

TEST REPORT

Product : Hunting Camera
Trade mark : BROWNING
Model/Type reference : BTC-DWPS-ATT, BTC-DWPS-VZW
Serial Number : N/A
Report Number : EED32M00186505
FCC ID : 2ALGTBTC-DWPS-AV
Date of Issue : Jul. 02, 2020
Test Standards : 47 CFR Part 2
47 CFR Part 27
Test result : PASS

Prepared for:

Prometheus Group LLC

P.O. Box 130100 Birmingham, Alabama 35213-0100 USA

Prepared by:

Centre Testing International Group Co., Ltd.

Hongwei Industrial Zone, Bao'an 70 District,

Shenzhen, Guangdong, China

TEL: +86-755-3368 3668

FAX: +86-755-3368 3385

Compiled by:

Sunlight Sun

Reviewed by:

Ware Xin

Sunlight Sun

Ware Xin

Approved by:

Sam Chuang

Date:

Jul. 02, 2020

Sam Chuang

Check No.:2447635447



2 Version

Version No.	Date	Description
00	Jul. 02, 2020	Original

3 Test Summary

LTE band 2			
Test Item	Test Requirement	Test method	Result
Effective Radiated Power of Transmitter(EIRP)	Part 2.1046(a) / Part 24.232(c)	TIA-603-E-2016&KDB 971168 D01v03r01	PASS
Spurious emissions at antenna terminals	Part 2.1051/ Part 2.1057/ Part 24.238(a)(b)	TIA-603-E-2016&KDB 971168 D01v03r01	PASS

Remark:

The tested samples and the sample information are provided by the client.

Tx: In this whole report Tx (or tx) means Transmitter.

Rx: In this whole report Rx (or rx) means Receiver.

RF: In this whole report RF means Radiated Frequency.

CH: In this whole report CH means channel.

Volt: In this whole report Volt means Voltage.

Temp: In this whole report Temp means Temperature.

Humid: In this whole report Humid means humidity.

Press: In this whole report Press means Pressure.

N/A: In this whole report not application

Model No.:BTC-DWPS-ATT, BTC-DWPS-VZW

Only the model BTC-DWPS-ATT was tested, since the electrical circuit design, layout, components used and internal wiring were identical for the above models, with only model number is different for the marketing requirement.

The marketing requirement is as below,

BTC-DWPS-ATT operates on the ATT Network

BTC-DWPS-VZW operates on the Verizon Network

The certified module ID is FCC ID: R17LE910NAV2, and report numbers of this certified module are 1506FR21-01 and RF exposure analysis dated on 04/14/2016.

This certified module will be integrated into a host that is a hunting camera. Therefore, it is the same mobile condition as the original filling.

In this report, this certified module is same as the original filling. We have verified the power and test for new radiated emission/exposure evaluation to demonstrate full compliance.

4 Content

1 COVER PAGE	1
2 VERSION	2
3 TEST SUMMARY	3
4 CONTENT	4
5 TEST REQUIREMENT	5
5.1 TEST SETUP.....	5
5.1.1 For Radiated Emissions test setup.....	5
5.2 TEST ENVIRONMENT.....	5
5.3 TEST CONDITION.....	5
6 GENERAL INFORMATION	6
6.1 CLIENT INFORMATION.....	6
6.2 GENERAL DESCRIPTION OF EUT.....	6
6.3 PRODUCT SPECIFICATION SUBJECTIVE TO THIS STANDARD.....	6
6.4 DESCRIPTION OF SUPPORT UNITS.....	7
6.5 TEST LOCATION.....	7
6.6 DEVIATION FROM STANDARDS.....	7
6.7 ABNORMALITIES FROM STANDARD CONDITIONS.....	7
6.8 OTHER INFORMATION REQUESTED BY THE CUSTOMER.....	7
6.9 MEASUREMENT UNCERTAINTY (95% CONFIDENCE LEVELS, K=2).....	7
7 EQUIPMENT LIST	8
8 RADIO TECHNICAL REQUIREMENTS SPECIFICATION	9
Appendix A) Effective Radiated Power of Transmitter (ERP/EIRP).....	10
Appendix B): Field strength of spurious radiation.....	12
PHOTOGRAPHS OF TEST SETUP	25
PHOTOGRAPHS OF EUT CONSTRUCTIONAL DETAILS	27

5 Test Requirement

5.1 Test setup

5.1.1 For Radiated Emissions test setup

Radiated Emissions setup:

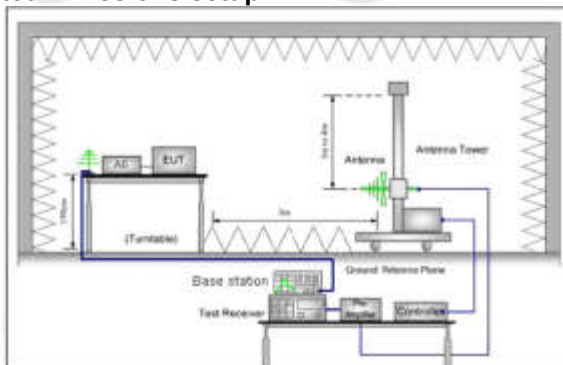


Figure 1.30MHz to 1GHz

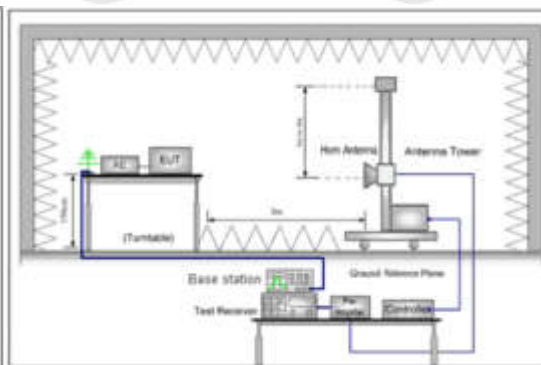


Figure 2. above 1GHz

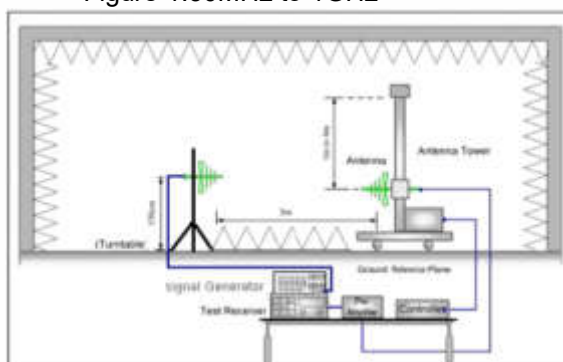


Figure 1. 30MHz to 1GHz

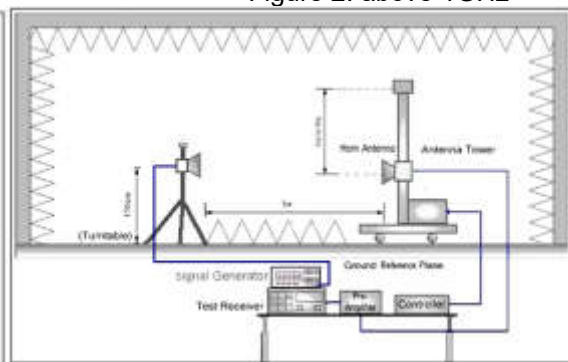


Figure 2. above 1GHz

5.2 Test Environment

Operating Environment:

Temperature:	25°C
Humidity:	53.6 % RH
Atmospheric Pressure:	1010mbar

5.3 Test Condition

Test channel:

Test Mode	Test Frequency ID	Bandwidth (MHz)	Number [UL]	Frequency of Uplink(MHz)	Number [DL]	Frequency of Downlink(MHz)
LTE band 13 TX:777-787MHz RX:746-756MHz	Low Range	5	23205	779.5	5205	748.5
		10	23230	782	5230	751
	Mid Range	5/10	23230	782	5230	751
	High Range	5	23255	784.5	5255	753.5
		10	23230	782	5230	751

6 General Information

6.1 Client Information

Applicant:	Prometheus Group LLC
Address of Applicant:	P.O. Box 130100 Birmingham, Alabama 35213-0100 USA
Manufacturer:	Hooray Innovation Limited
Address of Manufacturer:	Flat 3, 15/F, Wah Yiu Industrial Building, 30-32 Au Pui Wan Street, Shatin, HK.
Factory:	Hooray Innovation Limited
Address of Factory:	Flat 3, 15/F, Wah Yiu Industrial Building, 30-32 Au Pui Wan Street, Shatin, HK.

6.2 General Description of EUT

Product Name:	Hunting Camera	
Model No.(EUT):	BTC-DWPS-ATT, BTC-DWPS-VZW	
Test Model No.:	BTC-DWPS-ATT	
Trade mark:	BROWNING	
EUT Supports Radios application:	LTE Band 2: Tx: 1850-1910MHz, Rx: 1930-1990MHz LTE Band 4: Tx: 1710-1755 MHz, Rx: 2110-2155 MHz LTE Band 5: Tx: 824-849 MHz, Rx: 869-894MHz LTE Band 12: Tx: 699-716 MHz, Rx: 729-746 MHz LTE Band 13: Tx: 777-787 MHz, Rx: 746-756 MHz	
Test Power Grade:	Default	
Test Software of EUT:	Default	
Power Supply:	Battery	AA 1.5V*8
Firmware version:	N/A	
Hardware version:	N/A	
Sample Received Date:	Jun. 28, 2020	
Sample tested Date:	Jun. 28, 2020 to Jun. 30, 2020	

6.3 Product Specification subjective to this standard

Frequency Band:	LTE Band 13: Tx: 777 MHz – 787 MHz, Rx: 746 MHz – 756 MHz
Modulation Type:	QPSK, 16QAM
Antenna Type	Dipole Antenna
Antenna Gain:	1.42 dBi
Test Voltage:	DC 12V

6.4 Description of Support Units

The EUT has been tested with associated equipment below

Associated equipment name		Manufacture	model	S/N serial number	Supplied by	Certification
AE1	Notebook	DELL	DELL 3490	D245DX2	DELL	CE&FCC

6.5 Test Location

All tests were performed at:

Centre Testing International Group Co., Ltd

Building C, Hongwei Industrial Park Block 70, Bao'an District, Shenzhen, China

Telephone: +86 (0) 755 33683668 Fax: +86 (0) 755 33683385

No tests were sub-contracted.

FCC Designation No.: CN1164

6.6 Deviation from Standards

None.

6.7 Abnormalities from Standard Conditions

None.

6.8 Other Information Requested by the Customer

None.

6.9 Measurement Uncertainty (95% confidence levels, k=2)

No.	Item	Measurement Uncertainty
1	Radio Frequency	7.9×10^{-8}
2	RF power, conducted	0.46dB (30MHz-1GHz)
		0.55dB (1GHz-18GHz)
3	Radiated Spurious emission test	4.3dB (30MHz-1GHz)
		4.5dB (1GHz-12.75GHz)
4	Conduction emission	3.5dB (9kHz to 150kHz)
		3.1dB (150kHz to 30MHz)
5	Temperature test	0.64°C
6	Humidity test	3.8%
7	DC power voltages	0.026%

7 Equipment List

3M full-anechoic Chamber					
Equipment	Manufacturer	Model No.	Serial Number	Cal. date (mm-dd-yyyy)	Cal. Due date (mm-dd-yyyy)
RSE Automatic test software	JS Tonscend	JS36-RSE	10166	---	---
Receiver	Keysight	N9038A	MY57290136	03-05-2020	03-04-2021
Spectrum Analyzer	Keysight	N9020B	MY57111112	03-05-2020	03-04-2021
Spectrum Analyzer	Keysight	N9030B	MY57140871	03-05-2020	03-04-2021
TRILOG Broadband Antenna	Schwarzbeck	VULB 9163	9163-1148	04-25-2018	04-24-2021
Horn Antenna	Schwarzbeck	BBHA 9170	9170-832	04-25-2018	04-24-2021
Communication Antenna	Schwarzbeck	CLSA 0110L	1014	---	---
Horn Antenna	ETS-LINDGREN	3117	00057407	07-10-2018	07-09-2021
Preamplifier	EMCI	EMC184055SE	980596	05-20-2020	05-19-2021
Communication test set	R&S	CMW500	102898	01-14-2020	01-13-2021
Preamplifier	EMCI	EMC001330	980563	04-22-2020	04-21-2021
Preamplifier	JS Tonscend	980380	EMC051845 SE	01-09-2020	01-08-2021
Temperature/ Humidity Indicator	biaozhi	GM1360	EE1186631	04-27-2020	04-26-2021
Fully Anechoic Chamber	TDK	FAC-3	---	01-17-2018	01-16-2021
Filter bank	JS Tonscend	JS0806-F	188060094	04-10-2018	04-09-2021
Cable line	Times	SFT205-NMSM-2.50M	394812-0001	---	---
Cable line	Times	SFT205-NMSM-2.50M	394812-0002	---	---
Cable line	Times	SFT205-NMSM-2.50M	394812-0003	---	---
Cable line	Times	SFT205-NMSM-2.50M	393495-0001	---	---
Cable line	Times	EMC104-NMNM-1000	SN160710	---	---
Cable line	Times	SFT205-NMSM-3.00M	394813-0001	---	---
Cable line	Times	SFT205-NMNM-1.50M	381964-0001	---	---
Cable line	Times	SFT205-NMSM-7.00M	394815-0001	---	---
Cable line	Times	HF160-KMKM-3.00M	393493-0001	---	---

8 Radio Technical Requirements Specification

Reference documents for testing:

No.	Identity	Document Title
1	PART 22	PART 22 – PUBLIC MOBILE SERVICES Subpart H – Cellular Radiotelephone Service
2	PART 24	PART 24 – PERSONAL COMMUNICATIONS SERVICES Subpart E – Broadband PCS
3	PART 27	PART 27 – MISCELLANEOUS WIRELESS COMMUNICATIONS SERVICES
3	PART 2	Frequency allocations and radio treaty matters; general rules and regulations
4	TIA-603-E-2016	Land Mobile FM or PM -Communications Equipment -Measurement and Performance Standards
5	KDB971168 D01	KDB971168 D01 Power Meas License Digital Systems v03r01

Test Results List:

Test Requirement	Test method	Test item	Verdict	Note
Part 2.1046(a)/ Part 24.232(c)	TIA-603-E-2016& KDB 971168 D01v03r01	Effective Radiated Power of Transmitter(ERP)	PASS	Appendix A)
Part 2.1051/ Part 2.1057/ Part 24.238(a)(b)	TIA-603-E-2016& KDB 971168 D01v03r012	Spurious emissions at antenna terminals	PASS	Appendix B)

Appendix A) Effective Radiated Power of Transmitter (ERP/EIRP)

Receiver Setup:	<table><tr><td>Frequency</td><td>Detector</td><td>RBW</td><td>VBW</td><td>Remark</td></tr><tr><td>30MHz-1GHz</td><td>peak</td><td>120kHz</td><td>300kHz</td><td>Peak</td></tr><tr><td>Above 1GHz</td><td>Peak</td><td>1MHz</td><td>3MHz</td><td>Peak</td></tr></table>	Frequency	Detector	RBW	VBW	Remark	30MHz-1GHz	peak	120kHz	300kHz	Peak	Above 1GHz	Peak	1MHz	3MHz	Peak
Frequency	Detector	RBW	VBW	Remark												
30MHz-1GHz	peak	120kHz	300kHz	Peak												
Above 1GHz	Peak	1MHz	3MHz	Peak												
Measurement Procedure:	Test procedure as below: 1) The EUT was powered ON and placed on a 0.8m high table at a 3 meter fully Anechoic Chamber. The antenna of the transmitter was extended to its maximum length. modulation mode and the measuring receiver shall be tuned to the frequency of the transmitter under test. 2) The EUT was set 3 meters(above 18GHz the distance is 1 meter) away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower. 3) The disturbance of the transmitter was maximized on the test receiver display by raising and lowering from 1m to 4m the receive antenna and by rotating through 360° the turntable. After the fundamental emission was maximized, a field strength measurement was made. 4) Steps 1) to 3) were performed with the EUT and the receive antenna in both vertical and horizontal polarization. 5) The transmitter was then removed and replaced with another antenna. The center of the antenna was approximately at the same location as the center of the transmitter. 6) A signal at the disturbance was fed to the substitution antenna by means of a non-radiating cable. With both the substitution and the receive antennas horizontally polarized, the receive antenna was raised and lowered to obtain a maximum reading at the test receiver. The level of the signal generator was adjusted until the measured field strength level in step 3) is obtained for this set of conditions. 7) The output power into the substitution antenna was then measured. 8) Steps 6) and 7)were repeated with both antennas polarized. 9) Calculate power in dBm by the following formula: E.I.R.P = Output power level of S.G - TX cable lose + Antenna gain of substitution horn E.R.P=E.I.R.P-2.15dB where: Pg is the generator output power into the substitution antenna. 10) Test the EUT in the lowest channel, the middle channel the Highest channel 11) The radiation measurements are performed in X, Y, Z axis positioning for EUT operation mode,And found the X axis positioning which it is worse case. 12) Repeat above procedures until all frequencies measured was complete.															
Limit:	<table><tr><td>Mode</td><td>LTE Band 13</td></tr><tr><td>Limit</td><td>34.77dBm (3W)</td></tr></table>	Mode	LTE Band 13	Limit	34.77dBm (3W)											
Mode	LTE Band 13															
Limit	34.77dBm (3W)															

Measurement Data

LTE Band 13

Channel Bandwidth	Modulation	CH	Frequency (MHz)	RB Configuration		Average Power (dBm)	Antenna Gain (dBi)	E.R.P		Limit (W)
				Size	Offset			(dBm)	(W)	
5M	QPSK	23230	783.1766	1	0	9.18	1.42	8.03	0.00635	<3
10MHz	QPSK	23230	785.3771	1	0	5.99	1.42	4.84	0.00305	<3

Note:TX cable lose=0.42dB

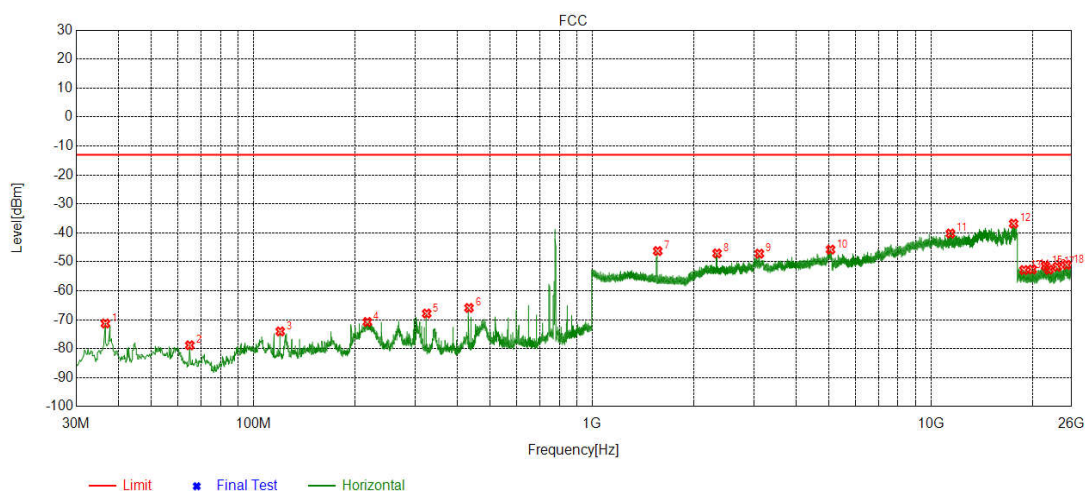
Appendix B): Field strength of spurious radiation

Receiver Setup:	Frequency	Detector	RBW	VBW	Remark
	0.009MHz-30MHz	Peak	10kHz	30kHz	Peak
	30MHz-1GHz	Peak	120kHz	300kHz	Peak
	Above 1GHz	Peak	1MHz	3MHz	Peak
Measurement Procedure:	1. Scan up to 10th harmonic, find the maximum radiation frequency to measure. 2. The technique used to find the Spurious Emissions of the transmitter was the antenna substitution method. Substitution method was performed to determine the actual ERP/EIRP emission levels of the EUT. Test procedure as below: 1) The EUT was powered ON and placed on a 1.5m high table at a 3 meter fully Anechoic Chamber. The antenna of the transmitter was extended to its maximum length. modulation mode and the measuring receiver shall be tuned to the frequency of the transmitter under test. 2) The EUT was set 3 meters(above 18GHz the distance is 1 meter) away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower. 3) The disturbance of the transmitter was maximized on the test receiver display by raising and lowering from 1m to 4m the receive antenna and by rotating through 360° the turntable. After the fundamental emission was maximized, a field strength measurement was made. 4) Steps 1) to 3) were performed with the EUT and the receive antenna in both vertical and horizontal polarization. 5) The transmitter was then removed and replaced with another antenna. The center of the antenna was approximately at the same location as the center of the transmitter. 6) A signal at the disturbance was fed to the substitution antenna by means of a non-radiating cable. With both the substitution and the receive antennas horizontally polarized, the receive antenna was raised and lowered to obtain a maximum reading at the test receiver. The level of the signal generator was adjusted until the measured field strength level in step 3) is obtained for this set of conditions. 7) The output power into the substitution antenna was then measured. 8) Steps 6) and 7) were repeated with both antennas polarized. 9) Calculate power in dBm by the following formula: $\text{ERP(dBm)} = \text{Pg(dBm)} - \text{cable loss (dB)} + \text{antenna gain (dBd)}$ $\text{EIRP(dBm)} = \text{Pg(dBm)} - \text{cable loss (dB)} + \text{antenna gain (dBi)}$ $\text{EIRP} = \text{ERP} + 2.15\text{dB}$ where: Pg is the generator output power into the substitution antenna. 10) Test the EUT in the lowest channel, the middle channel the Highest channel 11) The radiation measurements are performed in X, Y, Z axis positioning for EUT operation mode, And found the X axis positioning which it is worse case. 12) Repeat above procedures until all frequencies measured was complete.				
Limit:	Attenuated at least 43+10log(P)				

Test Data:

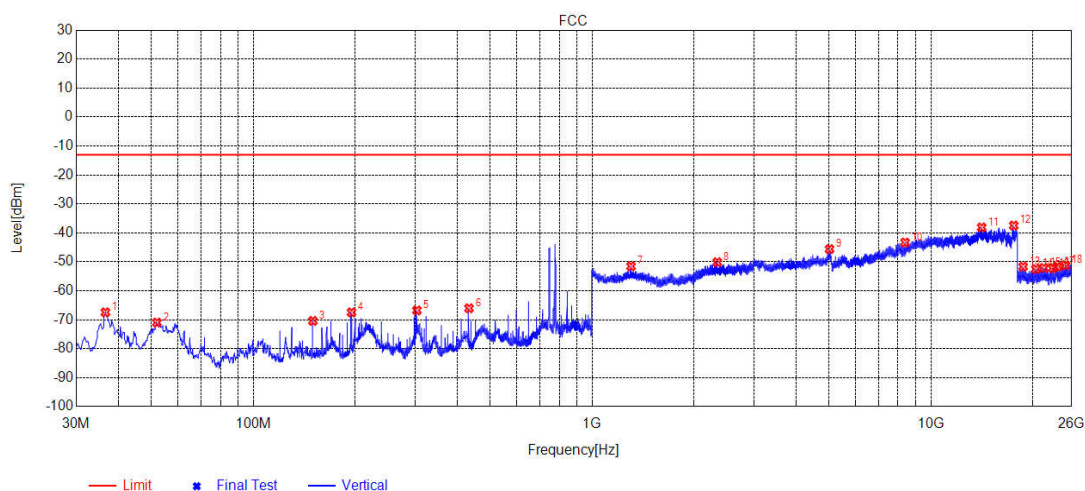
QPSK:

Mode:	LTE		
Band:	13	Channel:	23205



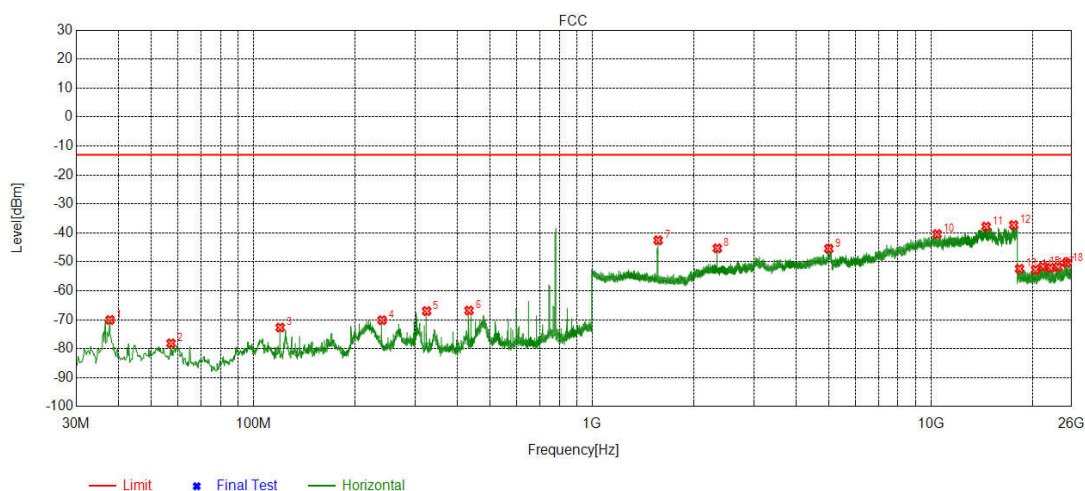
NO.	Freq. [MHz]	Height [cm]	Azimuth [deg]	Level [dBm]	Limit [dBm]	Margin [dB]	Result	Polarity
1	36.5973	150	336	-71.28	-13.00	58.28	PASS	Horizontal
2	64.9270	150	69	-78.82	-13.00	65.82	PASS	Horizontal
3	120.0340	150	336	-74.03	-13.00	61.03	PASS	Horizontal
4	217.0534	150	69	-70.76	-13.00	57.76	PASS	Horizontal
5	324.9390	150	269	-67.85	-13.00	54.85	PASS	Horizontal
6	433.2126	150	269	-65.91	-13.00	52.91	PASS	Horizontal
7	1562.2562	150	69	-46.27	-13.00	33.27	PASS	Horizontal
8	2338.5339	150	336	-47.08	-13.00	34.08	PASS	Horizontal
9	3117.7559	150	9	-47.18	-13.00	34.18	PASS	Horizontal
10	5057.3529	150	138	-45.78	-13.00	32.78	PASS	Horizontal
11	11423.6712	150	321	-40.21	-13.00	27.21	PASS	Horizontal
12	17554.4777	150	339	-36.79	-13.00	23.79	PASS	Horizontal
13	18830.1132	150	303	-52.83	-13.00	39.83	PASS	Horizontal
14	19921.0368	150	69	-52.63	-13.00	39.63	PASS	Horizontal
15	21810.7124	150	136	-51.41	-13.00	38.41	PASS	Horizontal
16	22310.2524	150	203	-52.70	-13.00	39.70	PASS	Horizontal
17	23598.3039	150	203	-51.71	-13.00	38.71	PASS	Horizontal
18	25174.3670	150	236	-51.04	-13.00	38.04	PASS	Horizontal

Mode:	LTE		
Band:	13	Channel:	23205



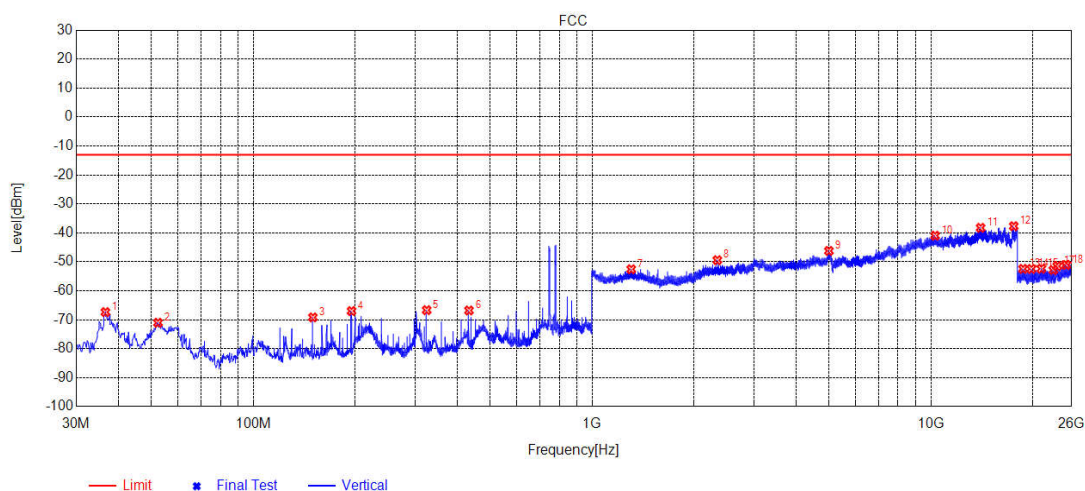
NO.	Freq. [MHz]	Height [cm]	Azimuth [deg]	Level [dBm]	Limit [dBm]	Margin [dB]	Result	Polarity
1	36.5973	150	302	-67.43	-13.00	54.43	PASS	Vertical
2	51.9264	150	102	-70.96	-13.00	57.96	PASS	Vertical
3	149.9160	150	3	-70.39	-13.00	57.39	PASS	Vertical
4	194.9330	150	169	-67.45	-13.00	54.45	PASS	Vertical
5	303.9828	150	202	-66.77	-13.00	53.77	PASS	Vertical
6	433.2126	150	102	-66.04	-13.00	53.04	PASS	Vertical
7	1303.0303	150	335	-51.54	-13.00	38.54	PASS	Vertical
8	2342.1342	150	302	-50.12	-13.00	37.12	PASS	Vertical
9	5023.6012	150	266	-45.61	-13.00	32.61	PASS	Vertical
10	8394.2697	150	10	-43.31	-13.00	30.31	PASS	Vertical
11	14127.5564	150	28	-38.11	-13.00	25.11	PASS	Vertical
12	17561.9781	150	285	-37.45	-13.00	24.45	PASS	Vertical
13	18727.0691	150	169	-51.65	-13.00	38.65	PASS	Vertical
14	20412.2565	150	335	-52.48	-13.00	39.48	PASS	Vertical
15	21545.7418	150	36	-52.08	-13.00	39.08	PASS	Vertical
16	22903.8762	150	169	-52.25	-13.00	39.25	PASS	Vertical
17	23621.0248	150	36	-51.61	-13.00	38.61	PASS	Vertical
18	24985.2394	150	136	-51.22	-13.00	38.22	PASS	Vertical

Mode:	LTE		
Band:	13	Channel:	23230



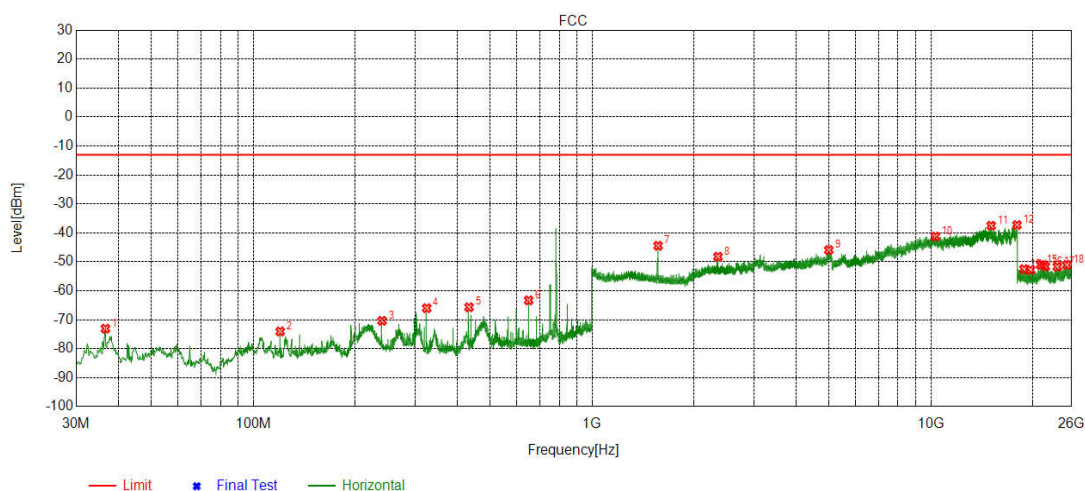
NO.	Freq. [MHz]	Height [cm]	Azimuth [deg]	Level [dBm]	Limit [dBm]	Margin [dB]	Result	Polarity
1	37.7616	150	268	-70.06	-13.00	57.06	PASS	Horizontal
2	57.1654	150	268	-78.14	-13.00	65.14	PASS	Horizontal
3	120.0340	150	3	-72.68	-13.00	59.68	PASS	Horizontal
4	239.9500	150	360	-70.13	-13.00	57.13	PASS	Horizontal
5	324.9390	150	168	-67.00	-13.00	54.00	PASS	Horizontal
6	433.2126	150	135	-66.81	-13.00	53.81	PASS	Horizontal
7	1566.8567	150	69	-42.55	-13.00	29.55	PASS	Horizontal
8	2342.7343	150	334	-45.33	-13.00	32.33	PASS	Horizontal
9	4998.8499	150	0	-45.47	-13.00	32.47	PASS	Horizontal
10	10430.6215	150	46	-40.42	-13.00	27.42	PASS	Horizontal
11	14559.5780	150	0	-37.84	-13.00	24.84	PASS	Horizontal
12	17558.9779	150	156	-37.29	-13.00	24.29	PASS	Horizontal
13	18276.4911	150	69	-52.38	-13.00	39.38	PASS	Horizontal
14	20381.2152	150	301	-52.74	-13.00	39.74	PASS	Horizontal
15	21435.6574	150	135	-51.65	-13.00	38.65	PASS	Horizontal
16	22546.1018	150	102	-52.12	-13.00	39.12	PASS	Horizontal
17	23728.8692	150	202	-51.78	-13.00	38.78	PASS	Horizontal
18	25162.5265	150	168	-50.37	-13.00	37.37	PASS	Horizontal

Mode:	LTE		
Band:	13	Channel:	23230



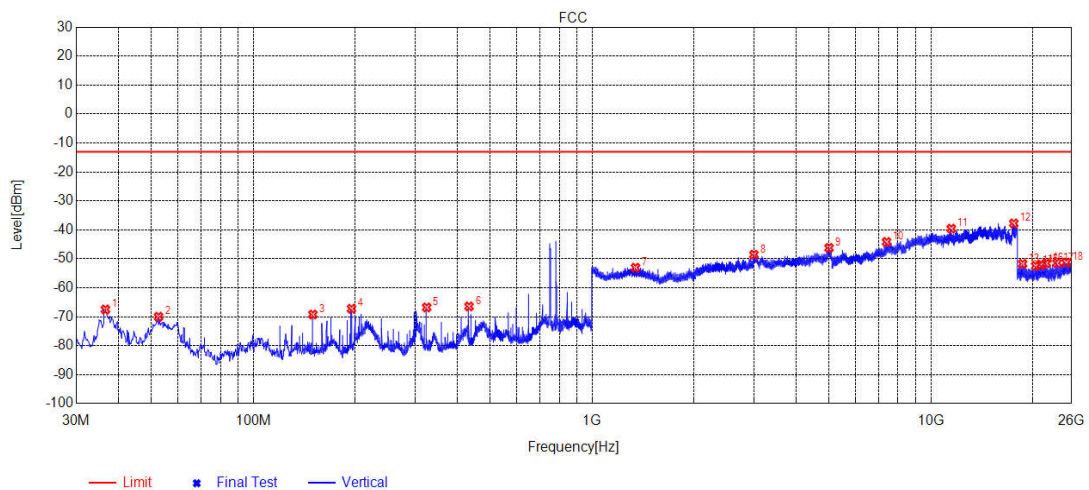
NO.	Freq. [MHz]	Height [cm]	Azimuth [deg]	Level [dBm]	Limit [dBm]	Margin [dB]	Result	Polarity
1	36.5973	150	336	-67.34	-13.00	54.34	PASS	Vertical
2	52.3145	150	103	-71.03	-13.00	58.03	PASS	Vertical
3	149.9160	150	3	-69.18	-13.00	56.18	PASS	Vertical
4	194.9330	150	336	-66.98	-13.00	53.98	PASS	Vertical
5	324.9390	150	36	-66.68	-13.00	53.68	PASS	Vertical
6	433.2126	150	69	-66.78	-13.00	53.78	PASS	Vertical
7	1304.6305	150	302	-52.55	-13.00	39.55	PASS	Vertical
8	2342.5343	150	302	-49.42	-13.00	36.42	PASS	Vertical
9	5001.8501	150	119	-46.22	-13.00	33.22	PASS	Vertical
10	10293.3647	150	82	-40.96	-13.00	27.96	PASS	Vertical
11	14026.3013	150	119	-38.23	-13.00	25.23	PASS	Vertical
12	17564.2282	150	138	-37.68	-13.00	24.68	PASS	Vertical
13	18710.7484	150	169	-52.42	-13.00	39.42	PASS	Vertical
14	19810.9524	150	336	-52.44	-13.00	39.44	PASS	Vertical
15	21203.6481	150	69	-52.37	-13.00	39.37	PASS	Vertical
16	22984.5194	150	336	-52.82	-13.00	39.82	PASS	Vertical
17	23605.3442	150	269	-51.47	-13.00	38.47	PASS	Vertical
18	25108.4443	150	69	-51.09	-13.00	38.09	PASS	Vertical

Mode:	LTE		
Band:	13	Channel:	23255



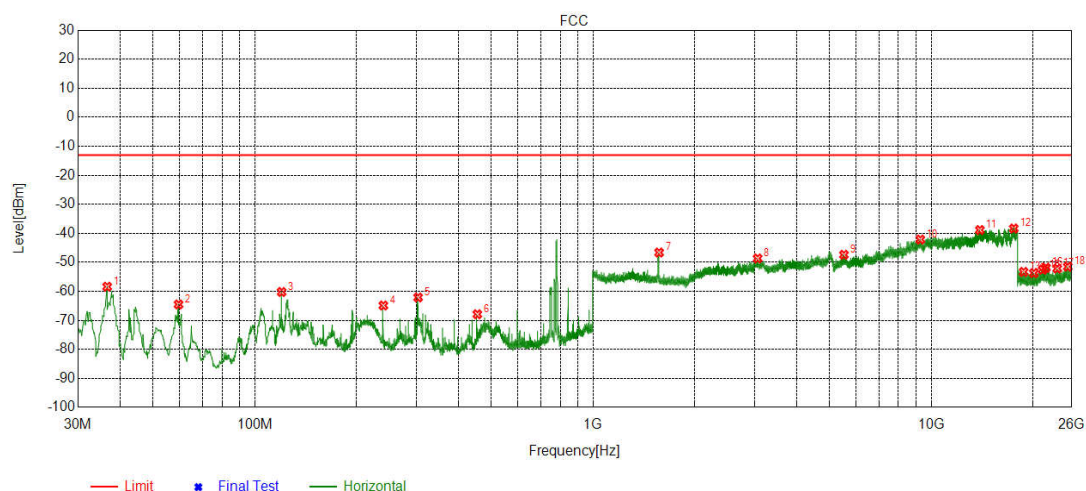
NO.	Freq. [MHz]	Height [cm]	Azimuth [deg]	Level [dBm]	Limit [dBm]	Margin [dB]	Result	Polarity
1	36.5973	150	269	-73.08	-13.00	60.08	PASS	Horizontal
2	120.0340	150	335	-74.05	-13.00	61.05	PASS	Horizontal
3	239.9500	150	203	-70.37	-13.00	57.37	PASS	Horizontal
4	324.9390	150	3	-66.00	-13.00	53.00	PASS	Horizontal
5	433.2126	150	203	-65.68	-13.00	52.68	PASS	Horizontal
6	649.9540	150	136	-63.28	-13.00	50.28	PASS	Horizontal
7	1566.2566	150	69	-44.45	-13.00	31.45	PASS	Horizontal
8	2353.3353	150	335	-48.23	-13.00	35.23	PASS	Horizontal
9	4997.3499	150	10	-45.94	-13.00	32.94	PASS	Horizontal
10	10307.6154	150	119	-41.26	-13.00	28.26	PASS	Horizontal
11	15070.3535	150	28	-37.52	-13.00	24.52	PASS	Horizontal
12	17960.2480	150	321	-37.28	-13.00	24.28	PASS	Horizontal
13	18831.3933	150	335	-52.53	-13.00	39.53	PASS	Horizontal
14	19707.5883	150	302	-52.78	-13.00	39.78	PASS	Horizontal
15	21115.9646	150	103	-51.06	-13.00	38.06	PASS	Horizontal
16	21781.9113	150	269	-51.59	-13.00	38.59	PASS	Horizontal
17	23622.9449	150	36	-51.71	-13.00	38.71	PASS	Horizontal
18	25208.2883	150	302	-51.07	-13.00	38.07	PASS	Horizontal

Mode:	LTE		
Band:	13	Channel:	23255



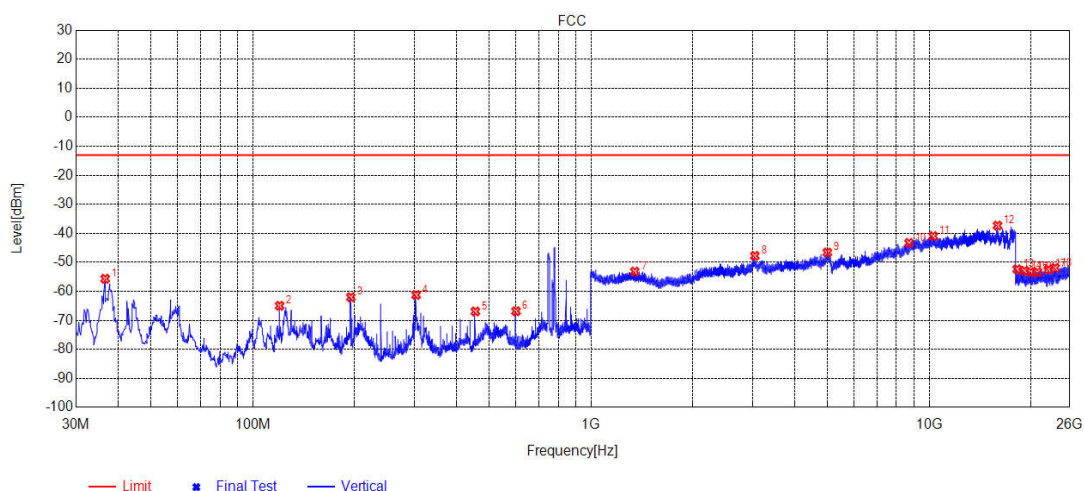
NO.	Freq. [MHz]	Height [cm]	Azimuth [deg]	Level [dBm]	Limit [dBm]	Margin [dB]	Result	Polarity
1	36.5973	150	36	-67.49	-13.00	54.49	PASS	Vertical
2	52.5085	150	3	-69.98	-13.00	56.98	PASS	Vertical
3	149.9160	150	3	-69.22	-13.00	56.22	PASS	Vertical
4	194.9330	150	3	-67.22	-13.00	54.22	PASS	Vertical
5	324.9390	150	102	-66.77	-13.00	53.77	PASS	Vertical
6	433.2126	150	169	-66.42	-13.00	53.42	PASS	Vertical
7	1343.0343	150	169	-53.05	-13.00	40.05	PASS	Vertical
8	3004.5002	150	46	-48.57	-13.00	35.57	PASS	Vertical
9	5006.3503	150	193	-46.21	-13.00	33.21	PASS	Vertical
10	7401.9701	150	46	-44.15	-13.00	31.15	PASS	Vertical
11	11491.9246	150	46	-39.58	-13.00	26.58	PASS	Vertical
12	17574.7287	150	193	-37.76	-13.00	24.76	PASS	Vertical
13	18656.9863	150	202	-51.71	-13.00	38.71	PASS	Vertical
14	20391.1356	150	302	-52.42	-13.00	39.42	PASS	Vertical
15	21171.6469	150	235	-52.05	-13.00	39.05	PASS	Vertical
16	21911.5165	150	302	-51.53	-13.00	38.53	PASS	Vertical
17	23565.6626	150	202	-51.46	-13.00	38.46	PASS	Vertical
18	25109.4044	150	136	-51.27	-13.00	38.27	PASS	Vertical

Mode:	LTE		
Band:	13	Channel:	23230



NO.	Freq. [MHz]	Height [cm]	Azimuth [deg]	Level [dBm]	Limit [dBm]	Margin [dB]	Result	Polarity
1	36.5973	150	0	-58.39	-13.00	45.39	PASS	Horizontal
2	59.4939	150	0	-64.50	-13.00	51.50	PASS	Horizontal
3	120.0340	150	308	-60.20	-13.00	47.20	PASS	Horizontal
4	239.9500	150	94	-64.87	-13.00	51.87	PASS	Horizontal
5	303.9828	150	0	-62.10	-13.00	49.10	PASS	Horizontal
6	454.9450	150	41	-67.89	-13.00	54.89	PASS	Horizontal
7	1568.2568	150	41	-46.61	-13.00	33.61	PASS	Horizontal
8	3067.5034	150	3	-48.65	-13.00	35.65	PASS	Horizontal
9	5519.3760	150	350	-47.39	-13.00	34.39	PASS	Horizontal
10	9285.3143	150	145	-42.12	-13.00	29.12	PASS	Horizontal
11	13927.2964	150	292	-38.85	-13.00	25.85	PASS	Horizontal
12	17542.4771	150	29	-38.33	-13.00	25.33	PASS	Horizontal
13	18752.0301	150	255	-53.28	-13.00	40.28	PASS	Horizontal
14	20100.5640	150	94	-53.70	-13.00	40.70	PASS	Horizontal
15	21377.7351	150	0	-52.52	-13.00	39.52	PASS	Horizontal
16	21841.4337	150	201	-51.85	-13.00	38.85	PASS	Horizontal
17	23593.1837	150	201	-52.13	-13.00	39.13	PASS	Horizontal
18	25339.4936	150	201	-51.49	-13.00	38.49	PASS	Horizontal

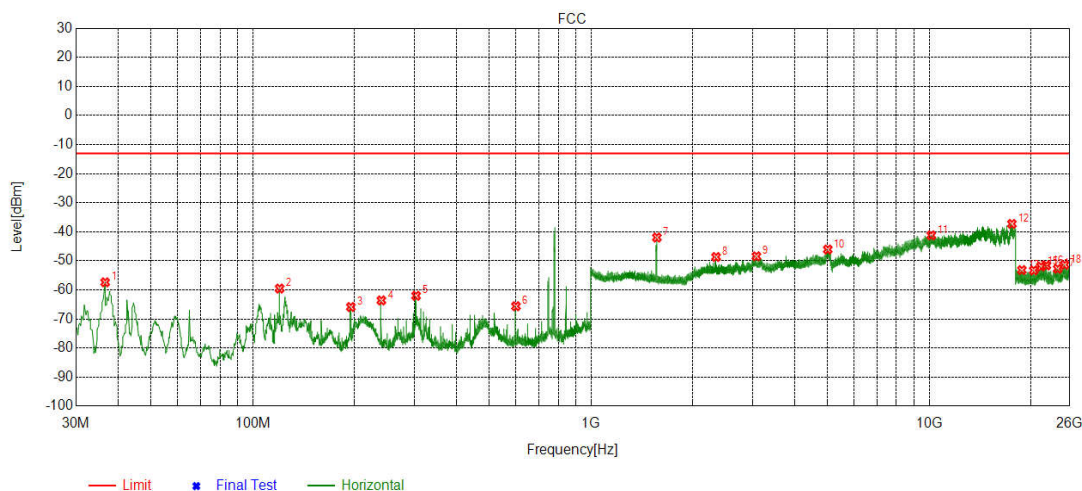
Mode:	LTE		
Band:	13	Channel:	23230



NO.	Freq. [MHz]	Height [cm]	Azimuth [deg]	Level [dBm]	Limit [dBm]	Margin [dB]	Result	Polarity
1	36.5973	150	149	-55.67	-13.00	42.67	PASS	Vertical
2	120.0340	150	42	-64.98	-13.00	51.98	PASS	Vertical
3	194.9330	150	0	-62.01	-13.00	49.01	PASS	Vertical
4	303.9828	150	0	-61.24	-13.00	48.24	PASS	Vertical
5	454.9450	150	42	-66.93	-13.00	53.93	PASS	Vertical
6	600.0860	150	96	-66.84	-13.00	53.84	PASS	Vertical
7	1347.6348	150	308	-53.17	-13.00	40.17	PASS	Vertical
8	3051.0026	150	322	-47.76	-13.00	34.76	PASS	Vertical
9	4997.3499	150	28	-46.62	-13.00	33.62	PASS	Vertical
10	8719.7860	150	175	-43.32	-13.00	30.32	PASS	Vertical
11	10279.1140	150	351	-40.94	-13.00	27.94	PASS	Vertical
12	15921.6461	150	116	-37.32	-13.00	24.32	PASS	Vertical
13	18198.4079	150	0	-52.38	-13.00	39.38	PASS	Vertical
14	19133.8054	150	42	-52.92	-13.00	39.92	PASS	Vertical
15	19952.7181	150	96	-53.34	-13.00	40.34	PASS	Vertical
16	20885.8754	150	201	-53.38	-13.00	40.38	PASS	Vertical
17	22520.8208	150	357	-52.46	-13.00	39.46	PASS	Vertical
18	23577.8231	150	42	-51.93	-13.00	38.93	PASS	Vertical

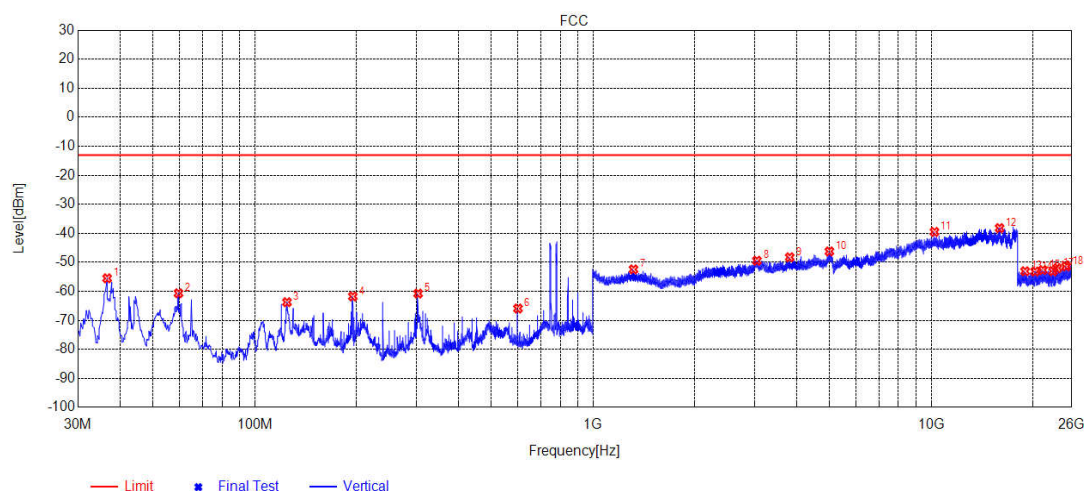
16-QAM:

Mode:	LTE		
Band:	13	Channel:	23230



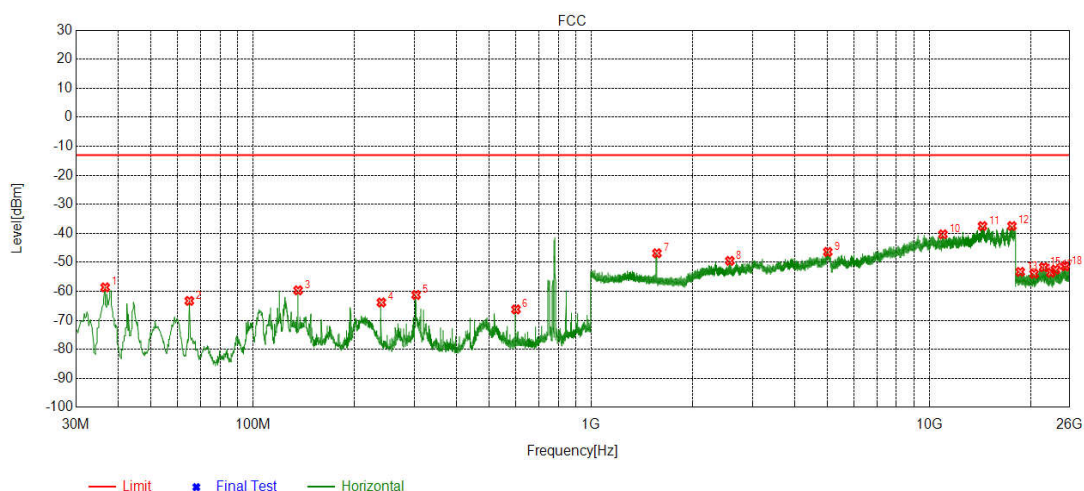
NO.	Freq. [MHz]	Height [cm]	Azimuth [deg]	Level [dBm]	Limit [dBm]	Margin [dB]	Result	Polarity
1	36.5973	150	96	-57.37	-13.00	44.37	PASS	Horizontal
2	120.0340	150	357	-59.53	-13.00	46.53	PASS	Horizontal
3	194.9330	150	308	-65.87	-13.00	52.87	PASS	Horizontal
4	239.9500	150	42	-63.60	-13.00	50.60	PASS	Horizontal
5	303.9828	150	42	-62.00	-13.00	49.00	PASS	Horizontal
6	599.8920	150	0	-65.60	-13.00	52.60	PASS	Horizontal
7	1566.0566	150	42	-41.96	-13.00	28.96	PASS	Horizontal
8	2343.5344	150	308	-48.66	-13.00	35.66	PASS	Horizontal
9	3083.2542	150	175	-48.43	-13.00	35.43	PASS	Horizontal
10	5012.3506	150	352	-46.09	-13.00	33.09	PASS	Horizontal
11	10141.1071	150	235	-41.21	-13.00	28.21	PASS	Horizontal
12	17559.7280	150	57	-37.27	-13.00	24.27	PASS	Horizontal
13	18793.3117	150	0	-53.17	-13.00	40.17	PASS	Horizontal
14	20374.8150	150	308	-53.27	-13.00	40.27	PASS	Horizontal
15	21402.0561	150	0	-51.96	-13.00	38.96	PASS	Horizontal
16	22204.6482	150	0	-51.60	-13.00	38.60	PASS	Horizontal
17	23977.1991	150	96	-52.72	-13.00	39.72	PASS	Horizontal
18	25147.8059	150	308	-51.35	-13.00	38.35	PASS	Horizontal

Mode:	LTE		
Band:	13	Channel:	23230



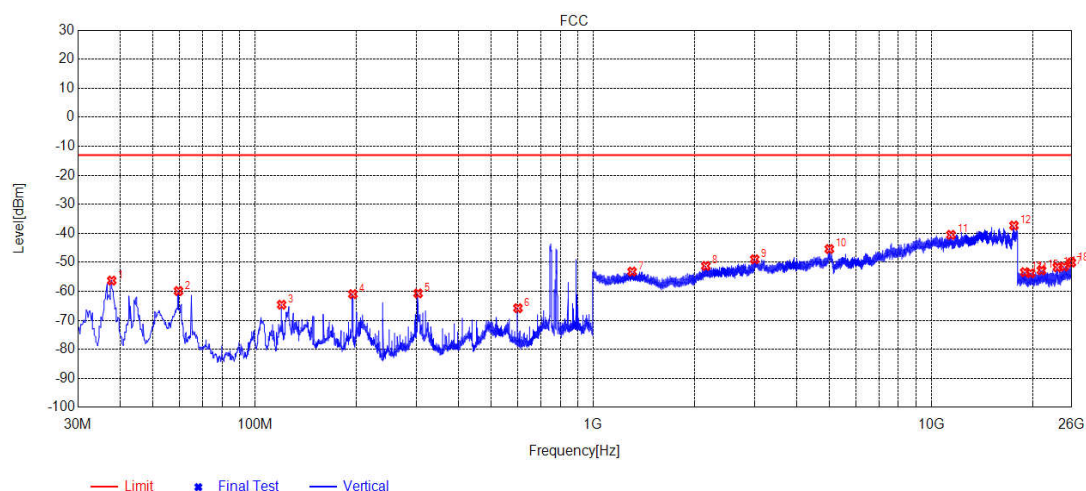
NO.	Freq. [MHz]	Height [cm]	Azimuth [deg]	Level [dBm]	Limit [dBm]	Margin [dB]	Result	Polarity
1	36.5973	150	308	-55.50	-13.00	42.50	PASS	Vertical
2	59.4939	150	308	-60.65	-13.00	47.65	PASS	Vertical
3	124.4969	150	308	-63.73	-13.00	50.73	PASS	Vertical
4	194.9330	150	357	-61.75	-13.00	48.75	PASS	Vertical
5	303.9828	150	202	-60.75	-13.00	47.75	PASS	Vertical
6	600.0860	150	202	-65.91	-13.00	52.91	PASS	Vertical
7	1317.8318	150	149	-52.42	-13.00	39.42	PASS	Vertical
8	3051.7526	150	87	-49.42	-13.00	36.42	PASS	Vertical
9	3816.7908	150	87	-48.24	-13.00	35.24	PASS	Vertical
10	5000.3500	150	3	-46.24	-13.00	33.24	PASS	Vertical
11	10227.3614	150	262	-39.49	-13.00	26.49	PASS	Vertical
12	15929.1465	150	233	-38.18	-13.00	25.18	PASS	Vertical
13	18949.4780	150	0	-53.06	-13.00	40.06	PASS	Vertical
14	20284.2514	150	0	-53.17	-13.00	40.17	PASS	Vertical
15	21379.3352	150	202	-52.64	-13.00	39.64	PASS	Vertical
16	22920.8368	150	0	-53.05	-13.00	40.05	PASS	Vertical
17	23591.2637	150	42	-52.01	-13.00	39.01	PASS	Vertical
18	25073.5629	150	149	-51.38	-13.00	38.38	PASS	Vertical

Mode:	LTE		
Band:	13	Channel:	23230



NO.	Freq. [MHz]	Height [cm]	Azimuth [deg]	Level [dBm]	Limit [dBm]	Margin [dB]	Result	Polarity
1	36.5973	150	0	-58.63	-13.00	45.63	PASS	Horizontal
2	64.9270	150	0	-63.28	-13.00	50.28	PASS	Horizontal
3	136.1392	150	357	-59.64	-13.00	46.64	PASS	Horizontal
4	239.9500	150	201	-63.83	-13.00	50.83	PASS	Horizontal
5	303.9828	150	357	-61.23	-13.00	48.23	PASS	Horizontal
6	600.0860	150	0	-66.22	-13.00	53.22	PASS	Horizontal
7	1566.4566	150	41	-46.85	-13.00	33.85	PASS	Horizontal
8	2573.1573	150	0	-49.49	-13.00	36.49	PASS	Horizontal
9	5013.8507	150	58	-46.40	-13.00	33.40	PASS	Horizontal
10	10979.6490	150	350	-40.33	-13.00	27.33	PASS	Horizontal
11	14375.0688	150	116	-37.50	-13.00	24.50	PASS	Horizontal
12	17564.2282	150	175	-37.47	-13.00	24.47	PASS	Horizontal
13	18586.5835	150	95	-53.27	-13.00	40.27	PASS	Horizontal
14	20417.3767	150	41	-53.93	-13.00	40.93	PASS	Horizontal
15	21802.3921	150	95	-51.67	-13.00	38.67	PASS	Horizontal
16	22905.1562	150	357	-53.56	-13.00	40.56	PASS	Horizontal
17	23612.0645	150	0	-52.51	-13.00	39.51	PASS	Horizontal
18	25239.3296	150	201	-51.37	-13.00	38.37	PASS	Horizontal

Mode:	LTE		
Band:	13	Channel:	23230



NO.	Freq. [MHz]	Height [cm]	Azimuth [deg]	Level [dBm]	Limit [dBm]	Margin [dB]	Result	Polarity
1	37.7616	150	149	-56.29	-13.00	43.29	PASS	Vertical
2	59.4939	150	308	-59.88	-13.00	46.88	PASS	Vertical
3	120.0340	150	357	-64.61	-13.00	51.61	PASS	Vertical
4	194.9330	150	96	-60.95	-13.00	47.95	PASS	Vertical
5	303.9828	150	0	-60.70	-13.00	47.70	PASS	Vertical
6	599.8920	150	357	-65.80	-13.00	52.80	PASS	Vertical
7	1304.6305	150	0	-53.19	-13.00	40.19	PASS	Vertical
8	2156.7157	150	0	-51.24	-13.00	38.24	PASS	Vertical
9	3007.5004	150	292	-48.95	-13.00	35.95	PASS	Vertical
10	4997.3499	150	57	-45.41	-13.00	32.41	PASS	Vertical
11	11436.4218	150	28	-40.52	-13.00	27.52	PASS	Vertical
12	17564.9782	150	204	-37.30	-13.00	24.30	PASS	Vertical
13	18914.2766	150	255	-53.39	-13.00	40.39	PASS	Vertical
14	19685.1874	150	42	-53.73	-13.00	40.73	PASS	Vertical
15	21175.8070	150	0	-52.75	-13.00	39.75	PASS	Vertical
16	23596.0638	150	96	-51.67	-13.00	38.67	PASS	Vertical
17	24733.7093	150	357	-51.46	-13.00	38.46	PASS	Vertical
18	25969.2788	150	357	-50.09	-13.00	37.09	PASS	Vertical

Note:

Scan from 9kHz to 25GHz, the disturbance above 18GHz and below 30MHz was very low, and the above harmonics were the highest point could be found when testing, so only the above harmonics had been displayed. The amplitude of spurious emissions from the radiator which are attenuated more than 20dB below the limit need not be reported.

PHOTOGRAPHS OF EUT Constructional Details

Refer to Report No.EED32M00186501 for EUT external and internal photos.

*** End of Report ***

The test report is effective only with both signature and specialized stamp, The result(s) shown in this report refer only to the sample(s) tested. Without written approval of CTI, this report can't be reproduced except in full.