



Test report No. : 4789310744-US-R0-V0
Page : 1 of 120
Issued date : Jan. 16, 2020
FCC ID : K7SWIB001

RADIO TEST REPORT

Product : BOOST↑CHARGE Wireless Charging Stand 10W
Model Name : WIB001
FCC ID : K7SWIB001
Test Regulation : FCC 47 CFR Part 15 Subpart C (Section 15.209)
Received Date : Dec. 6, 2019
Test Date : Dec. 6, 2019 ~ Dec 16, 2019
Issued Date : Jan. 16, 2020

Applicant : Belkin International, Inc.
12045 East Waterfront Drive, Playa Vista, CA 90094 USA

Issued By : Underwriters Laboratories Taiwan Co., Ltd.
Building B and Building E, No. 372-7, Sec. 4, Zhongxing Rd.,
Zhudong Township, Hsinchu County, Taiwan



The results reported herein have been performed in accordance with the laboratory's terms of accreditation. This report shall not be reproduced except in full without the written approval of the Laboratory. The results in this report are responsible of the test sample(s) provided by the client only and are not to be used to indicate applicability to other similar products.

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REVISION HISTORY

Original Test Report No.: 4789310744-US-R0-V0

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1. Attestation of Test Results

APPLICANT: Belkin International, Inc.
12045 East Waterfront Drive, Playa Vista, CA 90094 USA

MANUFACTURER Belkin International, Inc.
12045 East Waterfront Drive, Playa Vista, CA 90094 USA

EUT DESCRIPTION: BOOST↑CHARGE Wireless Charging Stand 10W

BRAND: Belkin

MODEL: WIB001

SAMPLE STAGE: Production Unit

DATE of TESTED: Dec. 6, 2019 ~ Dec 16, 2019

APPLICABLE STANDARDS	
STANDARD	Test Results
FCC 47 CFR PART 15 Subpart C (Section 15.209)	PASS

Underwriters Laboratories Taiwan Co., Ltd. tested the above equipment in accordance with the requirements set forth in the above standards. All indications of Pass/Fail in this report are opinions expressed by Underwriters Laboratories Taiwan Co., Ltd. based on interpretations and/or observations of test results. Measurement Uncertainties were not taken into account and are published for informational purposes only. The test results show that the equipment tested is capable of demonstrating compliance with the requirements as documented in this report.

Note: The results documented in this report apply only to the tested sample, under the conditions and modes of operation as described herein. This document may not be altered or revised in any way unless done so by Underwriters Laboratories Taiwan Co., Ltd. and all revisions are duly noted in the revisions section. Any alteration of this document not carried out by Underwriters Laboratories Taiwan Co., Ltd. will constitute fraud and shall nullify the document. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, any agency of the Federal Government, or any agency of any government.

Prepared By:

Cindy Hsin
Project Handler

Date : Jan. 16, 2020

Approved and Authorized By:

Stanley Wu
Senior Project Engineer

Date : Jan. 16, 2020

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2. Summary of Test Results

Summary of Test Results		
FCC Clause	Test Items	Result
15.209	Radiated Emissions	PASS
15.207	AC Power Conducted Emission	PASS
2.1049	20dB Bandwidth	PASS
15.203	Antenna Requirement	PASS

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3. Test Methodology and Reference Procedures

The tests documented in this report were performed in accordance with 47 CFR FCC Part 2, KDB414788 D01 Radiated Test Site v01r01, ANSI C63.10-2013.

4. Facilities and Accreditation

Test Location	Underwriters Laboratories Taiwan Co., Ltd.
Address	Building B and Building E, No. 372-7, Sec. 4, Zhongxing Rd., Zhudong Township, Hsinchu County, Taiwan
Accreditation Certificate	Underwriters Laboratories Taiwan Co., Ltd. is accredited by TAF, Laboratory Code 3398. The full scope of accreditation can be viewed at http://accreditation.taftw.org.tw/taf/public/basic/viewApplyItems.action?unitNo=3398

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5. Measurement Uncertainty

For statement of conformity, accuracy method (Section 8.2.4 and 8.2.5 of ISO Guide 98-4) was applied as decision rule for measurement in this test report.

The following uncertainties have been calculated to provide a confidence level of 95 % using a coverage factor $k=2$.

Test Item	Measurement Frequency Range	K	U(dB)
Conducted disturbance at mains terminals ports	0.15MHz ~ 30MHz	2	1.7
Radiated disturbance below 30MHz	9 kHz - 30 MHz	2	2.2
Radiated disturbance below 1 GHz	30MHz ~ 1GHz	2	5.3

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6. Equipment under Test

6.1. Description of EUT

Product	BOOST↑CHARGE Wireless Charging Stand 10W
Brand Name	Belkin
Model Name	WIB001
S/N	35F10F6C900656
Operating Frequency	111-130 kHz
Normal Voltage	Input: DC 5V / 2A Output:5W Input: DC 9V / 2A, 12V / 1.5A Output:10W
Hardware Version	1
Software Version	N/A

Note:

1. The EUT contains following accessory devices

Product	Brand	Model	Description	Remark
Adapter 1	belkin	A138A-120150U-US5	AC Input: 100-240Vac~50/60Hz, 0.5A DC Output: 5V/2A, 9V/2A,12V/1.5A	Black and white (Optional)
Adapter 2	belkin	DSA-18QFB FUS A	AC Input: 100-240Vac~50/60Hz, 0.8A DC Output: 3.6V-6V/2A, 6V-9V/2A, 9V-12V/1.5A	Black and white (Optional)
USB cable	Belkin	F2CU012bt04	Length:1.3m	Black and white (Optional)

The above EUT information is declared by manufacturer and for more detailed features description, please refer the manufacturer's or user's manual.

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6.2. Test Condition

Test Item	Test Site No.	Environmental Condition	Input Power	Test Date	Tested by
Radiated Spurious Emission	966-2	24~26°C / 66~70%RH	120Vac / 60 Hz	Dec. 9, 2019 ~ Dec. 10, 2019	Will Chen
AC power Line Conducted Emission	SR1	22~26°C / 60~70%RH	120Vac / 60 Hz	Dec. 12, 2019 ~ Dec. 16, 2019	Will Chen

FCC Test Firm Registration Number: 498077

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6.3. Test Mode Applicability and Tested Channel Detail

Test item	Operating Mode	Descriptions
Radiated Emissions	Standby	EUT Alone powered by AC/DC adapter 1 & adapter 2
	Operating (With & Without 3mm gap)	EUT and smart phone powered by AC/DC adapter 1 & adapter 2 (Phone 5W, 20-50% power charging)
	Operating (With & Without 3mm gap)	EUT and 10W load powered by AC/DC adapter 1 & adapter 2 (10W Load, >90% power charging)
AC Power Line Conducted Emission	Standby	EUT Alone powered by AC/DC adapter 1 & adapter 2
	Operating (With & Without 3mm gap)	EUT and smart phone powered by AC/DC adapter 1 & adapter 2 (Phone 5W, 20-50% power charging)
	Operating (With & Without 3mm gap)	EUT and 10W load powered by AC/DC adapter 1 & adapter 2 (10W Load, >90% power charging)

Note:

1. The fundamental of the EUT was investigated in three orthogonal axes X/Y/Z, it was determined that Z axis was worst-case . Therefore, all final radiated testing was performed with the EUT in Z axis.
2. For below 30MHz testing, investigation was done on three antenna orientations (parallel, perpendicular, and ground-parallel), parallel and perpendicular are the worst orientations, therefore testing was performed on these two orientations only.
3. Although these tests were performed other than open area test site, adequate comparison measurements were confirmed against 300 m open area test site. Therefore sufficient tests were made to demonstrate that the alternative site produces results that correlate with the ones of tests made in an open field based on KDB 414788 D01.
4. For AC power line conducted emissions, the pre-scan has been determined by AC power 120Vac (worst case)

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7. Test Equipment

Test Equipment List					
Equipment	Manufacturer	Model No.	Serial No.	Cal. Date	Cal. Interval
Radiated Spurious Emission					
Spectrum Analyzer	Keysight	N9010A	MY56070827	Nov. 13, 2019	1 year
EMI Test Receiver	Rohde & Schwarz	ESR7	101753	Nov. 19, 2019	1 year
Loop Antenna	ETS lindgren	6502	00213440	Dec. 11, 2018	1 year
Trilog-Broadband Antenna with 5dB Attenuator	Schwarzbeck & EMCI	VULB 9168 & N-6-05	774 & AT-N0538	Jan. 14, 2019	1 year
Preamplifier (30-1000 MHz)	EMCI	EMC330E	980405	Jan. 30, 2019	1 year
RF Cable (9 KHz~18 GHz)	UltraPhase & EMC Instrument	A1K50-UP0358-A1K50-1500&EMC106-NM-SM-2500/7000	170111-4&170219/170102	Jan. 29, 2019	1 year
AC power Line Conducted Emission					
EMI Test Receiver	Rohde & Schwarz	ESR7	101753	Nov. 19, 2019	1 year
Two-Line V-Network	Rohde & Schwarz	ENV216	102136	Aug. 8, 2019	1 year
Impuls-Begrenzer Pulse Limiter	Rohde & Schwarz	ESH3-Z2	102219-Qt	Aug. 6, 2019	1 year
Cables	HARBOUR INDUSTRIES	LL142	170205-5000-1	Jan. 29, 2019	1 year

UL Software		
Description	Name	Version
Radiated measurement	EZ EMC	1.1.4.2
AC power Line Conducted Emission	EZ EMC	1.1.4.2

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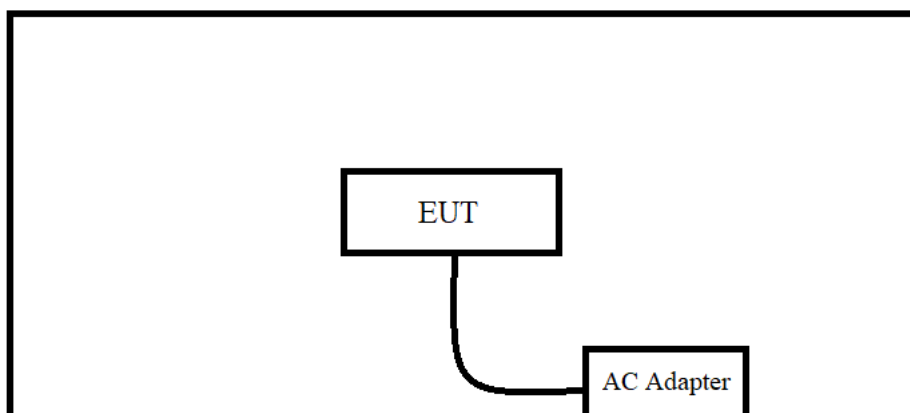
8. Description of Test Setup

Support Equipment

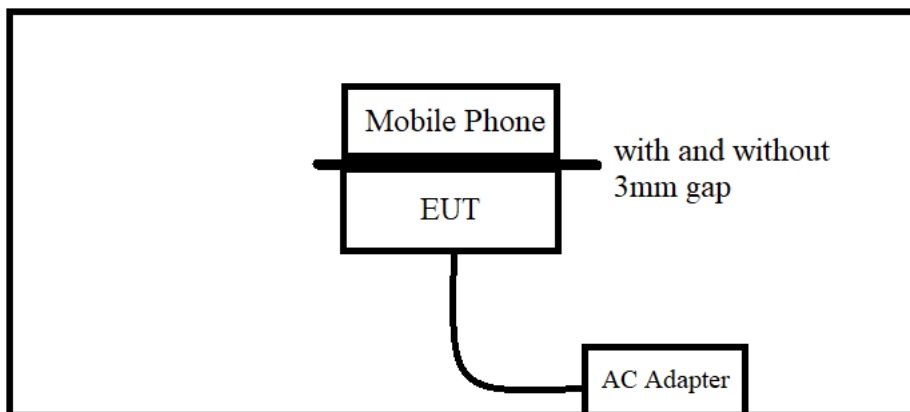
Item	Equipment	Brand Name	Model Name	S/N
1	Phone	Apple	Iphone8	N/A
2	10W Resistor Load	N/A	N/A	N/A

Setup Diagram for Test

STANDBY MODE



OPERATING MODE WITH PHONE



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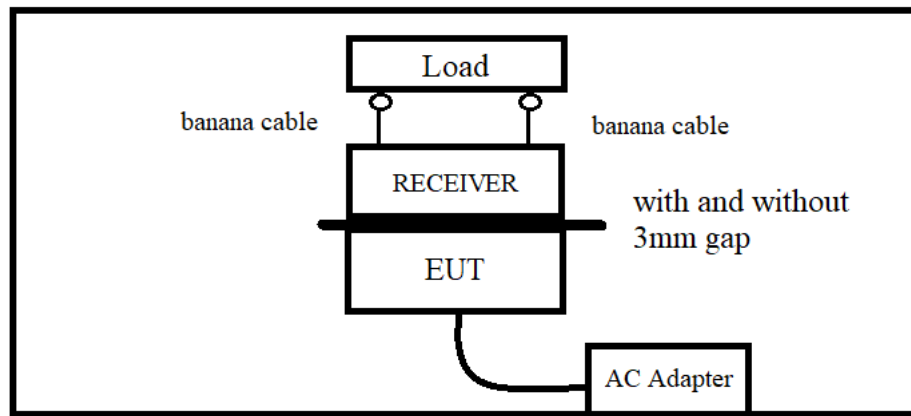
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OPERATING MODE WITH 10W LOAD



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9. Test Results

9.1. Radiated Spurious Emission

Requirements

According to FCC Clause 15.209 (a), Except as provided elsewhere in this subpart, the emissions from an intentional radiator shall not exceed the field strength levels specified in the following table:

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 lower limit shall apply at the transition frequencies.
2. Emission level (dBuV/m) = 20 log Emission level (uV/m).
3. For frequencies above 1000MHz, the field strength limits are based on average detector, however, the peak field strength of any emission shall not exceed the maximum permitted average limits, specified above by more than 20dB under any condition of modulation.

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Test Procedures

[For 9 kHz ~ 30 MHz]

- a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter chamber room. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- c. Parallel, perpendicular, and ground-parallel orientations of the antenna are set to make the measurement.
- d. For each suspected emission, the EUT was arranged to its worst case and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
- e. For measurement below 30MHz, the initial step in collecting conducted emission data is a spectrum analyzer peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak detector mode re-measured. If the emission level of the EUT measured by the peak detector is lower than the applicable limit, the peak emission level will be reported. Otherwise, the emission measurement will be repeated using the quasi-peak detector and reported.

NOTE:

1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 9kHz at frequency below 30MHz.

[For above 30 MHz]

- a. The EUT was placed on the top of a rotating table 0.8 meters (for 30MHz ~ 1GHz) above the ground at 3 meter chamber room for test. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- c. The height of antenna is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
- e. For measurement below 1GHz, the initial step in collecting conducted emission data is a spectrum analyzer peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak detector mode re-measured. If the emission level of the EUT measured by the peak detector is lower than the applicable limit, the peak emission level will be reported. Otherwise, the emission measurement will be repeated using the quasi-peak detector and reported.

Note:

- a. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120kHz for Quasi-peak detection (QP) at frequency below 1GHz.
- b. All modes of operation were investigated and the worst-case emissions are reported.

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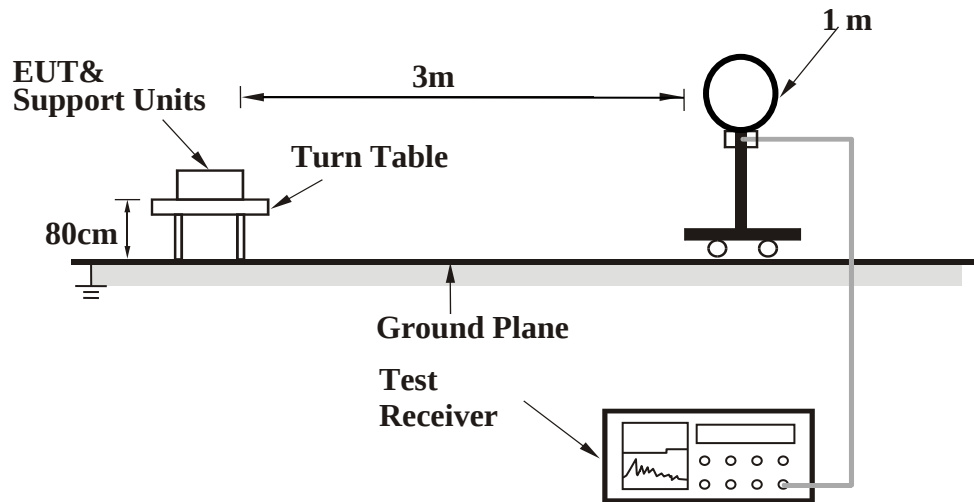
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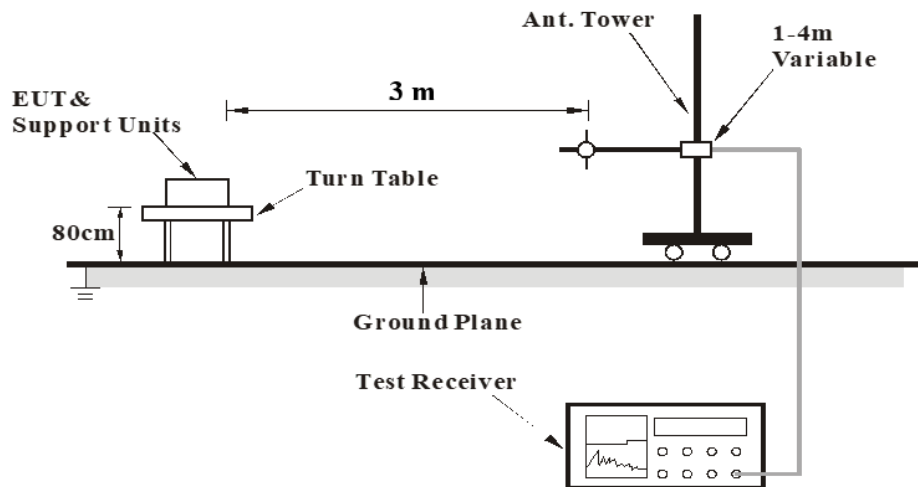


Test Setup

<Frequency Range 9 kHz ~ 30 MHz>



<Frequency Range 30 MHz ~ 1 GHz >



For the actual test configuration, please refer to the Setup Configurations.

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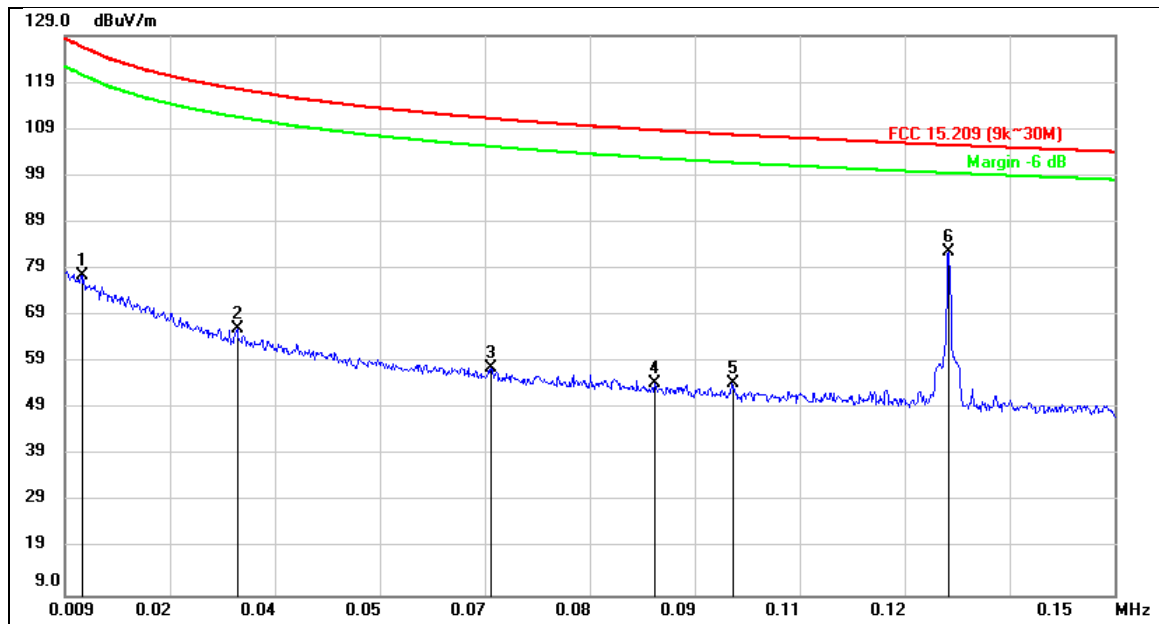
Test Data

9 kHz ~ 30 MHz Data

Standby Mode

Adapter 1

EUT Test Condition		Measurement Detail	
Frequency Range	9 kHz ~ 0.15 MHz	Antenna Polarity	Perpendicular



Notation	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	0.0113	58.21	19.34	77.55	126.67	-49.12	AVG
2	0.0321	51.86	14.24	66.10	117.53	-51.43	AVG
3	0.0663	45.13	12.65	57.78	111.20	-53.42	AVG
4	0.0883	41.99	12.32	54.31	108.69	-54.38	AVG
5	0.0987	42.15	12.16	54.31	107.72	-53.41	QP
6*	0.1278	70.57	12.11	82.68	105.49	-22.81	AVG

Remarks:

- Result value (dBuV/m) = Reading value (dBuV/m) + Correction Factor (dB/m).
- Margin(dB) = Result value (dBuV/m) - Limit value (dBuV/m).
- Correction Factor (dB/m) = Antenna Factor (dBuV/m) + Cable Loss (dB) - Preamp Factor (dB).
- The other emission levels were very low against the limit.
- “*” : Fundamental Frequency.

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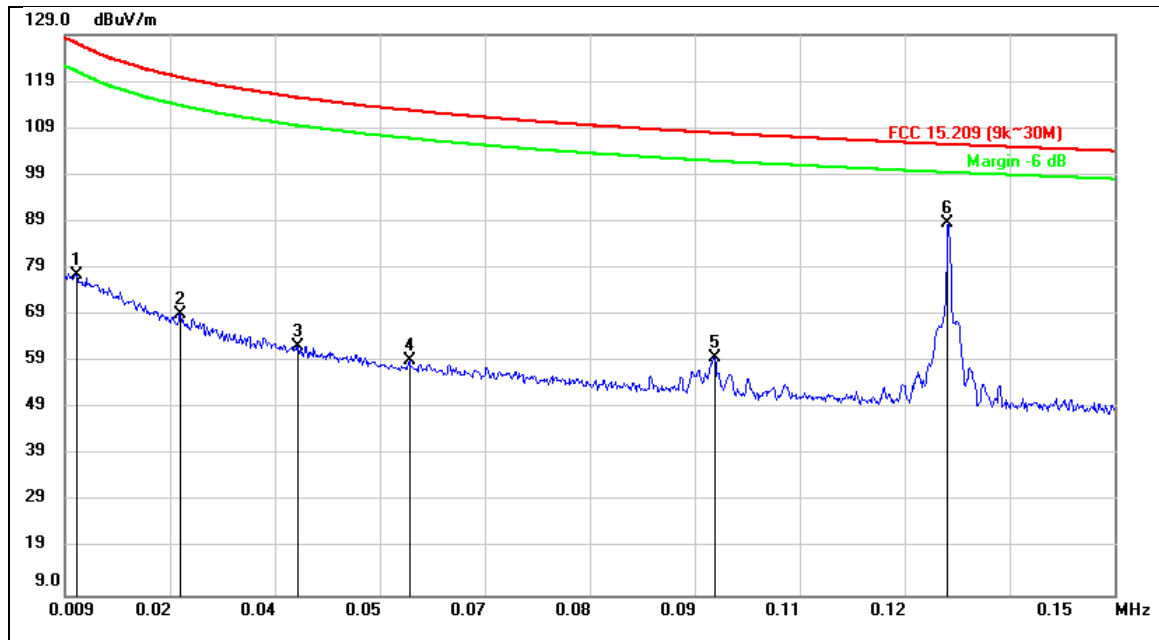
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EUT Test Condition		Measurement Detail	
Frequency Range	9 kHz ~ 0.15 MHz	Antenna Polarity	Parallel



Notation	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	0.0106	58.08	19.52	77.60	127.17	-49.57	AVG
2	0.0245	53.23	15.84	69.07	119.84	-50.77	AVG
3	0.0403	48.73	13.63	62.36	115.50	-53.14	AVG
4	0.0552	46.32	12.82	59.14	112.80	-53.66	AVG
5	0.0963	47.75	12.20	59.95	107.94	-47.99	QP
6*	0.1276	76.47	12.10	88.57	105.50	-16.93	AVG

Remarks:

- Result value (dBuV/m) = Reading value (dBuV/m) + Correction Factor (dB/m).
- Margin(dB) = Result value (dBuV/m) - Limit value (dBuV/m).
- Correction Factor (dB/m) = Antenna Factor (dBuV/m) + Cable Loss (dB) - Preamp Factor (dB).
- The other emission levels were very low against the limit.
- “*” : Fundamental Frequency.

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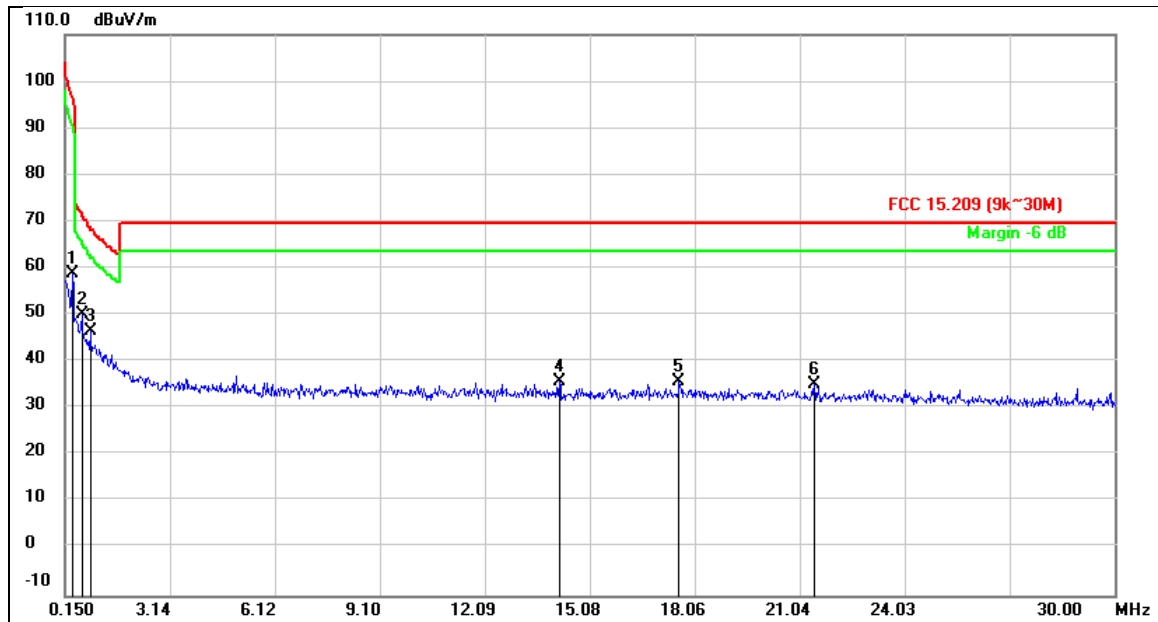
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EUT Test Condition		Measurement Detail	
Frequency Range	0.15 MHz ~ 30 MHz	Antenna Polarity	Perpendicular



Notation	Frequency (MHz)	Reading (dBuV/m)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	0.3848	46.97	11.85	58.82	95.94	-37.12	AVG
2	0.6375	38.48	11.80	50.28	71.54	-21.26	QP
3	0.8783	34.73	11.93	46.66	68.74	-22.08	QP
4	14.2372	24.36	11.49	35.85	69.54	-33.69	QP
5	17.6401	24.21	11.40	35.61	69.54	-33.93	QP
6	21.4758	24.03	11.06	35.09	69.54	-34.45	QP

Remarks:

1. Result value (dBuV/m) = Reading value (dBuV/m) + Correction Factor (dB/m).
2. Margin(dB) = Result value (dBuV/m) - Limit value (dBuV/m).
3. Correction Factor (dB/m) = Antenna Factor (dBuV/m) + Cable Loss (dB) - Preamp Factor (dB).
4. The other emission levels were very low against the limit.

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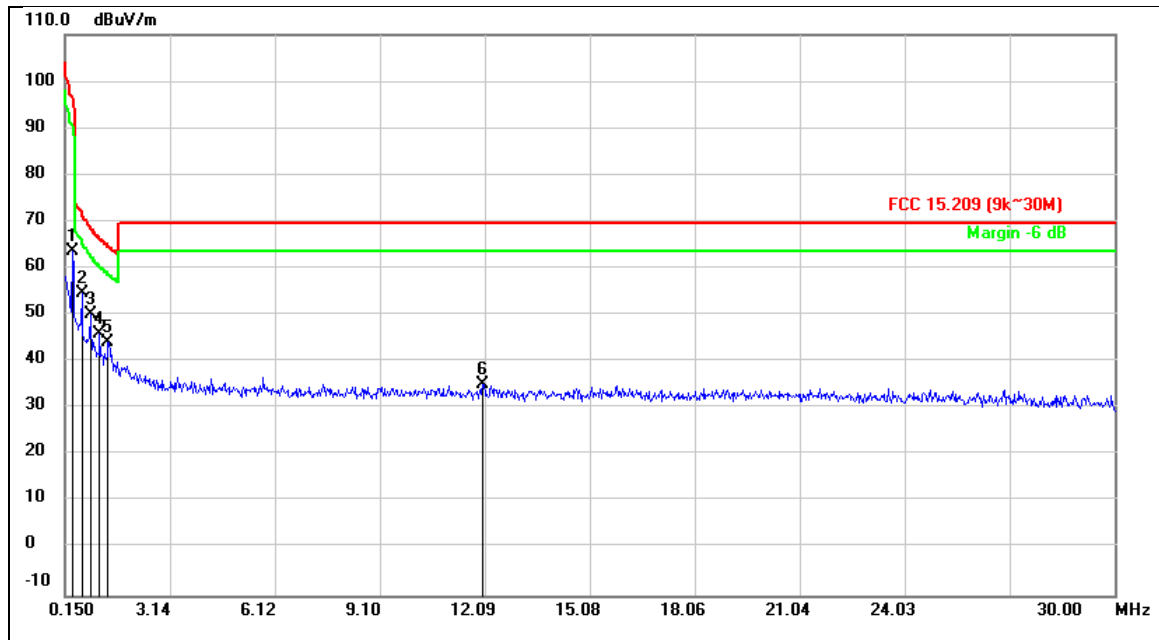
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EUT Test Condition		Measurement Detail	
Frequency Range	0.15 MHz ~ 30 MHz	Antenna Polarity	Parallel



Notation	Frequency (MHz)	Reading (dBuV/m)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	0.3848	51.69	11.85	63.54	95.94	-32.40	AVG
2	0.6394	42.99	11.80	54.79	71.51	-16.72	QP
3	0.8923	38.07	11.94	50.01	68.60	-18.59	QP
4	1.1510	33.97	11.99	45.96	66.41	-20.45	QP
5	1.4027	32.16	11.88	44.04	64.66	-20.62	QP
6	12.0602	23.59	11.57	35.16	69.54	-34.38	QP

Remarks:

- Result value (dBuV/m) = Reading value (dBuV/m) + Correction Factor (dB/m).
- Margin(dB) = Result value (dBuV/m) - Limit value (dBuV/m).
- Correction Factor (dB/m) = Antenna Factor (dBuV/m) + Cable Loss (dB) - Preamp Factor (dB).
- The other emission levels were very low against the limit.

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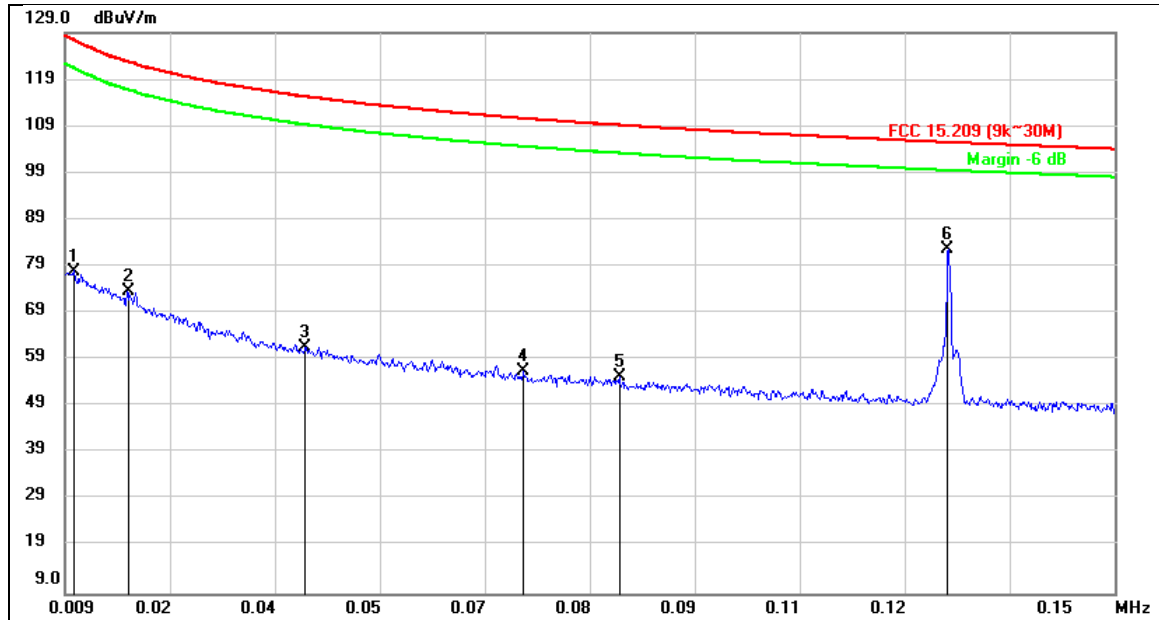
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Adapter 2

EUT Test Condition		Measurement Detail	
Frequency Range	9 kHz ~ 0.15 MHz	Antenna Polarity	Perpendicular



Notation	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	0.0103	58.40	19.60	78.00	127.38	-49.38	AVG
2	0.0175	55.82	17.69	73.51	122.81	-49.30	AVG
3	0.0413	48.15	13.56	61.71	115.31	-53.60	AVG
4	0.0706	43.84	12.58	56.42	110.63	-54.21	AVG
5	0.0834	42.99	12.41	55.40	109.19	-53.79	AVG
6*	0.1276	70.58	12.10	82.68	105.50	-22.82	AVG

Remarks:

1. Result value (dBuV/m) = Reading value (dBuV/m) + Correction Factor (dB/m).
2. Margin(dB) = Result value (dBuV/m) - Limit value (dBuV/m).
3. Correction Factor (dB/m) = Antenna Factor (dBuV/m) + Cable Loss (dB) - Preamp Factor (dB).
4. The other emission levels were very low against the limit.
5. “*” : Fundamental Frequency.

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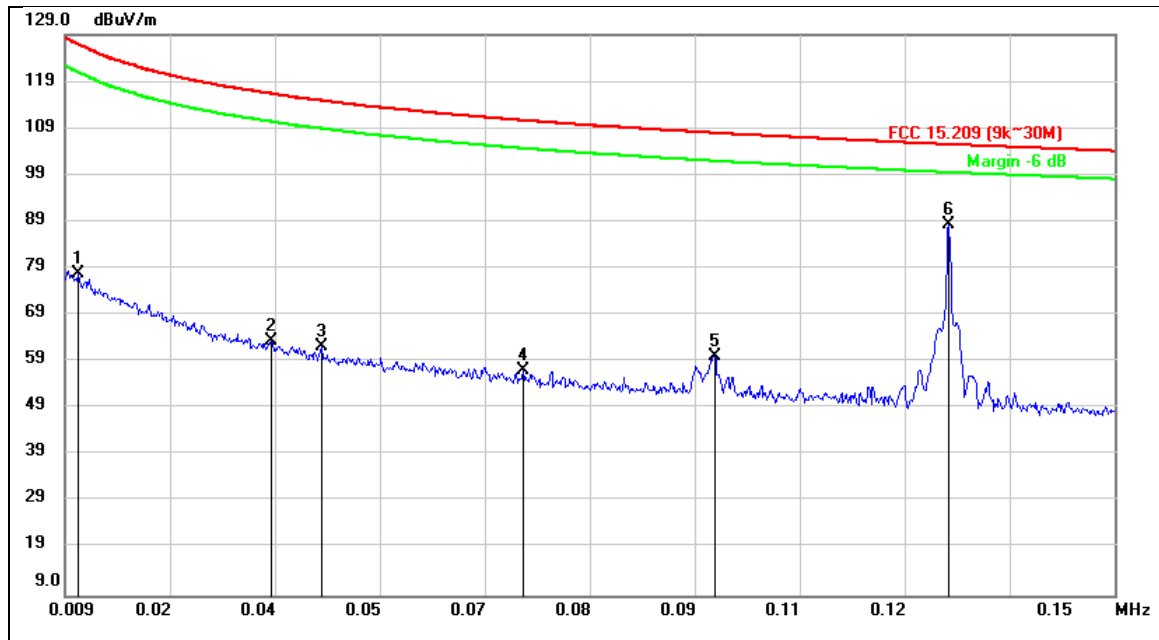
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EUT Test Condition		Measurement Detail	
Frequency Range	9 kHz ~ 0.15 MHz	Antenna Polarity	Parallel



Notation	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	0.0108	58.44	19.46	77.90	127.03	-49.13	AVG
2	0.0368	49.65	13.90	63.55	116.36	-52.81	AVG
3	0.0435	48.85	13.39	62.24	114.88	-52.64	AVG
4	0.0706	44.46	12.58	57.04	110.63	-53.59	AVG
5	0.0963	48.06	12.20	60.26	107.94	-47.68	QP
6*	0.1278	76.24	12.11	88.35	105.49	-17.14	AVG

Remarks:

- Result value (dBuV/m) = Reading value (dBuV/m) + Correction Factor (dB/m).
- Margin(dB) = Result value (dBuV/m) - Limit value (dBuV/m).
- Correction Factor (dB/m) = Antenna Factor (dBuV/m) + Cable Loss (dB) - Preamp Factor (dB).
- The other emission levels were very low against the limit.
- “*” : Fundamental Frequency.

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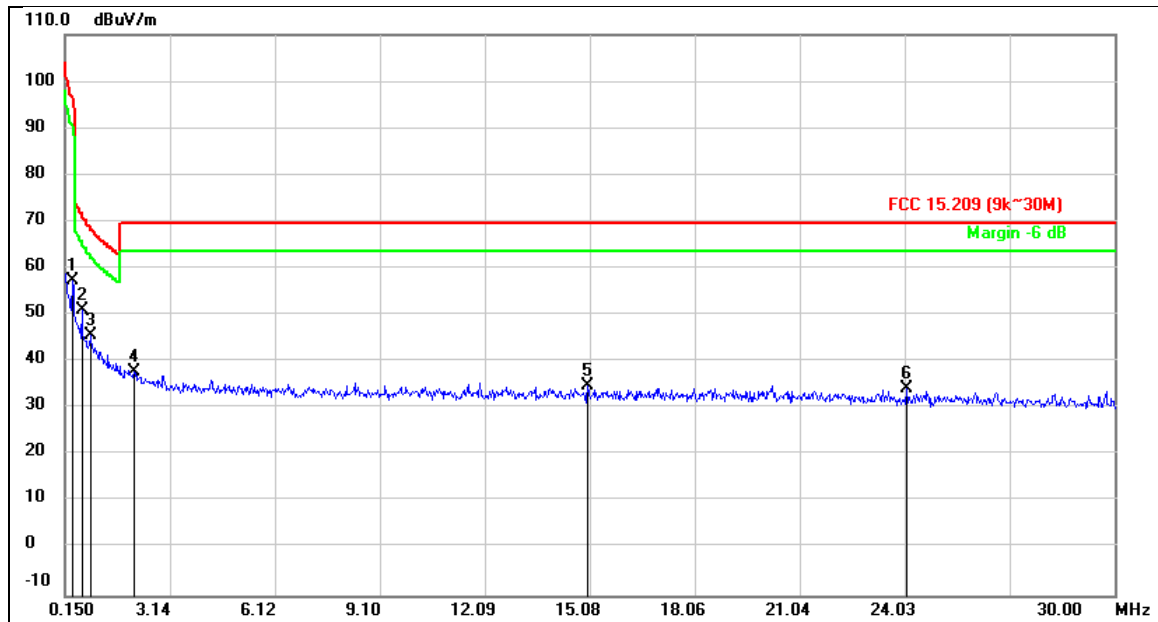
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EUT Test Condition		Measurement Detail	
Frequency Range	0.15 MHz ~ 30 MHz	Antenna Polarity	Perpendicular



Notation	Frequency (MHz)	Reading (dBuV/m)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	0.3837	45.38	11.85	57.23	95.97	-38.74	AVG
2	0.6394	39.20	11.80	51.00	71.51	-20.51	QP
3	0.8933	33.83	11.94	45.77	68.59	-22.82	QP
4	2.1420	26.19	11.57	37.76	69.54	-31.78	QP
5	15.0233	23.23	11.47	34.70	69.54	-34.84	QP
6	24.1086	23.58	10.57	34.15	69.54	-35.39	QP

Remarks:

1. Result value (dBuV/m) = Reading value (dBuV/m) + Correction Factor (dB/m).
2. Margin(dB) = Result value (dBuV/m) - Limit value (dBuV/m).
3. Correction Factor (dB/m) = Antenna Factor (dBuV/m) + Cable Loss (dB) - Preamp Factor (dB).
4. The other emission levels were very low against the limit.

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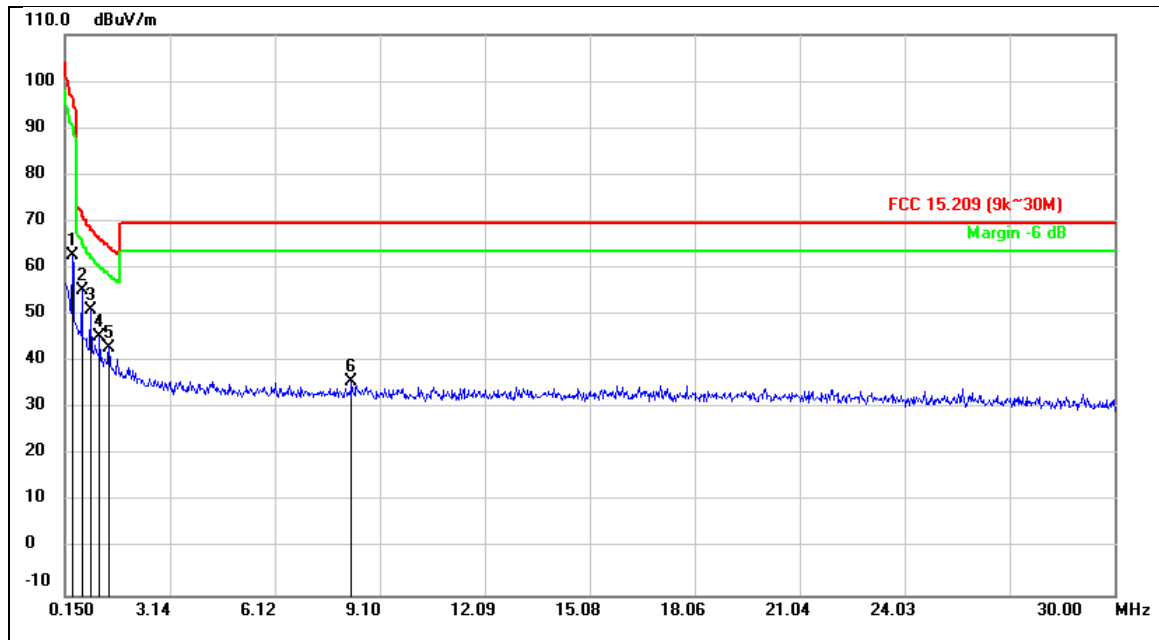
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EUT Test Condition		Measurement Detail	
Frequency Range	0.15 MHz ~ 30 MHz	Antenna Polarity	Parallel



Notation	Frequency (MHz)	Reading (dBuV/m)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	0.3837	50.94	11.85	62.79	95.97	-33.18	AVG
2	0.6405	43.35	11.80	55.15	71.50	-16.35	QP
3	0.8933	39.17	11.94	51.11	68.59	-17.48	QP
4	1.1510	33.51	11.99	45.50	66.41	-20.91	QP
5	1.4077	31.22	11.88	43.10	64.64	-21.54	QP
6	8.3268	24.05	11.63	35.68	69.54	-33.86	QP

Remarks:

- Result value (dBuV/m) = Reading value (dBuV/m) + Correction Factor (dB/m).
- Margin(dB) = Result value (dBuV/m) - Limit value (dBuV/m).
- Correction Factor (dB/m) = Antenna Factor (dBuV/m) + Cable Loss (dB) - Preamp Factor (dB).
- The other emission levels were very low against the limit.

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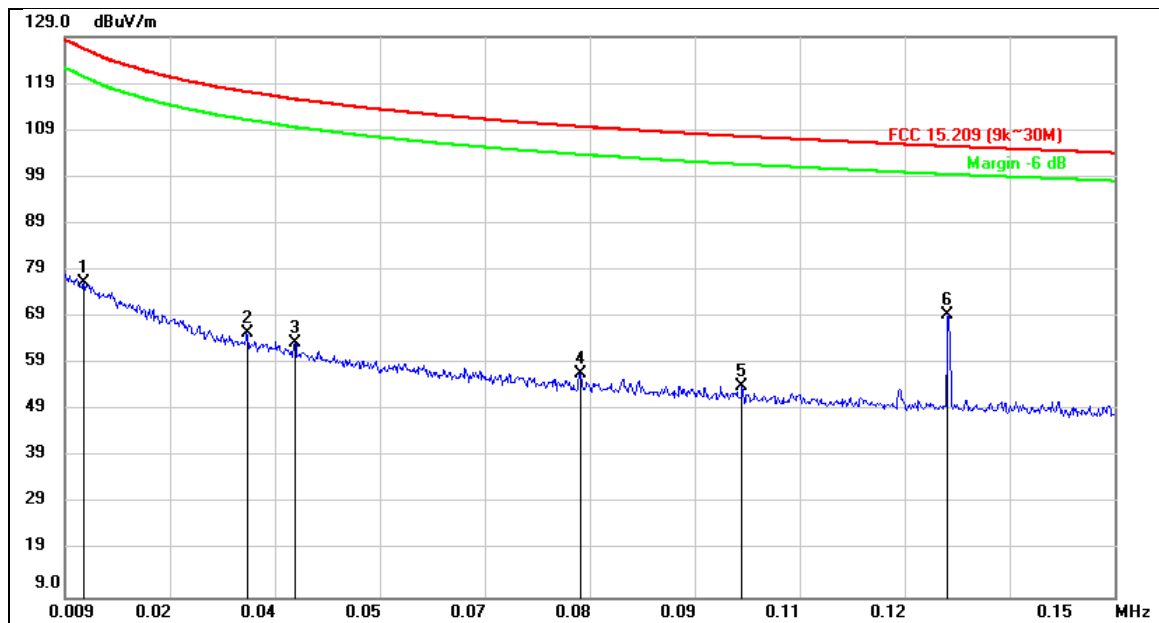


Operating Mode

Adapter 1

Smart phone (With 3mm gap)

EUT Test Condition		Measurement Detail	
Frequency Range	9 kHz ~ 0.15 MHz	Antenna Polarity	Perpendicular



Notation	Frequency (MHz)	Reading (dBuV/m)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	0.0115	57.01	19.28	76.29	126.52	-50.23	AVG
2	0.0335	51.26	14.15	65.41	117.19	-51.78	AVG
3	0.0400	49.74	13.66	63.40	115.56	-52.16	AVG
4	0.0782	44.27	12.48	56.75	109.75	-53.00	AVG
5	0.1000	42.01	12.14	54.15	107.60	-53.45	QP
6*	0.1276	57.31	12.10	69.41	105.50	-36.09	AVG

Remarks:

1. Result value (dBuV/m) = Reading value (dBuV/m) + Correction Factor (dB/m).
2. Margin(dB) = Result value (dBuV/m) - Limit value (dBuV/m).
3. Correction Factor (dB/m) = Antenna Factor (dBuV/m) + Cable Loss (dB) - Preamp Factor (dB).
4. The other emission levels were very low against the limit.
5. “*” : Fundamental Frequency.

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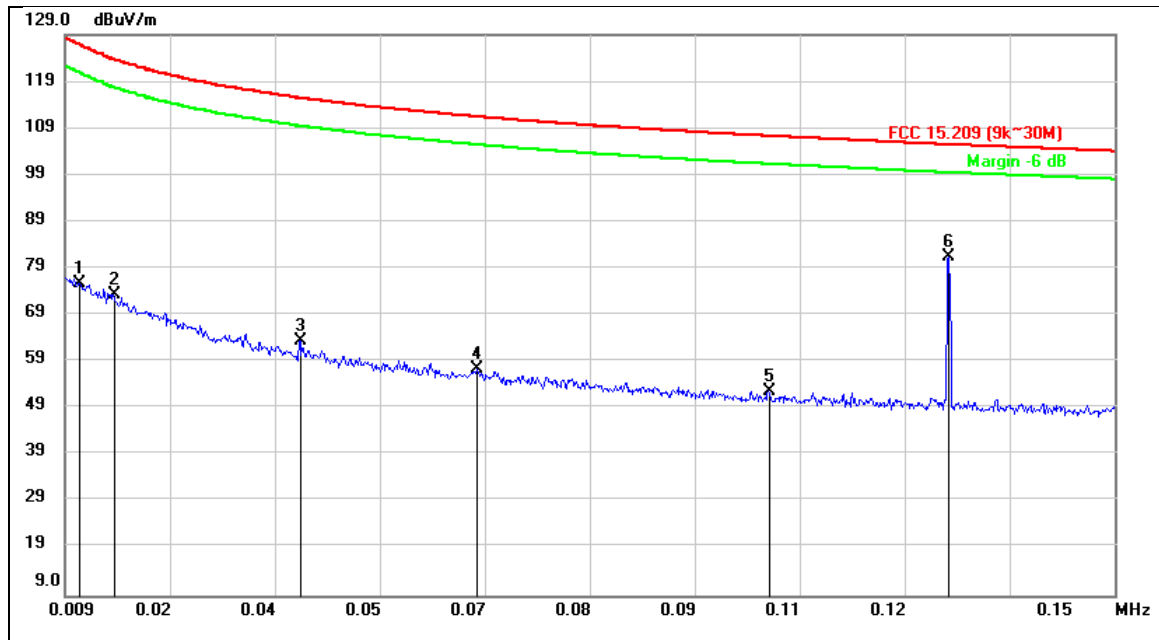
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EUT Test Condition		Measurement Detail	
Frequency Range	9 kHz ~ 0.15 MHz	Antenna Polarity	Parallel



Notation	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	0.0110	56.46	19.42	75.88	126.88	-51.00	AVG
2	0.0155	55.25	18.21	73.46	123.79	-50.33	AVG
3	0.0406	49.98	13.61	63.59	115.44	-51.85	AVG
4	0.0645	44.74	12.67	57.41	111.44	-54.03	AVG
5	0.1036	40.53	12.13	52.66	107.32	-54.66	QP
6*	0.1278	69.47	12.10	81.57	105.49	-23.92	AVG

Remarks:

- Result value (dBuV/m) = Reading value (dBuV/m) + Correction Factor (dB/m).
- Margin(dB) = Result value (dBuV/m) - Limit value (dBuV/m).
- Correction Factor (dB/m) = Antenna Factor (dBuV/m) + Cable Loss (dB) - Preamp Factor (dB).
- The other emission levels were very low against the limit.
- “*” : Fundamental Frequency.

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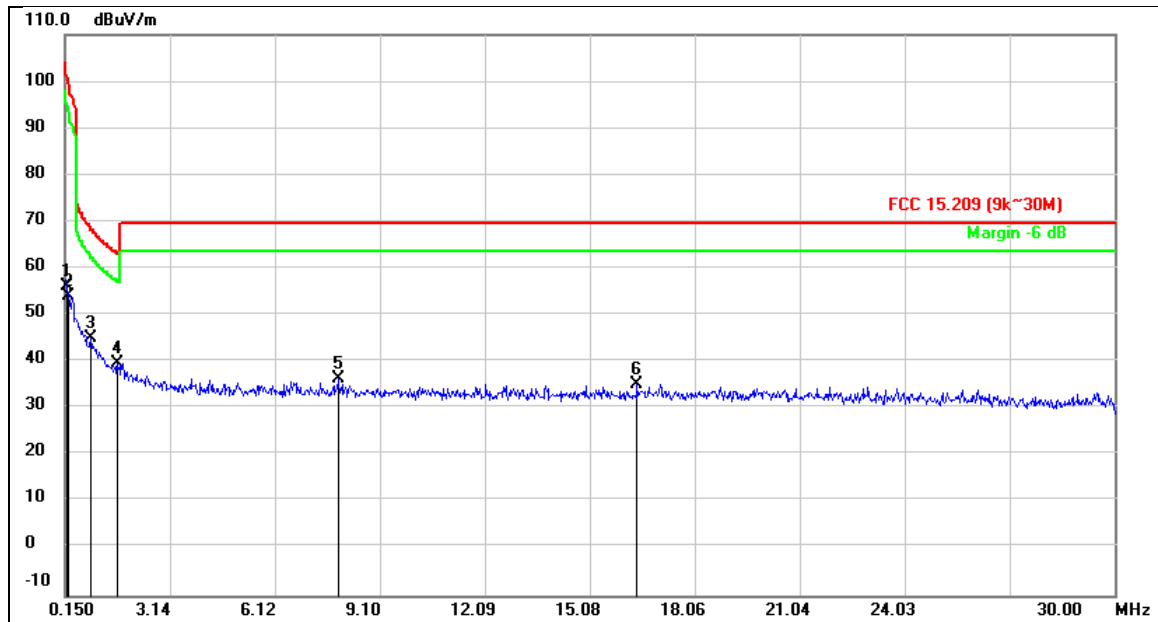
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EUT Test Condition		Measurement Detail	
Frequency Range	0.15 MHz ~ 30 MHz	Antenna Polarity	Perpendicular



Notation	Frequency (MHz)	Reading (dBuV/m)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	0.2097	44.26	12.04	56.30	101.21	-44.91	AVG
2	0.2445	41.99	11.97	53.96	99.86	-45.90	AVG
3	0.8972	33.24	11.94	45.18	68.55	-23.37	QP
4	1.6624	27.95	11.77	39.72	63.19	-23.47	QP
5	7.9389	24.66	11.63	36.29	69.54	-33.25	QP
6	16.4411	23.71	11.43	35.14	69.54	-34.40	QP

Remarks:

- Result value (dBuV/m) = Reading value (dBuV/m) + Correction Factor (dB/m).
- Margin(dB) = Result value (dBuV/m) - Limit value (dBuV/m).
- Correction Factor (dB/m) = Antenna Factor (dBuV/m) + Cable Loss (dB) - Preamp Factor (dB).
- The other emission levels were very low against the limit.

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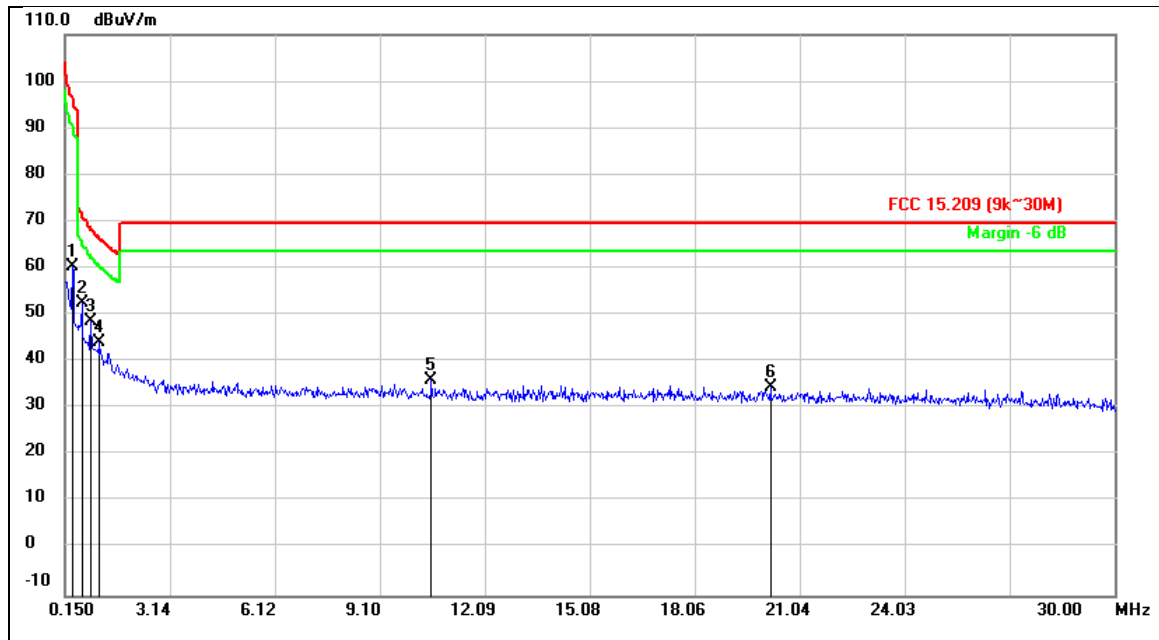
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EUT Test Condition		Measurement Detail	
Frequency Range	0.15 MHz ~ 30 MHz	Antenna Polarity	Parallel



Notation	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	0.3837	48.57	11.85	60.42	95.97	-35.55	AVG
2	0.6394	40.69	11.80	52.49	71.51	-19.02	QP
3	0.8943	36.81	11.94	48.75	68.58	-19.83	QP
4	1.1490	32.14	11.99	44.13	66.42	-22.29	QP
5	10.5915	24.40	11.61	36.01	69.54	-33.53	QP
6	20.2261	23.33	11.29	34.62	69.54	-34.92	QP

Remarks:

- Result value (dBuV/m) = Reading value (dBuV/m) + Correction Factor (dB/m).
- Margin(dB) = Result value (dBuV/m) - Limit value (dBuV/m).
- Correction Factor (dB/m) = Antenna Factor (dBuV/m) + Cable Loss (dB) - Preamp Factor (dB).
- The other emission levels were very low against the limit.

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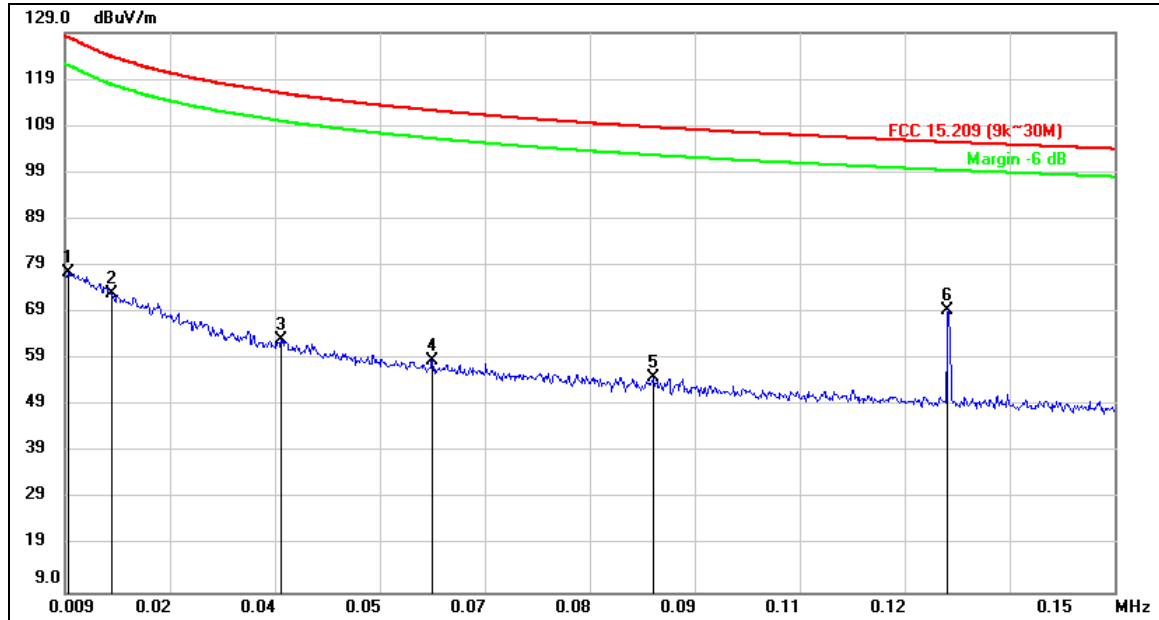
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Smart phone (Without 3mm gap)

EUT Test Condition		Measurement Detail	
Frequency Range	9 kHz ~ 0.15 MHz	Antenna Polarity	Perpendicular



Notation	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	0.0095	57.97	19.63	77.60	128.02	-50.42	AVG
2	0.0154	54.84	18.24	73.08	123.83	-50.75	AVG
3	0.0381	49.39	13.80	63.19	116.03	-52.84	AVG
4	0.0583	46.02	12.77	58.79	112.31	-53.52	AVG
5	0.0881	42.83	12.32	55.15	108.71	-53.56	AVG
6*	0.1276	57.34	12.10	69.44	105.50	-36.06	AVG

Remarks:

1. Result value (dBuV/m) = Reading value (dBuV/m) + Correction Factor (dB/m).
2. Margin(dB) = Result value (dBuV/m) - Limit value (dBuV/m).
3. Correction Factor (dB/m) = Antenna Factor (dBuV/m) + Cable Loss (dB) - Preamp Factor (dB).
4. The other emission levels were very low against the limit.
5. “*” : Fundamental Frequency.

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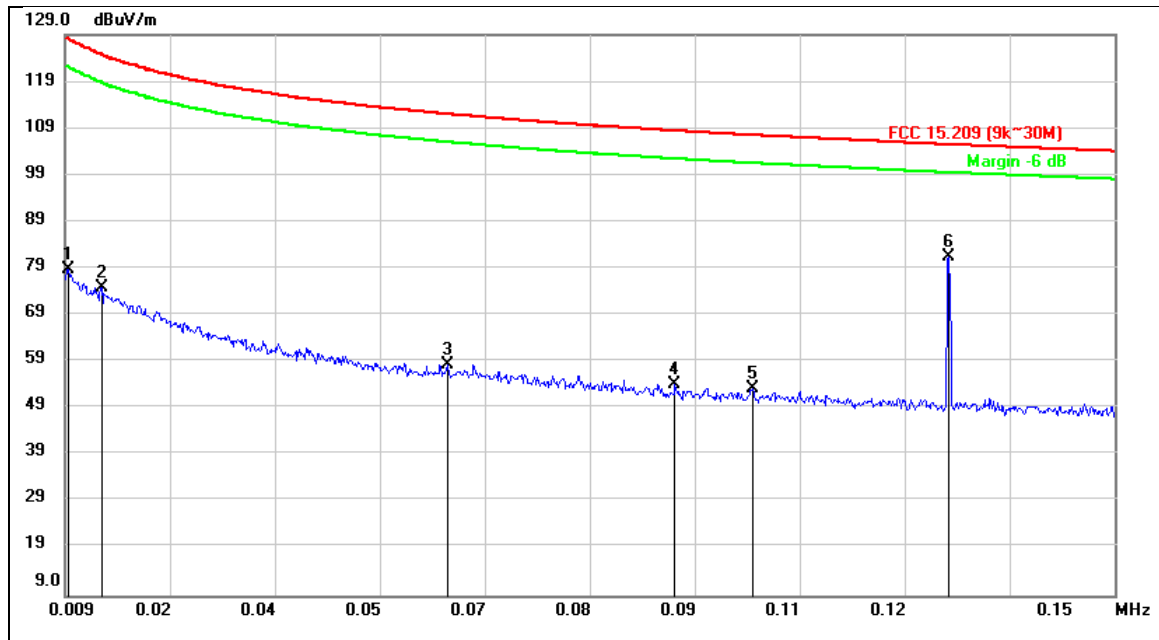
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EUT Test Condition		Measurement Detail	
Frequency Range	9 kHz ~ 0.15 MHz	Antenna Polarity	Parallel



Notation	Frequency (MHz)	Reading (dBuV/m)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	0.0094	59.07	19.63	78.70	128.06	-49.36	AVG
2	0.0139	56.35	18.64	74.99	124.80	-49.81	AVG
3	0.0605	45.65	12.73	58.38	111.97	-53.59	AVG
4	0.0909	41.89	12.28	54.17	108.44	-54.27	QP
5	0.1014	41.03	12.14	53.17	107.49	-54.32	QP
6*	0.1278	69.48	12.10	81.58	105.49	-23.91	AVG

Remarks:

- Result value (dBuV/m) = Reading value (dBuV/m) + Correction Factor (dB/m).
- Margin(dB) = Result value (dBuV/m) - Limit value (dBuV/m).
- Correction Factor (dB/m) = Antenna Factor (dBuV/m) + Cable Loss (dB) - Preamp Factor (dB).
- The other emission levels were very low against the limit.
- “*” : Fundamental Frequency.

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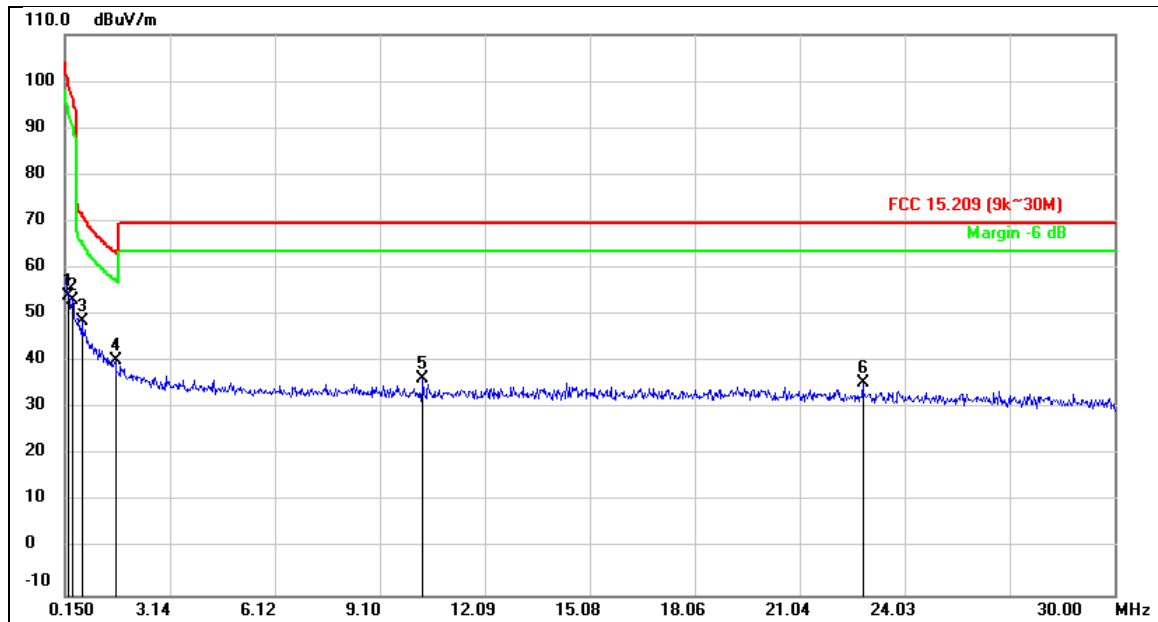
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EUT Test Condition		Measurement Detail	
Frequency Range	0.15 MHz ~ 30 MHz	Antenna Polarity	Perpendicular



Notation	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	0.2425	42.13	11.98	54.11	99.94	-45.83	AVG
2	0.3818	41.29	11.85	53.14	96.02	-42.88	AVG
3	0.6394	36.95	11.80	48.75	71.51	-22.76	QP
4	1.6047	28.48	11.79	40.27	63.50	-23.23	QP
5	10.3328	24.71	11.62	36.33	69.54	-33.21	QP
6	22.8478	24.54	10.81	35.35	69.54	-34.19	QP

Remarks:

- Result value (dBuV/m) = Reading value (dBuV/m) + Correction Factor (dB/m).
- Margin(dB) = Result value (dBuV/m) - Limit value (dBuV/m).
- Correction Factor (dB/m) = Antenna Factor (dBuV/m) + Cable Loss (dB) - Preamp Factor (dB).
- The other emission levels were very low against the limit.

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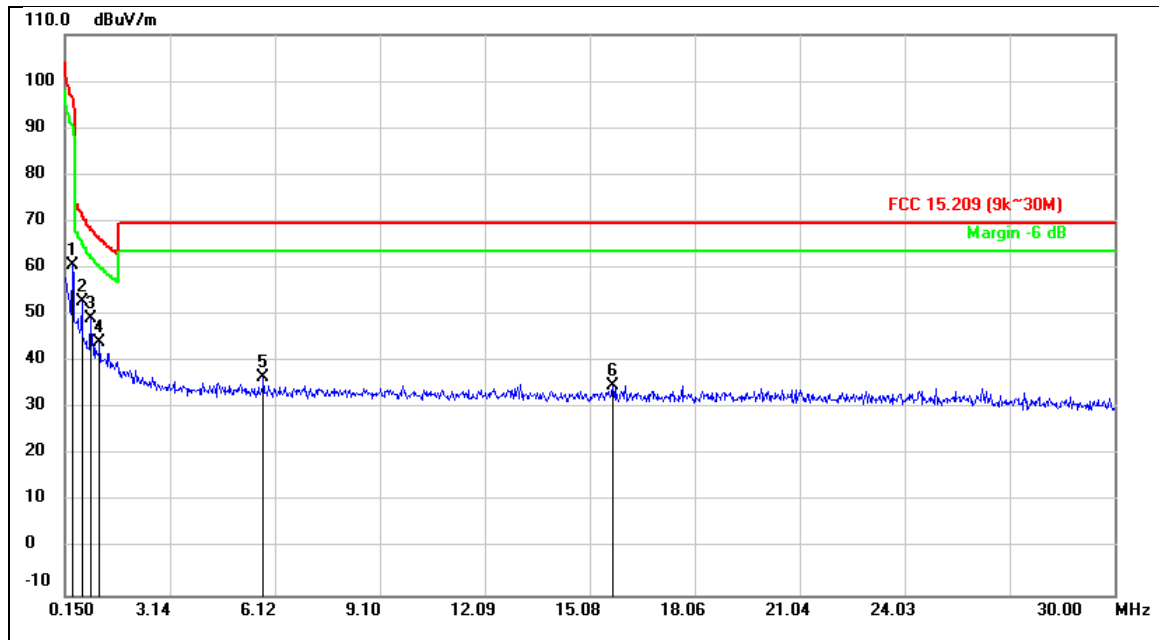
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EUT Test Condition		Measurement Detail	
Frequency Range	0.15 MHz ~ 30 MHz	Antenna Polarity	Parallel



Notation	Frequency (MHz)	Reading (dBuV/m)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	0.3848	48.76	11.85	60.61	95.94	-35.33	AVG
2	0.6385	41.01	11.80	52.81	71.52	-18.71	QP
3	0.8923	37.18	11.94	49.12	68.60	-19.48	QP
4	1.1470	32.21	11.99	44.20	66.44	-22.24	QP
5	5.8096	24.93	11.63	36.56	69.54	-32.98	QP
6	15.7397	23.35	11.45	34.80	69.54	-34.74	QP

Remarks:

- Result value (dBuV/m) = Reading value (dBuV/m) + Correction Factor (dB/m).
- Margin(dB) = Result value (dBuV/m) - Limit value (dBuV/m).
- Correction Factor (dB/m) = Antenna Factor (dBuV/m) + Cable Loss (dB) - Preamp Factor (dB).
- The other emission levels were very low against the limit.

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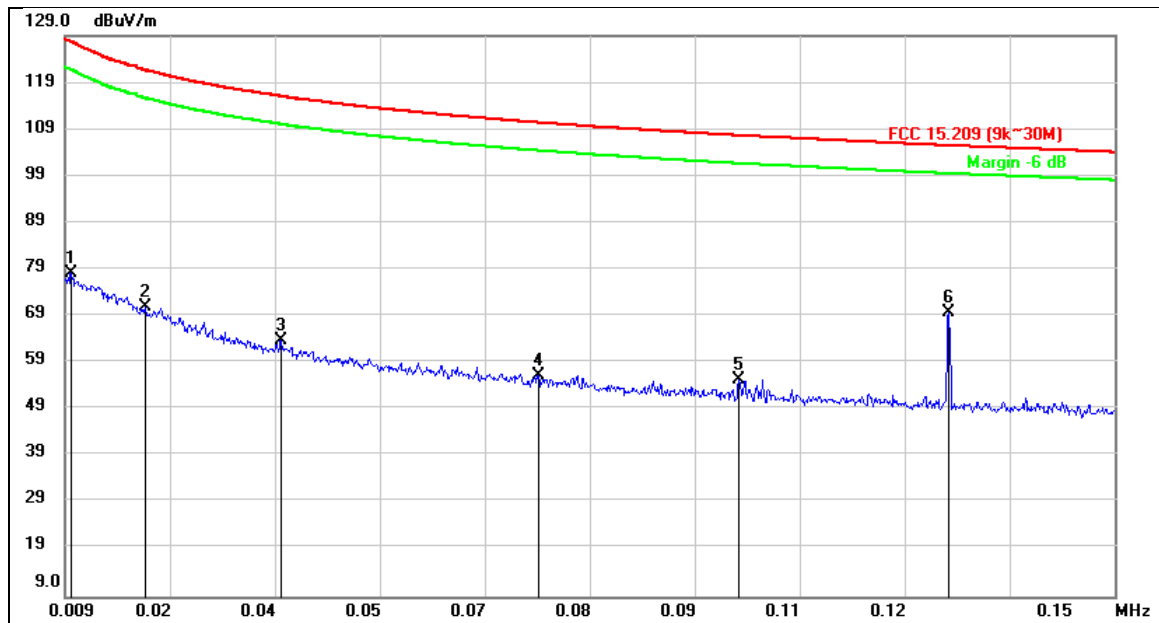
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Adapter 2

Smart phone (With 3mm gap)

EUT Test Condition		Measurement Detail	
Frequency Range	9 kHz ~ 0.15 MHz	Antenna Polarity	Perpendicular



Notation	Frequency (MHz)	Reading (dBuV/m)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	0.0098	58.37	19.66	78.03	127.77	-49.74	AVG
2	0.0199	53.79	17.05	70.84	121.63	-50.79	AVG
3	0.0380	49.87	13.80	63.67	116.06	-52.39	AVG
4	0.0726	43.82	12.56	56.38	110.40	-54.02	AVG
5	0.0996	43.19	12.15	55.34	107.64	-52.30	QP
6*	0.1278	57.62	12.11	69.73	105.49	-35.76	AVG

Remarks:

- Result value (dBuV/m) = Reading value (dBuV/m) + Correction Factor (dB/m).
- Margin(dB) = Result value (dBuV/m) - Limit value (dBuV/m).
- Correction Factor (dB/m) = Antenna Factor (dBuV/m) + Cable Loss (dB) - Preamp Factor (dB).
- The other emission levels were very low against the limit.
- “*” : Fundamental Frequency.

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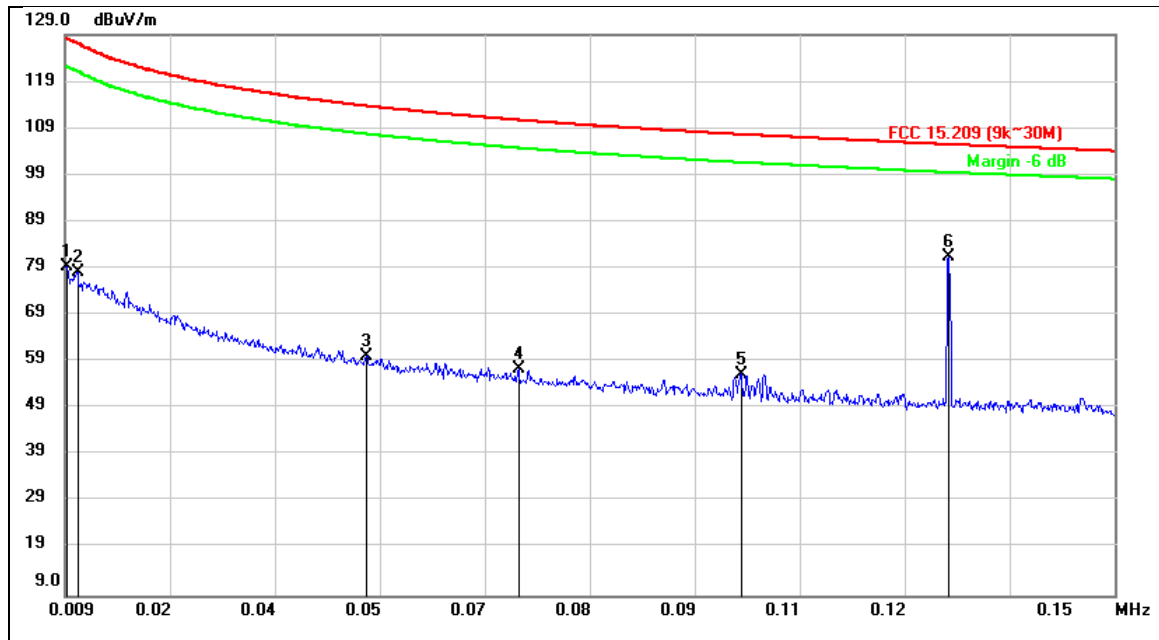
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EUT Test Condition		Measurement Detail	
Frequency Range	9 kHz ~ 0.15 MHz	Antenna Polarity	Parallel



Notation	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	0.0093	59.74	19.62	79.36	128.14	-48.78	AVG
2	0.0107	58.70	19.49	78.19	127.10	-48.91	AVG
3	0.0495	47.33	12.94	60.27	113.72	-53.45	AVG
4	0.0700	44.81	12.59	57.40	110.70	-53.30	AVG
5	0.0998	44.26	12.14	56.40	107.62	-51.22	QP
6*	0.1276	69.45	12.10	81.55	105.50	-23.95	AVG

Remarks:

- Result value (dBuV/m) = Reading value (dBuV/m) + Correction Factor (dB/m).
- Margin(dB) = Result value (dBuV/m) - Limit value (dBuV/m).
- Correction Factor (dB/m) = Antenna Factor (dBuV/m) + Cable Loss (dB) - Preamp Factor (dB).
- The other emission levels were very low against the limit.
- “*” : Fundamental Frequency.

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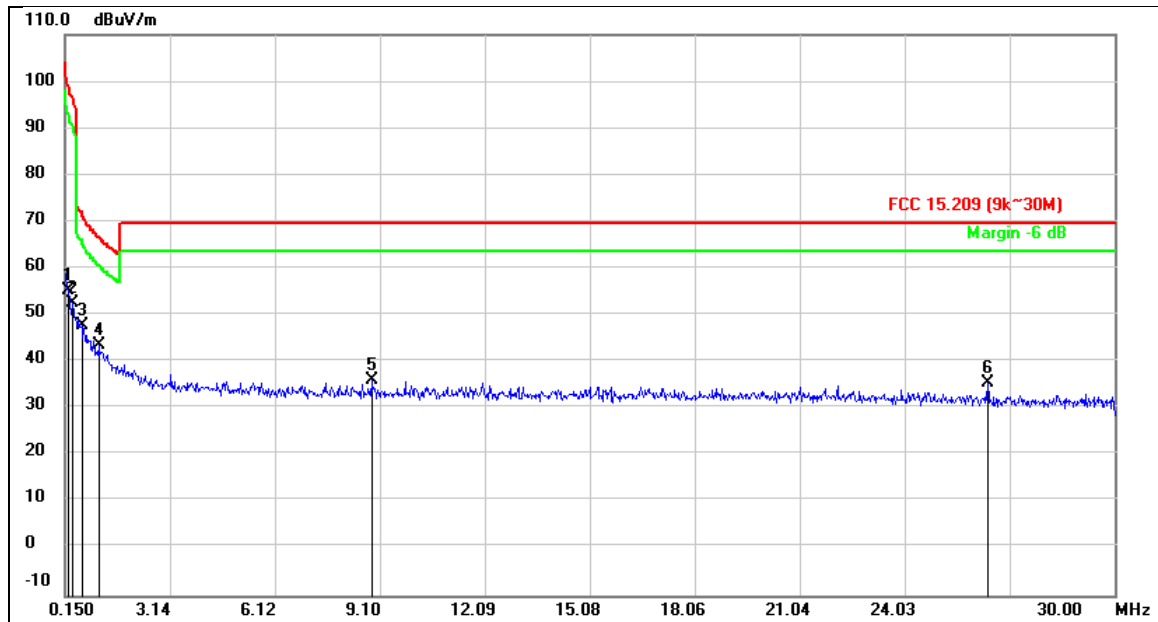
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Doc No: 17-EM-F0972 / 1.0



EUT Test Condition		Measurement Detail	
Frequency Range	0.15 MHz ~ 30 MHz	Antenna Polarity	Perpendicular



Notation	Frequency (MHz)	Reading (dBuV/m)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	0.2505	43.24	11.96	55.20	99.63	-44.43	AVG
2	0.3848	40.65	11.85	52.50	95.94	-43.44	AVG
3	0.6405	35.98	11.80	47.78	71.50	-23.72	QP
4	1.1191	31.42	11.99	43.41	66.66	-23.25	QP
5	8.8791	24.41	11.63	36.04	69.54	-33.50	QP
6	26.4140	25.25	10.15	35.40	69.54	-34.14	QP

Remarks:

- Result value (dBuV/m) = Reading value (dBuV/m) + Correction Factor (dB/m).
- Margin(dB) = Result value (dBuV/m) - Limit value (dBuV/m).
- Correction Factor (dB/m) = Antenna Factor (dBuV/m) + Cable Loss (dB) - Preamp Factor (dB).
- The other emission levels were very low against the limit.

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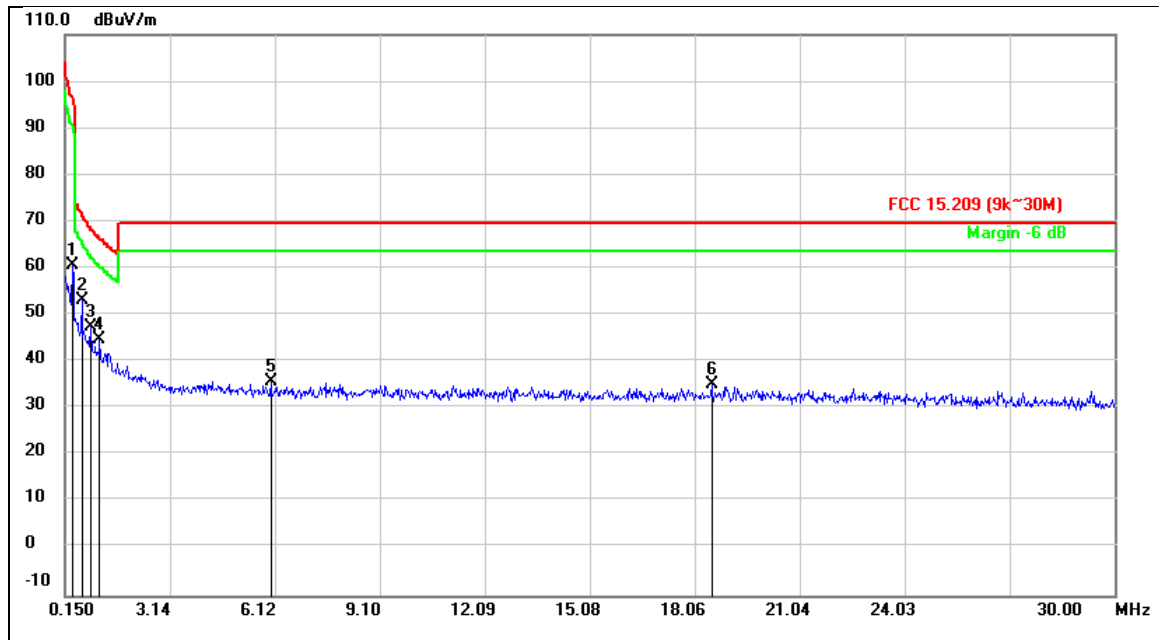
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Doc No: 17-EM-F0972 / 1.0



EUT Test Condition		Measurement Detail	
Frequency Range	0.15 MHz ~ 30 MHz	Antenna Polarity	Parallel



Notation	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	0.3837	48.85	11.85	60.70	95.97	-35.27	AVG
2	0.6394	41.27	11.80	53.07	71.51	-18.44	QP
3	0.8933	35.64	11.94	47.58	68.59	-21.01	QP
4	1.1490	32.78	11.99	44.77	66.42	-21.65	QP
5	6.0175	24.19	11.63	35.82	69.54	-33.72	QP
6	18.5426	23.80	11.37	35.17	69.54	-34.37	QP

Remarks:

- Result value (dBuV/m) = Reading value (dBuV/m) + Correction Factor (dB/m).
- Margin(dB) = Result value (dBuV/m) - Limit value (dBuV/m).
- Correction Factor (dB/m) = Antenna Factor (dBuV/m) + Cable Loss (dB) - Preamp Factor (dB).
- The other emission levels were very low against the limit.

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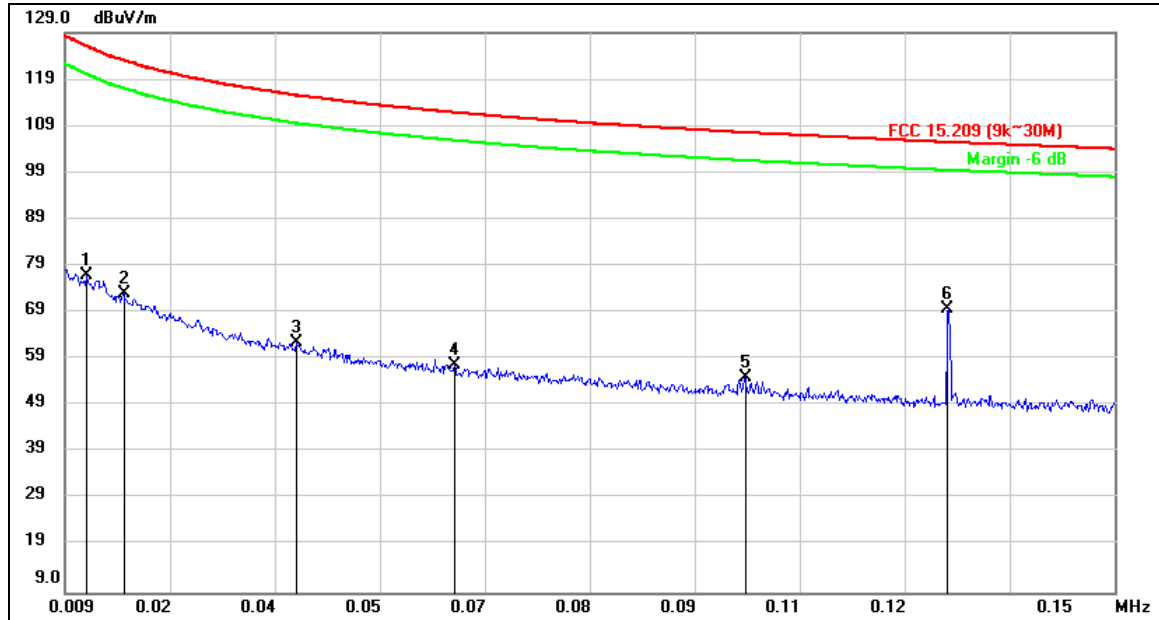
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Smart phone (Without 3mm gap)

EUT Test Condition		Measurement Detail	
Frequency Range	9 kHz ~ 0.15 MHz	Antenna Polarity	Perpendicular



Notation	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	0.0120	57.87	19.15	77.02	126.16	-49.14	AVG
2	0.0169	55.08	17.85	72.93	123.10	-50.17	AVG
3	0.0401	49.04	13.65	62.69	115.54	-52.85	AVG
4	0.0614	45.17	12.72	57.89	111.85	-53.96	AVG
5	0.1004	42.92	12.14	55.06	107.57	-52.51	QP
6*	0.1276	57.70	12.10	69.80	105.50	-35.70	AVG

Remarks:

- Result value (dBuV/m) = Reading value (dBuV/m) + Correction Factor (dB/m).
- Margin(dB) = Result value (dBuV/m) - Limit value (dBuV/m).
- Correction Factor (dB/m) = Antenna Factor (dBuV/m) + Cable Loss (dB) - Preamp Factor (dB).
- The other emission levels were very low against the limit.
- “*” : Fundamental Frequency

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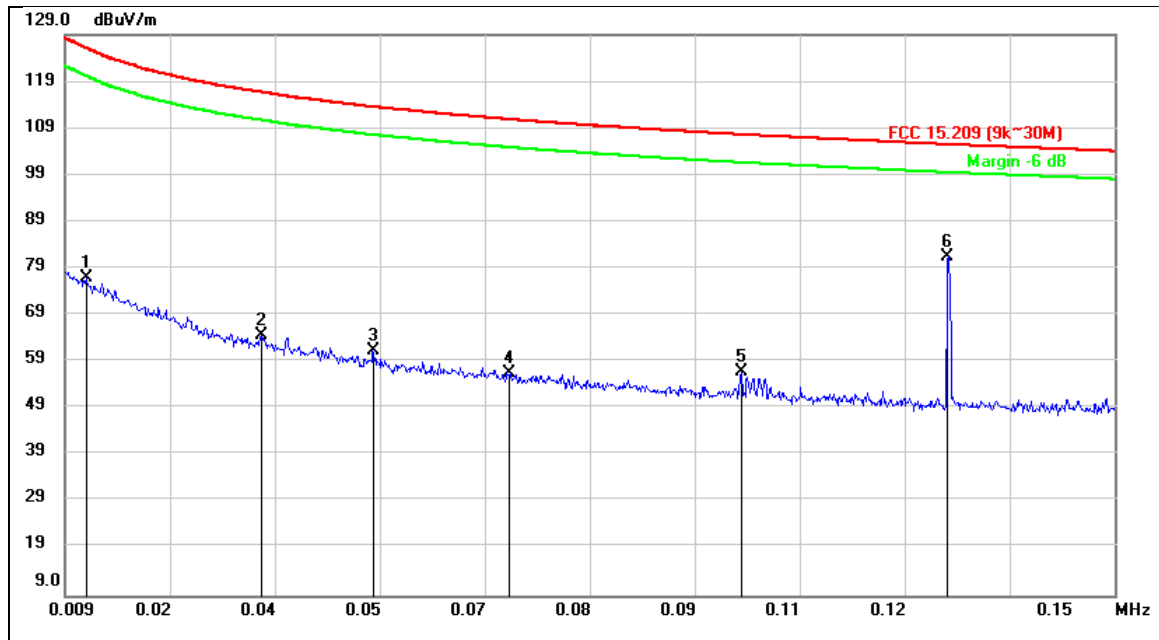
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EUT Test Condition		Measurement Detail	
Frequency Range	9 kHz ~ 0.15 MHz	Antenna Polarity	Parallel



Notation	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	0.0119	57.86	19.17	77.03	126.24	-49.21	AVG
2	0.0354	50.67	13.99	64.66	116.71	-52.05	AVG
3	0.0505	48.48	12.89	61.37	113.54	-52.17	AVG
4	0.0687	43.96	12.61	56.57	110.87	-54.30	AVG
5	0.0999	44.77	12.14	56.91	107.61	-50.70	QP
6*	0.1276	69.41	12.10	81.51	105.50	-23.99	AVG

Remarks:

1. Result value (dBuV/m) = Reading value (dBuV/m) + Correction Factor (dB/m).
2. Margin(dB) = Result value (dBuV/m) - Limit value (dBuV/m).
3. Correction Factor (dB/m) = Antenna Factor (dBuV/m) + Cable Loss (dB) - Preamp Factor (dB).
4. The other emission levels were very low against the limit.
5. “*” : Fundamental Frequency.

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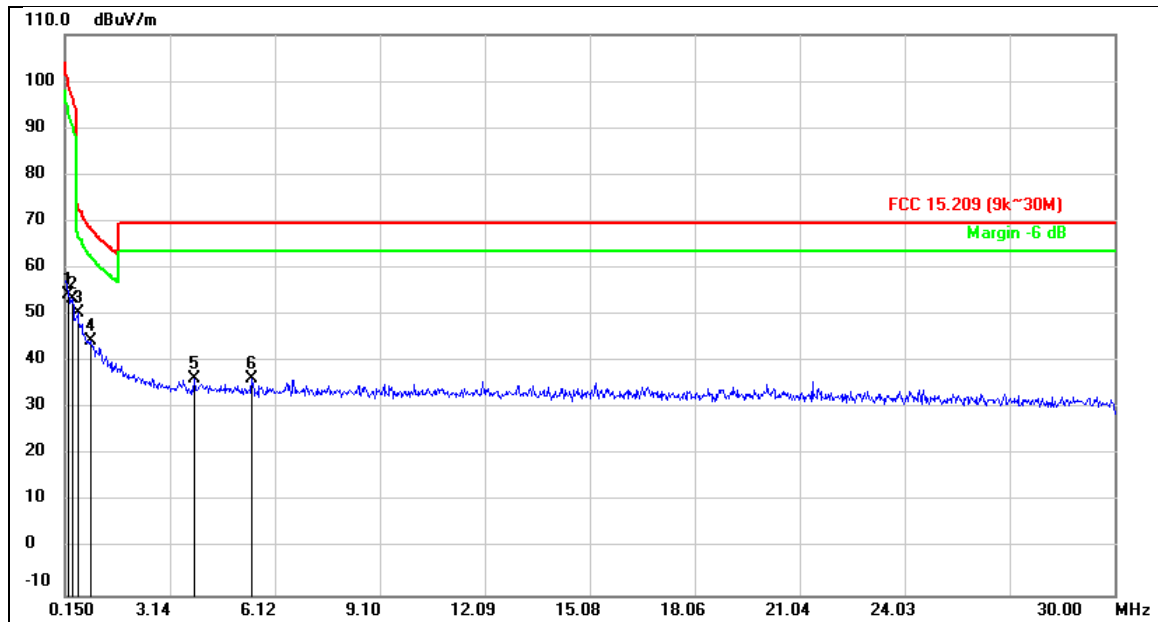
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EUT Test Condition		Measurement Detail	
Frequency Range	0.15 MHz ~ 30 MHz	Antenna Polarity	Perpendicular



Notation	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	0.2425	42.29	11.98	54.27	99.94	-45.67	AVG
2	0.3818	41.58	11.85	53.43	96.02	-42.59	AVG
3	0.5172	38.70	11.81	50.51	73.35	-22.84	QP
4	0.8972	32.62	11.94	44.56	68.55	-23.99	QP
5	3.8444	25.06	11.42	36.48	69.54	-33.06	QP
6	5.4762	24.60	11.63	36.23	69.54	-33.31	QP

Remarks:

1. Result value (dBuV/m) = Reading value (dBuV/m) + Correction Factor (dB/m).
2. Margin(dB) = Result value (dBuV/m) - Limit value (dBuV/m).
3. Correction Factor (dB/m) = Antenna Factor (dBuV/m) + Cable Loss (dB) - Preamp Factor (dB).
4. The other emission levels were very low against the limit.

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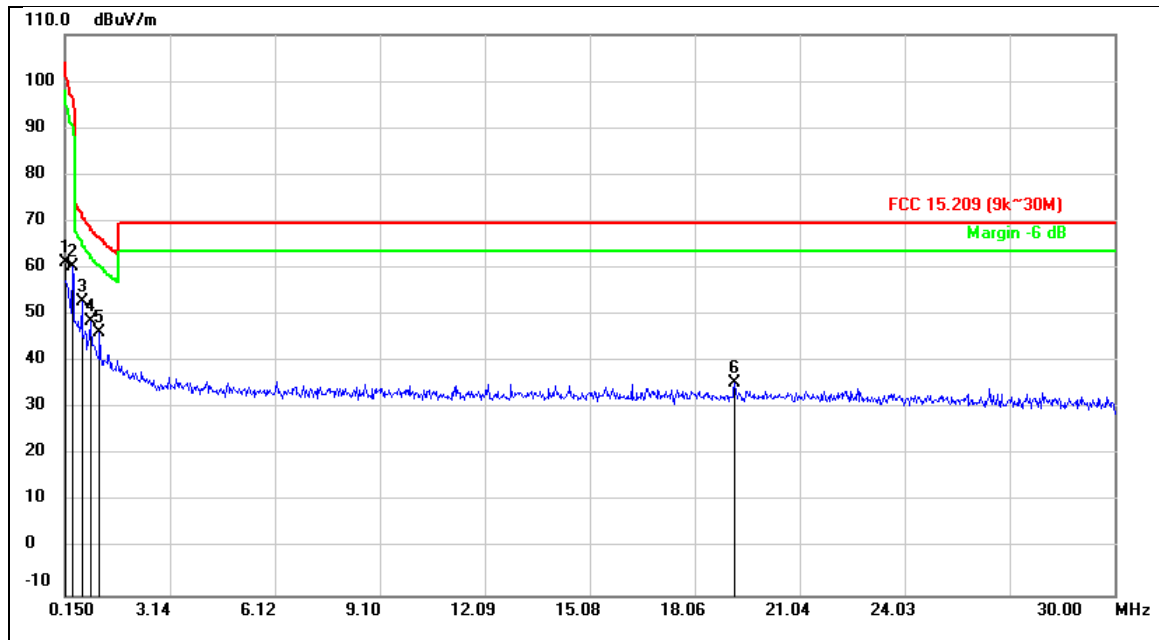
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EUT Test Condition		Measurement Detail	
Frequency Range	0.15 MHz ~ 30 MHz	Antenna Polarity	Parallel



Notation	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	0.1539	49.07	12.14	61.21	103.87	-42.66	AVG
2	0.3828	48.57	11.85	60.42	95.99	-35.57	AVG
3	0.6385	41.11	11.80	52.91	71.52	-18.61	QP
4	0.8943	36.74	11.94	48.68	68.58	-19.90	QP
5	1.1490	34.28	11.99	46.27	66.42	-20.15	QP
6	19.2132	24.12	11.35	35.47	69.54	-34.07	QP

Remarks:

- Result value (dBuV/m) = Reading value (dBuV/m) + Correction Factor (dB/m).
- Margin(dB) = Result value (dBuV/m) - Limit value (dBuV/m).
- Correction Factor (dB/m) = Antenna Factor (dBuV/m) + Cable Loss (dB) - Preamp Factor (dB).
- The other emission levels were very low against the limit.

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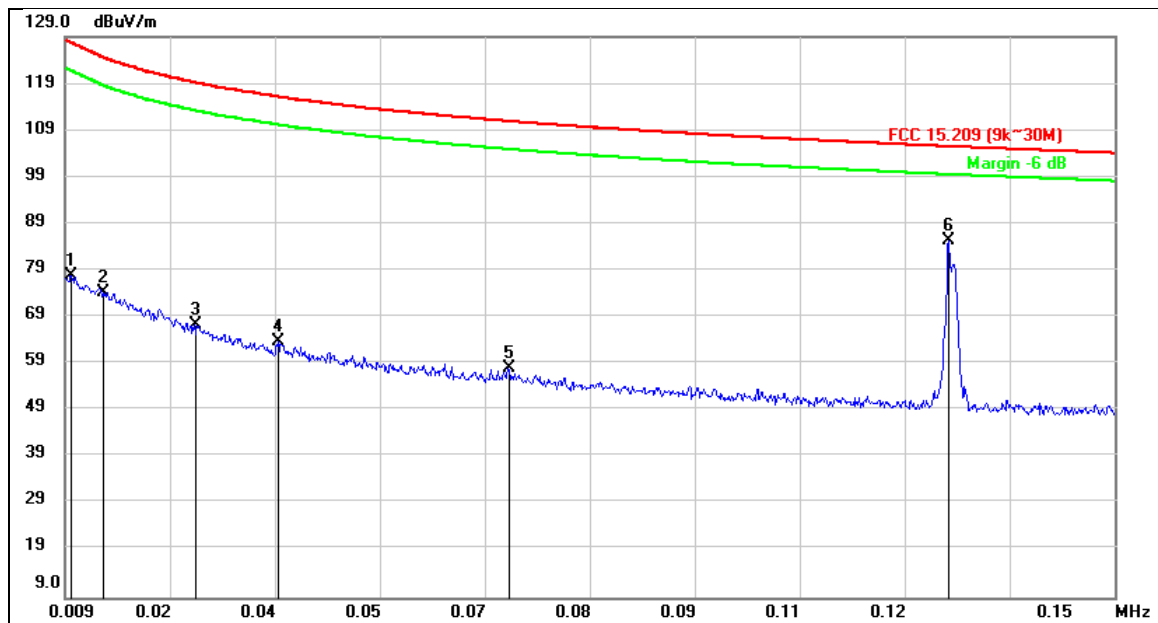


Operating Mode

Adapter 1

10W load (With 3mm gap)

EUT Test Condition		Measurement Detail	
Frequency Range	9 kHz ~ 0.15 MHz	Antenna Polarity	Perpendicular



Notation	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	0.0098	58.26	19.66	77.92	127.75	-49.83	AVG
2	0.0143	55.72	18.54	74.26	124.51	-50.25	AVG
3	0.0264	51.99	15.32	67.31	119.20	-51.89	AVG
4	0.0377	49.83	13.83	63.66	116.14	-52.48	AVG
5	0.0686	45.30	12.61	57.91	110.89	-52.98	AVG
6*	0.1278	73.25	12.10	85.35	105.49	-20.14	AVG

Remarks:

- Result value (dBuV/m) = Reading value (dBuV/m) + Correction Factor (dB/m).
- Margin(dB) = Result value (dBuV/m) - Limit value (dBuV/m).
- Correction Factor (dB/m) = Antenna Factor (dBuV/m) + Cable Loss (dB) - Preamp Factor (dB).
- The other emission levels were very low against the limit.
- “*” : Fundamental Frequency.

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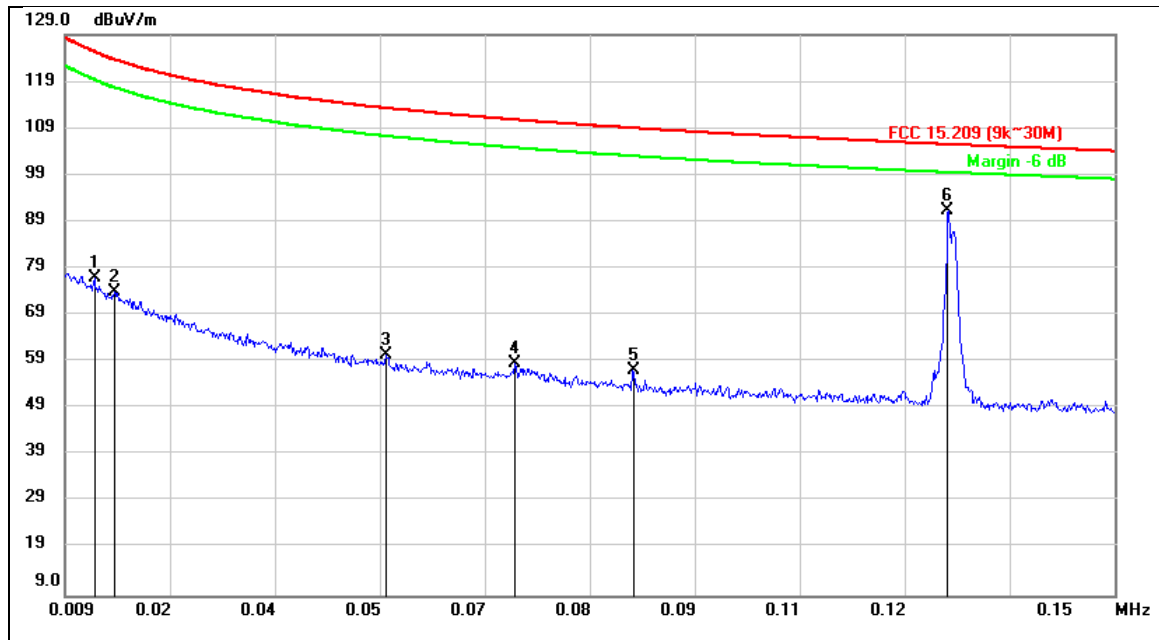
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EUT Test Condition		Measurement Detail	
Frequency Range	9 kHz ~ 0.15 MHz	Antenna Polarity	Parallel



Notation	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	0.0130	58.14	18.89	77.03	125.44	-48.41	AVG
2	0.0157	55.71	18.16	73.87	123.69	-49.82	AVG
3	0.0522	47.57	12.86	60.43	113.27	-52.84	AVG
4	0.0694	46.04	12.60	58.64	110.78	-52.14	AVG
5	0.0854	44.94	12.36	57.30	108.99	-51.69	AVG
6*	0.1276	79.29	12.10	91.39	105.50	-14.11	AVG

Remarks:

- Result value (dBuV/m) = Reading value (dBuV/m) + Correction Factor (dB/m).
- Margin(dB) = Result value (dBuV/m) - Limit value (dBuV/m).
- Correction Factor (dB/m) = Antenna Factor (dBuV/m) + Cable Loss (dB) - Preamp Factor (dB).
- The other emission levels were very low against the limit.
- “*” : Fundamental Frequency.

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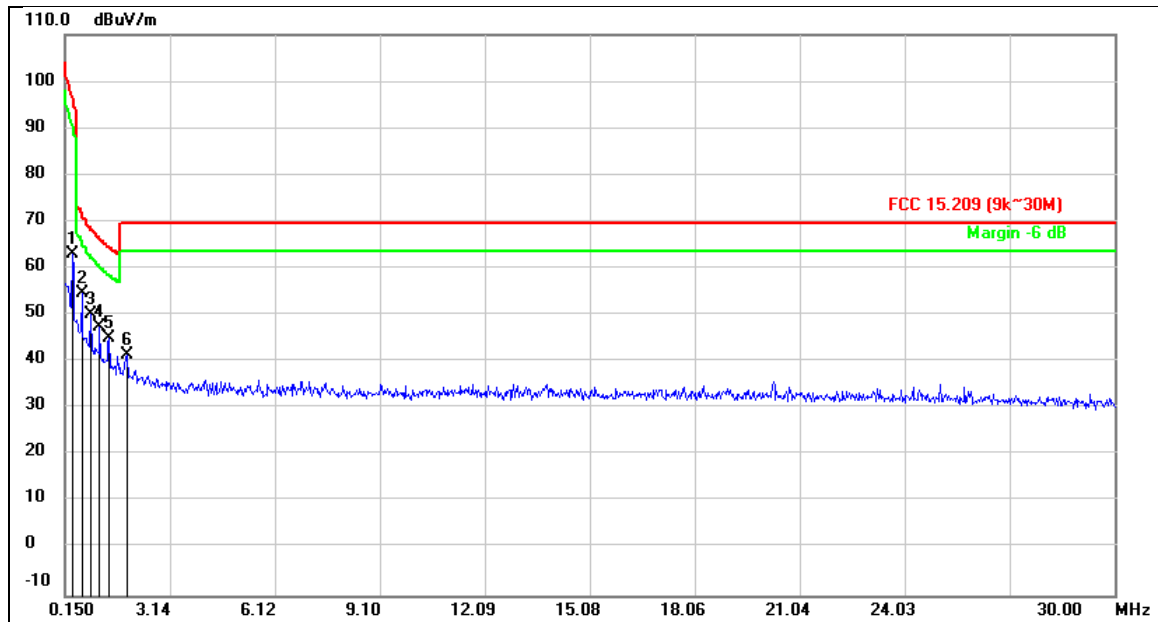
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EUT Test Condition		Measurement Detail	
Frequency Range	0.15 MHz ~ 30 MHz	Antenna Polarity	Perpendicular



Notation	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	0.3837	51.26	11.85	63.11	95.97	-32.86	AVG
2	0.6405	42.91	11.80	54.71	71.50	-16.79	QP
3	0.8933	38.07	11.94	50.01	68.59	-18.58	QP
4	1.1510	35.38	11.99	47.37	66.41	-19.04	QP
5	1.4057	33.18	11.88	45.06	64.65	-19.59	QP
6	1.9131	29.78	11.66	41.44	69.54	-28.10	QP

Remarks:

1. Result value (dBuV/m) = Reading value (dBuV/m) + Correction Factor (dB/m).
2. Margin(dB) = Result value (dBuV/m) - Limit value (dBuV/m).
3. Correction Factor (dB/m) = Antenna Factor (dBuV/m) + Cable Loss (dB) - Preamp Factor (dB).
4. The other emission levels were very low against the limit.

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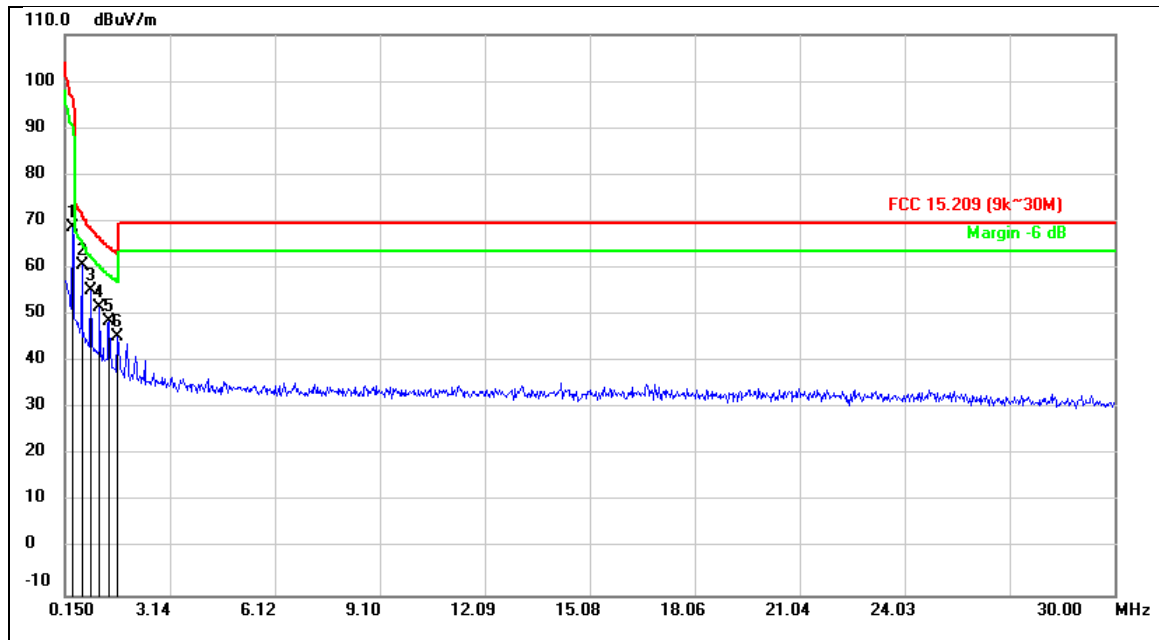
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EUT Test Condition		Measurement Detail	
Frequency Range	0.15 MHz ~ 30 MHz	Antenna Polarity	Parallel



Notation	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	0.3828	57.03	11.85	68.88	95.99	-27.11	AVG
2	0.6394	48.95	11.80	60.75	71.51	-10.76	QP
3	0.8943	43.33	11.94	55.27	68.58	-13.31	QP
4	1.1500	39.77	11.99	51.76	66.41	-14.65	QP
5	1.4046	36.66	11.88	48.54	64.65	-16.11	QP
6	1.6594	33.51	11.77	45.28	63.21	-17.93	QP

Remarks:

1. Result value (dBuV/m) = Reading value (dBuV/m) + Correction Factor (dB/m).
2. Margin(dB) = Result value (dBuV/m) - Limit value (dBuV/m).
3. Correction Factor (dB/m) = Antenna Factor (dBuV/m) + Cable Loss (dB) - Preamp Factor (dB).
4. The other emission levels were very low against the limit.

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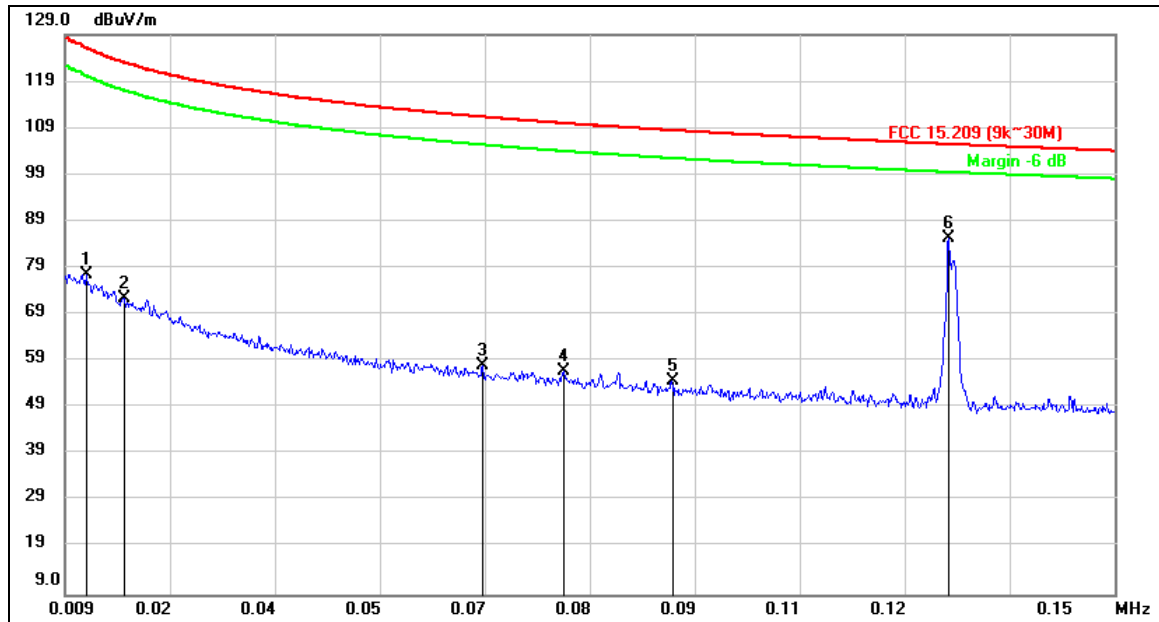
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10W load (Without 3mm gap)

EUT Test Condition		Measurement Detail	
Frequency Range	9 kHz ~ 0.15 MHz	Antenna Polarity	Perpendicular



Notation	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	0.0119	58.38	19.17	77.55	126.23	-48.68	AVG
2	0.0169	54.57	17.84	72.41	123.10	-50.69	AVG
3	0.0651	45.42	12.67	58.09	111.36	-53.27	AVG
4	0.0760	44.21	12.51	56.72	110.00	-53.28	AVG
5	0.0905	42.46	12.28	54.74	108.47	-53.73	QP
6*	0.1278	73.15	12.10	85.25	105.49	-20.24	AVG

Remarks:

- Result value (dBuV/m) = Reading value (dBuV/m) + Correction Factor (dB/m).
- Margin(dB) = Result value (dBuV/m) - Limit value (dBuV/m).
- Correction Factor (dB/m) = Antenna Factor (dBuV/m) + Cable Loss (dB) - Preamp Factor (dB).
- The other emission levels were very low against the limit.
- “*” : Fundamental Frequency.

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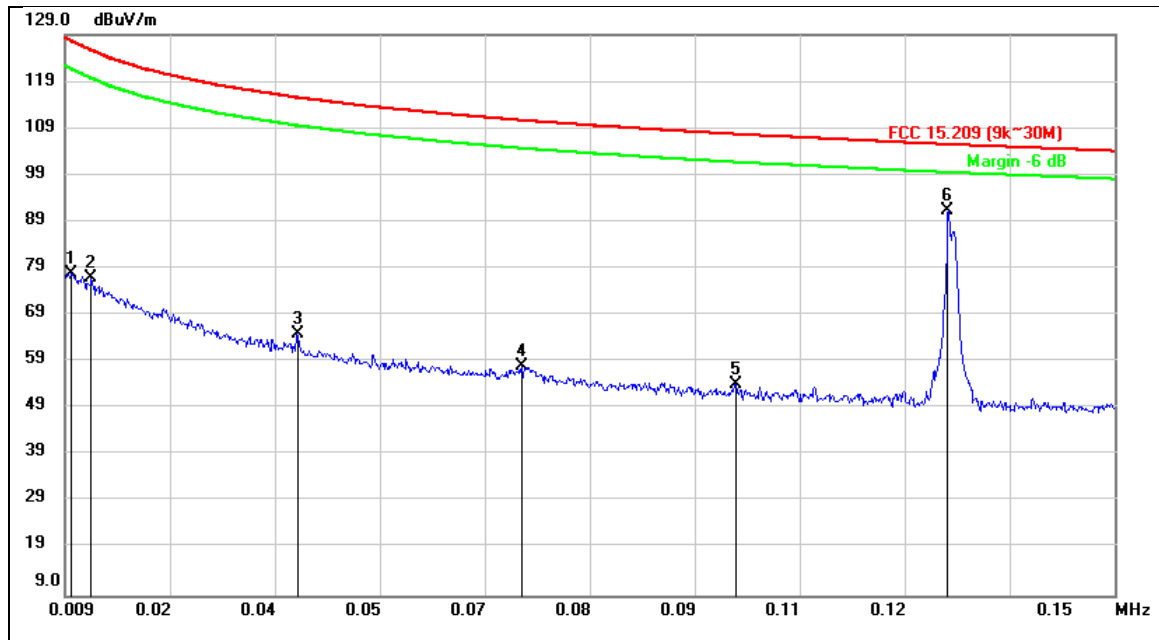
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EUT Test Condition		Measurement Detail	
Frequency Range	9 kHz ~ 0.15 MHz	Antenna Polarity	Parallel



Notation	Frequency (MHz)	Reading (dBuV/m)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	0.0100	58.25	19.68	77.93	127.60	-49.67	AVG
2	0.0126	57.87	18.99	76.86	125.73	-48.87	AVG
3	0.0403	51.21	13.63	64.84	115.50	-50.66	AVG
4	0.0704	45.39	12.58	57.97	110.65	-52.68	AVG
5	0.0991	41.97	12.15	54.12	107.68	-53.56	QP
6*	0.1276	79.26	12.10	91.36	105.50	-14.14	AVG

Remarks:

- Result value (dBuV/m) = Reading value (dBuV/m) + Correction Factor (dB/m).
- Margin(dB) = Result value (dBuV/m) - Limit value (dBuV/m).
- Correction Factor (dB/m) = Antenna Factor (dBuV/m) + Cable Loss (dB) - Preamp Factor (dB).
- The other emission levels were very low against the limit.
- “*” : Fundamental Frequency.

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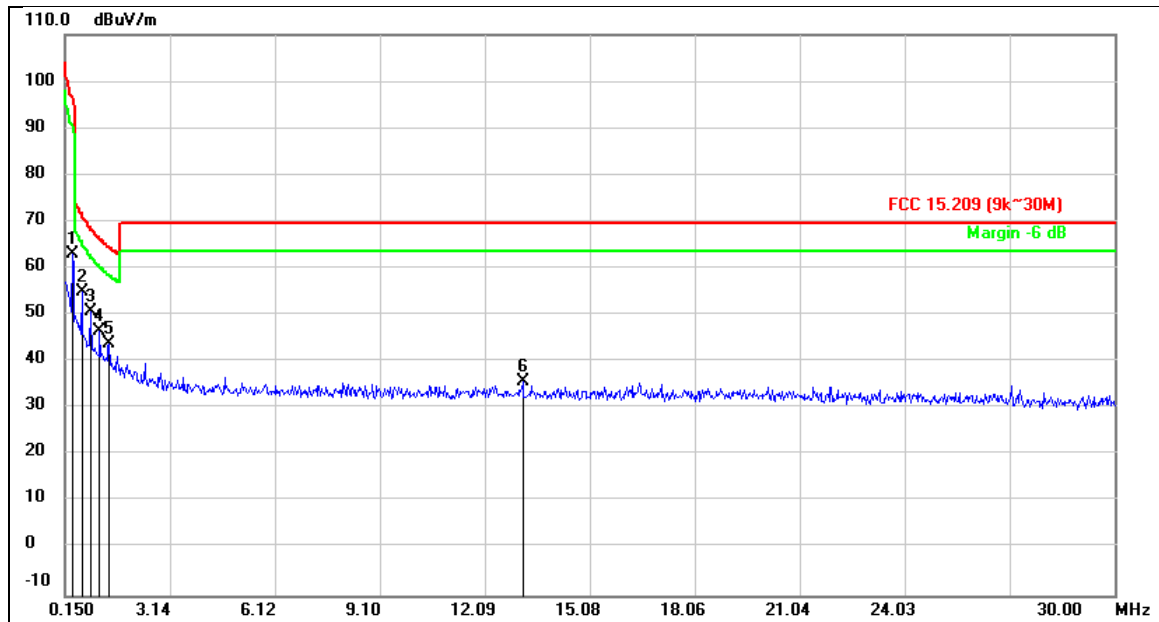
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EUT Test Condition		Measurement Detail	
Frequency Range	0.15 MHz ~ 30 MHz	Antenna Polarity	Perpendicular



Notation	Frequency (MHz)	Reading (dBuV/m)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	0.3828	51.17	11.85	63.02	95.99	-32.97	AVG
2	0.6375	43.05	11.80	54.85	71.54	-16.69	QP
3	0.8943	38.79	11.94	50.73	68.58	-17.85	QP
4	1.1510	34.42	11.99	46.41	66.41	-20.00	QP
5	1.4057	31.86	11.88	43.74	64.65	-20.91	QP
6	13.1716	24.33	11.52	35.85	69.54	-33.69	QP

Remarks:

- Result value (dBuV/m) = Reading value (dBuV/m) + Correction Factor (dB/m).
- Margin(dB) = Result value (dBuV/m) - Limit value (dBuV/m).
- Correction Factor (dB/m) = Antenna Factor (dBuV/m) + Cable Loss (dB) - Preamp Factor (dB).
- The other emission levels were very low against the limit.

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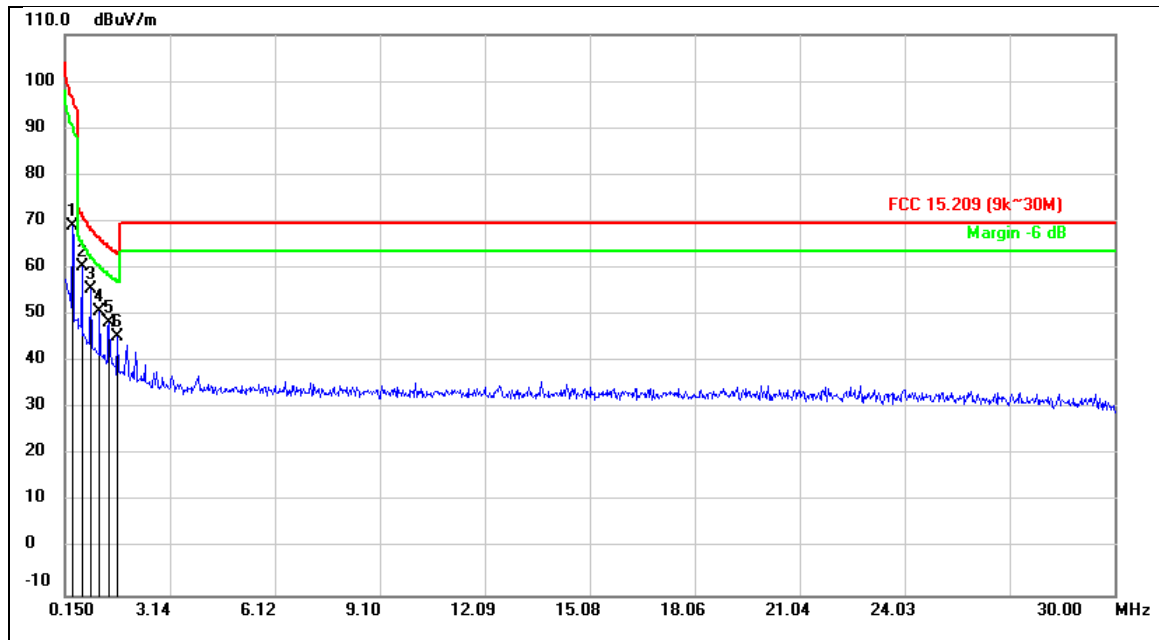
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EUT Test Condition		Measurement Detail	
Frequency Range	0.15 MHz ~ 30 MHz	Antenna Polarity	Parallel



Notation	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	0.3837	57.30	11.85	69.15	95.97	-26.82	AVG
2	0.6385	48.67	11.80	60.47	71.52	-11.05	QP
3	0.8953	43.68	11.94	55.62	68.57	-12.95	QP
4	1.1490	38.87	11.99	50.86	66.42	-15.56	QP
5	1.4057	36.44	11.88	48.32	64.65	-16.33	QP
6	1.6594	33.73	11.77	45.50	63.21	-17.71	QP

Remarks:

- Result value (dBuV/m) = Reading value (dBuV/m) + Correction Factor (dB/m).
- Margin(dB) = Result value (dBuV/m) - Limit value (dBuV/m).
- Correction Factor (dB/m) = Antenna Factor (dBuV/m) + Cable Loss (dB) - Preamp Factor (dB).
- The other emission levels were very low against the limit.

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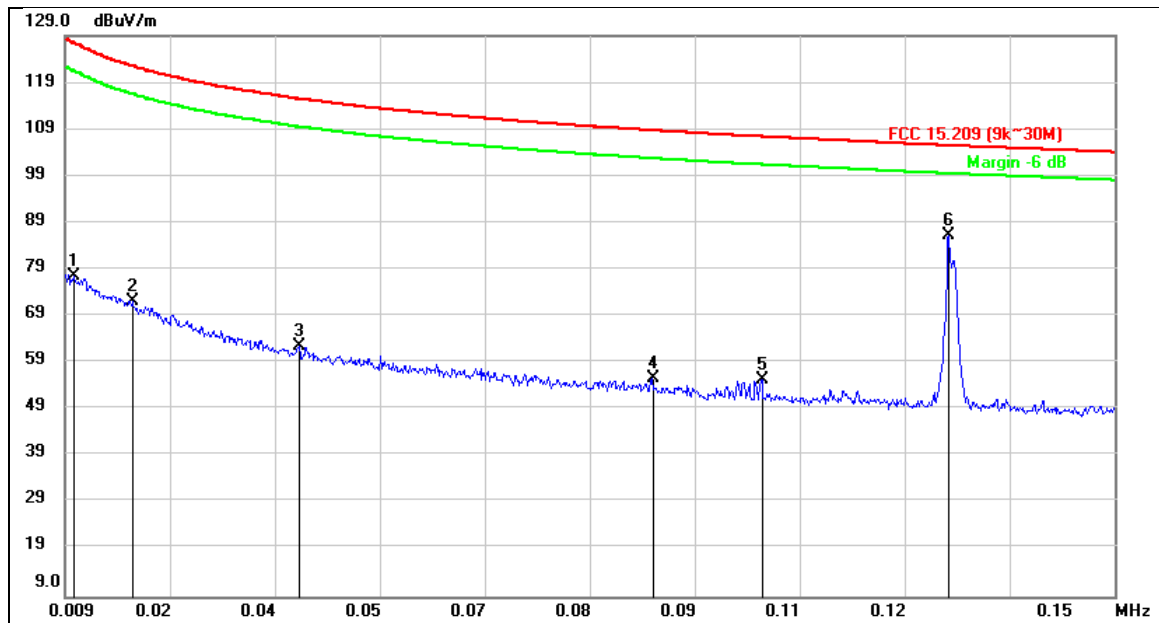
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Adapter 2

10W load (With 3mm gap)

EUT Test Condition		Measurement Detail	
Frequency Range	9 kHz ~ 0.15 MHz	Antenna Polarity	Perpendicular



Notation	Frequency (MHz)	Reading (dBuV/m)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	0.0103	57.87	19.60	77.47	127.38	-49.91	AVG
2	0.0181	54.72	17.52	72.24	122.51	-50.27	AVG
3	0.0404	48.86	13.62	62.48	115.48	-53.00	AVG
4	0.0879	43.28	12.32	55.60	108.73	-53.13	AVG
5	0.1026	43.26	12.14	55.40	107.40	-52.00	QP
6*	0.1276	74.20	12.10	86.30	105.50	-19.20	AVG

Remarks:

- Result value (dBuV/m) = Reading value (dBuV/m) + Correction Factor (dB/m).
- Margin(dB) = Result value (dBuV/m) - Limit value (dBuV/m).
- Correction Factor (dB/m) = Antenna Factor (dBuV/m) + Cable Loss (dB) - Preamp Factor (dB).
- The other emission levels were very low against the limit.
- “*” : Fundamental Frequency.

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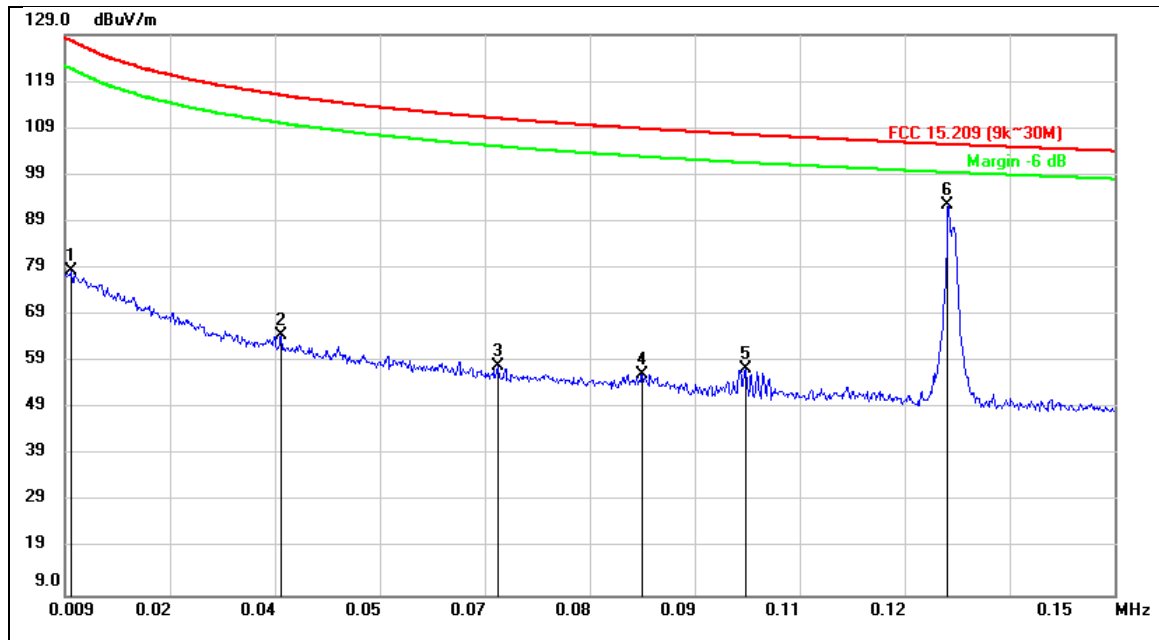
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EUT Test Condition		Measurement Detail	
Frequency Range	9 kHz ~ 0.15 MHz	Antenna Polarity	Parallel



Notation	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	0.0099	58.84	19.67	78.51	127.68	-49.17	AVG
2	0.0380	50.79	13.80	64.59	116.06	-51.47	AVG
3	0.0672	45.39	12.63	58.02	111.08	-53.06	AVG
4	0.0865	44.04	12.35	56.39	108.88	-52.49	AVG
5	0.1004	45.32	12.14	57.46	107.57	-50.11	QP
6*	0.1276	80.35	12.10	92.45	105.50	-13.05	AVG

Remarks:

1. Result value (dBuV/m) = Reading value (dBuV/m) + Correction Factor (dB/m).
2. Margin(dB) = Result value (dBuV/m) - Limit value (dBuV/m).
3. Correction Factor (dB/m) = Antenna Factor (dBuV/m) + Cable Loss (dB) - Preamp Factor (dB).
4. The other emission levels were very low against the limit.
5. “*” : Fundamental Frequency.

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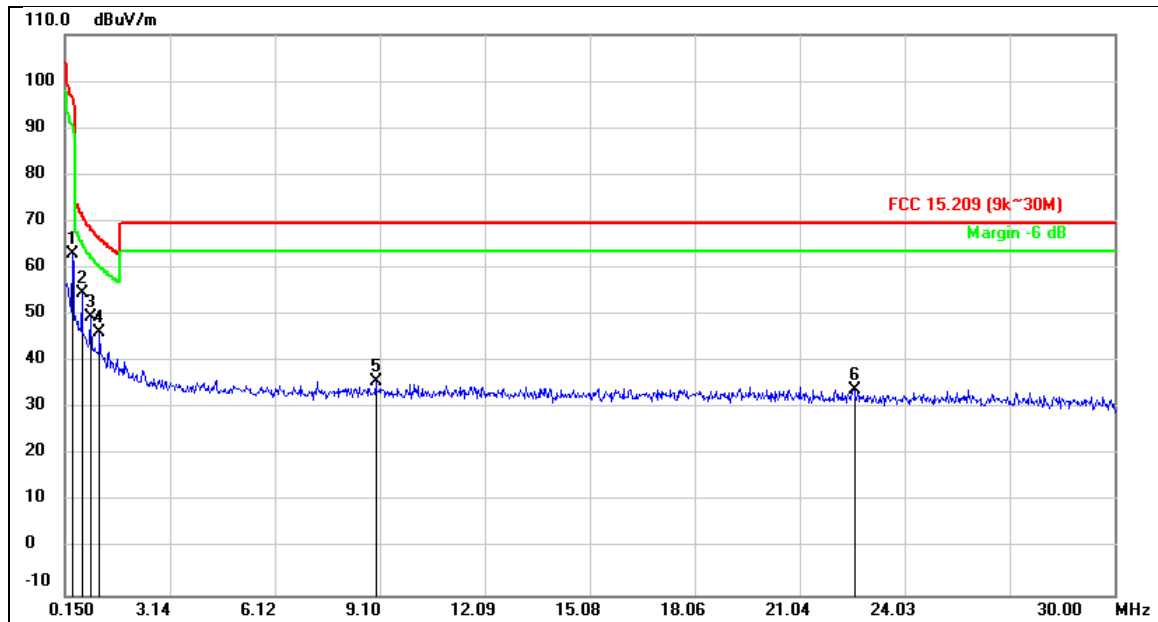
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EUT Test Condition		Measurement Detail	
Frequency Range	0.15 MHz ~ 30 MHz	Antenna Polarity	Perpendicular



Notation	Frequency (MHz)	Reading (dBuV/m)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	0.3828	51.28	11.85	63.13	95.99	-32.86	AVG
2	0.6394	42.72	11.80	54.52	71.51	-16.99	QP
3	0.8933	37.75	11.94	49.69	68.59	-18.90	QP
4	1.1500	34.12	11.99	46.11	66.41	-20.30	QP
5	9.0055	24.24	11.63	35.87	69.54	-33.67	QP
6	22.5962	23.23	10.86	34.09	69.54	-35.45	QP

Remarks:

1. Result value (dBuV/m) = Reading value (dBuV/m) + Correction Factor (dB/m).
2. Margin(dB) = Result value (dBuV/m) - Limit value (dBuV/m).
3. Correction Factor (dB/m) = Antenna Factor (dBuV/m) + Cable Loss (dB) - Preamp Factor (dB).
4. The other emission levels were very low against the limit.

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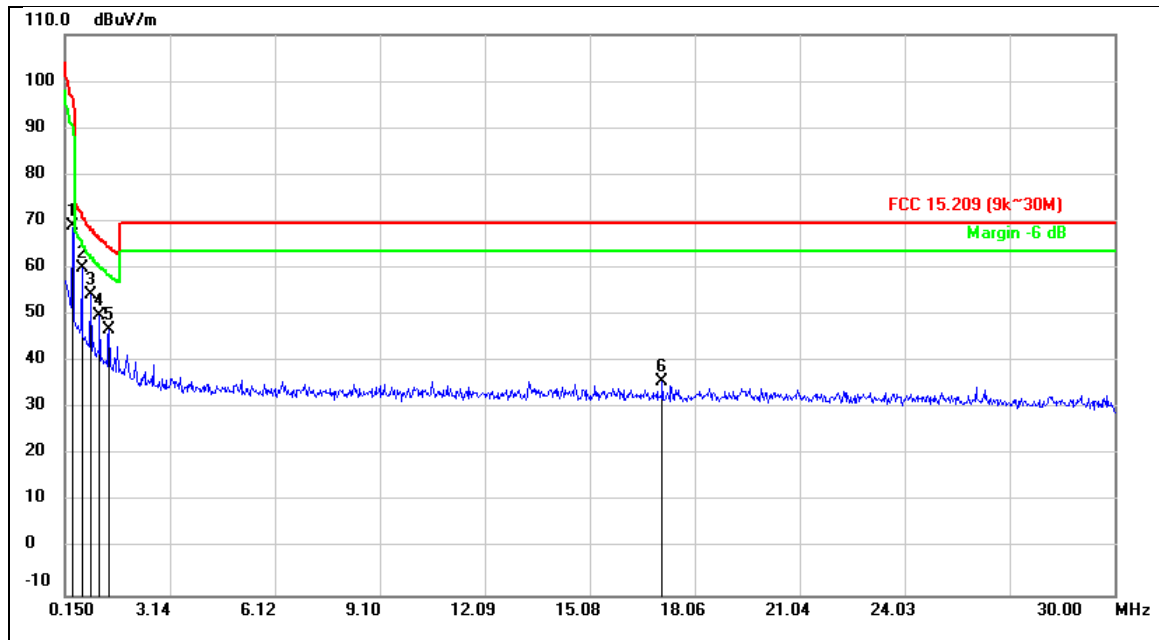
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EUT Test Condition		Measurement Detail	
Frequency Range	0.15 MHz ~ 30 MHz	Antenna Polarity	Parallel



Notation	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	0.3837	57.05	11.85	68.90	95.97	-27.07	AVG
2	0.6385	48.29	11.80	60.09	71.52	-11.43	QP
3	0.8953	42.40	11.94	54.34	68.57	-14.23	QP
4	1.1579	37.88	11.99	49.87	66.35	-16.48	QP
5	1.4057	34.96	11.88	46.84	64.65	-17.81	QP
6	17.1456	24.38	11.41	35.79	69.54	-33.75	QP

Remarks:

1. Result value (dBuV/m) = Reading value (dBuV/m) + Correction Factor (dB/m).
2. Margin(dB) = Result value (dBuV/m) - Limit value (dBuV/m).
3. Correction Factor (dB/m) = Antenna Factor (dBuV/m) + Cable Loss (dB) - Preamp Factor (dB).
4. The other emission levels were very low against the limit.

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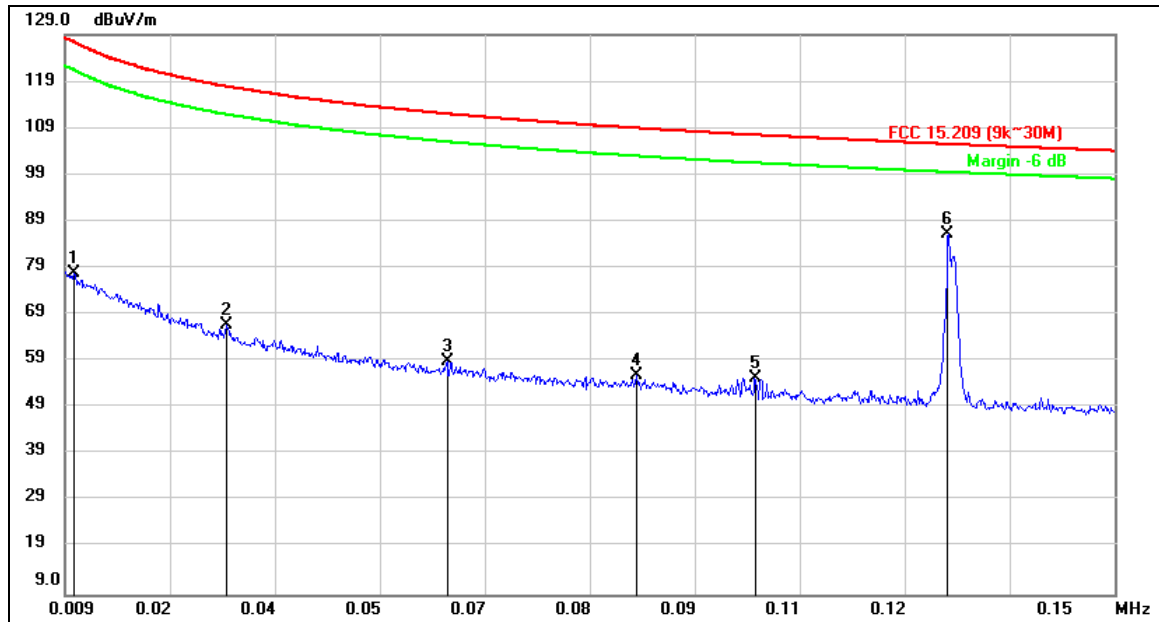
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10W load (Without 3mm gap)

EUT Test Condition		Measurement Detail	
Frequency Range	9 kHz ~ 0.15 MHz	Antenna Polarity	Perpendicular



Notation	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	0.0103	58.39	19.60	77.99	127.38	-49.39	AVG
2	0.0308	52.44	14.34	66.78	117.86	-51.08	AVG
3	0.0603	46.24	12.74	58.98	112.00	-53.02	AVG
4	0.0858	43.45	12.36	55.81	108.95	-53.14	AVG
5	0.1018	43.15	12.14	55.29	107.46	-52.17	QP
6*	0.1276	74.17	12.10	86.27	105.50	-19.23	AVG

Remarks:

- Result value (dBuV/m) = Reading value (dBuV/m) + Correction Factor (dB/m).
- Margin(dB) = Result value (dBuV/m) - Limit value (dBuV/m).
- Correction Factor (dB/m) = Antenna Factor (dBuV/m) + Cable Loss (dB) - Preamp Factor (dB).
- The other emission levels were very low against the limit.
- “*” : Fundamental Frequency.

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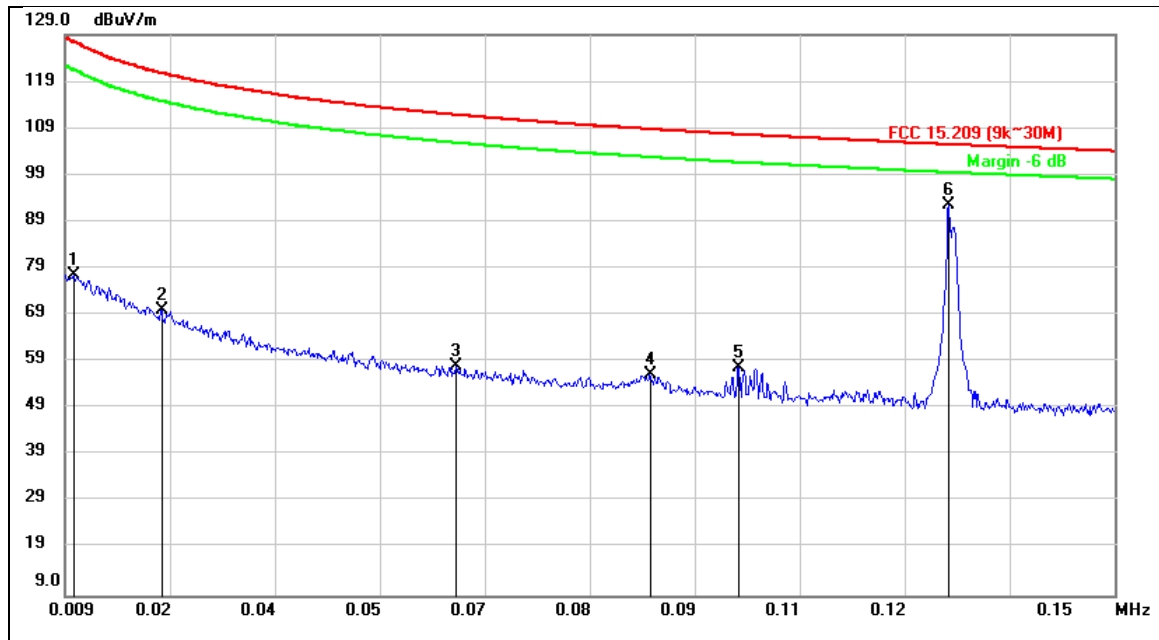
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EUT Test Condition		Measurement Detail	
Frequency Range	9 kHz ~ 0.15 MHz	Antenna Polarity	Parallel



Notation	Frequency (MHz)	Reading (dBuV/m)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	0.0103	57.94	19.60	77.54	127.38	-49.84	AVG
2	0.0220	53.49	16.48	69.97	120.81	-50.84	AVG
3	0.0616	45.32	12.71	58.03	111.83	-53.80	AVG
4	0.0877	43.82	12.33	56.15	108.75	-52.60	AVG
5	0.0995	45.66	12.15	57.81	107.65	-49.84	QP
6*	0.1276	80.40	12.10	92.50	105.50	-13.00	AVG

Remarks:

- Result value (dBuV/m) = Reading value (dBuV/m) + Correction Factor (dB/m).
- Margin(dB) = Result value (dBuV/m) - Limit value (dBuV/m).
- Correction Factor (dB/m) = Antenna Factor (dBuV/m) + Cable Loss (dB) - Preamp Factor (dB).
- The other emission levels were very low against the limit.
- “*” : Fundamental Frequency.

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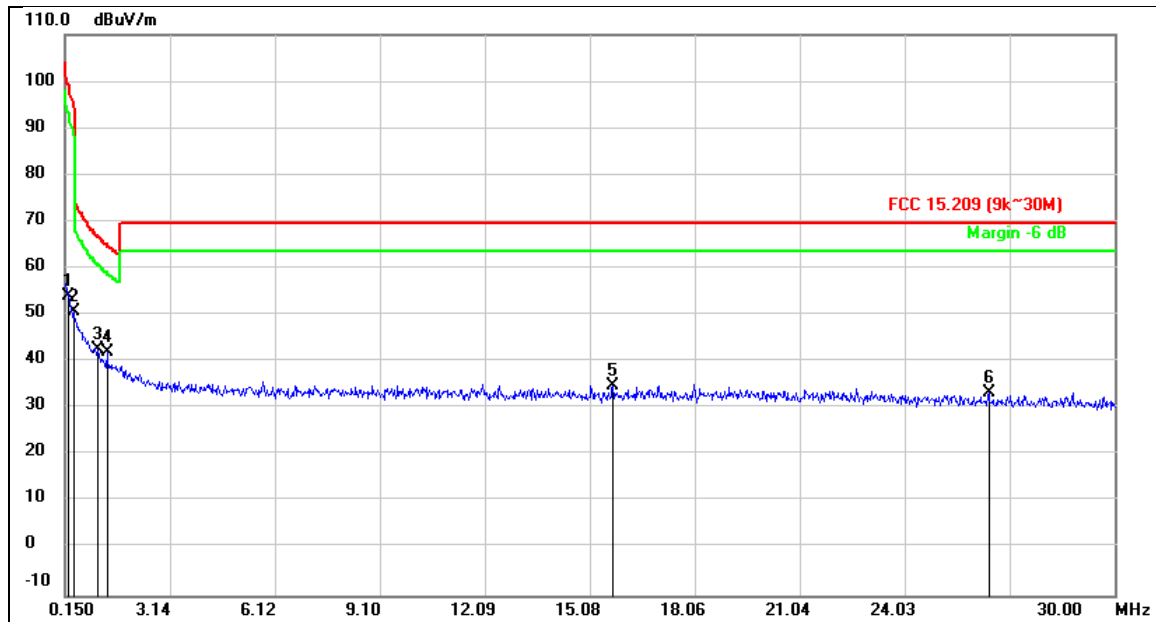
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EUT Test Condition		Measurement Detail	
Frequency Range	0.15 MHz ~ 30 MHz	Antenna Polarity	Perpendicular



Notation	Frequency (MHz)	Reading (dBuV/m)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	0.2595	42.03	11.95	53.98	99.35	-45.37	AVG
2	0.4107	38.87	11.84	50.71	95.35	-44.64	AVG
3	1.0843	30.66	12.00	42.66	66.93	-24.27	QP
4	1.3599	30.22	11.90	42.12	64.95	-22.83	QP
5	15.7516	23.47	11.45	34.92	69.54	-34.62	QP
6	26.4319	23.32	10.15	33.47	69.54	-36.07	QP

Remarks:

- Result value (dBuV/m) = Reading value (dBuV/m) + Correction Factor (dB/m).
- Margin(dB) = Result value (dBuV/m) - Limit value (dBuV/m).
- Correction Factor (dB/m) = Antenna Factor (dBuV/m) + Cable Loss (dB) - Preamp Factor (dB).
- The other emission levels were very low against the limit.

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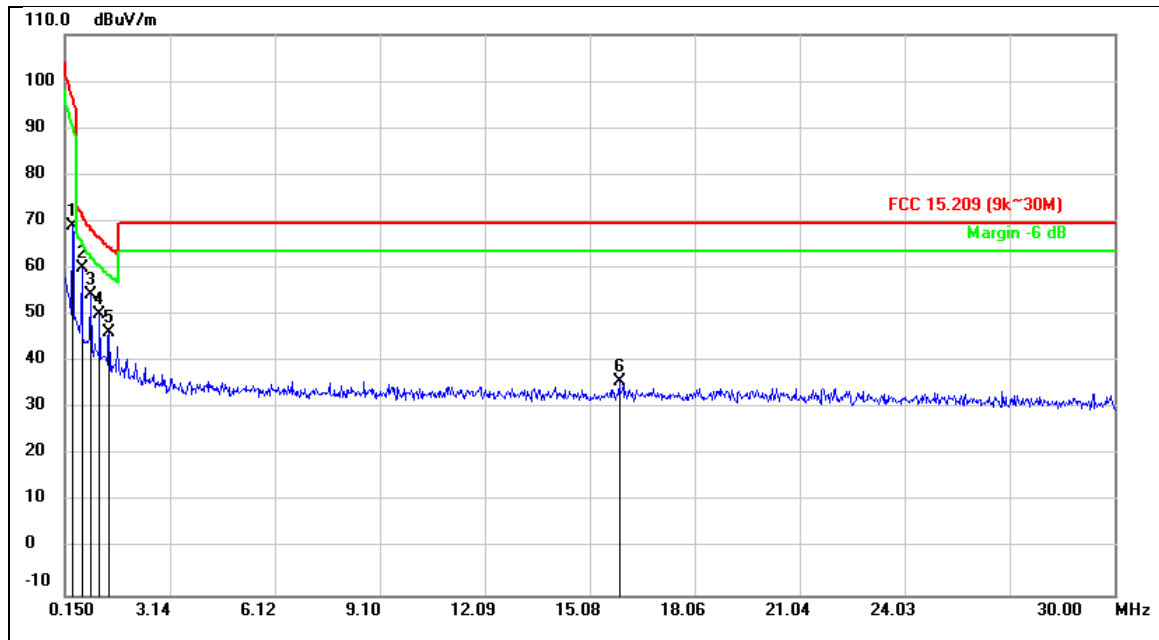
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EUT Test Condition		Measurement Detail	
Frequency Range	0.15 MHz ~ 30 MHz	Antenna Polarity	Parallel



Notation	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	0.3828	57.28	11.85	69.13	95.99	-26.86	AVG
2	0.6385	48.31	11.80	60.11	71.52	-11.41	QP
3	0.8943	42.54	11.94	54.48	68.58	-14.10	QP
4	1.1490	38.19	11.99	50.18	66.42	-16.24	QP
5	1.4077	34.35	11.88	46.23	64.64	-18.41	QP
6	15.9188	24.18	11.44	35.62	69.54	-33.92	QP

Remarks:

- Result value (dBuV/m) = Reading value (dBuV/m) + Correction Factor (dB/m).
- Margin(dB) = Result value (dBuV/m) - Limit value (dBuV/m).
- Correction Factor (dB/m) = Antenna Factor (dBuV/m) + Cable Loss (dB) - Preamp Factor (dB).
- The other emission levels were very low against the limit.

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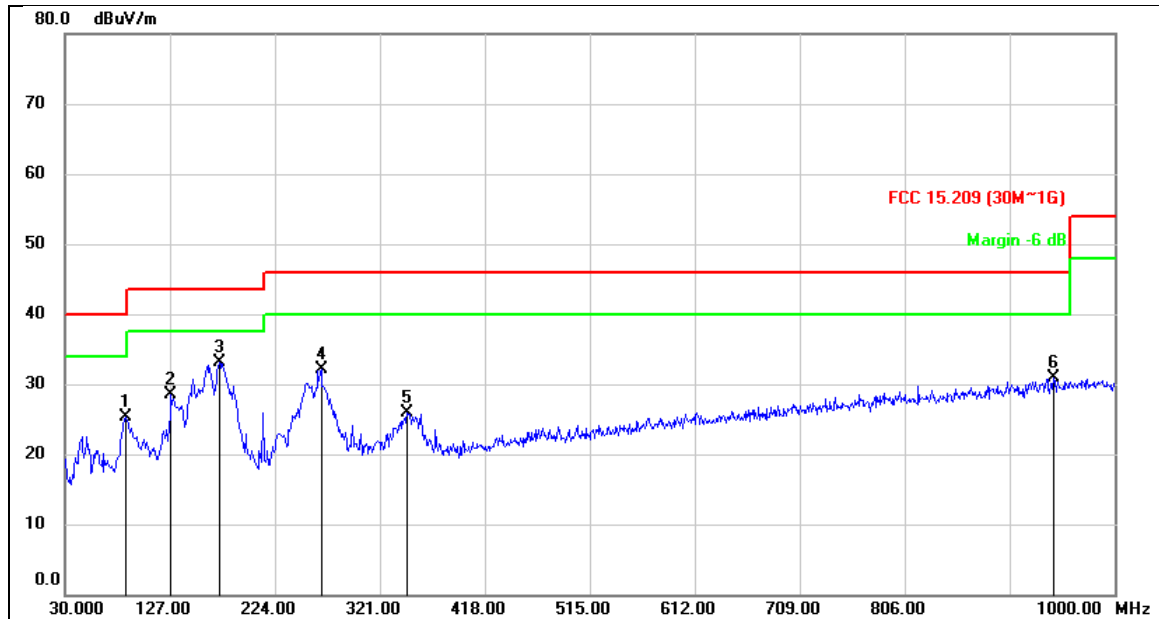


30 MHz ~ 1 GHz Data

Standby Mode

Adapter 1

EUT Test Condition		Measurement Detail	
Frequency Range	30MHz ~ 1 GHz	Antenna Polarity	Horizontal



Notation	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	
1	86.5187	46.30	-20.93	25.37	40.00	-14.63	peak
2	128.8107	45.53	-17.06	28.47	43.50	-15.03	peak
3	172.9780	48.54	-15.50	33.04	43.50	-10.46	peak
4	266.6800	47.41	-15.21	32.20	46.00	-13.80	peak
5	346.7373	38.88	-13.07	25.81	46.00	-20.19	peak
6	944.2573	32.69	-1.69	31.00	46.00	-15.00	peak

Remarks:

1. Result value (dBuV/m) = Reading value (dBuV/m) + Correction Factor (dB/m).
2. Margin(dB) = Result value (dBuV/m) - Limit value (dBuV/m).
3. Correction Factor (dB/m) = Antenna Factor (dBuV/m) + Cable Loss (dB) - Preamp Factor (dB).
4. The peak result complies with QP limit, QP result is deemed to comply with QP limit.
5. The other emission levels were very low against the limit.

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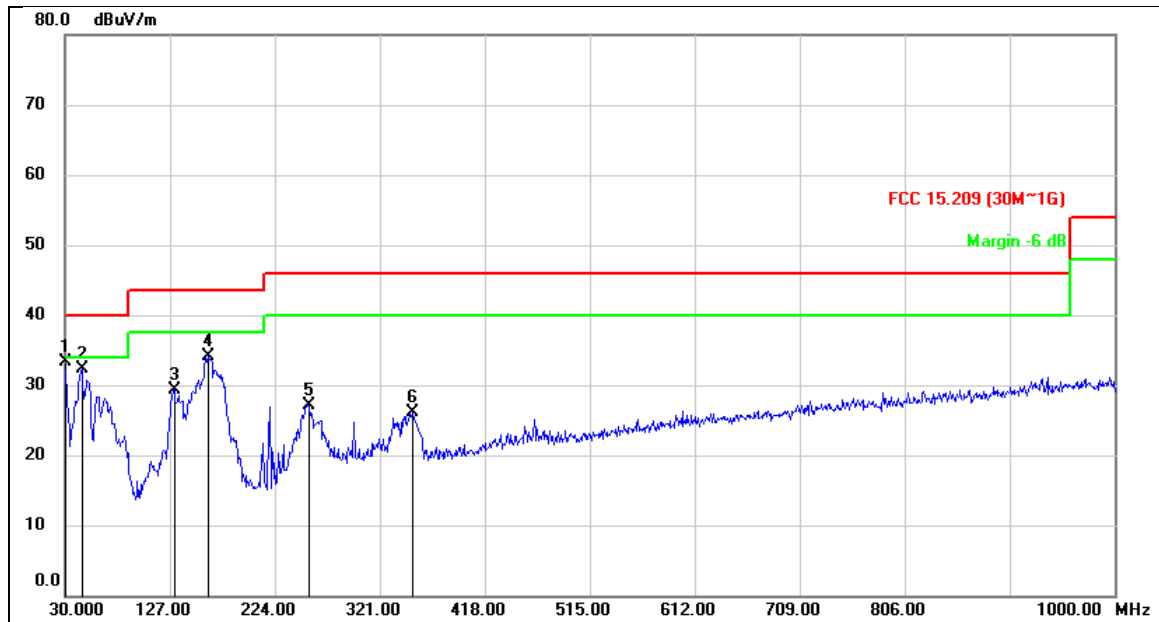
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EUT Test Condition		Measurement Detail	
Frequency Range	30MHz ~ 1 GHz	Antenna Polarity	Vertical



Notation	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	
1	30.3880	49.79	-16.53	33.26	40.00	-6.74	peak
2	45.6493	47.36	-15.10	32.26	40.00	-7.74	peak
3	131.1063	46.11	-16.80	29.31	43.50	-14.19	peak
4	162.1463	49.13	-14.93	34.20	43.50	-9.30	peak
5	255.8160	42.77	-15.63	27.14	46.00	-18.86	peak
6	351.3933	39.08	-12.97	26.11	46.00	-19.89	peak

Remarks:

1. Result value (dBuV/m) = Reading value (dBuV/m) + Correction Factor (dB/m).
2. Margin(dB) = Result value (dBuV/m) - Limit value (dBuV/m).
3. Correction Factor (dB/m) = Antenna Factor (dBuV/m) + Cable Loss (dB) - Preamp Factor (dB).
4. The peak result complies with QP limit, QP result is deemed to comply with QP limit.
5. The other emission levels were very low against the limit.

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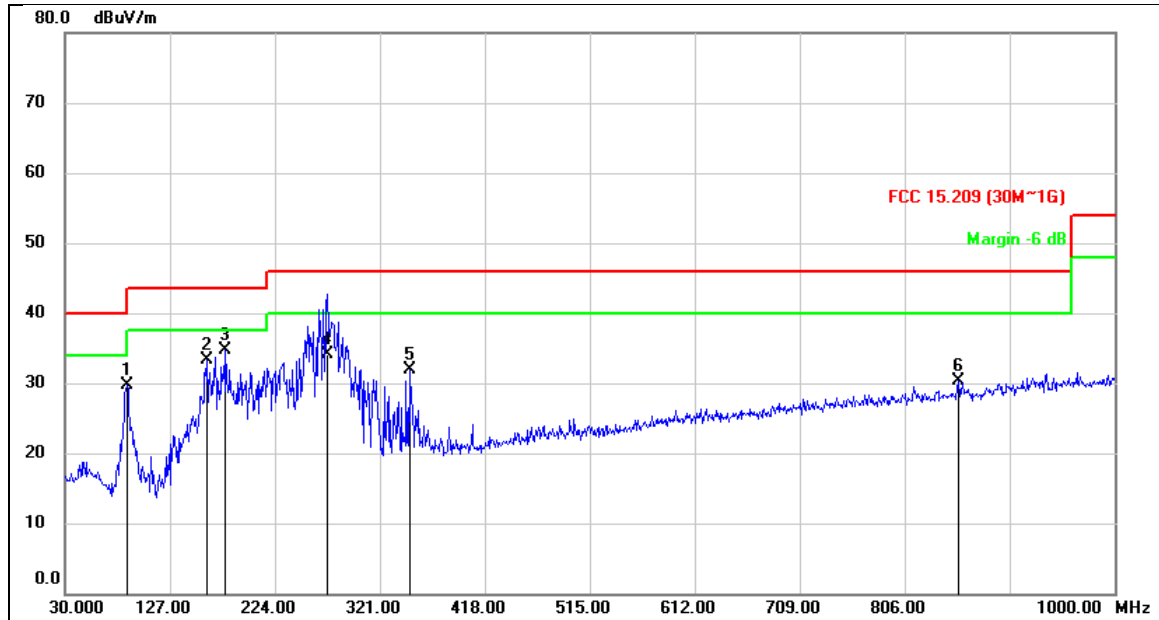
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Adapter 2

EUT Test Condition		Measurement Detail	
Frequency Range	30MHz ~ 1 GHz	Antenna Polarity	Horizontal



Notation	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1*	87.2623	50.77	-21.02	29.75	40.00	-10.25	peak
2*	161.3380	48.24	-14.94	33.30	43.50	-10.20	peak
3*	179.0243	50.93	-16.27	34.66	43.50	-8.84	peak
4	272.5970	48.89	-14.78	34.11	46.00	-11.89	QP
5*	349.0007	44.98	-13.03	31.95	46.00	-14.05	peak
6*	856.2460	33.51	-3.19	30.32	46.00	-15.68	peak

Remarks:

1. Result value (dBuV/m) = Reading value (dBuV/m) + Correction Factor (dB/m).
2. Margin(dB) = Result value (dBuV/m) - Limit value (dBuV/m).
3. Correction Factor (dB/m) = Antenna Factor (dBuV/m) + Cable Loss (dB) - Preamplifier Factor (dB).
4. “*”: The peak result complies with QP limit, QP result is deemed to comply with QP limit.
5. The other emission levels were very low against the limit.

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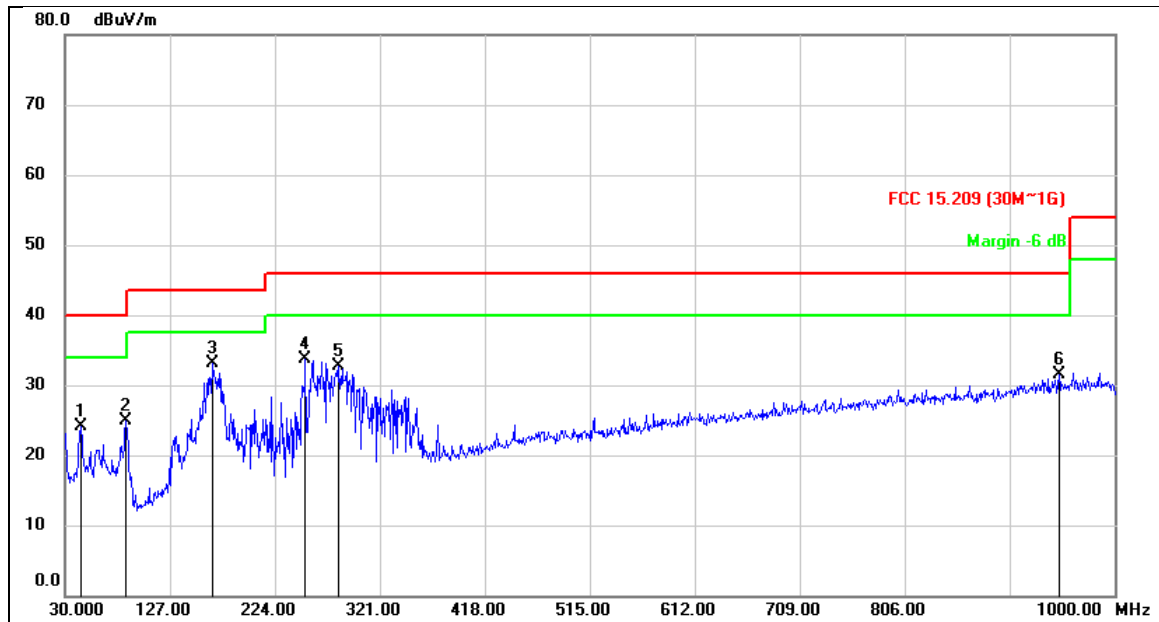
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EUT Test Condition		Measurement Detail	
Frequency Range	30MHz ~ 1 GHz	Antenna Polarity	Vertical



Notation	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	45.0350	39.23	-15.17	24.06	40.00	-15.94	peak
2	86.9712	45.81	-20.99	24.82	40.00	-15.18	peak
3	166.4143	48.18	-14.99	33.19	43.50	-10.31	peak
4	252.7120	49.39	-15.71	33.68	46.00	-12.32	peak
5	283.5580	47.07	-14.28	32.79	46.00	-13.21	peak
6	949.1720	33.10	-1.63	31.47	46.00	-14.53	peak

Remarks:

1. Result value (dBuV/m) = Reading value (dBuV/m) + Correction Factor (dB/m).
2. Margin(dB) = Result value (dBuV/m) - Limit value (dBuV/m).
3. Correction Factor (dB/m) = Antenna Factor (dBuV/m) + Cable Loss (dB) - Preamp Factor (dB).
4. The peak result complies with QP limit, QP result is deemed to comply with QP limit.
5. The other emission levels were very low against the limit.

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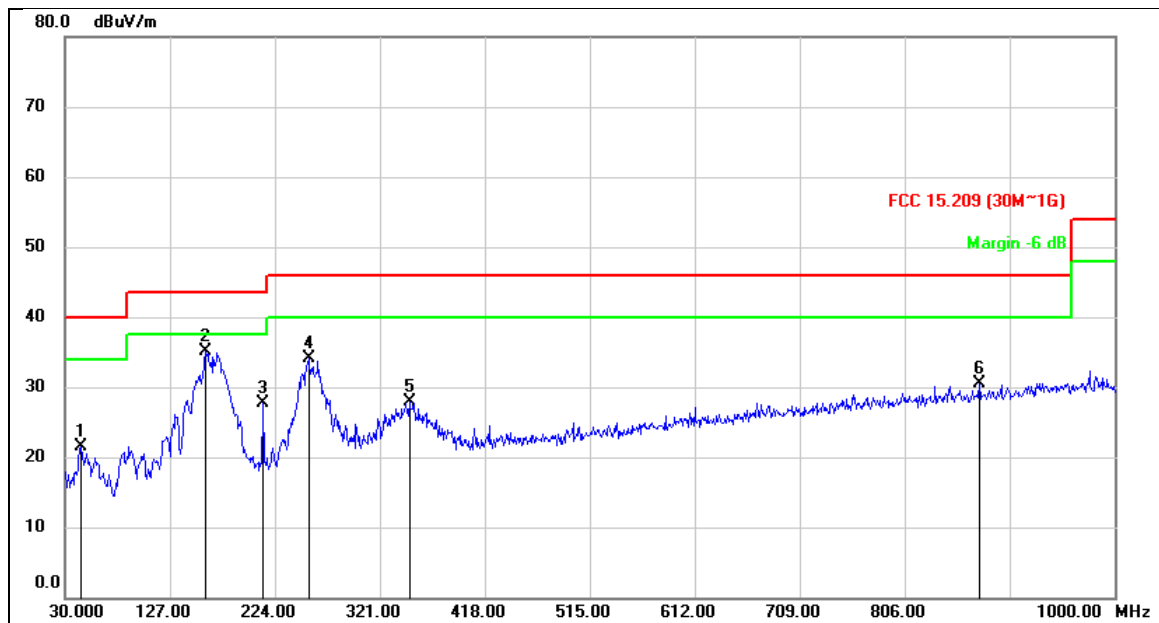


Operating Mode

Adapter 1

Smart phone (With 3mm gap)

EUT Test Condition		Measurement Detail	
Frequency Range	30MHz ~ 1 GHz	Antenna Polarity	Horizontal



Notation	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	
1	45.0997	36.65	-15.16	21.49	40.00	-18.51	peak
2	160.0447	50.03	-14.97	35.06	43.50	-8.44	peak
3	213.3300	45.36	-17.63	27.73	43.50	-15.77	peak
4	255.1047	49.85	-15.65	34.20	46.00	-11.80	peak
5	348.8390	40.95	-13.04	27.91	46.00	-18.09	peak
6	875.7107	33.57	-3.00	30.57	46.00	-15.43	peak

Remarks:

1. Result value (dBuV/m) = Reading value (dBuV/m) + Correction Factor (dB/m).
2. Margin(dB) = Result value (dBuV/m) - Limit value (dBuV/m).
3. Correction Factor (dB/m) = Antenna Factor (dBuV/m) + Cable Loss (dB) - Preamp Factor (dB).
4. The peak result complies with QP limit, QP result is deemed to comply with QP limit.
5. The other emission levels were very low against the limit.

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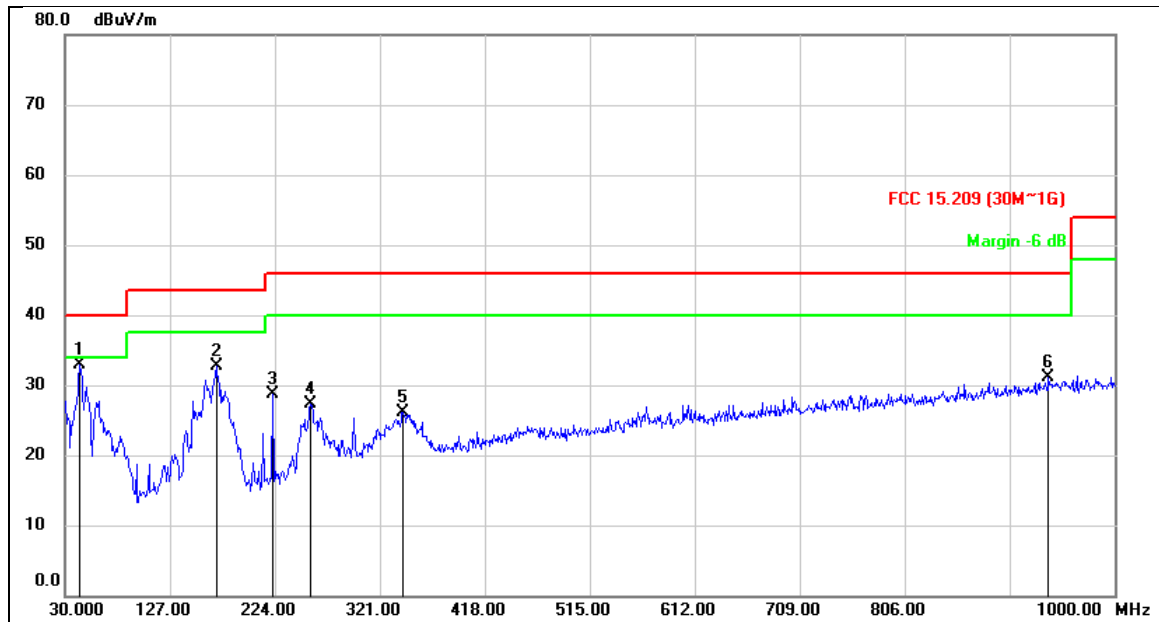
Facsimile (FAX) :+886-3-583-7948

Doc No: 17-EM-F0972 / 1.0



Test report No. : 4789310744-US-R0-V0
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Issued date : Jan. 16, 2020
FCC ID : K7SWIB001

EUT Test Condition		Measurement Detail	
Frequency Range	30MHz ~ 1 GHz	Antenna Polarity	Vertical



Notation	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	
1	44.0327	48.12	-15.24	32.88	40.00	-7.12	peak
2	170.4236	47.88	-15.23	32.65	43.50	-10.85	peak
3	222.7713	46.08	-17.45	28.63	46.00	-17.37	peak
4	257.6590	42.90	-15.60	27.30	46.00	-18.70	peak
5	342.5987	39.28	-13.12	26.16	46.00	-19.84	peak
6	939.0193	32.92	-1.77	31.15	46.00	-14.85	peak

Remarks:

1. Result value (dBuV/m) = Reading value (dBuV/m) + Correction Factor (dB/m).
2. Margin(dB) = Result value (dBuV/m) - Limit value (dBuV/m).
3. Correction Factor (dB/m) = Antenna Factor (dBuV/m) + Cable Loss (dB) - Preamp Factor (dB).
4. The peak result complies with QP limit, QP result is deemed to comply with QP limit.
5. The other emission levels were very low against the limit.

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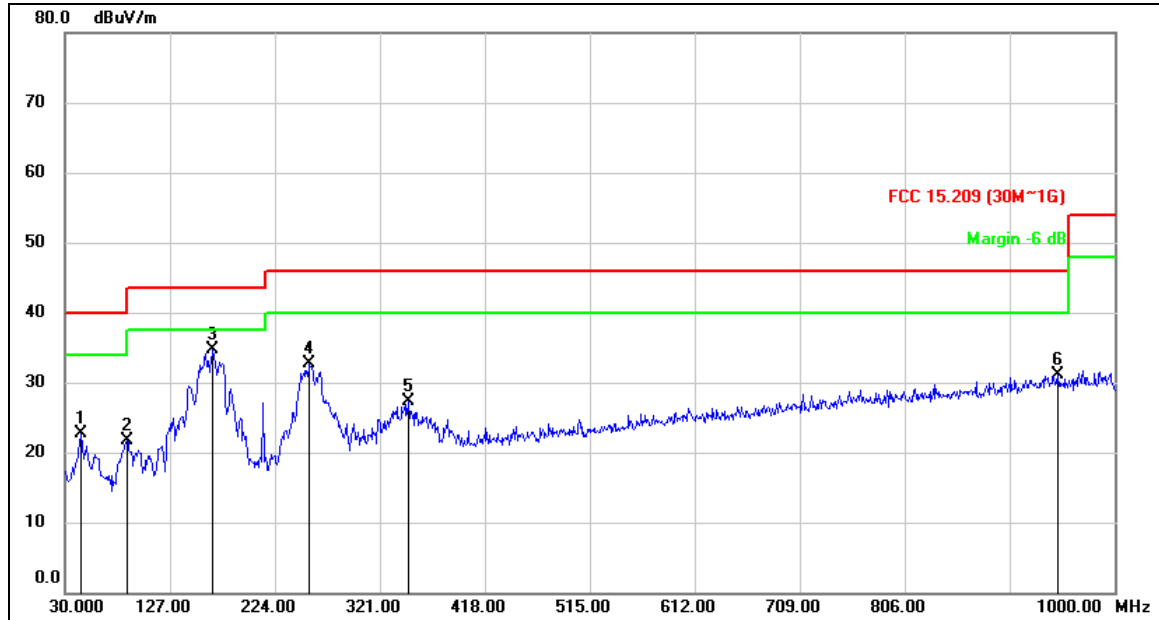
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Doc No: 17-EM-F0972 / 1.0



Smart phone (Without 3mm gap)

EUT Test Condition		Measurement Detail	
Frequency Range	30MHz ~ 1 GHz	Antenna Polarity	Horizontal



Notation	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	44.6793	37.84	-15.19	22.65	40.00	-17.35	peak
2	87.7797	42.77	-21.08	21.69	40.00	-18.31	peak
3	167.0932	49.65	-15.01	34.64	43.50	-8.86	peak
4	256.1393	48.24	-15.63	32.61	46.00	-13.39	peak
5	347.6427	40.37	-13.05	27.32	46.00	-18.68	peak
6	948.1050	32.71	-1.64	31.07	46.00	-14.93	peak

Remarks:

1. Result value (dBuV/m) = Reading value (dBuV/m) + Correction Factor (dB/m).
2. Margin(dB) = Result value (dBuV/m) - Limit value (dBuV/m).
3. Correction Factor (dB/m) = Antenna Factor (dBuV/m) + Cable Loss (dB) - Preamp Factor (dB).
4. The peak result complies with QP limit, QP result is deemed to comply with QP limit.
5. The other emission levels were very low against the limit.

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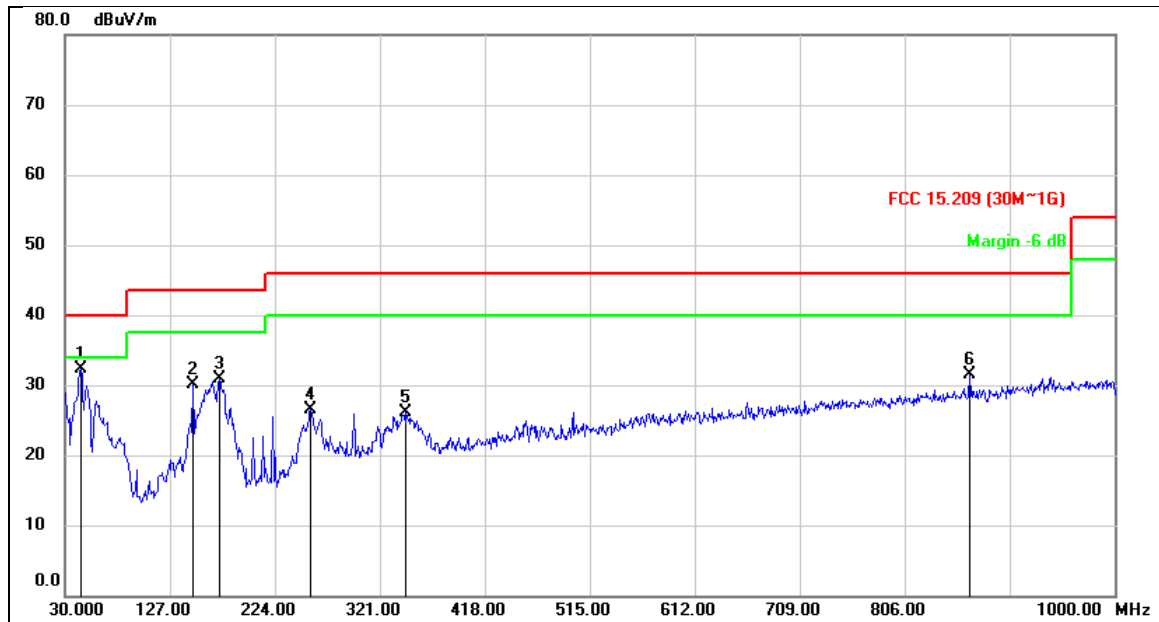
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Doc No: 17-EM-F0972 / 1.0



EUT Test Condition		Measurement Detail	
Frequency Range	30MHz ~ 1 GHz	Antenna Polarity	Vertical



Notation	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	44.7440	47.49	-15.19	32.30	40.00	-7.70	peak
2	148.4693	45.39	-15.32	30.07	43.50	-13.43	peak
3	173.3660	46.52	-15.55	30.97	43.50	-12.53	peak
4	257.6590	42.07	-15.60	26.47	46.00	-19.53	peak
5	345.9290	39.19	-13.10	26.09	46.00	-19.91	peak
6	866.6573	34.53	-3.08	31.45	46.00	-14.55	peak

Remarks:

1. Result value (dBuV/m) = Reading value (dBuV/m) + Correction Factor (dB/m).
2. Margin(dB) = Result value (dBuV/m) - Limit value (dBuV/m).
3. Correction Factor (dB/m) = Antenna Factor (dBuV/m) + Cable Loss (dB) - Preamp Factor (dB).
4. The peak result complies with QP limit, QP result is deemed to comply with QP limit.
5. The other emission levels were very low against the limit.

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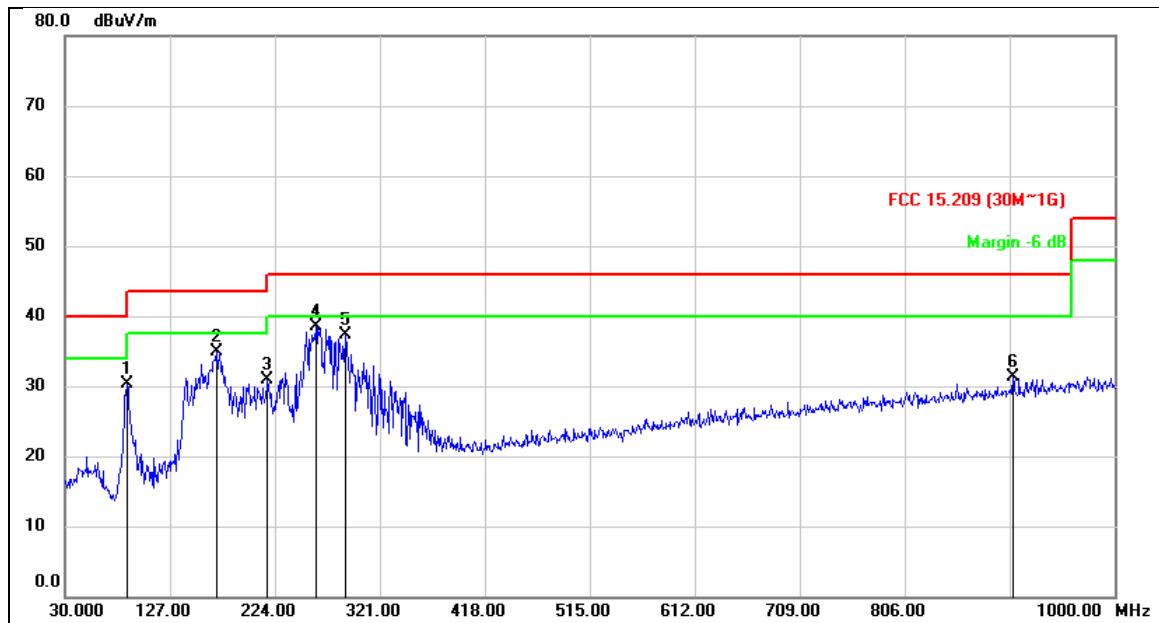
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Adapter 2

Smart phone (With 3mm gap)

EUT Test Condition		Measurement Detail	
Frequency Range	30MHz ~ 1 GHz	Antenna Polarity	Horizontal



Notation	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	
1	87.5856	51.45	-21.06	30.39	40.00	-9.61	peak
2	169.8739	50.02	-15.18	34.84	43.50	-8.66	peak
3	218.0183	48.51	-17.59	30.92	46.00	-15.08	peak
4	262.0886	53.87	-15.46	38.41	46.00	-7.59	peak
5	289.0869	51.58	-14.19	37.39	46.00	-8.61	peak
6	906.8476	33.71	-2.41	31.30	46.00	-14.70	peak

Remarks:

1. Result value (dBuV/m) = Reading value (dBuV/m) + Correction Factor (dB/m).
2. Margin(dB) = Result value (dBuV/m) - Limit value (dBuV/m).
3. Correction Factor (dB/m) = Antenna Factor (dBuV/m) + Cable Loss (dB) - Preamp Factor (dB).
4. The peak result complies with QP limit, QP result is deemed to comply with QP limit.
5. The other emission levels were very low against the limit.

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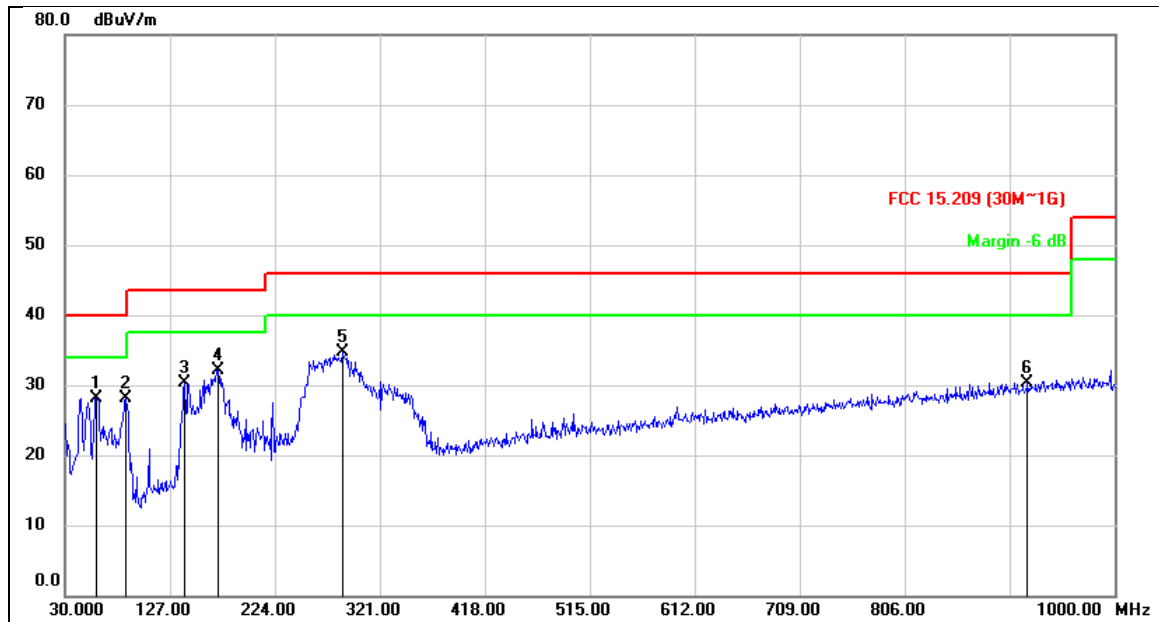
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Doc No: 17-EM-F0972 / 1.0



Test report No. : 4789310744-US-R0-V0
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EUT Test Condition		Measurement Detail	
Frequency Range	30MHz ~ 1 GHz	Antenna Polarity	Vertical



Notation	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	
1	59.6820	43.79	-15.64	28.15	40.00	-11.85	peak
2	86.5187	48.95	-20.93	28.02	40.00	-11.98	peak
3	141.4530	45.93	-15.59	30.34	43.50	-13.16	peak
4	172.1697	47.51	-15.40	32.11	43.50	-11.39	peak
5	287.9553	48.97	-14.20	34.77	46.00	-11.23	peak
6	919.5870	32.52	-2.12	30.40	46.00	-15.60	peak

Remarks:

1. Result value (dBuV/m) = Reading value (dBuV/m) + Correction Factor (dB/m).
2. Margin(dB) = Result value (dBuV/m) - Limit value (dBuV/m).
3. Correction Factor (dB/m) = Antenna Factor (dBuV/m) + Cable Loss (dB) - Preamp Factor (dB).
4. The peak result complies with QP limit, QP result is deemed to comply with QP limit.
5. The other emission levels were very low against the limit.

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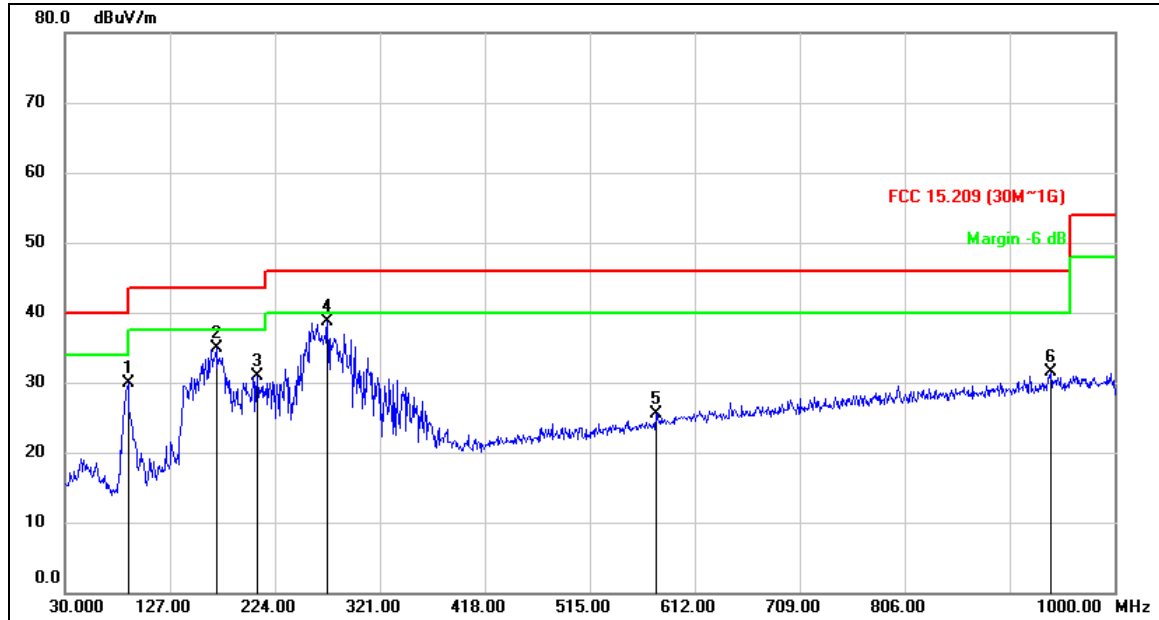
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Smart phone (Without 3mm gap)

EUT Test Condition		Measurement Detail	
Frequency Range	30MHz ~ 1 GHz	Antenna Polarity	Horizontal



Notation	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	88.2970	51.13	-21.13	30.00	43.50	-13.50	peak
2	169.8740	50.07	-15.18	34.89	43.50	-8.61	peak
3	207.9627	48.46	-17.56	30.90	43.50	-12.60	peak
4	272.9849	53.37	-14.76	38.61	46.00	-7.39	peak
5	577.0477	33.25	-7.66	25.59	46.00	-20.41	peak
6	941.0887	33.27	-1.74	31.53	46.00	-14.47	peak

Remarks:

1. Result value (dBuV/m) = Reading value (dBuV/m) + Correction Factor (dB/m).
2. Margin(dB) = Result value (dBuV/m) - Limit value (dBuV/m).
3. Correction Factor (dB/m) = Antenna Factor (dBuV/m) + Cable Loss (dB) - Preamp Factor (dB).
4. The peak result complies with QP limit, QP result is deemed to comply with QP limit.
5. The other emission levels were very low against the limit.

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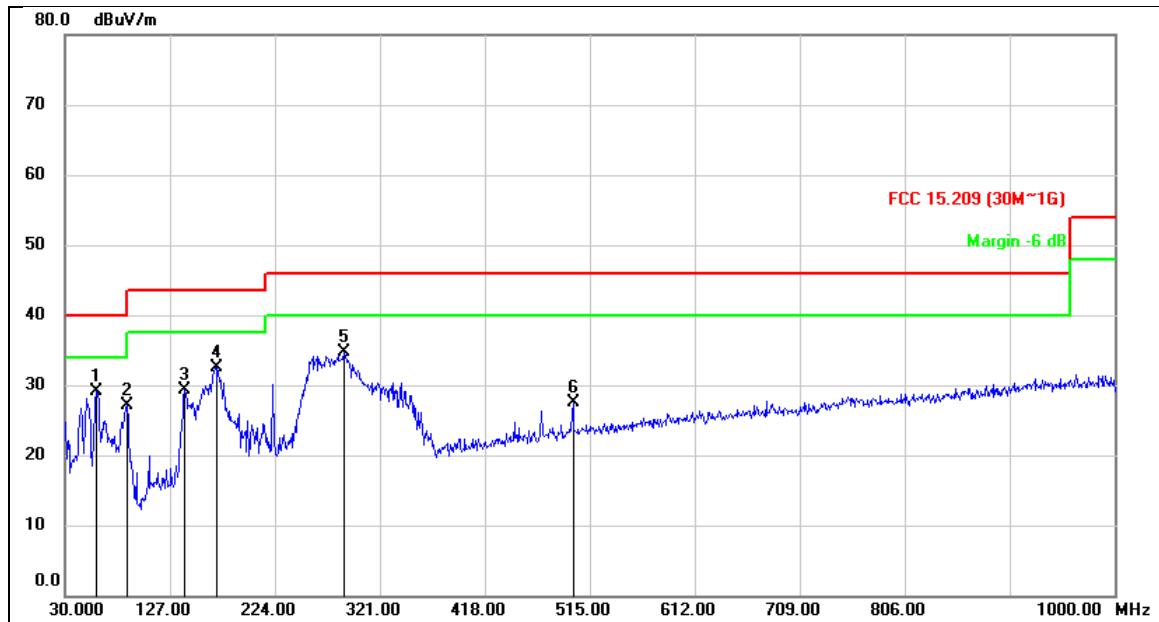
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EUT Test Condition		Measurement Detail	
Frequency Range	30MHz ~ 1 GHz	Antenna Polarity	Vertical



Notation	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	59.3587	44.69	-15.60	29.09	40.00	-10.91	peak
2	87.3270	48.05	-21.03	27.02	40.00	-12.98	peak
3	140.6770	45.05	-15.66	29.39	43.50	-14.11	peak
4	170.1973	47.75	-15.21	32.54	43.50	-10.96	peak
5	288.9577	48.92	-14.20	34.72	46.00	-11.28	peak
6	499.5123	36.84	-9.38	27.46	46.00	-18.54	peak

Remarks:

1. Result value (dBuV/m) = Reading value (dBuV/m) + Correction Factor (dB/m).
2. Margin(dB) = Result value (dBuV/m) - Limit value (dBuV/m).
3. Correction Factor (dB/m) = Antenna Factor (dBuV/m) + Cable Loss (dB) - Preamp Factor (dB).
4. The peak result complies with QP limit, QP result is deemed to comply with QP limit.
5. The other emission levels were very low against the limit.

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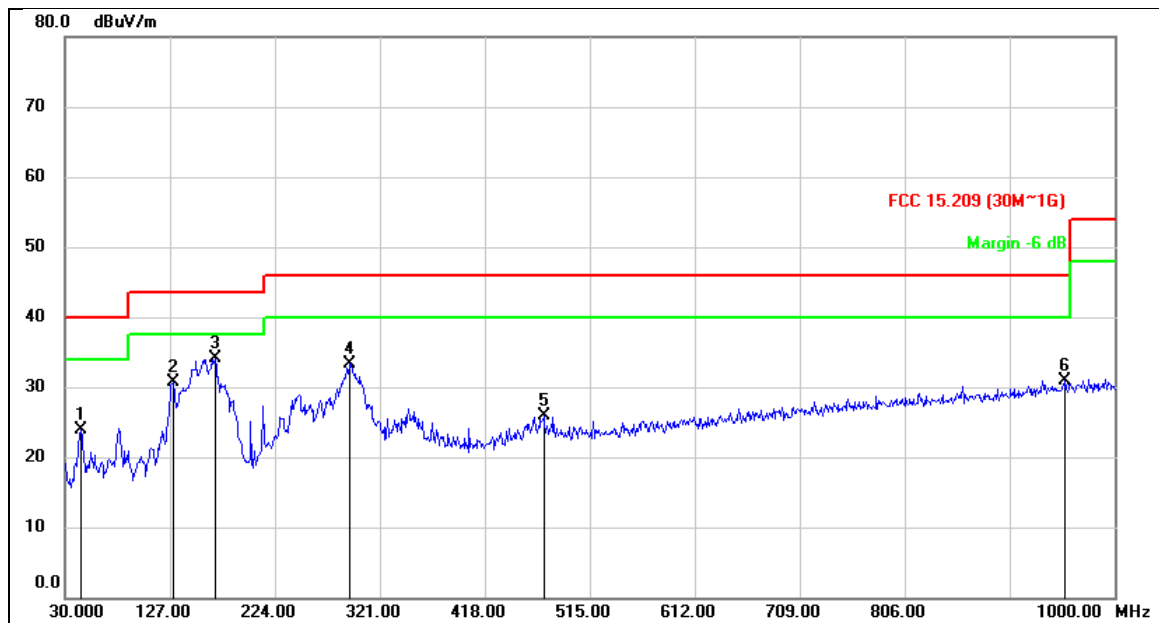


Operating Mode

Adapter 1

10W load (With 3mm gap)

EUT Test Condition		Measurement Detail	
Frequency Range	30MHz ~ 1 GHz	Antenna Polarity	Horizontal



Notation	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	
1	44.5500	39.14	-15.20	23.94	40.00	-16.06	peak
2	130.5890	47.62	-16.87	30.75	43.50	-12.75	peak
3	169.4212	49.15	-15.14	34.01	43.50	-9.49	peak
4	293.4520	47.57	-14.18	33.39	46.00	-12.61	peak
5	472.9343	35.79	-9.86	25.93	46.00	-20.07	peak
6	955.0567	32.55	-1.59	30.96	46.00	-15.04	peak

Remarks:

1. Result value (dBuV/m) = Reading value (dBuV/m) + Correction Factor (dB/m).
2. Margin(dB) = Result value (dBuV/m) - Limit value (dBuV/m).
3. Correction Factor (dB/m) = Antenna Factor (dBuV/m) + Cable Loss (dB) - Preamp Factor (dB).
4. The peak result complies with QP limit, QP result is deemed to comply with QP limit.
5. The other emission levels were very low against the limit.

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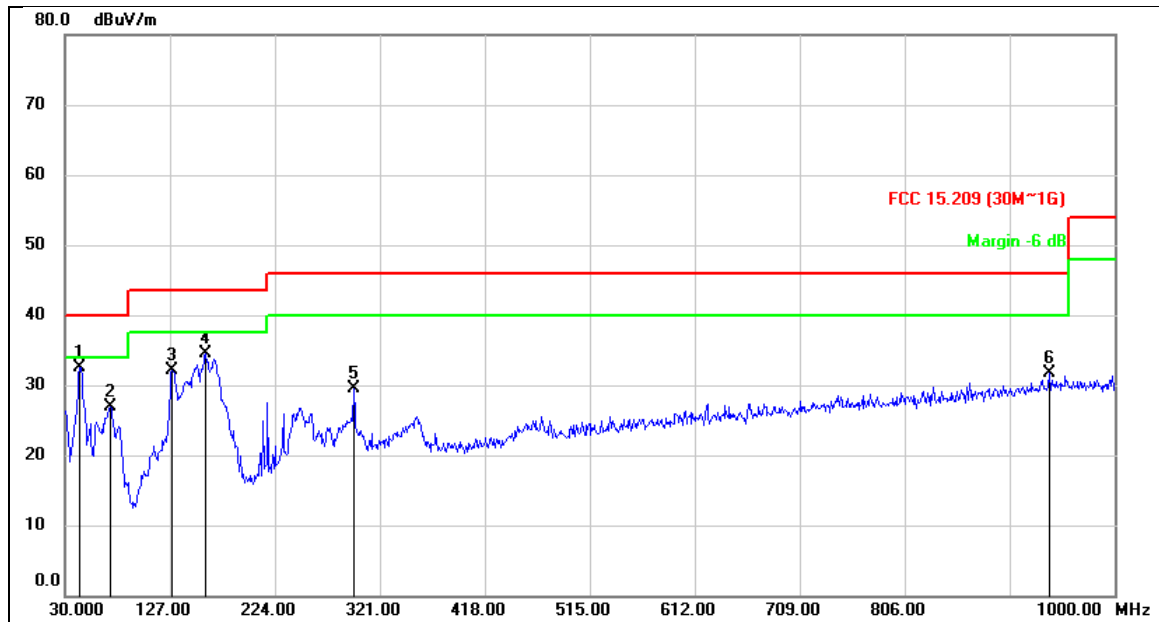
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Doc No: 17-EM-F0972 / 1.0



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Issued date : Jan. 16, 2020
FCC ID : K7SWIB001

EUT Test Condition		Measurement Detail	
Frequency Range	30MHz ~ 1 GHz	Antenna Polarity	Vertical



Notation	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	44.0327	47.80	-15.24	32.56	40.00	-7.44	peak
2	72.3567	44.96	-18.01	26.95	40.00	-13.05	peak
3	129.3926	49.17	-17.00	32.17	43.50	-11.33	peak
4	159.9800	49.53	-14.97	34.56	43.50	-8.94	peak
5	297.0410	43.72	-14.14	29.58	46.00	-16.42	peak
6	940.7653	33.36	-1.74	31.62	46.00	-14.38	peak

Remarks:

1. Result value (dBuV/m) = Reading value (dBuV/m) + Correction Factor (dB/m).
2. Margin(dB) = Result value (dBuV/m) - Limit value (dBuV/m).
3. Correction Factor (dB/m) = Antenna Factor (dBuV/m) + Cable Loss (dB) - Preamp Factor (dB).
4. The peak result complies with QP limit, QP result is deemed to comply with QP limit.
5. The other emission levels were very low against the limit.

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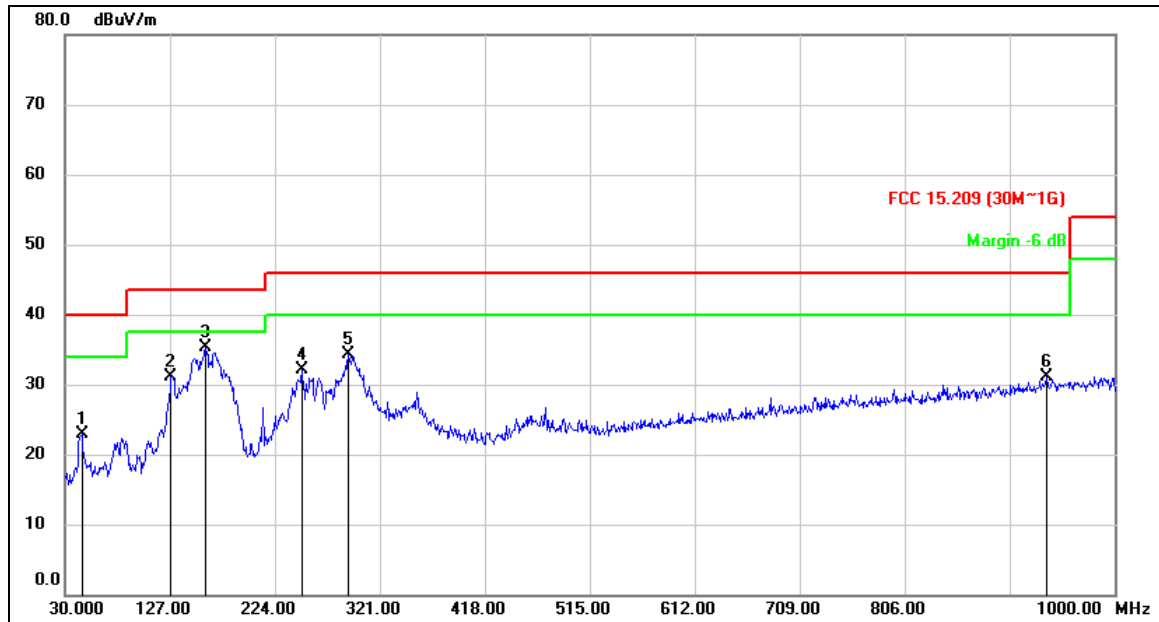
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Doc No: 17-EM-F0972 / 1.0



10W load (Without 3mm gap)

EUT Test Condition		Measurement Detail	
Frequency Range	30MHz ~ 1 GHz	Antenna Polarity	Horizontal



Notation	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	45.6493	37.98	-15.10	22.88	40.00	-17.12	peak
2	128.6489	48.28	-17.08	31.20	43.50	-12.30	peak
3	160.0123	50.35	-14.97	35.38	43.50	-8.12	peak
4	250.0607	47.92	-15.76	32.16	46.00	-13.84	peak
5	291.9323	48.39	-14.18	34.21	46.00	-11.79	peak
6	937.7583	32.95	-1.79	31.16	46.00	-14.84	peak

Remarks:

1. Result value (dBuV/m) = Reading value (dBuV/m) + Correction Factor (dB/m).
2. Margin(dB) = Result value (dBuV/m) - Limit value (dBuV/m).
3. Correction Factor (dB/m) = Antenna Factor (dBuV/m) + Cable Loss (dB) - Preamp Factor (dB).
4. The peak result complies with QP limit, QP result is deemed to comply with QP limit.
5. The other emission levels were very low against the limit.

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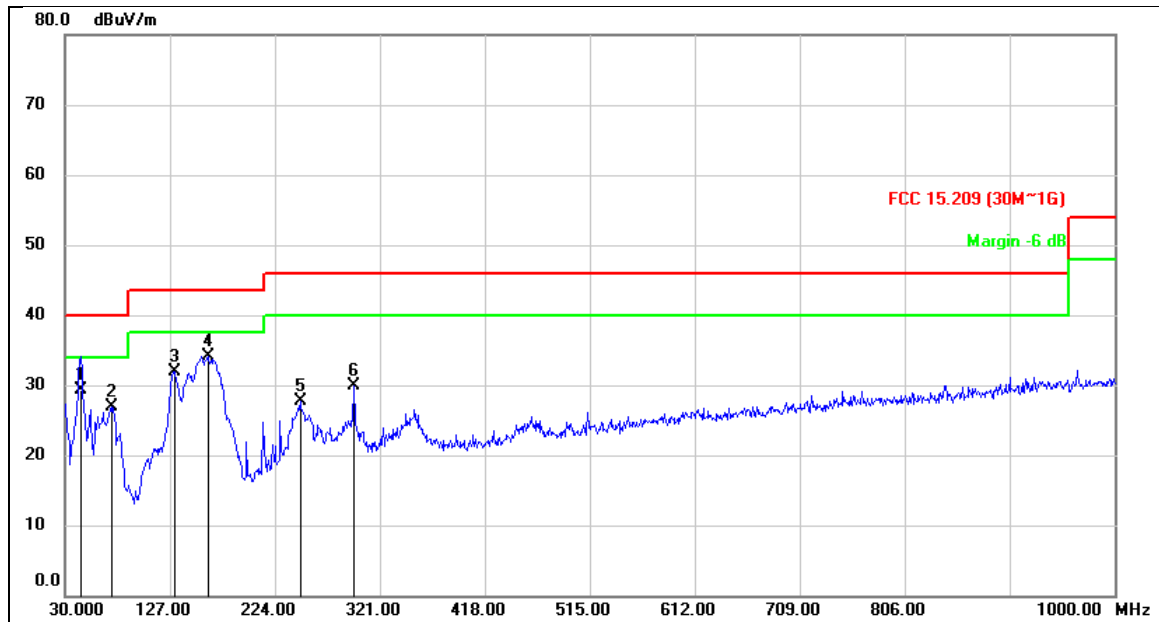
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Doc No: 17-EM-F0972 / 1.0



EUT Test Condition		Measurement Detail	
Frequency Range	30MHz ~ 1 GHz	Antenna Polarity	Vertical



Notation	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	44.6470	44.49	-15.19	29.30	40.00	-10.70	QP
2*	73.2943	45.03	-18.18	26.85	40.00	-13.15	peak
3*	131.1063	48.67	-16.80	31.87	43.50	-11.63	peak
4*	161.9522	48.98	-14.93	34.05	43.50	-9.45	peak
5*	248.1530	43.56	-15.79	27.77	46.00	-18.23	peak
6*	297.0087	44.04	-14.14	29.90	46.00	-16.10	peak

Remarks:

1. Result value (dBuV/m) = Reading value (dBuV/m) + Correction Factor (dB/m).
2. Margin(dB) = Result value (dBuV/m) - Limit value (dBuV/m).
3. Correction Factor (dB/m) = Antenna Factor (dBuV/m) + Cable Loss (dB) - Preamp Factor (dB).
4. “*”: The peak result complies with QP limit, QP result is deemed to comply with QP limit.
5. The other emission levels were very low against the limit.

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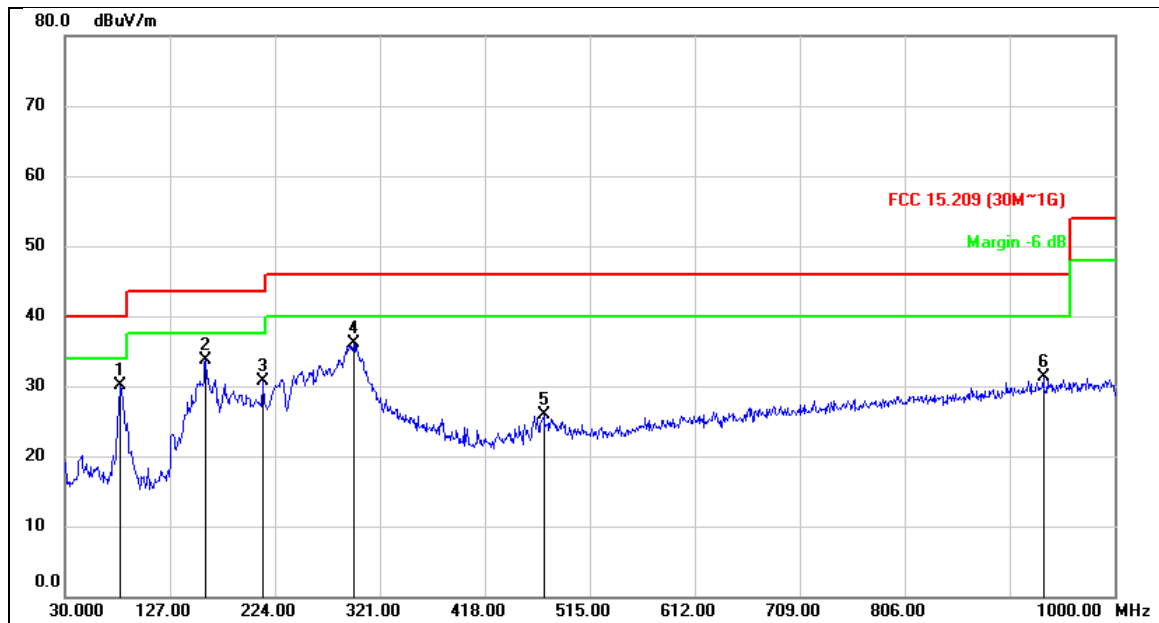
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Adapter 2

10W load (With 3mm gap)

EUT Test Condition		Measurement Detail	
Frequency Range	30MHz ~ 1 GHz	Antenna Polarity	Horizontal



Notation	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	
1	82.1537	50.28	-20.20	30.08	40.00	-9.92	peak
2	160.0447	48.76	-14.97	33.79	43.50	-9.71	peak
3	213.3300	48.24	-17.63	30.61	43.50	-12.89	peak
4	297.5260	50.19	-14.13	36.06	46.00	-9.94	peak
5	472.5463	35.78	-9.87	25.91	46.00	-20.09	peak
6	934.0723	33.12	-1.85	31.27	46.00	-14.73	peak

Remarks:

1. Result value (dBuV/m) = Reading value (dBuV/m) + Correction Factor (dB/m).
2. Margin(dB) = Result value (dBuV/m) - Limit value (dBuV/m).
3. Correction Factor (dB/m) = Antenna Factor (dBuV/m) + Cable Loss (dB) - Preamp Factor (dB).
4. The peak result complies with QP limit, QP result is deemed to comply with QP limit.
5. The other emission levels were very low against the limit.

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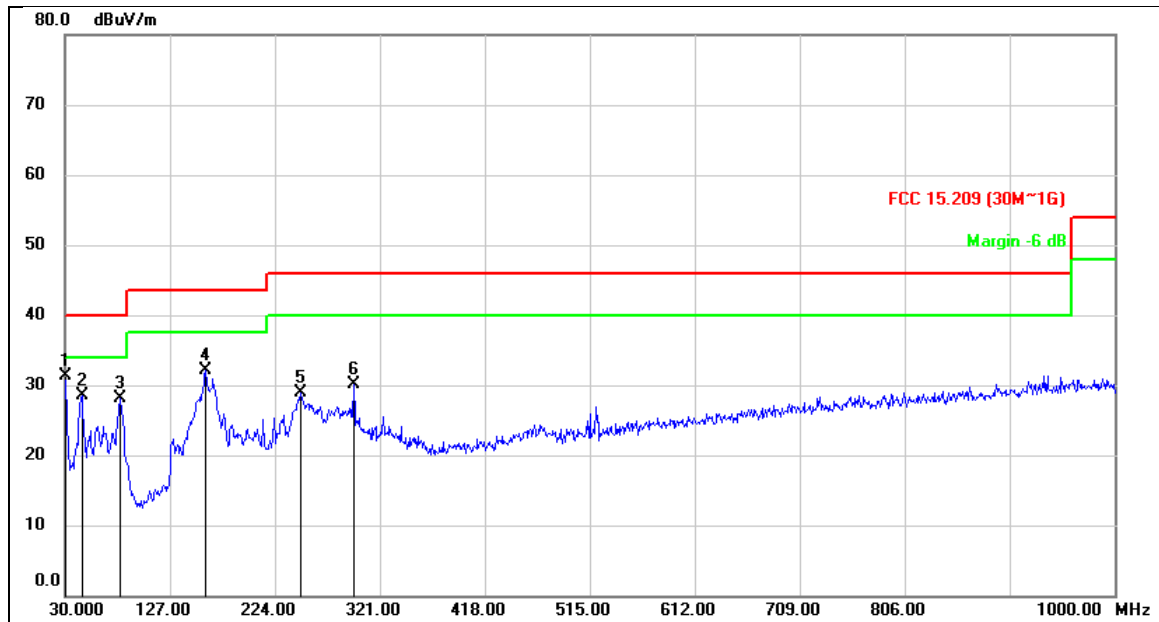
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Doc No: 17-EM-F0972 / 1.0



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Issued date : Jan. 16, 2020
FCC ID : K7SWIB001

EUT Test Condition		Measurement Detail	
Frequency Range	30MHz ~ 1 GHz	Antenna Polarity	Vertical



Notation	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	30.9053	47.78	-16.49	31.29	40.00	-8.71	peak
2	45.8757	43.56	-15.08	28.48	40.00	-11.52	peak
3	81.3777	48.05	-20.04	28.01	40.00	-11.99	peak
4	159.9800	47.08	-14.97	32.11	43.50	-11.39	peak
5	248.9937	44.68	-15.77	28.91	46.00	-17.09	peak
6	297.0087	44.22	-14.14	30.08	46.00	-15.92	peak

Remarks:

1. Result value (dBuV/m) = Reading value (dBuV/m) + Correction Factor (dB/m).
2. Margin(dB) = Result value (dBuV/m) - Limit value (dBuV/m).
3. Correction Factor (dB/m) = Antenna Factor (dBuV/m) + Cable Loss (dB) - Preamp Factor (dB).
4. The peak result complies with QP limit, QP result is deemed to comply with QP limit.
5. The other emission levels were very low against the limit.

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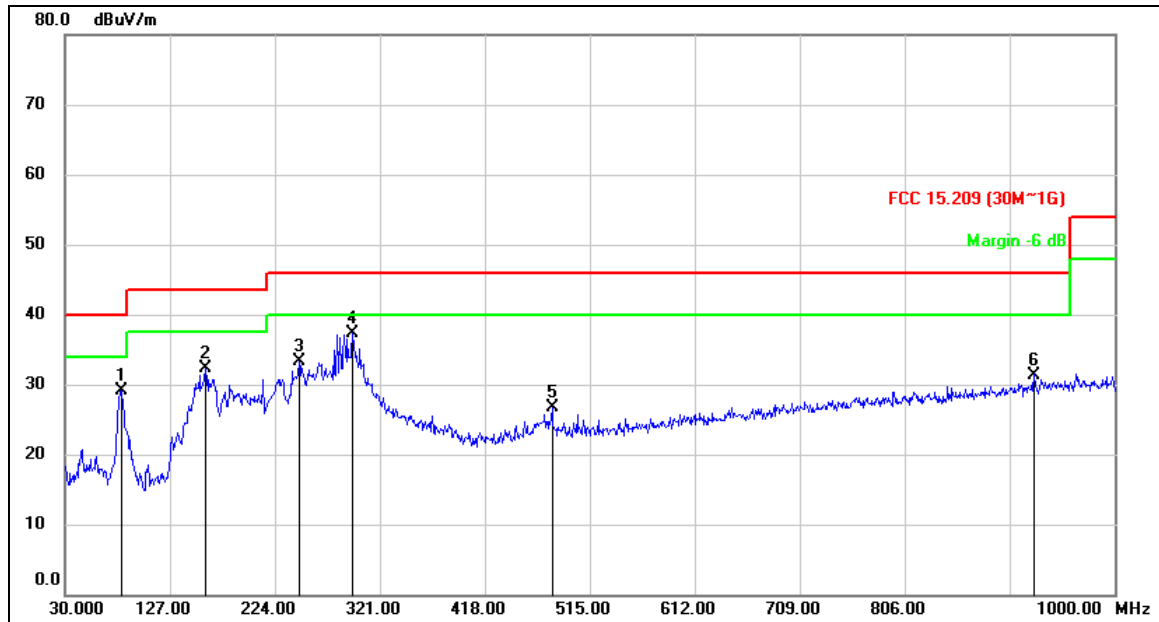
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Doc No: 17-EM-F0972 / 1.0



10W load (Without 3mm gap)

EUT Test Condition		Measurement Detail	
Frequency Range	30MHz ~ 1 GHz	Antenna Polarity	Horizontal



Notation	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	
1	82.8973	49.55	-20.36	29.19	40.00	-10.81	peak
2	160.0123	47.20	-14.97	32.23	43.50	-11.27	peak
3	247.2153	49.06	-15.80	33.26	46.00	-12.74	peak
4	295.8123	51.43	-14.15	37.28	46.00	-8.72	peak
5	480.4680	36.42	-9.73	26.69	46.00	-19.31	peak
6	925.8920	33.40	-2.00	31.40	46.00	-14.60	peak

Remarks:

1. Result value (dBuV/m) = Reading value (dBuV/m) + Correction Factor (dB/m).
2. Margin(dB) = Result value (dBuV/m) - Limit value (dBuV/m).
3. Correction Factor (dB/m) = Antenna Factor (dBuV/m) + Cable Loss (dB) - Preamp Factor (dB).
4. The peak result complies with QP limit, QP result is deemed to comply with QP limit.
5. The other emission levels were very low against the limit.

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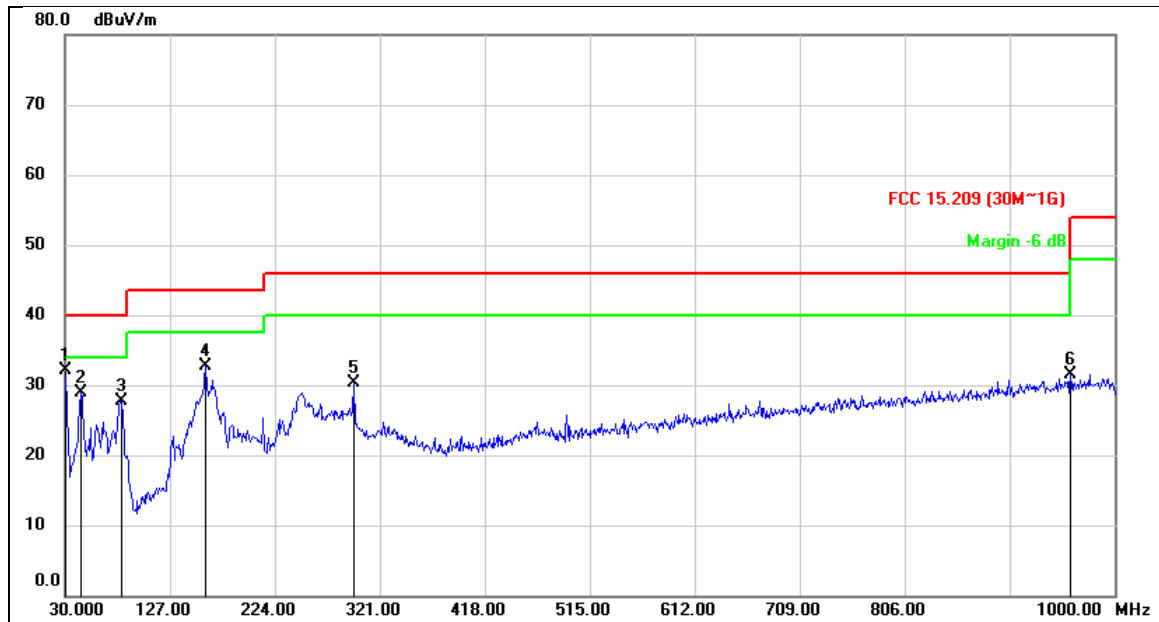
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Doc No: 17-EM-F0972 / 1.0



EUT Test Condition		Measurement Detail	
Frequency Range	30MHz ~ 1 GHz	Antenna Polarity	Vertical



Notation	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	
1	30.7760	48.67	-16.50	32.17	40.00	-7.83	peak
2	45.0997	44.13	-15.16	28.97	40.00	-11.03	peak
3	82.4123	47.97	-20.26	27.71	40.00	-12.29	peak
4	160.0123	47.58	-14.97	32.61	43.50	-10.89	peak
5	297.0087	44.49	-14.14	30.35	46.00	-15.65	peak
6	959.4217	33.01	-1.54	31.47	46.00	-14.53	peak

Remarks:

1. Result value (dBuV/m) = Reading value (dBuV/m) + Correction Factor (dB/m).
2. Margin(dB) = Result value (dBuV/m) - Limit value (dBuV/m).
3. Correction Factor (dB/m) = Antenna Factor (dBuV/m) + Cable Loss (dB) - Preamp Factor (dB).
4. The peak result complies with QP limit, QP result is deemed to comply with QP limit.
5. The other emission levels were very low against the limit.

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9.2. AC Power Line Conducted Emission

Requirements

Frequency (MHz)	Conducted limit (dB μ V)	
	Quasi-peak	Average
0.15 - 0.5	66 - 56	56 - 46
0.50 - 5.0	56	46
5.0 - 30	60	50

Note:

1. The lower limit shall apply at the transition frequencies.
2. The limit decreases in line with the logarithm of the frequency in the range of 0.15 to 0.50MHz.

Test Procedures

- a. The EUT was placed 0.4 meters from the conducting wall of the shielded room with EUT being connected to the power mains through a line impedance stabilization network (LISN). Other support units were connected to the power mains through another LISN. The two LISNs provide 50 ohm/ 50uH of coupling impedance for the measuring instrument.
- b. Both lines of the power mains connected to the EUT were checked for maximum conducted interference.
- c. The frequency range from 150kHz to 30MHz was searched. Emission levels under (Limit - 20dB) was not recorded.

NOTE:

1. The resolution bandwidth and video bandwidth of test receiver is 9kHz for quasi-peak detection (QP) and average detection (AV) at frequency 0.15MHz-30MHz.

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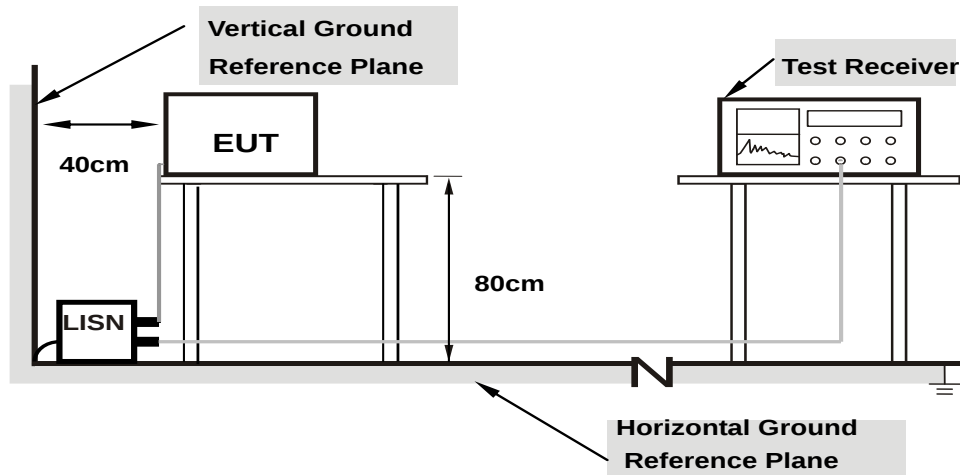
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Test Setup



Note: 1.Support units were connected to second LISN.

For the actual test configuration, please refer to the Setup Configurations.

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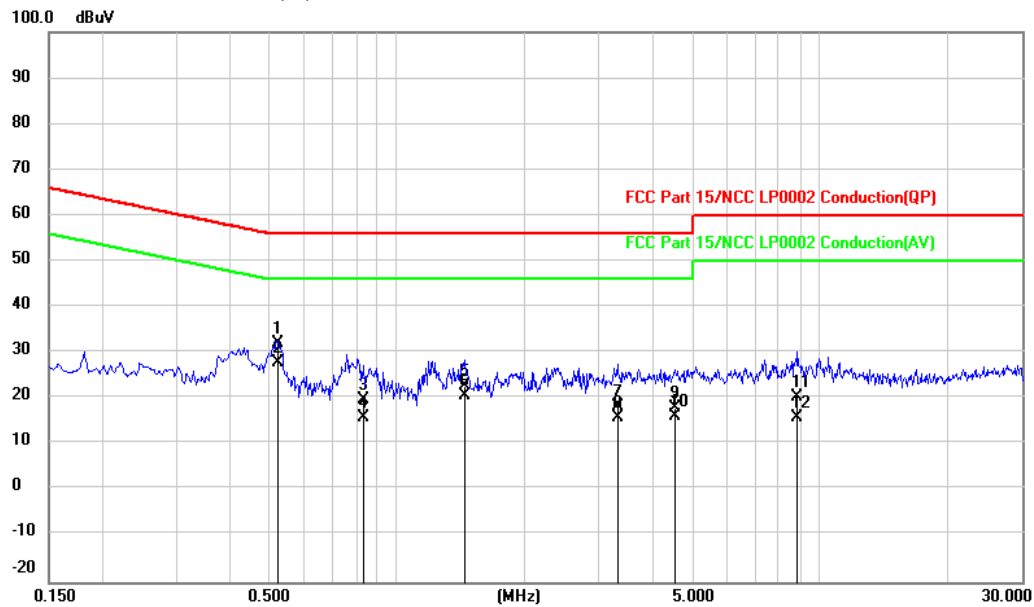
Test Data

Standby Mode

Adapter 1

EUT Test Condition		Measurement Detail	
Mode	Standby Mode	Frequency Range	150 kHz ~ 30 MHz

Phase of Power : Line (L)



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No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	dB	(dBuV)	(dBuV)	(dB)	
1	0.5220	12.34	19.61	31.95	56.00	-24.05	QP
2	0.5220	8.28	19.61	27.89	46.00	-18.11	AVG
3	0.8314	0.16	19.62	19.78	56.00	-36.22	QP
4	0.8314	-3.87	19.62	15.75	46.00	-30.25	AVG
5	1.4469	3.12	19.62	22.74	56.00	-33.26	QP
6	1.4469	1.07	19.62	20.69	46.00	-25.31	AVG
7	3.3163	-1.43	19.66	18.23	56.00	-37.77	QP
8	3.3163	-3.81	19.66	15.85	46.00	-30.15	AVG
9	4.5300	-1.84	19.69	17.85	56.00	-38.15	QP
10	4.5300	-3.49	19.69	16.20	46.00	-29.80	AVG
11	8.8300	0.48	19.74	20.22	60.00	-39.78	QP
12	8.8300	-3.96	19.74	15.78	50.00	-34.22	AVG

Remarks:

1. Result value (dBuV) = Reading value (dBuV) + Correction Factor (dB)
2. Margin(dB) = Result value (dBuV) - Limit value (dBuV)
3. Correction Factor(dB) = Insertion loss(dB) + Cable loss(dB)
4. The other emission levels were very low against the limit.

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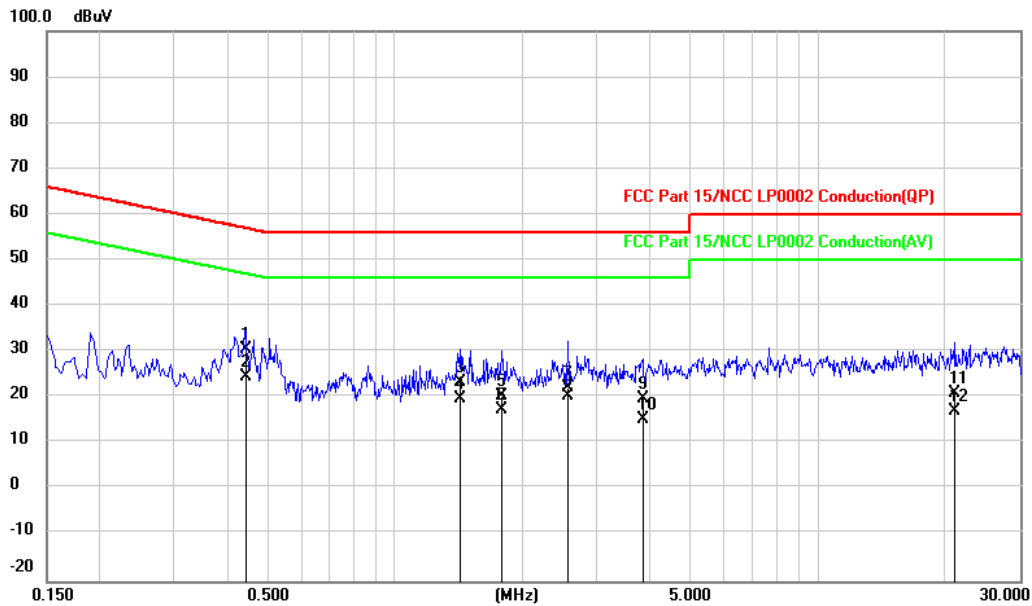
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Phase of Power : Neutral (N)



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Test report No. : 4789310744-US-R0-V0
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Issued date : Jan. 16, 2020
FCC ID : K7SWIB001

No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	dB	(dBuV)	(dBuV)	(dB)	
1	0.4428	10.81	19.62	30.43	57.01	-26.58	QP
2	0.4428	5.00	19.62	24.62	47.01	-22.39	AVG
3	1.4299	3.67	19.63	23.30	56.00	-32.70	QP
4	1.4299	0.04	19.63	19.67	46.00	-26.33	AVG
5	1.7860	0.64	19.65	20.29	56.00	-35.71	QP
6	1.7860	-2.22	19.65	17.43	46.00	-28.57	AVG
7	2.5540	2.63	19.66	22.29	56.00	-33.71	QP
8	2.5540	0.77	19.66	20.43	46.00	-25.57	AVG
9	3.8500	0.04	19.69	19.73	56.00	-36.27	QP
10	3.8500	-4.36	19.69	15.33	46.00	-30.67	AVG
11	21.1115	1.06	19.90	20.96	60.00	-39.04	QP
12	21.1115	-2.97	19.90	16.93	50.00	-33.07	AVG

Remarks:

1. Result value (dBuV) = Reading value (dBuV) + Correction Factor (dB)
2. Margin(dB) = Result value (dBuV) - Limit value (dBuV)
3. Correction Factor(dB) = Insertion loss(dB) + Cable loss(dB)
4. The other emission levels were very low against the limit.

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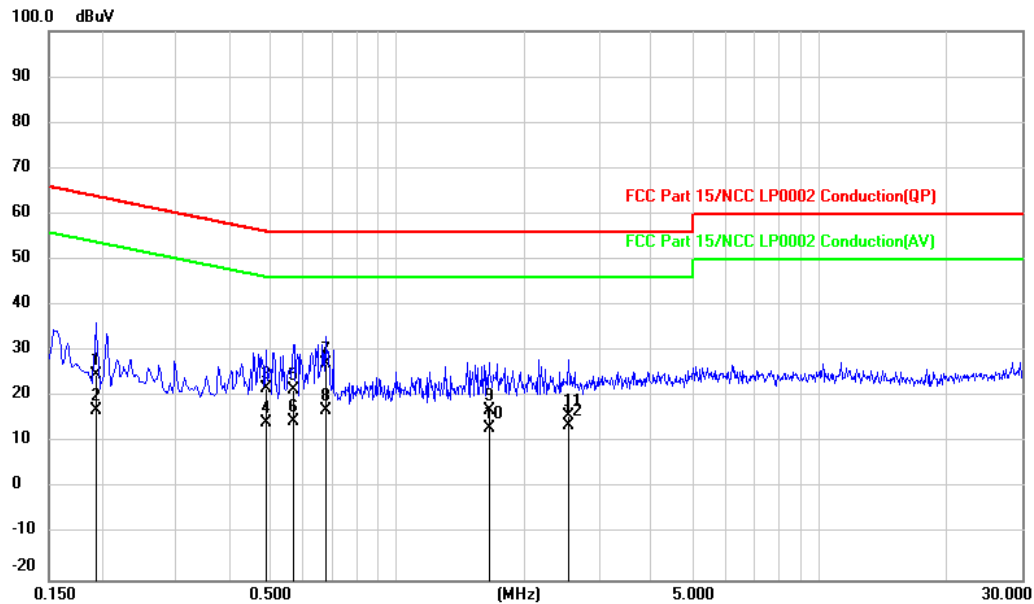
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Adapter 2

EUT Test Condition		Measurement Detail	
Mode	Standby Mode	Frequency Range	150 kHz ~ 30 MHz

Phase of Power : Line (L)



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No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	dB	(dBuV)	(dBuV)	(dB)	
1	0.1947	5.10	19.61	24.71	63.83	-39.12	QP
2	0.1947	-2.57	19.61	17.04	53.83	-36.79	AVG
3	0.4926	2.19	19.61	21.80	56.12	-34.32	QP
4	0.4926	-5.11	19.61	14.50	46.12	-31.62	AVG
5	0.5700	2.00	19.61	21.61	56.00	-34.39	QP
6	0.5700	-4.87	19.61	14.74	46.00	-31.26	AVG
7	0.6780	7.68	19.61	27.29	56.00	-28.71	QP
8	0.6780	-2.65	19.61	16.96	46.00	-29.04	AVG
9	1.6500	-2.48	19.63	17.15	56.00	-38.85	QP
10	1.6500	-6.47	19.63	13.16	46.00	-32.84	AVG
11	2.5500	-3.93	19.65	15.72	56.00	-40.28	QP
12	2.5500	-6.04	19.65	13.61	46.00	-32.39	AVG

Remarks:

1. Result value (dBuV) = Reading value (dBuV) + Correction Factor (dB)
2. Margin(dB) = Result value (dBuV) - Limit value (dBuV)
3. Correction Factor(dB) = Insertion loss(dB) + Cable loss(dB)
4. The other emission levels were very low against the limit.

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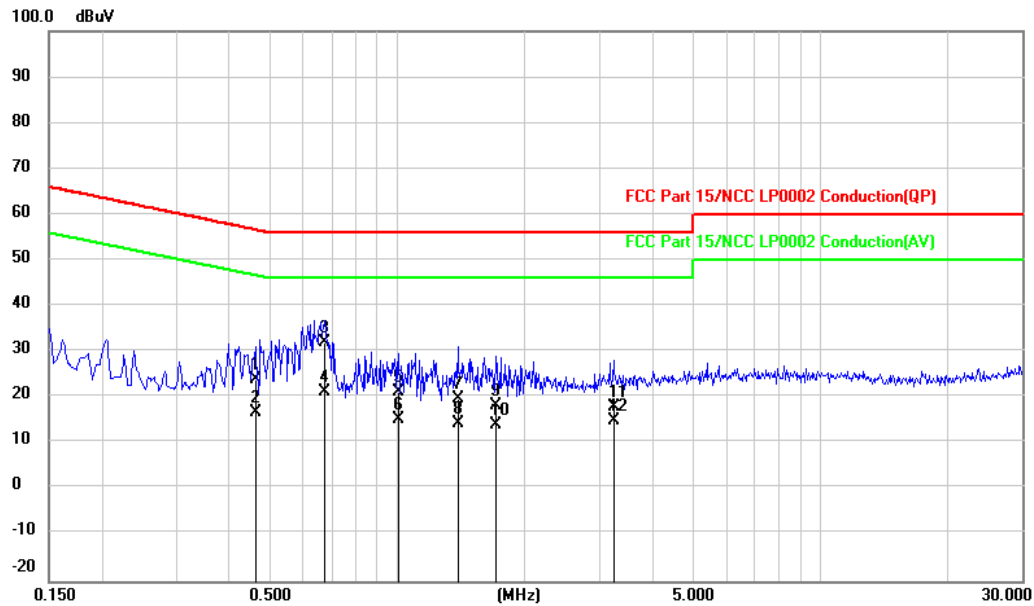
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Phase of Power : Neutral (N)



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No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	dB	(dBuV)	(dBuV)	(dB)	
1	0.4646	4.42	19.62	24.04	56.61	-32.57	QP
2	0.4646	-3.02	19.62	16.60	46.61	-30.01	AVG
3	0.6740	12.47	19.62	32.09	56.00	-23.91	QP
4	0.6740	1.70	19.62	21.32	46.00	-24.68	AVG
5	1.0056	1.51	19.62	21.13	56.00	-34.87	QP
6	1.0056	-4.46	19.62	15.16	46.00	-30.84	AVG
7	1.3900	0.09	19.63	19.72	56.00	-36.28	QP
8	1.3900	-5.36	19.63	14.27	46.00	-31.73	AVG
9	1.7140	-1.34	19.64	18.30	56.00	-37.70	QP
10	1.7140	-5.67	19.64	13.97	46.00	-32.03	AVG
11	3.2500	-1.61	19.68	18.07	56.00	-37.93	QP
12	3.2500	-4.60	19.68	15.08	46.00	-30.92	AVG

Remarks:

1. Result value (dBuV) = Reading value (dBuV) + Correction Factor (dB)
2. Margin(dB) = Result value (dBuV) - Limit value (dBuV)
3. Correction Factor(dB) = Insertion loss(dB) + Cable loss(dB)
4. The other emission levels were very low against the limit.

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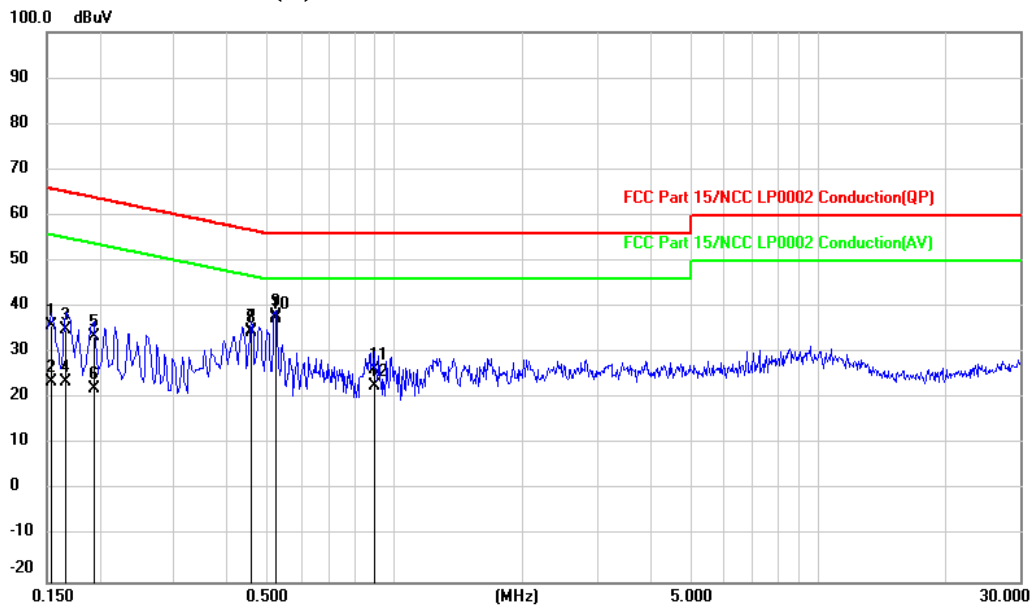
Operating Mode

Adapter 1

Smart phone (With 3mm gap)

EUT Test Condition		Measurement Detail	
Mode	Operating Mode	Frequency Range	150 kHz ~ 30 MHz

Phase of Power : Line (L)



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No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	dB	(dBuV)	(dBuV)	(dB)	
1	0.1539	16.24	19.62	35.86	65.79	-29.93	QP
2	0.1539	4.07	19.62	23.69	55.79	-32.10	AVG
3	0.1660	15.52	19.62	35.14	65.16	-30.02	QP
4	0.1660	3.93	19.62	23.55	55.16	-31.61	AVG
5	0.1949	13.83	19.61	33.44	63.83	-30.39	QP
6	0.1949	2.47	19.61	22.08	53.83	-31.75	AVG
7	0.4582	15.13	19.61	34.74	56.73	-21.99	QP
8	0.4582	14.70	19.61	34.31	46.73	-12.42	AVG
9	0.5206	18.39	19.61	38.00	56.00	-18.00	QP
10	0.5206	17.70	19.61	37.31	46.00	-8.69	AVG
11	0.8915	6.69	19.62	26.31	56.00	-29.69	QP
12	0.8915	3.12	19.62	22.74	46.00	-23.26	AVG

Remarks:

1. Result value (dBuV) = Reading value (dBuV) + Correction Factor (dB)
2. Margin(dB) = Result value (dBuV) - Limit value (dBuV)
3. Correction Factor(dB) = Insertion loss(dB) + Cable loss(dB)
4. The other emission levels were very low against the limit.

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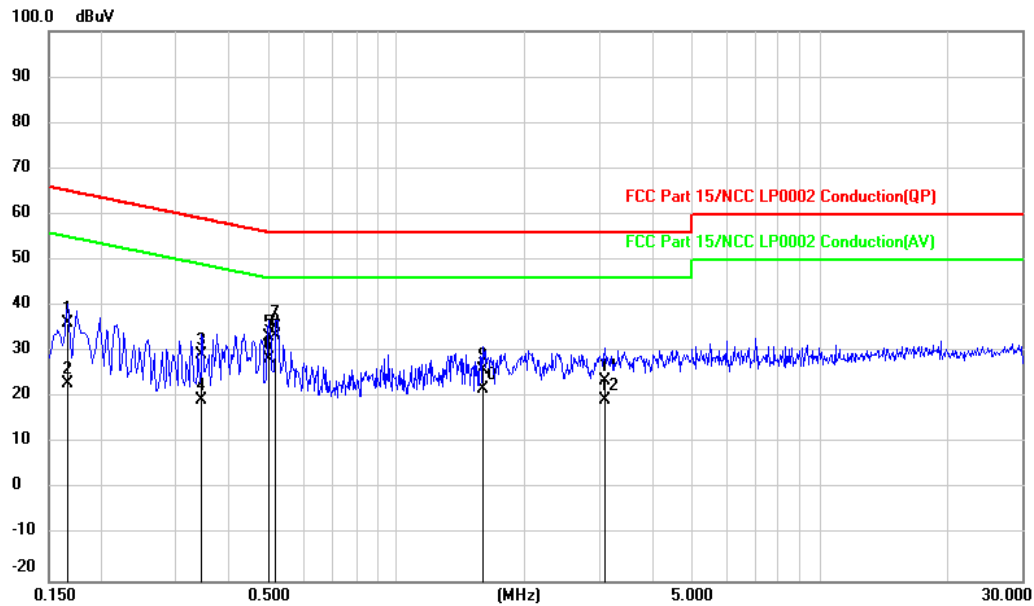
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Phase of Power : Neutral (N)



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No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	dB	(dBuV)	(dBuV)	(dB)	
1	0.1660	16.61	19.62	36.23	65.16	-28.93	QP
2	0.1660	3.48	19.62	23.10	55.16	-32.06	AVG
3	0.3460	9.71	19.62	29.33	59.06	-29.73	QP
4	0.3460	-0.07	19.62	19.55	49.06	-29.51	AVG
5	0.4972	13.61	19.62	33.23	56.05	-22.82	QP
6	0.4972	8.70	19.62	28.32	46.05	-17.73	AVG
7	0.5180	15.86	19.62	35.48	56.00	-20.52	QP
8	0.5180	13.85	19.62	33.47	46.00	-12.53	AVG
9	1.5940	6.40	19.64	26.04	56.00	-29.96	QP
10	1.5940	2.24	19.64	21.88	46.00	-24.12	AVG
11	3.0940	3.90	19.68	23.58	56.00	-32.42	QP
12	3.0940	-0.28	19.68	19.40	46.00	-26.60	AVG

Remarks:

1. Result value (dBuV) = Reading value (dBuV) + Correction Factor (dB)
2. Margin(dB) = Result value (dBuV) - Limit value (dBuV)
3. Correction Factor(dB) = Insertion loss(dB) + Cable loss(dB)
4. The other emission levels were very low against the limit.

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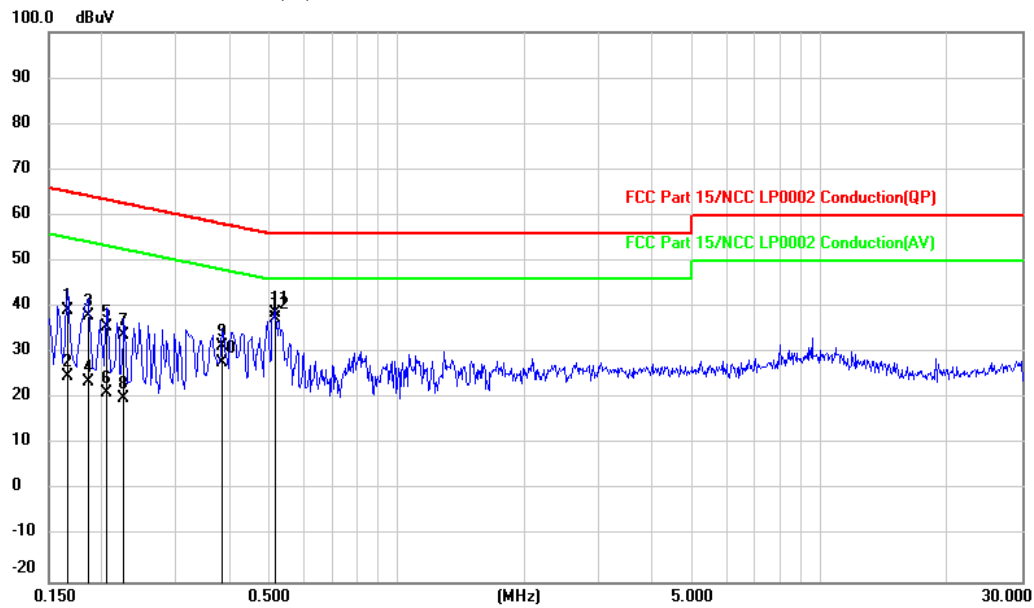
Doc No: 17-EM-F0972 / 1.0



Smart phone (Without 3mm gap)

EUT Test Condition		Measurement Detail	
Mode	Operating Mode	Frequency Range	150 kHz ~ 30 MHz

Phase of Power : Line (L)



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Test report No. : 4789310744-US-R0-V0
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FCC ID : K7SWIB001

No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	dB	(dBuV)	(dBuV)	(dB)	
1	0.1660	19.59	19.62	39.21	65.16	-25.95	QP
2	0.1660	5.14	19.62	24.76	55.16	-30.40	AVG
3	0.1862	18.47	19.61	38.08	64.20	-26.12	QP
4	0.1862	4.12	19.61	23.73	54.20	-30.47	AVG
5	0.2058	15.90	19.61	35.51	63.37	-27.86	QP
6	0.2058	1.54	19.61	21.15	53.37	-32.22	AVG
7	0.2260	14.34	19.61	33.95	62.60	-28.65	QP
8	0.2260	0.36	19.61	19.97	52.60	-32.63	AVG
9	0.3860	11.77	19.61	31.38	58.15	-26.77	QP
10	0.3860	8.15	19.61	27.76	48.15	-20.39	AVG
11	0.5140	18.91	19.61	38.52	56.00	-17.48	QP
12	0.5140	17.97	19.61	37.58	46.00	-8.42	AVG

Remarks:

1. Result value (dBuV) = Reading value (dBuV) + Correction Factor (dB)
2. Margin(dB) = Result value (dBuV) - Limit value (dBuV)
3. Correction Factor(dB) = Insertion loss(dB) + Cable loss(dB)
4. The other emission levels were very low against the limit.

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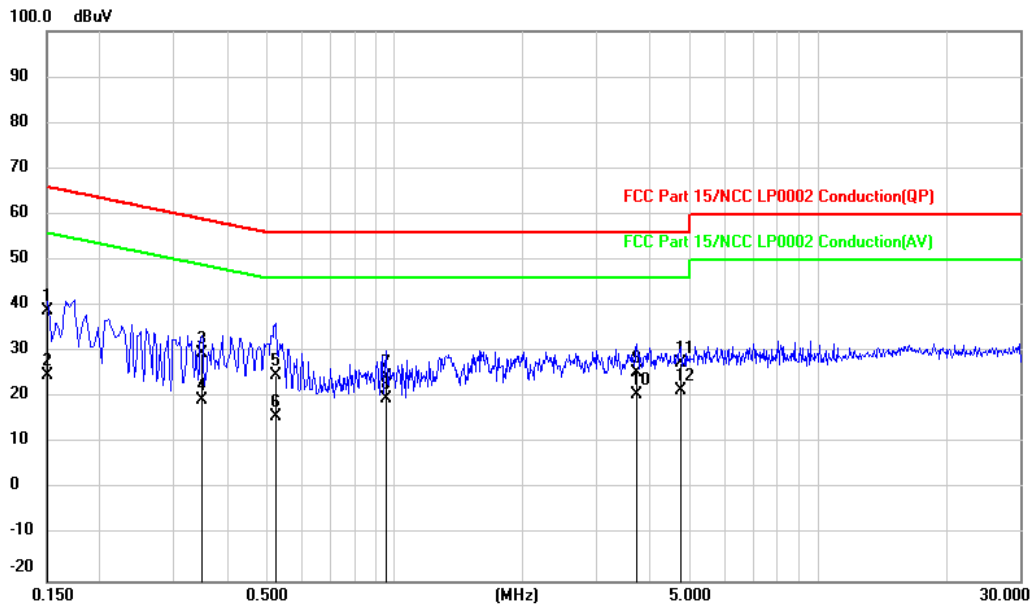
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Doc No: 17-EM-F0972 / 1.0



Phase of Power : Neutral (N)



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Doc No: 17-EM-F0972 / 1.0



Test report No. : 4789310744-US-R0-V0
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Issued date : Jan. 16, 2020
FCC ID : K7SWIB001

No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	dB	(dBuV)	(dBuV)	(dB)	
1	0.1503	19.29	19.62	38.91	65.98	-27.07	QP
2	0.1503	5.34	19.62	24.96	55.98	-31.02	AVG
3	0.3500	9.98	19.62	29.60	58.96	-29.36	QP
4	0.3500	-0.04	19.62	19.58	48.96	-29.38	AVG
5	0.5220	5.37	19.62	24.99	56.00	-31.01	QP
6	0.5220	-3.71	19.62	15.91	46.00	-30.09	AVG
7	0.9506	4.94	19.62	24.56	56.00	-31.44	QP
8	0.9506	0.01	19.62	19.63	46.00	-26.37	AVG
9	3.7220	5.76	19.69	25.45	56.00	-30.55	QP
10	3.7220	1.03	19.69	20.72	46.00	-25.28	AVG
11	4.7268	7.71	19.71	27.42	56.00	-28.58	QP
12	4.7268	1.98	19.71	21.69	46.00	-24.31	AVG

Remarks:

1. Result value (dBuV) = Reading value (dBuV) + Correction Factor (dB)
2. Margin(dB) = Result value (dBuV) - Limit value (dBuV)
3. Correction Factor(dB) = Insertion loss(dB) + Cable loss(dB)
4. The other emission levels were very low against the limit.

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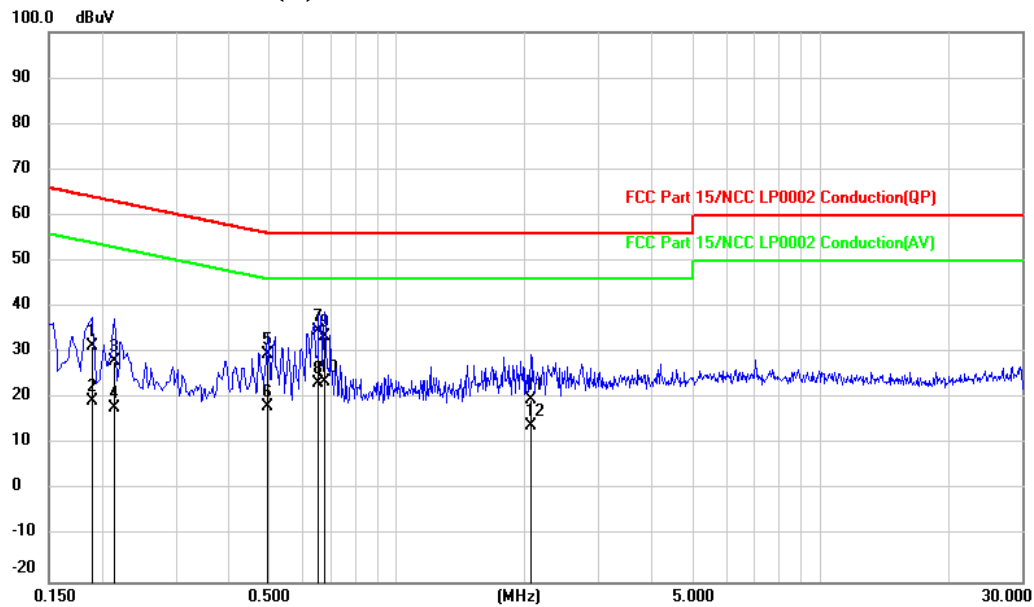


Adapter 2

Smart phone (With 3mm gap)

EUT Test Condition		Measurement Detail	
Mode	Operating Mode	Frequency Range	150 kHz ~ 30 MHz

Phase of Power : Line (L)



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Test report No. : 4789310744-US-R0-V0
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No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	dB	(dBuV)	(dBuV)	(dB)	
1	0.1900	11.96	19.61	31.57	64.04	-32.47	QP
2	0.1900	-0.15	19.61	19.46	54.04	-34.58	AVG
3	0.2148	8.49	19.61	28.10	63.02	-34.92	QP
4	0.2148	-1.70	19.61	17.91	53.02	-35.11	AVG
5	0.4969	9.95	19.61	29.56	56.05	-26.49	QP
6	0.4969	-1.33	19.61	18.28	46.05	-27.77	AVG
7	0.6540	15.14	19.61	34.75	56.00	-21.25	QP
8	0.6540	3.87	19.61	23.48	46.00	-22.52	AVG
9	0.6728	13.81	19.61	33.42	56.00	-22.58	QP
10	0.6728	4.19	19.61	23.80	46.00	-22.20	AVG
11	2.0700	0.03	19.63	19.66	56.00	-36.34	QP
12	2.0700	-5.49	19.63	14.14	46.00	-31.86	AVG

Remarks:

1. Result value (dBuV) = Reading value (dBuV) + Correction Factor (dB)
2. Margin(dB) = Result value (dBuV) - Limit value (dBuV)
3. Correction Factor(dB) = Insertion loss(dB) + Cable loss(dB)
4. The other emission levels were very low against the limit.

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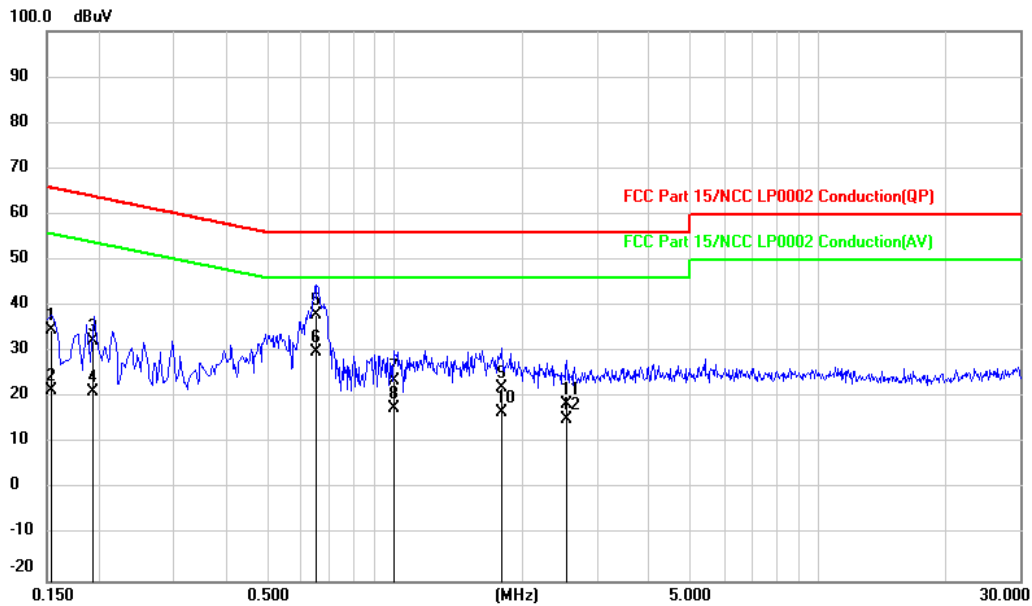
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Doc No: 17-EM-F0972 / 1.0



Phase of Power : Neutral (N)



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Test report No. : 4789310744-US-R0-V0
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FCC ID : K7SWIB001

No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	dB	(dBuV)	(dBuV)	(dB)	
1	0.1544	15.21	19.62	34.83	65.76	-30.93	QP
2	0.1544	2.02	19.62	21.64	55.76	-34.12	AVG
3	0.1914	12.88	19.62	32.50	63.98	-31.48	QP
4	0.1914	1.76	19.62	21.38	53.98	-32.60	AVG
5	0.6540	18.34	19.62	37.96	56.00	-18.04	QP
6	0.6540	10.28	19.62	29.90	46.00	-16.10	AVG
7	0.9940	3.91	19.62	23.53	56.00	-32.47	QP
8	0.9940	-1.86	19.62	17.76	46.00	-28.24	AVG
9	1.7820	2.47	19.65	22.12	56.00	-33.88	QP
10	1.7820	-2.90	19.65	16.75	46.00	-29.25	AVG
11	2.5460	-1.23	19.66	18.43	56.00	-37.57	QP
12	2.5460	-4.32	19.66	15.34	46.00	-30.66	AVG

Remarks:

1. Result value (dBuV) = Reading value (dBuV) + Correction Factor (dB)
2. Margin(dB) = Result value (dBuV) - Limit value (dBuV)
3. Correction Factor(dB) = Insertion loss(dB) + Cable loss(dB)
4. The other emission levels were very low against the limit.

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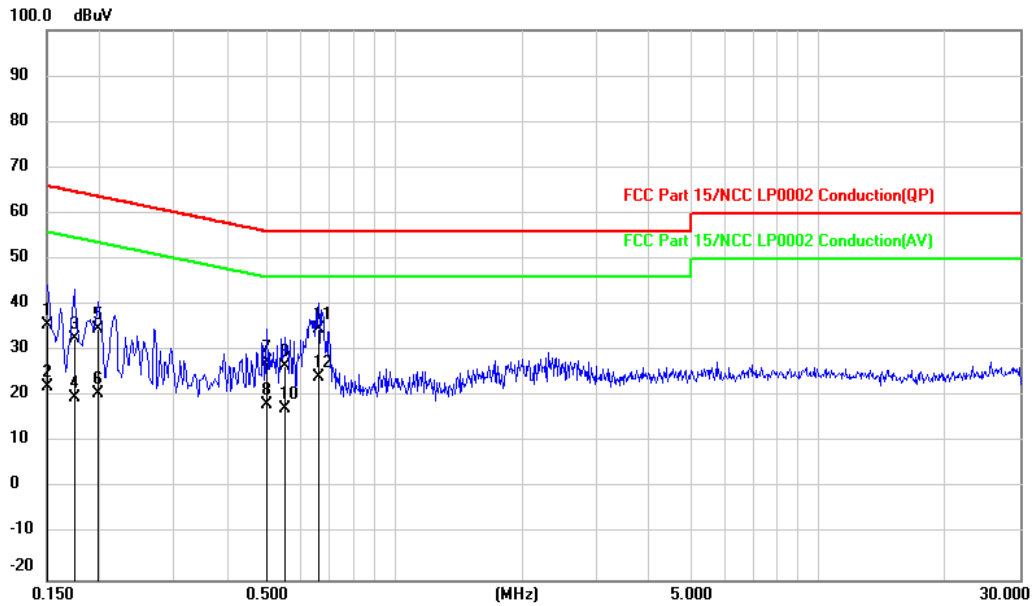
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Smart phone (Without 3mm gap)

EUT Test Condition		Measurement Detail	
Mode	Operating Mode	Frequency Range	150 kHz ~ 30 MHz

Phase of Power : Line (L)



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Doc No: 17-EM-F0972 / 1.0



Test report No. : 4789310744-US-R0-V0
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FCC ID : K7SWIB001

No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	dB	(dBuV)	(dBuV)	(dB)	
1	0.1503	16.08	19.62	35.70	65.98	-30.28	QP
2	0.1503	2.42	19.62	22.04	55.98	-33.94	AVG
3	0.1740	13.09	19.62	32.71	64.77	-32.06	QP
4	0.1740	0.28	19.62	19.90	54.77	-34.87	AVG
5	0.1986	15.27	19.61	34.88	63.67	-28.79	QP
6	0.1986	1.09	19.61	20.70	53.67	-32.97	AVG
7	0.4980	7.96	19.61	27.57	56.03	-28.46	QP
8	0.4980	-1.41	19.61	18.20	46.03	-27.83	AVG
9	0.5500	7.18	19.61	26.79	56.00	-29.21	QP
10	0.5500	-2.29	19.61	17.32	46.00	-28.68	AVG
11	0.6580	15.18	19.61	34.79	56.00	-21.21	QP
12	0.6580	4.64	19.61	24.25	46.00	-21.75	AVG

Remarks:

1. Result value (dBuV) = Reading value (dBuV) + Correction Factor (dB)
2. Margin(dB) = Result value (dBuV) - Limit value (dBuV)
3. Correction Factor(dB) = Insertion loss(dB) + Cable loss(dB)
4. The other emission levels were very low against the limit.

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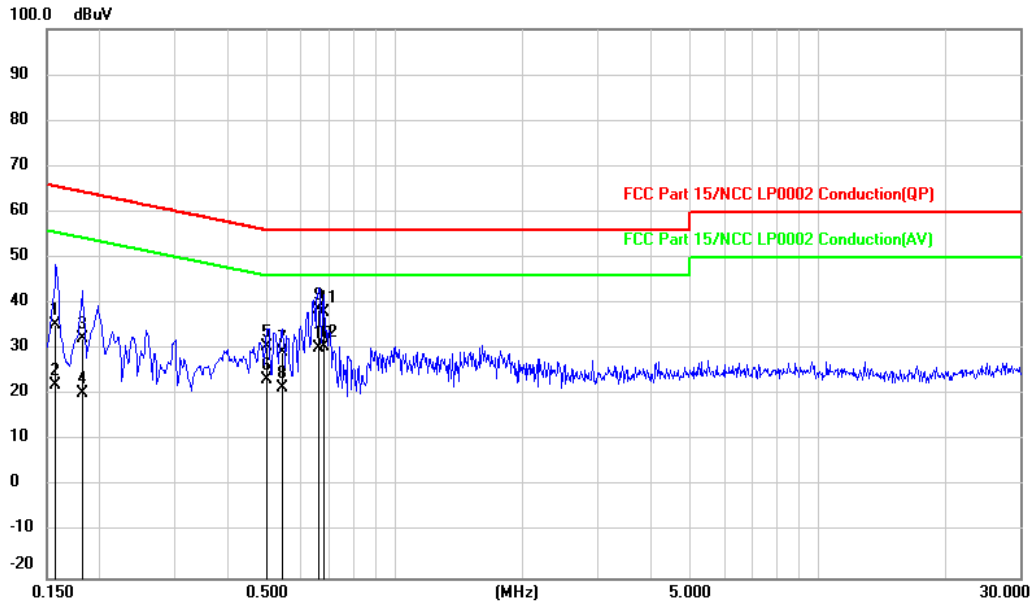
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Phase of Power : Neutral (N)



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No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	dB	(dBuV)	(dBuV)	(dB)	
1	0.1580	15.77	19.62	35.39	65.57	-30.18	QP
2	0.1580	2.42	19.62	22.04	55.57	-33.53	AVG
3	0.1819	12.59	19.62	32.21	64.40	-32.19	QP
4	0.1819	0.79	19.62	20.41	54.40	-33.99	AVG
5	0.4999	11.08	19.62	30.70	56.00	-25.30	QP
6	0.4999	3.88	19.62	23.50	46.00	-22.50	AVG
7	0.5425	9.66	19.62	29.28	56.00	-26.72	QP
8	0.5425	1.86	19.62	21.48	46.00	-24.52	AVG
9	0.6580	18.89	19.62	38.51	56.00	-17.49	QP
10	0.6580	10.67	19.62	30.29	46.00	-15.71	AVG
11	0.6780	18.48	19.62	38.10	56.00	-17.90	QP
12	0.6780	10.87	19.62	30.49	46.00	-15.51	AVG

Remarks:

1. Result value (dBuV) = Reading value (dBuV) + Correction Factor (dB)
2. Margin(dB) = Result value (dBuV) - Limit value (dBuV)
3. Correction Factor(dB) = Insertion loss(dB) + Cable loss(dB)
4. The other emission levels were very low against the limit.

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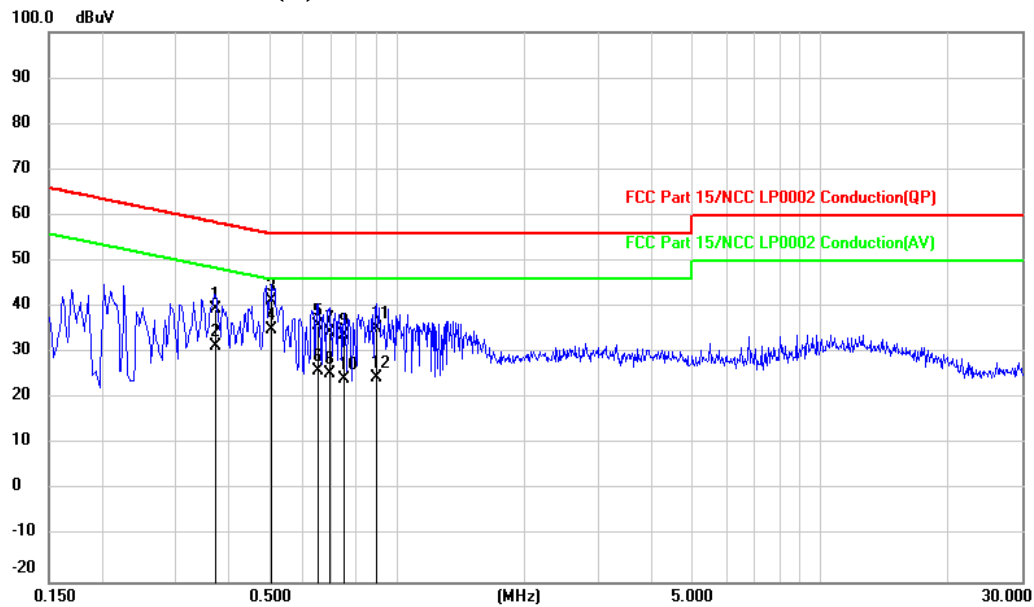
Operating Mode

Adapter 1

10W load (With 3mm gap)

EUT Test Condition		Measurement Detail	
Mode	Operating Mode	Frequency Range	150 kHz ~ 30 MHz

Phase of Power : Line (L)



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No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	dB	(dBuV)	(dBuV)	(dB)	
1	0.3712	19.95	19.61	39.56	58.47	-18.91	QP
2	0.3712	11.77	19.61	31.38	48.47	-17.09	AVG
3	0.5070	21.74	19.61	41.35	56.00	-14.65	QP
4	0.5070	15.40	19.61	35.01	46.00	-10.99	AVG
5	0.6500	16.31	19.61	35.92	56.00	-20.08	QP
6	0.6500	6.48	19.61	26.09	46.00	-19.91	AVG
7	0.6900	14.84	19.61	34.45	56.00	-21.55	QP
8	0.6900	5.85	19.61	25.46	46.00	-20.54	AVG
9	0.7500	14.31	19.62	33.93	56.00	-22.07	QP
10	0.7500	4.49	19.62	24.11	46.00	-21.89	AVG
11	0.8943	15.76	19.62	35.38	56.00	-20.62	QP
12	0.8943	4.97	19.62	24.59	46.00	-21.41	AVG

Remarks:

1. Result value (dBuV) = Reading value (dBuV) + Correction Factor (dB)
2. Margin(dB) = Result value (dBuV) - Limit value (dBuV)
3. Correction Factor(dB) = Insertion loss(dB) + Cable loss(dB)
4. The other emission levels were very low against the limit.

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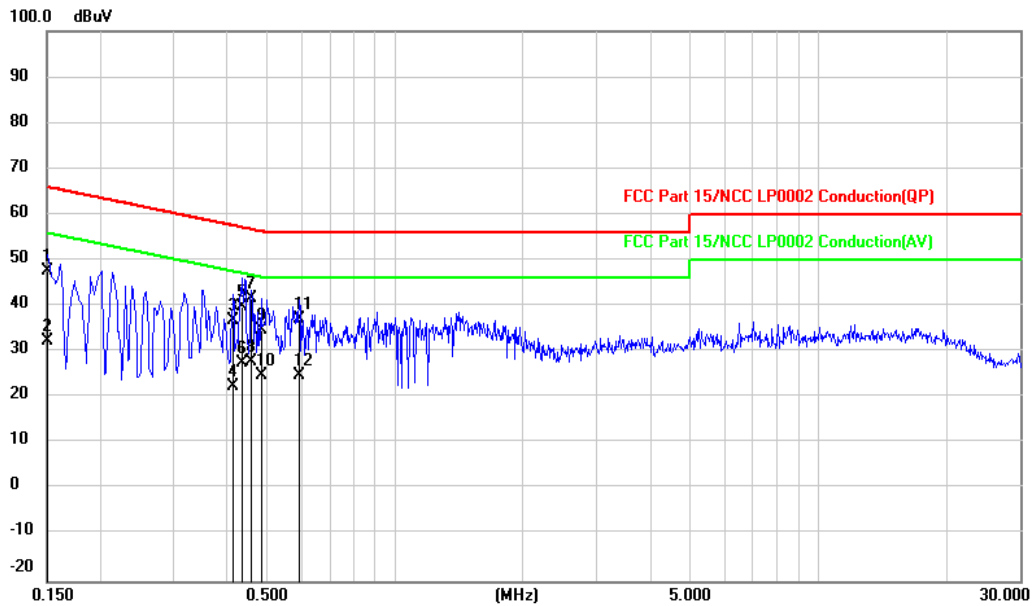
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Phase of Power : Neutral (N)



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Test report No. : 4789310744-US-R0-V0
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No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	dB	(dBuV)	(dBuV)	(dB)	
1	0.1505	28.13	19.62	47.75	65.97	-18.22	QP
2	0.1505	12.64	19.62	32.26	55.97	-23.71	AVG
3	0.4143	17.32	19.62	36.94	57.56	-20.62	QP
4	0.4143	2.94	19.62	22.56	47.56	-25.00	AVG
5	0.4320	20.14	19.62	39.76	57.21	-17.45	QP
6	0.4320	7.80	19.62	27.42	47.21	-19.79	AVG
7	0.4580	21.97	19.62	41.59	56.73	-15.14	QP
8	0.4580	8.28	19.62	27.90	46.73	-18.83	AVG
9	0.4803	15.20	19.62	34.82	56.33	-21.51	QP
10	0.4803	5.34	19.62	24.96	46.33	-21.37	AVG
11	0.5940	17.46	19.62	37.08	56.00	-18.92	QP
12	0.5940	5.36	19.62	24.98	46.00	-21.02	AVG

Remarks:

1. Result value (dBuV) = Reading value (dBuV) + Correction Factor (dB)
2. Margin(dB) = Result value (dBuV) - Limit value (dBuV)
3. Correction Factor(dB) = Insertion loss(dB) + Cable loss(dB)
4. The other emission levels were very low against the limit.

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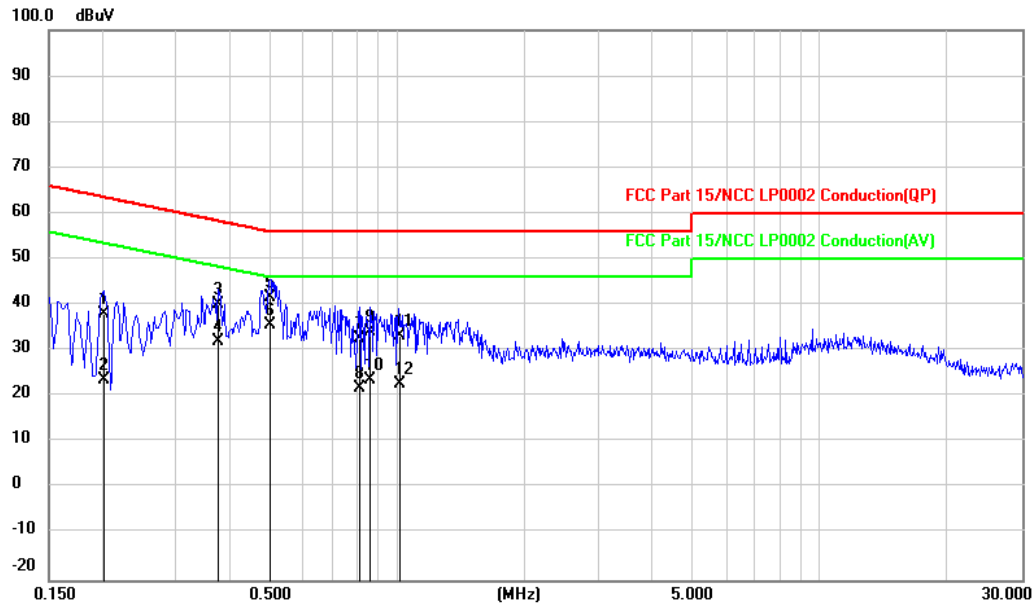
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10W load (Without 3mm gap)

EUT Test Condition		Measurement Detail	
Mode	Operating Mode	Frequency Range	150 kHz ~ 30 MHz

Phase of Power : Line (L)



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No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	dB	(dBuV)	(dBuV)	(dB)	
1	0.2020	18.48	19.61	38.09	63.53	-25.44	QP
2	0.2020	4.04	19.61	23.65	53.53	-29.88	AVG
3	0.3780	20.40	19.61	40.01	58.32	-18.31	QP
4	0.3780	12.39	19.61	32.00	48.32	-16.32	AVG
5	0.5017	22.06	19.61	41.67	56.00	-14.33	QP
6	0.5017	15.94	19.61	35.55	46.00	-10.45	AVG
7	0.8139	13.07	19.62	32.69	56.00	-23.31	QP
8	0.8139	2.20	19.62	21.82	46.00	-24.18	AVG
9	0.8695	14.65	19.62	34.27	56.00	-21.73	QP
10	0.8695	4.01	19.62	23.63	46.00	-22.37	AVG
11	1.0200	13.73	19.62	33.35	56.00	-22.65	QP
12	1.0200	3.23	19.62	22.85	46.00	-23.15	AVG

Remarks:

1. Result value (dBuV) = Reading value (dBuV) + Correction Factor (dB)
2. Margin(dB) = Result value (dBuV) - Limit value (dBuV)
3. Correction Factor(dB) = Insertion loss(dB) + Cable loss(dB)
4. The other emission levels were very low against the limit.

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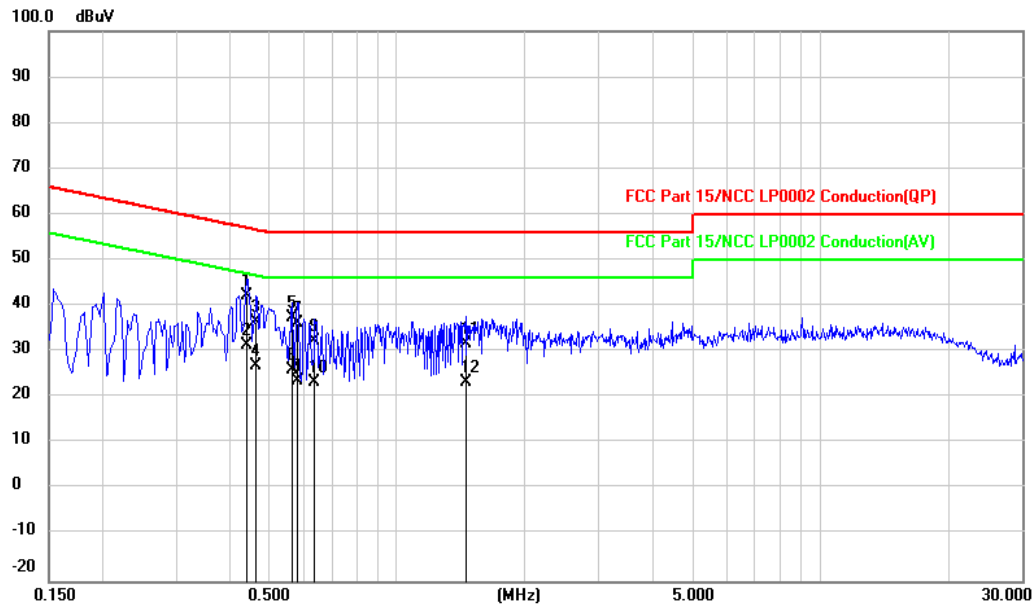
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Doc No: 17-EM-F0972 / 1.0



Phase of Power : Neutral (N)



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Test report No. : 4789310744-US-R0-V0
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No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	dB	(dBuV)	(dBuV)	(dB)	
1	0.4419	22.78	19.62	42.40	57.03	-14.63	QP
2	0.4419	11.93	19.62	31.55	47.03	-15.48	AVG
3	0.4644	17.01	19.62	36.63	56.61	-19.98	QP
4	0.4644	7.20	19.62	26.82	46.61	-19.79	AVG
5	0.5660	17.69	19.62	37.31	56.00	-18.69	QP
6	0.5660	6.50	19.62	26.12	46.00	-19.88	AVG
7	0.5814	16.51	19.62	36.13	56.00	-19.87	QP
8	0.5814	4.15	19.62	23.77	46.00	-22.23	AVG
9	0.6348	12.71	19.62	32.33	56.00	-23.67	QP
10	0.6348	3.74	19.62	23.36	46.00	-22.64	AVG
11	1.4540	12.23	19.63	31.86	56.00	-24.14	QP
12	1.4540	3.69	19.63	23.32	46.00	-22.68	AVG

Remarks:

1. Result value (dBuV) = Reading value (dBuV) + Correction Factor (dB)
2. Margin(dB) = Result value (dBuV) - Limit value (dBuV)
3. Correction Factor(dB) = Insertion loss(dB) + Cable loss(dB)
4. The other emission levels were very low against the limit.

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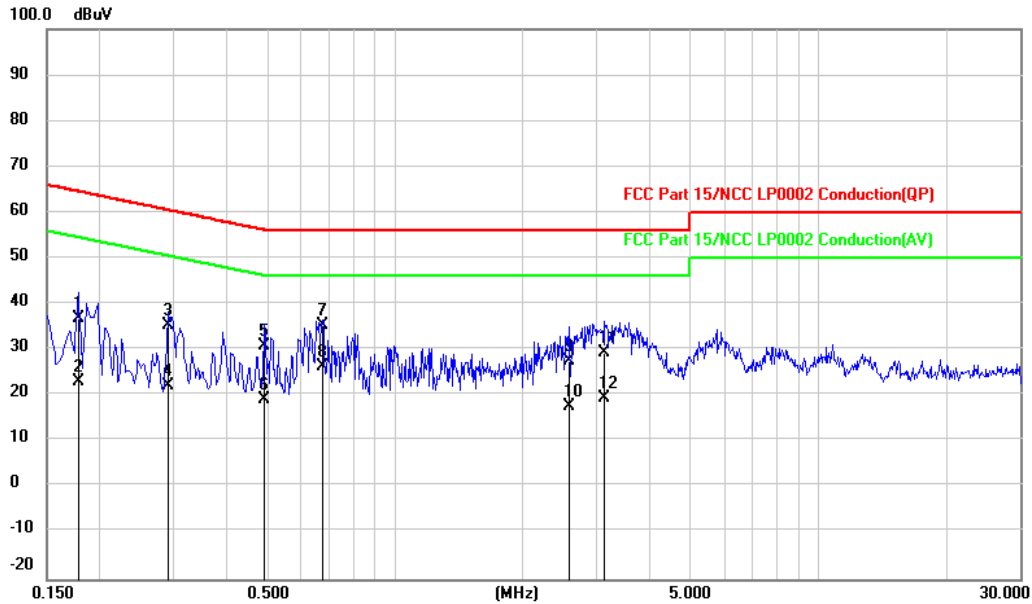


Adapter 2

10W load (With 3mm gap)

EUT Test Condition		Measurement Detail	
Mode	Operating Mode	Frequency Range	150 kHz ~ 30 MHz

Phase of Power : Line (L)



Underwriters Laboratories Taiwan Co., Ltd.

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No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	dB	(dBuV)	(dBuV)	(dB)	
1	0.1792	17.39	19.61	37.00	64.52	-27.52	QP
2	0.1792	3.36	19.61	22.97	54.52	-31.55	AVG
3	0.2900	15.89	19.61	35.50	60.52	-25.02	QP
4	0.2900	2.41	19.61	22.02	50.52	-28.50	AVG
5	0.4907	11.17	19.61	30.78	56.16	-25.38	QP
6	0.4907	-0.56	19.61	19.05	46.16	-27.11	AVG
7	0.6740	15.68	19.61	35.29	56.00	-20.71	QP
8	0.6740	6.62	19.61	26.23	46.00	-19.77	AVG
9	2.5780	7.78	19.65	27.43	56.00	-28.57	QP
10	2.5780	-2.03	19.65	17.62	46.00	-28.38	AVG
11	3.1260	9.62	19.66	29.28	56.00	-26.72	QP
12	3.1260	-0.13	19.66	19.53	46.00	-26.47	AVG

Remarks:

1. Result value (dBuV) = Reading value (dBuV) + Correction Factor (dB)
2. Margin(dB) = Result value (dBuV) - Limit value (dBuV)
3. Correction Factor(dB) = Insertion loss(dB) + Cable loss(dB)
4. The other emission levels were very low against the limit.

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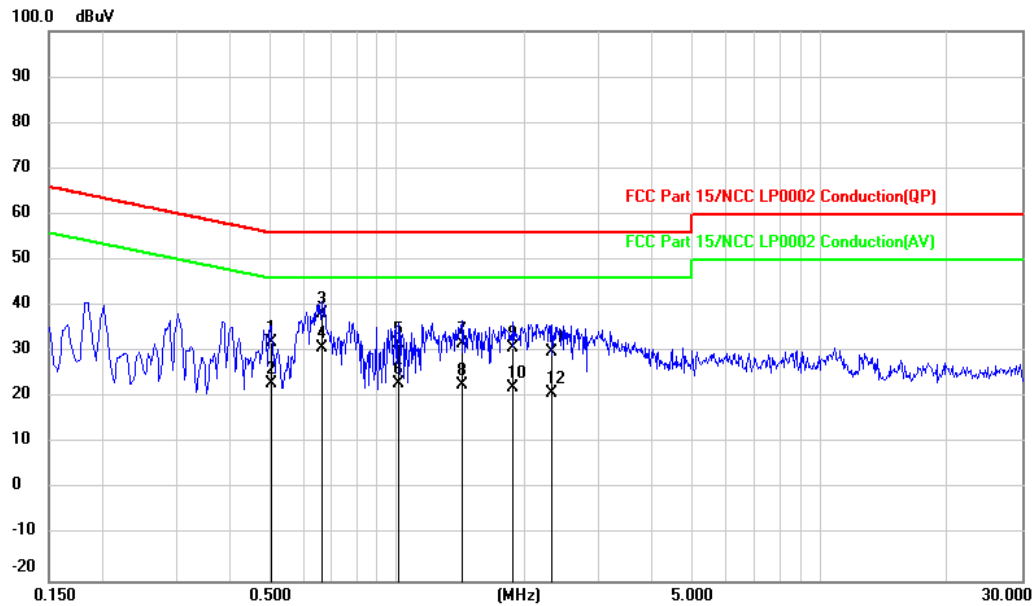
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Doc No: 17-EM-F0972 / 1.0



Phase of Power : Neutral (N)



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Doc No: 17-EM-F0972 / 1.0



Test report No. : 4789310744-US-R0-V0
Page : 114 of 120
Issued date : Jan. 16, 2020
FCC ID : K7SWIB001

No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	dB	(dBuV)	(dBuV)	(dB)	
1	0.5065	12.55	19.62	32.17	56.00	-23.83	QP
2	0.5065	3.52	19.62	23.14	46.00	-22.86	AVG
3	0.6617	18.76	19.62	38.38	56.00	-17.62	QP
4	0.6617	11.15	19.62	30.77	46.00	-15.23	AVG
5	1.0100	11.99	19.62	31.61	56.00	-24.39	QP
6	1.0100	3.55	19.62	23.17	46.00	-22.83	AVG
7	1.4220	12.08	19.63	31.71	56.00	-24.29	QP
8	1.4220	3.06	19.63	22.69	46.00	-23.31	AVG
9	1.8771	11.35	19.65	31.00	56.00	-25.00	QP
10	1.8771	2.65	19.65	22.30	46.00	-23.70	AVG
11	2.3300	10.39	19.65	30.04	56.00	-25.96	QP
12	2.3300	1.18	19.65	20.83	46.00	-25.17	AVG

Remarks:

1. Result value (dBuV) = Reading value (dBuV) + Correction Factor (dB)
2. Margin(dB) = Result value (dBuV) - Limit value (dBuV)
3. Correction Factor(dB) = Insertion loss(dB) + Cable loss(dB)
4. The other emission levels were very low against the limit.

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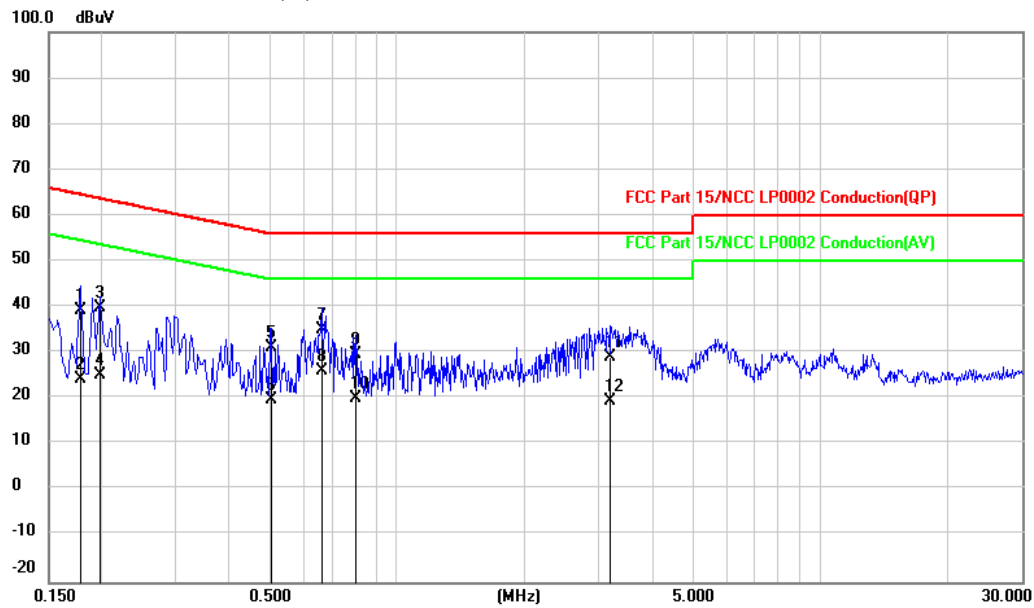
Doc No: 17-EM-F0972 / 1.0



10W load (Without 3mm gap)

EUT Test Condition		Measurement Detail	
Mode	Operating Mode	Frequency Range	150 kHz ~ 30 MHz

Phase of Power : Line (L)



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Test report No. : 4789310744-US-R0-V0
Page : 116 of 120
Issued date : Jan. 16, 2020
FCC ID : K7SWIB001

No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	dB	(dBuV)	(dBuV)	(dB)	
1	0.1792	19.51	19.61	39.12	64.52	-25.40	QP
2	0.1792	4.62	19.61	24.23	54.52	-30.29	AVG
3	0.1980	20.12	19.61	39.73	63.69	-23.96	QP
4	0.1980	5.53	19.61	25.14	53.69	-28.55	AVG
5	0.5021	11.69	19.61	31.30	56.00	-24.70	QP
6	0.5021	0.26	19.61	19.87	46.00	-26.13	AVG
7	0.6617	15.40	19.61	35.01	56.00	-20.99	QP
8	0.6617	6.42	19.61	26.03	46.00	-19.97	AVG
9	0.7980	9.90	19.62	29.52	56.00	-26.48	QP
10	0.7980	0.41	19.62	20.03	46.00	-25.97	AVG
11	3.1939	9.29	19.66	28.95	56.00	-27.05	QP
12	3.1939	-0.18	19.66	19.48	46.00	-26.52	AVG

Remarks:

1. Result value (dBuV) = Reading value (dBuV) + Correction Factor (dB)
2. Margin(dB) = Result value (dBuV) - Limit value (dBuV)
3. Correction Factor(dB) = Insertion loss(dB) + Cable loss(dB)
4. The other emission levels were very low against the limit.

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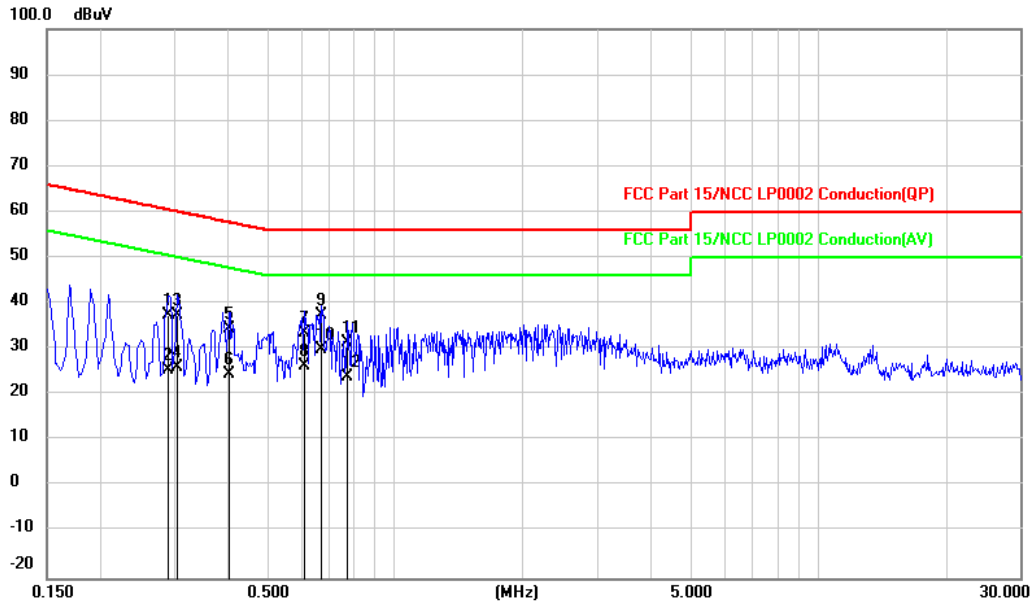
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Doc No: 17-EM-F0972 / 1.0



Phase of Power : Neutral (N)



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Page : 118 of 120
Issued date : Jan. 16, 2020
FCC ID : K7SWIB001

No.	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV)	dB	(dBuV)	(dBuV)	(dB)	
1	0.2910	17.93	19.62	37.55	60.50	-22.95	QP
2	0.2910	5.95	19.62	25.57	50.50	-24.93	AVG
3	0.3060	17.91	19.62	37.53	60.08	-22.55	QP
4	0.3060	6.39	19.62	26.01	50.08	-24.07	AVG
5	0.4053	14.79	19.62	34.41	57.74	-23.33	QP
6	0.4053	5.01	19.62	24.63	47.74	-23.11	AVG
7	0.6100	13.89	19.62	33.51	56.00	-22.49	QP
8	0.6100	6.77	19.62	26.39	46.00	-19.61	AVG
9	0.6700	17.96	19.62	37.58	56.00	-18.42	QP
10	0.6700	10.45	19.62	30.07	46.00	-15.93	AVG
11	0.7740	11.83	19.62	31.45	56.00	-24.55	QP
12	0.7740	4.25	19.62	23.87	46.00	-22.13	AVG

Remarks:

1. Result value (dBuV) = Reading value (dBuV) + Correction Factor (dB)
2. Margin(dB) = Result value (dBuV) - Limit value (dBuV)
3. Correction Factor(dB) = Insertion loss(dB) + Cable loss(dB)
4. The other emission levels were very low against the limit.

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9.3. 20dB Bandwidth

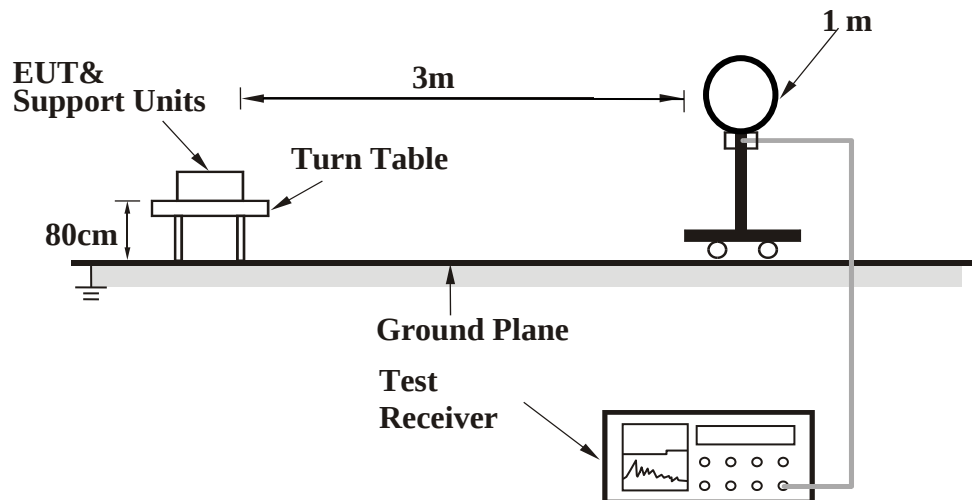
Requirements

The 20 dB bandwidth shall be specified in operating frequency band.

Test Procedures

- The testing follows the guidelines in ANSI C63.10-2013.
- The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter chamber room.
- The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- The EUT was arranged to its worst case and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
- The bandwidth of the fundamental frequency was measured by spectrum analyzer with 200Hz RBW and 620Hz VBW. The 20dB bandwidth is defined as the total spectrum the power of which is higher than peak power minus 20dB.

Test Setup



For the actual test configuration, please refer to the Setup Configurations.

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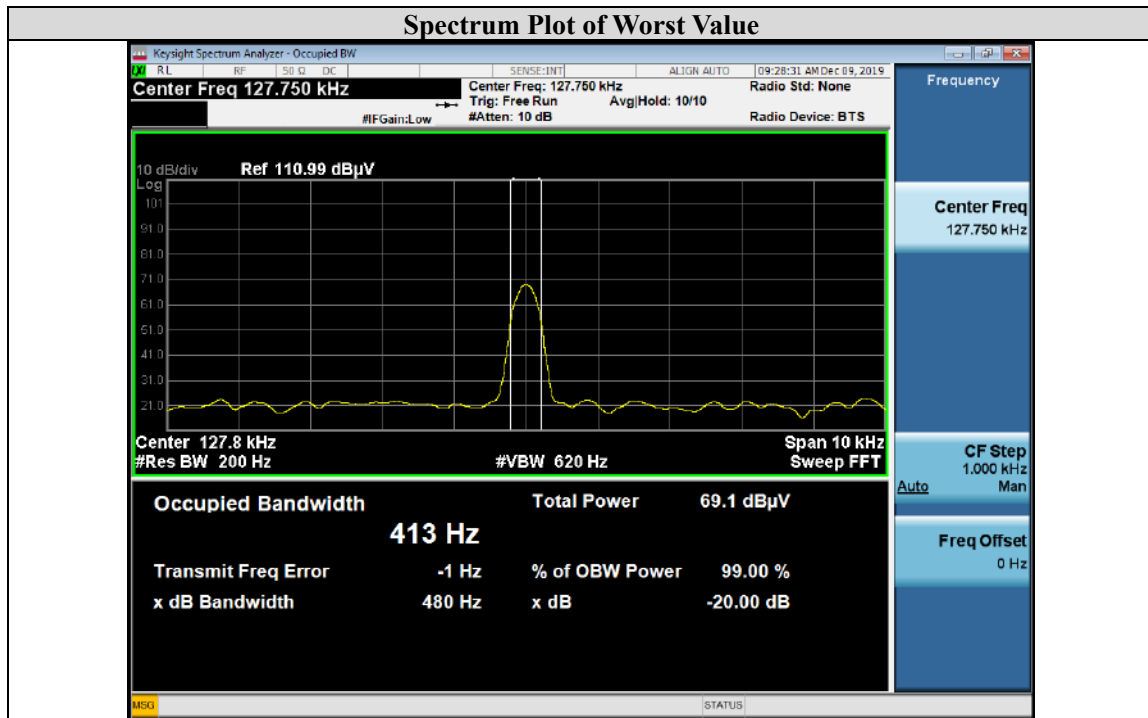
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Test Data

Frequency (kHz)	20dB Bandwidth (kHz)
127.8	0.480



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