

0659



FCC Radio Test Report

FCC ID: EROTS1070

Report No. : BTL-FCCP-3-2003T099

Equipment : 10.1 inch Touch Screen Surface mount **Model Name** : M201923006, TS-1070-B-S, TS-1070-W-S

Brand Name : CRESTRON

Applicant: Crestron Electronics, Inc.

Address : 15 Volvo Drive, Rockleigh, NJ 07647

Radio Function : WLAN 2.4 GHz

FCC Rule Part(s)
Measurement

: FCC Part15, Subpart C (15.247)

: ANSI C63.10-2013

Procedure(s)

Date of Receipt : 2020/3/20

Date of Test : 2020/3/20 ~ 2020/4/15

Issued Date : 2020/5/4

The above equipment has been tested and found in compliance with the requirement of the above standards by BTL Inc.

Prepared by

Approved by

Peter Chen, Engineer

Scott Hsu , Manager

BTL Inc.

No.18, Ln. 171, Sec. 2, Jiuzong Rd., Neihu Dist., Taipei City 114, Taiwan

Tel: +886-2-2657-3299 Fax: +886-2-2657-3331 Web: www.newbtl.com

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Declaration

BTL represents to the client that testing is done in accordance with standard procedures as applicable and that test instruments used has been calibrated with standards traceable to international standard(s) and/or national standard(s).

BTL's reports apply only to the specific samples tested under conditions. It is manufacture's responsibility to ensure that additional production units of this model are manufactured with the identical electrical and mechanical components. **BTL** shall have no liability for any declarations, inferences or generalizations drawn by the client or others from **BTL** issued reports.

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BTL's laboratory quality assurance procedures are in compliance with the **ISO/IEC 17025** requirements, and accredited by the conformity assessment authorities listed in this test report.

BTL is not responsible for the sampling stage, so the results only apply to the sample as received.

The information, data and test plan are provided by manufacturer which may affect the validity of results, so it is manufacturer's responsibility to ensure that the apparatus meets the essential requirements of applied standards and in all the possible configurations as representative of its intended use.

Limitation

For the use of the authority's logo is limited unless the Test Standard(s)/Scope(s)/Item(s) mentioned in this test report is (are) included in the conformity assessment authorities acceptance respective.

Please note that the measurement uncertainty is provided for informational purpose only and are not use in determining the Pass/Fail results.

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REPORT ISSUED HISTORY

Report Version	Description	Issued Date
R00	Original Issue.	2020/5/4

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SUMMARY OF TEST RESULTS

Test procedures according to the technical standards.

	FCC Part 15, Subpart C (1	15.247)		
Standard(s) Section	Description	Test Result	Judgement	Remark
15.207	AC Power Line Conducted Emissions		N/A	NOTE(3)
15.205 15.209 15.247(d)	Radiated Emissions	APPENDIX A APPENDIX B	Pass	
15.247(a)	Bandwidth	APPENDIX C	Pass	
15.247(b)	Output Power	APPENDIX D	Pass	
15.247(e)	Power Spectral Density	APPENDIX E	Pass	
15.247(d)	Antenna conducted Spurious Emission	APPENDIX F	Pass	
15.203	Antenna Requirement		Pass	

NOTE:

- (1) "N/A" denotes test is not applicable in this Test Report.(2) The report format version is TP.1.1.1.
- (3) Input power is supplied by POE.

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□ CB16

1.1 TEST FACILITY

The test facilities used to collect the test data in this report
--

No. 68-1, Ln. 169, Sec. 2, Datong Rd., Xizhi Dist., New Taipei City 221, Taiwan The test sites and facilities are covered under FCC RN: 355421 and DN: TW1099.

he test sites and facilities are covered under FCC RN: 355421 and DN: 1W1099. \Box C05 \Box CB08 \Box CB11 \Box CB15

⊠ SR06

No.18, Ln. 171, Sec. 2, Jiuzong Rd., Neihu Dist., Taipei City 114, Taiwan

The test sites and facilities are covered under FCC RN: 325517 and DN: TW1115.

□ C03 ⊠ CB18 □ CB19

1.2 MEASUREMENT UNCERTAINTY

The reported uncertainty of measurement $\mathbf{y} \pm \mathbf{U}$, where expanded uncertainty \mathbf{U} is based on a standard uncertainty multiplied by a coverage factor of $\mathbf{k} = \mathbf{2}$, providing a level of confidence of approximately 95 %. The measurement instrumentation uncertainty considerations contained in CISPR 16-4-2. The BTL measurement uncertainty is less than the CISPR 16-4-2 \mathbf{U}_{cispr} requirement.

A. Radiated emissions below 1 GHz test:

Test Site	Method	Measurement Frequency Range	Ant. H / V	U,(dB)
		30MHz ~ 200MHz	V	4.20
CB18	B18 CISPR	30MHz ~ 200MHz	Η	3.64
(3m)	CISPR	200MHz ~ 1,000MHz	V	4.56
		200MHz ~ 1,000MHz	Н	3.90

B. Radiated emissions above 1 GHz test:

Test Site	Method	Measurement Frequency Range	Ant. H / V	U,(dB)
		1GHz ~ 6GHz	V	4.46
CB18	CISPR	1GHz ~ 6GHz	Н	4.40
(3m)	CISPR	6GHz ~ 18GHz	V	3.88
		6GHz ~ 18GHz	Н	4.00

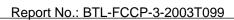
Test Site	Method	Measurement Frequency Range	U,(dB)
CB18	CISPR	18 ~ 26.5 GHz	4.62
(1m)	CISPR	26.5 ~ 40 GHz	5.12

C. Conducted test:

Test Item	U,(dB)
Bandwidth	1.13
Output power	1.06
Power Spectral Density	1.20
Conducted Spurious emissions	1.14
Conducted Band edges	1.13

NOTE:

Unless specifically mentioned, the uncertainty of measurement has not been taken into account to declare the compliance or non-compliance to the specification.





1.3 TEST ENVIRONMENT CONDITIONS

Test Item	Environment Condition	Test Voltage	Tested by
Radiated emissions below 1 GHz	23 °C, 65 %	DC 48V	Hunter Chiang
Radiated emissions above 1 GHz	23 °C, 65 %	DC 48V	Hunter Chiang
Bandwidth	24.1 °C, 46 %	DC 48V	Tim Lee
Output Power	24.1 °C, 46 %	DC 48V	Tim Lee
Power Spectral Density	24.1 °C, 46 %	DC 48V	Tim Lee
Antenna conducted Spurious Emission	24.1 °C, 46 %	DC 48V	Tim Lee

1.4 TABLE OF PARAMETERS OF TEXT SOFTWARE SETTING

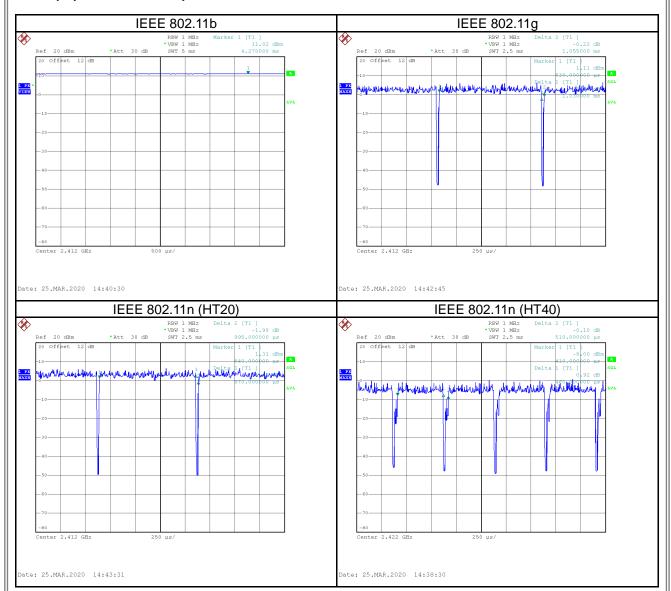
Test Software		QRCT V	1.0.00108	
Mode	2412 MHz	2437 MHz	2462 MHz	Data Rate
IEEE 802.11b	16	16	16	1 Mbps
IEEE 802.11g	12	13	12	6 Mbps
IEEE 802.11n (HT20)	12	13	12	MCS 0
Mode	2422 MHz	2437 MHz	2452 MHz	Data Rate
IEEE 802.11n (HT40)	11	12	11	MCS 0

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1.5 DUTY CYCLE

If duty cycle is \geq 98 %, duty factor is not required. If duty cycle is < 98 %, duty factor shall be considered.



Remark	Delta 1			Delta 2	On Time/Period	10 log(1/Duty Cycle)
Mode	ON	Numbers	On Time (B)	Period (ON+OFF)	Duty Cycle	Duty Factor
iviode	(ms)	(ON)	(ms)	(ms)	(%)	(dB)
IEEE 802.11b	1.000	1	1.000	1.000	100.00%	0.00
IEEE 802.11g	1.030	1	1.030	1.055	97.63%	0.10
IEEE 802.11n (HT20)	0.970	1	0.970	0.995	97.49%	0.11
IEEE 802.11n (HT40)	0.460	1	0.460	0.510	90.20%	0.45



NOTE:

For IEEE 802.11g:

For radiated emissions frequency above 1 MHz, the resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 1 kHz (Duty cycle < 98%).

For IEEE 802.11n (HT20):

For radiated emissions frequency above 1 MHz, the resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 1.5 kHz (Duty cycle < 98%).

For IEEE 802.11n (HT40):

For radiated emissions frequency above 1 MHz, the resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 2.2 kHz (Duty cycle < 98%).

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2 GENERAL INFORMATION

2.1 DESCRIPTION OF EUT

ch Touch Screen Surface mount 23006, TS-1070-B-S, TS-1070-W-S FRON
, ,
TPON.
RON
23006 includes two series: TS-1070-B-S, TS-1070-W-S
des are identical to each other except below:
k, W: White, S: Smooth
tage supplied from POE.
VDC 350mA (802.3at type 1), 48 VDC 600mA (802.3at type 2)
1Hz ~ 2483.5 MHz
1Hz ~ 2462 MHz
02.11b: DSSS
02.11g: OFDM
02.11n: OFDM
02.11b: 11/5.5/2/1 Mbps
02.11g: 54/48/36/24/18/12/9/6 Mbps
02.11n: up to 150 Mbps
02.11b: 19.45 dBm (0.0881 W)
02.11g: 19.84 dBm (0.0964 W)
02.11n (HT20): 19.74 dBm (0.0942 W)
02.11n (HT40): 19.53 dBm (0.0897 W)
23006
ering Sample

NOTE:

(1) For a more detailed features description, please refer to the manufacturer's specifications or the user's manual.

(2) Channel List:

Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
01	2412	05	2432	09	2452
02	2417	06	2437	10	2457
03	2422	07	2442	11	2462
04	2427	08	2447		

(3) Table for Filed Antenna:

Ant.	Brand	Model Name	Antenna Type	Connector	Gain (dBi)
1	YAGEO	TS WLAN MAIN	PIFA	IPEX	-1.64

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2.2 TEST MODES

Test Items	Test mode	Channel	Note
Transmitter Radiated Emissions (below 1GHz)	TX Mode_IEEE 802.11b	11	-
	TX Mode_IEEE 802.11b		
	TX Mode_IEEE 802.11g	01/11	Dondodao
	TX Mode_IEEE 802.11n (HT20)		Bandedge
Transmitter Radiated Emissions (above 1GHz)	TX Mode_IEEE 802.11n (HT40)	03/09	
	TX Mode_IEEE 802.11b		
	TX Mode_IEEE 802.11g	01/06/11	I I a mana a da
	TX Mode_IEEE 802.11n (HT20)		Harmonic
	TX Mode_IEEE 802.11n (HT40)	03/06/09	
	TX Mode_IEEE 802.11b		
Bandwidth	TX Mode_IEEE 802.11g	01/06/11	-
Dandwidth	TX Mode_IEEE 802.11n (HT20)		
	TX Mode_IEEE 802.11n (HT40)	03/06/09	
	TX Mode_IEEE 802.11b		
Output Power	TX Mode_IEEE 802.11g	01/06/11	_
ou.put i outo	TX Mode_IEEE 802.11n (HT20)		
	TX Mode_IEEE 802.11n (HT40)	03/06/09	
	TX Mode_IEEE 802.11b		
Power Spectral Density	TX Mode_IEEE 802.11g	01/06/11	_
	TX Mode_IEEE 802.11n (HT20)		
	TX Mode_IEEE 802.11n (HT40)	03/06/09	
	TX Mode_IEEE 802.11b	01/06/11	
Antenna conducted Spurious Emission	TX Mode_IEEE 802.11g		_
,	TX Mode_IEEE 802.11n (HT20)		
	TX Mode_IEEE 802.11n (HT40)	03/06/09	

NOTE:

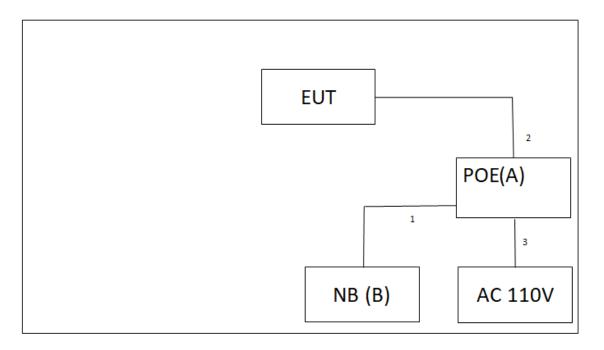
- (1) The Radiated emissions test was verified based on the worst conducted power and Bandwidth test results reported in the original report.
- (2) For radiated emission band edge test, both Vertical and Horizontal are evaluated, but only the worst case (Vertical) is recorded.
- (3) All X, Y and Z axes are evaluated, but only the worst case (X axis) is recorded.
- (4) There were no emissions found below 30 MHz within 20 dB of the limit.

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2.3 BLOCK DIAGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED

Equipment letters and Cable numbers refer to item numbers described in the tables of clause 2.4.



2.4 SUPPORT UNITS

Item	Equipment	Brand	Model No.	Series No.	Remarks
A	MANAGED POE SWITCH	CRESTRON	CEN-SWPOE-16	N/A	Supplied by test requester.
В	NB	HP	TPN-l119	N/A	Furnished by test lab.

Item	Shielded	Ferrite Core	Length	Cable Type	Remarks
1	NO	NO	2m	RJ45	Supplied by test requester.
2	NO	NO	2m	RJ45	Furnished by test lab.
3	NO	NO	1.5m	Power Cable	Furnished by test lab.

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3 RADIATED EMISSIONS TEST

3.1 LIMIT

In case the emission fall within the restricted band specified on 15.205, then the 15.209 limit in the table below has to be followed.

LIMITS OF RADIATED EMISSIONS MEASUREMENT (9 kHz to 1000 MHz)

Frequency (MHz)	Field Strength (microvolts/meter)	Measurement Distance (meters)
0.009~0.490	2400/F(KHz)	300
0.490~1.705	24000/F(KHz)	30
1.705~30.0	30	30
30~88	100	3
88~216	150	3
216~960	200	3
960~1000	500	3

LIMITS OF RADIATED EMISSIONS MEASUREMENT (Above 1000 MHz)

l		Radiated	Emissions	
Frequency (MHz)		(dBuV/m)		Measurement Distance
	(IVITIZ)	Peak	Average	(meters)
	Above 1000	74	54	3

NOTE:

- (1) The limit for radiated test was performed according to FCC Part 15, Subpart C.
- (2) The tighter limit applies at the band edges.
- (3) Emission level (dBuV/m)=20log Emission level (uV/m).
- (4) The test result calculated as following:

Measurement Value = Reading Level + Correct Factor

Correct Factor = Antenna Factor + Cable Loss - Amplifier Gain(if use)

Margin Level = Measurement Value - Limit Value

Calculation example:

Reading Level		Correct Factor		Measurement Value
19.11	+	2.11	II	21.22

Measurement Value		Limit Value		Margin Level
21.22	-	54	=	-32.78

Spectrum Parameter	Setting	
Attenuation	Auto	
Start Frequency	1000 MHz	
Stop Frequency	10th carrier harmonic	
RBW / VBW	1MHz / 3MHz for Peak,	
(Emission in restricted band)	1MHz / 1/T for Average	

Spectrum Parameter	Setting
Attenuation	Auto
Start ~ Stop Frequency	9KHz~90KHz for PK/AVG detector
Start ~ Stop Frequency	90KHz~110KHz for QP detector
Start ~ Stop Frequency	110KHz~490KHz for PK/AVG detector
Start ~ Stop Frequency	490KHz~30MHz for QP detector
Start ~ Stop Frequency	30MHz~1000MHz for QP detector

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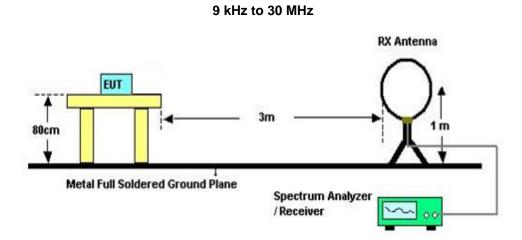
3.2 TEST PROCEDURE

- a. The measuring distance of 3 m shall be used for measurements. The EUT was placed on the top of a rotating table 0.8 meter above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation. (below 1GHz)
- b. The measuring distance of 3 m shall be used for measurements. The EUT was placed on the top of a rotating table 1.5 meter above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.(above 1GHz)
- c. The height of the equipment or of the substitution antenna shall be 0.8 m or 1.5 m, the height of the test antenna shall vary between 1 m to 4 m. 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 find the maximum reading (used Bore sight function).
- e. The receiver system was set to peak and average detect function and specified bandwidth with maximum hold mode when the test frequency is above 1GHz.
- f. The initial step in collecting radiated emission data is a receiver peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak detector mode re-measured.
- g. All readings are Peak unless otherwise stated QP in column of Note. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform. (below 1GHz)
- h. All readings are Peak Mode value unless otherwise stated AVG in column of Note. If the Peak Mode Measured value compliance with the Peak Limits and lower than AVG Limits, the EUT shall be deemed to meet both Peak & AVG Limits and then only Peak Mode was measured, but AVG Mode didn't perform. (above 1GHz)
- For the actual test configuration, please refer to the related Item EUT TEST PHOTO.

3.3 DEVIATION FROM TEST STANDARD

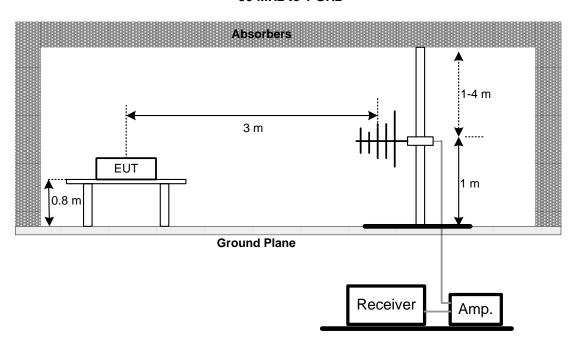
No deviation.

3.4 TEST SETUP

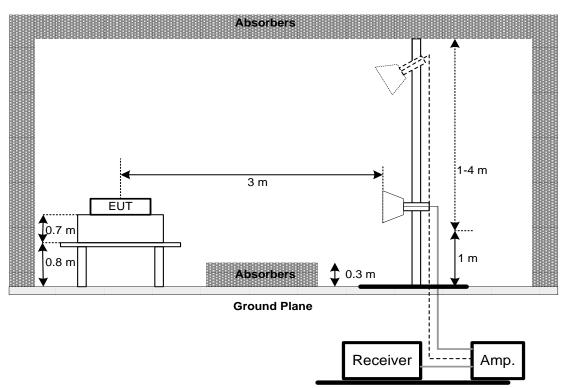




30 MHz to 1 GHz



Above 1 GHz



3.5 EUT OPERATING CONDITIONS

The EUT was programmed to be in continuously transmitting mode.



3.6 TEST RESULT – 30 MHZ TO 1 GHZ Please refer to the APPENDIX A.

3.7 TEST RESULT - ABOVE 1 GHZ

Please refer to the APPENDIX B.

NOTE:

(1) No limit: This is fundamental signal, the judgment is not applicable. For fundamental signal judgment was referred to Peak output test.

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4 BANDWIDTH TEST

4.1 LIMIT

FCC Part15, Subpart C (15.247)				
Section Test Item Limit				
15.247(a)	6 dB Bandwidth	500 kHz		

4.2 TEST PROCEDURE

- a. The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram below.
- b. Spectrum Setting: RBW= 100KHz, VBW=300KHz, Sweep time = 2.5 ms.

4.3 DEVIATION FROM TEST STANDARD

No deviation.

4.4 TEST SETUP

EUT SPECTRUM ANALYZER

4.5 EUT OPERATING CONDITIONS

The EUT was programmed to be in continuously transmitting mode.

4.6 TEST RESULT

Please refer to the APPENDIX C.

5 OUTPUT POWER TEST

5.1 LIMIT

	FCC Part15, Subpart C (15.247)	
Section	Test Item	Limit
15.247(b)	Maximum Output Power	1 Watt or 30dBm

5.2 TEST PROCEDURE

- a. The EUT was directly connected to the power meter and antenna output port as show in the block diagram below.
- b. The maximum peak conducted output power was performed in accordance with method 9.1.2 of FCC KDB 558074 D01 DTS Meas Guidance.

5.3 DEVIATION FROM TEST STANDARD

No deviation.

5.4 TEST SETUP



5.5 EUT OPERATING CONDITIONS

The EUT was programmed to be in continuously transmitting mode.

5.6 TEST RESULT

Please refer to the APPENDIX D.

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6 POWER SPECTRAL DENSITY

6.1 LIMIT

FCC Part15, Subpart C (15.247)			
Section	Test Item	Limit	
15.247(e)	Power Spectral Density	8 dBm (in any 3 kHz)	

6.2 TEST PROCEDURE

- a. The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram below.
- b. Spectrum Setting: RBW = 3 kHz, VBW = 10 kHz, Sweep time = Auto.

6.3 DEVIATION FROM TEST STANDARD

No deviation.

6.4 TEST SETUP

EUT	SPECTRUM
	ANALYZER

6.5 EUT OPERATING CONDITIONS

The EUT was programmed to be in continuously transmitting mode.

6.6 TEST RESULT

Please refer to the APPENDIX E.

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7 ANTENNA CONDUCTED SPURIOUS EMISSIONS TEST

7.1 LIMIT

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated device is operating, the RF power that is produced 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, provided that the transmitter demonstrates compliance with the peak conducted power limits.

7.2 TEST PROCEDURE

- a. The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram below.
- b. Spectrum Setting: RBW = 100 kHz, VBW=300 kHz, Sweep time = Auto.
- c. Offset = antenna gain + cable loss.

7.3 DEVIATION FROM TEST STANDARD

No deviation.

7.4 TEST SETUP

EUT	SPECTRUM
	ANALYZER

7.5 EUT OPERATING CONDITIONS

The EUT was programmed to be in continuously transmitting mode.

7.6 TEST RESULT

Please refer to the APPENDIX F.

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8 LIST OF MEASURING EQUIPMENTS

			Radiated Emission	ons		
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated Date	Calibrated Until
1	Preamplifier	EMCI	EMC001340	980555	2019/4/12	2020/4/11
2	Preamplifier	EMCI	EMC02325B	980217	2019/4/12	2020/4/11
3	Preamplifier	EMCI	EMC012645B	980267	2019/4/12	2020/4/11
4	Preamplifier	EMCI	EMC2654045	980030	2020/1/31	2021/1/30
5	Test Cable	EMCI	EMC104-SM-SM- 800	150207	2019/4/12	2020/4/11
6	Test Cable	EMCI	EMC104-SM-SM- 3000	151205	2019/4/12	2020/4/11
7	Test Cable	EMCI	EMC-SM-SM-700 0	180408	2019/4/12	2020/4/11
8	MXE EMI Receiver	Agilent	N9038A	MY55420127	2020/3/26	2021/3/25
9	Signal Analyzer	Agilent	N9010A	MY56480554	2019/6/6	2020/6/5
10	Loop Ant	EMCO	EMCI-LPA600	274	2019/5/31	2020/5/30
11	Horm Ant	SCHWARZBECK	BBHA 9120D	9120D-1342	2019/6/10	2020/6/9
12	Horm Ant	Schwarzbeck	BBHA 9170	187	2019/12/21	2020/12/20
13	Trilog-Broadband Antenna	Schwarzbeck	VULB 9168	000992	2019/5/29	2020/5/28
14	5dB Attenuator	EMCI	EMCI-N-6-05	AT-N0508	2019/5/29	2020/5/28

	Bandwidth					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated Date	Calibrated Until
1	Spectrum Analyzer	R&S	FSP40	100129	2019/5/23	2020/5/22

	Output Power					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated Date	Calibrated Until
1	Power Meter	Anritsu	ML2487A	6K00004714	2019/6/20	2020/6/19
2	Power Sensor	Anritsu	MA2491A	1725282	2019/6/20	2020/6/19

	Power Spectral Density					
Iten	n Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated Date	Calibrated Until
1	Spectrum Analyzer	R&S	FSP40	100129	2019/5/23	2020/5/22

Antenna conducted Spurious Emission						
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated Date	Calibrated Until
1	Spectrum Analyzer	R&S	FSP40	100129	2019/5/23	2020/5/22

Remark: "N/A" denotes no model name, no serial no. or no calibration specified. All calibration period of equipment list is one year.

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9 EUT TEST PHOTO
Please refer to document Appendix No.: TP-2003T099-FCCP-1 (APPENDIX-TEST PHOTOS).
10 EUT PHOTOS
Please refer to document Appendix No.: EP-2003T099-1 (APPENDIX-EUT PHOTOS).

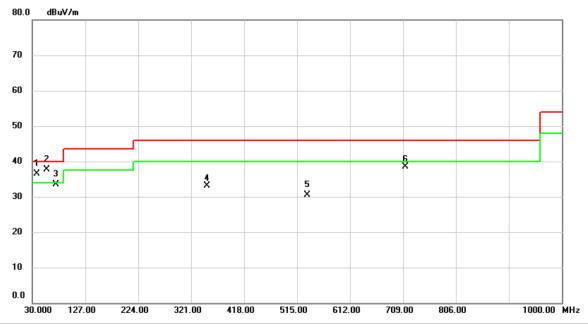
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APPENDIX A	RADIATED EMISSIONS - 30 MHZ TO 1 GHZ

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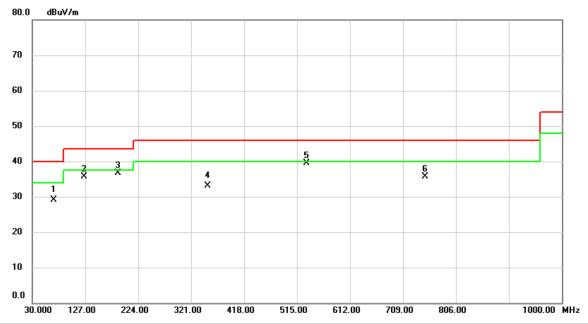
Test Mode	IEEE 802.11b	Test Date	2020/3/20	
Test Frequency	CH11: 2462 MHz	Polarization	Vertical	



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
		MHz	dBu∀	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	ļ	37.7600	48.91	-12.34	36.57	40.00	-3.43	QP	
2	*	56.1900	49.52	-11.77	37.75	40.00	-2.25	QP	
3		73.6500	48.01	-14.53	33.48	40.00	-6.52	QP	
4		350.1000	42.54	-9.49	33.05	46.00	-12.95	peak	
5		533.4300	35.46	-5.03	30.43	46.00	-15.57	QP	
6		712.8800	40.46	-2.02	38.44	46.00	-7.56	peak	

- (1) Measurement Value = Reading Level + Correct Factor.(2) Margin Level = Measurement Value Limit Value.

Test Mode	IEEE 802.11b	Test Date	2020/3/20	
Test Frequency	CH11: 2462 MHz	Polarization	Horizontal	



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
		MHz	dBu∀	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		69.7700	42.90	-13.83	29.07	40.00	-10.93	QP	
2		125.0600	48.99	-13.33	35.66	43.50	-7.84	peak	
3		187.1400	50.23	-13.44	36.79	43.50	-6.71	peak	
4	;	351.0700	42.59	-9.46	33.13	46.00	-12.87	QP	
5	* (532.4600	44.52	-5.06	39.46	46.00	-6.54	peak	
6	7	749.7400	37.20	-1.52	35.68	46.00	-10.32	peak	

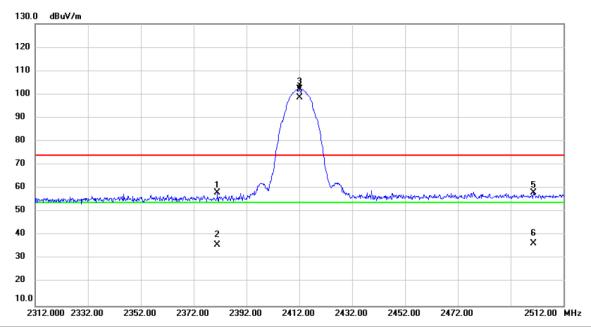
- (1) Measurement Value = Reading Level + Correct Factor.(2) Margin Level = Measurement Value Limit Value.



APPENDIX B RADIATED EMISSIONS - ABOVE 1 GHZ

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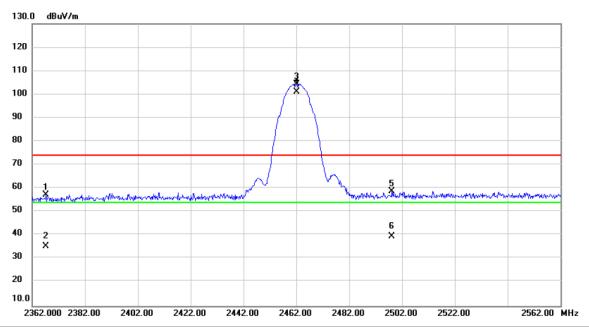
Test Mode	IEEE 802.11b	Test Date	2020/3/12	
Test Frequency	CH01: 2412 MHz	Polarization	Vertical	l



No.	Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		2381.000	26.87	31.21	58.08	74.00	-15.92	peak	
2		2381.000	4.71	31.21	35.92	54.00	-18.08	AVG	
3	Χ	2412.000	70.78	31.34	102.12	74.00	28.12	peak	No Limit
4	*	2412.000	67.45	31.34	98.79	54.00	44.79	AVG	No Limit
5		2500.600	26.50	31.73	58.23	74.00	-15.77	peak	
6		2500.600	4.80	31.73	36.53	54.00	-17.47	AVG	

- (1) Measurement Value = Reading Level + Correct Factor.
 (2) Margin Level = Measurement Value Limit Value.

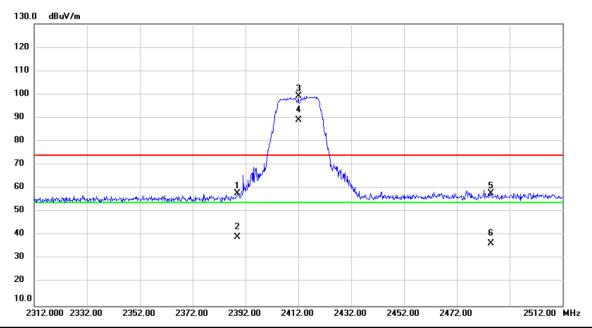
Test Mode	IEEE 802.11b	Test Date	2020/3/13
Test Frequency	CH06: 2462 MHz	Polarization	Vertical



No.	Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
		MHz	dBu∀	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		2367.200	26.18	31.15	57.33	74.00	-16.67	peak	
2		2367.200	4.34	31.15	35.49	54.00	-18.51	AVG	
3	Χ	2462.000	72.81	31.56	104.37	74.00	30.37	peak	No Limit
4	*	2462.000	69.61	31.56	101.17	54.00	47.17	AVG	No Limit
5		2498.200	26.98	31.72	58.70	74.00	-15.30	peak	
6		2498.200	7.86	31.72	39.58	54.00	-14.42	AVG	

- (1) Measurement Value = Reading Level + Correct Factor.
 (2) Margin Level = Measurement Value Limit Value.

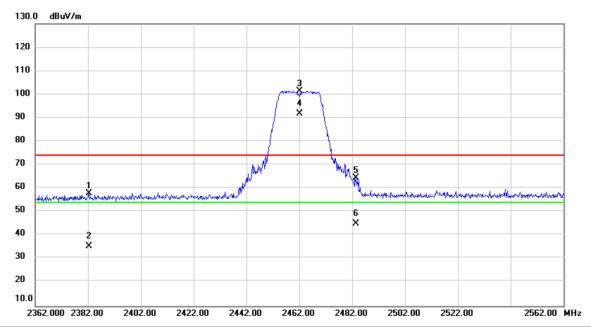
Test Mode	IEEE 802.11g	Test Date	2020/3/13
Test Frequency	CH01: 2412 MHz	Polarization	Vertical



No.	Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
		MHz	dBu∀	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		2389.000	26.75	31.24	57.99	74.00	-16.01	peak	
2		2389.000	8.08	31.24	39.32	54.00	-14.68	AVG	
3	Χ	2412.000	68.02	31.34	99.36	74.00	25.36	peak	No Limit
4	*	2412.000	57.79	31.34	89.13	54.00	35.13	AVG	No Limit
5		2484.800	26.32	31.66	57.98	74.00	-16.02	peak	
6		2484.800	4.95	31.66	36.61	54.00	-17.39	AVG	

- (1) Measurement Value = Reading Level + Correct Factor.
 (2) Margin Level = Measurement Value Limit Value.

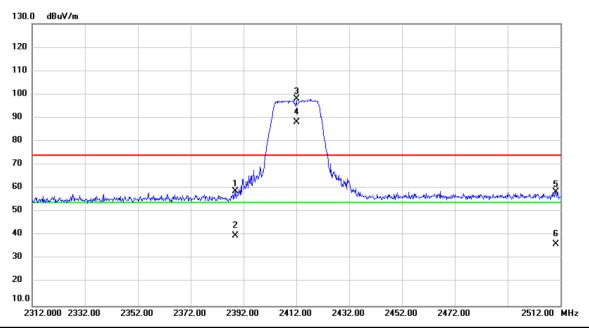
Test Mode	IEEE 802.11g	Test Date	2020/3/13
Test Frequency	CH11: 2462 MHz	Polarization	Vertical



No.	Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		2382.400	26.55	31.21	57.76	74.00	-16.24	peak	
2		2382.400	3.99	31.21	35.20	54.00	-18.80	AVG	
3	Χ	2462.000	69.91	31.56	101.47	74.00	27.47	peak	No Limit
4	*	2462.000	60.27	31.56	91.83	54.00	37.83	AVG	No Limit
5		2483.600	32.81	31.66	64.47	74.00	-9.53	peak	
6		2483.600	13.21	31.66	44.87	54.00	-9.13	AVG	

- (1) Measurement Value = Reading Level + Correct Factor.
 (2) Margin Level = Measurement Value Limit Value.

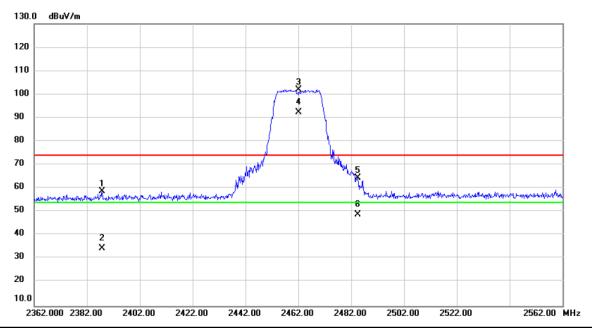
Test Mode	IEEE 802.11n (HT20)	Test Date	2020/3/13
Test Frequency	CH01: 2412 MHz	Polarization	Vertical



No.	Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		2388.800	27.57	31.24	58.81	74.00	-15.19	peak	
2		2388.800	8.60	31.24	39.84	54.00	-14.16	AVG	
3	Χ	2412.000	66.69	31.34	98.03	74.00	24.03	peak	No Limit
4	*	2412.000	56.91	31.34	88.25	54.00	34.25	AVG	No Limit
5		2510.200	26.69	31.76	58.45	74.00	-15.55	peak	
6		2510.200	4.45	31.76	36.21	54.00	-17.79	AVG	

- (1) Measurement Value = Reading Level + Correct Factor.
 (2) Margin Level = Measurement Value Limit Value.

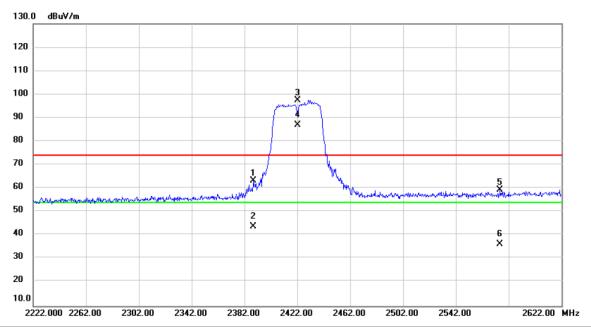
Test Mode	IEEE 802.11n (HT20)	Test Date	2020/3/13
Test Frequency	CH11: 2462 MHz	Polarization	Vertical



No.	Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		2387.800	27.43	31.24	58.67	74.00	-15.33	peak	
2		2387.800	3.18	31.24	34.42	54.00	-19.58	AVG	
3	Χ	2462.000	70.41	31.56	101.97	74.00	27.97	peak	No Limit
4	*	2462.000	60.73	31.56	92.29	54.00	38.29	AVG	No Limit
5		2484.400	32.72	31.66	64.38	74.00	-9.62	peak	
6		2484.400	17.15	31.66	48.81	54.00	-5.19	AVG	

- (1) Measurement Value = Reading Level + Correct Factor.
 (2) Margin Level = Measurement Value Limit Value.

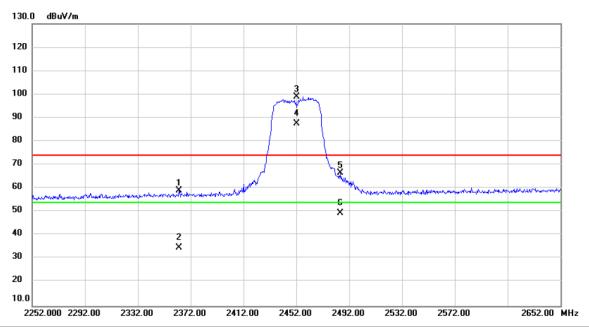
Test Mode	IEEE 802.11n (HT40)	Test Date	2020/3/13
Test Frequency	CH03: 2422 MHz	Polarization	Vertical



No.	Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
		MHz	dBu∀	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		2388.800	31.97	31.24	63.21	74.00	-10.79	peak	
2		2388.800	12.54	31.24	43.78	54.00	-10.22	AVG	
3	Х	2422.000	66.15	31.39	97.54	74.00	23.54	peak	No Limit
4	*	2422.000	55.49	31.39	86.88	54.00	32.88	AVG	No Limit
5		2575.600	27.47	31.97	59.44	74.00	-14.56	peak	
6		2575.600	4.26	31.97	36.23	54.00	-17.77	AVG	

- (1) Measurement Value = Reading Level + Correct Factor.
 (2) Margin Level = Measurement Value Limit Value.

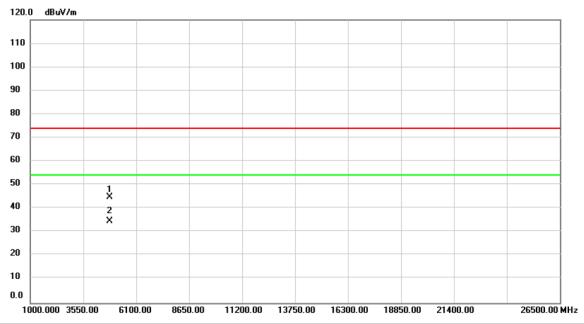
Test Mode	IEEE 802.11n (HT40)	Test Date	2020/3/13
Test Frequency	CH09: 2452 MHz	Polarization	Vertical



No.	Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		2363.200	28.03	31.13	59.16	74.00	-14.84	peak	
2		2363.200	3.48	31.13	34.61	54.00	-19.39	AVG	
3	Χ	2452.000	67.53	31.52	99.05	74.00	25.05	peak	No Limit
4	*	2452.000	56.15	31.52	87.67	54.00	33.67	AVG	No Limit
5		2485.600	34.75	31.66	66.41	74.00	-7.59	peak	
6		2485.600	17.81	31.66	49.47	54.00	-4.53	AVG	

- (1) Measurement Value = Reading Level + Correct Factor.
 (2) Margin Level = Measurement Value Limit Value.

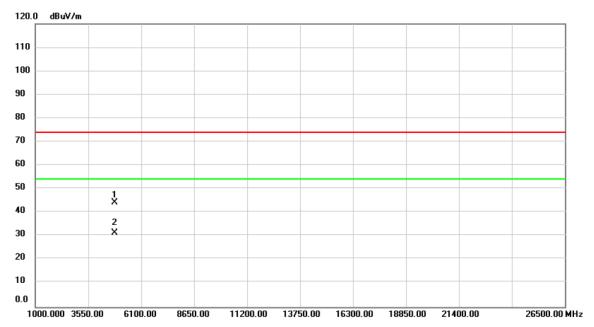
Test Mode	IEEE 802.11b	Test Date	2020/3/13
Test Frequency	CH01: 2412 MHz	Polarization	Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
		MHz	dBu∀	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		4824.000	55.50	-10.52	44.98	74.00	-29.02	peak	
2	* .	4824.000	45.16	-10.52	34.64	54.00	-19.36	AVG	

- (1) Measurement Value = Reading Level + Correct Factor.(2) Margin Level = Measurement Value Limit Value.

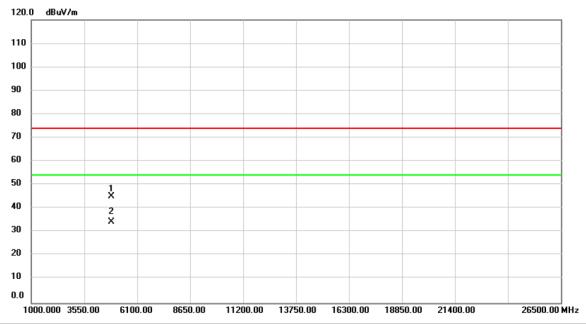
Test Mode	IEEE 802.11b	Test Date	2020/3/13
Test Frequency	CH01: 2412 MHz	Polarization	Horizontal



No.	Mk.	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
		MHz	dBu∀	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		4824.000	54.80	-10.52	44.28	74.00	-29.72	peak	
2	*	4824.000	41.88	-10.52	31.36	54.00	-22.64	AVG	

- (1) Measurement Value = Reading Level + Correct Factor.(2) Margin Level = Measurement Value Limit Value.

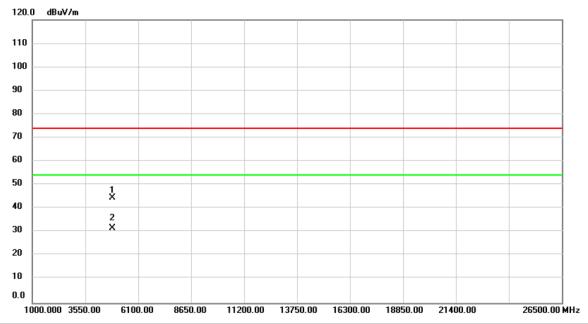
Test Mode	IEEE 802.11b	Test Date	2020/3/13	
Test Frequency	CH06: 2437 MHz	Polarization	Vertical	



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
		MHz	dBu∀	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	4	874.000	55.62	-10.40	45.22	74.00	-28.78	peak	
2	* 4	874.000	44.77	-10.40	34.37	54.00	-19.63	AVG	

- (1) Measurement Value = Reading Level + Correct Factor.(2) Margin Level = Measurement Value Limit Value.

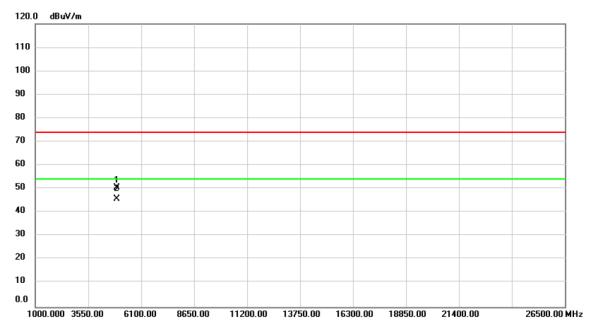
Test Mode	IEEE 802.11b	Test Date	2020/3/13
Test Frequency	CH06: 2437 MHz	Polarization	Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
		MHz	dBu∨	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	4	4874.000	55.03	-10.40	44.63	74.00	-29.37	peak	
2	* 4	4874.000	42.03	-10.40	31.63	54.00	-22.37	AVG	

- (1) Measurement Value = Reading Level + Correct Factor.(2) Margin Level = Measurement Value Limit Value.

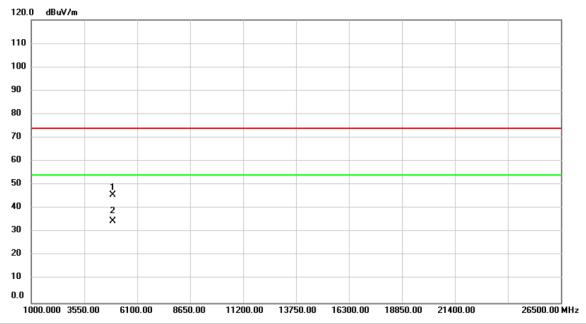
Test Mode	IEEE 802.11b	Test Date	2020/3/13	ì
Test Frequency	CH11: 2462 MHz	Polarization	Vertical	



No.	Mk.	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
		MHz	dBu∀	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		4924.000	60.85	-10.28	50.57	74.00	-23.43	peak	
2	*	4924.000	56.09	-10.28	45.81	54.00	-8.19	AVG	

- (1) Measurement Value = Reading Level + Correct Factor.(2) Margin Level = Measurement Value Limit Value.

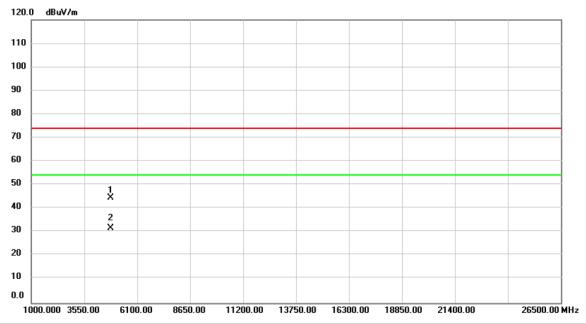
Test Mode	IEEE 802.11b	Test Date	2020/3/13
Test Frequency	CH11: 2462 MHz	Polarization	Horizontal



No.	Mk.	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
		MHz	dBu∨	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		4924.000	56.02	-10.28	45.74	74.00	-28.26	peak	
2	*	4924.000	44.99	-10.28	34.71	54.00	-19.29	AVG	

- (1) Measurement Value = Reading Level + Correct Factor.(2) Margin Level = Measurement Value Limit Value.

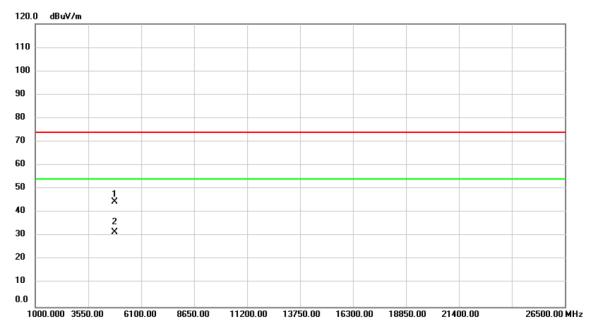
Test Mode	IEEE 802.11g	Test Date	2020/3/19
Test Frequency	CH01: 2412 MHz	Polarization	Vertical



No.	Mk.	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
		MHz	dBu∀	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		4824.000	54.93	-10.52	44.41	74.00	-29.59	peak	
2	*	4824.000	42.08	-10.52	31.56	54.00	-22.44	AVG	

- (1) Measurement Value = Reading Level + Correct Factor.(2) Margin Level = Measurement Value Limit Value.

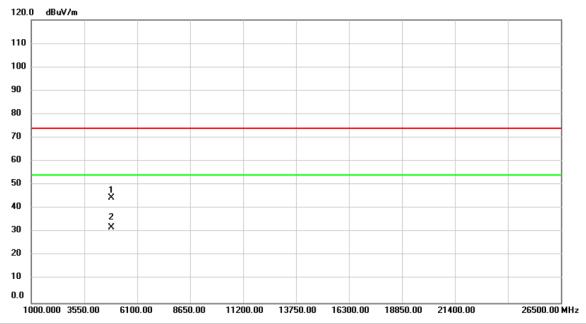
Test Mode	IEEE 802.11g	Test Date	2020/3/19	
Test Frequency	CH01: 2412 MHz	Polarization	Horizontal	



No.	Mk.	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
		MHz	dBu∨	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		4824.000	55.14	-10.52	44.62	74.00	-29.38	peak	
2	*	4824.000	42.03	-10.52	31.51	54.00	-22.49	AVG	

- (1) Measurement Value = Reading Level + Correct Factor.(2) Margin Level = Measurement Value Limit Value.

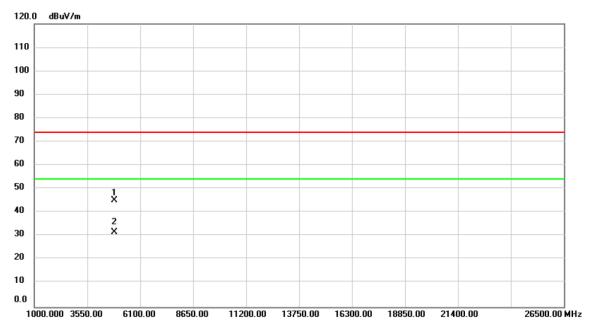
Test Mode	IEEE 802.11g	Test Date	2020/3/19	ì
Test Frequency	CH06: 2437 MHz	Polarization	Vertical	1



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
		MHz	dBu∀	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	4	4874.000	54.88	-10.40	44.48	74.00	-29.52	peak	
2	* 4	4874.000	42.49	-10.40	32.09	54.00	-21.91	AVG	

- (1) Measurement Value = Reading Level + Correct Factor.(2) Margin Level = Measurement Value Limit Value.

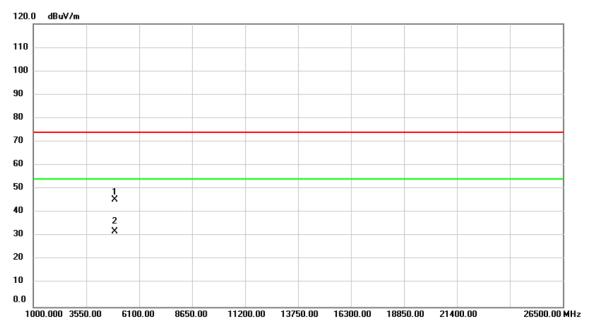
Test Mode	IEEE 802.11g	Test Date	2020/3/19
Test Frequency	CH06: 2437 MHz	Polarization	Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
		MHz	dBu∨	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		4874.000	55.55	-10.40	45.15	74.00	-28.85	peak	
2	*	4874.000	42.01	-10.40	31.61	54.00	-22.39	AVG	

- (1) Measurement Value = Reading Level + Correct Factor.(2) Margin Level = Measurement Value Limit Value.

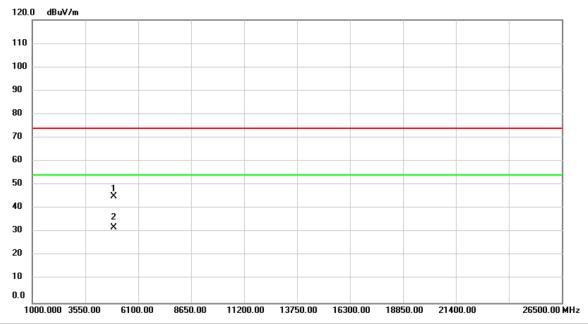
Test Mode	IEEE 802.11g	Test Date	2020/3/19	
Test Frequency	CH11: 2462 MHz	Polarization	Vertical	



No.	Mk	c. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
		MHz	dBu∨	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		4924.000	55.61	-10.28	45.33	74.00	-28.67	peak	
2	*	4924.000	42.33	-10.28	32.05	54.00	-21.95	AVG	

- (1) Measurement Value = Reading Level + Correct Factor.(2) Margin Level = Measurement Value Limit Value.

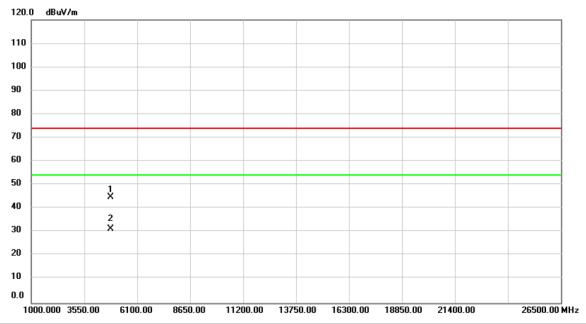
Test Mode	IEEE 802.11g	Test Date	2020/3/19
Test Frequency	CH11: 2462 MHz	Polarization	Horizontal



No. M	Лk. Freq	_	Correct Factor	Measure- ment	Limit	Over		
	MHz	dBu∀	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	4924.00	0 55.50	-10.28	45.22	74.00	-28.78	peak	
2 *	4924.00	0 42.11	-10.28	31.83	54.00	-22.17	AVG	

- (1) Measurement Value = Reading Level + Correct Factor.(2) Margin Level = Measurement Value Limit Value.

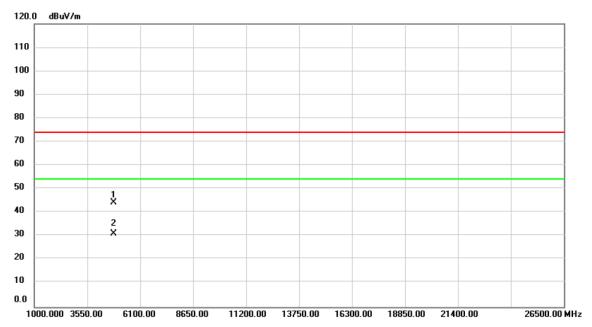
Test Mode	IEEE 802.11n (HT20)	Test Date	2020/3/19
Test Frequency	CH01: 2412 MHz	Polarization	Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
		MHz	dBu∀	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	4	1824.000	55.26	-10.52	44.74	74.00	-29.26	peak	
2	* 4	1824.000	41.84	-10.52	31.32	54.00	-22.68	AVG	

- (1) Measurement Value = Reading Level + Correct Factor.(2) Margin Level = Measurement Value Limit Value.

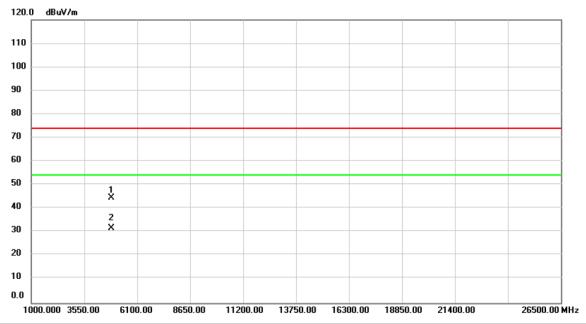
Test Mode	IEEE 802.11n (HT20)	Test Date	2020/3/19	
Test Frequency	CH01: 2412 MHz	Polarization	Horizontal	l



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
		MHz	dBu∨	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		4824.000	54.84	-10.52	44.32	74.00	-29.68	peak	
2	*	4824.000	41.62	-10.52	31.10	54.00	-22.90	AVG	

- (1) Measurement Value = Reading Level + Correct Factor.(2) Margin Level = Measurement Value Limit Value.

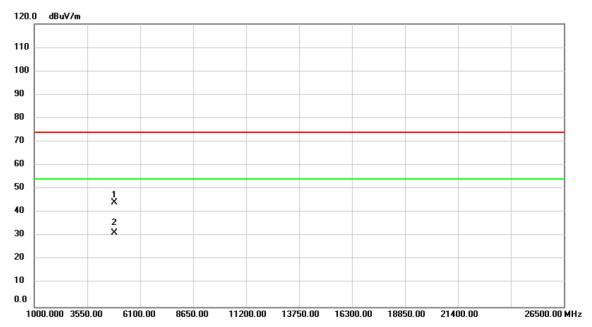
Test Mode	IEEE 802.11n (HT20)	Test Date	2020/3/19
Test Frequency	CH06: 2437 MHz	Polarization	Vertical



No.	Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
		MHz	dBu∨	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		4874.000	54.84	-10.40	44.44	74.00	-29.56	peak	
2	*	4874.000	41.94	-10.40	31.54	54.00	-22.46	AVG	

- (1) Measurement Value = Reading Level + Correct Factor.(2) Margin Level = Measurement Value Limit Value.

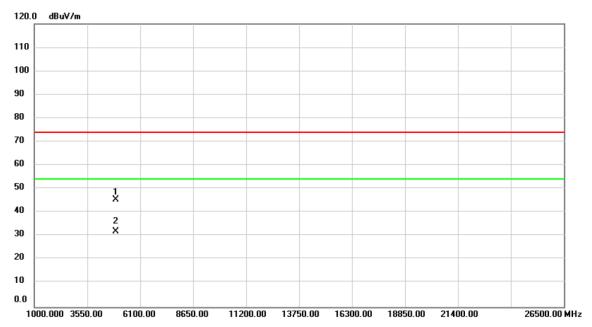
Test Mode	IEEE 802.11n (HT20)	Test Date	2020/3/19
Test Frequency	CH06: 2437 MHz	Polarization	Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
		MHz	dBu∀	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		4874.000	54.57	-10.40	44.17	74.00	-29.83	peak	
2	* .	4874.000	41.87	-10.40	31.47	54.00	-22.53	AVG	

- (1) Measurement Value = Reading Level + Correct Factor.(2) Margin Level = Measurement Value Limit Value.

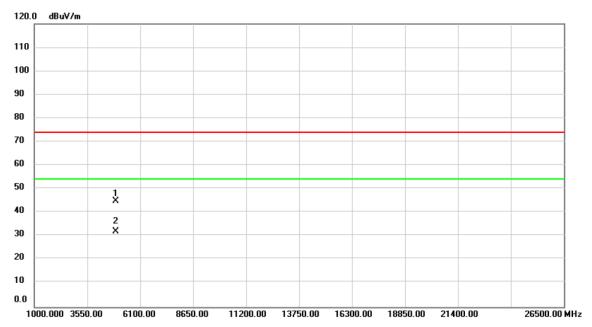
Test Mode	IEEE 802.11n (HT20)	Test Date	2020/3/19
Test Frequency	CH11: 2462 MHz	Polarization	Vertical



No.	Mk.	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
		MHz	dBu∨	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		4924.000	55.68	-10.28	45.40	74.00	-28.60	peak	
2	*	4924.000	42.18	-10.28	31.90	54.00	-22.10	AVG	

- (1) Measurement Value = Reading Level + Correct Factor.(2) Margin Level = Measurement Value Limit Value.

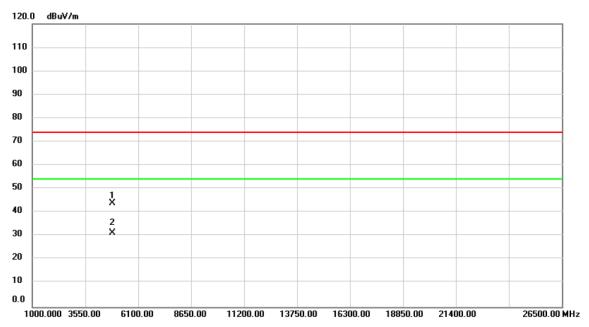
Test Mode	IEEE 802.11n (HT20)	Test Date	2020/3/19	
Test Frequency	CH11: 2462 MHz	Polarization	Horizontal	l



No.	Mk.	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
		MHz	dBu∀	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		4924.000	55.01	-10.28	44.73	74.00	-29.27	peak	
2	*	4924.000	42.15	-10.28	31.87	54.00	-22.13	AVG	

- (1) Measurement Value = Reading Level + Correct Factor.(2) Margin Level = Measurement Value Limit Value.

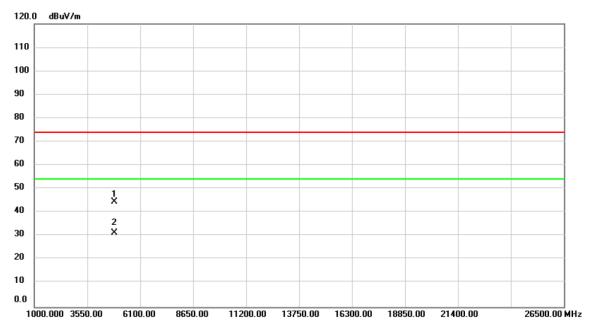
Test Mode	IEEE 802.11n (HT40)	Test Date	2020/3/19	
Test Frequency	CH03: 2422 MHz	Polarization	Vertical	



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
		MHz	dBu∨	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	4	1844.000	54.54	-10.47	44.07	74.00	-29.93	peak	
2	* 4	1844.000	41.89	-10.47	31.42	54.00	-22.58	AVG	

- (1) Measurement Value = Reading Level + Correct Factor.(2) Margin Level = Measurement Value Limit Value.

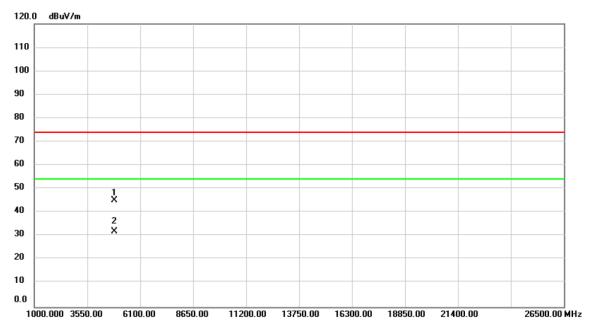
Test Mode	IEEE 802.11n (HT40)	Test Date	2020/3/19	
Test Frequency	CH03: 2422 MHz	Polarization	Horizontal	



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
		MHz	dBu∨	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	4	844.000	55.10	-10.47	44.63	74.00	-29.37	peak	
2	* 4	844.000	41.71	-10.47	31.24	54.00	-22.76	AVG	

- (1) Measurement Value = Reading Level + Correct Factor.(2) Margin Level = Measurement Value Limit Value.

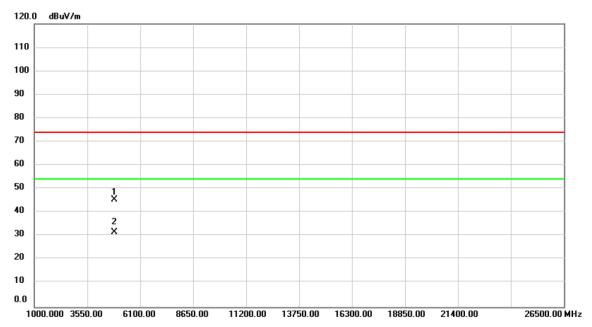
Test Mode	IEEE 802.11n (HT40)	Test Date	2020/3/19
Test Frequency	CH06: 2437 MHz	Polarization	Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
		MHz	dBu∨	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	4	4874.000	55.42	-10.40	45.02	74.00	-28.98	peak	
2	* 4	4874.000	42.23	-10.40	31.83	54.00	-22.17	AVG	

- (1) Measurement Value = Reading Level + Correct Factor.(2) Margin Level = Measurement Value Limit Value.

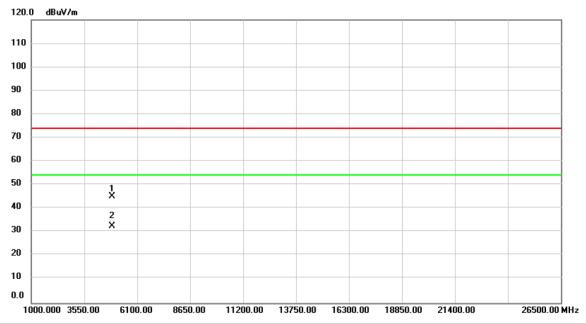
Test Mode	IEEE 802.11n (HT40)	Test Date	2020/3/19
Test Frequency	CH06: 2437 MHz	Polarization	Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
		MHz	dBu∨	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		4874.000	55.80	-10.40	45.40	74.00	-28.60	peak	
2	*	4874.000	41.93	-10.40	31.53	54.00	-22.47	AVG	

- (1) Measurement Value = Reading Level + Correct Factor.(2) Margin Level = Measurement Value Limit Value.

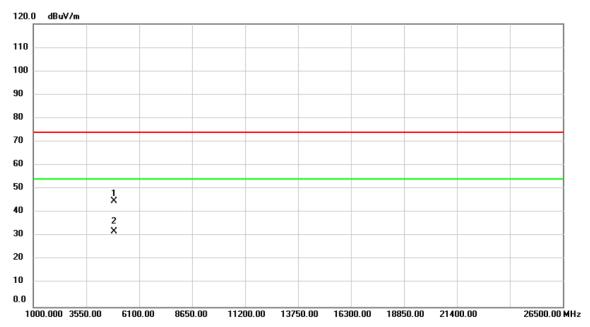
Test Mode	IEEE 802.11n (HT40)	Test Date	2020/3/19
Test Frequency	CH09: 2452 MHz	Polarization	Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
		MHz	dBu∀	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		4904.000	55.37	-10.32	45.05	74.00	-28.95	peak	
2	*	4904.000	42.75	-10.32	32.43	54.00	-21.57	AVG	

- (1) Measurement Value = Reading Level + Correct Factor.(2) Margin Level = Measurement Value Limit Value.

Test Mode	IEEE 802.11n (HT40)	Test Date	2020/3/19
Test Frequency	CH09: 2452 MHz	Polarization	Horizontal



No.	Mk.	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
		MHz	dBu∀	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		4904.000	55.03	-10.32	44.71	74.00	-29.29	peak	
2	*	4904.000	42.27	-10.32	31.95	54.00	-22.05	AVG	

- (1) Measurement Value = Reading Level + Correct Factor.(2) Margin Level = Measurement Value Limit Value.



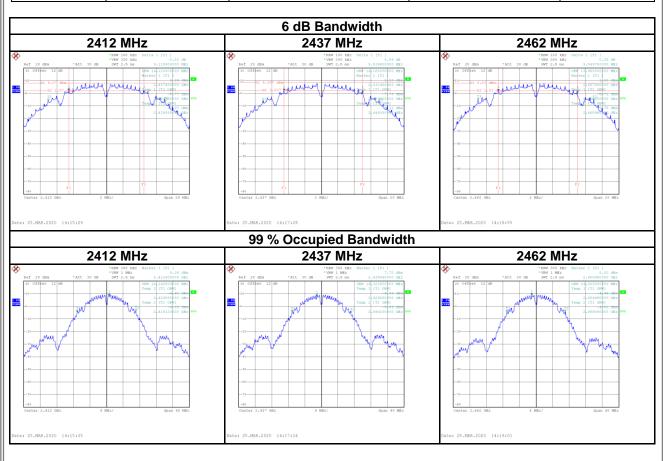
Report No.: BTL-FCCP-3-2003T099 APPENDIX C BANDWIDTH

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Test Mode IE

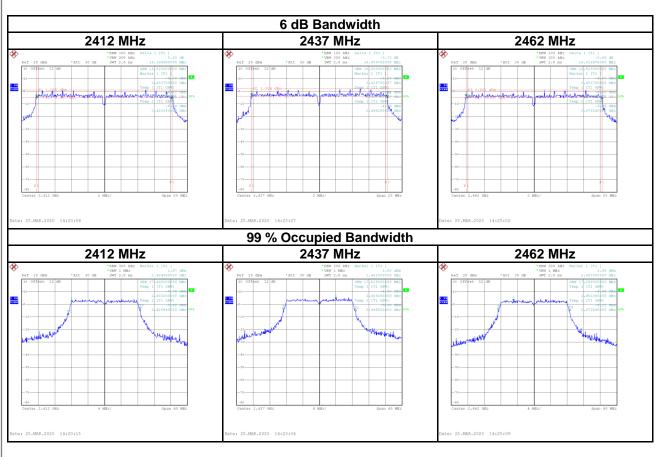
Frequency (MHz)	6dB Bandwidth (MHz)	99 % Occupied Bandwidth (MHz)	6 dB Bandwidth Limit (kHz)	Result
2412	9.12	14.24	500	Complies
2437	9.54	14.32	500	Complies
2462	9.55	14.08	500	Complies





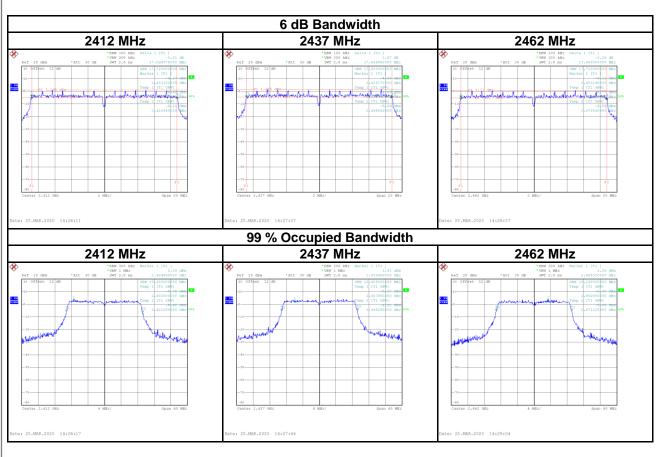
Test Mode	IEEE 802.11g
100t Wood	1002.119

Frequency (MHz)	6dB Bandwidth (MHz)	99 % Occupied Bandwidth (MHz)	6 dB Bandwidth Limit (kHz)	Result
2412	16.40	17.44	500	Complies
2437	16.48	17.52	500	Complies
2462	16.42	17.28	500	Complies



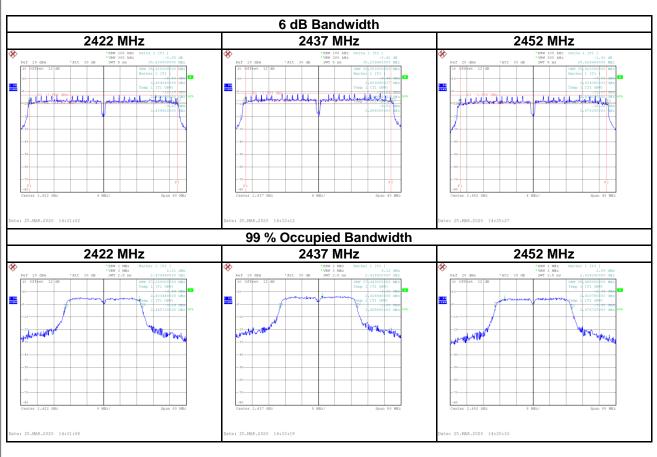


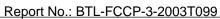
Frequency (MHz)	6dB Bandwidth (MHz)	99 % Occupied Bandwidth (MHz)	6 dB Bandwidth Limit (kHz)	Result
2412	17.60	18.40	500	Complies
2437	17.65	18.40	500	Complies
2462	17.66	18.24	500	Complies





Frequency (MHz)	6dB Bandwidth (MHz)	99 % Occupied Bandwidth (MHz)	6 dB Bandwidth Limit (kHz)	Result
2422	35.83	37.28	500	Complies
2437	35.24	37.44	500	Complies
2452	35.43	36.96	500	Complies







APPENDIX D	OUTPUT POWER

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Test Mode	IEEE 802.11b		Те	sted Date	2020/3/25
Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Limit (dBm)	Limit (W)	Result
2412	19.45	0.0881	30.00	1.0000	Complies
2437	19.18	0.0828	30.00	1.0000	Complies
2462	19.29	0.0849	30.00	1.0000	Complies

Test Mode	IEEE 802.11g	IEEE 802.11g			2020/3/25
	T	I			
Frequency	Conducted Power	Conducted Power (W)	Limit	Limit	Result
(MHz)	(dBm)	Conducted Fower (W)	(dBm)	(W)	Result
2412	19.47	0.0885	30.00	1.0000	Complies
2437	19.84	0.0964	30.00	1.0000	Complies
2462	19.51	0.0893	30.00	1.0000	Complies

	Test Mode	IEEE 802.11n (HT20)			sted Date 20)20/3/25
١,						
	Frequency	Conducted Power	Conducted Power (W)	Limit	Limit	Result
	(MHz)	(dBm)	Conducted Power (vv)	(dBm)	(W)	Result
	2412	19.45	0.0881	30.00	1.0000	Complies
	2437	19.74	0.0942	30.00	1.0000	Complies
	2462	19.33	0.0857	30.00	1.0000	Complies

Test N	Mode	IEEE 802.11n (HT40)			sted Date 2	020/3/25
Fred	quency	ency Conducted Power Limit			Limit	
(N	ИHz)	(dBm)	Conducted Power (W)	(dBm)	(W)	Result
2	2422	18.51	0.0710	30.00	1.0000	Complies
2	2437	19.53	0.0897	30.00	1.0000	Complies
2	2452	18.33	0.0681	30.00	1.0000	Complies





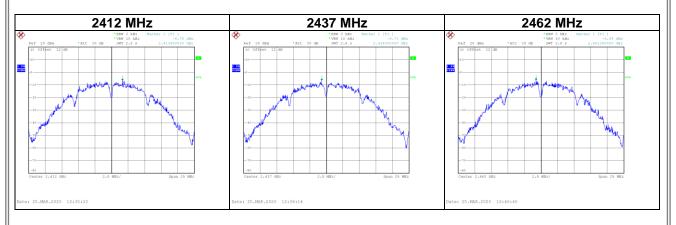
APPENDIX E POWER SPECTRAL DENSITY

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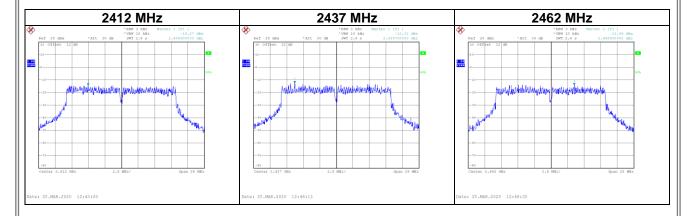
Test Mode IEEE 802.11b

Frequency (MHz)	Power Density (dBm/3kHz)	Limit (dBm)	Result
2412	-6.75	8.00	Complies
2437	-6.73	8.00	Complies
2462	-6.49	8.00	Complies



Test Mode IEEE 802.11g

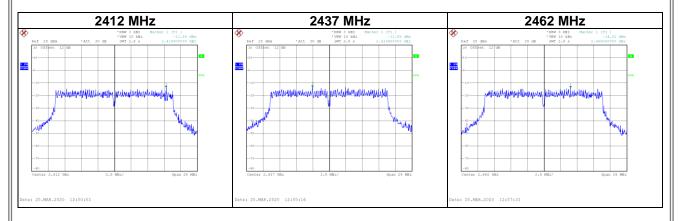
Frequency	Power Density	Limit	Result
(MHz)	(dBm/3kHz)	(dBm)	Resuit
2412	-14.27	8.00	Complies
2437	-12.31	8.00	Complies
2462	-13.94	8.00	Complies





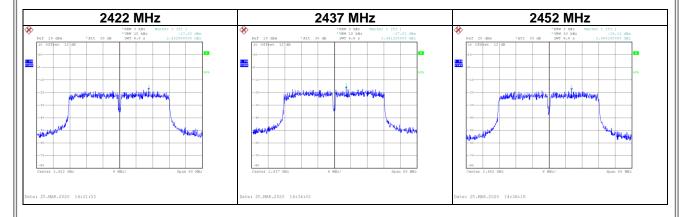
Test Mode IEEE 802.11n (HT20)

Frequency (MHz)	Power Density (dBm/3kHz)	Limit (dBm)	Result
2412	-13.86	8.00	Complies
2437	-13.55	8.00	Complies
2462	-14.02	8.00	Complies



Test Mode IEEE 802.11n (HT40)

Frequency (MHz)	Power Density (dBm/3kHz)	Limit (dBm)	Result
2422	-17.93	8.00	Complies
2437	-17.01	8.00	Complies
2452	-18.13	8.00	Complies





APPENDIX F	ANTENNA CONDUCTED SPURIOUS EMISSIONS

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