TEST REPORT

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

Manufacturer or Supplier	Belkin International, Inc.
Address	12045 East Waterfront Drive, Playa Vista, CA 90094 USA
Product	BOOSTCHARGE Wireless Car Charger with Vent Mount 10W
Additional Product	Wireless Car Charger with Vent Mount 10W
Brand Name	belkin, playa
Model	WIC001
Additional Model & Model Difference	PW0002, See items 3.1
Date of tests	Mar. 16, 2020 ~ Aug. 19, 2020

The submitted sample of the above equipment has been tested for according to the requirements of the following standards:

☒ **FCC Part 15, Subpart C**

CONCLUSION: The submitted sample was found to COMPLY with the test requirement

Tested by Lucas Chen Project Engineer / EMC Department	Approved by Glyn He Assistant Manager/ EMC Department
	 Date: Sep. 03, 2020

Bureau Veritas Shenzhen Co., Ltd. Dongguan Branch

No. 96, Guantai Road (Houjie Section), Houjie Town, Dongguan City, Guangdong Province. 523942. People's Republic of China.

Tel: +86 769 8998 2098
Fax: +86 769 8593 1080
Email: customerservice.dg@cn.bureauveritas.com

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RELEASE CONTROL RECORD

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
RF200316N007	Original release	Sep. 03, 2020

1 SUMMARY OF TEST RESULTS

The EUT has been tested according to the following specifications:

APPLIED STANDARD: FCC Part 15, Subpart C			
STANDARD SECTION	**TEST TYPE AND LIMIT**	**RESULT**	**REMARK**
§15.203	Antenna Requirement	PASS	No antenna connector is used.
§15.207	AC Power Conducted Emission	N/A	Without AC Mains port of the EUT
§15.209	Radiated Emission	PASS	Meet the requirement of limit.
§15.215 (c)	20dB Bandwidth	PASS	Meet the requirement of limit.

2 MEASUREMENT UNCERTAINTY

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the EUT as specified in CISPR 16-4-2:

MEASUREMENT	FREQUENCY	UNCERTAINTY
Conducted emissions	9kHz~30MHz	2.70dB
Radiated emissions	9KHz ~ 30MHz	2.16dB
	30MHz ~ 1GMHz	3.60dB

This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.

3 GENERAL INFORMATION

3.1 GENERAL DESCRIPTION OF EUT

PRODUCT	BOOSTCHARGE Wireless Car Charger with Vent Mount 10W
ADDITIONAL PRODUCT	Wireless Car Charger with Vent Mount 10W
MODEL NO.	WIC001
ADDITIONAL MODE	PW0002
FCC ID	K7SWIC001
POWER SUPPLY	Car charger: Input: DC 12-24V 3.5A USB-A port 1 output: DC 3.6-6.5V 3A or 6.5-9V 2A or 9-12V 1.5A USB-A port 2 output: DC 5V 2.4A Wireless charger: Input: DC 5V 2A or 9V 1.67A or 12V 1.5A Output: 5W or 7.5W or 10W
MODULATION TYPE	FSK
OPERATING FREQUENCY RANGE	111-145KHz
I/O PORTS	Coil Antenna
FIELD STRENGTH(MAX.)	92.52dBuV/m
MAXIMUM POWER OUTPUT FROM THE CHARGING COIL	Max Power Should be 10W
CABLE SUPPLIED	USB-A to USB-C cable: Shielded, detachable 1.2m

NOTES:

1. For a more detailed features description, please refer to the manufacturer's specifications or the user's manual.
2. For the test results, the EUT had been tested with all conditions. But only the worst case was shown in test report.
3. Please refer to the EUT photo document (Reference No.: 200316N007) for detailed product photo.
4. Additional model PW0002 is identical with test model WIC001 except the model no. for trading purpose.
5. Model list:

Product	Brand	Model no.
BOOSTCHARGE Wireless Car Charger with Vent Mount 10W	belkin	WIC001
Wireless Car Charger with Vent Mount 10W	playa	PW0002

3.2 DESCRIPTION OF TEST MODES

The following test frequencies are provided to this EUT:

Operating Frequency Range(KHz)	Tested Frequency(KHz)	Mode
111-145	127.776	10W Receiver load operating
111-145	127.776	iPhone X operating
111-145	127.776	Standby

3.3 TEST MODE APPLICABILITY AND TESTED CHANNEL DETAIL

EUT CONFIGURE	APPLICABLE TO			DESCRIPTION
	RE<1G	PLC	20BW	
A	√	-	√	10W Receiver load operating
B	√	-	√	iPhone X operating
C	√	-	√	Standby

Where **RE<1G:** Radiated Emission below 1GHz **PLC:** Power Line Conducted Emission
20BW: 20dB Bandwidth

Note:
1. The EUT is designed to be positioned on the **X-plane** only.

Radiated Emission Test (Below 1GHz):

☒ Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations and antenna ports (if EUT with antenna diversity architecture).
☒ Following channel(s) was (were) selected for the final test as listed below.

EUT configure mode	Operating Frequency Range(KHz)	Tested Frequency(KHz)	Modulation Type
A	111-145	127.776	FSK
B	111-145	127.776	FSK
C	111-145	127.776	FSK

20dB Bandwidth TEST:

☒ Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations and antenna ports (if EUT with antenna diversity architecture).
☒ Following channel(s) was (were) selected for the final test as listed below.

EUT configure mode	Operating Frequency Range(KHz)	Tested Frequency(KHz)	Modulation Type
A	111-145	127.776	FSK
B	111-145	127.776	FSK
C	111-145	127.776	FSK

TEST CONDITION:

Applicable to	Environmental conditions	Input Power(Car Charger)	Tested by
RE<1G	24 ℃, 64% RH	DC 12V	Walker
PLC	-	-	-
20BW	24 ℃, 64% RH	DC 12V	Robert Cheng

3.4 DESCRIPTION OF SUPPORT UNITS

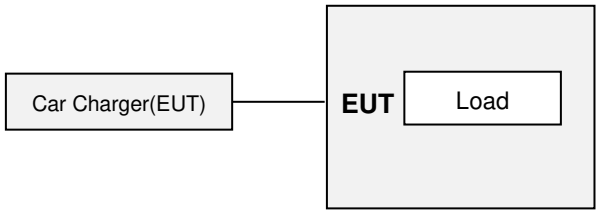
The EUT has been tested as a dependent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

NO.	PRODUCT	BRAND	MODEL NO.	SERIAL NO.	FCC ID
1	iPhone X	Apple	MQA52CH/A	N/A	N/A
2	Receiver load	N/A	N/A	N/A	N/A
3	DC source	LONG WEI	PS-6403D	010934269	N/A

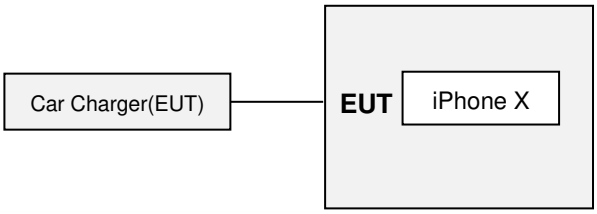
NO.	DESCRIPTION OF THE ABOVE SUPPORT UNITS
1	N/A
2	N/A
3	AC Line: Unshielded, Detachable 1.5m; DC Line: Unshielded, Detachable 1.0m

3.5 CONFIGURATION OF SYSTEM UNDER TEST

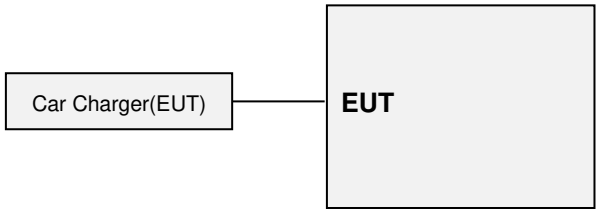
Test Mode A



Test Mode B



Test Mode C



3.6 GENERAL DESCRIPTION OF APPLIED STANDARDS

The EUT is a RF Product. According to the specifications of the manufacturer, it must comply with the requirements of the following standards:

FCC Part 15, Subpart C (15.209)
ANSI C63.10-2013

All test items have been performed and recorded as per the above standards.

4 EMISSION TEST

4.1 RADIATED EMISSION MEASUREMENT

4.1.1 LIMITS OF RADIATED EMISSION MEASUREMENT

TEST STANDARD: FCC Part 15, Subpart C, Section 15.209

Emissions radiated outside of the specified bands, shall be according to the general radiated limits as following:

FREQUENCIES (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. As shown in 15.35(b), 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.
4. The measured field strength was extrapolated to distance 30 meters, using the formula that the limit of field strength varies as the inverse distance square (40dB per decade of distance)

4.1.2TEST INSTRUMENTS

FREQUENCY 9KHz-30MHz

Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
EMI Test Receiver	Rohde&Schwarz	ESR7	101564	Mar. 18,20	Mar. 17,21
Active Loop Antenna	SCHWARZBECK	FMZB 1519B	1519B-045	May 30,20	May 29,21
Amplifier	Burgeon	BPA-530	100210	Mar. 15,20	Mar. 14,21
Test Software	ADT	ADT_Radiated _V8.7.07	N/A	N/A	N/A

NOTE: 1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to CEPREI/CHINA, GRGT/CHINA and NIM/CHINA.
2. The test was performed in 10m Chamber
3. The FCC Site Registration No. is 749762.

FREQUENCY 30MHz-1GHz

Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
EMI Test Receiver	Rohde&Schwarz	ESU40	100449	Mar. 18,20	Mar. 17,21
Bilog Antenna	Teseq	CBL 6111D	30643	May 30,20	May 29,21
Amplifier	Burgeon	BPA-530	100220	Mar. 15,20	Mar. 14,21
3m Semi-anechoic Chamber	ETS-LINDGREN	9m*6m*6m	NSEMC003	May 23,20	May 22,21
Test software	ADT	ADT_Radiated _V7.6.15.9.2	N/A	N/A	N/A

NOTES: 1. The test was performed in 966 Chamber
2. The calibration interval of the above test instruments is 12 months. And the calibrations are traceable to CEPREI/CHINA, GRGT/CHINA and NIM/CHINA.
3. The FCC Site Registration No. is 749762.

4.1.3TEST PROCEDURE

< Below 30MHz >

a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 10 meters Semi-anechoic 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. 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 and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
e. The test-receiver system was set to quasi-peak detect function and specified bandwidth with maximum hold mode when the test frequency is below 1 GHz.

<30MHz~1GHz >

a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meters semi-anechoic chamber. 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 antenna is a broadband antenna, and its height 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. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.

NOTES:

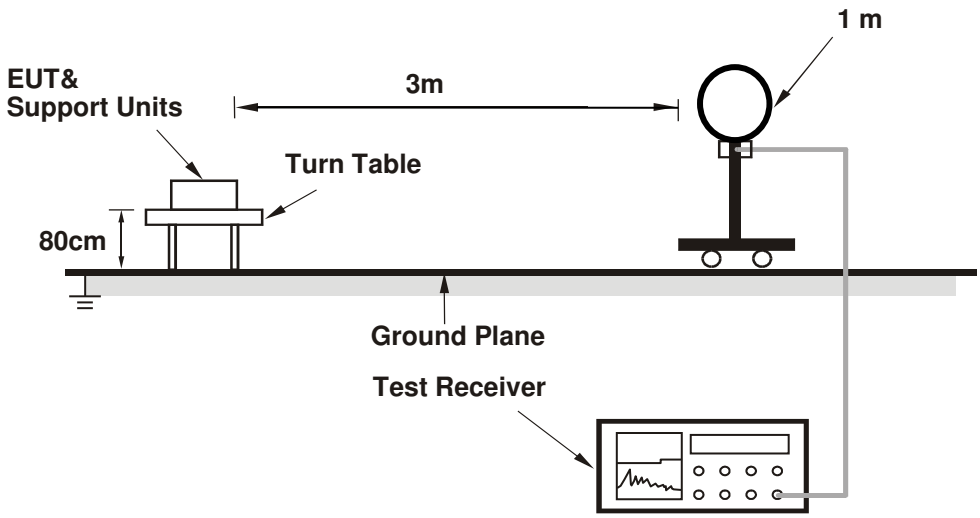
1. The resolution bandwidth of test receiver/spectrum analyzer is 120kHz for Quasi-peak detection (QP) at frequency below 1GHz.
2. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB/m)
3. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
4. Margin value = Emission level – Limit value.

4.1.4 DEVIATION FROM TEST STANDARD

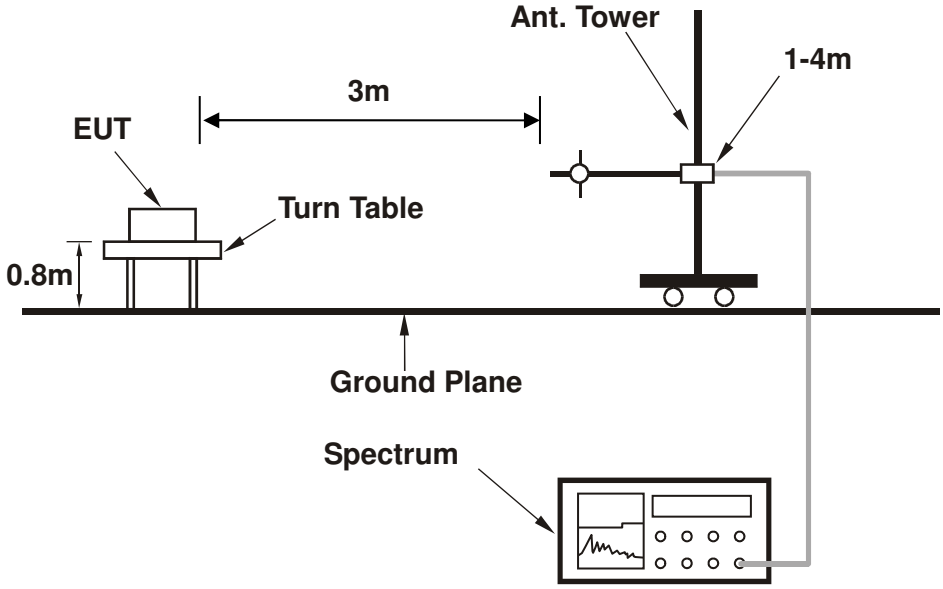
No deviation.

4.1.5TEST SETUP

Below 30MHz test setup



Below 1GHz test setup



Note: For the actual test configuration, please refer to the attached file (Test Setup Photo).

4.1.6 EUT OPERATING CONDITIONS

a. Turn on the EUT.

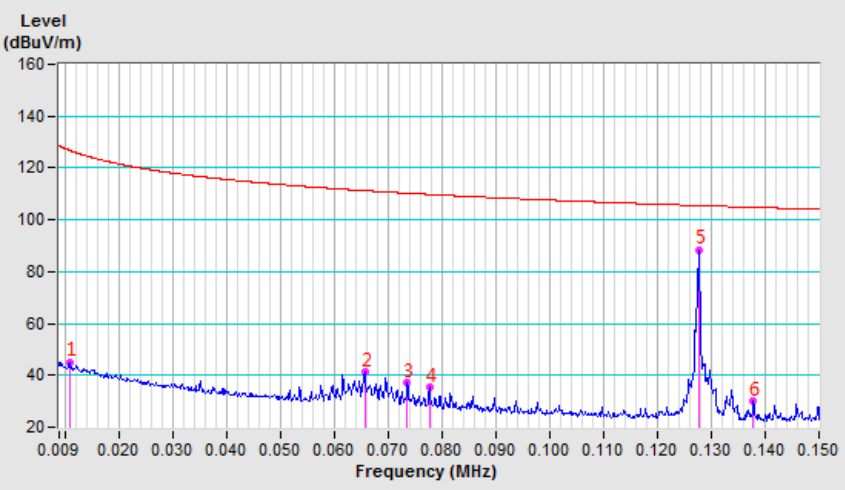
b. The EUT tested in charging mode and standby mode respectively.

4.1.7TEST RESULTS

Charging Mode:

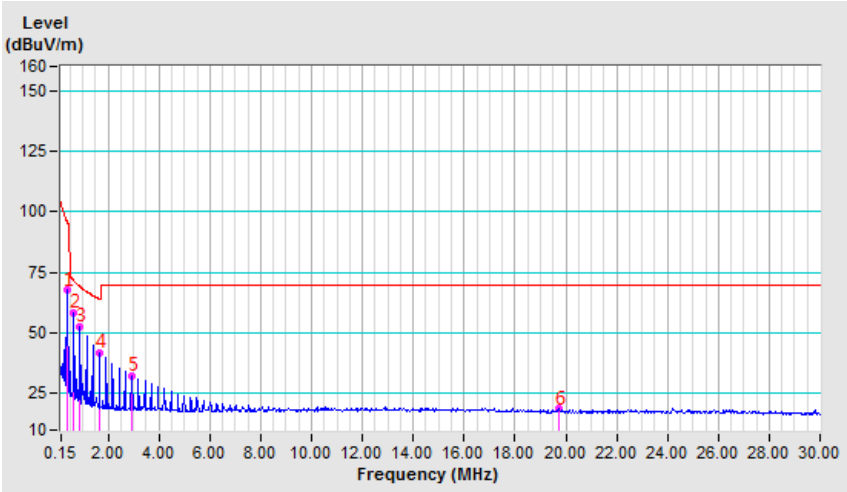
Test Mode	A	Frequency Range	9 kHz ~ 150 KHz
Test Voltage	DC 12V	Detector Function	Quasi-Peak (QP)
Environmental Conditions	21deg. C, 67% RH	Tested By	KAMIKO

ANTENNA POLARITY & TEST DISTANCE: LOOP ANTENNA PARALLEL AT 3m								
No	Freq. (MHz)	Correction Factor (dB/m)	Raw Value (dBuV)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)
1	0.0109 AV	-10.81	55.95	45.14	126.86	-81.72	100	242
2	0.0657 AV	-11.26	52.64	41.38	111.26	-69.88	100	57
3	0.0736 AV	-11.20	48.42	37.22	110.26	-73.04	100	234
4	0.0777 AV	-11.23	46.40	35.17	109.80	-74.63	100	54
5	*0.1278 AV	-11.03	99.45	88.42	105.47	-17.05	100	59
6	0.1378 AV	-10.90	40.74	29.84	104.82	-74.98	100	35



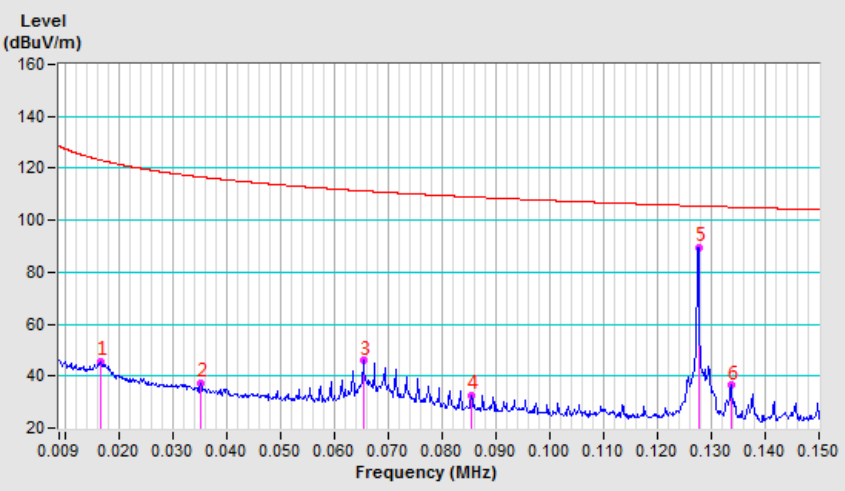
Test Mode	A	Frequency Range	150 kHz ~ 30 MHz
Test Voltage	DC 12V	Detector Function	Quasi-Peak (QP)
Environmental Conditions	21deg. C, 67% RH	Tested By	KAMIKO

ANTENNA POLARITY & TEST DISTANCE: LOOP ANTENNA PARALLEL AT 3m								
No	Freq. (MHz)	Correction Factor (dB/m)	Raw Value (dBuV)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)
1	0.3828 AV	-10.89	78.46	67.57	95.94	-28.37	100	60
2	0.6381 QP	-10.81	69.19	58.38	71.72	-13.34	100	55
3	0.8933 QP	-10.64	63.45	52.81	69.07	-16.26	100	58
4	1.6605 QP	-10.81	52.89	42.08	64.18	-22.10	100	58
5	2.9366 QP	-10.77	43.32	32.55	69.54	-36.99	100	55
6	19.7087 QP	-10.20	28.80	18.60	69.54	-50.94	100	239



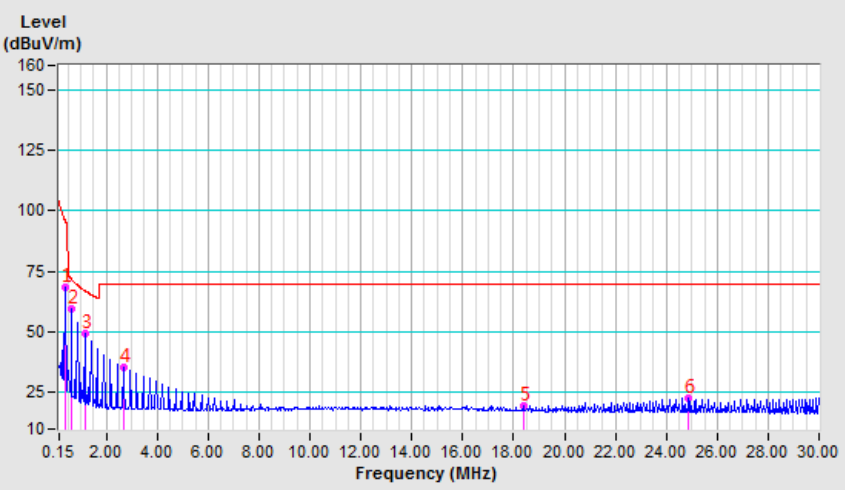
Test Mode	A	Frequency Range	9 kHz ~ 150 KHz
Test Voltage	DC 12V	Detector Function	Quasi-Peak (QP)
Environmental Conditions	21deg. C, 67% RH	Tested By	KAMIKO

ANTENNA POLARITY & TEST DISTANCE: LOOP ANTENNA PERPENDICULAR AT 3m								
No	Freq. (MHz)	Correction Factor (dB/m)	Raw Value (dBuV)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)
1	0.0166 AV	-11.04	56.67	45.63	123.18	-77.55	100	128
2	0.0352 AV	-11.50	48.88	37.38	116.68	-79.30	100	33
3	0.0654 AV	-11.27	57.09	45.82	111.29	-65.47	100	148
4	0.0855 AV	-11.28	43.88	32.60	108.97	-76.37	100	184
5	*0.1276 AV	-11.03	100.70	89.67	105.48	-15.81	100	335
6	0.1336 AV	-10.96	47.48	36.52	105.09	-68.57	100	138



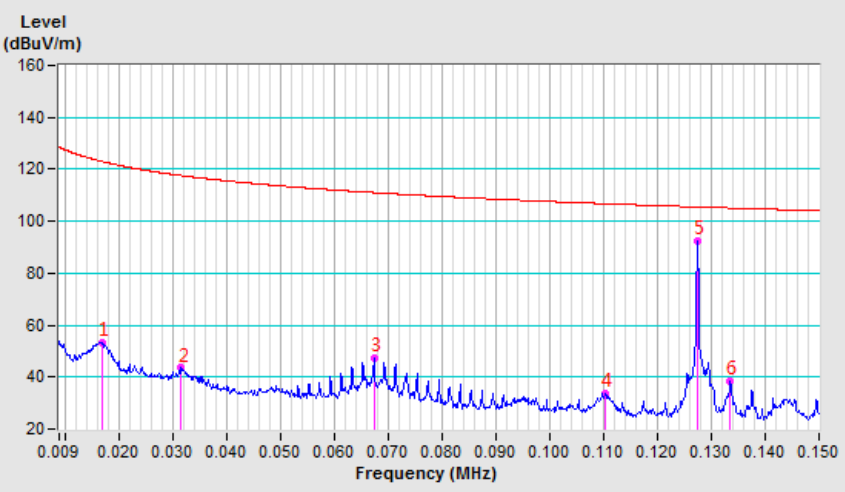
Test Mode	A	Frequency Range	150 kHz ~ 30 MHz
Test Voltage	DC 12V	Detector Function	Quasi-Peak (QP)
Environmental Conditions	21deg. C, 67% RH	Tested By	KAMIKO

ANTENNA POLARITY & TEST DISTANCE: LOOP ANTENNA PERPENDICULAR AT 3m								
No	Freq. (MHz)	Correction Factor (dB/m)	Raw Value (dBuV)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)
1	0.3828 AV	-10.89	79.68	68.79	95.94	-27.15	100	334
2	0.6381 QP	-10.81	70.41	59.60	71.72	-12.12	100	336
3	1.1485 QP	-10.65	60.35	49.70	67.08	-17.38	100	335
4	2.6799 QP	-10.81	46.18	35.37	69.54	-34.17	100	153
5	18.3758 QP	-10.10	29.64	19.54	69.54	-50.00	100	175
6	24.8849 QP	-9.98	32.70	22.72	69.54	-46.82	100	201



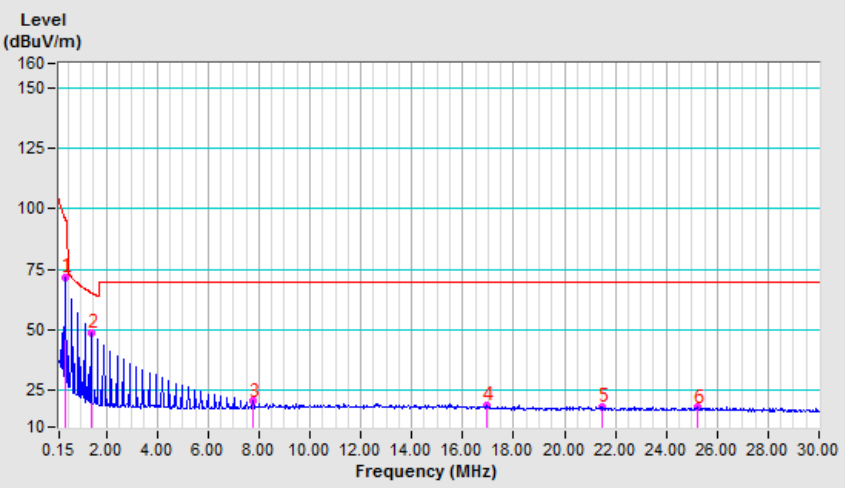
Test Mode	A	Frequency Range	9 kHz ~ 150 KHz
Test Voltage	DC 12V	Detector Function	Quasi-Peak (QP)
Environmental Conditions	21deg. C, 67% RH	Tested By	KAMIKO

ANTENNA POLARITY & TEST DISTANCE: LOOP ANTENNA GROUND-PARALLEL AT 3m								
No	Freq. (MHz)	Correction Factor (dB/m)	Raw Value (dBuV)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)
1	0.0169 AV	-11.05	64.46	53.41	123.06	-69.65	100	171
2	0.0317 AV	-11.51	54.97	43.46	117.60	-74.14	100	168
3	0.0674 AV	-11.25	58.70	47.45	111.03	-63.58	100	56
4	0.1104 AV	-11.25	45.15	33.90	106.74	-72.84	100	160
5	***0.1275 AV**	**-11.03**	**103.55**	**92.52**	**105.49**	**-12.97**	**100**	**56**
6	0.1335 AV	-10.96	49.61	38.65	105.09	-66.44	100	65



Test Mode	A	Frequency Range	150 kHz ~ 30 MHz
Test Voltage	DC 12V	Detector Function	Quasi-Peak (QP)
Environmental Conditions	21deg. C, 67% RH	Tested By	KAMIKO

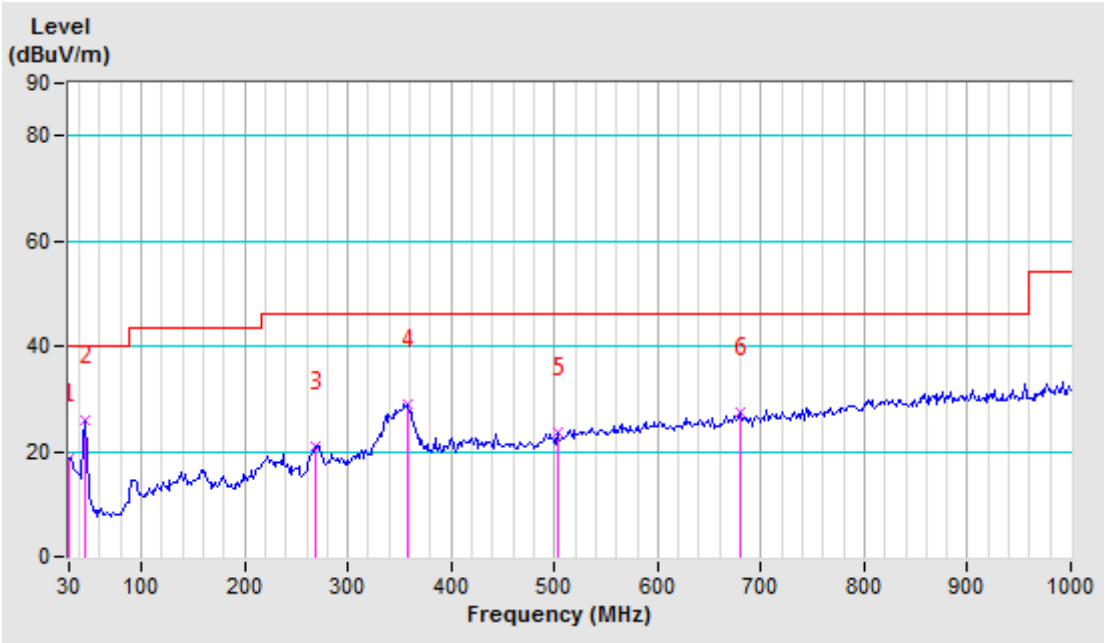
ANTENNA POLARITY & TEST DISTANCE: LOOP ANTENNA PERPENDICULAR AT 3m								
No	Freq. (MHz)	Correction Factor (dB/m)	Raw Value (dBuV)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)
1	0.3813 AV	-10.89	82.53	71.64	95.98	-24.34	100	57
2	1.4023 QP	-10.73	59.75	49.02	65.51	-16.49	100	58
3	7.7771 QP	-10.55	31.11	20.56	69.54	-48.98	100	66
4	16.9489 QP	-10.00	29.13	19.13	69.54	-50.41	100	194
5	21.5087 QP	-10.14	28.37	18.23	69.54	-51.31	100	58
6	25.2402 QP	-10.01	27.98	17.97	69.54	-51.57	100	182



Test Mode	A	Frequency Range	30MHz ~ 1000MHz
Test Voltage	DC 12V	Detector Function	Quasi-Peak (QP)
Environmental Conditions	21deg. C, 67% RH	Tested By	KAMIKO

Antenna Polarity & Test Distance: Horizontal At 3m								
No.	Freq. (MHz)	Correction Factor (dB/m)	Raw Value (dBuV)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)
1	30.00	-11.00	29.74	18.74	40.00	-21.26	118	0
2	45.54	-17.68	43.66	25.98	40.00	-14.02	100	0
3	269.39	-14.62	35.66	21.04	46.00	-24.96	149	0
4	358.00	-10.12	39.02	28.90	46.00	-17.10	134	0
5	502.56	-6.56	30.15	23.59	46.00	-22.41	164	0
6	679.78	-2.68	29.97	27.29	46.00	-18.71	188	0

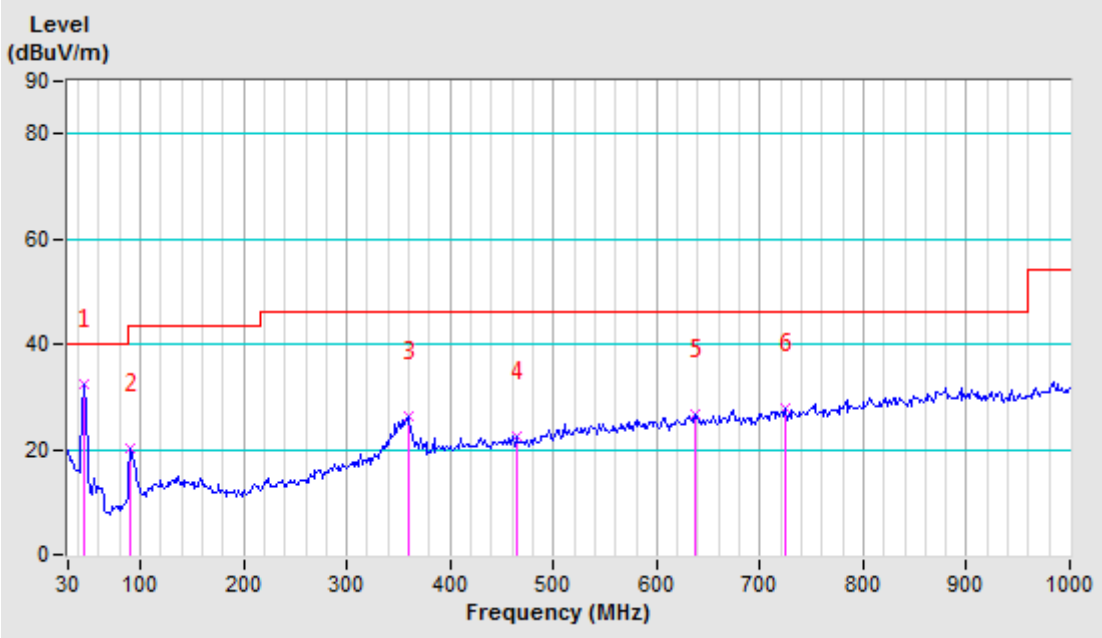
REMARKS: 1. Peak detector quick scan is showed on the graph and final quasi-peak detector data is measured corresponding to relevant limit and recorded in the data table.
2. Negative sign (-) in the margin column signify levels below the limit.
3. Frequency range scanned: 30-1000MHz.
4. Only emissions significantly above equipment noise floor are reported.



Test Mode	A	Frequency Range	30MHz ~ 1000MHz
Test Voltage	DC 12V	Detector Function	Quasi-Peak (QP)
Environmental Conditions	21deg. C, 67% RH	Tested By	KAMIKO

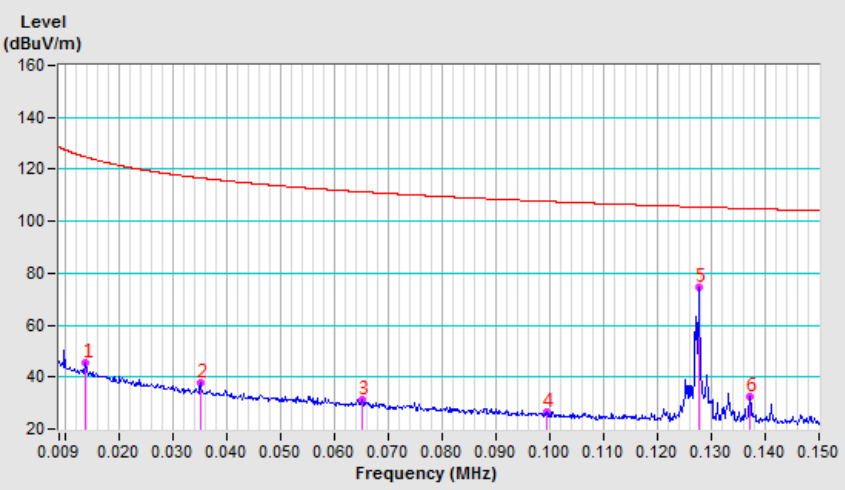
Antenna Polarity & Test Distance: Vertical At 3m								
No.	Freq. (MHz)	Correction Factor (dB/m)	Raw Value (dBuV)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)
1	45.54	-17.68	49.98	32.30	40.00	-7.70	100	0
2	90.62	-19.21	39.50	20.29	43.50	-23.21	100	0
3	359.55	-10.10	36.26	26.16	46.00	-19.84	100	0
4	463.70	-7.61	30.01	22.40	46.00	-23.60	100	0
5	636.25	-3.22	29.82	26.60	46.00	-19.40	100	0
6	724.86	-2.16	30.08	27.92	46.00	-18.08	100	0

REMARKS: 1. Peak detector quick scan is showed on the graph and final quasi-peak detector data is measured corresponding to relevant limit and recorded in the data table.
2. Negative sign (-) in the margin column signify levels below the limit.
3. Frequency range scanned: 30-1000MHz.
4. Only emissions significantly above equipment noise floor are reported.



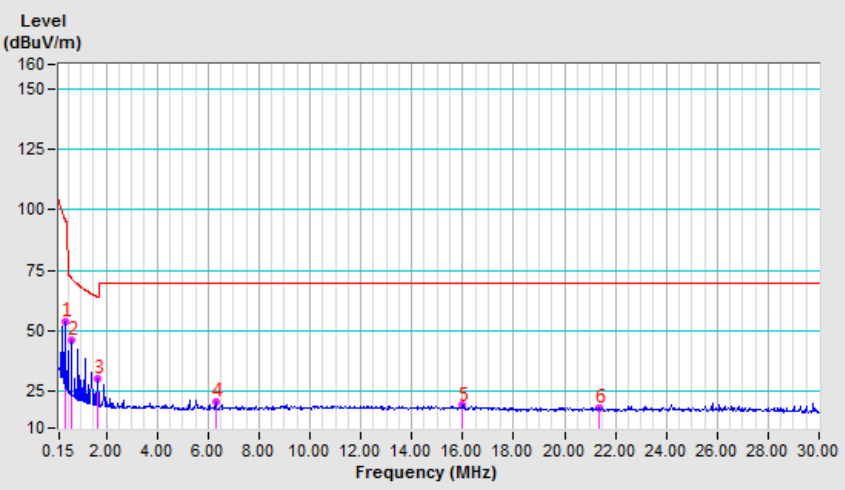
Test Mode	B	Frequency Range	9 kHz ~ 150 KHz
Test Voltage	DC 12V	Detector Function	Quasi-Peak (QP)
Environmental Conditions	21deg. C, 67% RH	Tested By	KAMIKO

ANTENNA POLARITY & TEST DISTANCE: LOOP ANTENNA PARALLEL AT 3m								
No	Freq. (MHz)	Correction Factor (dB/m)	Raw Value (dBuV)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)
1	0.014 AV	-10.94	56.27	45.33	124.70	-79.37	100	179
2	0.0352 AV	-11.50	49.26	37.76	116.68	-78.92	100	263
3	0.0653 AV	-11.27	42.49	31.22	111.31	-80.09	100	155
4	0.0994 QP	-11.39	37.89	26.50	107.65	-81.15	100	231
5	*0.1278 AV	-11.03	85.55	74.52	105.47	-30.95	100	163
6	0.1372 AV	-10.91	43.22	32.31	104.86	-72.55	100	167



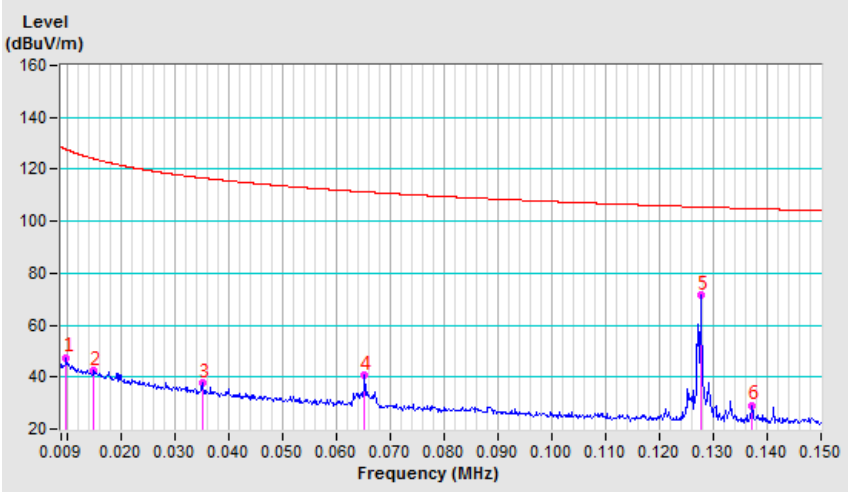
Test Mode	B	Frequency Range	150 kHz ~ 30 MHz
Test Voltage	DC 12V	Detector Function	Quasi-Peak (QP)
Environmental Conditions	21deg. C, 67% RH	Tested By	KAMIKO

ANTENNA POLARITY & TEST DISTANCE: LOOP ANTENNA PARALLEL AT 3m								
No	Freq. (MHz)	Correction Factor (dB/m)	Raw Value (dBuV)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)
1	0.3828 AV	-10.89	64.64	53.75	95.94	-42.19	100	164
2	0.6381 QP	-10.81	57.01	46.20	71.72	-25.52	100	150
3	1.6605 QP	-10.81	41.32	30.51	64.18	-33.67	100	167
4	6.3143 QP	-10.73	31.40	20.67	69.54	-48.87	100	149
5	15.9907 QP	-9.94	29.20	19.26	69.54	-50.28	100	121
6	21.3684 QP	-10.16	28.65	18.49	69.54	-51.05	100	360



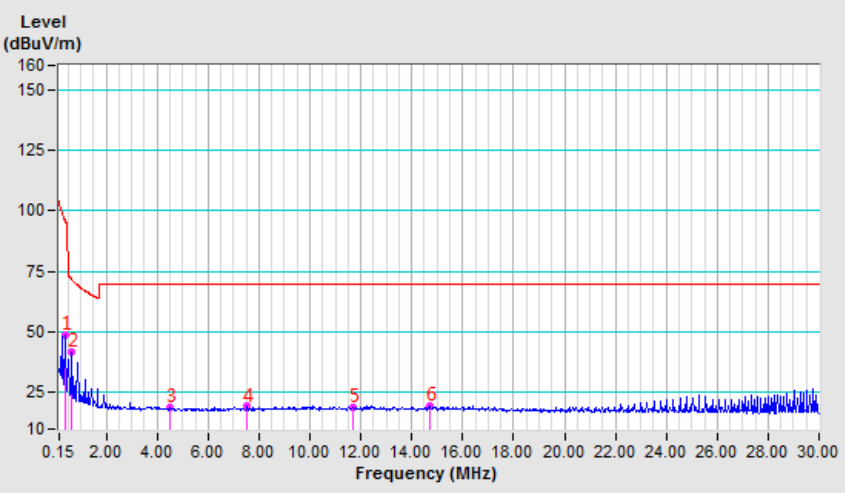
Test Mode	B	Frequency Range	9 kHz ~ 150 KHz
Test Voltage	DC 12V	Detector Function	Quasi-Peak (QP)
Environmental Conditions	21deg. C, 67% RH	Tested By	KAMIKO

ANTENNA POLARITY & TEST DISTANCE: LOOP ANTENNA PERPENDICULAR AT 3m								
No	Freq. (MHz)	Correction Factor (dB/m)	Raw Value (dBuV)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)
1	0.01 AV	-10.76	58.25	47.49	127.63	-80.14	100	235
2	0.015 AV	-10.98	53.26	42.28	124.09	-81.81	100	132
3	0.0352 AV	-11.50	49.02	37.52	116.68	-79.16	100	15
4	0.0652 AV	-11.27	52.04	40.77	111.31	-70.54	100	6
5	*0.1278 AV	-11.03	82.40	71.37	105.47	-34.10	100	64
6	0.1372 AV	-10.91	40.10	29.19	104.85	-75.66	100	235



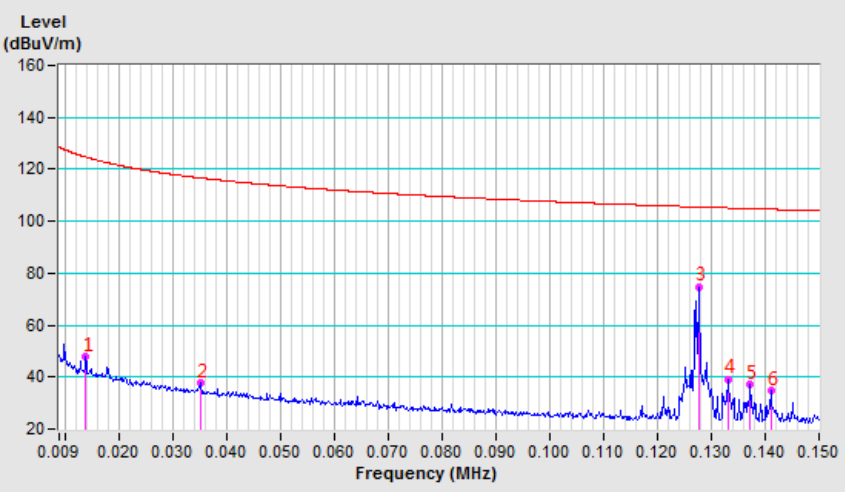
Test Mode	B	Frequency Range	150 kHz ~ 30 MHz
Test Voltage	DC 12V	Detector Function	Quasi-Peak (QP)
Environmental Conditions	21deg. C, 67% RH	Tested By	KAMIKO

ANTENNA POLARITY & TEST DISTANCE: LOOP ANTENNA PERPENDICULAR AT 3m								
No	Freq. (MHz)	Correction Factor (dB/m)	Raw Value (dBuV)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)
1	0.3828 AV	-10.89	59.76	48.87	95.94	-47.07	100	66
2	0.6381 QP	-10.81	52.41	41.60	71.72	-30.12	100	80
3	4.5023 QP	-10.65	29.44	18.79	69.54	-50.75	100	125
4	7.5442 QP	-10.57	29.85	19.28	69.54	-50.26	100	165
5	11.707 QP	-10.10	29.26	19.16	69.54	-50.38	100	47
6	14.6922 QP	-9.90	29.26	19.36	69.54	-50.18	100	78



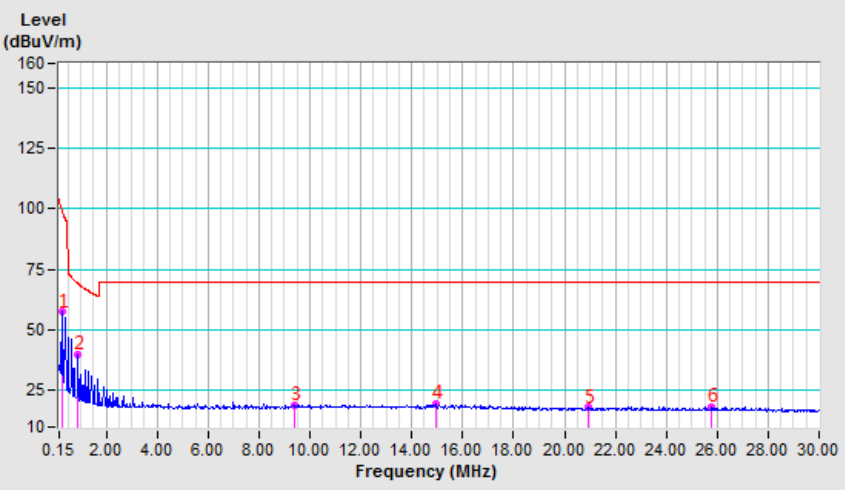
Test Mode	B	Frequency Range	9 kHz ~ 150 KHz
Test Voltage	DC 12V	Detector Function	Quasi-Peak (QP)
Environmental Conditions	21deg. C, 67% RH	Tested By	KAMIKO

ANTENNA POLARITY & TEST DISTANCE: LOOP ANTENNA GROUND-PARALLEL AT 3m								
No	Freq. (MHz)	Correction Factor (dB/m)	Raw Value (dBuV)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)
1	0.014 AV	-10.94	58.78	47.84	124.69	-76.85	100	172
2	0.0352 AV	-11.50	49.24	37.74	116.68	-78.94	100	190
3	*0.1278 AV	-11.03	85.83	74.80	105.47	-30.67	100	146
4	0.1331 AV	-10.97	50.06	39.09	105.12	-66.03	100	172
5	0.1371 AV	-10.91	48.04	37.13	104.86	-67.73	100	171
6	0.1411 AV	-10.85	45.72	34.87	104.61	-69.74	100	171



Test Mode	B	Frequency Range	150 kHz ~ 30 MHz
Test Voltage	DC 12V	Detector Function	Quasi-Peak (QP)
Environmental Conditions	21deg. C, 67% RH	Tested By	KAMIKO

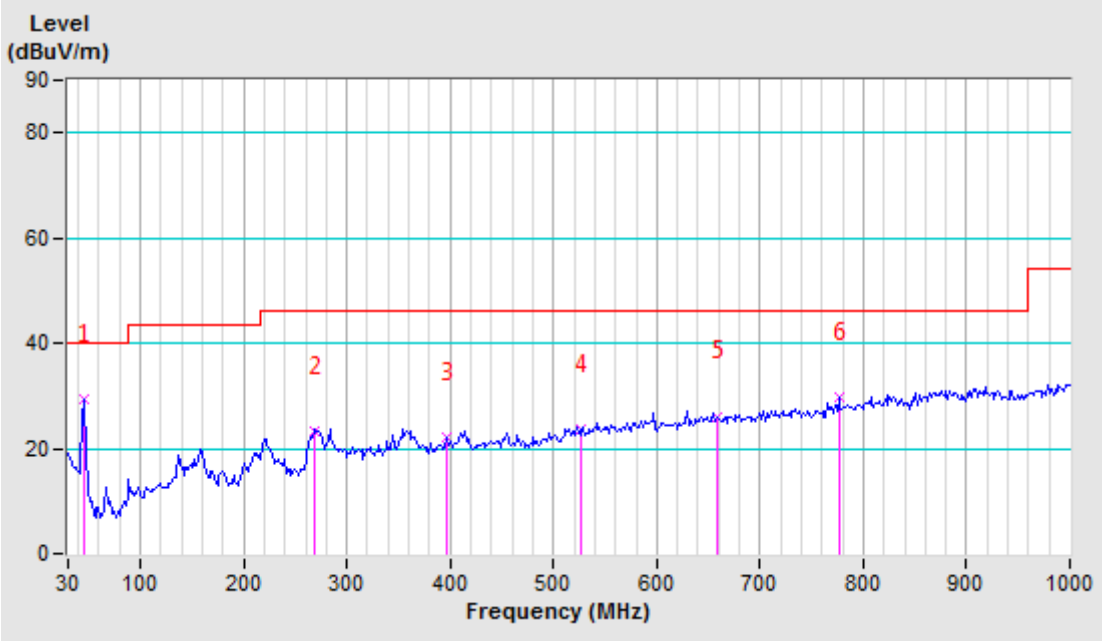
ANTENNA POLARITY & TEST DISTANCE: LOOP ANTENNA PERPENDICULAR AT 3m								
No	Freq. (MHz)	Correction Factor (dB/m)	Raw Value (dBuV)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)
1	0.253 AV	-10.78	68.14	57.36	99.54	-42.18	100	170
2	0.8933 QP	-10.64	50.71	40.07	69.07	-29.00	100	143
3	9.395 QP	-10.31	29.45	19.14	69.54	-50.40	100	195
4	14.9563 QP	-9.87	29.53	19.66	69.54	-49.88	100	358
5	20.9177 QP	-10.16	28.17	18.01	69.54	-51.53	100	74
6	25.785 QP	-10.05	28.09	18.04	69.54	-51.50	100	201



Test Mode	B	Frequency Range	30MHz ~ 1000MHz
Test Voltage	DC 12V	Detector Function	Quasi-Peak (QP)
Environmental Conditions	21deg. C, 67% RH	Tested By	KAMIKO

Antenna Polarity & Test Distance: Horizontal At 3m								
No.	Freq. (MHz)	Correction Factor (dB/m)	Raw Value (dBuV)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)
1	45.54	-17.68	46.91	29.23	40.00	-10.77	100	50
2	267.84	-14.63	37.97	23.34	46.00	-22.66	100	32
3	396.86	-8.85	30.86	22.01	46.00	-23.99	100	22
4	527.44	-5.50	29.10	23.60	46.00	-22.40	100	12
5	658.01	-3.34	29.45	26.11	46.00	-19.89	100	3
6	776.15	-0.93	30.75	29.82	46.00	-16.18	100	0

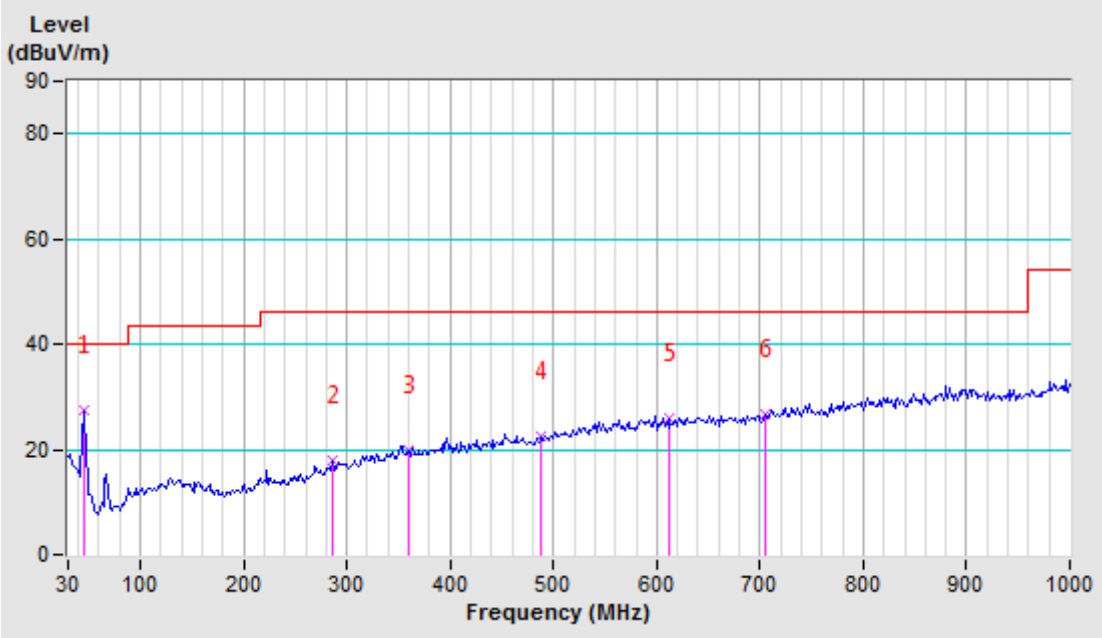
REMARKS: 1. Peak detector quick scan is showed on the graph and final quasi-peak detector data is measured corresponding to relevant limit and recorded in the data table.
2. Negative sign (-) in the margin column signify levels below the limit.
3. Frequency range scanned: 30-1000MHz.
4. Only emissions significantly above equipment noise floor are reported.



Test Mode	B	Frequency Range	30MHz ~ 1000MHz
Test Voltage	DC 12V	Detector Function	Quasi-Peak (QP)
Environmental Conditions	21deg. C, 67% RH	Tested By	KAMIKO

Antenna Polarity & Test Distance: Vertical At 3m								
No.	Freq. (MHz)	Correction Factor (dB/m)	Raw Value (dBuV)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)
1	45.54	-17.68	45.06	27.38	40.00	-12.62	100	0
2	286.49	-13.31	31.11	17.80	46.00	-28.20	100	0
3	359.55	-10.10	29.87	19.77	46.00	-26.23	100	0
4	488.57	-6.88	29.43	22.55	46.00	-23.45	100	0
5	611.38	-3.63	29.65	26.02	46.00	-19.98	100	0
6	704.65	-2.32	28.95	26.63	46.00	-19.37	100	0

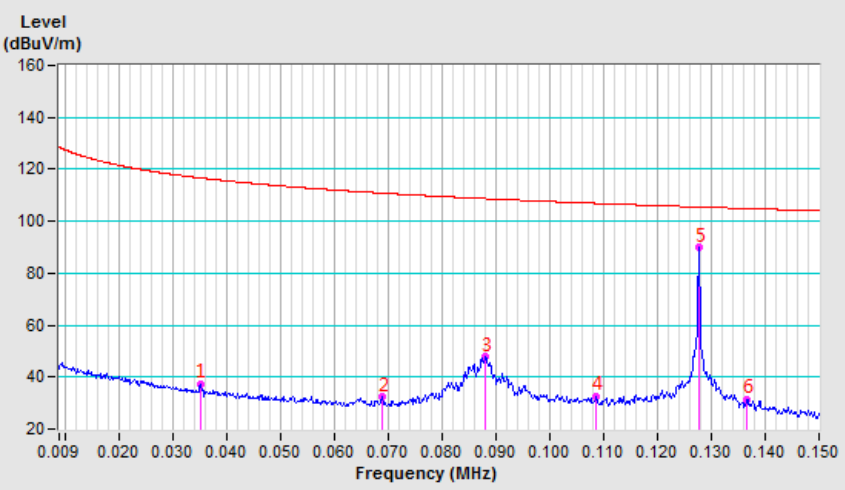
REMARKS: 1. Peak detector quick scan is showed on the graph and final quasi-peak detector data is measured corresponding to relevant limit and recorded in the data table.
2. Negative sign (-) in the margin column signify levels below the limit.
3. Frequency range scanned: 30-1000MHz.
4. Only emissions significantly above equipment noise floor are reported.



Standby Mode

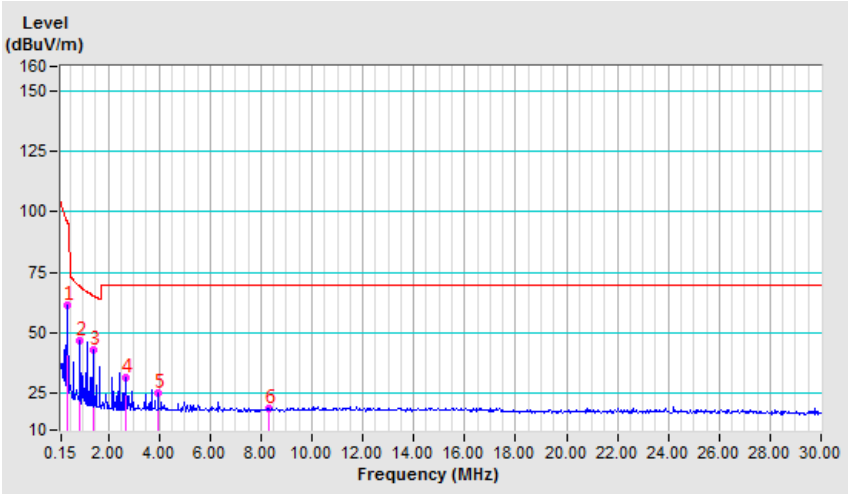
Test Mode	C	Frequency Range	9 kHz ~ 150 KHz
Test Voltage	DC 12V	Detector Function	Quasi-Peak (QP)
Environmental Conditions	21deg. C, 67% RH	Tested By	KAMIKO

ANTENNA POLARITY & TEST DISTANCE: LOOP ANTENNA PARALLEL AT 3m								
No	Freq. (MHz)	Correction Factor (dB/m)	Raw Value (dBuV)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)
1	0.0351 AV	-11.50	48.91	37.41	116.69	-79.28	100	61
2	0.0689 AV	-11.24	43.63	32.39	110.83	-78.44	100	51
3	0.0881 AV	-11.31	59.08	47.77	108.70	-60.93	100	108
4	0.1086 QP	-11.28	43.88	32.60	106.88	-74.28	100	260
5	*0.1278 AV	-11.03	100.91	89.88	105.47	-15.59	100	86
6	0.1367 AV	-10.92	42.31	31.39	104.89	-73.50	100	72



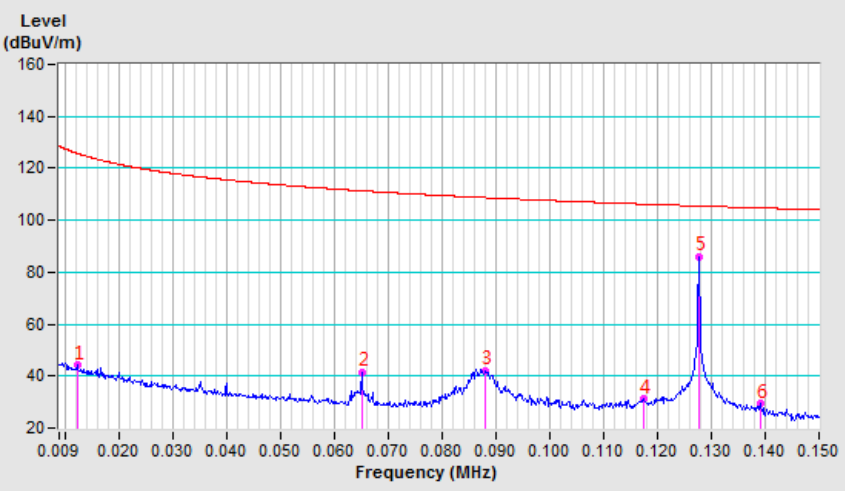
Test Mode	C	Frequency Range	150 kHz ~ 30 MHz
Test Voltage	DC 12V	Detector Function	Quasi-Peak (QP)
Environmental Conditions	21deg. C, 67% RH	Tested By	KAMIKO

ANTENNA POLARITY & TEST DISTANCE: LOOP ANTENNA PARALLEL AT 3m								
No	Freq. (MHz)	Correction Factor (dB/m)	Raw Value (dBuV)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)
1	0.3828 AV	-10.89	72.51	61.62	95.94	-34.32	100	83
2	0.8933 QP	-10.64	57.52	46.88	69.07	-22.19	100	83
3	1.4053 QP	-10.73	53.80	43.07	65.49	-22.42	100	83
4	2.6829 QP	-10.81	42.57	31.76	69.54	-37.78	100	83
5	3.9605 QP	-10.44	35.81	25.37	69.54	-44.17	100	68
6	8.2815 QP	-10.48	29.47	18.99	69.54	-50.55	100	149



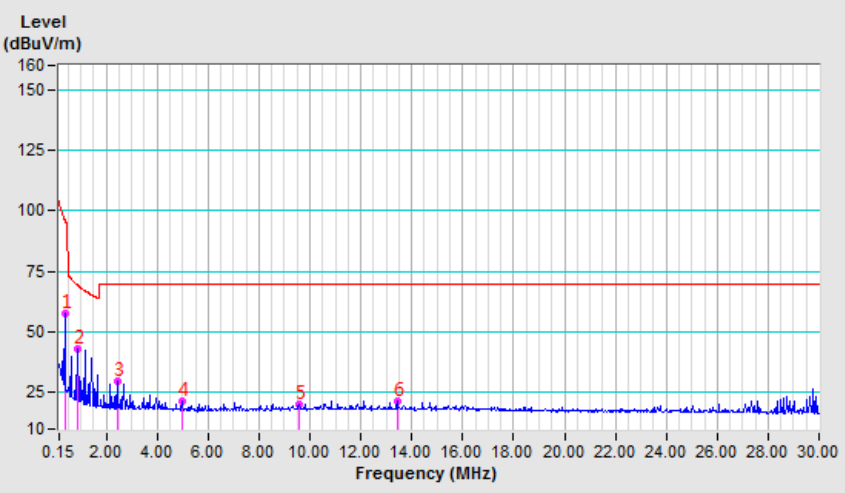
Test Mode	C	Frequency Range	9 kHz ~ 150 KHz
Test Voltage	DC 12V	Detector Function	Quasi-Peak (QP)
Environmental Conditions	21deg. C, 67% RH	Tested By	KAMIKO

ANTENNA POLARITY & TEST DISTANCE: LOOP ANTENNA PERPENDICULAR AT 3m								
No	Freq. (MHz)	Correction Factor (dB/m)	Raw Value (dBuV)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)
1	0.0124 AV	-10.87	55.01	44.14	125.71	-81.57	100	215
2	0.0651 AV	-11.27	52.71	41.44	111.33	-69.89	100	225
3	0.0882 AV	-11.31	53.45	42.14	108.70	-66.56	100	360
4	0.1175 AV	-11.15	42.32	31.17	106.20	-75.03	100	0
5	*0.1278 AV	-11.03	96.99	85.96	105.47	-19.51	100	360
6	0.1391 AV	-10.88	40.19	29.31	104.73	-75.42	100	354



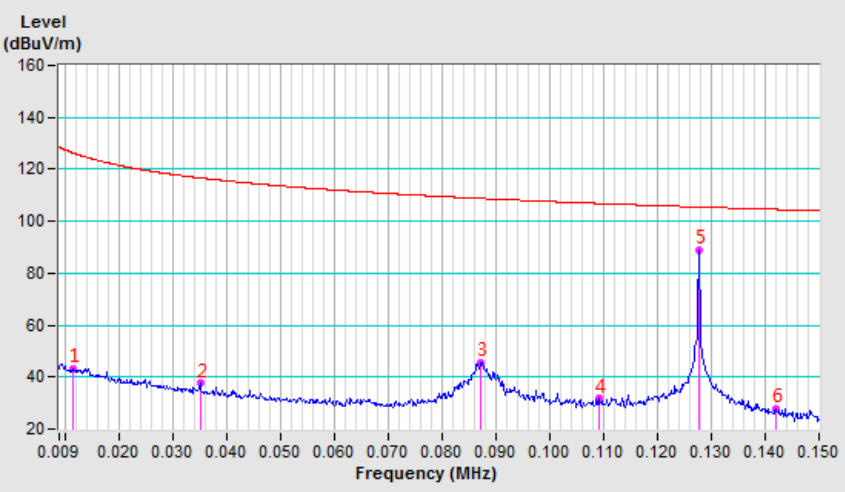
Test Mode	C	Frequency Range	150 kHz ~ 30 MHz
Test Voltage	DC 12V	Detector Function	Quasi-Peak (QP)
Environmental Conditions	21deg. C, 67% RH	Tested By	KAMIKO

ANTENNA POLARITY & TEST DISTANCE: LOOP ANTENNA PERPENDICULAR AT 3m								
No	Freq. (MHz)	Correction Factor (dB/m)	Raw Value (dBuV)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)
1	0.3828 AV	-10.89	68.57	57.68	95.94	-38.26	100	3
2	0.8933 QP	-10.64	53.47	42.83	69.07	-26.24	100	360
3	2.4277 QP	-10.85	40.64	29.79	69.54	-39.75	100	183
4	4.9815 QP	-10.87	32.18	21.31	69.54	-48.23	100	169
5	9.5831 QP	-10.28	30.77	20.49	69.54	-49.05	100	169
6	13.416 QP	-9.99	31.66	21.67	69.54	-47.87	100	183



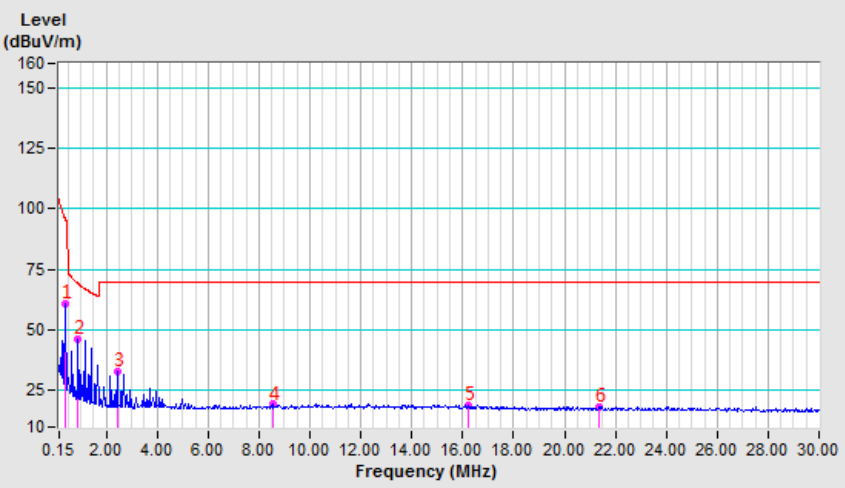
Test Mode	C	Frequency Range	9 kHz ~ 150 KHz
Test Voltage	DC 12V	Detector Function	Quasi-Peak (QP)
Environmental Conditions	21deg. C, 67% RH	Tested By	KAMIKO

ANTENNA POLARITY & TEST DISTANCE: LOOP ANTENNA GROUND-PARALLEL AT 3m								
No	Freq. (MHz)	Correction Factor (dB/m)	Raw Value (dBuV)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)
1	0.0116 AV	-10.84	54.25	43.41	126.32	-82.91	100	162
2	0.0352 AV	-11.50	49.16	37.66	116.68	-79.02	100	306
3	0.0873 AV	-11.30	57.00	45.70	108.78	-63.08	100	29
4	0.1091 QP	-11.27	42.98	31.71	106.85	-75.14	100	80
5	*0.1278 AV	-11.03	100.09	89.06	105.47	-16.41	100	72
6	0.1421 AV	-10.84	38.78	27.94	104.55	-76.61	100	80



Test Mode	C	Frequency Range	150 kHz ~ 30 MHz
Test Voltage	DC 12V	Detector Function	Quasi-Peak (QP)
Environmental Conditions	21deg. C, 67% RH	Tested By	KAMIKO

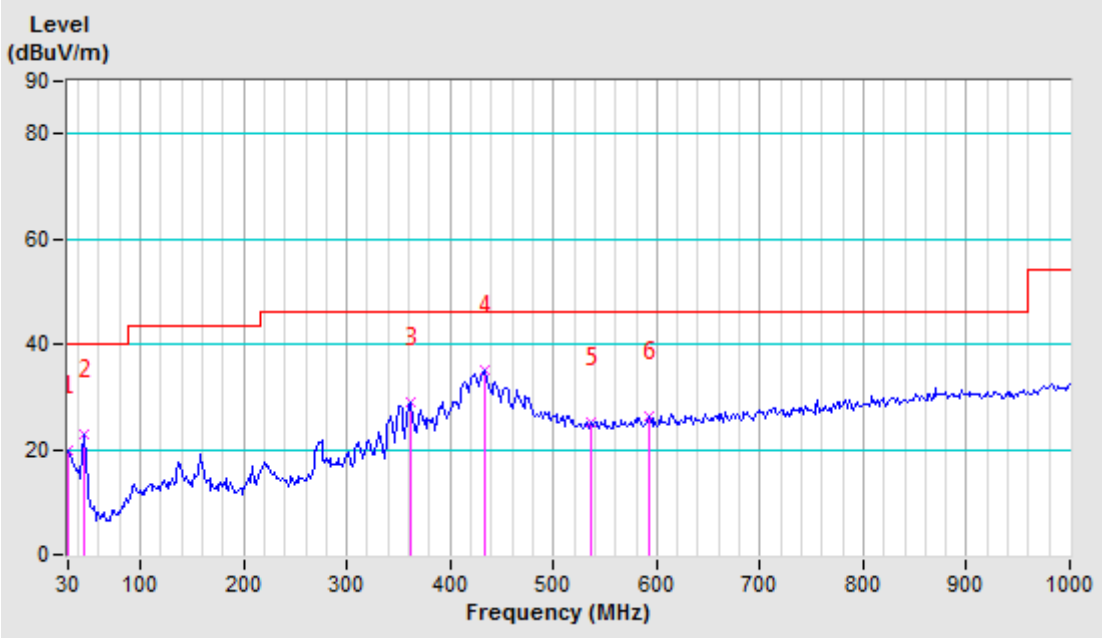
ANTENNA POLARITY & TEST DISTANCE: LOOP ANTENNA PERPENDICULAR AT 3m								
No	Freq. (MHz)	Correction Factor (dB/m)	Raw Value (dBuV)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)
1	0.3828 AV	-10.89	71.64	60.75	95.94	-35.19	100	74
2	0.8933 QP	-10.64	56.68	46.04	69.07	-23.03	100	66
3	2.4277 QP	-10.85	43.62	32.77	69.54	-36.77	100	80
4	8.5368 QP	-10.43	29.70	19.27	69.54	-50.27	100	302
5	16.2011 QP	-9.95	28.90	18.95	69.54	-50.59	100	117
6	21.358 QP	-10.16	28.70	18.54	69.54	-51.00	100	21



Test Mode	C	Frequency Range	30MHz ~ 1000MHz
Test Voltage	DC 12V	Detector Function	Quasi-Peak (QP)
Environmental Conditions	21deg. C, 67% RH	Tested By	KAMIKO

Antenna Polarity & Test Distance: Horizontal At 3m								
No.	Freq. (MHz)	Correction Factor (dB/m)	Raw Value (dBuV)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)
1	30.00	-11.00	30.76	19.76	40.00	-20.24	100	0
2	45.54	-17.68	40.54	22.86	40.00	-17.14	100	0
3	361.11	-10.06	38.85	28.79	46.00	-17.21	100	0
4	434.17	-8.19	43.16	34.97	46.00	-11.03	100	0
5	536.76	-5.17	30.38	25.21	46.00	-20.79	100	0
6	592.72	-3.99	30.16	26.17	46.00	-19.83	100	0

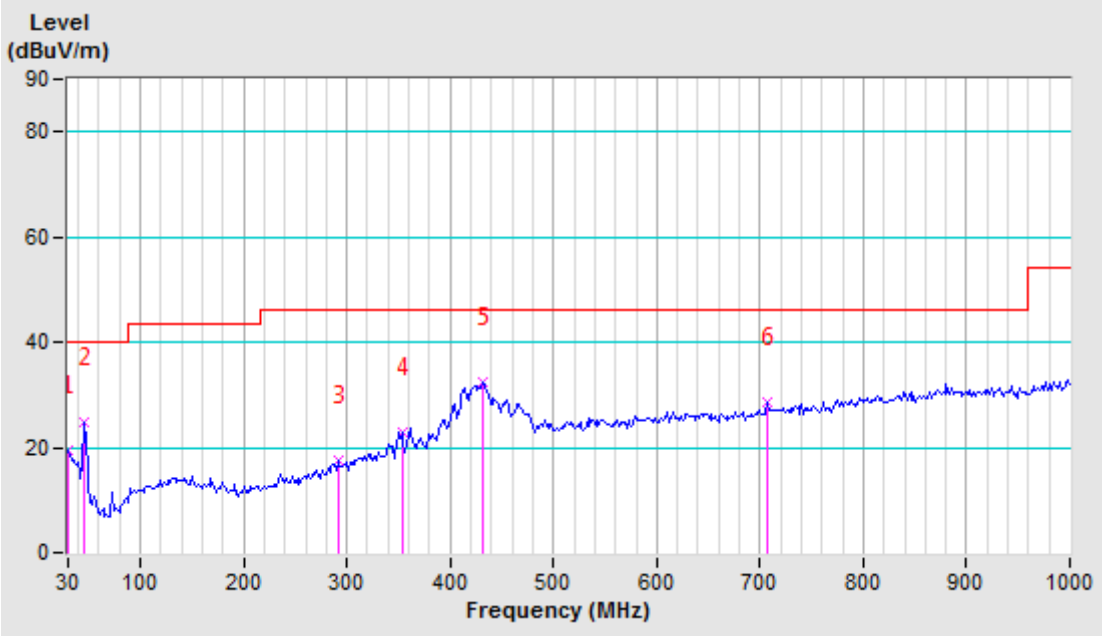
REMARKS: 1. Peak detector quick scan is showed on the graph and final quasi-peak detector data is measured corresponding to relevant limit and recorded in the data table.
2. Negative sign (-) in the margin column signify levels below the limit.
3. Frequency range scanned: 30-1000MHz.
4. Only emissions significantly above equipment noise floor are reported.



Test Mode	C	Frequency Range	30MHz ~ 1000MHz
Test Voltage	DC 12V	Detector Function	Quasi-Peak (QP)
Environmental Conditions	21deg. C, 67% RH	Tested By	KAMIKO

Antenna Polarity & Test Distance: Vertical At 3m								
No.	Freq. (MHz)	Correction Factor (dB/m)	Raw Value (dBuV)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)
1	30.00	-11.00	30.41	19.41	40.00	-20.59	200	0
2	45.54	-17.68	42.47	24.79	40.00	-15.21	200	0
3	291.15	-12.90	30.39	17.49	46.00	-28.51	200	0
4	353.33	-10.18	33.15	22.97	46.00	-23.03	200	0
5	431.06	-8.27	40.78	32.51	46.00	-13.49	200	0
6	707.76	-2.20	30.64	28.44	46.00	-17.56	200	0

REMARKS: 1. Peak detector quick scan is showed on the graph and final quasi-peak detector data is measured corresponding to relevant limit and recorded in the data table.
2. Negative sign (-) in the margin column signify levels below the limit.
3. Frequency range scanned: 30-1000MHz.
4. Only emissions significantly above equipment noise floor are reported.



4.2 20dB BANDWIDTH MEASUREMENT

4.2.1 LIMITS OF 20dB BANDWIDTH MEASUREMENT

The field strength of any emissions appearing between the band edges and out of band shall be attenuated at least 20 dB below the level of the unmodulated carrier or to the general limits in Section 15.209.

4.2.2 TEST INSTRUMENTS

Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
EMI Test Receiver	Rohde&Schwarz	ESR7	101564	Mar. 18,20	Mar. 17,21
Active Loop Antenna	SCHWARZBECK	FMZB 1519B	1519B-045	May 30,20	May 29,21
Amplifier	Burgeon	BPA-530	100210	Mar. 15,20	Mar. 14,21
Test Software	ADT	ADT_Radiated _V8.7.07	N/A	N/A	N/A

NOTE: 1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to CEPREI/CHINA, GRGT/CHINA and NIM/CHINA.
2. The test was performed in RF Oven room.

4.2.3 TEST PROCEDURE

a. Check the calibration of the measuring instrument using either an internal calibrator or a known signal from an external generator.

b. Turn on the EUT and connect it to measurement instrument. Then set it to any one convenient frequency within its operating range. Set a reference level on the measuring instrument equal to the highest peak value.

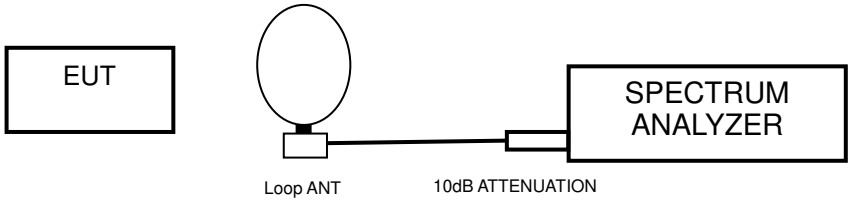
c. Measure the frequency difference of two frequencies that were attenuated 20dB from the reference level. Record the frequency difference as the emission bandwidth.

d. Repeat above procedures until all frequencies measured were complete.

4.2.4 DEVIATION FROM TEST STANDARD

No deviation.

4.2.5 TEST SETUP



4.2.6 EUT OPERATING CONDITION

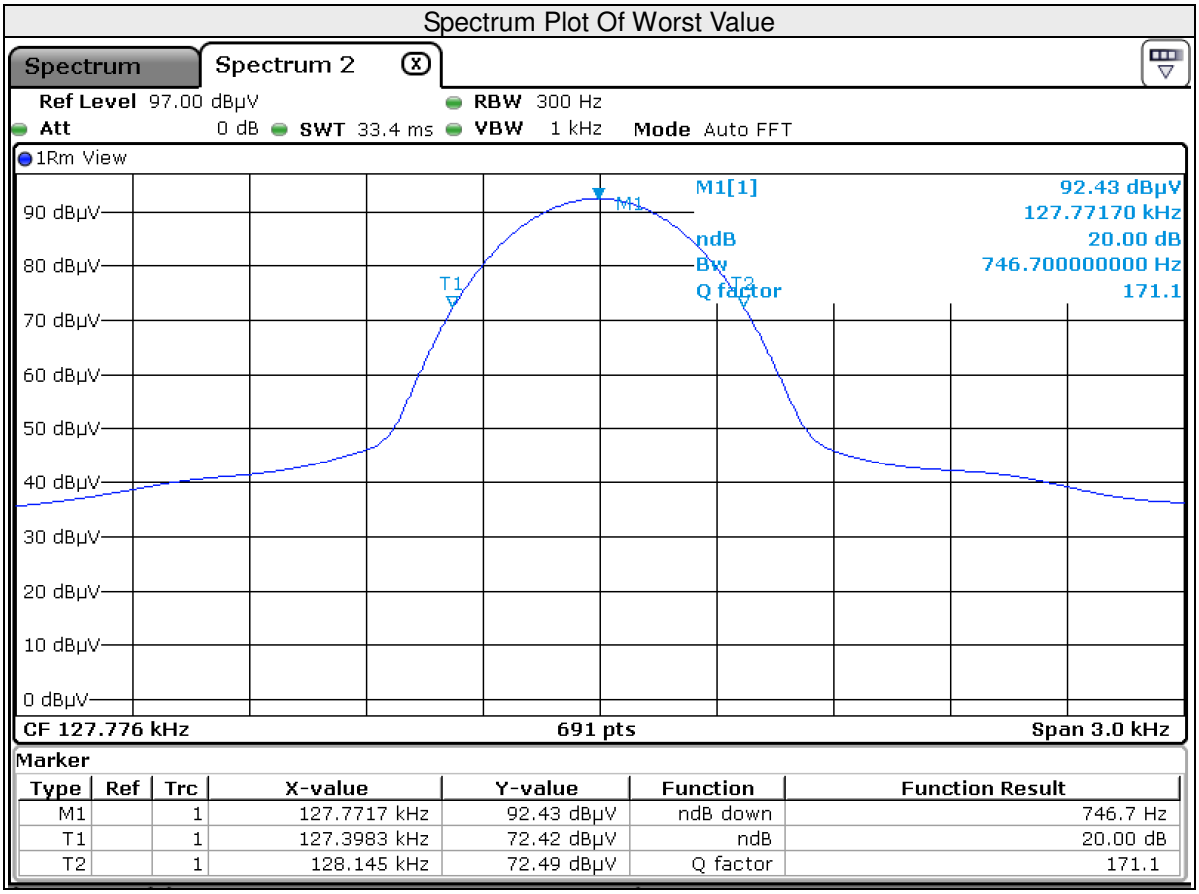
a. Turn on the EUT.
b. The EUT tested in charging mode and standby mode respectively.

4.2.7 TEST RESULTS

Test Mode	Frequency (kHz)	20dB Bandwidth (Hz)
10W Receiver load operating	127.776	746.7

Test Plot:

Spectrum Plot Of Worst Value



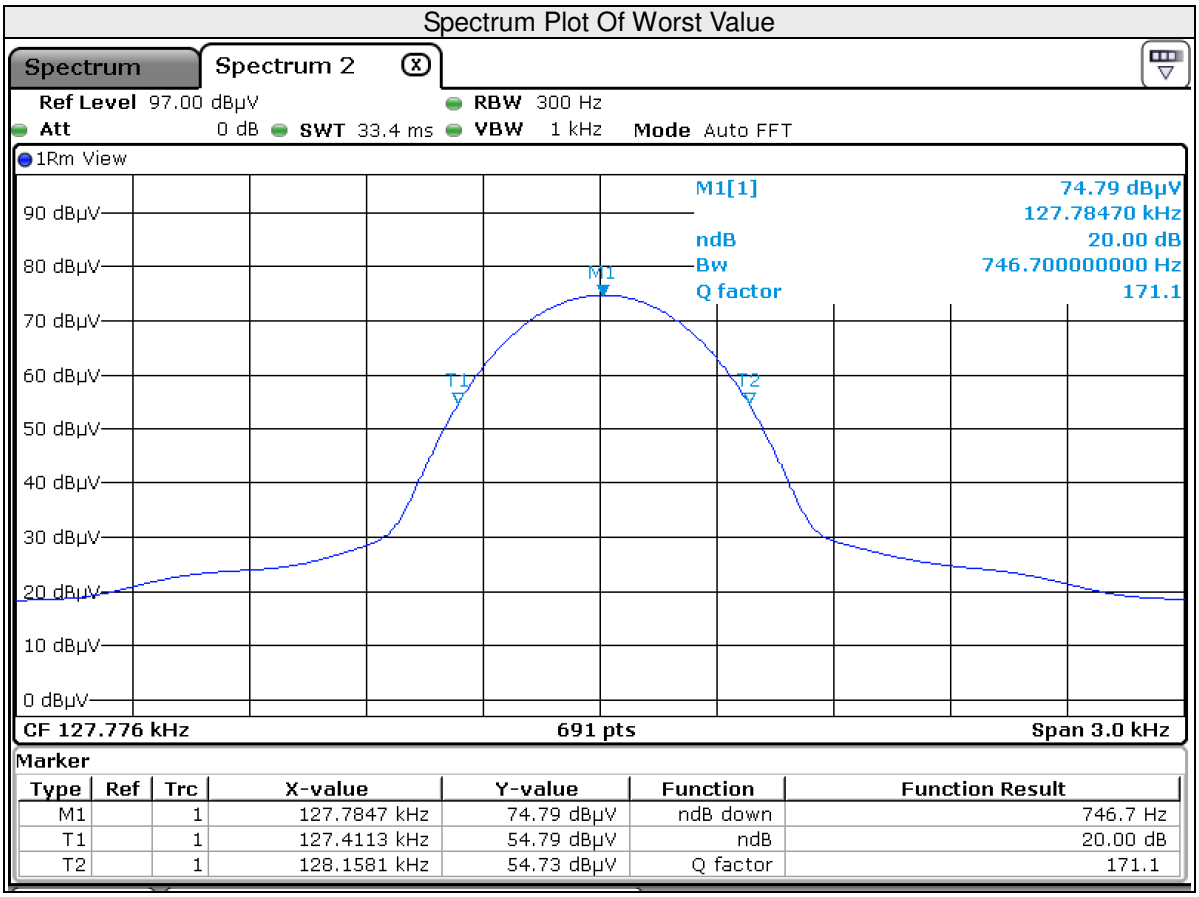
Marker

Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	127.7717 kHz	92.43 dBµV	ndB down	746.7 Hz
T1		1	127.3983 kHz	72.42 dBµV	ndB	20.00 dB
T2		1	128.145 kHz	72.49 dBµV	Q factor	171.1

Test Mode	Frequency (kHz)	20dB Bandwidth (Hz)
iPhone X operating	127.776	746.7

Test Plot:

Spectrum Plot Of Worst Value

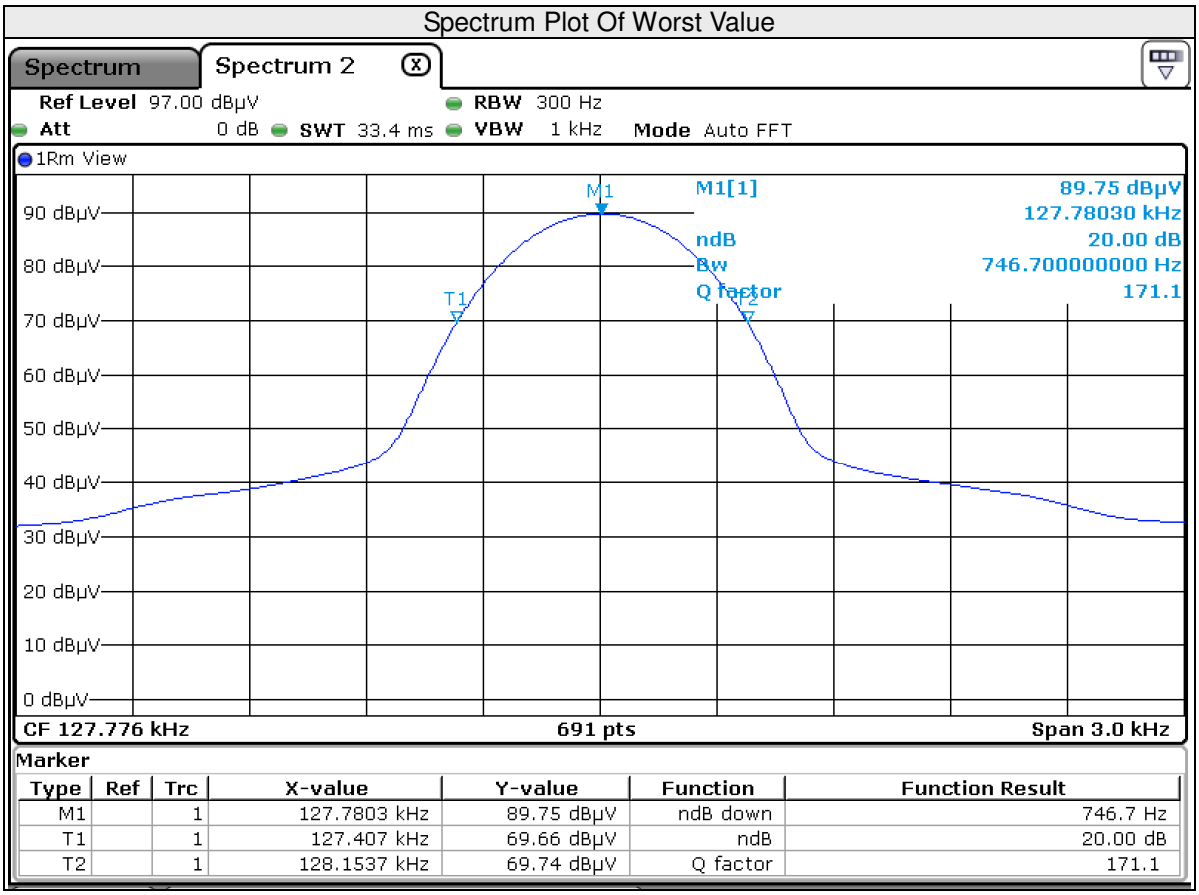


Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	127.7847 kHz	74.79 dBµV	ndB down	746.7 Hz
T1		1	127.4113 kHz	54.79 dBµV	ndB	20.00 dB
T2		1	128.1581 kHz	54.73 dBµV	Q factor	171.1

Test Mode	Frequency (kHz)	20dB Bandwidth (Hz)
Standby	127.776	746.7

Test Plot:

Spectrum Plot Of Worst Value



Marker

Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	127.7803 kHz	89.75 dBµV	ndB down	746.7 Hz
T1		1	127.407 kHz	69.66 dBµV	ndB	20.00 dB
T2		1	128.1537 kHz	69.74 dBµV	Q factor	171.1

5 PHOTOGRAPHS OF THE TEST CONFIGURATION

Please refer to the attached file (Test Setup Photo).

6 APPENDIX A – MODIFICATIONS RECORDERS FOR ENGINEERING CHANGES TO THE EUT BY THE LAB

No any modifications were made to the EUT by the lab during the test.

---END---