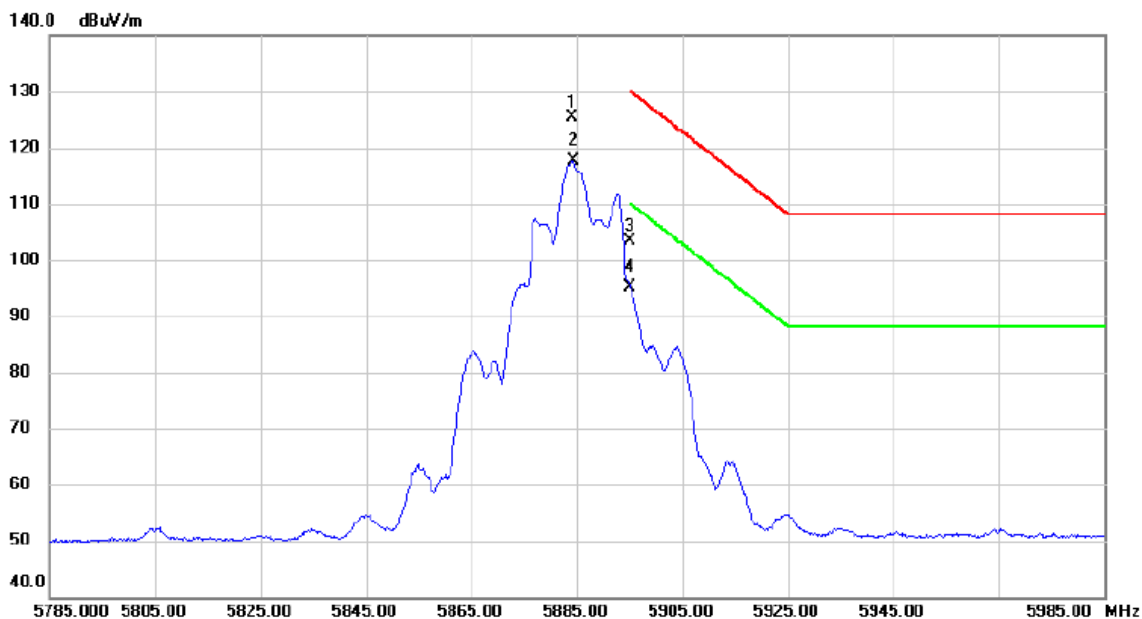


No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	17594.050	44.99	12.78	57.77	68.20	-10.43	AVG	
2		17602.750	55.02	12.78	67.80	88.20	-20.40	peak	

REMARKS:

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

Test Mode	UNII-4_TX A Mode 5885 MHz	Polarization	Vertical
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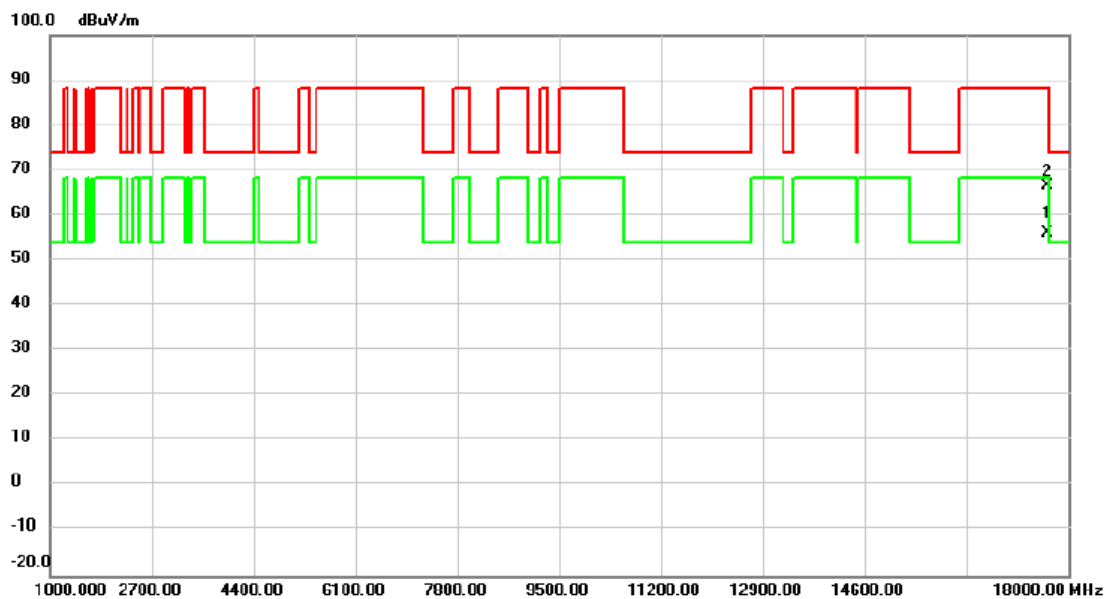


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		5884.200	108.5	16.89	125.40			peak	No Limit
2	*	5884.300	100.8	16.89	117.73			AVG	No Limit
3		5895.000	86.34	16.92	103.26	130.20	-26.94	peak	
4		5895.000	78.33	16.92	95.25	110.20	-14.95	AVG	

REMARKS:

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

Test Mode	UNII-4_TX A Mode 5885 MHz	Polarization	Vertical
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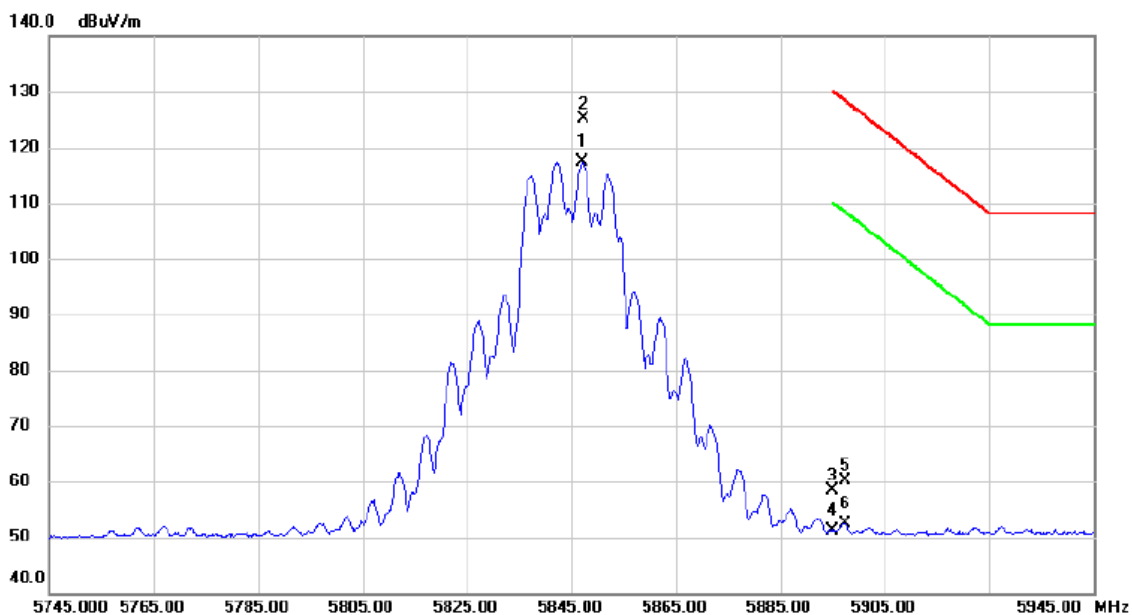


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	*	17653.550	43.40	12.69	56.09	68.20	-12.11	AVG	
2		17653.900	53.78	12.69	66.47	88.20	-21.73	peak	

REMARKS:

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

Test Mode	UNII-3+UNII-4_TX AX(HE20) Mode 5845 MHz	Polarization	Vertical
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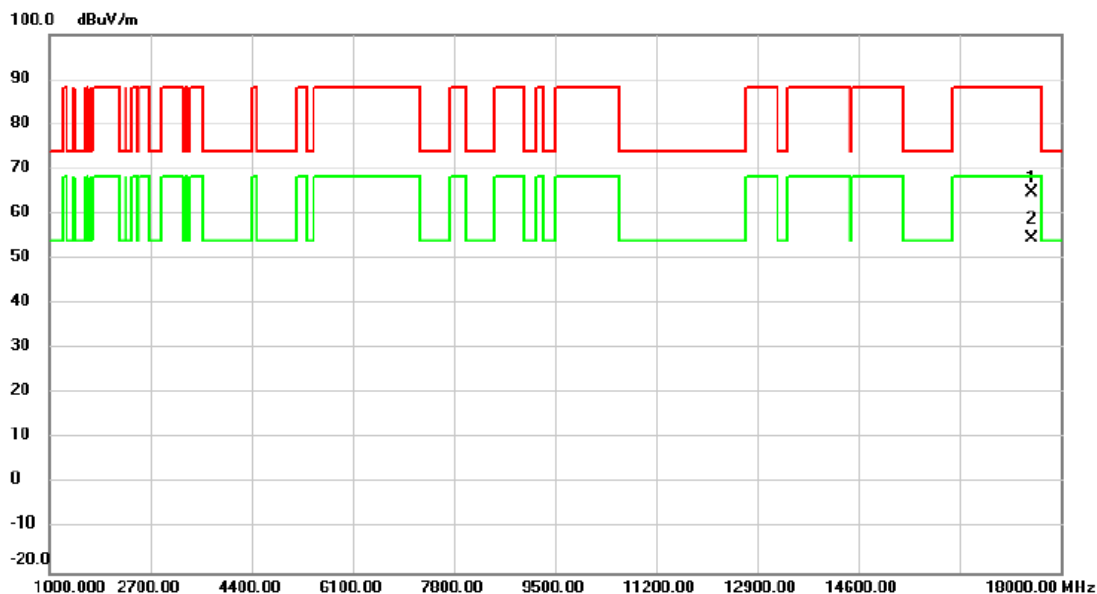


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	*	5847.100	100.5	16.80	117.31			AVG	No Limit
2		5847.200	108.3	16.80	125.11			peak	No Limit
3		5895.000	41.58	16.92	58.50	130.20	-71.70	peak	
4		5895.000	34.27	16.92	51.19	110.20	-59.01	AVG	
5		5897.400	43.17	16.93	60.10	128.44	-68.34	peak	
6		5897.400	35.51	16.93	52.44	108.44	-56.00	AVG	

REMARKS:

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

Test Mode	UNII-3+UNII-4_TX AX(HE20) Mode 5845 MHz	Polarization	Vertical
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No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		17504.600	51.86	12.93	64.79	88.20	-23.41	peak	
2	*	17505.600	41.75	12.92	54.67	68.20	-13.53	AVG	

REMARKS:

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

Test Mode	UNII-4_TX AX(HE20) Mode 5865 MHz	Polarization	Vertical
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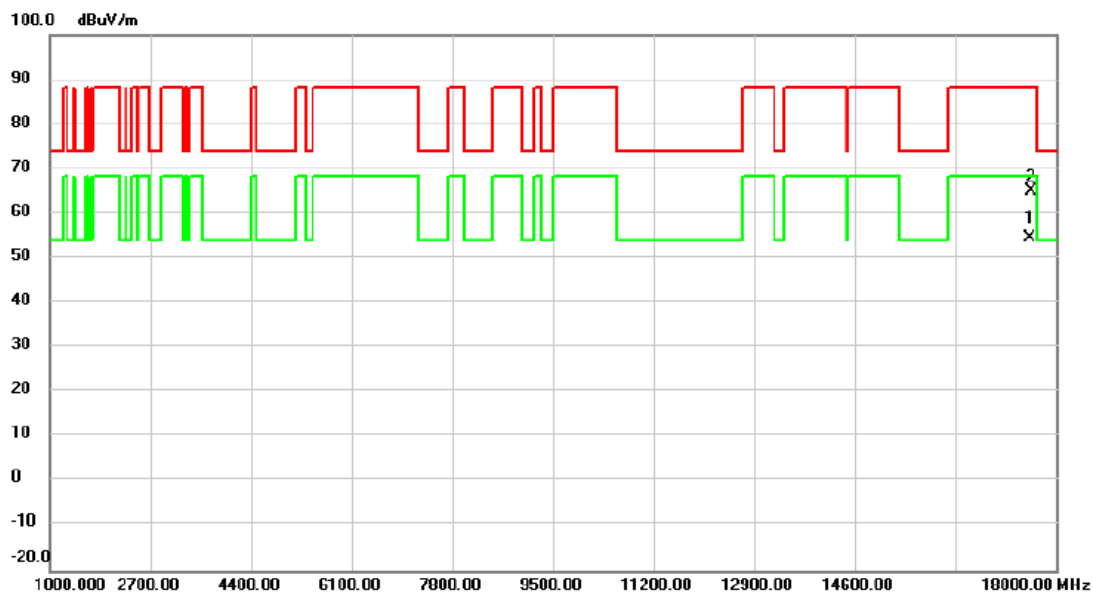


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	*	5865.400	98.91	16.84	115.75			AVG	No Limit
2		5870.800	107.5	16.86	124.42			peak	No Limit
3		5895.000	59.59	16.92	76.51	130.20	-53.69	peak	
4		5895.000	48.64	16.92	65.56	110.20	-44.64	AVG	

REMARKS:

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

Test Mode	UNII-4_TX AX(HE20) Mode 5865 MHz	Polarization	Vertical
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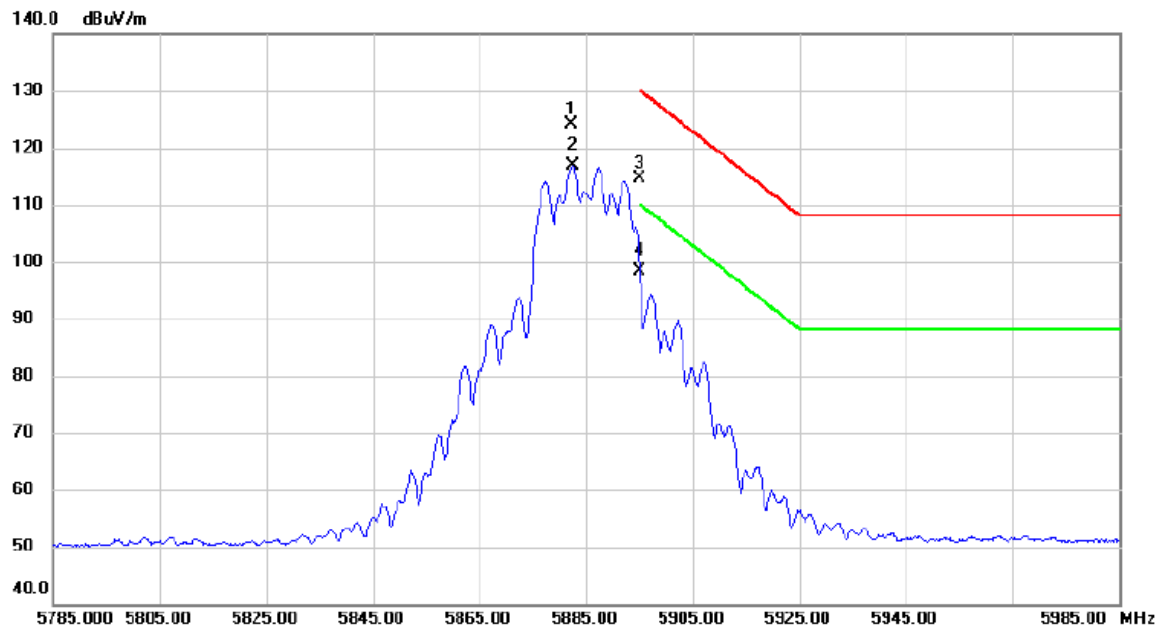
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	*	17564.900	41.83	12.83	54.66	68.20	-13.54	AVG	
2		17571.400	52.09	12.82	64.91	88.20	-23.29	peak	

REMARKS:

(1) Measurement Value = Reading Level + Correct Factor.

(2) Margin Level = Measurement Value - Limit Value.

Test Mode	UNII-4_TX AX(HE20) Mode 5885 MHz	Polarization	Vertical
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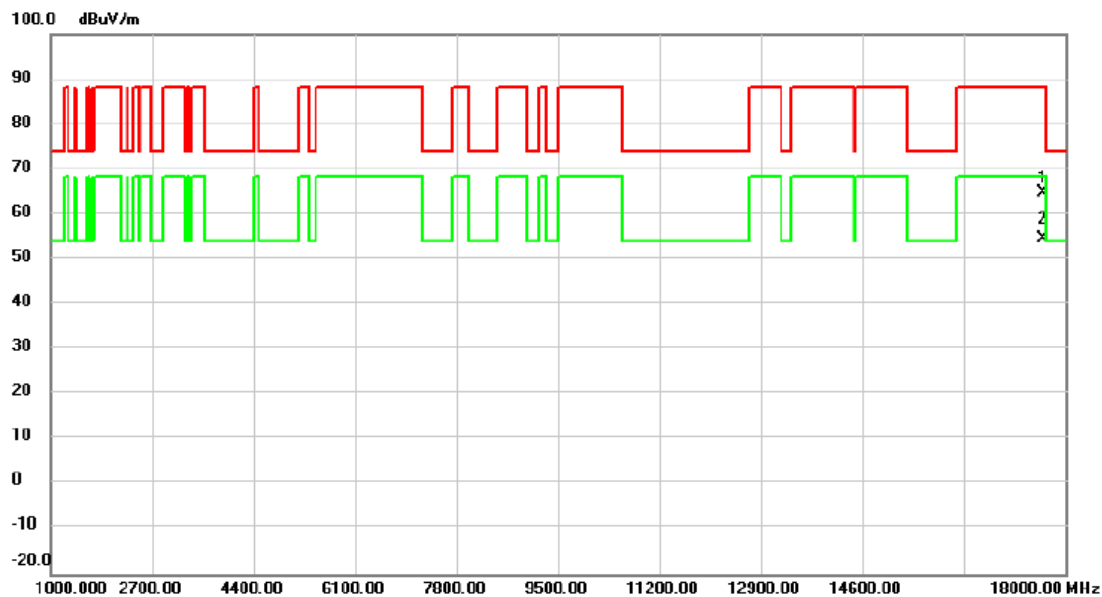


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		5882.200	107.1	16.89	124.02			peak	No Limit
2	*	5882.400	99.98	16.89	116.87			AVG	No Limit
3		5895.000	97.59	16.92	114.51	130.20	-15.69	peak	
4		5895.000	81.41	16.92	98.33	110.20	-11.87	AVG	

REMARKS:

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

Test Mode	UNII-4_TX AX(HE20) Mode 5885 MHz	Polarization	Vertical
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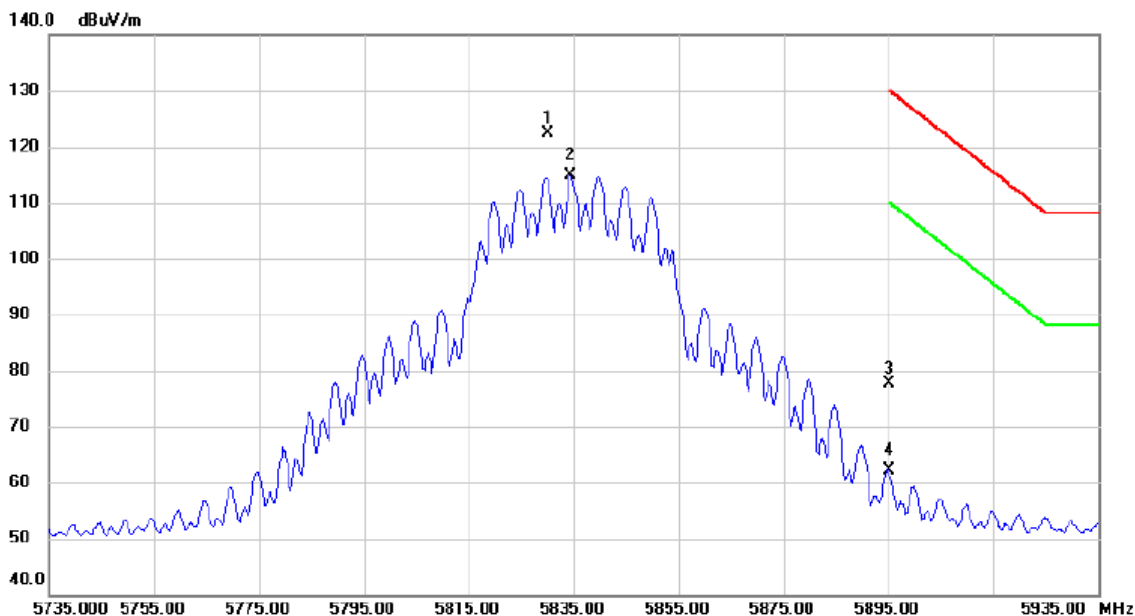


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		17624.800	52.14	12.73	64.87	88.20	-23.33	peak	
2	*	17629.600	41.74	12.73	54.47	68.20	-13.73	AVG	

REMARKS:

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

Test Mode	UNII-3+UNII-4_TX AX(HE40) Mode 5835 MHz	Polarization	Vertical
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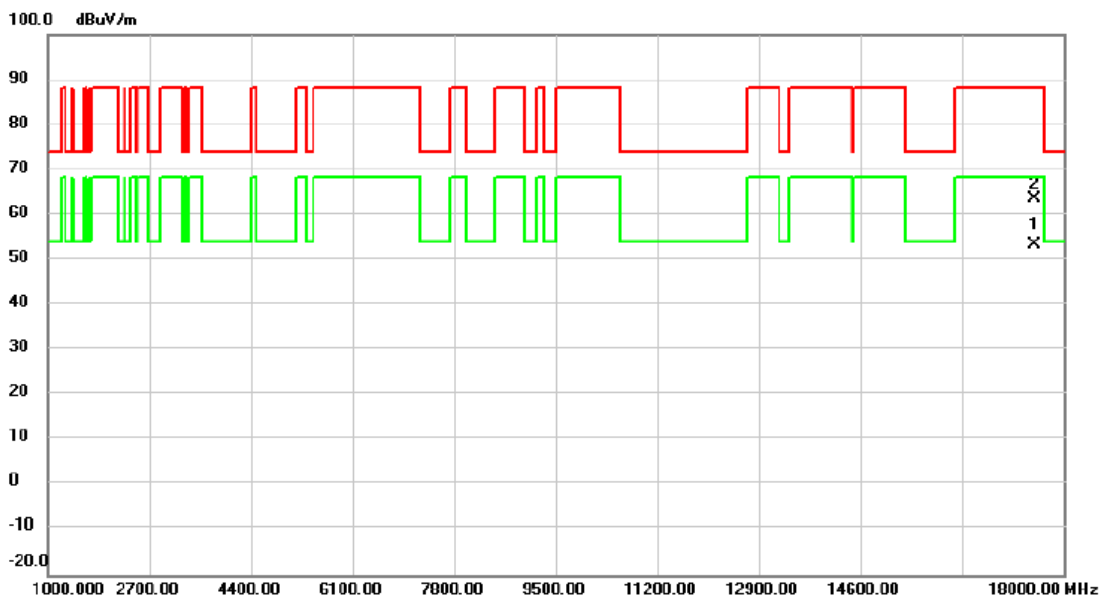


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		5830.000	105.5	16.75	122.33			peak	No Limit
2	*	5834.400	98.20	16.76	114.96			AVG	No Limit
3		5895.000	60.64	16.92	77.56	130.20	-52.64	peak	
4		5895.000	45.12	16.92	62.04	110.20	-48.16	AVG	

REMARKS:

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

Test Mode	UNII-3+UNII-4_TX AX(HE40) Mode 5835 MHz	Polarization	Vertical
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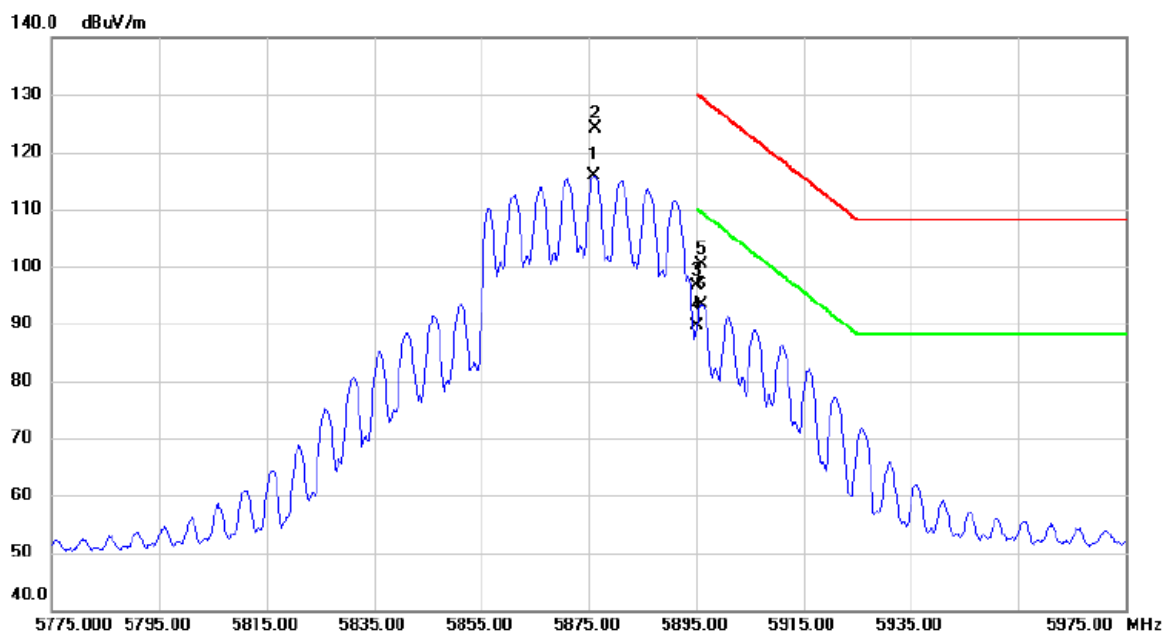


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	*	17506.700	40.40	12.92	53.32	68.20	-14.88	AVG	
2		17516.100	50.78	12.92	63.70	88.20	-24.50	peak	

REMARKS:

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

Test Mode	UNII-4_TX AX(HE40) Mode 5875 MHz	Polarization	Vertical
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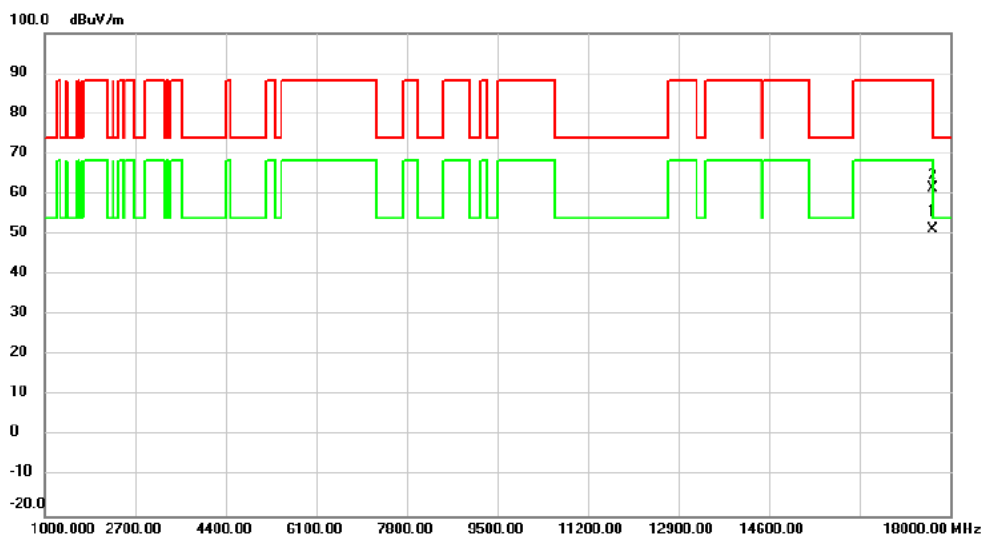


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	*	5875.900	99.13	16.87	116.00			AVG	No Limit
2		5876.100	107.1	16.87	124.06			peak	No Limit
3		5895.000	79.60	16.92	96.52	130.20	-33.68	peak	
4		5895.000	72.63	16.92	89.55	110.20	-20.65	AVG	
5		5895.800	83.47	16.92	100.39	129.61	-29.22	peak	
6		5895.800	76.47	16.92	93.39	109.61	-16.22	AVG	

REMARKS:

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

Test Mode	UNII-4_TX AX(HE40) Mode 5875 MHz	Polarization	Vertical
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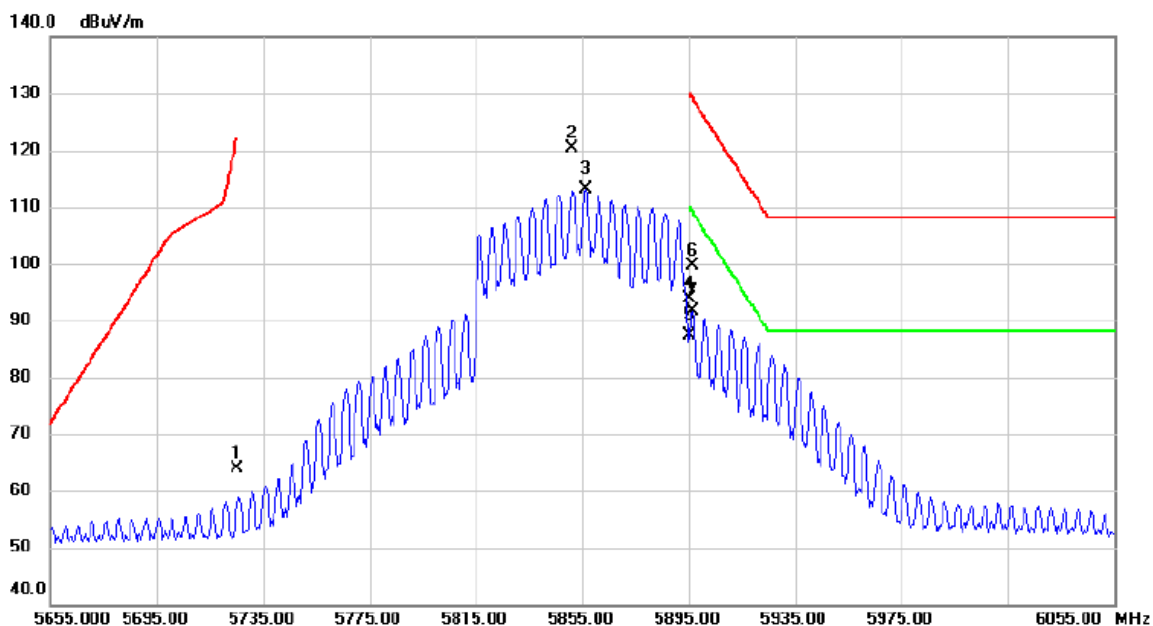


No. Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin		
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	17665.500	38.58	12.66	51.24	68.20	-16.96	AVG	
2	17674.700	48.90	12.65	61.55	88.20	-26.65	peak	

REMARKS:

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

Test Mode	UNII-3+UNII-4_TX AX(HE80) Mode 5855 MHz	Polarization	Vertical
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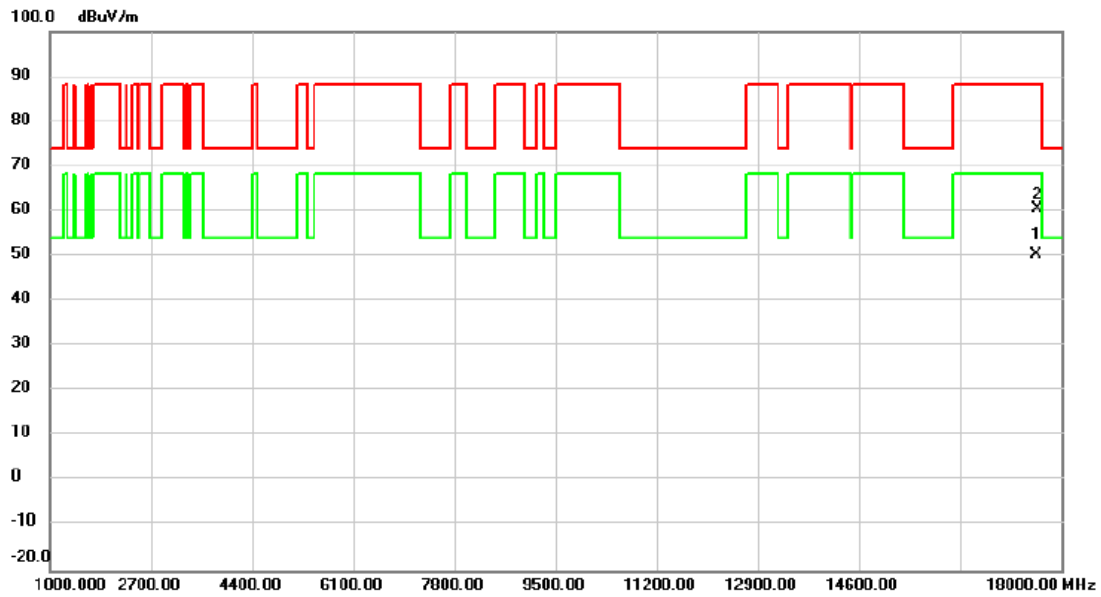
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		5725.000	47.38	16.46	63.84	122.20	-58.36	peak	
2		5851.000	103.7	16.80	120.50			peak	No Limit
3		5856.200	96.22	16.82	113.04			AVG	No Limit
4		5895.000	76.94	16.92	93.86	130.20	-36.34	peak	
5		5895.000	70.49	16.92	87.41	110.20	-22.79	AVG	
6		5896.200	82.72	16.93	99.65	129.32	-29.67	peak	
7	*	5896.200	74.61	16.93	91.54	109.32	-17.78	AVG	

REMARKS:

(1) Measurement Value = Reading Level + Correct Factor.

(2) Margin Level = Measurement Value - Limit Value.

Test Mode	UNII-3+UNII-4_TX AX(HE80) Mode 5855 MHz	Polarization	Vertical
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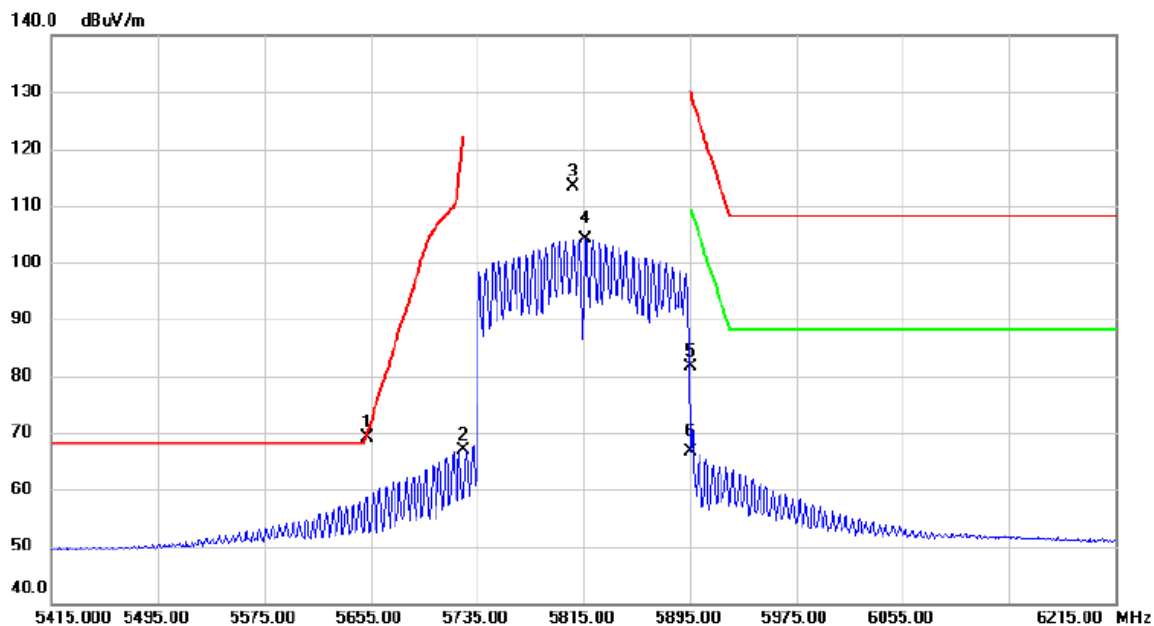


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	*	17570.300	37.60	12.83	50.43	68.20	-17.77	AVG	
2		17605.000	47.80	12.77	60.57	88.20	-27.63	peak	

REMARKS:

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

Test Mode	UNII-3+UNII-4_TX AX(HE160) Mode 5815 MHz	Polarization	Vertical
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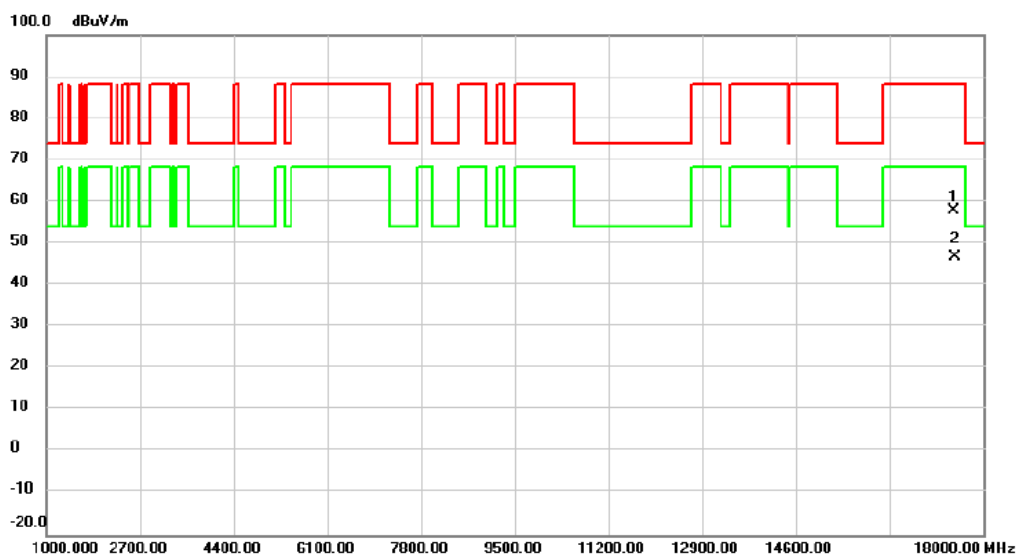


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	*	5652.600	52.81	16.26	69.07	70.12	-1.05	peak	
2		5725.000	50.37	16.46	66.83	122.20	-55.37	peak	
3		5807.000	96.69	16.69	113.38			peak	No Limit
4		5817.000	87.30	16.72	104.02			AVG	No Limit
5		5895.000	64.77	16.92	81.69	130.20	-48.51	peak	
6		5895.000	49.65	16.92	66.57	110.20	-43.63	AVG	

REMARKS:

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

Test Mode	UNII-3+UNII-4_TX AX(HE160) Mode 5815 MHz	Polarization	Vertical
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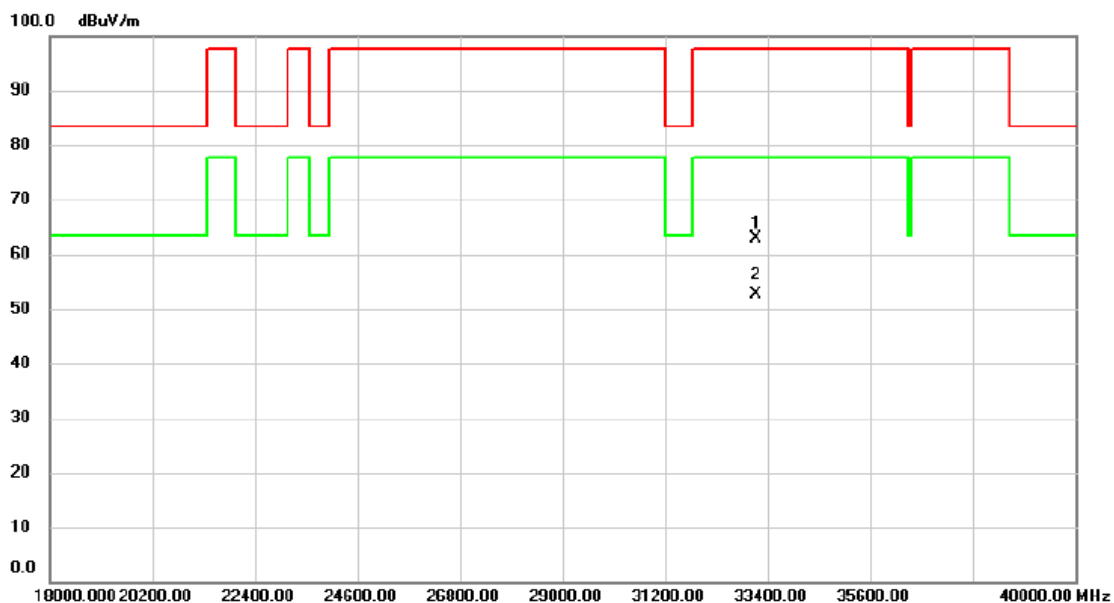


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		17472.950	45.07	12.90	57.97	88.20	-30.23	peak	
2	*	17480.950	33.96	12.90	46.86	68.20	-21.34	AVG	

REMARKS:

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

Test Mode	TX AX(HE80) Mode Channel 171	Polarization	Vertical
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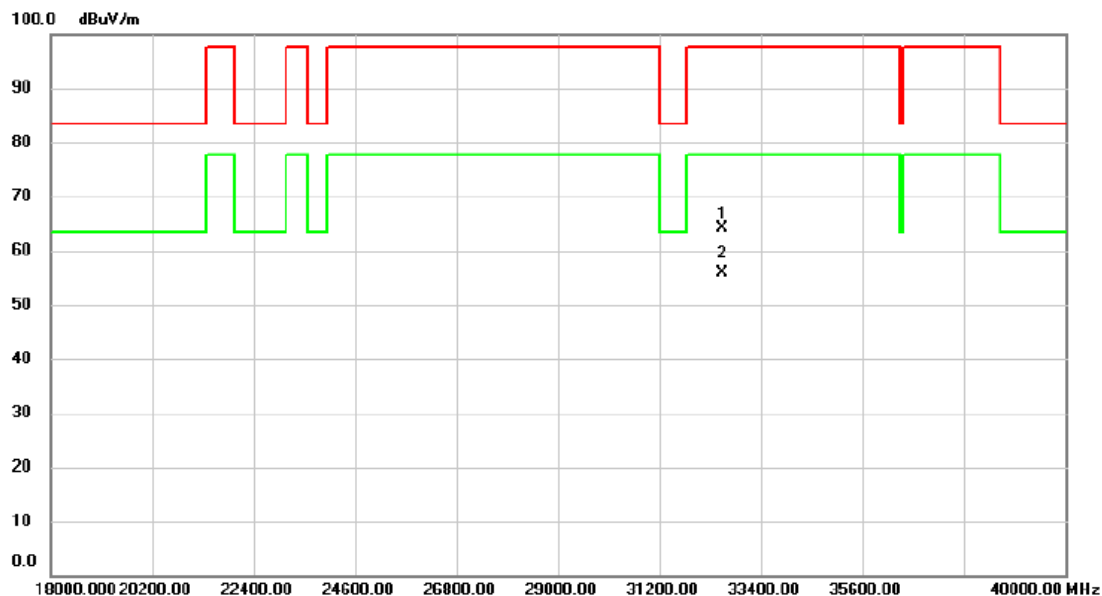
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		33158.00	52.75	10.10	62.85	97.70	-34.85	peak	
2	*	33158.00	42.65	10.10	52.75	77.70	-24.95	AVG	

REMARKS:

(1) Measurement Value = Reading Level + Correct Factor.

(2) Margin Level = Measurement Value - Limit Value.

Test Mode	TX AX(HE80) Mode Channel 171	Polarization	Horizontal
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No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		32575.00	53.37	10.79	64.16	97.70	-33.54	peak	
2	*	32575.00	45.16	10.79	55.95	77.70	-21.75	AVG	

REMARKS:

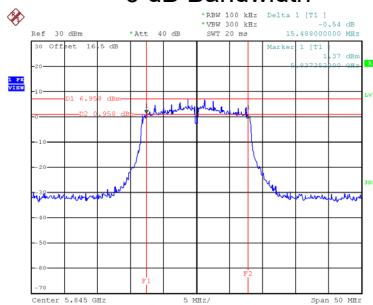
- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value - Limit Value.

APPENDIX E - BANDWIDTH

Test Mode	UNII-3+UNII-4_TX A Mode
-----------	-------------------------

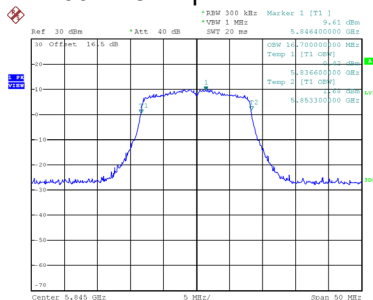
Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	99 % Occupied Bandwidth (MHz)	6 dB Bandwidth Min. Limit (MHz)	Result
169	5845	15.488	16.700	0.5	Complies

CH169 6 dB Bandwidth



Date: 28.AUG.2024 17:07:48

99 % Occupied Bandwidth

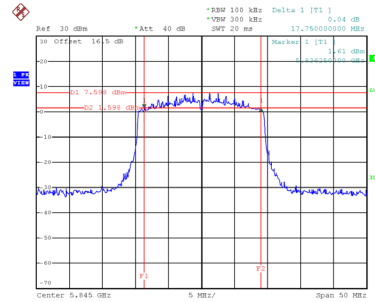


Date: 28.AUG.2024 17:05:25

Test Mode	UNII-3+UNII-4_TX AX(HE20) Mode
-----------	--------------------------------

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	99 % Occupied Bandwidth (MHz)	6 dB Bandwidth Min. Limit (MHz)	Result
169	5845	17.750	19.100	0.5	Complies

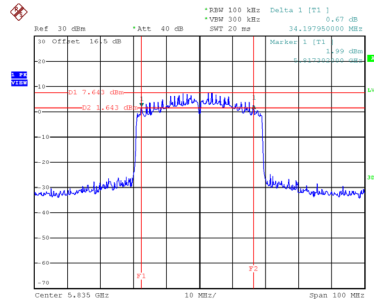
CH169 6 dB Bandwidth



Test Mode	UNII-3+UNII-4_TX AX(HE40) Mode
-----------	--------------------------------

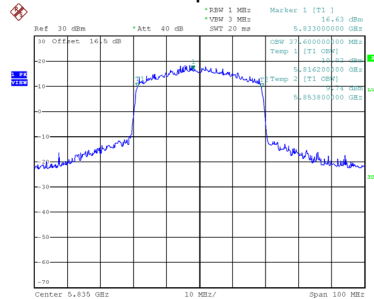
Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	99 % Occupied Bandwidth (MHz)	6 dB Bandwidth Min. Limit (MHz)	Result
167	5835	34.198	37.600	0.5	Complies

CH167 6 dB Bandwidth



Date: 28.AUG.2024 17:34:10

99 % Occupied Bandwidth

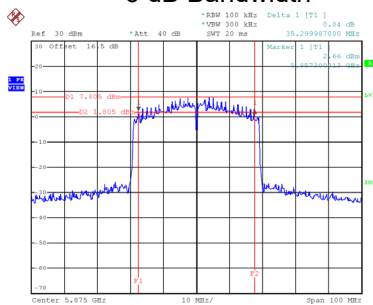


Date: 28.AUG.2024 17:31:52

Test Mode	UNII-4_TX AX(HE40) Mode
-----------	-------------------------

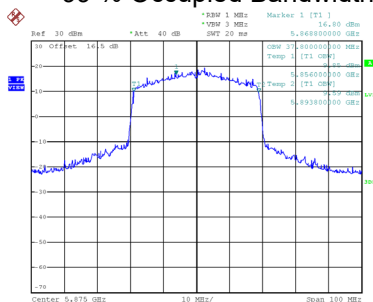
Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	99 % Occupied Bandwidth (MHz)	6 dB Bandwidth Min. Limit (MHz)	Result
175	5875	35.300	37.800	0.5	Complies

CH175 6 dB Bandwidth



Date: 28.AUG.2024 17:38:31

99 % Occupied Bandwidth



Date: 28.AUG.2024 17:35:32

APPENDIX F - MAXIMUM E.I.R.P.

Test Mode	UNII-3+UNII-4_TX A Mode_Ant. 1
-----------	--------------------------------

Channel	Frequency (MHz)	Output Power (dBm)	Duty Factor	e.i.r.p. (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
169	5845	18.80	0.18	26.14	36.00	3.9810	Complies

Test Mode	UNII-3+UNII-4_TX A Mode_Ant. 2
-----------	--------------------------------

Channel	Frequency (MHz)	Output Power (dBm)	Duty Factor	e.i.r.p. (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
169	5845	18.95	0.18	26.29	36.00	3.9810	Complies

Test Mode	UNII-3+UNII-4_TX A Mode_Ant. 3
-----------	--------------------------------

Channel	Frequency (MHz)	Output Power (dBm)	Duty Factor	e.i.r.p. (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
169	5845	18.51	0.18	25.85	36.00	3.9810	Complies

Test Mode	UNII-3+UNII-4_TX A Mode_Total
-----------	-------------------------------

Channel	Frequency (MHz)	e.i.r.p. (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
169	5845	30.87	36.00	3.9810	Complies

Test Mode	UNII-4_TX A Mode_Ant. 1
-----------	-------------------------

Channel	Frequency (MHz)	Output Power (dBm)	Duty Factor	e.i.r.p. (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
173	5865	19.15	0.18	26.49	36.00	3.9810	Complies
177	5885	18.59	0.18	25.93	36.00	3.9810	Complies

Test Mode	UNII-4_TX A Mode_Ant. 2
-----------	-------------------------

Channel	Frequency (MHz)	Output Power (dBm)	Duty Factor	e.i.r.p. (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
173	5865	19.32	0.18	26.66	36.00	3.9810	Complies
177	5885	18.67	0.18	26.01	36.00	3.9810	Complies

Test Mode	UNII-4_TX A Mode_Ant. 3
-----------	-------------------------

Channel	Frequency (MHz)	Output Power (dBm)	Duty Factor	e.i.r.p. (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
173	5865	18.94	0.18	26.28	36.00	3.9810	Complies
177	5885	18.14	0.18	25.48	36.00	3.9810	Complies

Test Mode	UNII-4_TX A Mode_Total
-----------	------------------------

Channel	Frequency (MHz)	e.i.r.p. (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
173	5865	31.25	36.00	3.9810	Complies
177	5885	30.59	36.00	3.9810	Complies

Test Mode	UNII-3+UNII-4_TX AX(HE20) Mode_Ant. 1
-----------	---------------------------------------

Channel	Frequency (MHz)	Output Power (dBm)	Duty Factor	e.i.r.p. (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
169	5845	19.61	0.22	26.99	36.00	3.9810	Complies

Test Mode	UNII-3+UNII-4_TX AX(HE20) Mode_Ant. 2
-----------	---------------------------------------

Channel	Frequency (MHz)	Output Power (dBm)	Duty Factor	e.i.r.p. (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
169	5845	19.82	0.22	27.20	36.00	3.9810	Complies

Test Mode	UNII-3+UNII-4_TX AX(HE20) Mode_Ant. 3
-----------	---------------------------------------

Channel	Frequency (MHz)	Output Power (dBm)	Duty Factor	e.i.r.p. (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
169	5845	19.42	0.22	26.80	36.00	3.9810	Complies

Test Mode	UNII-3+UNII-4_TX AX(HE20) Mode_Total
-----------	--------------------------------------

Channel	Frequency (MHz)	e.i.r.p. (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
169	5845	31.78	36.00	3.9810	Complies

Test Mode	UNII-4_TX AX(HE20) Mode_Ant. 1
-----------	--------------------------------

Channel	Frequency (MHz)	Output Power (dBm)	Duty Factor	e.i.r.p. (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
173	5865	19.63	0.22	27.01	36.00	3.9810	Complies
177	5885	19.31	0.22	26.69	36.00	3.9810	Complies

Test Mode	UNII-4_TX AX(HE20) Mode_Ant. 2
-----------	--------------------------------

Channel	Frequency (MHz)	Output Power (dBm)	Duty Factor	e.i.r.p. (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
173	5865	19.67	0.22	27.05	36.00	3.9810	Complies
177	5885	19.48	0.22	26.86	36.00	3.9810	Complies

Test Mode	UNII-4_TX AX(HE20) Mode_Ant. 3
-----------	--------------------------------

Channel	Frequency (MHz)	Output Power (dBm)	Duty Factor	e.i.r.p. (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
173	5865	19.18	0.22	26.56	36.00	3.9810	Complies
177	5885	19.07	0.22	26.45	36.00	3.9810	Complies

Test Mode	UNII-4_TX AX(HE20) Mode_Total
-----------	-------------------------------

Channel	Frequency (MHz)	e.i.r.p. (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
173	5865	31.66	36.00	3.9810	Complies
177	5885	31.45	36.00	3.9810	Complies

Test Mode	UNII-3+UNII-4_TX AX(HE40) Mode_Ant. 1
-----------	---------------------------------------

Channel	Frequency (MHz)	Output Power (dBm)	Duty Factor	e.i.r.p. (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
167	5835	21.84	0.23	29.23	36.00	3.9810	Complies

Test Mode	UNII-3+UNII-4_TX AX(HE40) Mode_Ant. 2
-----------	---------------------------------------

Channel	Frequency (MHz)	Output Power (dBm)	Duty Factor	e.i.r.p. (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
167	5835	21.93	0.23	29.32	36.00	3.9810	Complies

Test Mode	UNII-3+UNII-4_TX AX(HE40) Mode_Ant. 3
-----------	---------------------------------------

Channel	Frequency (MHz)	Output Power (dBm)	Duty Factor	e.i.r.p. (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
167	5835	21.39	0.23	28.78	36.00	3.9810	Complies

Test Mode	UNII-3+UNII-4_TX AX(HE40) Mode_Total
-----------	--------------------------------------

Channel	Frequency (MHz)	e.i.r.p. (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
167	5835	33.88	36.00	3.9810	Complies

Test Mode	UNII-4_TX AX(HE40) Mode_Ant. 1
-----------	--------------------------------

Channel	Frequency (MHz)	Output Power (dBm)	Duty Factor	e.i.r.p. (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
175	5875	21.64	0.23	29.03	36.00	3.9810	Complies

Test Mode	UNII-4_TX AX(HE40) Mode_Ant. 2
-----------	--------------------------------

Channel	Frequency (MHz)	Output Power (dBm)	Duty Factor	e.i.r.p. (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
175	5875	21.87	0.23	29.26	36.00	3.9810	Complies

Test Mode	UNII-4_TX AX(HE40) Mode_Ant. 3
-----------	--------------------------------

Channel	Frequency (MHz)	Output Power (dBm)	Duty Factor	e.i.r.p. (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
175	5875	21.59	0.23	28.98	36.00	3.9810	Complies

Test Mode	UNII-4_TX AX(HE40) Mode_Total
-----------	-------------------------------

Channel	Frequency (MHz)	e.i.r.p. (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
175	5875	33.86	36.00	3.9810	Complies

Test Mode	UNII-3+UNII-4_TX AX(HE80) Mode_Ant. 1
-----------	---------------------------------------

Channel	Frequency (MHz)	Output Power (dBm)	Duty Factor	e.i.r.p. (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
171	5855	23.07	0.26	30.49	36.00	3.9810	Complies

Test Mode	UNII-3+UNII-4_TX AX(HE80) Mode_Ant. 2
-----------	---------------------------------------

Channel	Frequency (MHz)	Output Power (dBm)	Duty Factor	e.i.r.p. (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
171	5855	23.22	0.26	30.64	36.00	3.9810	Complies

Test Mode	UNII-3+UNII-4_TX AX(HE80) Mode_Ant. 3
-----------	---------------------------------------

Channel	Frequency (MHz)	Output Power (dBm)	Duty Factor	e.i.r.p. (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
171	5855	22.83	0.26	30.25	36.00	3.9810	Complies

Test Mode	UNII-3+UNII-4_TX AX(HE80) Mode_Total
-----------	--------------------------------------

Channel	Frequency (MHz)	e.i.r.p. (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
171	5855	35.23	36.00	3.9810	Complies

Test Mode	UNII-3+UNII-4_TX AX(HE160) Mode_Ant. 1
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Channel	Frequency (MHz)	Output Power (dBm)	Duty Factor	e.i.r.p. (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
163	5815	21.18	0.24	28.58	36.00	3.9810	Complies

Test Mode	UNII-3+UNII-4_TX AX(HE160) Mode_Ant. 2
-----------	--

Channel	Frequency (MHz)	Output Power (dBm)	Duty Factor	e.i.r.p. (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
163	5815	21.39	0.24	28.79	36.00	3.9810	Complies

Test Mode	UNII-3+UNII-4_TX AX(HE160) Mode_Ant. 3
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Channel	Frequency (MHz)	Output Power (dBm)	Duty Factor	e.i.r.p. (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
163	5815	21.04	0.24	28.44	36.00	3.9810	Complies

Test Mode	UNII-3+UNII-4_TX AX(HE160) Mode_Total
-----------	---------------------------------------

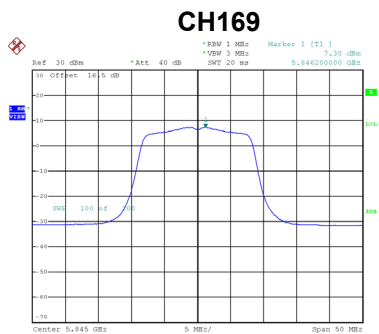
Channel	Frequency (MHz)	e.i.r.p. (dBm)	Max. Limit (dBm)	Max. Limit (W)	Result
163	5815	33.37	36.00	3.9810	Complies

Note: Output power = Measure result + Cable loss

APPENDIX G - POWER SPECTRAL DENSITY (E.I.R.P.)

Test Mode	UNII-3+UNII-4_TX A Mode_Ant. 1
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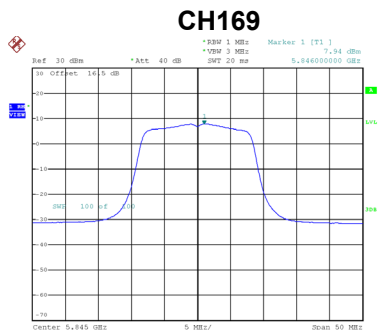
Channel	Frequency (MHz)	Power Spectral Density (dBm/MHz)	Duty Factor	Power Spectral Density (e.i.r.p.) (dBm/MHz)	Max. Limit (dBm/MHz)	Result
169	5845	7.30	0.18	14.64	20.00	Complies



Date: 28.AUG.2024 15:54:34

Test Mode	UNII-3+UNII-4_TX A Mode_Ant. 2
-----------	--------------------------------

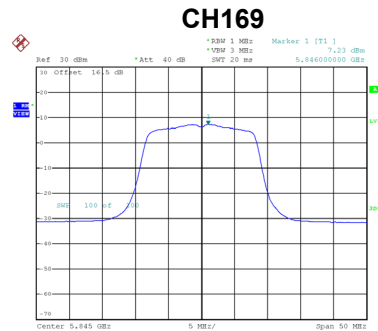
Channel	Frequency (MHz)	Power Spectral Density (dBm/MHz)	Duty Factor	Power Spectral Density (e.i.r.p.) (dBm/MHz)	Max. Limit (dBm/MHz)	Result
169	5845	7.94	0.18	15.28	20.00	Complies



Date: 28.AUG.2024 15:54:03

Test Mode	UNII-3+UNII-4_TX A Mode_Ant. 3
-----------	--------------------------------

Channel	Frequency (MHz)	Power Spectral Density (dBm/MHz)	Duty Factor	Power Spectral Density (e.i.r.p.) (dBm/MHz)	Max. Limit (dBm/MHz)	Result
169	5845	7.23	0.18	14.57	20.00	Complies



Date: 28.AUG.2024 15:53:30

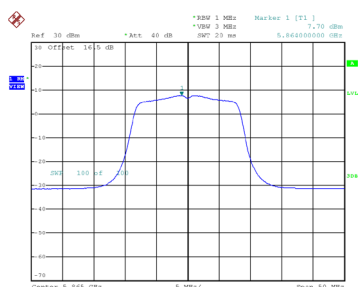
Test Mode	UNII-3+UNII-4_TX A Mode_Total
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Channel	Frequency (MHz)	Power Spectral Density (e.i.r.p.) (dBm/MHz)	Max. Limit (dBm/MHz)	Result
169	5845	19.61	20.00	Complies

Test Mode	UNII-4_TX A Mode_Ant. 1
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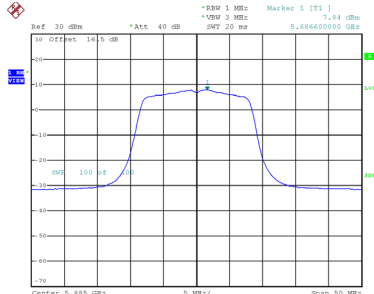
Channel	Frequency (MHz)	Power Spectral Density (dBm/MHz)	Duty Factor	Power Spectral Density (e.i.r.p.) (dBm/MHz)	Max. Limit (dBm/MHz)	Result
173	5865	7.70	0.18	15.04	20.00	Complies
177	5885	7.84	0.18	15.18	20.00	Complies

CH173



Date: 28.AUG.2024 15:55:54

CH177

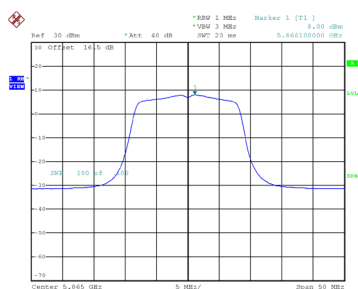


Date: 28.AUG.2024 16:06:00

Test Mode	UNII-4_TX A Mode_Ant. 2
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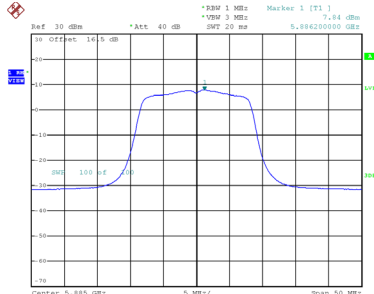
Channel	Frequency (MHz)	Power Spectral Density (dBm/MHz)	Duty Factor	Power Spectral Density (e.i.r.p.) (dBm/MHz)	Max. Limit (dBm/MHz)	Result
173	5865	8.00	0.18	15.34	20.00	Complies
177	5885	7.84	0.18	15.18	20.00	Complies

CH173



Date: 28.AUG.2024 15:56:23

CH177

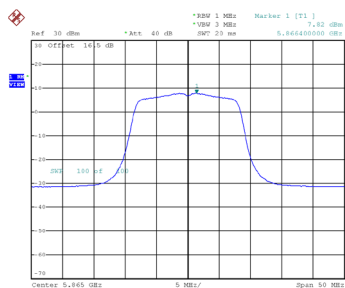


Date: 28.AUG.2024 16:06:26

Test Mode	UNII-4_TX A Mode_Ant. 3
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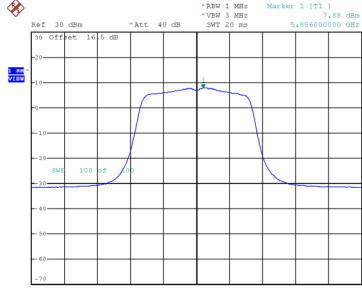
Channel	Frequency (MHz)	Power Spectral Density (dBm/MHz)	Duty Factor	Power Spectral Density (e.i.r.p.) (dBm/MHz)	Max. Limit (dBm/MHz)	Result
173	5865	7.82	0.18	15.16	20.00	Complies
177	5885	7.88	0.18	15.22	20.00	Complies

CH173



Date: 28.AUG.2024 15:56:52

CH177



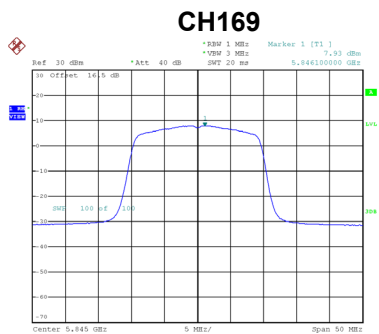
Date: 28.AUG.2024 16:06:55

Test Mode	UNII-4_TX A Mode_Total
-----------	------------------------

Channel	Frequency (MHz)	Power Spectral Density (e.i.r.p.) (dBm/MHz)	Max. Limit (dBm/MHz)	Result
173	5865	19.95	20.00	Complies
177	5885	19.97	20.00	Complies

Test Mode	UNII-3+UNII-4_TX AX(HE20) Mode_Ant. 1
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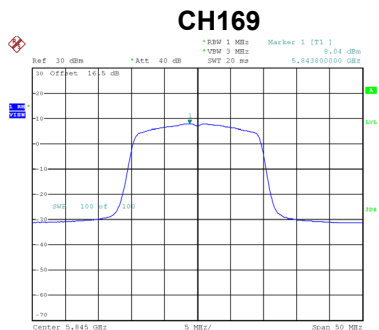
Channel	Frequency (MHz)	Power Spectral Density (dBm/MHz)	Duty Factor	Power Spectral Density (e.i.r.p.) (dBm/MHz)	Max. Limit (dBm/MHz)	Result
169	5845	7.93	0.22	15.31	20.00	Complies



Date: 28.AUG.2024 16:18:57

Test Mode	UNII-3+UNII-4_TX AX(HE20) Mode_Ant. 2
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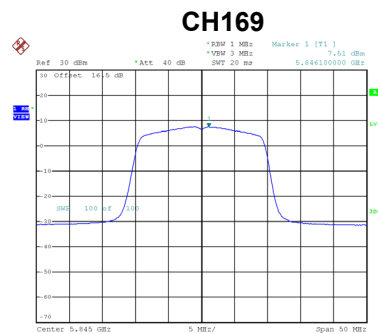
Channel	Frequency (MHz)	Power Spectral Density (dBm/MHz)	Duty Factor	Power Spectral Density (e.i.r.p.) (dBm/MHz)	Max. Limit (dBm/MHz)	Result
169	5845	8.04	0.22	15.42	20.00	Complies



Date: 28.AUG.2024 16:19:23

Test Mode	UNII-3+UNII-4_TX AX(HE20) Mode_Ant. 3
-----------	---------------------------------------

Channel	Frequency (MHz)	Power Spectral Density (dBm/MHz)	Duty Factor	Power Spectral Density (e.i.r.p.) (dBm/MHz)	Max. Limit (dBm/MHz)	Result
169	5845	7.51	0.22	14.89	20.00	Complies



Date: 28.AUG.2024 16:19:54

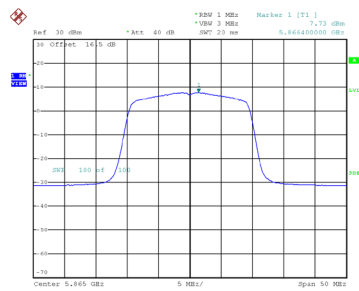
Test Mode	UNII-3+UNII-4_TX AX(HE20) Mode_Total
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Channel	Frequency (MHz)	Power Spectral Density (e.i.r.p.) (dBm/MHz)	Max. Limit (dBm/MHz)	Result
169	5845	19.99	20.00	Complies

Test Mode	UNII-4_TX AX(HE20) Mode_Ant. 1
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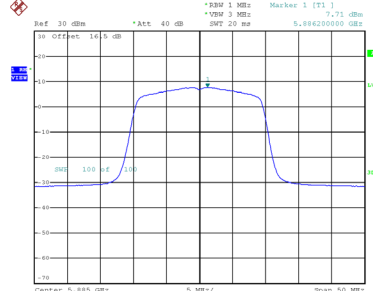
Channel	Frequency (MHz)	Power Spectral Density (dBm/MHz)	Duty Factor	Power Spectral Density (e.i.r.p.) (dBm/MHz)	Max. Limit (dBm/MHz)	Result
173	5865	7.73	0.22	15.11	20.00	Complies
177	5885	7.71	0.22	15.09	20.00	Complies

CH173



Date: 28.AUG.2024 16:12:45

CH177

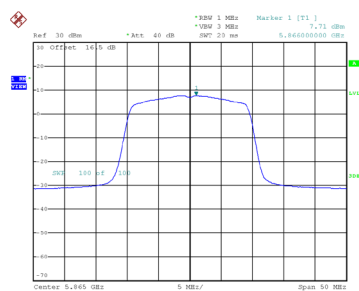


Date: 28.AUG.2024 16:16:48

Test Mode	UNII-4_TX AX(HE20) Mode_Ant. 2
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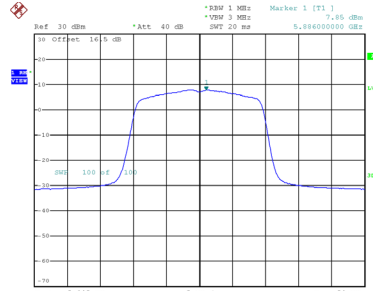
Channel	Frequency (MHz)	Power Spectral Density (dBm/MHz)	Duty Factor	Power Spectral Density (e.i.r.p.) (dBm/MHz)	Max. Limit (dBm/MHz)	Result
173	5865	7.71	0.22	15.09	20.00	Complies
177	5885	7.85	0.22	15.23	20.00	Complies

CH173



Date: 28.AUG.2024 16:24:14

CH177

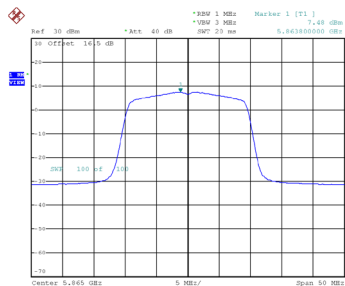


Date: 28.AUG.2024 16:16:22

Test Mode	UNII-4_TX AX(HE20) Mode_Ant. 3
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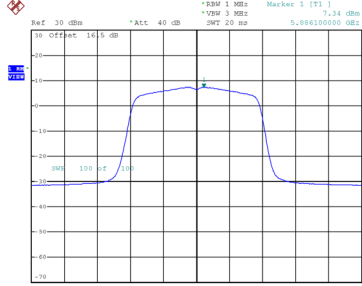
Channel	Frequency (MHz)	Power Spectral Density (dBm/MHz)	Duty Factor	Power Spectral Density (e.i.r.p.) (dBm/MHz)	Max. Limit (dBm/MHz)	Result
173	5865	7.48	0.22	14.86	20.00	Complies
177	5885	7.34	0.22	14.72	20.00	Complies

CH173



Date: 28.AUG.2024 16:23:36

CH177



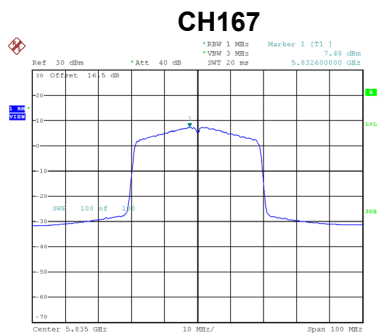
Date: 28.AUG.2024 16:15:50

Test Mode	UNII-4_TX AX(HE20) Mode_Total
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Channel	Frequency (MHz)	Power Spectral Density (e.i.r.p.) (dBm/MHz)	Max. Limit (dBm/MHz)	Result
173	5865	19.80	20.00	Complies
177	5885	19.79	20.00	Complies

Test Mode	UNII-3+UNII-4_TX AX(HE40) Mode_Ant. 1
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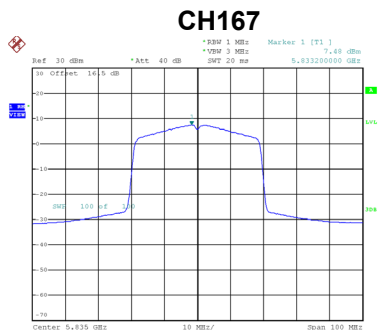
Channel	Frequency (MHz)	Power Spectral Density (dBm/MHz)	Duty Factor	Power Spectral Density (e.i.r.p.) (dBm/MHz)	Max. Limit (dBm/MHz)	Result
167	5835	7.48	0.23	14.87	20.00	Complies



Date: 28.AUG.2024 16:40:15

Test Mode	UNII-3+UNII-4_TX AX(HE40) Mode_Ant. 2
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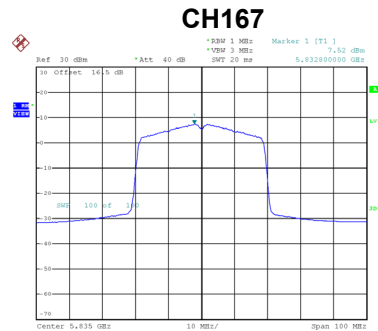
Channel	Frequency (MHz)	Power Spectral Density (dBm/MHz)	Duty Factor	Power Spectral Density (e.i.r.p.) (dBm/MHz)	Max. Limit (dBm/MHz)	Result
167	5835	7.48	0.23	14.87	20.00	Complies



Date: 28.AUG.2024 16:39:41

Test Mode	UNII-3+UNII-4_TX AX(HE40) Mode_Ant. 3
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Channel	Frequency (MHz)	Power Spectral Density (dBm/MHz)	Duty Factor	Power Spectral Density (e.i.r.p.) (dBm/MHz)	Max. Limit (dBm/MHz)	Result
167	5835	7.52	0.23	14.91	20.00	Complies



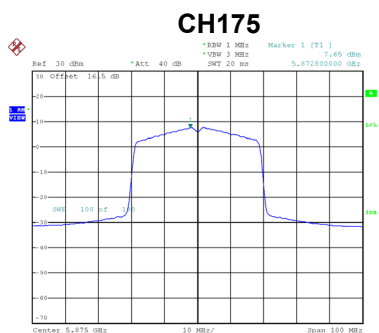
Date: 28.AUG.2024 16:39:05

Test Mode	UNII-3+UNII-4_TX AX(HE40) Mode_Total
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Channel	Frequency (MHz)	Power Spectral Density (e.i.r.p.) (dBm/MHz)	Max. Limit (dBm/MHz)	Result
167	5835	19.65	20.00	Complies

Test Mode	UNII-4_TX AX(HE40) Mode_Ant. 1
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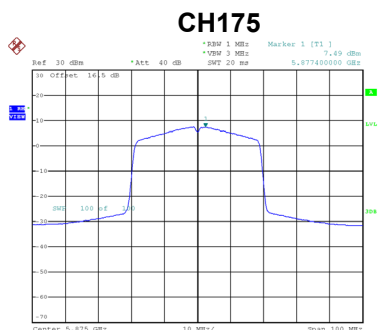
Channel	Frequency (MHz)	Power Spectral Density (dBm/MHz)	Duty Factor	Power Spectral Density (e.i.r.p.) (dBm/MHz)	Max. Limit (dBm/MHz)	Result
175	5875	7.65	0.23	15.04	20.00	Complies



Date: 28.AUG.2024 16:41:57

Test Mode	UNII-4_TX AX(HE40) Mode_Ant. 2
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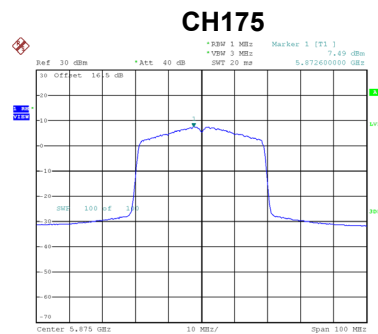
Channel	Frequency (MHz)	Power Spectral Density (dBm/MHz)	Duty Factor	Power Spectral Density (e.i.r.p.) (dBm/MHz)	Max. Limit (dBm/MHz)	Result
175	5875	7.49	0.23	14.88	20.00	Complies



Date: 28.AUG.2024 16:42:42

Test Mode	UNII-4_TX AX(HE40) Mode_Ant. 3
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Channel	Frequency (MHz)	Power Spectral Density (dBm/MHz)	Duty Factor	Power Spectral Density (e.i.r.p.) (dBm/MHz)	Max. Limit (dBm/MHz)	Result
175	5875	7.49	0.23	14.88	20.00	Complies



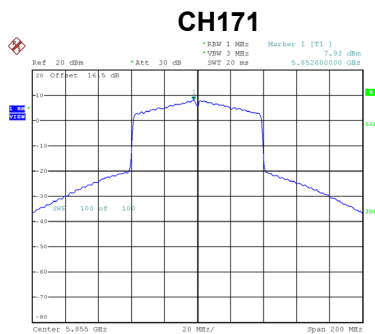
Date: 28.AUG.2024 16:44:40

Test Mode	UNII-4_TX AX(HE40) Mode_Total
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Channel	Frequency (MHz)	Power Spectral Density (e.i.r.p.) (dBm/MHz)	Max. Limit (dBm/MHz)	Result
175	5875	19.70	20.00	Complies

Test Mode	UNII-3+UNII-4_TX AX(HE80) Mode_Ant. 1
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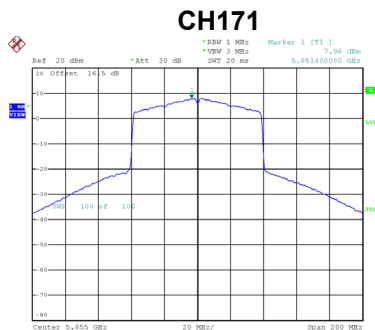
Channel	Frequency (MHz)	Power Spectral Density (dBm/MHz)	Duty Factor	Power Spectral Density (e.i.r.p.) (dBm/MHz)	Max. Limit (dBm/MHz)	Result
171	5855	7.93	0.26	15.35	20.00	Complies



Date: 3.SEP.2024 10:11:49

Test Mode	UNII-3+UNII-4_TX AX(HE80) Mode_Ant. 2
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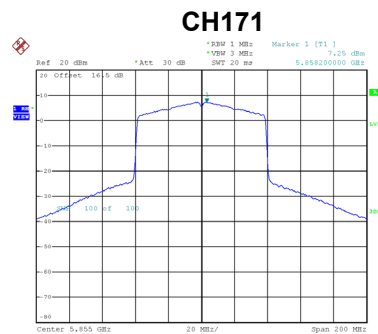
Channel	Frequency (MHz)	Power Spectral Density (dBm/MHz)	Duty Factor	Power Spectral Density (e.i.r.p.) (dBm/MHz)	Max. Limit (dBm/MHz)	Result
171	5855	7.96	0.26	15.38	20.00	Complies



Date: 3.SEP.2024 10:12:35

Test Mode	UNII-3+UNII-4_TX AX(HE80) Mode_Ant. 3
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Channel	Frequency (MHz)	Power Spectral Density (dBm/MHz)	Duty Factor	Power Spectral Density (e.i.r.p.) (dBm/MHz)	Max. Limit (dBm/MHz)	Result
171	5855	7.25	0.26	14.67	20.00	Complies



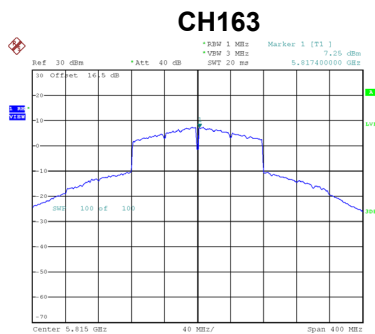
Date: 3.SEP.2024 10:13:37

Test Mode	UNII-3+UNII-4_TX AX(HE80) Mode_Total
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Channel	Frequency (MHz)	Power Spectral Density (e.i.r.p.) (dBm/MHz)	Max. Limit (dBm/MHz)	Result
171	5855	19.91	20.00	Complies

Test Mode	UNII-3+UNII-4_TX AX(HE160) Mode_Ant. 1
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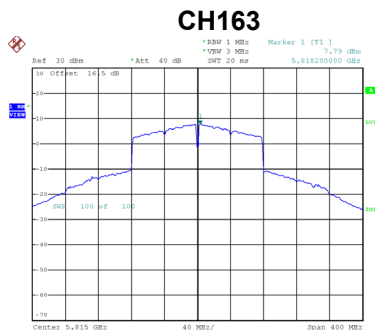
Channel	Frequency (MHz)	Power Spectral Density (dBm/MHz)	Duty Factor	Power Spectral Density (e.i.r.p.) (dBm/MHz)	Max. Limit (dBm/MHz)	Result
163	5815	7.25	0.24	14.65	20.00	Complies



Date: 28.AUG.2024 17:01:40

Test Mode	UNII-3+UNII-4_TX AX(HE160) Mode_Ant. 2
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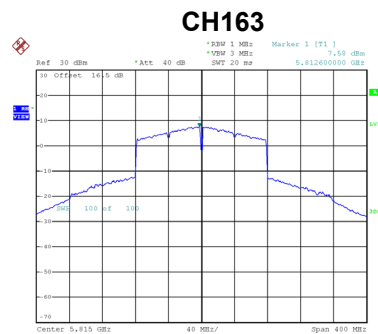
Channel	Frequency (MHz)	Power Spectral Density (dBm/MHz)	Duty Factor	Power Spectral Density (e.i.r.p.) (dBm/MHz)	Max. Limit (dBm/MHz)	Result
163	5815	7.79	0.24	15.19	20.00	Complies



Date: 28.AUG.2024 17:01:07

Test Mode	UNII-3+UNII-4_TX AX(HE160) Mode_Ant. 3
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Channel	Frequency (MHz)	Power Spectral Density (dBm/MHz)	Duty Factor	Power Spectral Density (e.i.r.p.) (dBm/MHz)	Max. Limit (dBm/MHz)	Result
163	5815	7.58	0.24	14.98	20.00	Complies



Date: 28.AUG.2024 17:00:09

Test Mode	UNII-3+UNII-4_TX AX(HE160) Mode_Total
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Channel	Frequency (MHz)	Power Spectral Density (e.i.r.p.) (dBm/MHz)	Max. Limit (dBm/MHz)	Result
163	5815	19.73	20.00	Complies

APPENDIX H - FREQUENCY STABILITY

Test Mode	UNII-4
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Voltage vs. Frequency Stability

Voltage (V)	Measurement Frequency (MHz)
Center Frequency	5845.0000
138	5844.9550
120	5844.9599
102	5844.9398
Maximum Deviation (MHz)	-0.0602
Maximum Deviation (ppm)	-10.3000

Temperature vs. Frequency Stability

Temperature (°C)	Measurement Frequency (MHz)
Center Frequency	5845.0000
0	5844.9399
10	5844.9599
20	5844.9398
30	5844.9399
40	5844.9398
Maximum Deviation (MHz)	-0.0602
Maximum Deviation (ppm)	-10.3000

End of Test Report