FCC Radio Test Report

FCC ID: 2AX7X-JOWUAWC1

Report No.	:	BTL-FCCP-1-2009T076
Equipment	:	Wireless Charger
Model Name	:	JOWUAWC1
Brand Name	:	JOWUA
Applicant	:	JOWUA INTERNATIONAL LIMITED TAIWAN BRANCH
Address	:	9F.,No.156, Sec. 3,Minsheng E. Rd.,Songshan Dist.,Taipei City 105, Taiwan (R.O.C.)
Radio Function	:	WPC-Qi (110 kHz to 205 kHz)
FCC Rule Part(s)	:	FCC Part15, Subpart C (15.209)
Measurement Procedure(s)	:	ANSI C63.10-2013
Date of Receipt	:	2020/11/4
Date of Test	:	2020/11/4 ~ 2020/11/18
Issued Date	:	2020/12/8

The above equipment has been tested and found in compliance with the requirement of the above standards by BTL Inc.

Prepared by : Peter Chen, Engineer

Approved by : Scott Hsu , Manager

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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** shall have no liability for any declarations, inferences or generalizations drawn by the client or others from **BTL** issued reports.

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** 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.

CONTENTS

REPORT ISSUED HISTORY

Report Version	Description	Issued Date
R00	Original Issue.	2020/12/8

1 SUMMARY OF TEST RESULTS

Test procedures according to the technical standards.

FCC Part 15, Subpart C (15.209)				
Standard(s) Section	**Description**	**Test Result**	**Judgement**	**Remark**
15.207	AC Power Line Conducted Emissions	APPENDIX A	Pass	------
15.209	Radiated Emissions	APPENDIX B APPENDIX C	Pass	------
15.215(c)	20 dB Bandwidth	APPENDIX D	Pass	------

NOTE:
(1) ”N/A” denotes test is not applicable in this Test Report.
(2) The report format version is TP.1.1.1.

1.1 TEST FACILITY

The test facilities used to collect the test data in this report:

No. 68-1, Ln. 169, Sec. 2, Datong Rd., Xizhi Dist., New Taipei City 221, Taiwan
The test sites and facilities are covered under FCC RN: 674415 and DN: TW0659.

☒ C05 ☐ CB08 ☐ CB11 ☒ CB15 ☐ CB16
☐ SR06

1.2 MEASUREMENT UNCERTAINTY

The reported uncertainty of measurement **y** ± **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 %**. The measurement instrumentation uncertainty considerations contained in CISPR 16-4-2. The BTL measurement uncertainty is less than the CISPR 16-4-2 U_{cispr} requirement.

A. AC power line conducted emissions test:

Test Site	Method	Measurement Frequency Range	U (dB)
C05	CISPR	150 kHz ~ 30MHz	3.44

B. Radiated emissions below 1 GHz test :

Test Site	Measurement Frequency Range	U,(dB)
CB15	0.03 GHz ~ 0.2 GHz	4.17
	0.2 GHz ~ 1 GHz	4.72
	1 GHz ~ 6 GHz	5.21
	6 GHz ~ 18 GHz	5.51
	18 GHz ~ 26 GHz	3.69
	26 GHz ~ 40 GHz	4.23

C. Conducted test :

Test Item	U,(dB)
Bandwidth	1.13

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

1.3 TEST ENVIRONMENT CONDITIONS

Test Item	Environment Condition	Test Voltage	Tested by
AC Power Line Conducted Emissions	24 °C, 58 %	AC 120V	Jay Kao
Radiated emissions (9KHz-30MHz)	Refer to data	AC 120V	Jay Kao
Radiated emissions (30MHz TO 1000MHz)	Refer to data	AC 120V	Jay Kao
20 dB Bandwidth	24.5 °C, 48 %	AC 120V	Tim Lee

2 GENERAL INFORMATION

2.1 DESCRIPTION OF EUT

Equipment	Wireless Charger
Model Name	JOWUAWC1
Brand Name	JOWUA
Model Difference	N/A
Power Source	Supplied from USB port or Type-C Port
Power Rating	Single input: 5V/3A Single output: 5V(5W); 9V(10W) Dual output: 5V(5W+5W) Single input: 9V/3A Single output: 5V(5W); 9V(15W) Dual output: 5V(5W+5W); 9V(10W+10W) Dual input: 5V/3A+5V/3A Single output: 5V(5W); 9V(15W) Dual output: 5V(5W+5W); 9V(10W+10W)
Products Covered	1 * USB cable 1 * Type-C Cable
Frequency Range	110 KHz ~ 205 KHz
Modulation Technology	ASK
Max H-field strength	91.95 dBuV/m
Test Model	JOWUAWC1
Sample Status	Engineering Sample
EUT Modification(s)	N/A

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 (KHz)
-	110 ~ 205

(3) Table for Filed Antenna:

Ant.	Brand	Test Model	Antenna Type	Connector	Gain (dBi)
1	N/A	N/A	Coil	N/A	N/A
2	N/A	N/A	Coil	N/A	N/A
3	N/A	N/A	Coil	N/A	N/A

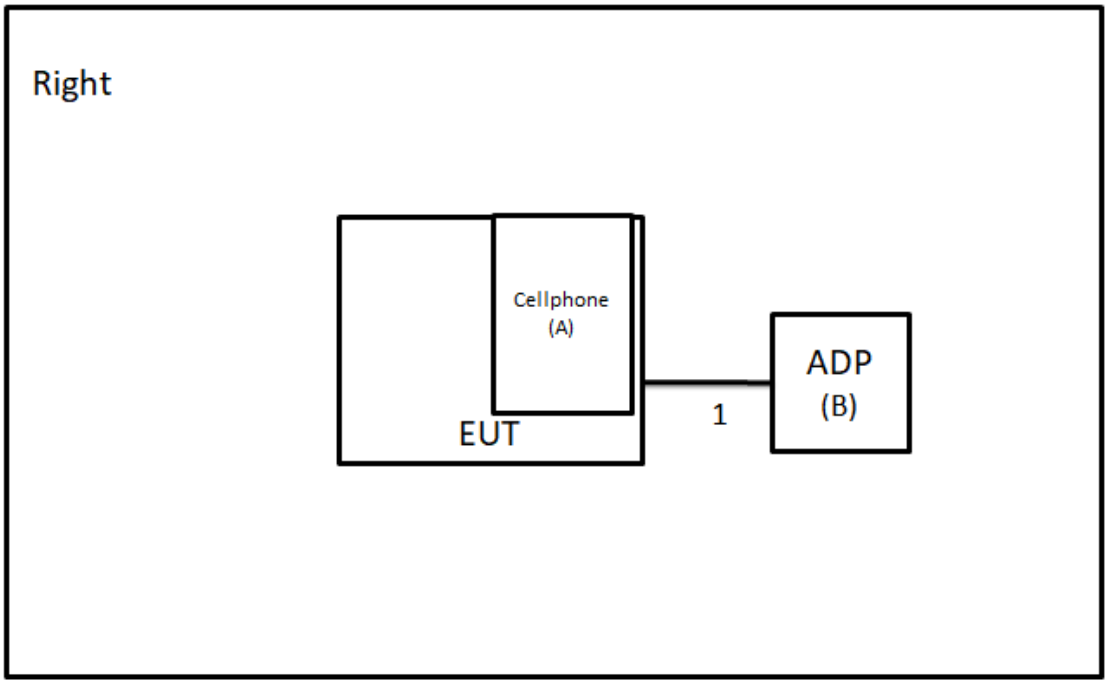
2.2 TEST MODES

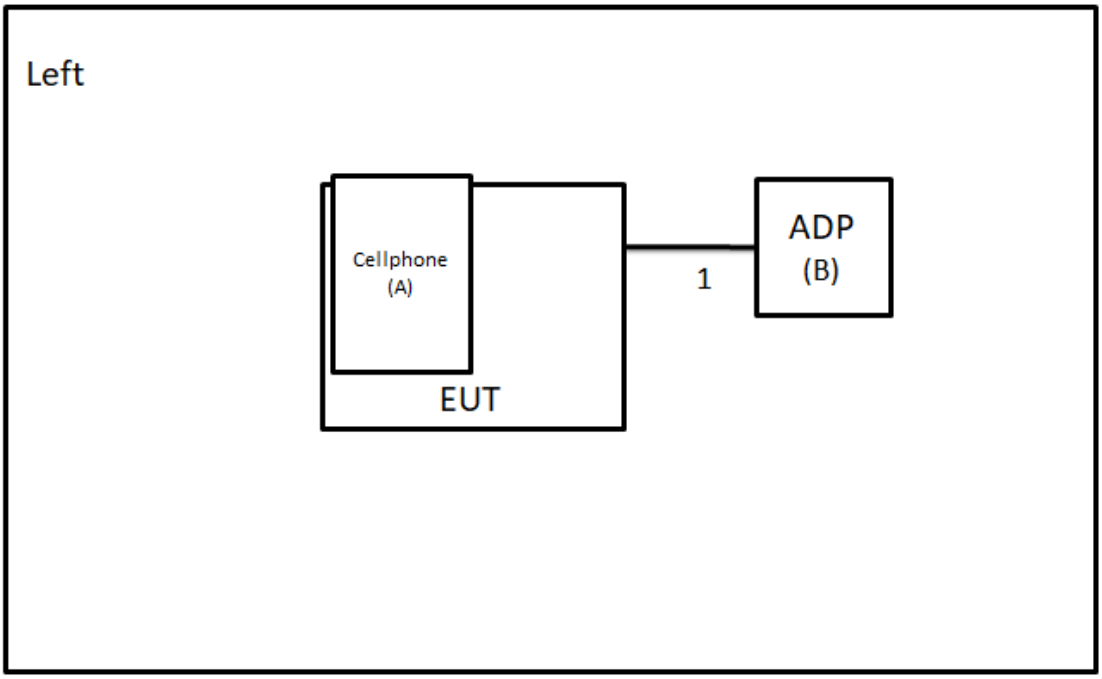
Test Items	Test mode	Channel	Note
AC power line conducted emissions	Normal/Idle	-	(1)
Radiated emissions (9KHz-30MHz)	Transmit	-	(1)
Radiated emissions (30MHz TO 1000MHz)	Transmit	-	(1)
20 dB Bandwidth	Transmit	-	(1)

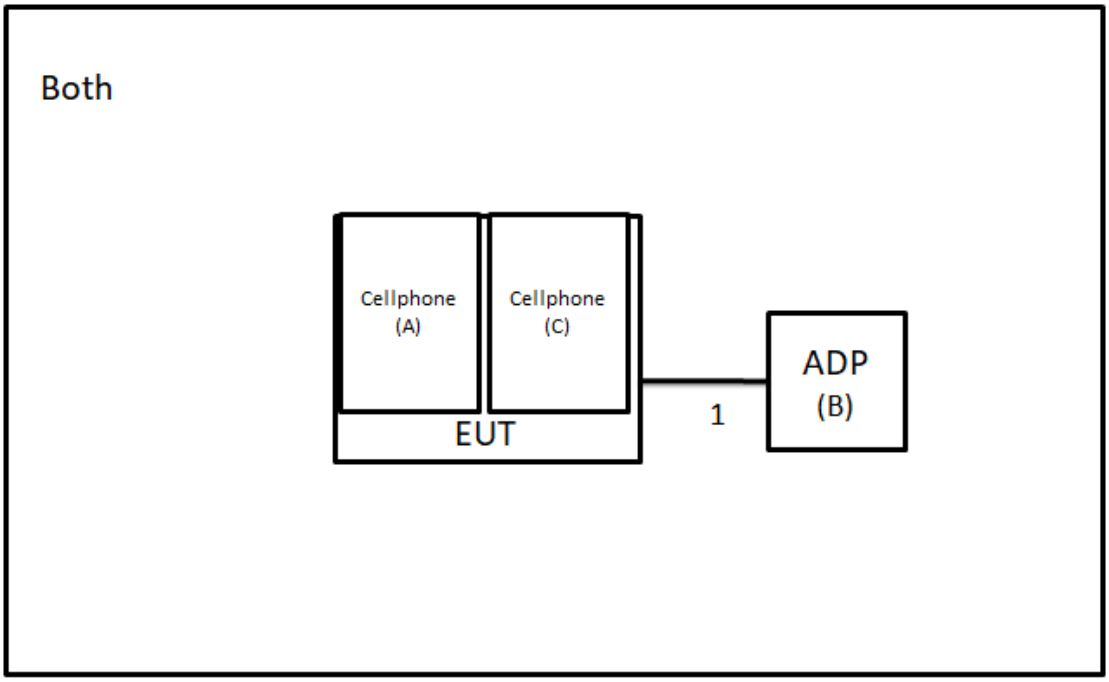
Note:
(1) The EUT includes three configuration of Right, Left and Both mode, all are evaluated, only the worst cases are recorded in this report.

2.3 BLOCK DIAGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED

Equipment letters and Cable numbers refer to item numbers described in the tables of clause 2.4.







2.4 SUPPORT UNITS

Item	Equipment	Brand	Model No.	Series No.	Remarks
A	Cellphone	APPLE	A2221	N/A	Furnished by test lab.
B	ADP	KINYO	CUH-5335	N/A	Supplied by test requester.
C	Cellphone	APPLE	A1865	N/A	Furnished by test lab.

Item	Shielded	Ferrite Core	Length	Cable Type	Remarks
1	N/A	N/A	0.5m	USB To Type C	Supplied by test requester.

3 AC POWER LINE CONDUCTED EMISSIONS TEST

3.1 LIMIT

Frequency (MHz)	Limit (dBμV)	
	Quasi-peak	Average
0.15 - 0.5	66 - 56 *	56 - 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.
(3) The test result calculated as following:
Measurement Value = Reading Level + Correct Factor
Correct Factor = Insertion Loss + Cable Loss + Attenuator Factor (if use)
Margin Level = Measurement Value – Limit Value
Calculation example:

Reading Level		Correct Factor		Measurement Value
38.22	+	3.45	=	41.67

Measurement Value		Limit Value		Margin Level
41.67	-	60	=	-18.33

The following table is the setting of the receiver.

Receiver Parameter	Setting
Attenuation	10 dB
Start Frequency	0.15 MHz
Stop Frequency	30 MHz
IF Bandwidth	9 KHz

3.2 TEST PROCEDURE

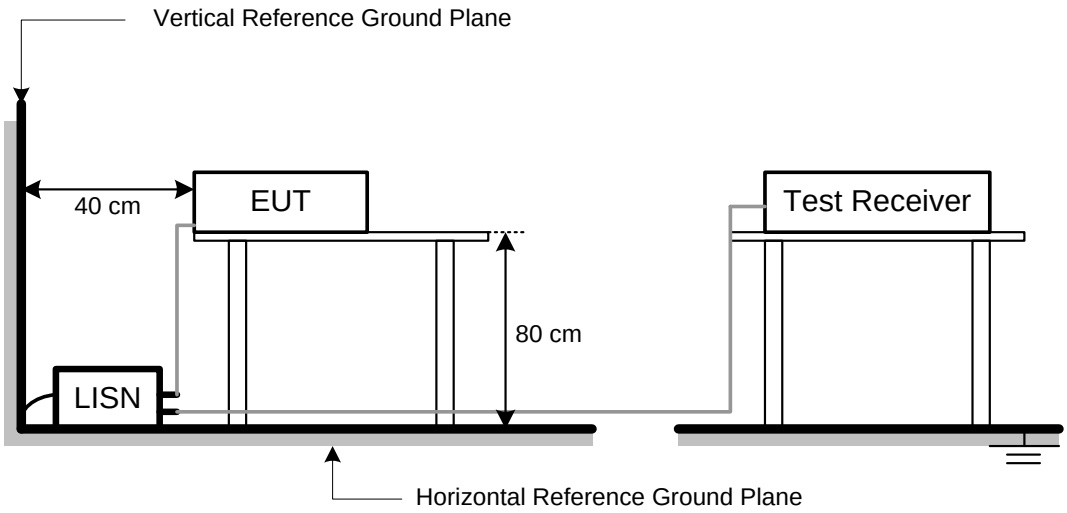
a. The EUT was placed 0.8 m above the horizontal ground plane with the EUT being connected to the power mains through a line impedance stabilization network (LISN).
All other support equipment were powered from an additional LISN(s).
The LISN provides 50 Ohm/50uH of impedance for the measuring instrument.
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 to keep the cable above 40 cm.
c. Excess I/O cables that are not connected to a peripheral shall be bundled in the center.
The end of the cable will be terminated, using the correct terminating impedance.
The overall length shall not exceed 1 m.
d. The LISN is spaced at least 80 cm from the nearest part of the EUT chassis.
e. For the actual test configuration, please refer to the related Item - EUT TEST PHOTO.

NOTE:
(1) In the results, each reading is marked as Peak, QP or AVG per the detector used.
BW=9 kHz (6 dB Bandwidth)
(2) All readings are Peak unless otherwise stated QP or AVG in column of Note. Both the QP and the AVG readings must be less than the limit for compliance.

3.3 DEVIATION FROM TEST STANDARD

No deviation.

3.4 TEST SETUP



3.5 TEST RESULT

Please refer to the APPENDIX A.

4 RADIATED EMISSIONS TEST

4.1 LIMIT

In case the emission fall within the restricted band specified on 15.205(a), then the 15.209(a) limit in the table below has to be followed.

LIMITS OF RADIATED EMISSION MEASUREMENT(9 kHz-1000 MHz)

Frequency (MHz)	Field Strength (microvolts/meter)	Measurement Distance (meters)
0.009-0.490	2400/F(kHz)	300
0.490-1.705	24000/F(kHz)	30
1.705-30.0	30	30
30-88	100	3
88-216	150	3
216-960	200	3
Above 960	500	3

NOTE:
(1) The limit for radiated test was performed according to FCC Part 15, Subpart C.
(2) The tighter limit applies at the band edges.
(3) Emission level (dBuV/m)=20log Emission level (uV/m).
(4) The test result calculated as following:
Measurement Value = Reading Level + Correct Factor
Correct Factor = Antenna Factor + Cable Loss - Amplifier Gain(if use)
Margin Level = Measurement Value - Limit Value
Calculation example:

Reading Level		Correct Factor		Measurement Value
19.11	+	2.11	=	21.22

Measurement Value		Limit Value		Margin Level
21.22	-	54	=	-32.78

4.2 TEST PROCEDURE

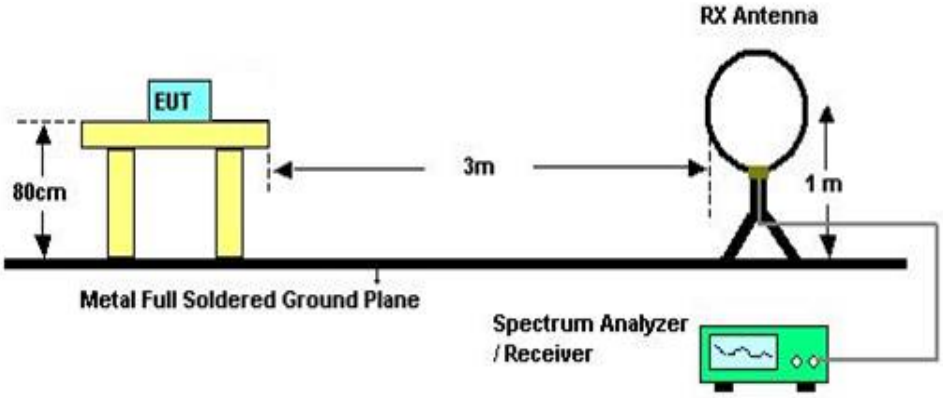
a. The measuring distance of 3 m shall be used for measurements. The EUT was placed on the top of a rotating table 0.8 meter above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.(below 1 GHz)
b. The height of the equipment or of the substitution antenna shall be 0.8m 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.
c. 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).
d. 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.
e. 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 1 GHz)
f. For the actual test configuration, please refer to the related Item – EUT TEST PHOTO.

4.3 DEVIATION FROM TEST STANDARD

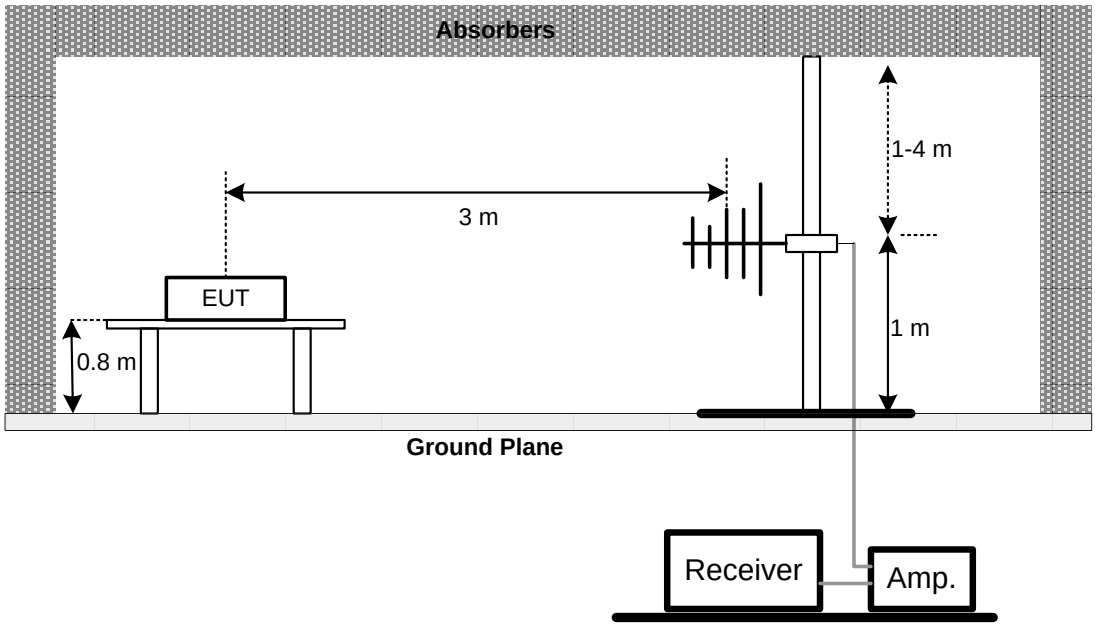
No deviation.

4.4 TEST SETUP

9 kHz to 30 MHz



30 MHz to 1 GHz



4.5 EUT OPERATING CONDITIONS

The EUT was programmed to be in continuously transmitting mode.

4.6 TEST RESULT – 9 KHZ TO 30 MHZ

Please refer to the APPENDIX B.

4.7 TEST RESULT – 30 MHZ TO 1 GHZ

Please refer to the APPENDIX C.

NOTE:

(1) No limit: This is fundamental signal, the judgment is not applicable.
For fundamental signal judgment was referred to Peak output test.

5 20 DB BANDWIDTH

5.1 LIMIT

N/A

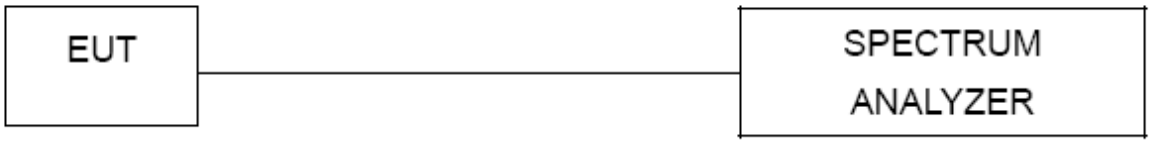
5.2 TEST PROCEDURE

a. The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram below,
b. Spectrum Setting : RBW= 1 kHz, VBW=1 kHz, Sweep time = 20 ms.

5.3 DEVIATION FROM TEST STANDARD

No deviation.

5.4 TEST SETUP



5.5 EUT OPERATING CONDITIONS

The EUT was programmed to be in continuously transmitting mode.

5.6 TEST RESULT

Please refer to the APPENDIX D.

6 LIST OF MEASURING EQUIPMENTS

AC Power Line Conducted Emissions						
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated Date	Calibrated Until
1	TWO-LINE V-NETWORK	R&S	ENV216	101050	2020/6/11	2021/6/10
2	Test Cable	EMCI	EMC400-BM-BM-5000	170501	2020/6/8	2021/6/7
3	EMI Test Receiver	R&S	ESR7	101433	2019/12/13	2020/12/12
4	Measurement Software	EZ	EZ_EMC (Version NB-03A1-01)	N/A	N/A	N/A

Radiated Emissions						
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated Date	Calibrated Until
1	Preamplifier	EMCI	EMC001340	980555	2020/4/10	2021/4/9
2	Preamplifier	EMCI	EMC02325B	980217	2020/4/10	2021/4/9
3	Test Cable	EMCI	EMC-SM-SM-1000	180809	2020/4/10	2021/4/9
4	Test Cable	EMCI	EMC104-SM-SM-3000	151205	2020/4/10	2021/4/9
5	Test Cable	EMCI	EMC-SM-SM-7000	180408	2020/4/10	2021/4/9
6	MXE EMI Receiver	Agilent	N9038A	MY554200087	2020/6/10	2021/6/9
7	Loop Ant	EMCO	6502	274	2020/6/16	2021/6/15
8	Horm Ant	SCHWARZBECK	BBHA 9120D	9120D-1342	2020/6/12	2021/6/11
9	Trilog-Broadband Antenna	Schwarzbeck	VULB 9168	VULB 9168-352	2020/7/24	2021/7/23
10	5dB Attenuator	EMCI	EMCI-N-6-05	AT-N0625	2020/7/24	2021/7/23
11	Measurement Software	EZ	EZ_EMC (Version NB-03A1-01)	N/A	N/A	N/A

20 dB Bandwidth Measurement						
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated Date	Calibrated Until
1	Spectrum Analyzer	R&S	FSP 40	100129	2020/6/15	2021/6/14

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

7 EUT TEST PHOTO

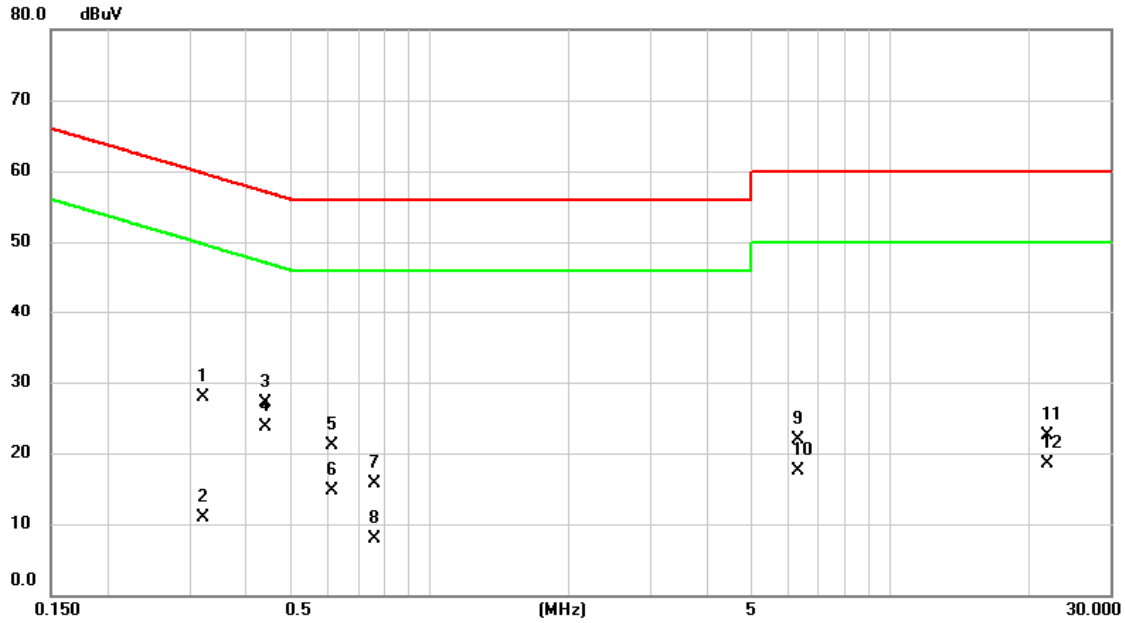
Please refer to document Appendix No.: TP-2009T076-FCCP-1 (APPENDIX-TEST PHOTOS).

8 EUT PHOTOS

Please refer to document Appendix No.: EP-2009T076-1 (APPENDIX-EUT PHOTOS).

APPENDIX A AC POWER LINE CONDUCTED EMISSIONS

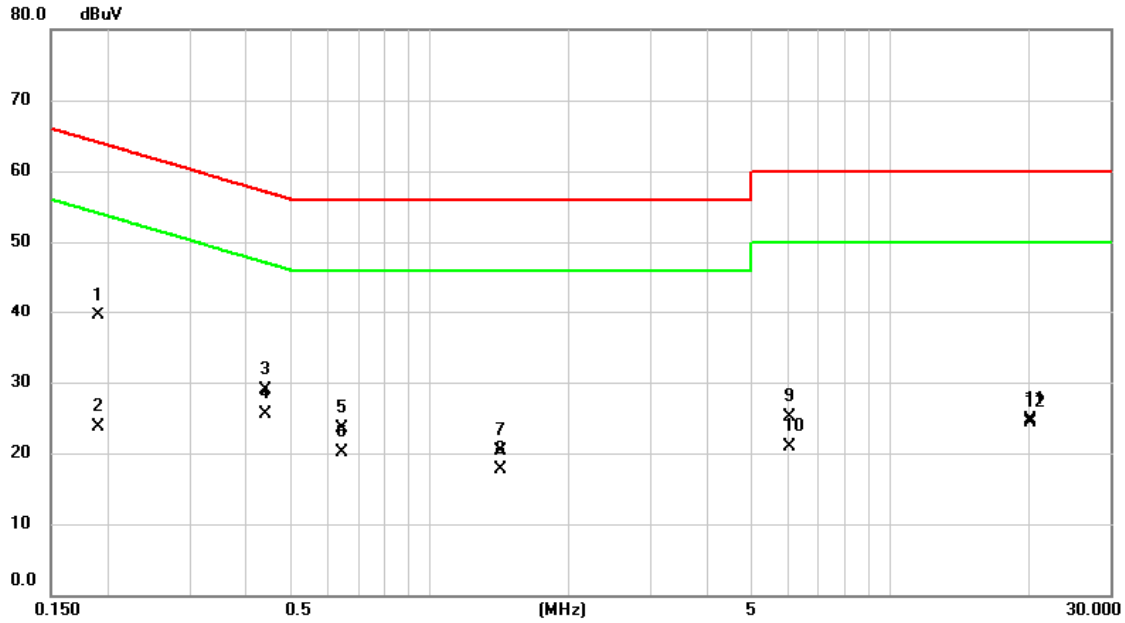
Test Mode	Normal_Both	Tested Date	2020/10/14
Test Voltage	AC 120V/60Hz	Phase	Line



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.3210	18.13	9.68	27.81	59.68	-31.87	QP	
2		0.3210	1.24	9.68	10.92	49.68	-38.76	AVG	
3		0.4402	17.50	9.68	27.18	57.06	-29.88	QP	
4	*	0.4402	14.08	9.68	23.76	47.06	-23.30	AVG	
5		0.6157	11.36	9.68	21.04	56.00	-34.96	QP	
6		0.6157	5.01	9.68	14.69	46.00	-31.31	AVG	
7		0.7597	6.04	9.69	15.73	56.00	-40.27	QP	
8		0.7597	-1.72	9.69	7.97	46.00	-38.03	AVG	
9		6.3330	12.02	9.86	21.88	60.00	-38.12	QP	
10		6.3330	7.62	9.86	17.48	50.00	-32.52	AVG	
11		21.9593	12.50	9.95	22.45	60.00	-37.55	QP	
12		21.9593	8.64	9.95	18.59	50.00	-31.41	AVG	

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

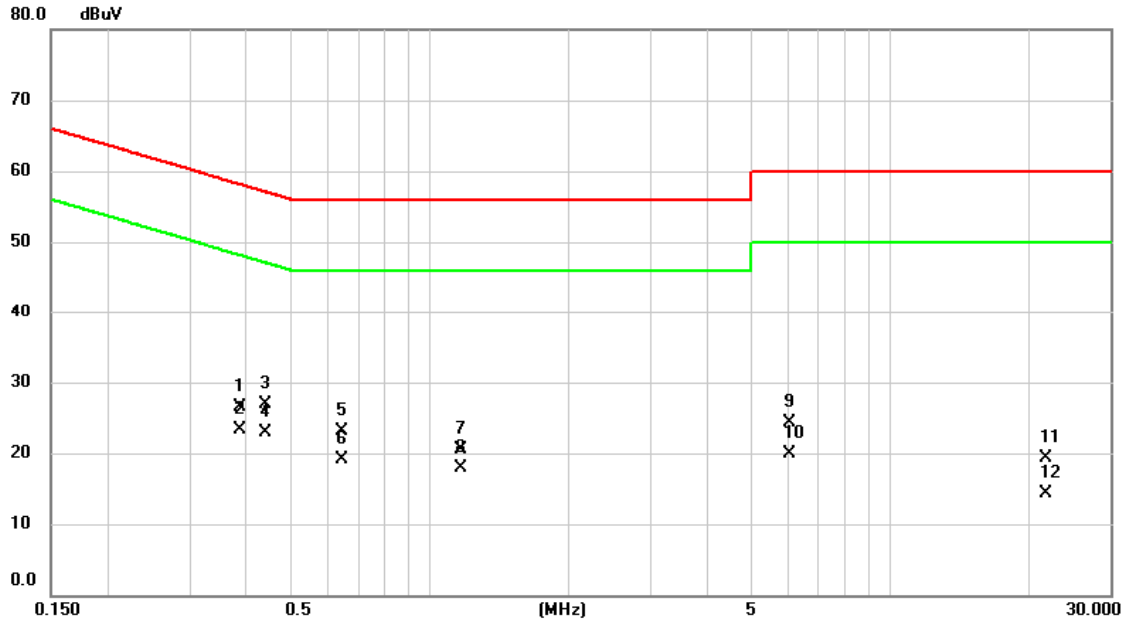
Test Mode	Normal_Both	Tested Date	2020/10/14
Test Voltage	AC 120V/60Hz	Phase	Neutral



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.1905	29.92	9.67	39.59	64.01	-24.42	QP	
2		0.1905	13.95	9.67	23.62	54.01	-30.39	AVG	
3		0.4402	19.21	9.68	28.89	57.06	-28.17	QP	
4	*	0.4402	15.90	9.68	25.58	47.06	-21.48	AVG	
5		0.6450	13.76	9.68	23.44	56.00	-32.56	QP	
6		0.6450	10.48	9.68	20.16	46.00	-25.84	AVG	
7		1.4212	10.50	9.71	20.21	56.00	-35.79	QP	
8		1.4212	8.00	9.71	17.71	46.00	-28.29	AVG	
9		6.0720	15.27	9.85	25.12	60.00	-34.88	QP	
10		6.0720	11.10	9.85	20.95	50.00	-29.05	AVG	
11		20.1525	14.70	9.96	24.66	60.00	-35.34	QP	
12		20.1525	14.36	9.96	24.32	50.00	-25.68	AVG	

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

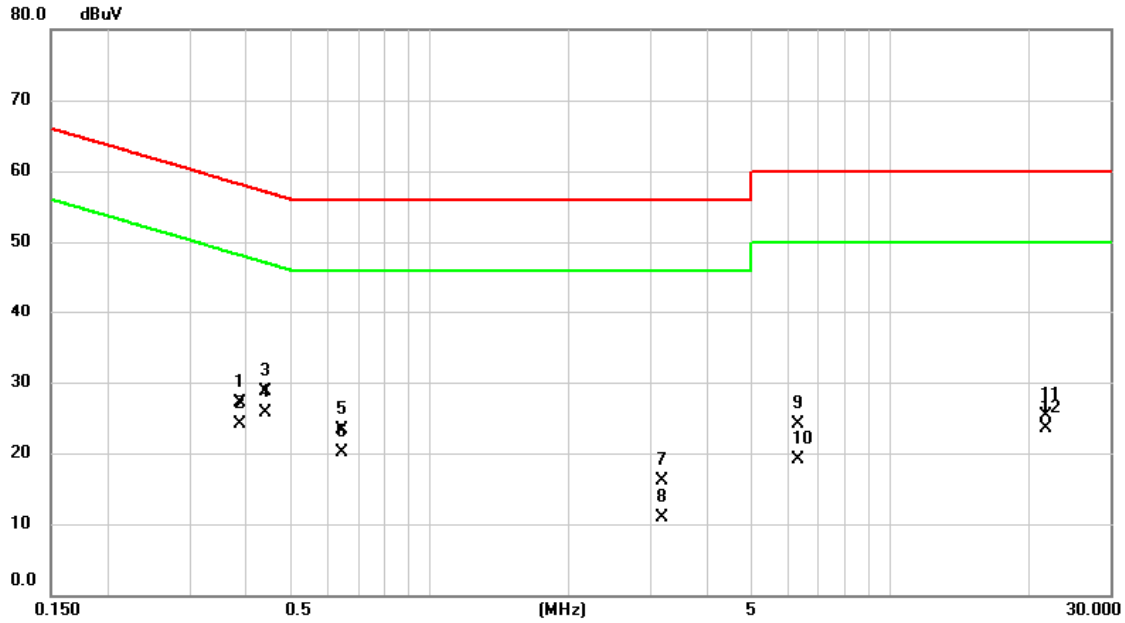
Test Mode	Idle_Both	Tested Date	2020/10/14
Test Voltage	AC 120V/60Hz	Phase	Line



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.3885	16.83	9.68	26.51	58.10	-31.59	QP	
2		0.3885	13.55	9.68	23.23	48.10	-24.87	AVG	
3		0.4402	17.17	9.68	26.85	57.06	-30.21	QP	
4	*	0.4402	13.20	9.68	22.88	47.06	-24.18	AVG	
5		0.6450	13.34	9.68	23.02	56.00	-32.98	QP	
6		0.6450	9.41	9.68	19.09	46.00	-26.91	AVG	
7		1.1647	10.84	9.70	20.54	56.00	-35.46	QP	
8		1.1647	8.24	9.70	17.94	46.00	-28.06	AVG	
9		6.0765	14.53	9.85	24.38	60.00	-35.62	QP	
10		6.0765	10.03	9.85	19.88	50.00	-30.12	AVG	
11		21.7208	9.28	9.95	19.23	60.00	-40.77	QP	
12		21.7208	4.44	9.95	14.39	50.00	-35.61	AVG	

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

Test Mode	Idle_Both	Tested Date	2020/10/14
Test Voltage	AC 120V/60Hz	Phase	Neutral

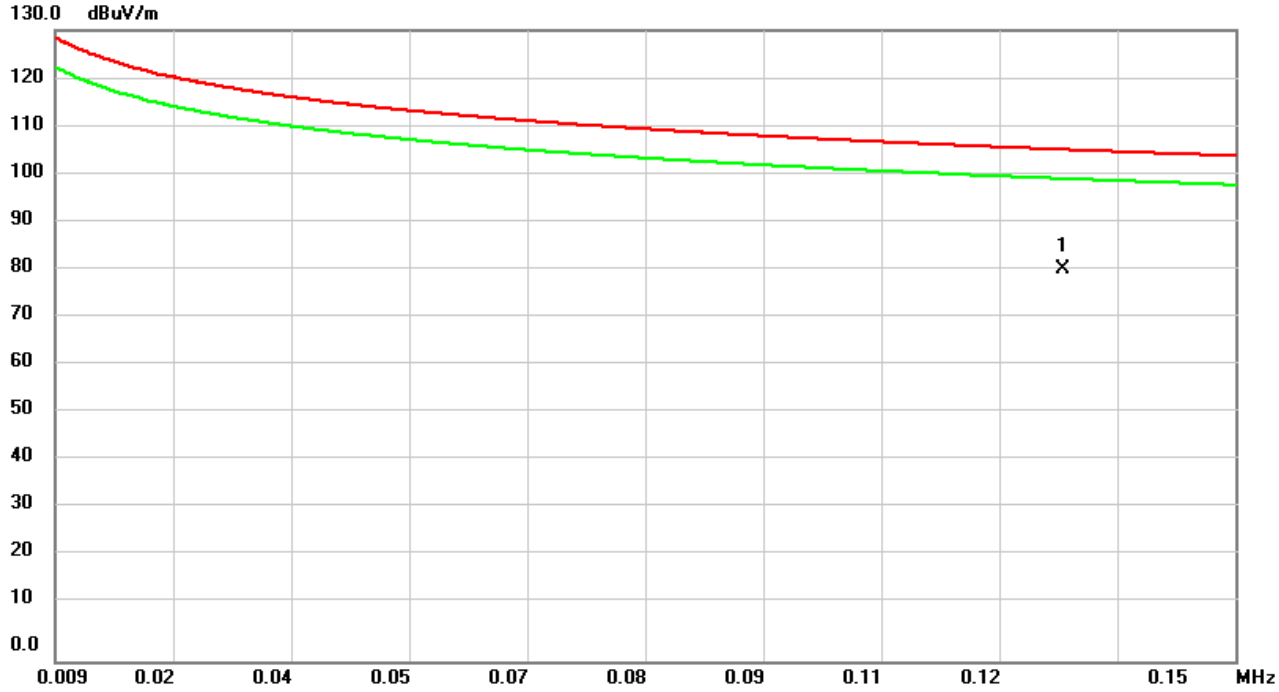


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.3885	17.36	9.68	27.04	58.10	-31.06	QP	
2		0.3885	14.44	9.68	24.12	48.10	-23.98	AVG	
3		0.4402	18.99	9.68	28.67	57.06	-28.39	QP	
4	*	0.4402	15.98	9.68	25.66	47.06	-21.40	AVG	
5		0.6450	13.60	9.68	23.28	56.00	-32.72	QP	
6		0.6450	10.50	9.68	20.18	46.00	-25.82	AVG	
7		3.1898	6.34	9.76	16.10	56.00	-39.90	QP	
8		3.1898	1.20	9.76	10.96	46.00	-35.04	AVG	
9		6.3330	14.23	9.86	24.09	60.00	-35.91	QP	
10		6.3330	9.19	9.86	19.05	50.00	-30.95	AVG	
11		21.7118	15.27	9.95	25.22	60.00	-34.78	QP	
12		21.7118	13.49	9.95	23.44	50.00	-26.56	AVG	

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

APPENDIX B RADIATED EMISSIONS - 9 KHZ TO 30 MHZ

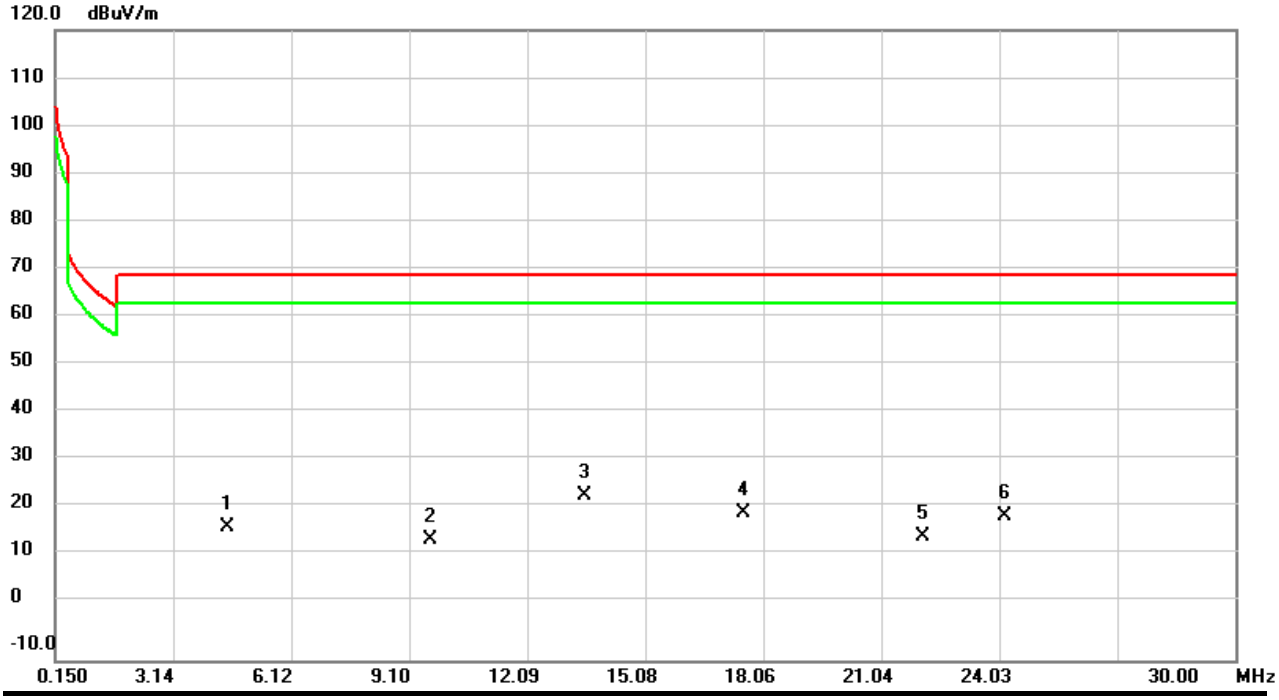
Test Mode	TX_Right	Test Date	2020/11/12
Test Frequency	129.58K	Polarization	Vertical
Temp	23°C	Hum.	64%



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	0.1295	77.64	3.28	80.92	105.36	-24.44	AVG	

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

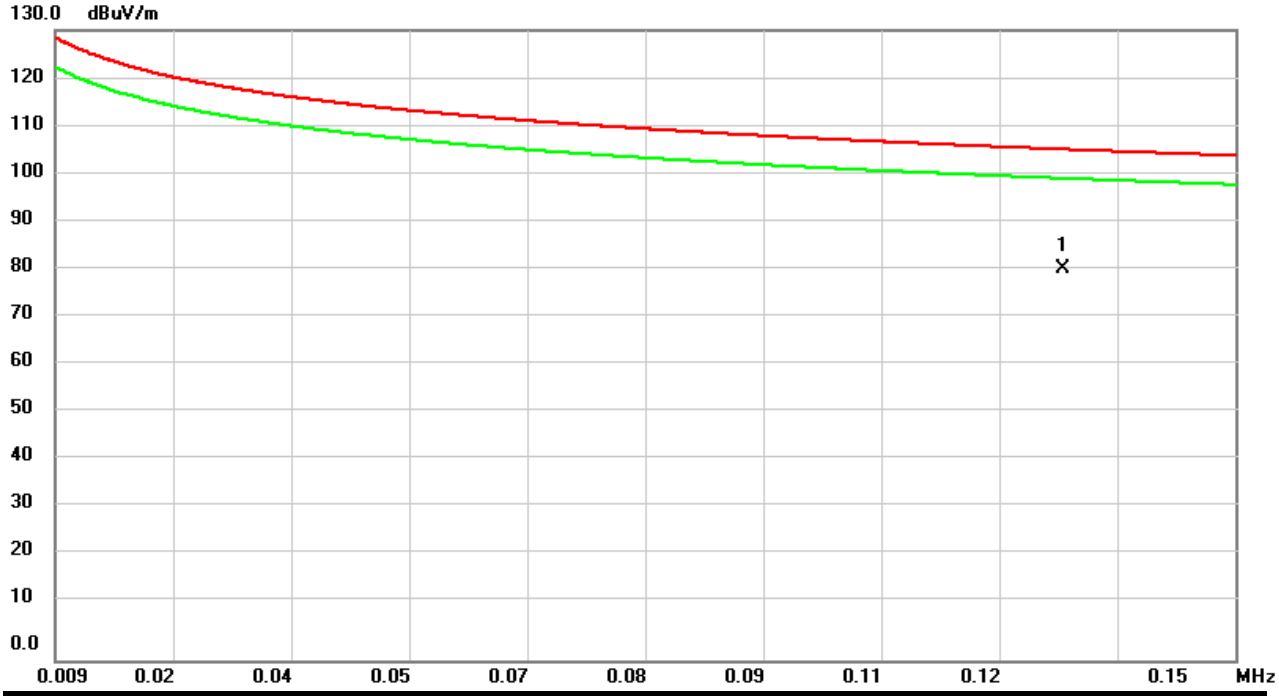
Test Mode	TX_Right	Test Date	2020/11/12
Test Frequency	129.58K	Polarization	Vertical
Temp	23°C	Hum.	64%



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		4.5240	32.77	-15.44	17.33	69.54	-52.21	QP	
2		9.6294	29.65	-14.69	14.96	69.54	-54.58	QP	
3	*	13.5606	38.91	-15.10	23.81	69.54	-45.73	QP	
4		17.5803	36.05	-15.66	20.39	69.54	-49.15	QP	
5		22.0828	30.82	-15.43	15.39	69.54	-54.15	QP	
6		24.1583	34.51	-14.87	19.64	69.54	-49.90	QP	

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

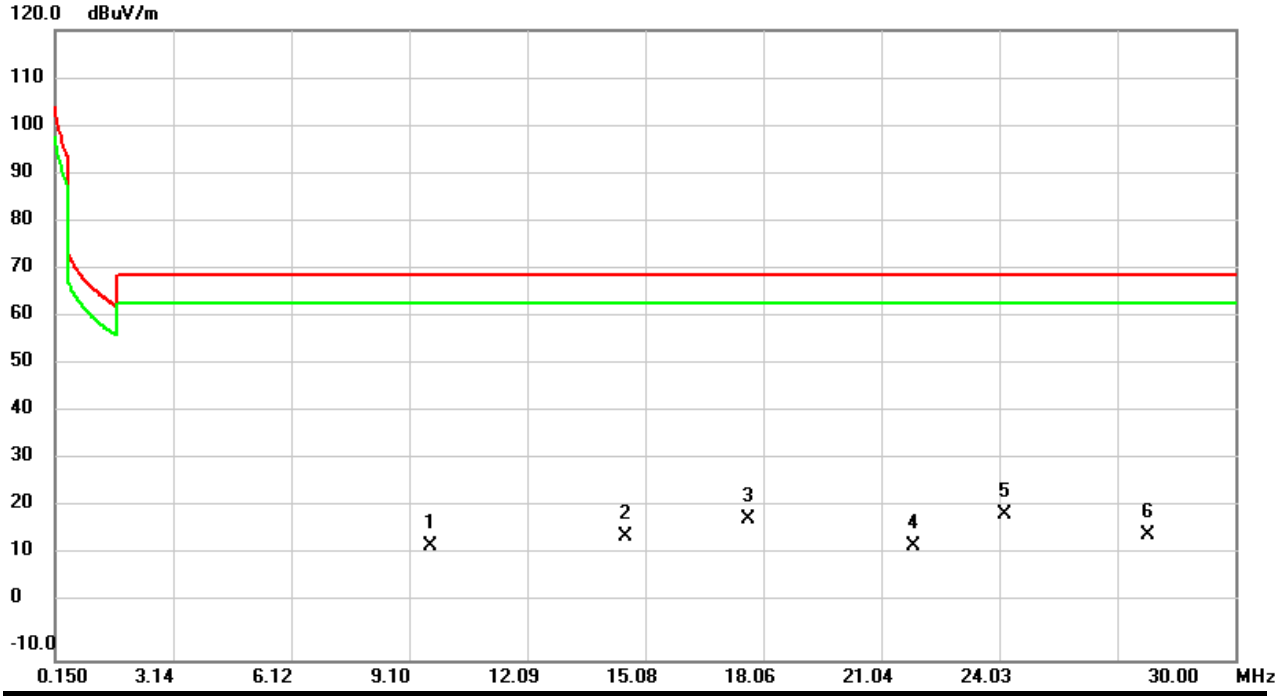
Test Mode	TX_Right	Test Date	2020/11/12
Test Frequency	129.58K	Polarization	Horizontal
Temp	23°C	Hum.	64%



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	0.1295	77.50	3.28	80.78	105.36	-24.58	AVG	

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

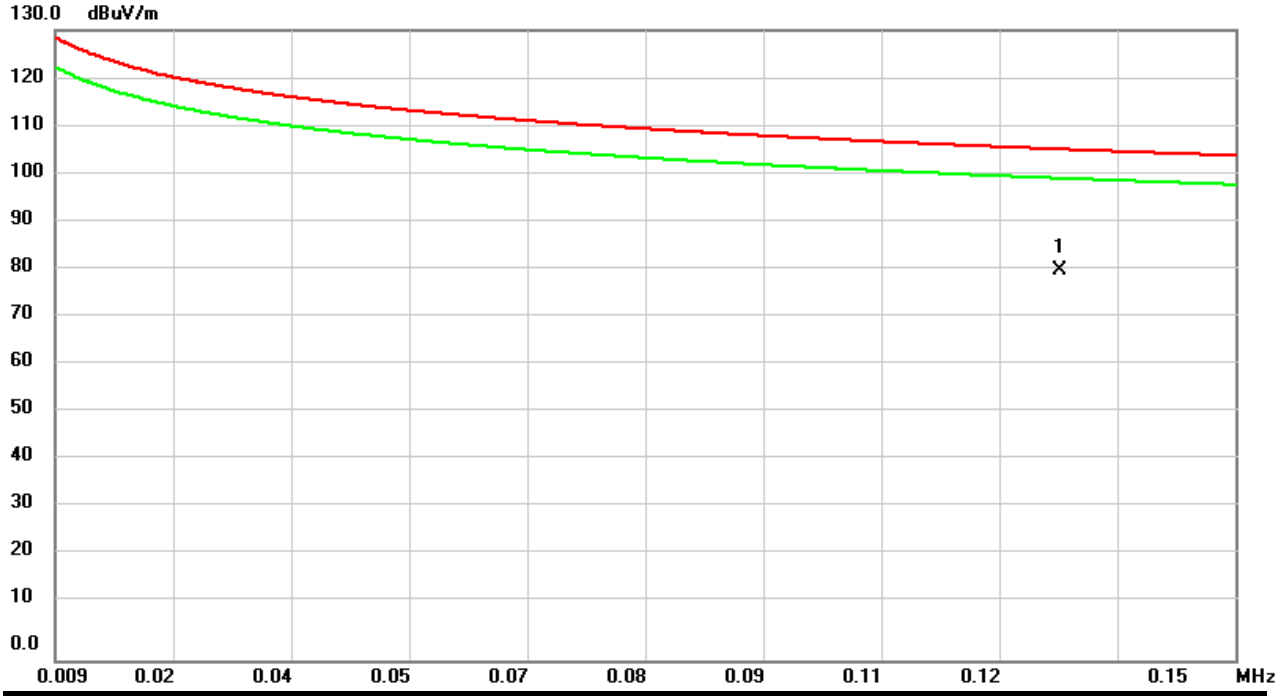
Test Mode	TX_Right	Test Date	2020/11/12
Test Frequency	129.58K	Polarization	Horizontal
Temp	23°C	Hum.	64%



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		9.6283	28.33	-14.69	13.64	69.54	-55.90	QP	
2		14.5635	30.89	-15.24	15.65	69.54	-53.89	QP	
3		17.6760	34.87	-15.67	19.20	69.54	-50.34	QP	
4		21.8520	28.95	-15.49	13.46	69.54	-56.08	QP	
5	*	24.1543	34.88	-14.87	20.01	69.54	-49.53	QP	
6		27.7901	29.79	-13.89	15.90	69.54	-53.64	QP	

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

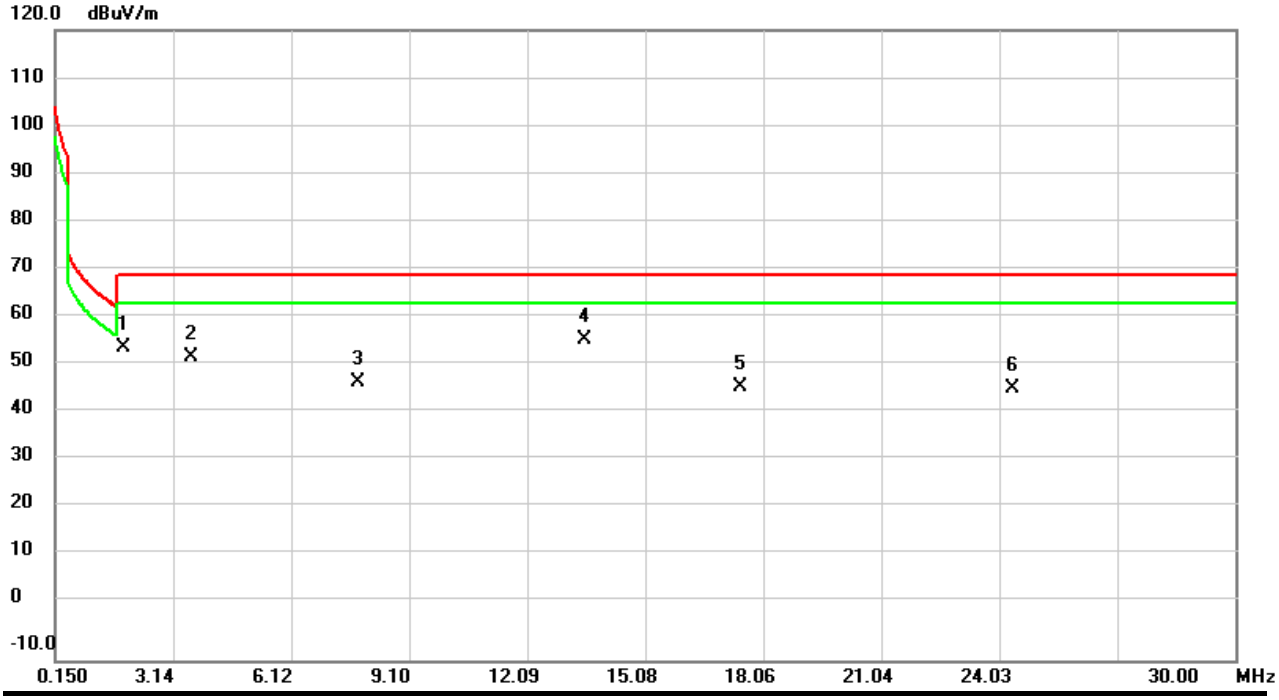
Test Mode	TX_Left	Test Date	2020/11/12
Test Frequency	129K	Polarization	Vertical
Temp	23°C	Hum.	64%



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	0.1290	67.07	13.30	80.37	105.39	-25.02	AVG	

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

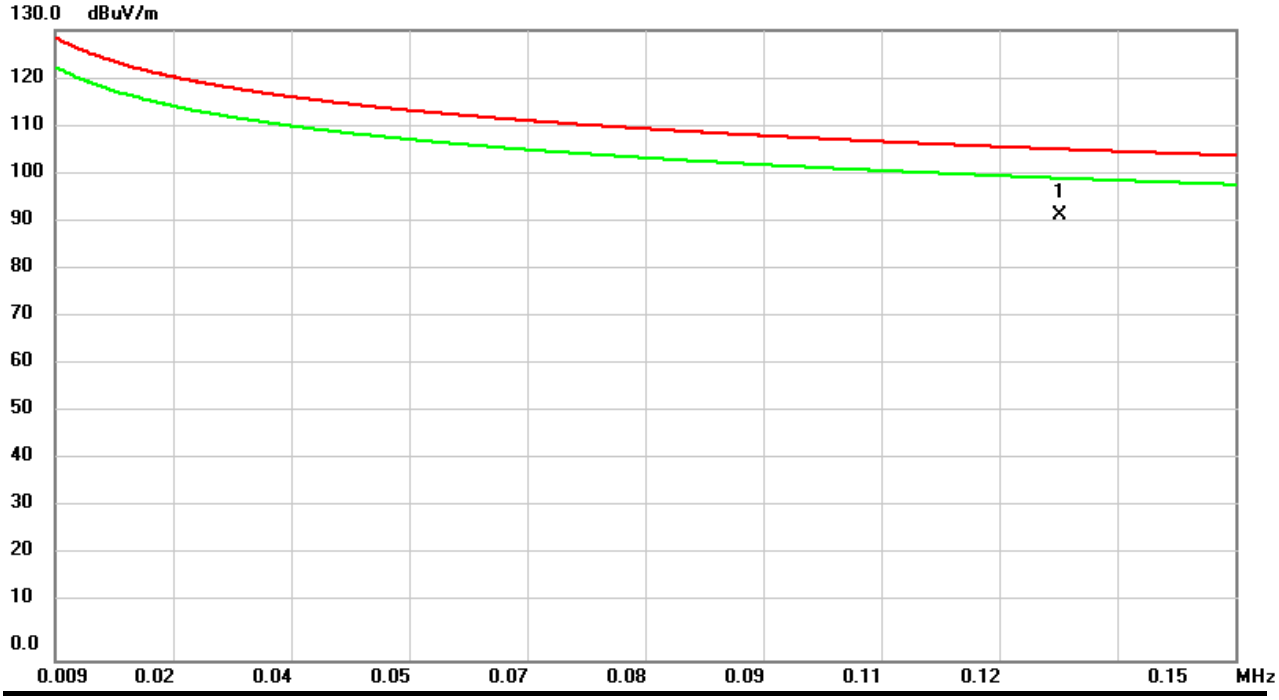
Test Mode	TX_Left	Test Date	2020/11/12
Test Frequency	129K	Polarization	Vertical
Temp	23°C	Hum.	64%



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		1.8674	57.74	-3.10	54.64	69.54	-14.90	QP	
2		3.5798	57.93	-5.23	52.70	69.54	-16.84	QP	
3		7.8115	52.43	-5.03	47.40	69.54	-22.14	QP	
4	*	13.5616	61.37	-5.10	56.27	69.54	-13.27	QP	
5		17.4800	51.98	-5.64	46.34	69.54	-23.20	QP	
6		24.3802	50.81	-4.80	46.01	69.54	-23.53	QP	

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

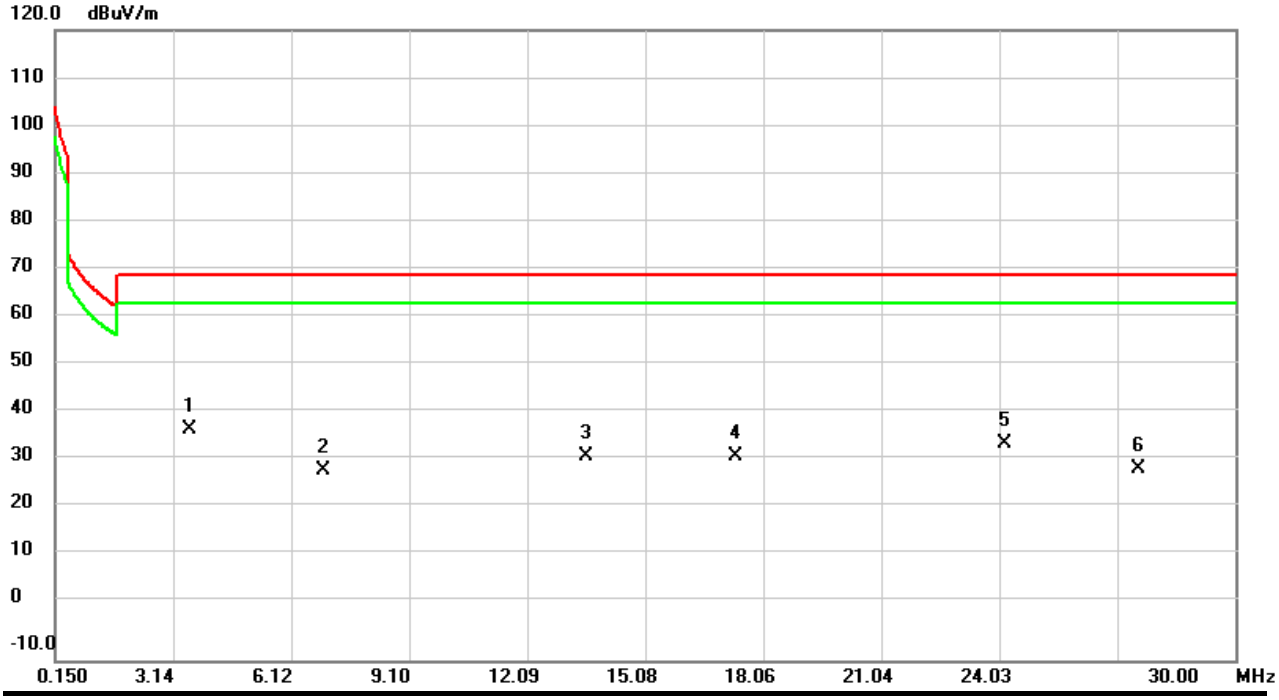
Test Mode	TX_Left	Test Date	2020/11/12
Test Frequency	129K	Polarization	Horizontal
Temp	23°C	Hum.	64%



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	0.1290	78.65	13.30	91.95	105.39	-13.44	AVG	

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

Test Mode	TX_Left	Test Date	2020/11/12
Test Frequency	129K	Polarization	Horizontal
Temp	23°C	Hum.	64%

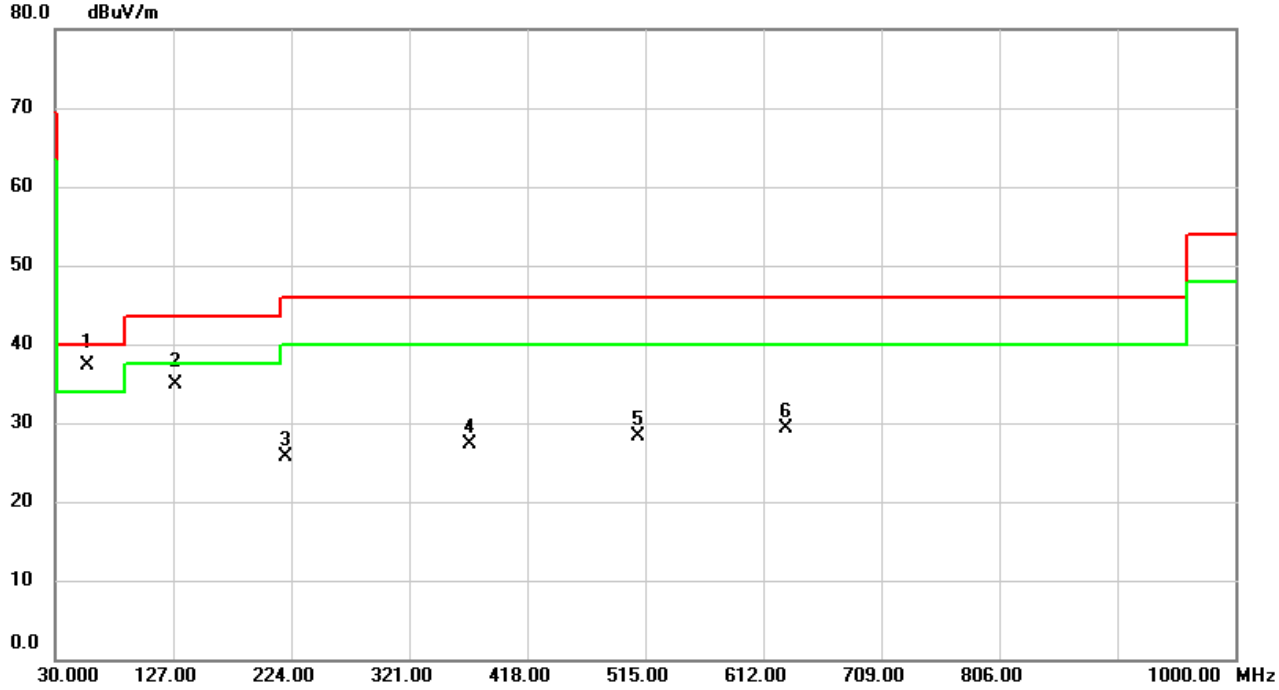


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	3.5562	42.70	-5.22	37.48	69.54	-32.06	QP	
2		6.9325	34.31	-5.20	29.11	69.54	-40.43	QP	
3		13.5661	37.08	-5.10	31.98	69.54	-37.56	QP	
4		17.3607	37.70	-5.63	32.07	69.54	-37.47	QP	
5		24.1734	39.67	-4.86	34.81	69.54	-34.73	QP	
6		27.5498	33.59	-3.96	29.63	69.54	-39.91	QP	

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

APPENDIX C RADIATED EMISSIONS - 30 MHZ TO 1 GHZ

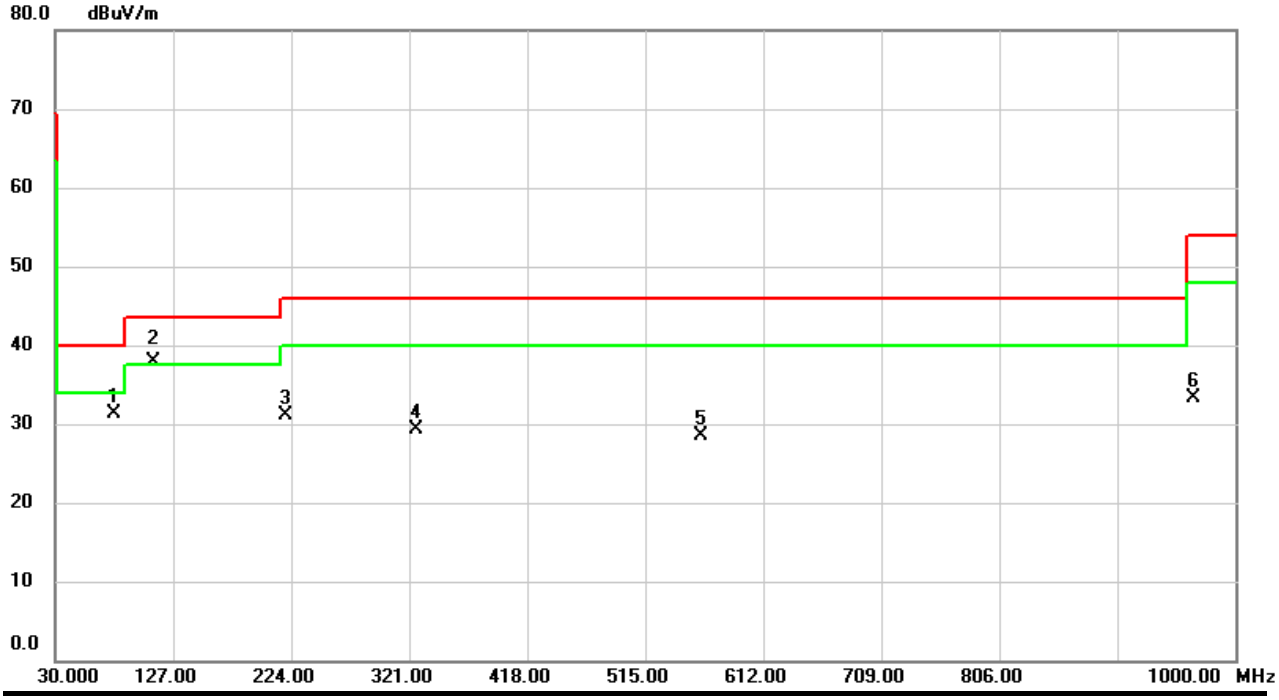
Test Mode	TX_Both	Test Date	2020/11/12
Test Frequency	121.14K	Polarization	Vertical
Temp	23°C	Hum.	64%



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	56.7073	45.72	-8.47	37.25	40.00	-2.75	QP	
2		129.4895	44.32	-9.50	34.82	43.50	-8.68	QP	
3		219.6996	36.60	-10.85	25.75	46.00	-20.25	peak	
4		370.5670	32.96	-5.60	27.36	46.00	-18.64	peak	
5		508.5980	30.90	-2.58	28.32	46.00	-17.68	peak	
6		630.6886	29.58	-0.21	29.37	46.00	-16.63	peak	

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

Test Mode	TX_Both	Test Date	2020/11/12
Test Frequency	121.14K	Polarization	Horizontal
Temp	23°C	Hum.	64%



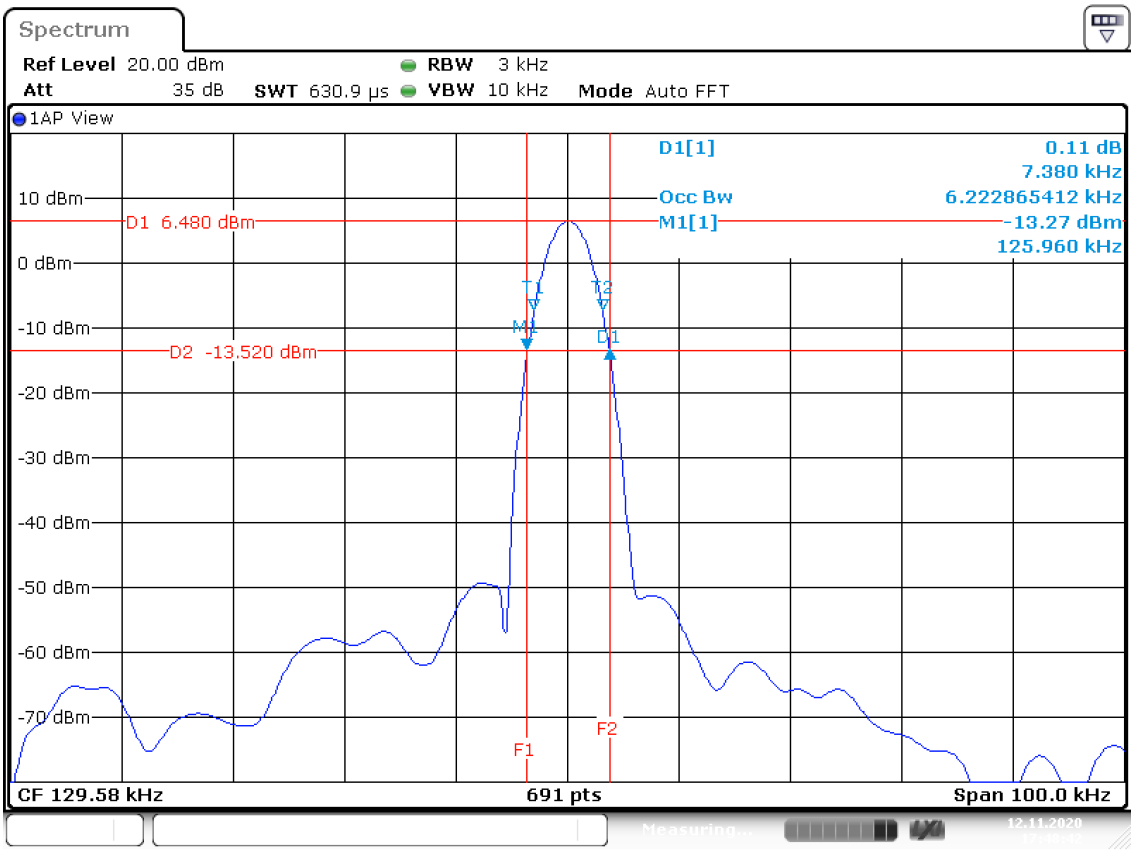
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		78.4030	43.64	-12.40	31.24	40.00	-8.76	peak	
2	*	110.5423	49.33	-11.33	38.00	43.50	-5.50	QP	
3		219.6673	41.97	-10.85	31.12	46.00	-14.88	peak	
4		326.5290	36.12	-6.73	29.39	46.00	-16.61	peak	
5		560.8486	29.95	-1.54	28.41	46.00	-17.59	peak	
6		965.8883	28.00	5.27	33.27	54.00	-20.73	peak	

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

APPENDIX D 20 DB BANDWIDTH

Test Mode	TX_Right

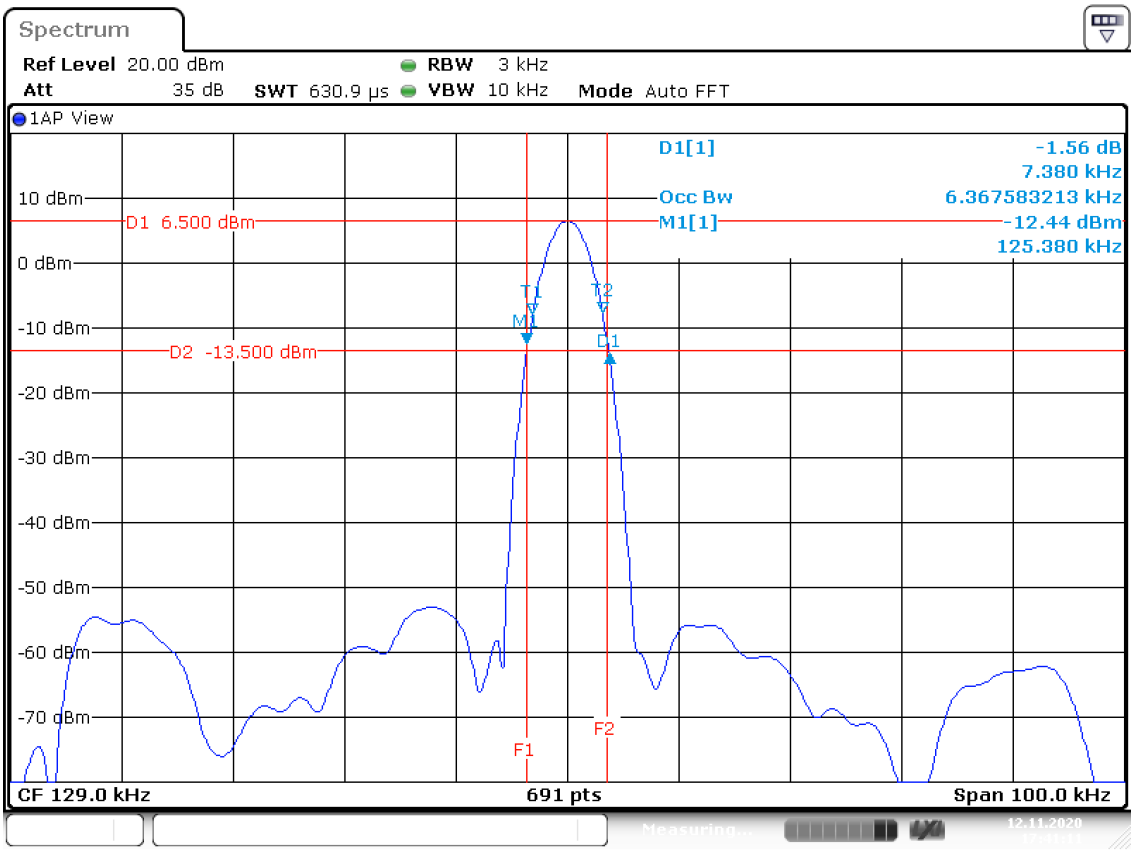
Frequency (KHz)	20 dB Bandwidth (KHz)	Operated Frequency Range (KHz)	Result
129.58	7.380	6.223	Complied



Date: 12.NOV.2020 17:48:42

Test Mode	TX_Left

Frequency (KHz)	20 dB Bandwidth (KHz)	Operated Frequency Range (KHz)	Result
129.00	7.380	6.368	Complied



Date: 12.NOV.2020 17:41:11

End of Test Report