

APPLICANT NAME & ADDRESS

Xnergy Autonomous Power Technologies Pte Ltd
988 Toa Payoh North, #06-01, Singapore 319002

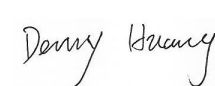
PRODUCT NAME	PH Series Wireless Charger Transmitter
FCC MODEL NUMBER(S)	TX18PH-xUyz (x, y, z can be any alphanumeric)
ISED MODEL NUMBER(S)	TX18PH-AU10, TX18PH-AU20
FCC ID	2BOHS-XNGYPHTX
IC	33631-XNGYPHTX
TEST STANDARDS	47 CFR FCC PART 15 SUBPART C ISED RSS-247 Issue 4 ISED RSS-GEN Issue 5

TEST LABORATORY & ADDRESS

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SINGLAS REGISTRATION	① LA-2009-0450-E ② LA-2009-0450-E-1

FCC REGISTRATION	600804	ISED COMPANY NUMBER	12002A
CAB IDENTIFIER	SGAP07		

RECEIPT OF EUTs	05 MAR 2025	TEST PERIOD	10 MAR 2025 – 6 NOV 2025
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PREPARED BY	APPROVED BY
 Jonathan He Senior Laboratory Technician	 Denny Huang Senior Project Engineer

This report shall not be reproduced, except in full, without the written approval from the Laboratory. The results in this report apply only to the test sample(s) specified and at the time of testing period only. The results are not to be used to indicate applicability to other similar products.

The results reported herein have been performed in accordance with the laboratory's terms of accreditation under the Singapore Accreditation Council.



SUMMARY OF TEST RESULTS

Clause	Test Items	FCC/ISED Rules	Test Results
1	6dB Bandwidth and 99% Occupied Bandwidth	FCC Part 15.247 (a) (2) RSS-247 Clause 5.2 (a) ISED RSS-Gen Clause 6.7	Pass
2	Conducted Output Power	FCC Part 15.247 (b) (3) RSS-247 Clause 5.4 (d)	Pass
3	Power Spectral Density	FCC Part 15.247 (e) RSS-247 Clause 5.2 (b)	Pass
4	Conducted Bandedge and Spurious Emission	FCC Part 15.247 (d) RSS-247 Clause 5.5	Pass
5	Radiated Bandedge and Spurious Emission	FCC Part 15.247 (d) FCC Part 15.209 FCC Part 15.205 RSS-247 Clause 5.5 RSS-GEN Clause 8.9	Pass
6	Conducted Emission Test for AC Power Port	FCC Part 15.207 RSS-GEN Clause 8.8	Pass
7	Antenna Requirement	FCC Part 15.203 RSS-GEN Clause 6.8	Pass
Note: Lab performed measurements at test anechoic chamber and comparing them to measurements obtained on an open field site. And these measurements below 30 MHz were correlated to measurements performed on an OFS.			

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RELEASE CONTROL RECORDS

For any necessary material amendments or modifications to a test report after issue, it will be made only in the form of a new revision of test report. The latest revision of test report replaces all former test reports issued. The former test reports are no longer valid.

It will be uniquely identified with a new revision number and be clearly recorded in the table below, including the change description and a reference to the original test report that it replaces.

Revision	Report Date	Description	Revised by
Ø	19 November, 2025	Initial Issue.	
R01	1 December, 2025	Addressed TCB's Comments.	JONATHAN HE

PRODUCT DETAILS

MANUFACTURER	Xnergy Autonomous Power Technologies Pte Ltd	
PRODUCT NAME	PH Series Wireless Charger Transmitter	
PRODUCT DESCRIPTION	EUT is a wireless charger with Bluetooth Low Energy intended for industrial application. The EUT includes two units: Transmitter Powering Unit (TPU) and Transmitter Pad (TXP)	
FCC MODEL NUMBER(S)	TX18PH-xUyz (x, y, z can be any alphanumeric)	
ISED MODEL NUMBER(S)	TX18PH-AU10, TX18PH-AU20	
TEST MODEL	TX18PH-AU20	
SERIAL NUMBER FOR TEST MODEL(S)	TX18PH-AU10, TX18PH-AU20	
MODEL DIFFERENCE	The last four digits xUyz denotes cable length and target market. Their electrical circuit design, layout, components used and internal wiring are identical, only the color and model name is different. For the cable length of the EUT, no impact on RF portion, please refer to the EMC test report for more evaluation. We select "TX18PH-AU20" as the representative model for RF compliance test.	
RADIO TECHNOLOGY	Bluetooth - Low Energy	
OPERATION FREQUENCY	2402 MHz ~ 2480 MHz	
MODULATION	GFSK	
DATA RATE	LE 1M	1 Mbps
RATED SUPPLY VOLTAGE / FREQUENCY / CURRENT	AC Single Phase 100-230 VAC, 50 / 60 Hz, 16 A max	
SOFTWARE VERSION	Rev A	
HARDWARE VERSION	Rev A	

MAXIMUM OUTPUT POWER

Test Mode	Frequency (MHz)	Channel Number	Maximum Peak Conducted Output Power (dBm)
Bluetooth LE 1M	2402 ~ 2480	0-39[40]	-18.52

CHANNEL LIST

Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
0	2402	11	2424	22	2446	33	2468
1	2404	12	2426	23	2448	34	2470
2	2406	13	2428	24	2450	35	2472
3	2408	14	2430	25	2452	36	2474
4	2410	15	2432	26	2454	37	2476
5	2412	16	2434	27	2456	38	2478
6	2414	17	2436	28	2458	39	2480
7	2416	18	2438	29	2460	/	/
8	2418	19	2440	30	2462	/	/
9	2420	20	2442	31	2464	/	/
10	2422	21	2444	32	2466	/	/

TEST CHANNEL CONFIGURATION

Test Mode	Test Channel	Frequency
Bluetooth LE 1M	CH 0 (Low Channel), CH 19 (MID Channel), CH 39 (High Channel)	2402 MHz, 2440 MHz, 2480 MHz

THE WORSE CASE POWER SETTING PARAMETER

The Worse Case Power Setting Parameter under 2400 ~ 2483.5 MHz Band				
Test Software Version		nRF Connect for Desktop		
Test Mode	Transmit Antenna Number	Test Software Setting Value		
		CH 0	CH 19	CH 39
Bluetooth LE 1M	1	-16	-16	-16

DESCRIPTION OF AVAILABLE ANTENNAS

Antenna	Frequency (MHz)	Antenna Type	Maximum Peak Antenna Gain (dBi)
1	2402 ~ 2480	PCB Antenna	0.99

Test Mode	Transmit and Receive Mode	Description
Bluetooth LE 1M	☒ 1TX, 1RX	Antenna 1 can be used as transmitting/receiving antenna.

Note: The value of the antenna gain was declared by customer.

EUT CONFIGURATION

The EUT was tested in the following configuration(s):

Controlled in test mode using a software application on the EUT supplied by customer. The application was used to enable continuous transmission and to select the mode, test channels, bandwidth, data rates as required.

Worst-case data rates as provided by the client were:

Bluetooth LE mode: 1 Mbps

The measured additional path loss was included in any path loss calculations for all RF cables used during tests.

DESCRIPTION OF TEST SETUP

SUPPORT EQUIPMENT

Item	Equipment	Brand Name	Model Name	Remarks
1	Laptop	Lenovo	V15 G4 IRU	/
2	USB to Serial Cable	/	/	/

I/O CABLES

Cable No	Port	Connector Type	Cable Type	Cable Length(m)	Remarks
1	AC	AC	Unshielded	2.0 m	/

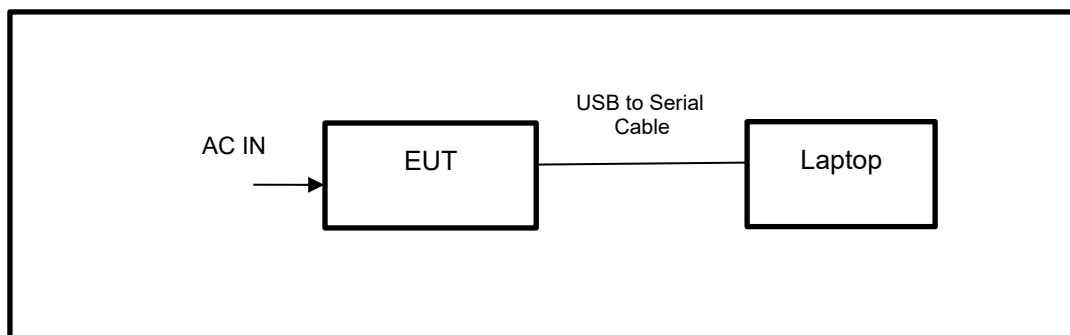
ACCESSORIES

Item	Accessory	Brand Name	Model Name	Description
/	/	/	/	/

TEST SETUP

The EUT can work in engineering mode with a software through a laptop.

SETUP DIAGRAM FOR TESTS



Note: The USB to Serial and laptop were removed for the Radiated Emission Test.

MEASURING EQUIPMENT AND SOFTWARE USED

ANTENNA PORT CONDUCTED TEST EQUIPMENT					
Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Due. Date
Signal Analyzer	R&S	FSV40	101517	Jul.15, 2024	Jul.15, 2025

9 kHz ~ 30 MHz RADIATED EMISSION TEST EQUIPMENT					
Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Due. Date
EMI Test Receiver	R&S	ESU26	100405	Jan.7, 2025	Jan.7, 2026
Teseq Loop Antenna	Teseq	HLA6121	49613	May.17, 2024	May.17, 2027
Software					
Description	Manufacturer	Name		Version	
For Radiated Emission Test	Toyo	Toyo EMI Software EP5/RE		V6.0.40	

30 MHz ~ 1 GHz RADIATED EMISSION TEST EQUIPMENT					
Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Due. Date
EMI Test Receiver	R&S	ESU26	100405	Jan.7, 2025	Jan.7, 2026
Bilog Antenna	Teseq	CBL6112B	2874	Dec.17, 2024	Dec.17, 2025
Pre-Amplifier	TDK	PA-02-9K1G	TRS-301-00008	May.17, 2025	May.17, 2026
Software					
Description	Manufacturer	Name		Version	
For Radiated Emission Test	Toyo	Toyo EMI Software EP5/RE		V6.0.40	

1 GHz ~ 6 GHz RADIATED EMISSION TEST EQUIPMENT					
Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Due. Date
EMI Test Receiver	R&S	ESU26	100405	Jan.7, 2025	Jan.7, 2026
Horn Antenna	EMCO	3115	9805-5466	Jun.25, 2024	Jun.25, 2026
Pre-Amplifier	Com-Power Corp.	PAM-6000	18030027	Jun.25, 2024	Jun.25, 2026
Software					
Description	Manufacturer	Name		Version	
For Radiated Emission Test	Toyo	Toyo EMI Software EP5/RE		V6.0.40	

6 GHz ~ 18 GHz RADIATED EMISSION TEST EQUIPMENT					
Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Due. Date
EMI Test Receiver	R&S	ESU26	100405	Jan.7, 2025	Jan.7, 2026
Horn Antenna	Schwarzbeck	BBHA 9120 C	9120C-381	Oct.22, 2024	Oct.22, 2025
Pre-Amplifier	Schwarzbeck	HAP06-18W	00000008	Oct.22, 2024	Oct.22, 2025
Software					
Description	Manufacturer	Name		Version	
For Radiated Emission Test	Toyo	Toyo EMI Software EP5/RE		V6.0.40	

18 GHz ~ 26 GHz RADIATED EMISSION TEST EQUIPMENT					
Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Due. Date
EMI Test Receiver	R&S	ESU26	100405	Jan.7, 2025	Jan.7, 2026
Horn Antenna	Schwarzbeck	BBHA9170	00885	Jan.24, 2025	Jan.24, 2026
Pre-Amplifier	Schwarzbeck	EMCI	EMC184045SE	Jan.16, 2025	Jan.16, 2026
Software					
Description	Manufacturer	Name		Version	
For Radiated Emission Test	Toyo	Toyo EMI Software EP5/RE		V6.0.40	

CONDUCTED EMISSION TEST EQUIPMENT					
Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Due. Date
R&S EMI RECEIVER	R&S	ESR7	102294	Jun.12, 2024	Jun.12, 2025
Line Impedance Stabilising NetWork (LISN)	SCHAFFNER	NNB 41	04/10069	Oct.17, 2024	Oct.17, 2025
Software					
Description	Manufacturer	Name		Version	
For Conducted Emission Test	Toyo	Toyo EMI Software EP7/CE		V8.0.50	

EXTERNAL EUT PHOTOGRAPHS

Refer to Appendix I “PH Series Wireless Charger Transmitter External Photographs”.

INTERNAL EUT PHOTOGRAPHS

Refer to Appendix II “PH Series Wireless Charger Transmitter Internal Photographs”.

TEST SETUP PHOTOGRAPHS

Refer to Appendix V “PH Series Wireless Charger RF Exposure Test Setup Photographs”.

DEVIATION FROM TEST METHOD

No deviation from standard test method

MODIFICATION OF EUT FOR COMPLIANCE

No modifications were made to the EUT

DECISION RULES AND MEASUREMENT UNCERTAINTY

METROLOGICAL TRACEABILITY

The measuring equipment utilized to perform the tests documented in this report has been calibrated in accordance with the manufacturer's recommendations and is traceable to recognize national standards.

DECISION RULE

The decision rule is based on simple acceptance in accordance with ISO Guide 98-4: 2012 Clause 8.2. (Measurement uncertainty is not taken into account when stating conformity with a specified requirement.)

MEASUREMENT UNCERTAINTY

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the apparatus:

Test Item	Measurement Frequency Range	K	U
Conduction Emission	150 kHz ~ 30 MHz	2	3.32dB
Radiated Emission	9 kHz ~ 30 MHz	2	2.24dB
	30 MHz ~ 1 GHz	2	4.19dB
	1 GHz ~ 6 GHz	2	5.05dB
	6 GHz ~ 18 GHz	2	5.23dB
	18 GHz ~ 40 GHz	2	5.31dB
DTS and 99% Occupied Bandwidth	/	2	±1.17%
Conducted Output Power	/	2	±1.15dB
Power Spectral Density Level	/	2	±1.21dB
Conducted Band-edge and Unwanted Emissions	9 kHz ~ 1 GHz	2	±0.80dB
	1 GHz ~ 26 GHz	2	±2.42dB

Note: This uncertainty represents an expanded uncertainty expressed at approximately the 95 % confidence level using a coverage factor of k=2.

ANTENNA PORT TEST RESULTS

6 DB DTS BANDWIDTH AND 99 % OCCUPIED BANDWIDTH

LIMITS

CFR 47FCC Part15 (15.247) Subpart C ISED RSS-247 ISSUE 4			
Section	Test Item	Limit	Frequency Range (MHz)
CFR 47 FCC 15.247(a)(2)	6 dB Bandwidth	≥ 500 kHz	2400-2483.5
ISED RSS-Gen Clause 6.7	99 % Occupied Bandwidth	None; for reporting purposes only.	2400-2483.5

TEST PROCEDURE

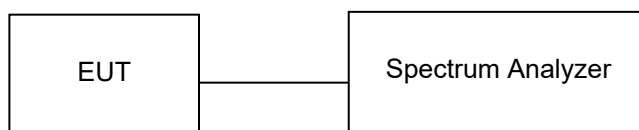
Refer to ANSI C63.10-2020 clause 11.8 for DTS bandwidth and clause 6.9 for Occupied Bandwidth. Connect the EUT to the spectrum analyzer and use the following settings:

Center Frequency	The center frequency of the channel under test
Frequency Span	For 6dB Bandwidth: Enough to capture all products of the modulation carrier emission For 99% Occupied Bandwidth: Between 1.5 times and 5.0 times the OBW
Detector	Peak
RBW	For 6dB Bandwidth: 1 % to 5 % of the occupied bandwidth but no less than 100 kHz For 99% Occupied Bandwidth: 1 % to 5 % of the occupied bandwidth
VBW	For 6dB Bandwidth: $\geq 3 \times$ RBW For 99% Occupied Bandwidth: $\geq 3 \times$ RBW
Trace	Max hold
Sweep	Auto couple

a) Use the 99 % power bandwidth function of the instrument, allow the trace to stabilize and report the measured bandwidth.

b) Allow the trace to stabilize and measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission.

TEST SETUP



TEST ENVIRONMENT

Temperature	22 °C	Relative Humidity	51%
Atmosphere Pressure	101 kPa	Test Voltage	AC 120 V/60 Hz

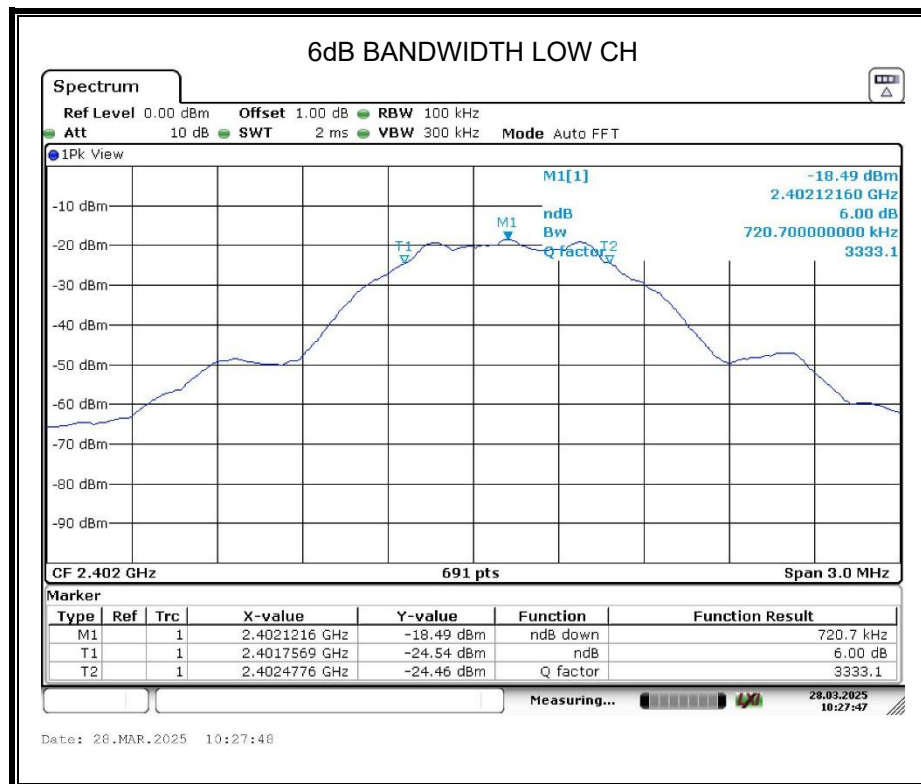
TEST DATE / ENGINEER

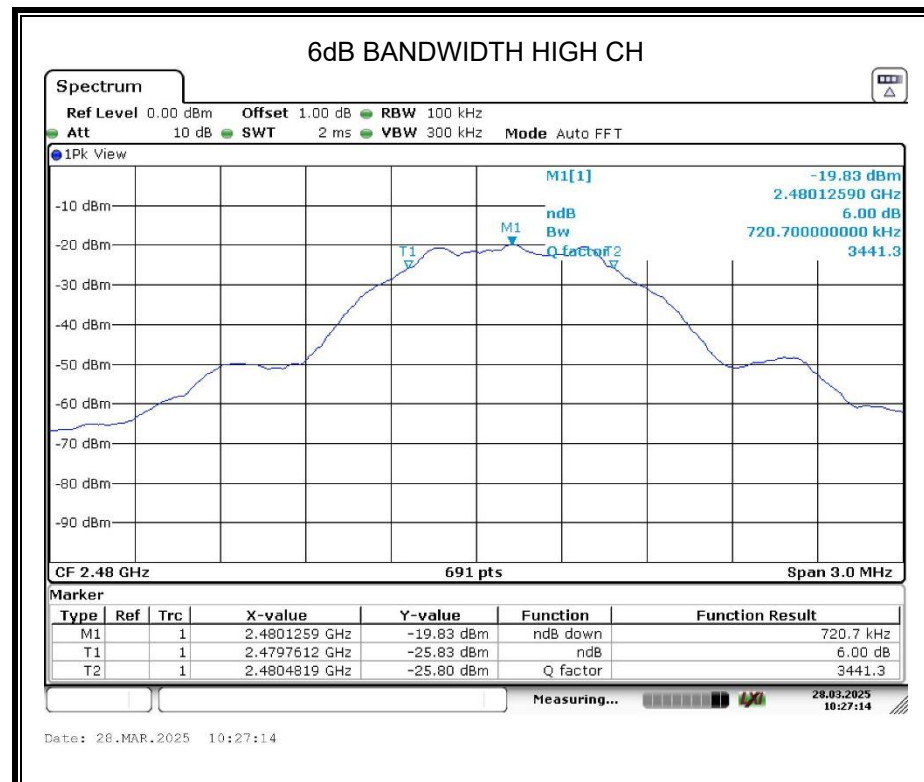
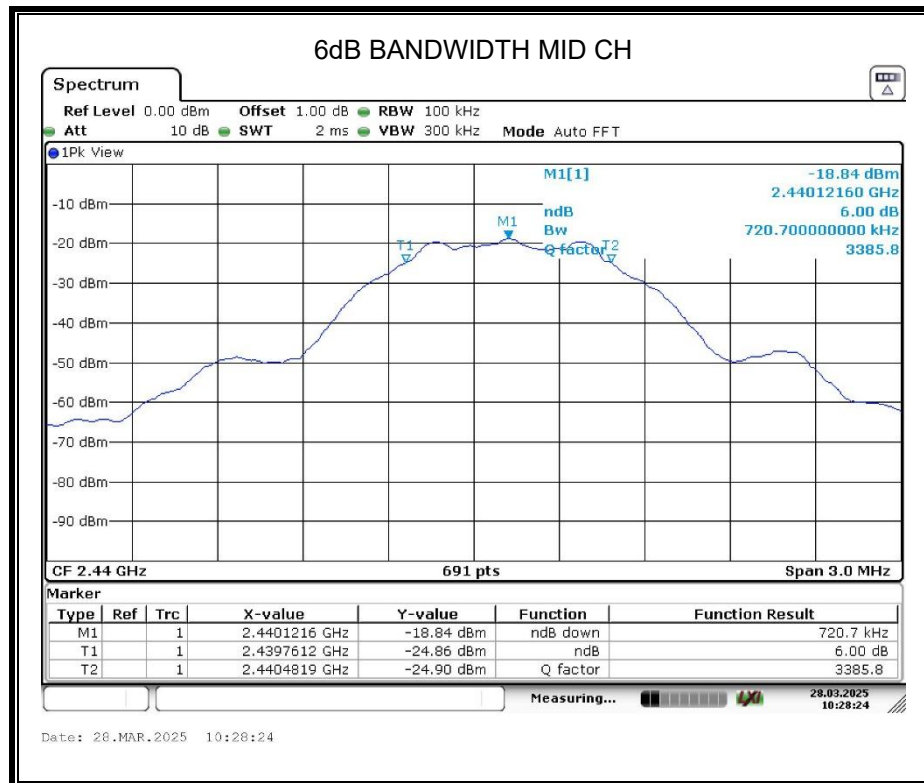
Test Date	March 28, 2025	Test By	Denny Huang
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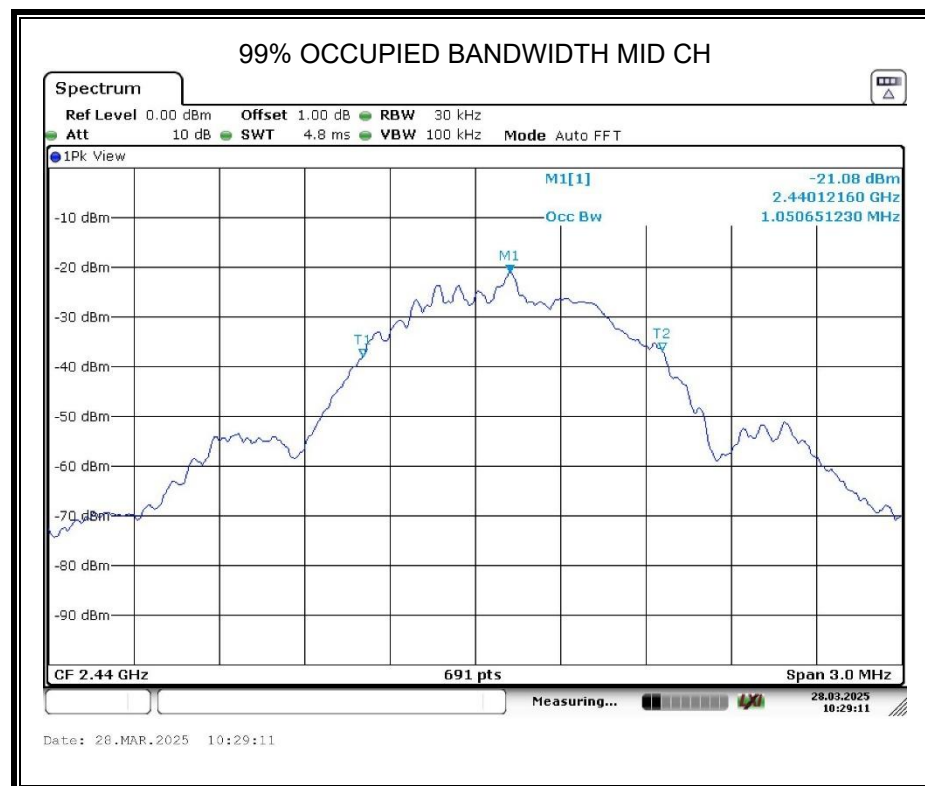
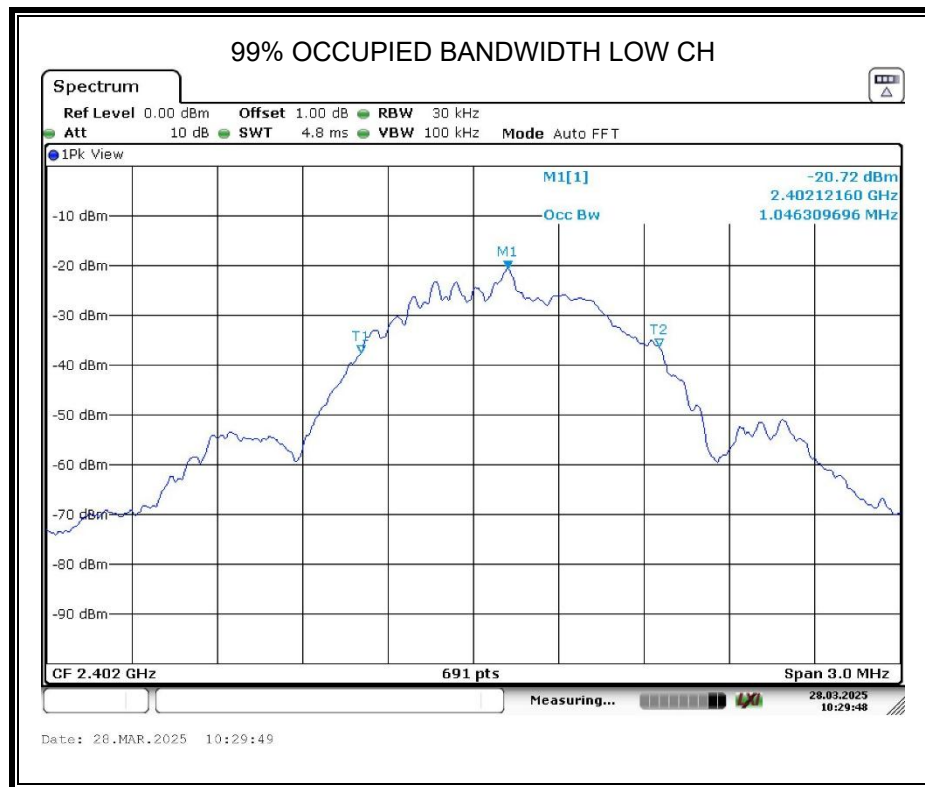
RESULTS

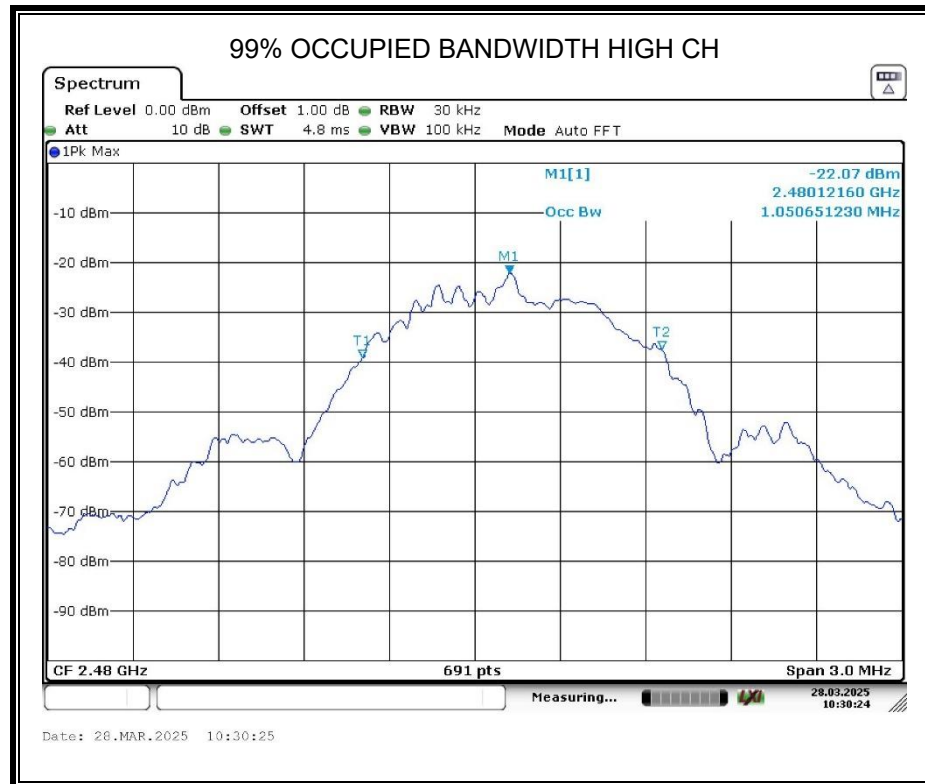
LE 1M MODE

Channel	6 dB bandwidth (MHz)	99 % bandwidth (MHz)	Limit (kHz)	Result
Low	0.7207	1.0463	500	Pass
Middle	0.7207	1.0507	500	Pass
High	0.7207	1.0507	500	Pass









CONDUCTED OUTPUT POWER

LIMITS

CFR 47 FCC Part15 (15.247) Subpart C ISED RSS-247 ISSUE 4			
Section	Test Item	Limit	Frequency Range (MHz)
CFR 47 FCC 15.247(b)(3) ISED RSS-247 5.4 (d)	Conducted Output Power	1 watt or 30 dBm	2400-2483.5

TEST PROCEDURE

Refer to ANSI C63.10-2020 clause 11.9.

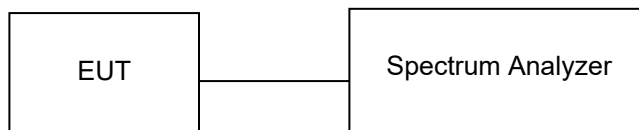
Connect the EUT to the spectrum analyzer and use the following settings:

Center Frequency	The center frequency of the channel under test
Frequency Span	$\geq 3 \times \text{RBW}$
Detector	Peak
RBW	$\geq \text{DTS bandwidth}$
VBW	$\geq 3 \times \text{RBW}$
Trace	Max hold
Sweep	Auto couple

Allow trace to fully stabilize and use the marker-to-peak function to set the marker to the peak of the emission.

The indicated level is the peak conducted output power, after any corrections for external attenuators and cables.

TEST SETUP



TEST ENVIRONMENT

Temperature	22 °C	Relative Humidity	51%
Atmosphere Pressure	101 kPa	Test Voltage	AC 120 V/60 Hz

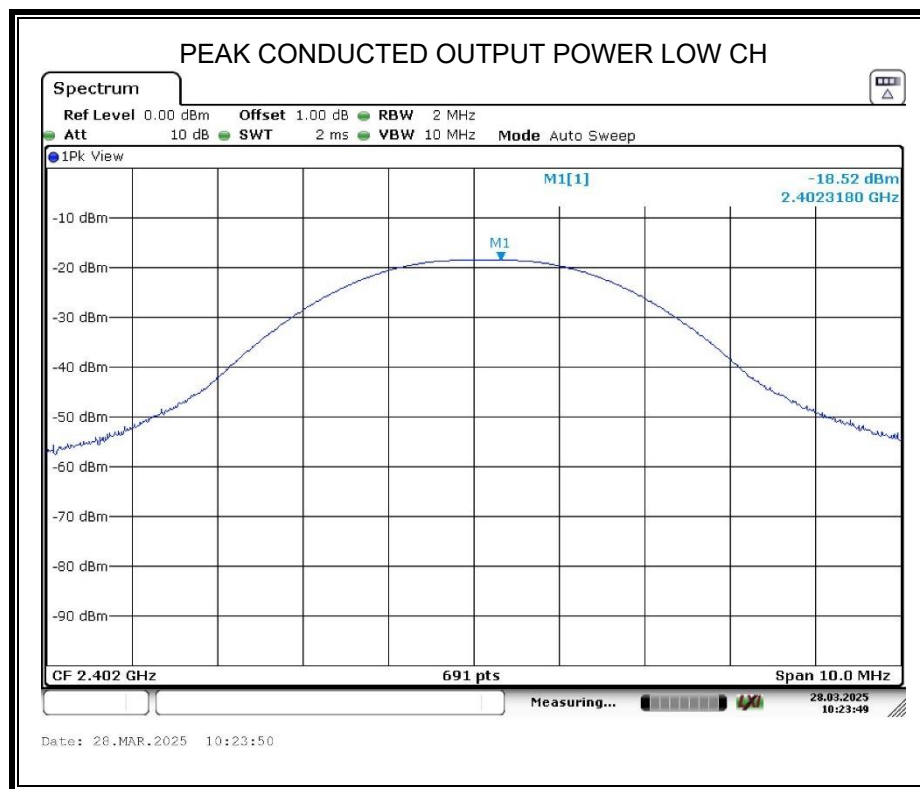
TEST DATE / ENGINEER

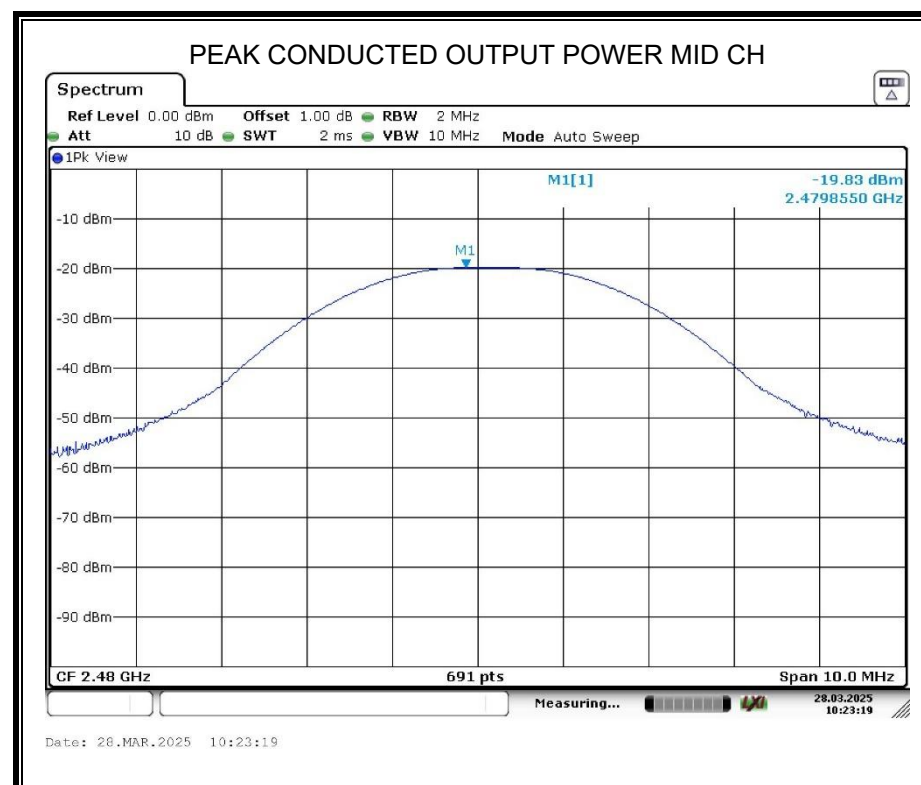
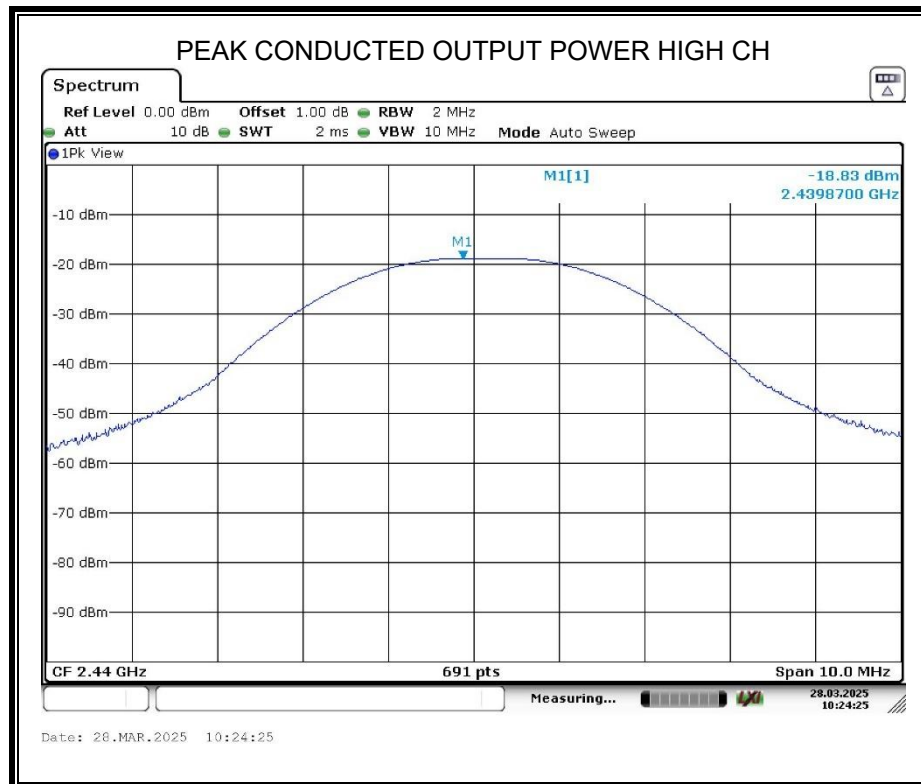
Test Date	March 28, 2025	Test By	Denny Huang
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RESULTS

LE 1M MODE

Channel	Frequency	Maximum Peak Conducted Output Power	Limit	Result
	(MHz)	(dBm)	(dBm)	
Low	2402	-18.52	30	Pass
Middle	2440	-18.83	30	Pass
High	2480	-19.83	30	Pass





POWER SPECTRAL DENSITY

LIMITS

CFR 47 FCC Part15 (15.247) Subpart C ISED RSS-247 ISSUE 4			
Section	Test Item	Limit	Frequency Range (MHz)
CFR 47 FCC §15.247 (e) ISED RSS-247 5.2 (b)	Power Spectral Density	8 dBm in any 3 kHz band	2400-2483.5

TEST PROCEDURE

Refer to ANSI C63.10-2020 clause 11.10.

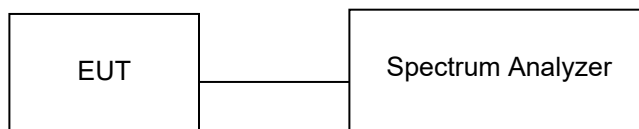
Connect the EUT to the spectrum analyzer and use the following settings:

Center Frequency	The center frequency of the channel under test
Detector	Peak
RBW	$3 \text{ kHz} \leq \text{RBW} \leq 100 \text{ kHz}$
VBW	$\geq 3 \times \text{RBW}$
Span	1.5 x DTS bandwidth
Trace	Max hold
Sweep time	Auto couple

Allow trace to fully stabilize and use the peak marker function to determine the maximum amplitude level within the RBW.

If measured value exceeds limit, reduce RBW (no less than 3 kHz) and repeat.

TEST SETUP



TEST ENVIRONMENT

Temperature	22 °C	Relative Humidity	51%
Atmosphere Pressure	101 kPa	Test Voltage	AC 120 V/60 Hz

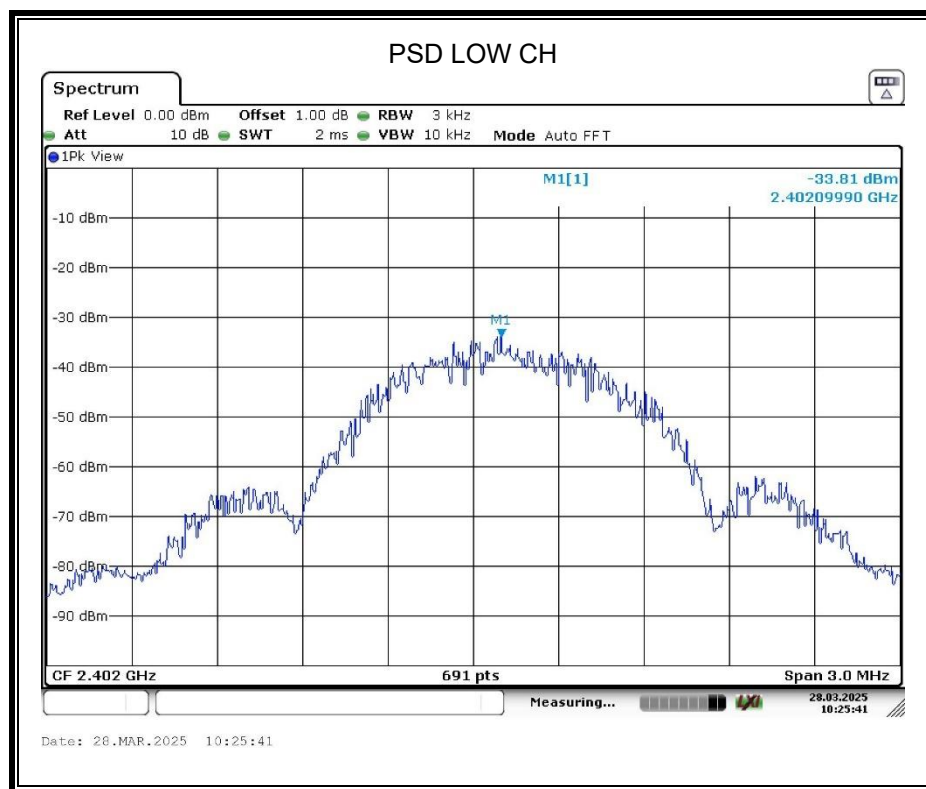
TEST DATE / ENGINEER

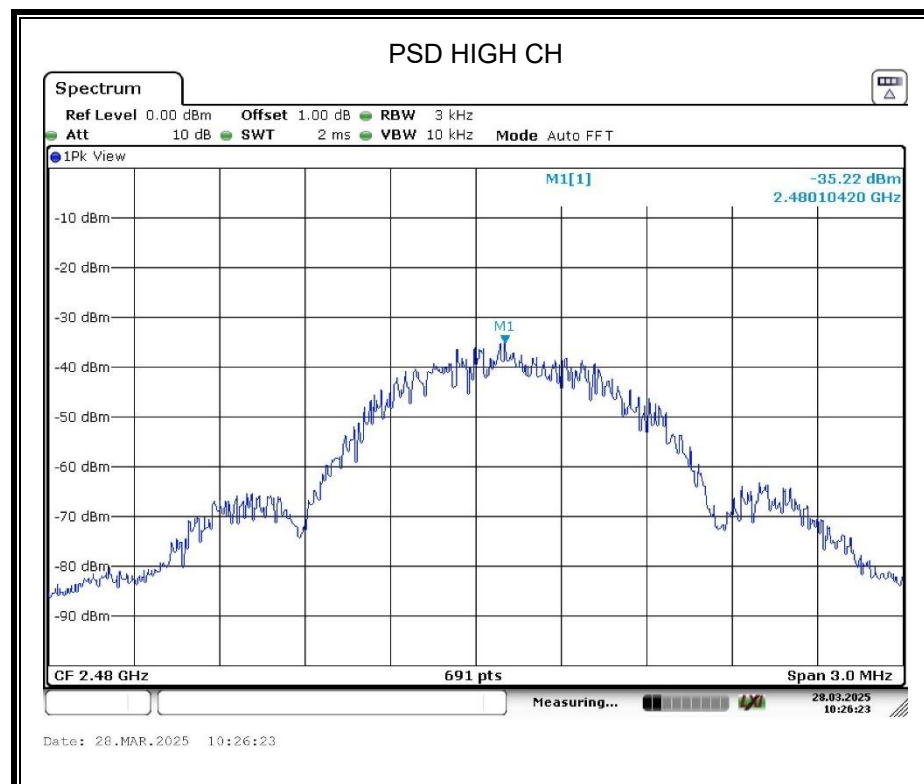
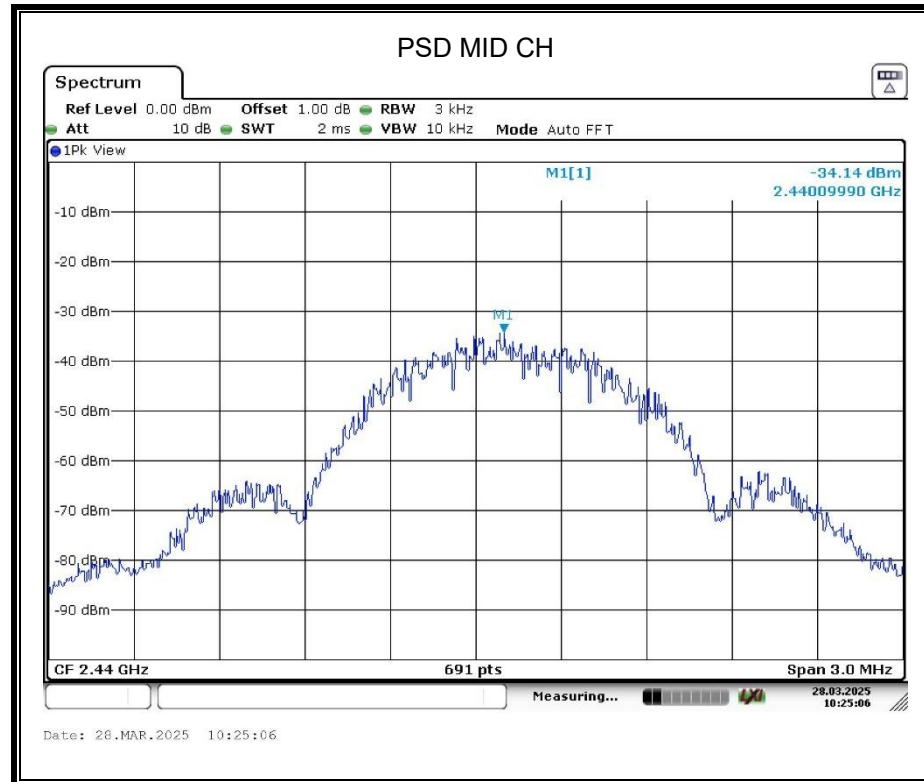
Test Date	March 28, 2025	Test By	Denny Huang
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RESULTS

LE 1M MODE

Test Channel	Power Spectral Density (dBm/3kHz)	Limit (dBm/3kHz)	Result
Low	-33.81	8	PASS
Middle	-34.14	8	PASS
High	-35.22	8	PASS





CONDUCTED BANDEDGE AND SPURIOUS EMISSIONS

LIMITS

CFR 47 FCC Part15 (15.247) Subpart C ISED RSS-247 ISSUE 4		
Section	Test Item	Limit
CFR 47 FCC §15.247 (d) ISED RSS-247 5.5	Conducted Bandedge and Spurious Emissions	at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power

TEST PROCEDURE

Refer to ANSI C63.10-2020 clause 11.11 and 11.13.

Connect the EUT to the spectrum analyzer and use the following settings for reference level measurement:

Center Frequency	The center frequency of the channel under test
Detector	Peak
RBW	100 kHz
VBW	$\geq 3 \times \text{RBW}$
Span	1.5 x DTS bandwidth
Trace	Max hold
Sweep time	Auto couple.

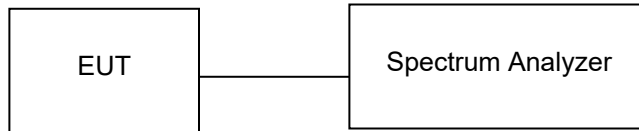
Allow trace to fully stabilize and use the peak marker function to determine the maximum PSD level.

Change the settings for emission level measurement:

Span	Set the center frequency and span to encompass frequency range to be measured
Detector	Peak
RBW	100 kHz
VBW	$\geq 3 \times \text{RBW}$
measurement points	$\geq \text{span}/\text{RBW}$
Trace	Max hold
Sweep time	Auto couple.

Allow trace to fully stabilize and use the peak marker function to determine the maximum PSD level. Ensure that the amplitude of all unwanted emissions outside of the authorized frequency band (excluding restricted frequency bands) is attenuated by at least the minimum requirements specified in 11.11.

TEST SETUP



TEST ENVIRONMENT

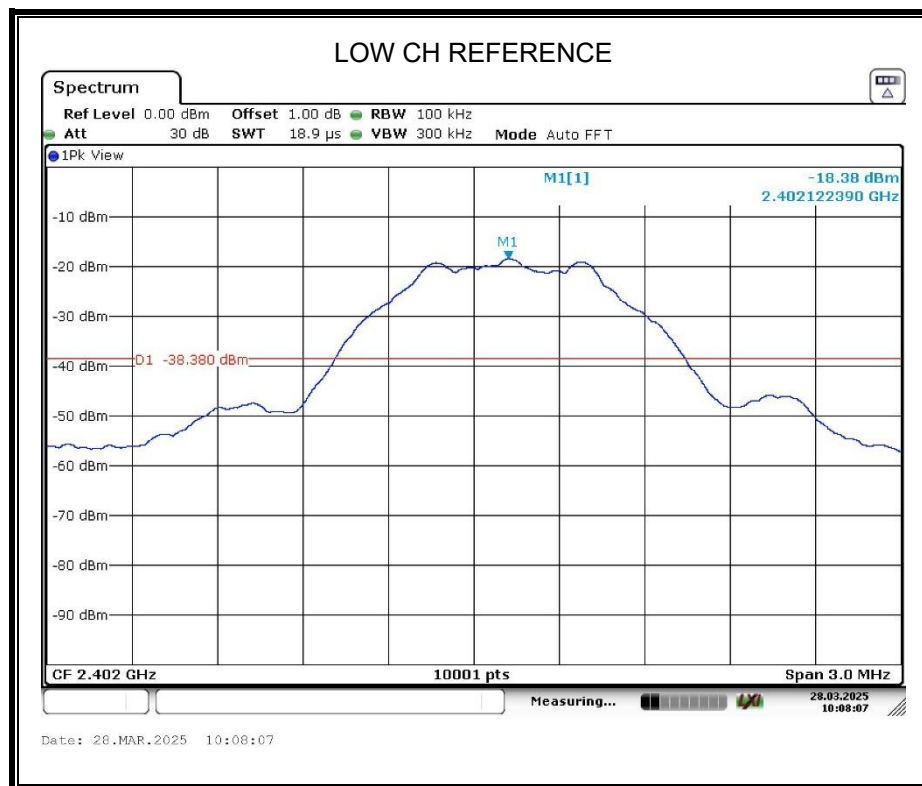
Temperature	22 °C	Relative Humidity	51%
Atmosphere Pressure	101 kPa	Test Voltage	AC 120 V/60 Hz

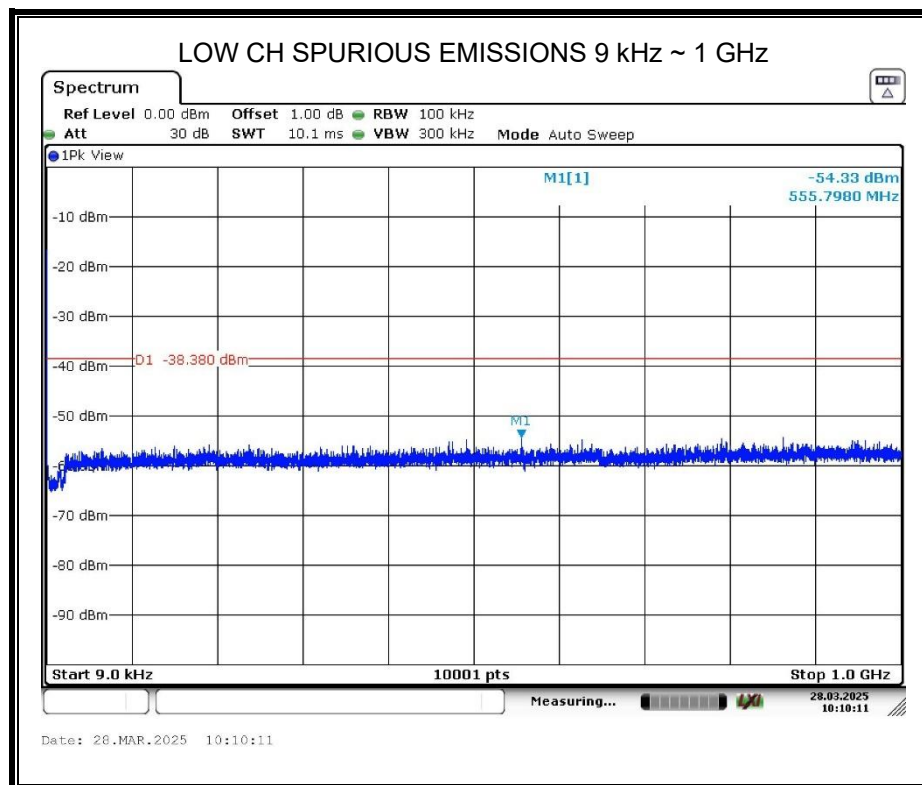
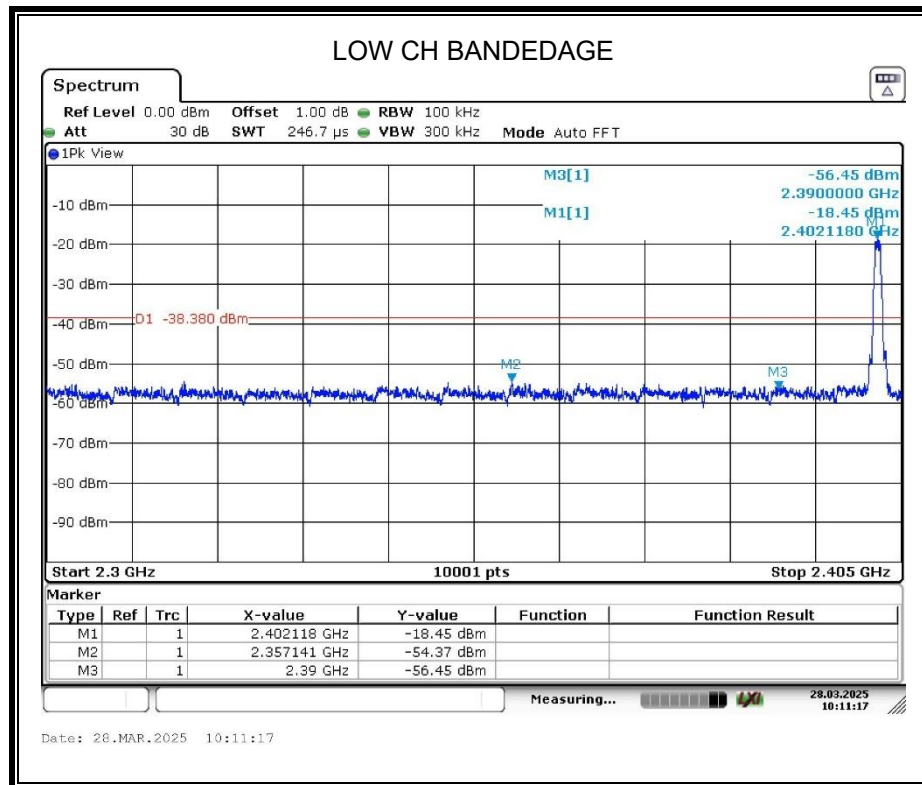
TEST DATE / ENGINEER

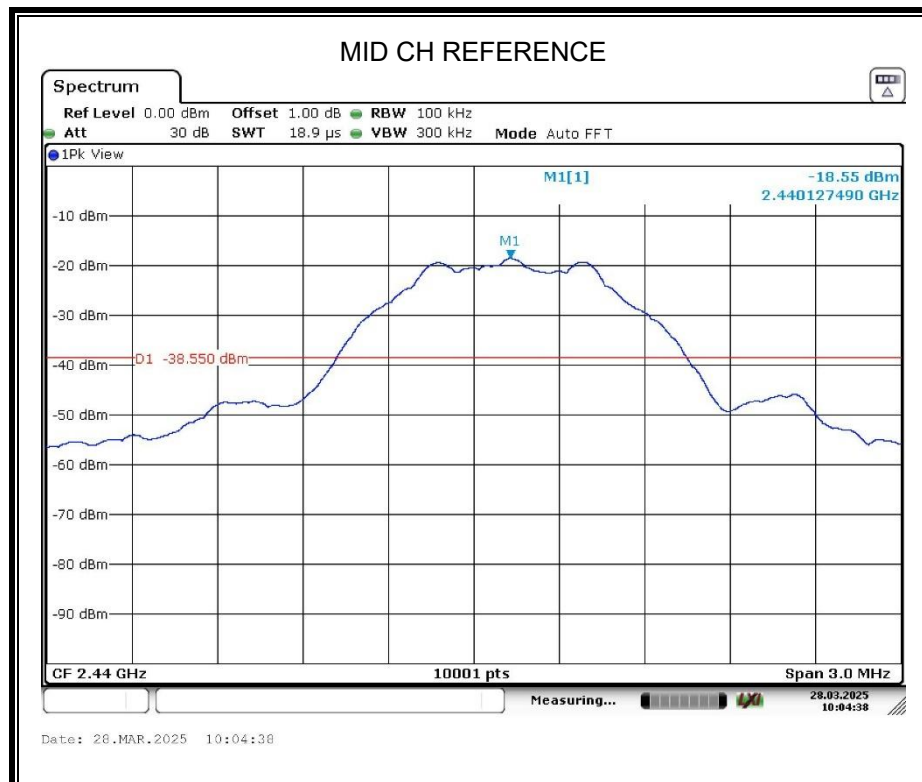
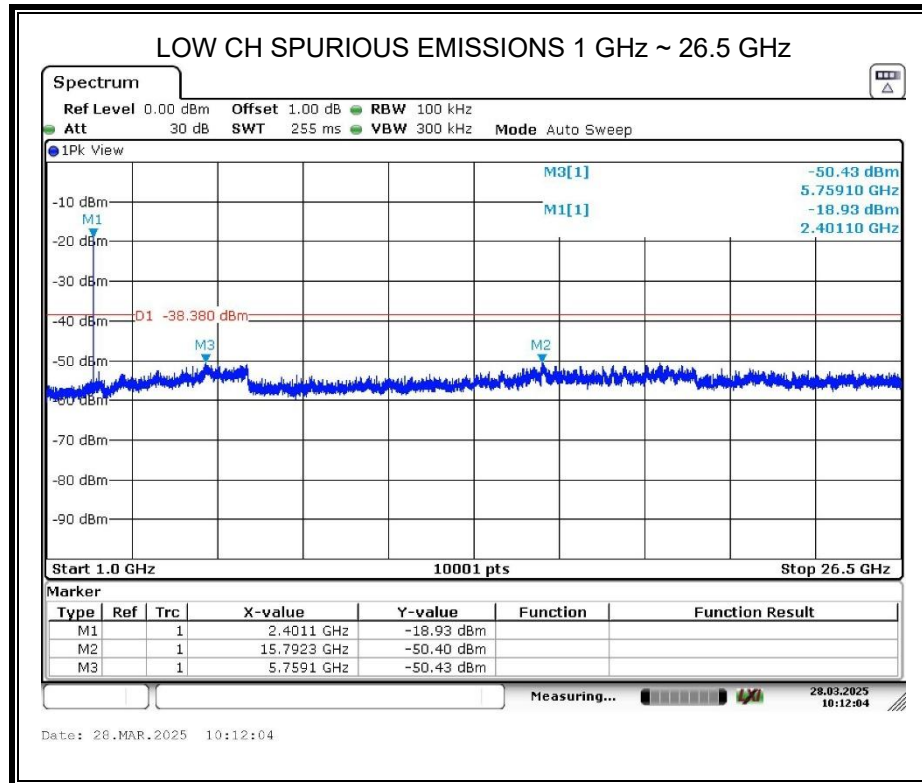
Test Date	March 28, 2025	Test By	Denny Huang
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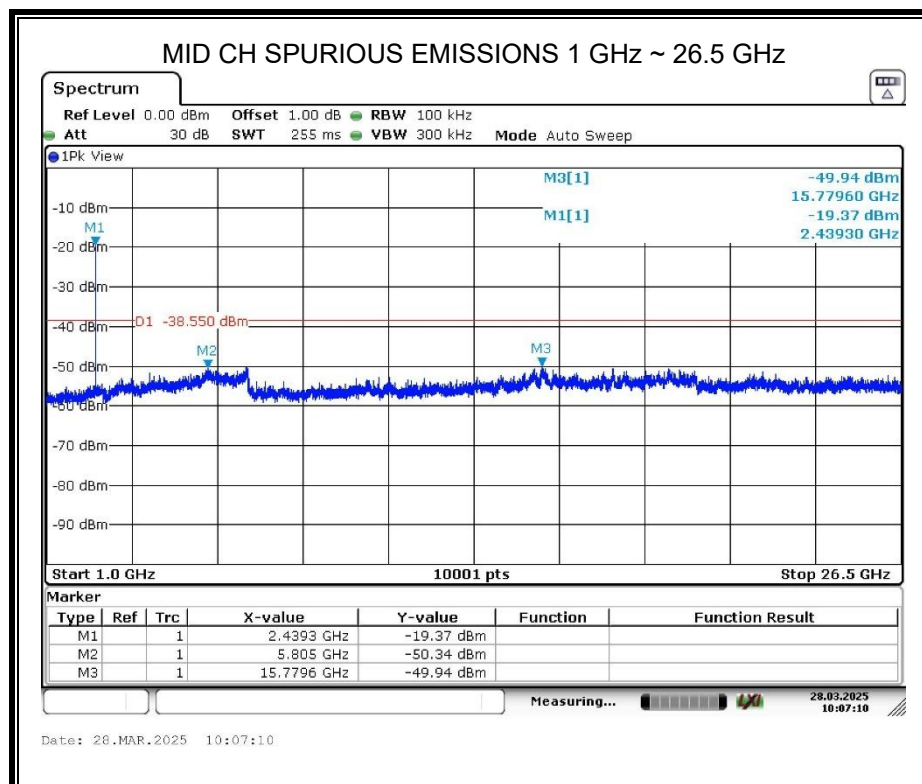
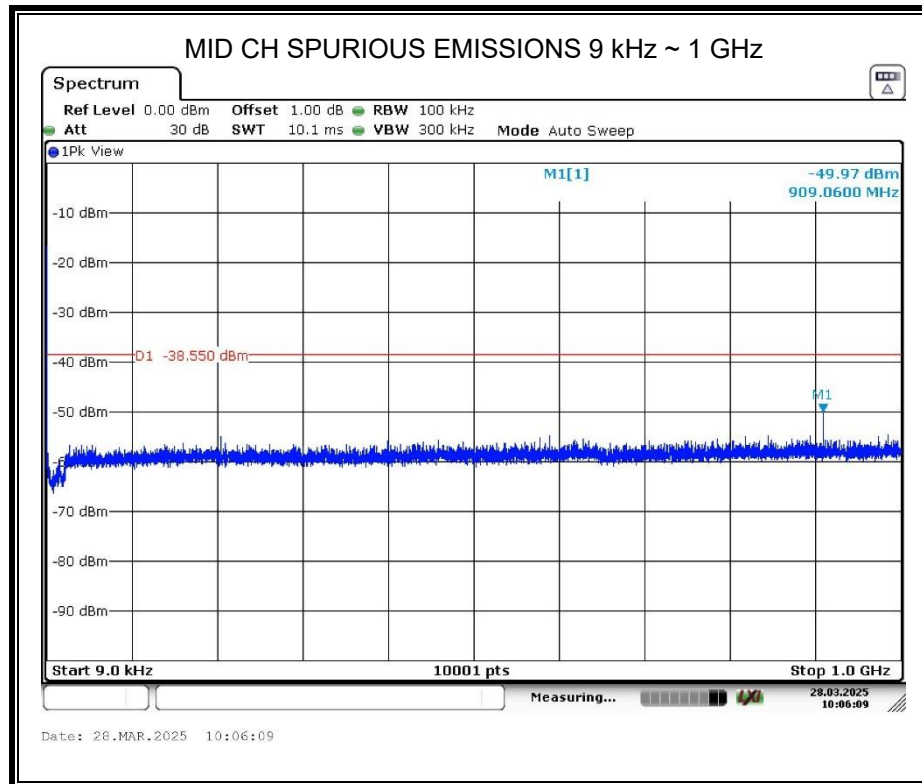
RESULTS

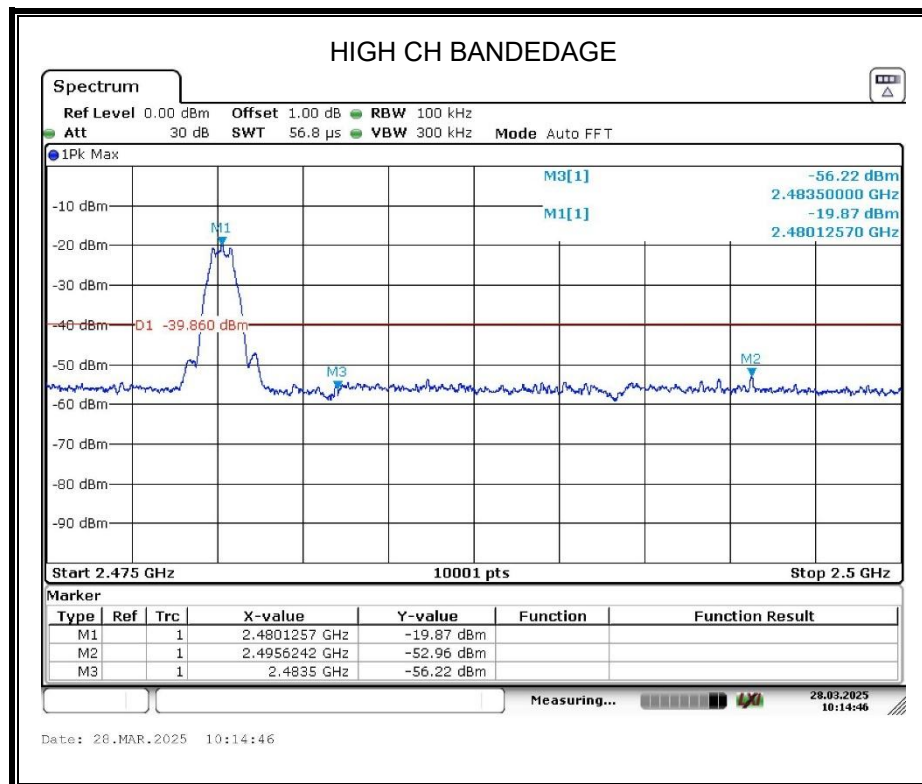
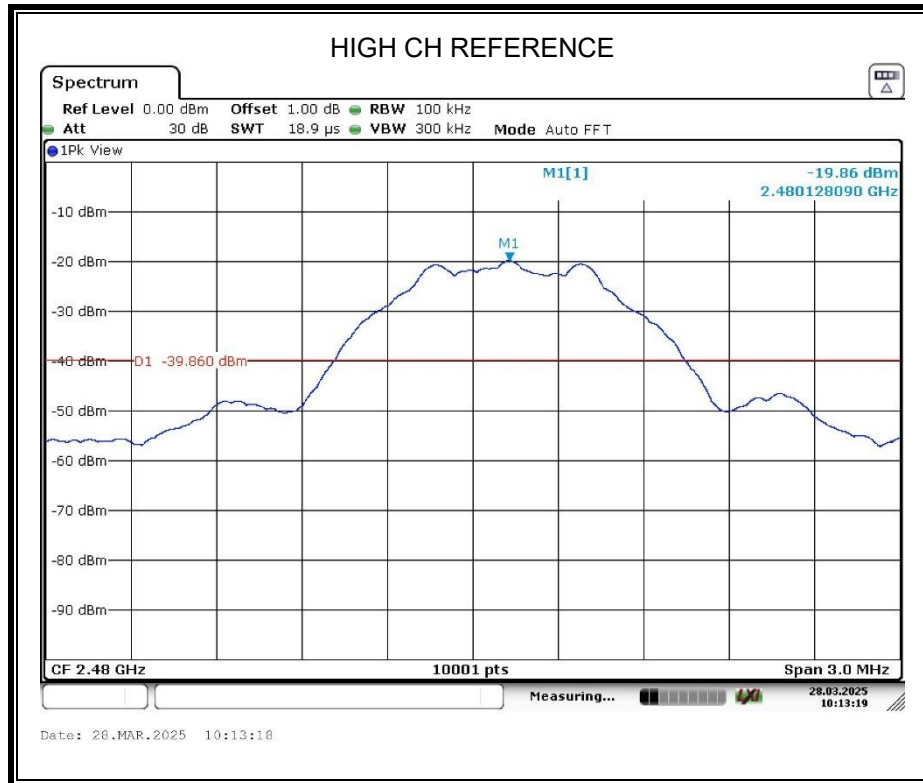
LE 1M MODE

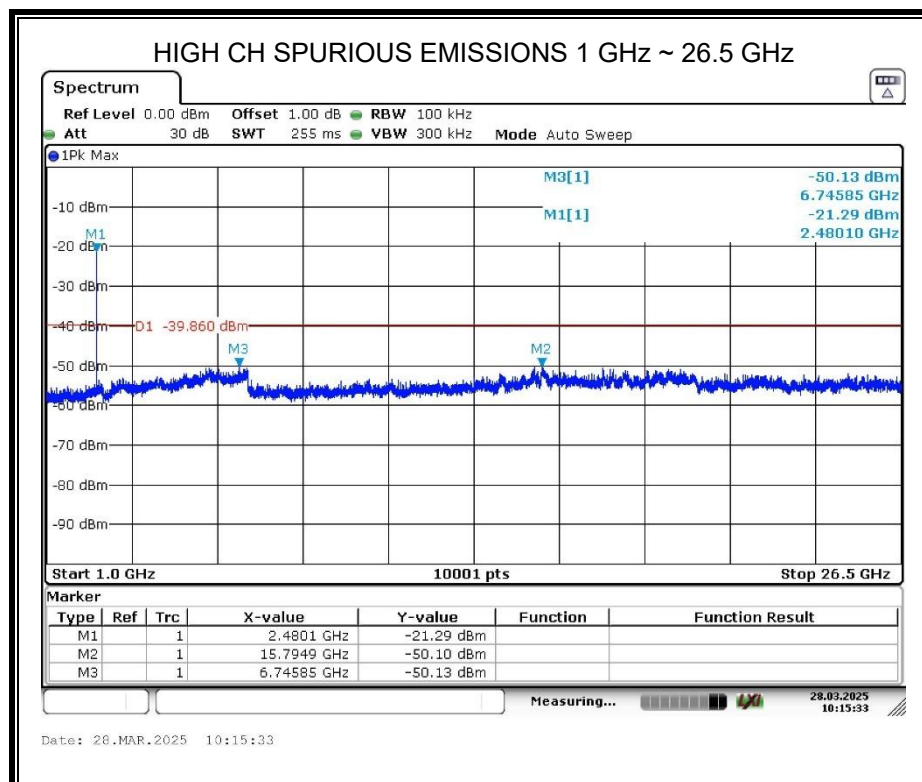
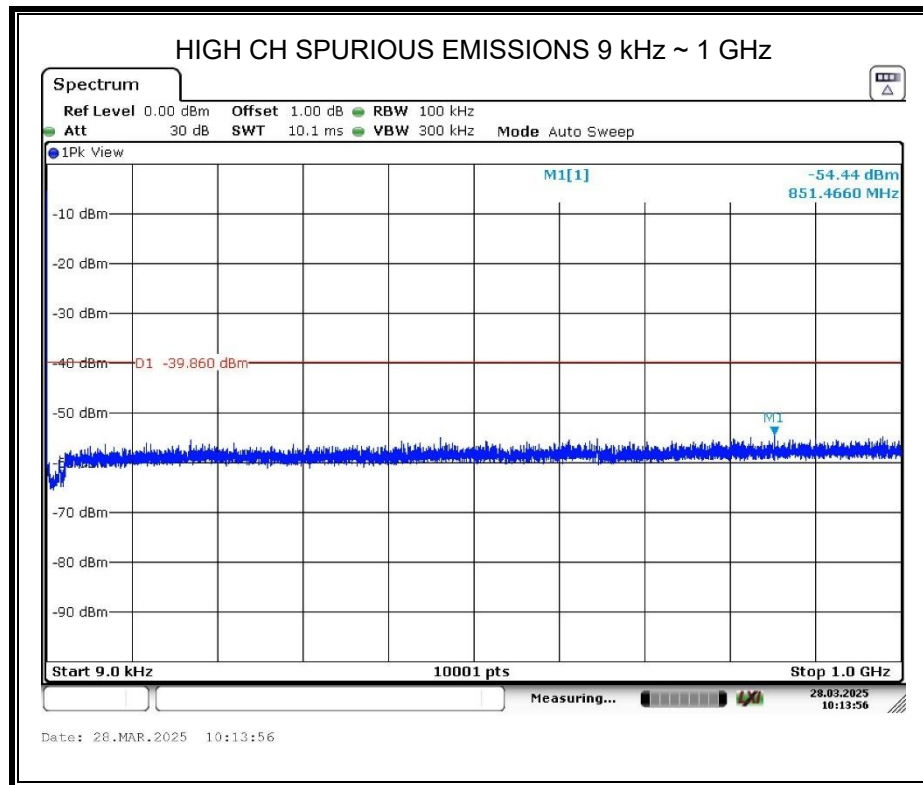












RADIATED TEST RESULTS

LIMITS

Please refer to CFR 47 FCC §15.205 and §15.209, ISSED RSS-GEN Clause 8.9 and Clause 8.10.

Radiation Disturbance Test Limit

Emissions radiated outside of the specified frequency bands above 30 MHz			
Frequency Range (MHz)	Field Strength Limit	Field Strength Limit	
	(dBuV/m) at 10 m	(dBuV/m) at 3 m	
	Quasi-Peak	Peak	Average
30 - 88	39.08	/	
88 - 216	43.52	/	
216 - 960	46.44	/	
Above 960	49.54	/	
Above 1000	/	74	54

FCC Emissions radiated outside of the specified frequency bands below 30 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

FCC Restricted bands of operation refer to FCC §15.205 (a):

MHz	MHz	MHz	GHz
0.090-0.110	16.42-16.423	399.9-410	4.5-5.15
¹ 0.495-0.505	16.69475-16.69525	608-614	5.35-5.46
2.1735-2.1905	16.80425-16.80475	960-1240	7.25-7.75
4.125-4.128	25.5-25.67	1300-1427	8.025-8.5
4.17725-4.17775	37.5-38.25	1435-1626.5	9.0-9.2
4.20725-4.20775	73-74.6	1645.5-1646.5	9.3-9.5
6.215-6.218	74.8-75.2	1660-1710	10.6-12.7
6.26775-6.26825	108-121.94	1718.8-1722.2	13.25-13.4
6.31175-6.31225	123-138	2200-2300	14.47-14.5
8.291-8.294	149.9-150.05	2310-2390	15.35-16.2
8.362-8.366	156.52475-156.52525	2483.5-2500	17.7-21.4
8.37625-8.38675	156.7-156.9	2690-2900	22.01-23.12
8.41425-8.41475	162.0125-167.17	3260-3267	23.6-24.0
12.29-12.293	167.72-173.2	3332-3339	31.2-31.8
12.51975-12.52025	240-285	3345.8-3358	36.43-36.5
12.57675-12.57725	322-335.4	3600-4400	(²)
13.36-13.41			

Note: ¹Until February 1, 1999, this restricted band shall be 0.490-0.510 MHz.

²Above 38.6c

ISED General field strength limits at frequencies below 30 MHz

Table 6 – General field strength limits at frequencies below 30 MHz		
Frequency	Magnetic field strength (H-Field) (µA/m)	Measurement distance (m)
9 - 490 kHz ^{Note 1}	6.37/F (F in kHz)	300
490 - 1705 kHz	63.7/F (F in kHz)	30
1.705 - 30 MHz	0.08	30

Note 1: The emission limits for the ranges 9-90 kHz and 110-490 kHz are based on measurements employing a linear average detector.

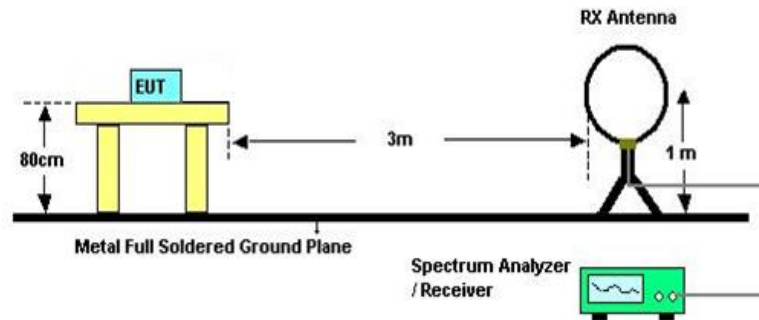
ISED Restricted bands please refer to ISED RSS-GEN Clause 8.10

Table 7 – Restricted frequency bands ^{Note 1}		
MHz	MHz	GHz
0.090 - 0.110	149.9 - 150.05	9.0 - 9.2
0.495 - 0.505	156.52475 - 156.52525	9.3 - 9.5
2.1735 - 2.1905	156.7 - 156.9	10.6 - 12.7
3.020 - 3.028	162.0125 - 167.17	13.25 - 13.4
4.125 - 4.128	167.72 - 173.2	14.47 - 14.5
4.17725 - 4.17775	240 - 285	15.35 - 16.2
4.20725 - 4.20775	322 - 335.4	17.7 - 21.4
5.677 - 5.683	399.9 - 410	22.01 - 23.12
6.215 - 6.218	608 - 614	23.6 - 24.0
6.26775 - 6.26825	960 - 1427	31.2 - 31.8
6.31175 - 6.31225	1435 - 1626.5	36.43 - 36.5
8.291 - 8.294	1645.5 - 1646.5	Above 38.6
8.362 - 8.366	1660 - 1710	
8.37625 - 8.38675	1718.8 - 1722.2	
8.41425 - 8.41475	2200 - 2300	
12.29 - 12.293	2310 - 2390	
12.51975 - 12.52025	2483.5 - 2500	
12.57675 - 12.57725	2655 - 2900	
13.36 - 13.41	3260 - 3267	
16.42 - 16.423	3332 - 3339	
16.69475 - 16.69525	3345.8 - 3358	
16.80425 - 16.80475	3500 - 4400	
25.5 - 25.67	4500 - 5150	
37.5 - 38.25	5350 - 5480	
73 - 74.6	7250 - 7750	
74.8 - 75.2	8025 - 8500	
108 - 138		

Note 1: Certain frequency bands listed in table 7 and in bands above 38.6 GHz are designated for licence-exempt applications. These frequency bands and the requirements that apply to related devices are set out in the 200 and 300 series of RSSs.

TEST SETUP AND PROCEDURE

Below 30 MHz

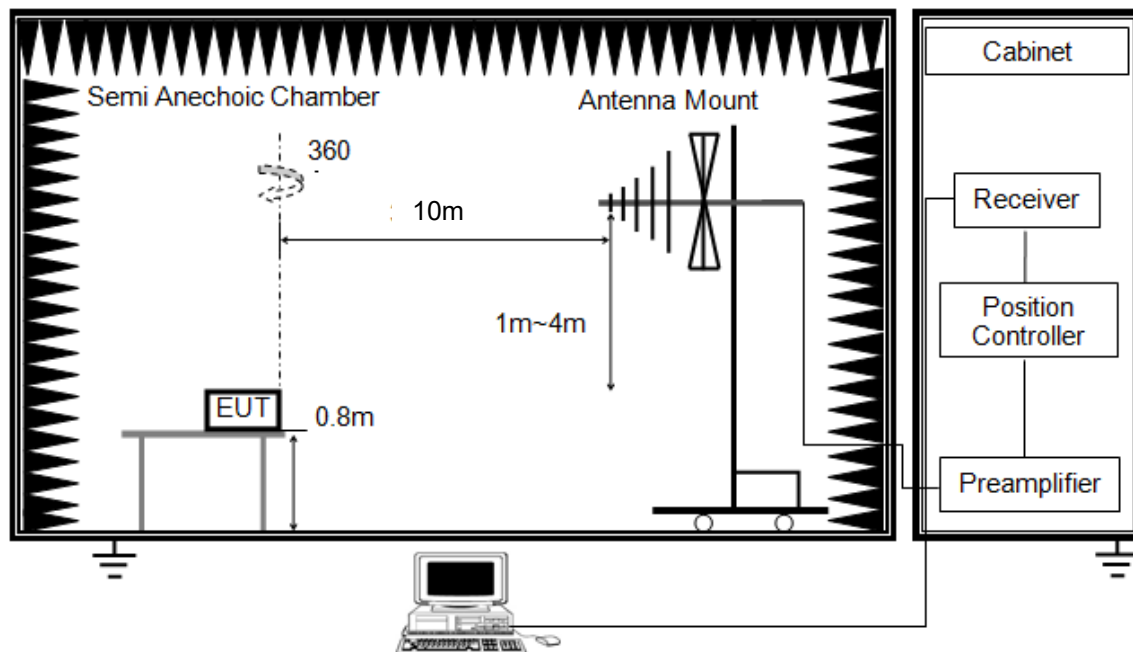


The setting of the spectrum analyzer

RBW	200 Hz (From 9 kHz to 0.15 MHz) / 9 kHz (From 0.15 MHz to 30 MHz)
VBW	600 Hz (From 0.9 kHz to 0.15 MHz) / 30 kHz (From 0.15 MHz to 30 MHz)
Sweep	Auto
Trace	Max hold

1. The testing follows the guidelines in ANSI C63.10-2020 clause 11.11.
2. The EUT was arranged to its worst case and then turntable (from 0 degrees to 360 degrees) to find the maximum reading. A pre-amp and a high pass filter are used for the test in order to get better signal level. Both Horizontal, Face-on and Face-off polarizations of the antenna are set to make the measurement.
3. The EUT was placed on a turntable 80 cm above ground.
4. The EUT was set 3 meters from the interference receiving antenna, which was mounted on the top of a 1 m height antenna tower.
5. The radiated emission limits are based on measurements employing a CISPR quasi-peak detector except for the frequency bands 9-90 kHz, 110-490 kHz and above 1000 MHz. Radiated emission limits in these three bands are based on measurements employing an average detector.
6. The initial step in collecting conducted emission data is a spectrum analyzer peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak and average detector mode re-measured. If the emission level of the EUT measured by the peak detector is 3 dB lower than the applicable limit, the peak emission level will be reported. Otherwise, the emission measurement will be repeated using the quasi-peak and average detector and reported.
7. Although these tests were performed other than the open field site, adequate comparison measurements were confirmed against 30 m open field site. Therefore, sufficient tests were made to demonstrate that the alternative site produces results that correlate with the ones of tests made in an open field site based on KDB 414788.
8. The limits in CFR 47, Part 15, Subpart C, paragraph 15.209 (a), are identical to those in RSS-GEN Section 8.9, Table 6, since the measurements are performed in terms of magnetic field strength and converted to electric field strength levels (as reported in the table) using the free space impedance of 377 Ω . For example, the measurement frequency X kHz resulted in a level of Y dBuV/m, which is equivalent to $Y-51.5 = Z$ dBuA/m, which has the same margin, W dB, to the corresponding RSS-GEN Table 6 limit as it has to be 15.209(a) limit.

Below 1 GHz and above 30 MHz

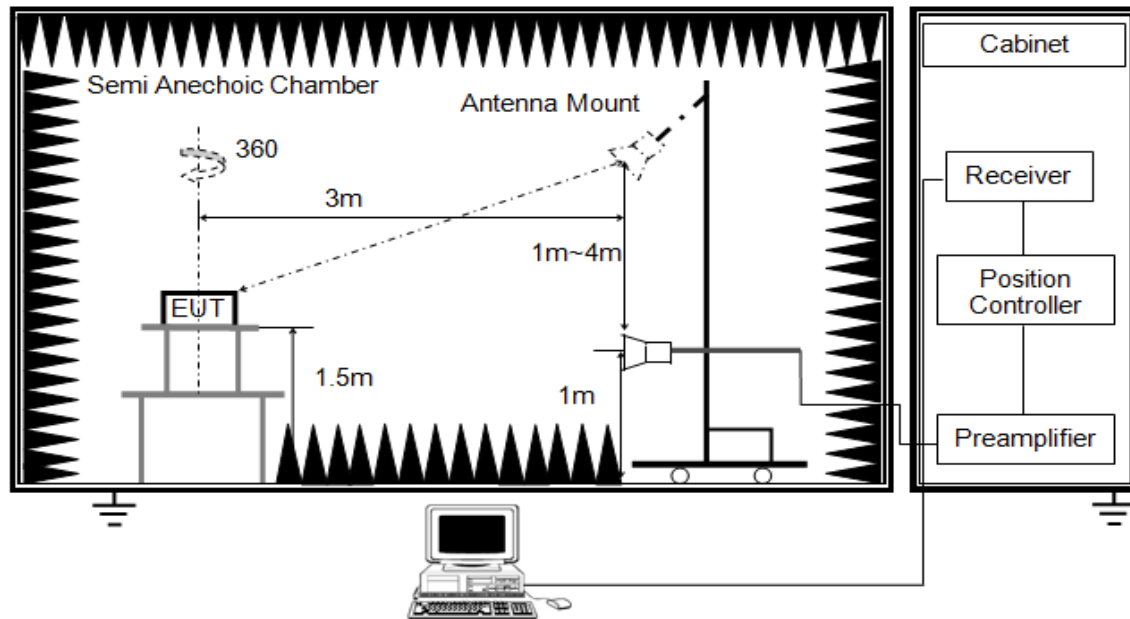


The setting of the spectrum analyzer

RBW	120 kHz
VBW	300 kHz
Sweep	Auto
Detector	Peak/QP
Trace	Max hold

1. The testing follows the guidelines in ANSI C63.10-2020 clause 11.11.
2. The EUT was arranged to its worst case and then tune the antenna tower (from 1 m to 4 m) and turntable (from 0 degree to 360 degrees) to find the maximum reading. A pre-amp and a high pass filter are used for the test in order to get better signal level. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
3. The EUT was placed on a turntable 80 cm above ground.
4. The EUT was set 10 meters from the interference receiving antenna, which was mounted on the top of a variable height antenna tower.
5. The initial step in collecting conducted emission data is a spectrum analyzer peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak detector mode re-measured. If the emission level of the EUT measured by the peak detector is 3 dB lower than the applicable limit, the peak emission level will be reported. Otherwise, the emission measurement will be repeated using the quasi-peak detector and reported.

Above 1 GHz



The setting of the spectrum analyzer

RBW	1 MHz
VBW	3 MHz
Sweep	Auto
Detector	Peak
Trace	Max hold

1. The testing follows the guidelines in ANSI C63.10-2020 clause 11.11 and 11.12.
2. The EUT was arranged to its worst case and then tune the antenna tower (from 1 m to 4 m) and turntable (from 0 degree to 360 degrees) to find the maximum reading. A pre-amp and a band reject filter/high pass filter are used for the test in order to get better signal level. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
3. The EUT was placed on a turntable 1.5 m above ground.
4. The EUT was set 3 meters from the interference receiving antenna, which was mounted on the top of a variable height antenna tower.
5. The initial step in collecting conducted emission data is a spectrum analyzer peak detector mode pre-scanning the measurement frequency range. This peak level, once corrected, must comply with the limit specified in Section 15.209. If the peak values are less than the average limit of 54 dBuV/m, the Average result is deemed to comply with average limit.

TEST DATA GRAPH LEGEND



RESULTS

RESTRICTED BANDEDGE

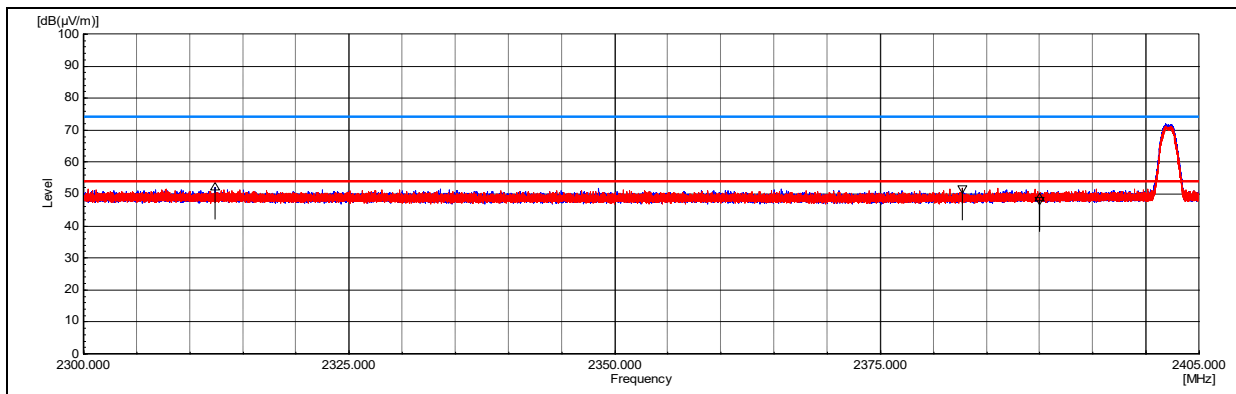
TEST ENVIRONMENT

Temperature	22.5 °C	Relative Humidity	62%
Atmosphere Pressure	101 kPa	Test Voltage	AC 120 V/60 Hz

TEST DATE / ENGINEER

Test Date	March 28, 2025	Test By	Jonathan He
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LE 1M MODE RESTRICTED BANDEDGE (LOW CHANNEL)



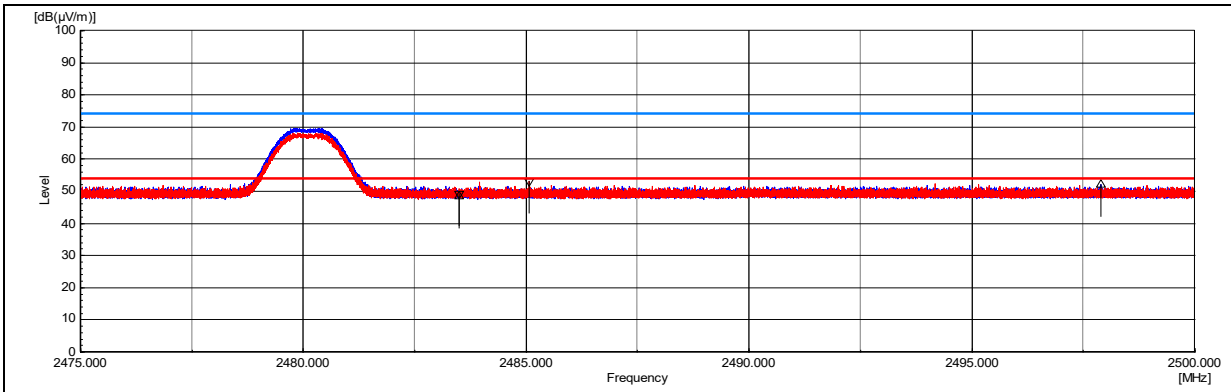
Frequency [MHz]	(P)	Reading [dB(μV)]	Factor [dB(1/m)]	Level PK [dB(μV/m)]	Limit PK [dB(μV/m)]	Margin PK [dB]	Height [cm]	Angle [°]
2390.001	H	17.6	31.1	48.7	74	25.3	200	45
2312.362	H	20.8	31.2	52	74	22	100	118
2390.001	V	17.1	31.1	48.2	74	25.8	200	212
2382.659	V	20.8	31	51.8	74	22.2	400	206

Note: 1. Level = Reading (Level) + (Correct) Factor.

2. If the peak values are less than the average limit of 54 dBuV/m, the average result is deemed to comply with the average limit.

3. Peak: peak detector.

LE 1M MODE RESTRICTED BANDEDGE (HIGH CHANNEL)



Frequency [MHz]	(P)	Reading [dB(μV)]	Factor [dB(1/m)]	Level PK [dB(μV/m)]	Limit PK [dB(μV/m)]	Margin PK [dB]	Height [cm]	Angle [°]
2483.5	H	17	31.4	48.4	74	25.6	100	337
2497.888	H	20.5	31.5	52	74	22	100	292
2483.5	V	17.8	31.4	49.2	74	24.8	200	256
2485.061	V	21.7	31.4	53.1	74	20.9	200	256

Note: 1. Level = Reading (Level) + (Correct) Factor.

2. If the peak values are less than the average limit of 54 dBuV/m, the average result is deemed to comply with the average limit.

3. Peak: peak detector.

SPURIOUS EMISSIONS (1 GHz ~ 6 GHz)

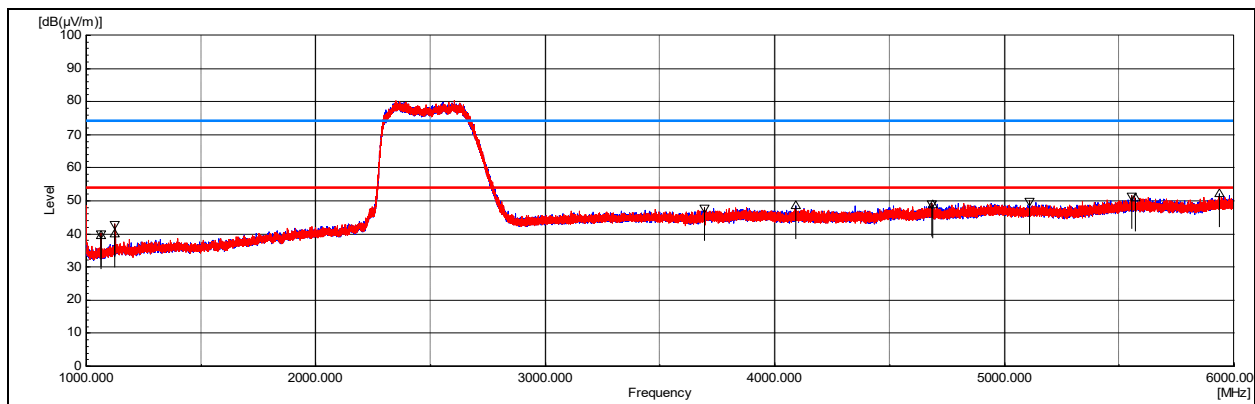
TEST ENVIRONMENT

Temperature	22.5 °C	Relative Humidity	62%
Atmosphere Pressure	101 kPa	Test Voltage	AC 120 V/60 Hz

TEST DATE / ENGINEER

Test Date	March 28, 2025	Test By	Jonathan He
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LE 1M MODE HARMONICS AND SPURIOUS EMISSIONS (LOW CHANNEL)



Frequency [MHz]	(P)	Reading [dB(μV)]	Factor [dB(1/m)]	Level PK [dB(μV/m)]	Limit PK [dB(μV/m)]	Margin PK [dB]	Height [cm]	Angle [°]
1062.452	H	42.8	-3.5	39.3	74	34.7	100	294
1124.903	H	42.3	-2.5	39.8	74	34.2	200	279
4092.115	H	38.8	9.7	48.5	74	25.5	100	206
4687.173	H	38.4	10.4	48.8	74	25.2	200	353
5570.755	H	37.8	13.1	50.9	74	23.1	300	212
5937.554	H	37.5	14.7	52.2	74	21.8	100	89
1062.452	V	43.6	-3.5	40.1	74	33.9	200	38
1124.903	V	45.5	-2.5	43	74	31	100	15
3691.65	V	37.9	10.1	48	74	26	300	162
4684.312	V	38.7	10.4	49.1	74	24.9	200	345
5108.006	V	37.6	12.4	50	74	24	100	292
5554.426	V	38.5	13.1	51.6	74	22.4	100	45

Note: 1. Level = Reading (Level) + (Correct) Factor.

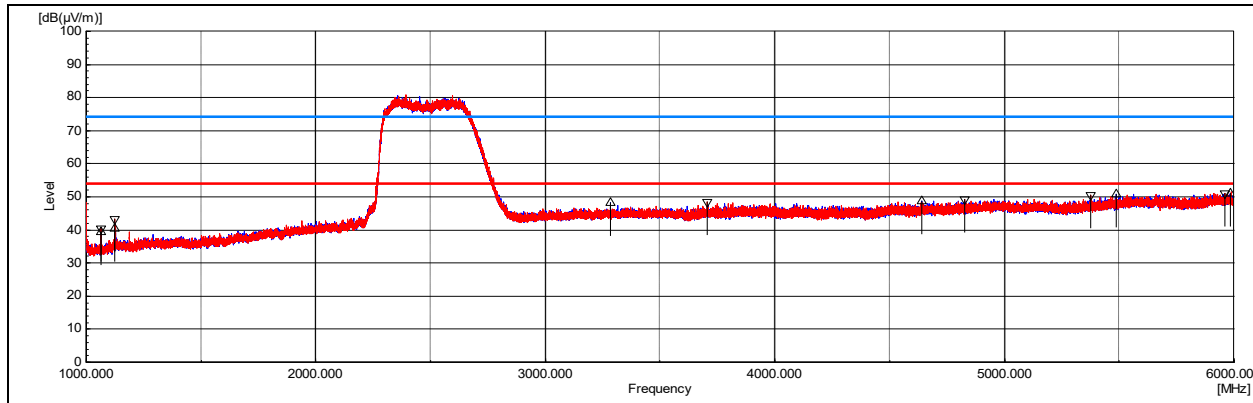
2. If the peak values are less than the average limit of 54 dBuV/m, the average result is deemed to comply with the average limit.

3. PK: peak detector.

4. Band reject filter was used during the test.

5. Proper operation of the transmitter prior to adding the filter to the measurement chain.

LE 1M MODE HARMONICS AND SPURIOUS EMISSIONS (MID CHANNEL)



Frequency [MHz]	(P)	Reading [dB(μV)]	Factor [dB(1/m)]	Level PK [dB(μV/m)]	Limit PK [dB(μV/m)]	Margin PK [dB]	Height [cm]	Angle [°]
1062.62	H	42.9	-3.5	39.4	74	34.6	100	14
1124.903	H	42.8	-2.5	40.3	74	33.7	200	16
3282.432	H	39.3	8.8	48.1	74	25.9	200	224
4638.188	H	38.4	10.4	48.8	74	25.2	100	294
5488.104	H	38	12.9	50.9	74	23.1	300	179
5985.865	H	36.1	15	51.1	74	22.9	100	162
1062.62	V	44	-3.5	40.5	74	33.5	100	15
1125.072	V	45.7	-2.5	43.2	74	30.8	200	330
3704.948	V	38.3	10.2	48.5	74	25.5	400	294
4825.543	V	38.6	10.5	49.1	74	24.9	200	97
5376.835	V	37.6	12.8	50.4	74	23.6	300	0
5958.932	V	36.2	14.9	51.1	74	22.9	300	219

Note: 1. Level = Reading (Level) + (Correct) Factor.

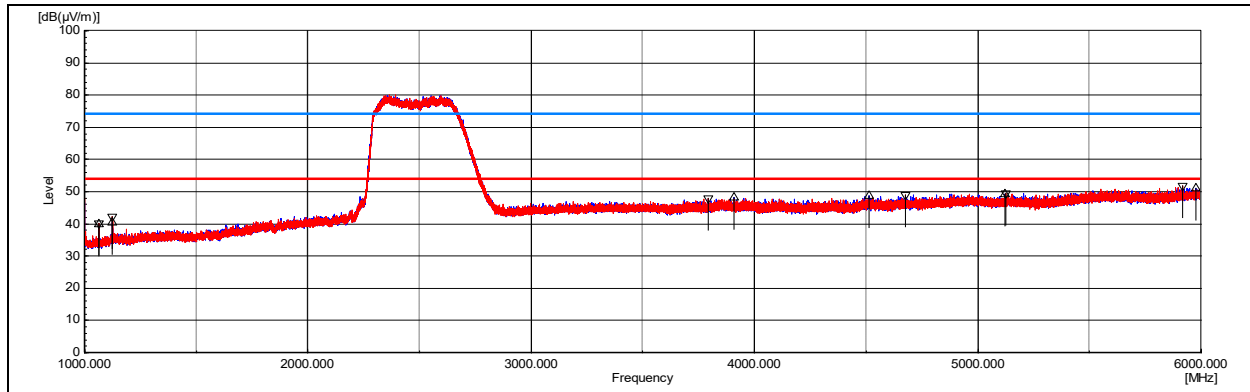
2. If the peak values are less than the average limit of 54 dBuV/m, the average result is deemed to comply with the average limit.

3. PK: peak detector.

4. Band reject filter was used during the test.

5. Proper operation of the transmitter prior to adding the filter to the measurement chain.

LE 1M MODE HARMONICS AND SPURIOUS EMISSIONS (HIGH CHANNEL)



Frequency [MHz]	(P)	Reading [dB(μV)]	Factor [dB(1/m)]	Level PK [dB(μV/m)]	Limit PK [dB(μV/m)]	Margin PK [dB]	Height [cm]	Angle [°]
1062.452	H	43.4	-3.5	39.9	74	34.1	100	104
1124.903	H	42.8	-2.5	40.3	74	33.7	100	191
3906.612	H	38	10.2	48.2	74	25.8	100	1
4513.285	H	38.2	10.6	48.8	74	25.2	300	198
5122.483	H	36.8	12.5	49.3	74	24.7	300	169
5977.111	H	36.1	15	51.1	74	22.9	300	0
1062.62	V	43.7	-3.5	40.2	74	33.8	200	257
1125.072	V	44.9	-2.5	42.4	74	31.6	200	286
3792.65	V	37.8	10.2	48	74	26	300	59
4676.063	V	38.6	10.4	49	74	25	100	89
5124.335	V	36.9	12.5	49.4	74	24.6	100	118
5918.363	V	37.4	14.5	51.9	74	22.1	200	126

- Note: 1. Level = Reading (Level) + (Correct) Factor.
 2. If the peak values are less than the average limit of 54 dBuV/m, the average result is deemed to comply with the average limit.
 3. PK: peak detector.
 4. Band reject filter was used during the test.
 5. Proper operation of the transmitter prior to adding the filter to the measurement chain.

SPURIOUS EMISSIONS (6 GHz ~ 18 GHz)

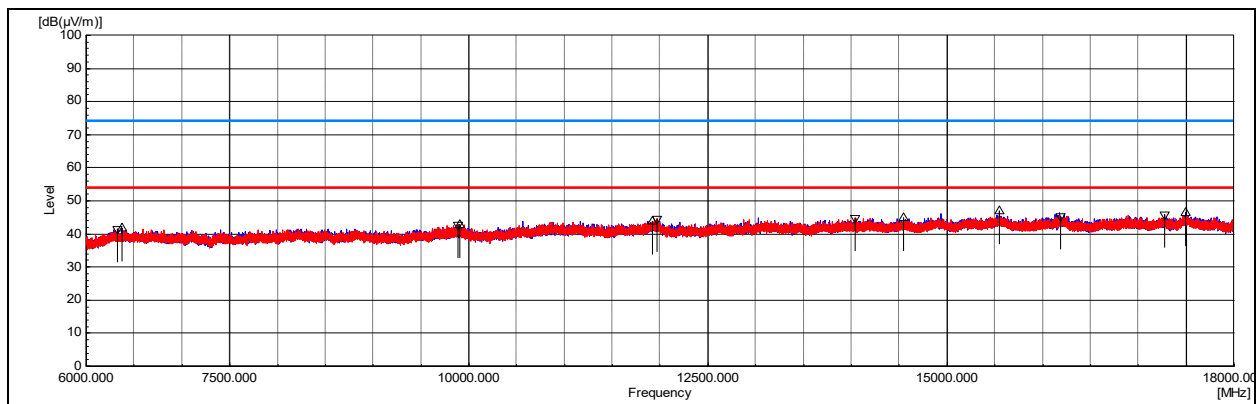
TEST ENVIRONMENT

Temperature	22.5 °C	Relative Humidity	62%
Atmosphere Pressure	101 kPa	Test Voltage	AC 120 V/60 Hz

TEST DATE / ENGINEER

Test Date	March 28, 2025	Test By	Jonathan He
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LE 1M MODE HARMONICS AND SPURIOUS EMISSIONS (LOW CHANNEL)



Frequency [MHz]	(P)	Reading [dB(μV)]	Factor [dB(1/m)]	Level PK [dB(μV/m)]	Limit PK [dB(μV/m)]	Margin PK [dB]	Height [cm]	Angle [°]
6372.892	H	48.3	-6.7	41.6	74	32.4	100	0
9904.66	H	45.8	-3.1	42.7	74	31.3	400	127
11923.04	H	43.8	0.1	43.9	74	30.1	400	127
14544.6	H	45.4	-0.5	44.9	74	29.1	400	221
15544.5	H	46.1	0.9	47	74	27	200	95
17494.61	H	44.4	2	46.4	74	27.6	300	266
6322.392	V	48.5	-7	41.5	74	32.5	400	101
9883.248	V	45.8	-3	42.8	74	31.2	400	86
11969.91	V	44.4	0	44.4	74	29.6	200	249
14040.81	V	44.8	0	44.8	74	29.2	100	142
16188.48	V	44.4	1	45.4	74	28.6	400	53
17272.81	V	44.5	1.2	45.7	74	28.3	300	174

Note: 1. Level = Reading (Level) + (Correct) Factor.

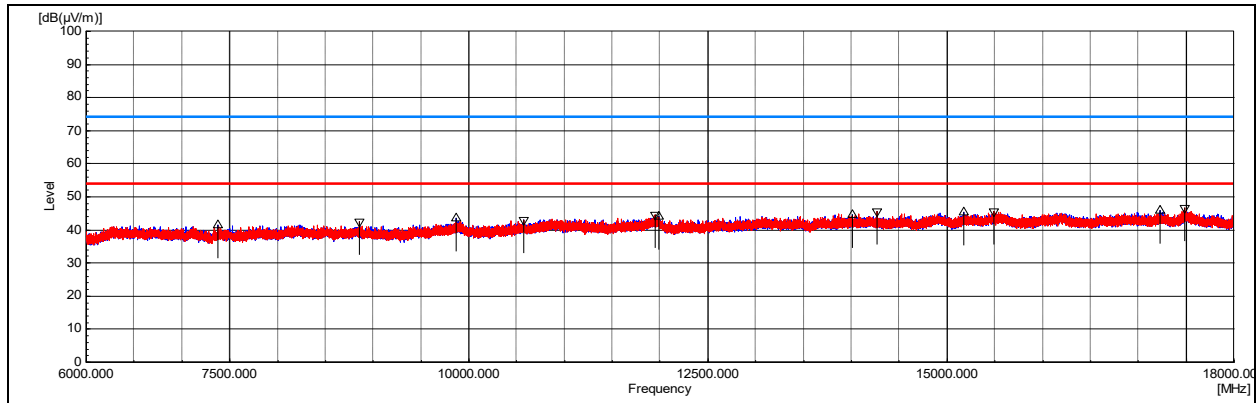
2. If the peak values are less than the average limit of 54 dBuV/m, the average result is deemed to comply with the average limit.

3. PK: peak detector.

4. High pass filter was used during the test.

5. Proper operation of the transmitter prior to adding the filter to the measurement chain.

LE 1M MODE HARMONICS AND SPURIOUS EMISSIONS (MID CHANNEL)



Frequency [MHz]	(P)	Reading [dB(μV)]	Factor [dB(1/m)]	Level PK [dB(μV/m)]	Limit PK [dB(μV/m)]	Margin PK [dB]	Height [cm]	Angle [°]
7376.428	H	49.2	-7.8	41.4	74	32.6	100	205
9865.876	H	46.6	-3	43.6	74	30.4	400	265
11983.64	H	44.1	-0.1	44	74	30	400	309
14005.26	H	44.6	-0.1	44.5	74	29.5	100	147
15175.65	H	45.3	0	45.3	74	28.7	200	147
17225.14	H	44.4	1.3	45.7	74	28.3	200	294
8853.452	V	48.5	-6.1	42.4	74	31.6	300	30
10577.32	V	45.2	-2.3	42.9	74	31.1	300	191
11949.71	V	44.7	0	44.7	74	29.3	100	133
14267.05	V	45.9	-0.2	45.7	74	28.3	400	74
15492.79	V	44.8	0.8	45.6	74	28.4	100	45
17486.93	V	44.9	1.9	46.8	74	27.2	300	60

Note: 1. Level = Reading (Level) + (Correct) Factor.

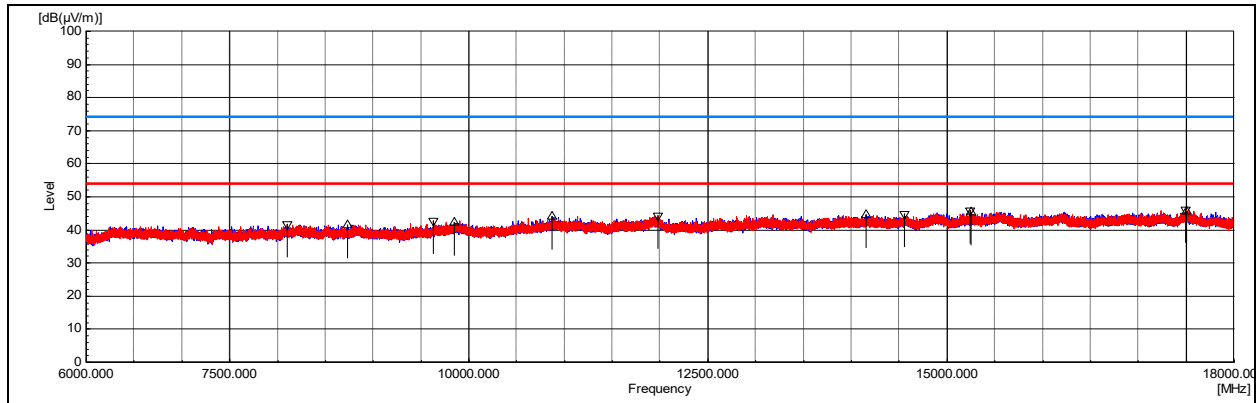
2. If the peak values are less than the average limit of 54 dBuV/m, the average result is deemed to comply with the average limit.

3. PK: peak detector.

4. High pass filter was used during the test.

5. Proper operation of the transmitter prior to adding the filter to the measurement chain.

LE 1M MODE HARMONICS AND SPURIOUS EMISSIONS (HIGH CHANNEL)



Frequency [MHz]	(P)	Reading [dB(μV)]	Factor [dB(1/m)]	Level PK [dB(μV/m)]	Limit PK [dB(μV/m)]	Margin PK [dB]	Height [cm]	Angle [°]
8733.06	H	48	-6.4	41.6	74	32.4	300	265
9848.1	H	45.4	-3.1	42.3	74	31.7	200	125
10869.41	H	44.9	-1	43.9	74	30.1	100	196
14149.08	H	44.4	0.1	44.5	74	29.5	200	346
15251.2	H	45.4	0	45.4	74	28.6	400	127
17501.07	H	43.6	2	45.6	74	28.4	300	265
8103.224	V	49.2	-7.6	41.6	74	32.4	400	337
9632.364	V	46.9	-4.2	42.7	74	31.3	300	359
11980.41	V	44.3	-0.1	44.2	74	29.8	100	174
14553.89	V	45.2	-0.5	44.7	74	29.3	100	267
15243.52	V	46	0	46	74	28	200	265
17490.57	V	44	2	46	74	28	300	17

Note: 1. Level = Reading (Level) + (Correct) Factor.

2. If the peak values are less than the average limit of 54 dBuV/m, the average result is deemed to comply with the average limit.

3. PK: peak detector.

4. High pass filter was used during the test.

5. Proper operation of the transmitter prior to adding the filter to the measurement chain.

SPURIOUS EMISSIONS (18 GHz ~ 26 GHz)

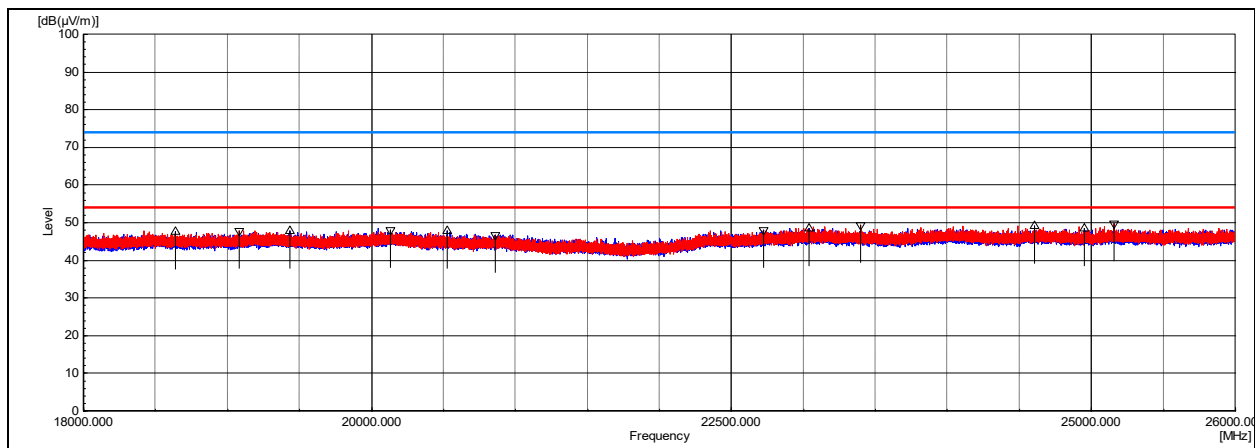
TEST ENVIRONMENT

Temperature	22.5 °C	Relative Humidity	62%
Atmosphere Pressure	101 kPa	Test Voltage	AC 120 V/60 Hz

TEST DATE / ENGINEER

Test Date	March 28, 2025	Test By	Jonathan He
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LE 1M MODE HARMONICS AND SPURIOUS EMISSIONS (LOW CHANNEL)



Frequency [MHz]	(P)	Reading [dB(μV)]	Factor [dB(1/m)]	Level PK [dB(μV/m)]	Limit AV [dB(μV/m)]	Margin AV [dB]
18635.09	H	39.7	7.8	47.5	54	6.5
19432.85	H	39.9	7.8	47.7	54	6.3
20524.46	H	38.8	9	47.8	54	6.2
23036.8	H	37.4	11.1	48.5	54	5.5
24602.44	H	37.3	11.8	49.1	54	4.9
24952.84	H	36.6	11.9	48.5	54	5.5
19082.45	V	40	7.9	47.9	54	6.1
20130.69	V	39.2	8.8	48	54	6
20856.82	V	37.6	9	46.6	54	7.4
22720.07	V	37.2	10.8	48	54	6
23396.63	V	38.3	11.1	49.4	54	4.6
25157.26	V	37.8	11.9	49.7	54	4.3

Note: 1. Level = Reading (Level) + (Correct) Factor.

2. If the peak values are less than the average limit of 54 dBuV/m, the average result is deemed to comply with the average limit.

3. PK: Peak detector.

4. Proper operation of the transmitter prior to adding the filter to the measurement chain.

5. All modes and channels have been tested, only the worst data was recorded in the report.

SPURIOUS EMISSIONS (30 MHz ~ 1 GHz)

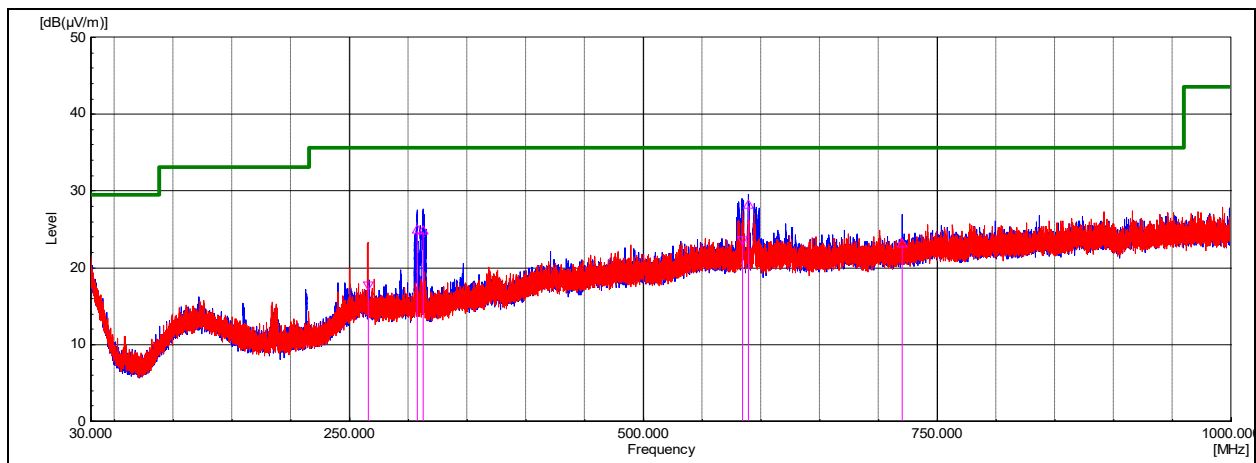
TEST ENVIRONMENT

Temperature	22.5 °C	Relative Humidity	62%
Atmosphere Pressure	101 kPa	Test Voltage	AC 120 V/60 Hz

TEST DATE / ENGINEER

Test Date	July 25, 2025	Test By	Jonathan He
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LE 1M MODE HARMONICS AND SPURIOUS EMISSIONS (LOW CHANNEL)



Frequency [MHz]	(P)	Reading QP [dB(μV)]	Factor [dB(1/m)]	Level QP [dB(μV/m)]	Limit QP [dB(μV/m)]	Margin QP [dB]	Height [cm]	Angle [°]
589.379	H	38.6	-10.4	28.2	35.6	7.4	154.6	37
312.802	H	42.2	-17.4	24.8	35.6	10.8	297.1	69
307.47	H	42.2	-17.3	24.9	35.6	10.7	299.4	74
583.819	V	34.3	-10.6	23.7	35.6	11.9	100.8	139
265.423	V	35	-17.3	17.7	35.6	17.9	111.4	356
720.006	H	31.7	-8.7	23	35.6	12.6	129.7	131

Note: 1. Level = Reading (Level) + (Correct) Factor.

2. QP: quasi-peak detector.

3. All modes and channels have been tested, only the worst data was recorded in the report.

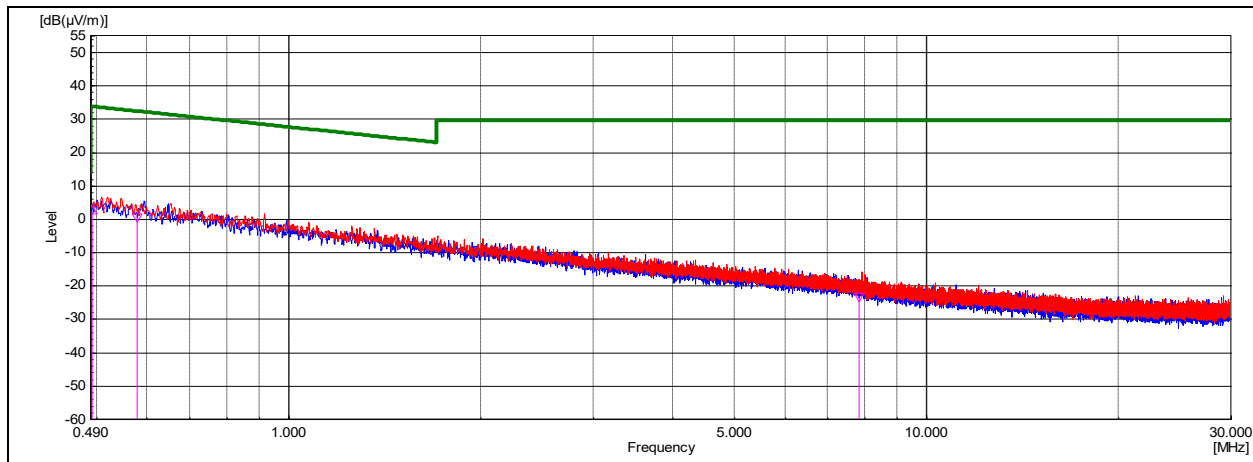
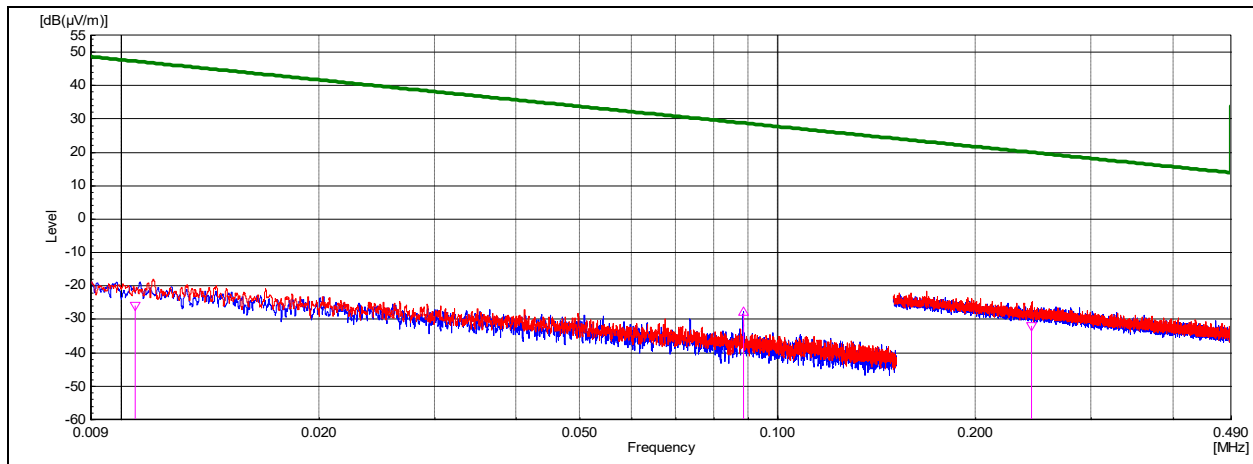
SPURIOUS EMISSIONS (9 kHz ~ 30 MHz)**TEST ENVIRONMENT**

Temperature	22.5 °C	Relative Humidity	62%
Atmosphere Pressure	101 kPa	Test Voltage	AC 120 V/60 Hz

TEST DATE / ENGINEER

Test Date	July 25, 2025	Test By	Jonathan He
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LE 1M MODE HARMONICS AND SPURIOUS EMISSIONS (LOW CHANNEL)



Frequency	Reading QP	(P)	Factor	Level QP	Result	Limit QP	Limit QP	Margin
(MHz)	(dBuV)	/	(dB/m)	(dBuV/m)	(dBuA/m)	(dBuV/m)	(dBuA/m)	(dB)
0.578	29.4	V	-28.5	0.9	-50.60	32.4	-19.1	31.50
7.832	5.7	V	-28.7	-23	-74.50	29.5	-22	52.50
0.492	30.9	H	-28.5	2.4	-49.10	33.8	-17.7	31.40
0.088	39.8	H	-67.6	-27.8	-79.30	28.7	-22.8	56.50
0.01	36.2	V	-61.9	-25.7	-77.20	47.2	-4.3	72.90
0.243	36.7	V	-68.4	-31.7	-83.20	19.9	-31.6	51.60

Note: 1. Level = Reading (Level) + (Correct) Factor.

2. QP: Quasi-peak detector.

3. All modes and channels have been tested, only the worst data was recorded in the report.

4. If the peak values are less than the limit of, the average/quasi-peak result is deemed to comply with the average limit.

AC POWER LINE CONDUCTED EMISSION

LIMITS

Please refer to CFR 47 FCC §15.207 (a) and ISED RSS-Gen Clause 8.8.

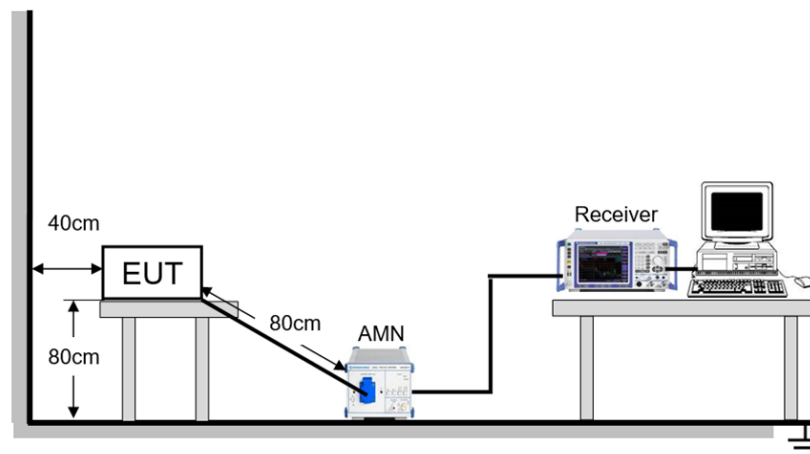
FREQUENCY (MHz)	Quasi-peak	Average
0.15 -0.5	66 - 56 *	56 - 46 *
0.50 -5.0	56.00	46.00
5.0 -30.0	60.00	50.00

TEST PROCEDURE

The EUT is put on a table of non-conducting material that is 80 cm high. The vertical conducting wall of the shielding is located 40 cm to the rear of the EUT. The power line of the EUT is connected to the AC mains through a Artificial Mains Network (A.M.N.). A EMI Measurement Receiver (R&S Test Receiver ESR3) is used to test the emissions from both sides of AC line. According to the requirements in Section 6.2 of ANSI C63.10-2020. Conducted emissions from the EUT measured in the frequency range between 0.15 MHz and 30 MHz using CISPR Quasi-Peak and average detector mode. The bandwidth of EMI test receiver is set at 9 kHz.

The arrangement of the equipment is installed to meet the standards and operate in a manner, which tends to maximize its emission characteristics in a normal application.

TEST SETUP



TEST ENVIRONMENT

Temperature	22.5 °C	Relative Humidity	62%
Atmosphere Pressure	101 kPa	Test Voltage	AC 120 V/60 Hz

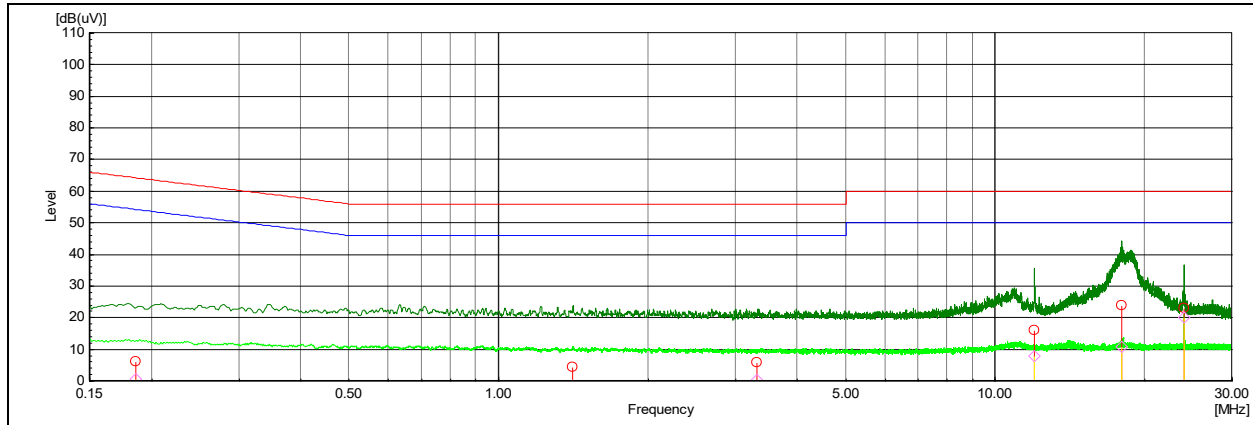
TEST DATE / ENGINEER

Test Date	March 26, 2025	Test By	Jonathan He
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TEST DATA GRAPH LEGEND Neutral - QP Neutral - AVG Live - QP Live - AVG

TEST RESULTS

LE 1M MODE AC POWER LINE CONDUCTED EMISSION LINE PHASE N (LOW CHANNEL)



Frequency [MHz]	Reading QP [dB(uV)]	Reading AV [dB(uV)]	Factor [dB]	Level QP [dB(uV)]	Level AV [dB(uV)]	Limit QP [dB(uV)]	Limit AV [dB(uV)]	Margin QP [dB]	Margin AV [dB]
18.61499	10.2	4.9	10.5	20.7	15.4	60	50	39.3	34.6
23.9984	12	9.2	10.6	22.6	19.8	60	50	37.4	30.2
12.02429	2.5	-5	10.4	12.9	5.4	60	50	47.1	44.6
0.36114	-6.1	-11.7	10.3	4.2	-1.4	58.7	48.7	54.5	50.1
0.99931	-6.4	-11.8	10.3	3.9	-1.5	56	46	52.1	47.5
3.62088	-4.7	-10.2	10.4	5.7	0.2	56	46	50.3	45.8

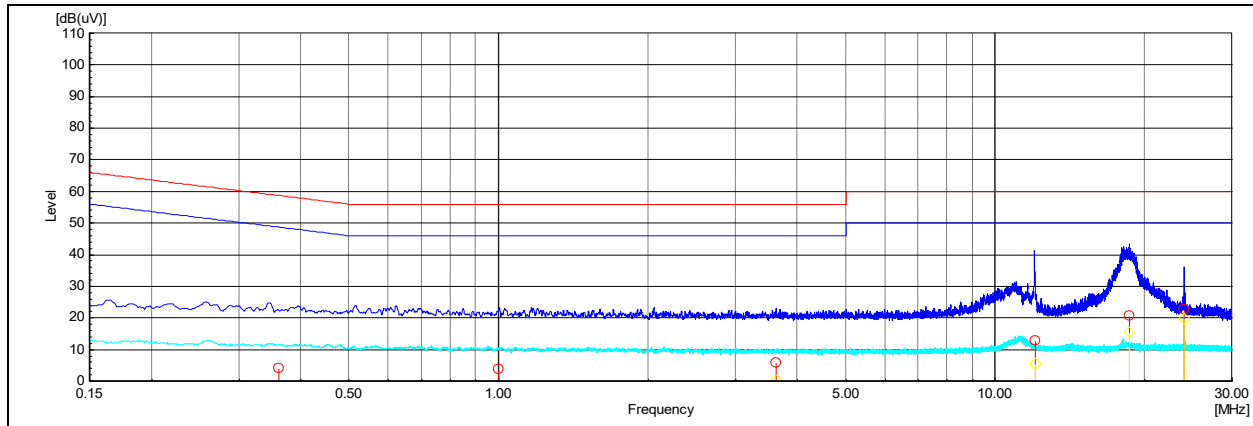
Note: 1. Level = Reading (Level) + (Correct) Factor.

2. AV: Average detector.

3. QP: Quasi-peak detector.

4. All modes and channels have been tested, only the worst data was recorded in the report.

LE 1M MODE AC POWER LINE CONDUCTED EMISSION LINE PHASE L1 (LOW CHANNEL)



Frequency [MHz]	Reading QP [dB(uV)]	Reading AV [dB(uV)]	Factor [dB]	Level QP [dB(uV)]	Level AV [dB(uV)]	Limit QP [dB(uV)]	Limit AV [dB(uV)]	Margin QP [dB]	Margin AV [dB]
23.99965	12.2	9.4	10.7	22.9	20.1	60	50	37.1	29.9
17.98717	13.4	0.1	10.5	23.9	10.6	60	50	36.1	39.4
12.0004	5.4	-2.5	10.5	15.9	8	60	50	44.1	42
3.31192	-4.5	-10.2	10.4	5.9	0.2	56	46	50.1	45.8
1.40867	-6	-11.8	10.3	4.3	-1.5	56	46	51.7	47.5
0.18576	-4.1	-9.6	10.3	6.2	0.7	64.2	54.2	58	53.5

Note: 1. Level = Reading (Level) + (Correct) Factor.

2. AV: Average detector.

3. QP: Quasi-peak detector.

4. All modes and channels have been tested, only the worst data was recorded in the report.

ANTENNA REQUIREMENT

REQUIREMENT

Please refer to FCC part 15.203

An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this section. The manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited.

Please refer to FCC part 15.247(b)(4)

The conducted output power limit specified in paragraph (b) of this section is based on the use of antennas with directional gains that do not exceed 6 dBi. Except as shown in paragraph (c) of this section, if transmitting antennas of directional gain greater than 6 dBi are used, the conducted output power from the intentional radiator shall be reduced below the stated values in paragraphs (b)(1), (b)(2), and (b)(3) of this section, as appropriate, by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

DESCRIPTION

Pass



END OF TEST REPORT