

Prüfbericht-Nr.: <i>Test report no.:</i>	CN25LQNA 001	Auftrags-Nr.: <i>Order no.:</i>	48256015	Seite 1 von 26 <i>Page 1 of 26</i>
Kunden-Referenz-Nr.: <i>Client reference no.:</i>	N/A	Auftragsdatum: <i>Order date:</i>	2024-12-19	
Auftraggeber: <i>Client:</i>	Doodle labs(SG) Pte Ltd 601 MacPherson Road, Grantral Complex, Suite 07-15, Singapore 368242, Singapore			
Prüfgegenstand: <i>Test item:</i>	Mesh Rider Radio			
Bezeichnung / Typ-Nr.: <i>Identification / Type no.:</i>	RM-2450-2L, RM-2025-2L, RM-2450-12M3, RM-2450-12M3-IN, RM-2025-62M3, RM-2025-62M3-IN, RM-2450-12M4, RM-2450-12M4-IN, RM-2025-62M4, RM-2025-62M4-IN, RM-1700-22M3, RM-1700-22M3-IN, RM-1700-22M4, RM-1700-22M4-IN, RM-2100-42M3, RM-2100-42M3-IN, RM-2100-42M4, RM-2100-42M4-IN, RM-2450-2LSX-SA-ST, RM-2025-2LMX-SA-ST			
Auftrags-Inhalt: <i>Order content:</i>	FCC Part 15C Test report (2.4GHz)			
Prüfgrundlage: <i>Test specification:</i>	FCC 47CFR Part 15: Subpart C Section 15.247			
Wareneingangsdatum: <i>Date of sample receipt:</i>	2025-01-21			
Prüfmuster-Nr.: <i>Test sample no:</i>	A003914831-001 A003914831-006 & 007			
Prüfzeitraum: <i>Testing period:</i>	2025-02-03 - 2023-02-20			
Ort der Prüfung: <i>Place of testing:</i>	EMC/RF Taipei Testing Site			
Prüflaboratorium: <i>Testing laboratory:</i>	Taipei Testing Laboratories			
Prüfergebnis*: <i>Test result*:</i>	Pass			
überprüft von: <i>compiled by:</i>	 Ryan Chen		genehmigt von: <i>authorized by:</i>	
Datum: <i>Date:</i>	2025-03-04		Ausstellungsdatum: <i>Issue date:</i>	2025-03-04
Stellung / Position:	Senior Project Manager		Stellung / Position:	Senior Project Manager
Sonstiges / Other:	This report is to add series models. Both RM-2450-2LSX-SA-ST and RM-2450-2L have Path Power Amplifier (PA) IC change. RM-2450-2LSX-SA-ST is just a label change variant for RM-2450-2L. Some components were replaced by 2nd source without affecting the electrical characteristics. Only conducted power and radiated spurious emissions tests were evaluated. For the model differences, please refer to section 3.2 for the details.			
Zustand des Prüfgegenstandes bei Anlieferung: <i>Condition of the test item at delivery:</i>	Prüfmuster vollständig und unbeschädigt <i>Test item complete and undamaged</i>			
* Legende:	1 = sehr gut P(ass) = entspricht o.g. Prüfgrundlage(n)	2 = gut F(ail) = entspricht nicht o.g. Prüfgrundlage(n)	3 = befriedigend F(ail) = entspricht nicht o.g. Prüfgrundlage(n)	4 = ausreichend N/A = nicht anwendbar
* Legend:	1 = very good P(ass) = passed a.m. test specification(s)	2 = good F(ail) = failed a.m. test specification(s)	3 = satisfactory F(ail) = failed a.m. test specification(s)	4 = sufficient N/A = not applicable
Dieser Prüfbericht bezieht sich nur auf das o.g. Prüfmuster und darf ohne Genehmigung der Prüfstelle nicht auszugsweise vervielfältigt werden. Dieser Bericht berechtigt nicht zur Verwendung eines Prüfzeichens. <i>This test report only relates to the a. m. test sample. Without permission of the test center this test report is not permitted to be duplicated in extracts. This test report does not entitle to carry any test mark.</i>				

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Anmerkungen
Remarks

- | | |
|----------|--|
| 1 | <p>Alle eingesetzten Prüfmittel waren zum angegebenen Prüfzeitraum gemäß eines festgelegten Kalibrierungsprogramms unseres Prüfhauses kalibriert. Sie entsprechen den in den Prüfprogrammen hinterlegten Anforderungen. Die Rückverfolgbarkeit der eingesetzten Prüfmittel ist durch die Einhaltung der Regelungen unseres Managementsystems gegeben.
Detaillierte Informationen bezüglich Prüfkonditionen, Prüfequipment und Messunsicherheiten sind im Prüflabor vorhanden und können auf Wunsch bereitgestellt werden.</p> <p><i>The equipment used during the specified testing period was calibrated according to our test laboratory calibration program. The equipment fulfils the requirements included in the relevant standards. The traceability of the test equipment used is ensured by compliance with the regulations of our management system. Detailed information regarding test conditions, equipment and measurement uncertainty is available in the test laboratory and could be provided on request.</i></p> |
| 2 | <p>Wie vertraglich vereinbart, wurde dieses Dokument nur digital unterzeichnet. Der TÜV Rheinland hat nicht überprüft, welche rechtlichen oder sonstigen diesbezüglichen Anforderungen für dieses Dokument gelten. Diese Überprüfung liegt in der Verantwortung des Benutzers dieses Dokuments. Auf Verlangen des Kunden kann der TÜV Rheinland die Gültigkeit der digitalen Signatur durch ein gesondertes Dokument bestätigen. Diese Anfrage ist an unseren Vertrieb zu richten. Eine Umweltgebühr für einen solchen zusätzlichen Service wird erhoben. Informationen zur Verifizierung der Authentizität unserer Dokumente erhalten Sie auf folgender Webseite: go.tuv.com/digital-signature</p> <p><i>As contractually agreed, this document has been signed digitally only. TUV Rheinland has not verified and unable to verify which legal or other pertaining requirements are applicable for this document. Such verification is within the responsibility of the user of this document. Upon request by its client, TUV Rheinland can confirm the validity of the digital signature by a separate document. Such request shall be addressed to our Sales department. An environmental fee for such additional service will be charged. For information on verifying the authenticity of our documents, please visit the following website: go.tuv.com/digital-signature</i></p> |
| 3 | <p>Prüfklausel mit der Note * wurden an qualifizierte Unterauftragnehmer vergeben und sind unter der jeweiligen Prüfklausel des Berichts beschrieben.
Abweichungen von Prüfspezifikation(en) oder Kundenanforderungen sind in der jeweiligen Prüfklausel im Bericht aufgeführt.</p> <p><i>Test clauses with remark of * are subcontracted to qualified subcontractors and described under the respective test clause in the report.
Deviations of testing specification(s) or customer requirements are listed in specific test clause in the report.</i></p> |
| 4 | <p>Die Entscheidungsregel für Konformitätserklärungen basierend auf numerischen Messergebnissen in diesem Prüfbericht basiert auf der "Null-Grenzwert-Regel" und der "Einfachen Akzeptanz" gemäß ILAC G8:2019 und IEC Guide 115:2021, es sei denn, in der auf Seite 1 dieses Berichts genannten angewandten Norm ist etwas anderes festgelegt oder vom Kunden gewünscht. Dies bedeutet, dass die Messunsicherheit nicht berücksichtigt wird und daher auch nicht im Prüfbericht angegeben wird. Zu weiteren Informationen bezüglich des Risikos durch diese Entscheidungsregel siehe ILAC G8:2019.</p> <p><i>The decision rule for statements of conformity, based on numerical measurement results, in this test report is based on the "Zero Guard Band Rule" and "Simple Acceptance" in accordance with ILAC G8:2019 and IEC Guide 115:2021, unless otherwise specified in the applied standard mentioned on Page 1 of this report or requested by the customer. This means that measurement uncertainty is not taken in account and hence also not declared in the test report. For additional information to the resulting risk based of this decision rule please refer to ILAC G8:2019.</i></p> |

TEST SUMMARY

Report Section	FCC Clause	Test Item	Result
5.1.1	15.247(b) & 15.203	Antenna Requirement	Pass
5.1.2	15.247(b)(3)	Peak Output Power	Pass
-	15.247(a)(2)	6 dB Bandwidth	Note 1
-	2.1049	99% Occupied Bandwidth	Note 1
-	15.247(e)	Power Spectral Density	Note 1
-	15.247(d)	Conducted Spurious Emissions and Band Edges	Note 1
5.1.3	15.247(d) & 15.205 & 15.209	Radiated Spurious Emissions and Band Edges	Pass
-	15.207	Mains Conducted Emission	Note 1

Note:

1. Refer to original report for the details.
2. Determining compliance based on the results of the compliance measurement, not taking into account measurement instrumentation uncertainty.

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APPENDIX SP - PHOTOGRAPHS OF TEST SETUP

APPENDIX EP - PHOTOGRAPHS OF EUT

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HISTORY OF THIS TEST REPORT

Revision	Description	Date Issued
R01	Original Release	2025-03-04

1. General Remarks

1.1 Complementary Materials

All attachments are integral parts of this test report. This applies especially to the following appendix:

Appendix A - Test Result of Radiated Emissions

Appendix SP - Photographs of Test Setup

Appendix EP - Photographs of EUT

Applied Standard and Test Levels

Radio
FCC 47CFR Part 15: Subpart C Section 15.247
FCC 47CFR Part 2: Subpart J Section 2.1049
ANSI C63.10:2013
KDB 558074 D01 15.247 Meas Guidance v05r02
KDB 662911 D01 Multiple Transmitter Output v02r01

1.2 Decision Rule of Conformity

The decision rule of conformity of this test report is following the requirements of the requested standard in the quotation, and agreed among testing laboratory and manufacturer (applicant) to exclude the consideration of Measurement Uncertainty, unless it is required by the specific standard.

2. Test Sites

2.1 Test Laboratory

Taipei Testing Laboratories

11F. No.758, Sec. 4, Bade Rd., Songshan Dist.
Taipei City 105
Taiwan (R.O.C.)

2.2 Test Facility

Taipei Testing Laboratories

No.458-18, Sec. 2, Fenliao Rd., Linkou Dist.,
New Taipei City 244
Taiwan (R.O.C.)
FCC Registration No.: 180491
ISED Registration No.: 25563

2.3 Traceability

All measurement equipment calibrations are traceable to NML(Taiwan)/NIST(USA) or where calibration is performed outside Taiwan, to equivalent nationally recognized standards organizations.

2.4 Calibration

Equipment requiring calibration is calibrated periodically in a suitably accredited Calibration Lab. Additionally all equipment is verified for proper performance on a regular basis using in house standards or comparisons.

2.5 Measurement Uncertainty

All measurement uncertainty values are shown with a coverage factor of $k=2$ to indicate a 95% level of confidence.

Emission Measurement Uncertainty

Parameter	Uncertainty
Radiated Emission (9 kHz ~ 30 MHz)	± 1.15 dB
Radiated Emission (30 MHz ~ 200 MHz)	± 1.32 dB
Radiated Emission (200 MHz ~ 1 GHz)	± 1.31 dB
Radiated Emission (1 GHz ~ 18 GHz)	± 1.53 dB
Radiated Emission (18 GHz ~ 40 GHz)	± 2.50 dB
Mains Conducted Emission	± 1.65 dB

3. General Product Information

3.1 Product Function and Intended Use

The EUT is a Mesh Rider Radio. It contains a 2.4GHz compatible module enabling the user to communicate data through a Wireless interface.

For details refer to the User Guide, Data Sheet and Circuit Diagram.

3.2 System Details and Ratings

Basic Information of EUT

Item	EUT information
Kind of Equipment/Test Item	Mesh Rider Radio
Type Identification	RM-2450-2L, RM-2025-2L, RM-2450-12M3, RM-2450-12M3-IN, RM-2025-62M3, RM-2025-62M3-IN, RM-2450-12M4, RM-2450-12M4-IN, RM-2025-62M4, RM-2025-62M4-IN, RM-1700-22M3, RM-1700-22M3-IN, RM-1700-22M4, RM-1700-22M4-IN, RM-2100-42M3, RM-2100-42M3-IN, RM-2100-42M4, RM-2100-42M4-IN, RM-2450-2LSX-SA-ST, RM-2025-2LMX-SA-ST
FCC ID	2AG87RM2450-2L

Technical Specification of EUT

Item	EUT information
Operating Frequency	10MHz: 2412 MHz ~ 2467 MHz 20MHz: 2412 MHz ~ 2462 MHz
Channel Number	g/n mode_10MHz: 12 g/n mode_20MHz: 11
Data Rate	g mode: 54.0 / 48.0 / 36.0 / 24.0 / 18.0 / 12.0 / 9.0 / 6.0 Mbps n mode: up to MCS15
Operation Voltage	5 Vdc
Modulation	OFDM (BPSK, QPSK, 16QAM, 64QAM)
Maximum Output Power (mW)	g_10MHz: 381.54 g_20MHz: 189.7 n_10MHz: 413.6 n_20MHz: 410.41
Antenna Information	Refer to 5.1.1
Accessory Device	Refer to 4.4

Note:

1. All models are listed as below.

Report no.:	Model Type	Type Identification	Difference
CN2239JU (P15C-2.4G) 001	Main	RM-2450-2L	All models are electrically identical, different model names are for marketing purpose.
	Series	RM-2025-2L	
CN2239JU (P15C-2.4G) 002	Series	RM-2450-12M3	The changes made in new models is in the interface connector(s) and related PCB. The RF section and PCB remains the same.
		RM-2450-12M4	
		RM-2450-12M3-IN	Equivalent to RM-2450-12M3 Same appearance and RF layout and function. The only difference is model name.
		RM-2025-62M3	
		RM-2025-62M3-IN	
		RM-1700-22M3	
		RM-1700-22M3-IN	
		RM-2100-42M3	
		RM-2100-42M3-IN	Equivalent to RM-2450-12M4 Same appearance and RF layout and function. The only difference is model name.
		RM-2450-12M4-IN	
		RM-2025-62M4	
		RM-2025-62M4-IN	
		RM-1700-22M4	
		RM-1700-22M4-IN	
		RM-2100-42M4	
		RM-2100-42M4-IN	
CN25LQNA 001	Series	RM-2450-2LSX-SA-ST	The change on RM-2450-2L and new models is 2.4GHz Path Power Amplifier (PA) IC change.
		RM-2025-2LMX-SA-ST	
		RM-2450-12M3	
		RM-2450-12M4	

3.3 Noise Generating and Noise Suppressing Parts

Refer to the Circuit Diagram.

3.4 Submitted Documents

- Circuit Diagram
- Instruction Manual
- Rating Label
- Technical Description

4. Test Set-up and Operation Modes

4.1 Principle of Configuration Selection

The test modes were adapted accordingly in reference to the instructions for use.

During testing, Channel and Power Controlling Software provided by the customer was used to control the operating channel as well as the output power level. The RF output power selection is for the setting of RF output expected by the customer and is going to be fixed on the firmware of the final end product.

4.2 Carrier Frequency and Channel

<g/n mode_10MHz>

Channel	Frequency (MHz)	Channel	Frequency (MHz)
1	2412	8	2447
2	2417	9	2452
3	2422	10	2457
4	2427	11	2462
5	2432	12	2467
6	2437		
7	2442		

<g/n mode_20MHz>

Channel	Frequency (MHz)	Channel	Frequency (MHz)
1	2412	8	2447
2	2417	9	2452
3	2422	10	2457
4	2427	11	2462
5	2432		
6	2437		
7	2442		

4.3 Test Operation and Test Software

Setup for testing: Test samples are provided with a RJ-45 interface which makes it possible to control them through a test software installed on a notebook computer.

This software was running on the laptop computer connected to the EUT. It was used to enable the operation modes listed as below.

Test Software	Putty
---------------	-------

The samples were used as follows:

A003914831-001

A003914831-006 & 007

Full test was applied on all test modes, but only worst case was shown.

The EUT provides two completed transmitters and receivers.

Modulation Mode	Tx Function
g_10MHz	2TX
g_20MHz	2TX
n_10MHz	2TX
n_20MHz	2TX

There're two antennas used for the EUT. Only the antenna with 2.2 dBi gain was chosen for the final test.

EUT Configure Mode	Applicable To				Description
	Output Power	Radiated Spurious Emissions above 1 GHz	Radiated Spurious Emissions below 1 GHz	Mains Conducted Emission	
-	√	√	√	-	RM-2450-2LSX-SA-ST
-	-	-	√	-	RM-2450-12M3
-	-	-	√	-	RM-2450-12M4

Note:

1. The EUT had been pre-tested on the positioned of each 3 axis. The worst case was found when position on **Y-plane**.
2. "-" means no effect.

Output Power

- ☒ Pre-Scan full test was applied on all test modes, but only worst case was shown.
- ☒ Following channel(s) was (were) selected for the final test as listed below.

EUT Configure Mode	Mode	Available Channel	Tested Channel	Date Rate (Mbps)
-	g_10 MHz	1 to 12	1, 6, 12	6.0
-	g_20 MHz	1 to 11	1, 6, 11	6.0
-	n_10 MHz	1 to 12	1, 6, 12	MCS0
-	n_20 MHz	1 to 11	1, 6, 11	MCS0

Radiated Spurious Emissions (Above 1 GHz)

- ☒ Pre-Scan full test was applied on all test modes, but only worst case was shown.
- ☒ Following channel(s) was (were) selected for the final test as listed below.

EUT Configure Mode	Mode	Available Channel	Tested Channel	Date Rate (Mbps)
-	g_10 MHz	1 to 12	1, 6, 12	6.0
-	g_20 MHz	1 to 11	1, 6, 11	6.0
-	n_10 MHz	1 to 12	1, 6, 12	MCS0
-	n_20 MHz	1 to 11	1, 6, 11	MCS0

Radiated Spurious Emissions (Below 1 GHz)

- ☒ Pre-Scan full test was applied on all test modes, but only worst case was shown.
- ☒ Following channel(s) was (were) selected for the final test as listed below.

EUT Configure Mode	Mode	Available Channel	Tested Channel	Date Rate (Mbps)
-	n_10 MHz	1 to 12	6	MCS0

Test Condition

Test Item	Ambient Temperature	Relative Humidity	Tested by
Output Power	21.8-22.7 °C	51-53 %	Andy Chen
Radiated Spurious Emissions above 1 GHz	22-24.6 °C	52-55 %	Chuan Chu & Ivan Chiang
Radiated Spurious Emissions below 1 GHz	22-24.6 °C	52-55 %	Chuan Chu & Ivan Chiang

4.4 Special Accessories and Auxiliary Equipment

The product has been tested together with the following additional accessories:

Accessory of EUT

None

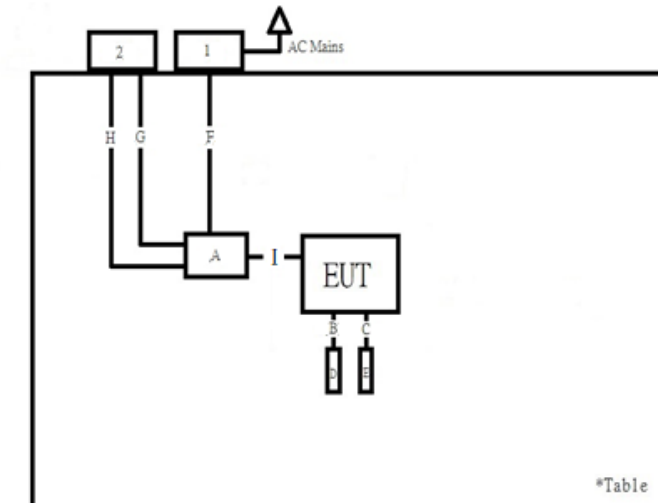
Support Unit

Support Unit								
No	Description	Brand	Model	S/N	Shielded	Ferrite Core (Qty)	Length (cm)	Remark
A	Break Out Board	Doodle labs	SR200-300P-2278-04	N/A	-	-	-	RM-2450-2LSX-SA-ST
B	RF Cable	Doodle labs	SR700-400W-7062	N/A	NO	NO	20	
C	RF Cable	Doodle labs	SR700-400W-7062	N/A	NO	NO	20	
D	Antennas	Doodle labs	DOODLE LABS-01	N/A	-	-	-	
E	Antennas	Doodle labs	DOODLE LABS-02	N/A	-	-	-	
F	Power Cable	Doodle labs	DOODLE LABS-03	N/A	NO	NO	50	
G	Type-C Cable	Doodle labs	SR700-400W-7073	N/A	NO	NO	100	
H	Ethernet Cable	Doodle labs	SR700-400W-7094	N/A	NO	NO	100	
I	15Pins Cable	Doodle labs	SR700-400W-7071	N/A	NO	NO	10	
1	Power Supply	Gwinstek	GPS-3303	GEU915615	-	-	-	
2	Notebook	Dell	Latitude 7490	887V7Y2	-	-	-	RM-2450-12M3
A	Break Out Board	Doodle labs	SR200-300P-2330-01	N/A	-	-	-	
B	RF Cable	Doodle labs	SR700-400W-7062	N/A	NO	NO	20	
C	RF Cable	Doodle labs	SR700-400W-7062	N/A	NO	NO	20	
D	Antennas	Doodle labs	DOODLE LABS-01	N/A	-	-	-	
E	Antennas	Doodle labs	DOODLE LABS-02	N/A	-	-	-	
F	Power Cord	Doodle labs	DOODLE LABS-03	N/A	NO	NO	50	
G	Type-C Cable	Doodle labs	SR700-400W-7073	N/A	NO	NO	100	
H	Ethernet Cable	Doodle labs	SR700-400W-7094	N/A	NO	NO	100	
I	6Pins Cable	Doodle labs	DOODLE LABS-04	N/A	NO	NO	10	
J	4Pins Cable	Doodle labs	DOODLE LABS-05	N/A	NO	NO	10	
K	4Pins Cable	Doodle labs	DOODLE LABS-06	N/A	NO	NO	10	
L	4Pins Cable	Doodle labs	DOODLE LABS-07	N/A	NO	NO	10	
1	Power Supply	Gwinstek	GPS-3303	GEU915615	-	-	-	
2	Notebook	Dell	Latitude 7490	887V7Y2	-	-	-	
A	Socket Cable	Doodle labs	DOODLE LABS-08	N/A	NO	NO	64	RM-2450-12M4
B	RF Cable	Doodle labs	SR700-400W-7062	N/A	NO	NO	20	
C	RF Cable	Doodle labs	SR700-400W-7062	N/A	NO	NO	20	
D	Antennas	Doodle labs	DOODLE LABS-01	N/A	-	-	-	
E	Antennas	Doodle labs	DOODLE LABS-02	N/A	-	-	-	
F	Ethernet Cable	Doodle labs	SR700-400W-7094	N/A	NO	NO	100	
G	Type-C Cable	Doodle labs	SR700-400W-7073	N/A	NO	NO	100	
1	Power Supply	Gwinstek	GPS-3303	GEU915615	-	-	-	
2	Notebook	Dell	Latitude 7490	887V7Y2	-	-	-	

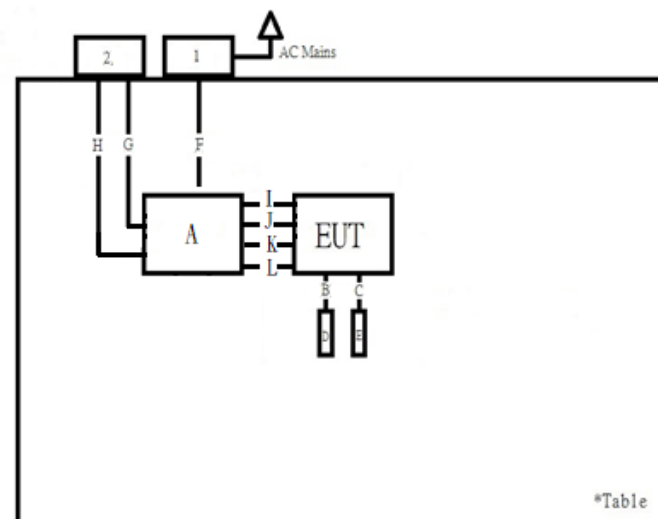
4.5 Test Setup Diagram

<Radiated Spurious Emissions mode>

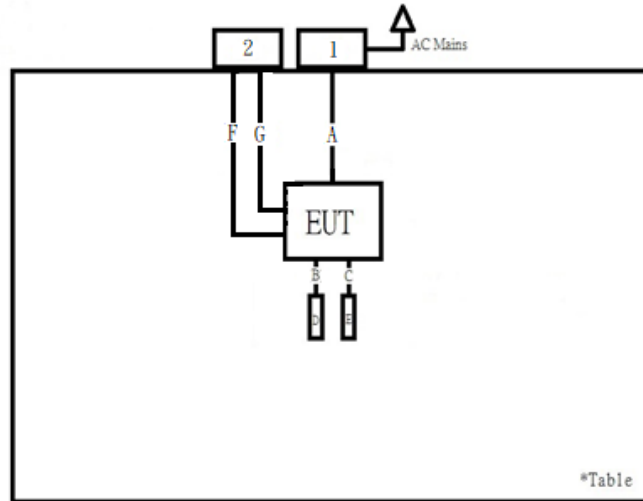
RM-2450-2LSX-SA-ST



RM-2450-12M3

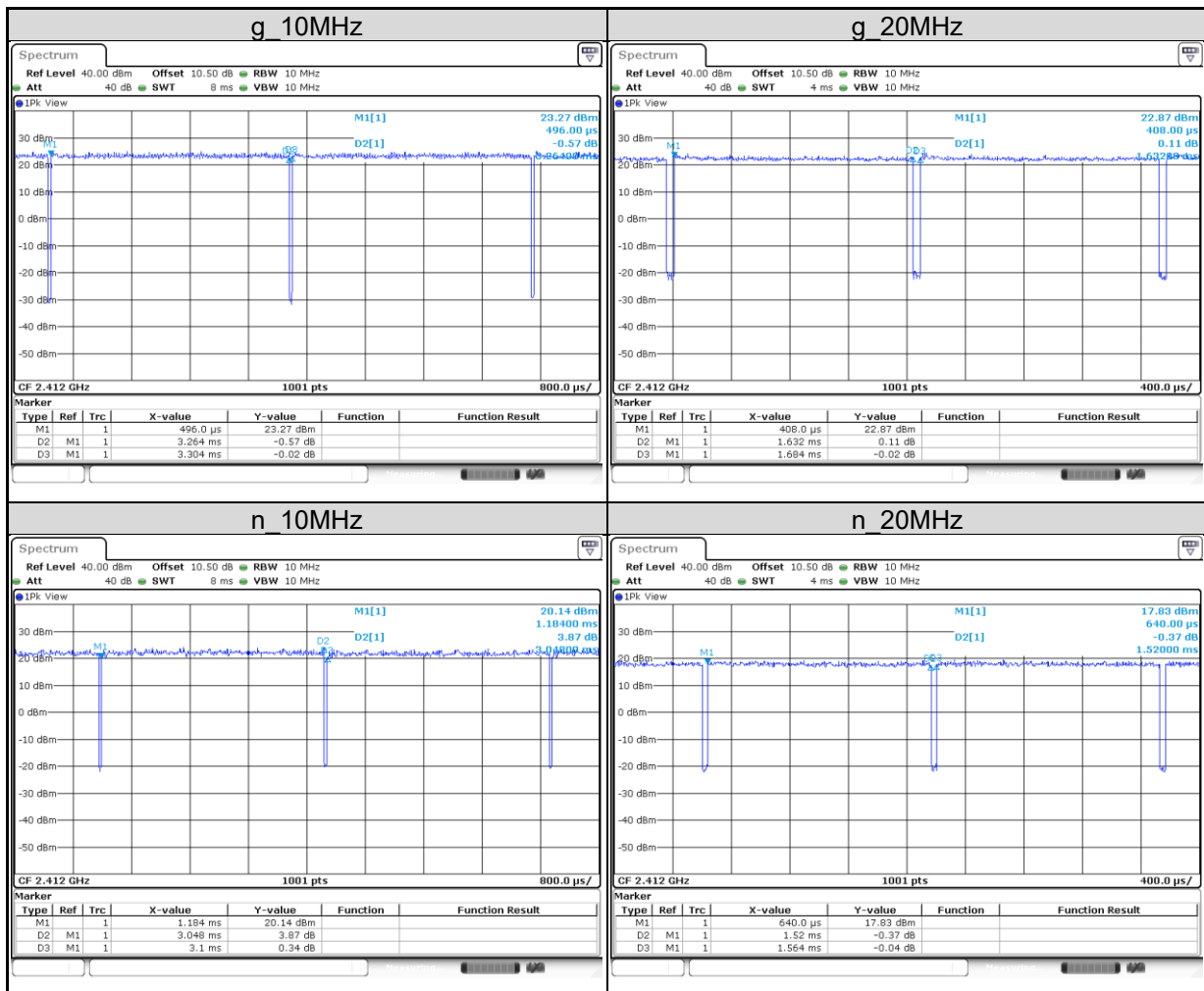


RM-2450-12M4



4.6 Duty Cycle of Test Signal

Mode	On + Off Time (ms)	On Time (ms)	Duty Cycle (%)	Duty Factor (dB)
g_10MHz	3.30	3.26	98.79	0.05
g_20MHz	1.68	1.63	96.91	0.14
n_10MHz	3.10	3.05	98.32	0.07
n_20MHz	1.56	1.52	97.19	0.12



5. Test Results

5.1 Transmitter Requirement & Test Suites

5.1.1 Antenna Requirement

Requirement Use of approved antennas only

According to the manufacturer declaration, the antenna information is as listed below. The antenna is with no possibility of replacement with a non-approved antenna by the end-user. Therefore, the EUT is considered to comply with this provision.

Antenna Gain	Connector	Part No.	Vendor
2.2 dBi	RP-SMA	RN-SMA4-RP	Microchip
0.56 dBi	RP-SMA	RN-SMA-S-RP	Microchip

Refer to EUT photo for details.

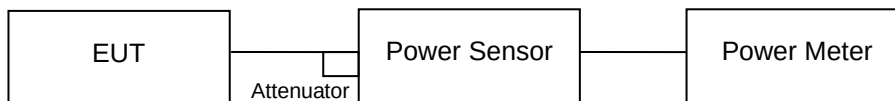
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5.1.2 Peak Output Power

Limit 1 watt (30 dBm)

Kind of Test Site Shielded room

Test Setup



Test Instruments

Kind of Equipment	Manufacturer	Type	S/N	Calibration Date	Calibration Due Date	Test Date	
						From	Until
Power Meter	Anritsu	ML2495A	1901008	2024/03/12	2025/03/11	2025/2/3	2025/2/13
Power Sensor	Anritsu	MA2411B	1725269	2024/03/12	2025/03/11	2025/2/3	2025/2/13

Test Procedures

A peak power sensor was used on the output port of the EUT. A power meter was used to read the response of the peak power sensor. Record the power level.

Average power sensor was used to perform output power measurement, trigger and gating function of wide band power meter is enabled to measure max output power of TX on burst. Duty factor is not added to measured value.

Test Result

Peak Output Power

<g_10MHz>

Channel	Channel Frequency (MHz)	Peak Output Power (dBm)		Total Power		Limit (dBm)
		Chain 0	Chain 1	(dBm)	(mW)	
1	2412	18.89	19.24	22.08	161.39	30
6	2437	22.59	23.01	25.82	381.54	30
12	2467	17.08	17.18	20.14	103.29	30

<g_20MHz>

Channel	Channel Frequency (MHz)	Peak Output Power (dBm)		Total Power		Limit (dBm)
		Chain 0	Chain 1	(dBm)	(mW)	
1	2412	19.46	20.06	22.78	189.70	30
6	2437	19.42	19.79	22.62	182.78	30
11	2462	18.38	18.48	21.44	139.33	30

<n_10MHz>

Channel	Channel Frequency (MHz)	Peak Output Power (dBm)		Total Power		Limit (dBm)
		Chain 0	Chain 1	(dBm)	(mW)	
1	2412	20.13	20.17	23.16	207.03	30
6	2437	23.09	23.22	26.17	413.60	30
12	2467	19.98	20.26	23.13	205.71	30

<n_20MHz>

Channel	Channel Frequency (MHz)	Peak Output Power (dBm)		Total Power		Limit (dBm)
		Chain 0	Chain 1	(dBm)	(mW)	
1	2412	19.37	19.92	22.66	184.67	30
6	2437	22.01	22.39	25.21	332.24	30
11	2462	22.87	23.36	26.13	410.41	30

Average Power
<g_10MHz>

Channel	Channel Frequency (MHz)	Average Power (dBm)		Total Power	
		Chain 0	Chain 1	(dBm)	(mW)
1	2412	11.96	12.53	15.26	33.61
6	2437	15.94	16.53	19.26	84.24
12	2467	10.80	11.48	14.16	26.08

<g_20MHz>

Channel	Channel Frequency (MHz)	Average Power (dBm)		Total Power	
		Chain 0	Chain 1	(dBm)	(mW)
1	2412	12.98	13.67	16.35	43.14
6	2437	12.83	13.32	16.09	40.66
11	2462	11.84	12.19	15.03	31.83

<n_10MHz>

Channel	Channel Frequency (MHz)	Average Power (dBm)		Total Power	
		Chain 0	Chain 1	(dBm)	(mW)
1	2412	13.19	13.94	16.59	45.62
6	2437	17.38	17.77	20.59	114.54
12	2467	13.62	14.14	16.90	48.96

<n_20MHz>

Channel	Channel Frequency (MHz)	Average Power (dBm)		Total Power	
		Chain 0	Chain 1	(dBm)	(mW)
1	2412	12.21	12.86	15.56	35.95
6	2437	14.87	15.41	18.16	65.44
11	2462	16.62	16.89	19.77	94.79

5.1.3 Radiated Spurious Emissions and Band Edges

Limit

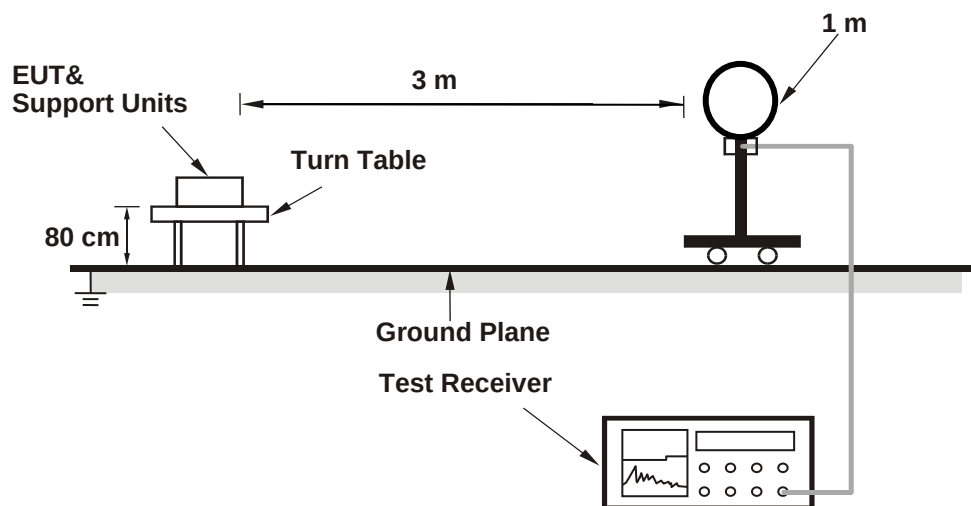
Radiated emissions which fall in the restricted bands, as defined in §15.205(a), must comply with the radiated emission limits specified in §15.209(a).

Emissions radiated outside the restricted and authorized frequency bands must either comply with the radiated emission limits specified for the restricted bands or in §15.247(d).

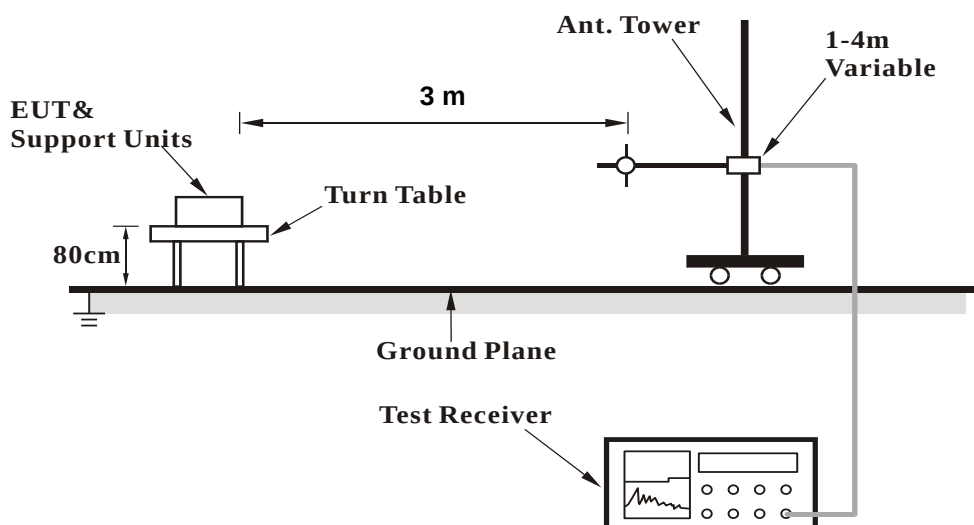
Kind of Test Site 3m Semi-Anechoic Chamber

Test Setup

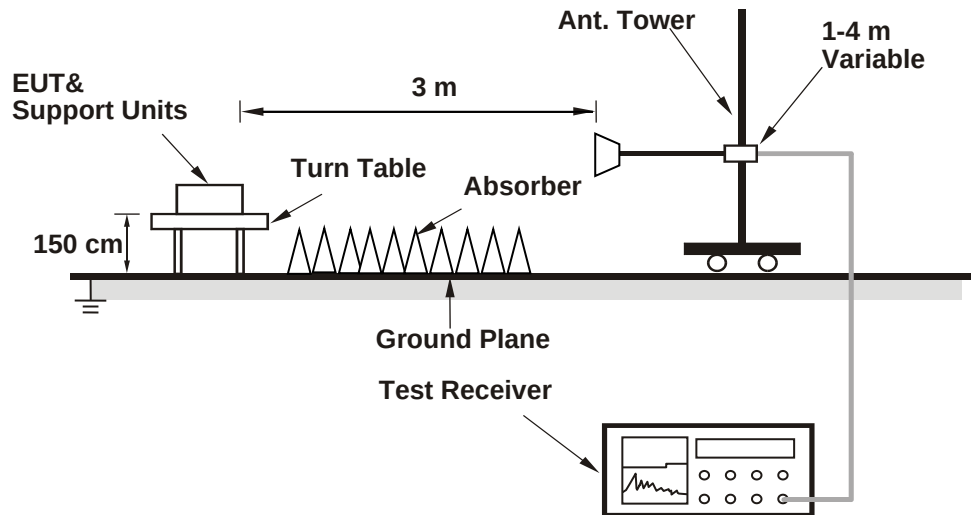
<Radiated Emissions below 30 MHz>



<Radiated Emissions 30 MHz to 1 GHz>



<Radiated Emissions above 1 GHz>



For the actual test configuration, please refer to the attached file (Test Setup Photo).

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Test Instruments

Kind of Equipment	Manufacturer	Type	S/N	Calibration Date	Calibration Due Date
Above 1 GHz					
Signal Analyzer	R&S	FSV40	101509	2024/4/30	2025/4/29
Horn Antenna	ETS-Lindgren	3117	00218929	2024/11/21	2025/11/20
Horn Antenna	SCHWARZBECK	BBHA 9170	00890	2024/4/30	2025/4/29
HF-AMP + AC source	EMCI	EMC051845SE	980633	2024/3/28	2025/3/27
HF-AMP + AC source	EMCI	EMC184045SE	980656	2025/1/15	2026/1/14
Test Software	Audix E3	15914a_20191106 tuv	PK-001087	N/A	N/A
30 MHz ~ 1 GHz					
Receiver	R&S	ESR7	102109	2024/2/22	2025/2/20
Bilog Antenna	SCHWARZBECK	VULB-9168	00951	2024/3/21	2025/3/20
LF-AMP	Agilent	8447D	2727A05146	2025/1/15	2026/1/14
Test Software	Audix E3	15914a_20191106 tuv	PK-001087	N/A	N/A
Below 30 MHz					
Receiver	R&S	ESR7	102109	2024/2/22	2025/2/20
Loop Antenna	SCHWARZBECK	FMZB 1519B	00215	2024/12/11	2025/12/10
Test Software	Audix E3	15914a_20191106 tuv	PK-001087	N/A	N/A

Test Procedures**For Radiated Emissions below 30 MHz**

- a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter chamber room. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- c. Parallel (OPEN), perpendicular (CLOSE), and ground-parallel (GROUND) orientations of the antenna are set to make the measurement.
- d. For each suspected emission, the EUT was arranged to its worst case and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
- e. The test-receiver system was set to Quasi-Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.

Note:

1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 9 kHz at frequency below 30 MHz.
2. All modes of operation were investigated and the worst-case emissions are reported.

For Radiated Emissions above 30 MHz

- a. The EUT was placed on the top of a rotating table 0.8 meters (for 30 MHz ~ 1 GHz) / 1.5 meters (for above 1 GHz) above the ground at 3 meter chamber room for test. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- c. The height of antenna is varied from one meter to four meters above the ground to determine the maximum value of the field strength. 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 from 1 meter to 4 meters and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
- e. The test-receiver system was set to quasi-peak detect function and specified bandwidth with maximum hold mode when the test frequency is below 1 GHz.
- f. The test-receiver system was set to peak and average detected function and specified bandwidth with maximum hold mode when the test frequency is above 1 GHz. If the peak reading value also meets average limit, measurement with the average detector is unnecessary.

Note:

1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120 kHz for Quasi-peak detection (QP) or Peak detection (PK) at frequency below 1 GHz.
2. The resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 3 MHz for Peak detection (PK) at frequency above 1 GHz.
3. The resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is $\geq 1/T$ (Duty cycle $< 98\%$) or 10 Hz (Duty cycle $\geq 98\%$) for Average detection (AV) at frequency above 1 GHz.
4. All modes of operation were investigated and the worst-case emissions are reported.
5. The Radiated Emissions testing was performed in the X(E1), Y(H) and Z(E2) axis orientation. The worst-case Axis orientation is recorded in this test report.
6. The emission levels of other frequencies (including the 10th harmonic of the highest fundamental frequency) are very lower than the limit and are not shown in the test report.

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Test Results

Factor (dB/m) = Antenna Factor (dB/m) + Cable Loss (dB) – Amplifier (dB)

Level (dBuV/m) = Reading (dBuV) + Factor (dB/m)

Please refer to Appendix A.

Appendix A: Test Results of Radiated Spurious Emissions Test

<RM-2450-2LSX-SA-ST>

Band Edges, 2.31GHz ~ 2.5GHz

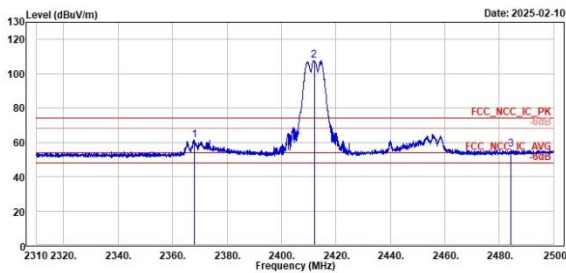
g_10MHz

Ch 01 (Horizontal) Peak

Ch 01 (Vertical) Peak



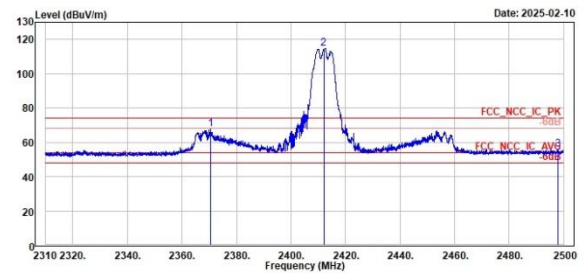
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	Freq	Level	Read	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg		
1	2367.95	61.25	23.25	38.00	74.00	-12.75	184	292 Peak	Horizontal	
2 *	2412.00	107.67	69.31	38.36	74.00	33.67	184	292 Peak	Horizontal	
3	2484.33	55.64	17.04	38.60	74.00	-18.36	184	292 Peak	Horizontal	



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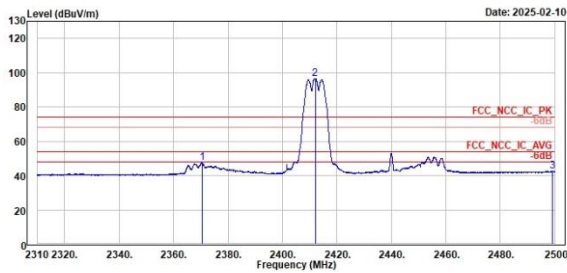
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	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg		
1	2370.42	67.59	29.57	38.02	74.00	-6.41	300	243 Peak	Vertical	
2 *	2412.00	114.70	76.34	38.36	74.00	40.70	300	243 Peak	Vertical	
3	2497.77	55.79	17.17	38.62	74.00	-18.21	300	243 Peak	Vertical	

g_10MHz

Ch 01 (Horizontal) Average



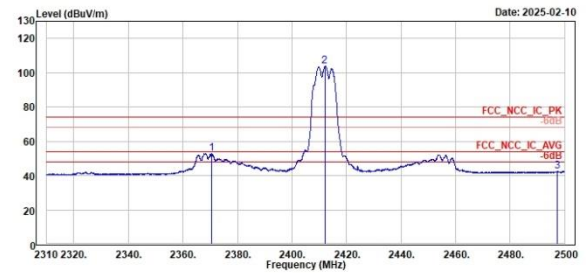
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	Freq	Level	Read	Level	Factor	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	dB	cm	deg			
1	2370.37	47.64	9.62	38.02	54.00	-6.36	184	292	Average	Horizontal		
2 *	2412.00	96.59	58.23	38.36	54.00	42.59	184	292	Average	Horizontal		
3	2499.24	42.55	3.93	38.62	54.00	-11.45	184	292	Average	Horizontal		



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	Freq	Level	Read	Level	Factor	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	dB	cm	deg			
1	2370.56	52.90	14.08	38.02	54.00	-1.10	380	243	Average	Vertical		
2 *	2412.00	103.87	65.51	38.36	54.00	49.87	380	243	Average	Vertical		
3	2497.25	42.40	3.78	38.62	54.00	-11.60	380	243	Average	Vertical		

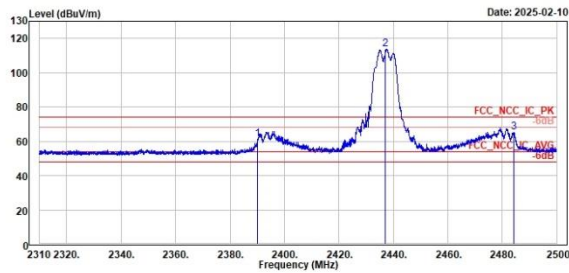
g_10MHz

Ch 06 (Horizontal) Peak

Ch 06 (Vertical) Peak



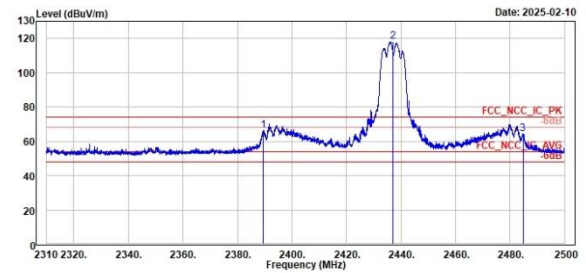
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	Freq	Level	Read	Level	Factor	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg				
1	2389.99	61.18	22.97	38.21	74.00	-12.82	182	93	Peak	Horizontal		
2 *	2437.00	113.61	75.12	38.49	74.00	39.61	182	93	Peak	Horizontal		
3	2484.09	65.37	26.77	38.60	74.00	-8.63	182	93	Peak	Horizontal		



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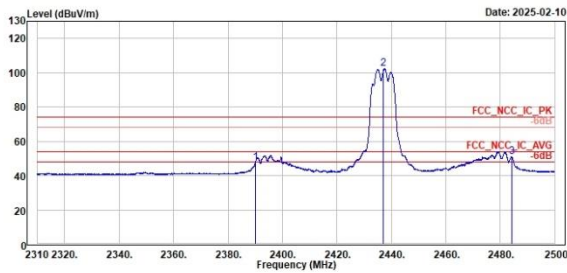
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	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg				
1	2389.61	66.11	27.90	38.21	74.00	-7.89	260	238	Peak	Vertical		
2 *	2437.00	118.16	79.67	38.49	74.00	44.16	260	238	Peak	Vertical		
3	2484.71	64.47	25.87	38.60	74.00	-9.53	260	238	Peak	Vertical		

g_10MHz

Ch 06 (Horizontal) Average



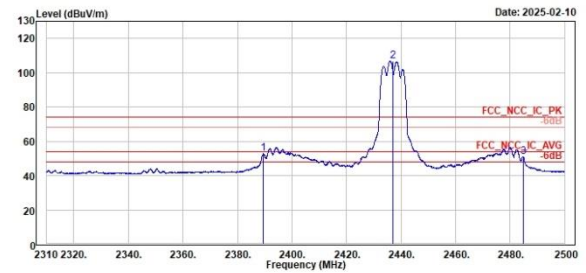
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	Freq	Level	Read	Level	Factor	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	dB	cm	deg			
1	2389.99	47.34	9.03	38.21	54.00	-6.76	102	93	Average	Horizontal		
2 *	2437.00	102.56	64.87	38.49	54.00	48.56	102	93	Average	Horizontal		
3 †	2484.23	50.74	12.14	38.60	54.00	-3.26	102	93	Average	Horizontal		



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	Freq	Level	Read	Level	Factor	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	dB	cm	deg			
1 †	2389.56	52.70	14.49	38.21	54.00	-1.30	260	238	Average	Vertical		
2 *	2437.00	106.97	68.48	38.49	54.00	52.97	260	238	Average	Vertical		
3 †	2484.75	51.05	12.45	38.60	54.00	-2.95	260	238	Average	Vertical		

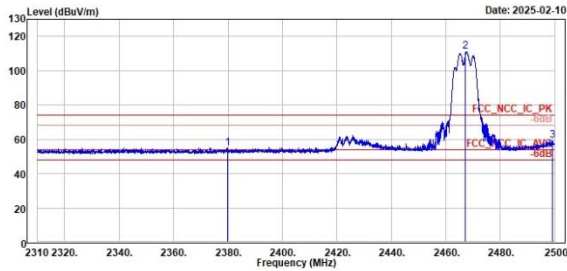
g_10MHz

Ch 12 (Horizontal) Peak

Ch 12 (Vertical) Peak



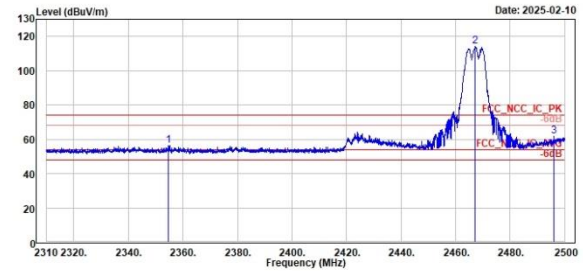
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	Freq	Level	Read	Level	Factor	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg				
1	2379.92	55.08	16.96	38.12	74.00	-18.92	100	92	Peak	Horizontal		
2 *	2467.00	111.00	72.42	38.58	74.00	37.00	100	92	Peak	Horizontal		
3	2499.10	59.32	20.70	38.62	74.00	-14.68	100	92	Peak	Horizontal		



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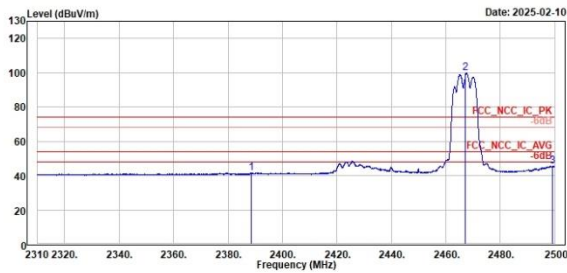
	Freq	Level	Read	Level	Factor	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg				
1	2354.65	56.57	18.68	37.89	74.00	-17.43	316	121	Peak	Vertical		
2 *	2467.00	114.07	75.49	38.58	74.00	40.07	316	121	Peak	Vertical		
3	2496.06	61.61	22.99	38.62	74.00	-12.39	316	121	Peak	Vertical		

g_10MHz

Ch 12 (Horizontal) Average



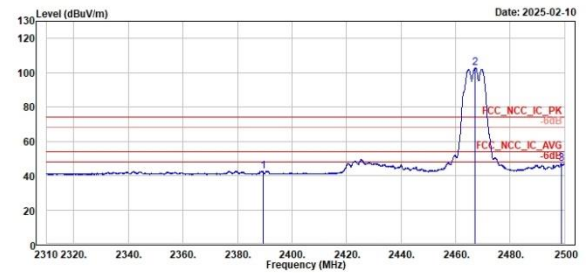
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	Freq	Level	Read	Level	Factor	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	dB	cm	deg			
1	2388.42	41.65	3.45	38.20	54.00	-12.35	100	92	Average	Horizontal		
2 *	2467.00	99.00	61.22	38.58	54.00	45.00	100	92	Average	Horizontal		
3	2499.29	45.53	6.91	38.62	54.00	-8.47	100	92	Average	Horizontal		



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	Freq	Level	Read	Level	Factor	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	dB	cm	deg			
1	2389.37	42.59	4.39	38.20	54.00	-11.41	316	121	Average	Vertical		
2 *	2467.00	102.74	64.16	38.58	54.00	48.74	316	121	Average	Vertical		
3	2498.72	46.88	8.26	38.62	54.00	-7.12	316	121	Average	Vertical		

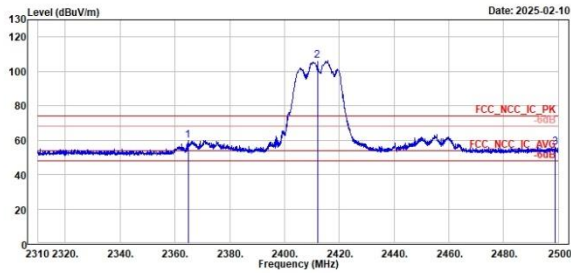
g_20MHz

Ch 01 (Horizontal) Peak

Ch 01 (Vertical) Peak



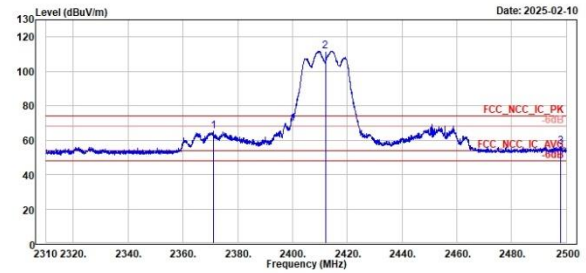
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	Freq	Level	Read	Level	Factor	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg				
1	2364.77	59.96	21.98	37.98	74.00	-14.04	121	63	Peak	Horizontal		
2 *	2412.00	106.14	67.78	38.36	74.00	32.14	121	63	Peak	Horizontal		
3	2498.81	56.05	17.43	38.62	74.00	-17.95	121	63	Peak	Horizontal		



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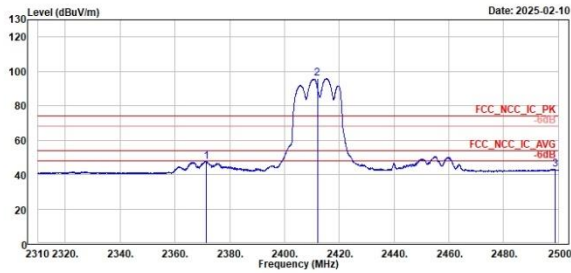
	Freq	Level	Read	Level	Factor	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg				
1	2371.13	65.36	27.32	38.04	74.00	-8.64	304	158	Peak	Vertical		
2 *	2412.00	111.90	73.54	38.36	74.00	37.90	304	158	Peak	Vertical		
3	2497.77	56.33	17.71	38.62	74.00	-17.67	304	158	Peak	Vertical		

g_20MHz

Ch 01 (Horizontal) Average



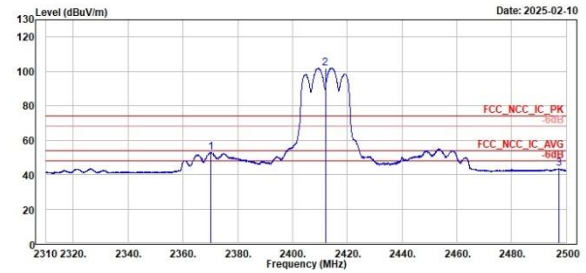
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	Freq	Level	Read	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg		
1	2371.42	47.44	9.40	38.04	54.00	-6.56	121	63 Average	Horizontal	
2 *	2412.00	96.10	57.74	38.36	54.00	42.10	121	63 Average	Horizontal	
3	2498.86	42.93	4.31	38.62	54.00	-11.07	121	63 Average	Horizontal	



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	Freq	Level	Read	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg		
1	2370.28	52.92	14.00	38.02	54.00	-1.08	304	158 Average	Vertical	
2 *	2412.00	102.01	63.65	38.36	54.00	48.01	304	158 Average	Vertical	
3	2497.29	43.34	4.72	38.62	54.00	-10.66	304	158 Average	Vertical	

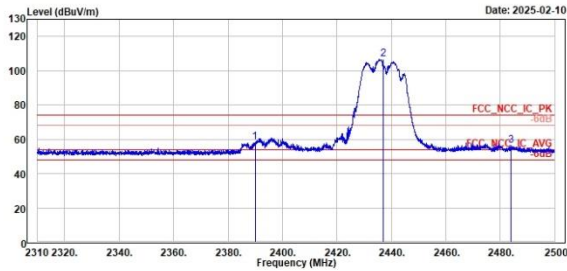
g_20MHz

Ch 06 (Horizontal) Peak

Ch 06 (Vertical) Peak



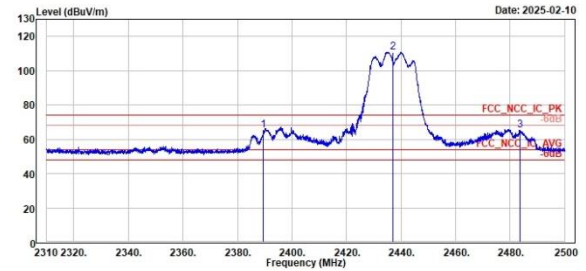
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	Freq	Level	Read	Level	Factor	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg				
1	2389.94	58.41	20.20	38.21	74.00	-15.59	335	90	Peak	Horizontal		
2 *	2437.00	106.58	68.09	38.49	74.00	32.58	335	90	Peak	Horizontal		
3	2484.04	56.36	17.76	38.60	74.00	-17.64	335	90	Peak	Horizontal		



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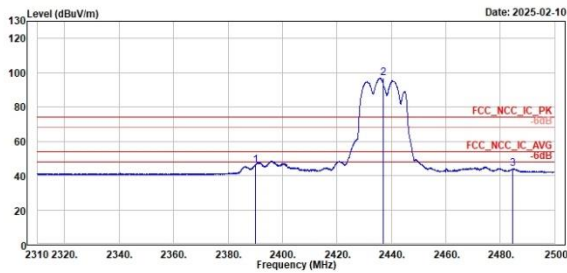
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	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg				
1	2389.56	65.22	27.01	38.21	74.00	-8.78	262	76	Peak	Vertical		
2 *	2437.00	110.93	72.44	38.49	74.00	36.93	262	76	Peak	Vertical		
3	2483.71	65.28	26.68	38.60	74.00	-8.72	262	76	Peak	Vertical		

g_20MHz

Ch 06 (Horizontal) Average



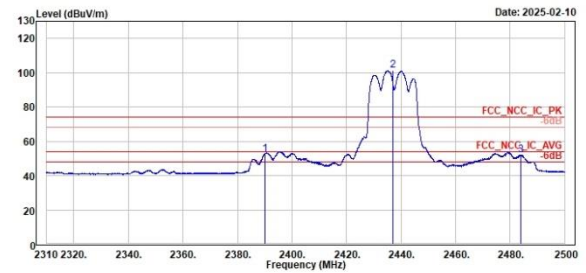
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	Freq	Level	Read	Level	Factor	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	dB	cm	deg			
1	2389.99	46.19	7.98	38.21	54.00	-7.81	335	90	Average	Horizontal		
2 *	2437.00	96.72	58.23	38.49	54.00	42.72	335	90	Average	Horizontal		
3	2484.52	43.90	5.30	38.60	54.00	-10.10	335	90	Average	Horizontal		



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	Freq	Level	Read	Level	Factor	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	dB	cm	deg			
1	2389.99	52.56	14.35	38.21	54.00	-1.44	262	76	Average	Vertical		
2 *	2437.00	101.22	62.73	38.49	54.00	47.22	262	76	Average	Vertical		
3	2483.95	51.93	13.33	38.60	54.00	-2.07	262	76	Average	Vertical		

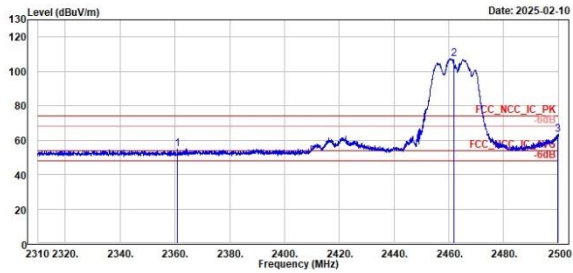
g_20MHz

Ch 11 (Horizontal) Peak

Ch 11 (Vertical) Peak



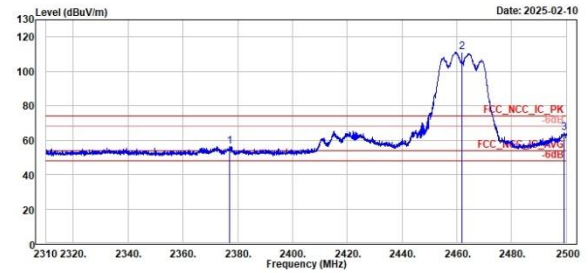
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	Freq	Level	Read	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg		
1	2361.02	55.06	17.12	37.94	74.00	-18.94	100	66 Peak	Horizontal	
2 *	2462.00	107.19	68.62	38.57	74.00	33.19	100	66 Peak	Horizontal	
3	2499.91	63.36	24.74	38.62	74.00	-10.64	100	66 Peak	Horizontal	



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	Freq	Level	Read	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg		
1	2377.12	56.41	18.32	38.09	74.00	-17.59	295	156 Peak	Vertical	
2 *	2462.00	111.32	72.75	38.57	74.00	37.32	295	156 Peak	Vertical	
3	2499.19	64.08	25.46	38.62	74.00	-9.92	295	156 Peak	Vertical	

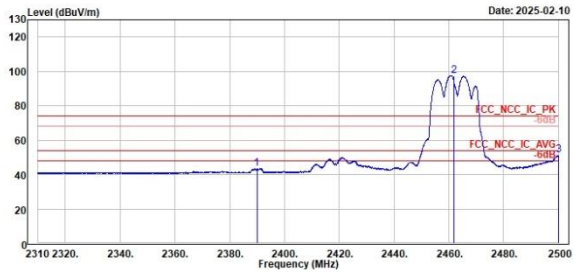
g_20MHz

Ch 11 (Horizontal) Average

Ch 11 (Vertical) Average



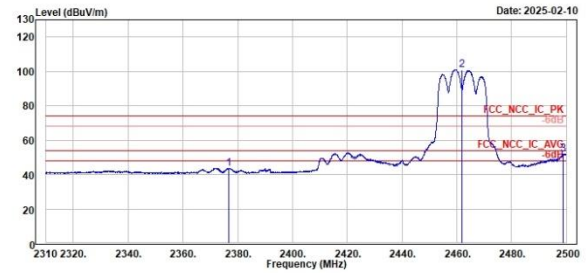
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	Freq	Level	Read	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg		
1	2389.94	43.56	5.35	38.21	54.00	-10.44	100	66 Average	Horizontal	
2 *	2462.00	97.57	59.00	38.57	54.00	43.57	100	66 Average	Horizontal	
3 !	2500.00	51.60	12.98	38.62	54.00	-2.40	100	66 Average	Horizontal	



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	Freq	Level	Read	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg		
1	2376.79	43.71	5.63	38.08	54.00	-10.29	295	156 Average	Vertical	
2 *	2462.00	100.99	62.42	38.57	54.00	46.99	295	156 Average	Vertical	
3 !	2498.72	52.10	13.48	38.62	54.00	-1.90	295	156 Average	Vertical	

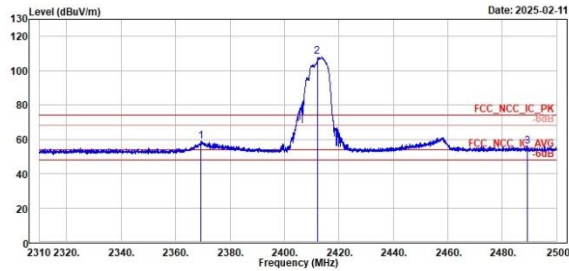
n_10MHz

Ch 01 (Horizontal) Peak

Ch 01 (Vertical) Peak



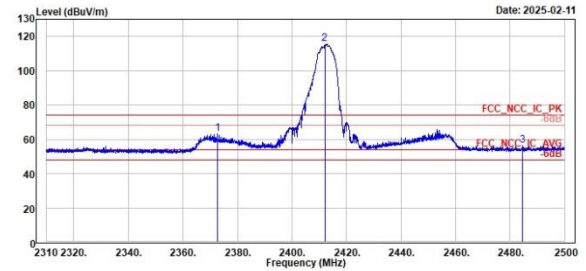
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	Freq	Level	Read	Level	Factor	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB		cm	deg			
1	2369.28	58.82	20.81	38.01	74.00	-15.18		118	65	Peak	Horizontal	
2 *	2412.00	108.10	69.74	38.36	74.00	34.10		118	65	Peak	Horizontal	
3	2489.27	55.99	17.38	38.61	74.00	-18.01		118	65	Peak	Horizontal	



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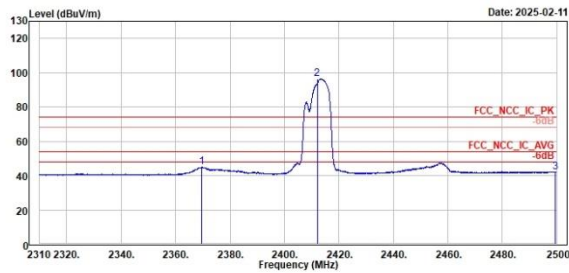
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	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB		cm	deg			
1	2372.61	63.21	25.16	38.05	74.00	-10.79		375	123	Peak	Vertical	
2 *	2412.00	115.46	77.10	38.36	74.00	41.46		375	123	Peak	Vertical	
3	2484.66	56.52	17.92	38.60	74.00	-17.48		375	123	Peak	Vertical	

n_10MHz

Ch 01 (Horizontal) Average



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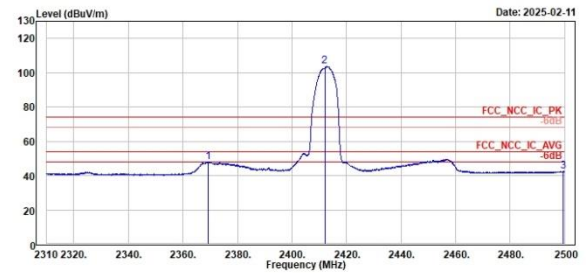


	Freq	Level	Read	Level	Factor	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	dB	cm	deg			
1	2369.66	44.76	6.74	38.02	54.00	-9.24	118	65	Average	Horizontal		
2 *	2412.00	96.61	58.25	38.36	54.00	42.61	118	65	Average	Horizontal		
3	2499.43	42.24	3.62	38.62	54.00	-11.76	118	65	Average	Horizontal		

Ch 01 (Vertical) Average



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	Freq	Level	Read	Level	Factor	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	dB	cm	deg			
1	2369.33	47.99	9.98	38.01	54.00	-6.01	375	123	Average	Vertical		
2 *	2412.00	103.69	65.33	38.36	54.00	49.69	375	123	Average	Vertical		
3	2499.38	42.38	3.76	38.62	54.00	-11.62	375	123	Average	Vertical		

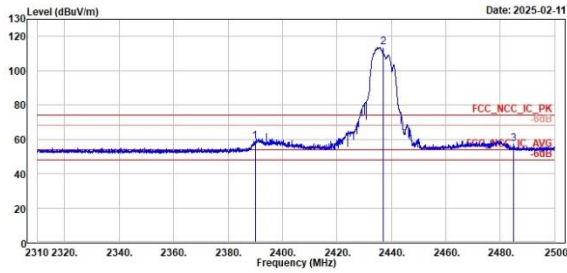
n_10MHz

Ch 06 (Horizontal) Peak

Ch 06 (Vertical) Peak



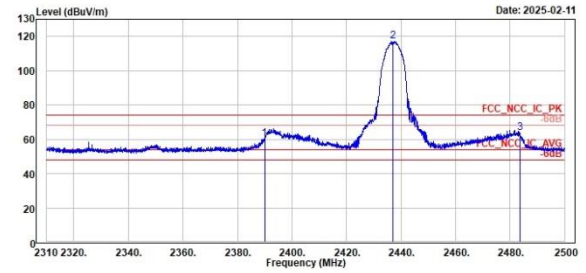
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	Freq	Level	Read	Level	Factor	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg				
1	2389.94	59.84	20.83	38.21	74.00	-14.96	335	88	Peak	Horizontal		
2 *	2437.00	113.00	75.31	38.49	74.00	39.80	335	88	Peak	Horizontal		
3	2484.75	57.46	18.86	38.60	74.00	-16.54	335	88	Peak	Horizontal		



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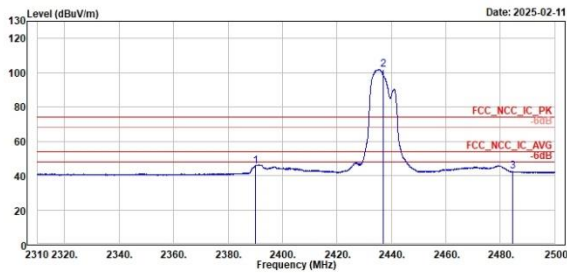
	Freq	Level	Read	Level	Factor	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg				
1	2389.94	60.37	22.16	38.21	74.00	-13.63	180	282	Peak	Vertical		
2 *	2437.00	117.12	78.63	38.49	74.00	43.12	180	282	Peak	Vertical		
3	2483.50	63.70	25.10	38.60	74.00	-10.30	180	282	Peak	Vertical		

n_10MHz

Ch 06 (Horizontal) Average



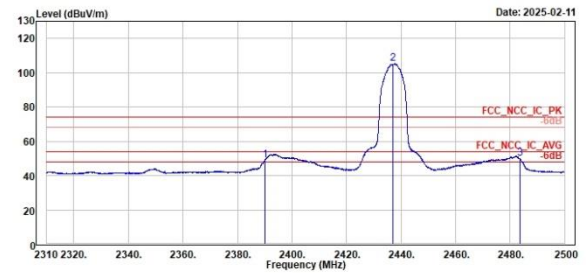
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	Freq	Level	Read	Level	Factor	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg				
1	2389.99	45.59	7.38	38.21	54.00	-8.41	335	88	Average	Horizontal		
2 *	2437.00	101.88	63.39	38.49	54.00	47.88	335	88	Average	Horizontal		
3	2484.47	42.55	3.95	38.60	54.00	-11.45	335	88	Average	Horizontal		



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	Freq	Level	Read	Level	Factor	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg				
1	2389.99	49.05	18.84	38.21	54.00	-4.95	180	282	Average	Vertical		
2 *	2437.00	105.21	66.72	38.49	54.00	51.21	180	282	Average	Vertical		
3	2483.52	49.85	11.25	38.60	54.00	-4.15	180	282	Average	Vertical		

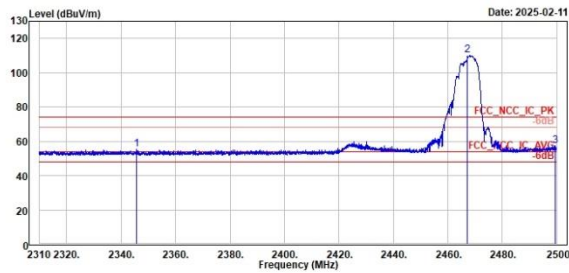
n_10MHz

Ch 12 (Horizontal) Peak

Ch 12 (Vertical) Peak



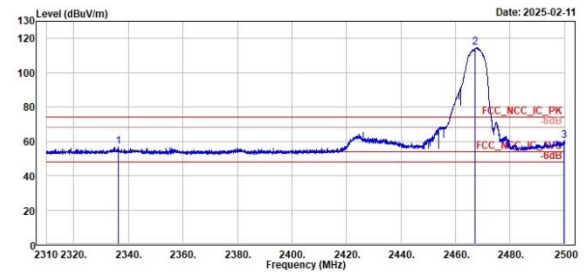
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	Freq	Level	Read	Level	Factor	Limit	Over	Apos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg				
1	2345.72	55.14	17.32	37.82	74.00	-18.86	287	94	Peak	Horizontal		
2 *	2467.00	118.20	71.62	38.58	74.00	36.20	287	94	Peak	Horizontal		
3	2499.38	57.49	18.87	38.62	74.00	-16.51	287	94	Peak	Horizontal		



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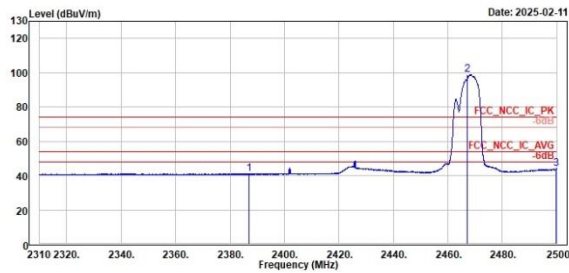
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	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg				
1	2336.32	56.91	19.12	37.79	74.00	-17.09	286	115	Peak	Vertical		
2 *	2467.00	114.77	76.19	38.58	74.00	40.77	286	115	Peak	Vertical		
3	2499.81	60.16	21.54	38.62	74.00	-13.84	286	115	Peak	Vertical		

n_10MHz

Ch 12 (Horizontal) Average



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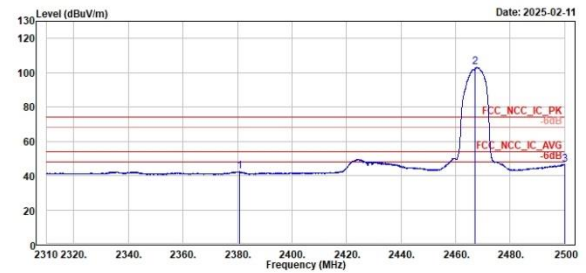


	Freq	Level	Read	Level	Factor	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg				
1	2386.95	41.11	2.93	38.18	54.00	-12.89	287	94	Average	Horizontal		
2 *	2467.00	98.78	68.20	38.58	54.00	44.78	287	94	Average	Horizontal		
3	2499.91	43.88	5.26	38.62	54.00	-10.12	287	94	Average	Horizontal		

Ch 12 (Vertical) Average



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	Freq	Level	Read	Level	Factor	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg				
1	2386.95	41.11	2.93	38.18	54.00	-12.89	286	115	Average	Vertical		
2 *	2467.00	103.09	64.51	38.58	54.00	49.09	286	115	Average	Vertical		
3	2499.95	46.58	7.96	38.62	54.00	-7.42	286	115	Average	Vertical		

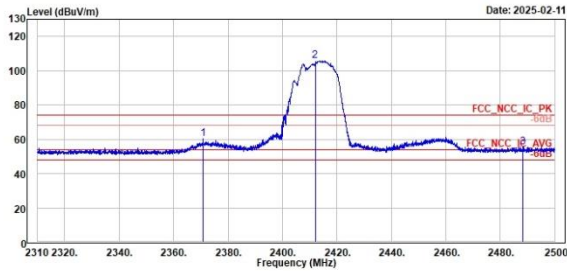
n_20MHz

Ch 01 (Horizontal) Peak

Ch 01 (Vertical) Peak



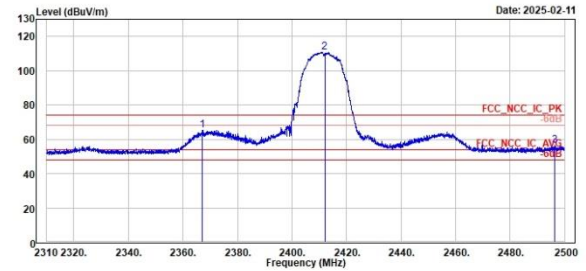
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	Freq	Level	Read	Level	Factor	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	dB	cm	deg			
1	2370.75	60.47	22.44	38.03	74.00	-13.53	299	89	Peak	Horizontal		
2 *	2412.00	105.70	67.34	38.36	74.00	31.70	299	89	Peak	Horizontal		
3	2488.36	55.59	16.98	38.61	74.00	-18.41	299	89	Peak	Horizontal		



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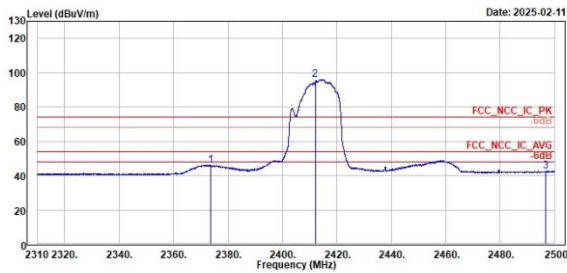
	Freq	Level	Read	Level	Factor	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	dB	cm	deg			
1	2367.05	65.21	27.21	38.00	74.00	-8.79	310	158	Peak	Vertical		
2 *	2412.00	110.89	72.53	38.36	74.00	36.89	310	158	Peak	Vertical		
3	2496.49	56.34	17.72	38.62	74.00	-17.66	310	158	Peak	Vertical		

n_20MHz

Ch 01 (Horizontal) Average



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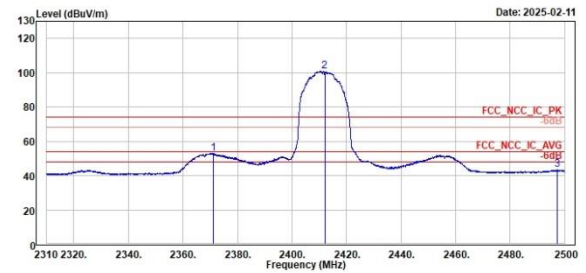


	Freq	Level	Read	Level	Factor	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	dB	cm	deg			
1	2373.56	46.13	8.07	38.06	54.00	-7.87	299	89	Average	Horizontal		
2 *	2412.00	96.03	57.67	38.36	54.00	42.03	299	89	Average	Horizontal		
3	2496.72	42.55	3.93	38.62	54.00	-11.45	299	89	Average	Horizontal		

Ch 01 (Vertical) Average



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	Freq	Level	Read	Level	Factor	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	dB	cm	deg			
1	2373.56	46.13	8.07	38.06	54.00	-7.87	299	89	Average	Horizontal		
2 *	2412.00	96.03	57.67	38.36	54.00	42.03	299	89	Average	Horizontal		
3	2496.72	42.55	3.93	38.62	54.00	-11.45	299	89	Average	Horizontal		

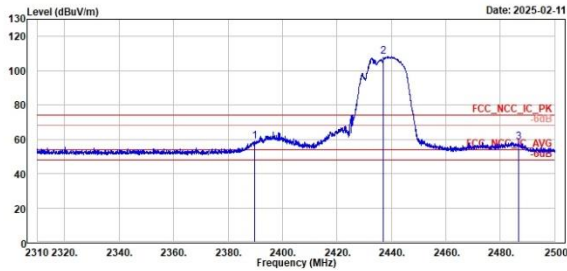
n_20MHz

Ch 06 (Horizontal) Peak

Ch 06 (Vertical) Peak



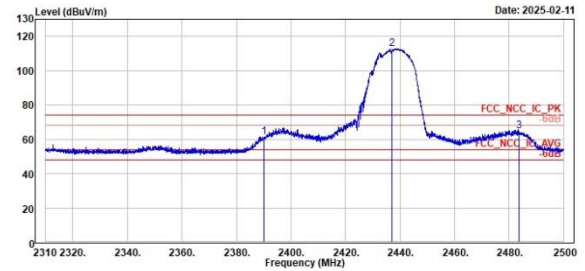
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	Freq	Level	Read	Level	Factor	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg				
1	2389.90	58.63	20.42	38.21	74.00	-15.37	337	90	Peak	Horizontal		
2 *	2437.00	108.45	69.96	38.49	74.00	34.45	337	90	Peak	Horizontal		
3	2486.75	58.36	19.76	38.60	74.00	-15.64	337	90	Peak	Horizontal		



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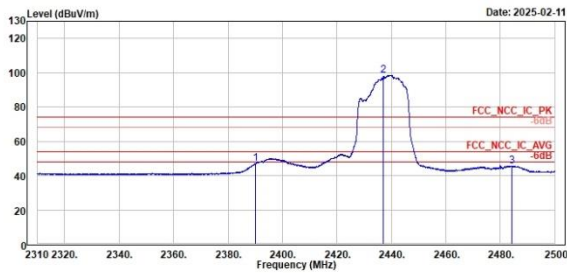
	Freq	Level	Read	Level	Factor	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg				
1	2389.99	61.33	23.12	38.21	74.00	-12.67	292	117	Peak	Vertical		
2 *	2437.00	112.93	74.44	38.49	74.00	38.93	292	117	Peak	Vertical		
3	2483.76	64.66	26.06	38.60	74.00	-9.34	292	117	Peak	Vertical		

n_20MHz

Ch 06 (Horizontal) Average



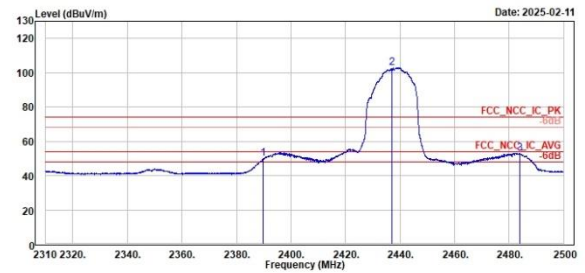
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	Freq	Level	Read	Level	Factor	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	dB	cm	deg			
1	2389.99	46.82	8.61	38.21	54.00	-7.18	337	90	Average	Horizontal		
2 *	2437.00	98.51	60.82	38.49	54.00	44.51	337	90	Average	Horizontal		
3	2484.18	45.69	7.09	38.60	54.00	-8.31	337	90	Average	Horizontal		



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	Freq	Level	Read	Level	Factor	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	dB	cm	deg			
1	2389.71	49.86	11.65	38.21	54.00	-4.14	292	117	Average	Vertical		
2 *	2437.00	102.99	64.58	38.49	54.00	48.99	292	117	Average	Vertical		
3	2483.99	52.75	14.15	38.60	54.00	-1.25	292	117	Average	Vertical		

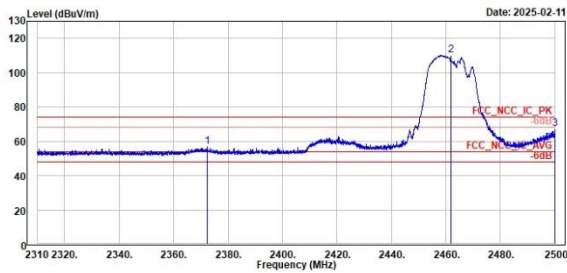
n_20MHz

Ch 11 (Horizontal) Peak

Ch 11 (Vertical) Peak



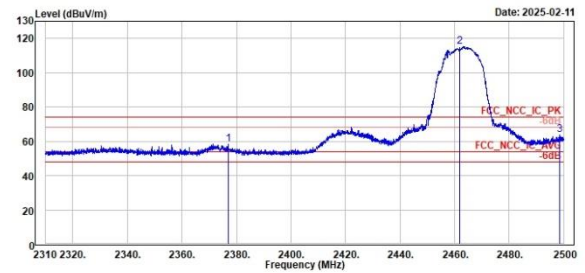
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	Freq	Level	Read	Level	Factor	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg				
1	2372.32	56.86	18.81	38.05	74.00	-17.14	100	63	Peak	Horizontal		
2 *	2462.00	118.22	71.65	38.57	74.00	36.22	100	63	Peak	Horizontal		
3	2500.00	67.37	28.75	38.62	74.00	-6.63	100	63	Peak	Horizontal		



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	Freq	Level	Read	Level	Factor	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg				
1	2376.93	58.31	20.22	38.09	74.00	-15.69	322	267	Peak	Vertical		
2 *	2462.00	115.34	76.77	38.57	74.00	41.34	322	267	Peak	Vertical		
3	2498.67	63.67	25.25	38.62	74.00	-10.13	322	267	Peak	Vertical		

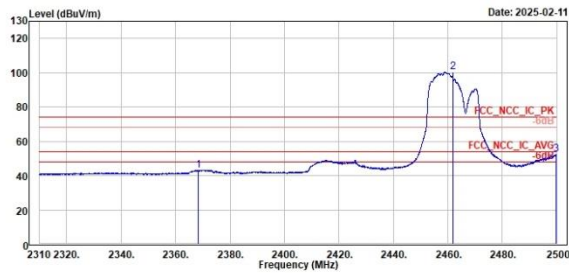
n_20MHz

Ch 11 (Horizontal) Average

Ch 11 (Vertical) Average



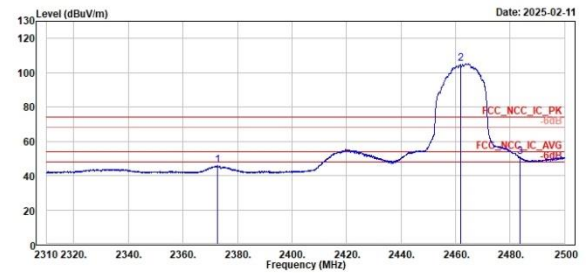
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	Freq	Level	Read	Level	Factor	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg				
1	2368.24	43.15	5.14	38.01	54.00	-10.85	100	63	Average	Horizontal		
2 *	2462.00	100.20	61.63	38.57	54.00	46.20	100	63	Average	Horizontal		
3 †	2499.76	52.15	13.53	38.62	54.00	-1.85	100	63	Average	Horizontal		



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	Freq	Level	Read	Level	Factor	Limit	Over	APos	TPos	Remark	Pol/Phase	Note
	MHz	dBuV/m	dBuV	dB/m	dBuV/m	dB	cm	deg				
1	2372.61	45.88	7.83	38.05	54.00	-8.12	322	267	Average	Vertical		
2 *	2462.00	105.07	66.50	38.57	54.00	51.07	322	267	Average	Vertical		
3 †	2483.52	50.92	12.32	38.60	54.00	-3.08	322	267	Average	Vertical		