



RF TEST REPORT

Product Name: Fixed UHF Reader

Model Name: UR4

FCC ID: 2AC6AUR4P

Issued For : Shenzhen Chainway Information Technology Co., Ltd

9F Building 2, Daqian Industrial Park, District 67, XingDong
Community, Xin'an Street, Bao'an District, Shenzhen, Guangdong,
China

Issued By : Shenzhen LGT Test Service Co., Ltd.

Room 205, Building 13, Zone B, Zhenxiong Industrial Park, No.177,
Renmin West Road, Jinsha, Kengzi Street, Pingshan District,
Shenzhen, Guangdong, China

Report Number: LGT25C202RF02

Sample Received Date: Jul. 11, 2025

Date of Test: Jul. 11, 2025 ~ Aug. 11, 2025

Date of Issue: Aug. 11, 2025

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TEST REPORT CERTIFICATION

Applicant: Shenzhen Chainway Information Technology Co., Ltd
9F Building 2, Daqian Industrial Park, District 67, XingDong
Address: Community, Xin'an Street, Bao'an District, Shenzhen, Guangdong, China

Manufacturer: Shenzhen Chainway Information Technology Co., Ltd
9F Building 2, Daqian Industrial Park, District 67, XingDong
Address: Community, Xin'an Street, Bao'an District, Shenzhen, Guangdong, China

Product Name: Fixed UHF Reader

Trademark: Chainway

Model Name: UR4

Sample Status: Normal

APPLICABLE STANDARDS	
STANDARD	TEST RESULTS
FCC Part 15.247, Subpart C ANSI C63.10-2013	PASS

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Revision History

Rev.	Issue Date	Revisions
00	Aug. 11, 2025	Initial Issue



1. SUMMARY OF TEST RESULTS

Test procedures according to the technical standards:
KDB 558074 D01 15.247 Meas Guidance v05r02.

FCC Part 15.247, Subpart C			
Standard Section	Test Item	Judgment	Remark
15.207	Conducted Emission	PASS	--
15.247(a)(1)	Hopping Channel Separation	PASS	--
15.247(a)(1)&(b)(1)	Output Power	PASS	--
15.209	Radiated Spurious Emission	PASS	--
15.247(d)	Conducted Spurious & Band Edge Emission	PASS	--
15.247(a)(1)(iii)	Number of Hopping Frequency	PASS	--
15.247(a)(1)(iii)	Dwell Time	PASS	--
15.247(a)(1)	Bandwidth	PASS	--
15.205	Restricted bands of operation	PASS	--
Part 15.247(d)/part 15.209(a)	Band Edge Emission	PASS	--
15.203	Antenna Requirement	PASS	--

NOTE:

- (1) 'N/A' denotes test is not applicable in this Test Report.
- (2) All tests are according to ANSI C63.10-2013.



1.1 TEST FACTORY

Company Name:	Shenzhen LGT Test Service Co., Ltd.
Address:	Room 205, Building 13, Zone B, Zhenxiong Industrial Park, No.177, Renmin West Road, Jinsha, Kengzi Street, Pingshan District, Shenzhen, Guangdong, China
Accreditation Certificate:	A2LA Certificate No.: 6727.01
	FCC Registration No.: 746540
	CAB ID: CN0136

1.2 MEASUREMENT UNCERTAINTY

The reported uncertainty of measurement $y \pm U$, where expanded uncertainty U is based on a standard uncertainty multiplied by a coverage factor of $k=2$, providing a level of confidence of approximately **95** %.

No.	Item	Uncertainty
1	Occupied Channel Bandwidth	$\pm 0.46\%$
2	RF Output Power, Conducted	$\pm 0.71\text{dB}$
3	Power Spectral Density, Conducted	$\pm 1.57\text{dB}$
4	Unwanted Emission, Conducted	$\pm 0.63\text{dB}$
5	Conducted emission	$\pm 2.80\text{dB}$
6	All Emissions, Radiated (0.009-30MHz)	$\pm 2.16\text{dB}$
7	All Emissions, Radiated (30MHz-1GHz)	$\pm 4.61\text{dB}$
8	All Emissions, Radiated (1GHz-18GHz)	$\pm 5.49\text{dB}$
9	Temperature	$\pm 0.5^{\circ}\text{C}$
10	Humidity	$\pm 2\%$
11	Duty Cycle	$\pm 2.3\%$

Note: The measurement uncertainty is not included in the test result.



2. GENERAL INFORMATION

2.1 GENERAL DESCRIPTION OF THE EUT

Product Name:	Fixed UHF Reader	
Trademark:	Chainway	
Test Model Name:	UR4	
Series Model:	N/A	
Model Difference:	N/A	
Product Description:	Operation Frequency:	902.75-927.25 MHz
	Modulation Type:	FSK
	Number Of Channel:	50
	Antenna Designation:	External
	Antenna Gain (dBi)	3
Channel List:	Please refer to the Note 3	
Rating:	Input: 100-240V~ 50/60Hz 0.8A Output: DC 12.0V 2.0A 24.0W	
Hardware Version:	UR4_Hardware_version	
Software Version:	UR4_Software_version	
Connecting I/O Port(s):	Please refer to the Note 1.	

Note:

1. For a more detailed features description, please refer to the manufacturer's specifications or the User Manual.
2. The antenna information refers to the manufacturer provide report, applicable only to the tested sample identified in the report. Due to the incorrect antenna information, a series of problems such as the accuracy of the test results will be borne by the customer.



3.

Operation Frequency each of channel							
Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
1	902.75MHz	16	910.25MHz	31	917.75MHz	46	925.25MHz
2	903.25MHz	17	910.75MHz	32	918.25MHz	47	925.75MHz
3	903.75MHz	18	911.25MHz	33	918.75MHz	48	926.25MHz
4	904.25MHz	19	911.75MHz	34	919.25MHz	49	926.75MHz
5	904.75MHz	20	912.25MHz	35	919.75MHz	50	927.25MHz
6	905.25MHz	21	912.75MHz	36	920.25MHz		
7	905.75MHz	22	913.25MHz	37	920.75MHz		
8	906.25MHz	23	913.75MHz	38	921.25MHz		
9	906.75MHz	24	914.25MHz	39	921.75MHz		
10	907.25MHz	25	914.75MHz	40	922.25MHz		
11	907.75MHz	26	915.25MHz	41	922.75MHz		
12	908.25MHz	27	915.75MHz	42	923.25MHz		
13	908.75MHz	28	916.25MHz	43	923.75MHz		
14	909.25MHz	29	916.75MHz	44	924.25MHz		
15	909.75MHz	30	917.25MHz	45	924.75MHz		



2.2 DESCRIPTION OF THE TEST MODES

To investigate the maximum EMI emission characteristics generated from EUT, the test system was pre-scanning tested based on the consideration of following EUT operation mode or test configuration mode which possibly have effect on EMI emission level. Each of these EUT operation mode(s) or test configuration mode(s) mentioned above was evaluated respectively.

Worst Mode	Frequency (MHz)
Mode 1	902.75
Mode 2	915.25
Mode 3	927.25

Note:

- (1) The measurements are performed at all Bit Rate of Transmitter, the worst data was reported.
- (2) We tested for all available U.S. voltage and frequencies (For 120V, 50/60Hz and 240V, 50/60Hz) for which the device is capable of operation, and the worst case of 120V/ 60Hz is shown in the report.
- (3) The battery is fully charged during the radiated and RF conducted test.

For AC Conducted Emission

Test Case	
AC Conducted Emission	Mode 13: Keeping TX

2.3 TABLE OF PARAMETERS OF TEST SOFTWARE SETTING

During testing channel & 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 power expected by the customer and is going to be fixed on the firmware of the final end product power parameters of FHSS.

Test software Version	Test program: 902-928M	
UHFAPP-1.3.10	Mode Or Modulation type	Power setting
	FSK	22



2.4 DESCRIPTION OF NECESSARY ACCESSORIES AND SUPPORT UNITS

The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

Accessories Equipment

Description	Manufacturer	Model	S/N	Rating
Adapter	ULLPOWER	ICP30A-120-2000	N/A	Input: 100-240V ~ 50/60Hz 0.8A Output: 12V, 2A

Auxiliary Equipment

Description	Manufacturer	Model	S/N	Rating
Laptop	Lenovo	ThinkBook 14 G3 ITL	N/A	N/A

Note:

- (1) For detachable type I/O cable should be specified the length in cm in 『Length』 column.
- (2) “YES” is means “with core”; “NO” is means “without core”.



2.6 EQUIPMENTS LIST

Conducted Emission					
Equipment	Manufacturer	Model No.	Serial No.	Cal. Date	Cal. Until
EMI Test Receiver	R&S	ESU8	100372	2025.03.06	2026.03.05
LISN	COM-POWER	LI-115	02032	2025.03.05	2026.03.04
LISN	SCHWARZBECK	NNLK 8122	00160	2025.03.05	2026.03.04
Transient Limiter	CYBERTEK	EM5010A	E225010004 9	2025.03.05	2026.03.04
Coaxial cables (9kHz-30MHz)	Juncoax	JMR600-N MNM-2M	N.A	2025.03.06	2026.03.05
Temperature & Humidity	JINGCHUANG	BT-3	N.A	2025.03.10	2026.03.09
Testing Software	EMC-I_V1.4.0.3_SKET				

Radiated Test equipment					
Equipment	Manufacturer	Model No.	Serial No.	Cal. Date	Cal. Until
EMI Test Receiver	R&S	ESU8	100372	2025.03.06	2026.03.05
Active loop Antenna	ETS	6502	00049544	2025.03.11	2028.03.10
Spectrum Analyzer	Keysight	N9010B	MY60242508	2025.03.05	2026.03.04
Trilog Broadband Antenna (30M-1G)	SCHWARZBECK	VULB 9168	2705	2024.05.17	2027.05.16
Horn Antenna(1-18G)	SCHWARZBECK	3115	10SL0060	2025.03.10	2028.03.09
Horn Antenna(18-40G)	SCHWARZBECK	BBHA 9170	685	2023.10.23	2026.10.22
Pre-amplifier(30M-1G)	EMtrace	RP01A	02019	2025.03.06	2026.03.05
Pre-amplifier(1-26.5G)	Agilent	8449B	3008A4722	2025.03.06	2026.03.05
Pre-amplifier(18-40G)	SCHWARZBECK	BBV 9721	9721-019	2024.10.21	2025.10.20
Coaxial cables (9kHz-1GHz)	Juncoax	JMR600-N MNM-8M	N.A	2025.03.06	2026.03.05
Coaxial cables (1GHz-18GHz)	TaiHe	UCD460B- NMSM-1M 9	N.A	2025.03.06	2026.03.05
Coaxial cables (18GHz-40GHz)	Junkosha Inc.	MWX241-0 5000KMSK MS	N.A	2025.03.08	2026.03.07
Temperature& Humidity test chamber	AISRY	LX-1000L	171200018	2024.08.05	2025.08.04
Antenna Tower	SAEMC	BK-4AT-BS -D	SK20210930 08	N.A	N.A
Temperature & Humidity	JINGCHUANG	BT-3	N.A	2025.03.10	2026.03.09
Testing Software	EMC-I_V1.4.0.3_SKET				

RF Conducted Test equipment					
Equipment	Manufacturer	Model No.	Serial No.	Cal. Date	Cal. Until
Signal Analyzer	Keysight	N9010B	MY60242508	2025.03.05	2026.03.04
Signal Analyzer	Keysight	N9020A	MY50530994	2025.03.05	2026.03.04
Signal Analyzer	R&S	FSV40-N	102245	2025.02.17	2026.02.16
Power Sensor	R&S	NRP8S	149.0006K02 -104963-Ae	2025.03.06	2026.03.05
RF Automatic Test system	MW	MW100 -RFCB	MW220324L G-33	2025.03.06	2026.03.05
MXG Vector Signal Generator	Keysight	N5182B	MY59100717	2025.03.05	2026.03.04



Temperature& Humidity test chamber	AISRY	LX-1000L	171200018	2024.08.05	2025.08.04
Attenuator	eastsheep	90db	N.A	2025.03.06	2026.03.05
Temperature & Humidity	JINGCHUANG	BT-3	N.A	2025.03.10	2026.03.09
Digital multimeter	MASTECH	MS8261	MBGBC8305 3	2025.03.05	2026.03.04
DC source	Jiuyuan	QJ6010E	N.A	2025.03.09	2026.03.08
Testing Software	MTS8310_V2.0.0.0_MW				



3. EMC EMISSION TEST

3.1 CONDUCTED EMISSION MEASUREMENT

3.1.1 POWER LINE CONDUCTED EMISSION LIMITS

The radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies, within the band 150 kHz to 30 MHz, shall not exceed the limits in the following table.

FREQUENCY (MHz)	Conducted Emission limit (dBuV)	
	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

Note:

- (1) The tighter limit applies at the band edges.
- (2) The limit of “ * ” marked band means the limitation decreases linearly with the logarithm of the frequency in the range.

The following table is the setting of the receiver

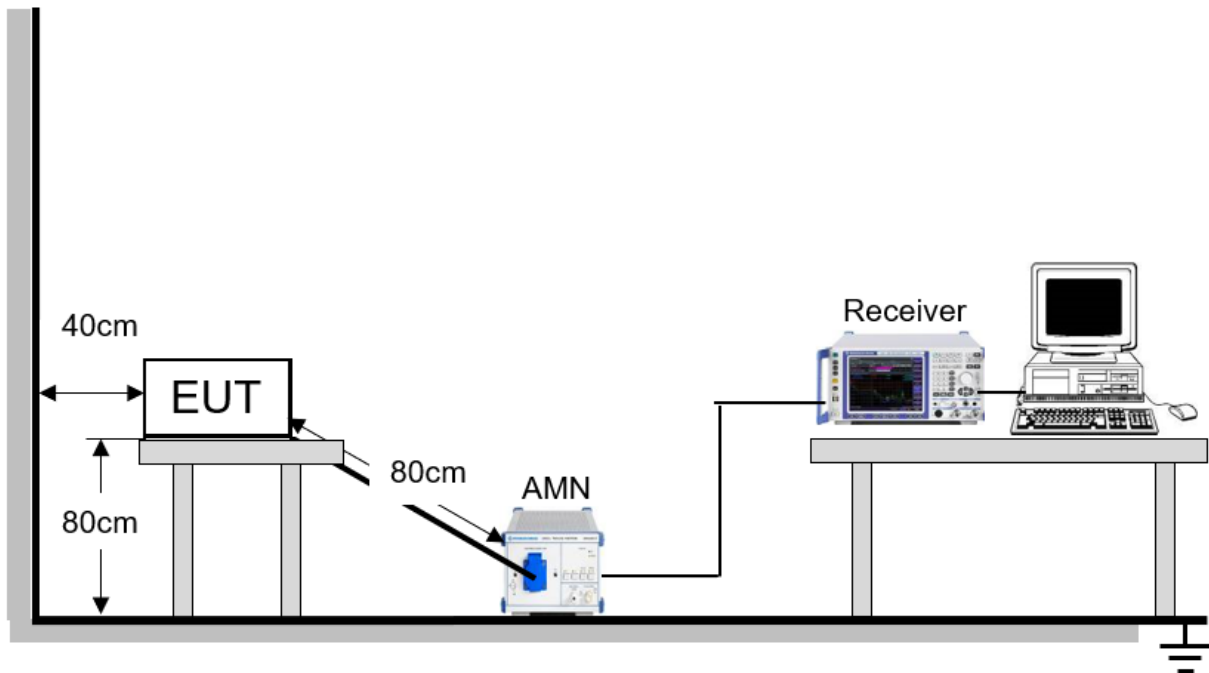
Receiver Parameters	Setting
Attenuation	10 dB
Start Frequency	0.15 MHz
Stop Frequency	30 MHz
IF Bandwidth	9 kHz



3.1.2 TEST PROCEDURE

- The EUT is 0.8 m from the horizontal ground plane and 0.4 m from the vertical ground plane with EUT being connected to the power mains through a line impedance stabilization network (LISN). All other support equipments are powered from additional LISN(s). The LISN provides 50 Ohm/ 50uH of coupling impedance for the measuring instrument.
- Interconnecting cables that hang closer than 40 cm to the ground plane shall be folded back and forth in the center forming a bundle 30 to 40 cm long.
- I/O cables that are not connected to a peripheral shall be bundled in the center. The end of the cable may be terminated, if required, using the correct terminating impedance. The overall length shall not exceed 1 m.
- LISN is at least 80 cm from the nearest part of EUT chassis.
- For the actual test configuration, please refer to the related Item –EUT Test Photos.

3.1.3 TEST SETUP



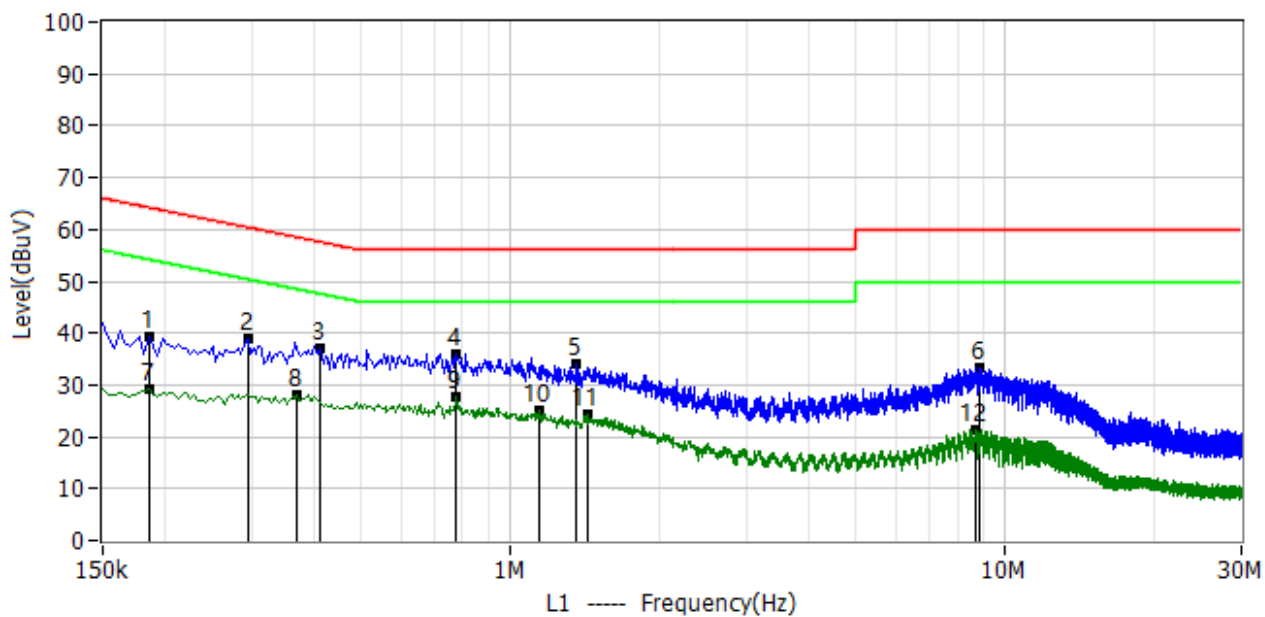
3.1.4 EUT OPERATING CONDITIONS

The EUT was configured for testing in a typical fashion (as a customer would normally use it). The EUT has been programmed to continuously transmit during test. This operating condition was tested and used to collect the included data.



3.1.5 TEST RESULT

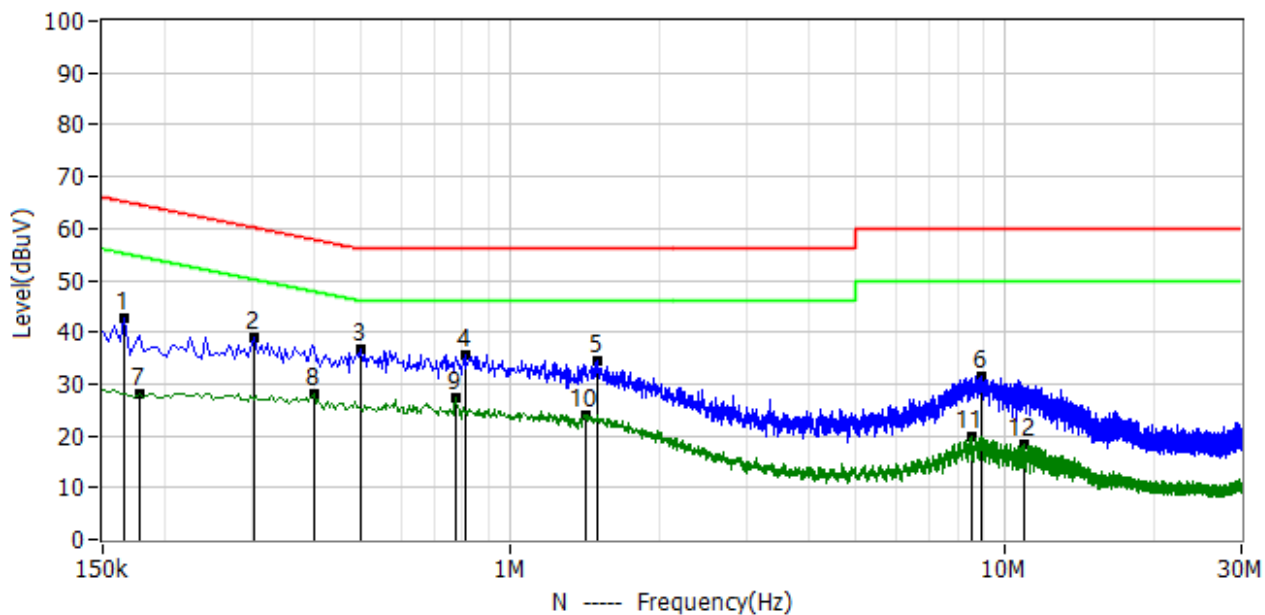
Project: LGT25C202	Test Engineer: LiuH
EUT: Fixed UHF Reader	Temperature: 26.5°C
M/N: UR4	Humidity: 49%RH
Test Voltage: AC 120V/60Hz	Test Data: 2025-07-15
Test Mode: TX	
Note:	



No.	Frequency MHz	Reading dBuV	Factor dB	Level dBuV	Limit dBuV	Margin dB	Detector	Polar
1*	0.186	28.75	10.68	39.43	64.21	-24.79	QP	L1
2*	0.294	28.35	10.77	39.12	60.41	-21.29	QP	L1
3*	0.414	26.27	10.87	37.14	57.57	-20.43	QP	L1
4*	0.778	25.26	10.87	36.13	56.00	-19.87	QP	L1
5*	1.362	23.12	11.09	34.21	56.00	-21.79	QP	L1
6*	8.898	21.77	11.46	33.23	60.00	-26.77	QP	L1
7*	0.186	18.52	10.68	29.20	54.21	-25.02	AV	L1
8*	0.370	17.23	10.89	28.12	48.50	-20.38	AV	L1
9*	0.778	16.98	10.87	27.85	46.00	-18.15	AV	L1
10*	1.138	13.99	10.95	24.94	46.00	-21.06	AV	L1
11*	1.434	13.13	11.12	24.25	46.00	-21.75	AV	L1
12*	8.698	9.88	11.46	21.34	50.00	-28.66	AV	L1



Project: LGT25C202	Test Engineer: LiuH
EUT: Fixed UHF Reader	Temperature: 26.5°C
M/N: UR4	Humidity: 49%RH
Test Voltage: AC 120V/60Hz	Test Data: 2025-07-15
Test Mode: TX	
Note:	



No.	Frequency MHz	Reading dBuV	Factor dB	Level dBuV	Limit dBuV	Margin dB	Detector	Polar
1*	0.166	31.99	10.64	42.63	65.16	-22.52	QP	N
2*	0.302	28.05	10.77	38.82	60.19	-21.37	QP	N
3*	0.498	26.03	10.84	36.87	56.03	-19.16	QP	N
4*	0.810	24.71	10.83	35.54	56.00	-20.46	QP	N
5*	1.494	23.33	11.10	34.43	56.00	-21.57	QP	N
6*	8.930	20.03	11.47	31.50	60.00	-28.50	QP	N
7*	0.178	17.59	10.64	28.23	54.58	-26.35	AV	N
8*	0.402	17.27	10.82	28.09	47.81	-19.72	AV	N
9*	0.774	16.40	10.83	27.23	46.00	-18.77	AV	N
10*	1.418	12.96	11.05	24.01	46.00	-21.99	AV	N
11*	8.526	8.46	11.45	19.91	50.00	-30.09	AV	N
12*	10.890	6.78	11.53	18.31	50.00	-31.69	AV	N



3.2 RADIATED EMISSION MEASUREMENT

3.2.1 RADIATED EMISSION LIMITS

In any 100 kHz bandwidth outside the operating frequency band. In case the emission fall within the Restricted band specified on Part15.205 (a)&209(a) limit in the table and according to ANSI C63.10-2013 below has to be followed.

LIMITS OF RADIATED EMISSION MEASUREMENT (0.009MHz - 1000MHz)

Frequencies (MHz)	Field Strength (micorvolts/meter)	Measurement Distance (meters)
0.009~0.490	2400/F(KHz)	300
0.490~1.705	24000/F(KHz)	30
1.705~30.0	30	30
30~88	100	3
88~216	150	3
216~960	200	3
Above 960	500	3

LIMITS OF RADIATED EMISSION MEASUREMENT (1GHz-25 GHz)

FREQUENCY (MHz)	(dBuV/m) (at 3M)	
	PEAK	AVERAGE
Above 1000	74	54

Notes:

- (1) The limit for radiated test was performed according to FCC PART 15C.
- (2) The tighter limit applies at the band edges.
- (3) Emission level (dBuV/m)=20log Emission level (uV/m).

LIMITS OF RESTRICTED FREQUENCY BANDS

FREQUENCY (MHz)	FREQUENCY (MHz)	FREQUENCY (MHz)	FREQUENCY (GHz)
0.090-0.110	16.42-16.423	399.9-410	4.5-5.15
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	Above 38.6
13.36-13.41			



For Radiated Emission

Spectrum Parameter	Setting
Attenuation	Auto
Detector	Peak/QP/AV
Start Frequency	9 KHz/150KHz (Peak/QP/AV)
Stop Frequency	150KHz/30MHz (Peak/QP/AV)
RB / VB (emission in restricted band)	200Hz (From 9kHz to 0.15MHz)/ 9KHz (From 0.15MHz to 30MHz); 200Hz (From 9kHz to 0.15MHz)/ 9KHz (From 0.15MHz to 30MHz)

Spectrum Parameter	Setting
Attenuation	Auto
Detector	Peak/QP
Start Frequency	30 MHz (Peak/QP)
Stop Frequency	1000 MHz (Peak/QP)
RB / VB (emission in restricted band)	120 KHz / 300 KHz

Spectrum Parameter	Setting
Attenuation	Auto
Detector	Peak
Start Frequency	1000 MHz (Peak/AV)
Stop Frequency	10th carrier hamonic (Peak/AV)
RB / VB (emission in restricted band)	1 MHz / 3 MHz(Peak) 1 MHz/1/T MHz(AVG)

For Restricted band

Spectrum Parameter	Setting
Detector	Peak
Start/Stop Frequency	Lower Band Edge: 2310 to 2410 MHz Upper Band Edge: 2476 to 2500 MHz
RB / VB	1 MHz / 3 MHz(Peak) 1 MHz/1/T MHz(AVG)

Receiver Parameter	Setting
Attenuation	Auto
Start ~ Stop Frequency	9kHz~90kHz / RB 200Hz for PK & AV
Start ~ Stop Frequency	90kHz~110kHz / RB 200Hz for QP
Start ~ Stop Frequency	110kHz~490kHz / RB 200Hz for PK & AV
Start ~ Stop Frequency	490kHz~30MHz / RB 9kHz for QP
Start ~ Stop Frequency	30MHz~1000MHz / RB 120kHz for QP



3.2.2 TEST PROCEDURE

- a. The measuring distance at 3 m shall be used for measurements at frequency 0.009MHz up to 1GHz, and above 1GHz.
- b. The EUT was placed on the top of a rotating table 0.8 m (above 1GHz is 1.5 m) above the ground at a 3 m anechoic chamber test site. The table was rotated 360 degree to determine the position of the highest radiation.
- c. The height of the equipment shall be 0.8 m (above 1GHz is 1.5 m); the height of the test antenna shall vary between 1 m to 4 m. Horizontal and vertical polarization of the antenna are set to make the measurement.
- d. 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 QuasiPeak detector mode will be re-measured.
- e. If the Peak Mode measured value is compliance with and lower than Quasi Peak Mode Limit, the EUT shall be deemed to meet QP Limits and no additional QP Mode measurement was performed.
- f. For the actual test configuration, please refer to the related Item –EUT Test Photos.

Note:

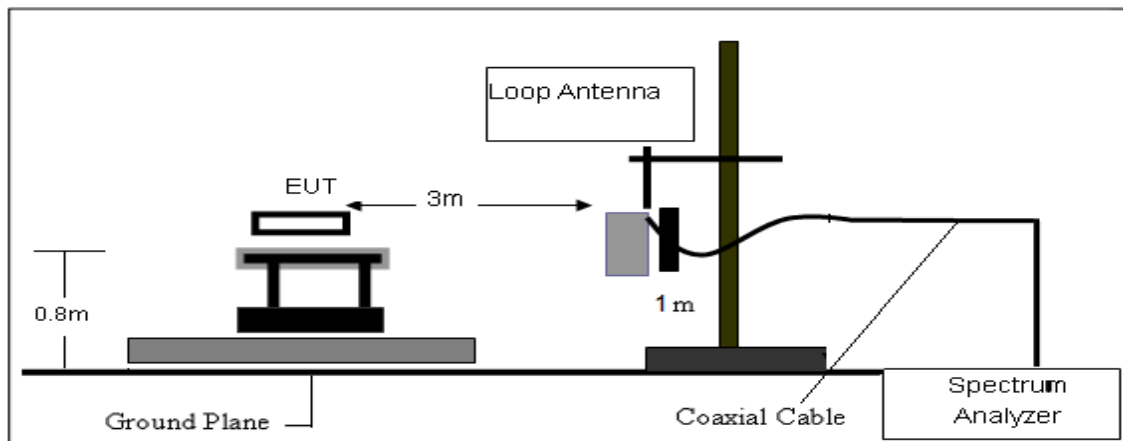
Both horizontal and vertical antenna polarities were tested and performed pretest to three orthogonal axis. The worst case emissions were reported.

3.2.3 DEVIATION FROM TEST STANDARD

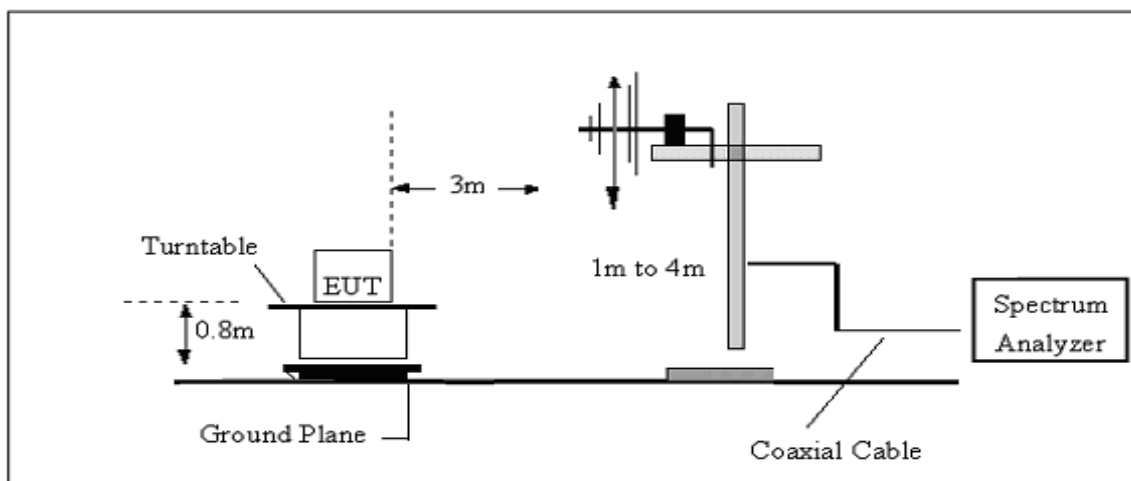
No deviation.

3.2.4 TESTSETUP

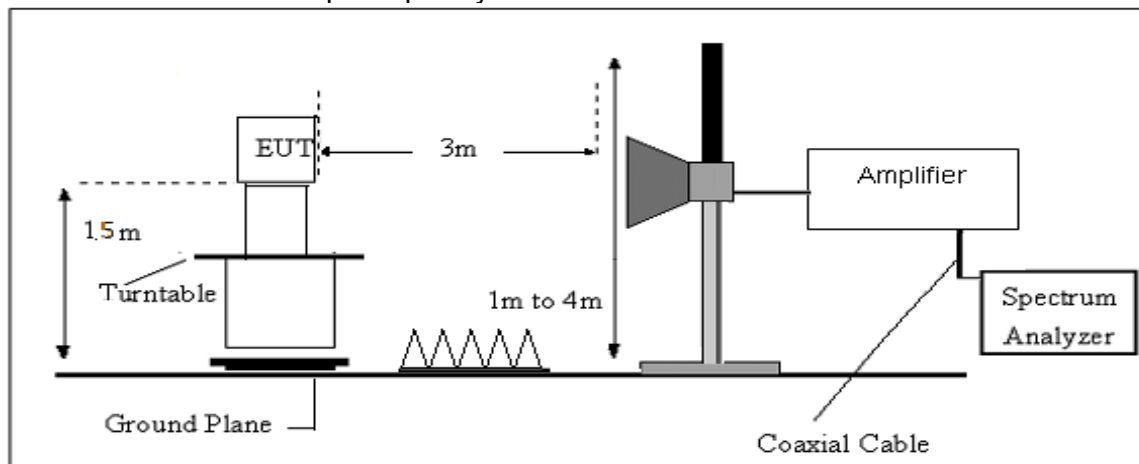
(A) Radiated Emission Test-Up Frequency Below 30MHz



(B) Radiated Emission Test-Up Frequency 30MHz~1GHz



(C) Radiated Emission Test-Up Frequency Above 1GHz



3.2.5 EUT OPERATING CONDITIONS

Please refer to section 3.1.4 of this report.



3.2.6 FIELD STRENGTH CALCULATION

The field strength is calculated by adding the Antenna Factor and Cable Factor and subtracting the Amplifier Gain and Duty Cycle Correction Factor (if any) from the measured reading. The basic equation with a sample calculation is as follows:

$$FS = RA + AF + CL - AG$$

Where

FS = Field Strength

CL = Cable Attenuation Factor (Cable Loss)

RA = Reading Amplitude

AG = Amplifier Gain

AF = Antenna Factor

For example

Frequency	FS	RA	AF	CL	AG	Factor
(MHz)	(dBμV/m)	(dBμV/m)	(dB)	(dB)	(dB)	(dB)
300	40	58.1	12.2	1.6	31.9	-18.1

$$\text{Factor} = \text{AF} + \text{CL} - \text{AG}$$



3.2.7 TEST RESULTS

Results of Radiated Emissions (9 KHz~30MHz)

No.	Frequency	Reading dBuV	Factor dB/m	Level dBuV/m	Limit dBuV/m	Margin dB	Detector	Remark
1*	-	-	-	-	-	-	-	See Note

Note:

The emission from 9 kHz to 30MHz was pre-tested and found the result was 20dB lower than the limit, and the permissible value has no need to be reported.

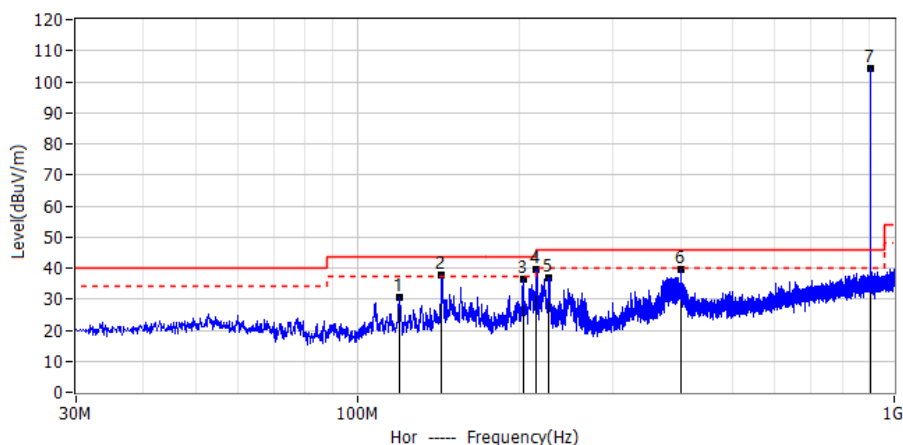
Distance extrapolation factor = $40 \log (\text{specific distance} / \text{test distance})$ (dB);

Limit line = specific limits (dBuV) + distance extrapolation factor.

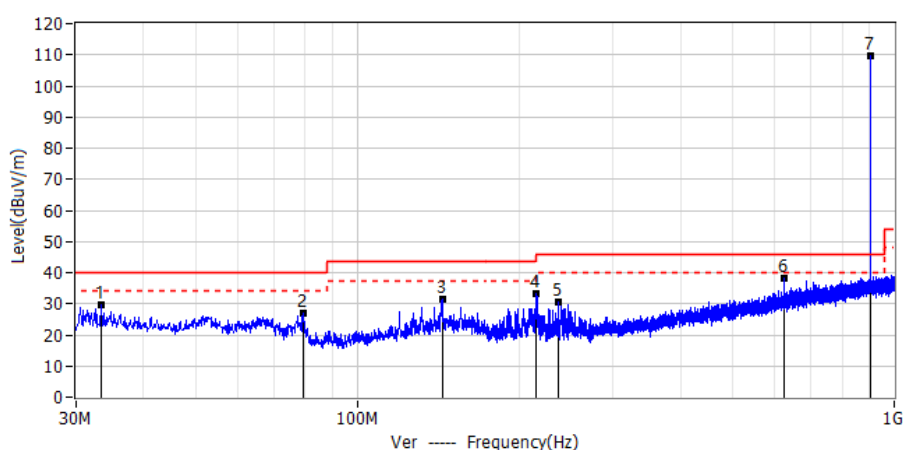


Results of Radiated Emissions (30MHz~1000MHz)

Project: LGT25C202	Test Engineer: LiuH
EUT: Fixed UHF Reader	Temperature: 25.1°C
M/N: UR4	Humidity: 55%RH
Test Voltage: AC 120V/60Hz	Test Data: 2025-08-06
Test Mode: L	
Note:	



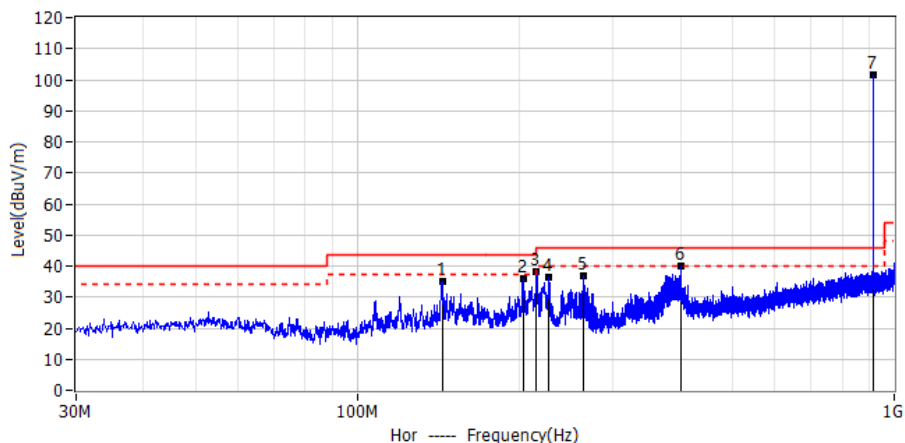
No.	Frequency MHz	Reading dBuV	Factor dB/m	Level dBuV/m	Limit dBuV/m	Margin dB	Detector	Polar
1*	119.968	10.74	19.68	30.42	43.50	-13.08	PK	Hor
2*	143.854	16.19	21.67	37.86	43.50	-5.64	PK	Hor
3*	203.994	18.34	18.05	36.39	43.50	-7.11	PK	Hor
4*	215.998	21.36	18.09	39.45	43.50	-4.05	PK	Hor
5*	227.880	17.99	18.81	36.80	46.00	-9.20	PK	Hor
6*	400.055	14.54	25.12	39.66	46.00	-6.34	PK	Hor
!7*	902.758	69.69	34.37	104.06	N/A	N/A	PK	Hor



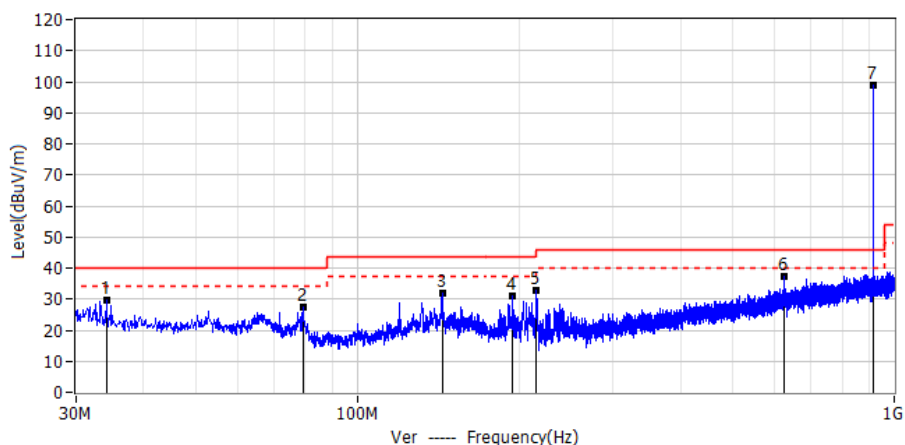
No.	Frequency MHz	Reading dBuV	Factor dB/m	Level dBuV/m	Limit dBuV/m	Margin dB	Detector	Polar
1*	33.395	10.07	19.78	29.85	40.00	-10.15	PK	Ver
2*	79.228	10.18	16.73	26.91	40.00	-13.09	PK	Ver
3*	143.975	9.79	21.66	31.45	43.50	-12.05	PK	Ver
4*	215.755	15.15	18.07	33.22	43.50	-10.28	PK	Ver
5*	236.731	11.31	19.25	30.56	46.00	-15.44	PK	Ver
6*	624.974	8.12	30.00	38.12	46.00	-7.88	PK	Ver
!7*	902.758	75.37	34.37	109.74	N/A	N/A	PK	Ver



Project: LGT25C202	Test Engineer: LiuH
EUT: Fixed UHF Reader	Temperature: 25.1°C
M/N: UR4	Humidity: 55%RH
Test Voltage: AC 120V/60Hz	Test Data: 2025-08-06
Test Mode: M	
Note:	



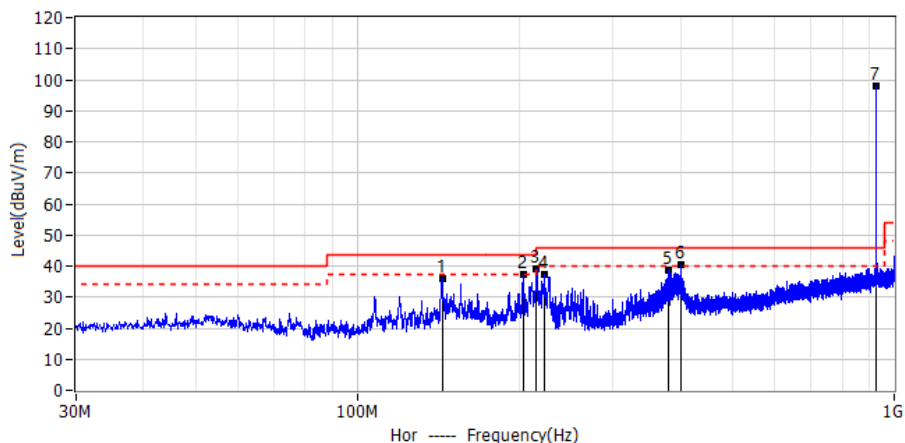
No.	Frequency MHz	Reading dBuV	Factor dB/m	Level dBuV/m	Limit dBuV/m	Margin dB	Detector	Polar
1*	144.096	13.57	21.65	35.22	43.50	-8.28	PK	Hor
2*	204.115	17.93	18.05	35.98	43.50	-7.52	PK	Hor
3*	215.998	20.14	18.09	38.23	43.50	-5.27	PK	Hor
4*	227.759	17.79	18.80	36.59	46.00	-9.41	PK	Hor
5*	263.770	16.48	20.52	37.00	46.00	-9.00	PK	Hor
6*	399.934	14.98	25.12	40.10	46.00	-5.90	PK	Hor
!7*	915.246	67.56	34.13	101.69	N/A	N/A	PK	Hor



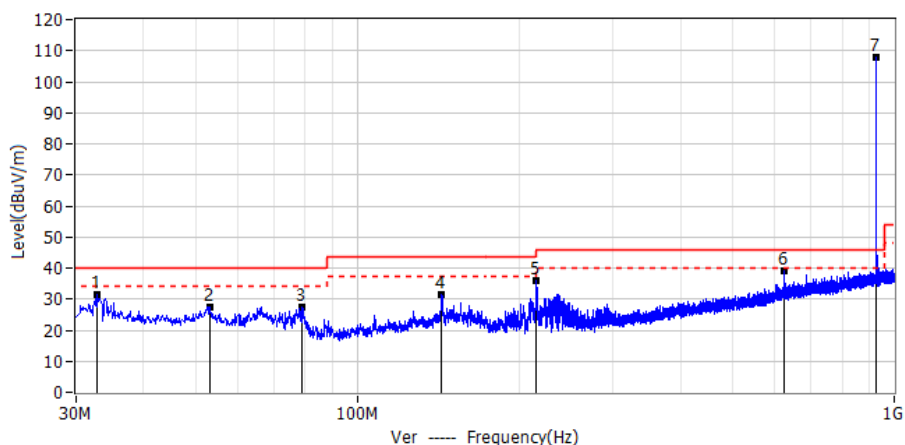
No.	Frequency MHz	Reading dBuV	Factor dB/m	Level dBuV/m	Limit dBuV/m	Margin dB	Detector	Polar
1*	34.123	9.72	19.82	29.54	40.00	-10.46	PK	Ver
2*	79.349	10.88	16.69	27.57	40.00	-12.43	PK	Ver
3*	143.975	10.33	21.66	31.99	43.50	-11.51	PK	Ver
4*	195.021	12.31	18.60	30.91	43.50	-12.59	PK	Ver
5*	215.876	14.54	18.08	32.62	43.50	-10.88	PK	Ver
6*	624.974	7.35	30.00	37.35	46.00	-8.65	PK	Ver
!7*	915.246	64.95	34.13	99.08	N/A	N/A	PK	Ver



Project: LGT25C202	Test Engineer: LiuH
EUT: Fixed UHF Reader	Temperature: 25.1°C
M/N: UR4	Humidity: 55%RH
Test Voltage: AC 120V/60Hz	Test Data: 2025-08-06
Test Mode: H	
Note:	



No.	Frequency MHz	Reading dBuV	Factor dB/m	Level dBuV/m	Limit dBuV/m	Margin dB	Detector	Polar
1*	143.975	14.19	21.66	35.85	43.50	-7.65	PK	Hor
2*	203.751	19.16	18.05	37.21	43.50	-6.29	PK	Hor
3*	215.513	21.20	18.05	39.25	43.50	-4.25	PK	Hor
4*	223.273	18.96	18.45	37.41	46.00	-8.59	PK	Hor
5*	380.413	14.48	24.31	38.79	46.00	-7.21	PK	Hor
6*	400.055	15.26	25.12	40.38	46.00	-5.62	PK	Hor
!7*	927.250	63.63	34.38	98.01	N/A	N/A	PK	Hor

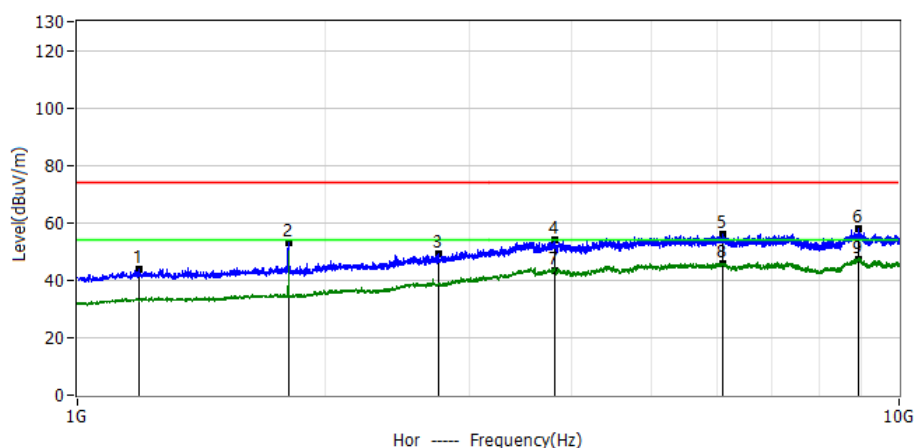


No.	Frequency MHz	Reading dBuV	Factor dB/m	Level dBuV/m	Limit dBuV/m	Margin dB	Detector	Polar
1*	32.910	11.61	19.71	31.32	40.00	-8.68	PK	Ver
2*	53.280	6.44	20.86	27.30	40.00	-12.70	PK	Ver
3*	79.106	10.79	16.76	27.55	40.00	-12.45	PK	Ver
4*	143.733	9.94	21.68	31.62	43.50	-11.88	PK	Ver
5*	215.876	17.75	18.08	35.83	43.50	-7.67	PK	Ver
6*	625.095	8.88	30.00	38.88	46.00	-7.12	PK	Ver
!7*	927.250	73.52	34.38	107.90	N/A	N/A	PK	Ver

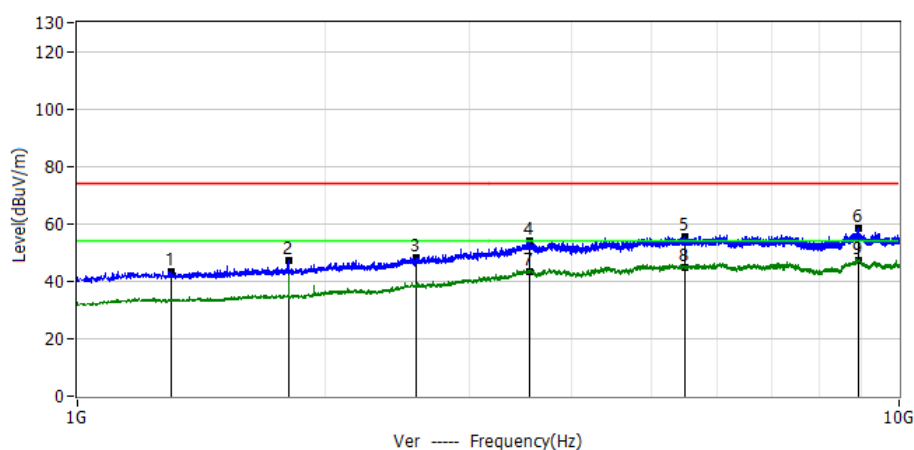


Results of Radiated Emissions (Above 1000MHz)

Project: LGT25C202	Test Engineer: LiuH
EUT: Fixed UHF Reader	Temperature: 22.6°C
M/N: UR4	Humidity: 54%RH
Test Voltage: AC 120V/60Hz	Test Data: 2025-08-04
Test Mode: L	
Note:	



No.	Frequency MHz	Reading dBuV	Factor dB/m	Level dBuV/m	Limit dBuV/m	Margin dB	Detector	Polar
1*	1190.1000	64.32	-20.31	44.01	74.00	-29.99	PK	Hor
2*	1805.5000	69.59	-16.36	53.23	74.00	-20.77	PK	Hor
3*	2751.6000	57.10	-8.05	49.05	74.00	-24.95	PK	Hor
4*	3804.6000	56.25	-2.04	54.21	74.00	-19.79	PK	Hor
5*	6106.4000	59.62	-3.41	56.21	74.00	-17.79	PK	Hor
6*	8923.4000	61.47	-3.50	57.97	74.00	-16.03	PK	Hor
7*	3804.6000	45.54	-2.04	43.50	54.00	-10.50	AV	Hor
8*	6106.4000	49.11	-3.41	45.70	54.00	-8.30	AV	Hor
9*	8923.4000	50.70	-3.50	47.20	54.00	-6.80	AV	Hor

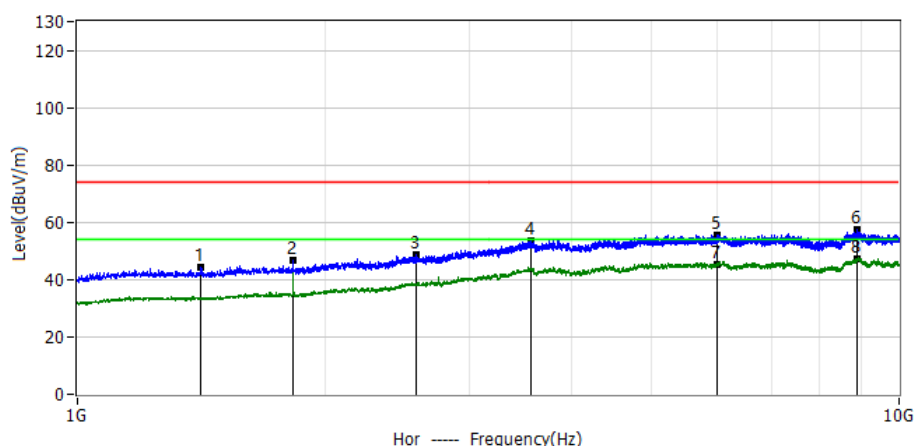


No.	Frequency MHz	Reading dBuV	Factor dB/m	Level dBuV/m	Limit dBuV/m	Margin dB	Detector	Polar
1*	1302.6000	63.42	-19.99	43.43	74.00	-30.57	PK	Ver
2*	1805.5000	63.68	-16.36	47.32	74.00	-26.68	PK	Ver
3*	2584.0000	57.22	-8.88	48.34	74.00	-25.66	PK	Ver
4*	3545.9000	57.02	-2.78	54.24	74.00	-19.76	PK	Ver
5*	5486.5000	58.68	-3.08	55.60	74.00	-18.40	PK	Ver
6*	8925.6000	61.70	-3.49	58.21	74.00	-15.79	PK	Ver
7*	3545.9000	46.08	-2.78	43.30	54.00	-10.70	AV	Ver
8*	5486.5000	47.68	-3.08	44.60	54.00	-9.40	AV	Ver

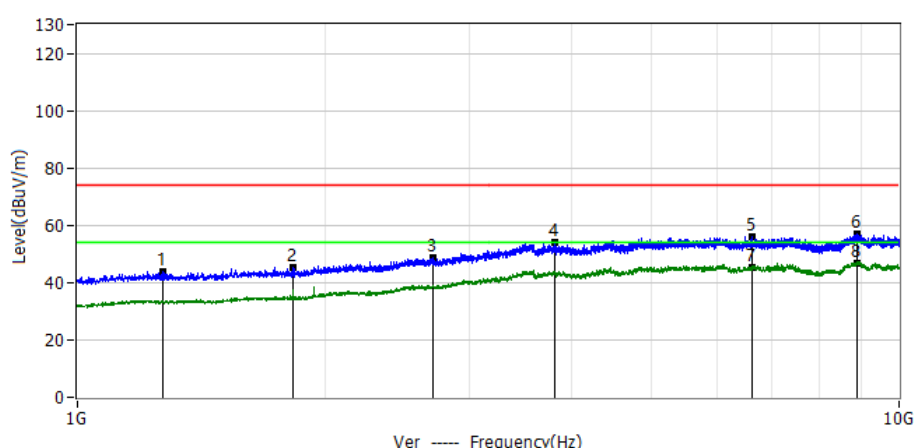


No.	Frequency MHz	Reading dBuV	Factor dB/m	Level dBuV/m	Limit dBuV/m	Margin dB	Detector	Polar
9*	8925.6000	50.49	-3.49	47.00	54.00	-7.00	AV	Ver

Project: LGT25C202	Test Engineer: LiuH
EUT: Fixed UHF Reader	Temperature: 22.6°C
M/N: UR4	Humidity: 54%RH
Test Voltage: AC 120V/60Hz	Test Data: 2025-08-04
Test Mode: M	
Note:	



No.	Frequency MHz	Reading dBuV	Factor dB/m	Level dBuV/m	Limit dBuV/m	Margin dB	Detector	Polar
1*	1411.7000	63.55	-19.17	44.38	74.00	-29.62	PK	Hor
2*	1831.4000	62.93	-16.17	46.76	74.00	-27.24	PK	Hor
3*	2588.5000	57.62	-8.86	48.76	74.00	-25.24	PK	Hor
4*	3569.5000	56.21	-2.81	53.40	74.00	-20.60	PK	Hor
5*	5996.1000	59.15	-3.58	55.57	74.00	-18.43	PK	Hor
6*	8879.5000	61.12	-3.67	57.45	74.00	-16.55	PK	Hor
7*	5996.1000	48.98	-3.58	45.40	54.00	-8.60	AV	Hor
8*	8879.5000	50.67	-3.67	47.00	54.00	-7.00	AV	Hor



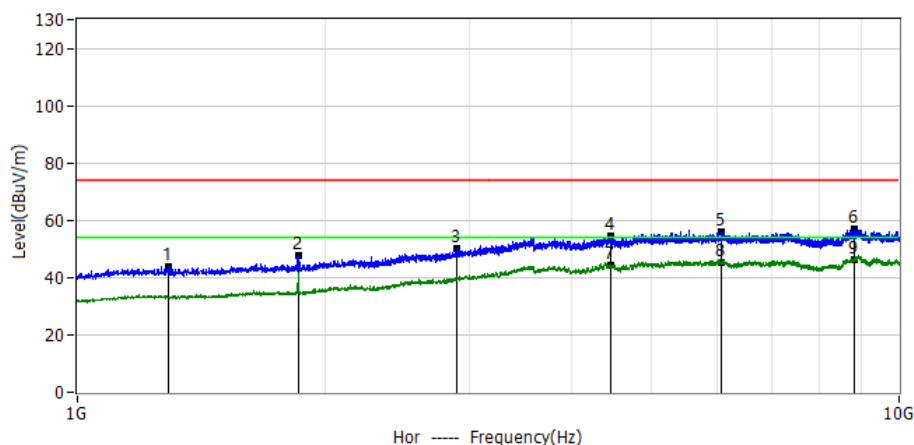
No.	Frequency MHz	Reading dBuV	Factor dB/m	Level dBuV/m	Limit dBuV/m	Margin dB	Detector	Polar
1*	1268.9000	63.87	-20.08	43.79	74.00	-30.21	PK	Ver
2*	1830.2000	61.63	-16.18	45.45	74.00	-28.55	PK	Ver
3*	2710.0000	56.76	-8.00	48.76	74.00	-25.24	PK	Ver
4*	3814.7000	55.90	-2.07	53.83	74.00	-20.17	PK	Ver
5*	6629.5000	60.27	-4.07	56.20	74.00	-17.80	PK	Ver
6*	8898.6000	60.76	-3.60	57.16	74.00	-16.84	PK	Ver
7*	6629.5000	49.27	-4.07	45.20	54.00	-8.80	AV	Ver



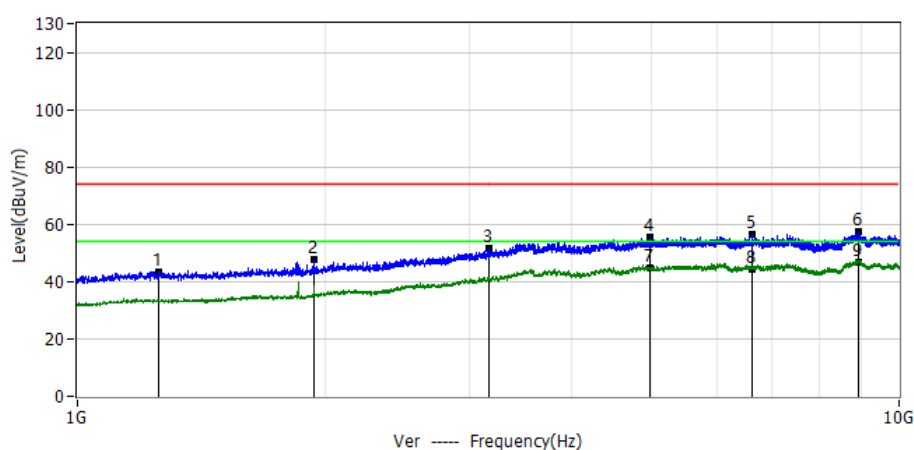
No.	Frequency MHz	Reading dBuV	Factor dB/m	Level dBuV/m	Limit dBuV/m	Margin dB	Detector	Polar
8*	8898.6000	50.40	-3.60	46.80	54.00	-7.20	AV	Ver



Project: LGT25C202	Test Engineer: LiuH
EUT: Fixed UHF Reader	Temperature: 22.6°C
M/N: UR4	Humidity: 54%RH
Test Voltage: AC 120V/60Hz	Test Data: 2025-08-04
Test Mode: H	
Note:	



No.	Frequency MHz	Reading dBuV	Factor dB/m	Level dBuV/m	Limit dBuV/m	Margin dB	Detector	Polar
1*	1292.5000	63.96	-20.03	43.93	74.00	-30.07	PK	Hor
2*	1855.0000	63.50	-15.98	47.52	74.00	-26.48	PK	Hor
3*	2895.6000	56.95	-6.95	50.00	74.00	-24.00	PK	Hor
4*	4459.4000	57.05	-2.45	54.60	74.00	-19.40	PK	Hor
5*	6077.1000	59.27	-3.42	55.85	74.00	-18.15	PK	Hor
6*	8805.2000	60.36	-3.61	56.75	74.00	-17.25	PK	Hor
7*	4459.4000	46.55	-2.45	44.10	54.00	-9.90	AV	Hor
8*	6077.1000	48.72	-3.42	45.30	54.00	-8.70	AV	Hor
9*	8805.2000	49.71	-3.61	46.10	54.00	-7.90	AV	Hor

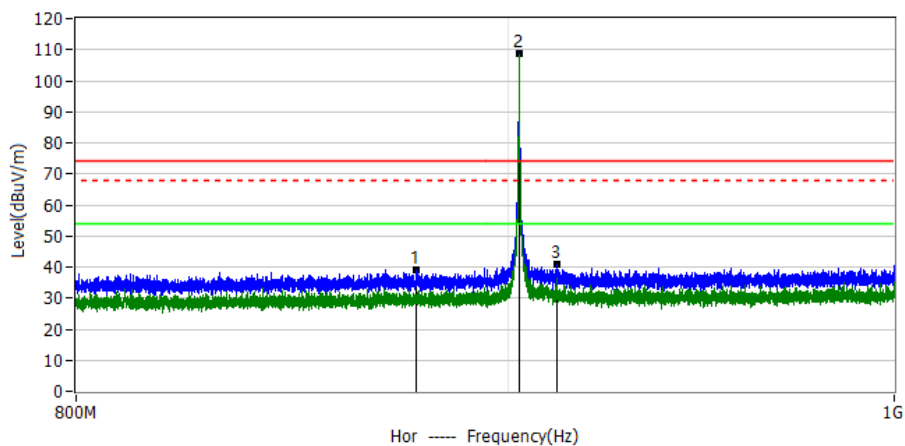


No.	Frequency MHz	Reading dBuV	Factor dB/m	Level dBuV/m	Limit dBuV/m	Margin dB	Detector	Polar
1*	1257.6000	63.50	-20.11	43.39	74.00	-30.61	PK	Ver
2*	1937.1000	62.68	-15.12	47.56	74.00	-26.44	PK	Ver
3*	3165.6000	56.53	-5.14	51.39	74.00	-22.61	PK	Ver
4*	4980.2000	57.77	-2.49	55.28	74.00	-18.72	PK	Ver
5*	6616.0000	60.34	-4.07	56.27	74.00	-17.73	PK	Ver
6*	8923.4000	60.88	-3.50	57.38	74.00	-16.62	PK	Ver
7*	4980.2000	47.19	-2.49	44.70	54.00	-9.30	AV	Ver
8*	6616.0000	48.57	-4.07	44.50	54.00	-9.50	AV	Ver
9*	8923.4000	50.20	-3.50	46.70	54.00	-7.30	AV	Ver

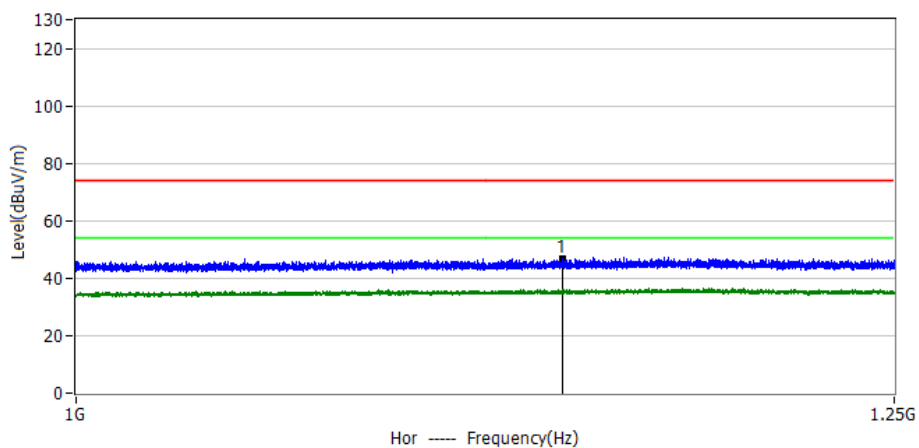


3.2.8 TEST RESULTS (BAND EDGE REQUIREMENTS)

Project: LGT25C202	Test Engineer: LiuH
EUT: Fixed UHF Reader	Temperature: 25.1°C
M/N: UR4	Humidity: 55%RH
Test Voltage: AC 120V/60Hz	Test Data: 2025-08-06
Test Mode: L	
Note:	



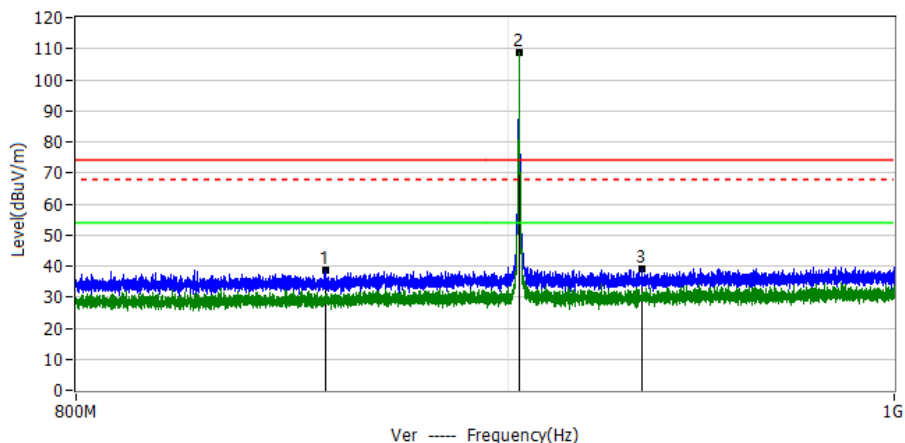
No.	Frequency MHz	Reading dBuV	Factor dB/m	Level dBuV/m	Limit dBuV/m	Margin dB	Detector	Polar
1*	877.875	4.94	34.10	39.04	74.00	-34.96	PK	Hor
2*	902.750	74.39	34.37	108.76	N/A	N/A	PK	Hor
3*	912.000	6.53	34.28	40.81	74.00	-33.19	PK	Hor



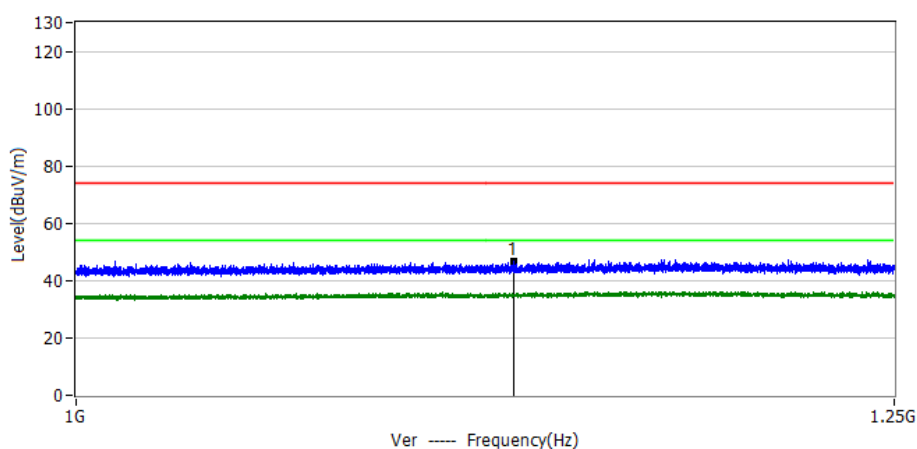
No.	Frequency MHz	Reading dBuV	Factor dB/m	Level dBuV/m	Limit dBuV/m	Margin dB	Detector	Polar
1*	1141.8000	15.83	30.90	46.73	74.00	-27.27	PK	Hor



Project: LGT25C202	Test Engineer: LiuH
EUT: Fixed UHF Reader	Temperature: 25.1°C
M/N: UR4	Humidity: 55%RH
Test Voltage: AC 120V/60Hz	Test Data: 2025-08-06
Test Mode: L	
Note:	



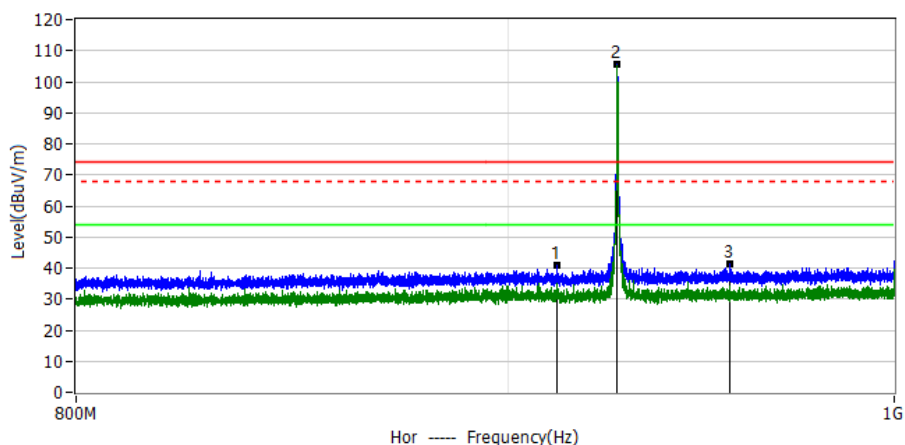
No.	Frequency MHz	Reading dBuV	Factor dB/m	Level dBuV/m	Limit dBuV/m	Margin dB	Detector	Polar
1*	856.450	4.89	33.69	38.58	74.00	-35.42	PK	Ver
2*	902.750	74.45	34.37	108.82	N/A	N/A	PK	Ver
3*	933.375	4.79	34.43	39.22	74.00	-34.78	PK	Ver



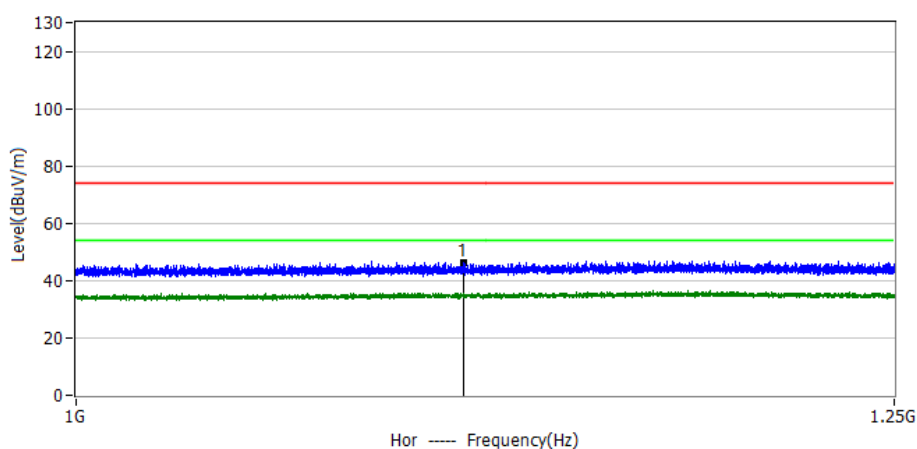
No.	Frequency MHz	Reading dBuV	Factor dB/m	Level dBuV/m	Limit dBuV/m	Margin dB	Detector	Polar
1*	1126.8000	15.69	30.84	46.53	74.00	-27.47	PK	Ver



Project: LGT25C202	Test Engineer: LiuH
EUT: Fixed UHF Reader	Temperature: 25.1°C
M/N: UR4	Humidity: 55%RH
Test Voltage: AC 120V/60Hz	Test Data: 2025-08-06
Test Mode: H	
Note:	



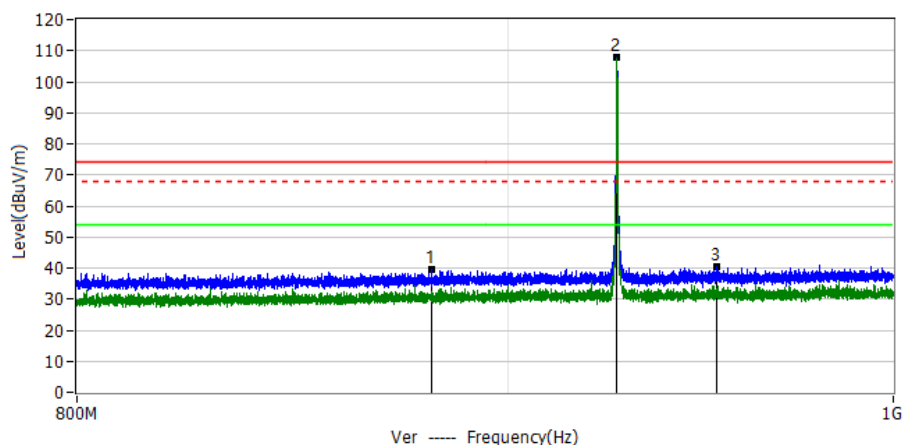
No.	Frequency MHz	Reading dBuV	Factor dB/m	Level dBuV/m	Limit dBuV/m	Margin dB	Detector	Polar
1*	911.975	6.53	34.28	40.81	74.00	-33.19	PK	Hor
2*	927.250	71.11	34.38	105.49	N/A	N/A	PK	Hor
3*	956.100	6.11	35.02	41.13	74.00	-32.87	PK	Hor



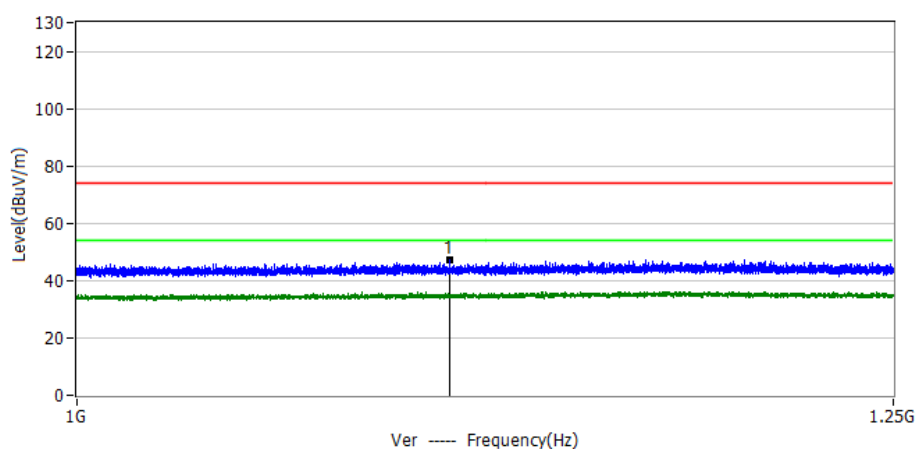
No.	Frequency MHz	Reading dBuV	Factor dB/m	Level dBuV/m	Limit dBuV/m	Margin dB	Detector	Polar
1*	1111.4000	15.55	30.78	46.33	74.00	-27.67	PK	Hor



Project: LGT25C202	Test Engineer: LiuH
EUT: Fixed UHF Reader	Temperature: 25.1°C
M/N: UR4	Humidity: 55%RH
Test Voltage: AC 120V/60Hz	Test Data: 2025-08-06
Test Mode: H	
Note:	



No.	Frequency MHz	Reading dBuV	Factor dB/m	Level dBuV/m	Limit dBuV/m	Margin dB	Detector	Polar
1*	881.500	5.29	34.20	39.49	74.00	-34.51	PK	Ver
2*	927.250	73.36	34.38	107.74	N/A	N/A	PK	Ver
3*	952.700	5.21	35.03	40.24	74.00	-33.76	PK	Ver



No.	Frequency MHz	Reading dBuV	Factor dB/m	Level dBuV/m	Limit dBuV/m	Margin dB	Detector	Polar
1*	1107.1000	16.68	30.76	47.44	74.00	-26.56	PK	Ver



4. CONDUCTED SPURIOUS & BAND EDGE EMISSION

4.1 LIMIT

According to FCC section 15.247(d), in any 100kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20dB below that in the 100kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement.

4.2 TEST PROCEDURE

Spectrum Parameter	Setting
Detector	Peak
Start/Stop Frequency	30 MHz to 10th carrier harmonic
RB / VB (emission in restricted band)	100 KHz/300 KHz
Trace-Mode:	Max hold

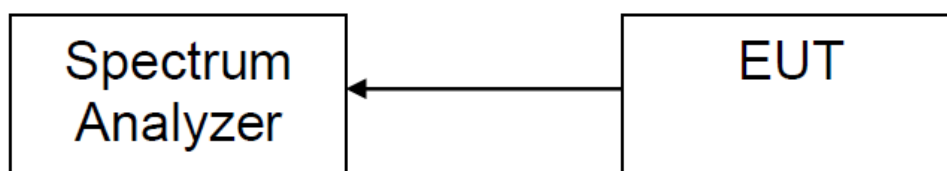
For Band edge

Spectrum Parameter	Setting
Detector	Peak
Start/Stop Frequency	Lower Band Edge: 800 – 904 MHz Upper Band Edge: 924 – 1000 MHz
RB / VB (emission in restricted band)	100 KHz/300 KHz
Trace-Mode:	Max hold

For Hopping Band edge

Spectrum Parameter	Setting
Detector	Peak
Start/Stop Frequency	Lower Band Edge: 800 – 904 MHz Upper Band Edge: 924 – 1000 MHz
RB / VB (emission in restricted band)	100 KHz/300 KHz
Trace-Mode:	Max hold

4.3 TEST SETUP



The EUT is connected to the Spectrum Analyzer; the RF load attached to the EUT antenna terminal is 50Ohm; the path loss as the factor is calibrated to correct the reading. Tune the measurement with the spectrum analyzer's resolution bandwidth (RBW) = 100 kHz. In order to make an accurate measurement, the span is set to be greater than RBW.



4.4 EUT OPERATION CONDITIONS

Please refer to section 3.1.4 of this report.

4.5 TEST RESULTS

For the measurement records, refer to the appendix I.

Note: Not recorded emission from 9 KHz to 30 MHz as emission level at least 20dBc lower than emission limit.



5. NUMBER OF HOPPING CHANNEL

5.1 LIMIT

FCC Part 15.247, Subpart C				
Section	Test Item	Limit	Note	Result
15.247 (a)(1)(i)	Number of Hopping Channel	≥ 25	if the 20 dB bandwidth ≥ 250 kHz	PASS
		≥ 50	if the 20 dB bandwidth ≤ 250 kHz	

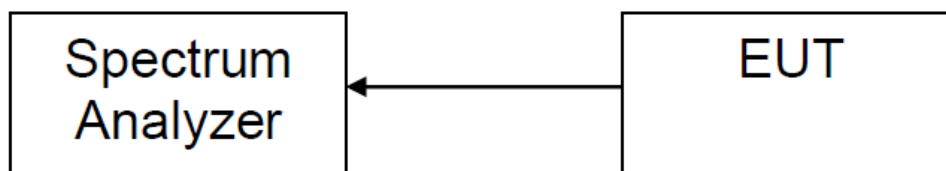
5.2 TEST PROCEDURE

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

b.

Spectrum Parameters	Setting
Attenuation	Auto
Span Frequency	> Operating FrequencyRange
RB	300KHz
VB	300KHz
Detector	Peak
Trace	Max Hold
Sweep Time	Auto

5.3 TEST SETUP



5.4 EUT OPERATION CONDITIONS

Please refer to section 3.1.4 of this report.

5.5 TEST RESULTS

For the measurement records, refer to the appendix I.



6. AVERAGE TIME OF OCCUPANCY

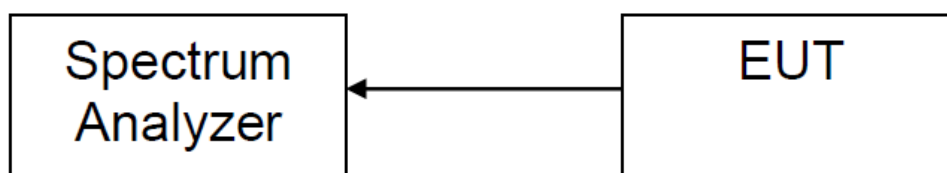
6.1 LIMIT

FCC Part 15.247, Subpart C				
Section	Test Item	Limit	FrequencyRange (MHz)	Result
15.247 (a)(1)(i)	Average Time of Occupancy	0.4sec	902-928	PASS

6.2 TEST PROCEDURE

- The transmitter output (antenna port) was connected to the spectrum analyzer.
- Set RBW = 1MHz/VBW = 3MHz.
- Use a video trigger with the trigger level set to enable triggering only on full pulses.
- Sweep Time is more than once pulse time.
Set the center frequency on any frequency would be measure and set the frequency span to zero span.
- Measure the maximum time duration of one single pulse.
- Set the EUT for DH5, DH3 and DH1 packet transmitting.
- Measure the maximum time duration of one single pulse.
- DH5 Packet permit maximum $1600 / 79 / 6 = 3.37$ hops per second in each channel (5 time slots RX, 1 time slot TX). So the number of pulses in the observation period of 31.6 seconds is $3.37 \times 31.6 = 106.6$.
- DH3 Packet permit maximum $1600 / 79 / 4 = 5.06$ hops per second in each channel (3 time slots RX, 1 time slot TX). So the number of pulses in the observation period of 31.6 seconds is $5.06 \times 31.6 = 160$.
- DH1 Packet permit maximum $1600 / 79 / 2 = 10.12$ hops per second in each channel (1 time slot RX, 1 time slot TX). So the number of pulses in the observation period of 31.6 seconds is $10.12 \times 31.6 = 320$.

6.3 TEST SETUP



6.4 EUT OPERATION CONDITIONS

Please refer to section 3.1.4 of this report.

6.5 TEST RESULTS

For the measurement records, refer to the appendix I.



7. HOPPING CHANNEL SEPARATION MEASUREMENT

7.1 LIMIT

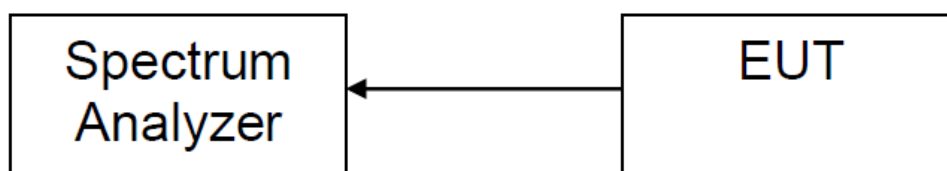
Frequency hopping systems shall have hopping channel carrier frequencies separated by a minimum of 25 kHz or the 20 dB bandwidth of the hopping channel, whichever is greater. Alternatively, frequency hopping systems operating in the 2400-2483.5 MHz band may have hopping channel carrier frequencies that are separated by 25 kHz or two-thirds of the 20 dB bandwidth of the hopping channel, whichever is greater, provided the systems operate with an output power no greater than 125 mW.

Spectrum Parameter	Setting
Attenuation	Auto
Span Frequency	> 20 dB Bandwidth or Channel Separation
RB	30 kHz (20dB Bandwidth) / 30 kHz (Channel Separation)
VB	100 kHz (20dB Bandwidth) / 100 kHz (Channel Separation)
Detector	Peak
Trace	Max Hold
Sweep Time	Auto

7.2 TEST PROCEDURE

- The transmitter output (antenna port) was connected to the spectrum analyser in peak hold mode.
- The resolution bandwidth of 30 kHz and the video bandwidth of 100 kHz were utilised for 20 dB bandwidth measurement.
- The resolution bandwidth of 30 kHz and the video bandwidth of 100 kHz were utilised for channel separation measurement.

7.3 TEST SETUP



7.4 EUT OPERATION CONDITIONS

The EUT was programmed to be in continuously transmitting mode.

7.5 TEST RESULTS

For the measurement records, refer to the appendix I.



8. BANDWIDTH TEST

8.1 LIMIT

FCC Part15 15.247, Subpart C				
Section	Test Item	Limit	FrequencyRange (MHz)	Result
15.247 (a)(1) (i)	20dB Bandwidth	500KHz	902-928	PASS

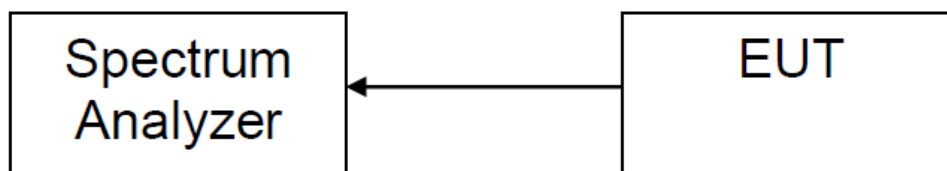
8.2 TEST PROCEDURE

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

b.

Spectrum Parameter	Setting
Attenuation	Auto
Span Frequency	> Measurement Bandwidth or Channel Separation
RB	10 kHz (20dB Bandwidth) / 10 kHz (Channel Separation)
VB	30 kHz (20dB Bandwidth) / 30 kHz (Channel Separation)
Detector	Peak
Trace	Max Hold
Sweep Time	Auto

8.3 TEST SETUP



8.4 EUT OPERATION CONDITIONS

Please refer to section 3.1.4 of this report.

8.5 TEST RESULTS

For the measurement records, refer to the appendix I.



9. OUTPUT POWER TEST

9.1 LIMIT

FCC Part 15.247, Subpart C				
Section	Test Item	Limit	Frequency Range (MHz)	Result
15.247 (b)(2)	Output Power	If the number channels ≥ 50 , the output power of the system shall not exceed 1 W (30dBm)	902-928	PASS
		If the number channels ≥ 25 and < 50 , the output power of the system shall not exceed 0.25W (24dBm)		

9.2 TEST PROCEDURE

This is an RF-conducted test to evaluate maximum peak output power. Use a direct connection between the antenna port of the unlicensed wireless device and the spectrum analyzer, through suitable attenuation. The hopping shall be disabled for this test:

a) Use the following spectrum analyzer settings:

1) Span: Approximately five times the 20 dB bandwidth, centered on a hopping channel.

2) RBW > 20 dB bandwidth of the emission being measured.

3) VBW $\geq$ RBW.

4) Sweep: Auto.

5) Detector function: Peak.

6) Trace: Max hold.

b) Allow trace to stabilize.

c) Use the marker-to-peak function to set the marker to the peak of the emission.

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

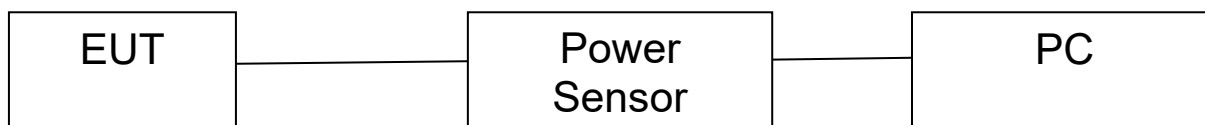
e) A plot of the test results and setup description shall be included in the test report.

NOTE—A peak responding power sensor may be used, where the power sensor and sensor system video bandwidth is greater than the occupied bandwidth of the unlicensed wireless device, rather than a spectrum analyzer.

PKPM1 Peak power sensor method:

The maximum peak conducted output power may be measured using a broadband peak RF power sensor. The power sensor shall have a video bandwidth that is greater than or equal to the DSS bandwidth and shall use a fast-responding diode detector.

9.3 TEST SETUP



9.4 EUT OPERATION CONDITIONS

Please refer to section 3.1.4 of this report.

9.5 TEST RESULTS

For the measurement records, refer to the appendix I.



10. ANTENNA REQUIREMENT

10.1 STANDARD REQUIREMENT

15.203 requirement: For intentional device, according to 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.

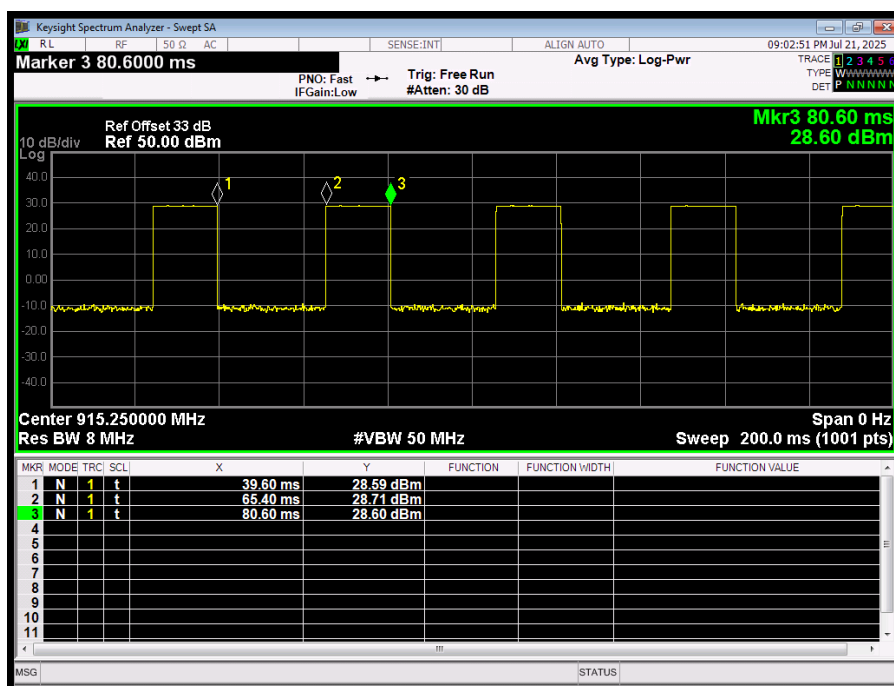
10.2 EUT ANTENNA

The EUT antenna is External Antenna. It comply with the standard requirement.



APPENDIX I - TEST RESULTS

DUTY CYCLE





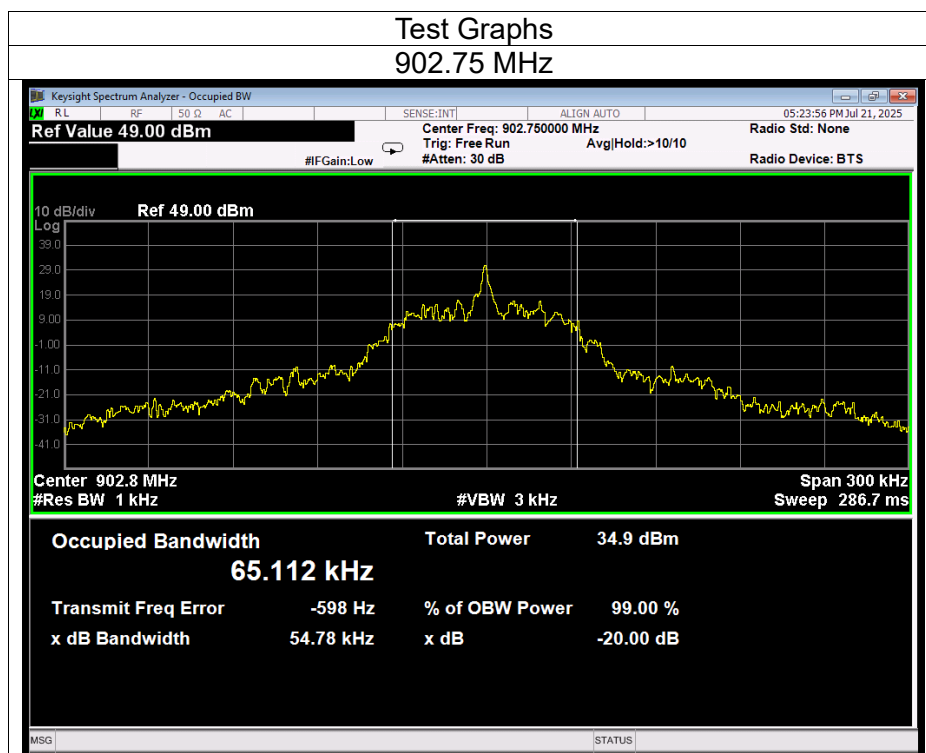
CONDUCTED OUTPUT POWER

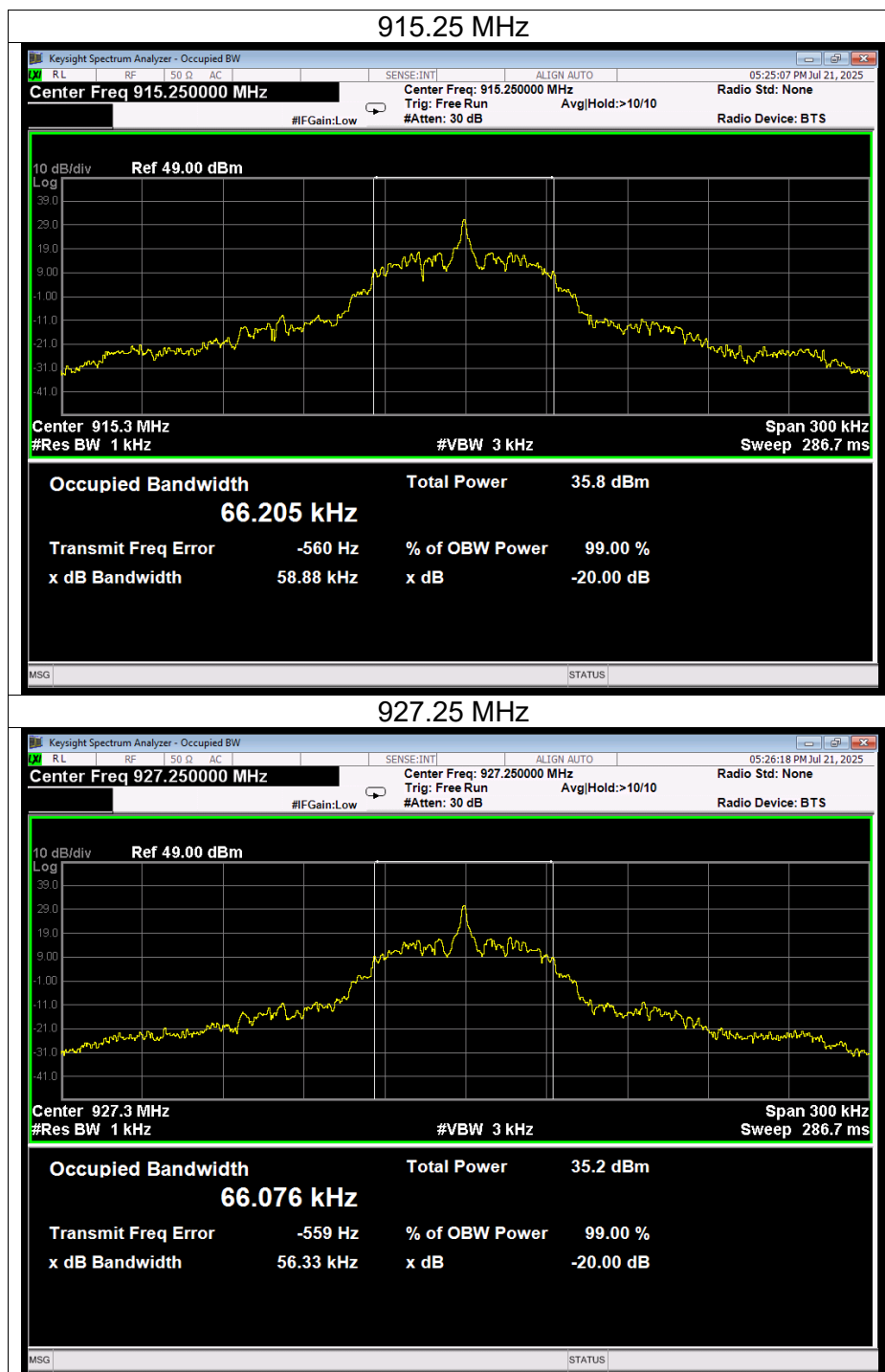
Modulation	ANT	Frequency (MHz)	Peak Power (dBm)	Limit (dBm)
FSK	1	902.75	28.53	30.00
	1	915.25	28.82	30.00
	1	927.25	28.34	30.00
	2	902.75	28.34	30.00
	2	915.25	28.50	30.00
	2	927.25	27.93	30.00
	3	902.75	28.26	30.00
	3	915.25	28.58	30.00
	3	927.25	27.98	30.00
	4	902.75	28.78	30.00
	4	915.25	28.26	30.00
	4	927.25	28.19	30.00



-20DB BANDWIDTH

Modulation	ANT	Frequency (MHz)	-20 dB Bandwidth (KHz)	Result
FSK	1	902.75	55.39	PASS
	1	915.25	55.32	PASS
	1	927.25	55.43	PASS

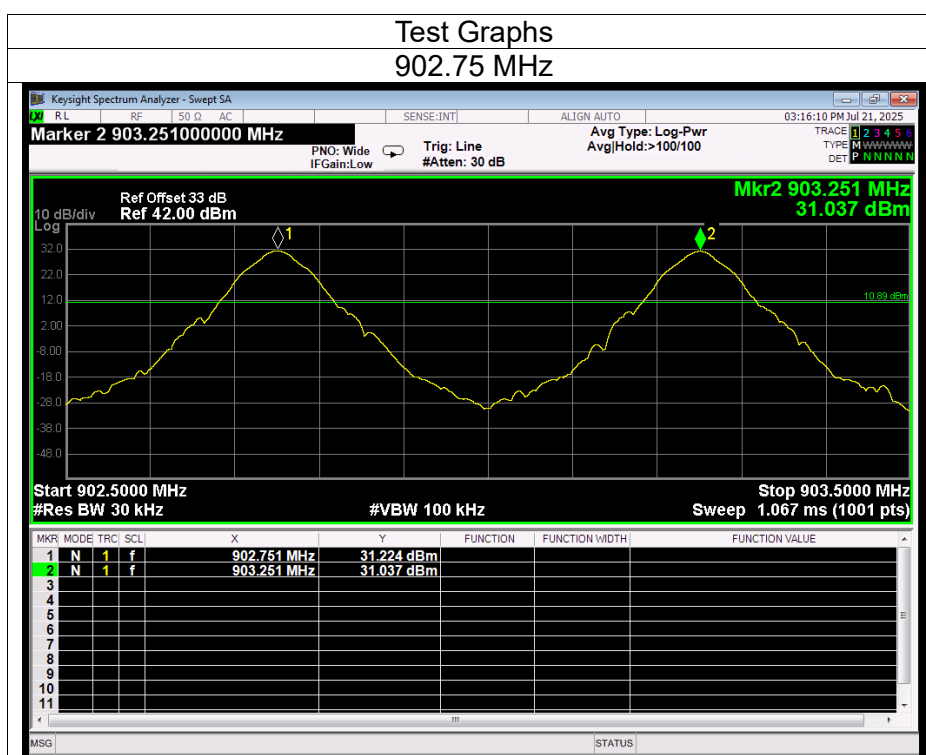


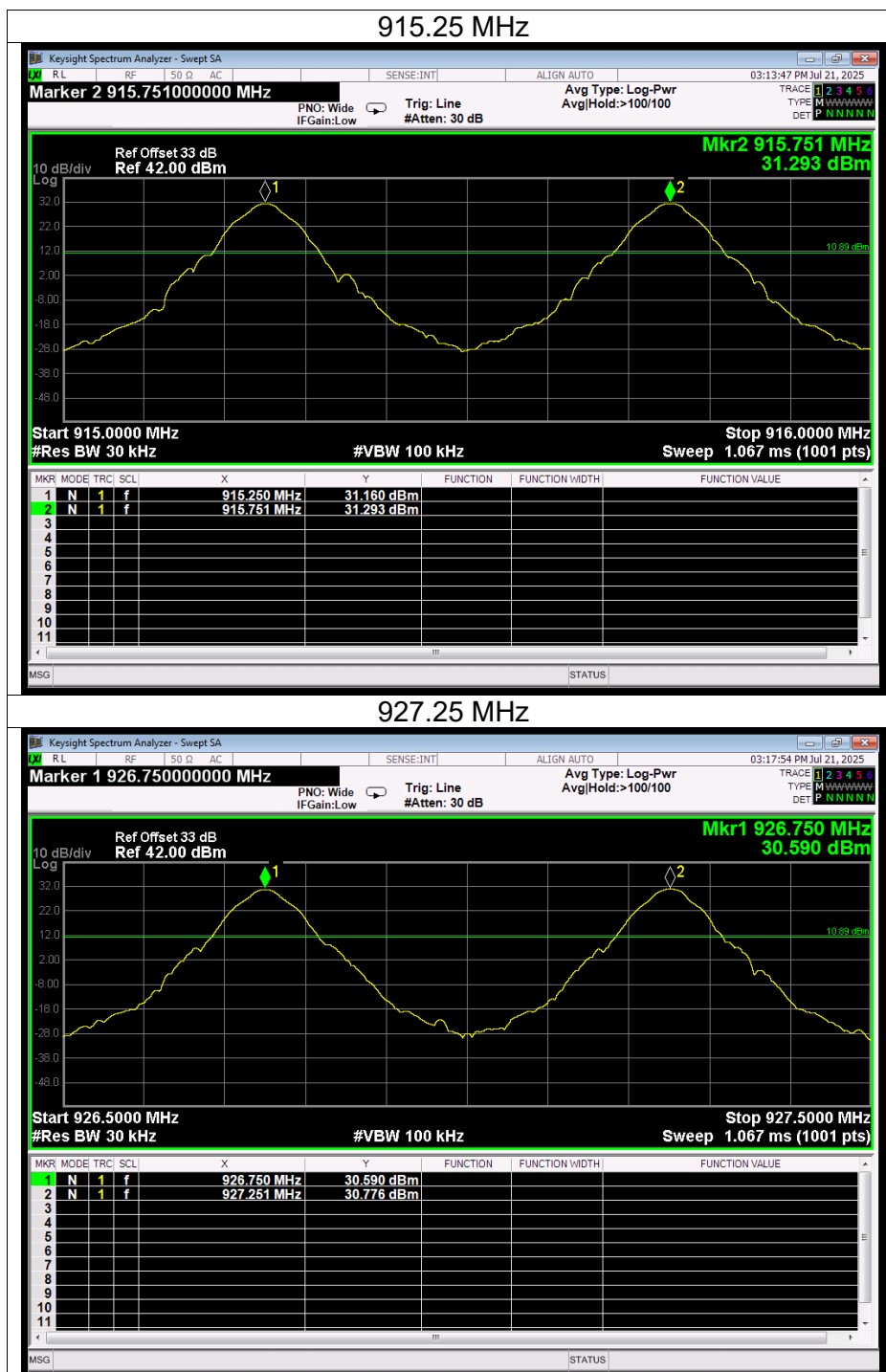




Carrier Frequencies Separation

Modulation	ANT	Frequency (MHz)	Mark1 Frequency (MHz)	Mark2 Frequency (MHz)	Channel Separation (KHz)	Limit (KHz)	Result
FSK	1	902.75	902.751	903.251	500.000	55.39	Pass
	1	915.25	915.251	915.751	500.000	55.32	Pass
	1	927.25	926.751	927.251	500.000	55.43	Pass

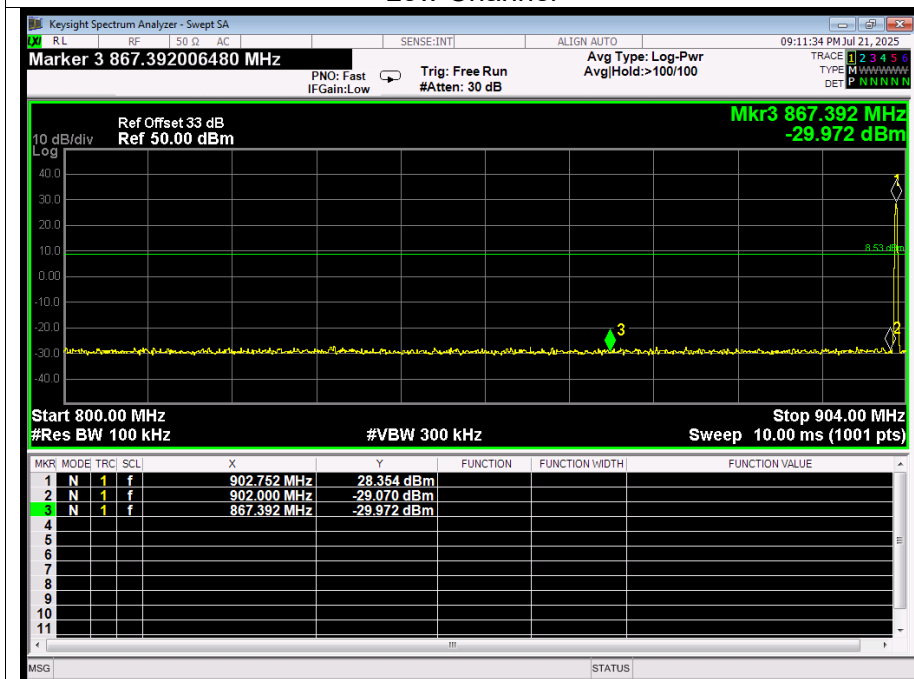




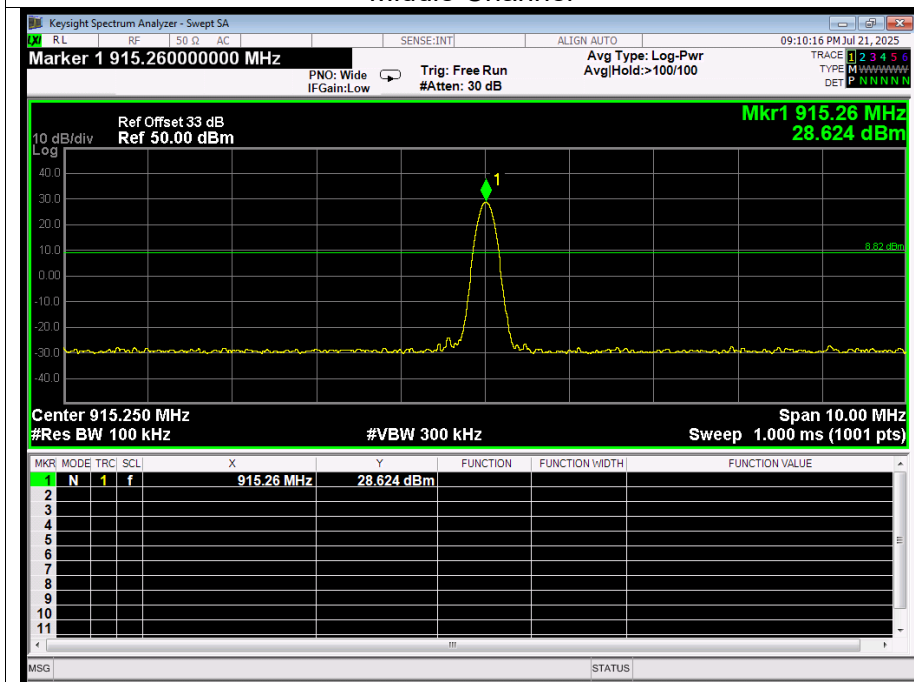


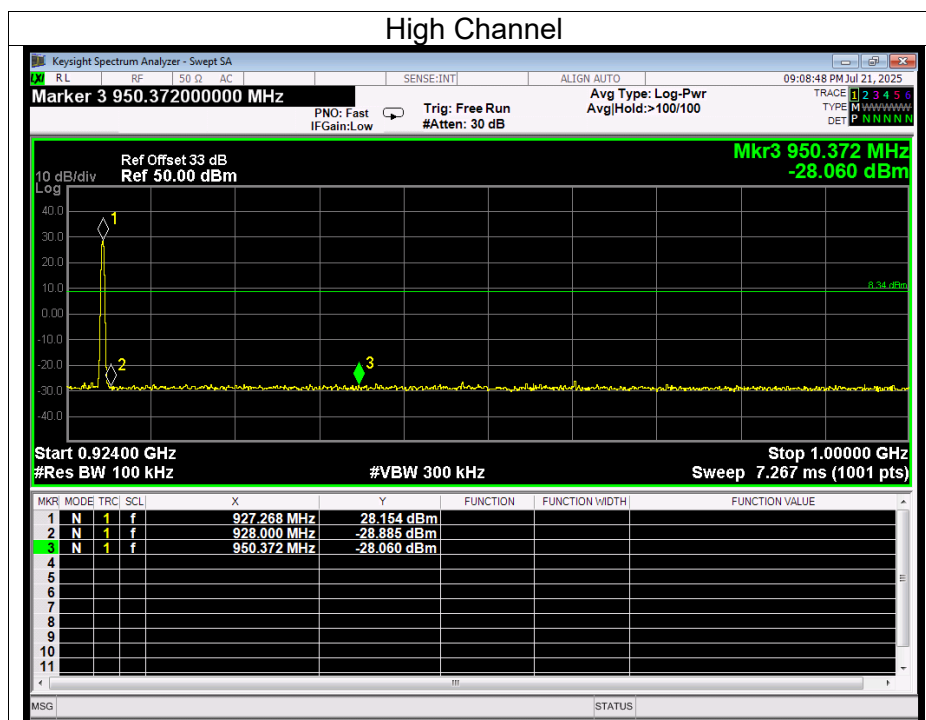
Band Edge

Test Graphs Low Channel



Middle Channel

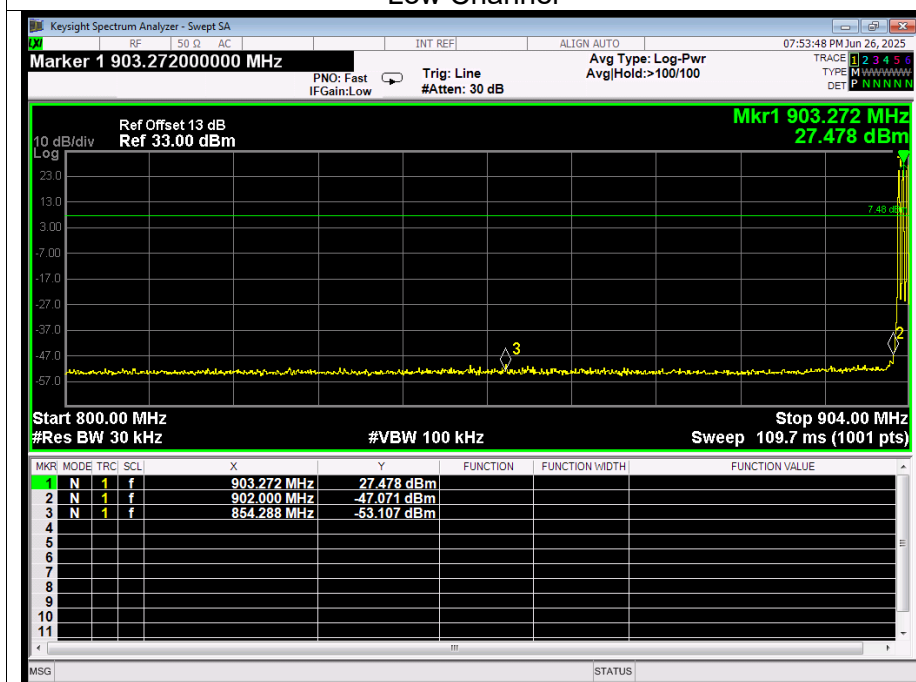




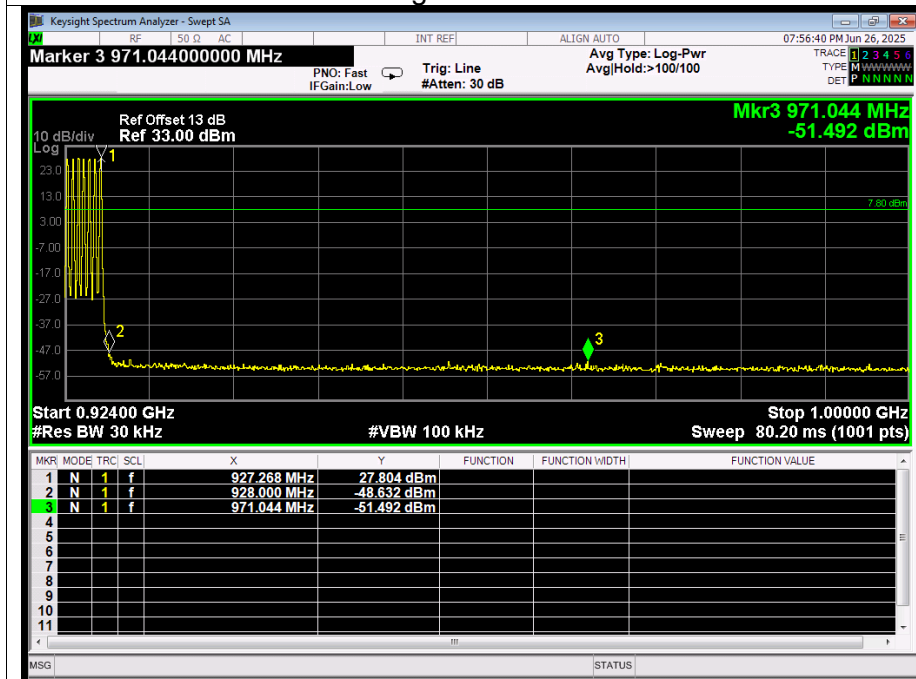


Band Edge(Hopping)

Test Graphs Low Channel



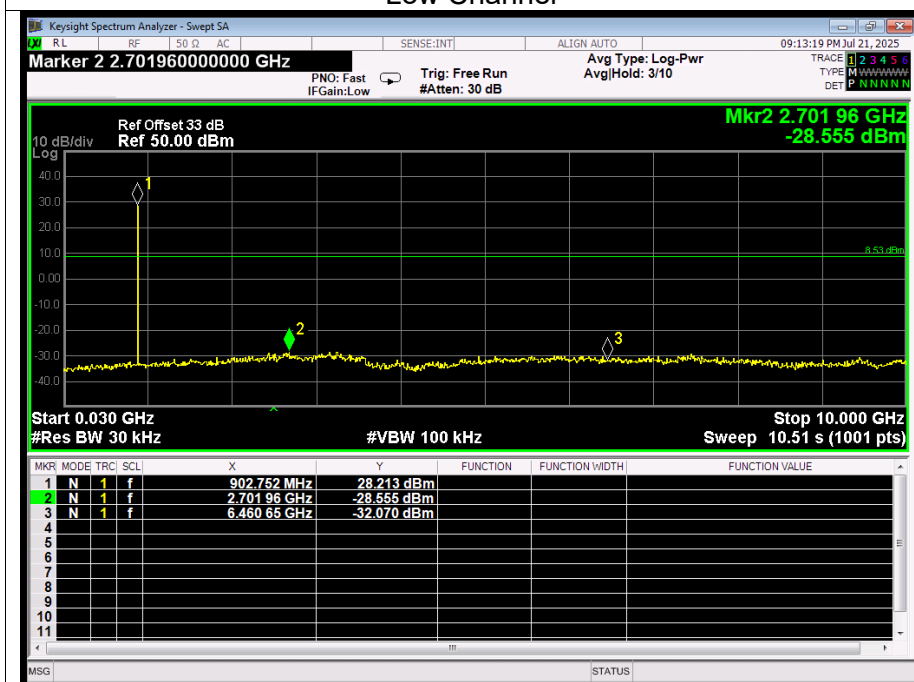
High Channel



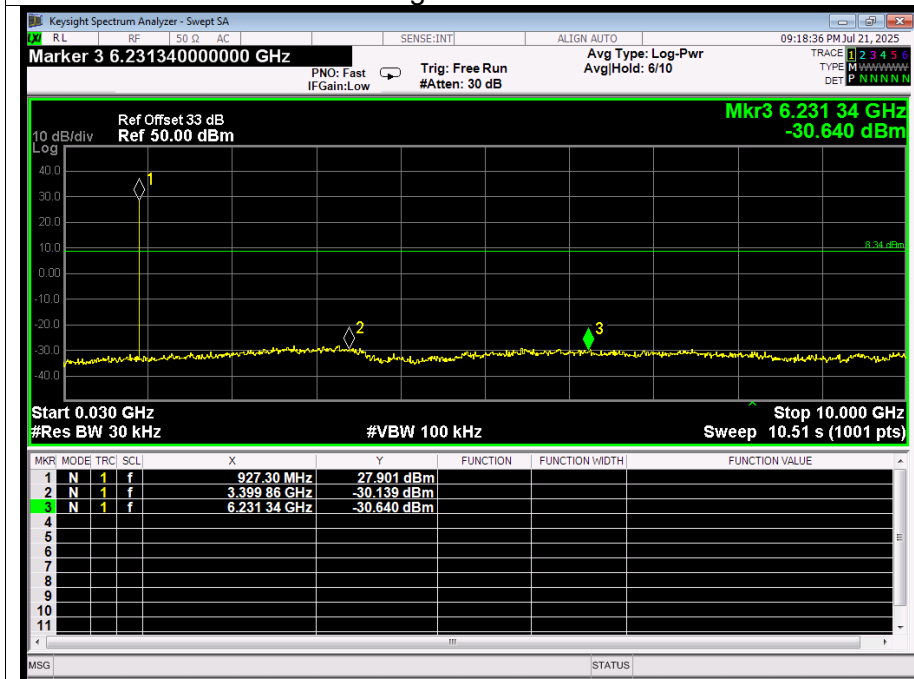


Conducted RF Spurious Emission

Test Graphs Low Channel



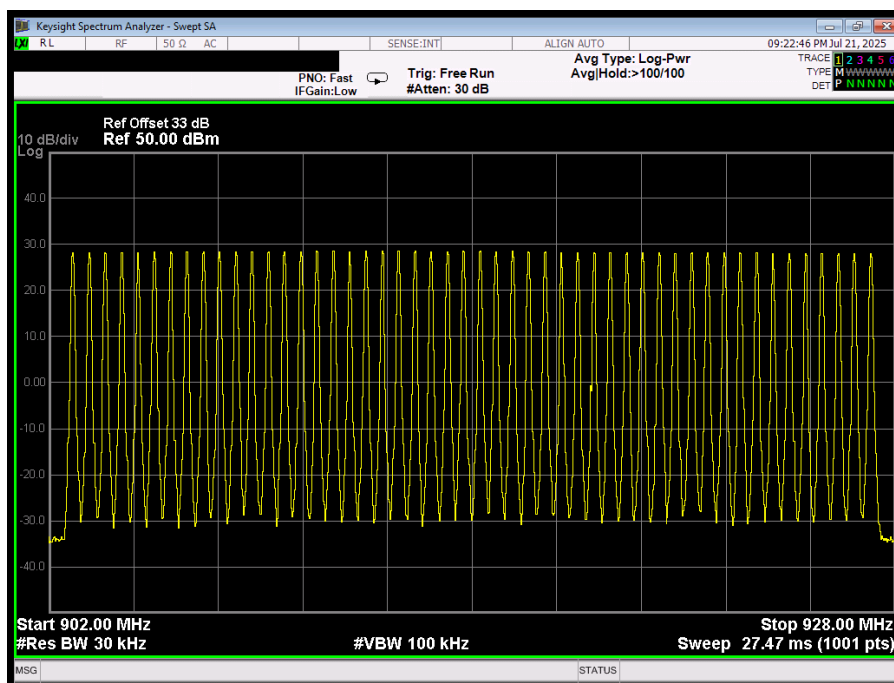
High Channel





Number of Hopping Channel

50 Hopping Channel

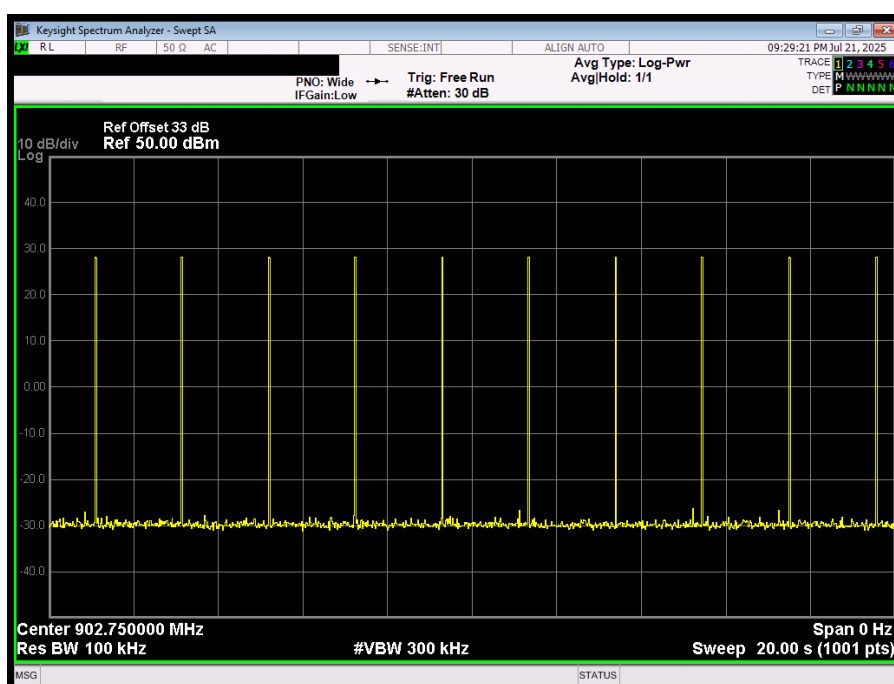
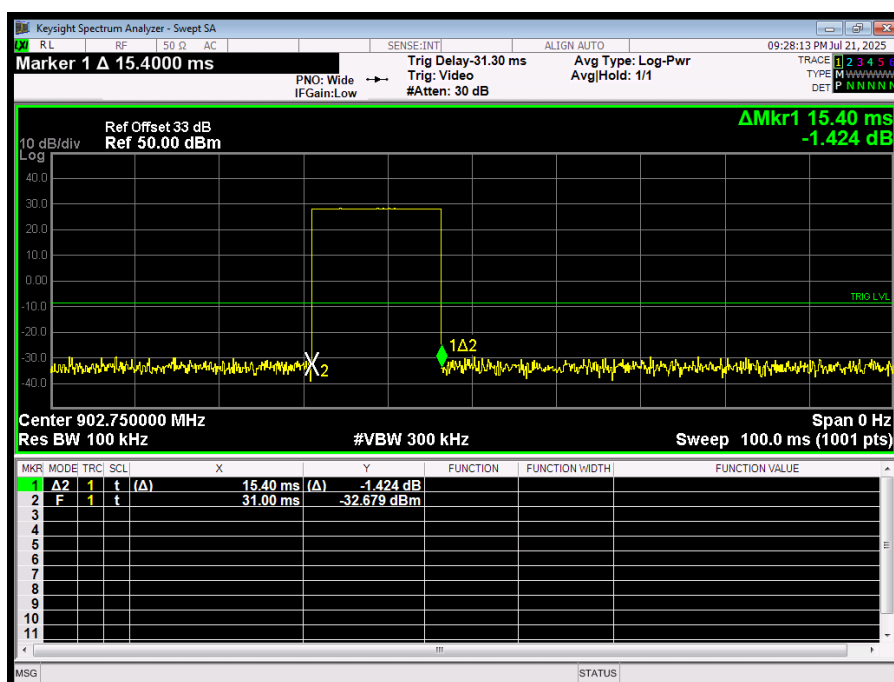




Dwell Time

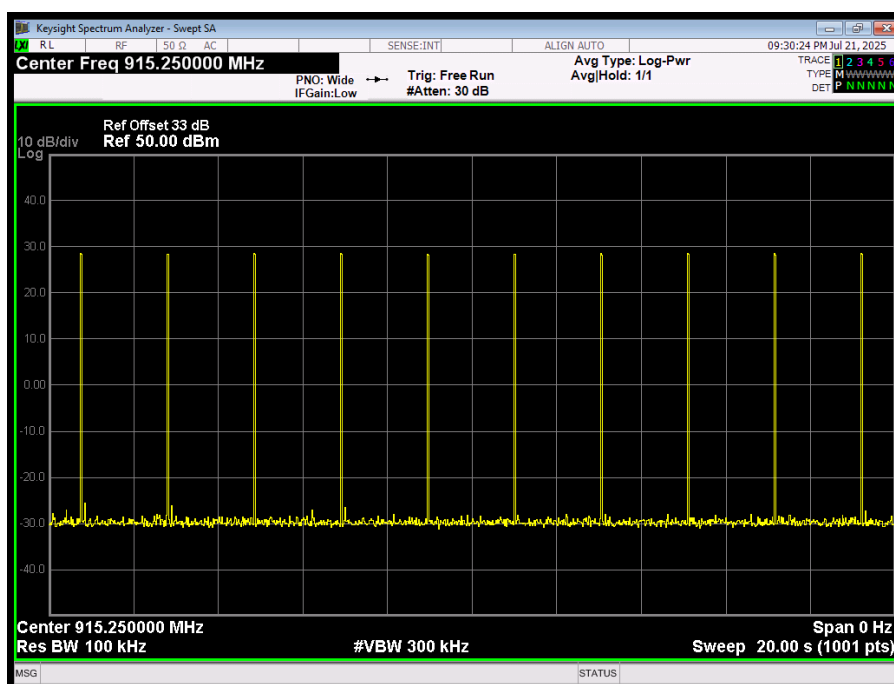
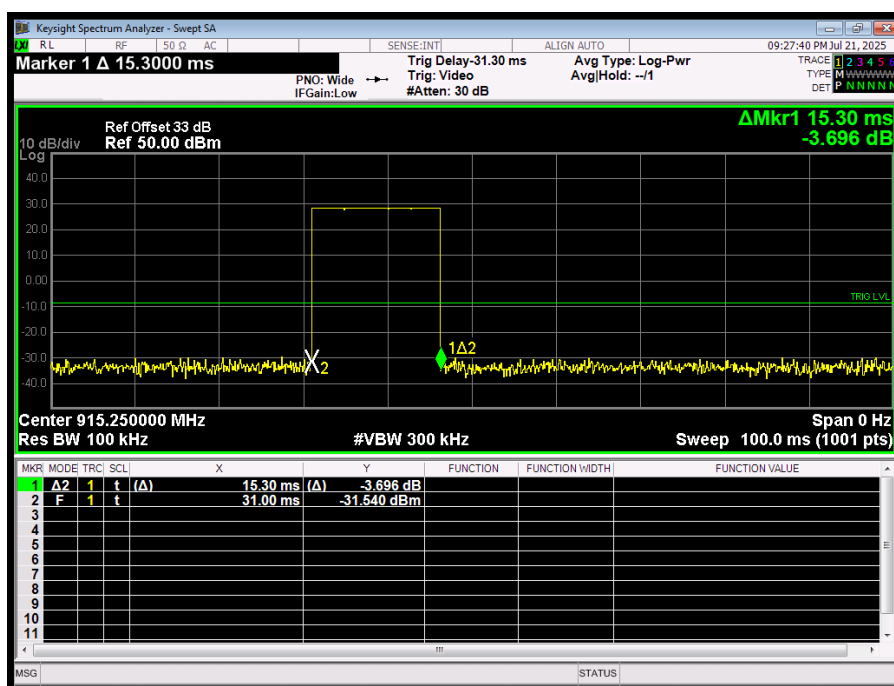
Modulation	ANT	Frequency (MHz)	Pulse Time (ms)	Total Dwell Time (ms)	Burst Count	Period Time (ms)	Limit (ms)	Verdict
FSK	1	902.75	15.4	154	10	20000	400	Pass
FSK	1	915.25	15.3	153	10	20000	400	Pass
FSK	1	927.25	15.5	155	10	20000	400	Pass

Low Channel



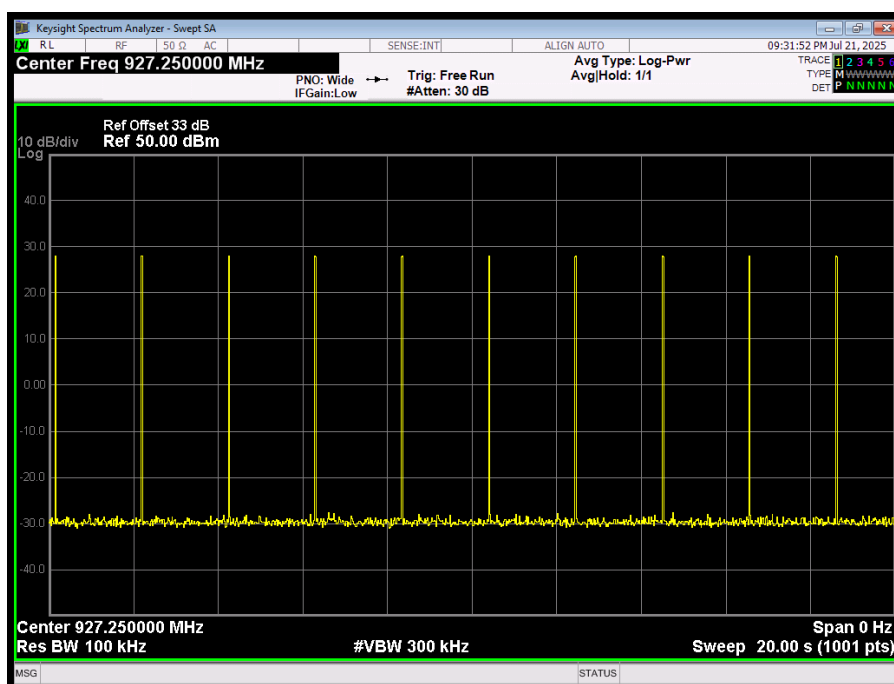
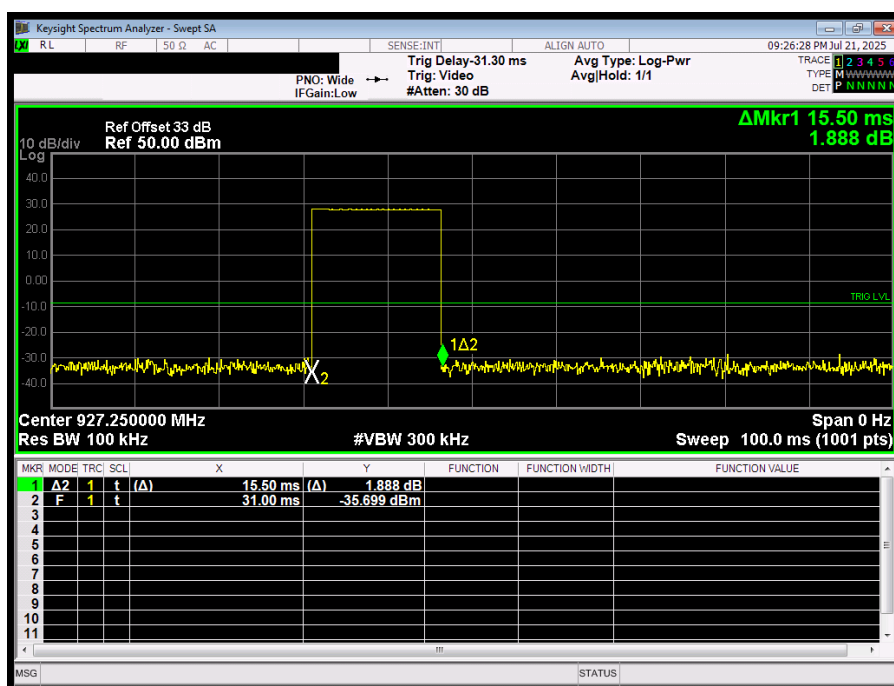


Middle Channel





High Channel





APPENDIX II - MEASUREMENT PHOTOS

Note: Please see the attached RF_Test Setup photos for FCC ID & IC.

※※※※※END OF THE REPORT※※※※※