

FCC Radio Test Report

FCC ID: 2APPZ-I30

This report concerns (check one): ☒Original Grant ☐Class I Change ☐Class II Change

Project No. : 1804C008
Equipment : IP DoorPhone
Test Model : i30
Series Model : i20s
Applicant : Fanvil Technology Co., LTD.
Address : 4F,Block A,Bldg#1,GaoXinQi Hi-TechPark
Phase-II,67th District,Bao'An,Shenzhen,China

Date of Receipt : Apr. 02, 2018
Date of Test : Apr. 08, 2018 ~ Sep. 30, 2018
Issued Date : Sep. 30, 2018
Tested by : BTL Inc.

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Declaration

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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.

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REPORT ISSUED HISTORY

Issue No.	Description	Issued Date
BTL-FCCP-1-1804C008	Original Issue.	Jun. 27, 2018
MDG1809033	Changed applicant information and added the conducted test data.	Sep. 30, 2018

1 CERTIFICATION

Equipment : IP DoorPhone
Brand Name : Fanvil
Test Model : i30
Series Model : i20s
Applicant : Fanvil Technology Co., LTD.
Manufacturer : Fanvil Technology Co., LTD.
Address : 4F,Block A,Bldg#1,GaoXinQi Hi-TechPark Phase-II,67th District,Bao'An,
Shenzhen,China
Factory : Fanvil Technology Co., LTD.
Address : 4F,Block A,Bldg#1,GaoXinQi Hi-TechPark Phase-II,67th District,Bao'An,
Shenzhen,China
Date of Test : Apr. 09, 2018 ~ Apr. 30, 2018
Test Sample : Engineering Sample No. D180402821
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-1-1804C008) were obtained utilizing the test procedures, test instruments, test sites that has been accredited by the Authority of NVLAP according to the ISO-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

2.1 TEST FACILITY

The test facilities used to collect the test data in this report is at the location of No.3,Jinshagang 1st Road, Shixia, Dalang Town, Dongguan, Guangdong, China.

BTL's test firm number for FCC: 854385

BTL's designation number for FCC: CN5020

2.2 MEASUREMENT UNCERTAINTY

The measurement uncertainty figures shall be calculated according the methods described in the ETSI TR 100 028 and shall correspond to an expansion factor (coverage factor) $k=1.96$ or $k=2$ (which provide confidence levels of respectively 90% and 95.45% in the case where the distributions characterizing the actual measurement uncertainties are normal (Gaussian)). Measurement Uncertainty for a Level of Confidence of 95 %, $U=2 \times U_c(y)$.

The BTL measurement uncertainty as below table:

A. Conducted Measurement :

Test Site	Method	Measurement Frequency Range	U, (dB)
DG-C02	CISPR	150 kHz ~ 30 MHz	2.32

B. Radiated Measurement:

Test Site	Method	Measurement Frequency Range	Ant. H / V	U, (dB)
DG-CB03	CISPR	9KHz~30MHz	V	3.79
		9KHz~30MHz	H	3.57
		30MHz ~ 200MHz	V	3.82
		30MHz ~ 200MHz	H	3.78
		200MHz ~ 1,000MHz	V	4.10
		200MHz ~ 1,000MHz	H	4.06
		1GHz~18GHz	V	3.12
		1GHz~18GHz	H	3.68
		18GHz~40GHz	V	4.15
		18GHz~40GHz	H	4.14

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

3 GENERAL INFORMATION

3.1 GENERAL DESCRIPTION OF EUT

Equipment	IP DoorPhone	
Brand Name	Fanvil	
Test Model	i30	
Series Model	i20s	
Model Difference	The difference between i30 and i20s is that i30 has access to the camera module and i20s has no camera module.	
Product Description	Operation Frequency	13.56 MHz
	Antenna Designation	LOOP Antenna
Power Source	#1 supplied from Lead-acid battery(support unit) #2 Supplied from PoE	
Power Rating	#1 DC 12V #2 DC 48V	

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 generates from EUT, the test system was pre-scanning tested base on the consideration of following EUT operation mode or test configuration mode which possible 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

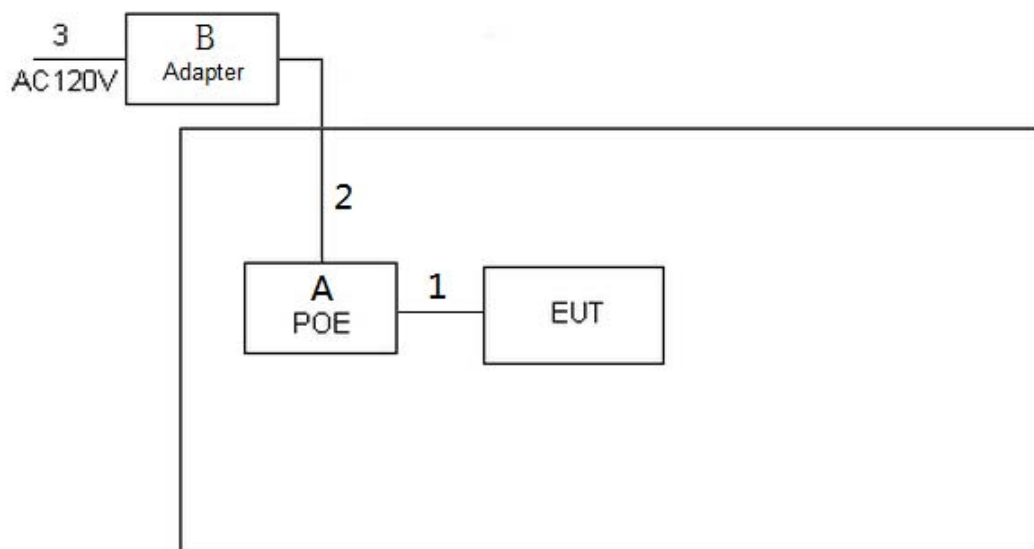
Conducted emission test	
Final Test Mode	Description
Mode 1	13.56MHz Transmit

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

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

Antenna Requirement 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.
A	PoE Switch	Fanvil	DGS-1008P/Dlink	N/A	N/A
B	Adapter	Leader	NU60-F4B0125-I1NN	N/A	N/A

Item	Shielded Type	Ferrite Core	Length	Note
1	NO	NO	1m	RJ45 Cable
2	NO	NO	1.5m	DC Cable
3	NO	NO	1.8m	AC Cable

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

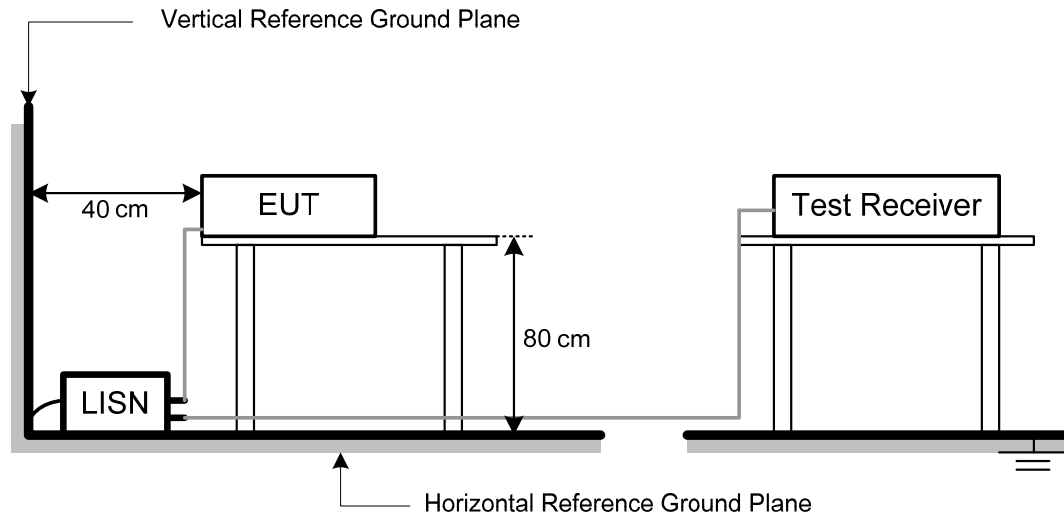
4.2 TEST PROCEDURES

- 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: 27°C

Relative Humidity: 39%

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)

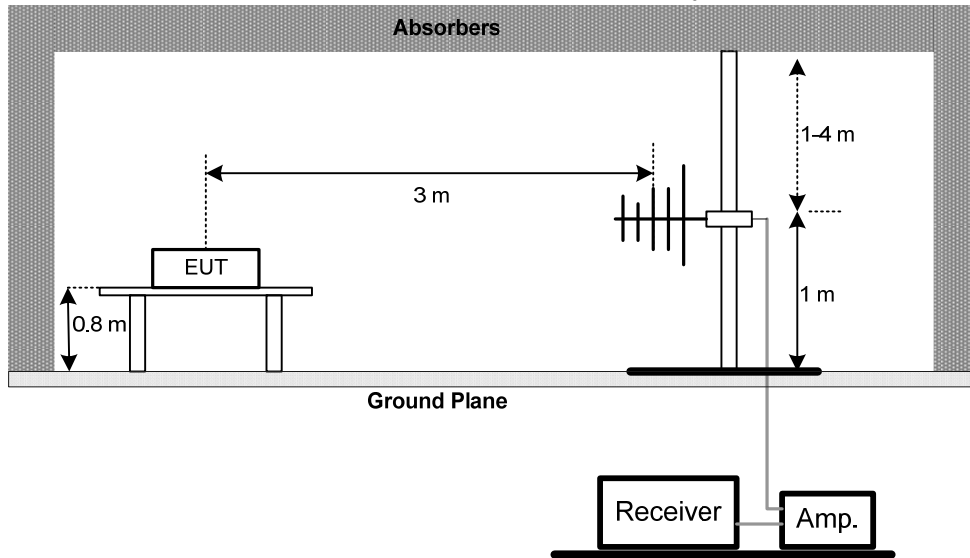
- a. Spectrum Setting:
 - 9 KHz – 150 KHz, RBW= 200Hz, VBW=200Hz, Sweep time = 200 ms.
 - 150 K Hz – 30 MHz, RBW= 10 KHz, VBW=10 KHz, Sweep time = 200 ms.
 - 30 MHz – 1000 MHz, RBW= 100KHz, VBW=100KHz, Sweep time = 200 ms.
- b. All readings are Peak unless otherwise stated QP in column of Note. Peak 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

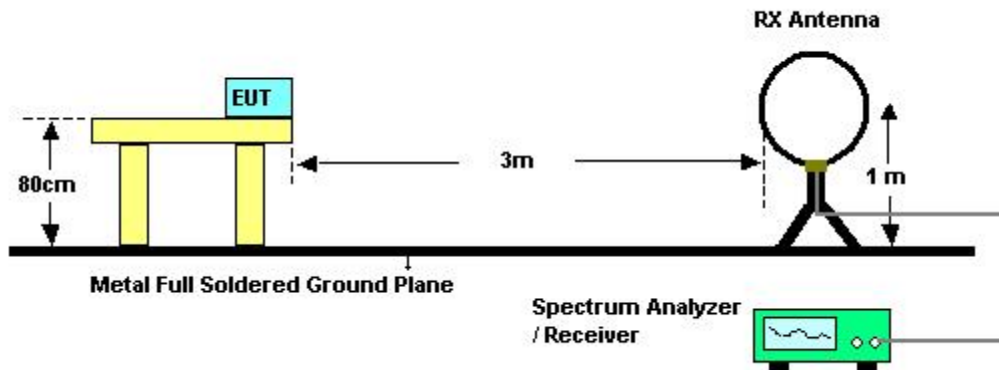
No deviation

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: 25°C
Relative Humidity: 60%
Test Voltage: DC 12V

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±5°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: 25°C
Relative Humidity: 58%
Test Voltage: DC 12V

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	EMI Test Receiver	R&S	ESCI	100382	Mar. 11, 2019
2	LISN	EMCO	3816/2	52765	Mar. 11, 2019
3	50Ω Terminator	SHX	TF2-3G-A	8122901	Mar. 11, 2019
4	TWO-LINE V-NETWORK	R&S	ENV216	101447	Mar. 11, 2019
5	Measurement Software	Farad	EZ-EMC Ver.NB-03A1-01	N/A	N/A
6	Cable	N/A	RG223	12m	Mar. 23, 2019

Radiated Emission Measurement - 9kHz TO 30 MHz					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Loop Antenna	EM	EM-6876-1	230	Feb. 07, 2019
2	Cable	N/A	RG 213/U	C-102	Jun. 01, 2019
3	EMI Test Receiver	R&S	ESCI	100382	Mar. 11, 2019
4	Measurement Software	Farad	EZ-EMC Ver.NB-03A1-01	N/A	N/A

Radiated Emission Measurement – 30 MHz TO 1000 MHz					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Antenna	Schwarbeck	VULB9160	9160-3232	Mar. 11, 2019
2	Amplifier	HP	8447D	2944A09673	Aug. 11, 2019
3	Receiver	Agilent	N9038A	MY52130039	Aug. 11, 2019
4	Cable	emci	LMR-400(30MHz-1 GHz)(8m+5m)	N/A	May 25, 2019
5	Controller	CT	SC100	N/A	N/A
6	Controller	MF	MF-7802	MF780208416	N/A
7	Measurement Software	Farad	EZ-EMC Ver.NB-03A1-01	N/A	N/A

Frequency Stability Measurement					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Spectrum Analyzer	R&S	FSP40	100185	Aug. 11, 2019
2	Const Temp. & Humidity Chamber	Bell	BTH-50C	20170306001	Mar. 11, 2019

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 Measurement Photos



Radiated emission test photos
9KHz to 30MHz



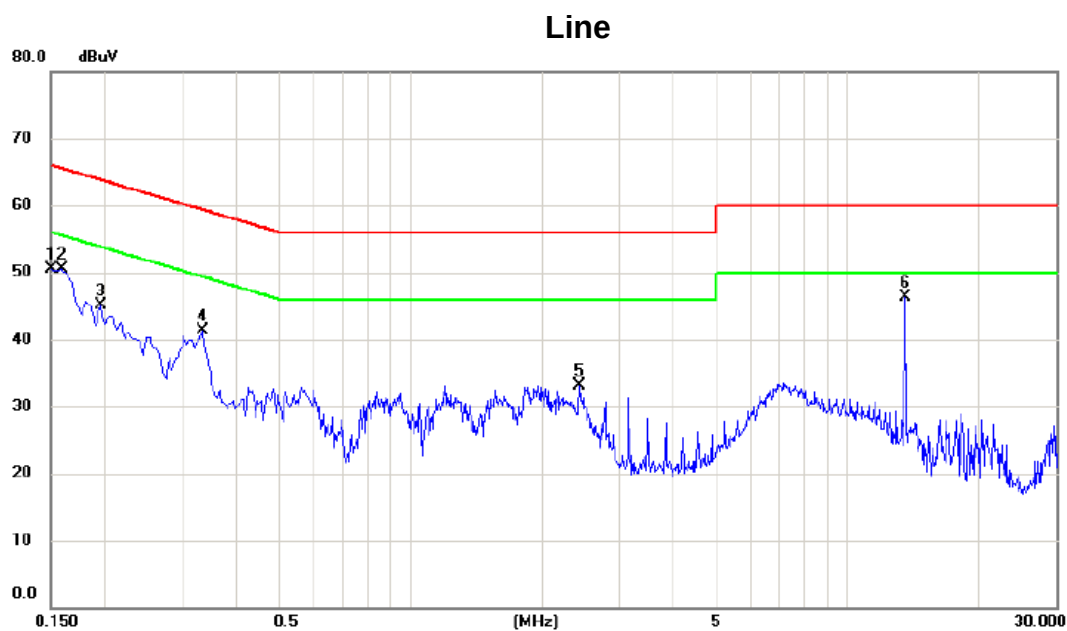
**Radiated emission test photos
30MHz to 1000MHz**



APPENDIX A - CONDUCTED EMISSION

Test Mode:

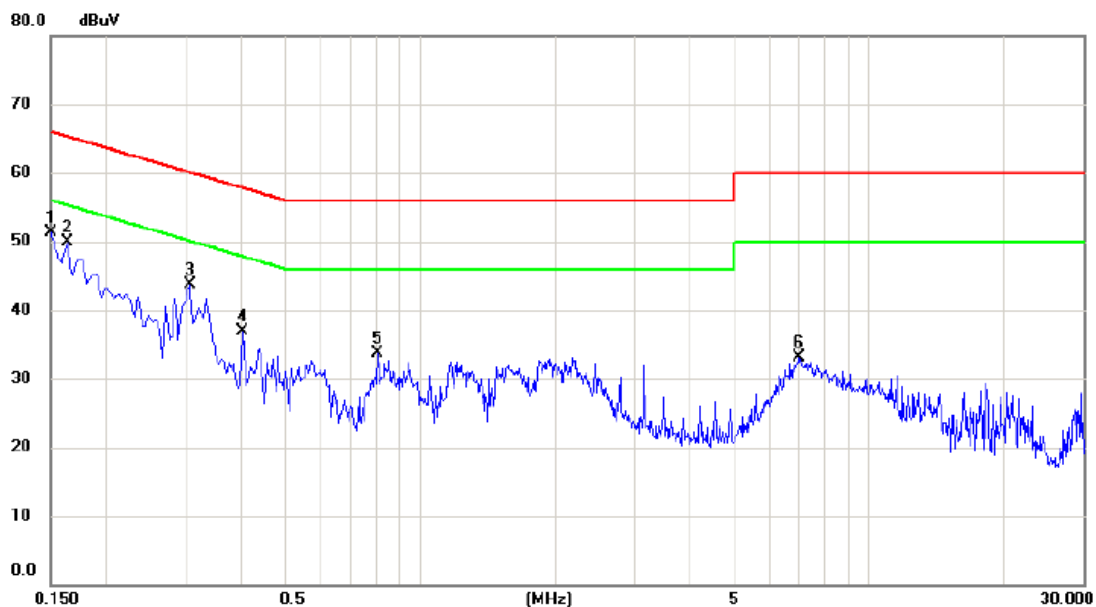
TX Mode



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Margin dB	Detector	Comment
1		0.1500	40.64	9.82	50.46	66.00	-15.54	peak	
2		0.1590	40.64	9.82	50.46	65.52	-15.06	peak	
3		0.1950	35.35	9.82	45.17	63.82	-18.65	peak	
4		0.3345	31.57	9.81	41.38	59.34	-17.96	peak	
5		2.4405	23.17	10.02	33.19	56.00	-22.81	peak	
6	*	13.5600	35.66	10.68	46.34	60.00	-13.66	peak	

Test Mode: TX Mode

Neutral

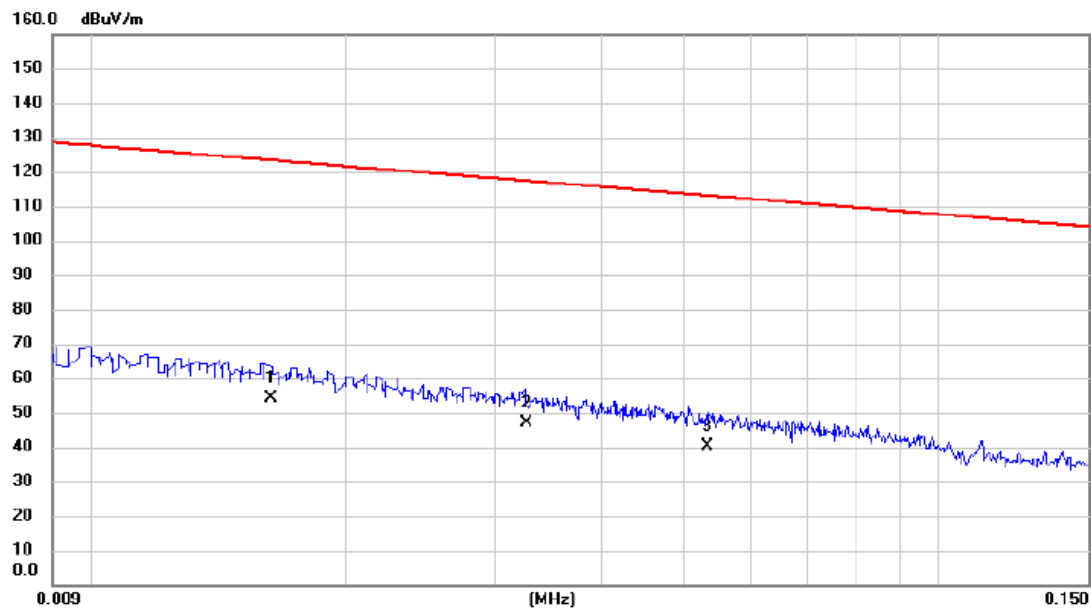


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Margin dB	Detector	Comment
1	*	0.1500	41.42	9.91	51.33	66.00	-14.67	peak	
2		0.1635	40.08	9.91	49.99	65.28	-15.29	peak	
3		0.3075	33.71	9.93	43.64	60.04	-16.40	peak	
4		0.4020	26.91	9.95	36.86	57.81	-20.95	peak	
5		0.8024	23.60	10.09	33.69	56.00	-22.31	peak	
6		6.9900	22.43	10.59	33.02	60.00	-26.98	peak	

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

Test Mode: 13.56MHz Transmit

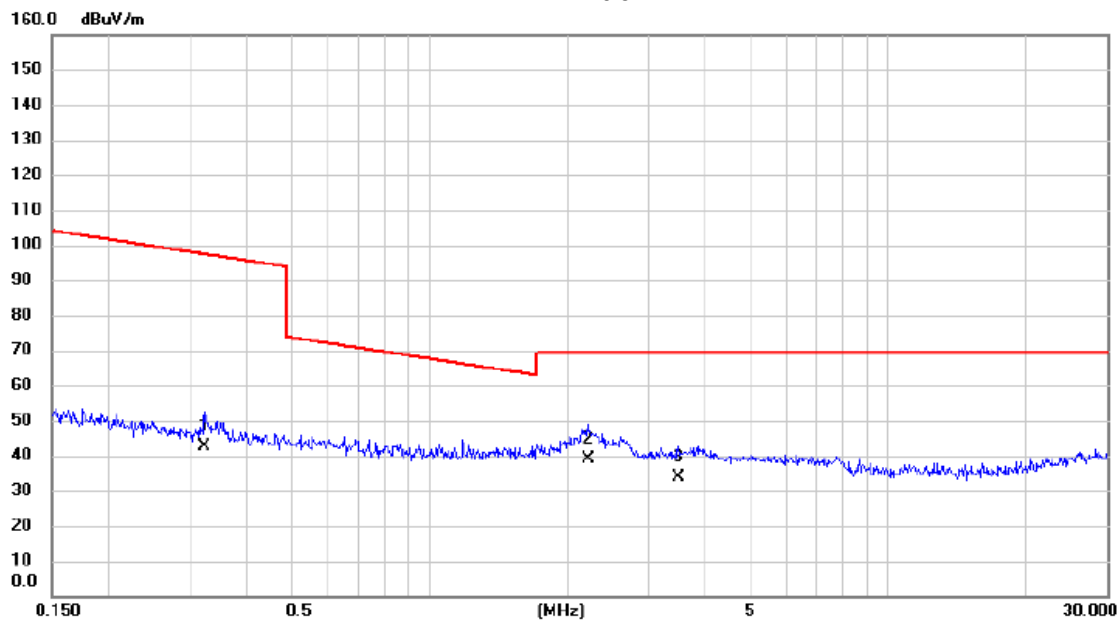
Ant 0°



No.	Mk.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	*	0.0163	34.13	20.10	54.23	123.36	-69.13	AVG	
2		0.0326	27.73	19.24	46.97	117.34	-70.37	AVG	
3		0.0533	21.60	18.65	40.25	113.07	-72.82	AVG	

Test Mode: 13.56MHz Transmit

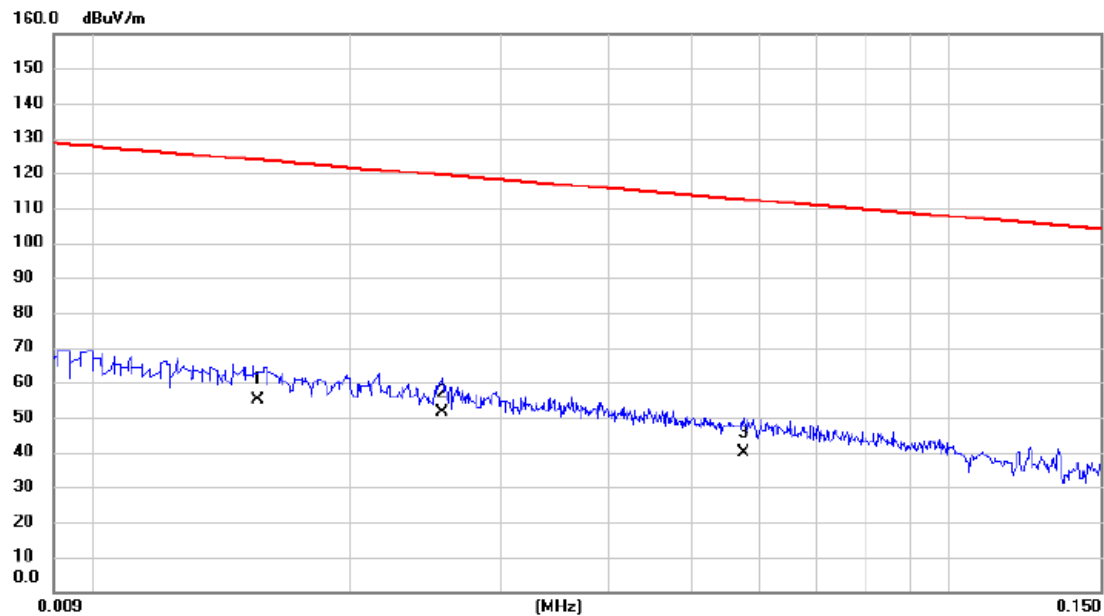
Ant 0°



No.	Mk.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		0.3234	26.18	16.60	42.78	97.41	-54.63	AVG	
2	*	2.2132	23.37	15.45	38.82	69.54	-30.72	QP	
3		3.4906	18.58	15.09	33.67	69.54	-35.87	QP	

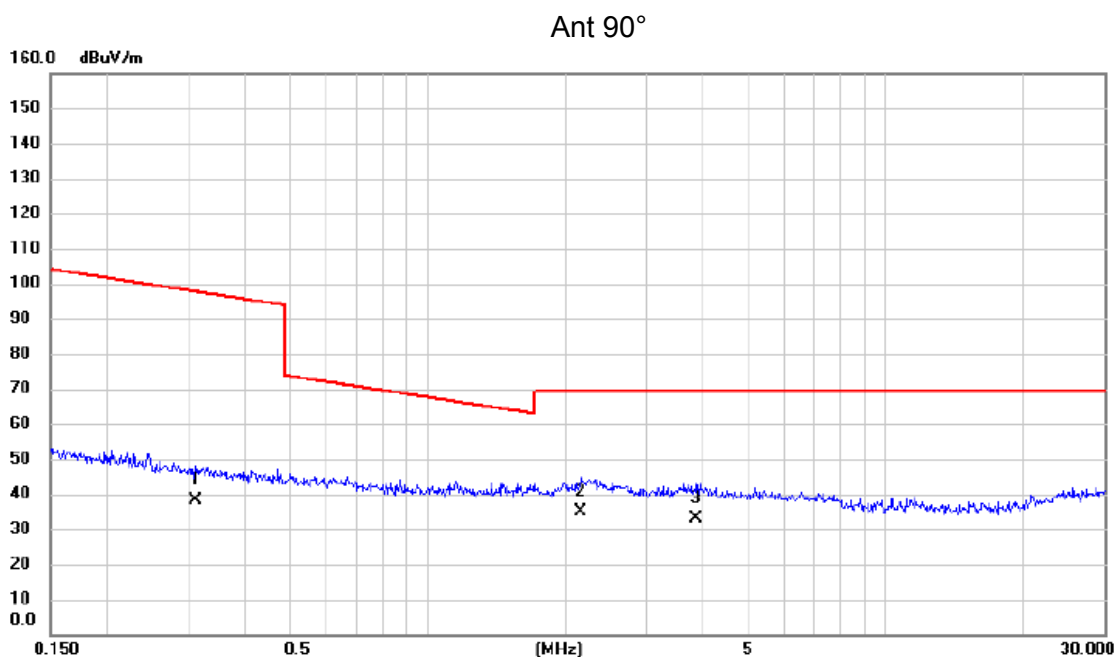
Test Mode: 13.56MHz Transmit

Ant 90°



No.	Mk.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		0.0156	34.98	20.19	55.17	123.74	-68.57	AVG	
2	*	0.0256	32.13	19.45	51.58	119.44	-67.86	AVG	
3		0.0575	21.32	18.58	39.90	112.41	-72.51	AVG	

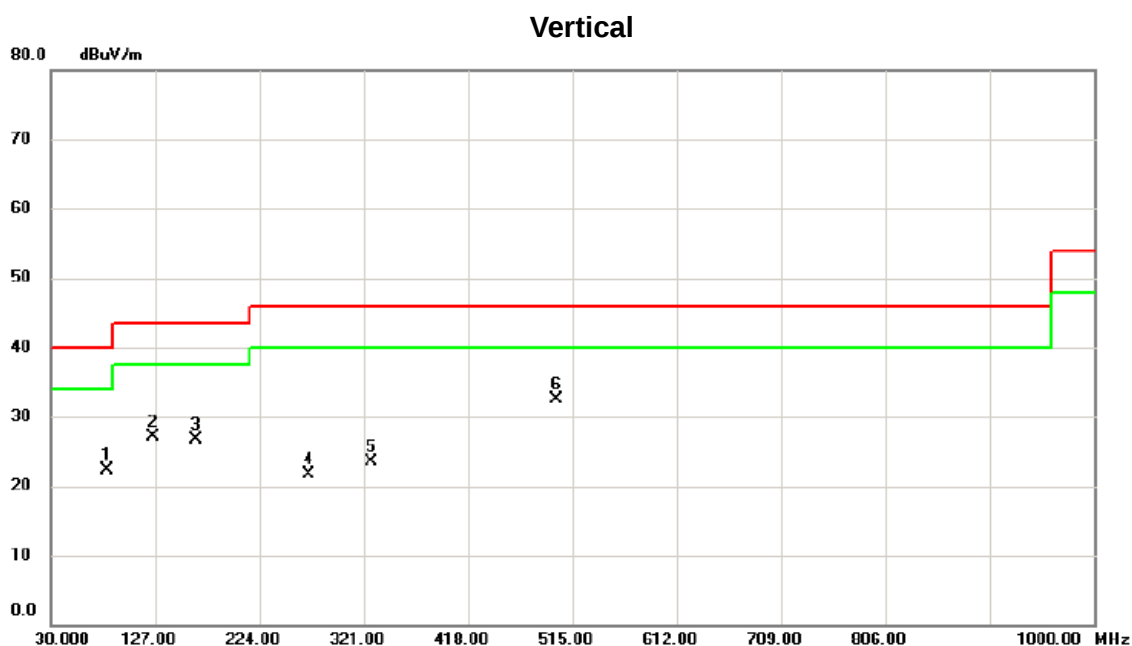
Test Mode: 13.56MHz Transmit



No.	Mk.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		0.3116	21.47	16.61	38.08	97.73	-59.65	AVG	
2	*	2.1552	19.63	15.46	35.09	69.54	-34.45	QP	
3		3.8603	18.20	14.99	33.19	69.54	-36.35	QP	

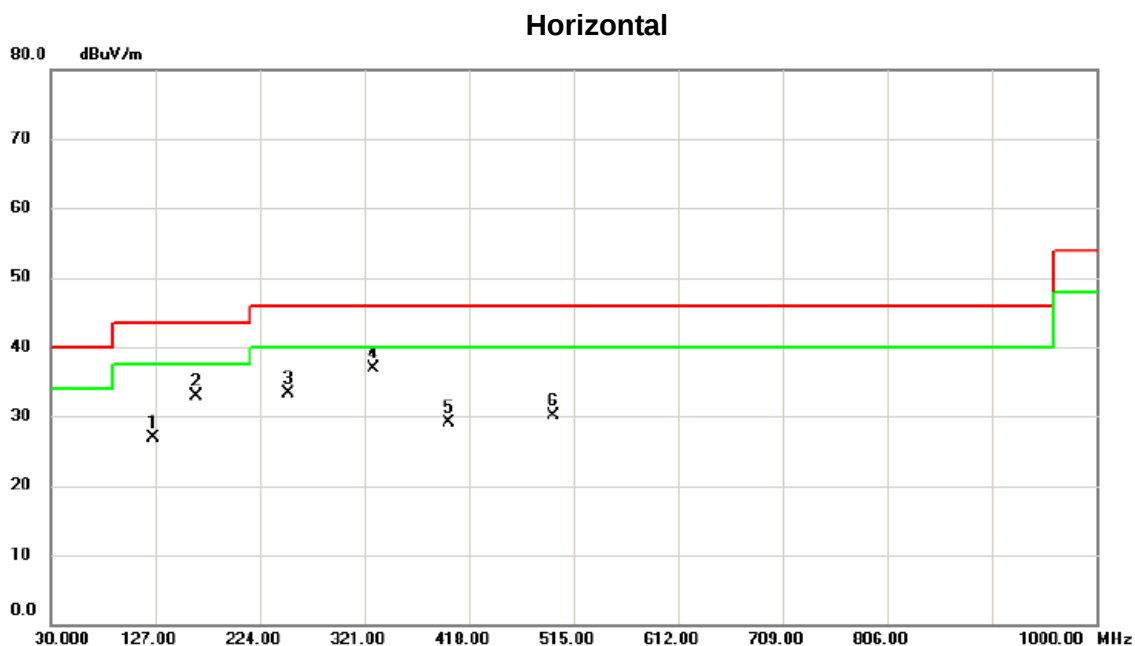
APPENDIX C - RADIATED EMISSION (30MHZ TO 1000MHZ)

Test Mode:	13.56MHz Transmit
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No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		82.3800	41.79	-19.41	22.38	40.00	-17.62	peak	
2		125.0600	41.82	-14.67	27.15	43.50	-16.35	peak	
3		164.8300	38.34	-11.60	26.74	43.50	-16.76	peak	
4		269.5900	35.00	-13.31	21.69	46.00	-24.31	peak	
5		327.7900	35.11	-11.51	23.60	46.00	-22.40	peak	
6	*	500.4500	41.76	-9.20	32.56	46.00	-13.44	peak	

Test Mode: 13.56MHz Transmit

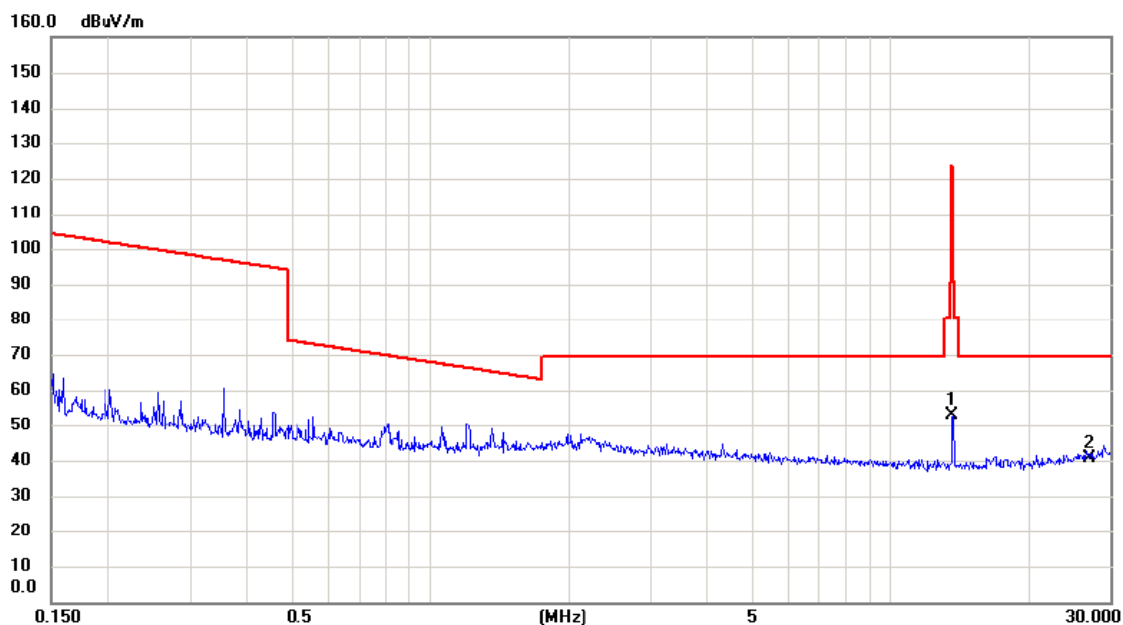


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		125.0600	41.60	-14.67	26.93	43.50	-16.57	peak	
2		164.8300	44.41	-11.60	32.81	43.50	-10.69	peak	
3		250.1900	48.36	-15.02	33.34	46.00	-12.66	peak	
4	*	329.7300	48.35	-11.54	36.81	46.00	-9.19	peak	
5		399.5700	39.21	-10.10	29.11	46.00	-16.89	peak	
6		496.5700	39.22	-9.15	30.07	46.00	-15.93	peak	

APPENDIX D - RADIATED EMISSION (FCC PART 15.225)

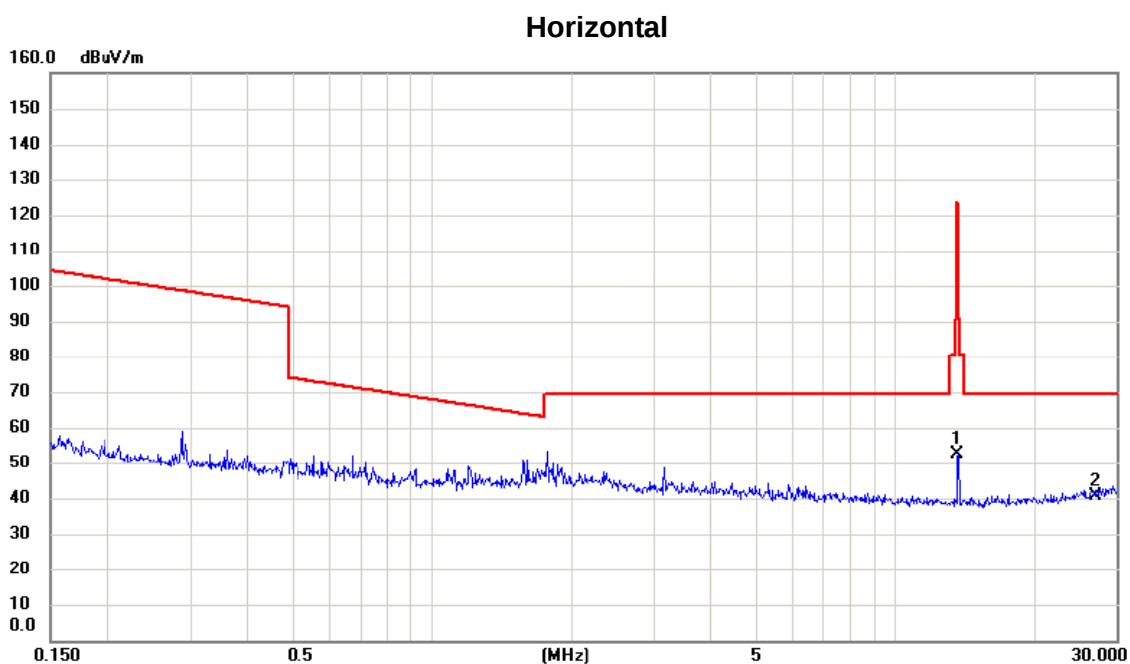
Test Mode: 13.56MHz Transmit

Vertical



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		13.5600	38.36	14.66	53.02	124.00	-70.98	peak	
2	*	27.1200	21.30	19.48	40.78	69.50	-28.72	peak	

Test Mode: 13.56MHz Transmit



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		13.5600	37.81	14.66	52.47	124.00	-71.53	peak	
2	*	27.1200	21.25	19.48	40.73	69.50	-28.77	peak	

APPENDIX E - FREQUENCY STABILITY MEASUREMENT

Test Mode:	13.56MHz Transmit
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Frequency Stability Versus Environmental Temperature						
	Temperature (°C)	Voltage (AC)	Frequency (MHz)	Frequency Error (kHz)	Limit (kHz)	Result
0 min	25	120V	13.56	-	-	-
	50	120V	13.561	1	+/- 1.356	PASS
2 min	-20	120V	13.5605	0.5	+/- 1.356	PASS
	50	120V	13.5607	0.7	+/- 1.356	PASS
5 min	-20	120V	13.5501	0.1	+/- 1.356	PASS
	50	120V	13.5606	0.6	+/- 1.356	PASS
10 min	-20	120V	13.5598	-0.2	+/- 1.356	PASS
	50	120V	13.5604	0.4	+/- 1.356	PASS
	-20	120V	13.5598	-0.2	+/- 1.356	PASS

Frequency Stability Versus Input Voltage						
Temperature (°C)	Voltage (AC)		Frequency (MHz)	Frequency Error (kHz)	Limit (kHz)	Result
25	V-nom	120	13.56	-	-	-
25	V-min	108	13.5608	0.8	+/- 1.356	PASS
25	V-max	138	13.5604	0.4	+/- 1.356	PASS