

FCC Radio Test Report

FCC ID: CJ6PYT0XPC

Report No. : BTL-FCCP-4-2103T163
Equipment : Notebook Computer
Model Name : dynabook E10-S, SATELLITE PRO E10-S, dynabook E10W-S, SATELLITE PRO E10W-S
Brand Name : dynabook
Applicant : Dynabook Inc.
Address : 6-15, Toyosu 5-chome, Koto-ku, Tokyo 135-8505, Japan

Radio Function : RLAN 5 GHz (U-NII 1, U-NII 2A, U-NII 2C, U-NII 3)

FCC Rule Part(s) : FCC Part15, Subpart E (15.407)
Measurement Procedure(s) : ANSI C63.10-2013

Date of Receipt : 2021/3/30
Date of Test : 2021/3/30 ~ 2021/4/21
Issued Date : 2021/4/26

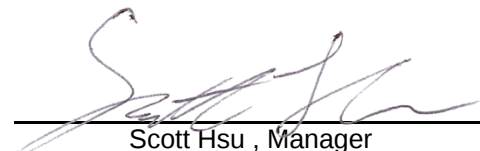
The above equipment has been tested and found in compliance with the requirement of the above standards by BTL Inc.

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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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REVISION HISTORY

Report No.	Version	Description	Issued Date
BTL-FCCP-4-2103T163	R00	Original Report.	2021/4/26

1 SUMMARY OF TEST RESULTS

Test procedures according to the technical standards.

FCC Part 15, Subpart E (15.407)				
Standard(s) Section	Description	Test Result	Judgement	Remark
15.207	AC Power Line Conducted Emissions	APPENDIX A	Pass	-----
15.205 15.209 15.407(b)	Radiated Emissions	APPENDIX B APPENDIX C	Pass	-----
15.407(a)	Bandwidth	APPENDIX D	Pass	-----
15.407(a)	Output Power	APPENDIX E	Pass	-----
15.407(a)	Power Spectral Density	APPENDIX F	Pass	-----
15.203	Antenna Requirement	-----	Pass	-----
15.407(c)	Automatically Discontinue Transmission	-----	Pass	NOTE (3)

NOTE:

- (1) "N/A" denotes test is not applicable in this Test Report.
- (2) The report format version is TP.1.1.1.
- (3) The EUT can detect the controlling signal of ACK message transmitting from remote device and verify whether it shall resend or discontinue transmission.

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: 674415 and DN: TW0659.

☒ C05 ☐ CB08 ☐ CB11 ☒ CB15 ☐ CB16
☒ SR05

1.2 MEASUREMENT UNCERTAINTY

The reported uncertainty of measurement $y \pm U$, where expanded uncertainty U is based on a standard uncertainty multiplied by a coverage factor of $k = 2$, 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 U_{cispr} requirement.

A. AC power line conducted emissions test:

Test Site	Method	Measurement Frequency Range	U (dB)
C05	CISPR	150 kHz ~ 30MHz	3.44

B. Radiated emissions test :

Test Site	Measurement Frequency Range	U,(dB)
CB15	0.03 GHz ~ 0.2 GHz	4.17
	0.2 GHz ~ 1 GHz	4.72
	1 GHz ~ 6 GHz	5.21
	6 GHz ~ 18 GHz	5.51
	18 GHz ~ 26 GHz	3.69
	26 GHz ~ 40 GHz	4.23

C. Conducted test :

Test Item	U,(dB)
Bandwidth	1.13
Output power	1.07
Power Spectral Density	1.20
Conducted Band edges	1.13
Frequency Stability	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
AC Power Line Conducted Emissions	24 °C, 62 %	AC 120V	William Wei
Radiated emissions below 1 GHz	22 °C, 61 %	AC 120V	Hunter Chiang
Radiated emissions above 1 GHz	22 °C, 61 %	AC 120V	Hunter Chiang
Bandwidth	25.1 °C, 46 %	AC 120V	Connor Xie
Output Power	25.1 °C, 46 %	AC 120V	Connor Xie
Power Spectral Density	25.1 °C, 46 %	AC 120V	Connor Xie

1.4 TABLE OF PARAMETERS OF TEST SOFTWARE SETTING

UNII-1				
Test Software	Realtek MP v0.0001.12.20161226			
Mode	5180 MHz	5200 MHz	5240 MHz	Data Rate
IEEE 802.11a	41	40	39	6 Mbps
IEEE 802.11n (HT20)	38	37	38	MCS 0
IEEE 802.11ac (VHT20)	38	36	37	MCS 0
Mode	5190 MHz	5230 MHz		Data Rate
IEEE 802.11n (HT40)	37	37		MCS 0
IEEE 802.11ac (VHT40)	34	34		MCS 0
Mode	5210 MHz			Data Rate
IEEE 802.11ac (VHT80)	32			MCS 0

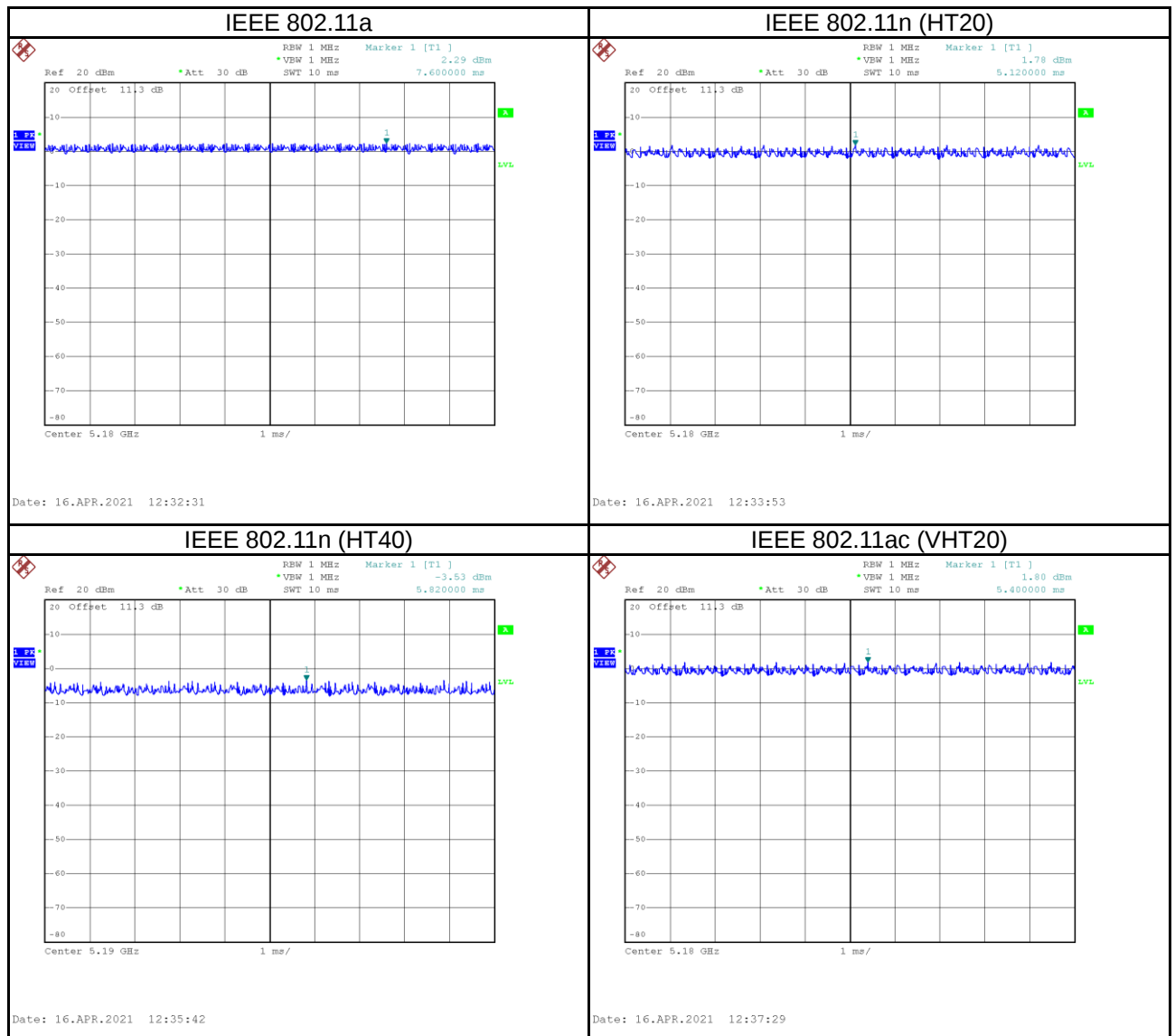
UNII-3				
Test Software	Realtek MP v0.0001.12.20161226			
Mode	5745 MHz	5785 MHz	5825 MHz	Data Rate
IEEE 802.11a	38	38	37	6 Mbps
IEEE 802.11n (HT20)	37	36	33	MCS 0
IEEE 802.11ac (VHT20)	36	35	32	MCS 0
Mode	5755 MHz	5795 MHz		Data Rate
IEEE 802.11n (HT40)	32	31		MCS 0
IEEE 802.11ac (VHT40)	35	33		MCS 0
Mode	5775 MHz			Data Rate
IEEE 802.11ac (VHT80)	28			MCS 0

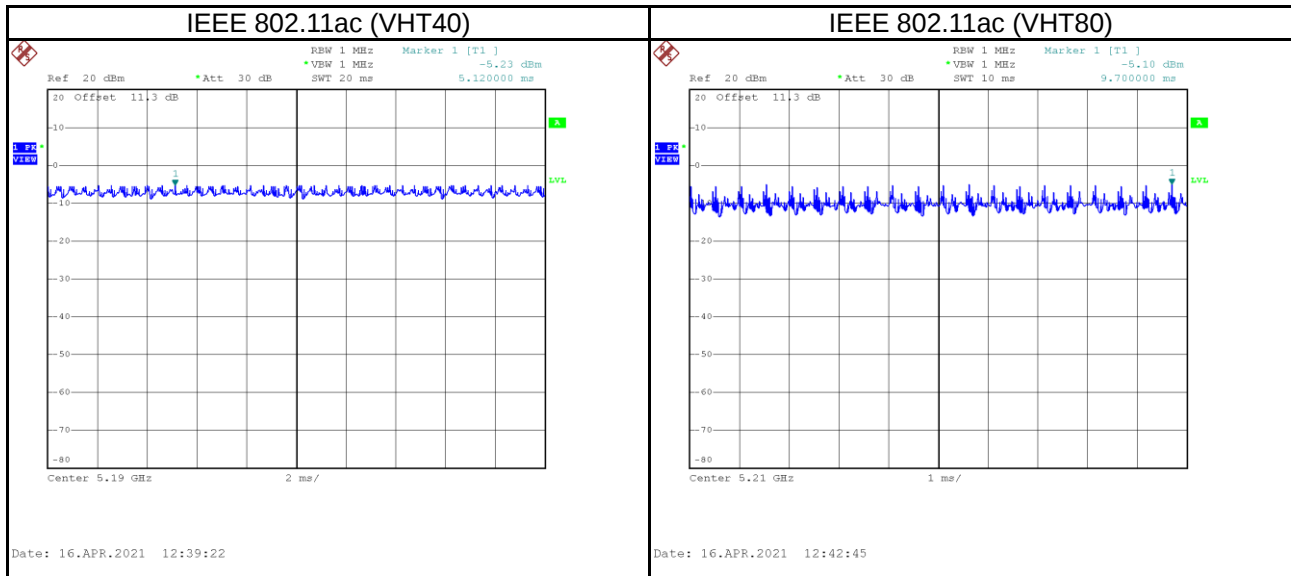
1.5 DUTY CYCLE

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 (ms)	Numbers (ON)	On Time (B) (ms)	Period (ON+OFF) (ms)	Duty Cycle (%)	Duty Factor (dB)
IEEE 802.11a	1.000	1	1.000	1.000	100.00%	0.00
IEEE 802.11n (HT20)	1.000	1	1.000	1.000	100.00%	0.00
IEEE 802.11n (HT40)	1.000	1	1.000	1.000	100.00%	0.00
IEEE 802.11ac (VHT20)	1.000	1	1.000	1.000	100.00%	0.00
IEEE 802.11ac (VHT40)	1.000	1	1.000	1.000	100.00%	0.00
IEEE 802.11ac (VHT80)	1.000	1	1.000	1.000	100.00%	0.00





2 GENERAL INFORMATION

2.1 DESCRIPTION OF EUT

Equipment	Notebook Computer
Model Name	dynabook E10-S, SATELLITE PRO E10-S, dynabook E10W-S, SATELLITE PRO E10W-S
Brand Name	dynabook
Model Difference	Different model distribute to different area.
Power Source	(1) DC Voltage supplied from AC/DC adapter. (2) Battery supplied.
Power Rating	(1) I/P: 100-240V~50 / 60Hz, 1.5A, O/P:19V---2.1A , 39.9W (2) I/P: DC 7.6V, 6000mAh, 45.6Wh
Products Covered	1 * Power Adapter: BSY / BSY065T1902102D 1 * Battery: 4588105-2S
Operation Band	UNII-1: 5150 MHz to 5250 MHz UNII-3: 5725 MHz to 5850 MHz
Operation Frequency	UNII-1: 5180 MHz ~ 5240 MHz UNII-3: 5745 MHz ~ 5825 MHz
Modulation Technology	OFDM
Transfer Rate	802.11a: 54/48/36/24/18/12/9/6 Mbps 802.11n: Up to 150 Mbps 802.11ac: Up to 433.3 Mbps
Output Power Max. for UNII-1	IEEE 802.11a: 13.37 dBm (0.0217 W) IEEE 802.11n (HT20): 12.59 dBm (0.0182 W) IEEE 802.11n (HT40): 12.69 dBm (0.0186 W) IEEE 802.11ac (VHT20): 12.36 dBm (0.0172 W) IEEE 802.11ac (VHT40): 11.40 dBm (0.0138 W) IEEE 802.11ac (VHT80): 10.69 dBm (0.0117 W)
Output Power Max. for UNII-3	IEEE 802.11a: 14.28 dBm (0.0268 W) IEEE 802.11n (HT20): 13.67 dBm (0.0233 W) IEEE 802.11n (HT40): 12.15 dBm (0.0164 W) IEEE 802.11ac (VHT20): 13.47 dBm (0.0222 W) IEEE 802.11ac (VHT40): 13.50 dBm (0.0224 W) IEEE 802.11ac (VHT80): 10.72 dBm (0.0118 W)
Test Model	dynabook E10-S
Sample Status	Engineering Sample
EUT Modification(s)	N/A

NOTE:

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

(2) Channel List:

IEEE 802.11a IEEE 802.11n (HT20) IEEE 802.11ac (VHT20)		IEEE 802.11n (HT40) IEEE 802.11ac (VHT40)		IEEE 802.11ac (VHT80)	
UNII-1		UNII-1		UNII-1	
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
36	5180	38	5190	42	5210
40	5200	46	5230		
44	5220				
48	5240				

IEEE 802.11a IEEE 802.11n (HT20) IEEE 802.11ac (VHT20)		IEEE 802.11n (HT40) IEEE 802.11ac (VHT40)		IEEE 802.11ac (VHT80)	
UNII-3		UNII-3		UNII-3	
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
149	5745	151	5755	155	5775
153	5765	159	5795		
157	5785				
161	5805				
165	5825				

(3) Table for Filed Antenna:

Antenna	Manufacture	Antenna Part Number	Type	Connector	Frequency (MHz)	Gain (dBi)
Main	SLEing	SLEingB222060295	PIFA	MHF Plug(IV)	2400-2500	1.95
					5150-5250	1.64
					5725-5850	1.48
Aux	SLEing	SLEingB222070515	PIFA	MHF Plug(IV)	2400-2500	1.79
					5150-5250	1.63
					5725-5850	1.96

NOTE: The EUT only support SISO mode.

2.2 TEST MODES

Test Items	Test mode	Channel	Note
AC power line conducted emissions	Normal/Idle	-	-
Transmitter Radiated Emissions (below 1GHz)	TX Mode_IEEE 802.11n (HT40)	38	-
Transmitter Radiated Emissions (above 1GHz)	TX Mode_IEEE 802.11a TX Mode_IEEE 802.11n (HT20)	36/48, 52/64 100/140 149/165	Bandedge
	TX Mode_IEEE 802.11n (HT40)	38/46, 54/62 102/134 151/159	
	TX Mode_IEEE 802.11ac (VHT80)	42, 58 106/122 155	
	TX Mode_IEEE 802.11a TX Mode_IEEE 802.11n (HT20)	36/40/48 52/60/64 100/116/140 149/157/165	Harmonic
	TX Mode_IEEE 802.11n (HT40)	38/46, 54/62 102/110/134 151/159	
	TX Mode_IEEE 802.11ac (VHT80)	42, 58 106/122 155	
Bandwidth & Power Spectral Density	TX Mode_IEEE 802.11a TX Mode_IEEE 802.11n (HT20)	36/40/48 52/60/64 100/116/140 149/157/165	-
	TX Mode_IEEE 802.11n (HT40)	38/46, 54/62 102/110/134 151/159	
	TX Mode_IEEE 802.11ac (VHT80)	42, 58 106/122 155	
Output Power	TX Mode_IEEE 802.11a TX Mode_IEEE 802.11n (HT20) TX Mode_IEEE 802.11ac (VHT20)	36/40/48 52/60/64 100/116/140 149/157/165	-
	TX Mode_IEEE 802.11n (HT40) TX Mode_IEEE 802.11ac (VHT40)	38/46, 54/62 102/110/134 151/159	
	TX Mode_IEEE 802.11ac (VHT80)	42, 58 106/122 155	

NOTE:

- (1) For radiated emission band edge test, both Vertical and Horizontal are evaluated, but only the worst case (Horizontal) is recorded.
- (2) All X, Y and Z axes are evaluated, but only the worst case (Y axis) is recorded.
- (3) There were no emissions found below 30 MHz within 20 dB of the limit.

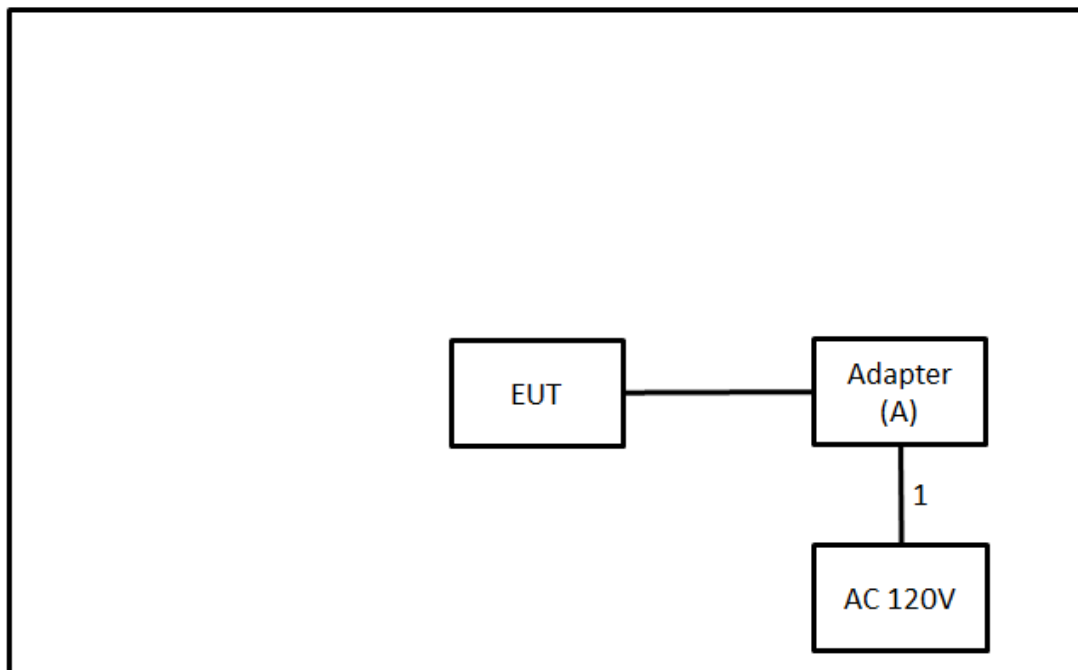
2.3 BLOCK DIAGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED

Equipment letters and Cable numbers refer to item numbers described in the tables of clause 0.

AC power line conducted emissions



Radiated Emissions



2.4 SUPPORT UNITS

Item	Equipment	Brand	Model No.	Series No.	Remarks
A	Adapter	BSY	BYS065T1902102 D	N/A	Supplied by test requester

Item	Shielded	Ferrite Core	Length	Cable Type	Remarks
1	N/A	N/A	1.8m	Power Cord	Supplied by test requester

3 AC POWER LINE CONDUCTED EMISSIONS TEST

3.1 LIMIT

Frequency (MHz)	Limit (dBμV)	
	Quasi-peak	Average
0.15 - 0.5	66 - 56 *	56 - 46 *
0.50 - 5.0	56	46
5.0 - 30.0	60	50

NOTE:

- (1) The tighter limit applies at the band edges.
- (2) The limit of " * " marked band means the limitation decreases linearly with the logarithm of the frequency in the range.
- (3) The test result calculated as following:
 Measurement Value = Reading Level + Correct Factor
 Correct Factor = Insertion Loss + Cable Loss + Attenuator Factor (if use)
 Margin Level = Measurement Value – Limit Value
 Calculation example:

Reading Level		Correct Factor		Measurement Value
38.22	+	3.45	=	41.67

Measurement Value		Limit Value		Margin Level
41.67	-	60	=	-18.33

The following table is the setting of the receiver.

Receiver Parameter	Setting
Attenuation	10 dB
Start Frequency	0.15 MHz
Stop Frequency	30 MHz
IF Bandwidth	9 KHz

3.2 TEST PROCEDURE

- a. The EUT was placed 0.8 m above the horizontal ground plane with the EUT being connected to the power mains through a line impedance stabilization network (LISN).
 All other support equipment were powered from an additional LISN(s).
 The LISN provides 50 Ohm/50uH of impedance for the measuring instrument.
- b. Interconnecting cables that hang closer than 40 cm to the ground plane shall be folded back and forth in the center forming a bundle to keep the cable above 40 cm.
- c. Excess I/O cables that are not connected to a peripheral shall be bundled in the center.
 The end of the cable will be terminated, using the correct terminating impedance.
 The overall length shall not exceed 1 m.
- d. The LISN is spaced at least 80 cm from the nearest part of the EUT chassis.
- e. For the actual test configuration, please refer to the related Item – EUT TEST PHOTO.

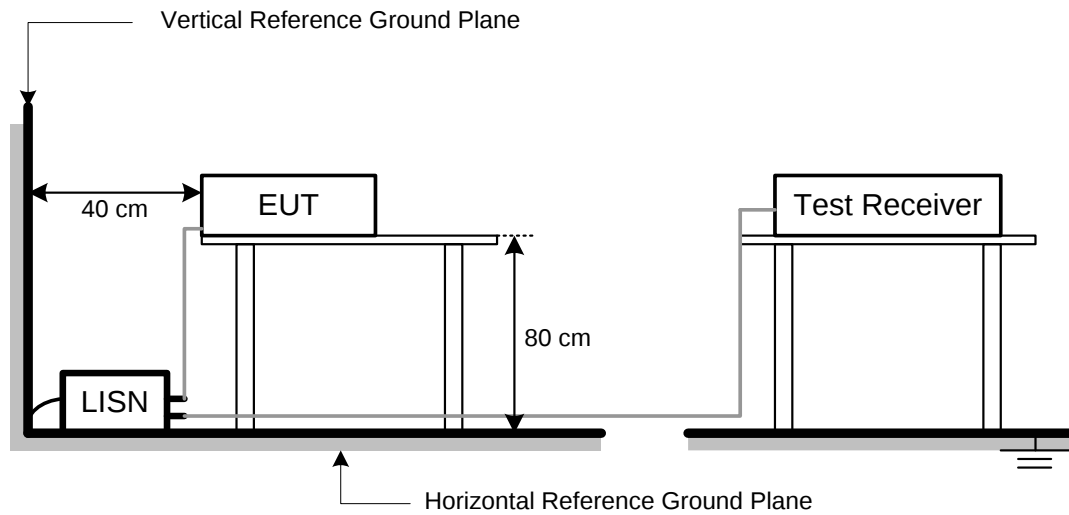
NOTE:

- (1) In the results, each reading is marked as Peak, QP or AVG per the detector used.
 BW=9 kHz (6 dB Bandwidth)
- (2) All readings are Peak unless otherwise stated QP or AVG in column of Note. Both the QP and the AVG readings must be less than the limit for compliance.

3.3 DEVIATION FROM TEST STANDARD

No deviation.

3.4 TEST SETUP



3.5 TEST RESULT

Please refer to the APPENDIX A.

4 RADIATED EMISSIONS TEST

4.1 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 UNWANTED EMISSION OUT OF THE RESTRICTED BANDS

Frequency (MHz)	EIRP Limit (dBm)	Equivalent Field Strength at 3m (dBμV/m)
5150-5250	-27	68.3
5250-5350	-27	68.3
5470-5725	-27	68.3
5725-5850	-27 (NOTE 2)	68.3
	10 (NOTE 2)	105.3
	15.6 (NOTE 2)	110.9
	27 (NOTE 2)	122.3

NOTE:

- (1) The following formula is used to convert the equipment isotropic radiated power (eirp) to field strength:

$$E = \frac{1000000\sqrt{30P}}{3} \mu\text{V/m, where P is the eirp (Watts)}$$

- (2) According to FCC 16-24, All emissions shall be limited to a level of -27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.

- (3) 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
36.23	+	-11.97	=	24.26

Measurement Value		Limit Value		Margin Level
24.26	-	40	=	-15.74

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

4.2 TEST PROCEDURE

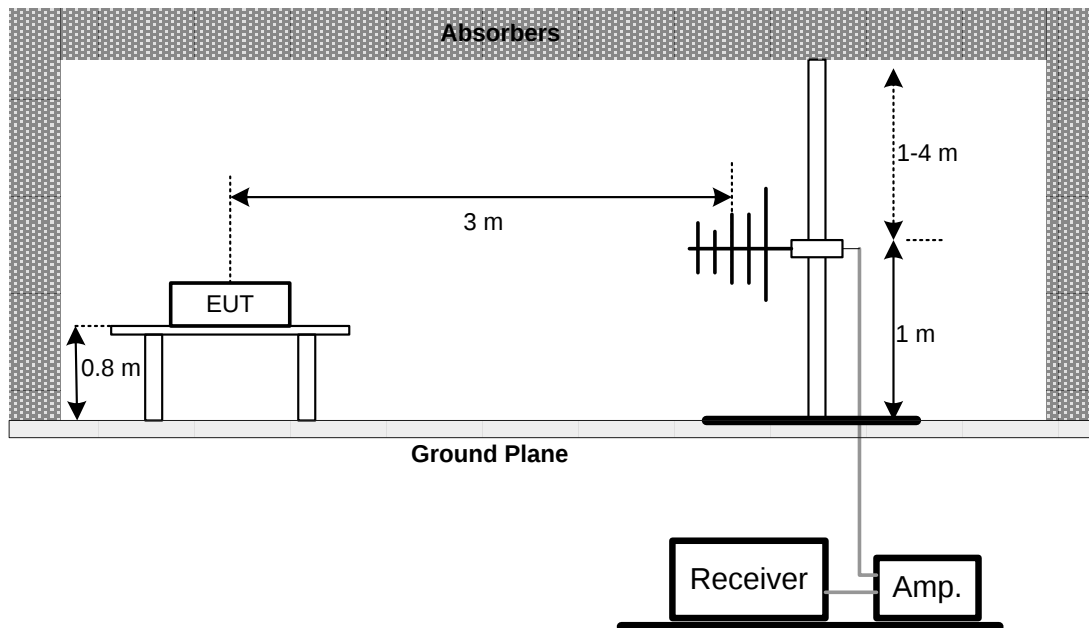
- The measuring distance of 3 m shall be used for measurements. The EUT was placed on the top of a rotating table 0.8 meter above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.(below 1GHz)
- The measuring distance of 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)
- 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.
- 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).
- 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.
- 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.
- 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)
- 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.

4.3 DEVIATION FROM TEST STANDARD

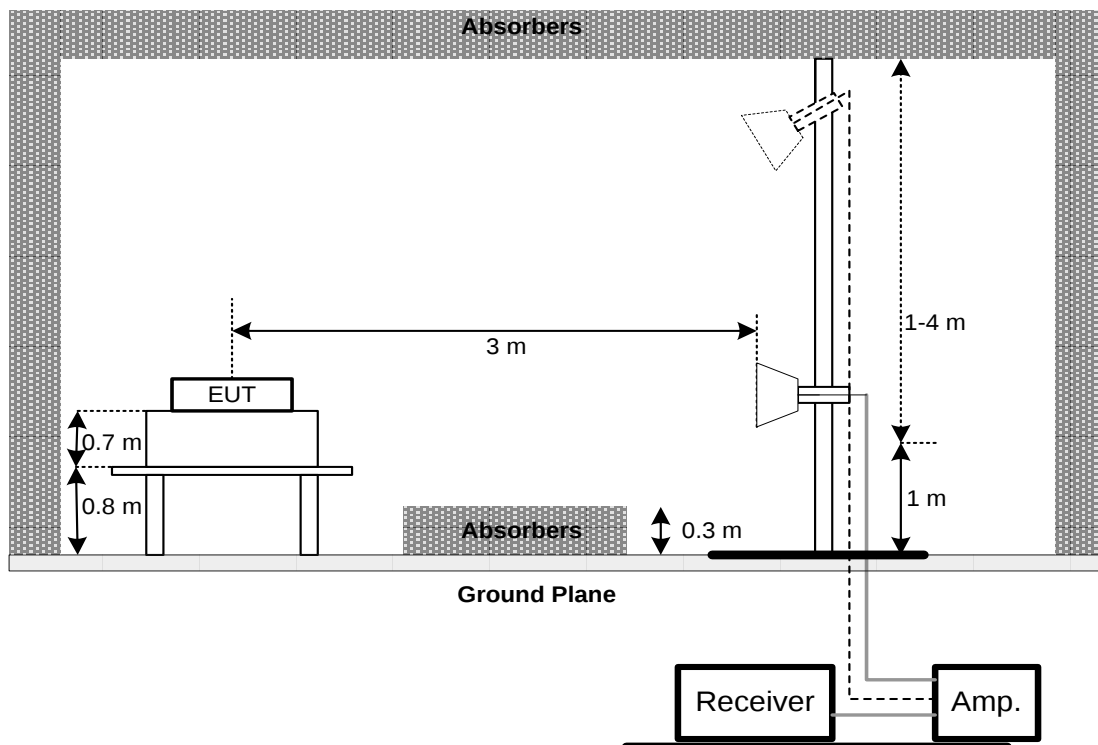
No deviation.

4.4 TEST SETUP

30 MHz to 1 GHz



Above 1 GHz



4.5 EUT OPERATING CONDITIONS

The EUT was programmed to be in continuously transmitting mode.

4.6 TEST RESULT – 30 MHZ TO 1 GHZ

Please refer to the APPENDIX B.

4.7 TEST RESULT – ABOVE 1 GHZ

Please refer to the APPENDIX C.

NOTE:

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

5 BANDWIDTH TEST

5.1 LIMIT

FCC Part15, Subpart E (15.407)		
Section	Test Item	Frequency Range (MHz)
15.407(a)	26 dB Bandwidth	5150-5250
		5250-5350
		5470-5725
	Minimum 500 kHz 6 dB Bandwidth	5725-5850

5.2 TEST PROCEDURE

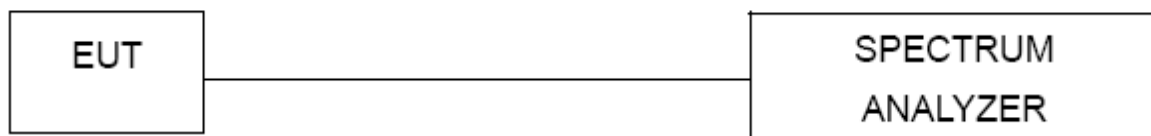
- The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram below.
- Spectrum Setting:

Spectrum Parameter	Setting
Attenuation	Auto
Span Frequency	> 26 dB Bandwidth
RBW	300 kHz(Bandwidth 20 MHz) 1 MHz(Bandwidth 40 MHz and 80 MHz)
VBW	1 MHz(Bandwidth 20 MHz) 3 MHz(Bandwidth 40 MHz and 80 MHz)
Detector	Peak
Trace	Max Hold
Sweep Time	Auto

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.

6 OUTPUT POWER TEST

6.1 LIMIT

FCC Part15, Subpart E (15.407)			
Section	Test Item	Limit	Frequency Range (MHz)
15.407(a)	Maximum Output Power	Fixed:1 Watt (30 dBm) Mobile and portable: 250 mW (24 dBm)	5150-5250
		250 mW (24 dBm)	5250-5350
			5470-5725
		1 Watt (30dBm)	5725-5850

Note: The maximum e.i.r.p at any elevation angle above 30 degrees as measured from the horizon must not exceed 125 mW(21 dBm).

6.2 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 of clause E. 3. a) FCC KDB 789033 D02 General UNII Test Procedures New Rules v02r01.
 - a)Method PM (Measurement using an RF average power meter):
 - (i) Measurements may be performed using a wideband RF power meter with a thermocouple detector or equivalent if all of the following conditions are satisfied
The EUT is configured to transmit continuously or to transmit with a constant duty cycle.
At all times when the EUT is transmitting, it must be transmitting at its maximum power control level.
The integration period of the power meter exceeds the repetition period of the transmitted signal by at least a factor of five.
 - (ii) If the transmitter does not transmit continuously, measure the duty cycle, x, of the transmitter output signal as described in II.B.
 - (iii) Measure the average power of the transmitter. This measurement is an average over both the on and off periods of the transmitter.
 - (iv) Adjust the measurement in dBm by adding $10 \log (1/x)$ where x is the duty cycle (e.g., $10 \log (1/0.25)$ if the duty cycle is 25%).

6.3 DEVIATION FROM TEST STANDARD

No deviation.

6.4 TEST SETUP



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.

7 POWER SPECTRAL DENSITY

7.1 LIMIT

FCC Part15, Subpart E (15.407)			
Section	Test Item	Limit	Frequency Range (MHz)
15.407(a)	Power Spectral Density	Other than Mobile and portable: 17 dBm/MHz	5150-5250
		Mobile and portable: 11 dBm/MHz	
		11 dBm/MHz	5250-5350
		30 dBm/500 kHz	5470-5725
			5725-5850

7.2 TEST PROCEDURE

- The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram below.
- Spectrum Setting:

Spectrum Parameter	Setting
Attenuation	Auto
Span Frequency	Encompass the entire emissions bandwidth (EBW) of the signal
RBW	= 1 MHz
VBW	≥ 3 MHz
Detector	RMS
Trace	Max Hold
Sweep Time	Auto

7.3 DEVIATION FROM TEST STANDARD

No deviation.

7.4 TEST SETUP



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.

8 LIST OF MEASURING EQUIPMENTS

AC Power Line Conducted Emissions						
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated Date	Calibrated Until
1	TWO-LINE V-NETWORK	R&S	ENV216	101050	2020/6/11	2021/6/10
2	Test Cable	EMCI	EMC400-BM-BM-5000	170501	2020/6/8	2021/6/7
3	EMI Test Receiver	R&S	ESCI	100080	2020/6/15	2021/6/14
4	Measurement Software	EZ	EZ EMC (Version NB-03A1-01)	N/A	N/A	N/A

Radiated Emissions						
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated Date	Calibrated Until
1	Preamplifier	EMCI	EMC02325B	980217	2021/4/8	2022/4/7
2	Preamplifier	EMCI	EMC012645B	980267	2021/4/8	2022/4/7
3	Preamplifier	EMCI	EMC184045SE	980512	2020/6/1	2021/5/31
4	Test Cable	EMCI	EMC-SM-SM-1000	180809	2021/4/8	2022/4/7
5	Test Cable	EMCI	EMC104-SM-SM-3000	151205	2021/4/8	2022/4/7
6	Test Cable	EMCI	EMC-SM-SM-7000	180408	2021/4/8	2022/4/7
7	MXE EMI Receiver	Agilent	N9038A	MY554200087	2020/6/10	2021/6/9
8	Signal Analyzer	Agilent	N9010A	MY56480554	2020/8/25	2021/8/24
9	Horn Ant	SCHWARZBECK	BBHA 9120D	9120D-1342	2020/6/12	2021/6/11
10	Horn Ant	Schwarzbeck	BBHA 9170	BBHA 9170340	2020/7/9	2021/7/8
11	Trilog-Broadband Antenna	Schwarzbeck	VULB 9168	VULB 9168-352	2020/7/24	2021/7/23
12	5dB Attenuator	EMCI	EMCI-N-6-05	AT-N0625	2020/7/24	2021/7/23
13	Measurement Software	EZ	EZ EMC (Version NB-03A1-01)	N/A	N/A	N/A

Bandwidth						
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated Date	Calibrated Until
1	Spectrum Analyzer	R&S	FSP 40	100129	2020/6/15	2021/6/14

Output Power						
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated Date	Calibrated Until
1	Spectrum Analyzer	R&S	FSP 40	100129	2020/6/15	2021/6/14
2	Power Meter	Anritsu	ML2487A	6K00004714	2020/9/3	2021/9/2
3	Power Sensor	Anritsu	MA2491A	034138	2020/9/3	2021/9/2

Power Spectral Density						
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated Date	Calibrated Until
1	Spectrum Analyzer	R&S	FSP 40	100129	2020/6/15	2021/6/14

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

9 EUT TEST PHOTO

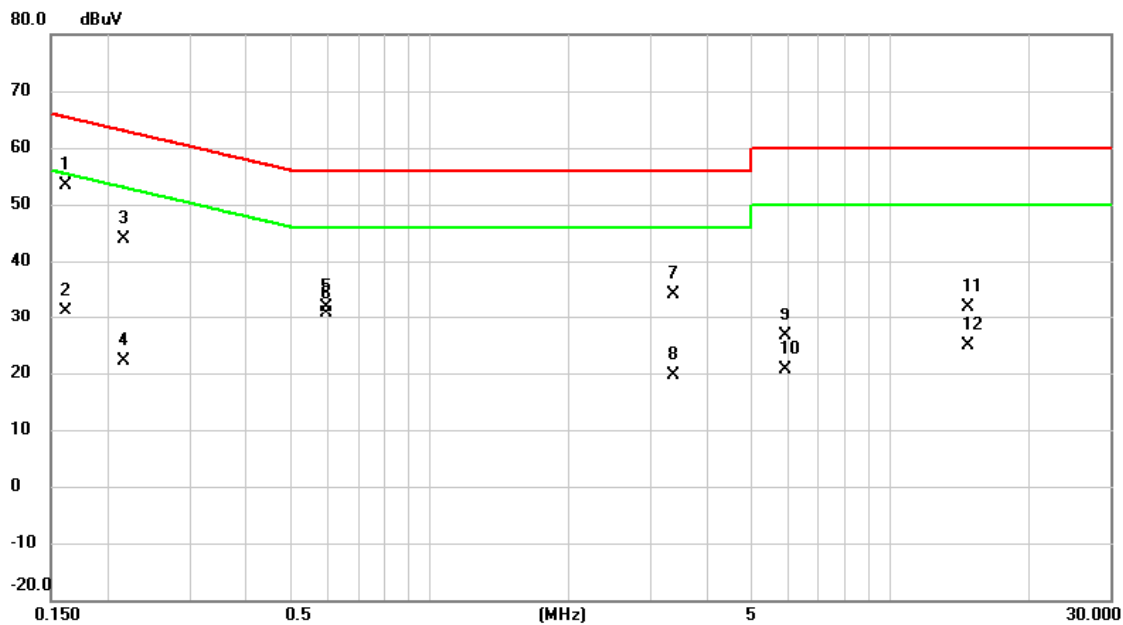
Please refer to document Appendix No.: TP-2103T163-FCCP-1 (APPENDIX-TEST PHOTOS).

10 EUT PHOTOS

Please refer to document Appendix No.: EP-2103T163-1 (APPENDIX-EUT PHOTOS).

APPENDIX A AC POWER LINE CONDUCTED EMISSIONS

Test Mode	Normal	Tested Date	2021/4/23
Test Frequency	-	Phase	Line

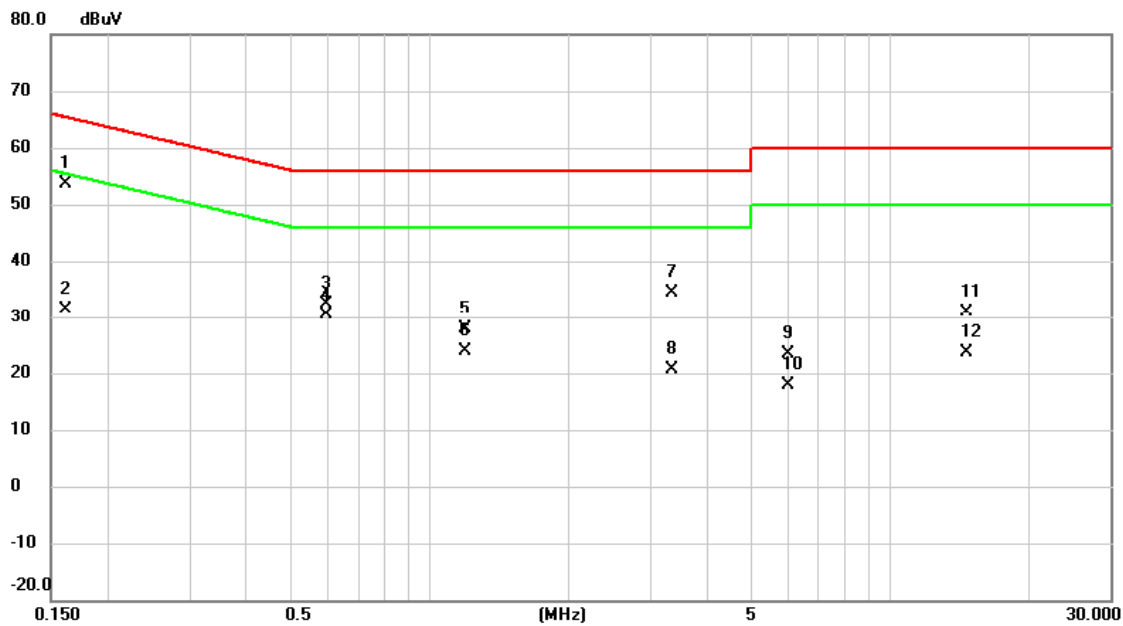


No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1	*	0.1613	43.80	9.68	53.48	65.40	-11.92	QP	
2		0.1613	21.40	9.68	31.08	55.40	-24.32	AVG	
3		0.2153	34.10	9.67	43.77	63.00	-19.23	QP	
4		0.2153	12.51	9.67	22.18	53.00	-30.82	AVG	
5		0.5977	22.31	9.68	31.99	56.00	-24.01	QP	
6		0.5977	20.84	9.68	30.52	46.00	-15.48	AVG	
7		3.3608	24.43	9.77	34.20	56.00	-21.80	QP	
8		3.3608	9.80	9.77	19.57	46.00	-26.43	AVG	
9		5.9123	16.80	9.84	26.64	60.00	-33.36	QP	
10		5.9123	10.69	9.84	20.53	50.00	-29.47	AVG	
11		14.7683	21.88	9.94	31.82	60.00	-28.18	QP	
12		14.7683	14.91	9.94	24.85	50.00	-25.15	AVG	

REMARKS:

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

Test Mode	Normal	Tested Date	2021/4/23
Test Frequency	-	Phase	Neutral



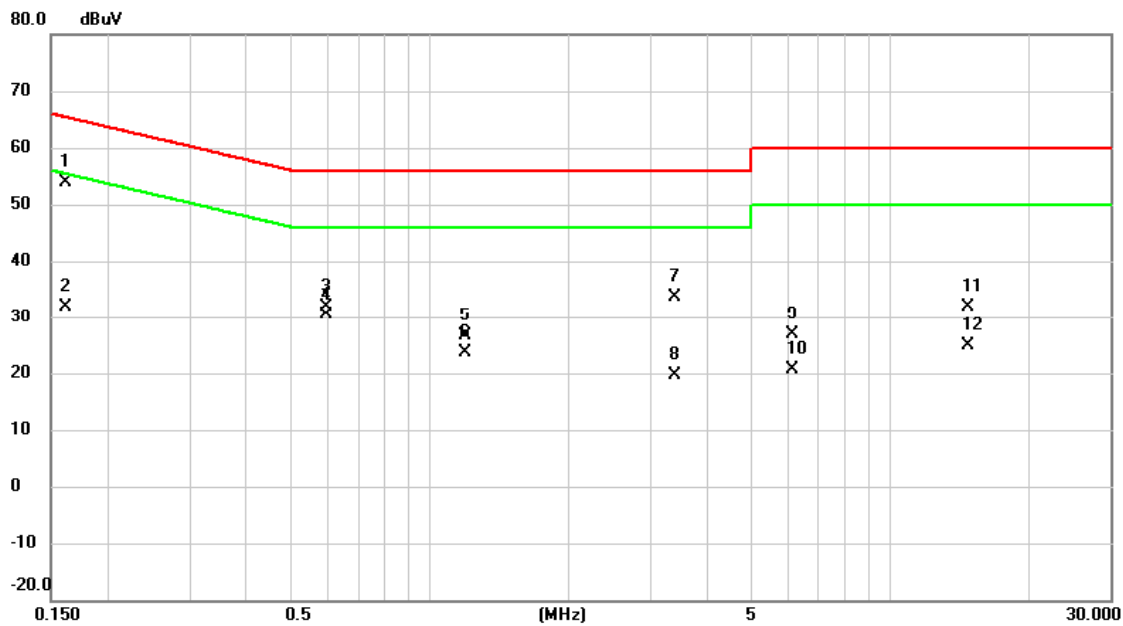
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Over dB	Detector	Comment
1	*	0.1613	44.04	9.68	53.72	65.40	-11.68	QP	
2		0.1613	21.68	9.68	31.36	55.40	-24.04	AVG	
3		0.5955	22.73	9.68	32.41	56.00	-23.59	QP	
4		0.5955	20.75	9.68	30.43	46.00	-15.57	AVG	
5		1.1940	18.15	9.70	27.85	56.00	-28.15	QP	
6		1.1940	14.08	9.70	23.78	46.00	-22.22	AVG	
7		3.3450	24.66	9.77	34.43	56.00	-21.57	QP	
8		3.3450	10.90	9.77	20.67	46.00	-25.33	AVG	
9		6.0248	13.54	9.84	23.38	60.00	-36.62	QP	
10		6.0248	7.94	9.84	17.78	50.00	-32.22	AVG	
11		14.6670	20.83	9.94	30.77	60.00	-29.23	QP	
12		14.6670	13.64	9.94	23.58	50.00	-26.42	AVG	

REMARKS:

(1) Measurement Value = Reading Level + Correct Factor.

(2) Margin Level = Measurement Value - Limit Value.

Test Mode	Idle	Tested Date	2021/4/23
Test Frequency	-	Phase	Line



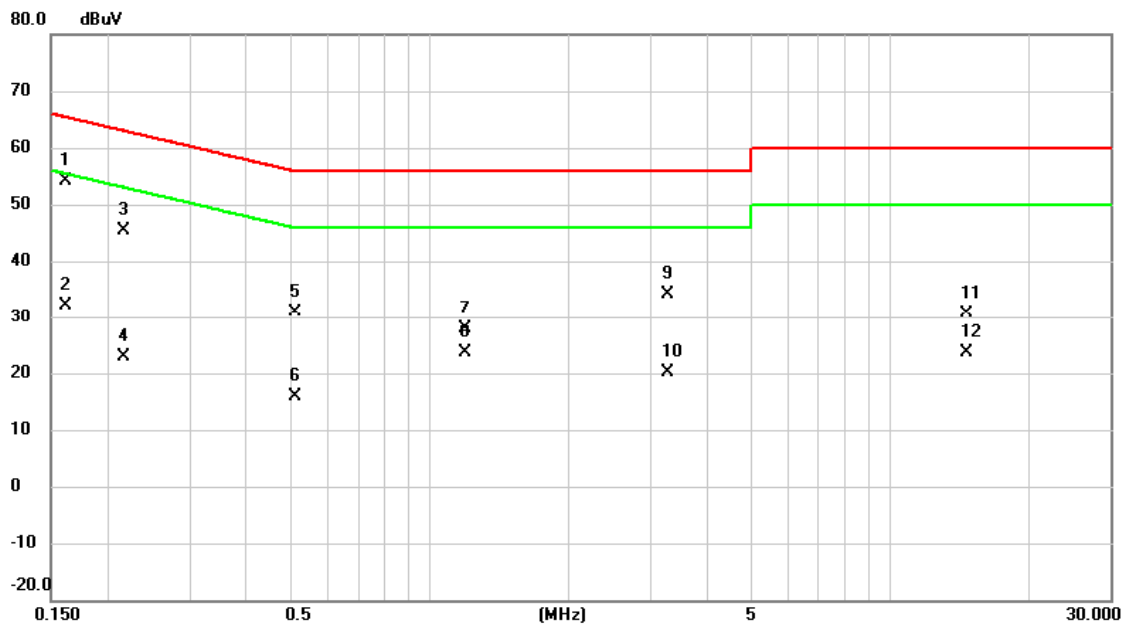
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Over dB	Detector	Comment
1	*	0.1613	44.29	9.68	53.97	65.40	-11.43	QP	
2		0.1613	22.24	9.68	31.92	55.40	-23.48	AVG	
3		0.5977	22.30	9.68	31.98	56.00	-24.02	QP	
4		0.5977	20.80	9.68	30.48	46.00	-15.52	AVG	
5		1.1940	17.05	9.70	26.75	56.00	-29.25	QP	
6		1.1940	13.81	9.70	23.51	46.00	-22.49	AVG	
7		3.3900	23.89	9.77	33.66	56.00	-22.34	QP	
8		3.3900	9.87	9.77	19.64	46.00	-26.36	AVG	
9		6.1395	17.12	9.85	26.97	60.00	-33.03	QP	
10		6.1395	10.66	9.85	20.51	50.00	-29.49	AVG	
11		14.7345	21.82	9.94	31.76	60.00	-28.24	QP	
12		14.7345	14.85	9.94	24.79	50.00	-25.21	AVG	

REMARKS:

(1) Measurement Value = Reading Level + Correct Factor.

(2) Margin Level = Measurement Value - Limit Value.

Test Mode	Idle	Tested Date	2021/4/23
Test Frequency	-	Phase	Neutral



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Over dB	Detector	Comment
1	*	0.1613	44.51	9.68	54.19	65.40	-11.21	QP	
2		0.1613	22.50	9.68	32.18	55.40	-23.22	AVG	
3		0.2153	35.78	9.67	45.45	63.00	-17.55	QP	
4		0.2153	13.21	9.67	22.88	53.00	-30.12	AVG	
5		0.5100	21.11	9.68	30.79	56.00	-25.21	QP	
6		0.5100	6.16	9.68	15.84	46.00	-30.16	AVG	
7		1.1940	18.30	9.70	28.00	56.00	-28.00	QP	
8		1.1940	14.01	9.70	23.71	46.00	-22.29	AVG	
9		3.2820	24.38	9.77	34.15	56.00	-21.85	QP	
10		3.2820	10.36	9.77	20.13	46.00	-25.87	AVG	
11		14.6558	20.78	9.94	30.72	60.00	-29.28	QP	
12		14.6558	13.65	9.94	23.59	50.00	-26.41	AVG	

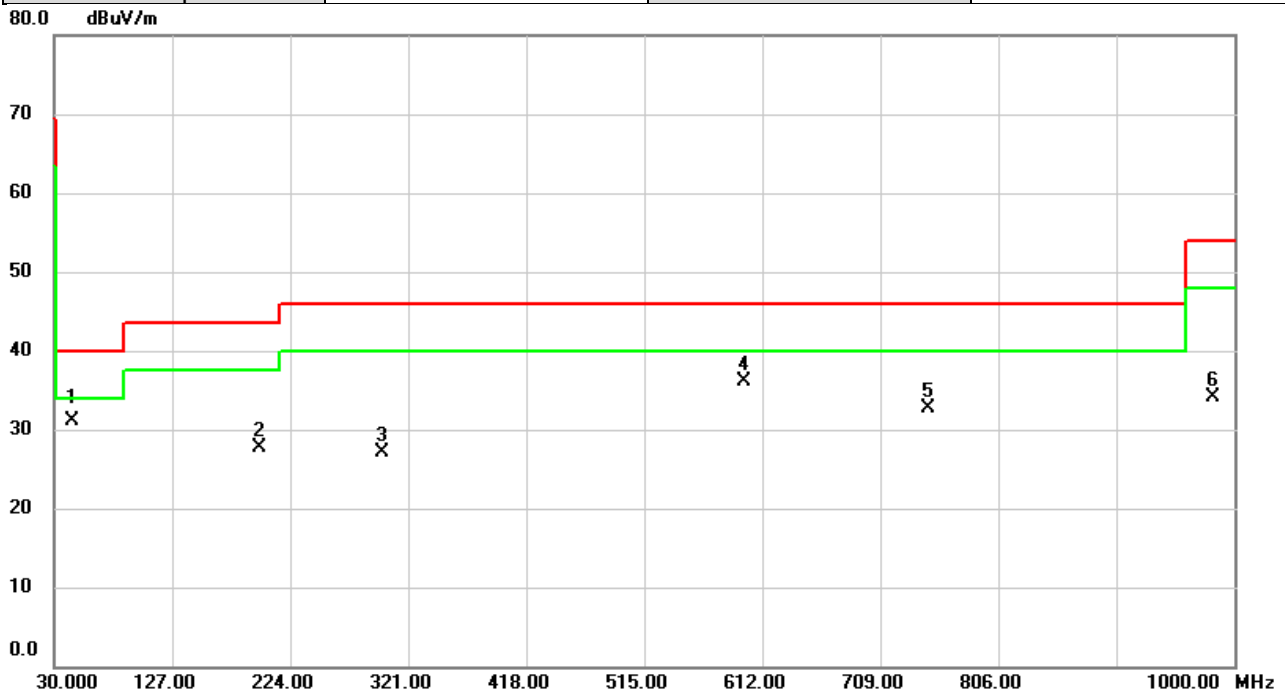
REMARKS:

(1) Measurement Value = Reading Level + Correct Factor.

(2) Margin Level = Measurement Value - Limit Value.

APPENDIX B RADIATED EMISSIONS - 30 MHZ TO 1 GHZ

Test Mode	IEEE802.11n (HT40)	Test Date	2021/4/14
Test Frequency	5190MHz	Polarization	Vertical
Temp	22°C	Hum.	61%

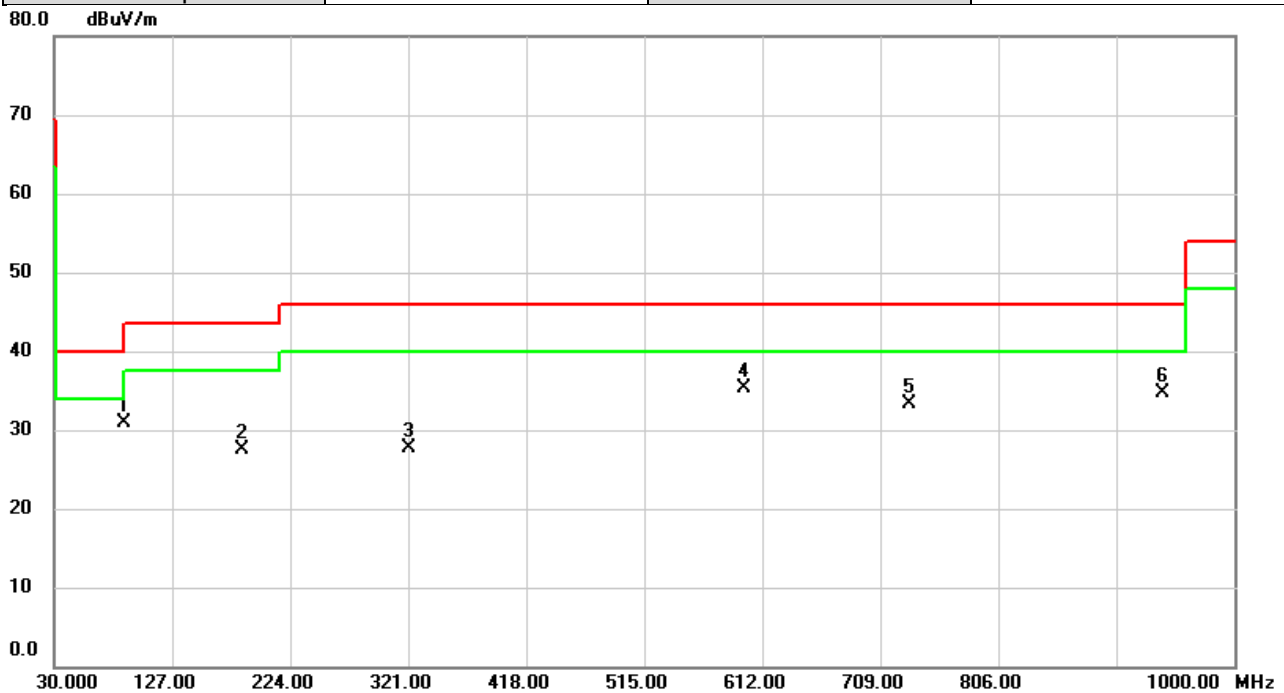


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	*	45.2613	39.43	-8.23	31.20	40.00	-8.80	QP	
2		199.3943	38.35	-10.74	27.61	43.50	-15.89	peak	
3		299.5630	34.42	-7.38	27.04	46.00	-18.96	peak	
4		596.9326	36.82	-0.70	36.12	46.00	-9.88	peak	
5		748.6406	30.82	1.91	32.73	46.00	-13.27	peak	
6		982.7016	28.52	5.49	34.01	54.00	-19.99	peak	

REMARKS:

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

Test Mode	IEEE802.11n (HT40)	Test Date	2021/4/14
Test Frequency	5190MHz	Polarization	Horizontal
Temp	22°C	Hum.	61%



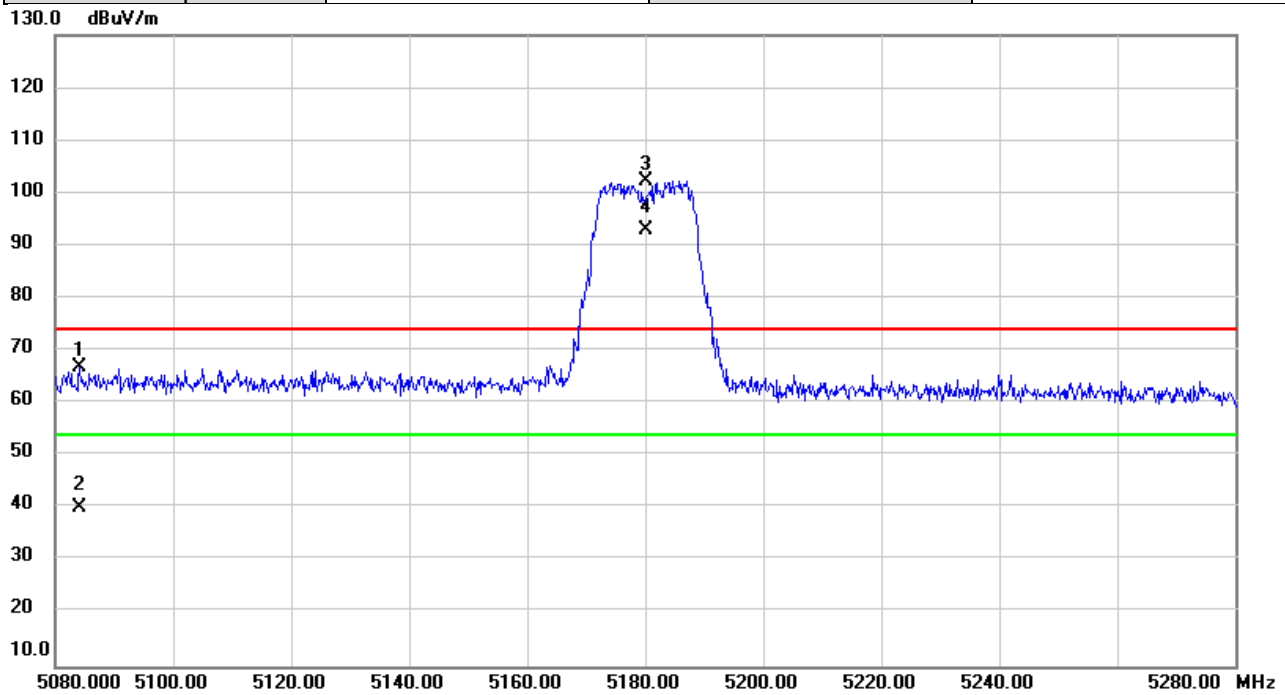
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	86.9712	45.05	-14.15	30.90	40.00	-9.10	peak	
2		184.0360	37.68	-10.09	27.59	43.50	-15.91	peak	
3		321.9376	34.61	-6.83	27.78	46.00	-18.22	peak	
4		597.2236	35.93	-0.70	35.23	46.00	-10.77	peak	
5		733.1206	31.73	1.56	33.29	46.00	-12.71	peak	
6		941.2826	29.74	4.91	34.65	46.00	-11.35	peak	

REMARKS:

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

APPENDIX C RADIATED EMISSIONS - ABOVE 1 GHZ

Test Mode	IEEE802.11a	Test Date	2021/4/13
Test Frequency	5180MHz	Polarization	Horizontal
Temp	22°C	Hum.	61%



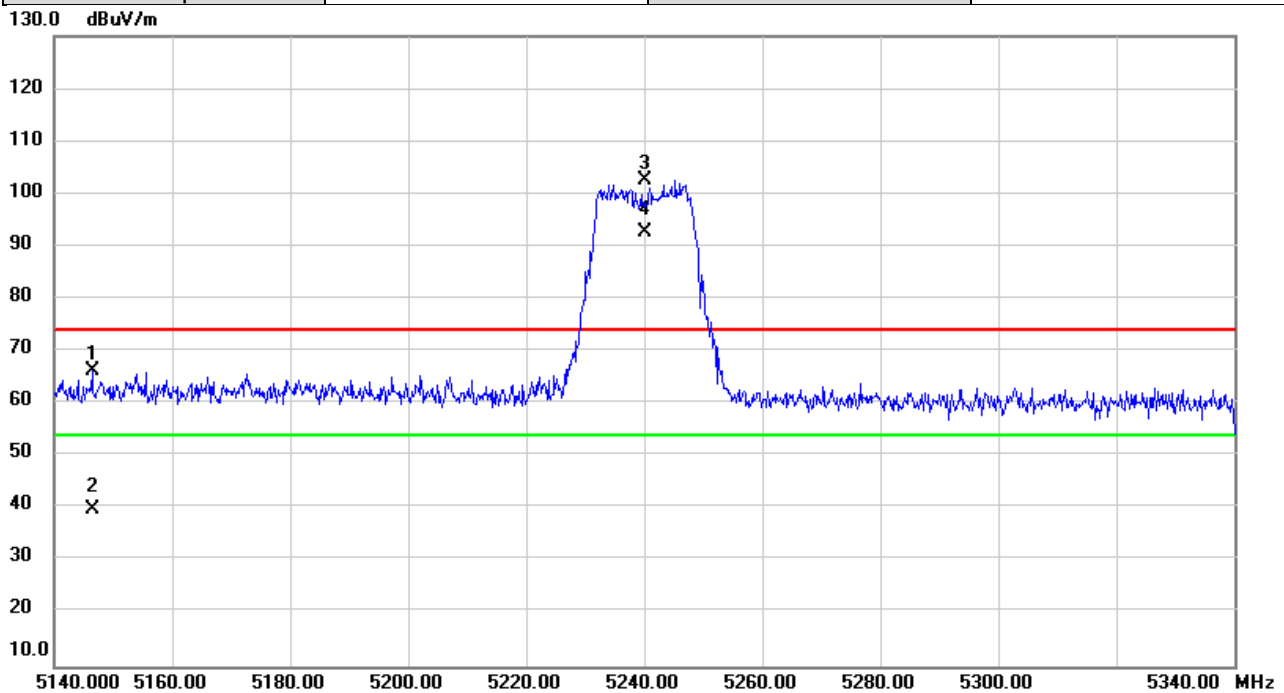
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		5084.180	29.67	37.24	66.91	74.00	-7.09	peak	
2		5084.180	2.87	37.24	40.11	54.00	-13.89	AVG	
3	X	5180.000	64.89	37.33	102.22	74.00	28.22	peak	NoLimit
4	*	5180.000	55.58	37.33	92.91	54.00	38.91	AVG	NoLimit

REMARKS:

(1) Measurement Value = Reading Level + Correct Factor.

(2) Margin Level = Measurement Value - Limit Value.

Test Mode	IEEE802.11a	Test Date	2021/4/13
Test Frequency	5240MHz	Polarization	Horizontal
Temp	22°C	Hum.	61%



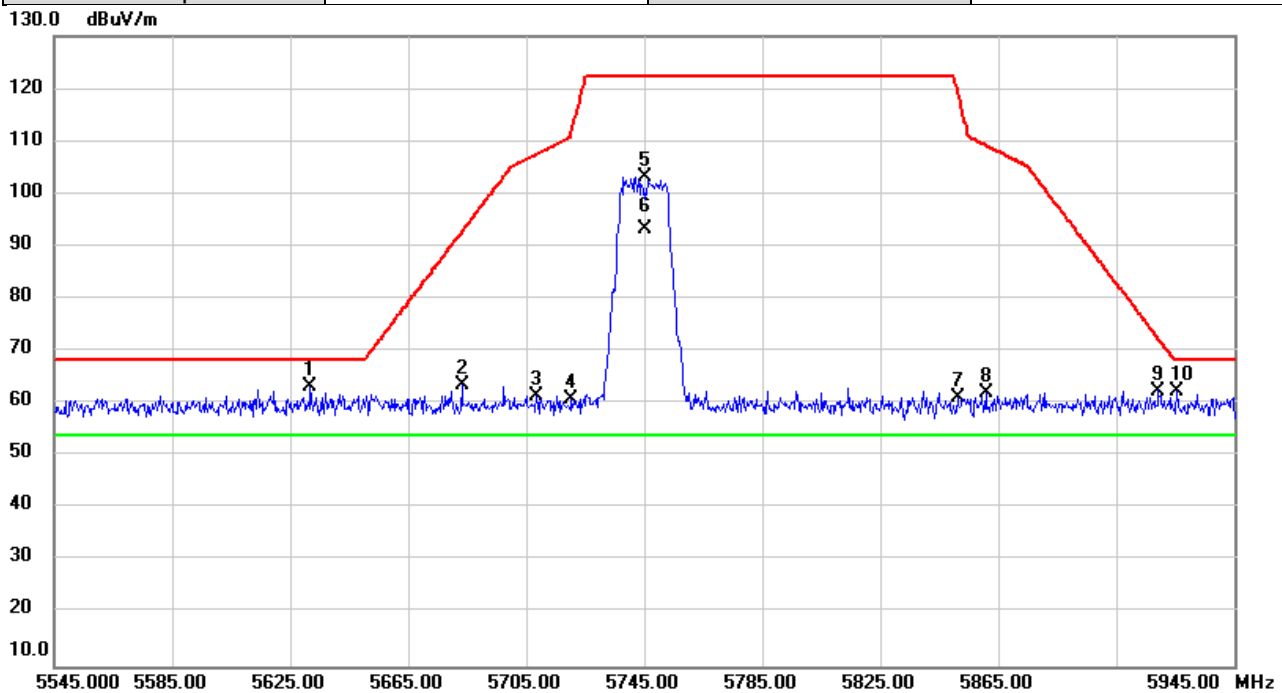
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		5146.560	28.92	37.30	66.22	74.00	-7.78	peak	
2		5146.560	2.49	37.30	39.79	54.00	-14.21	AVG	
3	X	5240.000	65.22	37.38	102.60	74.00	28.60	peak	NoLimit
4	*	5240.000	55.31	37.38	92.69	54.00	38.69	AVG	NoLimit

REMARKS:

(1) Measurement Value = Reading Level + Correct Factor.

(2) Margin Level = Measurement Value - Limit Value.

Test Mode	IEEE802.11a	Test Date	2021/4/13
Test Frequency	5745MHz	Polarization	Horizontal
Temp	22°C	Hum.	61%



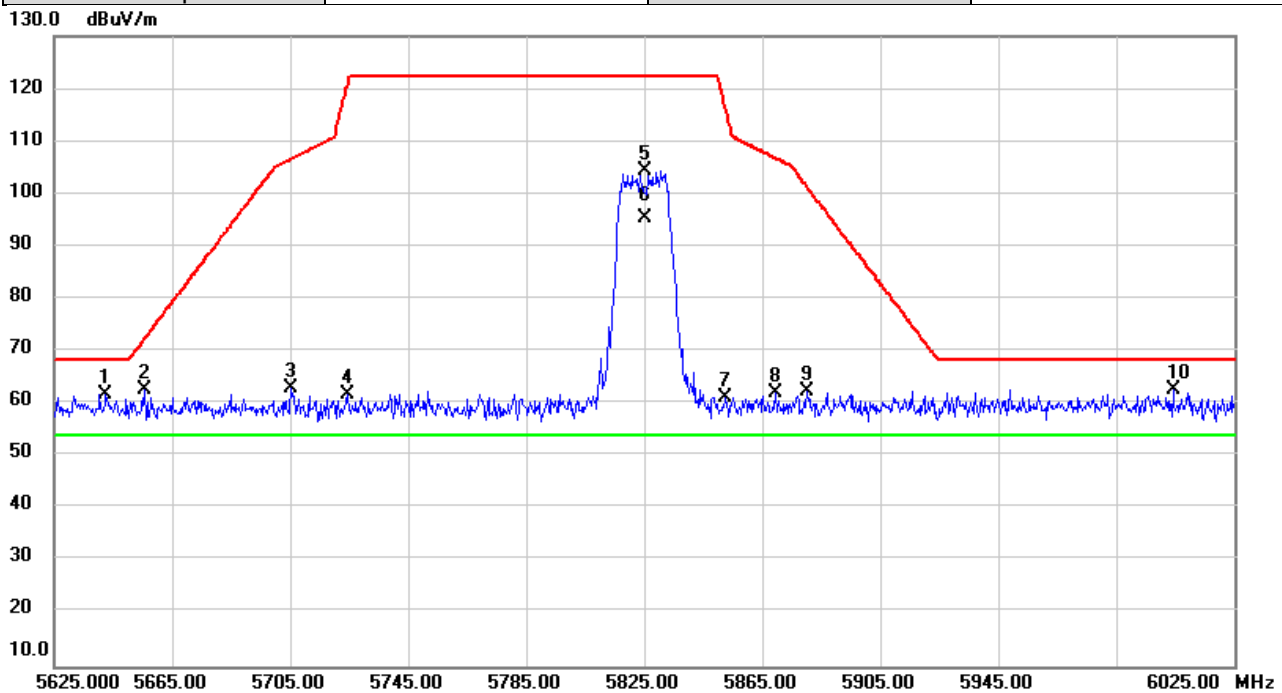
No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		5631.933	25.35	37.89	63.24	68.20	-4.96	peak	
2		5683.187	25.55	38.00	63.55	92.79	-29.24	peak	
3		5708.360	23.53	38.06	61.59	107.54	-45.95	peak	
4		5720.440	22.71	38.08	60.79	111.80	-51.01	peak	
5		5745.000	64.95	38.13	103.08	122.20	-19.12	peak	NoLimit
6	*	5745.000	55.24	38.13	93.37	54.00	39.37	AVG	NoLimit
7		5851.147	22.70	38.36	61.06	119.58	-58.52	peak	
8		5860.880	23.69	38.38	62.07	109.15	-47.08	peak	
9		5919.360	24.00	38.50	62.50	72.36	-9.86	peak	
10		5925.373	23.77	38.52	62.29	68.20	-5.91	peak	

REMARKS:

(1) Measurement Value = Reading Level + Correct Factor.

(2) Margin Level = Measurement Value - Limit Value.

Test Mode	IEEE802.11a	Test Date	2021/4/13
Test Frequency	5825MHz	Polarization	Horizontal
Temp	22°C	Hum.	61%



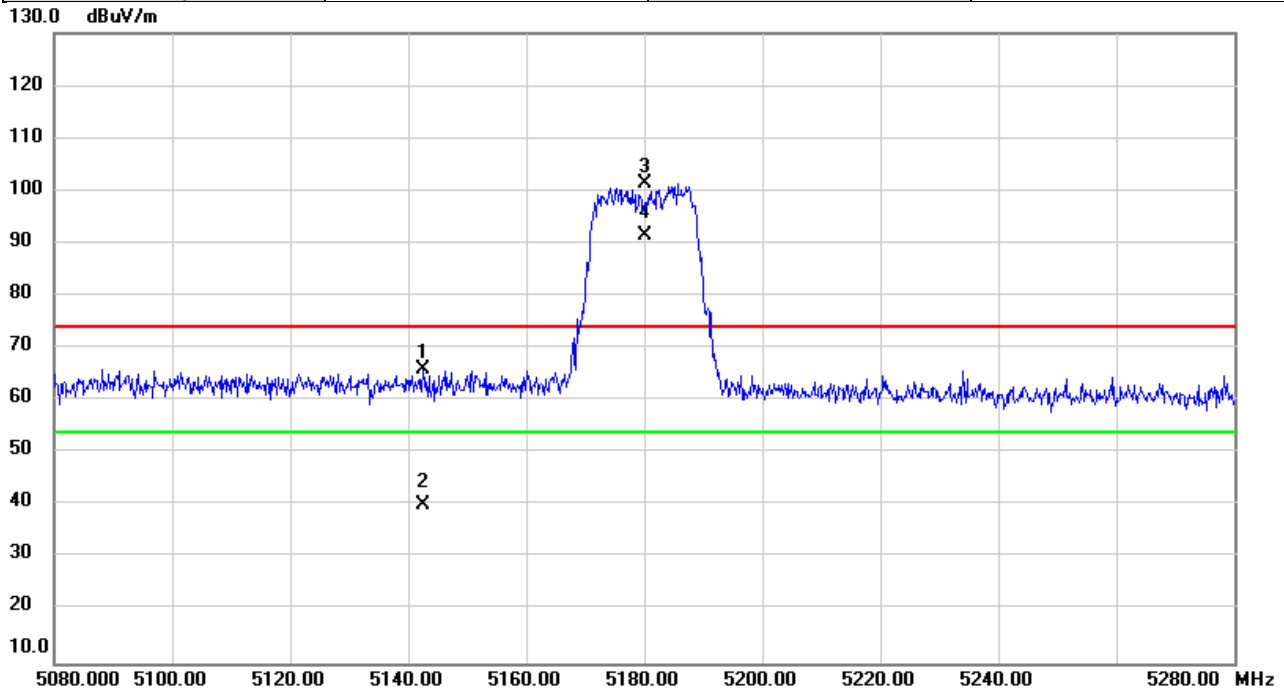
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		5642.573	23.71	37.91	61.62	68.20	-6.58	peak	
2		5655.707	24.83	37.95	62.78	72.44	-9.66	peak	
3		5705.360	24.81	38.05	62.86	106.70	-43.84	peak	
4		5724.227	23.61	38.09	61.70	120.44	-58.74	peak	
5		5825.000	65.90	38.31	104.21	122.20	-17.99	peak	NoLimit
6	*	5825.000	57.00	38.31	95.31	54.00	41.31	AVG	NoLimit
7		5852.613	22.93	38.36	61.29	116.24	-54.95	peak	
8		5869.613	23.75	38.40	62.15	106.71	-44.56	peak	
9		5880.173	23.98	38.43	62.41	101.36	-38.95	peak	
10		6004.320	23.96	38.70	62.66	68.20	-5.54	peak	

REMARKS:

(1) Measurement Value = Reading Level + Correct Factor.

(2) Margin Level = Measurement Value - Limit Value.

Test Mode	IEEE802.11n (HT20)	Test Date	2021/4/13
Test Frequency	5180MHz	Polarization	Horizontal
Temp	22°C	Hum.	61%



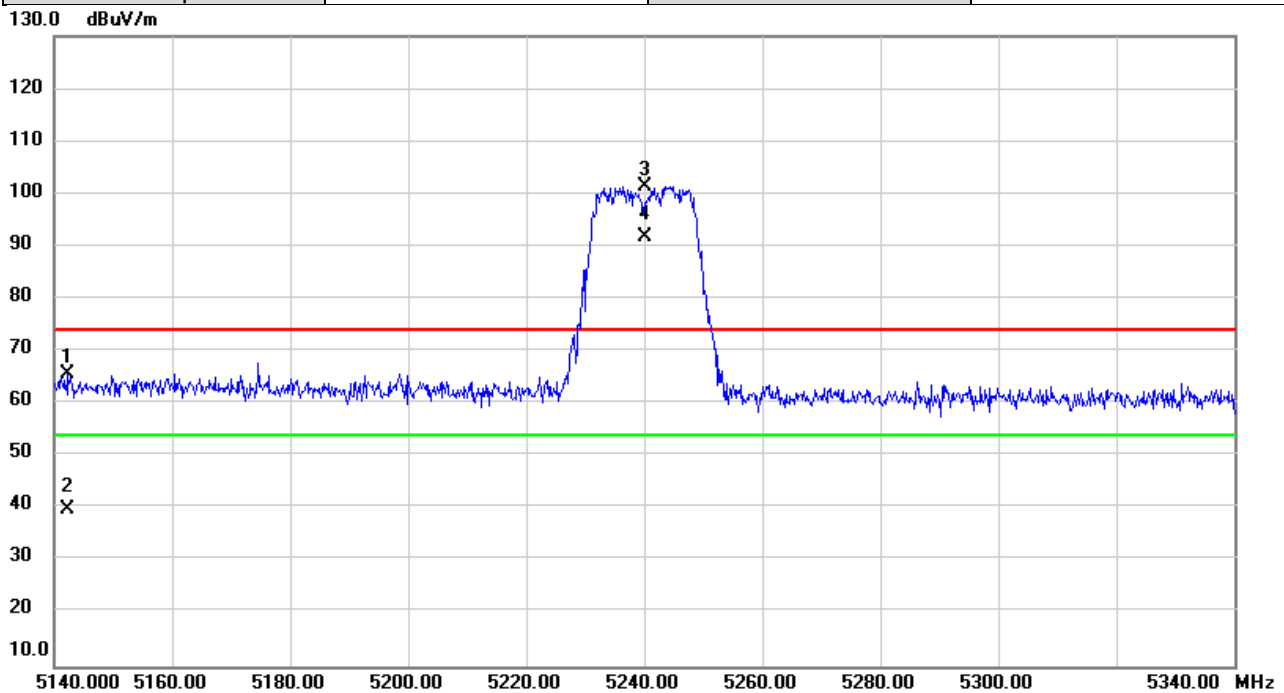
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		5142.513	28.51	37.30	65.81	74.00	-8.19	peak	
2		5142.513	2.82	37.30	40.12	54.00	-13.88	AVG	
3	X	5180.000	63.89	37.33	101.22	74.00	27.22	peak	NoLimit
4	*	5180.000	54.04	37.33	91.37	54.00	37.37	AVG	NoLimit

REMARKS:

(1) Measurement Value = Reading Level + Correct Factor.

(2) Margin Level = Measurement Value - Limit Value.

Test Mode	IEEE802.11n (HT20)	Test Date	2021/4/13
Test Frequency	5240MHz	Polarization	Horizontal
Temp	22°C	Hum.	61%



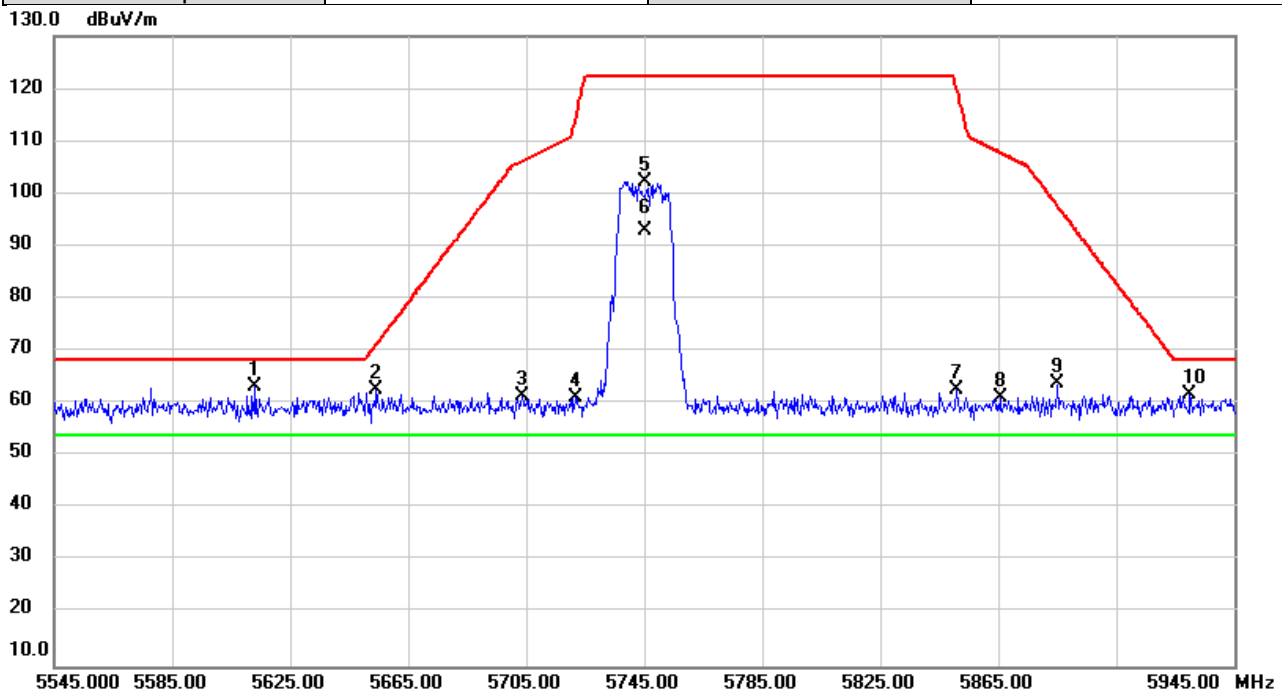
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		5142.260	28.21	37.30	65.51	74.00	-8.49	peak	
2		5142.260	2.48	37.30	39.78	54.00	-14.22	AVG	
3	X	5240.000	64.04	37.38	101.42	74.00	27.42	peak	NoLimit
4	*	5240.000	54.34	37.38	91.72	54.00	37.72	AVG	NoLimit

REMARKS:

(1) Measurement Value = Reading Level + Correct Factor.

(2) Margin Level = Measurement Value - Limit Value.

Test Mode	IEEE802.11n (HT20)	Test Date	2021/4/13
Test Frequency	5745MHz	Polarization	Horizontal
Temp	22°C	Hum.	61%



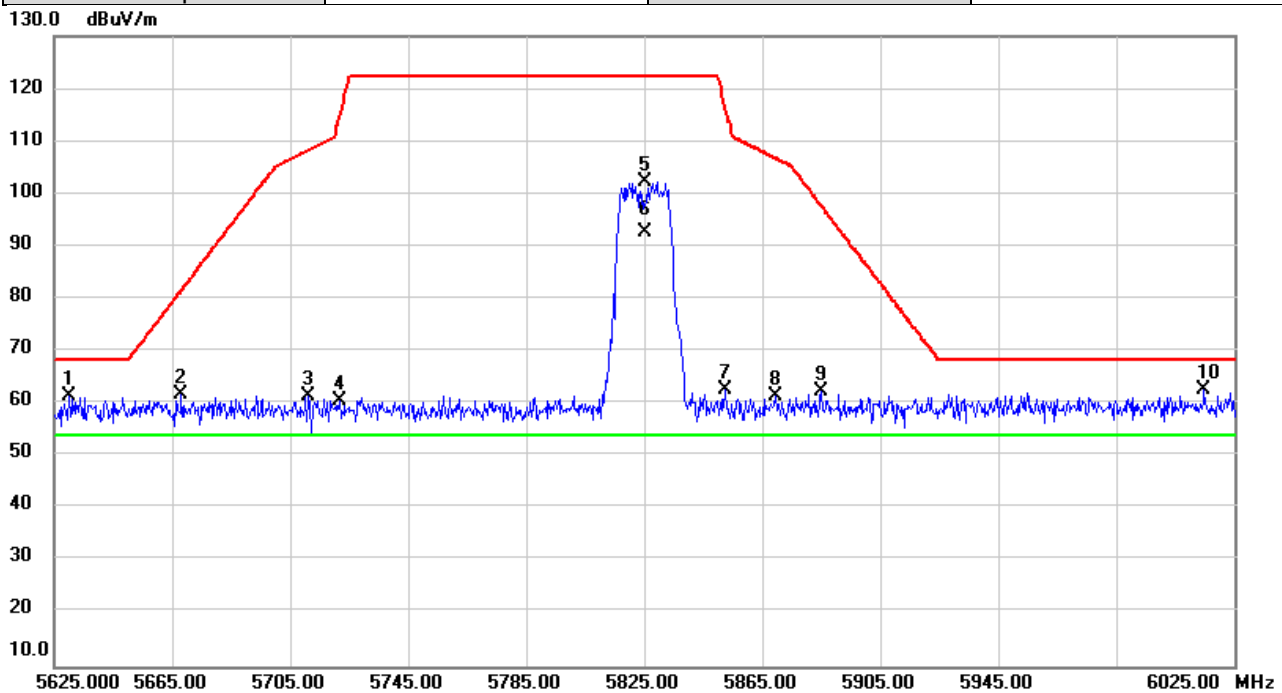
No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		5613.213	25.34	37.86	63.20	68.20	-5.00	peak	
2		5654.293	24.73	37.95	62.68	71.39	-8.71	peak	
3		5703.560	23.28	38.04	61.32	106.20	-44.88	peak	
4		5721.560	23.20	38.09	61.29	114.36	-53.07	peak	
5		5745.000	64.12	38.13	102.25	122.20	-19.95	peak	NoLimit
6	*	5745.000	54.89	38.13	93.02	54.00	39.02	AVG	NoLimit
7		5850.987	24.17	38.36	62.53	119.95	-57.42	peak	
8		5865.747	22.71	38.39	61.10	107.79	-46.69	peak	
9		5885.027	25.27	38.43	63.70	97.75	-34.05	peak	
10		5929.933	23.35	38.53	61.88	68.20	-6.32	peak	

REMARKS:

(1) Measurement Value = Reading Level + Correct Factor.

(2) Margin Level = Measurement Value - Limit Value.

Test Mode	IEEE802.11n (HT20)	Test Date	2021/4/13
Test Frequency	5825MHz	Polarization	Horizontal
Temp	22°C	Hum.	61%



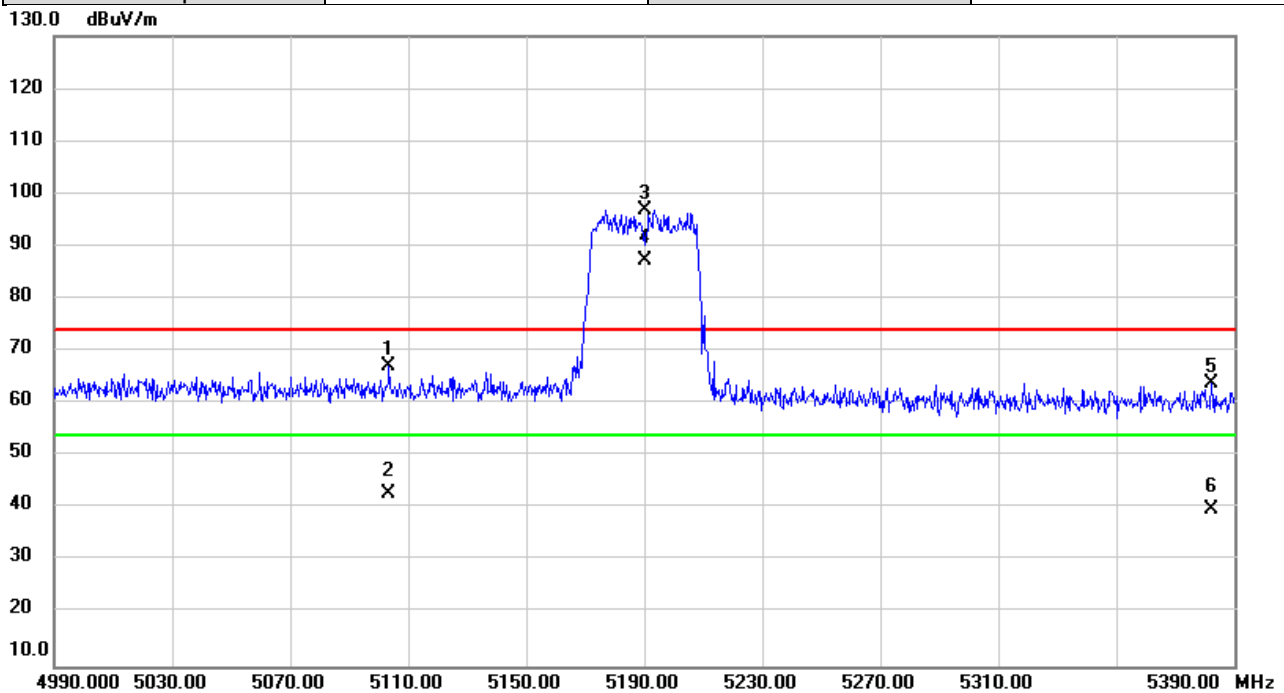
No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		5630.080	23.45	37.89	61.34	68.20	-6.86	peak	
2		5667.867	23.64	37.97	61.61	81.46	-19.85	peak	
3		5711.400	23.29	38.06	61.35	108.39	-47.04	peak	
4		5721.840	22.42	38.09	60.51	115.00	-54.49	peak	
5		5825.000	63.88	38.31	102.19	122.20	-20.01	peak	NoLimit
6	*	5825.000	54.47	38.31	92.78	54.00	38.78	AVG	NoLimit
7		5852.667	24.19	38.36	62.55	116.12	-53.57	peak	
8		5869.493	22.94	38.40	61.34	106.74	-45.40	peak	
9		5885.120	23.87	38.43	62.30	97.69	-35.39	peak	
10		6014.773	23.92	38.75	62.67	68.20	-5.53	peak	

REMARKS:

(1) Measurement Value = Reading Level + Correct Factor.

(2) Margin Level = Measurement Value - Limit Value.

Test Mode	IEEE802.11n (HT40)	Test Date	2021/4/13
Test Frequency	5190MHz	Polarization	Horizontal
Temp	22°C	Hum.	61%

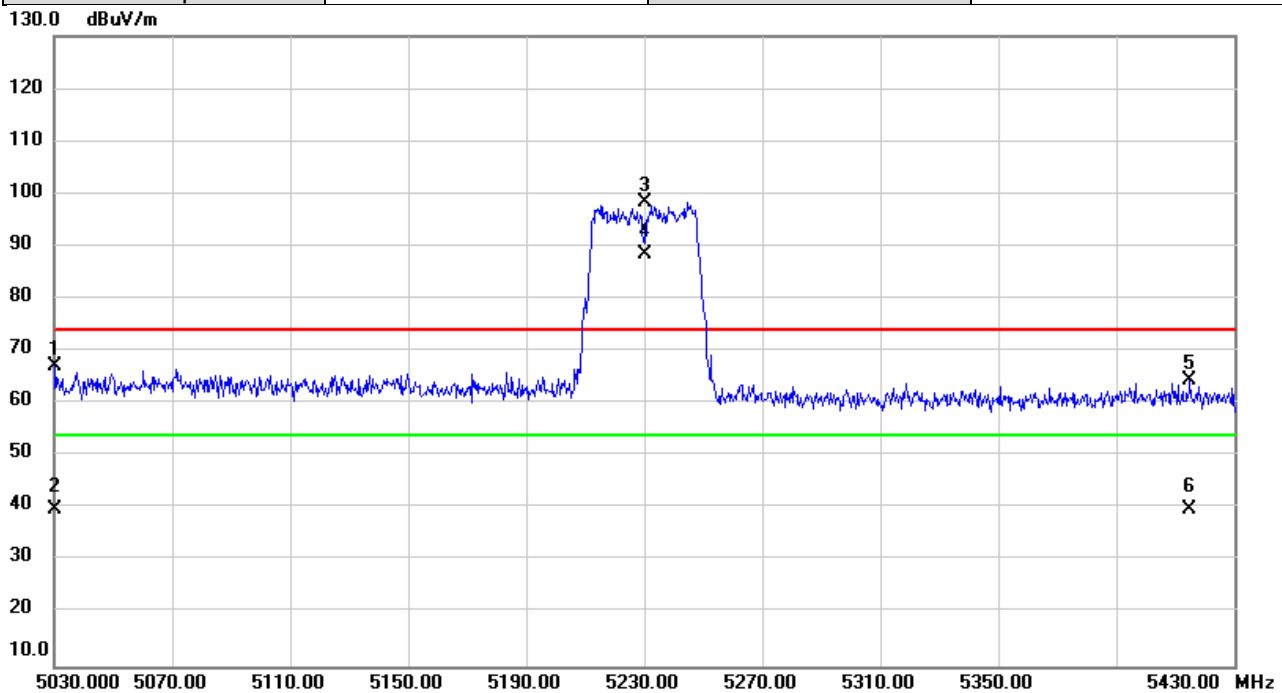


No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		5103.293	29.80	37.26	67.06	74.00	-6.94	peak	
2		5103.293	5.45	37.26	42.71	54.00	-11.29	AVG	
3	X	5190.000	59.67	37.33	97.00	74.00	23.00	peak	NoLimit
4	*	5190.000	49.90	37.33	87.23	54.00	33.23	AVG	NoLimit
5		5382.227	26.33	37.51	63.84	74.00	-10.16	peak	
6		5382.227	2.21	37.51	39.72	54.00	-14.28	AVG	

REMARKS:

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

Test Mode	IEEE802.11n (HT40)	Test Date	2021/4/13
Test Frequency	5230MHz	Polarization	Horizontal
Temp	22°C	Hum.	61%

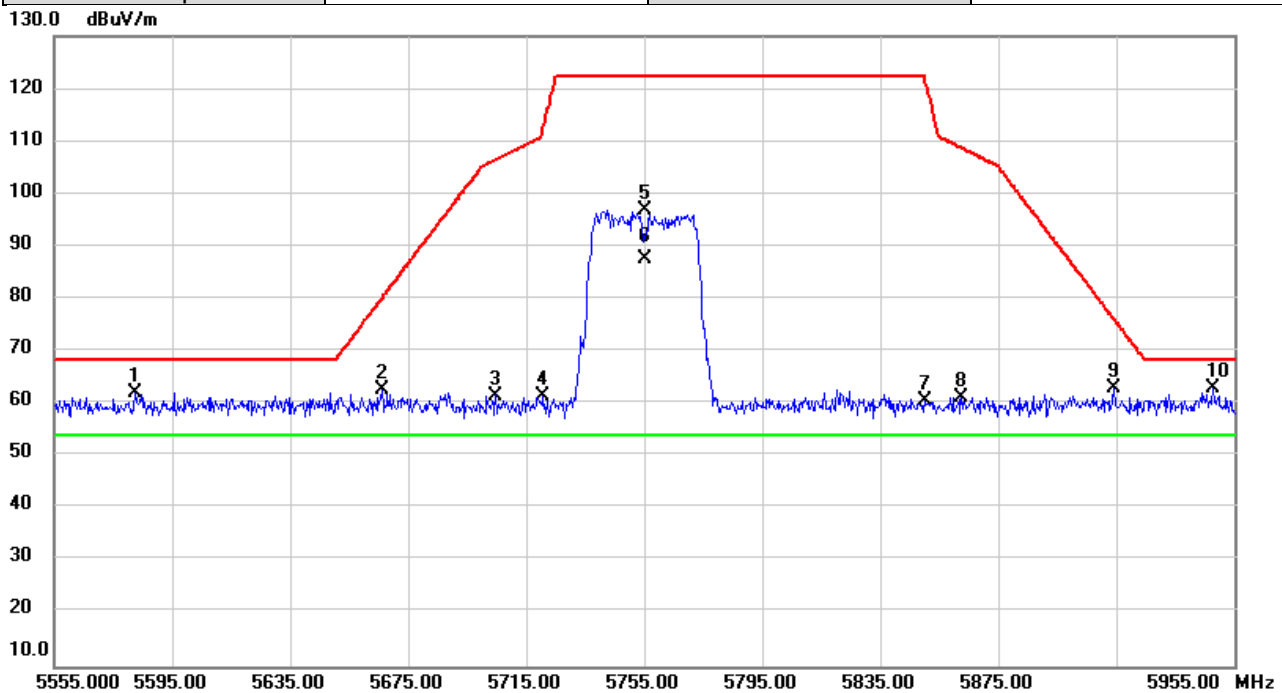


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		5030.453	30.03	37.20	67.23	74.00	-6.77	peak	
2		5030.453	2.66	37.20	39.86	54.00	-14.14	AVG	
3	X	5230.000	60.85	37.37	98.22	74.00	24.22	peak	NoLimit
4	*	5230.000	51.09	37.37	88.46	54.00	34.46	AVG	NoLimit
5		5415.000	26.88	37.54	64.42	74.00	-9.58	peak	
6		5415.000	2.29	37.54	39.83	54.00	-14.17	AVG	

REMARKS:

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

Test Mode	IEEE802.11n (HT40)	Test Date	2021/4/13
Test Frequency	5755MHz	Polarization	Horizontal
Temp	22°C	Hum.	61%



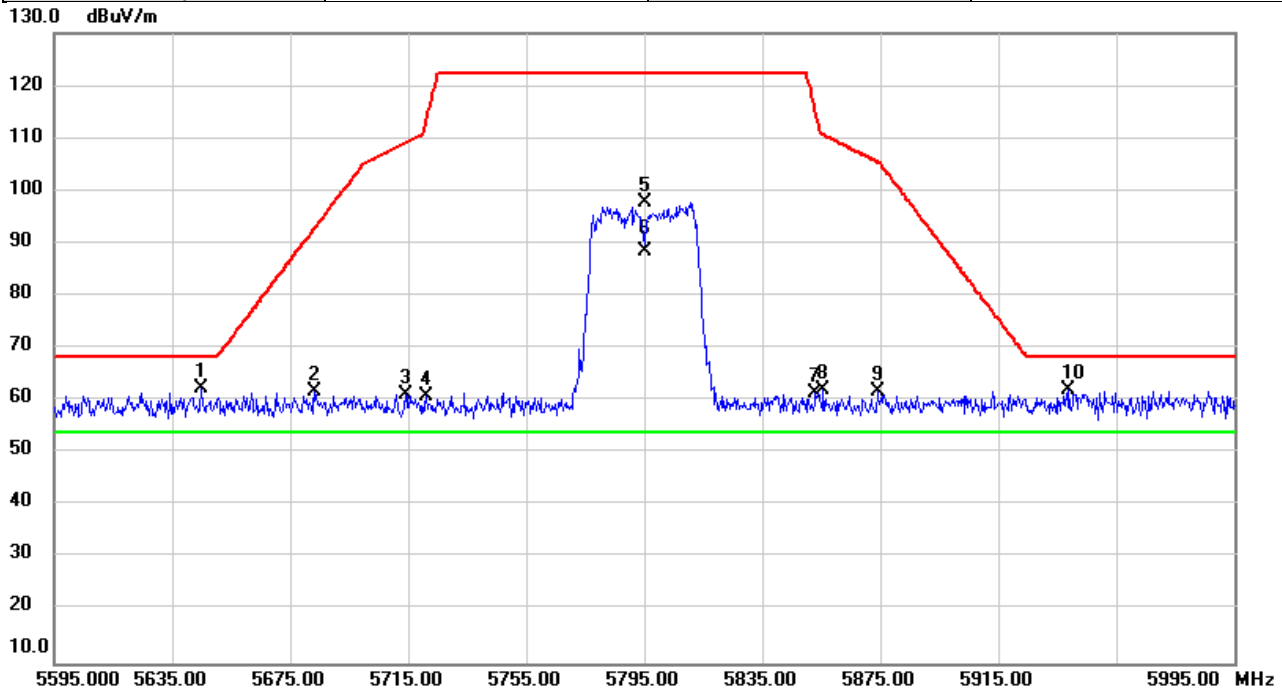
No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		5582.253	24.38	37.79	62.17	68.20	-6.03	peak	
2		5666.053	24.76	37.97	62.73	80.11	-17.38	peak	
3		5704.853	23.55	38.05	61.60	106.56	-44.96	peak	
4		5720.813	23.25	38.08	61.33	112.65	-51.32	peak	
5		5755.000	58.58	38.16	96.74	122.20	-25.46	peak	NoLimit
6	*	5755.000	49.31	38.16	87.47	54.00	33.47	AVG	NoLimit
7		5850.427	22.28	38.36	60.64	121.23	-60.59	peak	
8		5862.413	22.77	38.38	61.15	108.72	-47.57	peak	
9		5914.173	24.41	38.50	62.91	76.19	-13.28	peak	
10		5948.040	24.26	38.57	62.83	68.20	-5.37	peak	

REMARKS:

(1) Measurement Value = Reading Level + Correct Factor.

(2) Margin Level = Measurement Value - Limit Value.

Test Mode	IEEE802.11n (HT40)	Test Date	2021/4/13
Test Frequency	5795MHz	Polarization	Horizontal
Temp	22°C	Hum.	61%



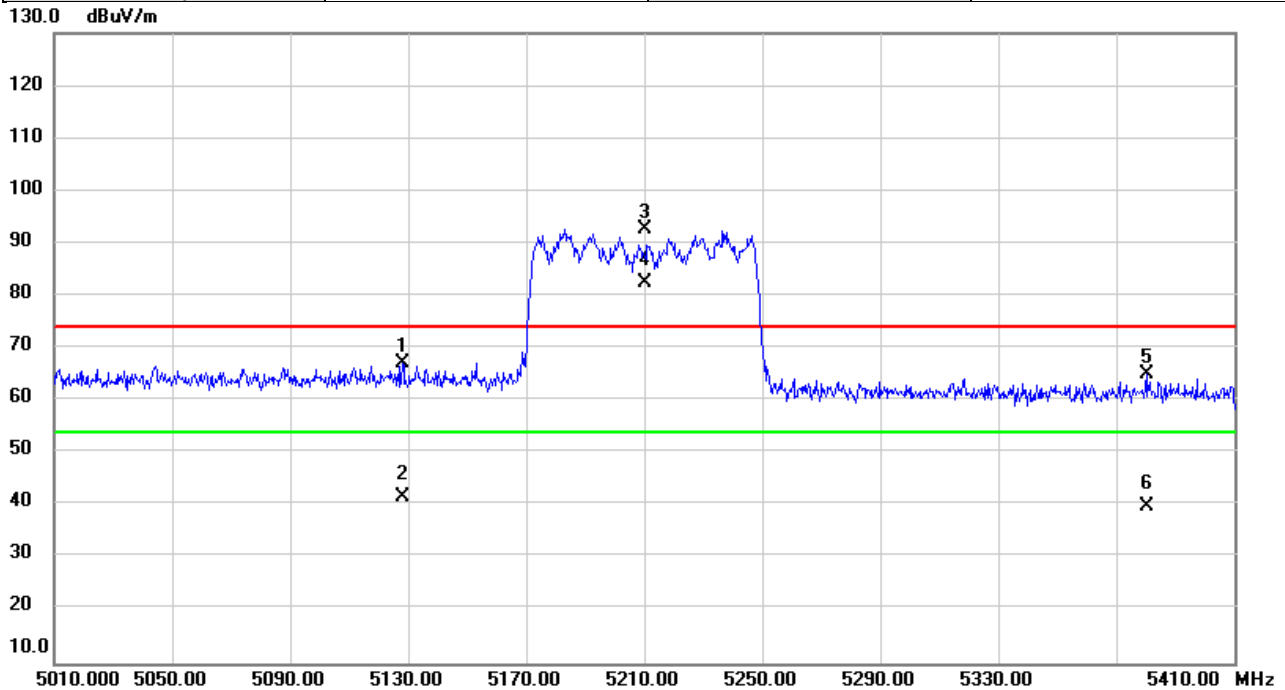
No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		5644.827	24.57	37.92	62.49	68.20	-5.71	peak	
2		5683.507	23.71	38.00	61.71	93.03	-31.32	peak	
3		5713.947	23.03	38.07	61.10	109.11	-48.01	peak	
4		5721.293	22.69	38.09	60.78	113.75	-52.97	peak	
5		5795.000	59.42	38.24	97.66	122.20	-24.54	peak	NoLimit
6	*	5795.000	50.17	38.24	88.41	54.00	34.41	AVG	NoLimit
7		5853.133	23.17	38.36	61.53	115.06	-53.53	peak	
8		5855.507	23.57	38.37	61.94	110.66	-48.72	peak	
9		5874.067	23.33	38.41	61.74	105.46	-43.72	peak	
10		5938.760	23.58	38.55	62.13	68.20	-6.07	peak	

REMARKS:

(1) Measurement Value = Reading Level + Correct Factor.

(2) Margin Level = Measurement Value - Limit Value.

Test Mode	IEEE802.11ac (VHT80)	Test Date	2021/4/14
Test Frequency	5210MHz	Polarization	Horizontal
Temp	22°C	Hum.	61%

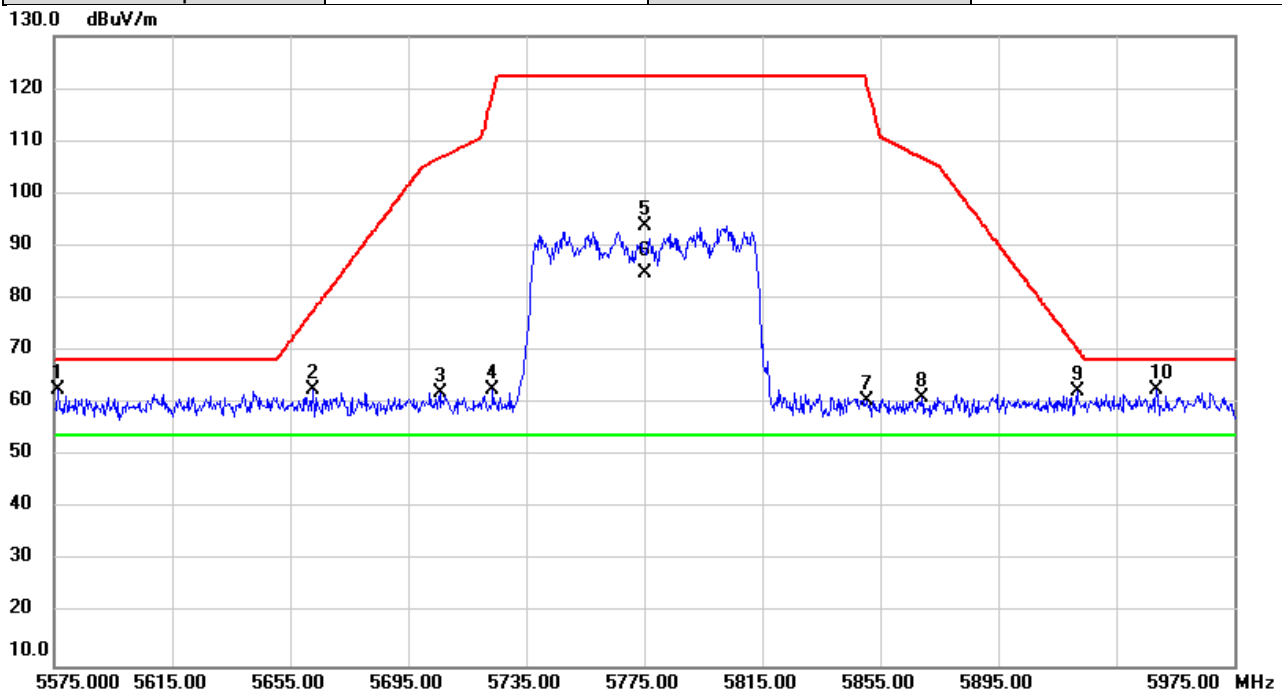


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		5128.320	29.74	37.29	67.03	74.00	-6.97	peak	
2		5128.320	4.35	37.29	41.64	54.00	-12.36	AVG	
3	X	5210.000	55.24	37.36	92.60	74.00	18.60	peak	NoLimit
4	*	5210.000	45.00	37.36	82.36	54.00	28.36	AVG	NoLimit
5		5380.320	27.39	37.51	64.90	74.00	-9.10	peak	
6		5380.320	2.36	37.51	39.87	54.00	-14.13	AVG	

REMARKS:

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

Test Mode	IEEE802.11ac (VHT80)	Test Date	2021/4/14
Test Frequency	5775MHz	Polarization	Horizontal
Temp	22°C	Hum.	61%



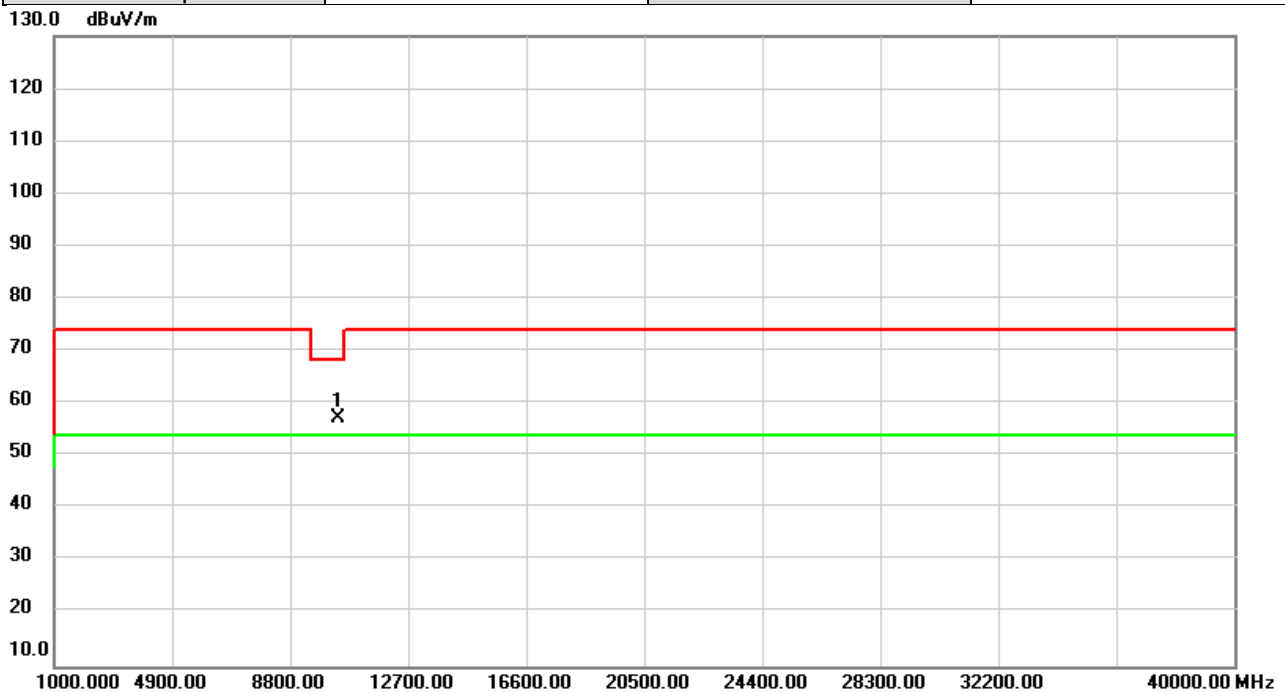
No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		5576.200	24.89	37.77	62.66	68.20	-5.54	peak	
2		5662.720	24.65	37.96	62.61	77.64	-15.03	peak	
3		5705.733	24.14	38.05	62.19	106.81	-44.62	peak	
4		5723.440	24.66	38.09	62.75	118.64	-55.89	peak	
5		5775.000	55.64	38.20	93.84	122.20	-28.36	peak	NoLimit
6	*	5775.000	46.55	38.20	84.75	54.00	30.75	AVG	NoLimit
7		5850.720	22.21	38.36	60.57	120.56	-59.99	peak	
8		5869.160	22.73	38.40	61.13	106.83	-45.70	peak	
9		5921.920	23.84	38.52	62.36	70.47	-8.11	peak	
10		5948.707	24.21	38.57	62.78	68.20	-5.42	peak	

REMARKS:

(1) Measurement Value = Reading Level + Correct Factor.

(2) Margin Level = Measurement Value - Limit Value.

Test Mode	IEEE802.11a	Test Date	2021/4/14
Test Frequency	5180MHz	Polarization	Vertical
Temp	22°C	Hum.	61%

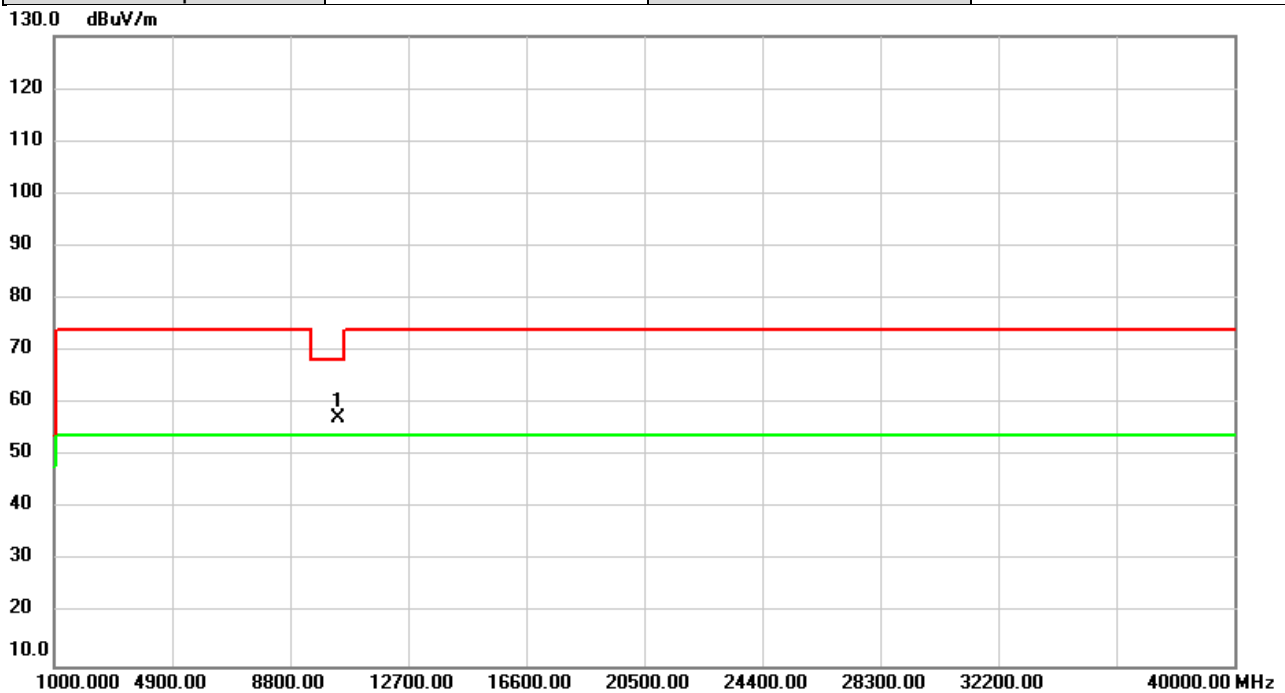


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	10360.00	52.34	4.85	57.19	68.20	-11.01	peak	

REMARKS:

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

Test Mode	IEEE802.11a	Test Date	2021/4/14
Test Frequency	5180MHz	Polarization	Horizontal
Temp	22°C	Hum.	61%

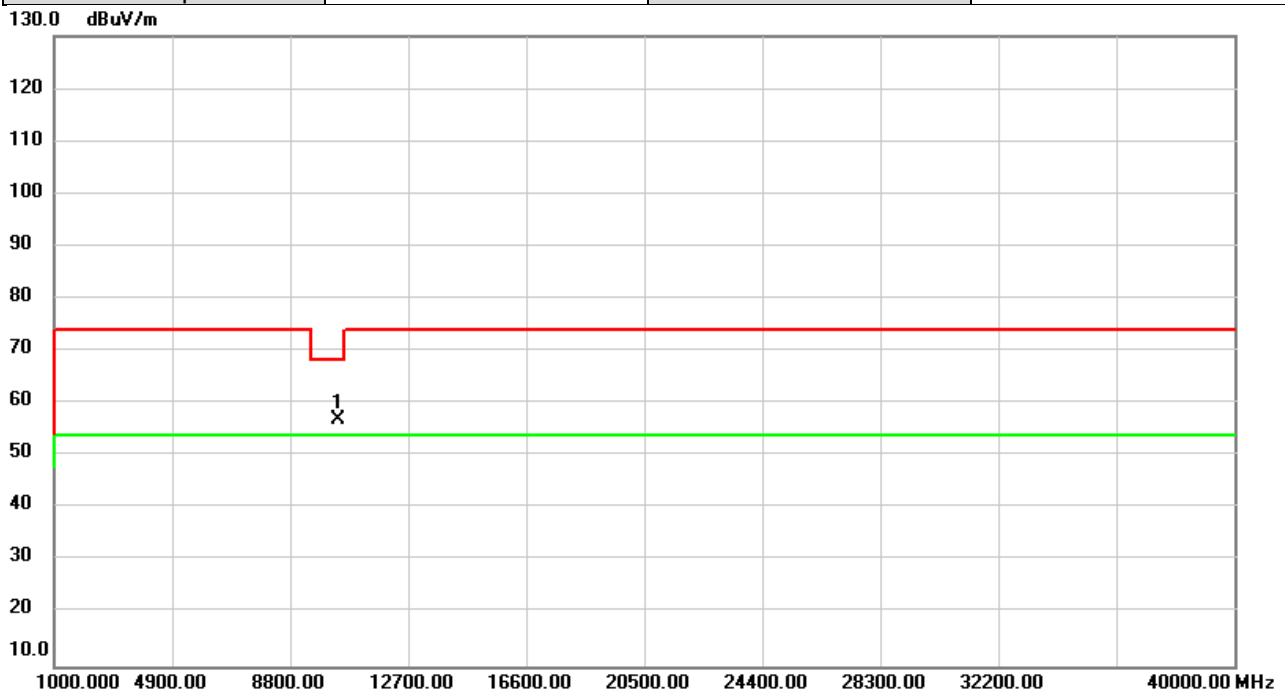


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	10360.00	52.31	4.85	57.16	68.20	-11.04	peak	

REMARKS:

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

Test Mode	IEEE802.11a	Test Date	2021/4/14
Test Frequency	5200MHz	Polarization	Vertical
Temp	22°C	Hum.	61%

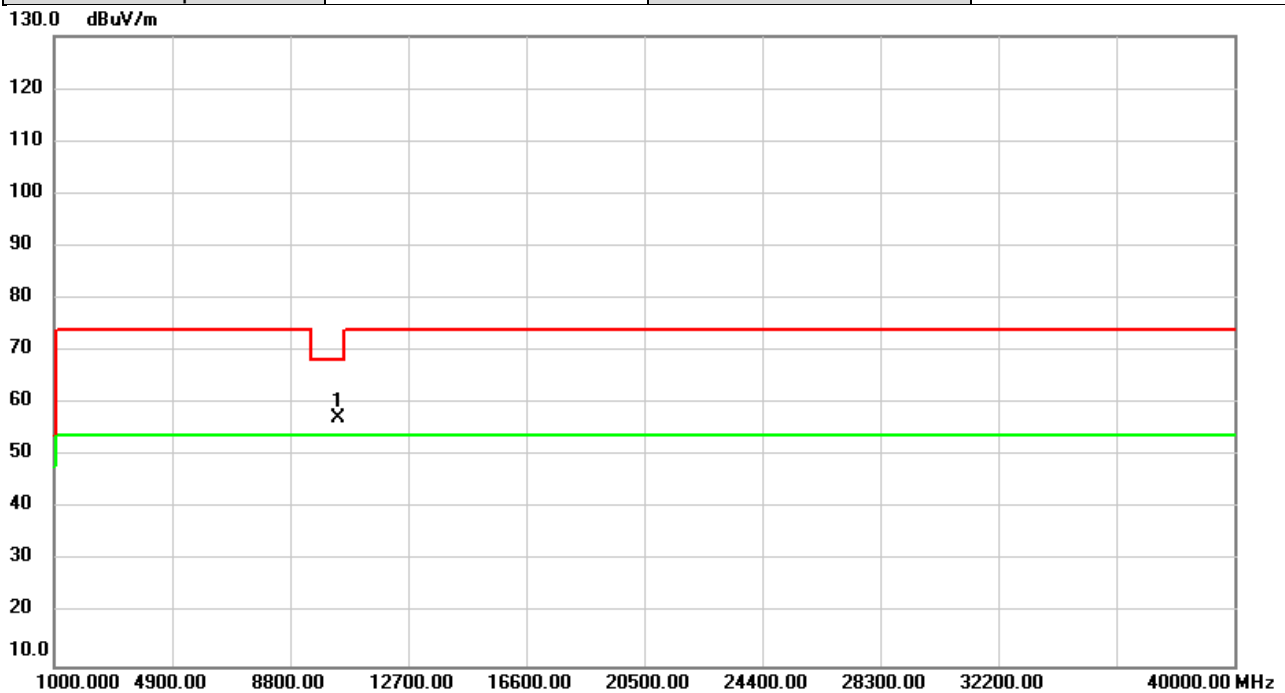


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	10400.00	52.16	4.94	57.10	68.20	-11.10	peak	

REMARKS:

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

Test Mode	IEEE802.11a	Test Date	2021/4/14
Test Frequency	5200MHz	Polarization	Horizontal
Temp	22°C	Hum.	61%

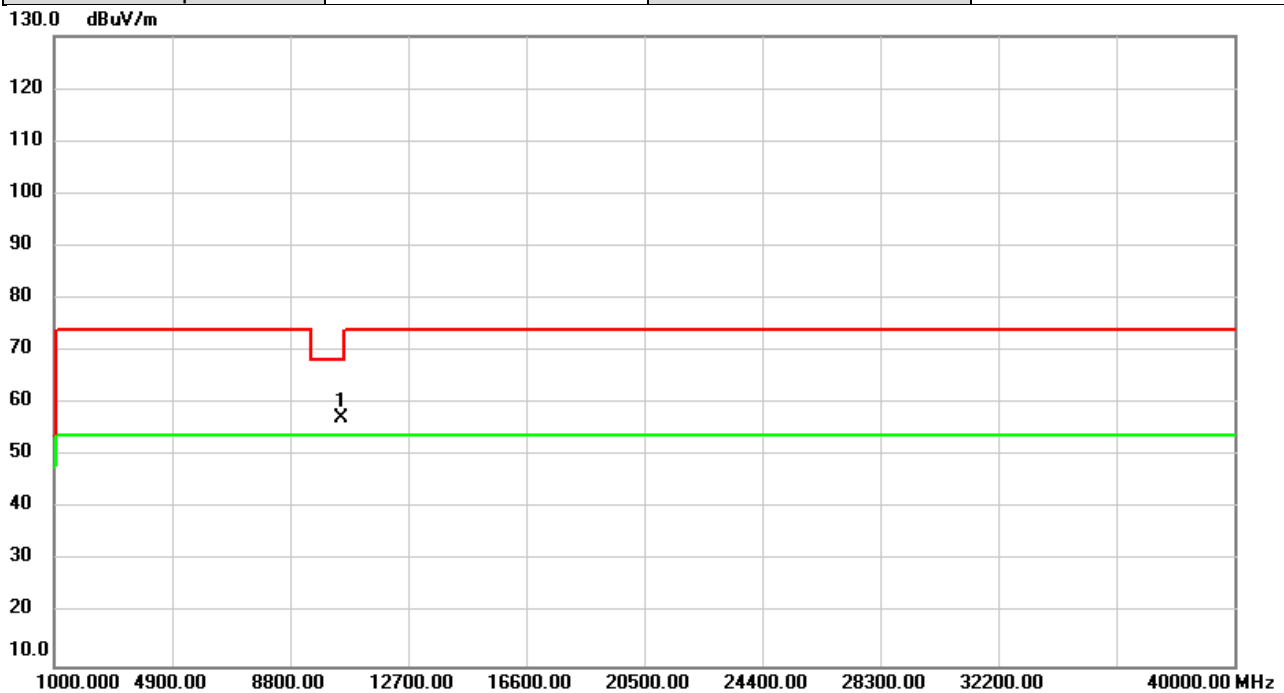


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	10400.00	52.46	4.94	57.40	68.20	-10.80	peak	

REMARKS:

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

Test Mode	IEEE802.11a	Test Date	2021/4/14
Test Frequency	5240MHz	Polarization	Vertical
Temp	22°C	Hum.	61%

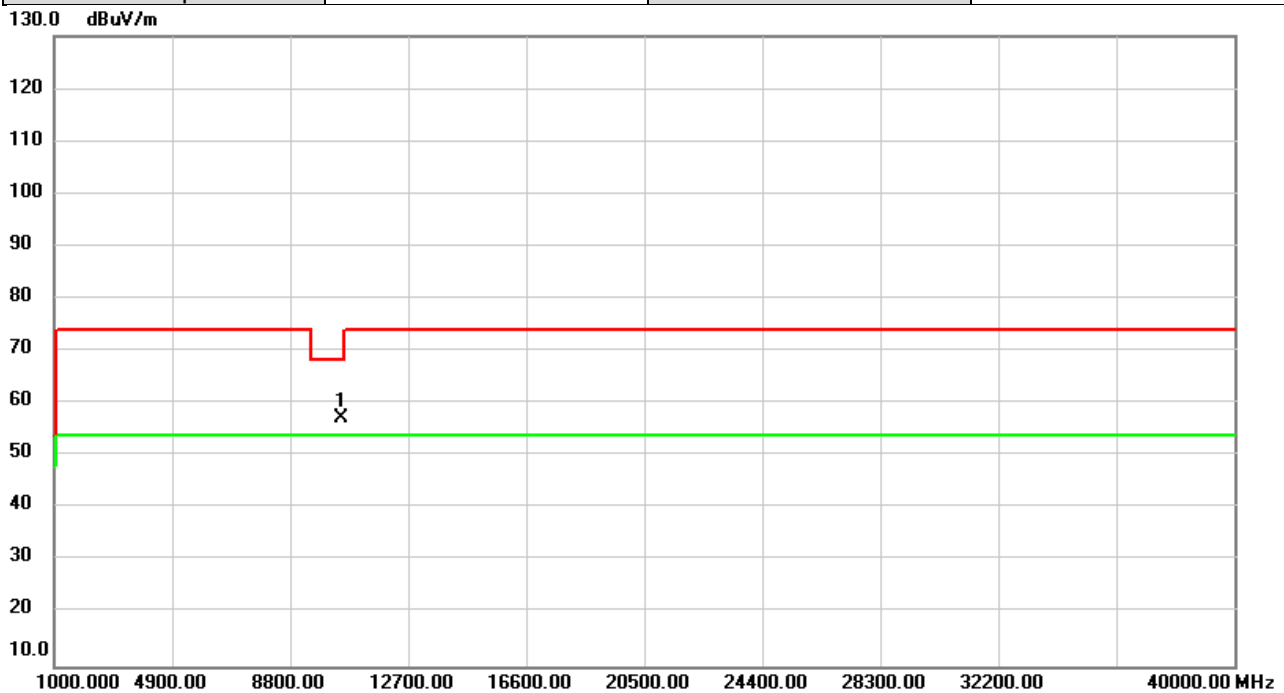


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	10480.00	52.22	5.15	57.37	68.20	-10.83	peak	

REMARKS:

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

Test Mode	IEEE802.11a	Test Date	2021/4/14
Test Frequency	5240MHz	Polarization	Horizontal
Temp	22°C	Hum.	61%

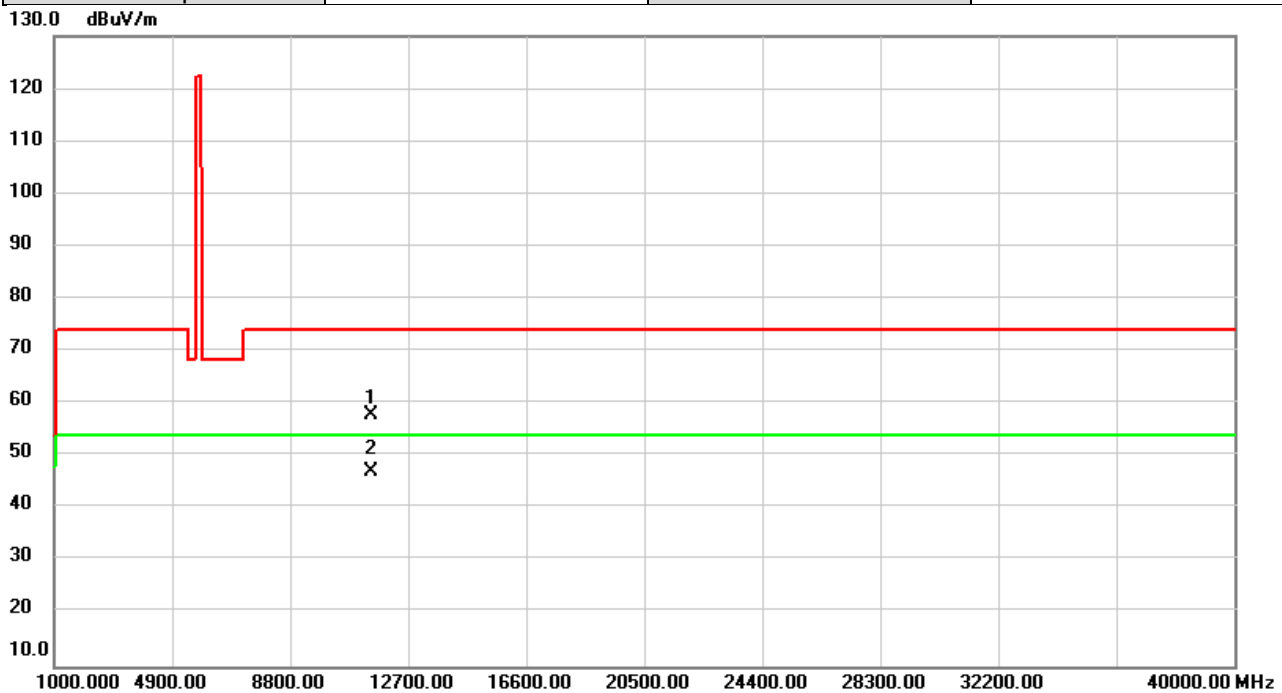


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	10480.00	52.11	5.15	57.26	68.20	-10.94	peak	

REMARKS:

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

Test Mode	IEEE802.11a	Test Date	2021/4/14
Test Frequency	5745MHz	Polarization	Vertical
Temp	22°C	Hum.	61%



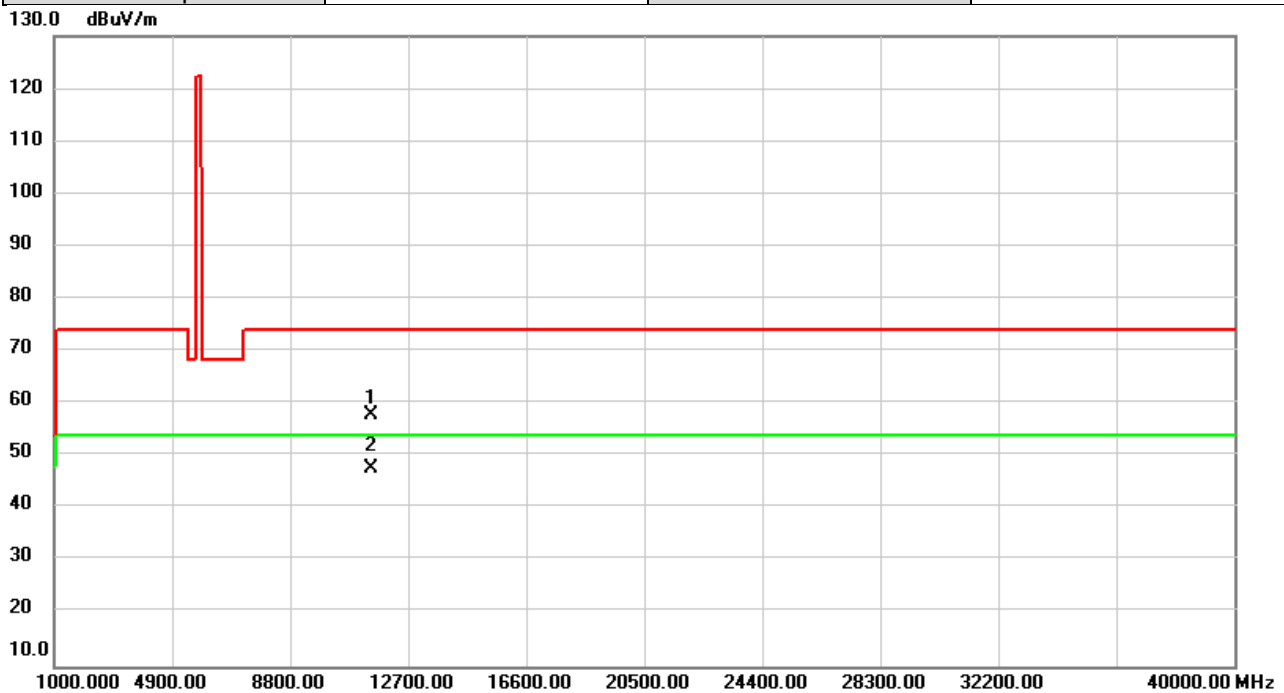
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		11490.00	52.67	5.05	57.72	74.00	-16.28	peak	
2	*	11490.00	42.10	5.05	47.15	54.00	-6.85	AVG	

REMARKS:

(1) Measurement Value = Reading Level + Correct Factor.

(2) Margin Level = Measurement Value - Limit Value.

Test Mode	IEEE802.11a	Test Date	2021/4/14
Test Frequency	5745MHz	Polarization	Horizontal
Temp	22°C	Hum.	61%



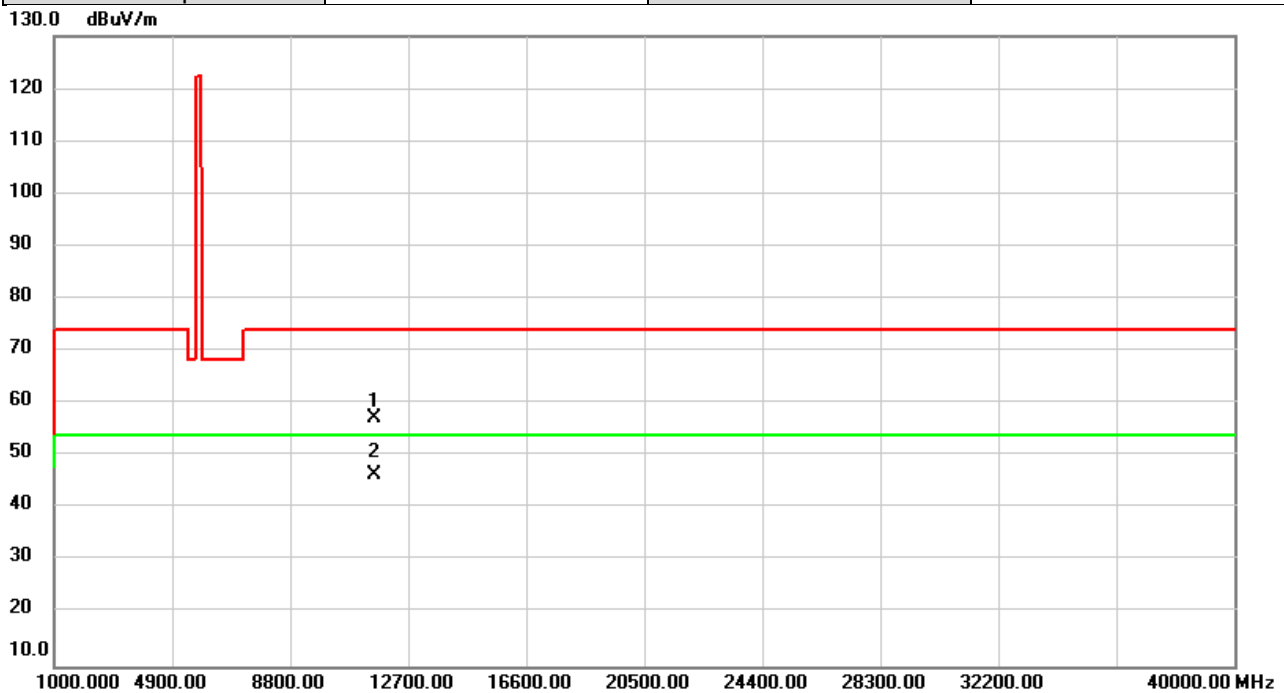
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		11490.00	52.79	5.05	57.84	74.00	-16.16	peak	
2	*	11490.00	42.56	5.05	47.61	54.00	-6.39	AVG	

REMARKS:

(1) Measurement Value = Reading Level + Correct Factor.

(2) Margin Level = Measurement Value - Limit Value.

Test Mode	IEEE802.11a	Test Date	2021/4/14
Test Frequency	5785MHz	Polarization	Vertical
Temp	22°C	Hum.	61%



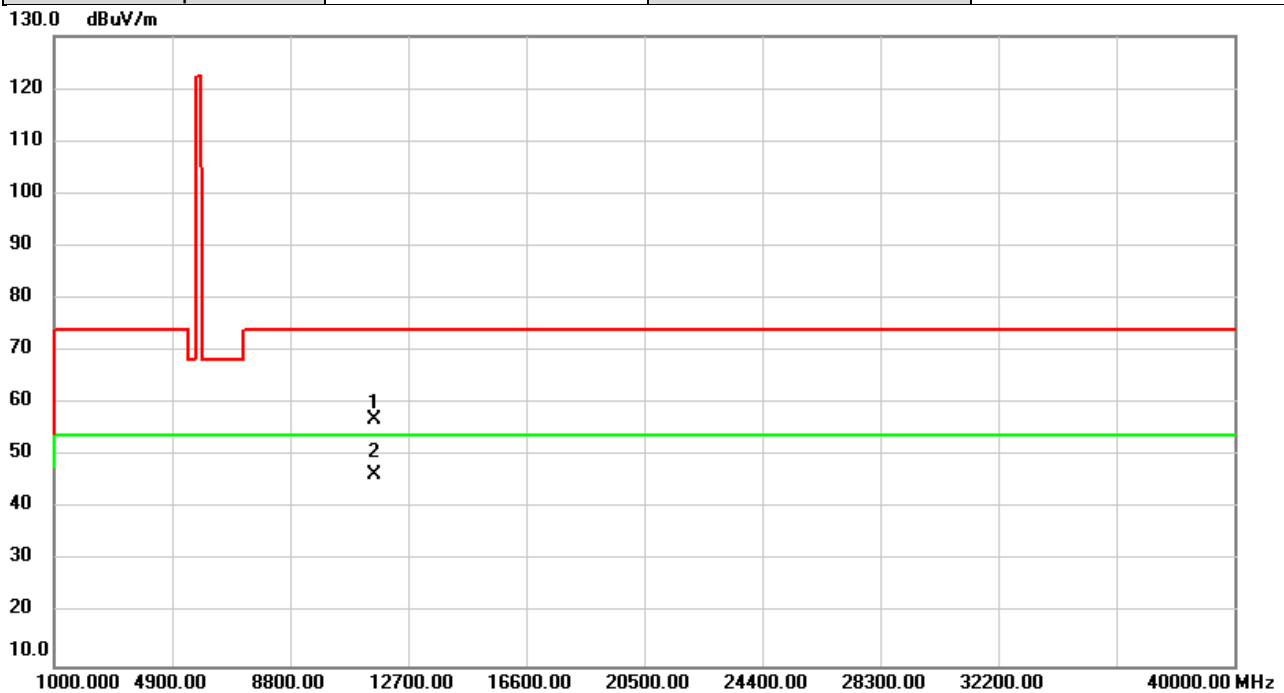
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		11570.00	52.36	4.87	57.23	74.00	-16.77	peak	
2	*	11570.00	41.55	4.87	46.42	54.00	-7.58	AVG	

REMARKS:

(1) Measurement Value = Reading Level + Correct Factor.

(2) Margin Level = Measurement Value - Limit Value.

Test Mode	IEEE802.11a	Test Date	2021/4/14
Test Frequency	5785MHz	Polarization	Horizontal
Temp	22°C	Hum.	61%



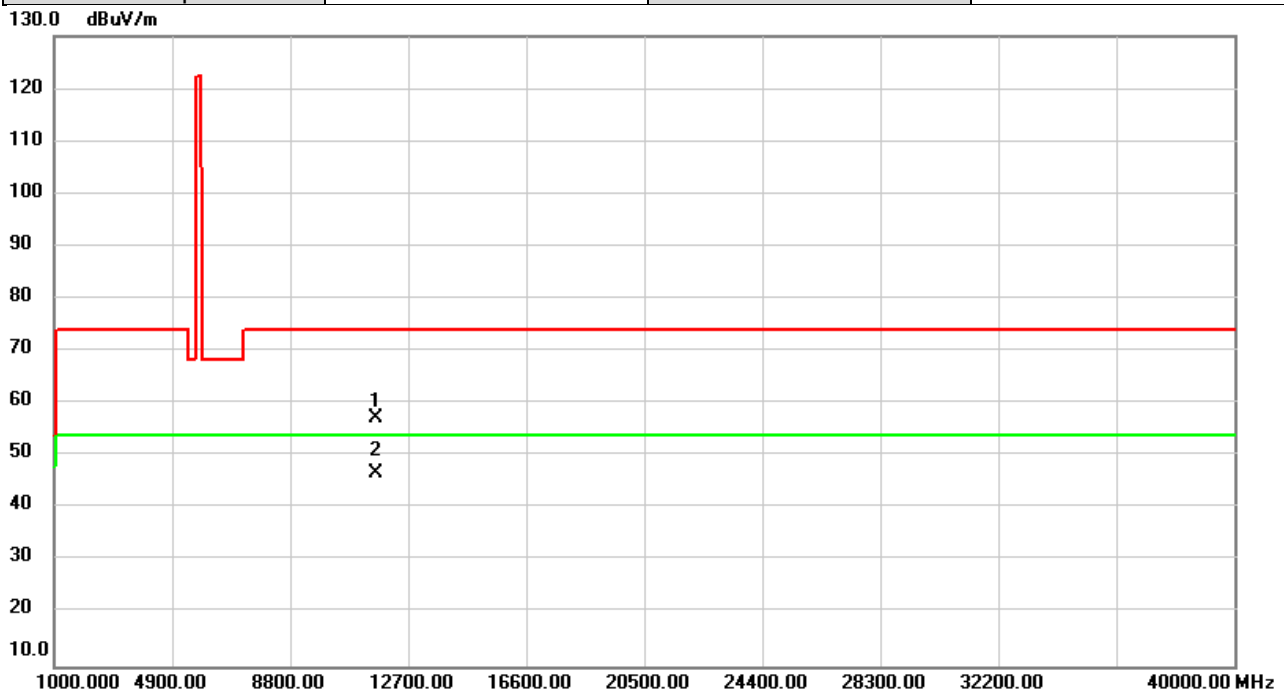
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		11570.00	52.07	4.87	56.94	74.00	-17.06	peak	
2	*	11570.00	41.52	4.87	46.39	54.00	-7.61	AVG	

REMARKS:

(1) Measurement Value = Reading Level + Correct Factor.

(2) Margin Level = Measurement Value - Limit Value.

Test Mode	IEEE802.11a	Test Date	2021/4/14
Test Frequency	5825MHz	Polarization	Vertical
Temp	22°C	Hum.	61%



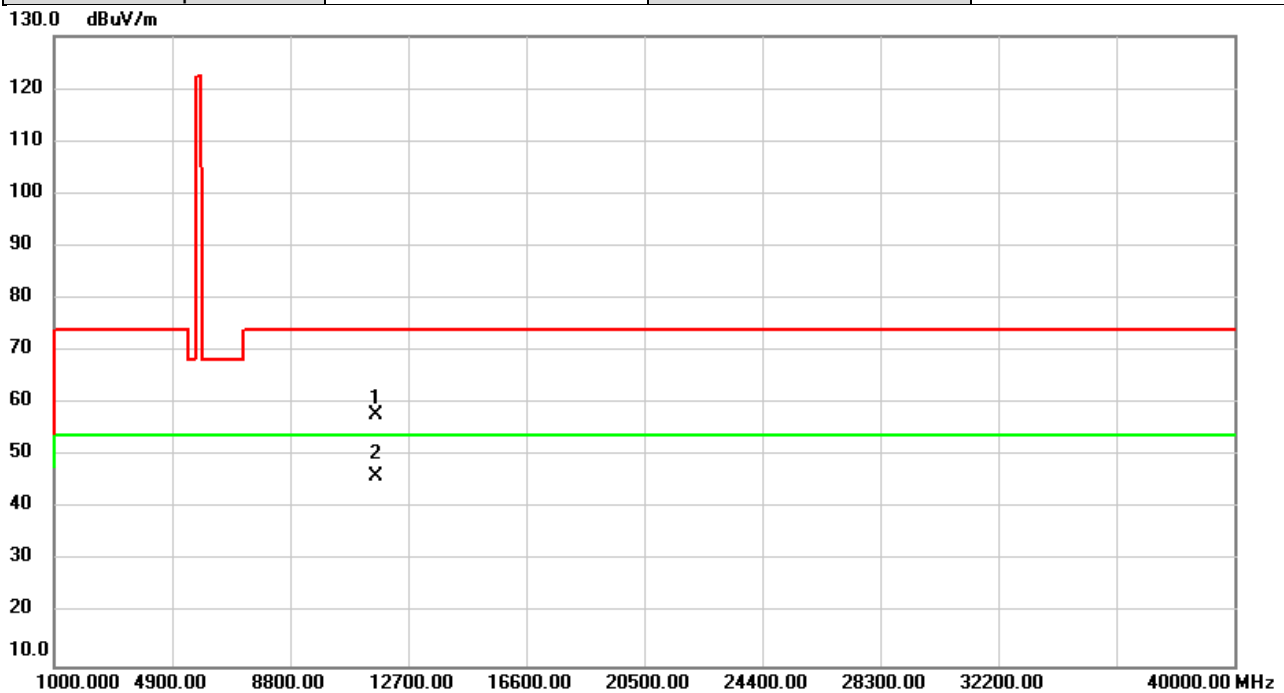
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		11650.00	52.62	4.69	57.31	74.00	-16.69	peak	
2	*	11650.00	42.19	4.69	46.88	54.00	-7.12	AVG	

REMARKS:

(1) Measurement Value = Reading Level + Correct Factor.

(2) Margin Level = Measurement Value - Limit Value.

Test Mode	IEEE802.11a	Test Date	2021/4/14
Test Frequency	5825MHz	Polarization	Horizontal
Temp	22°C	Hum.	61%



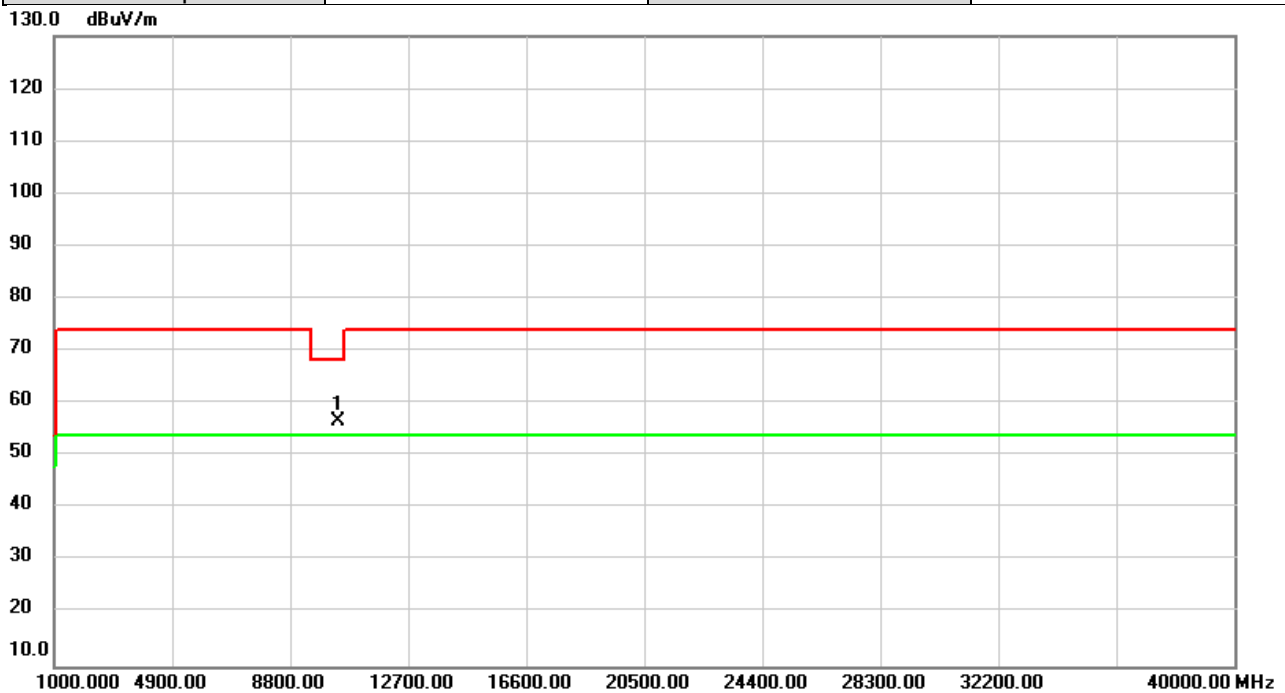
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		11650.00	53.13	4.69	57.82	74.00	-16.18	peak	
2	*	11650.00	41.47	4.69	46.16	54.00	-7.84	AVG	

REMARKS:

(1) Measurement Value = Reading Level + Correct Factor.

(2) Margin Level = Measurement Value - Limit Value.

Test Mode	IEEE802.11n(HT20)	Test Date	2021/4/14
Test Frequency	5180MHz	Polarization	Vertical
Temp	22°C	Hum.	61%

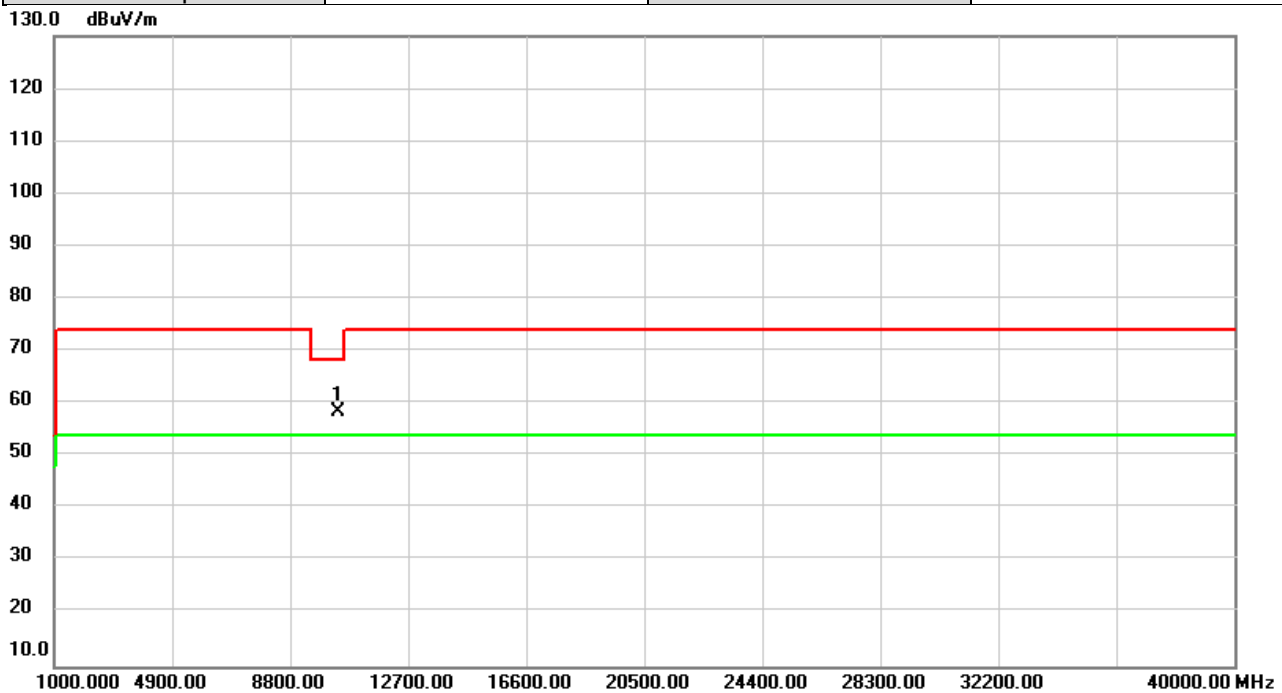


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	10360.00	51.72	4.85	56.57	68.20	-11.63	peak	

REMARKS:

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

Test Mode	IEEE802.11n(HT20)	Test Date	2021/4/14
Test Frequency	5180MHz	Polarization	Horizontal
Temp	22°C	Hum.	61%

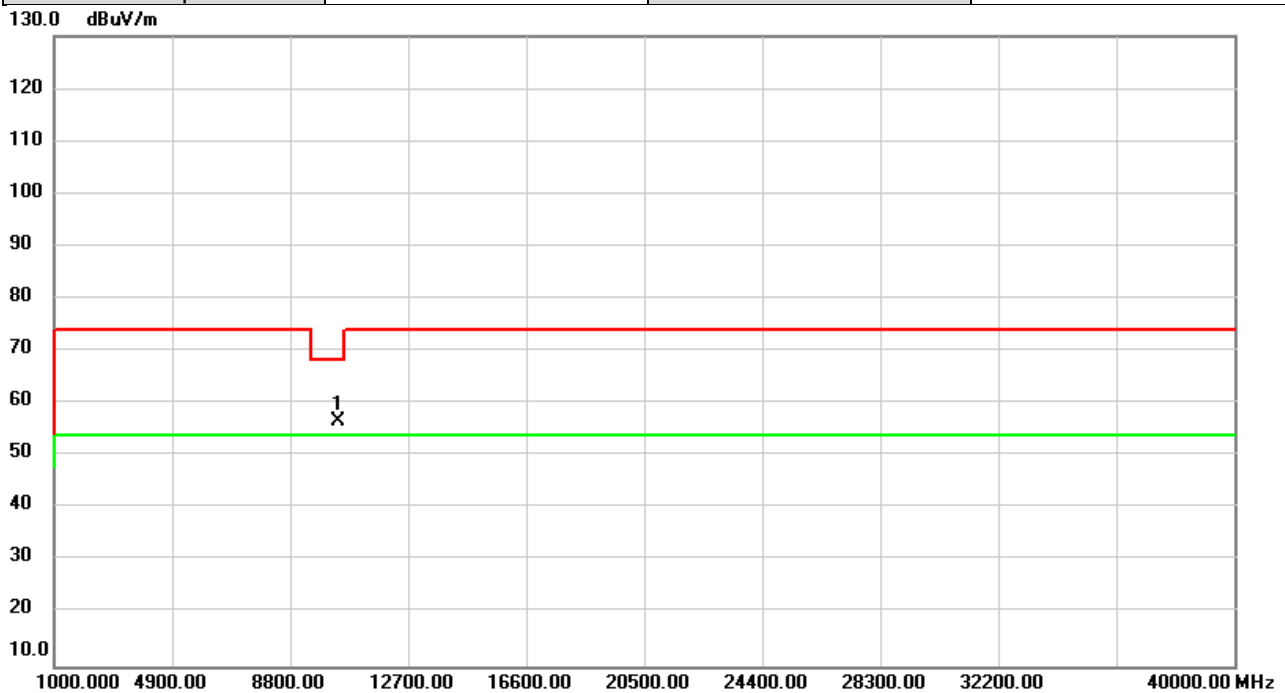


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	10360.00	53.64	4.85	58.49	68.20	-9.71	peak	

REMARKS:

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

Test Mode	IEEE802.11n(HT20)	Test Date	2021/4/14
Test Frequency	5200MHz	Polarization	Vertical
Temp	22°C	Hum.	61%

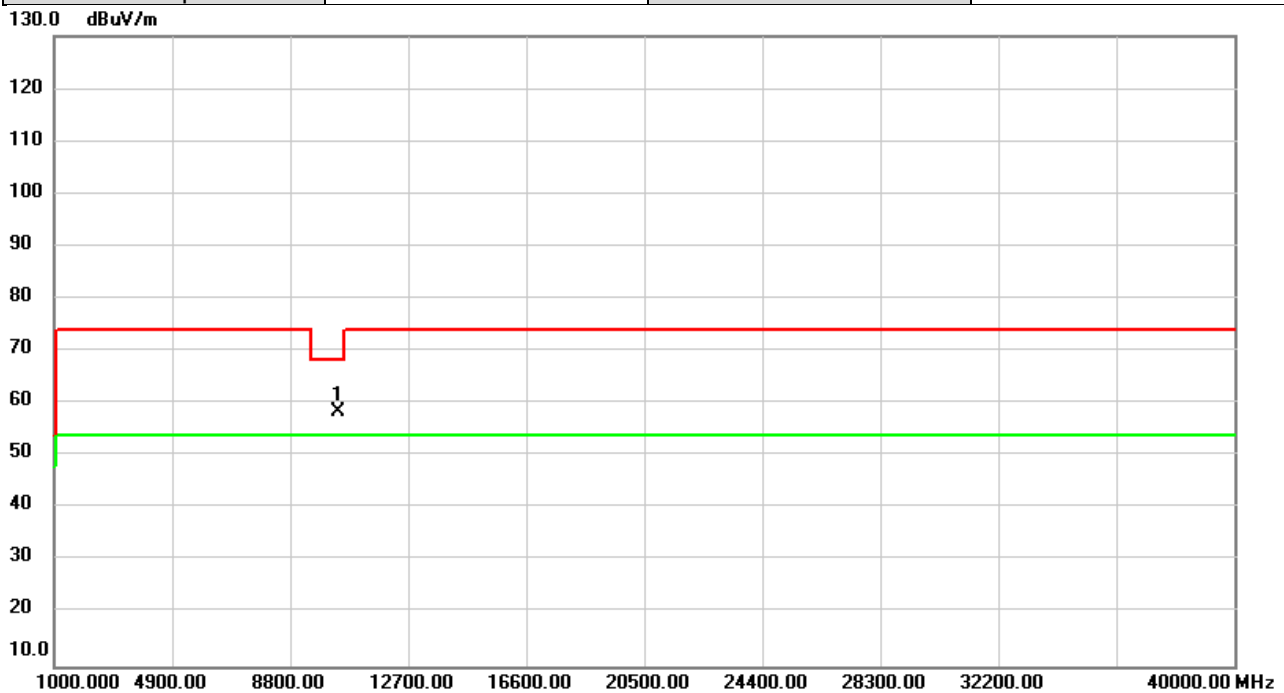


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	10400.00	51.82	4.94	56.76	68.20	-11.44	peak	

REMARKS:

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

Test Mode	IEEE802.11n(HT20)	Test Date	2021/4/14
Test Frequency	5200MHz	Polarization	Horizontal
Temp	22°C	Hum.	61%

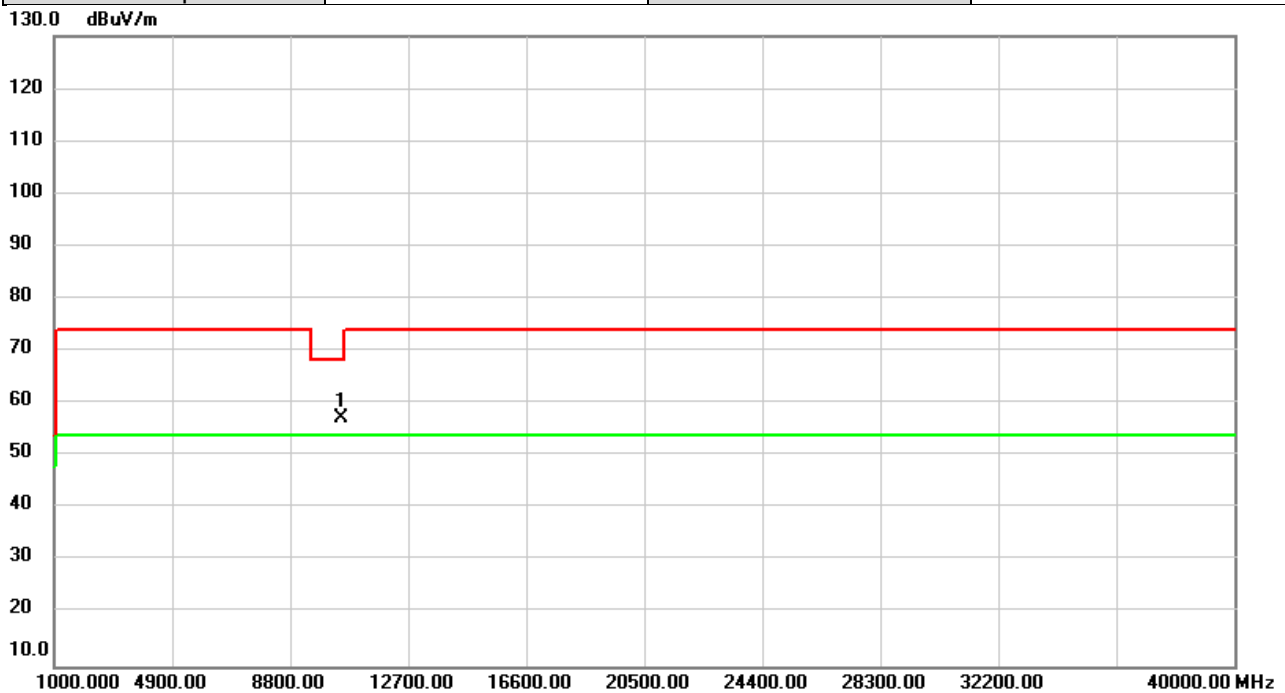


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	10400.00	53.51	4.94	58.45	68.20	-9.75	peak	

REMARKS:

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

Test Mode	IEEE802.11n(HT20)	Test Date	2021/4/14
Test Frequency	5240MHz	Polarization	Vertical
Temp	22°C	Hum.	61%

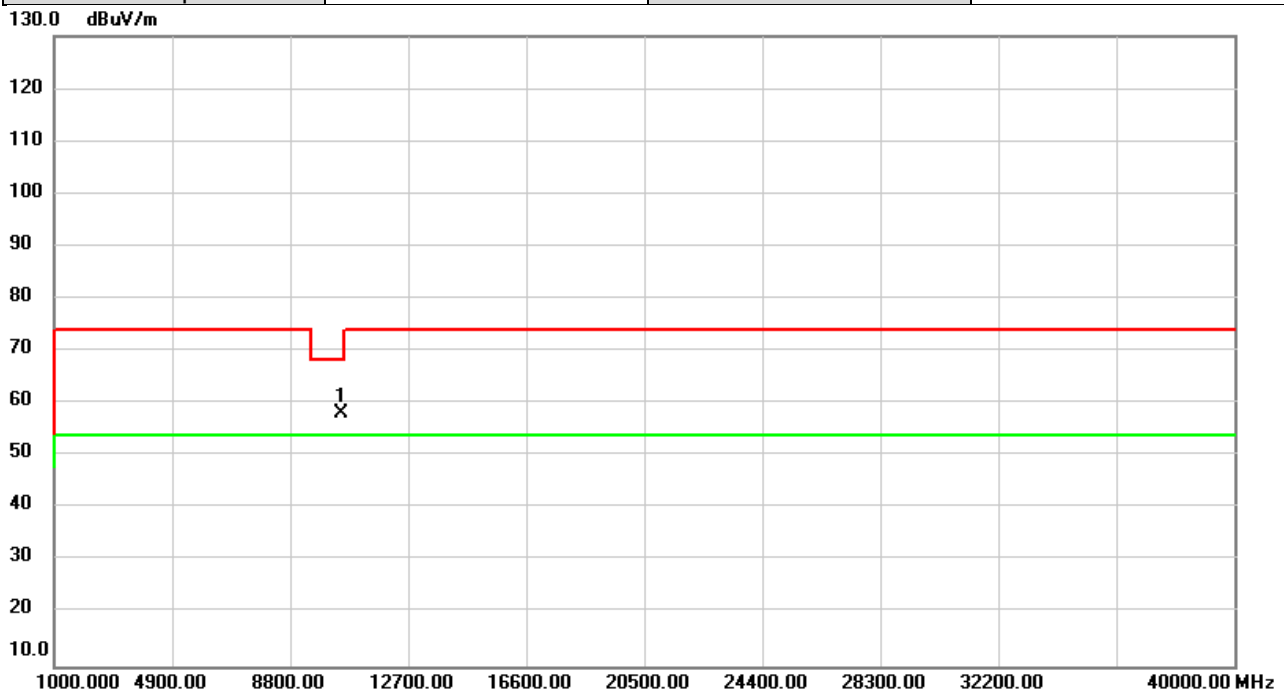


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	10480.00	52.00	5.15	57.15	68.20	-11.05	peak	

REMARKS:

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

Test Mode	IEEE802.11n(HT20)	Test Date	2021/4/14
Test Frequency	5240MHz	Polarization	Horizontal
Temp	22°C	Hum.	61%

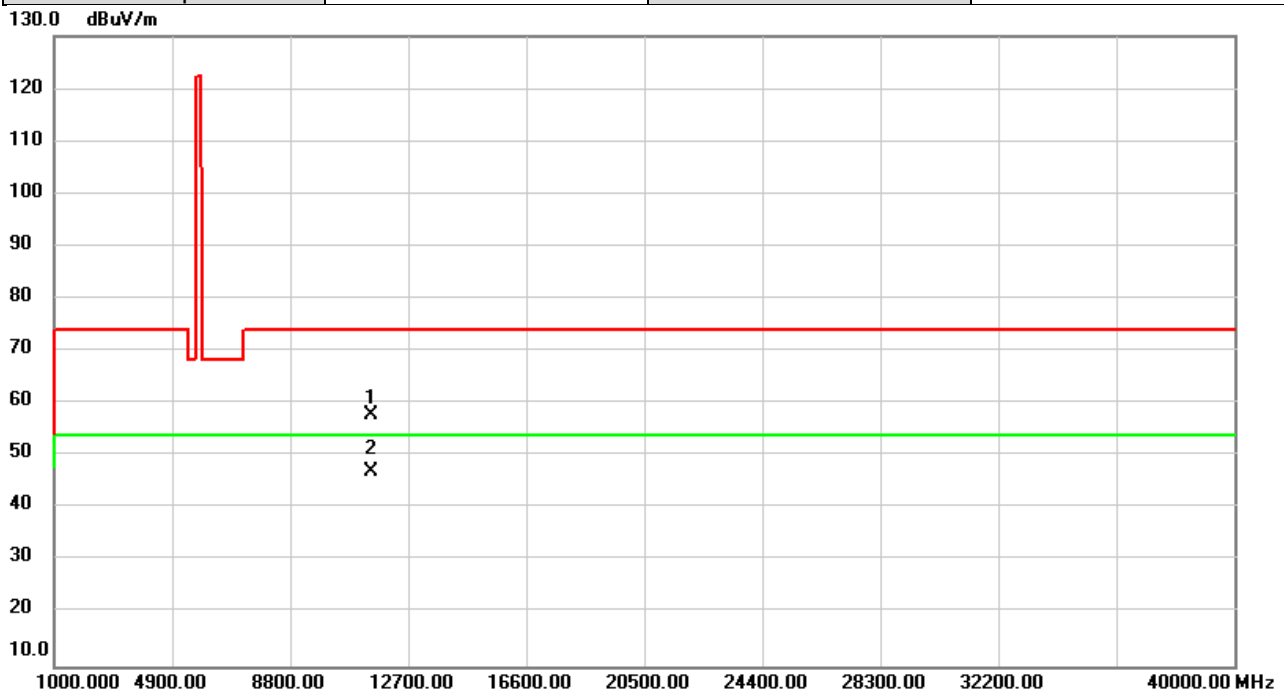


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	10480.00	52.97	5.15	58.12	68.20	-10.08	peak	

REMARKS:

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

Test Mode	IEEE802.11n(HT20)	Test Date	2021/4/14
Test Frequency	5745MHz	Polarization	Vertical
Temp	22°C	Hum.	61%



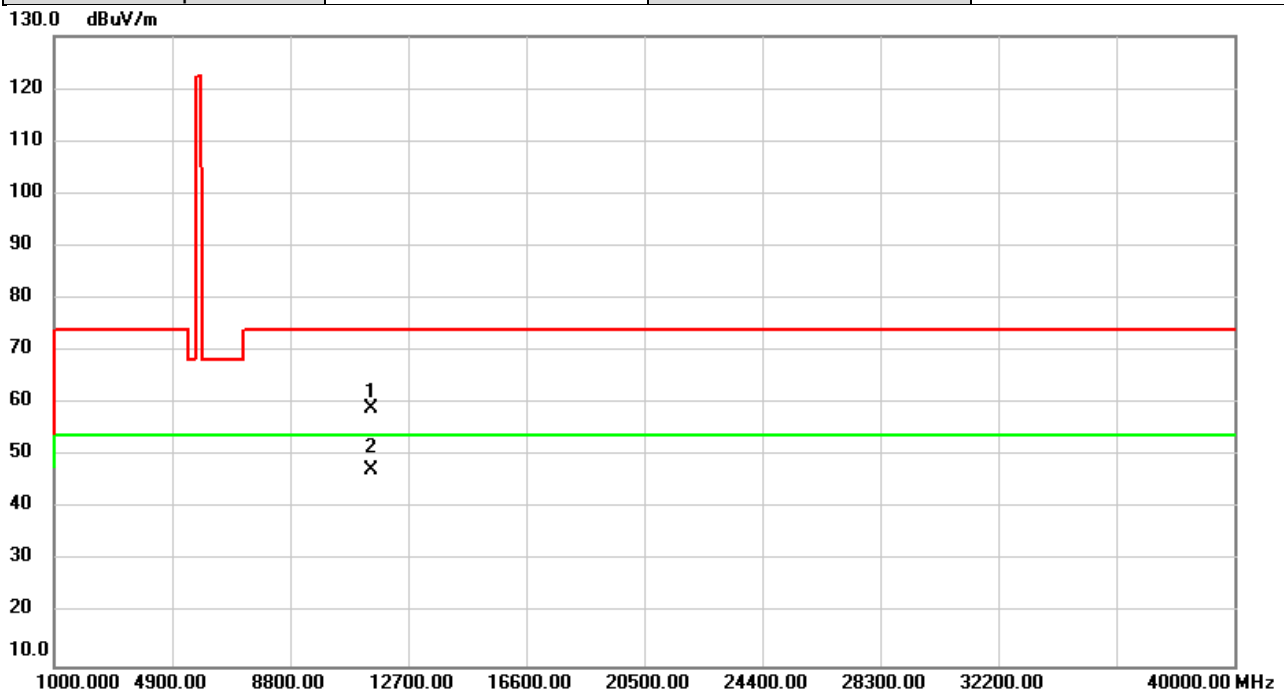
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		11490.00	52.73	5.05	57.78	74.00	-16.22	peak	
2	*	11490.00	41.91	5.05	46.96	54.00	-7.04	AVG	

REMARKS:

(1) Measurement Value = Reading Level + Correct Factor.

(2) Margin Level = Measurement Value - Limit Value.

Test Mode	IEEE802.11n(HT20)	Test Date	2021/4/14
Test Frequency	5745MHz	Polarization	Horizontal
Temp	22°C	Hum.	61%



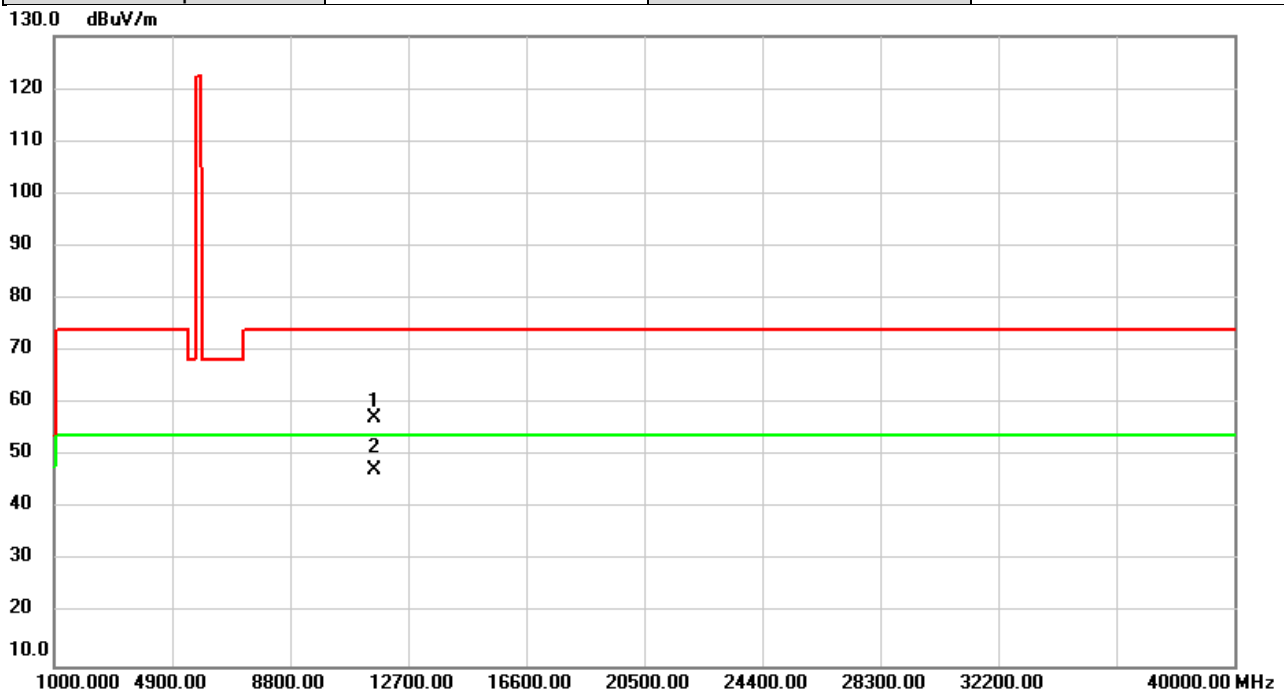
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		11490.00	53.90	5.05	58.95	74.00	-15.05	peak	
2	*	11490.00	42.43	5.05	47.48	54.00	-6.52	AVG	

REMARKS:

(1) Measurement Value = Reading Level + Correct Factor.

(2) Margin Level = Measurement Value - Limit Value.

Test Mode	IEEE802.11n(HT20)	Test Date	2021/4/14
Test Frequency	5785MHz	Polarization	Vertical
Temp	22°C	Hum.	61%



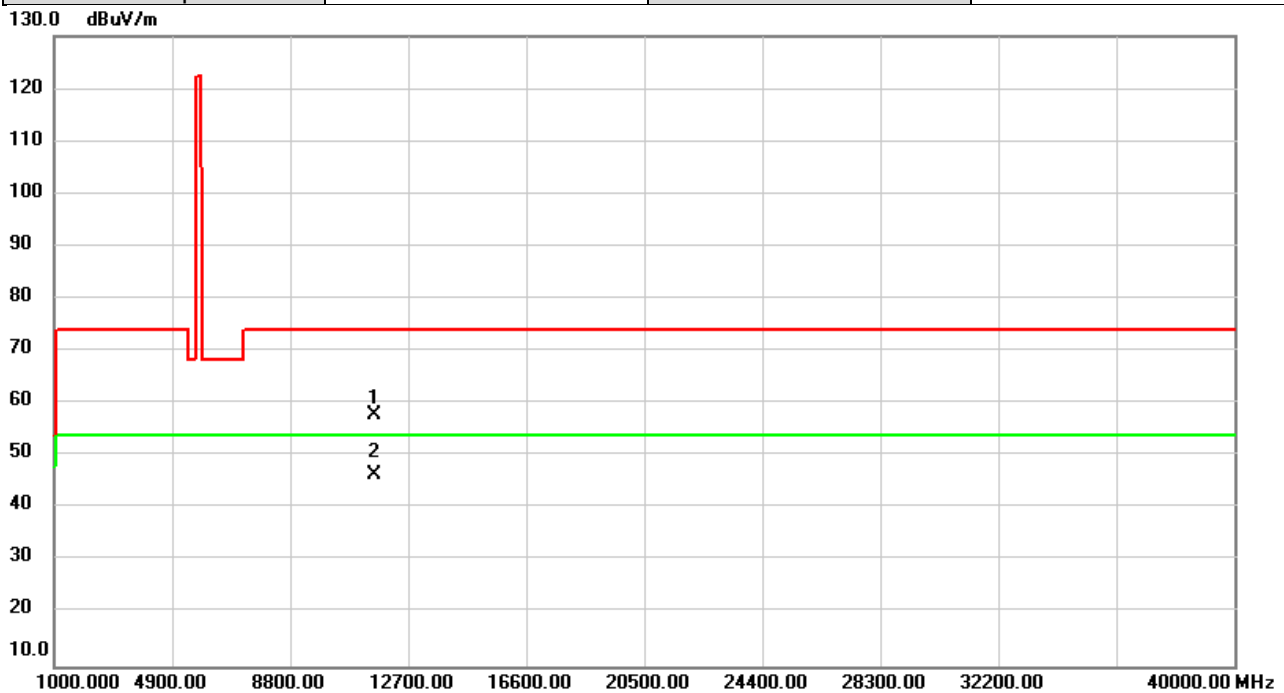
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		11570.00	52.33	4.87	57.20	74.00	-16.80	peak	
2	*	11570.00	42.61	4.87	47.48	54.00	-6.52	AVG	

REMARKS:

(1) Measurement Value = Reading Level + Correct Factor.

(2) Margin Level = Measurement Value - Limit Value.

Test Mode	IEEE802.11n(HT20)	Test Date	2021/4/14
Test Frequency	5785MHz	Polarization	Horizontal
Temp	22°C	Hum.	61%



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		11570.00	53.00	4.87	57.87	74.00	-16.13	peak	
2	*	11570.00	41.55	4.87	46.42	54.00	-7.58	AVG	

REMARKS:

(1) Measurement Value = Reading Level + Correct Factor.

(2) Margin Level = Measurement Value - Limit Value.

Test Mode	IEEE802.11n(HT20)	Test Date	2021/4/14
Test Frequency	5825MHz	Polarization	Vertical
Temp	22°C	Hum.	61%



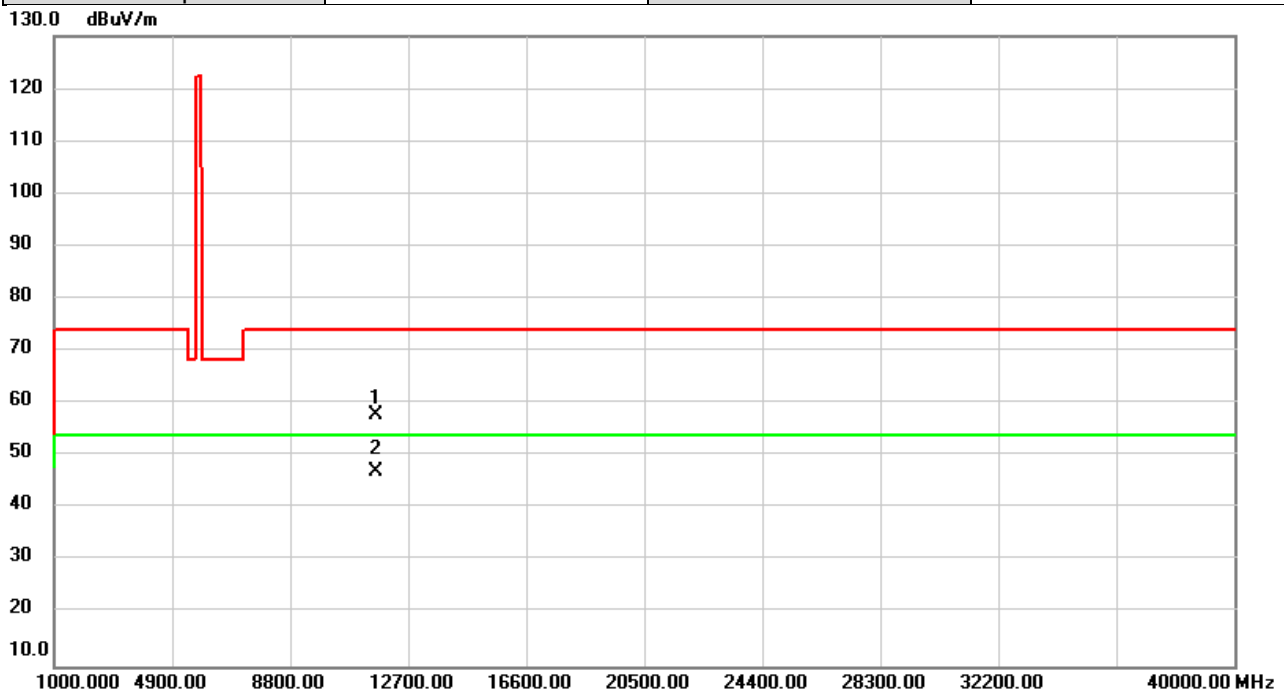
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	11650.00	53.08	4.69	57.77	74.00	-16.23	peak	
2		11650.00	42.08	4.69	46.77	74.00	-27.23	peak	

REMARKS:

(1) Measurement Value = Reading Level + Correct Factor.

(2) Margin Level = Measurement Value - Limit Value.

Test Mode	IEEE802.11n(HT20)	Test Date	2021/4/14
Test Frequency	5825MHz	Polarization	Horizontal
Temp	22°C	Hum.	61%



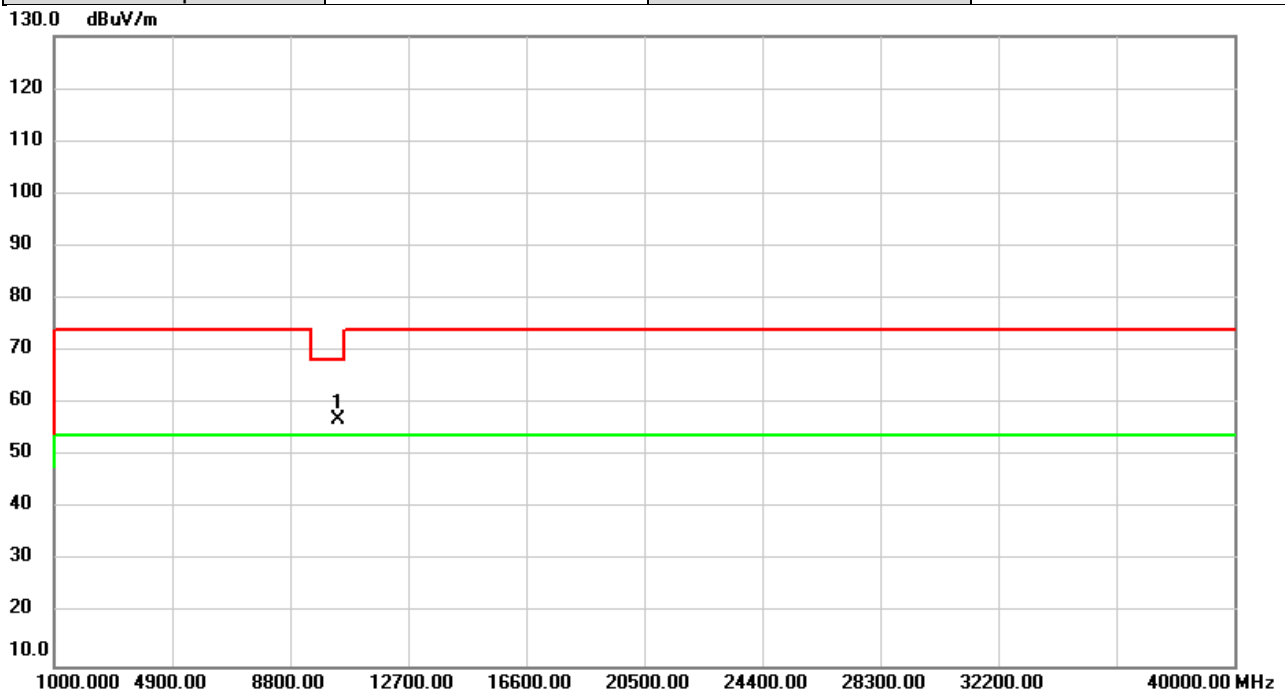
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		11650.00	53.18	4.69	57.87	74.00	-16.13	peak	
2	*	11650.00	42.23	4.69	46.92	54.00	-7.08	AVG	

REMARKS:

(1) Measurement Value = Reading Level + Correct Factor.

(2) Margin Level = Measurement Value - Limit Value.

Test Mode	IEEE802.11n(HT40)	Test Date	2021/4/14
Test Frequency	5190MHz	Polarization	Vertical
Temp	22°C	Hum.	61%

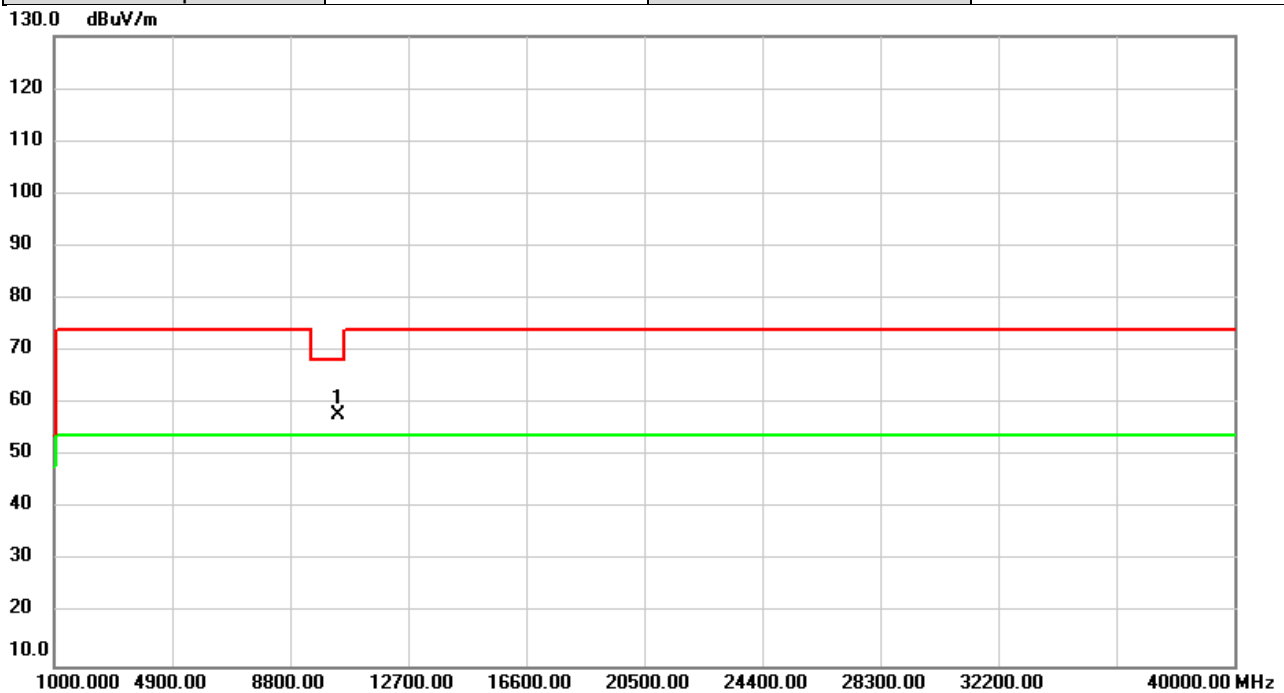


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	10380.00	52.21	4.89	57.10	68.20	-11.10	peak	

REMARKS:

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

Test Mode	IEEE802.11n(HT40)	Test Date	2021/4/14
Test Frequency	5190MHz	Polarization	Horizontal
Temp	22°C	Hum.	61%

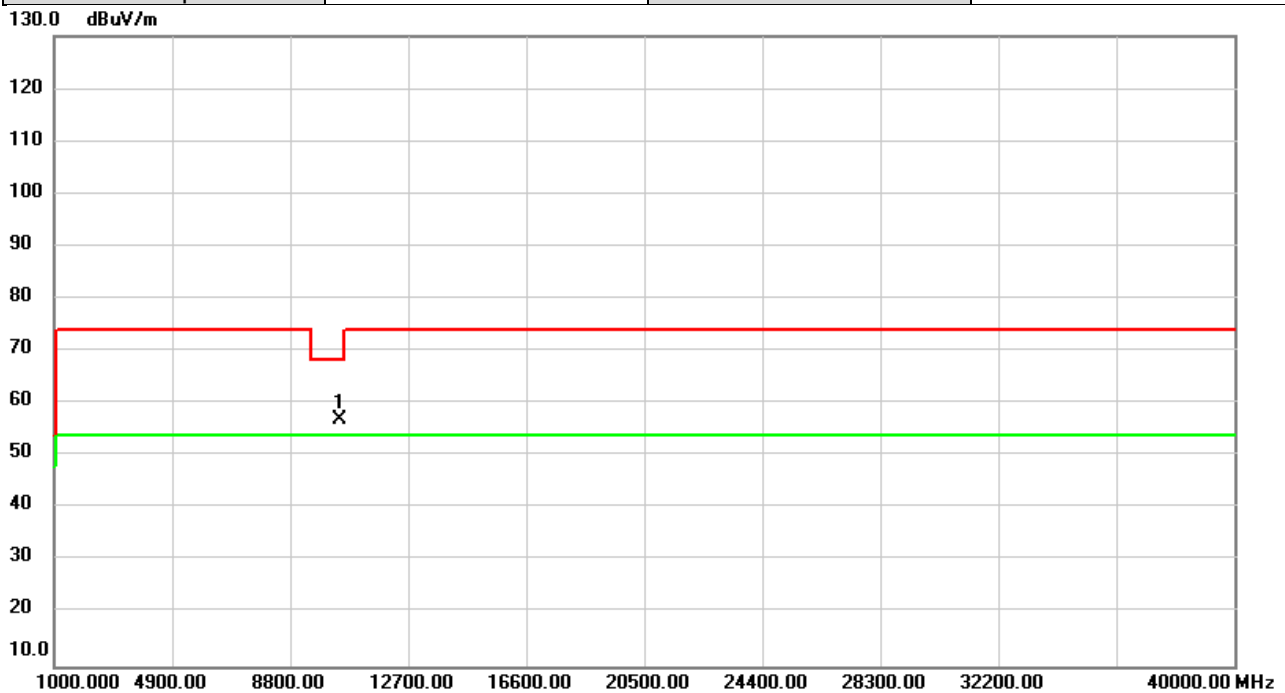


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	10380.00	53.10	4.89	57.99	68.20	-10.21	peak	

REMARKS:

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

Test Mode	IEEE802.11n(HT40)	Test Date	2021/4/14
Test Frequency	5230MHz	Polarization	Vertical
Temp	22°C	Hum.	61%

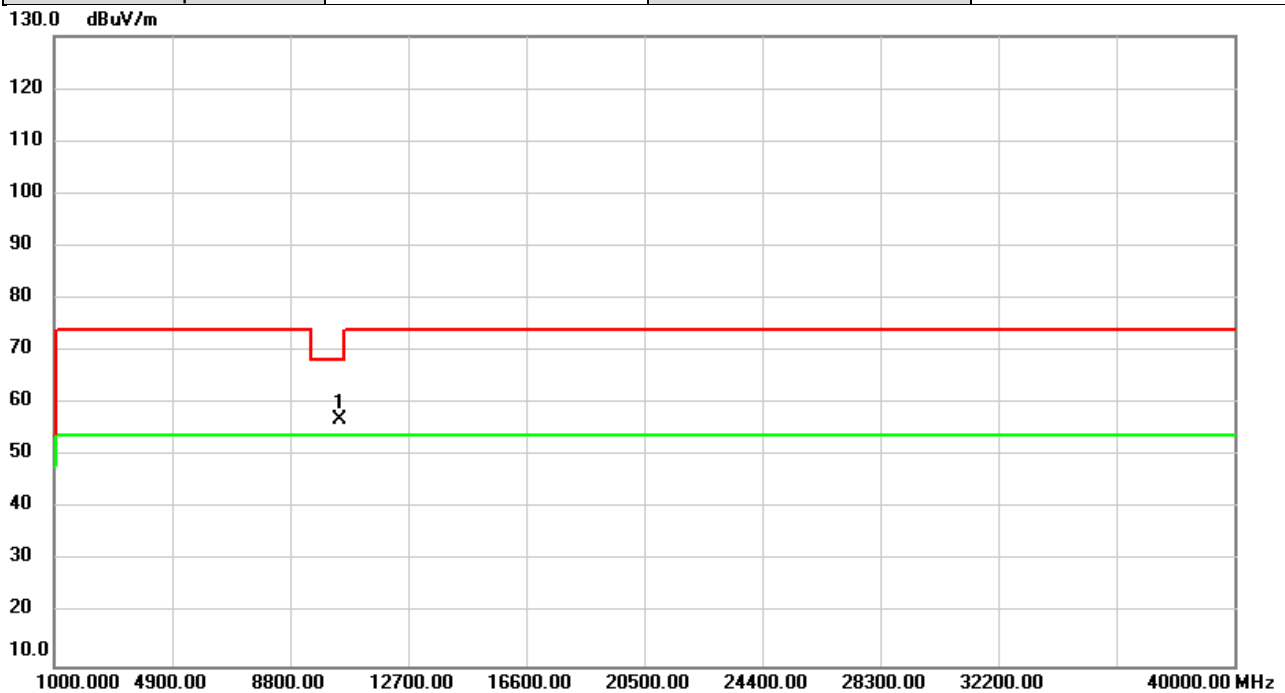


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	10460.00	51.85	5.10	56.95	68.20	-11.25	peak	

REMARKS:

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

Test Mode	IEEE802.11n(HT40)	Test Date	2021/4/14
Test Frequency	5230MHz	Polarization	Horizontal
Temp	22°C	Hum.	61%

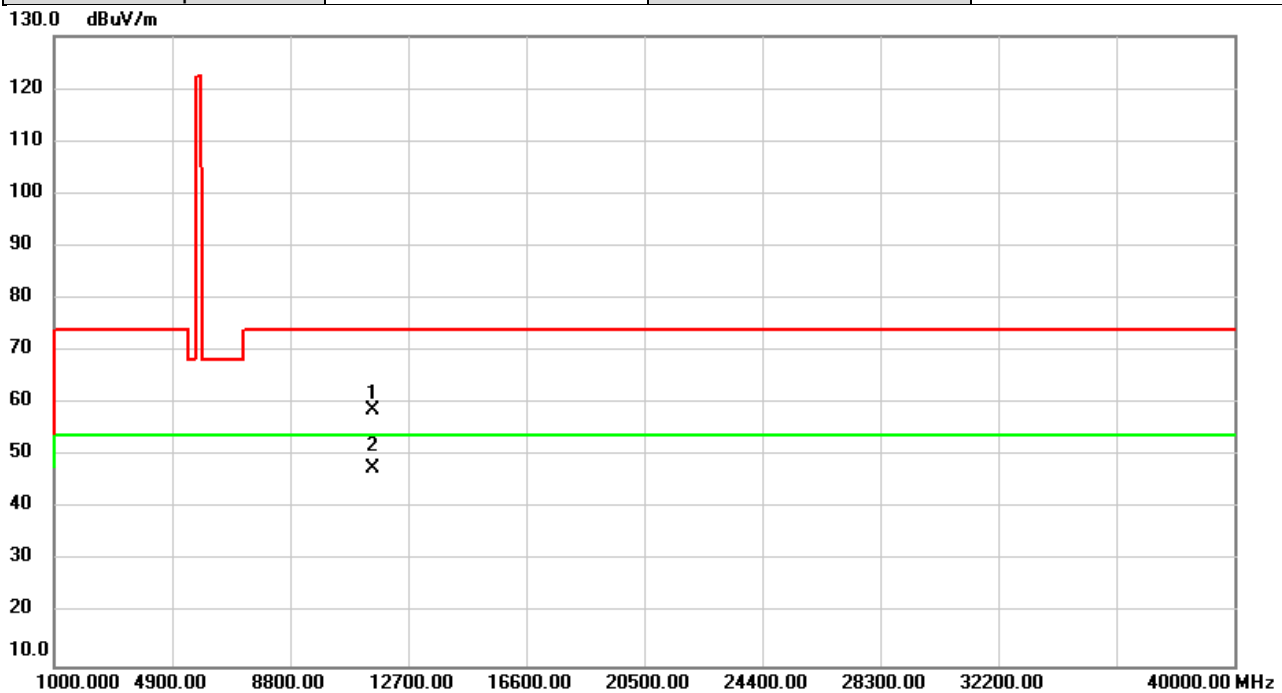


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	10460.00	51.92	5.10	57.02	68.20	-11.18	peak	

REMARKS:

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

Test Mode	IEEE802.11n(HT40)	Test Date	2021/4/14
Test Frequency	5755MHz	Polarization	Vertical
Temp	22°C	Hum.	61%



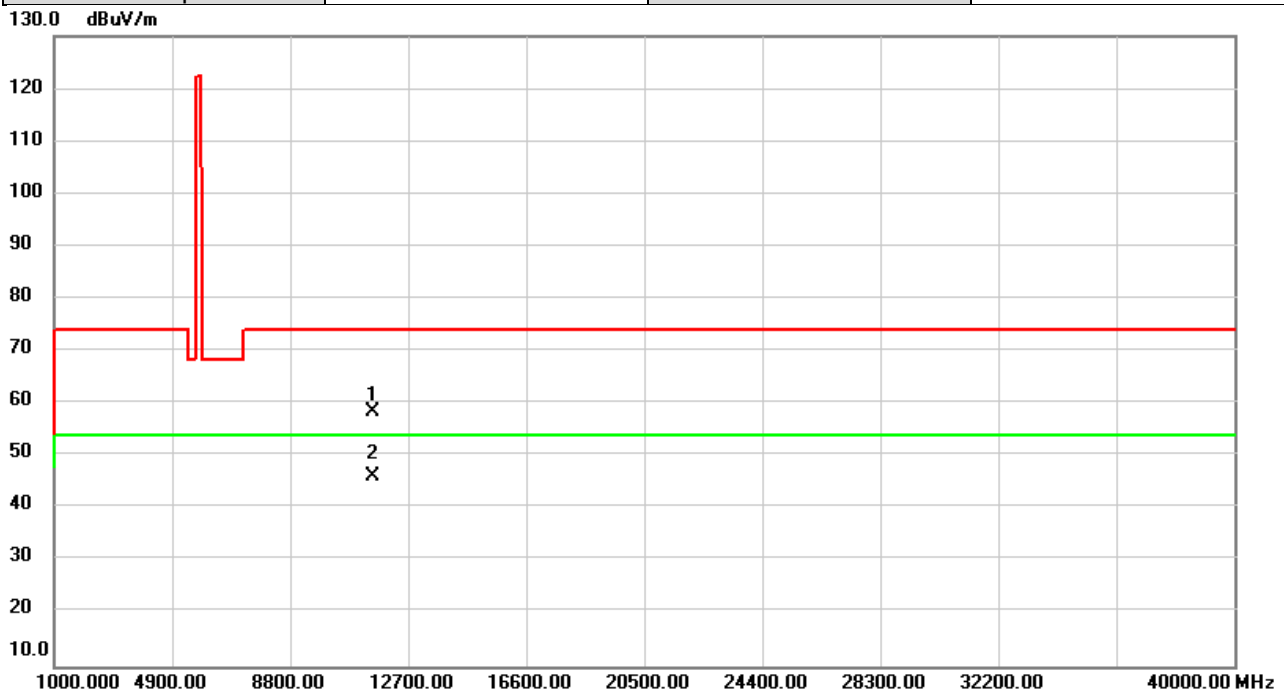
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		11510.00	53.75	5.01	58.76	74.00	-15.24	peak	
2	*	11510.00	42.78	5.01	47.79	54.00	-6.21	AVG	

REMARKS:

(1) Measurement Value = Reading Level + Correct Factor.

(2) Margin Level = Measurement Value - Limit Value.

Test Mode	IEEE802.11n(HT40)	Test Date	2021/4/14
Test Frequency	5755MHz	Polarization	Horizontal
Temp	22°C	Hum.	61%



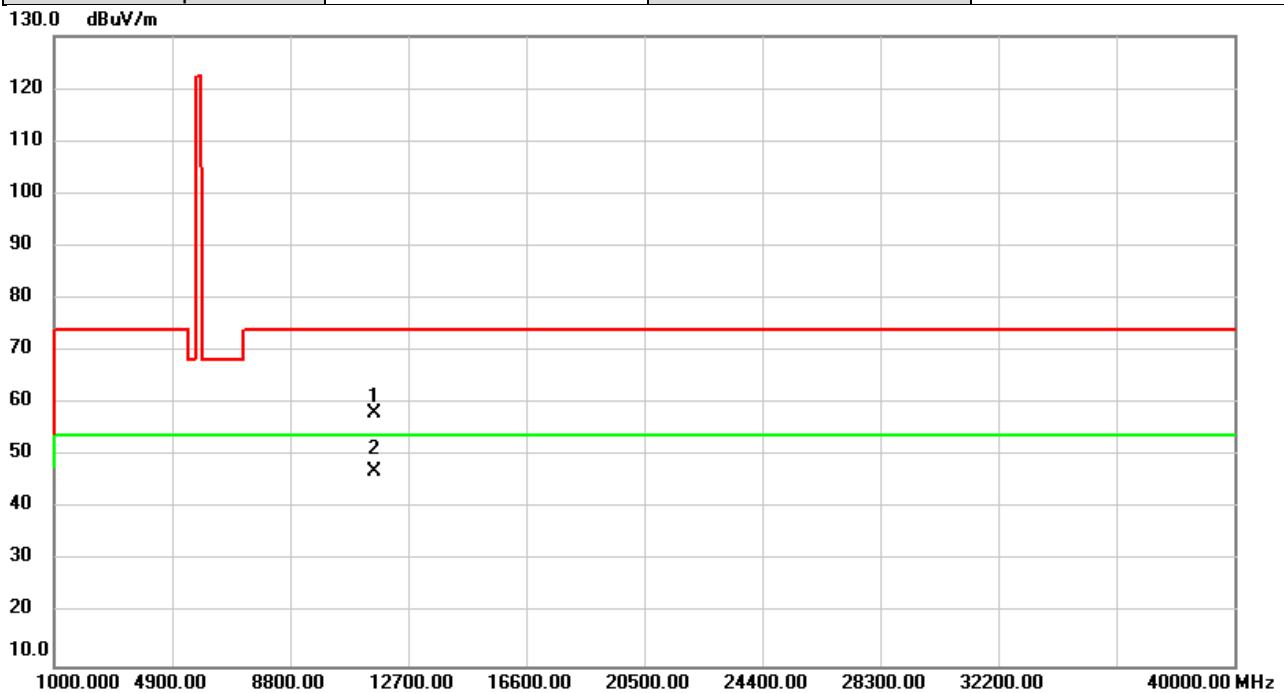
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		11510.00	53.48	5.01	58.49	74.00	-15.51	peak	
2	*	11510.00	41.24	5.01	46.25	54.00	-7.75	AVG	

REMARKS:

(1) Measurement Value = Reading Level + Correct Factor.

(2) Margin Level = Measurement Value - Limit Value.

Test Mode	IEEE802.11n(HT40)	Test Date	2021/4/14
Test Frequency	5795MHz	Polarization	Vertical
Temp	22°C	Hum.	61%



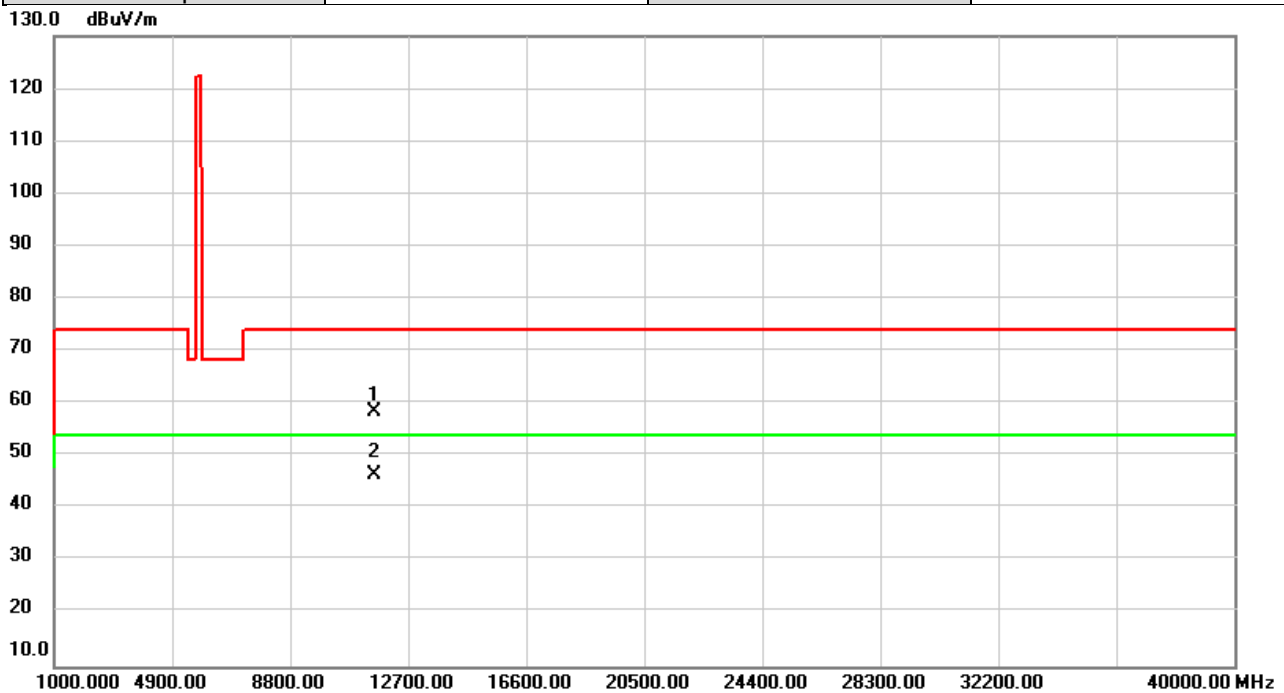
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		11590.00	53.35	4.83	58.18	74.00	-15.82	peak	
2	*	11590.00	42.36	4.83	47.19	54.00	-6.81	AVG	

REMARKS:

(1) Measurement Value = Reading Level + Correct Factor.

(2) Margin Level = Measurement Value - Limit Value.

Test Mode	IEEE802.11n(HT40)	Test Date	2021/4/14
Test Frequency	5795MHz	Polarization	Horizontal
Temp	22°C	Hum.	61%



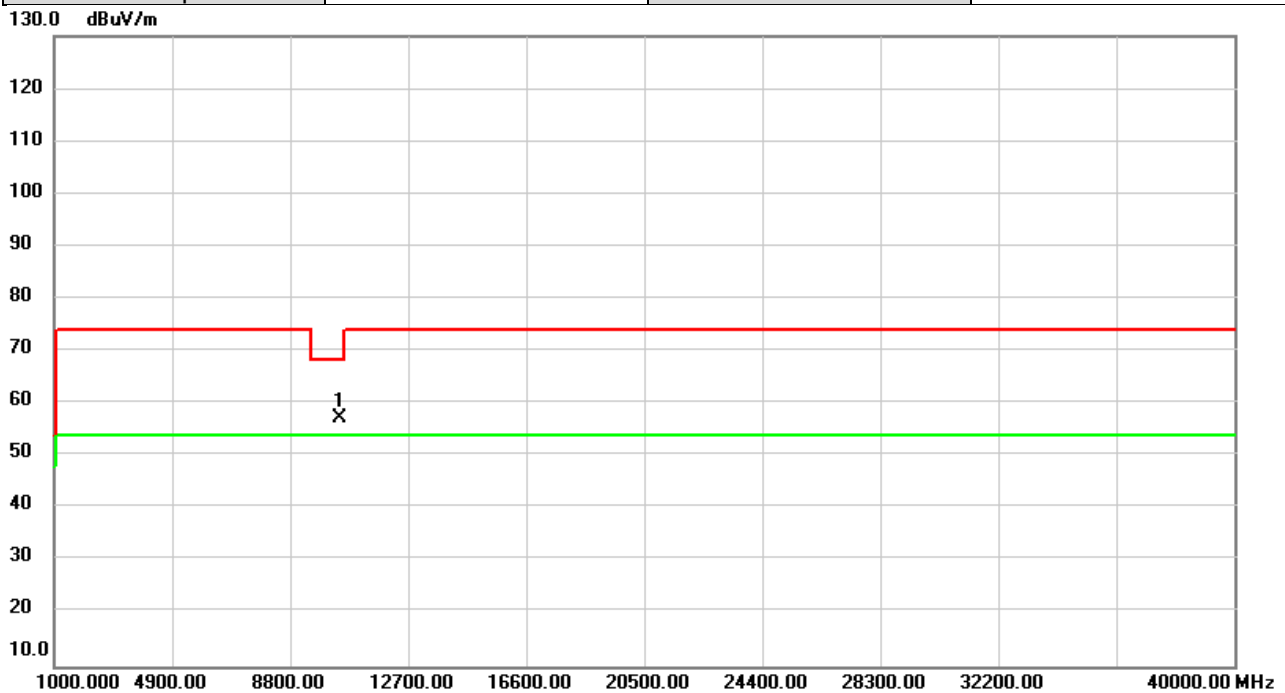
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		11590.00	53.52	4.83	58.35	74.00	-15.65	peak	
2	*	11590.00	41.59	4.83	46.42	54.00	-7.58	AVG	

REMARKS:

(1) Measurement Value = Reading Level + Correct Factor.

(2) Margin Level = Measurement Value - Limit Value.

Test Mode	IEEE802.11ac(VHT80)	Test Date	2021/4/14
Test Frequency	5210MHz	Polarization	Vertical
Temp	22°C	Hum.	61%

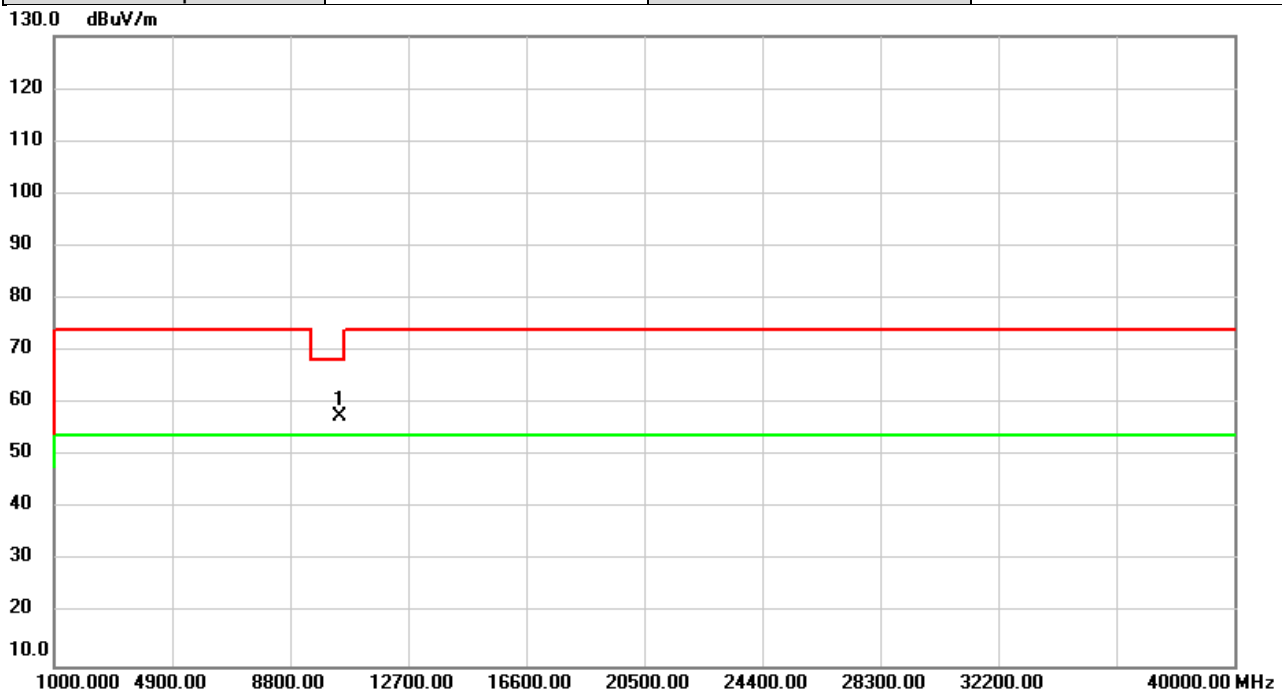


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	10420.00	52.14	4.99	57.13	68.20	-11.07	peak	

REMARKS:

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

Test Mode	IEEE802.11ac(VHT80)	Test Date	2021/4/14
Test Frequency	5210MHz	Polarization	Horizontal
Temp	22°C	Hum.	61%

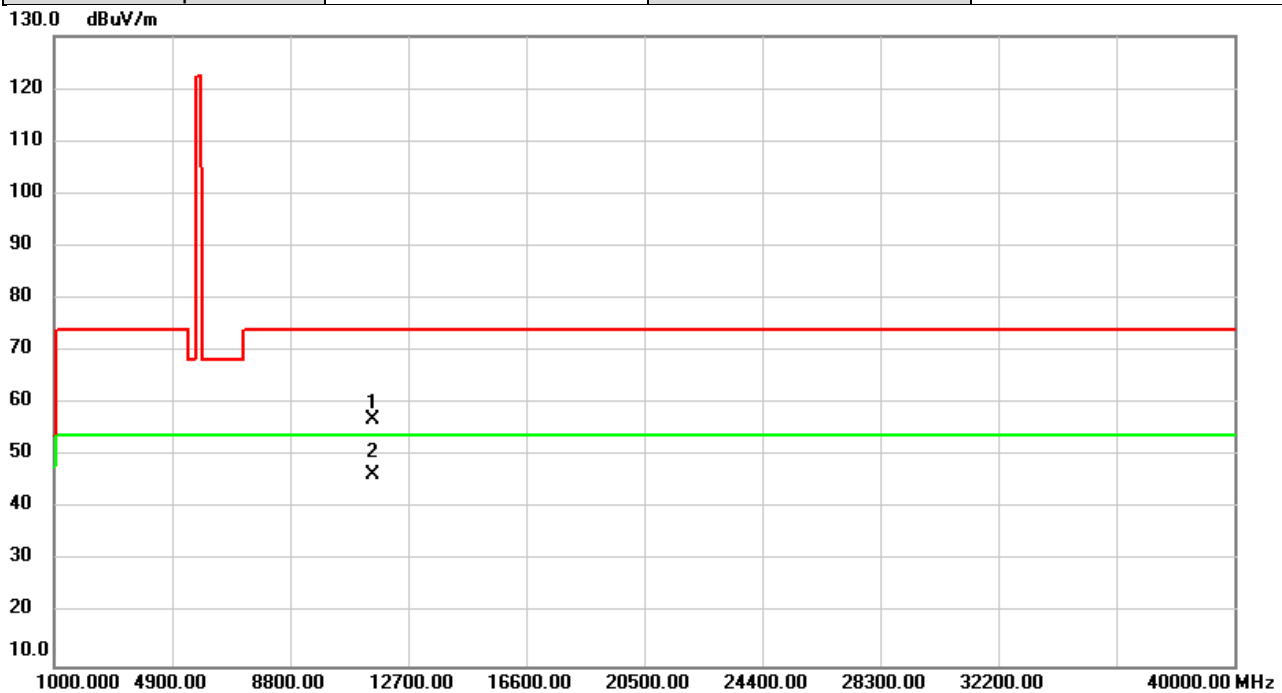


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	10420.00	52.51	4.99	57.50	68.20	-10.70	peak	

REMARKS:

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

Test Mode	IEEE802.11ac(VHT80)	Test Date	2021/4/14
Test Frequency	5775MHz	Polarization	Vertical
Temp	22°C	Hum.	61%



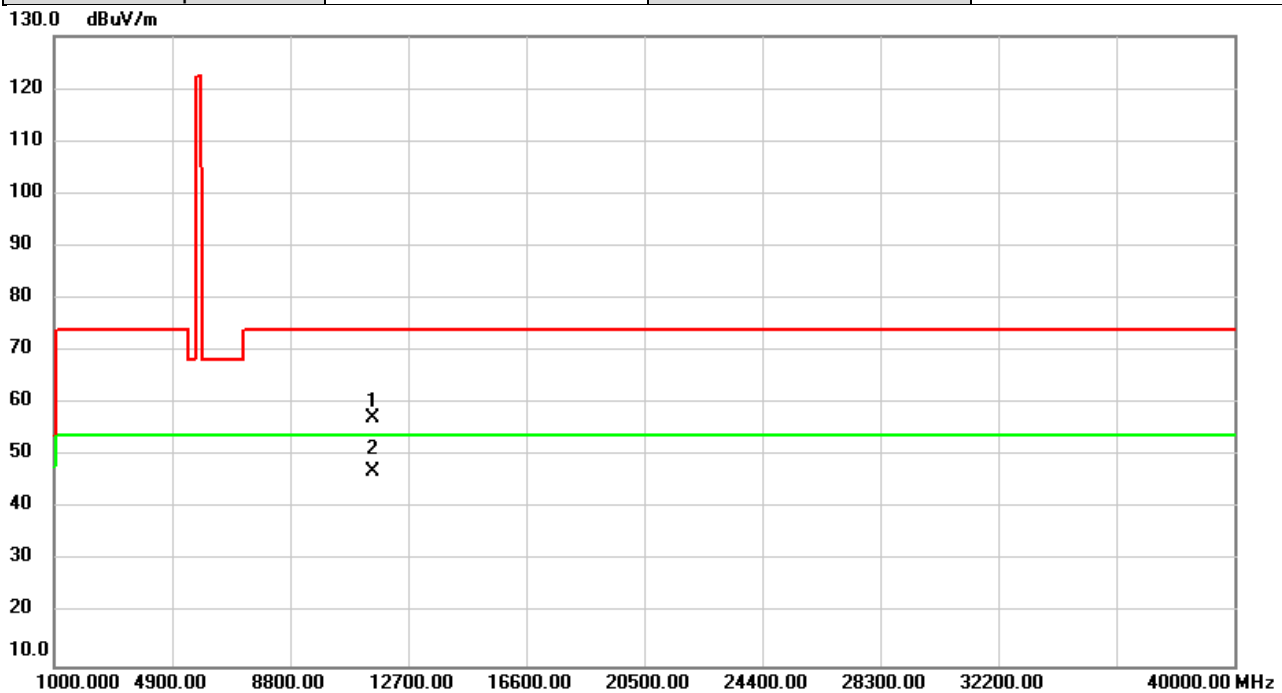
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		11550.00	52.01	4.92	56.93	74.00	-17.07	peak	
2	*	11550.00	41.39	4.92	46.31	54.00	-7.69	AVG	

REMARKS:

(1) Measurement Value = Reading Level + Correct Factor.

(2) Margin Level = Measurement Value - Limit Value.

Test Mode	IEEE802.11ac(VHT80)	Test Date	2021/4/14
Test Frequency	5775MHz	Polarization	Horizontal
Temp	22°C	Hum.	61%



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		11550.00	52.31	4.92	57.23	74.00	-16.77	peak	
2	*	11550.00	42.15	4.92	47.07	54.00	-6.93	AVG	

REMARKS:

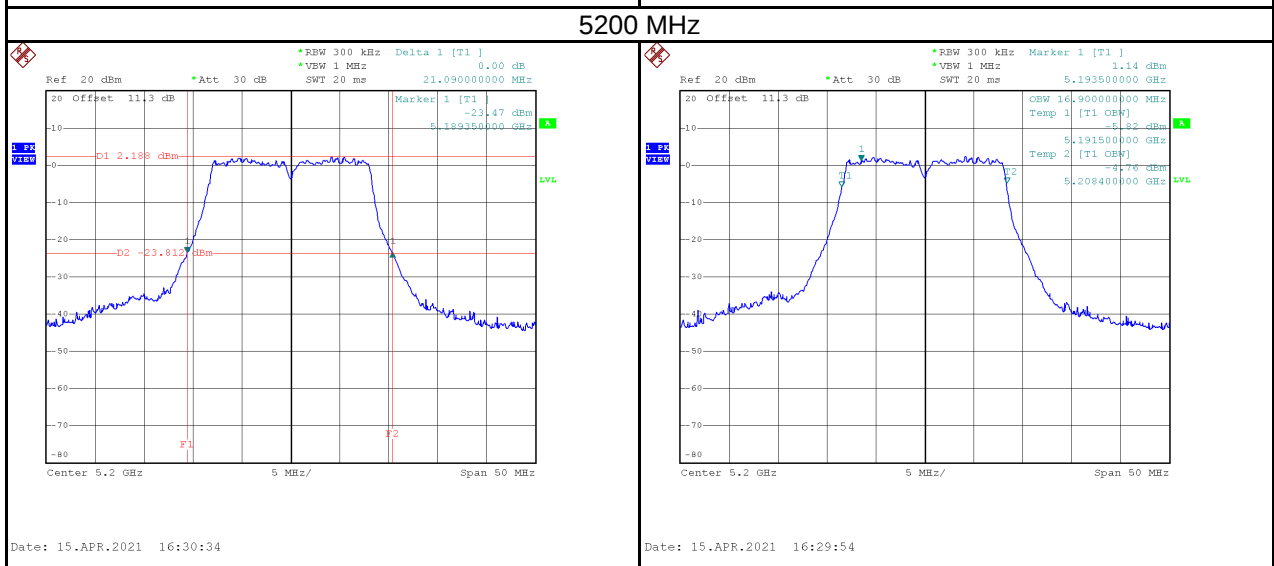
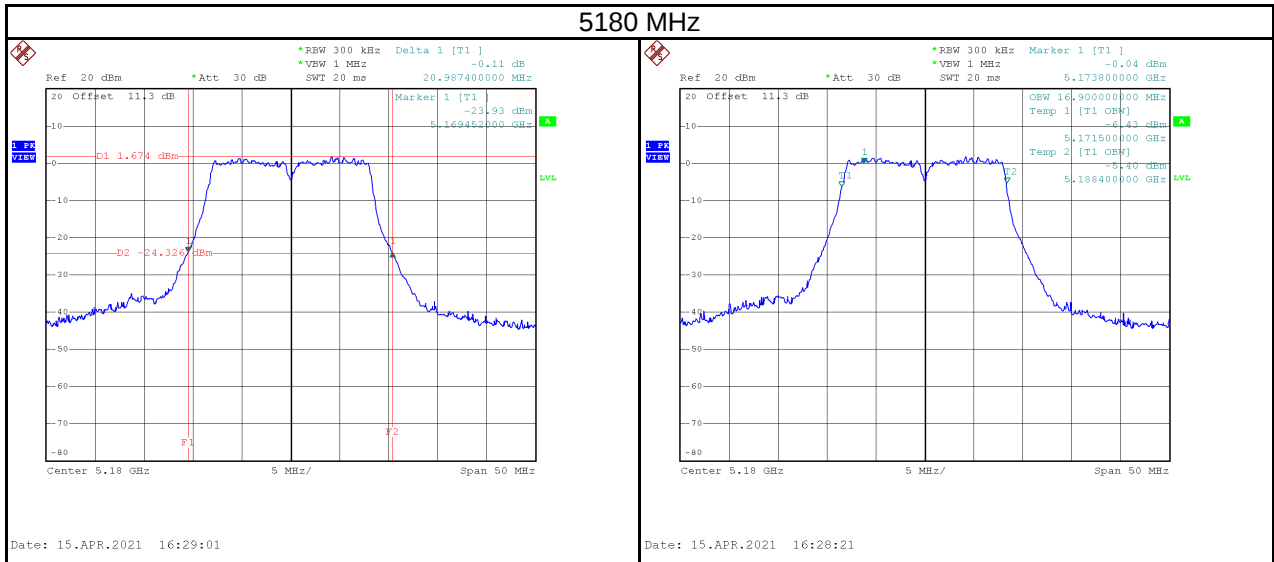
(1) Measurement Value = Reading Level + Correct Factor.

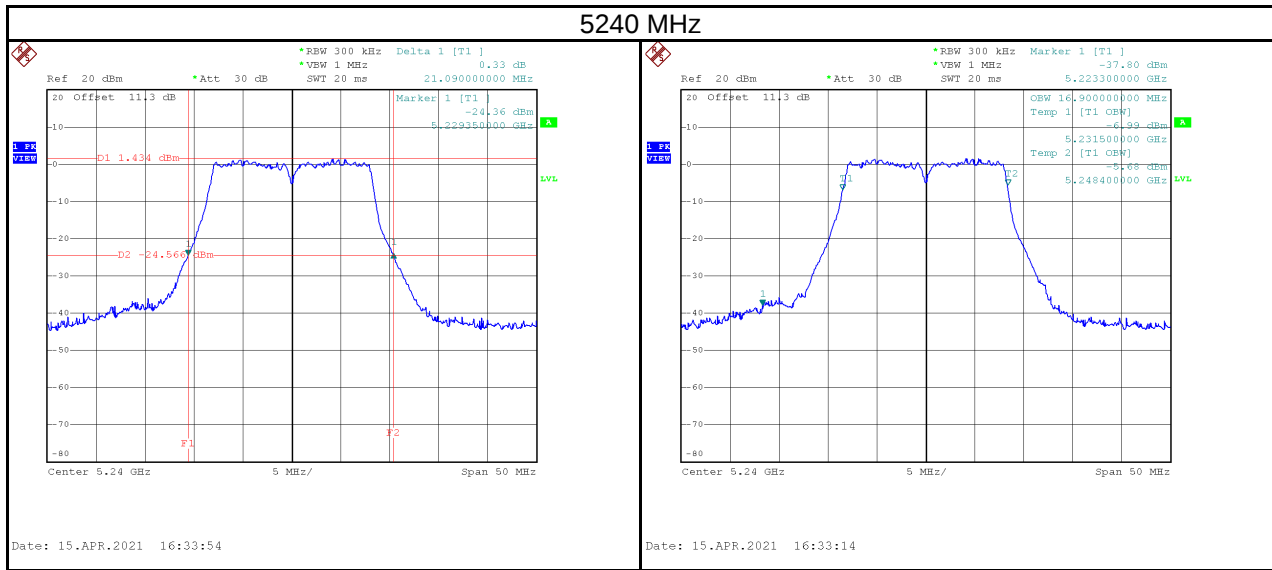
(2) Margin Level = Measurement Value - Limit Value.

APPENDIX D BANDWIDTH

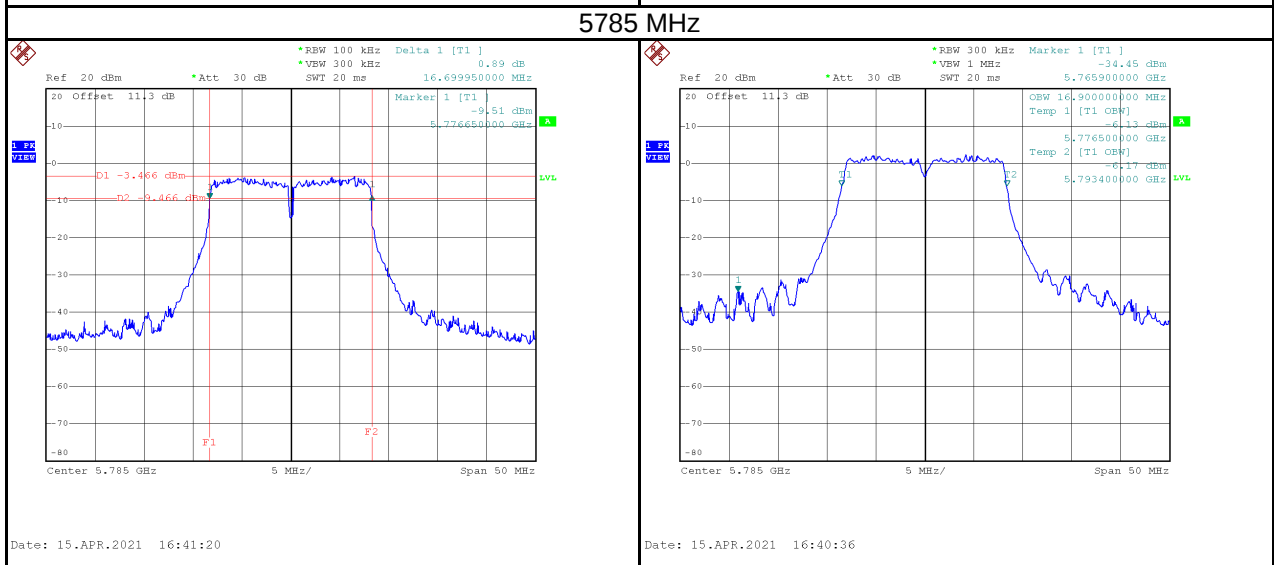
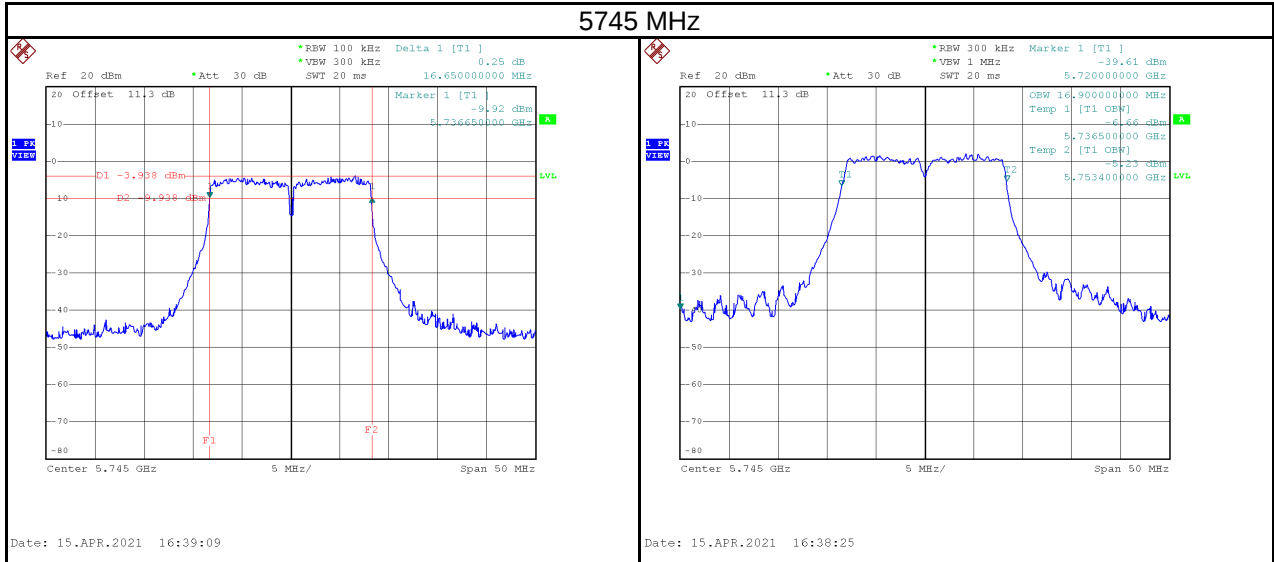
Test Mode	IEEE 802.11a
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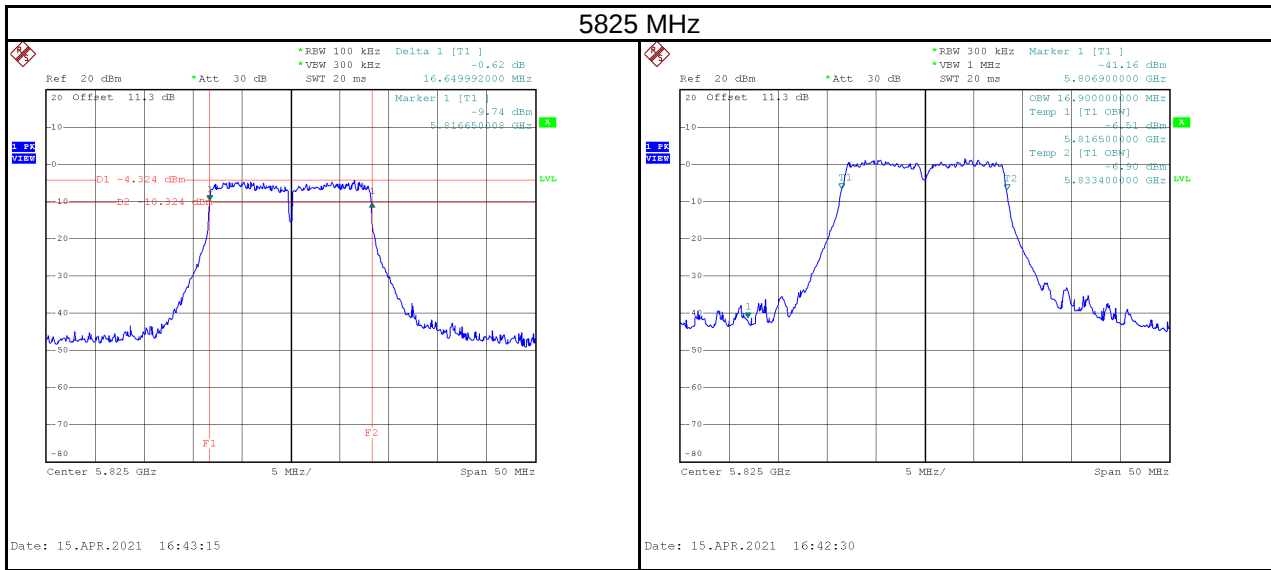
Test Frequency (MHz)	26 dB Bandwidth (MHz)	99 % Occupied Bandwidth (MHz)	Limit
5180	20.99	16.90	No limit
5200	21.09	16.90	No limit
5240	21.09	16.90	No limit





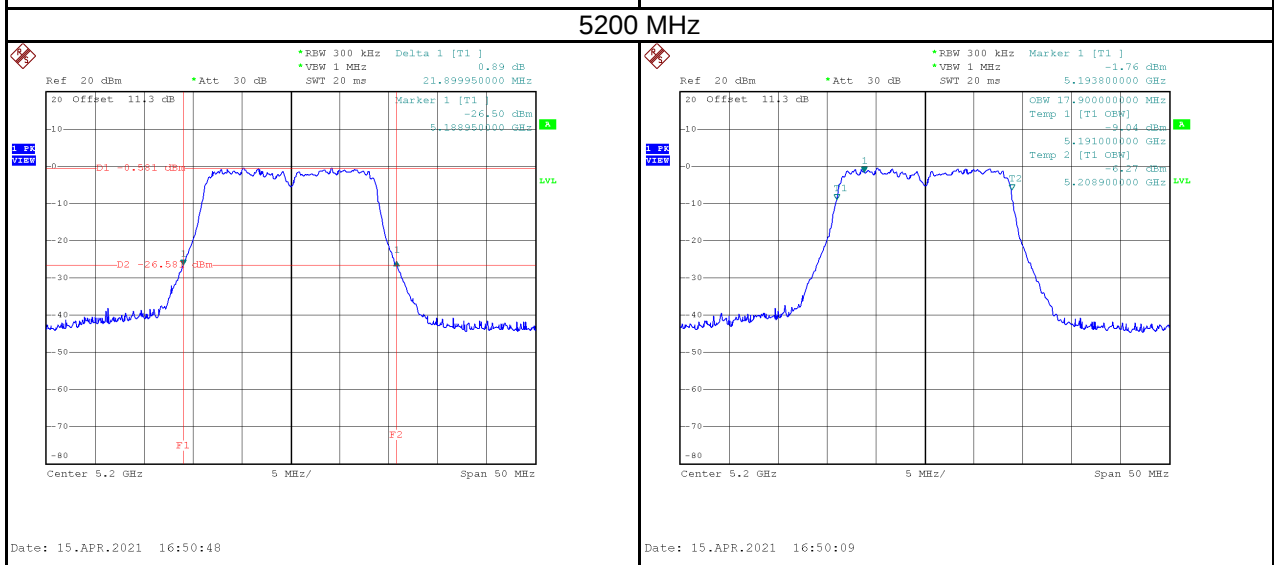
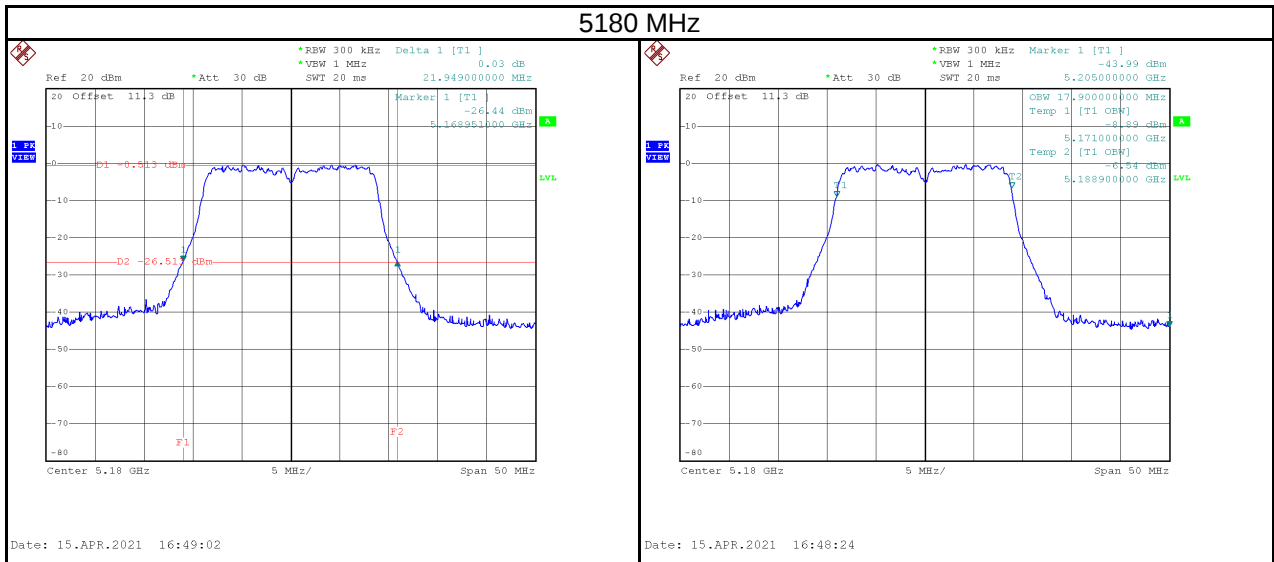
Test Frequency (MHz)	6 dB Bandwidth (MHz)	99 % Occupied Bandwidth (MHz)	Minimum 6 dB Bandwidth Limit (kHz)	Result
5745	16.65	16.90	500	Pass
5785	16.70	16.90	500	Pass
5825	16.65	16.90	500	Pass

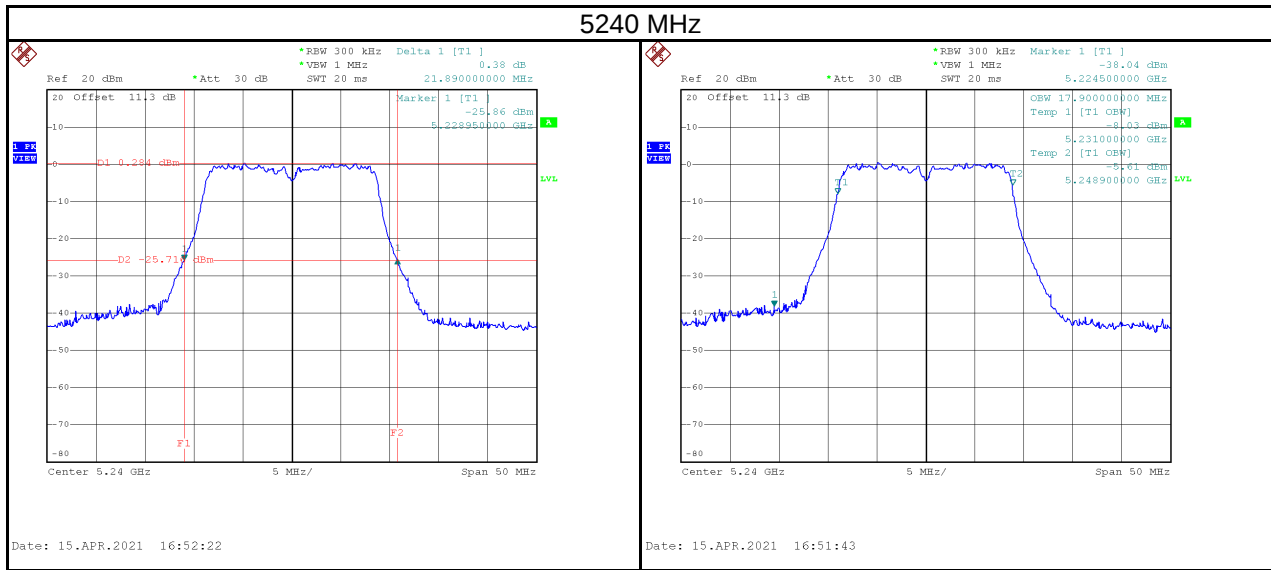




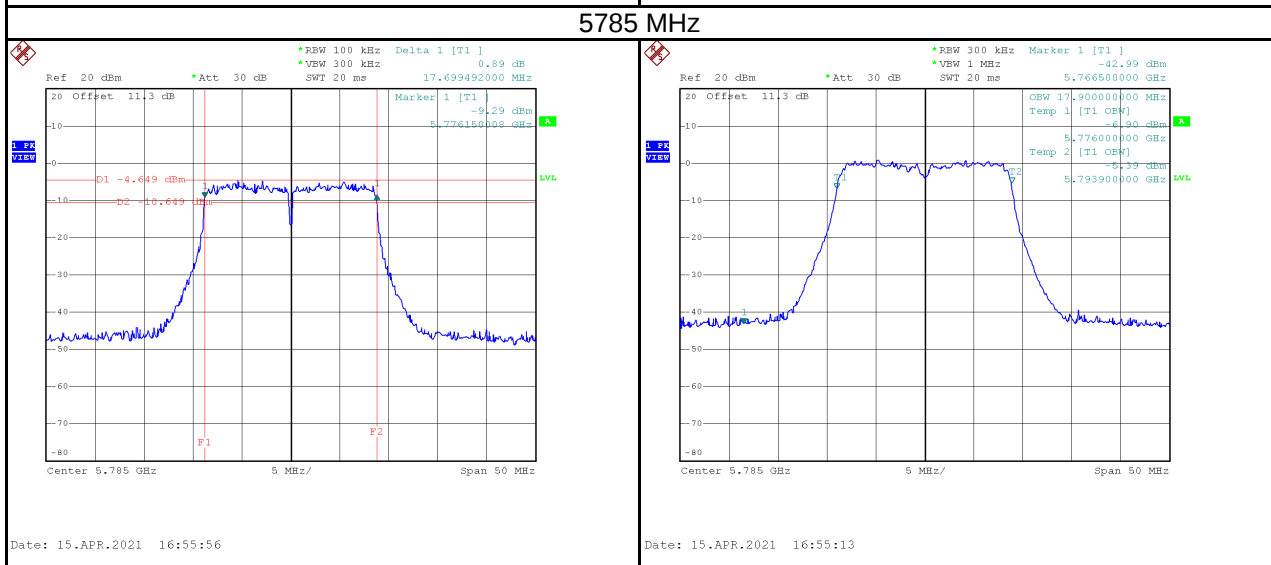
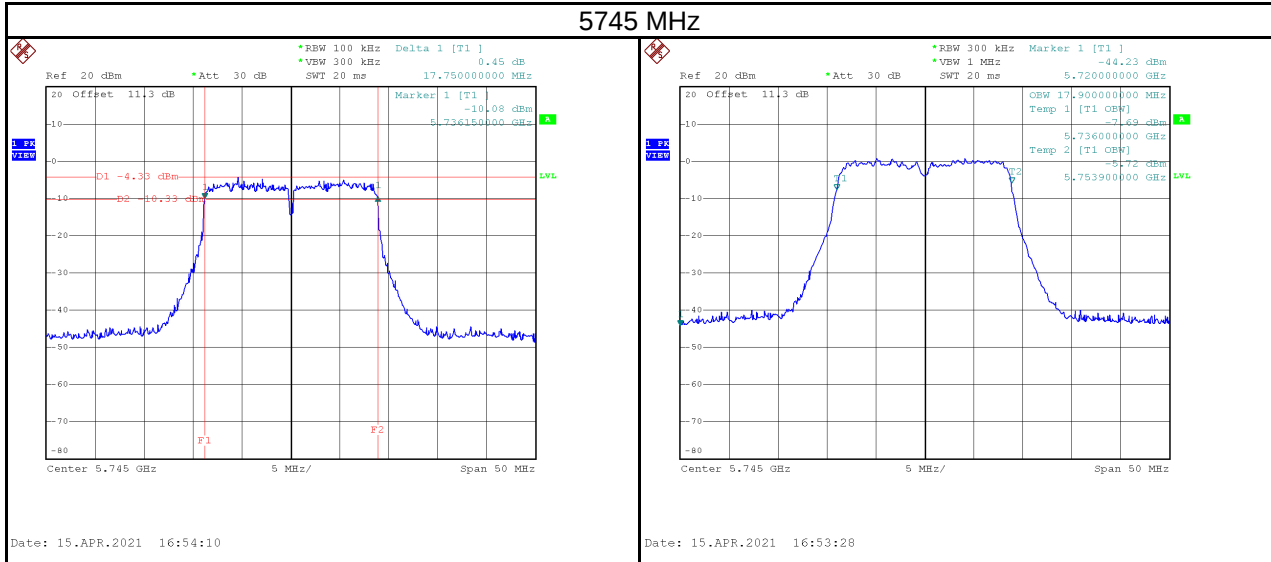
Test Mode	IEEE 802.11n (HT20)
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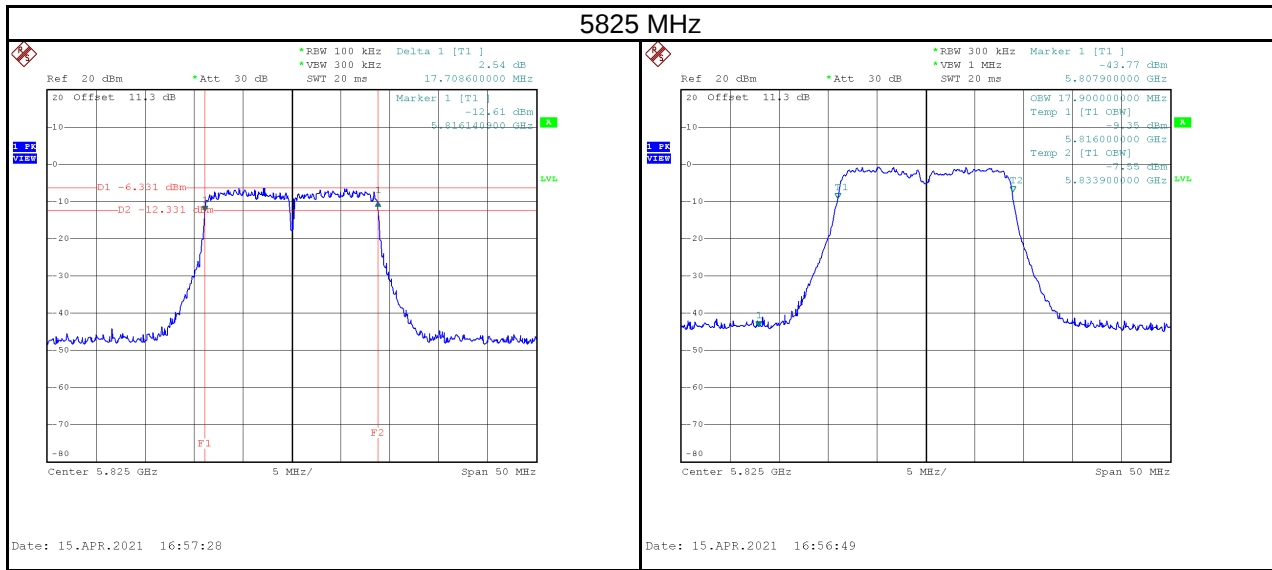
Test Frequency (MHz)	26 dB Bandwidth (MHz)	99 % Occupied Bandwidth (MHz)	Limit
5180	21.95	17.90	No limit
5200	21.90	17.90	No limit
5240	21.89	17.90	No limit





Test Frequency (MHz)	6 dB Bandwidth (MHz)	99 % Occupied Bandwidth (MHz)	Minimum 6 dB Bandwidth Limit (kHz)	Result
5745	17.75	17.90	500	Pass
5785	17.70	17.90	500	Pass
5825	17.71	17.90	500	Pass

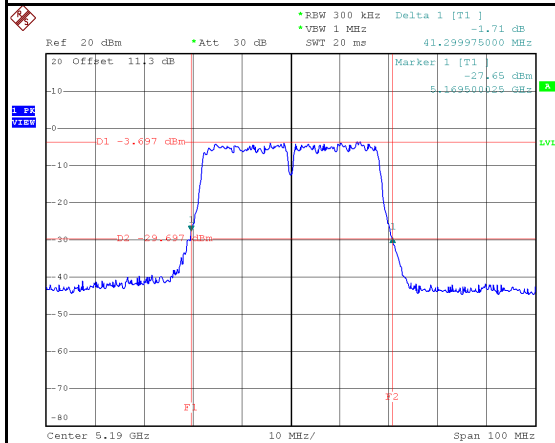




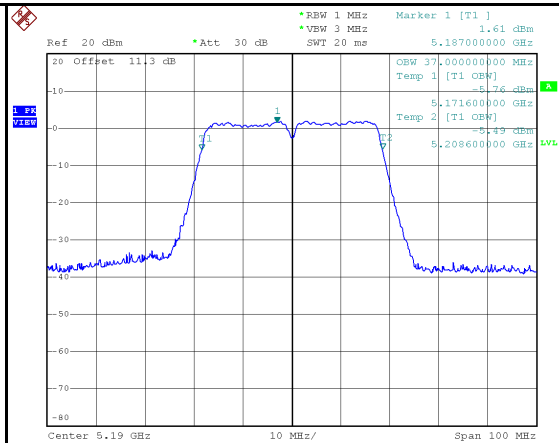
Test Mode	IEEE 802.11n (HT40)
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Test Frequency (MHz)	26 dB Bandwidth (MHz)	99 % Occupied Bandwidth (MHz)	Limit
5190	41.30	37.00	No limit
5230	41.99	37.00	No limit

5190 MHz

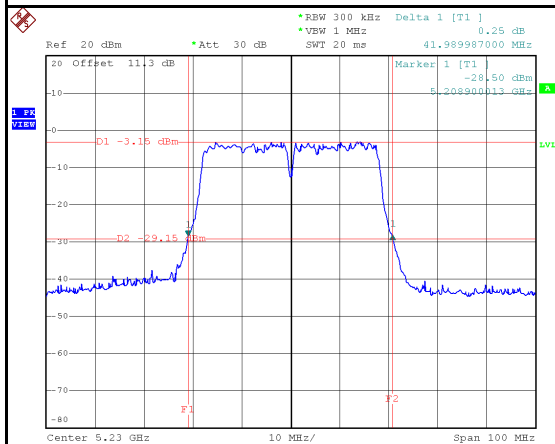


Date: 15.APR.2021 17:33:19

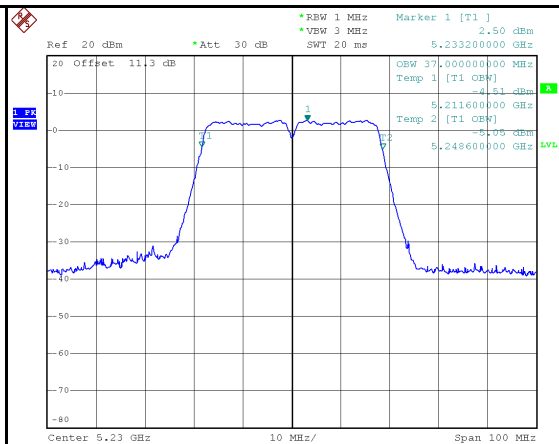


Date: 15.APR.2021 17:32:37

5230 MHz



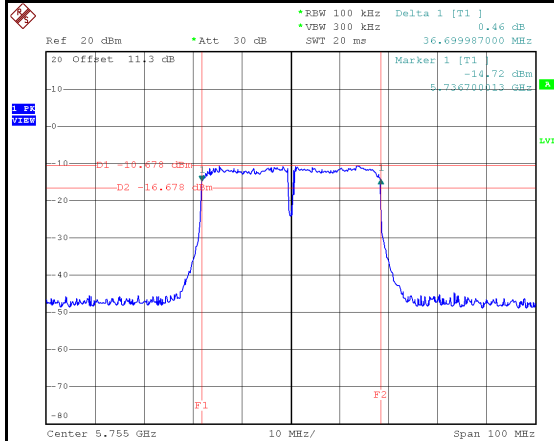
Date: 15.APR.2021 17:35:39



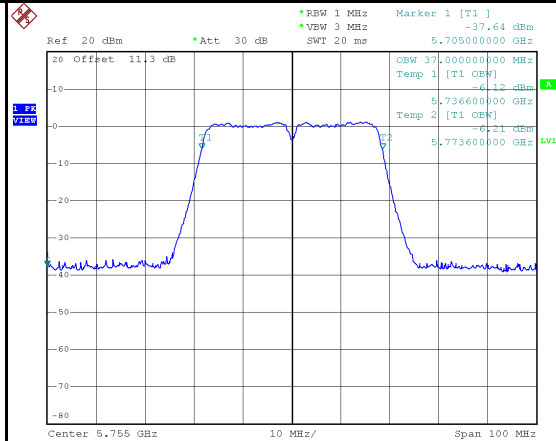
Date: 15.APR.2021 17:34:58

Test Frequency (MHz)	6 dB Bandwidth (MHz)	99 % Occupied Bandwidth (MHz)	Minimum 6 dB Bandwidth Limit (kHz)	Result
5755	36.70	37.00	500	Pass
5795	36.60	36.80	500	Pass

5755 MHz

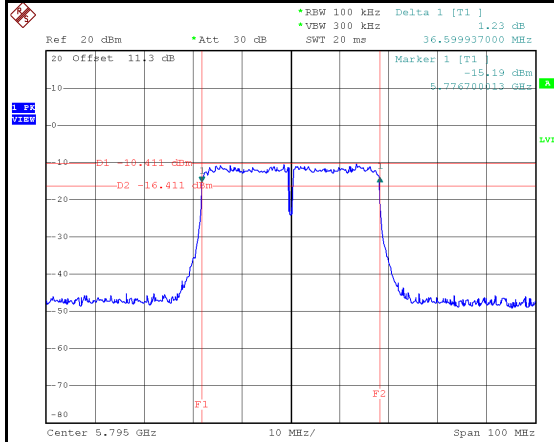


Date: 15.APR.2021 17:37:31

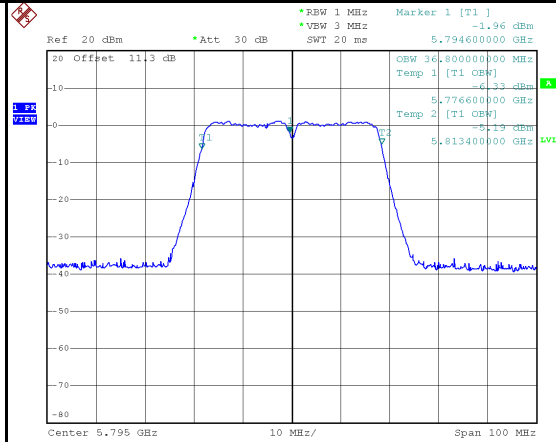


Date: 15.APR.2021 17:36:48

5795 MHz



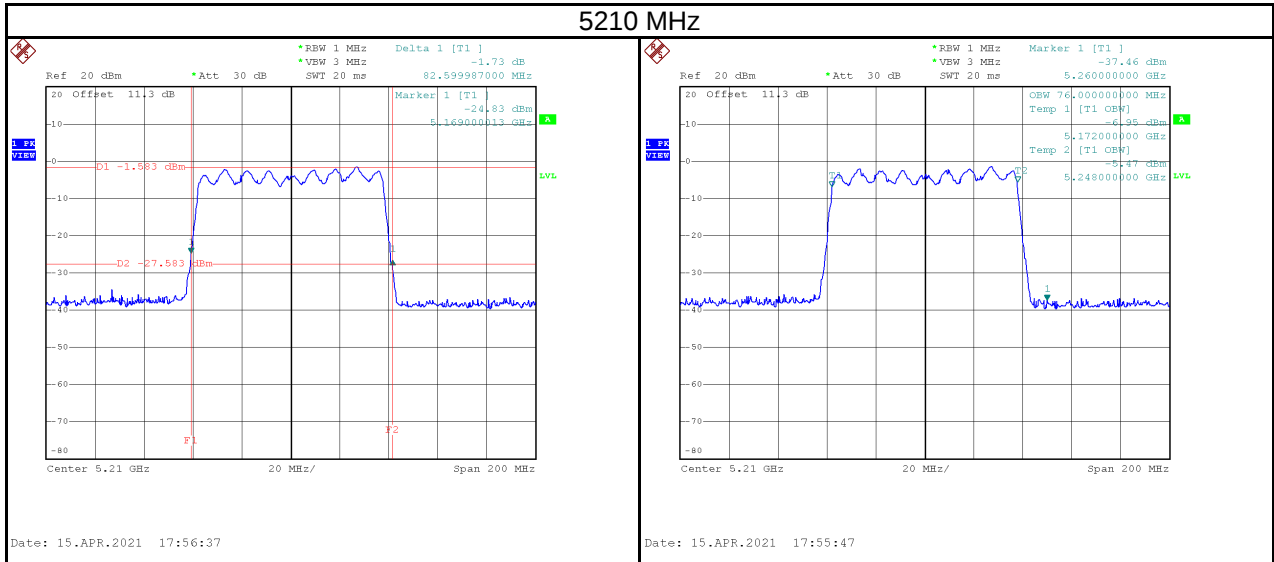
Date: 15.APR.2021 17:39:36



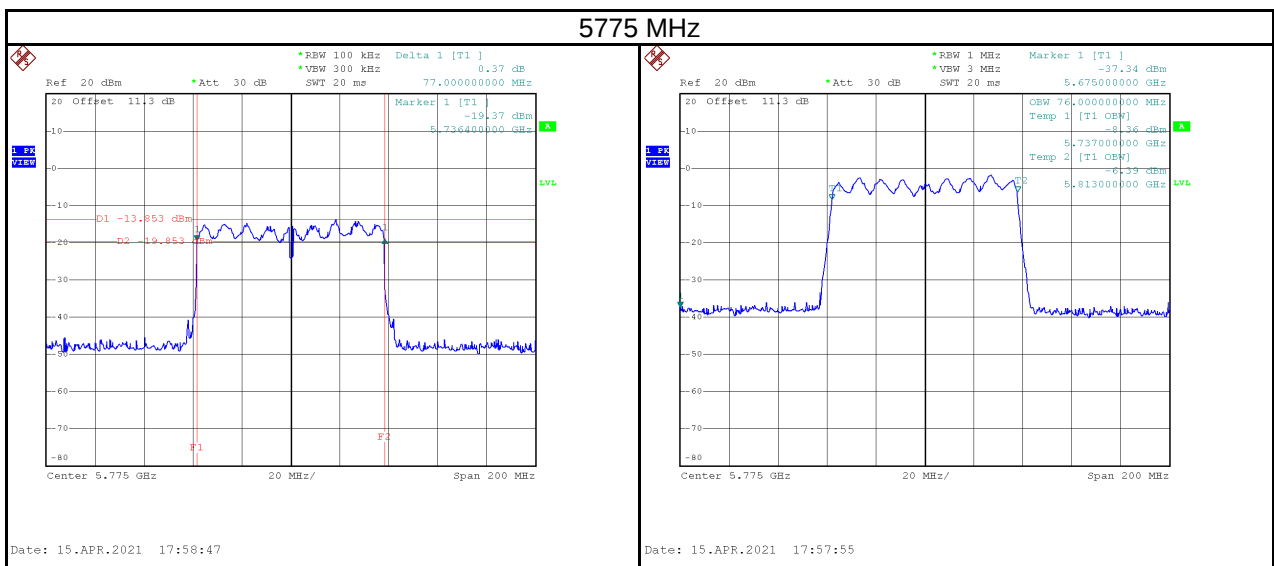
Date: 15.APR.2021 17:38:53

Test Mode	IEEE 802.11ac (VHT80)
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Test Frequency (MHz)	26 dB Bandwidth (MHz)	99 % Occupied Bandwidth (MHz)	Limit
5210	82.60	76.00	No limit



Test Frequency (MHz)	6 dB Bandwidth (MHz)	99 % Occupied Bandwidth (MHz)	Minimum 6 dB Bandwidth Limit (kHz)	Result
5775	77.00	76.00	500	Pass



APPENDIX E CONDUCTED OUTPUT POWER

Test Mode	IEEE 802.11a	Tested Date	2021/4/12
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Test Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
5180	13.37	0.0217	24.00	0.2500	Pass
5200	13.08	0.0203	24.00	0.2500	Pass
5240	12.94	0.0197	24.00	0.2500	Pass

Test Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
5745	14.22	0.0264	30.00	1.0000	Pass
5785	14.28	0.0268	30.00	1.0000	Pass
5825	13.72	0.0236	30.00	1.0000	Pass

Test Mode	IEEE 802.11n (HT20)	Tested Date	2021/4/12
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Test Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
5180	12.20	0.0166	24.00	0.2500	Pass
5200	11.75	0.0150	24.00	0.2500	Pass
5240	12.59	0.0182	24.00	0.2500	Pass

Test Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
5745	13.64	0.0231	30.00	1.0000	Pass
5785	13.67	0.0233	30.00	1.0000	Pass
5825	12.01	0.0159	30.00	1.0000	Pass

Test Mode	IEEE 802.11n (HT40)	Tested Date	2021/4/12
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Test Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
5190	12.34	0.0171	24.00	0.2500	Pass
5230	12.69	0.0186	24.00	0.2500	Pass

Test Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
5755	12.15	0.0164	30.00	1.0000	Pass
5795	11.63	0.0146	30.00	1.0000	Pass

Test Mode	IEEE 802.11ac (VHT20)	Tested Date	2021/4/12
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Test Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
5180	12.36	0.0172	24.00	0.2500	Pass
5200	11.51	0.0142	24.00	0.2500	Pass
5240	12.20	0.0166	24.00	0.2500	Pass

Test Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
5745	13.47	0.0222	30.00	1.0000	Pass
5785	13.07	0.0203	30.00	1.0000	Pass
5825	11.59	0.0144	30.00	1.0000	Pass

Test Mode	IEEE 802.11ac (VHT40)	Tested Date	2021/4/12
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Test Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
5190	11.17	0.0131	24.00	0.2500	Pass
5230	11.40	0.0138	24.00	0.2500	Pass

Test Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
5755	13.50	0.0224	30.00	1.0000	Pass
5795	12.75	0.0188	30.00	1.0000	Pass

Test Mode	IEEE 802.11ac (VHT80)	Tested Date	2021/4/12
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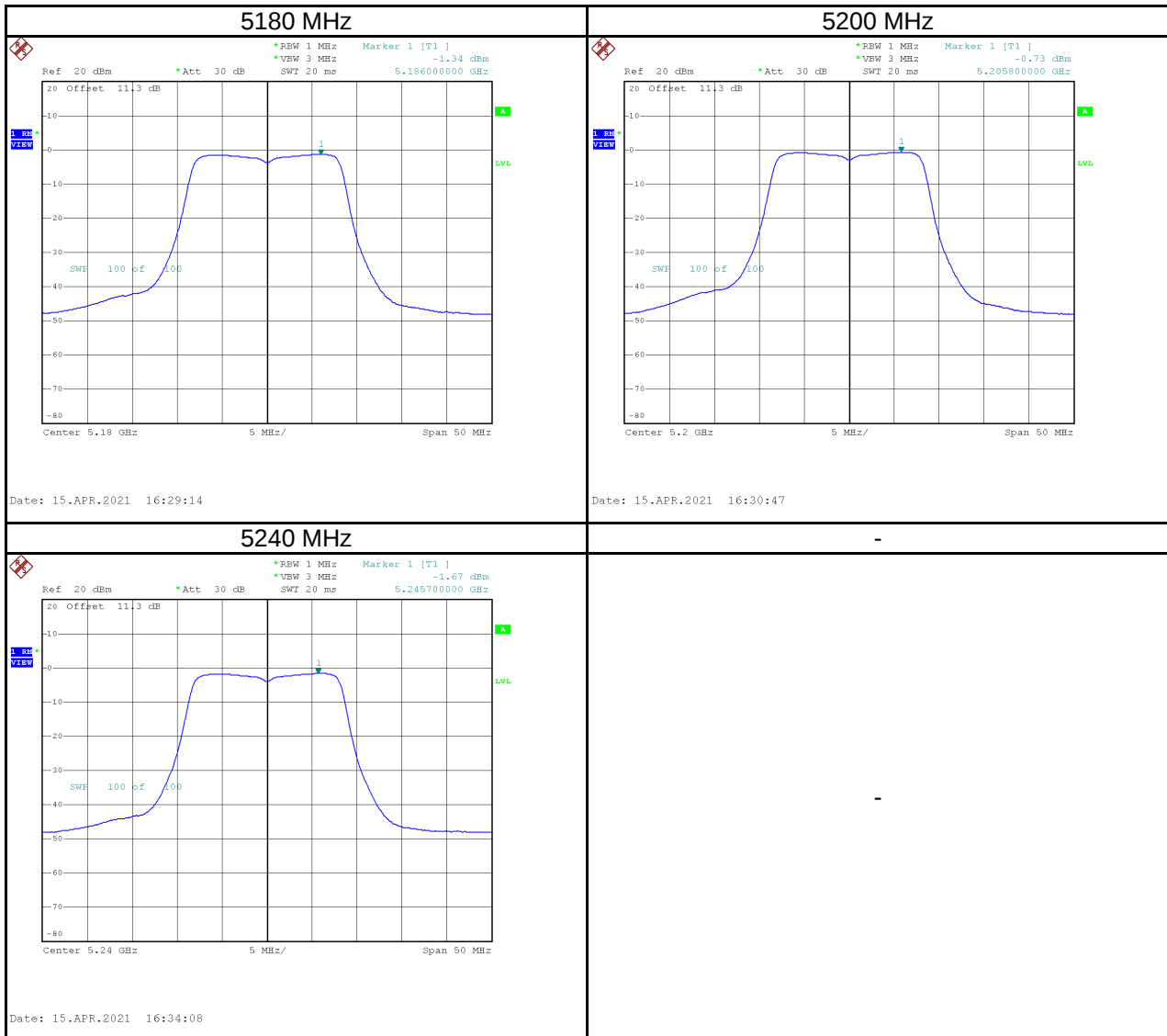
Test Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
5210	10.69	0.0117	24.00	0.2500	Pass

Test Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
5775	10.72	0.0118	30.00	1.0000	Pass

APPENDIX F POWER SPECTRAL DENSITY

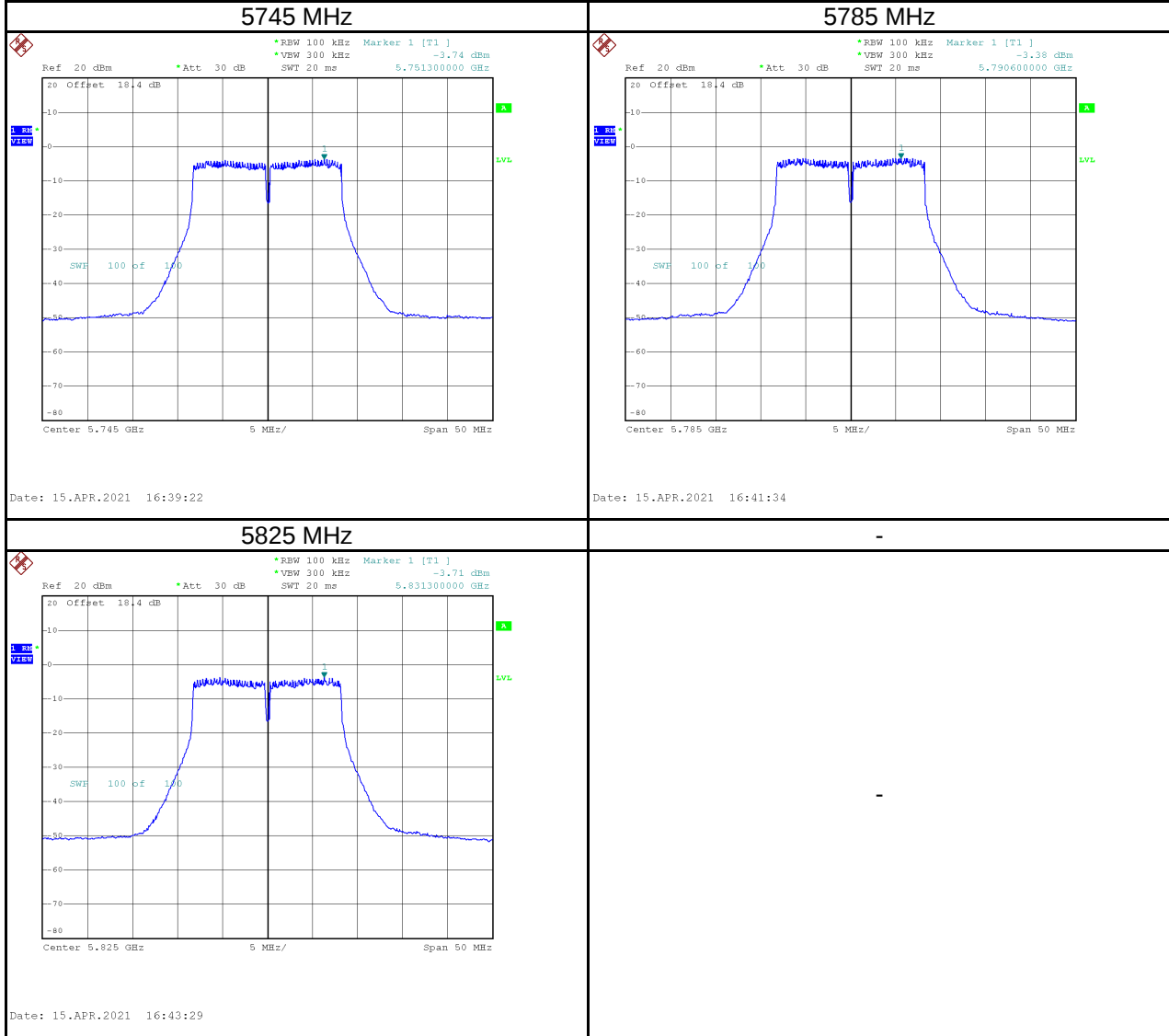
Test Mode	IEEE 802.11a
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Test Frequency (MHz)	Power Density (dBm/MHz)	Duty Factor (dB)	Calculated Power Density (dBm/MHz)	Maximum Limit (dBm/MHz)	Result
5180	-1.34	0.00	-1.34	17.00	Pass
5200	-0.73	0.00	-0.73	17.00	Pass
5240	-1.67	0.00	-1.67	17.00	Pass



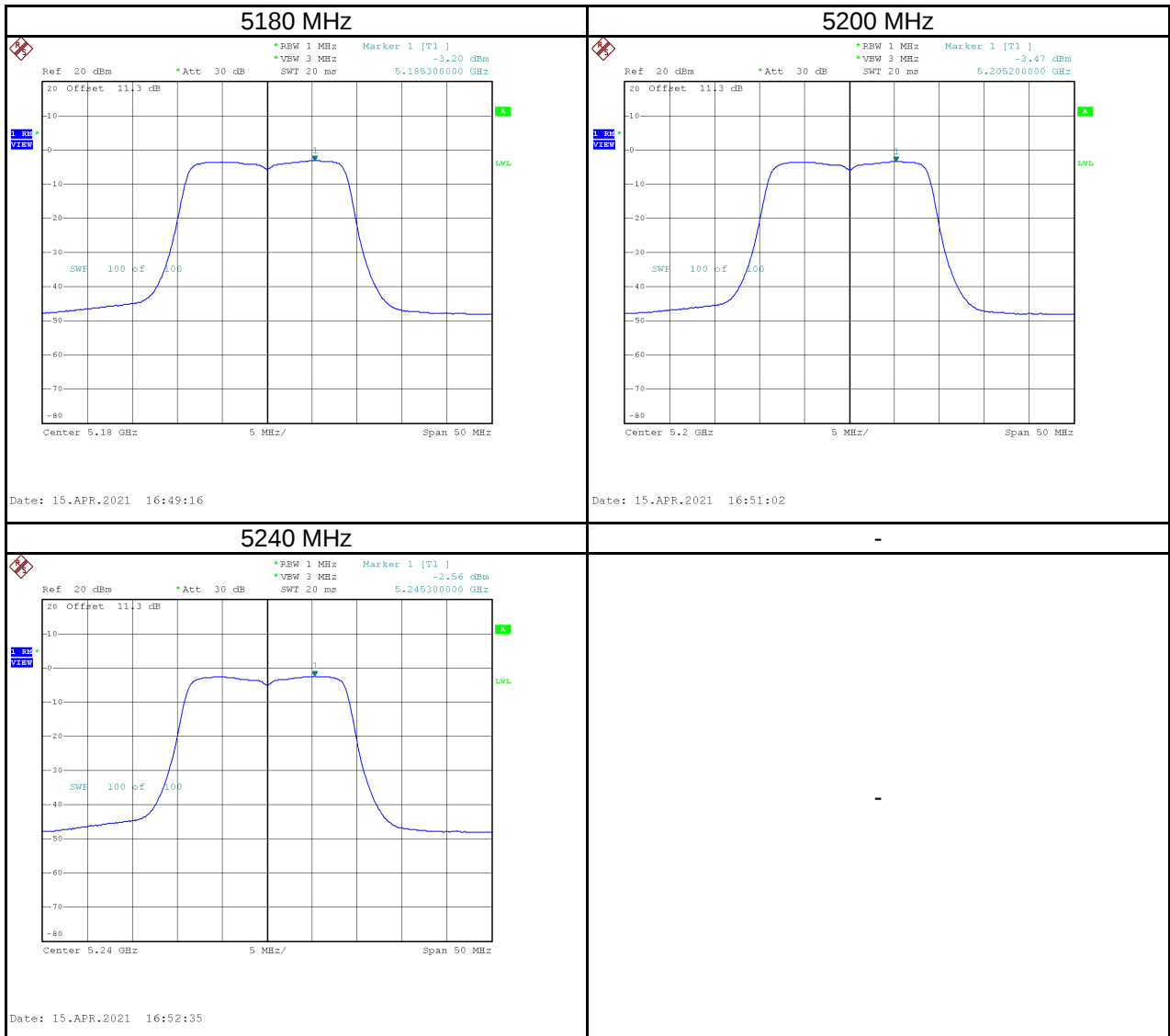
Test Frequency (MHz)	Power Density (dBm/100 kHz)	Power Density (dBm/500 kHz)	Duty Factor (dB)	Calculated Power Density (dBm/500 kHz)	Maximum Limit (dBm/500 kHz)	Result
5745	-3.74	3.25	0.00	3.25	30.00	Pass
5785	-3.38	3.61	0.00	3.61	30.00	Pass
5825	-3.71	3.28	0.00	3.28	30.00	Pass

NOTE: $PSD_{dBm/500\text{ kHz}} = PSD_{dBm/100\text{ kHz}} + 10 \times \log_{10}(500\text{ kHz} / 100\text{ kHz})$



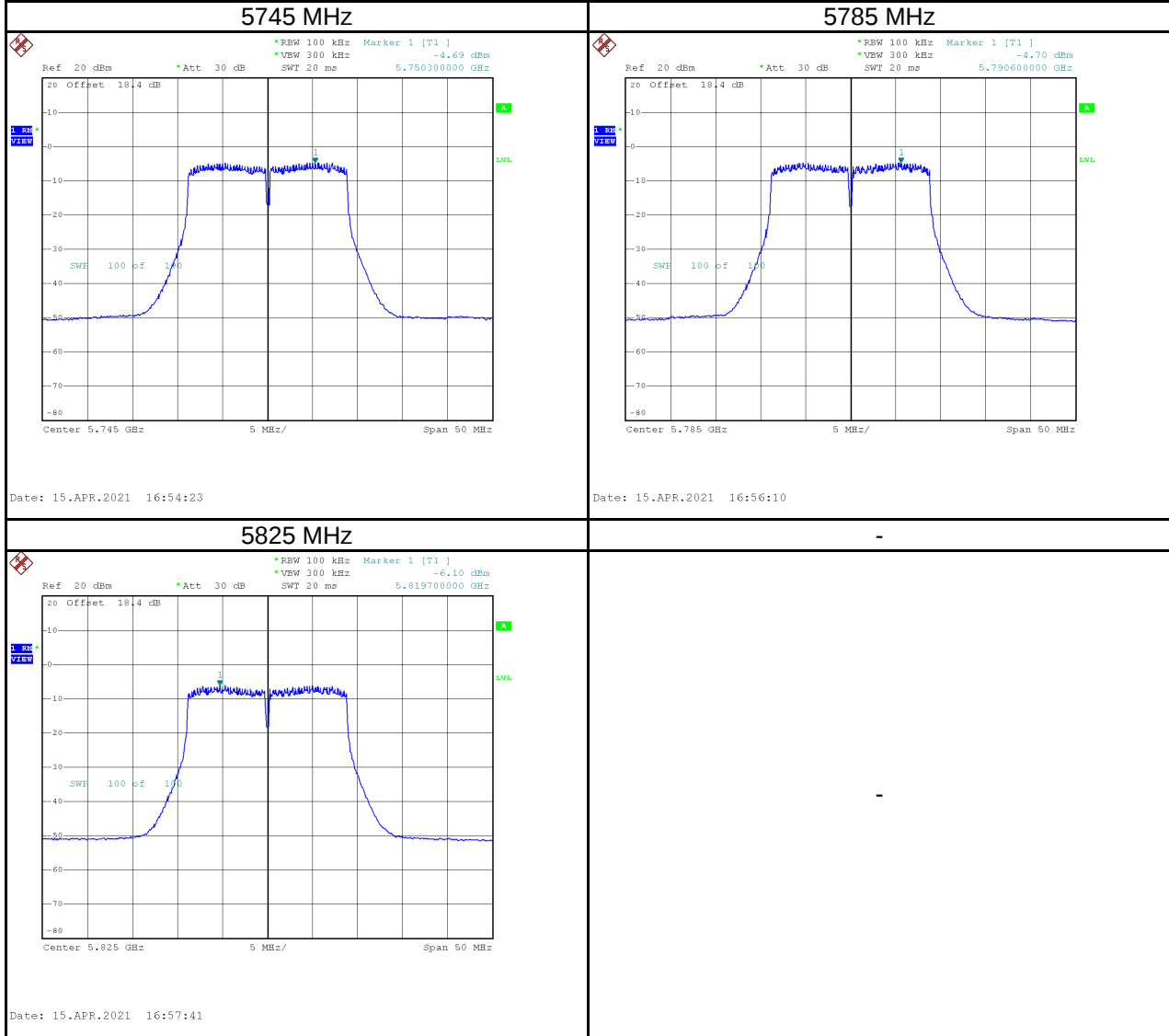
Test Mode	IEEE 802.11n (HT20)
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Test Frequency (MHz)	Power Density (dBm/MHz)	Duty Factor (dB)	Calculated Power Density (dBm/MHz)	Maximum Limit (dBm/MHz)	Result
5180	-3.20	0.00	-3.20	17.00	Pass
5200	-3.47	0.00	-3.47	17.00	Pass
5240	-2.56	0.00	-2.56	17.00	Pass



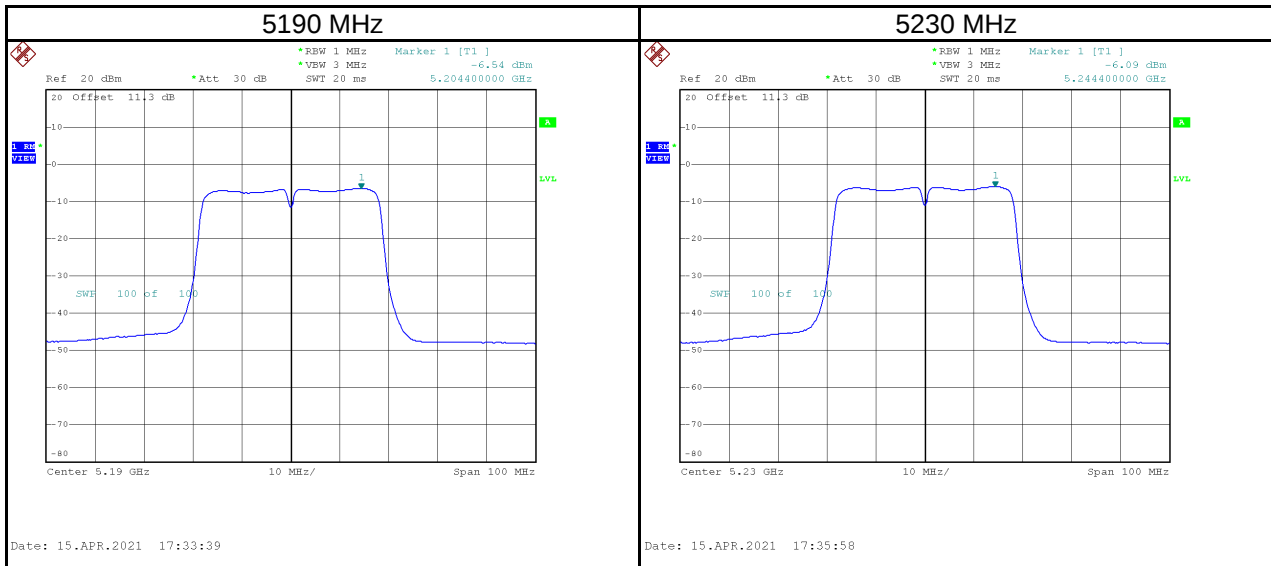
Test Frequency (MHz)	Power Density (dBm/100 kHz)	Power Density (dBm/500 kHz)	Duty Factor (dB)	Calculated Power Density (dBm/500 kHz)	Maximum Limit (dBm/500 kHz)	Result
5745	-4.69	2.30	0.00	2.30	30.00	Pass
5785	-4.70	2.29	0.00	2.29	30.00	Pass
5825	-6.10	0.89	0.00	0.89	30.00	Pass

NOTE: $PSD_{dBm/500\text{ kHz}} = PSD_{dBm/100\text{ kHz}} + 10 \times \log_{10}(500\text{ kHz} / 100\text{ kHz})$



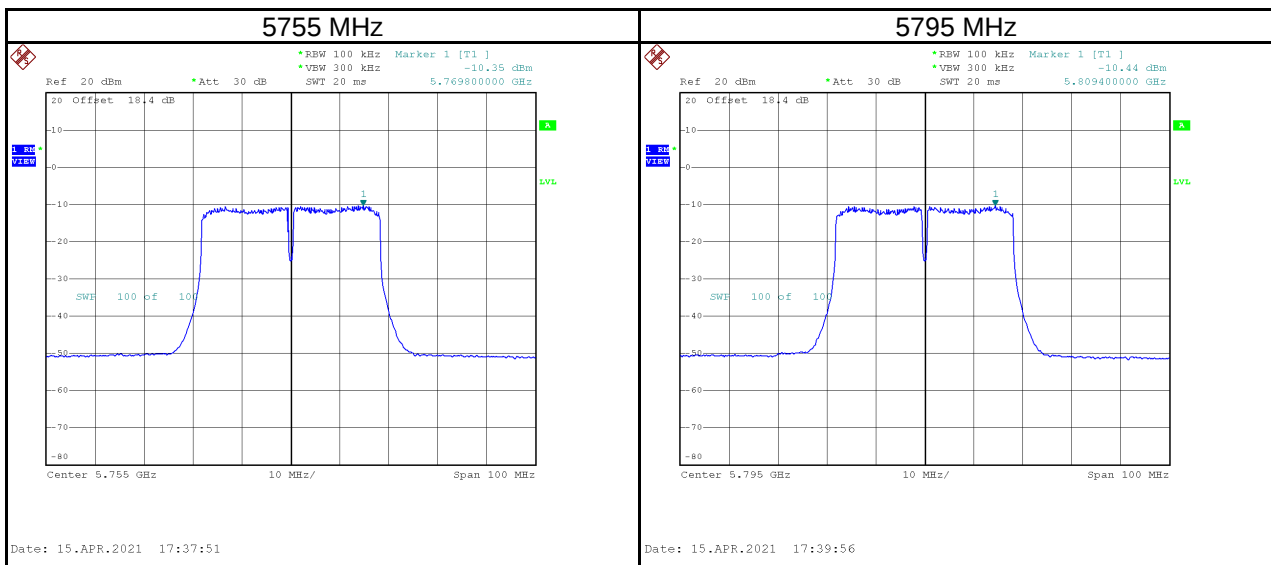
Test Mode	IEEE 802.11n (HT40)
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Test Frequency (MHz)	Power Density (dBm/MHz)	Duty Factor (dB)	Calculated Power Density (dBm/MHz)	Maximum Limit (dBm/MHz)	Result
5190	-6.54	0.00	-6.54	17.00	Pass
5230	-6.09	0.00	-6.09	17.00	Pass



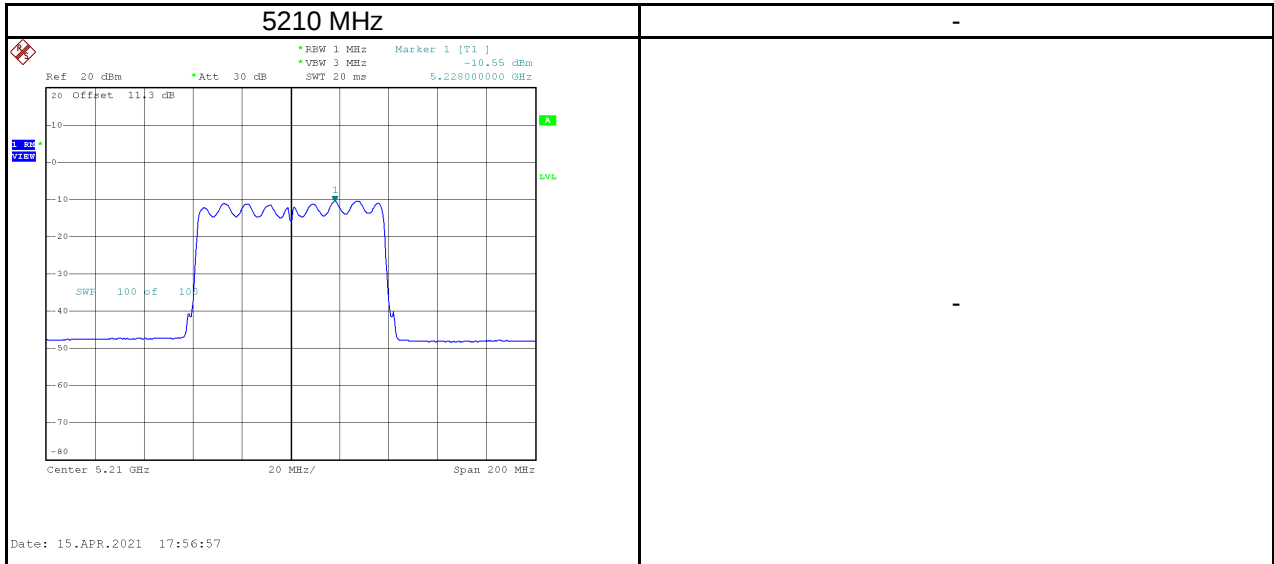
Test Frequency (MHz)	Power Density (dBm/100 kHz)	Power Density (dBm/500 kHz)	Duty Factor (dB)	Calculated Power Density (dBm/500 kHz)	Maximum Limit (dBm/500 kHz)	Result
5755	-10.35	-3.36	0.00	-3.36	30.00	Pass
5795	-10.44	-3.45	0.00	-3.45	30.00	Pass

NOTE: $PSD_{dBm/500\text{ kHz}} = PSD_{dBm/100\text{ kHz}} + 10 \times \log_{10}(500\text{ kHz} / 100\text{ kHz})$



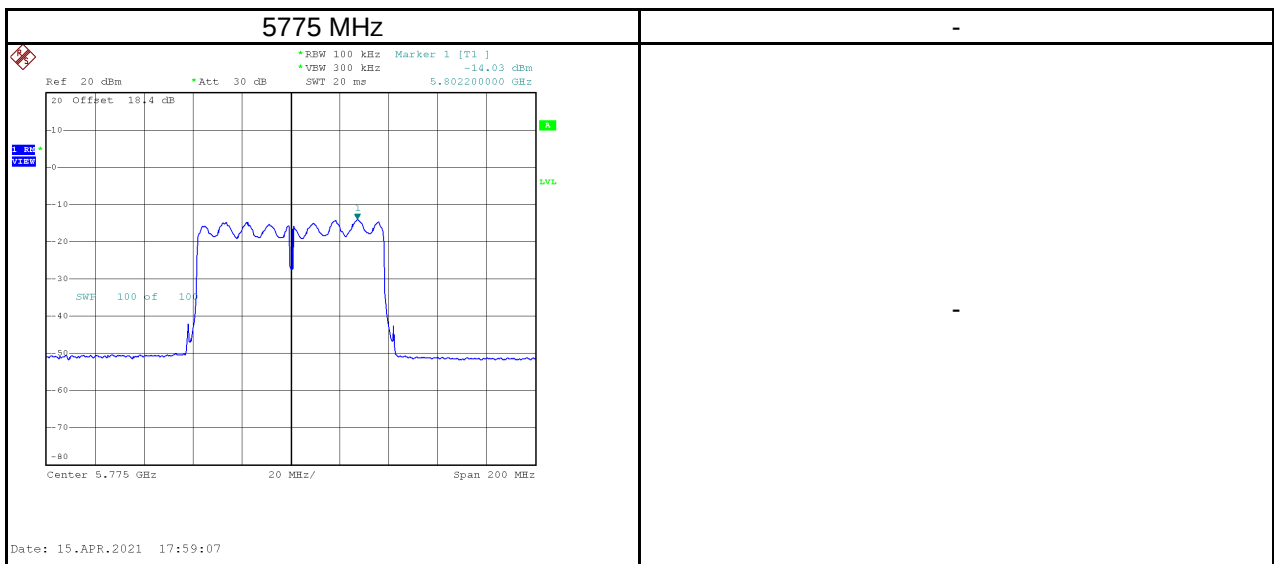
Test Mode	IEEE 802.11ac (VHT80)
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Test Frequency (MHz)	Power Density (dBm/MHz)	Duty Factor (dB)	Calculated Power Density (dBm/MHz)	Maximum Limit (dBm/MHz)	Result
5210	-10.55	0.00	-10.55	17.00	Pass



Test Frequency (MHz)	Power Density (dBm/100 kHz)	Power Density (dBm/500 kHz)	Duty Factor (dB)	Calculated Power Density (dBm/500 kHz)	Maximum Limit (dBm/500 kHz)	Result
5775	-14.03	-7.04	0.00	-7.04	30.00	Pass

NOTE: $PSD_{dBm/500\text{ kHz}} = PSD_{dBm/100\text{ kHz}} + 10 \times \log_{10}(500\text{ kHz} / 100\text{ kHz})$



End of Test Report