

FCC Radio Test Report

FCC ID: XHM-P6XXD84X

Project No. : 1907T138
Equipment : POS
Test Model : POS617
Series Model : POS667
Applicant : FLYTECH Technology Co., Ltd.
Address : 1F, No. 168, Sing-Ai Rd., NeiHu District 11494,
Taipei, Taiwan

Date of Receipt : 2019/8/8
Date of Test : 2019/8/8 ~ 2019/9/4
Issued Date : 2019/10/30
Tested by : BTL Inc.

Testing Engineer

:


(Tim Lee)

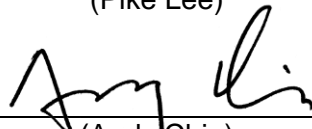
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Declaration

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.

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

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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.

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REPORT ISSUED HISTORY

Report Version	Description	Issued Date
R00	Original Issue.	

1 CERTIFICATION

Equipment : POS
Brand Name : FLYTECH
Test Model : POS617
Series Model : POS667
Applicant : FLYTECH Technology Co., Ltd.
Manufacturer : FLYTECH Technology Co., Ltd.
Address : 1F, No. 168, Sing-Ai Rd., NeiHu District 11494, Taipei, Taiwan
Factory : FLYTECH TECHNOLOGY CO., LTD.
Address : No.36, Huaya 3rd Rd., Guishan Dist., Taoyuan City 33383, Taiwan
Date of Test : 2019/8/8 ~ 2019/9/4
Test Sample : Engineering Sample
Standard(s) : FCC Part 15, Subpart C (15.225)
ANSI C63.10-2013

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

The test data, data evaluation, and equipment configuration contained in our test report (Ref No. BTL-FCCP-1-1907T138) were obtained utilizing the test procedures, test instruments, test sites that has been accredited by the Authority of TAF according to the ISO/IEC 17025 quality assessment standard and technical standard(s).

2 SUMMARY OF TEST RESULTS

Test procedures according to the technical standards:

Standard Section	Test Item	Result
15.207	Conducted emission	PASS
15.35 / 15.205 / 15.209 / 15.225	Radiated emission	PASS
15.225(e)	Frequency Stability	PASS
15.203	Antenna Requirement	PASS

NOTE:

(1) N/A denotes test is not applicable in this test report

2.1 TEST FACILITY

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

Conducted emission Test:

C05: (VCCI RN: C-14742; FCC RN:674415; FCC DN:TW0659)

No. 68-1, Ln. 169, Sec. 2, Datong Rd., Xizhi Dist., New Taipei City 221, Taiwan

Radiated emission Test:

CB15: (VCCI RN: R-20020; FCC RN:674415; FCC DN:TW0659)

No. 68-1, Ln. 169, Sec. 2, Datong Rd., Xizhi Dist., New Taipei City 221, Taiwan

2.2 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%**.

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. Conducted emission Test:

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

B. Radiated emission test:

Test Site	Method	Measurement Frequency Range	U,(dB)
CB15 (3m)	CISPR	9kHz ~ 150kHz	2.82
		150kHz ~ 30MHz	2.58

Test Site	Method	Measurement Frequency Range	Ant. H / V	U,(dB)
CB15 (3m)	CISPR	30MHz ~ 200MHz	V	4.20
		30MHz ~ 200MHz	H	3.64
		200MHz ~ 1,000MHz	V	4.56
		200MHz ~ 1,000MHz	H	3.90

3 GENERAL INFORMATION

3.1 GENERAL DESCRIPTION OF EUT

Equipment	POS	
Brand Name	FLYTECH	
Test Model	POS617	
Series Model	POS667	
Model Difference	The stand base type is different.	
Product Description	Operation Frequency	13.56 MHz
	Antenna Designation	LOOP Antenna
Power Source	DC voltage supplied from AC/DC Adapter.	
Power Rating	#1 Brand/model: Delta / ADP-90WH K I/P: 100-240V ~ 1.7A 50-60Hz O/P: 19.5V $\overline{\text{---}}$ 4.62A #2 Brand/model: Delta / ADP-90MD H I/P: 100-240V ~ 1.5A 50-60Hz O/P: 19V $\overline{\text{---}}$ 4.74A	
Products Covered	Mother Board: Flytech / D84U CPU: INTEL / i7-7600U 2.8G INTEL / i5-6200U 2.3G LCM MSR FINGERPRINTER I-button NFC Panel: 15.6" 2nd display: 15.6" and 10.1" M.2 SSD Adapter: Delta / ADP-90WH K Delta / ADP-90MD H	

Note:

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

3.2 DESCRIPTION OF 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.

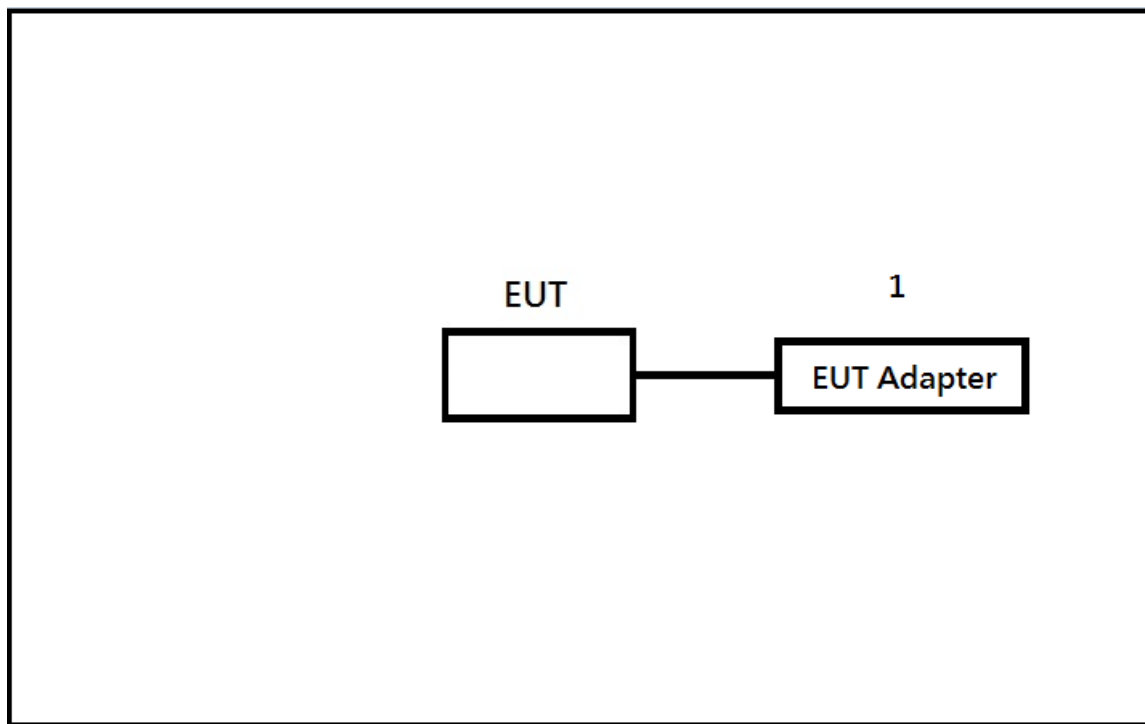
Pretest Mode	Description
Mode 1	13.56MHz Transmit

Conducted emission test	
Final Test Mode	Description
Mode 1	13.56MHz Transmit

Radiated emission test	
Final Test Mode	Description
Mode 1	13.56MHz Transmit

Frequency Stability test	
Final Test Mode	Description
Mode 1	13.56MHz Transmit

3.3 BLOCK DIAGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED



3.4 DESCRIPTION OF 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	Mfr/Brand	Model/Type No.	FCC ID	Series No.
-	-	-	-	-	-

Item	Shielded Type	Ferrite Core	Length	Note
1	NO	NO	1.5M	Adapter

4 CONDUCTED EMISSION

4.1 LIMITS

FREQUENCY (MHz)	(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.
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

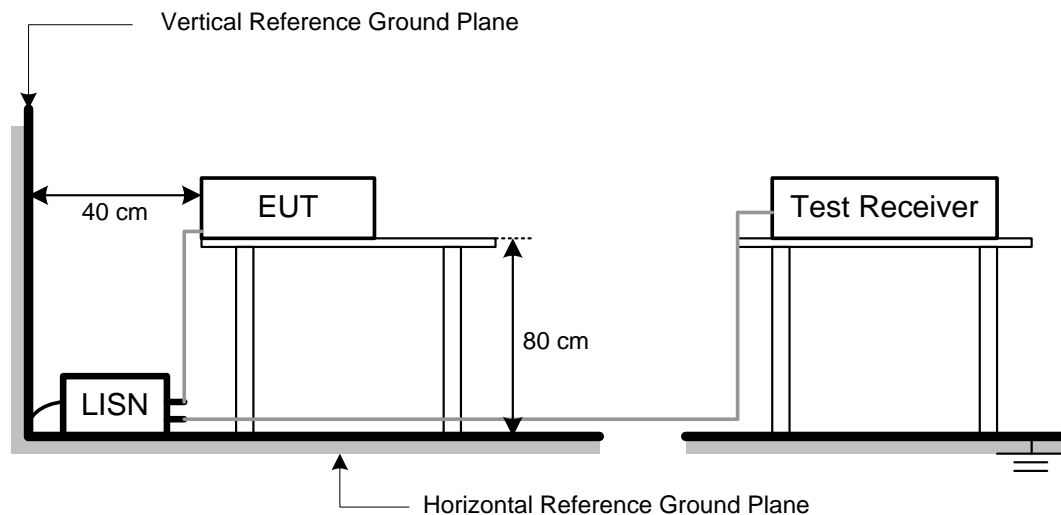
4.2 TEST PROCEDURES

- 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 equipments 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.

NOTE:

- a. Reading in which marked as Peak, QP or AVG means measurements by using are Quasi-Peak or Average Mode with Detector BW=9 kHz (6 dB Bandwidth).
- b. All readings are Peak Mode value unless otherwise stated QP or AVG in column of Note. If the Peak or QP Mode Measured value compliance with the QP Limits and lower than AVG Limits, the EUT shall be deemed to meet both QP & AVG Limits and then only Peak or QP Mode was measured, but AVG Mode didn't perform.

4.3 TEST SETUP LAYOUT



4.4 DEVIATION FROM TEST STANDARD

No deviation

4.5 EUT OPERATING CONDITIONS

The EUT used during radiated and/or conducted emission measurement was designed to exercise in a manner similar to a typical use.

4.6 EUT TEST CONDITIONS

Temperature: 25°C

Relative Humidity: 45%

Test Voltage: AC 120V/60Hz

4.7 TEST RESULTS

Please refer to the Appendix A.

Remark:

- (1) All readings are QP Mode value unless otherwise stated AVG in column of 『Note』. If the QP Mode Measured value compliance with the QP Limits and lower than AVG Limits, the EUT shall be deemed to meet both QP & AVG Limits and then only QP Mode was measured, but AVG Mode didn't perform in this case, a "*" marked in AVG Mode column of Interference Voltage Measured.
- (2) Measuring frequency range from 150KHz to 30MHz.

5 RADIATED EMISSION

5.1 LIMITS

FCC Part 15.209				
Frequency (MHz)	Field Strength Limitation		Field Strength Limitation at 3m Measurement Dist	
	(uV/m)	Dist	(uV/m)	(dBuV/m)
0.009 – 0.490	2400 / F(KHz)	300m	10000 * 2400/F(KHz)	20log 2400/F(KHz) + 80
0.490 – 1.705	24000 / F(KHz)	30m	100 * 24000/F(KHz)	20log 24000/F(KHz) + 40
1.705 – 30.00	30	30m	100* 30	20log 30 + 40
30.0 – 88.0	100	3m	100	20log 100
88.0 – 216.0	150	3m	150	20log 150
216.0 – 960.0	200	3m	200	20log 200
Above 960.0	500	3m	500	20log 500
FCC Part 15.225(a)/(b)/(c)				
Frequency (MHz)	Field Strength Limitation		Field Strength Limitation at 3m Measurement Dist	
	(uV/m)	Dist	(uV/m)	(dBuV/m)
13.553 – 13.567	15,848	30 m	15,848*100	124
13.567 – 13.710	334	30 m	334*100	90.5
13.110 – 13.410 13.710 – 14.010	106	30 m	106*100	80.5

NOTE:

- (1) The tighter limit shall apply at the boundary between two frequency range.
- (2) Limitation expressed in dBuV/m is calculated by 20log Emission Level (uV/m).
- (3) If measurement is made at 3m distance, then F.S Limitation at 3m distance is adjusted by using the formula of $L_{d1} = L_{d2} * (d_2/d_1)^2$.
Example:
F.S Limit at 30m distance is 30uV/m , then F.S Limitation at 3m distance is adjusted as $L_{d1} = L_1 = 30uV/m * (10)^2 = 100 * 30 uV/m$
- (4) 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

5.2 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 1GHz)
- b. 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.
- c. 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.
- d. 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)
- e. For the actual test configuration, please refer to the related Item –EUT Test Photos.

NOTE: (FCC PART 15.209)

- a. Reading in which marked as QP or Peak means measurements by using are Quasi-Peak Mode with Detector BW=120 kHz.
- b. 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.

NOTE: (FCC PART 15.225)

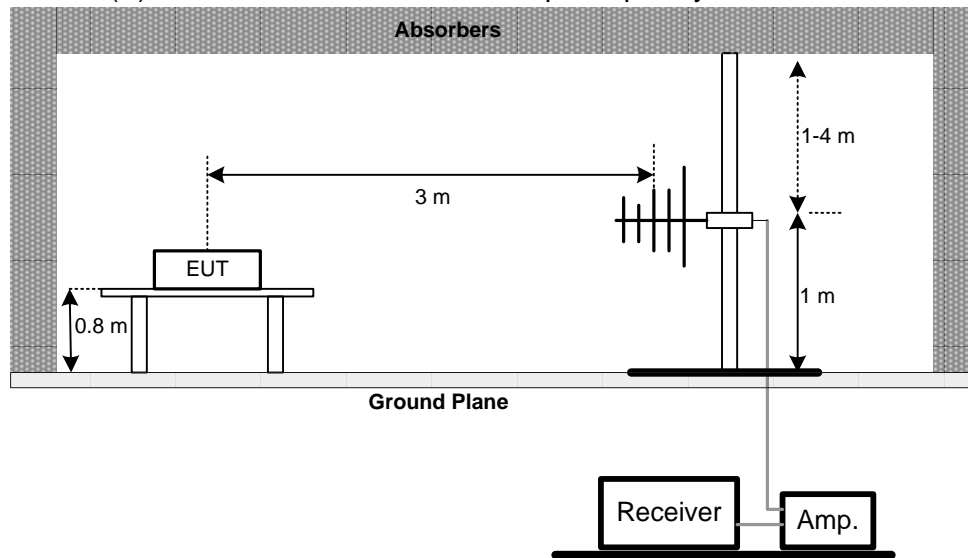
- a. Spectrum Setting:
 - 9 KHz – 150 KHz, RBW= 200Hz, VBW=200Hz, Sweep time = 200 ms.
 - 150 K Hz – 30 MHz, RBW= 10 KHz, VBW=10 KHz, Sweep time = 200 ms.
 - 30 MHz – 1000 MHz, RBW= 100KHz, VBW=100KHz, Sweep time = 200 ms.
- b. All readings are Peak unless otherwise stated QP in column of Note. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform.
- c. The Log-Bicon Antenna will use to test frequency range from 30MHz to 1000MHz and the Loop Antenna will use to test frequency below 30MHz.

5.3 DEVIATION FROM TEST STANDARD

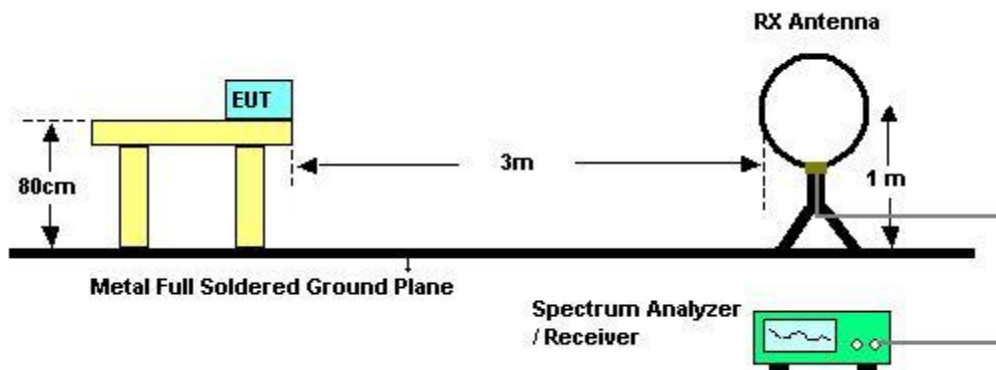
No deviation

5.4 TEST SETUP

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



(B) For radiated emissions below 30MHz



5.5 EUT OPERATING CONDITIONS

The EUT tested system was configured as the statements of **4.5** unless otherwise a special operating condition is specified in the follows during the testing.

5.6 EUT TEST CONDITIONS

Temperature: 23°C

Relative Humidity: 68%

Test Voltage: AC 120V/60Hz

5.7 TEST RESULTS (BELOW 30MHZ) - FCC PART 15.209

Please refer to the Appendix B.

5.8 TEST RESULTS - (30-1000MHZ) - FCC PART 15.209

Please refer to the Appendix C.

5.9 TEST RESULTS- FCC PART 15.225

Please refer to the Appendix D.

6 FREQUENCY STABILITY

6.1 LIMITS

FCC Part 15.225(e)
The frequency tolerance of the carrier signal shall be maintained within +/-0.01% of the operating frequency over a temperature variation of - 20 degrees to + 50 degrees C at normal supply voltage, and for a variation in the primary supply voltage from 85% to 115% of the rated supply voltage at a temperature of 20 degrees C. For battery operated equipment, the equipment tests shall be performed using a new battery.

6.2 TEST PROCEDURE

- a. The equipment under test was connected to an external AC power supply and the RF output was connected to a frequency counter via feed through attenuators. The EUT was placed inside the temperature chamber.
After the temperature stabilized for approximately 20 minutes, the frequency of the output signal was recorded from the counter.
- b. At room temperature ($25\pm5^{\circ}\text{C}$), an external variable AC power supply was connected to the EUT. The frequency of the transmitter was measured for 115%, 100% and 85% of the nominal operating input voltage.

6.3 DEVIATION FROM TEST STANDARD

No deviation

6.4 EUT OPERATING CONDITIONS

The EUT tested system was configured as the statements of 4.5 unless otherwise a special operating condition is specified in the follows during the testing.

6.5 EUT TEST CONDITIONS

Temperature: 23°C
Relative Humidity: 48%
Test Voltage: AC 120V/60Hz

6.6 TEST RESULTS

Please refer to the Appendix E.

7 MEASUREMENT INSTRUMENTS LIST

Conducted Emission Measurement					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	TWO-LINE V-NETWORK	R&S	ENV216	101050	2020/3/17
2	Test Cable	EMCI	EMCCFD300-BM-BMR-6000	170715	2020/8/6
3	EMI Test Receiver	R&S	ESR7	101433	2019/12/4
4	Measurement Software	EZ	EZ EMC (Version NB-03A)	N/A	N/A

Radiated Emission Measurement					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Preamplifier	EMCI	EMC001340	980555	2020/4/11
2	Preamplifier	EMCI	EMC02325B	980217	2020/4/11
3	Test Cable	EMCI	EMC104-SM-SM-800	150207	2020/4/11
4	Test Cable	EMCI	EMC104-SM-SM-3000	151205	2020/4/11
5	Test Cable	EMCI	EMC-SM-SM-7000	180408	2020/4/11
6	MXE EMI Receiver	Agilent	N9038A	MY55420127	2020/3/25
7	Loop Ant	EMCO	EMCI-LPA600	274	2020/5/30
8	Trilog-Broadband Antenna	Schwarzbeck	VULB 9168	000992	2020/5/28
9	5dB Attenuator	EMCI	EMCI-N-6-05	AT-N0508	2020/5/28

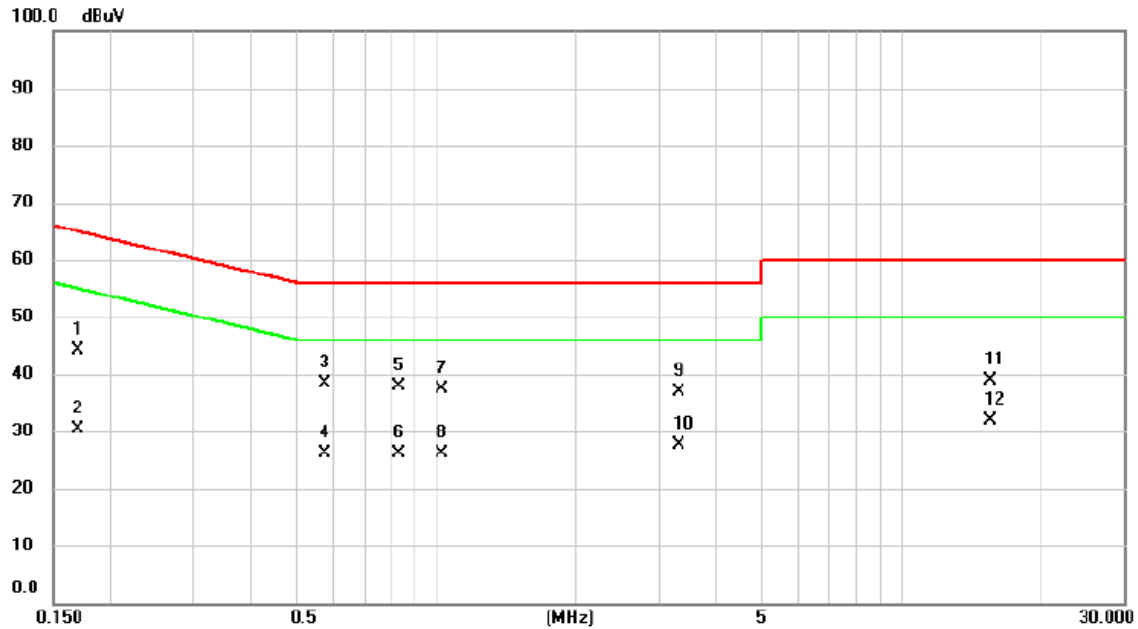
Frequency Stability Measurement					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Spectrum Analyzer	R&S	FSV	103032	2019/12/5
2	Thermal Chamber	HOLINK	H-TH-2SP-B	H1/EK04101902	2020/7/23

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

APPENDIX A - CONDUCTED EMISSION

Test Mode: 13.56MHz Transmit

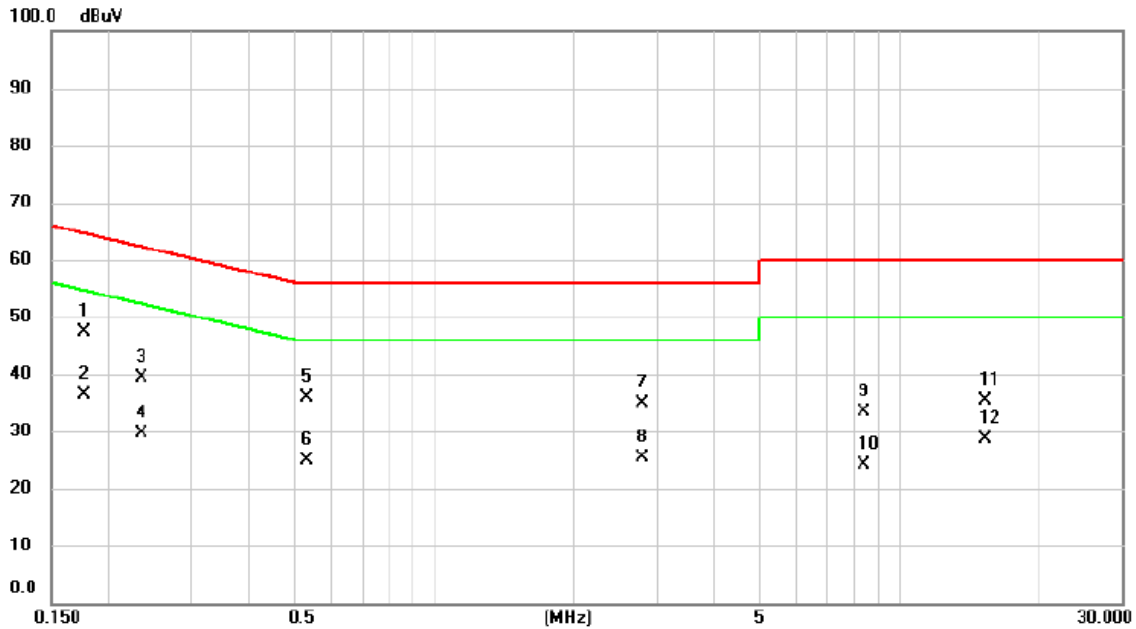
Line



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Over dB	Detector	Comment
1		0.1703	34.49	9.57	44.06	64.95	-20.89	QP	
2		0.1703	20.91	9.57	30.48	54.95	-24.47	AVG	
3	*	0.5775	28.77	9.62	38.39	56.00	-17.61	QP	
4		0.5775	16.61	9.62	26.23	46.00	-19.77	AVG	
5		0.8317	28.14	9.63	37.77	56.00	-18.23	QP	
6		0.8317	16.44	9.63	26.07	46.00	-19.93	AVG	
7		1.0275	27.73	9.64	37.37	56.00	-18.63	QP	
8		1.0275	16.48	9.64	26.12	46.00	-19.88	AVG	
9		3.3203	27.17	9.71	36.88	56.00	-19.12	QP	
10		3.3203	17.89	9.71	27.60	46.00	-18.40	AVG	
11		15.4568	29.08	9.92	39.00	60.00	-21.00	QP	
12		15.4568	21.91	9.92	31.83	50.00	-18.17	AVG	

Test Mode: 13.56MHz Transmit

Neutral

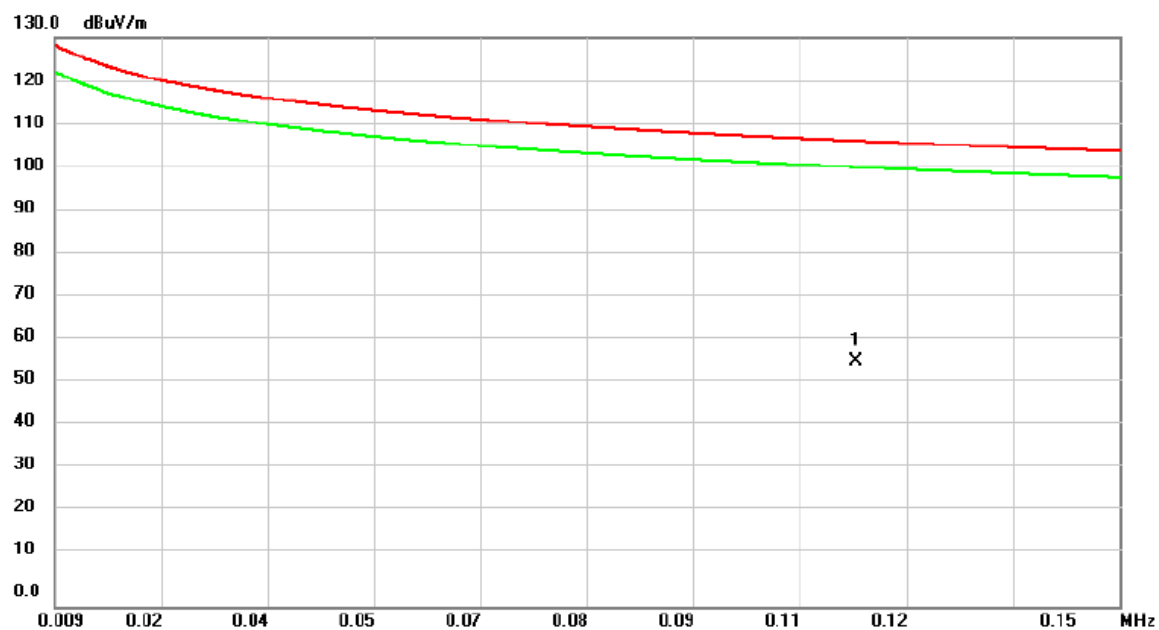


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Over dB	Detector	Comment
1	*	0.1770	37.82	9.61	47.43	64.63	-17.20	QP	
2		0.1770	26.80	9.61	36.41	54.63	-18.22	AVG	
3		0.2355	29.89	9.61	39.50	62.25	-22.75	QP	
4		0.2355	19.92	9.61	29.53	52.25	-22.72	AVG	
5		0.5325	26.20	9.67	35.87	56.00	-20.13	QP	
6		0.5325	15.17	9.67	24.84	46.00	-21.16	AVG	
7		2.8028	25.22	9.73	34.95	56.00	-21.05	QP	
8		2.8028	15.59	9.73	25.32	46.00	-20.68	AVG	
9		8.3873	23.61	9.88	33.49	60.00	-26.51	QP	
10		8.3873	14.15	9.88	24.03	50.00	-25.97	AVG	
11		15.2475	25.40	9.99	35.39	60.00	-24.61	QP	
12		15.2475	18.59	9.99	28.58	50.00	-21.42	AVG	

APPENDIX B - RADIATED EMISSION (9KHZ-30MHZ)

Test Mode:	13.56MHz Transmit
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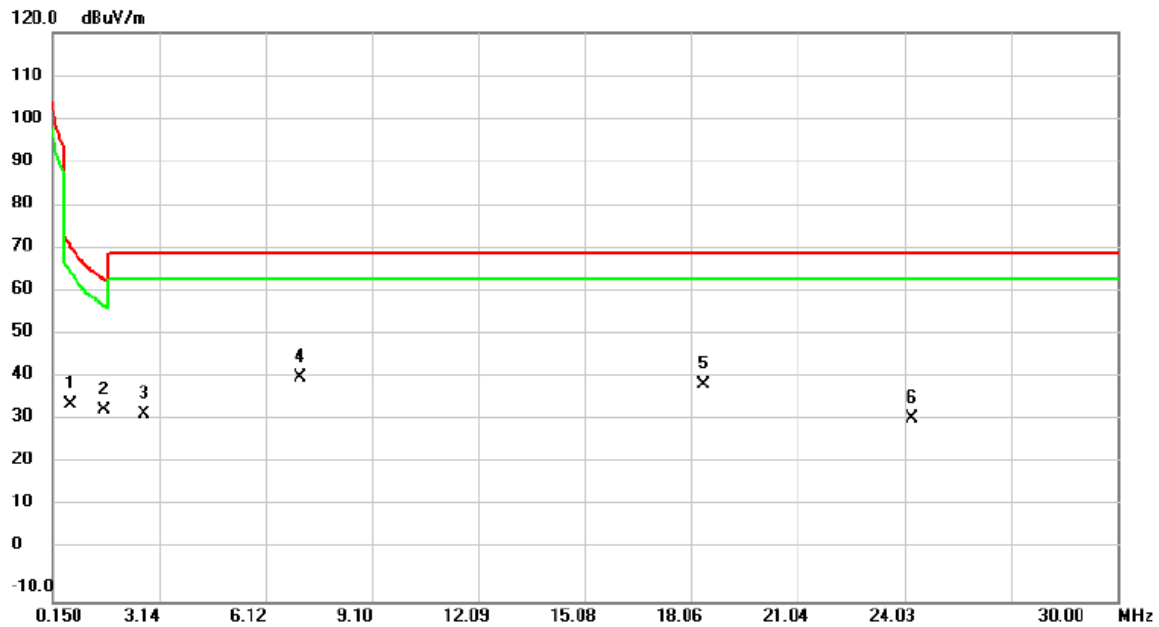
Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	0.1151	40.76	15.17	55.93	106.38	-50.45	AVG	

Test Mode: 13.56MHz Transmit

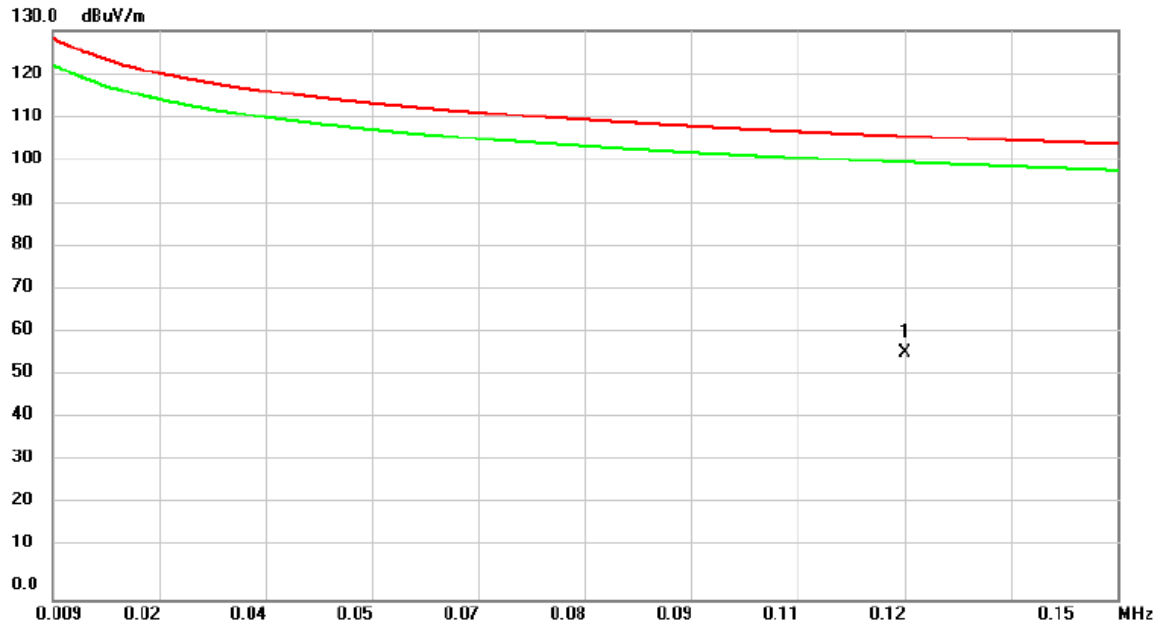
Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		0.6276	32.91	2.25	35.16	71.65	-36.49	QP	
2		1.5828	35.31	-1.70	33.61	63.61	-30.00	QP	
3		2.7171	36.12	-3.28	32.84	69.54	-36.70	QP	
4	*	7.0752	45.05	-3.95	41.10	69.54	-28.44	QP	
5		18.4182	45.69	-6.06	39.63	69.54	-29.91	QP	
6		24.2390	39.60	-7.92	31.68	69.54	-37.86	QP	

Test Mode:	13.56MHz Transmit
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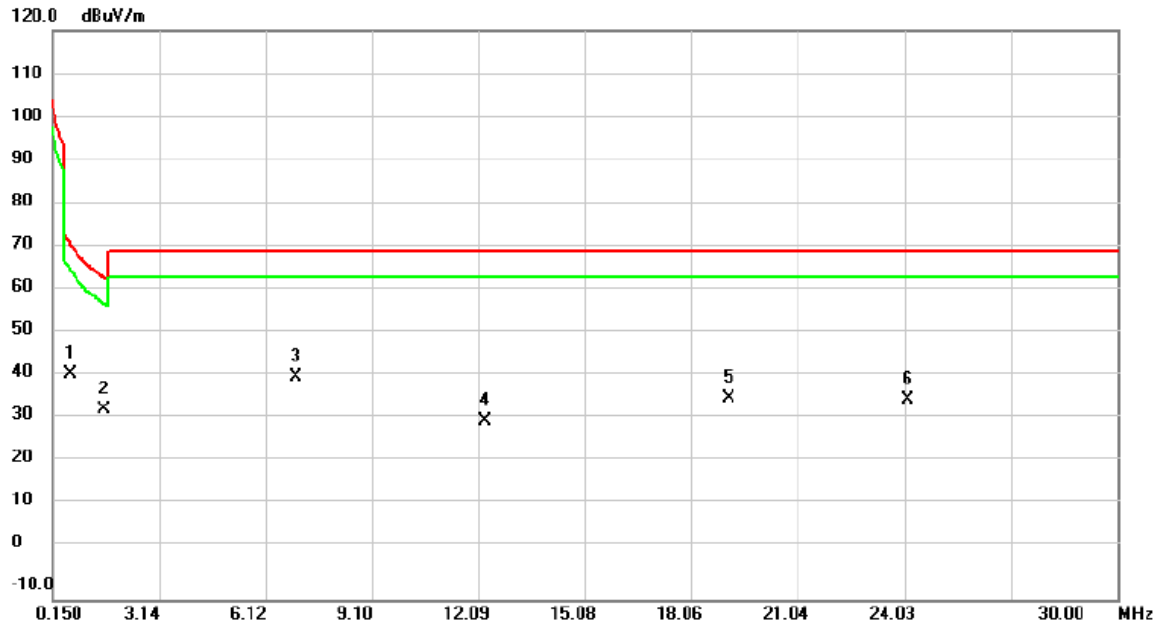
Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	0.1218	41.75	14.80	56.55	105.89	-49.34	AVG	

Test Mode: 13.56MHz Transmit

Horizontal

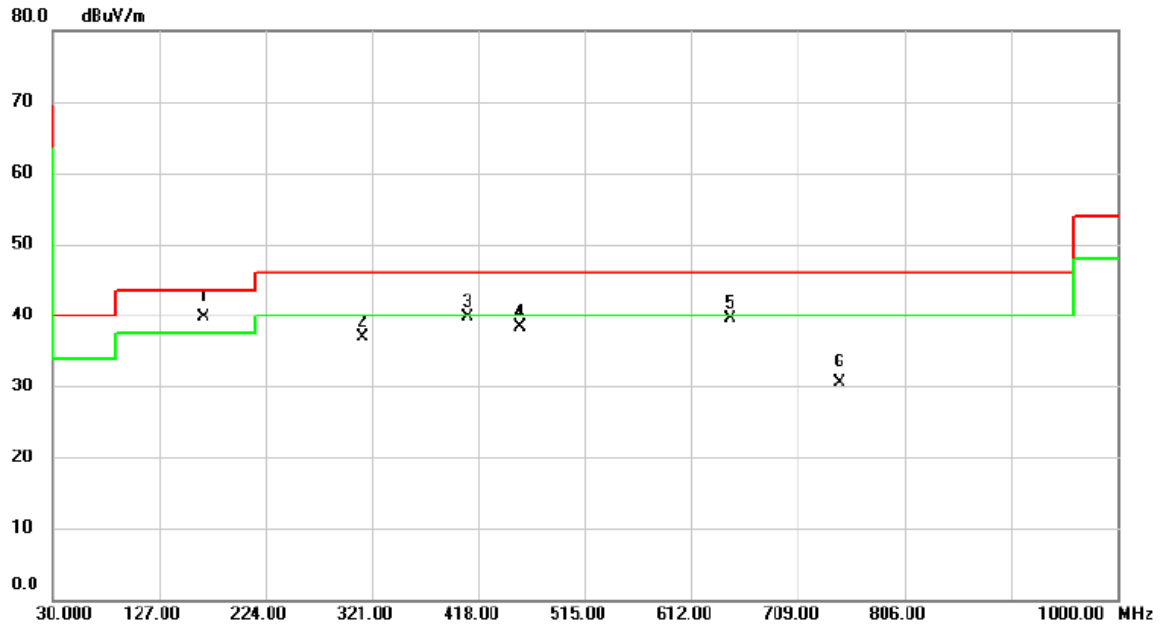


No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		0.6276	39.16	2.25	41.41	71.65	-30.24	QP	
2		1.6126	35.23	-1.78	33.45	63.45	-30.00	QP	
3	*	6.9558	44.67	-3.93	40.74	69.54	-28.80	QP	
4		12.2690	35.42	-4.60	30.82	69.54	-38.72	QP	
5		19.1047	42.28	-6.19	36.09	69.54	-33.45	QP	
6		24.1196	43.49	-7.83	35.66	69.54	-33.88	QP	

APPENDIX C - RADIATED EMISSION (30MHZ TO 1000MHZ)

Test Mode:	13.56MHz Transmit
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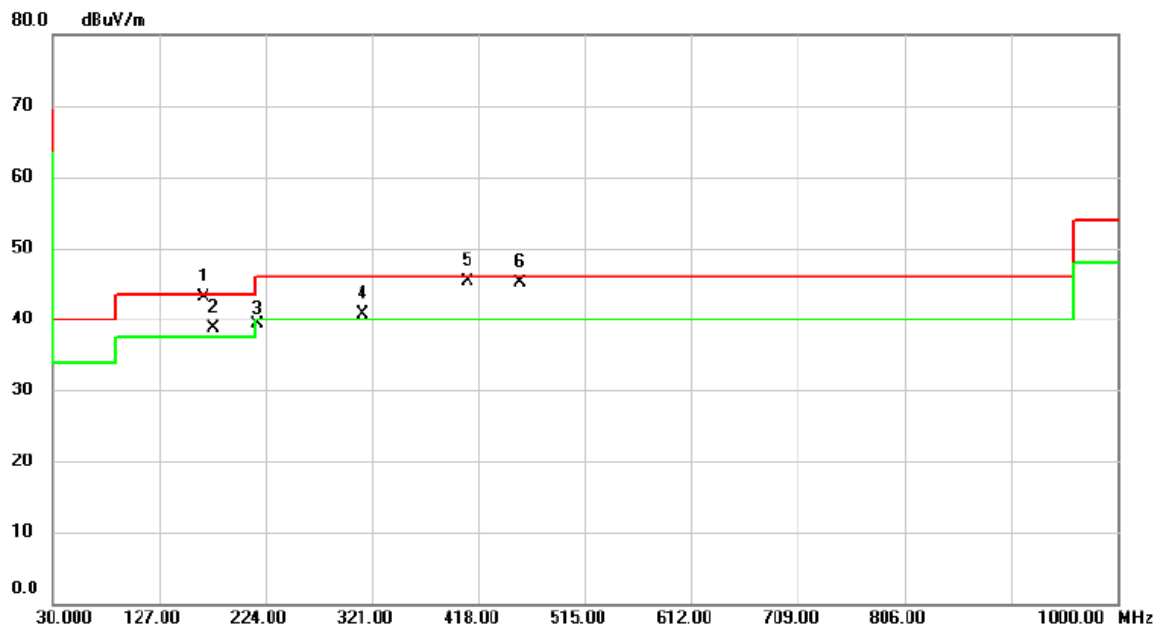
Vertical



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	*	167.7400	48.02	-8.34	39.68	43.50	-3.82	QP	
2		312.2700	43.91	-6.93	36.98	46.00	-9.02	peak	
3		408.3000	44.13	-4.39	39.74	46.00	-6.26	peak	
4		455.8300	41.47	-3.25	38.22	46.00	-7.78	peak	
5		647.8900	38.95	0.60	39.55	46.00	-6.45	peak	
6		746.8300	27.92	2.52	30.44	46.00	-15.56	QP	

Test Mode: 13.56MHz Transmit

Horizontal

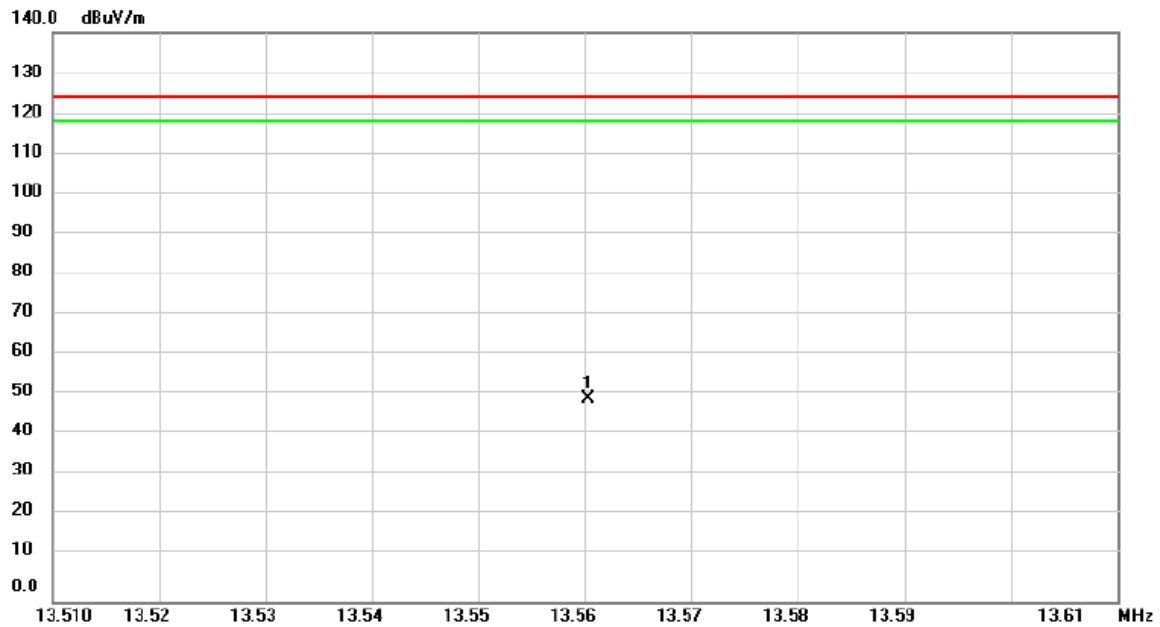


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	*	167.7400	51.53	-8.34	43.19	43.50	-0.31	QP	
2	!	176.4700	47.85	-9.05	38.80	43.50	-4.70	QP	
3		216.2400	49.66	-10.39	39.27	46.00	-6.73	peak	
4	!	312.2700	47.56	-6.93	40.63	46.00	-5.37	QP	
5	!	408.3000	49.70	-4.39	45.31	46.00	-0.69	QP	
6	!	455.8300	48.35	-3.25	45.10	46.00	-0.90	QP	

APPENDIX D - RADIATED EMISSION (FCC PART 15.225)

Test Mode:	13.56MHz Transmit
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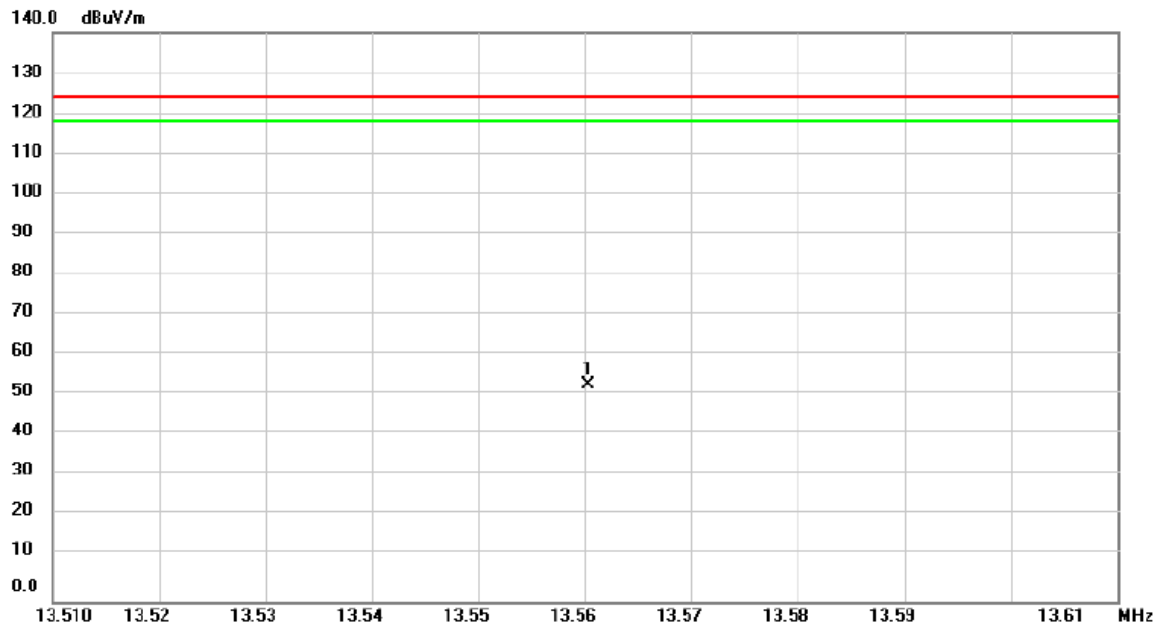
Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	13.5603	54.35	-4.59	49.76	124.00	-74.24	peak	

Test Mode:	13.56MHz Transmit
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Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	13.5603	57.88	-4.59	53.29	124.00	-70.71	peak	

APPENDIX E - FREQUENCY STABILITY MEASUREMENT

Test Mode:	13.56MHz Transmit
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Condition			Frequency Error (ppm)										Limit (ppm)	Result
Temperature	Modulation Mode	Test Freq.	0 min	2 min	5 min	10 min	0 min	2 min	5 min	10 min				
			Normal										100	Pass
T20°CVmax	CW	13.56	13.560376	13.560376	13.560376	13.560376	27.73	27.73	27.73	27.73				
T20°CVmin	CW	13.56	13.560376	13.560376	13.560376	13.560376	27.73	27.73	27.73	27.73	Pass			
			Extreme										100	Pass
T55°CVnom	CW	13.56	13.560405	13.560405	13.560405	13.560405	29.87	29.87	29.87	29.87				
T40°CVnom	CW	13.56	13.560362	13.560362	13.560362	13.560362	26.70	26.70	26.70	26.70				
T30°CVnom	CW	13.56	13.560376	13.560376	13.560376	13.560376	27.73	27.73	27.73	27.73				
T20°CVnom	CW	13.56	13.560376	13.560376	13.560376	13.560376	27.73	27.73	27.73	27.73				
T10°CVnom	CW	13.56	13.560405	13.560405	13.560405	13.560405	29.87	29.87	29.87	29.87				
T0°CVnom	CW	13.56	13.560420	13.560420	13.560420	13.560420	30.97	30.97	30.97	30.97				
T-10°CVnom	CW	13.56	13.560434	13.560434	13.560434	13.560434	32.01	32.01	32.01	32.01				
T-20°CVnom	CW	13.56	13.560434	13.560434	13.560434	13.560434	32.01	32.01	32.01	32.01				

NOTE: 0.01 % = 100 ppm.

End of Test Report