TEST REPORT

Product	:	Desktop PC
Trade mark	:	COMPAQ
Model/Type reference	:	QD15I5GW8512, QD15I3GW8512
Serial Number	:	N/A
Report Number	:	EED32R80383902
FCC ID	:	2BLU9-QD15GW
Date of Issue	:	Apr. 24, 2025
Test Standards	:	47 CFR Part 15 Subpart C
Test result	:	PASS

Prepared for:

M&M Electronics, S.A.
Cocosolito, Colon Free Zone, Main Entrance Warehouse 10D and 11D, Panama

Prepared by:

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Date: Apr. 24, 2025

Check No.:1637210325

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2 Version

Version No.	Date	Description
00	Apr. 24, 2025	Original

3 Test Summary

Test Item	Test Requirement	Result
Antenna Requirement	47 CFR Part 15, Subpart C Section 15.203/15.247 (c)	PASS
AC Power Line Conducted Emission	47 CFR Part 15, Subpart C Section 15.207	PASS
Maximum Conducted Output Power	47 CFR Part 15, Subpart C Section 15.247 (b)(1)	NOTE
20dB Emission Bandwidth	47 CFR Part 15, Subpart C Section 15.247 (a)(1)	NOTE
Carrier Frequency Separation	47 CFR Part 15, Subpart C Section 15.247 (a)(1)	NOTE
Number of Hopping Channels	47 CFR Part 15, Subpart C Section 15.247 (a)(1)	NOTE
Time of Occupancy	47 CFR Part 15, Subpart C Section 15.247 (a)(1)	NOTE
Pseudorandom Frequency Hopping Sequence	47 CFR Part 15, Subpart C Section 15.247(b)(4)	NOTE
Band Edge Measurements	47 CFR Part 15, Subpart C Section 15.247(d)	NOTE
Conducted Spurious Emissions	47 CFR Part 15, Subpart C Section 15.247(d)	NOTE
Radiated Spurious emissions	47 CFR Part 15, Subpart C Section 15.205/15.209	PASS
Restricted bands around fundamental frequency	47 CFR Part 15, Subpart C Section 15.205/15.209	NOTE

Remark:
NOTE: The test data refer to the report of No.180717-02.TR05 (FCC ID: PD9AX201NG)
Model No.: QD15I5GW8512, QD15I3GW8512
Only the model QD15I5GW8512 was tested. The They have same electrical, PCB and layout, only the model name, QD1515GW8512andQD1513GW8512 are different for marketing requirements.

4 General Information

4.1 Client Information

Applicant:	M&M Electronics, S.A.
Address of Applicant:	Cocosolito, Colon Free Zone, Main Entrance Warehouse 10D and 11D, Panama
Manufacturer:	M&M Electronics, S.A.
Address of Manufacturer:	Cocosolito, Colon Free Zone, Main Entrance Warehouse 10D and 11D, Panama
Factory:	Hunan Greatwall Computer System Co.,Ltd
Address of Factory:	Hunan Greatwall Industrial Park, Tianyi Science and Technology City, Xiangyun Middle Road, Tianyuan District, Zhuzhou, Hunan Province

4.2 General Description of EUT

Product Name:	Desktop PC	
Model No.:	QD15I5GW8512, QD15I3GW8512	
Test Model No.:	QD15I5GW8512	
Trade Mark:	COMPAQ	
Product Type:	☐ Mobile ☐ Portable ☒ Fixed Location	
Operation Frequency:	2402MHz-2480MHz	
Modulation Technique:	Frequency Hopping Spread Spectrum(FHSS)	
Modulation Type:	GFSK, π/4DQPSK, 8DPSK	
Number of Channel:	79	
Hopping Channel Type:	Adaptive Frequency Hopping systems	
Antenna Type:	PIFA Antenna	
Antenna Gain:	1.65 dBi	
Power Supply:	Adapter:	AC 100~240V
Test Voltage:	AC 120V	
Sample Received Date:	Apr. 09, 2025	
Sample tested Date:	Apr. 09, 2025 to Apr. 22, 2025	

Operation Frequency each of channel							
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
0	2402	20	2422	40	2442	60	2462
1	2403	21	2423	41	2443	61	2463
2	2404	22	2424	42	2444	62	2464
3	2405	23	2425	43	2445	63	2465
4	2406	24	2426	44	2446	64	2466
5	2407	25	2427	45	2447	65	2467
6	2408	26	2428	46	2448	66	2468
7	2409	27	2429	47	2449	67	2469
8	2410	28	2430	48	2450	68	2470
9	2411	29	2431	49	2451	69	2471
10	2412	30	2432	50	2452	70	2472
11	2413	31	2433	51	2453	71	2473
12	2414	32	2434	52	2454	72	2474
13	2415	33	2435	53	2455	73	2475
14	2416	34	2436	54	2456	74	2476
15	2417	35	2437	55	2457	75	2477
16	2418	36	2438	56	2458	76	2478
17	2419	37	2439	57	2459	77	2479
18	2420	38	2440	58	2460	78	2480
19	2421	39	2441	59	2461		

Note:
In section 15.31(m), regards to the operating frequency range over 10 MHz, the Lowest frequency, the middle frequency, and the highest frequency of channel were selected to perform the test, and the selected channel see below:

Channel	Frequency(MHz)
The lowest channel (CH0)	2402
The middle channel (CH39)	2441
The highest channel (CH78)	2480

4.3 Test Configuration

EUT Test Software Settings:		
Test Software:	DRTU.exe	
EUT Power Grade:	Default (Power level is built-in set parameters and cannot be changed and selected)	
Use test software to set the lowest frequency, the middle frequency and the highest frequency keep transmitting of the EUT.		
Mode	Channel	Frequency(MHz)
DH1/DH3/DH5	CH0	2402
	CH39	2441
	CH78	2480
2DH1/2DH3/2DH5	CH0	2402
	CH39	2441
	CH78	2480
3DH1/3DH3/3DH5	CH0	2402
	CH39	2441
	CH78	2480

4.4 Test Environment

Operating Environment:	
Radiated Spurious Emissions:	
Temperature:	22~25.0 °C
Humidity:	50~55 % RH
Atmospheric Pressure:	1010mbar
Conducted Emissions:	
Temperature:	22~25.0 °C
Humidity:	50~55 % RH
Atmospheric Pressure:	1010mbar
RF Conducted:	
Temperature:	22~25.0 °C
Humidity:	50~55 % RH
Atmospheric Pressure:	1010mbar

4.5 Description of Support Units

The EUT has been tested with associated equipment below.

1）Support equipment

Description	Manufacturer	Model No.	Certification	Supplied by
/	/	/	/	/

4.6 Test Location

All tests were performed at:

Centre Testing International Group Co., Ltd
Building C, Hongwei Industrial Park Block 70, Bao'an District, Shenzhen, China
Telephone: +86 (0) 755 33683668 Fax:+86 (0) 755 33683385
No tests were sub-contracted.
FCC Designation No.: CN1164

4.7 Measurement Uncertainty (95% confidence levels, k=2)

No.	Item	Measurement Uncertainty
1	Radio Frequency	7.9×10^{-8}
2	RF power, conducted	0.46dB (30MHz-1GHz)
		0.55dB (1GHz-40GHz)
3	Radiated Spurious emission test	3.3dB (9kHz-30MHz)
		4.3dB (30MHz-1GHz)
		4.5dB (1GHz-18GHz)
		3.4dB (18GHz-40GHz)
4	Conduction emission	3.5dB (9kHz-150kHz)
		3.1dB (150kHz-30MHz)
5	Temperature test	0.64°C
6	Humidity test	3.8%
7	DC power voltages	0.026%

4.8 Equipment List

Conducted disturbance Test					
Equipment	Manufacturer	Model No.	Serial Number	Cal. date (mm-dd-yyyy)	Cal. Due date (mm-dd-yyyy)
Receiver	R&S	ESCI	100435	04-08-2025	04-07-2026
Temperature/ Humidity Indicator	Defu	TH128	/	04-25-2024	04-24-2025
LISN	R&S	ENV216	100098	09-19-2024	09-18-2025
Barometer	changchun	DYM3	1188	---	---
Test software	Fara	EZ-EMC	EMC-CON 3A1.1	---	---
Capacitive voltage probe	Schwarzbeck	CVP 9222C	00124	06-18-2024	06-17-2025
ISN	TESEQ	ISN T800	30297	12-05-2024	12-04-2025

3M Semi-anechoic Chamber (2)- Radiated disturbance Test					
Equipment	Manufacturer	Model No.	Serial Number	Cal. date (mm-dd-yyyy)	Cal. Due date (mm-dd-yyyy)
3M Chamber & Accessory Equipment	TDK	SAC-3	---	05/22/2022	05/21/2025
Receiver	R&S	ESCI7	100938-003	09/07/2024	09/06/2025
Spectrum Analyzer	R&S	FSV40	101200	07/18/2024	07/17/2025
TRILOG Broadband Antenna	schwarzbeck	VULB 9163	9163-618	05/22/2022	05/21/2025
Loop Antenna	Schwarzbeck	FMZB 1519B	1519B-076	04/07/2025	04/06/2026
Microwave Preamplifier	Tonscend	EMC051845SE	980380	12/05/2024	12/04/2025
Horn Antenna	A.H.SYSTEMS	SAS-574	374	07/02/2023	07/01/2026
Horn Antenna	ETS-LINGREN	BBHA 9120D	9120D-1869	04/07/2025	04/06/2026
Preamplifier	Agilent	11909A	12-1	03/03/2025	03/02/2026
Preamplifier	CD	PAP-1840-60	6041.6042	06/19/2024	06/18/2025
Test software	Fara	EZ-EMC	EMEC-3A1-Pre	---	---
Cable line	Fulai(7M)	SF106	5219/6A	05/22/2022	05/21/2025

Cable line	Fulai(6M)	SF106	5220/6A	05/22/2022	05/21/2025
Cable line	Fulai(3M)	SF106	5216/6A	05/22/2022	05/21/2025
Cable line	Fulai(3M)	SF106	5217/6A	05/22/2022	05/21/2025

3M full-anechoic Chamber					
Equipment	**Manufacturer**	**Model No.**	**Serial Number**	**Cal. Date (mm-dd-yyyy)**	**Cal. Due date (mm-dd-yyyy)**
Fully Anechoic Chamber	TDK	FAC-3	---	01-09-2024	01-08-2027
Receiver	Keysight	N9038A	MY57290136	01-04-2025	01-03-2026
Spectrum Analyzer	Keysight	N9020B	MY57111112	01-14-2025	01-13-2026
Spectrum Analyzer	Keysight	N9030B	MY57140871	01-14-2025	01-13-2026
TRILOG Broadband Antenna	Schwarzbeck	VULB 9163	9163-1148	04-28-2024	04-27-2025
Horn Antenna	Schwarzbeck	BBHA 9170	9170-832	04-16-2024 04-12-2025	04-15-2025 04-11-2026
Horn Antenna	ETS-LINDGREN	3117	57407	07-03-2024	07-02-2025
Preamplifier	EMCI	EMC001330	980563	03-03-2025	03-02-2026
Preamplifier	Tonscend	TAP-011858	AP21B806112	07-18-2024	07-17-2025
Preamplifier	Tonscend	EMC051845SE	980380	12-05-2024	12-04-2025
Communication test set	R&S	CMW500	102898	01-04-2025	01-03-2026
Temperature/ Humidity Indicator	biaozhi	GM1360	EE1186631	03-31-2025	03-30-2026
RSE Automatic test software	JS Tonscend	JS36-RSE	V4.0.0.0	---	---
Cable line	Times	SFT205-NMSM-2.50M	394812-0001	01-09-2024	01-08-2027
Cable line	Times	SFT205-NMSM-2.50M	394812-0002	01-09-2024	01-08-2027
Cable line	Times	SFT205-NMSM-2.50M	394812-0003	01-09-2024	01-08-2027
Cable line	Times	SFT205-NMSM-2.50M	393495-0001	01-09-2024	01-08-2027
Cable line	Times	EMC104-NMNM-1000	SN160710	01-09-2024	01-08-2027
Cable line	Times	SFT205-NMSM-3.00M	394813-0001	01-09-2024	01-08-2027
Cable line	Times	SFT205-NMNM-1.50M	381964-0001	01-09-2024	01-08-2027

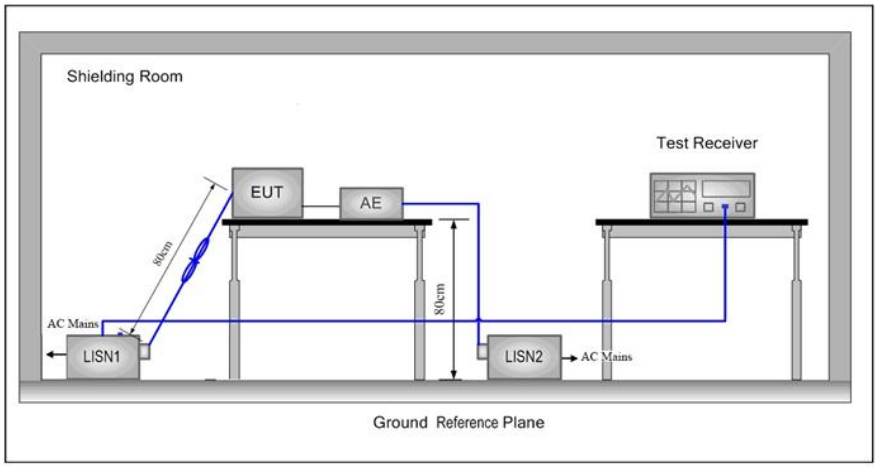
Cable line	Times	SFT205-NMSM-7.00M	394815-0001	01-09-2024	01-08-2027
Cable line	Times	HF160-KMKM-3.00M	393493-0001	01-09-2024	01-08-2027

5 Test results and Measurement Data

5.1 Antenna Requirement

Standard requirement:	47 CFR Part 15C Section 15.203 /247(c)
15.203 requirement: An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator, the manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited. 15.247(b) (4) requirement: The conducted output power limit specified in paragraph (b) of this section is based on the use of antennas with directional gains that do not exceed 6 dBi. Except as shown in paragraph (c) of this section, if transmitting antennas of directional gain greater than 6 dBi are used, the conducted output power from the intentional radiator shall be reduced below the stated values in paragraphs (b)(1), (b)(2), and (b)(3) of this section, as appropriate, by the amount in dB that the directional gain of the antenna exceeds 6 dBi.	
EUT Antenna:	Please see Internal photos
The antenna is PIFA antenna. The best case gain of the antenna is 1.65 dBi.	

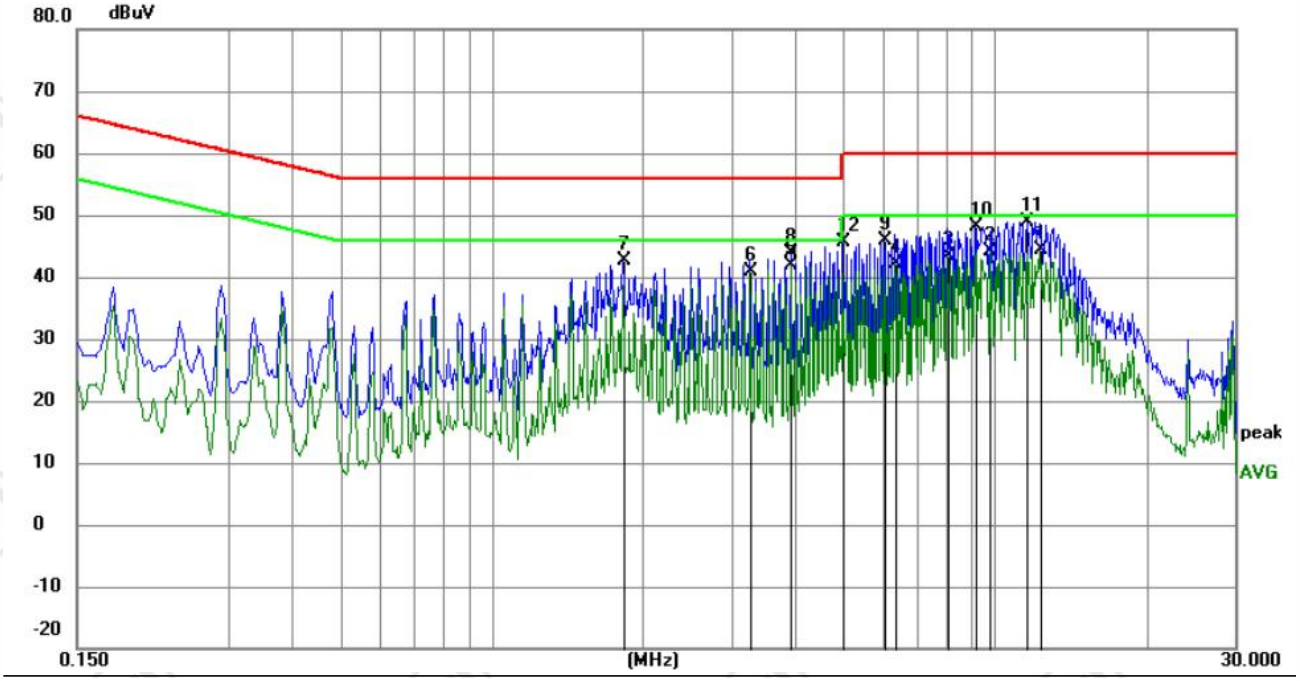
5.2 AC Power Line Conducted Emissions

Test Requirement:	47 CFR Part 15C Section 15.207
Test Method:	ANSI C63.10: 2013
Test Frequency Range:	150kHz to 30MHz
Receiver setup:	RBW=9 kHz, VBW=30 kHz, Sweep time=auto
Limit:	Frequency range (MHz) / Limit (dBuV): Quasi-peak / Average 0.15-0.5: 66 to 56* / 56 to 46* 0.5-5: 56 / 46 5-30: 60 / 50 * Decreases with the logarithm of the frequency.
Test Setup:	
Test Procedure:	1) The mains terminal disturbance voltage test was conducted in a shielded room. 2) The EUT was connected to AC power source through a LISN 1 (Line Impedance Stabilization Network) which provides a 50Ω/50μH + 5Ω linear impedance. The power cables of all other units of the EUT were connected to a second LISN 2, which was bonded to the ground reference plane in the same way as the LISN 1 for the unit being measured. A multiple socket outlet strip was used to connect multiple power cables to a single LISN provided the rating of the LISN was not exceeded. 3) The tabletop EUT was placed upon a non-metallic table 0.8m above the ground reference plane. And for floor-standing arrangement, the EUT was placed on the horizontal ground reference plane, 4) The test was performed with a vertical ground reference plane. The rear of the EUT shall be 0.4 m from the vertical ground reference plane. The vertical ground reference plane was bonded to the horizontal ground reference plane. The LISN 1 was placed 0.8 m from the boundary of the unit under test and bonded to a ground reference plane for LISNs mounted on top of the ground reference plane. This distance was between the closest points of the LISN 1 and the EUT. All other units of the EUT and associated equipment was at least 0.8 m from the LISN 2. 5) In order to find the maximum emission, the relative positions of

	equipment and all of the interface cables must be changed according to ANSI C63.10: 2013 on conducted measurement.
Exploratory Test Mode:	Non-hopping transmitting mode with all kind of modulation and all kind of data type at the lowest, middle, high channel.
Final Test Mode:	Through Pre-scan, find the DH5 of data type and GFSK modulation at the lowest channel is the worst case. Only the worst case is recorded in the report.
Test Results:	Pass

Measurement Data

Live line:

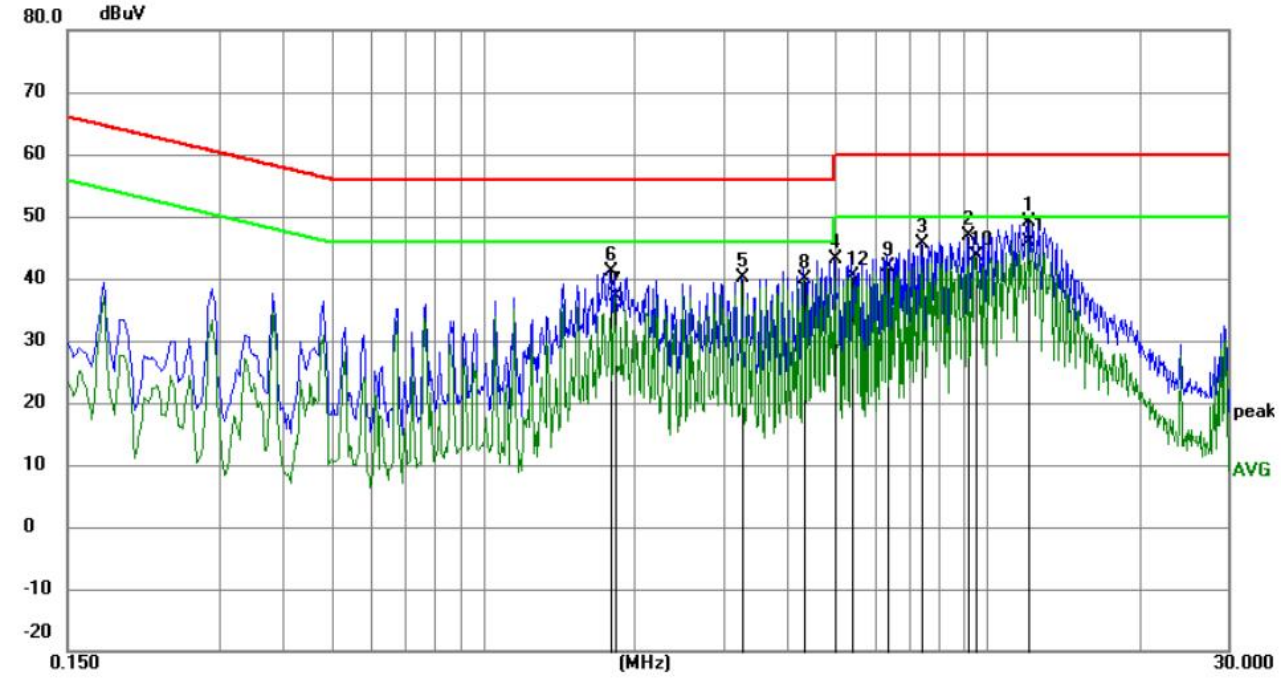


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		12.2955	34.37	9.91	44.28	50.00	-5.72	AVG	
2		9.7890	34.12	9.96	44.08	50.00	-5.92	AVG	
3		8.0565	33.49	10.00	43.49	50.00	-6.51	AVG	
4		6.3375	32.13	10.04	42.17	50.00	-7.83	AVG	
5	*	3.9345	31.74	10.10	41.84	46.00	-4.16	AVG	
6		3.2640	30.82	10.12	40.94	46.00	-5.06	AVG	
7		1.8239	32.48	10.17	42.65	56.00	-13.35	QP	
8		3.9345	33.72	10.10	43.82	56.00	-12.18	QP	
9		6.0495	35.94	10.04	45.98	60.00	-14.02	QP	
10		9.1230	38.04	9.97	48.01	60.00	-11.99	QP	
11		11.6160	39.01	9.92	48.93	60.00	-11.07	QP	
12		4.9920	35.60	10.06	45.66	56.00	-10.34	QP	

Remark:

1. The following Quasi-Peak and Average measurements were performed on the EUT:
2. Final Test Level =Receiver Reading + LISN Factor + Cable Loss.
3. If the Peak value under Average limit, the Average value is not recorded in the report.

Neutral line:



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		12.0030	39.10	9.91	49.01	60.00	-10.99	QP	
2		9.1185	36.83	9.97	46.80	60.00	-13.20	QP	
3		7.3950	35.53	10.02	45.55	60.00	-14.45	QP	
4		4.9920	33.08	10.06	43.14	56.00	-12.86	QP	
5		3.2640	29.94	10.12	40.06	56.00	-15.94	QP	
6		1.7879	30.86	10.17	41.03	56.00	-14.97	QP	
7		1.8239	26.91	10.17	37.08	46.00	-8.92	AVG	
8		4.3215	29.86	10.08	39.94	46.00	-6.06	AVG	
9		6.3420	31.74	10.04	41.78	50.00	-8.22	AVG	
10		9.5010	33.68	9.96	43.64	50.00	-6.36	AVG	
11	*	12.0030	35.96	9.91	45.87	50.00	-4.13	AVG	
12		5.3790	30.25	10.05	40.30	50.00	-9.70	AVG	

Remark:

1. The following Quasi-Peak and Average measurements were performed on the EUT:
2. Final Test Level =Receiver Reading + LISN Factor + Cable Loss.
3. If the Peak value under Average limit, the Average value is not recorded in the report.

5.3 Radiated Spurious Emission & Restricted bands

Test Requirement:	47 CFR Part 15C Section 15.209 and 15.205
Test Method:	ANSI C63.10: 2013
Test Site:	Measurement Distance: 3m (Semi-Anechoic Chamber)

Receiver Setup:

Frequency	Detector	RBW	VBW	Remark
0.009MHz-0.090MHz	Peak	10kHz	30kHz	Peak
0.009MHz-0.090MHz	Average	10kHz	30kHz	Average
0.090MHz-0.110MHz	Quasi-peak	10kHz	30kHz	Quasi-peak
0.110MHz-0.490MHz	Peak	10kHz	30kHz	Peak
0.110MHz-0.490MHz	Average	10kHz	30kHz	Average
0.490MHz -30MHz	Quasi-peak	10kHz	30kHz	Quasi-peak
30MHz-1GHz	Peak	100 kHz	300kHz	Peak
Above 1GHz	Peak	1MHz	3MHz	Peak
	Peak	1MHz	10kHz	Average

Limit:

Frequency	Field strength (microvolt/meter)	Limit (dBuV/m)	Remark	Measurement distance (m)
0.009MHz-0.490MHz	2400/F(kHz)	-	-	300
0.490MHz-1.705MHz	24000/F(kHz)	-	-	30
1.705MHz-30MHz	30	-	-	30
30MHz-88MHz	100	40.0	Quasi-peak	3
88MHz-216MHz	150	43.5	Quasi-peak	3
216MHz-960MHz	200	46.0	Quasi-peak	3
960MHz-1GHz	500	54.0	Quasi-peak	3
Above 1GHz	500	54.0	Average	3

Note: 15.35(b), Unless otherwise specified, the limit on peak radio frequency emissions is 20dB above the maximum permitted average emission limit applicable to the equipment under test. This peak limit applies to the total peak emission level radiated by the device.

Test Setup:	

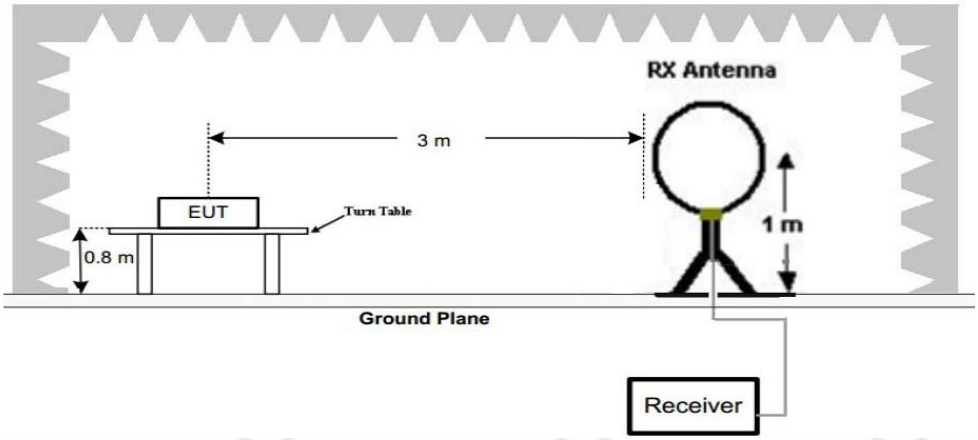


Figure 1. Below 30MHz

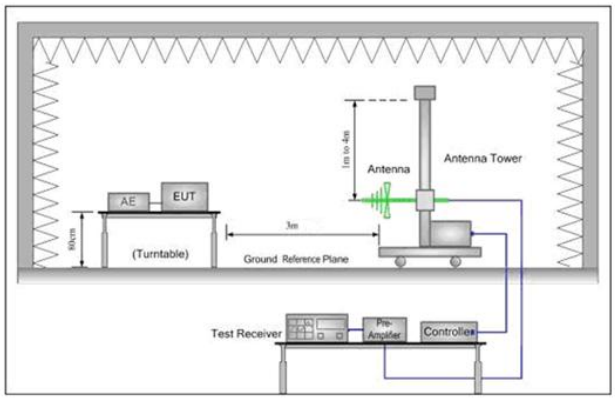


Figure 2. 30MHz to 1GHz

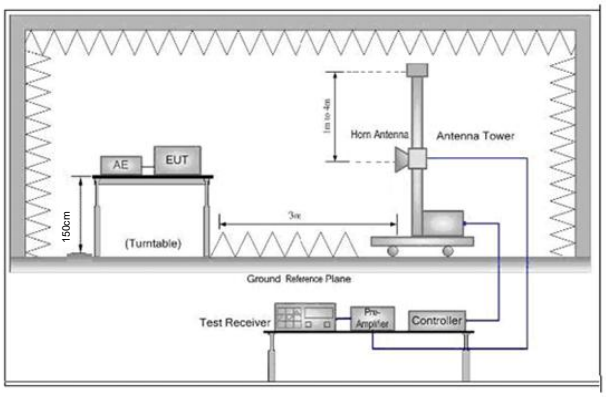


Figure 3. Above 1 GHz

Test Procedure:	a. 1) Below 1G: The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter semi-anechoic camber. The table was rotated 360 degrees to determine the position of the highest radiation. 2) Above 1G: The EUT was placed on the top of a rotating table 1.5 meters above the ground at a 3 meter semi-anechoic camber. The table was rotated 360 degrees to determine the position of the highest radiation. Note: For the radiated emission test above 1GHz: Place the measurement antenna away from each area of the EUT determined to be a source of emissions at the specified measurement distance, while keeping the measurement antenna aimed at the source of emissions at each frequency of significant emissions, with polarization oriented for maximum response. The measurement antenna may have to be higher or lower than the EUT, depending on the radiation pattern of the emission and staying aimed at the emission source for receiving the maximum signal. The final measurement antenna elevation shall be that which maximizes the emissions. The measurement antenna elevation for maximum emissions shall be restricted to a range of heights of from 1 m to 4 m above the ground or reference ground plane. b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower. c. The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the

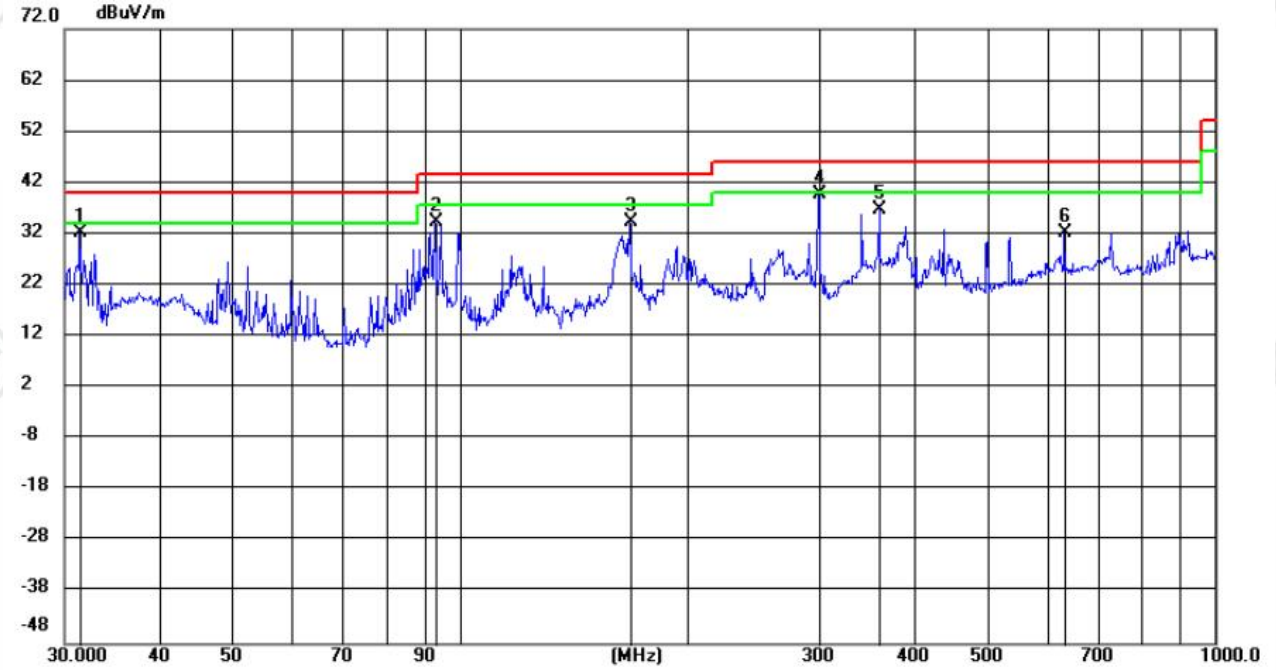
	measurement. d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters (for the test frequency of below 30MHz, the antenna was tuned to heights 1 meter) and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading. e. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode. f. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet. g. Test the EUT in the lowest channel (2402MHz),the middle channel (2441MHz),the Highest channel (2480MHz) h. The radiation measurements are performed in X, Y, Z axis positioning for Transmitting mode, and found the X axis positioning which it is the worst case. i. Repeat above procedures until all frequencies measured was complete.
Exploratory Test Mode:	Non-hopping transmitting mode with all kind of modulation and all kind of data type
Final Test Mode:	Through Pre-scan, find the DH5 of data type and GFSK modulation is the worst case. Pretest the EUT at Transmitting mode, For below 1GHz part, through pre-scan, the worst case is the lowest channel. Only the worst case is recorded in the report.
Test Results:	Pass

Radiated Spurious Emission below 1GHz:

During the test, the Radiates Emission from 30MHz to 1GHz was performed in all modes, only the worst case lowest channel of DH5 for GFSK was recorded in the report.

Horizontal:

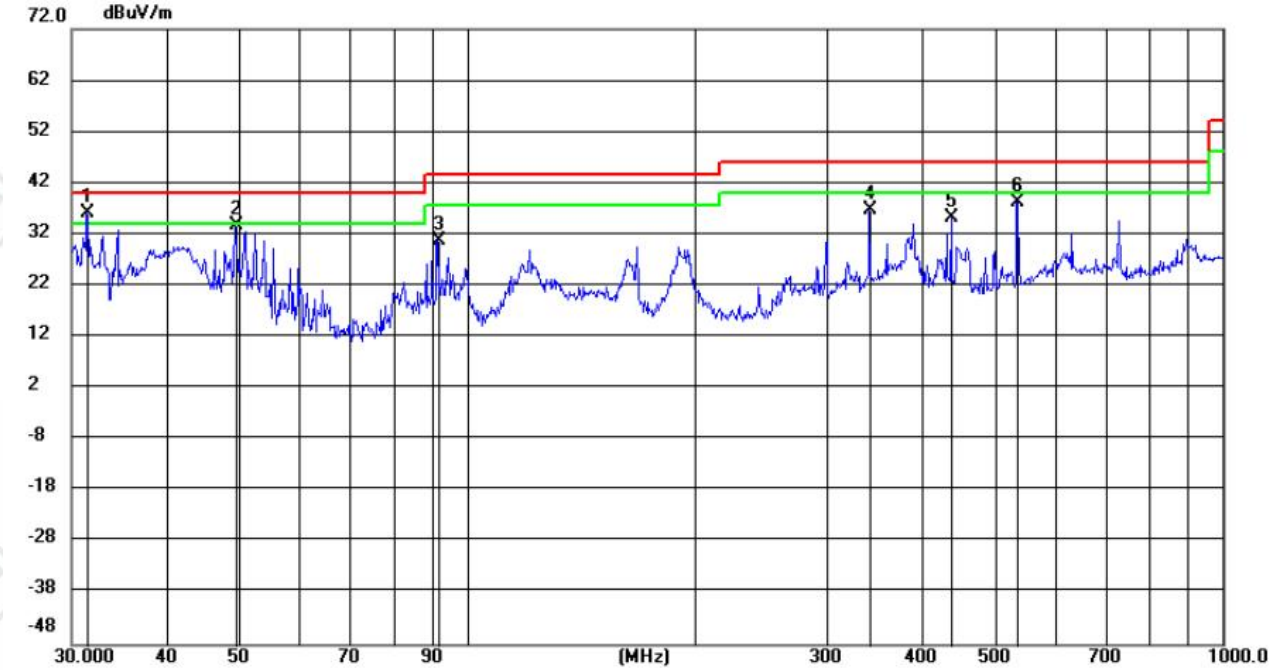
Test Graph



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		Antenna Height	Table Degree	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1		31.4543	19.69	12.44	32.13	40.00	-7.87	QP	200	14	
2		93.0152	22.35	11.99	34.34	43.50	-9.16	QP	200	215	
3		167.9714	23.13	11.28	34.41	43.50	-9.09	QP	200	57	
4	*	298.9486	23.30	16.54	39.84	46.00	-6.16	QP	100	248	
5		360.0056	18.51	18.39	36.90	46.00	-9.10	QP	100	102	
6		633.0188	8.72	23.64	32.36	46.00	-13.64	QP	100	60	

Vertical:

Test Graph



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		Antenna Height	Table Degree	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector	cm	degree	Comment
1	*	31.4598	23.72	12.44	36.16	40.00	-3.84	QP	200	90	
2		49.4807	19.14	14.48	33.62	40.00	-6.38	QP	100	299	
3		91.5109	18.95	11.73	30.68	43.50	-12.82	QP	100	140	
4		340.8414	18.87	17.81	36.68	46.00	-9.32	QP	100	66	
5		438.2710	15.11	20.06	35.17	46.00	-10.83	QP	100	119	
6		535.6134	16.62	21.72	38.34	46.00	-7.66	QP	100	352	

Radiated Spurious Emission above 1GHz:

Mode:		GFSK Transmitting				Channel:		2402 MHz	
NO	Freq. [MHz]	Factor [dB]	Reading [dBμV]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Result	Polarity	Remark
1	1384.8257	12.79	36.60	49.39	74.00	24.61	Pass	H	PK
2	1856.3238	14.48	36.61	51.09	74.00	22.91	Pass	H	PK
3	3568.1379	-13.59	52.95	39.36	74.00	34.64	Pass	H	PK
4	4667.3612	-9.07	50.47	41.40	74.00	32.60	Pass	H	PK
5	6735.149	-3.34	47.01	43.67	74.00	30.33	Pass	H	PK
6	10192.079	1.53	44.22	45.75	74.00	28.25	Pass	H	PK
7	1426.1617	12.89	36.99	49.88	74.00	24.12	Pass	V	PK
8	1862.7242	14.50	36.76	51.26	74.00	22.74	Pass	V	PK
9	3483.6322	-13.89	54.02	40.13	74.00	33.87	Pass	V	PK
10	4822.0715	-8.55	49.79	41.24	74.00	32.76	Pass	V	PK
11	7584.7556	-2.16	46.75	44.59	74.00	29.41	Pass	V	PK
12	11991.399	3.12	44.66	47.78	74.00	26.22	Pass	V	PK

Mode:		GFSK Transmitting				Channel:		2441 MHz	
NO	Freq. [MHz]	Factor [dB]	Reading [dBμV]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Result	Polarity	Remark
1	1341.0894	12.46	37.30	49.76	74.00	24.24	Pass	H	PK
2	1857.9239	14.49	36.52	51.01	74.00	22.99	Pass	H	PK
3	3858.0572	-12.06	51.71	39.65	74.00	34.35	Pass	H	PK
4	5782.1855	-5.82	48.12	42.30	74.00	31.70	Pass	H	PK
5	7986.4824	-1.37	49.83	48.46	74.00	25.54	Pass	H	PK
6	10208.980	1.60	44.68	46.28	74.00	27.72	Pass	H	PK
7	1316.0211	12.24	37.19	49.43	74.00	24.57	Pass	V	PK
8	1886.3258	14.38	36.73	51.11	74.00	22.89	Pass	V	PK
9	4161.6274	-10.97	50.86	39.89	74.00	34.11	Pass	V	PK
10	5957.6972	-5.48	48.23	42.75	74.00	31.25	Pass	V	PK
11	7994.933	-1.37	51.55	50.18	74.00	23.82	Pass	V	PK
12	10808.320	1.89	44.32	46.21	74.00	27.79	Pass	V	PK

Mode:		GFSK Transmitting				Channel:		2480 MHz	
NO	Freq. [MHz]	Factor [dB]	Reading [dBμV]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Result	Polarity	Remark
1	1300.1533	12.09	37.54	49.63	74.00	24.37	Pass	H	PK
2	1759.6506	14.23	36.84	51.07	74.00	22.93	Pass	H	PK
3	3828.8053	-12.24	52.64	40.40	74.00	33.60	Pass	H	PK
4	5790.636	-5.81	47.96	42.15	74.00	31.85	Pass	H	PK
5	8000.7834	-1.35	51.23	49.88	74.00	24.12	Pass	H	PK
6	11943.296	3.06	44.61	47.67	74.00	26.33	Pass	H	PK
7	1297.6198	12.07	37.00	49.07	74.00	24.93	Pass	V	PK
8	1698.9799	14.08	37.00	51.08	74.00	22.92	Pass	V	PK
9	3424.4783	-13.92	53.54	39.62	74.00	34.38	Pass	V	PK
10	5115.241	-7.51	49.11	41.60	74.00	32.40	Pass	V	PK
11	7992.9829	-1.37	50.76	49.39	74.00	24.61	Pass	V	PK
12	11282.202	2.43	44.82	47.25	74.00	26.75	Pass	V	PK

Mode:		π/4DQPSK Transmitting				Channel:		2402 MHz	
NO	Freq. [MHz]	Factor [dB]	Reading [dBμV]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Result	Polarity	Remark
1	1380.0253	12.74	36.59	49.33	74.00	24.67	Pass	H	PK
2	1994.1996	14.68	37.15	51.83	74.00	22.17	Pass	H	PK
3	3819.0546	-12.30	53.09	40.79	74.00	33.21	Pass	H	PK
4	4988.4826	-8.12	50.23	42.11	74.00	31.89	Pass	H	PK
5	8000.1333	-1.36	51.40	50.04	74.00	23.96	Pass	H	PK
6	11120.341	2.11	44.70	46.81	74.00	27.19	Pass	H	PK
7	1369.8913	12.72	37.20	49.92	74.00	24.08	Pass	V	PK
8	1859.6573	14.50	36.28	50.78	74.00	23.22	Pass	V	PK
9	3876.2584	-12.02	52.14	40.12	74.00	33.88	Pass	V	PK
10	5853.6902	-5.44	47.97	42.53	74.00	31.47	Pass	V	PK
11	8000.7834	-1.35	50.69	49.34	74.00	24.66	Pass	V	PK
12	11683.278	2.58	45.49	48.07	74.00	25.93	Pass	V	PK

Mode:		π/4DQPSK Transmitting				Channel:		2441 MHz	
NO	Freq. [MHz]	Factor [dB]	Reading [dBμV]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Result	Polarity	Remark
1	1318.0212	12.26	37.55	49.81	74.00	24.19	Pass	H	PK
2	1811.7875	14.29	38.14	52.43	74.00	21.57	Pass	H	PK
3	3858.0572	-12.06	52.25	40.19	74.00	33.81	Pass	H	PK
4	5866.0411	-5.50	49.00	43.50	74.00	30.50	Pass	H	PK
5	9314.521	0.88	45.23	46.11	74.00	27.89	Pass	H	PK
6	11894.543	2.73	44.94	47.67	74.00	26.33	Pass	H	PK
7	1319.0879	12.28	37.52	49.80	74.00	24.20	Pass	V	PK
8	1856.7238	14.49	36.68	51.17	74.00	22.83	Pass	V	PK
9	3830.1053	-12.22	51.66	39.44	74.00	34.56	Pass	V	PK
10	5126.9418	-7.47	49.33	41.86	74.00	32.14	Pass	V	PK
11	8000.7834	-1.35	50.01	48.66	74.00	25.34	Pass	V	PK
12	11865.941	2.61	45.01	47.62	74.00	26.38	Pass	V	PK

Mode:		π/4DQPSK Transmitting				Channel:		2480 MHz	
NO	Freq. [MHz]	Factor [dB]	Reading [dBμV]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Result	Polarity	Remark
1	1325.4884	12.28	37.77	50.05	74.00	23.95	Pass	H	PK
2	1756.7171	14.17	37.71	51.88	74.00	22.12	Pass	H	PK
3	3842.4562	-12.14	51.50	39.36	74.00	34.64	Pass	H	PK
4	5882.2922	-5.58	48.25	42.67	74.00	31.33	Pass	H	PK
5	8000.7834	-1.35	50.99	49.64	74.00	24.36	Pass	H	PK
6	11940.696	3.03	45.48	48.51	74.00	25.49	Pass	H	PK
7	1355.6237	12.55	37.86	50.41	74.00	23.59	Pass	V	PK
8	1780.8521	14.28	37.49	51.77	74.00	22.23	Pass	V	PK
9	3547.9865	-13.78	53.09	39.31	74.00	34.69	Pass	V	PK
10	5472.1148	-6.47	48.32	41.85	74.00	32.15	Pass	V	PK
11	7994.283	-1.37	50.34	48.97	74.00	25.03	Pass	V	PK
12	9789.0526	1.11	44.18	45.29	74.00	28.71	Pass	V	PK

Mode:			8DPSK Transmitting			Channel:		2402 MHz	
NO	Freq. [MHz]	Factor [dB]	Reading [dBμV]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Result	Polarity	Remark
1	1515.101	13.29	37.10	50.39	74.00	23.61	Pass	H	PK
2	2046.2031	14.78	36.79	51.57	74.00	22.43	Pass	H	PK
3	3254.1669	-14.11	54.12	40.01	74.00	33.99	Pass	H	PK
4	4981.9821	-8.11	49.82	41.71	74.00	32.29	Pass	H	PK
5	8000.7834	-1.35	50.32	48.97	74.00	25.03	Pass	H	PK
6	11243.199	2.38	44.62	47.00	74.00	27.00	Pass	H	PK
7	1456.9638	13.02	38.13	51.15	74.00	22.85	Pass	V	PK
8	1929.9287	14.63	37.57	52.20	74.00	21.80	Pass	V	PK
9	3808.0039	-12.38	51.97	39.59	74.00	34.41	Pass	V	PK
10	5730.8321	-5.97	49.06	43.09	74.00	30.91	Pass	V	PK
11	7991.0327	-1.37	51.18	49.81	74.00	24.19	Pass	V	PK
12	11230.198	2.33	44.85	47.18	74.00	26.82	Pass	V	PK

Mode:			8DPSK Transmitting			Channel:		2441 MHz	
NO	Freq. [MHz]	Factor [dB]	Reading [dBμV]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Result	Polarity	Remark
1	1414.2943	12.90	36.83	49.73	74.00	24.27	Pass	H	PK
2	1950.5967	14.82	36.47	51.29	74.00	22.71	Pass	H	PK
3	4220.7814	-10.83	51.01	40.18	74.00	33.82	Pass	H	PK
4	6304.8203	-4.79	47.85	43.06	74.00	30.94	Pass	H	PK
5	9857.3072	1.40	45.16	46.56	74.00	27.44	Pass	H	PK
6	11695.629	2.64	44.88	47.52	74.00	26.48	Pass	H	PK
7	1378.9586	12.74	36.81	49.55	74.00	24.45	Pass	V	PK
8	1789.2526	14.19	37.47	51.66	74.00	22.34	Pass	V	PK
9	3915.9111	-11.95	51.46	39.51	74.00	34.49	Pass	V	PK
10	6280.1187	-4.81	47.53	42.72	74.00	31.28	Pass	V	PK
11	7992.9829	-1.37	50.48	49.11	74.00	24.89	Pass	V	PK
12	11890.642	2.71	45.80	48.51	74.00	25.49	Pass	V	PK

Mode:			8DPSK Transmitting			Channel:		2480 MHz	
NO	Freq. [MHz]	Factor [dB]	Reading [dBμV]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Result	Polarity	Remark
1	1378.0252	12.73	36.90	49.63	74.00	24.37	Pass	H	PK
2	1917.9279	14.76	36.63	51.39	74.00	22.61	Pass	H	PK
3	4185.679	-11.02	51.13	40.11	74.00	33.89	Pass	H	PK
4	5784.1356	-5.82	48.16	42.34	74.00	31.66	Pass	H	PK
5	7994.283	-1.37	50.77	49.40	74.00	24.60	Pass	H	PK
6	11219.798	2.28	44.49	46.77	74.00	27.23	Pass	H	PK
7	1315.7544	12.24	37.31	49.55	74.00	24.45	Pass	V	PK
8	1988.1992	14.59	37.41	52.00	74.00	22.00	Pass	V	PK
9	3899.0099	-11.97	51.41	39.44	74.00	34.56	Pass	V	PK
10	6167.6612	-4.72	47.87	43.15	74.00	30.85	Pass	V	PK
11	7995.583	-1.36	50.85	49.49	74.00	24.51	Pass	V	PK
12	9696.0964	1.26	44.50	45.76	74.00	28.24	Pass	V	PK

Remark:

1) The field strength is calculated by adding the Antenna Factor, Cable Factor & Preamplifier. The basic equation with a sample calculation is as follows:
   Final Test Level =Receiver Reading + Antenna Factor + Cable Factor – Preamplifier Factor
2) Scan from 9kHz to 25GHz, the disturbance above 10GHz and below 30MHz was very low. As shown in this section, for frequencies above 1GHz, the field strength limits are based on average limits. However, the peak field strength of any emission shall not exceed the maximum permitted average limits specified above by more than 20 dB under any condition of modulation. So, only the peak measurements were shown in the report.

7 PHOTOGRAPHS OF EUT Constructional Details

Refer to Report No.EED32R80383901 for EUT external and internal photos.

Statement

1. This report is considered invalid without approved signature, special seal and the seal on the perforation;

2. The Company Name shown on Report and Address, the sample(s) and sample information was/were provided by the applicant who should be responsible for the authenticity which CTI hasn't verified;

3. The result(s) shown in this report refer(s) only to the sample(s) tested;

4. Unless otherwise stated,the decision rule for conformity reporting is based on Binary Statement for Simple Acceptance Rule stated in ILAC-G8:09/2019/CNAS-GL015:2022;

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