

## FCC Test Report

**Report No.:** RF180313C07

**FCC ID:** PY7-77587P

**Received Date:** Feb. 06, 2018

**Test Date:** Mar. 16 ~ Mar. 19, 2018

**Issued Date:** Mar. 19, 2018

**Applicant:** Sony Mobile Communications Inc.

**Address:** 4-12-3, Higashi-shinagawa, Shinagawa-ku, Tokyo, 140-0002, Japan

**Issued By:** Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch

**Lab Address:** No. 47-2, 14th Ling, Chia Pau Vil., Lin Kou Dist., New Taipei City, Taiwan, R.O.C.

**Test Location:** No. 19, Hwa Ya 2nd Rd., Wen Hwa Vil., Kwei Shan Dist., Taoyuan City 33383, TAIWAN (R.O.C.)

**FCC Registration /  
Designation Number:** 788550 / TW0003



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### Release Control Record

Issue No.	Description	Date Issued
RF180313C07	Original release	Mar. 19, 2018

## 1 Certificate of Conformity

**Product:** Wireless Charging Dock

**Brand:** Sony

**Sample Status:** Engineering sample

**Applicant:** Sony Mobile Communications Inc.

**Test Date:** Mar. 16 ~ Mar. 19, 2018

**Standards:** 47 CFR FCC Part 15, Subpart C (Section 15.209)  
KDB 414788 D01 Radiated Test Site v01  
ANSI C63.10: 2013

The above equipment has been tested by **Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch**, and found compliance with the requirement of the above standards. The test record, data evaluation & Equipment Under Test (EUT) configurations represented herein are true and accurate accounts of the measurements of the sample's RF characteristics under the conditions specified in this report.

**Prepared by :** Celine Chou , **Date:** Mar. 19, 2018  
Celine Chou / Specialist

**Approved by :** Bruce Chen , **Date:** Mar. 19, 2018  
Bruce Chen / Project Engineer

## 2 Summary of Test Results

47 CFR FCC Part 15, Subpart C (Section 15.209)			
FCC Clause	Test Item	Result	Remarks
15.207	AC Power Conducted Emission	Pass	Meet the requirement of limit. Minimum passing margin is -8.88dB at 0.59028MHz.
15.209	Radiated Emission Test	Pass	Meet the requirement of limit. Minimum passing margin is -5.1dB at 41.57MHz.

### 2.1 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	Expanded Uncertainty (k=2) ( $\pm$ )
Conducted Emissions at mains ports	150kHz ~ 30MHz	2.94 dB
Radiated Emissions up to 1 GHz	30MHz ~ 200MHz	3.86 dB
	200MHz ~ 1000MHz	3.87 dB

### 2.2 Modification Record

There were no modifications required for compliance.

### 3 General Information

#### 3.1 General Description of EUT

Product	Wireless Charging Dock
Sample Status	Engineering sample
Power Supply Rating	9Vdc or 12Vdc (adapter)
Operating Frequency	115-148kHz
Antenna Type	Loop antenna
Field Strength	90.9dBuV/m
Dimensions	65mm (W) x 100mm (L) x 46mm (D)
Accessory Device	Adapter
Data Cable Supplied	NA
Maximum Power Output from the Charging Coil	Less than 9W

Note: The EUT uses following adapter.

Brand	Sony
Model	UCH12 (AC-0051-US)
Input power	100-240Vac, 50-60Hz, Max. 0.4A
Output power	9Vdc, 1.8A; 12Vdc, 1.35A

#### 3.2 Description of Test Modes

1 channel is provided to this EUT

Channel	Freq. (kHz)
1	122 (Note)

Note: The worse frequency is 122kHz.

### 3.2.1 Test Mode Applicability and Tested Channel Detail

EUT CONFIGURE MODE	APPLICABLE TO		DESCRIPTION
	RE<1G	PLC	
A	√	√	Charging Mode
B	√	√	Standby Mode

Where **RE<1G**: Radiated Emission below 1GHz **PLC**: Power Line Conducted Emission

#### Radiated Emission Test (Below 1GHz):

- Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates 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	Available Channel	Tested Channel
A, B	1	1

#### Power Line Conducted Emission Test:

- Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates 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	Available Channel	Tested Channel
A, B	1	1

#### Test Condition:

Applicable To	Environmental Conditions	Input Power	Tested by
<b>RE&lt;1G</b>	21 deg. C, 66% RH	120Vac, 60Hz	Willy Cheng
<b>PLC</b>	25 deg. C, 75% RH	120Vac, 60Hz	Adair Peng

### 3.3 Description of Support Units

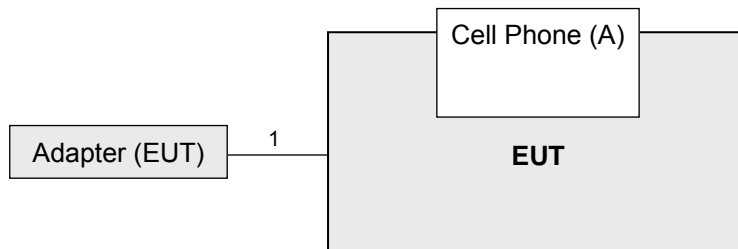
The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

ID	Product	Brand	Model No.	Serial No.	FCC ID	Remarks
A.	Cell Phone	Sony Mobile	NA	QV7000XA1B	NA	Provided by manufacturer

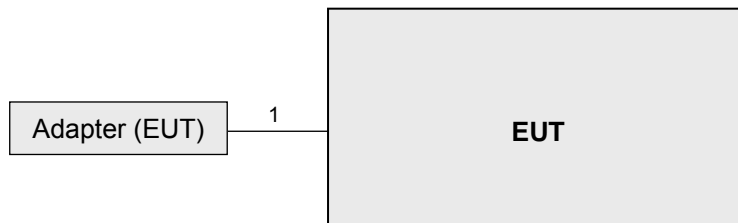
ID	Descriptions	Qty.	Length (m)	Shielding (Yes/No)	Cores (Qty.)	Remarks
1.	USB	1	0.94	Y	0	Provided by manufacturer

#### 3.3.1 Configuration of System under Test

Charging Mode (Test Mode A)



Standby Mode (Test Mode B)



### 3.4 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)

KDB 414788 D01 Radiated Test Site v01

ANSI C63.10-2013

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



## 4 Test Types and Results

### 4.1 Radiated Emission and Bandedge Measurement

#### 4.1.1 Limits of Radiated Emission and Bandedge Measurement

##### FOR FREQUENCY BELOW 30MHz

Frequency (MHz)	Field Strength (dBuV/m)		Measurement Distance (meters)
	uV/m	dBuV/m	
0.009 – 0.490	2400 / F (kHz)	48.52-13.80	300
0.490 – 1.705	24000 / F (kHz)	33.80-22.97	30
1.705 – 30.0	30	29.54	30

##### FOR FREQUENCY BETWEEN 30-1000MHz

Frequency (MHz)	Class A (at 10m)		Class B (at 3m)	
	uV/m	dBuV/m	uV/m	dBuV/m
30-88	90	39.1	100	40.0
88-216	150	43.5	150	43.5
216-960	210	46.4	200	46.0
Above 960	300	49.5	500	54.0

#### 4.1.2 Test Instruments

Description & Manufacturer	Model No.	Serial No.	Cal. Date	Cal. Due
Test Receiver ROHDE & SCHWARZ	ESIB7	100187	May 02, 2017	May 01, 2018
Spectrum Analyzer ROHDE & SCHWARZ	FSP40	100041	Dec. 12, 2017	Dec. 11, 2018
BILOG Antenna SCHWARZBECK	VULB9168	9168-171	Dec. 11, 2017	Dec. 10, 2018
HORN Antenna SCHWARZBECK	9120D	209	Dec. 13, 2017	Dec. 12, 2018
HORN Antenna SCHWARZBECK	BBHA 9170	BBHA9170241	Dec. 01, 2017	Nov. 30, 2018
Loop Antenna EMCI	EM-6879	269	Aug. 11, 2017	Aug. 10, 2018
Preamplifier Agilent (Below 1GHz)	8447D	2944A10738	Aug. 21, 2017	Aug. 20, 2018
Preamplifier Agilent (Above 1GHz)	8449B	3008A02465	Apr. 05, 2017	Apr. 04, 2018
RF signal cable HUBER+SUHNER	SUCOFLEX 104	Cable-CH3-03 (223653/4)	Aug. 21, 2017	Aug. 20, 2018
RF signal cable HUBER+SUHNER& EMCI	SUCOFLEX 104&EMC104-SM-S M-8000	Cable-CH3-03 (309224+170907)	Sep.11, 2017	Sep. 10, 2018
Software BV ADT	ADT_Radiated_ V7.6.15.9.4	NA	NA	NA
Antenna Tower inn-co GmbH	MA 4000	013303	NA	NA
Antenna Tower Controller BV ADT	AT100	AT93021702	NA	NA
Turn Table BV ADT	TT100	TT93021702	NA	NA
Turn Table Controller BV ADT	SC100	SC93021702	NA	NA
Boresight Antenna Fixture	FBA-01	FBA-SIP01	NA	NA

- Note: 1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.
2. The test was performed in HwaYa Chamber 3.
3. The horn antenna and preamplifier (model: 8449B) are used only for the measurement of emission frequency above 1GHz if tested.
4. The FCC Designation Number is TW0003. The number will be varied with the Lab location and scope as attached.
5. The IC Site Registration No. is IC 7450F-3.

### 4.1.3 Test Procedures

#### For Radiated emission below 30MHz

- 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. Both X and Y axes 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. The test-receiver system was set to Quasi-Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.

Note:

1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 9kHz at frequency below 30MHz.
2. There is a comparison data of both open-field test site and semi-Anechoic chamber, and the result came out very similar.

#### For Radiated emission above 30MHz

- a. The EUT was placed on the top of a rotating table 0.8 meters (for below 1GHz) / 1.5 meters (for above 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. 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.
- f. The test-receiver system was set to peak and average detect function and specified bandwidth with maximum hold mode when the test frequency is above 1 GHz. If the peak reading value also meets average limit, measurement with the average detector is unnecessary.

Note:

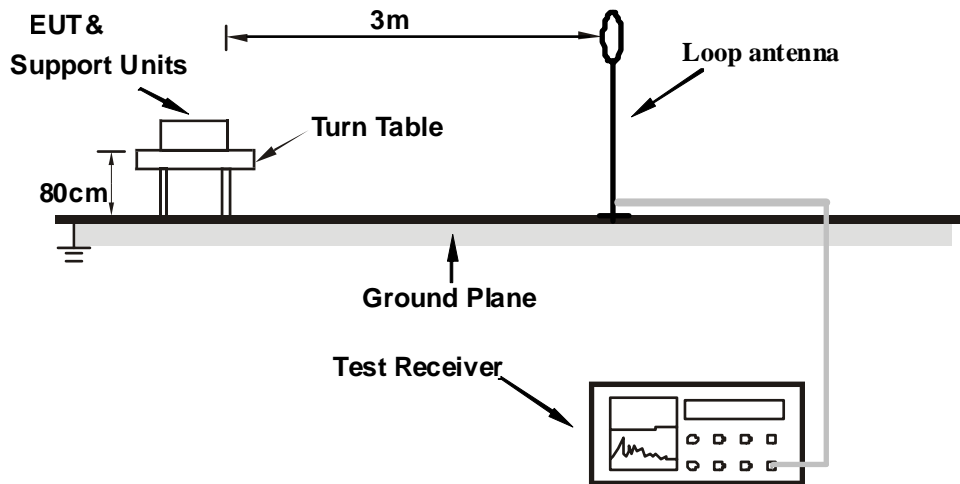
1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120kHz for Quasi-peak detection (QP) at frequency below 1GHz.
2. The resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 3 MHz for Peak detection (PK) at frequency above 1GHz.
3. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and the video bandwidth is  $\geq 1/T$  (Duty cycle < 98%) or 10Hz (Duty cycle  $\geq 98\%$ ) for Average detection (AV) at frequency above 1GHz.
4. All modes of operation were investigated and the worst-case emissions are reported.

#### 4.1.4 Deviation from Test Standard

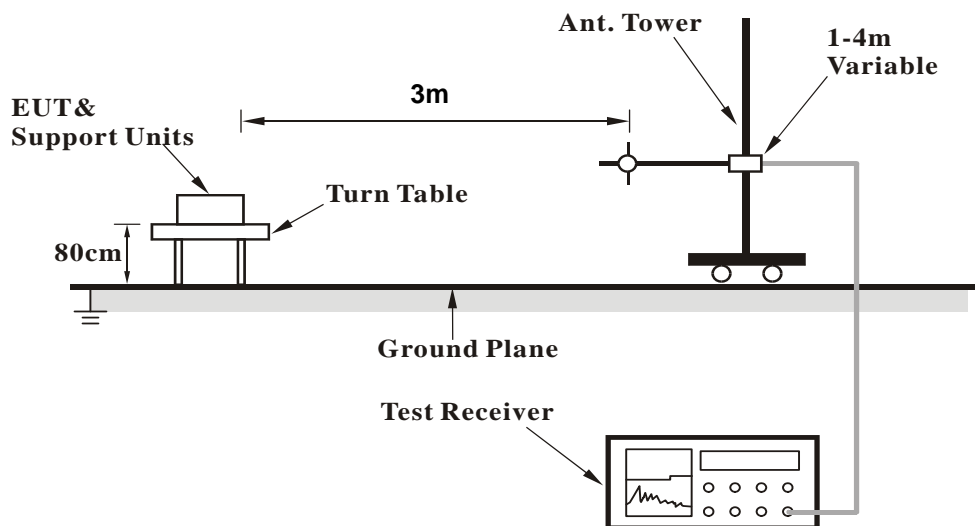
No deviation.

#### 4.1.5 Test Set Up

##### For Radiated emission below 30MHz



##### For Radiated emission 30MHz to 1GHz



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

#### 4.1.6 EUT Operating Conditions

##### Test Mode A

- The EUT powered by adapter.
- Put the cell phone on the EUT (wireless charging) during the test.

##### Test Mode B

- The EUT powered by adapter.

#### 4.1.7 Test Results

Below 30MHz Data:

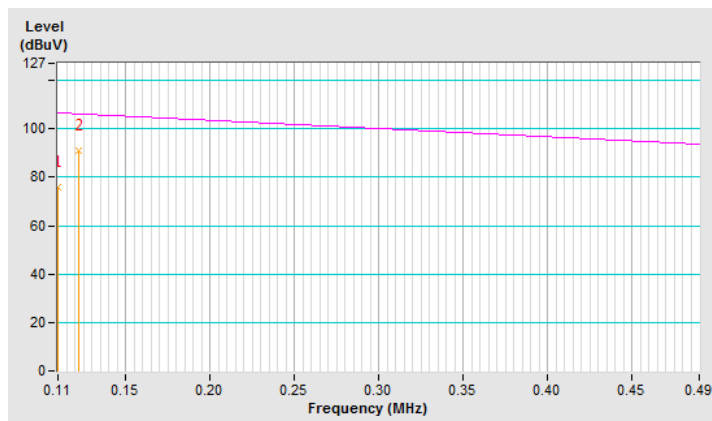
Charging Mode (Z-plane)

Channel	TX Channel 1	Detector Function	Quasi-Peak
Frequency Range	110 kHz ~ 490 kHz		
Test Mode	A		

ANTENNA POLARITY & TEST DISTANCE: LOOP ANTENNA OPEN AT 3m								
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	0.110	75.80	106.80	-31.00	1.00	312	55.50	20.30
2	*0.122	90.86	105.90	-15.04	1.00	312	70.56	20.30

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. “ \* “: Fundamental frequency.
6. Loop antenna was used for all radiated emission below 30MHz.
7. Limit @3m=Limit@300m+40log(300 / 3)=Limit@300m+80
8. Limit @3m=Limit@30m+40log(30 / 3)=Limit@30m+40

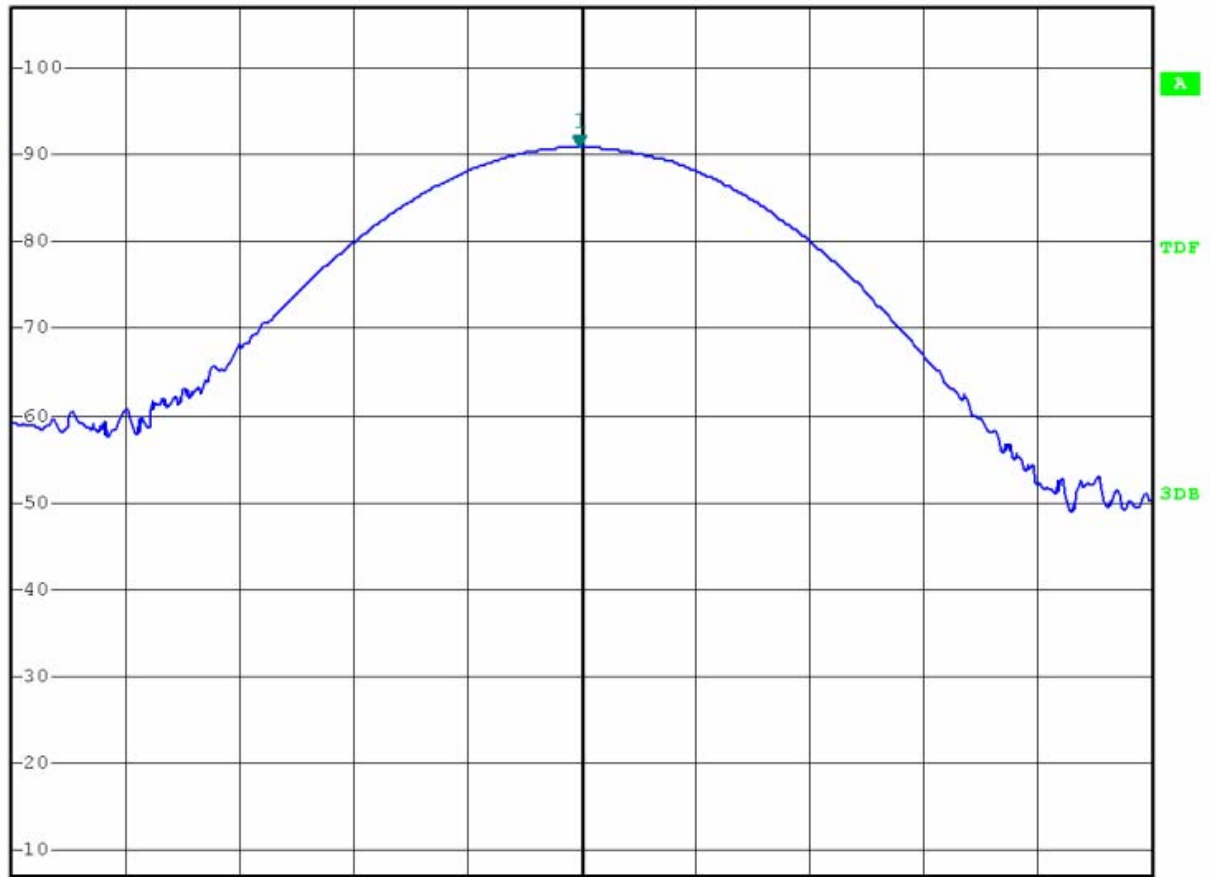




\*RBW 10 kHz    Marker 1 [T1 ]  
 \*VBW 30 kHz    90.86 dBµV/m

Ref 107 dBµV/m    \*Att 10 dB    SWT 2.5 ms    121.900000000 kHz

1 PK  
VIEW



Center 122 kHz    5 kHz/    Span 50 kHz

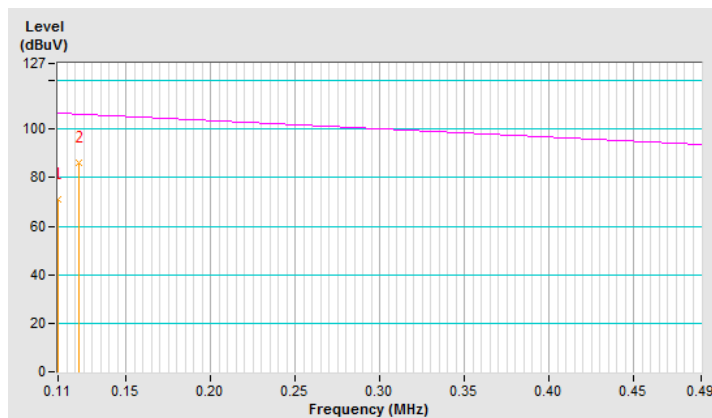
Channel	TX Channel 1	Detector Function	Quasi-Peak
Frequency Range	110 kHz ~ 490 kHz		
Test Mode	A		

**ANTENNA POLARITY & TEST DISTANCE: LOOP ANTENNA CLOSE AT 3m**

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	0.110	70.80	106.80	-36.00	1.00	32	50.50	20.30
2	*0.122	85.83	105.90	-20.0	1.00	32	65.53	20.30

**Remarks:**

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. “ \* “: Fundamental frequency.
6. Loop antenna was used for all radiated emission below 30MHz.
7. Limit @3m=Limit@300m+40log(300 / 3)=Limit@300m+80
8. Limit @3m=Limit@30m+40log(30 / 3)=Limit@30m+40





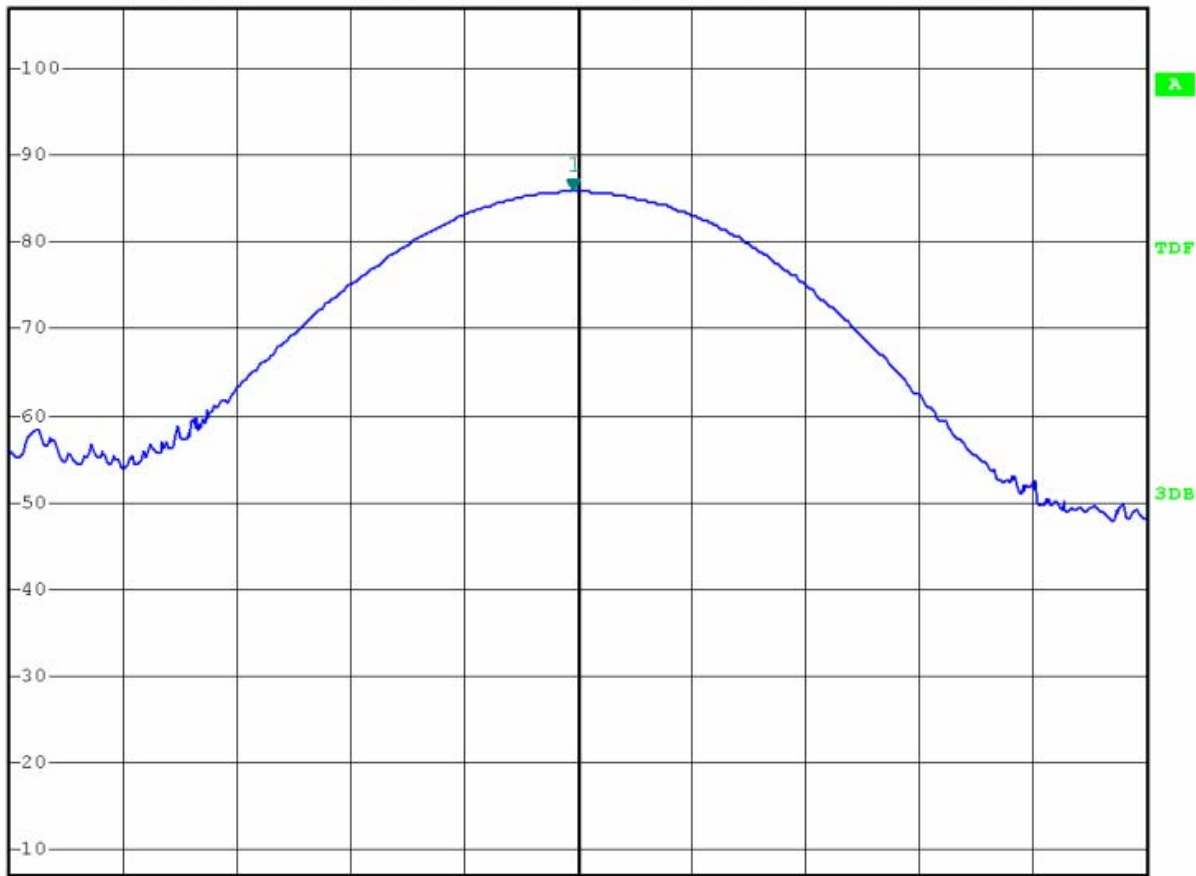


\*RBW 10 kHz    Marker 1 [T1 ]  
 \*VBW 30 kHz    85.83 dBμV/m  
 SWT 2.5 ms    121.800000000 kHz

Ref 107 dBμV/m

\*Att 10 dB

1 PK  
VIEW



Center 122 kHz

5 kHz/

Span 50 kHz

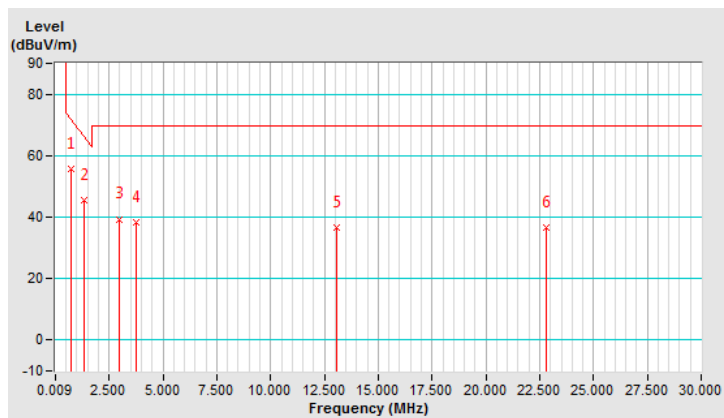
Channel	TX Channel 1	Detector Function	Quasi-Peak
Frequency Range	9 kHz ~ 30 MHz		
Test Mode	A		

**ANTENNA POLARITY & TEST DISTANCE: LOOP ANTENNA OPEN AT 3m**

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	0.729	55.8	70.4	-14.6	1.00	337	35.5	20.3
2	1.329	45.5	65.1	-19.6	1.00	157	25.2	20.3
3	2.948	39.4	69.5	-30.1	1.00	322	19.1	20.3
4	3.728	38.4	69.5	-31.1	1.00	302	18.0	20.4
5	13.085	36.5	69.5	-33.0	1.00	4	16.0	20.5
6	22.802	36.6	69.5	-32.9	1.00	276	16.1	20.5

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. “ \* “: Fundamental frequency.
6. Loop antenna was used for all radiated emission below 30MHz.
7. Limit @3m=Limit@300m+40log(300 / 3)=Limit@300m+80
8. Limit @3m=Limit@30m+40log(30 / 3)=Limit@30m+40

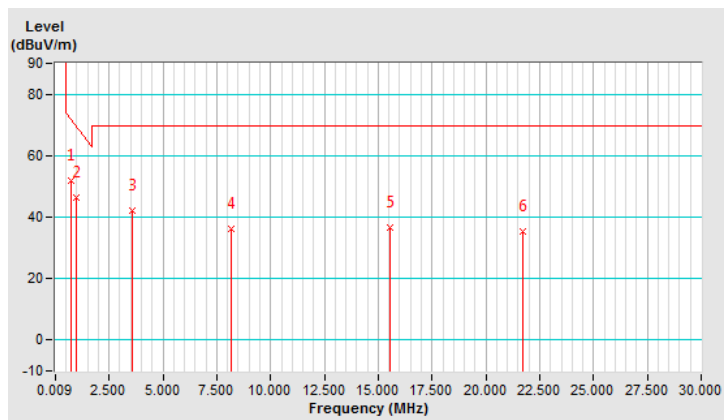


Channel	TX Channel 1	Detector Function	Quasi-Peak
Frequency Range	9 kHz ~ 30 MHz		
Test Mode	A		

ANTENNA POLARITY & TEST DISTANCE: LOOP ANTENNA CLOSE AT 3m								
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	0.729	51.9	70.4	-18.5	1.00	90	31.6	20.3
2	0.969	46.3	67.9	-21.6	1.00	30	26.0	20.3
3	3.548	42.2	69.5	-27.3	1.00	171	21.8	20.4
4	8.167	36.1	69.5	-33.4	1.00	49	15.7	20.4
5	15.544	36.5	69.5	-33.0	1.00	52	15.9	20.6
6	21.722	35.3	69.5	-34.2	1.00	67	14.9	20.4

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. “ \* “: Fundamental frequency.
6. Loop antenna was used for all radiated emission below 30MHz.
7. Limit @3m=Limit@300m+40log(300 / 3)=Limit@300m+80
8. Limit @3m=Limit@30m+40log(30 / 3)=Limit@30m+40



### Standby Mode (Z-plane)

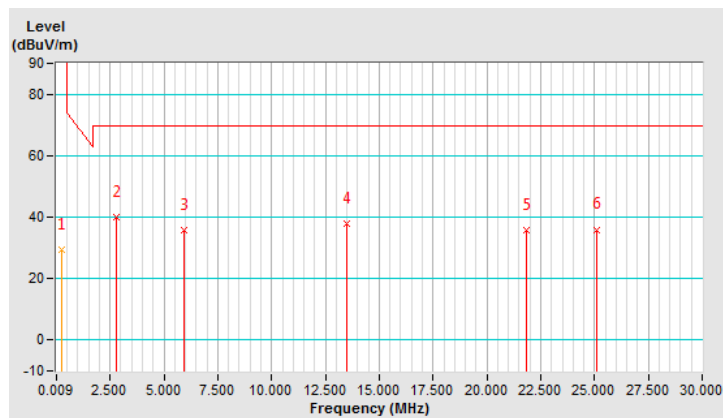
Channel	TX Channel 1	Detector Function	Quasi-Peak
Frequency Range	9 kHz ~ 30 MHz		
Test Mode	B		

#### ANTENNA POLARITY & TEST DISTANCE: LOOP ANTENNA OPEN AT 3m

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	0.244	29.5	99.9	-70.4	1.00	8	9.2	20.3
2	2.768	40.1	69.5	-29.4	1.00	17	19.8	20.3
3	5.947	35.9	69.5	-33.6	1.00	21	15.4	20.5
4	13.505	38.0	69.5	-31.5	1.00	11	17.5	20.5
5	21.842	35.6	69.5	-33.9	1.00	234	15.2	20.4
6	25.081	36.0	69.5	-33.5	1.00	148	15.4	20.6

#### Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " \* ": Fundamental frequency.
6. Loop antenna was used for all radiated emission below 30MHz.
7. Limit @3m=Limit@300m+40log(300 / 3)=Limit@300m+80
8. Limit @3m=Limit@30m+40log(30 / 3)=Limit@30m+40



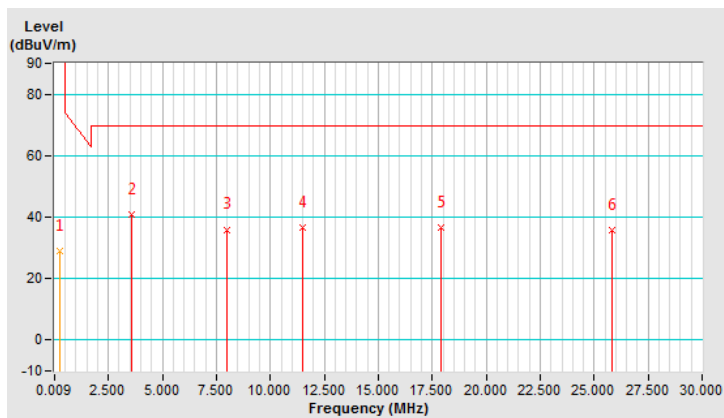
Channel	TX Channel 1	Detector Function	Quasi-Peak
Frequency Range	9 kHz ~ 30 MHz		
Test Mode	B		

**ANTENNA POLARITY & TEST DISTANCE: LOOP ANTENNA CLOSE AT 3m**

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	0.224	29.1	100.6	-71.5	1.00	271	8.8	20.3
2	3.548	40.7	69.5	-28.8	1.00	117	20.3	20.4
3	7.987	36.0	69.5	-33.5	1.00	15	15.6	20.4
4	11.526	36.5	69.5	-33.0	1.00	167	16.0	20.5
5	17.884	36.5	69.5	-33.0	1.00	240	16.0	20.5
6	25.801	35.9	69.5	-33.6	1.00	249	15.2	20.7

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. “ \* “: Fundamental frequency.
6. Loop antenna was used for all radiated emission below 30MHz.
7. Limit @3m=Limit@300m+40log(300 / 3)=Limit@300m+80
8. Limit @3m=Limit@30m+40log(30 / 3)=Limit@30m+40



### Charging Mode (Y-plane)

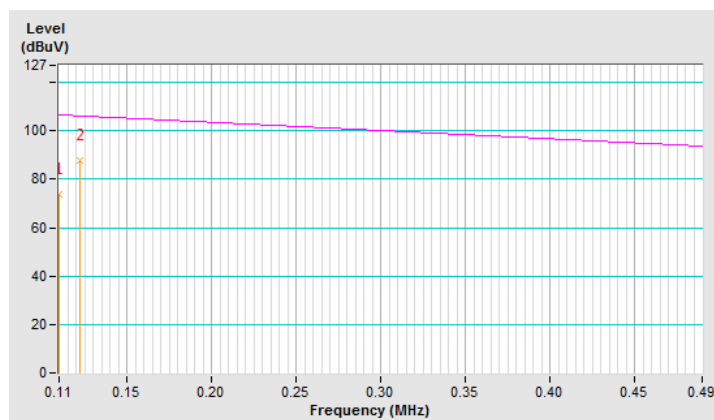
Channel	TX Channel 1	Detector Function	Quasi-Peak
Frequency Range	110 kHz ~ 490 kHz		
Test Mode	A		

#### ANTENNA POLARITY & TEST DISTANCE: LOOP ANTENNA OPEN AT 3m

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	0.110	73.60	106.80	-33.20	1.00	219	53.30	20.30
2	*0.122	87.43	105.90	-18.47	1.00	219	67.13	20.30

#### Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. “ \* “: Fundamental frequency.
6. Loop antenna was used for all radiated emission below 30MHz.
7. Limit @3m=Limit@300m+40log(300 / 3)=Limit@300m+80
8. Limit @3m=Limit@30m+40log(30 / 3)=Limit@30m+40

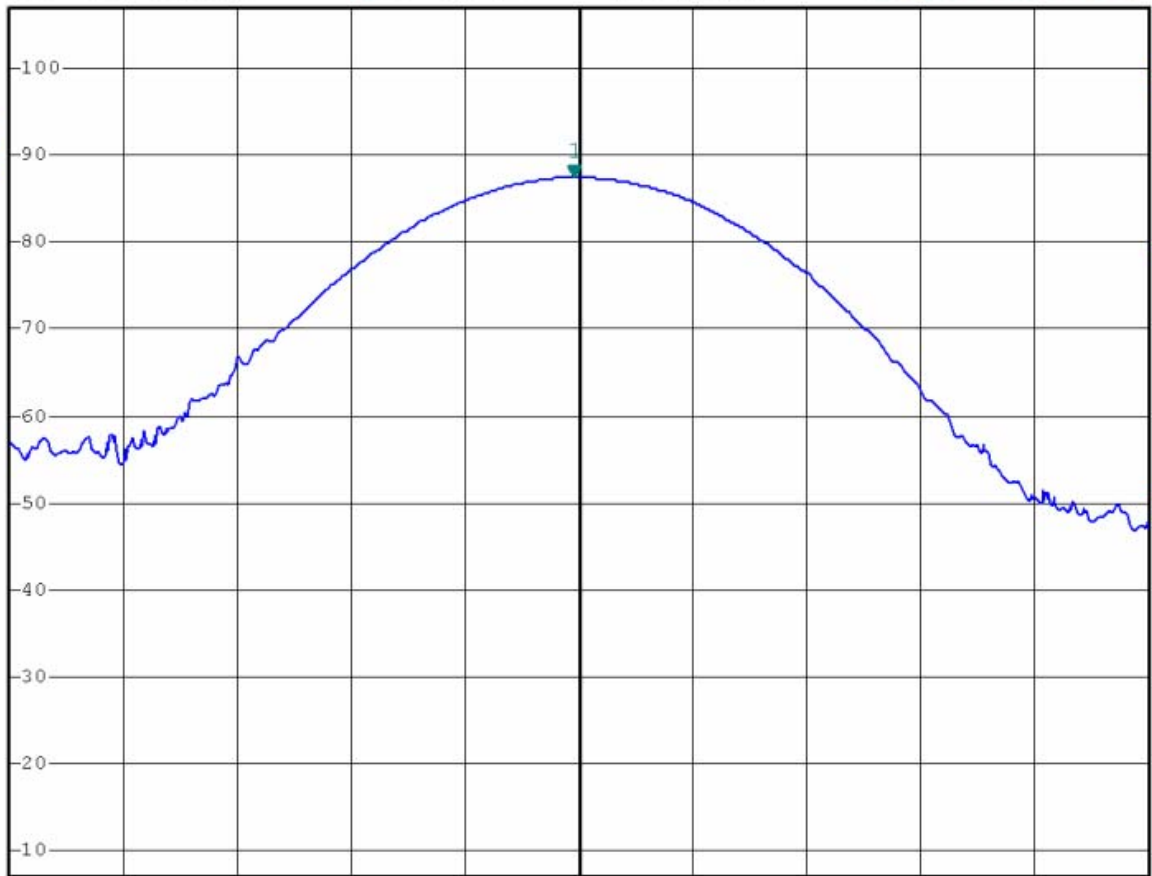




\*RBW 10 kHz    Marker 1 [T1 ]  
 \*VBW 30 kHz    87.43 dBμV/m  
 \*Att 10 dB    121.800000000 kHz  
 SWT 2.5 ms

Ref 107 dBμV/m

1 PK  
VIEW



Center 122 kHz

5 kHz/

Span 50 kHz

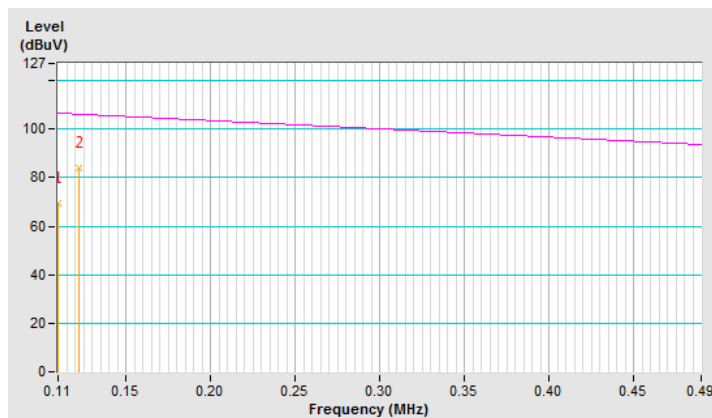
Channel	TX Channel 1	Detector Function	Quasi-Peak
Frequency Range	110 kHz ~ 490 kHz		
Test Mode	A		

**ANTENNA POLARITY & TEST DISTANCE: LOOP ANTENNA CLOSE AT 3m**

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	0.110	69.30	106.80	-37.50	1.00	300	49.00	20.30
2	*0.122	83.88	105.90	-22.02	1.00	300	63.58	20.30

**Remarks:**

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. “ \* “: Fundamental frequency.
6. Loop antenna was used for all radiated emission below 30MHz.
7. Limit @3m=Limit@300m+40log(300 / 3)=Limit@300m+80
8. Limit @3m=Limit@30m+40log(30 / 3)=Limit@30m+40





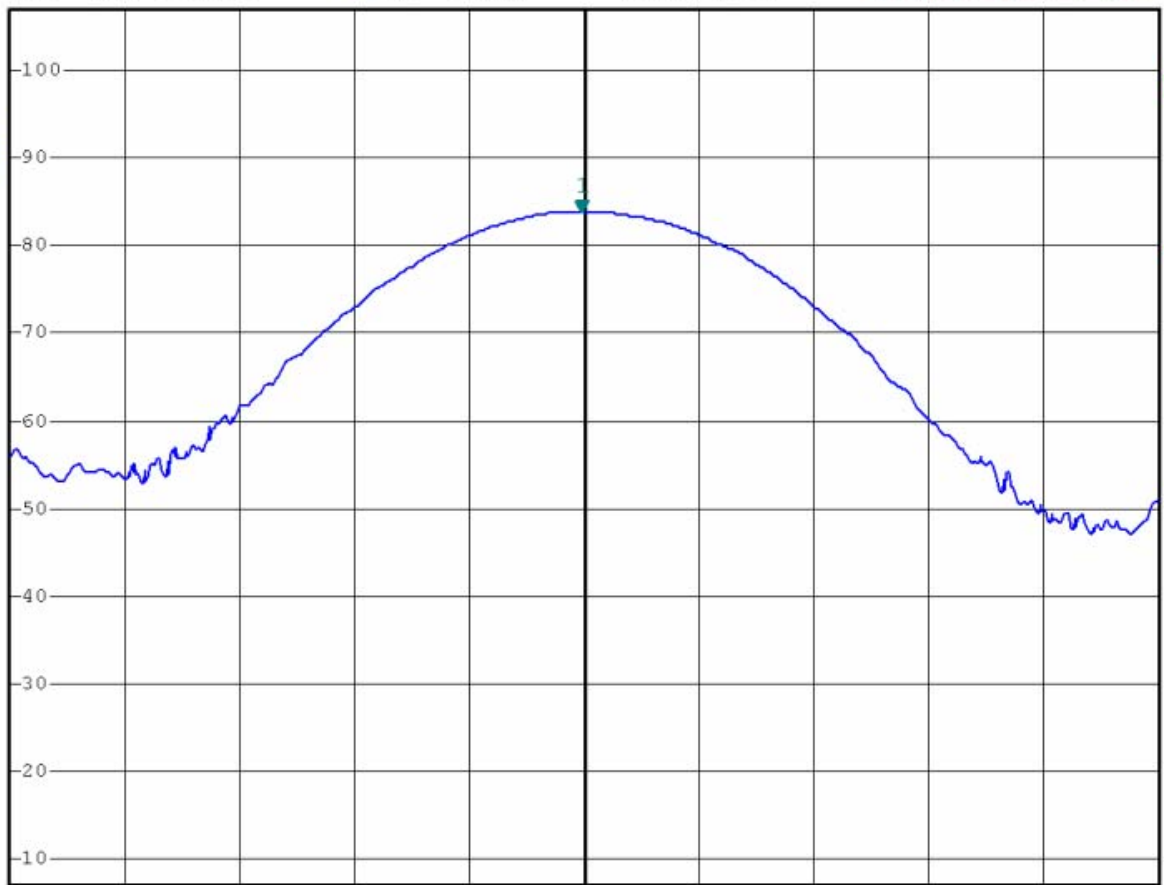


\*RBW 10 kHz    Marker 1 [T1 ]  
\*VBW 30 kHz    83.88 dBμV/m  
SWT 2.5 ms    121.900000000 kHz

Ref 107 dBμV/m

\*Att 10 dB

1 PK  
VIEW



Center 122 kHz

5 kHz/

Span 50 kHz

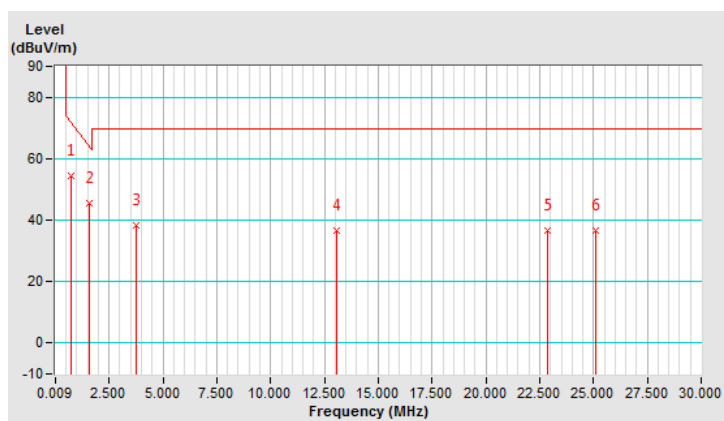
Channel	TX Channel 1	Detector Function	Quasi-Peak
Frequency Range	9 kHz ~ 30 MHz		
Test Mode	A		

**ANTENNA POLARITY & TEST DISTANCE: LOOP ANTENNA OPEN AT 3m**

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	0.729	54.4	70.4	-16.0	1.00	214	34.1	20.3
2	1.569	45.5	63.7	-18.2	1.00	211	25.2	20.3
3	3.728	38.2	69.5	-31.3	1.00	19	17.8	20.4
4	13.085	36.8	69.5	-32.7	1.00	315	16.3	20.5
5	22.862	36.8	69.5	-32.7	1.00	168	16.3	20.5
6	25.081	36.5	69.5	-33.0	1.00	277	15.9	20.6

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. “ \* “: Fundamental frequency.
6. Loop antenna was used for all radiated emission below 30MHz.
7. Limit @3m=Limit@300m+40log(300 / 3)=Limit@300m+80
8. Limit @3m=Limit@30m+40log(30 / 3)=Limit@30m+40



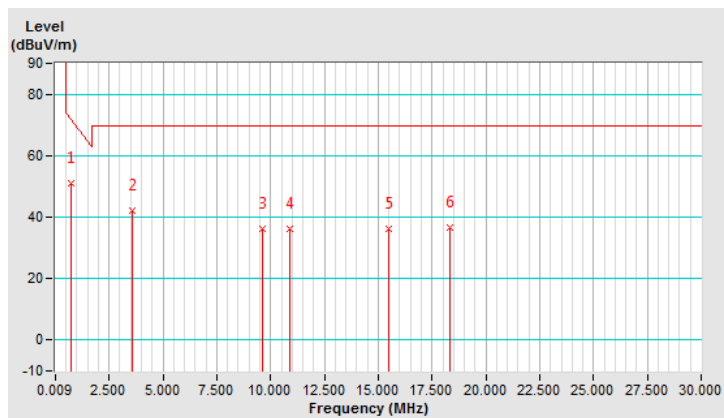
Channel	TX Channel 1	Detector Function	Quasi-Peak
Frequency Range	9 kHz ~ 30 MHz		
Test Mode	A		

**ANTENNA POLARITY & TEST DISTANCE: LOOP ANTENNA CLOSE AT 3m**

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	0.729	50.9	70.4	-19.5	1.00	100	30.6	20.3
2	3.548	42.1	69.5	-27.4	1.00	8	21.7	20.4
3	9.606	36.0	69.5	-33.5	1.00	322	15.5	20.5
4	10.866	36.2	69.5	-33.3	1.00	342	15.7	20.5
5	15.484	36.3	69.5	-33.2	1.00	356	15.8	20.5
6	18.304	36.6	69.5	-32.9	1.00	176	16.1	20.5

**Remarks:**

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. “ \* “: Fundamental frequency.
6. Loop antenna was used for all radiated emission below 30MHz.
7. Limit @3m=Limit@300m+40log(300 / 3)=Limit@300m+80
8. Limit @3m=Limit@30m+40log(30 / 3)=Limit@30m+40



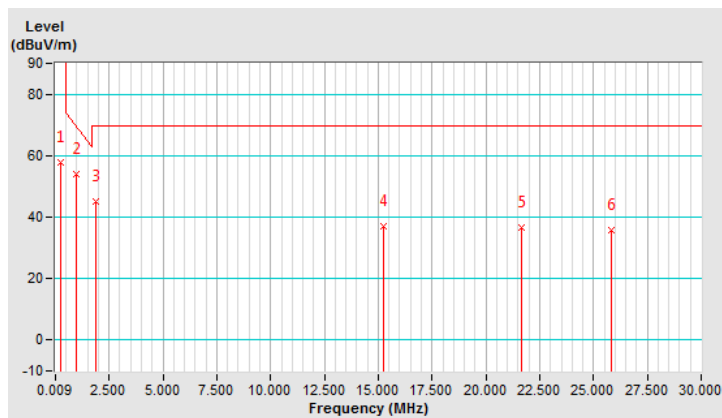
Standby Mode (Y-plane)

Channel	TX Channel 1	Detector Function	Quasi-Peak
Frequency Range	9 kHz ~ 30 MHz		
Test Mode	B		

ANTENNA POLARITY & TEST DISTANCE: LOOP ANTENNA OPEN AT 3m								
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	0.244	57.8	99.9	-42.1	1.00	177	37.5	20.3
2	0.969	54.1	67.9	-13.8	1.00	308	33.8	20.3
3	1.868	45.1	69.5	-24.4	1.00	308	24.8	20.3
4	15.244	37.2	69.5	-32.3	1.00	10	16.7	20.5
5	21.663	36.6	69.5	-32.9	1.00	254	16.2	20.4
6	25.801	35.8	69.5	-33.7	1.00	335	15.1	20.7

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. “ \* “: Fundamental frequency.
6. Loop antenna was used for all radiated emission below 30MHz.
7. Limit @3m=Limit@300m+40log(300 / 3)=Limit@300m+80
8. Limit @3m=Limit@30m+40log(30 / 3)=Limit@30m+40



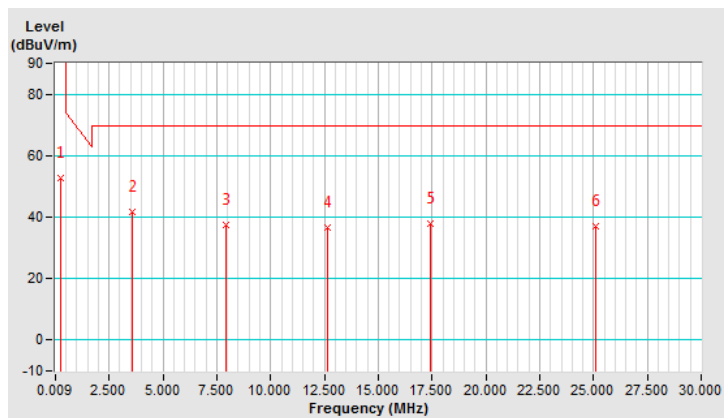
Channel	TX Channel 1	Detector Function	Quasi-Peak
Frequency Range	9 kHz ~ 30 MHz		
Test Mode	B		

**ANTENNA POLARITY & TEST DISTANCE: LOOP ANTENNA CLOSE AT 3m**

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	0.244	52.9	99.9	-47.0	1.00	76	32.6	20.3
2	3.548	41.5	69.5	-28.0	1.00	196	21.1	20.4
3	7.927	37.4	69.5	-32.1	1.00	170	17.0	20.4
4	12.665	36.6	69.5	-32.9	1.00	291	16.1	20.5
5	17.404	37.7	69.5	-31.8	1.00	35	17.2	20.5
6	25.081	37.0	69.5	-32.5	1.00	335	16.4	20.6

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. “ \* “: Fundamental frequency.
6. Loop antenna was used for all radiated emission below 30MHz.
7. Limit @3m=Limit@300m+40log(300 / 3)=Limit@300m+80
8. Limit @3m=Limit@30m+40log(30 / 3)=Limit@30m+40



Below 1GHz Data:

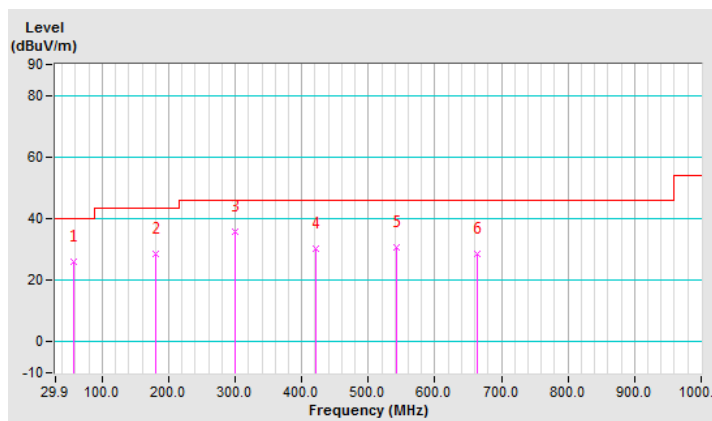
Charging Mode (Z-plane)

Channel	TX Channel 1	Detector Function	Quasi-Peak
Frequency Range	30 MHz ~ 1GHz		
Test Mode	A		

Antenna Polarity & Test Distance: Horizontal At 3m								
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	57.12	26.2 QP	40.0	-13.8	1.99 H	6	40.6	-14.4
2	179.61	28.6 QP	43.5	-14.9	1.50 H	90	43.6	-15.0
3	300.16	35.8 QP	46.0	-10.2	1.00 H	243	48.5	-12.7
4	420.70	30.2 QP	46.0	-15.8	1.99 H	215	41.0	-10.8
5	543.19	30.7 QP	46.0	-15.3	1.50 H	106	39.4	-8.7
6	663.74	28.5 QP	46.0	-17.5	1.00 H	128	35.0	-6.5

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value

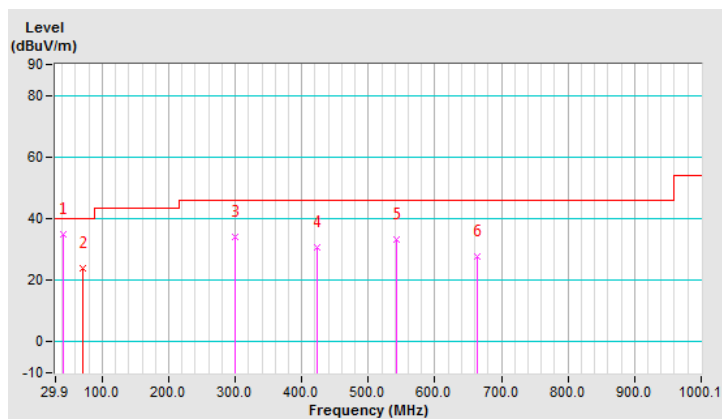


Channel	TX Channel 1	Detector Function	Quasi-Peak
Frequency Range	30 MHz ~ 1GHz		
Test Mode	A		

Antenna Polarity & Test Distance: Vertical At 3m								
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	41.57	34.9 QP	40.0	-5.1	1.50 V	260	49.5	-14.6
2	71.57	24.0 QP	40.0	-16.0	1.00 V	189	40.4	-16.4
3	300.16	33.9 QP	46.0	-12.1	1.99 V	131	46.6	-12.7
4	422.65	30.8 QP	46.0	-15.2	1.00 V	181	41.5	-10.7
5	543.19	33.2 QP	46.0	-12.8	1.50 V	17	41.9	-8.7
6	663.74	27.6 QP	46.0	-18.4	1.00 V	154	34.1	-6.5

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value



### Standby Mode (Z-plane)

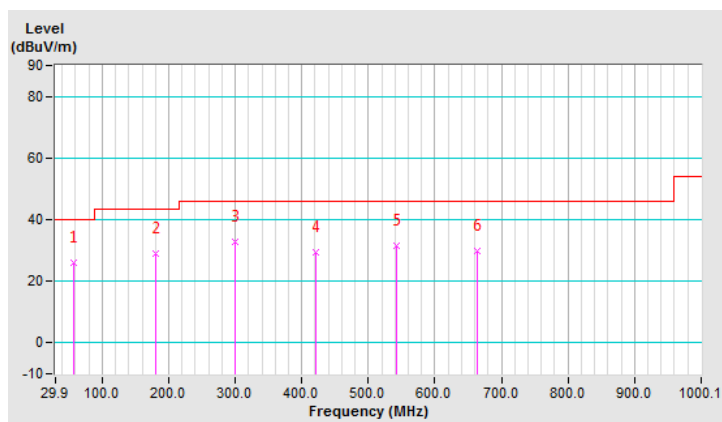
Channel	TX Channel 1	Detector Function	Quasi-Peak
Frequency Range	30 MHz ~ 1GHz		
Test Mode	B		

#### Antenna Polarity & Test Distance: Horizontal At 3m

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	57.12	26.0 QP	40.0	-14.0	1.99 H	156	40.4	-14.4
2	179.61	28.8 QP	43.5	-14.7	1.49 H	86	43.8	-15.0
3	300.16	32.9 QP	46.0	-13.1	1.00 H	235	45.6	-12.7
4	420.70	29.4 QP	46.0	-16.6	1.99 H	203	40.2	-10.8
5	543.19	31.6 QP	46.0	-14.4	1.49 H	111	40.3	-8.7
6	663.74	30.0 QP	46.0	-16.0	1.00 H	123	36.5	-6.5

#### Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value



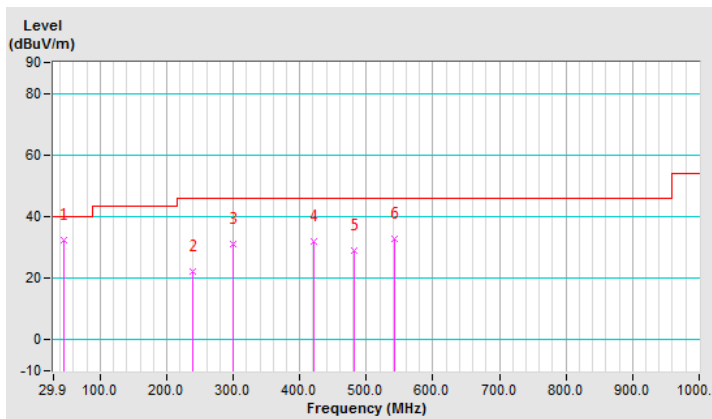


Channel	TX Channel 1	Detector Function	Quasi-Peak
Frequency Range	30 MHz ~ 1GHz		
Test Mode	B		

Antenna Polarity & Test Distance: Vertical At 3m								
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	45.45	32.3 QP	40.0	-7.7	1.00 V	272	46.7	-14.4
2	239.88	22.4 QP	46.0	-23.6	1.00 V	174	37.5	-15.1
3	300.16	31.1 QP	46.0	-14.9	1.50 V	125	43.8	-12.7
4	420.70	31.8 QP	46.0	-14.2	1.00 V	169	42.6	-10.8
5	480.97	29.1 QP	46.0	-16.9	1.50 V	180	38.8	-9.7
6	543.19	32.8 QP	46.0	-13.2	1.00 V	6	41.5	-8.7

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value



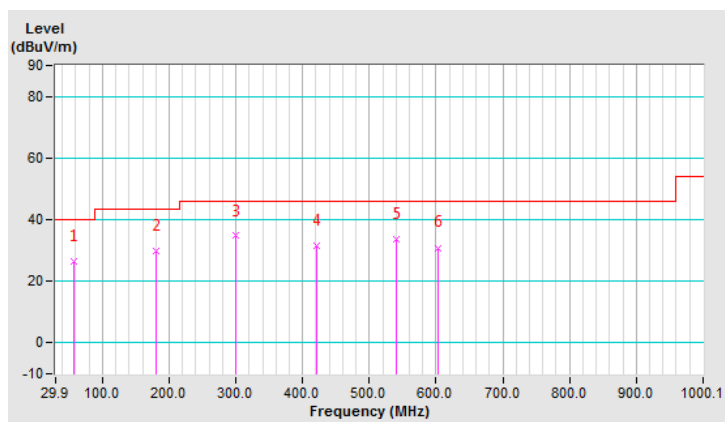
### Charging Mode (Y-plane)

Channel	TX Channel 1	Detector Function	Quasi-Peak
Frequency Range	30 MHz ~ 1GHz		
Test Mode	A		

Antenna Polarity & Test Distance: Horizontal At 3m								
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	57.12	26.3 QP	40.0	-13.7	2.00 H	246	40.7	-14.4
2	179.61	30.0 QP	43.5	-13.5	1.50 H	82	45.0	-15.0
3	300.16	34.7 QP	46.0	-11.3	1.01 H	250	47.4	-12.7
4	420.70	31.5 QP	46.0	-14.5	1.01 H	222	42.3	-10.8
5	541.25	33.8 QP	46.0	-12.2	1.50 H	186	42.6	-8.8
6	603.47	30.9 QP	46.0	-15.1	1.50 H	189	38.2	-7.3

#### Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value

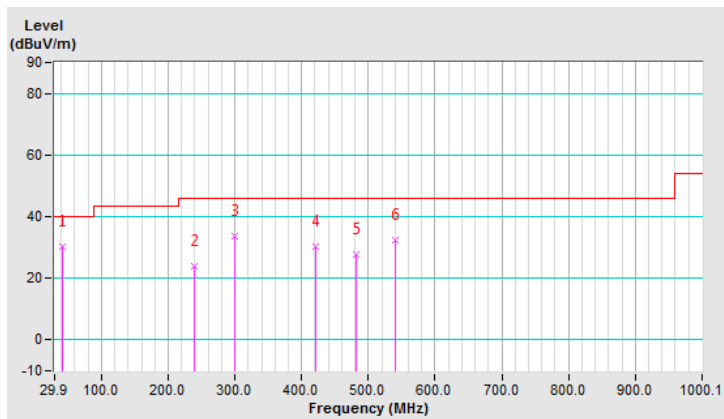


Channel	TX Channel 1	Detector Function	Quasi-Peak
Frequency Range	30 MHz ~ 1GHz		
Test Mode	A		

Antenna Polarity & Test Distance: Vertical At 3m								
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	41.57	30.2 QP	40.0	-9.8	1.50 V	8	44.8	-14.6
2	239.88	23.9 QP	46.0	-22.1	1.00 V	157	39.0	-15.1
3	300.16	33.8 QP	46.0	-12.2	1.50 V	121	46.5	-12.7
4	420.70	30.1 QP	46.0	-15.9	1.00 V	130	40.9	-10.8
5	480.97	27.6 QP	46.0	-18.4	1.99 V	167	37.3	-9.7
6	541.25	32.5 QP	46.0	-13.5	1.00 V	34	41.3	-8.8

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value



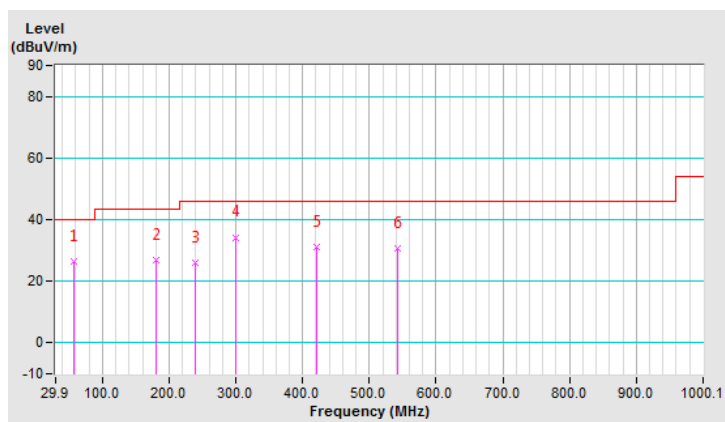
Standby Mode (Y-plane)

Channel	TX Channel 1	Detector Function	Quasi-Peak
Frequency Range	30 MHz ~ 1GHz		
Test Mode	B		

Antenna Polarity & Test Distance: Horizontal At 3m								
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	57.12	26.3 QP	40.0	-13.7	2.00 H	86	40.7	-14.4
2	179.61	26.8 QP	43.5	-16.7	1.50 H	88	41.8	-15.0
3	239.88	26.0 QP	46.0	-20.0	1.00 H	121	41.1	-15.1
4	300.16	34.3 QP	46.0	-11.7	1.00 H	242	47.0	-12.7
5	420.70	31.1 QP	46.0	-14.9	2.00 H	213	41.9	-10.8
6	543.19	30.7 QP	46.0	-15.3	1.50 H	202	39.4	-8.7

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value

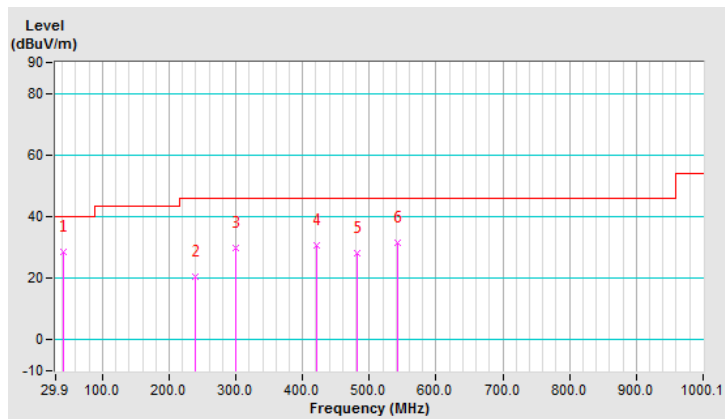


Channel	TX Channel 1	Detector Function	Quasi-Peak
Frequency Range	30 MHz ~ 1GHz		
Test Mode	B		

Antenna Polarity & Test Distance: Vertical At 3m								
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	41.57	28.7 QP	40.0	-11.3	1.00 V	24	43.3	-14.6
2	239.88	20.3 QP	46.0	-25.7	1.00 V	154	35.4	-15.1
3	300.16	30.0 QP	46.0	-16.0	1.99 V	133	42.7	-12.7
4	420.70	30.8 QP	46.0	-15.2	1.00 V	142	41.6	-10.8
5	480.97	28.1 QP	46.0	-17.9	1.99 V	181	37.8	-9.7
6	543.19	31.6 QP	46.0	-14.4	1.00 V	305	40.3	-8.7

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value



## 4.2 Conducted Emission Measurement

### 4.2.1 Limits of Conducted Emission Measurement

Frequency (MHz)	Conducted Limit (dBuV)	
	Quasi-peak	Average
0.15 - 0.5	66 - 56	56 - 46
0.50 - 5.0	56	46
5.0 - 30.0	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.

### 4.2.2 Test Instruments

Description & Manufacturer	Model No.	Serial No.	Cal. Date	Cal. Due
Test Receiver ROHDE & SCHWARZ	ESCI	100613	Nov. 23, 2017	Nov. 22, 2018
RF signal cable (with 10dB PAD) Woken	5D-FB	Cable-cond1-01	Sep. 05, 2017	Sep. 04, 2018
LISN ROHDE & SCHWARZ (EUT)	ESH3-Z5	835239/001	Mar. 06, 2018	Mar. 05, 2019
LISN ROHDE & SCHWARZ (Peripheral)	ESH3-Z5	100311	Aug. 15, 2017	Aug. 14, 2018
Software ADT	BV ADT_Cond_ V7.3.7.3	NA	NA	NA

Note: 1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.

2. The test was performed in HwaYa Shielded Room 1.

3. The VCCI Site Registration No. is C-2040.

#### 4.2.3 Test Procedures

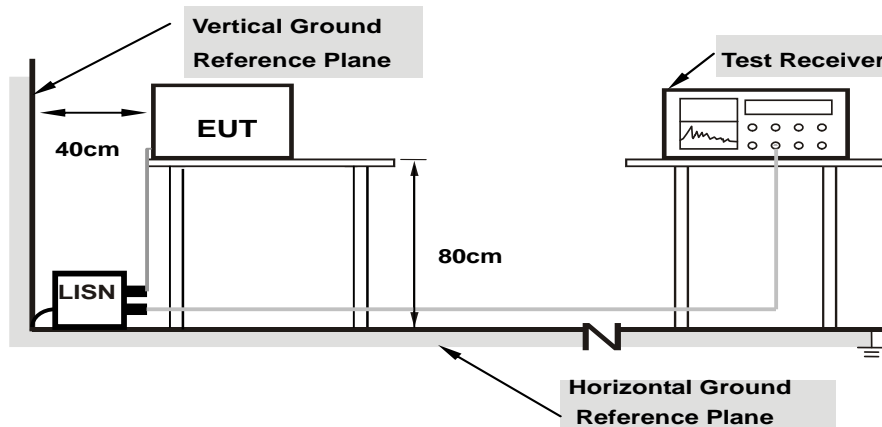
- The EUT was placed 0.4 meters from the conducting wall of the shielded room with EUT being connected to the power mains through a line impedance stabilization network (LISN). Other support units were connected to the power mains through another LISN. The two LISNs provide 50 ohm/ 50uH of coupling impedance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

Note: 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.

#### 4.2.4 Deviation from Test Standard

No deviation.

#### 4.2.5 Test Setup



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

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

#### 4.2.6 EUT Operating Conditions

Same as 4.1.6.

### 4.2.7 Test Results

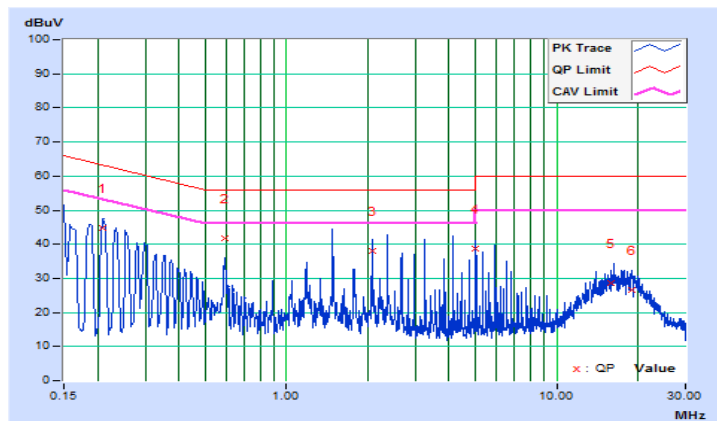
#### Charging Mode

Phase	Line (L)	Detector Function	Quasi-Peak (QP) / Average (AV)
Test Mode	A		

No	Freq. [MHz]	Corr. Factor (dB)	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
			1	0.20905	10.16	34.46	18.33	44.62	28.49	63.24
<b>2</b>	<b>0.59028</b>	<b>10.20</b>	<b>31.40</b>	<b>26.92</b>	<b>41.60</b>	<b>37.12</b>	<b>56.00</b>	<b>46.00</b>	<b>-14.40</b>	<b>-8.88</b>
3	2.06865	10.25	27.66	23.15	37.91	33.40	56.00	46.00	-18.09	-12.60
4	5.03000	10.40	28.36	24.10	38.76	34.50	60.00	50.00	-21.24	-15.50
5	15.84200	11.00	17.57	10.87	28.57	21.87	60.00	50.00	-31.43	-28.13
6	19.09800	11.20	15.27	8.55	26.47	19.75	60.00	50.00	-33.53	-30.25

#### Remarks:

1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. The emission levels of other frequencies were very low against the limit.
3. Margin value = Emission level - Limit value
4. Correction factor = Insertion loss + Cable loss
5. Emission Level = Correction Factor + Reading Value.



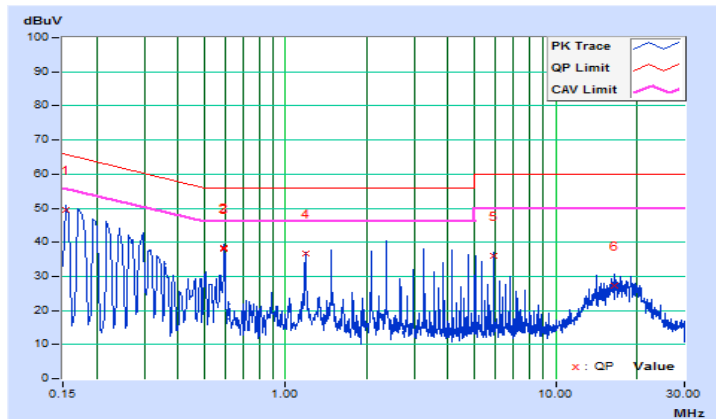


Phase	Neutral (N)	Detector Function	Quasi-Peak (QP) / Average (AV)
Test Mode	A		

No	Freq. [MHz]	Corr. Factor (dB)	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
			1	0.15400	10.15	39.22	25.29	49.37	35.44	65.78
2	0.59339	10.20	28.32	24.17	38.52	34.37	56.00	46.00	-17.48	-11.63
3	0.59400	10.20	27.75	23.60	37.95	33.80	56.00	46.00	-18.05	-12.20
4	1.18600	10.21	26.65	22.84	36.86	33.05	56.00	46.00	-19.14	-12.95
5	5.92200	10.42	25.54	22.74	35.96	33.16	60.00	50.00	-24.04	-16.84
6	16.43400	10.86	16.34	11.66	27.20	22.52	60.00	50.00	-32.80	-27.48

Remarks:

1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. The emission levels of other frequencies were very low against the limit.
3. Margin value = Emission level - Limit value
4. Correction factor = Insertion loss + Cable loss
5. Emission Level = Correction Factor + Reading Value.



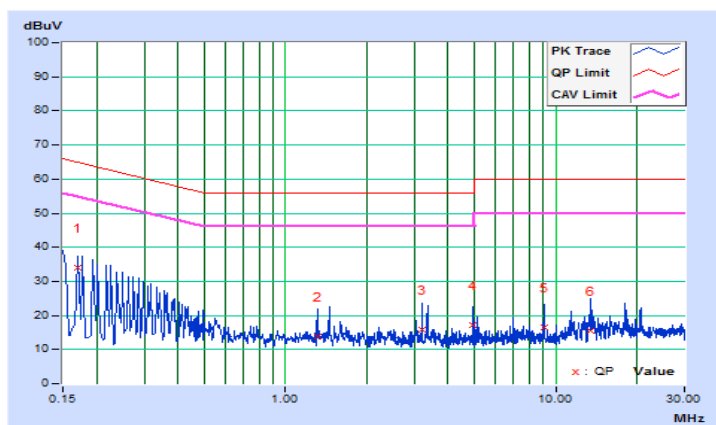
Standby Mode

Phase	Line (L)	Detector Function	Quasi-Peak (QP) / Average (AV)
Test Mode	B		

No	Freq. [MHz]	Corr. Factor (dB)	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
			1	0.17000	10.16	23.84	4.73	34.00	14.89	64.96
2	1.31000	10.19	3.48	1.33	13.67	11.52	56.00	46.00	-42.33	-34.48
3	3.21000	10.31	5.59	2.13	15.90	12.44	56.00	46.00	-40.10	-33.56
4	4.95800	10.39	6.83	2.39	17.22	12.78	56.00	46.00	-38.78	-33.22
5	9.04200	10.60	5.84	2.10	16.44	12.70	60.00	50.00	-43.56	-37.30
6	13.53800	10.86	4.54	1.49	15.40	12.35	60.00	50.00	-44.60	-37.65

Remarks:

1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. The emission levels of other frequencies were very low against the limit.
3. Margin value = Emission level - Limit value
4. Correction factor = Insertion loss + Cable loss
5. Emission Level = Correction Factor + Reading Value.

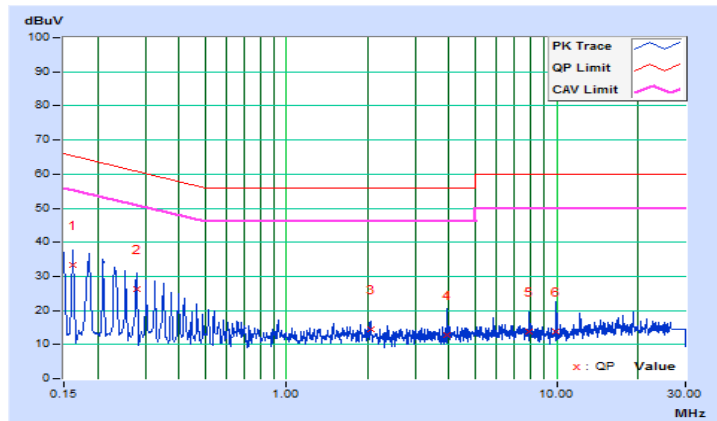


Phase	Neutral (N)	Detector Function	Quasi-Peak (QP) / Average (AV)
Test Mode	B		

No	Freq. [MHz]	Corr. Factor (dB)	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
			1	0.16190	10.15	23.06	3.47	33.21	13.62	65.37
2	0.27800	10.18	16.17	2.39	26.35	12.57	60.88	50.88	-34.53	-38.31
3	2.04200	10.23	4.13	2.57	14.36	12.80	56.00	46.00	-41.64	-33.20
4	3.94200	10.34	2.33	1.59	12.67	11.93	56.00	46.00	-43.33	-34.07
5	7.87800	10.49	3.22	1.19	13.71	11.68	60.00	50.00	-46.29	-38.32
6	9.91400	10.57	3.26	1.31	13.83	11.88	60.00	50.00	-46.17	-38.12

Remarks:

1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. The emission levels of other frequencies were very low against the limit.
3. Margin value = Emission level - Limit value
4. Correction factor = Insertion loss + Cable loss
5. Emission Level = Correction Factor + Reading Value.



## 5 Pictures of Test Arrangements

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

## Appendix – Information on the Testing Laboratories

We, Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch, were founded in 1988 to provide our best service in EMC, Radio, Telecom and Safety consultation. Our laboratories are FCC recognized accredited test firms and accredited and approved according to ISO/IEC 17025.

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The address and road map of all our labs can be found in our web site also.

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