FCC Test Report

APPLICANT : Motorola Mobility LLC EQUIPMENT : Mobile Cellular Phone

BRAND NAME : Motorola

MODEL NAME : XT1929-6

FCC ID : IHDT56XE4

STANDARD : FCC 47 CFR FCC Part 15 Subpart B

CLASSIFICATION: Declaration of Conformity

The product was received on Jan. 18, 2018 and testing was completed on Mar. 09, 2018. We, SPORTON INTERNATIONAL INC., would like to declare that the tested sample has been evaluated in accordance with the test procedures given in ANSI C63.4-2014 and has been in compliance with the applicable technical standards.

The test results in this report apply exclusively to the tested model / sample. Without written approval of SPORTON INTERNATIONAL INC., the test report shall not be reproduced except in full.

Reviewed by: Louis Wu / Manager

Louis Wu

Approved by: Jones Tsai / Manager



No. 52, Hwa Ya 1st Rd., Hwa Ya Technology Park, Kwei-Shan District, Tao Yuan City, Taiwan, R.O.C.

SPORTON INTERNATIONAL INC.

TEL: 886-3-327-3456 FAX: 886-3-328-4978 FCC ID: IHDT56XE4 Page Number : 1 of 24
Report Issued Date : Mar. 12, 2018
Report Version : Rev. 01

Report Template No.: BU5-FD15B Version 2.0

Testing Laboratory 1190

TABLE OF CONTENTS

RE	VISIO	N HISTORY	3
SU	MMAR	2Y OF TEST RESULT	4
		ERAL DESCRIPTION	
	1.1. 1.2. 1.3. 1.4. 1.5. 1.6. 1.7.	Applicant Manufacturer Product Feature of Equipment Under Test Product Specification of Equipment Under Test Modification of EUT Test Location Applicable Standards	5 5 7
2.	TEST	CONFIGURATION OF EQUIPMENT UNDER TEST	11
	2.1.	Test Mode	11
	2.2.	Connection Diagram of Test System	12
	2.3.	Support Unit used in test configuration and system	13
	2.4.	EUT Operation Test Setup	13
3.	TEST	RESULT	14
	3.1.	Test of AC Conducted Emission Measurement	14
	3.2.	Test of Radiated Emission Measurement	
4.	LIST	OF MEASURING EQUIPMENT	23
_	LINICE	EDTAINTY OF EVALUATION	24

TEL: 886-3-327-3456 FAX: 886-3-328-4978 FCC ID: IHDT56XE4 Page Number : 2 of 24
Report Issued Date : Mar. 12, 2018
Report Version : Rev. 01

Report Template No.: BU5-FD15B Version 2.0

REVISION HISTORY

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FC811821-05	Rev. 01	Initial issue of report	Mar. 12, 2018

TEL: 886-3-327-3456 FAX: 886-3-328-4978 FCC ID: IHDT56XE4 Page Number : 3 of 24
Report Issued Date : Mar. 12, 2018
Report Version : Rev. 01

Report Template No.: BU5-FD15B Version 2.0

SUMMARY OF TEST RESULT

Report Section	FCC Rule	Description	Limit	Result	Remark
					Under limit
3.1	15.107	AC Conducted Emission	< 15.107 limits	PASS	11.56 dB at
					0.166 MHz
					Under limit
3.2	15.109	Radiated Emission	< 15.109 limits	PASS	3.81 dB at
					193.890 MHz

TEL: 886-3-327-3456 FAX: 886-3-328-4978 FCC ID: IHDT56XE4 Page Number : 4 of 24
Report Issued Date : Mar. 12, 2018
Report Version : Rev. 01

Report Template No.: BU5-FD15B Version 2.0

1. General Description

1.1. Applicant

Motorola Mobility LLC

222 W, Merchandise Mart Plaza, Chicago IL 60654 USA

1.2. Manufacturer

Motorola Mobility LLC

222 W, Merchandise Mart Plaza, Chicago IL 60654 USA

1.3. Product Feature of Equipment Under Test

Product Feature						
Equipment	Mobile Cellular Phone					
Brand Name	Motorola					
Model Name	XT1929-6					
FCC ID	IHDT56XE4					
Sample 1	EUT with Dual	SIM				
Sample 2	EUT with Singl	le SIM				
		Sample 1	IMEI 1: 354102090013935			
	Conduction:		IMEI 2: 354102090013943			
IMEI Code		Sample 2	IMEI: 354103090003520			
IIVIEI Code		Sample 1	IMEI 1: 354102090013778			
	Radiation:		IMEI 2: 354102090013786			
		Sample 2	IMEI: 354103090003348			
	GSM/EGPRS/WCDMA/HSPA/LTE/GNSS/NFC					
	WLAN 11b/g/n HT20					
EUT supports Radios application	WLAN 11a/n HT20/HT40					
	WLAN 11ac VI	HT20/VHT40/	VHT80			
	Bluetooth BR/EDR/LE					
HW Version	DVT2					
EUT Stage	Identical Prototype					

Remark: The above EUT's information was declared by manufacturer. Please refer to the specifications or user's manual for more detailed description.

SPORTON INTERNATIONAL INC.

TEL: 886-3-327-3456 FAX: 886-3-328-4978 FCC ID: IHDT56XE4 Page Number : 5 of 24
Report Issued Date : Mar. 12, 2018
Report Version : Rev. 01

Report Template No.: BU5-FD15B Version 2.0

Accessory List Brand Name: Motorola Model Name : SC-22 SPN5970A AC Adapter 1 Manufacturer: Salom Brand Name: Motorola Model Name: SC-22 SPN5993A AC Adapter 2 Manufacturer: Chenyang Brand Name: Motorola Model Name: SC-23 SPN5971A AC Adapter 3 Manufacturer: Salom Brand Name: Motorola AC Adapter 4 Model Name: SC-23 SPN5989A Manufacturer: Chenyang Brand Name: Motorola Model Name: SC-27 SPN5975A AC Adapter 5 Manufacturer: Salom Brand Name: Motorola AC Adapter 6 Model Name: SC-27 SPN5992A Manufacturer: Chenyang Brand Name: Motorola **Battery** Model Name: JS40 Manufacturer: SUNWODA Brand Name: Motorola C2Audio Cable 1 Model Name: SC18C27844 Manufacturer: Luxshare Brand Name: Motorola C2Audio Cable 2 Model Name: SC18C27845 Manufacturer : Cabletech Brand Name: Cabletech USB Cable 1 Model Name: SKN6473A Brand Name: FOXLINK USB Cable 2 Model Name: SKN6473A 17195-C 0403532 Brand Name: SAIBAO **USB Cable 3** Model Name: SKN6473A 17214-C 1127044 Brand Name: Luxshare USB Cable 4 Model Name: SKN6473A 17227-C 1126538

TEL: 886-3-327-3456 FAX: 886-3-328-4978 FCC ID: IHDT56XE4 Page Number : 6 of 24
Report Issued Date : Mar. 12, 2018
Report Version : Rev. 01

Report Template No.: BU5-FD15B Version 2.0

1.4. Product Specification of Equipment Under Test

Standards-related Product Specification						
	GSM850: 824.2 MHz ~ 848.8 MHz					
	GSM1900: 1850.2 MHz ~ 1909.8MHz					
	WCDMA Band V: 826.4 MHz ~ 846.6 MHz					
	WCDMA Band IV: 1712.4 MHz ~ 1752.6 MHz					
	WCDMA Band II: 1852.4 MHz ~ 1907.6 MHz					
	LTE Band 2: 1850.7 MHz ~ 1909.3 MHz					
	LTE Band 4: 1710.7 MHz ~ 1754.3 MHz					
	LTE Band 5: 824.7 MHz ~ 848.3 MHz					
	LTE Band 7: 2502.5 MHz ~ 2567.5 MHz					
	LTE Band 12: 699.7 MHz ~ 715.3 MHz					
Tx Frequency	LTE Band 17: 706.5 MHz ~ 713.5 MHz					
	LTE Band 66: 1710.7 MHz ~ 1779.3 MHz					
	802.11b/g/n: 2412 MHz ~ 2462 MHz					
	802.11a/n/ac:					
	5180 MHz ~ 5240 MHz;					
	5260 MHz ~ 5320 MHz;					
	5500 MHz ~ 5580 MHz and 5660 MHz ~ 5700 MHz:					
	5745 MHz ~ 5825 MHz					
	3743 МП2 ~ 3623 МП2 Bluetooth: 2402 MHz ~ 2480 MHz					
	NFC : 13.56 MHz					
	GSM850: 869.2 MHz ~ 893.8 MHz					
	GSM1900: 1930.2 MHz ~ 1989.8 MHz					
	WCDMA Band V: 871.4 MHz ~ 891.6 MHz					
	WCDMA Band IV: 2112.4 MHz ~ 2152.6 MHz					
	WCDMA Band II: 1932.4 MHz ~ 1987.6 MHz LTE Band 2: 1930.7 MHz ~ 1989.3 MHz					
	LTE Band 4: 2110.7 MHz ~ 1969.3 MHz					
	LTE Band 4: 2110.7 MHz ~ 2134.3 MHz					
	LTE Band 5: 869.7 MHz ~ 893.5 MHz					
	LTE Band 12: 729.7 MHz ~ 745.3 MHz					
	LTE Band 12: 729.7 MHz ~ 743.3 MHz					
Rx Frequency	LTE Band 66: 2110.7 MHz ~ 2199.3 MHz					
	802.11b/g/n: 2412 MHz ~ 2462 MHz					
	802.11a/n/ac:					
	5180 MHz ~ 5240 MHz; 5260 MHz ~ 5320 MHz;					
	5260 MHz ~ 5320 MHz; 5500 MHz ~ 5580 MHz and 5660 MHz ~ 5700 MHz;					
	5745 MHz ~ 5825 MHz					
	5745 MHZ ~ 5825 MHZ Bluetooth: 2402 MHz ~ 2480 MHz					
	GPS: 1.57542 GHz					
	Glonass: 1602 MHz + n× 0.5625MHz (n=-7,-6,-5,0,,6)					
	NFC : 13.56 MHz					

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TEL: 886-3-327-3456 FAX: 886-3-328-4978 FCC ID: IHDT56XE4 Page Number : 7 of 24
Report Issued Date : Mar. 12, 2018
Report Version : Rev. 01

Report Template No.: BU5-FD15B Version 2.0

Standar	Standards-related Product Specification						
Antenna Type	WWAN: Fixed Internal Antenna LTE: Fixed Internal Antenna WLAN: Loop Antenna Bluetooth: Internal Antenna GPS/Glonass: Internal Loop Antenna NFC: Loop Antenna						
Type of Modulation	GSM: GMSK GPRS: GMSK EDGE(MCS 0-4): GMSK / (MCS 5-9): 8PSK WCDMA: QPSK (Uplink) HSDPA: 64 QAM (Downlink) HSUPA: QPSK (Uplink) LTE: QPSK / 16QAM / 64QAM 802.11b: DSSS (DBPSK / DQPSK / CCK) 802.11a/g/n/ac: OFDM (BPSK / QPSK / 16QAM / 64QAM / 256QAM) Bluetooth LE: GFSK Bluetooth (1Mbps): GFSK Bluetooth (2Mbps): \pi /4-DQPSK Bluetooth (3Mbps): 8-DPSK GPS/Glonass: BPSK NFC: ASK						

1.5. Modification of EUT

No modifications are made to the EUT during all test items.

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TEL: 886-3-327-3456 FAX: 886-3-328-4978 FCC ID: IHDT56XE4 Page Number : 8 of 24
Report Issued Date : Mar. 12, 2018
Report Version : Rev. 01

Report Template No.: BU5-FD15B Version 2.0

1.6. Test Location

Sporton Lab is accredited to ISO 17025 by Taiwan Accreditation Foundation (TAF code: 1190) and the FCC designation No. TW1093 and TW0007 under the FCC 2.948(e) by Mutual Recognition Agreement (MRA) in FCC Test.

Report No.: FC811821-05

Test Site	SPORTON INTERNATIONAL INC.
Test Site Location	No. 52, Hwa Ya 1 st Rd., Hwa Ya Technology Park, Kwei-Shan District, Tao Yuan City, Taiwan, R.O.C. TEL: +886-3-327-3456 FAX: +886-3-328-4978
Test Site No.	Sporton Site No.
root one noi	CO05-HY

Test Site	SPORTON INTERNATIONAL INC.
Test Site Location	No.58, Aly. 75, Ln. 564, Wenhua 3rd Rd. Guishan Dist, Taoyuan City, Taiwan (R.O.C.) TEL: +886-3-327-0868 FAX: +886-3-327-0855
Test Site No.	Sporton Site No. 03CH10-HY

 SPORTON INTERNATIONAL INC.
 Page Number
 : 9 of 24

 TEL: 886-3-327-3456
 Report Issued Date
 : Mar. 12, 2018

 FAX: 886-3-328-4978
 Report Version
 : Rev. 01

FCC ID : IHDT56XE4 Report Template No.: BU5-FD15B Version 2.0

1.7. Applicable Standards

According to the specifications of the manufacturer, the EUT must comply with the requirements of the following standards:

- FCC 47 CFR FCC Part 15 Subpart B
- ANSI C63.4-2014

Remark:

- 1. All test items were verified and recorded according to the standards and without any deviation during the test.
- 2. For FCC 15 Subpart B Unintentional Radiators, device supporting USB interface or similar peripherals (defined as the Section 15.3 (r) Peripheral device) acting as a peripheral for personal computers shall be authorized as "The Class B personal computers and peripherals" per the Section 15.101 (a) Equipment authorization of unintentional radiators.
- 3. For other Unintentional Radiators features of this EUT, test reports are be issued separately. Per the Note of the Section 15.101, when device supports features (USB, FM Radio, digital devices...etc) more than one category of authorization, type of authorization shall be appropriately chosen for FCC 15B compliance rule, and the Section 15.101 (b), only those receivers that operate (tune) within the frequency range of 30-960 MHz, CB receivers and radar detectors are subject to the authorizations shown in paragraph (a) of the Section 15.101. However, receivers indicated as being subject to Declaration of Conformity that are contained within a transceiver, the transmitter portion of which is subject to certification, shall be authorized under the verification procedure.

SPORTON INTERNATIONAL INC.

TEL: 886-3-327-3456 FAX: 886-3-328-4978 FCC ID: IHDT56XE4 Page Number : 10 of 24
Report Issued Date : Mar. 12, 2018
Report Version : Rev. 01

Report Template No.: BU5-FD15B Version 2.0

2. Test Configuration of Equipment Under Test

2.1. Test Mode

The EUT has been associated with peripherals pursuant to ANSI C63.4-2014 and configuration operated in a manner tended to maximize its emission characteristics in a typical application.

Frequency range investigated: conduction emission (150 kHz to 30 MHz), radiation emission (30MHz to the 5th harmonic of the highest fundamental frequency or to 40 GHz, whichever is lower).

Test Items	Function Type
	Mode 1: GSM850 Idle + Bluetooth Idle + WLAN Idle + Battery + USB Cable 1 Type C (Data Link with Notebook) + SIM 2 for Sample 1
	Mode 2: WCDMA Band V Idle + Bluetooth Idle + WLAN Idle + Battery + USB Cable 2 Type C (Data Link with Notebook) + SIM 1 for Sample 1
AC Conducted	Mode 3: GSM1900 Idle + Bluetooth Idle + WLAN Idle + Battery + USB Cable 3 Type C (Data Link with Notebook) +SIM 1 for Sample 1
Emission	Mode 4: WCDMA Band II Idle + Bluetooth Idle + WLAN Idle + Battery + USB Cable 4 Type C (Data Link with Notebook) + SIM 1 for Sample 1
	Mode 5: GSM850 Idle + Bluetooth Idle + WLAN Idle + Battery + USB 3.0 Cable Type C (Data Link with Notebook) + SIM 1 for Sample 1
	Mode 6: WCDMA Band II Idle + Bluetooth Idle + WLAN Idle + Battery + USB Cable 4 Type C (Data Link with Notebook) for Sample 2
	Mode 1: GSM850 Idle + Bluetooth Idle + WLAN Idle + Battery + USB Cable 1 Type C (Data Link with Notebook) + SIM 2 for Sample 1
	Mode 2: WCDMA Band V Idle + Bluetooth Idle + WLAN Idle + Battery + USB Cable 2 Type C (Data Link with Notebook) + SIM 1 for Sample 1
Radiated	Mode 3: GSM1900 Idle + Bluetooth Idle + WLAN Idle + Battery + USB Cable 3 Type C (Data Link with Notebook) + SIM 1 for Sample 1
Emissions	Mode 4: WCDMA Band II Idle + Bluetooth Idle + WLAN Idle + Battery + USB Cable 4 Type C (Data Link with Notebook) + SIM 1 for Sample 1
	Mode 5: GSM850 Idle + Bluetooth Idle + WLAN Idle + Battery + USB 3.0 Cable Type C (Data Link with Notebook) + SIM 1 for Sample 1
	Mode 6: GSM1900 Idle + Bluetooth Idle + WLAN Idle + Battery + USB Cable 3 Type C (Data Link with Notebook) for Sample 2

Remark:

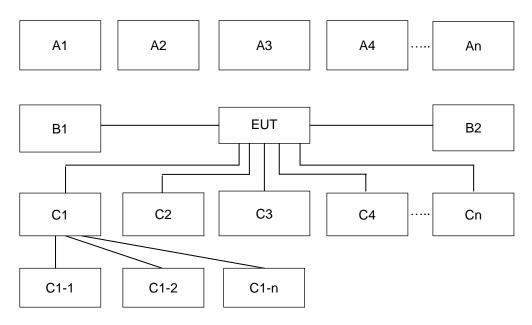
- 1. The worst case of AC is mode 6; only the test data of this mode was reported.
- 2. The worst case of RE is mode 3; only the test data of this mode was reported.
- Data Link with Notebook means data application transferred mode between EUT and Notebook.

SPORTON INTERNATIONAL INC.

TEL: 886-3-327-3456 FAX: 886-3-328-4978 FCC ID: IHDT56XE4 Page Number : 11 of 24
Report Issued Date : Mar. 12, 2018
Report Version : Rev. 01

Report Template No.: BU5-FD15B Version 2.0

2.2.Connection Diagram of Test System



	Test Setup								
No.	Wireless Station Connection Type		Test Mode						
NO.	Wireless Station	Connection Type	1	2	3	4	5	6	
A1	BT Earphone	Bluetooth	Х	Χ	Χ	Χ	Χ	Χ	
A2 System Simulator GSM/UMTS/CDMA/WCDMA/LTE		GSM/UMTS/CDMA/ WCDMA/LTE	Х	Х	Х	Х	Х	Х	
A3 AP router		WiFi	Х	Χ	Χ	Χ	Χ	Χ	
No.	Setup Peripherals	Connection Type	1	2	3	4	5	6	
C1	Notebook	USB cable	X	Χ	Χ	Χ	Χ	Χ	
C1-1 AP router		RJ-45 Cable to C1	Х	Χ	Χ	Χ	Χ	Χ	
C1-2 IPod		USB Cable to C1	Х	Χ	Χ	Χ	Χ	Χ	
C2 SD card		SD I/O interface without cable	Х	Х	Х	Х	Х	Х	

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TEL: 886-3-327-3456 FAX: 886-3-328-4978 FCC ID: IHDT56XE4 Page Number : 12 of 24
Report Issued Date : Mar. 12, 2018
Report Version : Rev. 01

Report Template No.: BU5-FD15B Version 2.0

2.3. Support Unit used in test configuration and system

Item	Equipment	Trade Name	Model Name	FCC ID	Data Cable	Power Cord	
1.	System Simulator	R&S	CMU 200	N/A	N/A	Unshielded, 1.8 m	
2.	System Simulator	Anritsu	MT8820C	N/A	N/A	Unshielded, 1.8 m	
3.	WLAN AP	ASUS	RT-AC66U	MSQ-RTAC66U	N/A	Unshielded, 1.8 m	
4.	Bluetooth Earphone	Lenovo	LBH301	PY7DDA-2029	N/A	N/A	
5.	Notebook	DELL	Latitude E6320	FCC DoC/ Contains FCC ID: QDS-BRCM1054	N/A	AC I/P: Unshielded, 1.2 m DC O/P: Shielded, 1.8 m	
6.	iPod	Apple	A1199	FCC DoC	Shielded, 1.0 m	N/A	
7.	SD Card	SanDisk	MicroSD HC	FCC DoC	N/A	N/A	
8.	USB HD	Lenovo	H568V	FCC DoC	Shielded, 0.5 m	N/A	
9.	USB3.0 Cable Type C	Moshi	99MO084101	N/A	N/A	N/A	

2.4. EUT Operation Test Setup

The EUT was in GSM or WCDMA idle mode during the testing. The EUT was synchronized to the BCCH, and is in continuous receiving mode by setting system simulator's paging reorganization.

At the same time, the EUT was attached to the Bluetooth earphone or WLAN AP, and the following programs installed in the EUT were programmed during the test.

1. Data application is transferred between Laptop and EUT via USB cable Type C.

SPORTON INTERNATIONAL INC.

TEL: 886-3-327-3456 FAX: 886-3-328-4978 FCC ID: IHDT56XE4 Page Number : 13 of 24
Report Issued Date : Mar. 12, 2018
Report Version : Rev. 01

Report Template No.: BU5-FD15B Version 2.0

3. Test Result

3.1. Test of AC Conducted Emission Measurement

3.1.1 Limits of AC Conducted Emission

For equipment that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies within the band 150 kHz to 30 MHz shall not exceed the limits in the following table.

Frequency of emission	Conducted limit (dBuV)			
(MHz)	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.

3.1.2 Measuring Instruments

The measuring equipment is listed in the section 4 of this test report.

3.1.3 Test Procedure

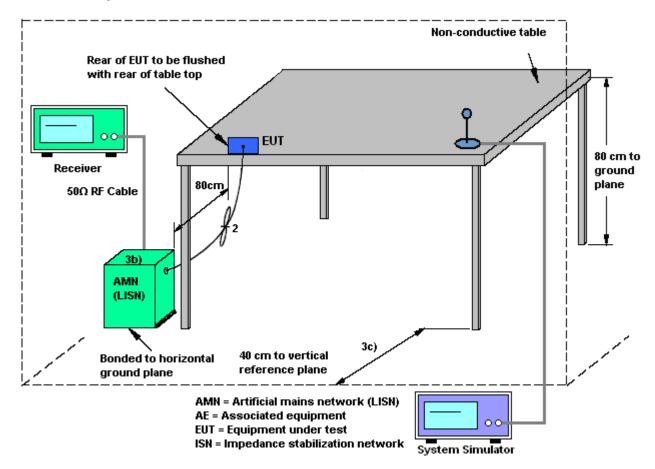
- 1. The EUT was placed 0.4 meter from the conducting wall of the shielding room was kept at least 80 centimeters from any other grounded conducting surface.
- 2. Connect EUT to the power mains through a line impedance stabilization network (LISN).
- 3. All the support units are connecting to the other LISN.
- 4. The LISN provides 50 ohm coupling impedance for the measuring instrument.
- 5. The FCC states that a 50 ohm, 50 microhenry LISN should be used.
- 6. Both sides of AC line were checked for maximum conducted interference.
- 7. The frequency range from 150 kHz to 30 MHz was searched.
- 8. Set the test-receiver system to Peak Detect Function and specified bandwidth (IF Bandwidth = 9kHz) with Maximum Hold Mode. Then measurement is also conducted by Average Detector and Quasi-Peak Detector Function respectively.

TEL: 886-3-327-3456 FAX: 886-3-328-4978 FCC ID: IHDT56XE4 Page Number : 14 of 24
Report Issued Date : Mar. 12, 2018
Report Version : Rev. 01

Report Template No.: BU5-FD15B Version 2.0

C Test Report No.: FC811821-05

3.1.4 Test Setup

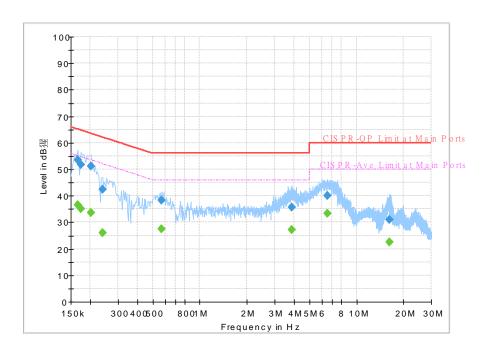


TEL: 886-3-327-3456 FAX: 886-3-328-4978 FCC ID: IHDT56XE4 Page Number : 15 of 24
Report Issued Date : Mar. 12, 2018
Report Version : Rev. 01

Report Template No.: BU5-FD15B Version 2.0

3.1.5 Test Result of AC Conducted Emission

Toot Engineer	Shareef Yu and Blue Lan	Temperature :	22~23 ℃	
lest Engineer :	Shareer tu ahu blue Lah	Relative Humidity :	58~62%	
Test Voltage :	120Vac / 60Hz	Phase :	Line	



Final Result:

Frequency (MHz)	Quasi-Peak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Line	Filter	Corr. (dB)
0.166000		36.59	55.16	18.57	L1	OFF	19.5
0.166000	53.60		65.16	11.56	L1	OFF	19.5
0.174000		34.99	54.77	19.78	L1	OFF	19.5
0.174000	51.86		64.77	12.91	L1	OFF	19.5
0.202000		33.62	53.53	19.91	L1	OFF	19.5
0.202000	51.22		63.53	12.31	L1	OFF	19.5
0.238000		25.91	52.17	26.26	L1	OFF	19.5
0.238000	42.25		62.17	19.92	L1	OFF	19.5
0.570000		27.38	46.00	18.62	L1	OFF	19.5
0.570000	38.36		56.00	17.64	L1	OFF	19.5
3.850000		27.14	46.00	18.86	L1	OFF	19.6
3.850000	35.78		56.00	20.22	L1	OFF	19.6
6.542000		33.21	50.00	16.79	L1	OFF	19.6
6.542000	40.12		60.00	19.88	L1	OFF	19.6
16.306000		22.57	50.00	27.43	L1	OFF	19.8
16.306000	30.88		60.00	29.12	L1	OFF	19.8

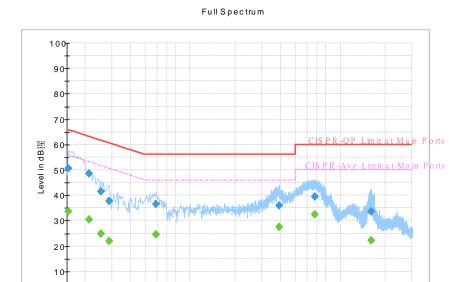
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TEL: 886-3-327-3456 FAX: 886-3-328-4978 FCC ID: IHDT56XE4 Page Number : 16 of 24
Report Issued Date : Mar. 12, 2018
Report Version : Rev. 01

Report Template No.: BU5-FD15B Version 2.0

FCC Test Report No.: FC811821-05

Toot Engineer	Shareef Yu and Blue Lan	Temperature :	22~23 ℃
lest Engineer :	Shareer tu ahu blue Lah	Relative Humidity :	58~62%
Test Voltage :	120Vac / 60Hz	Phase :	Neutral



2 M

Frequency in Hz

3M 4M5M6

8 10M

20M 30M

Final Result:

Frequency (MHz)	Quasi-Peak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Line	Filter	Corr. (dB)
0.154000		33.68	55.78	22.1	N	OFF	19.5
0.154000	50.68		65.78	15.10	N	OFF	19.5
0.210000		30.44	53.21	22.77	N	OFF	19.5
0.210000	48.61		63.21	14.60	N	OFF	19.5
0.254000		24.77	51.63	26.86	N	OFF	19.5
0.254000	41.61		61.63	20.02	N	OFF	19.5
0.286000		21.99	50.64	28.65	N	OFF	19.5
0.286000	37.81		60.64	22.83	N	OFF	19.5
0.590000		24.57	46.00	21.43	N	OFF	19.5
0.590000	36.51		56.00	19.49	N	OFF	19.5
3.894000		27.63	46.00	18.37	N	OFF	19.6
3.894000	36.06		56.00	19.94	N	OFF	19.6
6.734000		32.40	50.00	17.60	N	OFF	19.6
6.734000	39.54		60.00	20.46	N	OFF	19.6
15.954000		22.17	50.00	27.83	N	OFF	19.8
15.954000	33.74		60.00	26.26	N	OFF	19.8

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TEL: 886-3-327-3456 FAX: 886-3-328-4978 FCC ID: IHDT56XE4 Page Number : 17 of 24
Report Issued Date : Mar. 12, 2018
Report Version : Rev. 01

Report Template No.: BU5-FD15B Version 2.0

3.2. Test of Radiated Emission Measurement

3.2.1. Limit of Radiated Emission

The emissions from an unintentional radiator shall not exceed the field strength levels specified in the following table:

Frequency (MHz)	Field Strength (microvolts/meter)	Measurement Distance (meters)
30 – 88	100	3
88 – 216	150	3
216 - 960	200	3
Above 960	500	3

3.2.2. Measuring Instruments

The measuring equipment is listed in the section 4 of this test report.

SPORTON INTERNATIONAL INC.

TEL: 886-3-327-3456 FAX: 886-3-328-4978 FCC ID: IHDT56XE4 Page Number : 18 of 24
Report Issued Date : Mar. 12, 2018
Report Version : Rev. 01

Report Template No.: BU5-FD15B Version 2.0

3.2.3. Test Procedures

- 1. The EUT was placed on a turntable with 0.8 meter above ground.
- 2. The EUT was set 3 meters from the interference receiving antenna, which was mounted on the top of a variable height antenna tower.
- 3. The table was rotated 360 degrees to determine the position of the highest radiation.
- 4. The antenna is a Bi-Log antenna and its height is adjusted between one to four meters above ground to find the maximum value of the field strength for both horizontal polarization and vertical polarization of the antenna.
- 5. For each suspected emission, the EUT was arranged to its worst case and then tune the antenna tower (from 1 m to 4 m) and turntable (from 0 degree to 360 degrees) to find the maximum reading.
- 6. Set the test-receiver system to Peak Detect Function and specified bandwidth with Maximum Hold Mode (RBW=120kHz/VBW=300kHz for frequency below 1GHz; RBW=1MHz VBW=3MHz (Peak), RBW=1MHz/VBW=10Hz (Average) for frequency above 1GHz).
- 7. If the emission level of the EUT in peak mode was 3 dB lower than the limit specified, peak values of EUT will be reported. Otherwise, the emission will be repeated by using the quasi-peak method and reported.
- 8. Emission level $(dB\mu V/m) = 20 \log Emission level (\mu V/m)$
- 9. Corrected Reading: Antenna Factor + Cable Loss + Read Level Preamp Factor = Level

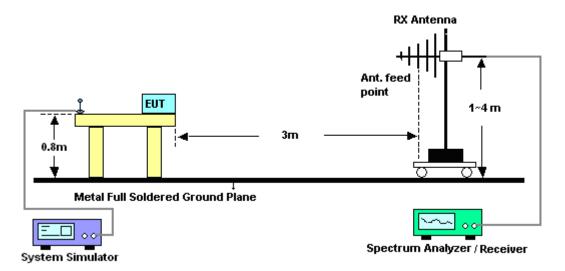
SPORTON INTERNATIONAL INC.

TEL: 886-3-327-3456 FAX: 886-3-328-4978 FCC ID: IHDT56XE4 Page Number : 19 of 24
Report Issued Date : Mar. 12, 2018
Report Version : Rev. 01

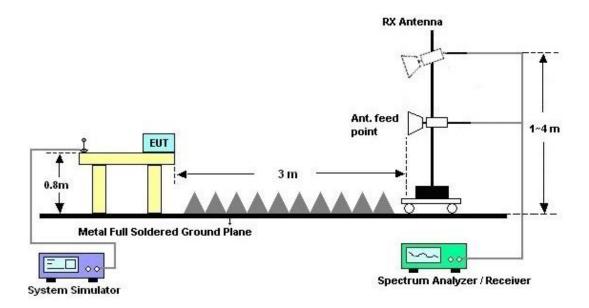
Report Template No.: BU5-FD15B Version 2.0

3.2.4. Test Setup of Radiated Emission

For radiated emissions from 30MHz to 1GHz



For radiated emissions above 1GHz

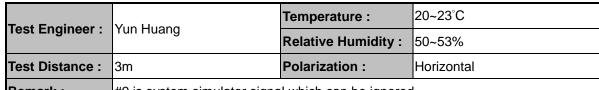


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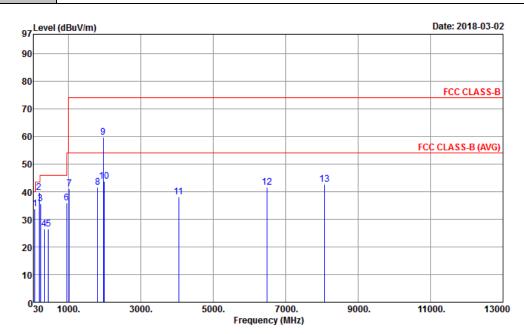
TEL: 886-3-327-3456 FAX: 886-3-328-4978 FCC ID: IHDT56XE4 Page Number : 20 of 24
Report Issued Date : Mar. 12, 2018
Report Version : Rev. 01

Report Template No.: BU5-FD15B Version 2.0

3.2.5. Test Result of Radiated Emission



Remark: #9 is system simulator signal which can be ignored.



Site : 03CH10-HY

Condition : FCC CLASS-B 3m HORN 9120D-HF HORIZONTAL

Project : 811821-05 Power : From System

Mode : 3

: SD to NB

	Freq	Level	Over Limit			Intenna Factor		Preamp Factor	A/Pos	T/Pos	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg	
1	74.55	33.83	-6.17	40.00	52.84	12.85	0.88	32.74			Peak
2	193.89	39.69	-3.81	43.50	55.96	14.88	1.49	32.64	100	0	Peak
3	227.10	35.70	-10.30	46.00	50.79	15.94	1.60	32.63			Peak
4	336.40	26.52	-19.48	46.00	37.26	19.93	1.92	32.59			Peak
5	449.10	26.42	-19.58	46.00	33.76	23.04	2.24	32.62			Peak
6	954.50	36.05	-9.95	46.00	33.39	30.85	3.29	31.48			Peak
7	1026.00	41.02	-32.98	74.00	76.56	24.38	3.40	63.32			Peak
8	1812.00	41.64	-32.36	74.00	74.87	25.82	4.61	63.66			Peak
9	1960.00	59.62			92.55	25.95	4.81	63.69			Peak
10	1996.00	43.77	-30.23	74.00	76.61	26.00	4.86	63.70	100	0	Peak
11	4046.00	38.14	-35.86	74.00	64.94	29.79	7.24	63.83			Peak
12	6490.00	41.52	-32.48	74.00	62.63	34.15	9.53	64.79			Peak
13	8062.00	42.75	-31.25	74.00	61.38	37.07	10.43	66.13			Peak

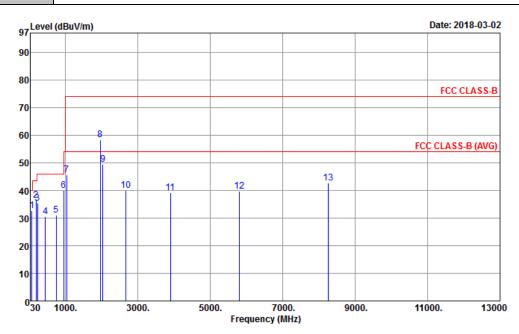
TEL: 886-3-327-3456 FAX: 886-3-328-4978 FCC ID: IHDT56XE4 Page Number : 21 of 24
Report Issued Date : Mar. 12, 2018
Report Version : Rev. 01

Report Template No.: BU5-FD15B Version 2.0

Report No.: FC811821-05

Test Engineer :	Vun Hunna	Temperature :	20~23°C
	run Huang	Relative Humidity :	50~53%
Test Distance :	3m	Polarization :	Vertical
_			

#8 is system simulator signal which can be ignored.



Site : 03CH10-HY

Condition : FCC CLASS-B 3m HORN 9120D-HF VERTICAL

Project : 811821-05 Power : From System

Mode : 3

: SD to NB

			0ver	Limit	ReadA	ntenna	Cable	Preamp	A/Pos	T/Pos	
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor			Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg	
1	74.55	32.73	-7.27	40.00	51.74	12.85	0.88	32.74			Peak
2	189.03	36.36	-7.14	43.50	52.68	14.84	1.49	32.65			Peak
3	233.31	35.27	-10.73	46.00	49.69	16.60	1.60	32.62			Peak
4	449.10	30.61	-15.39	46.00	37.95	23.04	2.24	32.62			Peak
5	748.70	31.11	-14.89	46.00	32.67	28.26	2.90	32.72			Peak
6	956.60	39.99	-6.01	46.00	37.18	30.94	3.32	31.45	100	0	Peak
7	1032.00	45.69	-28.31	74.00	81.20	24.38	3.43	63.32			Peak
8	1960.00	58.45			91.38	25.95	4.81	63.69			Peak
9	2036.00	49.54	-24.46	74.00	82.20	26.10	4.93	63.69	100	0	Peak
10	2666.00	40.08	-33.92	74.00	70.24	27.77	5.70	63.63			Peak
11	3898.00	39.25	-34.75	74.00	66.44	29.49	7.16	63.84			Peak
12	5804.00	39.74	-34.26	74.00	62.71	32.41	9.26	64.64			Peak
13	8252.00	42.78	-31.22	74.00	61.58	36.94	10.52	66.26			Peak

SPORTON INTERNATIONAL INC.

TEL: 886-3-327-3456 FAX: 886-3-328-4978 FCC ID: IHDT56XE4

Page Number : 22 of 24 Report Issued Date: Mar. 12, 2018 Report Version : Rev. 01

Report Template No.: BU5-FD15B Version 2.0

4. List of Measuring Equipment

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
AC Power Source	ChainTek	APC-1000W	N/A	N/A	N/A	Feb. 21, 2018 ~ Mar. 07, 2018	N/A	Conduction (CO05-HY)
EMI Test Receiver	Rohde & Schwarz	ESR3	102388	3.6GHz	Dec. 08, 2017	Feb. 21, 2018 ~ Mar. 07, 2018	Dec. 07, 2018	Conduction (CO05-HY)
LISN	Rohde & Schwarz	ENV216	100080	9kHz~30MHz	Nov. 30, 2017	Feb. 21, 2018 ~ Mar. 07, 2018	Nov. 29, 2018	Conduction (CO05-HY)
LISN	Rohde & Schwarz	ENV216	100081	9kHz~30MHz	Dec. 08, 2017	Feb. 21, 2018 ~ Mar. 07, 2018	Dec. 07, 2018	Conduction (CO05-HY)
Amplifier	SONOMA	310N	187311	9kHz~1GHz	Oct. 19, 2017	Feb. 23, 2018 ~ Mar. 09, 2018	Oct. 18, 2018	Radiation (03CH10-HY)
Bilog Antenna	TESEQ	CBL 6111D&00800 N1D01N-06	35413&02	30MHz~1GHz	Dec. 18, 2017	Feb. 23, 2018 ~ Mar. 09, 2018	Dec. 17, 2018	Radiation (03CH10-HY)
Horn Antenna	SCHWARZBE CK	BBHA 9120 D	9120D-1325	1GHz ~ 18GHz	Sep. 27, 2017	Feb. 23, 2018 ~ Mar. 09, 2018	Sep. 26, 2018	Radiation (03CH10-HY)
Preamplifier	Jet-Power	JAP00101800- 30-10P	16011855000 4	1GHz~18GHz	Apr. 13, 2017	Feb. 23, 2018 ~ Mar. 09, 2018	Apr. 12, 2018	Radiation (03CH10-HY)
Spectrum Analyzer	Keysight	N9010A	MY54200485	10Hz ~ 44GHz	Oct. 31, 2017	Feb. 23, 2018 ~ Mar. 09, 2018	Oct. 30, 2018	Radiation (03CH10-HY)
Antenna Mast	EMEC	AM-BS-4500-B	N/A	1~4m	N/A	Feb. 23, 2018 ~ Mar. 09, 2018	N/A	Radiation (03CH10-HY)
Turn Table	EMEC	TT 2200	N/A	0~360 Degree	N/A	Feb. 23, 2018 ~ Mar. 09, 2018	N/A	Radiation (03CH10-HY)
EMI Test Receiver	Keysight	N9038A (MXE)	MY57290111	3Hz~26.5GHz	Nov. 02, 2017	Feb. 23, 2018 ~ Mar. 09, 2018	Nov. 01, 2018	Radiation (03CH10-HY)

SPORTON INTERNATIONAL INC.

TEL: 886-3-327-3456 FAX: 886-3-328-4978 FCC ID: IHDT56XE4 Page Number : 23 of 24
Report Issued Date : Mar. 12, 2018
Report Version : Rev. 01

Report Template No.: BU5-FD15B Version 2.0



5. Uncertainty of Evaluation

Uncertainty of Conducted Emission Measurement (150 kHz ~ 30 MHz)

Measuring Uncertainty for a Level of Confidence	2.70
of 95% (U = 2Uc(y))	2.70

Uncertainty of Radiated Emission Measurement (30 MHz ~ 1000 MHz)

Measuring Uncertainty for a Level of Confidence	5.60
of 95% (U = 2Uc(y))	5.00

<u>Uncertainty of Radiated Emission Measurement (1000 MHz ~ 18000 MHz)</u>

Measuring Uncertainty for a Level of Confidence	5.90
of 95% (U = 2Uc(y))	5.90

SPORTON INTERNATIONAL INC.

TEL: 886-3-327-3456 FAX: 886-3-328-4978 FCC ID: IHDT56XE4 Page Number : 24 of 24
Report Issued Date : Mar. 12, 2018
Report Version : Rev. 01

Report Template No.: BU5-FD15B Version 2.0