FCC EMI TEST REPORT

FCC ID	**:**	**2AJOTTA1140**
Equipment	**:**	**Smart Phone**
Brand Name	**:**	**NOKIA**
Model Name	**:**	**TA1140, TA1141**
Applicant	**:**	**HMD Global Oy** **Bertel Jungin aukio 9, 02600 Espoo, Finland**
Manufacturer	**:**	**HMD Global Oy** **Bertel Jungin aukio 9, 02600 Espoo, Finland**
Standard	**:**	**FCC 47 CFR FCC Part 15 Subpart B**

The product was received on Oct. 11, 2018 and testing was started from Oct. 16, 2018 and completed on Feb. 13, 2019. 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 report must not be used by the client to claim product certification, approval, or endorsement by TAF or any agency of government.

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

Approved by: Joseph Lin

SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory
No. 52, Huaya 1st Rd., Guishan Dist., Taoyuan City, Taiwan (R.O.C.)

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History of this test report

Report No.	Version	Description	Issued Date
FC8O1133	01	Initial issue of report	Jan. 21, 2019
FC8O1133	02	1. Update 1.1 information. 2. Add Specification of Equipment in section 1.2. 3. Add LTE Band 12 and Band 14 test mode information in section 2.1.	Feb. 14, 2019

Summary of Test Result

Report Clause	Ref Std. Clause	Test Items	Result (PASS/FAIL)	Remark
3.1	15.107	AC Conducted Emission	Pass	Under limit 7.76 dB at 0.191 MHz
3.2	15.109	Radiated Emission	Pass	Under limit 4.82 dB at 47.280 MHz

Reviewed by: Louis Wu

Report Producer: Maggie Chiang

1. General Description

1.1. Product Feature of Equipment Under Test

Product Feature	
Equipment	Smart Phone
Brand Name	NOKIA
Model Name	TA1140, TA1141
FCC ID	2AJOTTA1140
Sample 1	EUT with PCB 1 and Battery 1
Sample 2	EUT with PCB 2 and Battery 2
EUT supports Radios application	GSM/EGPRS/WCDMA/HSPA/LTE/FM/GNSS WLAN 11b/g/n HT20/HT40 Bluetooth BR/EDR/LE
HW Version	3.0
SW Version	00N0_1_300
EUT Stage	Identical Prototype

Remark: The above EUT's information was declared by manufacturer.

1.2. Product Specification of Equipment Under Test

Standards-related Product Specification	
Tx Frequency	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 12: 699.7 MHz ~ 715.3 MHz LTE Band 14: 790.5 MHz ~ 795.5 MHz LTE Band 30: 2307.5 MHz ~ 2312.5 MHz 802.11b/g/n: 2412 MHz ~ 2462 MHz Bluetooth: 2402 MHz ~ 2480 MHz
Rx Frequency	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 ~ 2154.3 MHz LTE Band 5: 869.7 MHz ~ 893.3 MHz LTE Band 12: 729.7 MHz ~ 745.3 MHz LTE Band 14: 760.5 MHz ~ 765.5 MHz LTE Band 30: 2352.5 MHz ~ 2357.5 MHz 802.11b/g/n: 2412 MHz ~ 2462 MHz Bluetooth: 2402 MHz ~ 2480 MHz GNSS : 1559 MHz ~ 1610 MHz (GPS/Glonass) FM : 88 MHz ~ 108 MHz
Antenna Type	WWAN: PIFA Antenna WLAN: Monopole Antenna Bluetooth: Monopole Antenna GPS/Glonass: PIFA Antenna FM: using earphone as antenna
Type of Modulation	GSM: GMSK GPRS: GMSK EDGE(MCS 0-4): GMSK / (MCS 5-9): 8PSK WCDMA: QPSK (Uplink) HSDPA: 64QAM (Downlink) HSUPA: QPSK (Uplink) LTE: QPSK / 16QAM / 64QAM 802.11b : DSSS (DBPSK / DQPSK / CCK) 802.11g/n : OFDM (BPSK / QPSK / 16QAM / 64QAM) Bluetooth LE : GFSK Bluetooth (1Mbps) : GFSK Bluetooth (2Mbps) : π/4-DQPSK Bluetooth (3Mbps) : 8-DPSK GNSS : BPSK FM

1.3. Modification of EUT

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

1.4. Test Location

Test Site	SPORTON INTERNATIONAL INC.	
Test Site Location	No.52, Huaya 1st Rd., Guishan Dist., Taoyuan City, Taiwan (R.O.C.) TEL: +886-3-327-3456 FAX: +886-3-328-4978	
Test Site No.	**Sporton Site No.**	
	CO05-HY	03CH06-HY

FCC Designation No.: TW1093

1.5. 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: All test items were verified and recorded according to the standards and without any deviation during the test.

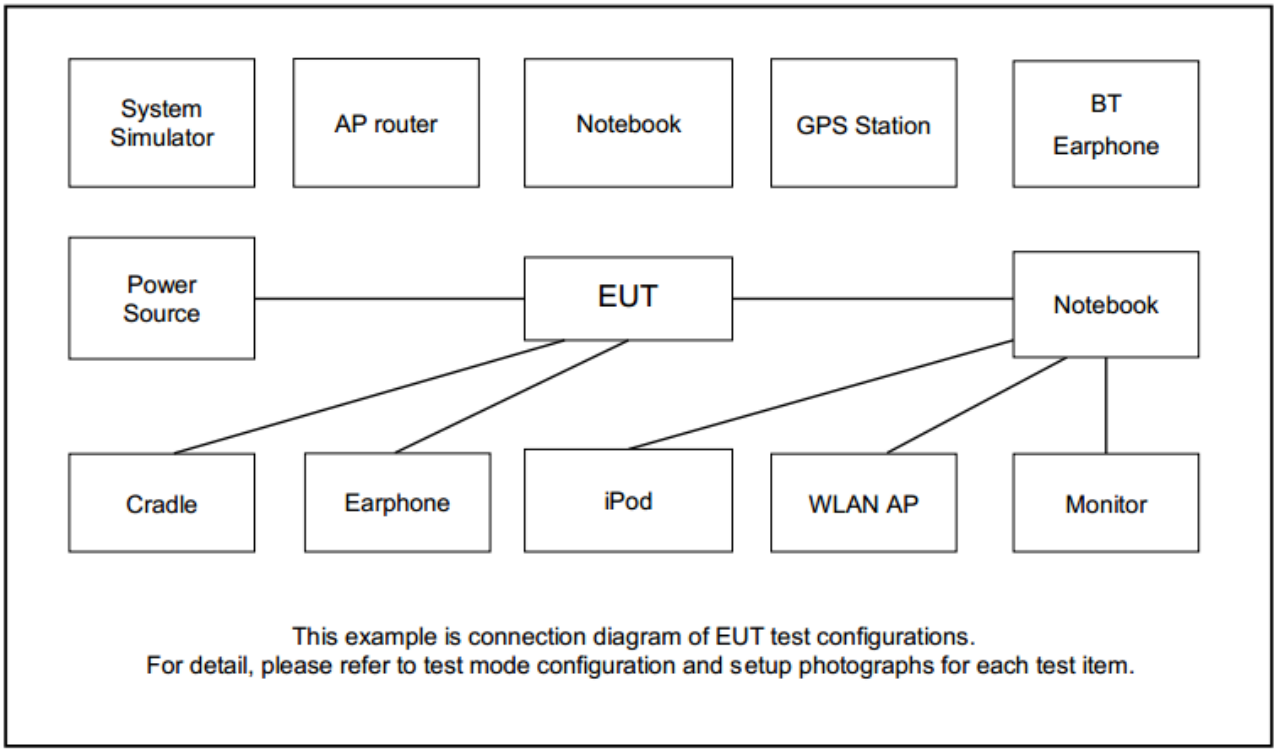
2. Test Configuration of Equipment Under Test

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
AC Conducted Emission	Mode 1: GSM850 Idle + WLAN (2.4GHz) Idle + Bluetooth Idle + GPS Rx + Earphone + USB Cable (Charging from Adapter 1) for Sample 1 Mode 2: GSM1900 Idle + WLAN (2.4GHz) Idle + Bluetooth Idle + Camera (Front) + Earphone + USB Cable (Charging from Adapter 2) for Sample 1 Mode 3: WCDMA Band II Idle + WLAN (2.4GHz) Idle + Bluetooth Idle + Camera (Rear) + Earphone + USB Cable (Charging from Adapter 1) for Sample 1 Mode 4: WCDMA Band V Idle + WLAN (2.4GHz) Idle + Bluetooth Idle + MPEG4 + Earphone + USB Cable (Charging from Adapter 2) for Sample 1 Mode 5: LTE Band 4 Idle + WLAN (2.4GHz) Idle + Bluetooth Idle + FM Rx + Earphone + USB Cable (Data Link with Notebook) for Sample 1 Mode 6: LTE Band 4 Idle + WLAN (2.4GHz) Idle + Bluetooth Idle + FM Rx + Earphone + USB Cable (Data Link with Notebook) for Sample 2 Mode 7: LTE Band 12 Idle + WLAN (2.4GHz) Idle + Bluetooth Idle + FM Rx + Earphone + USB Cable (Data Link with Notebook) for Sample 1 Mode 8: LTE Band 14 Idle + WLAN (2.4GHz) Idle + Bluetooth Idle + FM Rx + Earphone + USB Cable (Data Link with Notebook) for Sample 1
Radiated Emissions	Mode 1: GSM850 Idle + WLAN (2.4GHz) Idle + Bluetooth Idle + GPS Rx + Earphone + USB Cable (Charging from Adapter 1) for Sample 1 Mode 2: GSM1900 Idle + WLAN (2.4GHz) Idle + Bluetooth Idle + Camera (Front) + Earphone + USB Cable (Charging from Adapter 2) for Sample 1 Mode 3: WCDMA Band II Idle + WLAN (2.4GHz) Idle + Bluetooth Idle + Camera (Rear) + Earphone + USB Cable (Charging from Adapter 1) for Sample 1 Mode 4: WCDMA Band V Idle + WLAN (2.4GHz) Idle + Bluetooth Idle + MPEG4 + Earphone + USB Cable (Charging from Adapter 2) for Sample 1 Mode 5: LTE Band 4 Idle + WLAN (2.4GHz) Idle + Bluetooth Idle + FM Rx + Earphone + USB Cable (Data Link with Notebook) for Sample 1 Mode 6: GSM1900 Idle + WLAN (2.4GHz) Idle + Bluetooth Idle + Camera (Front) + Earphone + USB Cable (Charging from Adapter 2) for Sample 2 Mode 7: LTE Band 12 Idle + WLAN (2.4GHz) Idle + Bluetooth Idle + Camera (Front) + Earphone + USB Cable (Charging from Adapter 2) for Sample 1 Mode 8: LTE Band 14 Idle + WLAN (2.4GHz) Idle + Bluetooth Idle + Camera (Front) + Earphone + USB Cable (Charging from Adapter 2) for Sample 1
Remark: 1. The worst case of AC is mode 5; only the test data of this mode was reported. 2. The worst case of RE is mode 2; only the test data of this mode was reported. 3. Data Linking with Notebook means data application transferred mode between EUT and Notebook.	

2.2. Connection Diagram of Test System



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	Anritsu	MT8820C	N/A	N/A	Unshielded, 1.8m
2.	System Simulator	R&S	CMU 200	N/A	N/A	Unshielded, 1.8m
3.	GPS Station	Pendulum	GSG-54	N/A	N/A	Unshielded, 1.8m
4.	Bluetooth Earphone	Sony Ericsson	MW600	PY7DDA-2029	N/A	N/A
5.	WLAN AP	ASUS	RT-AC66U	MSQ-RTAC66U	N/A	Unshielded, 1.8m
6.	iPod	Apple	A1285	FCC DoC	Shielded, 1.0m	N/A
7.	iPod Earphone	Apple	N/A	Verification	Unshielded, 1.0m	N/A
8.	Notebook	DELL	Latitude E6320	FCC DoC/ Contains FCC ID: QDS-BRCM1054	N/A	AC I/P: Unshielded, 1.2m DC O/P: Shielded, 1.8m
9.	Notebook	Asus	P2430U	FCC DoC	N/A	AC I/P: Unshielded, 1.2m DC O/P: Shielded, 1.8m
10.	SD Card	SanDisk	MicroSD HC	FCC DoC	N/A	N/A

2.4. EUT Operation Test Setup

The EUT was in GSM or WCDMA or LTE idle mode during the testing. The EUT was synchronized with the BCCH, and had been continuous receiving mode by setting paging reorganization of the system simulator.

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.
2. Execute “GPS Test” to make the EUT receive continuous signals from GPS station.
3. Execute “Video player” to play MPEG4 files.
4. Turn on camera to capture images.
5. Execute FM function to make the EUT receive FM signals.

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 (MHz)	Conducted limit (dBuV)	
	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.

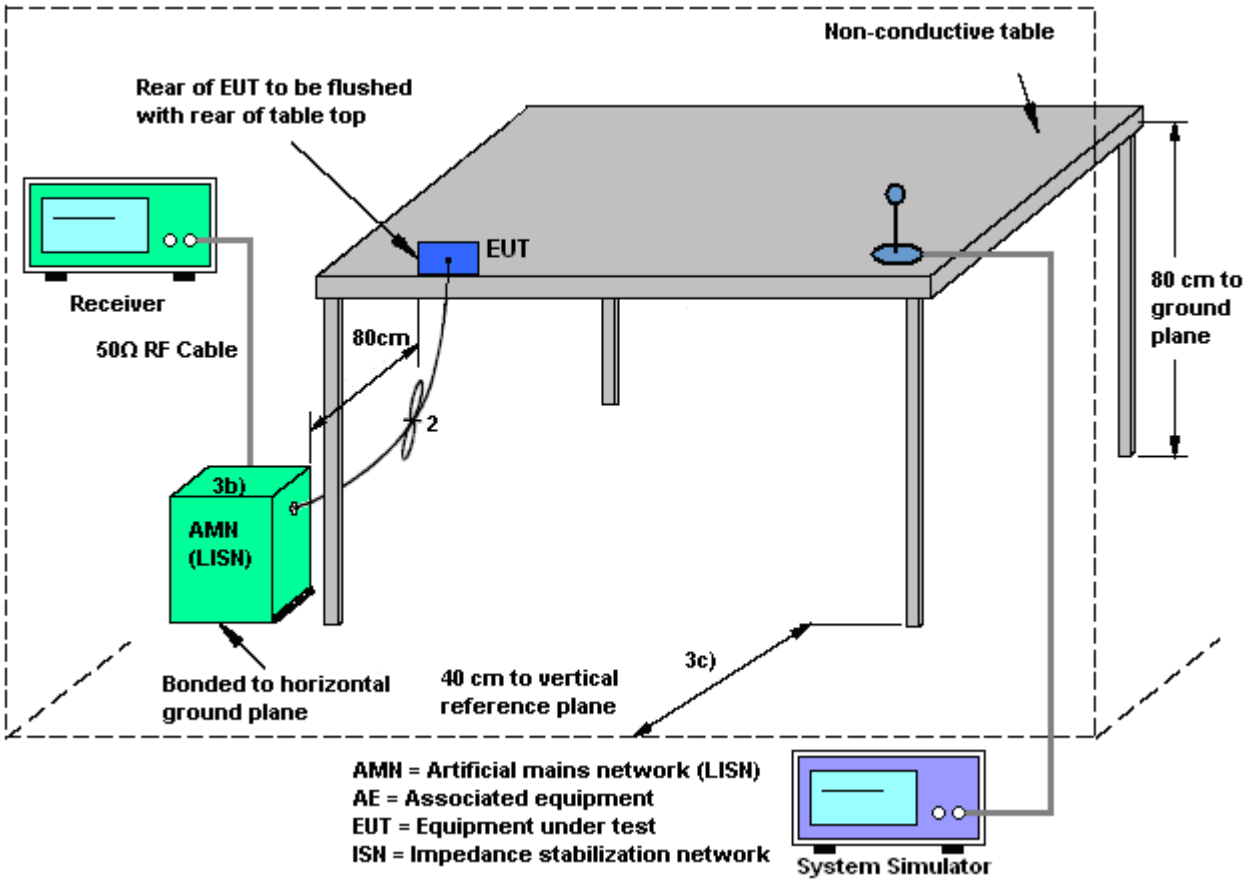
3.1.2 Measuring Instruments

Refer a test equipment and calibration data table in 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.

3.1.4 Test Setup



3.1.5 Test Result of AC Conducted Emission

Please refer to Appendix A.

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

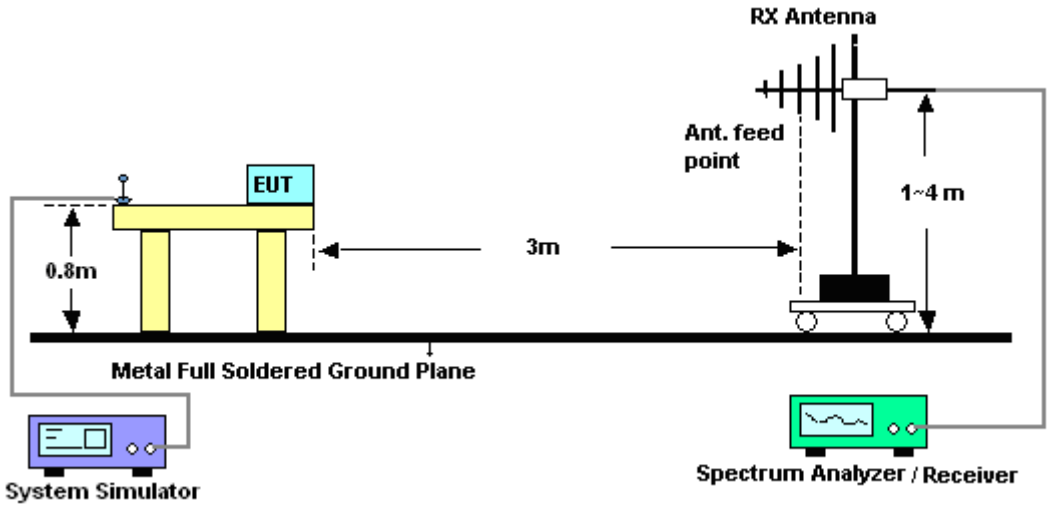
Refer a test equipment and calibration data table in this test report.

3.2.3. Test Procedures

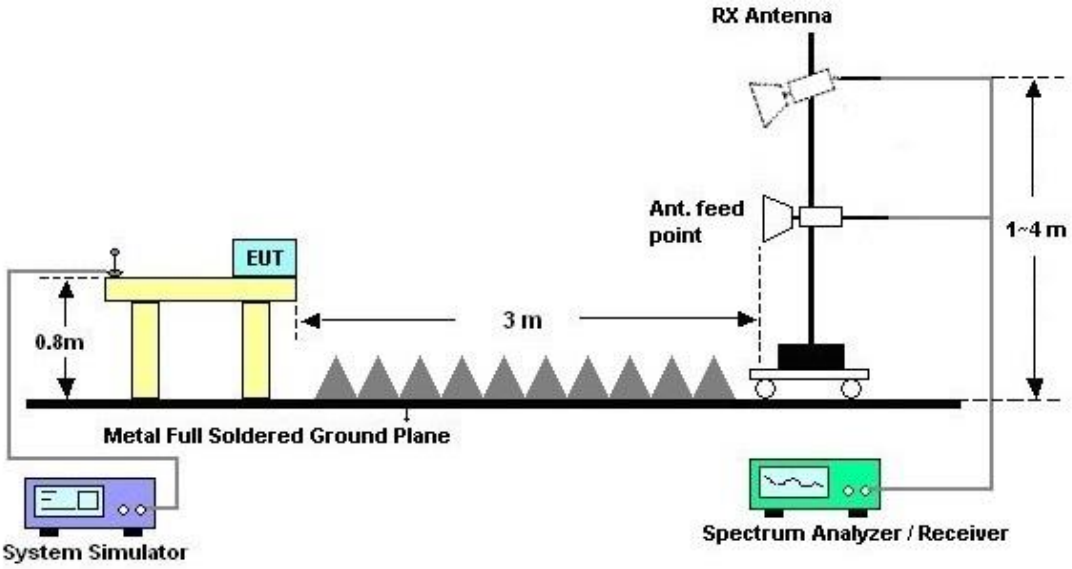
1. The EUT was placed on a turntable with 0.8 meter above ground.
2. The EUT was set 3 meters from the interference receiving antenna, which was mounted on the top of a variable height antenna tower.
3. The table was rotated 360 degrees to determine the position of the highest radiation.
4. The antenna 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 (dBμV/m) = 20 log Emission level (μV/m)
9. Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level

3.2.4. Test Setup of Radiated Emission

For radiated emissions from 30MHz to 1GHz



For radiated emissions above 1GHz



3.2.5. Test Result of Radiated Emission

Please refer to Appendix B.

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	Oct. 16, 2018~ Feb. 13, 2019	N/A	Conduction (CO05-HY)
EMI Test Receiver	Rohde & Schwarz	ESR3	102388	9KHz~3.6GHz	Dec. 08, 2017	Oct. 16, 2018	Dec. 07, 2018	Conduction (CO05-HY)
EMI Test Receiver	Rohde & Schwarz	ESR3	102388	9KHz~3.6GHz	Nov. 12, 2018	Jan. 07, 2019~ Feb. 13, 2019	Nov. 11, 2019	Conduction (CO05-HY)
LISN	Rohde & Schwarz	ENV216	100080	9kHz~30MHz	Nov. 30, 2017	Oct. 16, 2018	Nov. 29, 2018	Conduction (CO05-HY)
LISN	Rohde & Schwarz	ENV216	100080	9kHz~30MHz	Nov. 14, 2018	Jan. 07, 2019~ Feb. 13, 2019	Nov. 13, 2019	Conduction (CO05-HY)
Software	Rohde & Schwarz	EMC32 V10.30	N/A	N/A	N/A	Oct. 16, 2018~ Feb. 13, 2019	N/A	Conduction (CO05-HY)
LF Cable	HUBER + SUHNER	RG-214/U	LF01	N/A	Jan. 03, 2018	Oct. 16, 2018	Jan. 02, 2019	Conduction (CO05-HY)
LF Cable	HUBER + SUHNER	RG-214/U	LF01	N/A	Jan. 02, 2019	Jan. 07, 2019~ Feb. 13, 2019	Jan. 01, 2020	Conduction (CO05-HY)
Pulse Limiter	Rohde & Schwarz	ESH3-Z2	100851	N/A	Jan. 03, 2018	Oct. 16, 2018	Jan. 02, 2019	Conduction (CO05-HY)
Pulse Limiter	SCHWARZBECK	VTSD 9561-F N	9561-F N00373	9kHz-200MHz	Nov. 08, 2018	Jan. 07, 2019~ Feb. 13, 2019	Nov. 07, 2019	Conduction (CO05-HY)
Bilog Antenna	Schaffner	CBL6111C&N-6-06	2725&AT-N0601	30MHz~1GHz	Oct. 13, 2018	Oct. 17, 2018~ Feb. 13, 2019	Oct. 12, 2019	Radiation (03CH06-HY)
EMI Test Receiver	Rohde & Schwarz	ESU26	100472	20Hz~26.5GHz	Jan. 04, 2018	Oct. 17, 2018	Jan. 03, 2019	Radiation (03CH06-HY)
EMI Test Receiver	Rohde & Schwarz	ESU26	100472	20Hz~26.5GHz	Jan. 08, 2019	Feb. 13, 2019	Jan. 07, 2020	Radiation (03CH06-HY)
EMI Test Receiver	Rohde & Schwarz	ESU26	100390	20Hz~26.5GHz	Jan. 02, 2019	Jan. 10, 2019	Jan. 01, 2020	Radiation (03CH06-HY)
Horn Antenna	SCHWARZBECK	BBHA 9120 D	9120D-1156	1GHz~18GHz	Aug. 24, 2018	Oct. 17, 2018~ Jan. 10, 2019	Aug. 23, 2019	Radiation (03CH06-HY)
Preamplifier	Agilent	8449B	3008A01917	1GHz~26.5GHz	Apr. 23, 2018	Oct. 17, 2018~ Jan. 10, 2019	Apr. 22, 2019	Radiation (03CH06-HY)
Preamplifier	SONOMA	310N	186713	9kHz~1GHz	May 02, 2018	Oct. 17, 2018~ Feb. 13, 2019	May 01, 2019	Radiation (03CH06-HY)
Preamplifier	MITEQ	AMF-7D-00101800-30-10P	1850117	1GHz ~ 18GHz	May 24, 2018	Oct. 17, 2018~ Jan. 10, 2019	May 23, 2019	Radiation (03CH06-HY)
Antenna Mast	MF	MF-7802	MF780208212	1m~4m	N/A	Oct. 17, 2018~ Feb. 13, 2019	N/A	Radiation (03CH06-HY)
Turn Table	INN-CO	DS2000	420/650/00	0-360 degree	N/A	Oct. 17, 2018~ Feb. 13, 2019	N/A	Radiation (03CH06-HY)
Test Software	AUDIX	e3	6.2009-8-24(k5)	N/A	N/A	Oct. 17, 2018~ Feb. 13, 2019	N/A	Radiation (03CH06-HY)
RF Cable	HUBER+SUHNER/UTIFLEX	SUCOFLEX 104 / UFA210A	MY24966/4 / LF-01	30MHz-1GHz	Nov. 24, 2017	Oct. 17, 2018	Nov. 23, 2018	Radiation (03CH06-HY)
RF Cable	Infinet/Sunhner	LL142/SF104	CA3601-3601-HLL	1GHz-26GHz	Nov. 24, 2017	Oct. 17, 2018	Nov. 23, 2018	Radiation (03CH06-HY)
RF Cable	HUBER+SUHNER/WOKEN/ HARBOUR INDUSTRIES	SUCOFLEX 104 /STORM/LL142	MY24966/4/ 00100A1O2A178T/ CA3601-3601-1000	30MHz-26GHz	Nov. 22, 2018	Jan. 10, 2019~ Feb. 13, 2019	Nov. 21, 2019	Radiation (03CH06-HY)
Filter	Microwave	H1G013G1	SN477215	1.0G High Pass	Dec. 07, 2017	Oct. 17, 2018	Dec. 06, 2018	Radiation (03CH06-HY)
Filter	Wainwright	WLKS1200-8SS	SN3	1.2G Low Pass	Nov. 21, 2017	Oct. 17, 2018	Nov. 20, 2018	Radiation (03CH06-HY)
Filter	Microwave	H1G013G1	SN477215	1.0G High Pass	Nov. 02, 2018	Jan. 10, 2019~ Feb. 13, 2019	Nov. 01, 2019	Radiation (03CH06-HY)
Filter	Wainwright	WLKS1200-8SS	SN3	1.2G Low Pass	Nov. 02, 2018	Jan. 10, 2019~ Feb. 13, 2019	Nov. 01, 2019	Radiation (03CH06-HY)

5. Uncertainty of Evaluation

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

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	**2.2**

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

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	**3.9**

Uncertainty of Radiated Emission Measurement (1000 MHz ~ 18000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	**4.7**

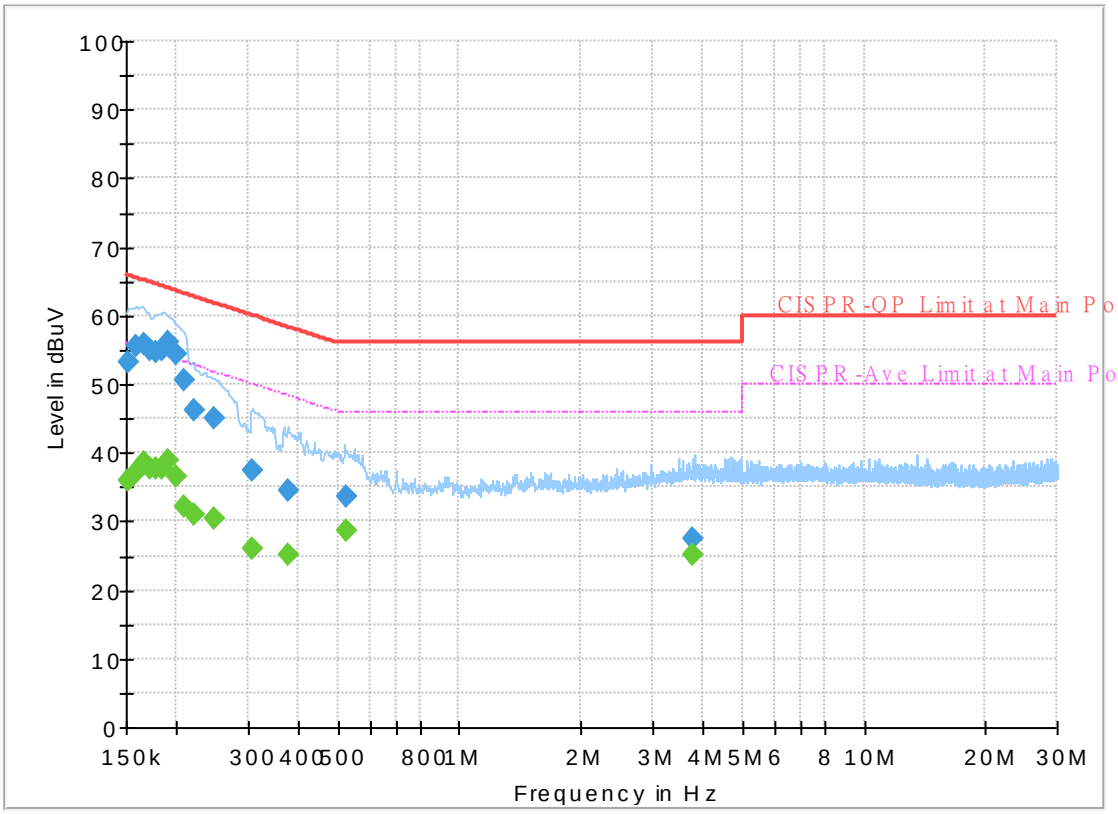
Appendix A. AC Conducted Emission Test Results

Test Engineer :	Rick Lin and Jimmy Chang	**Temperature :**	22~24℃
		Relative Humidity :	61~63%

EUT Information

Report NO :	8O1133
Test Mode :	Mode 5
Test Voltage :	Power From System
Phase :	Line

Full Spectrum



Final_Result

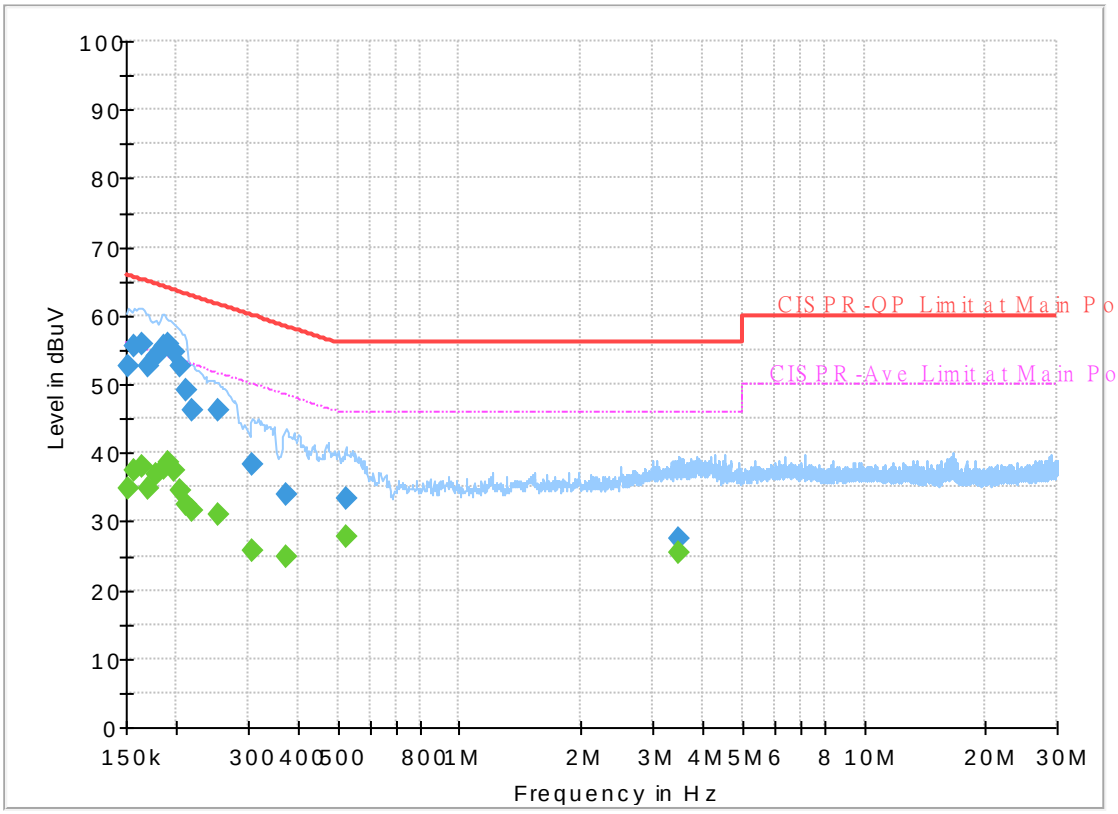
Frequency (MHz)	QuasiPeak (dBuV)	CAverage (dBuV)	Limit (dBuV)	Margin (dB)	Line	Filter	Corr. (dB)
0.152250	---	35.91	55.88	19.97	L1	OFF	19.5
0.152250	53.14	---	65.88	12.74	L1	OFF	19.5
0.159000	---	37.21	55.52	18.31	L1	OFF	19.5
0.159000	55.49	---	65.52	10.03	L1	OFF	19.5
0.165750	---	38.56	55.17	16.61	L1	OFF	19.5
0.165750	55.91	---	65.17	9.26	L1	OFF	19.5
0.172500	---	37.85	54.84	16.99	L1	OFF	19.5
0.172500	54.99	---	64.84	9.85	L1	OFF	19.5
0.177000	---	37.60	54.63	17.03	L1	OFF	19.5
0.177000	54.78	---	64.63	9.85	L1	OFF	19.5
0.183750	---	37.60	54.31	16.71	L1	OFF	19.5
0.183750	54.93	---	64.31	9.38	L1	OFF	19.5
0.190500	---	39.03	54.02	14.99	L1	OFF	19.5
0.190500	56.26	---	64.02	7.76	L1	OFF	19.5
0.199500	---	36.67	53.63	16.96	L1	OFF	19.5
0.199500	54.50	---	63.63	9.13	L1	OFF	19.5
0.208500	---	32.30	53.27	20.97	L1	OFF	19.5
0.208500	50.62	---	63.27	12.65	L1	OFF	19.5
0.219750	---	31.13	52.83	21.70	L1	OFF	19.5
0.219750	46.13	---	62.83	16.70	L1	OFF	19.5
0.249000	---	30.27	51.79	21.52	L1	OFF	19.5

0.249000	**44.95**	**---**	**61.79**	**16.84**	**L1**	**OFF**	**19.5**
0.307500	**---**	**25.99**	**50.04**	**24.05**	**L1**	**OFF**	**19.5**
0.307500	**37.37**	**---**	**60.04**	**22.67**	**L1**	**OFF**	**19.5**
0.377250	**---**	**25.00**	**48.34**	**23.34**	**L1**	**OFF**	**19.5**
0.377250	**34.41**	**---**	**58.34**	**23.93**	**L1**	**OFF**	**19.5**
0.528000	**---**	**28.65**	**46.00**	**17.35**	**L1**	**OFF**	**19.5**
0.528000	**33.60**	**---**	**56.00**	**22.40**	**L1**	**OFF**	**19.5**
3.774750	**---**	**25.18**	**46.00**	**20.82**	**L1**	**OFF**	**19.7**
3.774750	**27.37**	**---**	**56.00**	**28.63**	**L1**	**OFF**	**19.7**

EUT Information

Report NO :	8O1133
Test Mode :	Mode 5
Test Voltage :	Power From System
Phase :	Neutral

Full Spectrum



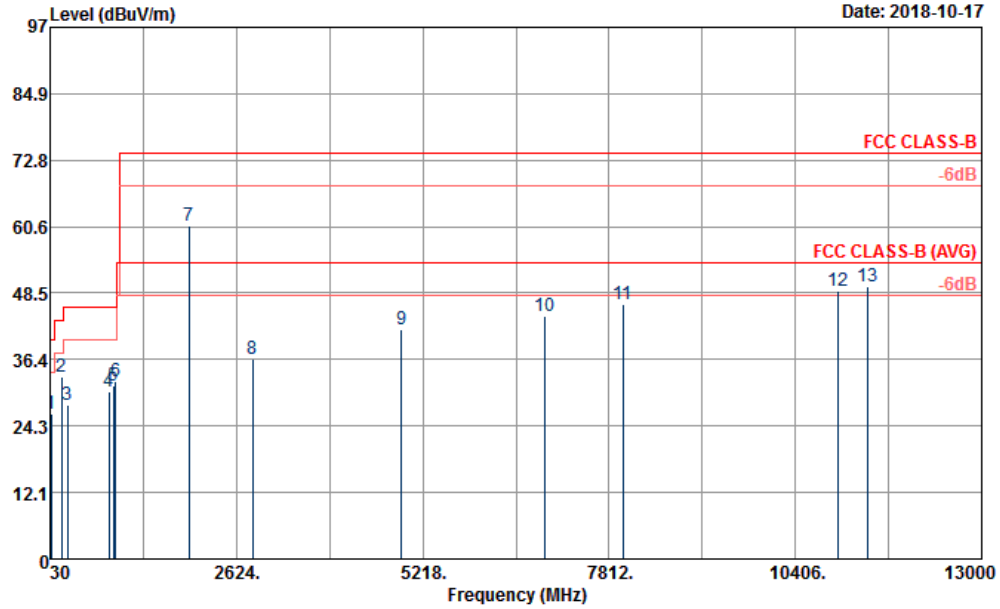
Final_Result

Frequency (MHz)	QuasiPeak (dBuV)	CAverage (dBuV)	Limit (dBuV)	Margin (dB)	Line	Filter	Corr. (dB)
0.152250	---	34.82	55.88	21.06	N	OFF	19.5
0.152250	52.57	---	65.88	13.31	N	OFF	19.5
0.156750	---	37.32	55.63	18.31	N	OFF	19.5
0.156750	55.45	---	65.63	10.18	N	OFF	19.5
0.163500	---	38.03	55.28	17.25	N	OFF	19.5
0.163500	55.92	---	65.28	9.36	N	OFF	19.5
0.170250	---	34.84	54.95	20.11	N	OFF	19.5
0.170250	52.69	---	64.95	12.26	N	OFF	19.5
0.177000	---	36.93	54.63	17.70	N	OFF	19.5
0.177000	54.10	---	64.63	10.53	N	OFF	19.5
0.186000	---	37.78	54.21	16.43	N	OFF	19.5
0.186000	55.44	---	64.21	8.77	N	OFF	19.5
0.190500	---	38.67	54.02	15.35	N	OFF	19.5
0.190500	55.93	---	64.02	8.09	N	OFF	19.5
0.197250	---	37.31	53.73	16.42	N	OFF	19.5
0.197250	54.79	---	63.73	8.94	N	OFF	19.5
0.204000	---	34.50	53.45	18.95	N	OFF	19.5
0.204000	52.67	---	63.45	10.78	N	OFF	19.5
0.210750	---	32.44	53.18	20.74	N	OFF	19.5
0.210750	49.04	---	63.18	14.14	N	OFF	19.5
0.217500	---	31.59	52.91	21.32	N	OFF	19.5

0.217500	**46.17**	**---**	**62.91**	**16.74**	**N**	**OFF**	**19.5**
0.253500	**---**	**30.90**	**51.64**	**20.74**	**N**	**OFF**	**19.5**
0.253500	**46.06**	**---**	**61.64**	**15.58**	**N**	**OFF**	**19.5**
0.307500	**---**	**25.75**	**50.04**	**24.29**	**N**	**OFF**	**19.5**
0.307500	**38.18**	**---**	**60.04**	**21.86**	**N**	**OFF**	**19.5**
0.375000	**---**	**24.88**	**48.39**	**23.51**	**N**	**OFF**	**19.5**
0.375000	**33.79**	**---**	**58.39**	**24.60**	**N**	**OFF**	**19.5**
0.523500	**---**	**27.64**	**46.00**	**18.36**	**N**	**OFF**	**19.5**
0.523500	**33.45**	**---**	**56.00**	**22.55**	**N**	**OFF**	**19.5**
3.468750	**---**	**25.32**	**46.00**	**20.68**	**N**	**OFF**	**19.7**
3.468750	**27.48**	**---**	**56.00**	**28.52**	**N**	**OFF**	**19.7**

Appendix B. Radiated Emission Test Result

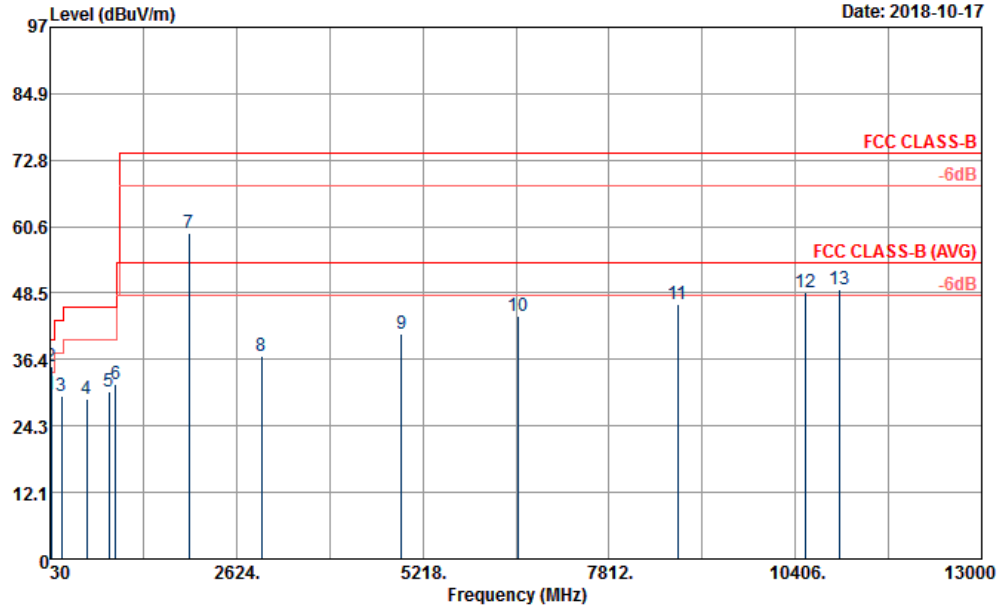
Test Engineer :	Donny Tang and Eric Jeng	**Temperature :**	23~25°C
		Relative Humidity :	50~51%
Test Distance :	3m	**Polarization :**	Horizontal
Remark :	#7 is system simulator signal which can be ignored.		



Site : 03CH06-HY
Condition : FCC CLASS-B 3m 9120D_1156_180824 HORIZONTAL
Project : 8O1133
Power : 120Vac/60Hz
Memo : Mode 2

	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	A/Pos	T/Pos	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg	
1	46.20	26.56	-13.44	40.00	41.81	15.54	0.97	31.76	---	---	Peak
2	191.46	33.20	-10.30	43.50	48.51	14.56	1.84	31.71	100	130	Peak
3	273.27	28.17	-17.83	46.00	38.99	18.63	2.25	31.70	---	---	Peak
4	852.30	30.61	-15.39	46.00	28.98	29.27	4.01	31.65	---	---	Peak
5	911.80	31.66	-14.34	46.00	29.38	29.44	4.17	31.33	---	---	Peak
6	947.50	32.39	-13.61	46.00	28.84	30.46	4.12	31.03	---	---	Peak
7	1960.00	60.88			89.66	26.00	6.32	61.10	---	---	Peak
8	2850.00	36.53	-37.47	74.00	61.85	28.20	7.79	61.31	---	---	Peak
9	4926.00	41.98	-32.02	74.00	58.68	31.27	10.70	58.67	---	---	Peak
10	6918.00	44.37	-29.63	74.00	55.07	35.03	12.89	58.62	---	---	Peak
11	8002.00	46.59	-27.41	74.00	53.18	37.30	13.91	57.80	---	---	Peak
12	10996.00	48.95	-25.05	74.00	48.12	40.50	16.83	56.50	---	---	Peak
13	11420.00	49.83	-24.17	74.00	48.71	39.82	17.47	56.17	100	246	Peak

Test Engineer :	Donny Tang and Eric Jeng	**Temperature :**	23~25°C
		Relative Humidity :	50~51%
Test Distance :	3m	**Polarization :**	Vertical
Remark :	#7 is system simulator signal which can be ignored.		



Site : 03CH06-HY
Condition : FCC CLASS-B 3m 9120D_1156_180824 VERTICAL
Project : 8O1133
Power : 120Vac/60Hz
Memo : Mode 2

	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Cable Loss	Preamp Factor	A/Pos	T/Pos	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg	
1	30.00	30.08	-9.92	40.00	36.95	24.19	0.71	31.77	---	---	Peak
2	47.28	35.18	-4.82	40.00	50.80	15.14	1.00	31.76	100	182	Peak
3	192.00	29.66	-13.84	43.50	44.93	14.59	1.85	31.71	---	---	Peak
4	544.30	29.27	-16.73	46.00	33.30	24.66	3.18	31.87	---	---	Peak
5	853.00	30.55	-15.45	46.00	28.92	29.27	4.01	31.65	---	---	Peak
6	939.80	31.98	-14.02	46.00	28.62	30.32	4.13	31.09	---	---	Peak
7	1960.00	59.47			88.25	26.00	6.32	61.10	---	---	Peak
8	2970.00	37.12	-36.88	74.00	61.93	28.50	8.07	61.38	---	---	Peak
9	4924.00	41.11	-32.89	74.00	57.81	31.27	10.70	58.67	---	---	Peak
10	6550.00	44.41	-29.59	74.00	56.54	34.20	12.36	58.69	---	---	Peak
11	8772.00	46.56	-27.44	74.00	51.44	37.93	14.82	57.63	---	---	Peak
12	10540.00	48.58	-25.42	74.00	49.96	40.00	16.16	57.54	---	---	Peak
13	11018.00	49.24	-24.76	74.00	48.42	40.43	16.87	56.48	100	331	Peak