FCC REPORT

Applicant:	Dragino Technology Co., Limited.
Address of Applicant:	Room 202, Block B, BCT Incubation Bases (BaoChengTai), No.8 Cai Yun Road Long Cheng Street, Long Gang District; Shenzhen 518116, China

Equipment Under Test (EUT)

Product Name:	Temperature & Humidity Sensor
Model No.:	LHT65
Trade mark:	DRAGINO
FCC ID:	ZHZLHT65
Applicable standards:	FCC CFR Title 47 Part 15 Subpart C Section 15.249
Date of sample receipt:	24 Sep., 2019
Date of Test:	25 Sep., to 23 Oct., 2019
Date of report issued:	23 Oct., 2019
Test Result:	PASS*

* In the configuration tested, the EUT complied with the standards specified above.

Authorized Signature:

Bruce Zhang
Laboratory Manager

2 Version

Version No.	Date	Description
00	*08 Oct., 2019*	*Original*
01	*23 Oct., 2019*	*Update page 6, 8, 9 and band edge test.*

Prepared By: Carey Chen ***Date:*** *08 Oct., 2019*

Project Engineer

Check By: Winner Zhang ***Date:*** *08 Oct., 2019*

Reviewer

3 Contents

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4 Test Summary

Test Item	Section in CFR 47	Result
Antenna requirement	15.203	Pass
Conducted Emission	15.207	N/A
Field strength of the fundamental signal	15.249 (a)(e)	Pass
Spurious emissions	15.249 (d)/15.209	Pass
20dB Occupy Bandwidth	15.215	Pass

Pass: The EUT comply with the essential requirements in the standard.

5 General Information

5.1 Client Information

Applicant:	Dragino Technology Co., Limited.
Address:	Room 202, Block B, BCT Incubation Bases (BaoChengTai), No.8 CaiYunRoad Long Cheng Street, LongGang District; Shenzhen 518116, China
Manufacturer/Factory:	Dragino Technology Co., Limited.
Address:	Room 202, Block B, BCT Incubation Bases (BaoChengTai), No.8 CaiYunRoad Long Cheng Street, LongGang District; Shenzhen 518116, China

5.2 General Description of E.U.T.

Product Name:	Temperature & Humidity Sensor
Model No.:	LHT65
Operation Frequency:	902.3MHz~927.8MHz
Modulation type:	LoRa
Antenna Type:	Internal Antenna
Antenna gain:	0 dBi
Power supply:	Rechargeable Lithium Battery DC3.0V/1500mAh
Test Sample Condition:	The test samples were provided in good working order with no visible defects.

Operation Frequency each of channel									
Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
0	902.3MHz	26	907.5MHz	52	912.7MHz	78	918.0MHz	104	923.2MHz
1	902.5MHz	27	907.7MHz	53	912.9MHz	79	918.2MHz	105	923.4MHz
2	902.7MHz	28	907.9MHz	54	913.1MHz	80	918.4MHz	106	923.6MHz
3	902.9MHz	29	908.1MHz	55	913.3MHz	81	918.6MHz	107	923.8MHz
4	903.1MHz	30	908.3MHz	56	913.5MHz	82	918.8MHz	108	924.0MHz
5	903.3MHz	31	908.5MHz	57	913.7MHz	83	919.0MHz	109	924.2MHz
6	903.5MHz	32	908.7MHz	58	913.9MHz	84	919.2MHz	110	924.4MHz
7	903.7MHz	33	908.9MHz	59	914.1MHz	85	919.4MHz	111	924.6MHz
8	903.9MHz	34	909.1MHz	60	914.3MHz	86	919.6MHz	112	924.8MHz
9	904.1MHz	35	909.3MHz	61	914.5MHz	87	919.8MHz	113	925.0MHz
10	904.3MHz	36	909.5MHz	62	914.7MHz	88	920.0MHz	114	925.2MHz
11	904.5MHz	37	909.7MHz	63	914.9MHz	89	920.2MHz	115	925.4MHz
12	904.7MHz	38	909.9MHz	64	915.2MHz	90	920.4MHz	116	925.6MHz
13	904.9MHz	39	910.1MHz	65	915.4MHz	91	920.6MHz	117	925.8MHz
14	905.1MHz	40	910.3MHz	66	915.6MHz	92	920.8MHz	118	926.0MHz
15	905.3MHz	41	910.5MHz	67	915.8MHz	93	921.0MHz	119	926.2MHz
16	905.5MHz	42	910.7MHz	68	916.0MHz	94	921.2MHz	120	926.4MHz
17	905.7MHz	43	910.9MHz	69	916.2MHz	95	921.4MHz	121	926.6MHz
18	905.9MHz	44	911.1MHz	70	916.4MHz	96	921.6MHz	122	926.8MHz
19	906.1MHz	45	911.3MHz	71	916.6MHz	97	921.8MHz	123	927.0MHz
20	906.3MHz	46	911.5MHz	72	916.8MHz	98	922.0MHz	124	927.2MHz
21	906.5MHz	47	911.7MHz	73	917.0MHz	99	922.2MHz	125	927.4MHz
22	906.7MHz	48	911.9MHz	74	917.2MHz	100	922.4MHz	126	927.6MHz
23	906.9MHz	49	912.1MHz	75	917.4MHz	101	922.6MHz	127	927.8MHz

24	907.1MHz	50	912.3MHz	76	917.6MHz	102	922.8MHz	
25	907.3MHz	51	912.5MHz	77	917.8MHz	103	923.0MHz	

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. Channel No. 0, 64 & 127 were selected as Lowest, Middle and Highest channel.

5.3 Test mode

Transmitting mode:	Keep the EUT in transmitting mode with modulation.

Pre-Test Mode: (highest channel=2407MHz)

CCIS has verified the construction and function in typical operation, The EUT was placed on three different polar directions; i.e. X axis, Y axis, Z axis. which was shown in this test report and defined as follows:

Axis	X	Y	Z
Field Strength(dBuV/m)	96.35	93.54	92.35

Final Test Mode:

According to ANSI C63.4 standards, the test results are both the “worst case” and “worst setup”:
X axis (see the test setup photo)

5.4 Description of Support Units

N/A

5.5 Laboratory Facility

The test facility is recognized, certified, or accredited by the following organizations:

- **FCC - Registration No.: 727551**

Shenzhen Zhongjian Nanfang Testing Co., Ltd. has been accredited as a testing laboratory by FCC (Federal Communications Commission). The Registration No. is 727551.

- **IC - Registration No.: 10106A-1**

The 3m Semi-anechoic chamber of Shenzhen Zhongjian Nanfang Testing Co., Ltd. has been Registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing with Registration No.: 10106A-1.

- **CNAS - Registration No.: CNAS L6048**

Shenzhen Zhongjian Nanfang Testing Co., Ltd. is accredited to ISO/IEC 17025:2005 General Requirements for the Competence of Testing and Calibration laboratories for the competence of testing. The Registration No. is CNAS L6048.

- **A2LA - Registration No.: 4346.01**

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2005 General requirements for the competence of testing and calibration laboratories. The test scope can be found as below link: https://portal.a2la.org/scopepdf/4346-01.pdf

5.6 Laboratory Location

Shenzhen Zhongjian Nanfang Testing Co., Ltd.
Address: No. B-C, 1/F., Building 2, Laodong No.2 Industrial Park, Xixiang Road,
Bao’an District, Shenzhen, Guangdong, China
Tel: +86-755-23118282, Fax: +86-755-23116366
Email: info@ccis-cb.com, Website: http://www.ccis-cb.com

5.7 Test Instruments list

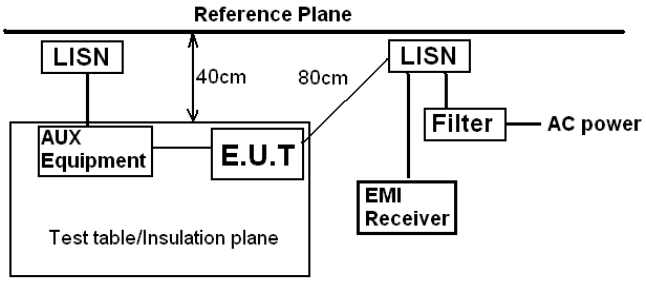
Radiated Emission:					
Test Equipment	**Manufacturer**	**Model No.**	**Serial No.**	**Cal. Date (mm-dd-yy)**	**Cal. Due date (mm-dd-yy)**
3m SAC	SAEMC	9m*6m*6m	966	07-22-2017	07-21-2020
BiConiLog Antenna	SCHWARZBECK	VULB9163	497	03-18-2019	03-17-2020
Horn Antenna	SCHWARZBECK	BBHA9120D	916	03-18-2019	03-17-2020
Horn Antenna	SCHWARZBECK	BBHA9120D	1805	06-22-2017	06-21-2020
Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA9170582	11-21-2018	11-20-2019
Loop Antenna	SCHWARZBECK	FMZB 1519 B	00044	03-18-2019	03-17-2020
EMI Test Software	AUDIX	E3	Version: 6.110919b		
Pre-amplifier	HP	8447D	2944A09358	03-18-2019	03-17-2020
Pre-amplifier	CD	PAP-1G18	11804	03-18-2019	03-17-2020
Spectrum analyzer	Rohde & Schwarz	FSP30	101454	03-18-2019	03-17-2020
Spectrum analyzer	Rohde & Schwarz	FSP40	100363	11-21-2018	11-20-2019
EMI Test Receiver	Rohde & Schwarz	ESRP7	101070	03-18-2019	03-17-2020
Simulated Station	Anritsu	MT8820C	6201026545	03-18-2019	03-17-2020
Cable	ZDECL	Z108-NJ-NJ-81	1608458	03-18-2019	03-17-2020
Cable	MICRO-COAX	MFR64639	K10742-5	03-18-2019	03-17-2020
Cable	SUHNER	SUCOFLEX100	58193/4PE	03-18-2019	03-17-2020

6 Test results and Measurement Data

6.1 Antenna requirement:

Standard requirement:	FCC Part15 C Section 15.203
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.*	
E.U.T Antenna:	
The antenna is Internal Antenna which cannot detachable . The best case gain of the antenna is 0 dBi.	

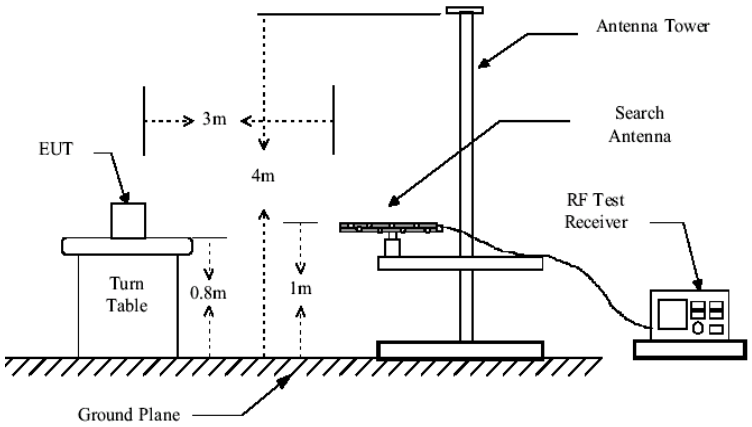
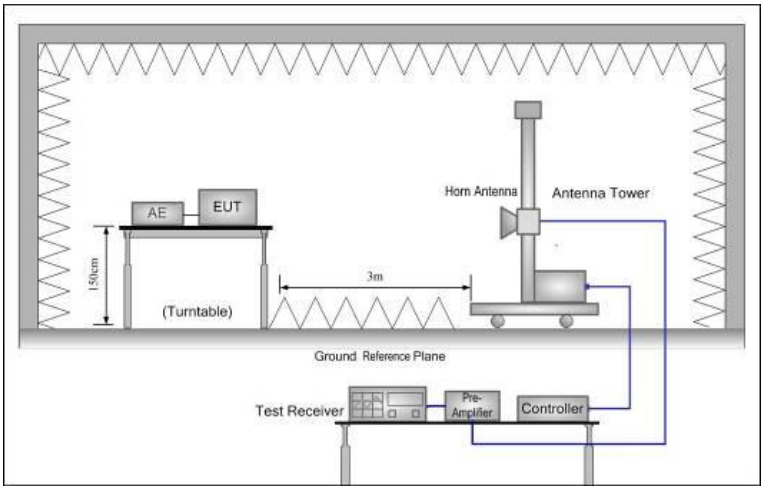
6.2 Conducted Emission

<table>
<tr><td>Test Requirement:</td><td colspan="3">FCC Part 15 B Section 15.207</td></tr>
<tr><td>Test Method:</td><td colspan="3">ANSI C63.10:2013</td></tr>
<tr><td>Test Frequency Range:</td><td colspan="3">150kHz to 30MHz</td></tr>
<tr><td>Class / Severity:</td><td colspan="3">Class B</td></tr>
<tr><td>Receiver setup:</td><td colspan="3">RBW=9kHz, VBW=30kHz</td></tr>
<tr><td>Limit:</td><td rowspan="2">Frequency range (MHz)</td><td colspan="2">Limit (dBµV)</td></tr>
<tr><td></td><td>Quasi-peak</td><td>Average</td></tr>
<tr><td></td><td>0.15-0.5</td><td>66 to 56*</td><td>56 to 46*</td></tr>
<tr><td></td><td>0.5-5</td><td>56</td><td>46</td></tr>
<tr><td></td><td>0.5-30</td><td>60</td><td>50</td></tr>
<tr><td></td><td colspan="3">* Decreases with the logarithm of the frequency.</td></tr>
<tr><td>Test setup:</td><td colspan="3"> 

Remark:
E.U.T: Equipment Under Test
LISN: Line Impedence Stabilization Network
Test table height=0.8m</td></tr>
<tr><td>Test procedure</td><td colspan="3">1. The E.U.T and simulators are connected to the main power through a line impedance stabilization network(L.I.S.N.). The provide a 50ohm/50uH coupling impedance for the measuring equipment.
2. The peripheral devices are also connected to the main power through a LISN that provides a 50ohm/50uH coupling impedance with 50ohm termination. (Please refers to the block diagram of the test setup and photographs).
3. Both sides of A.C. line are checked for maximum conducted interference. 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.</td></tr>
<tr><td>Test Instruments:</td><td colspan="3">Refer to section 5.9 for details</td></tr>
<tr><td>Test mode:</td><td colspan="3">Refer to section 5.3 for details</td></tr>
<tr><td>Test results:</td><td colspan="3">The power supply of the EUT is by the Battery, so not need to be tested.</td></tr>
</table>

6.3 Radiated Emission

<table>
<tr><td>Test Requirement:</td><td colspan="5">FCC Part15 C Section 15.249 and 15.209</td></tr>
<tr><td>Test Method:</td><td colspan="5">ANSI C63.10: 2013</td></tr>
<tr><td>Test Frequency Range:</td><td colspan="5">9KHz to 10000MHz</td></tr>
<tr><td>Test site:</td><td colspan="5">Measurement Distance: 3m</td></tr>
<tr><td rowspan="5">Receiver setup:</td><td>Frequency</td><td>Detector</td><td>RBW</td><td>VBW</td><td>Remark</td></tr>
<tr><td>30MHz-1GHz</td><td>Quasi-peak</td><td>100kHz</td><td>300kHz</td><td>Quasi-peak Value</td></tr>
<tr><td rowspan="2">Above 1GHz</td><td>Peak</td><td>1MHz</td><td>3MHz</td><td>Peak Value</td></tr>
<tr><td>RMS</td><td>1MHz</td><td>3MHz</td><td>Average Value</td></tr>
<tr><td></td><td></td><td></td><td></td></tr>
<tr><td rowspan="3">Limit:
(Field strength of the fundamental signal)</td><td colspan="2">Frequency</td><td colspan="2">Limit (dBuV/m @3m)</td><td>Remark</td></tr>
<tr><td colspan="2" rowspan="2">902.928MHz</td><td colspan="2">94.00</td><td>Average Value</td></tr>
<tr><td colspan="2">114.00</td><td>Peak Value</td></tr>
<tr><td rowspan="8">Limit:
(Spurious Emissions)</td><td colspan="2">Frequency</td><td colspan="2">Limit (dBuV/m @3m)</td><td>Remark</td></tr>
<tr><td colspan="2">30MHz-88MHz</td><td colspan="2">40.00</td><td>Quasi-peak Value</td></tr>
<tr><td colspan="2">88MHz-216MHz</td><td colspan="2">43.50</td><td>Quasi-peak Value</td></tr>
<tr><td colspan="2">216MHz-960MHz</td><td colspan="2">46.00</td><td>Quasi-peak Value</td></tr>
<tr><td colspan="2">960MHz-1GHz</td><td colspan="2">54.00</td><td>Quasi-peak Value</td></tr>
<tr><td colspan="2" rowspan="2">Above 1GHz</td><td colspan="2">54.00</td><td>Average Value</td></tr>
<tr><td colspan="2">74.00</td><td>Peak Value</td></tr>
<tr><td></td><td></td><td></td><td></td></tr>
<tr><td>Limit:
(outside of the specified frequency band)</td><td colspan="5">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.</td></tr>
<tr><td>Test Procedure:</td><td colspan="5">1. The EUT was placed on the top of a rotating table 0.8m(below 1GHz)/1.5m(above 1GHz) above the ground at a 3 meter camber. The table was rotated 360 degrees to determine the position of the highest radiation.
2. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
3. 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.
4. 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 and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
5. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.
6. 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.</td></tr>
</table>

Test setup:	Below 1GHz  Above 1GHz 
Test Instruments:	Refer to section 5.7
Test mode:	Refer to section 5.3
Test results:	Passed
Remark:	1. Pre-scan all kind of the place mode (X-axis, Y-axis, Z-axis), and found the X-axis is the worst case. 2. 9 kHz to 30MHz is too low, so only shows the data of above 30MHz in this report.

6.3.1 Field Strength Of The Fundamental Signal

Peak value							
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
902.3	63.42	22.50	3.73	89.65	114.00	-24.35	Vertical
	70.12	22.50	3.73	96.35	114.00	-17.65	Horizontoal
915.2	61.42	22.56	3.86	87.84	114.00	-26.16	Vertical
	67.59	22.56	3.86	94.01	114.00	-19.99	Horizontoal
927.8	60.36	22.62	3.99	86.97	114.00	-27.03	Vertical
	66.25	22.62	3.99	92.86	114.00	-21.14	Horizontoal
Average value							
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
902.3	54.25	22.50	3.73	80.48	94.00	-13.52	Vertical
	60.37	22.50	3.73	86.60	94.00	-7.40	Horizontoal
915.2	52.56	22.56	3.86	78.98	94.00	-15.02	Vertical
	57.86	22.56	3.86	84.28	94.00	-9.72	Horizontoal
927.8	51.12	22.62	3.99	77.73	94.00	-16.27	Vertical
	56.25	22.62	3.99	82.86	94.00	-11.14	Horizontoal

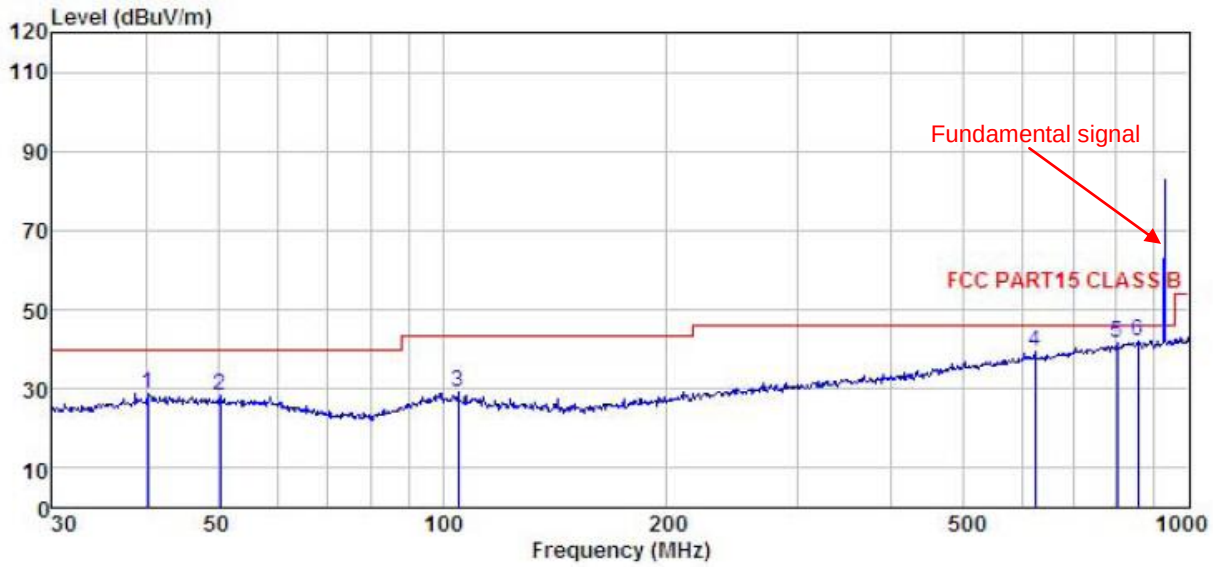
NOTE: Field strength of the fundamental signal test, RBW >20dB BW, VBW>=3XRBW.

6.3.2 Spurious Emissions

Measurement Data (worst case):

Below 1GHz:

Product Name:	Temperature & Humidity Sensor	**Product Model:**	LHT65
Test By:	Carey	**Test mode:**	2.4G Tx mode
Test Frequency:	30 MHz ~ 1 GHz	**Polarization:**	Vertical
Test Voltage:	DC 3V	**Environment:**	Temp: 24℃ Huni: 57%

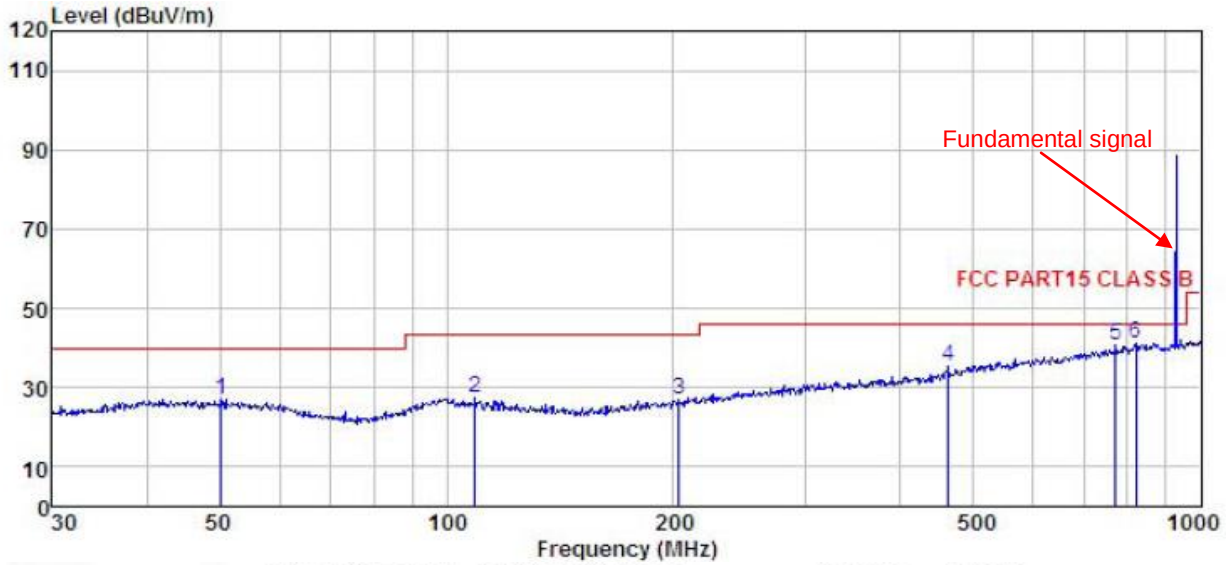


	Freq	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
1	40.276	15.36	12.40	1.22	0.00	28.98	40.00	-11.02	QP
2	50.409	15.01	12.05	1.25	0.00	28.31	40.00	-11.69	QP
3	104.903	15.00	12.09	2.00	0.00	29.09	43.50	-14.41	QP
4	622.890	15.74	19.59	3.90	0.00	39.23	46.00	-6.77	QP
5	801.786	15.63	21.50	4.34	0.00	41.47	46.00	-4.53	QP
6	854.025	15.23	22.59	4.15	0.00	41.97	46.00	-4.03	QP

Remark:

1. *Final Level = Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor.*
2. *The emission levels of other frequencies are very lower than the limit and not show in test report.*

Product Name:	Temperature & Humidity Sensor	Product Model:	LHT65
Test By:	Carey	Test mode:	2.4G Tx mode
Test Frequency:	30 MHz ~ 1 GHz	Polarization:	Horizontal
Test Voltage:	DC 3V	Environment:	Temp: 24℃ Huni: 57%



	Freq	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
1	50.232	13.55	12.08	1.25	0.00	26.88	40.00	-13.12	QP
2	109.029	13.48	11.75	2.04	0.00	27.27	43.50	-16.23	QP
3	203.523	13.23	10.76	2.87	0.00	26.86	43.50	-16.64	QP
4	462.346	15.28	16.91	3.30	0.00	35.49	46.00	-10.51	QP
5	771.449	15.17	20.99	4.36	0.00	40.52	46.00	-5.48	QP
6	821.710	14.87	21.97	4.28	0.00	41.12	46.00	-4.88	QP

Remark:

1. *Final Level = Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor.*
2. *The emission levels of other frequencies are very lower than the limit and not show in test report.*

Above 1GHz

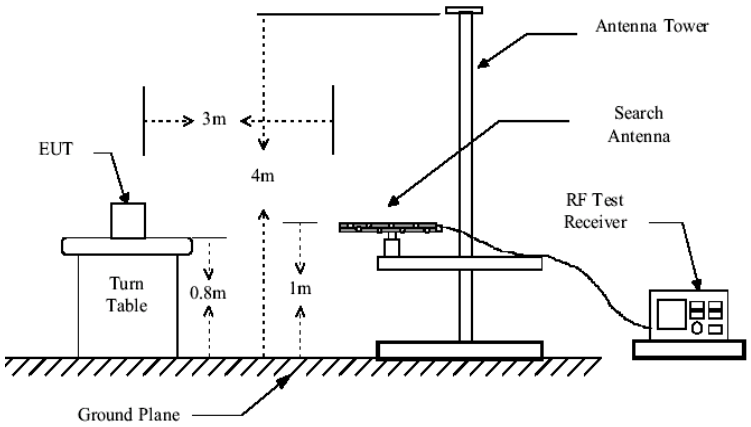
Test channel: Lowest channel								
Detector: Peak Value								
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
1804.60	63.25	25.61	4.12	41.21	51.77	74.00	-22.23	Vertical
1804.60	63.01	25.61	4.12	41.21	51.53	74.00	-22.47	Horizontal
Detector: Average Value								
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
1804.60	48.25	25.61	4.12	41.21	36.77	54.00	-17.23	Vertical
1804.60	48.82	25.61	4.12	41.21	37.34	54.00	-16.66	Horizontal
Test channel: Middle channel								
Detector: Peak Value								
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
1830.40	61.48	25.63	4.15	41.27	49.99	74.00	-24.01	Vertical
1830.40	59.89	25.63	4.15	41.27	48.40	74.00	-25.60	Horizontal
Detector: Average Value								
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
1830.40	48.49	25.63	4.15	41.27	37.00	54.00	-17.00	Vertical
1830.40	48.19	25.63	4.15	41.27	36.70	54.00	-17.30	Horizontal
Test channel: Highest channel								
Detector: Peak Value								
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
1855.60	59.44	25.66	4.18	41.34	47.94	74.00	-26.06	Vertical
1855.60	57.98	25.66	4.18	41.34	46.48	74.00	-27.52	Horizontal
Detector: Average Value								
Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
1855.60	48.70	25.66	4.18	41.34	37.20	54.00	-16.80	Vertical
1855.60	48.35	25.66	4.18	41.34	36.85	54.00	-17.15	Horizontal

Remark:

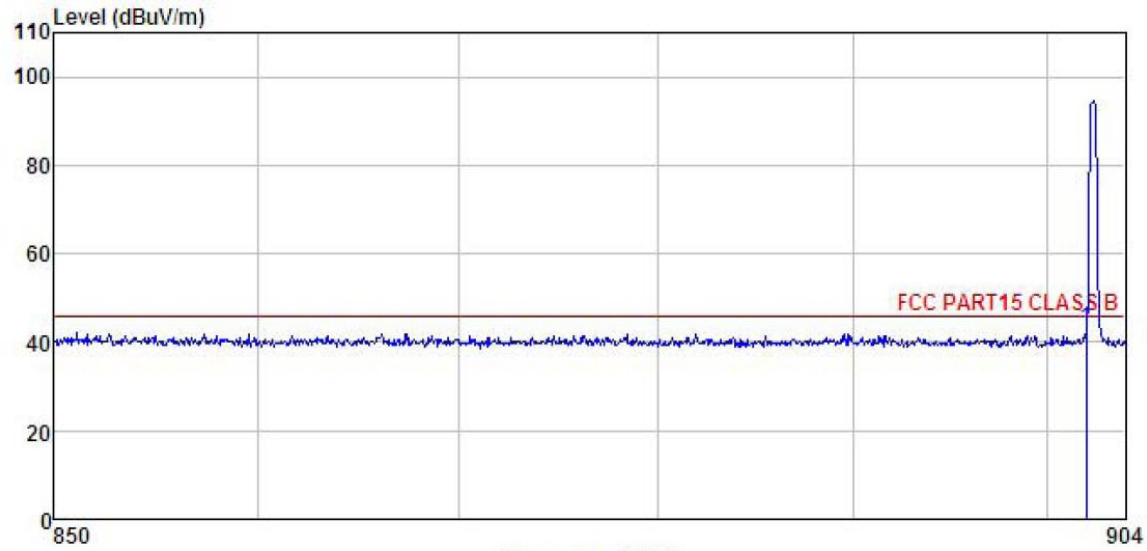
1. *Final Level = Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor.*
2. *The emission levels of other frequencies are very lower than the limit and not show in test report.*

6.3.3 Band Edge

Radiated Emission Method

<table>
<tr><td>Test Requirement:</td><td colspan="5">FCC Part 15 C Section 15.209</td></tr>
<tr><td>Test Method:</td><td colspan="5">ANSI C63.10: 2013</td></tr>
<tr><td>Test Frequency Range:</td><td colspan="5">850MHz to 1000MHz</td></tr>
<tr><td>Test Distance:</td><td colspan="5">3m</td></tr>
<tr><td>Receiver setup:</td><td>Frequency</td><td>Detector</td><td>RBW</td><td>VBW</td><td>Remark</td></tr>
<tr><td></td><td>30MHz-1GHz</td><td>Quasi-peak</td><td>100kHz</td><td>300kHz</td><td>Quasi-peak Value</td></tr>
<tr><td>Limit:</td><td colspan="2">Frequency</td><td colspan="2">Limit (dBuV/m @3m)</td><td>Remark</td></tr>
<tr><td></td><td colspan="2">30MHz-88MHz</td><td colspan="2">40.00</td><td>Quasi-peak Value</td></tr>
<tr><td></td><td colspan="2">88MHz-216MHz</td><td colspan="2">43.50</td><td>Quasi-peak Value</td></tr>
<tr><td></td><td colspan="2">216MHz-960MHz</td><td colspan="2">46.00</td><td>Quasi-peak Value</td></tr>
<tr><td></td><td colspan="2">960MHz-1GHz</td><td colspan="2">54.00</td><td>Quasi-peak Value</td></tr>
<tr><td>Test Procedure:</td><td colspan="5">7. The EUT was placed on the top of a rotating table 1.5 meters above the ground at a 3 meter camber. The table was rotated 360 degrees to determine the position of the highest radiation.
8. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
9. 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.
10. 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 and the rota table was turned from 0 degrees to 360 degrees to find the maximum reading.
11. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.
12. If the emission level of the EUT in peak mode was 10 dB 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 10 dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.</td></tr>
<tr><td>Test setup:</td><td colspan="5"> 
</td></tr>
<tr><td>Test Instruments:</td><td colspan="5">Refer to section 5.7 for details</td></tr>
<tr><td>Test mode:</td><td colspan="5">Refer to section 5.3 for details</td></tr>
<tr><td>Test results:</td><td colspan="5">Passed</td></tr>
</table>

Product Name:	Temperature & Humidity Sensor	Product Model:	LHT65
Test By:	Carey	Test mode:	2.4G-Tx mode
Test Channel:	Lowest channel	Polarization:	Vertical
Test Voltage:	DC 3V	Environment:	Temp: 24℃ Huni: 57%

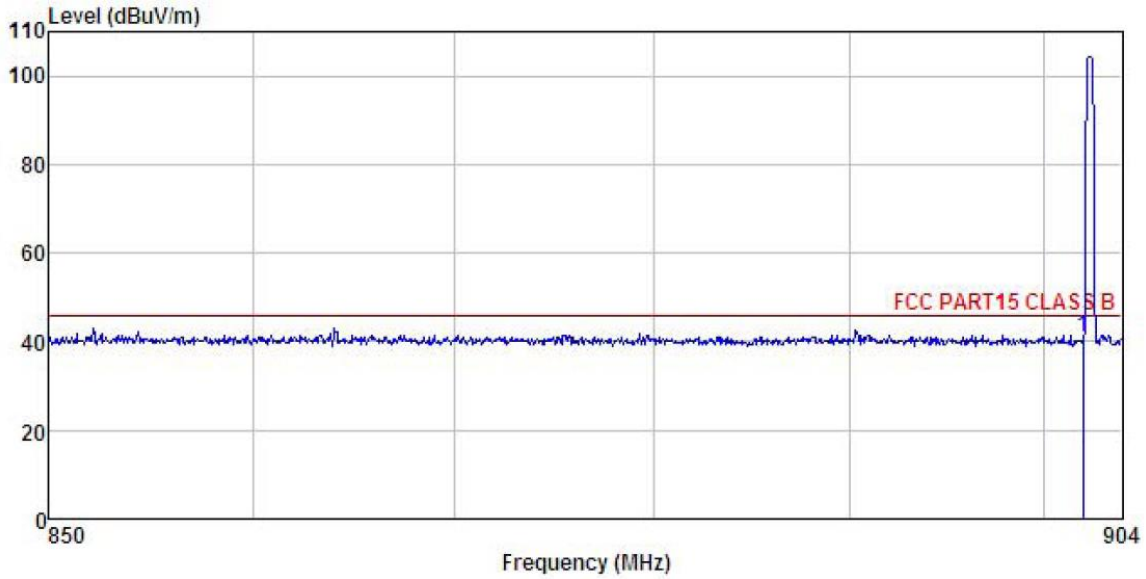


	Freq	ReadAntenna Level	Antenna Factor	Cable Loss	Preamp Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
1	902.000	16.82	22.50	3.73	0.00	43.05	46.00	-2.95	

Remark:

1. *Final Level = Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor.*
2. *The emission levels of other frequencies are very lower than the limit and not show in test report.*

Product Name:	Temperature & Humidity Sensor	Product Model:	LHT65
Test By:	Carey	Test mode:	2.4G-Tx mode
Test Channel:	Lowest channel	Polarization:	Horizontal
Test Voltage:	DC 3V	Environment:	Temp: 24℃ Huni: 57%

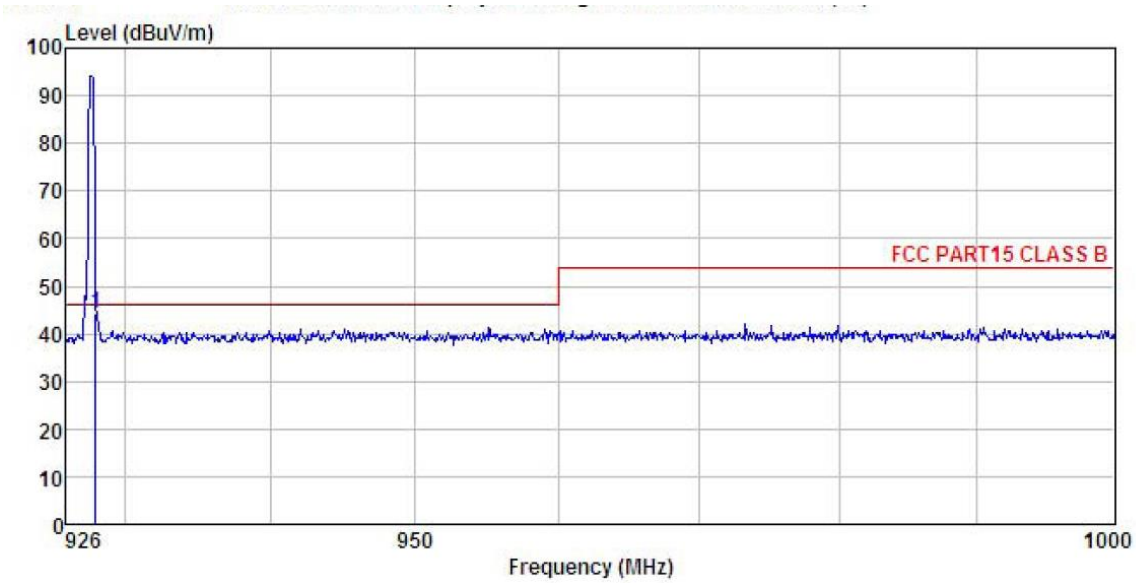


	Freq	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
1	902.000	14.83	22.50	3.73	0.00	41.06	46.00	-4.94	

Remark:

1. *Final Level = Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor.*
2. *The emission levels of other frequencies are very lower than the limit and not show in test report.*

Product Name:	Temperature & Humidity Sensor	Product Model:	LHT65
Test By:	Carey	Test mode:	2.4G-Tx mode
Test Channel:	Highest channel	Polarization:	Vertical
Test Voltage:	DC 3V	Environment:	Temp: 24℃ Huni: 57%

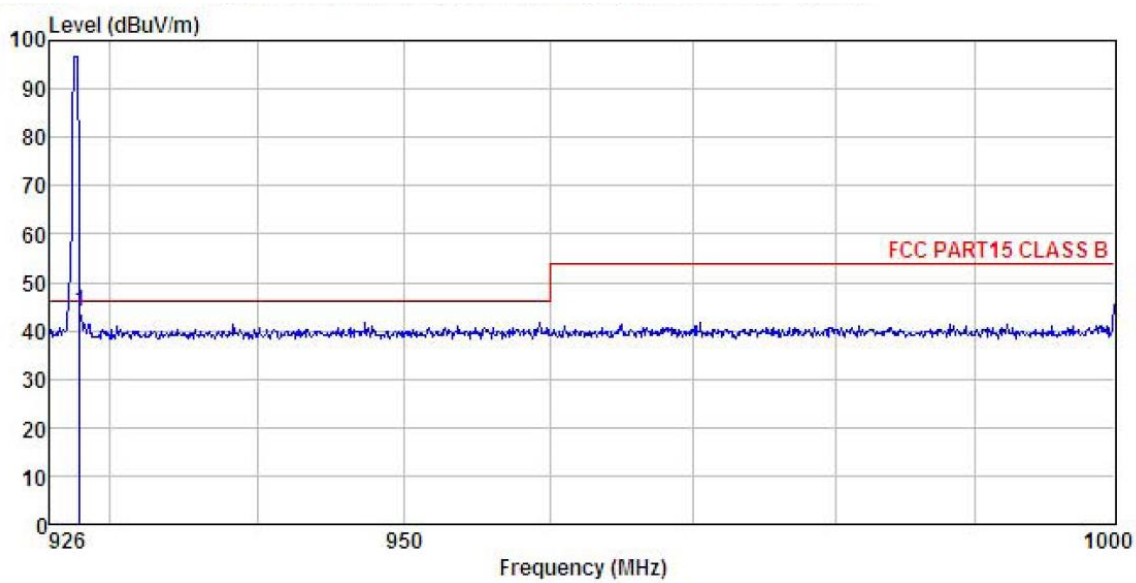


	Freq	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
1	928.000	17.66	22.61	3.99	0.00	44.26	46.00	-1.74	

Remark:

1. *Final Level = Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor.*
2. *The emission levels of other frequencies are very lower than the limit and not show in test report.*

Product Name:	Temperature & Humidity Sensor	Product Model:	LHT65
Test By:	Carey	Test mode:	2.4G-Tx mode
Test Channel:	Highest channel	Polarization:	Horizontal
Test Voltage:	DC 3V	Environment:	Temp: 24℃ Huni: 57%

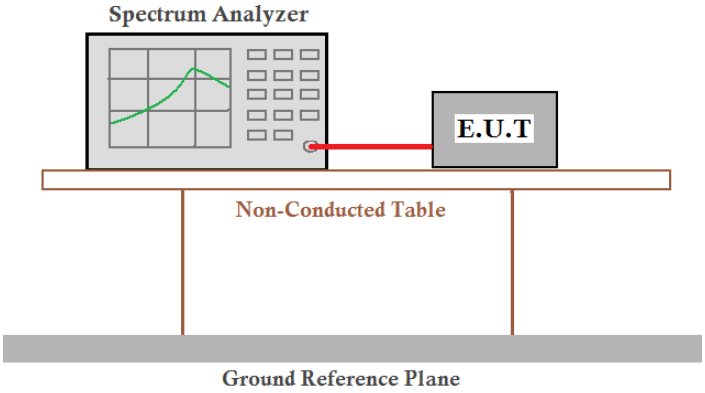


	Freq	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
1	928.000	17.26	22.61	3.99	0.00	43.86	46.00	-2.14	

Remark:

1. *Final Level = Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor.*
2. *The emission levels of other frequencies are very lower than the limit and not show in test report.*

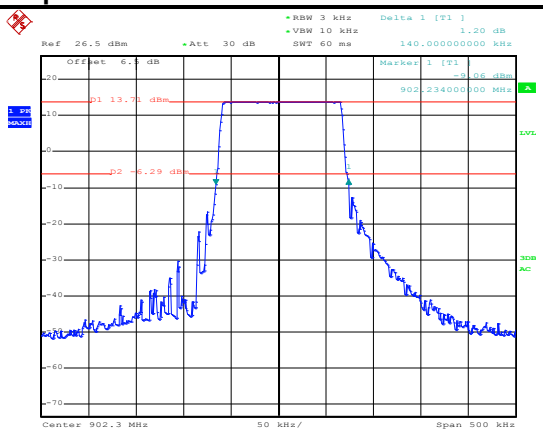
6.4 20dB Occupy Bandwidth

Test Requirement:	FCC Part 15 C Section 15.215
Test Method:	ANSI C63.10:2013
Receiver setup:	RBW=30 kHz, VBW=100 kHz, detector=Peak
Limit:	N/A
Test setup:	
Test Instruments:	Refer to section 5.7 for details
Test mode:	Transmitting mode
Test results:	Pass

Measurement Data:

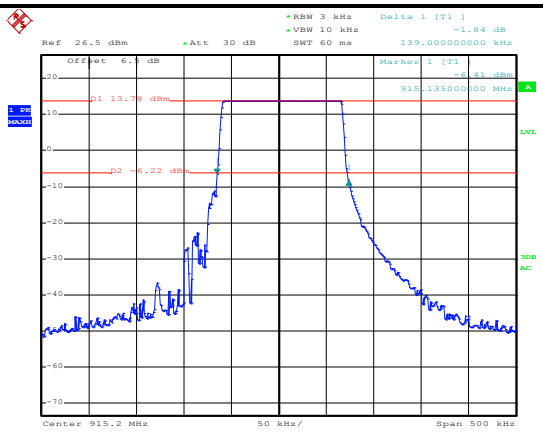
20dB Occupy Bandwidth (MHz)		
Lowest channel	Middle channel	Highest Highest
0.14	0.139	0.139

Test plot as follows:



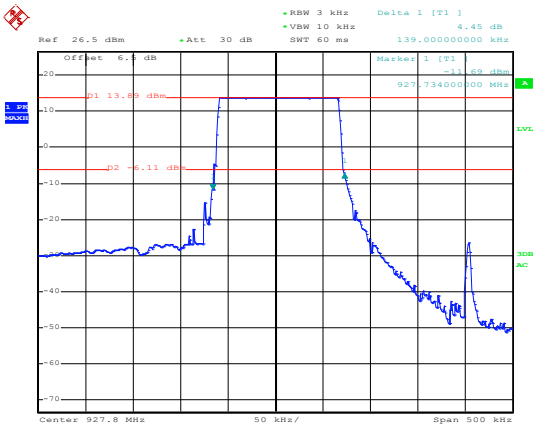
Date: 29.SEP.2019 17:04:16

Lowest channel



Date: 29.SEP.2019 17:17:02

Middle channel



Date: 29.SEP.2019 17:20:21

Highest channel