TEST REPORT

Product	:	Wireless Sensor H1, testo 164 H1
Trade mark	:	Testo
Model/Type reference	:	0572 2211 02
Serial Number	:	N/A
Report Number	:	EED32Q81995201
FCC ID	:	WAF-0572221102
Date of Issue	:	Feb. 20, 2025
Test Standards	:	47 CFR Part 15 Subpart C
Test result	:	PASS

Prepared for:

Testo SE & Co. KGaA
Celsiusstr. 2, 79822 Titisee-Neustadt, Germany

Prepared by:

Centre Testing International Group Co., Ltd.
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Compiled by:	Keven Tan	Reviewed by:	Frazer Li
Approved by:	Aaron Ma	Date:	Feb. 20, 2025

Check No.: 8947021224

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2 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	N/A
Maximum Conducted Output Power	47 CFR Part 15, Subpart C Section 15.247 (b)(1)	PASS
20dB Emission Bandwidth	47 CFR Part 15, Subpart C Section 15.247 (a)(1)	PASS
Carrier Frequency Separation	47 CFR Part 15, Subpart C Section 15.247 (a)(1)	PASS
Number of Hopping Channels	47 CFR Part 15, Subpart C Section 15.247 (a)(1)	PASS
Time of Occupancy	47 CFR Part 15, Subpart C Section 15.247 (a)(1)	PASS
Band Edge Measurements	47 CFR Part 15, Subpart C Section 15.247(d)	PASS
Conducted Spurious Emissions	47 CFR Part 15, Subpart C Section 15.247(d)	PASS
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	PASS

Remark:
N/A: The product is powered by battery.

3 General Information

3.1 Client Information

Applicant:	Testo SE & Co. KGaA
Address of Applicant:	Celsiusstr. 2, 79822 Titisee-Neustadt, Germany
Manufacturer:	Testo SE & Co. KGaA
Address of Manufacturer:	Celsiusstr. 2, 79822 Titisee-Neustadt, Germany

3.2 General Description of EUT

Product Name:	Wireless Sensor H1, testo 164 H1	
Model No.:	0572 2211 02	
Test model No.:	0572 2211 02	
Trade Mark:	Testo	
Product Type:	☐ Mobile ☐ Portable ☒ Fixed Location	
Operation Frequency:	915MHz~928MHz	
Modulation Technique:	Frequency Hopping Spread Spectrum(FHSS)	
Modulation Type:	GFSK	
Number of Channel:	64	
Hopping Channel Type:	Adaptive Frequency Hopping systems	
Antenna Type:	FPC Antenna	
Antenna Gain:	-1.13dBi	
Power Supply:	Battery:	DC 3.6V
Test Voltage:	DC 3.6V	
Sample Received Date:	Dec. 11, 2024	
Sample tested Date:	Dec. 11, 2024 to Jan. 08, 2025	

Operation Frequency each of channel

Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
1	915.2MHz	17	918.4MHz	33	921.6MHz	49	924.8MHz
2	915.4MHz	18	918.6MHz	34	921.8MHz	50	925.0MHz
3	915.6MHz	19	918.8MHz	35	922.0MHz	51	925.2MHz
4	915.8MHz	20	919.0MHz	36	922.2MHz	52	925.4MHz
5	916.0MHz	21	919.2MHz	37	922.4MHz	53	925.6MHz
6	916.2MHz	22	919.4MHz	38	922.6MHz	54	925.8MHz
7	916.4MHz	23	919.6MHz	39	922.8MHz	55	926.0MHz
8	916.6MHz	24	919.8MHz	40	923.0MHz	56	926.2MHz
9	916.8MHz	25	920.0MHz	41	923.2MHz	57	926.4MHz
10	917.0MHz	26	920.2MHz	42	923.4MHz	58	926.6MHz
11	917.2MHz	27	920.4MHz	43	923.6MHz	59	926.8MHz

12	917.4MHz	28	920.6MHz	44	923.8MHz	60	927.0MHz
13	917.6MHz	29	920.8MHz	45	924.0MHz	61	927.2MHz
14	917.8MHz	30	921.0MHz	46	924.2MHz	62	927.4MHz
15	918.0MHz	31	921.2MHz	47	924.4MHz	63	927.6MHz
16	918.2MHz	32	921.4MHz	48	924.6MHz	64	927.8MHz

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	915.2
The Middle channel	921.4
The Highest channel	927.8

3.3 Test Configuration

EUT Test Software Settings:	
Software:	SmartRF Studio 7.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.	
Channel	Frequency(MHz)
CH1	915.2
CH32	921.4
CH64	927.8

3.4 Test Environment

Operating Environment:	
Radiated Spurious 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

3.5 Description of Support Units

The EUT has been tested with associated equipment below.

1） support equipment

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

3.6 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

3.7 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 to 150kHz)
		3.1dB (150kHz to 30MHz)
5	Temperature test	0.64°C
6	Humidity test	3.8%
7	DC power voltages	0.026%

3.8 Equipment List

BT/WIFI/SRD RF test system					
Equipment	**Manufacturer**	**Mode No.**	**Serial Number**	**Cal. Date (mm-dd-yyyy)**	**Cal. Due date (mm-dd-yyyy)**
Spectrum Analyzer	R&S	FSP40	100416	03-22-2024	03-21-2025
ESG Vector Signal Generator	Agilent	E4438C	MY42082153	08-02-2024	08-01-2025
RF control unit(power unit)	R&S	JS0806-2	22G8060592	07-22-2024	07-21-2025
Power meter	R&S	NRP2	105141	08-21-2024	08-20-2027
Power sensor	R&S	NRP2-Z91	103511	08-21-2024	08-20-2027
High-low temperature test chamber	Dong Guang Qin Zhuo	LK-80GA	QZ20150611879	12-30-2024	11-29-2025
Temperature/ Humidity Indicator	biaozhi	HM10	1804186	05-29-2024	05-28-2025
BT&WI-FI Automatic test software	JS Tonscend	JS1120-3	V3.2.22	---	---
Spectrum Analyzer	R&S	FSV3044	101509	01/17/2024	01/16/2025

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	04/16/2024	04/15/2025
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	04/16/2024	04/15/2025
Preamplifier	Agilent	11909A	12-1	03/22/2024	03/21/2025
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

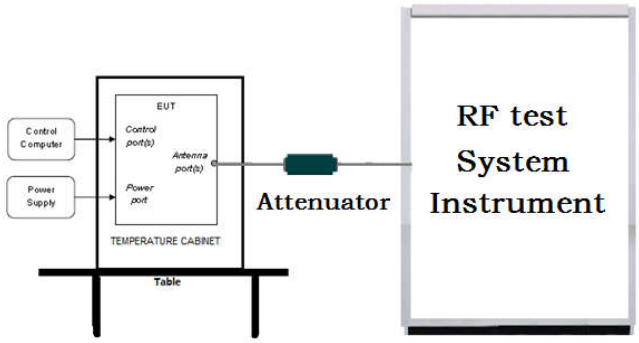
3M full-anechoic Chamber					
Equipment	**Manufacturer**	**Model No.**	**Serial Number**	**Cal. Date (mm-dd-yyyy)**	**Cal. Due date (mm-dd-yyyy)**
Fully Anechoic Chamber	TDK	FAC-3	---	01-09-2024	01-08-2027
Receiver	Keysight	N9038A	MY57290136	01-09-2024 01-04-2025	01-08-2025 01-03-2026
Spectrum Analyzer	Keysight	N9020B	MY57111112	01-29-2024	01-28-2025
Spectrum Analyzer	Keysight	N9030B	MY57140871	01-23-2024	01-22-2025
TRILOG Broadband Antenna	Schwarzbeck	VULB 9163	9163-1148	04-28-2024	04-27-2025
Horn Antenna	Schwarzbeck	BBHA 9170	9170-832	04-16-2024	04-15-2025
Horn Antenna	ETS-LINDGREN	3117	57407	07-03-2024	07-02-2025
Preamplifier	EMCI	EMC001330	980563	03-08-2024	03-07-2025
Preamplifier	Tonscend	TAP-011858	AP21B806112	07-18-2024	07-17-2025
Preamplifier	Tonscend	EMC051845SE	980380	12-05-2024	12-04-2025
Temperature/ Humidity Indicator	biaozhi	GM1360	EE1186631	04-07-2024	04-06-2025
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

4 Test results and Measurement Data

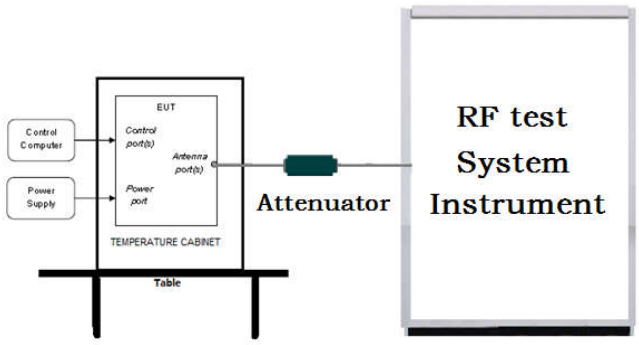
4.1 Antenna Requirement

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 FPC Antenna. The best case gain of the antenna is -1.13dBi.	

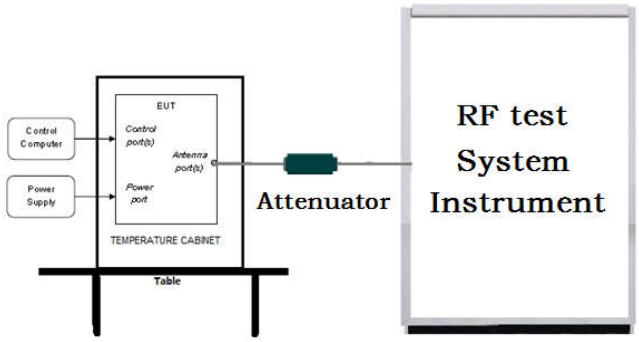
4.2 Maximum Conducted Output Power

Test Requirement:	47 CFR Part 15C Section 15.247 (b)(1)
Test Method:	ANSI C63.10:2013
Test Setup:	 Remark: Offset=Cable loss+ attenuation factor.
Test Procedure:	Use the following spectrum analyzer settings: Span = approximately 5 times the 20 dB bandwidth, centered on a hopping channel RBW > the 20 dB bandwidth of the emission being measured VBW ≥ RBW Sweep = auto Detector function = peak Trace = max hold Allow the trace to stabilize. Use the marker-to-peak function to set the marker to the peak of the emission.
Limit:	21dBm
Exploratory Test Mode:	Non-hopping transmitting with all kind of modulation and all kind of data type
Test Results:	Refer to Appendix A

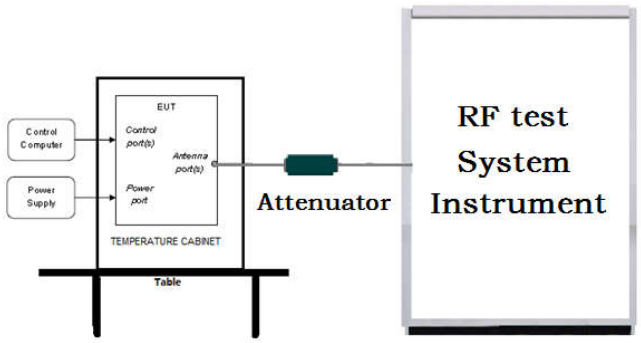
4.3 20dB Emission Bandwidth

Test Requirement:	47 CFR Part 15C Section 15.247 (a)(1)
Test Method:	ANSI C63.10:2013
Test Setup:	 Remark: Offset=Cable loss+ attenuation factor.
Test Procedure:	1. The RF output of EUT was connected to the spectrum analyzer by RF cable and attenuator. The path loss was compensated to the results for each measurement. 2. Set to the maximum power setting and enable the EUT transmit continuously. 3. Use the following spectrum analyzer settings for 20dB Bandwidth measurement. Span = approximately 2 to 5 times the 20 dB bandwidth, centered on a hopping channel; 1%≤RBW ≤5% of the 20 dB bandwidth; VBW≥3RBW; Sweep = auto; Detector function = peak; Trace = max hold. 4. Measure and record the results in the test report.
Limit:	Frequency hopping systems in the 902-928 MHz band: ①If Number of Hopping Channel≥50, 20dB Emission Bandwidth＜250kHz; ②If Number of Hopping Channel≥25, 20dB Emission Bandwidth≥250kHz;
Exploratory Test Mode:	Non-hopping transmitting with all kind of modulation and all kind of data type
Test Results:	Refer to Appendix A

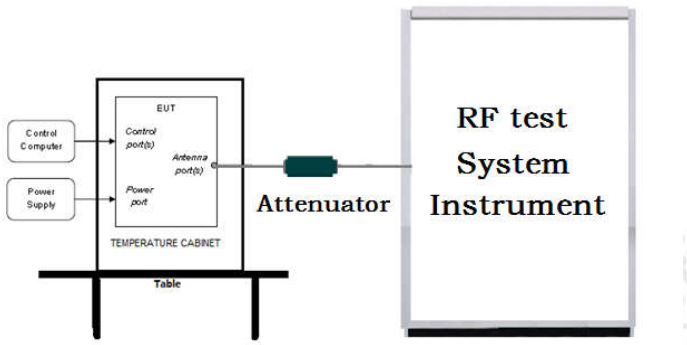
4.4 Carrier Frequency Separation

Test Requirement:	47 CFR Part 15C Section 15.247 (a)(1)
Test Method:	ANSI C63.10:2013
Test Setup:	 Remark: Offset=Cable loss+ attenuation factor.
Test Procedure:	1. The RF output of EUT was connected to the spectrum analyzer by RF cable and attenuator. The path loss was compensated to the results for each measurement. 2. Set to the maximum power setting and enable the EUT transmit continuously. 3. Enable the EUT hopping function. 4. Use the following spectrum analyzer settings: Span = wide enough to capture the peaks of two adjacent channels; RBW is set to approximately 30% of the channel spacing, adjust as necessary to best identify the center of each individual channel; VBW≥RBW; Sweep = auto; Detector function = peak; Trace = max hold. 5. Use the marker-delta function to determine the separation between the peaks of the adjacent channels. Record the value in report.
Limit:	Frequency hopping systems shall have hopping channel carrier frequencies separated by a minimum of 25 kHz or the 20 dB bandwidth of the hopping channel, whichever is greater.
Exploratory Test Mode:	Hopping transmitting with all kind of modulation and all kind of data type
Test Results:	Refer to Appendix A

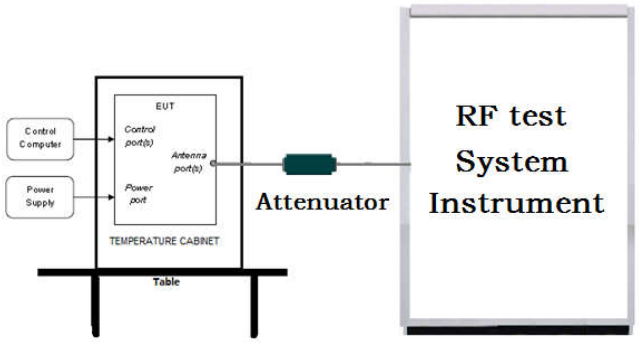
4.5 Number of Hopping Channel

Test Requirement:	47 CFR Part 15C Section 15.247 (a)(1)
Test Method:	ANSI C63.10:2013
Test Setup:	 Remark: Offset=Cable loss+ attenuation factor.
Test Procedure:	1. The RF output of EUT was connected to the spectrum analyzer by RF cable and attenuator. The path loss was compensated to the results for each measurement. 2. Set to the maximum power setting and enable the EUT transmit continuously. 3. Enable the EUT hopping function. 4. Use the following spectrum analyzer settings: Span = the frequency band of operation; set the RBW to less than 30% of the channel spacing or the 20 dB bandwidth, whichever is smaller; VBW≥RBW; Sweep= auto; Detector function = peak; Trace = max hold. 5. The number of hopping frequency used is defined as the number of total channel. 6. Record the measurement data in report.
Limit:	Frequency hopping systems in the 902-928 MHz band: ①If 20dB Emission Bandwidth＜250kHz,Number of Hopping Channel⩾50; ②If 20dB Emission Bandwidth⩾250kHz,Number of Hopping Channel⩾25;
Test Mode:	Hopping transmitting with all kind of modulation
Test Results:	Refer to Appendix A

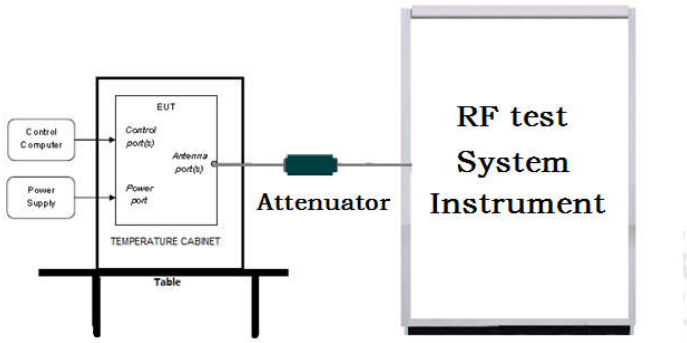
4.6 Time of Occupancy

Test Requirement:	47 CFR Part 15C Section 15.247 (a)(1)
Test Method:	ANSI C63.10:2013
Test Setup:	 Remark: Offset=Cable loss+ attenuation factor.
Test Procedure:	1. The RF output of EUT was connected to the spectrum analyzer by RF cable and attenuator. The path loss was compensated to the results for each measurement. 2. Set to the maximum power setting and enable the EUT transmit continuously. 3. Enable the EUT hopping function. 4. Use the following spectrum analyzer settings: Span = zero span, centered on a hopping channel; RBW shall be ≤ channel spacing and where possible RBW should be set >> 1 / T, where T is the expected dwell time per channel; VBW≥RBW; Sweep = as necessary to capture the entire dwell time per hopping channel; Detector function = peak; Trace = max hold. 5. Measure and record the results in the test report.
Limit:	The average time of occupancy on any channel shall not be greater than 0.4 seconds within a period of 0.4 seconds multiplied by the number of hopping channels employed.
Test Mode:	Hopping transmitting with all kind of modulation and all kind of data type.
Test Results:	Refer to Appendix A

4.7 Band edge Measurements

Test Requirement:	47 CFR Part 15C Section 15.247 (d)
Test Method:	ANSI C63.10:2013
Test Setup:	 Remark: Offset=Cable loss+ attenuation factor.
Test Procedure:	1. Set to the maximum power setting and enable the EUT transmit continuously. 2. Set RBW = 100 kHz, VBW = 300 kHz (≥RBW). Band edge emissions must be at least 20 dB down from the highest emission level within the authorized band as measured with a 100kHz RBW. The attenuation shall be 30 dB instead of 20 dB when RMS conducted output power procedure is used. 3. Enable hopping function of the EUT and then repeat step 2 and 3. 4. Measure and record the results in the test report.
Limit:	In any 100 kHz bandwidth outside the frequency band in which the spread spectrum intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement.
Exploratory Test Mode:	Hopping and Non-hopping transmitting with all kind of modulation and all kind of data type
Test Results:	Refer to Appendix A

4.8 Conducted Spurious Emissions

Test Requirement:	47 CFR Part 15C Section 15.247 (d)
Test Method:	ANSI C63.10:2013
Test Setup:	 Remark: Offset=Cable loss+ attenuation factor.
Test Procedure:	1. The RF output of EUT was connected to the spectrum analyzer by RF cable and attenuator. The path loss was compensated to the results for each measurement. 2. Set to the maximum power setting and enable the EUT transmit continuously. 3. Set RBW = 100 kHz, VBW = 300kHz, scan up through 10th harmonic. All harmonics / spurs must be at least 20 dB down from the highest emission level within the authorized band as measured with a 100kHz RBW. 4. Measure and record the results in the test report. 5. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.
Limit:	In any 100 kHz bandwidth outside the frequency band in which the spread spectrum intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement.
Exploratory Test Mode:	Non-hopping transmitting with all kind of modulation and all kind of data type
Test Results:	Refer to Appendix A

4.9 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:	

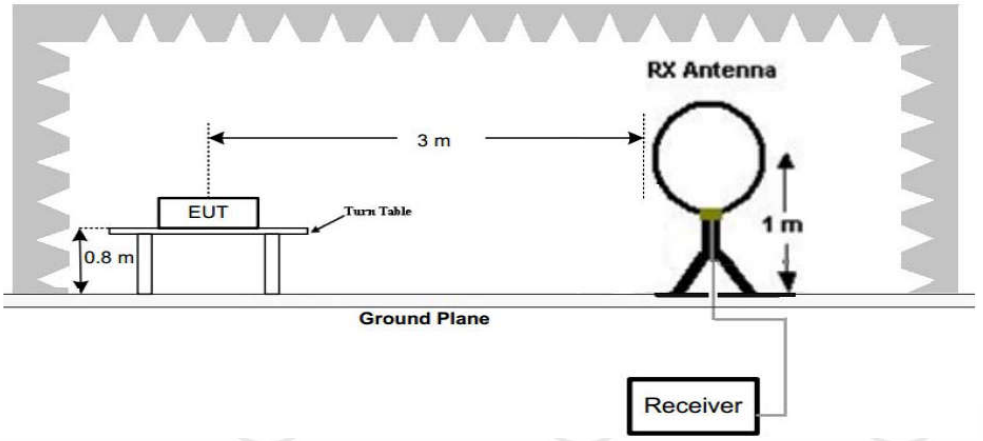


Figure 1. Below 30MHz

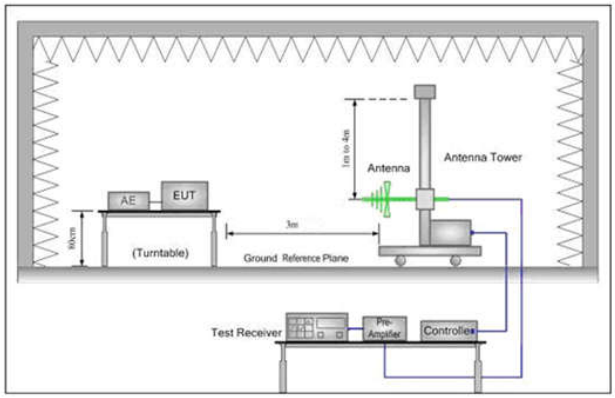


Figure 2. 30MHz to 1GHz

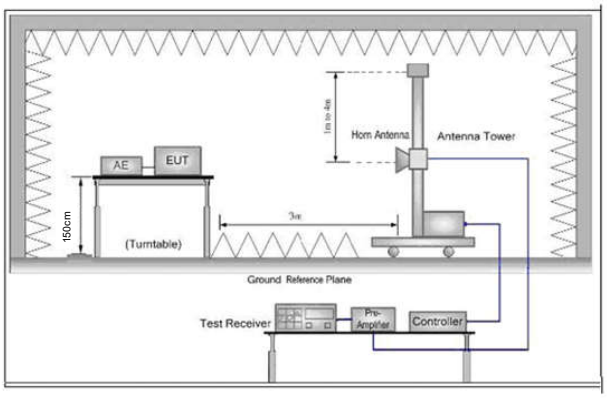


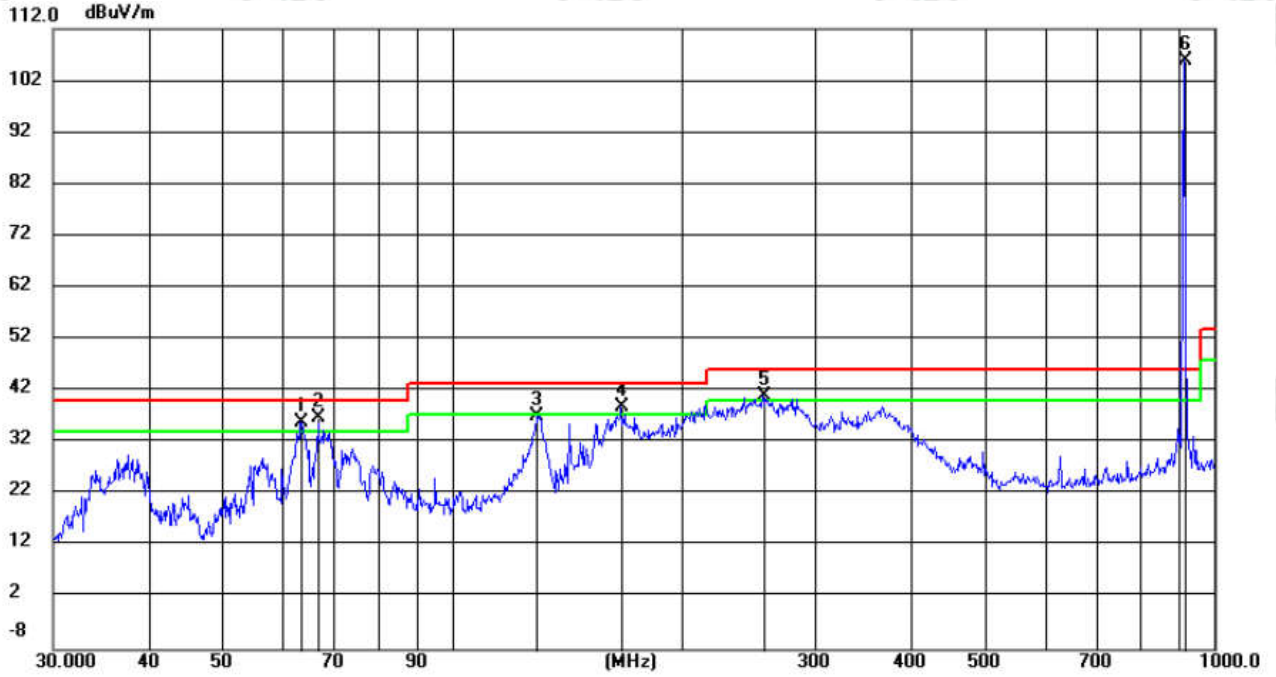
Figure 3. Above 1 GHz

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
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 the Lowest channel mode was recorded in the report.

Horizontal:



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	!	63.4132	23.99	12.10	36.09	40.00	-3.91	QP	200	198	
2	!	66.7559	25.70	11.26	36.96	40.00	-3.04	QP	200	336	
3		129.3316	27.23	10.02	37.25	43.50	-6.25	QP	200	7	
4	!	166.6806	28.21	10.82	39.03	43.50	-4.47	QP	200	188	
5	!	256.1166	26.65	14.50	41.15	46.00	-4.85	QP	100	224	
6	*	915.2659	79.70	26.01	105.71	46.00	59.71	QP	100	352	

Vertical:

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	!	39.7424	22.68	13.59	36.27	40.00	-3.73	QP	200	42	
2	!	63.9602	23.36	11.96	35.32	40.00	-4.68	QP	100	274	
3	!	66.7207	23.91	11.27	35.18	40.00	-4.82	QP	200	55	
4		143.0248	26.24	9.15	35.39	43.50	-8.11	QP	100	209	
5	!	166.6514	26.77	10.81	37.58	43.50	-5.92	QP	100	7	
6	*	915.2660	76.62	26.01	102.63	46.00	56.63	QP	100	7	

Radiated Spurious Emission above 1GHz:

Mode:			Transmitting			Channel:		915.2 MHz	
NO	Freq. [MHz]	Factor [dB]	Reading [dBμV]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Result	Polarity	Remark
1	1830.083	-18.14	59.19	41.05	74.00	32.95	Pass	H	PK
2	2745.5746	-16.25	58.17	41.92	74.00	32.08	Pass	H	PK
3	3796.0531	-11.95	52.22	40.27	74.00	33.73	Pass	H	PK
4	6091.2061	-6.06	47.07	41.01	74.00	32.99	Pass	H	PK
5	9812.4542	3.22	43.67	46.89	74.00	27.11	Pass	H	PK
6	13140.676	8.34	43.14	51.48	74.00	22.52	Pass	H	PK
7	1440.044	-22.58	61.81	39.23	74.00	34.77	Pass	V	PK
8	1830.6831	-18.13	59.95	41.82	74.00	32.18	Pass	V	PK
9	2745.5746	-16.25	58.93	42.68	74.00	31.32	Pass	V	PK
10	4283.0855	-10.05	50.74	40.69	74.00	33.31	Pass	V	PK
11	7226.2818	-4.76	46.55	41.79	74.00	32.21	Pass	V	PK
12	11959.5973	5.88	45.54	51.42	74.00	22.58	Pass	V	PK

Mode:			Transmitting			Channel:		921.4 MHz	
NO	Freq. [MHz]	Factor [dB]	Reading [dBμV]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Result	Polarity	Remark
1	1440.044	-22.58	61.87	39.29	74.00	34.71	Pass	H	PK
2	2764.1764	-16.30	57.83	41.53	74.00	32.47	Pass	H	PK
3	4692.1128	-9.20	49.54	40.34	74.00	33.66	Pass	H	PK
4	6403.2269	-5.39	47.21	41.82	74.00	32.18	Pass	H	PK
5	10780.5187	4.19	43.74	47.93	74.00	26.07	Pass	H	PK
6	14252.7502	12.64	39.35	51.99	74.00	22.01	Pass	H	PK
7	1439.644	-22.58	62.31	39.73	74.00	34.27	Pass	V	PK
8	1842.6843	-17.80	60.28	42.48	74.00	31.52	Pass	V	PK
9	2764.3764	-16.30	57.91	41.61	74.00	32.39	Pass	V	PK
10	3786.0524	-12.26	52.03	39.77	74.00	34.23	Pass	V	PK
11	6889.2593	-4.33	45.86	41.53	74.00	32.47	Pass	V	PK
12	9805.4537	3.32	44.80	48.12	74.00	25.88	Pass	V	PK

Mode:			Transmitting			Channel:		927.8 MHz	
NO	Freq. [MHz]	Factor [dB]	Reading [dBμV]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Result	Polarity	Remark
1	1440.244	-22.58	61.72	39.14	74.00	34.86	Pass	H	PK
2	1855.4855	-17.56	59.06	41.50	74.00	32.50	Pass	H	PK
3	2783.5784	-16.33	57.85	41.52	74.00	32.48	Pass	H	PK
4	4685.1123	-9.42	49.79	40.37	74.00	33.63	Pass	H	PK
5	7355.2904	-4.27	46.98	42.71	74.00	31.29	Pass	H	PK
6	10577.5052	4.50	44.11	48.61	74.00	25.39	Pass	H	PK
7	1598.0598	-21.88	60.16	38.28	74.00	35.72	Pass	V	PK
8	2516.5517	-16.62	55.39	38.77	74.00	35.23	Pass	V	PK
9	2783.5784	-16.33	59.10	42.77	74.00	31.23	Pass	V	PK
10	5085.139	-9.35	48.41	39.06	74.00	34.94	Pass	V	PK
11	7766.3178	-3.28	46.53	43.25	74.00	30.75	Pass	V	PK
12	10900.5267	5.58	43.41	48.99	74.00	25.01	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.

Note:

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 - Correct Factor

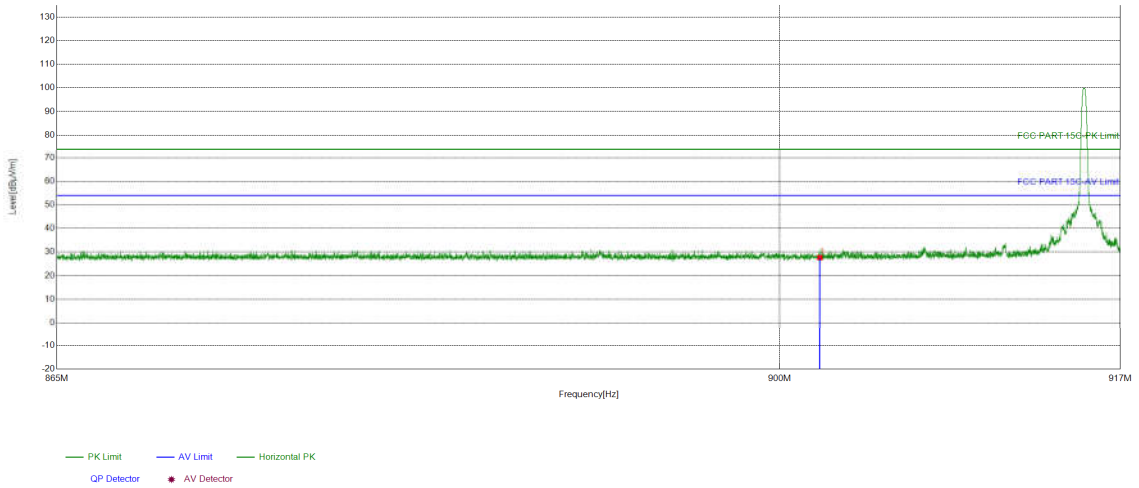
Correct Factor = Preamplifier Factor– Antenna Factor–Cable Factor

Restricted bands:

Test plot as follows:

Mode:	Transmitting	Channel:	915.2 MHz
Remark	23.5°C / 56.9%rF		

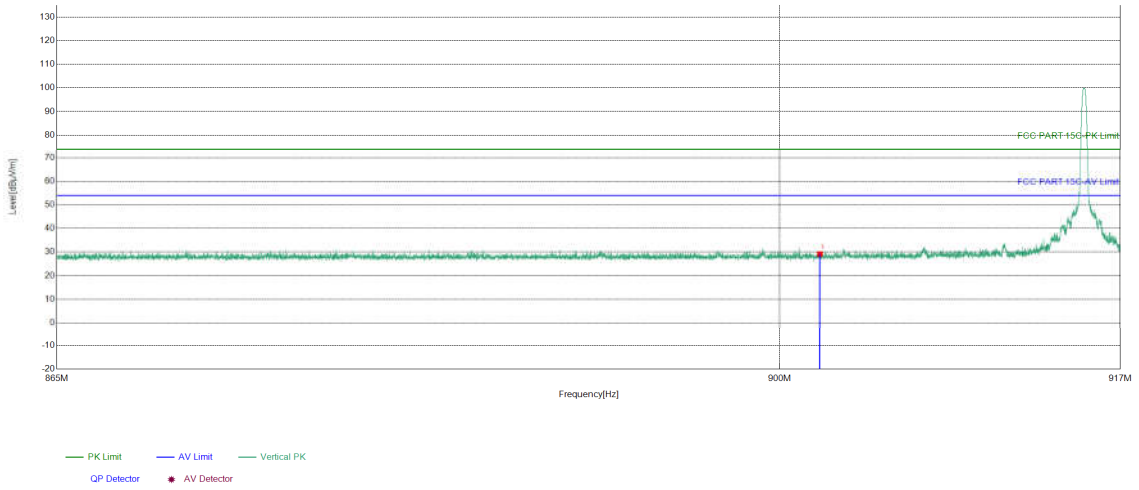
Test Graph



Suspected List									
NO	Freq. [MHz]	Factor [dB]	Reading [dBμV]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Result	Polarity	Remark
1	902	-4.96	32.58	27.62	74.00	46.38	PASS	Horizontal	PK

Mode:	Transmitting	Channel:	915.2 MHz
Remark	23.5°C / 56.9%rF		

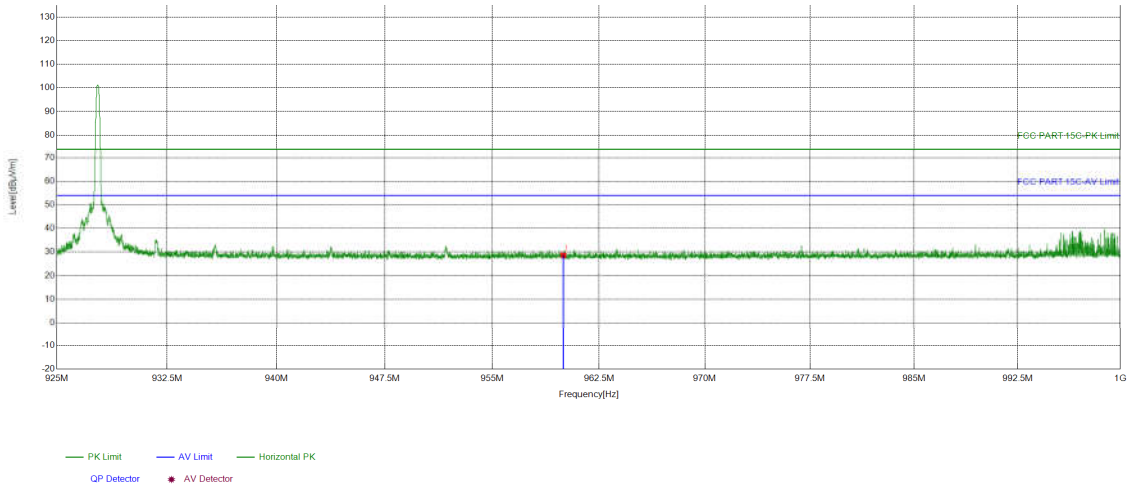
Test Graph



Suspected List									
NO	Freq. [MHz]	Factor [dB]	Reading [dBµV]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Result	Polarity	Remark
1	902	-4.96	34.08	29.12	74.00	44.88	PASS	Vertical	PK

Mode:	Transmitting	Channel:	927.8 MHz
Remark	23.5°C / 56.9%rF		

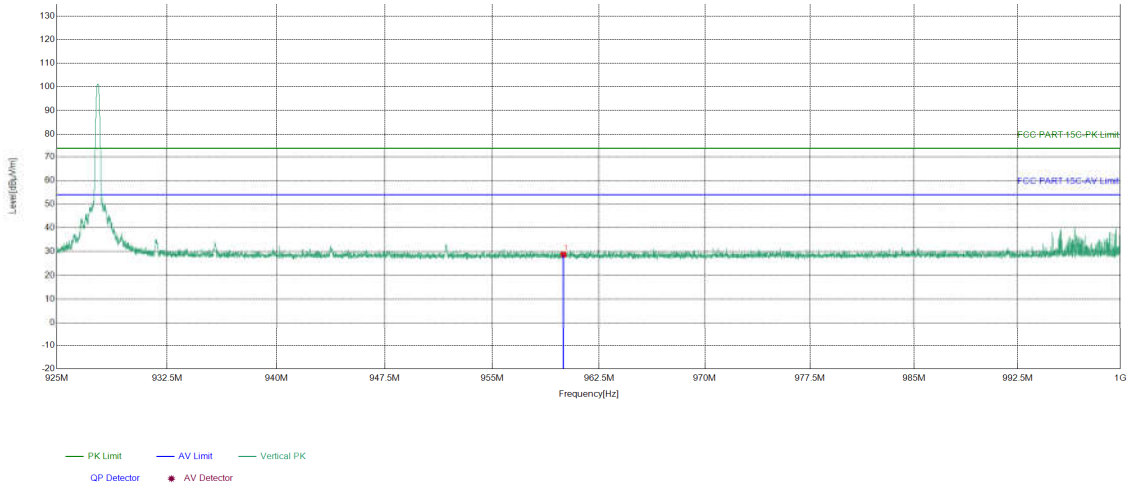
Test Graph



Suspected List									
NO	Freq. [MHz]	Factor [dB]	Reading [dBμV]	Level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Result	Polarity	Remark
1	960	-4.37	33.04	28.67	74.00	45.33	PASS	Horizontal	PK

Mode:	Transmitting	Channel:	927.8 MHz
Remark	23.5°C / 56.9%rF		

Test Graph



Suspected List									
NO	Freq. [MHz]	Factor [dB]	Reading [dBµV]	Level [dBµV/m]	Limit [dBµV/m]	Margin [dB]	Result	Polarity	Remark
1	960	-4.37	33.11	28.74	74.00	45.26	PASS	Vertical	PK

5 Appendix A

Refer to Refer to Appendix: 915MHz of EED32Q81995201

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;

5. Without written approval of CTI, this report can't be reproduced except in full.

*** End of Report ***