Microtest
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Test Report

Report No.: MTi230714007-01E1

Date of issue: 2023-11-01

Applicant: EXPEDITE INTERNATIONAL,INC

Product: LD3XR

Model(s): EI-MW-RC-09

FCC ID: OF6EIMWRC09

Shenzhen Microtest Co., Ltd.

http://www.mtitest.com

Address: 101, No. 7, Zone 2, Xinxing Industrial Park, Fuhai Avenue, Xinhe Community, Fuhai Street, Bao'an District, Shenzhen, Guangdong, China
Tel: (86-755)88850135 Fax: (86-755) 88850136 Web: www.mtitest.com E-mail: mti@51mti.com

Instructions

1. This test report shall not be partially reproduced without the written consent of the laboratory.

2. The test results in this test report are only responsible for the samples submitted

3. This test report is invalid without the seal and signature of the laboratory.

4. This test report is invalid if transferred, altered, or tampered with in any form without authorization.

5. Any objection to this test report shall be submitted to the laboratory within 15 days from the date of receipt of the report.

Table of contents

Test Result Certification	
Applicant:	EXPEDITE INTERNATIONAL,INC
Address:	1950 8th Ave. Baldwin, WI 54002, USA.
Manufacturer:	EXPEDITE INTERNATIONAL,INC
Address:	1950 8th Ave. Baldwin, WI 54002, USA.
Product description	
Product name:	LD3XR
Trademark:	LUCKY DUCK
Model name:	EI-MW-RC-09
Series Model:	N/A
Standards:	FCC 47 CFR Part 15 Subpart C
Test Method:	ANSI C63.10-2013
Date of Test	
Date of test:	2023-08-19 to 2023-11-01
Test result:	Pass

Test Engineer	:	Letter. Lan.
		(Letter Lan)
Reviewed By	:	Leon chen
		(Leon Chen)
Approved By	:	Tom Xue
		(Tom Xue)

1 General Description

1.1 Description of the EUT

Product name:	LD3XR
Model name:	EI-MW-RC-09
Series Model:	N/A
Model difference:	N/A
Electrical rating:	Input: DC 4.5V
Accessories:	N/A
Hardware version:	22019-1_V1.3_2
Software version:	SuperRevolt Ecaller Remote V1.0 230419
Test sample(s) number:	MTi230714007-01S1001
RF specification	
Operating frequency range:	433MHz
Modulation type:	lola
Antenna(s) type:	spring antenna
Antenna(s) gain:	2.15dBi

1.2 Description of test modes

No.	Emission test modes
Mode1	normal working

1.2.1 Operation channel list

Channel	Frequency
1	433MHz

Note: The test software provided by manufacturer is used to control EUT for working in engineering mode, that enables selectable channel, and capable of continuous transmitting mode.

1.2.2 Frequency Channel Under Test

Channel	Frequency
1	433MHz

Test Software: key
For power setting, refer to below table.
Default level test

1.3 Environmental Conditions

During the measurement the environmental conditions were within the listed ranges:

Temperature:	15°C ~ 35°C
Humidity:	20% RH ~ 75% RH
Atmospheric pressure:	98 kPa ~ 101 kPa

1.4 Description of support units

Support equipment list			
Description	Model	Serial No.	Manufacturer
/	/	/	/
Support cable list			
Description	Length (m)	From	To
/	/	/	/

1.5 Measurement uncertainty

Measurement	Uncertainty
Occupied channel bandwidth	±3 %
Time	±1 %
Radiated spurious emissions (9kHz~30MHz)	±4.3dB
Radiated spurious emissions (30MHz~1GHz)	±4.7dB
Radiated spurious emissions (above 1GHz)	±5.3dB
Temperature	±1 °C
Humidity	± 5 %

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

2 Summary of Test Result

No.	Item	Standard	Requirement	Result
1	Antenna requirement	47 CFR Part 15 Subpart C	47 CFR 15.203	Pass
2	20dB Bandwidth	47 CFR Part 15 Subpart C	47 CFR 15.231(c)	Pass
3	Dwell Time	47 CFR Part 15 Subpart C	47 CFR 15.231(a)(1) & (a)(2)	Pass
4	Duty Cycle	47 CFR Part 15 Subpart C	/	Pass
5	Radiated Emission (below 1GHz)	47 CFR Part 15 Subpart C	47 CFR 15.231	Pass
6	Radiated Emission (above 1GHz)	47 CFR Part 15 Subpart C	47 CFR 15.231	Pass

3 Test Facilities and accreditations

3.1 Test laboratory

Test laboratory:	Shenzhen Microtest Co., Ltd.
Test site location:	101, No.7, Zone 2, Xinxing Industrial Park, Fuhai Avenue, Xinhe Community, Fuhai Street, Bao'an District, Shenzhen, Guangdong, China
Telephone:	(86-755)88850135
Fax:	(86-755)88850136
CNAS Registration No.:	CNAS L5868
FCC Registration No.:	448573
IC Registration No.:	21760
CABID:	CN0093

4 List of test equipment

No.	Equipment	Manufacturer	Model	Serial No.	Cal. date	Cal. Due
20dB Bandwidth Dwell Time Duty Cycle						
1	Wideband Radio Communication Tester	Rohde&schwarz	CMW500	149155	2023-04-26	2024-04-25
2	ESG Series Analog Ssignal Generator	Agilent	E4421B	GB40051240	2023-04-25	2024-04-24
3	PXA Signal Analyzer	Agilent	N9030A	MY51350296	2023-04-25	2024-04-24
4	Synthesized Sweeper	Agilent	83752A	3610A01957	2023-04-25	2024-04-24
5	MXA Signal Analyzer	Agilent	N9020A	MY50143483	2023-04-26	2024-04-25
6	RF Control Unit	Tonscend	JS0806-1	19D8060152	2023-04-26	2024-04-25
7	Band Reject Filter Group	Tonscend	JS0806-F	19D8060160	2023-05-05	2024-05-04
8	ESG Vector Signal Generator	Agilent	N5182A	MY50143762	2023-04-25	2024-04-24
9	DC Power Supply	Agilent	E3632A	MY40027695	2023-05-05	2024-05-04
Radiated Emission (below 1GHz)						
1	EMI Test Receiver	Rohde&schwarz	ESCI7	101166	2023-04-26	2024-04-25
2	TRILOG Broadband Antenna	schwarabeck	VULB 9163	9163-1338	2023-06-11	2025-06-10
3	Amplifier	Hewlett-Packard	8447F	3113A06184	2023-06-26	2024-06-25
4	Multi-device Controller	TuoPu	TPMDC	/	2023-05-04	2024-05-03
Radiated Emission (above 1GHz)						
1	EMI Test Receiver	Rohde&schwarz	ESCI7	101166	2023-04-26	2024-04-25
2	Double Ridged Broadband Horn Antenna	schwarabeck	BBHA 9120 D	2278	2023-05-26	2024-05-25
3	Amplifier	Agilent	8449B	3008A01120	2023-06-26	2024-06-25
4	Multi-device Controller	TuoPu	TPMDC	/	2023-05-04	2024-05-03
5	MXA signal analyzer	Agilent	N9020A	MY54440859	2023-05-05	2024-05-04

5 Evaluation Results (Evaluation)

5.1 Antenna requirement

Test Requirement:	Refer to 47 CFR Part 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. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this section.
Description of the antenna of EUT:	The antenna of the EUT is permanently attached.
Conclusion:	The EUT complies with the requirement of FCC PART 15.203.

6 Radio Spectrum Matter Test Results (RF)

6.1 20dB Bandwidth

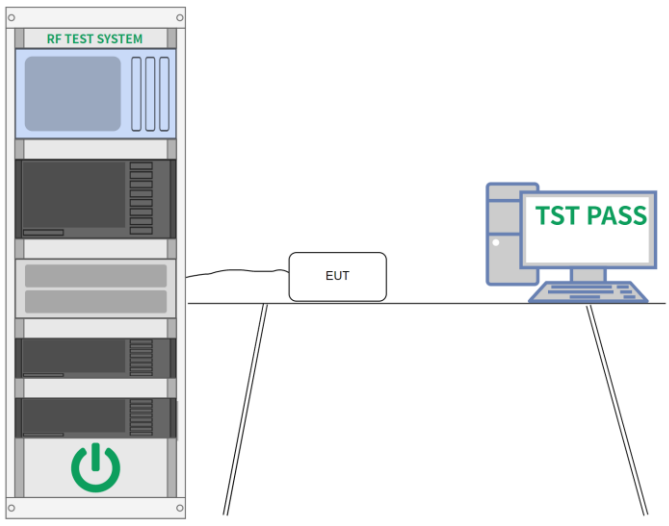
Test Requirement:	47 CFR 15.231(c)
Test Limit:	The bandwidth of the emission shall be no wider than 0.25% of the center frequency for devices operating above 70 MHz and below 900 MHz. For devices operating above 900 MHz, the emission shall be no wider than 0.5% of the center frequency. Bandwidth is determined at the points 20 dB down from the modulated carrier.
Test Method:	ANSI C63.10-2013, section 6.9.2
Procedure:	a) The spectrum analyzer center frequency is set to the nominal EUT channel center frequency. The span range for the EMI receiver or spectrum analyzer shall be between two times and five times the OBW. b) The nominal IF filter bandwidth (3 dB RBW) shall be in the range of 1% to 5% of the OBW and video bandwidth (VBW) shall be approximately three times RBW, unless otherwise specified by the applicable requirement. c) Set the reference level of the instrument as required, keeping the signal from exceeding the maximum input mixer level for linear operation. In general, the peak of the spectral envelope shall be more than [10 log (OBW/RBW)] below the reference level. Specific guidance is given in 4.1.5.2. d) Steps a) through c) might require iteration to adjust within the specified tolerances. e) The dynamic range of the instrument at the selected RBW shall be more than 10 dB below the target “-xx dB down” requirement; that is, if the requirement calls for measuring the -20 dB OBW, the instrument noise floor at the selected RBW shall be at least 30 dB below the reference value. f) Set detection mode to peak and trace mode to max hold. g) Determine the reference value: Set the EUT to transmit an unmodulated carrier or modulated signal, as applicable. Allow the trace to stabilize. Set the spectrum analyzer marker to the highest level of the displayed trace (this is the reference value). h) Determine the “-xx dB down amplitude” using [(reference value) - xx]. Alternatively, this

	calculation may be made by using the marker-delta function of the instrument. i) If the reference value is determined by an unmodulated carrier, then turn the EUT modulation ON, and either clear the existing trace or start a new trace on the spectrum analyzer and allow the new trace to stabilize. Otherwise, the trace from step g) shall be used for step j). j) Place two markers, one at the lowest frequency and the other at the highest frequency of the envelope of the spectral display, such that each marker is at or slightly below the “íxx dB down amplitude” determined in step h). If a marker is below this “-xx dB down amplitude” value, then it shall be as close as possible to this value. The occupied bandwidth is the frequency difference between the two markers. Alternatively, set a marker at the lowest frequency of the envelope of the spectral display, such that the marker is at or slightly below the “íxx dB down amplitude” determined in step h). Reset the marker-delta function and move the marker to the other side of the emission until the delta marker amplitude is at the same level as the reference marker amplitude. The marker-delta frequency reading at this point is the specified emission bandwidth. k) The occupied bandwidth shall be reported by providing plot(s) of the measuring instrument display; the plot axes and the scale units per division shall be clearly labeled. Tabular data may be reported in addition to the plot(s).

6.1.1 E.U.T. Operation:

Operating Environment:					
Temperature:	24.6 °C	Humidity:	50.9 %	Atmospheric Pressure:	98 kPa
Test mode:	Mode1				

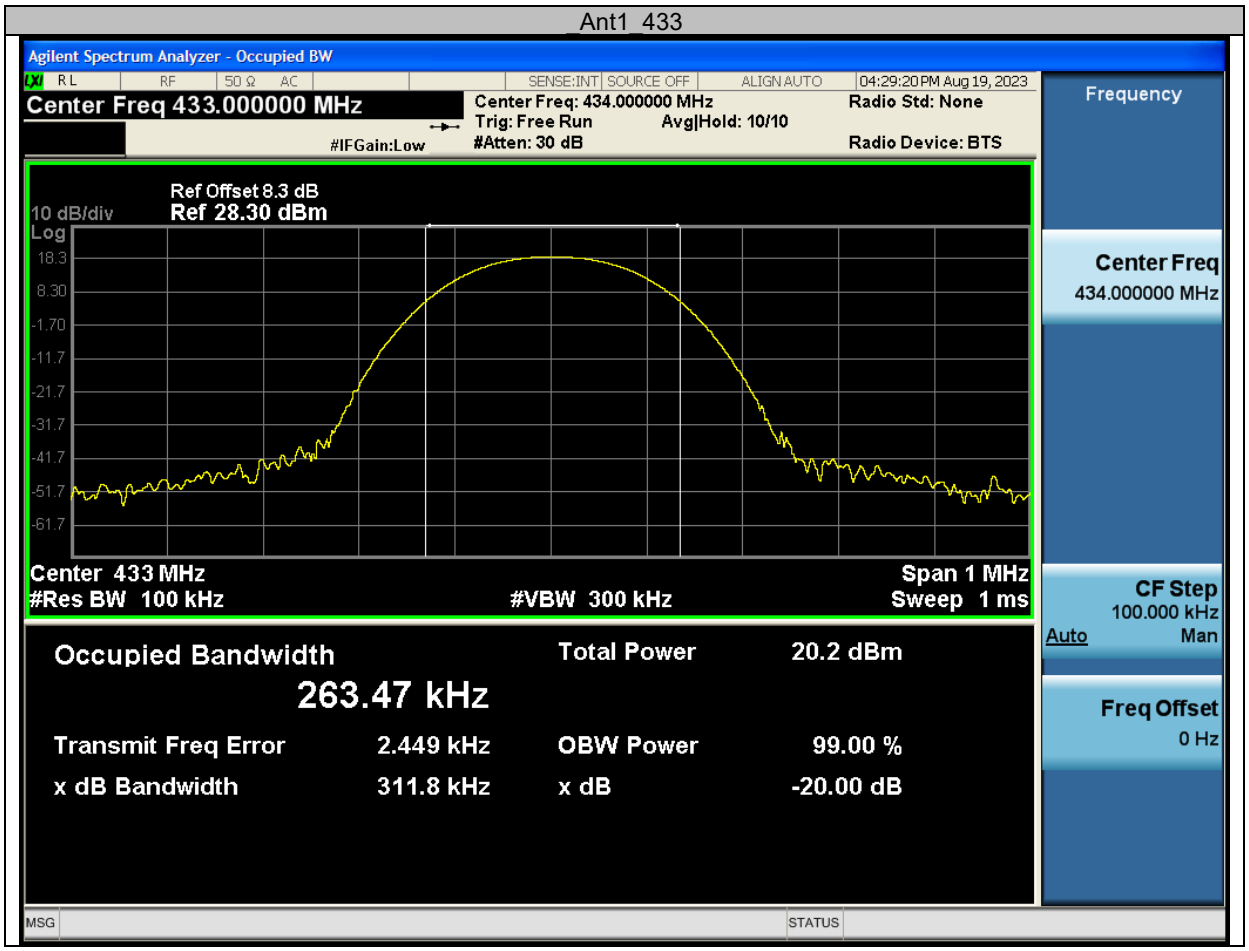
6.1.2 Test Setup Diagram:



6.1.3 Test Data:

Test Mode	Antenna	Frequency [MHz]	20db EBW [MHz]
/	Ant1	433	0.3118

Test Graphs



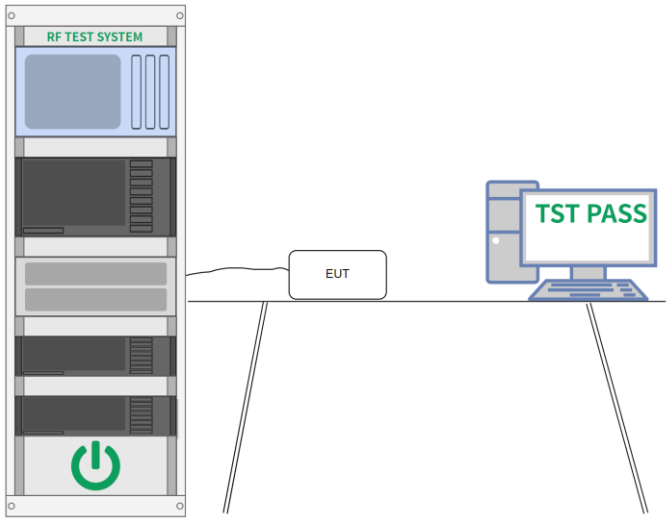
6.2 Dwell Time

Test Requirement:	47 CFR 15.231(a)(1) & (a)(2)
Test Limit:	(1) A manually operated transmitter shall employ a switch that will automatically deactivate the transmitter within not more than 5 seconds of being released. (2) A transmitter activated automatically shall cease transmission within 5 seconds after activation.
Test Method:	ANSI C63.10-2013, Section 7.4
Procedure:	For evaluation of periodic operation characteristics, the following procedure may be used: a) Trigger the spectrum analyzer sweep on the RF waveform of the unlicensed wireless device. b) Set the spectrum analyzer sweep time greater than the specified time for periodic operation. c) Manually activate and deactivate the unlicensed wireless device and confirm that it ceases transmission within the specified time of deactivation. d) Document the test results. e) Verify and document that periodic transmissions at regular predetermined intervals do not exist, except where regulatory requirements allow polling or supervision transmissions, including data, to determine system integrity. Compliance is addressed by an attestation supported by the equipment theory of operation.

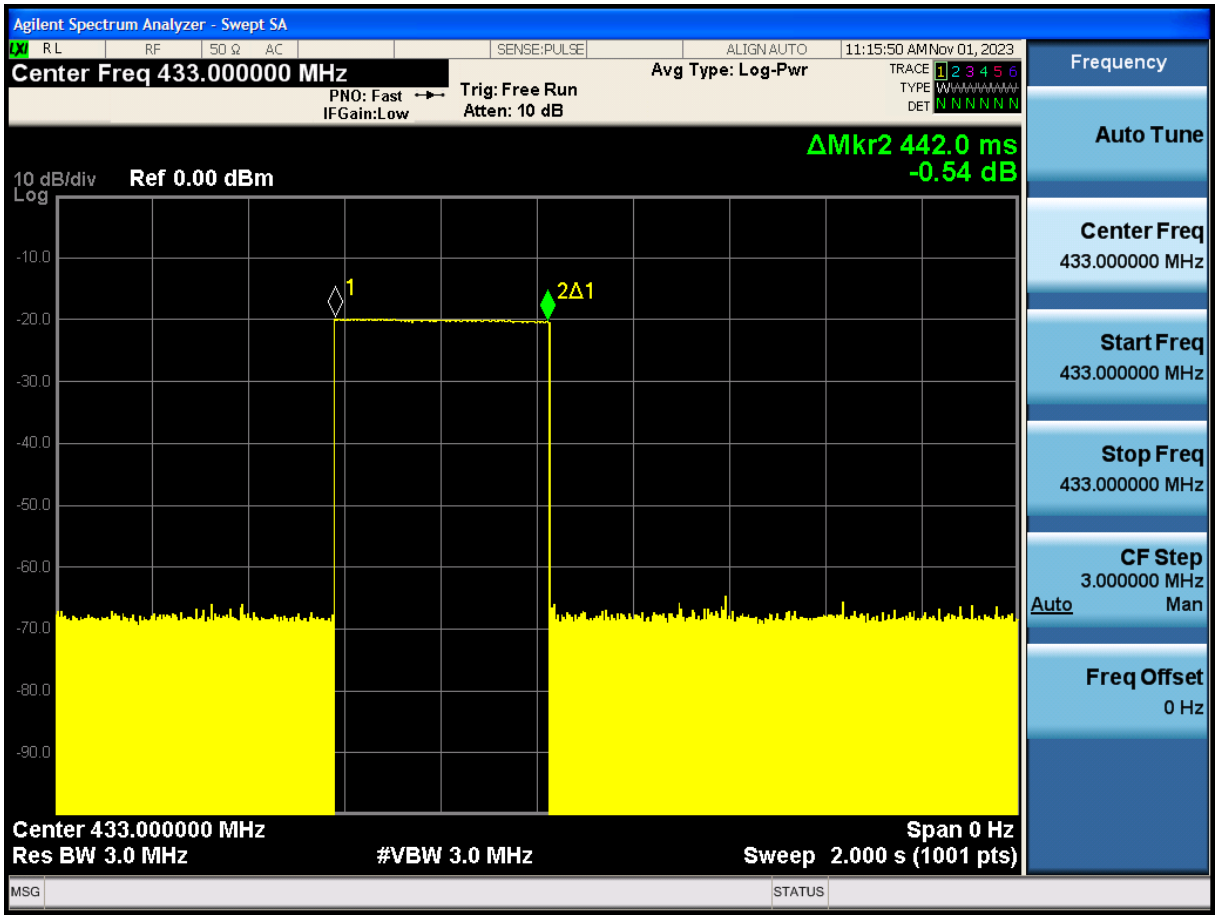
6.2.1 E.U.T. Operation:

Operating Environment:					
Temperature:	23.6 °C	Humidity:	50.9 %	Atmospheric Pressure:	98 kPa
Test mode:	Mode1				

6.2.2 Test Setup Diagram:



6.2.3 Test Data:



Result: Pass, the EUT had automatically deactivated transmission within 5 seconds.

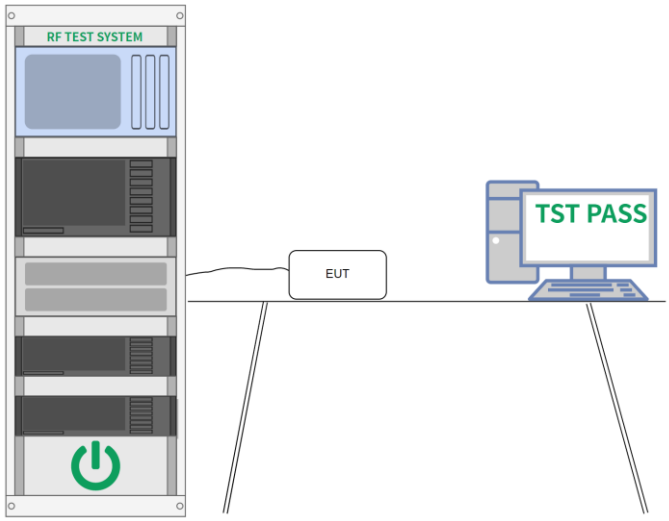
6.3 Duty Cycle

Test Requirement:	47 CFR 15.231(b) & (e)
Test Limit:	No limit, only for Report Use.
Test Method:	ANSI C63.10-2013, Section 7.5
Procedure:	a) Adjust and configure any EUT switches, controls, or input data streams to ensure that the EUT is transmitting or encoded to obtain the “worst-case” pulse ON time. b) Couple the final radio frequency output signal to the input of a spectrum analyzer. This may be performed by a radiated, direct connection (i.e., conducted) or by a “near-field” coupling method. The signal received shall be of sufficient level to trigger adequately the spectrum analyzer sweep display. NOTE—If the bandwidth of the pulse is greater than the RBW of the spectrum analyzer, then a similar measurement may be performed using a wideband digital storage oscilloscope (DSO). c) Adjust the center frequency of the spectrum analyzer to the center of the RF signal. d) Set the spectrum analyzer for ZERO SPAN. e) Adjust the SWEEP TIME to obtain at least a 100 ms period of time on the horizontal display axis of the spectrum analyzer. f) If the pulse train is periodic (i.e., consists of a series of pulses that repeat in a characteristic pattern over a constant time period), and the period (T) is less than or equal to 100 ms, then: 1) Set the TRIGGER on the spectrum analyzer to capture at least one period of the pulse train, including any blanking intervals. 2) Determine the total maximum pulse “ON time” (t_{ON}) over one period of the pulse train. An example of a periodic pulse train and the associated period is shown in Figure 14. If the pulse train contains pulses of different widths, then t_{ON} is determined by summing the duration of all of the pulses within the pulse train [i.e., $t_{ON} = \Sigma(t1 + t2 + \ldots tn)$]. 3) The duty cycle is then determined by dividing the total maximum “ON time” by the period of the pulse train (t_{ON}/T). g) If the pulse train is nonperiodic or is periodic with a period that exceeds 100 ms, or as an alternative to step f), then: 1) Set the TRIGGER on the spectrum analyzer to capture the greatest amount of pulse “ON time” over 100 ms. 2) Find the 100 ms period that contains the maximum “on time”; this may require summing the duration of multiple pulses as described in step f2). 3) Determine the duty cycle by dividing the total maximum “ON time” by 100 ms (t_{ON}/100 ms).

6.3.1 E.U.T. Operation:

Operating Environment:					
Temperature:	24.6 °C	Humidity:	57.9 %	Atmospheric Pressure:	98 kPa
Test mode:	Mode1				

6.3.2 Test Setup Diagram:


RF TEST SYSTEM
EUT
TST PASS

6.3.3 Test Data:

Test Mode	Antenna	Frequency [MHz]	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]	Factor
/	Ant1	433	100	100	100	0.00

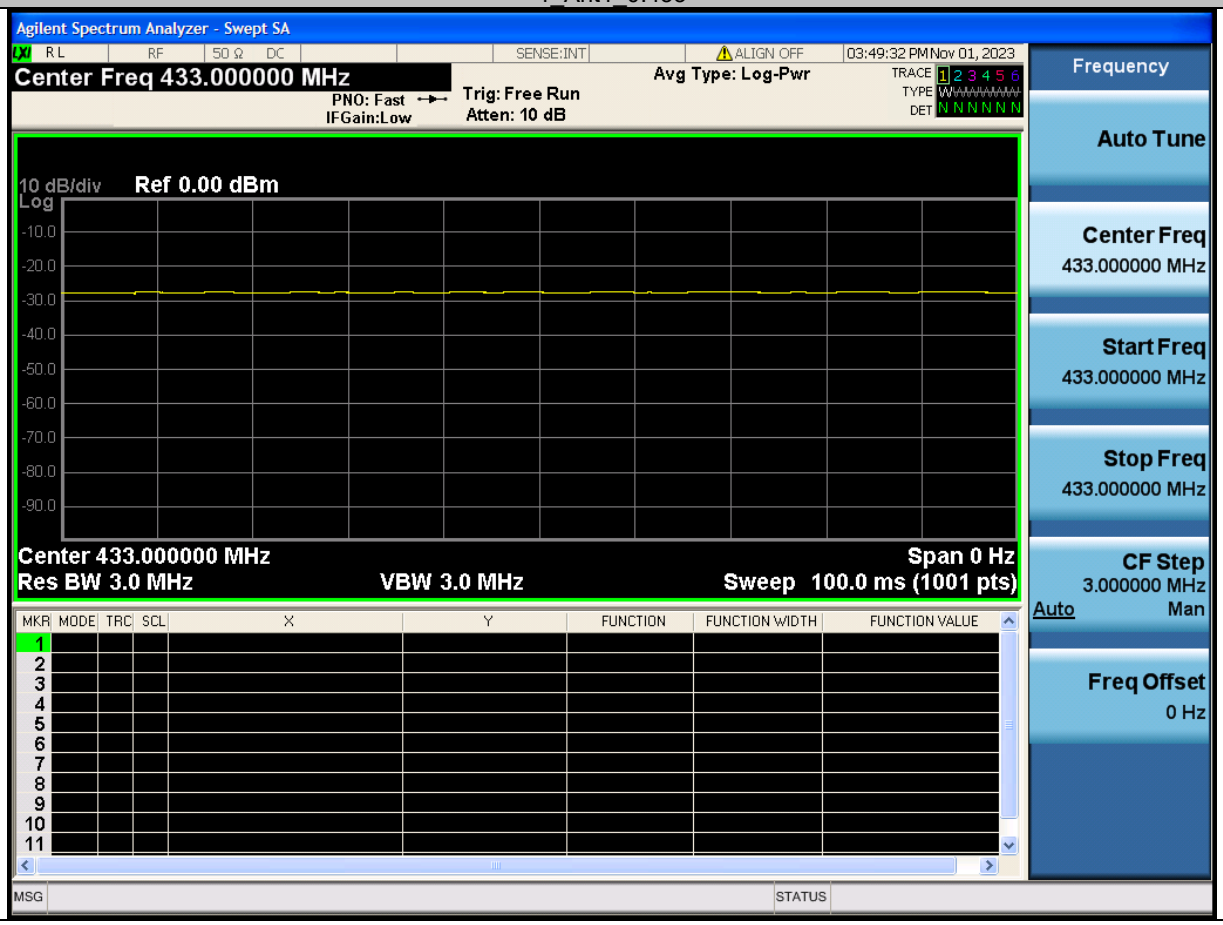
Notes:

Duty Cycle [%] = Transmission Duration [ms] / Transmission Period [ms] * 100

Factor = 20 * log (Duty Cycle)

Test Graphs

1_Ant1_0.433



6.4 Radiated Emission (below 1GHz)

<table>
<tr><td>Test Requirement:</td><td colspan="3">47 CFR 15.231</td></tr>
<tr><td>Test Limit:</td><td colspan="3"><table>
<tr><td>Frequency (MHz)</td><td>Field strength (microvolts/meter)</td><td>Measurement distance (meters)</td></tr>
<tr><td>0.009-0.490</td><td>2400/F(kHz)</td><td>300</td></tr>
<tr><td>0.490-1.705</td><td>24000/F(kHz)</td><td>30</td></tr>
<tr><td>1.705-30.0</td><td>30</td><td>30</td></tr>
<tr><td>30-88</td><td>100 **</td><td>3</td></tr>
<tr><td>88-216</td><td>150 **</td><td>3</td></tr>
<tr><td>216-960</td><td>200 **</td><td>3</td></tr>
<tr><td>Above 960</td><td>500</td><td>3</td></tr>
</table></td></tr>
<tr><td>Test Method:</td><td colspan="3">ANSI C63.10-2013, Section 6.5</td></tr>
<tr><td>Procedure:</td><td colspan="3">a. For below 1GHz, the EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.
b. The EUT was set 3 or 10 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 quasi-peak method as specified and then reported in a data sheet.
g. Test the EUT in the lowest channel, the middle channel, the Highest channel.
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.
Remark:
1. Level= Read Level+ Cable Loss+ Antenna Factor- Preamp Factor
2. Scan from 9kHz to 30MHz, the disturbance below 30MHz was very low. The points marked on above plots are the highest emissions could be found when testing, so only above points had been displayed. The amplitude of spurious emissions from the radiator which are attenuated more than 20dB below the limit need not be reported.
3. The disturbance below 1GHz was very low and the harmonics were the highest point could be found when testing, so only the above harmonics had been displayed.

FCC part 15.231(b): In addition to the provisions of § 15.205, the field strength of emissions from intentional radiators operated under this section shall not exceed the following:</td></tr>
</table>

Fundamental frequency (MHz)	Filed strength of fundamental(microvolts/meter)	Field strength of spurious emissions (microvolts/meter)
40.66-40.70	2,250	225
70-130	1,250	125
130-174	[1] 1,250 to 3,750	[1] 125 to 375
174-260	3,750	375
260-470	[1] 3,750 to 12,500	[1] 375 to 1,250
Above 470	12,500	1,250

[1] Linear interpolations.

(1) The above field strength limits are specified at a distance of 3 meters. The tighter limits apply at the band edges.

(2) Intentional radiators operating under the provisions of this section shall demonstrate compliance with the limits on the field strength of emissions, as shown in the above table, based on the average value of the measured emissions. As an alternative, compliance with the limits in the above table may be based on the use of measurement instrumentation with a CISPR quasi-peak detector. The specific method of measurement employed shall be specified in the application for equipment authorization. If average emission measurements are employed, the provisions in § 15.35 for averaging pulsed emissions and for limiting peak emissions apply. Further, compliance with the provisions of § 15.205 shall be demonstrated using the measurement instrumentation specified in that section.

(3) The limits on the field strength of the spurious emissions in the above table are based on the fundamental frequency of the intentional radiator. Spurious emissions shall be attenuated to the average (or, alternatively, CISPR quasi-peak) limits shown in this table or to the general limits shown in § 15.209, whichever limit permits a higher field strength.

FCC part 15.231(e): Intentional radiators may operate at a periodic rate exceeding that specified in paragraph (a) of this section and may be employed for any type of operation, including operation prohibited in paragraph (a) of this section, provided the intentional radiator complies with the provisions of paragraphs (b) through (d) of this section, except the field strength table in paragraph (b) of this section is replaced by the following:

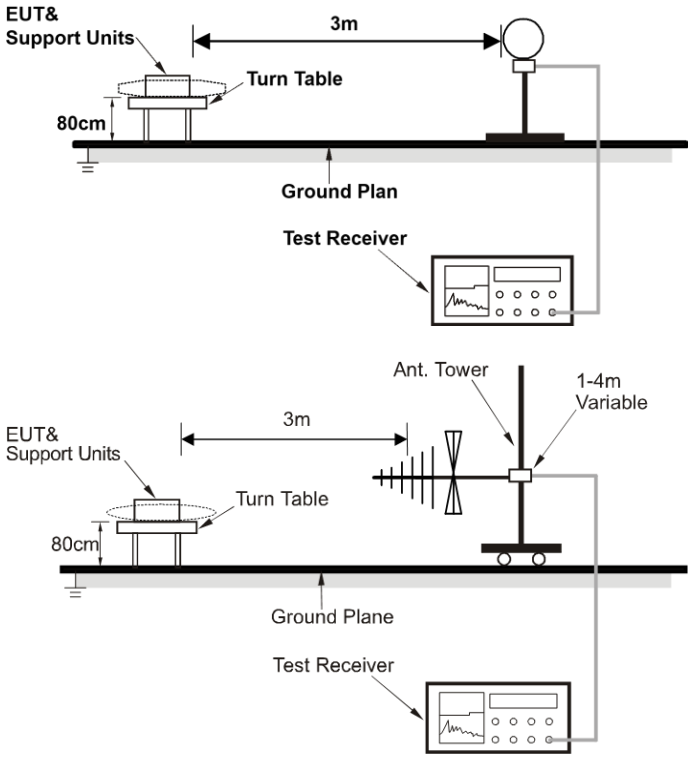
Fundamental frequency (MHz)	Filed strength of fundamental(microvolts/meter)	Field strength of spurious emissions (microvolts/meter)
40.66-40.70	1,000	100
70-130	500	50
130-174	500 to 1500 [1]	50 to 150 [1]
174-260	1,500	150
260-470	1,500 to 5,000 [1]	150 to 500 [1]
Above 470	5,000	500

6.4.1 E.U.T. Operation:

Operating Environment:					
Temperature:	33.2 °C	Humidity:	36.2 %	Atmospheric Pressure:	100 kPa

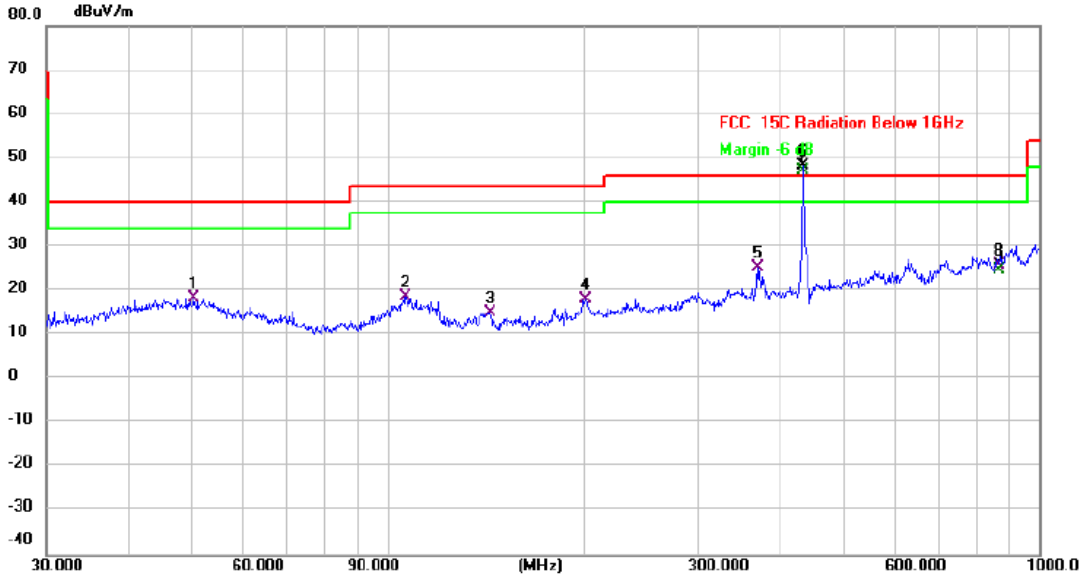
Test mode:	Mode1
Note: The amplitude of spurious emissions which are attenuated more than 20 dB below the limits are not reported. All modes of operation of the EUT were investigated, and only the worst-case results are reported. There were no emissions found below 30MHz within 20dB of the limit.	

6.4.2 Test Setup Diagram:



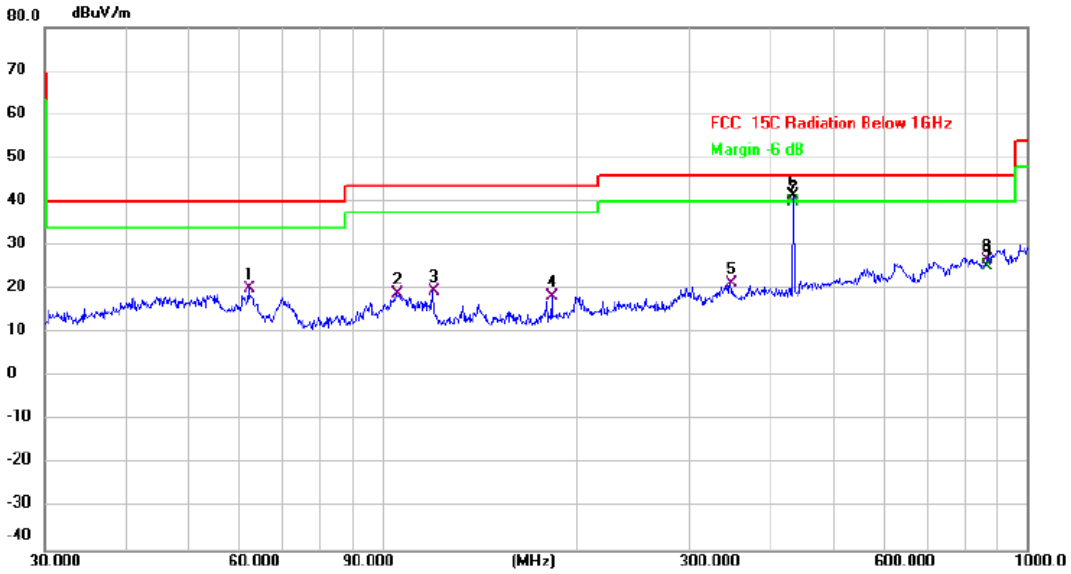
6.4.3 Test Data:

Mode1 / Polarization: Horizontal / CH: 433



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		50.4089	25.66	-7.27	18.39	40.00	-21.61	QP	
2		106.7587	25.66	-7.02	18.64	43.50	-24.86	QP	
3		143.3261	25.27	-10.07	15.20	43.50	-28.30	QP	
4		201.3930	24.61	-6.57	18.04	43.50	-25.46	QP	
5		369.4047	29.98	-4.69	25.29	46.00	-20.71	QP	
6	*	433.0000	53.52	-5.06	48.46	100.9	-52.44	peak	
7	X	433.0000	53.52	-5.06	48.46	80.90	-32.44	AVG	
8		866.0000	24.60	1.40	26.00	80.90	-54.90	peak	
9	X	866.0000	24.60	1.40	26.00	60.90	-34.90	AVG	

Mode1 / Polarization: Vertical / BW: 0.433 / CH: 433



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		62.2128	29.83	-9.57	20.26	40.00	-19.74	QP	
2		105.2718	26.16	-7.26	18.90	43.50	-24.60	QP	
3		119.8556	28.77	-9.22	19.55	43.50	-23.95	QP	
4		183.2005	28.83	-10.34	18.49	43.50	-25.01	QP	
5		346.8092	25.45	-4.11	21.34	46.00	-24.66	QP	
6	*	433.0000	46.37	-5.06	41.31	100.9	-59.59	peak	
7	X	433.0000	46.37	-5.06	41.31	80.90	-39.59	AVG	
8		866.0000	25.24	1.40	26.64	80.90	-54.26	peak	
9	X	866.0000	23.54	1.40	26.64	60.90	-34.26	AVG	

6.5 Radiated Emission (above 1GHz)

<table>
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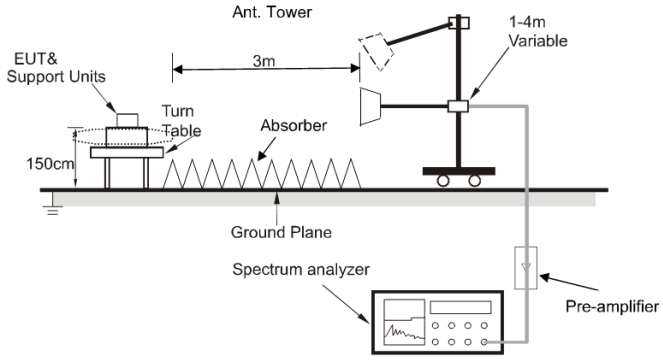
<tr><td>0.009-0.490</td><td>2400/F(kHz)</td><td>300</td></tr>
<tr><td>0.490-1.705</td><td>24000/F(kHz)</td><td>30</td></tr>
<tr><td>1.705-30.0</td><td>30</td><td>30</td></tr>
<tr><td>30-88</td><td>100 **</td><td>3</td></tr>
<tr><td>88-216</td><td>150 **</td><td>3</td></tr>
<tr><td>216-960</td><td>200 **</td><td>3</td></tr>
<tr><td>Above 960</td><td>500</td><td>3</td></tr>
</table></td></tr>
<tr><td>Test Method:</td><td colspan="3">ANSI C63.10-2013, Section 6.6</td></tr>
<tr><td>Procedure:</td><td colspan="3">a. For above 1GHz, the EUT was placed on the top of a rotating table 1.5 meters above the ground at a 3 meter fully-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.
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 or average method as specified and then reported in a data sheet.
g. Test the EUT in the lowest channel, the middle channel, the Highest channel.
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.
Remark:
1. Level= Read Level+ Cable Loss+ Antenna Factor- Preamp Factor
2. Scan from 18GHz to 40GHz, the disturbance above 18GHz was very low. The points marked on above plots are the highest emissions could be found when testing, so only above points had been displayed. The amplitude of spurious emissions from the radiator which are attenuated more than 20dB below the limit need not be reported.
3. 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. For the emissions whose peak level is lower than the average limit, only the peak measurement is shown in the report.
4. The disturbance above 18GHz were very low and the harmonics were the highest point could be found when testing, so only the above harmonics had been displayed.</td></tr>
</table>

6.5.1 E.U.T. Operation:

Operating Environment:					
Temperature:	33.2 °C	Humidity:	36.2 %	Atmospheric Pressure:	100 kPa
Test mode:	Mode1				
Note: Test frequency are from 1GHz to 25GHz, the amplitude of spurious emissions which are attenuated more than 20 dB below the limits are not reported. All modes of operation of the EUT were investigated, and only the worst-case results are reported.					

6.5.2 Test Setup Diagram:



6.5.3 Test Data:

Mode1 / Polarization: Horizontal / CH: 433

	MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector
1	1302.000	44.91	-6.84	38.07	74	-35.93	peak
2	1302.000	44.91	-6.84	38.07	54	-15.93	AVG
3	1736.000	42.84	-2.14	40.7	74	-33.3	peak
4	1736.000	42.84	-2.14	40.7	54	-13.3	AVG
5	2170.000	45.61	-3.34	42.27	74	-31.73	peak
6	2170.000	45.61	-3.34	42.27	54	-11.73	AVG

Mode1 / Polarization: Vertical / CH: 433

	MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector
1	1301.000	44.67	-6.84	37.83	74	-36.17	peak
2	1301.000	44.67	-6.84	37.83	54	-16.17	AVG
3	1736.000	43.42	-2.14	41.28	74	-32.72	peak
4	1736.000	43.42	-2.14	41.28	54	-12.72	AVG
5	2170.000	42.64	-3.34	39.3	74	-34.7	peak
6	2170.000	42.64	-3.34	39.3	54	-14.7	AVG

Photographs of the test setup

Refer to Appendix - Test Setup Photos

Photographs of the EUT

Refer to Appendix - EUT Photos

----End of Report----