Certificate #7136.01

FCC Radio Test Report

FCC ID: 2BHES-R1000M

This report concerns: Original Grant

Project No.	:	2406H005
Equipment	:	Remote Control Transmitter
Brand Name	:	ZOOMLION
Test Model	:	R1000M
Series Model	:	N/A
Applicant	:	Hunan Zoomlion Intelligent Technology Co.,Ltd.
Address	:	No.361, Zoomlion Technology Park, South Yinpen Road, Yuelu District, Changsha City, Hunan Province 410013, P.R. China
Manufacturer	:	Hunan Zoomlion Intelligent Technology Co.,Ltd.
Address	:	No.361, Zoomlion Technology Park, South Yinpen Road, Yuelu District, Changsha City, Hunan Province 410013, P.R. China
Factory	:	Hunan Zoomlion Intelligent Technology Co.,Ltd.
Address	:	No.361, Zoomlion Technology Park, South Yinpen Road, Yuelu District, Changsha City, Hunan Province 410013, P.R. China
Date of Receipt	:	Jul. 03, 2024
Date of Test	:	Jul. 03, 2024~Aug. 13, 2024
Issued Date	:	Aug. 26, 2024
Report Version	:	R01
Test Sample	:	Engineering Sample No.: SH20240703185
Standard(s)	:	FCC CFR Title 47, Part 15, Subpart C

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

Louis Li

Prepared by : Louis Li

Riley Wei

Approved by : Riley Wei

Add: No. 29, Jintang Road, Tangzhen Industry Park, Pudong New Area, Shanghai 201210, China.
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Declaration

BTL represents to the client that testing is done in accordance with standard procedures as applicable and that test instruments used has been calibrated with standards traceable to international standard(s) and/or national standard(s).

BTL's reports apply only to the specific samples tested under conditions. It is manufacture's responsibility to ensure that additional production units of this model are manufactured with the identical electrical and mechanical components. BTL assumes no responsibility for the data provided by the customer, any statements, inferences or generalizations drawn by the customer or others from the reports issued by BTL.

The report must not be used by the client to claim product certification, approval, or endorsement by A2LA or any agency of the U.S. Government.

This report is the confidential property of the client. As a mutual protection to the clients, the public and ourselves, the test report shall not be reproduced, except in full, without our written approval.

BTL's laboratory quality assurance procedures are in compliance with the ISO/IEC 17025: 2017 requirements, and accredited by the conformity assessment authorities listed in this test report.

BTL is not responsible for the sampling stage, so the results only apply to the sample as received.

The information, data and test plan are provided by manufacturer which may affect the validity of results, so it is manufacturer's responsibility to ensure that the apparatus meets the essential requirements of applied standards and in all the possible configurations as representative of its intended use.

Limitation

For the use of the authority's logo is limited unless the Test Standard(s)/Scope(s)/Item(s) mentioned in this test report is (are) included in the conformity assessment authorities acceptance respective.
Please note that the measurement uncertainty is provided for informational purpose only and are not use in determining the Pass/Fail results.

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REPORT ISSUED HISTORY

Report No.	Version	Description	Issued Date	Note
BTL-FCCP-1-2406H005	R00	Original Report.	Aug. 22, 2024	Invalid
BTL-FCCP-1-2406H005	R01	Revised report to address TCB's comments.	Aug. 26, 2024	Valid

1. APPLICABLE STANDARDS

According to the specifications of the manufacturer, the EUT must comply with the requirements of the following standards:
ANSI C63.10-2013

2. SUMMARY OF TEST RESULTS

Test procedures according to the technical standard(s):

FCC CFR Title 47, Part 15, Subpart C				
Standard(s) Section	**Test Item**	**Test Result**	**Judgment**	**Remark**
15.207(a)	AC Power Line Conducted Emissions	APPENDIX A	PASS	------
15.209 15.249(a)	Radiated Emissions	APPENDIX B APPENDIX C APPENDIX D	PASS	------
15.215(c)	Bandwidth	APPENDIX E	PASS	------
15.203	Antenna Requirement	------	PASS	Note(2)

Note:

(1) “N/A” denotes test is not applicable to this device.

(2) The device what use a permanently attached antenna were considered sufficient to comply with the provisions of 15.203.

2.1 TEST FACILITY

The test facilities used to collect the test data in this report is at the location of No. 29, Jintang Road, Tangzhen Industry Park, Pudong New Area, Shanghai 201210,China
BTL's Registration Number for FCC: 964234
BTL's Designation Number for FCC: CN1374

2.2 MEASUREMENT UNCERTAINTY

ISO/IEC 17025 requires that an estimate of the measurement uncertainties associated with the emissions test results be included in the report. The measurement uncertainties given below are based on a 95% confidence level (based on a coverage factor (k=2))
The BTL measurement uncertainty as below table:

A. Radiated emissions test:

Test Site	Measurement Frequency Range	Ant. H / V	U, (dB)
SH-CB02	9 KHz~30 MHz	-	2.72
	30 MHz~200 MHz	V	4.4
	30 MHz~200 MHz	H	3.16
	200 MHz~1,000 MHz	V	4.6
	200 MHz~1,000 MHz	H	4.2
	1GHz ~ 6GHz	-	4.56
	6GHz ~ 18GHz	-	5.14
	18 ~ 26.5 GHz	-	1.68
	26.5~40 GHz		1.71

Note: Unless specifically mentioned, the uncertainty of measurement has not been taken into account to declare the compliance or non-compliance to the specification.

2.3 TEST ENVIRONMENT CONDITIONS

Test Item	Temperature	Humidity	Test Voltage	Tested By
Conducted Emission	21°C	51%	AC 120V/60Hz	Toby Xiong
Radiated Emissions-9 kHz to 30 MHz	27.5°C	50%	DC 3.7V	Nicole Yan
Radiated Emissions-30 MHz to 1000 MHz	27.5°C	50%	DC 3.7V	Nicole Yan
Radiated Emissions-Above 1000 MHz	27.5°C	50%	DC 3.7V	Nicole Yan
Bandwidth	25°C	44%	DC 3.7V	Thacker Tang

3. GENERAL INFORMATION

3.1 GENERAL DESCRIPTION OF EUT

Equipment	Remote Control Transmitter
Brand Name	ZOOMLION
Test Model	R1000M
Series Model	N/A
Model Difference(s)	N/A
Power Source	#1 DC power supply. #2 Battery supplied.
Power Rating	#1 DC 5V, 1.5A #2 Nominal Capacity :3000mAh Nominal Voltage 3.7V
Operation Frequency	902-928MHz
Modulation Technology	FSK
Max. Field Strength	88.43 dBuV/m(AVG) 99.52 dBuV/m(Peak)

Note:

1. For a more detailed features description, please refer to the manufacturer's specifications or the user's manual.

2. Channel List:

Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
01	904.05	05	909.65	09	915.25	13	920.85
02	905.45	06	911.05	10	916.65	14	922.25
03	906.85	07	912.45	11	918.05	15	923.65
04	908.25	08	913.85	12	919.45	16	925.05

3. Table for Filed Antenna:

Ant.	Brand	P/N	Antenna Type	Connector	Gain (dBi)
1	Tech & Signal	KX-GSM-FPC-43-22	FPC	N/A	3

3.2 DESCRIPTION OF TEST MODES

The test system was pre-tested based on the consideration of all possible combinations of EUT operation mode.

Pretest Mode	Description
Mode 1	TX _904.05 MHz
Mode 2	TX _915.25 MHz
Mode 3	TX _925.05 MHz

Following mode(s) was (were) found to be the worst case(s) and selected for the final test.

Conducted emissions test	
Final Test Mode:	Description
Mode 1	TX _904.05 MHz

Radiated emissions test - Below 1GHz	
Final Test Mode	Description
Mode 1	TX _904.05 MHz

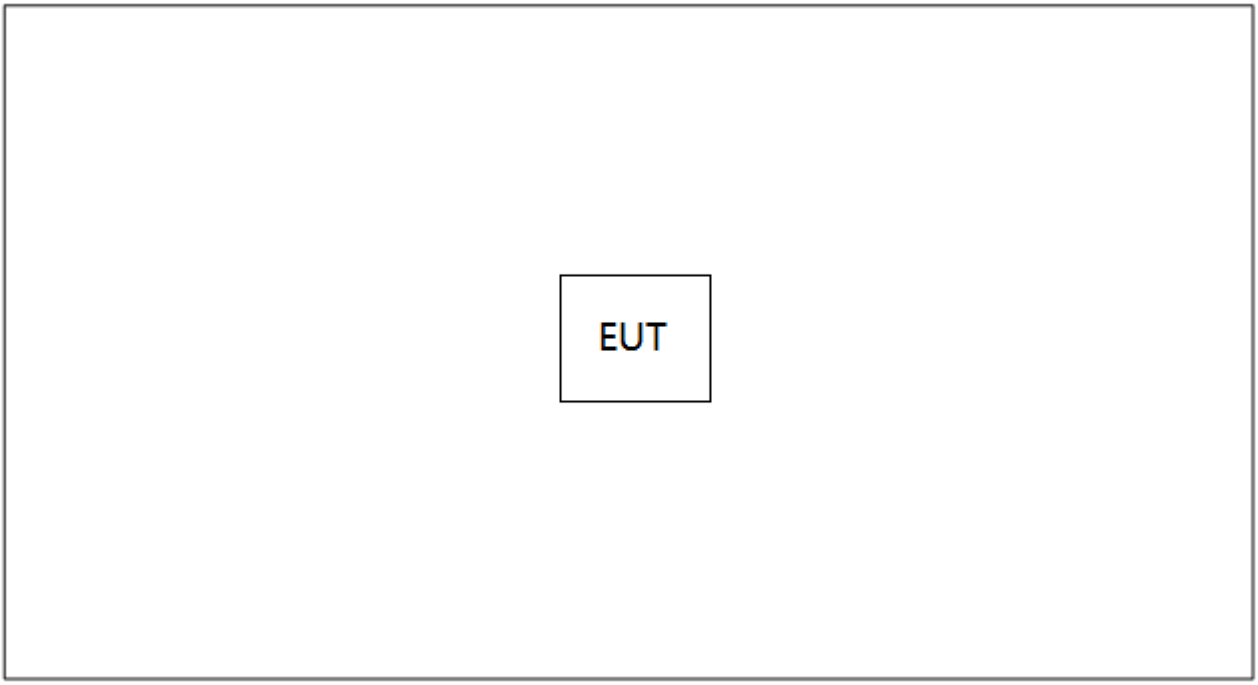
Radiated emissions test - Above 1GHz	
Final Test Mode	Description
Mode 1	TX _904.05 MHz
Mode 2	TX _915.25 MHz
Mode 3	TX _925.05 MHz

Bandwidth test	
Final Test Mode	Description
Mode 1	TX _904.05 MHz
Mode 2	TX _915.25 MHz
Mode 3	TX _925.05 MHz

Note:

(1) For Radiated Emission Below 1GHz test, the mode 1 was found to be the worst case and recorded.

3.3 BLOCK DIAGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED



3.4 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.

Item	Equipment	Brand	Model No.	Series No.
-	-	-	-	-

Item	Cable Type	Shielded Type	Ferrite Core	Length
-	-	-	-	-

3.5 CUSTOMER INFORMATION DESCRIPTION

1) The antenna gain is provided by the manufacturer.
   Except for radiated emissions, the results of all test items include cable losses. All cable losses are provided by the testing laboratory.

4. CONDUCTED EMISSIONS TEST

4.1 LIMIT

Frequency of Emission (MHz)	Limit (dBμV)	
	Quasi-peak	Average
0.15 - 0.50	66 to 56*	56 to 46*
0.50 - 5.0	56	46
5.0 - 30.0	60	50

NOTE:

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

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

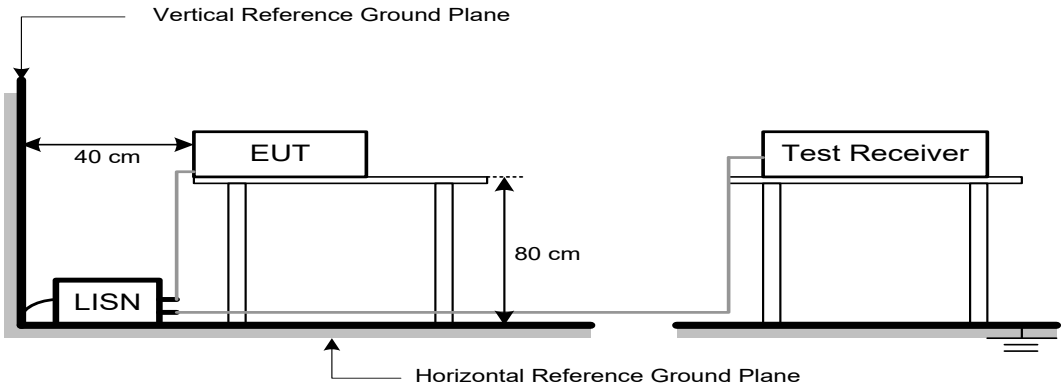
4.2 TEST PROCEDURE

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

4.3 DEVIATION FROM TEST STANDARD

No deviation

4.4 TEST SETUP



4.5 EUT OPERATION CONDITIONS

EUT was programmed to be in continuously transmitting mode.

4.6 TEST RESULTS

Please refer to the APPENDIX A.

5. EMC EMISSION TEST

5.1 RADIATED EMISSION MEASUREMENT

5.1.1 RADIATED EMISSION LIMITS (FCC 15.209 and 15.249)

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
960~1000	500	3

Harmonic emissions limits comply with below 54dBuV/m at 3m. Other emissions radiated outside of the specified frequency bands, except for harmonics, shall be attenuated by at least 50 dB below the level of the fundamental or comply with the radiated emissions limits specified in section15.209(a) limit in the table below has to be followed.

Fundamental Frequency	Field Strength of Fundamental (micorvolts/meter)	Field Strength of Harnibucs (micorvolts/meter)
902-928 MHz	50	500

LIMITS OF RADIATED EMISSION MEASUREMENT (FCC 15.209)

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).

Spectrum Parameter	Setting
Attenuation	Auto
Start Frequency	1000 MHz
Stop Frequency	10th carrier harmonic

Receiver Parameter	Setting
Attenuation	Auto
Start ~ Stop Frequency	30MHz~1000MHz for QP detector

DWELL TIME OF PERIODIC OPERATION MEASUREMENT

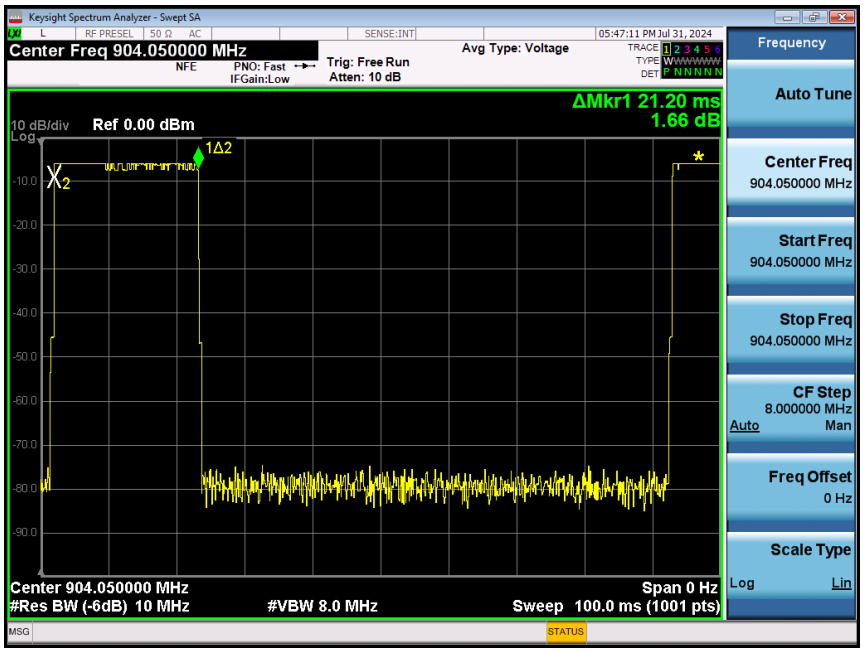
Duty Cycle = On Time/Total Time

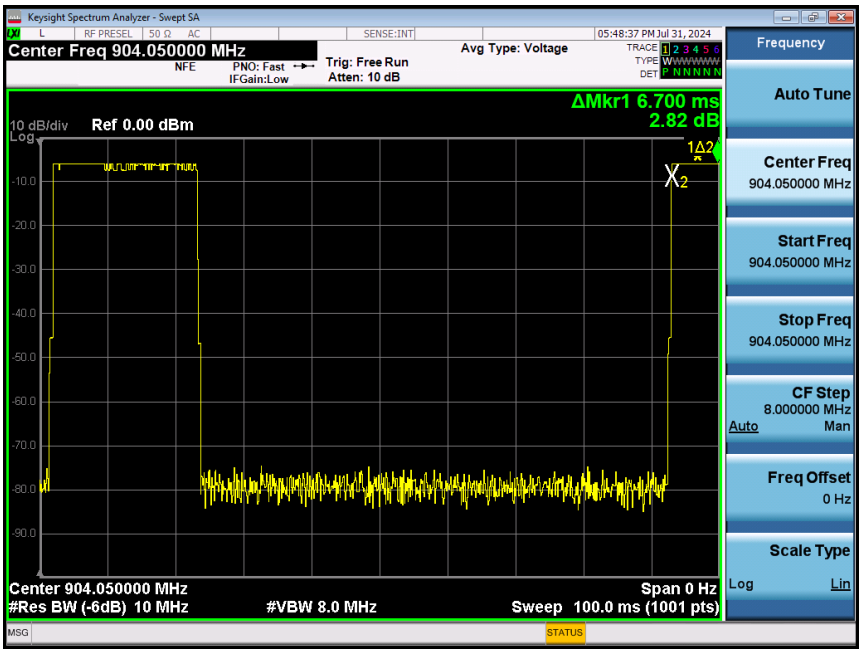
T_{ON}: 21.20+6.70=27.90ms

T_{Total}: 100 ms

Duty cycle= 27.90/100= 27.90%

Average Reading = Peak value + 20log(Duty cycle) , AV=Peak-11.09





5.1.2 TESTPROCEDURE

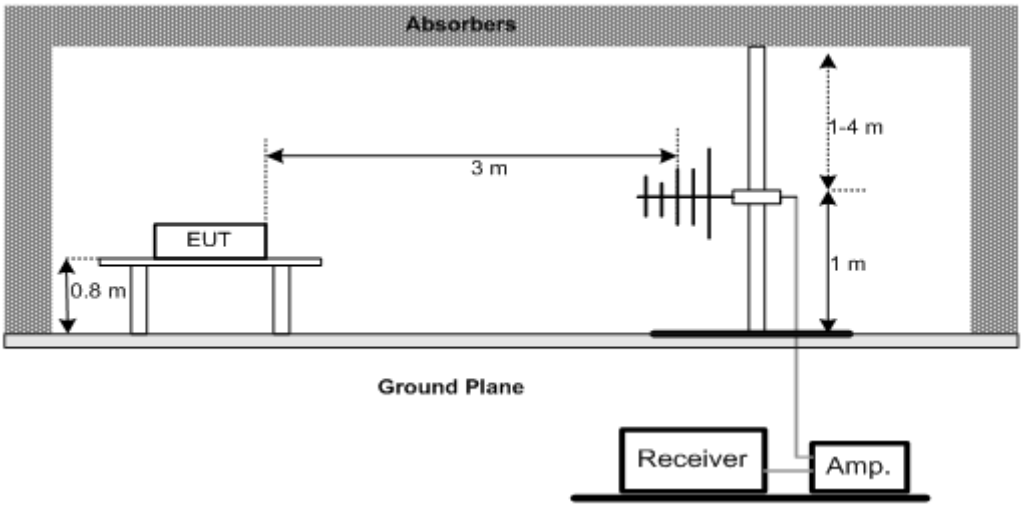
a. The measuring distance of 3 m shall be used for measurements. The EUT was placed on the top of a rotating table 0.8 meter above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.(below 1GHz)
b. The measuring distance of 3 m shall be used for measurements. The EUT was placed on the top of a rotating table 1.5 meter above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.(above 1GHz)
c. The height of the equipment or of the substitution antenna shall be 0.8 m or 1.5m,the height of the test antenna shall vary between 1 m to 4 m. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights find the maximum reading (used Bore sight function).
e. The receiver system was set to peak and average detect function and specified bandwidth with maximum hold mode when the test frequency is above 1GHz.
f. The initial step in collecting radiated emission data is a receiver peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak detector mode re-measured.
g. All readings are Peak unless otherwise stated QP in column of Note. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn‘t perform. (below 1GHz)
h. All readings are Peak Mode value unless otherwise stated AVG in column of Note. If the Peak Mode Measured value compliance with the Peak Limits and lower than AVG Limits, the EUT shall be deemed to meet both Peak & AVG Limits and then only Peak Mode was measured, but AVG Mode didn‘t perform. (above 1GHz)
i. For the actual test configuration, please refer to the related Item –EUT Test Photos.

5.1.3 DEVIATIONFROMTESTSTANDARD

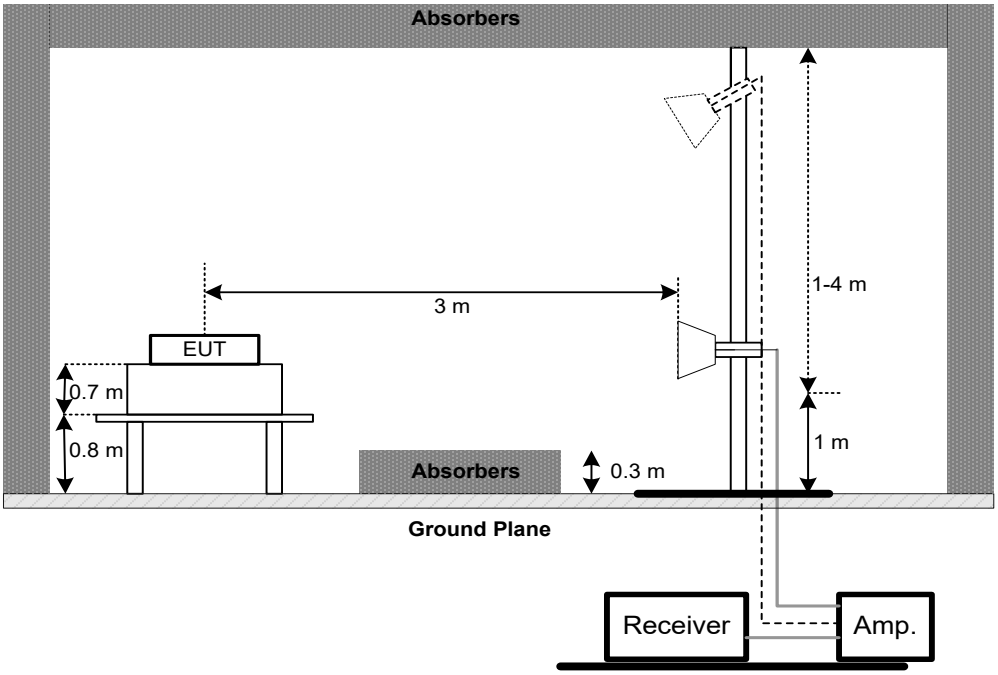
No deviation

5.1.4 TESTSETUP

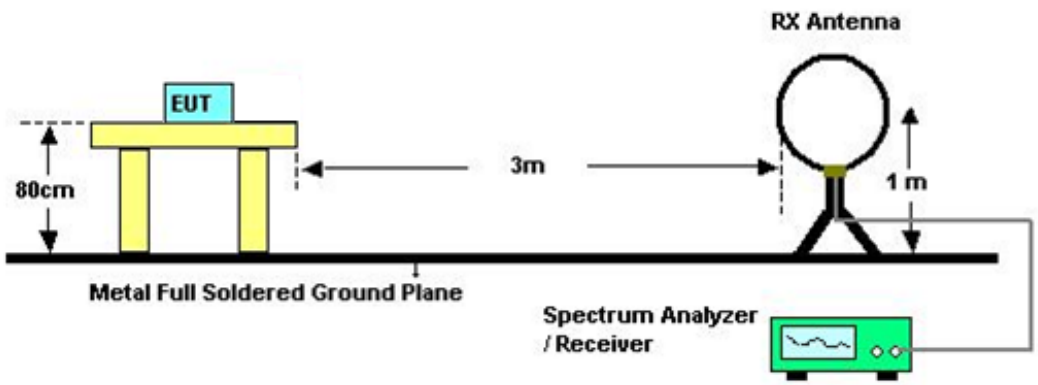
(A) Radiated Emission Test Set-Up Frequency Below 1 GHz



(B) Radiated Emission Test Set-Up Frequency Above 1 GHz



(C) For radiated emissions below 30MHz



5.1.5EUT OPERATING CONDITIONS

The EUT tested system was configured as the statements of 4.1.5 unless otherwise a special operating condition is specified in the follows during the testing.

5.1.6 TEST RESULTS (9KHZ TO 30MHZ)

Please refer to the Appendix B.

5.1.7 TEST RESULTS (30 TO 1000 MHZ)

Please refer to the Appendix C.

5.1.8 TEST RESULTS(ABOVE1000 MHZ)

Please refer to the Appendix D.

Remark:

(1) EUT Orthogonal Axis:
"X" - denotes Laid on Table; "Y" - denotes Vertical Stand "Z" - denotes Side Stand

(2) During the measurements above 1 GHz it is taken care of that the EUT is always within the 3 dB cone of radiation BW of the used antenna

6. BANDWIDTH TEST

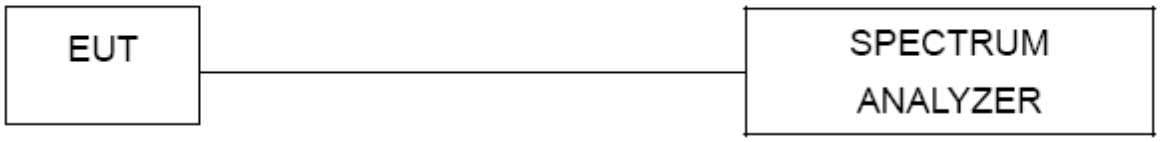
6.1 TEST PROCEDURE

a. The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram below,
b. Spectrum Setting: RBW= 3kHz, VBW=3kHz, Sweep time = Auto.

6.2 DEVIATION FROM STANDARD

No deviation.

6.3 TEST SETUP



6.4 EUT OPERATION CONDITIONS

The EUT tested system was configured as the statements of 4.1.5 unless otherwise a special operating condition is specified in the follows during the testing.

6.5 TEST RESULTS

Please refer to the Appendix E.

7. MEASUREMENT INSTRUMENTS LIST

Conducted Emissions					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Line Impedance Stabilisation Network	Schwarzbeck	NNLK 8121	8121-822	Feb. 2, 2025
2	TWO-LINE V-NETWORK	R&S	ENV216	101340	Jul. 13, 2024 Jul. 12, 2025
3	Test Cable	emci	EMCRG400-BM-N M-10000	N/A	Mar. 09, 2025
4	EMI Test Receiver	R&S	ESR3	100082	Dec.22, 2024
5	50Ω Terminator	SHX	TF2-1G-A	17051601	Feb. 2, 2025
6	50Ω coaxial switch	Anritsu	MP59B	6201750902	Feb. 2, 2025
7	Measurement Software	Farad	EZ-EMC Ver.NB-03A1-01	N/A	N/A

Radiated Emissions - 9 kHz to 30 MHz					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Loop Antenna	EMCI	EMCI LPA600	275	Mar. 12, 2025
2	MXE EMI Receiver	Keysight	N9038A	MY56400088	Feb. 2, 2025
3	Measurement Software	Farad	EZ-EMC Ver.NB-03A1	N/A	N/A
4	Wideband Radio Communication Test	R&S	CMW500	129246	Jul. 13, 2024 Jul. 12, 2025
5	Pre-Amplifier	emci	EMC9135	980401	Feb. 2, 2025

Radiated Emissions - 30 MHz to 1 GHz					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Antenna	emci	VULB 9168	1467	Mar. 12, 2025
2	Pre-Amplifier	emci	EMC9135	980401	Feb. 2, 2025
3	MXE EMI Receiver	Keysight	N9038A	MY56400088	Feb. 2, 2025
4	Test Cable	emci	EMC104-SM-SM-7 000	181020	May 20, 2025
5	Test Cable	emci	RWP50-4.6A-SMS M-1M	20200928 002	May 20, 2025
6	Test Cable	emci	EMC104-SM-SM-2 500	170618	May 20, 2025
7	Measurement Software	Farad	EZ-EMC Ver.NB-03A1	N/A	N/A
8	Wideband Radio Communication Test	R&S	CMW500	129246	Jul. 13, 2024 Jul. 12, 2025

Radiated Emissions - Above 1 GHz					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Double-Ridged Waveguide Horn Antenna	ETS-Lindgren	BBHA 9120D	9120D-1817	Mar.12, 2025
2	Pre-Amplifier	emci	EMC051845SE	980725	Jul. 13, 2024 Jul. 12, 2025
3	EXA Spectrum Analyzer	Keysight	N9010A	MY56480579	Feb. 2, 2025
4	Test Cable	emci	EMC104-SM-SM-7000	181020	May 20, 2025
5	Test Cable	emci	RWP50-4.6A-SMSM-1M	20200928 002	May 20, 2025
6	Test Cable	emci	EMC104-SM-SM-2500	170618	May 20, 2025
7	Measurement Software	Farad	EZ-EMC Ver.NB-03A1	N/A	N/A
8	Wideband Radio Communication Test	R&S	CMW500	129246	Jul. 13, 2024 Jul. 12, 2025
9	Antenna	Schwarzbeck	BBHA9170	9170-651	Mar. 15, 2025
10	Pre-Amplifier	EMC INSTRUMENT	EMC184045B	980265	Feb. 2, 2025
11	Test Cable	emci	100% S-Parameter Recorded	F02-150819-039	Oct. 21, 2024
12	Test Cable	emci	EMC104-SM-SM-2500	170616	Oct. 21, 2024
13	Test Cable	emci	EMC104-SM-SM-2500	170652	Oct. 21, 2024
14	EXA Spectrum Analyzer	Keysight	N9010A	MY56480559	Feb. 2, 2025

Bandwidth					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	EXA Spectrum Analyzer	Keysight	N9010A	MY56480545	Jul. 13, 2024 Jul. 12, 2025
2	BTL Conducted Test	BTL	20231123	N/A	N/A

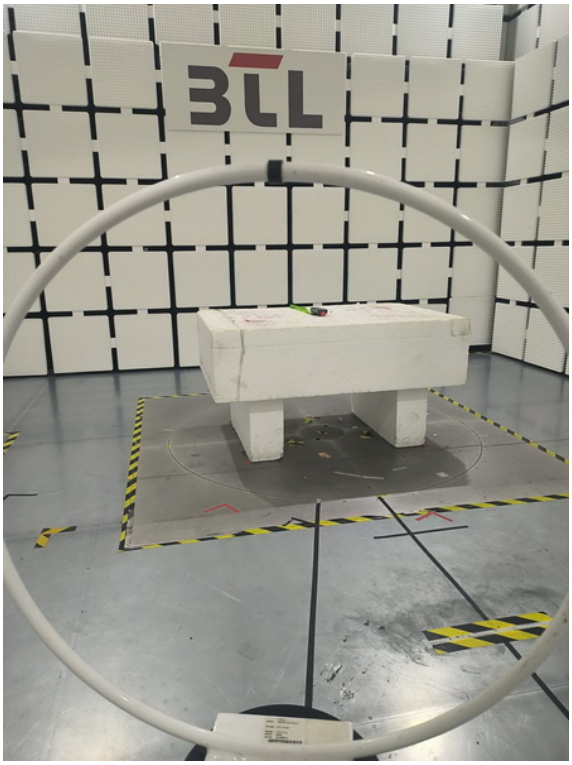
Remark "N/A" denotes no model name, serial no. or calibration specified.
All calibration period of equipment list is one year.

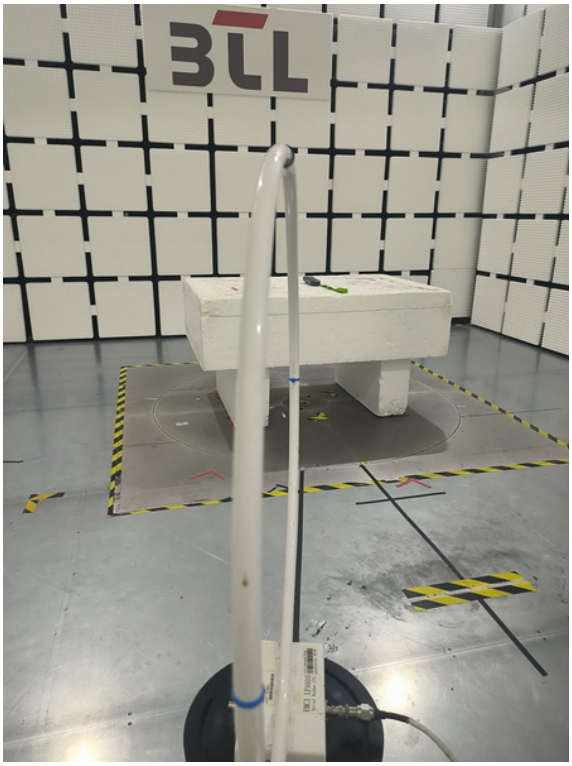
8. EUT TEST PHOTO

Conducted Emissions Test Photos

Radiated Emissions Test Photos

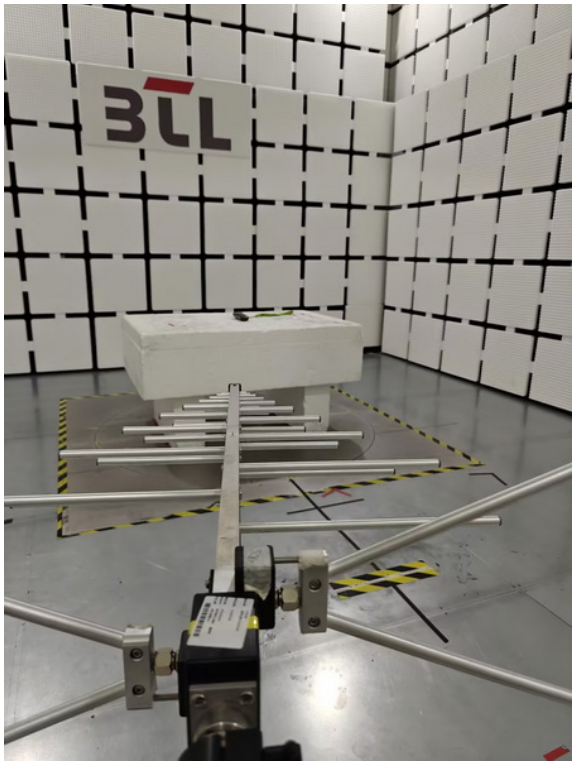
9 kHz to 30 MHz

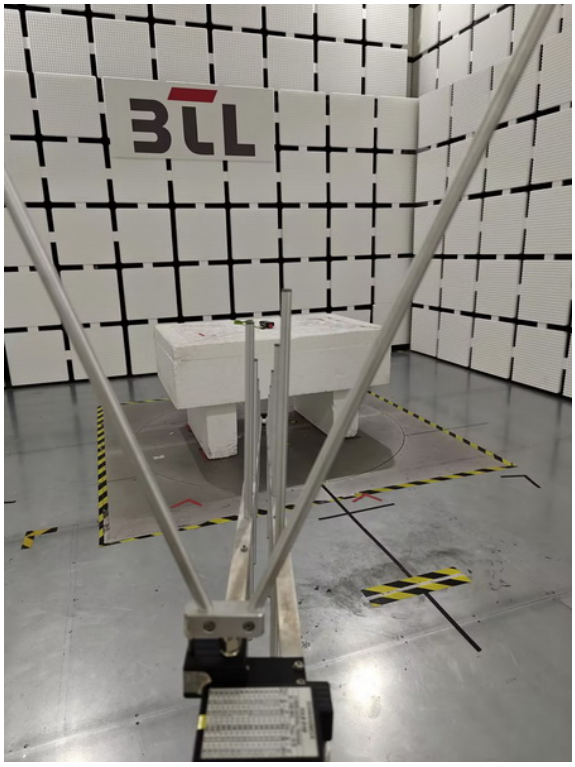




Radiated Emissions Test Photos

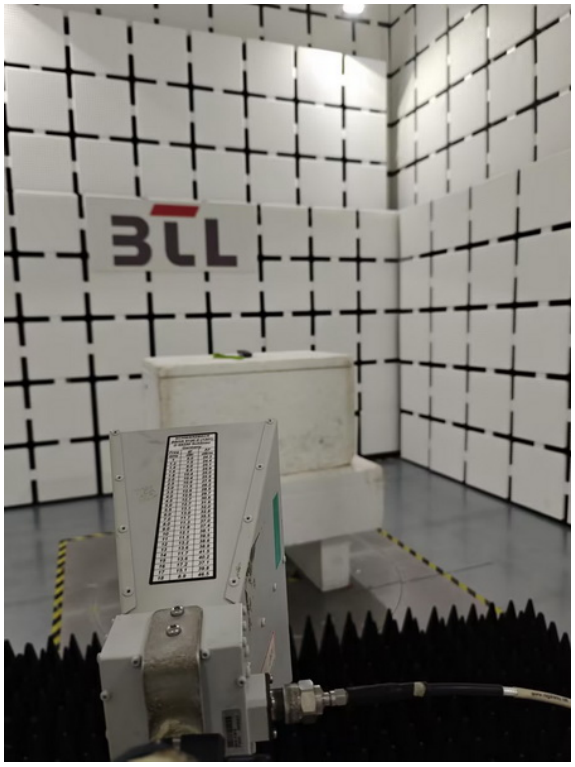
30 MHz to 1000 MHz





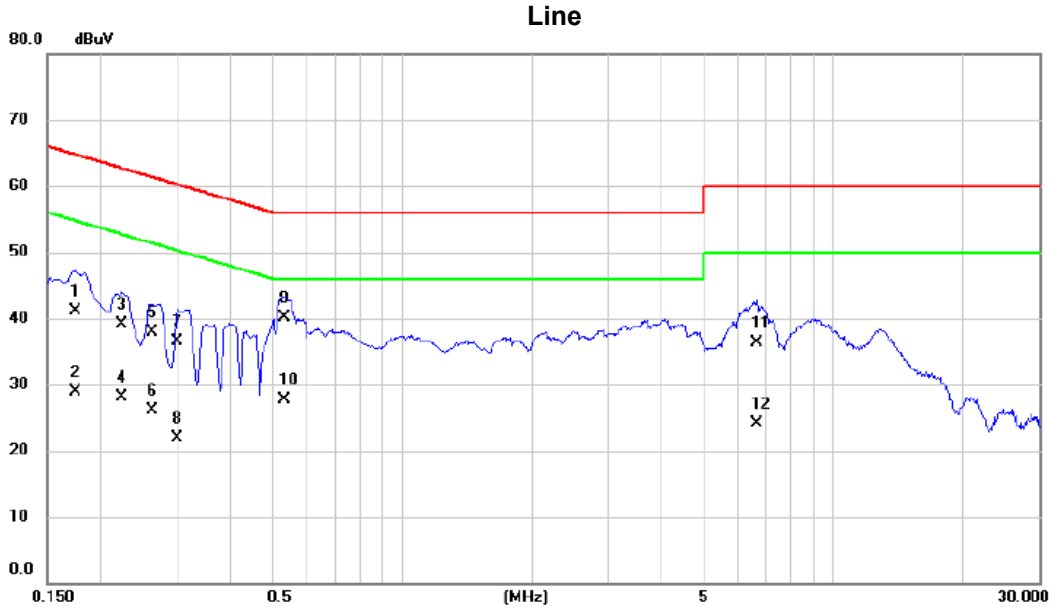
Radiated Emissions Test Photos

Above 1 GHz



APPENDIX A - CONDUCTED EMISSIONS

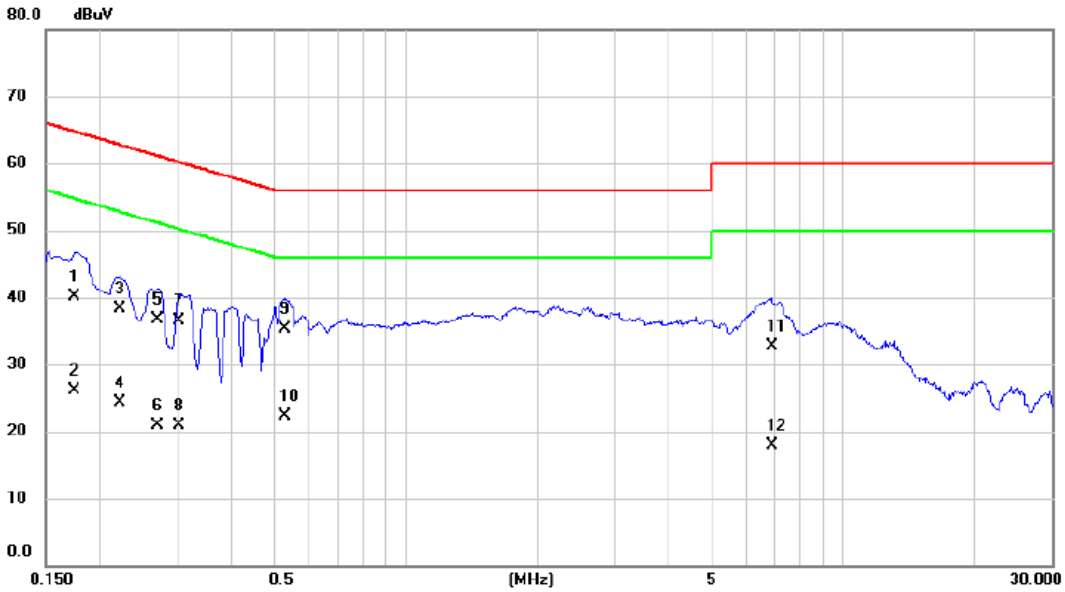
Test Mode:	TX _904.05MHz



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.1748	31.20	9.84	41.04	64.73	-23.69	QP	
2		0.1748	19.00	9.84	28.84	54.73	-25.89	AVG	
3		0.2243	29.30	9.89	39.19	62.66	-23.47	QP	
4		0.2243	18.30	9.89	28.19	52.66	-24.47	AVG	
5		0.2625	28.00	9.89	37.89	61.35	-23.46	QP	
6		0.2625	16.30	9.89	26.19	51.35	-25.16	AVG	
7		0.3007	26.70	9.90	36.60	60.22	-23.62	QP	
8		0.3007	12.00	9.90	21.90	50.22	-28.32	AVG	
9	*	0.5325	30.20	9.93	40.13	56.00	-15.87	QP	
10		0.5325	17.70	9.93	27.63	46.00	-18.37	AVG	
11		6.6255	26.00	10.33	36.33	60.00	-23.67	QP	
12		6.6255	13.70	10.33	24.03	50.00	-25.97	AVG	

Test Mode:	TX _904.05MHz

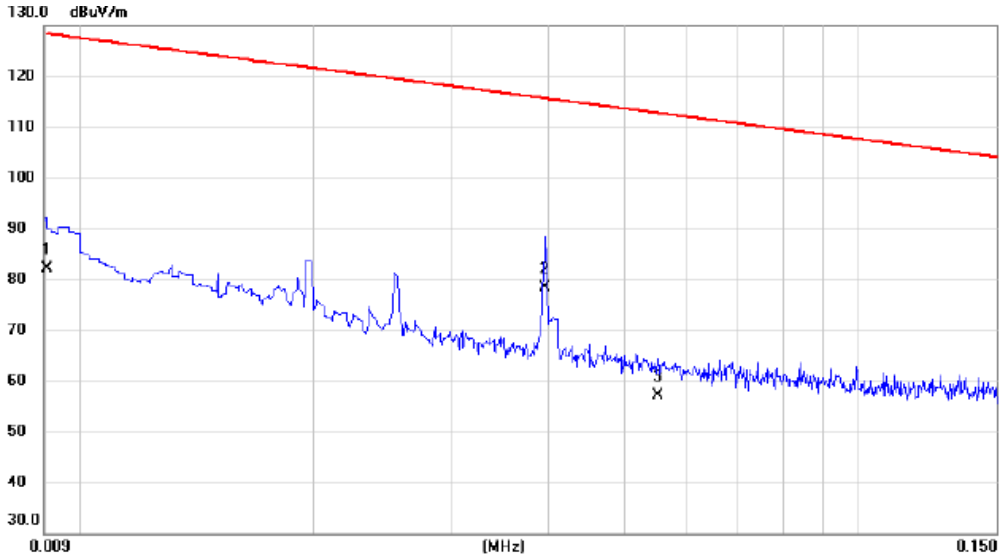
Neutral



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.1748	30.30	9.84	40.14	64.73	-24.59	QP	
2		0.1748	16.20	9.84	26.04	54.73	-28.69	AVG	
3		0.2220	28.40	9.90	38.30	62.74	-24.44	QP	
4		0.2220	14.40	9.90	24.30	52.74	-28.44	AVG	
5		0.2714	26.90	9.89	36.79	61.07	-24.28	QP	
6		0.2714	11.00	9.89	20.89	51.07	-30.18	AVG	
7		0.3030	26.70	9.89	36.59	60.16	-23.57	QP	
8		0.3030	11.10	9.89	20.99	50.16	-29.17	AVG	
9	*	0.5302	25.40	9.88	35.28	56.00	-20.72	QP	
10		0.5302	12.40	9.88	22.28	46.00	-23.72	AVG	
11		6.8775	22.60	10.19	32.79	60.00	-27.21	QP	
12		6.8775	7.70	10.19	17.89	50.00	-32.11	AVG	

APPENDIX B - RADIATED EMISSION - 9 KHZ TO 30 MHZ

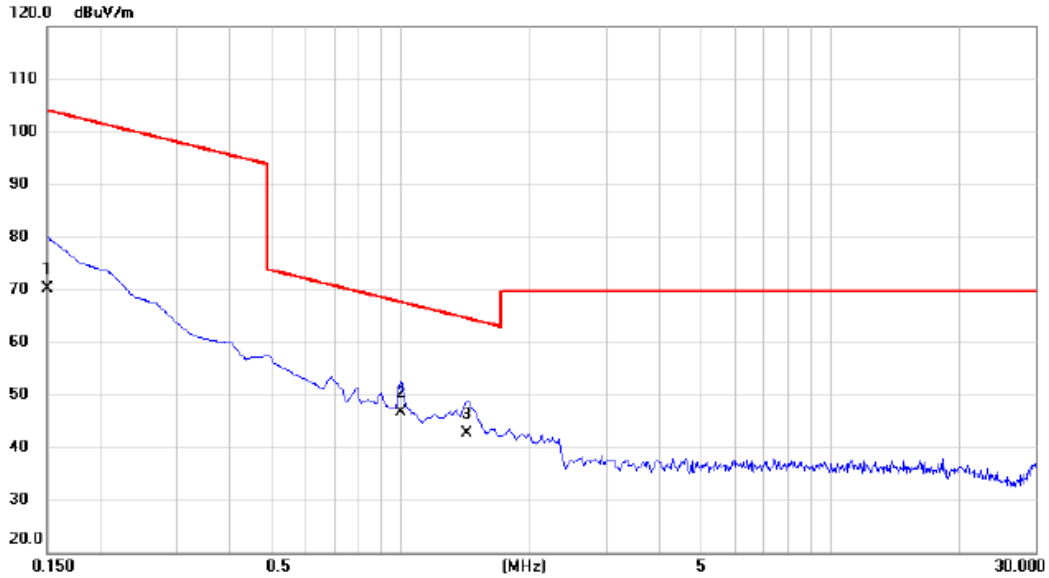
Test Mode	TX _904.05MHz	Polarization	Ant 0°



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		0.0091	3.10	78.96	82.06	128.42	-46.36	AVG	
2	*	0.0396	13.08	65.23	78.31	115.65	-37.34	AVG	
3		0.0552	-5.14	62.26	57.12	112.77	-55.65	AVG	

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

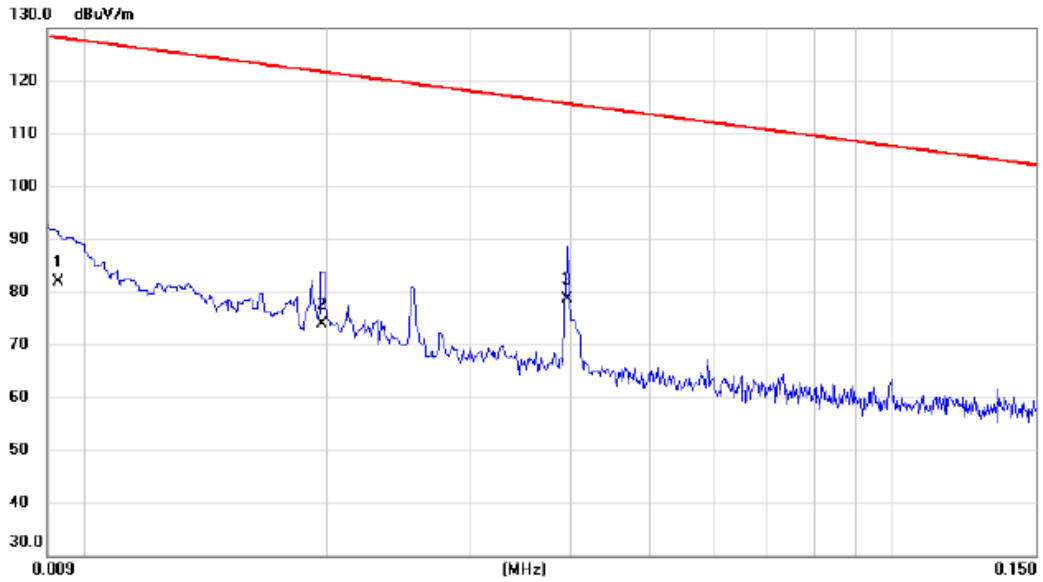
Test Mode	TX _904.05MHz	Polarization	Ant 0°



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		0.1500	15.15	54.88	70.03	104.09	-34.06	AVG	
2	*	1.0007	6.14	40.47	46.61	67.60	-20.99	QP	
3		1.4186	3.35	39.36	42.71	64.57	-21.86	QP	

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

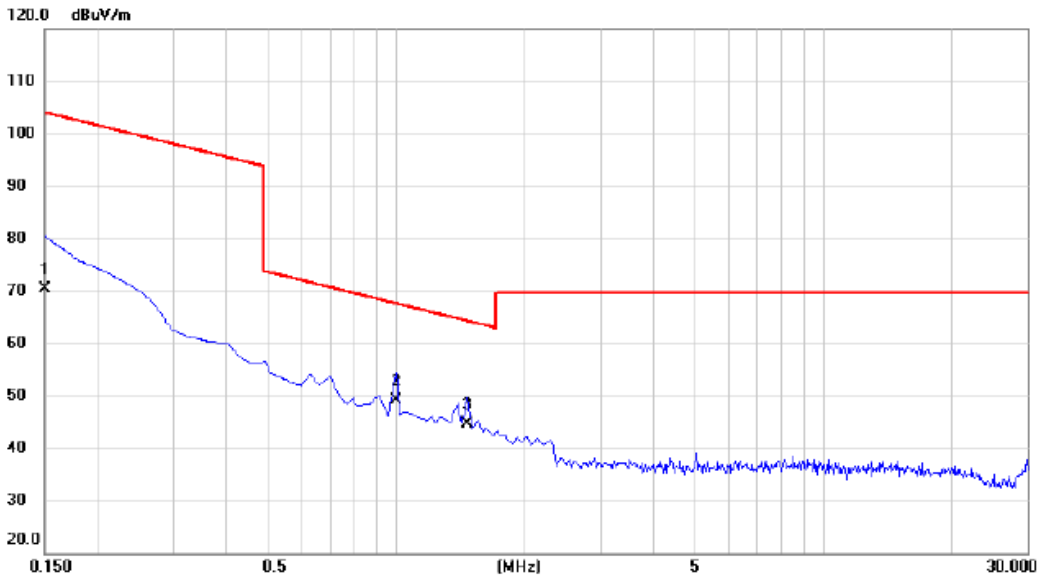
Test Mode	TX _904.05MHz	Polarization	Ant 90°



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		0.0093	2.95	78.87	81.82	128.24	-46.42	AVG	
2		0.0197	0.76	73.13	73.89	121.72	-47.83	AVG	
3	*	0.0396	13.28	65.23	78.51	115.65	-37.14	AVG	

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

Test Mode	TX _904.05MHz	Polarization	Ant 90°

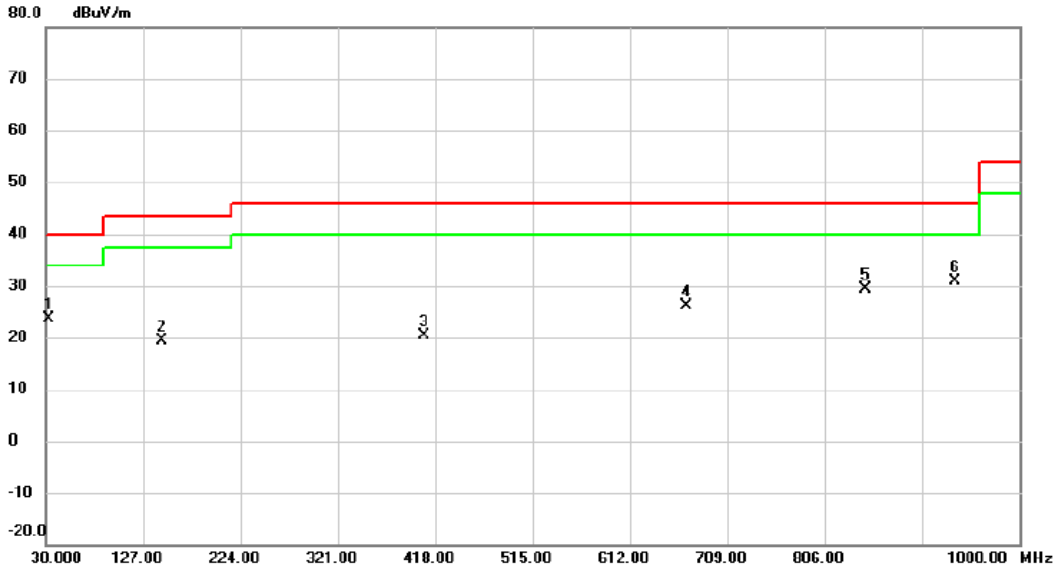


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		0.1500	15.62	54.88	70.50	104.09	-33.59	AVG	
2	*	1.0007	8.78	40.47	49.25	67.60	-18.35	QP	
3		1.4633	5.50	39.24	44.74	64.30	-19.56	QP	

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

APPENDIX C - RADIATED EMISSION - 30 MHZ TO 1000 MHZ

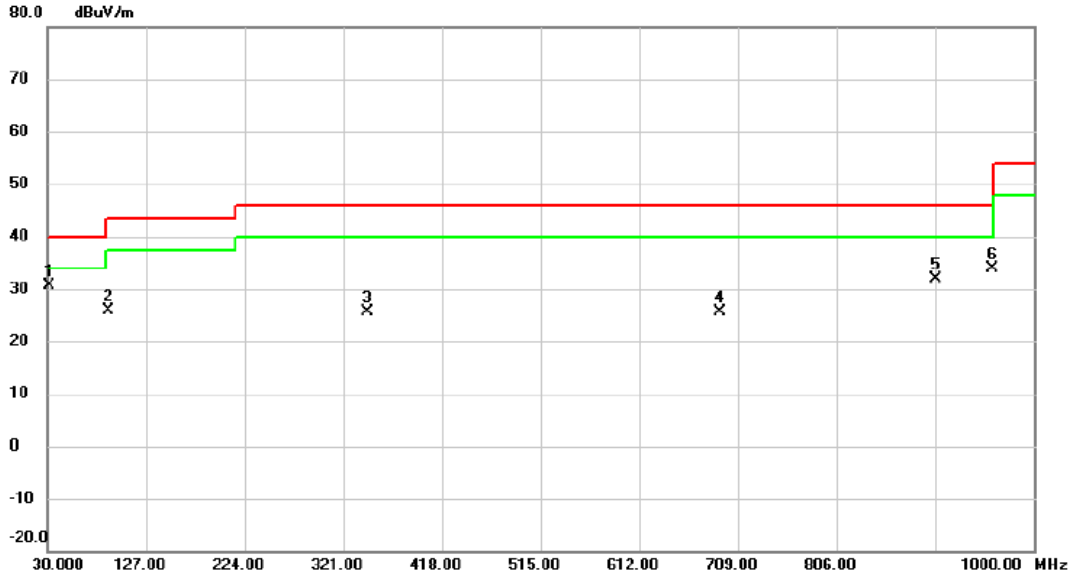
Test Mode	TX _904.05MHz	Polarization	Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		33.3950	40.75	-17.01	23.74	40.00	-16.26	peak	
2		145.4300	35.10	-15.60	19.50	43.50	-24.00	peak	
3		406.8450	32.38	-11.93	20.45	46.00	-25.55	peak	
4		668.7450	33.35	-7.32	26.03	46.00	-19.97	peak	
5		846.7400	33.95	-4.69	29.26	46.00	-16.74	peak	
6	*	935.4950	34.68	-3.68	31.00	46.00	-15.00	peak	

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

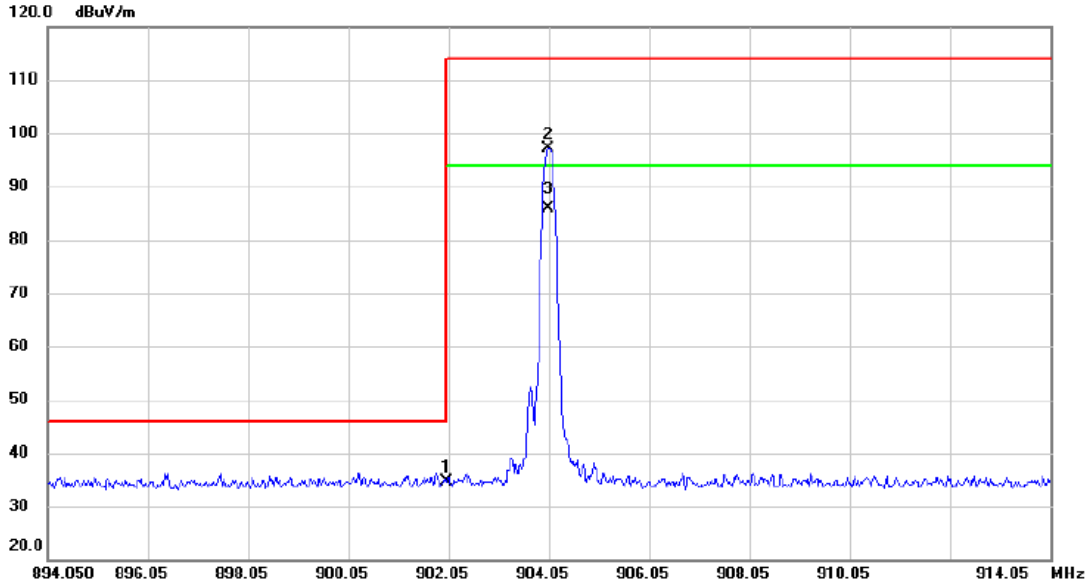
Test Mode	TX _904.05MHz	Polarization	Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	32.4250	47.67	-17.15	30.52	40.00	-9.48	peak	
2		89.6550	47.57	-21.58	25.99	43.50	-17.51	peak	
3		344.7650	39.04	-13.29	25.75	46.00	-20.25	peak	
4		691.0550	32.69	-6.96	25.73	46.00	-20.27	peak	
5		903.9700	36.08	-4.26	31.82	46.00	-14.18	peak	
6		959.7450	37.23	-3.34	33.89	46.00	-12.11	peak	

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

Test Mode	TX _904.05MHz	Polarization	Horizontal

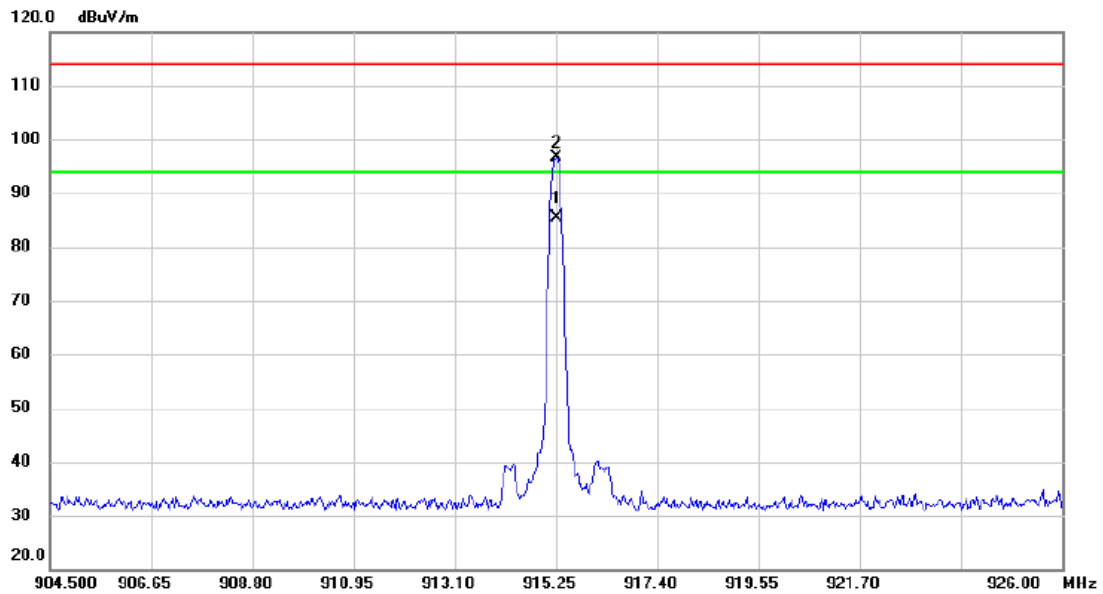


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		902.0000	38.96	-4.30	34.66	46.00	-11.34	peak	
2		904.0400	101.3	-4.26	97.08	114.00	-16.92	peak	
3	*	904.0400	90.25	-4.26	85.99	94.00	-8.01	AVG	

Remark:

(1) The average value of fundamental frequency is:
Average Reading = Peak value + 20log(Duty cycle) , AV =Peak-11.09

Test Mode	TX _915.25 MHz	Polarization	Horizontal

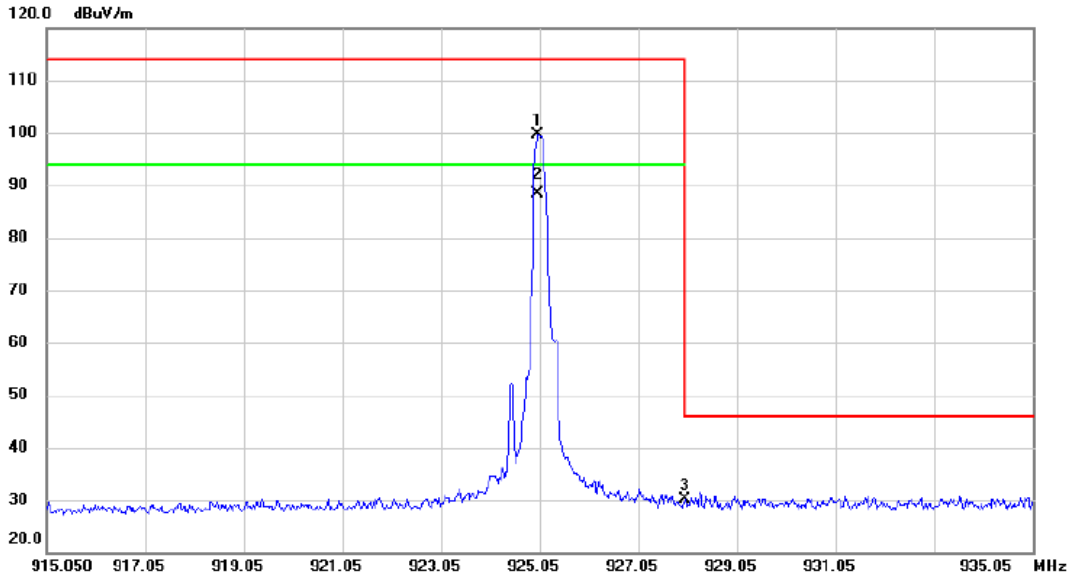


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	915.2607	89.53	-4.05	85.48	94.00	-8.52	AVG	
2		915.2608	100.6	-4.05	96.57	114.00	-17.43	peak	

Remark:

(1) The average value of fundamental frequency is:
Average Reading = Peak value + 20log(Duty cycle) , AV =Peak-11.09

Test Mode	TX _925.05 MHz	Polarization	Horizontal



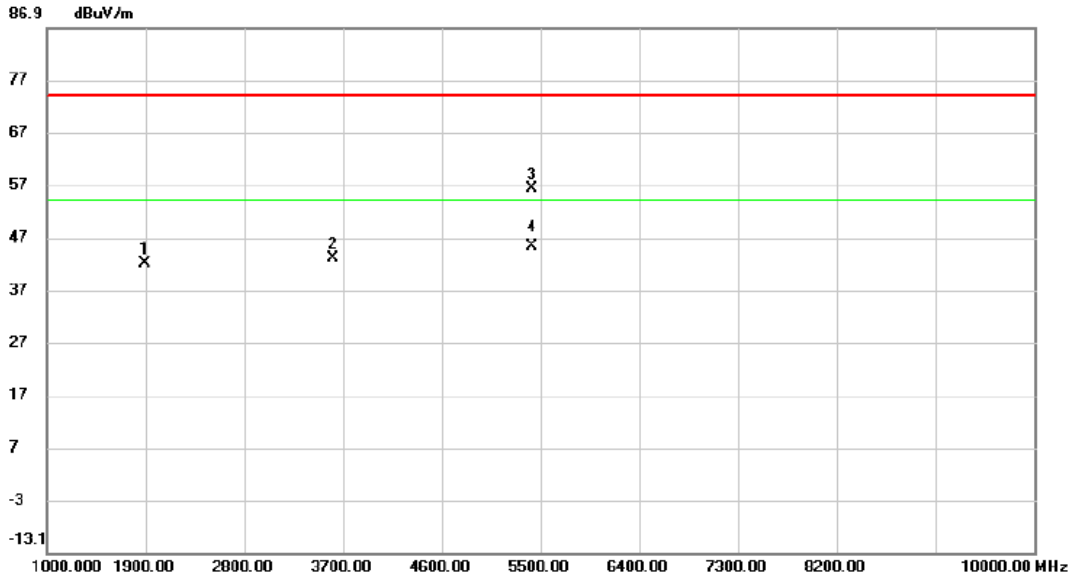
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		925.0200	103.4	-3.88	99.52	114.00	-14.48	peak	
2	*	925.0200	92.31	-3.88	88.43	94.00	-5.57	AVG	
3		928.0000	33.83	-3.82	30.01	46.00	-15.99	peak	

Remark:

(1) The average value of fundamental frequency is:
Average Reading = Peak value + 20log(Duty cycle) , AV =Peak-11.09

APPENDIX D - RADIATED EMISSION - ABOVE 1000 MHZ

Test Mode	TX _904.05MHz	Polarization	Vertical

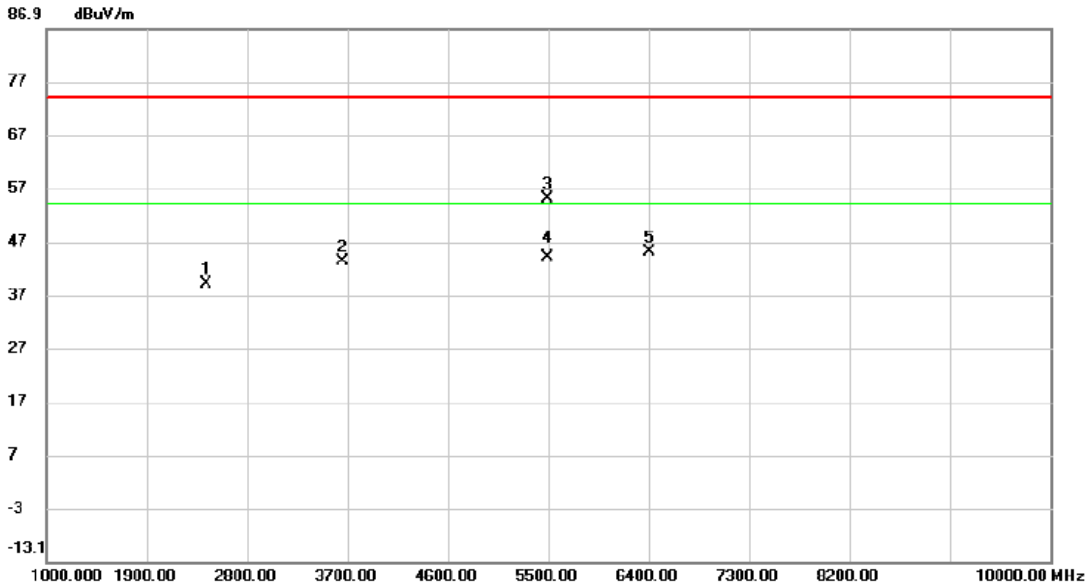


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		1891.000	65.60	-23.65	41.95	74.00	-32.05	peak	
2		3610.000	61.02	-18.04	42.98	74.00	-31.02	peak	
3		5419.000	65.08	-8.68	56.40	74.00	-17.60	peak	
4	*	5419.000	53.99	-8.68	45.31	54.00	-8.69	AVG	

Remark:

(1) The average value of fundamental frequency is:
Average Reading = Peak value + 20log(Duty cycle) , AV =Peak-11.09

Test Mode	TX _915.25 MHz	Polarization	Vertical

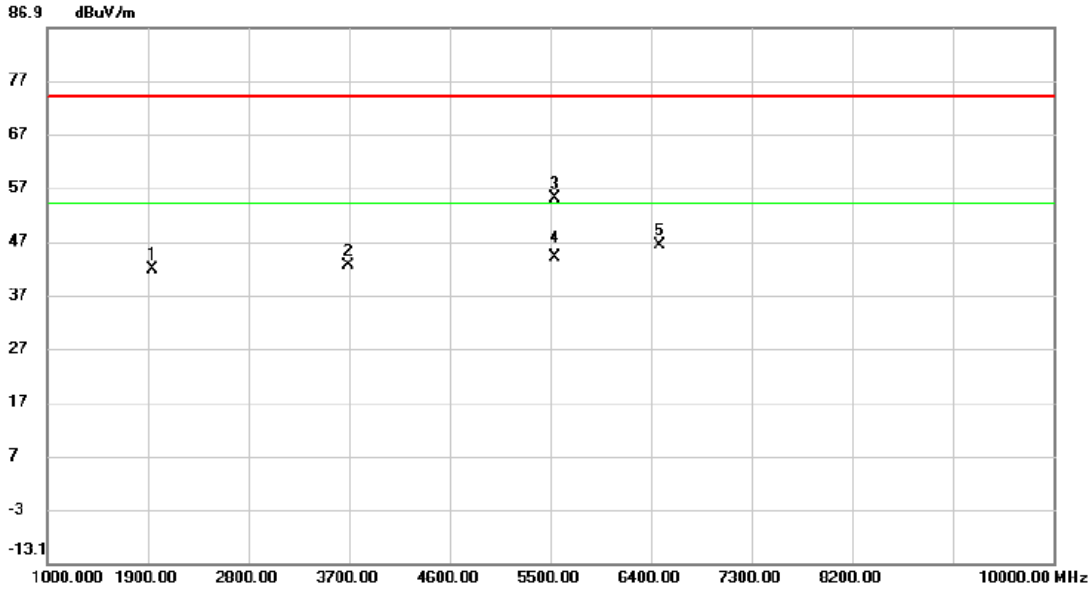


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		2431.000	60.65	-21.73	38.92	74.00	-35.08	peak	
2		3655.000	61.06	-17.84	43.22	74.00	-30.78	peak	
3		5491.000	63.42	-8.40	55.02	74.00	-18.98	peak	
4	*	5491.000	52.33	-8.40	43.93	54.00	-10.07	AVG	
5		6400.000	57.46	-12.34	45.12	74.00	-28.88	peak	

Remark:

(1) The average value of fundamental frequency is:
Average Reading = Peak value + 20log(Duty cycle) , AV =Peak-11.09

Test Mode	TX _925.05 MHz	Polarization	Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		1945.000	65.21	-23.52	41.69	74.00	-32.31	peak	
2		3699.100	60.15	-17.65	42.50	74.00	-31.50	peak	
3		5545.000	63.80	-8.69	55.11	74.00	-18.89	peak	
4	*	5545.000	52.71	-8.69	44.02	54.00	-9.98	AVG	
5		6472.000	58.83	-12.43	46.40	74.00	-27.60	peak	

Remark:

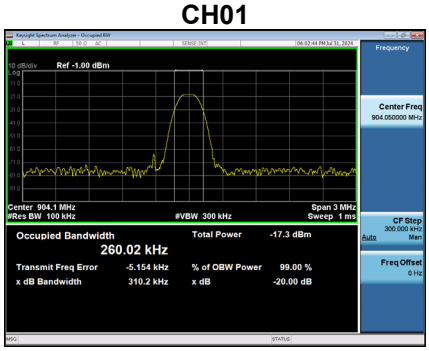
(1) The average value of fundamental frequency is:
Average Reading = Peak value + 20log(Duty cycle) , AV =Peak-11.09

APPENDIX E - BANDWIDTH

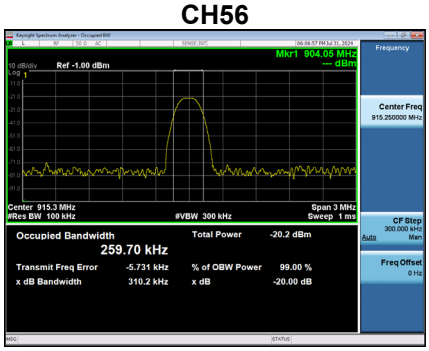
Test Mode	TX Mode

Frequency (MHz)	20 dB Bandwidth (MHz)
904.05	0.3102
915.25	0.3102
925.05	0.3115

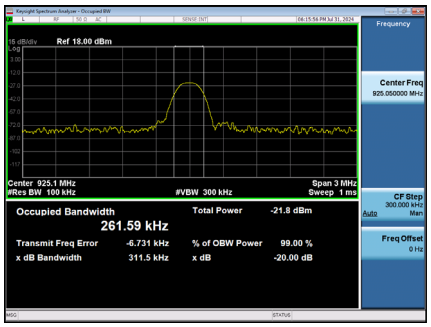
CH01



CH56



CH111



End of Test Report