

EMC TEST REPORT

Applicant:	Corporativo Lanix S.A. de C.V.
Address:	Carretera Internacional Hermosillo-Nogales Km 8.5, Hermosillo Sonora, Mexico

Manufacturer or Supplier	Tinno Mobile Technology Corp.
Address	4/F., H-3 Building, OCT Eastern Industrial Park. NO.1 XiangShan East Road., Nan Shan District, Shenzhen, P.R.China.
Product	smartphone
Brand Name	LANIX
Model Name	Ilium L1300
FCC ID	ZC4L1300
Date of tests	Aug. 17, 2016 ~ Aug. 31, 2016

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

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

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

Issued by Eric Shi
Engineer / Mobile Department

Approved by Bill Yao
Manager / Mobile Department




Date: Sep. 01, 2016

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BUREAU
VERITAS

Test Report No.: FV160816W001

RELEASE CONTROL RECORD

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
FV160816W001	Original release	Sep. 01, 2016



1 GENERAL INFORMATION

1.1 GENERAL DESCRIPTION OF EUT

PRODUCT	smartphone	
MODEL NAME	Ilium L1300	
NOMINAL VOLTAGE	5.0Vdc (adapter or host equipment) 3.85Vdc (Li-ion, battery)	
BATTERY	Brand Name: LANIX Model Name: Ilium L1300 Power Rating: DC 3.85V, 3000mAh, Li-ion	
MODULATION TYPE	WLAN	CCK, DQPSK, DBPSK for DSSS 64QAM, 16QAM, QPSK, BPSK for OFDM
	Bluetooth	GFSK, $\pi/4$ -DQPSK, 8DPSK
	GSM/EDGE	GMSK, 8PSK
	WCDMA	BPSK/QPSK
	LTE	QPSK/16QAM
OPERATING FREQUENCY	WLAN	2412 ~ 2462MHz for 11b/g/n(HT20) 2422 ~ 2452MHz for 11n(HT40)
	Bluetooth	2402MHz ~ 2480MHz
	GSM/EDGE	824.2MHz ~ 848.8MHz (FOR GSM 850) 1850.2MHz ~ 1909.8MHz (FOR PCS 1900)
	WCDMA	1852.4MHz ~ 1907.6MHz (FOR WCDMA Band2) 826.4MHz ~ 846.6MHz (FOR WCDMA Band5)
	LTE	1850MHz ~ 1910MHz (FOR LTE Band2) 1710MHz ~ 1755MHz (FOR LTE Band4) 2500MHz ~ 2570MHz (FOR LTE Band7) 704MHz ~ 716MHz (FOR LTE Band17)
HW Version	V1.0	
SW Version	Ilium L1300_TELCEL_SW_01	
I/O PORTS	Refer to user's manual	
CABLE	USB cable: non-shielded, detachable, 0.8m Earphone cable: non-shielded, detachable, 1.5m	
ACCESSORY DEVICES	Refer to note as below	

NOTE:

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



ADAPTER	
BRAND:	LANIX
MODEL:	Ilium L1300-C
INPUT:	AC 100-240V, 500mA
OUTPUT:	DC 5V, 3000mA DC 9V, 2000mA DC 12V, 1500mA

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

USB CABLE	
BRAND:	LANIX
MODEL:	Ilium L1300
SIGNAL LINE:	0.8 METER

EARPHONE	
BRAND:	LANIX
MODEL:	Ilium L1300
SIGNAL LINE:	1.5 METER

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



1.2 SUMMARY OF TEST RESULTS

The EUT has been tested according to the following specifications:

APPLIED STANDARD: FCC Part 15, Subpart B			
Standard Section	Test Item	Result	Remark
FCC Part 15, Subpart B, Class B ANSI C63.4:2014	Conducted Test	PASS	Meets limits minimum passing margin is 12.09dB at 2.368000MHz.
	Radiated Emission Test (30MHz ~ 1GHz)	PASS	Meets Class B Limit Minimum passing margin is -3.08dB at 145.43MHz
	Radiated Emission Test (Above 1GHz)	PASS	Meets Class B Limit Minimum passing margin is -14.58dB at 3618MHz

1.3 MEASUREMENT UNCERTAINTY

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the EUT as specified in CISPR 16-4-2:

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

MEASUREMENT	FREQUENCY	UNCERTAINTY
Conducted emissions	150kHz ~ 30MHz	+/-2.66dB
Radiated emissions	30MHz ~ 1GHz	+/-4.06dB
	1GHz ~ 18GHz	+/-4.58dB



1.4 DESCRIPTION OF TEST MODES

Test Mode	Test Condition
Radiated emission test	
1	GSM850 Idle +Adapter + Earphone + USB cable + BT Idle + Wifi Idle(2.4G) + GLONASS Rx
2	GSM1900 Idle +Adapter + Earphone + USB cable + BT Idle + Wifi Idle(2.4G) + GPS Rx
3	WCDMA 850 Idle +Adapter + Earphone + USB cable + BT Idle + Wifi Idle(2.4G)+ GLONASS Rx
4	WCDMA 1900 Idle +Adapter + Earphone + USB cable + BT Idle + Wifi Idle(2.4G) + GPS Rx
5	LTE B2 Idle +Adapter + Earphone + USB cable + BT Idle + Wifi Idle(2.4G) + GLONASS Rx + FM Rx
6	LTE B4 Idle +Adapter+ Earphone + USB cable + BT Idle + Wifi Idle(2.4G) + GPS Rx +Mpeg4
7	LTE B7 Idle +Adapter + Earphone + USB cable + BT Idle + Wifi Idle(2.4G) + GLONASS Rx + Front camera on
8	LTE B17 Idle + USB Link+ Earphone + USB cable + BT Idle + Wifi Idle(2.4G) + GPS Rx + Back camera on
Conducted emission test	
1	GSM850 Idle +Adapter + Earphone + USB cable + BT Idle + Wifi Idle(2.4G) + GLONASS Rx
2	GSM1900 Idle +Adapter + Earphone + USB cable + BT Idle + Wifi Idle(2.4G) + GPS Rx
3	WCDMA850 Idle +Adapter + Earphone + USB cable + BT Idle + Wifi Idle(2.4G)+ GLONASS Rx
4	WCDMA1900 Idle +Adapter + Earphone + USB cable + BT Idle + Wifi Idle(2.4G) + GPS Rx
5	LTE B2 Idle +Adapter + Earphone + USB cable + BT Idle + Wifi Idle(2.4G) + GLONASS Rx + Mpeg4
6	LTE B4 Idle +Adapter+ Earphone + USB cable + BT Idle + Wifi Idle(2.4G) + GPS Rx + Front camera on
7	LTE B7 Idle +Adapter + Earphone + USB cable + BT Idle + Wifi Idle(2.4G) + GLONASS Rx + Back camera on
8	LTE B17 Idle + USB Link+ Earphone + USB cable + BT Idle + Wifi Idle(2.4G) + GPS Rx + FM Rx

NOTE:

1. For conducted emission test, test mode 8 was the worst case and only this mode was presented in this report.
2. For radiated emission test, test mode 7 was the worst case and only this mode was presented in this report.



1.5 DESCRIPTION OF SUPPORT UNITS

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

FOR EMISSION TESTS

NO.	PRODUCT	BRAND	MODEL NO.	SERIAL NO.	FCC ID
1	Wireless AP	ABOCOM	WR224GR	060500749P	D43064
2	Bluetooth Earphone	FAP00	H6080	12098	N/A
3	Notebook	DELL	E6420	9H12FS1	N/A
4	Printer	HP	hp LaserJet 1300	CNSJF75989	N/A

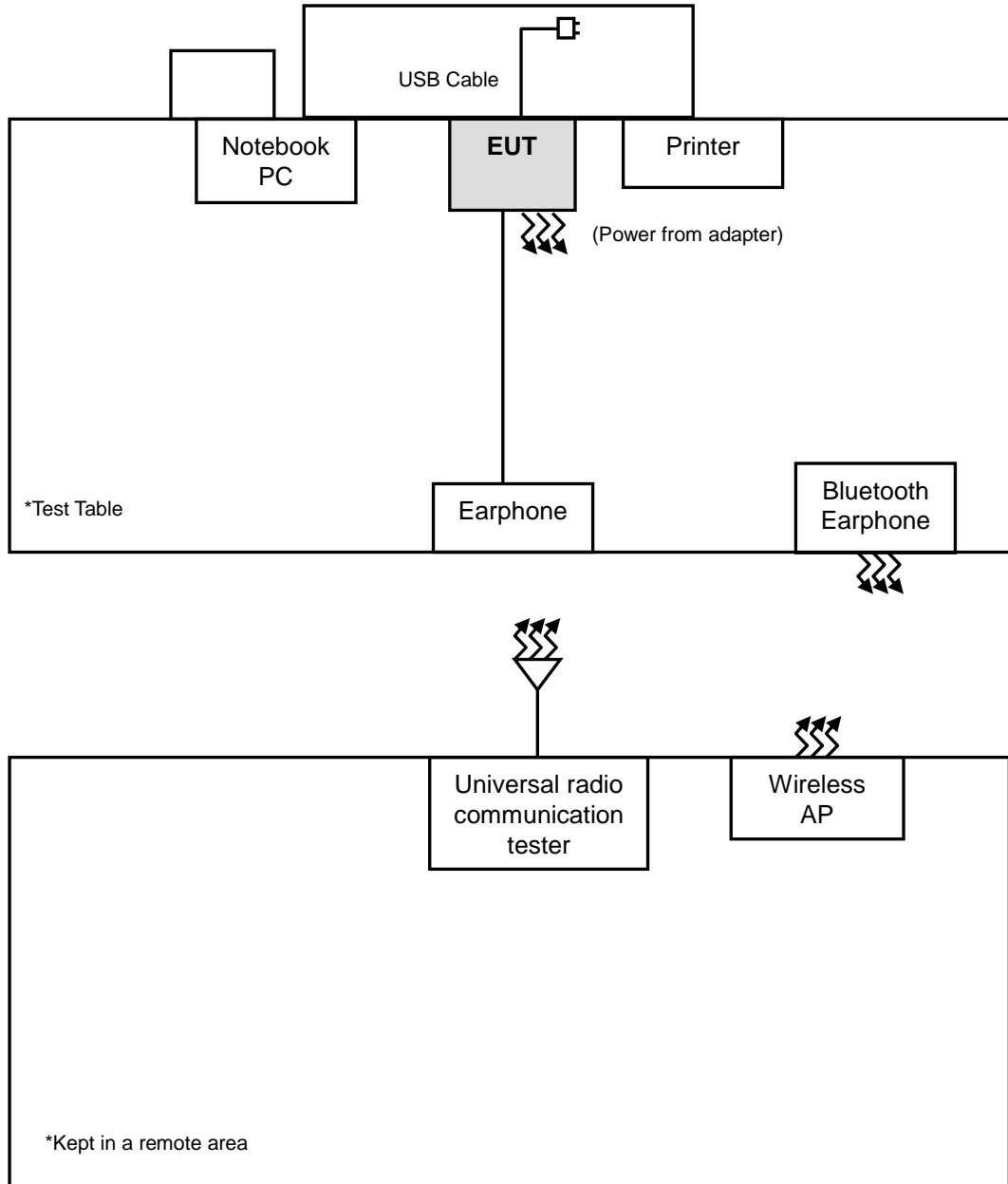
NO.	SIGNAL CABLE DESCRIPTION OF THE ABOVE SUPPORT UNITS
1	N/A
2	N/A
3	DC Line: Unshielded, Undetachable, 2.0m
4	USB Line: Shielded, Detachable 1.5m;

NOTE:

1. All power cords of the above support units are non shielded (1.8m).
2. Items 2-3 acted as communication partners.



1.6 CONFIGURATION OF SYSTEM UNDER TEST





2 EMISSION TEST

2.1 CONDUCTED EMISSION MEASUREMENT

2.1.1 LIMITS OF CONDUCTED EMISSION MEASUREMENT

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

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

NOTE: 1.The lower limit shall apply at the transition frequencies.

2. The limit decreases in line with the logarithm of the frequency in the range of 0.15 to 0.50MHz.

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

2.1.2 TEST INSTRUMENTS

Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
EMI Test Receiver	Rohde&Schwarz	ESR7	101494	Apr. 05,16	Apr. 04,17
Bilog Antenna	Teseq	CBL 6111D	30643	Jul. 14, 16	Jul. 13, 17
Amplifier	Burgeon	BPA-530	100220	Apr. 05,16	Apr. 04,17
3m Semi-anechoic Chamber	ETS-LINDGREN	9m*6m*6m	NSEMC003	Mar. 12,16	Mar. 11,18
Test software	ADT	ADT_Radiated_V7.6.15.9.2	N/A	N/A	N/A

NOTE: 1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to CEPREI/CHINA, GRGT/CHINA and NIM/CHINA.

2. The test was performed in Dongguan Shielded Room 553.



2.1.3 TEST PROCEDURES

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

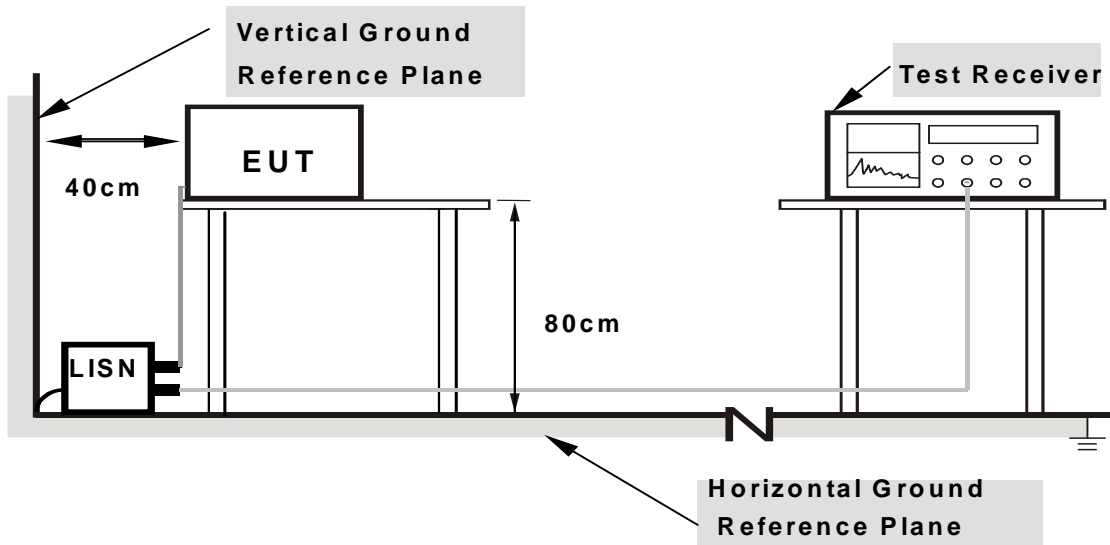
NOTE: All modes of operation were investigated and the worst-case emissions are reported.

2.1.4 DEVIATION FROM TEST STANDARD

No deviation.



2.1.5 TEST SETUP



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

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

2.1.6 EUT OPERATING CONDITIONS

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



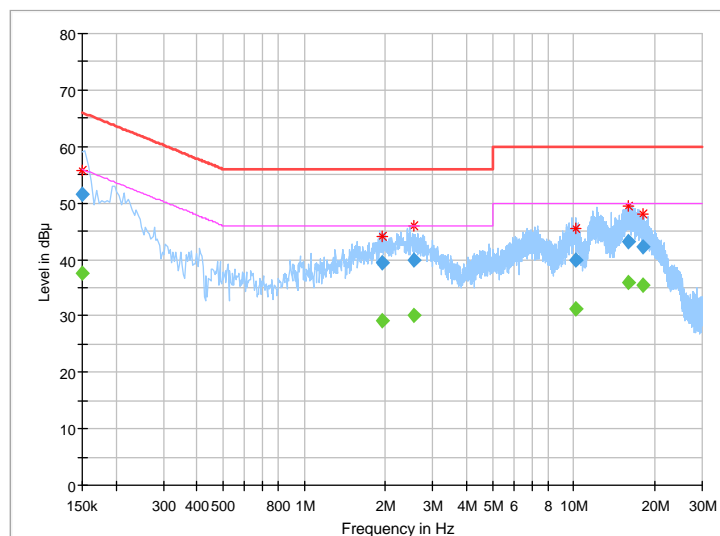
2.1.7 TEST RESULTS

TEST VOLTAGE	DC 5V From Adapter Input 230 Vac, 50 Hz	6dB BANDWIDTH	9 kHz
ENVIRONMENTAL CONDITIONS	24deg. C, 55RH	TESTED BY	Eric

Frequency (MHz)	QuasiPeak (dB μ V)	CAverage (dB μ V)	Limit (dB μ V)	Margin (dB)	Line	Filter	Corr. (dB)
0.150000	---	37.49	56.00	18.51	L1	ON	9.6
0.150000	51.43	---	66.00	14.57	L1	ON	9.6
1.952000	---	29.08	46.00	16.92	L1	ON	9.7
1.952000	39.43	---	56.00	16.57	L1	ON	9.7
2.540000	---	30.00	46.00	16.00	L1	ON	9.7
2.540000	39.90	---	56.00	16.10	L1	ON	9.7
10.176000	---	31.18	50.00	18.82	L1	ON	9.9
10.176000	39.97	---	60.00	20.03	L1	ON	9.9
15.996000	---	35.93	50.00	14.07	L1	ON	9.9
15.996000	43.04	---	60.00	16.96	L1	ON	9.9
18.020000	---	35.52	50.00	14.48	L1	ON	9.9
18.020000	42.13	---	60.00	17.87	L1	ON	9.9

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

Full Spectrum



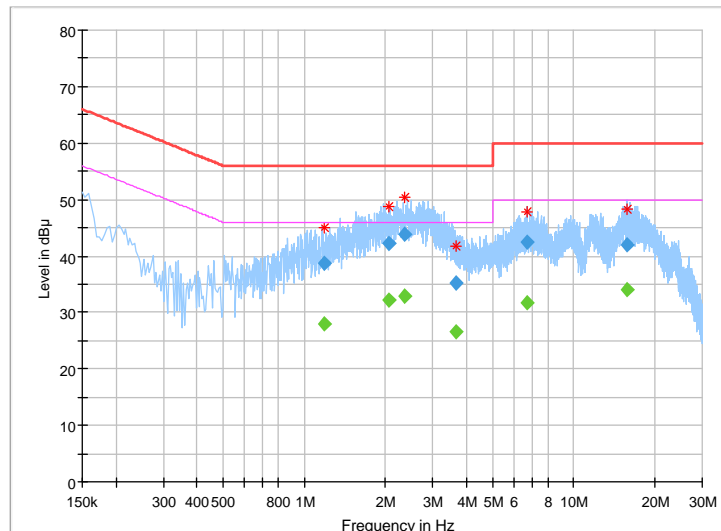


TEST VOLTAGE	DC 5V From Adapter Input 230 Vac, 50 Hz	6dB BANDWIDTH	9 kHz
ENVIRONMENTAL CONDITIONS	24deg. C, 55RH	TESTED BY	Eric

Frequency (MHz)	QuasiPeak (dBuV)	CAverage (dBuV)	Limit (dBuV)	Margin (dB)	Line	Filter	Corr. (dB)
1.188000	---	27.91	46.00	18.09	N	ON	9.9
1.188000	38.73	---	56.00	17.27	N	ON	9.9
2.062000	---	32.29	46.00	13.71	N	ON	9.8
2.062000	42.29	---	56.00	13.71	N	ON	9.8
2.368000	---	32.82	46.00	13.18	N	ON	9.8
2.368000	43.91	---	56.00	12.09	N	ON	9.8
3.652000	---	26.61	46.00	19.39	N	ON	9.8
3.652000	35.19	---	56.00	20.81	N	ON	9.8
6.752000	---	31.72	50.00	18.28	N	ON	9.8
6.752000	42.46	---	60.00	17.54	N	ON	9.8
15.796000	---	34.06	50.00	15.94	N	ON	9.9
15.796000	41.88	---	60.00	18.12	N	ON	9.9

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

Full Spectrum





2.2 RADIATED EMISSION MEASUREMENT

2.2.1 Limits of Radiated Emission Measurement

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

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

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

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

- NOTE:**
1. The lower limit shall apply at the transition frequencies.
 2. Emission level (dBuV/m) = 20 log Emission level (uV/m).
 3. As shown in 15.35(b), for frequencies above 1000MHz, the field strength limits are based on average detector, however, the peak field strength of any emission shall not exceed the maximum permitted average limits, specified above by more than 20dB under any condition of modulation.
 4. QP detector shall be applied if not specified.



2.2.2 Test Instruments

For frequency below 1G

Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
EMI Test Receiver	Rohde&Schwarz	ESR7	101494	Apr. 05,16	Apr. 04,17
Bilog Antenna	Teseq	CBL 6111D	30643	Jul. 14, 16	Jul. 13, 17
Amplifier	Burgeon	BPA-530	100220	Apr. 05,16	Apr. 04,17
3m Semi-anechoic Chamber	ETS-LINDGREN	9m*6m*6m	NSEMC003	Mar. 12,16	Mar. 11,18
Test software	ADT	ADT_Radiated_V7.6.15.9.2	N/A	N/A	N/A

For frequency above 1G

Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
Horn Antenna	ETS-Lindgren	3117	00062558	May 30,16	May 29,18
Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA9170242	Mar. 12,16	Mar. 11,17
Signal and Spectrum Analyzer	Rohde&Schwarz	FSV40	101094	Apr. 05,16	Apr. 04,17
Broadband Preamplifier	SCHWARZBECK	BBV9718	305	Mar. 09,16	Mar. 08,17
Pre-Amplifier (18GHz-40GHz)	EMCI	EMC 184045	980102	Nov. 11,15	Nov. 10,16
Test Software	ADT	ADT_Radiated_V7.6.15.9.2	N/A	N/A	N/A

- NOTE:**
1. The test was performed in 966m Chamber (a 3m Semi-anechoic chamber).
 2. The calibration interval of the above test instruments is 12 months or 24 months and the calibrations are traceable to CEPREI/CHINA, GRGT/CHINA and NIM/CHINA.
 3. The FCC Site Registration No. is 502831.



2.2.3 Test Procedure

<Frequency Range below 1GHz>

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

- a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter semi-anechoic chamber room. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- c. The height of antenna is varied from 1 meter to 4 meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
- e. The test-receiver system was set to quasi-peak detect function and specified bandwidth with maximum hold mode when the test frequency is below 1GHz.

NOTE:

1. The resolution bandwidth of test receiver/spectrum analyzer is 120kHz for Quasi-peak detection (QP) at frequency below 1GHz.
2. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB/m)
3. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB) (if the raw value not contains the amplifier);
4. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB) – Amplifier Gain(dB) (if the raw value contains the amplifier).
5. Margin value = Emission level – Limit value.



<Frequency Range above 1GHz>

- a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter fully-anechoic chamber room. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- c. The height of antenna is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement. The bore sight should be used during the test above 1GHz.
- d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
- e. The test-receiver system was set to peak and average detect function and specified bandwidth with maximum hold mode when the test frequency is above 1 GHz

NOTE:

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

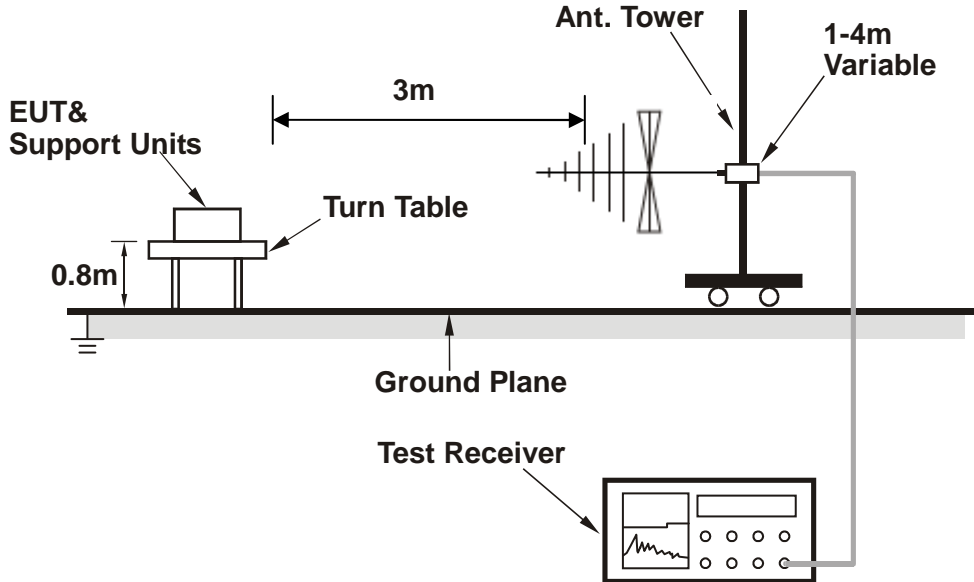
2.2.4 DEVIATION FROM TEST STANDARD

No deviation.

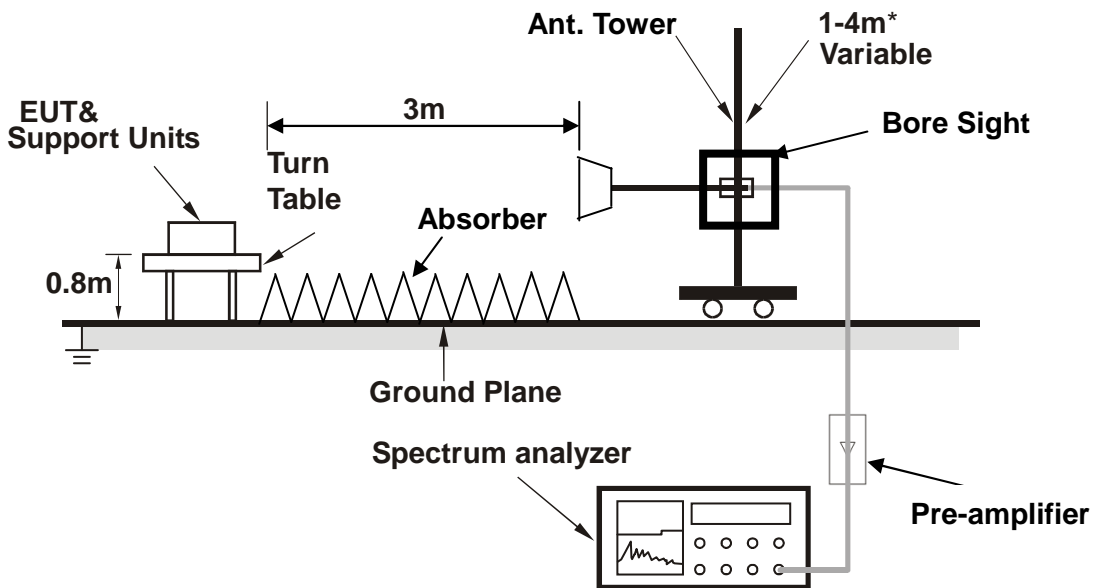


2.2.5 Test Setup

<Frequency Range below 1GHz>



<Frequency Range above 1GHz>



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

2.2.6 EUT OPERATING CONDITIONS

Same as item 2.1.6.

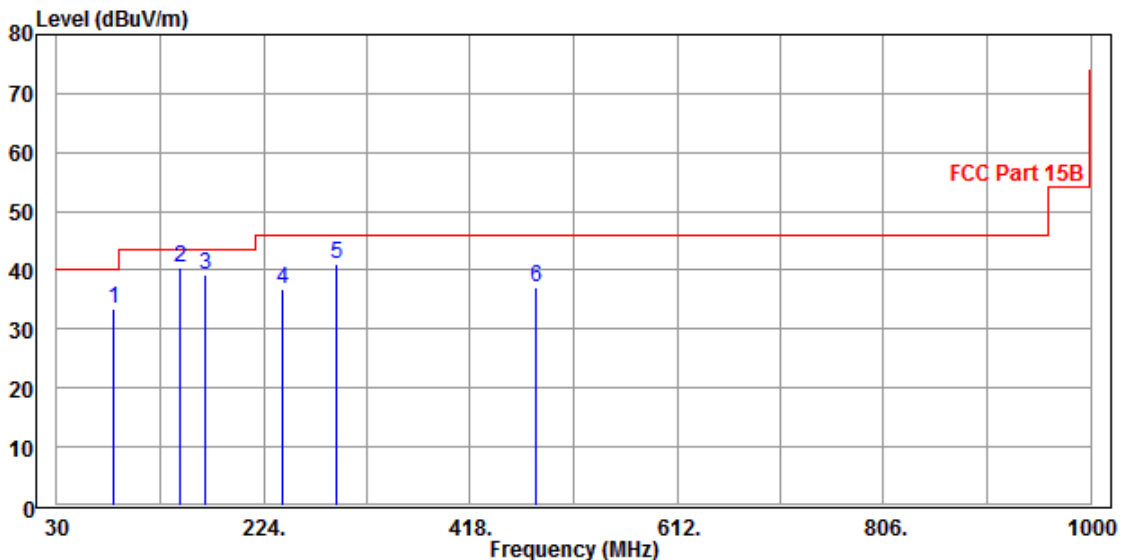


2.2.7 TEST RESULTS

TEST VOLTAGE	DC 5V From Adapter Input 120Vac, 50 Hz	FREQUENCY RANGE	30-1000 MHz
ENVIRONMENTAL CONDITIONS	24deg. C, 58 %RH	DETECTOR FUNCTION & BANDWIDTH	Quasi-Peak , 120 kHz
TESTED BY	Alex Chen		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
82.38	33.58	62.63	40.00	-6.42	6.67	1.40	37.12	200	300	QP
145.43	40.42	66.73	43.50	-3.08	8.65	1.85	36.81	175	85	QP
168.71	39.14	63.80	43.50	-4.36	10.07	1.99	36.72	200	161	QP
241.46	36.85	58.96	46.00	-9.15	12.01	2.40	36.52	200	40	QP
292.87	41.21	62.12	46.00	-4.79	12.91	2.68	36.50	200	140	QP
480.08	37.22	52.57	46.00	-8.78	18.16	3.40	36.91	200	75	QP

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

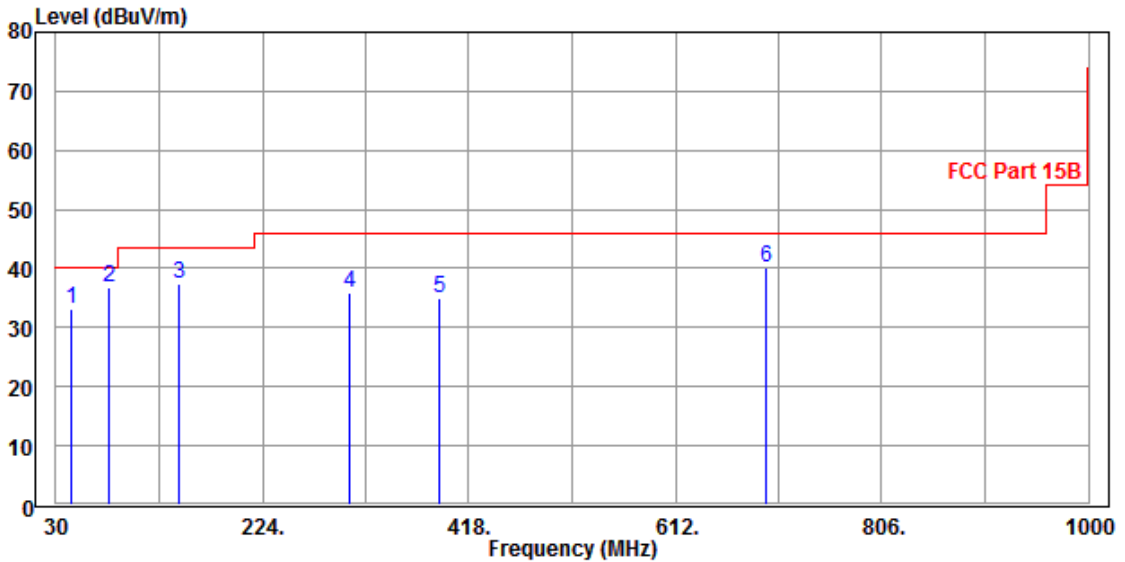




TEST VOLTAGE	DC 5V From Adapter Input 120 Vac, 50 Hz	FREQUENCY RANGE	30-1000 MHz
ENVIRONMENTAL CONDITIONS	24deg. C, 58 %RH	DETECTOR FUNCTION & BANDWIDTH	Quasi-Peak , 120 kHz
TESTED BY	Alex Chen		

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
44.55	33.25	61.16	40.00	-6.75	8.52	1.01	37.44	100	300	QP
79.47	36.66	65.83	40.00	-3.34	6.62	1.37	37.16	100	48	QP
146.40	37.47	63.65	43.50	-6.03	8.77	1.86	36.81	100	220	QP
305.48	35.79	56.33	46.00	-10.21	13.23	2.74	36.51	100	15	QP
390.84	34.97	51.74	46.00	-11.03	16.82	3.11	36.70	100	148	QP
697.36	40.19	50.25	46.00	-5.81	23.03	4.27	37.36	100	256	QP

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

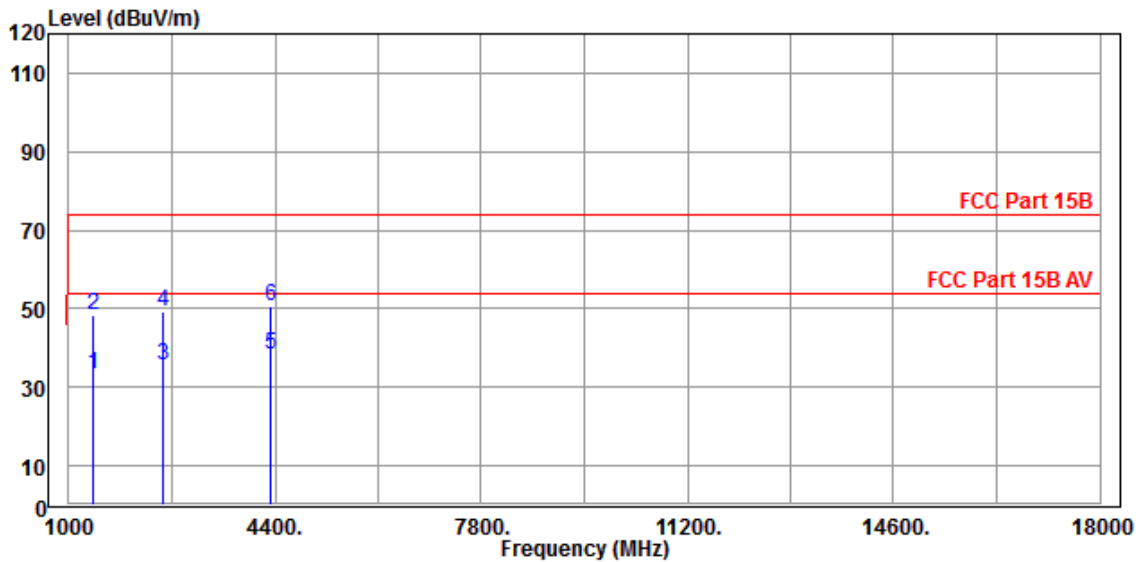




TEST VOLTAGE	DC 5V From Adapter Input 120 Vac, 50 Hz	FREQUENCY RANGE	1-18 GHz
ENVIRONMENTAL CONDITIONS	24deg. C, 58 %RH	DETECTOR FUNCTION & BANDWIDTH	Peak/Average, 1 MHz
TESTED BY	Alex Chen		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
1408	33.45	46.92	54.00	-20.55	28.79	6.10	48.36	100	30	Average
1408	48.25	61.72	74.00	-25.75	28.79	6.10	48.36	100	30	Peak
2564	35.78	43.16	54.00	-18.22	32.46	8.46	48.30	100	72	Average
2564	49.38	56.76	74.00	-24.62	32.46	8.46	48.30	100	72	Peak
4332	38.42	41.77	54.00	-15.58	34.13	11.22	48.70	100	140	Average
4332	50.67	54.02	74.00	-23.33	34.13	11.22	48.70	100	140	Peak

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

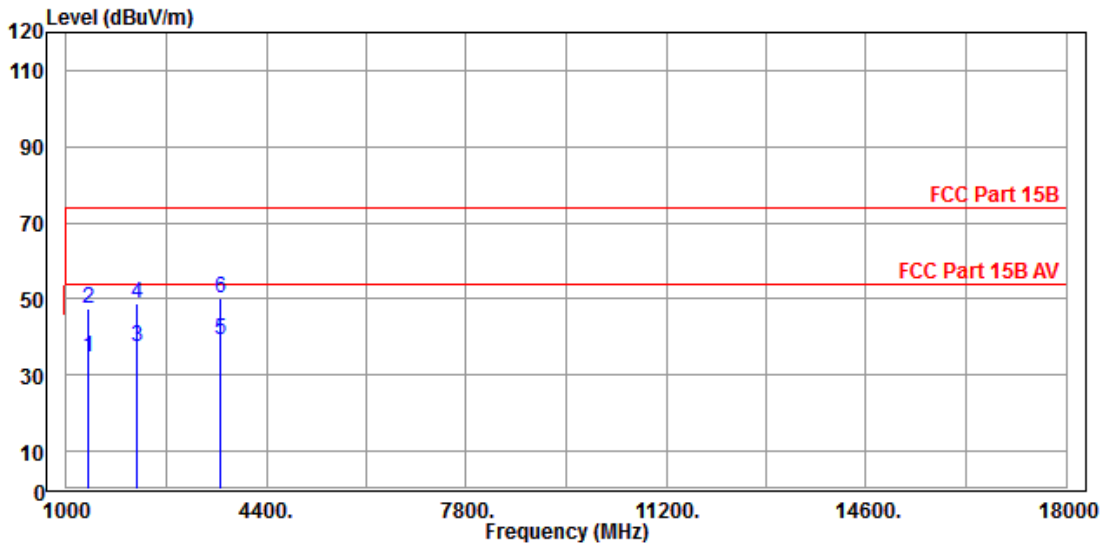




TEST VOLTAGE	DC 5V From Adapter Input 120 Vac, 50 Hz	FREQUENCY RANGE	1-18 GHz
ENVIRONMENTAL CONDITIONS	24deg. C, 58 %RH	DETECTOR FUNCTION & BANDWIDTH	Peak/Average, 1 MHz
TESTED BY	Alex Chen		

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
1374	34.78	48.28	54.00	-19.22	28.83	6.03	48.36	100	15	Average
1374	47.65	61.15	74.00	-26.35	28.83	6.03	48.36	100	15	Peak
2207	37.24	45.64	54.00	-16.76	32.11	7.82	48.33	100	80	Average
2207	48.96	57.36	74.00	-25.04	32.11	7.82	48.33	100	80	Peak
3618	39.42	44.53	54.00	-14.58	33.19	10.15	48.45	100	148	Average
3618	50.03	55.14	74.00	-23.97	33.19	10.15	48.45	100	148	Peak

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





**BUREAU
VERITAS**

Test Report No.: FV160816W001

3 APPENDIX A – MODIFICATIONS RECORDERS FOR ENGINEERING CHANGES TO THE EUT BY THE LAB

No any modifications were made to the EUT by the lab during the test.

---END---