

TEST REPORT

Product : WCDMA Digital Mobile Phone
Trade mark : RugGear
Model/Type reference : RG310, RG310EX, RG320EX
Serial Number : N/A
Report Number : EED32I00185901
FCC ID : ZLE-RG310
Date of Issue : Jul. 18, 2016
Test Standards : 47 CFR Part 15 Subpart B (2015)
Test result : PASS

Prepared for:

Power Idea Technology Limited.
4th Floor, A Section, Languang Science&technology Xinx RD,
Hi-Tech Industrial Park North, Nanshan, ShenZhen, China

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

Tested By:

Tom-chen
Tom chen (Test Project)

Compiled by:

Kevin yang
Kevin yang (Project Engineer)

Reviewed by:

Sheek . Luo
Sheek Luo (Reviewer)

Approved by:

Sheek . Luo
Sheek Luo (Lab supervisor)

Date:
Report Seal

Jul. 18, 2016

Check No.: 2384307786

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2 Version

Version No.	Date	Description
00	Jul. 18, 2016	Original

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3 Test Summary

Test Item	Test Requirement	Test method	Result
Radiated Emission	47 CFR Part 15B	ANSI C63.4-2014	PASS
Conducted Emission (150KHz to 30MHz)	47 CFR Part 15B	ANSI C63.4-2014	PASS

Remark:

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

Model No.: RG310, RG310EX, RG320EX

Only the model RG310 was tested, the PCB, Schematic, Hardware etc were identical for the above models, Only different model name due to difference agent and marketing purposes.

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5 General Information

5.1 Client Information

Applicant:	Power Idea Technology Limited.
Address of Applicant:	4th Floor, A Section, Languang Science&technology Xinx RD, Hi-Tech Industrial Park North, Nanshan, ShenZhen, China
Manufacturer:	Power Idea Technology Limited.
Address of Manufacturer:	4th Floor, A Section, Languang Science&technology Xinx RD, Hi-Tech Industrial Park North, Nanshan, ShenZhen, China

5.2 General Description of EUT

Product Name:	WCDMA Digital Mobile Phone
Mode No.(EUT):	RG310, RG310EX, RG320EX
Test Mode No.:	RG310
Trade Mark:	RugGear
EUT Supports Radios application	GPS:1575.42MHz Bluetooth V3.0+EDR Bluetooth V4.0 BLE Wlan 2.4GHz 802.11b/g/n(HT20&HT40) GSM/GPRS/EDGE 850/1900 WCDMA/HSDPA HSUPA HSPA+(Down Link) Band V/Band II
Power Supply:	Model: HKC0055010-2D Input: 100-240V~ 50/60Hz 0.2A Output: 5.0V =1.0A
Battery	Li-ion 3.7V/3600mAh

5.3 Product Specification subjective to this standard

Frequency Range:	1575.42MHz
Sample Type:	Portable production
Test software of EUT	Engineer Mode
Test voltage:	AC 120V/60Hz
Sample Received Date:	Jun. 30, 2016
Sample tested Date:	Jun. 30, 2016 to Jul. 18, 2016

5.4 Test Environment

Operating Environment:	
Temperature:	21°C
Humidity:	54 % RH
Atmospheric Pressure:	1010 mbar

5.5 Description of Support Units

1) support equipment

Description	Manufacturer	Model No.	Certification	Supplied by
PC	LENOVO	T3900	FCC DOC	CTI
Monitor	HP	V193	FCC DOC	CTI
Mouse	LENOVO	LXH-EMS-10ZA	FCC DOC	CTI
Keyboard	LENOVO	LXH-EKB-10YA	FCC DOC	CTI
Printer	HP	1020	FCC DOC	CTI

5.6 Test Location

All tests were performed at:

Centre Testing International Group Co., Ltd.

Hongwei Industrial Zone, Bao'an 70 District, Shenzhen, Guangdong, China 518101

Telephone: +86 (0) 755 3368 3668 Fax:+86 (0) 755 3368 3385

No tests were sub-contracted.

5.7 Test Facility

The test facility is recognized, certified, or accredited by the following organizations:

CNAS-Lab Code: L1910

Centre Testing International Group Co., Ltd. has been assessed and proved to be in compliance with CNAS-CL01 Accreditation Criteria for Testing and Calibration Laboratories (identical to ISO/IEC 17025: 2005 General Requirements) for the Competence of Testing and Calibration Laboratories..

A2LA-Lab Cert. No. 3061.01

Centre Testing International Group Co., Ltd. EMC Laboratory has been accredited by A2LA for technical competence in the field of electrical testing, and proved to be in compliance with ISO/IEC 17025: 2005 General Requirements for the Competence of Testing and Calibration Laboratories and any additional program requirements in the identified field of testing.

FCC-Registration No.: 886427

Centre Testing International Group Co., Ltd. EMC Laboratory has been registered and fully described in a report filed with the FCC (Federal Communications Commission). The acceptance letter from the FCC is maintained in our files. Registration 886427.

IC-Registration No.: 7408A-2

The 3m Alternate Test Site of Centre Testing International Group Co., Ltd. has been registered by Certification and Engineering Bureau of Industry Canada for the performance of radiated measurements with Registration No. 7408A-2 .

IC-Registration No.: 7408B-1

The 10m Alternate Test Site of Centre Testing International Group Co., Ltd. has been registered by Certification and Engineering Bureau of Industry Canada for the performance of radiated measurements with Registration No. 7408B-1.

NEMKO-Aut. No.: ELA503

Centre Testing International Group Co., Ltd. has been assessed the quality assurance system, the testing facilities, qualifications and testing practices of the relevant parts of the organization. The quality assurance system of the Laboratory has been validated against ISO/IEC 17025 or equivalent. The laboratory also fulfils the conditions described in Nemko Document NLA-10.

VCCI

The Radiation 3 & 10 meters site of Centre Testing International Group Co., Ltd. has been registered in accordance with the Regulations for Voluntary Control Measures with Registration No.: R-4096. Main Ports Conducted Interference Measurement of Centre Testing International Group Co., Ltd. has been registered in accordance with the Regulations for Voluntary Control Measures with Registration No.: C-4563.

Telecommunication Ports Conducted Disturbance Measurement of Centre Testing International Group Co., Ltd. has been registered in accordance with the Regulations for Voluntary Control Measures with Registration No.: T-2146.

The Radiation 3 meters site of Centre Testing International Group Co., Ltd. has been registered in accordance with the Regulations for Voluntary Control Measures with Registration No.: G-758

5.8 Deviation from Standards

None.

5.9 Abnormalities from Standard Conditions

None.

5.10 Other Information Requested by the Customer

None.

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

No.	Item	Measurement Uncertainty
1	Radio Frequency	7.9×10^{-8}
2	Radiated Spurious emission	4.5dB (30MHz-1GHz)
		4.8dB (1GHz-12.75GHz)
3	Conduction emission	3.6dB (9kHz to 150kHz)
		3.2dB (150kHz to 30MHz)
4	Temperature	0.64°C
5	Humidity	2.8%
6	DC power voltages	0.025%

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6 Equipment List

Conducted disturbance Test					
Equipment	Manufacturer	Mode No.	Serial Number	Cal. date (mm-dd-yyyy)	Cal. Due date (mm-dd-yyyy)
Receiver	R&S	ESCI	100009	06-16-2016	06-15-2017
Temperature/ Humidity Indicator	TAYLOR	1451	1905	04-27-2016	04-26-2017
Communication test set	Agilent	E5515C	GB47050534	04-01-2016	03-31-2017
Communication test set	R&S	CMW500	152394	04-01-2016	03-31-2017
LISN	R&S	ENV216	100098	06-16-2016	06-15-2017
LISN	schwarzbeck	NNLK8121	8121-529	06-16-2016	06-15-2017
Voltage Probe	R&S	ESH2-Z3	--	07-09-2014	07-07-2017
Current Probe	R&S	EZ17	100106	06-16-2016	06-15-2017
ISN	TESEQ GmbH	ISN T800	30297	01-29-2015	01-27-2017

3M Semi/full-anechoic Chamber					
Equipment	Manufacturer	Mode No.	Serial Number	Cal. date (mm-dd-yyyy)	Cal. Due date (mm-dd-yyyy)
3M Chamber & Accessory Equipment	TDK	SAC-3	---	06-05-2016	06-05-2019
TRILOG Broadband Antenna	SCHWARZBECK	VULB9163	9163-484	05-23-2016	05-22-2017
Microwave Preamplifier	Agilent	8449B	3008A02425	02-04-2016	02-03-2017
Horn Antenna	ETS-LINDGREN	3117	00057410	06-30-2015	06-28-2018
Horn Antenna	A.H.SYSTEMS	SAS-574	374	06-30-2015	06-28-2018
Loop Antenna	ETS	6502	00071730	07-30-2015	07-28-2017
Spectrum Analyzer	R&S	FSP40	100416	06-16-2016	06-15-2017
Receiver	R&S	ESCI	100435	06-16-2016	06-15-2017
Multi device Controller	matureo	NCD/070/10711 112	---	01-12-2016	01-11-2017
LISN	schwarzbeck	NNBM8125	81251547	06-16-2016	06-15-2017
LISN	schwarzbeck	NNBM8125	81251548	06-16-2016	06-15-2017
Signal Generator	Agilent	E4438C	MY45095744	04-01-2016	03-31-2017
Signal Generator	Keysight	E8257D	MY53401106	04-01-2016	03-31-2017
Temperature/ Humidity Indicator	TAYLOR	1451	1905	04-27-2016	04-26-2017
Communication test set	Agilent	E5515C	GB47050534	04-01-2016	03-31-2017
Cable line	Fulai(7M)	SF106	5219/6A	01-12-2016	01-11-2017
Cable line	Fulai(6M)	SF106	5220/6A	01-12-2016	01-11-2017
Cable line	Fulai(3M)	SF106	5216/6A	01-12-2016	01-11-2017
Cable line	Fulai(3M)	SF106	5217/6A	01-12-2016	01-11-2017
Communication test set	R&S	CMW500	152394	04-01-2016	03-31-2017
High-pass filter	Sinoscite	FL3CX03WG18 NM12-0398-002	---	01-12-2016	01-11-2017
High-pass filter	MICRO-TRONICS	SPA-F-63029-4	---	01-12-2016	01-11-2017
band rejection filter	Sinoscite	FL5CX01CA09C L12-0395-001	---	01-12-2016	01-11-2017
band rejection filter	Sinoscite	FL5CX01CA08C L12-0393-001	---	01-12-2016	01-11-2017
band rejection filter	Sinoscite	FL5CX02CA04C L12-0396-002	---	01-12-2016	01-11-2017
band rejection filter	Sinoscite	FL5CX02CA03C L12-0394-001	---	01-12-2016	01-11-2017

7 Test results and Measurement Data

7.1 Conducted Emissions

Test Requirement: 47 CFR Part 15B

Test Method: ANSI C63.4

Test frequency range: 150kHz to 30MHz

Limit:

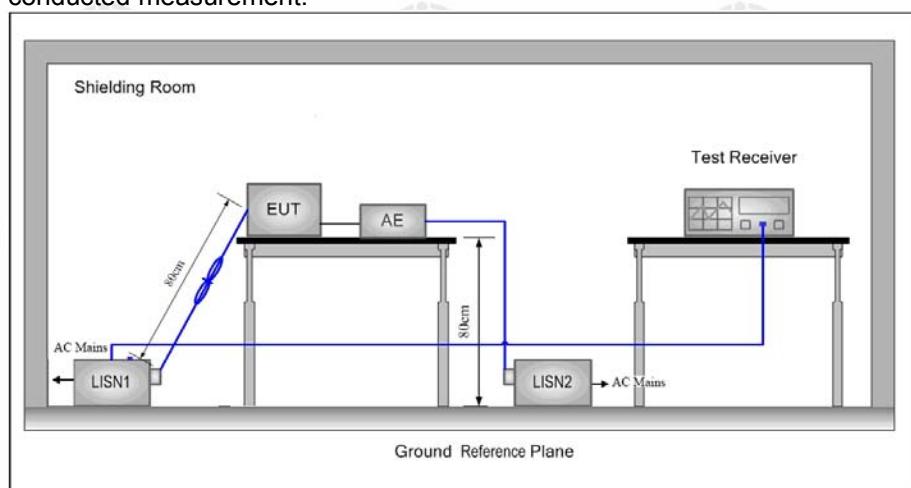
Frequency range (MHz)	Limit (dB μ V)	
	Quasi-peak	Average
0.15-0.5	66 to 56*	56 to 46*
0.5-5	56	46
5-30	60	50

* Decreases with the logarithm of the frequency.

Test 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 $50\Omega/50\mu\text{H} + 5\Omega$ 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 LISN 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 C63.4 on conducted measurement.

Test Setup:



Instruments Used: Refer to section 6 for details

Test Mode: Read & Write Int. Memory mode, GPS receive mode

Test Results:

Measurement Data

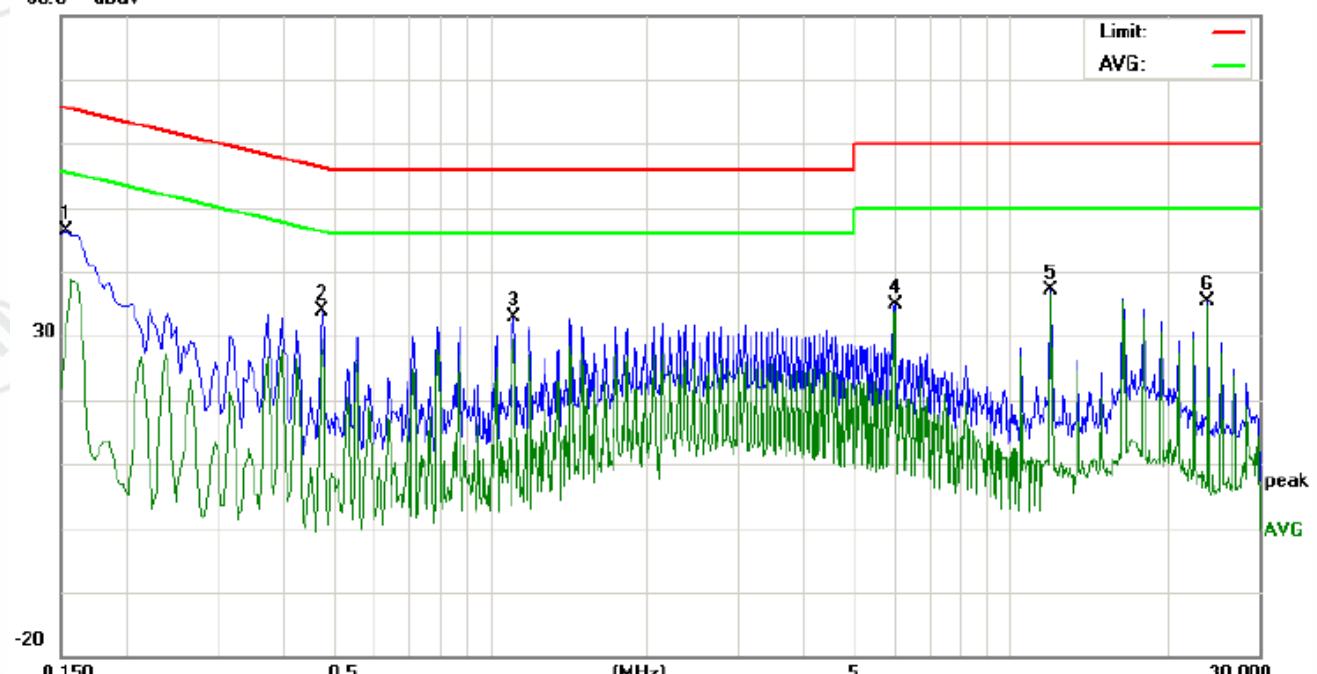
An initial pre-scan was performed on the live and neutral lines with peak detector.

Quasi-Peak and Average measurement were performed at the frequencies with maximized peak emission were detected.

Read & Write Int. Memory mode

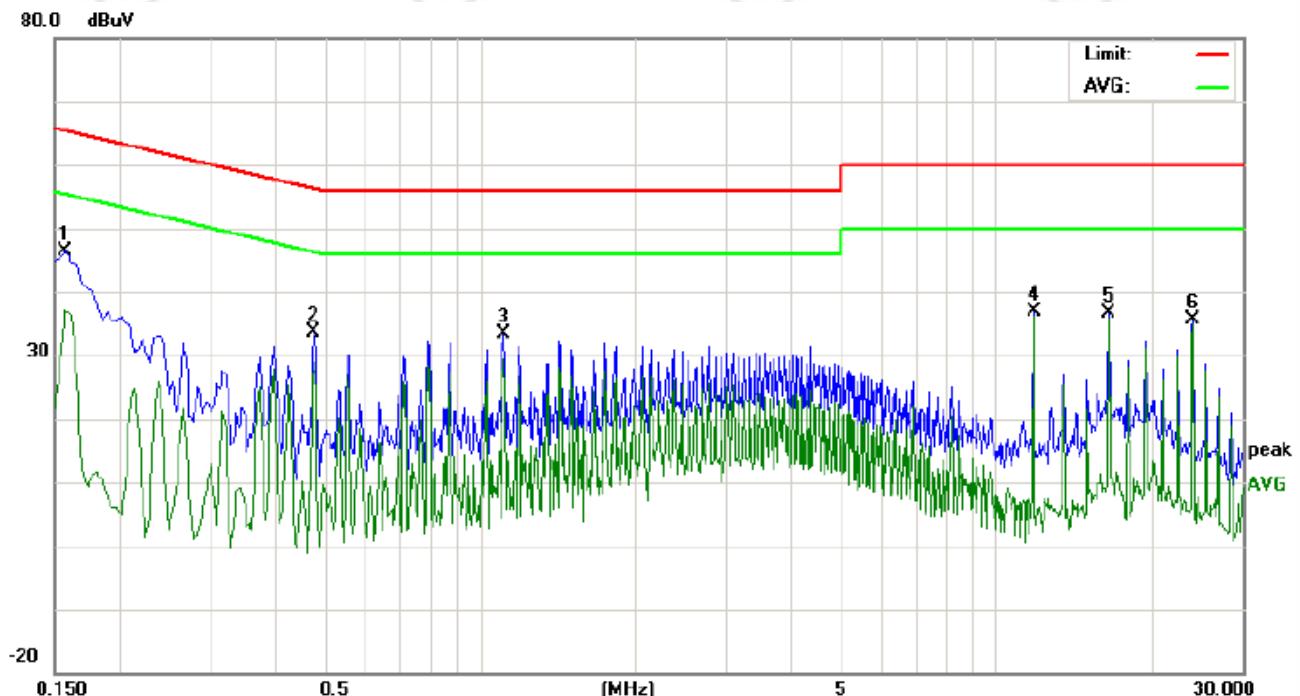
Live Line:

80.0 dBuV



No.	Freq.	Reading_Level (dBuV)			Correct Factor	Measurement (dBuV)			Limit (dBuV)		Margin (dB)		P/F	Comment
		MHz	Peak	QP	AVG	dB	peak	QP	AVG	QP	AVG	QP	AVG	
1	0.1539	36.50	32.10	21.29	9.80	46.30	41.90	31.09	65.78	55.78	-23.88	-24.69	P	
2	0.4758	24.02	22.60	19.39	9.90	33.92	32.50	29.29	56.41	46.41	-23.91	-17.12	P	
3	1.1109	22.83	21.50	19.38	10.00	32.83	31.50	29.38	56.00	46.00	-24.50	-16.62	P	
4	5.9912	24.90	24.09	23.87	10.00	34.90	34.09	33.87	60.00	50.00	-25.91	-16.13	P	
5	11.9313	27.00	26.72	26.56	10.04	37.04	36.76	36.60	60.00	50.00	-23.24	-13.40	P	
6	23.8871	24.84	24.34	24.14	10.42	35.26	34.76	34.56	60.00	50.00	-25.24	-15.44	P	

Neutral Line:



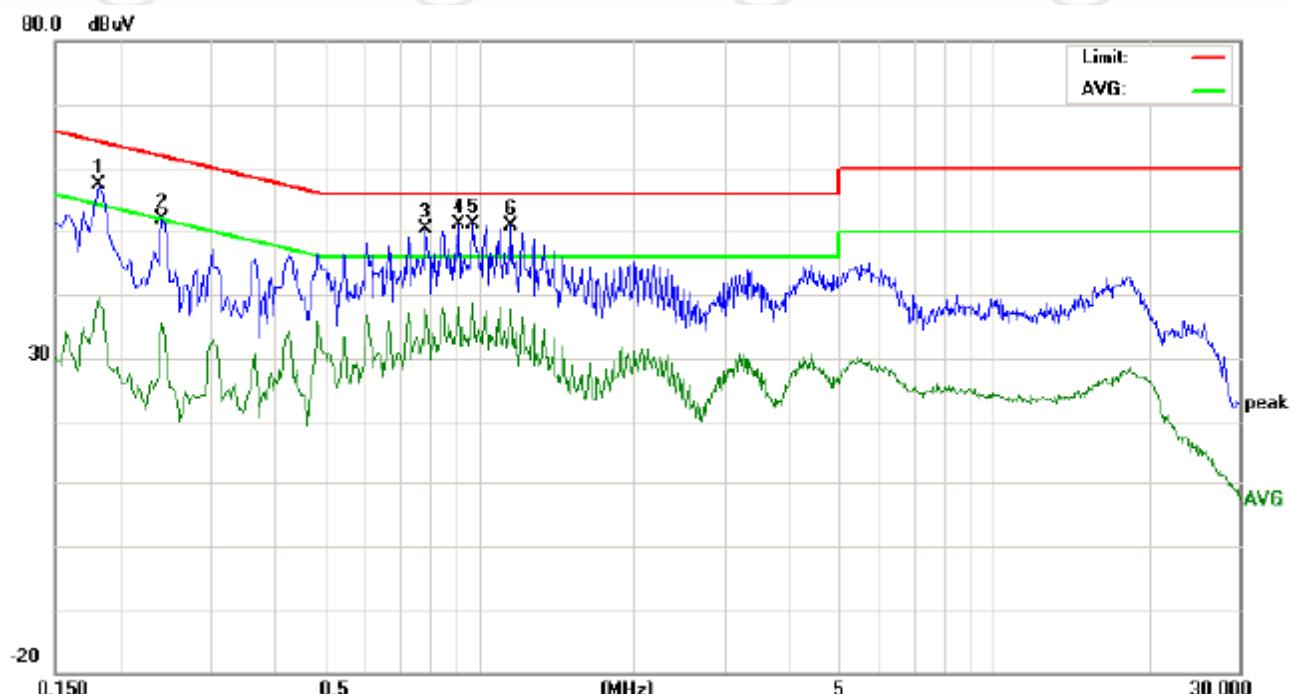
No.	Freq.	Reading_Level (dBuV)				Correct Factor	Measurement (dBuV)				Limit (dBuV)		Margin (dB)		
		MHz	Peak	QP	AVG		peak	QP	AVG	QP	AVG	QP	AVG	P/F	Comment
1	0.1580	36.55	32.10	27.22	9.80	46.35	41.90	37.02	65.56	55.56	-23.66	-18.54	P		
2	0.4780	23.77	22.00	19.10	9.90	33.67	31.90	29.00	56.37	46.37	-24.47	-17.37	P		
3	1.1140	23.26	21.50	19.48	10.00	33.26	31.50	29.48	56.00	46.00	-24.50	-16.52	P		
4	11.8459	26.76	26.53	26.15	10.04	36.80	36.57	36.19	60.00	50.00	-23.43	-13.81	P		
5	16.5339	26.38	25.98	25.58	10.22	36.60	36.20	35.80	60.00	50.00	-23.80	-14.20	P		
6	24.0180	25.31	24.80	24.48	10.42	35.73	35.22	34.90	60.00	50.00	-24.78	-15.10	P		

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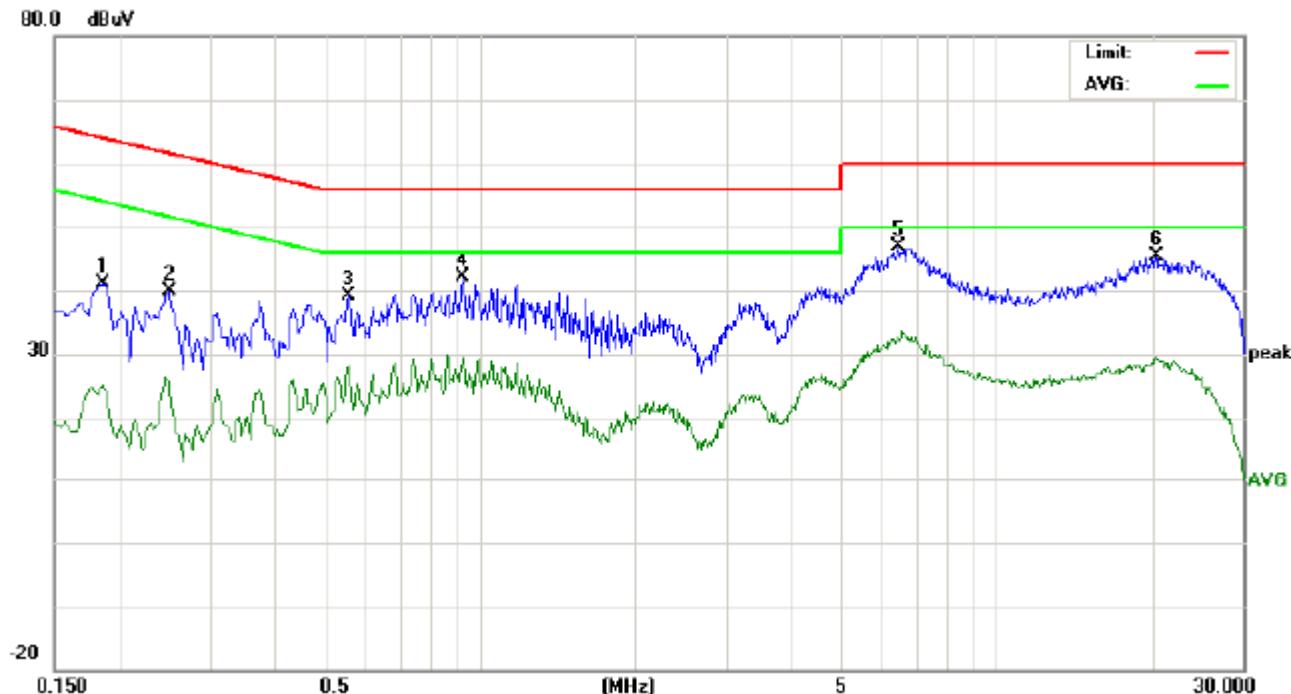
GPS receive mode

Live Line:



No.	Freq.	Reading_Level (dBuV)			Correct Factor	Measurement (dBuV)			Limit (dBuV)		Margin (dB)			
		MHz	Peak	QP	Avg	dB	peak	QP	Avg	QP	Avg	QP	Avg	P/F
1	0.1819	47.61	35.90	29.73	9.80	57.41	45.70	39.53	64.39	54.39	-18.69	-14.86	P	
2	0.2420	42.07	30.00	25.85	9.80	51.87	39.80	35.65	62.02	52.02	-22.22	-16.37	P	
3	0.7900	40.48	36.90	27.68	9.90	50.38	46.80	37.58	56.00	46.00	-9.20	-8.42	P	
4	0.9140	41.15	36.00	28.12	10.00	51.15	46.00	38.12	56.00	46.00	-10.00	-7.88	P	
5	0.9740	41.23	36.20	28.75	10.00	51.23	46.20	38.75	56.00	46.00	-9.80	-7.25	P	
6	1.1539	40.88	36.70	27.64	10.00	50.88	46.70	37.64	56.00	46.00	-9.30	-8.36	P	

Neutral Line:



No.	Freq.	Reading_Level (dBuV)			Correct Factor			Measurement (dBuV)			Limit (dBuV)			Margin (dB)		
		MHz	Peak	QP	Avg	dB	peak	QP	Avg	QP	Avg	QP	Avg	P/F	Comment	
1	0.1860	31.21	27.40	15.23	9.80	41.01	37.20	25.03	64.21	54.21	-27.01	-29.18	P			
2	0.2500	30.03	26.40	15.85	9.80	39.83	36.20	25.65	61.75	51.75	-25.55	-26.10	P			
3	0.5580	29.12	26.00	18.32	9.90	39.02	35.90	28.22	56.00	46.00	-20.10	-17.78	P			
4	0.9260	32.18	27.80	18.62	10.00	42.18	37.80	28.62	56.00	46.00	-18.20	-17.38	P			
5	6.4860	36.87	31.50	22.06	10.00	46.87	41.50	32.06	60.00	50.00	-18.50	-17.94	P			
6	20.4540	34.96	27.50	19.07	10.49	45.45	37.99	29.56	60.00	50.00	-22.01	-20.44	P			

Notes:

1. The following Quasi-Peak and Average measurements were performed on the EUT:
2. Final Test Level = Receiver Reading + LISN Factor + Cable Loss.
3. AC120V and 240V are tested and found the worst case is 120V, So only the 120V data were shown in the above.

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7.2 Radiated Emission

Test Requirement: 47 CFR Part 15B

Test Method: ANSI C63.4

Test site: Measurement Distance: 3m (Semi-Anechoic Chamber)

Receiver setup:

Frequency	Detector	RBW	VBW	Remark
30MHz-1GHz	Quasi-peak	120kHz	300kHz	Quasi-peak Value
Above 1GHz	Peak	1MHz	3MHz	Peak Value

Limit:

Frequency	Limit (dB μ V/m @3m)	Remark
30MHz-88MHz	40.0	Quasi-peak Value
88MHz-216MHz	43.5	Quasi-peak Value
216MHz-960MHz	46.0	Quasi-peak Value
960MHz-1GHz	54.0	Quasi-peak Value
Above 1GHz	54.0	Average Value
	74.0	Peak Value

Test Procedure:

Below 1GHz test procedure as below:

- The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.
- The EUT was set 3 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 and the rotating 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.

Above 1GHz test procedure as below:

- Different between above is the test site, change from Semi- Anechoic Chamber to fully Anechoic Chamber (Above 18GHz the distance is 1 meter).
- The radiation measurements are performed in X, Y, Z axis positioning for Transmitting mode, and found the X axis positioning which it is worse case.
- Repeat above procedures until all frequencies measured was complete.

Test Setup:

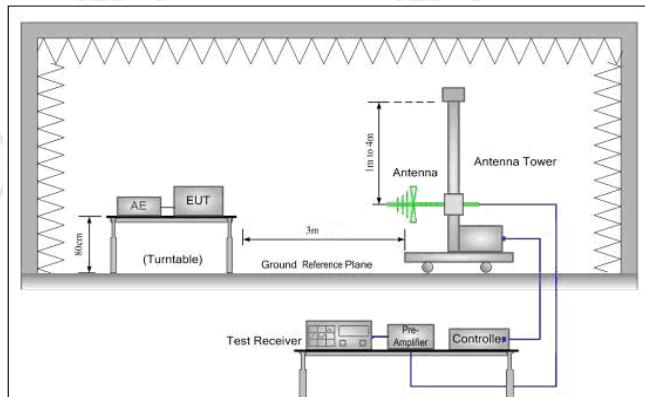


Figure 1. 30MHz to 1GHz

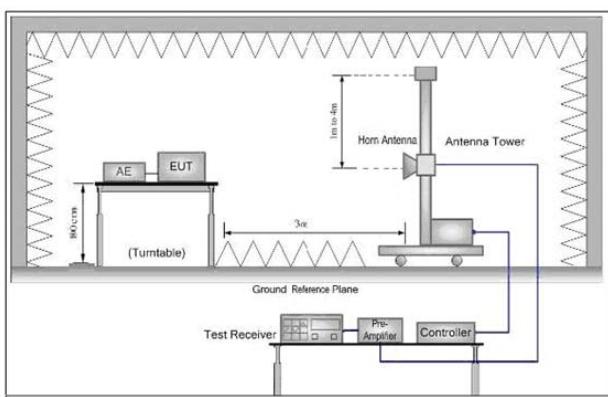


Figure 2. Above 1 GHz

Instruments Used: Refer to section 6 for details

Test Mode: Read & Write Int. Memory mode, GPS receive mode

Test Results: Pass

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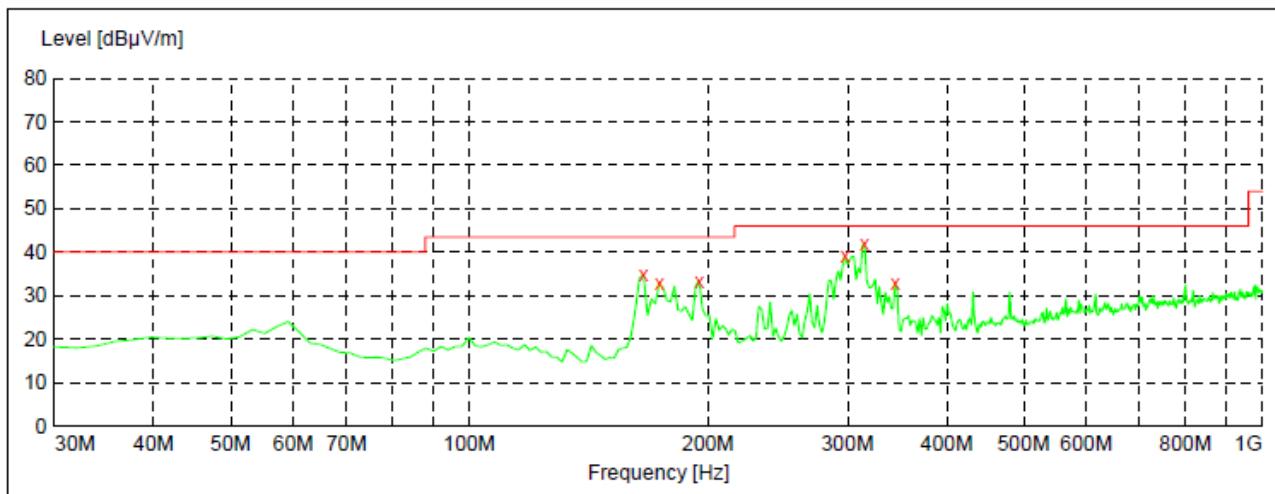
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QP value:

Below 1GHz

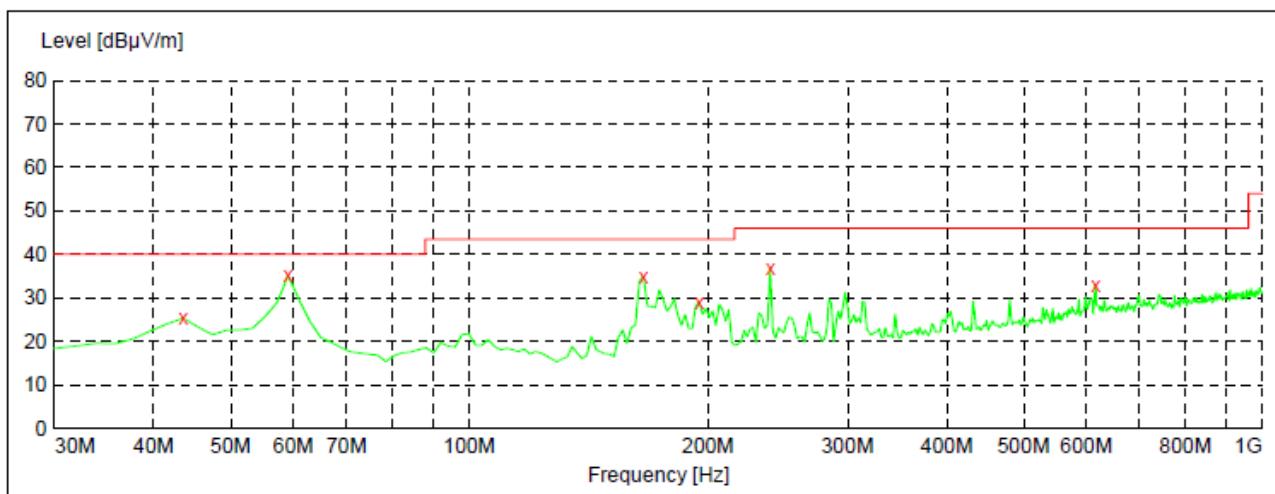
Read & Write Int. Memory mode

Horizontal



Frequency	Level	Transd	Limit	Margin	Polarization
MHz	dB μ V/m	dB	dB μ V/m	dB	
165.800000	34.80	8.5	43.5	-8.7	HORIZONTAL
173.560000	32.90	8.7	43.5	-10.6	HORIZONTAL
194.900000	33.40	13.3	43.5	-10.1	HORIZONTAL
297.720000	39.10	15.6	46.0	-6.9	HORIZONTAL
315.180000	42.00	16.1	46.0	-4.0	HORIZONTAL
344.280000	32.90	16.8	46.0	-13.1	HORIZONTAL

Vertical



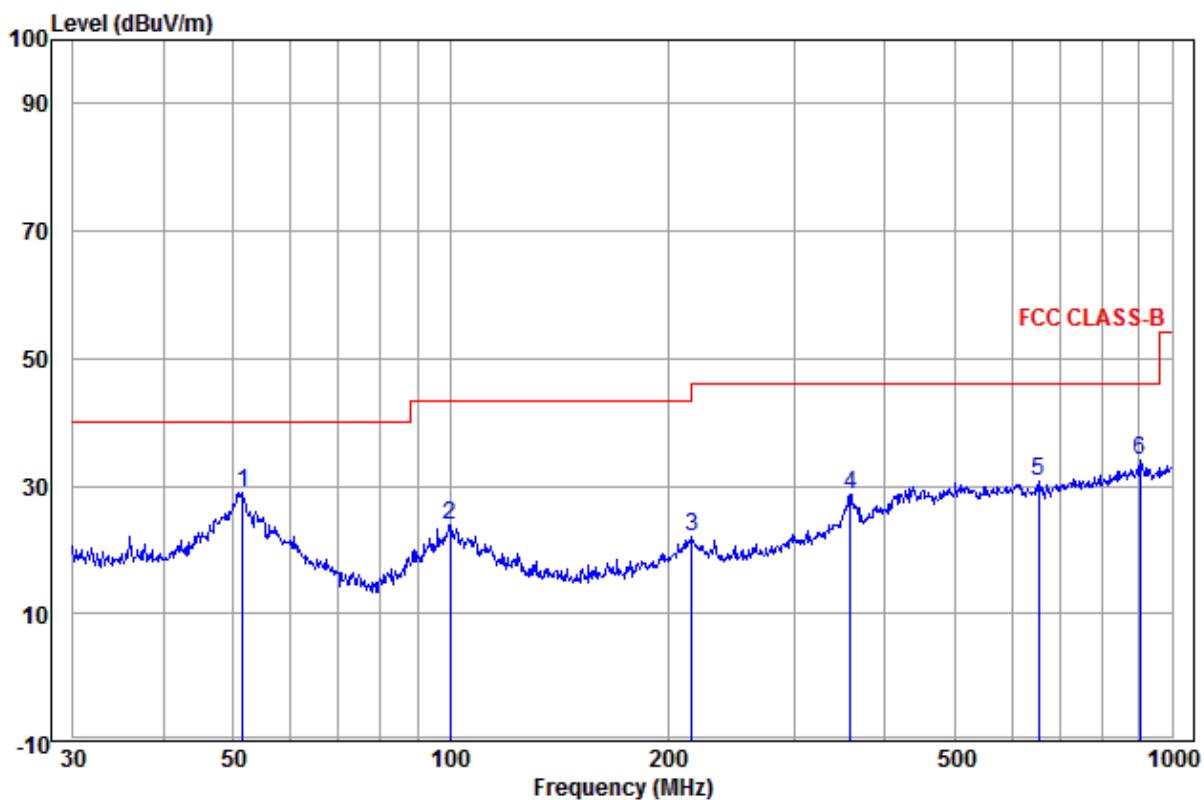
Frequency MHz	Level dB μ V/m	Transd dB	Limit dB μ V/m	Margin dB	Polarization
43.580000	25.30	15.2	40.0	-14.7	VERTICAL
59.100000	35.10	14.1	40.0	-4.9	VERTICAL
165.800000	34.90	8.5	43.5	-8.6	VERTICAL
194.900000	29.00	13.3	43.5	-14.5	VERTICAL
239.520000	36.80	14.7	46.0	-9.2	VERTICAL
615.880000	33.00	21.9	46.0	-13.0	VERTICAL

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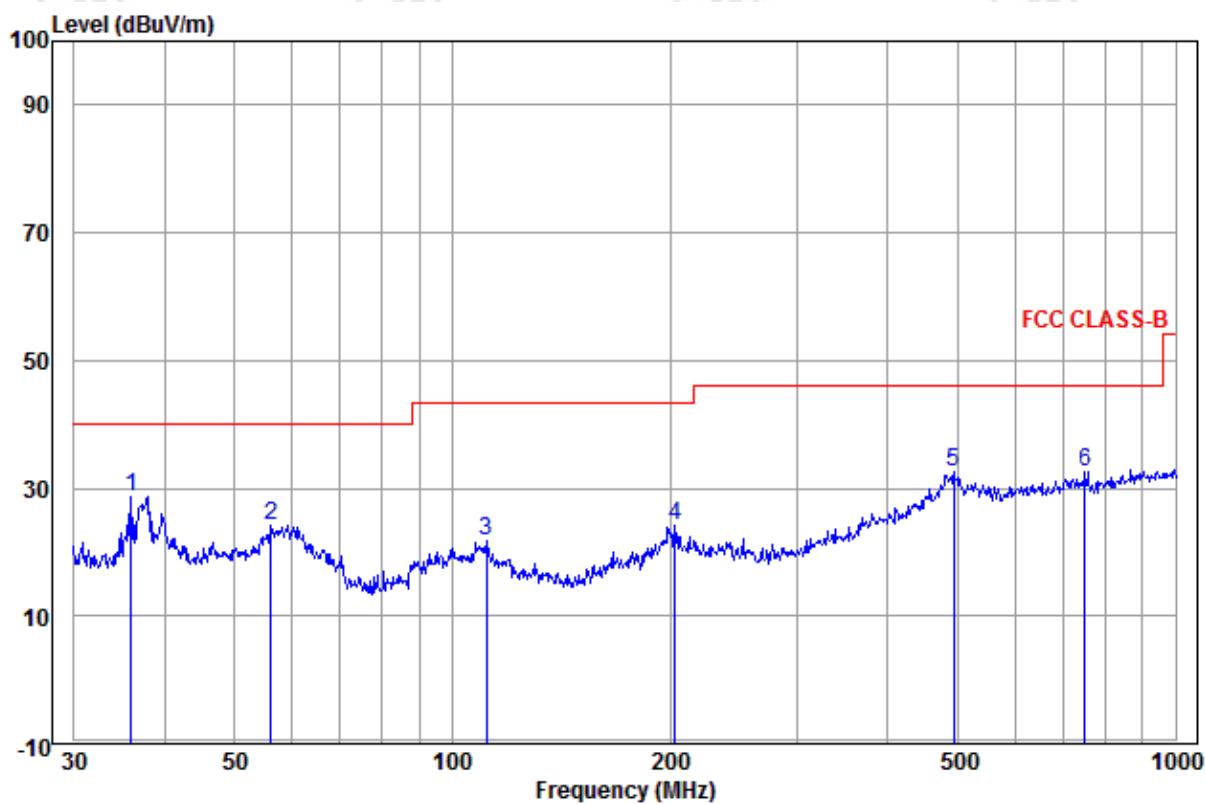
GPS receive mode

Horizontal



Freq	Ant Factor	Ant	Cable	Read	Limit Level	Limit Line	Over Limit	Pol/Phase	Remark
		MHz	dB/m	dB					
1 pp	51.481	14.89	1.40	12.68	28.97	40.00	-11.03	Horizontal	
2	99.878	13.18	1.57	9.06	23.81	43.50	-19.69	Horizontal	
3	216.024	11.88	2.26	7.79	21.93	46.00	-24.07	Horizontal	
4	357.929	15.05	2.73	10.91	28.69	46.00	-17.31	Horizontal	
5	654.232	19.70	3.60	7.45	30.75	46.00	-15.25	Horizontal	
6	903.309	22.40	4.34	7.17	33.91	46.00	-12.09	Horizontal	

Vertical



Freq	Ant Factor	Cable Loss	Read Level	Level	Limit Line	Over Limit	Over Pol/Phase		Remark
							MHz	dB/m	dB
1 pp	36.001	13.58	0.77	14.41	28.76	40.00	-11.24	Vertical	
2	56.197	14.27	1.42	8.62	24.31	40.00	-15.69	Vertical	
3	111.347	12.27	1.57	7.89	21.73	43.50	-21.77	Vertical	
4	203.523	11.66	2.22	10.39	24.27	43.50	-19.23	Vertical	
5	494.199	18.26	3.11	11.06	32.43	46.00	-13.57	Vertical	
6	750.108	21.00	4.01	7.64	32.65	46.00	-13.35	Vertical	

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Above 1GHz

Peak value:

Read & Write Int. Memory mode

Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Read Level (dB μ V)	Level (dB μ V/m)	Limit (dB μ V/m)	Over Limit (dB)	Result	Antenna Polaxis
1115.673	30.02	2.41	35.06	47.42	44.79	74	-29.21	Pass	Horizontal
1450.122	30.77	2.78	34.72	46.29	45.12	74	-28.88	Pass	Horizontal
1764.123	31.34	3.05	34.46	45.7	45.63	74	-28.37	Pass	Horizontal
2927.691	33.49	5.48	34.49	44.84	49.32	74	-24.68	Pass	Horizontal
4076.070	32.99	5.41	34.57	43.65	47.48	74	-26.52	Pass	Horizontal
4920.955	34.94	5.07	34.32	42.74	48.43	74	-25.57	Pass	Horizontal
1247.899	30.34	2.57	34.91	49.36	47.36	74	-26.64	Pass	Vertical
1842.139	31.46	3.11	34.41	45.75	45.91	74	-28.09	Pass	Vertical
2400.466	32.56	4.31	34.39	47.73	50.21	74	-23.79	Pass	Vertical
3112.129	33.50	5.60	34.51	45.5	50.09	74	-23.91	Pass	Vertical
3824.757	32.92	5.47	34.58	44.66	48.47	74	-25.53	Pass	Vertical
4858.719	34.8	5.09	34.34	43.49	49.04	74	-24.96	Pass	Vertical

GPS receive mode

Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Read Level (dB μ V)	Level (dB μ V/m)	Limit (dB μ V/m)	Over Limit (dB)	Result	Antenna Polaxis
1283.335	30.42	2.61	34.88	44.49	42.64	74	-31.36	Pass	Horizontal
2400.466	32.56	4.31	34.39	43.98	46.46	74	-27.54	Pass	Horizontal
3552.582	33.13	5.51	34.56	43.91	47.99	74	-26.01	Pass	Horizontal
4834.046	34.75	5.10	34.35	41.49	46.99	74	-27.01	Pass	Horizontal
6992.135	36.40	6.48	34.90	39.11	47.09	74	-26.91	Pass	Horizontal
12086.330	39.57	8.51	34.34	35.45	49.19	74	-24.81	Pass	Horizontal
1216.534	30.27	2.53	34.95	44.18	42.03	74	-31.97	Pass	Vertical
2050.000	31.82	3.38	34.31	43.16	44.05	74	-29.95	Pass	Vertical
3104.217	33.51	5.60	34.51	43.29	47.89	74	-26.11	Pass	Vertical
4278.055	33.49	5.32	34.51	41.33	45.63	74	-28.37	Pass	Vertical
7489.599	36.45	6.92	34.90	40.24	48.71	74	-25.29	Pass	Vertical
11872.880	39.56	8.40	34.36	34.29	47.89	74	-26.11	Pass	Vertical

Remark:

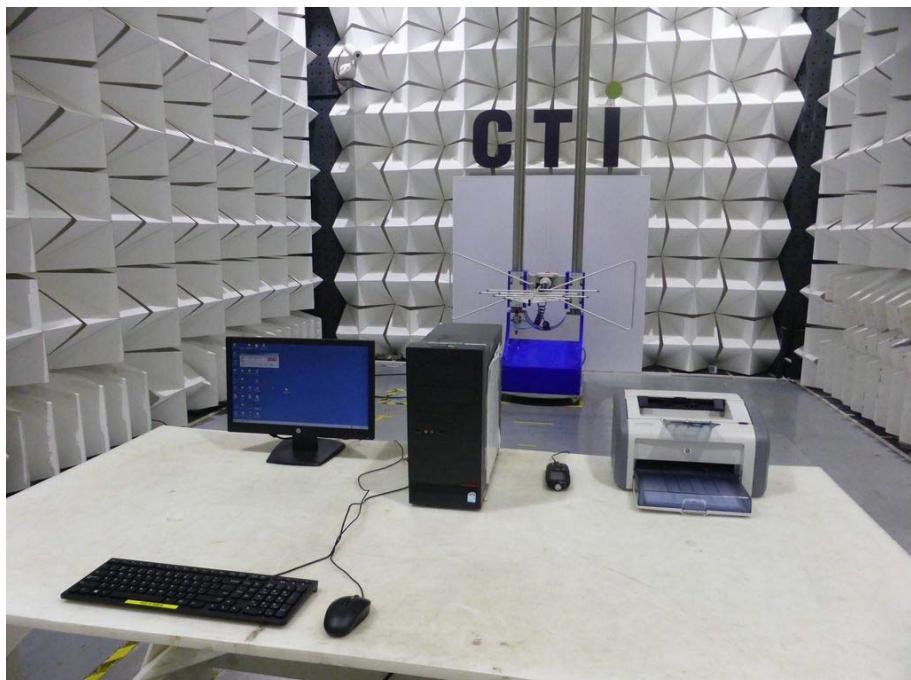
- 1) The field strength is calculated by adding the Antenna Factor, Cable Factor & Preamplifier. The basic equation with a sample calculation is as follows:

$$\text{Final Test Level} = \text{Receiver Reading} - \text{Correct Factor}$$

$$\text{Correct Factor} = \text{Preamplifier Factor} - \text{Antenna Factor} - \text{Cable Factor}$$
- 2) Scan from 9kHz to 25GHz, the disturbance above 13GHz 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.
- 3) As shown in this section, the Radiated Emission limits are based on Peak limits. However, the peak Radiated Emission shall not exceed the maximum permitted average limits specified above by more than 20 dB under any condition of modulation. So, only the peak measurements were shown in the report.

APPENDIX 1 PHOTOGRAPHS OF TEST SETUP

Test Model No.: RG310



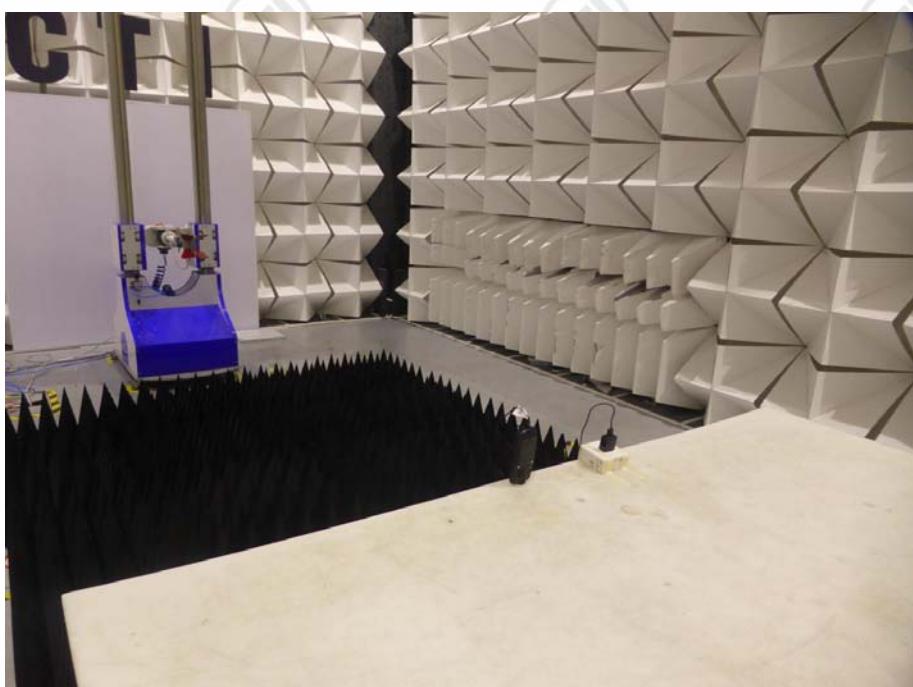
Radiated emission Test Setup-1(Below 1GHz)



Radiated emission Test Setup-2(Below 1GHz)



Radiated emission Test Setup-1 (Above 1GHz)



Radiated emission Test Setup-2(Below 1GHz)



Conducted Emissions-1



Conducted Emissions-2

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APPENDIX 2 PHOTOGRAPHS OF EUT

Test mode No.: RG310



View of Product-1



View of Product-2

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View of Product-3



View of Product-4



View of Product-5



View of Product-6



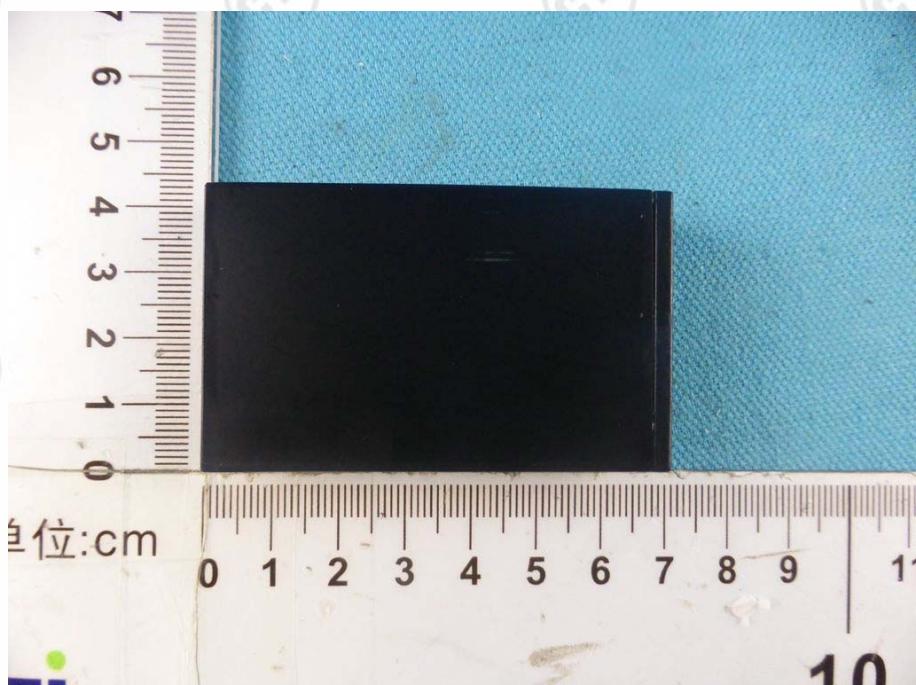
View of Product-7



View of Product-8



View of Product-9



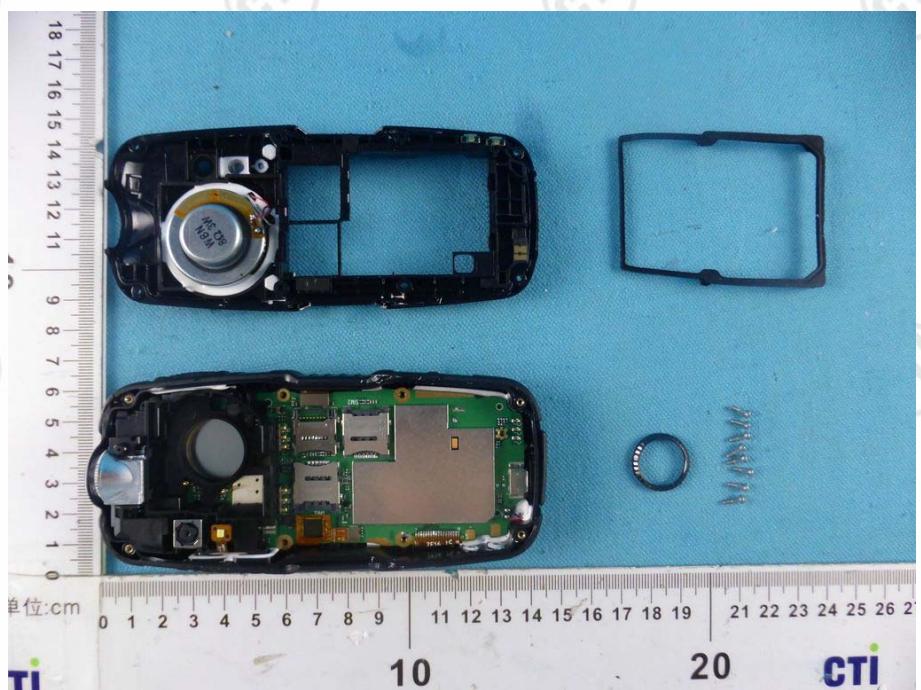
View of Product-10

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View of Product-11



View of Product-12



View of Product-13



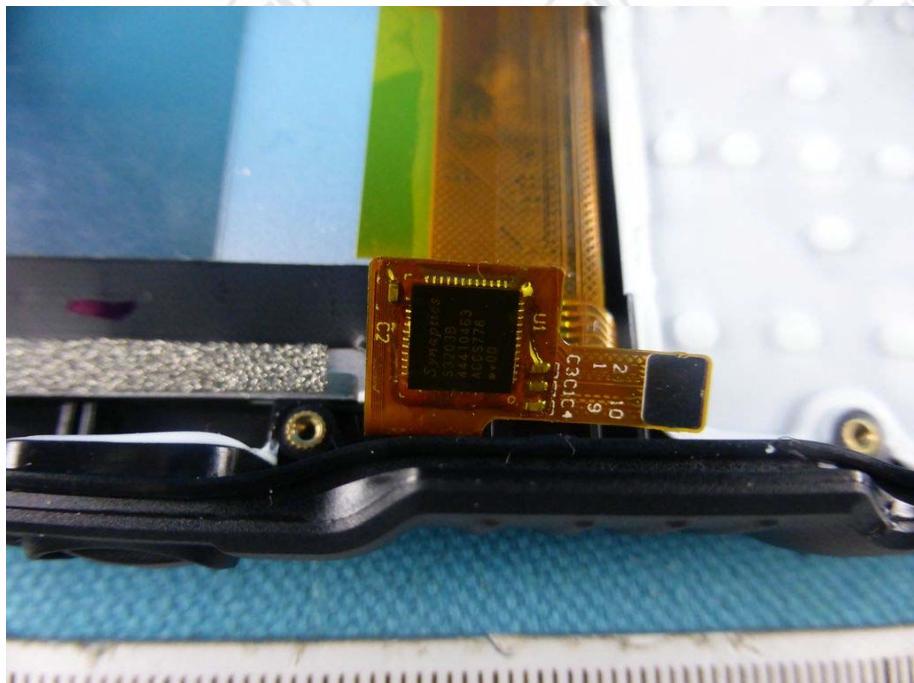
View of Product-14



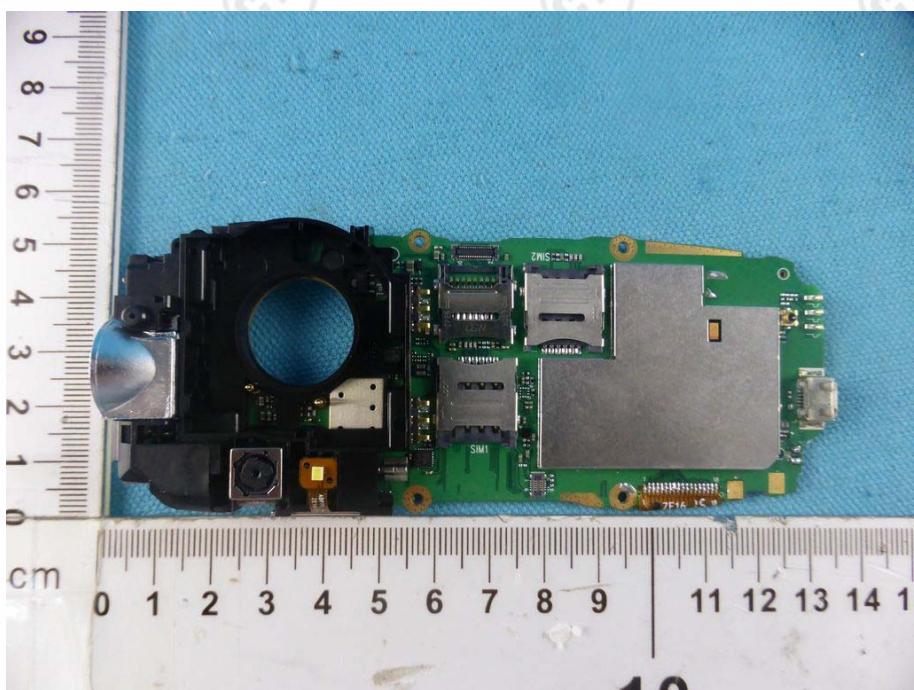
View of Product-15



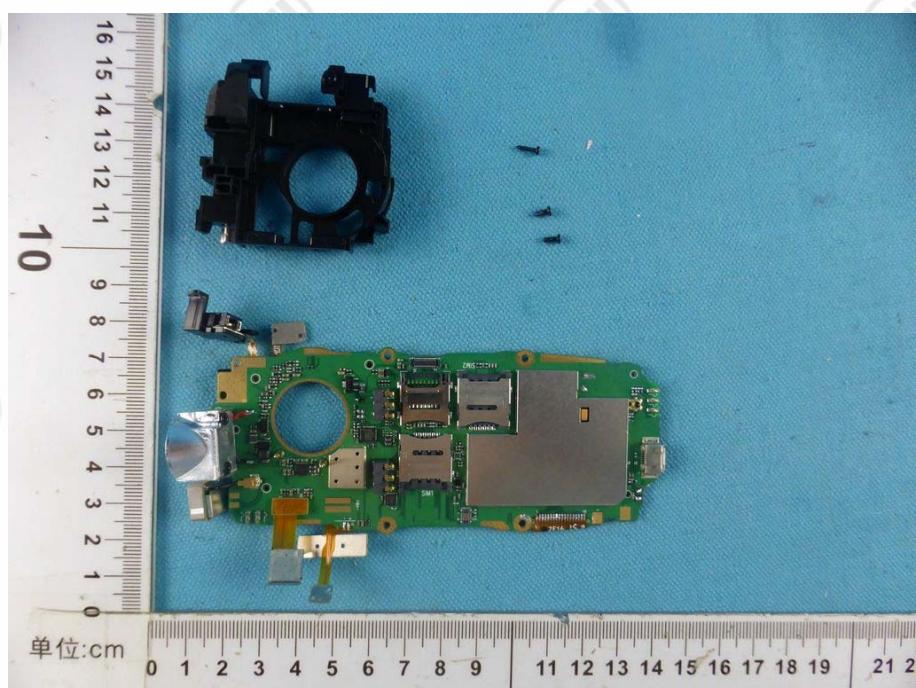
View of Product-16



View of Product-17



View of Product-18



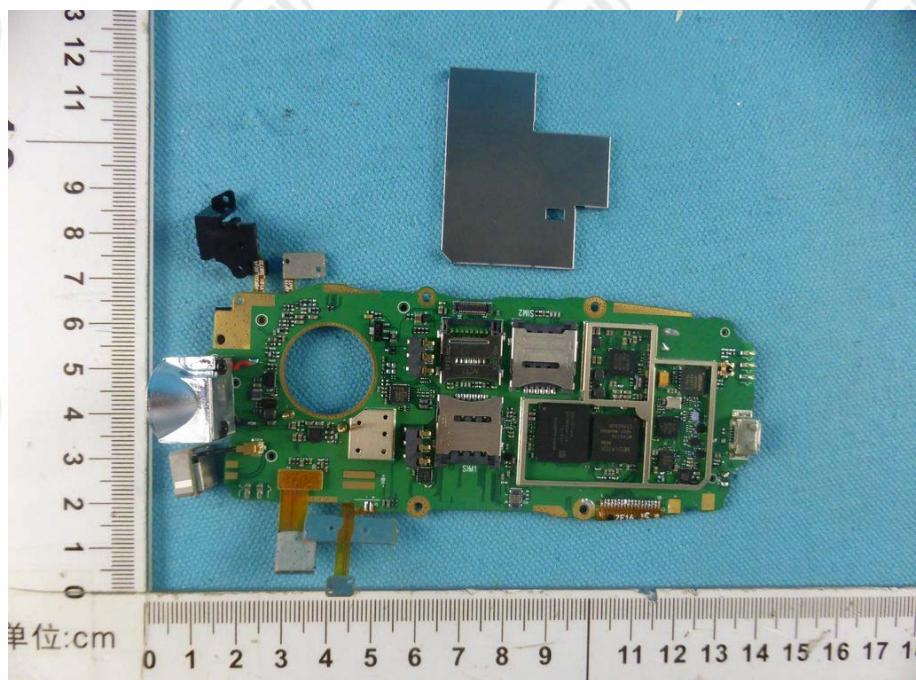
View of Product-19



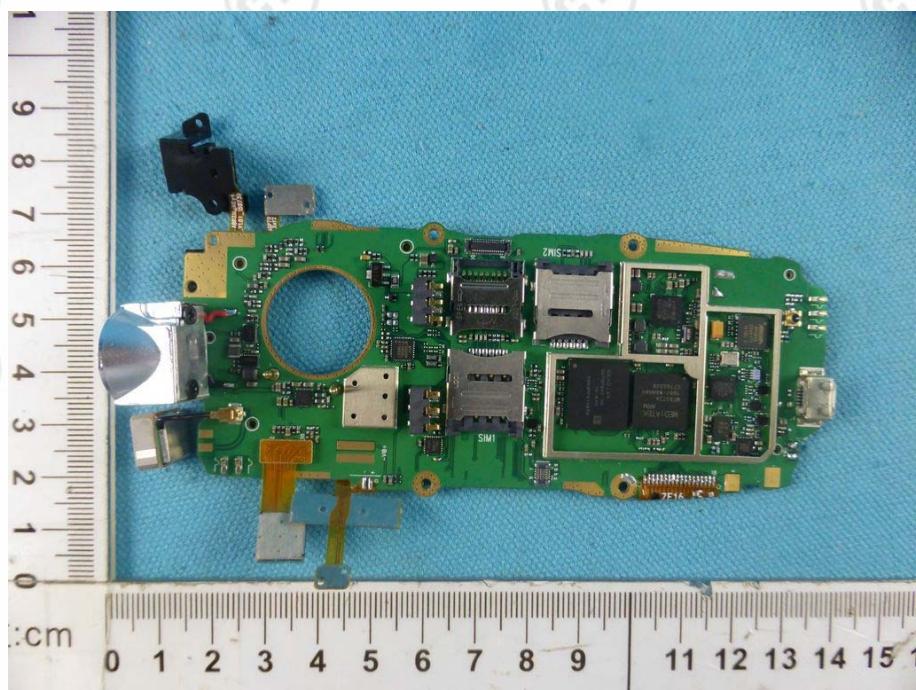
View of Product-20

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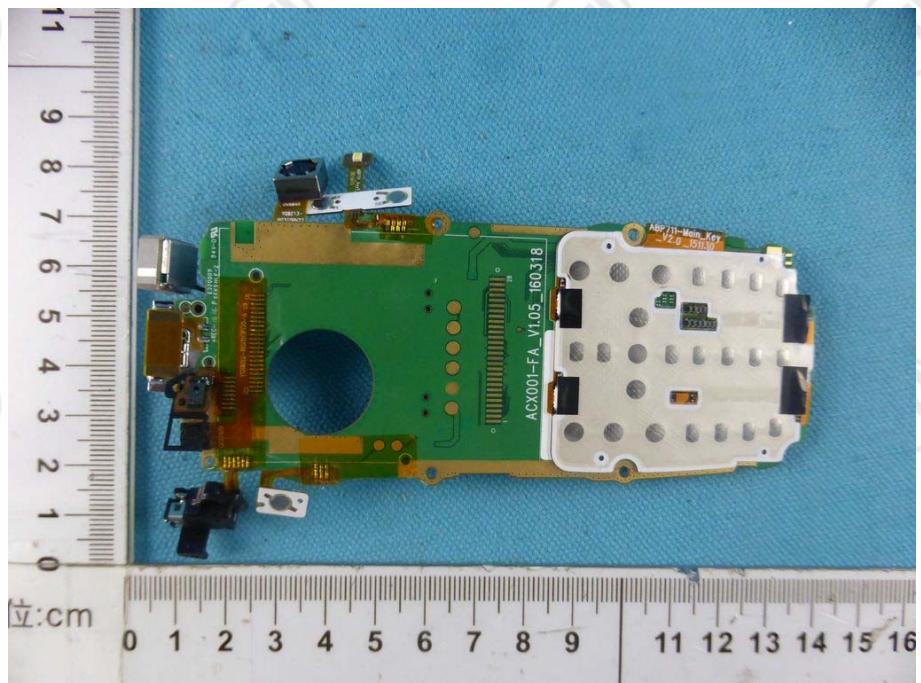
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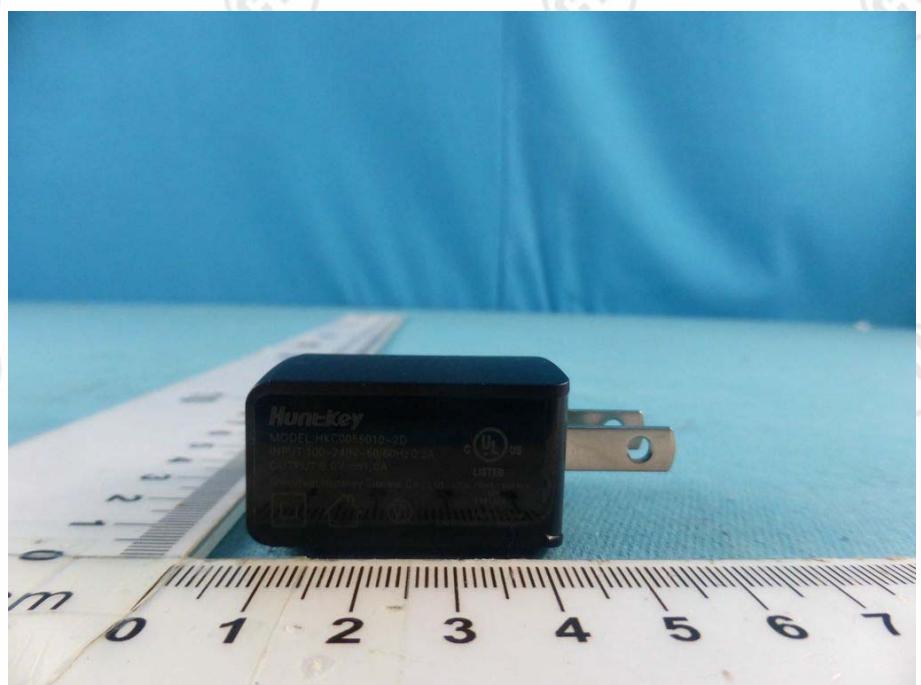
View of Product-21



View of Product-22



View of Product-23



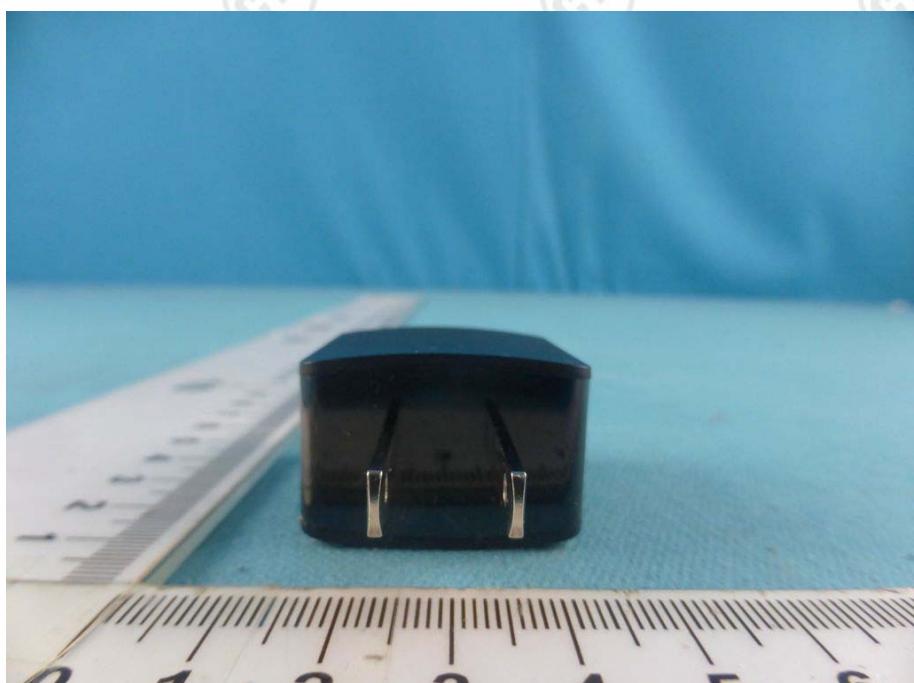
View of Product-24

Report No. : EED32I00185901

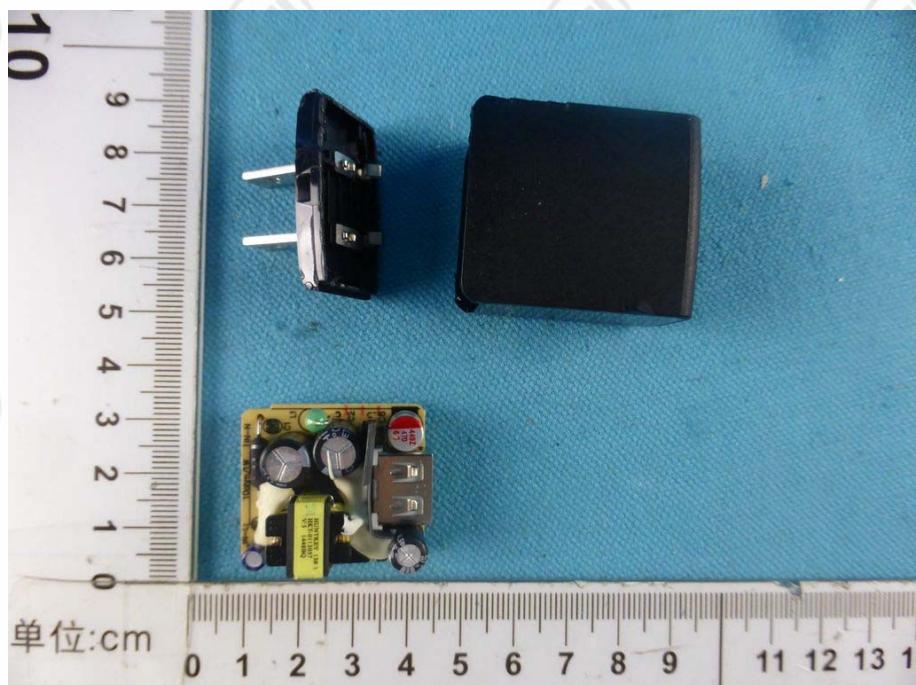
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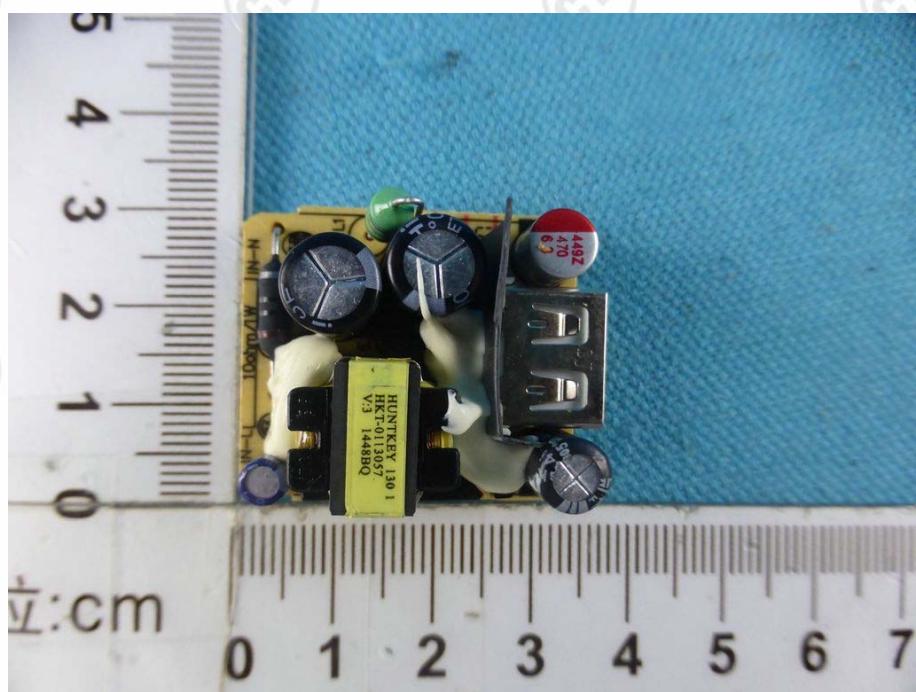
View of Product-25



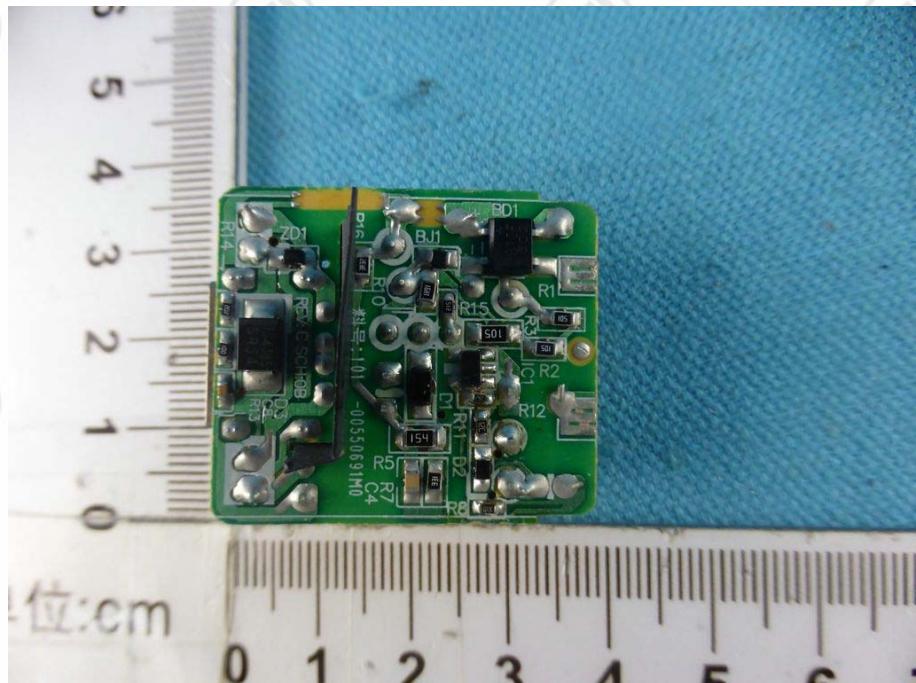
View of Product-26



View of Product-27



View of Product-28



View of Product-29

*** End of Report ***

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