FCC RADIO TEST REPORT

Applicant : ADESSO INC.

Address: 160 Commerce Way Walnut, CA 91789, U.S.A.

Equipment : Wireless Barcode Scanner

Nuscan 5200xx, Nuscan 7000xx, Nuscan 7100xx, Nuscan 7200xx,

Report No.: DEFI1711108

Nuscan 7300xx, Nuscan 7400xx, Nuscan 7500xx, Nuscan

7600xx, Nuscan 7700xx, Nuscan 7800xx, Nuscan 7900xx, Nuscan

Model No. : 6000xx, Nuscan 6100xx, Nuscan 6200xx, Nuscan 6300xx, Nuscan

6400xx, Nuscan 6500xx, Nuscan 8000xx, Nuscan 8100xx, Nuscan 8200xx, Nuscan 8300xx, Nuscan 8400xx, Nuscan 8500xx (xx are

variable; first x denote engine. Second x denote interface)

Trade Name : A S

FCC ID : 2ACFQ5200TR

I HEREBY CERTIFY THAT:

The sample was received on Oct. 19, 2017 and the testing was carried out on Oct. 30, 2017 at Cerpass Technology Corp. The test result refers exclusively to the test presented test model / sample. Without written approval of Cerpass Technology Corp., the test report shall not be reproduced except in full.

Approved by:

Mark Liao

EMC/RF B.U. Manager

Laboratory Accreditation:

 \boxtimes

Cerpass Technology Corporation Test Laboratory

TAF LAB Code: 1439

Cerpass Technology Corp. Issued date : Dec. 19, 2017

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History of this test report

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■ ORIGINAL

 $\hfill\square$ Additional attachment as following record:

Attachment No.	Issue Date	Description

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1. Summary of Test Procedure and Test Results

1.1 Applicable Standards

ANSI C63.4: 2014

FCC Rules and Regulations Part 15 Subpart C §15.249

FCC Rule	. Description of Test	Result
15.203	. Antenna Requirement	Pass
15.207	. Conducted Emission	N/A
15.209 15.249(a)(d)	. Radiated Emission	Pass
15.215(c)	. 20dB Bandwidth Measurement	Pass
15.249(d)	. Band Edges Measurement Data	Pass

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2. Test Configuration of Equipment under Test

2.1 Feature of Equipment under Test

Product	Wireless Barcode Scanner
Test Model	Nuscan 5200xx, Nuscan 7000xx, Nuscan 7100xx, Nuscan 7200xx, Nuscan 7300xx, Nuscan 7400xx, Nuscan 7500xx, Nuscan 7600xx, Nuscan 7700xx, Nuscan 7800xx, Nuscan 7900xx, Nuscan 6000xx, Nuscan 6100xx, Nuscan 6200xx, Nuscan 6300xx, Nuscan 6400xx, Nuscan 6500xx, Nuscan 8000xx, Nuscan 8100xx, Nuscan 8200xx, Nuscan 8300xx, Nuscan 8400xx, Nuscan 8500xx (xx are variable; first x denote engine. Second x denote interface)
Model Discrepancy	All models are identical to each other except for color and tooling The model Nuscan 5200TR was chosen for the final testing.
Frequency Range	2416~2479MHz
Modulation	GFSK
Antenna Type	Loop Antenna /4dBi
Power Supply Rating	DC 3.7V

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Note: for more details, please refer to the User's manual of the EUT.

2.2 Carrier Frequency of Channels

Channel	Frequency(MHz)	Channel	Frequency(MHz)
*01	2416	*33	2448
02	2417	34	2449
03	2418	35	2450
04	2419	21	2451
05	2420	22	2452
06	2421	23	2453
07	2422	24	2454
08	2423	25	2455
09	2424	26	2456
10	2425	27	2457
11	2426	28	2458
12	2427	29	2459
13	2428	30	2460
14	2429	31	2461
15	2430	32	2462
16	2431	33	2463
17	2432	34	2464
18	2433	35	2465
19	2434	36	2466
20	2435	37	2467
21	2436	38	2468
22	2437	39	2469
23	2438	40	2470
24	2439	41	2471
25	2440	42	2472
26	2441	43	2473
27	2442	44	2474
28	2443	45	2475
29	2444	46	2476
30	2445	47	2477
31	2446	48	2478
32	2447	*49	2479

Note: Channels remarked * are selected to perform test.

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2.3 Test Mode and Test Software

- a. During testing, the interface cables and equipment positions were varied according to ANSI C63.4.
- b. The complete test system included support units and EUT for the RF test.
- c. The EUT had been tested under operating condition
 EUT staying in continuous transmitting mode was programmed.
 Channel Low (2416MHz), Channel Mid (2448MHz) and Channel High (2479MHz) were chosen for full testing.

2.4 Description of Test System

The EUT has been tested as an independent unit together without any other necessary accessories or support units.

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2.5 General Information of Test

		Cerpass Technology Corporation Test Laboratory	
		Address: No.10, Ln. 2, Lianfu St., Luzhu Dist., Taoyuan City	
	Test Site	33848, Taiwan (R.O.C.)	
		Tel:+886-3-3226-888	
		Fax:+886-3-3226-881	
		Address: No.68-1, Shihbachongsi, Shihding Township,	
		New Taipei City 223, Taiwan, R.O.C.	
		Tel: +886-2-2663-8582	
	FCC	TW1079, TW1061,390316, 228391, 641184	
	IC	4934E-1, 4934E-2	
		T-2205 for Telecommunication Test	
	VCCI	C-4663 for Conducted emission test	
	V 001	R-3428, R-4218 for Radiated emission test	
		G-812, G-813 for radiated disturbance above 1GHz	
Frequency Range Investigated:		Conducted: from 150kHz to 30 MHz	
		Radiation: from 30 MHz to 25000MHz	
Test Distance:		The test distance of radiated emission from antenna to	
		EUT is 3 M.	

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3. Test Equipment and Ancillaries Used for Tests

Instrument	Manufacturer	Model No.	Serial No.	Calibration Date	Valid Date
EMI Test Receiver	R&S	ESCI	100853	2017.02.14	2018.02.13
Preamplifier	HP	8447F	3113A0591 5	2017.02.14	2018.02.13
Loop Antenna	R&S	HFH2-Z2	100150	2017.10.24	2018.10.23
Horn Antenna	EMCO	3116	31974	2017.02.18	2018.02.17
Ultra Broadband Antenna	SCHAFFNER	CBL6112D	22241	2017.02.14	2018.02.13
Broad-Band Horn Antenna	Schwarzbeck	BBHA9170	9170-347	2017.05.07	2018.05.06
Preamplifier	COM-POWER	PA-840	711885	2017.03.22	2018.03.21
Broad-Band Horn Antenna	Sunol	DRH-118	A072913	2017.09.22	2018.09.21
EXA Signal Analyzer	Agilent	N9020A	US462202 90	2017.05.26	2018.05.25
Temperature/ Humidity Meter	mingle	ETH529	N/A	2017.02.14	2018.02.13

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4. Antenna Requirements

4.1 Standard Applicable

For intentional device, according to FCC 47 CFR Section 15.203, 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.

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4.2 Antenna Construction and Directional Gain

Antenna	Peak Gain
Springs antenna	4.0dBi

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5. Test of AC Power Line Conducted Emission

5.1 Test Limit

Conducted Emissions were measured from 150 kHz to 30 MHz with a bandwidth of 9 KHz on the 120 VAC power and return leads of the EUT according to the methods defined in ANSI C63.4-2014. The EUT was placed on a nonmetallic stand in a shielded room 0.8 meters above the ground plane as shown in section 2.2. The interface cables and equipment positioning were varied within limits of reasonable applications to determine the position produced maximum conducted emissions.

Frequency (MHz)	Quasi Peak (dB µ V)	Average (dB μ V)
0.15 – 0.5	66-56*	56-46*
0.5 - 5.0	56	46
5.0 – 30.0	60	50

^{*}Decreases with the logarithm of the frequency.

5.2 Test Procedures

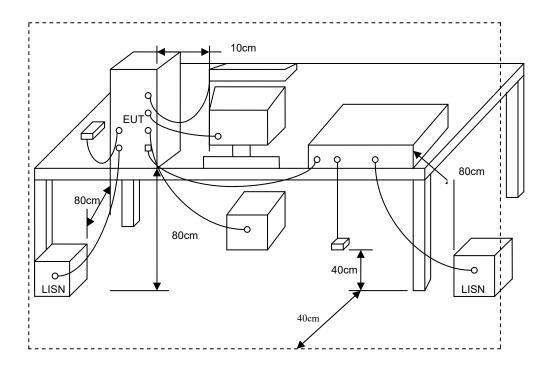
- a. The EUT was placed 0.4 meter from the conducting wall of the shielding room was kept at least 80 centimeters from any other grounded conducting surface.
- b. Connect EUT to the power mains through a line impedance stabilization network (LISN).
- c. All the support units are connecting to the other LISN.
- d. The LISN provides 50 ohm coupling impedance for the measuring instrument.
- e. The FCC states that a 50 ohm, 50 micro-Henry LISN should be used.
- f. Both sides of AC line were checked for maximum conducted interference.
- g. The frequency range from 150 kHz to 30 MHz was searched.
- h. Set the test-receiver system to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.

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5.3 Typical Test Setup



5.4 Test Result and Data

Not applicable since the EUT supplied by battery.

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6. Test of Spurious Emission (Radiated)

6.1 Test Limit

Radiated emissions from 30 MHz to 25 GHz were measured according to the methods defines in ANSI C63.4-2014. The interface cables and equipment positions were varied within limits of reasonable applications to determine the positions producing maximum radiated emissions for unintentional device, according to § 15.109(a), except for Class A digital devices, the field strength of radiated emissions from unintentional radiators at a distance of 3 meters shall not exceed the following values:

Frequency (MHz)	Distance Meters	Radiated (µ V / M)	Radiated (dB µ V/ M)
30-88	3	100	40.0
88-216	3	150	43.5
216-960	3	200	46.0
Above 960	3	500	54.0

For unintentional device, according to CISPR PUB.22, for Class B digital devices, the general requirement of field strength of radiated emissions from intentional radiators at a distance of 10 meters shall not exceed the below table.

Frequency (MHz)	Distance Meters	Radiated (dB µ V/ M)	
30-230	10	30	
230-1000	10	37	

6.2 Test Procedures

- a. The EUT was placed on a rotatable table top 0.8 meter above ground.
- b. The EUT was set 3 meters from the interference receiving antenna which was mounted on the top of a variable height antenna tower.
- c. The table was rotated 360 degrees to determine the position of the highest radiation.
- d. The antenna is a broadband antenna and its height is varied between one meter and four meters above ground to find the maximum value of the field strength both horizontal polarization and vertical polarization of the antenna are set to make the measurement.
- e. For each suspected emission the EUT was arranged to its worst case and then tune the antenna tower (from 1 M to 4 M) and turn table (from 0 degree to 360 degrees) to find the maximum reading.
- f. Set the test-receiver system to Peak or CISPR quasi-peak Detect Function and specified bandwidth with Maximum Hold Mode.
- q. If the emission level of the EUT in peak mode was 3 dB lower than the limit specified, then testing will be stopped and peak values of EUT will be reported, otherwise, the emissions which do not have 3 dB margin will be repeated one by one using the quasi-peak method and reported.
- h. For testing above 1GHz, the emission level of the EUT in peak mode was 20dB lower than average limit (that means the emission level in peak mode also complies with the limit in average mode), then testing will be stopped and peak values of EUT will be reported, otherwise, the emissions will be measured in average mode again and reported.
- i. "Cone of radiation" has been considered to be 3dB bandwidth of the measurement antenna.

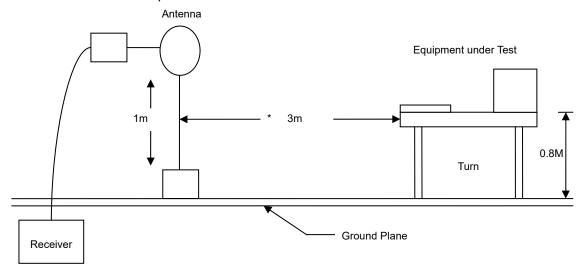
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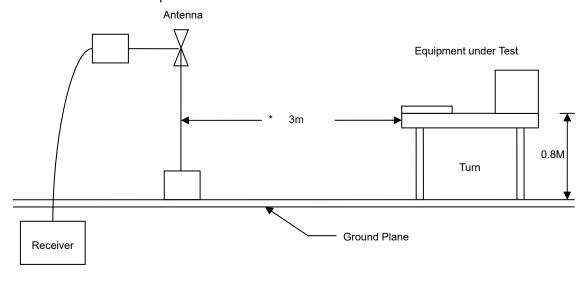


6.3 Typical Test Setup

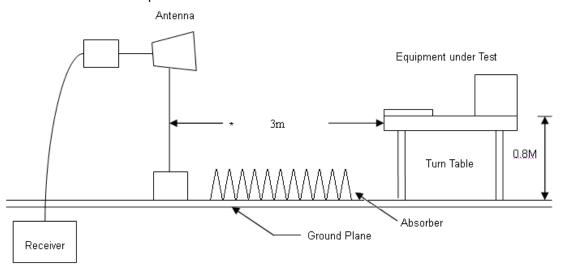
Below 30MHz test setup



30MHz- 1GHz Test Setup



Above 1GHz Test Setup



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6.4 Test Result and Data (30MHz ~ 1GHz)

Power	:	DC 3.7V	Temperature :	24 °C
Test Mode	:	TX Mode	Humidity :	54 %
Test date	:	Dec. 14, 2017	Atmospheric Pressure :	1010 hpa

Frequency	AntPol.	Correct	Reading	Measure	Limit 3m	Safe	Detector
(MHz)	H/V	Factor	level	Level	(dBuV/m)	Margin	mode
		(dB)	(dBuV)	(dBuV/m)		(dB)	(PK/QP)
280.2599	Н	-8.36	43.69	35.33	46.00	-10.67	QP
420.9100	Н	-4.86	40.32	35.46	46.00	-10.54	QP
429.6399	Н	-4.71	38.93	34.22	46.00	-11.78	QP
439.3399	Н	-4.07	37.82	33.75	46.00	-12.25	QP
482.0199	Н	-1.22	33.70	32.48	46.00	-13.52	QP
503.3600	Н	-2.27	37.12	34.85	46.00	-11.15	QP
280.2600	V	-8.36	36.21	27.85	46.00	-18.15	peak
432.5500	V	-4.53	40.53	36.00	46.00	-10.00	QP
460.6800	V	-2.70	42.45	39.75	46.00	-6.25	peak
520.8200	V	-2.60	36.86	34.26	46.00	-11.74	peak
689.6000	V	-1.23	34.51	33.28	46.00	-12.72	peak
741.9800	V	1.15	32.72	33.87	46.00	-12.13	peak

Note: Level = Reading + Factor Margin = Level – Limit

Factor = Antenna Factor + Cable Loss - Amplifier Factor

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6.5 Test Result and Data (1GHz ~ 25GHz)

Power	:	DC 3.7V	Temperature :	24 °C
Test Mode		TX-2416MHz	Humidity :	54 %
Test date	:	Dec. 19, 2017	Atmospheric Pressure :	1010 hpa

Frequency	AntPol.	Correct	Reading	Measure	Limit 3m	Safe	Detector
(MHz)	H/V	Factor	level	Level	(dBuV/m)	Margin	mode
		(dB)	(dBuV)	(dBuV/m)		(dB)	(PK/QP)
1056.667	Н	-5.65	54.68	49.03	74.00	-24.97	peak
2416.667	Н	3.06	50.77	53.83	74.00	-20.17	peak
4825.000	Н	14.27	49.14	63.41	74.00	-10.59	peak
4825.000	Н	14.27	27.62	41.89	54.00	-12.11	AVG
5335.000	Н	14.88	32.58	47.46	74.00	-26.54	peak
6695.000	Н	17.09	31.75	48.84	74.00	-25.16	peak
7261.667	Н	19.10	41.66	60.76	74.00	-13.24	peak
7261.667	Н	19.10	20.65	39.75	54.00	-14.25	AVG
1028.333	V	-5.91	58.32	52.41	74.00	-21.59	peak
2416.667	V	3.06	50.47	53.53	74.00	-20.47	peak
3266.667	V	8.17	34.52	42.69	74.00	-31.31	peak
4825.000	V	14.27	49.31	63.58	74.00	-10.42	peak
4825.000	V	14.27	28.31	42.58	54.00	-11.42	AVG
6213.333	V	16.35	31.33	47.68	74.00	-26.32	peak
7261.667	V	19.10	41.32	60.42	74.00	-13.58	peak
7261.667	V	19.10	20.19	39.29	54.00	-14.71	AVG

Note: Level = Reading + Factor Margin = Level – Limit

Factor = Antenna Factor + Cable Loss - Amplifier Factor

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Power	:	DC 3.7V	Temperature :	24 °C
Test Mode		TX-2448MHz	Humidity :	54 %
Test date	:	Dec. 19, 2017	Atmospheric Pressure :	1010 hpa

Frequency	AntPol.	Correct	Reading	Measure	Limit 3m	Safe	Detector
(MHz)	H/V	Factor	level	Level	(dBuV/m)	Margin	mode
		(dB)	(dBuV)	(dBuV/m)		(dB)	(PK/QP)
1056.667	Н	-5.65	53.10	47.45	74.00	-26.55	peak
2445.000	Н	3.18	48.60	51.78	74.00	-22.22	peak
2813.333	Н	5.52	37.48	43.00	74.00	-31.00	peak
4910.000	Н	14.43	54.52	68.95	74.00	-5.05	peak
4910.000	Н	14.43	32.51	46.94	54.00	-7.06	AVG
5731.667	Н	15.59	32.02	47.61	74.00	-26.39	peak
7346.667	Н	19.43	40.13	59.56	74.00	-14.44	peak
7346.667	Н	19.43	19.84	39.27	54.00	-14.73	AVG
1028.333	V	-5.91	59.38	53.47	74.00	-20.53	peak
2445.000	V	3.18	49.87	53.05	74.00	-20.95	peak
4910.000	V	14.43	51.84	66.27	74.00	-7.73	peak
4910.000	V	14.43	30.66	45.09	54.00	-8.91	AVG
5788.333	V	15.74	31.45	47.19	74.00	-26.81	peak
6383.333	V	16.41	31.04	47.45	74.00	-26.55	peak
7346.667	V	19.43	39.57	59.00	74.00	-15.00	peak
7346.667	V	19.43	18.54	37.97	54.00	-16.03	AVG

Note: Level = Reading + Factor Margin = Level – Limit

Factor = Antenna Factor + Cable Loss - Amplifier Factor

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Power :	DC 3.7V	Temperature :	24 °C
Test Mode	TX-2479MHz	Humidity :	54 %
Test date :	Dec. 19, 2017	Atmospheric Pressure :	1010 hpa

Frequency	AntPol.	Correct	Reading	Measure	Limit 3m	Safe	Detector
(MHz)	H/V	Factor	level	Level	(dBuV/m)	Margin	mode
		(dB)	(dBuV)	(dBuV/m)		(dB)	(PK/QP)
1028.333	Н	-5.91	54.83	48.92	74.00	-25.08	peak
1510.000	Н	-1.55	45.82	44.27	74.00	-29.73	peak
2473.333	Н	3.31	41.67	44.98	74.00	-29.02	peak
4966.667	Н	14.54	55.05	69.59	74.00	-4.41	peak
4966.667	Н	14.54	30.84	45.38	54.00	-8.62	AVG
5731.667	Н	15.59	31.59	47.18	74.00	-26.82	peak
7431.667	Н	19.76	38.46	58.22	74.00	-15.78	peak
7431.667	Н	19.76	16.65	36.41	54.00	-17.59	AVG
1028.333	V	-5.91	54.83	48.92	74.00	-25.08	peak
2473.333	V	-1.55	45.82	44.27	74.00	-29.73	peak
3521.667	V	3.31	41.67	44.98	74.00	-29.02	peak
4966.667	V	14.54	55.05	69.59	74.00	-4.41	peak
4966.667	V	14.54	30.84	45.38	54.00	-8.62	AVG
6100.000	V	15.59	31.59	47.18	74.00	-26.82	peak
7431.667	V	19.76	38.46	58.22	74.00	-15.78	peak
7431.667	V	19.76	16.65	36.41	54.00	-17.59	AVG

Note: Level = Reading + Factor Margin = Level – Limit

Factor = Antenna Factor + Cable Loss - Amplifier Factor

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7. 20dB Bandwidth Measurement Data

7.1 Test Limit

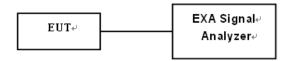
Intentional radiators operating under the alternative provisions to the general emission limits, as contained in § 15.217 through 15.257 and in Subpart E of this part, must be designed to ensure that the 20 dB bandwidth of the emission, or whatever bandwidth may otherwise be specified in the specific rule section under which the equipment operates, is contained within the frequency band designated in the rule section under which the equipment is operated.

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7.2 Test Procedure

- a. The transmitter output was connected to the spectrum analyzer.
- b. Set RBW of spectrum analyzer to 30 KHz and VBW to 100KHz.
- c. The 20 dB bandwidth is defined as the total spectrum the power of which is higher than peak power minus 20dB.

7.3 Test Setup Layout



7.4 Test Result and Data

Power	:	DC 3.7V	Temperature	24 °C
Test Mode		TX-Mode	Humidity :	54 %
Test date	:	Dec. 19, 2017	Atmospheric Pressure	1010 hpa

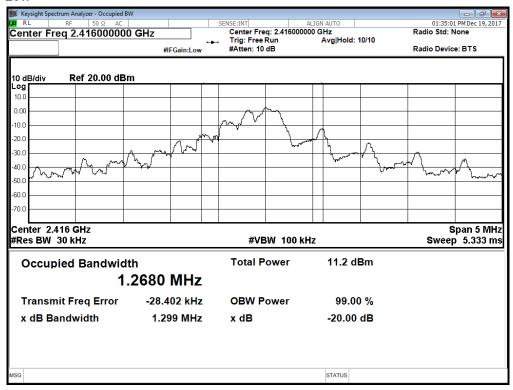
Channel	Frequency (MHz)	20dB Bandwidth (KHz)
Low	2416	1299.00
Mid	2448	1547.00
High	2479	1520.00

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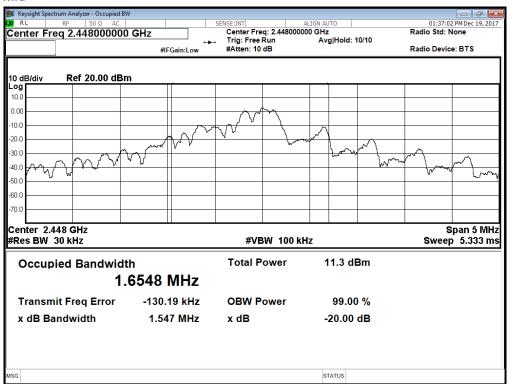
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Channel: Low



Channel: Mid

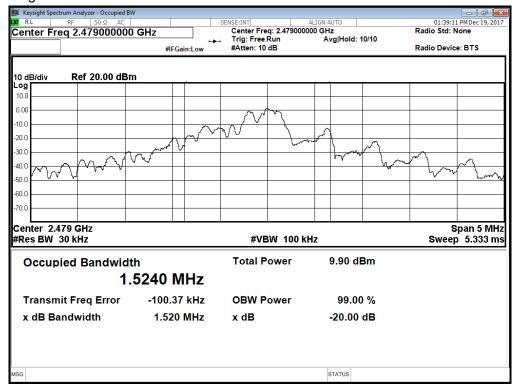


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Channel: High



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8. Band Edges Measurement

8.1 Test Limit

Emissions radiated outside of the specified frequency bands, except for harmonics, shall be attenuated by at least 50 dB below the level of the fundamental or to the general radiated emission limits in Section 15.209, whichever is the lesser attenuation.

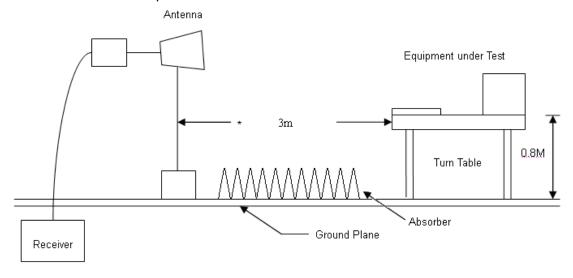
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8.2 Test Procedure

- a) The EUT was placed on a rotatable table top 0.8 meter above ground.
- b) The EUT was set 3 meters from the interference receiving antenna which was mounted on the top of a variable height antenna tower.
- c) The table was rotated 360 degrees to determine the position of the highest radiation.
- d) The resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and video bandwidth is 3 MHz for Peak detection at frequency above 1GHz.
- e) The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 10Hz for Average detection at frequency above 1GHz.
- f) The band edges was measured and recorded.

8.3 Test Setup Layout

Above 1GHz Test Setup



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8.4 Restrict band emission Measurement Data

Power :	:	DC 3.7V	Temperature :	24 °C
Test Mode		TX-2416MHz	Humidity :	54 %
Test date :	:	Dec. 19, 2017	Atmospheric Pressure :	1010 hpa

VERTICAL

No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector Type
1	2390.000	2.95	52.72	55.67	74.00	-18.33	peak
2	2390.000	2.95	33.97	36.92	54.00	-17.08	AVG
3	2400.000	2.99	58.91	61.90	74.00	-12.10	peak
4	2400.000	2.99	37.40	40.39	54.00	-13.61	AVG
9	2416.000	3.06	93.75	96.81	114.00	-17.19	peak
10	2416.000	3.06	71.86	74.92	94.00	-19.08	AVG

HORIZONTAL

No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector Type
1	2390.000	2.95	56.25	59.20	74.00	-14.80	peak
2	2390.000	2.95	35.48	38.43	54.00	-15.57	AVG
3	2400.000	2.99	58.51	61.50	74.00	-12.50	peak
4	2400.000	2.99	35.67	38.66	54.00	-15.34	AVG
5	2415.750	3.06	93.76	96.82	114.00	-17.18	peak
9	2415.750	3.06	71.54	74.60	94.00	-19.40	AVG

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Power	:	DC 3.7V	Temperature :	24 °C
Test Mode		TX-2479MHz	Humidity :	54 %
Test date	:	Dec. 19, 2017	Atmospheric Pressure :	1010 hpa

VERTICAL

No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector Type
1	2478.750	3.33	92.46	95.79	114.00	-18.21	PEAK
2	2478.750	3.33	70.62	73.95	94.00	-20.05	AVG
3	2483.500	3.35	67.54	70.89	74.00	-3.11	PEAK
4	2483.500	3.35	44.78	48.13	54.00	-5.87	AVG

HORIZONTAL

No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector Type
1	2479.250	3.33	93.58	96.91	114.00	-17.09	PEAK
2	2479.250	3.33	70.35	73.68	94.00	-20.32	AVG
3	2483.500	3.35	67.85	71.20	74.00	-2.80	PEAK
4	2483.500	3.35	44.97	48.32	54.00	-5.68	AVG

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9. Restricted Bands of Operation

Only spurious emissions are permitted in any of the frequency bands listed below:

MHz	MHz	MHz	GHz
0.09000 - 0.11000	16.42000 – 16.42300	399.9 – 410.0	4.500 - 5.250
0.49500 - 0.505**	16.69475 – 16.69525	608.0 - 614.0	5.350 - 5.460
2.17350 - 2.19050	16.80425 – 16.80475	960.0 – 1240.0	7.250 - 7.750
4.12500 - 4.12800	25.50000 – 25.67000	1300.0 – 1427.0	8.025 - 8.500
4.17725 – 4.17775	37.50000 – 38.25000	1435.0 – 1626.5	9.000 - 9.200
4.20725 - 4.20775	73.00000 – 74.60000	1645.5 – 1646.5	9.300 - 9.500
6.21500 - 6.21800	74.80000 – 75.20000	1660.0 – 1710.0	10.600 – 12.700
6.26775 - 6.26825	108.00000 – 121.94000	1718.8 – 1722.2	13.250 - 13.400
6.31175 - 6.31225	123.00000 – 138.00000	2200.0 - 2300.0	14.470 – 14.500
8.29100 - 8.29400	149.90000 – 150.05000	2310.0 – 2390.0	15.350 – 16.200
8.36200 - 8.36600	156.52475 – 156.52525	2483.5 – 2500.0	17.700 – 21.400
8.37625 - 8.38675	156.70000 – 156.90000	2655.0 – 2900.0	22.010 – 23.120
8.41425 - 8.41475	162.01250 – 167.17000	3260.0 - 3267.0	23.600 - 24.000
12.29000 - 12.29300	167.72000 – 173.20000	3332.0 - 3339.0	31.200 – 31.800
12.51975 – 12.52025	240.00000 – 285.00000	3345.8 - 3358.0	36.430 - 36.500
12.57675 – 12.57725	322.00000 - 335.40000	3600.0 - 4400.0	Above 38.6
13.36000 – 13.41000			

^{**:} Until February 1, 1999, this restricted band shall be 0.490-0.510 MHz

9.1 Labeling Requirement

The device shall bear the following statement in a conspicuous location on the device: This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

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