AUDIX Technology Corp.
No. 53-11, Dingfu, Linkou, Dist.,
New Taipei City244, Taiwan
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FCC 15.247 & RSS-247
2.4 GHz Report

for

Amtran Technology Co., Ltd.

17F., No. 268, Liancheng Rd., Jhonghe District, New Taipei City 23553, Taiwan, R.O.C.

Brand	**:**	**CISCO**
Product Name	**:**	**Video Conferencing Equipment**
Model Name	**:**	**AA55WW**
FCC ID	**:**	**MDZAA55WW**
IC	**:**	**7825A-AA55WW**

Prepared by: **:** **AUDIX Technology Corporation, EMC Department**

Testing Laboratory
1724

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TABLE OF CONTENTS

AUDIX Technology Corp.
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TEST REPORT CERTIFICATION

Applicant	:	Amtran Technology Co., Ltd.
Manufacture	:	Amtran Technology Co., Ltd.
Product Name	:	Video Conferencing Equipment
Model No.	:	AA55WW
Serial No.	:	N/A
Brand	:	CISCO

Applicable Standards:

47 CFR FCC Part 15 Subpart C:2016
RSS-Gen (Issue 4), November 2014
RSS-247 (Issue 1), May 2015
ANSI C63.10:2013
FCC Public Notice DA 00-705

AUDIX Technology Corp. tested the equipment mentioned in accordance with the requirements set forth in the above standards. Test results indicate that the equipment tested is capable of demonstrating compliance with the requirements as documented within this report. ***AUDIX Technology Corp.*** does not assume responsibility for any conclusions and generalizations drawn from the test results with regard to other specimens and samples.

Date of Test: 2016. 11. 07 ~ 10 Date of Report: 2016. 11. 10

Producer: _____
(Tina Huang/Administrator)

Signatory: _____
(Jarwei Wang/Section Manager)

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1. REPORT HISTORY

Revision	Date	Revision Summary	Report Number
0	2016. 11. 10	Original Report.	EM-F160712

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2. SUMMARY OF TEST RESULTS

Rule		Description	Results
FCC	IC		
15.207	RSS-Gen §8.8	Conducted Emission	**PASS**
15.247(d)/ 15.205	RSS-Gen §8.9 RSS-247 §5.5	Radiated Band Edge and Radiated Spurious Emission	**PASS**
15.247(a)(1)	RSS-247 §5.1(2)	20dB Bandwidth	**N/A, Note**
15.247(a)(1)	RSS-247 §5.1(2)	Carrier Frequency Separation	**N/A, Note**
15.247(a)(1)(iii)	RSS-247 §5.1(4)	Time of Occupancy	**N/A, Note**
15.247(a)(1)(iii)	RSS-247 §5.1(4)	Number of Hopping Channels	**N/A, Note**
15.247(b)(1)	RSS-247 §5.1(2)	Maximum Peak Output Power	**N/A, Note**
15.247(d)	RSS-247 §5.5	Conducted Band Edges and Conducted Spurious Emission	**PASS**
15.203	---	Antenna Requirement	**PASS**
Note: All conducted results are authorized to leverage to original grant FCC ID: VOB-P2180 and IC: 7361A-P2180.			

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3. GENERAL INFORMATION

3.1. Description of EUT

<table>
<tr><td>Product</td><td>Video Conferencing Equipment</td></tr>
<tr><td>Model Number</td><td>AA55WW</td></tr>
<tr><td>Serial Number</td><td>N/A</td></tr>
<tr><td>Brand Name</td><td>CISCO</td></tr>
<tr><td>Applicant</td><td>Amtran Technology Co., Ltd.
17F., No. 268, Liancheng Rd., Jhonghe District, New Taipei City 23553, Taiwan, R.O.C.</td></tr>
<tr><td>Manufacture</td><td>Amtran Technology Co., Ltd.
17F., No. 268, Liancheng Rd., Jhonghe District, New Taipei City 23553, Taiwan, R.O.C.</td></tr>
<tr><td>RF Features</td><td>WLAN:802.11a/b/g/n/ac
Bluetooth: BT and BLE</td></tr>
<tr><td>Transmit Type</td><td>
<table>
<tr><th colspan="2">2.4 GHz</th></tr>
<tr><td>802.11b</td><td>2T2R</td></tr>
<tr><td>802.11g</td><td>2T2R</td></tr>
<tr><td>802.11n-HT20</td><td>2T2R</td></tr>
<tr><td>802.11n-HT40</td><td>2T2R</td></tr>
<tr><td>BT</td><td>1T1R</td></tr>
<tr><td>BLE</td><td>1T1R</td></tr>
</table>
<table>
<tr><th colspan="2">UNII Bands</th></tr>
<tr><td>802.11a</td><td>2T2R</td></tr>
<tr><td>802.11n-HT20/
802.11ac-VHT20</td><td>2T2R</td></tr>
<tr><td>802.11n-HT40/
802.11ac-VHT40</td><td>2T2R</td></tr>
<tr><td>802.11ac-VHT80</td><td>2T2R</td></tr>
</table>
</td></tr>
<tr><td>Date of Receipt of Sample</td><td>2016. 09. 01</td></tr>
</table>

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3.2. EUT Specifications Assessed in Current Report

Mode	Fundamental Range (MHz)	Channel Number	Modulation	Data Rate (Mbps)
Bluetooth	2402-2480	79	FHSS (GFSK, π/4 DQPSK, 8-DPSK)	1/2/3

Channel List					
Channel Number	Frequency (MHz)	Channel Number	Frequency (MHz)	Channel Number	Frequency (MHz)
00	2402	27	2429	54	2456
01	2403	28	2430	55	2457
02	2404	29	2431	56	2458
03	2405	30	2432	57	2459
04	2406	31	2433	58	2460
05	2407	32	2434	59	2461
06	2408	33	2435	60	2462
07	2409	34	2436	61	2463
08	2410	35	2437	62	2464
09	2411	36	2438	63	2465
10	2412	37	2439	64	2466
11	2413	38	2440	65	2467
12	2414	39	2441	66	2468
13	2415	40	2442	67	2469
14	2416	41	2443	68	2470
15	2417	42	2444	69	2471
16	2418	43	2445	70	2472
17	2419	44	2446	71	2473
18	2420	45	2447	72	2474
19	2421	46	2448	73	2475
20	2422	47	2449	74	2476
21	2423	48	2450	75	2477
22	2424	49	2451	76	2478
23	2425	50	2452	77	2479
24	2426	51	2453	78	2480
25	2427	52	2454		
26	2428	53	2455		

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3.3. Antenna Information

No.	Antenna Part Number	Manufacture	Antenna Type	Frequency (GHz)	Max Gain (dBi)
1	RFMTA340776IMLB701	Walsin Technology Corporation	PIFA	2.4	**4.61**
				5	**5.60**
2.	RFMTA340784IMLB701		PIFA	2.4	**4.10**
				5	**5.77**

3.4. Test Configuration

AC Conduction	
Test Case	Normal operation

Item		Modulation	Data Rate	Test Channel
Radiated Test Case	Radiated Band Edge	GFSK	1Mbps	0/78
		8-DPSK	3Mbps	0/78
	Radiated Spurious Emission Note 2	GFSK	1Mbps	0/39/78

Note 1:
■Mobile Device
□Portable Device, and 3 axis were assessed.
- □ Lie
- □ Side
- □ Stand

Note 2: We performed testing of the highest and lowest data rate.

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3.5. Tested Supporting System List

3.5.1. Support Peripheral Unit

No.	Product	Brand	Model No.	Serial No.	FCC ID
For Power Line Emission					
1.	PC System	Lenovo	MT-M 2697-AH5	PBFK914	By DoC
2.	USB Keyboard	Lenovo	SK-8825	00556863	By DoC
3.	USB Mouse	Lenovo	LXB MO28UOAUSB	4402687	By DoC
4.	Laser Printer	SAMSUNG	ML-1630	4561B1CP600023X	A3LML1630
5.	I-POD	APPLE	A1204	4H722TG2VTE	By DoC
6.	Earphone	SAMPO	EK-Y1251MP	N/A	N/A
7.	5G Server	D-Link	DIR-868L	R3WE1D7002319	KA2IR868LA1
8.	Mobile Phone	SAMSUNG	GT-I9300	RF1C86ATMSV	N/A
For Radiated Emission					
1.	Notebook PC	acer	MS2362	N/A	PPD-AAR5B225
2.	TV	LG	22LK330-DB	N/A	N/A
3.	USB HUB	SENSE	UP250	N/A	DoC
4.	USB Storage Media	pqi	U273	N/A	DoC

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3.5.2. Cable Lists

No.	Cable Description Of The Above Support Units
For Radiated Emission	
1.	HDMI Cable: Shielded, Detachable, 1.8m
2.	USB Cable: Shielded, Undetachable, 1.8m
3.	USB Cable: Shielded, Undetachable, 1.8m
4.	USB Cable: Shielded, Detachable, 1.8m Power Cord: Unshielded, Detachable, 1.8m
5.	USB Cable: Shielded, Undetachable, 1.0m
6.	Earphone Cable: Unshielded, Detachable, 1.2m
7.	LAN Cable: Unshielded, Detachable, 10.0m Adapter: WA-30B12, Power Cable: Unshielded, Undetachable, 1.2m
For Power Line Emission	
1.	Adapter: Chicony, M/N CPA09-A065N1, DC Power Cord: Unshielded, Undetachable, 1.8m, Bonded a ferrite core AC Power Cord: Unshielded, Detachable, 1.8m LAN Cable: Unshielded, Detachable, 1.8m
2.	HDMI Cable: Unshielded, Detachable, 1.8m Audio Cable: Unshielded, Detachable, 1.8m
3.	USB Cable: Unshielded, Detachable, 1.0m

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3.6. Setup Configuration

3.6.1. EUT Configuration for Power Line and Radiated Emission

3.7. Operating Condition of EUT

Test program "ADB" is used for enabling EUT RF function under continues transmitting and choosing data rate/ channel.

3.8. Description of Test Facility

Test Firm Name	:	**AUDIX Technology Corporation** **EMC Department** No. 53-11, Dingfu, Linkou Dist., New Taipei City 244, Taiwan
Test Location & Facility	:	**No. 7 Shielded Room** No. 53-11, Dingfu, Linkou Dist., New Taipei City 244, Taiwan **Semi-Anechoic Chamber** No. 53-11, Dingfu, Linkou Dist., New Taipei City 244, Taiwan Federal Communication Commission Registration Number: 90993 Renewal on May 06 2015 IC Test Site Registration No.: 5183B-1 Renewal on September 17, 2014 **FullyAnechoic Chamber** No. 53-11, Dingfu, Linkou Dist., New Taipei City 244, Taiwan IC Test Site Registration No.: 5183B-4 Renewal on August 31, 2015
NVLAP Lab. Code	:	200077-0
TAF Accreditation No	:	1724
FCC OET Designation	:	TW1004 & TW1090

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3.9. Measurement Uncertainty

Test Item	Frequency Range	Uncertainty
Conduction Test	150kHz~30MHz	±3.5dB
Radiation Test (Distance: 3m)	30MHz~1000MHz	± 3.68dB
	Above 1GHz	± 5.82dB

Remark：Uncertainty = $ku_c(y)$

Test Item	Uncertainty
20dB Bandwidth	±0.2kHz
Carrier Frequency Separation	±0.2kHz
Time of Occupancy	±0.03sec
Maximum peak Output power	± 0.52dB
Conducted Emission Limitations	± 0.13dB

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4. MEASUREMENT EQUIPMENT LIST

4.1. Conducted Emission Measurement

Item	Type	Manufacturer	Model No.	Serial No.	Cal. Date	Cal. Interval
1.	Test Receiver	R&S	ESCI	101276	2016. 03. 31	1 Year
2.	A.M.N.	R&S	ESH2-Z5	100366	2016. 07. 27	1 Year
3.	L.I.S.N.	Kyoritsu	KNW-407	8-1539-3	2016. 01. 21	1 Year
4.	Pulse Limiter	R&S	ESH3-Z2	101495	2016. 01. 17	1 Year
5.	Test Software	Audix	e3	V.6.120424	N.C.R.	N.C.R.

4.2. Radiated Emission Measurement

4.2.1. Frequency Range 9kHz~1000MHz (Semi Anechoic Chamber)

Item	Type	Manufacturer	Model No.	Serial No.	Cal. Date	Cal. Interval
1.	Spectrum Analyzer	Agilent	N9010A-526	MY53400071	2016. 09. 19	1 Year
2.	Test Receiver	R & S	ESCS30	100338	2016. 06. 22	1 Year
3.	Amplifier	HP	8447D	2944A06305	2016. 02. 23	1 Year
4.	Bilog Antenna	CHASE	CBL6112D	33821	2016. 01. 30	1 Year
5.	Loop Antenna	R&S	HFH2-Z2	891847/27	2015. 12. 24	1 Year
6.	Test Software	Audix	e3	V.6.110601	N.C.R.	N.C.R.

4.2.2. Frequency Range Above 1000MHz (Fully Anechoic Chamber)

Item	Type	Manufacturer	Model No.	Serial No.	Cal. Date	Cal. Interval
1.	Spectrum Analyzer	Agilent	E4446A	US44300366	2016. 08. 19	1 Year
2.	Amplifier	Agilent	8449B	3008A02678	2016. 03. 04	1 Year
3.	2.4GHz Notch Filter	K&L	7NSL10-2441.5E130.5-00	1	2016. 07. 28	1 Year
4.	Horn Antenna	ETS-Lindgren	3117	00135902	2016. 03. 05	1 Year
5.	Horn Antenna	EMCO	3116	2653	2016. 10. 24	1 Year
6.	Test Software	Audix	e3	V.6.110601	N.C.R.	N.C.R.

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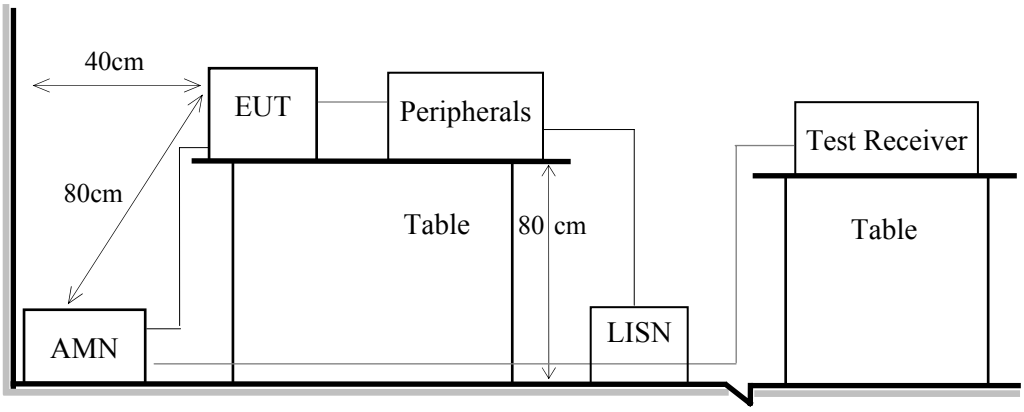
5. CONDUCTED EMISSION MEASUREMET

5.1. Block Diagram of Test Setup

Shielded Room Setup Diagram



Ground Plane

5.2. Power Line Conducted Emission Limit

Frequency	Conducted Limit	
	Quasi-Peak Level	Average Level
150kHz ~ 500kHz	66 ~ 56 dBμV	56 ~ 46 dBμV
500kHz ~ 5MHz	56 dBμV	46 dBμV
5MHz ~ 30MHz	60 dBμV	50 dBμV

Remark 1.: If the average limit is met when using a Quasi-Peak detector, the measurement using the average detector is not required.
2.: The lower limit applies to the band edges.

5.3. Test Procedure

5.3.1. To set up the EUT as indicated in ANSI C 63.10. The EUT was placed on the table which has 80 cm height to the ground and 40 cm distance to the conducting wall.

5.3.2. Power supplier of the EUT was connected to the AC mains through an Artificial Mains Network (A.M.N.).

5.3.3. The AC power supplies to all peripheral devices must be provided through line impedance stabilization network (L.I.S.N.)

5.3.4. Checking frequency range from 150 kHz to 30 MHz and record the emission which does not have 20 dB below limit.

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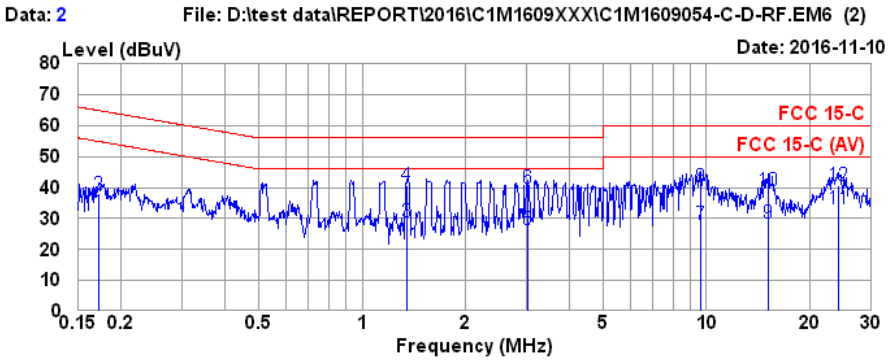
5.4. Conducted Emission Measurement Results

PASSED.

Test Date	2016/11/10	Temp./Hum.	24℃/53%
Test Voltage	AC 120V, 60Hz		



Site no. : No.7 Shielded Room
Data no. : 2
Condition : ESH2-Z5 366(ADAPTER)
Phase : NEUTRAL
Limit : FCC 15-C
Env. / Ins. : 24*C / 53% ESCI (1276)
Engineer : Nick Du
EUT : AA55WW
Power Rating : 120Vac/60Hz
Test Mode : Operating

	Freq. (MHz)	AMN Factor (dB)	Cable Loss (dB)	Pulse Att. (dB)	Reading (dBµV)	Emission Level (dBµV)	Limits (dBµV)	Margin (dB)	Remark
1	0.172	0.18	0.03	9.85	21.64	31.70	64.86	33.16	Average
2	0.172	0.18	0.03	9.85	27.57	37.63	64.86	27.23	QP
3	1.352	0.23	0.07	9.93	18.80	29.03	56.00	26.97	Average
4	1.352	0.23	0.07	9.93	30.47	40.70	56.00	15.30	QP
5	3.025	0.29	0.09	9.91	16.12	26.41	56.00	29.59	Average
6	3.025	0.29	0.09	9.91	29.51	39.80	56.00	16.20	QP
7	9.654	0.52	0.17	9.88	17.52	28.09	60.00	31.91	Average
8	9.654	0.52	0.17	9.88	29.64	40.21	60.00	19.79	QP
9	15.066	0.80	0.21	9.90	17.54	28.45	60.00	31.55	Average
10	15.066	0.80	0.21	9.90	27.94	38.85	60.00	21.15	QP
11	24.271	0.95	0.28	9.96	22.01	33.20	60.00	26.80	Average
12	24.271	0.95	0.28	9.96	29.32	40.51	60.00	19.49	QP

Remarks: 1. Emission Level= AMN Factor + Cable Loss + Pulse Att. + Reading.
2. If the average limit is met when useing a quasi-peak detector, the EUT shall be deemed to meet both limits and measurement with average detector is unnecessary.

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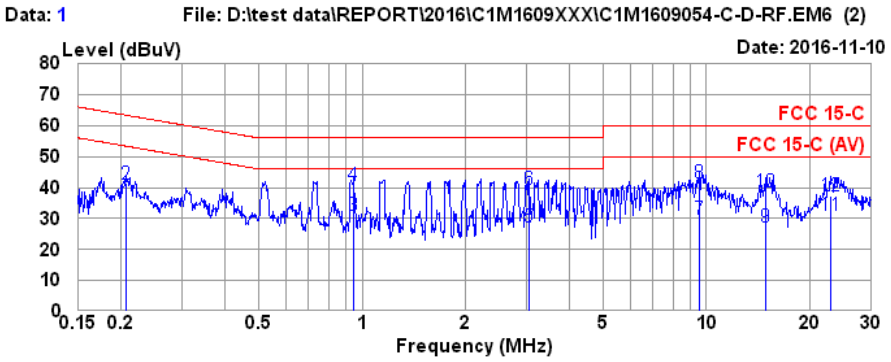
Test Date	2016/11/10	Temp./Hum.	24°C/53%
Test Voltage	AC 120V, 60Hz		



Site no. : No.7 Shielded Room
Data no. : 1
Condition : ESH2-Z5 366(ADAPTER)
Phase : LINE
Limit : FCC 15-C
Env. / Ins. : 24*C / 53% ESCI (1276)
Engineer : Nick Du
EUT : AA55WW
Power Rating : 120Vac/60Hz
Test Mode : Operating

	Freq. (MHz)	AMN Factor (dB)	Cable Loss (dB)	Pulse Att. (dB)	Reading (dBµV)	Emission Level (dBµV)	Limits (dBµV)	Margin (dB)	Remark
1	0.206	0.16	0.04	9.85	25.00	35.05	53.36	18.31	Average
2	0.206	0.16	0.04	9.85	30.89	40.94	63.36	22.42	QP
3	0.948	0.21	0.06	9.90	20.95	31.12	46.00	14.88	Average
4	0.948	0.21	0.06	9.90	30.34	40.51	56.00	15.49	QP
5	3.058	0.30	0.09	9.91	17.04	27.34	46.00	18.66	Average
6	3.058	0.30	0.09	9.91	29.07	39.37	56.00	16.63	QP
7	9.552	0.56	0.17	9.88	18.98	29.59	50.00	20.41	Average
8	9.552	0.56	0.17	9.88	30.78	41.39	60.00	18.61	QP
9	14.907	0.89	0.21	9.90	16.32	27.32	50.00	22.68	Average
10	14.907	0.89	0.21	9.90	27.67	38.67	60.00	21.33	QP
11	22.896	1.18	0.27	9.95	19.51	30.91	50.00	19.09	Average
12	22.896	1.18	0.27	9.95	26.09	37.49	60.00	22.51	QP

Remarks: 1. Emission Level= AMN Factor + Cable Loss + Pulse Att. + Reading.
2. If the average limit is met when useing a quasi-peak detector, the EUT shall be deemed to meet both limits and measurement with average detector is unnecessary.

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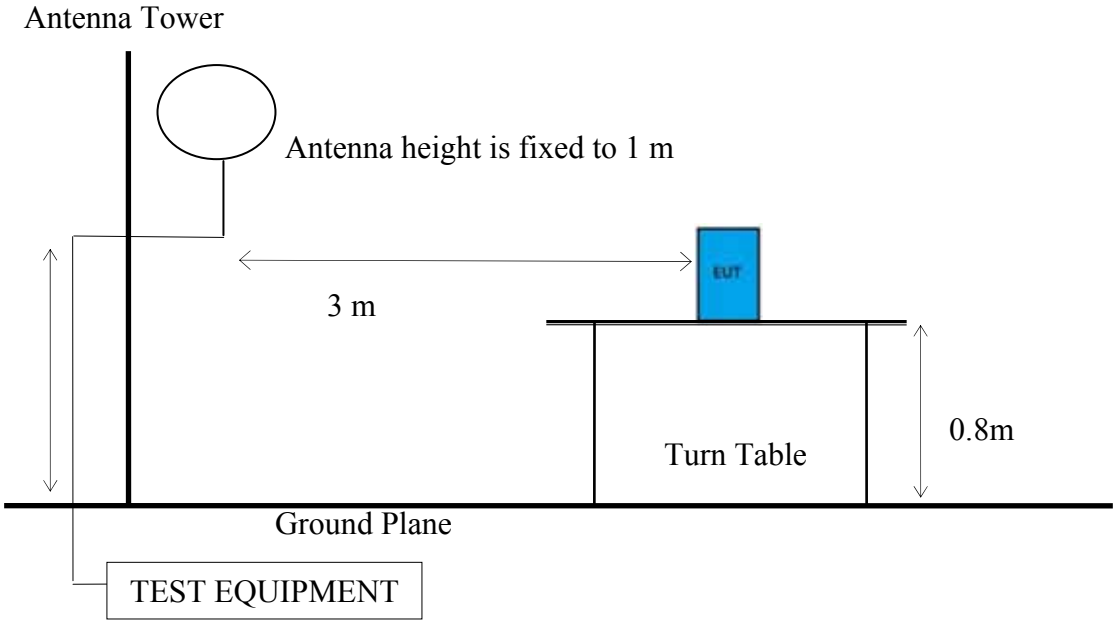
6. RADIATED EMISSION MEASUREMENT

6.1. Block Diagram of Test Setup

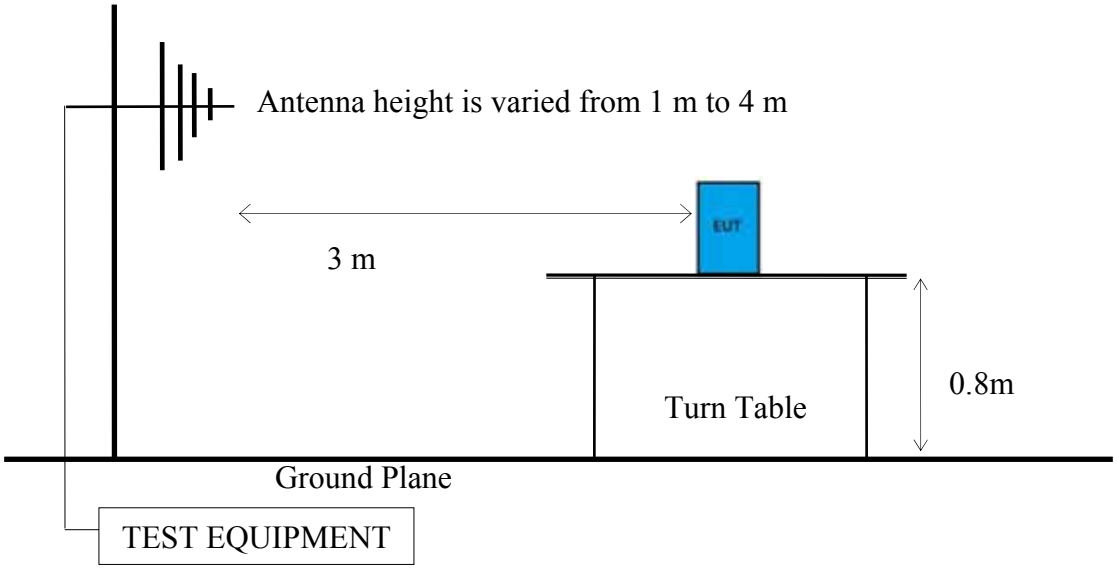
6.1.1. Block Diagram of EUT

Indicated as section 3.5

6.1.2. Semi Anechoic Chamber (3m) Setup Diagram for 9kHz-30MHz



6.1.3. Semi Anechoic Chamber (3m) Setup Diagram for 30-1000 MHz



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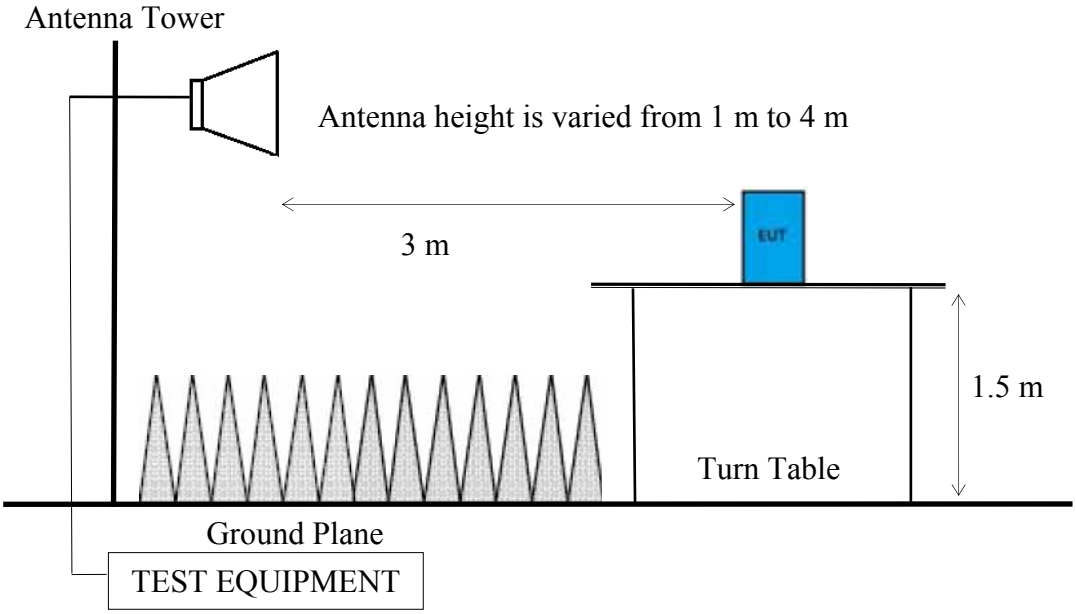
6.1.4. Fully Anechoic Chamber (3m) Setup Diagram for above 1GHz



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6.2. Radiated Emission Limits

In any 100kHz bandwidth outside the frequency band, the radio frequency power produced by the intentional radiator shall be at least 20dB below that in the 100kHz bandwidth within the band that contains the highest level. In addition, radiated emissions which fall in restricted bands, as defined in Section 15.205, must also comply with the radiated emission limits specified as below.

Frequency (MHz)	Distance (m)	Field Strengths Limits	
		μV/m	dBμV/m
0.009 - 0.490	300	67.6	2400/kHz
0.490 - 1.705	30	87.6	24000/kHz
1.705 - 30	30	29.5	30
30 ~ 88	3	100	40.0
88 ~ 216	3	150	43.5
216 ~ 960	3	200	46.0
Above 960	3	500	54.0
Above 1000	3	74.0 dBμV/m (Peak) 54.0 dBμV/m (Average)	

Remark：(1) dBμV/m = 20 log (μV/m)

(2) The tighter limit applies to the edge between two frequency bands.

(3) Distance refers to the distance in meters between the measuring instrument antenna and the closed point of any part of the device or system.

(4) Fundamental and emission fall within operation band are exempted from this section.

(5) Pursuant to ANSI C63.10: 6.6.4.3, if the maximized peak measured value complies with the average limit, then it is unnecessary to perform an average measurement.

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6.3. Test Procedure

Frequency Range 9kHz~30MHz:
The EUT setup on the turn table which has 0.8 m height to the ground. The turn table rotated 360 degrees and antenna fixed to 1 m to find the maximum emission level. In order to find the maximum emission, all of the interface cables were manipulated according to ANSI C63.10-2013 regulation.

(1) RBW = 9kHz with peak and average detector.
(2) Detector: average and peak (9kHz-490kHz)
Q.P. (490kHz-30MHz)

Frequency Range 30MHz ~ 40GHz:
The EUT setup on the turn table which has 1.5m height to the ground. The turn table rotated 360 degrees and antenna varied from 1 m to 4 m to find the maximum emission level. Both horizontal and vertical polarization are required. In order to find the maximum emission, all of the interface cables were manipulated according to ANSI C63.10-2013 regulation.

Frequency below 1 GHz:
Spectrum Analyzer is used for pre-testing with following setting:

(1) RBW = 120KHz
(2) VBW ≥ 3 x RBW.
(3) Detector = Peak.
(4) Sweep time = auto.
(5) Trace mode = max hold.
(6) Allow sweeps to continue until the trace stabilizes.
(7) When peak-detected value is lower than limit that the measurement using the Q.P. detector is not required. Otherwise using Q.P. for finally measurement.

Frequency above 1GHz to 10th harmonic:

Peak Detector:

(1) RBW = 1MHz
(2) VBW ≥ 3 x RBW.
(3) Detector = Peak.
(4) Sweep time = auto.
(5) Trace mode = max hold.
(6) Allow sweeps to continue until the trace stabilizes.
(7) When peak-detected value is lower than limit that the measurement using the average detector is not required. Otherwise using average for finally measurement.

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Average Measurement:

■**Option 1:**

(1) RBW = 1 MHz
(2) VBW =1/T
(3) Detector = Peak.
(4) Sweep time = auto.
(5) Trace mode = max hold.
(6) Allow sweeps to continue until the trace stabilizes.

☐**Option 2:**

Average Emission Level= Peak Emission Level+ D.C.C.F.

6.4. Measurement Result Explanation

■Peak Emission Level=Antenna Factor + Cable Loss + Meter Reading

■Average Emission Level l=Antenna Factor + Cable Loss + Meter Reading

☐Average Emission Level= Peak Emission Level+ DCCF

Duty Cycle Correction Factor (DCCF)= 20log (TX_{on}/100ms) presented in section 3.5

☐ERP= Peak Emission Level-95.2dB-2.14dB

6.5. Test Results

PASSED.

Test Date	2016/11/07	Temp./Hum.	23℃/53%
Test Voltage	AC 120V, 60Hz		

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6.5.1. Emissions within Restricted Frequency Bands

6.5.1.1. Frequency 9kHz~30MHz

The emissions (9kHz~30MHz) not reported for there is no emission be found.

6.5.1.2. Frequency Below 1 GHz

Modulation	8-DPSK	Frequency	TX 2480MHz

Antenna at Horizontal Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Meter Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
119.24	13.01	2.50	18.87	34.38	43.50	9.12	Peak
197.81	9.45	3.32	18.68	31.45	43.50	12.05	Peak
359.80	15.13	5.09	14.62	34.84	46.00	11.16	Peak
712.88	18.65	7.15	6.98	32.78	46.00	13.22	Peak

Antenna at Vertical Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Meter Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
46.49	11.44	1.51	26.00	38.95	40.00	1.05	Peak
121.18	12.99	2.52	26.20	41.71	43.50	1.79	Peak
312.27	14.07	4.48	19.44	37.99	46.00	8.01	Peak
727.43	18.83	7.23	5.72	31.78	46.00	14.22	Peak

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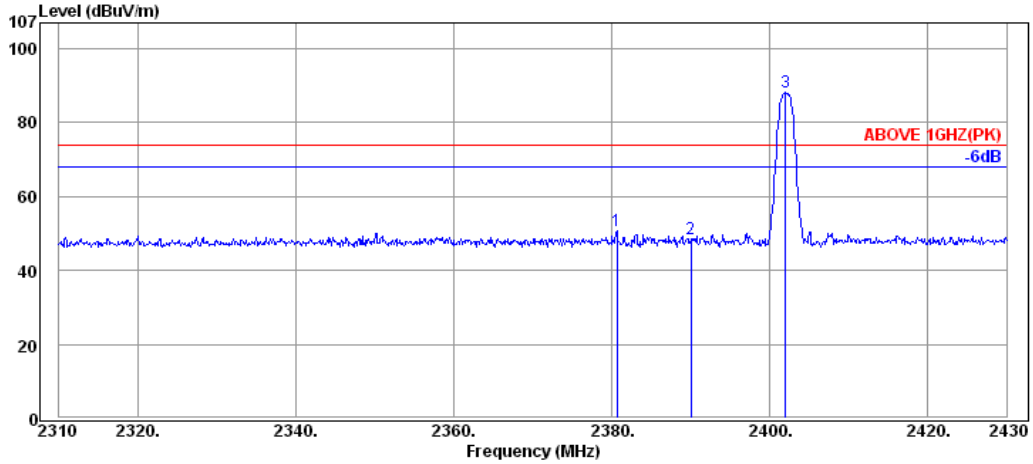
6.5.1.3. Frequency Above 1 GHz to 10th harmonics

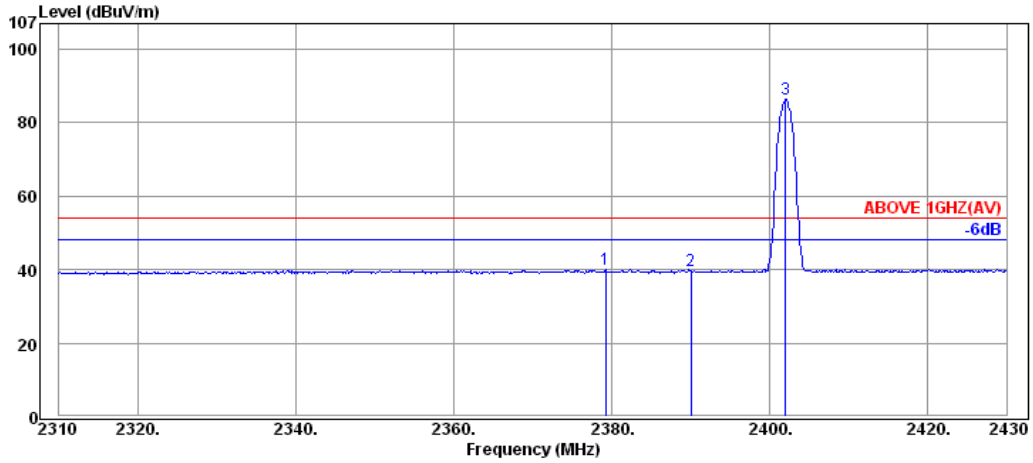
Band Edge:

Modulation	8-DPSK	Frequency	TX 2402MHz



Antenna at Horizontal Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Meter Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
2380.68	32.13	6.07	12.68	50.88	74.00	23.12	Peak
2390.04	32.16	6.08	10.34	48.58	74.00	25.42	Peak
2402.04	32.16	6.09	49.97	88.22	---	---	Peak



Antenna at Horizontal Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Meter Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
2379.24	32.13	6.06	2.04	40.23	54.00	13.77	Average
2390.04	32.16	6.08	1.34	39.58	54.00	14.42	Average
2402.04	32.16	6.09	48.08	86.33	---	---	Average

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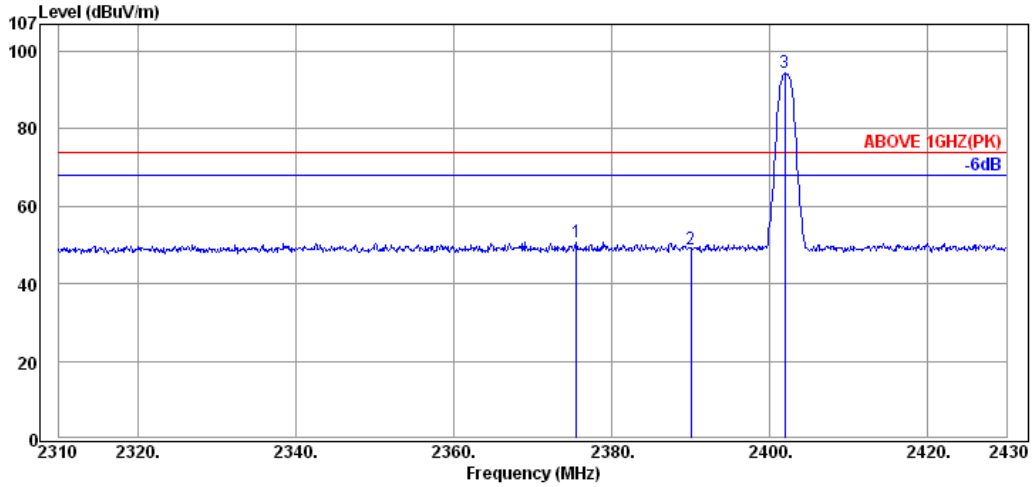
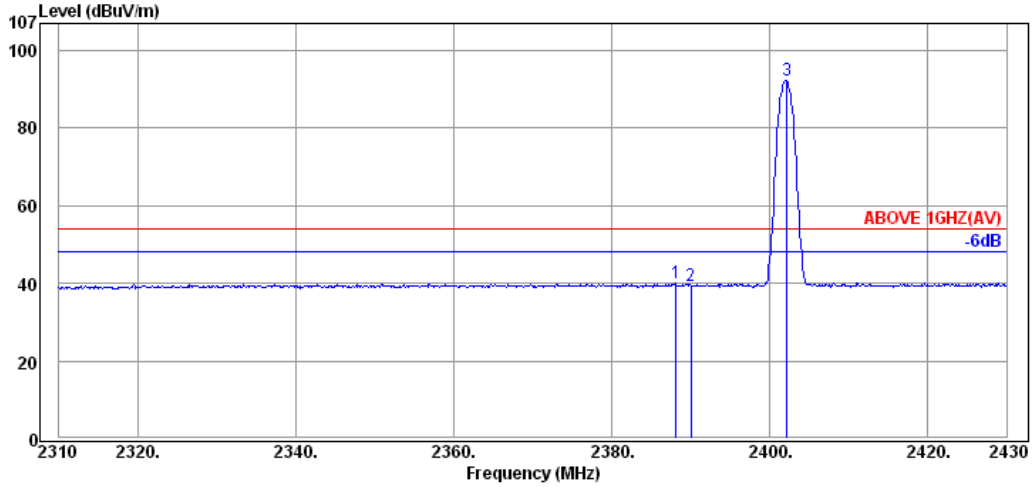
Modulation	8-DPSK	Frequency	TX 2402MHz



Antenna at Vertical Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Meter Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
2375.52	32.13	6.06	12.63	50.82	74.00	23.18	Peak
2390.04	32.16	6.08	10.80	49.04	74.00	24.96	Peak
2401.92	32.16	6.09	56.17	94.42	---	---	Peak



Antenna at Vertical Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Meter Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
2388.12	32.16	6.08	1.70	39.94	54.00	14.06	Average
2390.04	32.16	6.08	1.13	39.37	54.00	14.63	Average
2402.16	32.16	6.09	54.16	92.41	---	---	Average

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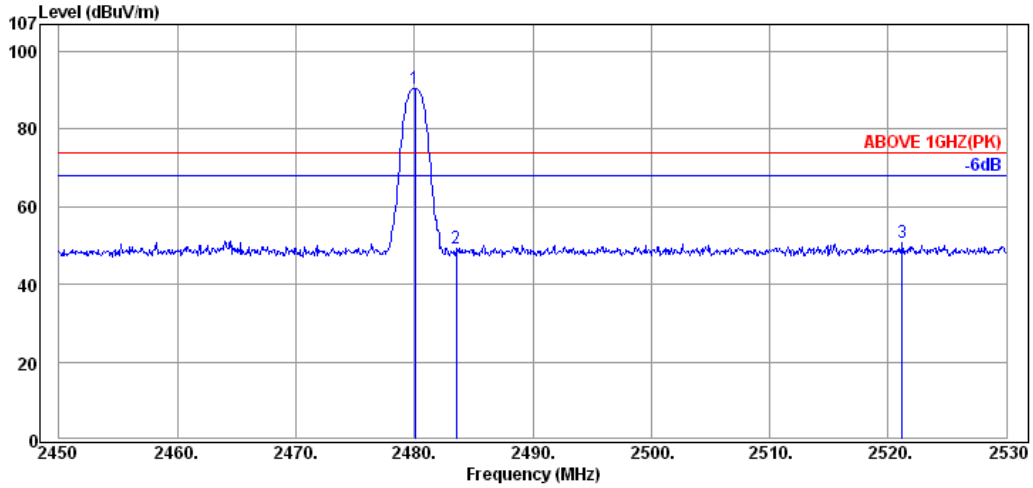
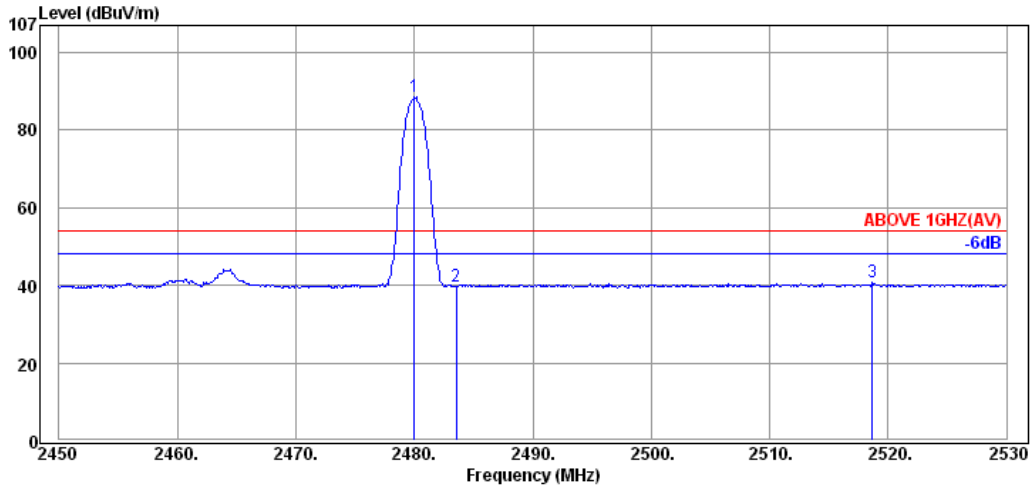
Modulation	8-DPSK	Frequency	TX 2480MHz



Antenna at Horizontal Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Meter Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
2480.08	32.28	6.18	51.98	90.44	---	---	Peak
2483.52	32.28	6.19	10.75	49.22	74.00	24.78	Peak
2521.20	32.32	6.23	12.18	50.73	74.00	23.27	Peak



Antenna at Horizontal Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Meter Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
2480.00	32.28	6.18	50.11	88.57	---	---	Average
2483.52	32.28	6.19	1.27	39.74	54.00	14.26	Average
2518.64	32.32	6.23	2.11	40.66	54.00	13.34	Average

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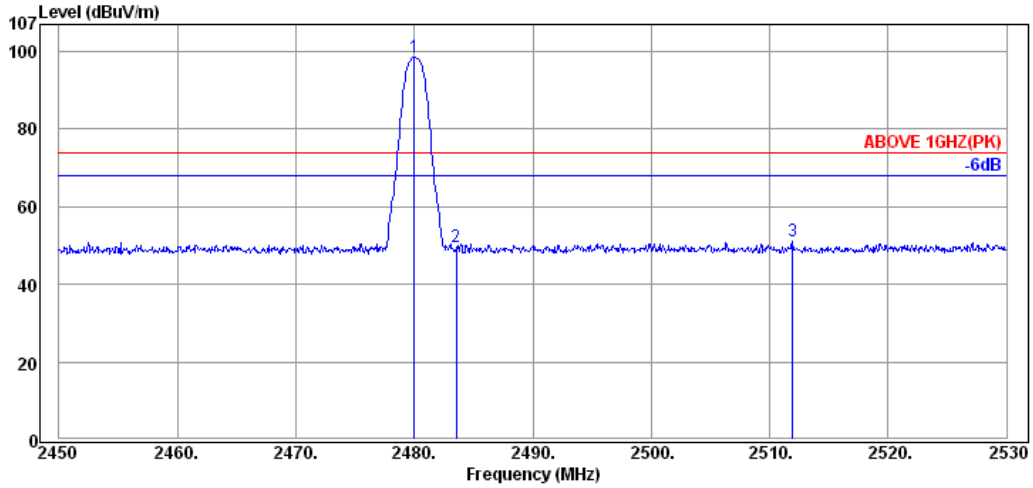
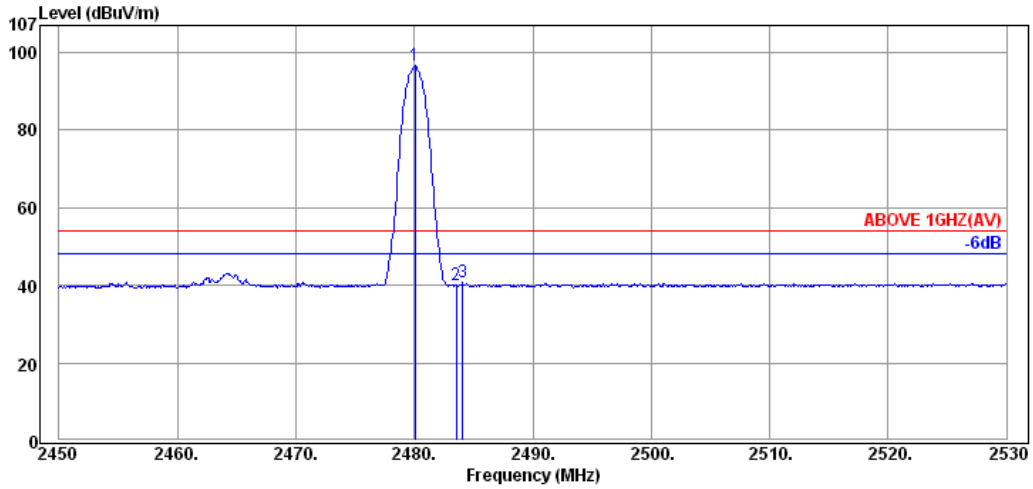
Modulation	8-DPSK	Frequency	TX 2480MHz



Antenna at Vertical Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Meter Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
2480.00	32.28	6.18	60.04	98.50	---	---	Peak
2483.52	32.28	6.19	11.00	49.47	74.00	24.53	Peak
2511.92	32.32	6.22	12.44	50.98	74.00	23.02	Peak



Antenna at Vertical Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Meter Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
2480.08	32.28	6.18	58.07	96.53	---	---	Average
2483.52	32.28	6.19	1.56	40.03	54.00	13.97	Average
2484.08	32.28	6.19	2.24	40.71	54.00	13.29	Average

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6.5.2. Emissions outside the frequency band:

The emissions (up to 25GHz) not reported for there is no emission be found.

Modulation	8-DPSK	Frequency	TX 2402MHz

Antenna at Horizontal Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Meter Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
4805.00	34.22	8.87	0.32	43.41	54.00	10.59	Peak
7205.00	35.80	11.27	-1.43	45.64	54.00	8.36	Peak

Antenna at Vertical Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Meter Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
4805.00	34.22	8.87	1.24	44.33	54.00	9.67	Peak
7205.00	35.80	11.27	-2.25	44.82	54.00	9.18	Peak

Modulation	8-DPSK	Frequency	TX 2441MHz

Antenna at Horizontal Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Meter Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
4880.00	34.25	9.14	0.43	43.82	54.00	10.18	Peak
7325.00	35.80	11.95	-0.52	47.23	54.00	6.77	Peak

Antenna at Vertical Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Meter Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
4880.00	34.25	9.14	0.97	44.36	54.00	9.64	Peak
7325.00	35.80	11.95	-2.73	45.02	54.00	8.98	Peak

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Modulation	8-DPSK	Frequency	TX 2480MHz

Antenna at Horizontal Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Meter Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
4960.00	34.29	9.40	0.35	44.04	54.00	9.96	Peak
7440.00	35.80	12.56	-2.44	45.92	54.00	8.08	Peak

Antenna at Vertical Polarization

Emission Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Meter Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector
4960.00	34.29	9.40	-0.66	43.03	54.00	10.97	Peak
7440.00	35.80	12.56	-2.21	46.15	54.00	7.85	Peak

6.5.3. Emissions in Non-restricted Frequency Bands

All emission levels below the 15.209 general radiated emissions limits is not required.

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7. DEVIATION TO TEST SPECIFICATIONS

【NONE】

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APPDNDIX A

TEST PHOTOGRAPHS

(Model: AA55WW)

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A.1 Conducted Emission Measurement

FRONT VIEW

BACK VIEW

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Partner System: 5G AP Server

AUDIX Technology Corp.
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A.2 Radiated Measurement at Chamber

Frequency Below 1GHz

Frequency Above 1GHz