

RF TEST REPORT


FCC ID: 2AOHHTURBOXC7230C

According to

47 CFR FCC Part 15, Subpart E(Section 15.407)

ANSI C63.10:2013

Product description : Smart Module
Model No. : C7230C
Trade Mark : TurboX
Product No. : POC230731014-S001
Applicant : Thundercomm Technology Co., Ltd
No. 107, Middle Datagu Road, Xiantao Street, Yubei District,
Chongqing, China, 401122
Receipt date : 2023.08.02
Test date : 2023.08.03~2023.08.16
Issued Date : 2023.08.31

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REPORT ISSUED HISTORY

Report No.	Issue Date	Description
RF230731014-01-004	2023.08.31	Replaced the antenna, CPU, model, and IC of the product compared to the original report (SZ22110114W04). See below for details. After the evaluation, we retested the AC power line for conduction and radiation emission, Other test data is subject to the original report.

Content of change:

1. The new antenna is changed, and the antenna gain is different. 2.4G and Bluetooth are the gain becomes larger, and 5G is the gain becomes smaller
2. QCS8250 replaced by QCS7230, both CPUs have the same PIN, which is pin-for-pin with the original CPU, and the RF performance is basically the same.
3. Modify the product name, model and FCC ID, original FCC ID: 2AOHHTURBOXC865C Change to 2AOHHTURBOXC7230C

1. General Information

1.1 Applicant

Thundercomm Technology Co., Ltd

No. 107, Middle Datagu Road, Xiantao Street, Yubei District, Chongqing, China, 401122

1.2 Manufacturer

Thundercomm Technology Co., Ltd

No. 107, Middle Datagu Road, Xiantao Street, Yubei District, Chongqing, China, 401122

1.3 Basic Description of Equipment Under Test

Equipment Name	Smart Module	
Model Number	C7230C	
Trademark	TURBOX	
Software Version	FlatBuild_Turbox-QCS8250_xx.xx_la1.0.D.userdebug.202210 24.1345	
Hardware Version	DT865_DEq_LA-IOB V03	
EUT Stage	○ Product Unit	● Final-Sample
Operating Band	5150MHz ~5350MHz	● IEEE 802.11a/n/ac/ax(20MHz)
	5470MHz ~5725MHz	● IEEE 802.11n/ac/ax(40MHz)
	5725MHz ~5850MHz	● IEEE 802.11ac/ax(80MHz)
Product Type	IEEE 802.11a: WLAN (SISO) IEEE 802.11n: WLAN (MIMO) IEEE 802.11ac: WLAN (MIMO) IEEE 802.11ax: WLAN (MIMO)	
Nominal Bandwidth	20MHz / 40MHz / 80MHz	
Modulation	OFDM, OFDMA	
Data Rate (Mbps)	IEEE 11a mode : 6M/9M/12M/18M/24M/36M/48M/54M IEEE 11n mode : MCS0~MCS7 IEEE 11ac mode : MCS0~MCS9 IEEE 11ax mode : MCS0~MCS11	
Type of Device	Slave device	
Antenna gain	Ant1: 2.08dBi, Ant2: 2.080dBi	
Antenna type	PIFA antenna	
DFS Function	•	5250MHz ~5350MHz
	•	5470MHz ~5725MHz

Channel Information			
Frequency Range (MHz)	IEEE Std. 802.11	Ch. Frequency (MHz)	Channel Number
5150-5250	802.11a /n /ac /ax (20MHz)	5180-5240	36-48
5250-5350		5260-5320	52-64
5470-5725		5500-5700	100-140
5725-5850		5745-5825	149-165
5150-5250	802.11n /ac /ax (40MHz)	5190-5230	38-46
5250-5350		5270-5310	54-62
5470-5725		5510-5670	102-134
5725-5850		5755-5795	151-159
5150-5250	802.11ac /ax (80MHz)	5210	42
5250-5350		5290	58
5470-5725		5530, 5610	106, 122
5725-5850		5775	155

2. Summary of Test Results

2.1 Summary of Test Items

47 CFR FCC Part 15, Subpart C (Section 15.247)			
Test item	Standard	Results	Remarks
AC Power Conducted Emission	15.207 15.407(b)	Pass	Meet the requirement of the limit
Radiated Emission	15.205(a) 15.209(a) 15.407(b)	Pass	Note3
Antenna Requirements	15.203	Compliance	Note1
Spectrum Bandwidth	15.407(a) 15.407(e)	Pass	Note2
Maximum EIRP	15.407(a)	Pass	Note2
Power Spectral Density	15.407(a)	Pass	Note2
<p>Note:</p> <p>1.The EUT has two PCB antennas, the max. gain of antenna 1 is 2.08dBi and the max. gain of antenna 2 is 2.08dBi, and the antenna connector is designed with permanent attachment and no consideration of replacement.</p> <p>2. For test item: Spectrum Bandwidth, Maximum EIRP and Power Spectral Density, Please refer to original report(SZ22110114W04)</p> <p>3. For radiated emissions below 1GHz, we have retested. For radiated emissions above 1GHz, we have tested the data of the worst case mode.</p> <p>4. The DFS test report was documented in a separate report(Report No.: SZ22110114W05).</p>			

2.2 Application of Standard

47 CFR FCC Part 15, Subpart E

KDB 662911 D01 Multiple Transmitter Output v02r01

KDB 789033 D02 General UNII Test Procedures New Rules v02r01

KDB 905462 D02 UNII DFS Compliance Procedures New Rules v02

ANSI C63.10:2013

2.3 Test Instruments

Radiated Emissions						
No.	Equipment	Manufacturer	Type No.	Serial No.	Cal. date (yyyy/mm/dd)	Cal. Due date (yyyy/mm/dd)
1	Test receiver	Rohde&Schwarz	ESU	100184	2023/5/3	2024/5/2
2	Horn Antenna	Schwarzbeck	BBHA 9120 D	9120D-127 3	2023/4/23	2024/4/22
3	Low frequency amplifier	Unknown	LNA 0920N	2014	2023/5/3	2024/5/2
4	High frequency amplifier	Schwarzbeck	BBV 9718	284	2023/5/3	2024/5/2
5	Loop Antenna	Schwarzbeck	FMZB151 9B	00029	2022/7/4	2025/7/3
6	Log periodic antenna	Schwarzbeck	VULB 9168	1151	2023/4/23	2024/4/22
7	Horn Antenna	Schwarzbeck	BBHA 9120 D	9120D-127 3	2022/5/5	2025/5/4
8	Horn Antenna	Schwarzbeck	BBHA 9170	9170#685	2022/7/4	2025/7/3
9	Temp&Humidity Recorder	Meideshi	JR900	/	2023/5/3	2024/5/2
10	RF cable(966 chamber)9kHz- 1GHz	Unknown	Unknown	Unknown	2023/5/3	2024/5/2
11	RF cable(966 chamber)1GHz -18GHz	Unknown	Unknown	Unknown	2023/5/3	2024/5/2
12	RF cable(966 chamber)18GH z-40GHz	Unknown	Unknown	Unknown	2023/5/3	2024/5/2
13	Test software	Farad Technology Co., Ltd	EZ-EMC	/	/	/
Conducted Emission						
1	Test receiver	Rohde&Schwarz	ESCI	100718	2023/5/3	2024/5/2
2	LISN	Rohde&Schwarz	ENV216	100075	2023/5/3	2024/5/2
3	Pulse limiter	Rohde&Schwarz	ESH3-Z2	102299	2023/5/3	2024/5/2
4	RF cable (9kHz-30MHz)	Unknown	Unknown	Unknown	2023/5/3	2024/5/2
5	Test software	Farad Technology Co., Ltd	EZ-EMC	/	/	/
RF Conducted Emission						
1	MXA Signal Analyzer	Keysight	N9021B	MY600801 69	2023/4/23	2024/4/22
2	RF Control Unit	dsusoft	JS0806-2	21G80604 49	2023/4/23	2024/4/22
3	power supply unit	dsusoft	JS0806-4 ADC	N/A	2023/4/23	2024/4/22
4	VXG Signal Generator	Keysight	M9384B	MY612707 87	2023/4/23	2024/4/22
5	EXG Analog Signal Generator	Keysight	N5173B	MY591012 82	2023/4/23	2024/4/22
6	Test software	dsusoft	JS1120-3	/	/	/

2.4 Operation Mode

The EUT was supplied by and it was run in TX mode that was controlled by Master provided RF testing program. The worst case test result was showed in the report.

2.5 Test Condition

Test Item	Environmental conditions	Input Power	Tested by
AC Power Conducted Emission	25°C, 53% RH	AC 120V/60Hz	Albert Fan
Radiated Emission	24°C, 51% RH	AC 120V/60Hz	Albert Fan

Note: Adapter supply voltage AC 120V/60Hz.

The applicant declare the operating environment of EUT as below:

Normal conditions: 5V DC, 15~35°C

2.6 Duty Cycle of Test Signal

If duty cycle is $\geq 98\%$, duty factor is not required.

If duty cycle is $< 98\%$, duty factor shall be considered.

All the duty factor of other test mode have been considered.

Test Graphs

Please refer to the SZ22110114W04.

2.7 Measurement Uncertainty

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the EUT.

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

Uncertainty	
Parameter	Uncertainty
Occupied Channel Bandwidth	± 143.88 kHz
Power Spectral Density	± 0.743 dB
Conducted Spurious Emission	± 1.328 dB
RF power conducted	± 0.384 dB
Conducted emission(9kHz~30MHz) AC main	± 2.72 dB
Radiated emission(9kHz~30MHz)	± 2.66 dB
Radiated emission (30MHz~1GHz)	± 4.62 dB
Radiated emission (1GHz~18GHz)	± 4.86 dB
Radiated emission (18GHz~40GHz)	± 3.80 dB

2.8 Test Location

Company:	Shenzhen Haiyun Standard Technical CO., Ltd.
Address:	Room 110, 111, 112, 113, 115, 116, Block B, Jinyuan Business Building, No. 302, Xixiang Avenue, Labor Community, Xixiang Street, Baoan District, Shenzhen, China
CNAS Registration Number:	CNAS L18252
CAB identifier:	CN0145
A2LA Certificate Number:	6823.01
Telephone:	0755-26024411

2.9 BLOCK DIAGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED



2.10 SUPPORT UNITS

Support Equipment				
No.	Equipment	Brand Name	Model Name	Remarks
1	mini PC	/	S10	DC 12V/4A
2	Adapter	CHANNEL WELL TECHNOLOGY	S1C045DC	INPUT: 100-240V~ 50/60Hz 1.5A OUTPUT:5.0V $\overline{\text{---}}$ 3.0A15.0W; 9.0V $\overline{\text{---}}$ 3.0A27W; 15.0V $\overline{\text{---}}$ 3.0A45.0W; 20V $\overline{\text{---}}$ 2.25A 45.0W

2.11 Deviation from Standards

None

2.12 Abnormalities from Standard Conditions

None

3. Test Procedure And Results

3.1 AC Power Line Conducted Emission

3.1.1 Limit

Frequency	Maximum RF Line Voltage	
	Quasi-Peak Level dB(μ V)	Average Level dB(μ V)
150kHz ~ 500kHz	66 ~ 56*	56 ~ 46*
500kHz ~ 5MHz	56	46
5MHz ~ 30MHz	60	50

Notes: 1. * Decreasing linearly with logarithm of frequency.

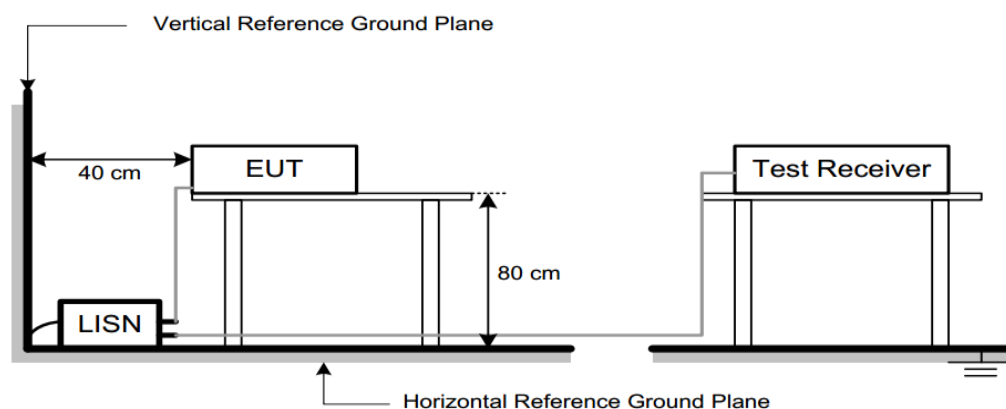
2. The lower limit shall apply at the transition frequencies.

3.1.2 Test Procedure

Test Method	
●Conducted Measurement	○Radiated Measurement
Test Channels	
○ Lowest, Middle and Highest Channel	○ Lowest and Highest Channel
Environmental conditions	
●Normal	○Normal and Extreme
Note: ●:Test ○:No Test	

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

3.1.3 Test Setup

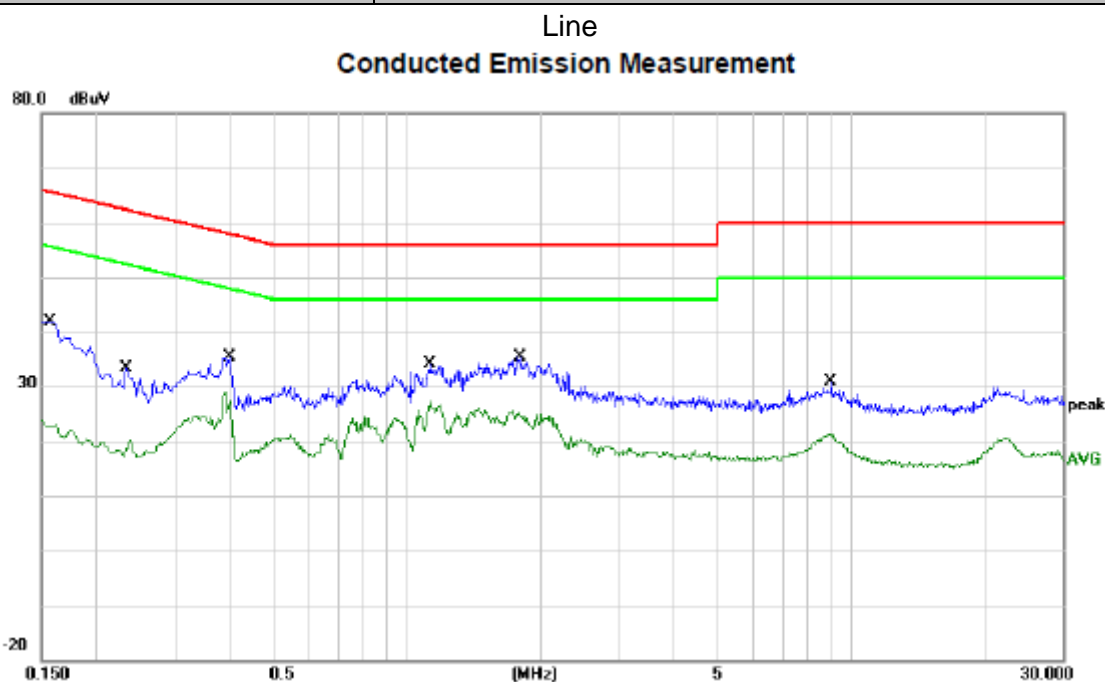


3.1.4 Test Result

Note:

1. Correct Factor = LISN Factor + Cable Loss + Pulse Limiter Factor, the value was added to Original Receiver Reading by the software automatically.
2. Measurement = Reading + Correct Factor.
3. Over = Measurement – Limit
4. The TX AX20 Mode Channel 149 is found to be the worst case and recorded.

150kHz~30MHz	TX N(HT40) Channel 151
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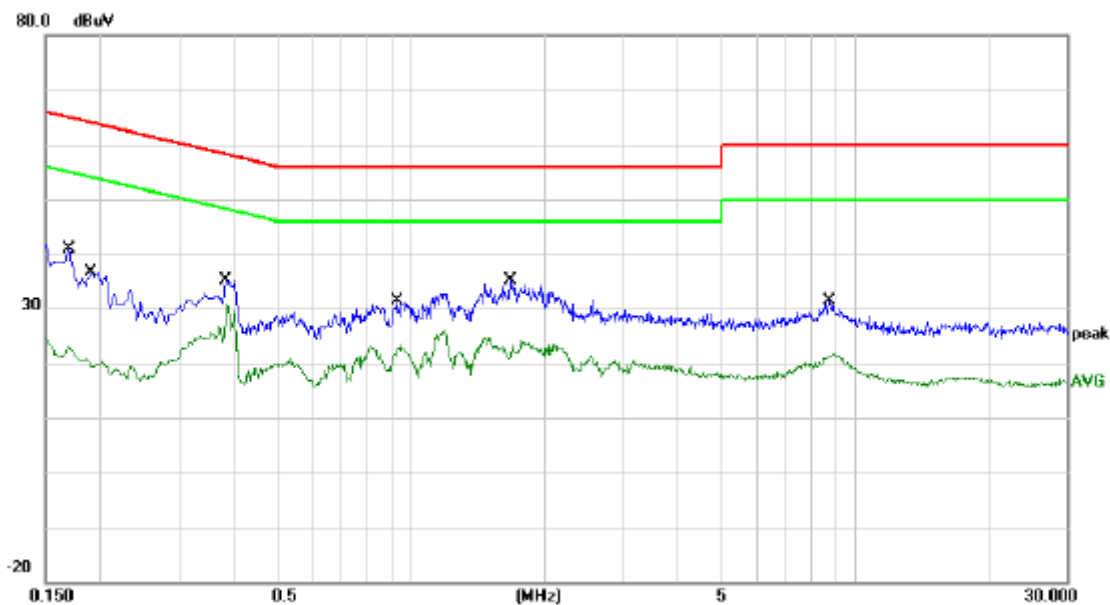
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Over dB	Detector	Comment
1		0.1580	13.12	19.88	33.00	65.57	-32.57	QP	
2		0.1580	0.98	19.88	20.86	55.57	-34.71	AVG	
3		0.2340	5.03	19.88	24.91	62.31	-37.40	QP	
4		0.2340	-0.75	19.88	19.13	52.31	-33.18	AVG	
5		0.3980	11.65	19.88	31.53	57.90	-26.37	QP	
6		0.3980	6.51	19.88	26.39	47.90	-21.51	AVG	
7		1.1340	8.55	19.89	28.44	56.00	-27.56	QP	
8 *		1.1340	5.06	19.89	24.95	46.00	-21.05	AVG	
9		1.7980	8.47	19.90	28.37	56.00	-27.63	QP	
10		1.7980	4.26	19.90	24.16	46.00	-21.84	AVG	
11		9.0260	4.20	19.95	24.15	60.00	-35.85	QP	
12		9.0260	0.28	19.95	20.23	50.00	-29.77	AVG	

150kHz~30MHz

TX N(HT40) Channel 151

Neutral

Conducted Emission Measurement



No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Over		
		MHz	Level	Factor	ment			Detector	Comment
			dBuV	dB	dBuV	dBuV	dB		
1		0.1700	11.71	19.88	31.59	64.96	-33.37	QP	
2		0.1700	1.12	19.88	21.00	54.96	-33.96	AVG	
3		0.1900	8.16	19.88	28.04	64.04	-36.00	QP	
4		0.1900	-0.40	19.88	19.48	54.04	-34.56	AVG	
5		0.3820	11.59	19.88	31.47	58.24	-26.77	QP	
6	*	0.3820	7.66	19.88	27.54	48.24	-20.70	AVG	
7		0.9300	4.99	19.89	24.88	56.00	-31.12	QP	
8		0.9300	2.10	19.89	21.99	46.00	-24.01	AVG	
9		1.6780	6.69	19.90	26.59	56.00	-29.41	QP	
10		1.6780	0.60	19.90	20.50	46.00	-25.50	AVG	
11		8.7700	4.82	19.95	24.77	60.00	-35.23	QP	
12		8.7700	0.72	19.95	20.67	50.00	-29.33	AVG	

3.2 Radiated Emission

3.2.1 Limit

1) Limit of radiated emission measurement:

Radiated emissions which fall in the restricted bands must comply with the radiated emission limits specified as below table. Other emissions shall be at least 20dB below the highest level of the desired power:

Frequency (MHz)	Distance Meters(m)	Field Strength Limit	
		$\mu\text{V/m}$	$\text{dB}(\mu\text{V})/\text{m}$
0.009 – 0.49	300	2400/F(kHz)	-
0.490 – 1.705	30	24000/F(kHz)	-
1.705 – 30	30	30	-
30~88	3	100	40.0
88~216	3	150	43.5
216~960	3	200	46.0
960~1000	3	500	54.0
Above 1000	3	74.0 $\text{dB}(\mu\text{V})/\text{m}$ (Peak) 54.0 $\text{dB}(\mu\text{V})/\text{m}$ (Average)	

Note: (1) Emission level $\text{dB}\mu\text{V} = 20 \log \text{Emission level } \mu\text{V/m}$

(2) The smaller limit shall apply at the cross point between two frequency bands.

(3) Distance is the distance in meters between the measuring instrument, antenna and the closest point of any part of the device or system.

2) Limit of unwanted emission out of the restricted bands:

Frequency(MHz)	EIRP Limit(dBm/MHz)	Equivalent Field Strength at 3m($\text{dB}\mu\text{V/m}$)
5150-5250	-27	68.2
5250-5350	-27	68.2
5470-5725	-27	68.2
5725-5850	-27 NOTE (2)	68.2
	10 NOTE (2)	105.2
	15.6 NOTE (2)	110.8
	27 NOTE (2)	122.2

Note: (1) The following formula is used to convert the equipment isotropic radiated power (eirp) to field strength: $E[\text{dB}\mu\text{V/m}] = \text{EIRP}[\text{dBm}] + 95.2$, for $d=3\text{m}$

(2) According to 15.407(b)(4)(i), 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.

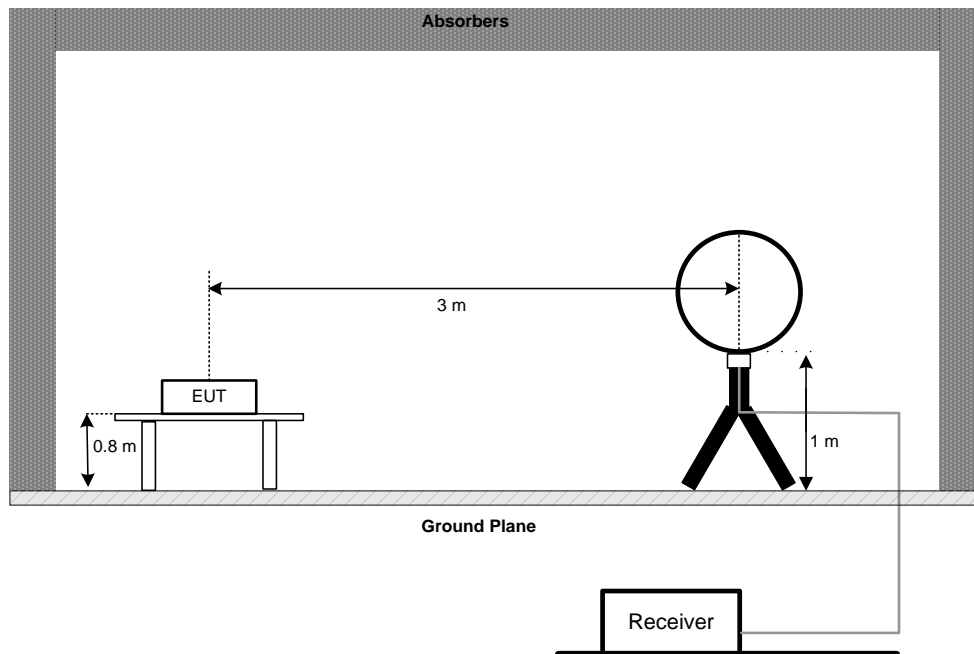
3.2.2 Test Procedure

Test Method	
○Conducted Measurement	●Radiated Measurement
Test Channels	
●Lowest, Middle and Highest Channel	○ Lowest and Highest Channel
Environmental conditions	
●Normal	○Normal and Extreme
Note:●:Test ○:No Test	

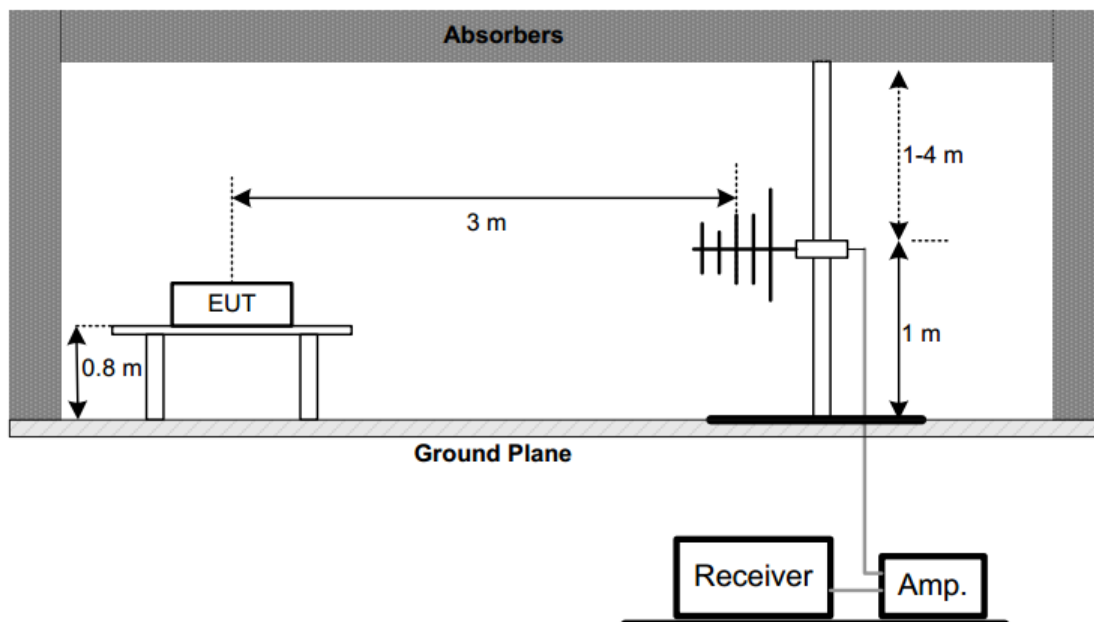
- a) The measuring distance of 3 m shall be used for measurements. The EUT was placed on the top of a rotating table 0.8 meter above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.(below 1 GHz)
- b) The measuring distance 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.

3.2.3 Test Setup

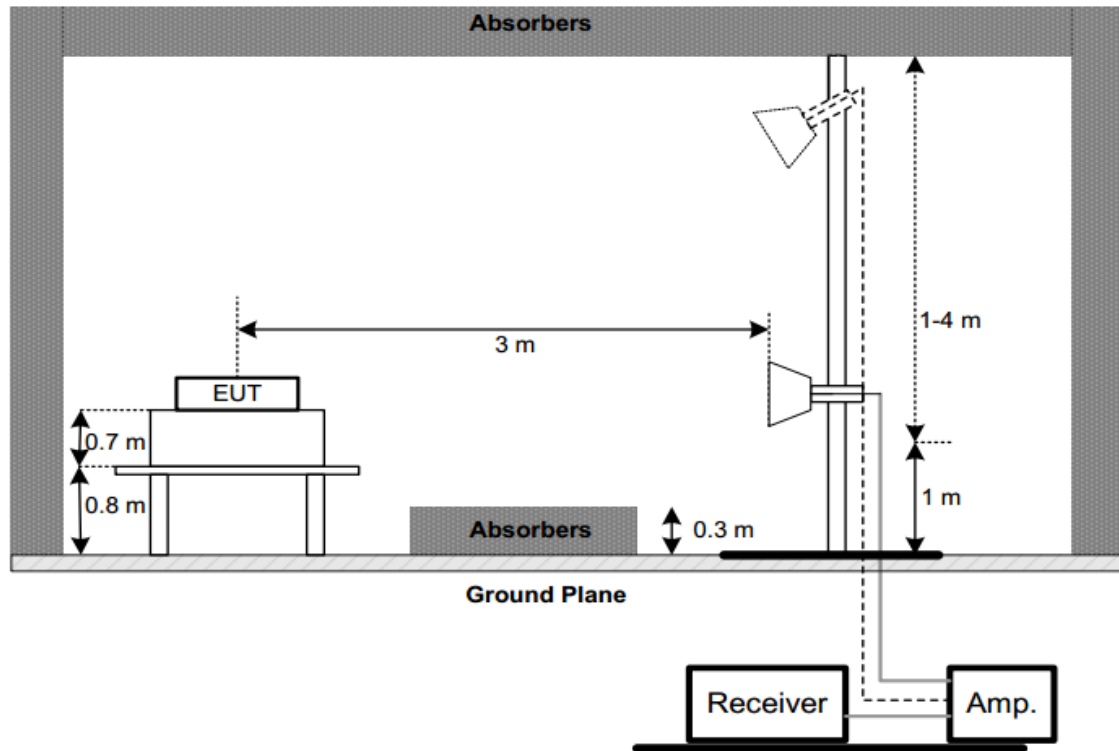
(A) Radiated Emission Test Set-Up Frequency Below 30 MHz



(B) Radiated Emission Test Set-Up Frequency 30 MHz-1000 MHz



(C) Radiated Emission Test Set-Up Frequency Above 1 GHz



3.2.4 Test Result

1) Radiated emission: 9kHz-30MHz

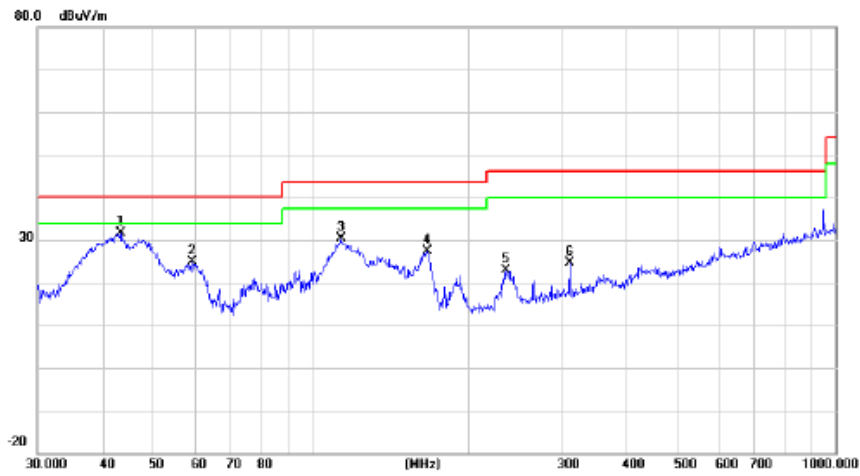
The low frequency, which started from 9 kHz to 30MHz, was pre-scanned and the result which was 20dB lower than the limit line was not recorded in this report.

2) Radiated emission: 30MHz-1G

Note:

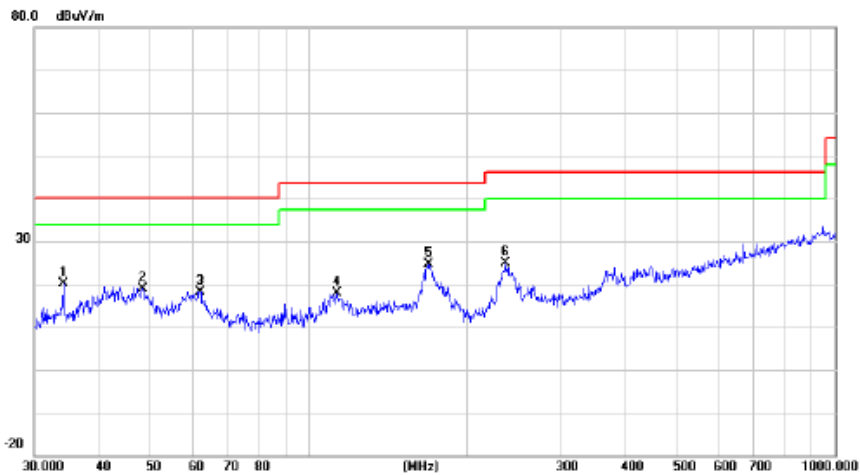
1. Measurement = Reading + Correct Factor.
2. Over = Measurement – Limit
3. The TX N(HE40) Mode Channel 151 is found to be the worst case and recorded.

VERTICAL
Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	cm	degree	Comment
1	*	43.2016	42.36	-10.72	31.64	40.00	-8.36	peak		
2		59.2324	38.92	-12.05	24.87	40.00	-15.13	peak		
3		113.7143	42.22	-11.72	30.50	43.50	-13.00	peak		
4		168.0680	37.02	-9.74	27.28	43.50	-16.22	peak		
5		234.9910	32.92	-10.06	22.86	46.00	-23.14	peak		
6		311.0866	32.67	-8.00	24.67	46.00	-21.33	peak		

HORIZONTAL
Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	cm	degree	Comment
1		34.0363	31.90	-11.78	20.12	40.00	-19.88	peak		
2		48.1625	29.72	-10.94	18.78	40.00	-21.22	peak		
3		61.9950	30.48	-12.30	18.18	40.00	-21.82	peak		
4		112.9196	29.62	-11.82	17.80	43.50	-25.70	peak		
5	*	168.4137	34.49	-9.93	24.56	43.50	-18.94	peak		
6		235.8163	34.79	-10.03	24.76	46.00	-21.24	peak		

3) Radiated emission: Above 1G

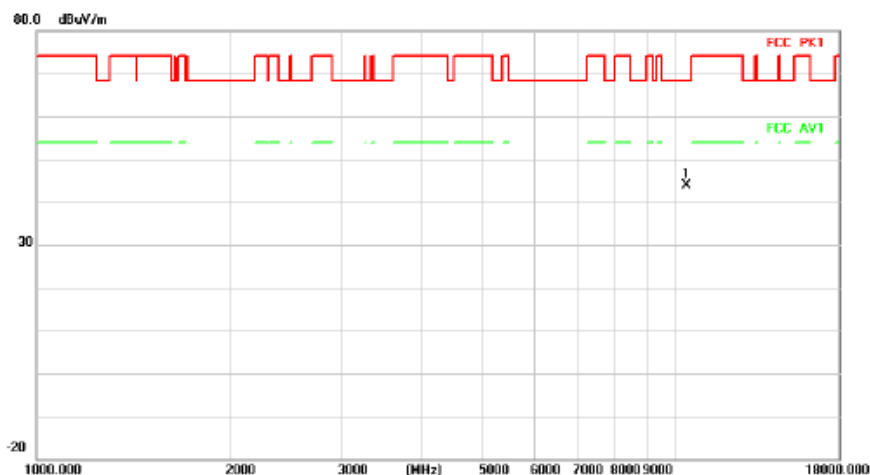
Note:

1. Measurement = Reading + Correct Factor.
2. Over = Measurement – Limit

Above 1G (1GHz~18GHz)	Test mode:N(HT40)	Test Channel:39
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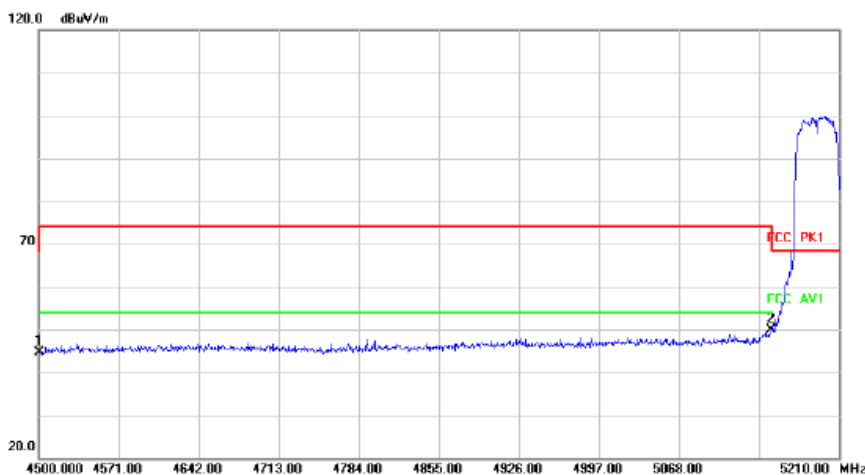
VERTICAL

Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	cm	degree	Comment
1	*	10380.000	34.67	9.24	43.91	68.20	-24.29	peak		

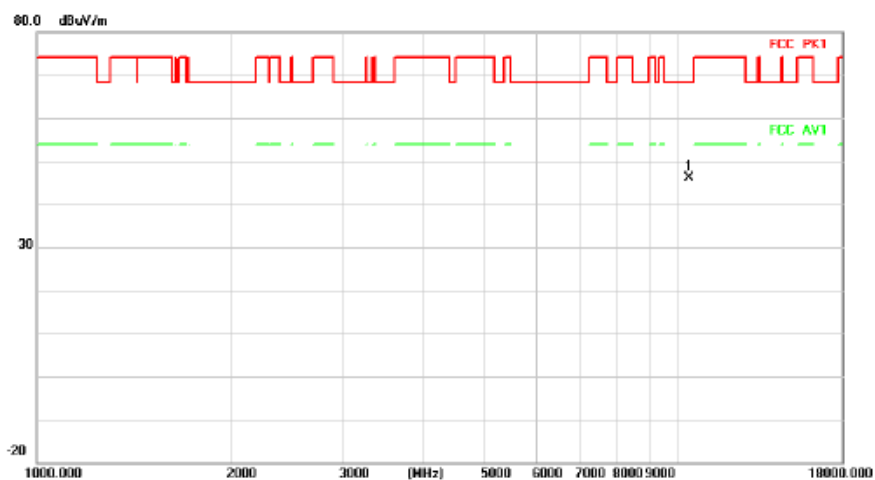
Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	cm	degree	Comment
1		4500.000	37.40	7.17	44.57	68.20	-23.63	peak		
2	*	5150.000	40.82	9.17	49.99	68.20	-18.21	peak		

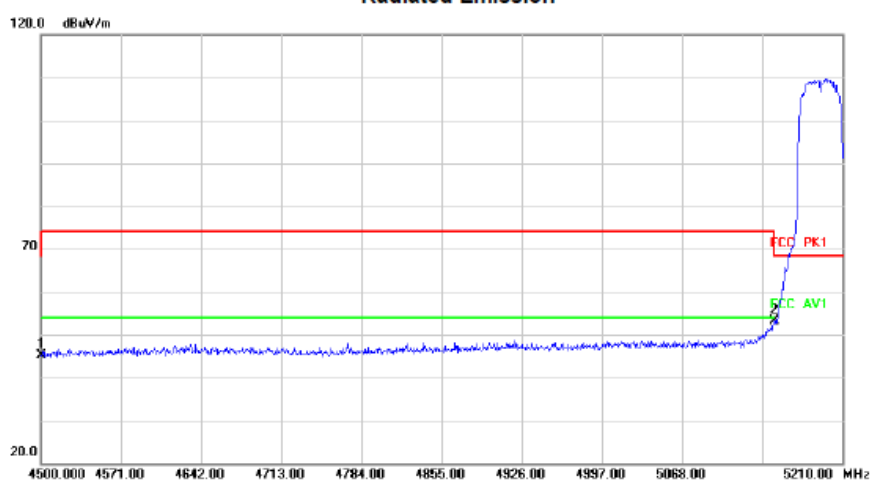
HORIZONTAL

Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	cm	degree
1	*	10380.000	38.97	9.24	46.21	68.20	-21.99	peak	

Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	cm	degree
1		4500.000	38.04	7.17	45.21	68.20	-22.99	peak	
2	*	5150.000	43.89	9.17	53.06	68.20	-15.14	peak	

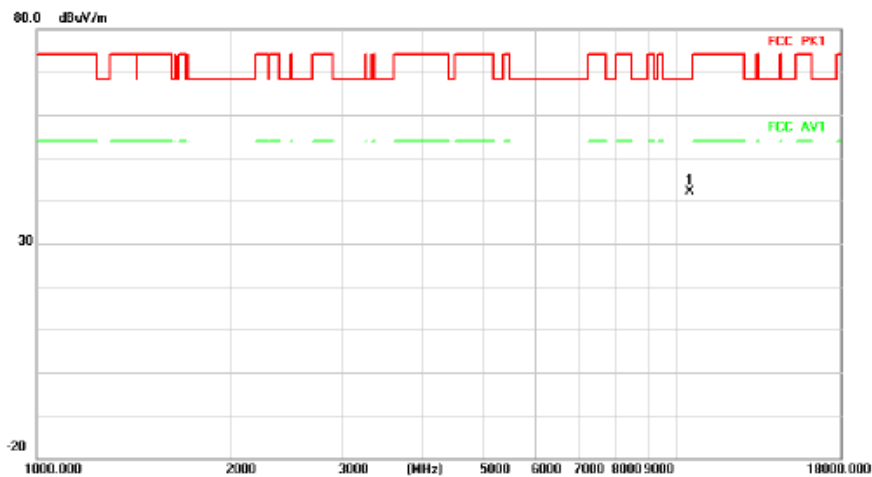
Above 1G (1GHz~18GHz)

Test mode: N(HT40)

Test Channel:46

VERTICAL

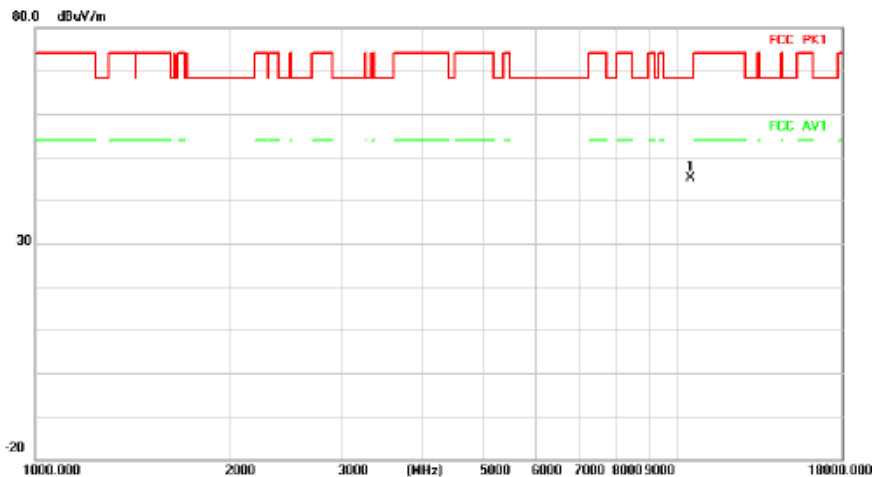
Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector	cm	degree
1	*	10460.000	32.91	9.34	42.25	68.20	-25.95	peak		

HORIZONTAL

Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector	cm	degree
1	*	10460.000	35.85	9.34	45.19	68.20	-23.01	peak		

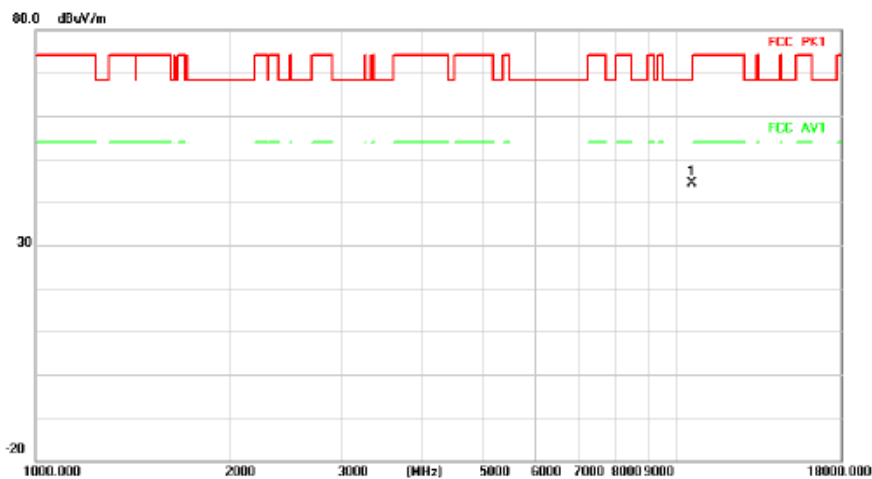
Above 1G (1GHz~18GHz)

Test mode: N(HT40)

Test Channel:54

VERTICAL

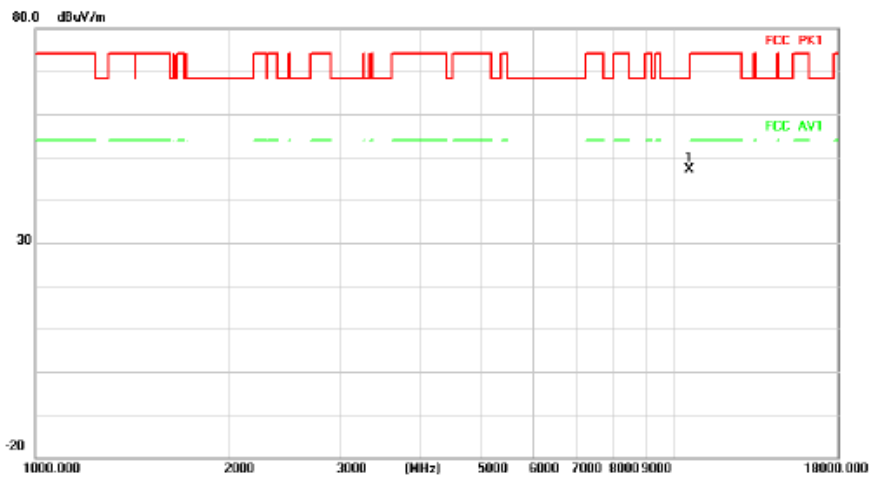
Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector	cm	degree
1	*	10540.000	35.00	9.44	44.44	68.20	-23.76	peak		

HORIZONTAL

Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector	cm	degree
1	*	10540.000	37.72	9.44	47.16	68.20	-21.04	peak		

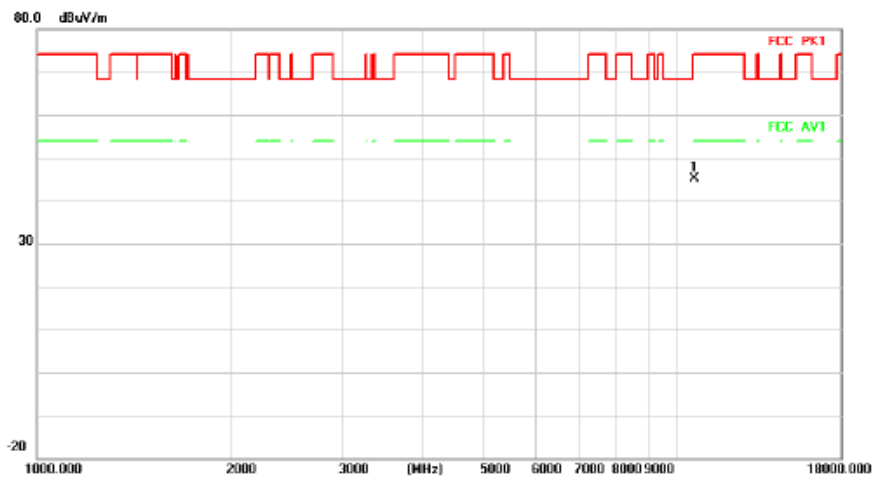
Above 1G (1GHz~18GHz)

Test mode: N(HT40)

Test Channel:64

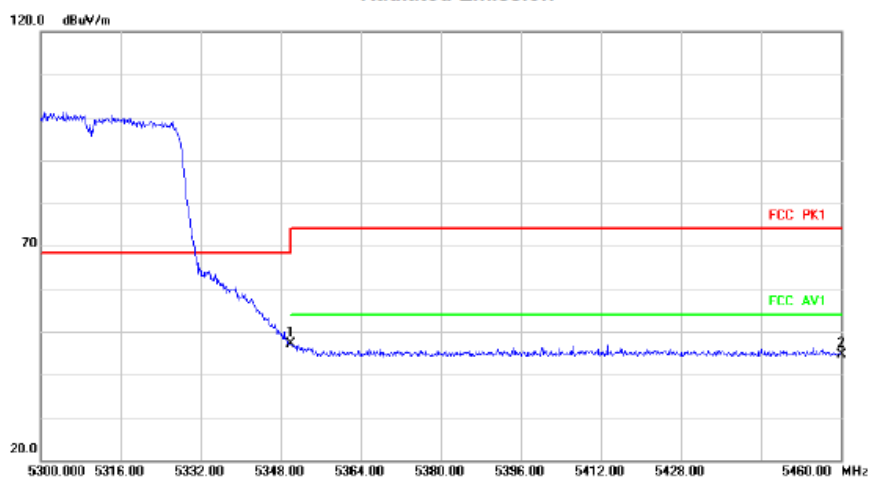
VERTICAL

Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	cm	degree	Comment
1	*	10620.000	35.54	9.54	45.08	74.00	-28.92	peak		

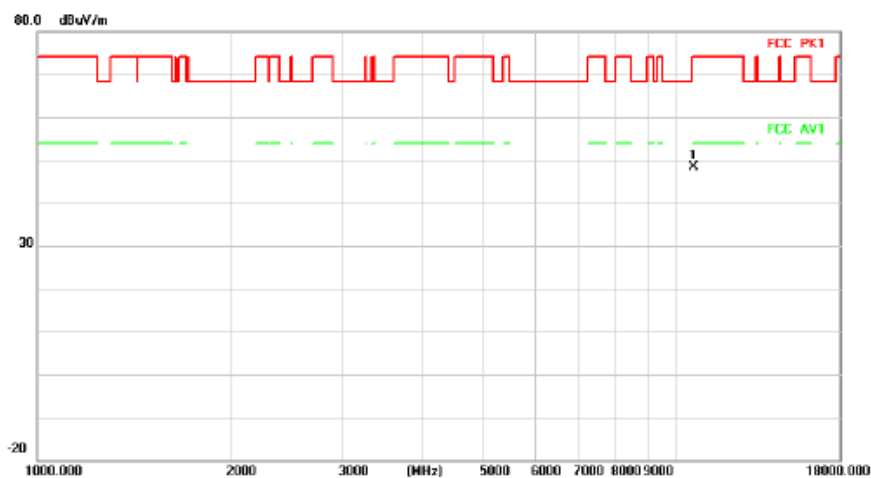
Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	cm	degree	Comment
1	*	5350.000	37.84	9.30	47.14	68.20	-21.06	peak		
2		5460.000	35.31	9.31	44.62	68.20	-23.58	peak		

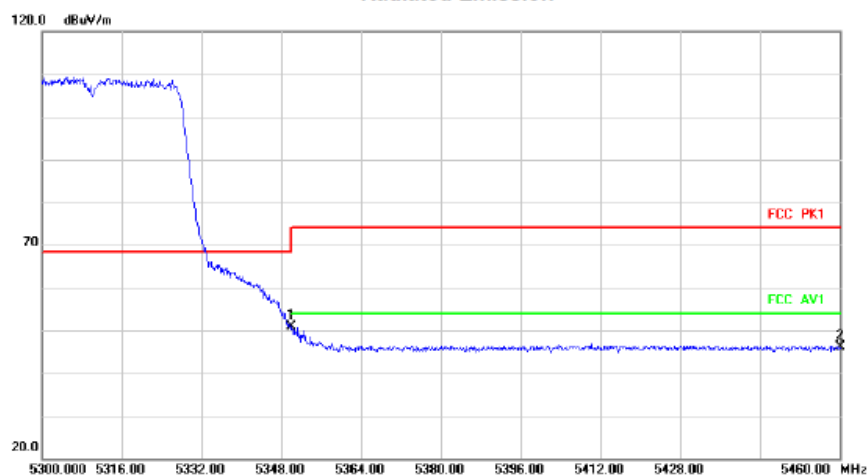
HORIZONTAL

Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	cm	degree
1	*	10620.000	38.94	9.54	48.48	74.00	-25.52	peak	

Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	cm	degree
1	*	5350.000	41.52	9.30	50.82	68.20	-17.38	peak	
2		5460.000	36.74	9.31	46.05	68.20	-22.15	peak	

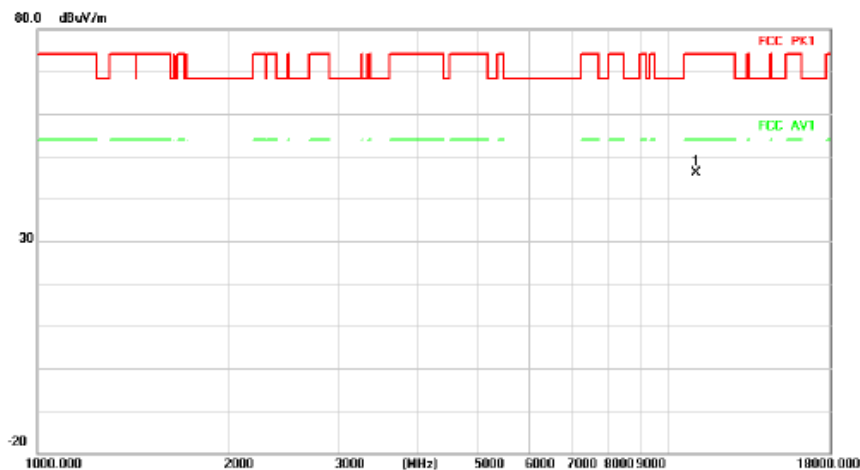
Above 1G (1GHz~18GHz)

Test mode: N(HT40)

Test Channel:102

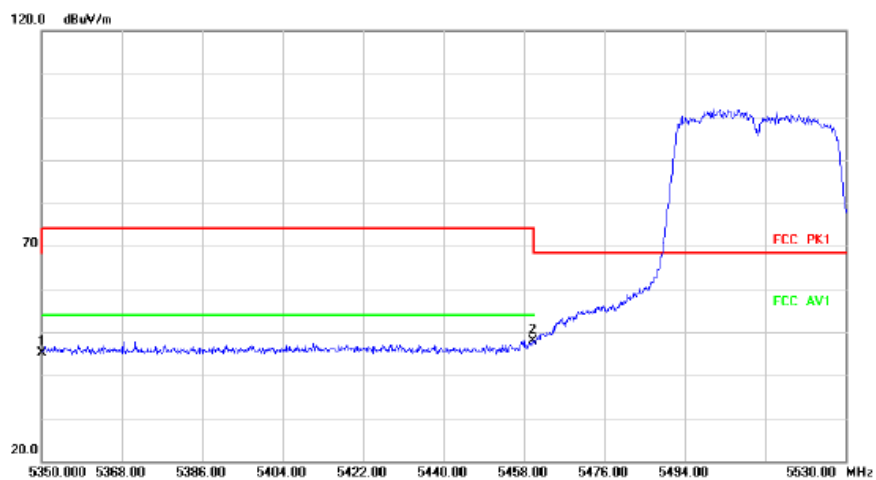
VERTICAL

Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector	cm	degree
1	*	11020.000	35.96	10.15	46.11	74.00	-27.89	peak		Comment

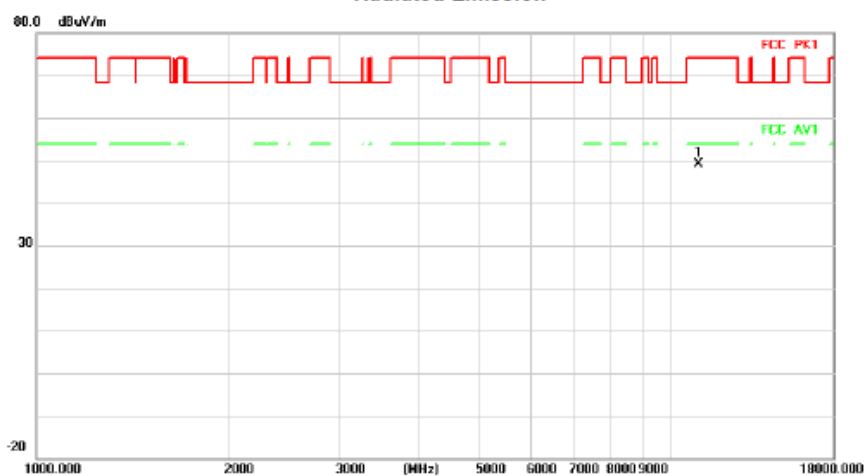
Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector	cm	degree
1		5350.000	35.88	9.30	45.18	68.20	-23.02	peak		Comment
2	*	5460.000	38.46	9.31	47.77	68.20	-20.43	peak		Comment

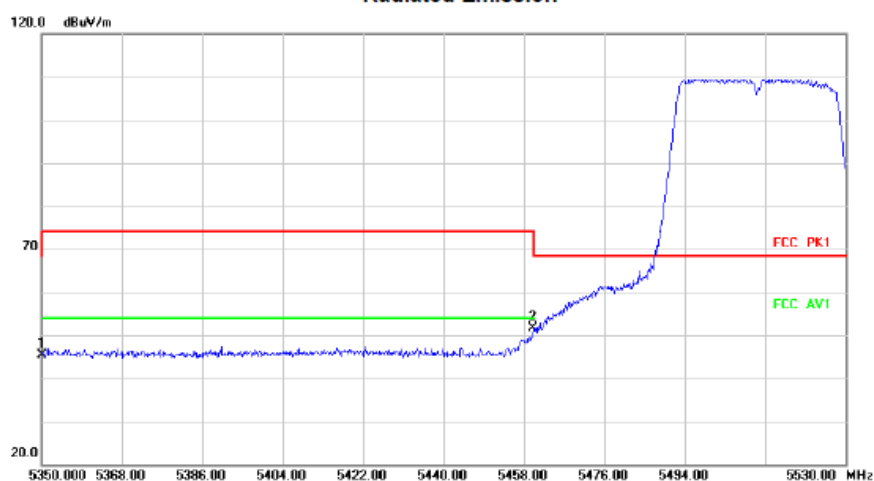
HORIZONTAL

Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector	cm	degree
1	*	11020.000	38.98	10.15	49.13	74.00	-24.87	peak		

Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector	cm	degree
1		5350.000	36.03	9.30	45.33	68.20	-22.87	peak		
2	*	5460.000	42.32	9.31	51.63	68.20	-16.57	peak		

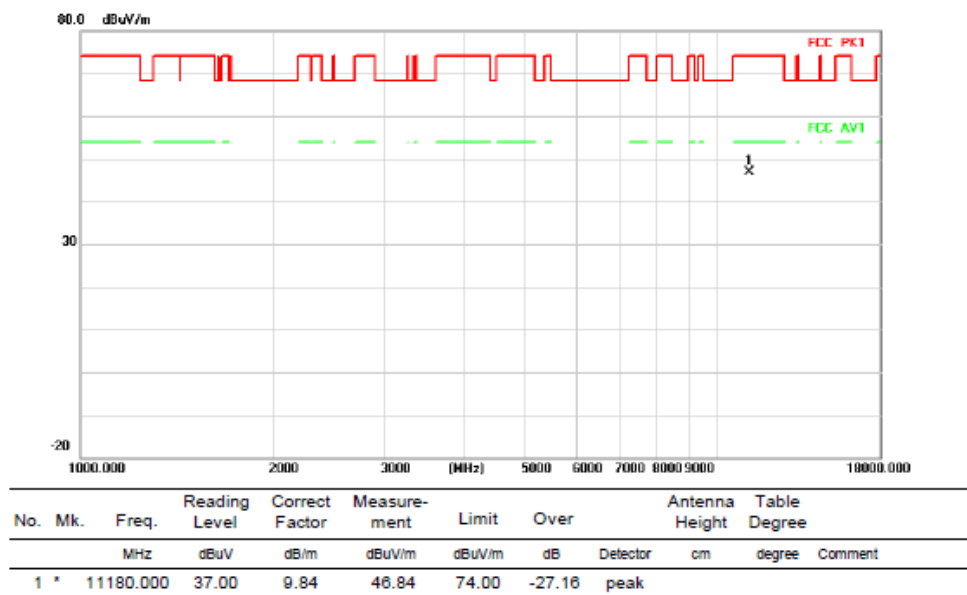
Above 1G (1GHz~18GHz)

Test mode: N(HT40)

Test Channel:118

VERTICAL

Radiated Emission



HORIZONTAL

Radiated Emission



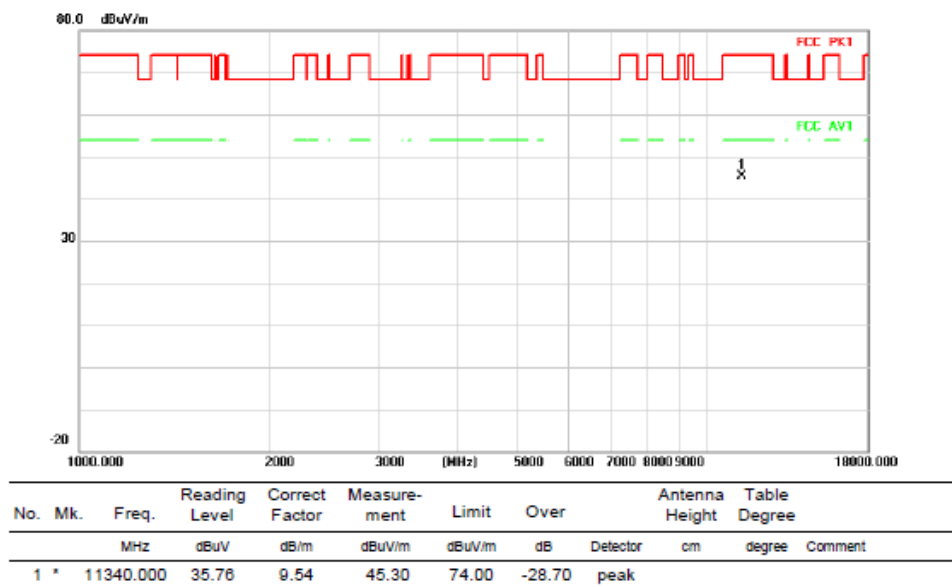
Above 1G (1GHz~18GHz)

Test mode: N(HT40)

Test Channel:134

VERTICAL

Radiated Emission



HORIZONTAL

Radiated Emission



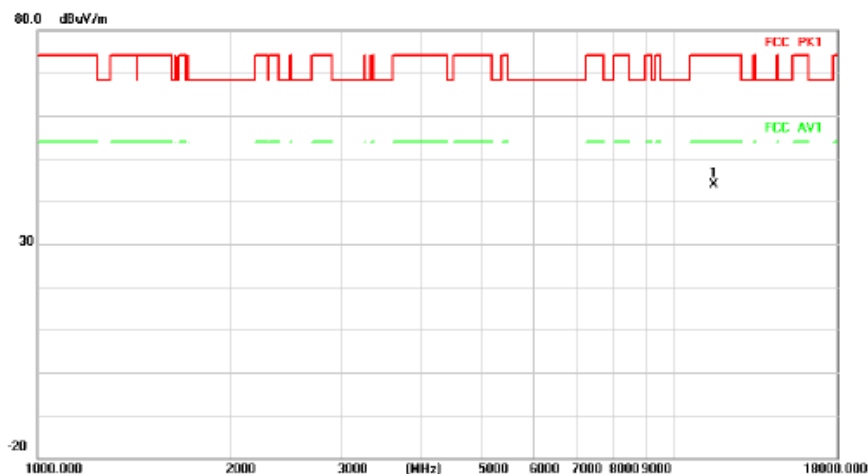
Above 1G (1GHz~18GHz)

Test mode: N(HT40)

Test Channel:151

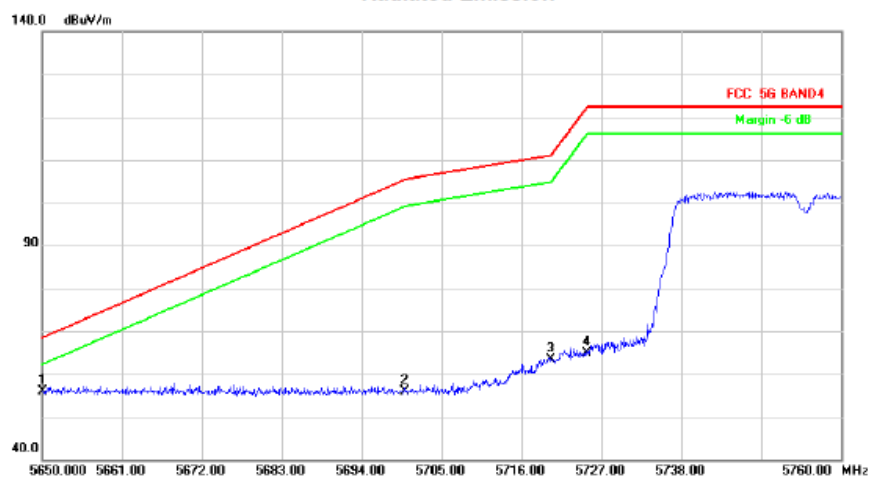
VERTICAL

Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	cm	degree	Comment
1	*	11510.000	34.14	9.76	43.90	74.00	-30.10	peak		

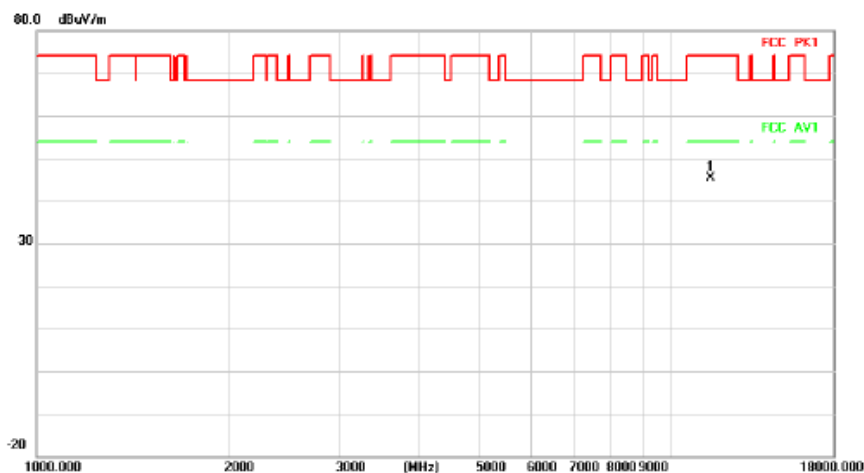
Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	cm	degree	Comment
1	*	5650.000	46.83	9.16	55.99	68.20	-12.21	peak		
2		5700.000	46.79	9.10	55.89	105.20	-49.31	peak		
3		5720.000	54.34	9.08	63.42	110.80	-47.38	peak		
4		5725.000	55.81	9.08	64.89	122.20	-57.31	peak		

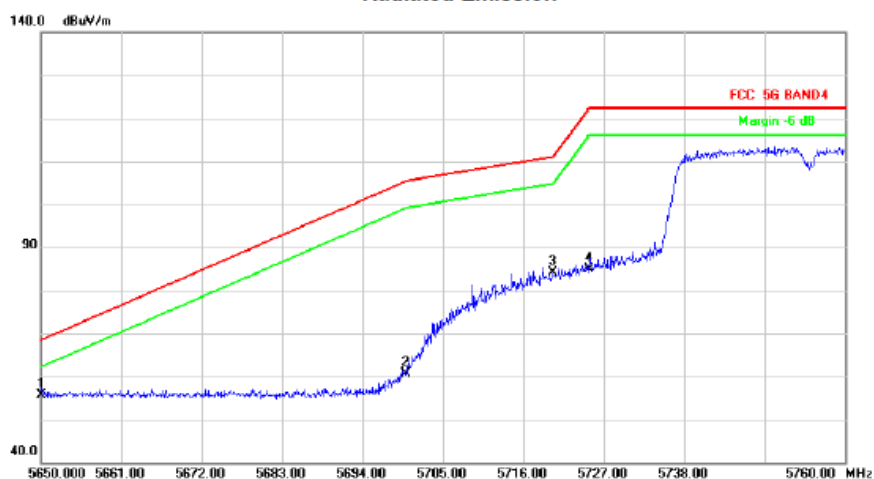
HORIZONTAL

Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	cm	degree
1	*	11510.000	35.89	9.76	45.45	74.00	-28.55 peak		

Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	cm	degree
1	*	5650.000	46.45	9.16	55.61	68.20	-12.59 peak		
2		5700.000	51.49	9.10	60.59	105.20	-44.61 peak		
3		5720.000	75.07	9.08	84.15	110.80	-26.65 peak		
4		5725.000	75.83	9.08	84.91	122.20	-37.29 peak		

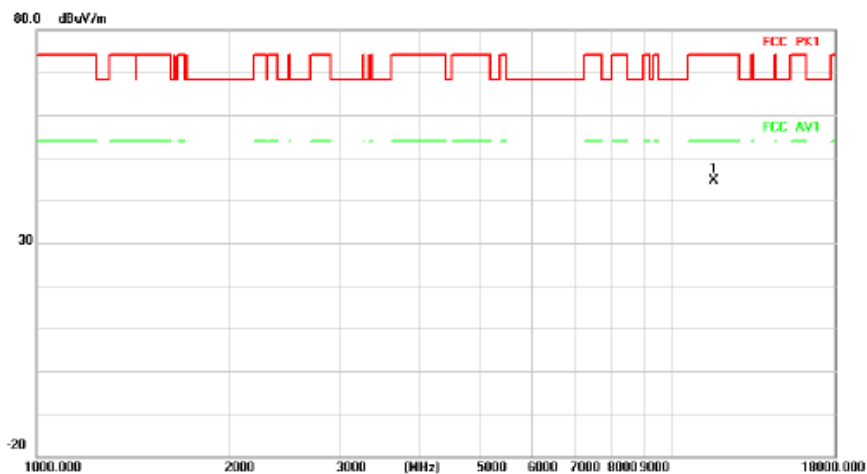
Above 1G (1GHz~18GHz)

Test mode: N(HT40)

Test Channel:159

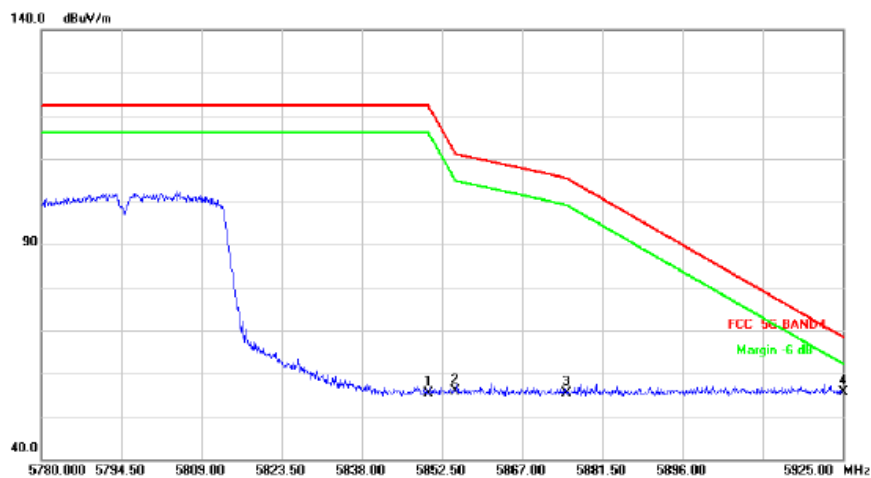
VERTICAL

Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	cm	degree
1	*	11590.000	34.56	9.99	44.55	74.00	-29.45	peak	

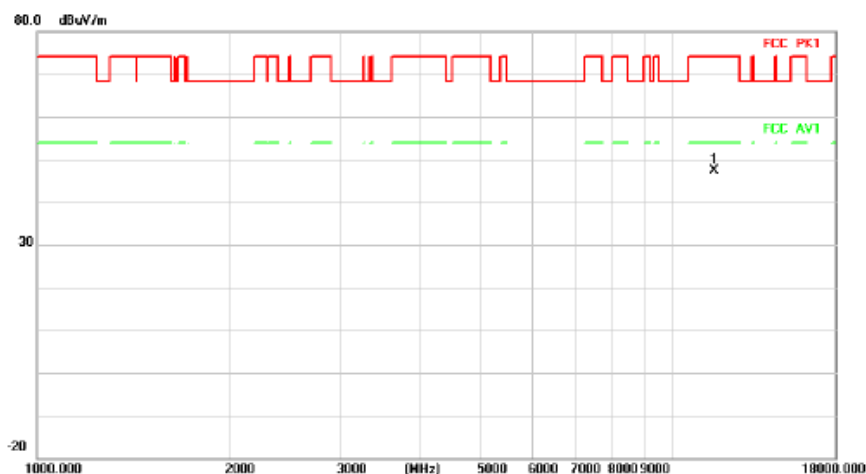
Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	cm	degree
1		5850.000	46.21	9.24	55.45	122.20	-66.75	peak	
2		5855.000	46.62	9.26	55.88	110.80	-54.92	peak	
3		5875.000	46.00	9.36	55.36	105.20	-49.84	peak	
4	*	5925.000	46.09	9.61	55.70	68.20	-12.50	peak	

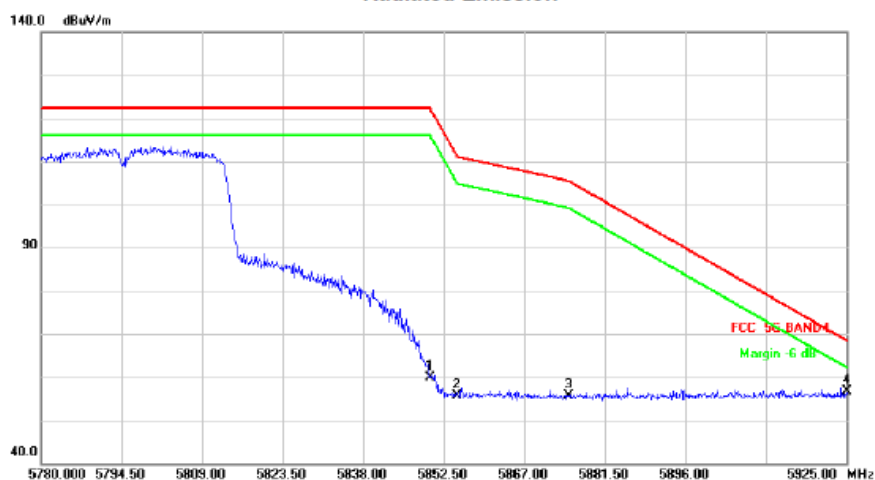
HORIZONTAL

Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	cm	degree
1	*	11590.000	37.51	9.99	47.50	74.00	-26.50	peak	

Radiated Emission



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	cm	degree
1		5850.000	50.59	9.24	59.83	122.20	-62.37	peak	
2		5855.000	46.27	9.26	55.53	110.80	-55.27	peak	
3		5875.000	46.37	9.36	55.73	105.20	-49.47	peak	
4	*	5925.000	46.96	9.61	56.57	68.20	-11.63	peak	

(END OF REPORT)