



# FCC Radio Test Report

# FCC ID: QISBAH2-W19A

This report concerns: Original Grant

Project No. : 1904C015 Equipment Tablet Test Model : BAH2-W19 Series Model : N/A : Huawei Technologies Co., Ltd. Applicant : Administration Building, Headquarters of Huawei Address Technologies Co., Ltd., Bantian, Longgang District, Shenzhen, 518129, China Date of Receipt : Apr. 03, 2019 **Date of Test** : Apr. 08, 2019 ~ Apr. 23, 2019 Issued Date : Apr. 24, 2019 : BTL Inc. Tested by **Testing Engineer** 2 Steven Lu (Steven Lu) **Technical Manager** han . **Authorized Signatory** (Ethan Ma) BTL INC No.3, Jinshagang 1st Road, Shixia, Dalang Town, Dongguan, Guangdong, China. TEL: +86-769-8318-3000 FAX: +86-769-8319-6000 ACCREDITED Certificate #5123.02



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The information, data and test plan are provided by manufacturer which may affect the validity of results, so it is manufacturer's responsibility to ensure that the apparatus meets the essential requirements of applied standards and in all the possible configurations as representative of its intended use.

#### Limitation

For the use of the authority's logo is limited unless the Test Standard(s)/Scope(s)/Item(s) mentioned in this test report is (are) included in the conformity assessment authorities acceptance respective. Please note that the measurement uncertainty is provided for informational purpose only and are not use in determining the Pass/Fail results.





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# **REPORT ISSUED HISTORY**

Report Version	Description	Issued Date
R00	Original Issue.	Apr. 24, 2019





#### **1. GENERAL SUMMARY**

Equipment :	Tablet
Brand Name :	HUAWEI
Test Model :	BAH2-W19
Series Model :	N/A
Applicant :	Huawei Technologies Co., Ltd.
Manufacturer :	Huawei Technologies Co., Ltd.
Address :	Administration Building, Headquarters of Huawei Technologies Co., Ltd.,
	Bantian, Longgang District, Shenzhen, 518129, China
Date of Test :	Apr. 08, 2019 ~ Apr. 23, 2019
Test Sample :	Engineering Sample No.: D190403498
Standard(s) :	FCC Part15, Subpart E(15.407)
	ANSI C63.10-2013
	KDB 558074 D01 15.247 Meas Guidance

The above equipment has been tested and found compliance with the requirement of the relative standards by BTL Inc..

The test data, data evaluation, and equipment configuration contained in our test report (Ref No. BTL-FCCP-4-1904C015) were obtained utilizing the test procedures, test instruments, test sites that has been accredited by the Authority of A2LA according to the ISO/IEC 17025 quality assessment standard and technical standard(s).

Test results included in this report are only for the UNII-1, UNII-2A, UNII-2C and UNII-3 part.

# 2. SUMMARY OF TEST RESULTS

Test	orocedures	according	to the	technical	standard(s):
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FCC Part15, Subpart E(15.407)						
Standard(s) Section	Test Item	Test Result	Judgement	Remark		
15.207 15.407(b)	AC Power Line Conducted Emissions	APPENDIX A	PASS			
15.407(b) 15.205(a) 15.209(a)	Radiated Emissions	APPENDIX B APPENDIX C APPENDIX D	PASS			
15.407(a) 15.407(e)	Spectrum Bandwidth	APPENDIX E	PASS			
15.407(a)	Maximum Output Power	APPENDIX F	PASS			
15.407(a)	Power Spectral Density	APPENDIX G	PASS			
15.407(g)	Frequency Stability	APPENDIX H	PASS			
15.203	Antenna Requirements		PASS			
15.407(c)	Automatically Discontinue Transmission		PASS	NOTE (2)		

Note:

- (1) "N/A" denotes test is not applicable in this test report.
- (2) During no any information transmission, the EUT can automatically discontinue transmission and become standby mode for power saving. the EUT can detect the controlling signal of ACK message transmitting from remote device and verify whether it shall resend or discontinue transmission.
- (3) For UNII-1 this device was functioned as a
- $\Box$  Access point device  $\boxtimes$  Client device
- (4) BAH2-W19 has two storage scenarios: 3GB+32GB and 4GB+64GB. All rest test items are conducted only for 4GB+64GB except RSE test. RSE test is done both for 4GB+64GB and 3GB+32GB. For the RSE of 3GB+32GB only the worst case is evalucated and recorded in the test report.



#### 2.1 TEST FACILITY

The test facilities used to collect the test data in this report is at the location of No.3, Jinshagang 1st Road, Shixia, Dalang Town, Dongguan, Guangdong, China. BTL's Test Firm Registration Number for FCC: 357015 BTL's Designation Number for FCC: CN1240

#### 2.2 MEASUREMENT UNCERTAINTY

ISO/IEC 17025 requires that an estimate of the measurement uncertainties associated with the emissions test results be included in the report. The measurement uncertainties given below are based on a 95% confidence level (based on a coverage factor (k=2)) The BTL measurement uncertainty as below table:

A. AC power line conducted emissions test:

Test Site	Method	Measurement Frequency Range	U, (dB)
DG-C02	CISPR	150 KHz ~ 30 MHz	2.32

#### B. Radiated emissions test:

Test Site Method		Measurement Frequency Range	Ant. H / V	U, (dB)
		Range	11/V	
		9 kHz~30 MHz	V	3.79
		9 kHz~30 MHz	Н	3.57
	CISPR	30 MHz~200 MHz	V	3.82
		30 MHz~200 MHz	Н	3.60
		200 MHz~1,000 MHz	V	3.86
DG-CB03		200 MHz~1,000 MHz	Н	3.94
		1 GHz~18 GHz	V	3.12
		1 GHz~18 GHz	Н	3.68
		18 GHz~40 GHz	V	4.15
		18 GHz~40 GHz	Н	4.14

Note: Unless specifically mentioned, the uncertainty of measurement has not been taken into account to declare the compliance or non-compliance to the specification.



# **3. GENERAL INFORMATION**

#### 3.1 GENERAL DESCRIPTION OF EUT

Equipment	Tablet
Brand Name	HUAWEI
Test Model	BAH2-W19
Series Model	N/A
Model Difference(s)	Please refer to note 3.
Software Version	BAH2-W19 8.0.0.135(C605)
Hardware Version	SH0BAH2LM
Power Source	1# DC voltage supplied from AC/DC adapter. 2# Supplied from battery. 3# Supplied from USB port.
Power Rating	1# I/P: 100-240V ~50/60Hz, 0.5A O/P: 5V === 2A OR 9V === 2A 2# DC 3.82V, 7350mAh 3# DC 5V
Operation Frequency	UNII-1: 5150 MHz~5250 MHz UNII-2A: 5250 MHz~5350 MHz UNII-2C: 5470 MHz~5725 MHz UNII-3: 5725 MHz~5850 MHz
Modulation Type	OFDM
Bit Rate of Transmitter	Up to 433.3 Mbps Mbps
Maximum Output Power for UNII-1	IEEE 802.11a: 14.14 dBm (0.0259 W) IEEE 802.11n (HT20): 14.22 dBm (0.0264 W) IEEE 802.11n (HT40): 14.13 dBm (0.0259 W) IEEE 802.11ac (VHT20): 14.16 dBm (0.0261 W) IEEE 802.11ac (VHT40): 14.12 dBm (0.0258 W) IEEE 802.11ac (VHT80): 14.30 dBm (0.0269 W)
Maximum Output Power for UNII-2A	IEEE 802.11a: 13.88 dBm (0.0244 W) IEEE 802.11n (HT20): 13.74 dBm (0.0237 W) IEEE 802.11n (HT40): 14.06 dBm (0.0255 W) IEEE 802.11ac (VHT20):13.89 dBm (0.0245 W) IEEE 802.11ac (VHT40): 13.92 dBm (0.0247 W) IEEE 802.11ac (VHT80): 13.89 dBm (0.0245 W)
Maximum Output Power for UNII-2C	IEEE 802.11a: 14.01 dBm (0.0252 W) IEEE 802.11n (HT20): 14.19 dBm (0.0263 W) IEEE 802.11n (HT40): 14.09 dBm (0.0257 W) IEEE 802.11ac (VHT20): 14.11 dBm (0.0258 W) IEEE 802.11ac (VHT40): 14.20 dBm (0.0263 W) IEEE 802.11ac (VHT80): 14.14 dBm (0.0259 W)
Maximum Output Power for UNII-3 Note:	IEEE 802.11a: 13.88 dBm (0.0244 W) IEEE 802.11n (HT20): 13.97 dBm (0.0250 W) IEEE 802.11n (HT40): 13.81 dBm (0.0241 W) IEEE 802.11ac (VHT20): 13.86 dBm (0.0243 W) IEEE 802.11ac (VHT40): 13.84 dBm (0.0242 W) IEEE 802.11ac (VHT80): 14.00 dBm (0.0251 W)

Note:

1. For a more detailed features description, please refer to the manufacturer's specifications or the user's manual.

# **B**TL

# 2. Channel List:

IEEE 802.11a IEEE 802.11n (HT20) IEEE 802.11ac (VHT20)		IEEE 802.11n (HT40) IEEE 802.11ac (VHT40)		IEEE 802.11ac (VHT80)	
UNII-1		UNII-1		UNII-1	
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
36	5180	38	5190	42	5210
40	5200	46	5230		
44	5220				
48	5240				

IEEE 802.11a IEEE 802.11n (HT20) IEEE 802.11ac (VHT20)		IEEE 802.11n (HT40) IEEE 802.11ac (VHT40)		IEEE 802.11ac (VHT80)	
UNII-2A		UNII-2A		UNII-2A	
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
52	5260	54	5270	58	5290
56	5280	62	5310		
60	5300				
64	5320				

IEEE 802.11a IEEE 802.11n (HT20) IEEE 802.11ac (VHT20)		IEEE 802.11n (HT40) IEEE 802.11ac (VHT40)		IEEE 802.11ac (VHT80)		
UNII	-2C	UNI	I-2C	UNI	UNII-2C	
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)	
100	5500	102	5510	106	5530	
104	5520	110	5550	122	5610	
108	5540	118	5590			
112	5560	126	5630			
116	5580	134	5670			
120	5600					
124	5620					
128	5640					
132	5660					
136	5680					
140	5700					

IEEE 802.11a IEEE 802.11n (HT20) IEEE 802.11ac (VHT20)		IEEE 802.11n (HT40) IEEE 802.11ac (VHT40)		IEEE 802.11ac (VHT80)	
UN	UNII-3		III-3	UN	II-3
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
149	5745	151	5755	155	5775
153	5765	159	5795		
157	5785				
161	5805				
165	5825				

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Page 11 of 451 Report Version: R00 3. BAH2-W19 has two storage scenarios, with different memory. EMCP Storage Capacity is 3GB+32GB, LPDDR3+EMMC separation Scheme storage capacity is 4GB+64GB.The two storage mode of peripheral circuit has slight change, but does not affect product performance. The differences about storage scenarios are showed in following table. Other parts of the Tablet are the same, including the appearance, the antenna, Chipset, Bluetooth mode, Wifi mode, Adapter, Battery, Mainboard, Software and so on.

Model	BAH2-	-W19
Storage Scenarios	EMCP	LPDDR3+eMMC
Storage Capacity	3GB+32GB	4GB+64GB

#### 4. Antenna Specification:

Ant.	Brand	Model Name	Antenna Type	Connector	Gain (dBi)
1	N/A	N/A	Internal	N/A	0





5. The EUT contains following accessory devices:

The EUT contains following accessory devices:					
Items	Brand	Factory	Model Name	Description	
Adapter	HUAWEI	Salcomp (Shenzhen) Co., Ltd. HENZHEN HUNTKE Y ELECTRONICS C O., LTD. BYD ELECTRONIC CO.,LTD.	HW-090200UH0	I/P: 100-240V ~50/60Hz, 0.5A O/P: 5V ━━━ 2A OR 9V ━━━ 2A	
Li-ion Battery	HUAWEI	SCUD (Fujian) Electronics Co., Ltd. SUNWODA Electronic Co., Ltd	HB299418ECW	Rated capacity: 7350mAh Nominal Voltage: +3.82V Charging Voltage:	
		Huizhou Desay Battery Co., Ltd		The second secon	
		HUIZHOU DEHONG TECHNOLOGY CO.,LTD.	330-50507	_	
		NingBo Broad Telecommunication Co.,Ltd.	CUDU01B-HC295-EH		
USB Cable		HONGFUJIN PRECISION INDUSTRIAL(SHEN ZHEN).LTD	WA0020	Signal Cable 5V~12V/3A USB2.0 USB-A to USB-C Charge Data	
	-	Dongguan Mingji Electronics Technology Group Co.,Ltd	L99UC131-CS-H	Cable,1.0m,USB-C (24AWG+30AWG*2C+ 24AWG+2*28AWG Drain)*3.1mm,USB-A	
		Freeport Resources Enterprises (Jiangxi) Co.,Ltd	18-93C2CHO-001HF		
		LUXSHARE Precision Industry Co., Ltd.	203-1572-0		
HUAWEI					
Smart Dock for					
MediaPad	HUAWEI	-	C-Bach2-Cradle	DC 9V,2A max	
M5 lite					
(10.1-inch)					



#### 3.2 TEST MODES

The test system was pre-tested based on the consideration of all possible combinations of EUT operation mode.

Pretest Mode	Description
Mode 1	TX A Mode / CH36, CH40, CH48 (UNII-1)
Mode 2	TX N (HT20) Mode / CH36, CH40, CH48 (UNII-1)
Mode 3	TX N (HT40) Mode / CH38, CH46 (UNII-1)
Mode 4	TX AC (VHT20) Mode / CH36, CH40, CH48 (UNII-1)
Mode 5	TX AC (VHT40) Mode / CH38, CH46 (UNII-1)
Mode 6	TX AC (VHT80) Mode / CH42 (UNII-1)
Mode 7	TX A Mode / CH52, CH60, CH64 (UNII-2A)
Mode 8	TX N (HT20) Mode / CH52, CH60, CH64 (UNII-2A)
Mode 9	TX N (HT40) Mode / CH54, CH62 (UNII-2A)
Mode 10	TX AC (VHT20) Mode / CH52, CH60, CH64 (UNII-2A)
Mode 11	TX AC (VHT40) Mode / CH54, CH62 (UNII-2A)
Mode 12	TX AC (VHT80) Mode / CH58 (UNII-2A)
Mode 13	TX A Mode / CH100, CH116, CH140 (UNII-2C)
Mode 14	TX N (HT20) Mode / CH100, CH116, CH140 (UNII-2C)
Mode 15	TX N (HT40) Mode / CH102, CH110, CH134 (UNII-2C)
Mode 16	TX AC (VHT20) Mode / CH100, CH116, CH140 (UNII-2C)
Mode 17	TX AC (VHT40) Mode / CH102, CH110, CH134 (UNII-2C)
Mode 18	TX AC (VHT80) Mode / CH106, CH122 (UNII-2C)
Mode 19	TX A Mode / CH149,CH157,CH165 (UNII-3)
Mode 20	TX N (HT20) Mode / CH149,CH157,CH165 (UNII-3)
Mode 21	TX N (HT40) Mode / CH151,CH159 (UNII-3)
Mode 22	TX AC (VHT20) Mode / CH149,CH157,CH165 (UNII-3)
Mode 23	TX AC (VHT40) Mode / CH151,CH159 (UNII-3)
Mode 24	TX AC (VHT80) Mode / CH155 (UNII-3)
Mode 25	TX AC(VHT80) Mode / CH42 (UNII-1)

Following mode(s) as (were) found to be the worst case(s) and selected for the final test.

AC power line conducted emissions test		
Final Test Mode	Description	
Mode 25	TX AC(VHT80) Mode / CH42 (UNII-1)	



Radiated emissions test - Below 1GHz			
Final Test Mode	Description		
Mode 25	TX AC(VHT80) Mode / CH42 (UNII-1)		

Radiated emissions test - Above 1GHz			
Final Test Mode	Description		
Mode 1	TX A Mode / CH36, CH40, CH48 (UNII-1)		
Mode 2	TX N (HT20) Mode / CH36, CH40, CH48 (UNII-1)		
Mode 3	TX N (HT40) Mode / CH38, CH46 (UNII-1)		
Mode 4	TX AC (VHT20) Mode / CH36, CH40, CH48 (UNII-1)		
Mode 5	TX AC (VHT40) Mode / CH38, CH46 (UNII-1)		
Mode 6	TX AC (VHT80) Mode / CH42 (UNII-1)		
Mode 7	TX A Mode / CH52, CH60, CH64 (UNII-2A)		
Mode 8	TX N (HT20) Mode / CH52, CH60, CH64 (UNII-2A)		
Mode 9	TX N (HT40) Mode / CH54, CH62 (UNII-2A)		
Mode 10	TX AC (VHT20) Mode / CH52, CH60, CH64 (UNII-2A)		
Mode 11	TX AC (VHT40) Mode / CH54, CH62 (UNII-2A)		
Mode 12	TX AC (VHT80) Mode / CH58 (UNII-2A)		
Mode 13	TX A Mode / CH100, CH116, CH140 (UNII-2C)		
Mode 14	TX N (HT20) Mode / CH100, CH116, CH140 (UNII-2C)		
Mode 15	TX N (HT40) Mode / CH102, CH110, CH134 (UNII-2C)		
Mode 16	TX AC (VHT20) Mode / CH100, CH116, CH140 (UNII-2C)		
Mode 17	TX AC (VHT40) Mode / CH102, CH110, CH134 (UNII-2C)		
Mode 18	TX AC (VHT80) Mode / CH106, CH122 (UNII-2C)		
Mode 19	TX A Mode / CH149,CH157,CH165 (UNII-3)		
Mode 20	TX N (HT20) Mode / CH149,CH157,CH165 (UNII-3)		
Mode 21	TX N (HT40) Mode / CH151,CH159 (UNII-3)		
Mode 22	TX AC (VHT20) Mode / CH149,CH157,CH165 (UNII-3)		
Mode 23	TX AC (VHT40) Mode / CH151,CH159 (UNII-3)		
Mode 24	TX AC (VHT80) Mode / CH155 (UNII-3)		



Conducted test			
Test Mode	Description		
Mode 1	TX A Mode / CH36, CH40, CH48 (UNII-1)		
Mode 2	TX N (HT20) Mode / CH36, CH40, CH48 (UNII-1)		
Mode 3	TX N (HT40) Mode / CH38, CH46 (UNII-1)		
Mode 4	TX AC (VHT20) Mode / CH36, CH40, CH48 (UNII-1)		
Mode 5	TX AC (VHT40) Mode / CH38, CH46 (UNII-1)		
Mode 6	TX AC (VHT80) Mode / CH42 (UNII-1)		
Mode 7	TX A Mode / CH52, CH60, CH64 (UNII-2A)		
Mode 8	TX N (HT20) Mode / CH52, CH60, CH64 (UNII-2A)		
Mode 9	TX N (HT40) Mode / CH54, CH62 (UNII-2A)		
Mode 10	TX AC (VHT20) Mode / CH52, CH60, CH64 (UNII-2A)		
Mode 11	TX AC (VHT40) Mode / CH54, CH62 (UNII-2A)		
Mode 12	TX AC (VHT80) Mode / CH58 (UNII-2A)		
Mode 13	TX A Mode / CH100, CH116, CH140 (UNII-2C)		
Mode 14	TX N (HT20) Mode / CH100, CH116, CH140 (UNII-2C)		
Mode 15	TX N (HT40) Mode / CH102, CH110, CH134 (UNII-2C)		
Mode 16	TX AC (VHT20) Mode / CH100, CH116, CH140 (UNII-2C)		
Mode 17	TX AC (VHT40) Mode / CH102, CH110, CH134 (UNII-2C)		
Mode 18	TX AC (VHT80) Mode / CH106, CH122 (UNII-2C)		
Mode 19	TX A Mode / CH149,CH157,CH165 (UNII-3)		
Mode 20	TX N (HT20) Mode / CH149,CH157,CH165 (UNII-3)		
Mode 21	TX N (HT40) Mode / CH151,CH159 (UNII-3)		
Mode 22	TX AC (VHT20) Mode / CH149,CH157,CH165 (UNII-3)		
Mode 23	TX AC (VHT40) Mode / CH151,CH159 (UNII-3)		
Mode 24	TX AC (VHT80) Mode / CH155 (UNII-3)		

Note:

(1) For radiated emission below 1 GHz test, the IEEE 802.11ac80 channel 42 is found to be the worst case and recorded.

(2) For radiated emission above 1 GHz test, 1GHz~26.5GHz and 26.5GHz~40GHz have been pre-tested and in this report only recorded the worst case. The remaining spurious points are all below the limit value of 20dB.



### 3.3 PARAMETERS OF TEST SOFTWARE

UNII-1				
Test Software	WiFi RF Auth2.5.4			
Test Frequency (MHz)	5180	5200	5240	
IEEE 802.11a	13	13	13	
IEEE 802.11n (HT20)	13	13	13	
IEEE 802.11ac (VHT20)	13	13	13	
Test Frequency (MHz)	5190	5230		
IEEE 802.11n (HT40)	13	13		
IEEE 802.11ac (VHT40)	13	13		
Test Frequency (MHz)	5210			
IEEE 802.11ac (VHT80)	13			

UNII-2A				
Test Software	WiFi RF Auth2.5.4			
Test Frequency (MHz)	5260	5300	5320	
IEEE 802.11a	13	13	13	
IEEE 802.11n (HT20)	13	13	13	
IEEE 802.11ac (VHT20)	13	13	13	
Test Frequency (MHz)	5270	5310		
IEEE 802.11n (HT40)	13	13		
IEEE 802.11ac (VHT40)	13	13		
Test Frequency (MHz)	5290			
IEEE 802.11ac (VHT80)	13			



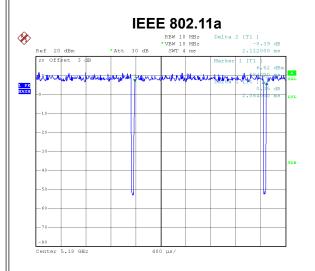
UNII-2C			
Test Software		WiFi RF Auth2.5.4	
Test Frequency (MHz)	5500	5580	5700
IEEE 802.11a	13	13	13
IEEE 802.11n (HT20)	13	13	13
IEEE 802.11ac (VHT20)	13	13	13
Test Frequency (MHz)	5510	5550	5670
IEEE 802.11n (HT40)	13	13	13
IEEE 802.11ac (VHT40)	13	13	13
Test Frequency (MHz)	5530	5610	
IEEE 802.11ac (VHT80)	13	13	

UNII-3			
Test Software		WiFi RF Auth2.5.4	
Test Frequency (MHz)	5745	5785	5825
IEEE 802.11a	13	13	13
IEEE 802.11n (HT20)	13	13	13
IEEE 802.11ac (VHT20)	13	13	13
Test Frequency (MHz)	5755	5795	
IEEE 802.11n (HT40)	13	13	
IEEE 802.11ac (VHT40)	13	13	
Test Frequency (MHz)	5775		
IEEE 802.11ac (VHT80)	13		



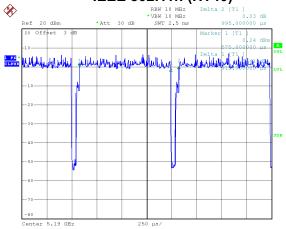
# 3.4 DUTY CYCLE

If duty cycle is  $\geq$  98 %, duty factor is not required. If duty cycle is < 98 %, duty factor shall be considered.



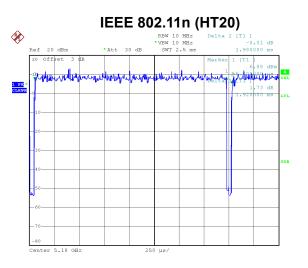
Date: 12.APR.2019 15:46:10

Duty cycle = 2.064 ms / 2.112 ms = 97.73% Duty Factor = 10 \* log(1 / 97.73%) = 0.10 dB IEEE 802.11n (HT40)

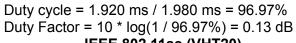


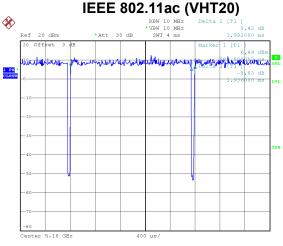
Date: 12.APR.2019 15:47:19

Duty cycle = 0.915 ms / 0.995 ms = 91.96%
Duty Factor = 10 * log(1 / 91.96%) = 0.36 dB



Date: 12.APR.2019 15:46:37



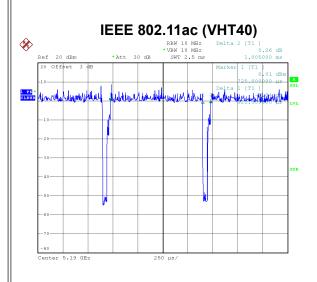


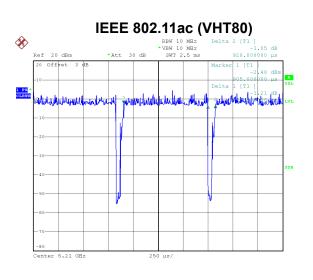
Date: 12.APR.2019 15:46:58

Duty cycle = 1.936 ms / 1.992 ms = 97.19% Duty Factor = 10 \* log(1 / 97.19%) = 0.12 dB









Date: 12.APR.2019 15:47:46

Duty cycle = 0.925 ms / 1.005 ms = 92.04% Duty Factor = 10 \* log(1 / 92.04%) = 0.36 dB Date: 12.APR.2019 15:48:08

Duty cycle = 0.845 ms / 0.920 ms = 91.85%Duty Factor =  $10 * \log(1 / 91.85\%) = 0.37 \text{ dB}$ 

#### NOTE:

For IEEE 802.11a, IEEE 802.11n (HT20) and IEEE 802.11ac (VHT20): For radiated emissions frequency above 1 GHz, the resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 1 kHz (Duty cycle < 98%).

For IEEE 802.11n (HT40) and IEEE 802.11ac (VHT40):

For radiated emissions frequency above 1 GHz, the resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 2 kHz (Duty cycle < 98%).

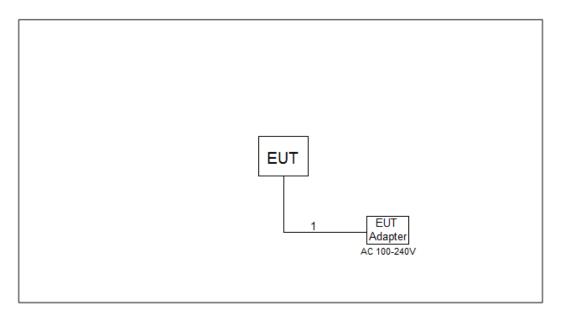
#### For IEEE 802.11ac (VHT80):

For radiated emissions frequency above 1 GHz, the resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 3 kHz (Duty cycle < 98%).





### 3.5 BLOCK DIAGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED



#### 3.6 SUPPORT UNITS

Item	Equipment	Mfr/Brand	Model/Type No.	Series No.
-	-	-	-	-

Item	Shielded Type	Ferrite Core	Length	Note
1	NO	NO	1m	DC Cable



# 4. AC POWER LINE CONDUCTED EMISSIONS TEST

#### 4.1 LIMIT

Frequency	Limit (dBµV)	
(MHz)	Quasi-peak	Average
0.15 - 0.5	66 to 56*	56 to 46*
0.5 - 5.0	56	46
5.0 - 30.0	60	50

NOTE:

(1) The tighter limit applies at the band edges.

(2) The limit of " \* " marked band means the limitation decreases linearly with the logarithm of the frequency in the range.

The following table is the setting of the receiver

Receiver Parameter	Setting
Attenuation	10 dB
Start Frequency	0.15 MHz
Stop Frequency	30 MHz
IF Bandwidth	9 KHz

#### 4.2 TEST PROCEDURE

- a. The EUT was placed 0.8 meters from the horizontal ground plane with EUT being connected to the power mains through a line impedance stabilization network (LISN). All other support equipment powered from additional LISN(s). The LISN provide 50 Ohm/ 50uH of coupling impedance for the measuring instrument.
- b. Interconnecting cables that hang closer than 40 cm to the ground plane shall be folded back and forth in the center forming a bundle 30 to 40 cm long.
- c. I/O cables that are not connected to a peripheral shall be bundled in the center. The end of the cable may be terminated, if required, using the correct terminating impedance. The overall length shall not exceed 1 m.
- d. LISN at least 80 cm from nearest part of EUT chassis.
- e. For the actual test configuration, please refer to the related Item -EUT Test Photos.

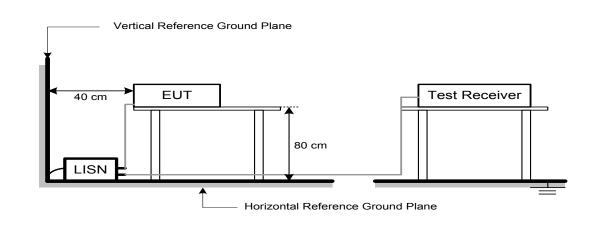
#### 4.3 DEVIATION FROM TEST STANDARD

No deviation





# 4.4 TEST SETUP



#### 4.5 EUT OPERATION CONDITIONS

The EUT was configured for testing in a typical fashion (as a customer would normally use it). The EUT has been programmed to continuously transmit during test. This operating condition was tested and used to collect the included data.

The EUT was programmed to be in continuously transmitting/TX mode.

#### 4.6 EUT TEST CONDITIONS

Temperature: 25°C Relative Humidity: 53% Test Voltage: AC 120V/60Hz

#### 4.7 TEST RESULTS

Please refer to the APPENDIX A.



# 5. RADIATED EMISSIONS TEST

#### **5.1 LIMIT**

In case the emission fall within the restricted band specified on 15.205(a), then the 15.209(a) limit in the table below has to be followed.

#### LIMITS OF RADIATED EMISSIONS MEASUREMENT (9 kHz to 1000 MHz)

Frequency	Field Strength	Measurement Distance
(MHz)	(microvolts/meter)	(meters)
0.009-0.490	2400/F(kHz)	300
0.490-1.705	24000/F(kHz)	30
1.705-30.0	30	30
30-88	100	3
88-216	150	3
216-960	200	3
Above 960	500	3

#### LIMITS OF UNWANTED EMISSION OUT OF THE RESTRICTED BANDS

Frequency	EIRP Limit	Band edge	Harmonic
(MHz)	(dBm/MHz)	at 3m (dBµV/m)	at 1.5m (dBµV/m)
5150-5250	-27	68.3	74.3 (Note 3)
5250-5350	-27	68.3	74.3 (Note 3)
5470-5725	-27	68.3	74.3 (Note 3)
	-27 NOTE (2)	68.3	74.3 (Note 3)
5725-5850	10 NOTE (2)	105.3	111.3(Note 3)
5725-5650	15.6 NOTE (2)	110.9	116.9(Note 3)
	27 NOTE (2)	122.3	128.3(Note 3)

#### NOTE:

(1) The following formula is used to convert the equipment isotropic radiated power (eirp) to field strength:  $E = \frac{1000000\sqrt{30P}}{1000000\sqrt{30P}}$ 

<sup>-</sup> μV/m, where P is the eirp (Watts)

(2) According to FCC 16-24, all emissions shall be limited to a level of -27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.

(3)

$$FS_{\text{limit}} = FS_{\text{max}} - 20\log\left(\frac{d_{\text{limit}}}{d_{\text{measure}}}\right)$$

20log d limit/d measure=20log 3/1.5=6 dB.



# 5.2 TEST PROCEDURE

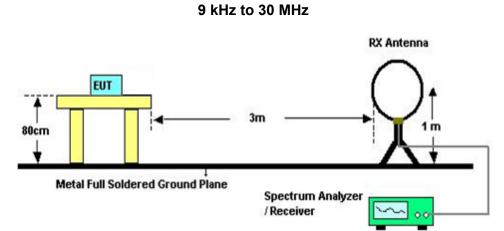
- a. The measuring distance of 3 m shall be used for measurements. The EUT was placed on the top of a rotating table 0.8 meter above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.(below 1GHz)
- b. The measuring distance of 3 m or 1.5m shall be used for measurements. The EUT was placed on the top of a rotating table 1.5 meter above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.(above 1GHz)
- c. The height of the equipment or of the substitution antenna shall be 0.8m or 1.5m; the height of the test antenna shall vary between 1 m to 4 m. 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 find the maximum reading (used Bore sight function).
- e. The 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.
- f. The initial step in collecting radiated emission data is a receiver peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak detector mode re-measured.
- g. All readings are Peak unless otherwise stated QP in column of Note. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform. (below 1 GHz)
- h. All readings are Peak Mode value unless otherwise stated AVG in column of Note. If the Peak Mode Measured value compliance with the Peak Limits and lower than AVG Limits, the EUT shall be deemed to meet both Peak & AVG Limits and then only Peak Mode was measured, but AVG Mode didn't perform. (above 1 GHz)
- i. For the actual test configuration, please refer to the related Item –EUT Test Photos.

#### 5.3 DEVIATION FROM TEST STANDARD

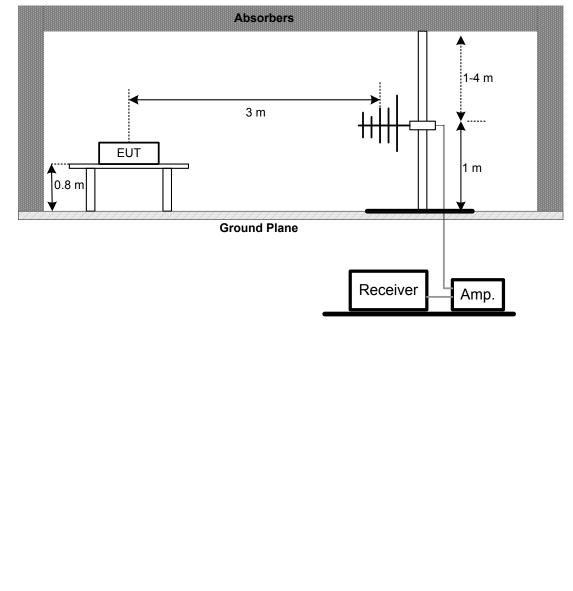
No deviation



#### 5.4 TEST SETUP



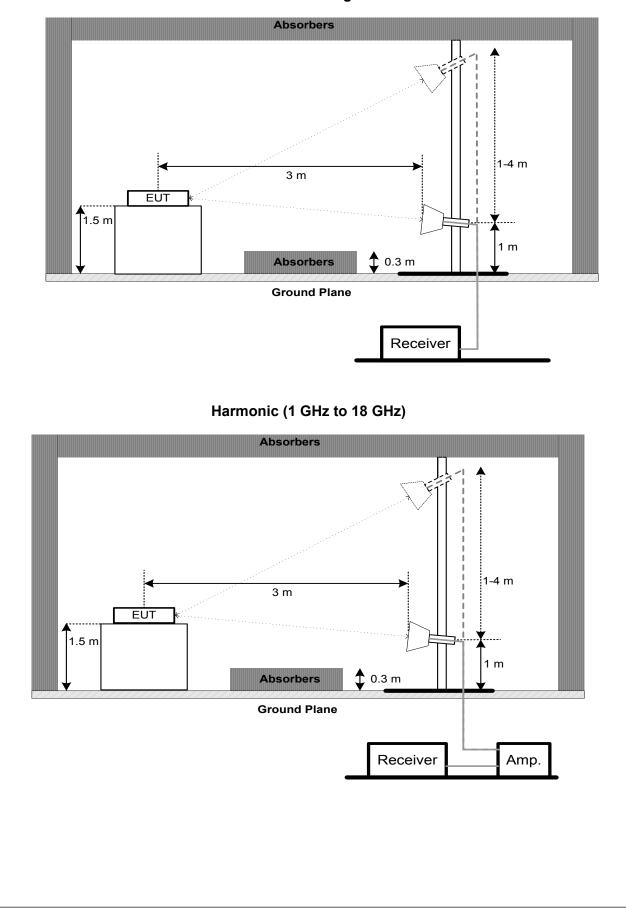
30 MHz to 1 GHz





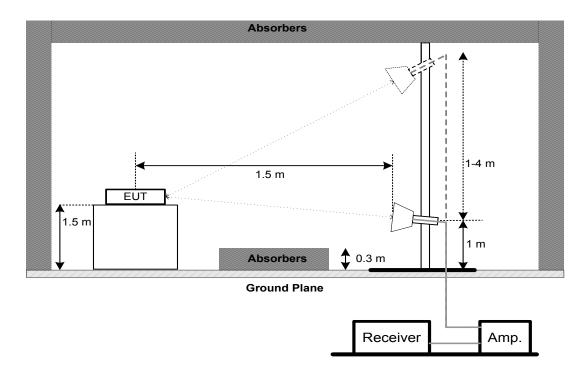


#### Band edge





#### Harmonic (Above 18 GHz)



#### 5.5 EUT OPERATION CONDITIONS

The EUT tested system was configured as the statements of 4.5 unless otherwise a special operating condition is specified in the follows during the testing.

#### 5.6 EUT TEST CONDITIONS

Temperature: 24°C Relative Humidity: 68% Test Voltage: AC 120V/60Hz

#### 5.7 TEST RESULTS - 9 KHZ to 30 MHZ

Please refer to the APPENDIX B

Remark:

- (1) Distance extrapolation factor = 40 log (specific distance / test distance) (dB).
- (2) Limit line = specific limits (dBuV) + distance extrapolation factor.
- (3) For radiated emissions below 1GHz, all adapters had been pre-tested and in this report only recorded the worst case (Salcomp).

#### 5.8 TEST RESULTS - 30 MHz TO 1000 MHz

Please refer to the APPENDIX C. Remark:

(1) For radiated emissions below 1GHz, all adapters had been pre-tested and in this report only recorded the worst case (Salcomp).

#### 5.9 TEST RESULTS - ABOVE 1000 MHz

Please refer to the APPENDIX D.

Remark:

(1) No limit: This is fundamental signal, the judgment is not applicable. For fundamental signal judgment was referred to Peak output test.



# 6. BANDWIDTH TEST

#### 6.1 LIMIT

FCC Part15, Subpart E (15.407)			
Section	Test Item	Limit	Frequency Range (MHz)
	26 dB Bandwidth	-	5150-5250
15.407(a)	26 dB Bandwidth	-	5250-5350
15.407(e)	26 dB Bandwidth	-	5470-5725
	6 dB Bandwidth	Minimum 500 kHz	5725-5850

#### 6.2 TEST PROCEDURE

- a. The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram below
- b. Spectrum Setting:
  - For UNII-1, UNII-2A, UNII-2C:

Spectrum Parameter	Setting
Attenuation	Auto
Span Frequency	> 26 dB Bandwidth
RBW	300 kHz (Bandwidth 20 MHz)
RDVV	1 MHz (Bandwidth 40 MHz and 80 MHz)
VBW	1 MHz (Bandwidth 20 MHz)
VBVV	3 MHz (Bandwidth 40 MHz and 80 MHz)
Detector	Peak
Trace	Max Hold
Sweep Time	Auto

#### For UNII-3:

Spectrum Parameter	Setting
Attenuation	Auto
Span Frequency	6 dB Bandwidth
RBW	100 kHz
VBW	300 kHz
Detector	Peak
Trace	Max Hold
Sweep Time	Auto

c. Measured the spectrum width with power higher than 26 dB below carrier

#### 6.3 TEST PROCEDURE

No deviation.





#### 6.4 TEST SETUP

EUT	SPECTRUM	
	ANALYZER	

#### 6.5 EUT OPERATION CONDITIONS

The EUT was programmed to be in continuously transmitting mode.

#### 6.6 EUT TEST CONDITIONS

Temperature: 25.9°C Relative Humidity: 57.4% Test Voltage: AC 120V/60Hz

#### 6.7 TEST RESULTS

Please refer to the APPENDIX E.



# 7. MAXIMUM OUTPUT POWER TEST

#### 7.1 LIMIT

FCC Part15, Subpart E (15.407)					
Section	Test Item	Limit	Frequency Range (MHz)		
15.407(a)	Maximum Output Power	AP device: 1 Watt (30 dBm) Client device: 250 mW (24 dBm)	5150-5250		
		250 mW (24 dBm)	5250-5350		
		250 mW (24 dBm)	5470-5725		
		1 Watt (30dBm)	5725-5850		

#### Note:

- a. For an outdoor access point operating in the band 5.15-5.25 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W provided the maximum antenna gain does not exceed 6 dBi. In addition, the maximum power spectral density shall not exceed 17 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. The maximum e.i.r.p. at any elevation angle above 30 degrees as measured from the horizon must not exceed 125 mW (21 dBm).
- b. For the 5.25-5.35 GHz and 5.47-5.725 GHz bands, the maximum conducted output power over the frequency bands of operation shall not exceed the lesser of 250 mW or 11 dBm + 10log B, where B is the 26dB Bandwidth in megahertz.

#### 7.2 TEST PROCEDURE

- a. The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram below.
- b. Used spectrum analyzer band power measurement function.
- c. Spectrum Setting

Spectrum Parameter	Setting		
Attenuation	Auto		
Span Frequency	Encompass the entire emissions bandwidth (EBW) of the signal		
RBW	= 1 MHz.		
VBW	≥ 3 MHz.		
Sweep points	≥ 2 x span / RBW		
Detector	RMS		
Trace	Trace average at least 100 traces in power averaging(rms) mode.		
Sweep Time	auto		

d. Test test was performed in accordance with method of FCC KDB 789033 D02 General UNII Test Procedures New Rules v02r01.

#### 7.3 DEVIATION FROM STANDARD

No deviation.





# 7.4 TEST SETUP



#### 7.5 EUT OPERATION CONDITIONS

The EUT was programmed to be in continuously transmitting mode.

#### 7.6 EUT TEST CONDITIONS

Temperature: 25.9°C Relative Humidity: 57.4% Test Voltage: AC 120V/60Hz

#### 7.7 TEST RESULTS

Please refer to the APPENDIX F.



# 8. POWER SPECTRAL DENSITY TEST

#### 8.1 LIMIT

FCC Part15, Subpart E (15.407)					
Section	on Test Item Limit		Frequency Range (MHz)		
	Power Spectral Density	AP device: 17 dBm/MHz Client device: 11 dBm/MHz	5150-5250		
15.407(a)		11 dBm/MHz	5250-5350		
		11 dBm/MHz	5470-5725		
		30 dBm/500 kHz	5725-5850		

#### 8.2 TEST PROCEDURE

- a. The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram below.
- b. Spectrum Setting

Spectrum Parameter	Setting
Attenuation	Auto
Span Frequency	Encompass the entire emissions bandwidth (EBW) of the signal
RBW	= 1 MHz.
VBW	≥ 3 MHz.
Detector	RMS
Trace average	100 trace
Sweep Time	Auto

Note:

- 1. For UNII-3, according to KDB publication 789033 D02 General UNII Test Procedures New Rules v02r01, section II.F.5., it is acceptable to set RBW at 1 MHz and VBW at 3 MHz if the spectrum analyzer does not have 500 kHz RBW.
- The value measured with RBW=1 MHz is to be added with 10log(500 kHz/1 MHz) which is -3 dB. For example, if the measured value is +10dBm using RBW=1 MHz (that is +10 dBm/MHz), then the converted value will be +7dBm/500kHz.

#### 8.3 DEVIATION FROM STANDARD

No deviation.





#### 8.4 TEST SETUP

EUT	SPECTRUM
	ANALYZER

#### 8.5 EUT OPERATION CONDITIONS

The EUT was programmed to be in continuously transmitting mode.

#### **8.6 UT TEST CONDITIONS**

Temperature: 25.9°C Relative Humidity: 57.4% Test Voltage: AC 120V/60Hz

#### 8.7 TEST RESULTS

Please refer to the APPENDIX H.



# 9. FREQUENCY STABILITY MEASUREMENT

#### 9.1 LIMIT

FCC Part15, Subpart E (15.407)					
Section	Test Item	Limit	Frequency Range (MHz)		
15.407(g)	Frequency Stability	Specified in the user's manual	5150-5250		
			5250-5350		
			5470-5725		
			5725-5850		

#### 9.2 TEST PROCEDURE

- a. The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram below.
- b. Spectrum Setting:

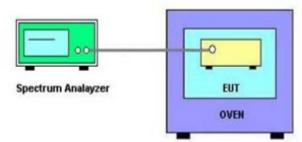
Spectrum Parameter	Setting	
Attenuation	Auto	
Span Frequency	Entire absence of modulation emissions	
Span Frequency	bandwidth	
RBW	10 kHz	
VBW	30 kHz	
Sweep Time	Auto	

- c. The test extreme voltage is to change the primary supply voltage from 85 to 115 percent of the nominal value.
- d. User manual temperature is 0°C~35°C.

#### 9.3 DEVIATION FROM STANDARD

No deviation.

#### 9.4 TEST SETUP



#### 9.5 EUT OPERATION CONDITIONS

The EUT was programmed to be in continuously transmitting mode.

#### 9.6 EUT TEST CONDITIONS

Temperature: 25.9°C Relative Humidity: 57.4% Test Voltage: AC 120V/60Hz

#### 9.7 TEST RESULTS

Please refer to the APPENDIX I.

# **10. MEASUREMENT INSTRUMENTS LIST**

	Kind of Equipment	Manufacturer	1						
	King of Equipment		AC Power Line Conducted Emissions						
			Type No.	Serial No.	Calibrated until				
	EMI Test Receiver	R&S	ESCI	100382	Mar. 10, 2020				
2	LISN	EMCO	3816/2	52765	Mar. 10, 2020				
3	50ohm Teminator	SHX	TF5-3	15041305	Mar. 10, 2020				
4	Artificial-Mains Network	SCHWARZBEC K	NSLK 8127	8127685	Mar. 10, 2020				
5	TRANSIENT LIMITER	EM	EM-7600	772	Mar. 10, 2020				
6	Measurement Software	Farad	EZ-EMC Ver.NB-03A1-01	N/A	N/A				
7	Cable	N/A	RG223	12m	Mar. 12, 2020				
			issions - 9 kHz to						
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until				
1	Loop Antenna	EM	EM-6876-1	230	Jan. 15, 2020				
2	Cable	N/A	RG 213/U	C-102	Jun. 01, 2019				
3	EMI Test Receiver	R&S	ESCI	100895	Mar. 10, 2020				
4	Measurement	Forad	EZ-EMC	NI/A	N/A				
4	Software	Farad	Ver.NB-03A1-01	N/A	IN/A				
			ssions - 30 MHz to		1				
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until				
1	Antenna	Schwarzbeck	VULB9160	9160-3232	Mar. 09, 2020				
2	Amplifier	HP	8447D	2944A09673	Aug. 11, 2019				
3	Receiver	Agilent	N9038A	MY52130039	Aug. 11, 2019				
4	Cable	emci	LMR-400(30MHz- 1GHz)(8m+5m)	N/A	May 25, 2019				
5	Controller	СТ	SC100	N/A	N/A				
6	Controller	MF	MF-7802	MF780208416	N/A				
7	Measurement Software	Farad	EZ-EMC Ver.NB-03A1-01	N/A	N/A				
			nissions - Above ′	-					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until				
1	Double Ridged Guide Antenna	ETS	3115	75789	Mar. 09, 2020				
2	Broad-Band Horn Antenna	Schwarzbeck	BBHA 9170	9170319	Jun. 30, 2019				
3	Amplifier	Agilent	8449B	3008A02333	Mar. 10, 2020				
4	Microwave Preamplifier With Adaptor	EMC INSTRUMENT	EMC2654045	980039 & HA01	Mar. 10, 2020				
5	Receiver	Agilent	N9038A	MY52130039	Aug. 11, 2019				
6	Controller	CT	SC100	N/A	N/A				
7	Controller	MF	MF-7802	MF780208416	N/A N/A				
8	Cable	mitron	B10-01-01-12M	18072744	Jul. 30, 2019				
9	Measurement	Farad	EZ-EMC Ver.NB-03A1-01	N/A	N/A				





Bandwidth												
Item	Kind of Equipment Manufacture		Type No.	Serial No.	Calibrated until							
1	Spectrum Analyzer	R&S	FSP40	100185	Aug. 11, 2019							
Maximum Output Power												
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until							
1	Spectrum Analyzer	R&S	FSP40	Aug. 11, 2019								
Power Spectral Density												
Item	Kind of Equipment Manufacturer		Type No.	Serial No.	Calibrated until							
1	Spectrum Analyzer R&S		FSP40	100185	Aug. 11, 2019							
Frequency Stability												
Item	Kind of Equipment Manufacturer		Type No.	Serial No.	Calibrated until							
1	Spectrum Analyzer	R&S	FSP40	100185	Aug. 11, 2019							
2	Precision Oven Tester Bell		BTH-50C	20170306001	Mar. 10, 2020							

Remark: "N/A" denotes no model name, serial no. or calibration specified.

All calibration period of equipment list is one year.



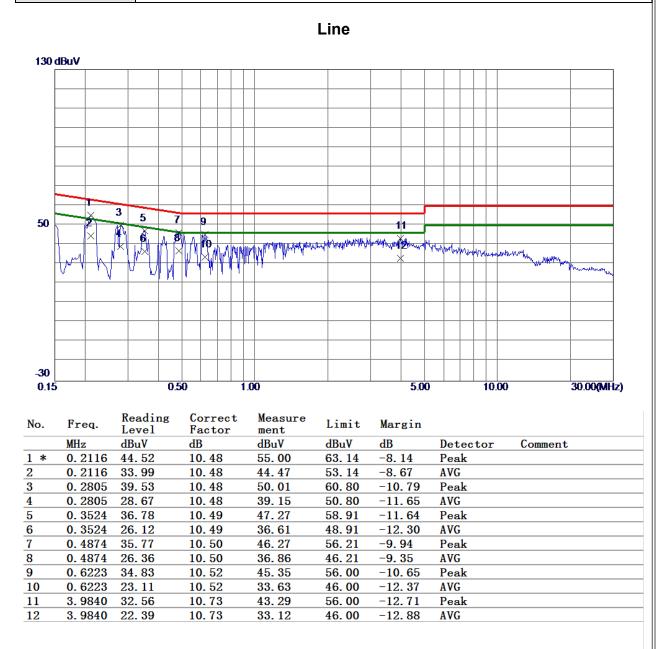
# **APPENDIX A - AC POWER LINE CONDUCTED EMISSIONS**





Test Mode:

### TX AC80 MODE CHANNEL 42



- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value Limit Value.
- (3) The test result has included the cable loss.





Test Mode: TX AC80 MODE CHANNEL 42 Neutral 130 dBuV 9 50 AND THE AND TH -30 0.15 0.50 1.00 5.00 10.00 30.00(MHz) Reading Correct Measure No. Freq. Limit Margin Level Factor ment MHz dBuV dB Comment dBuV dB dBuV Detector 0.2084 38.74 49.19 10.45 63.27 -14.08 Peak 2 0.2805 36.10 10.46 46.56 60.80 -14.24 Peak

**REMARKS**:

1

3 \*

4

5

6 7

8

9

10

0.4873

0.4873

0.6180

0.6180

1.1310

1.1310

3. 2280

3.2280 27.69

39.30

28.25

36.46

25.49

33.80

23.51

37.17

10.49

10.49

10.49

10.49

10.52

10.52

10.66

10.66

49.79

38.74

46.95

35.98

44.32

34.03

47.83

38.35

56.21

46.21

56.00

46.00

56.00

46.00

56.00

46.00

-6.42

-7.47

-9.05

-10.02

-11.68

-11.97

-8.17

-7.65

Peak

AVG

Peak

AVG

Peak

AVG

Peak

AVG

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value Limit Value.
- (3) The test result has included the cable loss.

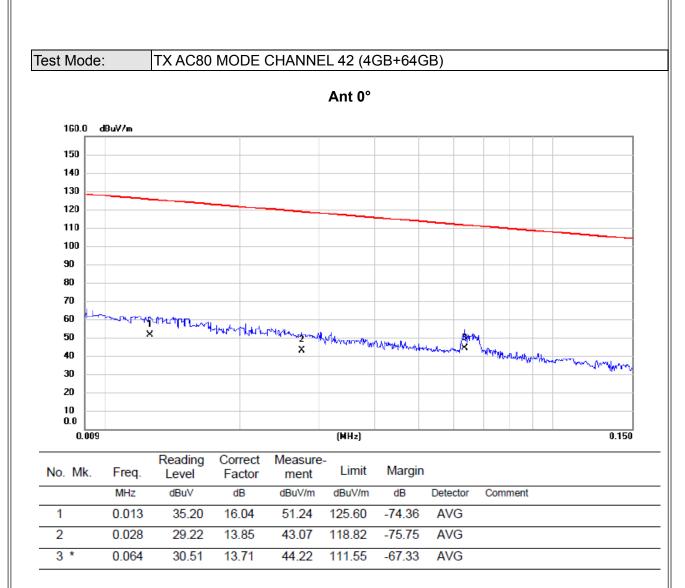




# **APPENDIX B - RADIATED EMISSION - 9 KHZ TO 30 MHZ**







- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value Limit Value.



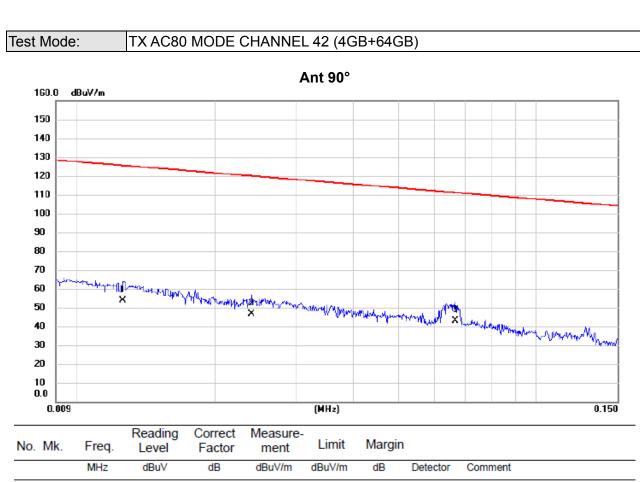


Test Mode: TX AC80 MODE CHANNEL 42 (4GB+64GB) Ant 0° 160.0 dBuV/m 150140 130 120 110 100 90 80 70 60 50 14 ςU manzy بالاللا بمك X 40 30 20 10 0.0 0.150 0.5 (MHz) 5 30.000 Reading Correct Measure-No. Mk. Freq. Limit Margin Level Factor ment dBuV dB dB MHz dBuV/m dBuV/m Detector Comment 0.159 31.13 13.57 44.70 103.58 -58.88 AVG 1 2 \* 1.503 QP 29.28 12.16 41.44 64.06 -22.62 2.213 3 29.74 11.69 41.43 69.54 -28.11 QP

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value Limit Value.







#### 37.85 1 0.013 16.04 53.89 125.60 -71.71 AVG 0.024 32.86 13.83 120.00 -73.31 AVG 2 46.69 3 \* 0.067 29.45 13.66 43.11 111.12 -68.01 AVG

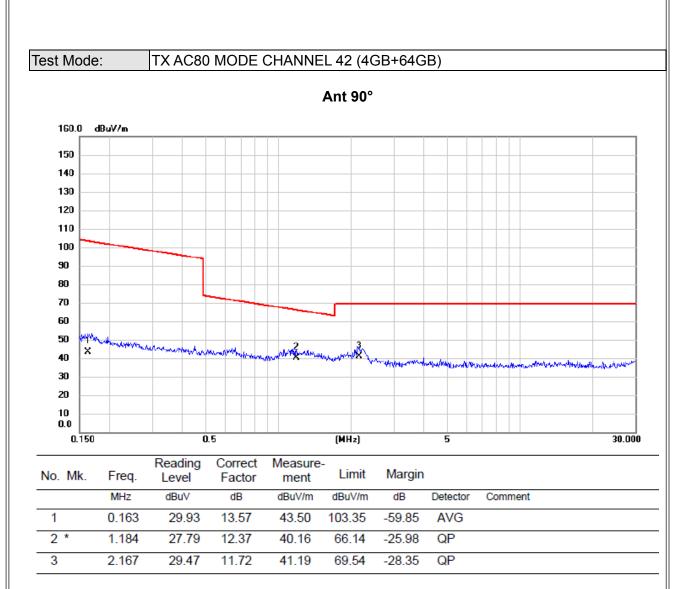
**REMARKS**:

(1) Measurement Value = Reading Level + Correct Factor.

(2) Margin Level = Measurement Value - Limit Value.



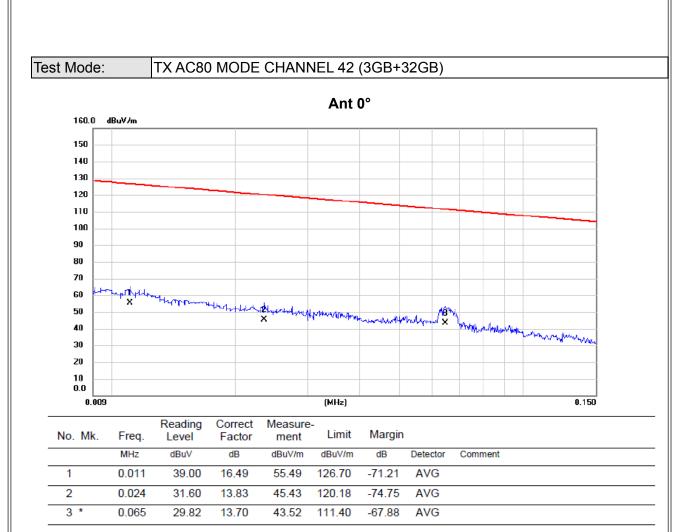




- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value Limit Value.



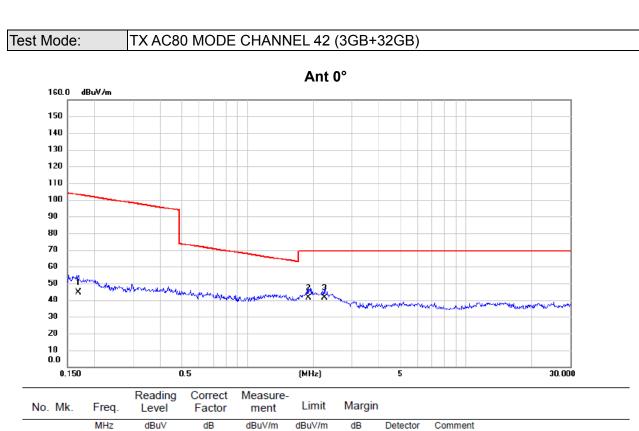




- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value Limit Value.





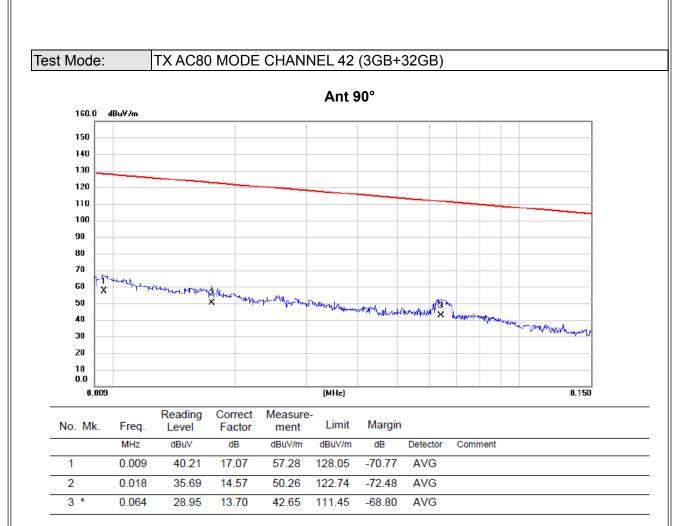


NO. MK.	⊢req.	Level	Factor	ment	Limit	Margin		
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	0.169	30.98	13.58	44.56	103.07	-58.51	AVG	
2	1.898	29.52	11.88	41.40	69.54	-28.14	QP	
3 *	2.249	29.92	11.67	41.59	69.54	-27.95	QP	
-								

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value Limit Value.





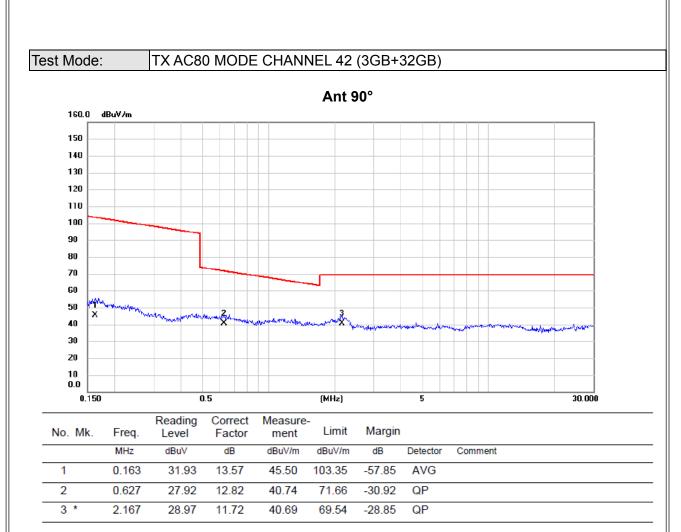


(1) Measurement Value = Reading Level + Correct Factor.

(2) Margin Level = Measurement Value - Limit Value.







(1) Measurement Value = Reading Level + Correct Factor.

(2) Margin Level = Measurement Value - Limit Value.





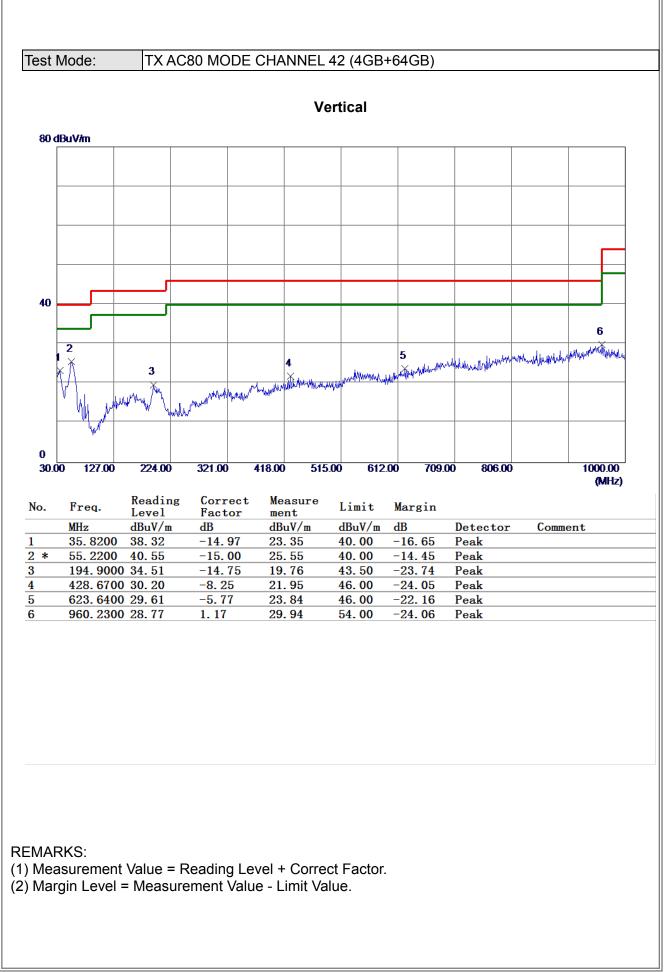
# **APPENDIX C - RADIATED EMISSION - 30 MHZ TO 1 GHZ**

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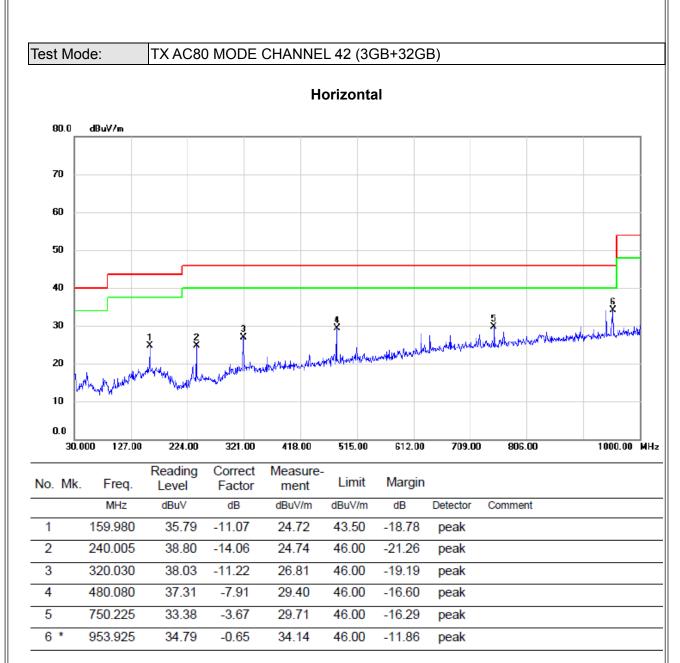


Test Mode: TX AC80 MODE CHANNEL 42 (3GB+32GB) Vertical 80.0 dBuV/m 70 60 50 40 <u>6</u> 30 ŝ \* 20 10 0.0 30.000 224.00 321.00 418.00 515.00 612.00 709.00 806.00 1000.00 MHz 127.00 Reading Correct Measure-No. Mk. Limit Margin Freq. Factor Level ment MHz dBuV dB dBuV/m dBuV/m dB Detector Comment 30.970 39.74 40.00 -14.91 24.83 -15.17 1 peak 2 159.980 39.07 -11.07 28.00 43.50 -15.50 peak 3 240.005 40.45 -14.06 26.39 46.00 -19.61 peak 480.080 33,15 -7.91 25.24 46.00 -20.76 4 peak 750.225 33.50 -3.67 29.83 46.00 -16.17 5 peak 6 \* 953.925 33.80 -0.65 33.15 46.00 -12.85 peak

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value Limit Value.







- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value Limit Value.

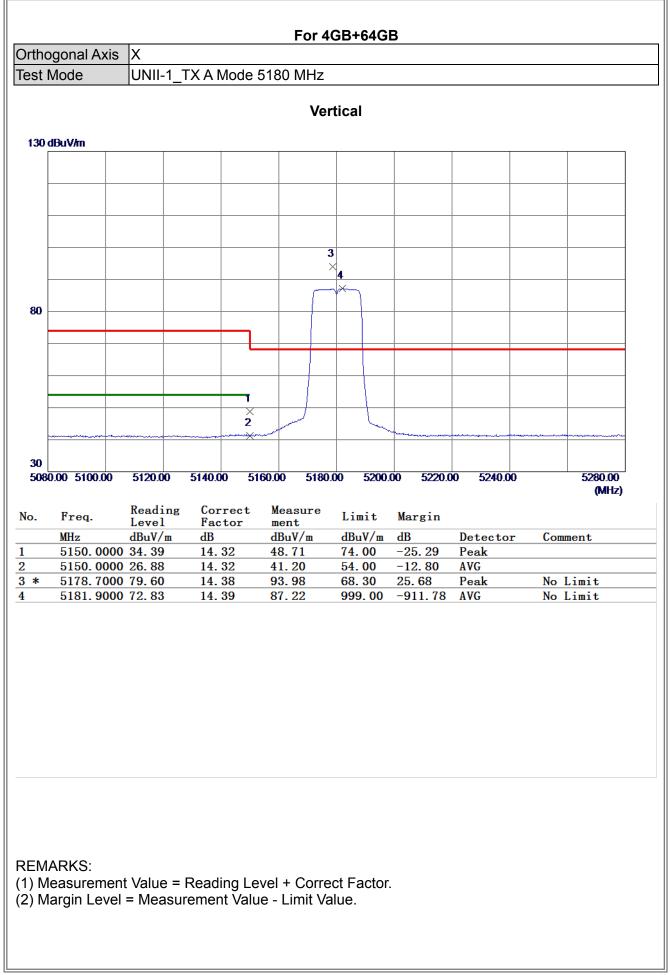




## **APPENDIX D - RADIATED EMISSION - ABOVE 1000 MHZ**

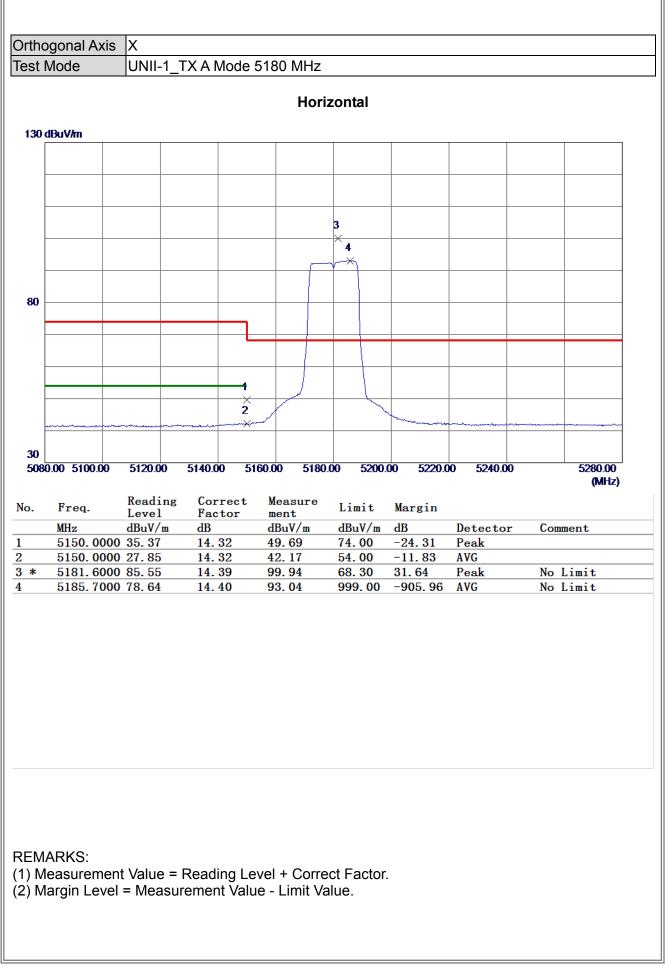












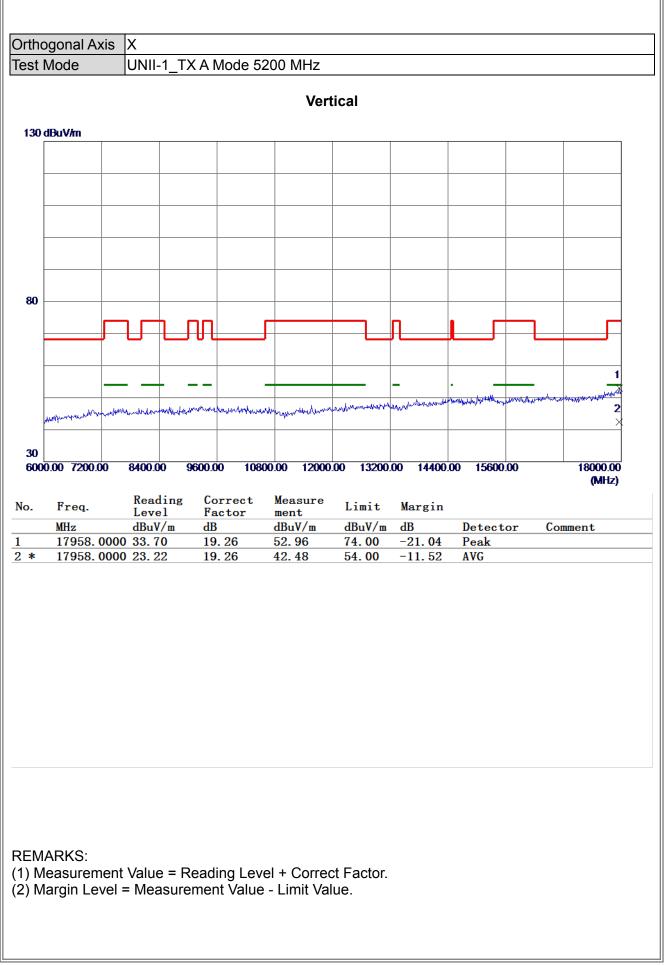






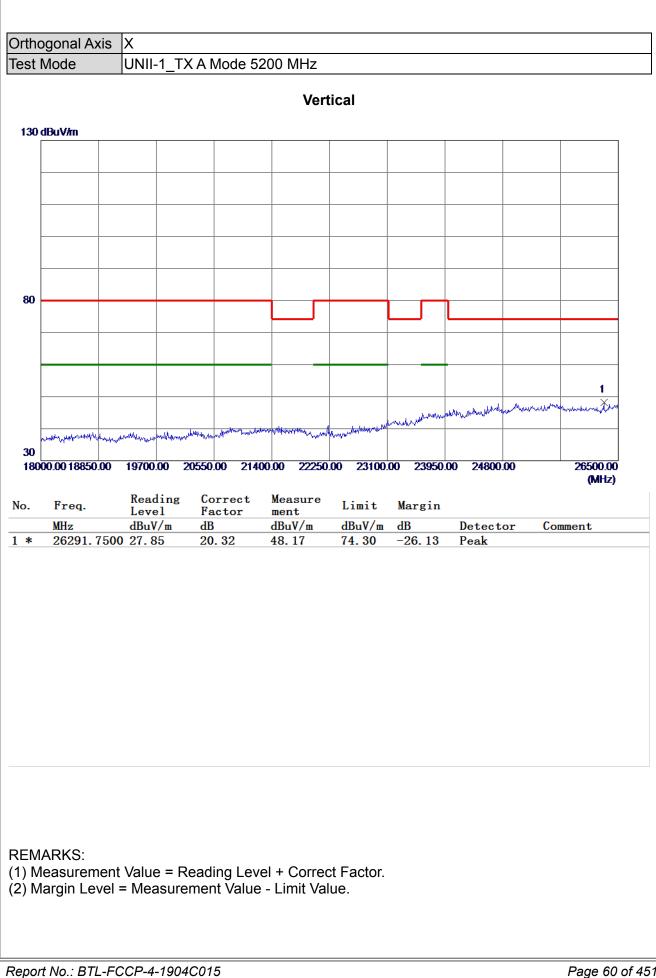






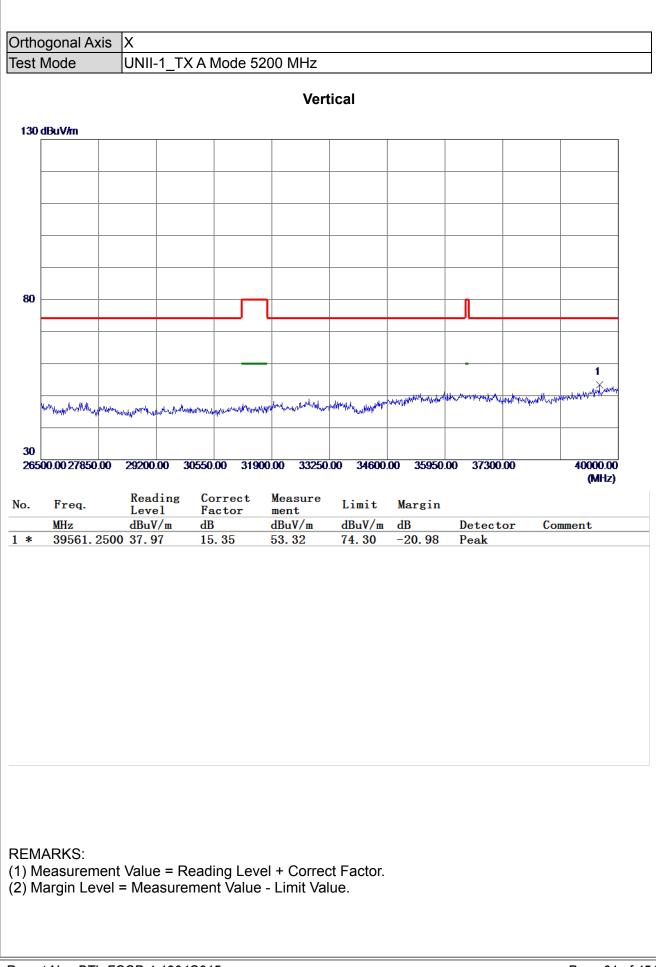






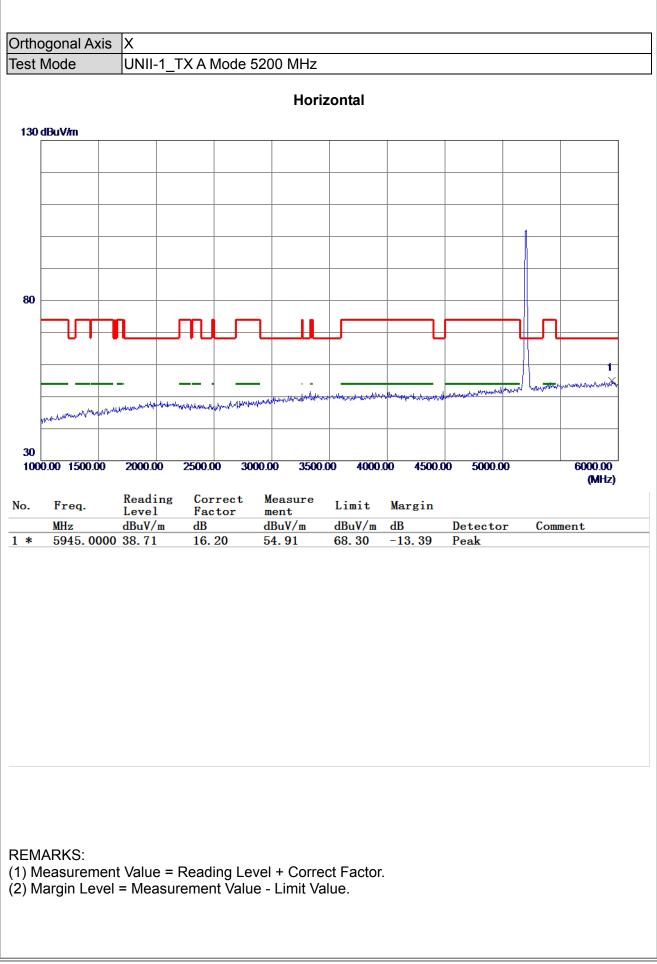






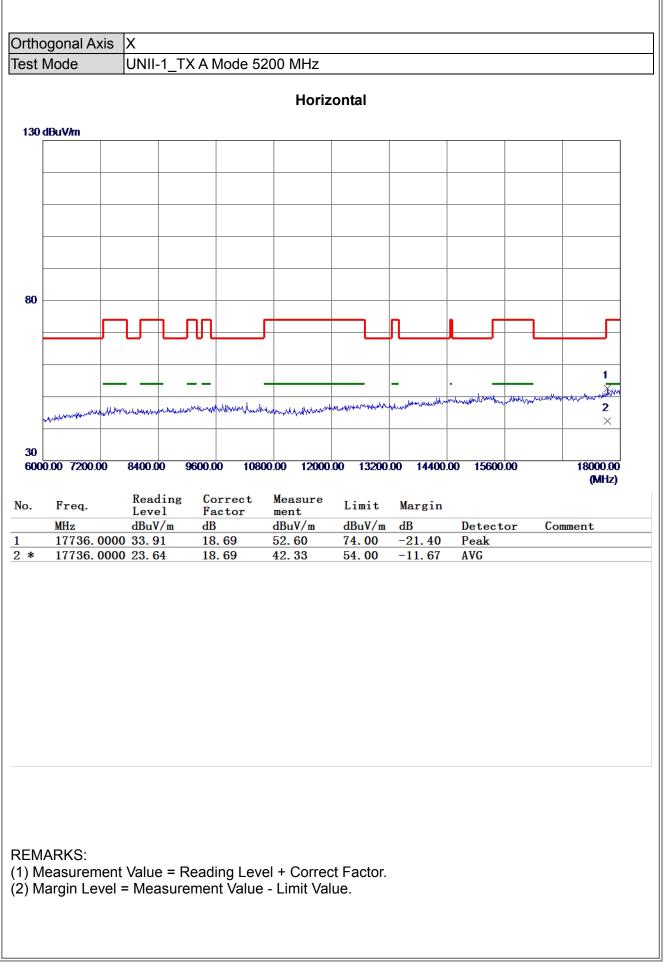






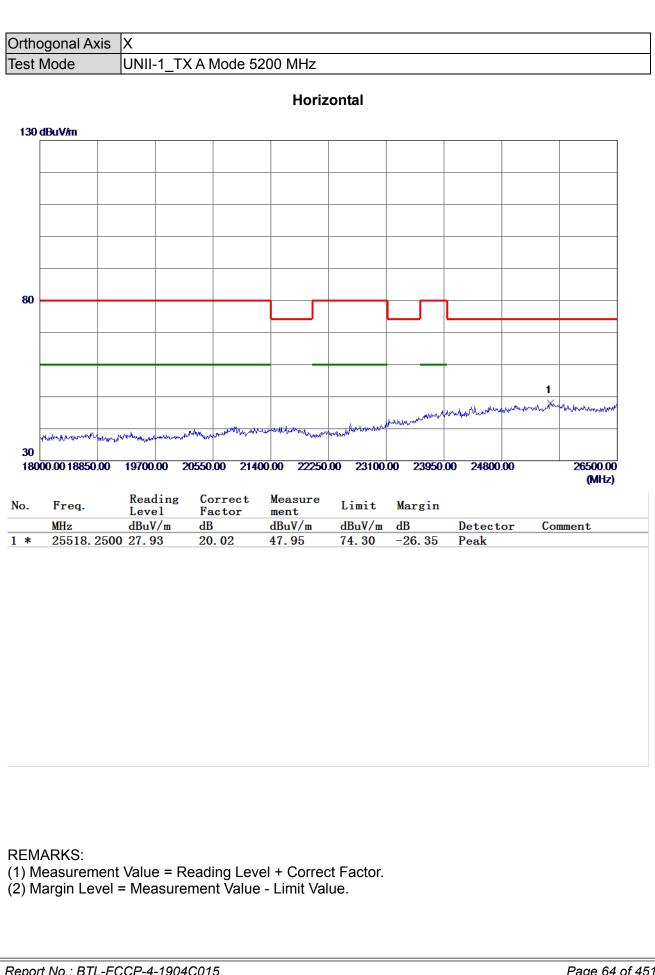






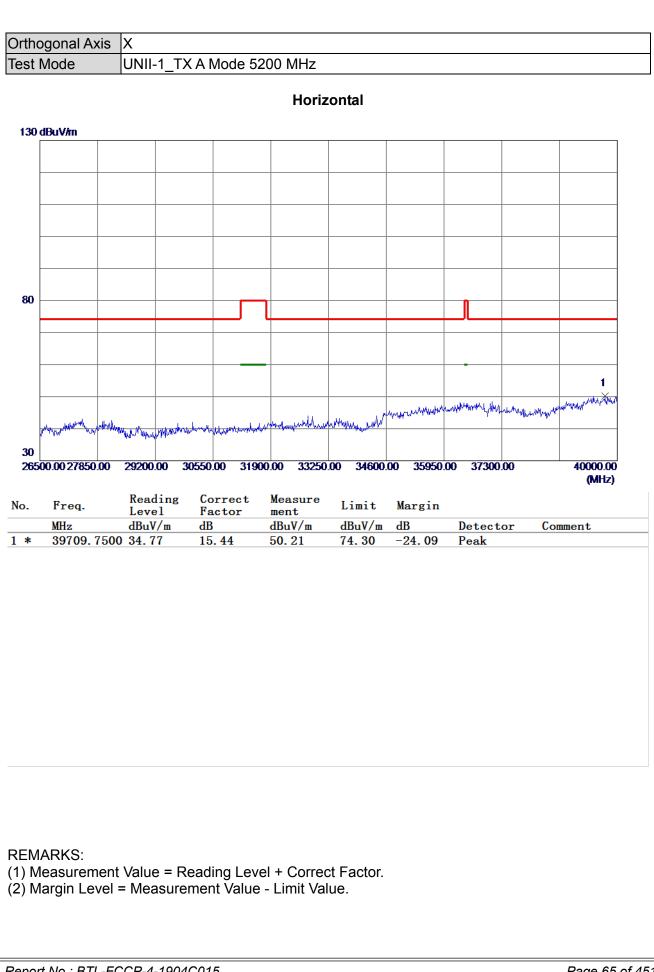






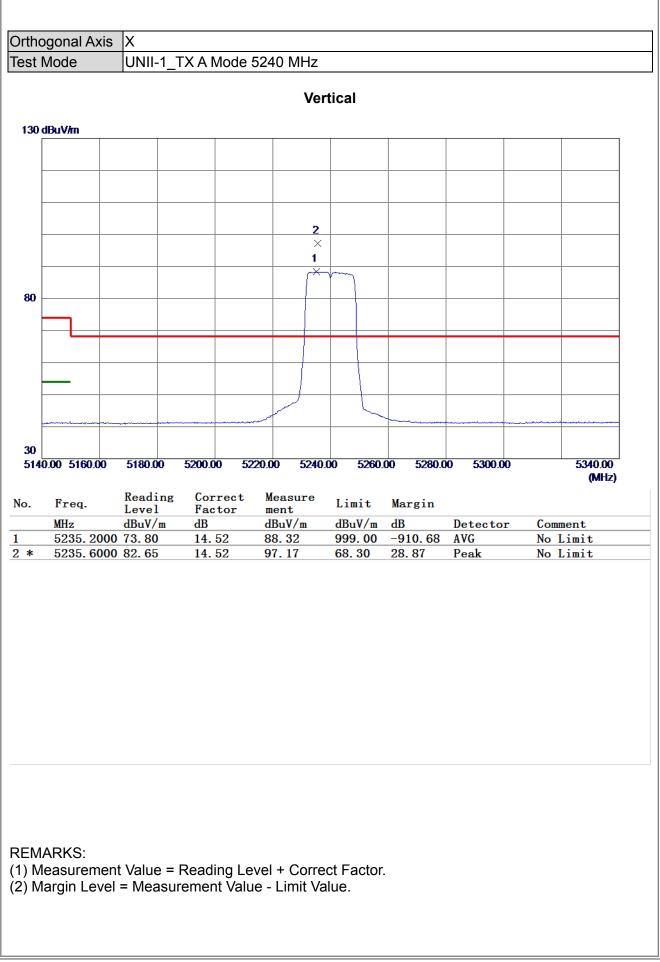






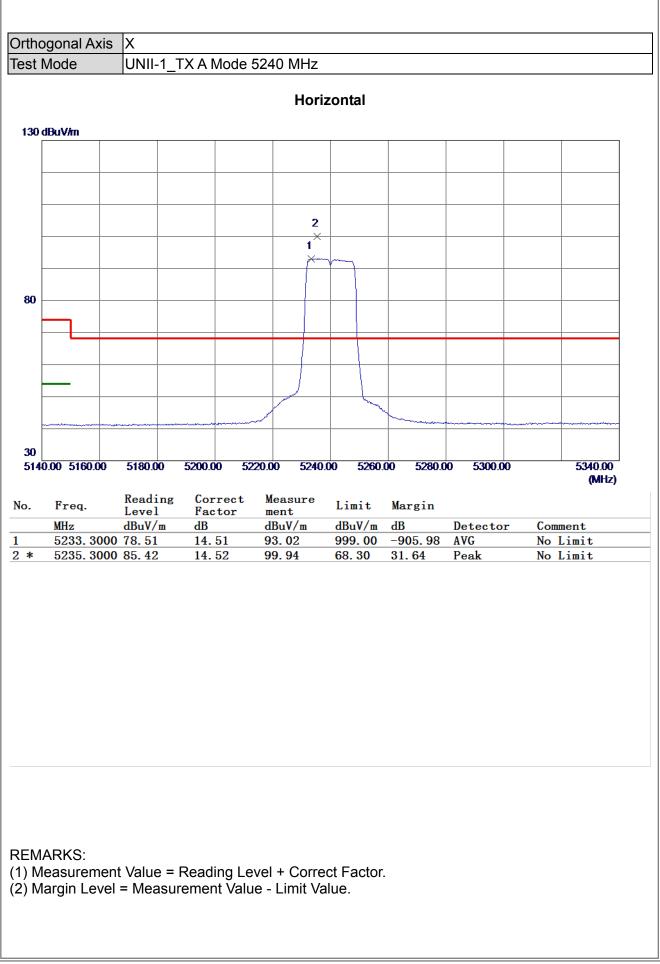






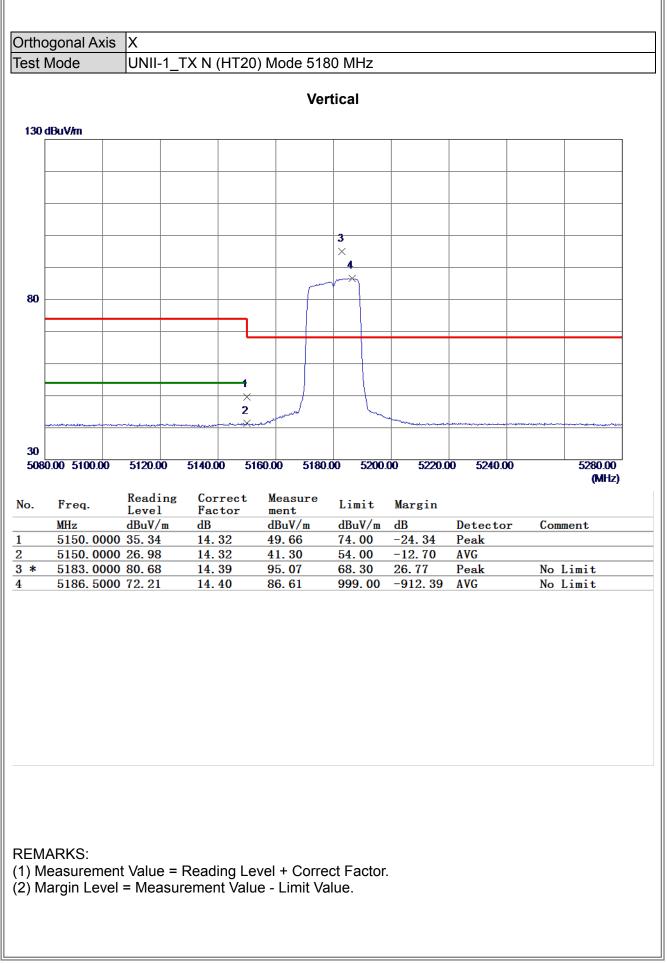






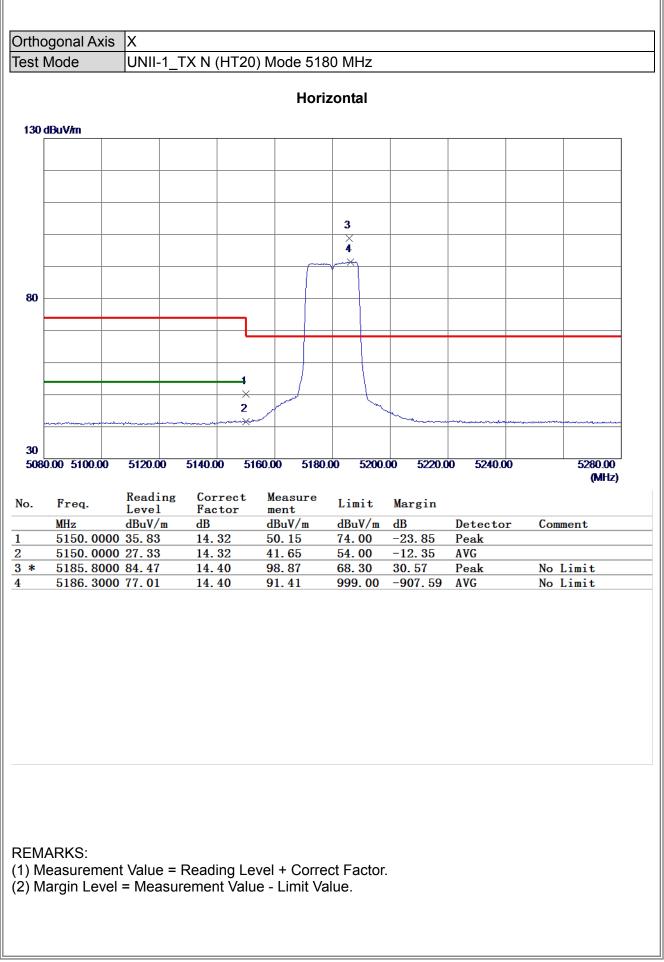












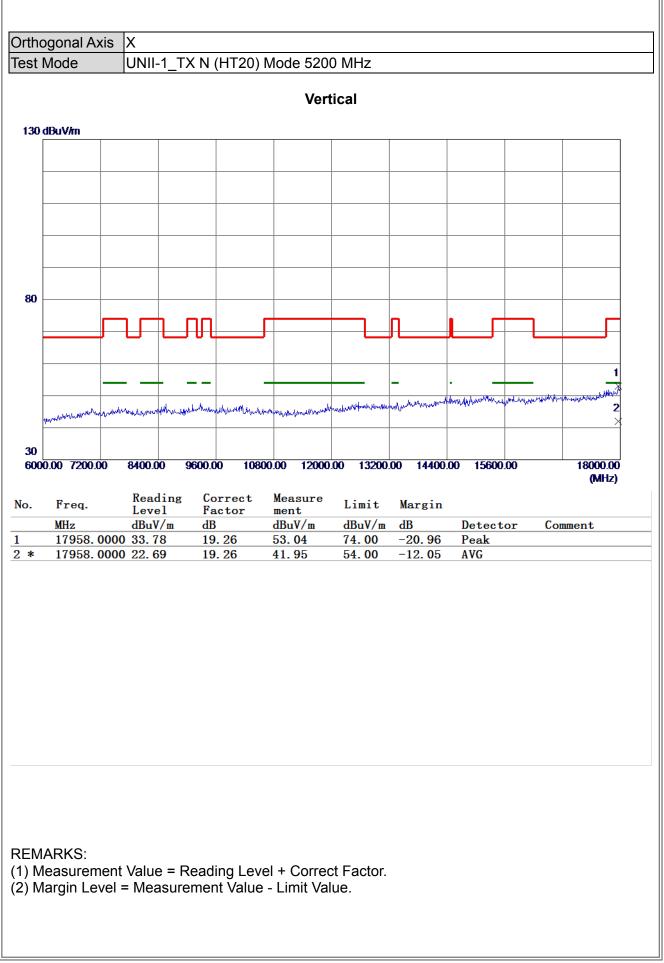






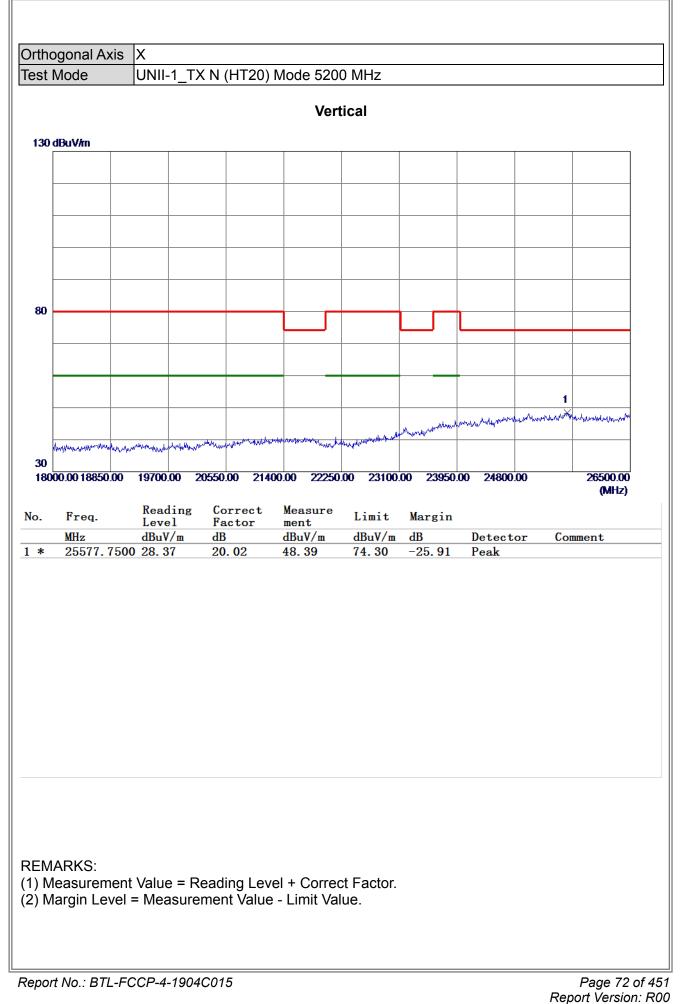






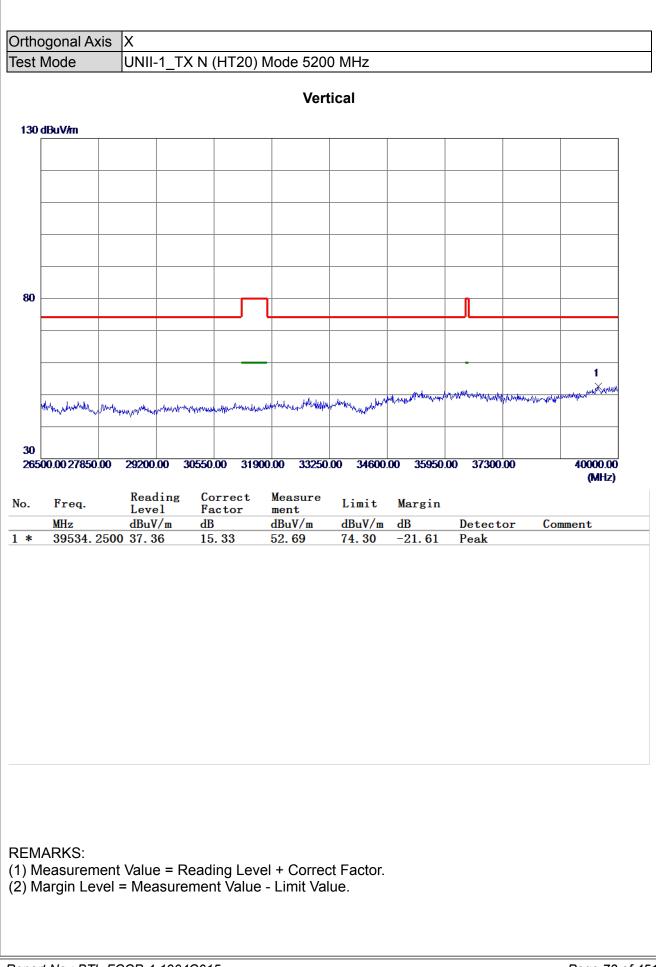












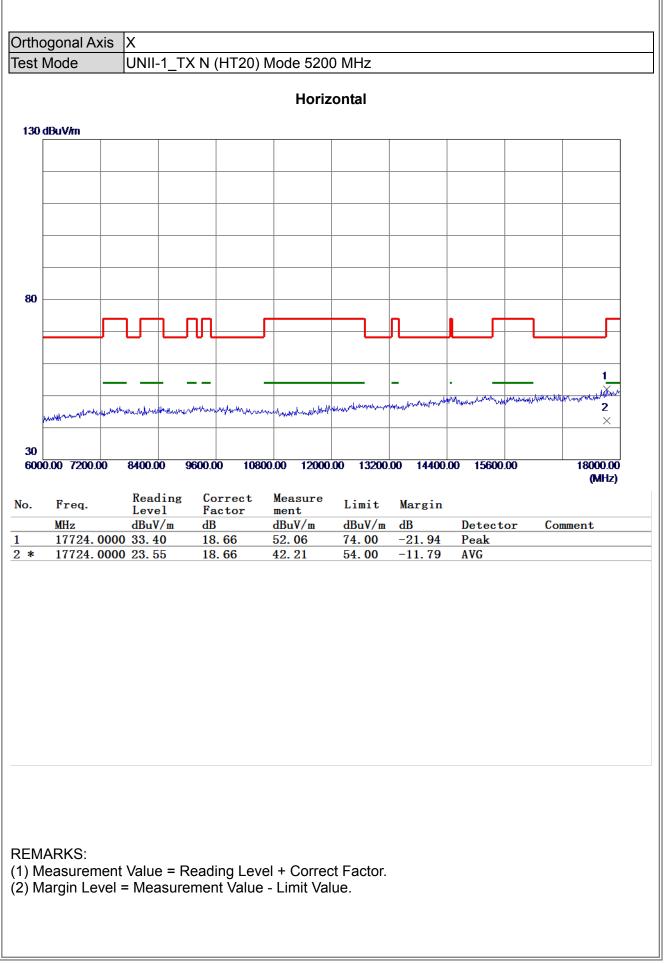






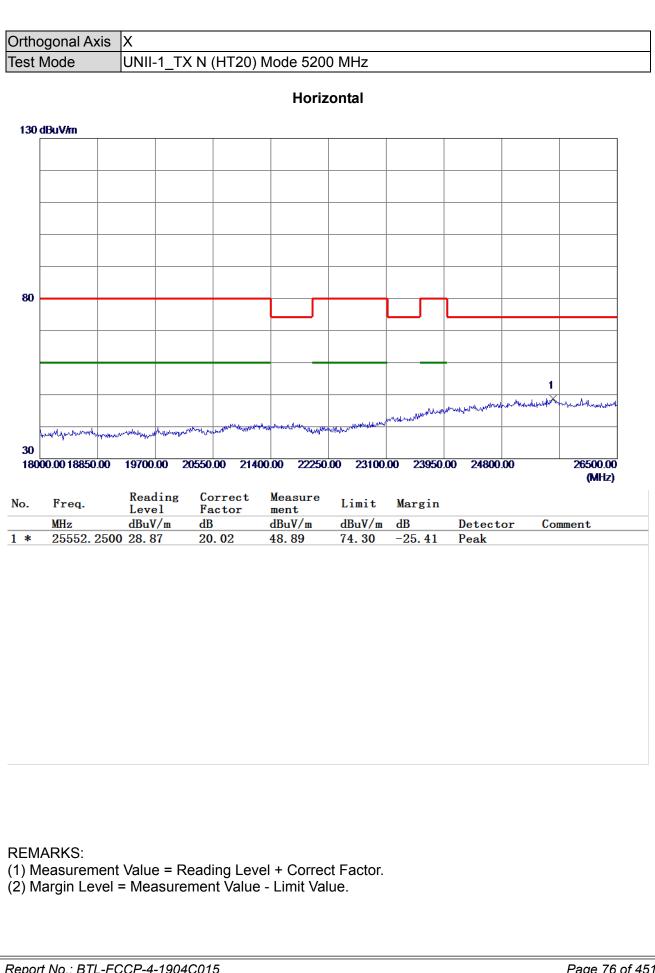






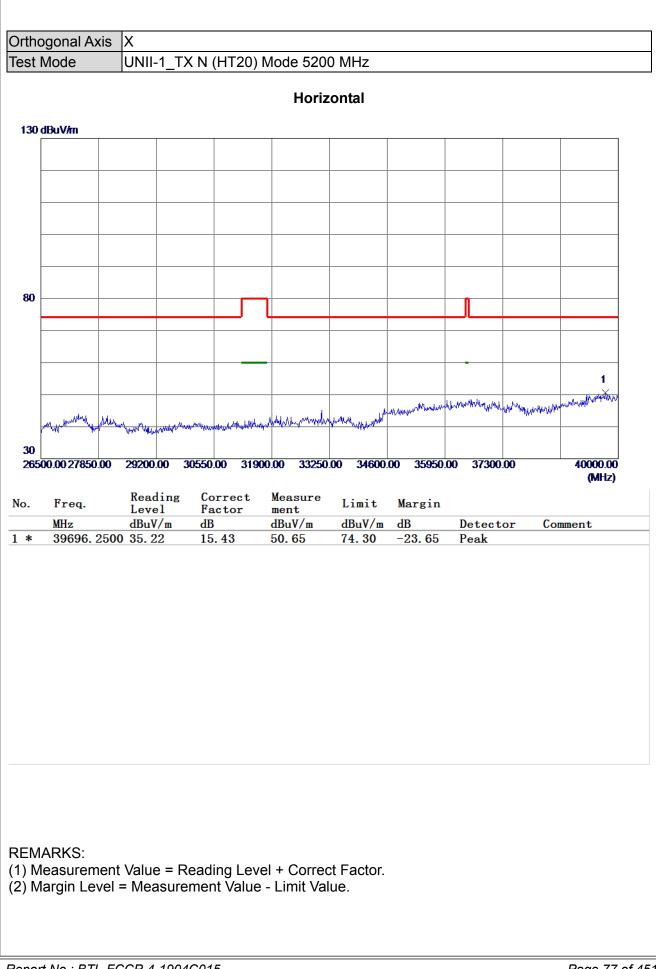






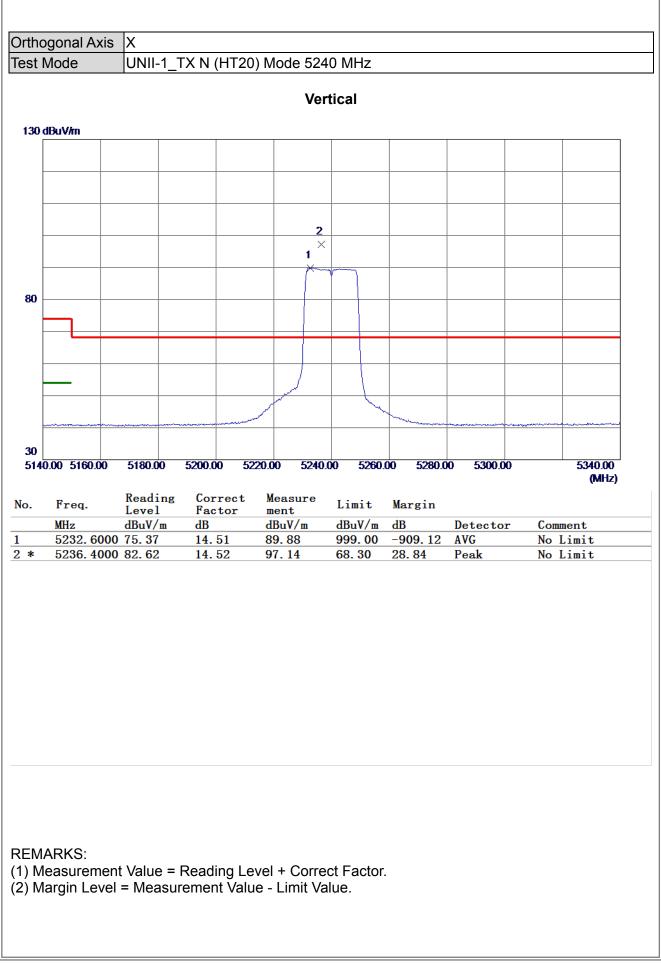






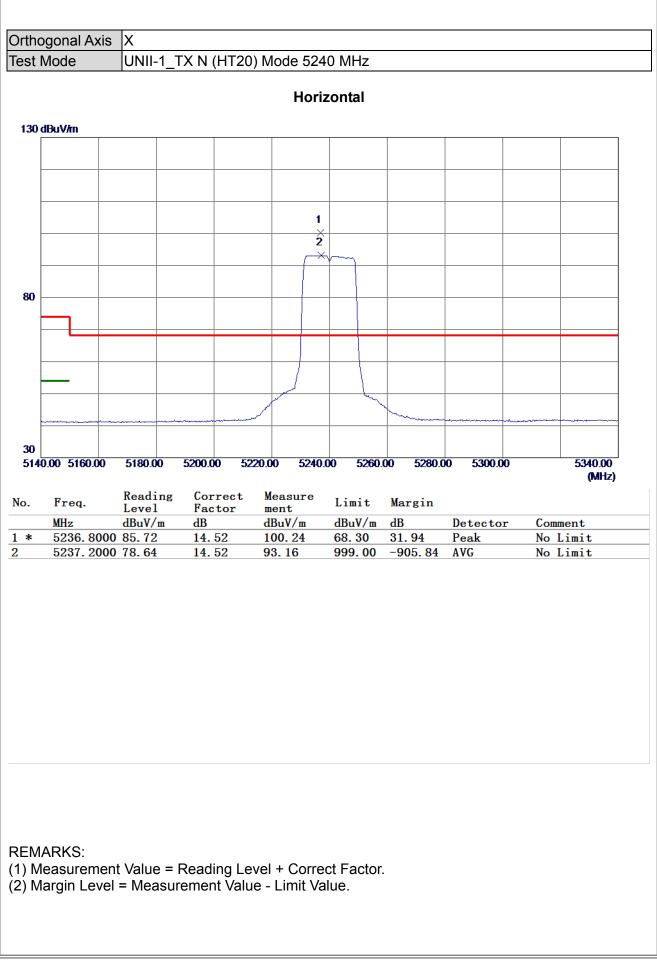






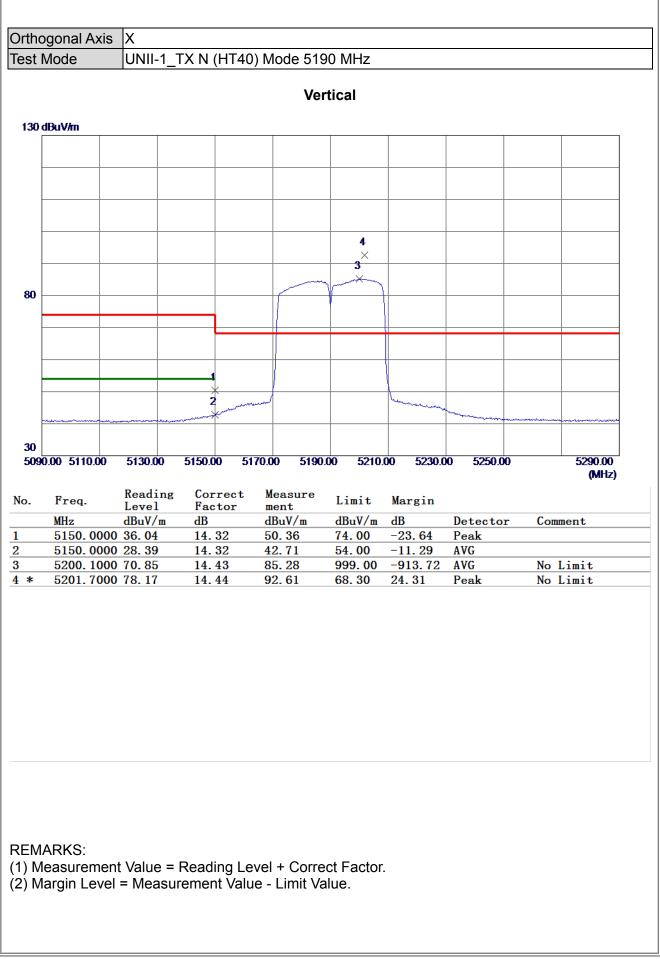












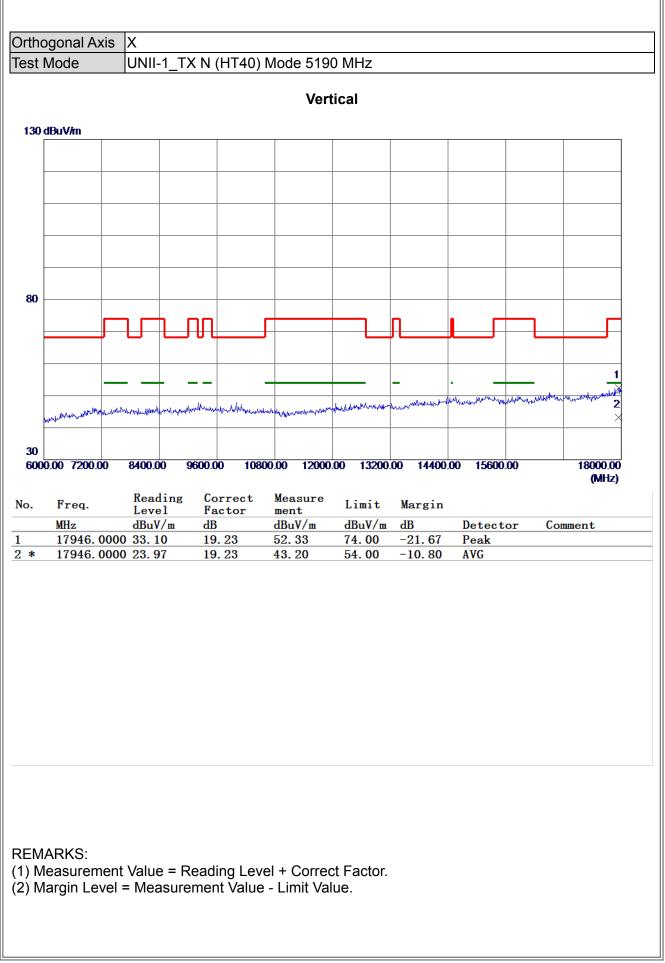






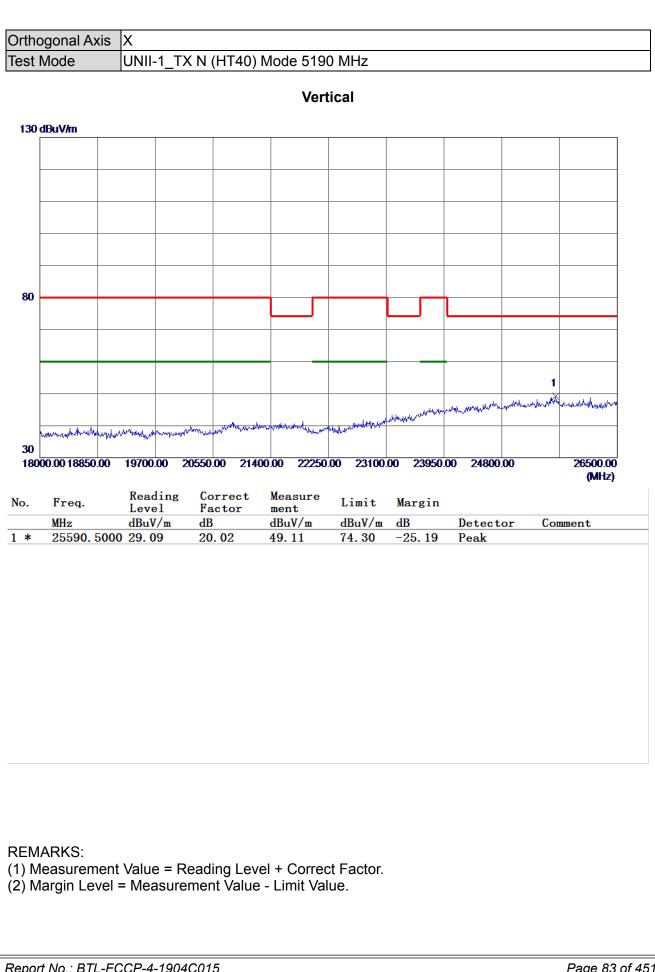






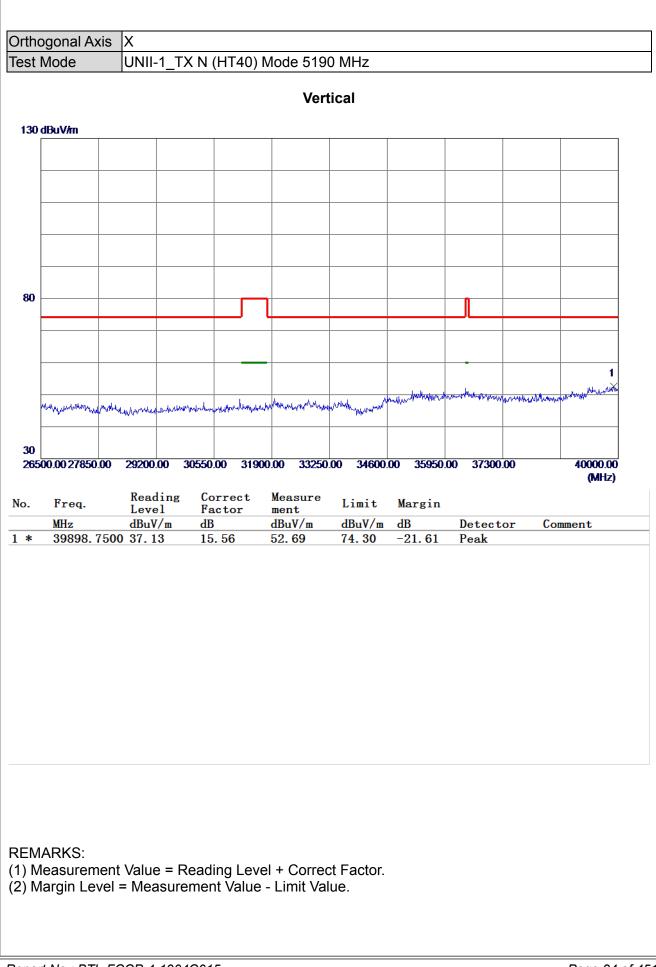






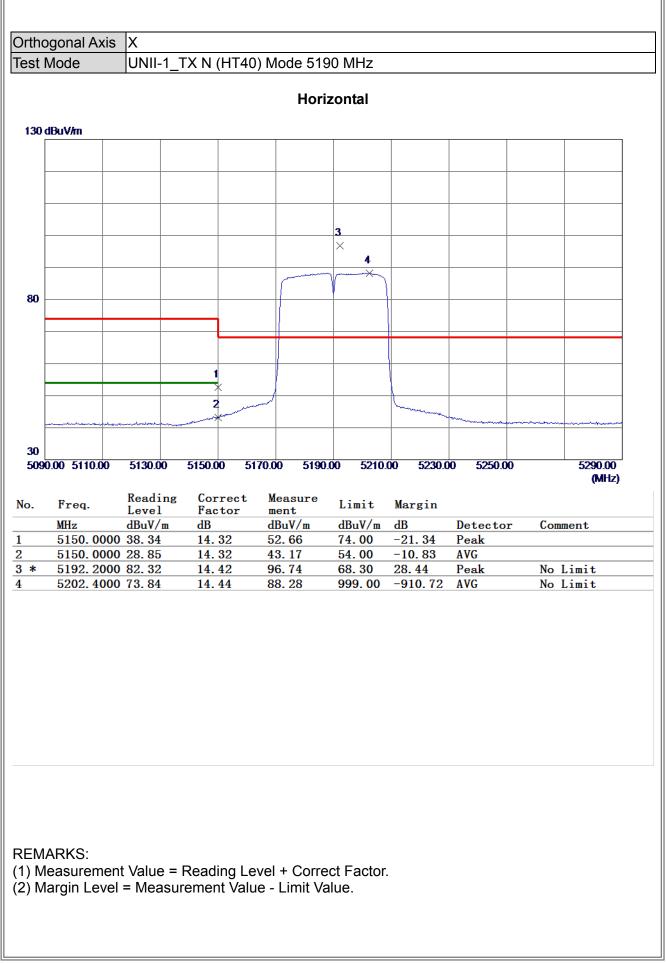






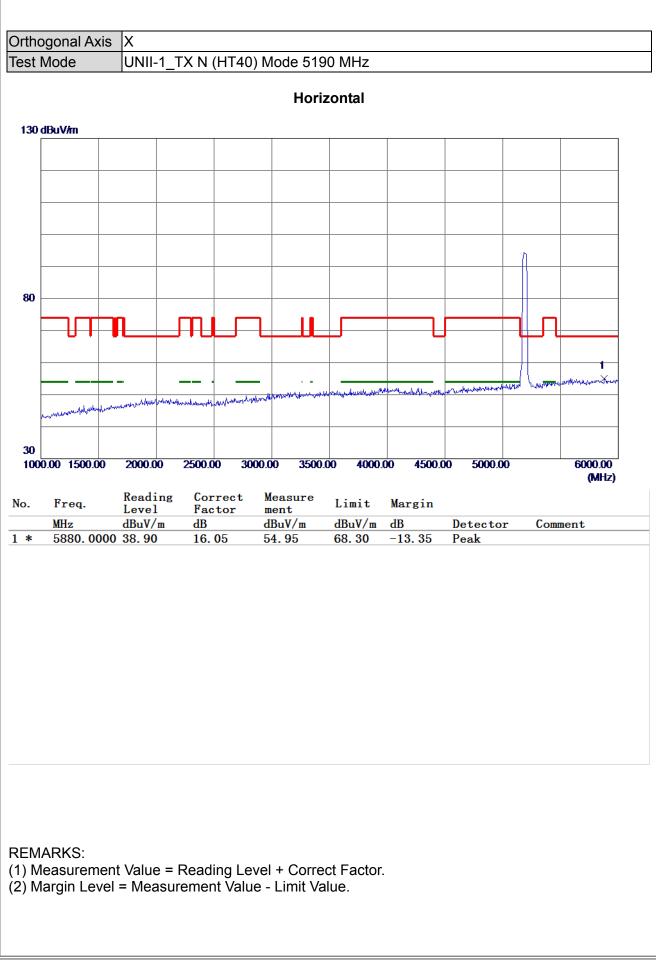






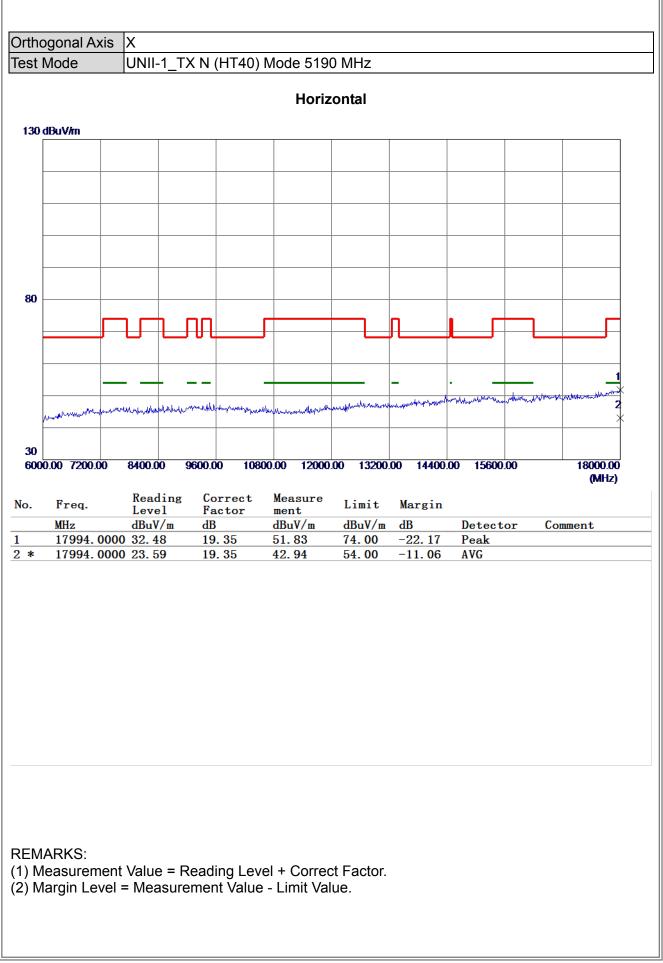






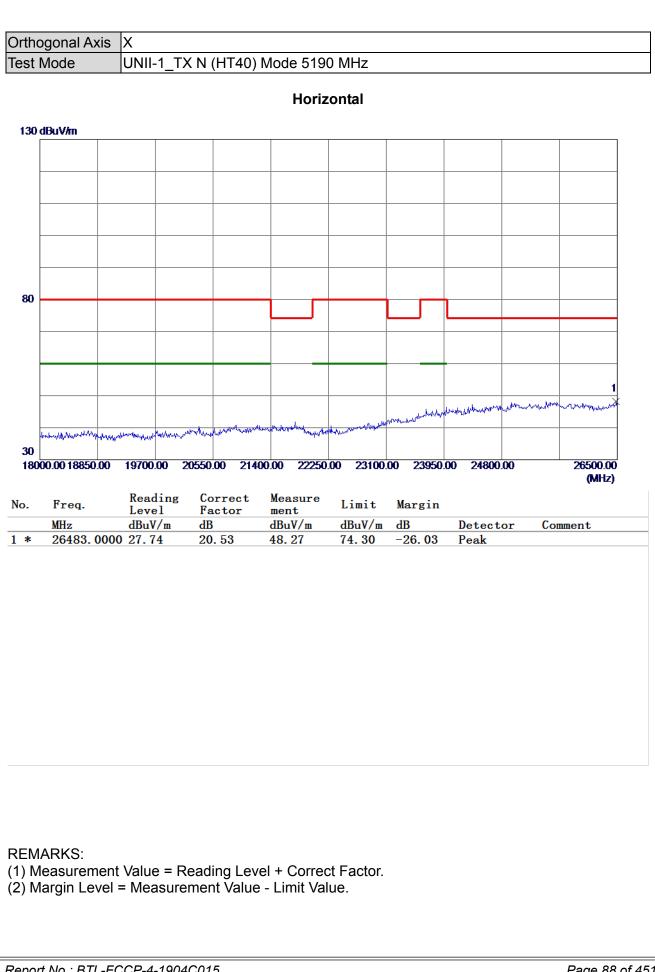






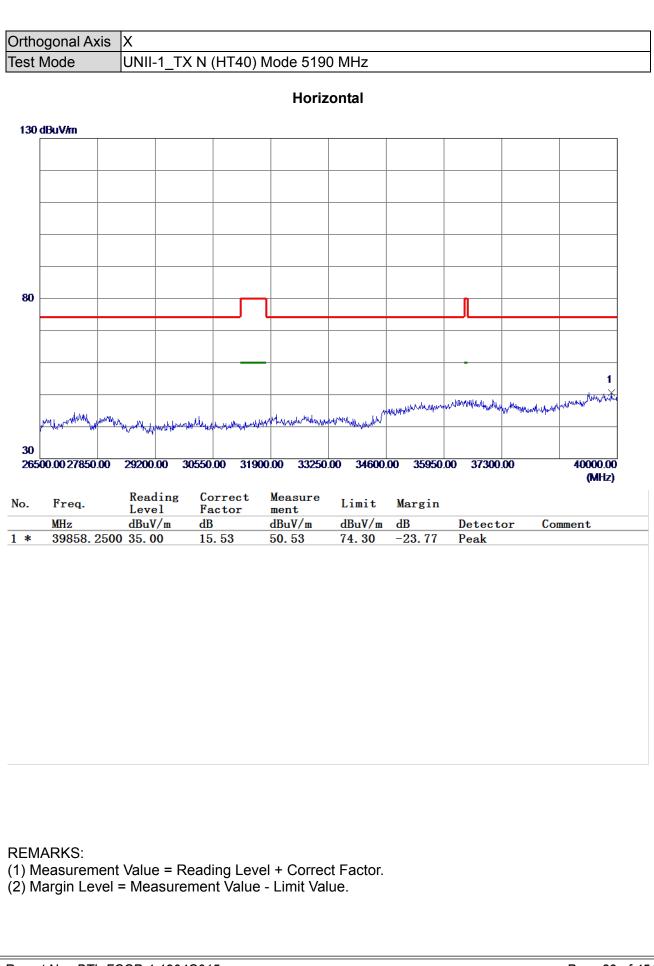






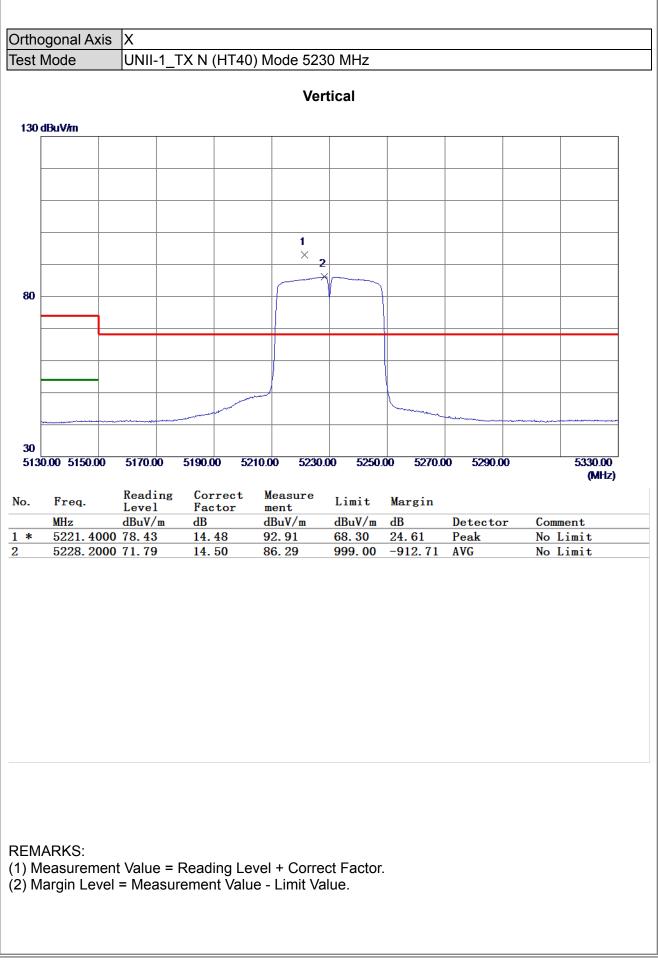












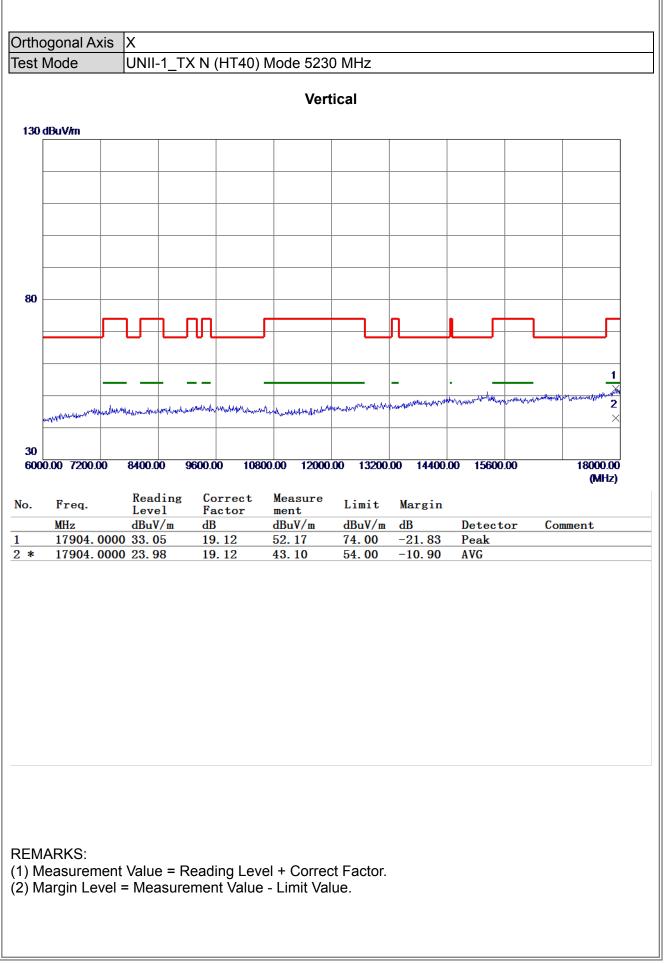






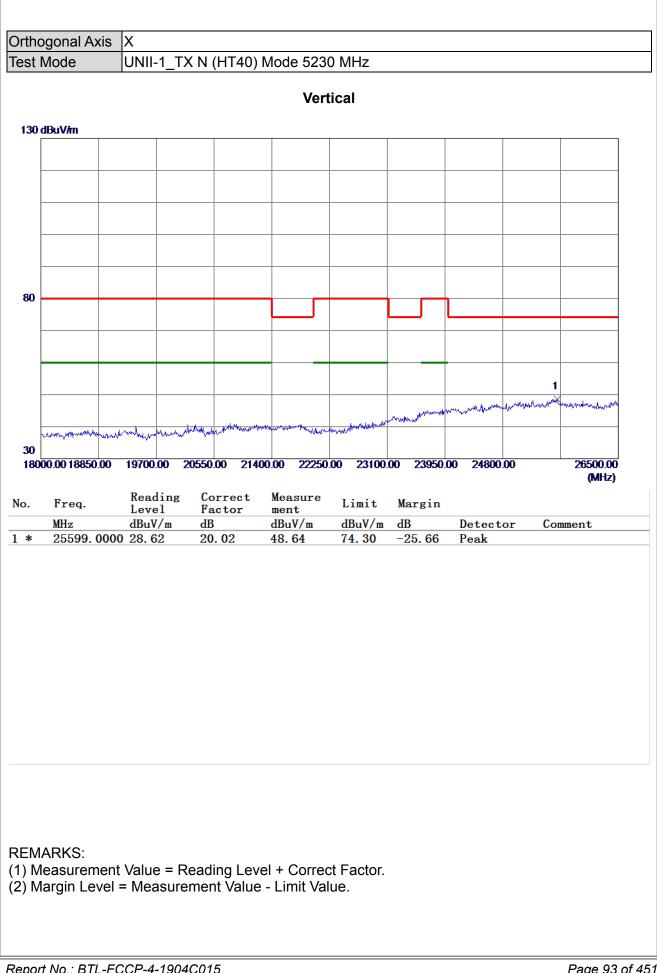






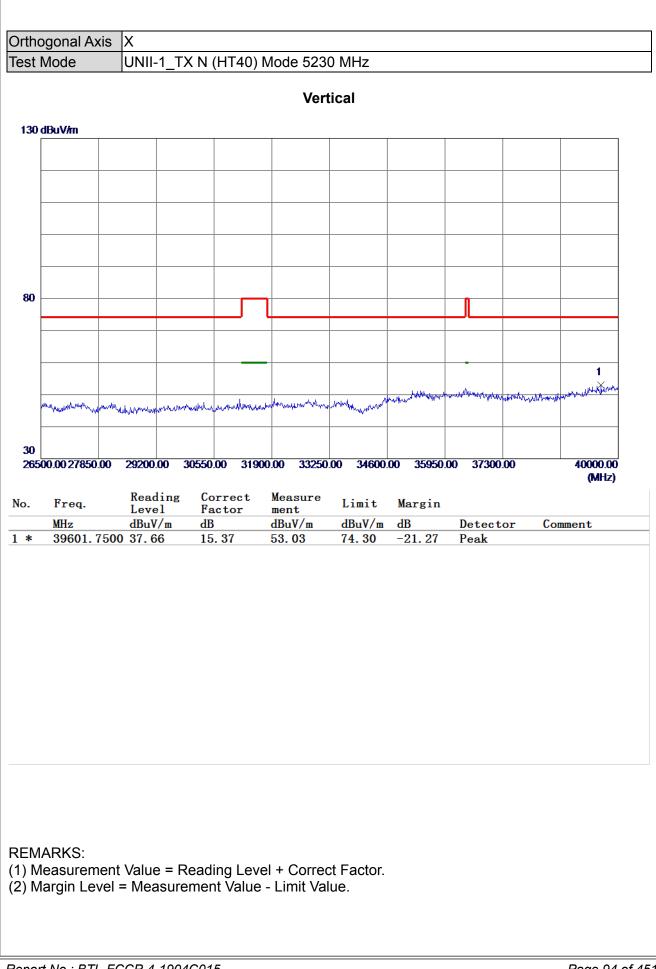






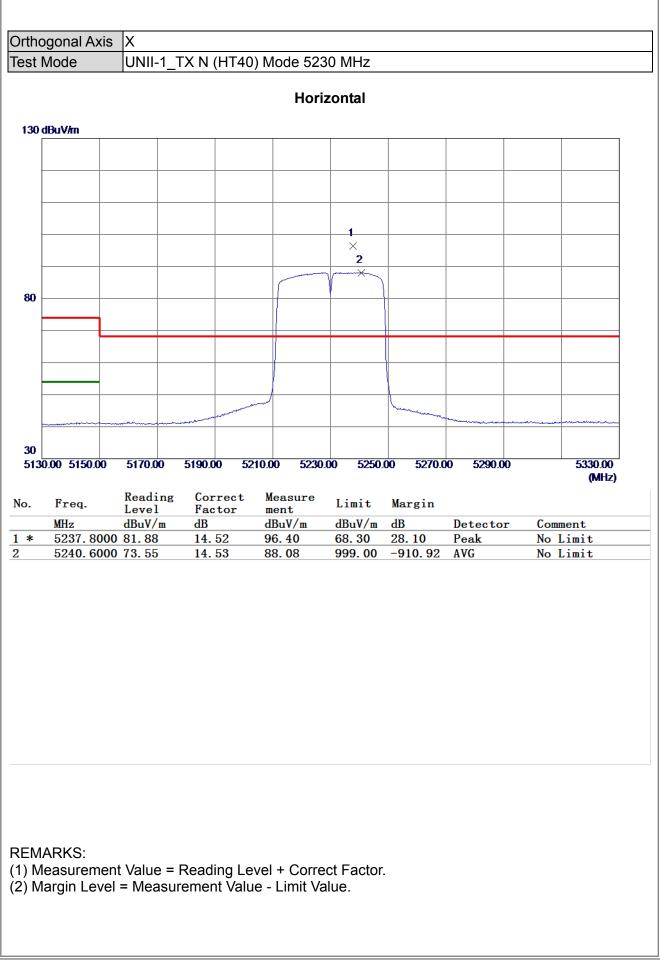






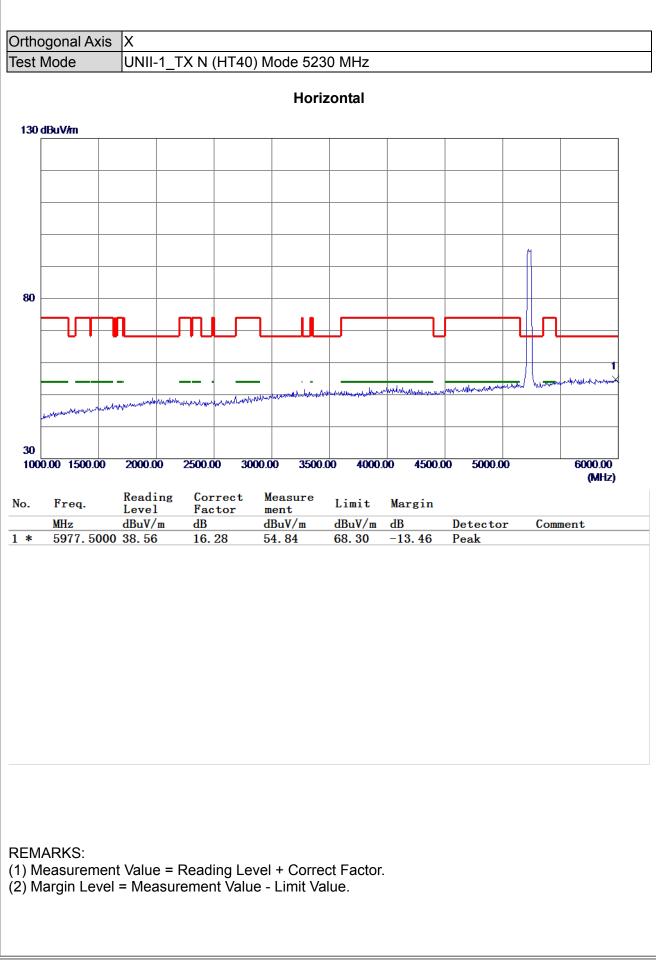






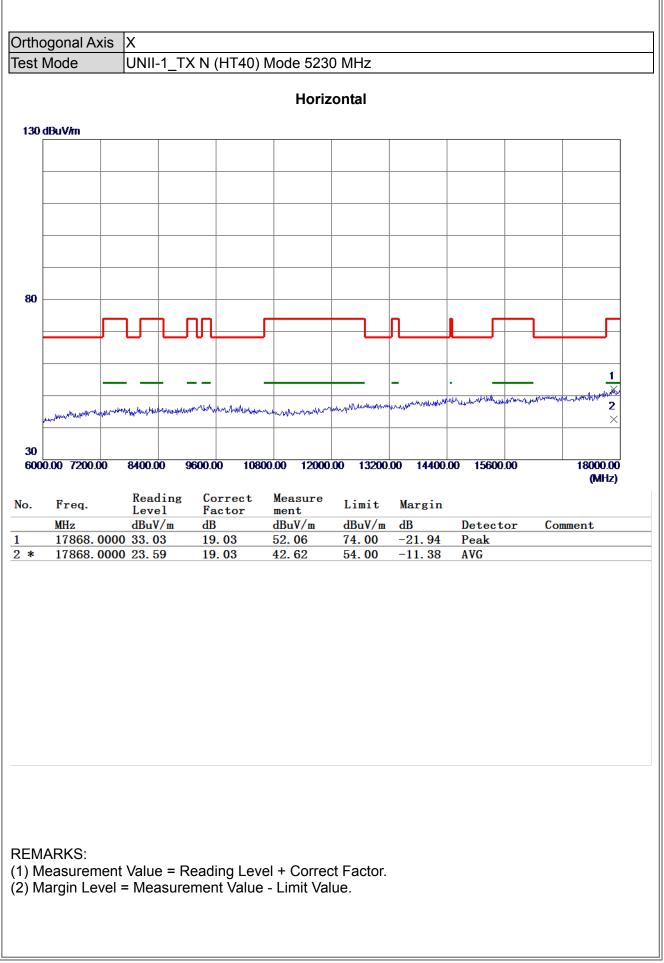






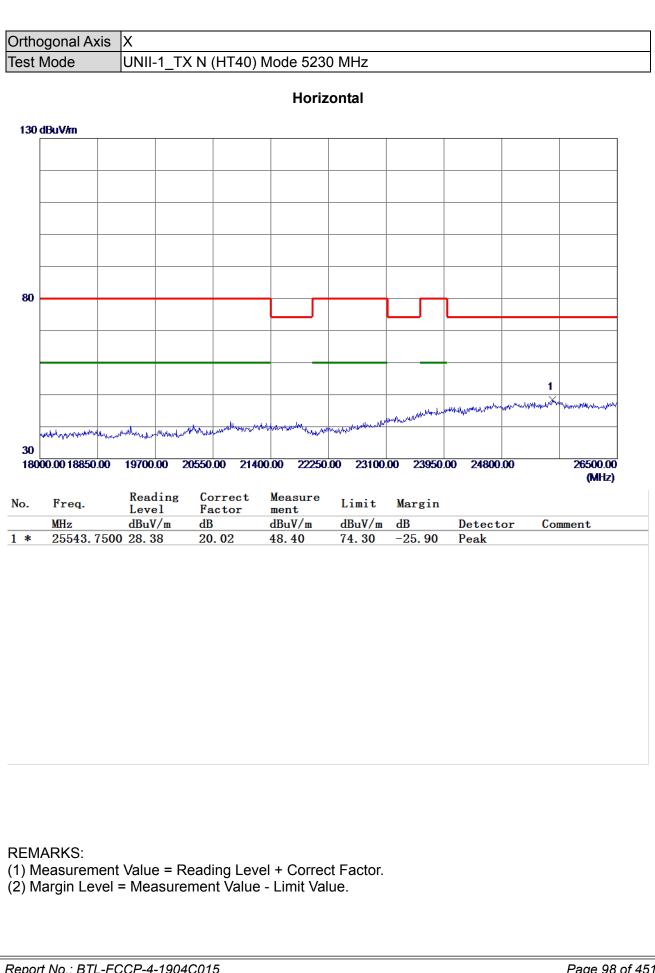






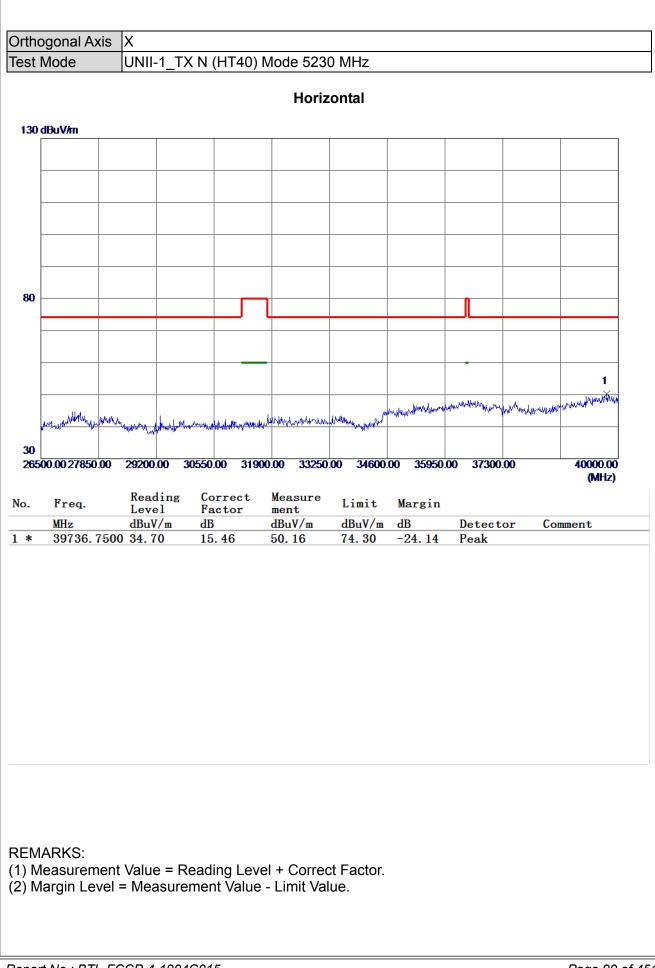






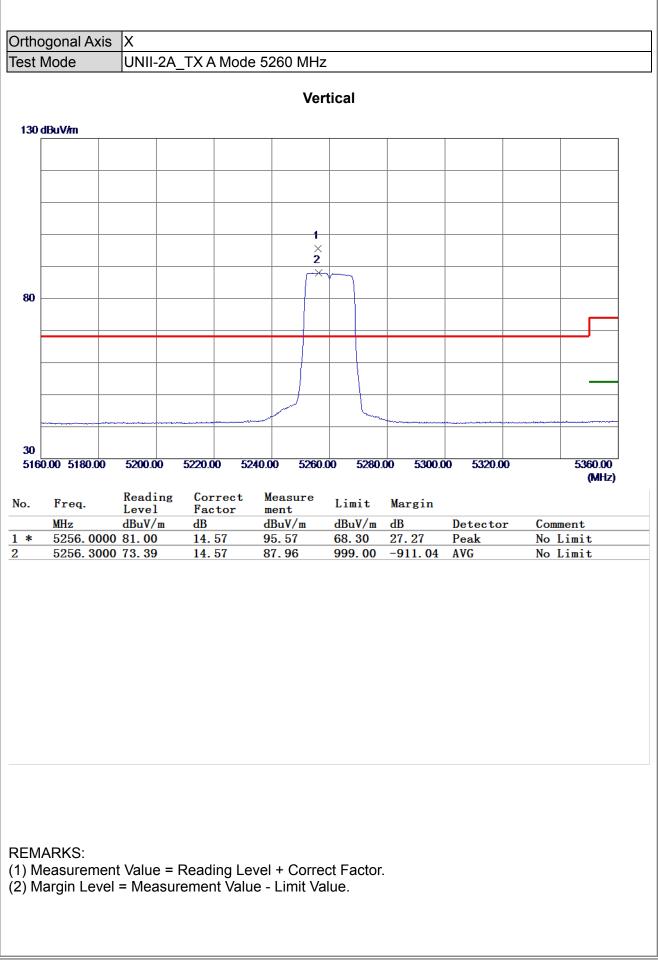






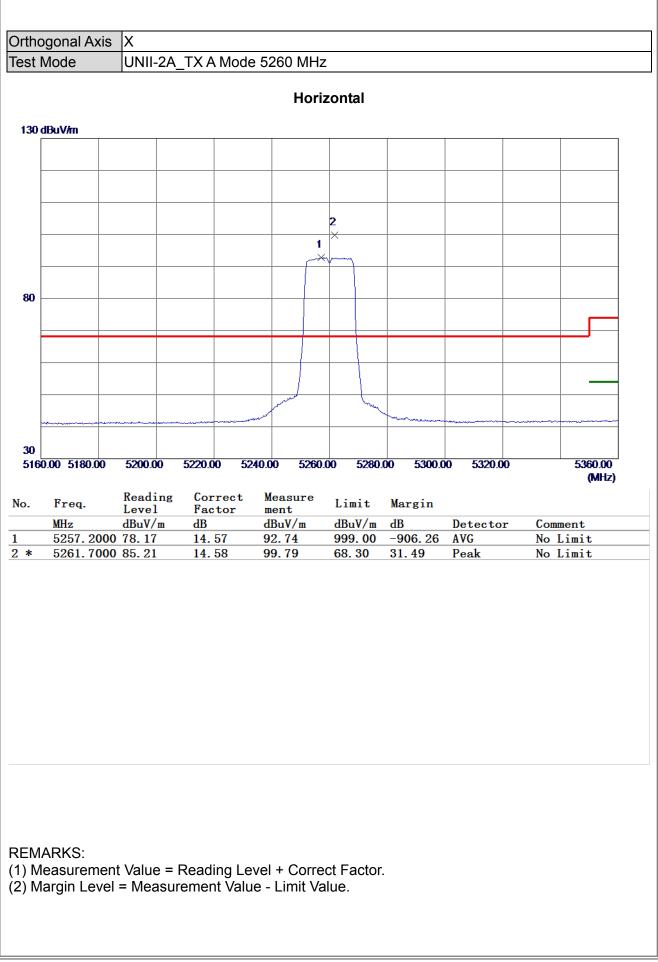












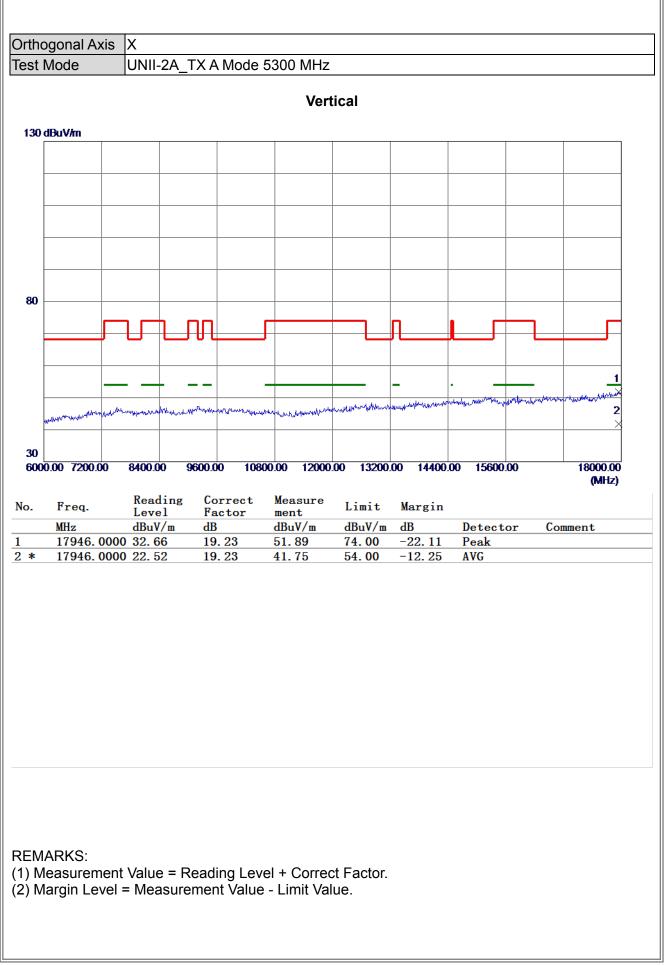






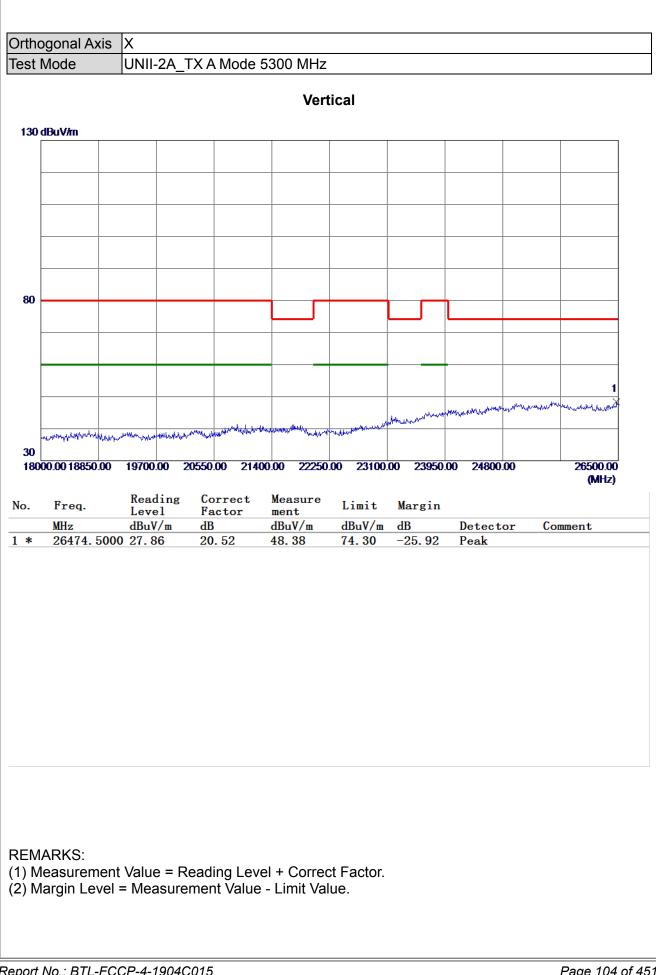






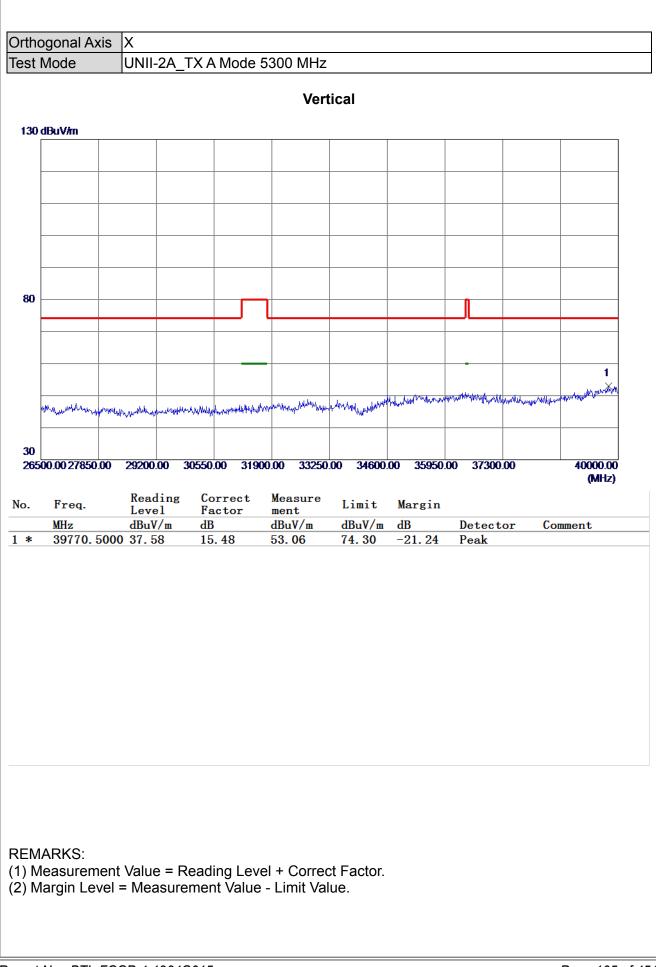






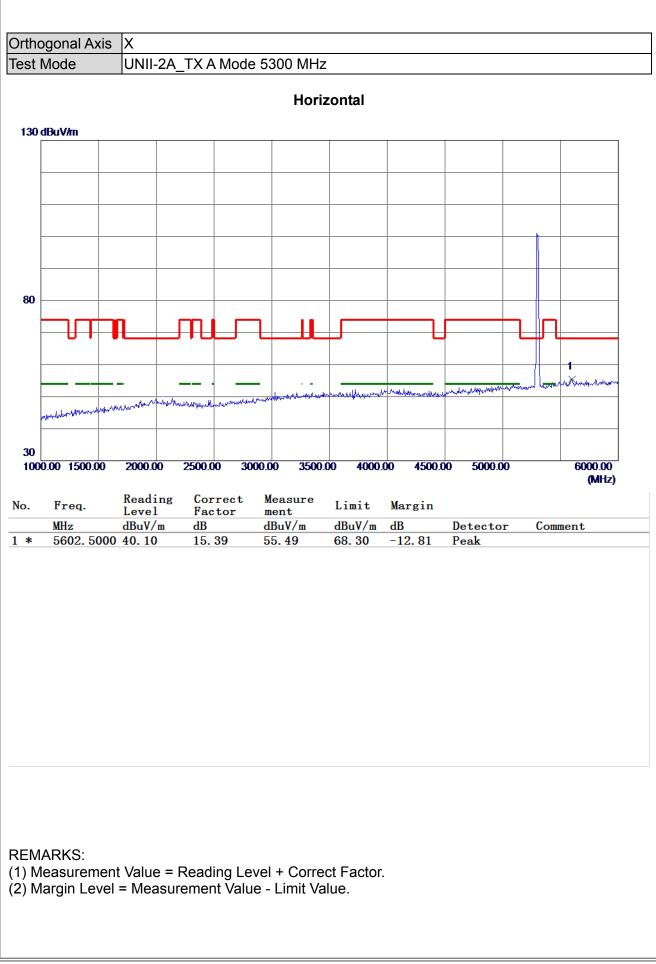






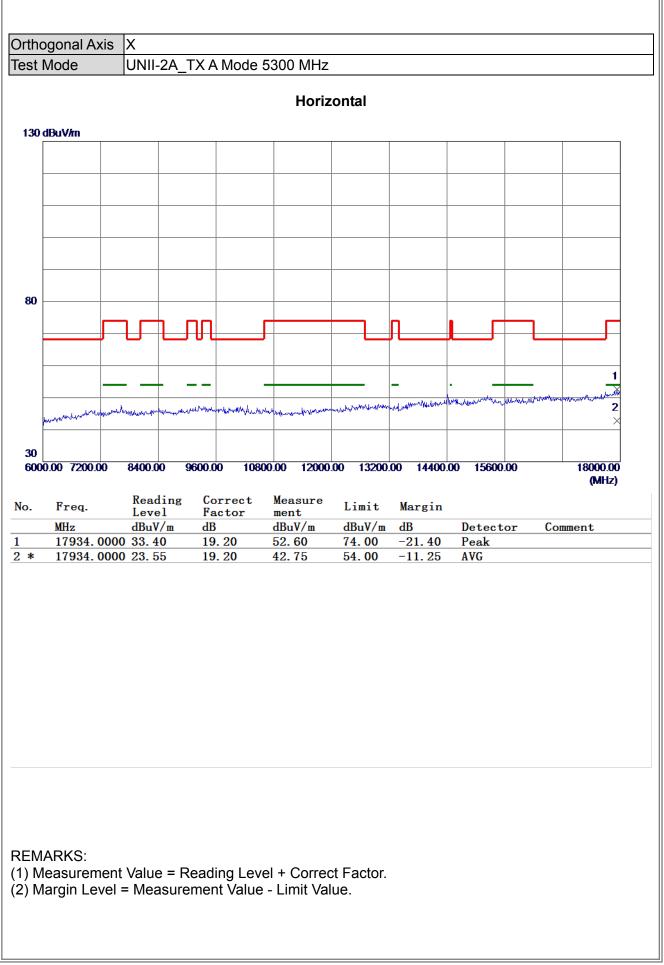






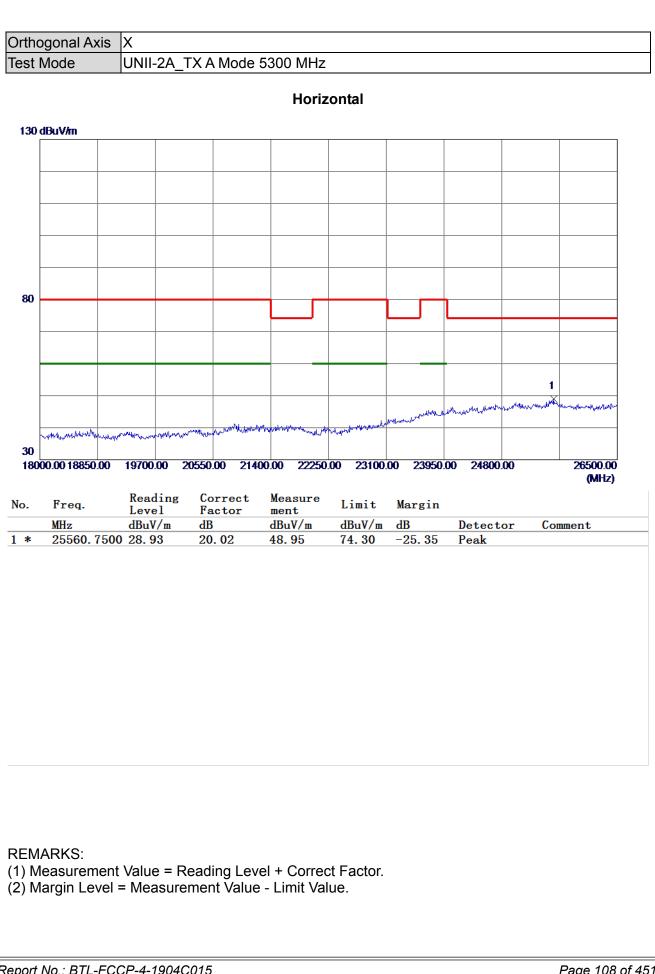






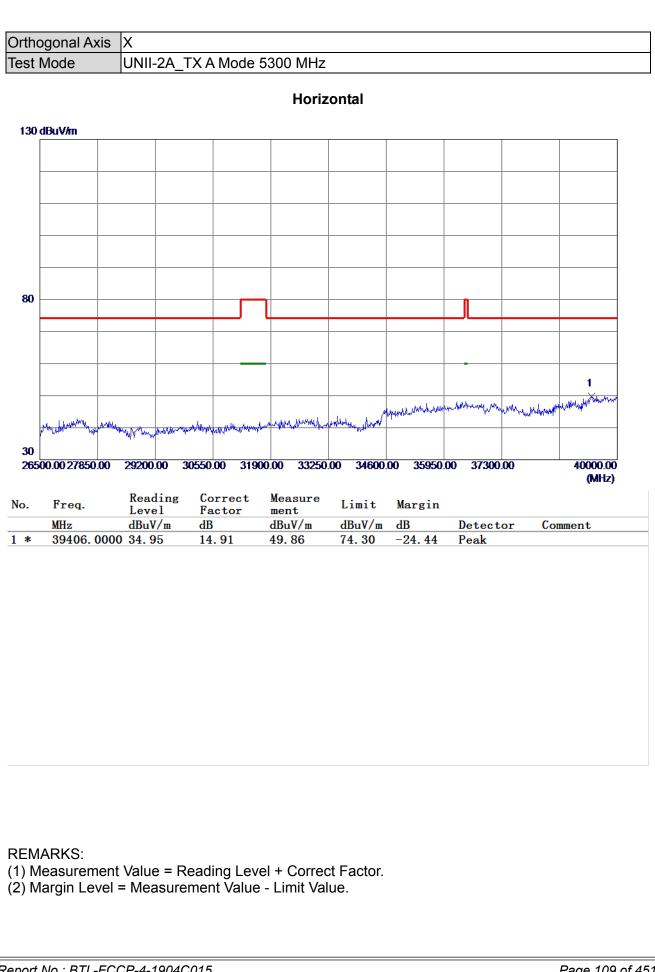






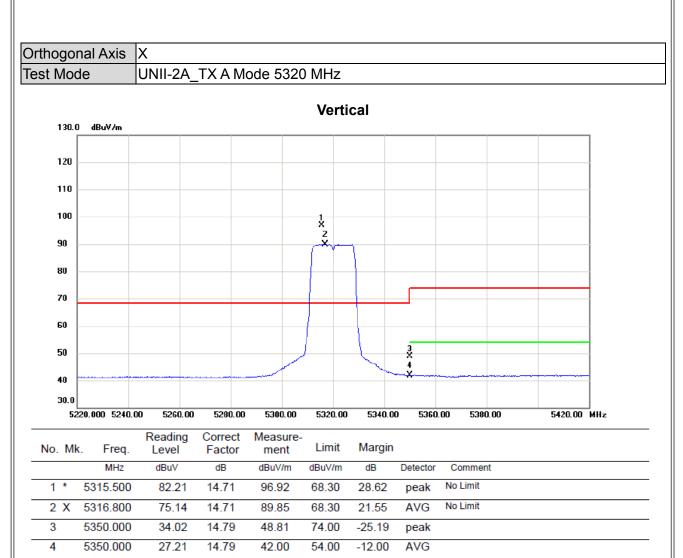










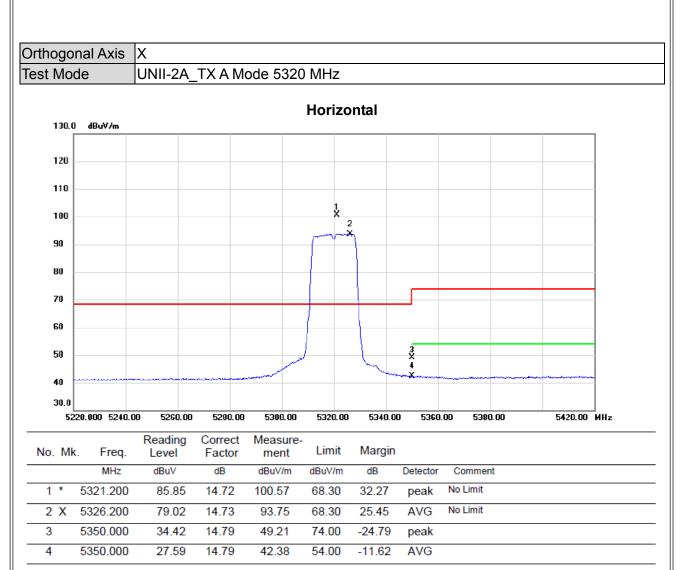


**REMARKS**:

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value Limit Value.



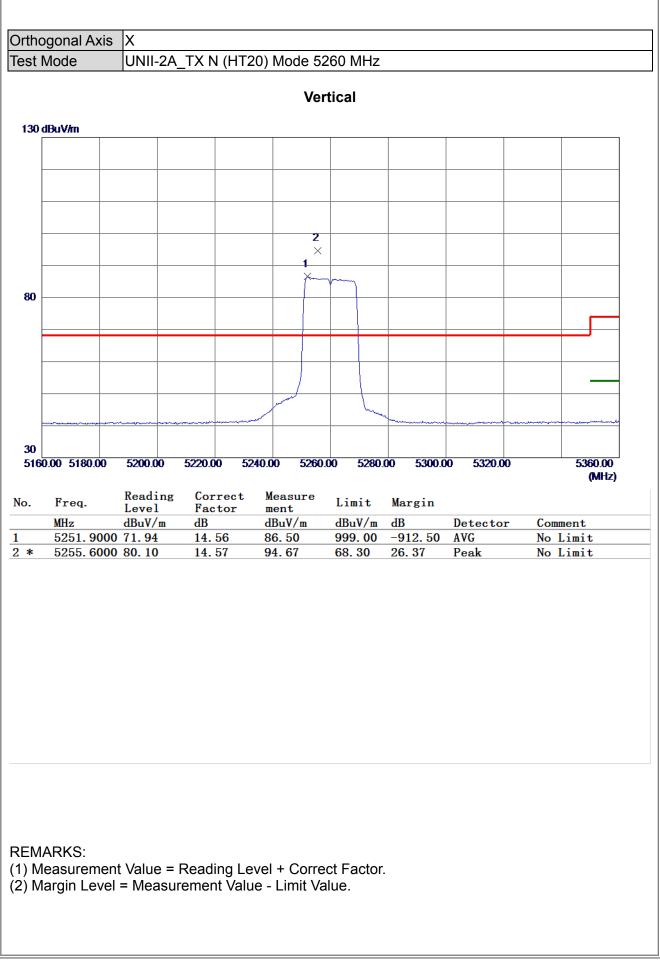




REMARKS: (1) Measurement Value = Reading Level + Correct Factor. (2) Margin Level = Measurement Value - Limit Value.

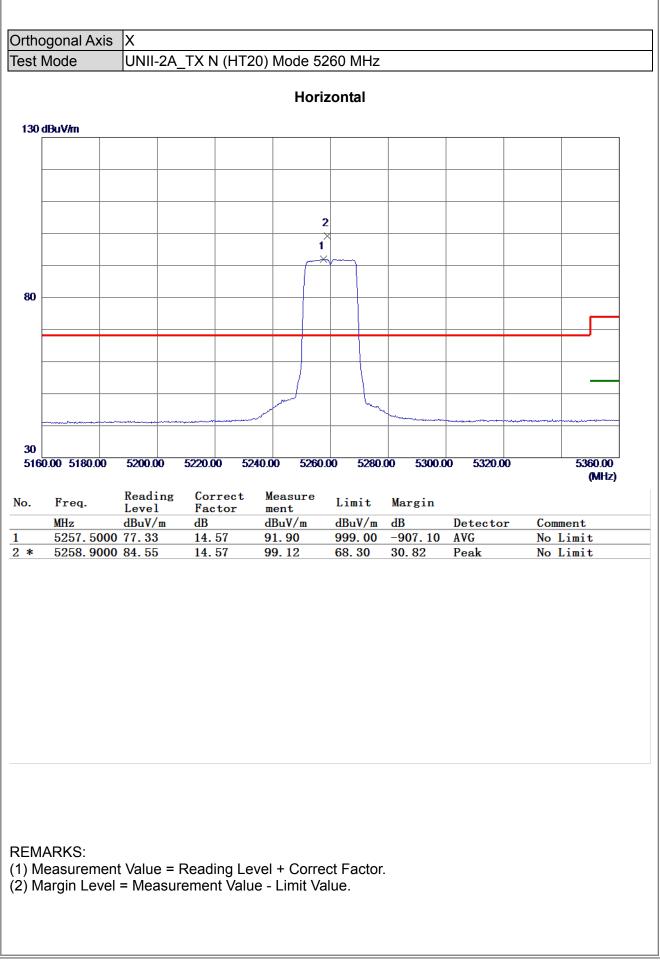






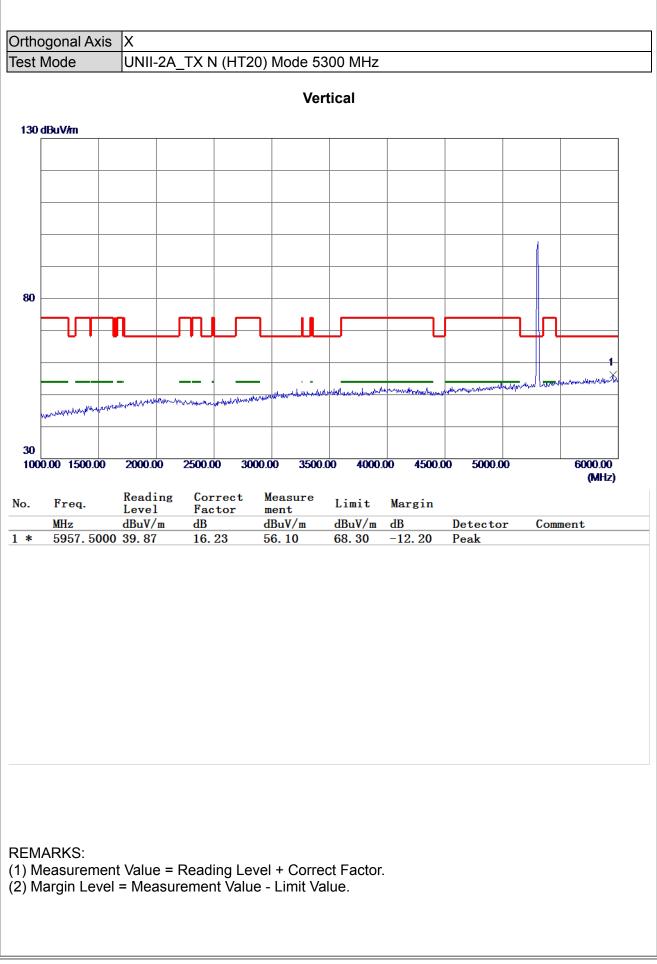






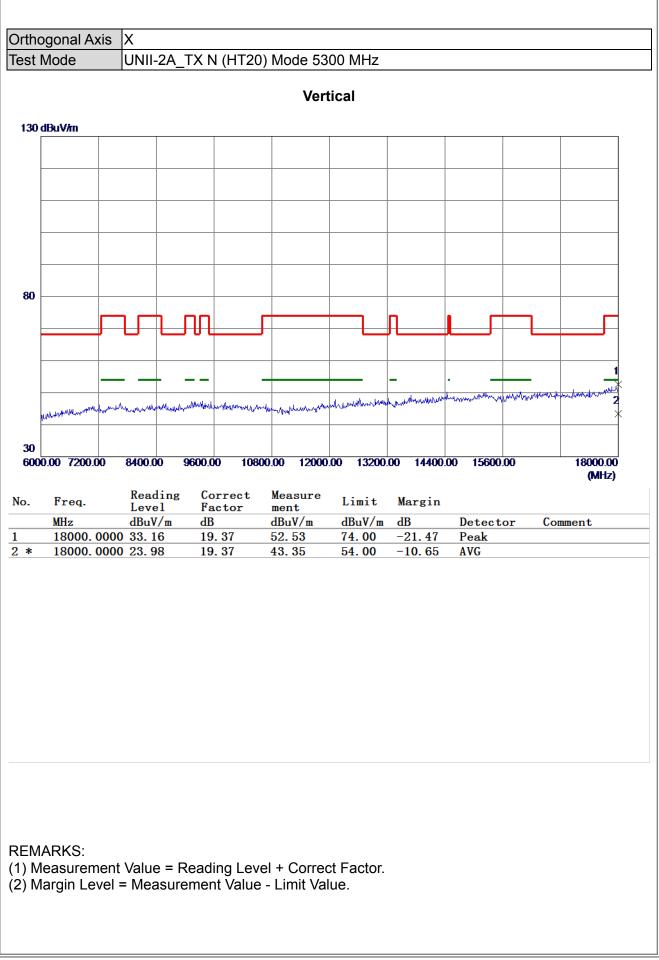






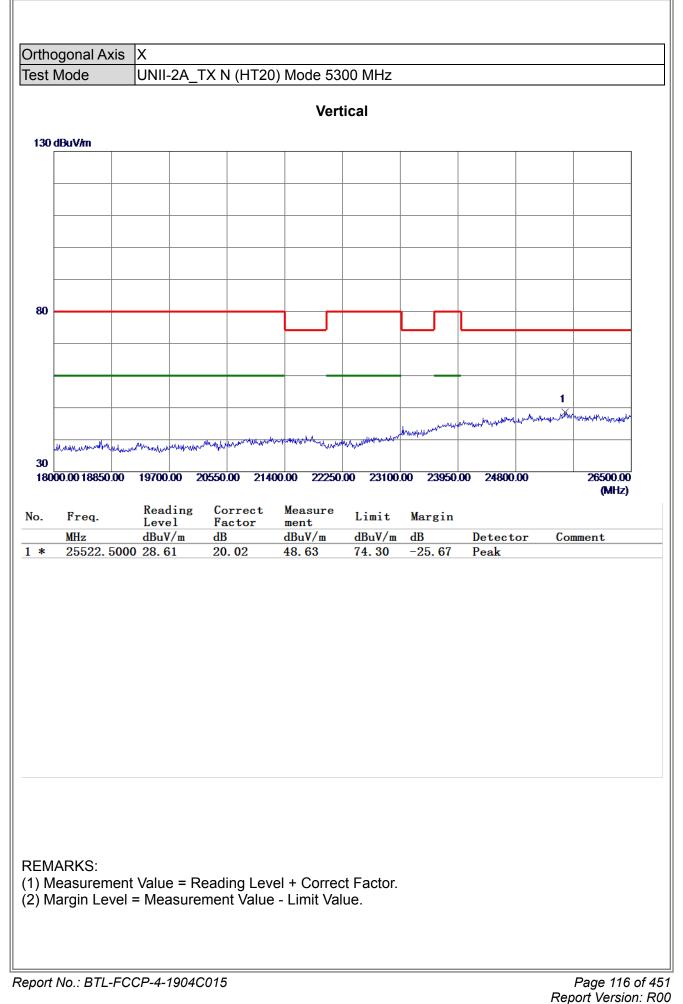






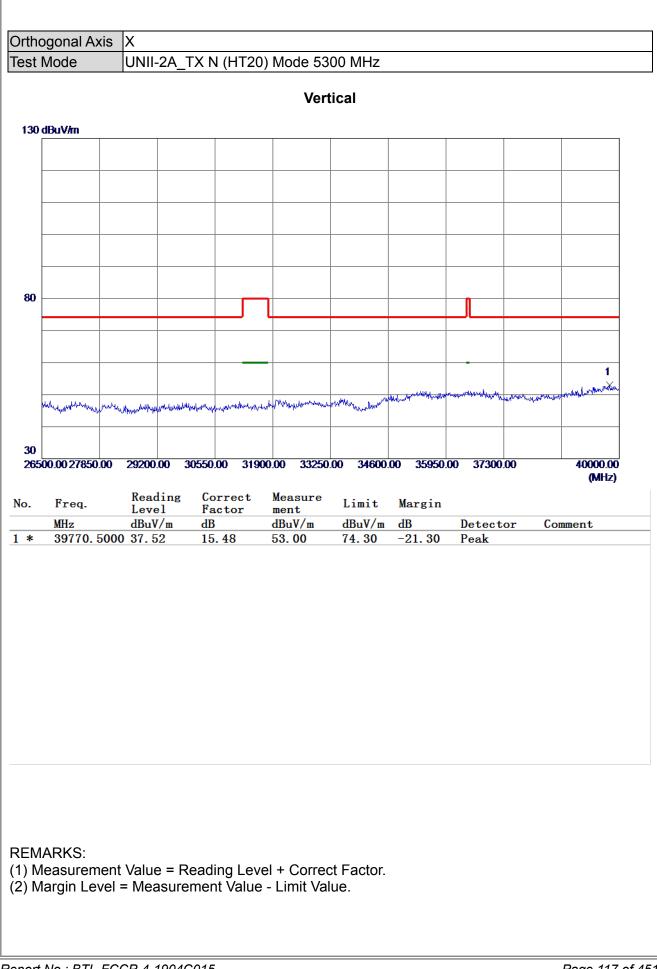












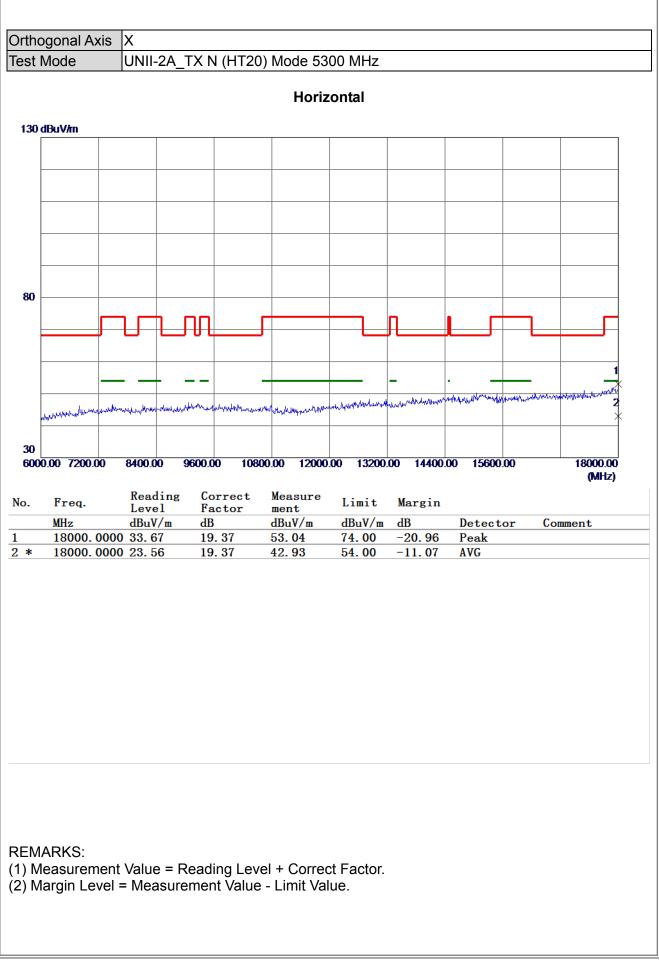






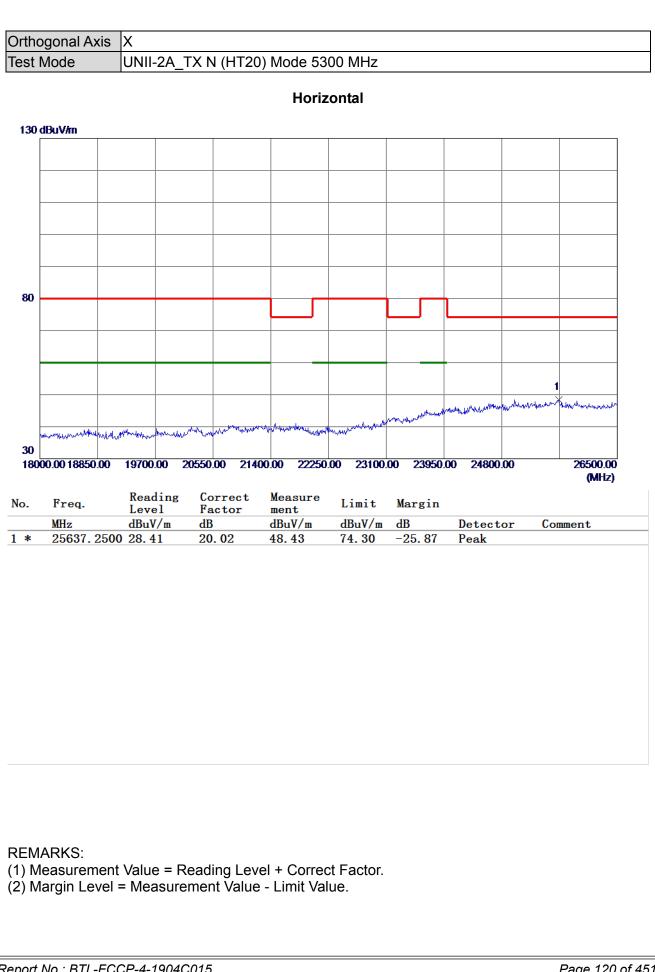






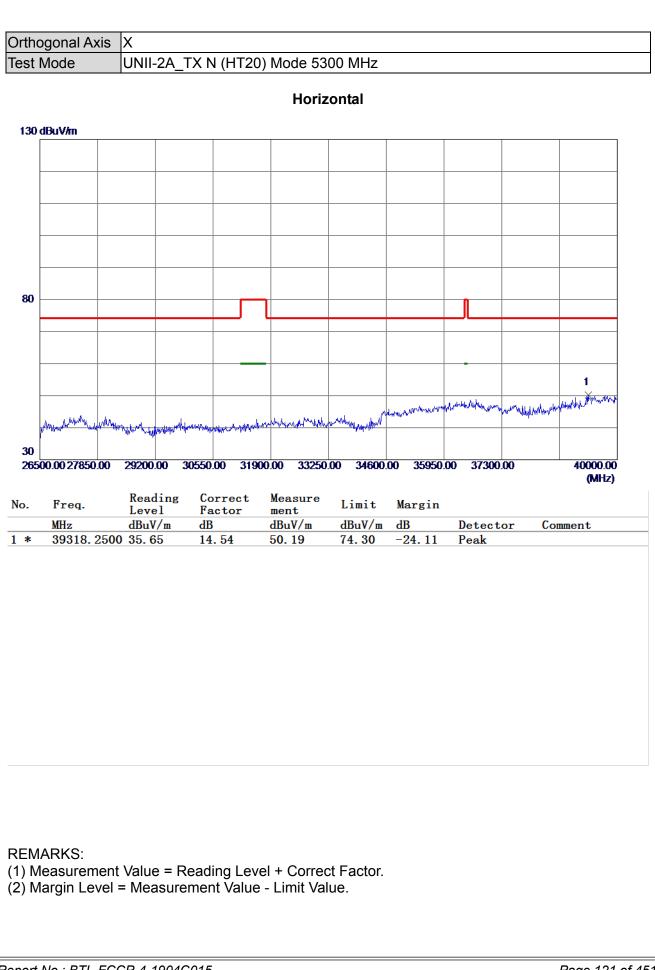






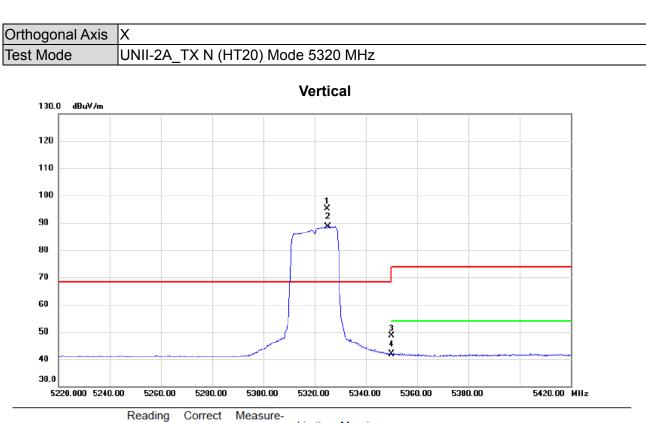










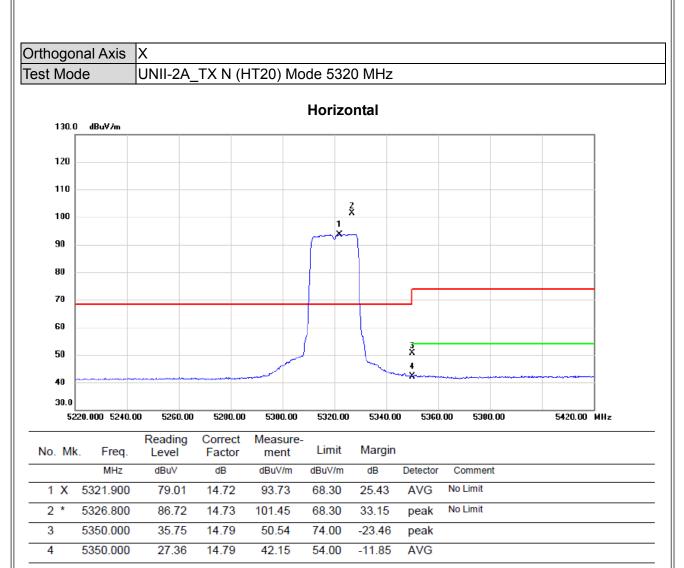


No. Mk	. Freq.	Level		ment	Limit	Margin		
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	5325.000	80.50	14.72	95.22	68.30	26.92	peak	No Limit
2 X	5325.300	73.85	14.73	88.58	68.30	20.28	AVG	No Limit
3	5350.000	33.93	14.79	48.72	74.00	-25.28	peak	
4	5350.000	27.14	14.79	41.93	54.00	-12.07	AVG	

REMARKS: (1) Measurement Value = Reading Level + Correct Factor. (2) Margin Level = Measurement Value - Limit Value.





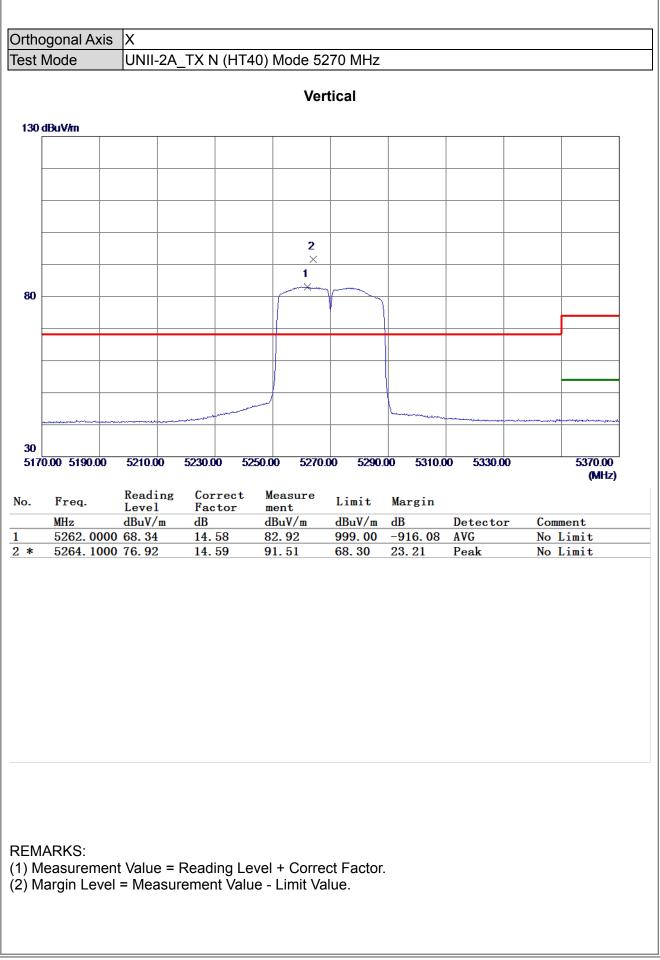


REMARKS:

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value Limit Value.







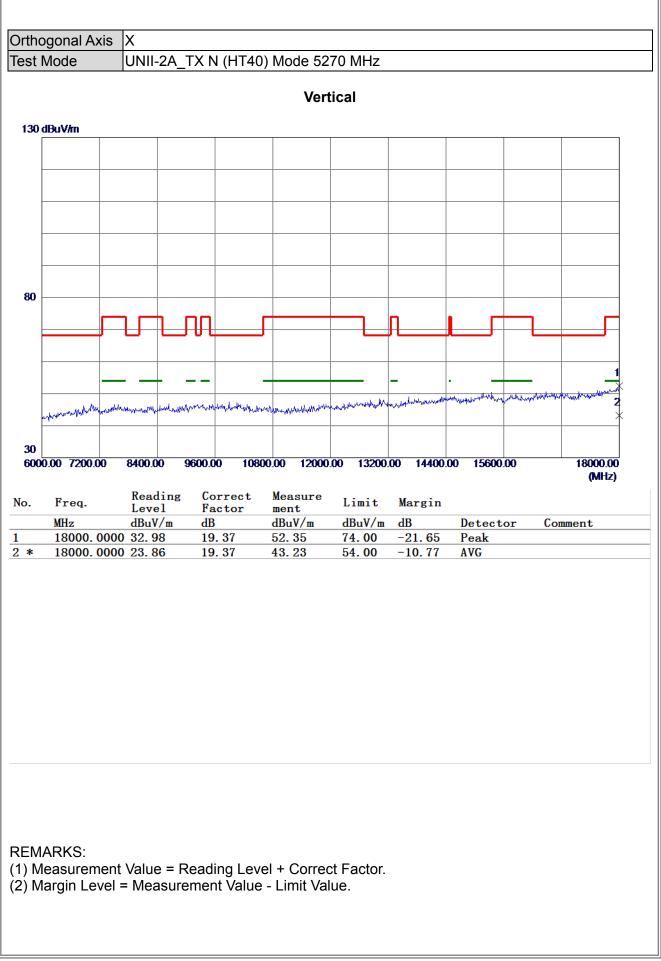






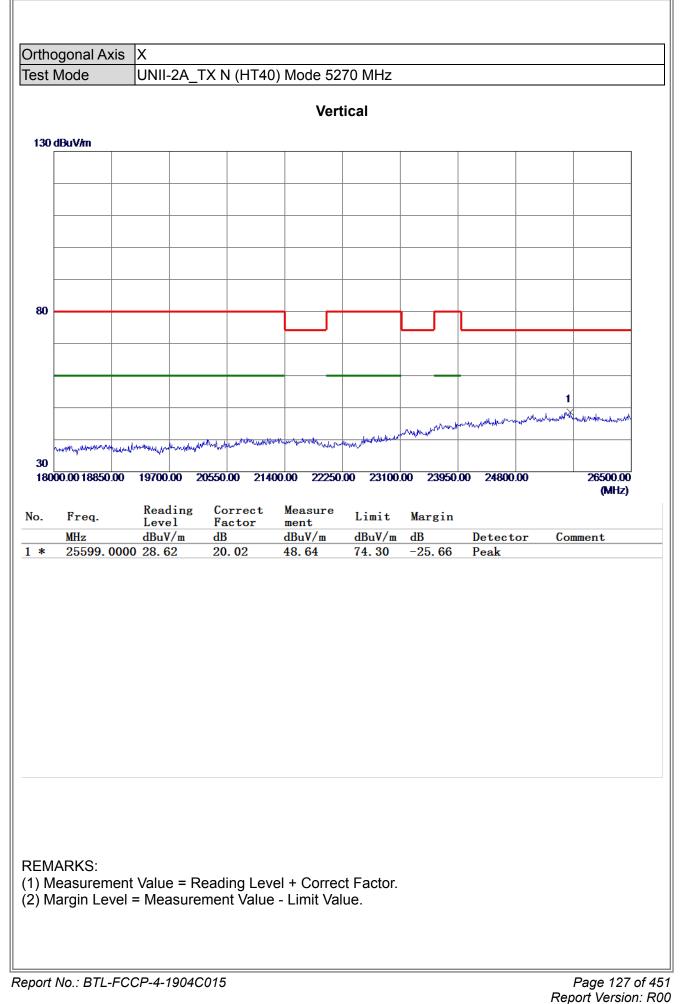






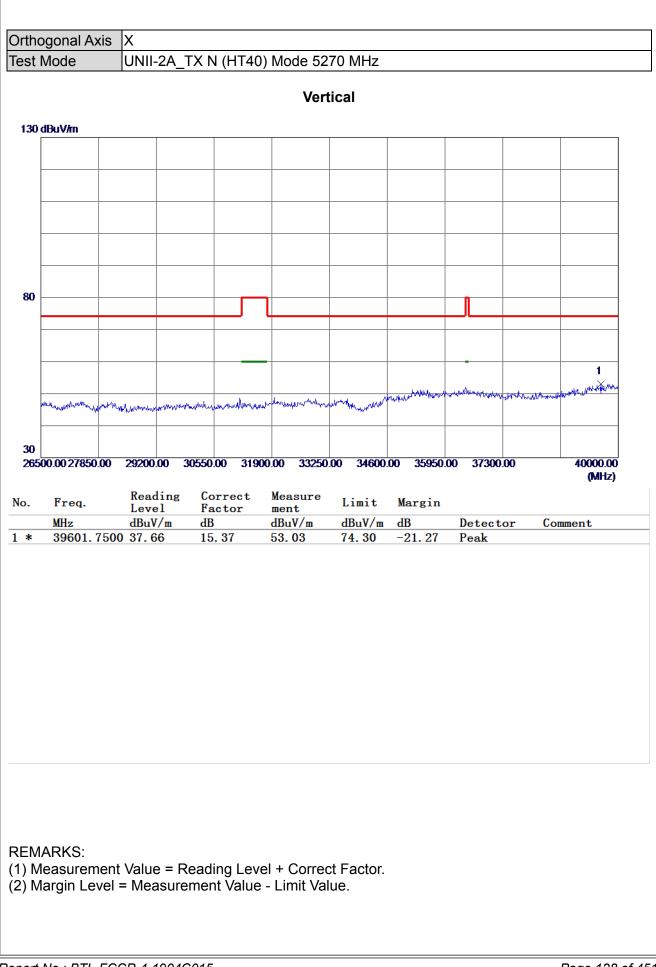






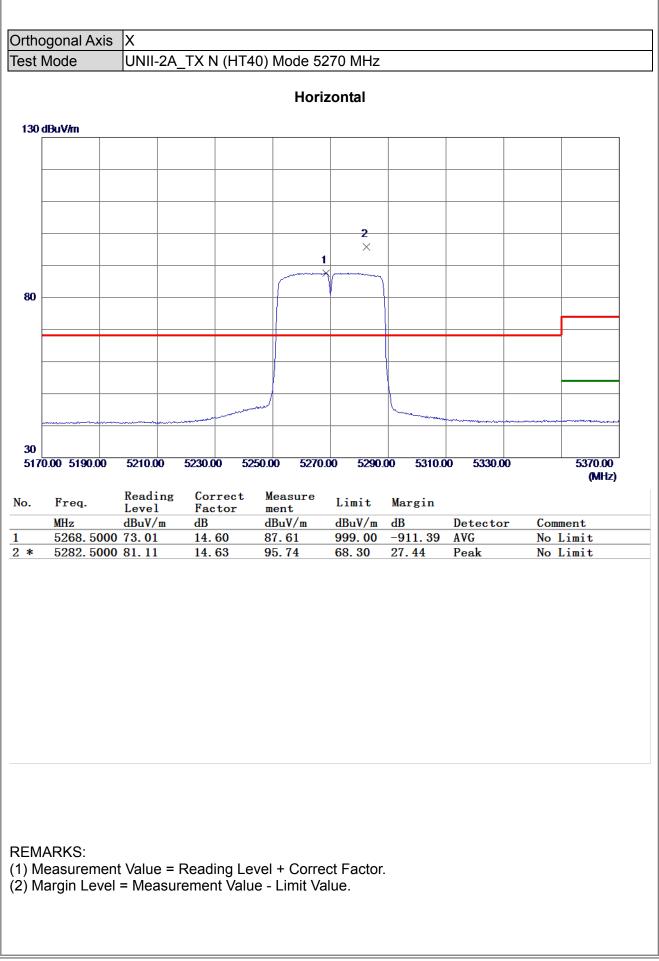






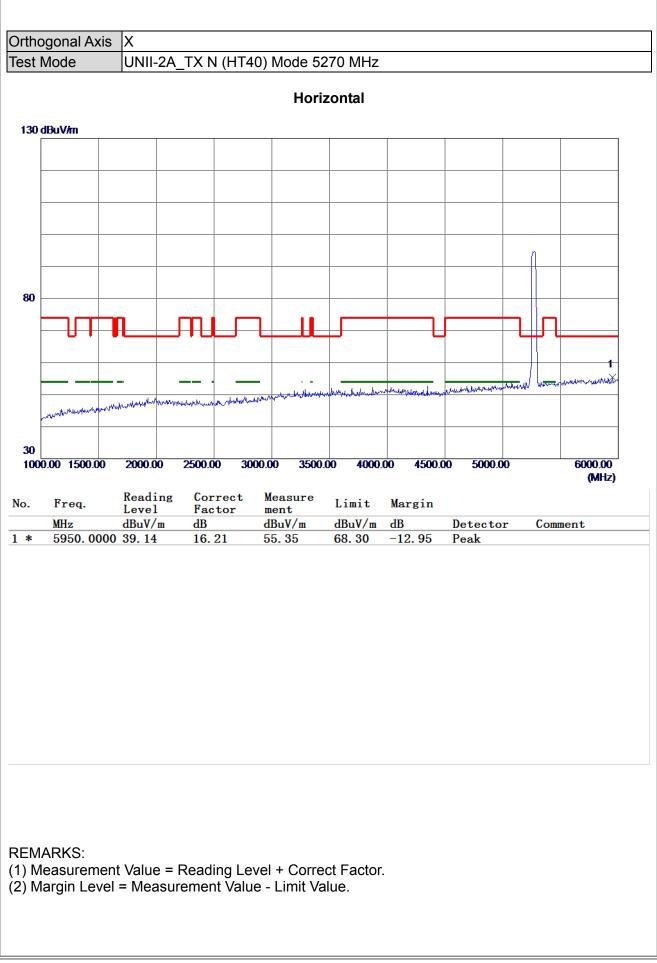






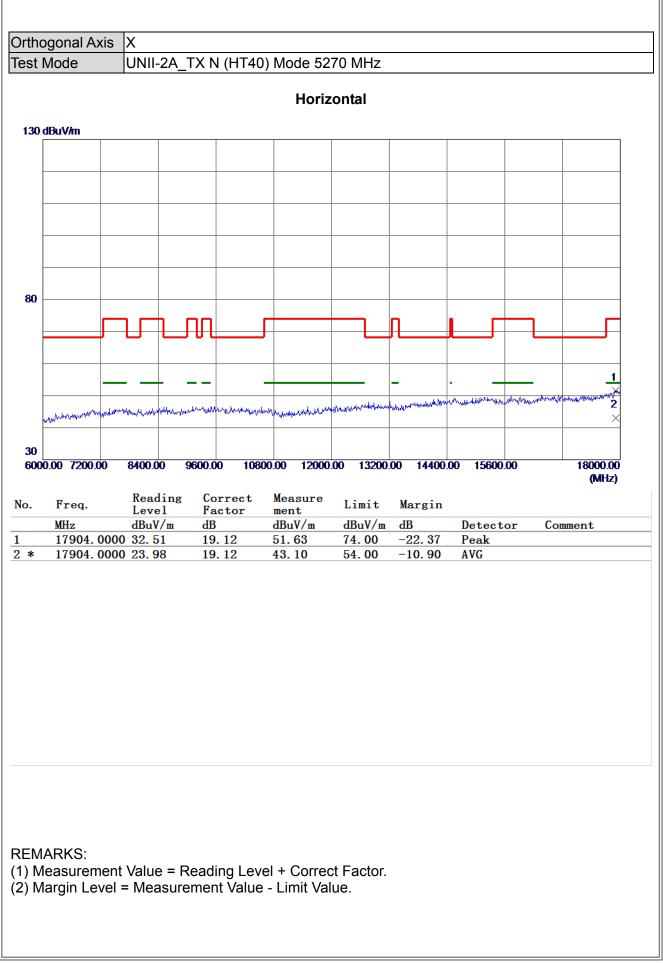






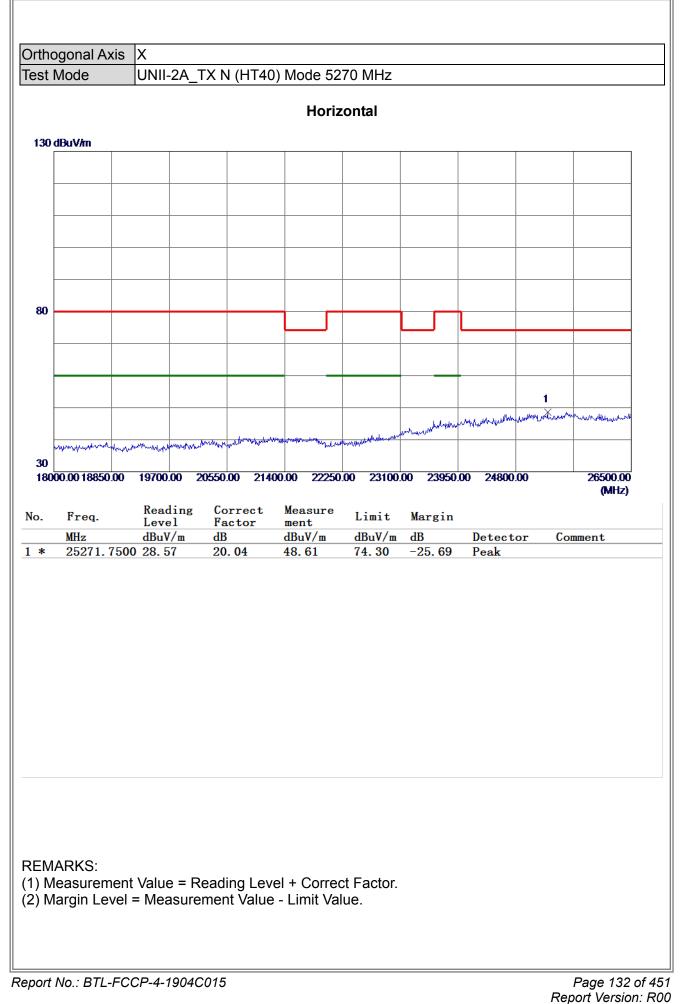






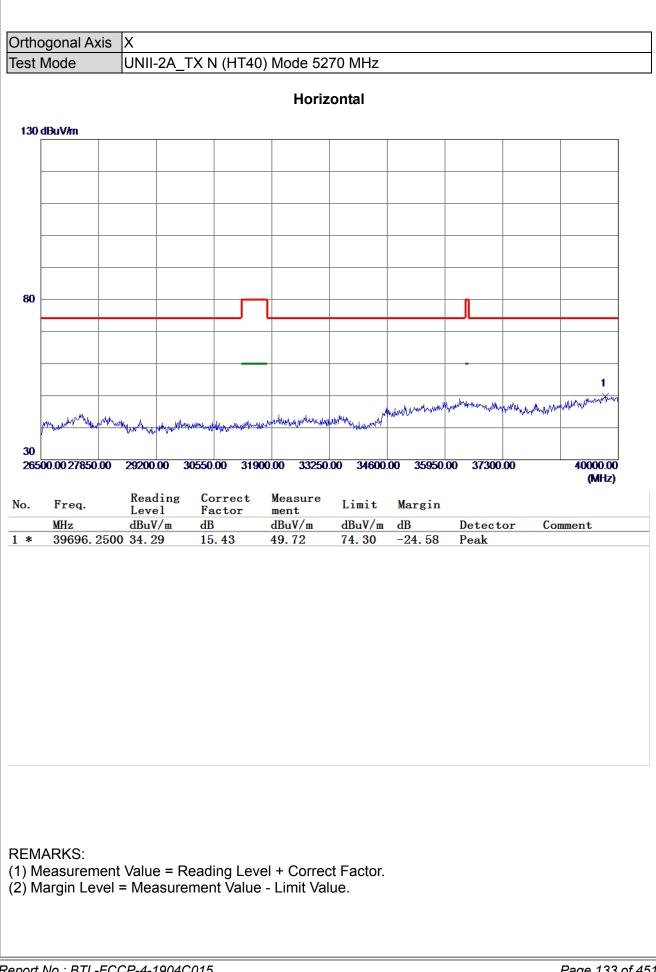






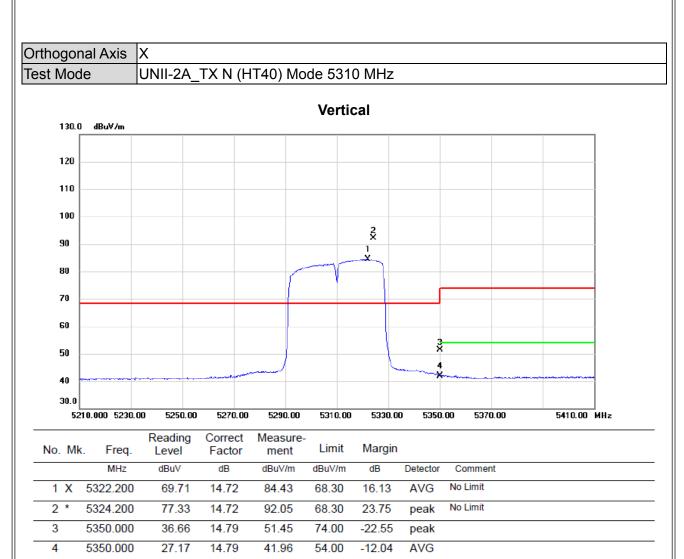












REMARKS:

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value Limit Value.

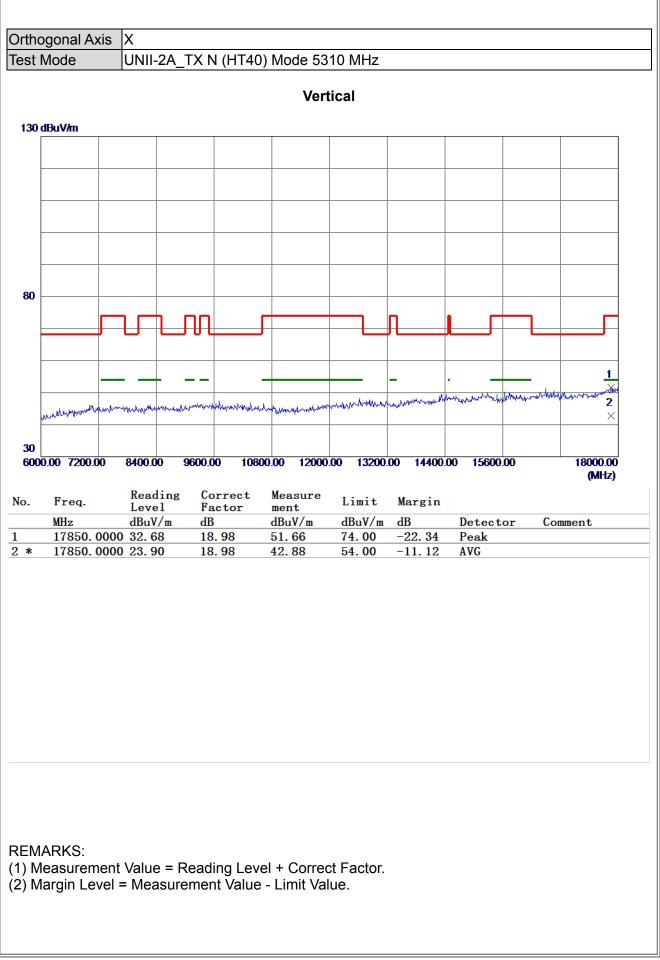






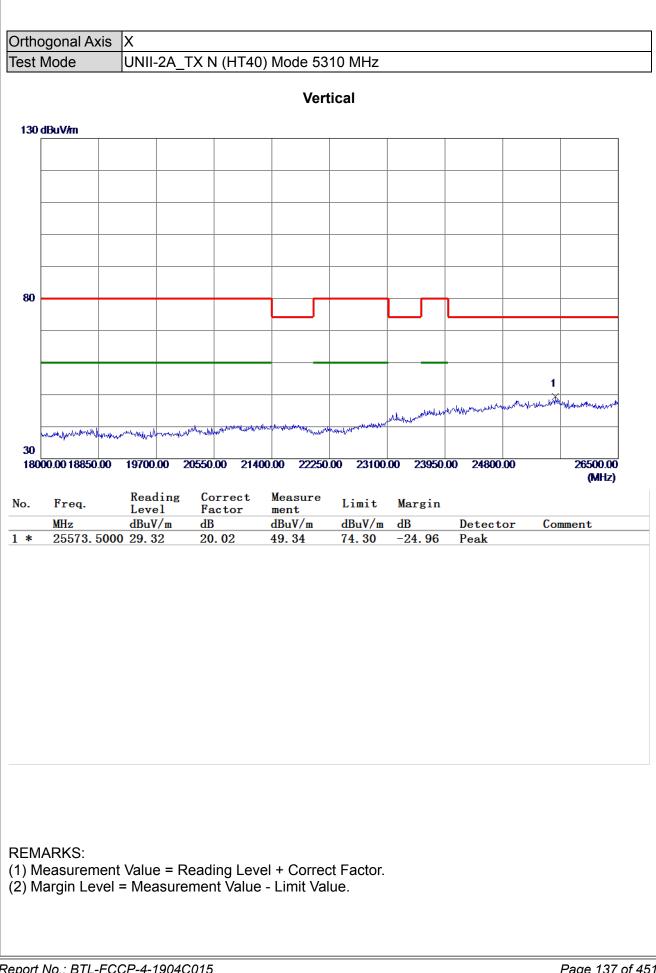






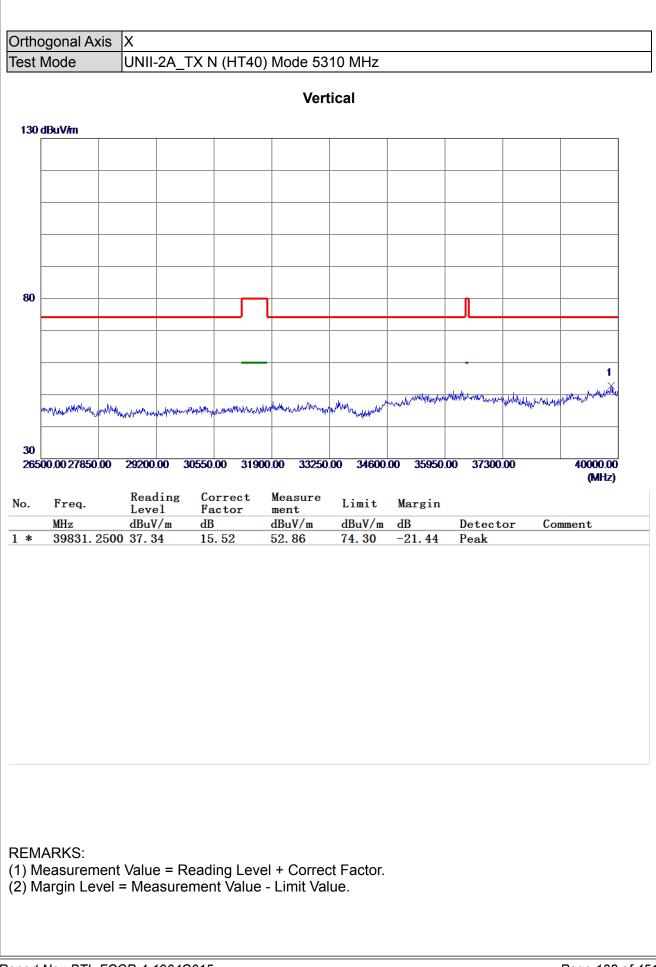






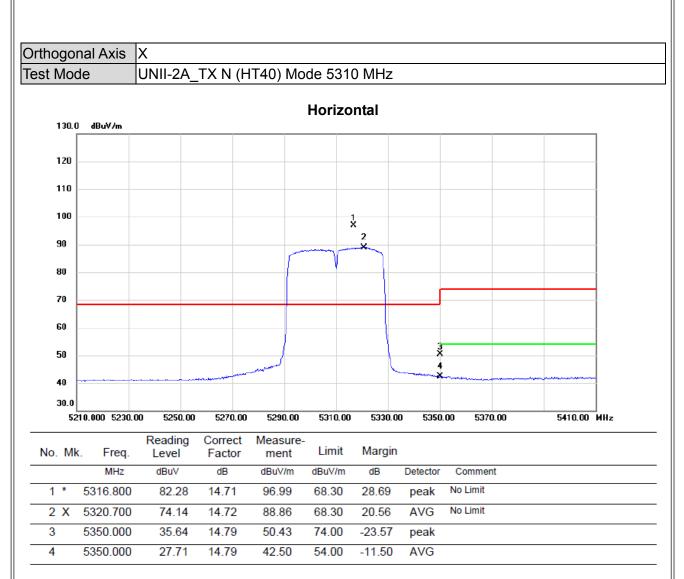












REMARKS: (1) Measurement Value = Reading Level + Correct Factor. (2) Margin Level = Measurement Value - Limit Value.











