

FCC Radio Test Report

FCC ID: KA2BAX2830PA1

Report No. : BTL-FCCP-2-2003H027
Equipment : Nuclias Cloud-Managed AX3600 Access Point
Model Name : DBA-X2830P
Brand Name : D-Link Corporation
Applicant : D-Link Corporation
Address : 17595 Mt. Herrmann, Fountain Valley, California United State 92708

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

Date of Receipt : 2020/3/20
Date of Test : 2020/3/20 ~ 2020/5/26
Issued Date : 2020/8/3

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

Prepared by


Peter Chen, Engineer

**Approved by**


Scott Hsu, Manager

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.

The report must not be used by the client to claim product certification, approval, or endorsement by NIST, A2LA, or any agency of the U.S. Government.

This report is the confidential property of the client. As a mutual protection to the clients, the public and ourselves, the test report shall not be reproduced, except in full, without our written approval.

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.	2020/8/3

1 TEST DATA RE-USE SUMMARY

Differences Brief Description:

The hardware of this device are identical to the build-in antenna type of the implementation in FCC ID: KA2WL8630APA1.

The product change items are changed enclosure and added cloud function in software. The data from that application has been verified through appropriate spot checks to demonstrate compliance for this device as shown in the summary table below.

The Spot check results that can refer to the APPENDIX.

Spot Check Verification Result Summary

Equipment Class	Reference FCC ID	Reference Report No.	Report Title/ Section
UNII-RLAN	KA2WL8630APA1	BTL-FCCP-2-1909H044	All Section

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
☒ SR06

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)
CB18	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)
Output power	1.06

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	25 °C, 62 %	AC 120V	William Wei
Radiated emissions below 1 GHz	22 °C, 65 %	AC 120V	Hunter Chiang
Radiated emissions above 1 GHz	22 °C, 65 %	AC 120V	Hunter Chiang
Output Power	23.4 °C, 52 %	AC 120V	Jay Kao

2 LIST OF MEASURING EQUIPMENTS

Radiated Emissions						
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated Date	Calibrated Until
1	Preamplifier	EMCI	EMC001340	980555	2020/4/11	2021/4/10
2	Preamplifier	EMCI	EMC02325B	980217	2019/4/12	2021/4/10
3	Preamplifier	EMCI	EMC012645B	980267	2019/4/12	2021/4/10
4	Preamplifier	EMCI	EMC2654045	980030	2020/1/31	2021/1/30
5	Test Cable	EMCI	EMC104-SM-SM-800	150207	2019/4/12	2021/4/10
6	Test Cable	EMCI	EMC104-SM-SM-3000	151205	2019/4/12	2021/4/10
7	Test Cable	EMCI	EMC-SM-SM-7000	180408	2019/4/12	2021/4/10
8	MXE EMI Receiver	Agilent	N9038A	MY55420127	2020/3/25	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	Horn Ant	SCHWARZBECK	BBHA 9120D	9120D-1342	2019/6/10	2020/6/9
12	Horn 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

Output Power						
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated Date	Calibrated Until
1	Power Meter	Anritsu	ML2487A	6K00004714	2020/6/19	2021/6/18
2	Power Sensor	Anritsu	MA2491A	1725282	2020/6/19	2021/6/18

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

3 EUT TEST PHOTO

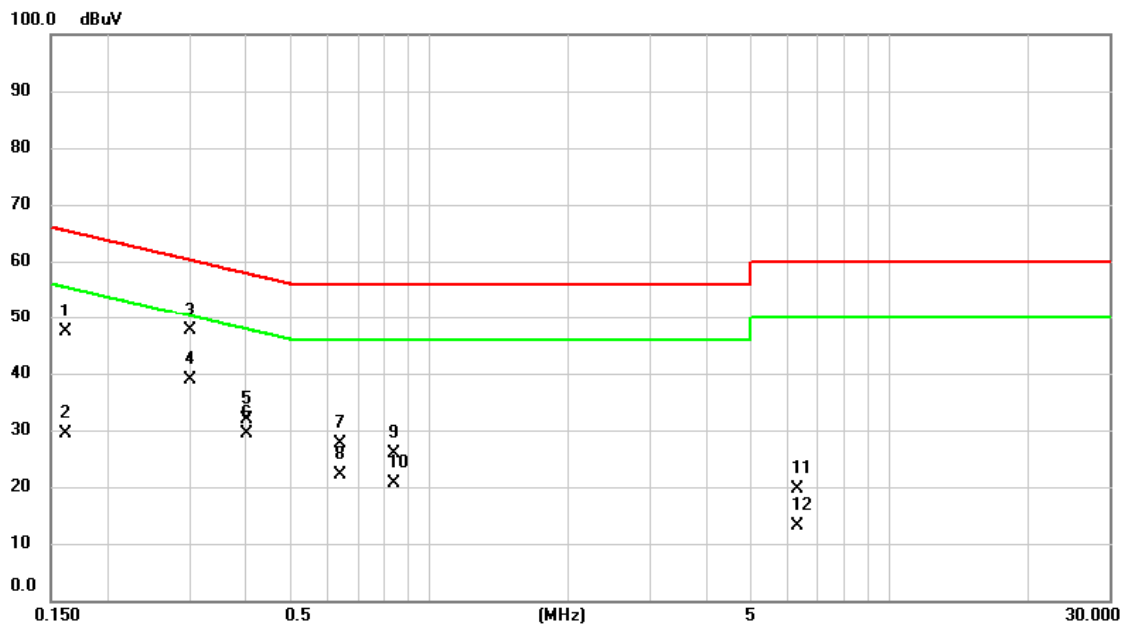
Please refer to document Appendix No.: TP-2003H027-FCCP-1 (APPENDIX-TEST PHOTOS).

4 EUT PHOTOS

Please refer to document Appendix No.: EP-2003H027-1 (APPENDIX-EUT PHOTOS).

APPENDIX A AC POWER LINE CONDUCTED EMISSIONS

Test Mode	Normal	Tested Date	2020/4/16
Test Frequency	-	Phase	Line

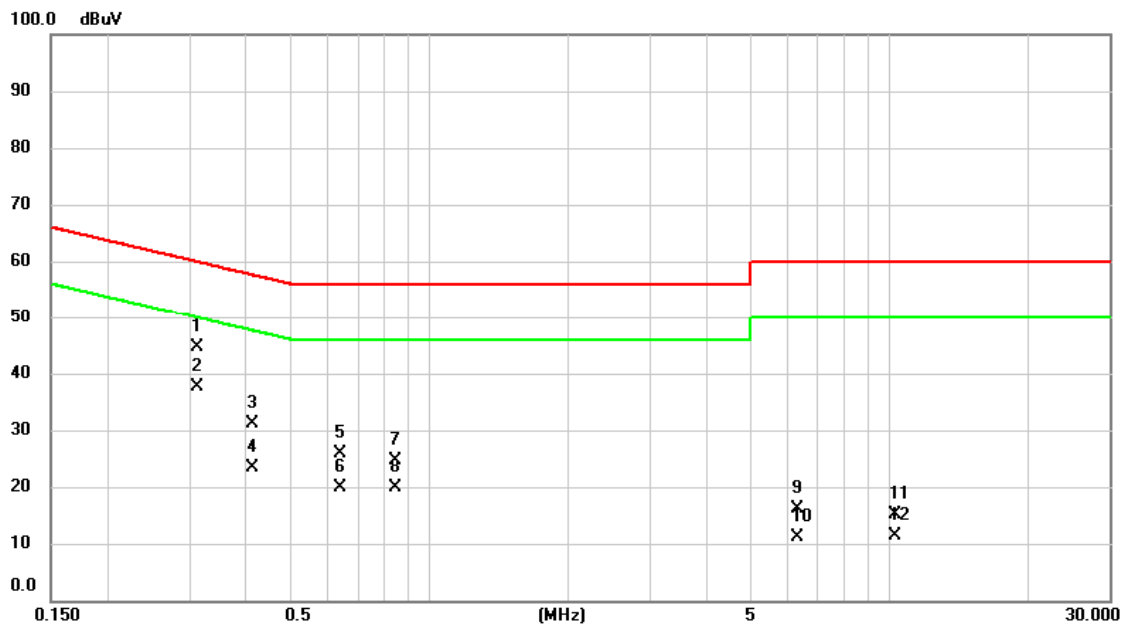


No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.1613	37.80	9.60	47.40	65.40	-18.00	QP	
2		0.1613	19.66	9.60	29.26	55.40	-26.14	AVG	
3		0.3007	37.86	9.65	47.51	60.22	-12.71	QP	
4	*	0.3007	29.17	9.65	38.82	50.22	-11.40	AVG	
5		0.4020	22.30	9.65	31.95	57.81	-25.86	QP	
6		0.4020	19.80	9.65	29.45	47.81	-18.36	AVG	
7		0.6427	18.04	9.66	27.70	56.00	-28.30	QP	
8		0.6427	12.35	9.66	22.01	46.00	-23.99	AVG	
9		0.8407	16.14	9.65	25.79	56.00	-30.21	QP	
10		0.8407	10.97	9.65	20.62	46.00	-25.38	AVG	
11		6.3353	9.74	9.81	19.55	60.00	-40.45	QP	
12		6.3353	3.34	9.81	13.15	50.00	-36.85	AVG	

REMARKS:

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

Test Mode	Normal	Tested Date	2020/4/16
Test Frequency	-	Phase	Neutral

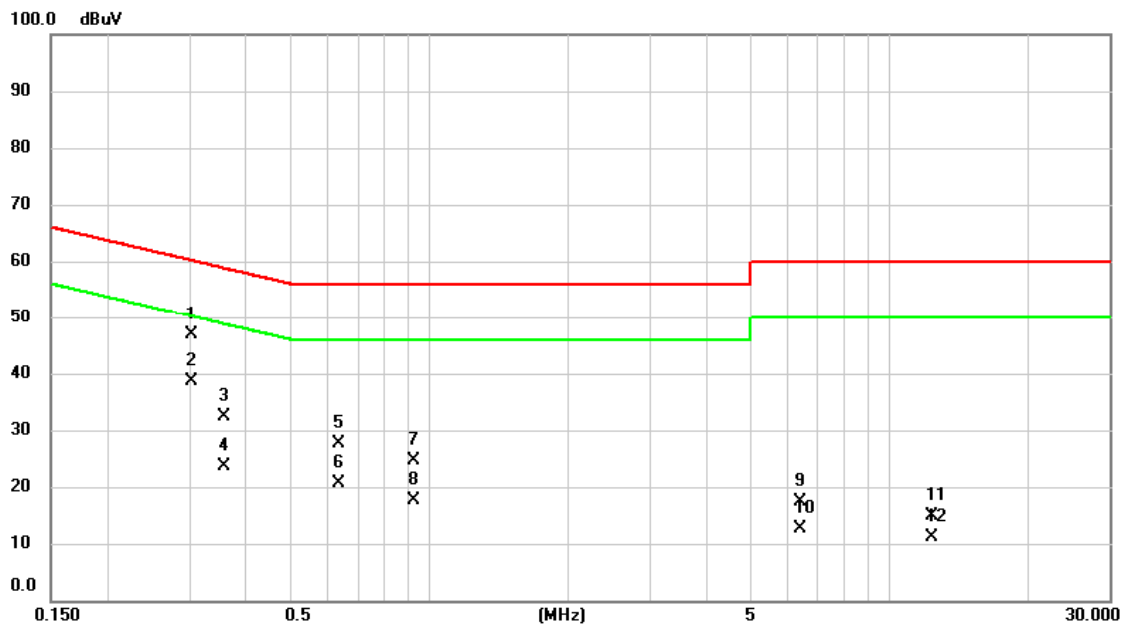


No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.3120	35.09	9.65	44.74	59.92	-15.18	QP	
2	*	0.3120	28.10	9.65	37.75	49.92	-12.17	AVG	
3		0.4132	21.51	9.65	31.16	57.58	-26.42	QP	
4		0.4132	13.66	9.65	23.31	47.58	-24.27	AVG	
5		0.6405	16.19	9.66	25.85	56.00	-30.15	QP	
6		0.6405	10.32	9.66	19.98	46.00	-26.02	AVG	
7		0.8430	15.04	9.65	24.69	56.00	-31.31	QP	
8		0.8430	10.12	9.65	19.77	46.00	-26.23	AVG	
9		6.3015	6.30	9.81	16.11	60.00	-43.89	QP	
10		6.3015	1.44	9.81	11.25	50.00	-38.75	AVG	
11		10.2524	5.24	9.88	15.12	60.00	-44.88	QP	
12		10.2524	1.50	9.88	11.38	50.00	-38.62	AVG	

REMARKS:

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

Test Mode	Idle	Tested Date	2020/4/16
Test Frequency	-	Phase	Line

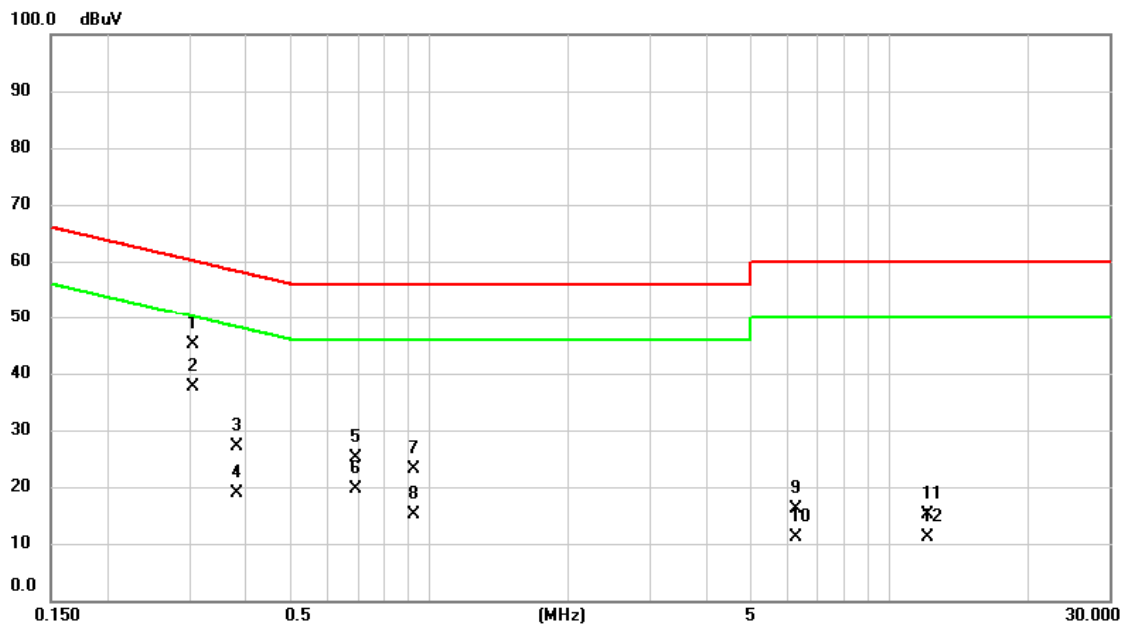


No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.3030	37.11	9.65	46.76	60.16	-13.40	QP	
2	*	0.3030	29.06	9.65	38.71	50.16	-11.45	AVG	
3		0.3592	22.70	9.65	32.35	58.75	-26.40	QP	
4		0.3592	13.93	9.65	23.58	48.75	-25.17	AVG	
5		0.6360	17.99	9.66	27.65	56.00	-28.35	QP	
6		0.6360	11.01	9.66	20.67	46.00	-25.33	AVG	
7		0.9240	15.09	9.64	24.73	56.00	-31.27	QP	
8		0.9240	7.90	9.64	17.54	46.00	-28.46	AVG	
9		6.3983	7.58	9.81	17.39	60.00	-42.61	QP	
10		6.3983	2.75	9.81	12.56	50.00	-37.44	AVG	
11		12.3720	4.99	9.91	14.90	60.00	-45.10	QP	
12		12.3720	1.16	9.91	11.07	50.00	-38.93	AVG	

REMARKS:

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

Test Mode	Idle	Tested Date	2020/4/16
Test Frequency	-	Phase	Neutral



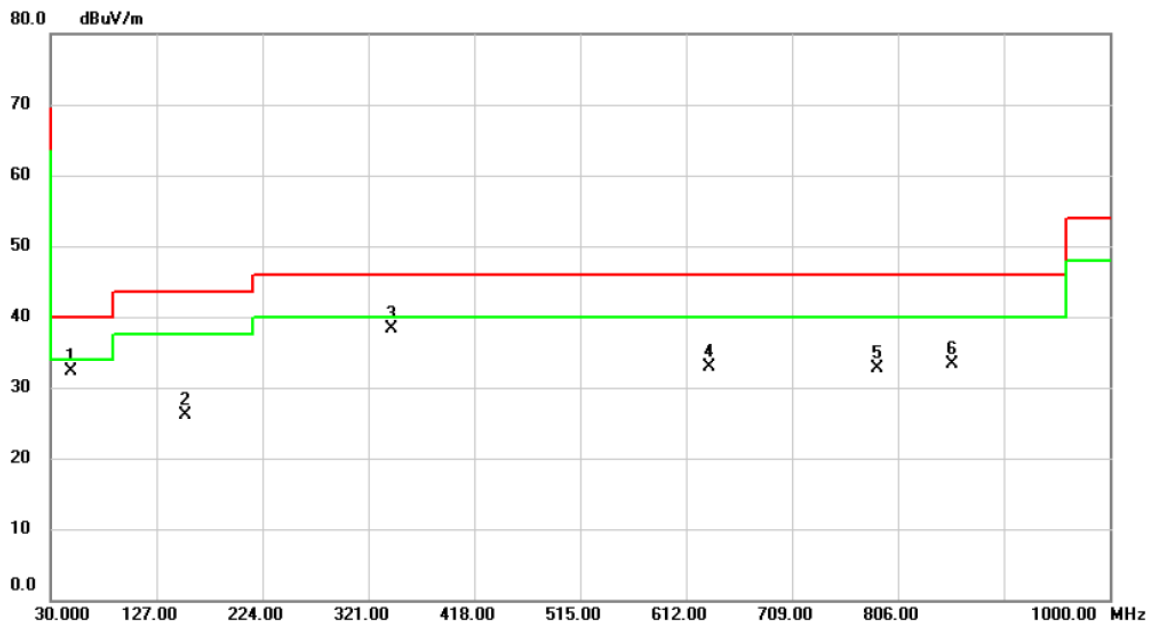
No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.3052	35.59	9.65	45.24	60.10	-14.86	QP	
2	*	0.3052	27.90	9.65	37.55	50.10	-12.55	AVG	
3		0.3817	17.60	9.65	27.25	58.24	-30.99	QP	
4		0.3817	9.14	9.65	18.79	48.24	-29.45	AVG	
5		0.6945	15.57	9.67	25.24	56.00	-30.76	QP	
6		0.6945	10.08	9.67	19.75	46.00	-26.25	AVG	
7		0.9240	13.52	9.64	23.16	56.00	-32.84	QP	
8		0.9240	5.50	9.64	15.14	46.00	-30.86	AVG	
9		6.2588	6.32	9.81	16.13	60.00	-43.87	QP	
10		6.2588	1.41	9.81	11.22	50.00	-38.78	AVG	
11		12.1335	5.17	9.91	15.08	60.00	-44.92	QP	
12		12.1335	1.33	9.91	11.24	50.00	-38.76	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	UNII-1_ IEEE 802.11n (HT20)	Test Date	2020/4/15
Test Frequency	CH48: 5240 MHz	Polarization	Vertical

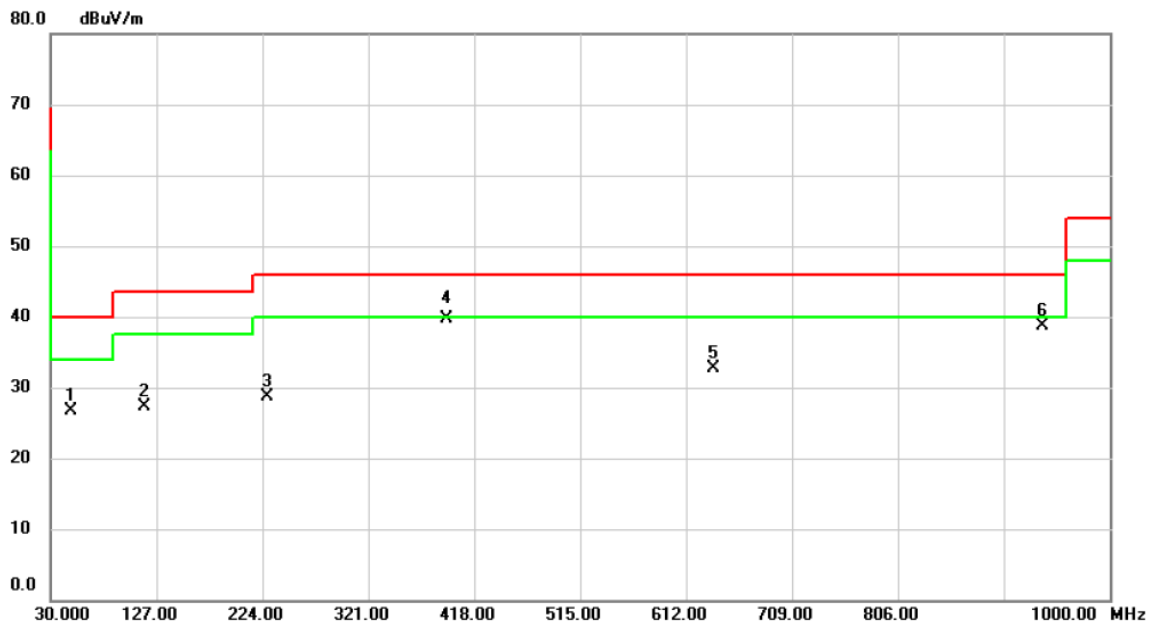


No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		48.4300	40.43	-8.09	32.34	40.00	-7.66	peak	
2		153.1900	34.66	-8.59	26.07	43.50	-17.43	peak	
3	*	342.3400	44.77	-6.39	38.38	46.00	-7.62	peak	
4		633.3400	32.94	-0.01	32.93	46.00	-13.07	peak	
5		786.6000	29.75	2.86	32.61	46.00	-13.39	peak	
6		855.4700	29.25	4.08	33.33	46.00	-12.67	peak	

REMARKS:

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

Test Mode	UNII-1_ IEEE 802.11n (HT20)	Test Date	2020/4/15
Test Frequency	CH48: 5240 MHz	Polarization	Horizontal



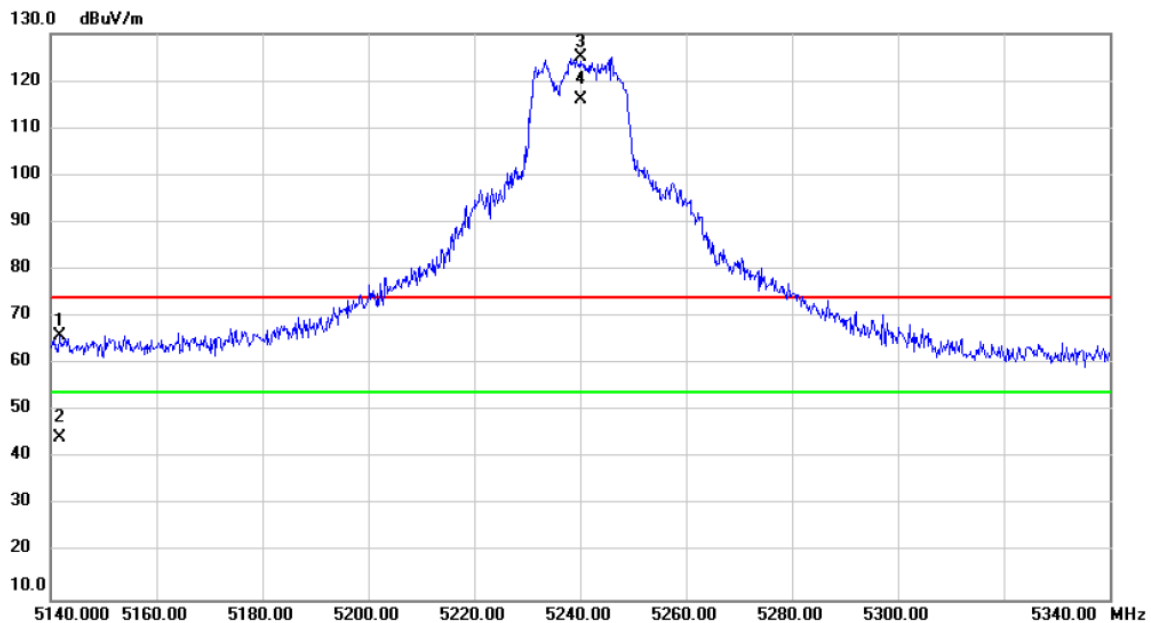
No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		48.4300	34.83	-8.09	26.74	40.00	-13.26	peak	
2		116.3300	38.17	-10.90	27.27	43.50	-16.23	peak	
3		228.8500	38.31	-9.68	28.63	46.00	-17.37	peak	
4	*	392.7800	45.00	-5.23	39.77	46.00	-6.23	QP	
5		637.2200	32.76	0.03	32.79	46.00	-13.21	peak	
6		937.9200	33.15	5.61	38.76	46.00	-7.24	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	UNII-1_ IEEE 802.11n (HT20)	Test Date	2020/4/15
Test Frequency	CH48: 5240 MHz	Polarization	Vertical

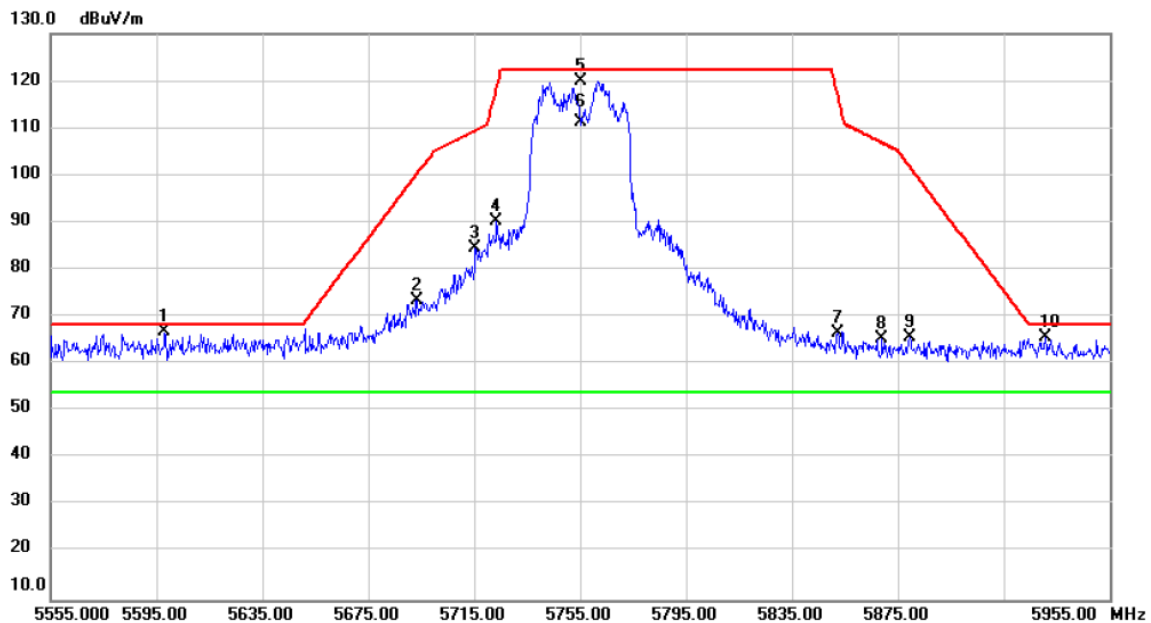


No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		5141.600	28.21	37.60	65.81	74.00	-8.19	peak	
2		5141.600	6.72	37.60	44.32	54.00	-9.68	AVG	
3	X	5240.000	87.30	37.71	125.01	74.00	51.01	peak	No Limit
4	*	5240.000	78.48	37.71	116.19	54.00	62.19	AVG	No Limit

REMARKS:

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

Test Mode	UNII-3_ IEEE 802.11n (HT40)	Test Date	2020/4/15
Test Frequency	CH151: 5755 MHz	Polarization	Vertical

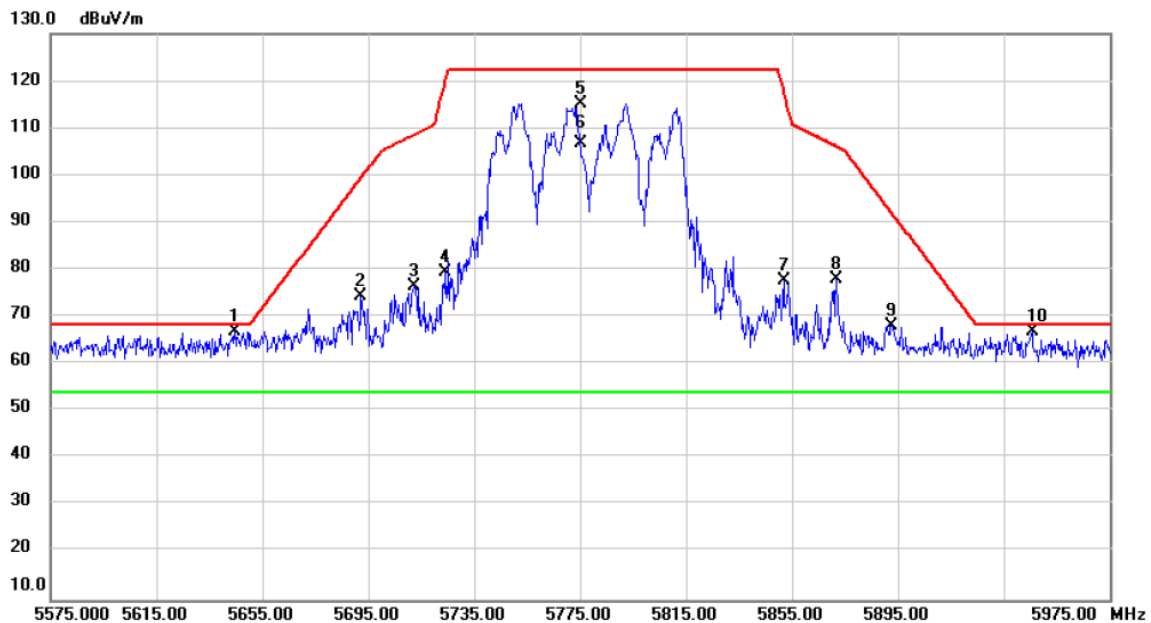


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		5598.200	28.55	38.15	66.70	68.20	-1.50	peak	
2		5693.400	35.24	38.28	73.52	100.33	-26.81	peak	
3		5715.400	46.34	38.31	84.65	109.51	-24.86	peak	
4		5723.400	51.95	38.32	90.27	118.55	-28.28	peak	
5		5755.000	81.51	38.37	119.88	122.20	-2.32	peak	No Limit
6	*	5755.000	72.88	38.37	111.25	54.00	57.25	AVG	No Limit
7		5852.200	27.97	38.50	66.47	117.18	-50.71	peak	
8		5869.000	26.92	38.53	65.45	106.88	-41.43	peak	
9		5879.400	27.03	38.54	65.57	101.93	-36.36	peak	
10		5930.600	27.10	38.61	65.71	68.20	-2.49	peak	

REMARKS:

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

Test Mode	UNII-3_ IEEE 802.11ac (VHT80)	Test Date	2020/4/15
Test Frequency	CH155: 5775 MHz	Polarization	Vertical

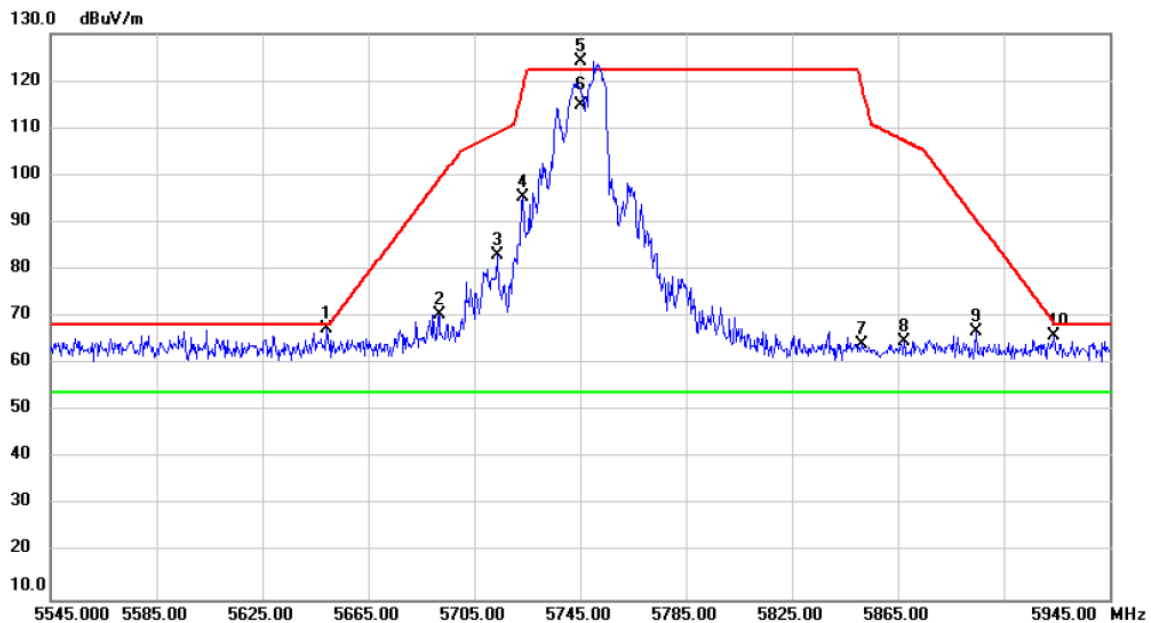


No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		5644.600	28.78	38.21	66.99	68.20	-1.21	peak	
2		5692.200	36.20	38.28	74.48	99.45	-24.97	peak	
3		5712.200	38.28	38.31	76.59	108.62	-32.03	peak	
4		5724.200	41.18	38.32	79.50	120.38	-40.88	peak	
5		5775.000	76.81	38.39	115.20	122.20	-7.00	peak	No Limit
6	*	5775.000	68.27	38.39	106.66	54.00	52.66	AVG	No Limit
7		5851.800	39.11	38.50	77.61	118.09	-40.48	peak	
8		5871.800	39.41	38.53	77.94	106.09	-28.15	peak	
9		5892.600	29.63	38.56	68.19	92.14	-23.95	peak	
10		5945.800	28.24	38.63	66.87	68.20	-1.33	peak	

REMARKS:

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

Test Mode	UNII-3_ IEEE 802.11ax (HEW20)	Test Date	2020/4/15
Test Frequency	CH149: 5745 MHz	Polarization	Vertical

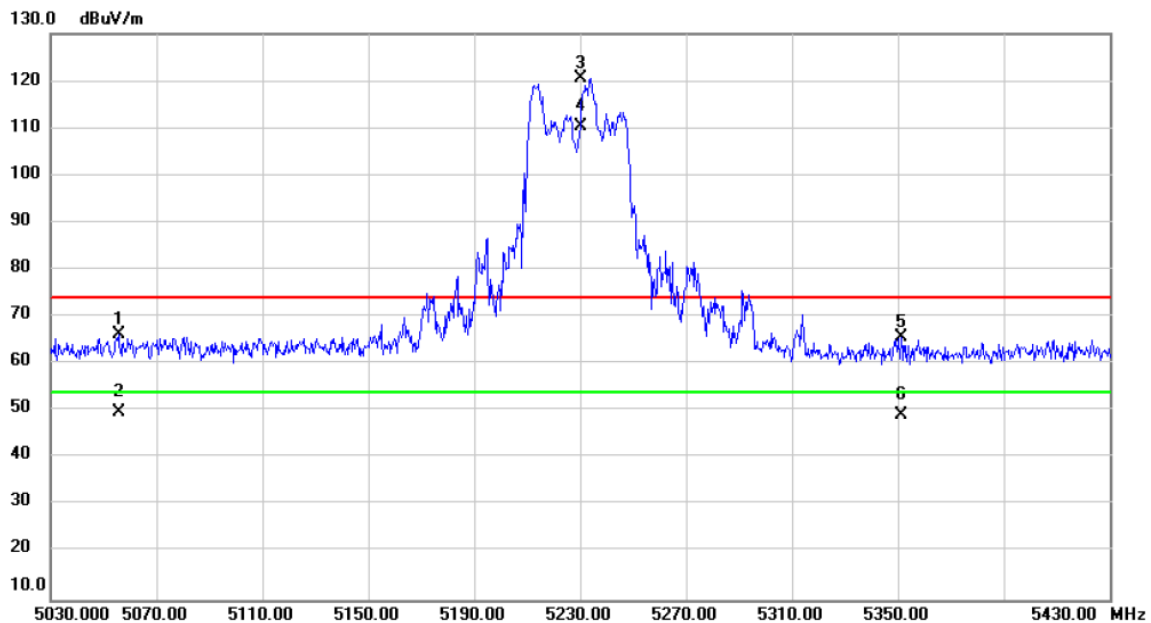


No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		5649.400	29.11	38.22	67.33	68.20	-0.87	peak	
2		5691.800	32.25	38.28	70.53	99.15	-28.62	peak	
3		5713.800	44.71	38.31	83.02	109.07	-26.05	peak	
4		5723.400	57.09	38.32	95.41	118.55	-23.14	peak	
5	X	5745.000	85.94	38.35	124.29	122.20	2.09	peak	No Limit
6	*	5745.000	76.51	38.35	114.86	54.00	60.86	AVG	No Limit
7		5851.400	25.60	38.50	64.10	119.01	-54.91	peak	
8		5867.400	26.18	38.52	64.70	107.33	-42.63	peak	
9		5894.600	28.23	38.56	66.79	90.66	-23.87	peak	
10		5924.200	27.43	38.60	66.03	68.79	-2.76	peak	

REMARKS:

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

Test Mode	UNII-1_ IEEE 802.11ax (HEW40)	Test Date	2020/4/15
Test Frequency	CH46: 5230 MHz	Polarization	Vertical

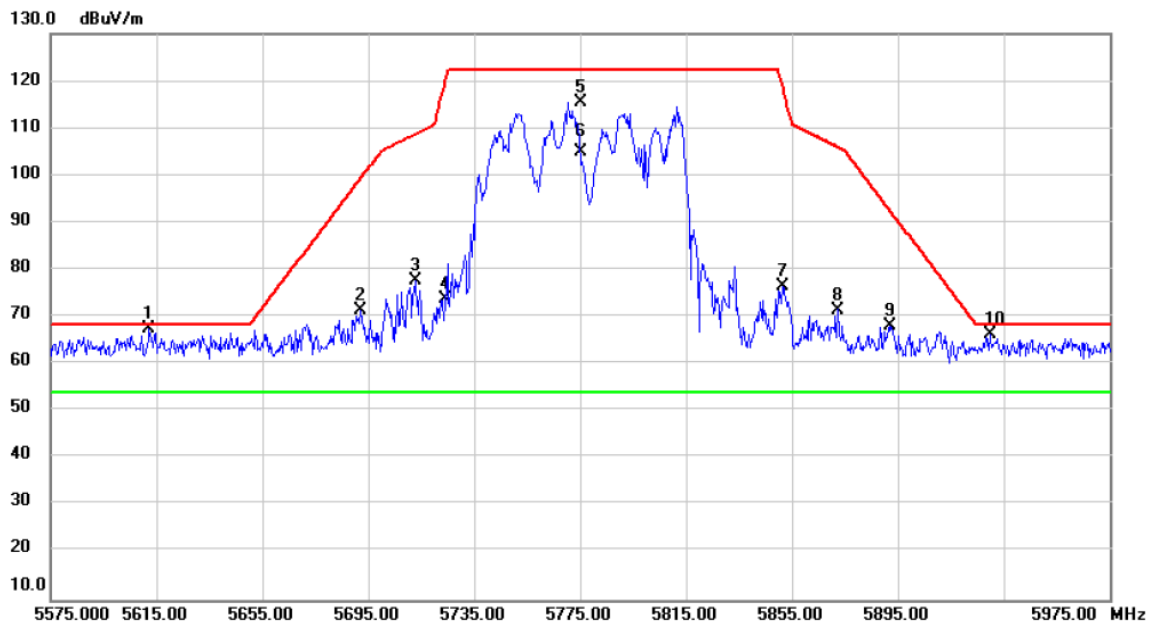


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		5055.600	28.87	37.50	66.37	74.00	-7.63	peak	
2		5055.600	12.29	37.50	49.79	54.00	-4.21	AVG	
3	X	5230.000	82.80	37.70	120.50	74.00	46.50	peak	No Limit
4	*	5230.000	72.69	37.70	110.39	54.00	56.39	AVG	No Limit
5		5351.200	27.71	37.84	65.55	74.00	-8.45	peak	
6		5351.200	11.24	37.84	49.08	54.00	-4.92	AVG	

REMARKS:

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

Test Mode	UNII-3_ IEEE 802.11ax (HEW80)	Test Date	2020/4/15
Test Frequency	CH155: 5775 MHz	Polarization	Vertical

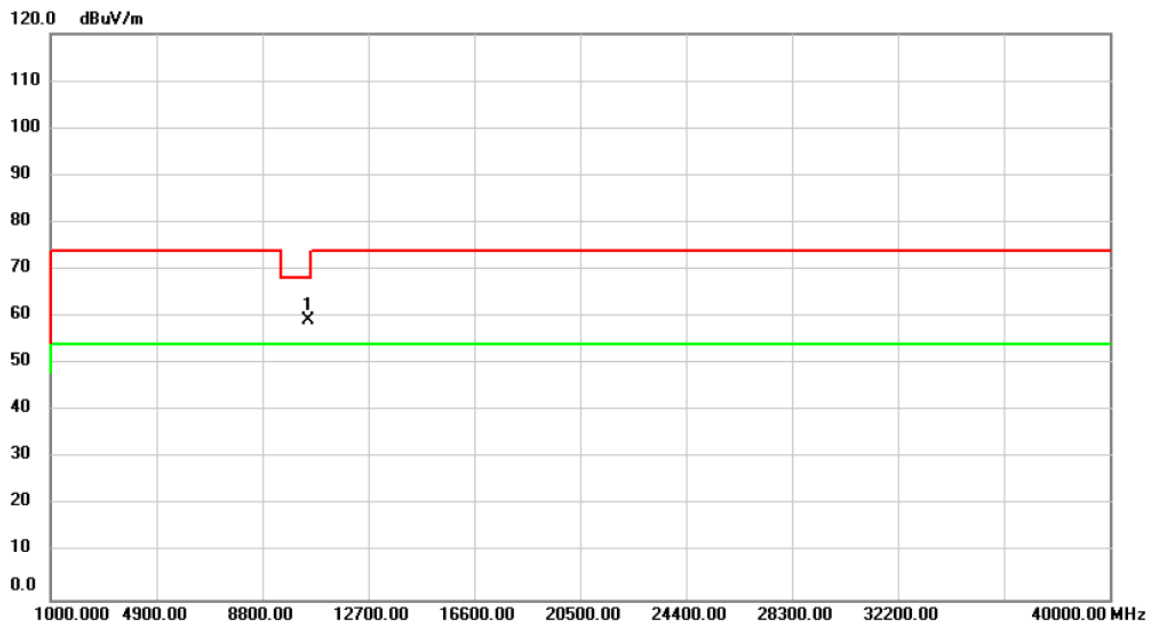


No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		5612.200	29.25	38.17	67.42	68.20	-0.78	peak	
2		5692.200	32.98	38.28	71.26	99.45	-28.19	peak	
3		5712.600	39.35	38.31	77.66	108.73	-31.07	peak	
4		5724.200	35.48	38.32	73.80	120.38	-46.58	peak	
5		5775.000	77.11	38.39	115.50	122.20	-6.70	peak	No Limit
6	*	5775.000	66.69	38.39	105.08	54.00	51.08	AVG	No Limit
7		5851.400	37.83	38.50	76.33	119.01	-42.68	peak	
8		5872.200	32.97	38.53	71.50	105.98	-34.48	peak	
9		5892.200	29.54	38.56	68.10	92.44	-24.34	peak	
10		5929.800	27.76	38.61	66.37	68.20	-1.83	peak	

REMARKS:

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

Test Mode	UNII-1_IEEE 802.11n (HT20)	Test Date	2020/4/15
Test Frequency	CH48: 5240 MHz	Polarization	Vertical

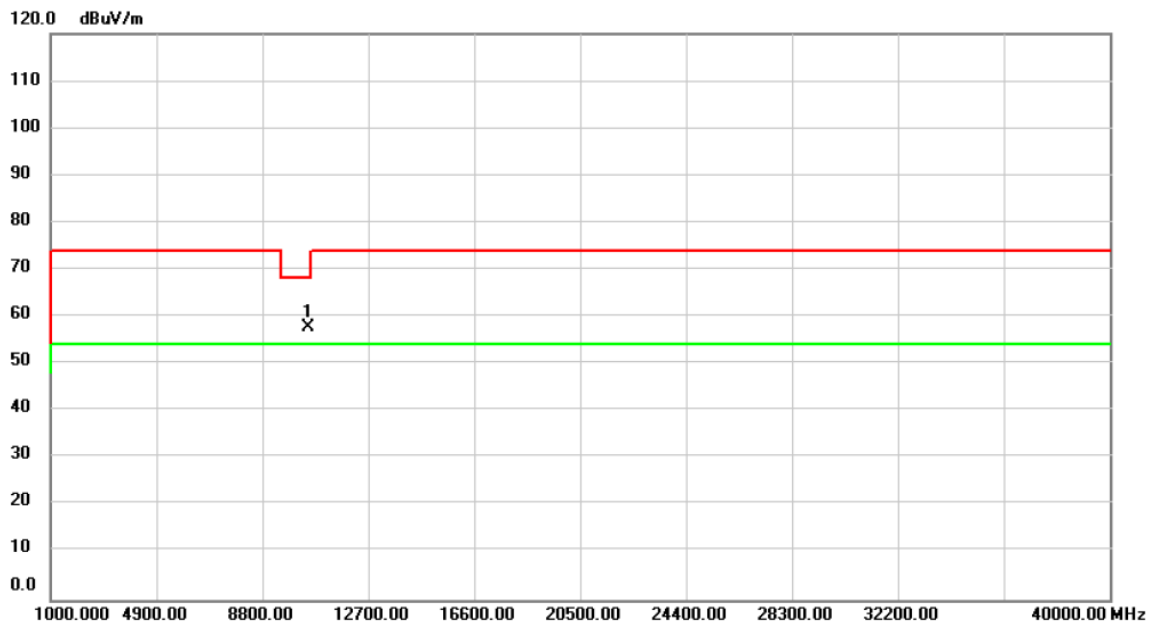


No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector	Comment
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB		
1	*	10480.00	55.54	3.84	59.38	68.20	-8.82	peak	

REMARKS:

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

Test Mode	UNII-1_IEEE 802.11n (HT20)	Test Date	2020/4/15
Test Frequency	CH48: 5240 MHz	Polarization	Horizontal

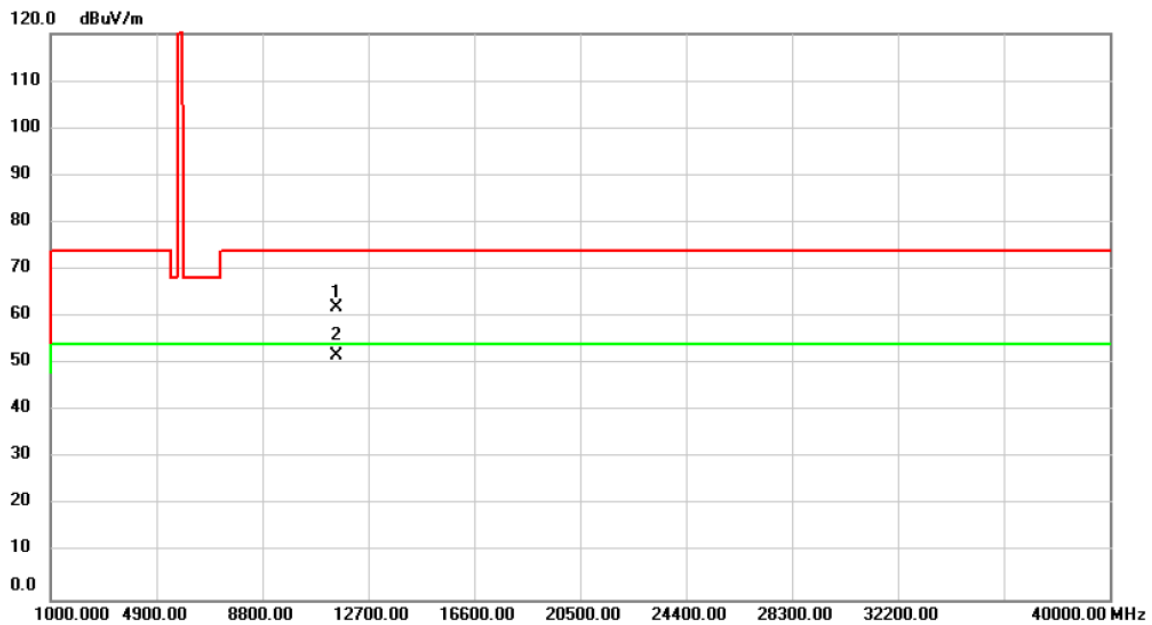


No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	10480.00	53.99	3.84	57.83	68.20	-10.37	peak	

REMARKS:

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

Test Mode	UNII-3_ IEEE 802.11n (HT40)	Test Date	2020/4/15
Test Frequency	CH151: 5755 MHz	Polarization	Vertical

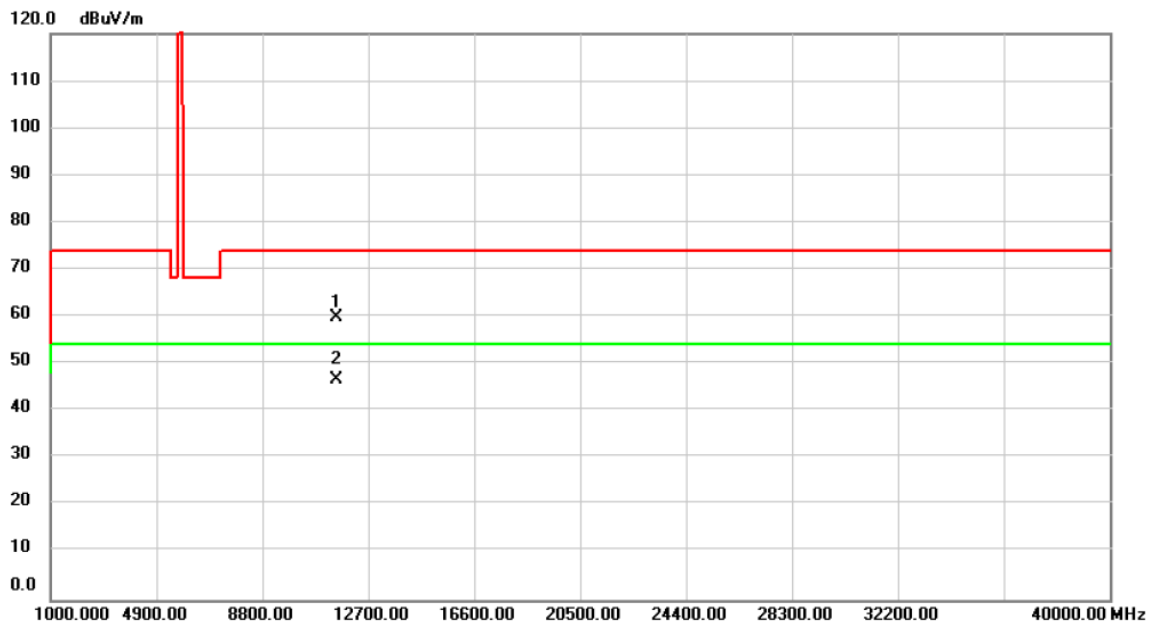


No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		11510.00	56.76	5.07	61.83	74.00	-12.17	peak	
2	*	11510.00	46.80	5.07	51.87	54.00	-2.13	AVG	

REMARKS:

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

Test Mode	UNII-3_ IEEE 802.11n (HT40)	Test Date	2020/4/15
Test Frequency	CH151: 5755 MHz	Polarization	Horizontal

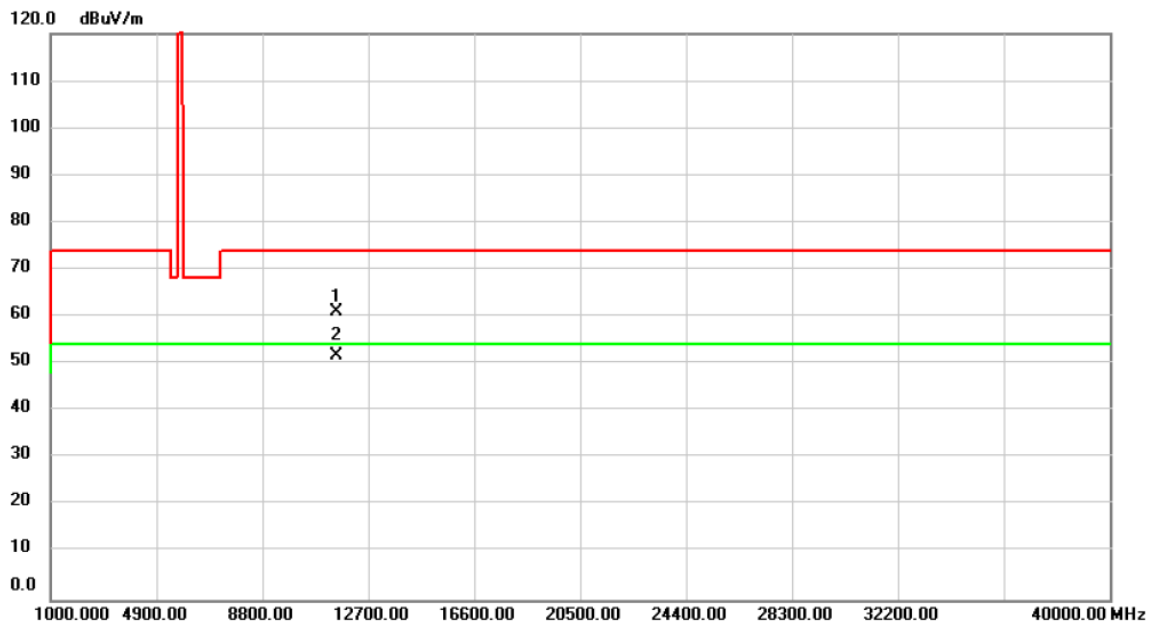


No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		11510.00	54.68	5.07	59.75	74.00	-14.25	peak	
2	*	11510.00	41.66	5.07	46.73	54.00	-7.27	AVG	

REMARKS:

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

Test Mode	UNII-3_IIEEE 802.11ac (VHT80)	Test Date	2020/4/15
Test Frequency	CH155: 5775 MHz	Polarization	Vertical

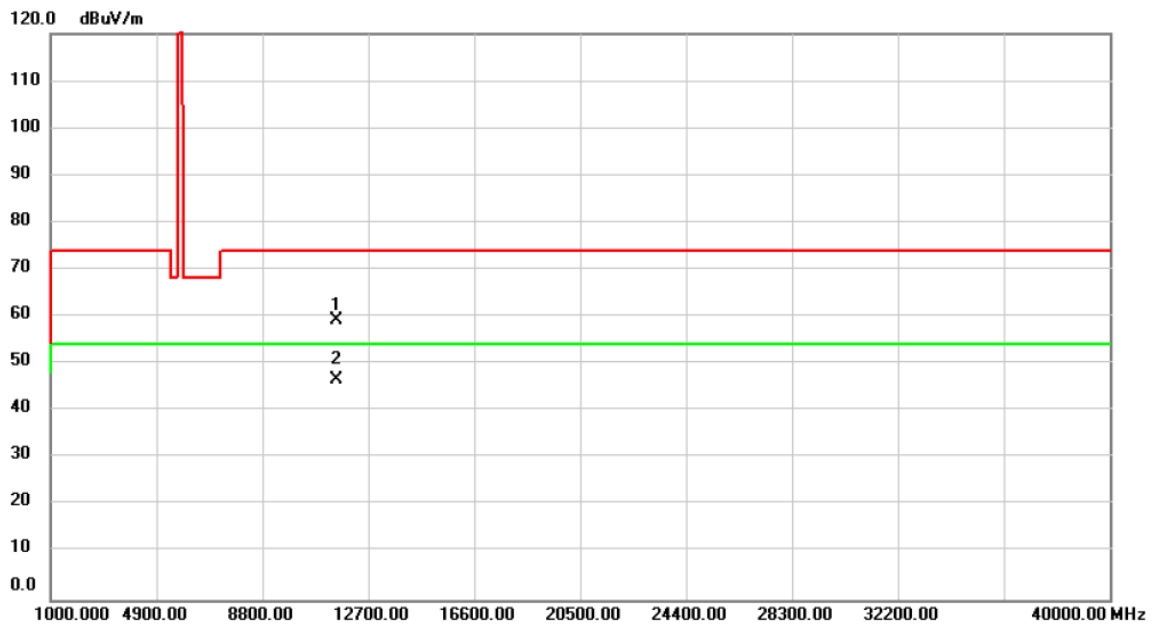


No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		11550.00	56.20	4.88	61.08	74.00	-12.92	peak	
2	*	11550.00	46.79	4.88	51.67	54.00	-2.33	AVG	

REMARKS:

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

Test Mode	UNII-3_ IEEE 802.11ac (VHT80)	Test Date	2020/4/15
Test Frequency	CH155: 5775 MHz	Polarization	Horizontal

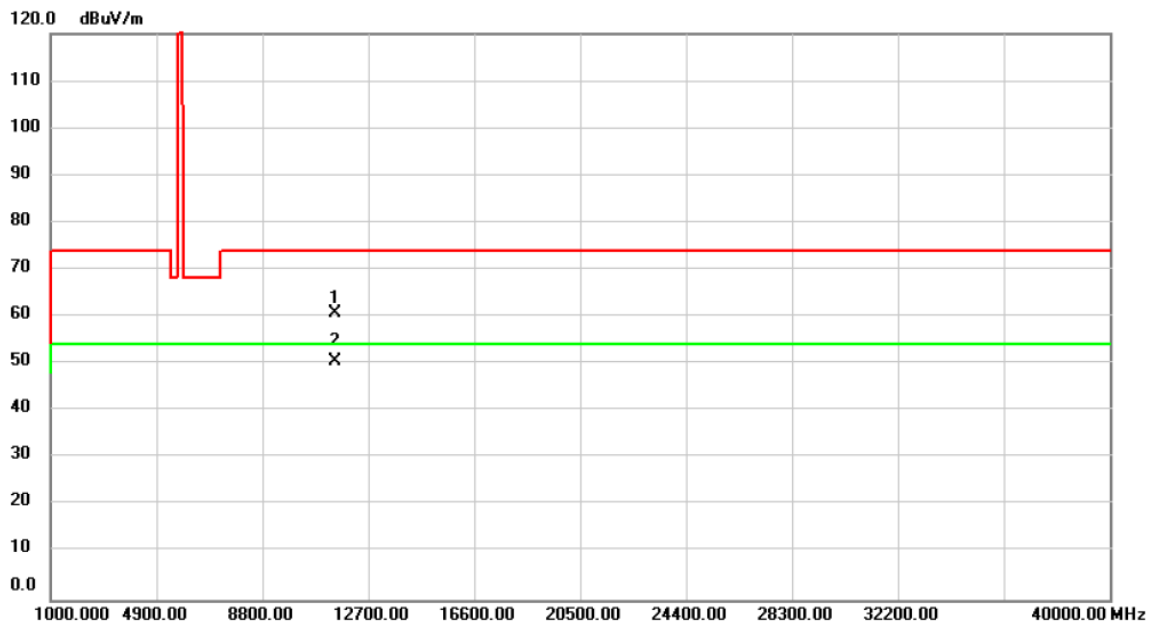


No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		11550.00	54.45	4.88	59.33	74.00	-14.67	peak	
2	*	11550.00	41.81	4.88	46.69	54.00	-7.31	AVG	

REMARKS:

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

Test Mode	UNII-3_ IEEE 802.11ax (HEW20)	Test Date	2020/4/15
Test Frequency	CH149: 5745 MHz	Polarization	Vertical

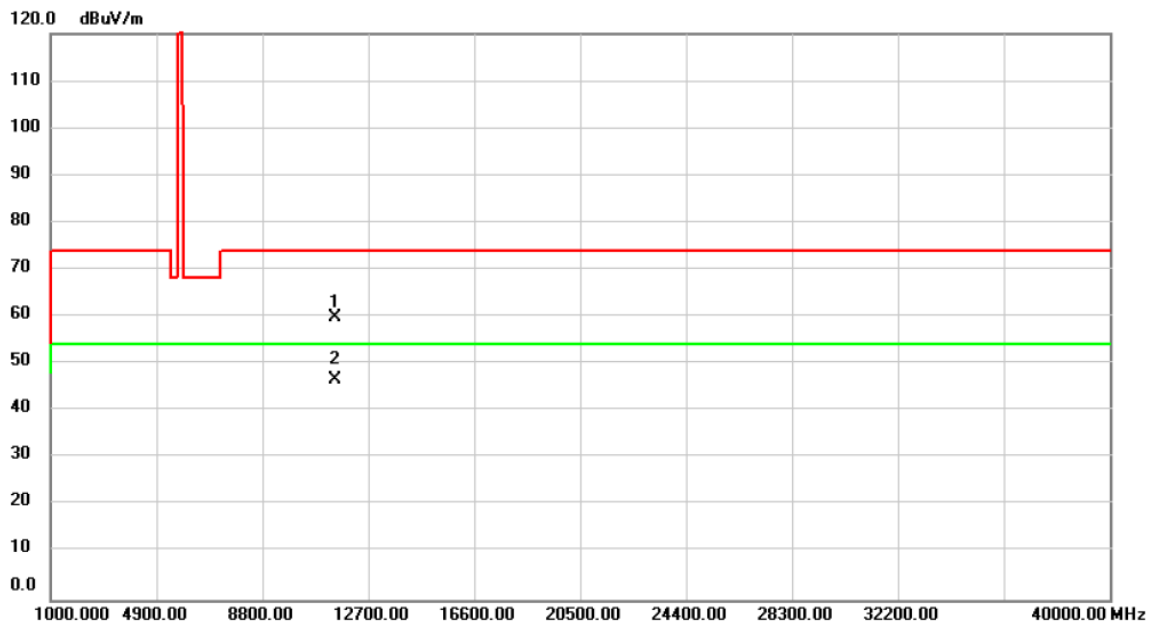


No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		11490.00	55.52	5.11	60.63	74.00	-13.37	peak	
2	*	11490.00	45.31	5.11	50.42	54.00	-3.58	AVG	

REMARKS:

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

Test Mode	UNII-3_ IEEE 802.11ax (HEW20)	Test Date	2020/4/15
Test Frequency	CH149: 5745 MHz	Polarization	Horizontal

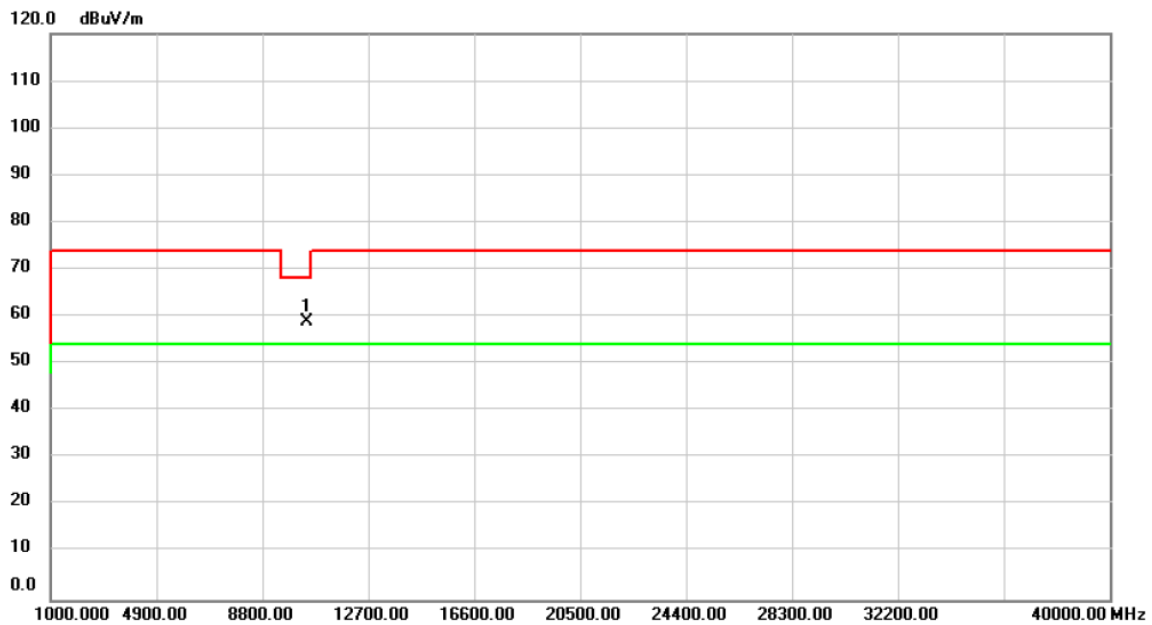


No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		11490.00	54.65	5.11	59.76	74.00	-14.24	peak	
2	*	11490.00	41.41	5.11	46.52	54.00	-7.48	AVG	

REMARKS:

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

Test Mode	UNII-1_ IEEE 802.11ax (HEW40)	Test Date	2020/4/15
Test Frequency	CH46: 5230 MHz	Polarization	Vertical

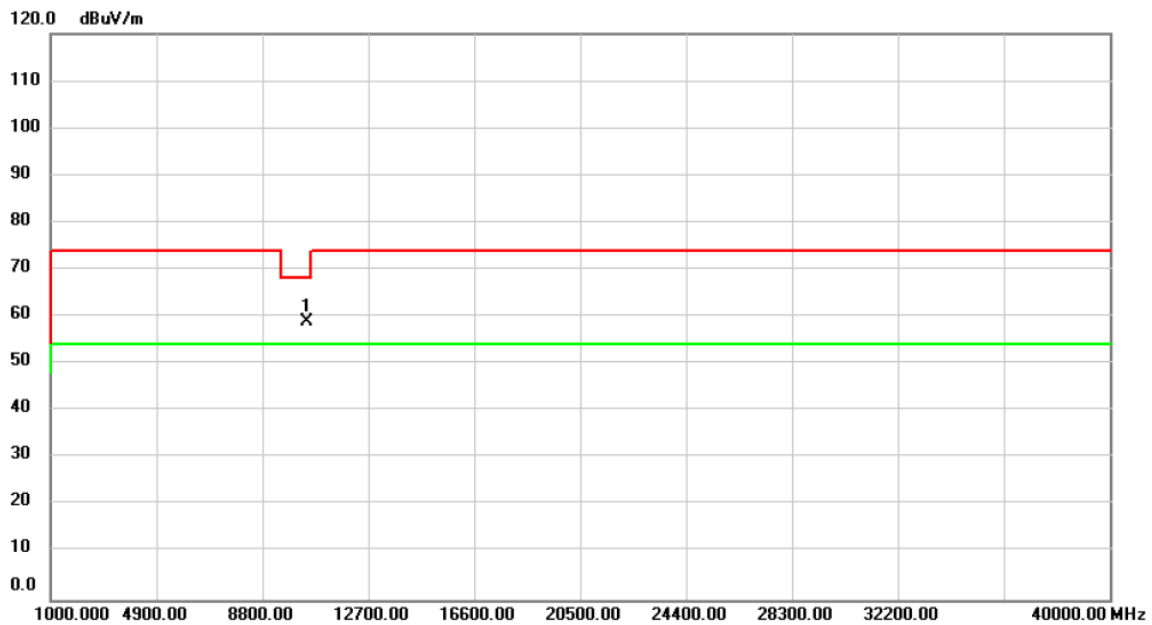


No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	10460.00	55.22	3.82	59.04	68.20	-9.16	peak	

REMARKS:

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

Test Mode	UNII-1_ IEEE 802.11ax (HEW40)	Test Date	2020/4/15
Test Frequency	CH46: 5230 MHz	Polarization	Horizontal

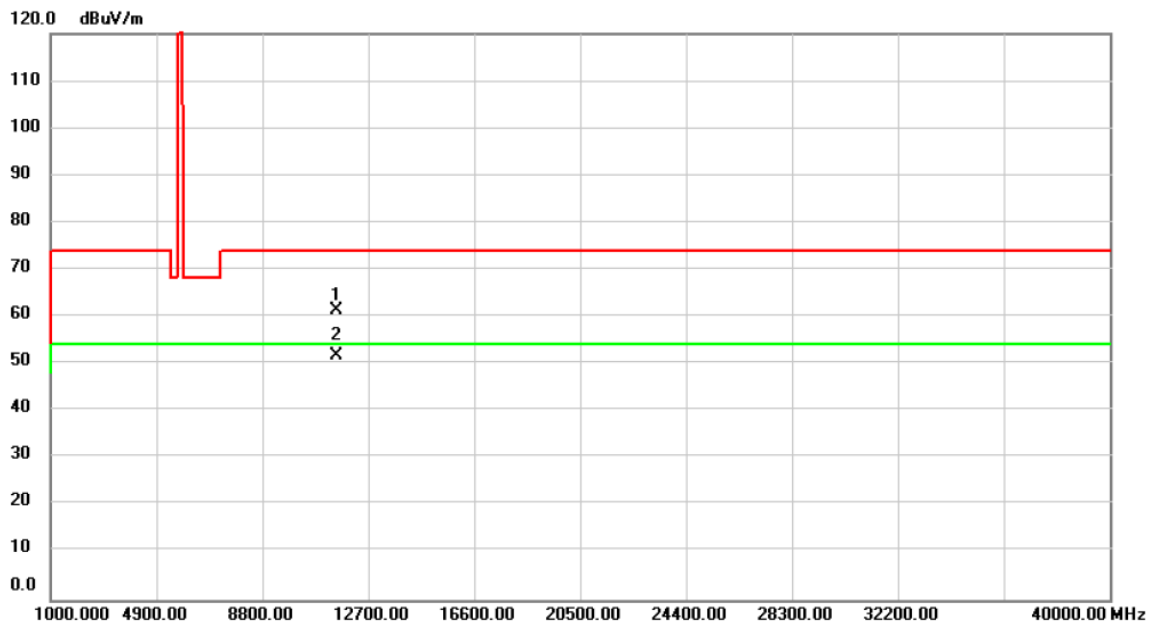


No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	10460.00	55.01	3.82	58.83	68.20	-9.37	peak	

REMARKS:

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

Test Mode	UNII-3_ IEEE 802.11ax (HEW80)	Test Date	2020/4/15
Test Frequency	CH155: 5775 MHz	Polarization	Vertical

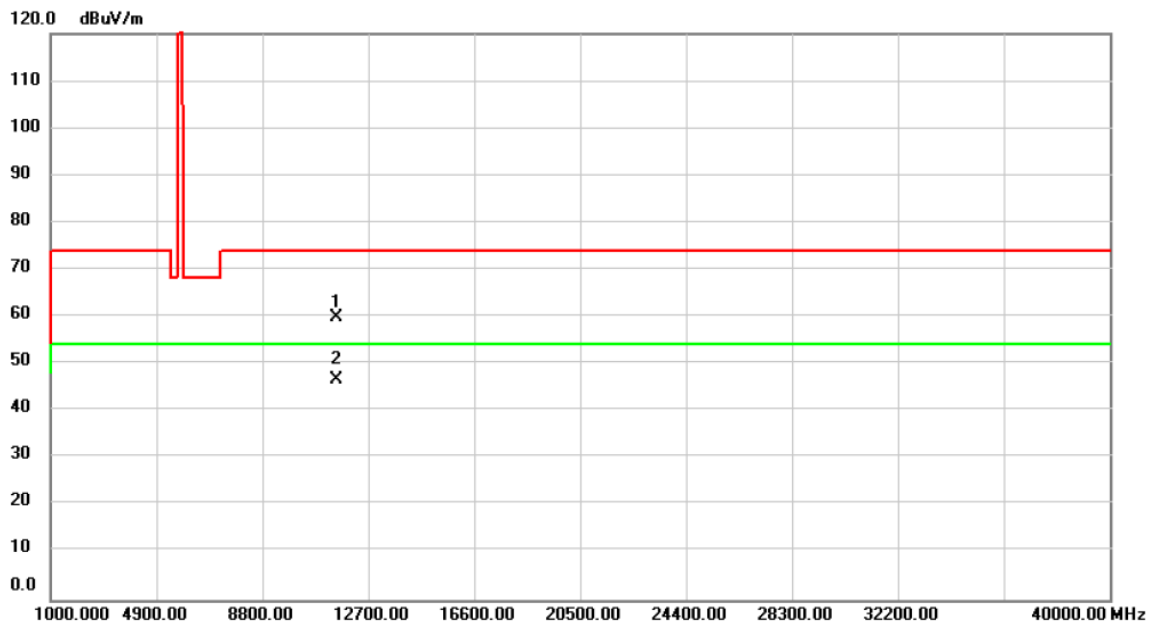


No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		11550.00	56.48	4.88	61.36	74.00	-12.64	peak	
2	*	11550.00	46.99	4.88	51.87	54.00	-2.13	AVG	

REMARKS:

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

Test Mode	UNII-3_ IEEE 802.11ax (HEW80)	Test Date	2020/4/15
Test Frequency	CH155: 5775 MHz	Polarization	Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		11550.00	55.02	4.88	59.90	74.00	-14.10	peak	
2	*	11550.00	41.67	4.88	46.55	54.00	-7.45	AVG	

REMARKS:

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

APPENDIX D OUTPUT POWER

Test Mode :	Non-Beamforming mode	Tested Date	2020/5/13
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Mode		Frequency (MHz)	ANT-1		ANT-2		ANT-3		ANT-4		Total Power		Limit		
			Average		Average		Average		Average		Average		Average		PASS/ FAIL
			dBm	W	dBm	W	dBm	W	dBm	W	dBm	W	dBm	W	
802.11a	Band 1	5180	16.74	0.0472	16.60	0.0457	16.91	0.0491	16.05	0.0403	22.61	0.1823	30.00	1.0000	PASS
	Band 4	5745	21.57	0.1435	21.50	0.1413	21.28	0.1343	21.10	0.1288	27.39	0.5479	30.00	1.0000	PASS
802.11n_20MHz	Band 1	5180	18.65	0.0733	17.95	0.0624	17.84	0.0608	17.40	0.0550	24.00	0.2514	30.00	1.0000	PASS
	Band 4	5745	22.96	0.1977	22.27	0.1687	21.54	0.1426	21.65	0.1462	28.16	0.6551	30.00	1.0000	PASS
802.11n_40MHz	Band 1	5190	16.68	0.0466	16.74	0.0472	16.90	0.0490	15.91	0.0390	22.59	0.1817	30.00	1.0000	PASS
	Band 4	5755	22.15	0.1641	22.94	0.1968	22.22	0.1667	22.09	0.1618	28.38	0.6894	30.00	1.0000	PASS
802.11ac_80MHz	Band 1	5210	13.04	0.0201	13.79	0.0239	13.60	0.0229	13.03	0.0201	19.40	0.0871	30.00	1.0000	PASS
	Band 4	5775	22.05	0.1603	22.69	0.1858	21.95	0.1567	21.89	0.1545	28.18	0.6573	30.00	1.0000	PASS
802.11ac_(80+80) MHz	Band 1	5210 + 5775	13.39	0.0218	13.60	0.0229	13.55	0.0226	12.92	0.0196	19.39	0.0870	30.00	1.0000	PASS
	Band 4	5775 + 5210	14.11	0.0258	14.65	0.0292	13.96	0.0249	14.44	0.0278	20.32	0.1076	30.00	1.0000	PASS
802.11ac_20MHz	Band 1	5180	17.20	0.0525	18.06	0.0640	18.07	0.0641	17.38	0.0547	23.72	0.2353	30.00	1.0000	PASS
	Band 4	5745	21.10	0.1288	22.39	0.1734	21.22	0.1324	21.69	0.1476	27.65	0.5822	30.00	1.0000	PASS
802.11ac_40MHz	Band 1	5190	16.36	0.0433	16.85	0.0484	16.94	0.0494	15.95	0.0394	22.56	0.1805	30.00	1.0000	PASS
	Band 4	5755	22.18	0.1652	22.65	0.1841	22.35	0.1718	22.21	0.1663	28.37	0.6874	30.00	1.0000	PASS
802.11ax_20MHz	Band 1	5180	18.02	0.0634	17.70	0.0589	17.78	0.0600	17.07	0.0509	23.68	0.2332	30.00	1.0000	PASS
	Band 4	5745	22.80	0.1905	22.58	0.1811	21.79	0.1510	21.82	0.1521	28.29	0.6747	30.00	1.0000	PASS
802.11ax_40MHz	Band 1	5190	14.83	0.0304	15.46	0.0352	15.44	0.0350	14.61	0.0289	21.12	0.1295	30.00	1.0000	PASS
	Band 4	5755	22.20	0.1660	22.98	0.1986	22.32	0.1706	22.24	0.1675	28.47	0.7027	30.00	1.0000	PASS
802.11ax_80MHz	Band 1	5210	11.35	0.0136	12.02	0.0159	11.80	0.0151	11.41	0.0138	17.67	0.0585	30.00	1.0000	PASS
	Band 4	5775	21.89	0.1545	22.51	0.1782	21.78	0.1507	22.01	0.1589	28.08	0.6423	30.00	1.0000	PASS
802.11ax_(80+80) MHz	Band 1	5210 + 5775	12.93	0.0196	11.77	0.0150	11.80	0.0151	11.24	0.0133	18.00	0.0631	30.00	1.0000	PASS
	Band 4	5775 + 5210	14.10	0.0257	12.26	0.0168	10.28	0.0107	12.68	0.0185	18.56	0.0717	30.00	1.0000	PASS

Test Mode :	Beamforming mode	Tested Date	2020/5/13
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Mode		Frequency (MHz)	ANT-1		ANT-2		ANT-3		ANT-4		Total Power		Limit		
			Average		Average		Average		Average		Average		Average		PASS/ FAIL
			dBm	W	dBm	W	dBm	W	dBm	W	dBm	W	dBm	W	
802.11a	Band 1	5180	10.72	0.0118	10.58	0.0114	10.89	0.0123	10.03	0.0101	16.59	0.0456	25.60	0.3631	PASS
	Band 4	5745	15.55	0.0359	15.48	0.0353	15.26	0.0336	15.08	0.0322	21.37	0.1370	25.60	0.3631	PASS
802.11n_20MHz	Band 1	5180	12.63	0.0183	11.93	0.0156	11.82	0.0152	11.38	0.0137	17.98	0.0629	25.60	0.3631	PASS
	Band 4	5745	16.94	0.0494	16.25	0.0422	15.52	0.0356	15.63	0.0366	22.14	0.1638	25.60	0.3631	PASS
802.11n_40MHz	Band 1	5190	10.66	0.0116	10.72	0.0118	10.88	0.0122	9.89	0.0097	16.57	0.0454	25.60	0.3631	PASS
	Band 4	5755	16.13	0.0410	16.92	0.0492	16.20	0.0417	16.07	0.0405	22.36	0.1724	25.60	0.3631	PASS
802.11ac_80MHz	Band 1	5210	7.02	0.0050	7.77	0.0060	7.58	0.0057	7.01	0.0050	13.38	0.0218	25.60	0.3631	PASS
	Band 4	5775	16.03	0.0401	16.67	0.0465	15.93	0.0392	15.87	0.0386	22.16	0.1643	25.60	0.3631	PASS
802.11ac_(80+80) MHz	Band 1	5210 + 5775	7.37	0.0055	7.58	0.0057	7.53	0.0057	6.90	0.0049	13.37	0.0217	25.60	0.3631	PASS
	Band 4	5775 + 5210	8.09	0.0064	8.63	0.0073	7.94	0.0062	8.42	0.0070	14.30	0.0269	25.60	0.3631	PASS
802.11ac_20MHz	Band 1	5180	11.18	0.0131	12.04	0.0160	12.05	0.0160	11.36	0.0137	17.70	0.0588	25.60	0.3631	PASS
	Band 4	5745	15.08	0.0322	16.37	0.0434	15.20	0.0331	15.67	0.0369	21.63	0.1456	25.60	0.3631	PASS
802.11ac_40MHz	Band 1	5190	10.34	0.0108	10.83	0.0121	10.92	0.0124	9.93	0.0098	16.54	0.0451	25.60	0.3631	PASS
	Band 4	5755	16.16	0.0413	16.63	0.0460	16.33	0.0430	16.19	0.0416	22.35	0.1719	25.60	0.3631	PASS
802.11ax_20MHz	Band 1	5180	12.00	0.0158	11.68	0.0147	11.76	0.0150	11.05	0.0127	17.66	0.0583	25.60	0.3631	PASS
	Band 4	5745	16.78	0.0476	16.56	0.0453	15.77	0.0378	15.80	0.0380	22.27	0.1687	25.60	0.3631	PASS
802.11ax_40MHz	Band 1	5190	8.81	0.0076	9.44	0.0088	9.42	0.0087	8.59	0.0072	15.10	0.0324	25.60	0.3631	PASS
	Band 4	5755	16.18	0.0415	16.96	0.0497	16.30	0.0427	16.22	0.0419	22.45	0.1757	25.60	0.3631	PASS
802.11ax_80MHz	Band 1	5210	5.33	0.0034	6.00	0.0040	5.78	0.0038	5.39	0.0035	11.65	0.0146	25.60	0.3631	PASS
	Band 4	5775	15.87	0.0386	16.49	0.0446	15.76	0.0377	15.99	0.0397	22.06	0.1606	25.60	0.3631	PASS
802.11ax_(80+80) MHz	Band 1	5210 + 5775	6.91	0.0049	5.75	0.0038	5.78	0.0038	5.22	0.0033	11.98	0.0158	25.60	0.3631	PASS
	Band 4	5775 + 5210	8.08	0.0064	6.24	0.0042	4.26	0.0027	6.66	0.0046	12.54	0.0179	25.60	0.3631	PASS

End of Test Report