



# **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:	Corporativo Lanix S.A. de C.V.
Address:	Carretera Internacional Hermosillo-Nogales Km 8.5, Hermosillo Sonora, Mexico
Product:	mobile phone
Brand Name:	LANIX
Model Name:	L530
FCC ID:	ZC4L530
Date of tests:	May 24, 2018 ~ Jun. 23, 2018

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

**ANSI C63.4:2014** 

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

Issued by Alex Chen Engineer / Mobile Department	Approved by Sam Tung Manager / Mobile Department
Alex	rwb

Date: Jul. 06, 2018 Date: Jul. 06, 2018

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# RELEASE CONTROL RECORD

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
FV180523W008	Original release	Jul. 06, 2018

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# 1 GENERAL INFORMATION

# 1.1 GENERAL DESCRIPTION OF EUT

PRODUCT	mobile phone			
BRAND NAME	LANIX			
MODEL NAME	L530			
NOMINAL VOLTAGE	5Vdc (adapter or host equipment) 3.8Vdc (Li-ion, battery)			
BATTERY	Brand Name: LANIX Model Name: L530BAT Power Rating: DC 3.8V, 2200mAh, Li-ion			
	WLAN	CCK, DQPSK, DBPSK for DSSS 64QAM, 16QAM, QPSK, BPSK for OFDM		
	BT_LE	BT-LE(GFSK) for DTS		
	Bluetooth	GFSK, π/4-DQPSK, 8DPSK		
MODULATION TYPE	GPS	C/A code		
MODOLATION TIPE	GSM	GMSK		
	WCDMA	BPSK/QPSK		
	LTE	QPSK/16QAM		
	FM	FSK		
	WLAN	2412 ~ 2472MHz for 11b/g/n(HT20)		
	Bluetooth/BT_LE	2402MHz ~ 2480MHz		
	GPS	1575.42MHz		
ODED ATING	GSM	824.2MHz ~ 848.8MHz (FOR GSM 850) 1850.2MHz ~ 1909.8MHz (FOR GSM 1900)		
OPERATING FREQUENCY	WCDMA	1852.4MHz ~ 1907.6MHz (FOR WCDMA Band 2) 826.4MHz ~ 846.6MHz (FOR WCDMA Band 5)		
	LTE	1850.7MHz ~ 1909.3MHz (FOR LTE Band2) 1710.7MHz ~ 1754.3MHz (FOR LTE Band4) 824.7MHz ~ 848.3MHz (FOR LTE Band5) 2502.5MHz ~ 2567.5MHz (FOR LTE Band7)		
	FM	88MHz ~ 108MHz		
HW VERSION	1.0			
SW VERSION	L530_SW_01			
I/O PORTS	Refer to user's manual			
CABLE SUPPLIED	USB cable: non-shielded, detachable, 1.0m			
	No B102 Dazu Chuangyin Mansion, North of Beihuan Tel: ±86 755 8869 6566			

BV 7Layers Communications Technology (Shenzhen) Co. Ltd No.B102, Dazu Chuangxin Mansion, North of Beihuan Avenue, North Area, Hi-Tech Industrial Park, Nanshan District, Shenzhen51800, China Tel: +86 755 8869 6566 Fax: +86 755 8869 6577



	Earphone cable: non-shielded, detachable, 1.0m		
ACCESSORY DEVICES	Refer to note as below		

#### NOTE:

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

ADAPTER		
BRAND:	LANIX	
MODEL:	L530-C	
INPUT:	AC 100-240V, 200mA	
OUTPUT:	DC 5V, 1000mA	

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

USB CABLE	·
BRAND:	LANIX
MODEL:	L530
SIGNAL LINE:	1.0 METER

EARPHONE		
BRAND:	LANIX	
MODEL:	L530	
SIGNAL LINE:	1.0 METER	

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

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## 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 -9.31dB at 1.304000MHz.
	Radiated Emission Test (30MHz ~ 1GHz)	PASS	Meets Class B Limit Minimum passing margin is -9.97dB at 41.64MHz
	Radiated Emission Test (Above 1GHz)	PASS	Meets Class B Limit Minimum passing margin is -12.58dB at 3670MHz

## 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
De dista de amissione	30MHz ~ 1GHz	+/-3.26dB
Radiated emissions	1GHz ~ 18GHz	+/-4.48dB



# 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)+ GPS Rx+ Back camera on				
2	GSM1900 Idle+ Adapter+ Earphone+ USB cable+ BT Idle+ WIFI Idle(2.4G)+ GPS Rx+ Front camer aon				
3	WCDMA B2 Idle+ Adapter+ Earphone+ USB cable+ BT Idle+ WIFI Idle(2.4G)+ GPS Rx+ MPEG4				
4	WCDMA B5 Idle+ Adapter+ Earphone+ USB cable+ BT Idle+ WIFI Idle(2.4G)+ GPS Rx+ FM Rx				
5	LTE B2 Idle+ Adapter+ Earphone+ USB cable+ BT Idle+ WIFI Idle(2.4G)+ GPS Rx				
6	LTE B4 Idle+ Adapter+ Earphone+ USB cable+ BT Idle+ WIFI Idle(2.4G)+ GPS Rx				
7	LTE B5 Idle+ Adapter+ Earphone+ USB cable+ BT Idle+ WIFI Idle(2.4G)+ GPS Rx				
8	LTE B7 Idle+ Adapter+ Earphone+ USB cable+ BT Idle+ WIFI Idle(2.4G)+ GPS Rx				
11	GSM 850 Idle+ USB Link+ Earphone+ BT Idle+ WIFI Idle(2.4G)				
	Conducted emission test				
1	GSM850 Idle+ Adapter+ Earphone+ USB cable+ BT Idle+ WIFI Idle(2.4G)+ GPS Rx+ Back camera on				
2	GSM1900 Idle+ Adapter+ Earphone+ USB cable+ BT Idle+ WIFI Idle(2.4G)+ GPS Rx+ Front camer aon				
3	WCDMA B2 Idle+ Adapter+ Earphone+ USB cable+ BT Idle+ WIFI Idle(2.4G)+ GPS Rx+ MPEG4				
4	WCDMA B5 Idle+ Adapter+ Earphone+ USB cable+ BT Idle+ WIFI Idle(2.4G)+ GPS Rx+ FM Rx				
5	LTE B2 Idle+ Adapter+ Earphone+ USB cable+ BT Idle+ WIFI Idle(2.4G)+ GPS Rx				
6	LTE B4 Idle+ Adapter+ Earphone+ USB cable+ BT Idle+ WIFI Idle(2.4G)+ GPS Rx				
7	LTE B5 Idle+ Adapter+ Earphone+ USB cable+ BT Idle+ WIFI Idle(2.4G)+ GPS Rx				
8	LTE B7 Idle+ Adapter+ Earphone+ USB cable+ BT Idle+ WIFI Idle(2.4G)+ GPS Rx				
NOTE:					

#### NOTE:

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

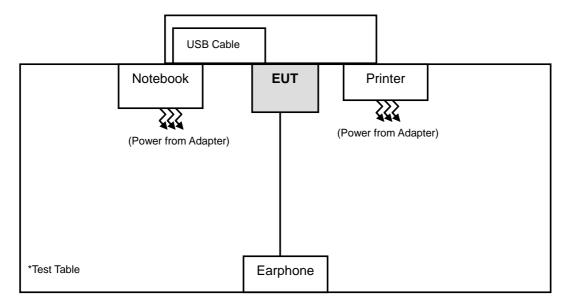
NO.	PRODUCT	BRAND	MODEL NO.	SERIAL NO.	FCC ID
1	Notebook	N/A	N/A	N/A	N/A
2	Printer	N/A	N/A	N/A	N/A

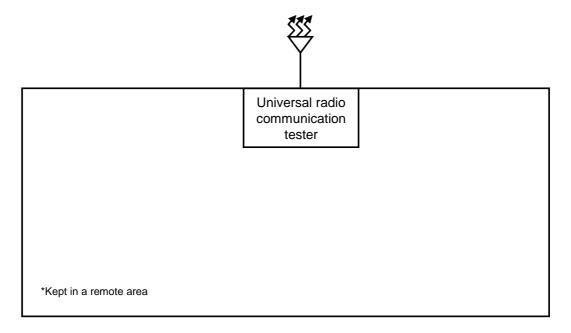
NO.	SIGNAL CABLE DESCRIPTION OF THE ABOVE SUPPORT UNITS
1	N/A
2	N/A



# 1.6 CONFIGURATION OF SYSTEM UNDER TEST

# **Test configuration 1**

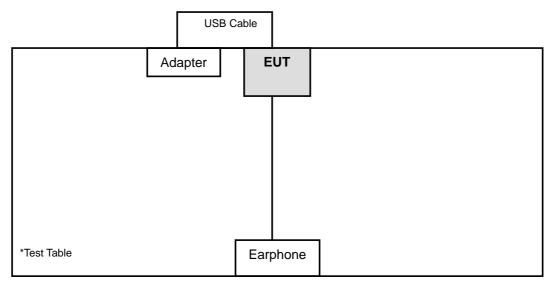


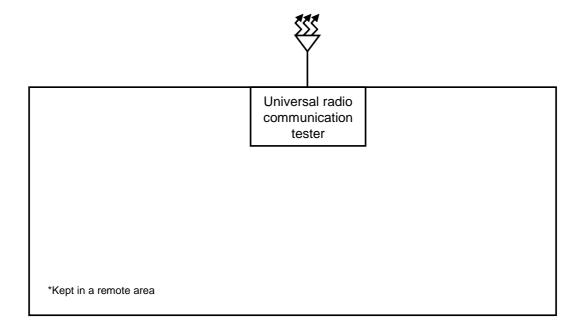


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# **Test configuration 2**





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# 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 0.5 ~ 5	66 to 56 56	56 to 46 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

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Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
EMI Test Receiver	Rohde&Schwarz	ESR3	101900	Mar. 15,18	Mar. 14,19
EMC32 test software	Rohde&Schwarz	EMC32	NA	NA	NA
LISN network	Rohde&Schwarz	ENV216	101922	Sep. 18,17	Sep. 17,18

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

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



# 2.1.3 TEST PROCEDURES

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

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

### 2.1.4 DEVIATION FROM TEST STANDARD

No deviation.

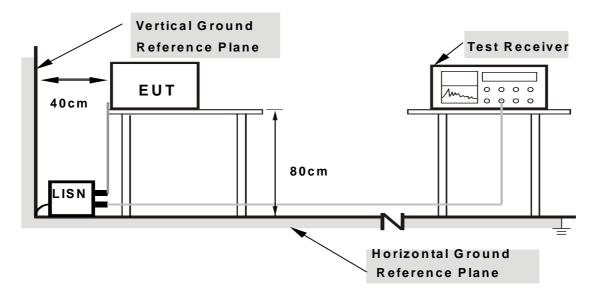


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Test Report No.: FV180523W008

# 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.



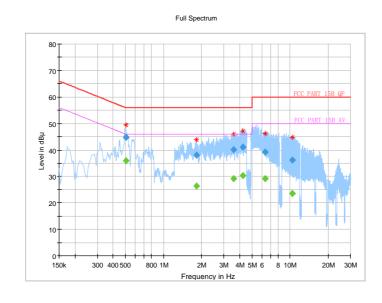
### 2.1.7 TEST RESULTS

TEST VOLTAGE	DC 5V From Adapter Input 120 Vac, 60 Hz	Detector Function & Resolution Bandwidth	Quasi-Peak (QP) / Average (AV), 9 kHz
ENVIRONMENTAL CONDITIONS	24deg. C, 55RH	TESTED BY	John Wen

Frequency (MHz)	QuasiPeak (dB¦ÌV)	CAverage (dB¦ÌV)	Limit (dB¦ÌV)	Margin (dB)	Line	Filter	Corr. (dB)
0.508000		36.02	46.00	-9.98	L	ON	9.7
0.508000	44.77		56.00	-11.23	┙	ON	9.7
1.824000		26.41	46.00	-19.59	L	ON	9.7
1.824000	37.93		56.00	-18.07	L	ON	9.7
3.584000		29.06	46.00	-16.94	L	ON	9.7
3.584000	40.13		56.00	-15.87	L	ON	9.7
4.220000		30.35	46.00	-15.65	L	ON	9.7
4.220000	40.99		56.00	-15.01	L	ON	9.7
6.324000		29.25	50.00	-20.75	L	ON	9.8
6.324000	39.23		60.00	-20.77	L	ON	9.8
10.452000		23.51	50.00	-26.49	L	ON	9.9
10.452000	36.11		60.00	-23.89	L	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.



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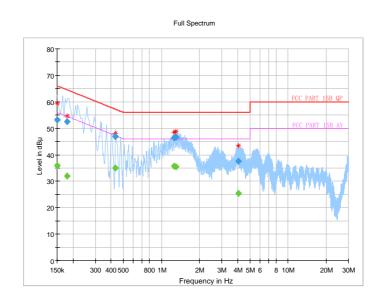


TEST VOLTAGE		Detector Function & Resolution Bandwidth	Quasi-Peak (QP) / Average (AV), 9 kHz
ENVIRONMENTAL CONDITIONS	24deg. C, 55RH	TESTED BY	John Wen

Frequency (MHz)	QuasiPeak (dBuV)	CAverage (dBuV)	Limit (dBuV)	Margin (dB)	Line	Filter	Corr. (dB)
0.150000		35.82	56.00	-20.18	N	ON	9.8
0.150000	53.25		66.00	-12.75	N	ON	9.8
0.180000		32.02	54.49	-22.47	N	ON	10.2
0.180000	52.52		64.49	-11.97	N	ON	10.2
0.432000		34.88	47.21	-12.33	N	ON	10.1
0.432000	46.98		57.21	-10.23	N	ON	10.1
1.260000		35.76	46.00	-10.24	N	ON	9.9
1.260000	46.53		56.00	-9.47	N	ON	9.9
1.304000		35.42	46.00	-10.58	N	ON	9.9
1.304000	46.69		56.00	-9.31	N	ON	9.9
4.032000		25.53	46.00	-20.47	N	ON	9.8
4.032000	37.58		56.00	-18.42	N	ON	9.8

**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.





## 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			
88-216	43.5	33.1	40	30	
216-230	46.4	6.4			
230-960	40.4	35.6	47	37	
960-1000	49.5	43.5	47	37	
1000-3000	Avg: 49.5	Avg: 43.5	Not defined	Not defined	
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			
88-216	54	43.5	50.5	40.5	
216-230	56.9	46			
230-960	50.9	40	57.5	47.5	
960-1000	60	54	57.5	47.5	
1000-3000			Avg: 56	Avg: 50	
	Avg: 60	Avg: 54	Peak: 76	Peak: 70	
3000+	Peak: 80	Peak: 74	Avg: 60	Avg: 54	
			Peak: 80	Peak: 74	

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Frequency Range (For unintentional radiators)

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

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

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

#### 2.2.2 **TEST INSTRUMENTS**

Frequency range below1GHz

· requested ratings to the restaurant										
Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.					
3m Semi-anechoic	ETS-LINDGREN	0~*6~*6~	Euroshieldpn-	Apr 01 10	Apr. 20,19					
Chamber	E I S-LINDGREN	9111 6111 6111	CT0001143-1216	Apr. 21,18						
Bilog Antenna	ETS-LINDGREN	3143B	00161965	Nov. 26,16	Nov. 25,18					
MXE EMI Receiver	KEYSIGHT	N9038A-544	MY54450026	Mar. 16,18	Mar. 15,19					
Signal Pre-Amplifier	EMSI	EMC 9135	980249	Jul. 24,17	Jul. 23,18					

Frequency range above 1GHz

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Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
3m Semi-anechoic	ETS-LINDGREN		Euroshieldpn-	Apr. 21,18	Apr. 20,19
Chamber	E I 3-LINDGKEN	9111 0111 0111	CT0001143-1216	Αρι. 21,16	Apr. 20, 19
Horn Antenna	ETS-LINDGREN	3117	00168728	Nov. 26,16	Nov. 25,18
MXE EMI Receiver	KEYSIGHT	N9038A-544	MY54450026	Mar. 16,18	Mar. 15,19
Cianal Dra Amplifiar	EMCI	EMC	980257	h.l. 04.47	Iul. 22.40
Signal Pre-Amplifier	EMSI	012645B	960257	Jul. 24,17	Jul. 23,18

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

- 2. The calibration interval of the above test instruments is 12 months or 24 months and the calibrations are traceable to CEPREI/CHINA, GRGT/CHINA and NIM/CHINA.
- 3. The FCC Site Registration No. is 525120.



## 2.2.3 TEST PROCEDURE

#### <Frequency Range below 1GHz>

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

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

#### NOTE:

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



#### <Frequency Range above 1GHz>

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

#### NOTE:

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

#### 2.2.4 **DEVIATION FROM TEST STANDARD**

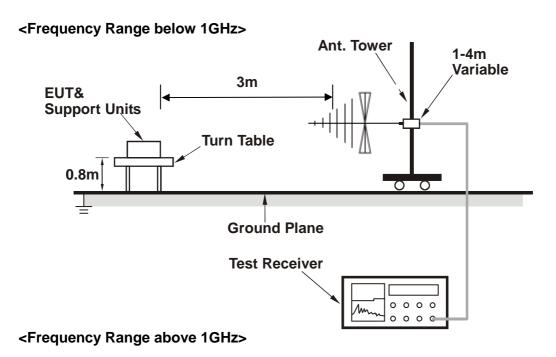
No deviation.

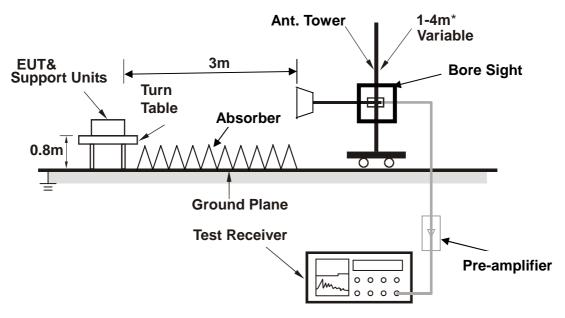
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### 2.2.5 TEST SETUP





\*: 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.

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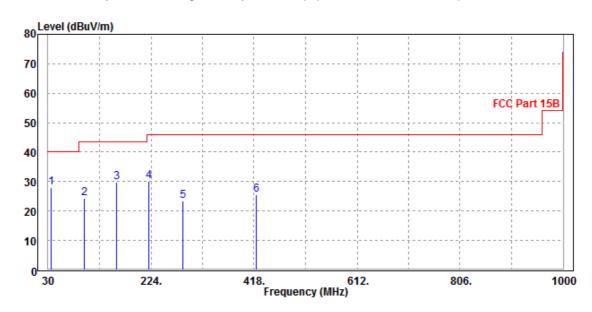


#### **TEST RESULTS** 2.2.7

TEST VOLTAGE	DC 5V From Adapter Input 120 Vac, 60 Hz	FREQUENCY RANGE	30-1000 MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70 %RH	DETECTOR FUNCTION & RESOLUTION BANDWIDTH	Quasi-Peak, 120 kHz
TESTED BY	Vincent 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	
35.82	27.95	51.29	40	-12.05	13.69	0.56	37.59	100	250	QP	
97.9	24.48	51.57	43.5	-19.02	9.03	1.06	37.18	100	60	QP	
159.01	29.68	54.63	43.5	-13.82	10.51	1.28	36.74	100	70	QP	
220.12	30.05	53.67	46	-15.95	11.45	1.52	36.59	100	210	QP	
283.17	23.28	44.87	46	-22.72	13.43	1.7	36.72	100	40	QP	
422.85	25.66	43.17	46	-20.34	17.31	2.05	36.87	100	150	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.



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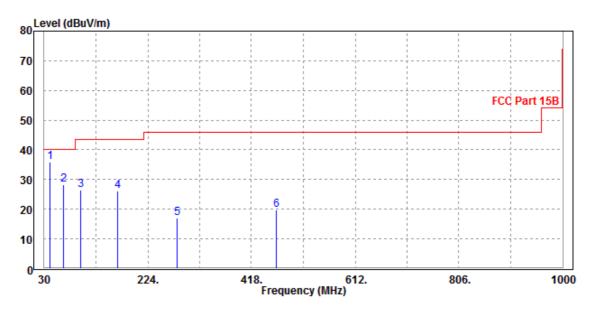
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TEST VOLTAGE	DC 5V From Adapter Input 120 Vac, 60 Hz	FREQUENCY RANGE	30-1000 MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70 %RH	DETECTOR FUNCTION & RESOLUTION BANDWIDTH	Quasi-Peak, 120 kHz
TESTED BY	Vincent Chen		

	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	
41.64	36.03	63.46	40	-3.97	9.43	0.62	37.48	100	120	QP	
66.86	28.22	57.36	40	-11.78	7.35	0.84	37.33	100	170	QP	
97.9	26.52	53.61	43.5	-16.98	9.03	1.06	37.18	100	40	QP	
167.74	26.1	51.08	43.5	-17.4	10.41	1.31	36.7	100	60	QP	
278.32	16.91	38.61	46	-29.09	13.32	1.69	36.71	100	80	QP	
464.56	19.7	36.83	46	-26.3	17.68	2.13	36.94	100	240	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.



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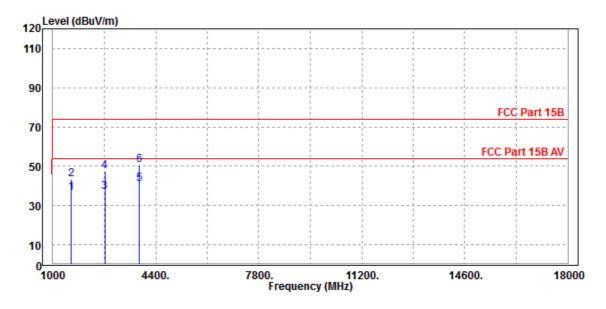


TEST VOLTAGE	DC 5V From Adapter Input 120 Vac, 60 Hz	FREQUENCY RANGE	1-18 GHz
ENVIRONMENTAL CONDITIONS	123dag C 70 % PH		Peak/Average, 1 MHz
TESTED BY	Vincent Chen		

	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	
1595	36.48	49	54	-17.52	29.31	6.53	48.36	100	120	Average	
1595	43.29	55.81	74	-30.71	29.31	6.53	48.36	100	120	Peak	
2715	37.12	44.09	54	-16.88	32.62	8.72	48.31	100	63	Average	
2715	47.29	54.26	74	-26.71	32.62	8.72	48.31	100	63	Peak	
3865	41.07	45.44	54	-12.93	33.58	10.58	48.53	100	112	Average	
3865	50.73	55.1	74	-23.27	33.58	10.58	48.53	100	112	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.



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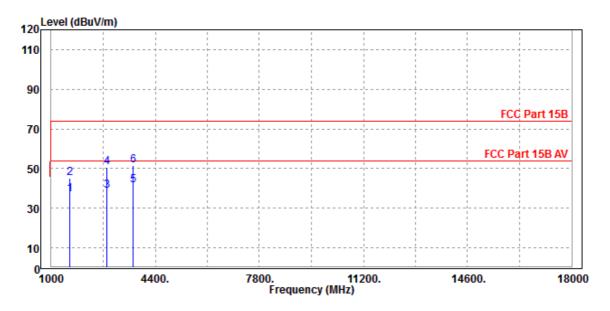


LIEST VOLTAGE	DC 5V From Adapter Input 120 Vac, 60 Hz	FREQUENCY RANGE	1-18 GHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70 %RH	DETECTOR FUNCTION & RESOLUTION BANDWIDTH	Peak/Average, 1 MHz
TESTED BY	Vincent Chen		

	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
1595	36.87	49.39	54	-17.13	29.31	6.53	48.36	100	96	Average
1595	45.34	57.86	74	-28.66	29.31	6.53	48.36	100	96	Peak
2805	38.85	45.59	54	-15.15	32.71	8.87	48.32	100	248	Average
2805	50.57	57.31	74	-23.43	32.71	8.87	48.32	100	248	Peak
3670	41.42	46.37	54	-12.58	33.27	10.24	48.46	100	45	Average
3670	51.56	56.51	74	-22.44	33.27	10.24	48.46	100	45	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.



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# 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---

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