FCC Test Report

Report No.:	2405U83389EJ
Applicant:	Nexite LTD
Address:	126 Yigal Alon St, Tel-Aviv, Israel
Product Name:	uXciter
Product Model:	NX-UXC-2000-HB
Multiple Models:	N/A
Trade Mark:	nexite
FCC ID:	2A6MX13EA2BCXF
Standards:	FCC CFR Title 47 Part 18
Test Date:	2025-01-18 to 2025-01-23
Test Result:	Complied
Report Date:	2025-01-24

Reviewed by: Frank Yin, Project Engineer

Approved by: Jacob Kong, Manager

Prepared by:

World Alliance Testing and Certification (Shenzhen) Co., Ltd

No. 1002, East Block, Laobing Building, Xingye Road 3012, Xixiang street, Bao'an District, Shenzhen, Guangdong, People's Republic of China

NVLAP TESTING NVLAP LAB CODE 600335-0

ilac-MRA

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Announcement

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2. The results in this report apply only to the sample tested.

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4. The information marked "#" is provided by the applicant, the laboratory is not responsible for its authenticity and this information can affect the validity of the result in the test report. Customer model name, addresses, names, trademarks etc. are included.

Revision History

Version No.	Issued Date	Description
00	*2025-01-24*	*Original*

Contents

1 General Information

1.1 Client Information

Applicant:	Nexite LTD
Address:	126 Yigal Alon St, Tel-Aviv, Israel
Manufacturer:	Nexite LTD
Address:	126 Yigal Alon St, Tel-Aviv, Israel

1.2 Product Description of EUT

The EUT is uXciter that contains 2.4G WLAN and UHF WPT transmitter radios, this report covers the full testing of the UHF transmitter.

Sample Serial Number	2NVX-1(assigned by WATC)
Sample Received Date	2024-07-05
Sample Status	Good Condition
Frequency Range	902.5MHz – 927.5MHz (251 hopping channels with 100kHz channel spacing)
Modulation Technology	CW
Spatial Streams	SI (1TX)
Antenna Gain#	2.32dBi
Power Supply	DC 12V from AC adapter
Adapter Information	N/A
Modification	Sample No Modification by the test lab

1.3 Measurement Uncertainty

Parameter		Expanded Uncertainty (Confidence of 95%(U = 2Uc(y)))
AC Power Lines Conducted Emissions		±3.14dB
Radiated emission	Below 1GHz	±4.84dB
	Above 1GHz	±5.44dB
Conducted Power		0.74dB

Note 1: The extended uncertainty given in this report is obtained by combining the standard uncertainty times the coverage factor K with the 95% confidence interval. Otherwise required by the applicant or Product Regulations, Decision Rule in this report did not consider the uncertainty.

Note 2: The Decision Rule is based on simple acceptance with ISO Guide 98-4:2012 Clause 8.2 (Measurement uncertainty is not taken into account when stating conformity with a specified requirement.)

1.4 Laboratory Location

World Alliance Testing and Certification (Shenzhen) Co., Ltd

No. 1002, East Block, Laobing Building, Xingye Road 3012, Xixiang street, Bao'an District, Shenzhen, Guangdong, People's Republic of China

Tel: +86-755-29691511, Email: qa@watc.com.cn

The lab has been recognized as the FCC accredited lab under the KDB 974614 D01 and is listed in the FCC Public Access Link (PAL) database, FCC Registration No. : 463912, the FCC Designation No. : CN5040.

The lab has been recognized by Innovation, Science and Economic Development Canada to test to Canadian radio equipment requirements, the CAB identifier: CN0160.

1.5 Test Methodology

FCC CFR 47 Part 18

FCC OST MP-5-1986

KDB 680106 D01 Wireless Power Transfer v04

Unless otherwise stated there are no any additions to, deviations, or exclusions from the method

2 Description of Measurement

2.1 Test Configuration

Test Mode:	
Mode 1:	standby mode
Mode 2	working mode(charging tags with maximum output power)
For radiated emissions, EUT was investigated in three orthogonal orientation, the worst-case orientation was recorded in report	

2.2 Test Auxiliary Equipment

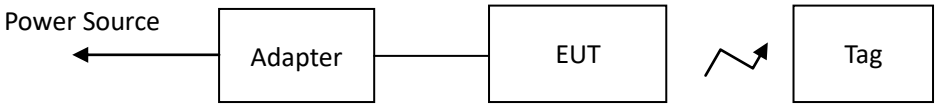
Manufacturer	Description	Model	Serial Number
unknown	AC adapter	unknown	unknown
Nexite LTD	Tag	NX-TAG-3000-HB	unknown

Note: above Auxiliary Equipment was provided by applicant.

2.3 Interconnecting Cables

Manufacturer	Description	Length(m)	From	To
Unknown	DC Power Cable	2.0	Adapter	EUT

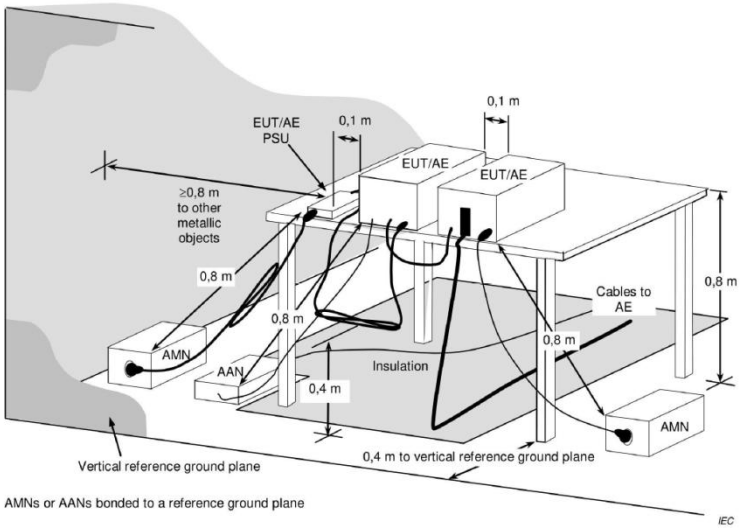
2.4 Block Diagram of Connection between EUT and AE



Note: for reference only, the actual connection setup used for testing please refer to the test photos.

2.5 Test Setup

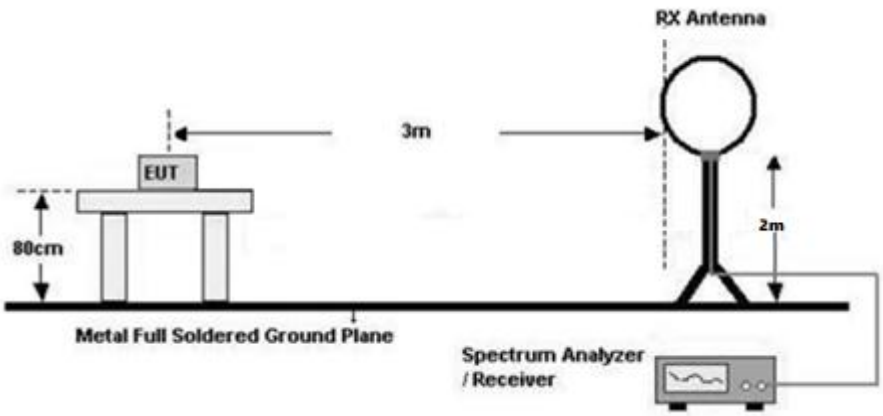
1) Conducted emission measurement:



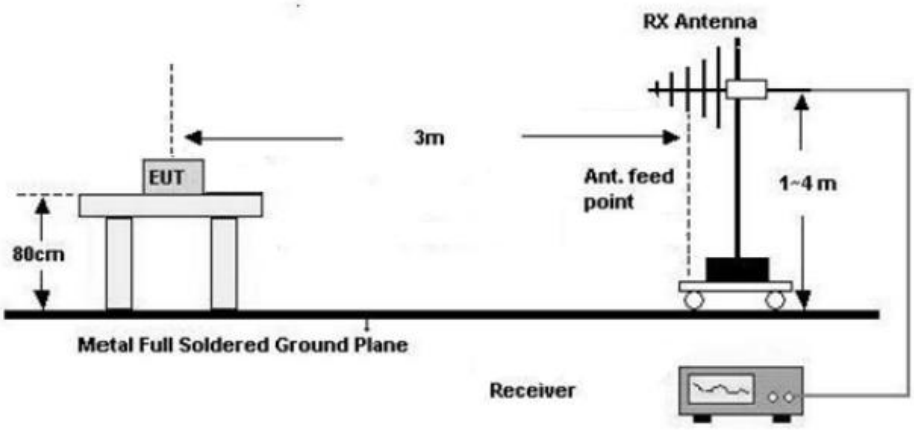
Note: The 0.8 m distance specified between EUT/AE/PSU and AMN/AAN, is applicable only to the EUT being measured. If the device is AE then it shall be >0.8 m.

2) Radiated emission measurement:

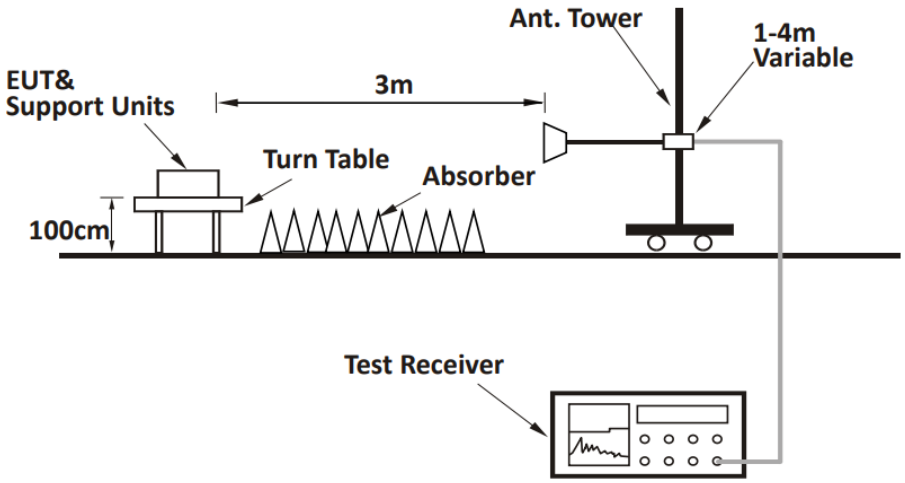
Below 30MHz (3m SAC)



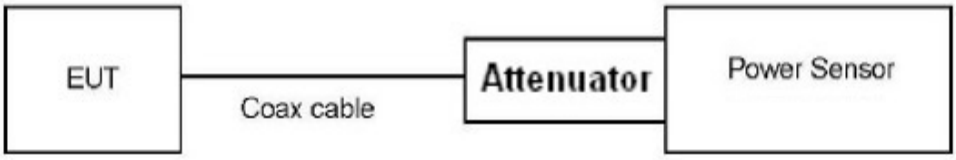
30MHz-1GHz (3m SAC)



Above 1GHz(3m FAC)



3) RF Conducted Test



2.6 Test Procedure

Conducted emission:

1. The E.U.T is placed on a non-conducting table 40cm from the vertical ground plane and 80cm above the horizontal ground plane (Please refer to the block diagram of the test setup and photographs).
2. Both sides of A.C. line are checked for maximum conducted interference.
3. Line conducted data is recorded for both Line and Neutral

Radiated Emission Procedure:

a) For below 30MHz

1. All measurements were made at a test distance of 3 m. The measured data was extrapolated from the test distance (3m) to the specification distance (300 m from 9-490 kHz and 30 m from 490 kHz- 30 MHz) to clearly show the relative levels of fundamental and spurious emissions and demonstrate compliance with the requirement that the level of any spurious emissions be below the level of the intentionally transmitted signal. The extrapolation factor for the limits were 20*Log (test distance / specification distance).
2. Loop antenna use, investigation was done on the three antenna orientations (parallel, perpendicular, gound-parallel)
3. The RBW/VBW of receiver is set to 200Hz/1kHz for 9kHz to 150kHz range, to 9kHz/30kHz for 150kHz to 30MHz range for scan Peak emission, 200Hz/9kHz IF BW was used for final measurement in the Quasi-peak or average detection mode for frequency range 9~150kHz/150kHz~30MHz respectively.
4. If the Peak emission complies with the QP limit, then perform final measurement is optional.

b) For 30MHz-1GHz:

1. The EUT was placed on the tabletop of a rotating table 0.8 m the ground at a 3 m semi anechoic chamber. The measurement distance from the EUT to the receiving antenna is 3 m.
2. EUT works in each mode of operation that needs to be tested. The highest signal levels relative to the limit shall be determined by rotating the EUT from 0° to 360° and with varying the measurement antenna height between 1 m and 4 m in vertical and horizontal polarizations.
3. The RBW/VBW of receiver is set to 100kHz/300kHz for scan Peak emission, 120kHz IF BW was used for final measurement in the Quasi-peak detection mode.
4. If the Peak emission complies with the QP limit, then perform final measurement is optional.

c) For above 1GHz:

1. The EUT was placed on the tabletop of a rotating table 1.0 m the ground at a 3 m fully anechoic room. The measurement distance from the EUT to the receiving antenna is 3 m.
2. EUT works in each mode of operation that needs to be tested，and having the EUT continuously working. The highest signal levels relative to the limit shall be determined by rotating the EUT from 0° to 360° and with varying the measurement antenna height between 1 m and 4 m in vertical and horizontal polarizations.
3. The RBW/VBW of spectrum analyzer is set to 1MHz/3MHz for scan Peak emission, for measured average emission, reduce the VBW to 10Hz. (Note: a high VBW (for example 1kHz, not less than 1/T) may used to scan average emissions to avoid long sweep time.)
4. If the Peak emission complies with the Average limit, then perform average measurement is optional.
5. Open the test software to control the test antenna and test turntable. Perform the test, save the test results, and export the test data.
6. measurements may be performed at a distance closer than that specified in the regulations; however, an attempt should be made to avoid making measurements in the near field.

RF Conducted Test:

1. The antenna port of EUT was connected to the RF port of the test equipment (Power Meter) through Attenuator and RF cable.
2. The cable assembly insertion loss of 7.0dB (including 6dB Attenuator and 1.0dB cable) was entered as an offset in the power meter. Note: Actual cable loss was unavailable at the time of testing, therefore a

loss of 1.0dB was assumed as worst case. This was later verified to be true by laboratory. (if the RF cable provided by client, the cable loss declared by client)

3. The EUT is keeping in continuous transmission mode and tested in all modulation modes.

2.7 Measurement Method

Description of Test	Measurement Method
AC Line Conducted Emissions	FCC OST MP-5-1986 Section 7
Radiated emission	FCC OST MP-5-1986 Section 5

2.8 Measurement Equipment

Manufacturer	Description	Model	Management No.	Calibration Date	Calibration Due Date
AC Line Conducted Emission Test					
ROHDE& SCHWARZ	EMI TEST RECEIVER	ESR	101817	2024/6/4	2025/6/3
R&S	LISN	ENV216	101748	2024/6/4	2025/6/3
N/A	Coaxial Cable	NO.12	N/A	2024/6/4	2025/6/3
Farad	Test Software	EZ-EMC	Ver. EMEC-3A1	/	/
Radiated Emission Test					
R&S	EMI test receiver	ESR3	102758	2024/6/4	2025/6/3
ROHDE& SCHWARZ	SPECTRUM ANALYZER	FSV40-N	101608	2024/6/4	2025/6/3
SONOMA INSTRUMENT	Low frequency amplifier	310	186014	2024/6/4	2025/6/3
A.H. Systems	PREAMPLIFIER	PAM-0118P	531	2024/6/4	2025/6/3
BACL	Loop Antenna	1313-1A	4010611	2024/2/7	2027/2/6
SCHWARZBECK	Log - periodic wideband antenna	VULB 9163	9163-872	2023/7/7	2026/7/6
Astro Antenna Ltd	Horn antenna	AHA-118S	3015	2023/7/6	2026/7/5
Oulitong	Band Reject Filter	OBSF-902-928-40S	OE02104362	2024/6/4	2025/6/3
N/A	Coaxial Cable	NO.9	N/A	2024/6/4	2025/6/3
N/A	Coaxial Cable	NO.15	N/A	2024/6/4	2025/6/3
N/A	Coaxial Cable	NO.16	N/A	2024/6/4	2025/6/3
N/A	Coaxial Cable	NO.17	N/A	2024/6/4	2025/6/3
Audix	Test Software	E3	191218 V9	/	/
Conducted Output Power Test					
ANRITSU	USB Power Sensor	MA24418A	12620	2024/6/4	2025/6/3
MEEA	6dB attenuator	603-06-1	N/A	2024/6/4	2025/6/3

Note: All equipment is calibrated with valid calibrations. Each measurement data is traceable to the national or International standards.

3 Test Results

3.1 Test Summary

FCC Rules	Description of Test	Result
FCC §18.307	AC Line Conducted Emissions	Compliance
FCC §18.305	Radiated emission	Compliance
/	Conducted Output Power	Report Only

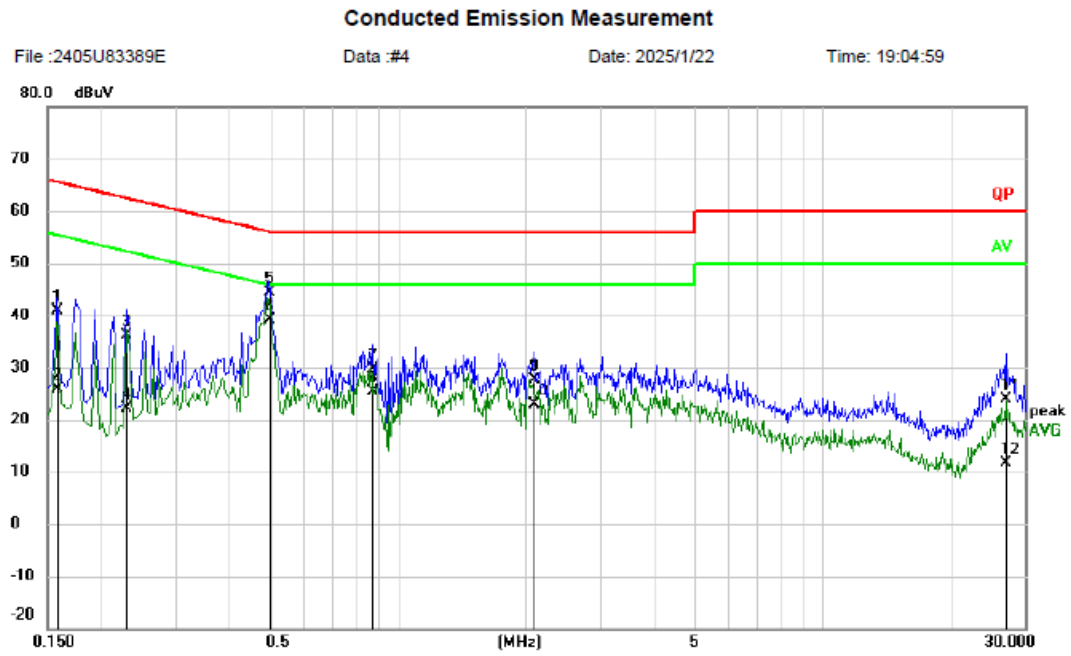
3.2 Limit

<table>
<tr><th>Test items</th><th>Limit</th></tr>
<tr><td>AC Line Conducted Emissions</td><td>
<table>
<tr><th rowspan="2">Frequency of emission (MHz)</th><th colspan="2">Conducted limit (dBµV)</th></tr>
<tr><th>Quasi-peak</th><th>Average</th></tr>
<tr><td>0.15-0.5</td><td>66 to 56 *</td><td>56 to 46 *</td></tr>
<tr><td>0.5-5</td><td>56</td><td>46</td></tr>
<tr><td>5-30</td><td>60</td><td>50</td></tr>
</table>
* Decreases with the logarithm of the frequency.
</td></tr>
<tr><td>Radiated emission</td><td>
a) ISM equipment operating on a frequency specified in § 18.301 is permitted unlimited radiated energy in the band specified for that frequency.
b) The field strength levels of emissions which lie outside the bands specified in § 18.301, unless otherwise indicated, shall not exceed the following:
<table>
<tr><th>Equipment</th><th>Operating frequency</th><th>RF Power generated by equipment (watts)</th><th>Field strength limit (uV/m)</th><th>Distance (meters)</th></tr>
<tr><td rowspan="2">Any type unless otherwise specified (miscellaneous)</td><td>Any ISM frequency</td><td>Below 500
500 or more</td><td>25
25 × SQRT(power/500)</td><td>300
[1] 300</td></tr>
<tr><td>Any non-ISM frequency</td><td>Below 500
500 or more</td><td>15
15 × SQRT(power/500)</td><td>300
[1] 300</td></tr>
</table>
</td></tr>
</table>

3.3 AC Line Conducted Emissions Test Data

Test Date:	2025-01-22	Test By:	Ryan Zhang
Environment condition:	Temperature: 22°C; Relative Humidity:46%; ATM Pressure: 100.7kPa		

Mode 1: standby mode



Limit: QP
Mode:standby
Note:

Phase: L1
Power: AC 120V/60Hz

Temperature: 22 ℃
Humidity: 46 %
Air Pressure: 1007 hpa

Receiver Setting: 9~150kHz: Pre-scan: RBW: 200Hz, DET: PK/AV; Final measure: RBW: 200Hz, DET: QP/AV
0.15~30MHz: Pre-scan: RBW: 9kHz, DET: PK/AV; Final measure: RBW: 9kHz, DET: QP/AV

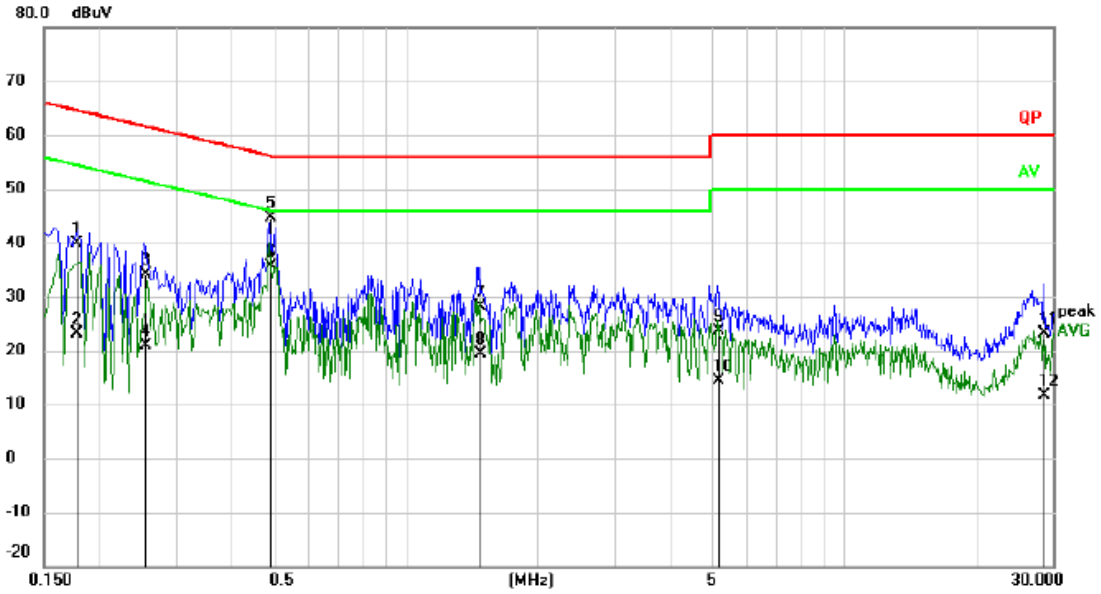
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over Limit		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.1580	30.50	10.27	40.77	65.57	-24.80	QP	
2		0.1580	15.60	10.27	25.87	55.57	-29.70	AVG	
3		0.2300	25.63	10.39	36.02	62.45	-26.43	QP	
4		0.2300	11.86	10.39	22.25	52.45	-30.20	AVG	
5		0.4980	33.74	10.59	44.33	56.03	-11.70	QP	
6	*	0.4980	28.52	10.59	39.11	46.03	-6.92	AVG	
7		0.8740	19.16	10.54	29.70	56.00	-26.30	QP	
8		0.8740	14.81	10.54	25.35	46.00	-20.65	AVG	
9		2.0940	17.07	10.67	27.74	56.00	-28.26	QP	
10		2.0940	12.24	10.67	22.91	46.00	-23.09	AVG	
11		27.0140	13.74	10.20	23.94	60.00	-36.06	QP	
12		27.0140	1.33	10.20	11.53	50.00	-38.47	AVG	

*:Maximum data x:Over limit !:over margin

Engineer Signature: Ryan

Conducted Emission Measurement

File :2405U83389E Data :#3 Date: 2025/1/22 Time: 19:02:23



Limit: QP Phase: N Temperature: 22 ℃

Mode: standby Power: AC 120V/60Hz Humidity: 46 %

Note: Air Pressure: 1007 hpa

Receiver Setting: 9~150kHz: Pre-scan: RBW: 200Hz, DET: PK/AV; Final measure: RBW: 200Hz, DET: QP/AV
0.15~30MHz: Pre-scan: RBW: 9kHz, DET: PK/AV; Final measure: RBW: 9kHz, DET: QP/AV

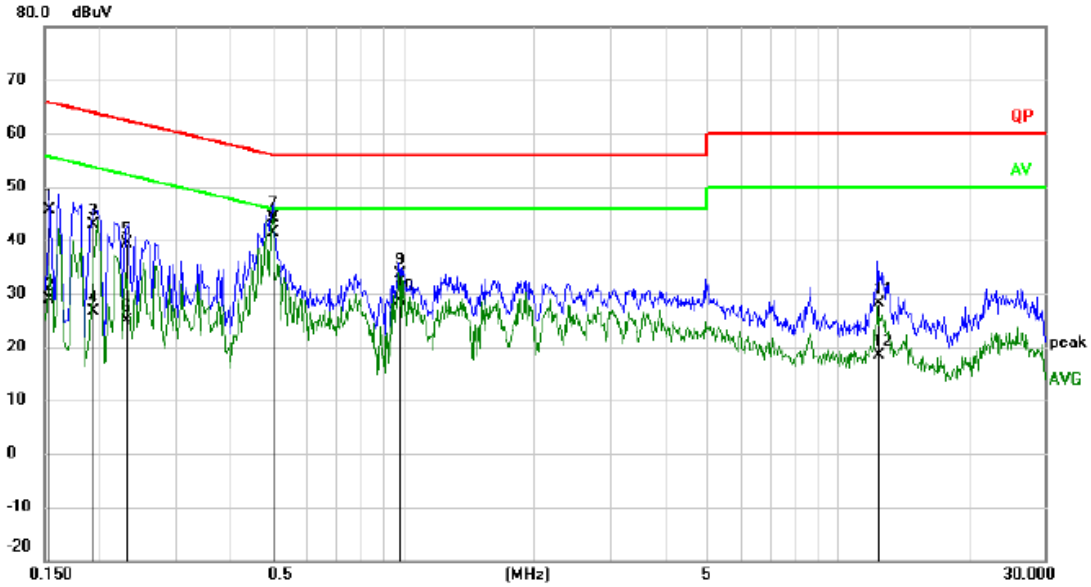
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over Limit		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.1780	29.57	10.32	39.89	64.58	-24.69	QP	
2		0.1780	12.84	10.32	23.16	54.58	-31.42	AVG	
3		0.2540	23.68	10.42	34.10	61.63	-27.53	QP	
4		0.2540	10.37	10.42	20.79	51.63	-30.84	AVG	
5		0.4900	34.02	10.58	44.60	56.17	-11.57	QP	
6	*	0.4900	25.02	10.58	35.60	46.17	-10.57	AVG	
7		1.4860	17.46	10.62	28.08	56.00	-27.92	QP	
8		1.4860	8.66	10.62	19.28	46.00	-26.72	AVG	
9		5.1620	13.21	10.37	23.58	60.00	-36.42	QP	
10		5.1620	3.89	10.37	14.26	50.00	-35.74	AVG	
11		28.4700	13.02	10.19	23.21	60.00	-36.79	QP	
12		28.4700	1.38	10.19	11.57	50.00	-38.43	AVG	

*:Maximum data x:Over limit !:over margin Engineer Signature: Ryan

Mode 2: working mode

Conducted Emission Measurement

File :2405U83389E Data :#1 Date: 2025/1/22 Time: 18:50:46



Limit: QP Phase: L1 Temperature: 22 ℃

Mode:working Power: AC 120V/60Hz Humidity: 46 %

Note: Air Pressure: 1007 hpa

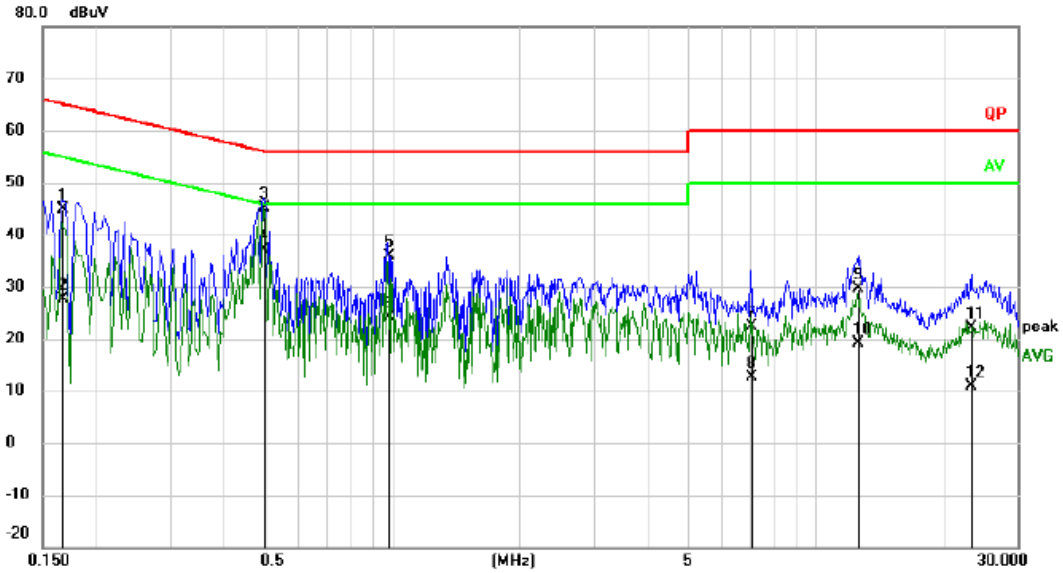
Receiver Setting: 9~150kHz: Pre-scan: RBW: 200Hz, DET: PK/AV; Final measure: RBW: 200Hz, DET: QP/AV
0.15~30MHz: Pre-scan: RBW: 9kHz, DET: PK/AV; Final measure: RBW: 9kHz, DET: QP/AV

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over Limit		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.1539	35.18	10.44	45.62	65.79	-20.17	QP	
2		0.1539	18.44	10.44	28.88	55.79	-26.91	AVG	
3		0.1940	32.60	10.37	42.97	63.86	-20.89	QP	
4		0.1940	16.26	10.37	26.63	53.86	-27.23	AVG	
5		0.2316	28.93	10.39	39.32	62.39	-23.07	QP	
6		0.2316	14.49	10.39	24.88	52.39	-27.51	AVG	
7		0.5020	33.60	10.59	44.19	56.00	-11.81	QP	
8	*	0.5020	30.75	10.59	41.34	46.00	-4.66	AVG	
9		0.9820	22.89	10.65	33.54	56.00	-22.46	QP	
10		0.9820	17.87	10.65	28.52	46.00	-17.48	AVG	
11		12.4220	17.73	10.34	28.07	60.00	-31.93	QP	
12		12.4220	7.98	10.34	18.32	50.00	-31.68	AVG	

*:Maximum data x:Over limit !:over margin Engineer Signature: Ryan

Conducted Emission Measurement

File :2405U83389E Data :#2 Date: 2025/1/22 Time: 18:53:51



Limit: QP Phase: N Temperature: 22 ℃

Mode:working Power: AC 120V/60Hz Humidity: 46 %

Note: Air Pressure: 1007 hpa

Receiver Setting: 9~150kHz: Pre-scan: RBW: 200Hz, DET: PK/AV; Final measure: RBW: 200Hz, DET: QP/AV
0.15~30MHz: Pre-scan: RBW: 9kHz, DET: PK/AV; Final measure: RBW: 9kHz, DET: QP/AV

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over Limit		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.1660	34.51	10.28	44.79	65.16	-20.37	QP	
2		0.1660	17.42	10.28	27.70	55.16	-27.46	AVG	
3		0.4980	34.55	10.59	45.14	56.03	-10.89	QP	
4	*	0.4980	26.43	10.59	37.02	46.03	-9.01	AVG	
5		0.9820	25.40	10.55	35.95	56.00	-20.05	QP	
6		0.9820	13.50	10.55	24.05	46.00	-21.95	AVG	
7		7.0580	11.91	10.37	22.28	60.00	-37.72	QP	
8		7.0580	2.14	10.37	12.51	50.00	-37.49	AVG	
9		12.5940	19.36	10.38	29.74	60.00	-30.26	QP	
10		12.5940	8.74	10.38	19.12	50.00	-30.88	AVG	
11		23.2700	11.97	10.24	22.21	60.00	-37.79	QP	
12		23.2700	0.75	10.24	10.99	50.00	-39.01	AVG	

*:Maximum data x:Over limit !:over margin Engineer Signature: Ryan

Remark:

Measurement (dBuV) = Reading Level (dBuV) + Correct Factor(dB)

Correct Factor (dB) = LISN Voltage Division Factor (dB)+ Cable loss(dB)

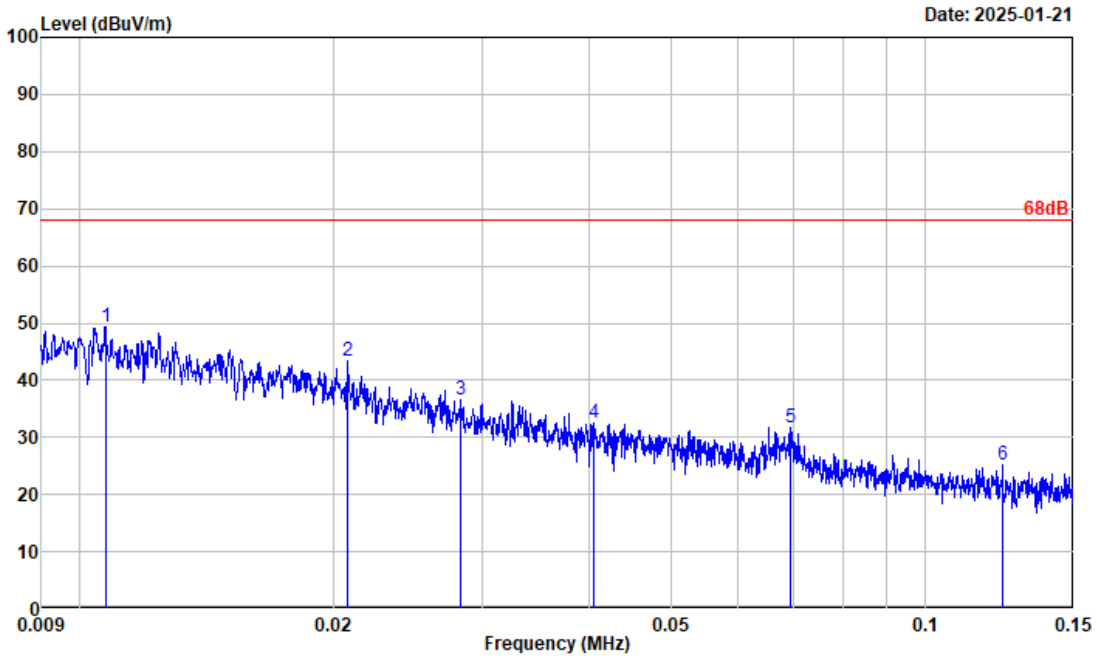
Over Limit = Measurement – Limit

3.4 Radiated emission Test Data

9 kHz-30MHz:

Test Date:	2025-01-21	Test By:	Luke Li
Environment condition:	Temperature: 22.5°C; Relative Humidity:41%; ATM Pressure: 101.1		

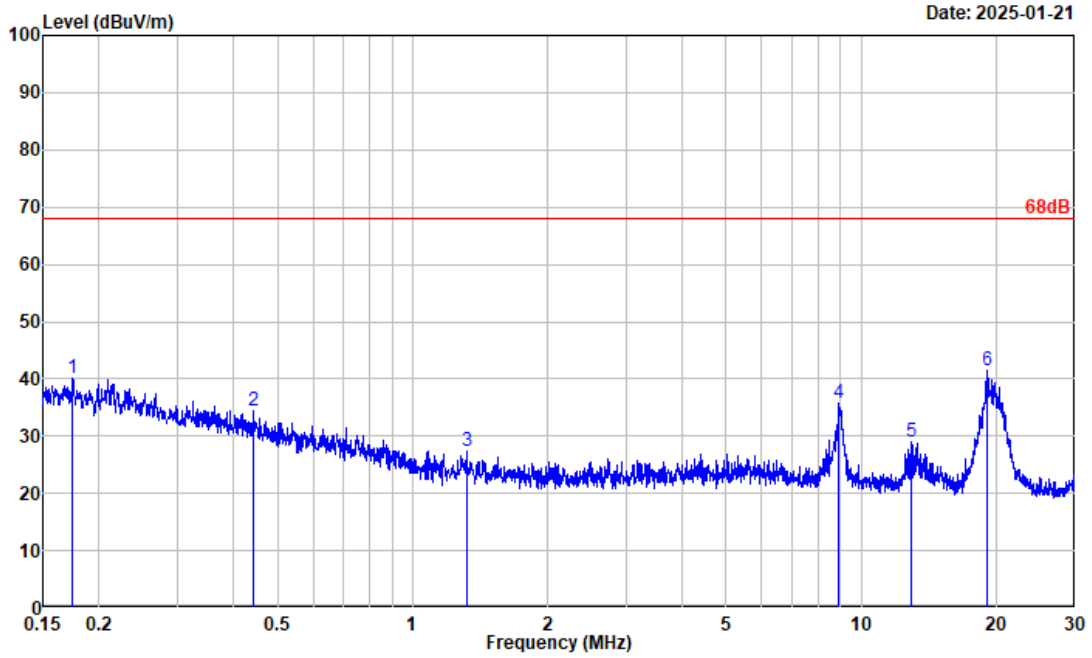
Mode 2: working mode (worst case)



Project No. : 2405U83389E
Test Mode : Working
Test Voltage : AC 120V/60Hz
Environment : 22.5℃/41%R.H./101.1kPa
Tested by : Luke Li
Polarization : PARALLEL
Remark : /

--No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Over Limit (dB)	Detector
1	0.011	12.57	36.76	49.33	68.00	-18.67	Peak
2	0.021	13.07	30.40	43.47	68.00	-24.53	Peak
3	0.028	10.82	25.65	36.47	68.00	-31.53	Peak
4	0.041	10.15	22.35	32.50	68.00	-35.50	Peak
5	0.069	14.01	17.75	31.76	68.00	-36.24	Peak
6	0.124	10.79	14.32	25.11	68.00	-42.89	Peak

Remarks: Factor = Antenna factor + Cable loss - Preamp gain
Result = Reading + Factor
Over Limit = Result - Limit
SA setting: RBW/VBW: 200Hz/1kHz, DET: PK



Project No. : 2405U83389E
Test Mode : Working
Test Voltage : AC 120V/60Hz
Environment : 22.5℃/41%R.H./101.1kPa
Tested by : Luke Li
Polarization : PARALLEL
Remark : /

--No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Over Limit (dB)	Detector
1	0.175	27.14	12.87	40.01	68.00	-27.99	Peak
2	0.441	27.77	6.68	34.45	68.00	-33.55	Peak
3	1.318	27.76	-0.51	27.25	68.00	-40.75	Peak
4	8.928	39.33	-3.68	35.65	68.00	-32.35	Peak
5	12.916	32.50	-3.44	29.06	68.00	-38.94	Peak
6	19.018	44.59	-3.15	41.44	68.00	-26.56	Peak

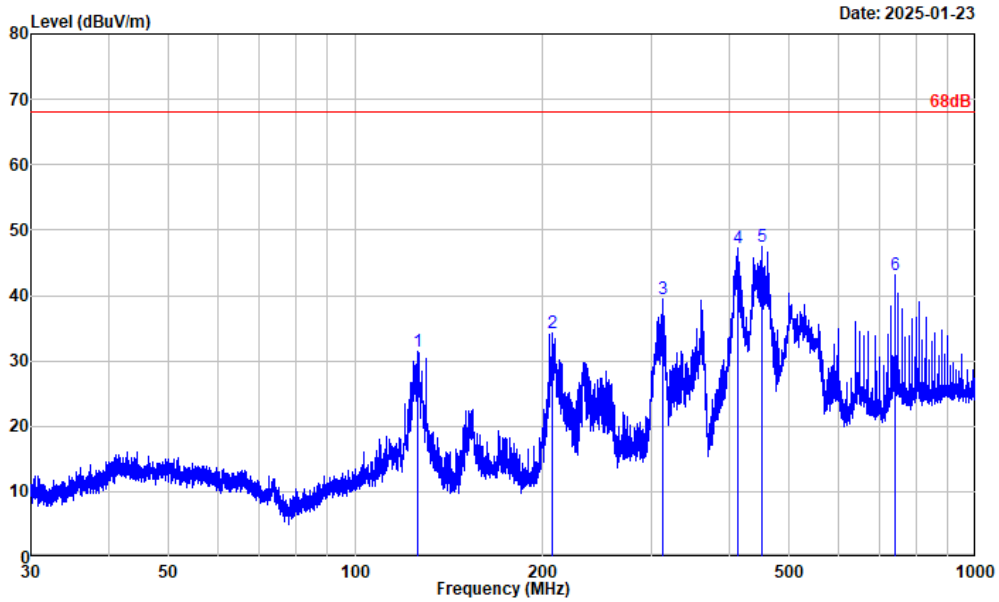
Remarks: Factor = Antenna factor + Cable loss - Preamp gain
Result = Reading + Factor
Over Limit = Result - Limit
SA setting: RBW/VBW: 9kHz/30kHz, DET: PK

Note: According to FCC § 18.305, the field strength limit of the outside band emissions is:
Limit=20lg(25)+20lg(300/3)=68dBuV/m

30MHz-1GHz:

Test Date:	2025-01-21~2025-01-23	**Test By:**	Luke Li
Environment condition:	Temperature: 22.5~23.1°C; Relative Humidity:41~51%; ATM Pressure: 101.0~101.1kPa		

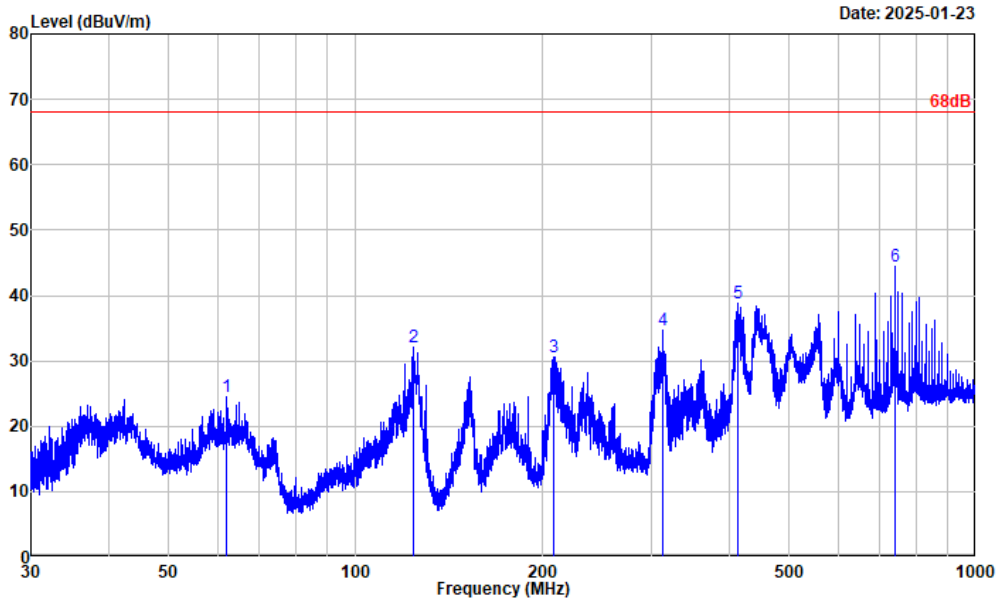
Mode 1: standby mode



Project No. : 2405U83389E
Test Mode : Standby
Test Voltage : AC 120V/60Hz
Environment : 23.1℃/51%R.H./101.0kPa
Tested by : Luke Li
Polarization : horizontal
Remark : /

--No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Over Limit (dB)	Detector
1	126.163	48.27	-16.82	31.45	68.00	-36.55	Peak
2	207.850	47.96	-13.78	34.18	68.00	-33.82	Peak
3	312.453	50.53	-11.00	39.53	68.00	-28.47	Peak
4	413.996	55.68	-8.39	47.29	68.00	-20.71	Peak
5	452.323	55.79	-8.27	47.52	68.00	-20.48	Peak
6	740.309	45.98	-2.87	43.11	68.00	-24.89	Peak

Remarks: Factor = Antenna factor + Cable loss - Preamp gain
Result = Reading + Factor
Over Limit = Result - Limit
SA setting: Pre-scan: RBW/VWB: 100Hz/300kHz, DET: PK
Final measure: RBW: 120kHz, DET: QP

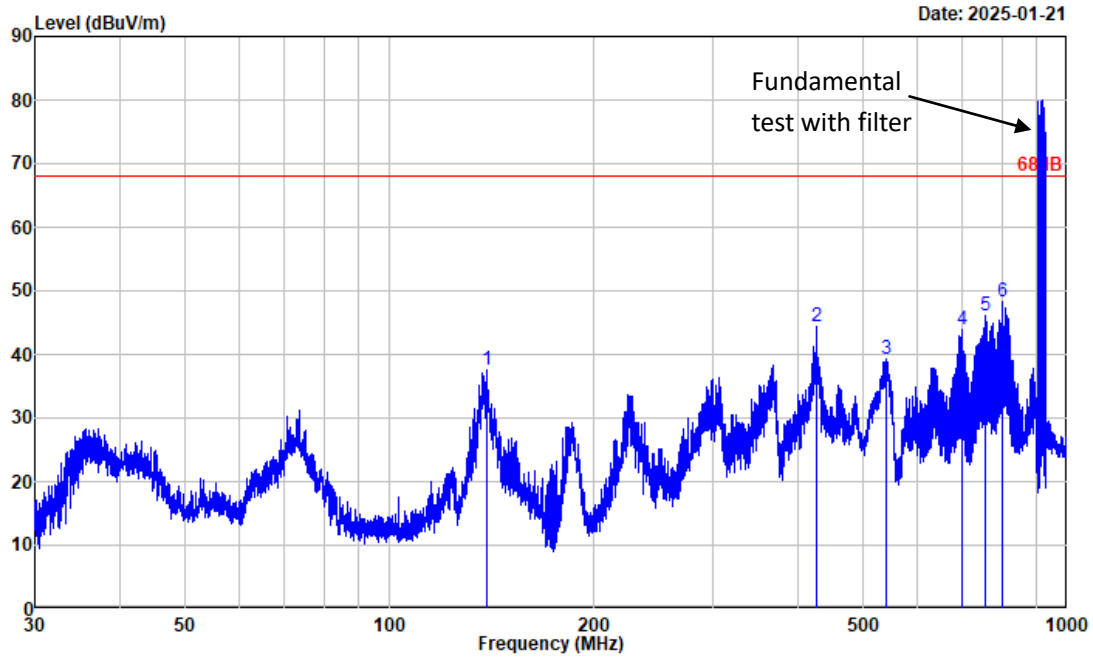


Project No. : 2405U83389E
Test Mode : Standby
Test Voltage : AC 120V/60Hz
Environment : 23.1℃/51%R.H./101.0kPa
Tested by : Luke Li
Polarization : vertical
Remark : /

--No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Over Limit (dB)	Detector
1	62.104	38.47	-13.87	24.60	68.00	-43.40	Peak
2	124.079	48.62	-16.53	32.09	68.00	-35.91	Peak
3	208.580	44.41	-13.79	30.62	68.00	-37.38	Peak
4	312.453	45.72	-11.00	34.72	68.00	-33.28	Peak
5	413.633	47.28	-8.39	38.89	68.00	-29.11	Peak
6	740.309	47.36	-2.87	44.49	68.00	-23.51	Peak

Remarks: Factor = Antenna factor + Cable loss - Preamp gain
Result = Reading + Factor
Over Limit = Result - Limit
SA setting: Pre-scan: RBW/VWB: 100Hz/300kHz, DET: PK
Final measure: RBW: 120kHz, DET: QP

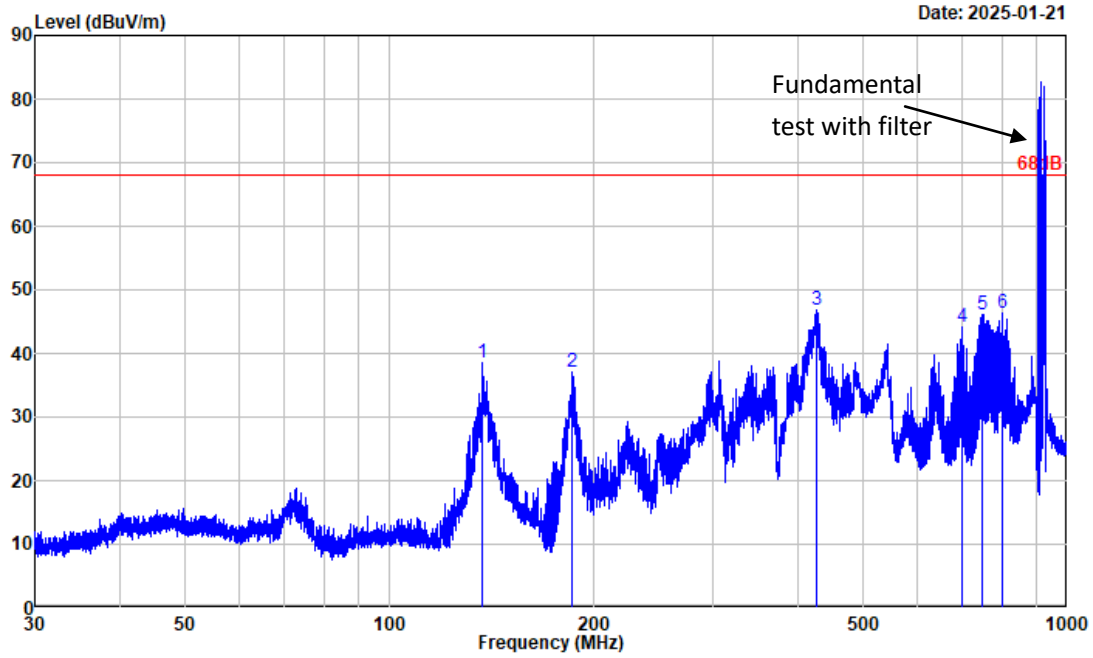
Mode 2: working mode



Project No. : 2405U83389E
Test Mode : Working
Test Voltage : AC 120V/60Hz
Environment : 22.5℃/41%R.H./101.1kPa
Tested by : Luke Li
Polarization : vertical
Remark : /

--No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Over Limit (dB)	Detector
1	139.178	55.18	-17.50	37.68	68.00	-30.32	Peak
2	426.334	52.78	-8.28	44.50	68.00	-23.50	Peak
3	541.610	45.89	-6.56	39.33	68.00	-28.67	Peak
4	700.839	47.98	-3.98	44.00	68.00	-24.00	Peak
5	757.709	48.58	-2.57	46.01	68.00	-21.99	Peak
6	802.138	50.67	-2.30	48.37	68.00	-19.63	Peak

Remarks: Factor = Antenna factor + Cable loss - Preamp gain
Result = Reading + Factor
Over Limit = Result - Limit
SA setting: Pre-scan: RBW/VWB: 100Hz/300kHz, DET: PK
Final measure: RBW: 120kHz, DET: QP



Project No. : 2405U83389E
Test Mode : Working
Test Voltage : AC 120V/60Hz
Environment : 22.5℃/41%R.H./101.1kPa
Tested by : Luke Li
Polarization : horizontal
Remark : /

--No.	Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Over Limit (dB)	Detector
1	137.360	55.96	-17.45	38.51	68.00	-29.49	Peak
2	185.951	52.14	-14.97	37.17	68.00	-30.83	Peak
3	425.961	55.01	-8.28	46.73	68.00	-21.27	Peak
4	698.080	48.08	-4.02	44.06	68.00	-23.94	Peak
5	750.108	48.87	-2.66	46.21	68.00	-21.79	Peak
6	800.382	48.73	-2.29	46.44	68.00	-21.56	Peak

Remarks: Factor = Antenna factor + Cable loss - Preamp gain
Result = Reading + Factor
Over Limit = Result - Limit
SA setting: Pre-scan: RBW/VWB: 100Hz/300kHz, DET: PK
Final measure: RBW: 120kHz, DET: QP

Note: According to FCC § 18.305, the field strength limit of the outside band emissions is:
Limit=20lg(25)+20lg(300/3)=68dBuV/m

Fundamental field strength:

Test Date:	2025-01-23	Test By:	Luke Li
Environment condition:	Temperature: 23.1°C; Relative Humidity:51%; ATM Pressure: 101.0kPa		

KDB 680106 D01 Wireless Power Transfer v04 Section 5.3:

Besides complying with the field strength limits in §18.305 (unwanted emission limits at 300 m and 1600 m distances5), the RF field strength measured beyond one meter (electric and magnetic components) is lower than that which is measured at one meter. These measurements shall be done while the transmitter is operating at full power to charge the client devices. The client device(s) shall be placed first within one meter from the transmitter antenna (or radiating structure) geometric center. Then, the client device(s) shall be placed beyond one meter, at least in two locations one meter apart (e.g., two and three meters away). The evaluation points shall be chosen along the direction of the main lobe of the field emission pattern (estimates of the lobe direction based on the transmitter geometry are acceptable, e.g., the main axis of a transmitter coil).

If a field pattern estimate is unavailable, measurements shall be repeated on radials that are no more than 30° apart from the direction of the main axis of the radiating structure on the planes containing the three principal axes (i.e., x-y, x-z, and y-z). Both electric and magnetic field components must be measured if the one-meter location is not in the far-field region (computed based on the frequency and antenna size of the WPT transmitter).

Below is the RF field strength measured result at 3 difference distance, base on the test result, the device compliance with above requirement.

Frequency (MHz)	Reading level (dBμV)	Polar (H/V)	Corrected Factor (dB/m)	Corrected Amplitude (dBμV/m)	Remark
Test Distance 1m					
915	92.22	horizontal	30.08	122.30	Peak
Test Distance 2m					
915	86.94	horizontal	30.08	117.02	Peak
Test Distance 3m					
915	81.58	horizontal	30.08	111.66	Peak

Remark:

Corrected Amplitude= Reading level + corrected Factor

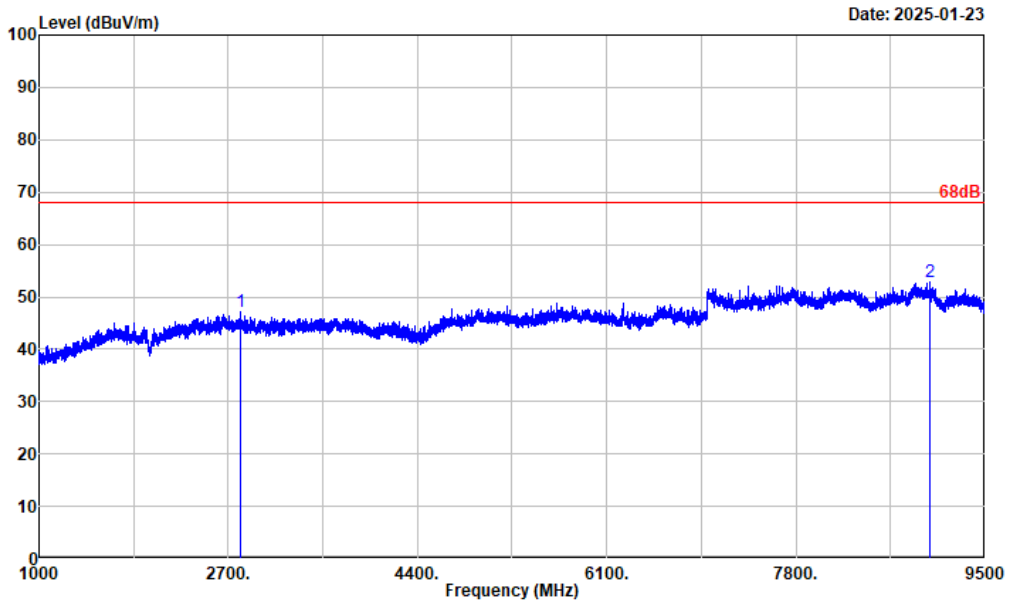
Corrected Factor = Antenna factor + Cable loss – Amplifier gain

The worst antenna polar was test and recorded.

Above 1GHz:

Test Date:	2025-01-18~2025-01-23	**Test By:**	Luke Li
Environment condition:	Temperature: 22.5~23.1°C; Relative Humidity: 32~51%; ATM Pressure:101.0~101.3kPa		

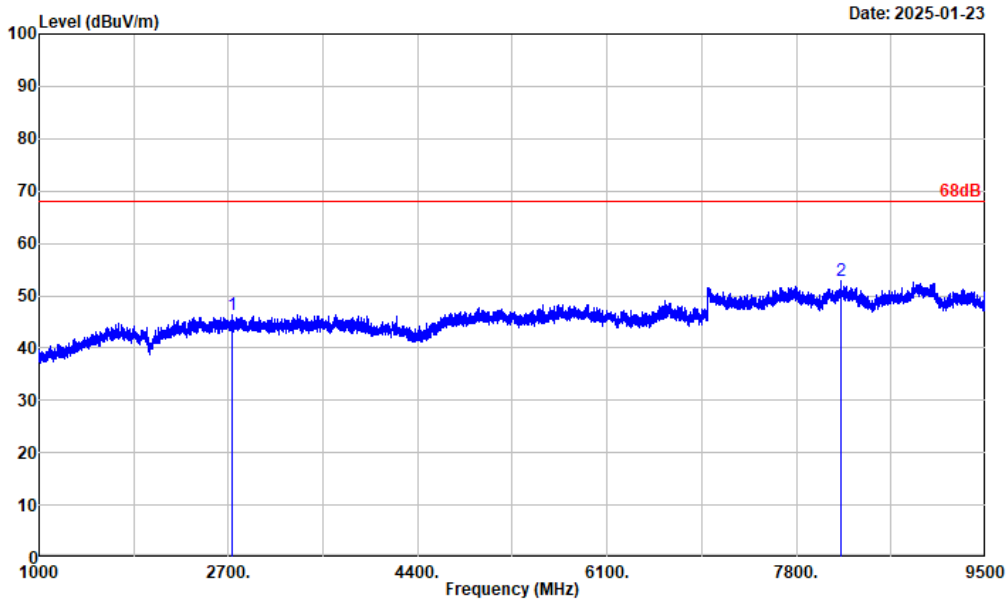
Mode 1: standby mode



Project No. : 2405U83389E
Test Mode : Standby
Test Voltage : AC 120V/60Hz
Environment : 23.1℃/51%R.H./101.0kPa
Tested by : Luke Li
Polarization : horizontal
Remark : /

--No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Over Limit (dB)	Detector
1	2811.000	49.41	-2.34	47.07	68.00	-20.93	Peak
2	9004.000	51.23	1.71	52.94	68.00	-15.06	Peak

Remarks: Factor = Antenna factor + Cable loss - Preamp gain
Result = Reading + Factor
Over Limit = Result - Limit
SA setting: Peak: RBW/VWB: 1MHz/3MHz, DET: PK
Average: RBW/VWB: 1MHz/1kHz, DET: PK

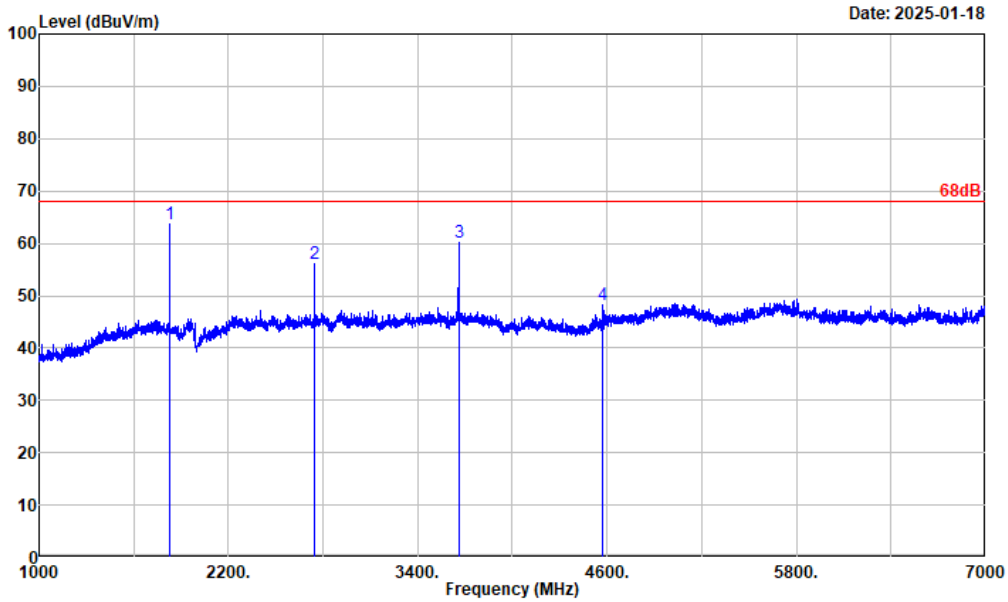


Project No. : 2405U83389E
Test Mode : Standby
Test Voltage : AC 120V/60Hz
Environment : 23.1℃/51%R.H./101.0kPa
Tested by : Luke Li
Polarization : vertical
Remark : /

--No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Over Limit (dB)	Detector
1	2738.000	48.64	-2.35	46.29	68.00	-21.71	Peak
2	8202.000	52.51	0.23	52.74	68.00	-15.26	Peak

Remarks: Factor = Antenna factor + Cable loss - Preamp gain
Result = Reading + Factor
Over Limit = Result - Limit
SA setting: Peak: RBW/VWB: 1MHz/3MHz, DET: PK
Average: RBW/VWB: 1MHz/1kHz, DET: PK

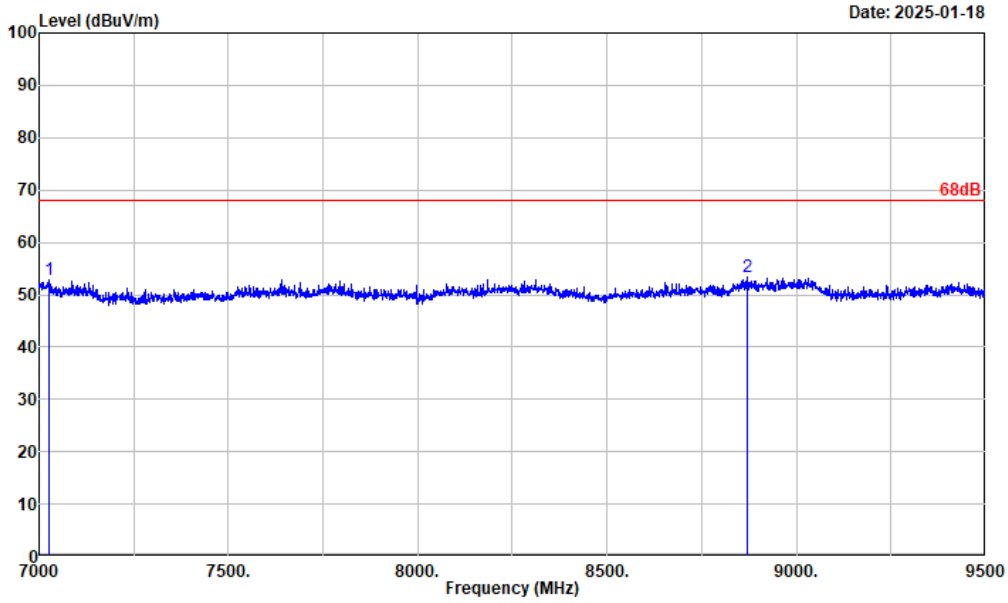
Mode 2: working mode



Project No. : 2405U83389E
Test Mode : Working
Test Voltage : AC 120V/60Hz
Environment : 22.5℃/32%R.H./101.3kPa
Tested by : Luke Li
Polarization : horizontal
Remark : /

--No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Over Limit (dB)	Detector
1	1830.000	67.64	-3.83	63.81	68.00	-4.19	Peak
2	2745.000	58.31	-2.35	55.96	68.00	-12.04	Peak
3	3660.000	62.90	-2.60	60.30	68.00	-7.70	Peak
4	4575.000	51.43	-3.17	48.26	68.00	-19.74	Peak

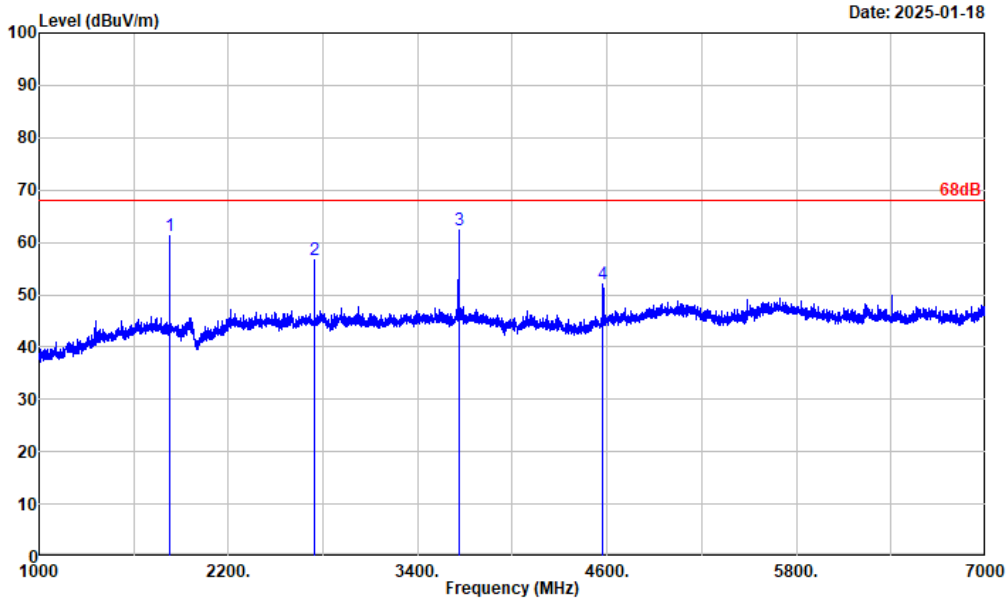
Remarks: Factor = Antenna factor + Cable loss - Preamp gain
Result = Reading + Factor
Over Limit = Result - Limit
SA setting: Peak: RBW/VWB: 1MHz/3MHz, DET: PK
Average: RBW/VWB: 1MHz/1kHz, DET: PK



Project No. : 2405U83389E
Test Mode : Working
Test Voltage : AC 120V/60Hz
Environment : 22.5℃/32%R.H./101.3kPa
Tested by : Luke Li
Polarization : horizontal
Remark : /

--No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Over Limit (dB)	Detector
1	7026.000	53.74	-0.86	52.88	68.00	-15.12	Peak
2	8869.000	51.81	1.66	53.47	68.00	-14.53	Peak

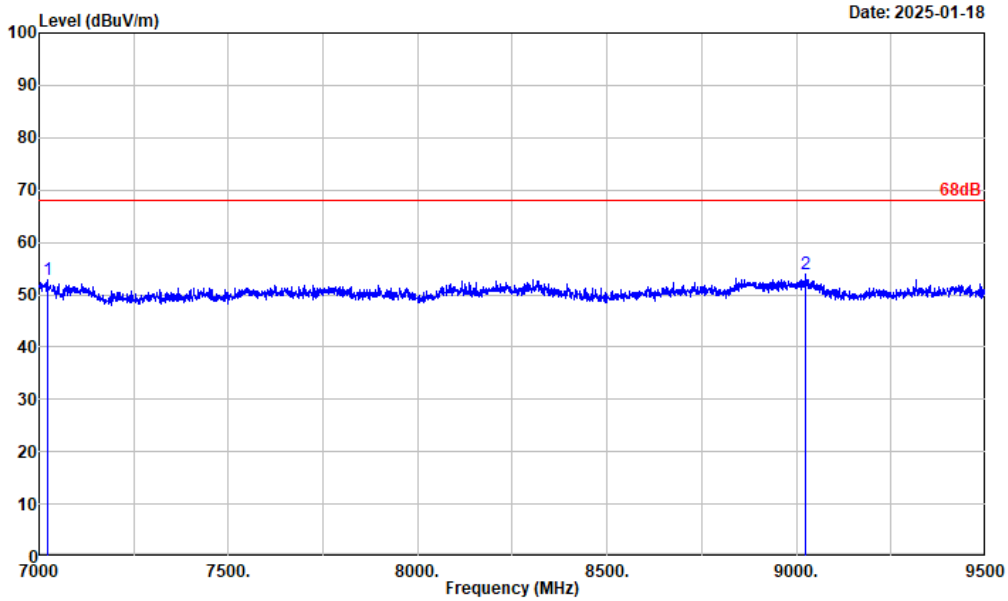
Remarks: Factor = Antenna factor + Cable loss - Preamp gain
Result = Reading + Factor
Over Limit = Result - Limit
SA setting: Peak: RBW/VWB: 1MHz/3MHz, DET: PK
Average: RBW/VWB: 1MHz/1kHz, DET: PK



Project No. : 2405U83389E
Test Mode : Working
Test Voltage : AC 120V/60Hz
Environment : 22.5℃/32%R.H./101.3kPa
Tested by : Luke Li
Polarization : vertical
Remark : /

--No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Over Limit (dB)	Detector
1	1830.000	65.19	-3.83	61.36	68.00	-6.64	Peak
2	2745.000	58.96	-2.35	56.61	68.00	-11.39	Peak
3	3660.000	64.95	-2.60	62.35	68.00	-5.65	Peak
4	4575.000	55.17	-3.17	52.00	68.00	-16.00	Peak

Remarks: Factor = Antenna factor + Cable loss - Preamp gain
Result = Reading + Factor
Over Limit = Result - Limit
SA setting: Peak: RBW/VWB: 1MHz/3MHz, DET: PK
Average: RBW/VWB: 1MHz/1kHz, DET: PK



Project No. : 2405U83389E
Test Mode : Working
Test Voltage : AC 120V/60Hz
Environment : 22.5℃/32%R.H./101.3kPa
Tested by : Luke Li
Polarization : vertical
Remark : /

--No.	Frequency (MHz)	Reading (dBµV)	Factor (dB/m)	Result (dBµV/m)	Limit (dBµV/m)	Over Limit (dB)	Detector
1	7021.000	53.76	-0.86	52.90	68.00	-15.10	Peak
2	9025.000	52.37	1.48	53.85	68.00	-14.15	Peak

Remarks: Factor = Antenna factor + Cable loss - Preamp gain
Result = Reading + Factor
Over Limit = Result - Limit
SA setting: Peak: RBW/VWB: 1MHz/3MHz, DET: PK
Average: RBW/VWB: 1MHz/1kHz, DET: PK

Note: According to FCC § 18.305, the field strength limit of the outside band emissions is:
Limit=20lg(25)+20lg(300/3)=68dBuV/m

3.5 RF Conducted Test Data

Test Date:	2025-01-21	Test By:	Ryan Zhang
Environment condition:	Temperature: 23.4°C; Relative Humidity:45%; ATM Pressure: 101.3kPa		

3.5.1 Conducted Output Power

Test Modes	Test Frequency (MHz)	Peak Conducted Output Power (dBm)
Hopping	902.5~927.5	16.69

4 Test Setup Photo

Please refer to the attachment 2405U83389EJ Test setup photo.

5 E.U.T Photo

Please refer to the attachment 2405U83389E External photo and 2405U83389E Internal photo.

---End of Report---