TEST REPORT

Reference No.	:	WTX21X05045984W-1
FCC ID	:	2AVI4-DT-G5
Applicant	:	Shenzhen Digtec Technology Co.,LTD
Address	:	5F (East Zone), B4, Dong Long Xing Technology Park, Hua Ning Road, Long Hua, Da Lang, Shenzhen, China
Product Name	:	Fast Wireless Charger
Test Model	:	DT-G5
Standards	:	FCC Part 18
Date of Receipt sample	:	May. 13, 2021
Date of Test	:	May. 13, 2021 to May. 21, 2021
Date of Issue	:	May. 21, 2021
Test Result	:	**Pass**

Remarks:
The results shown in this test report refer only to the sample(s) tested, this test report cannot be reproduced, except in full, without prior written permission of the company. The report would be invalid without specific stamp of test institute and the signatures of compiler and approver.

Prepared By:

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Jason Su / Project Engineer	Lion Cai / RF Manager	Silin Chen / Manager

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Report version

Version No.	Date of issue	Description
Rev.00	May. 21, 2021	Original
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1. GENERAL INFORMATION

1.1 Product Description for Equipment Under Test (EUT)

Client Information

Applicant:	Shenzhen Digtec Technology Co.,LTD
Address of applicant:	5F (East Zone), B4, Dong Long Xing Technology Park, Hua Ning Road, Long Hua, Da Lang, Shenzhen, China
Manufacturer:	Shenzhen Digtec Technology Co.,LTD
Address of manufacturer:	5F (East Zone), B4, Dong Long Xing Technology Park, Hua Ning Road, Long Hua, Da Lang, Shenzhen, China

General Description of EUT	
Product Name:	Fast Wireless Charger
Trade Name:	Digtec
Model No.:	DT-G5
Adding Model(s):	/
Note: The test data is gathered from a production sample, provided by the manufacturer.	

Technical Characteristics of EUT	
Frequency Range:	110~205kHz
Antenna Type:	Coil Antenna
Rated Voltage:	DC5V / DC9V /DC12V
Rated Current:	2A / 2.2A
Rated Power:	7.5W / 10W / 15W

1.2 Test Standards

The tests were performed according to following standards:
FCC Part 18 Subpart C: Industrial, Scientific, and medical medical equipment.

ANSI C63.4-2014: American National Standard for Methods of Measurement of Radio-Noise Emissions from Low-Voltage Electrical and Electronic Equipment in the range of 9 kHz to 40 GHz.

Maintenance of compliance is the responsibility of the manufacturer. Any modification of the product, which result in lowering the emission, should be checked to ensure compliance has been maintained.

1.3 Test Methodology

All measurements contained in this report were conducted with ANSI C63.4-2014, American National Standard for Methods of Measurement of Radio-Noise Emissions from Low-Voltage Electrical and Electronic Equipment in the range of 9 kHz to 40 GHz.

1.4 Test Facility

Laboratory: Waltek Testing Group (Shenzhen) Co., Ltd.
Address: 1/F., Room 101, Building 1, Hongwei Industrial Park, Liuxian 2nd Road, Bao'an District, Shenzhen, P.R.C. (518101）

FCC – Registration No.: 125990
Waltek Testing Group (Shenzhen) Co., Ltd. EMC Laboratory has been registered and fully described in a report filed with the FCC (Federal Communications Commission). The acceptance letter from the FCC is maintain ed in our files. The Designation Number is CN5010, and Test Firm Registration Number is 125990.

Industry Canada (IC) Registration No.: 11464A
The 3m Semi-anechoic chamber of Waltek Testing Group (Shenzhen) Co., Ltd. has been registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing with Registration No.: 11464A.

1.5 EUT Setup and Operation Mode

The equipment under test (EUT) was configured to measure its highest possible emission level. The test modes were adapted according to the operation manual for use, more detailed description as follows:

Test Mode List:

Test Mode	Description	Remark	Power Supply Mode
TM1	Wireless Charging	/	Input DC5V/2A; Output:7.5W
TM2	Wireless Charging	/	Input DC9V/2A; Output:10W
TM3	Wireless Charging	/	Input DC12V/2.2A; Output:15W

EUT Cable List and Details

Cable Description	Length (M)	Shielded/Unshielded	With Core/Without Core
USB Cable	1.0	Unshielded	Without Ferrite

Auxiliary Equipment List and Details

Description	Manufacturer	Model	Serial Number
Adapter	Xiaomi	MDY-08-ES	/

Special Cable List and Details

Cable Description	Length (M)	Shielded/Unshielded	With Core/Without Core
/	/	/	/

1.6 Measurement Uncertainty

Measurement uncertainty		
Parameter	Conditions	Uncertainty
Conducted Emissions	Conducted	9-150kHz ±3.74dB
		0.15-30MHz ±3.34dB
Radiated Emissions	Radiated	30-200MHz ±4.52dB
		0.2-1GHz ±5.56dB
		1-6GHz ±3.84dB
		6-18GHz ±3.92dB

1.7 Test Equipment List and Details

Description	Manufacturer	Model	Serial No.	Cal Date	Due Date
Spectrum Analyzer	Rohde & Schwarz	FSP	836079/035	2021-03-30	2022-03-29
EMI Test Receiver	Rohde & Schwarz	ESVB	825471/005	2021-04-12	2022-04-11
Amplifier	Agilent	8447F	3113A06717	2021-04-12	2022-04-11
Amplifier	C&D	PAP-1G18	2002	2021-04-12	2022-04-11
Trilog Broadband Antenna	Schwarz beck	VULB9163	9163-333	2021-03-20	2023-03-19
Horn Antenna	ETS	3117	00086197	2021-03-19	2023-03-18
Loop Antenna	Schwarz beck	FMZB 1516	9773	2021-03-20	2023-03-19
Trilog Broadband Antenna	Schwarz beck	VULB9163(B)	9163-635	2021-04-09	2023-04-08
Amplifier	Agilent	8447D	2944A10179	2021-04-12	2022-04-11
Pulse Limiter	Rohde & Schwarz	ESH3-Z2	100911	2021-04-15	2022-04-14

Software List			
Description	Manufacturer	Model	Version
EMI Test Software (Radiated Emission)*	Farad	EZ-EMC	RA-03A1
EMI Test Software (Conducted Emission)*	Farad	EZ-EMC	RA-03A1

*Remark: indicates software version used in the compliance certification testing

2. SUMMARY OF TEST RESULTS

FCC RULES	DESCRIPTION OF TEST	RESULT
§ 18.307 (b)	Conducted Emission	Compliant
§ 18.305 (b)	Radiated Emission	Compliant

3. Conducted Emissions

3.1 Standard Applicable

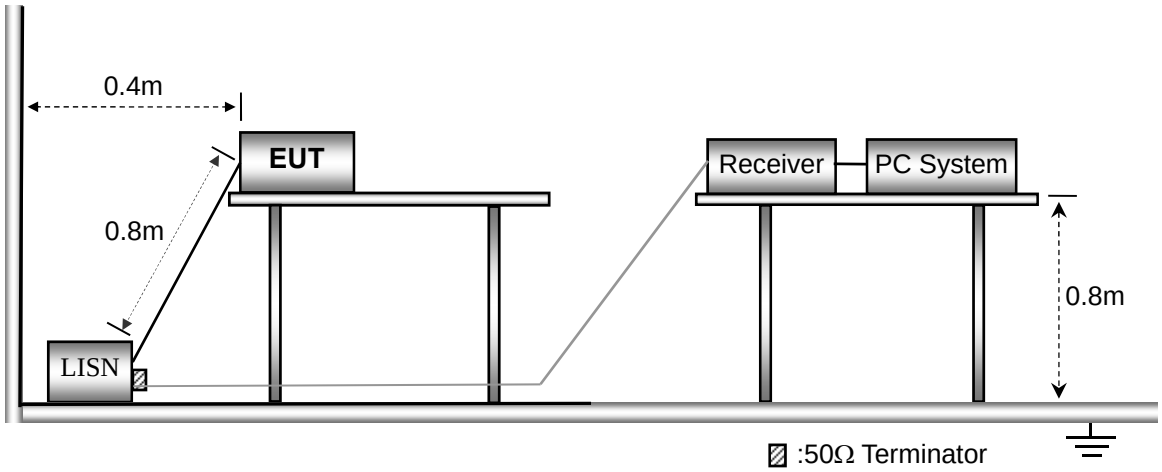
According to FCC 18.307(b), the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies shall not exceed the limits in the following tables:

Frequency (MHz)	Conducted limit (dBμV)	
	Quasi-peak	Average
0.15-0.5	66 to 56	56 to 46
0.5-5	56	46
5-30	60	50

3.2 Test Procedure

The setup of EUT is according with per ANSI C63.4-2014 measurement procedure. The specification used was with the FCC Part 18.307 Limit.
The external I/O cables were draped along the test table and formed a bundle 30 to 40 cm long in the middle.
The spacing between the peripherals was 10 cm.

3.3 Basic Test Setup Block Diagram



3.4 Environmental Conditions

Temperature:	23.5° C
Relative Humidity:	54%
ATM Pressure:	1016 mbar

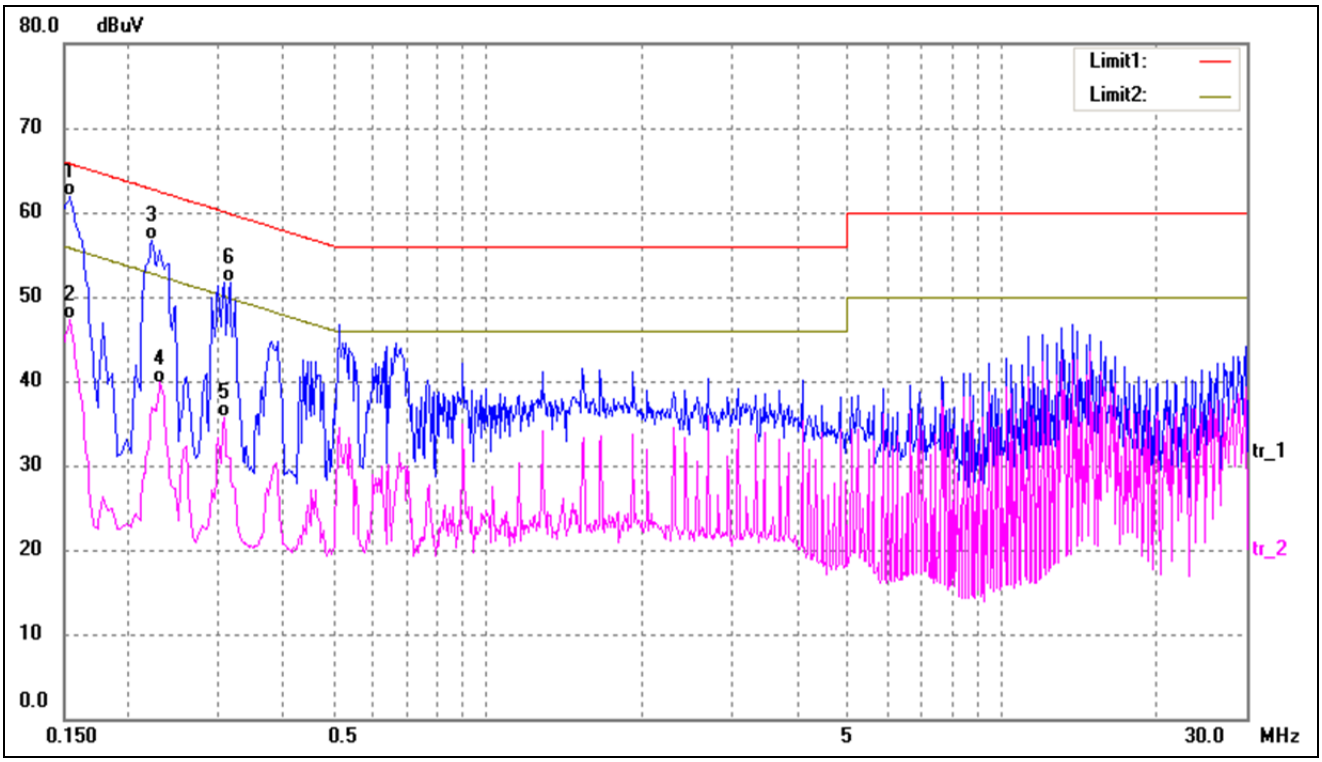
3.5 Test Receiver Setup

During the conducted emission test, the test receiver was set with the following configurations:

Start Frequency ..... 150 kHz
Stop Frequency..... 30 MHz
Sweep Speed ..... Auto
IF Bandwidth..... 10 kHz
Quasi-Peak Adapter Bandwidth ..... 9 kHz
Quasi-Peak Adapter Mode ..... Normal

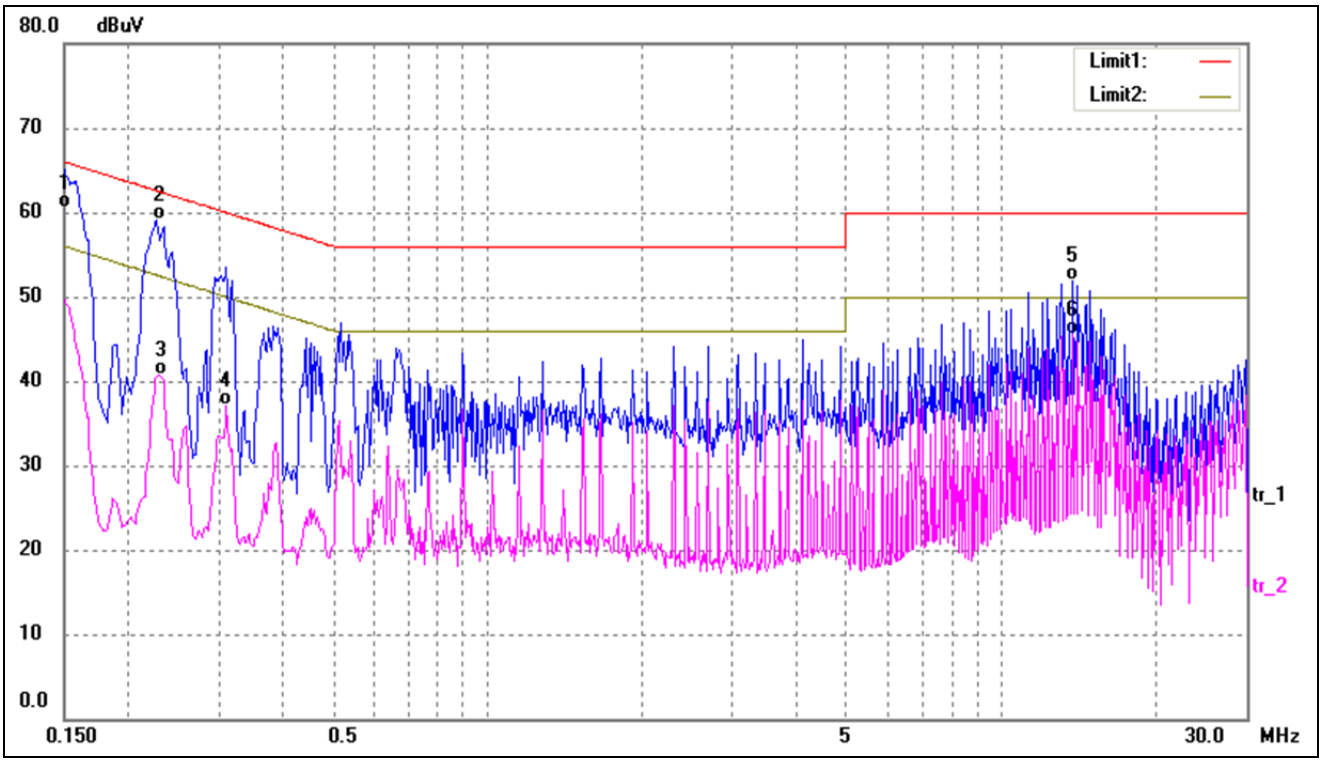
3.6 Summary of Test Results/Plots

Test mode:	TM1	Polarity:	Line



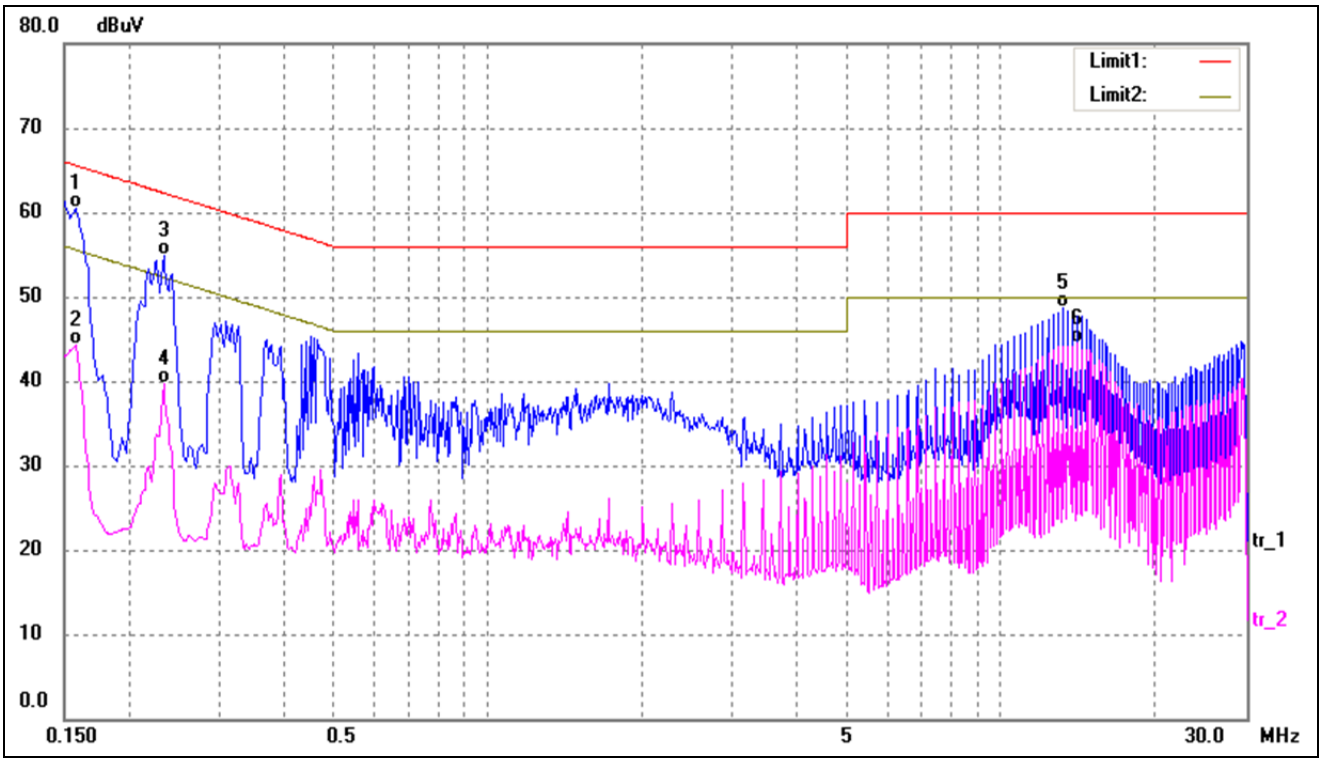
No.	Frequency	Reading	Correct	Result	Limit	Margin	Detector
	(MHz)	(dBuV)	(dB)	(dBuV)	(dBuV)	(dB)	
1*	0.1539	51.59	10.25	61.84	65.78	-3.94	QP
2	0.1539	37.05	10.25	47.30	55.78	-8.48	AVG
3	0.2220	46.52	10.26	56.78	62.74	-5.96	QP
4	0.2300	29.54	10.26	39.80	52.45	-12.65	AVG
5	0.3060	25.40	10.24	35.64	50.08	-14.44	AVG
6	0.3140	41.42	10.25	51.67	59.86	-8.19	QP

Test mode:	TM1	Polarity:	Neutral



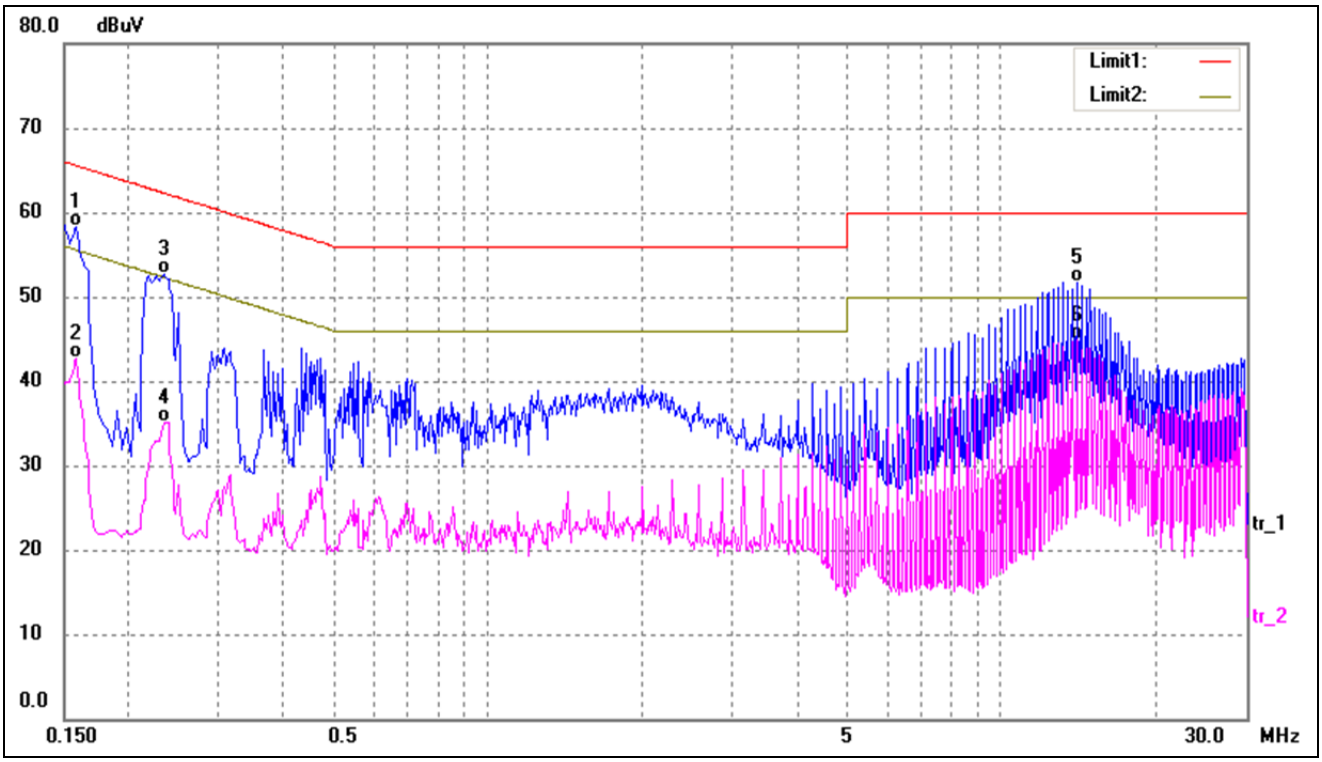
No.	Frequency	Reading	Correct	Result	Limit	Margin	Detector
	(MHz)	(dBuV)	(dB)	(dBuV)	(dBuV)	(dB)	
1	0.1500	50.32	10.25	60.57	65.99	-5.42	QP
2*	0.2260	48.77	10.26	59.03	62.59	-3.56	QP
3	0.2300	30.49	10.26	40.75	52.45	-11.70	AVG
4	0.3100	26.95	10.24	37.19	49.97	-12.78	AVG
5	13.8300	41.43	10.51	51.94	60.00	-8.06	QP
6	13.8300	34.93	10.51	45.44	50.00	-4.56	AVG

Test mode:	TM2	Polarity:	Line



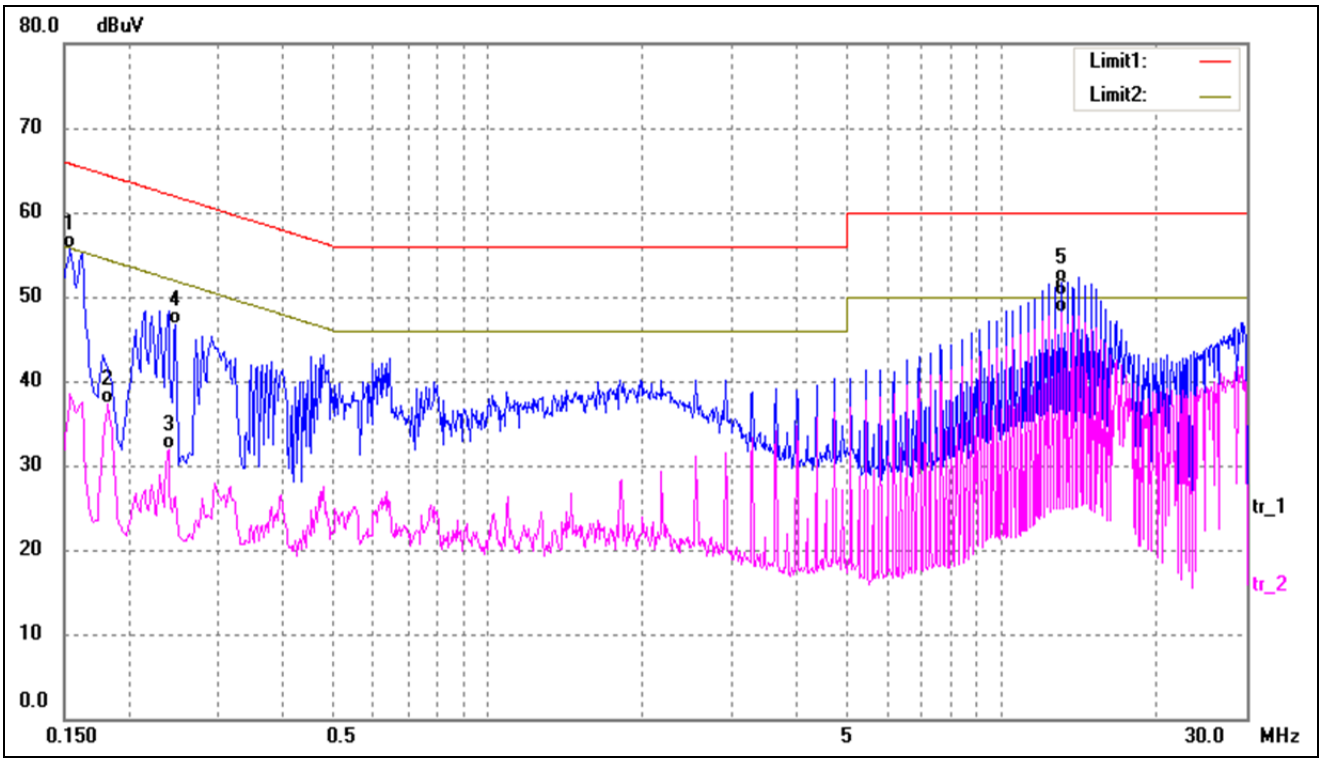
No.	Frequency	Reading	Correct	Result	Limit	Margin	Detector
	(MHz)	(dBuV)	(dB)	(dBuV)	(dBuV)	(dB)	
1*	0.1580	50.32	10.25	60.57	65.56	-4.99	QP
2	0.1580	34.01	10.25	44.26	55.56	-11.30	AVG
3	0.2340	44.69	10.26	54.95	62.30	-7.35	QP
4	0.2340	29.47	10.26	39.73	52.30	-12.57	AVG
5	13.1860	38.30	10.47	48.77	60.00	-11.23	QP
6	14.0460	33.97	10.52	44.49	50.00	-5.51	AVG

Test mode:	TM2	Polarity:	Neutral



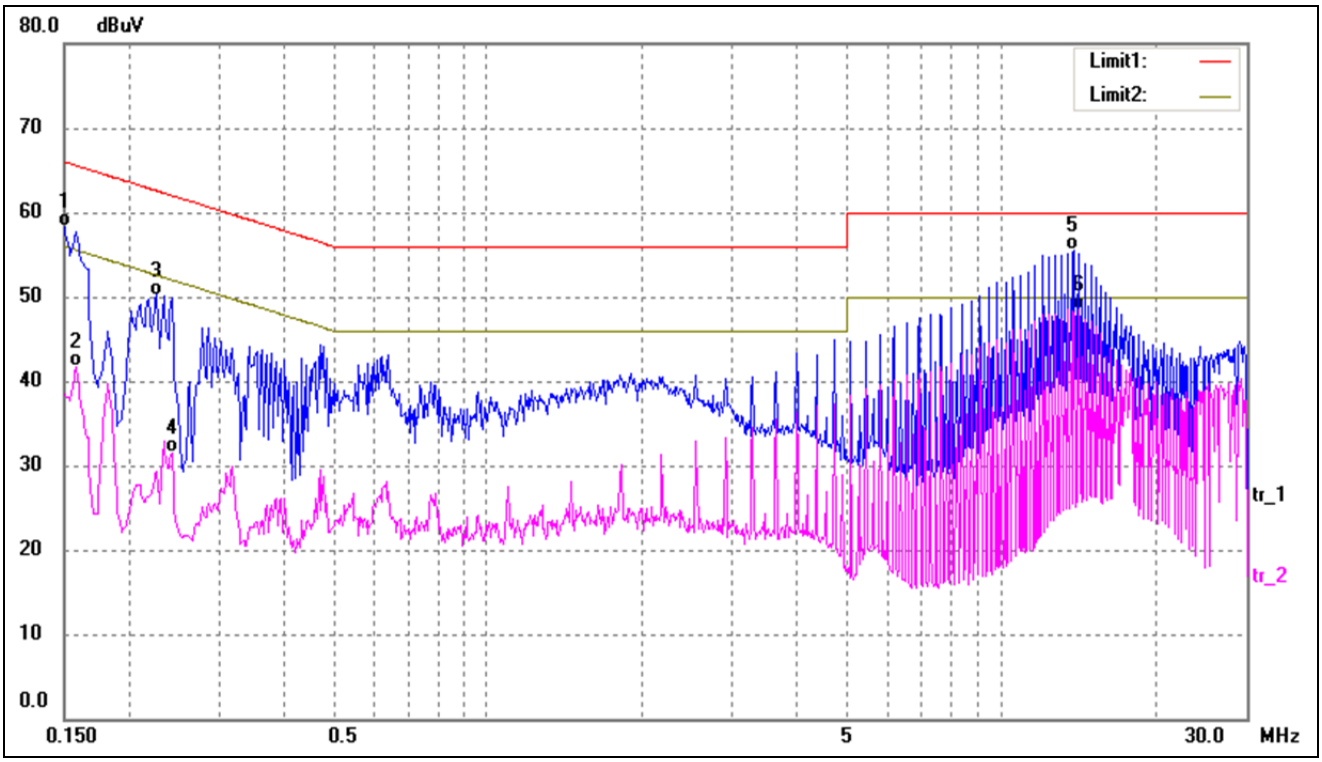
No.	Frequency	Reading	Correct	Result	Limit	Margin	Detector
	(MHz)	(dBuV)	(dB)	(dBuV)	(dBuV)	(dB)	
1	0.1580	48.01	10.25	58.26	65.56	-7.30	QP
2	0.1580	32.43	10.25	42.68	55.56	-12.88	AVG
3	0.2340	42.46	10.26	52.72	62.30	-9.58	QP
4	0.2340	24.82	10.26	35.08	52.30	-17.22	AVG
5	14.0420	41.25	10.52	51.77	60.00	-8.23	QP
6*	14.0420	34.37	10.52	44.89	50.00	-5.11	AVG

Test mode:	TM3	Polarity:	Line



No.	Frequency	Reading	Correct	Result	Limit	Margin	Detector
	(MHz)	(dBuV)	(dB)	(dBuV)	(dBuV)	(dB)	
1	0.1539	45.49	10.25	55.74	65.78	-10.04	QP
2	0.1819	27.10	10.26	37.36	54.39	-17.03	AVG
3	0.2380	21.63	10.26	31.89	52.16	-20.27	AVG
4	0.2460	36.38	10.26	46.64	61.89	-15.25	QP
5	13.1059	41.18	10.46	51.64	60.00	-8.36	QP
6*	13.1059	37.61	10.46	48.07	50.00	-1.93	AVG

Test mode:	TM3	Polarity:	Neutral



No.	Frequency	Reading	Correct	Result	Limit	Margin	Detector
	(MHz)	(dBuV)	(dB)	(dBuV)	(dBuV)	(dB)	
1	0.1500	48.06	10.25	58.31	65.99	-7.68	QP
2	0.1580	31.48	10.25	41.73	55.56	-13.83	AVG
3	0.2260	39.94	10.26	50.20	62.59	-12.39	QP
4	0.2420	21.22	10.26	31.48	52.02	-20.54	AVG
5	13.8420	45.01	10.51	55.52	60.00	-4.48	QP
6*	14.2020	37.99	10.53	48.52	50.00	-1.48	AVG

4. Radiated Emissions

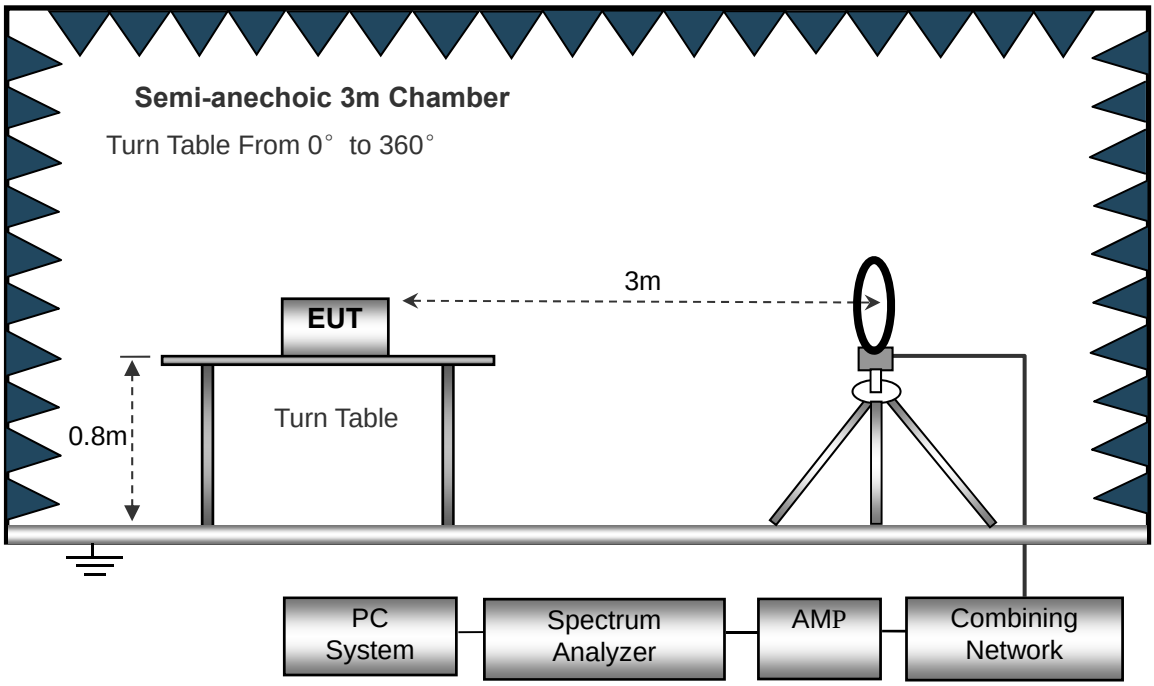
4.1 Test Procedure

The setup of EUT is according with per ANSI C63.4-2014 measurement procedure. The specification used was with the FCC Part 18.305 Limit.

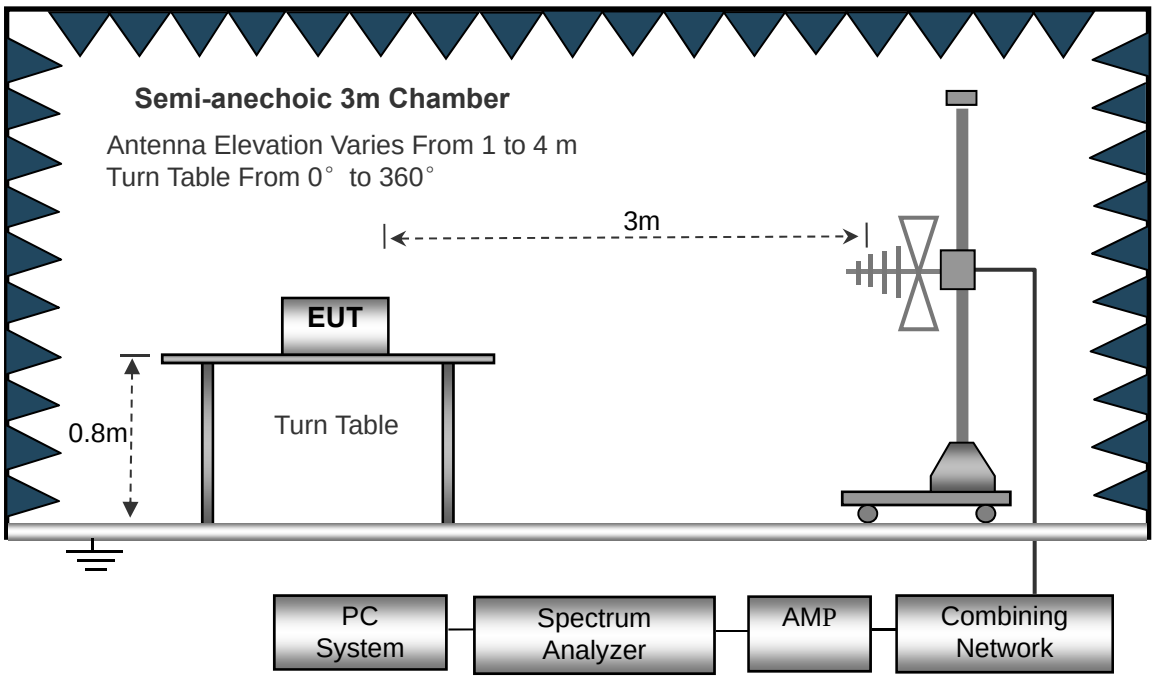
The external I/O cables were draped along the test table and formed a bundle 30 to 40 cm long in the middle.

The spacing between the peripherals was 10 cm.

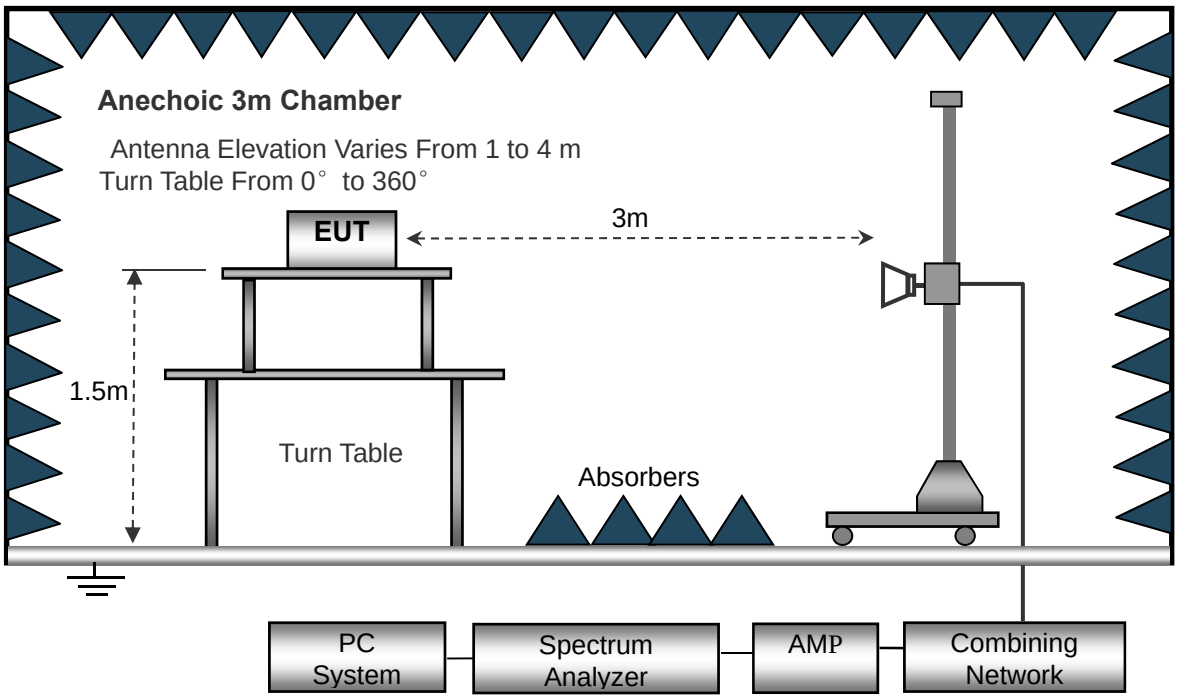
The test setup for emission measurement below 30MHz..



The test setup for emission measurement from 30 MHz to 1 GHz..



The test setup for emission measurement above 1 GHz..



4.2 Test Receiver Setup

Frequency :9kHz-30MHz	Frequency :30MHz-1GHz	Frequency :Above 1GHz
RBW=10KHz,	RBW=120KHz,	RBW=1MHz,
VBW =30KHz	VBW=300KHz	VBW=3MHz(Peak), 10Hz(AV)
Sweep time= Auto	Sweep time= Auto	Sweep time= Auto
Trace = max hold	Trace = max hold	Trace = max hold
Detector function = peak	Detector function = peak, QP	Detector function = peak, AV

4.3 Corrected Amplitude & Margin Calculation

The Corrected Amplitude is calculated by adding the Antenna Factor and the Cable Factor, and subtracting the Amplifier Gain from the Amplitude reading. The basic equation is as follows:

Corr. Ampl. = Indicated Reading – Corr. Factor

The "**Margin**" column of the following data tables indicates the degree of compliance with the applicable limit. For example, a margin of -6dBμV means the emission is 6dBμV below the maximum limit for Any non-ISM frequency device. The equation for margin calculation is as follows:

Margin = Corr. Ampl. – FCC Part 18.305 Limit

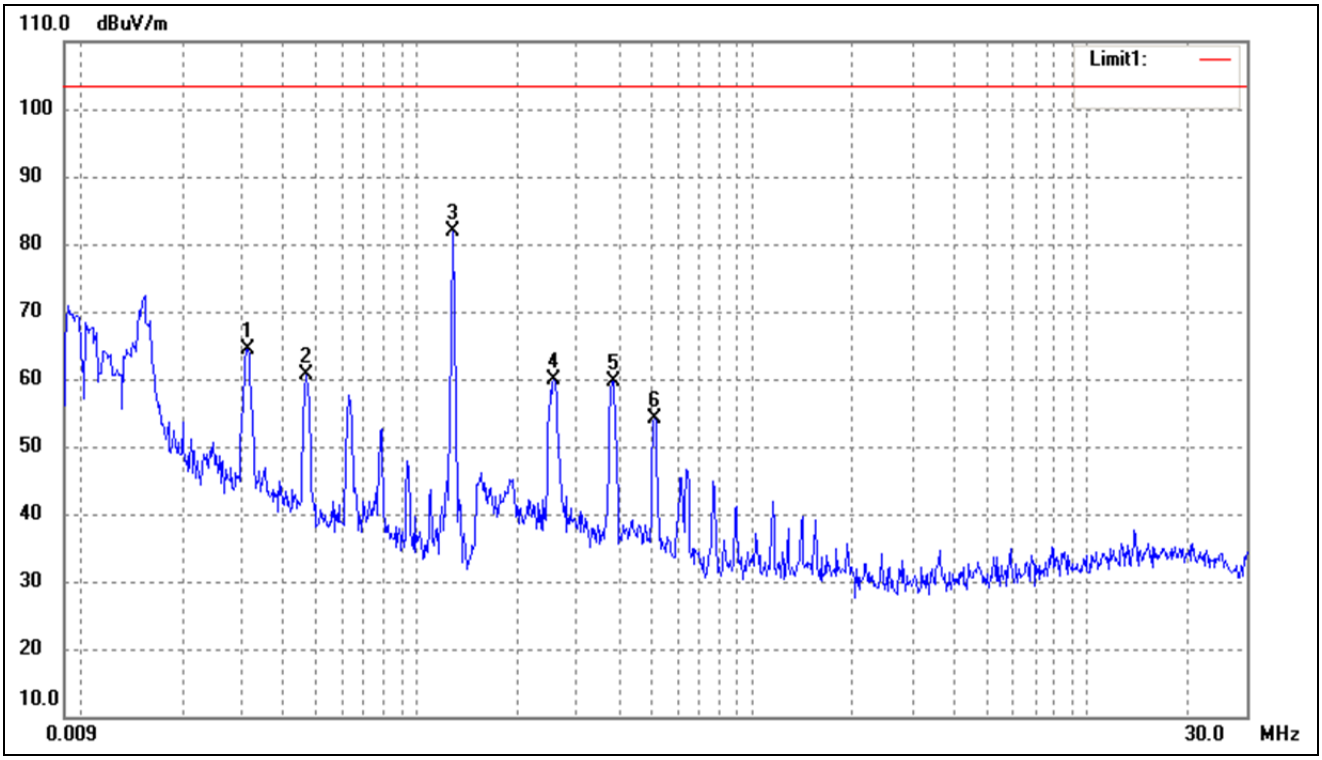
4.4 Environmental Conditions

Temperature:	23.5 °C
Relative Humidity:	54 %
ATM Pressure:	1011 mbar

4.5 Summary of Test Results/Plots

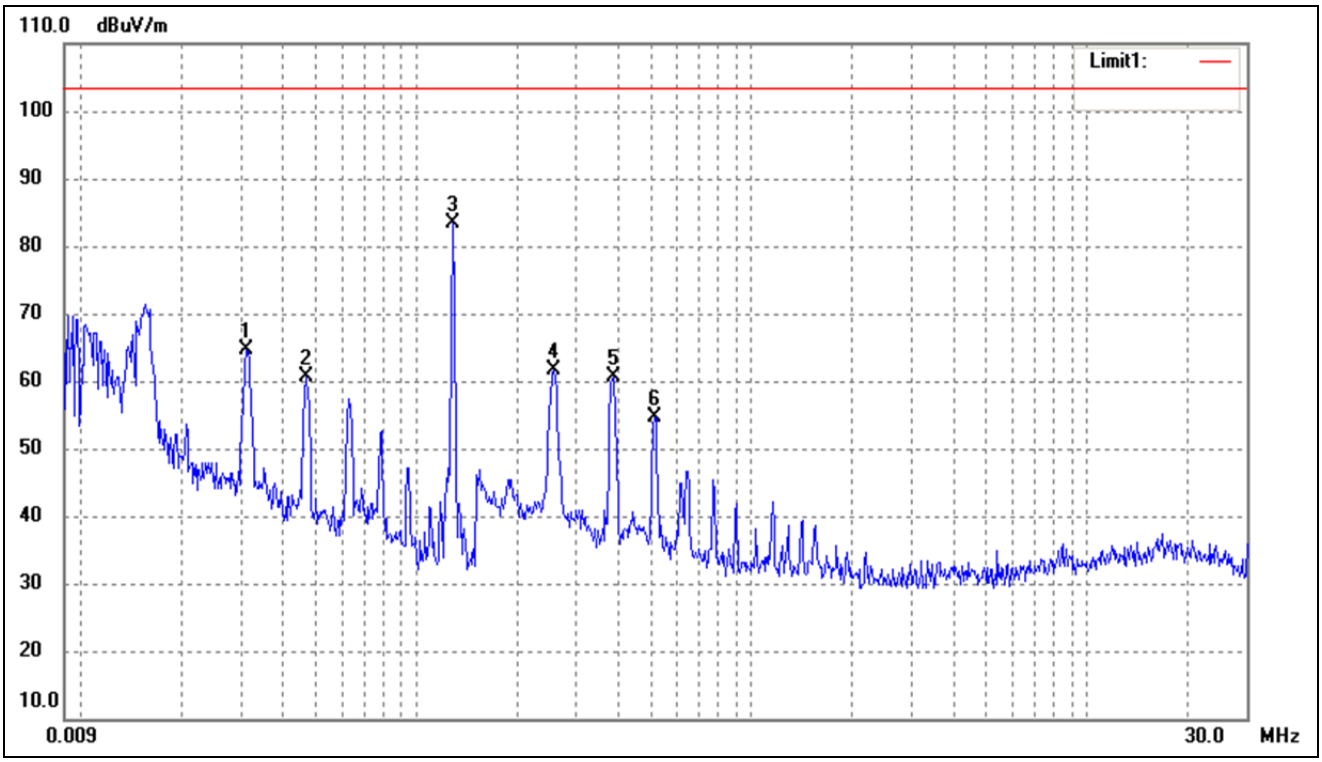
Plot of Radiated Emissions Test Data (Below 30MHz)

Test mode:	TM1	Polarity:	Horizontal



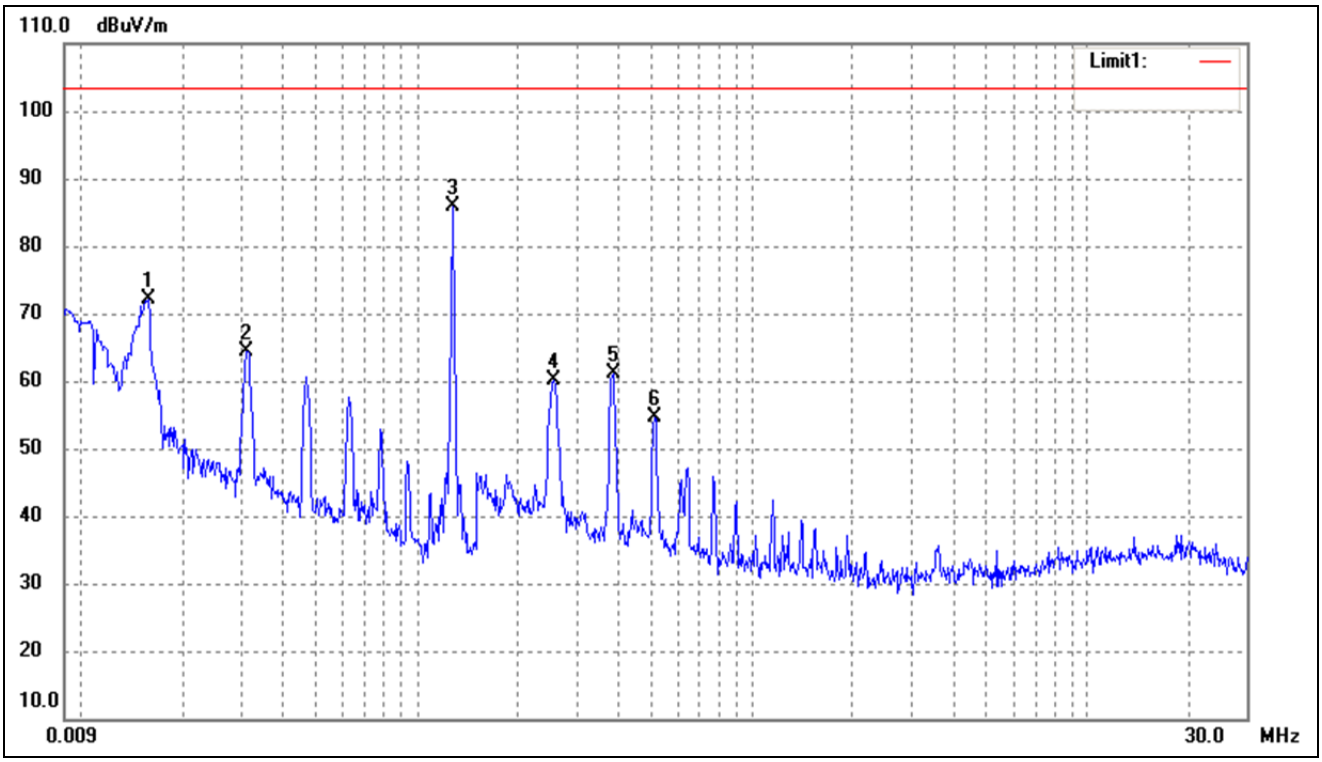
No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	( )	(cm)	
1	0.0313	70.49	-6.03	64.46	103.50	-39.04	-	-	peak
2	0.0468	65.53	-4.95	60.58	103.50	-42.92	-	-	peak
3	0.1281	87.00	-5.14	81.86	103.50	-21.64	-	-	peak
4	0.2562	67.43	-7.44	59.99	103.50	-43.51	-	-	peak
5	0.3832	67.51	-7.83	59.68	103.50	-43.82	-	-	peak
6	0.5101	61.86	-7.62	54.24	103.50	-49.26	-	-	peak

Test mode:	TM2	Polarity:	Horizontal



No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	( )	(cm)	
1	0.0312	70.58	-6.05	64.53	103.50	-38.97	-	-	peak
2	0.0469	65.49	-4.95	60.54	103.50	-42.96	-	-	peak
3	0.1281	88.49	-5.14	83.35	103.50	-20.15	-	-	peak
4	0.2562	68.96	-7.44	61.52	103.50	-41.98	-	-	peak
5	0.3832	68.45	-7.83	60.62	103.50	-42.88	-	-	peak
6	0.5101	62.20	-7.62	54.58	103.50	-48.92	-	-	peak

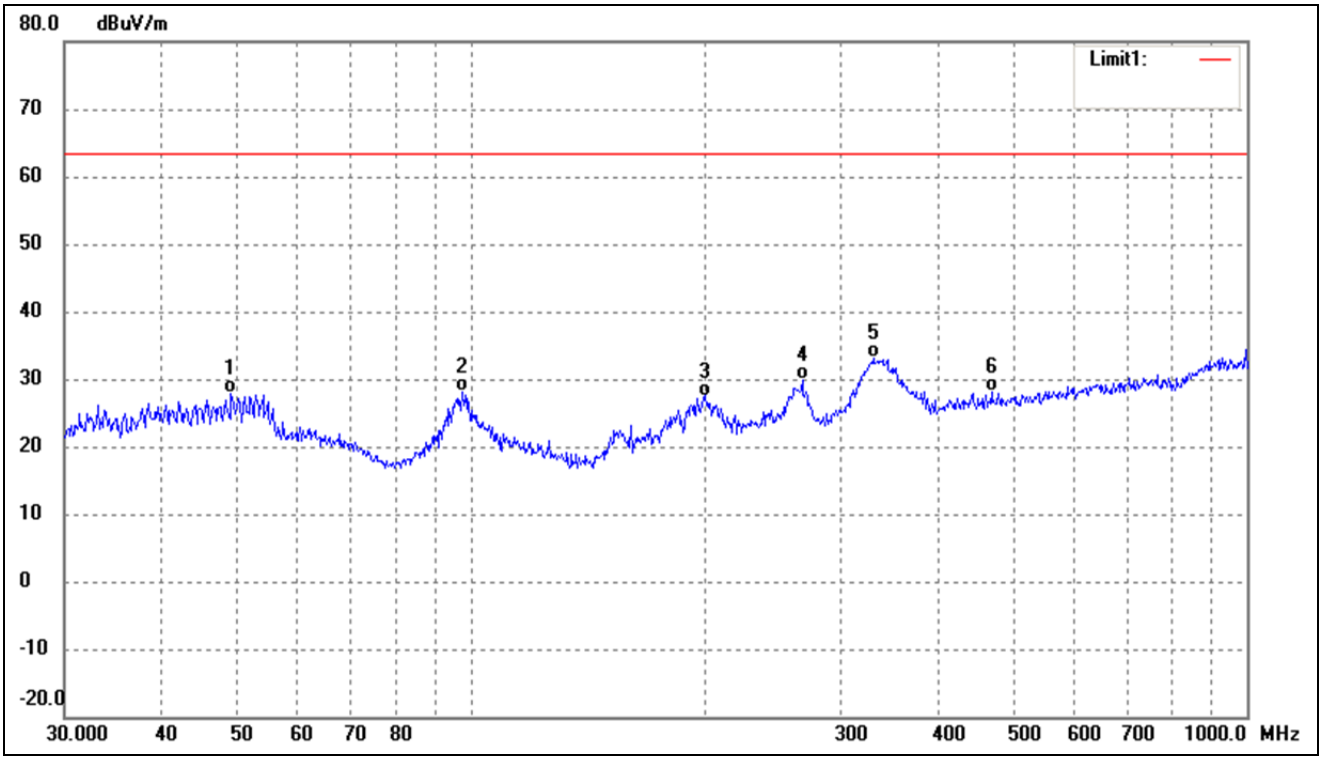
Test mode:	TM3	Polarity:	Horizontal



No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	( )	(cm)	
1	0.0158	78.81	-6.63	72.18	103.50	-31.32	-	-	peak
2	0.0311	70.49	-6.05	64.44	103.50	-39.06	-	-	peak
3	0.1278	91.02	-5.13	85.89	103.50	-17.61	-	-	peak
4	0.2562	67.69	-7.44	60.25	103.50	-43.25	-	-	peak
5	0.3852	68.88	-7.83	61.05	103.50	-42.45	-	-	peak
6	0.5101	62.13	-7.62	54.51	103.50	-48.99	-	-	peak

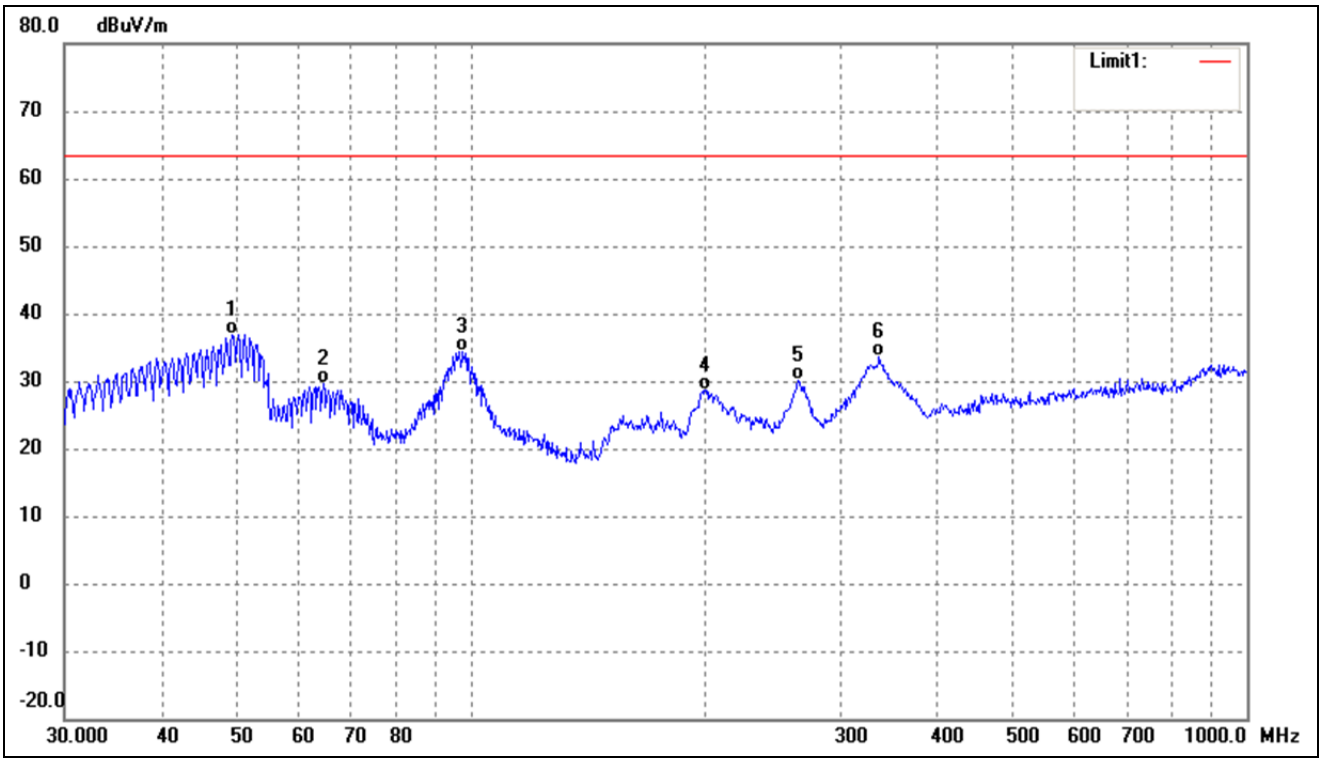
Plot of Radiated Emissions Test Data (Above 30MHz)

Test mode:	TM1	Polarity:	Horizontal



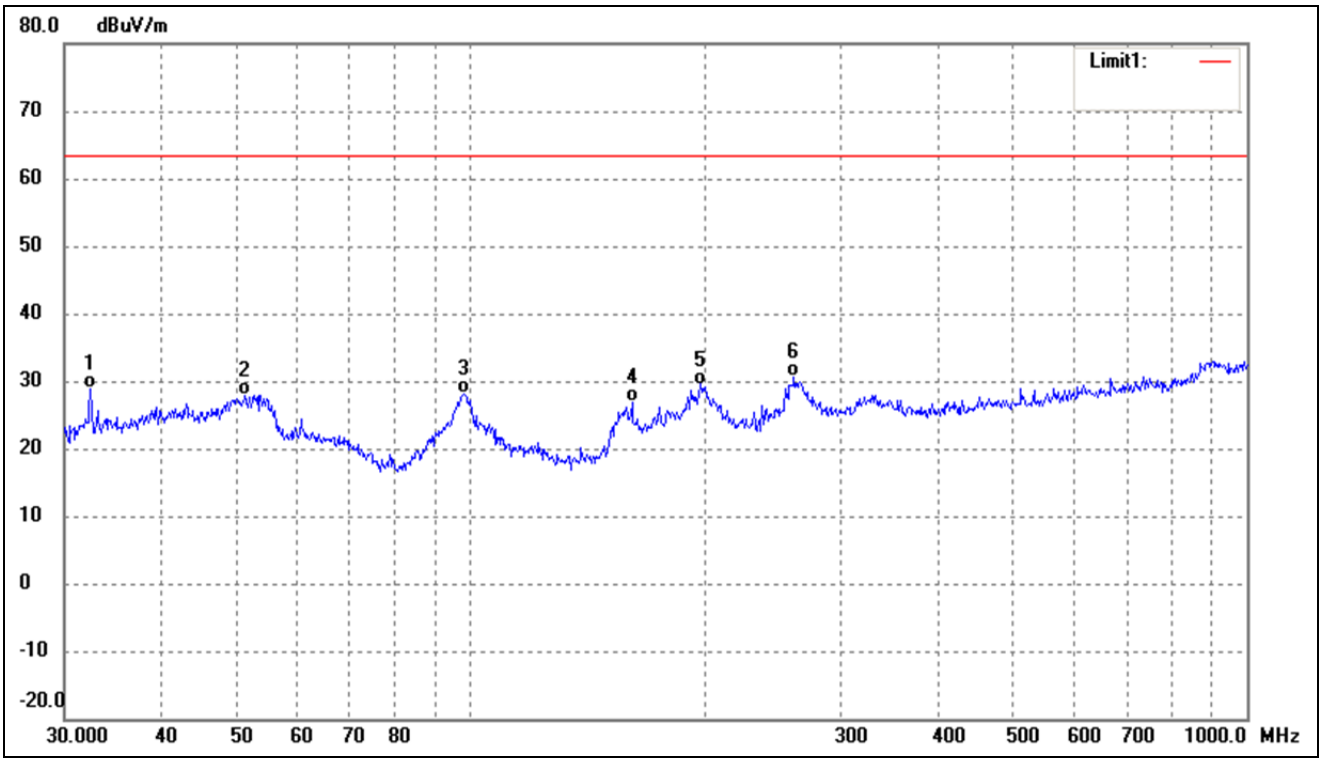
No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	( )	(cm)	
1	49.1865	39.48	-11.58	27.90	63.50	-35.60	-	-	QP
2	97.4560	41.85	-13.75	28.10	63.50	-35.40	-	-	QP
3	200.6881	39.92	-12.42	27.50	63.50	-36.00	-	-	QP
4	267.5455	40.67	-10.80	29.87	63.50	-33.63	-	-	QP
5	330.1949	41.80	-8.64	33.16	63.50	-30.34	-	-	QP
6	468.8762	33.21	-5.00	28.21	63.50	-35.29	-	-	QP

Test mode:	TM1	Polarity:	Vertical



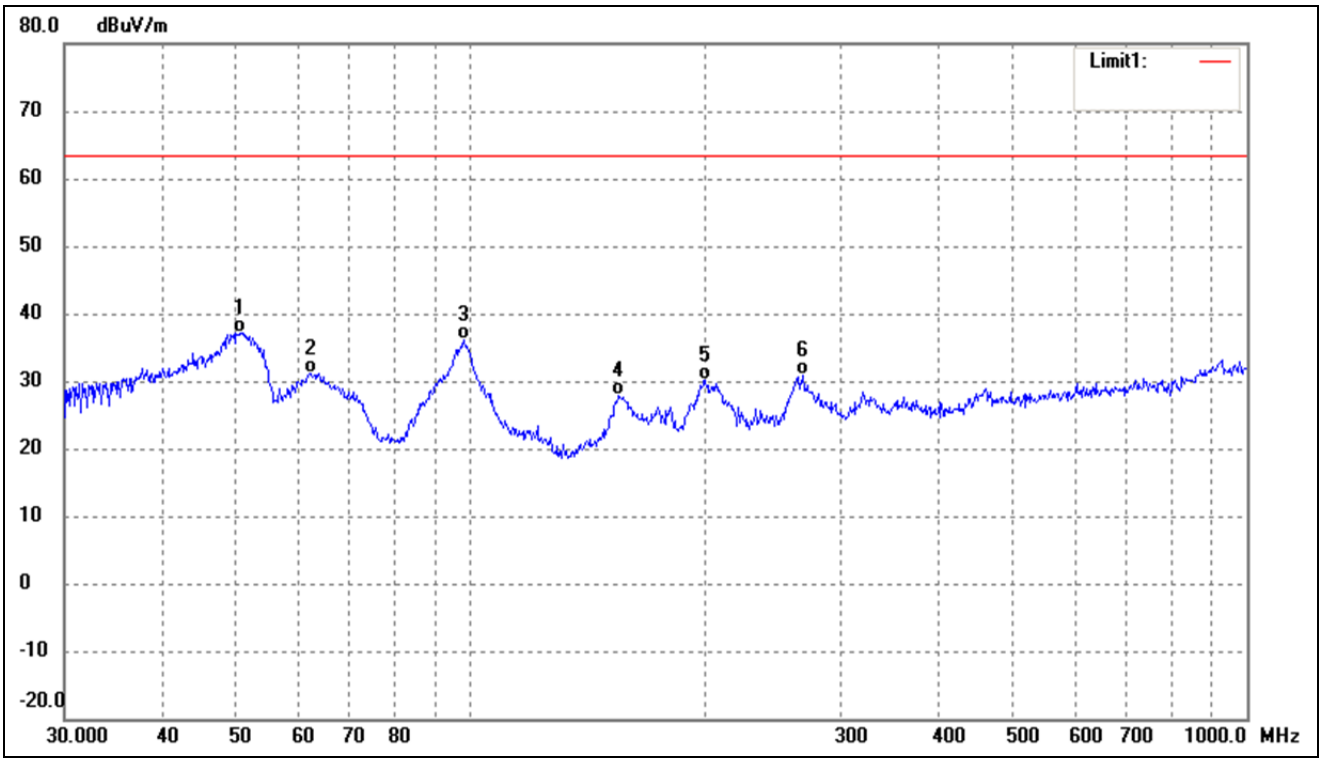
No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	( )	(cm)	
1	49.3594	48.44	-11.57	36.87	63.50	-26.63	-	-	QP
2	64.6594	43.49	-13.87	29.62	63.50	-33.88	-	-	QP
3	97.4560	48.23	-13.75	34.48	63.50	-29.02	-	-	QP
4	200.6881	41.01	-12.42	28.59	63.50	-34.91	-	-	QP
5	263.8190	41.07	-10.83	30.24	63.50	-33.26	-	-	QP
6	336.0352	41.89	-8.28	33.61	63.50	-29.89	-	-	QP

Test mode:	TM2	Polarity:	Horizontal



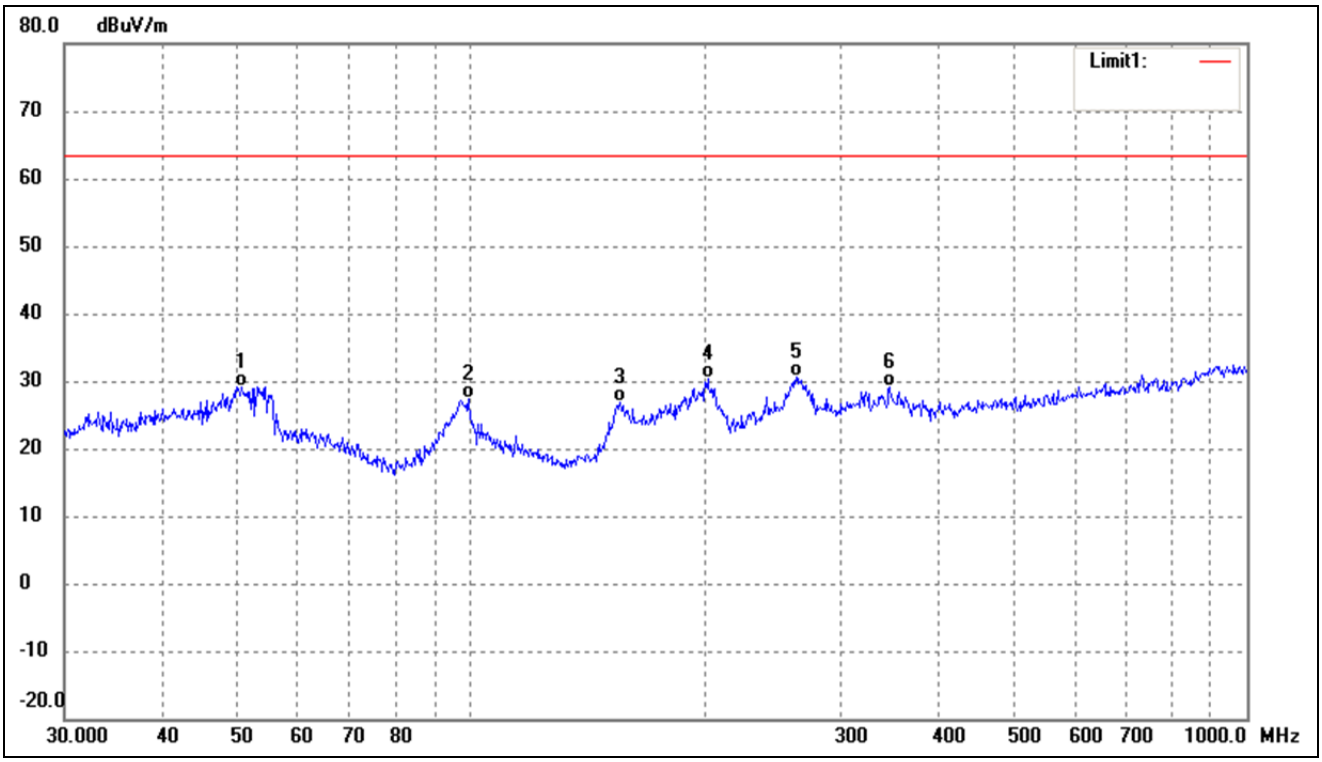
No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	( )	(cm)	
1	32.4059	42.82	-14.02	28.80	63.50	-34.70	-	-	QP
2	51.3005	39.81	-11.90	27.91	63.50	-35.59	-	-	QP
3	98.1419	41.73	-13.62	28.11	63.50	-35.39	-	-	QP
4	161.4742	42.31	-15.46	26.85	63.50	-36.65	-	-	QP
5	197.8928	42.07	-12.57	29.50	63.50	-34.00	-	-	QP
6	261.0583	41.44	-10.83	30.61	63.50	-32.89	-	-	QP

Test mode:	TM2	Polarity:	Vertical



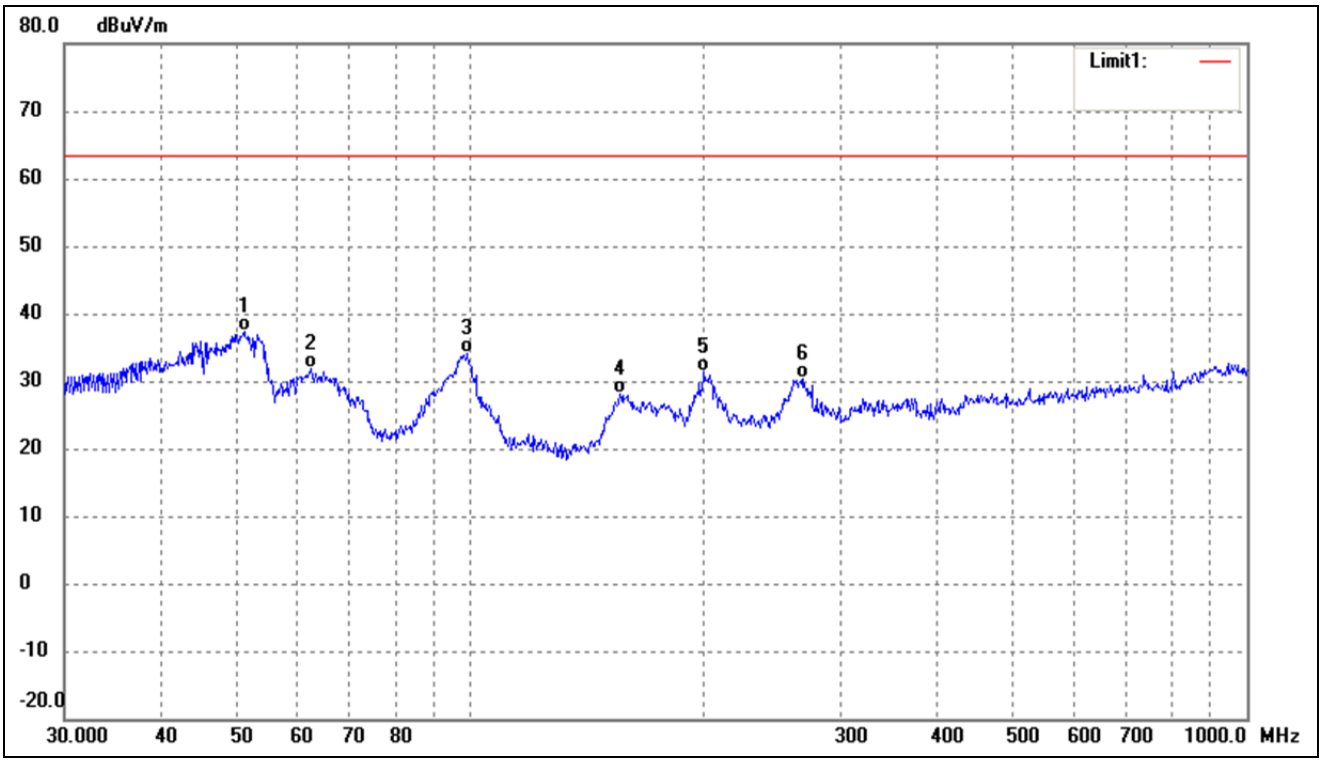
No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	( )	(cm)	
1	50.5860	48.92	-11.69	37.23	63.50	-26.27	-	-	QP
2	62.2128	44.58	-13.40	31.18	63.50	-32.32	-	-	QP
3	98.1419	49.77	-13.62	36.15	63.50	-27.35	-	-	QP
4	155.3644	43.40	-15.50	27.90	63.50	-35.60	-	-	QP
5	200.6881	42.62	-12.42	30.20	63.50	-33.30	-	-	QP
6	268.4853	41.68	-10.78	30.90	63.50	-32.60	-	-	QP

Test mode:	TM3	Polarity:	Horizontal



No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	( )	(cm)	
1	50.7637	40.90	-11.75	29.15	63.50	-34.35	-	-	QP
2	99.5281	40.74	-13.39	27.35	63.50	-36.15	-	-	QP
3	155.9101	42.26	-15.50	26.76	63.50	-36.74	-	-	QP
4	202.1005	42.80	-12.40	30.40	63.50	-33.10	-	-	QP
5	262.8955	41.36	-10.82	30.54	63.50	-32.96	-	-	QP
6	346.8092	36.69	-7.63	29.06	63.50	-34.44	-	-	QP

Test mode:	TM3	Polarity:	Vertical



No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	( )	(cm)	
1	51.1209	49.13	-11.85	37.28	63.50	-26.22	-	-	QP
2	62.4314	45.36	-13.45	31.91	63.50	-31.59	-	-	QP
3	99.1797	47.47	-13.45	34.02	63.50	-29.48	-	-	QP
4	155.9101	43.51	-15.50	28.01	63.50	-35.49	-	-	QP
5	199.9856	43.78	-12.42	31.36	63.50	-32.14	-	-	QP
6	268.4853	41.05	-10.78	30.27	63.50	-33.23	-	-	QP

Remark: '-'Means' the test Degree and Height are not recorded by the test software and only show the worst case in the test report.

APPENDIX PHOTOGRAPHS

Please refer to "ANNEX"

******* END OF REPORT *******