

# TEST REPORT

**Product Name** : Mobile Phone  
**Brand Mark** : TECNO  
**Model No.** : B1f  
**FCC ID** : 2ADYY-B1F  
**Report Number** : BLA-EMC-202006-A52-04  
**Date of Sample Receipt** : 2020/6/18  
**Date of Test** : 2020/6/18 to 2020/7/7  
**Date of Issue** : 2020/7/8  
**Test Standard** : 47 CFR Part 15, Subpart C 15.247  
**Test Result** : Pass

Prepared for:

**TECNO MOBILE LIMITED**

**ROOM 604 6/F SOUTH TOWER WORLD FINANCE CTR HARBOUR CITY 17 CANTON  
ROAD TST KL**

Prepared by:

**BlueAsia of Technical Services(Shenzhen) Co.,Ltd.**

**IOT Test Centre of BlueAsia**

**No. 448 Bulong Road, Bantian Street, Longgang District, Shenzhen,China**

**TEL: +86-755-28682673**

**FAX: +86-755-28682673**

Compiled by:

*Jason*

Approved by:

*Imen li*

Review by:

*Sweet. Liang*

Date: 2020/7/8



**REPORT REVISE RECORD**

<b>Version No.</b>	<b>Date</b>	<b>Description</b>
00	2020/7/8	Original

BlueAsia

## TABLE OF CONTENTS

<b>1</b>	<b>TEST SUMMARY .....</b>	<b>6</b>
<b>2</b>	<b>GENERAL INFORMATION .....</b>	<b>7</b>
<b>3</b>	<b>GENERAL DESCRIPTION OF E.U.T. ....</b>	<b>7</b>
<b>4</b>	<b>TEST ENVIRONMENT .....</b>	<b>8</b>
<b>5</b>	<b>TEST MODE .....</b>	<b>8</b>
<b>6</b>	<b>MEASUREMENT UNCERTAINTY .....</b>	<b>8</b>
<b>7</b>	<b>DESCRIPTION OF SUPPORT UNIT.....</b>	<b>9</b>
<b>8</b>	<b>LABORATORY LOCATION.....</b>	<b>9</b>
<b>9</b>	<b>TEST INSTRUMENTS LIST .....</b>	<b>10</b>
	<b>ANTENNA REQUIREMENT.....</b>	<b>13</b>
	CONCLUSION.....	13
	<b>CONDUCTED PEAK OUTPUT POWER .....</b>	<b>14</b>
	LIMITS.....	14
	BLOCK DIAGRAM OF TEST SETUP.....	14
	TEST DATA .....	15
	<b>CONDUCTED SPURIOUS EMISSIONS.....</b>	<b>16</b>
	LIMITS.....	16
	BLOCK DIAGRAM OF TEST SETUP.....	16
	TEST DATA .....	17
	<b>RADIATED EMISSIONS WHICH FALL IN THE RESTRICTED BANDS .....</b>	<b>18</b>
	LIMITS.....	18
	BLOCK DIAGRAM OF TEST SETUP.....	19
	PROCEDURE.....	19
	TEST DATA .....	21
	<b>CONDUCTED EMISSIONS AT AC POWER LINE (150KHZ-30MHZ) .....</b>	<b>53</b>
	LIMITS.....	53
	BLOCK DIAGRAM OF TEST SETUP.....	53
	PROCEDURE.....	53
	TEST DATA .....	55

<b>RADIATED SPURIOUS EMISSIONS .....</b>	<b>57</b>
LIMITS.....	57
BLOCK DIAGRAM OF TEST SETUP.....	58
PROCEDURE.....	58
TEST DATA .....	60
<b>CONDUCTED BAND EDGES MEASUREMENT .....</b>	<b>68</b>
LIMITS.....	68
BLOCK DIAGRAM OF TEST SETUP.....	68
TEST DATA .....	69
<b>MINIMUM 6DB BANDWIDTH .....</b>	<b>70</b>
LIMITS.....	70
BLOCK DIAGRAM OF TEST SETUP.....	70
TEST DATA .....	70
<b>POWER SPECTRUM DENSITY .....</b>	<b>71</b>
LIMITS.....	71
BLOCK DIAGRAM OF TEST SETUP.....	71
TEST DATA .....	71
<b>10 APPENDIX.....</b>	<b>72</b>
10.1 APPENDIX : DTS BANDWIDTH .....	72
<i>Test Result</i> .....	72
<i>Test Graphs</i> .....	73
10.2 APPENDIX : OCCUPIED CHANNEL BANDWIDTH.....	78
<i>Test Result</i> .....	78
<i>Test Graphs</i> .....	79
10.3 APPENDIX : MAXIMUM CONDUCTED OUTPUT POWER .....	84
<i>Test Result</i> .....	84
<i>Test Graphs</i> .....	85
10.4 APPENDIX : MAXIMUM POWER SPECTRAL DENSITY .....	90
<i>Test Result</i> .....	90
<i>Test Graphs</i> .....	91
10.5 APPENDIX : BAND EDGE MEASUREMENTS .....	96
<i>Test Result</i> .....	96
<i>Test Graphs</i> .....	97
10.6 APPENDIX F: CONDUCTED SPURIOUS EMISSION.....	101

Test Result..... 101

Test Graphs..... 102

BlueAsia

## 1 TEST SUMMARY

Test item	Test Requirement	Test Method	Class/Severity	Result
Antenna Requirement	47 CFR Part 15, Subpart C 15.247	N/A	47 CFR Part 15, Subpart C 15.203 & 15.247(c)	Pass
Conducted Peak Output Power	47 CFR Part 15, Subpart C 15.247	ANSI C63.10 (2013) Section 7.8.5	47 CFR Part 15, Subpart C 15.247(b)(3)	Pass
Conducted Spurious Emissions	47 CFR Part 15, Subpart C 15.247	ANSI C63.10 (2013) Section 7.8.8	47 CFR Part 15, Subpart C 15.247(d)	Pass
Radiated Emissions which fall in the restricted bands	47 CFR Part 15, Subpart C 15.247	ANSI C63.10 (2013) Section 6.10.5	47 CFR Part 15, Subpart C 15.209 & 15.247(d)	Pass
Conducted Emissions at AC Power Line (150kHz-30MHz)	47 CFR Part 15, Subpart C 15.247	ANSI C63.10 (2013) Section 6.2	47 CFR Part 15, Subpart C 15.207	Pass
Radiated Spurious Emissions	47 CFR Part 15, Subpart C 15.247	ANSI C63.10 (2013) Section 6.4,6.5,6.6	47 CFR Part 15, Subpart C 15.209 & 15.247(d)	Pass
Conducted Band Edges Measurement	47 CFR Part 15, Subpart C 15.247	ANSI C63.10 (2013) Section 7.8.6	47 CFR Part 15, Subpart C 15.247(d)	Pass
Minimum 6dB Bandwidth	47 CFR Part 15, Subpart C 15.247	ANSI C63.10 (2013) Section 11.8.1	47 CFR Part 15, Subpart C 15.247a(2)	Pass
Power Spectrum Density	47 CFR Part 15, Subpart C 15.247	ANSI C63.10 (2013) Section 11.10.2	47 CFR Part 15, Subpart C 15.247(e)	Pass

## 2 GENERAL INFORMATION

<b>Applicant</b>	TECNO MOBILE LIMITED
<b>Address</b>	ROOM 604 6/F SOUTH TOWER WORLD FINANCE CTR HARBOUR CITY 17 CANTON ROAD TST KL
<b>Manufacturer</b>	TECNO MOBILE LIMITED
<b>Address</b>	ROOM 604 6/F SOUTH TOWER WORLD FINANCE CTR HARBOUR CITY 17 CANTON ROAD TST KL
<b>Factory</b>	SHENZHEN TECNO TECHNOLOGY CO.,LTD.
<b>Address</b>	101, Building 24, Waijing Industrial Park, Fumin Community, Fucheng Street, Longhua District, Shenzhen City, P.R. China
<b>Product Name</b>	Mobile Phone
<b>Test Model No.</b>	B1f

## 3 GENERAL DESCRIPTION OF E.U.T.

<b>EUT Input Rating</b>	AC120V60Hz
<b>Adapter Model</b>	A8-501000
<b>In put</b>	100~240V~50/60Hz, 200mA
<b>Out Put</b>	5.0V, 1.0A
<b>Battery</b>	3.8V 2400mAh/2350mAh(typ/min) 9.12Wh/8.93Wh(typ/min)
<b>Hardware Version</b>	N/A
<b>Software Version</b>	N/A
<b>Operation Frequency:</b>	802.11b/g/n(HT20): 2412MHz to 2462MHz 802.11n(HT40): 2422MHz to 2452MHz
<b>Modulation Type:</b>	802.11b: DSSS (CCK, DQPSK, DBPSK) 802.11g/n: OFDM (64QAM, 16QAM, QPSK, BPSK)
<b>Channel Spacing:</b>	5MHz
<b>Number of Channels:</b>	802.11b/g/n(HT20):11 802.11n(HT40):7
<b>Antenna Type:</b>	Internal Antenna(Provided by the customer)
<b>Antenna Gain:</b>	0.6dBi

#### 4 TEST ENVIRONMENT

Environment	Temperature	Voltage
1010mpa	26	DC3.8V

#### 5 TEST MODE

TEST MODE	TEST MODE DESCRIPTION
TX	Keep the EUT in transmitting mode
TX mode (SE) below 1G	Keep the EUT in transmitting mode
TX mode (SE) Above 1G	Keep the EUT in transmitting mode

Remark: Only the data of the worst mode would be recorded in this report.

#### 6 MEASUREMENT UNCERTAINTY

Parameter	Expanded Uncertainty (Confidence of 95%)
Radiated Emission	$\pm 4.34$ dB
Radiated Emission	$\pm 4.24$ dB
Radiated Emission	$\pm 4.68$ dB
AC Power Line Conducted Emission	$\pm 3.45$ dB

Parameter	Expanded Uncertainty (Confidence of 95%)
Occupied Channel Bandwidth	$\pm 5$ %
RF output power, conducted	$\pm 1.5$ dB
Power Spectral Density, conducted	$\pm 3.0$ dB
Unwanted Emissions, conducted	$\pm 3.0$ dB
Temperature	$\pm 3$ °C
Supply voltages	$\pm 3$ %
Time	$\pm 5$ %
Radiated Emission (30MHz ~ 1000MHz)	$\pm 4.35$ dB
Radiated Emission (1GHz ~ 18GHz)	$\pm 4.44$ dB



## 7 DESCRIPTION OF SUPPORT UNIT

Device Type	Manufacturer	Model Name	Serial No.	Remark
--	--	--	--	--

**Note:**  
"--" means no any support device during testing.

## 8 LABORATORY LOCATION

All tests were performed at:  
BlueAsia of Technical Services(Shenzhen) Co., Ltd.  
IOT Test Centre of BlueAsia  
No. 448 Bulong Road, Bantian Street, Longgang District, Shenzhen, China  
Telephone: TEL: +86-755-28682673 FAX: +86-755-28682673  
No tests were sub-contracted.

## 9 TEST INSTRUMENTS LIST

Test Equipment Of Conducted Peak Output Power					
Equipment	Manufacturer	Model	S/N	Cal.Date	Cal.Due
Spectrum	R&S	FSP40	100817	7/4/2020	7/3/2021
Spectrum	Agilent	N9020A	MY49100060	12/17/2019	12/16/2020
Signal Generator	Agilent	N5182A	MY49060650	12/17/2019	12/16/2020
Signal Generator	Agilent	E8257D	MY44320250	4/20/2020	4/19/2021

Test Equipment Of Conducted Spurious Emissions					
Equipment	Manufacturer	Model	S/N	Cal.Date	Cal.Due
Spectrum	R&S	FSP40	100817	7/4/2020	7/3/2021
Spectrum	Agilent	N9020A	MY49100060	12/17/2019	12/16/2020
Signal Generator	Agilent	N5182A	MY49060650	12/17/2019	12/16/2020
Signal Generator	Agilent	E8257D	MY44320250	4/20/2020	4/19/2021

Test Equipment Of Radiated Emissions which fall in the restricted bands					
Equipment	Manufacturer	Model	S/N	Cal.Date	Cal.Due
Chamber	SKET	966	N/A	5/8/2018	5/7/2021
Spectrum	R&S	FSP40	100817	7/4/2020	7/3/2021
Receiver	R&S	ESR7	101199	4/20/2020	4/19/2021
broadband Antenna	Schwarzbeck	VULB9168	00836 P:00227	7/14/2018	7/13/2020
Horn Antenna	Schwarzbeck	9120D	01892 P:00331	7/14/2018	7/13/2020

Amplifier	SKET	LNPA-0118-45	N/A	7/4/2020	7/3/2021
EMI software	EZ	EZ-EMC	N/A	N/A	N/A
Loop antenna	SCHNARZBECK	FMZB1519B	00102	2/14/2019	2/13/2022
Controller	SKET	N/A	N/A	N/A	N/A
Coaxial Cable	BlueAsia	BLA-XC-02	N/A	N/A	N/A
Coaxial Cable	BlueAsia	BLA-XC-03	N/A	N/A	N/A
Coaxial Cable	BlueAsia	BLA-XC-01	N/A	N/A	N/A

**Test Equipment Of Conducted Emissions at AC Power Line (150kHz-30MHz)**

Equipment	Manufacturer	Model	S/N	Cal.Date	Cal.Due
Shield room	SKET	833	N/A	6/10/2018	6/9/2021
Receiver	R&S	ESPI3	101082	4/20/2020	4/19/2021
LISN	R&S	ENV216	3560.6550.15	7/4/2020	7/3/2021
LISN	AT	AT166-2	AKK1806000003	12/17/2019	12/16/2020
EMI software	EZ	EZ-EMC	N/A	N/A	N/A

**Test Equipment Of Radiated Spurious Emissions**

Equipment	Manufacturer	Model	S/N	Cal.Date	Cal.Due
Chamber	SKET	966	N/A	5/8/2018	5/7/2021
Spectrum	R&S	FSP40	100817	7/4/2020	7/3/2021
Receiver	R&S	ESR7	101199	4/20/2020	4/19/2021
broadband Antenna	Schwarzbeck	VULB9168	00836 P:00227	7/14/2018	7/13/2020
Horn Antenna	Schwarzbeck	9120D	01892 P:00331	7/14/2018	7/13/2020
Amplifier	SKET	LNPA-0118-45	N/A	7/4/2019	7/3/2020

EMI software	EZ	EZ-EMC	N/A	N/A	N/A
Loop antenna	SCHNARZBECK	FMZB1519B	00102	2/14/2019	2/13/2022
Controller	SKET	N/A	N/A	N/A	N/A
Coaxial Cable	BlueAsia	BLA-XC-02	N/A	N/A	N/A
Coaxial Cable	BlueAsia	BLA-XC-03	N/A	N/A	N/A
Coaxial Cable	BlueAsia	BLA-XC-01	N/A	N/A	N/A

**Test Equipment Of Conducted Band Edges Measurement**

Equipment	Manufacturer	Model	S/N	Cal.Date	Cal.Due
Spectrum	R&S	FSP40	100817	7/4/2020	7/3/2021
Spectrum	Agilent	N9020A	MY49100060	12/17/2019	12/16/2020
Signal Generator	Agilent	N5182A	MY49060650	12/17/2019	12/16/2020
Signal Generator	Agilent	E8257D	MY44320250	4/20/2020	4/19/2021

**Test Equipment Of Minimum 6dB Bandwidth**

Equipment	Manufacturer	Model	S/N	Cal.Date	Cal.Due
Spectrum	R&S	FSP40	100817	7/4/2020	7/3/2021
Spectrum	Agilent	N9020A	MY49100060	12/17/2019	12/16/2020
Signal Generator	Agilent	N5182A	MY49060650	12/17/2019	12/16/2020
Signal Generator	Agilent	E8257D	MY44320250	4/20/2020	4/19/2021

**Test Equipment Of Power Spectrum Density**

Equipment	Manufacturer	Model	S/N	Cal.Date	Cal.Due
Spectrum	R&S	FSP40	100817	7/4/2020	7/3/2021
Spectrum	Agilent	N9020A	MY49100060	12/17/2019	12/16/2020
Signal Generator	Agilent	N5182A	MY49060650	12/17/2019	12/16/2020

Signal Generator	Agilent	E8257D	MY44320250	4/20/2020	4/19/2021
------------------	---------	--------	------------	-----------	-----------

## ANTENNA REQUIREMENT

Test Standard	47 CFR Part 15, Subpart C 15.247
Test Method	N/A

## CONCLUSION

Standard Requirement:

An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of an antenna that uses a unique coupling to the intentional radiator, the manufacturer may design the unit permanently attached antenna or of an so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited.

EUT Antenna:

The antenna is integrated on the main PCB and no consideration of replacement. The best case gain of the antenna is 0.6dBi.

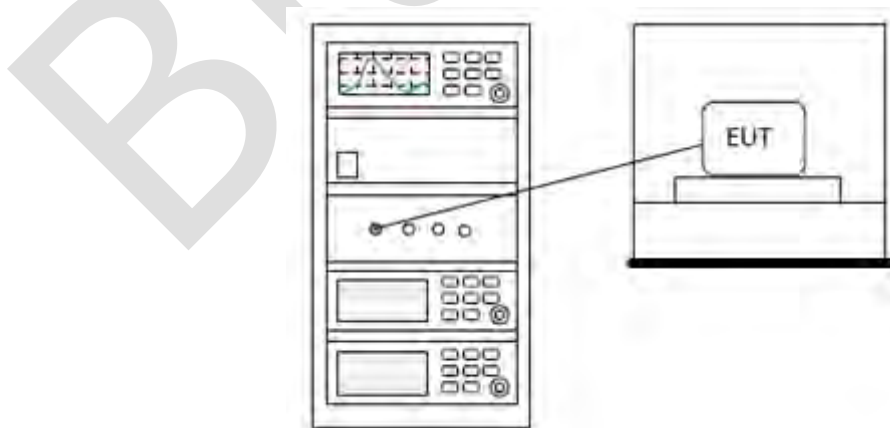
### CONDUCTED PEAK OUTPUT POWER

Test Standard	47 CFR Part 15, Subpart C 15.247
Test Method	ANSI C63.10 (2013) Section 7.8.5
Test Mode (Pre-Scan)	TX
Test Mode (Final Test)	TX
Tester	Eason
Temperature	26°C
Humidity	54%

### LIMITS

Frequency range(MHz)	Output power of the intentional radiator(watt)
902-928	1 for $\geq 50$ hopping channels
	0.25 for $25 \leq$ hopping channels $< 50$
	1 for digital modulation
2400-2483.5	1 for $\geq 75$ non-overlapping hopping channels
	0.125 for all other frequency hopping systems
	1 for digital modulation
5725-5850	1 for frequency hopping systems and digital modulation

### BLOCK DIAGRAM OF TEST SETUP



TEST DATA

Pass: Please Refer To Appendix: For Details

BlueAsia

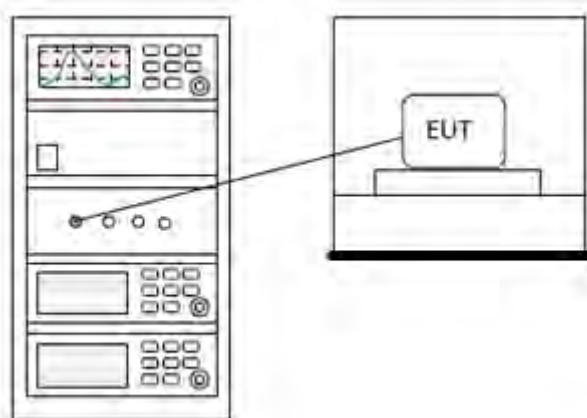
### CONDUCTED SPURIOUS EMISSIONS

<b>Test Standard</b>	47 CFR Part 15, Subpart C 15.247
<b>Test Method</b>	ANSI C63.10 (2013) Section 7.8.8
<b>Test Mode (Pre-Scan)</b>	TX
<b>Test Mode (Final Test)</b>	TX
<b>Tester</b>	Eason
<b>Temperature</b>	26°C
<b>Humidity</b>	54%

### LIMITS

<b>Limit:</b>	<p>In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under paragraph (b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20 dB. Attenuation below the general limits specified in §15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in §15.205(a), must also comply with the radiated emission limits specified in §15.209(a) (see §15.205(c)).</p>
---------------	---

### BLOCK DIAGRAM OF TEST SETUP





TEST DATA

Pass: Please Refer To Appendix: For Details

BlueAsia

### RADIATED EMISSIONS WHICH FALL IN THE RESTRICTED BANDS

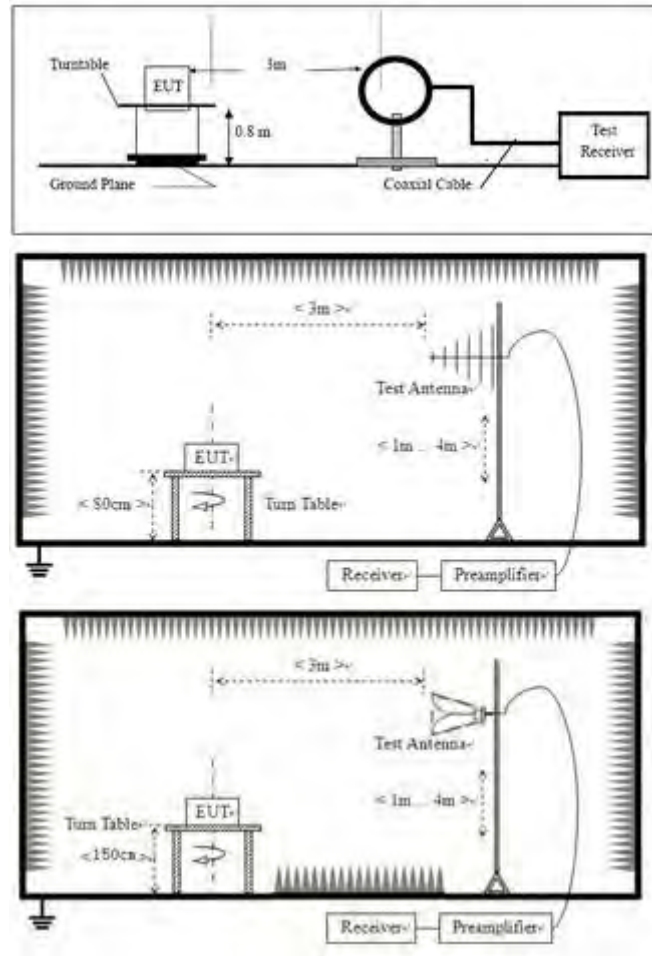
<b>Test Standard</b>	47 CFR Part 15, Subpart C 15.247
<b>Test Method</b>	ANSI C63.10 (2013) Section 6.10.5
<b>Test Mode (Pre-Scan)</b>	TX
<b>Test Mode (Final Test)</b>	TX
<b>Tester</b>	Eason
<b>Temperature</b>	26°C
<b>Humidity</b>	54%

### LIMITS

<b>Frequency(MHz)</b>	<b>Field strength(microvolts/meter)</b>	<b>Measurement distance(meters)</b>
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

Remark: The emission limits shown in the above table are based on measurements employing a CISPR quasi-peak detector except for the frequency bands 9-90kHz, 110-490kHz and above 1000 MHz. Radiated emission limits in these three bands are based on measurements employing an average detector, the peak field strength of any emission shall not exceed the maximum permitted average limits specified above by more than 20 dB under any condition of modulation.

## BLOCK DIAGRAM OF TEST SETUP



## PROCEDURE

- For below 1GHz, the EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 or 10 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.
- For above 1GHz, the EUT was placed on the top of a rotating table 1.5 meters above the ground at a 3 meter fully-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.
- The EUT was set 3 or 10 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- The antenna 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.
- 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 (for the test frequency of below 30MHz, the antenna was tuned to heights 1 meter) and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
- The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.
- If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.

- h. Test the EUT in the lowest channel, the middle channel, the Highest channel.
- i. The radiation measurements are performed in X, Y, Z axis positioning for Transmitting mode, and found the X axis positioning which it is the worst case.
- j. Repeat above procedures until all frequencies measured was complete.

Remark 1:  $\text{Level} = \text{Read Level} + \text{Cable Loss} + \text{Antenna Factor} - \text{Preamp Factor}$

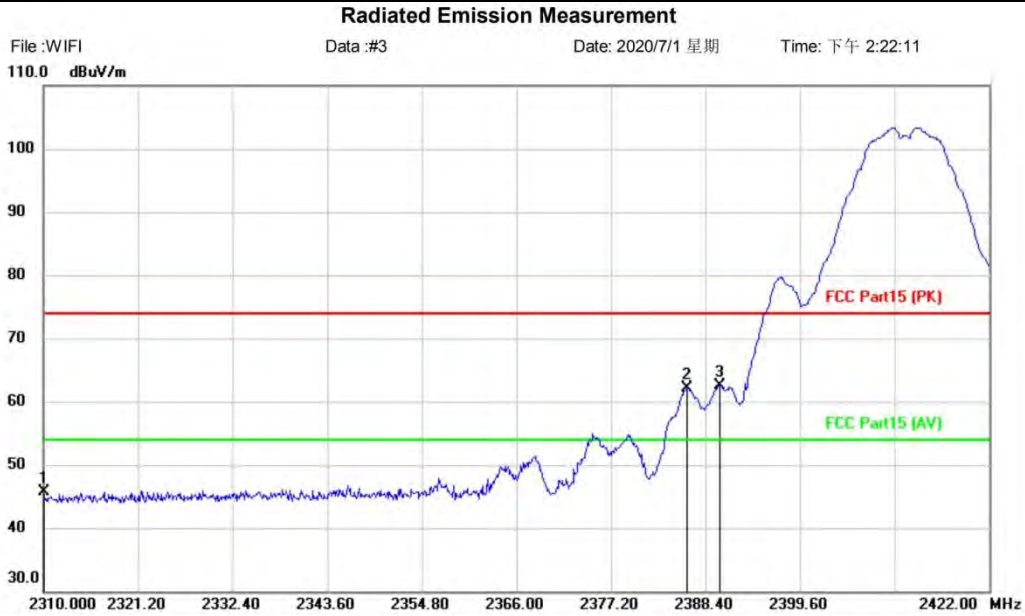
Remark 2: For frequencies above 1GHz, the field strength limits are based on average limits. However, the peak field strength of any emission shall not exceed the maximum permitted average limits specified above by more than 20 dB under any condition of modulation. For the emissions whose peak level is lower than the average limit, only the peak measurement is shown in the report.

BlueAsia

**TEST DATA**

[TestMode: 802.11b]; [Test channel:lowest]; [Polarity: Horizontal]

Peak value



File :WIFI Data :#3 Date: 2020/7/1 星期 Time: 下午 2:22:11  
 110.0 dBuV/m  
 Site Polarization: **Horizontal** Temperature:  
 Limit: FCC Part15 (PK) Power: Humidity: %  
 EUT: Mobile Phone Distance: 3m  
 M/N: B1f  
 Mode: B-2412  
 Note: 15

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	Comment
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	cm	degree	
1		2310.000	49.97	-4.20	45.77	74.00	-28.23	peak		
2		2386.272	65.93	-3.89	62.04	74.00	-11.96	peak		
3	*	2390.000	66.36	-3.88	62.48	74.00	-11.52	peak		

**Test Result: Pass**

[TestMode: 802.11b]; [ Test channel:lowest]; [Polarity: Horizontal]

Average value:

**Radiated Emission Measurement**



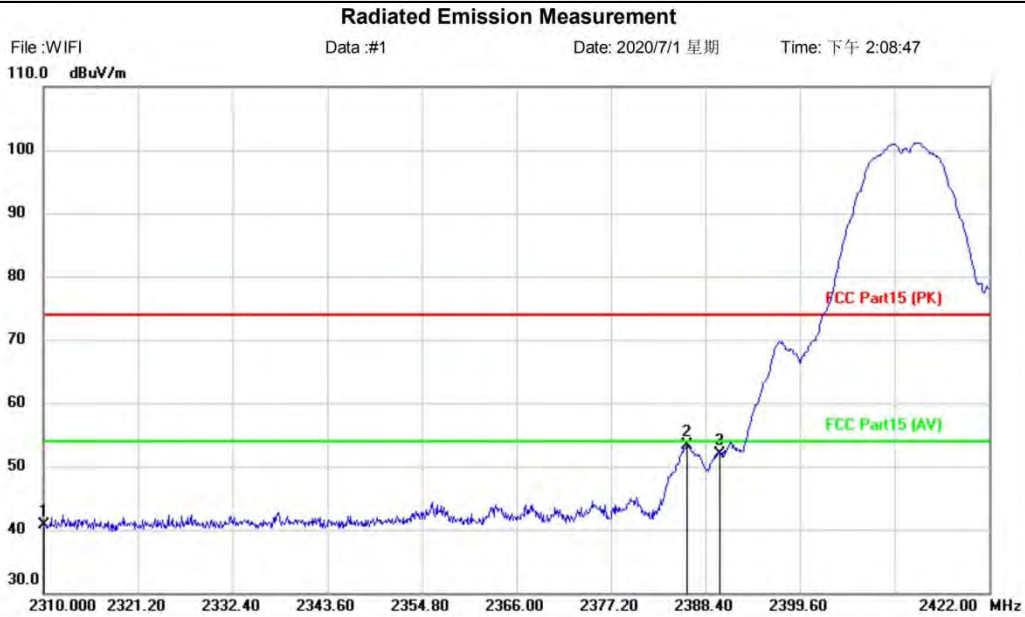
Site: Polarization: **Horizontal** Temperature:   
 Limit: FCC Part15 (PK) Power: Humidity: %   
 EUT: Mobile Phone Distance: 3m   
 M/N: B1f   
 Mode: B-2412   
 Note: 15

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	cm	degree	Comment
1		2310.000	32.52	-4.20	28.32	54.00	-25.68	AVG		
2	*	2386.384	52.60	-3.89	48.71	54.00	-5.29	AVG		
3		2390.000	50.47	-3.88	46.59	54.00	-7.41	AVG		

**Test Result: Pass**

[TestMode: 802.11b]; [Test channel:lowest]; [Polarity: Vertical]

Peak value



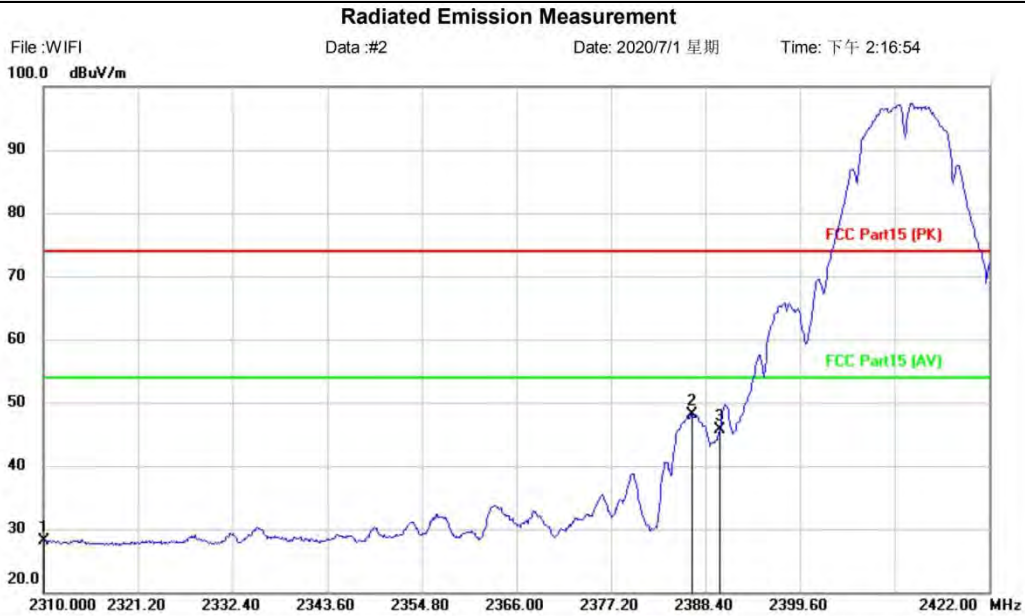
Site	Polarization: <b>Vertical</b>	Temperature:
Limit: FCC Part15 (PK)	Power:	Humidity: %
EUT: Mobile Phone	Distance: 3m	
M/N: B1f		
Mode: B-2412		
Note: 15		

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	cm	degree	Comment
1		2310.000	45.10	-4.49	40.61	74.00	-33.39	peak		
2	*	2386.160	57.48	-4.22	53.26	74.00	-20.74	peak		
3		2390.000	56.15	-4.21	51.94	74.00	-22.06	peak		

**Test Result: Pass**

[TestMode: 802.11b]; [Test channel:lowest]; [Polarity: Vertical]

Average value:



Site	Polarization: <b>Vertical</b>	Temperature:
Limit: FCC Part15 (PK)	Power:	Humidity: %
EUT: Mobile Phone	Distance: 3m	
M/N: B1f		
Mode: B-2412		
Note: 15		

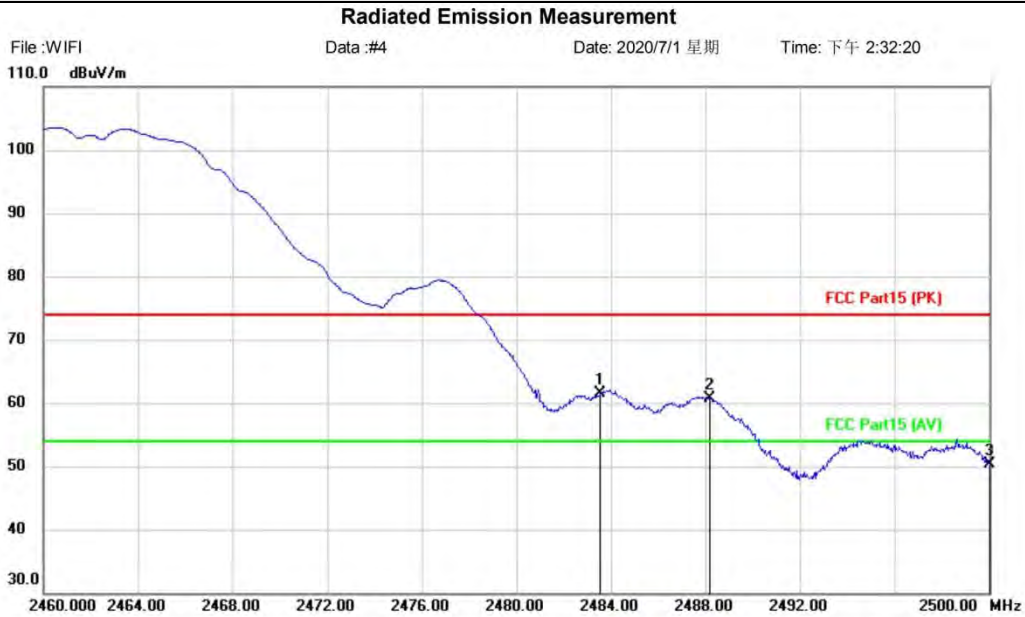
No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	cm	degree	Comment
1		2310.000	32.66	-4.49	28.17	54.00	-25.83	AVG		
2	*	2386.832	52.36	-4.22	48.14	54.00	-5.86	AVG		
3		2390.000	49.93	-4.21	45.72	54.00	-8.28	AVG		

**Test Result: Pass**



[TestMode:802.11b]; [Test channel:Highest]; [Polarity: Horizontal]

Peak value



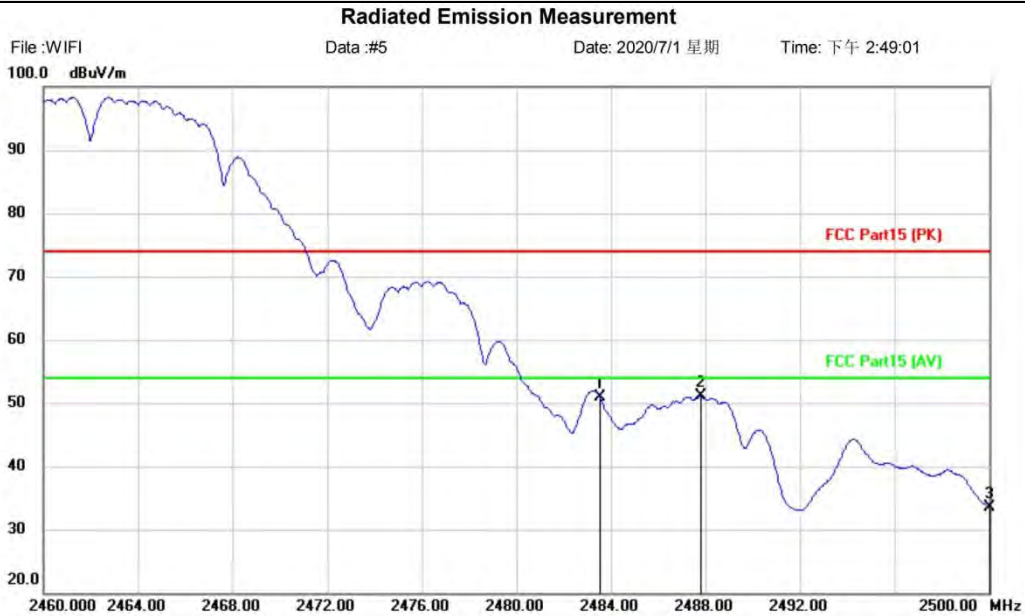
Site	Polarization: <b>Horizontal</b>	Temperature:
Limit: FCC Part15 (PK)	Power:	Humidity: %
EUT: Mobile Phone	Distance: 3m	
M/N: B1f		
Mode: B-2462		
Note: 15		

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	cm	degree	Comment
1	*	2483.500	64.94	-3.38	61.56	74.00	-12.44	peak		
2		2488.200	64.03	-3.36	60.67	74.00	-13.33	peak		
3		2500.000	53.56	-3.30	50.26	74.00	-23.74	peak		

**Test Result: Pass**

[TestMode: 802.11b]; [ Test channel:Highest]; [Polarity: Horizontal]

Average value:



Site: Limit: FCC Part15 (PK) EUT: Mobile Phone M/N: B1f Mode: B-2462 Note: 15

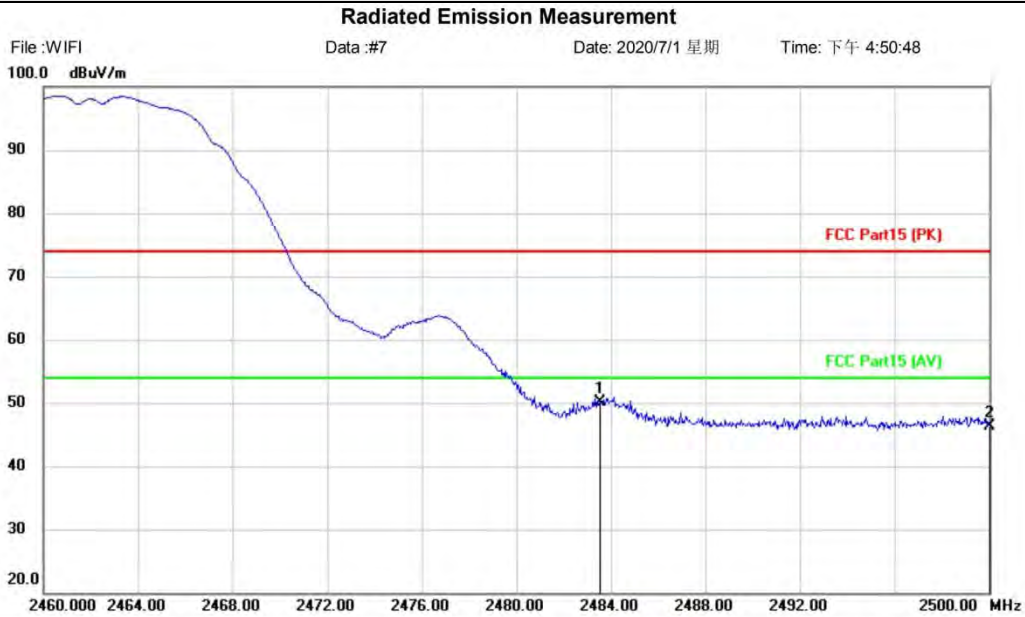
Polarization: **Horizontal** Power: Distance: 3m Temperature: Humidity: %

No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Antenna Height cm	Table Degree	Comment
1		2483.500	54.19	-3.38	50.81	54.00	-3.19	AVG		
2	*	2487.800	54.38	-3.36	51.02	54.00	-2.98	AVG		
3		2500.000	36.76	-3.30	33.46	54.00	-20.54	AVG		

**Test Result: Pass**

[TestMode: 802.11b]; [Test channel: Highest]; [Polarity: Vertical]

Peak value



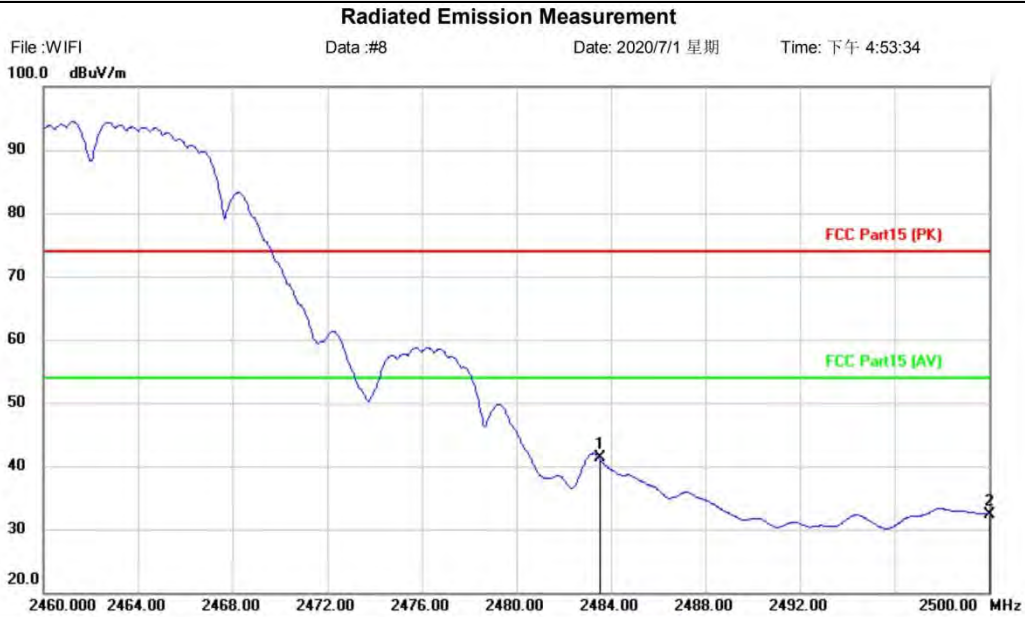
Site	Polarization: <b>Vertical</b>	Temperature:
Limit: FCC Part15 (PK)	Power:	Humidity: %
EUT: Mobile Phone	Distance: 3m	
M/N: B1f		
Mode: B-2462		
Note: 15		

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	cm	degree	Comment
1	*	2483.500	53.85	-3.77	50.08	74.00	-23.92	peak		
2		2500.000	50.06	-3.70	46.36	74.00	-27.64	peak		

**Test Result: Pass**

[TestMode: 802.11b]; [Test channel: Highest]; [Polarity: Vertical]

Average value:



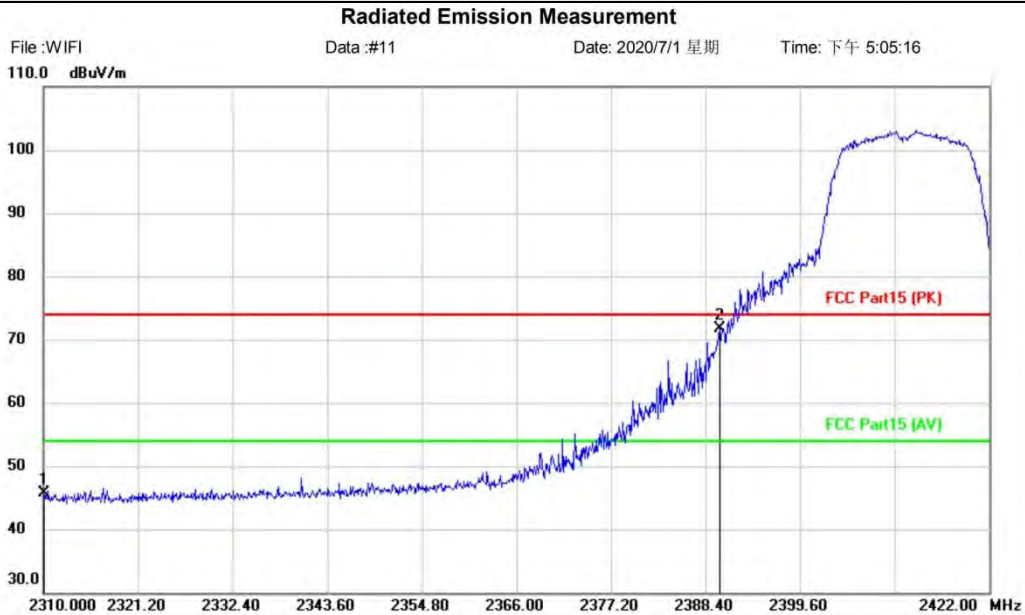
Site	Polarization: <b>Vertical</b>	Temperature:
Limit: FCC Part15 (PK)	Power:	Humidity: %
EUT: Mobile Phone	Distance: 3m	
M/N: B1f		
Mode: B-2462		
Note: 15		

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	cm	degree
1	*	2483.500	45.17	-3.77	41.40	54.00	-12.60	AVG	
2		2500.000	36.04	-3.70	32.34	54.00	-21.66	AVG	

**Test Result: Pass**

[TestMode: 802.11g]; [Test channel:lowest]; [Polarity: Horizontal]

Peak value



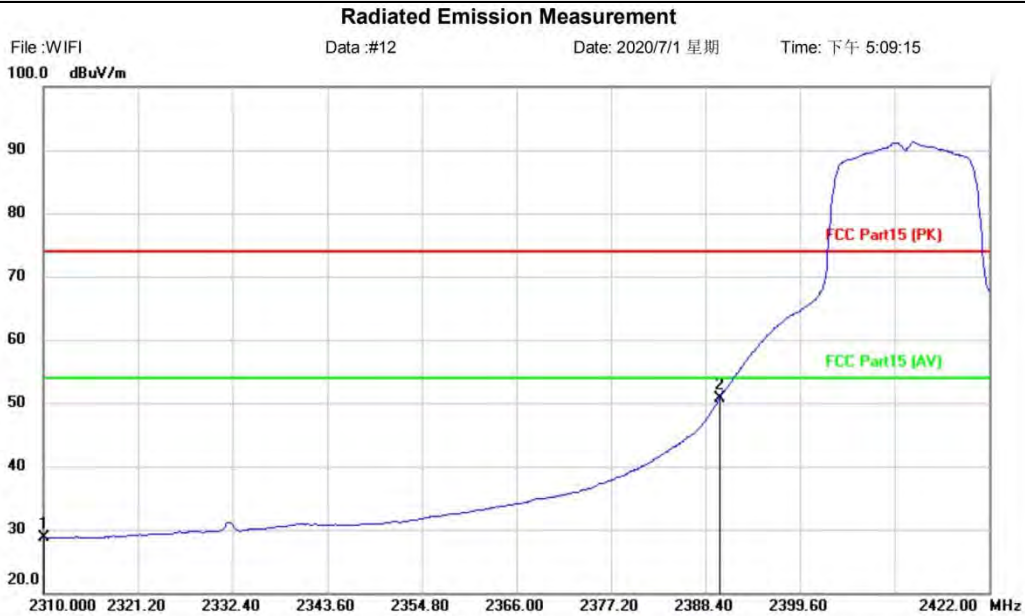
Site	Polarization: <b>Horizontal</b>	Temperature:
Limit: FCC Part15 (PK)	Power:	Humidity: %
EUT: Mobile Phone	Distance: 3m	
M/N: B1f		
Mode: G-2412		
Note: 13		

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	cm	degree	Comment
1		2310.000	49.88	-4.20	45.68	74.00	-28.32	peak		
2	*	2390.000	75.63	-3.88	71.75	74.00	-2.25	peak		

**Test Result: Pass**

[TestMode: 802.11g]; [ Test channel:lowest]; [Polarity: Horizontal]

Average value:



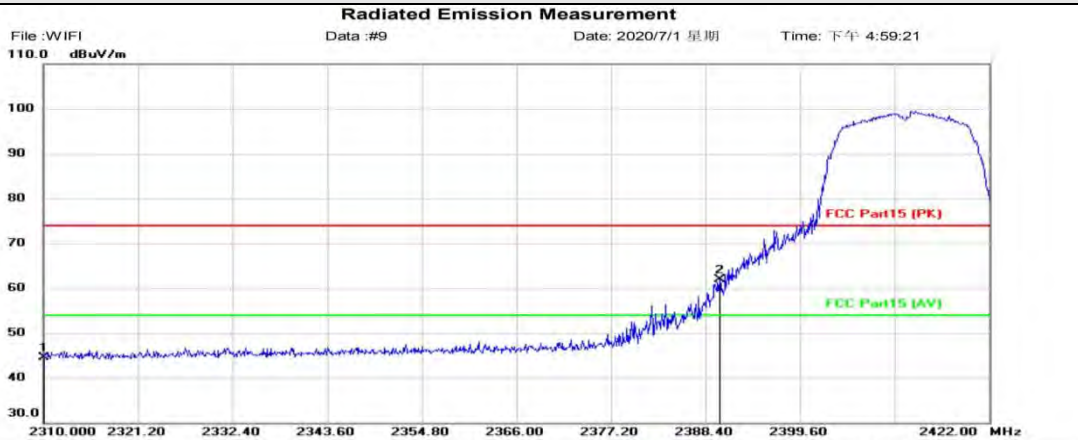
Site	Polarization: <b>Horizontal</b>	Temperature:
Limit: FCC Part15 (PK)	Power:	Humidity: %
EUT: Mobile Phone	Distance: 3m	
M/N: B1f		
Mode: G-2412		
Note: 13		

No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Antenna Height cm	Table Degree	Comment
1		2310.000	32.93	-4.20	28.73	54.00	-25.27	AVG			
2	*	2390.000	54.64	-3.88	50.76	54.00	-3.24	AVG			

**Test Result: Pass**

[TestMode: 802.11g]; [ Test channel:lowest]; [Polarity: Vertical]

Peak value



Site: Limit: FCC Part15 (PK)  
EUT: Mobile Phone  
M/N: B1f  
Mode: G-2412  
Note: 13

Polarization: **Vertical**  
Power:  
Distance: 3m

Temperature:  
Humidity: %

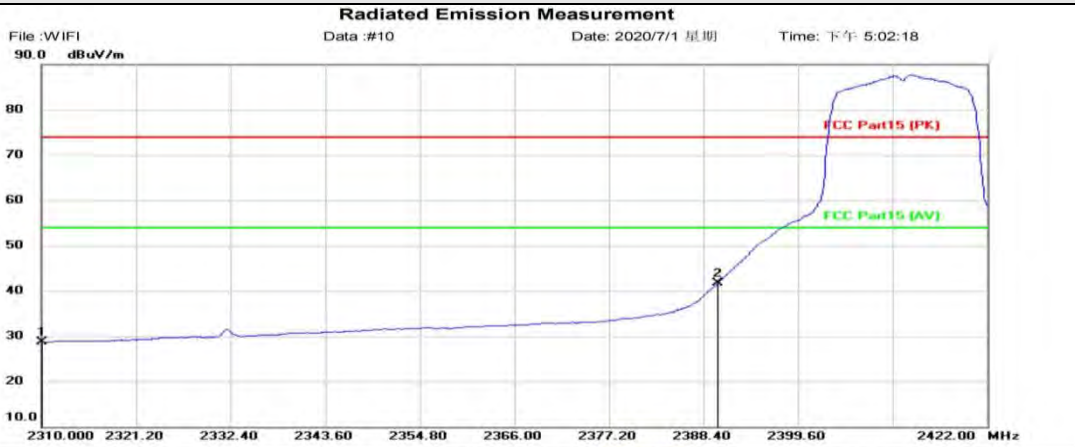
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Antenna Height cm	Table Degree	Comment
1		2310.000	48.93	-4.49	44.44	74.00	-29.56	peak			
2	*	2390.000	66.14	-4.21	61.93	74.00	-12.07	peak			

**Test Result: Pass**



[TestMode: 802.11g]; [Test channel:lowest]; [Polarity: Vertical]

Average value:



Site	Polarization: <b>Vertical</b>	Temperature:
Limit: FCC Part15 (PK)	Power:	Humidity: %
EUT: Mobile Phone	Distance: 3m	
M/N: B1f		
Mode: G-2412		
Note: 13		

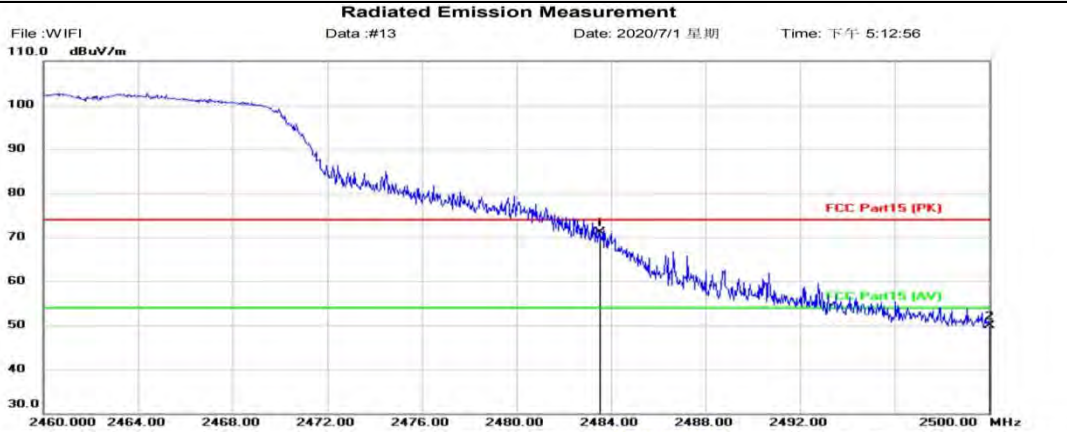
No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	cm	degree	Comment
1		2310.000	33.21	-4.49	28.72	54.00	-25.28	AVG		
2	*	2390.000	45.88	-4.21	41.67	54.00	-12.33	AVG		

**Test Result: Pass**



[TestMode: 802.11g]; [ Test channel: Highest]; [Polarity: Horizontal]

Peak value



File : WIFI  
110.0 dBuV/m  
Data : #13  
Date : 2020/7/1 星期  
Time : 下午 5:12:56

Site  
Limit: FCC Part15 (PK)  
EUT: Mobile Phone  
M/N: B1f  
Mode: G-2462  
Note: 13

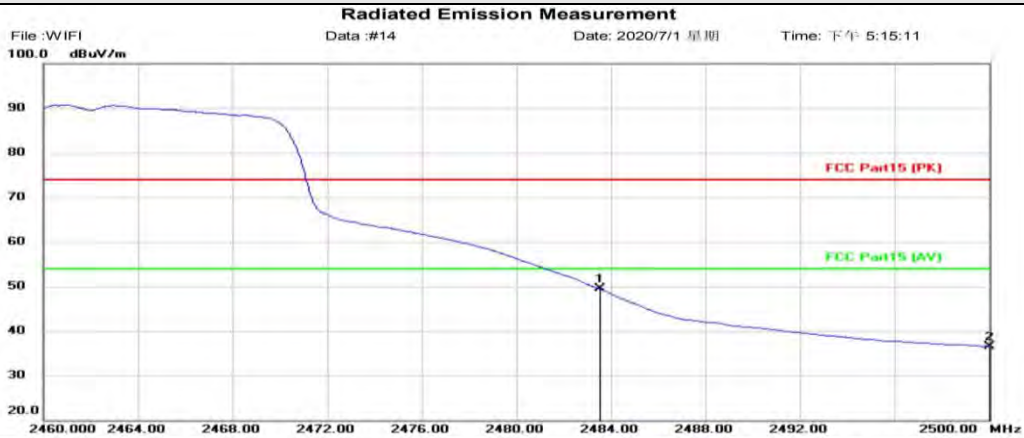
Polarization: **Horizontal**  
Power:  
Distance: 3m  
Temperature:  
Humidity: %

No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Antenna Height cm	Table Degree	Comment
1	*	2483.500	74.57	-3.38	71.19	74.00	-2.81	peak			
2		2500.000	53.28	-3.30	49.98	74.00	-24.02	peak			

**Test Result: Pass**

[TestMode: Test channel:Highest]; [Polarity: Horizontal]

Average value:



File :WIFI  
Data :#14  
Date: 2020/7/1 星期  
Time: 下午 5:15:11

Site  
Limit: FCC Part15 (PK)  
EUT: Mobile Phone  
M/N: B1f  
Mode: G-2462  
Note: 13

Polarization: **Horizontal**  
Power:  
Distance: 3m

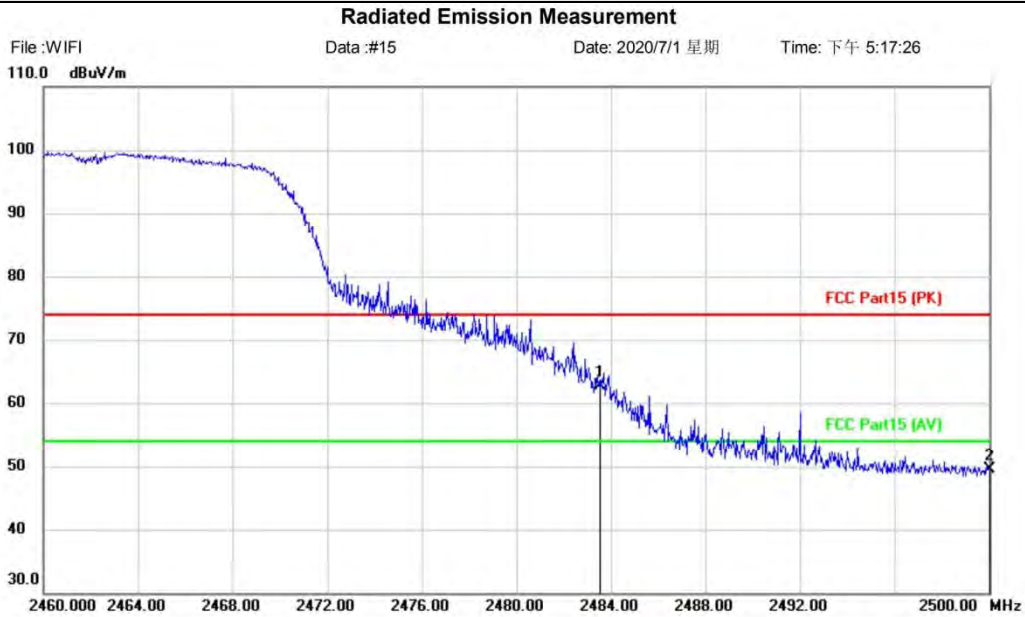
Temperature:  
Humidity: %

No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Antenna Height cm	Table Degree degree	Comment
1	*	2483.500	52.89	-3.38	49.51	54.00	-4.49	AVG			
2		2500.000	39.89	-3.30	36.59	54.00	-17.41	AVG			

**Test Result: Pass**

[TestMode: 802.11g]; [ Test channel:Highest]; [Polarity: Vertical]

Peak value



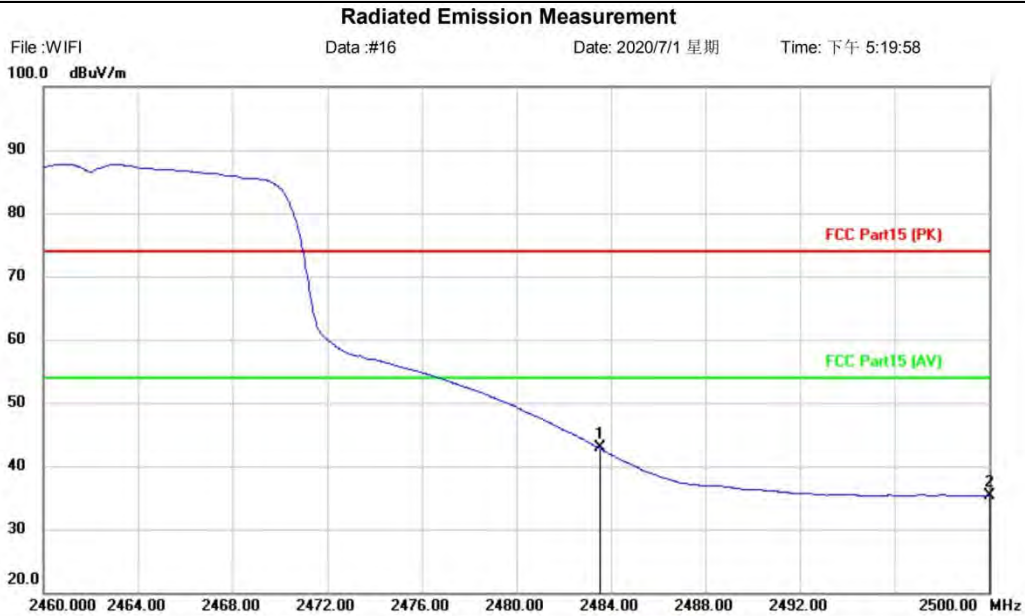
Site	Polarization: <b>Vertical</b>	Temperature:
Limit: FCC Part15 (PK)	Power:	Humidity: %
EUT: Mobile Phone	Distance: 3m	
M/N: B1f		
Mode: G-2462		
Note: 13		

No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Antenna Height cm	Table Degree degree	Comment
1	*	2483.500	66.52	-3.77	62.75	74.00	-11.25	peak			
2		2500.000	53.14	-3.70	49.44	74.00	-24.56	peak			

**Test Result: Pass**

[TestMode: 802.11g]; [Test channel: Highest]; [Polarity: Vertical]

Average value:



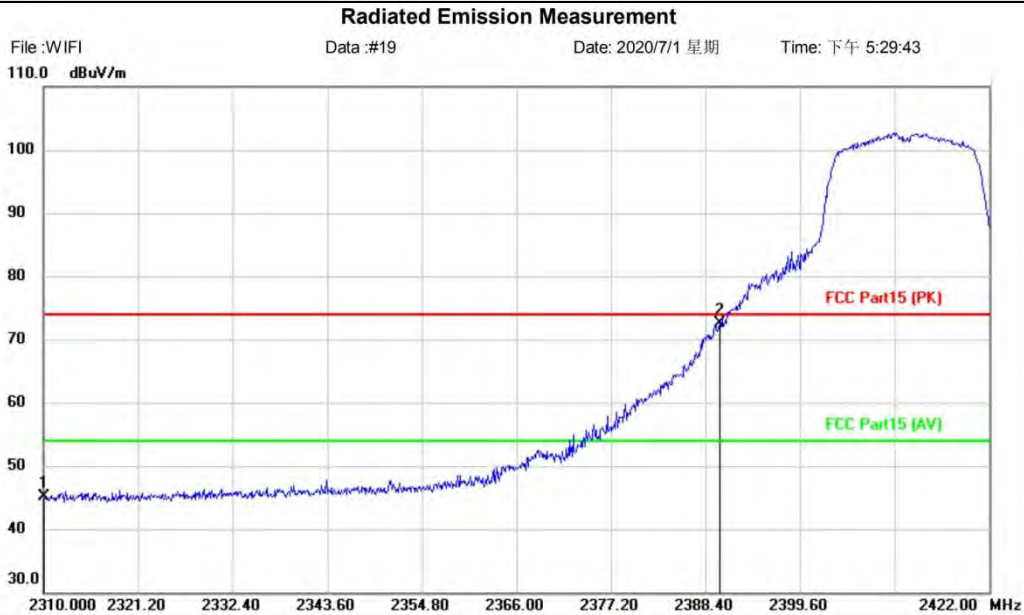
Site	Polarization: <b>Vertical</b>	Temperature:
Limit: FCC Part15 (PK)	Power:	Humidity: %
EUT: Mobile Phone	Distance: 3m	
M/N: B1f		
Mode: G-2462		
Note: 13		

No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Antenna Height cm	Table Degree	Detector	Comment
1	*	2483.500	46.60	-3.77	42.83	54.00	-11.17	AVG			
2		2500.000	38.93	-3.70	35.23	54.00	-18.77	AVG			

**Test Result: Pass**

[TestMode: 802.11n20]; [ Test channel:lowest]; [Polarity: Horizontal]

Peak value



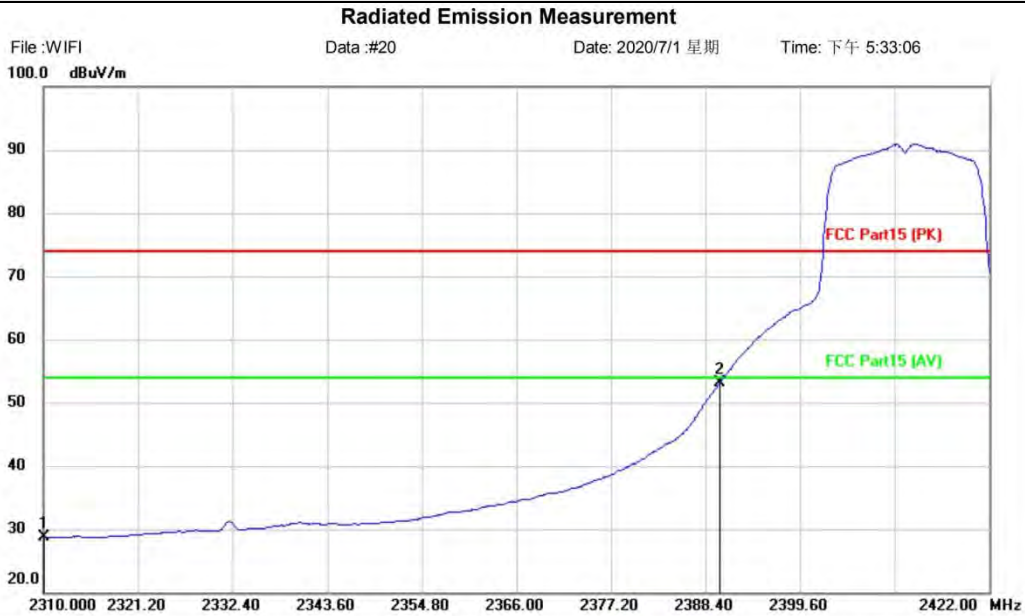
Site	Polarization: <b>Horizontal</b>	Temperature:
Limit: FCC Part15 (PK)	Power:	Humidity: %
EUT: Mobile Phone	Distance: 3m	
M/N: B1f		
Mode: N20-2412		
Note: 13		

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	cm	degree	Comment
1		2310.000	49.33	-4.20	45.13	74.00	-28.87	peak		
2	*	2390.000	76.47	-3.88	72.59	74.00	-1.41	peak		

**Test Result: Pass**

[TestMode: 802.11n20]; [ Test channel:lowest]; [Polarity: Horizontal]

Average value:



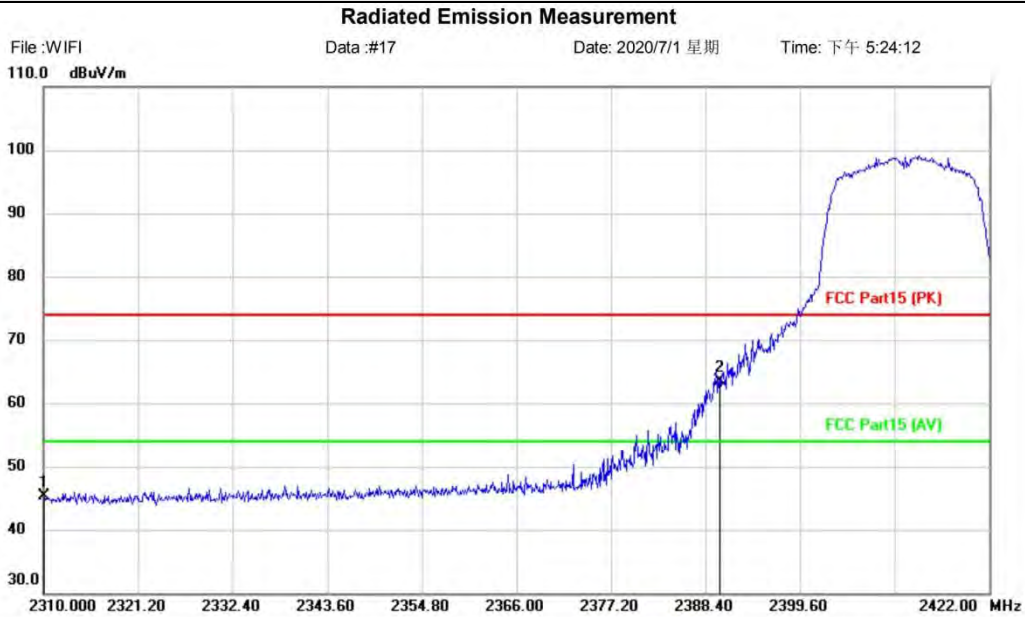
Site	Polarization: <b>Horizontal</b>	Temperature:
Limit: FCC Part15 (PK)	Power:	Humidity: %
EUT: Mobile Phone	Distance: 3m	
M/N: B1f		
Mode: N20-2412		
Note: 13		

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	cm	degree	Comment
1		2310.000	32.98	-4.20	28.78	54.00	-25.22	AVG		
2	*	2390.000	56.99	-3.88	53.11	54.00	-0.89	AVG		

**Test Result: Pass**

[TestMode: 802.11n20]; [Test channel:lowest]; [Polarity: Vertical]

Peak value



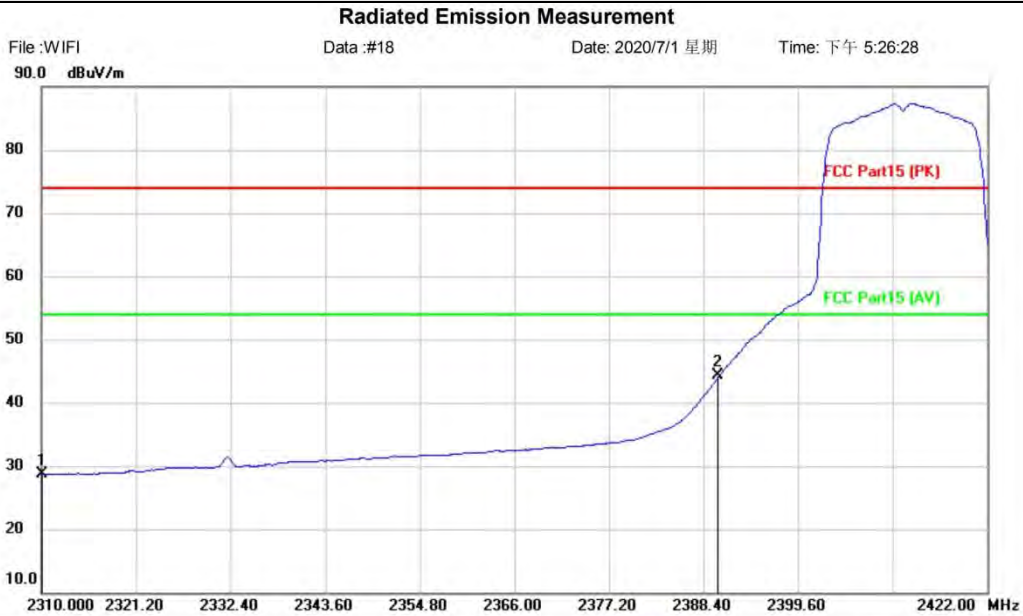
Site	Polarization: <b>Vertical</b>	Temperature:
Limit: FCC Part15 (PK)	Power:	Humidity: %
EUT: Mobile Phone	Distance: 3m	
M/N: B1f		
Mode: N20-2412		
Note: 13		

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	cm	degree	Comment
1		2310.000	49.77	-4.49	45.28	74.00	-28.72	peak		
2	*	2390.000	67.79	-4.21	63.58	74.00	-10.42	peak		

**Test Result: Pass**

[TestMode: 802.11n20]; [Test channel:lowest]; [Polarity: Vertical]

Average value:



Site	Polarization: <b>Vertical</b>	Temperature:
Limit: FCC Part15 (PK)	Power:	Humidity: %
EUT: Mobile Phone	Distance: 3m	
M/N: B1f		
Mode: N20-2412		
Note: 13		

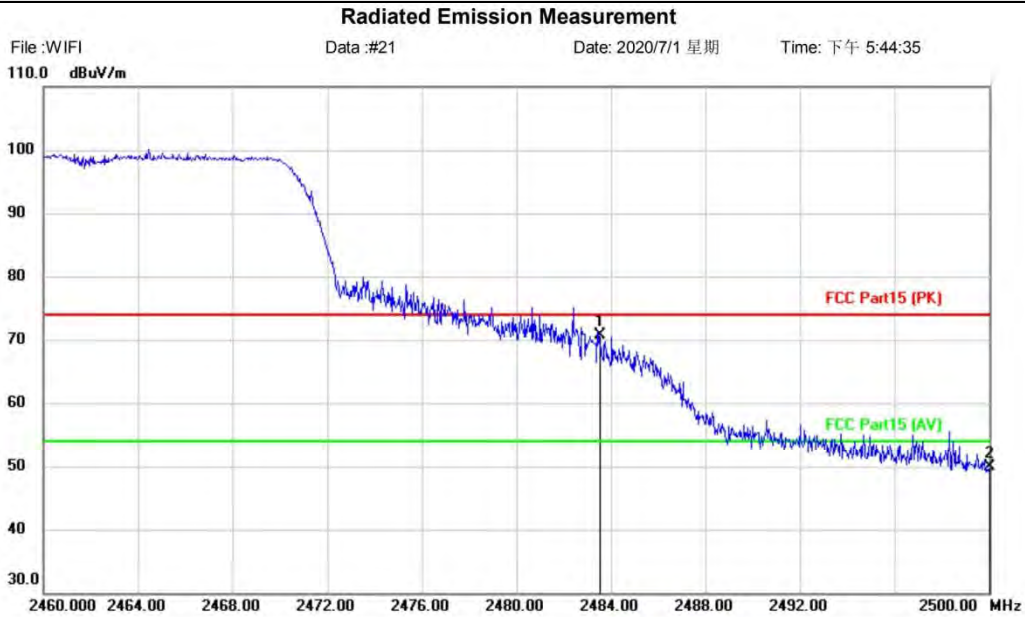
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Antenna Height cm	Table Degree	Comment
1		2310.000	33.23	-4.49	28.74	54.00	-25.26	AVG		
2	*	2390.000	48.55	-4.21	44.34	54.00	-9.66	AVG		

**Test Result: Pass**



[TestMode: 802.11n20]; [Test channel: Highest]; [Polarity: Horizontal]

Peak value



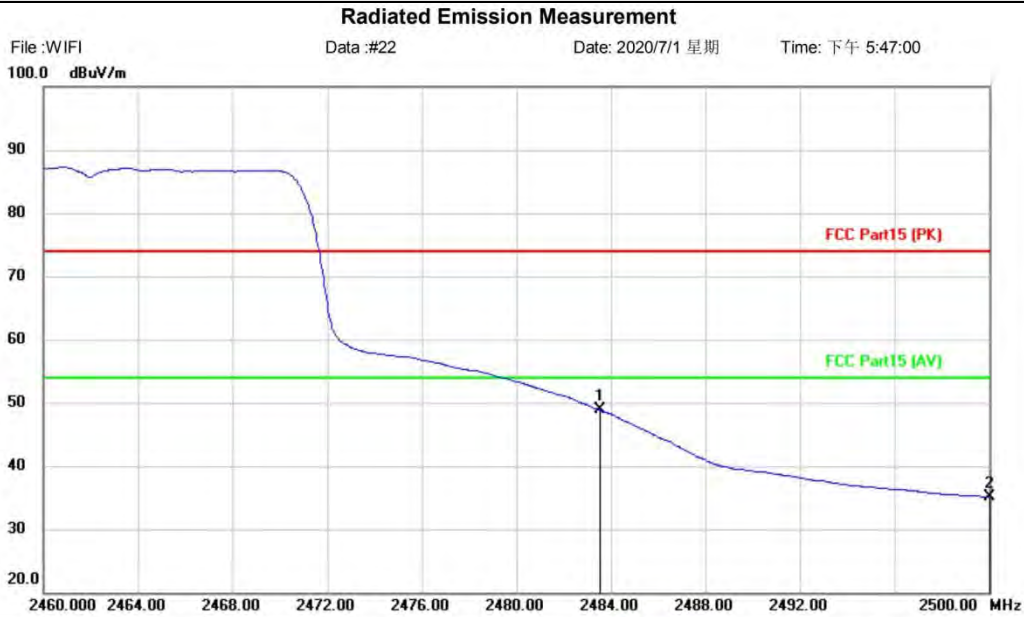
Site	Polarization: <b>Horizontal</b>	Temperature:
Limit: FCC Part15 (PK)	Power:	Humidity: %
EUT: Mobile Phone	Distance: 3m	
M/N: B1f		
Mode: N20-2462		
Note: 10		

No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Antenna Height cm	Table Degree	Comment
1	*	2483.500	74.01	-3.38	70.63	74.00	-3.37	peak			
2		2500.000	53.26	-3.30	49.96	74.00	-24.04	peak			

**Test Result: Pass**

[TestMode: 802.11n20]; [Test channel: Highest]; [Polarity: Horizontal]

Average value:



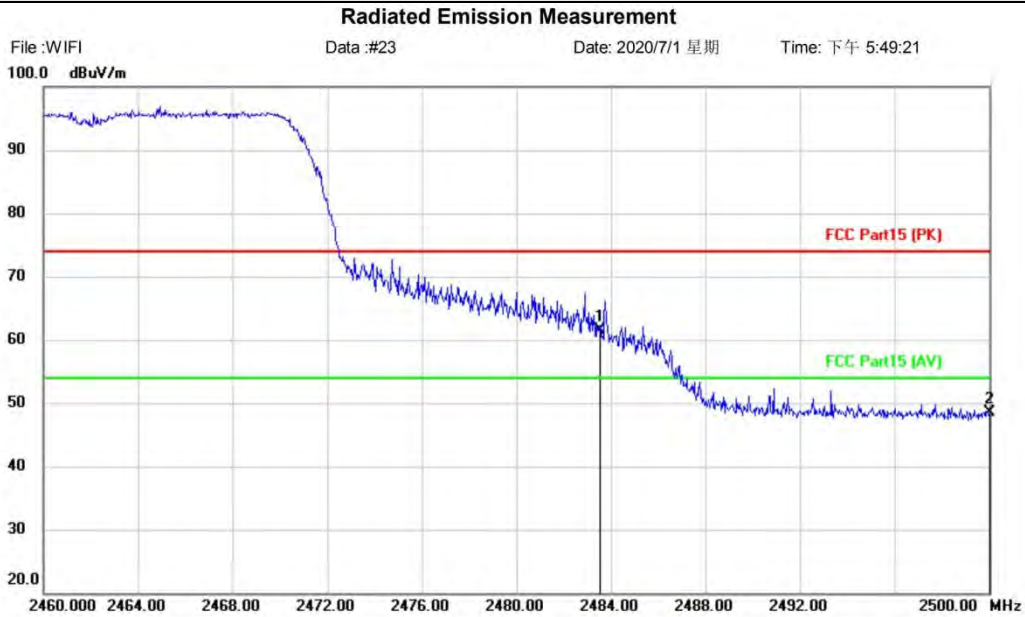
Site	Polarization: <b>Horizontal</b>	Temperature:
Limit: FCC Part15 (PK)	Power:	Humidity: %
EUT: Mobile Phone	Distance: 3m	
M/N: B1f		
Mode: N20-2462		
Note: 10		

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	cm	degree	Comment
1	*	2483.500	52.26	-3.38	48.88	54.00	-5.12	AVG		
2		2500.000	38.42	-3.30	35.12	54.00	-18.88	AVG		

**Test Result: Pass**

[TestMode: 802.11n20]; [Test channel: Highest]; [Polarity: Vertical]

Peak value



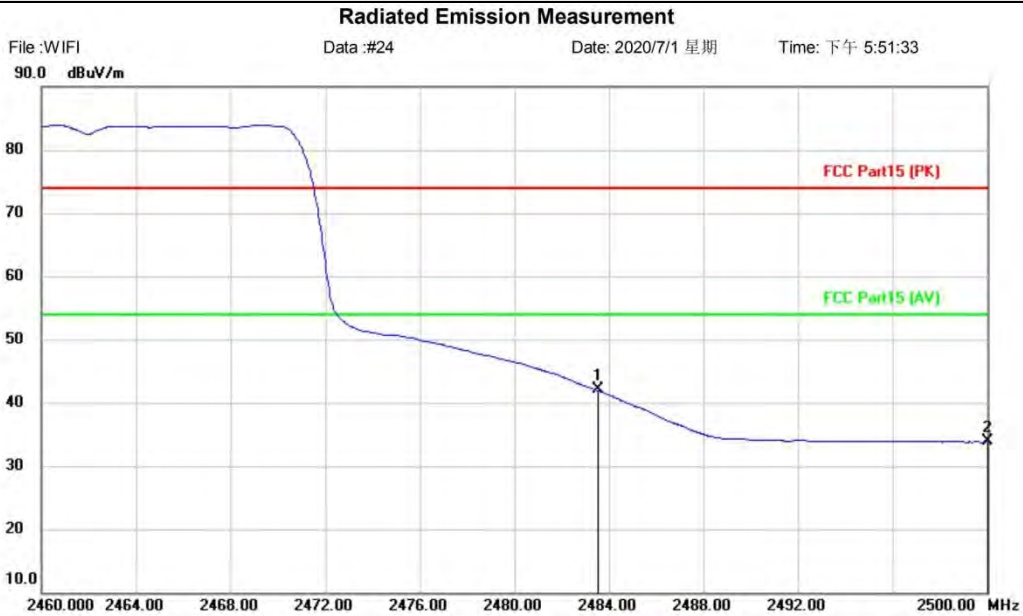
Site	Polarization: <b>Vertical</b>	Temperature:
Limit: FCC Part15 (PK)	Power:	Humidity: %
EUT: Mobile Phone	Distance: 3m	
M/N: B1f		
Mode: N20-2462		
Note: 13		

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	cm	degree	Comment
1	*	2483.500	65.32	-3.77	61.55	74.00	-12.45	peak		
2		2500.000	52.14	-3.70	48.44	74.00	-25.56	peak		

**Test Result: Pass**

[TestMode: 802.11n20]; [Test channel: Highest]; [Polarity: Vertical]

Average value:



File: WIFI      Data: #24      Date: 2020/7/1 星期      Time: 下午 5:51:33  
 90.0 dBuV/m

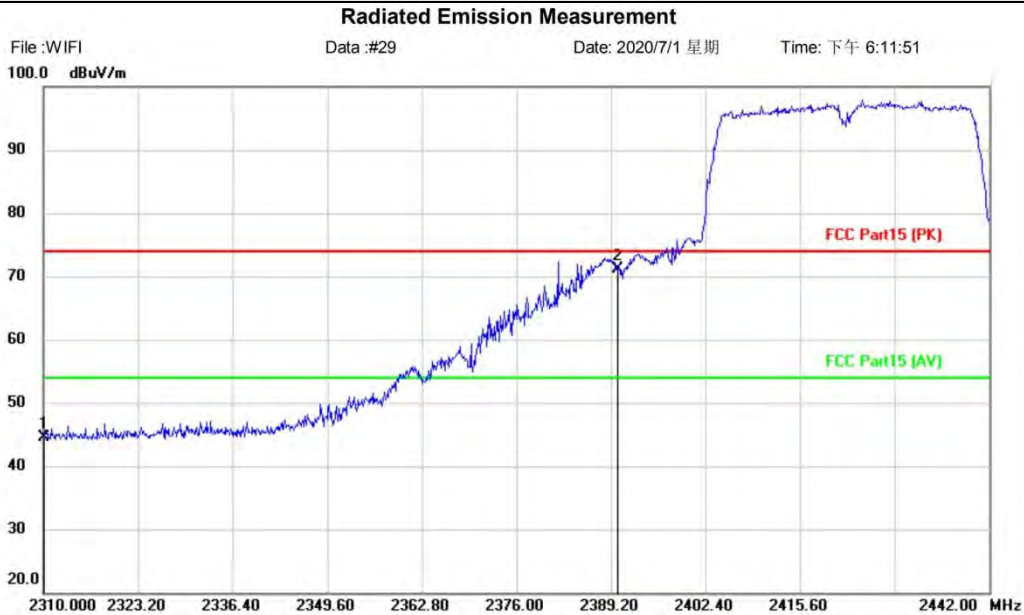
Site:      Polarization: **Vertical**      Temperature:      Humidity: %  
 Limit: FCC Part15 (PK)      Power:      Distance: 3m  
 EUT: Mobile Phone  
 M/N: B1f  
 Mode: N20-2462  
 Note: 13

No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measurement dBuV/m	Limit dBuV/m	Over dB	Detector	Antenna Height cm	Table Degree	Comment
1	*	2483.500	45.80	-3.77	42.03	54.00	-11.97	AVG			
2		2500.000	37.51	-3.70	33.81	54.00	-20.19	AVG			

**Test Result: Pass**

[TestMode: 802.11n40]; [Test channel:lowest]; [Polarity: Horizontal]

Peak value



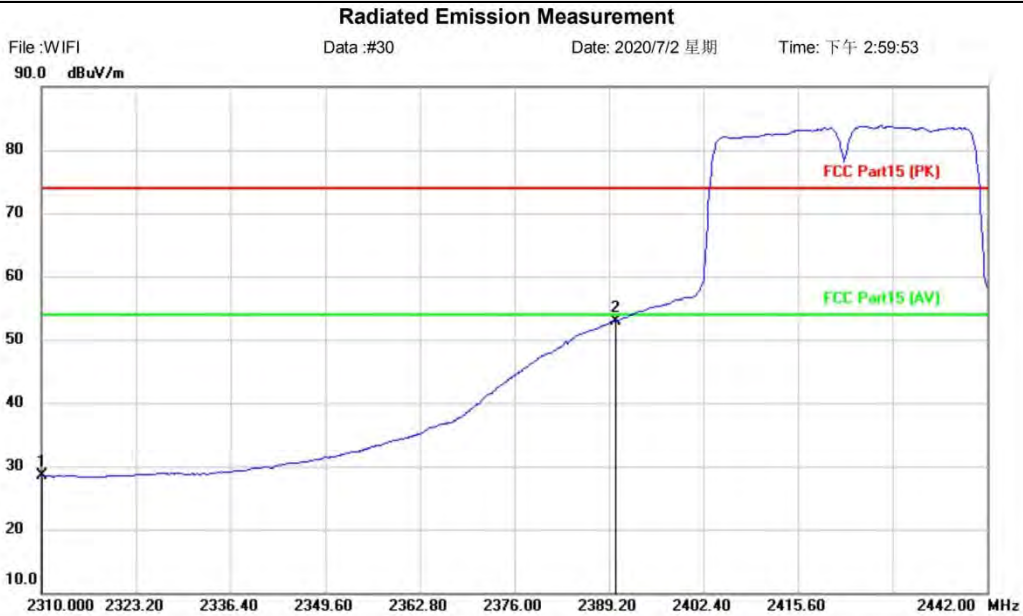
File :WIFI	Data :#29	Date: 2020/7/1 星期	Time: 下午 6:11:51
100.0	dBuV/m		
Site	Polarization: <b>Horizontal</b>	Temperature:	
Limit: FCC Part15 (PK)	Power:	Humidity: %	
EUT: Mobile Phone	Distance: 3m		
M/N: B1f			
Mode: N40-2422			
Note: 10			

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	cm	degree	Comment
1		2310.000	48.75	-4.20	44.55	74.00	-29.45	peak		
2	*	2390.000	74.95	-3.88	71.07	74.00	-2.93	peak		

**Test Result: Pass**

[TestMode: 802.11n40]; [Test channel:lowest]; [Polarity: Horizontal]

Average value:



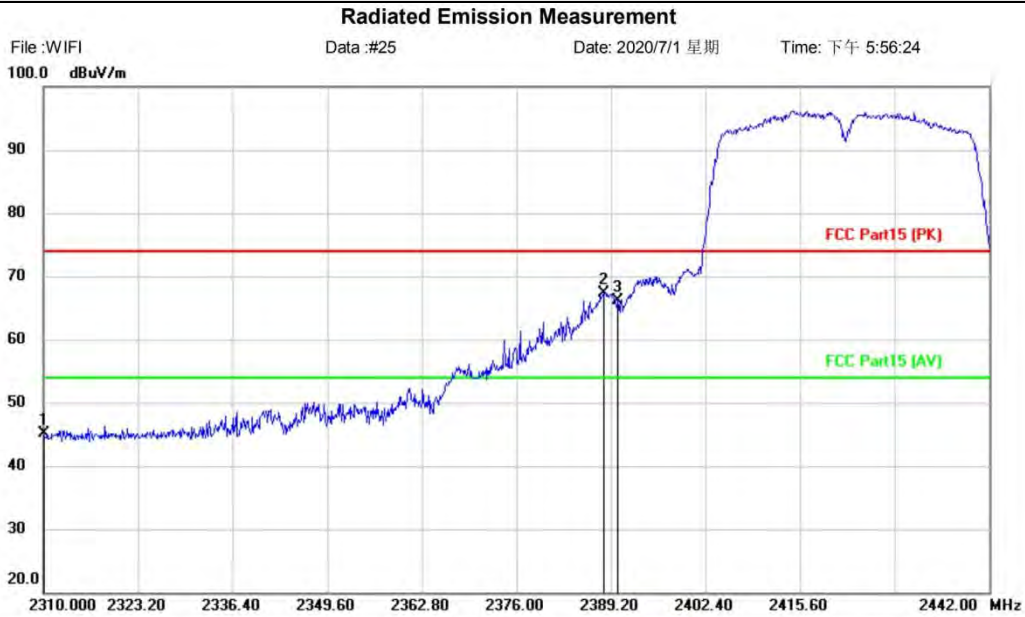
Site	Polarization: <b>Horizontal</b>	Temperature:
Limit: FCC Part15 (PK)	Power:	Humidity: %
EUT: Mobile Phone	Distance: 3m	
M/N: B1f		
Mode: N40-2422		
Note: 10		

No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Antenna Height cm	Table Degree	Comment
1		2310.000	32.65	-4.20	28.45	54.00	-25.55	AVG		
2	*	2390.000	56.85	-3.88	52.97	54.00	-1.03	AVG		

**Test Result: Pass**

[TestMode: 802.11n40]; [Test channel:lowest]; [Polarity: Vertical]

Peak value



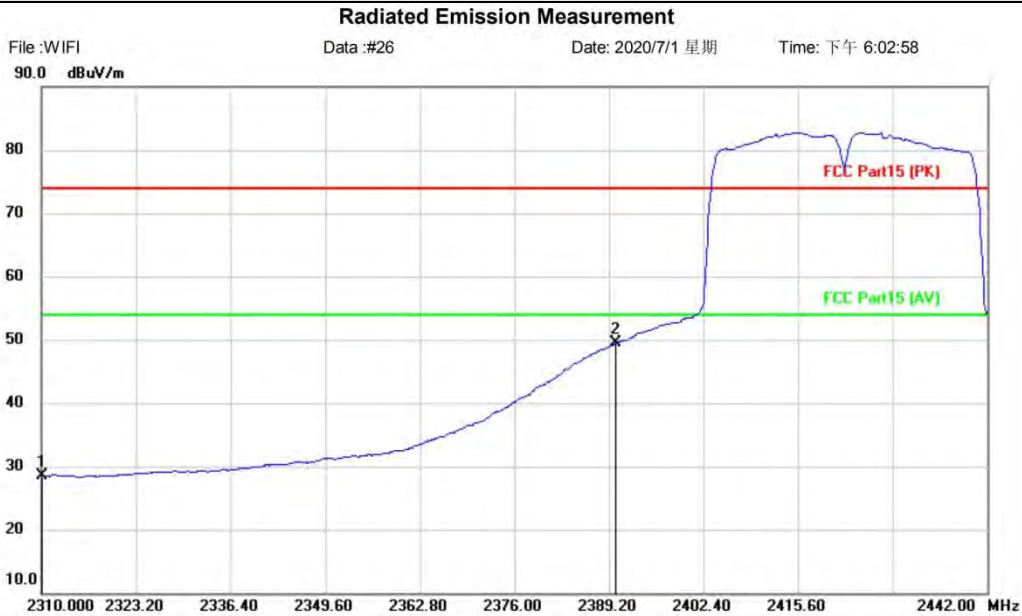
Site	Polarization: <b>Vertical</b>	Temperature:
Limit: FCC Part15 (PK)	Power:	Humidity: %
EUT: Mobile Phone	Distance: 3m	
M/N: B1f		
Mode: N40-2422		
Note: 13		

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	cm	degree	Comment
1		2310.000	49.63	-4.49	45.14	74.00	-28.86	peak		
2	*	2388.276	71.54	-4.21	67.33	74.00	-6.67	peak		
3		2390.000	70.27	-4.21	66.06	74.00	-7.94	peak		

**Test Result: Pass**

[TestMode: 802.11n40]; [Test channel:lowest]; [Polarity: Vertical]

Average value:



Site: Polarization: **Vertical** Temperature:  
Limit: FCC Part15 (PK) Power: Humidity: %  
EUT: Mobile Phone Distance: 3m  
M/N: B1f  
Mode: N40-2422  
Note: 13

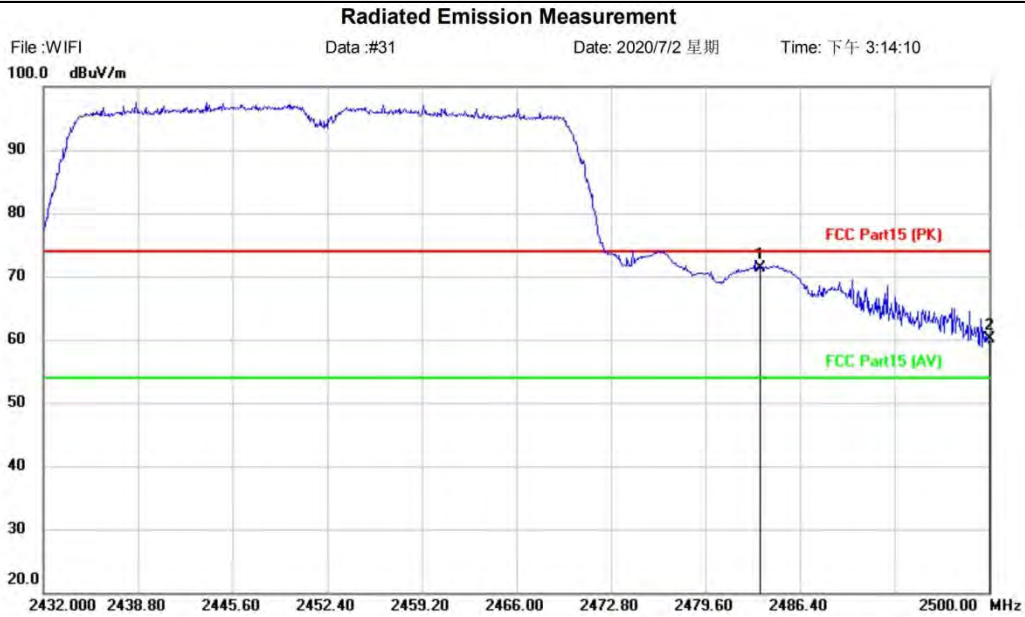
No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	cm	degree	Comment
1		2310.000	32.93	-4.49	28.44	54.00	-25.56	AVG		
2	*	2390.000	53.66	-4.21	49.45	54.00	-4.55	AVG		

**Test Result: Pass**



[TestMode: 802.11n40]; [Test channel: Highest]; [Polarity: Horizontal]

Peak value



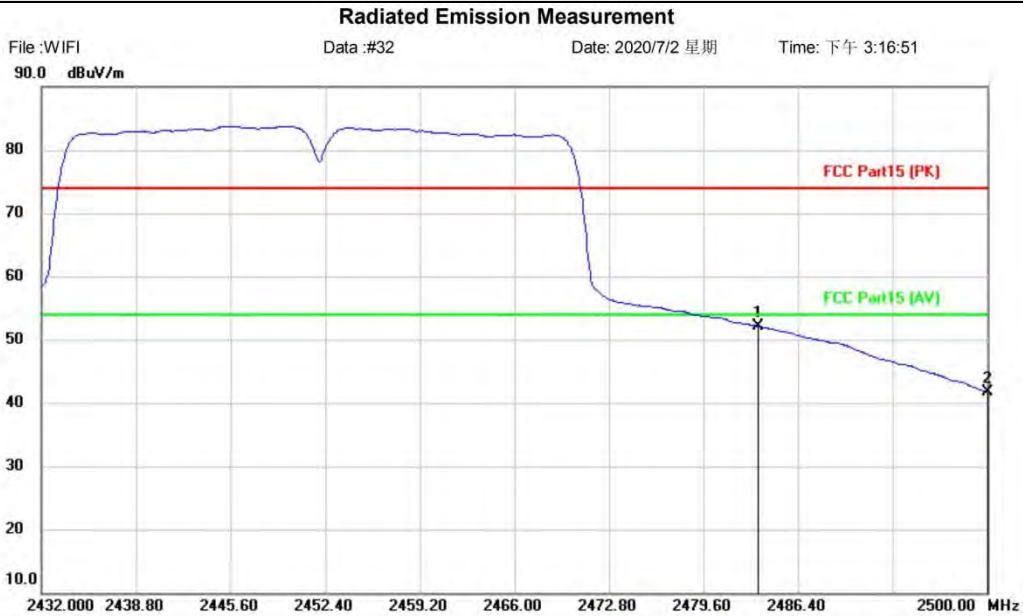
Site	Polarization: <b>Horizontal</b>	Temperature:
Limit: FCC Part15 (PK)	Power:	Humidity: %
EUT: Mobile Phone	Distance: 3m	
M/N: B1f		
Mode: N40-2452		
Note: 10		

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	cm	degree	Comment
1	*	2483.500	74.73	-3.38	71.35	74.00	-2.65	peak		
2		2500.000	63.47	-3.30	60.17	74.00	-13.83	peak		

**Test Result: Pass**

[TestMode: 802.11n40]; [Test channel: Highest]; [Polarity: Horizontal]

Average value:



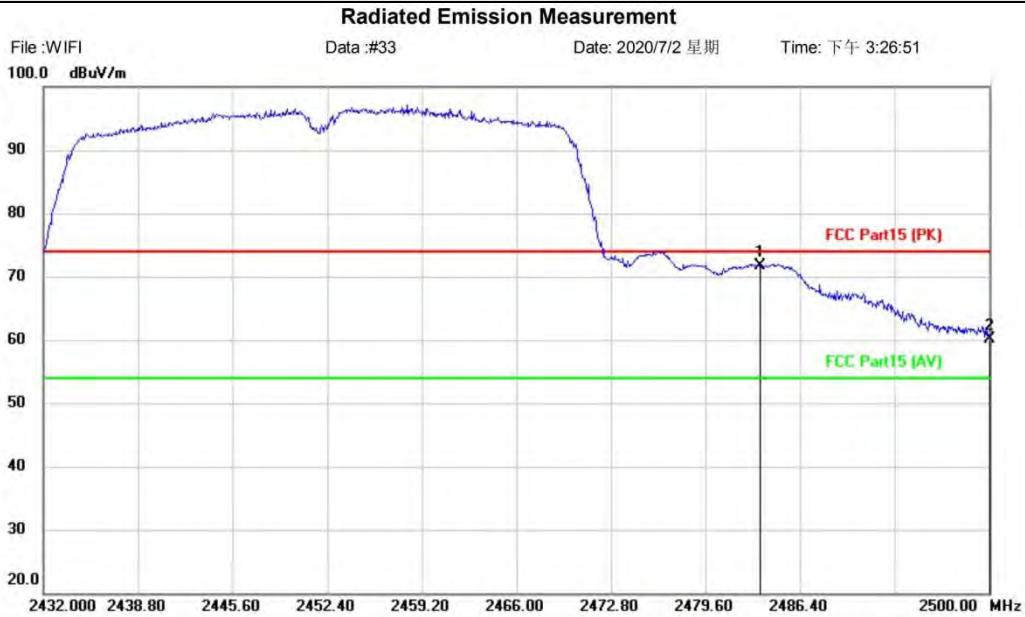
Site	Polarization: <b>Horizontal</b>	Temperature:
Limit: FCC Part15 (PK)	Power:	Humidity: %
EUT: Mobile Phone	Distance: 3m	
M/N: B1f		
Mode: N40-2452		
Note: 10		

No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Antenna Height cm	Table Degree	Detector	Comment
1	*	2483.500	55.53	-3.38	52.15	54.00	-1.85	AVG			
2		2500.000	44.96	-3.30	41.66	54.00	-12.34	AVG			

**Test Result: Pass**

[TestMode: 802.11n40]; [Test channel: Highest]; [Polarity: Vertical]

Peak value



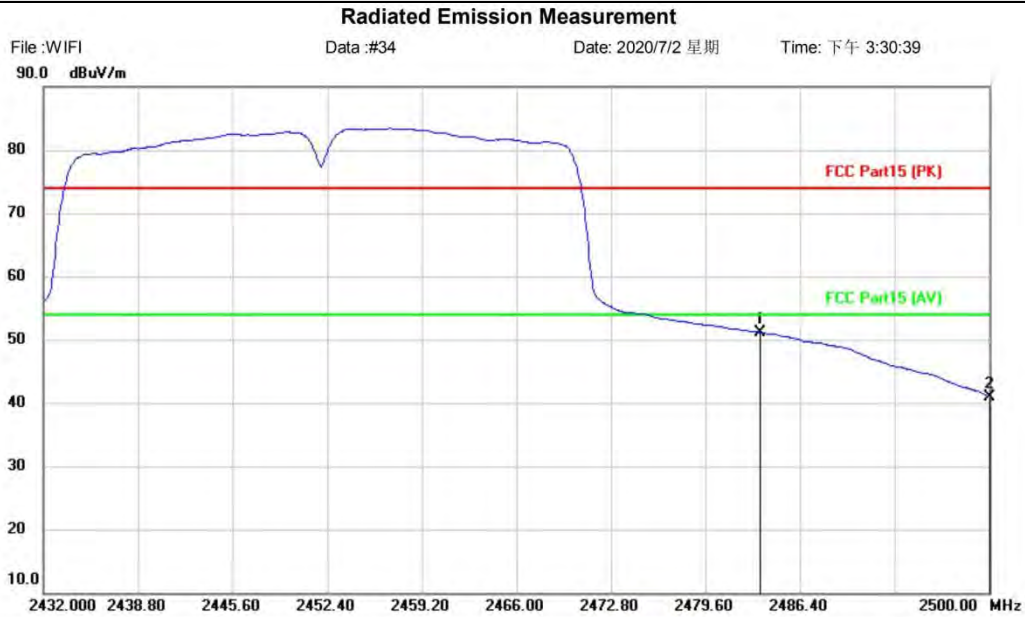
Site	Polarization: <b>Vertical</b>	Temperature:
Limit: FCC Part15 (PK)	Power:	Humidity: %
EUT: Mobile Phone	Distance: 3m	
M/N: B1f		
Mode: N40-2452		
Note: 13		

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	cm	degree	Comment
1	*	2483.500	75.57	-3.77	71.80	74.00	-2.20	peak		
2		2500.000	63.74	-3.70	60.04	74.00	-13.96	peak		

**Test Result: Pass**

[TestMode: 802.11n40]; [Test channel: Highest]; [Polarity: Vertical]

Average value:



Site Polarization: **Vertical** Temperature:  
 Limit: FCC Part15 (PK) Power: Humidity: %  
 EUT: Mobile Phone Distance: 3m  
 M/N: B1f  
 Mode: N40-2452  
 Note: 13

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	cm	degree	Comment
1	*	2483.500	54.96	-3.77	51.19	54.00	-2.81	AVG		
2		2500.000	44.66	-3.70	40.96	54.00	-13.04	AVG		

**Test Result: Pass**

### CONDUCTED EMISSIONS AT AC POWER LINE (150KHZ-30MHZ)

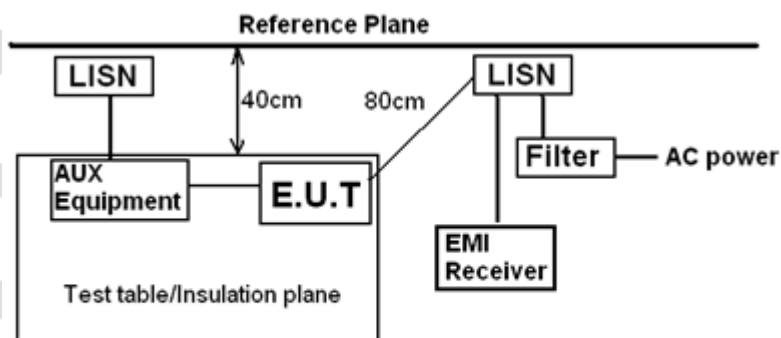
<b>Test Standard</b>	47 CFR Part 15, Subpart C 15.247
<b>Test Method</b>	ANSI C63.10 (2013) Section 6.2
<b>Test Mode (Pre-Scan)</b>	TX mode (SE)
<b>Test Mode (Final Test)</b>	TX mode (SE)
<b>Tester</b>	Eason
<b>Temperature</b>	26°C
<b>Humidity</b>	54%

### LIMITS

Frequency of emission(MHz)	Conducted limit(dB $\mu$ V)	
	Quasi-peak	Average
0.15-0.5	66 to 56*	56 to 46*
0.5-5	56	46
5-30	60	50

\*Decreases with the logarithm of the frequency.

### BLOCK DIAGRAM OF TEST SETUP



*Remark*  
 E.U.T: Equipment Under Test  
 LISN: Line Impedance Stabilization Network  
 Test table height=0.8m

### PROCEDURE

- 1) The mains terminal disturbance voltage test was conducted in a shielded room.
- 2) The EUT was connected to AC power source through a LISN 1 (Line Impedance Stabilization Network) which provides a 50ohm/50 $\mu$ H + 5ohm linear impedance. The power cables of all other units of the EUT were connected to a second LISN 2, which was bonded to the ground reference plane in the same way as

the LISN 1 for the unit being measured. A multiple socket outlet strip was used to connect multiple power cables to a single LISN provided the rating of the LISN was not exceeded.

3) The tabletop EUT was placed upon a non-metallic table 0.8m above the ground reference plane. And for floor-standing arrangement, the EUT was placed on the horizontal ground reference plane,

4) The test was performed with a vertical ground reference plane. The rear of the EUT shall be 0.4 m from the vertical ground reference plane. The vertical ground reference plane was bonded to the horizontal ground reference plane. The LISN 1 was placed 0.8 m from the boundary of the unit under test and bonded to a ground reference plane for LISNs mounted on top of the ground reference plane. This distance was between the closest points of the LISN 1 and the EUT. All other units of the EUT and associated equipment was at least 0.8 m from the LISN 2.

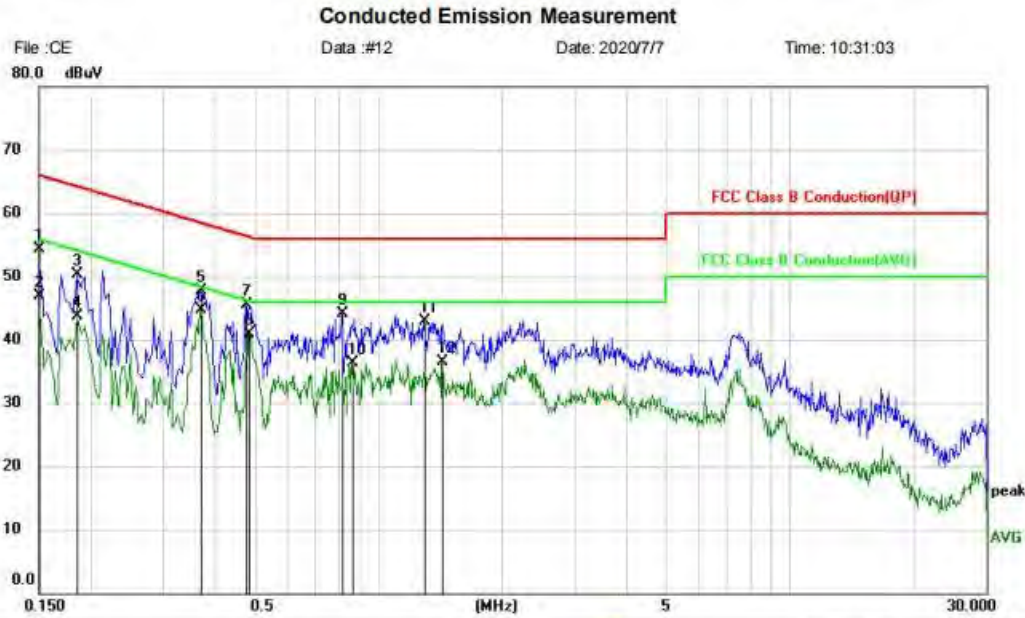
5) In order to find the maximum emission, the relative positions of equipment and all of the interface cables must be changed according to ANSI C63.10 on conducted measurement.

Remark: LISN=Read Level+ Cable Loss+ LISN Factor

BlueAsia

TEST DATA

[Line: Line]



File :CE  
Data :#12  
Date: 2020/7/7  
Time: 10:31:03

Site  
Limit: FCC Class B Conduction(QP)  
EUT: Mobile Phone  
M/N: B1f  
Mode: WIFI  
Note:

Phase: **L1**  
Power: AC120V/60Hz  
Temperature: 26  
Humidity: 60%

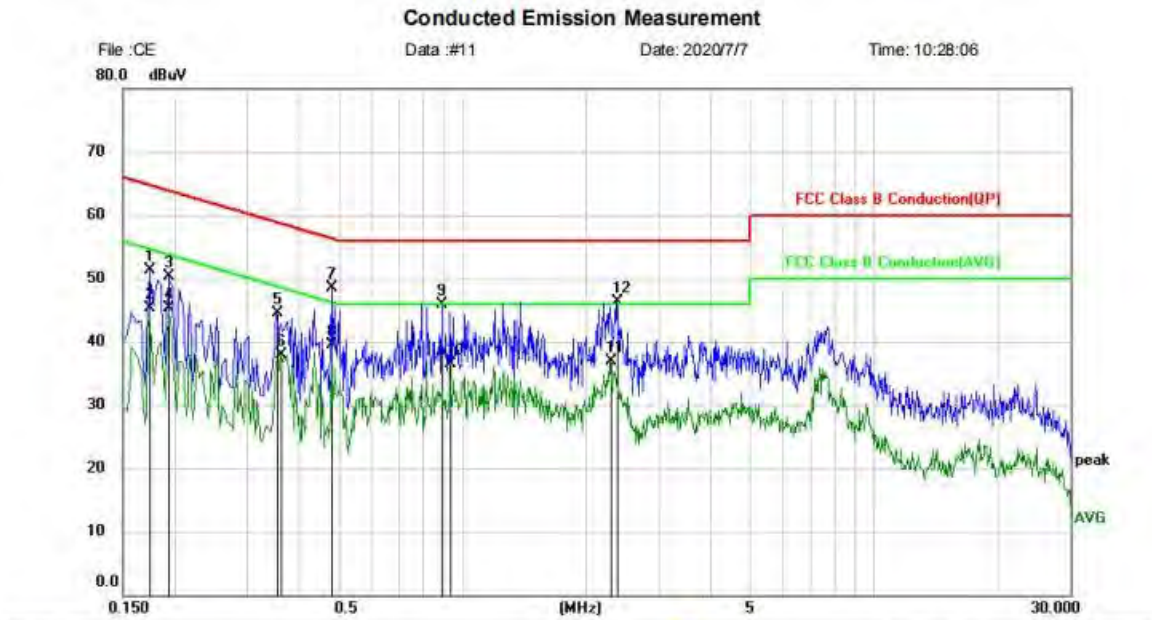
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Over dB	Detector	Comment
1		0.1500	44.36	9.88	54.24	66.00	-11.76	QP	
2		0.1500	37.03	9.88	46.91	56.00	-9.09	AVG	
3		0.1860	40.40	9.88	50.28	64.21	-13.93	QP	
4		0.1860	33.87	9.88	43.75	54.21	-10.46	AVG	
5		0.3700	37.92	9.75	47.67	58.50	-10.83	QP	
6	*	0.3700	34.98	9.75	44.73	48.50	-3.77	AVG	
7		0.4780	35.87	9.72	45.59	56.37	-10.78	QP	
8		0.4860	31.21	9.72	40.93	46.24	-5.31	AVG	
9		0.8139	34.41	9.72	44.13	56.00	-11.87	QP	
10		0.8620	26.59	9.74	36.33	46.00	-9.67	AVG	
11		1.2900	33.07	9.82	42.89	56.00	-13.11	QP	
12		1.4260	26.76	9.83	36.59	46.00	-9.41	AVG	

\*:Maximum data x:Over limit !:over margin

(Reference Only)

**Test Result: Pass**

[Line: Nutral]



Site: \_\_\_\_\_ Phase: **N** Temperature: 26  
 Limit: FCC Class B Conduction(QP) Power: AC120V/60Hz Humidity: 60 %  
 EUT: Mobile Phone  
 M/N: B1f  
 Mode: WIFI  
 Note:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector	Comment
		MHz	dBuV	dB	dBuV	dBuV	dB		
1		0.1740	41.45	9.87	51.32	64.77	-13.45	QP	
2		0.1740	35.53	9.87	45.40	54.77	-9.37	AVG	
3		0.1940	40.39	9.89	50.28	63.86	-13.58	QP	
4		0.1940	35.39	9.89	45.28	53.86	-8.58	AVG	
5		0.3540	34.66	9.76	44.42	58.87	-14.45	QP	
6		0.3620	28.23	9.75	37.98	48.68	-10.70	AVG	
7		0.4820	38.70	9.72	48.42	56.30	-7.88	QP	
8	*	0.4820	29.78	9.72	39.50	46.30	-6.80	AVG	
9		0.8940	36.25	9.75	46.00	56.00	-10.00	QP	
10		0.9380	26.76	9.76	36.52	46.00	-9.48	AVG	
11		2.2940	26.98	9.86	36.84	46.00	-9.16	AVG	
12		2.3740	36.53	9.86	46.39	56.00	-9.61	QP	

\*:Maximum data x:Over limit !:over margin (Reference Only)

**Test Result: Pass**



### RADIATED SPURIOUS EMISSIONS

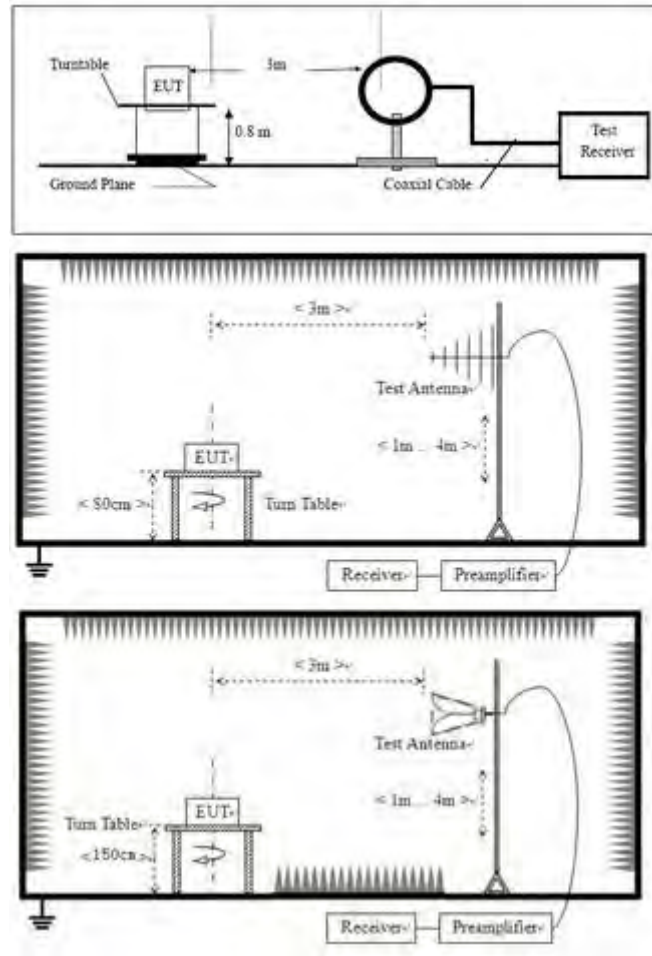
<b>Test Standard</b>	47 CFR Part 15, Subpart C 15.247
<b>Test Method</b>	ANSI C63.10 (2013) Section 6.4,6.5,6.6
<b>Test Mode (Pre-Scan)</b>	TX
<b>Test Mode (Final Test)</b>	TX
<b>Tester</b>	Eason
<b>Temperature</b>	26°C
<b>Humidity</b>	54%

### LIMITS

Frequency(MHz)	Field strength(microvolts/meter)	Measurement distance(meters)
0.009-0.490	2400/F(kHz)	300
0.490-1.705	24000/F(kHz)	30
1.705-30.0	30	30
30-88	100	3
88-216	150	3
216-960	200	3
Above 960	500	3

Remark: The emission limits shown in the above table are based on measurements employing a CISPR quasi-peak detector except for the frequency bands 9-90kHz, 110-490kHz and above 1000 MHz. Radiated emission limits in these three bands are based on measurements employing an average detector, the peak field strength of any emission shall not exceed the maximum permitted average limits specified above by more than 20 dB under any condition of modulation.

## BLOCK DIAGRAM OF TEST SETUP



## PROCEDURE

- For below 1GHz, the EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 or 10 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.
- For above 1GHz, the EUT was placed on the top of a rotating table 1.5 meters above the ground at a 3 meter fully-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.
- The EUT was set 3 or 10 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- The antenna 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.
- 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 (for the test frequency of below 30MHz, the antenna was tuned to heights 1 meter) and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
- The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.
- If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.

- h. Test the EUT in the lowest channel, the middle channel, the Highest channel.
- i. The radiation measurements are performed in X, Y, Z axis positioning for Transmitting mode, and found the X axis positioning which it is the worst case.
- j. Repeat above procedures until all frequencies measured was complete.

Remark:

- 1) For emission below 1GHz, through pre-scan found the worst case is the lowest channel. Only the worst case is recorded in the report.
- 2) The field strength is calculated by adding the Antenna Factor, Cable Factor & Preamplifier. The basic equation with a sample calculation is as follows:  
Final Test Level = Receiver Reading + Antenna Factor + Cable Factor + Preamplifier Factor
- 3) Scan from 9kHz to 25GHz, the disturbance above 18GHz and below 30MHz was very low. The points marked on above plots are the highest emissions could be found when testing, so only above points had been displayed. The amplitude of spurious emissions from the radiator which are attenuated more than 20dB below the limit need not be reported.
- 4) For frequencies above 1GHz, the field strength limits are based on average limits. However, the peak field strength of any emission shall not exceed the maximum permitted average limits specified above by more than 20 dB under any condition of modulation. For the emissions whose peak level is lower than the average limit, only the peak measurement is shown in the report.

TEST DATA

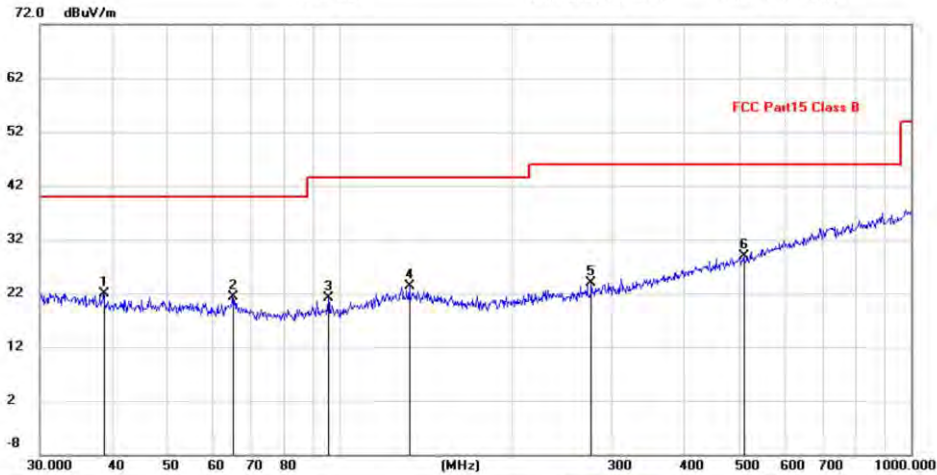
[TestMode: TX]; [Polarity: Horizontal]



Company: Qianhai BlueAsia of Technical Services (Shenzhen) Co., Ltd.  
Address: 深圳市龙岗区坂田街道布龙路448号BlueAsia物联网测试中心  
Tel: +86-755-28682673 or +86-755-23059481

Radiated Emission Measurement

File: RE Data: #21 Date: 2020/7/7 星期 Time: 下午 1:50:07



Site: Polarization: **Horizontal** Temperature:   
Limit: FCC Part15 Class B Power: Humidity: %   
EUT: Mobile Phone Distance: 3m   
M/N: B1f   
Mode: WIFI   
Note:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	cm	degree	Comment
1		38.7518	-2.02	24.02	22.00	40.00	-18.00	QP		
2		65.1145	-1.03	22.25	21.22	40.00	-18.78	QP		
3		95.7622	0.88	20.21	21.09	43.50	-22.41	QP		
4		132.6850	0.21	23.07	23.28	43.50	-20.22	QP		
5		276.1235	0.70	23.23	23.93	46.00	-22.07	QP		
6	*	510.0436	-0.42	29.26	28.84	46.00	-17.16	QP		

Test Result: Pass

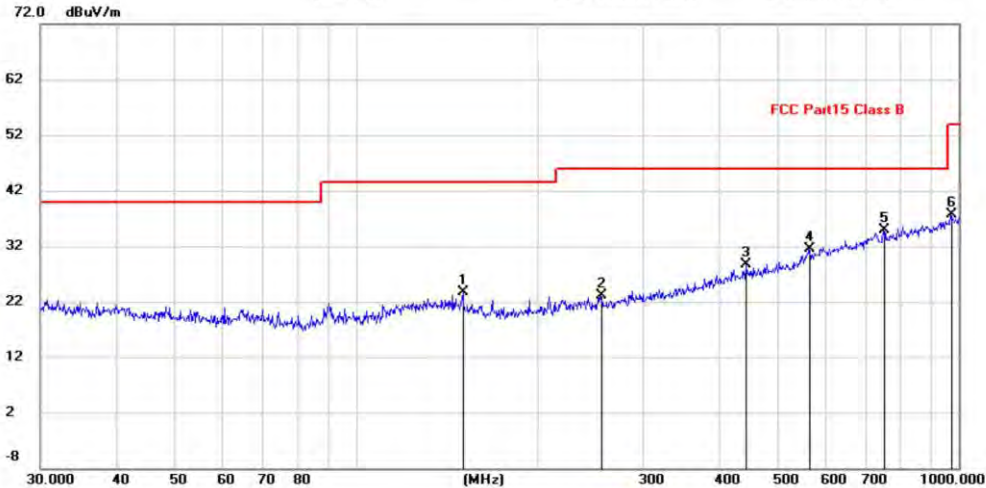
[TestMode: TX]; [Polarity: Vertical]



Company: Qianhai BlueAsia of Technical Services(Shenzhen) Co.,Ltd.  
Address: 深圳市龙岗区坂田街道布龙路448号BlueAsia物联网测试中心  
Tel: +86-755-28682673 or +86-755-23059481

**Radiated Emission Measurement**

File :RE Data :#22 Date: 2020/7/7 星期 Time: 下午 1:51:40



Site: Limit: FCC Part15 Class B  
EUT: Mobile Phone  
M/N: B1f  
Mode: WIFI  
Note:

Polarization: **Vertical**  
Power:  
Distance: 3m

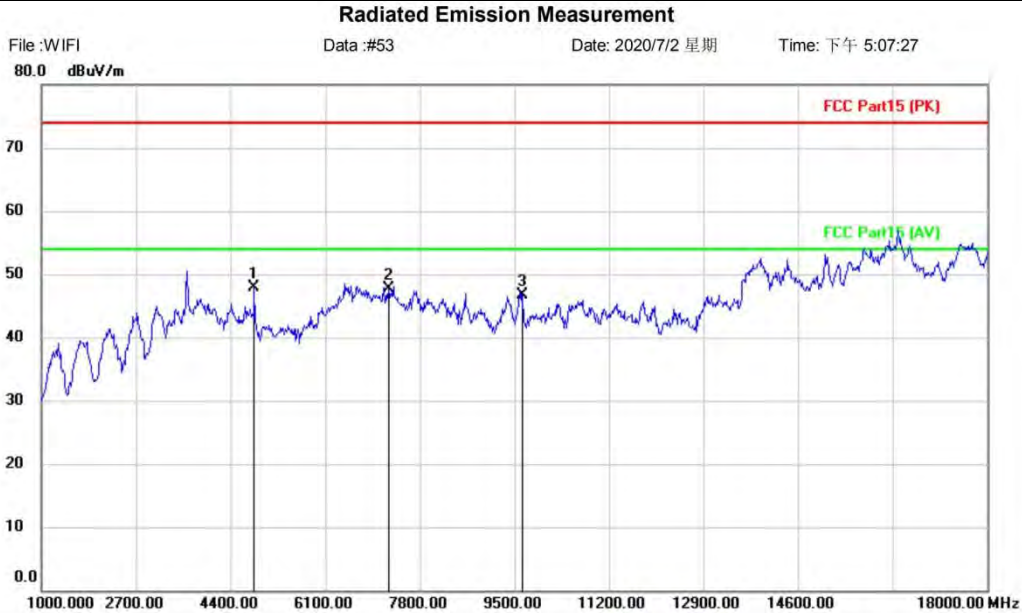
Temperature:  
Humidity: %

No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Antenna Height cm	Table Degree	Detector	Comment
1		150.5378	0.35	23.26	23.61	43.50	-19.89			QP	
2		254.7284	0.20	22.98	23.18	46.00	-22.82			QP	
3		444.8514	0.81	27.95	28.76	46.00	-17.24			QP	
4		564.6389	1.11	30.44	31.55	46.00	-14.45			QP	
5	*	750.1083	1.34	33.52	34.86	46.00	-11.14			QP	
6		968.9338	1.54	36.13	37.67	54.00	-16.33			QP	

**Test Result: Pass**

Remark: The pre-test were performed on lowest, middle and highest frequencies, only the worst case's (802.11b) data was showed.

[TestMode: Test channel:lowest]; [Polarity: Horizontal]



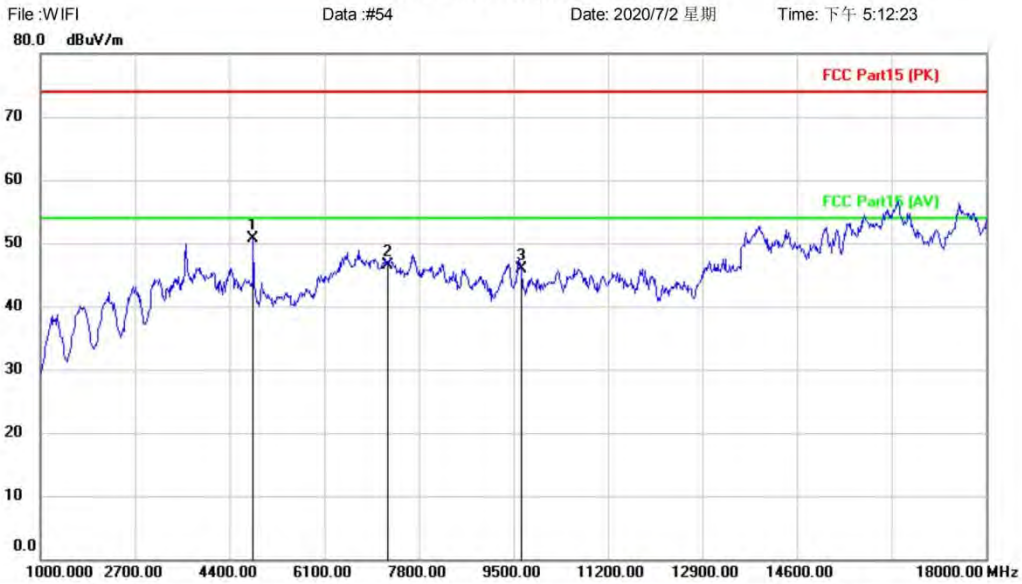
Site	Polarization: <b>Horizontal</b>	Temperature:
Limit: FCC Part15 (PK)	Power:	Humidity: %
EUT: Mobile Phone	Distance: 3m	
M/N: B1f		
Mode: B-2412		
Note:		

No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Antenna Height cm	Table Degree	Comment
1	*	4825.000	45.99	1.89	47.88	74.00	-26.12	peak			
2		7239.000	41.18	6.60	47.78	74.00	-26.22	peak			
3		9653.000	40.88	5.90	46.78	74.00	-27.22	peak			

**Test Result: Pass**

[TestMode: Test channel:lowest]; [Polarity: Vertical]

**Radiated Emission Measurement**



Site: Limit: FCC Part15 (PK) EUT: Mobile Phone M/N: B1f Mode: B-2412 Note:

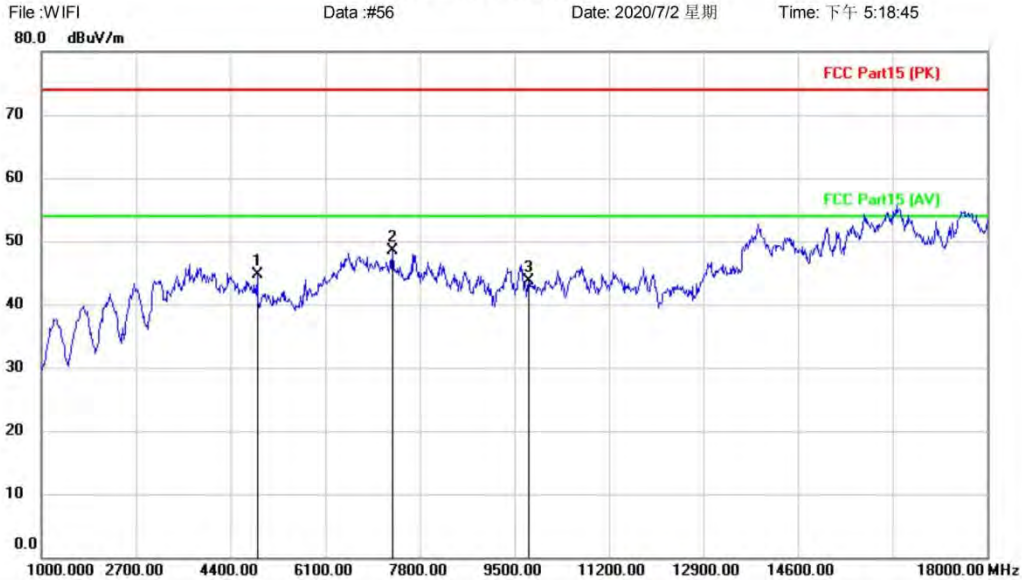
Polarization: **Vertical** Power: Temperature: Humidity: % Distance: 3m

No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Antenna Height cm	Table Degree	Comment
1	*	4825.000	48.83	1.89	50.72	74.00	-23.28	peak			
2		7239.000	39.72	6.74	46.46	74.00	-27.54	peak			
3		9653.000	40.21	5.76	45.97	74.00	-28.03	peak			

**Test Result: Pass**

[TestMode: Test channel:Middle]; [Polarity: Horizontal]

**Radiated Emission Measurement**



Site Polarization: **Horizontal** Temperature:  
 Limit: FCC Part15 (PK) Power: Humidity: %  
 EUT: Mobile Phone Distance: 3m  
 M/N: B1f  
 Mode: B-2437  
 Note:

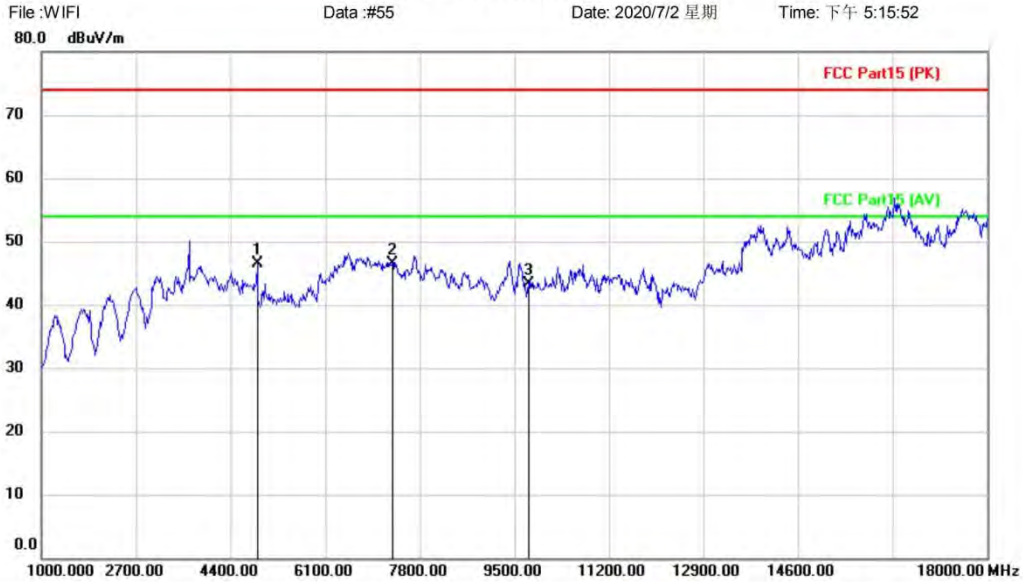
No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	cm	degree
1		4876.000	44.30	0.39	44.69	74.00	-29.31	peak	
2	*	7307.000	41.88	6.63	48.51	74.00	-25.49	peak	
3		9755.000	38.55	5.07	43.62	74.00	-30.38	peak	

**Test Result: Pass**



[TestMode: Test channel:Middle]; [Polarity: Vertical]

**Radiated Emission Measurement**



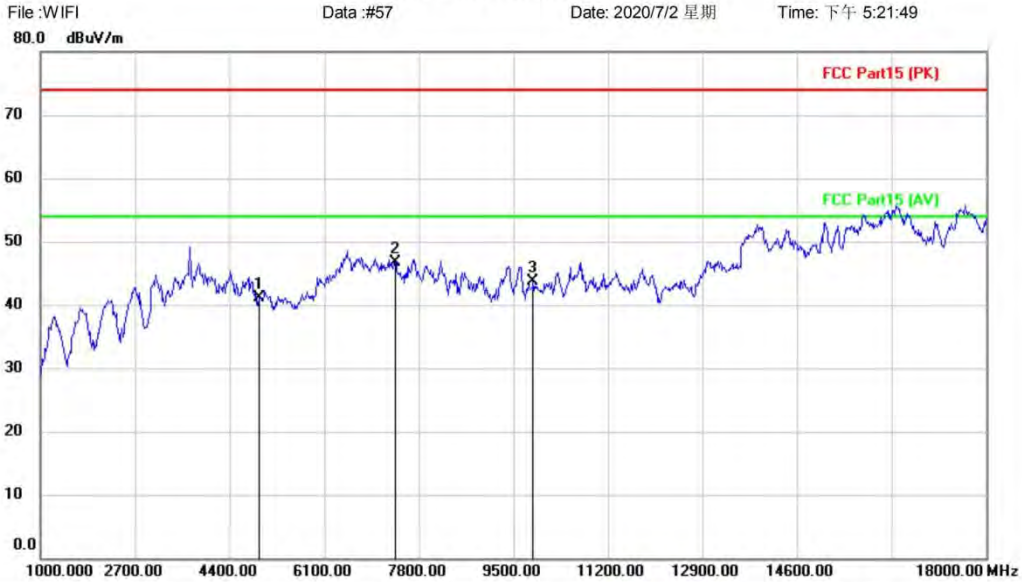
Site Polarization: **Vertical** Temperature:  
 Limit: FCC Part15 (PK) Power: Humidity: %  
 EUT: Mobile Phone Distance: 3m  
 M/N: B1f  
 Mode: B-2437  
 Note:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	cm	degree	Comment
1		4876.000	46.08	0.39	46.47	74.00	-27.53	peak		
2	*	7307.000	39.98	6.54	46.52	74.00	-27.48	peak		
3		9755.000	38.24	5.02	43.26	74.00	-30.74	peak		

**Test Result: Pass**

[TestMode: Test channel:Highest]; [Polarity: Horizontal]

**Radiated Emission Measurement**



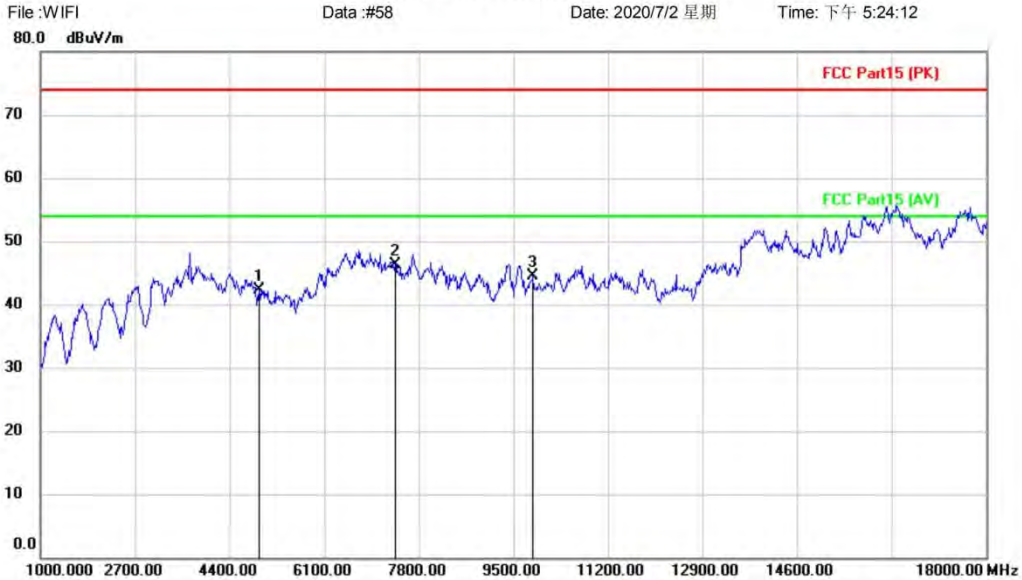
Site Polarization: **Horizontal** Temperature:  
 Limit: FCC Part15 (PK) Power: Humidity: %  
 EUT: Mobile Phone Distance: 3m  
 M/N: B1f  
 Mode: B-2462  
 Note:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	cm	degree	Comment
1		4927.000	40.81	0.29	41.10	74.00	-32.90	peak		
2	*	7375.000	40.95	5.76	46.71	74.00	-27.29	peak		
3		9857.000	38.00	5.67	43.67	74.00	-30.33	peak		

**Test Result: Pass**

[TestMode: Test channel:Highest]; [Polarity: Vertical]

**Radiated Emission Measurement**



Site Polarization: **Vertical** Temperature:  
 Limit: FCC Part15 (PK) Power: Humidity: %  
 EUT: Mobile Phone Distance: 3m  
 M/N: B1f  
 Mode: B-2462  
 Note:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	cm	degree	Comment
1		4927.000	42.10	0.29	42.39	74.00	-31.61	peak		
2	*	7375.000	40.89	5.46	46.35	74.00	-27.65	peak		
3		9857.000	38.77	5.73	44.50	74.00	-29.50	peak		

**Test Result: Pass**

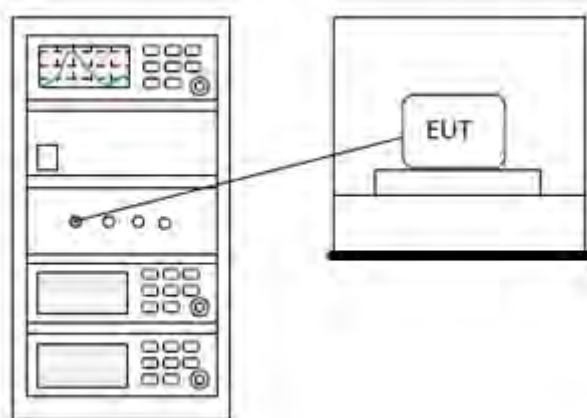
### CONDUCTED BAND EDGES MEASUREMENT

Test Standard	47 CFR Part 15, Subpart C 15.247
Test Method	ANSI C63.10 (2013) Section 7.8.6
Test Mode (Pre-Scan)	TX
Test Mode (Final Test)	TX
Tester	Eason
Temperature	26°C
Humidity	54%

### LIMITS

<b>Limit:</b>	In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under paragraph (b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20 dB. Attenuation below the general limits specified in §15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in §15.205(a), must also comply with the radiated emission limits specified in §15.209(a) (see §15.205(c)).
---------------	--

### BLOCK DIAGRAM OF TEST SETUP



TEST DATA

Pass: Please Refer To Appendix: For Details

BlueAsia

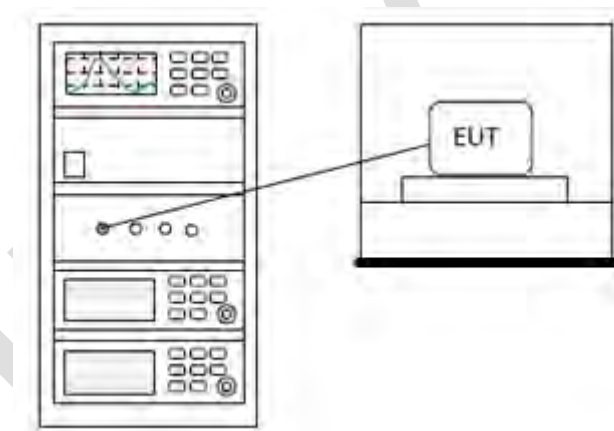
### MINIMUM 6DB BANDWIDTH

Test Standard	47 CFR Part 15, Subpart C 15.247
Test Method	ANSI C63.10 (2013) Section 11.8.1
Test Mode (Pre-Scan)	TX
Test Mode (Final Test)	TX
Tester	Eason
Temperature	26°C
Humidity	54%

### LIMITS

Limit:	≥500 kHz
--------	----------

### BLOCK DIAGRAM OF TEST SETUP



### TEST DATA

**Pass: Please Refer To Appendix: For Details**

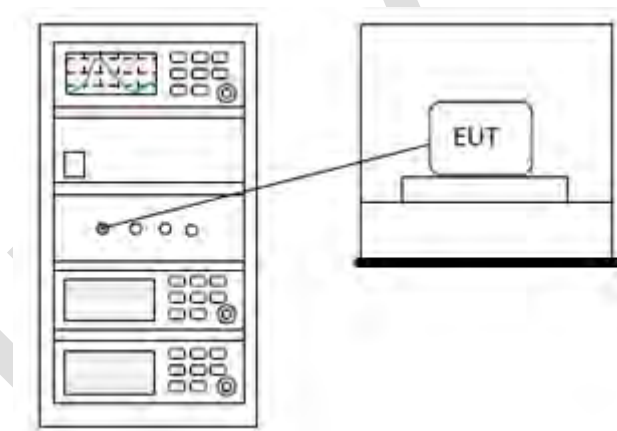
### POWER SPECTRUM DENSITY

Test Standard	47 CFR Part 15, Subpart C 15.247
Test Method	ANSI C63.10 (2013) Section 11.10.2
Test Mode (Pre-Scan)	TX
Test Mode (Final Test)	TX
Tester	Eason
Temperature	26°C
Humidity	54%

### LIMITS

Limit:	≤8dBm in any 3 kHz band during any time interval of continuous transmission
--------	---

### BLOCK DIAGRAM OF TEST SETUP



### TEST DATA

**Pass: Please Refer To Appendix: For Details**