

FCC Radio Test Report

FCC ID: 2AF82-FHD200

Report No. : BTL-FCCP-4-2104T005D
Equipment : Box PC
Model Name : FHD-200
Brand Name : Qbic
Applicant : Qbic Technology Co., Ltd.
Address : 26F.-12, NO.99, SEC. 1, XINTAI 5TH RD., XIZHI DIST., NEW TAIPEI CITY
22175, TAIWAN

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

FCC Rule Part(s) : FCC CFR Title 47, Part 15, Subpart E (15.407)
Measurement Procedure(s) : ANSI C63.10-2013

Date of Receipt : 2024/5/28
Date of Test : 2024/6/24 ~ 2024/7/31
Issued Date : 2024/8/9

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** assumes no responsibility for the data provided by the Customer, any statements, inferences or generalizations drawn by the customer or others from the reports issued by **BTL**.

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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REVISION HISTORY

Report No.	Version	Description	Issued Date	Note
BTL-FCCP-4-2104T005D	R00	Original Report.	2024/8/9	Valid

1 SUMMARY OF TEST RESULTS

Test procedures according to the technical standards.

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 APPENDIX D	Pass	-----
15.407(a)	Bandwidth	APPENDIX E	Pass	-----
15.407(a)	Output Power	APPENDIX F	Pass	-----
15.407(a)	Power Spectral Density	APPENDIX G	Pass	-----
15.203	Antenna Requirement	-----	Pass	-----
15.407(c)	Automatically Discontinue Transmission	-----	Pass	NOTE (3)

Statement of Conformity

The statement of conformity is based on the binary decision rule according to IEC Guide 115 and ILAC G8 "simple acceptance" principle. Without considering measurement uncertainty, its specific risk is less than 50% PFA. (PFA: Probability of False Accept)

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 locations stated below are under the TAF Accreditation Number 0659.

The test location(s) used to collect the test data in this report are:

No. 68-1, Ln. 169, Sec. 2, Datong Rd., Xizhi Dist., New Taipei City 221, Taiwan
(FCC DN: TW0659)

☐ C05 ☐ CB08 ☐ CB11 ☐ SR10 ☒ SR11

No. 68-2, Ln. 169, Sec. 2, Datong Rd., Xizhi Dist., New Taipei City 221, Taiwan
(FCC DN: TW0659)

☐ CB12 ☒ SR05

No. 72, Ln. 169, Sec. 2, Datong Rd., Xizhi Dist., New Taipei City 221, Taiwan
(FCC DN: TW0659)

☐ C06 ☒ CB21 ☐ CB22

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 %**.

A. AC power line conducted emissions test:

Test Site	Method	Measurement Frequency Range	U (dB)
SR05	CISPR	150 kHz ~ 30MHz	3.44

B. Radiated emissions test :

Test Site	Measurement Frequency Range	U (dB)
CB21	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)
Occupied Bandwidth	0.5332
Output power	0.3669
Power Spectral Density	0.6590
Conducted Spurious emissions	0.5416
Conducted Band edges	0.5335
Frequency Stability	0.5333

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

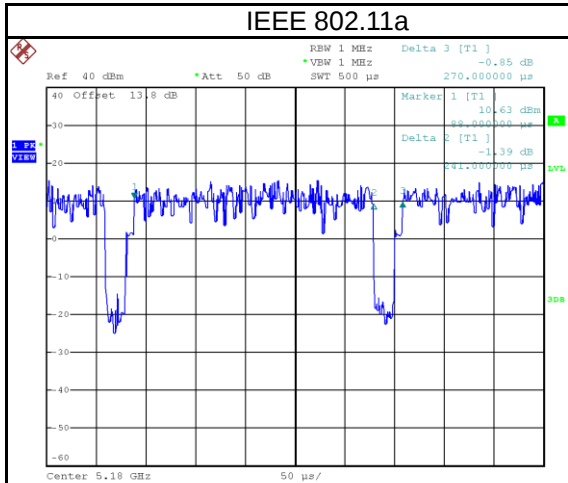
Test Item	Environment Condition	Test Voltage	Tested by
AC Power Line Conducted Emissions	22 °C, 50 %	AC 120V	Ken Lan
Radiated emissions below 1 GHz	Refer to data	AC 120V	Sean Huang
Radiated emissions above 1 GHz	Refer to data	AC 120V	Sean Huang
Bandwidth	24 °C, 52 %	AC 120V	Ken Lan
Output Power	24 °C, 52 %	AC 120V	Ken Lan
Power Spectral Density	24 °C, 52 %	AC 120V	Ken Lan

1.4 DUTY CYCLE

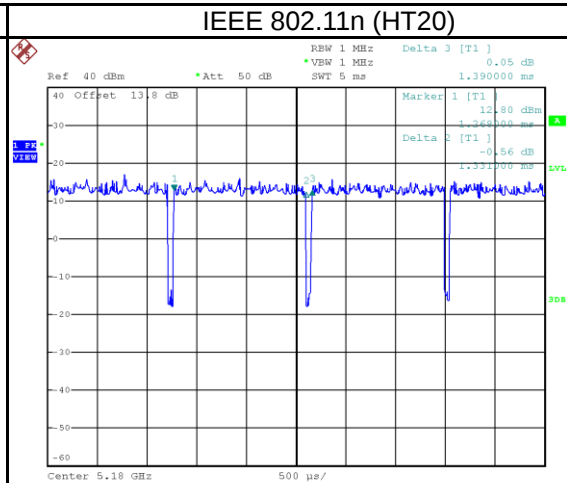
If duty cycle is $\geq 98\%$, duty factor is not required.

If duty cycle is $< 98\%$, duty factor shall be considered.

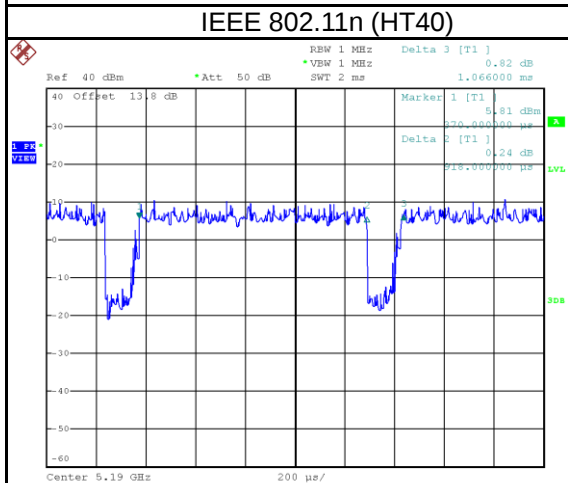
Remark	Delta 2			Delta 3	On Time/Period	10 log(1/Duty Cycle)
Mode	ON (ms)	Numbers (ON)	On Time (B) (ms)	Period (ON+OFF) (ms)	Duty Cycle (%)	Duty Factor (dB)
IEEE 802.11a	0.241	1	0.241	0.270	89.26%	0.49
IEEE 802.11n (HT20)	1.331	1	1.331	1.390	95.76%	0.19
IEEE 802.11n (HT40)	0.918	1	0.918	1.066	86.12%	0.65
IEEE 802.11ac (VHT80)	0.428	1	0.428	0.564	75.89%	1.20



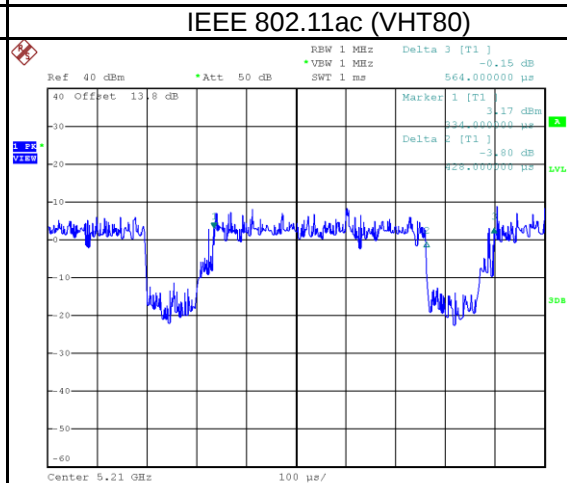
Date: 25.JUN.2024 17:55:04



Date: 25.JUN.2024 17:57:50



Date: 25.JUN.2024 18:10:18



Date: 25.JUN.2024 18:11:40

2 GENERAL INFORMATION

2.1 DESCRIPTION OF EUT

Equipment	Box PC
Model Name	FHD-200
Brand Name	Qbic
Model Difference	N/A
Power Source	DC Voltage supplied from AC/DC adapter.
Power Rating	I/P: 100-240V~, 50-60Hz, 300mA O/P: +5V, 2A MAX 10.0W
Products Covered	1 * Power Adapter: PHIHONG /PSM10R-050 1 * VESA Mounting: QBIC /MBP0400X01G01 1 * Veicro Tie: 3M /NBP0400101O01 1 * Power Plug for US.CE.US.AUS: PHIHONG /KPAD01005PH01 1 * Antenna: Joymax /TWX-100BRS3B-1242
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: 17.49 dBm (0.0561 W) IEEE 802.11n (HT20): 19.06 dBm (0.0805 W) IEEE 802.11n (HT40): 15.81 dBm (0.0381 W) IEEE 802.11ac (VHT80): 7.77 dBm (0.0060 W)
Output Power Max. for UNII-3	IEEE 802.11a: 10.77 dBm (0.0119 W) IEEE 802.11n (HT20): 10.76 dBm (0.0119 W) IEEE 802.11n (HT40): 12.06 dBm (0.0161 W) IEEE 802.11ac (VHT80): 10.37 dBm (0.0109 W)
Test Software Version	ADB
Test Model	FHD-200
Sample Status	Engineering Sample
EUT Modification(s)	N/A

NOTE:

(1) The above EUT information is declared by manufacturer and for more detailed features description, please refers to the manufacturer's specifications or 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	Model name	Type	Connector	Frequency (MHz)	Gain (dBi)
1	Joymax	TWX-100BRS3B-1 242	Dipole	RP SMA Plug	2400-2500	2.08
					5150-5250	4.05
					5555-5850	4.11

- (4) The above Antenna information are derived from the antenna data sheet provided by manufacturer and for more detailed features description, please refer to the manufacturer's specifications, the laboratory shall not be held responsible.

2.2 TEST MODES

Test Items	Test mode	Channel	Note
AC power line conducted emissions	Normal/Idle	-	-
Transmitter Radiated Emissions (below 1GHz)	TX Mode_IIEEE 802.11a	48	-
Transmitter Radiated Emissions (above 1GHz)	TX Mode_IIEEE 802.11a TX Mode_IIEEE 802.11n (HT20)	36/48 149/165	Bandedge
	TX Mode_IIEEE 802.11n (HT40)	38/46 151/159	
	TX Mode_IIEEE 802.11ac (VHT80)	42 155	
	TX Mode_IIEEE 802.11a TX Mode_IIEEE 802.11n (HT20)	36/40/48 149/157/165	Harmonic
	TX Mode_IIEEE 802.11n (HT40)	38/46 151/159	
	TX Mode_IIEEE 802.11ac (VHT80)	42 155	
Transmitter Radiated Emissions (above 18GHz)	TX Mode_IIEEE 802.11a	48	-
Bandwidth & Power Spectral Density & Output Power	TX Mode_IIEEE 802.11a TX Mode_IIEEE 802.11n (HT20)	36/40/48 149/157/165	-
	TX Mode_IIEEE 802.11n (HT40)	38/46 151/159	
	TX Mode_IIEEE 802.11ac (VHT80)	42 155	

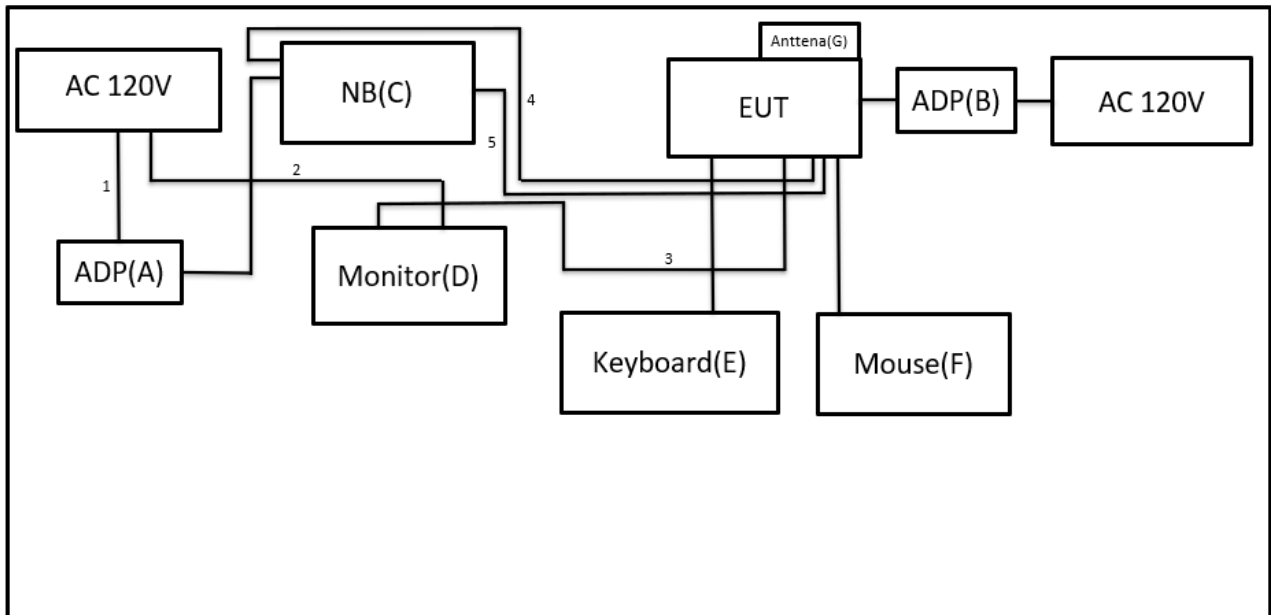
NOTE:

- (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 (X axis) is recorded.
- (3) IEEE 802.11n (HT20) & IEEE 802.11n (HT40) mode is worse than IEEE 802.11ac (VHT20) & IEEE 802.11ac (VHT40) mode, so we select IEEE 802.11n (HT20) & IEEE 802.11n (HT40) mode for the test.

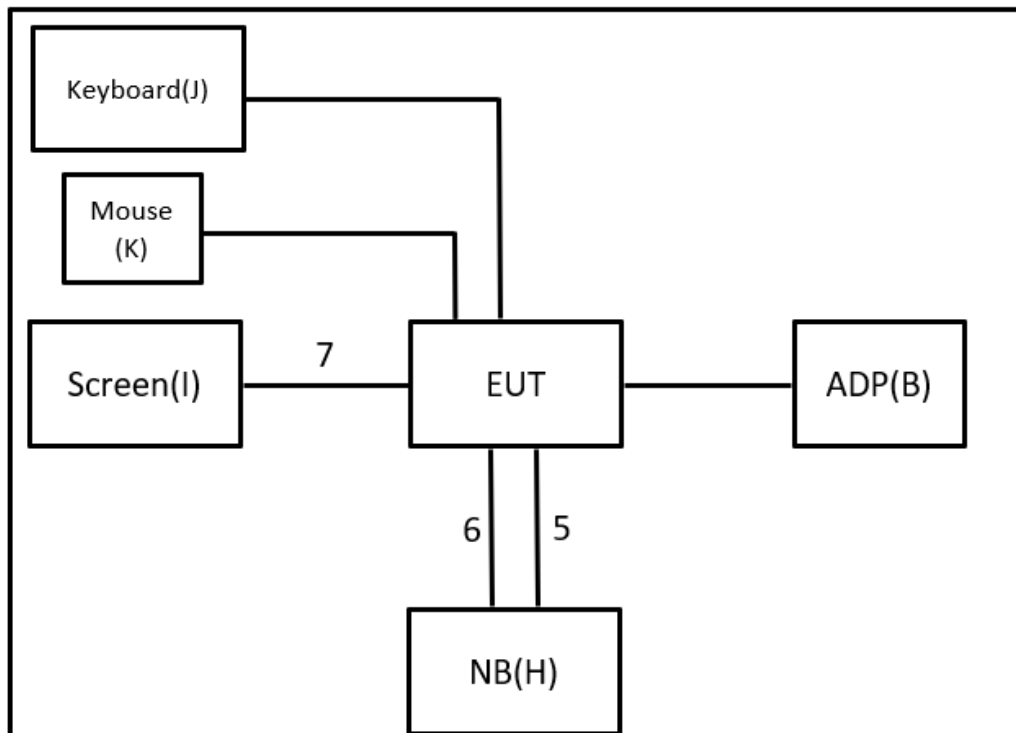
2.3 BLOCK DIAGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED

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

AC power line conducted emissions



Radiated Emissions



2.4 SUPPORT UNITS

Item	Equipment	Brand	Model No.	Series No.	Remarks
A	ADP	HP	HSTNN-CA40	N/A	Furnished by test lab.
B	ADP	PHIHONG	PSM10R-050	N/A	Supplied by test requester
C	NB	HP	240 G5	N/A	Furnished by test lab.
D	Monitor	DELL	U2720Q	N/A	Furnished by test lab.
E	Keyborad	DELL	KB216t	N/A	Furnished by test lab.
F	Mouse	DELL	MOCZUL	N/A	Furnished by test lab.
G	Anttena	JOEMAX	TWX-100BRS3B-1242	N/A	Supplied by test requester
H	NB	HP	TPN-I119	N/A	Furnished by test lab.
I	Screen	DELL	U2720Q	N/A	Furnished by test lab.
J	Keyboard	Bloody	KB-8	N/A	Furnished by test lab.
K	Mouse	Logitech	B100	N/A	Furnished by test lab.

Item	Shielded	Ferrite Core	Length	Cable Type	Remarks
1	No	No	1.8m	Power Cord	Furnished by test lab.
2	No	No	1.8m	Power Cord	Furnished by test lab.
3	No	No	1.5m	HDMI Cable	Furnished by test lab.
4	No	No	0.5m	LAN Cable	Furnished by test lab.
5	No	No	1.5m	USB - A to Micro-USB	Furnished by test lab.
6	No	No	1m	LAN Cable	Furnished by test lab.
7	No	No	1.8m	HDMI	Furnished by test lab.

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 (dBμV)		Correct Factor (dB)		Measurement Value (dBμV)
38.22	+	3.45	=	41.67

Measurement Value (dBμV)		Limit Value (dBμV)		Margin Level (dB)
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.

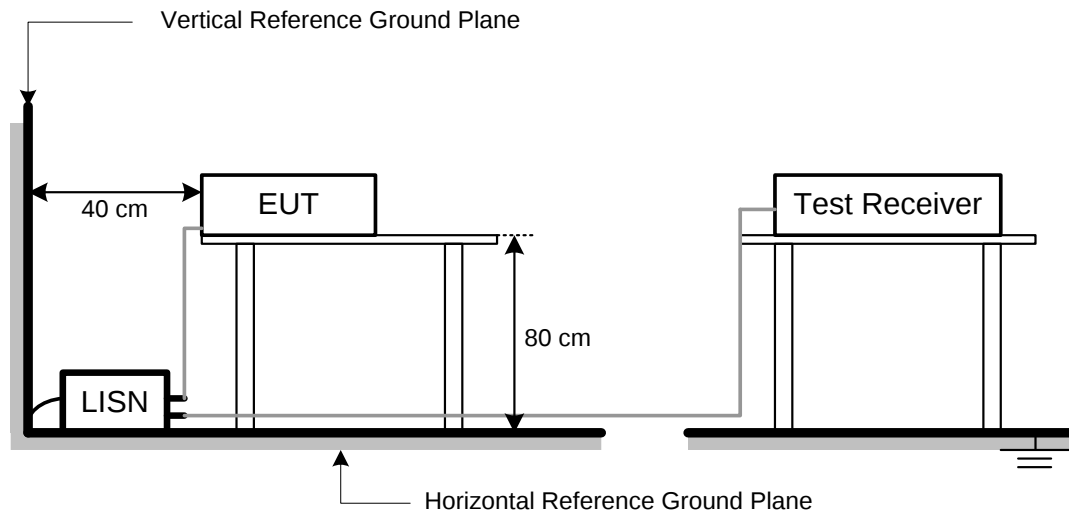
NOTE:

- (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 (dBμV)		Correct Factor (dB/m)		Measurement Value (dBμV/m)
36.23	+	-11.97	=	24.26

Measurement Value (dBμV/m)		Limit Value (dBμV/m)		Margin Level (dB)
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

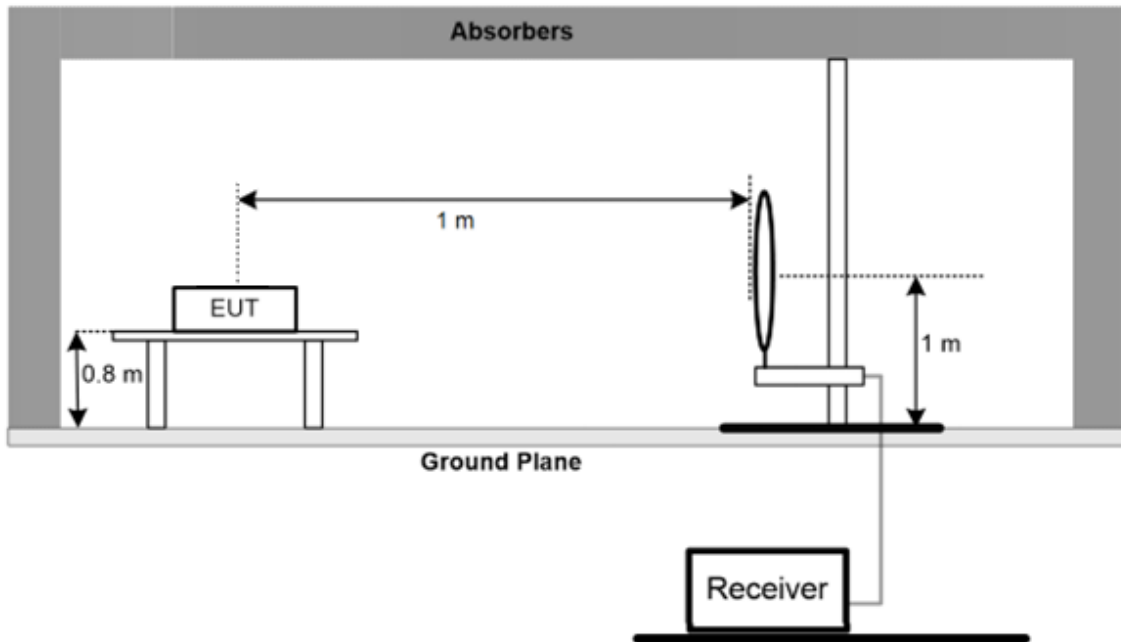
- The measuring distance of 1 m shall be used for measurements. The EUT was placed on the top of a rotating table 0.8 meter above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.(below 30MHz)
- The measuring distance 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

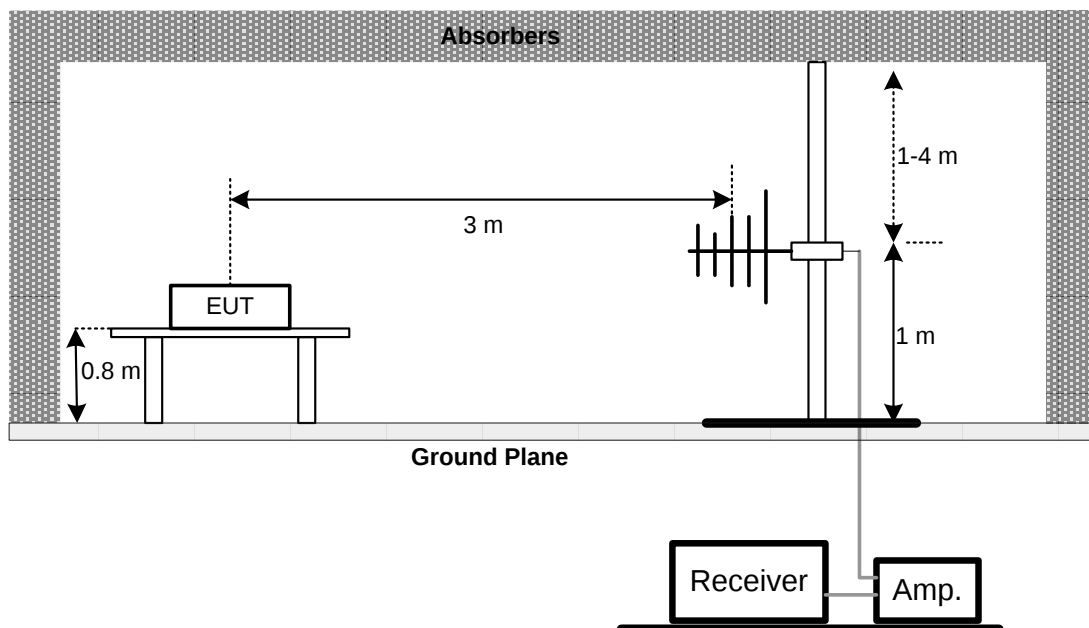
No deviation.

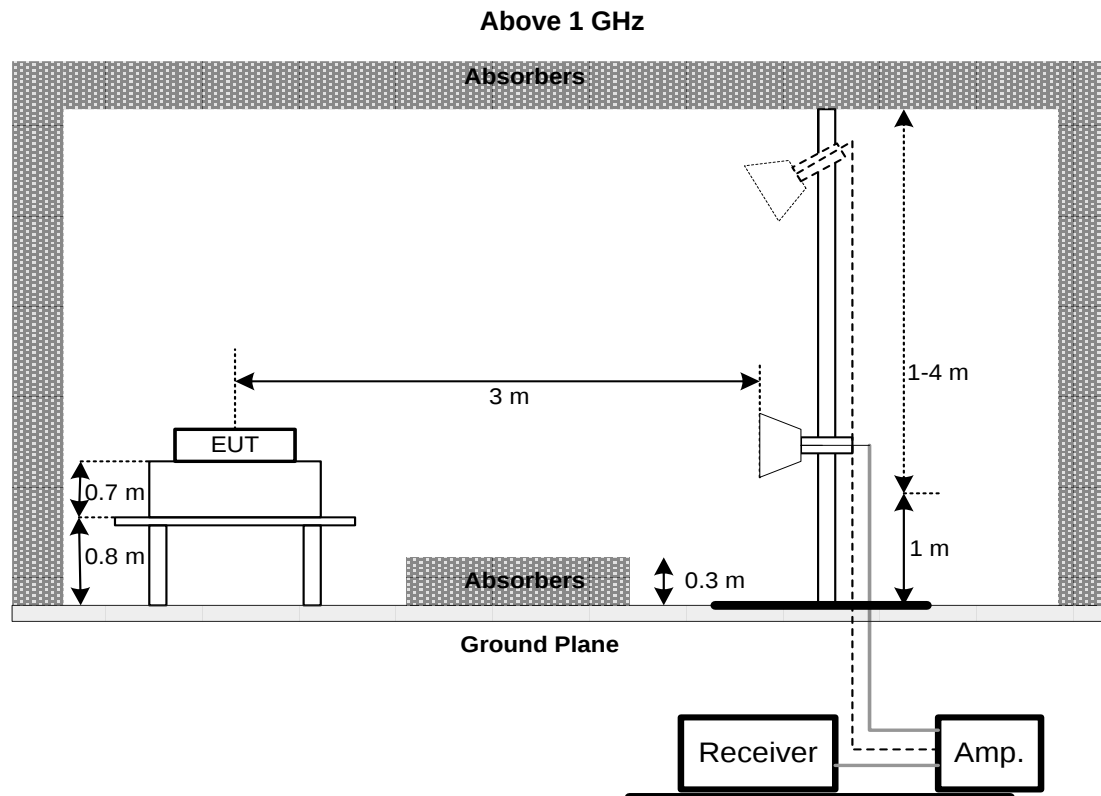
4.4 TEST SETUP

9 kHz to 30 MHz



30 MHz to 1 GHz





4.5 EUT OPERATING CONDITIONS

The EUT was programmed to be in continuously transmitting mode.

4.6 TEST RESULT – 9 KHZ TO 30 MHZ

Please refer to the APPENDIX B APPENDIX B.

4.7 TEST RESULT – 30 MHZ TO 1 GHZ

Please refer to the APPENDIX C.

4.8 TEST RESULT – ABOVE 1 GHZ

Please refer to the APPENDIX D.

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

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

- a. The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram below.
- b. 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 E.

6 OUTPUT POWER TEST

6.1 LIMIT

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 F.

7 POWER SPECTRAL DENSITY

7.1 LIMIT

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 G.

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	101497	2024/5/20	2025/5/19
2	Test Cable	EMCI	EMC400-BM-BM-5000	170501	2023/8/1	2024/7/31
3	EMI Test Receiver	R&S	ESR3	102950	2024/4/12	2025/4/11
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	EMC330N	980850	2023/9/6	2024/9/5
2	Preamplifier	EMCI	EMC118A45SE	980819	2024/3/6	2025/3/5
3	Pre-Amplifier	EMCI	EMC184045SE	980907	2023/9/21	2024/9/20
4	Preamplifier	EMCI	EMC001340	980579	2023/9/6	2024/9/5
5	Test Cable	EMCI	EMC104-SM-1000	180809	2024/3/8	2025/3/7
6	Test Cable	EMCI	EMC104-SM-SM-3000	220322	2024/3/8	2025/3/7
7	Test Cable	EMCI	EMC104-SM-SM-7000	220324	2024/3/8	2025/3/7
8	EXA Signal Analyzer	keysight	N9020B	MY57120120	2024/2/23	2025/2/22
9	Loop Ant	Electro-Metrics	EMCI-LPA600	291	2023/9/12	2024/9/11
10	Horn Antenna	RFSPIN	DRH18-E	211202A18EN	2024/5/9	2025/5/8
11	Horn Ant	Schwarzbeck	BBHA 9170D	1136	2024/5/17	2025/5/16
12	TRILOG Broadband Antenna	Schwarzbeck	VULB9168	1371	2023/8/8	2024/8/7
13	6dB Attenuator	EMCI	EMCI-N-6-06	AT-N0625	2023/8/8	2024/8/7
14	Test Cable	EMCI	EMC101G-KM-KM-3000	220329	2024/3/13	2025/3/12
15	Test Cable	EMCI	EMC102-KM-KM-1000	220327	2024/3/13	2025/3/12
16	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	101139	2024/3/8	2025/3/7

Output Power						
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated Date	Calibrated Until
1	Power Meter	Anritsu	ML2495A	1128008	2024/5/11	2025/5/10
2	Power Sensor	Anritsu	MA2411B	1126001	2024/5/11	2025/5/10

Power Spectral Density						
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated Date	Calibrated Until
1	Spectrum Analyzer	R&S	FSP 40	101139	2024/3/8	2025/3/7

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

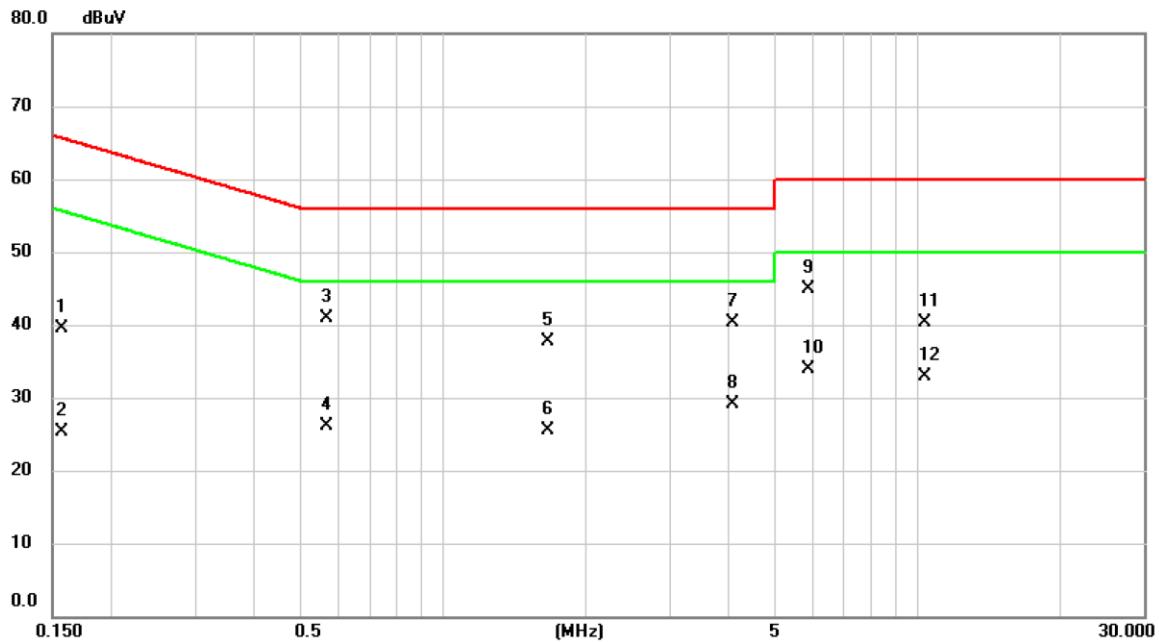
Please refer to document Appendix No.: TP-2104T005D-FCCP-1 (APPENDIX-TEST PHOTOS).

10 EUT PHOTOS

Please refer to document Appendix No.: EP-2104T005D-2 (APPENDIX-EUT PHOTOS).

APPENDIX A AC POWER LINE CONDUCTED EMISSIONS

Test Mode	Normal	Tested Date	2024/6/25
Test Frequency	-	Phase	Line

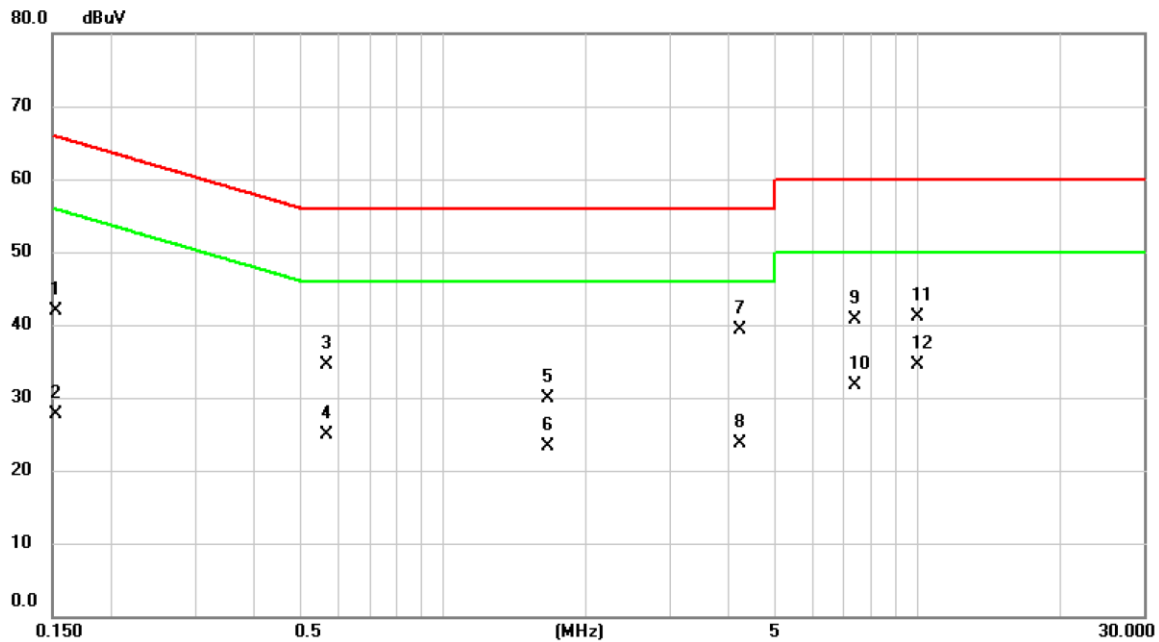


No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.1568	29.84	9.59	39.43	65.63	-26.20	QP	
2		0.1568	15.65	9.59	25.24	55.63	-30.39	AVG	
3	*	0.5685	31.39	9.59	40.98	56.00	-15.02	QP	
4		0.5685	16.45	9.59	26.04	46.00	-19.96	AVG	
5		1.6620	28.06	9.63	37.69	56.00	-18.31	QP	
6		1.6620	15.97	9.63	25.60	46.00	-20.40	AVG	
7		4.0695	30.52	9.71	40.23	56.00	-15.77	QP	
8		4.0695	19.37	9.71	29.08	46.00	-16.92	AVG	
9		5.8763	35.22	9.74	44.96	60.00	-15.04	QP	
10		5.8763	24.21	9.74	33.95	50.00	-16.05	AVG	
11		10.3830	30.44	9.79	40.23	60.00	-19.77	QP	
12		10.3830	23.19	9.79	32.98	50.00	-17.02	AVG	

REMARKS:

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

Test Mode	Normal	Tested Date	2024/6/25
Test Frequency	-	Phase	Neutral

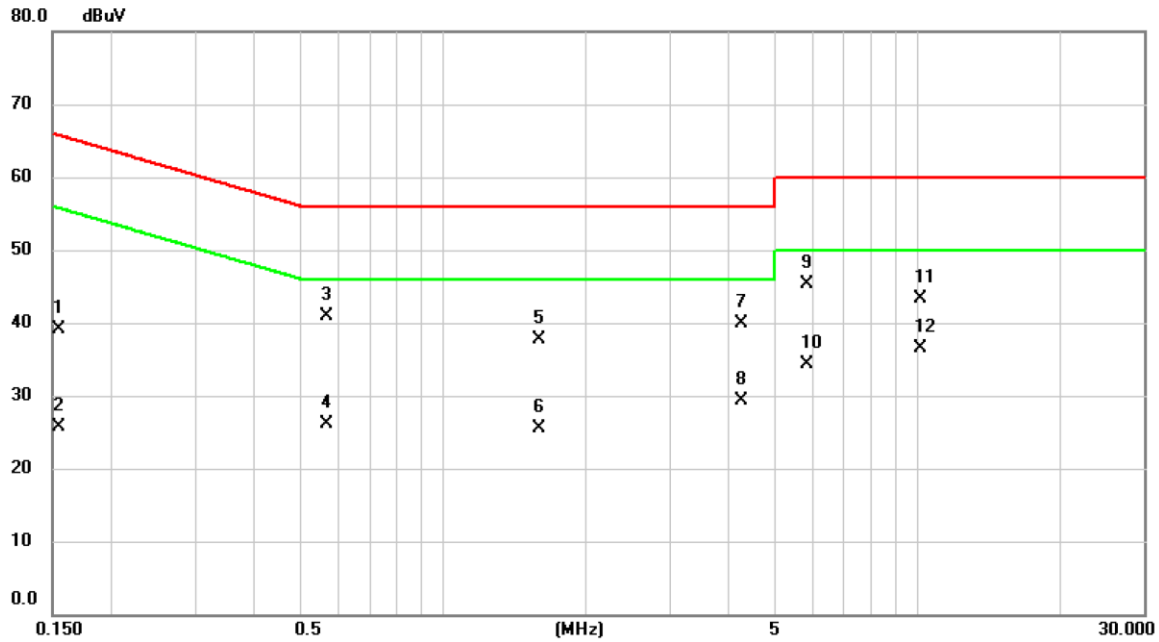


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Margin dB	Detector	Comment
1		0.1522	32.40	9.57	41.97	65.88	-23.91	QP	
2		0.1522	18.18	9.57	27.75	55.88	-28.13	AVG	
3		0.5685	24.96	9.60	34.56	56.00	-21.44	QP	
4		0.5685	15.22	9.60	24.82	46.00	-21.18	AVG	
5		1.6665	20.36	9.64	30.00	56.00	-26.00	QP	
6		1.6665	13.72	9.64	23.36	46.00	-22.64	AVG	
7		4.2338	29.63	9.74	39.37	56.00	-16.63	QP	
8		4.2338	13.88	9.74	23.62	46.00	-22.38	AVG	
9		7.3815	30.94	9.80	40.74	60.00	-19.26	QP	
10		7.3815	21.82	9.80	31.62	50.00	-18.38	AVG	
11		10.0163	31.24	9.83	41.07	60.00	-18.93	QP	
12	*	10.0163	24.70	9.83	34.53	50.00	-15.47	AVG	

REMARKS:

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

Test Mode	Idle	Tested Date	2024/6/25
Test Frequency	-	Phase	Line

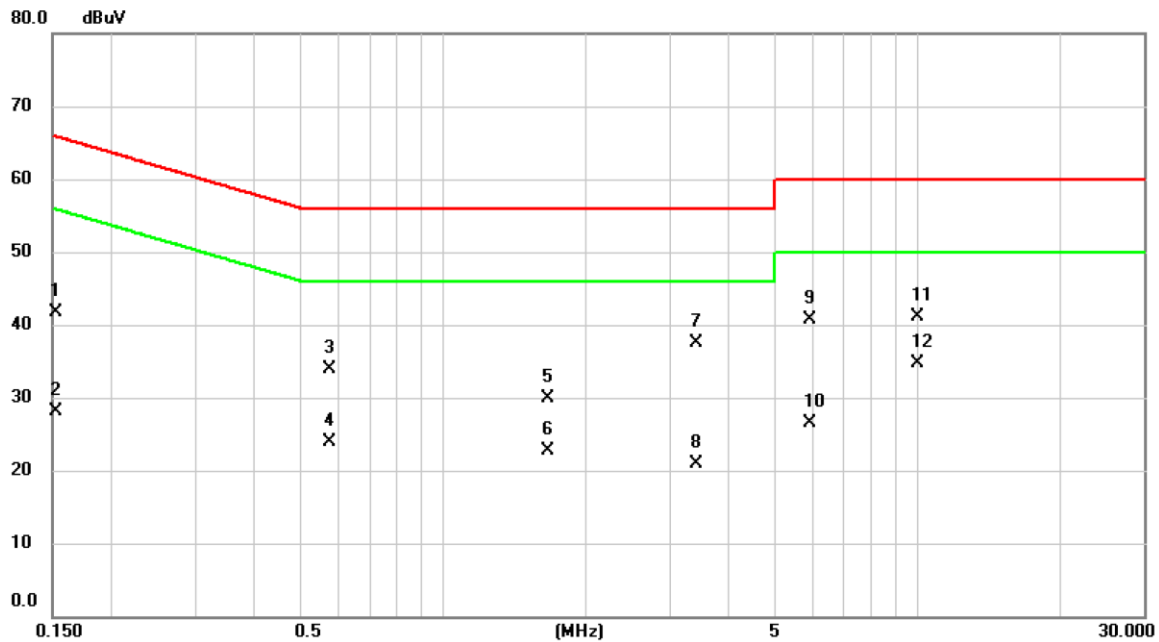


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Margin dB	Detector	Comment
1		0.1545	29.57	9.59	39.16	65.75	-26.59	QP	
2		0.1545	16.11	9.59	25.70	55.75	-30.05	AVG	
3		0.5685	31.33	9.59	40.92	56.00	-15.08	QP	
4		0.5685	16.44	9.59	26.03	46.00	-19.97	AVG	
5		1.5968	28.05	9.63	37.68	56.00	-18.32	QP	
6		1.5968	15.80	9.63	25.43	46.00	-20.57	AVG	
7		4.2563	30.29	9.71	40.00	56.00	-16.00	QP	
8		4.2563	19.66	9.71	29.37	46.00	-16.63	AVG	
9		5.8515	35.63	9.74	45.37	60.00	-14.63	QP	
10		5.8515	24.65	9.74	34.39	50.00	-15.61	AVG	
11		10.1243	33.60	9.79	43.39	60.00	-16.61	QP	
12	*	10.1243	26.73	9.79	36.52	50.00	-13.48	AVG	

REMARKS:

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

Test Mode	Idle	Tested Date	2024/6/25
Test Frequency	-	Phase	Neutral



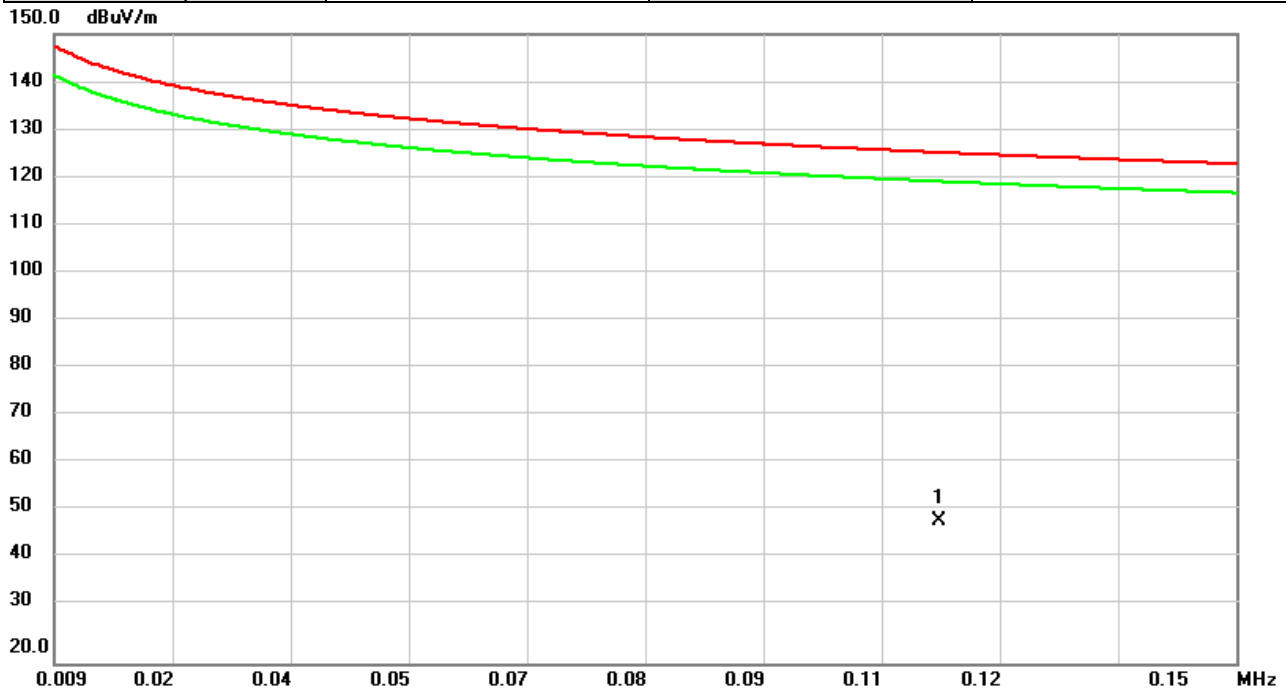
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.1522	32.19	9.57	41.76	65.88	-24.12	QP	
2		0.1522	18.54	9.57	28.11	55.88	-27.77	AVG	
3		0.5775	24.27	9.60	33.87	56.00	-22.13	QP	
4		0.5775	14.26	9.60	23.86	46.00	-22.14	AVG	
5		1.6620	20.36	9.64	30.00	56.00	-26.00	QP	
6		1.6620	13.16	9.64	22.80	46.00	-23.20	AVG	
7		3.4238	27.77	9.71	37.48	56.00	-18.52	QP	
8		3.4238	11.23	9.71	20.94	46.00	-25.06	AVG	
9		5.9213	31.02	9.78	40.80	60.00	-19.20	QP	
10		5.9213	16.65	9.78	26.43	50.00	-23.57	AVG	
11		10.0163	31.30	9.83	41.13	60.00	-18.87	QP	
12	*	10.0163	24.91	9.83	34.74	50.00	-15.26	AVG	

REMARKS:

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

APPENDIX B RADIATED EMISSIONS - 9 KHZ TO 30 MHZ

Test Mode	IEEE 802.11a	Test Date	2024/7/2
Test Frequency	5240MHz	Polarization	Vertical
Temp	27°C	Hum.	53%

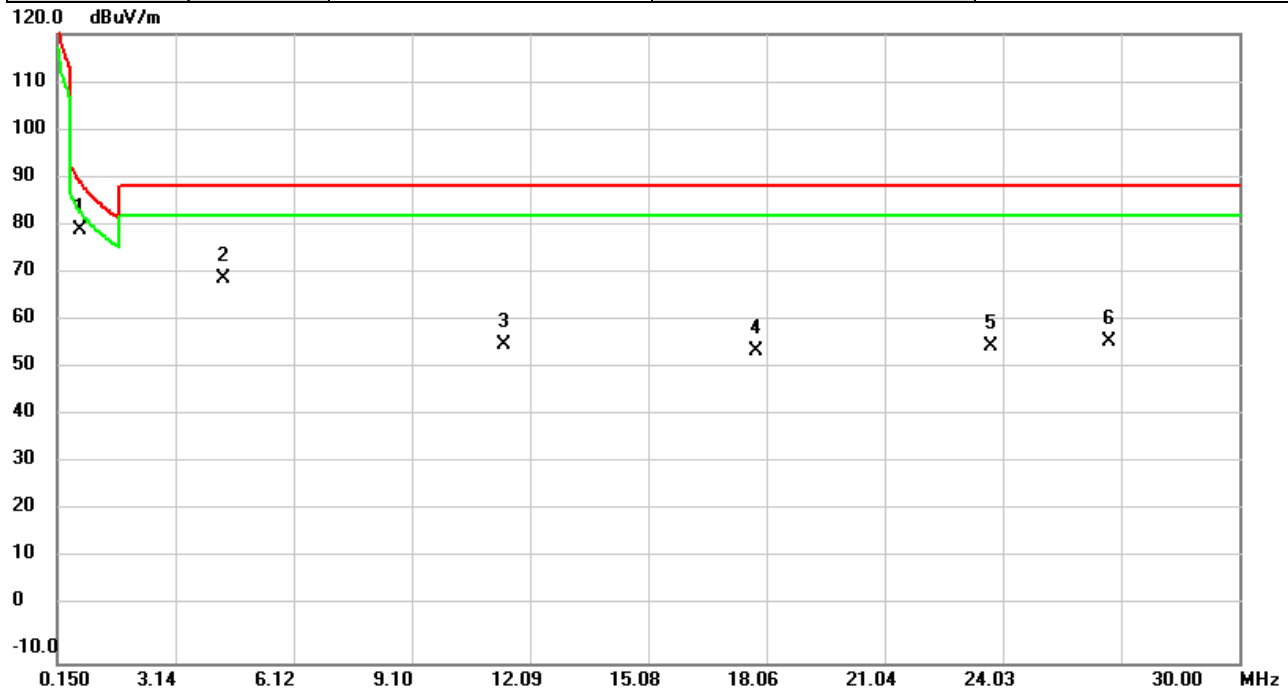


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	0.1145	33.28	16.02	49.30	125.51	-76.21	AVG	

REMARKS:

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

Test Mode	IEEE 802.11a	Test Date	2024/7/2
Test Frequency	5240MHz	Polarization	Vertical
Temp	27°C	Hum.	53%

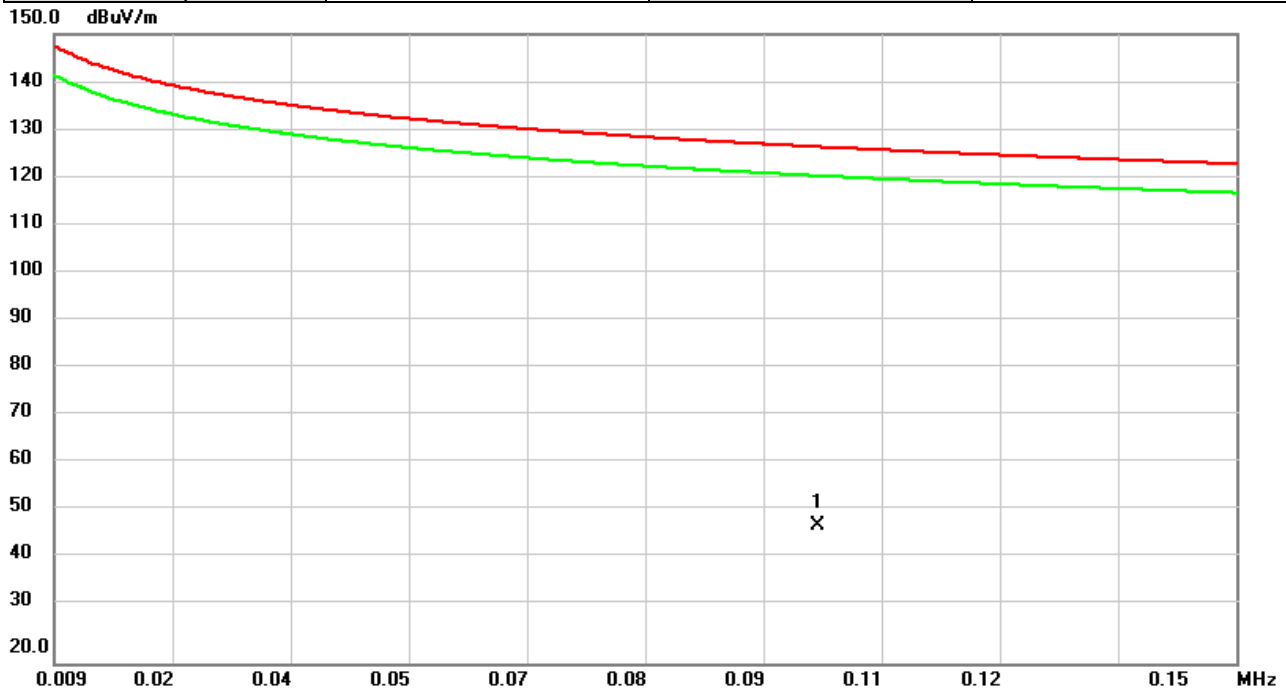


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	0.7460	76.47	3.11	79.58	89.23	-9.65	QP	
2		4.3430	73.63	-4.20	69.43	88.62	-19.19	QP	
3		11.4243	59.02	-3.30	55.72	88.62	-32.90	QP	
4		17.8082	58.48	-3.89	54.59	88.62	-34.03	QP	
5		23.7255	57.70	-2.32	55.38	88.62	-33.24	QP	
6		26.7095	57.22	-0.91	56.31	88.62	-32.31	QP	

REMARKS:

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

Test Mode	IEEE 802.11a	Test Date	2024/7/2
Test Frequency	5240MHz	Polarization	Horizontal
Temp	27°C	Hum.	53%

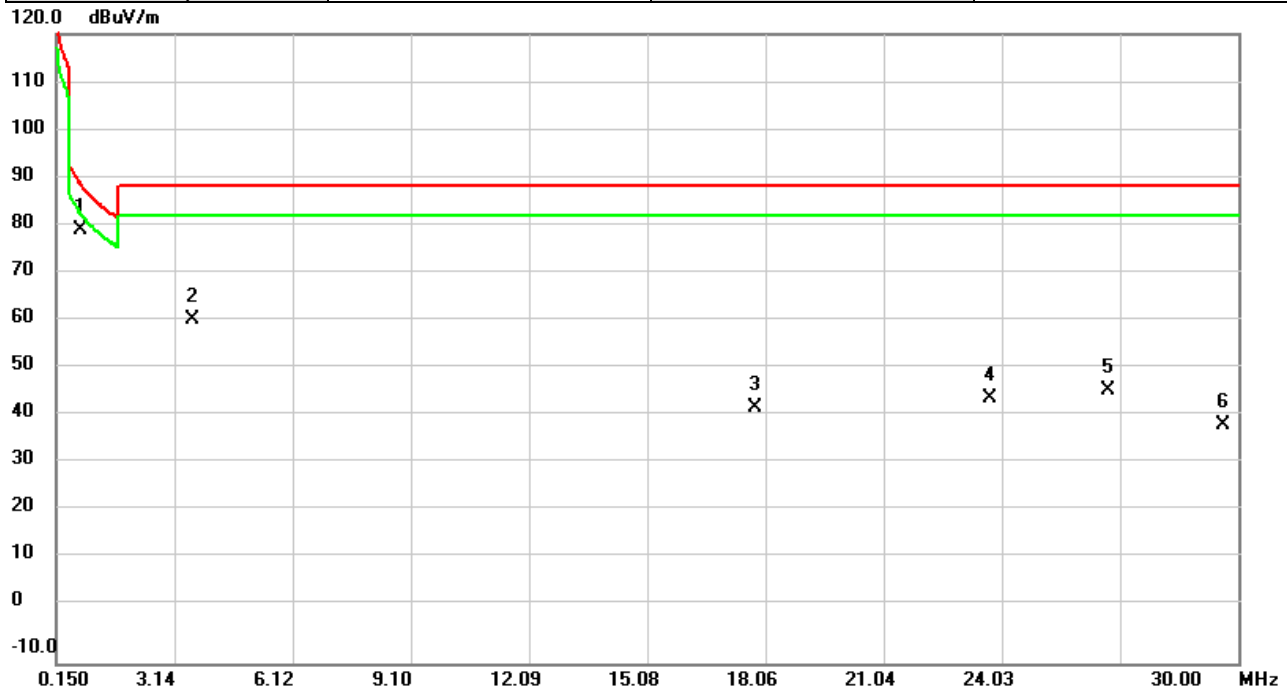


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	0.1000	31.73	16.65	48.38	126.68	-78.30	AVG	

REMARKS:

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

Test Mode	IEEE 802.11a	Test Date	2024/7/2
Test Frequency	5240MHz	Polarization	Horizontal
Temp	27°C	Hum.	53%



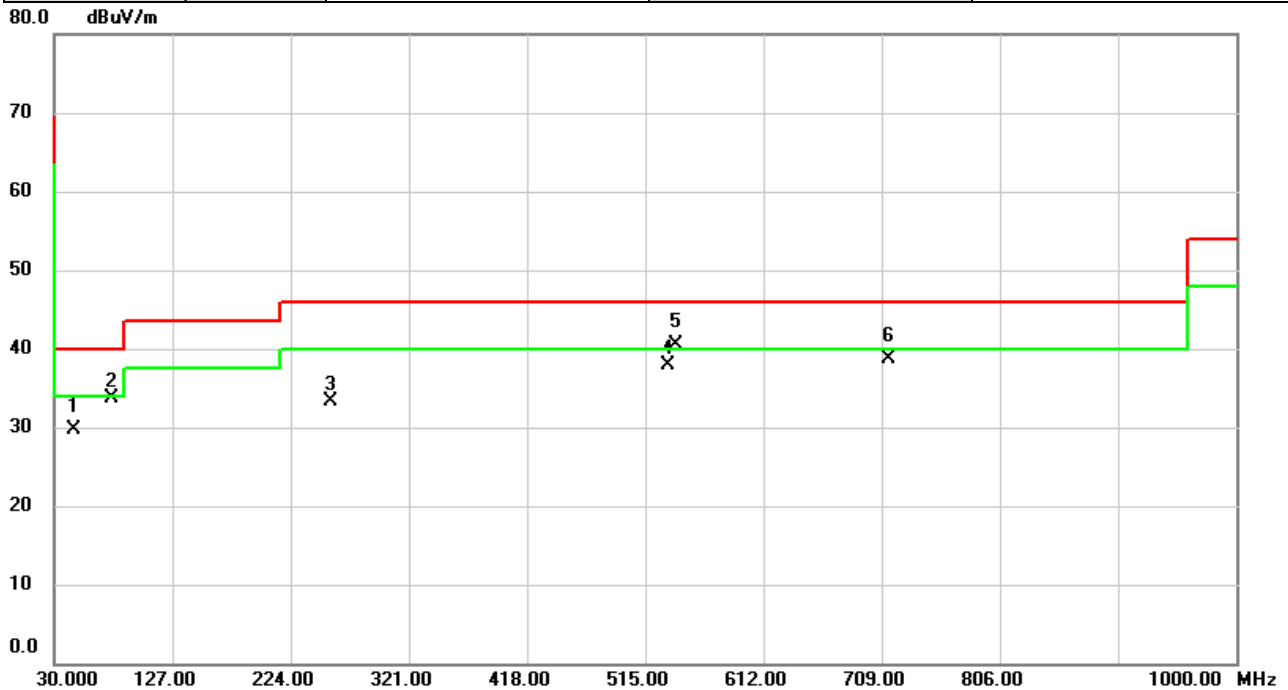
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	0.7490	76.36	3.08	79.44	89.19	-9.75	QP	
2		3.5977	64.96	-3.94	61.02	88.62	-27.60	QP	
3		17.8022	46.57	-3.89	42.68	88.62	-45.94	QP	
4		23.7365	47.08	-2.32	44.76	88.62	-43.86	QP	
5		26.7006	47.37	-0.91	46.46	88.62	-42.16	QP	
6		29.6170	38.60	0.48	39.08	88.62	-49.54	QP	

REMARKS:

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

APPENDIX C RADIATED EMISSIONS - 30 MHZ TO 1 GHZ

Test Mode	IEEE 802.11a	Test Date	2024/7/26
Test Frequency	5240MHz	Polarization	Vertical
Temp	21°C	Hum.	56%

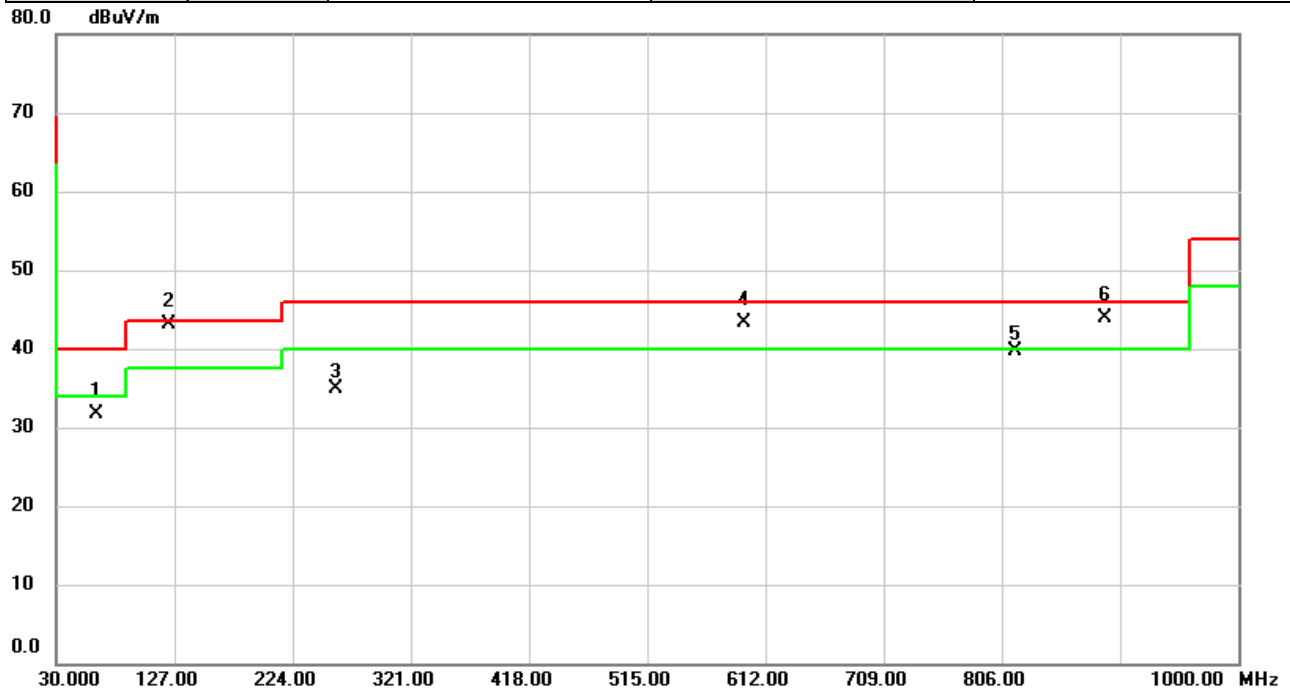


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		45.7170	41.47	-11.83	29.64	40.00	-10.36	QP	
2		77.2432	49.86	-16.25	33.61	40.00	-6.39	peak	
3		257.0425	46.50	-13.11	33.39	46.00	-12.61	peak	
4		533.1421	44.00	-6.06	37.94	46.00	-8.06	peak	
5	*	539.9922	46.51	-5.94	40.57	46.00	-5.43	QP	
6		714.6425	41.27	-2.54	38.73	46.00	-7.27	QP	

REMARKS:

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

Test Mode	IEEE 802.11a	Test Date	2024/7/26
Test Frequency	5240MHz	Polarization	Horizontal
Temp	21°C	Hum.	56%



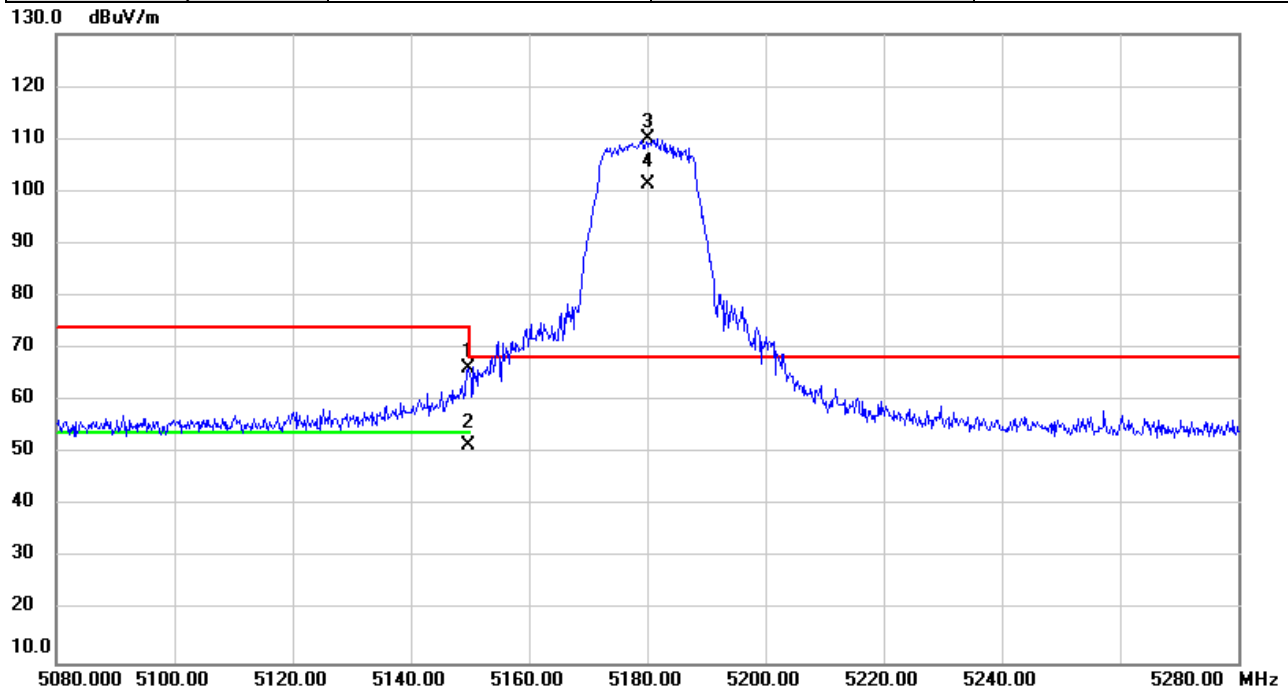
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		62.3614	44.51	-12.78	31.73	40.00	-8.27	QP	
2	*	122.8927	57.33	-14.22	43.11	43.50	-0.39	QP	
3		259.1230	48.05	-13.06	34.99	46.00	-11.01	peak	
4	!	593.8991	48.00	-4.61	43.39	46.00	-2.61	QP	
5		816.7153	40.78	-1.10	39.68	46.00	-6.32	peak	
6	!	890.9724	44.21	-0.24	43.97	46.00	-2.03	QP	

REMARKS:

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

APPENDIX D RADIATED EMISSIONS - ABOVE 1 GHZ

Test Mode	IEEE 802.11a	Test Date	2024/7/1
Test Frequency	5180MHz	Polarization	Horizontal
Temp	26°C	Hum.	60%

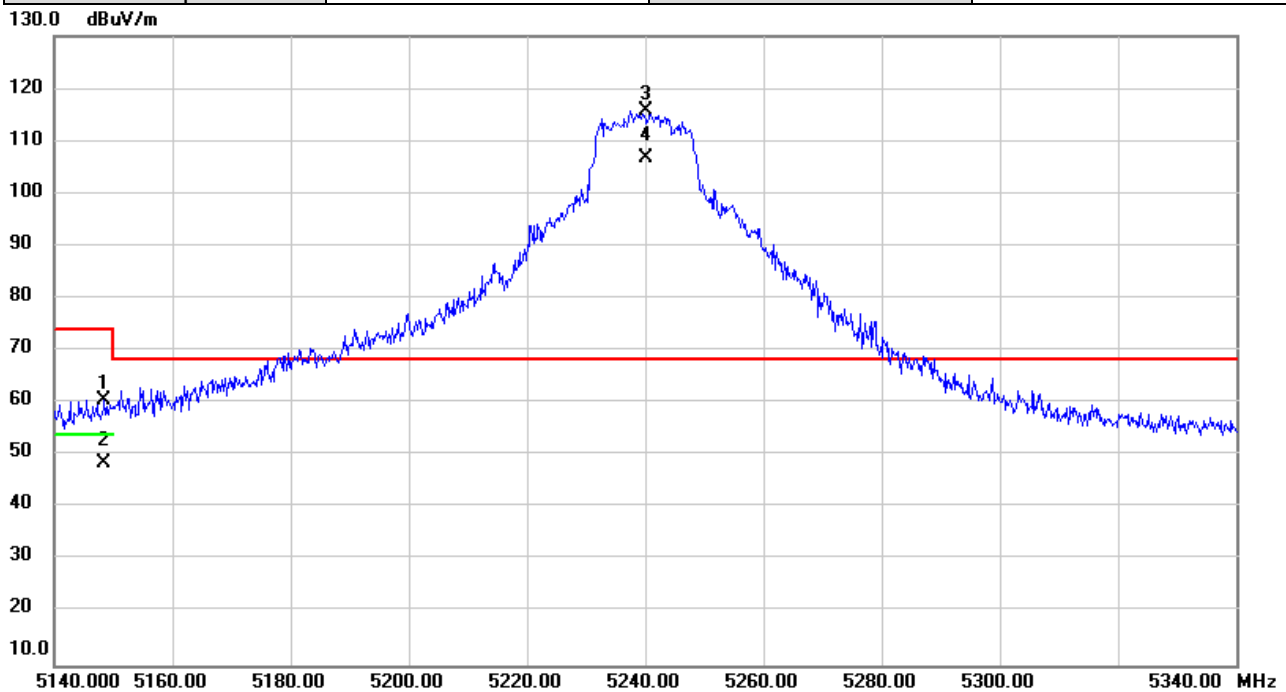


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		5149.607	64.88	1.37	66.25	74.00	-7.75	peak	
2		5149.607	50.20	1.37	51.57	54.00	-2.43	AVG	
3	*	5180.000	108.51	1.39	109.90	68.20	41.70	peak	No Limit
4	X	5180.000	100.02	1.39	101.41	68.20	33.21	AVG	No Limit

REMARKS:

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

Test Mode	IEEE 802.11a	Test Date	2024/7/1
Test Frequency	5240MHz	Polarization	Horizontal
Temp	26°C	Hum.	60%



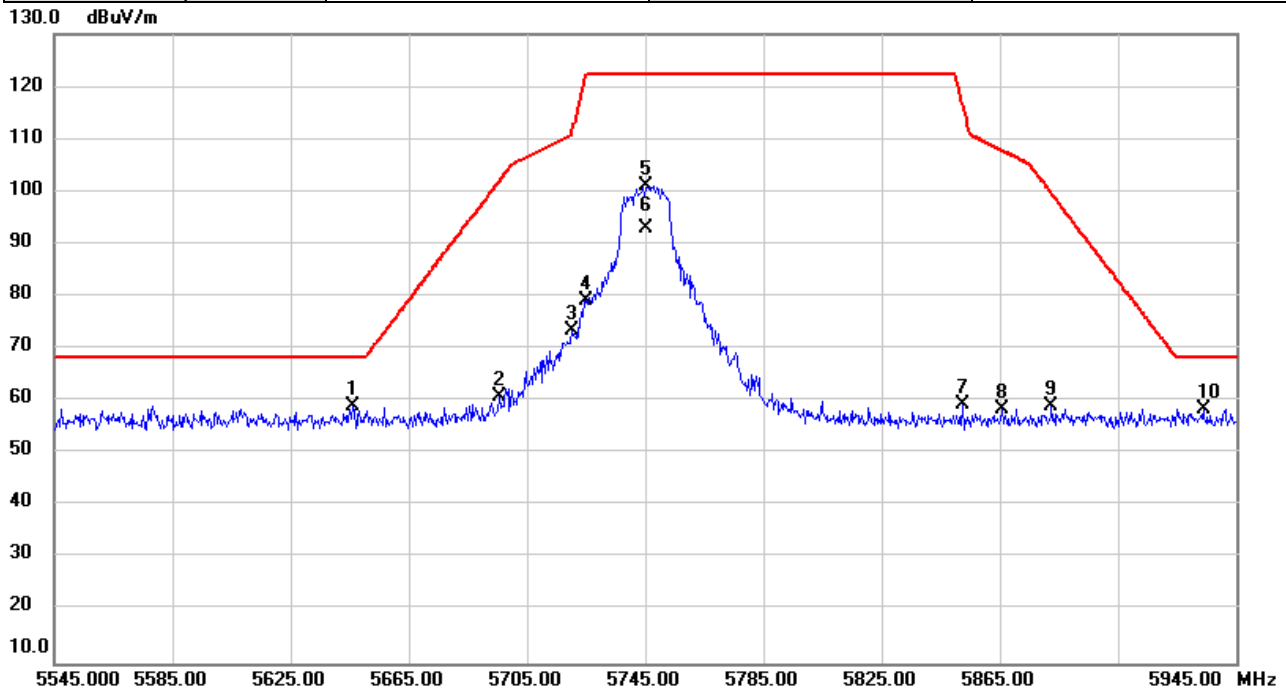
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		5148.500	59.26	1.37	60.63	74.00	-13.37	peak	
2		5148.500	47.18	1.37	48.55	54.00	-5.45	AVG	
3	*	5240.000	114.27	1.43	115.70	68.20	47.50	peak	No Limit
4	X	5240.000	105.37	1.43	106.80	68.20	38.60	AVG	No Limit

REMARKS:

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

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

Test Mode	IEEE 802.11a	Test Date	2024/7/1
Test Frequency	5745MHz	Polarization	Horizontal
Temp	26°C	Hum.	60%

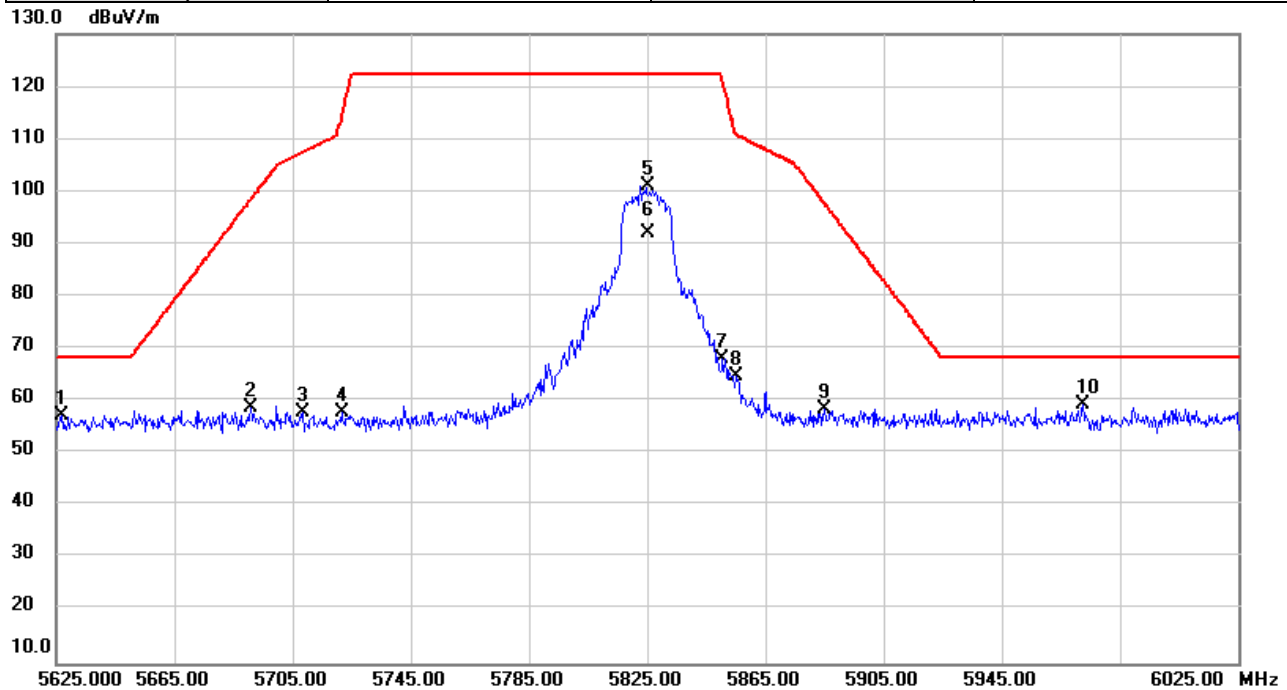


No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Over		
		MHz	Level	Factor	ment			Detector	Comment
			dBuV	dB	dBuV/m	dBuV/m	dB		
1	*	5645.867	57.10	2.06	59.16	68.20	-9.04	peak	
2		5695.507	58.60	2.22	60.82	101.89	-41.07	peak	
3		5720.027	71.01	2.30	73.31	110.86	-37.55	peak	
4		5725.160	76.95	2.32	79.27	122.20	-42.93	peak	
5		5745.000	98.59	2.38	100.97	122.20	-21.23	peak	No Limit
6		5745.000	90.65	2.38	93.03	122.20	-29.17	AVG	No Limit
7		5852.387	56.47	2.74	59.21	116.76	-57.55	peak	
8		5865.813	55.71	2.77	58.48	107.77	-49.29	peak	
9		5882.293	56.09	2.84	58.93	99.78	-40.85	peak	
10		5933.880	55.52	3.00	58.52	68.20	-9.68	peak	

REMARKS:

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

Test Mode	IEEE 802.11a	Test Date	2024/7/1
Test Frequency	5825MHz	Polarization	Horizontal
Temp	26°C	Hum.	60%

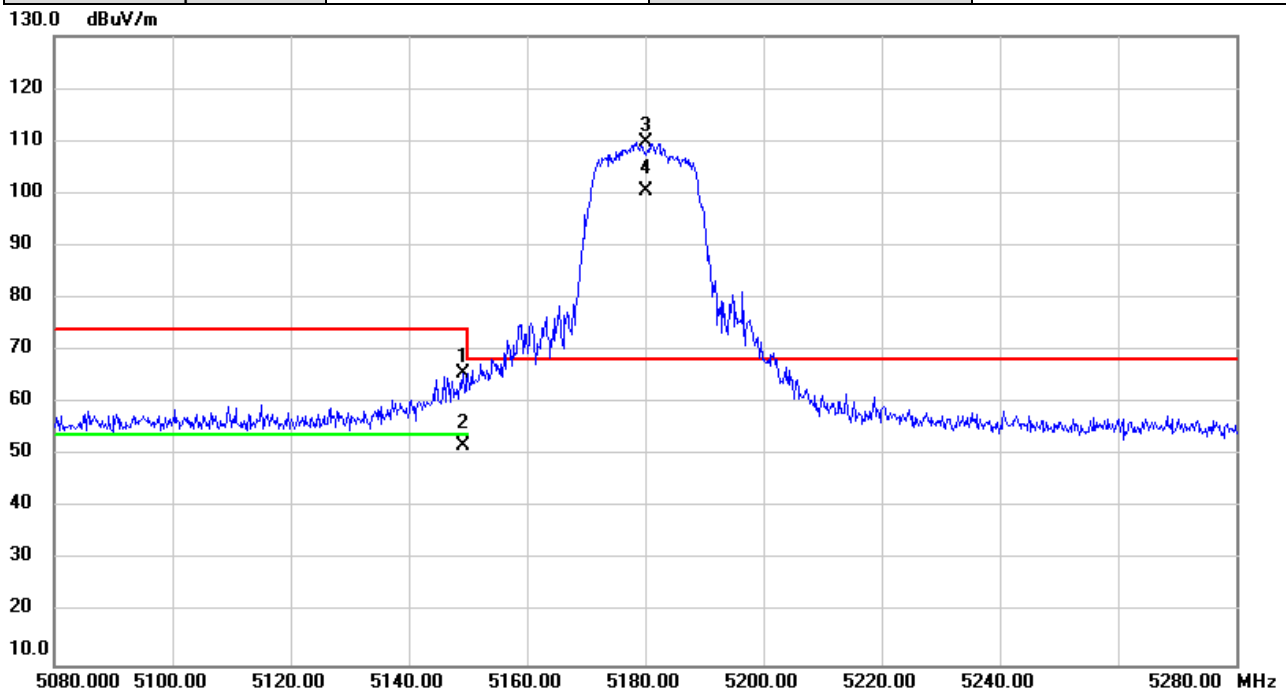


No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Over		
		MHz	Level	Factor	ment			Detector	Comment
			dBuV	dB	dBuV/m	dBuV/m	dB		
1		5626.680	55.38	2.00	57.38	68.20	-10.82	peak	
2		5690.693	56.45	2.21	58.66	98.34	-39.68	peak	
3		5708.333	55.61	2.27	57.88	107.54	-49.66	peak	
4		5721.760	55.60	2.31	57.91	114.81	-56.90	peak	
5		5825.000	98.38	2.65	101.03	122.20	-21.17	peak	No Limit
6		5825.000	89.39	2.65	92.04	122.20	-30.16	AVG	No Limit
7		5850.440	65.33	2.72	68.05	121.20	-53.15	peak	
8		5855.160	61.90	2.74	64.64	110.76	-46.12	peak	
9		5884.907	55.74	2.85	58.59	97.84	-39.25	peak	
10	*	5972.507	56.22	3.13	59.35	68.20	-8.85	peak	

REMARKS:

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

Test Mode	IEEE 802.11n (HT20)	Test Date	2024/7/1
Test Frequency	5180MHz	Polarization	Horizontal
Temp	26°C	Hum.	60%



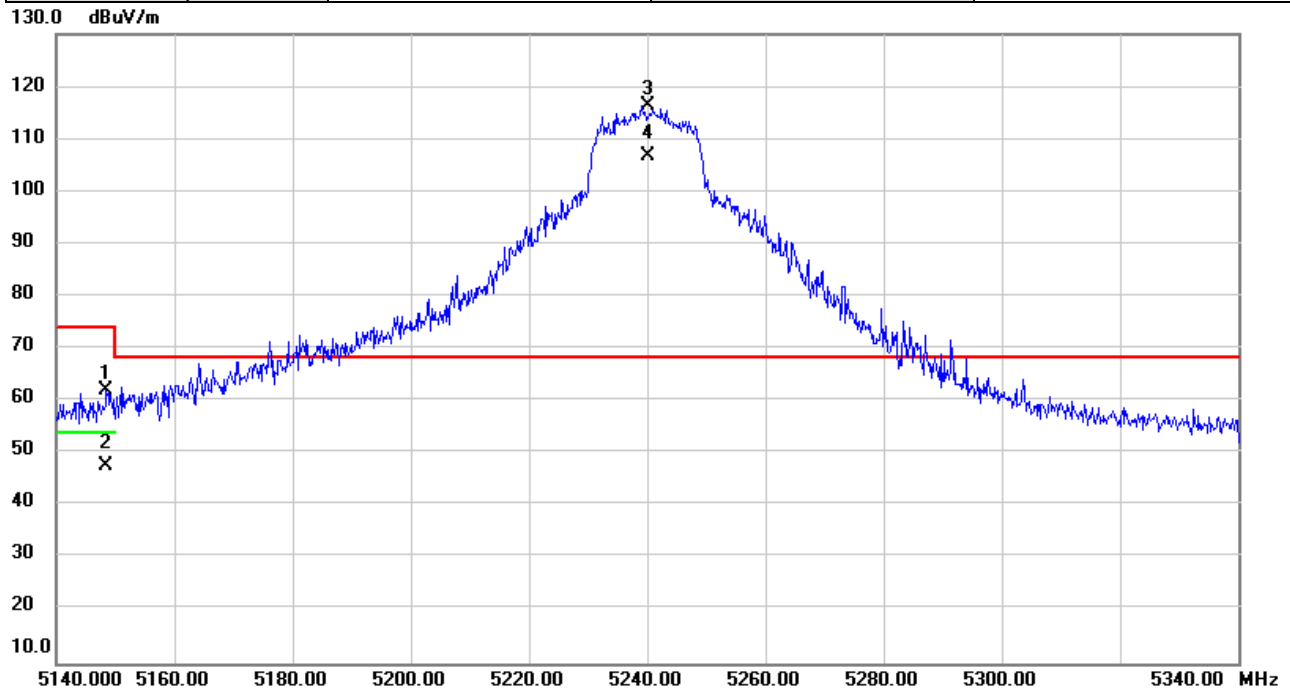
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		5149.220	64.20	1.37	65.57	74.00	-8.43	peak	
2		5149.220	50.33	1.37	51.70	54.00	-2.30	AVG	
3	*	5180.000	108.34	1.39	109.73	68.20	41.53	peak	No Limit
4	X	5180.000	99.11	1.39	100.50	68.20	32.30	AVG	No Limit

REMARKS:

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

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

Test Mode	IEEE 802.11n (HT20)	Test Date	2024/7/1
Test Frequency	5240MHz	Polarization	Horizontal
Temp	26°C	Hum.	60%



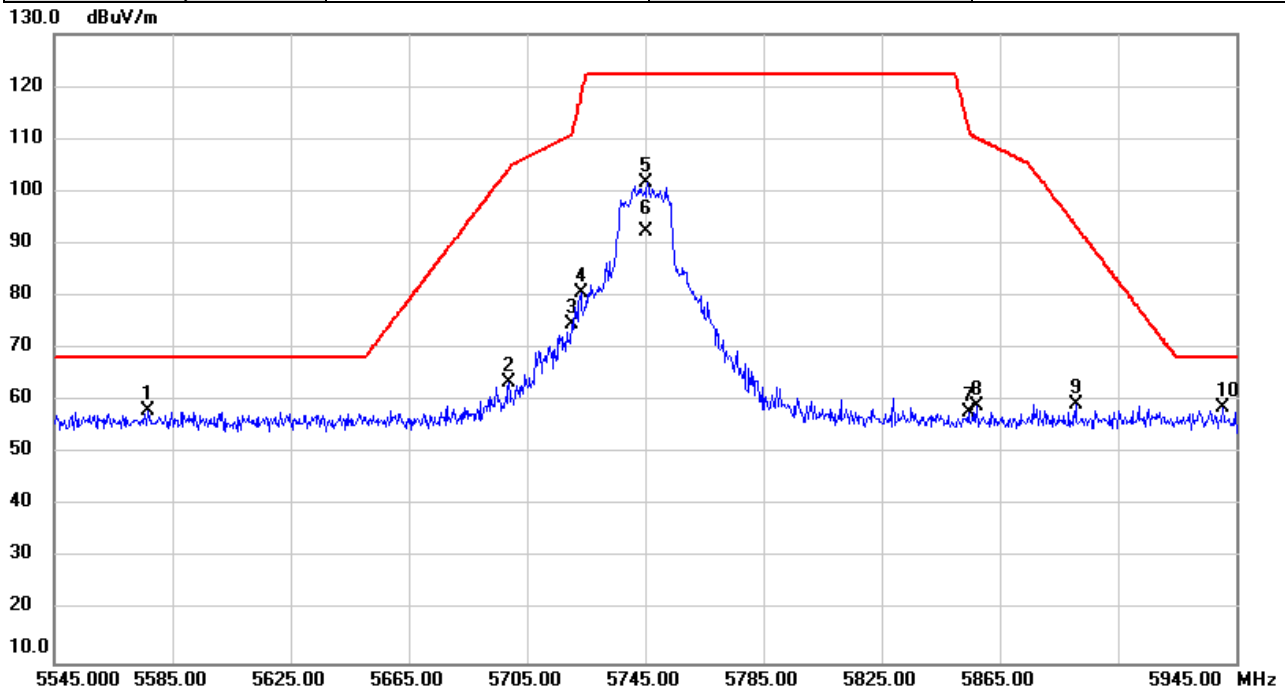
No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		5148.507	60.67	1.37	62.04	74.00	-11.96	peak	
2		5148.507	46.28	1.37	47.65	54.00	-6.35	AVG	
3	*	5240.000	114.93	1.43	116.36	68.20	48.16	peak	No Limit
4	X	5240.000	105.44	1.43	106.87	68.20	38.67	AVG	No Limit

REMARKS:

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

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

Test Mode	IEEE 802.11n (HT20)	Test Date	2024/7/1
Test Frequency	5745MHz	Polarization	Horizontal
Temp	26°C	Hum.	60%

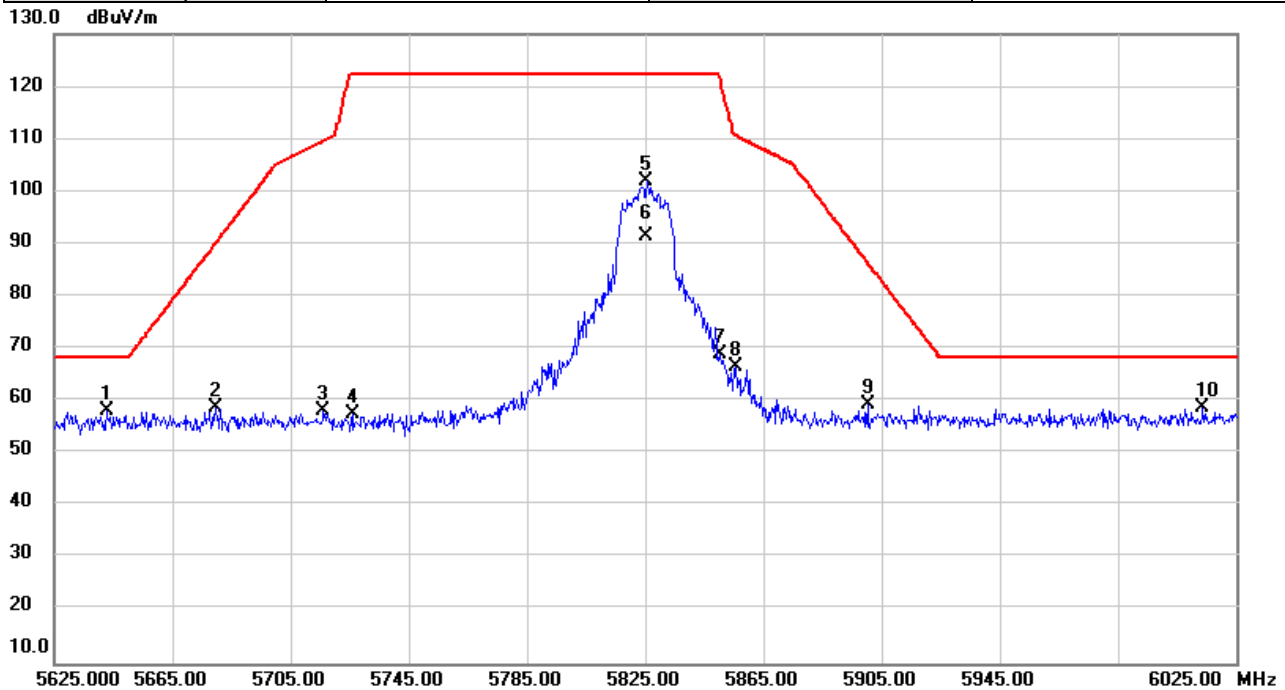


No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Over		
		MHz	Level	Factor	ment			Detector	Comment
			dBuV	dB	dBuV/m	dBuV/m	dB		
1		5576.747	56.23	1.83	58.06	68.20	-10.14	peak	
2		5698.613	61.17	2.24	63.41	104.18	-40.77	peak	
3		5720.053	72.22	2.30	74.52	110.92	-36.40	peak	
4		5723.320	78.47	2.31	80.78	118.37	-37.59	peak	
5		5745.000	99.17	2.38	101.55	122.20	-20.65	peak	No Limit
6		5745.000	89.98	2.38	92.36	122.20	-29.84	AVG	No Limit
7		5854.547	55.20	2.74	57.94	111.83	-53.89	peak	
8		5857.387	56.17	2.75	58.92	110.13	-51.21	peak	
9		5890.933	56.41	2.87	59.28	93.38	-34.10	peak	
10	*	5940.507	55.74	3.03	58.77	68.20	-9.43	peak	

REMARKS:

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

Test Mode	IEEE 802.11n (HT20)	Test Date	2024/7/1
Test Frequency	5825MHz	Polarization	Horizontal
Temp	26°C	Hum.	60%

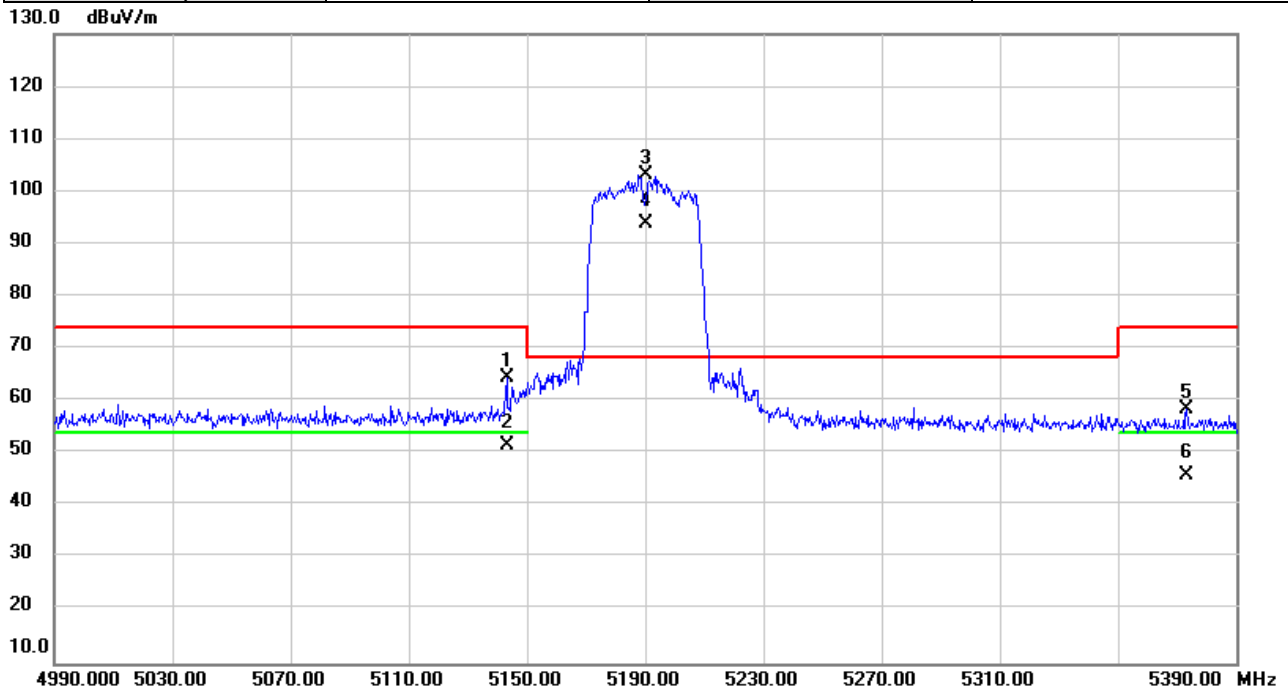


No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Over		
		MHz	Level	Factor	ment			Detector	Comment
			dBuV	dB	dBuV/m	dBuV/m	dB		
1		5642.947	56.24	2.05	58.29	68.20	-9.91	peak	
2		5679.680	56.69	2.18	58.87	90.20	-31.33	peak	
3		5715.973	55.74	2.29	58.03	109.67	-51.64	peak	
4		5725.920	55.14	2.32	57.46	122.20	-64.74	peak	
5		5825.000	99.21	2.65	101.86	122.20	-20.34	peak	No Limit
6		5825.000	88.91	2.65	91.56	122.20	-30.64	AVG	No Limit
7		5850.227	66.35	2.72	69.07	121.68	-52.61	peak	
8		5855.613	63.85	2.74	66.59	110.63	-44.04	peak	
9		5900.533	56.31	2.90	59.21	86.27	-27.06	peak	
10	*	6013.680	55.60	3.30	58.90	68.20	-9.30	peak	

REMARKS:

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

Test Mode	IEEE 802.11n (HT40)	Test Date	2024/7/1
Test Frequency	5190MHz	Polarization	Horizontal
Temp	26°C	Hum.	60%

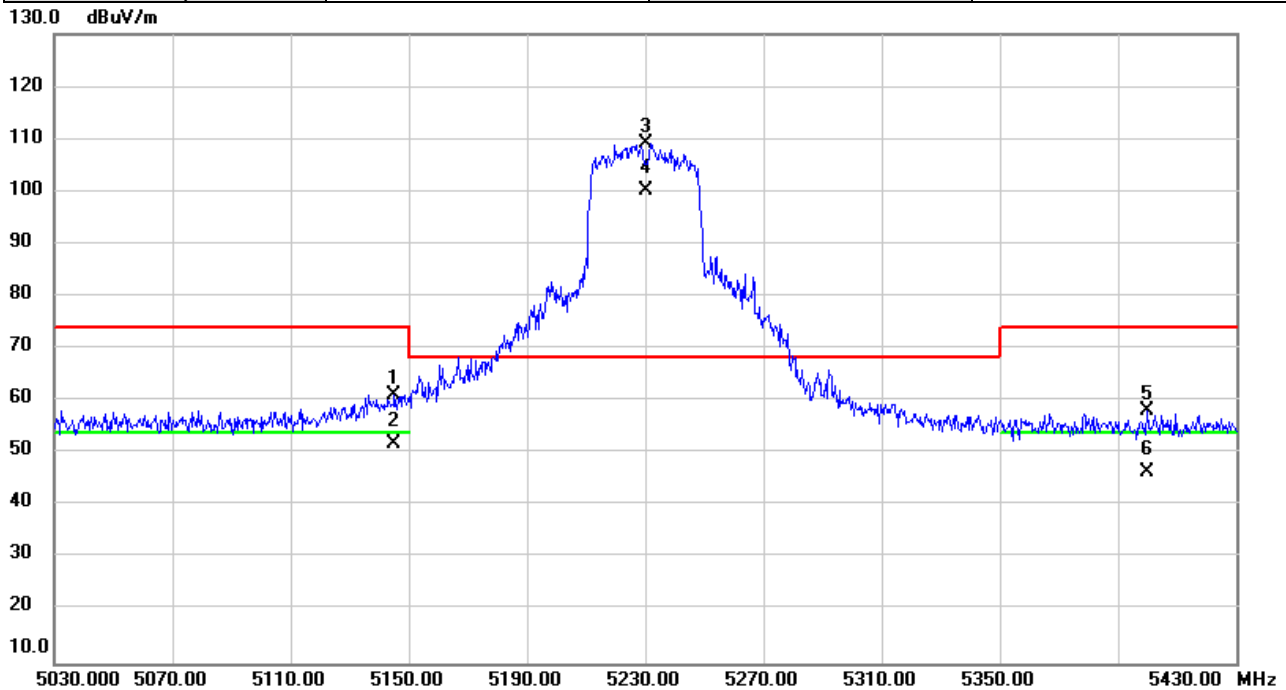


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		5143.080	63.11	1.37	64.48	74.00	-9.52	peak	
2		5143.080	50.11	1.37	51.48	54.00	-2.52	AVG	
3	*	5190.000	101.80	1.40	103.20	68.20	35.00	peak	No Limit
4	X	5190.000	92.31	1.40	93.71	68.20	25.51	AVG	No Limit
5		5373.453	56.85	1.51	58.36	74.00	-15.64	peak	
6		5373.453	44.44	1.51	45.95	54.00	-8.05	AVG	

REMARKS:

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

Test Mode	IEEE 802.11n (HT40)	Test Date	2024/7/1
Test Frequency	5230MHz	Polarization	Horizontal
Temp	26°C	Hum.	60%

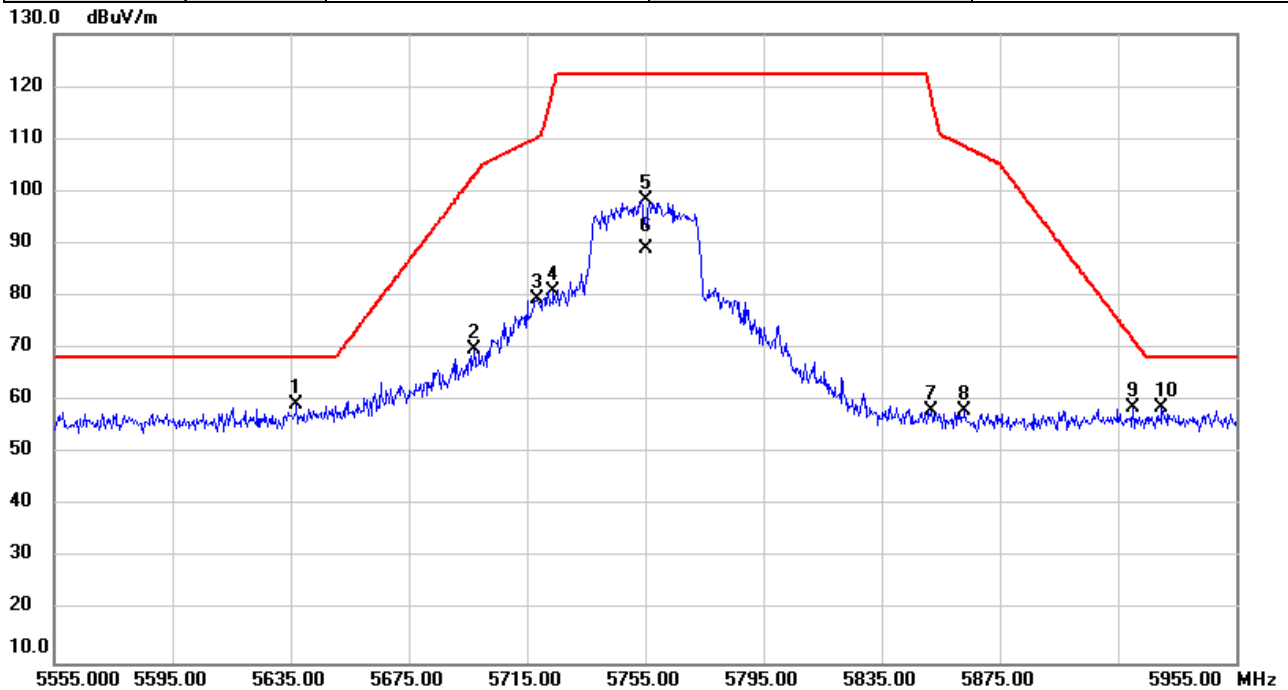


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		5144.880	59.82	1.37	61.19	74.00	-12.81	peak	
2		5144.880	50.35	1.37	51.72	54.00	-2.28	AVG	
3	*	5230.000	107.66	1.42	109.08	68.20	40.88	peak	No Limit
4	X	5230.000	98.82	1.42	100.24	68.20	32.04	AVG	No Limit
5		5399.813	56.68	1.52	58.20	74.00	-15.80	peak	
6		5399.813	45.05	1.52	46.57	54.00	-7.43	AVG	

REMARKS:

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

Test Mode	IEEE 802.11n (HT40)	Test Date	2024/7/1
Test Frequency	5755MHz	Polarization	Horizontal
Temp	26°C	Hum.	60%

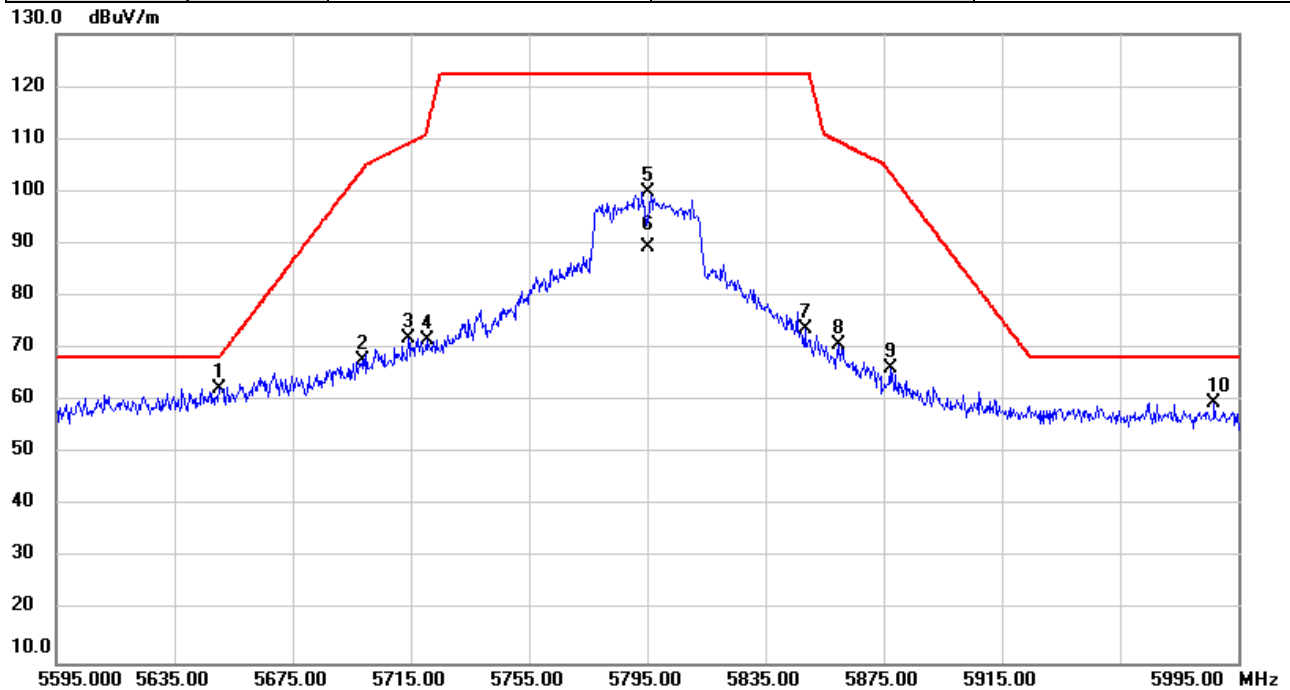


No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Over		
		MHz	Level	Factor	ment			Detector	Comment
			dBuV	dB	dBuV/m	dBuV/m	dB		
1	*	5637.120	57.23	2.03	59.26	68.20	-8.94	peak	
2		5697.213	67.50	2.23	69.73	103.15	-33.42	peak	
3		5718.386	77.28	2.30	79.58	110.35	-30.77	peak	
4		5724.000	78.67	2.31	80.98	119.92	-38.94	peak	
5		5755.000	95.81	2.42	98.23	122.20	-23.97	peak	No Limit
6		5755.000	86.63	2.42	89.05	122.20	-33.15	AVG	No Limit
7		5851.773	55.47	2.73	58.20	118.16	-59.96	peak	
8		5863.240	55.39	2.77	58.16	108.49	-50.33	peak	
9		5920.320	55.74	2.96	58.70	71.65	-12.95	peak	
10		5929.920	55.90	3.00	58.90	68.20	-9.30	peak	

REMARKS:

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

Test Mode	IEEE 802.11n (HT40)	Test Date	2024/7/1
Test Frequency	5795MHz	Polarization	Horizontal
Temp	26°C	Hum.	60%

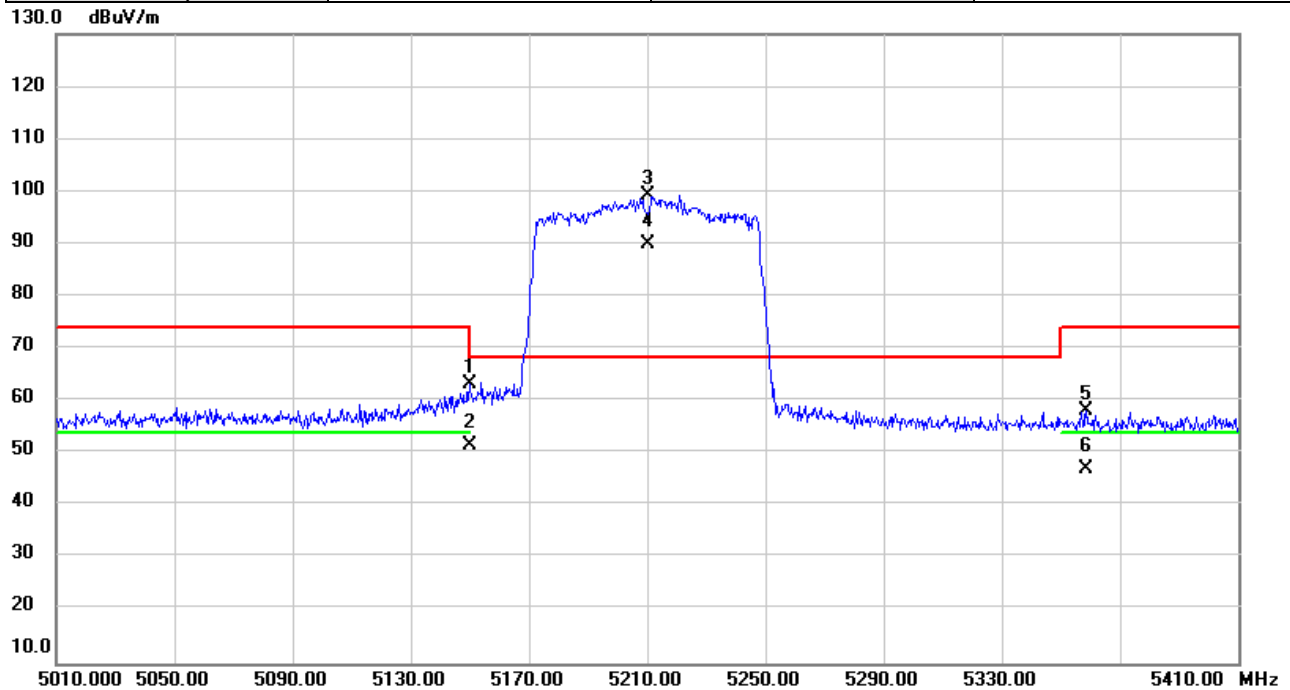


No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Over		
		MHz	Level	Factor	ment			Detector	Comment
			dBuV	dB	dBuV/m	dBuV/m	dB		
1	*	5650.027	60.41	2.08	62.49	68.22	-5.73	peak	
2		5698.560	65.53	2.24	67.77	104.14	-36.37	peak	
3		5714.053	69.57	2.28	71.85	109.14	-37.29	peak	
4		5720.387	69.44	2.30	71.74	111.68	-39.94	peak	
5		5795.000	97.28	2.55	99.83	122.20	-22.37	peak	No Limit
6		5795.000	86.93	2.55	89.48	122.20	-32.72	AVG	No Limit
7		5848.360	71.08	2.72	73.80	122.20	-48.40	peak	
8		5859.893	67.88	2.75	70.63	109.43	-38.80	peak	
9		5877.187	63.40	2.82	66.22	103.58	-37.36	peak	
10		5986.653	56.41	3.18	59.59	68.20	-8.61	peak	

REMARKS:

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

Test Mode	IEEE 802.11ac (VHT80)	Test Date	2024/7/1
Test Frequency	5210MHz	Polarization	Horizontal
Temp	26°C	Hum.	60%

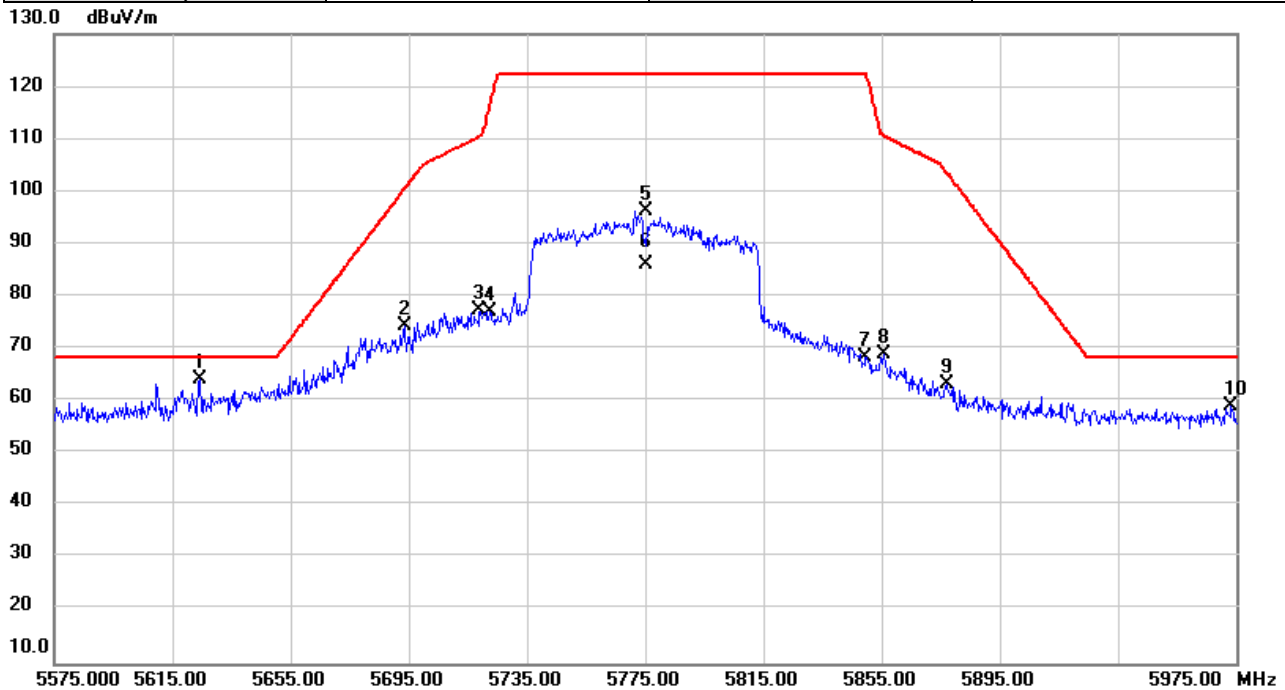


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		5149.907	61.96	1.37	63.33	74.00	-10.67	peak	
2		5149.907	50.11	1.37	51.48	54.00	-2.52	AVG	
3	*	5210.000	97.84	1.41	99.25	68.20	31.05	peak	No Limit
4	X	5210.000	88.61	1.41	90.02	68.20	21.82	AVG	No Limit
5		5358.733	56.70	1.50	58.20	74.00	-15.80	peak	
6		5358.733	45.41	1.50	46.91	54.00	-7.09	AVG	

REMARKS:

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

Test Mode	IEEE 802.11ac (VHT80)	Test Date	2024/7/1
Test Frequency	5775MHz	Polarization	Horizontal
Temp	26°C	Hum.	60%

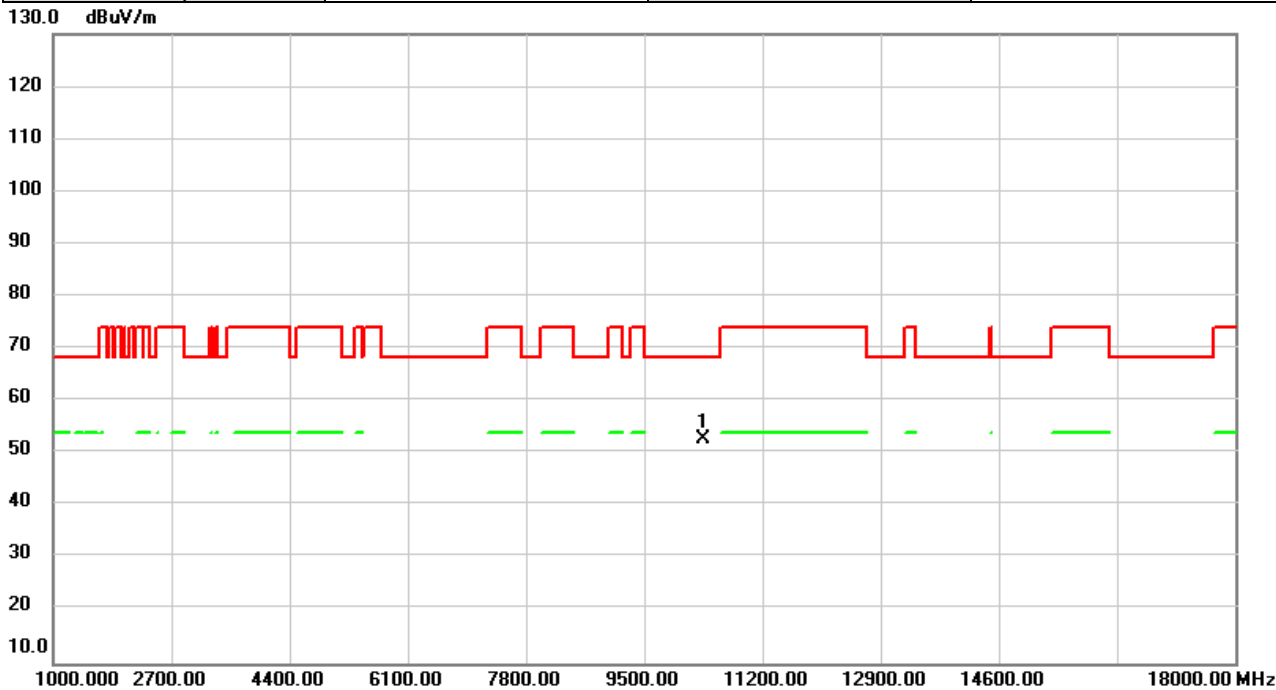


No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	5624.400	62.07	1.98	64.05	68.20	-4.15	peak	
2		5693.427	72.15	2.22	74.37	100.35	-25.98	peak	
3		5718.987	74.90	2.30	77.20	110.52	-33.32	peak	
4		5722.520	74.71	2.31	77.02	116.55	-39.53	peak	
5		5775.000	93.63	2.49	96.12	122.20	-26.08	peak	No Limit
6		5775.000	83.65	2.49	86.14	122.20	-36.06	AVG	No Limit
7		5849.640	65.69	2.72	68.41	122.20	-53.79	peak	
8		5855.573	66.18	2.74	68.92	110.64	-41.72	peak	
9		5877.373	60.52	2.82	63.34	103.44	-40.10	peak	
10		5973.400	55.79	3.13	58.92	68.20	-9.28	peak	

REMARKS:

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

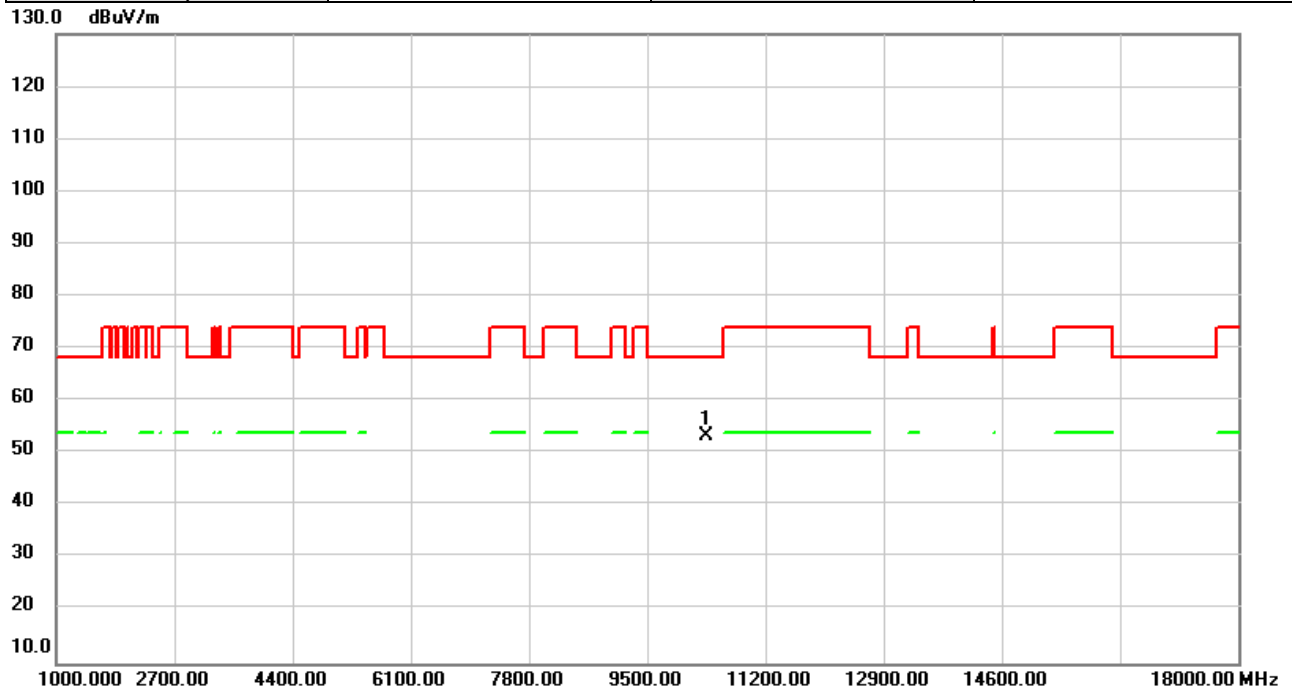
Test Mode	IEEE 802.11a	Test Date	2024/7/1
Test Frequency	5180MHz	Polarization	Vertical
Temp	26°C	Hum.	60%



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	10360.00	46.13	6.76	52.89	68.20	-15.31	peak	

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

Test Mode	IEEE 802.11a	Test Date	2024/7/1
Test Frequency	5180MHz	Polarization	Horizontal
Temp	26°C	Hum.	60%

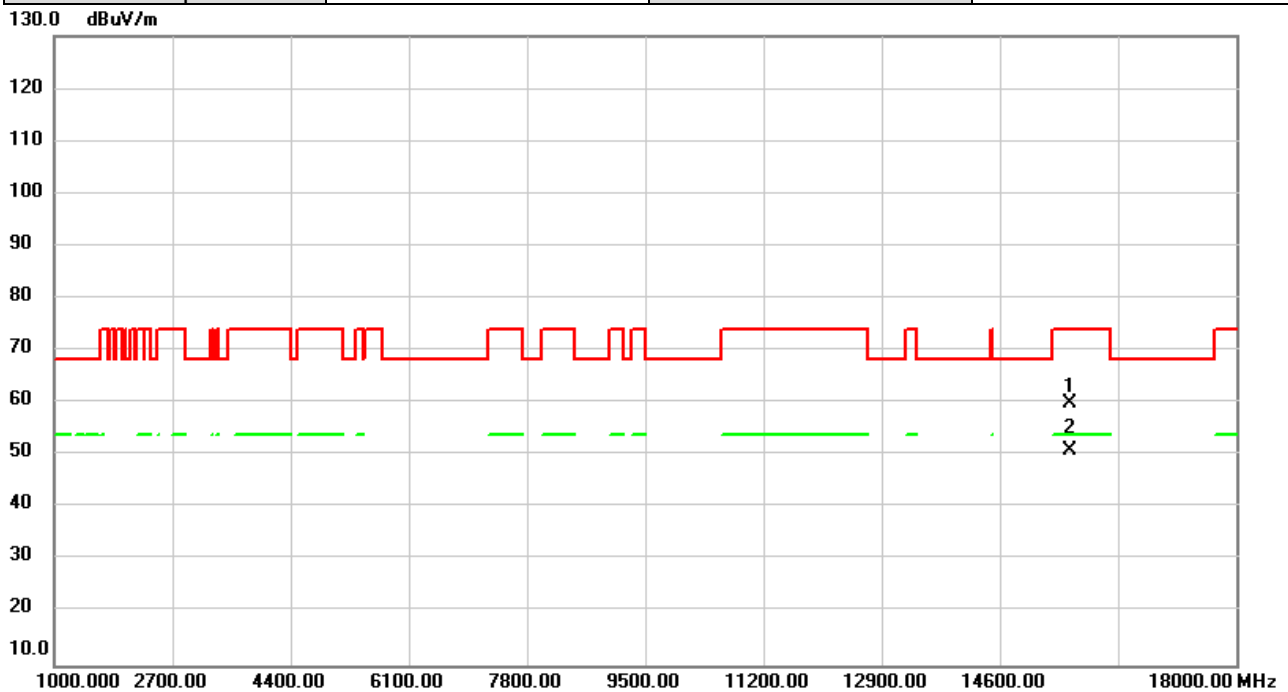


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	10360.00	46.48	6.76	53.24	68.20	-14.96	peak	

REMARKS:

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

Test Mode	IEEE 802.11a	Test Date	2024/7/1
Test Frequency	5200MHz	Polarization	Vertical
Temp	26°C	Hum.	60%

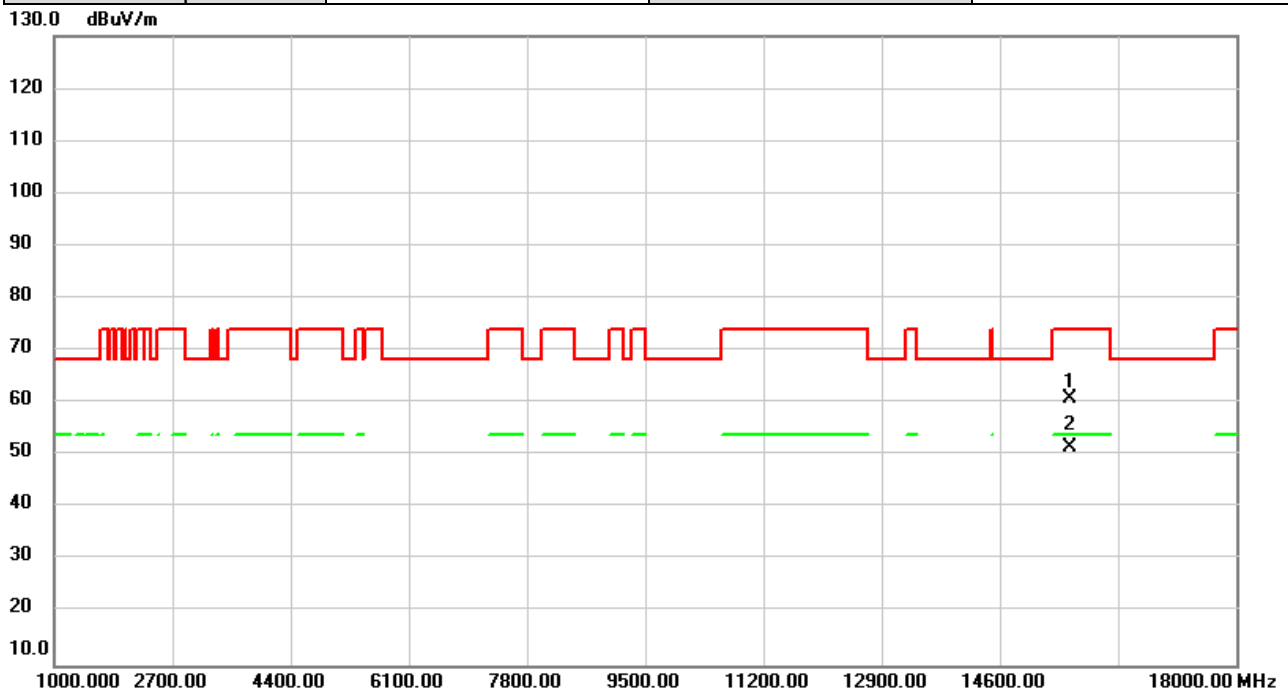


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		15600.00	51.28	8.63	59.91	74.00	-14.09	peak	
2	*	15600.00	42.18	8.63	50.81	54.00	-3.19	AVG	

REMARKS:

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

Test Mode	IEEE 802.11a	Test Date	2024/7/1
Test Frequency	5200MHz	Polarization	Horizontal
Temp	26°C	Hum.	60%

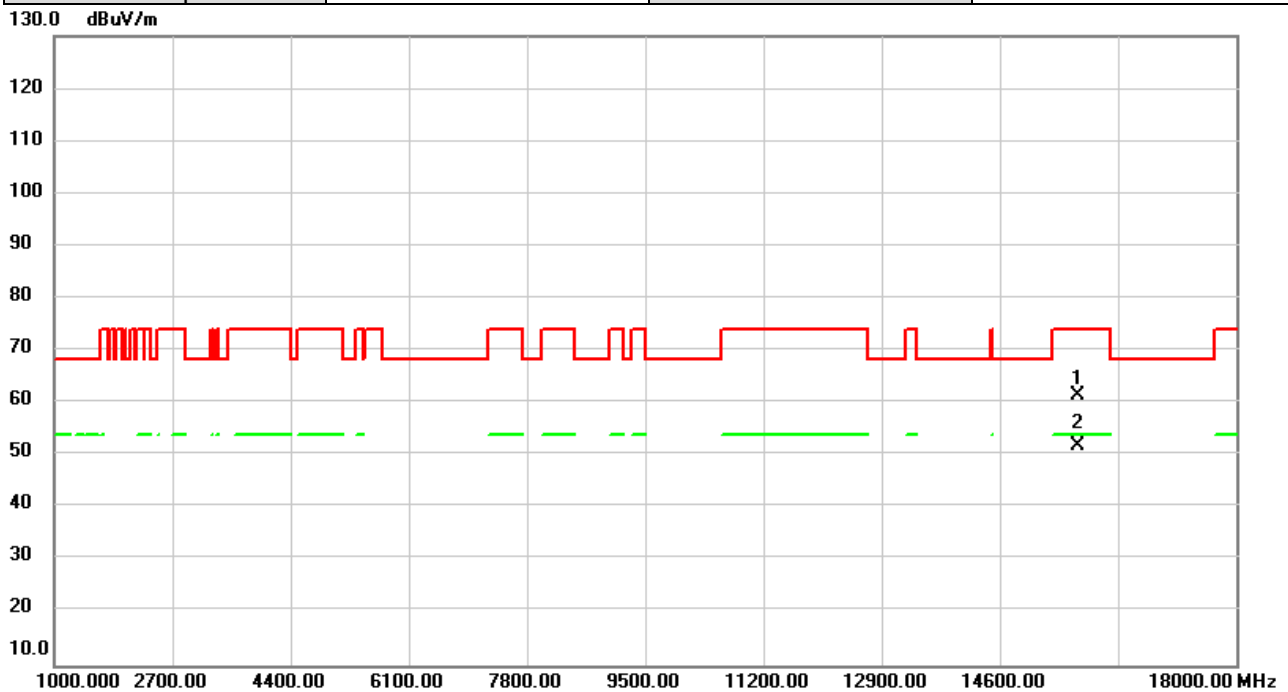


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		15600.00	52.11	8.63	60.74	74.00	-13.26	peak	
2	*	15600.00	42.93	8.63	51.56	54.00	-2.44	AVG	

REMARKS:

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

Test Mode	IEEE 802.11a	Test Date	2024/7/1
Test Frequency	5240MHz	Polarization	Vertical
Temp	26°C	Hum.	60%

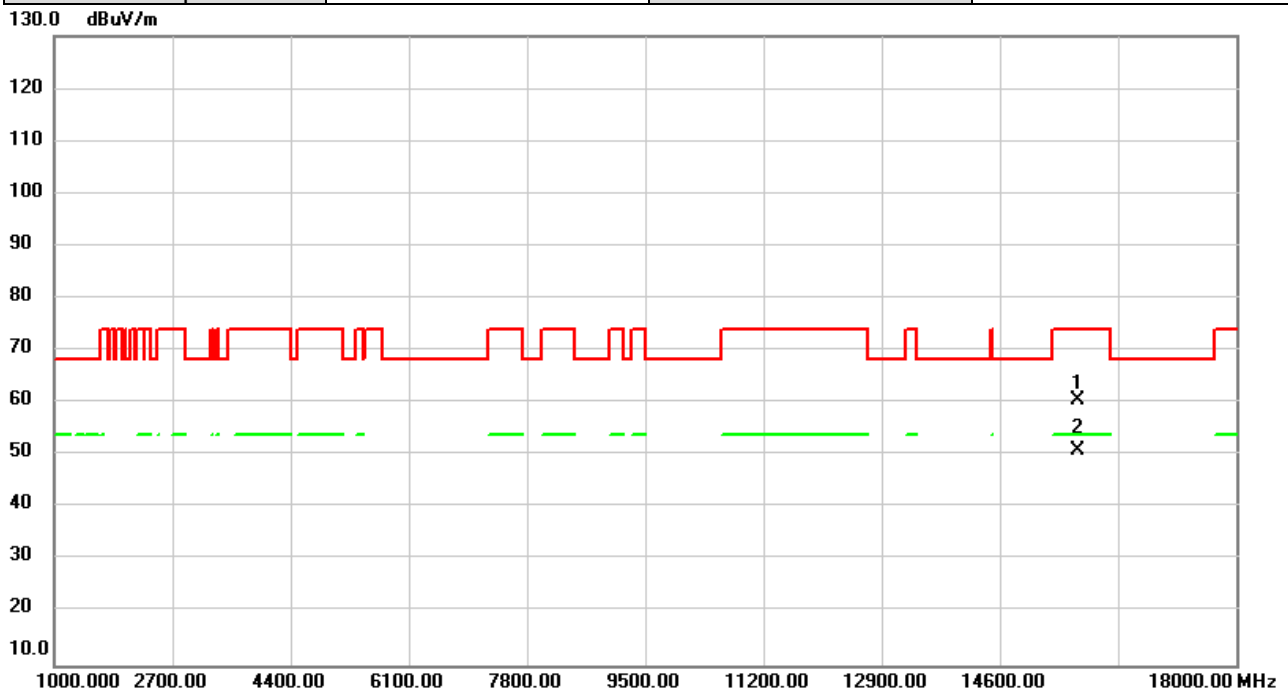


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		15720.00	52.76	8.69	61.45	74.00	-12.55	peak	
2	*	15720.00	43.19	8.69	51.88	54.00	-2.12	AVG	

REMARKS:

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

Test Mode	IEEE 802.11a	Test Date	2024/7/1
Test Frequency	5240MHz	Polarization	Horizontal
Temp	26°C	Hum.	60%

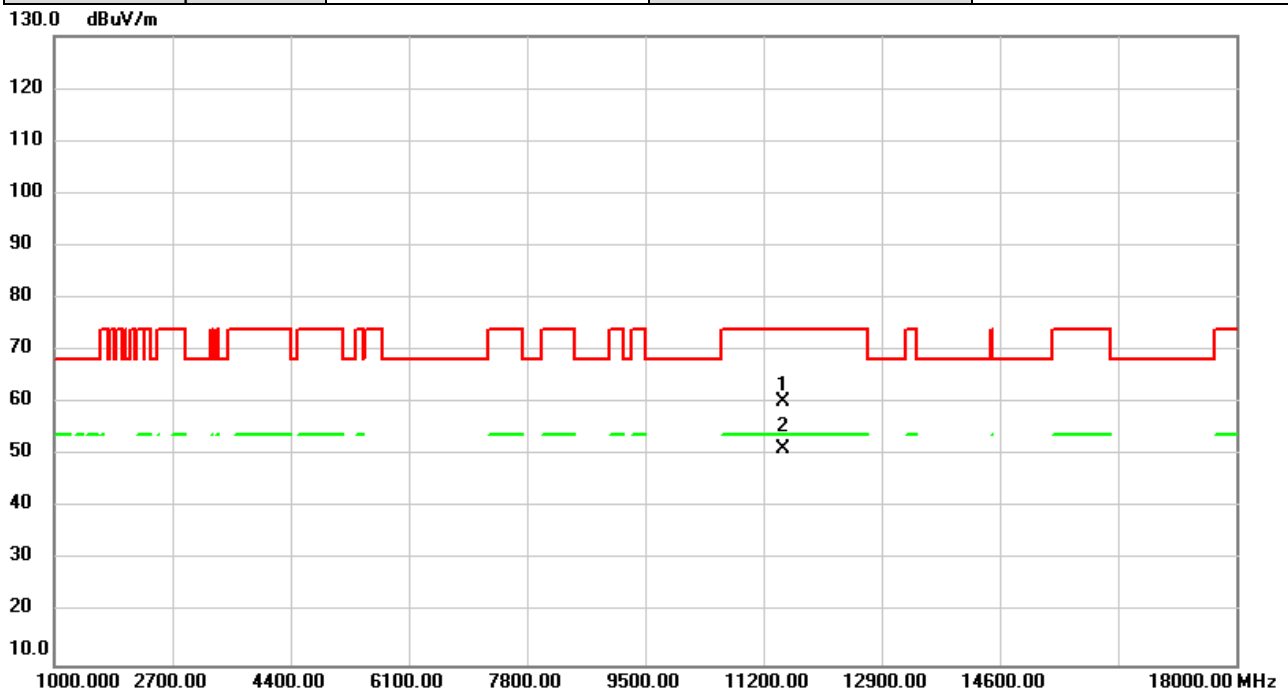


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		15720.00	51.81	8.69	60.50	74.00	-13.50	peak	
2	*	15720.00	42.39	8.69	51.08	54.00	-2.92	AVG	

REMARKS:

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

Test Mode	IEEE 802.11a	Test Date	2024/7/1
Test Frequency	5745MHz	Polarization	Vertical
Temp	26°C	Hum.	60%

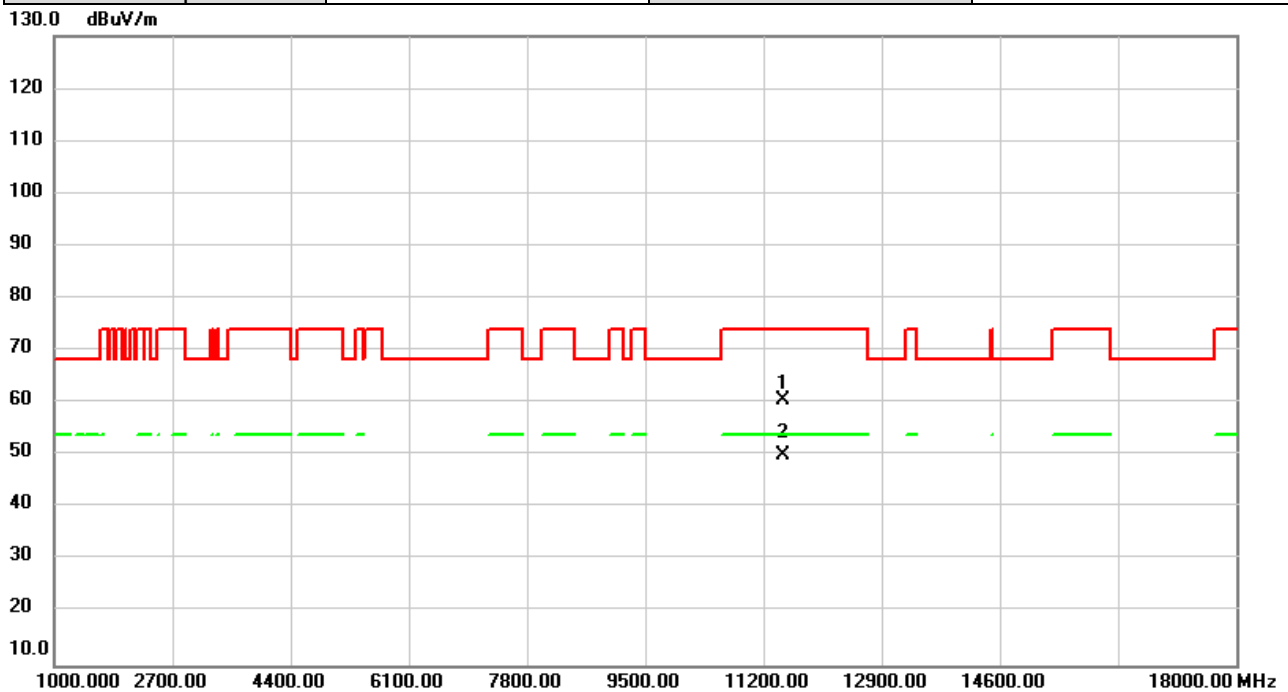


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		11490.00	52.74	7.56	60.30	74.00	-13.70	peak	
2	*	11490.00	43.70	7.56	51.26	54.00	-2.74	AVG	

REMARKS:

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

Test Mode	IEEE 802.11a	Test Date	2024/7/1
Test Frequency	5745MHz	Polarization	Horizontal
Temp	26°C	Hum.	60%

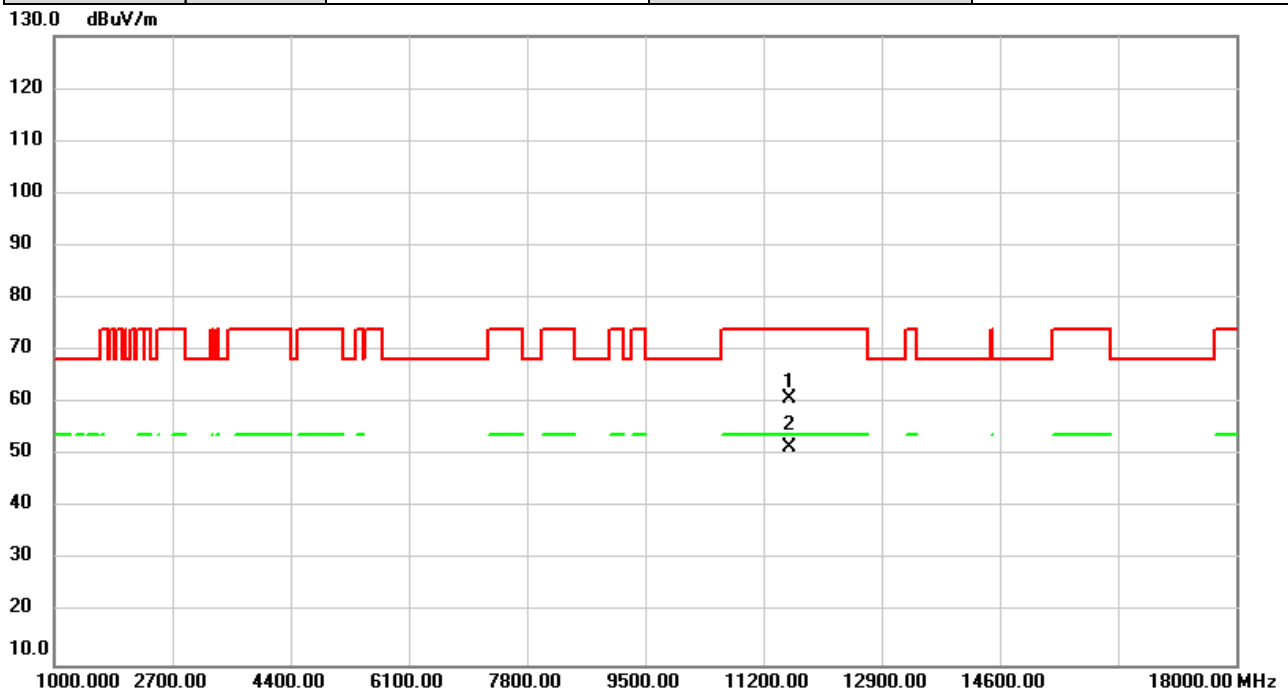


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		11490.00	53.04	7.56	60.60	74.00	-13.40	peak	
2	*	11490.00	42.37	7.56	49.93	54.00	-4.07	AVG	

REMARKS:

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

Test Mode	IEEE 802.11a	Test Date	2024/7/1
Test Frequency	5785MHz	Polarization	Vertical
Temp	26°C	Hum.	60%

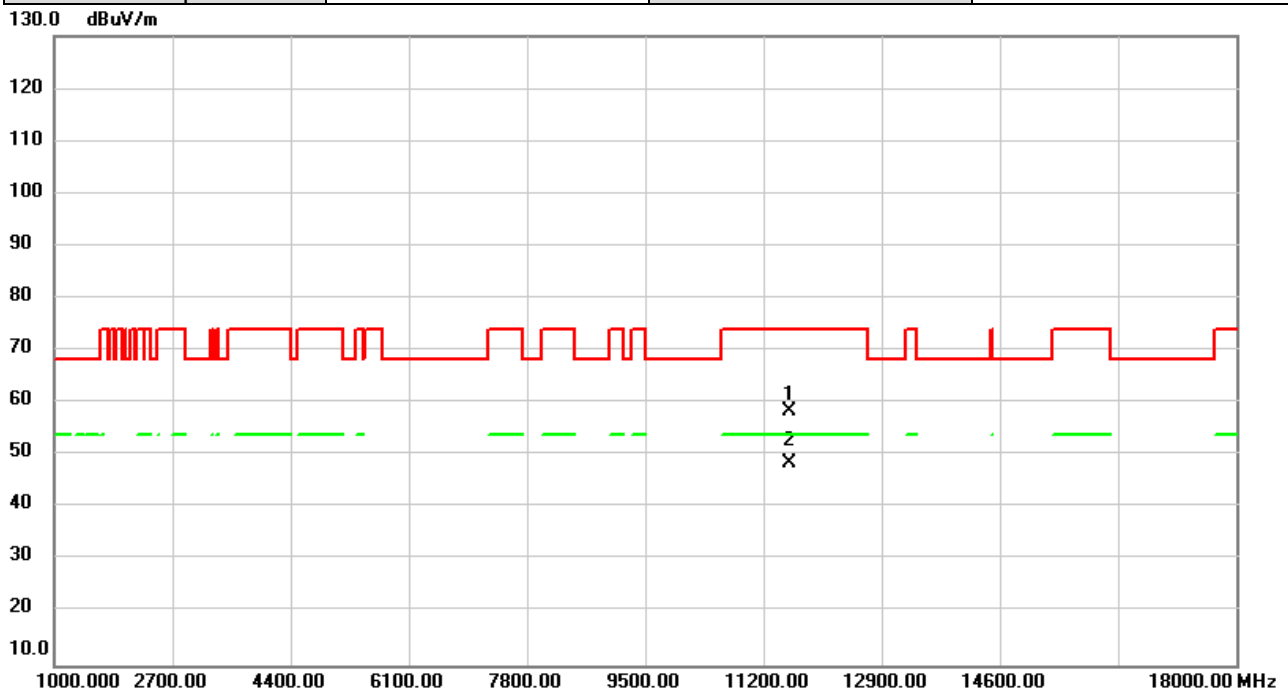


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		11570.00	53.34	7.59	60.93	74.00	-13.07	peak	
2	*	11570.00	44.03	7.59	51.62	54.00	-2.38	AVG	

REMARKS:

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

Test Mode	IEEE 802.11a	Test Date	2024/7/1
Test Frequency	5785MHz	Polarization	Horizontal
Temp	26°C	Hum.	60%

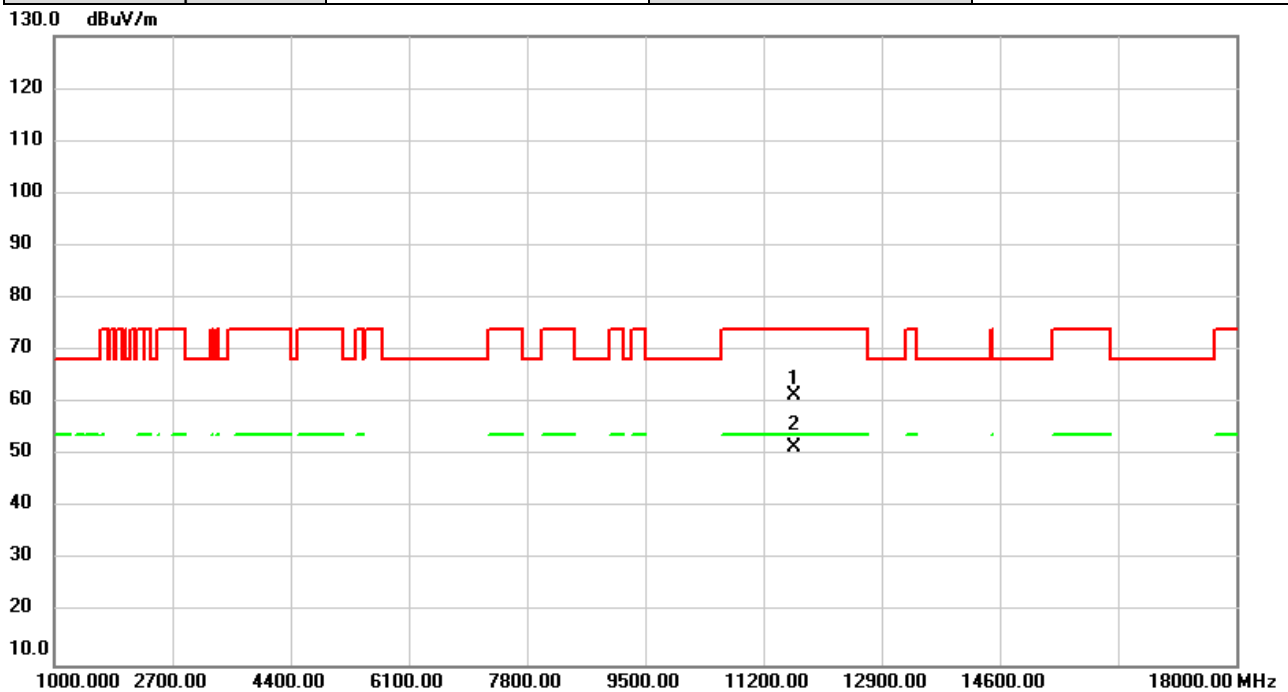


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		11570.00	50.78	7.59	58.37	74.00	-15.63	peak	
2	*	11570.00	41.03	7.59	48.62	54.00	-5.38	AVG	

REMARKS:

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

Test Mode	IEEE 802.11a	Test Date	2024/7/1
Test Frequency	5825MHz	Polarization	Vertical
Temp	26°C	Hum.	60%

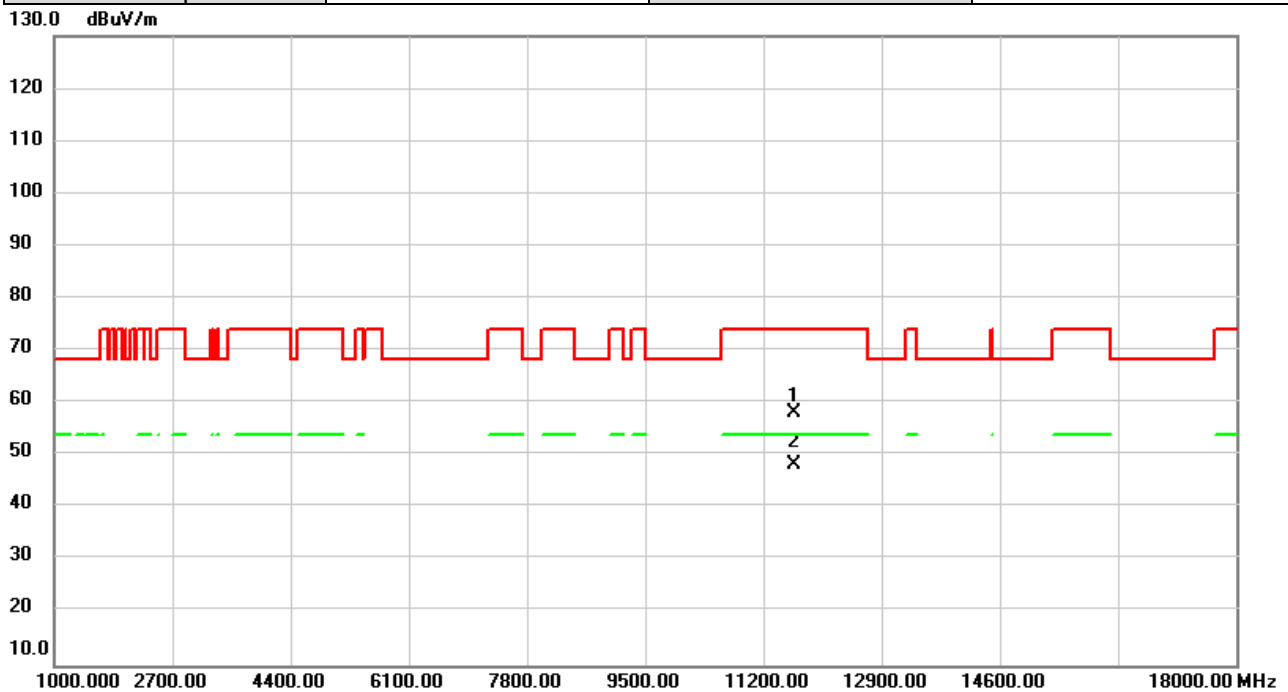


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		11650.00	53.74	7.62	61.36	74.00	-12.64	peak	
2	*	11650.00	43.97	7.62	51.59	54.00	-2.41	AVG	

REMARKS:

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

Test Mode	IEEE 802.11a	Test Date	2024/7/1
Test Frequency	5825MHz	Polarization	Horizontal
Temp	26°C	Hum.	60%

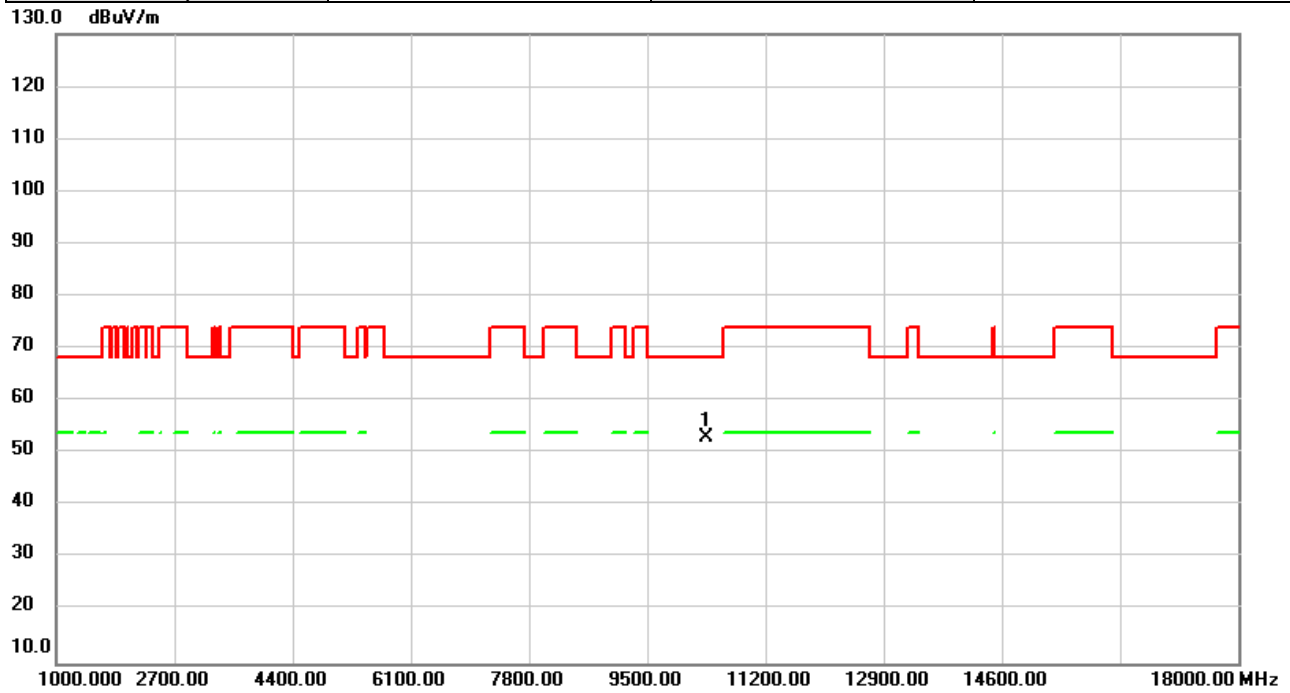


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		11650.00	50.68	7.62	58.30	74.00	-15.70	peak	
2	*	11650.00	40.70	7.62	48.32	54.00	-5.68	AVG	

REMARKS:

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

Test Mode	IEEE 802.11n (HT20)	Test Date	2024/7/1
Test Frequency	5180MHz	Polarization	Vertical
Temp	26°C	Hum.	60%

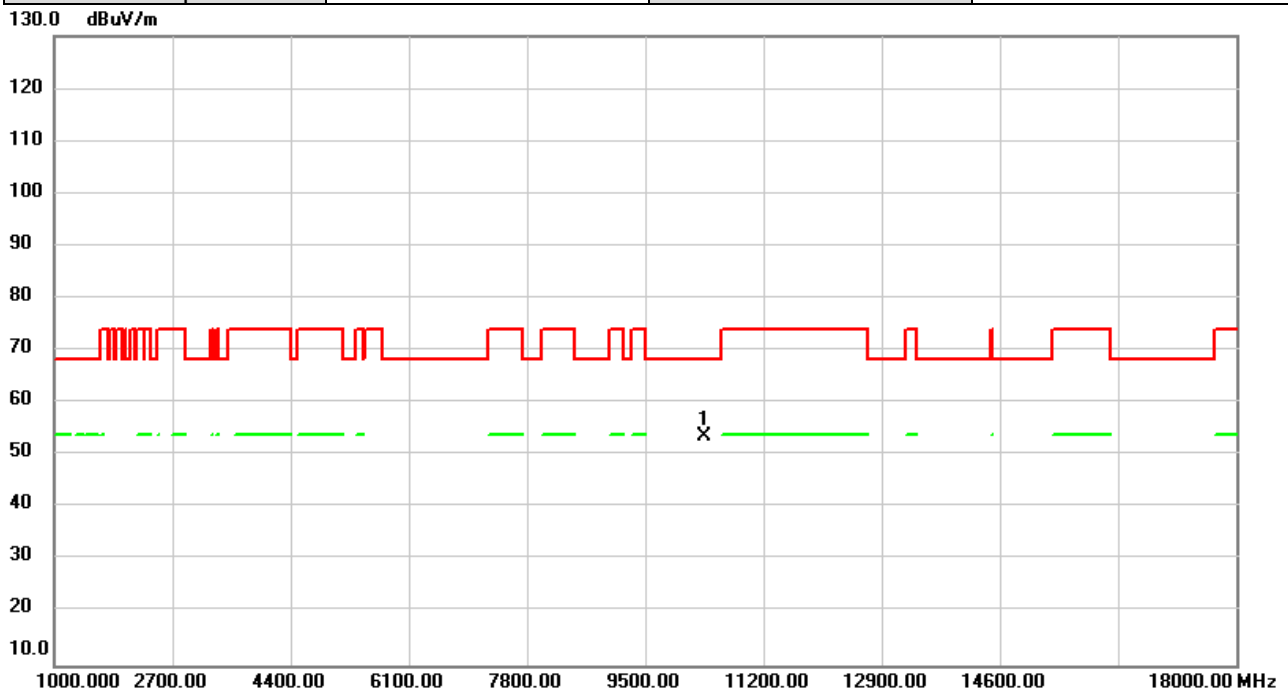


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	10360.00	46.25	6.76	53.01	68.20	-15.19	peak	

REMARKS:

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

Test Mode	IEEE 802.11n (HT20)	Test Date	2024/7/1
Test Frequency	5180MHz	Polarization	Horizontal
Temp	26°C	Hum.	60%

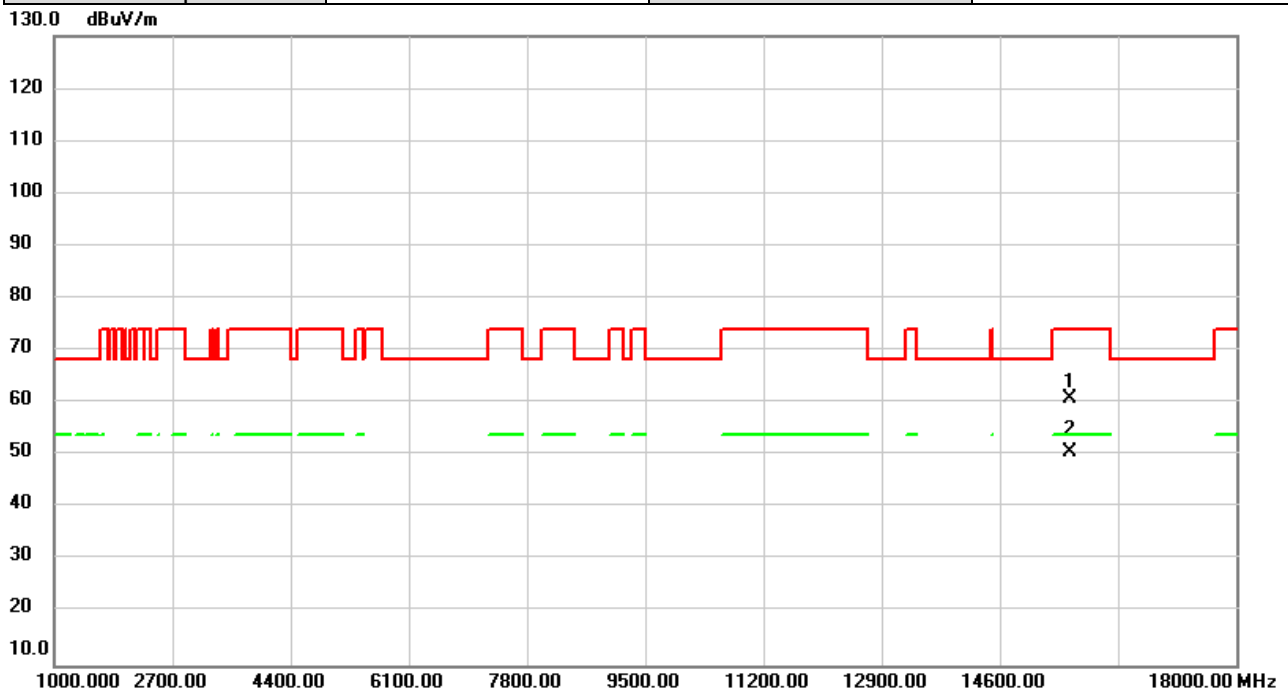


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	10360.00	46.89	6.76	53.65	68.20	-14.55	peak	

REMARKS:

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

Test Mode	IEEE 802.11n (HT20)	Test Date	2024/7/1
Test Frequency	5200MHz	Polarization	Vertical
Temp	26°C	Hum.	60%

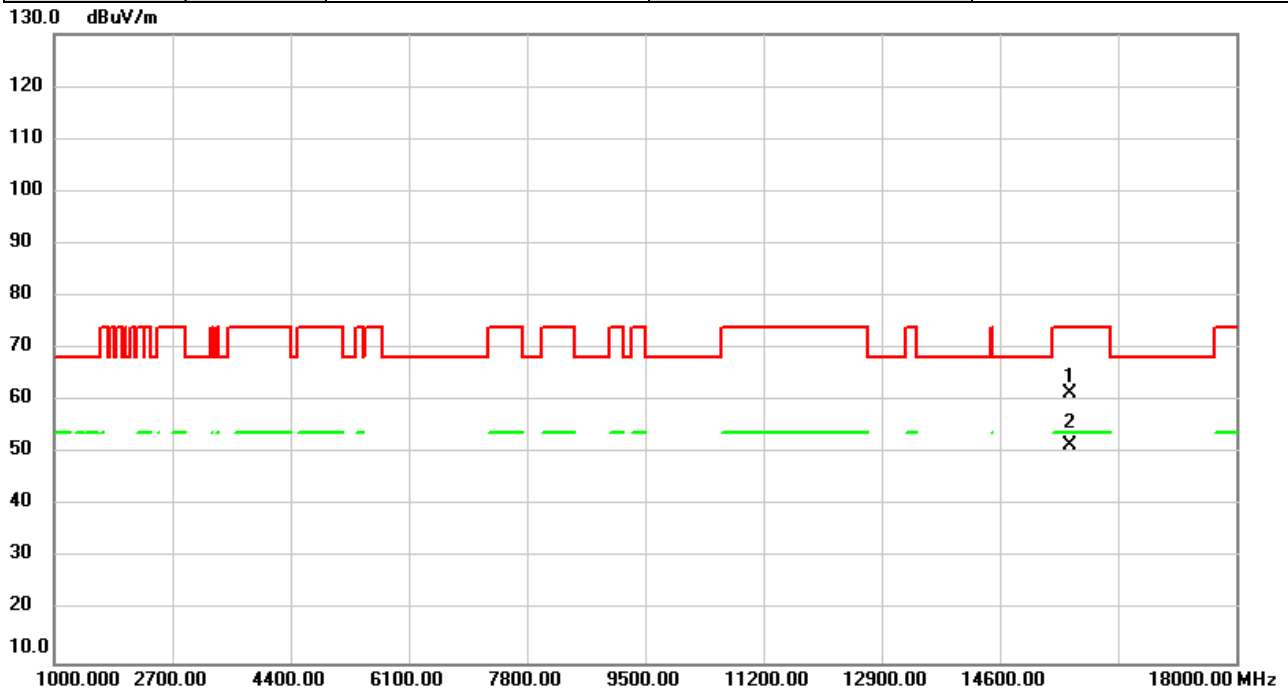


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		15600.00	52.32	8.63	60.95	74.00	-13.05	peak	
2	*	15600.00	41.93	8.63	50.56	54.00	-3.44	AVG	

REMARKS:

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

Test Mode	IEEE 802.11n (HT20)	Test Date	2024/7/1
Test Frequency	5200MHz	Polarization	Horizontal
Temp	26°C	Hum.	60%

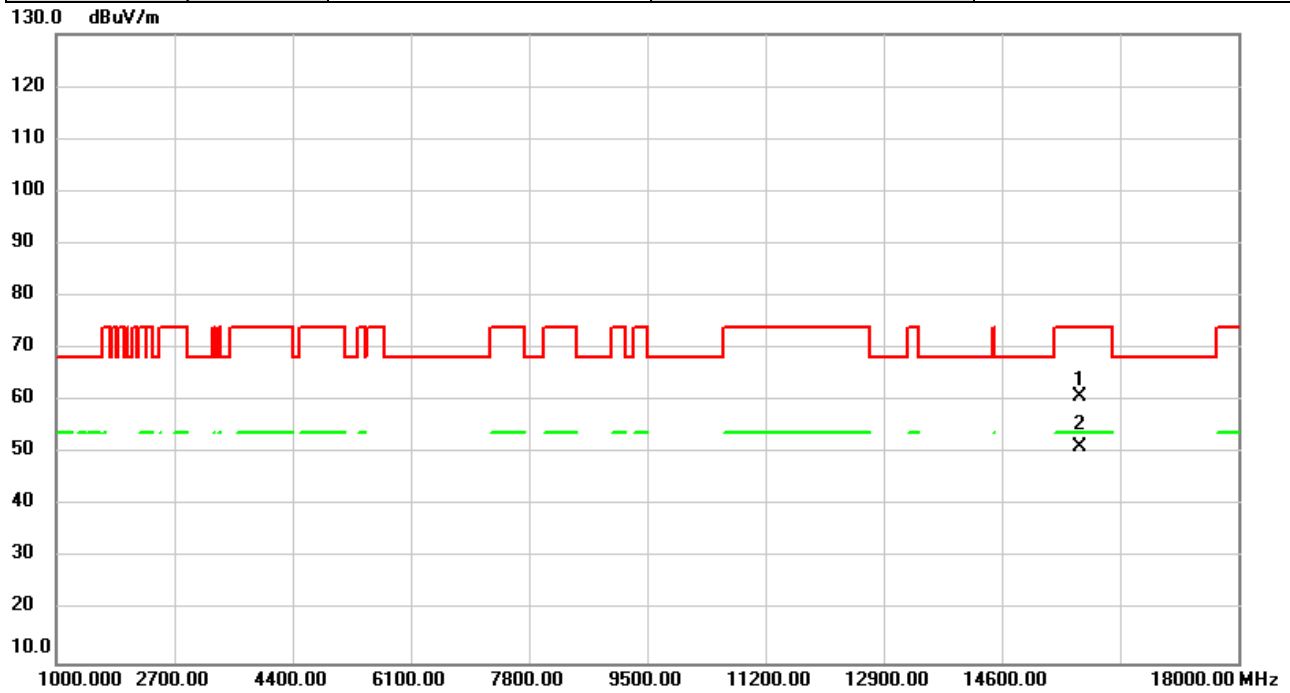


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		15600.00	52.85	8.63	61.48	74.00	-12.52	peak	
2	*	15600.00	42.86	8.63	51.49	54.00	-2.51	AVG	

REMARKS:

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

Test Mode	IEEE 802.11n (HT20)	Test Date	2024/7/1
Test Frequency	5240MHz	Polarization	Vertical
Temp	26°C	Hum.	60%

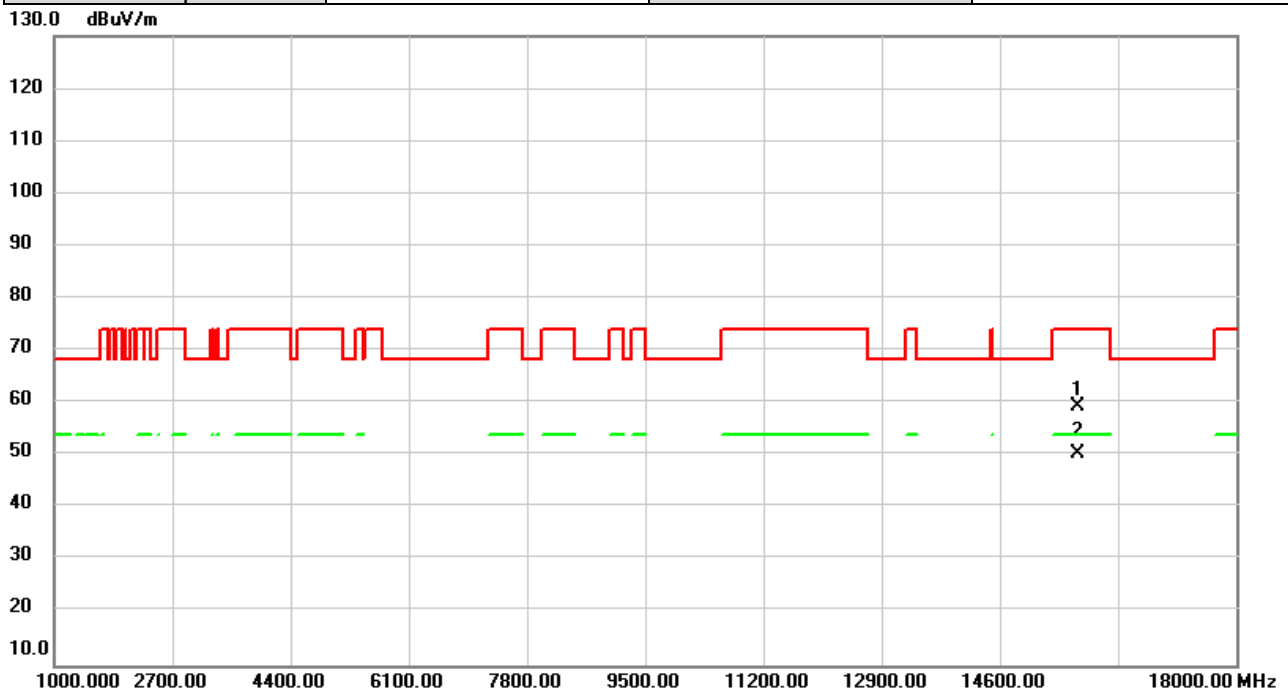


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		15720.00	52.17	8.69	60.86	74.00	-13.14	peak	
2	*	15720.00	42.68	8.69	51.37	54.00	-2.63	AVG	

REMARKS:

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

Test Mode	IEEE 802.11n (HT20)	Test Date	2024/7/1
Test Frequency	5240MHz	Polarization	Horizontal
Temp	26°C	Hum.	60%

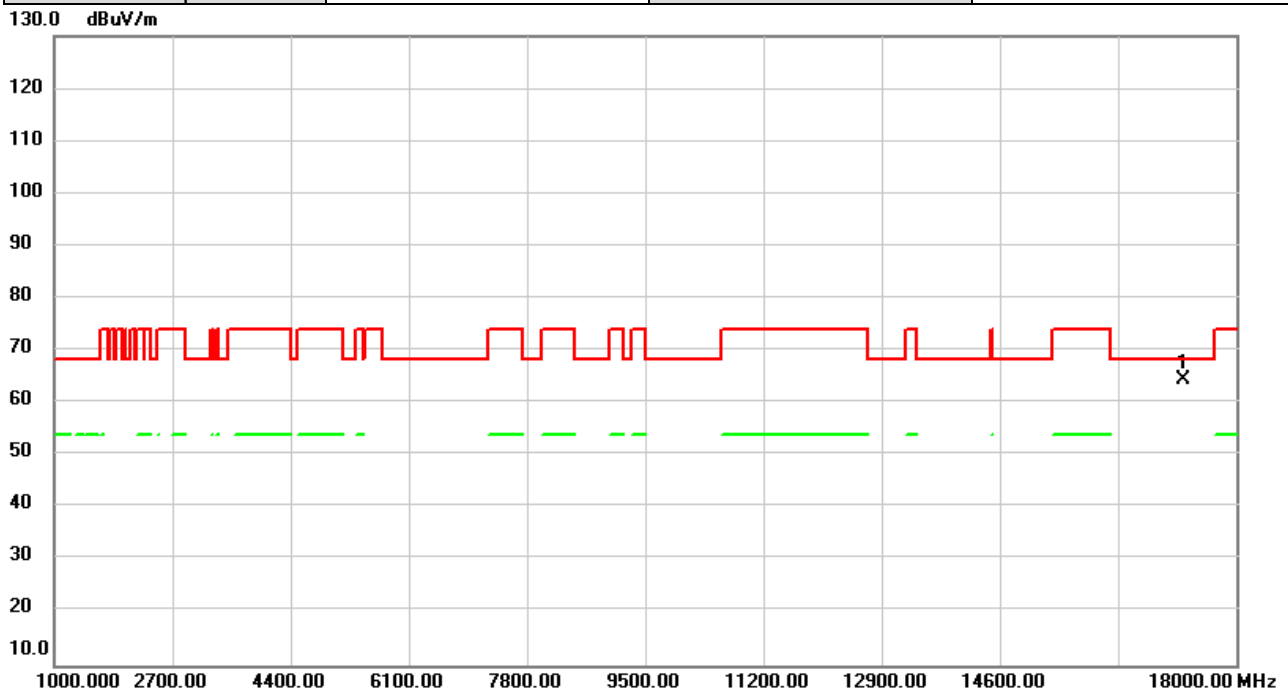


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		15720.00	50.65	8.69	59.34	74.00	-14.66	peak	
2	*	15720.00	41.73	8.69	50.42	54.00	-3.58	AVG	

REMARKS:

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

Test Mode	IEEE 802.11n (HT20)	Test Date	2024/7/1
Test Frequency	5745MHz	Polarization	Vertical
Temp	26°C	Hum.	60%

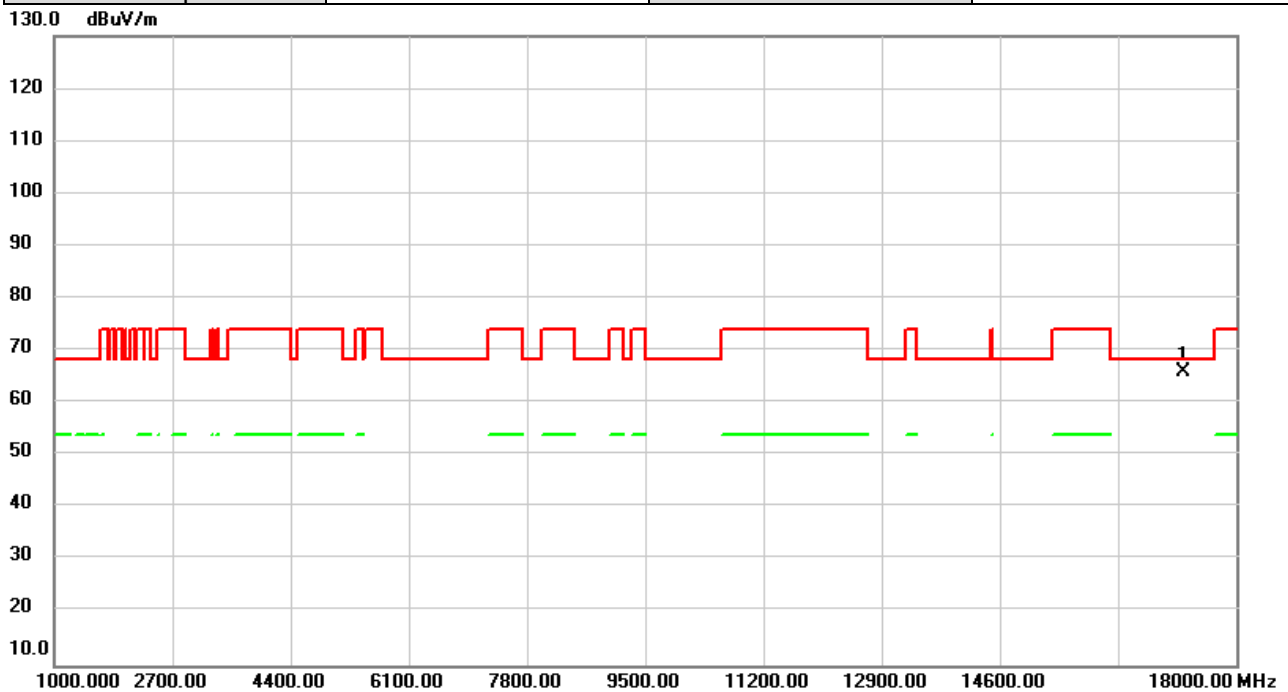


No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	17235.00	56.26	8.05	64.31	68.20	-3.89	peak	

REMARKS:

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

Test Mode	IEEE 802.11n (HT20)	Test Date	2024/7/1
Test Frequency	5745MHz	Polarization	Horizontal
Temp	26°C	Hum.	60%

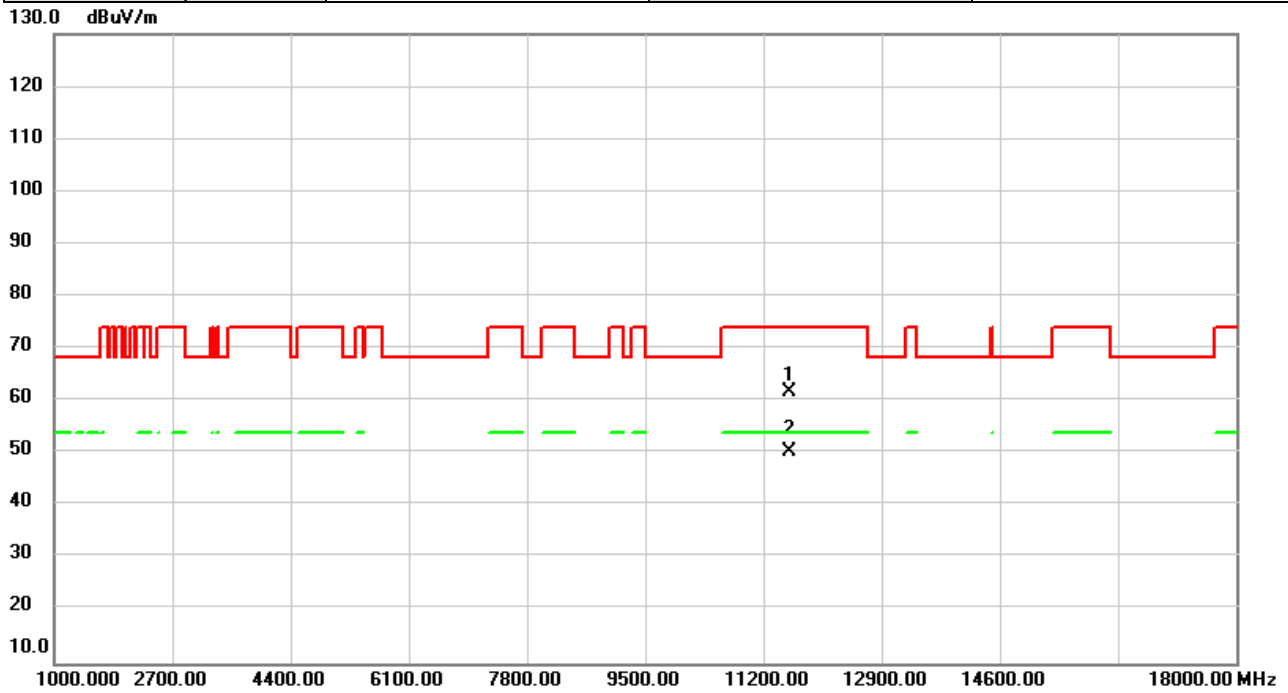


No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	17235.00	57.84	8.05	65.89	68.20	-2.31	peak	

REMARKS:

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

Test Mode	IEEE 802.11n (HT20)	Test Date	2024/7/1
Test Frequency	5785MHz	Polarization	Vertical
Temp	26°C	Hum.	60%

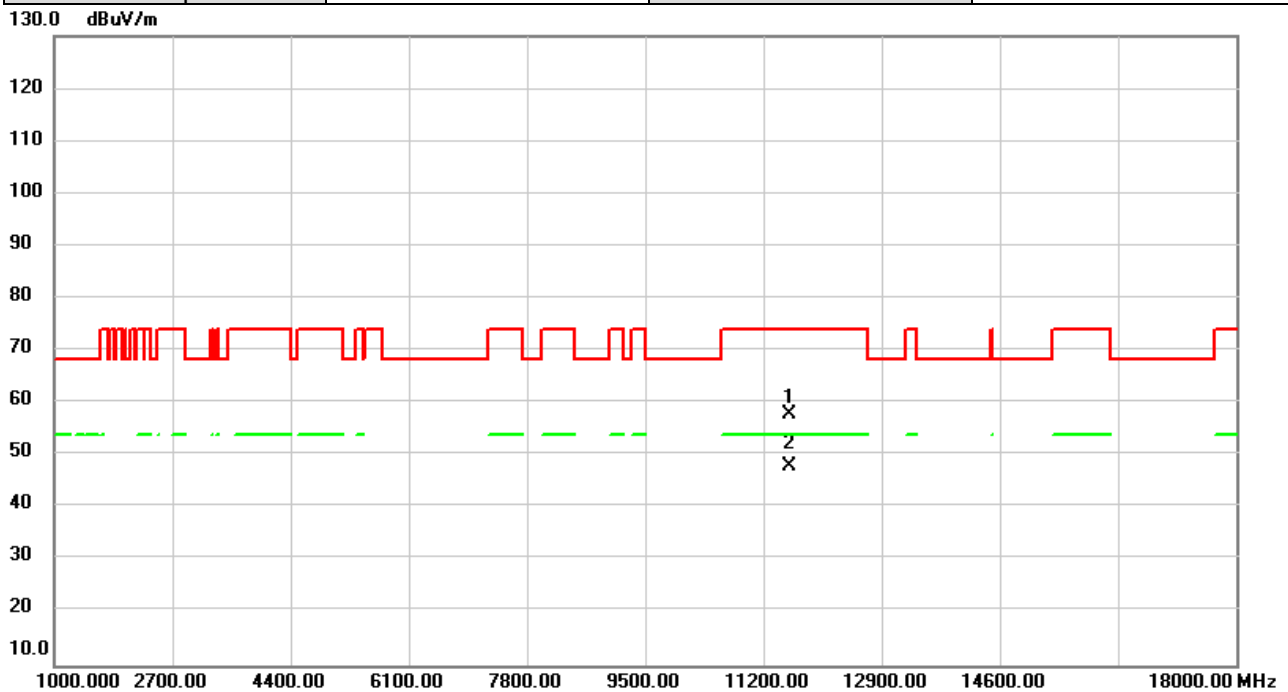


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		11570.00	54.09	7.59	61.68	74.00	-12.32	peak	
2	*	11570.00	42.77	7.59	50.36	54.00	-3.64	AVG	

REMARKS:

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

Test Mode	IEEE 802.11n (HT20)	Test Date	2024/7/1
Test Frequency	5785MHz	Polarization	Horizontal
Temp	26°C	Hum.	60%

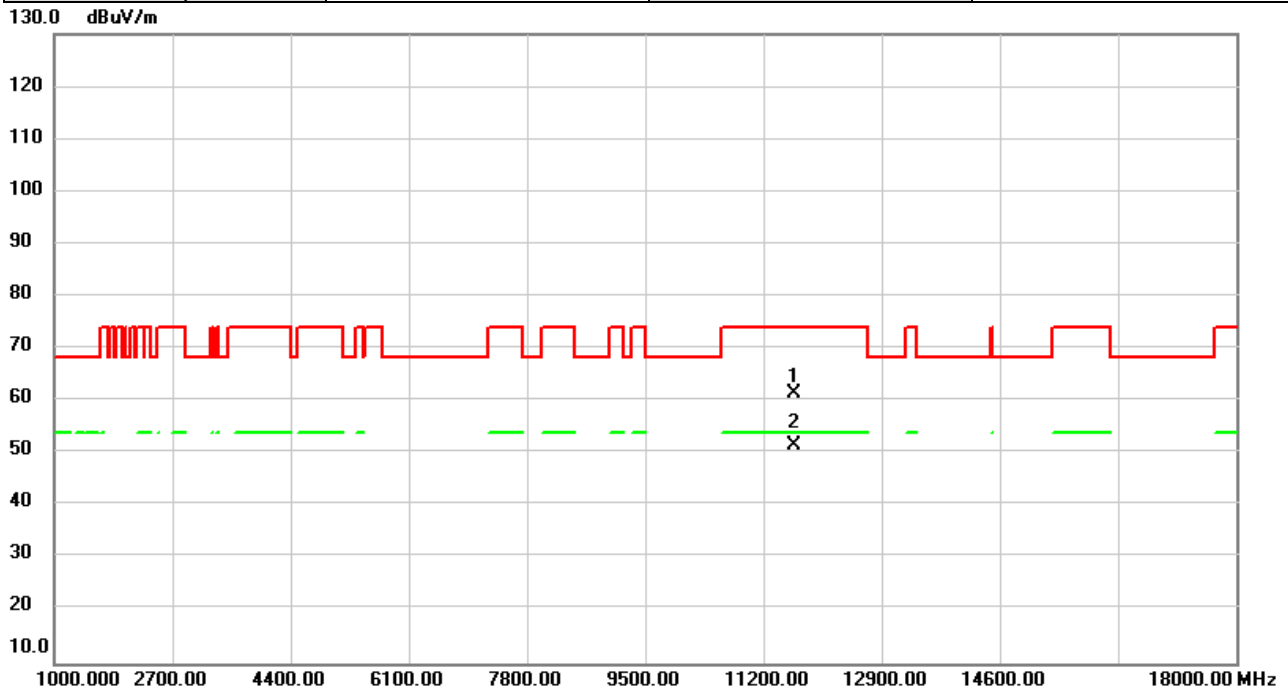


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		11570.00	50.25	7.59	57.84	74.00	-16.16	peak	
2	*	11570.00	40.45	7.59	48.04	54.00	-5.96	AVG	

REMARKS:

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

Test Mode	IEEE 802.11n (HT20)	Test Date	2024/7/1
Test Frequency	5825MHz	Polarization	Vertical
Temp	26°C	Hum.	60%

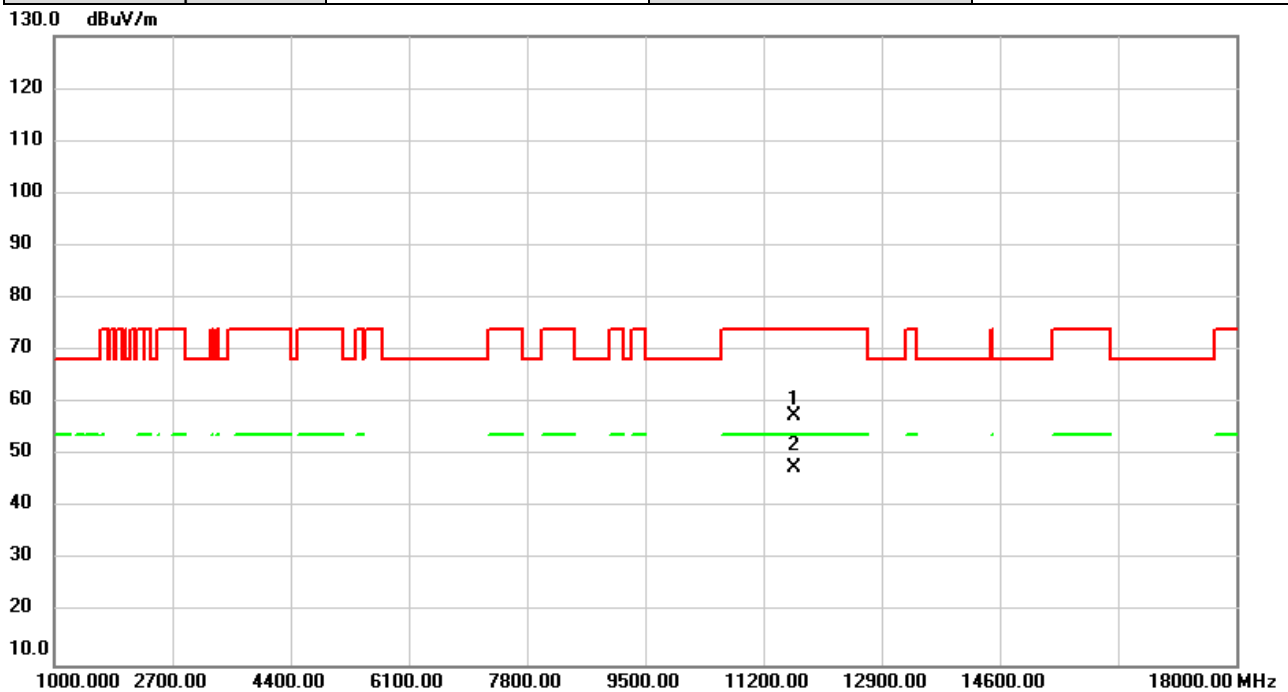


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		11650.00	53.82	7.62	61.44	74.00	-12.56	peak	
2	*	11650.00	43.93	7.62	51.55	54.00	-2.45	AVG	

REMARKS:

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

Test Mode	IEEE 802.11n (HT20)	Test Date	2024/7/1
Test Frequency	5825MHz	Polarization	Horizontal
Temp	26°C	Hum.	60%

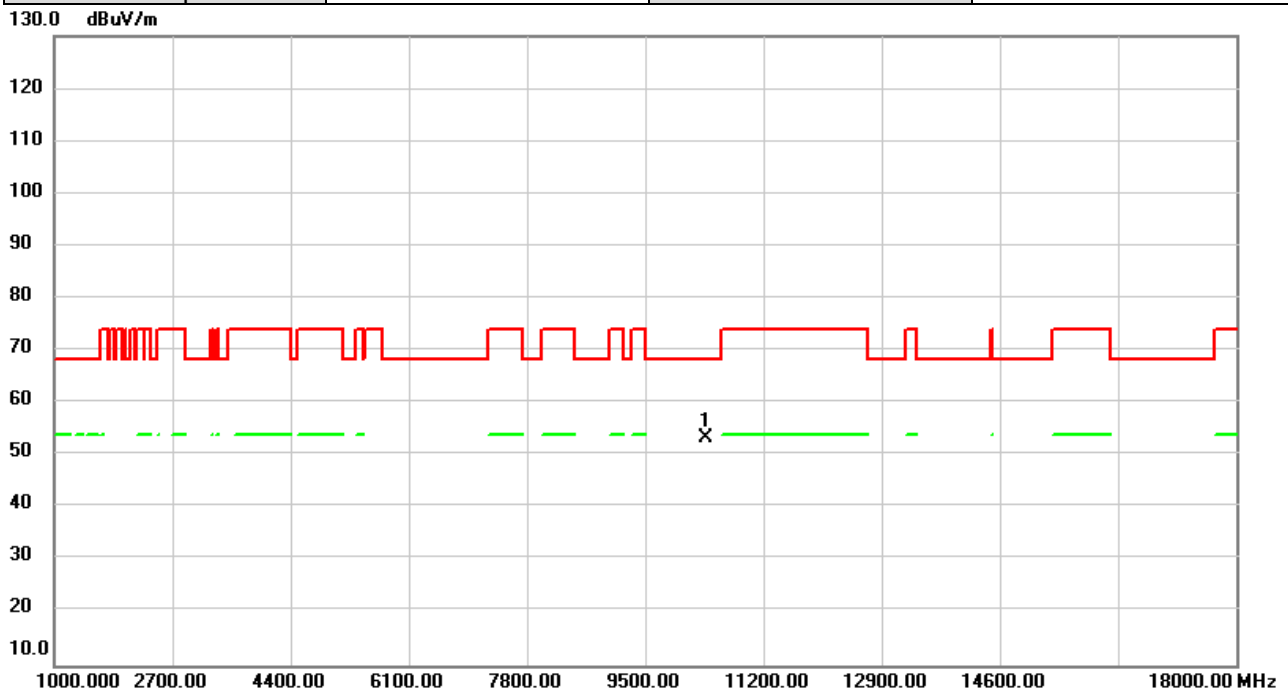


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		11650.00	49.87	7.62	57.49	74.00	-16.51	peak	
2	*	11650.00	39.98	7.62	47.60	54.00	-6.40	AVG	

REMARKS:

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

Test Mode	IEEE 802.11n (HT40)	Test Date	2024/7/1
Test Frequency	5190MHz	Polarization	Vertical
Temp	26°C	Hum.	60%

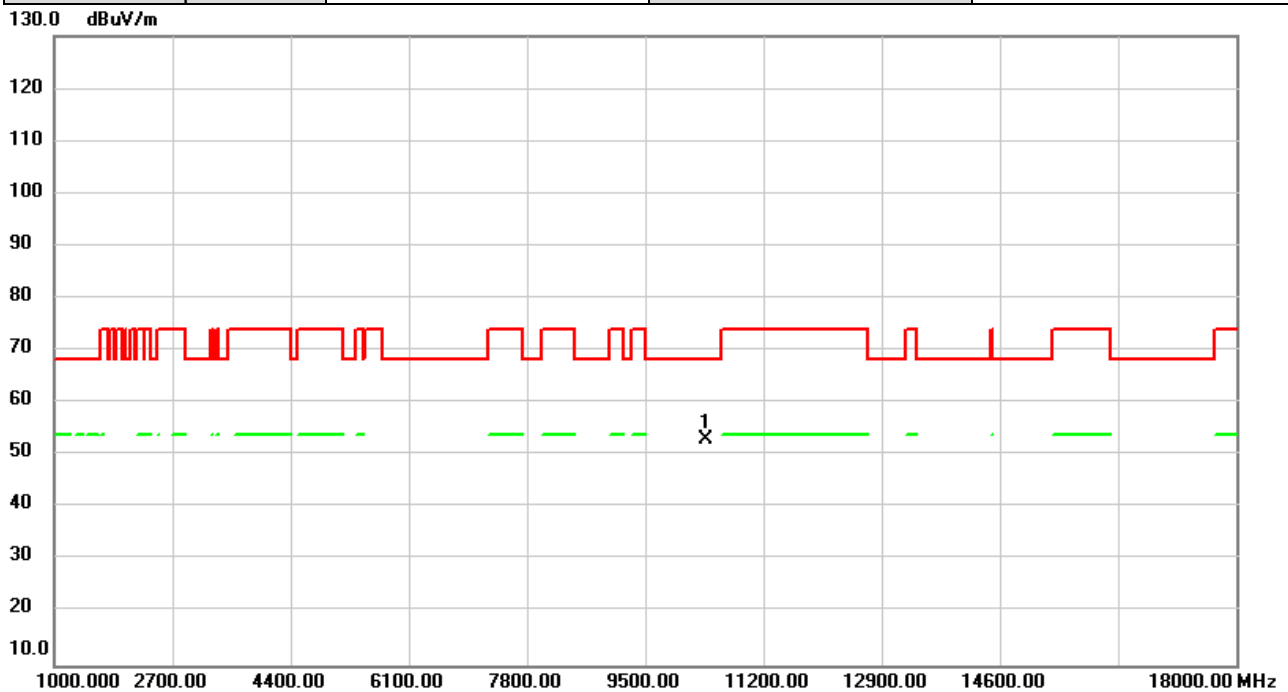


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	10380.00	46.55	6.78	53.33	68.20	-14.87	peak	

REMARKS:

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

Test Mode	IEEE 802.11n (HT40)	Test Date	2024/7/1
Test Frequency	5190MHz	Polarization	Horizontal
Temp	26°C	Hum.	60%

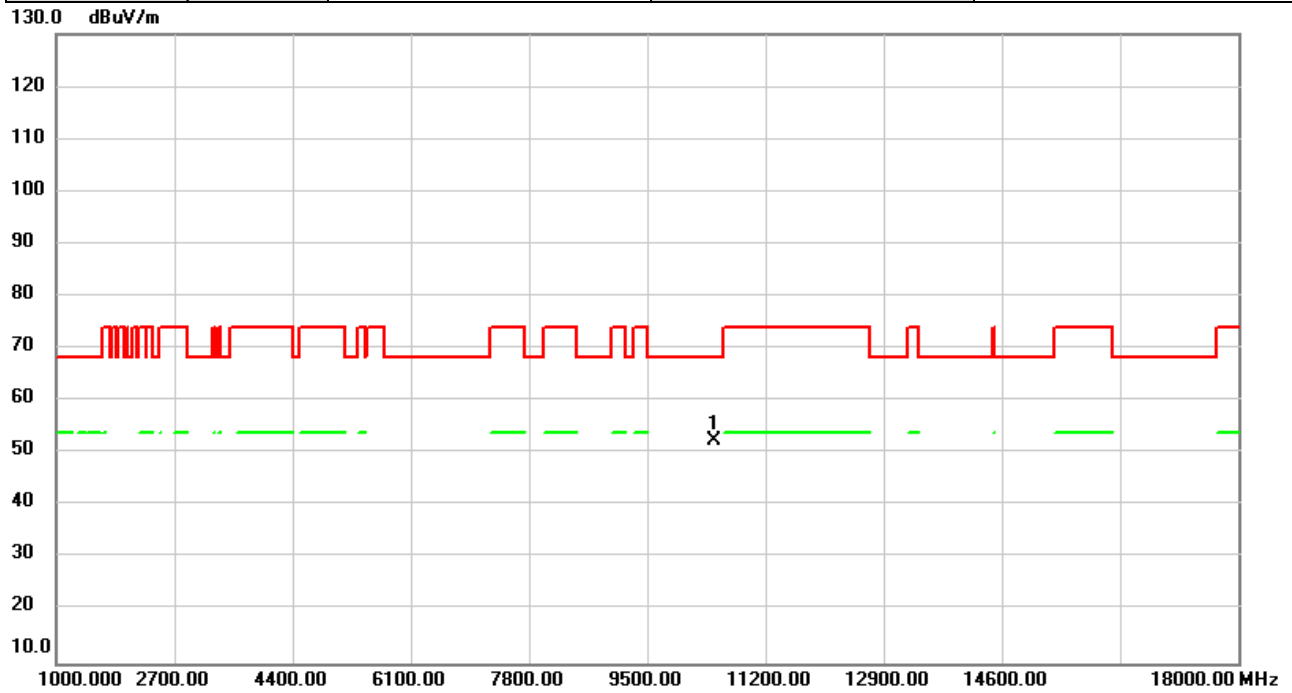


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	10380.00	46.21	6.78	52.99	68.20	-15.21	peak	

REMARKS:

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

Test Mode	IEEE 802.11n (HT40)	Test Date	2024/7/1
Test Frequency	5230MHz	Polarization	Vertical
Temp	26°C	Hum.	60%

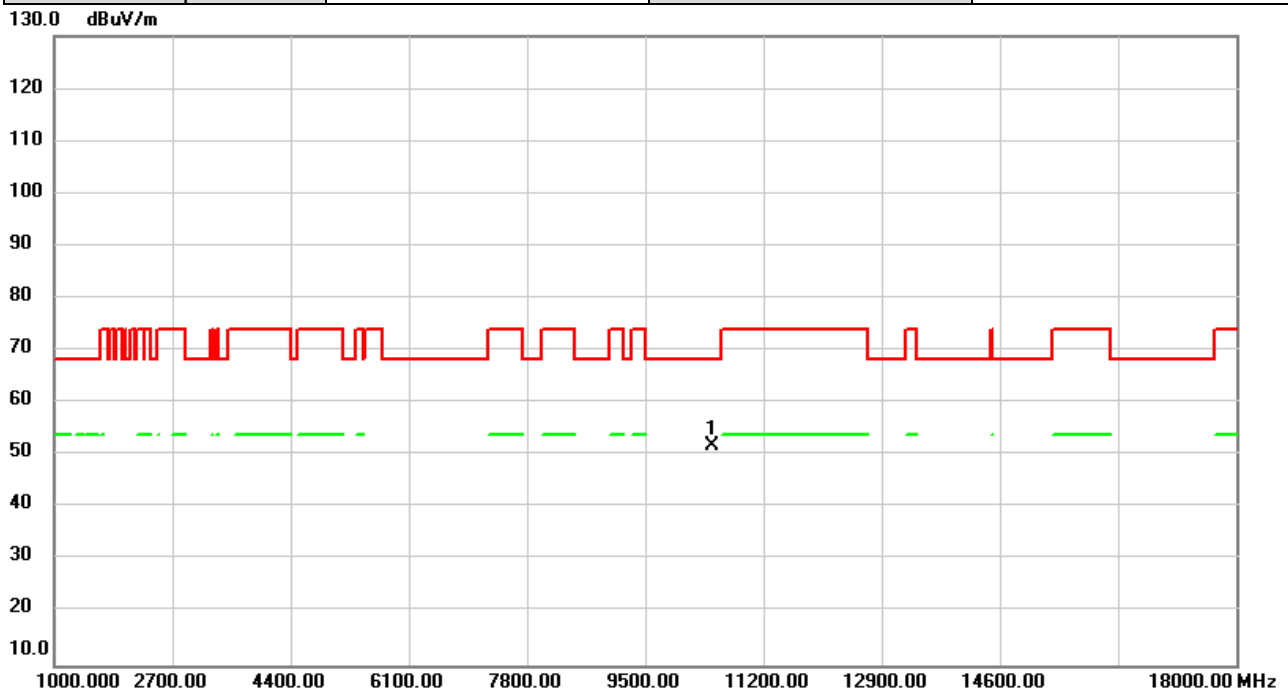


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	10460.00	45.66	6.80	52.46	68.20	-15.74	peak	

REMARKS:

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

Test Mode	IEEE 802.11n (HT40)	Test Date	2024/7/1
Test Frequency	5230MHz	Polarization	Horizontal
Temp	26°C	Hum.	60%

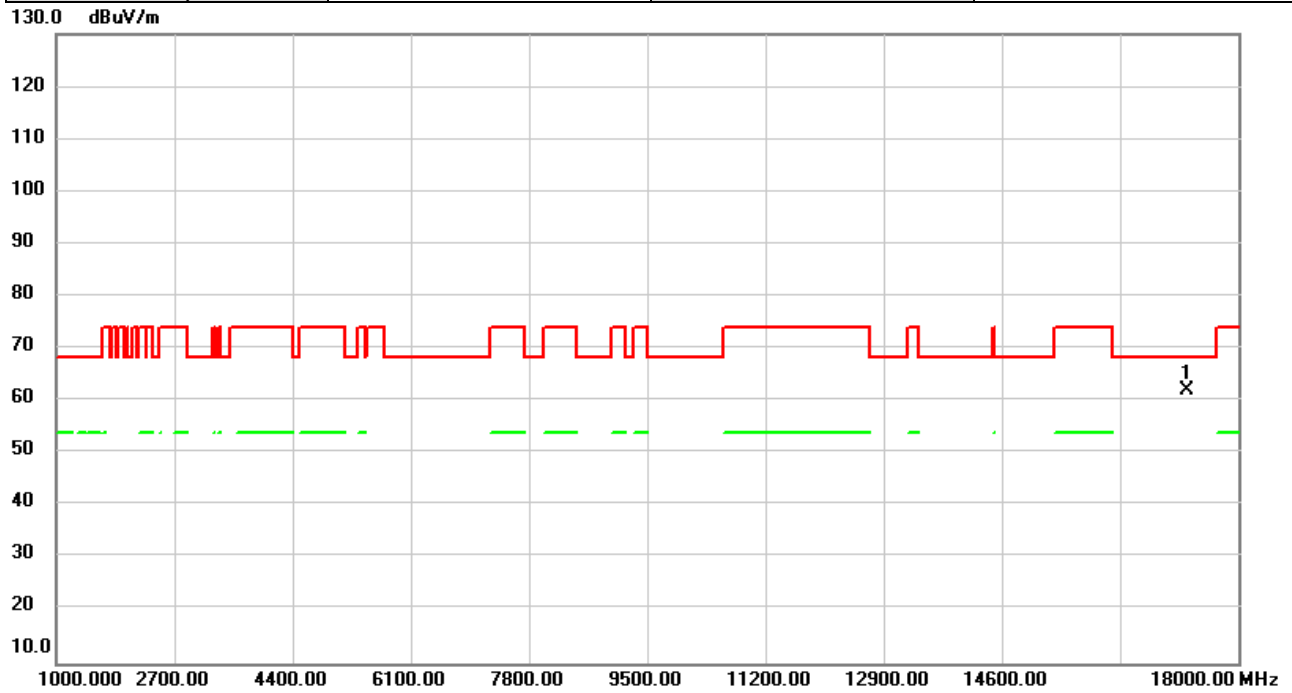


No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	10460.00	45.06	6.80	51.86	68.20	-16.34	peak	

REMARKS:

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

Test Mode	IEEE 802.11n (HT40)	Test Date	2024/7/1
Test Frequency	5755MHz	Polarization	Vertical
Temp	26°C	Hum.	60%

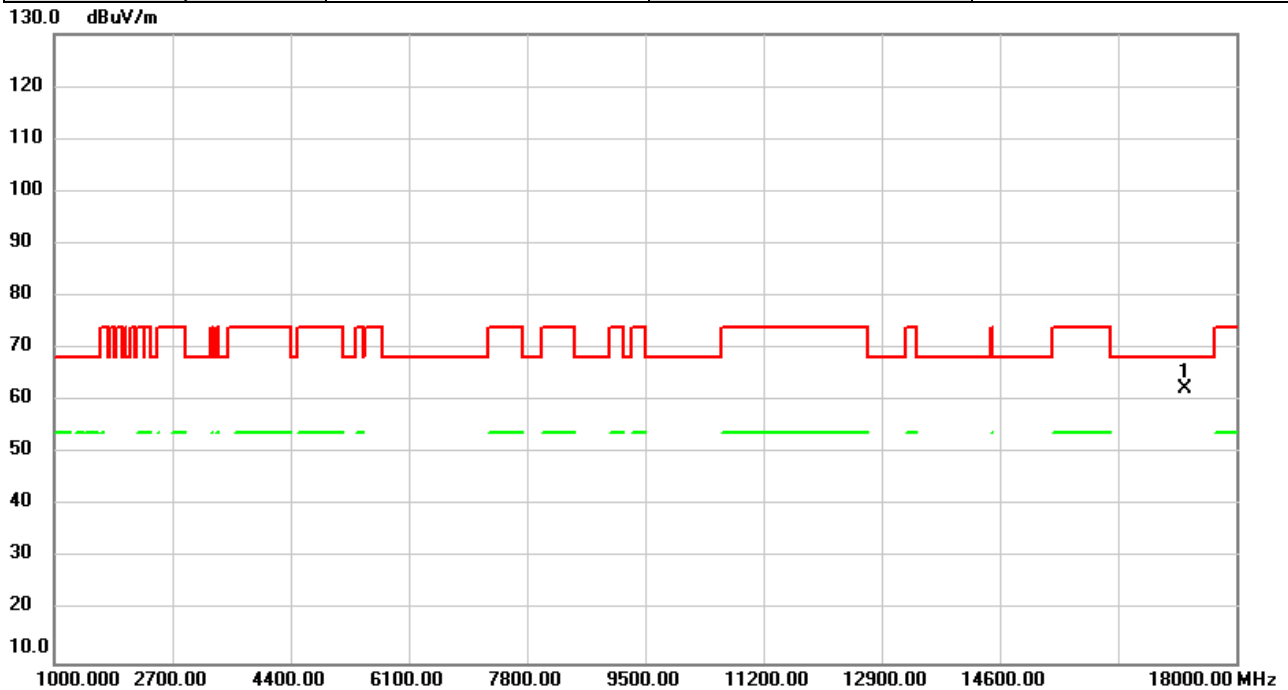


No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	17265.00	53.87	8.05	61.92	68.20	-6.28	peak	

REMARKS:

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

Test Mode	IEEE 802.11n (HT40)	Test Date	2024/7/1
Test Frequency	5755MHz	Polarization	Horizontal
Temp	26°C	Hum.	60%

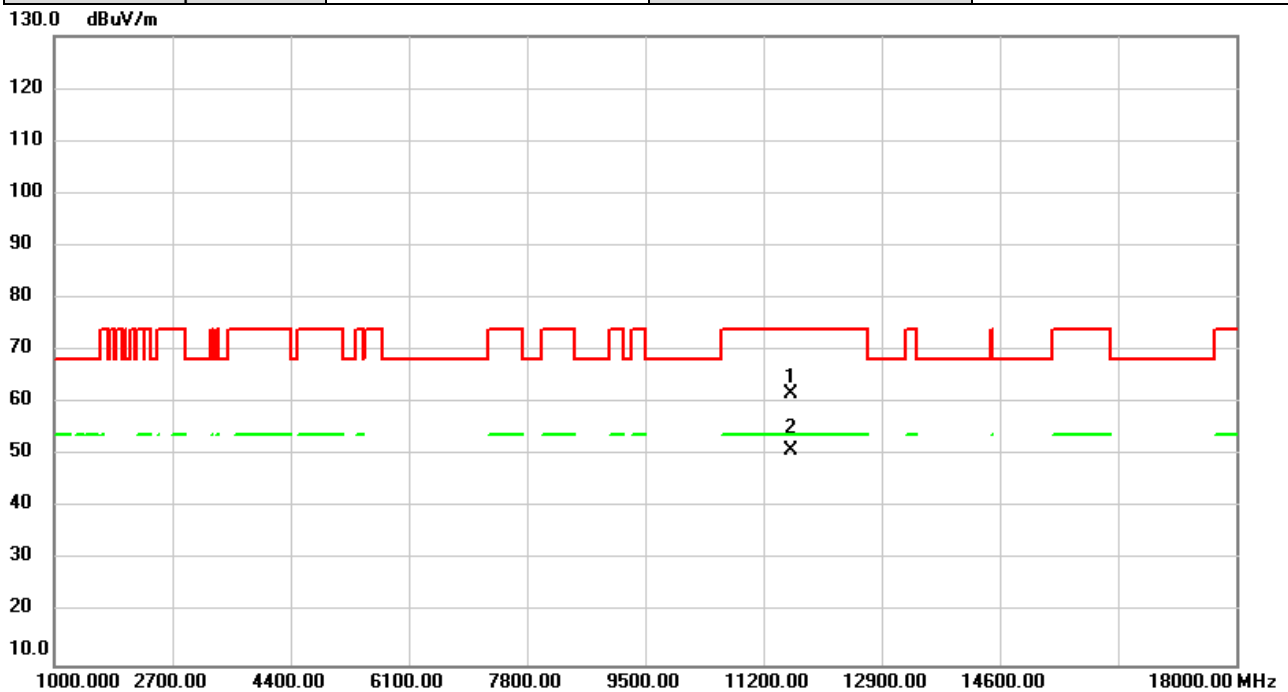


No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	17265.00	54.42	8.05	62.47	68.20	-5.73	peak	

REMARKS:

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

Test Mode	IEEE 802.11n (HT40)	Test Date	2024/7/1
Test Frequency	5795MHz	Polarization	Vertical
Temp	26°C	Hum.	60%

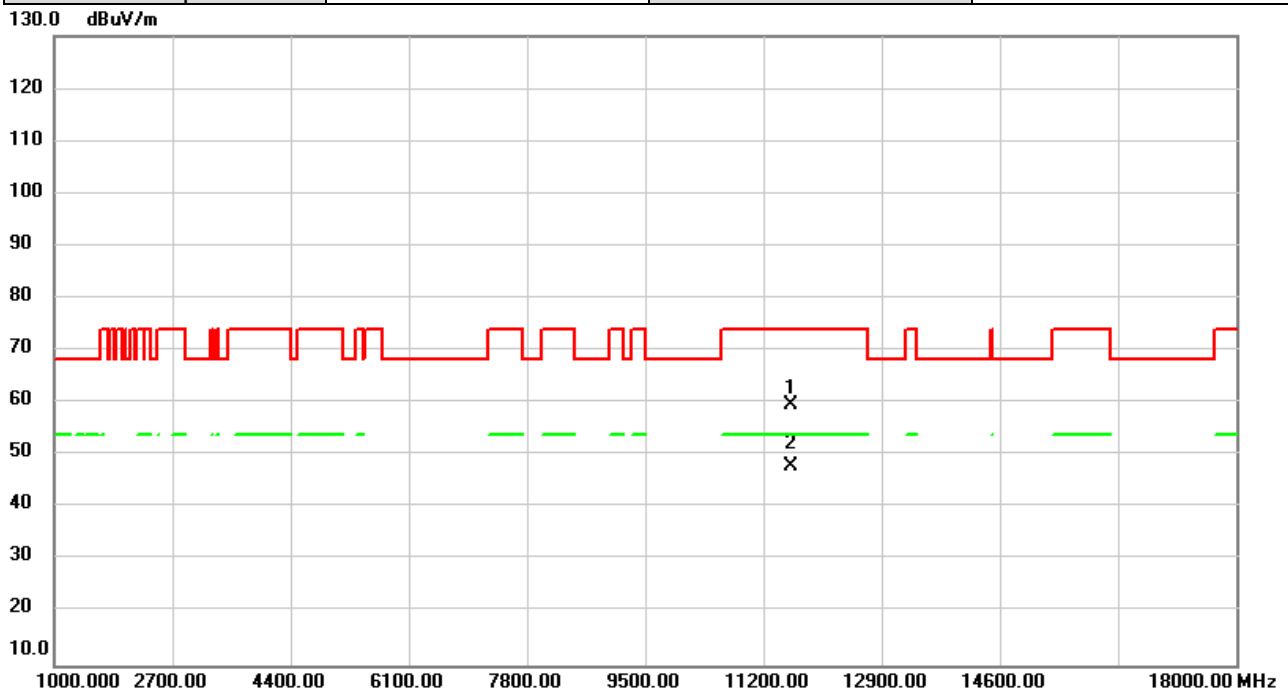


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		11590.00	54.23	7.61	61.84	74.00	-12.16	peak	
2	*	11590.00	43.40	7.61	51.01	54.00	-2.99	AVG	

REMARKS:

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

Test Mode	IEEE 802.11n (HT40)	Test Date	2024/7/1
Test Frequency	5795MHz	Polarization	Horizontal
Temp	26°C	Hum.	60%

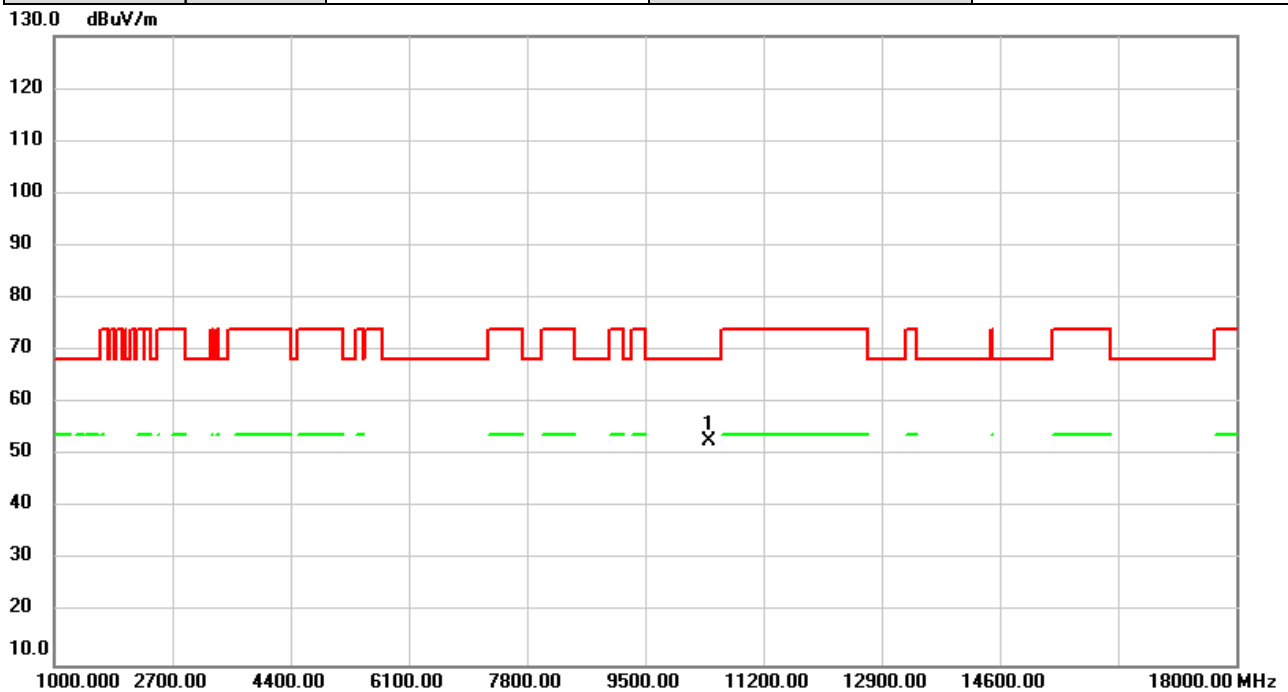


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		11590.00	51.96	7.61	59.57	74.00	-14.43	peak	
2	*	11590.00	40.41	7.61	48.02	54.00	-5.98	AVG	

REMARKS:

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

Test Mode	IEEE 802.11ac (VHT80)	Test Date	2024/7/1
Test Frequency	5210MHz	Polarization	Vertical
Temp	26°C	Hum.	60%

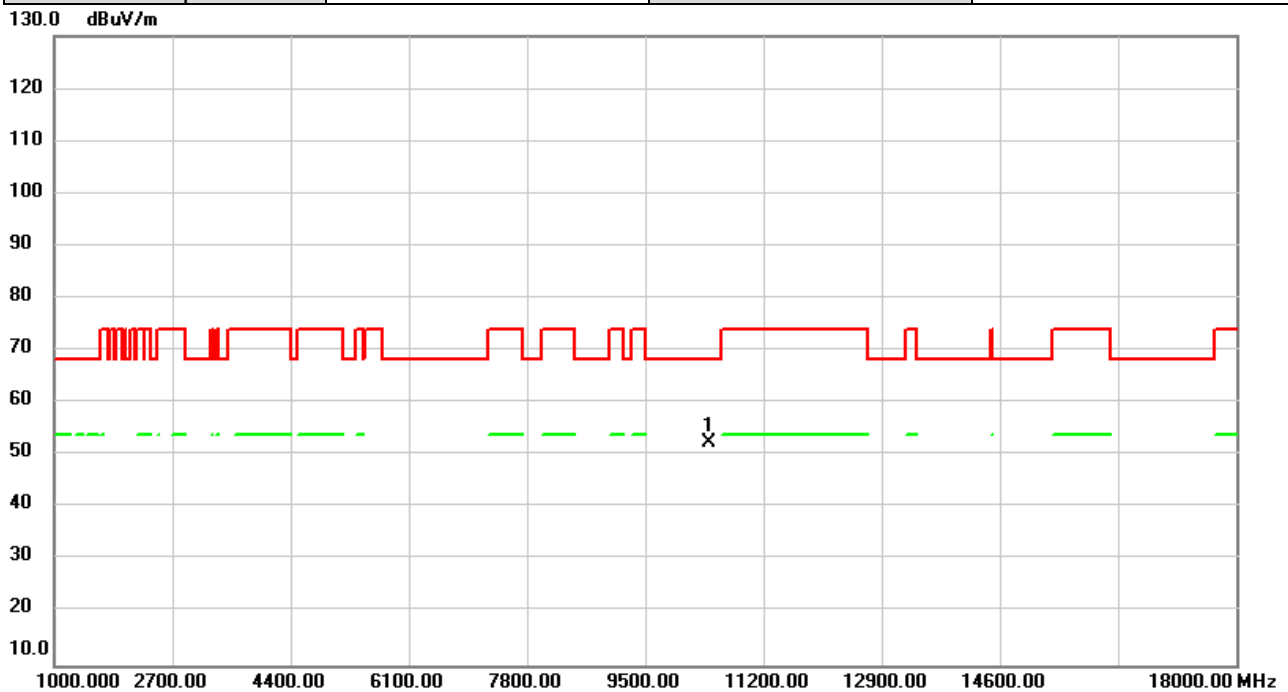


No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	10420.00	45.88	6.78	52.66	68.20	-15.54	peak	

REMARKS:

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

Test Mode	IEEE 802.11ac (VHT80)	Test Date	2024/7/1
Test Frequency	5210MHz	Polarization	Horizontal
Temp	26°C	Hum.	60%

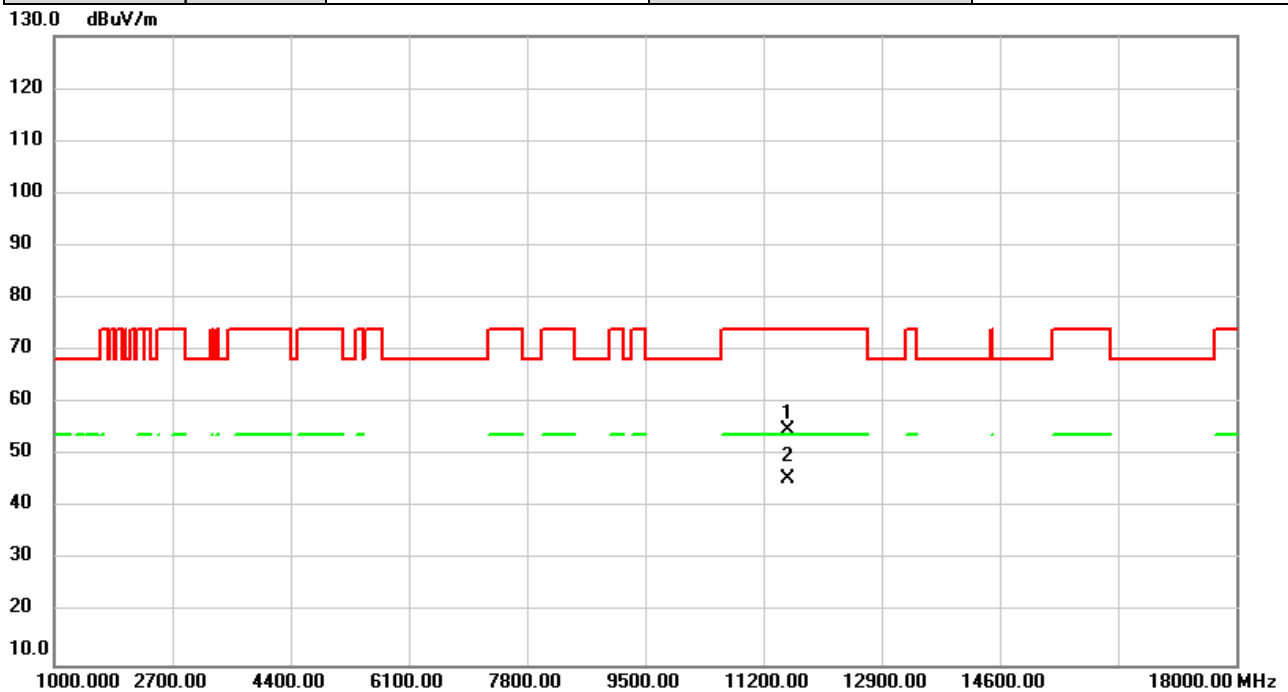


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	10420.00	45.59	6.78	52.37	68.20	-15.83	peak	

REMARKS:

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

Test Mode	IEEE 802.11ac (VHT80)	Test Date	2024/7/1
Test Frequency	5775MHz	Polarization	Vertical
Temp	26°C	Hum.	60%

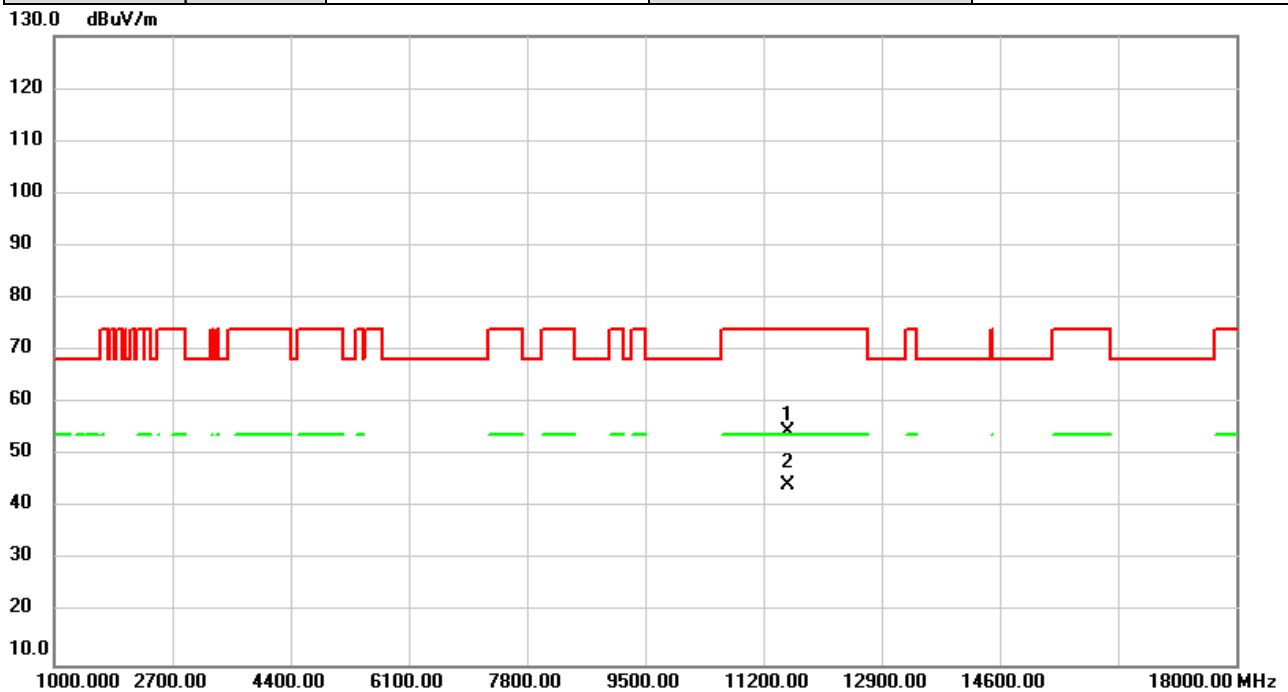


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		11550.00	47.39	7.58	54.97	74.00	-19.03	peak	
2	*	11550.00	37.96	7.58	45.54	54.00	-8.46	AVG	

REMARKS:

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

Test Mode	IEEE 802.11ac (VHT80)	Test Date	2024/7/1
Test Frequency	5775MHz	Polarization	Horizontal
Temp	26°C	Hum.	60%

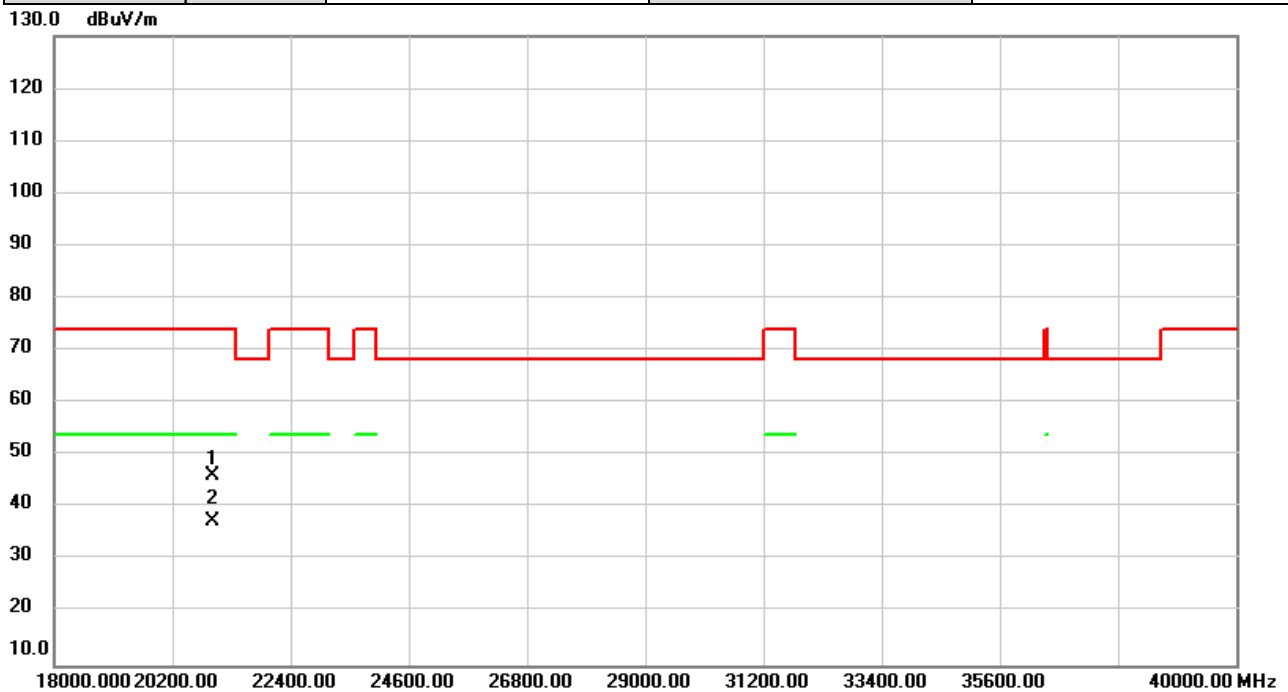


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		11550.00	47.10	7.58	54.68	74.00	-19.32	peak	
2	*	11550.00	36.63	7.58	44.21	54.00	-9.79	AVG	

REMARKS:

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

Test Mode	IEEE 802.11a	Test Date	2024/7/1
Test Frequency	5240MHz	Polarization	Vertical
Temp	26°C	Hum.	60%

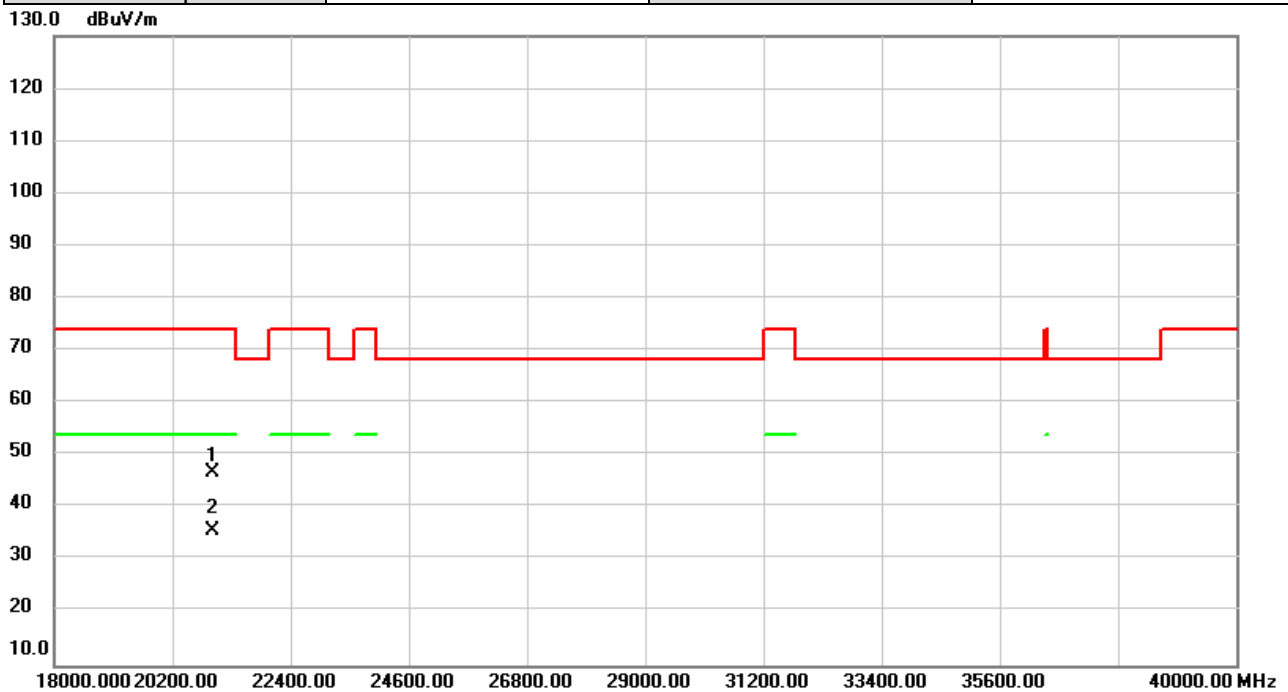


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		20960.00	52.28	-5.98	46.30	74.00	-27.70	peak	
2	*	20960.00	43.54	-5.98	37.56	54.00	-16.44	AVG	

REMARKS:

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

Test Mode	IEEE 802.11a	Test Date	2024/7/1
Test Frequency	5240MHz	Polarization	Horizontal
Temp	26°C	Hum.	60%



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		20960.00	52.61	-5.98	46.63	74.00	-27.37	peak	
2	*	20960.00	41.74	-5.98	35.76	54.00	-18.24	AVG	

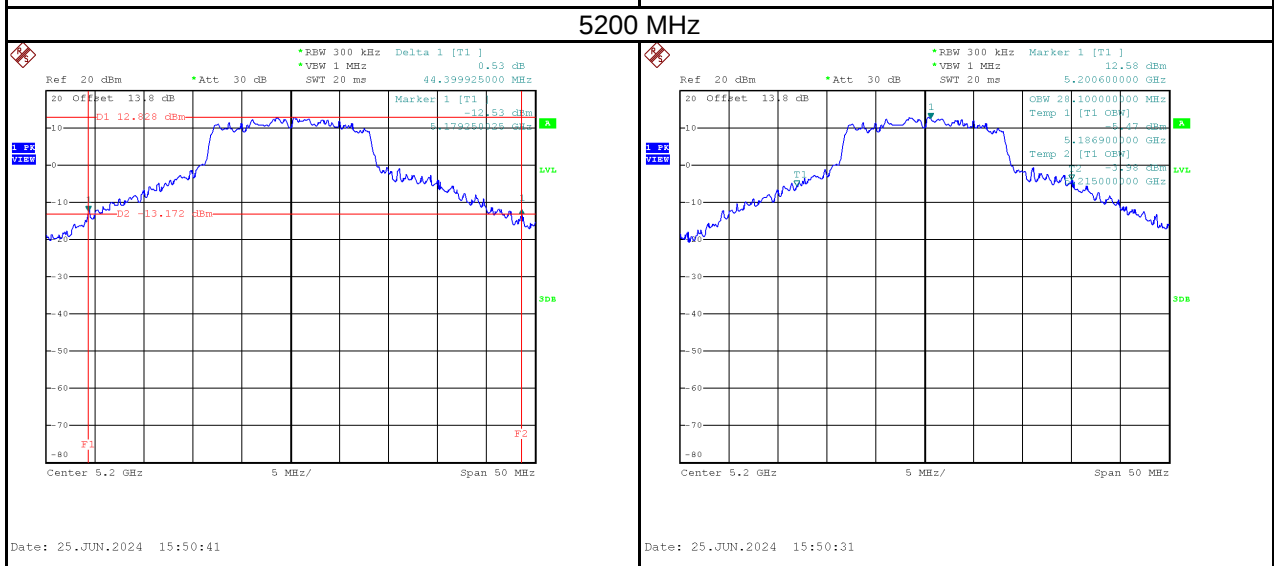
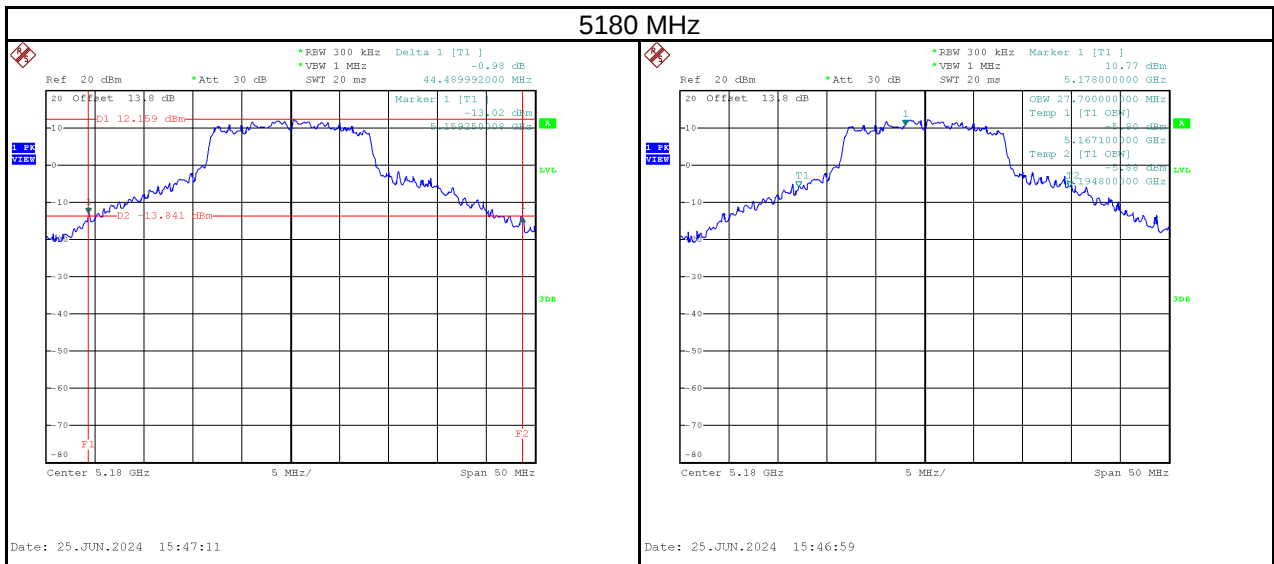
REMARKS:

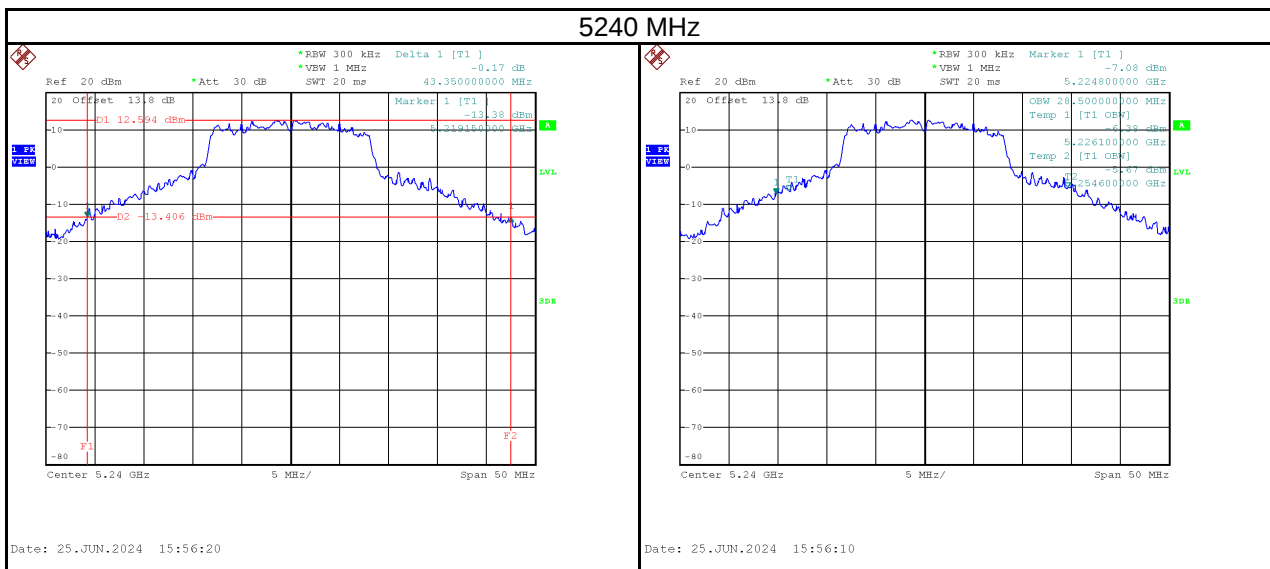
- (1) Measurement Value = Reading Level + Correct Factor.
(2) Margin Level = Measurement Value - Limit Value.

APPENDIX E BANDWIDTH

Test Mode	IEEE 802.11a
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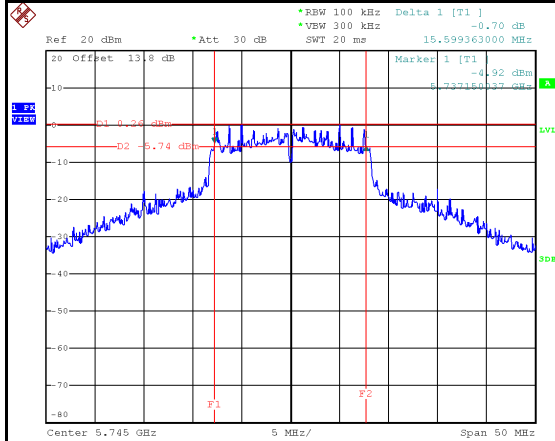
Test Frequency (MHz)	26 dB Bandwidth (MHz)	99 % Occupied Bandwidth (MHz)	Limit
5180	44.49	27.70	No limit
5200	44.40	28.10	No limit
5240	43.35	28.50	No limit



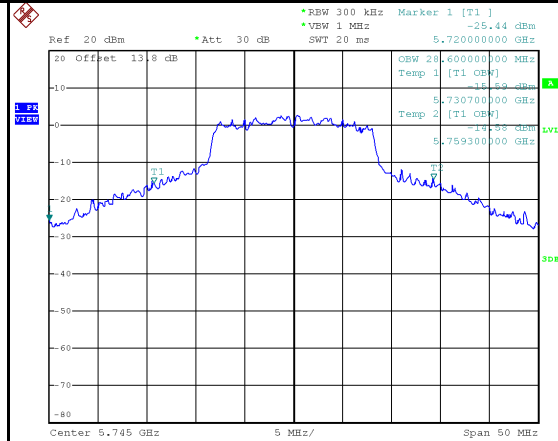


Test Frequency (MHz)	6 dB Bandwidth (MHz)	99 % Occupied Bandwidth (MHz)	Minimum 6 dB Bandwidth Limit (kHz)	Result
5745	15.60	28.60	500	Pass
5785	15.59	25.90	500	Pass
5825	15.50	27.10	500	Pass

5745 MHz

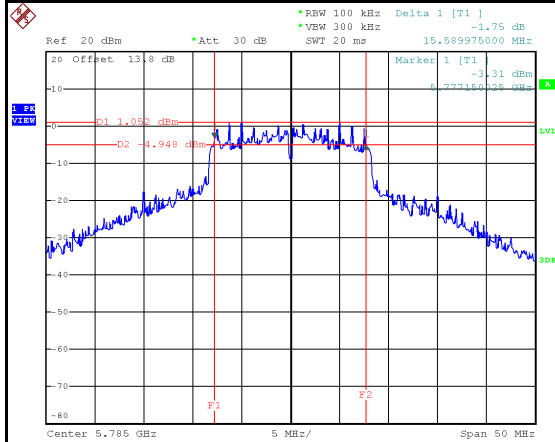


Date: 25.JUN.2024 15:59:12

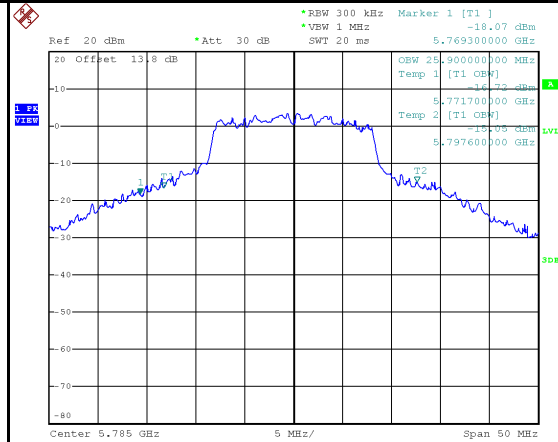


Date: 25.JUN.2024 15:58:42

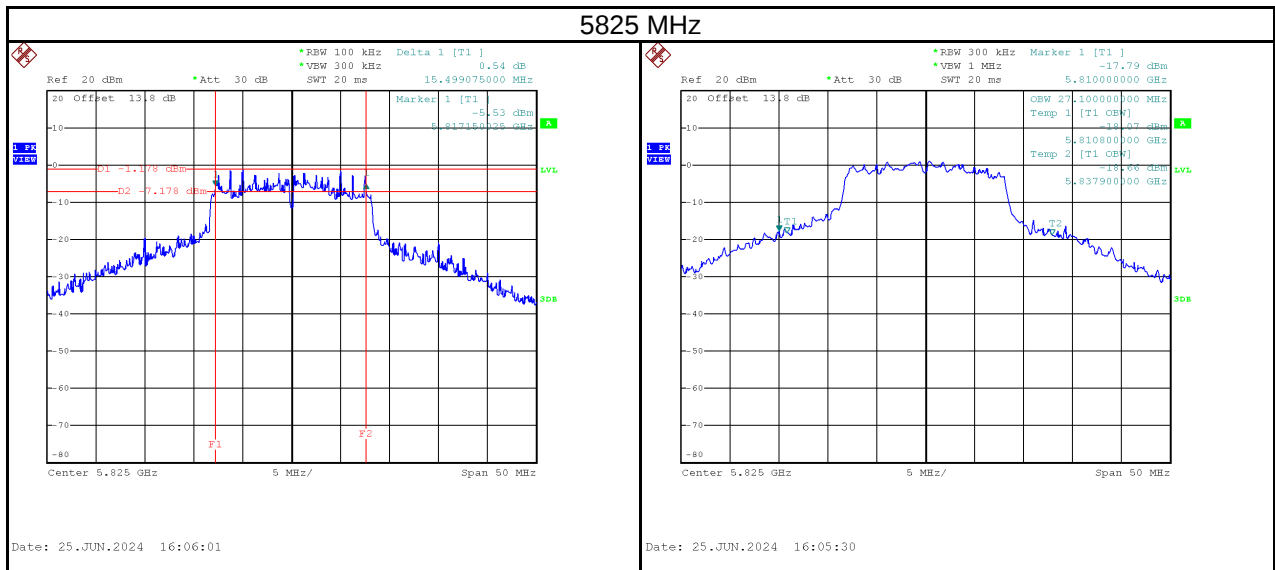
5785 MHz



Date: 25.JUN.2024 16:02:20

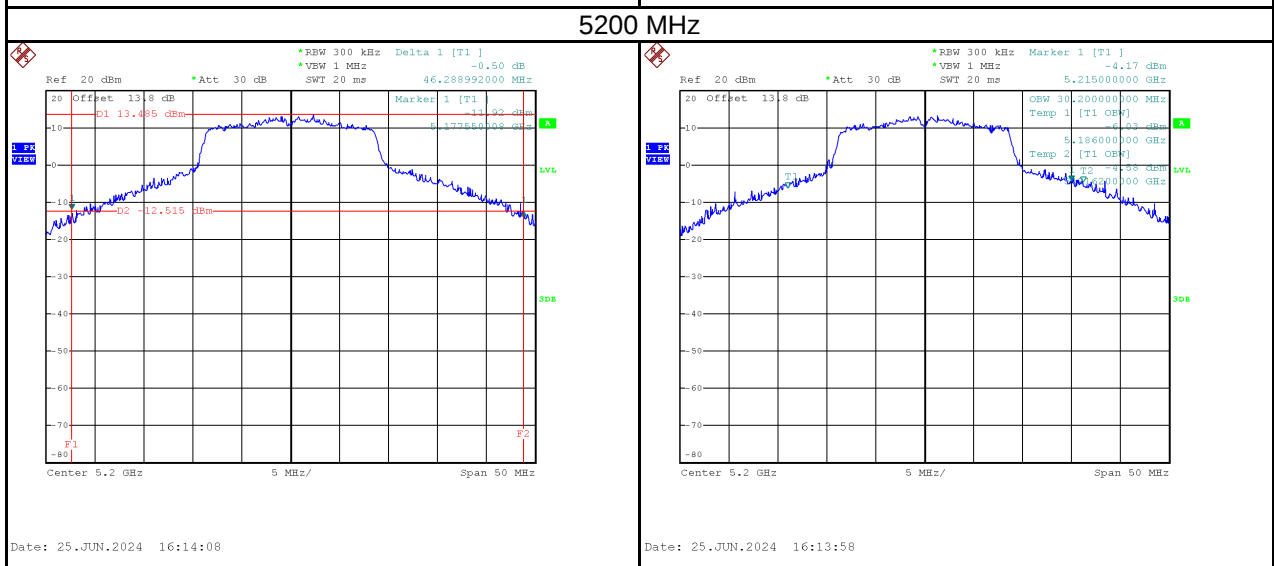
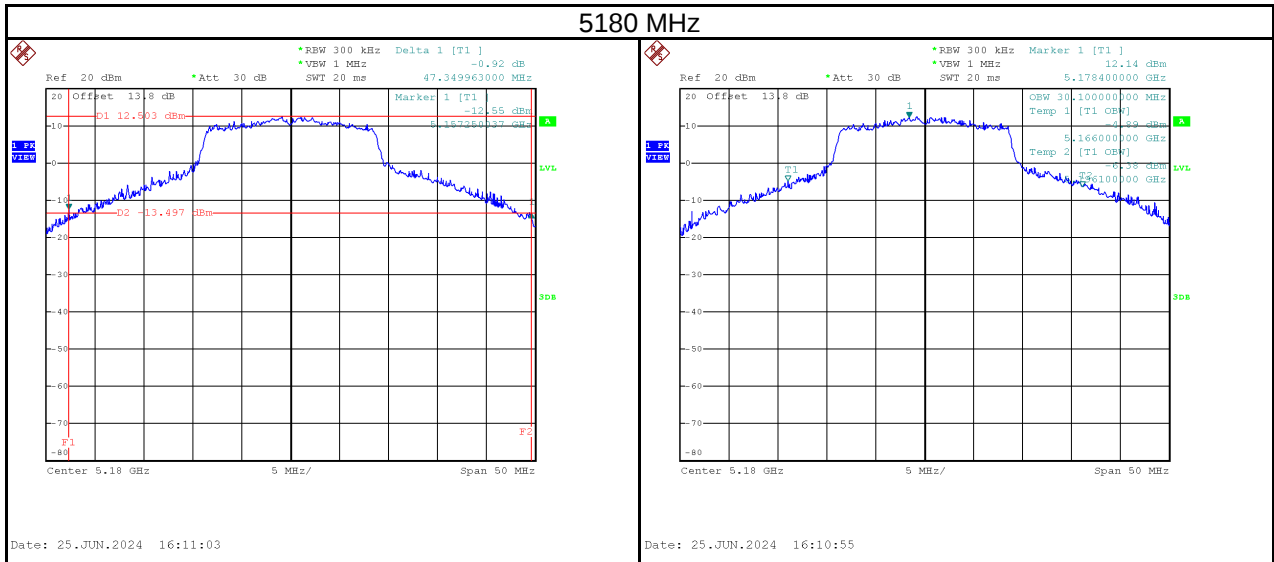


Date: 25.JUN.2024 16:01:50

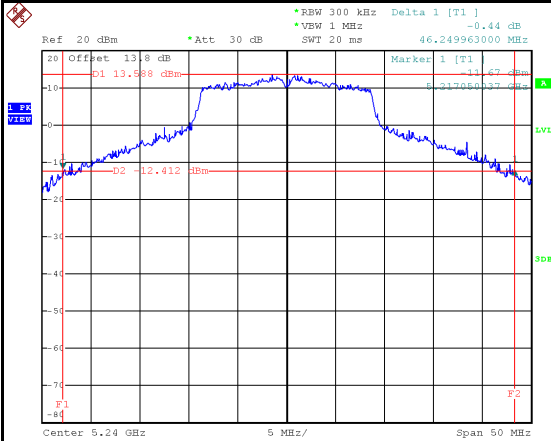


Test Mode	IEEE 802.11n (HT20)
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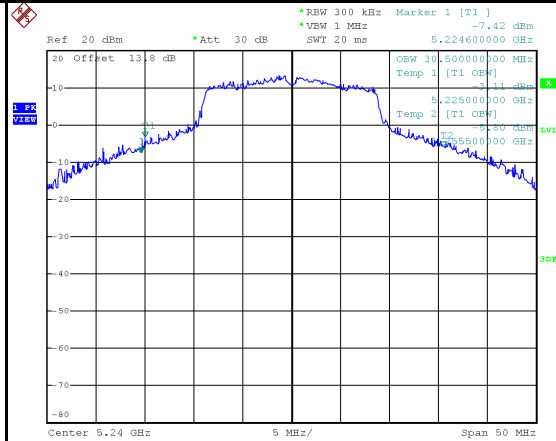
Test Frequency (MHz)	26 dB Bandwidth (MHz)	99 % Occupied Bandwidth (MHz)	Limit
5180	47.35	30.10	No limit
5200	46.29	30.20	No limit
5240	46.25	30.50	No limit



5240 MHz



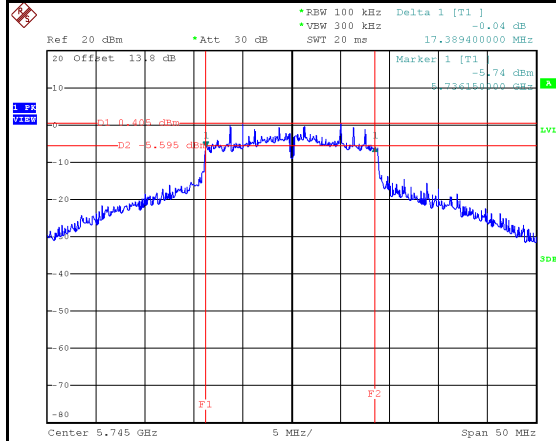
Date: 25.JUN.2024 16:15:46



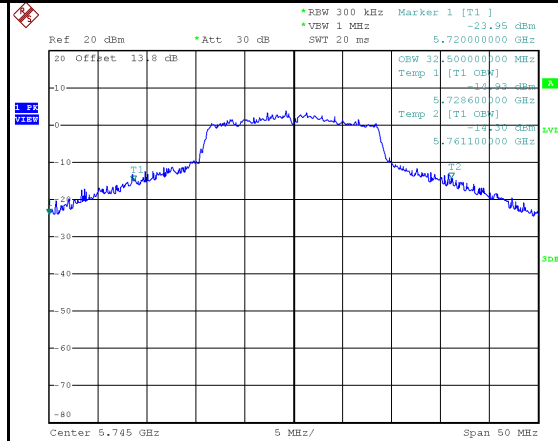
Date: 25.JUN.2024 16:15:36

Test Frequency (MHz)	6 dB Bandwidth (MHz)	99 % Occupied Bandwidth (MHz)	Minimum 6 dB Bandwidth Limit (kHz)	Result
5745	17.39	32.50	500	Pass
5785	16.60	29.30	500	Pass
5825	17.55	30.20	500	Pass

5745 MHz

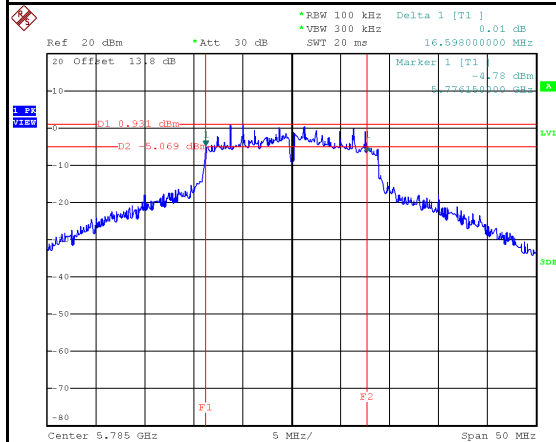


Date: 25.JUN.2024 16:23:07

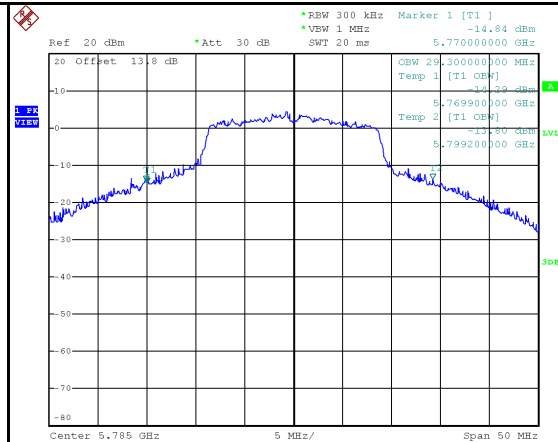


Date: 25.JUN.2024 16:22:40

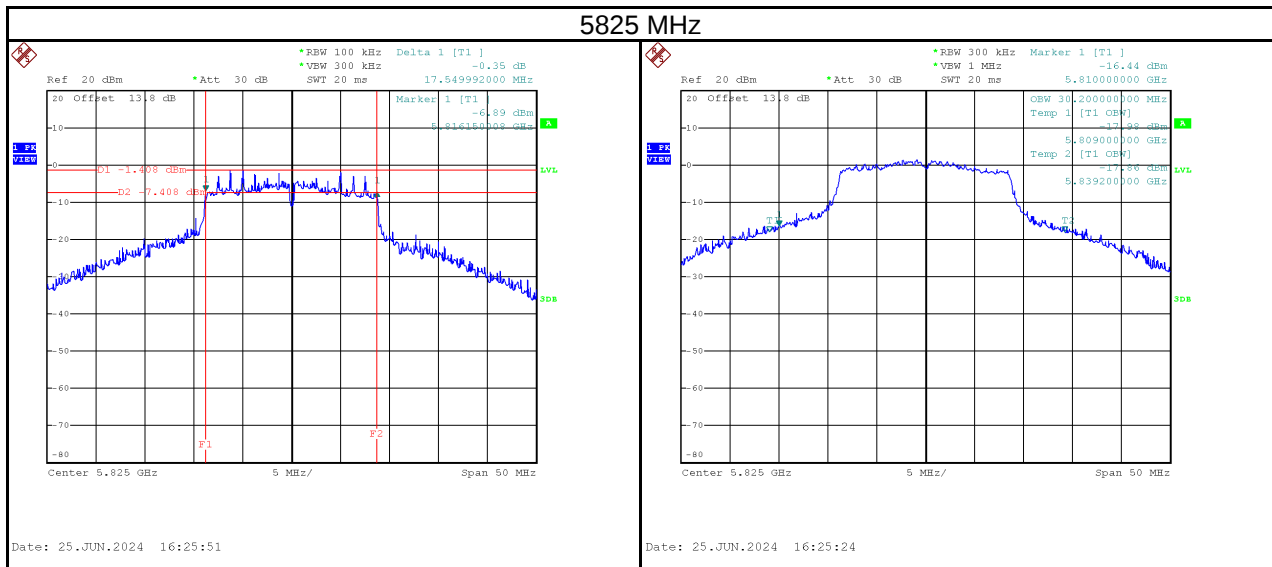
5785 MHz



Date: 25.JUN.2024 16:24:38



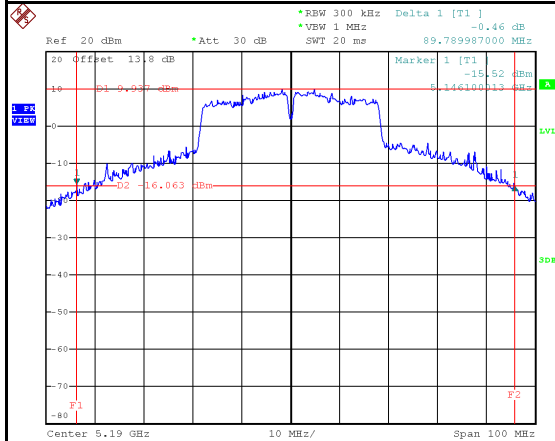
Date: 25.JUN.2024 16:24:07



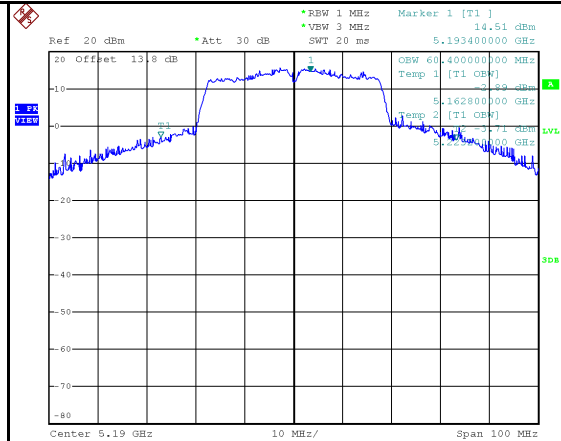
Test Mode	IEEE 802.11n (HT40)
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Test Frequency (MHz)	26 dB Bandwidth (MHz)	99 % Occupied Bandwidth (MHz)	Limit
5190	89.79	60.40	No limit
5230	92.10	59.60	No limit

5190 MHz

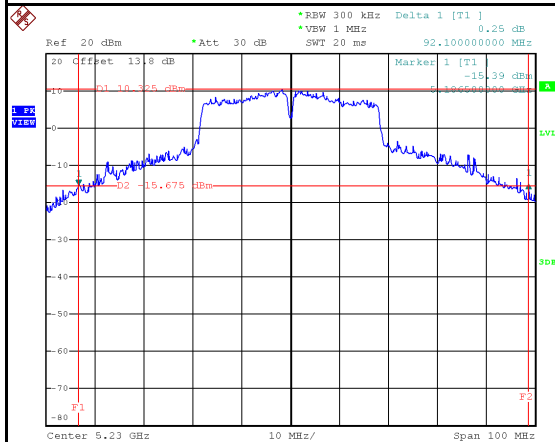


Date: 25.JUN.2024 16:29:21

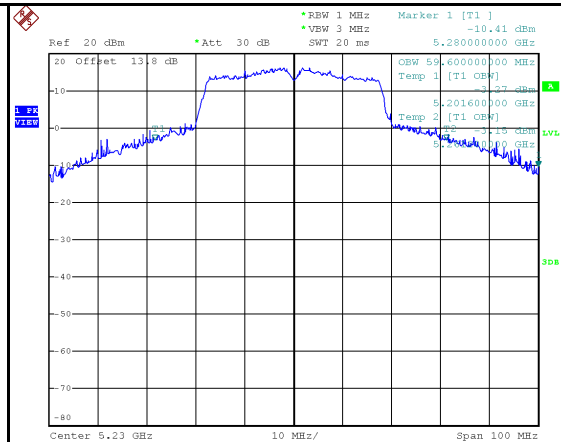


Date: 25.JUN.2024 16:29:08

5230 MHz



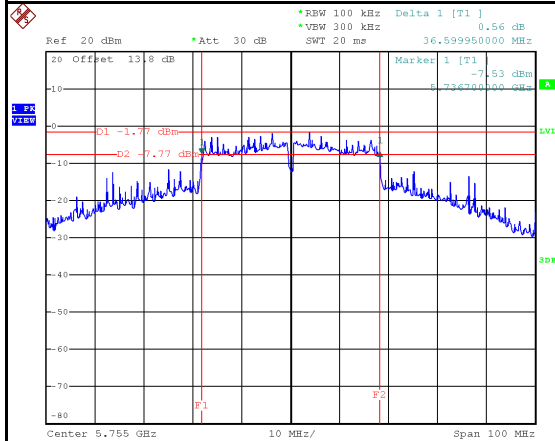
Date: 25.JUN.2024 16:33:54



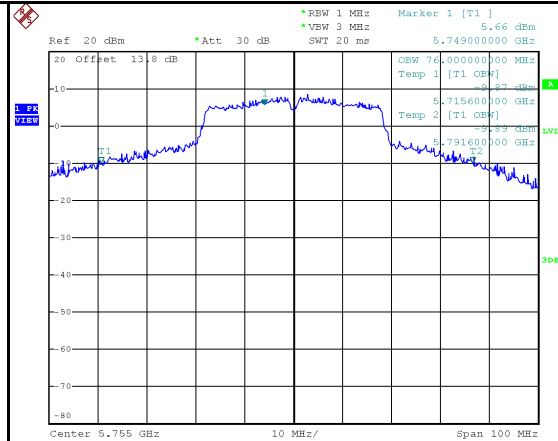
Date: 25.JUN.2024 16:33:43

Test Frequency (MHz)	6 dB Bandwidth (MHz)	99 % Occupied Bandwidth (MHz)	Minimum 6 dB Bandwidth Limit (kHz)	Result
5755	36.60	76.00	500	Pass
5795	36.00	68.00	500	Pass

5755 MHz

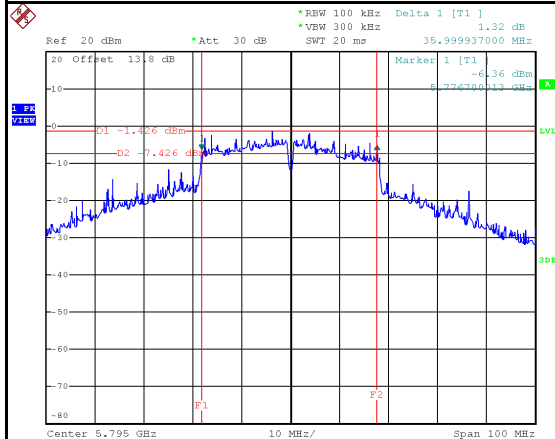


Date: 25.JUN.2024 16:42:10

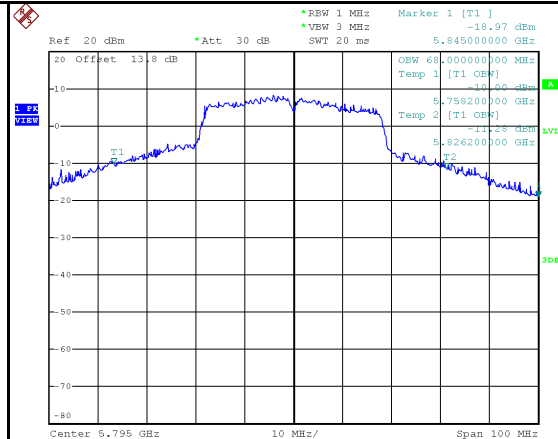


Date: 25.JUN.2024 16:41:32

5795 MHz



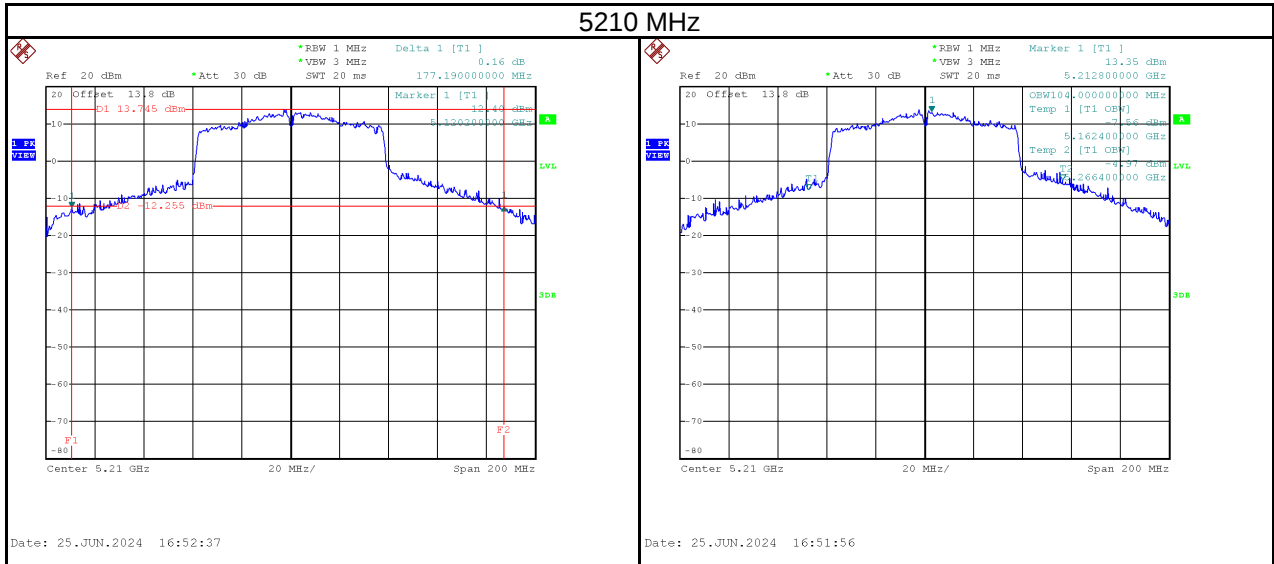
Date: 25.JUN.2024 16:45:19



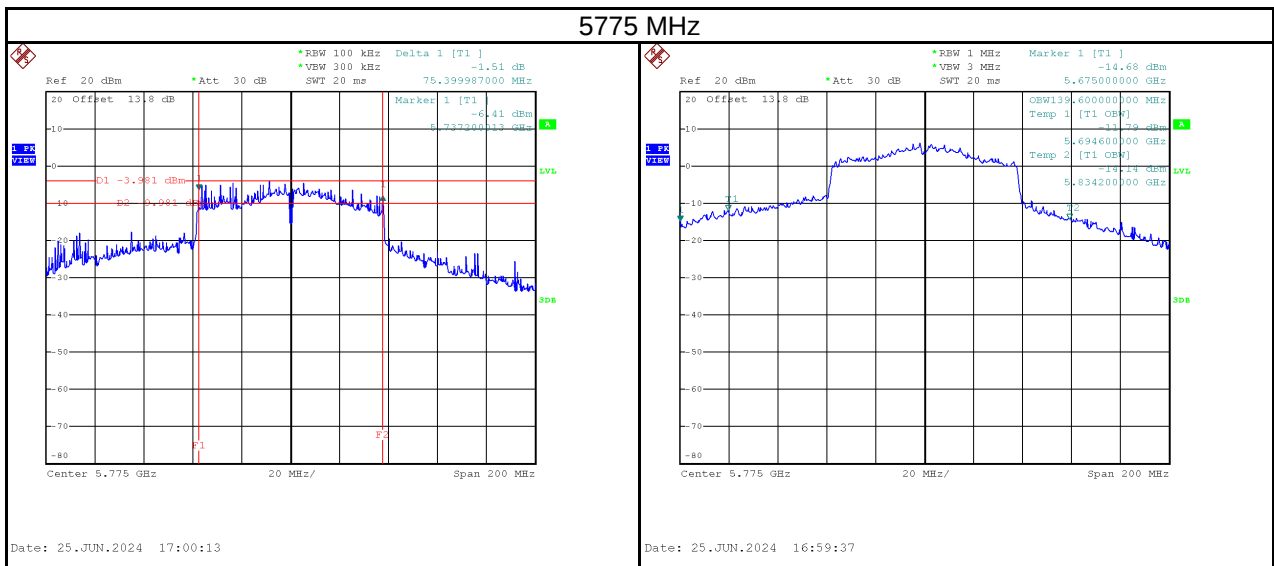
Date: 25.JUN.2024 16:44:40

Test Mode	IEEE 802.11ac (VHT80)
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Test Frequency (MHz)	26 dB Bandwidth (MHz)	99 % Occupied Bandwidth (MHz)	Limit
5210	177.19	104.00	No limit



Test Frequency (MHz)	6 dB Bandwidth (MHz)	99 % Occupied Bandwidth (MHz)	Minimum 6 dB Bandwidth Limit (kHz)	Result
5775	75.40	139.60	500	Pass



APPENDIX F CONDUCTED OUTPUT POWER

Test Mode	IEEE 802.11a	Tested Date	2024/6/21
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Test Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
5180	13.38	0.0218	24.00	0.2512	Pass
5200	15.76	0.0377	24.00	0.2512	Pass
5240	17.49	0.0561	24.00	0.2512	Pass

Test Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
5745	9.63	0.0092	30.00	1.0000	Pass
5785	10.77	0.0119	30.00	1.0000	Pass
5825	7.15	0.0052	30.00	1.0000	Pass

Test Mode	IEEE 802.11n (HT20)	Tested Date	2024/6/21
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Test Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
5180	19.06	0.0805	24.00	0.2512	Pass
5200	16.36	0.0433	24.00	0.2512	Pass
5240	17.25	0.0531	24.00	0.2512	Pass

Test Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
5745	10.68	0.0117	30.00	1.0000	Pass
5785	10.76	0.0119	30.00	1.0000	Pass
5825	7.57	0.0057	30.00	1.0000	Pass

Test Mode	IEEE 802.11n (HT40)	Tested Date	2024/6/21
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Test Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
5190	12.04	0.0160	24.00	0.2512	Pass
5230	15.81	0.0381	24.00	0.2512	Pass

Test Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
5755	10.90	0.0123	30.00	1.0000	Pass
5795	12.06	0.0161	30.00	1.0000	Pass

Test Mode	IEEE 802.11ac (VHT80)	Tested Date	2024/6/21
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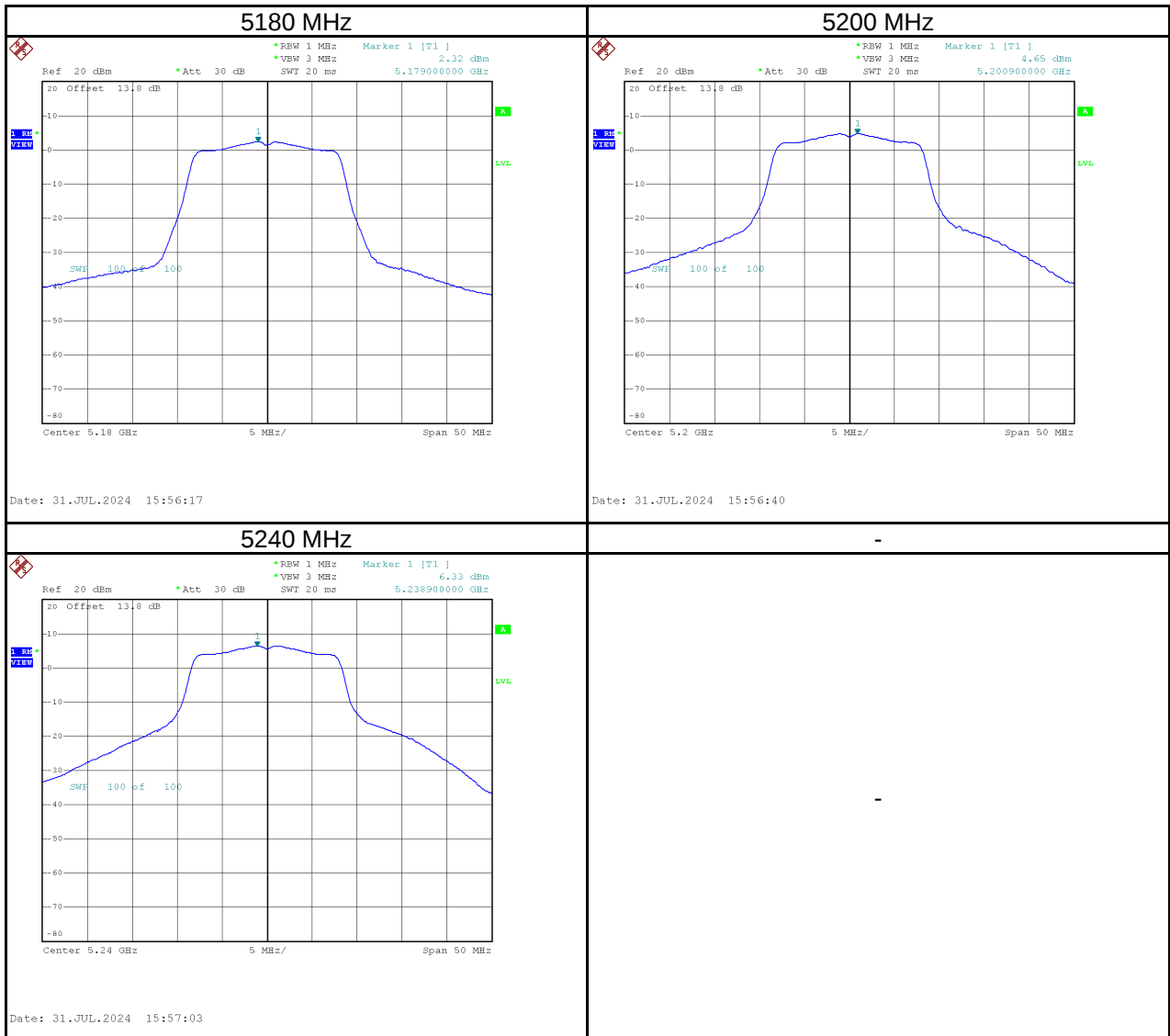
Test Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
5210	7.77	0.0060	24.00	0.2512	Pass

Test Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
5775	10.37	0.0109	30.00	1.0000	Pass

APPENDIX G POWER SPECTRAL DENSITY

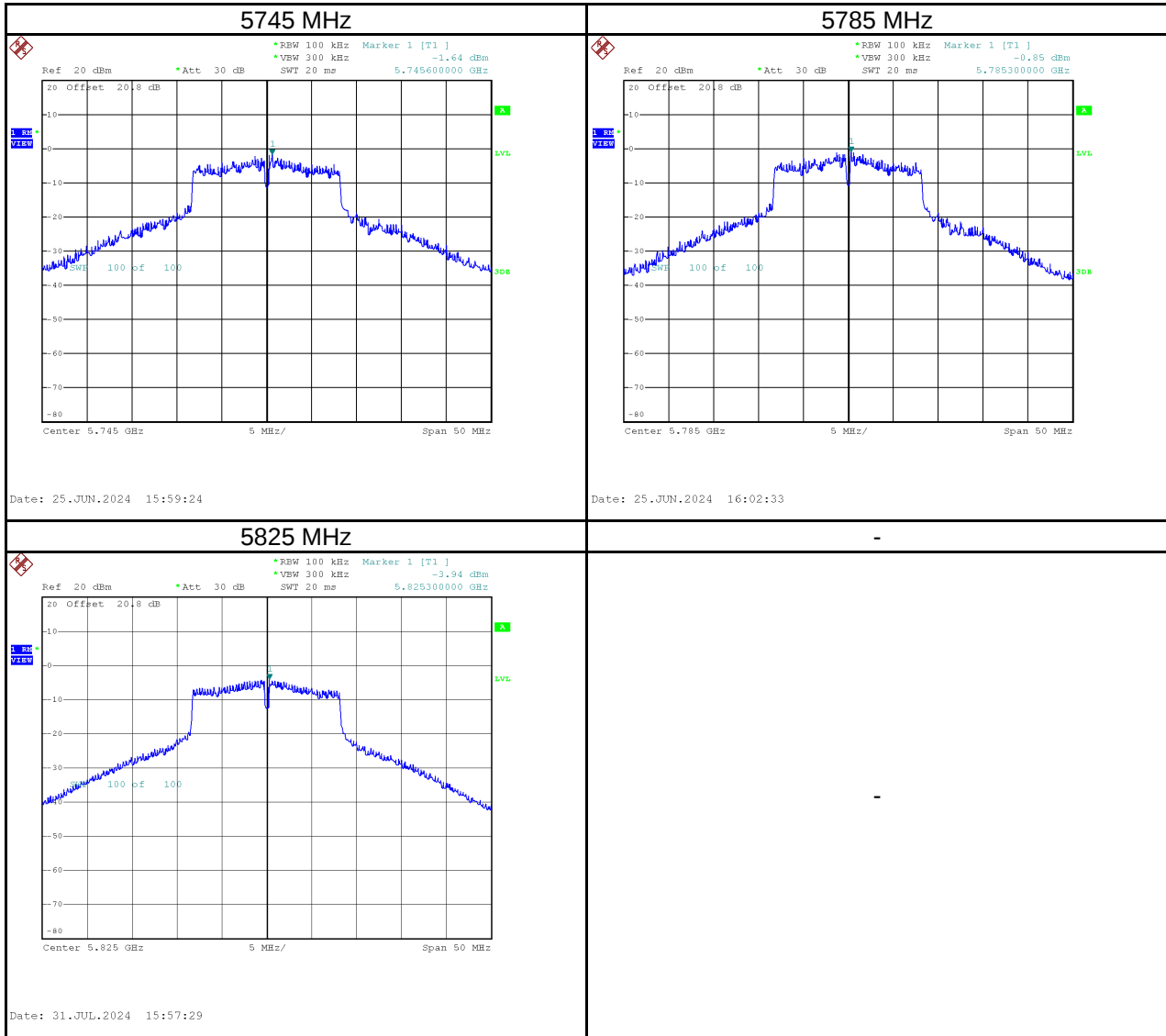
Test Mode	IEEE 802.11a
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Test Frequency (MHz)	Power Density (dBm/MHz)	Duty Factor (dB)	Calculated Power Density (dBm/MHz)	Maximum Limit (dBm/MHz)	Result
5180	2.32	0.49	2.81	17.00	Pass
5200	4.65	0.49	5.14	17.00	Pass
5240	6.33	0.49	6.82	17.00	Pass



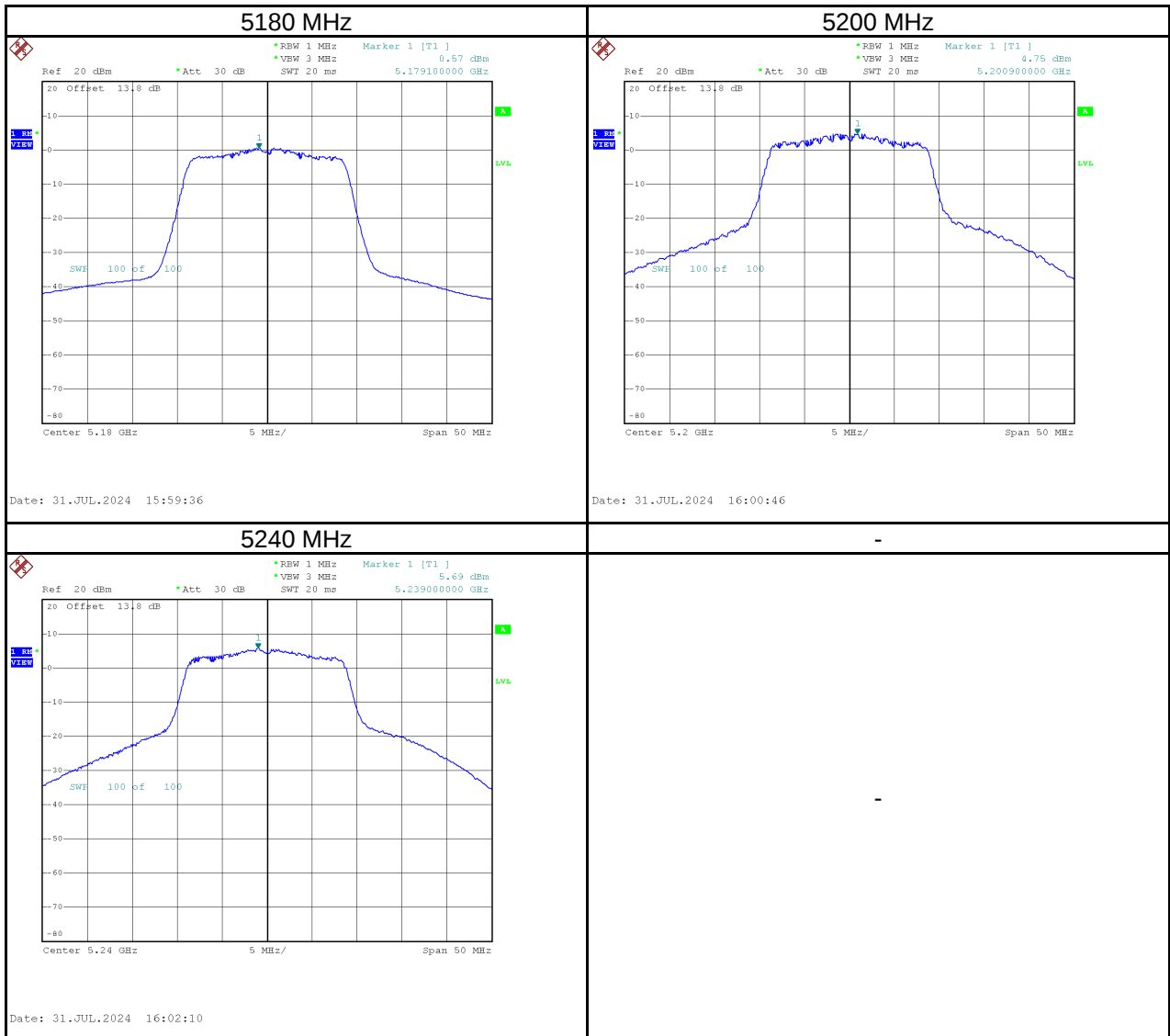
Test Frequency (MHz)	Power Density (dBm/100 kHz)	Power Density (dBm/500 kHz)	Duty Factor (dB)	Calculated Power Density (dBm/500 kHz)	Maximum Limit (dBm/500 kHz)	Result
5745	-1.64	5.35	0.49	5.84	30.00	Pass
5785	-0.85	6.14	0.49	6.63	30.00	Pass
5825	-3.94	3.05	0.49	3.54	30.00	Pass

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



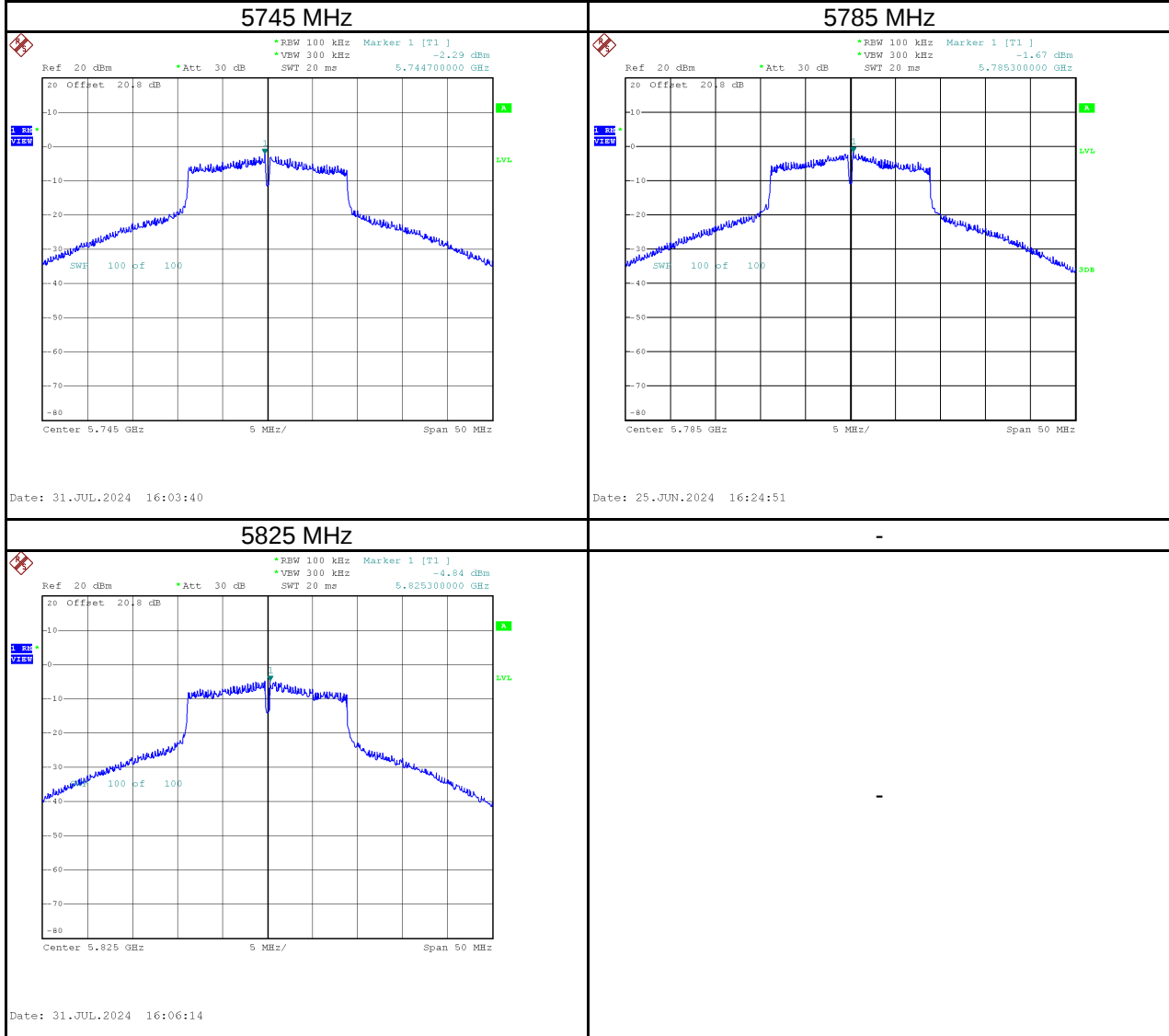
Test Mode	IEEE 802.11n (HT20)
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Test Frequency (MHz)	Power Density (dBm/MHz)	Duty Factor (dB)	Calculated Power Density (dBm/MHz)	Maximum Limit (dBm/MHz)	Result
5180	0.57	0.19	0.76	17.00	Pass
5200	4.75	0.19	4.94	17.00	Pass
5240	5.69	0.19	5.88	17.00	Pass



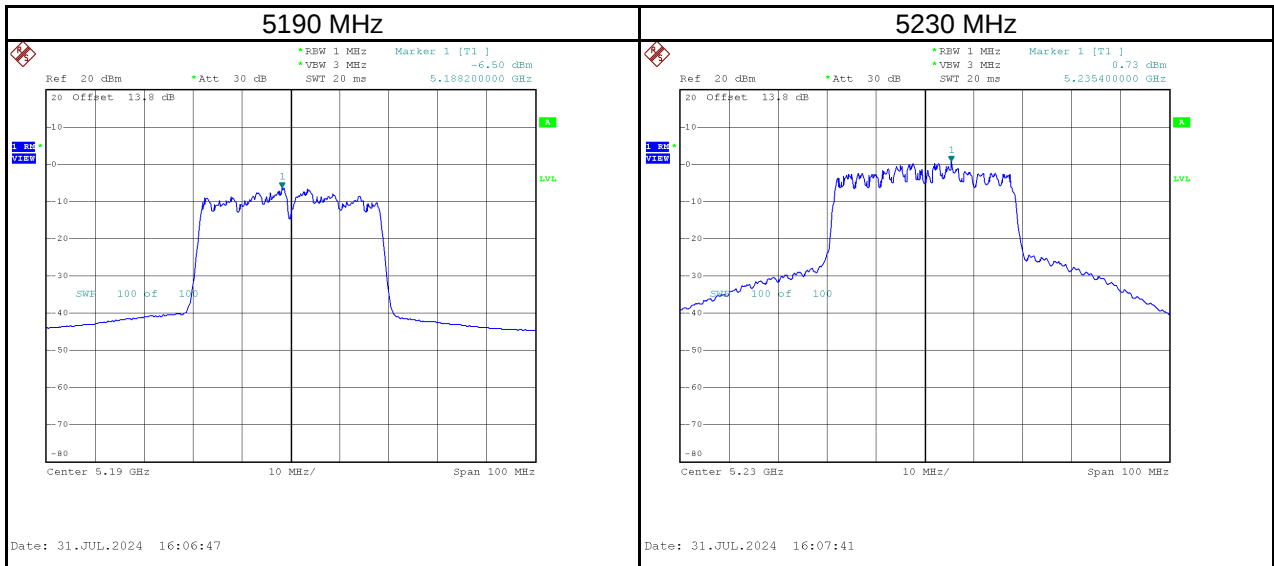
Test Frequency (MHz)	Power Density (dBm/100 kHz)	Power Density (dBm/500 kHz)	Duty Factor (dB)	Calculated Power Density (dBm/500 kHz)	Maximum Limit (dBm/500 kHz)	Result
5745	-2.29	4.70	0.19	4.89	30.00	Pass
5785	-1.67	5.32	0.19	5.51	30.00	Pass
5825	-4.84	2.15	0.19	2.34	30.00	Pass

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



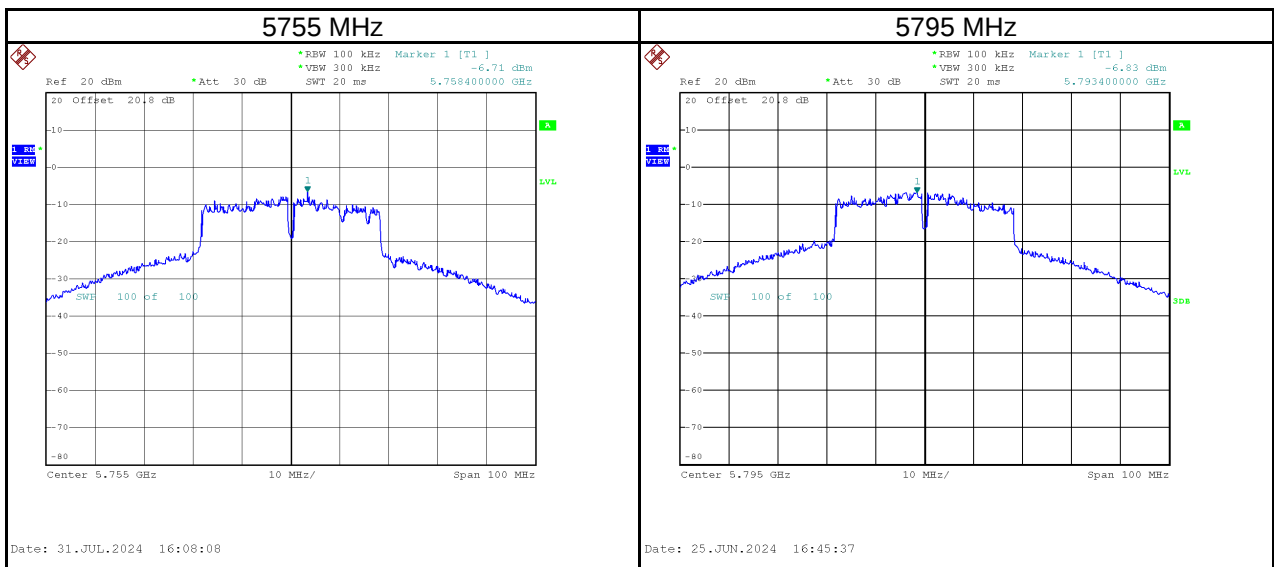
Test Mode	IEEE 802.11n (HT40)
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Test Frequency (MHz)	Power Density (dBm/MHz)	Duty Factor (dB)	Calculated Power Density (dBm/MHz)	Maximum Limit (dBm/MHz)	Result
5190	-6.50	0.65	-5.85	17.00	Pass
5230	0.73	0.65	1.38	17.00	Pass



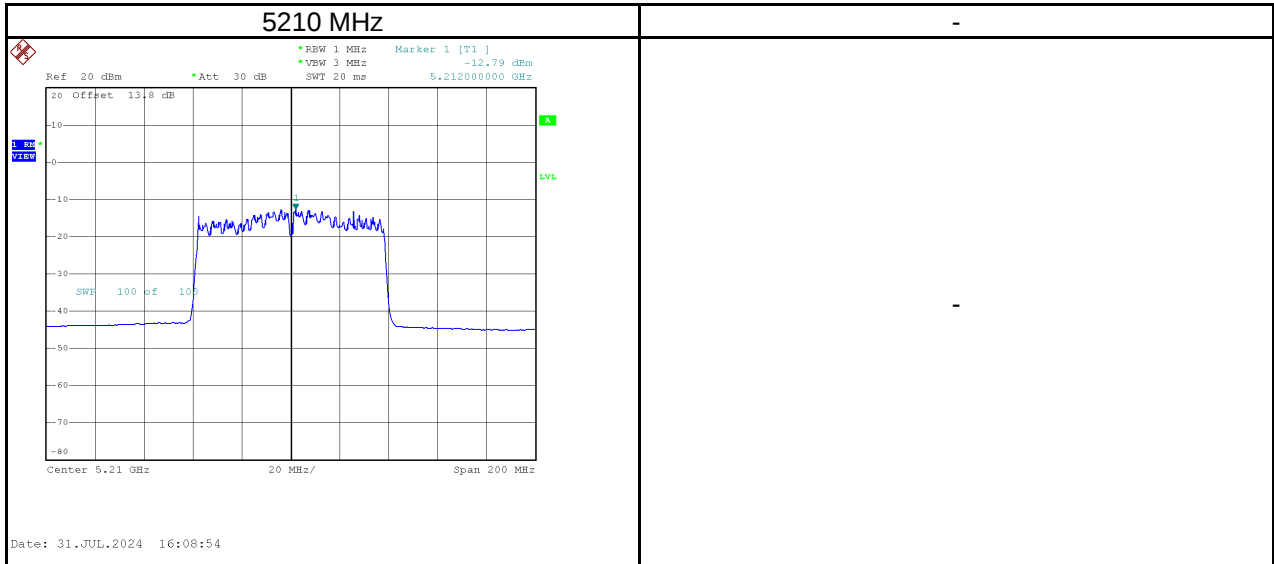
Test Frequency (MHz)	Power Density (dBm/100 kHz)	Power Density (dBm/500 kHz)	Duty Factor (dB)	Calculated Power Density (dBm/500 kHz)	Maximum Limit (dBm/500 kHz)	Result
5755	-6.71	0.28	0.65	0.93	30.00	Pass
5795	-6.83	0.16	0.65	0.81	30.00	Pass

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



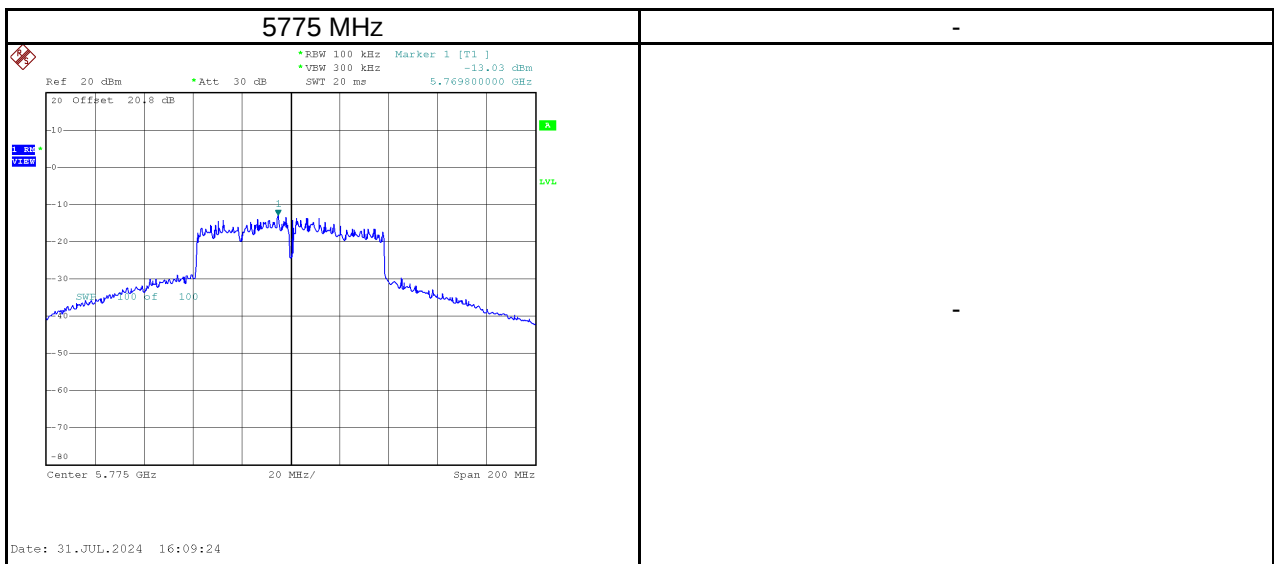
Test Mode	IEEE 802.11ac (VHT80)
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Test Frequency (MHz)	Power Density (dBm/MHz)	Duty Factor (dB)	Calculated Power Density (dBm/MHz)	Maximum Limit (dBm/MHz)	Result
5210	-12.79	1.20	-11.59	17.00	Pass



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	-13.03	-6.04	1.20	-4.84	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