EMC TEST REPORT

Applicant:	WIKO
Address:	1, rue Capitaine Dessemond 13007 - Marseille - France.

Manufacturer or Supplier	WIKO
Address	1, rue Capitaine Dessemond 13007 - Marseille - France.
Product	Smartphone
Brand Name	Wiko
Model Name	TOMMY2
FCC ID	2AM86V3931AC
Date of tests	Aug. 04, 2017 ~ Aug. 27, 2017

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

☒ **FCC Part 15, Subpart B, Class B**
☒ **ANSI C63.4:2014**

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

Issued by Simon Yang Engineer / Mobile Department	Approved by Bill Yao Manager / Mobile Department
Simon Date: Aug. 28, 2017	Bill Date: Aug. 28, 2017

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RELEASE CONTROL RECORD

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
FV170803W003	Original release	Aug. 28, 2017

1 GENERAL INFORMATION

1.1 GENERAL DESCRIPTION OF EUT

PRODUCT	Smartphone	
BRAND NAME	Wiko	
MODEL NAME	TOMMY2	
NOMINAL VOLTAGE	5.0Vdc (adapter or host equipment) 3.8Vdc (Li-ion, Polymer)	
BATTERY	Brand Name: Wiko Model Name: 4901 Power Rating: DC 3.8V, 2500mAh, Li-ion	
MODULATION TYPE	**WLAN**	CCK, DQPSK, DBPSK for DSSS 64QAM, 16QAM, QPSK, BPSK for OFDM
	BT_LE	DTS
	Bluetooth	GFSK, π/4-DQPSK, 8DPSK
	GPS/GLONASS	C/A code
	FM	FSK
	NFC	ASK
	GSM/EDGE	GMSK, 8PSK
	WCDMA	BPSK/QPSK
	LTE	QPSK/16QAM
OPERATING FREQUENCY	**WLAN**	2412 ~ 2462MHz for 11b/g/n(HT20) 2422 ~ 2452MHz for 11n(HT40)
	Bluetooth/BT_LE	2402MHz ~ 2480MHz
	GPS	1575.42MHz
	GLONASS	1602MHz
	FM	98MHz
	NFC	13.56MHz
	GSM/EDGE	824.2MHz ~ 848.8MHz (FOR GSM 850) 1850.2MHz ~ 1909.8MHz (FOR GSM 1900)
	WCDMA	1852.4MHz ~ 1907.6MHz (FOR WCDMA Band 2) 826.4MHz ~ 846.6MHz (FOR WCDMA Band 5)
	LTE	2500MHz ~ 2570MHz (FOR LTE Band7)

HW VERSION	V0.2
SW VERSION	TOMMY2-V02
I/O PORTS	Refer to user's manual
CABLE	USB cable: non-shielded, detachable, 1.0m Earphone cable: non-shielded, detachable, 1.2m
ACCESSORY DEVICES	Refer to note as below

NOTE:

1. For a more detailed features description, please refer to the manufacturer's specifications or the user's manual.
2. The EUT was powered by the following adapter:

ADAPTER	
BRAND:	N/A
MODEL:	TN-050100U1A
INPUT:	AC 100-240V, 150mA
OUTPUT:	DC 5V, 1000mA

3. The EUT matched the following USB cables and Earphone:

USB CABLE 1	
BRAND:	N/A
MODEL:	N/A
SIGNAL LINE:	1.0 METER

USB CABLE 2	
BRAND:	N/A
MODEL:	N/A
SIGNAL LINE:	1.0 METER

EARPHONE	
BRAND:	N/A
MODEL:	N/A
SIGNAL LINE:	1.2 METER

4. For the test results, the EUT had been tested with all conditions. But only the worst case was shown in test report.

1.2 SUMMARY OF TEST RESULTS

The EUT has been tested according to the following specifications:

APPLIED STANDARD: FCC Part 15, Subpart B			
Standard Section	**Test Item**	**Result**	**Remark**
FCC Part 15, Subpart B, Class B ANSI C63.4:2014	Conducted Test	PASS	Meets limits minimum passing margin is -11.71dB at 0.568000MHz.
	Radiated Emission Test (30MHz ~ 1GHz)	PASS	Meets Class B Limit Minimum passing margin is -0.59dB at 798.24MHz
	Radiated Emission Test (Above 1GHz)	PASS	Meets Class B Limit Minimum passing margin is -11.16dB at 3839MHz

1.3 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:

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

MEASUREMENT	FREQUENCY	UNCERTAINTY
Conducted emissions	150kHz ~ 30MHz	+/-2.66dB
Radiated emissions	30MHz ~ 1GHz	+/-3.26dB
	1GHz ~ 18GHz	+/-4.48dB

1.4 DESCRIPTION OF TEST MODES

For Conducted Emission evaluation, 240Vac/60Hz & 120/60Hz had been covered during the pre-test. The worst data was found at **120Vac/60Hz** and recorded in the applied test report.

Test Mode	Test Condition
Radiated emission test	
1	GSM850 Idle+ Adapter+ Earphone+ USB cable1+ BT Idle+ WIFI Idle(2.4G)+ GLONASS Rx
2	GSM1900 Idle+ Adapter+ Earphone+ USB cable2+ BT Idle+ WIFI Idle(2.4G)+ GPS Rx+ FM Rx
3	WCDMA850 Idle+ Adapter+ Earphone+ USB cable1+ BT Idle+ WIFI Idle(2.4G)+ GLONASS Rx+ Front camera on+ NFC Idle
4	WCDMA1900 Idle+ USB Link+ Earphone+ USB cable2+ BT Idle+ WIFI Idle(2.4G)+ GPS Rx+ MPEG4
5	LTE B7 Idle+ Adapter+ USB Link+ USB cable1+ BT Idle+ WIFI Idle(2.4G)+ GLONASS Rx+ Back camera on
Conducted emission test	
1	GSM850 Idle+ Adapter+ Earphone+ USB cable1+ BT Idle+ WIFI Idle(2.4G)+ GLONASS Rx
2	GSM1900 Idle+ Adapter+ Earphone+ USB cable2+ BT Idle+ WIFI Idle(2.4G)+ GPS Rx+ FM Rx
3	WCDMA850 Idle+ Adapter+ Earphone+ USB cable1+ BT Idle+ WIFI Idle(2.4G)+ GLONASS Rx+ Front camera on+ NFC Idle
4	WCDMA1900 Idle+ USB Link+ Earphone+ USB cable2+ BT Idle+ WIFI Idle(2.4G)+ GPS Rx+ MPEG4
5	LTE B7 Idle+ USB Link+ Earphone+ USB cable1+ BT Idle+ WIFI Idle(2.4G)+ GLONASS Rx+ Back camera on

NOTE:

1. For conducted emission test, test mode 1 was the worst case and only this mode was presented in this report.
2. For radiated emission test, test mode 4 was the worst case and only this mode was presented in this report

1.5 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.

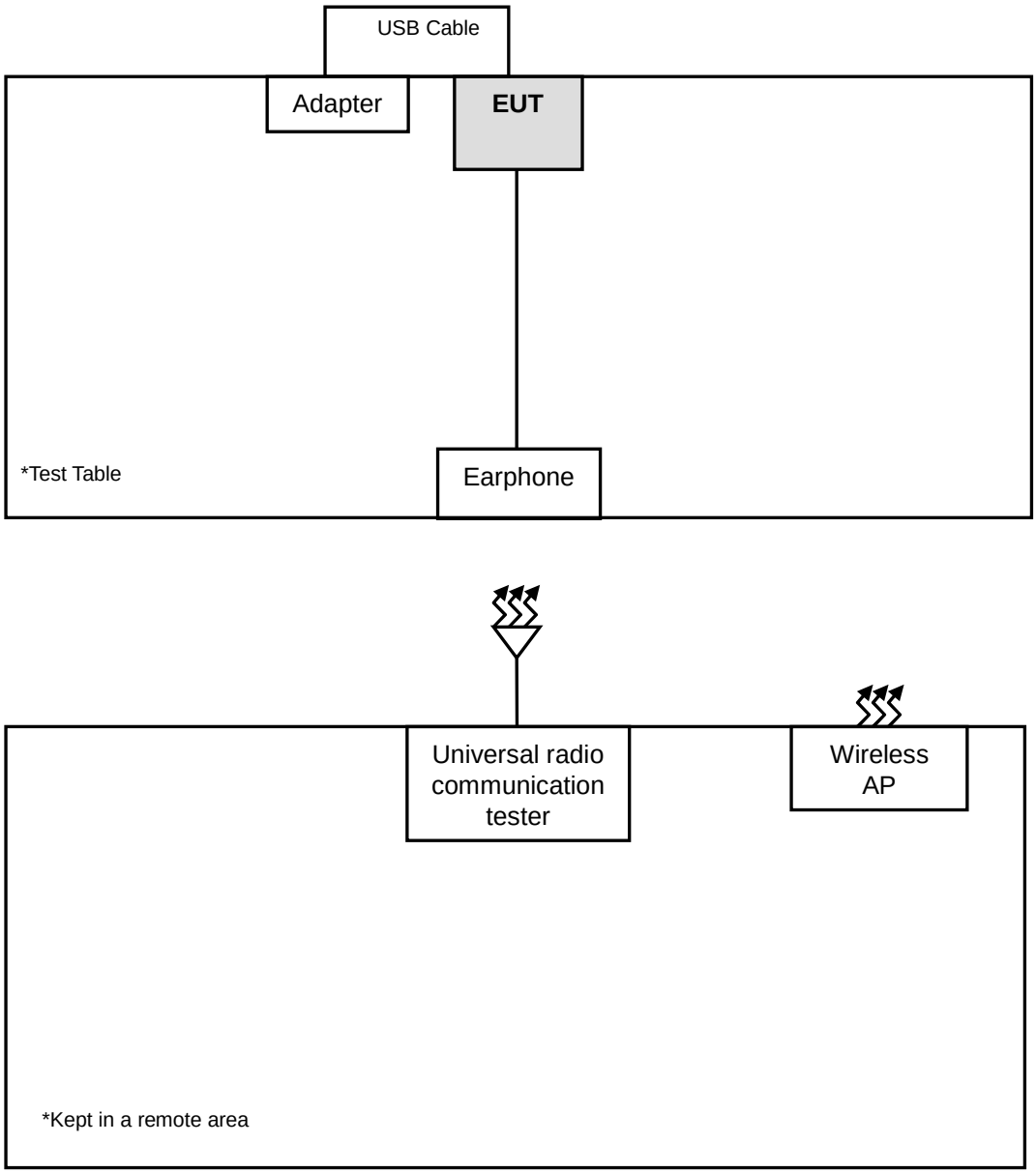
FOR EMISSION TESTS

NO.	PRODUCT	BRAND	MODEL NO.	SERIAL NO.	FCC ID
1	Universal Radio Communication Tester	R&S	N/A	N/A	N/A
2	Wireless AP	ABOCOM	WR224GR	060500749P	D43064

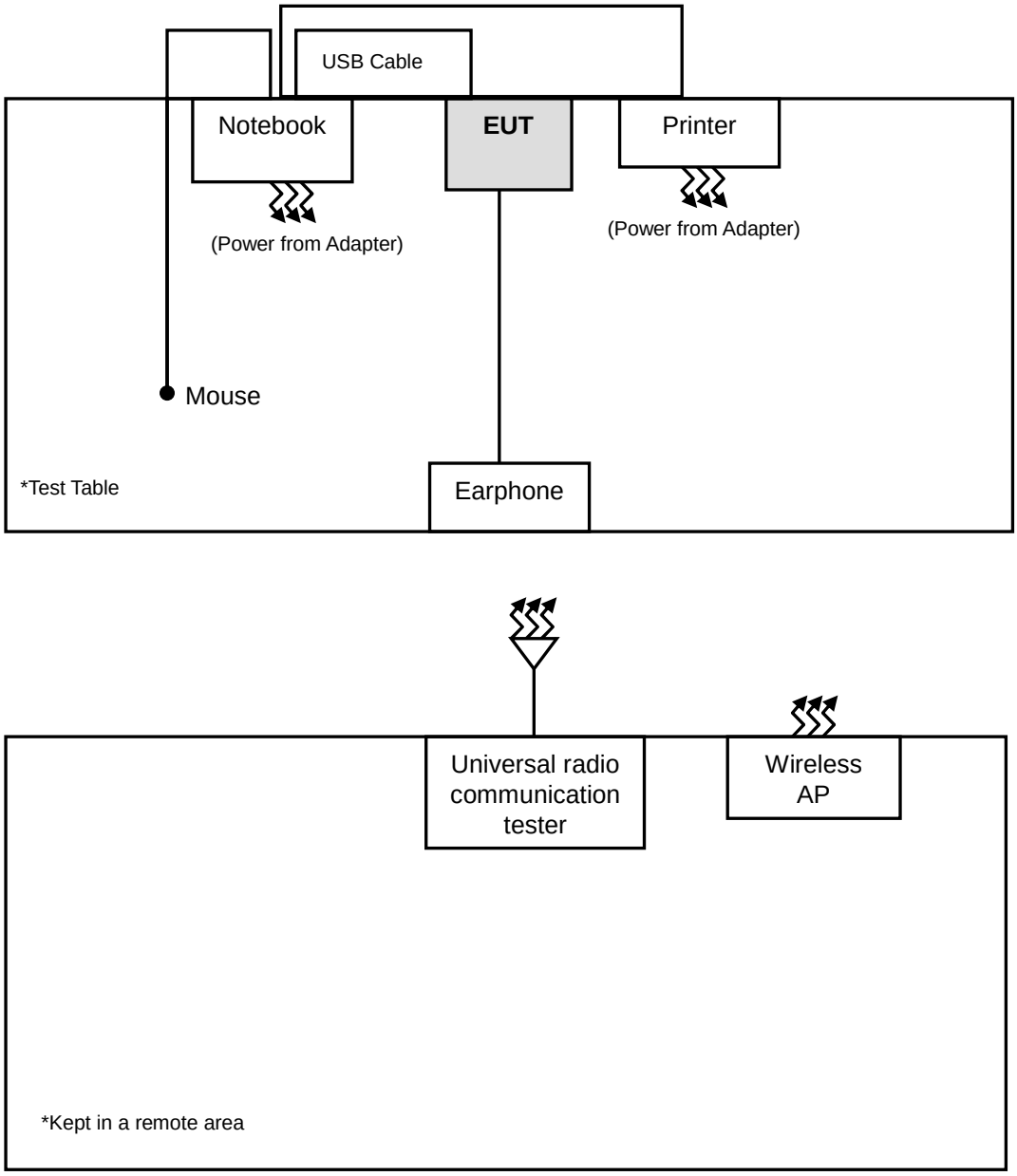
NO.	SIGNAL CABLE DESCRIPTION OF THE ABOVE SUPPORT UNITS
1	N/A
2	N/A

1.6 CONFIGURATION OF SYSTEM UNDER TEST

Test configuration 1



Test configuration 2



2 EMISSION TEST

2.1 CONDUCTED EMISSION MEASUREMENT

2.1.1 LIMITS OF CONDUCTED EMISSION MEASUREMENT

TEST STANDARD: FCC Part 15, Subpart B (Section: 15.107)

FREQUENCY OF EMISSION (MHz)	CONDUCTED LIMIT (dBμV)	
	Quasi-peak	Average
0.15 ~ 0.5	66 to 56	56 to 46
0.5 ~ 5	56	46
5 ~ 30	60	50

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.

3. All emanations from a class A/B digital device or system, including any network of conductors and apparatus connected thereto, shall not exceed the level of field strengths specified above.

2.1.2 TEST INSTRUMENTS

Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
EMI Test Receiver	Rohde&Schwarz	ESR3	101900	Jun. 28,17	Jun. 27,18
EMC32 test software	Rohde&Schwarz	EMC32	NA	NA	NA
LISN network	Rohde&Schwarz	ENV216	101922	Sep. 21, 16	Sep. 20, 17

NOTE: 1. The test was performed in CE shielded room

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.

2.1.3 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.

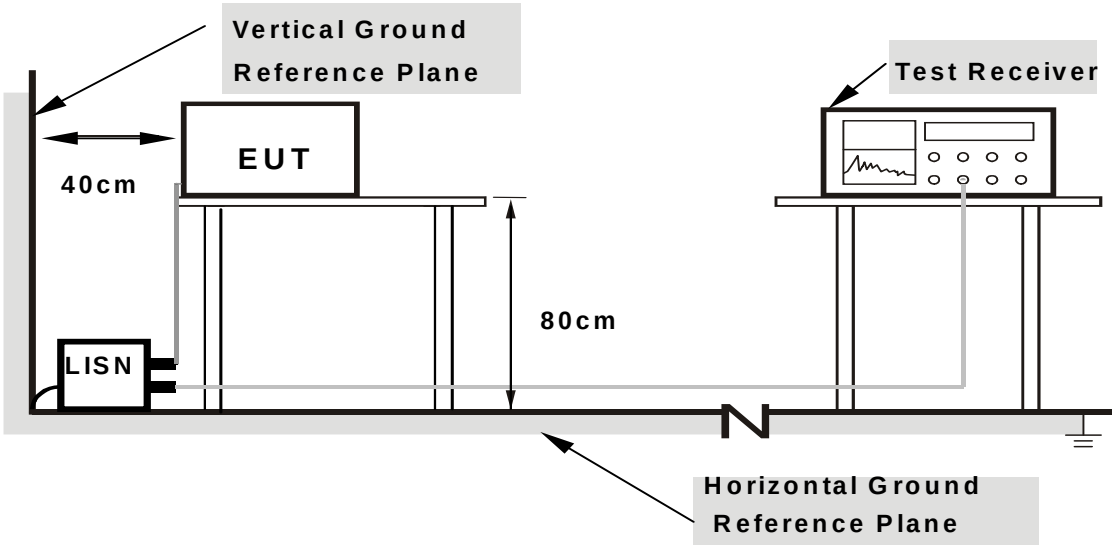
c. The frequency range from 150 kHz to 30MHz was searched. Emission levels under (Limit - 20dB) were not recorded.

NOTE: All modes of operation were investigated and the worst-case emissions are reported.

2.1.4 DEVIATION FROM TEST STANDARD

No deviation.

2.1.5 TEST SETUP



Note: 1.Support units were connected to second LISN.
2.Both of LISNs (AMN) are 80 cm from EUT and at least 80 from other units and other metal planes

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

2.1.6 EUT OPERATING CONDITIONS

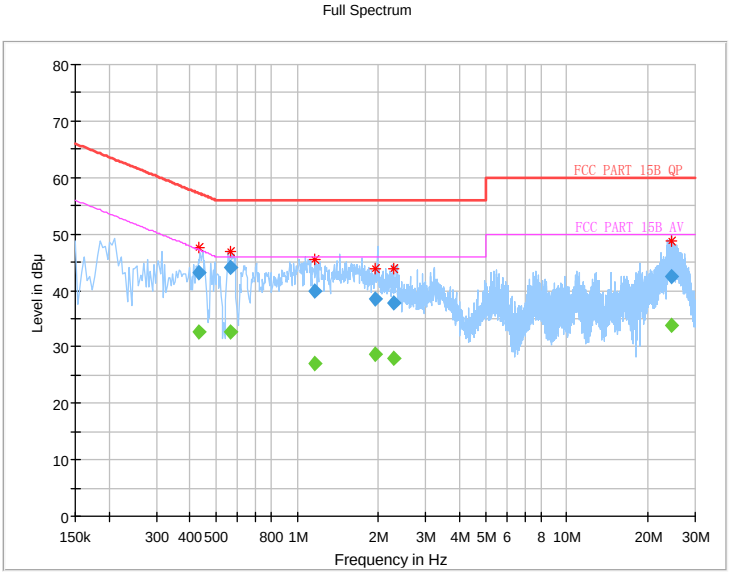
a. Turned on the power and connected of all equipment.
b. EUT was operated according to the use type described in the manufacturer's specifications or the user's manual.

2.1.7 TEST RESULTS

TEST VOLTAGE	DC 5.0V From Adapter Input 120 Vac, 60 Hz	**Detector Function & Resolution Bandwidth**	Quasi-Peak (QP) / Average (AV), 9 kHz
ENVIRONMENTAL CONDITIONS	23deg. C, 52RH	**TESTED BY**	Jocan Guo

Frequency (MHz)	QuasiPeak (dB¦ÌV)	CAverage (dB¦ÌV)	Limit (dB¦ÌV)	Margin (dB)	Line	Filter	Corr. (dB)
0.432000	---	32.69	47.21	-14.52	L1	ON	9.7
0.432000	43.08	---	57.21	-14.13	L1	ON	9.7
0.568000	---	32.64	46.00	-13.36	L1	ON	9.7
0.568000	43.97	---	56.00	-12.03	L1	ON	9.7
1.164000	---	27.07	46.00	-18.93	L1	ON	9.7
1.164000	39.81	---	56.00	-16.19	L1	ON	9.7
1.952000	---	28.75	46.00	-17.25	L1	ON	9.7
1.952000	38.38	---	56.00	-17.62	L1	ON	9.7
2.292000	---	28.10	46.00	-17.90	L1	ON	9.7
2.292000	37.67	---	56.00	-18.33	L1	ON	9.7
24.500000	---	33.85	50.00	-16.15	L1	ON	10.0
24.500000	42.34	---	60.00	-17.66	L1	ON	10.0

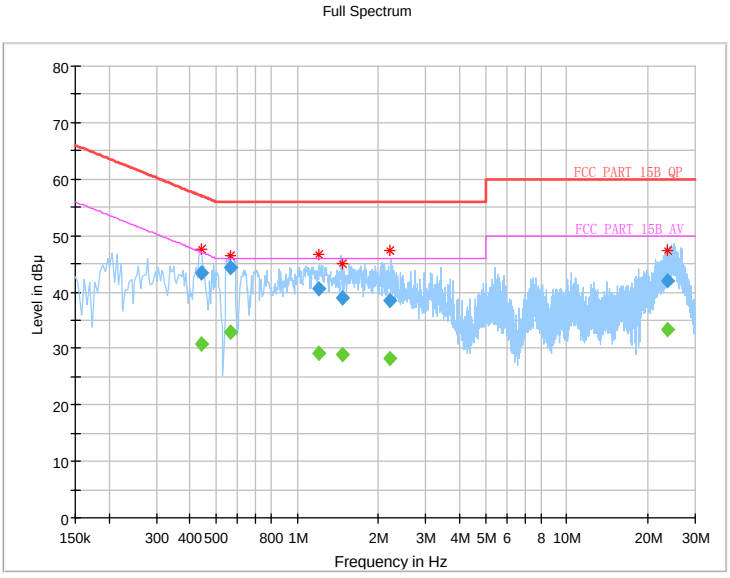
REMARKS: 1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
3. The emission levels of other frequencies were very low against the limit.
4. Margin value = Emission level - Limit value
5. Correction factor = Insertion loss + Cable loss
6. Emission Level = Correction Factor + Reading Value.



TEST VOLTAGE	DC 5.0V From Adapter Input 120 Vac, 60 Hz	Detector Function & Resolution Bandwidth	Quasi-Peak (QP) / Average (AV), 9 kHz
ENVIRONMENTAL CONDITIONS	23deg. C, 52RH	TESTED BY	Jocan Guo

Frequency (MHz)	QuasiPeak (dBuV)	CAverage (dBuV)	Limit (dBuV)	Margin (dB)	Line	Filter	Corr. (dB)
0.444000	---	30.85	46.99	-16.14	N	ON	10.1
0.444000	43.30	---	56.99	-13.69	N	ON	10.1
0.568000	---	32.99	46.00	-13.01	N	ON	10.1
0.568000	**44.29**	**---**	**56.00**	**-11.71**	**N**	**ON**	**10.1**
1.204000	---	29.25	46.00	-16.75	N	ON	9.9
1.204000	40.60	---	56.00	-15.40	N	ON	9.9
1.468000	---	28.99	46.00	-17.01	N	ON	9.9
1.468000	38.99	---	56.00	-17.01	N	ON	9.9
2.196000	---	28.32	46.00	-17.68	N	ON	9.8
2.196000	38.45	---	56.00	-17.55	N	ON	9.8
23.760000	---	33.35	50.00	-16.65	N	ON	10.1
23.760000	41.89	---	60.00	-18.11	N	ON	10.1

REMARKS: 1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
3. The emission levels of other frequencies were very low against the limit.
4. Margin value = Emission level - Limit value
5. Correction factor = Insertion loss + Cable loss
6. Emission Level = Correction Factor + Reading Value.



2.2 RADIATED EMISSION MEASUREMENT

2.2.1 LIMITS OF RADIATED EMISSION MEASUREMENT

TEST STANDARD: FCC Part 15, Subpart B (Section: 15.109)

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

Radiated Emissions Limits at 10 meters (dBμV/m)				
Frequencies (MHz)	**FCC 15B/ ICES-003, Class A**	**FCC 15B / ICES-003, Class B**	**CISPR 22, Class A**	**CISPR 22, Class B**
30-88	39	29.5	40	30
88-216	43.5	33.1		
216-230	46.4	35.6		
230-960			47	37
960-1000	49.5	43.5		
1000-3000	Avg: 49.5 Peak: 69.5	Avg: 43.5 Peak: 63.5	Not defined	Not defined
3000+			Not defined	Not defined

Radiated Emissions Limits at 3 meters (dBμV/m)				
Frequencies (MHz)	**FCC 15B / ICES-003, Class A**	**FCC 15B / ICES-003, Class B**	**CISPR 22, Class A**	**CISPR 22, Class B**
30-88	49.5	40	50.5	40.5
88-216	54	43.5		
216-230	56.9	46		
230-960			57.5	47.5
960-1000	60	54		
1000-3000	Avg: 60 Peak: 80	Avg: 54 Peak: 74	Avg: 56 Peak: 76	Avg: 50 Peak: 70
3000+			Avg: 60 Peak: 80	Avg: 54 Peak: 74

Frequency Range (For unintentional radiators)

Highest frequency generated or used in the device or on which the device operates or tunes (MHz)	Upper frequency of measurement range (MHz)
Below 1.705	30
1.705-108	1000
108-500	2000
500-1000	5000
Above 1000	5^{th} harmonic of the highest frequency or 40GHz, whichever is lower

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. QP detector shall be applied if not specified.

2.2.2 TEST INSTRUMENTS

Frequency range below1GHz

Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
3m Semi-anechoic Chamber	ETS-LINDGREN	9m*6m*6m	Euroshieldpn-CT0001143-1216	May 06,17	May 05,18
Bilog Antenna	ETS-LINDGREN	3143B	00161965	Nov. 26,16	Nov. 25,18
MXE EMI Receiver	KEYSIGHT	N9038A-544	MY54450026	Mar. 10,17	Mar. 09,18
Signal Pre-Amplifier	EMSI	EMC 9135	980249	Jul. 24,17	Jul. 23,18

Frequency range above 1GHz

Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
3m Semi-anechoic Chamber	ETS-LINDGREN	9m*6m*6m	Euroshieldpn-CT0001143-1216	May 06,17	May 05,18
Horn Antenna	ETS-LINDGREN	3117	00168728	Nov. 26,16	Nov. 25,18
MXE EMI Receiver	KEYSIGHT	N9038A-544	MY54450026	Mar. 10,17	Mar. 09,18
Signal Pre-Amplifier	EMSI	EMC 012645B	980257	Jul. 24,17	Jul. 23,18

NOTE: 1. The test was performed in 3m chamber.

2. The calibration interval of the above test instruments is 12 months or 24 months and the calibrations are traceable to CEPREI/CHINA, GRGT/CHINA and NIM/CHINA.

3. The FCC Site Registration No. is 525120.

2.2.3 TEST PROCEDURE

<Frequency Range below 1GHz>

The basic test procedure was in accordance with ANSI C63.4:2014 (section 12).

a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter 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 1 meter to 4 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 1GHz.

NOTE:

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) (if the raw value not contains the amplifier);
4. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB) – Amplifier Gain(dB) (if the raw value contains the amplifier).
5. Margin value = Emission level – Limit value.

<Frequency Range above 1GHz>

a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter fully-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. The bore sight should be used during the test above 1GHz.

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 and average detect function and specified bandwidth with maximum hold mode when the test frequency is above 1 GHz

NOTE:

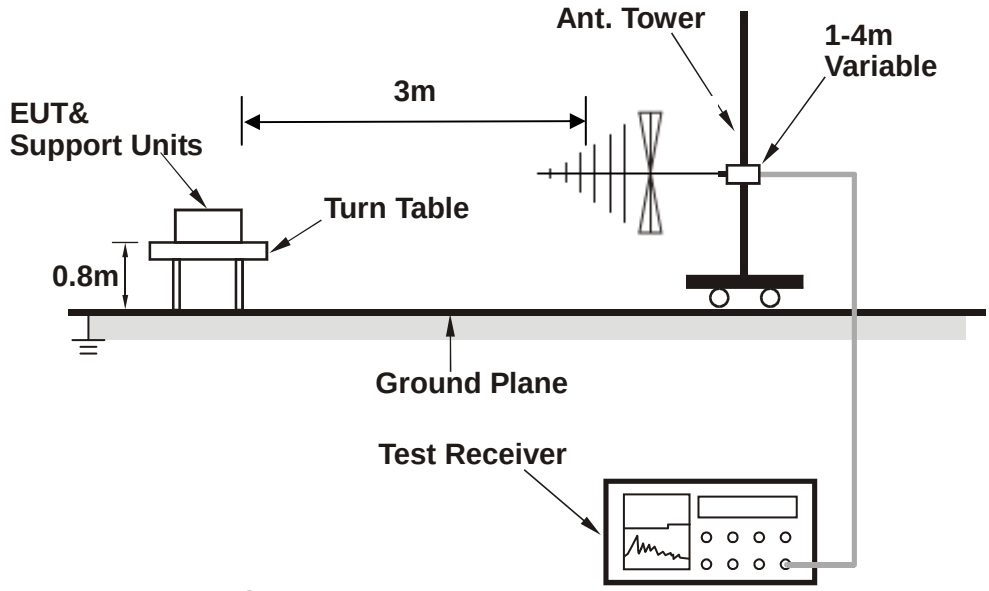
1. The resolution bandwidth of test receiver/spectrum analyzer is 120kHz for Quasi-peak detection (QP) at frequency below 1GHz.
2. The resolution bandwidth is 1MHz and video bandwidth of test receiver/spectrum analyzer is 3MHz for Peak detection at frequency above 1GHz. The resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and video bandwidth of test receiver/spectrum analyzer is 10Hz for Average detection (AV) at frequency above 1GHz.
3. For measurement of frequency above 1000 MHz, the EUT was set 3 meters away from the receiver antenna.
4. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB/m)
5. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB) (if the raw value not contains the amplifier);
6. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB) – Amplifier Gain(dB) (if the raw value contains the amplifier)
7. Margin value = Emission level – Limit value.

2.2.4 DEVIATION FROM TEST STANDARD

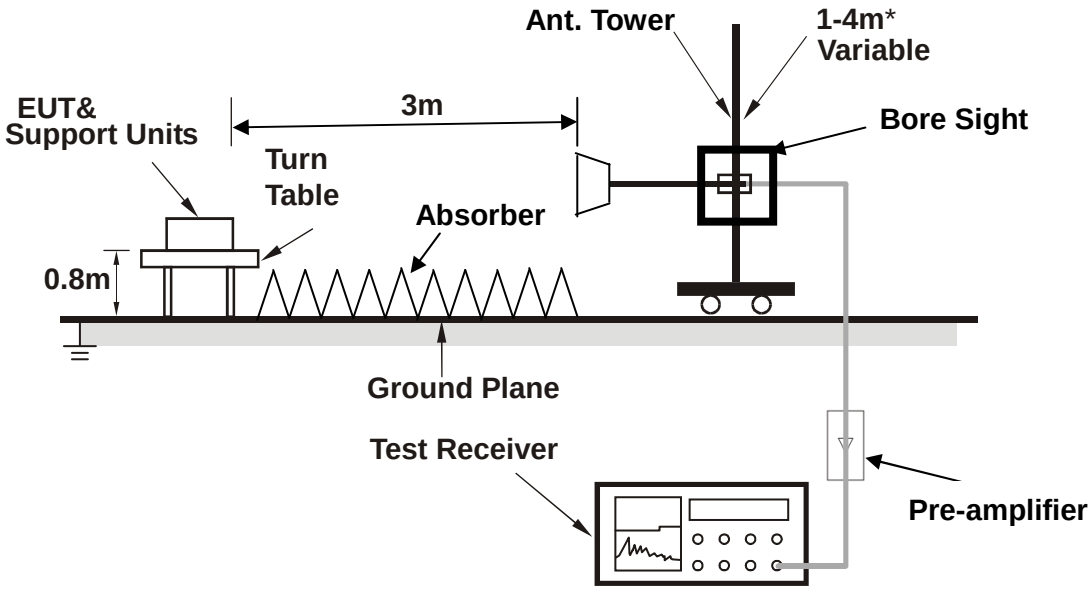
No deviation.

2.2.5 TEST SETUP

<Frequency Range below 1GHz>



<Frequency Range above 1GHz>



***** : depends on the EUT height and the antenna 3dB beamwidth both, refer to section 7.3 of CISPR 16-2-3.

2.2.6 EUT OPERATING CONDITIONS

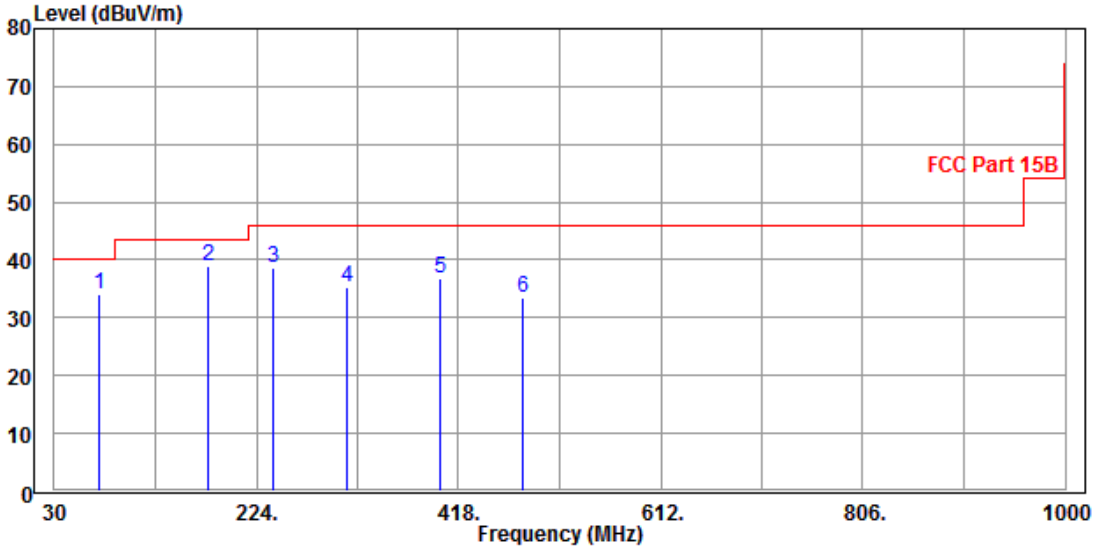
Same as item 2.1.6.

2.2.7 TEST RESULTS

TEST VOLTAGE	DC 5.0V From Adapter Input 120 Vac, 60 Hz	FREQUENCY RANGE	30-1000 MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70 %RH	DETECTOR FUNCTION & RESOLUTION BANDWIDTH	Quasi-Peak, 120 kHz
TESTED BY	Simon Yang		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
73.65	34.1	63.21	40	-5.9	6.79	1.32	37.22	100	36	QP
177.44	39.07	63.79	43.5	-4.43	9.94	2.04	36.7	100	255	QP
240.49	38.58	60.74	46	-7.42	11.96	2.4	36.52	100	168	QP
311.3	35.4	55.68	46	-10.6	13.47	2.77	36.52	100	98	QP
399.57	36.71	53.1	46	-9.29	17.18	3.15	36.72	100	113	QP
480.08	33.32	48.67	46	-12.68	18.16	3.4	36.91	100	287	QP

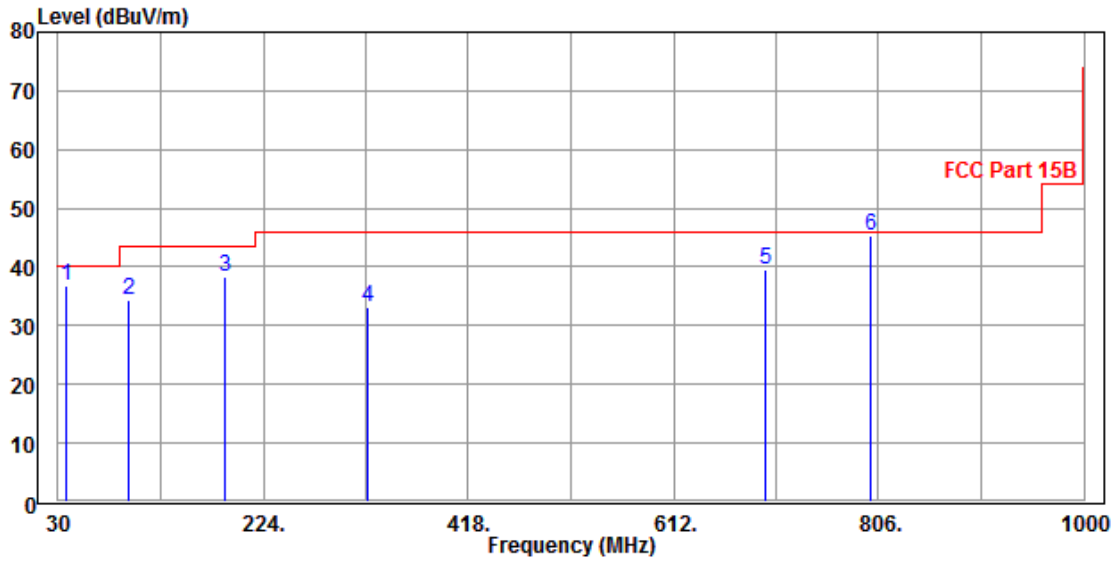
REMARKS:
1. Peak detector quick scan is showed on the graph and final quasi-peak detector data is measured corresponding to relevant limit and recorded in the data table.
2. Negative sign (-) in the margin column signify levels below the limit.
3. Frequency range scanned: 30MHz to 1000MHz.
4. Only emissions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



TEST VOLTAGE	DC 5.0V From Adapter Input 120 Vac, 60 Hz	**FREQUENCY RANGE**	30-1000 MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70 %RH	**DETECTOR FUNCTION & RESOLUTION BANDWIDTH**	Quasi-Peak, 120 kHz
TESTED BY	Simon Yang		

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	**EMISSION LEVEL (dBuV/m)**	**READ LEVEL (dBuV)**	**LIMIT (dBuV/m)**	**MARGIN (dB)**	**ANTENNA FACTOR (dB /m)**	**CABLE LOSS (dB)**	**PREAMP FACTOR (dB)**	**ANTENNA HEIGHT (cm)**	**TABLE ANGLE (Degree)**	**REMARK**
37.76	36.77	61.61	40	-3.23	11.75	0.91	37.5	100	55	QP
95.96	34.35	62.29	43.5	-9.15	7.56	1.51	37.01	100	126	QP
187.14	38.32	62.89	43.5	-5.18	9.97	2.1	36.64	100	68	QP
322.94	33.3	53.07	46	-12.7	13.96	2.82	36.55	100	263	QP
698.33	39.65	49.68	46	-6.35	23.05	4.28	37.36	100	189	QP
798.24	**45.41**	**55.36**	**46**	**-0.59**	**23**	**4.67**	**37.62**	**160**	**18**	**QP**

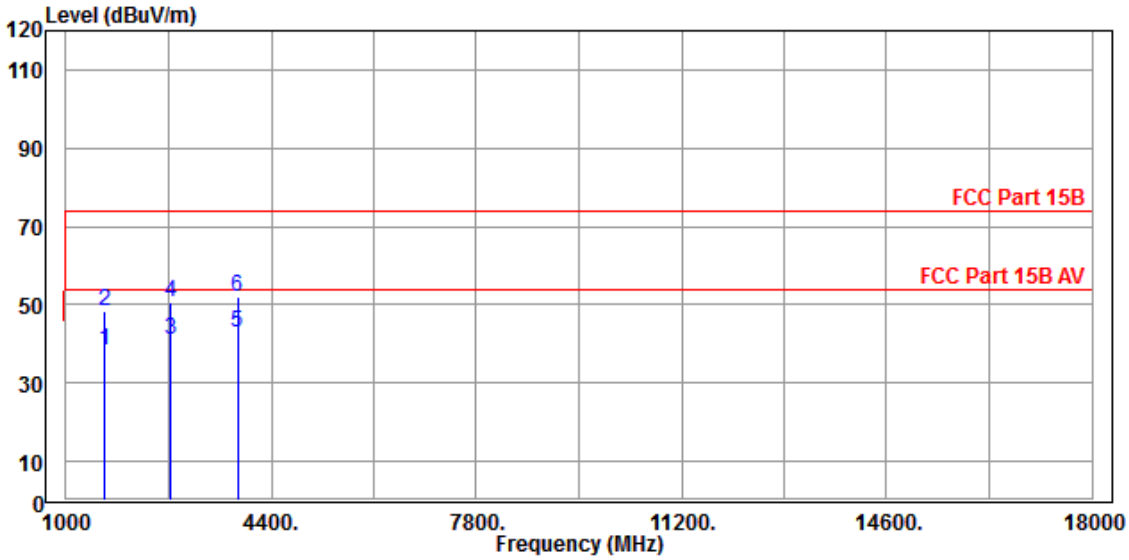
REMARKS:
1. Peak detector quick scan is showed on the graph and final quasi-peak detector data is measured corresponding to relevant limit and recorded in the data table.
2. Negative sign (-) in the margin column signify levels below the limit.
3. Frequency range scanned: 30MHz to 1000MHz.
4. Only emissions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



TEST VOLTAGE	DC 5.0V From Adapter Input 120 Vac, 60 Hz	FREQUENCY RANGE	1-18 GHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70 %RH	DETECTOR FUNCTION & RESOLUTION BANDWIDTH	Peak/Average, 1 MHz
TESTED BY	Simon Yang		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
1646	38.51	48.35	54	-15.49	29.63	6.65	46.12	100	55	Average
1646	48.18	58.02	74	-25.82	29.63	6.65	46.12	100	55	Peak
2734	41.19	45.67	54	-12.81	32.63	8.75	45.86	100	263	Average
2734	50.72	55.2	74	-23.28	32.63	8.75	45.86	100	263	Peak
3839	**42.84**	**44.65**	**54**	**-11.16**	**33.54**	**10.53**	**45.88**	**100**	**118**	**Average**
3839	51.8	53.61	74	-22.2	33.54	10.53	45.88	100	118	Peak

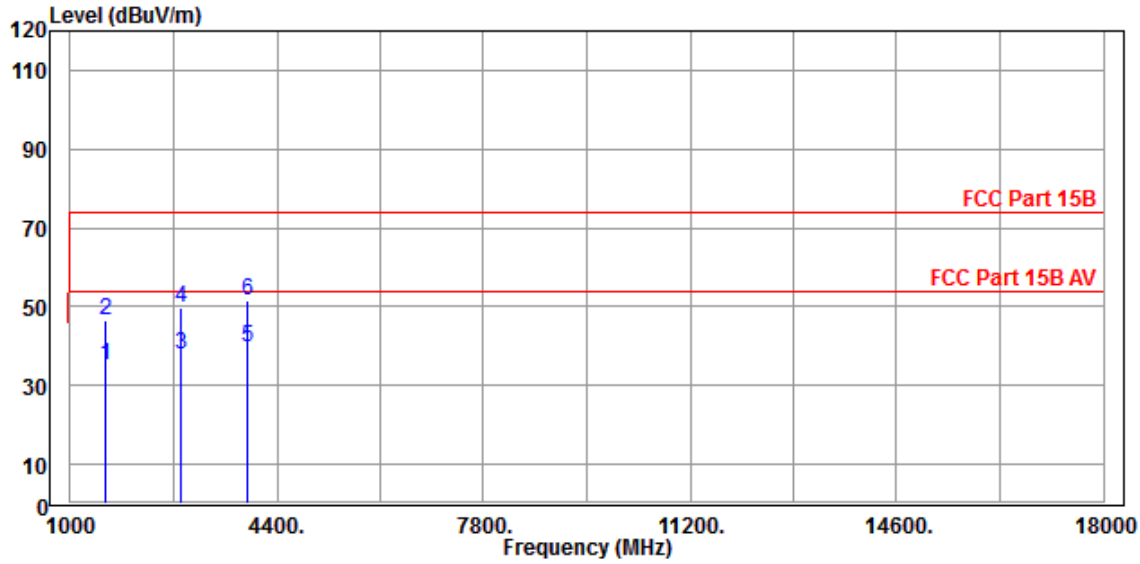
REMARKS:
1. Peak detector quick scan is showed on the graph and final quasi-peak detector data is measured corresponding to relevant limit and recorded in the data table.
2. Negative sign (-) in the margin column signify levels below the limit.
3. Frequency range scanned: 1GHz to 18GHz.
4. Only emissions significantly above equipment noise floor are reported.



TEST VOLTAGE	DC 5.0V From Adapter Input 120 Vac, 60 Hz	**FREQUENCY RANGE**	1-18 GHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70 %RH	**DETECTOR FUNCTION & RESOLUTION BANDWIDTH**	Peak/Average, 1 MHz
TESTED BY	Simon Yang		

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	**EMISSION LEVEL (dBuV/m)**	**READ LEVEL (dBuV)**	**LIMIT (dBuV/m)**	**MARGIN (dB)**	**ANTENNA FACTOR (dB /m)**	**CABLE LOSS (dB)**	**PREAMP FACTOR (dB)**	**ANTENNA HEIGHT (cm)**	**TABLE ANGLE (Degree)**	**REMARK**
1578	35.21	45.65	54	-18.79	29.2	6.5	46.14	100	105	Average
1578	46.76	57.2	74	-27.24	29.2	6.5	46.14	100	105	Peak
2819	38.1	42.33	54	-15.9	32.72	8.9	45.85	100	266	Average
2819	49.8	54.03	74	-24.2	32.72	8.9	45.85	100	266	Peak
3924	39.72	41.26	54	-14.28	33.68	10.68	45.9	100	96	Average
3924	51.49	53.03	74	-22.51	33.68	10.68	45.9	100	96	Peak

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: 1GHz to 18GHz.
4. Only emissions significantly above equipment noise floor are reported.



3 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---