



FCC Radio Test Report

FCC ID: 2AUTE-8BJ23K

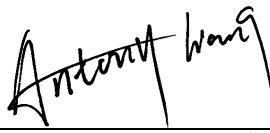
This report concerns: Original Grant

Project No. : 2410C017
Equipment : INK JET PRINTER
Brand Name : N/A
Model Name : V1, HCD-8BJ23K, A1, U300
Applicant : Xiamen Hanin Co.Ltd
Address : Room 305A, Angye Building, Pioneering Park, Torch High-tech Zone, Xiamen, China
Manufacturer : Xiamen Hanin Co.Ltd
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Factory : Xiamen Hanin Co.Ltd
Address : No. 96 Rongyuan Road, Tong'an District, Xiamen City, Fujian Province, China
Date of Receipt : Oct. 10, 2024
Date of Test : Oct. 12, 2024 ~ Nov. 18, 2025
Issued Date : Mar. 03, 2026
Test Sample : Engineering Sample No.: DG2025100922-1 for output power, DG2025100923 for Radiated Emissions-30 MHz to 1000 MHz, DG20241010156 for other.
Standard(s) : FCC CFR Title 47, Part 15, Subpart C

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

Prepared by

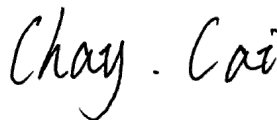
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Declaration

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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REVISION HISTORY

Report No.	Version	Description	Issued Date	Note
BTL-FCCP-2-2410C017	R00	Original Report.	Dec. 08, 2025	Invalid
BTL-FCCP-2-2410C017	R01	This report has changes as following: 1. Updated the description of summary on section 2. 2. Added the FCC ID of RF Module on section 2. It is a revision of the report BTL-FCCP-2-2410C017 R00. This is a newly released report, replacing the BTL-FCCP-2-2410C017 R00 report.	Feb. 04, 2026	Invalid
BTL-FCCP-2-2410C017	R02	This report modified the antenna gain on page 6. It is a revision of the report BTL-FCCP-2-2410C017 R01. This is a newly released report, replacing the BTL-FCCP-2-2410C017 R01 report.	Mar. 03, 2026	Valid

1. APPLICABLE STANDARDS

According to the specifications of the manufacturer, the EUT must comply with the requirements of the following standard:

ANSI C63.10-2020

The following reference test guidance is not within the scope of accreditation of A2LA:

KDB 558074 D01 15.247 Meas Guidance v05r02

2. SUMMARY OF TEST RESULTS

Test procedures according to the technical standard(s):

FCC CFR Title 47, Part 15, Subpart C				
Standard(s) Section	Test Item	Test Result	Judgment	Remark
15.207	AC Power Line Conducted Emissions	APPENDIX A	PASS	-----
15.247(d) 15.205(a) 15.209(a)	Radiated Emissions	APPENDIX B APPENDIX C APPENDIX D	PASS	-----
15.247(a)(2)	Bandwidth	-----	PASS	Note(3)
15.247(b)(3)	Maximum Output Power	APPENDIX E	PASS	-----
15.247(d)	Conducted Spurious Emission	-----	PASS	Note(3)
15.247(e)	Power Spectral Density	-----	PASS	Note(3)
15.203	Antenna Requirement	-----	PASS	Note(3)

Note:

- (1) "N/A" denotes test is not applicable to this device.
- (2) The device what use a permanently attached antenna were considered sufficient to comply with the provisions of 15.203.
- (3) The RF module of this INK JET PRINTER has been tested and certified. Please refer to the module report as listed in the below table for the test results of the RF module.

RF Module Model	Module Function	Report Number	FCC ID	Standard
AP6256	Bluetooth EDR	FR412211AC	ZQ6-AP6256	47 CFR FCC Part 15.247
	Bluetooth LE	FR412211AD		
	WLAN 2.4GHz	FR412211AA		47 CFR FCC Part 15.407
	RLAN 5GHz UNII 1~3	FR412211AB		
	MPE	FA412211		47 CFR Part 2.1091

1) Thus, only the AC Power Line Conducted Emissions, Radiated Emission and Maximum Output Power were evaluated and recorded in this report. For the test results of all other test items please refer to above module test report.

(4) Based on the RF module the antennas for this INK JET PRINTER were updated as below table:

Ant.	Antenna Mfr.	Model Name	Type	Antenna Gain(dBi)			
				BT	BLE	2.4G	5G
1	N/A	N/A	Internal	1.33	1.33	1.33	2.55

2.1 TEST FACILITY

The test facilities used to collect the test data in this report:

For Radiated Emissions-1 GHz to 18 GHz: Room 102 & 702, Building A3, No.9, Jinshagang 1st Road, Dalang, Dongguan, Guangdong People's Republic of China.

For other test items: No.3, Jinshagang 1st Road, Dalang, Dongguan, 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 Measurement:

Test Site	Method	Measurement Frequency Range	U,(dB)
DG-C02	CISPR	150kHz ~ 30MHz	2.66

B. Radiated emissions Measurement:

Test Site	Method	Measurement Frequency Range	U,(dB)
DG-CB01	CISPR	9kHz ~ 30MHz	2.26

Test Site	Method	Measurement Frequency Range	Ant. H / V	U,(dB)
DGDLCB03 (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)
DGDLCB03 (1m)	CISPR	18 ~ 26.5 GHz	4.30

C. Other Measurement:

Test Item	Uncertainty
Maximum Output Power	1.3 dB
Temperature	0.7 °C
Humidity	1.7 %

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	52%	AC 120V/60Hz	Hayden Chen	Oct. 23, 2024
Radiated Emissions -9 kHz to 30 MHz	25°C	50%	AC 120V/60Hz	Hayden Chen	Oct. 24, 2024
Radiated Emissions -30 MHz to 1000 MHz	24°C	53%	AC120V/60Hz	Calvin Wen	Oct. 20, 2025
Radiated Emissions -Above 1000 MHz	20°C	49%	AC120V/60Hz	Chen Mo	Oct. 21, 2024
	23°C	47%	AC 120V/60Hz	Drew Tan	Nov. 06, 2024
Maximum Output Power	25°C	57%	DC 24V	Arvin Tong	Nov. 11, 2025

3. GENERAL INFORMATION

3.1 GENERAL DESCRIPTION OF EUT

Equipment	INK JET PRINTER
Brand Name	N/A
Test Model	V1
Model Name	V1, HCD-8BJ23K, A1, U300
Model Difference(s)	Just different product models, everything else is the same
Hardware Version	V1-MBB
Software Version	V1-MBB V1
Power Source	DC Voltage supplied from AC adapter. Model: AP150G-240150
Power Rating	I/P: 100-240V~ 50/60Hz 1.5A Max O/P: 24.0V --- 1.5A 36.0W
Operation Frequency	2402 MHz ~ 2480 MHz
Modulation Type	GFSK
Bit Rate of Transmitter	1Mbps, 2Mbps
Max. Output Power	2Mbps: 2.71 dBm (0.0019 W)

Note:

1. The above EUT information is declared by manufacturer and for more detailed features description, please refers to the manufacturer's specifications or user's manual.

2. Channel List:

Channel	Frequency (MHz)	Channel	Frequency (MHz)
00	2402	20	2442
01	2404	21	2444
02	2406	22	2446
03	2408	23	2448
04	2410	24	2450
05	2412	25	2452
06	2414	26	2454
07	2416	27	2456
08	2418	28	2458
09	2420	29	2460
10	2422	30	2462
11	2424	31	2464
12	2426	32	2466
13	2428	33	2468
14	2430	34	2470
15	2432	35	2472
16	2434	36	2474
17	2436	37	2476
18	2438	38	2478
19	2440	39	2480

3.2 DESCRIPTION OF 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 Mode_1Mbps Channel 00/19/39
Mode 2	TX Mode_2Mbps Channel 00/19/39
Mode 3	TX Mode_1Mbps Channel 19

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 3	TX Mode_2Mbps Channel 19

Radiated emissions test - Below 1GHz & Above 18 GHz	
Final Test Mode	Description
Mode 3	TX Mode_2Mbps Channel 19

Radiated emissions test - 1 GHz - 18 GHz	
Final Test Mode	Description
Mode 1	TX Mode_1Mbps Channel 00/19/39
Mode 2	TX Mode_2Mbps Channel 00/19/39

Conducted test	
Final Test Mode	Description
Mode 1	TX Mode_1Mbps Channel 00/19/39
Mode 2	TX Mode_2Mbps Channel 00/19/39

Note:

- (1) For radiated emission above 1 GHz test, the spurious points of 1GHz~26.5GHz 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.
- (2) For AC power line conducted emissions and radiated emissions below 1 GHz test, the 2Mbps Channel 19 is found to be the worst case and recorded.
- (3) For radiated emission 1 GHz - 18GHz test, the polarization of Vertical and Horizontal are evaluated, the worst case is Vertical and recorded.
- (4) For radiated emission Harmonic 18-26.5GHz test, only tested the worst case and recorded.

3.3 PARAMETERS OF TEST SOFTWARE

During testing channel & power controlling software provided by the customer was used to control the operating channel as well as the output power level.

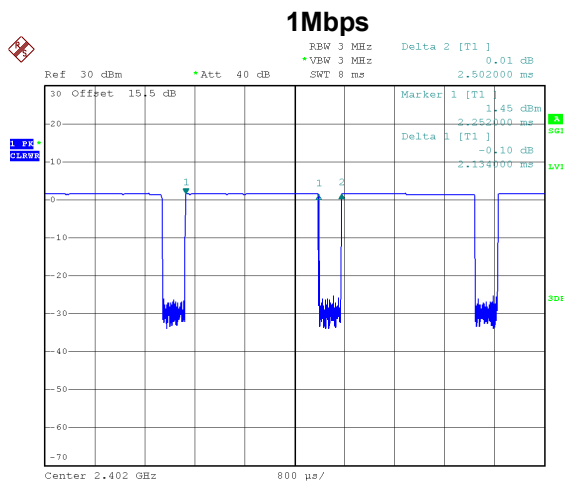
Test Software Version	IPOP V4.1		
Frequency (MHz)	2402	2440	2480
1Mbps	default	default	default
2Mbps	default	default	default

3.4 DUTY CYCLE

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

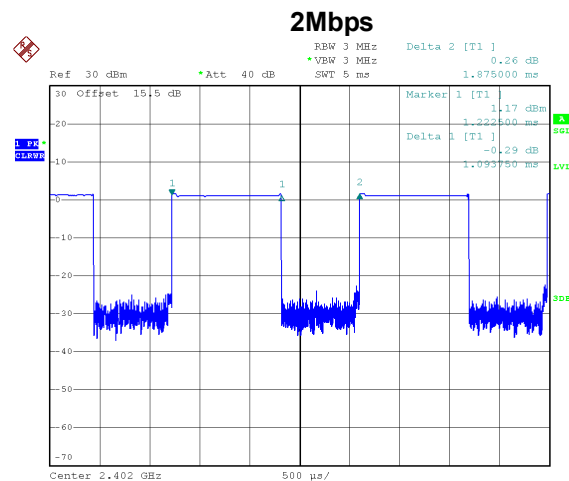
If duty cycle is $< 98\%$, duty factor shall be considered.

The output power = measured power + duty factor.



Date: 22.OCT.2025 10:35:05

Duty cycle = 2.134 ms / 2.502 ms = 85.29%
 Duty Factor = $10 \log(1/\text{Duty cycle}) = 0.69 \text{ dB}$



Date: 22.OCT.2025 10:35:49

Duty cycle = 1.094 ms / 1.875 ms = 58.35%
 Duty Factor = $10 \log(1/\text{Duty cycle}) = 2.34 \text{ dB}$

NOTE:

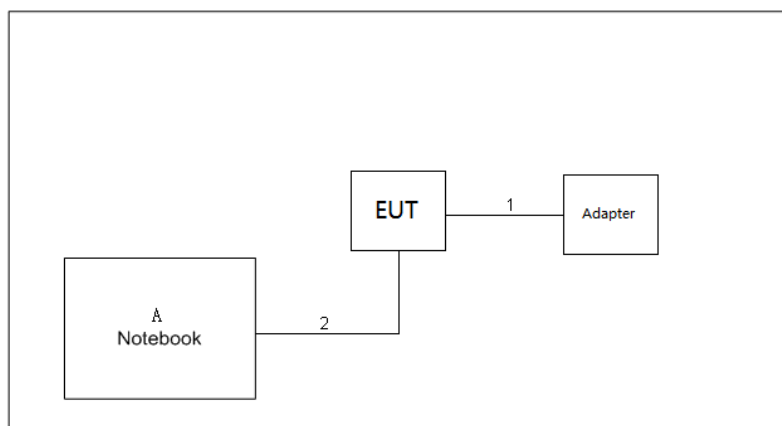
For 1Mbps:

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.

For 2Mbps:

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.

3.5 BLOCK DIAGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED



3.6 SUPPORT UNITS

Item	Equipment	Brand	Model No.	Series No.
A	Notebook	HW	WFH9	N/A

Item	Cable Type	Shielded Type	Ferrite Core	Length
1	DC Cable	NO	NO	1.2M
2	USB Cable	NO	NO	1.2M

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. All cable losses are provided by the testing laboratory.

4. AC POWER LINE CONDUCTED EMISSIONS

4.1 LIMIT

Frequency of Emission (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.
- (3) The test result calculated as following:
 Measurement Value = Reading Level + Correct Factor
 Correct Factor = Insertion Loss + Cable Loss + Attenuator Factor (if use)
 Margin Level = Measurement Value - Limit Value

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.

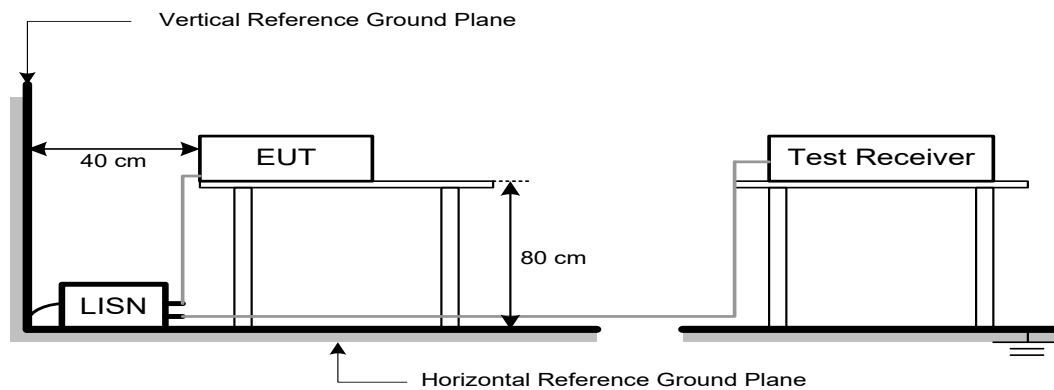
The following table is the setting of the receiver:

Receiver Parameters	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 OPERATING 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.

4.6 TEST RESULTS

Please refer to the APPENDIX A.

Remark:

- (1) All readings are QP Mode value unless otherwise stated AVG in column of 『Note』 . If the QP Mode Measured value compliance with the QP Limits and lower than AVG Limits, the EUT shall be deemed to meet both QP & AVG Limits and then only QP Mode was measured, but AVG Mode didn't perform. In this case, a " * " marked in AVG Mode column of Interference Voltage Measured.
- (2) Measuring frequency range from 150 kHz to 30 MHz.

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 EMISSION MEASUREMENT (9 kHz-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 RADIATED EMISSION MEASUREMENT (Above 1000 MHz)

Frequency (MHz)	Band edge/ Harmonic at 3m (dBμV/m)		Harmonic at 1m (dBμV/m)	
	Peak	Average	Peak	Average
Above 1000	74	54	83.5 (Note 5)	63.5 (Note 5)

Note:

(1) The limit for radiated test was performed according to FCC CFR Title 47, Part 15, Subpart C.

(2) The tighter limit applies at the band edges.

(3) Emission level (dBuV/m)=20log Emission level (uV/m).

(4) The test result calculated as following:

Measurement Value = Reading Level + Correct Factor

Correct Factor = Antenna Factor + Cable Loss - Amplifier Gain(if use)

Margin Level = Measurement Value - Limit Value

(5)

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

20log (d_{limit}/d_{measure})=20log (3/1)=9.5 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 1 GHz)
- 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
RBW / VBW (Emission in restricted band)	1 MHz / 3 MHz for PK value 1 MHz / 1/T Hz for AVG value

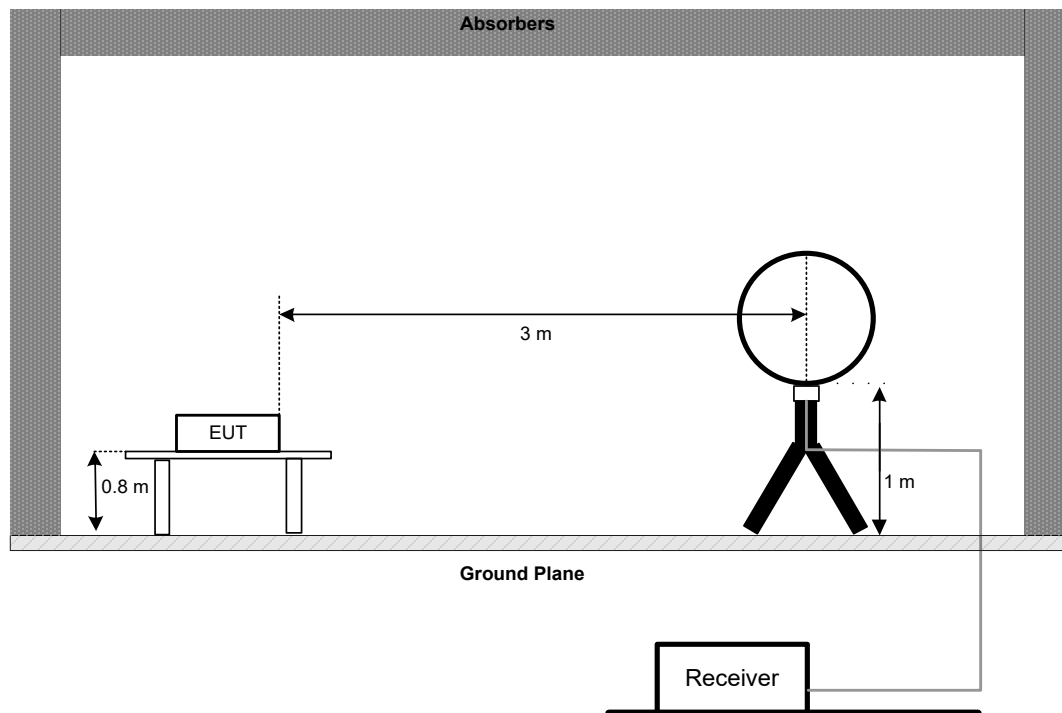
Spectrum Parameters	Setting
Start ~ Stop Frequency	9 kHz~90 kHz for PK/AVG detector
Start ~ Stop Frequency	90 kHz~110 kHz for QP detector
Start ~ Stop Frequency	110 kHz~490 kHz for PK/AVG detector
Start ~ Stop Frequency	490 kHz~30 MHz for QP detector
Start ~ Stop Frequency	30 MHz~1000 MHz for QP detector
Start ~ Stop Frequency	1 GHz~26.5 GHz for PK/AVG detector

5.3 DEVIATION FROM TEST STANDARD

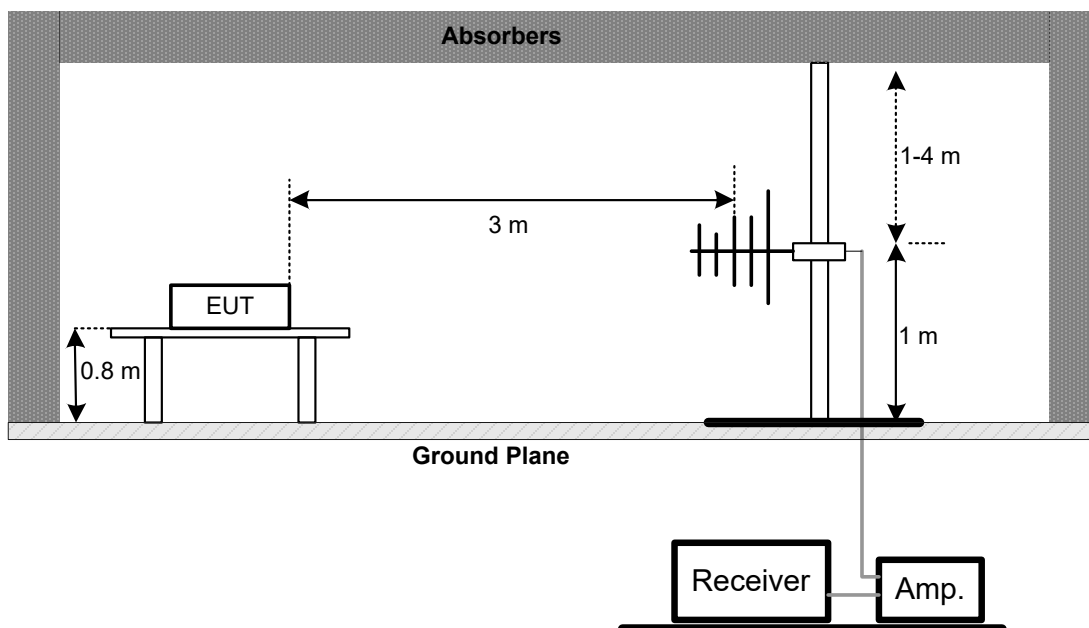
No deviation.

5.4 TEST SETUP

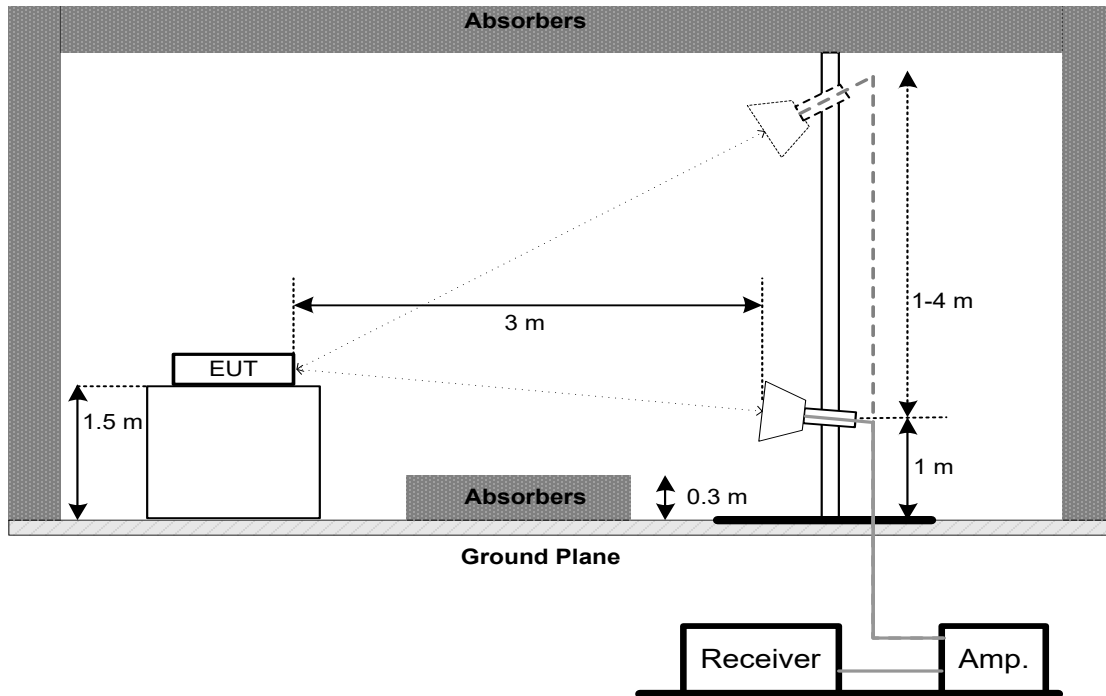
9 kHz to 30 MHz



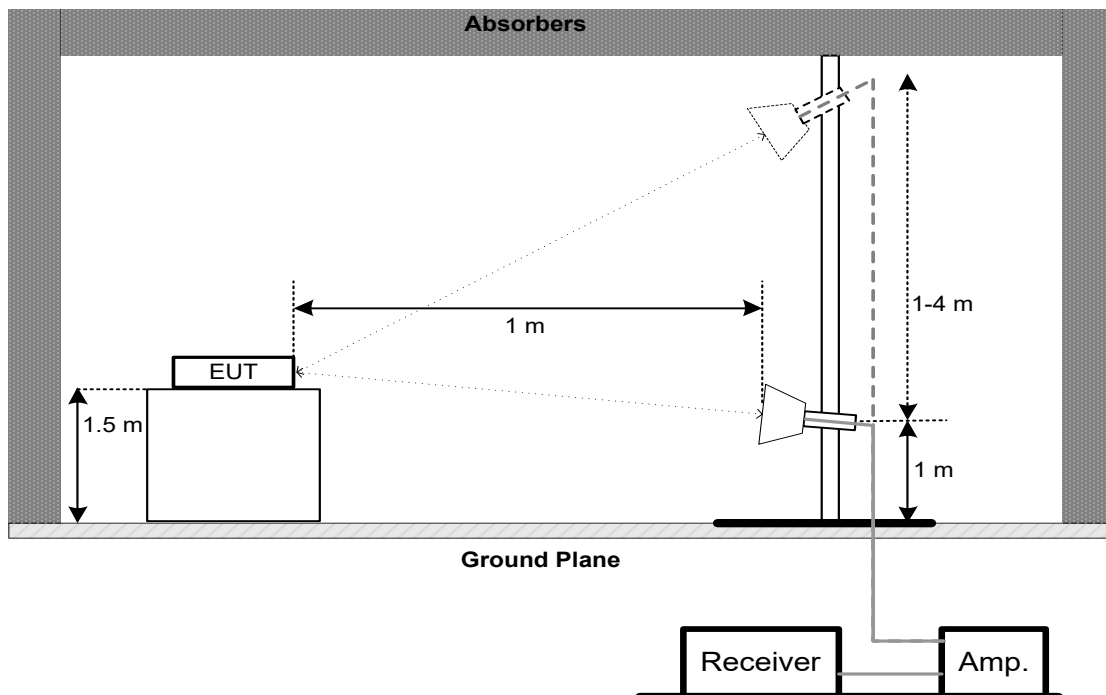
30 MHz to 1 GHz



**Above 1 GHz
Band edge & Harmonic(1 GHz to 18 GHz)**



Harmonic(18 GHz to 26.5 GHz)



5.5 EUT OPERATING CONDITIONS

The EUT was programmed to be in continuously transmitting mode.

5.6 TEST RESULT - 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 RESULT - 30 MHz TO 1000 MHz

Please refer to the APPENDIX C.

5.8 TEST RESULT - 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. MAXIMUM OUTPUT POWER

6.1 LIMIT

Section	Test Item	Limit
FCC 15.247(b)(3)	Maximum Output Power	1.0000 watt or 30.00 dBm

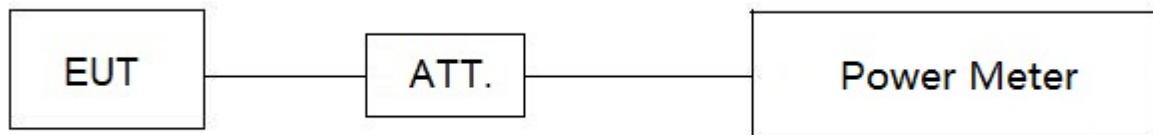
6.2 TEST PROCEDURE

- The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram below.
- The maximum conducted output power was performed in accordance with method 11.9.2.3.2 of ANSI C63.10-2020 & ANSI C63.10-2020+Cor.1-2023+C63.10a-2024+Errata to C63.10a-2024.

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. 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

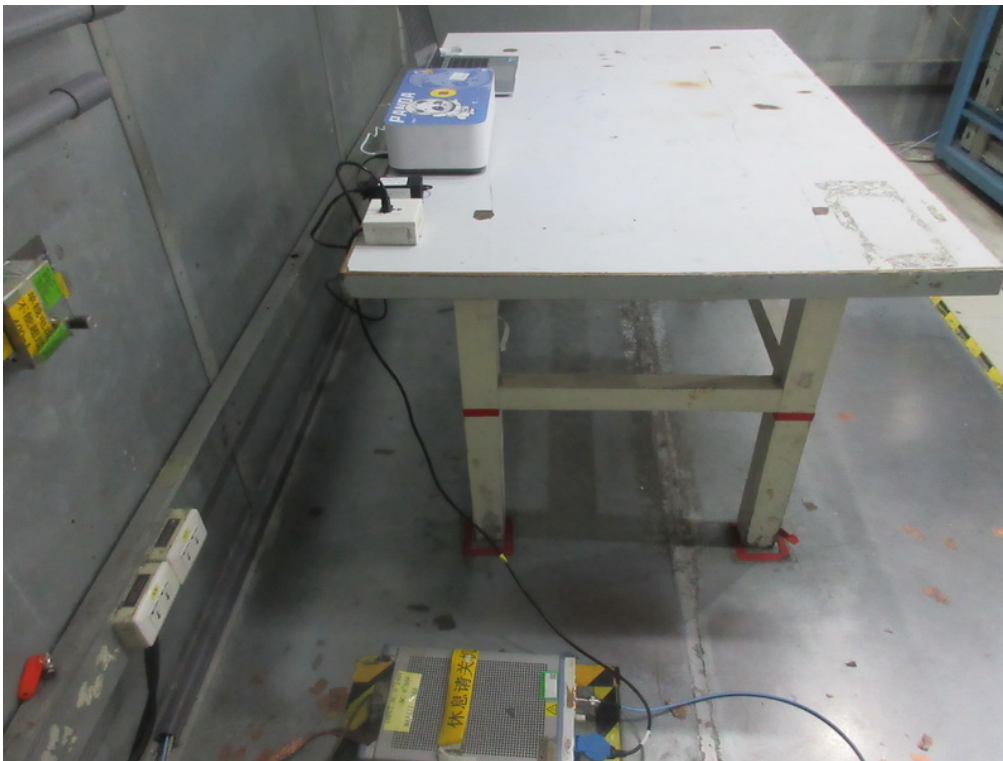
Radiated Emissions - 30 MHz to 1 GHz					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Trilog-Broadband Antenna	Schwarzbeck	VULB 9168	01462	Dec. 14, 2025
2	Attenuator	EMC INSTRUMENT	EMCI-N-6-06	AT-06009	Dec. 14, 2025
3	Preamplifier	EMC INSTRUMENT	EMC001330	980998	May 17, 2026
4	Cable	RegalWay	LMR400-NMNM-12 .5m	N/A	Jun. 04, 2026
5	Cable	RegalWay	LMR400-NMNM-3 m	N/A	Jun. 04, 2026
6	Cable	RegalWay	LMR400-NMNM-0. 5m	N/A	Jun. 04, 2026
7	Receiver	Agilent	N9038A	MY52130039	Jan. 10, 2026
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 15, 2026

Radiated Emissions - 1 GHz - 18 GHz					
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-SMS M-1.3M	N/A	Jan. 09, 2025
5	Cable	RegalWay	RWLP50-2.6A-3.5 M2.92MRA-3M	N/A	Jan. 09, 2025
6	Cable	RegalWay	RWLP50-4.0A-SMS M-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	STI	STI15-9912	N/A	Nov. 17, 2024
11	Double Ridged Horn Antenna	EMC INSTRUMENT	DRH18-E	210509A18ES	Aug. 28, 2025

Radiated Emissions - Above 18 GHz					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	EXA Spectrum Analyzer	Keysight	N9010A	MY55150209	Aug. 20, 2025
2	Low Noise Amplifier	CONNPHY	CLN-18G40G-4330 -K	619413	Jul. 17, 2025
3	Cable	RegalWay	RWLP50-2.6A-2.92 M2.92M-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

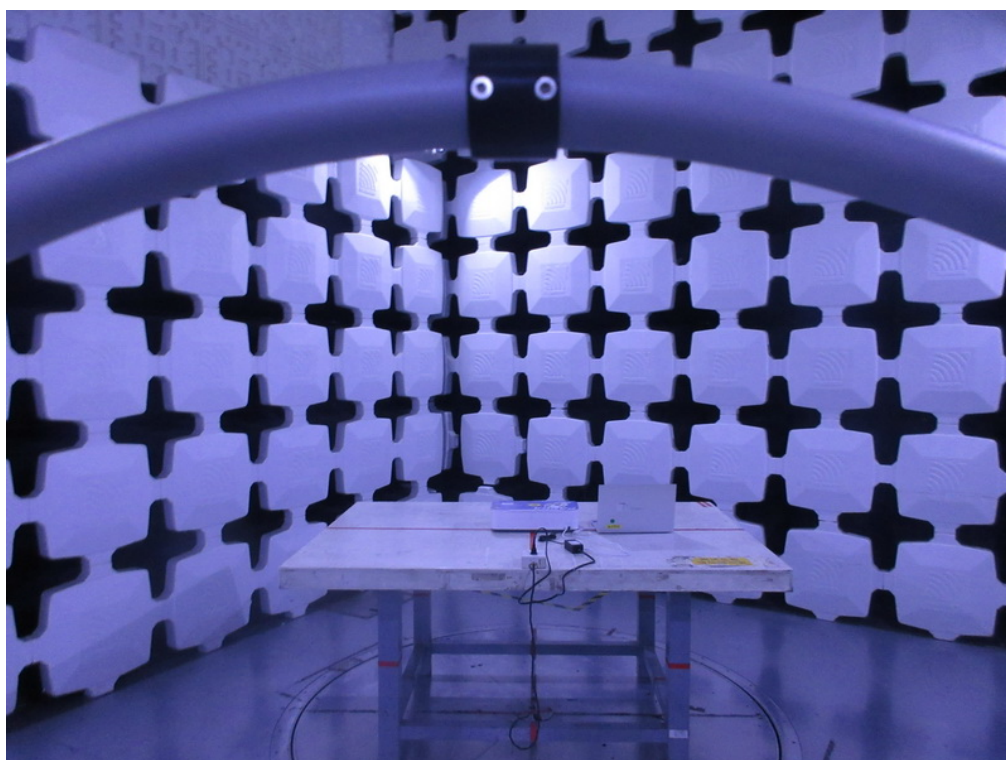
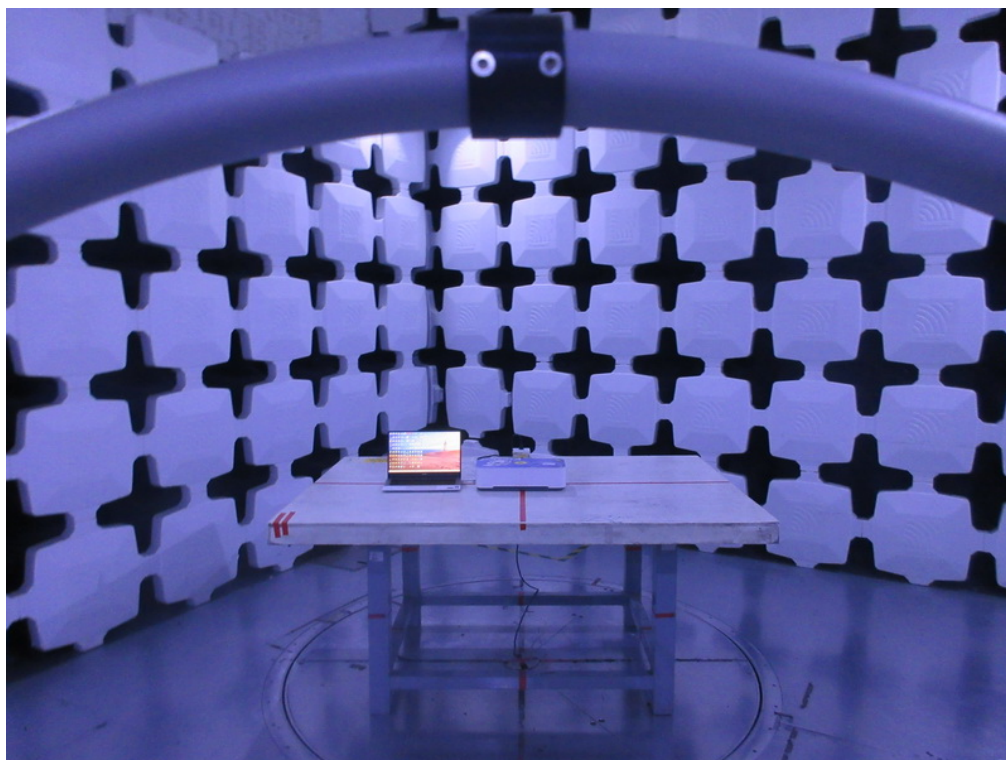
Maximum Output Power					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Peak Power Analyzer	Keysight	8990B	MY51000506	May 17, 2026
2	Wideband power sensor	Keysight	N1923A	MY58310004	May 17, 2026
3	Isolation attenuator	Z-Link	ASMA-10-18-2W	N/A	N/A

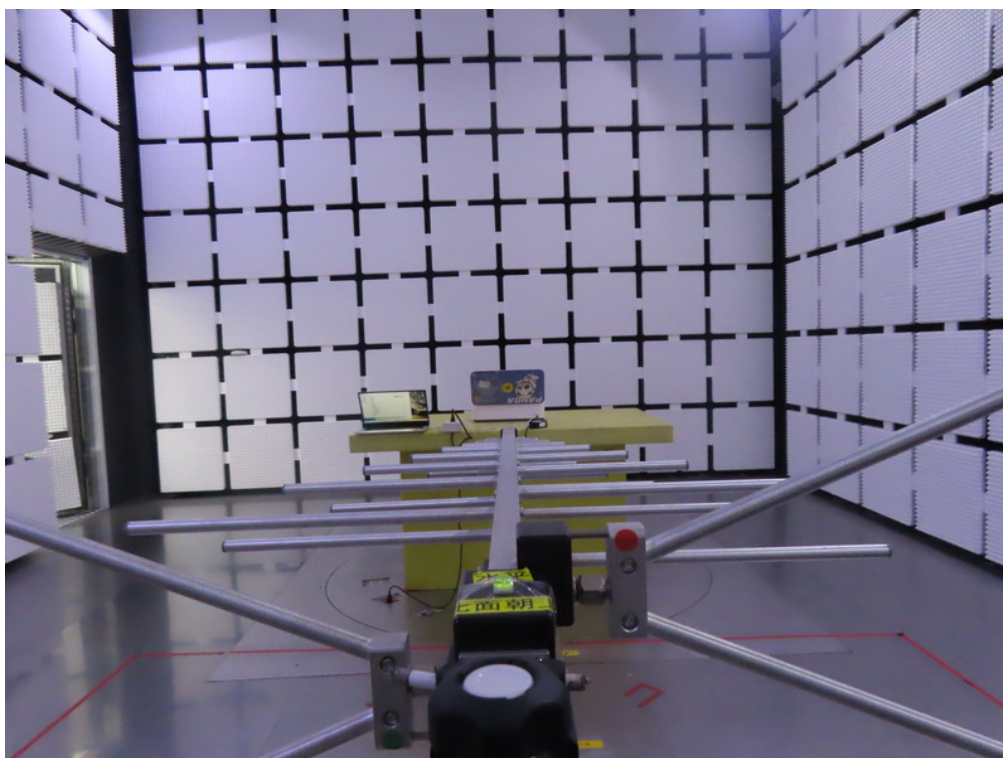
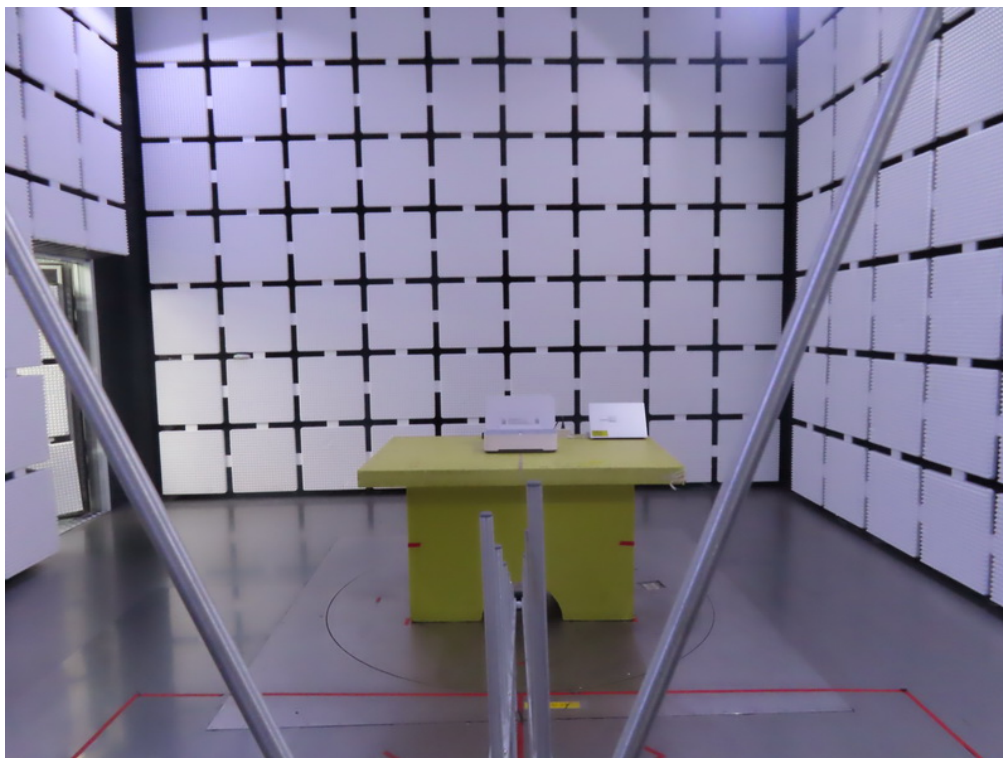
Remark: "N/A" denotes no model name, serial no. or calibration specified.
All calibration period of equipment list is one year.

8. EUT TEST PHOTO**AC Power Line Conducted Emissions Test Photos**

Radiated Emissions Test Photos

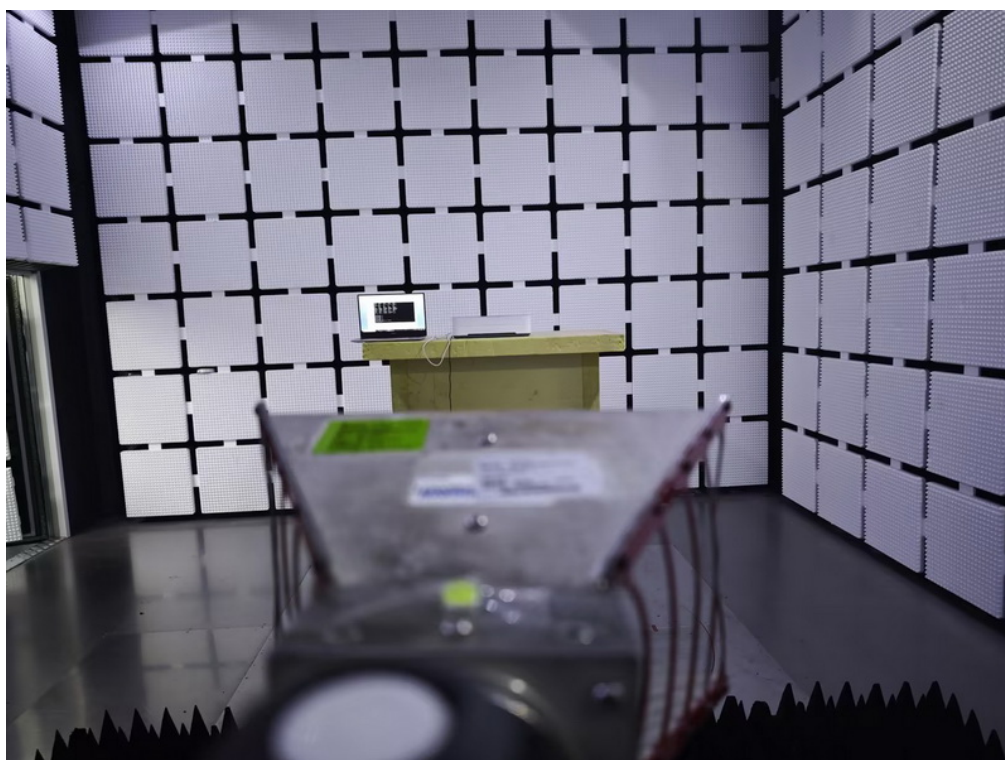
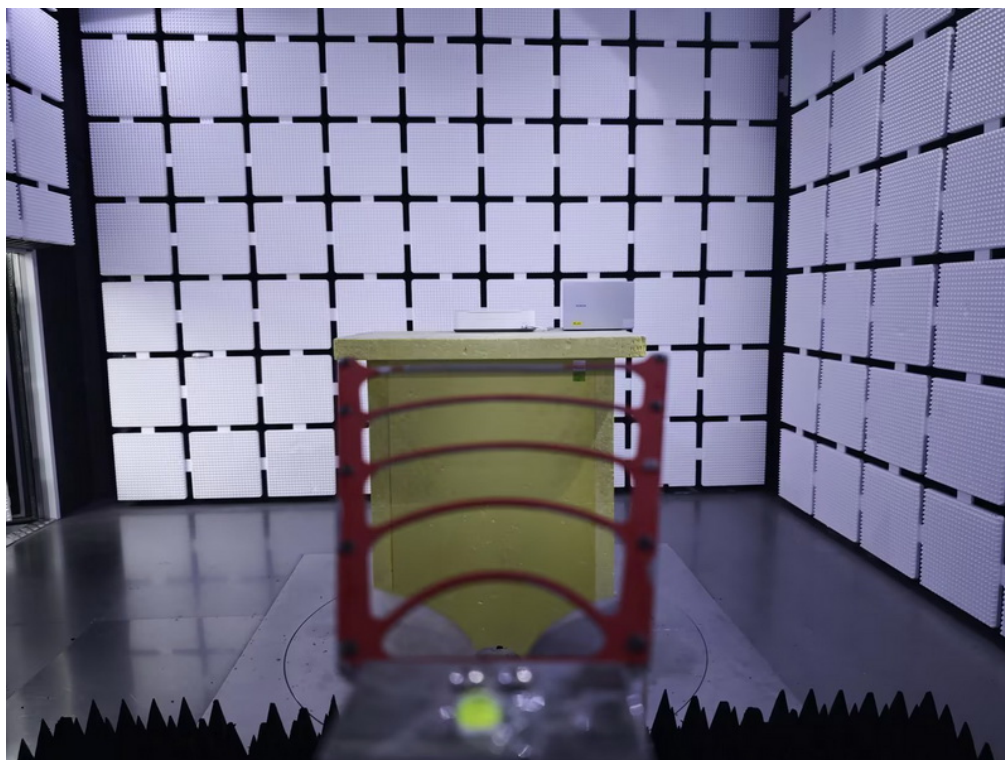
9 kHz to 30 MHz



Radiated Emissions Test Photos**30 MHz to 1000 MHz**

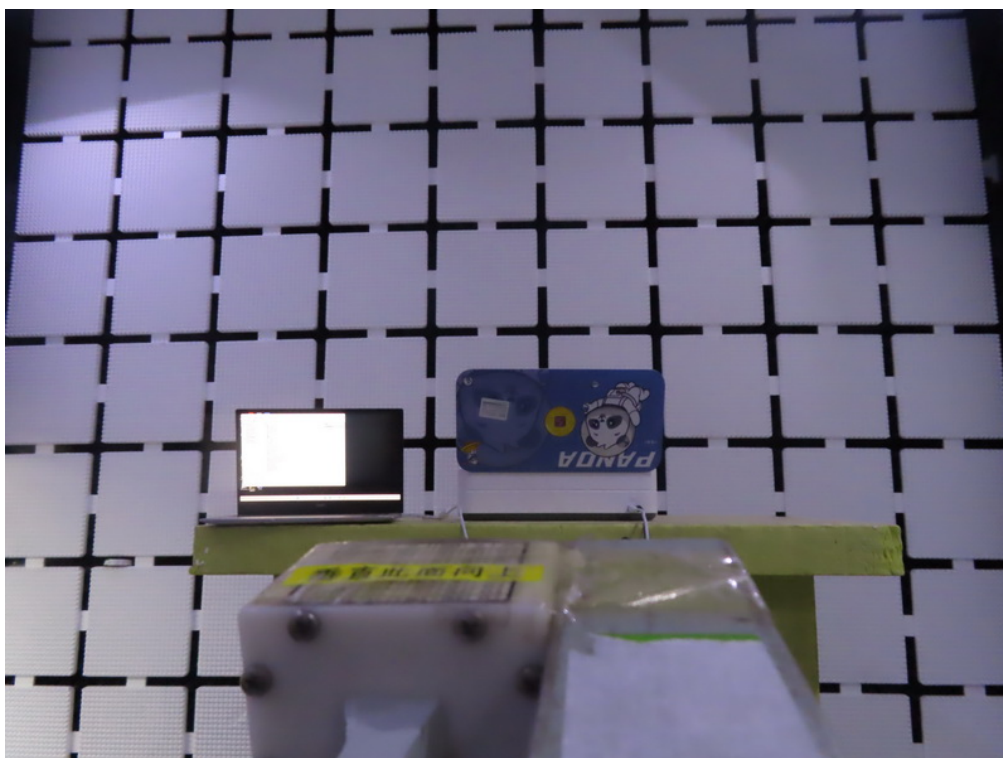
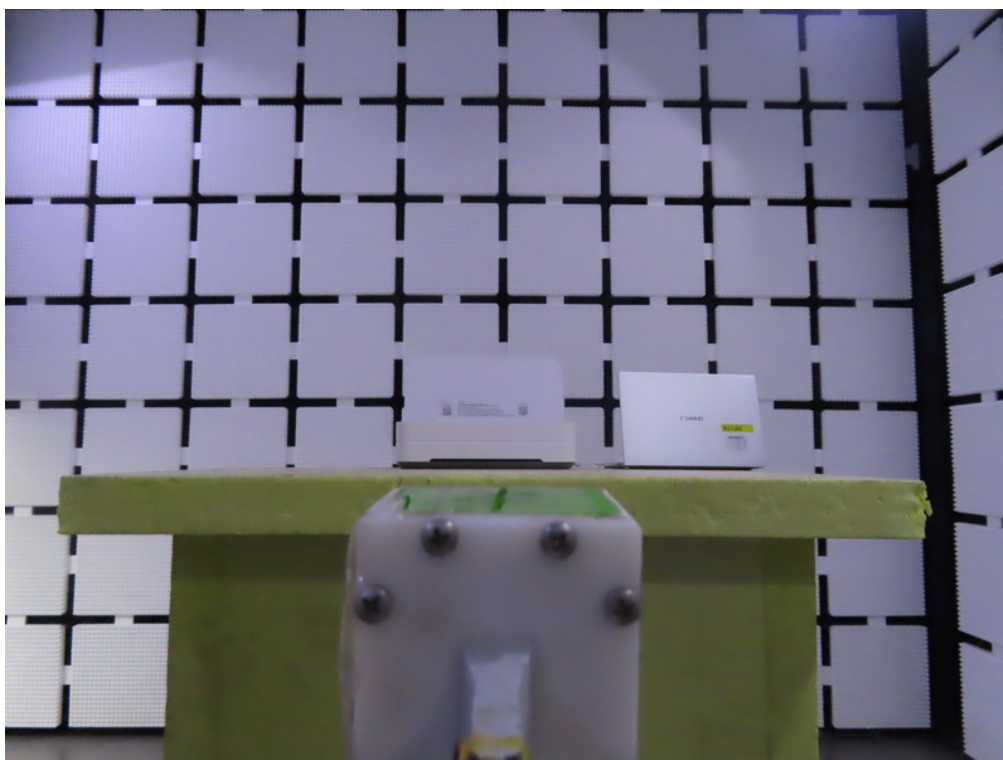
Radiated Emissions Test Photos

Band edge & Harmonic(1 GHz to 18 GHz)

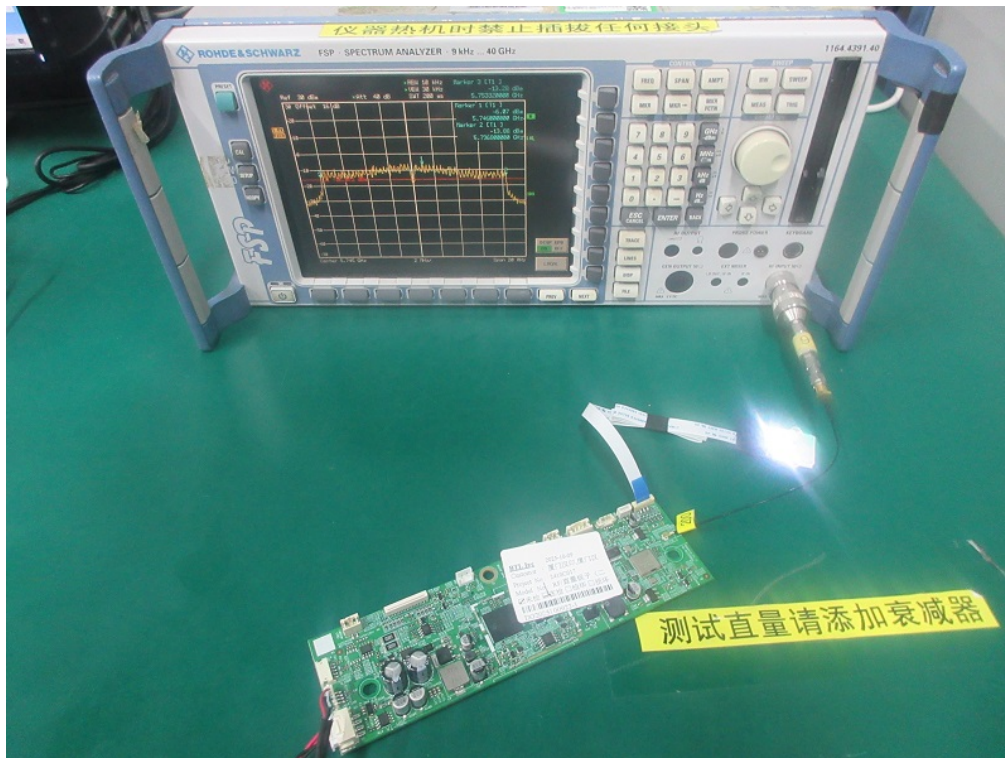


Radiated Emissions Test Photos

Harmonic(18 GHz to 26.5 GHz)

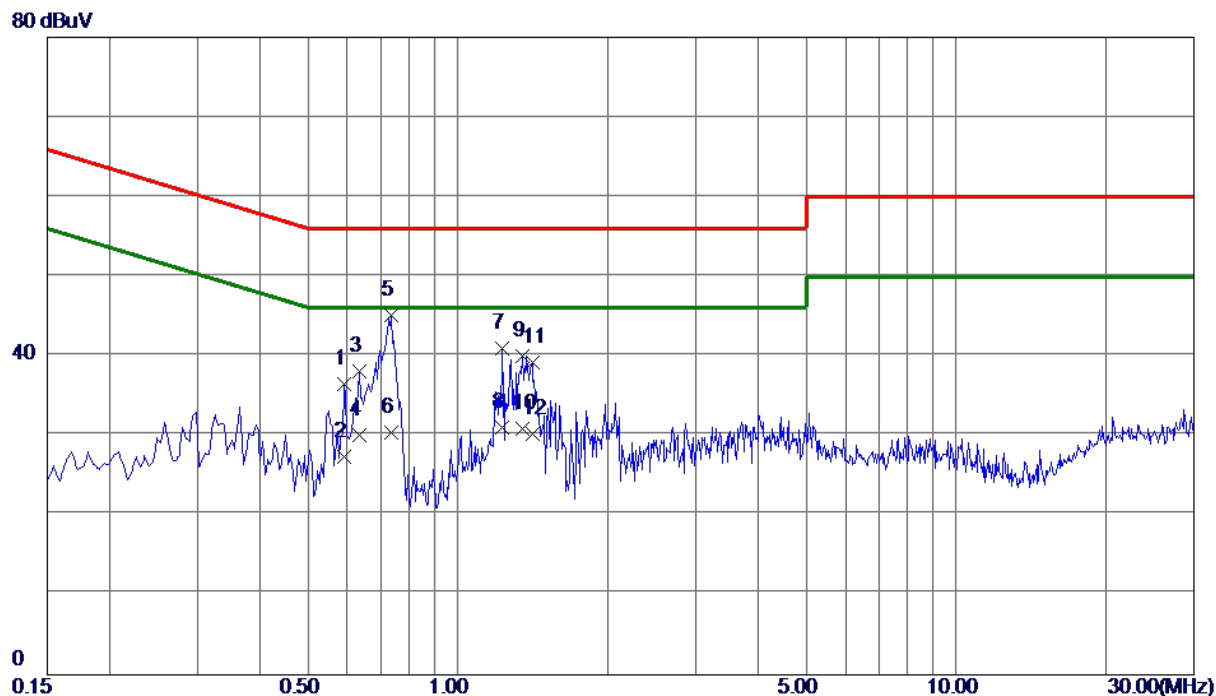


Conducted Test Photos



APPENDIX A - AC POWER LINE CONDUCTED EMISSIONS

Test Mode	TX Mode Channel 19_2Mbps	Phase	Line
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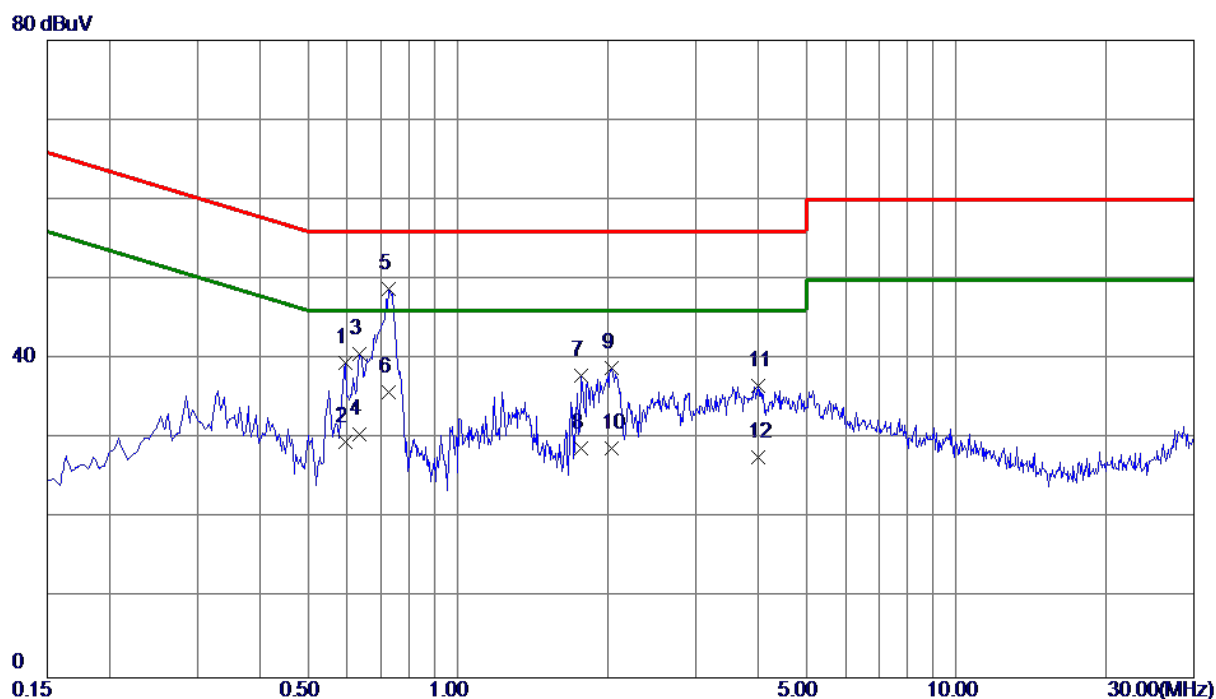
No.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure ment dBuV	Limit dBuV	Margin dB	Detector	Comment
1	0.5910	25.61	10.81	36.42	56.00	-19.58	QP	
2	0.5910	16.60	10.81	27.41	46.00	-18.59	AVG	
3	0.6360	27.22	10.89	38.11	56.00	-17.89	QP	
4	0.6360	19.20	10.89	30.09	46.00	-15.91	AVG	
5 *	0.7350	34.11	11.04	45.15	56.00	-10.85	QP	
6	0.7350	19.40	11.04	30.44	46.00	-15.56	AVG	
7	1.2300	29.70	11.31	41.01	56.00	-14.99	QP	
8	1.2300	19.70	11.31	31.01	46.00	-14.99	AVG	
9	1.3470	28.65	11.29	39.94	56.00	-16.06	QP	
10	1.3470	19.60	11.29	30.89	46.00	-15.11	AVG	
11	1.4100	27.94	11.28	39.22	56.00	-16.78	QP	
12	1.4100	18.90	11.28	30.18	46.00	-15.82	AVG	

REMARKS:

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

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

Test Mode	TX Mode Channel 19_2Mbps	Phase	Neutral
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No.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure ment dBuV	Limit dBuV	Margin dB	Detector	Comment
1	0.5955	28.80	10.78	39.58	56.00	-16.42	QP	
2	0.5955	18.80	10.78	29.58	46.00	-16.42	AVG	
3	0.6360	29.75	10.85	40.60	56.00	-15.40	QP	
4	0.6360	19.69	10.85	30.54	46.00	-15.46	AVG	
5 *	0.7260	37.83	10.98	48.81	56.00	-7.19	QP	
6	0.7260	24.90	10.98	35.88	46.00	-10.12	AVG	
7	1.7700	26.85	11.06	37.91	56.00	-18.09	QP	
8	1.7700	17.79	11.06	28.85	46.00	-17.15	AVG	
9	2.0400	27.99	10.89	38.88	56.00	-17.12	QP	
10	2.0400	17.90	10.89	28.79	46.00	-17.21	AVG	
11	3.9975	26.47	10.22	36.69	56.00	-19.31	QP	
12	3.9975	17.40	10.22	27.62	46.00	-18.38	AVG	

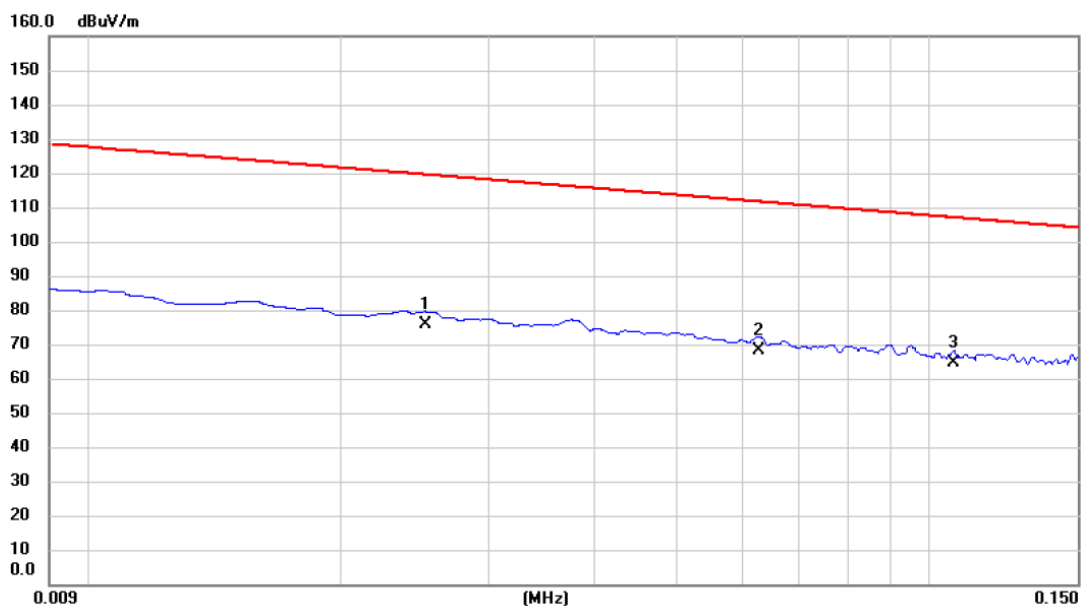
REMARKS:

(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 Mode Channel 19_2Mbps	Polarization	Ant 0°
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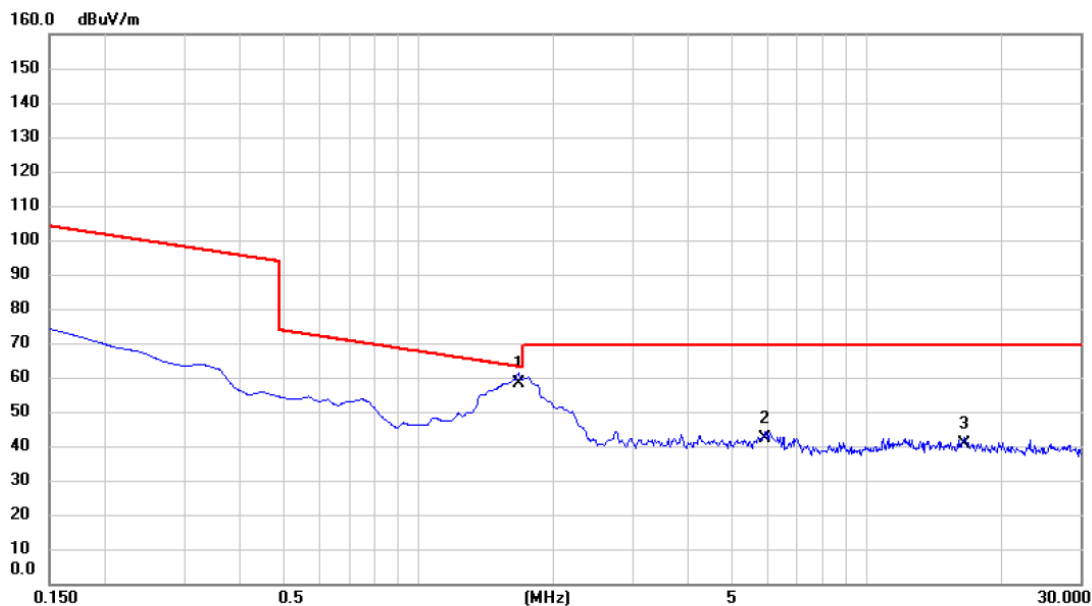
No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		0.025	54.91	20.99	75.90	119.58	-43.68	AVG	
2		0.063	47.03	21.27	68.30	111.66	-43.36	AVG	
3	*	0.107	43.11	21.32	64.43	107.02	-42.59	QP	

REMARKS:

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

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

Test Mode	TX Mode Channel 19_2Mbps	Polarization	Ant 0°
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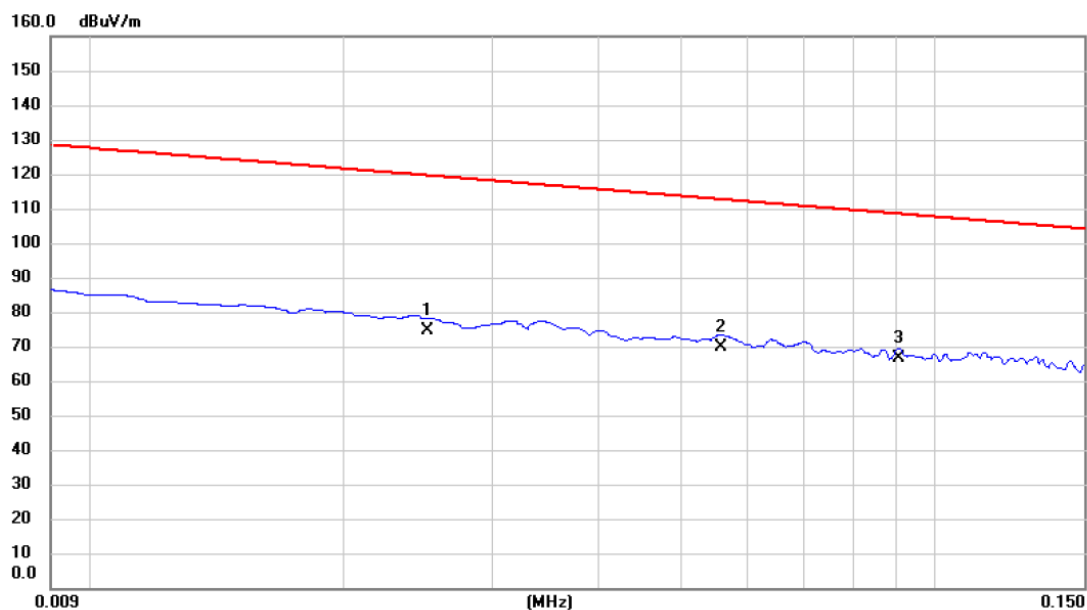
No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	1.672	37.25	21.13	58.38	63.14	-4.76	QP	
2		5.941	21.03	21.16	42.19	69.54	-27.35	QP	
3		16.478	19.35	21.26	40.61	69.54	-28.93	QP	

REMARKS:

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

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

Test Mode	TX Mode Channel 19_2Mbps	Polarization	Ant 90°
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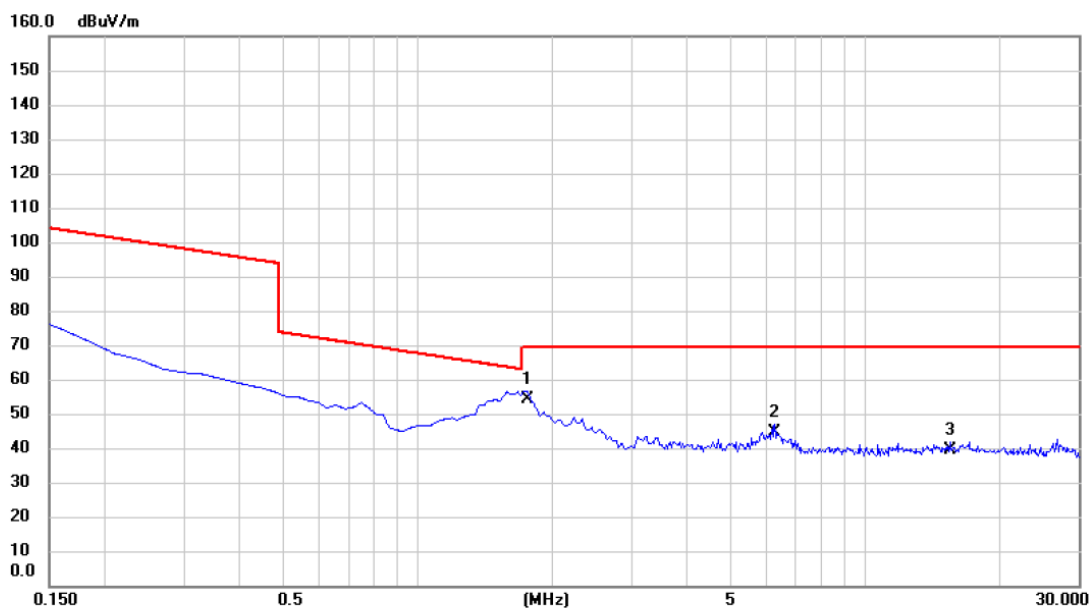
No. Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin		
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	0.025	53.65	20.98	74.63	119.61	-44.98	AVG	
2	0.056	48.36	21.25	69.61	112.67	-43.06	AVG	
3 *	0.091	45.09	21.33	66.42	108.46	-42.04	QP	

REMARKS:

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

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

Test Mode	TX Mode Channel 19_2Mbps	Polarization	Ant 90°
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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 *	1.762	33.09	21.12	54.21	69.54	-15.33	QP	
2	6.269	23.64	21.16	44.80	69.54	-24.74	QP	
3	15.463	18.24	21.23	39.47	69.54	-30.07	QP	

REMARKS:

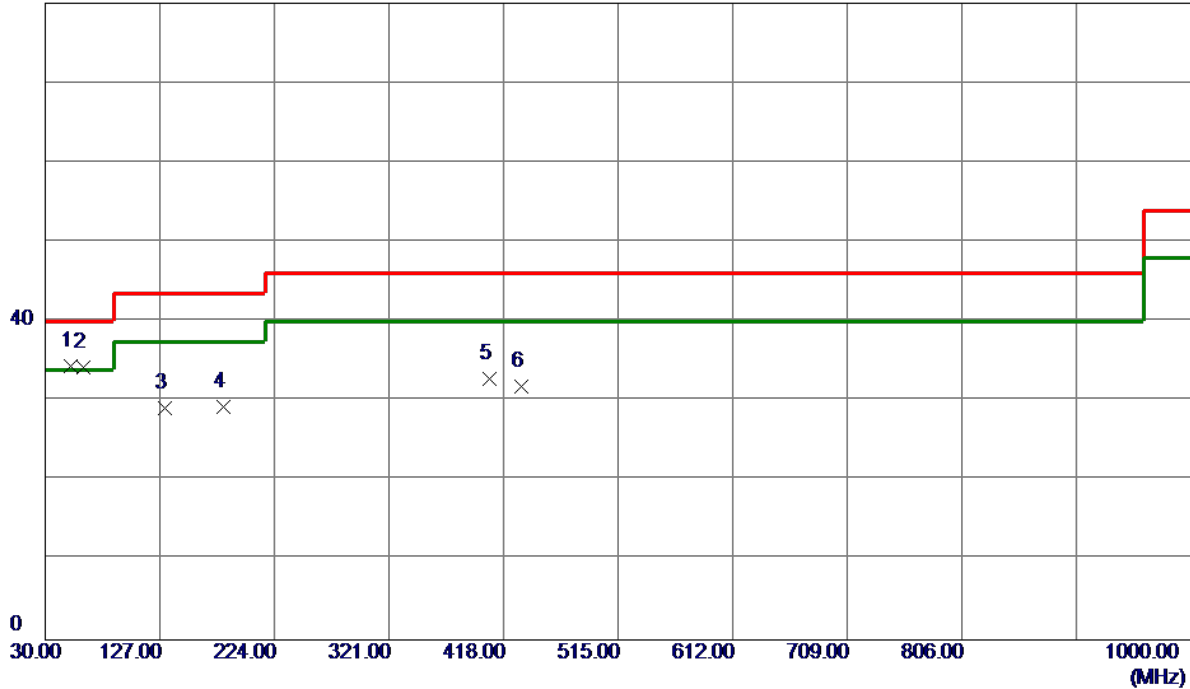
(1) Measurement Value = Reading Level + Correct Factor.

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

APPENDIX C - RADIATED EMISSION - 30 MHZ TO 1000 MHZ

Test Mode	TX Mode Channel 19_2Mbps	Polarization	Vertical
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80 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	51.3400	45.54	-11.08	34.46	40.00	-5.54	Peak	
2	62.0100	46.00	-11.83	34.17	40.00	-5.83	Peak	
3	130.8800	41.15	-12.05	29.10	43.52	-14.42	Peak	
4	181.3200	40.99	-11.76	29.23	43.52	-14.29	Peak	
5	406.3599	39.97	-7.20	32.77	46.02	-13.25	Peak	
6	433.5200	38.29	-6.44	31.85	46.02	-14.17	Peak	

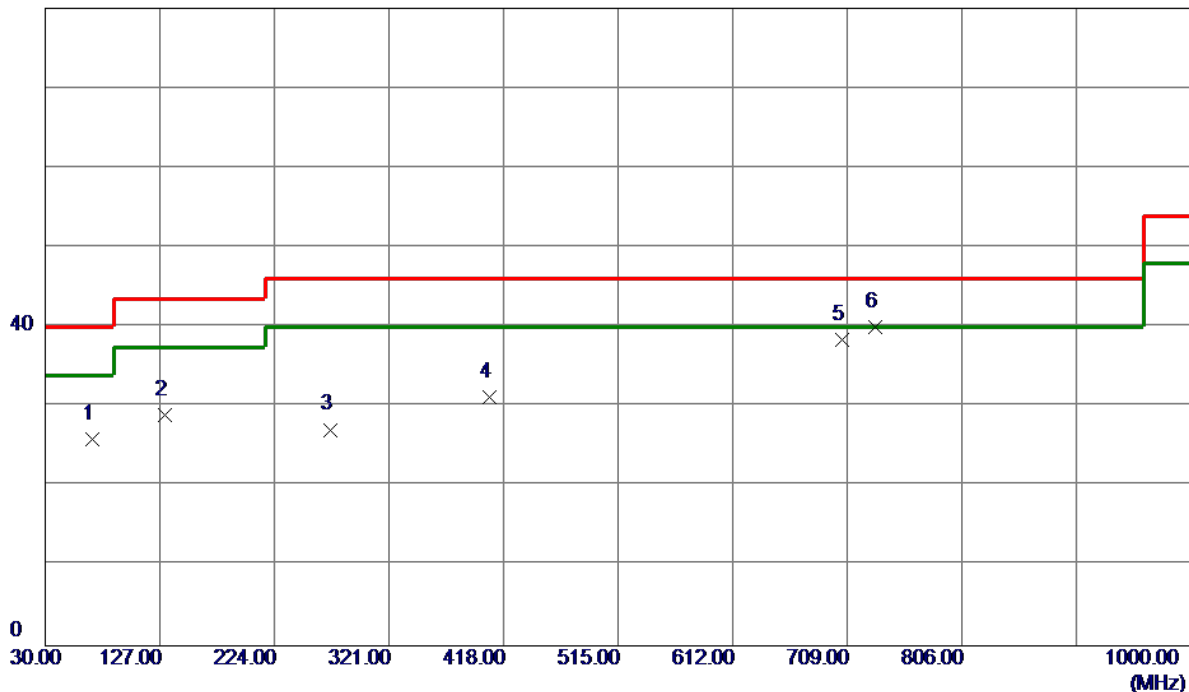
REMARKS:

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

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

Test Mode	TX Mode Channel 19_2Mbps	Polarization	Horizontal
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80 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	69.7699	38.89	-12.93	25.96	40.00	-14.04	Peak	
2	130.8800	41.01	-12.05	28.96	43.52	-14.56	Peak	
3	271.5300	37.73	-10.61	27.12	46.02	-18.90	Peak	
4	406.3599	38.44	-7.20	31.24	46.02	-14.78	Peak	
5	705.1200	40.41	-2.05	38.36	46.02	-7.66	Peak	
6 *	732.2800	41.08	-1.10	39.98	46.02	-6.04	Peak	

REMARKS:

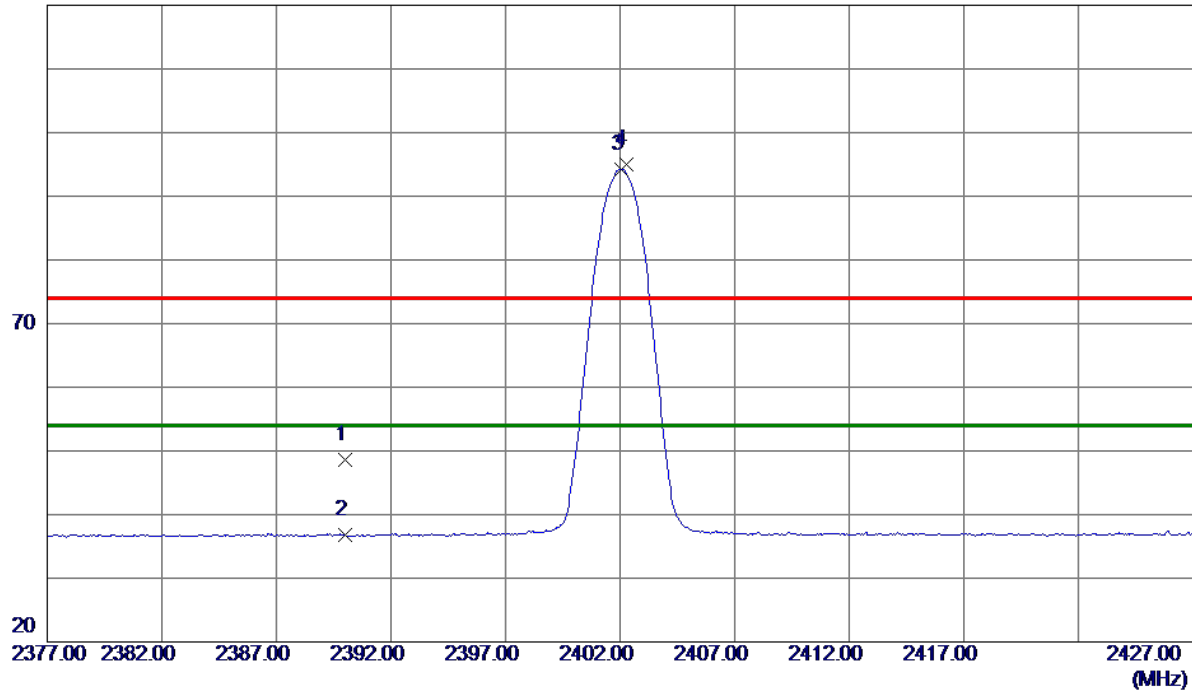
(1) Measurement Value = Reading Level + Correct Factor.

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

APPENDIX D - RADIATED EMISSION - ABOVE 1000 MHZ

Test Mode	TX 2402 MHz_CH00_1Mbps	Polarization	Vertical
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120 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2390.0000	40.20	8.32	48.52	74.00	-25.48	Peak	
2	2390.0000	28.50	8.32	36.82	54.00	-17.18	AVG	
3 *	2402.0500	85.88	8.35	94.23	54.00	40.23	AVG	No Limit
4	2402.2500	86.65	8.35	95.00	74.00	21.00	Peak	No Limit

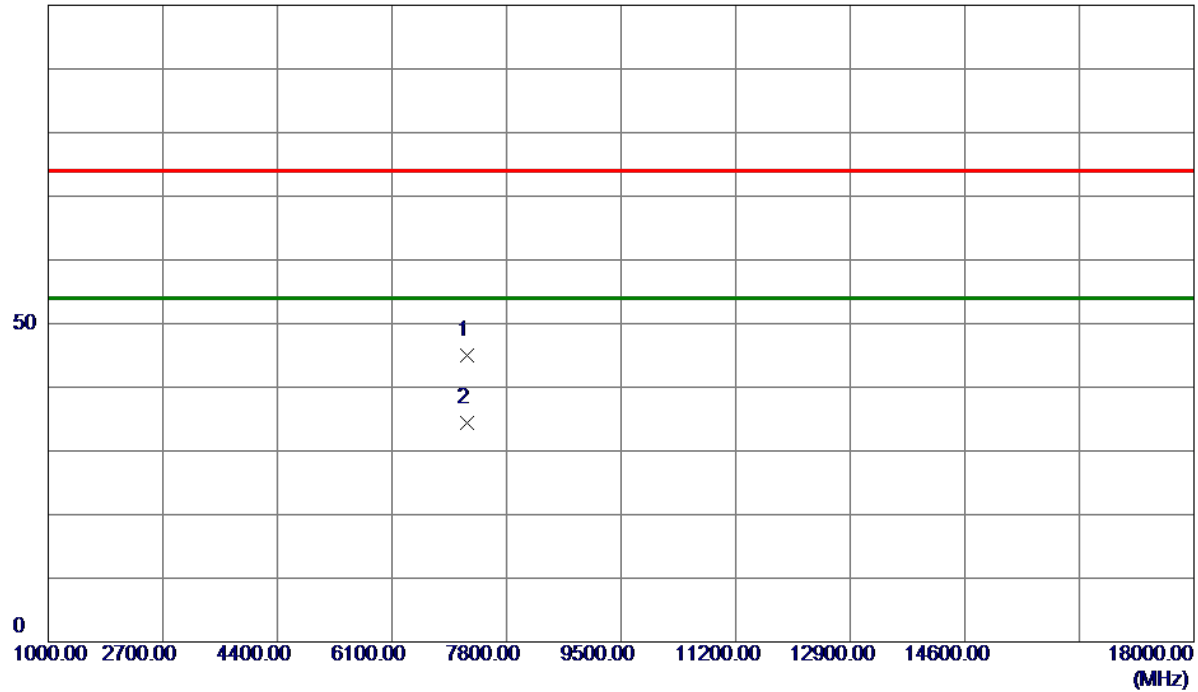
REMARKS:

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

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

Test Mode	TX 2402 MHz_CH00_1Mbps	Polarization	Vertical
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100 dBuV/m



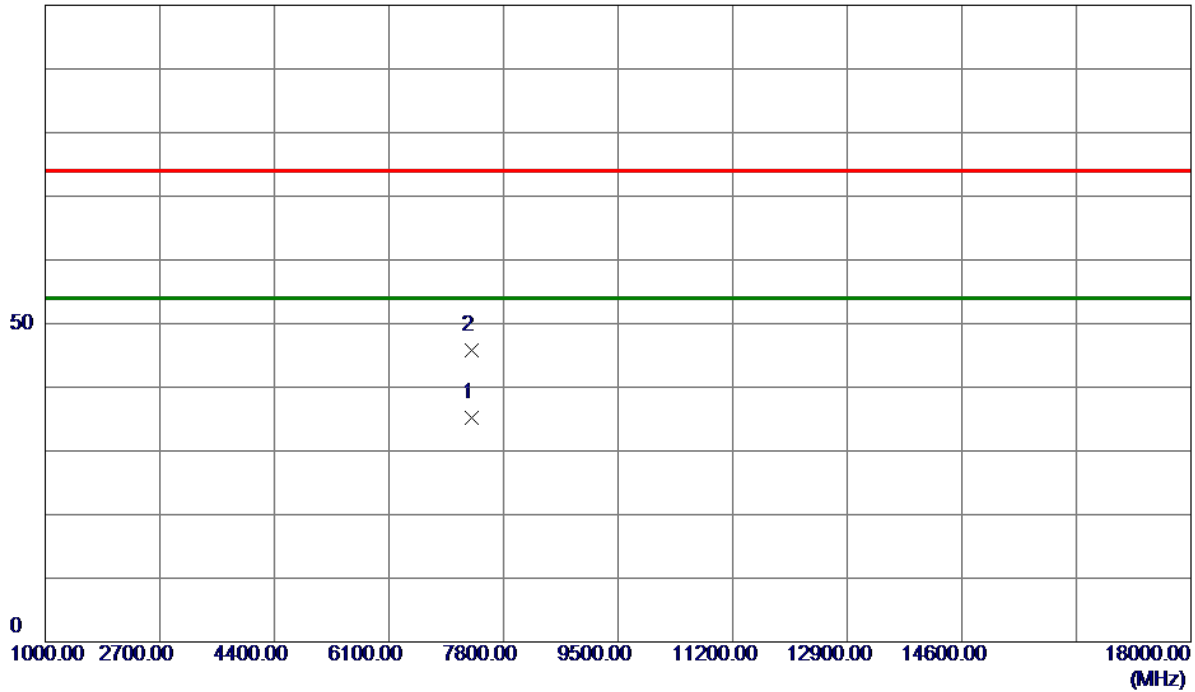
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	7205.1600	37.18	7.88	45.06	74.00	-28.94	Peak	
2 *	7206.4200	26.49	7.89	34.38	54.00	-19.62	AVG	

REMARKS:

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

Test Mode	TX 2440 MHz_CH19_1Mbps	Polarization	Vertical
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100 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	7319.4200	27.15	8.05	35.20	54.00	-18.80	AVG	
2	7320.4200	37.81	8.05	45.86	74.00	-28.14	Peak	

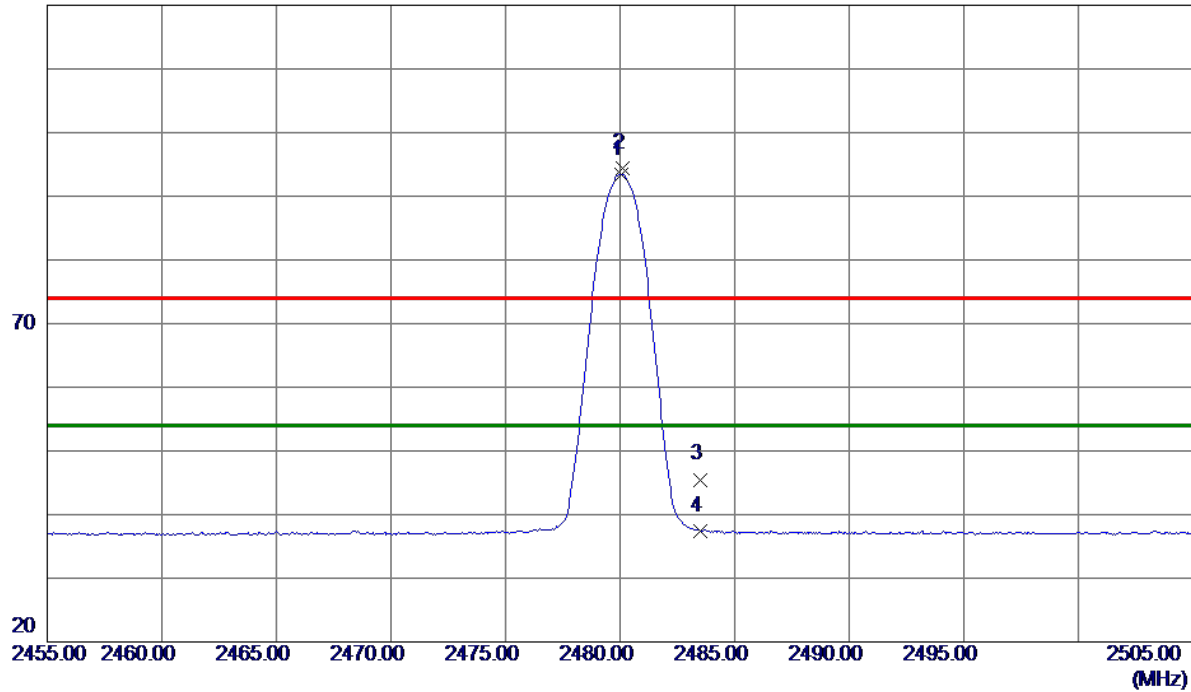
REMARKS:

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

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

Test Mode	TX 2480 MHz_CH39_1Mbps	Polarization	Vertical
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120 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	2480.0500	84.94	8.53	93.47	54.00	39.47	AVG	No Limit
2	2480.1000	85.93	8.53	94.46	74.00	20.46	Peak	No Limit
3	2483.5000	36.96	8.54	45.50	74.00	-28.50	Peak	
4	2483.5000	28.86	8.54	37.40	54.00	-16.60	AVG	

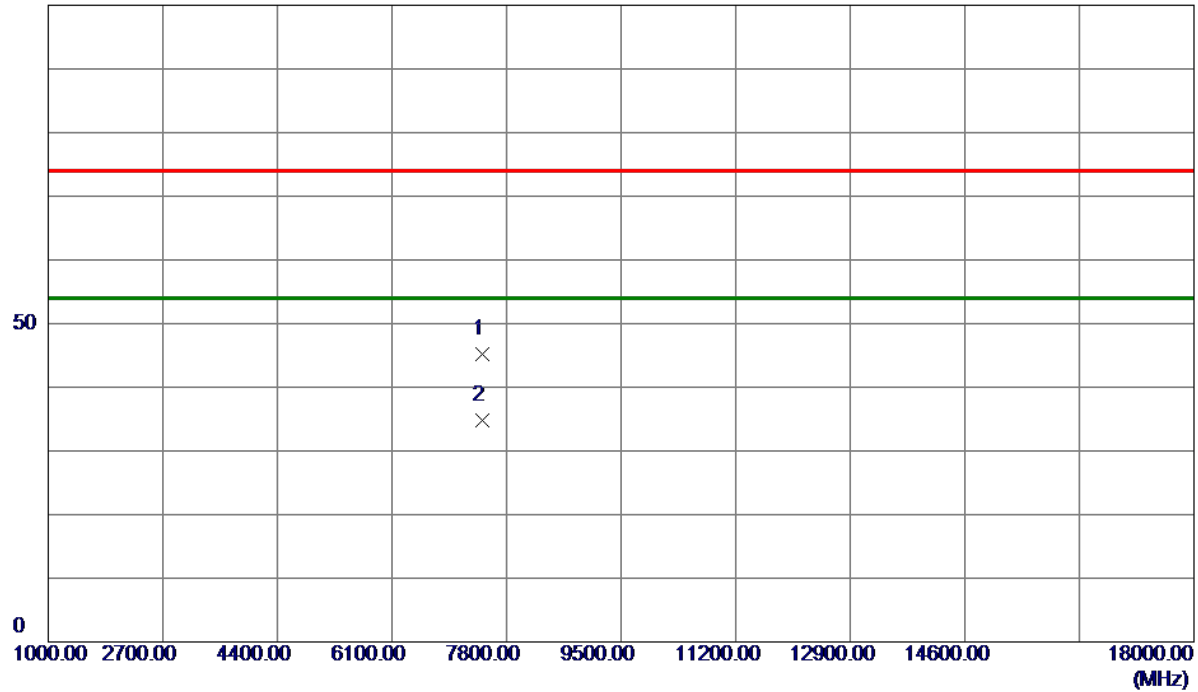
REMARKS:

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

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

Test Mode	TX 2480 MHz_CH39_1Mbps	Polarization	Vertical
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100 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	7435.9000	36.94	8.23	45.17	74.00	-28.83	Peak	
2 *	7439.6600	26.58	8.23	34.81	54.00	-19.19	AVG	

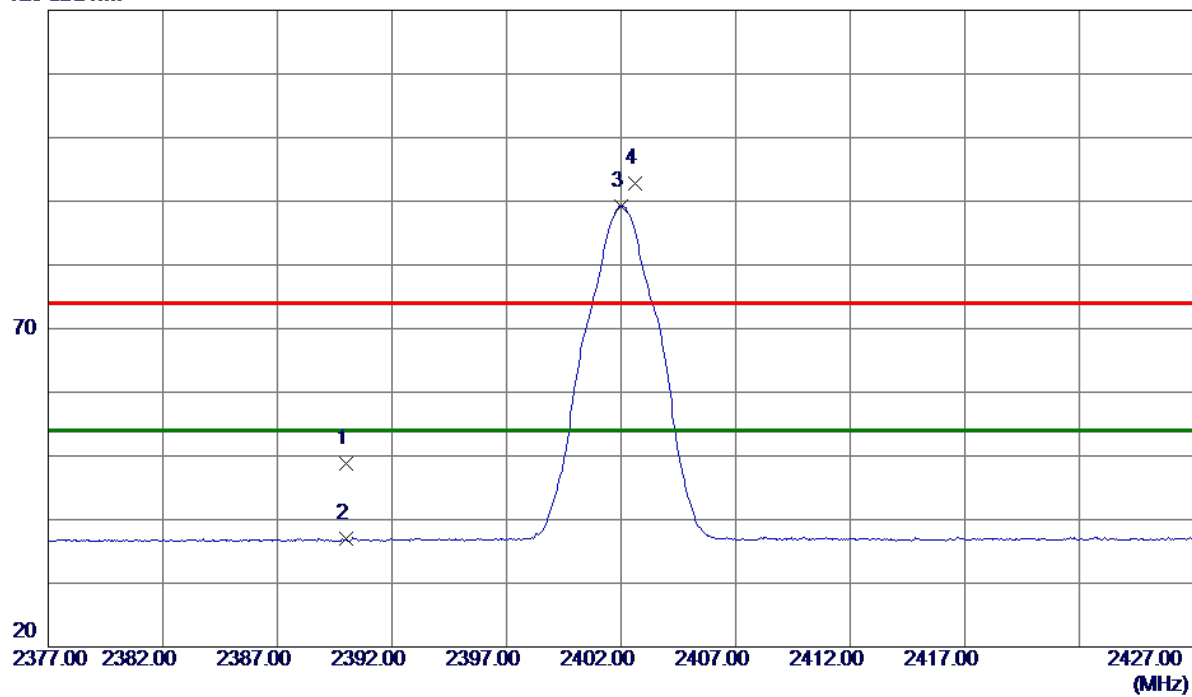
REMARKS:

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

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

Test Mode	TX 2402 MHz_CH00_2Mbps	Polarization	Vertical
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120 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2390.0000	40.39	8.32	48.71	74.00	-25.29	Peak	
2	2390.0000	28.59	8.32	36.91	54.00	-17.09	AVG	
3 *	2402.0000	80.92	8.35	89.27	54.00	35.27	AVG	No Limit
4	2402.6000	84.39	8.35	92.74	74.00	18.74	Peak	No Limit

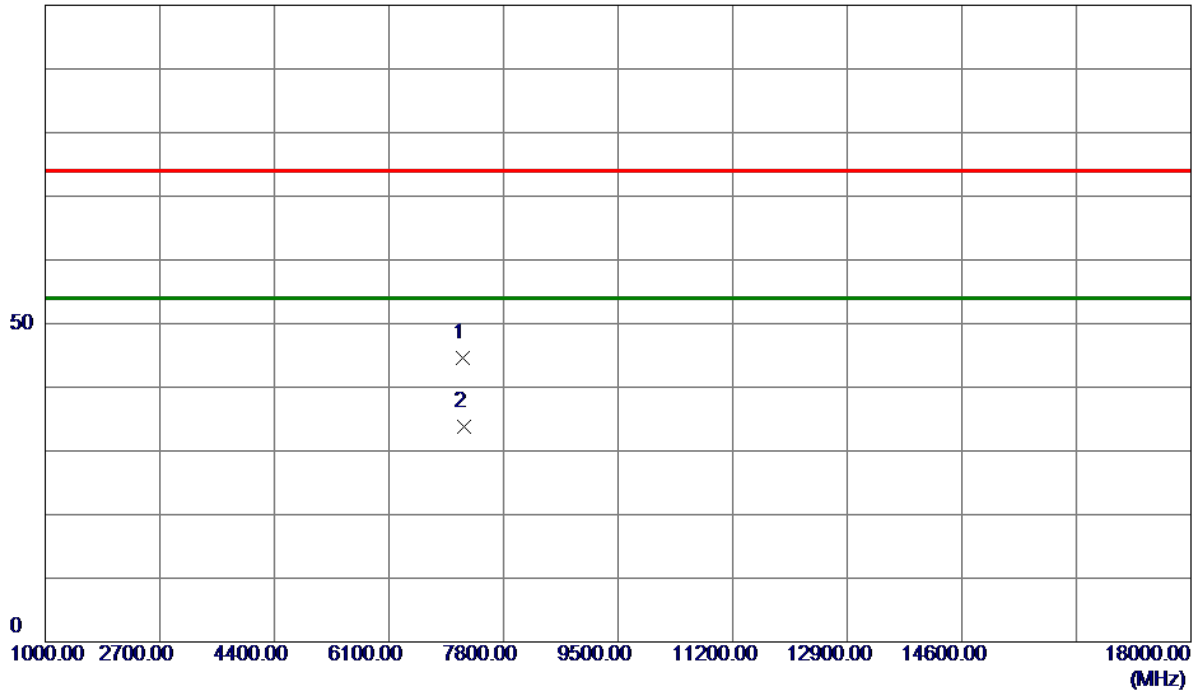
REMARKS:

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

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

Test Mode	TX 2402 MHz_CH00_2Mbps	Polarization	Vertical
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100 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	7200.3200	36.63	7.88	44.51	74.00	-29.49	Peak	
2 *	7207.8600	25.96	7.89	33.85	54.00	-20.15	AVG	

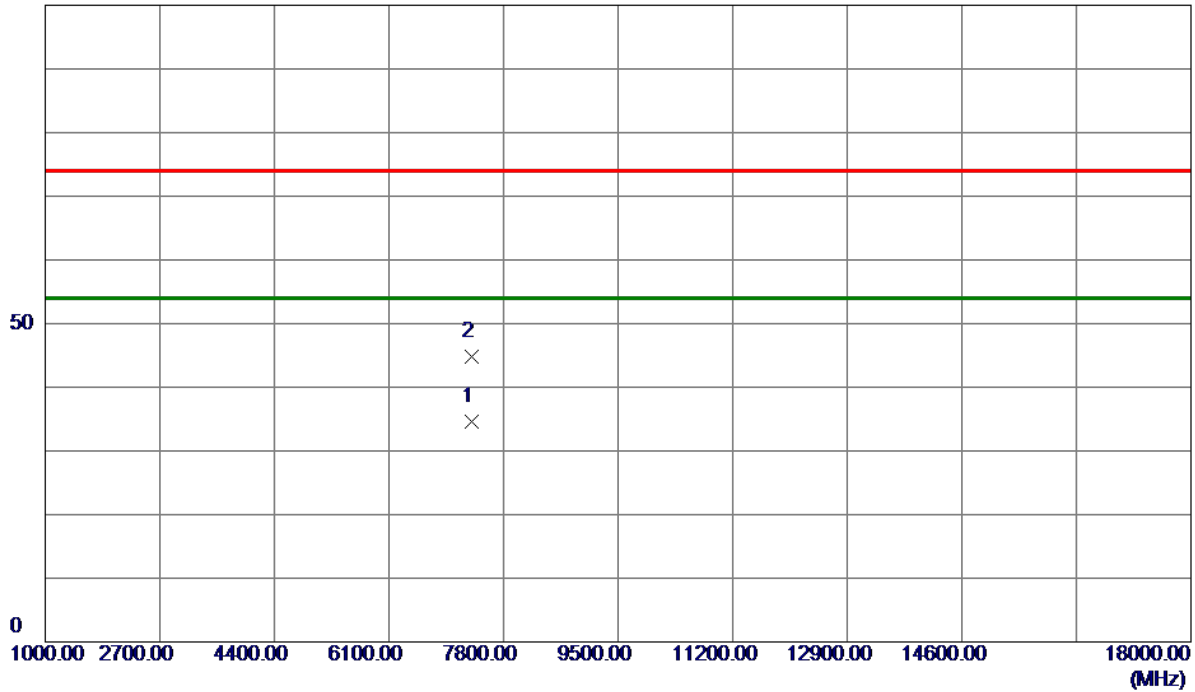
REMARKS:

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

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

Test Mode	TX 2440 MHz_CH19_2Mbps	Polarization	Vertical
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100 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	7321.5200	26.52	8.06	34.58	54.00	-19.42	AVG	
2	7323.1400	36.81	8.06	44.87	74.00	-29.13	Peak	

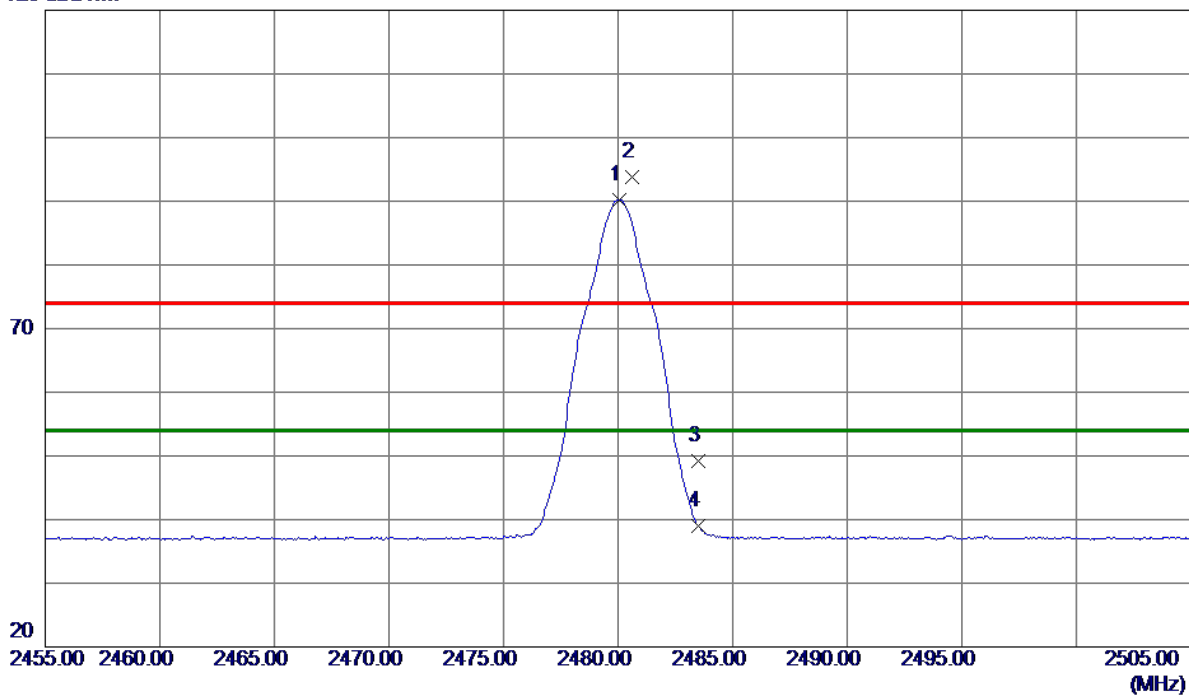
REMARKS:

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

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

Test Mode	TX 2480 MHz_CH39_2Mbps	Polarization	Vertical
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120 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	2480.0500	81.75	8.53	90.28	54.00	36.28	AVG	No Limit
2	2480.6000	85.18	8.53	93.71	74.00	19.71	Peak	No Limit
3	2483.5000	40.66	8.54	49.20	74.00	-24.80	Peak	
4	2483.5000	30.42	8.54	38.96	54.00	-15.04	AVG	

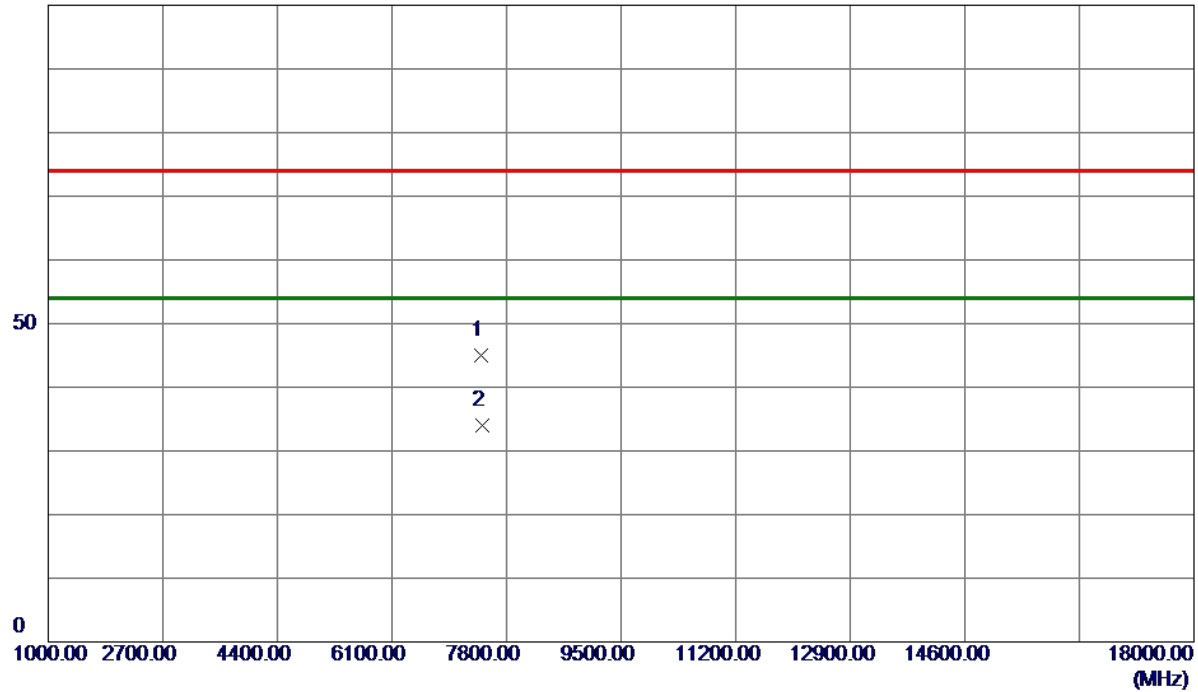
REMARKS:

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

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

Test Mode	TX 2480 MHz_CH39_2Mbps	Polarization	Vertical
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100 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	7431.5200	36.73	8.22	44.95	74.00	-29.05	Peak	
2 *	7438.6400	25.82	8.23	34.05	54.00	-19.95	AVG	

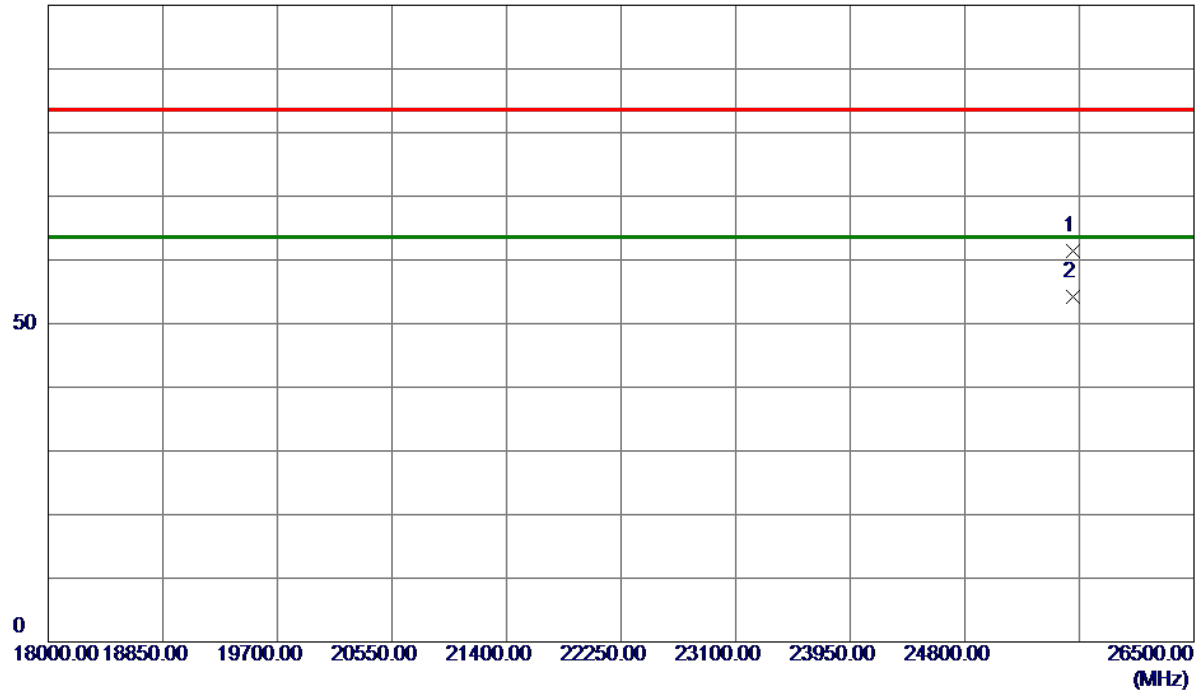
REMARKS:

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

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

Test Mode	TX 2440 MHz_CH19_2Mbps	Polarization	Vertical
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100 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	25599.0000	49.18	12.30	61.48	83.50	-22.02	Peak	
2 *	25599.0000	41.82	12.30	54.12	63.50	-9.38	AVG	

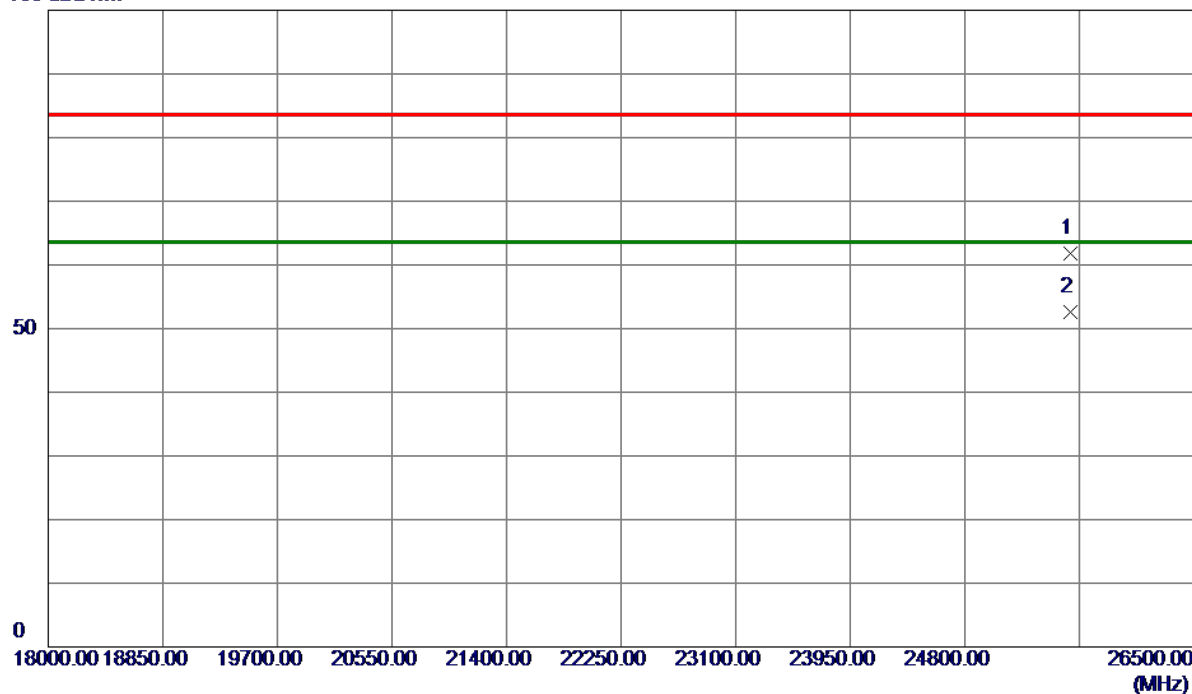
REMARKS:

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

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

Test Mode	TX 2440 MHz_CH19_2Mbps	Polarization	Horizontal
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100 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	25582.0000	49.58	12.30	61.88	83.50	-21.62	Peak	
2 *	25582.0000	40.35	12.30	52.65	63.50	-10.85	AVG	

REMARKS:

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

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

APPENDIX E - MAXIMUM OUTPUT POWER

Test Mode	TX Mode_1Mbps
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Frequency (MHz)	Output Power (dBm)	Duty Factor (dB)	Output Power + Duty Factor (dBm)	Output Power (W)	Max. Limit (dBm)	Max. Limit (W)	Test Result
2402	1.53	0.69	2.22	0.0017	30.00	1.0000	Pass
2440	1.94	0.69	2.63	0.0018	30.00	1.0000	Pass
2480	0.09	0.69	0.78	0.0012	30.00	1.0000	Pass

Note: Output power = Measure result + Cable loss

Test Mode	TX Mode_2Mbps
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Frequency (MHz)	Output Power (dBm)	Duty Factor (dB)	Output Power + Duty Factor (dBm)	Output Power (W)	Max. Limit (dBm)	Max. Limit (W)	Test Result
2402	-0.01	2.34	2.33	0.0017	30.00	1.0000	Pass
2440	0.37	2.34	2.71	0.0019	30.00	1.0000	Pass
2480	-1.47	2.34	0.87	0.0012	30.00	1.0000	Pass

Note: Output power = Measure result + Cable loss

End of Test Report