



Spectrum Research & Testing Lab., Inc.

No.167, Ln. 780, Shan-Tong Rd., Ling 8, Shan-Tong Li, Chung-Li Dist., Taoyuan City 320, Taiwan (R.O.C.)

TEST REPORT

Reference No.: A23080102

Report No.: FCCA23080102-X0

FCC ID : 2AZ3ICC180W

Page: 1 of 99

Date: Aug. 21, 2023

Product Name: Projector
Brand Name: HP
Model No.: CC180W
Series Model: ---
Applicant: GT Technology Chongqing Limited
3-1, No, 20 Qixin Road Yanjia Street Changshou District
Chongqing
Date of Receipt: Aug. 01, 2023
Finished date of Test: Aug. 01, 2023 ~ Aug. 18, 2023
Applicable Standards: FCC CFR Title 47, Part 15, Subpart E
FCC KDB 789033 D02 General UNII Test Procedures New Rules v02r01
FCC KDB 662911 D01 Multiple Transmitter Output v02r01
ANSI C63.10-2013

We, **Spectrum Research & Testing Laboratory Inc.**, hereby certify that one sample of the above was tested in our laboratory with positive results according to the above-mentioned standards. The records in the report are an accurate account of the results. Details of the results are given in the subsequent pages of this report.

Tested By :

Anny Ho (Auth)
(Jimmy Tseng)

Date:

8/21/2023

Approved By :

2/2
(Johnson Ho, Director)

Date:

8/21/2023



 Spectrum Research & Testing Lab., Inc. No.167, Ln. 780, Shan-Tong Rd., Ling 8, Shan-Tong Li, Chung-Li Dist., Taoyuan City 320, Taiwan (R.O.C.)	TEST REPORT	Reference No.: A23080102 Report No.: FCCA23080102-X0 FCC ID : 2AZ3ICC180W Page: 2 of 99 Date: Aug. 21, 2023
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Revisions History

Report No.	Issue Date	Revisions
FCCA23080102-X0	Aug. 21, 2023	Initial issue

Table of Contents

1	DOCUMENT POLICY AND TEST STATEMENT	5
1.1	DOCUMENT POLICY	5
1.2	TEST STATEMENT	5
1.3	EUT MODIFICATION	5
1.4	DECISION RULE	5
1.5	REPORTING STATEMENTS OF CONFORMITY	5
2	DESCRIPTION OF EUT AND TEST MODE	6
2.1	GENERAL DESCRIPTION OF EUT.....	6
2.2	DESCRIPTION OF TEST MODE	7
2.3	EUT OPERATING CONDITION	8
2.4	DESCRIPTION OF SUPPORT UNIT	8
2.5	CHANNEL AND FREQUENCY TABLE	9
3	DESCRIPTION OF APPLIED STANDARDS.....	10
3.1	SUMMARY OF TEST RESULTS	10
4	CONDUCTED EMISSION TEST	11
4.1	LIMIT	11
4.2	TEST EQUIPMENT	11
4.3	TEST SETUP	12
4.4	TEST PROCEDURE	12
4.5	TEST RESULT	13
5	RADIATED EMISSION TEST	17
5.1	LIMIT	17
4.2.2	TEST EQUIPMENT	18
5.2	TEST SET-UP	19
5.3	TEST PROCEDURE	20
5.4	TEST RESULT	21
6	PEAK CONDUCTED OUTPUT POWER TEST.....	79
6.1	LIMIT	79
6.2	TEST EQUIPMENT	79
6.3	TEST SET-UP	79
6.4	TEST PROCEDURE	79
6.5	EUT OPERATING CONDITION	79
6.6	TEST RESULT	80
6.7	26DB OCCUPIED BANDWIDTH.....	83
7	POWER SPECTRAL DENSITY TEST	90



**Spectrum Research &
Testing Lab., Inc.**

No.167, Ln. 780, Shan-Tong
Rd., Ling 8, Shan-Tong Li,
Chung-Li Dist., Taoyuan City
320, Taiwan (R.O.C.)

TEST REPORT

Reference No.: A23080102

Report No.: FCCA23080102-X0

FCC ID : 2AZ3ICC180W

Page: 4 of 99

Date: Aug. 21, 2023

7.1	LIMIT	90
7.2	TEST EQUIPMENT	91
7.3	TEST SET-UP	91
7.4	TEST PROCEDURE	91
7.5	EUT OPERATING CONDITION	91
7.6	TEST RESULT	92
8	ANTENNA APPLICATION	98
8.1	ANTENNA REQUIREMENT	98
8.2	RESULT	98
8.3	DESCRIPTION OF RF EXPOSURE	98
9	TERMS OF ABBREVIATION	99

 Spectrum Research & Testing Lab., Inc. No.167, Ln. 780, Shan-Tong Rd., Ling 8, Shan-Tong Li, Chung-Li Dist., Taoyuan City 320, Taiwan (R.O.C.)	TEST REPORT	Reference No.: A23080102 Report No.: FCCA23080102-X0 FCC ID : 2AZ3ICC180W Page: 5 of 99 Date: Aug. 21, 2023
--	----------------------	---

1 DOCUMENT POLICY AND TEST STATEMENT

1.1 DOCUMENT POLICY

- The report shall not be reproduced except in full, without the written approval of SRT Lab, Inc.
- FCC Registered Test Site Number : TW1016

1.2 TEST STATEMENT

- This random test report is for FCC's market spot check action by FCC ID: **2AZ3ICC180W** project, applied only to the specific samples tested under conditions.
- The test results in the report apply only to the unit tested by SRT Lab.
- There was no deviation from the requirements of test standards during the test.
- DC power source from DC adapter: 15V==3A

1.3 EUT MODIFICATION

- No modification in SRT Lab.

1.4 DECISION RULE

- To make sure the testing report(s) meet the requirement of ISO/IEC 17025:2017 standard and meet chapter 7.1 (Review of Requests, Tenders and Contracts), chapter 7.4 (Handling of Test or Calibration Items), chapter 7.8.2 (Reporting of Results – Common Requirement for Reports (Test, Calibration or Sampling)), This decision rule will be the base of adjustment (include the disclaimer scope) from SRT LAB.
- After communicate between SRT LAB. and clients /applicants and get the agreement, SRT LAB. will do the adjustment. According to this decision rule, SRT LAB. Manager(s) will do the Pass or Fail adjustment. (But one thing need to be concerned is, not every assessing rule suits all declaration of conformity assessing actions, it should be ruled depends on product's feature, test standard, technical regulation, test results, and also acceptance of risk of both sides.)
- This report according to the "description of applied standards and statements of conformity" on the report, as the decision rule.

1.5 REPORTING STATEMENTS OF CONFORMITY

Base on ISO/IEC 17025, the statements of conformity requirement of testing results.

- ☐ It does not need to provide the statements of conformity.
- ☒ It need to provide the statements of conformity and
 - ☒ Use CISPR 16-4, ISO/IEC Guide 98-3, IEC Guide 115, ETSI ETR 028 speciation and it does not need to provide additional uncertainty of the testing results or data on the report(s).
 - ☐ It need to provide additional uncertainty of the testing results or data on the report(s).

 Spectrum Research & Testing Lab., Inc. No.167,Ln. 780, Shan-Tong Rd.,Ling 8, Shan-Tong Li, Chung-Li Dist., Taoyuan City 320, Taiwan (R.O.C.)	TEST REPORT	Reference No.: A23080102 Report No.: FCCA23080102-X0 FCC ID : 2AZ3ICC180W Page: 6 of 99 Date: Aug. 21, 2023
--	----------------------	---

2 DESCRIPTION OF EUT AND TEST MODE

2.1 GENERAL DESCRIPTION OF EUT

PRODUCT	Projector
MODEL NO.	CC180W
BRAND NAME	HP
POWER SUPPLY	I/P: 100-240V~, 1.4A MAX, 50-60Hz O/P: 15.0V = 3.0A, 45.0W or 12.0V = 3.0A or 9.0V = 3.0A or 5.0V = 3.0A, 15.0W
CABLE	N/A
FREQUENCY BAND	5.15 GHz ~ 5.25 GHz, 5.725 ~ 5.85 GHz
CARRIER FREQUENCY	5.18 GHz ~ 5.24 GHz, 5.745 GHz ~ 5.825 GHz
NUMBER OF CHANNEL	5.2G band_802.11a/n - HT20 : 4 ch 5.2G band_802.11n - HT40 : 2 ch 5.8G band_802.11a/n - HT20 : 5 ch 5.8G band_802.11n - HT40 : 2 ch
RATED RF OUTPUT POWER (AVG)	11A Band 1 : 19.25 dBm = 84.14 mW Band 4 : 19.47 dBm = 88.51 mW 11N(20M) Band 1 : 18.56 dBm = 71.78 mW Band 4 : 18.31 dBm = 67.76 mW 11N(40M) Band 1 : 17.74 dBm = 59.43 mW Band 4 : 17.57 dBm = 57.15 mW
MODULATION TYPE	IEEE802.11A : OFDM (BPSK / 16-QAM / 64-QAM) IEEE802.11N : SISO-OFDM (256-QAM, rate 3/4 and 5/6)
MODE OF OPERATION	Duplex
BIT RATE OF TRANSMITTER	802.11A : 6, 9, 12, 18, 24, 36, 48, 54 Mbps 802.11N - HT20 : MCS0 ~ MCS7 (Max. 72.2 Mbps) 802.11N - HT40 : MCS0 ~ MCS7 (Max. 150 Mbps)
ANTENNA TYPE	FPC Antenna
ANTENNA GAIN	2.99 dBi
OPERATING TEMPERATURE RANGE	0~35°C

Brief description of the function/specification of the DUT

For more detailed information, please refer to the EUT's specification or user's manual provided by manufacturer.

 Spectrum Research & Testing Lab., Inc. No.167, Ln. 780, Shan-Tong Rd., Ling 8, Shan-Tong Li, Chung-Li Dist., Taoyuan City 320, Taiwan (R.O.C.)	TEST REPORT	Reference No.: A23080102 Report No.: FCCA23080102-X0 FCC ID : 2AZ3ICC180W Page: 7 of 99 Date: Aug. 21, 2023
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2.2 DESCRIPTION OF TEST MODE

The EUT use the software in TX test mode is “FCC_assist_1.0.2.2”.

After pre-test in chamber and evaluate:

1. OFDM was the worst modulation, so use of OFDM for the final test mode.
2. Choose lowest, middle and highest channels for final test.
3. Three axis (X, Y and Z axis) are evaluated in chamber, the X axis is the worst in test.

Test mode			Channel	Frequency(MHz)	Power Setting
1	802-11A	Band 1	CH036	5180	11
2			CH040	5200	11
3			CH048	5240	11
4		Band 4	CH149	5745	11
5			CH157	5785	11
6			CH165	5825	11
7	802-11N20	Band 1	CH036	5180	11
8			CH044	5200	11
9			CH048	5240	11
10		Band 4	CH149	5745	11
11			CH157	5785	11
12			CH165	5825	11
13	802-11N40	Band 1	CH038	5190	11
14			CH046	5230	11
15		Band 4	CH151	5755	11
16			CH159	5795	11

NOTE:

1. Below 1 GHz were pre-tested in chamber and chosen the worst case for conducted and radiated emission test.
2. Above 1 GHz were tested individually.

 Spectrum Research & Testing Lab., Inc. No.167,Ln. 780, Shan-Tong Rd.,Ling 8, Shan-Tong Li, Chung-Li Dist., Taoyuan City 320, Taiwan (R.O.C.)	TEST REPORT	Reference No.: A23080102 Report No.: FCCA23080102-X0 FCC ID : 2AZ31CC180W Page: 8 of 99 Date: Aug. 21, 2023
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2.3 EUT OPERATING CONDITION

1. Setup the EUT and all peripheral devices.
2. Turn on the power of all equipment and EUT.
3. Based on customer provided continuous program & Program instructions.
4. Set the EUT under continuous transmission mode.

2.4 DESCRIPTION OF SUPPORT UNIT

The EUT was configured by the requirement of ANSI C63.4: 2014. All interface ports were connected to the appropriate support units via specific cables. The support units and cables are listed below.

NO	DEVICE	BRAND	MODEL #	FCC ID/DOC	CABLE
1	PC	ASUS	M32AA1	DoC	1.8m unshielded power cable.
2	LCD Monitor	DELL	U2311Hb	DoC	1.8m unshielded power cable. 1.5m shielded data cable.
3	Mouse	ASUS	MOBTUO	DoC	1.5m unshielded data cable.
4	Keyboard	ASUS	AW211	DoC	1.5m unshielded data cable
5	Printer	HP	C8995A	DoC	1.5m unshielded power cable. 1.5m shielded data cable.
6	USB 2.0 HDD	Terasys	F-12U	DoC	1.5m shielded data cable.
7	USB Transfer board	NA	USB TO TTL	NA	NA
8	RF cable	NA	HLW 6154-013011	NA	NA
9	Dipole Antenna	兆赫通訊	6150-000000-360 00001	NA	NA
10	Bandpass Filter	NA	NF2400-2500MHz	NA	NA

NOTE: For the actual test configuration, please refer to the photos of testing.

 Spectrum Research & Testing Lab., Inc. No.167,Ln. 780, Shan-Tong Rd.,Ling 8, Shan-Tong Li, Chung-Li Dist., Taoyuan City 320, Taiwan (R.O.C.)	TEST REPORT	Reference No.: A23080102 Report No.: FCCA23080102-X0 FCC ID : 2AZ3IC180W Page: 9 of 99 Date: Aug. 21, 2023
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2.5 CHANNEL AND FREQUENCY TABLE

5.1G_802.11a/n - HT20			
Channel	Frequency	Channel	Frequency
CH36	5180 MHz	CH40	5200 MHz
CH48	5240 MHz	--	--

5.1G_802.11n - HT40			
Channel	Frequency	Channel	Frequency
CH38	5190 MHz	CH46	5230 MHz

5.8G_802.11a/n - HT20			
Channel	Frequency	Channel	Frequency
CH149	5745 MHz	CH157	5785 MHz
CH165	5825 MHz	--	--

5.8G_802.11n - HT40			
Channel	Frequency	Channel	Frequency
CH151	5755 MHz	CH159	5795 MHz

 Spectrum Research & Testing Lab., Inc. No.167,Ln. 780, Shan-Tong Rd.,Ling 8, Shan-Tong Li, Chung-Li Dist., Taoyuan City 320, Taiwan (R.O.C.)	TEST REPORT	Reference No.: A23080102 Report No.: FCCA23080102-X0 FCC ID : 2AZ3ICC180W Page: 10 of 99 Date: Aug. 21, 2023
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3 DESCRIPTION OF APPLIED STANDARDS

The EUT is a wireless product. According to the specifications provided by the applicant, it must comply with the requirements of the following standards:

- FCC CFR Title 47, Part 15, Subpart E
- FCC KDB 789033 D02 General UNII Test Procedures New Rules v02r01
- FCC KDB 662911 D01 Multiple Transmitter Output v02r01
- ANSI C63.10-2013

All tests have been performed and recorded as the above standards.

3.1 SUMMARY OF TEST RESULTS

The EUT has been tested according to the following specifications:

STANDARD SECTION	TEST TYPE AND LIMIT RESULTS	RESULTS
15.207 15.407(b)	AC Power Line Conducted Emissions	PASS
15.407(b) 15.205(a) 15.209(a)	Radiated Emissions	PASS
15.407(a) 15.407(e)	Bandwidth	PASS
15.407(a)	Maximum Output Power	PASS
15.407(a)	Power Spectral Density	PASS
15.407(g)	Frequency Stability	PASS
15.203	Antenna Requirements	PASS
15.407(c)	Automatically Discontinue Transmission	PASS

 Spectrum Research & Testing Lab., Inc. No.167, Ln. 780, Shan-Tong Rd., Ling 8, Shan-Tong Li, Chung-Li Dist., Taoyuan City 320, Taiwan (R.O.C.)	TEST REPORT	Reference No.: A23080102 Report No.: FCCA23080102-X0 FCC ID : 2AZ3ICC180W Page: 11 of 99 Date: Aug. 21, 2023
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4 CONDUCTED EMISSION TEST

4.1 LIMIT

Frequency (MHz)	Class A (dBμV)		Class B (dBμV)	
	Quasi-peak	Average	Quasi-peak	Average
0.15 - 0.5	79	66	66 - 56	56 - 46
0.50 - 5.0	73	60	56	46
5.0 - 30.0	73	60	60	50

NOTE:

1. The lower limit shall apply at the transition frequencies.
2. The limit decreases in line with the logarithm of the frequency in the range of 0.15 to 0.50 MHz.

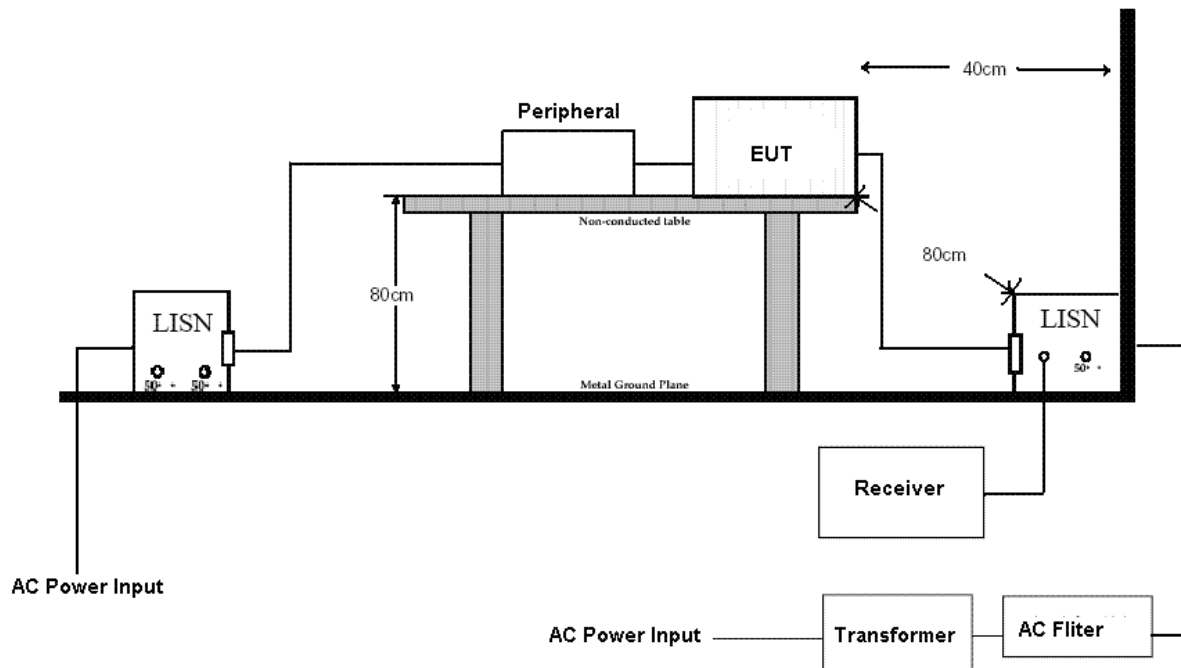
4.2 TEST EQUIPMENT

The following test equipment was used for the test:

Equipment/ Facilities	Specifications	Manufacturer	Model #/ Serial #	Due Date of Cal. & Cal. Center
EMI TEST RECEIVER	9 kHz ~ 2.75 GHz	ROHDE & SCHWARZ	ESCS30 / 100376	APR. 26, 2024 ETC
LISN	50 μH, 50 ohm	SOLAR	9252-50-R-24-BNC / 951315	FEB. 22, 2024 ETC
LISN	50 μH, 50 ohm	SCHWARZBECK	NSLK 8127/ 8127-808	MAR. 08, 2024 ETC
50Ω BNC TYPE TERMINATOR	50 ohm	N/A	11593A/ L1TEQU005	FEB. 14, 2024 ETC
50Ω BNC TYPE TERMINATOR	50 ohm	N/A	B00-CD-357 / L1TEQU009	JUL. 14, 2024 ETC
COAXIAL CABLE	5 m	HUBER+SUHNER	RG214/U(5m) / L1TCAB013	JUN. 23, 2024 ETC
FILTER	2 LINE, 30 A	FIL.COIL	FC-943 / 771	NCR
GROUND PLANE	2 m (H) x 3 m (W)	SRT	N/A	NCR
GROUND PLANE	2.5 m (H) x 3 m (W)	SRT	N/A	NCR
PULSE LIMITER	9 kHz ~ 30 MHz Insertion Loss= 10dB±0.3dB	ROHDE & SCHWARZ	ESH3-Z2 / L1TTES010	FEB. 16, 2024 ETC
THERMO-HYGRO	15 – 40 °C,	TOP	20-A / 6644	MAR. 01, 2024 ETC
MEASUREMENT SOFTWARE	N/A	EZ-EMC	SRT-03A1	NCR

NOTE: The calibration interval of the above test equipment is one year and the calibrations are traceable to NML/ROC and NIST/USA.

4.3 TEST SETUP



NOTE:

1. The EUT was put on a wooden table with 0.8m heights above ground plane, and 0.4m away from reference ground plane (> 2mx2m).
2. For the actual test configuration, please refer to the photos of testing.

4.4 TEST PROCEDURE

The EUT was tested according to the requirement of ANSI C63.4: 2014 and CISPR22:2003. The frequency spectrum from 0.15 MHz to 30 MHz was investigated. The LISN used was 50 ohm/50μH as specified. All readings were quasi-peak and average values with 10 kHz resolution bandwidth of the test receiver. The EUT system was operated in all typical methods by users. Both lines of the power mains of EUT were measured and the cables connected to EUT and support units were moved to find the maximum emission levels for each frequency. First, find the margin or higher points at least 6 points by software, then use manual to find the maximum data. The procedure is referred on the test procedure of SRT LAB.



Spectrum Research & Testing Lab., Inc.

No.167,Ln. 780, Shan-Tong Rd.,Ling 8, Shan-Tong Li, Chung-Li Dist., Taoyuan City 320, Taiwan (R.O.C.)

TEST REPORT

Reference No.: A23080102

Report No.: FCCA23080102-X0

FCC ID : 2AZ3IC180W

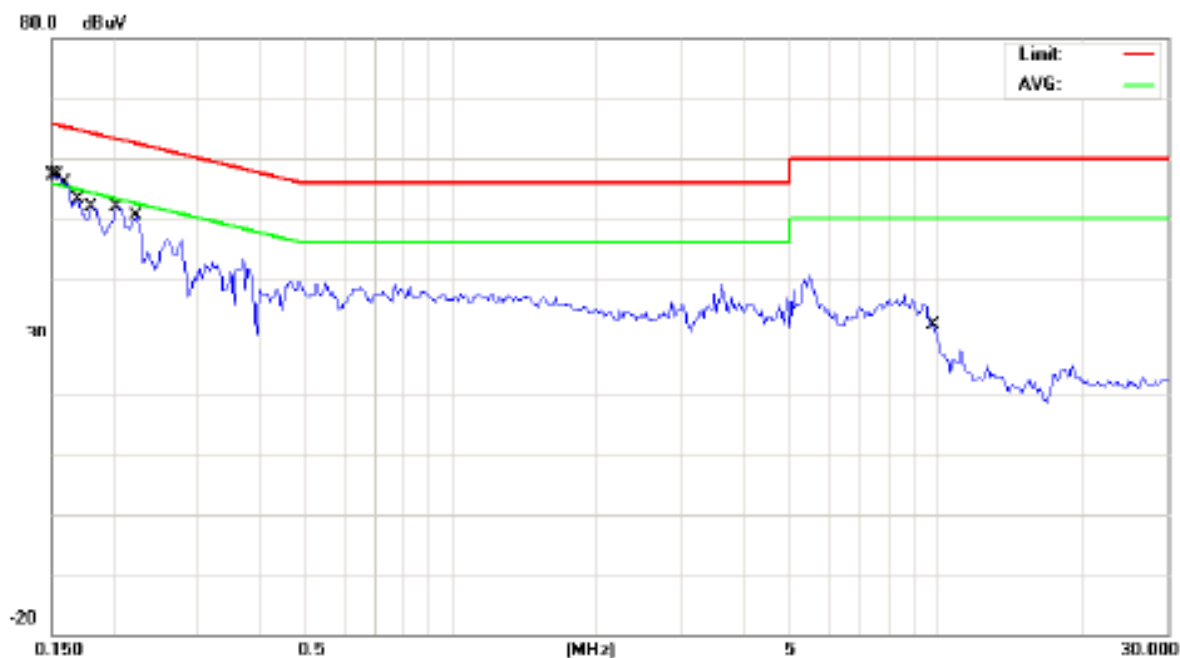
Page: 13 of 99

Date: Aug. 21, 2023

4.5 TEST RESULT

Temperature:	28 °C	Humidity:	81 %RH
Frequency Range:	0.15 - 30 MHz	Test Mode:	Wi-Fi 5G Link
Receiver Detector:	Q.P. and AV.	Tested By:	Jimmy Tseng

Power Line Measured : Line



Mk.	No.	Frequency (MHz)	Reading (dBuV)	Corrected factor(dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Comment
	1	0.1508	54.47	-0.04	54.43	65.96	-11.53	QP	
	2	0.1508	39.90	-0.04	39.86	55.96	-16.10	AVG	
*	3	0.1557	54.99	-0.04	54.95	65.69	-10.74	QP	
	4	0.1557	41.00	-0.04	40.96	55.69	-14.73	AVG	
	5	0.1607	53.56	-0.04	53.52	65.43	-11.91	QP	
	6	0.1607	39.34	-0.04	39.30	55.43	-16.13	AVG	
	7	0.1695	50.84	-0.04	50.80	64.98	-14.18	QP	
	8	0.1695	34.66	-0.04	34.62	54.98	-20.36	AVG	
	9	0.1812	43.52	-0.04	43.48	64.43	-20.95	QP	
	10	0.1812	26.45	-0.04	26.41	54.43	-28.02	AVG	
	11	0.2047	48.58	-0.04	48.54	63.42	-14.88	QP	
	12	0.2047	34.24	-0.04	34.20	53.42	-19.22	AVG	
	13	0.2242	45.40	-0.04	45.36	62.66	-17.30	QP	
	14	0.2242	33.36	-0.04	33.32	52.66	-19.34	AVG	
	15	10.0000	25.99	0.28	26.27	60.00	-33.73	QP	
	16	10.0000	20.88	0.28	21.16	50.00	-28.84	AVG	

 Spectrum Research & Testing Lab., Inc. No.167, Ln. 780, Shan-Tong Rd., Ling 8, Shan-Tong Li, Chung-Li Dist., Taoyuan City 320, Taiwan (R.O.C.)	TEST REPORT	Reference No.: A23080102 Report No.: FCCA23080102-X0 FCC ID : 2AZ3ICC180W Page: 14 of 99 Date: Aug. 21, 2023
--	----------------------	--

- NOTE:**
1. Measurement uncertainty is 2.92 dB
 2. Emission level = Reading value + Correction factor
 3. Correction Factor = Cable loss + Insertion loss of LISN
Difference of Pulse Limiter Factor between EMI Test Receiver corrected 10dB insertion loss.
 4. Margin value = Emission level - Limit
 5. The emission of other frequencies was very low against the limit.
 6. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.



Spectrum Research & Testing Lab., Inc.

No.167, Ln. 780, Shan-Tong Rd., Ling 8, Shan-Tong Li, Chung-Li Dist., Taoyuan City 320, Taiwan (R.O.C.)

TEST REPORT

Reference No.: A23080102

Report No.: FCCA23080102-X0

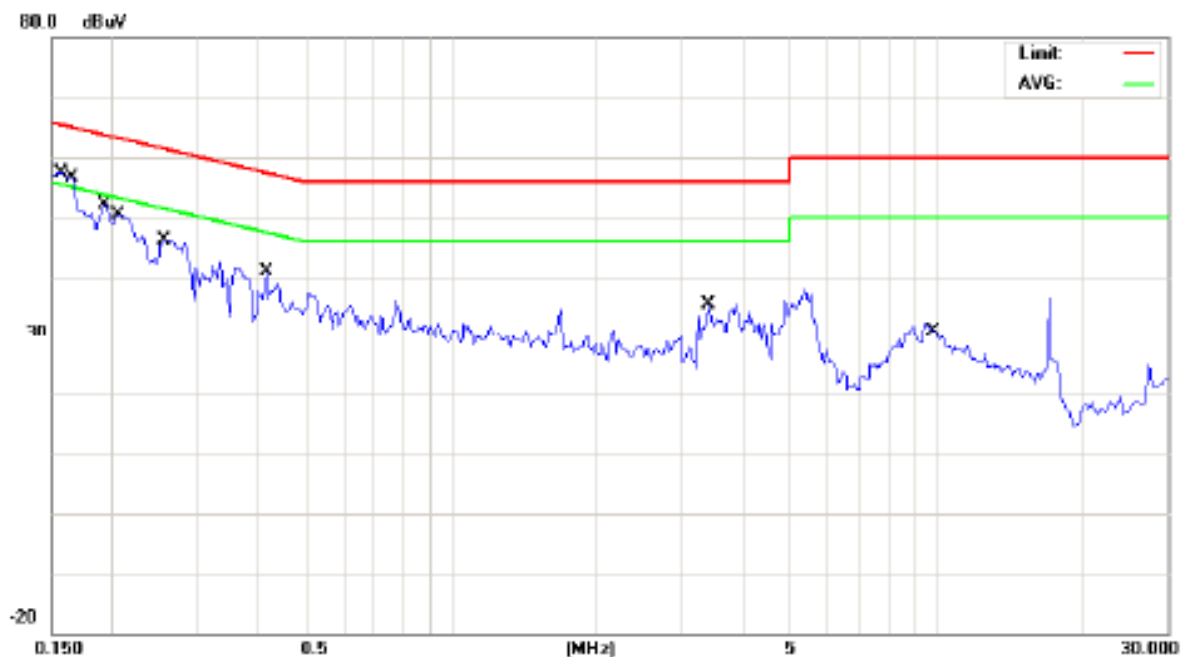
FCC ID : 2AZ3ICC180W

Page: 15 of 99

Date: Aug. 21, 2023

Temperature:	28 °C	Humidity:	81 %RH
Frequency Range:	0.15 - 30 MHz	Test Mode:	Wi-Fi 5G Link
Receiver Detector:	Q.P. and AV.	Tested By:	Jimmy Tseng

Power Line Measured : Neutral



Mk.	No.	Frequency (MHz)	Reading (dBuV)	Corrected factor(dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Detector	Comment
*	1	0.1578	54.67	-0.08	54.59	65.58	-10.99	QP	
	2	0.1578	40.23	-0.08	40.15	55.58	-15.43	AVG	
	3	0.1656	52.67	-0.08	52.59	65.18	-12.59	QP	
	4	0.1656	35.89	-0.08	35.81	55.18	-19.37	AVG	
	5	0.1930	44.66	-0.08	44.58	63.91	-19.33	QP	
	6	0.1930	28.49	-0.08	28.41	53.91	-25.50	AVG	
	7	0.2072	48.36	-0.08	48.28	63.32	-15.04	QP	
	8	0.2072	34.66	-0.08	34.58	53.32	-18.74	AVG	
	9	0.2562	43.45	-0.08	43.37	61.55	-18.18	QP	
	10	0.2562	29.44	-0.08	29.36	51.55	-22.19	AVG	
	11	0.4156	34.82	-0.08	34.74	57.54	-22.80	QP	
	12	0.4156	25.18	-0.08	25.10	47.54	-22.44	AVG	
	13	3.3945	26.57	0.03	26.60	56.00	-29.40	QP	
	14	3.3945	13.94	0.03	13.97	46.00	-32.03	AVG	
	15	10.0000	26.75	0.25	27.00	60.00	-33.00	QP	
	16	10.0000	21.80	0.25	22.05	50.00	-27.95	AVG	

 Spectrum Research & Testing Lab., Inc. No.167, Ln. 780, Shan-Tong Rd., Ling 8, Shan-Tong Li, Chung-Li Dist., Taoyuan City 320, Taiwan (R.O.C.)	TEST REPORT	Reference No.: A23080102 Report No.: FCCA23080102-X0 FCC ID : 2AZ3ICC180W Page: 16 of 99 Date: Aug. 21, 2023
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- NOTE:**
1. Measurement uncertainty is 2.92 dB
 2. Emission level = Reading value + Correction factor
 3. Correction Factor = Cable loss + Insertion loss of LISN
Difference of Pulse Limiter Factor between EMI Test Receiver corrected 10dB insertion loss.
 4. Margin value = Emission level - Limit
 5. The emission of other frequencies was very low against the limit.
 6. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.

 Spectrum Research & Testing Lab., Inc. No.167,Ln. 780, Shan-Tong Rd.,Ling 8, Shan-Tong Li, Chung-Li Dist., Taoyuan City 320, Taiwan (R.O.C.)	TEST REPORT	Reference No.: A23080102 Report No.: FCCA23080102-X0 FCC ID : 2AZ3ICC180W Page: 17 of 99 Date: Aug. 21, 2023
--	----------------------	--

5 RADIATED EMISSION TEST

5.1 LIMIT

FCC Part15, Subpart C Section 15.209 limit of radiated emission for frequency below1000MHz. The emissions from an intentional radiator shall not exceed the field strength levels specified in the following table:

FREQUENCY (MHz)	FIELD STRENGTH (microvolts/meter)	DISTANCE (m)	FIELD STRENGTH (dBμV/m)
0.009 - 0.490	2400/F(kHz)	300	67.6-20log(kHz)
0.490 - 1.705	24000/F(kHz)	30	87.6-20log(kHz)
1.705 - 30	30	30	30
30 - 80	100	3	40.0
88 - 216	150	3	43.5
216 - 960	200	3	46.0
Above 960	500	3	54.0

NOTE:

1. 30 dBuV (in 30m) = 70 dBuV (in 3m).
2. In the emission tables above , the tighter limit applies at the band edges.
3. Distance refers to the distance between measuring instrument, antenna, and the closest point of any part of the device or system.

FCC Part 15, Section15.35(b) limit of radiated emission for frequency above 1000 MHz

FREQUENCY (MHz)	Class A (dBuV/m) (at 3m)		Class B (dBuV/m) (at 3m)	
	PEAK	AVERAGE	PEAK	AVERAGE
Above 1000	80.0	60.0	74.0	54.0

 Spectrum Research & Testing Lab., Inc. No.167,Ln. 780, Shan-Tong Rd.,Ling 8, Shan-Tong Li, Chung-Li Dist., Taoyuan City 320, Taiwan (R.O.C.)	TEST REPORT	Reference No.: A23080102 Report No.: FCCA23080102-X0 FCC ID : 2AZ3ICC180W Page: 18 of 99 Date: Aug. 21, 2023
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4.2.2 TEST EQUIPMENT

Below 1 GHz The following test equipment was used during the radiated emission test:

Equipment/ Facilities	Specifications	Manufacturer	Model #/ Serial #	Due Date of Cal. & Cal. Center
EMI Test Receiver	9 kHz ~ 2.75 GHz	ROHDE & SCHWARZ	ESCS30 / 100376	APR. 26, 2024 ETC
Biconical Antenna	30 MHz ~ 200 MHz	EMCO	3108 / 2380	MAY. 01, 2024 ETC
Log Periodic Antenna	200 MHz ~ 1 GHz	EMCO	3146 / 9002-2686	MAY. 01, 2024 ETC
Open Area Test Site	3 ~ 10 M Measurement	SRT	A02 / SRT002	MAR. 07, 2024 SRT
Coaxial Cable	9 kHz ~ 1 GHz	TIMES	LMR-400(30m) / L1TCAB014	SEP. 08, 2023 ETC
Coaxial Cable	9 kHz ~ 1 GHz	Time	LMR-400 (#2m) / L1TCAB012	MAR. 20, 2024 ETC
Filter	2 LINE, 30 A	FIL.COIL	FC-943 / 869	NCR
Pre-Amplifier	0.1 MHz ~ 1.3 GHz	HP	8447D / 2944A06746	APR. 19, 2024 ETC
Thermo-Hygro	15 ~ 40 °C, 0 ~ 100% RH	TOP	20-A / 9326	MAR. 26, 2024 ETC

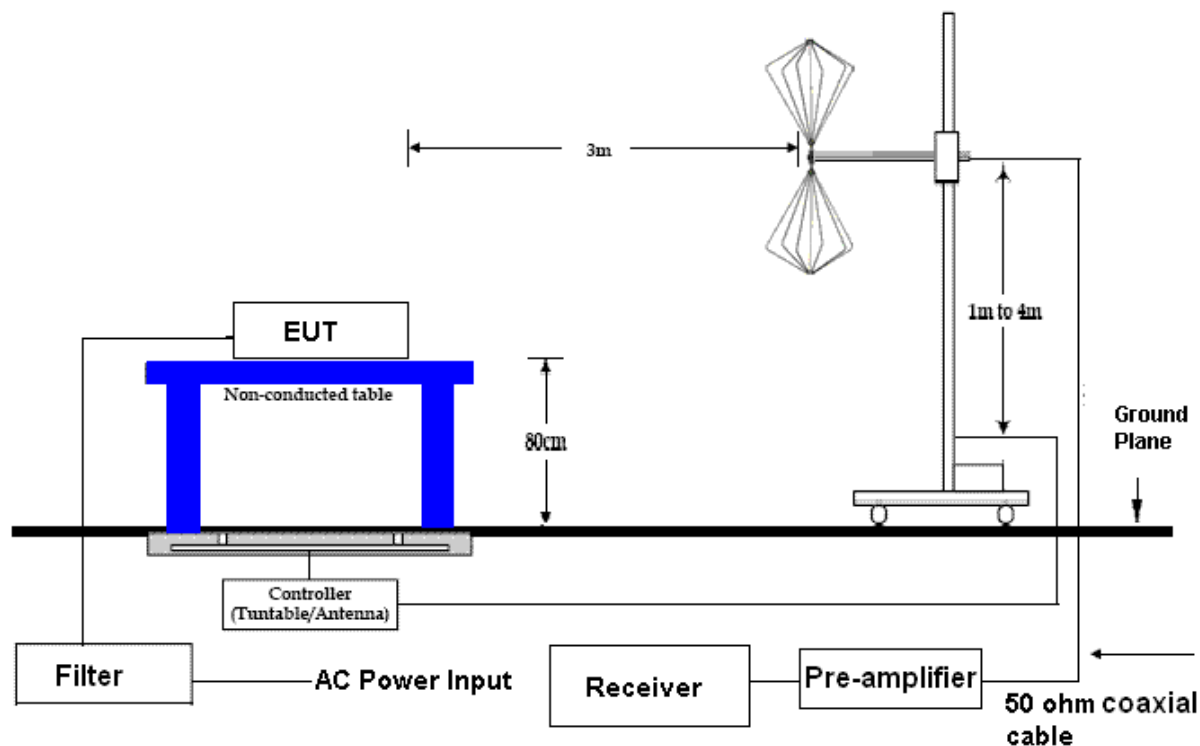
Above 1 GHz The following test equipment was used during the radiated emission test:

Equipment/ Facilities	Specifications	Manufacturer	Model #/ Serial #	Due Date of Cal. & Cal. Center
EXA Signal Analyzer	10Hz ~ 44 GHz	KEYSIGHT	N9010A / MY56480554	AUG. 24, 2023 ETC
Pre-Amplifier	1 GHz ~ 26.5 GHz	AGILENT	8449B / 3008A01995	MAR. 06, 2024 ETC
Horn Antenna	1 GHz ~ 18 GHz	EMCO	3115 / 9602-4681	FEB. 23, 2024 ETC
Horn Antenna	18 ~ 40 GHz	ETS-LINDGREN	3116 / 2567	MAY.13, 2024 ETC
Anechoic Chamber	3 M Measurement	SRT	A01 / SRT001	JUN. 22, 2024 SRT
RF Cable	Up to 18 GHz 6 m*2	EMCI	EMC107-SM-6000 / 230726	JUN. 14, 2024 ETC
RF Cable	Up to 18 GHz 1.5 m	JYEBAO	A30A30-L 142 / EQF-0035(001)	FEB. 16, 2024 ETC
K-Type Cable	Up tp 40 GHz 3 m	HUBER+ SUHNER	SF102-46/2*11SK252 / MY2611/2	APR. 24, 2024 ETC
K-Type Cable	Up to 40 GHz, 1 m	HUBER+ SUHNER	SF102/2*11SK252 / MY3331/2	FEB. 13, 2024 ETC
Filter	2 Line, 30 A	FIL.COIL	FC-943 / 869	NCR
Thermo-Hygro	15 ~ 40 °C, 0 ~ 100% RH	TOP	20-A / 6644	MAR. 01,2024 ETC
Measurement Software	N/A	EZ-EMC	SRT-03A1	NCR

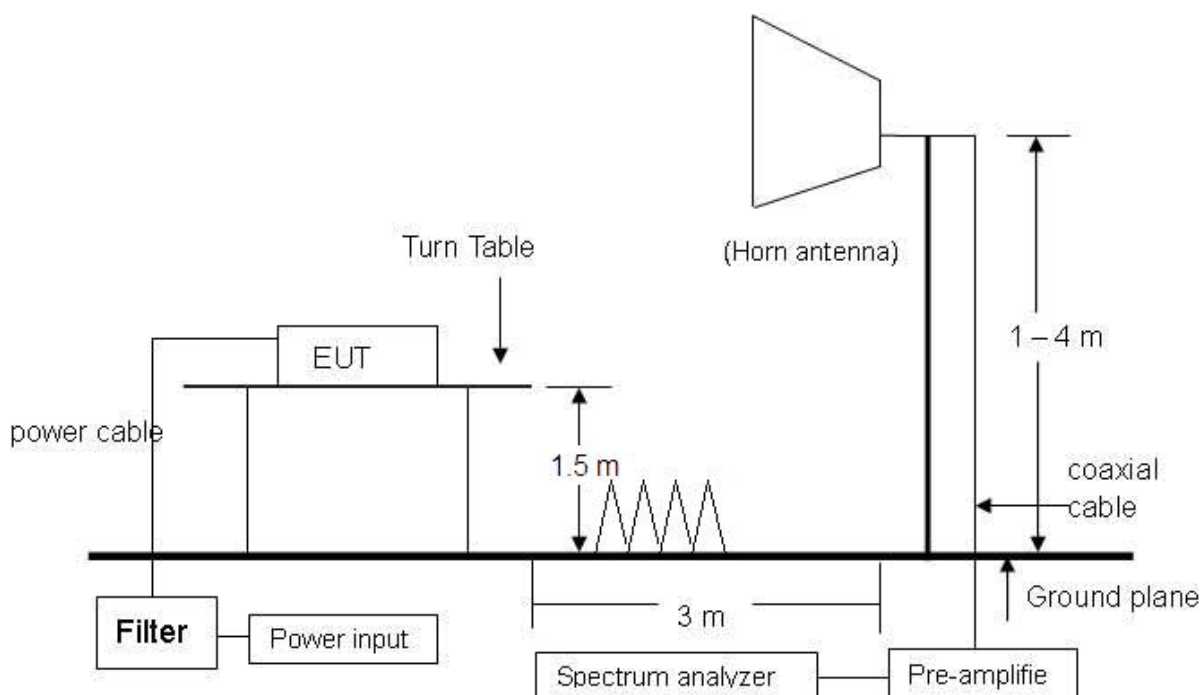
NOTE: The calibration interval of the above test equipment is one year and the calibrations are traceable to NML/ROC and NIST/USA.

5.2 TEST SET-UP

30 MHz ~ 1 GHz



Above 1 GHz



NOTE: The EUT system was put on a wooden table with 1.5m heights above a ground plane. For the actual test configuration, please refer to the photos of testing.

 Spectrum Research & Testing Lab., Inc. No.167,Ln. 780, Shan-Tong Rd.,Ling 8, Shan-Tong Li, Chung-Li Dist., Taoyuan City 320, Taiwan (R.O.C.)	TEST REPORT	Reference No.: A23080102 Report No.: FCCA23080102-X0 FCC ID : 2AZ3ICC180W Page: 20 of 99 Date: Aug. 21, 2023
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5.3 TEST PROCEDURE

The EUT was tested according to the requirement of ANSI C63.4: 2014 and CISPR 22:2003. The measurements were made at an open area test site with 3 meter measurement distance under 1 GHz and with 3m distance above 1GHz. The frequency spectrum measured started from 30 MHz to 1 GHz, all readings were quasi-peak values with 120 kHz resolution bandwidth of the test receiver. Above 1 GHz, the measurements were made at an open area test site with 3 meter measurement distance and all readings were peak or average values with 1 MHz resolution bandwidth of the test receiver. The EUT system was operated in all typical methods by users. The cables connected to EUT and support units were moved to find the maximum emission levels for each frequency. First, find the margin or higher points at least 6 points by software, then use manual to find the maximum data. The procedure is referred on the test procedure of SRT LAB.

 Spectrum Research & Testing Lab., Inc. No.167,Ln. 780, Shan-Tong Rd.,Ling 8, Shan-Tong Li, Chung-Li Dist., Taoyuan City 320, Taiwan (R.O.C.)	TEST REPORT	Reference No.: A23080102 Report No.: FCCA23080102-X0 FCC ID : 2AZ3IC180W Page: 21 of 99 Date: Aug. 21, 2023
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5.4 TEST RESULT

Temperature:	27 °C	Humidity:	80 %RH
Frequency Range:	30 M – 1 GHz	Test Mode:	Wi-Fi 5G+BT Link
Detector Type:	Quasi-peak	IF Bandwidth:	120 kHz
Tested By:	Jimmy Tseng	Tested Date:	Jul. 24, 2023

Antenna Polarization : Horizontal

Frequency (MHz)	Cable Loss (dB)	Antenna Factor (dB/m)	Pre-Amp (dB)	Reading Data (dBμV)	Emission Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	AZ (°)	EL (m)
75.03	2.32	8.60	28.15	50.35	33.12	40.0	-6.89	131	3.86
122.76	2.92	11.70	27.96	44.35	31.01	43.5	-12.49	311	3.71
171.48	3.27	12.50	27.72	42.81	30.86	43.5	-12.64	33	3.56
201.76	3.63	12.10	27.58	49.83	37.98	43.5	-5.52	329	3.47
222.91	3.85	12.16	27.52	42.15	30.65	46.0	-15.35	148	3.41
393.17	5.62	16.16	27.91	40.46	34.33	46.0	-11.67	163	2.87

Antenna Polarization : Vertical

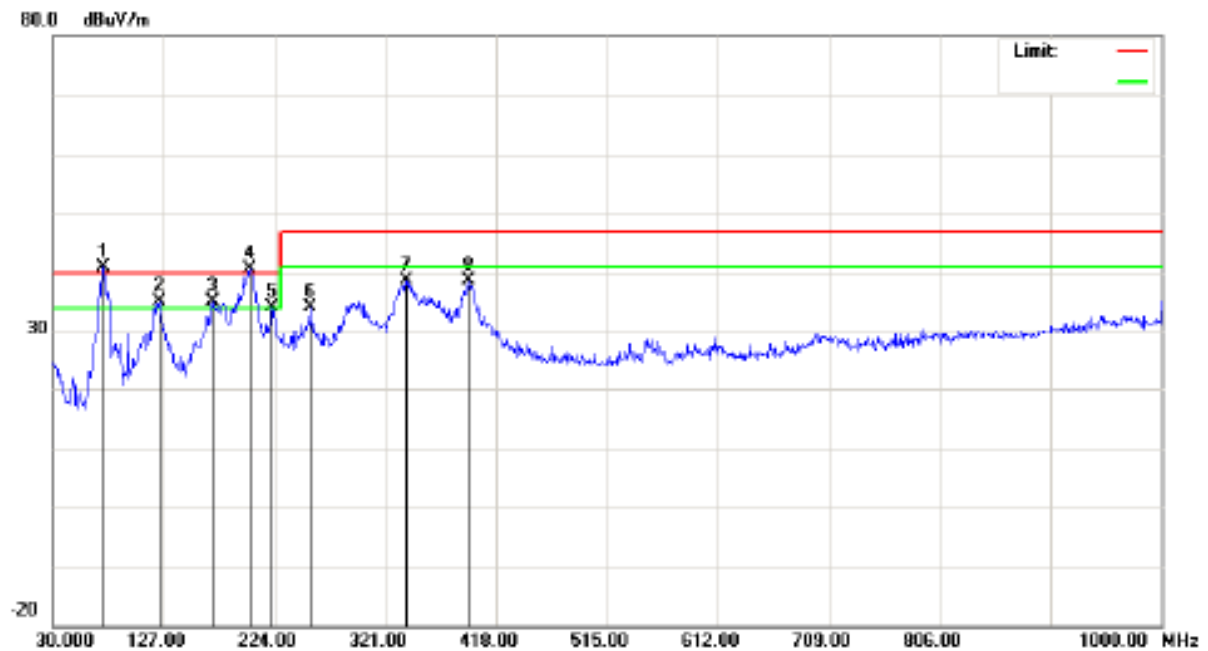
Frequency (MHz)	Cable Loss (dB)	Antenna Factor (dB/m)	Pre-Amp (dB)	Reading Data (dBμV)	Emission Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	AZ (°)	EL (m)
33.01	1.79	13.80	28.29	45.92	33.21	40.0	-6.79	150	1.01
51.67	2.09	11.50	28.23	41.33	26.69	40.0	-13.31	128	1.06
74.21	2.30	8.80	28.15	46.71	29.66	40.0	-10.34	120	1.14
209.72	3.69	12.02	27.55	45.13	33.29	43.5	-10.21	81	1.56
337.19	5.11	15.24	27.54	40.83	33.64	46.0	-12.36	56	1.95
392.72	5.61	16.14	27.91	45.43	39.27	46.0	-6.73	357	2.12

NOTE:

1. Measurement uncertainty is 4.20 dB.
2. "": Measurement does not apply for this frequency.
3. Emission Level = Reading Value + Ant. Factor + Cable Loss – Pre-Amplifier.
4. The field strength of other emission frequencies were very low against the limit.



Antenna Polarization : Horizontal



Antenna Polarization : Vertical





Spectrum Research & Testing Lab., Inc.

No.167,Ln. 780, Shan-Tong Rd.,Ling 8, Shan-Tong Li, Chung-Li Dist., Taoyuan City 320, Taiwan (R.O.C.)

TEST REPORT

Reference No.: A23080102

Report No.: FCCA23080102-X0

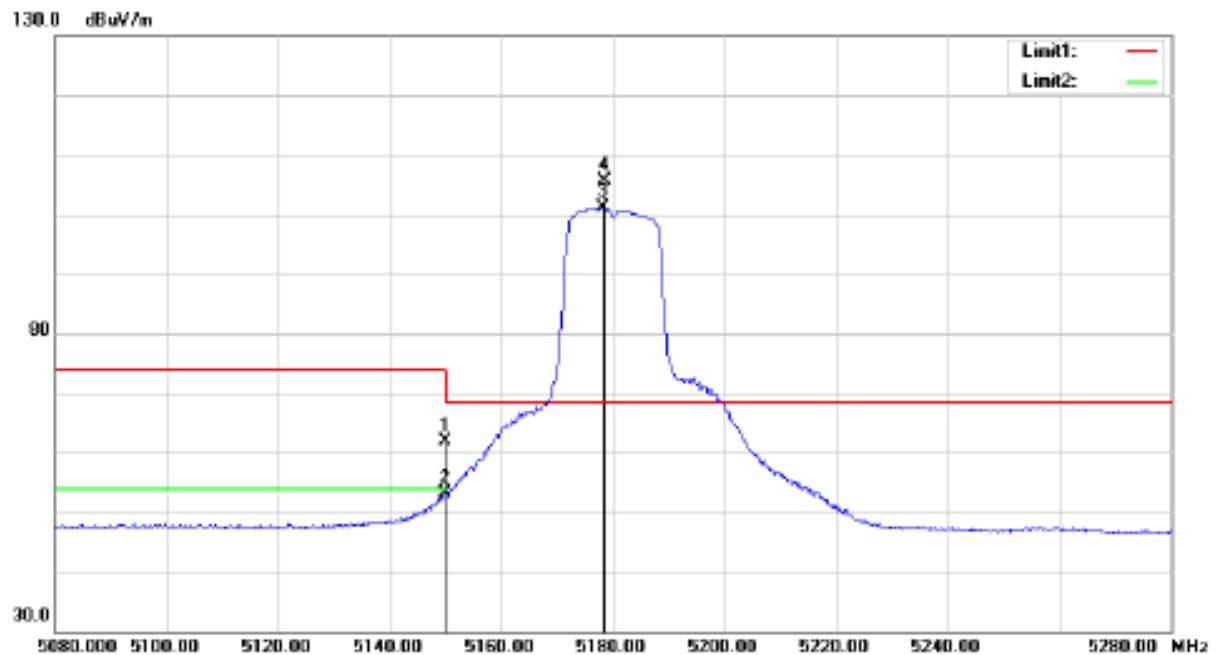
FCC ID : 2AZ3IC180W

Page: 23 of 99

Date: Aug. 21, 2023

Temperature:	28 °C	Humidity:	74 %RH
Frequency Range:	1 - 40 GHz	Test Mode:	11A
Detector Type:	PK. and AV.	L.O.:	5180 MHz
IF Bandwidth:	1 MHz	Tested Date:	Aug. 07, 2023

Antenna Polarization : Horizontal



Mk.	No.	Frequency (MHz)	Reading (dBuV/m)	Corrected factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Comment
	1	5150.000	54.67	7.21	61.88	74.00	-12.12	peak	
	2	5150.000	45.81	7.21	53.02	54.00	-0.98	AVG	
	3	5178.200	93.73	7.33	101.06	999.00	-897.9	AVG	
*	4	5178.400	98.37	7.33	105.70	68.30	37.40	peak	



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TEST REPORT

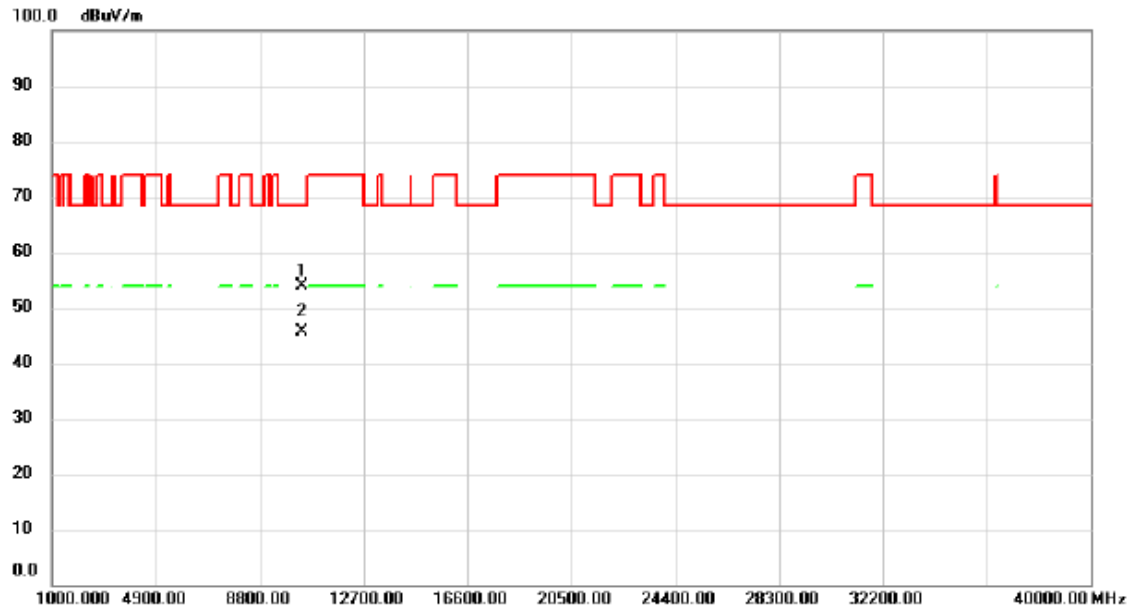
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Report No.: FCCA23080102-X0

FCC ID : 2AZ3ICC180W

Page: 24 of 99

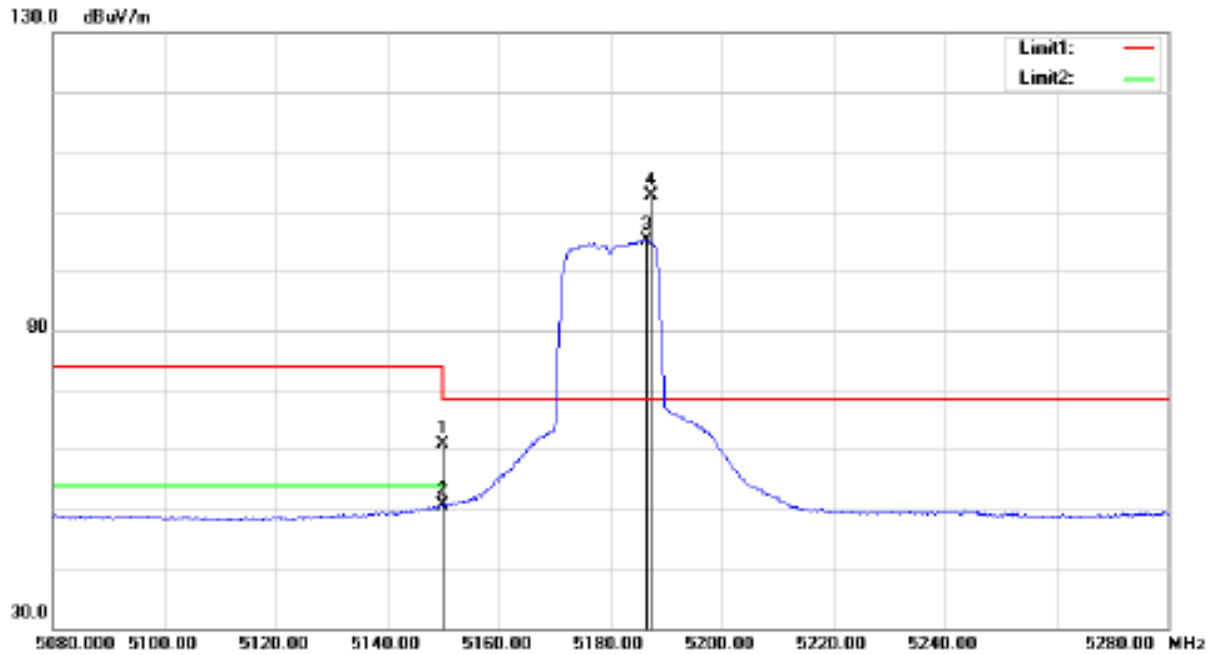
Date: Aug. 21, 2023



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	10361.12	39.64	14.36	54.00	68.30	-14.30	peak	
2		10361.74	31.22	14.36	45.58	68.30	-22.72	AVG	



Antenna Polarization : Vertical



Mk.	No.	Frequency (MHz)	Reading (dBuV/m)	Corrected factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Comment
	1	5150.000	41.75	19.21	60.96	74.00	-13.04	peak	
	2	5150.000	31.36	19.21	50.57	54.00	-3.43	AVG	
	3	5186.600	75.71	19.37	95.08	999.00	-903.9	AVG	
*	4	5187.200	83.23	19.37	102.60	68.30	34.30	peak	



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No.167,Ln. 780, Shan-Tong Rd.,Ling 8, Shan-Tong Li, Chung-Li Dist., Taoyuan City 320, Taiwan (R.O.C.)

TEST REPORT

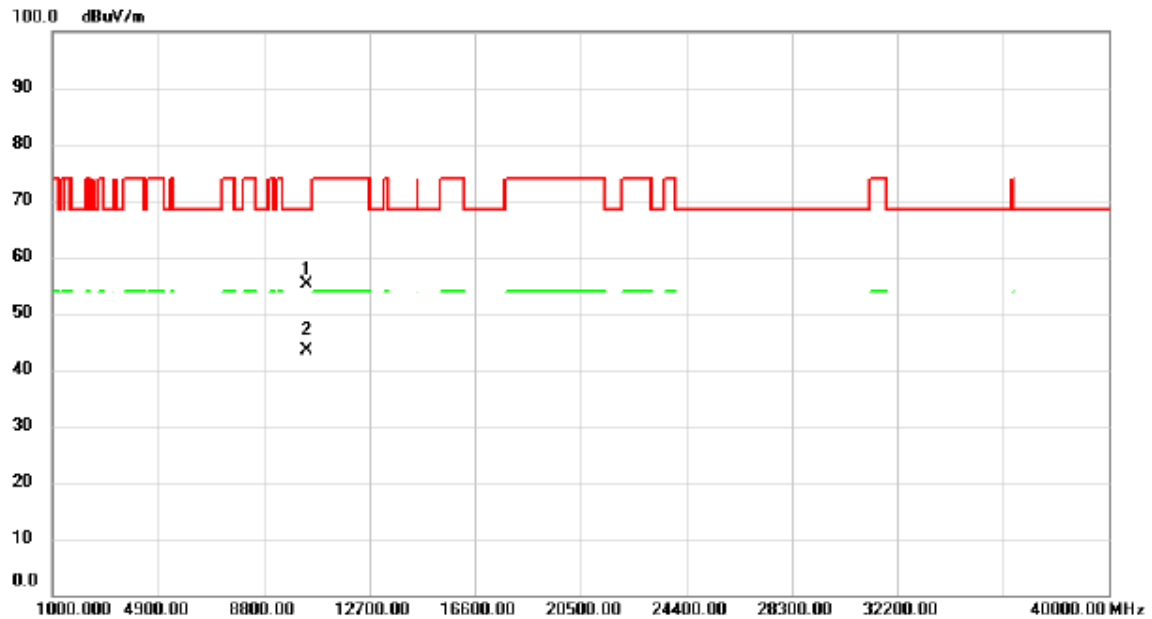
Reference No.: A23080102

Report No.: FCCA23080102-X0

FCC ID : 2AZ3ICC180W

Page: 26 of 99

Date: Aug. 21, 2023



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	*	10361.50	40.72	14.36	55.08	68.30	-13.22	peak	
2		10364.88	28.91	14.36	43.27	68.30	-25.03	AVG	

NOTE:

1. Measurement uncertainty is 4.04 dB.
2. Emission Level = Reading Value + Ant. Factor + Correct Factor (incl.:Cable Loss and Pre-Amplifier Gain)
3. The field strength of other emission frequencies were very low against the limit.
4. (F):The field strength of fundamental frequency.



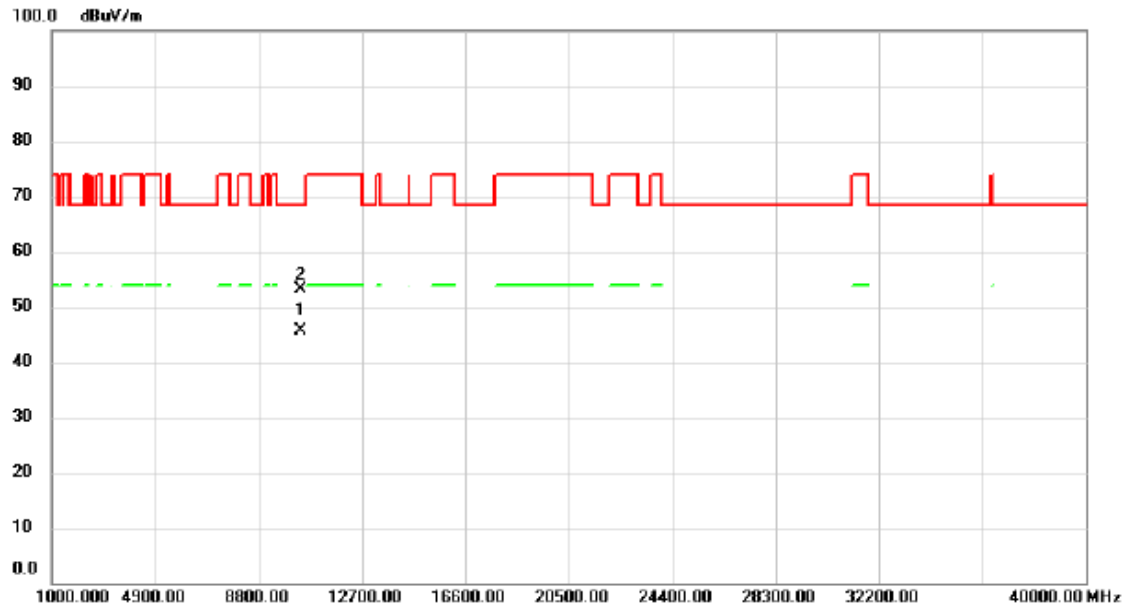
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No.167,Ln. 780, Shan-Tong Rd.,Ling 8, Shan-Tong Li, Chung-Li Dist., Taoyuan City 320, Taiwan (R.O.C.)

TEST REPORT

Reference No.: A23080102
Report No.: FCCA23080102-X0
FCC ID : 2AZ3IC180W
Page: 27 of 99
Date: Aug. 21, 2023

Temperature:	28 °C	Humidity:	74 %RH
Frequency Range:	1 - 40 GHz	Test Mode:	11A
Detector Type:	PK. and AV.	L.O.:	5200 MHz
IF Bandwidth:	1 MHz	Tested Date:	Aug. 07, 2023

Antenna Polarization : Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		10401.74	31.10	14.44	45.54	68.30	-22.76	AVG	
2	*	10403.86	38.65	14.45	53.10	68.30	-15.20	peak	

NOTE:

1. Measurement uncertainty is 4.04 dB.
2. Emission Level = Reading Value + Ant. Factor + Correct Factor (incl.:Cable Loss and Pre-Amplifier Gain)
3. The field strength of other emission frequencies were very low against the limit.
4. (F):The field strength of fundamental frequency.



Spectrum Research & Testing Lab., Inc.

No.167,Ln. 780, Shan-Tong Rd.,Ling 8, Shan-Tong Li, Chung-Li Dist., Taoyuan City 320, Taiwan (R.O.C.)

TEST REPORT

Reference No.: A23080102

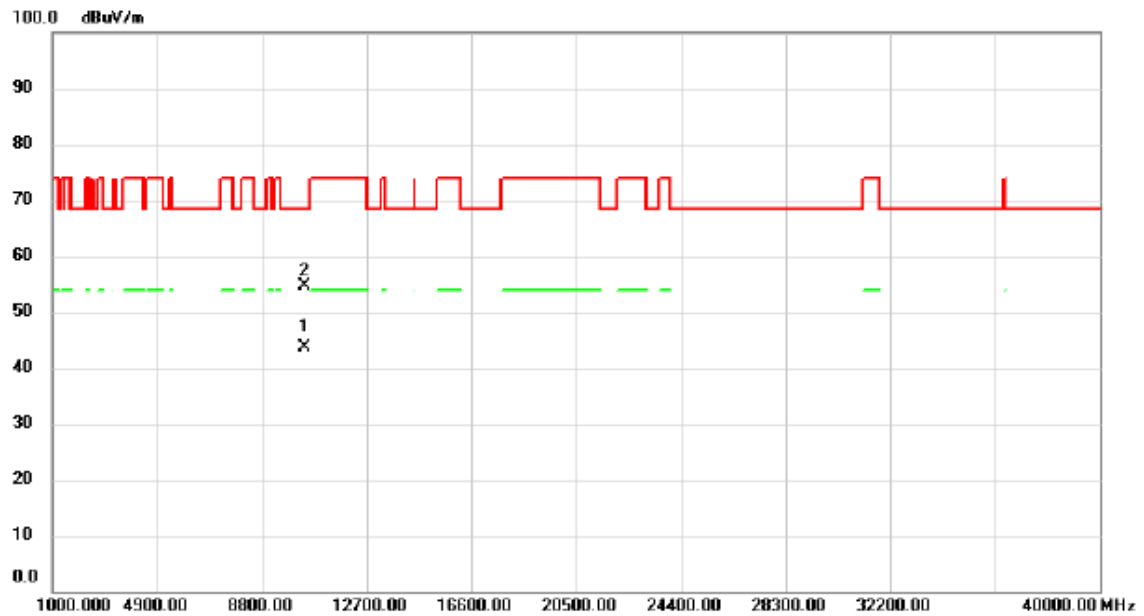
Report No.: FCCA23080102-X0

FCC ID : 2AZ3ICC180W

Page: 28 of 99

Date: Aug. 21, 2023

Antenna Polarization : Vertical



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		10402.21	29.07	14.45	43.52	68.30	-24.78	AVG	
2	*	10403.12	40.21	14.45	54.66	68.30	-13.64	peak	



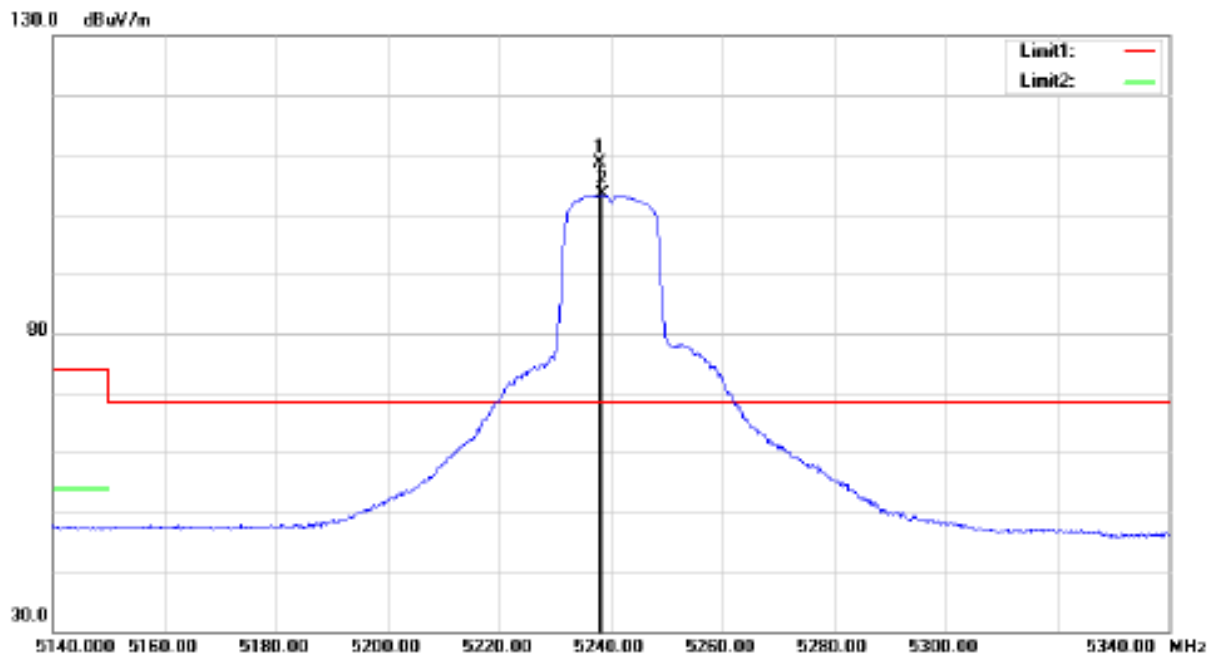
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No.167,Ln. 780, Shan-Tong Rd.,Ling 8, Shan-Tong Li, Chung-Li Dist., Taoyuan City 320, Taiwan (R.O.C.)

TEST REPORT

Reference No.: A23080102
Report No.: FCCA23080102-X0
FCC ID : 2AZ3IC180W
Page: 29 of 99
Date: Aug. 21, 2023

Temperature:	28 °C	Humidity:	74 %RH
Frequency Range:	1 - 40 GHz	Test Mode:	11A
Detector Type:	PK. and AV.	L.O.:	5240 MHz
IF Bandwidth:	1 MHz	Tested Date:	Aug. 07, 2023

Antenna Polarization : Horizontal



Mk.	No.	Frequency (MHz)	Reading (dBuV/m)	Corrected factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Comment
*	1	5238.000	101.00	7.51	108.51	68.30	40.21	peak	
	2	5238.400	95.76	7.51	103.27	999.00	-895.7	AVG	



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No.167,Ln. 780, Shan-Tong Rd.,Ling 8, Shan-Tong Li, Chung-Li Dist., Taoyuan City 320, Taiwan (R.O.C.)

TEST REPORT

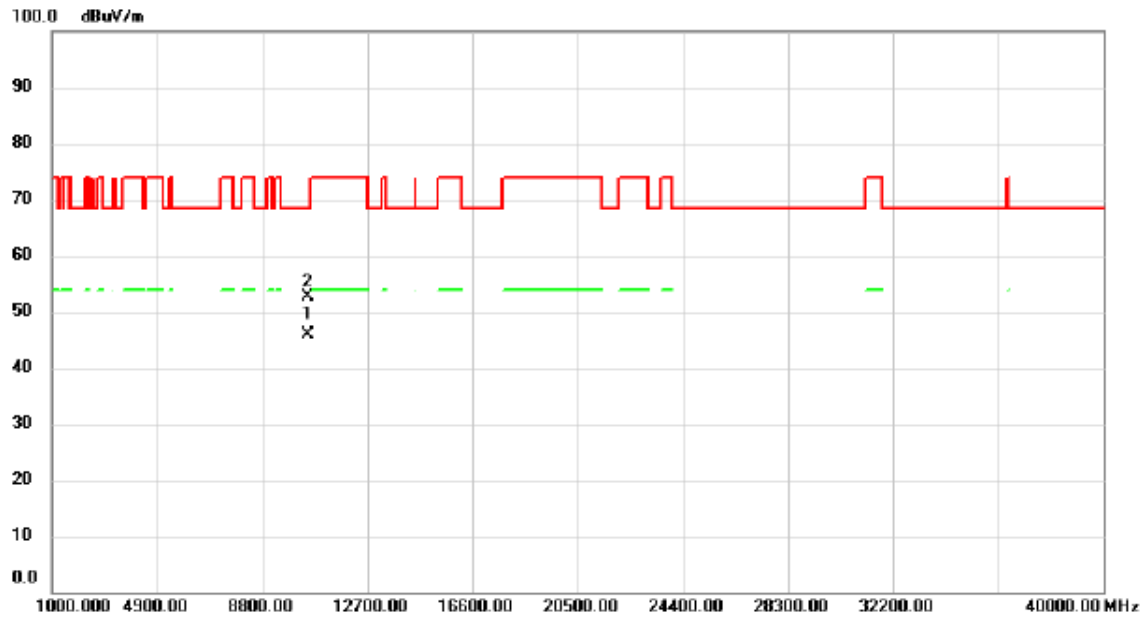
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Report No.: FCCA23080102-X0

FCC ID : 2AZ3ICC180W

Page: 30 of 99

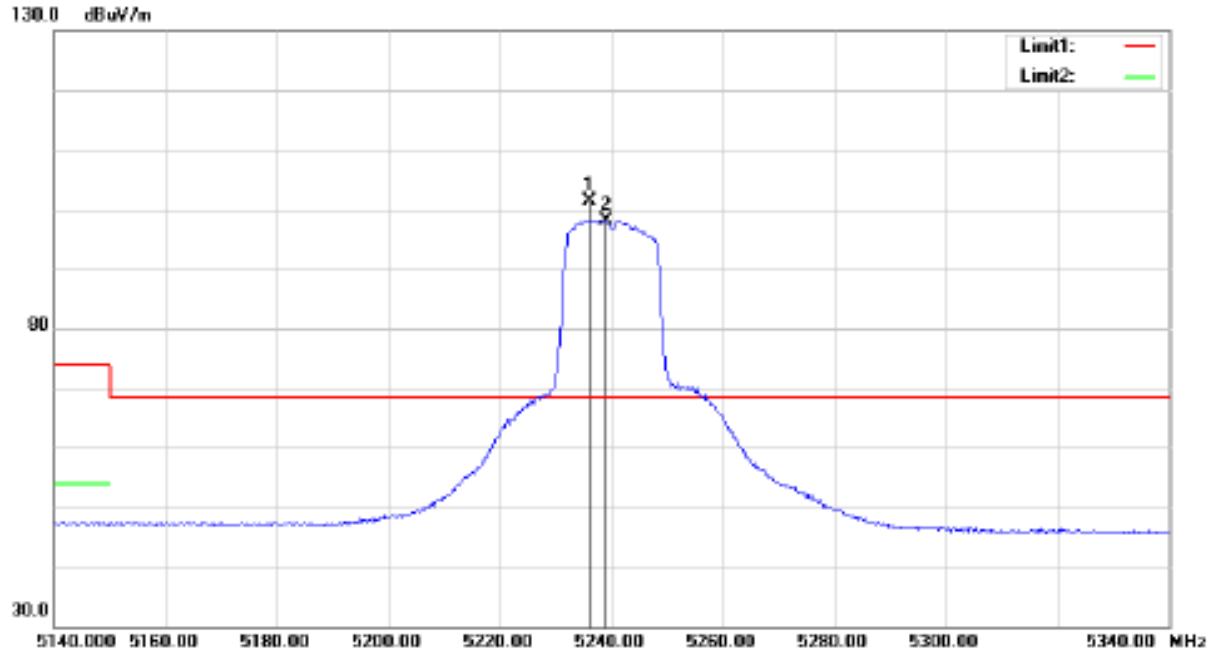
Date: Aug. 21, 2023



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		10483.40	31.31	14.61	45.92	68.30	-22.38	AVG	
2	*	10484.64	38.06	14.61	52.67	68.30	-15.63	peak	



Antenna Polarization : Vertical



Mk.	No.	Frequency (MHz)	Reading (dBuV/m)	Corrected factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Comment
*	1	5236.000	93.96	7.50	101.46	68.30	33.16	peak	
	2	5239.000	90.71	7.51	98.22	999.00	-900.7	AVG	



Spectrum Research & Testing Lab., Inc.

No.167,Ln. 780, Shan-Tong Rd.,Ling 8, Shan-Tong Li, Chung-Li Dist., Taoyuan City 320, Taiwan (R.O.C.)

TEST REPORT

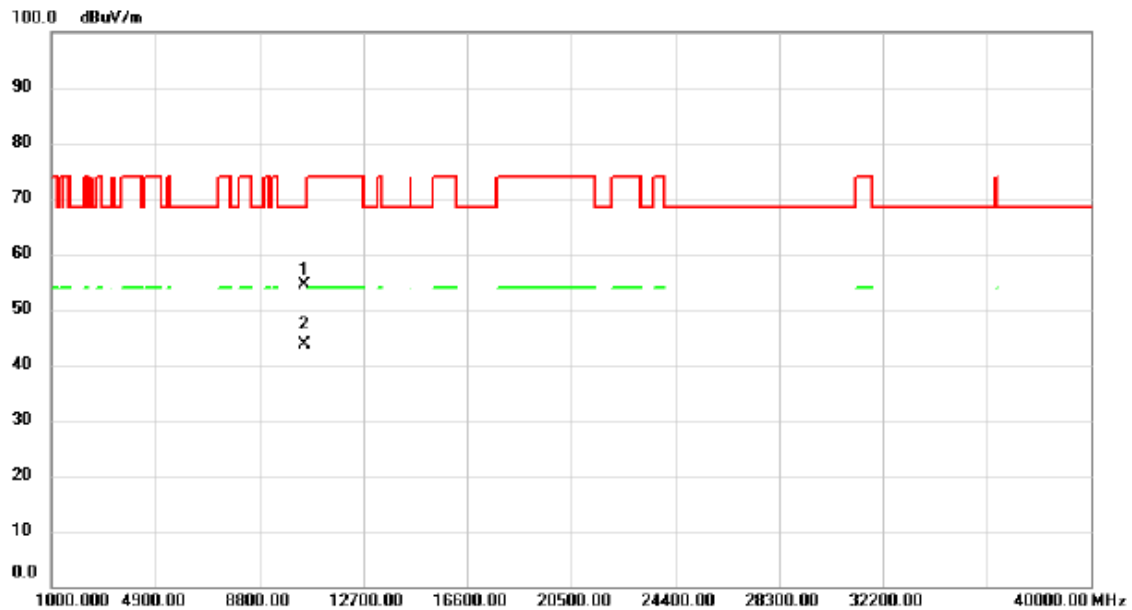
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Report No.: FCCA23080102-X0

FCC ID : 2AZ3ICC180W

Page: 32 of 99

Date: Aug. 21, 2023



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	10478.55	39.71	14.61	54.32	68.30	-13.98	peak	
2		10482.83	28.91	14.61	43.52	68.30	-24.78	AVG	

NOTE:

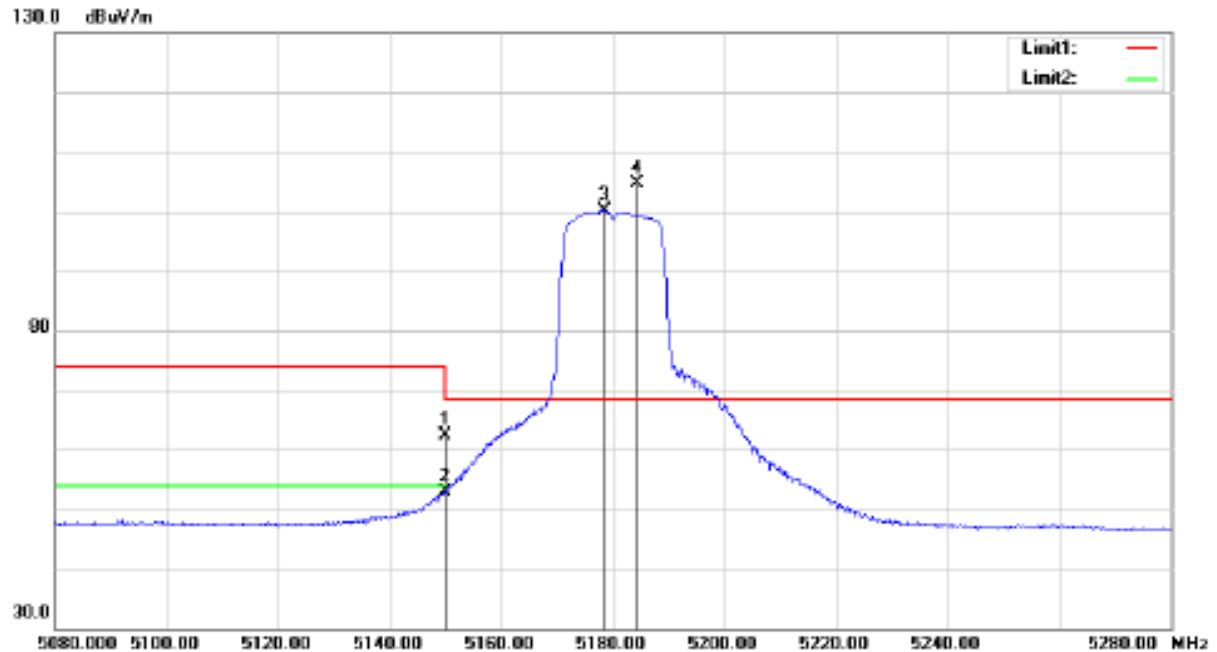
NOTE:

1. Measurement uncertainty is 4.04 dB.
2. Emission Level = Reading Value + Ant. Factor + Correct Factor (incl.:Cable Loss and Pre-Amplifier Gain)
3. The field strength of other emission frequencies were very low against the limit.
4. (F):The field strength of fundamental frequency.



Temperature:	28 °C	Humidity:	74 %RH
Frequency Range:	1 - 40 GHz	Test Mode:	11N20
Detector Type:	PK. and AV.	L.O.:	5180 MHz
IF Bandwidth:	1 MHz	Tested Date:	Aug. 07, 2023

Antenna Polarization : Horizontal



Mk.	No.	Frequency (MHz)	Reading (dBuV/m)	Corrected factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Comment
	1	5150.000	55.12	7.21	62.33	74.00	-11.67	peak	
	2	5150.000	45.78	7.21	52.99	54.00	-1.01	AVG	
	3	5178.600	92.86	7.33	100.19	999.00	-898.8	AVG	
*	4	5184.400	97.21	7.36	104.57	68.30	36.27	peak	



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No.167,Ln. 780, Shan-Tong Rd.,Ling 8, Shan-Tong Li, Chung-Li Dist., Taoyuan City 320, Taiwan (R.O.C.)

TEST REPORT

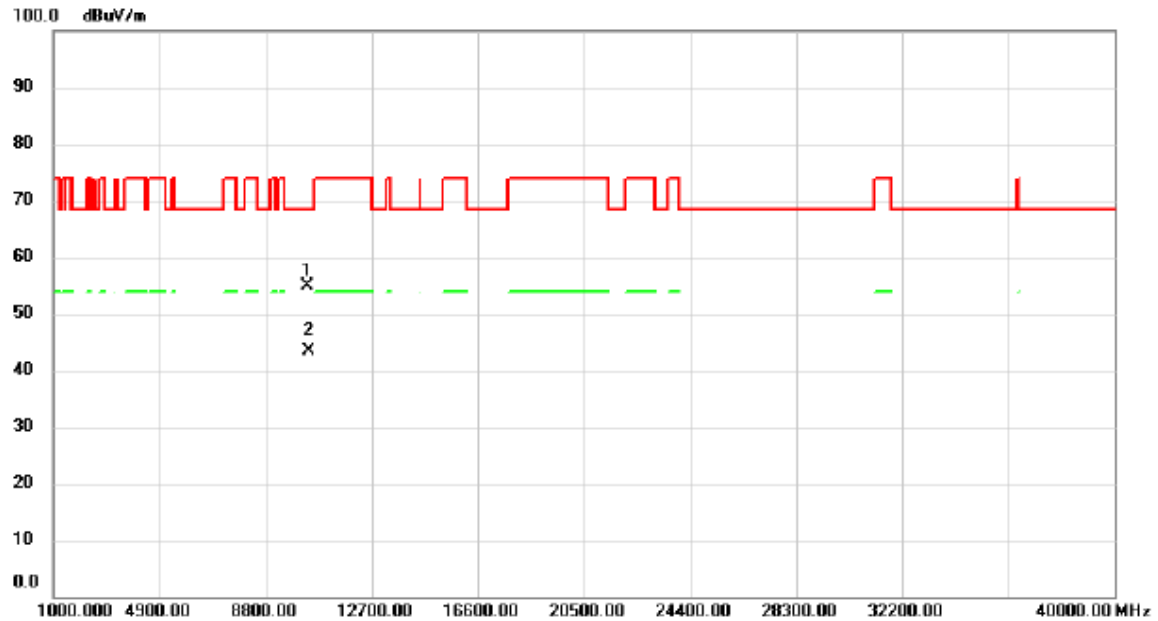
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Report No.: FCCA23080102-X0

FCC ID : 2AZ3ICC180W

Page: 34 of 99

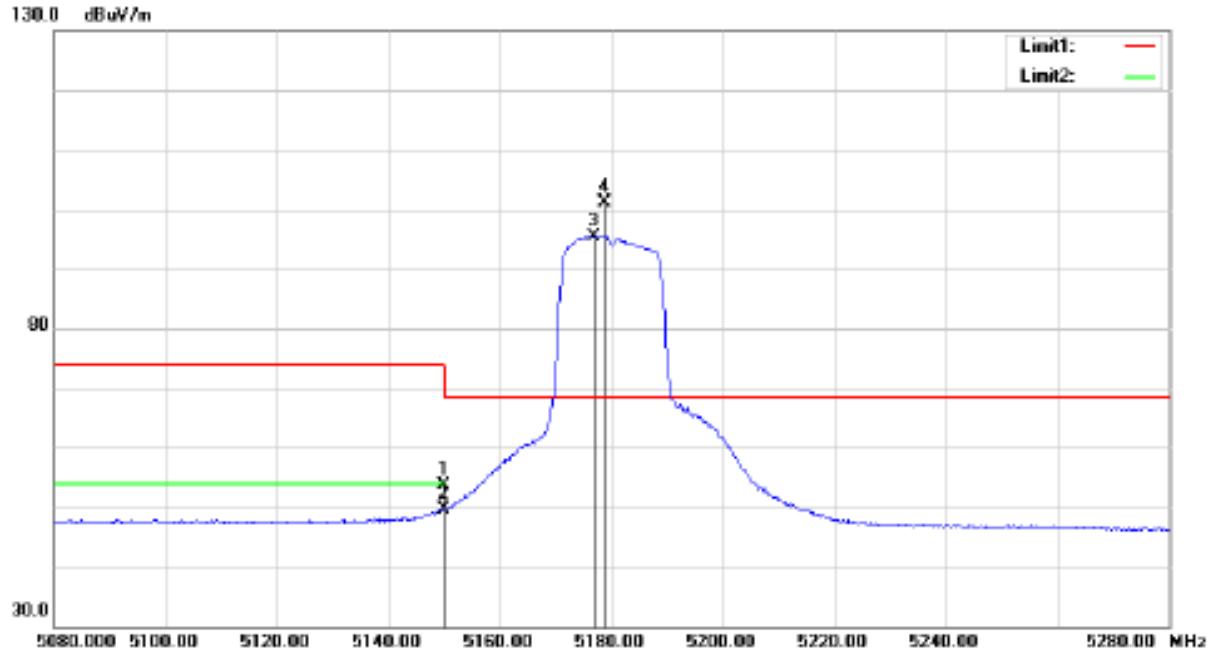
Date: Aug. 21, 2023



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	10358.01	40.58	14.35	54.93	68.30	-13.37	peak	
2		10364.37	28.97	14.36	43.33	68.30	-24.97	AVG	



Antenna Polarization : Vertical



Mk.	No.	Frequency (MHz)	Reading (dBuV/m)	Corrected factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Comment
	1	5150.000	46.33	7.21	53.54	74.00	-20.46	peak	
	2	5150.000	42.49	7.21	49.70	54.00	-4.30	AVG	
	3	5177.000	88.15	7.33	95.48	999.00	-903.5	AVG	
*	4	5178.800	93.86	7.34	101.20	68.30	32.90	peak	



Spectrum Research & Testing Lab., Inc.

No.167,Ln. 780, Shan-Tong Rd.,Ling 8, Shan-Tong Li, Chung-Li Dist., Taoyuan City 320, Taiwan (R.O.C.)

TEST REPORT

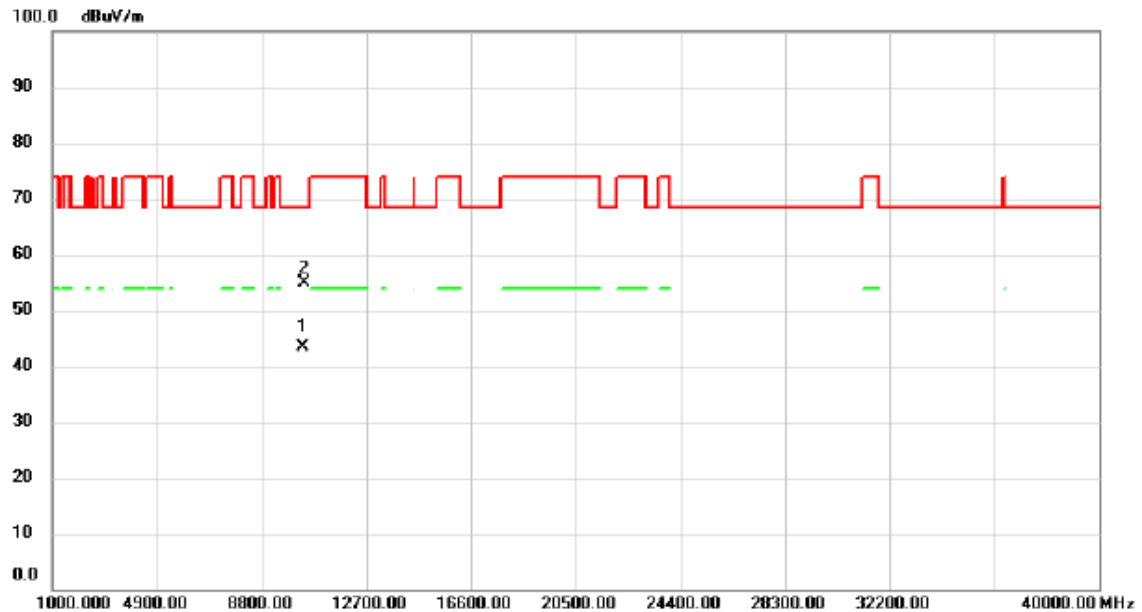
Reference No.: A23080102

Report No.: FCCA23080102-X0

FCC ID : 2AZ3ICC180W

Page: 36 of 99

Date: Aug. 21, 2023



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		10356.11	29.03	14.35	43.38	68.30	-24.92	AVG	
2	*	10363.42	40.49	14.36	54.85	68.30	-13.45	peak	

NOTE:

NOTE:

1. Measurement uncertainty is 4.04 dB.
2. Emission Level = Reading Value + Ant. Factor + Correct Factor (incl.:Cable Loss and Pre-Amplifier Gain)
3. The field strength of other emission frequencies were very low against the limit.
4. (F):The field strenght of fundamental frequency.



Spectrum Research & Testing Lab., Inc.

No.167,Ln. 780, Shan-Tong Rd.,Ling 8, Shan-Tong Li, Chung-Li Dist., Taoyuan City 320, Taiwan (R.O.C.)

TEST REPORT

Reference No.: A23080102

Report No.: FCCA23080102-X0

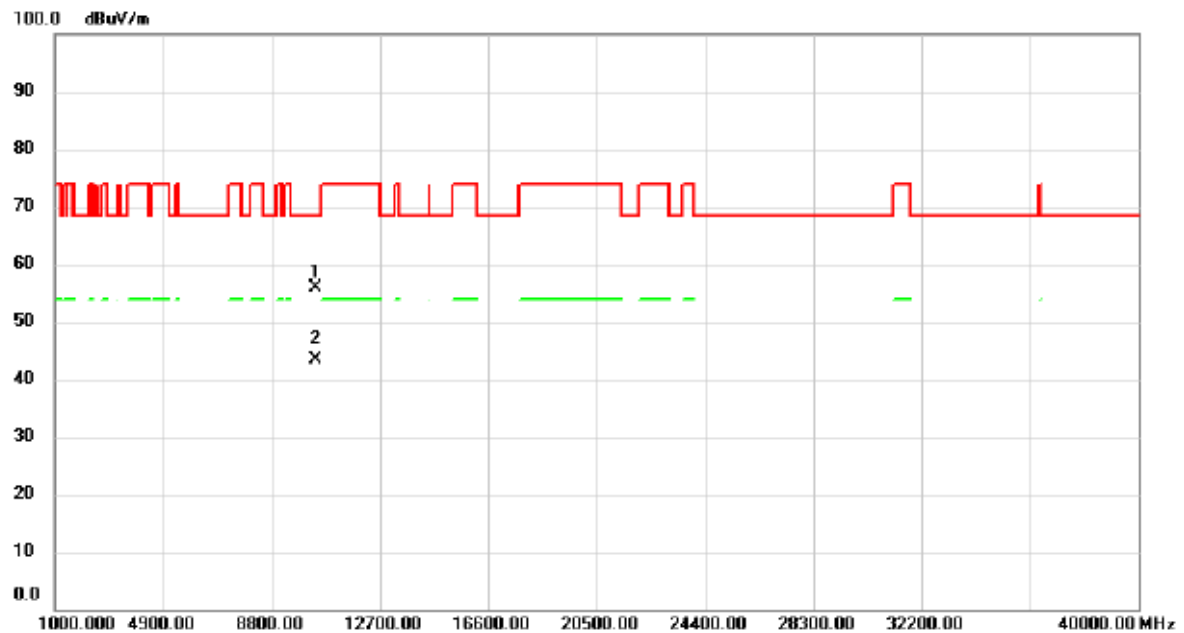
FCC ID : 2AZ3ICC180W

Page: 37 of 99

Date: Aug. 21, 2023

Temperature:	28 °C	Humidity:	74 %RH
Frequency Range:	1 - 40 GHz	Test Mode:	11N20
Detector Type:	PK. and AV.	L.O.:	5200 MHz
IF Bandwidth:	1 MHz	Tested Date:	Aug. 07, 2023

Antenna Polarization : Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	10399.19	41.52	14.44	55.96	68.30	-12.34	peak	
2		10403.96	28.98	14.45	43.43	68.30	-24.87	AVG	

NOTE:

1. Measurement uncertainty is 4.04 dB.
2. Emission Level = Reading Value + Ant. Factor + Correct Factor (incl.:Cable Loss and Pre-Amplifier Gain)
3. The field strength of other emission frequencies were very low against the limit.
4. (F):The field strength of fundamental frequency.



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TEST REPORT

Reference No.: A23080102

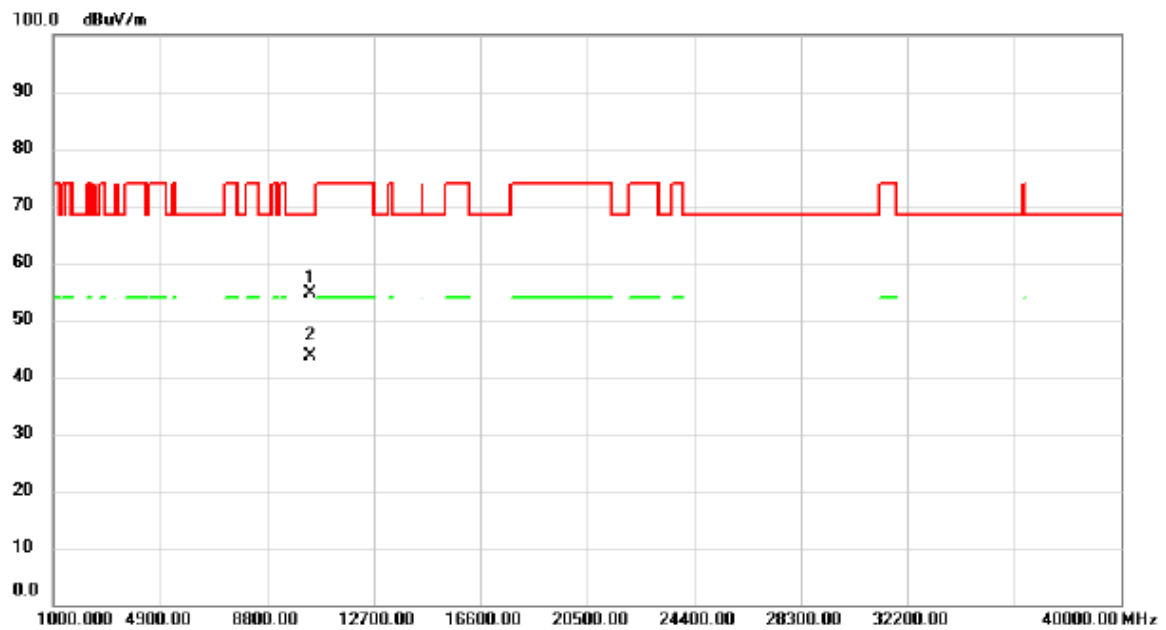
Report No.: FCCA23080102-X0

FCC ID : 2AZ3ICC180W

Page: 38 of 99

Date: Aug. 21, 2023

Antenna Polarization : Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	10395.32	40.23	14.43	54.66	68.30	-13.64	peak	
2		10403.48	29.21	14.45	43.66	68.30	-24.64	AVG	



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TEST REPORT

Reference No.: A23080102

Report No.: FCCA23080102-X0

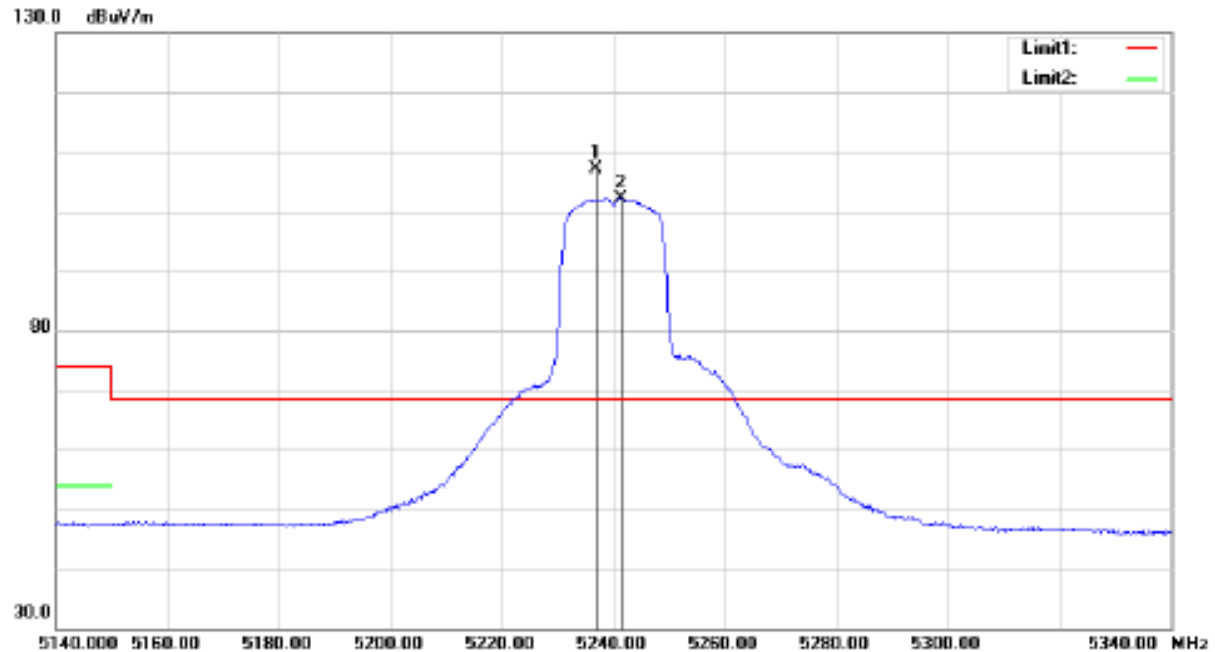
FCC ID : 2AZ3ICC180W

Page: 39 of 99

Date: Aug. 21, 2023

Temperature:	28 °C	Humidity:	74 %RH
Frequency Range:	1 - 40 GHz	Test Mode:	11N20
Detector Type:	PK. and AV.	L.O.:	5240 MHz
IF Bandwidth:	1 MHz	Tested Date:	Aug. 07, 2023

Antenna Polarization : Horizontal



Mk.	No.	Frequency (MHz)	Reading (dBuV/m)	Corrected factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Comment
*	1	5237.000	99.61	7.50	107.11	68.30	38.81	peak	
	2	5241.400	94.64	7.51	102.15	999.00	-896.8	AVG	



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TEST REPORT

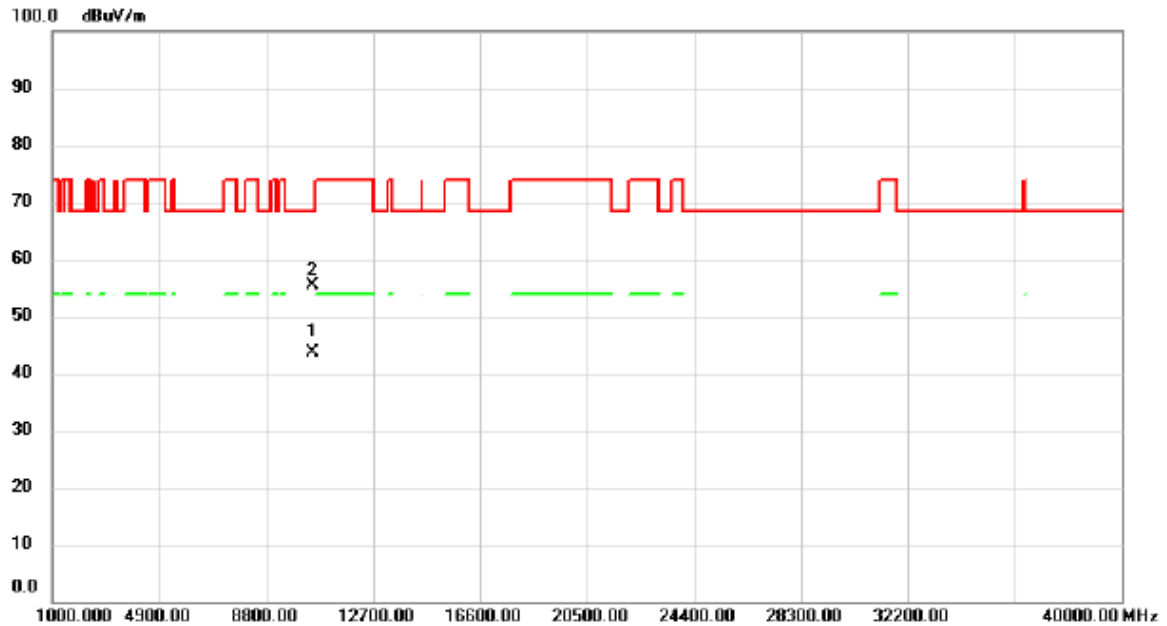
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Report No.: FCCA23080102-X0

FCC ID : 2AZ3ICC180W

Page: 40 of 99

Date: Aug. 21, 2023



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		10479.34	28.90	14.61	43.51	68.30	-24.79	AVG	
2	*	10483.09	40.88	14.61	55.49	68.30	-12.81	peak	

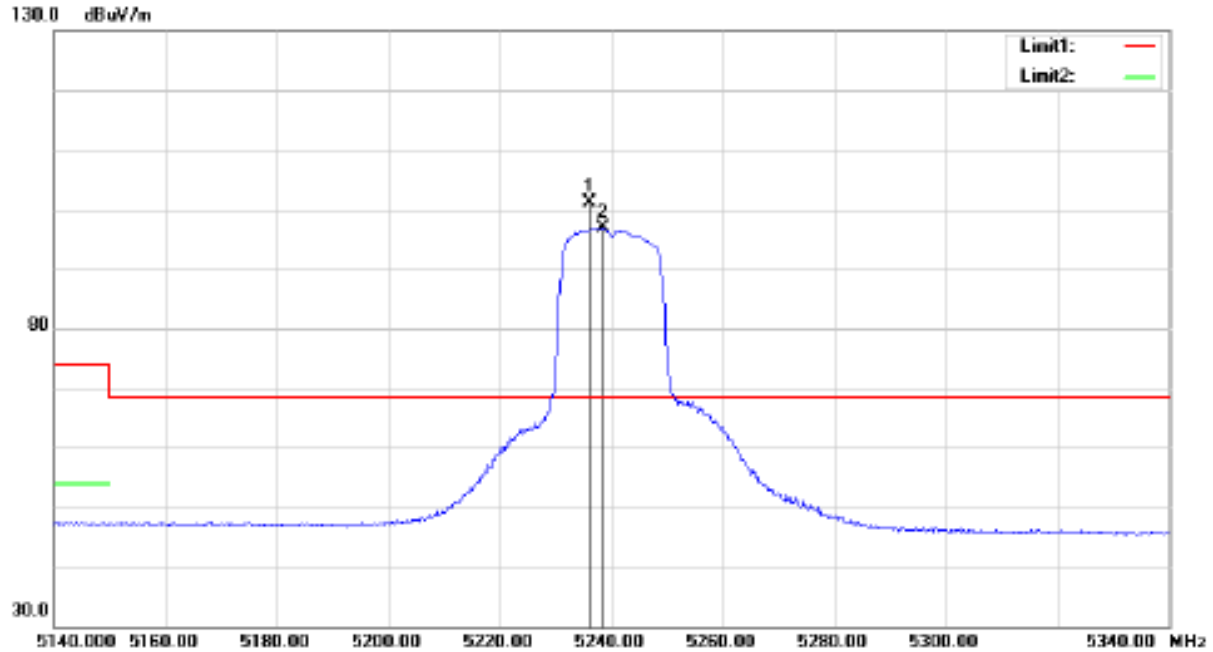


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TEST REPORT

Reference No.: A23080102
Report No.: FCCA23080102-X0
FCC ID : 2AZ3ICC180W
Page: 41 of 99
Date: Aug. 21, 2023

Antenna Polarization : Vertical



Mk.	No.	Frequency (MHz)	Reading (dBuV/m)	Corrected factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Comment
*	1	5236.200	93.57	7.50	101.07	68.30	32.77	peak	
	2	5238.600	89.32	7.51	96.83	999.00	-902.1	AVG	



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TEST REPORT

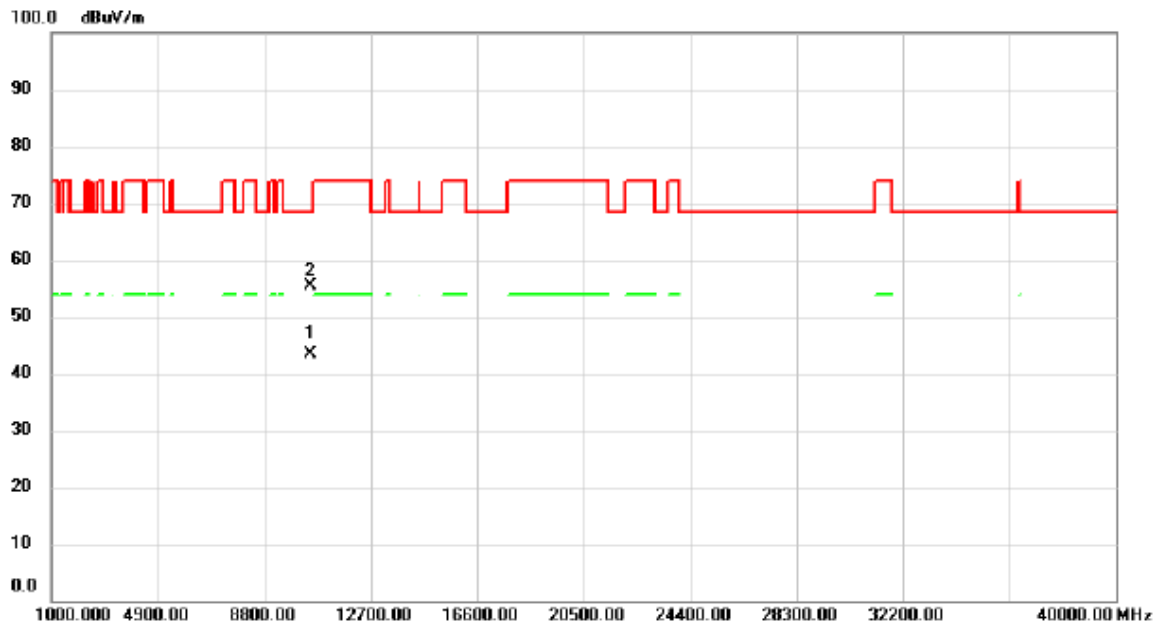
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Report No.: FCCA23080102-X0

FCC ID : 2AZ3ICC180W

Page: 42 of 99

Date: Aug. 21, 2023



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		10476.74	28.87	14.61	43.48	68.30	-24.82	AVG	
2	*	10483.20	40.75	14.61	55.36	68.30	-12.94	peak	

NOTE:

NOTE:

1. Measurement uncertainty is 4.04 dB.
2. Emission Level = Reading Value + Ant. Factor + Correct Factor (incl.:Cable Loss and Pre-Amplifier Gain)
3. The field strength of other emission frequencies were very low against the limit.
4. (F):The field strenght of fundamental frequency.



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TEST REPORT

Reference No.: A23080102

Report No.: FCCA23080102-X0

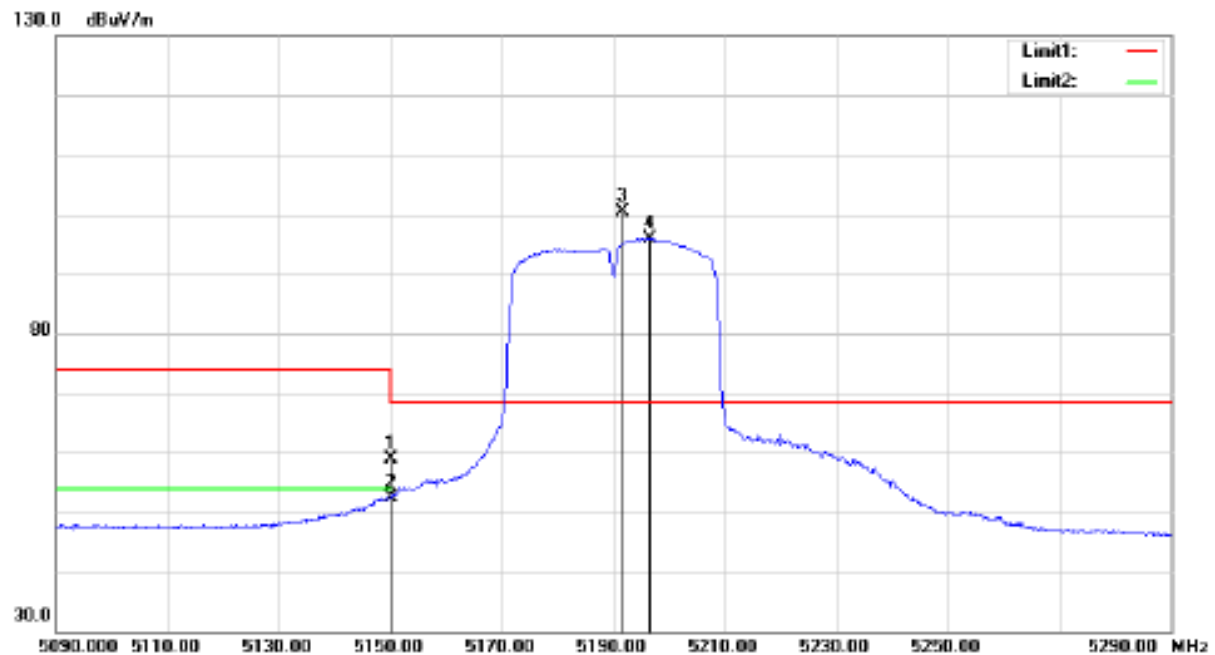
FCC ID : 2AZ3ICC180W

Page: 43 of 99

Date: Aug. 21, 2023

Temperature:	28 °C	Humidity:	74 %RH
Frequency Range:	1 - 40 GHz	Test Mode:	11N40
Detector Type:	PK. and AV.	L.O.:	5190 MHz
IF Bandwidth:	1 MHz	Tested Date:	Aug. 07, 2023

Antenna Polarization : Horizontal



Mk.	No.	Frequency (MHz)	Reading (dBuV/m)	Corrected factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Comment
	1	5150.000	51.73	7.21	58.94	74.00	-15.06	peak	
	2	5150.000	45.26	7.21	52.47	54.00	-1.53	AVG	
*	3	5191.800	93.05	7.39	100.44	68.30	32.14	peak	
	4	5196.600	88.53	7.41	95.94	999.00	-903.0	AVG	



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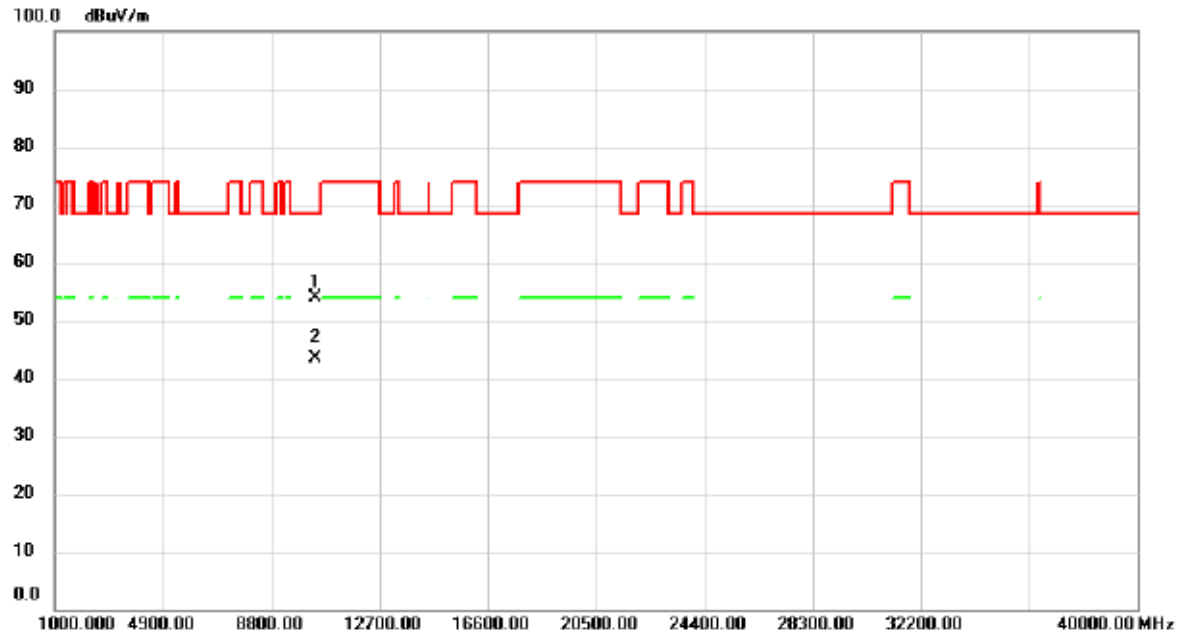
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Report No.: FCCA23080102-X0

FCC ID : 2AZ3ICC180W

Page: 44 of 99

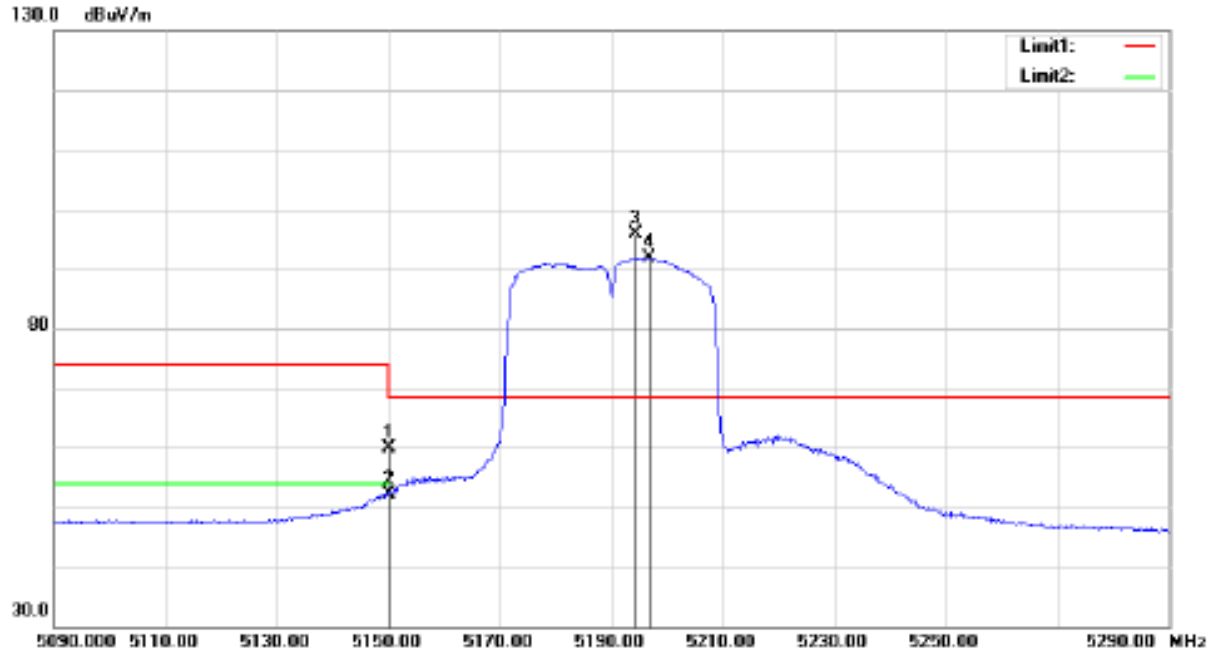
Date: Aug. 21, 2023



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	10379.76	39.55	14.40	53.95	68.30	-14.35	peak	
2		10384.95	28.93	14.41	43.34	68.30	-24.96	AVG	



Antenna Polarization : Vertical



Mk.	No.	Frequency (MHz)	Reading (dBuV/m)	Corrected factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Comment
	1	5150.000	52.68	7.21	59.89	74.00	-14.11	peak	
	2	5150.000	45.03	7.21	52.24	54.00	-1.76	AVG	
*	3	5194.400	88.51	7.40	95.91	68.30	27.61	peak	
	4	5196.800	84.53	7.41	91.94	999.00	-907.0	AVG	



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TEST REPORT

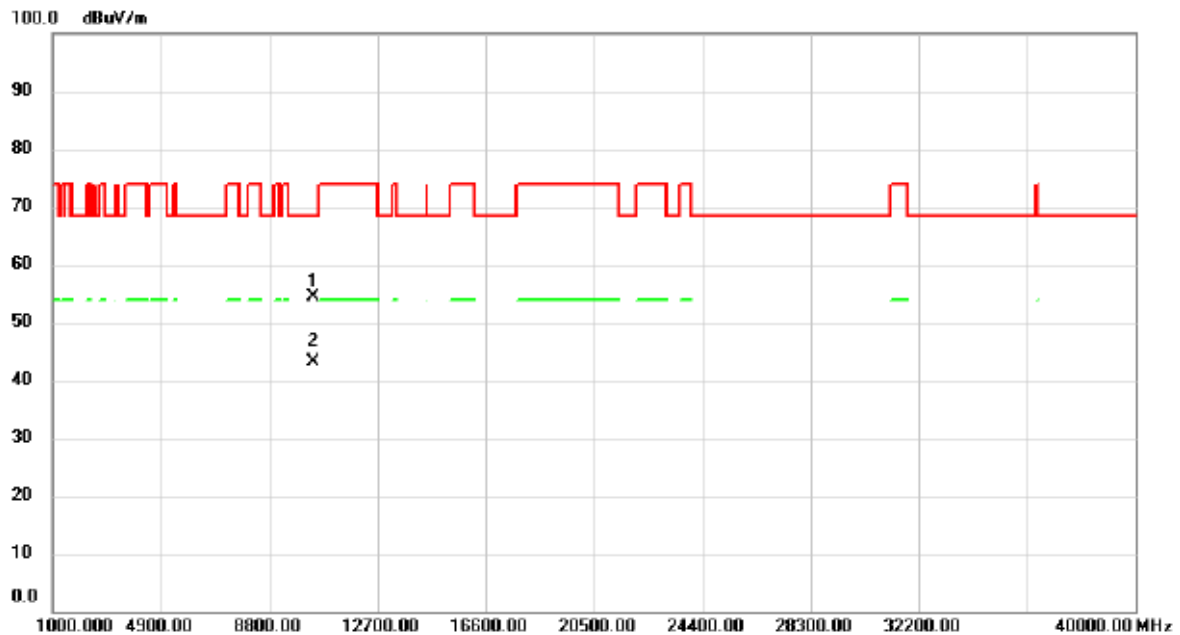
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Report No.: FCCA23080102-X0

FCC ID : 2AZ3IC180W

Page: 46 of 99

Date: Aug. 21, 2023



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	10377.58	39.95	14.39	54.34	68.30	-13.96	peak	
2		10378.53	28.79	14.39	43.18	68.30	-25.12	AVG	

NOTE:

NOTE:

1. Measurement uncertainty is 4.04 dB.
2. Emission Level = Reading Value + Ant. Factor + Correct Factor (incl.:Cable Loss and Pre-Amplifier Gain)
3. The field strength of other emission frequencies were very low against the limit.
4. (F):The field strength of fundamental frequency.



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TEST REPORT

Reference No.: A23080102

Report No.: FCCA23080102-X0

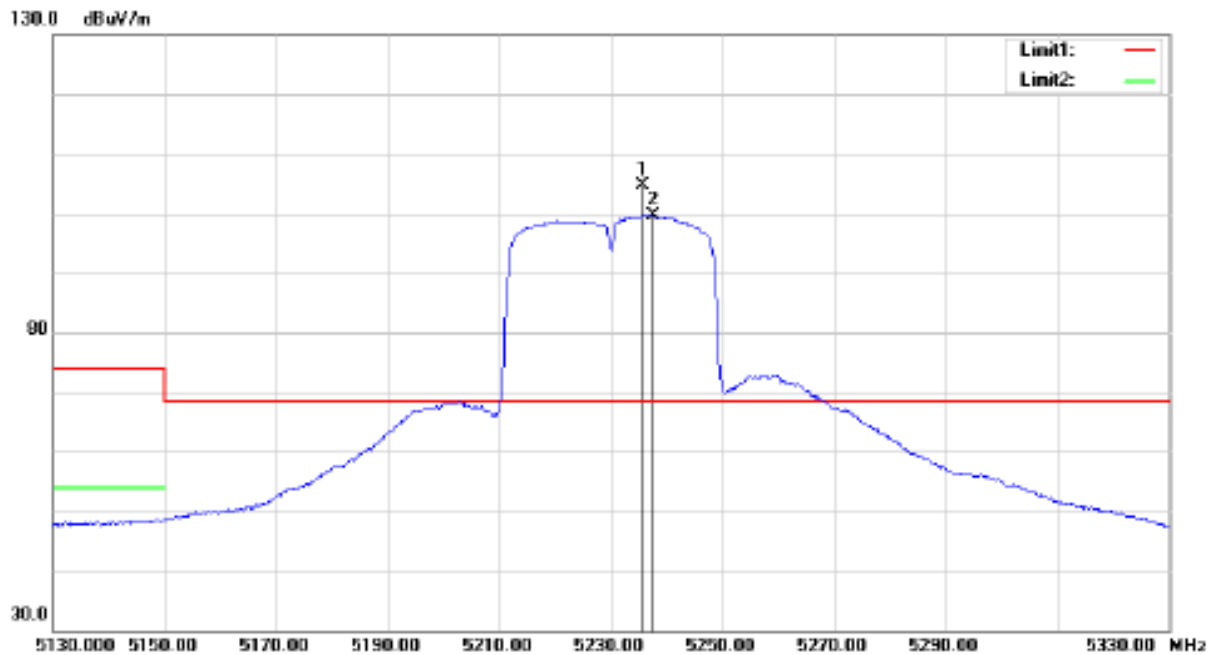
FCC ID : 2AZ3IC180W

Page: 47 of 99

Date: Aug. 21, 2023

Temperature:	28 °C	Humidity:	74 %RH
Frequency Range:	1 - 40 GHz	Test Mode:	11N40
Detector Type:	PK. and AV.	L.O.:	5230 MHz
IF Bandwidth:	1 MHz	Tested Date:	Aug. 07, 2023

Antenna Polarization : Horizontal



Mk.	No.	Frequency (MHz)	Reading (dBuV/m)	Corrected factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Comment
*	1	5235.800	97.14	7.50	104.64	68.30	36.34	peak	
	2	5237.600	92.17	7.51	99.68	999.00	-899.3	AVG	



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TEST REPORT

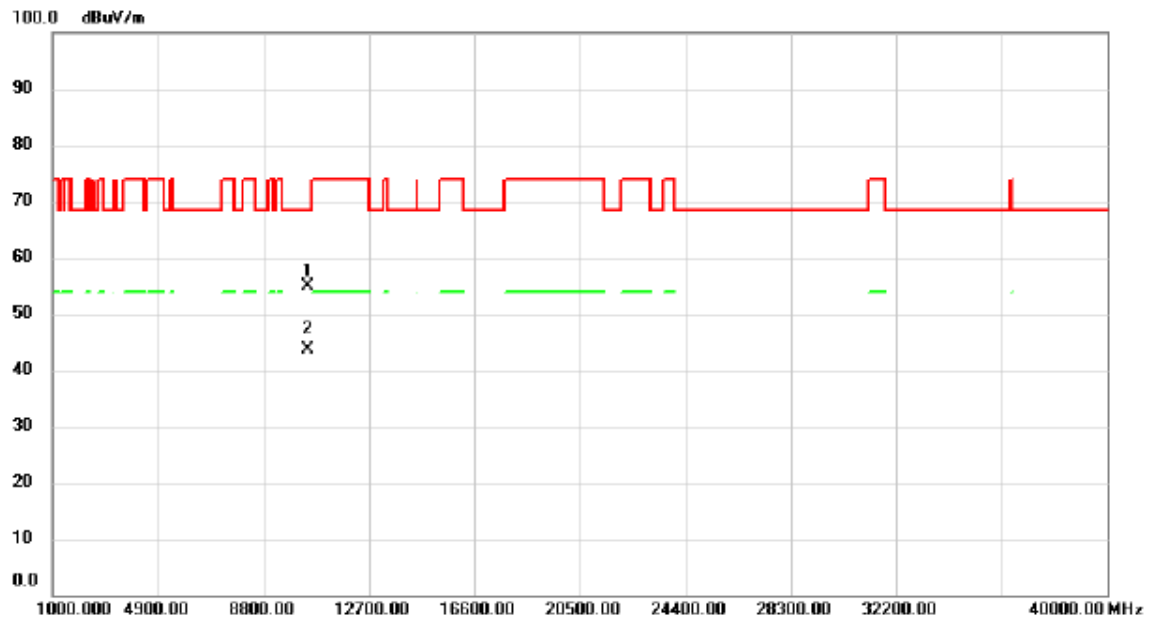
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Report No.: FCCA23080102-X0

FCC ID : 2AZ3ICC180W

Page: 48 of 99

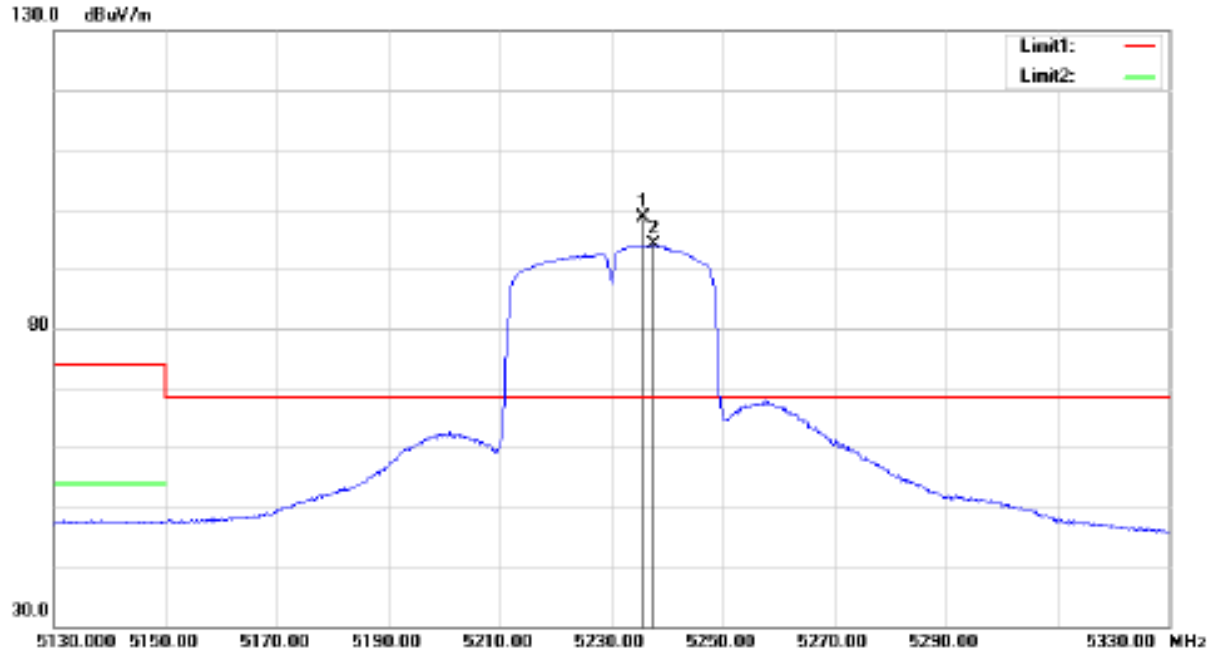
Date: Aug. 21, 2023



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	10462.23	40.27	14.57	54.84	68.30	-13.46	peak	
2		10462.90	29.03	14.57	43.60	68.30	-24.70	AVG	



Antenna Polarization : Vertical



Mk.	No.	Frequency (MHz)	Reading (dBuV/m)	Corrected factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Comment
*	1	5235.800	91.23	7.50	98.73	68.30	30.43	peak	
	2	5237.600	86.54	7.51	94.05	999.00	-904.9	AVG	



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TEST REPORT

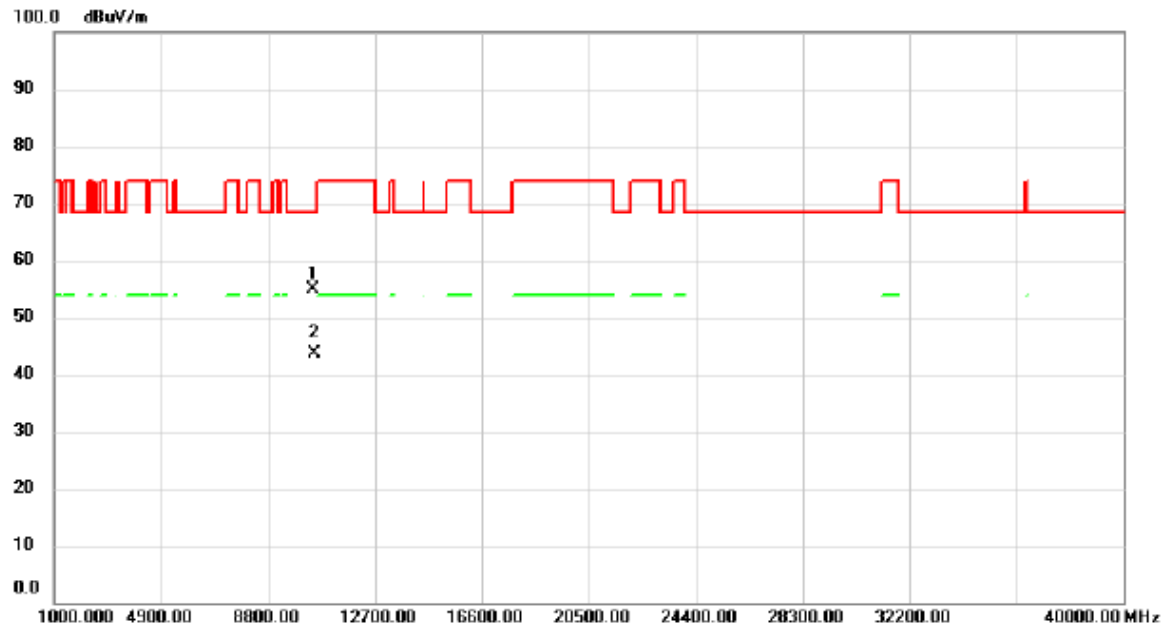
Reference No.: A23080102

Report No.: FCCA23080102-X0

FCC ID : 2AZ3ICC180W

Page: 50 of 99

Date: Aug. 21, 2023



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	*	10457.78	40.24	14.57	54.81	68.30	-13.49	peak	
2		10464.24	28.98	14.57	43.55	68.30	-24.75	AVG	

NOTE:

NOTE:

1. Measurement uncertainty is 4.04 dB.
2. Emission Level = Reading Value + Ant. Factor + Correct Factor (incl.:Cable Loss and Pre-Amplifier Gain)
3. The field strength of other emission frequencies were very low against the limit.
4. (F):The field strength of fundamental frequency.



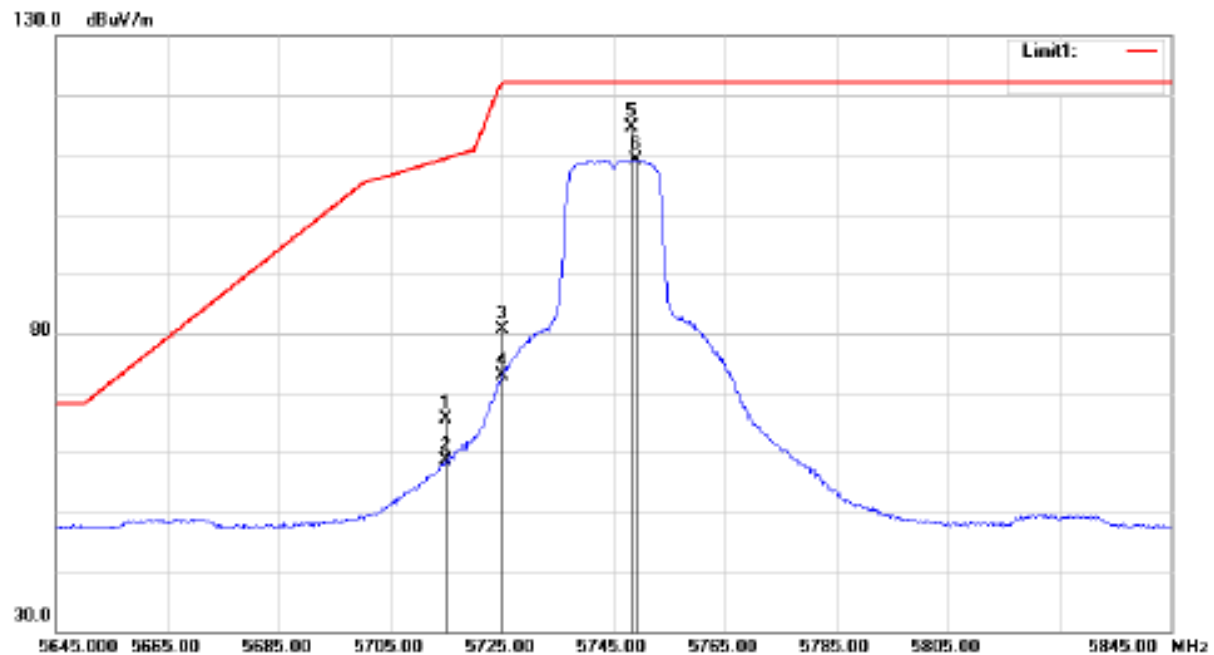
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TEST REPORT

Reference No.: A23080102
Report No.: FCCA23080102-X0
FCC ID : 2AZ3IC180W
Page: 51 of 99
Date: Aug. 21, 2023

Temperature:	28 °C	Humidity:	74 %RH
Frequency Range:	1 - 40 GHz	Test Mode:	11A
Detector Type:	PK. and AV.	L.O.:	5745 MHz
IF Bandwidth:	1 MHz	Tested Date:	Aug. 07, 2023

Antenna Polarization : Horizontal



Mk.	No.	Frequency (MHz)	Reading (dBuV/m)	Corrected factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Comment
	1	5715.000	57.99	7.60	65.59	109.40	-43.81	peak	
	2	5715.000	50.99	7.60	58.59	999.00	-940.4	AVG	
	3	5725.000	73.06	7.60	80.66	122.20	-41.54	peak	
	4	5725.000	65.36	7.60	72.96	999.00	-926.0	AVG	
*	5	5748.400	107.07	7.61	114.68	122.20	-7.52	peak	
	6	5749.000	101.54	7.61	109.15	999.00	-889.8	AVG	



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TEST REPORT

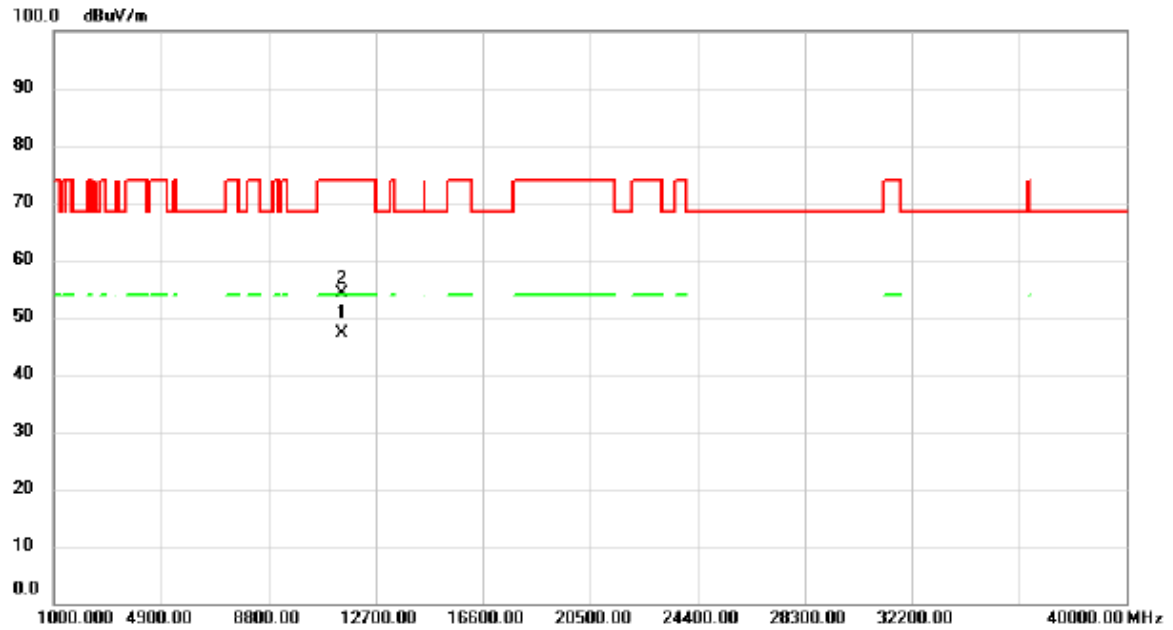
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Report No.: FCCA23080102-X0

FCC ID : 2AZ3ICC180W

Page: 52 of 99

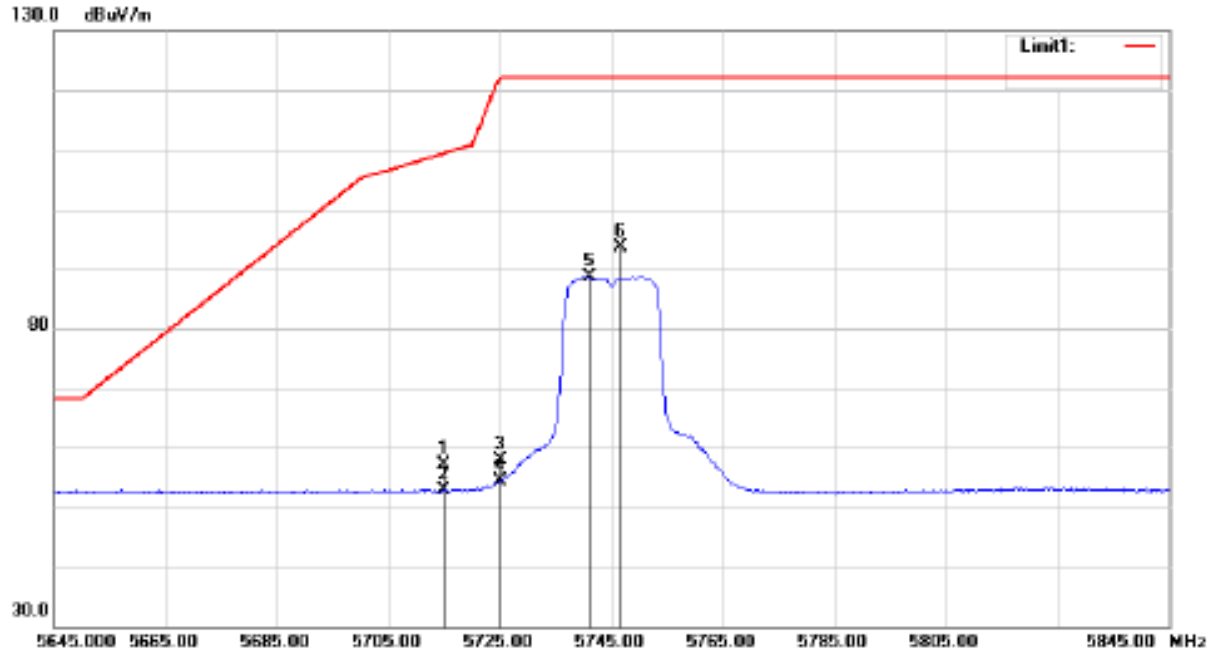
Date: Aug. 21, 2023



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	11489.13	30.54	16.48	47.02	54.00	-6.98	AVG	
2		11492.16	37.66	16.48	54.14	74.00	-19.86	peak	



Antenna Polarization : Vertical



Mk.	No.	Frequency (MHz)	Reading (dBuV/m)	Corrected factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Comment
	1	5715.000	37.42	19.60	57.02	109.40	-52.38	peak	
	2	5715.000	33.16	19.60	52.76	999.00	-946.2	AVG	
	3	5725.000	38.18	19.60	57.78	122.20	-64.42	peak	
	4	5725.000	34.67	19.60	54.27	999.00	-944.7	AVG	
	5	5741.000	68.96	19.61	88.57	999.00	-910.4	AVG	
*	6	5746.800	73.95	19.61	93.56	122.20	-28.64	peak	



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TEST REPORT

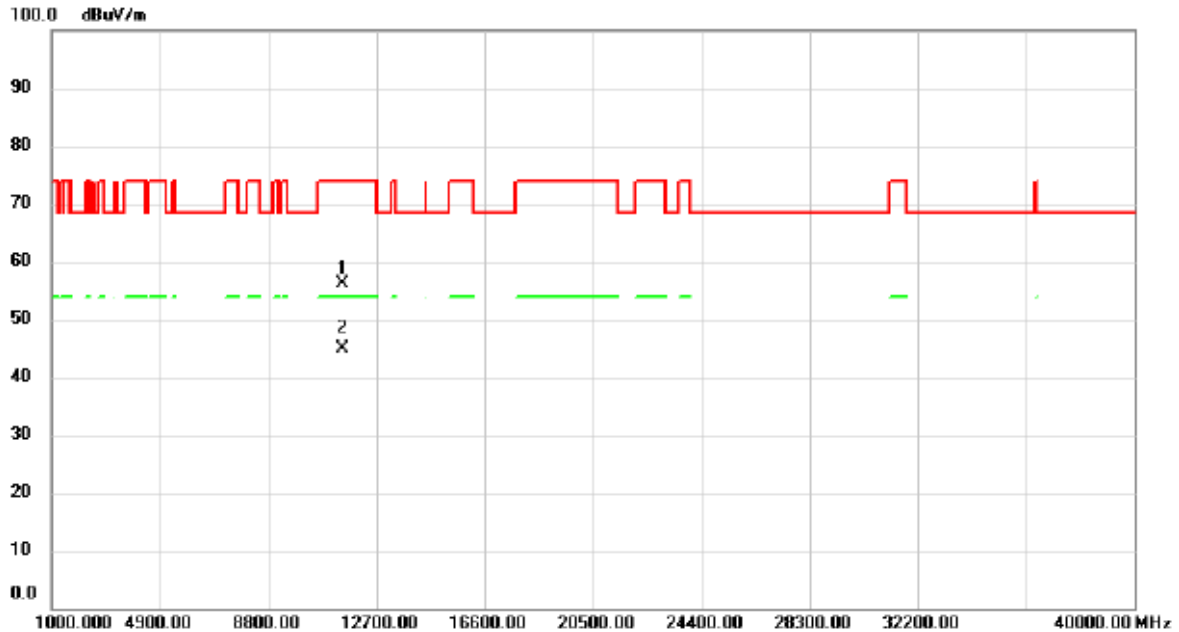
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Report No.: FCCA23080102-X0

FCC ID : 2AZ3ICC180W

Page: 54 of 99

Date: Aug. 21, 2023



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		11485.85	39.58	16.48	56.06	74.00	-17.94	peak	
2	*	11489.49	28.49	16.48	44.97	54.00	-9.03	AVG	

NOTE:

NOTE:

1. Measurement uncertainty is 4.04 dB.
2. Emission Level = Reading Value + Ant. Factor + Correct Factor (incl.:Cable Loss and Pre-Amplifier Gain)
3. The field strength of other emission frequencies were very low against the limit.
4. (F):The field strength of fundamental frequency.



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TEST REPORT

Reference No.: A23080102

Report No.: FCCA23080102-X0

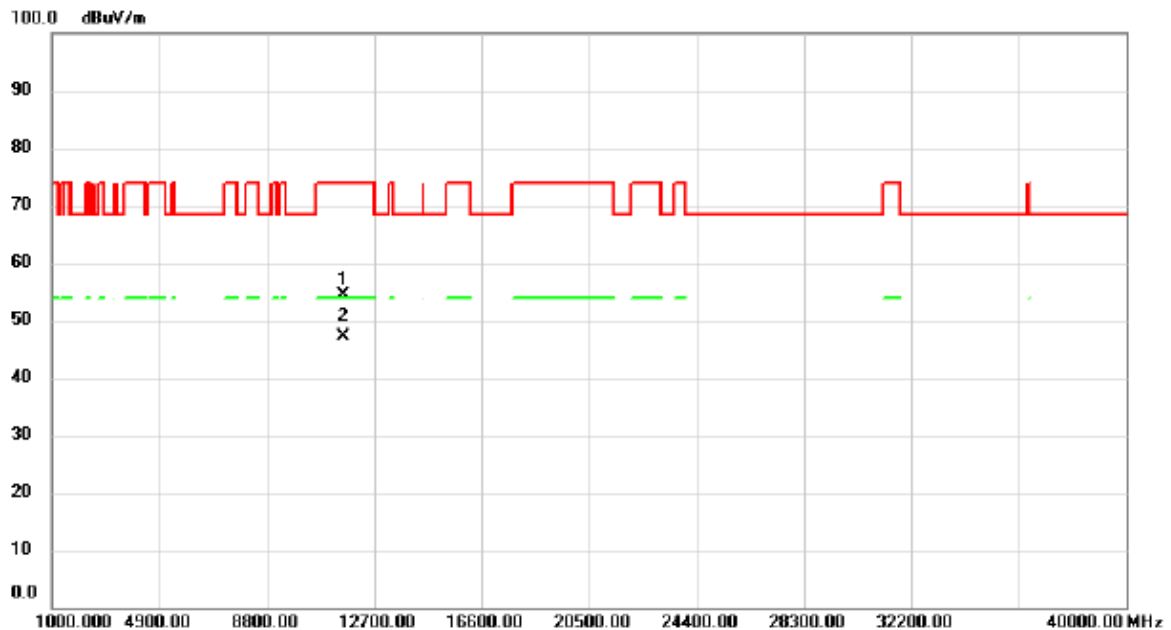
FCC ID : 2AZ3ICC180W

Page: 55 of 99

Date: Aug. 21, 2023

Temperature:	28 °C	Humidity:	74 %RH
Frequency Range:	1 - 40 GHz	Test Mode:	11A
Detector Type:	PK. and AV.	L.O.:	5785 MHz
IF Bandwidth:	1 MHz	Tested Date:	Aug. 07, 2023

Antenna Polarization : Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		11565.74	37.78	16.71	54.49	74.00	-19.51	peak	
2	*	11566.14	30.33	16.71	47.04	54.00	-6.96	AVG	

NOTE:

1. Measurement uncertainty is 4.04 dB.
2. Emission Level = Reading Value + Ant. Factor + Correct Factor (incl.:Cable Loss and Pre-Amplifier Gain)
3. The field strength of other emission frequencies were very low against the limit.
4. (F):The field strength of fundamental frequency.



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TEST REPORT

Reference No.: A23080102

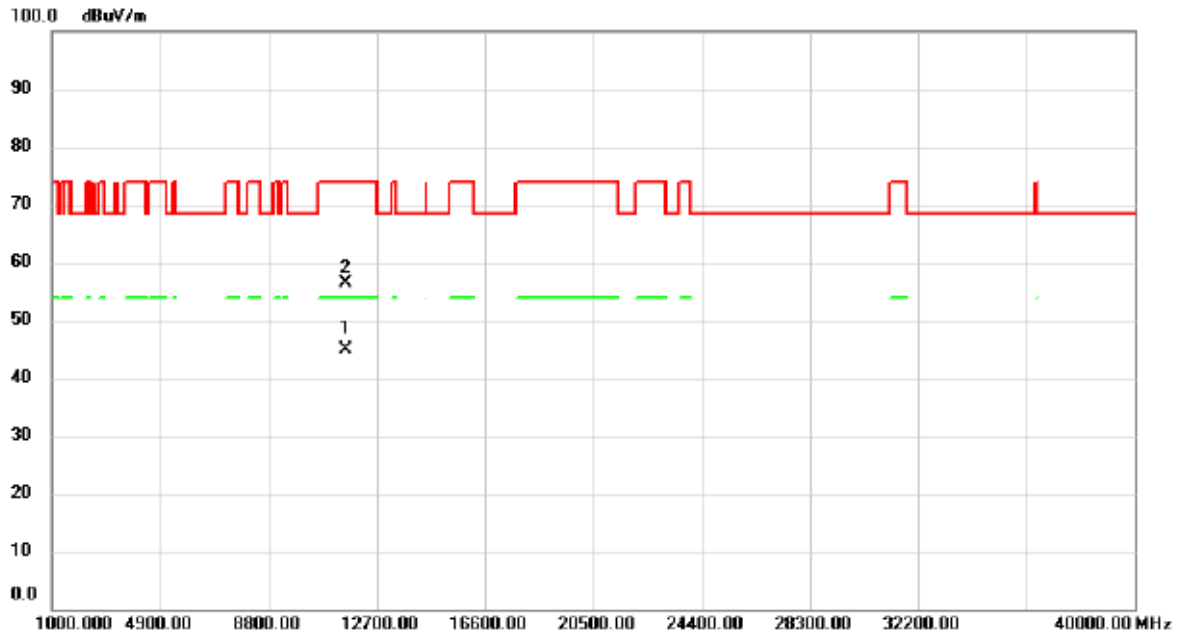
Report No.: FCCA23080102-X0

FCC ID : 2AZ3ICC180W

Page: 56 of 99

Date: Aug. 21, 2023

Antenna Polarization : Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	11565.13	28.14	16.71	44.85	54.00	-9.15	AVG	
2		11569.73	39.64	16.72	56.36	74.00	-17.64	peak	



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TEST REPORT

Reference No.: A23080102

Report No.: FCCA23080102-X0

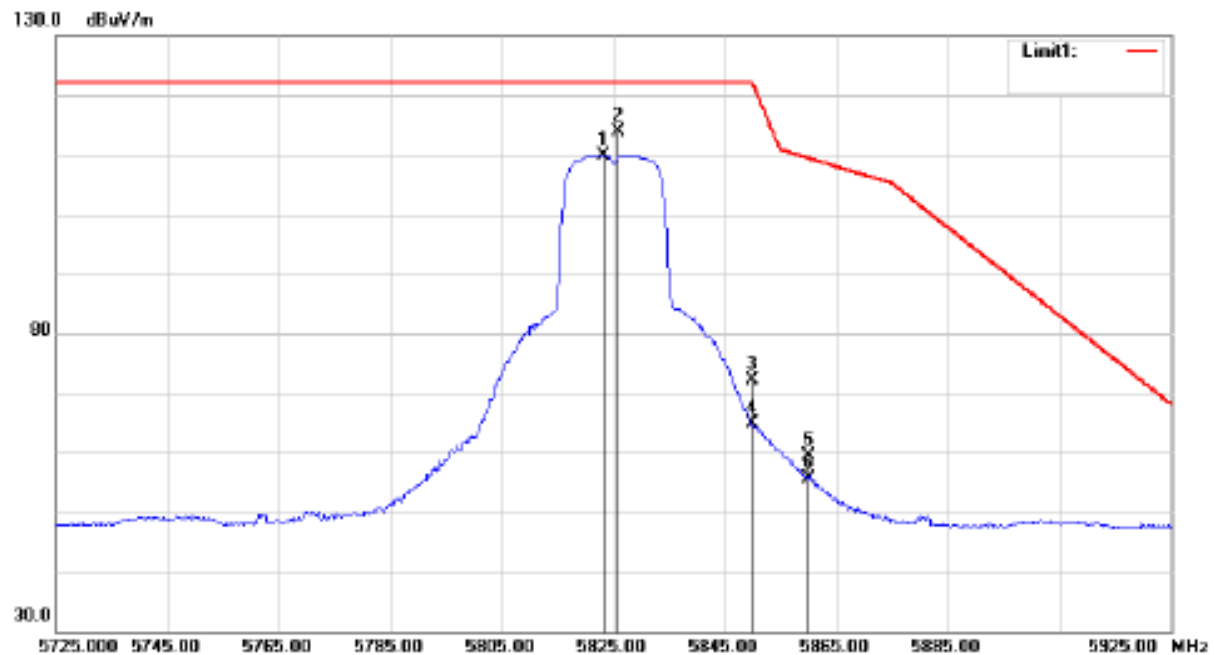
FCC ID : 2AZ3IC180W

Page: 57 of 99

Date: Aug. 21, 2023

Temperature:	28 °C	Humidity:	74 %RH
Frequency Range:	1 - 40 GHz	Test Mode:	11A
Detector Type:	PK. and AV.	L.O.:	5825 MHz
IF Bandwidth:	1 MHz	Tested Date:	Aug. 07, 2023

Antenna Polarization : Horizontal



Mk.	No.	Frequency (MHz)	Reading (dBuV/m)	Corrected factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Comment
	1	5823.200	102.03	7.75	109.78	999.00	-889.2	AVG	
*	2	5825.800	106.22	7.75	113.97	122.20	-8.23	peak	
	3	5850.000	64.25	7.76	72.01	122.20	-50.19	peak	
	4	5850.000	57.17	7.76	64.93	999.00	-934.0	AVG	
	5	5860.000	51.53	7.79	59.32	109.40	-50.08	peak	
	6	5860.000	47.89	7.79	55.68	999.00	-943.3	AVG	



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Chung-Li Dist., Taoyuan City
320, Taiwan (R.O.C.)

TEST REPORT

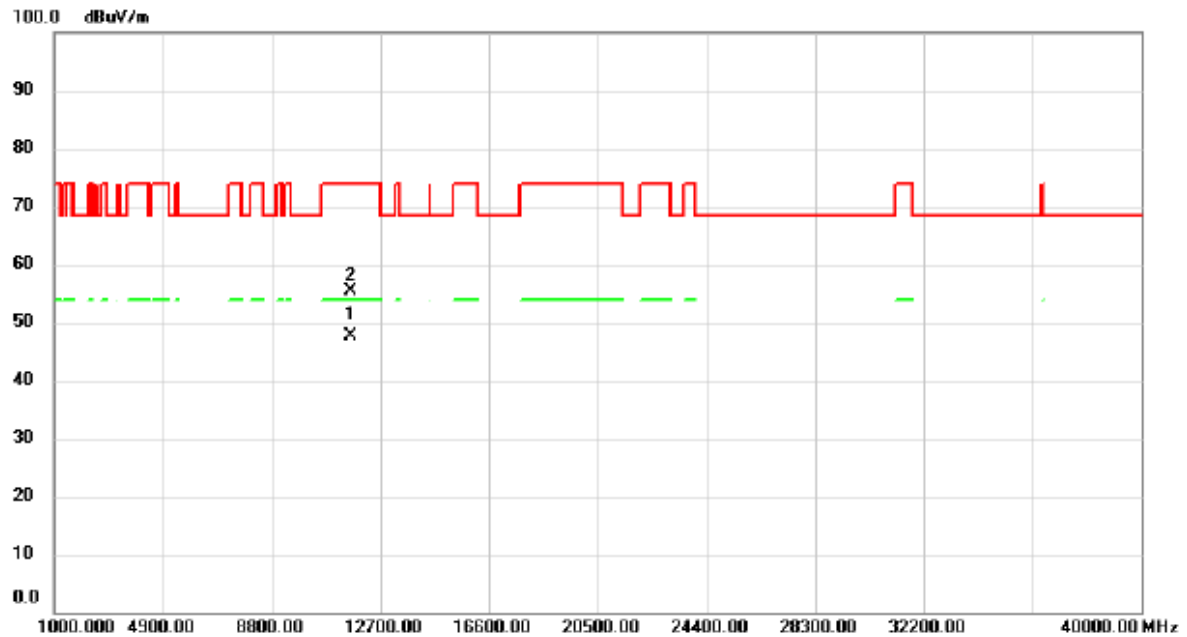
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Report No.: FCCA23080102-X0

FCC ID : 2AZ3ICC180W

Page: 58 of 99

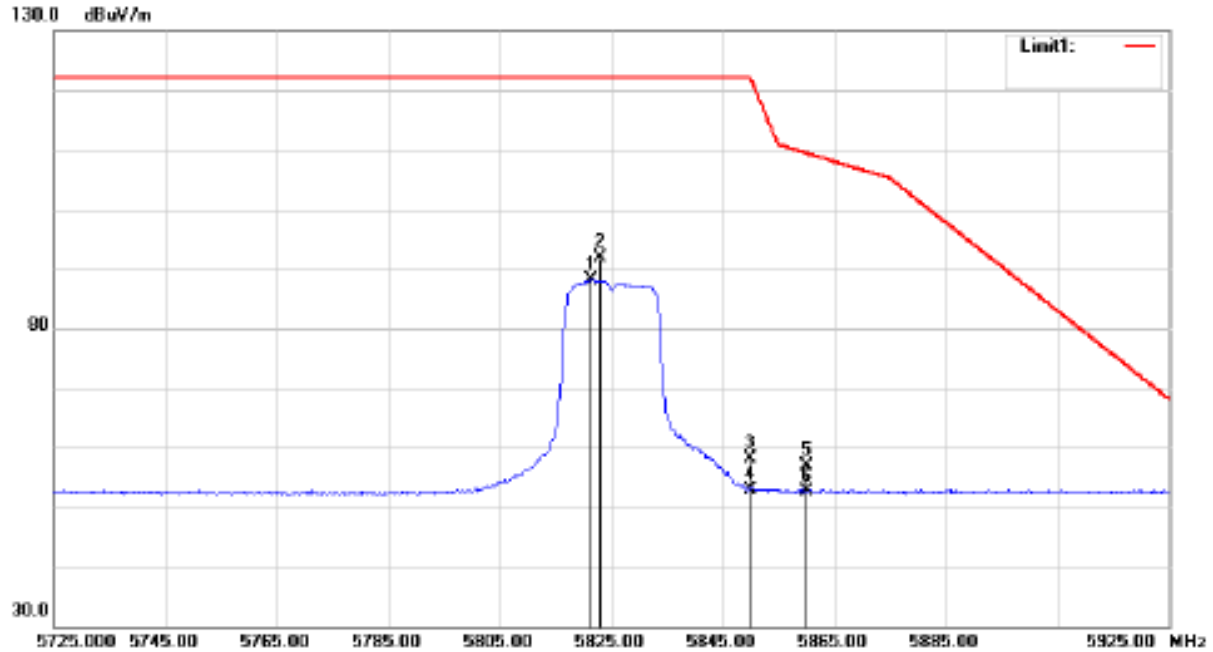
Date: Aug. 21, 2023



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	11651.84	30.62	16.94	47.56	54.00	-6.44	AVG	
2		11653.56	38.42	16.94	55.36	74.00	-18.64	peak	



Antenna Polarization : Vertical



Mk.	No.	Frequency (MHz)	Reading (dBuV/m)	Corrected factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Comment
	1	5821.400	68.31	19.75	88.06	999.00	-910.9	AVG	
*	2	5823.000	72.18	19.75	91.93	122.20	-30.27	peak	
	3	5850.000	38.33	19.76	58.09	122.20	-64.11	peak	
	4	5850.000	33.14	19.76	52.90	999.00	-946.1	AVG	
	5	5860.000	37.03	19.79	56.82	109.40	-52.58	peak	
	6	5860.000	32.93	19.79	52.72	999.00	-946.2	AVG	



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TEST REPORT

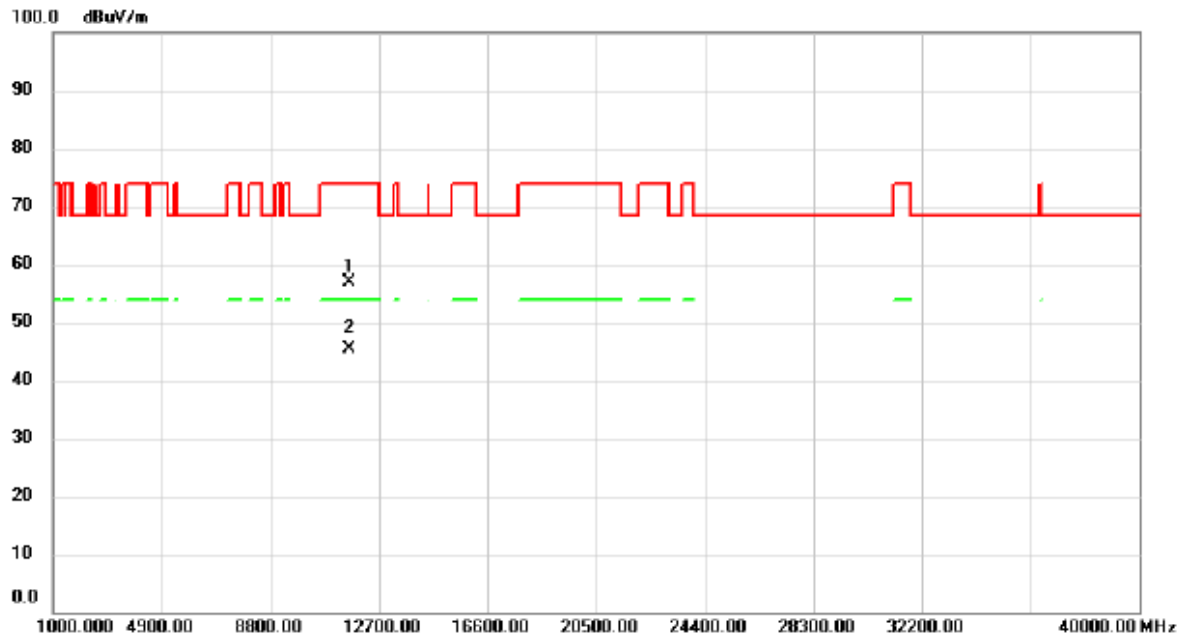
Reference No.: A23080102

Report No.: FCCA23080102-X0

FCC ID : 2AZ3ICC180W

Page: 60 of 99

Date: Aug. 21, 2023



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		11652.79	39.83	16.94	56.77	74.00	-17.23	peak	
2	*	11654.19	28.52	16.94	45.46	54.00	-8.54	AVG	

NOTE:

1. Measurement uncertainty is 4.04 dB.
2. Emission Level = Reading Value + Ant. Factor + Correct Factor (incl.:Cable Loss and Pre-Amplifier Gain)
3. The field strength of other emission frequencies were very low against the limit.
4. (F):The field strength of fundamental frequency.

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TEST REPORT

Reference No.: A23080102

Report No.: FCCA23080102-X0

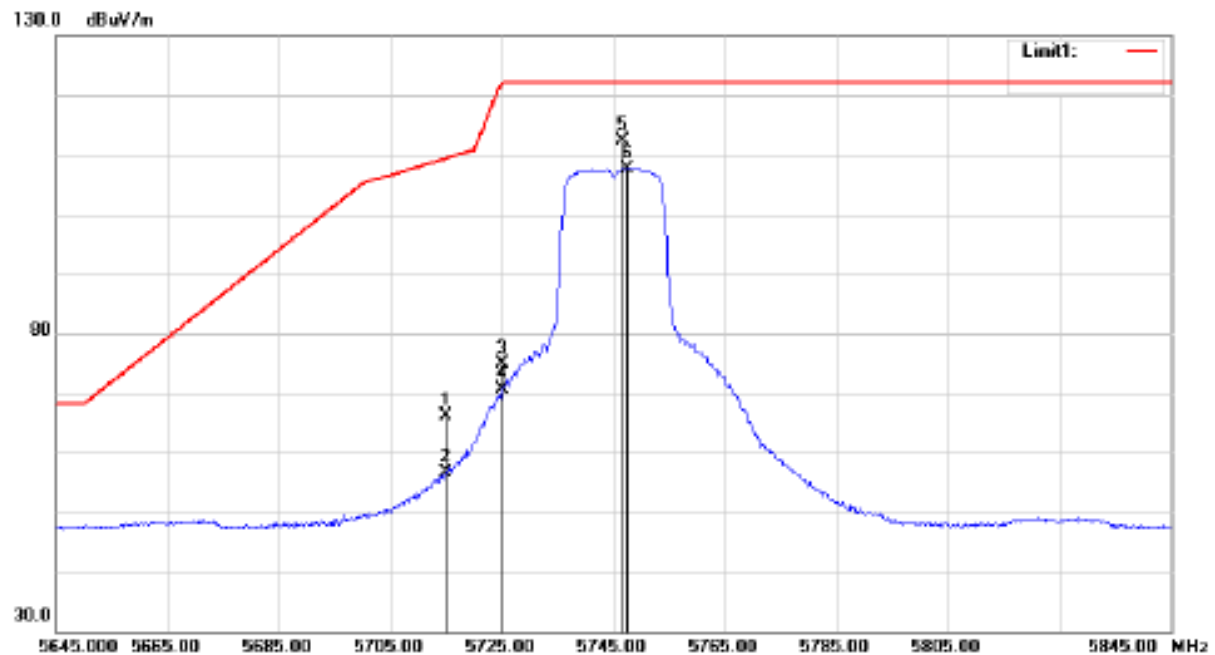
FCC ID : 2AZ3IC180W

Page: 61 of 99

Date: Aug. 21, 2023

Temperature:	28 °C	Humidity:	74 %RH
Frequency Range:	1 - 40 GHz	Test Mode:	11N20
Detector Type:	PK. and AV.	L.O.:	5745 MHz
IF Bandwidth:	1 MHz	Tested Date:	Aug. 07, 2023

Antenna Polarization : Horizontal



Mk.	No.	Frequency (MHz)	Reading (dBUV/m)	Corrected factor(dB)	Result (dBUV/m)	Limit (dBUV/m)	Margin (dB)	Detector	Comment
	1	5715.000	58.56	7.60	66.16	109.40	-43.24	peak	
	2	5715.000	49.01	7.60	56.61	999.00	-942.3	AVG	
	3	5725.000	67.24	7.60	74.84	122.20	-47.36	peak	
	4	5725.000	63.03	7.60	70.63	999.00	-928.3	AVG	
*	5	5746.600	104.89	7.61	112.50	122.20	-9.70	peak	
	6	5747.400	100.00	7.61	107.61	999.00	-891.3	AVG	



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TEST REPORT

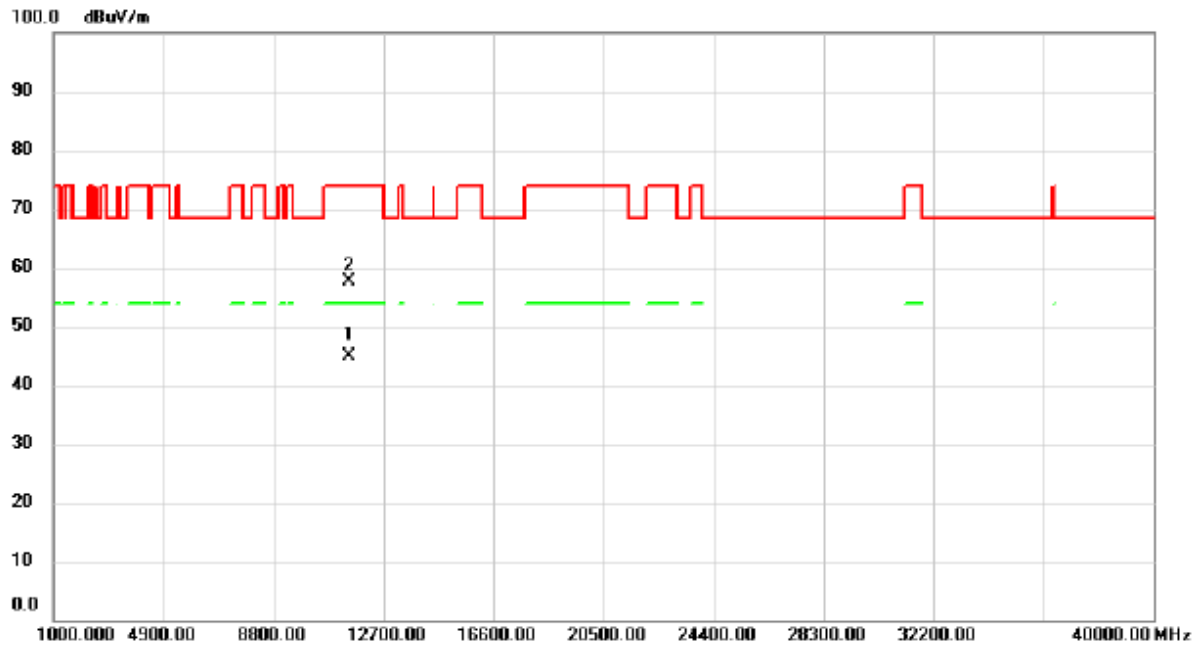
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Report No.: FCCA23080102-X0

FCC ID : 2AZ3ICC180W

Page: 62 of 99

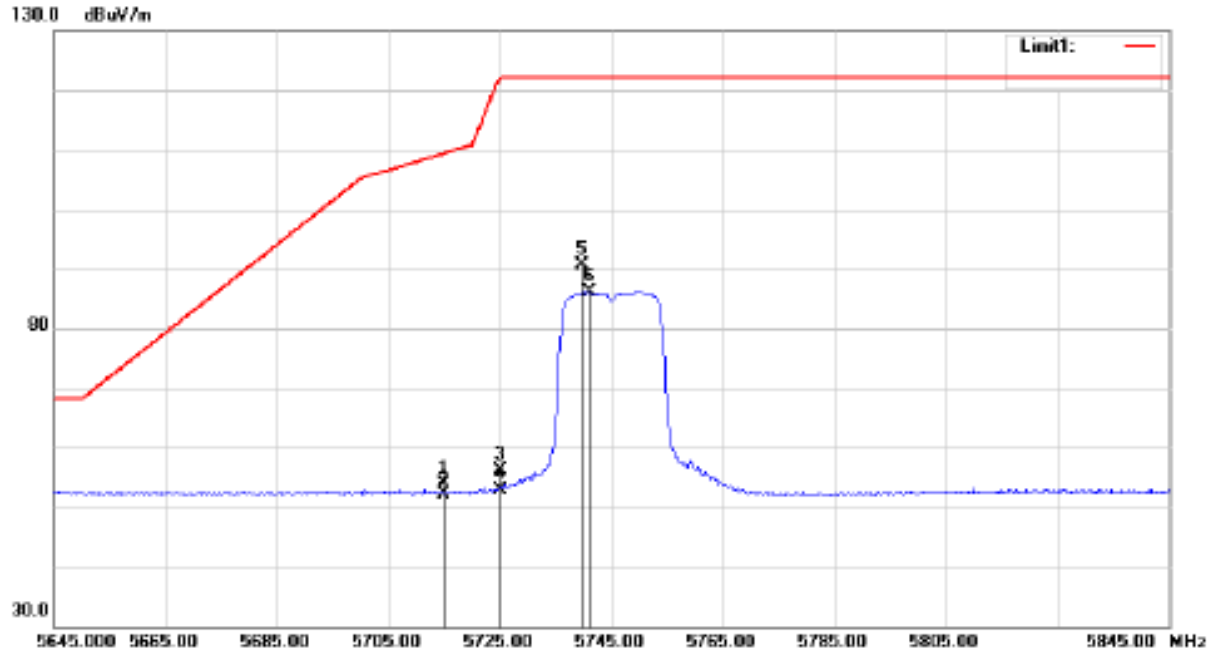
Date: Aug. 21, 2023



No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Over		
		MHz	Level	Factor	ment			Detector	Comment
			dBuV	dB	dBuV/m	dBuV/m	dB		
1	*	11491.15	28.32	16.48	44.80	54.00	-9.20	AVG	
2		11491.20	41.12	16.48	57.60	74.00	-16.40	peak	



Antenna Polarization : Vertical



Mk.	No.	Frequency (MHz)	Reading (dBuV/m)	Corrected factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Comment
	1	5715.000	34.19	19.60	53.79	109.40	-55.61	peak	
	2	5715.000	32.63	19.60	52.23	999.00	-946.7	AVG	
	3	5725.000	36.42	19.60	56.02	122.20	-66.18	peak	
	4	5725.000	33.40	19.60	53.00	999.00	-946.0	AVG	
*	5	5739.800	71.08	19.61	90.69	122.20	-31.51	peak	
	6	5741.200	66.63	19.61	86.24	999.00	-912.7	AVG	



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TEST REPORT

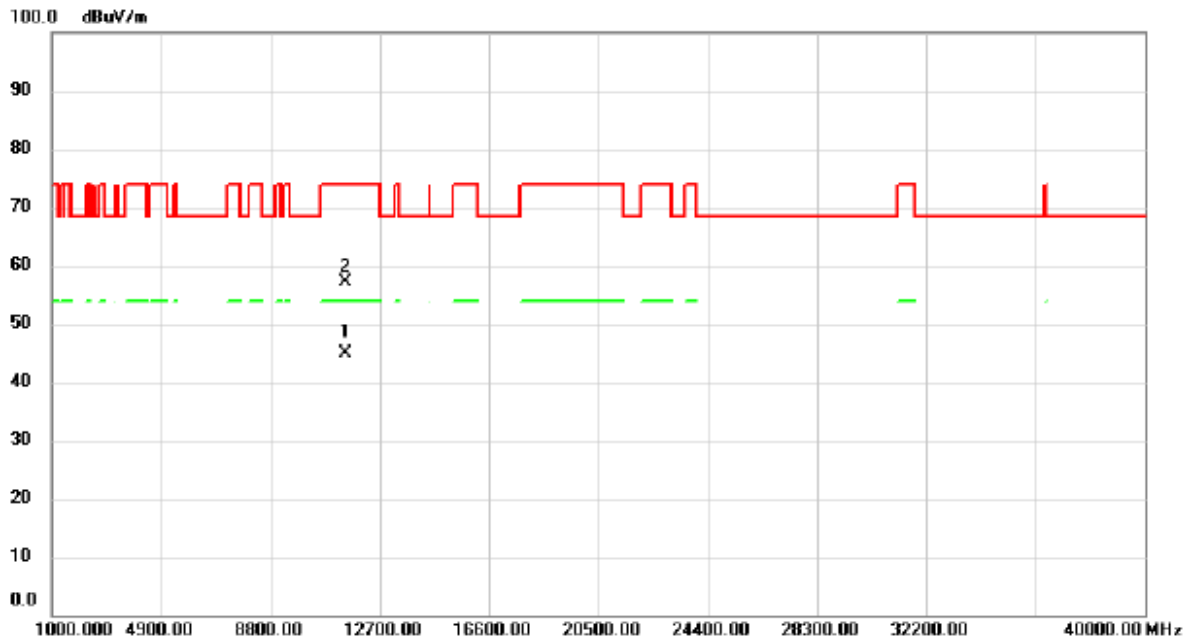
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Report No.: FCCA23080102-X0

FCC ID : 2AZ3ICC180W

Page: 64 of 99

Date: Aug. 21, 2023



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	*	11492.73	28.37	16.48	44.85	54.00	-9.15	AVG	
2		11492.99	40.71	16.48	57.19	74.00	-16.81	peak	

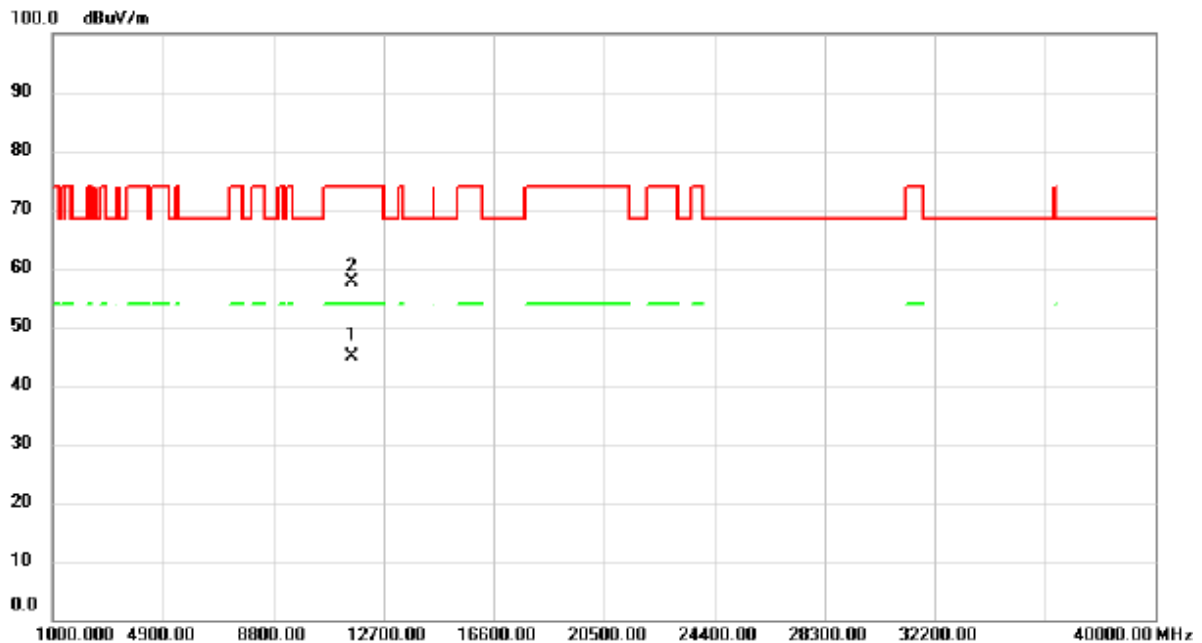
NOTE:

1. Measurement uncertainty is 4.04 dB.
2. Emission Level = Reading Value + Ant. Factor + Correct Factor (incl.:Cable Loss and Pre-Amplifier Gain)
3. The field strength of other emission frequencies were very low against the limit.
4. (F):The field strength of fundamental frequency.



Temperature:	28 °C	Humidity:	74 %RH
Frequency Range:	1 - 40 GHz	Test Mode:	11N20
Detector Type:	PK. and AV.	L.O.:	5785 MHz
IF Bandwidth:	1 MHz	Tested Date:	Aug. 07, 2023

Antenna Polarization : Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	*	11565.08	28.12	16.71	44.83	54.00	-9.17	AVG	
2		11567.89	40.80	16.72	57.52	74.00	-16.48	peak	

NOTE:

1. Measurement uncertainty is 4.04 dB.
2. Emission Level = Reading Value + Ant. Factor + Correct Factor (incl.:Cable Loss and Pre-Amplifier Gain)
3. The field strength of other emission frequencies were very low against the limit.
4. (F):The field strength of fundamental frequency.



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TEST REPORT

Reference No.: A23080102

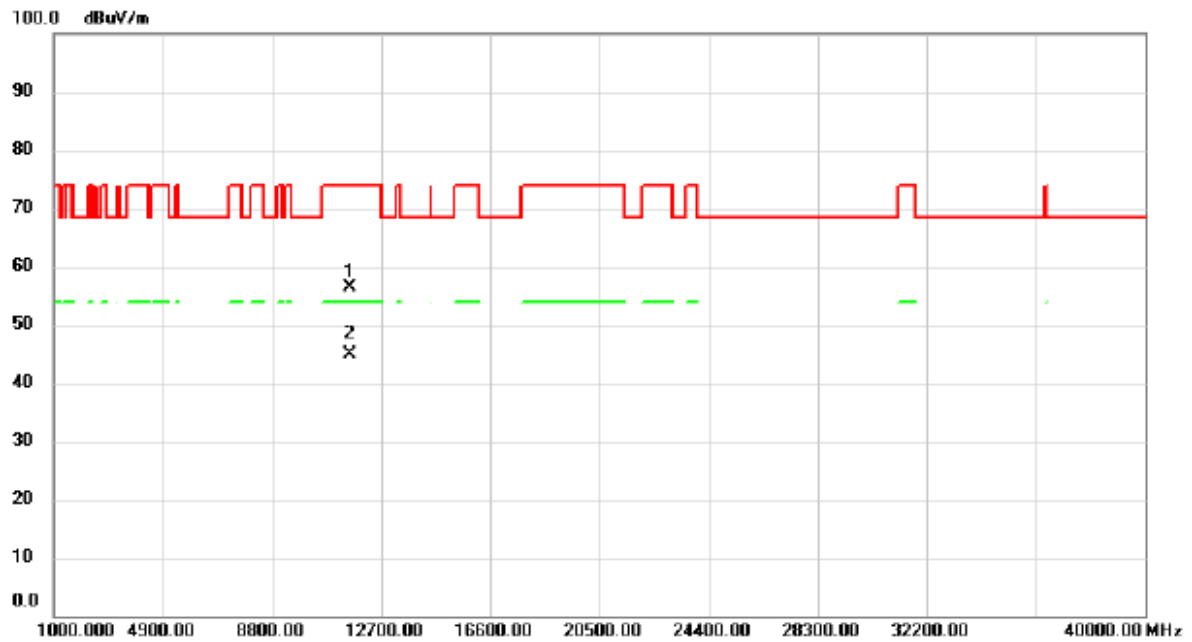
Report No.: FCCA23080102-X0

FCC ID : 2AZ3ICC180W

Page: 66 of 99

Date: Aug. 21, 2023

Antenna Polarization : Vertical

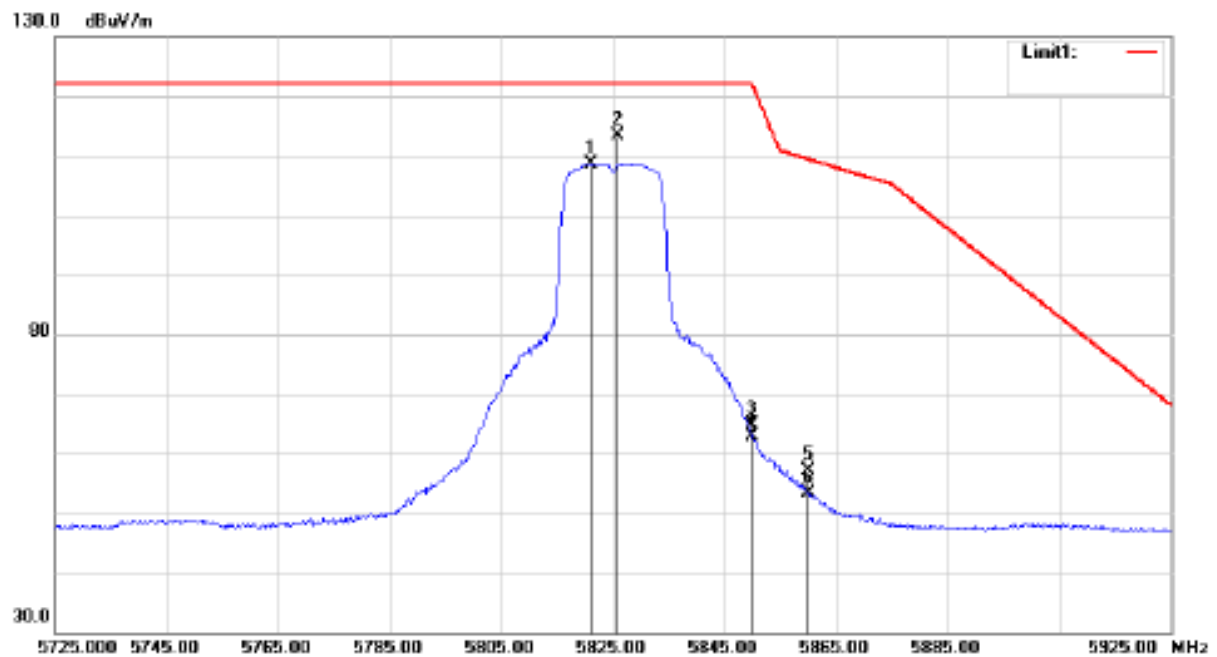


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		11570.26	39.71	16.72	56.43	74.00	-17.57	peak	
2	*	11570.51	28.08	16.72	44.80	54.00	-9.20	AVG	



Temperature:	28 °C	Humidity:	74 %RH
Frequency Range:	1 - 40 GHz	Test Mode:	11N20
Detector Type:	PK. and AV.	L.O.:	5825 MHz
IF Bandwidth:	1 MHz	Tested Date:	Aug. 07, 2023

Antenna Polarization : Horizontal



Mk.	No.	Frequency (MHz)	Reading (dBuV/m)	Corrected factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Comment
	1	5821.200	100.90	7.75	108.65	999.00	-890.3	AVG	
*	2	5825.800	105.71	7.75	113.46	122.20	-8.74	peak	
	3	5850.000	57.15	7.76	64.91	122.20	-57.29	peak	
	4	5850.000	55.21	7.76	62.97	999.00	-936.0	AVG	
	5	5860.000	49.22	7.79	57.01	109.40	-52.39	peak	
	6	5860.000	45.65	7.79	53.44	999.00	-945.5	AVG	



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TEST REPORT

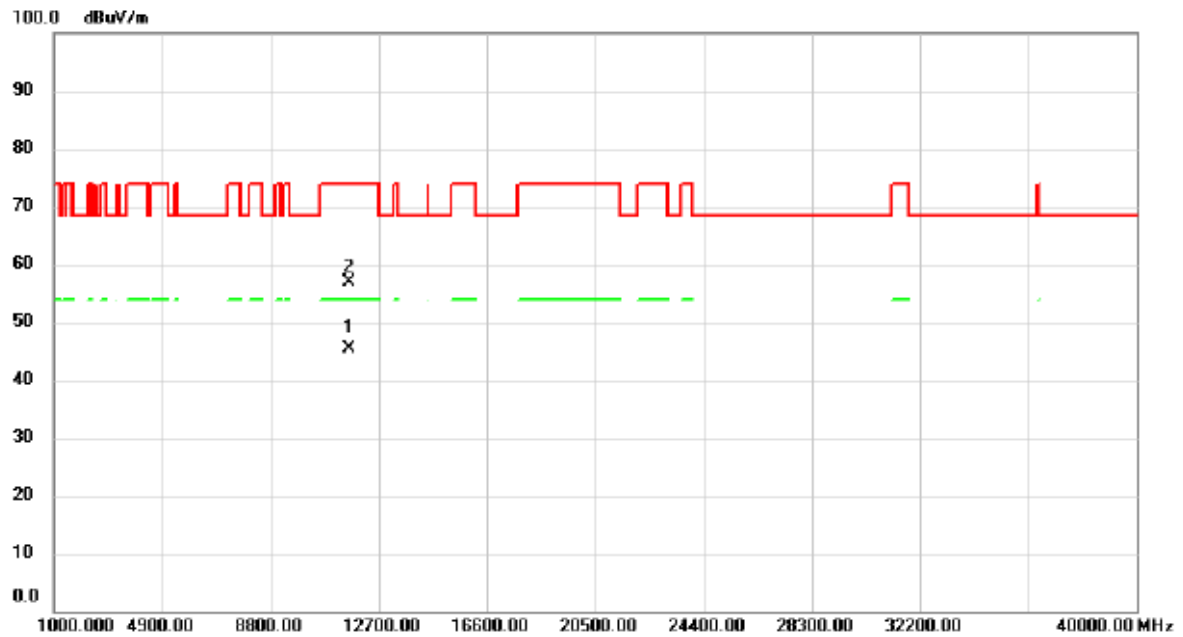
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Report No.: FCCA23080102-X0

FCC ID : 2AZ3ICC180W

Page: 68 of 99

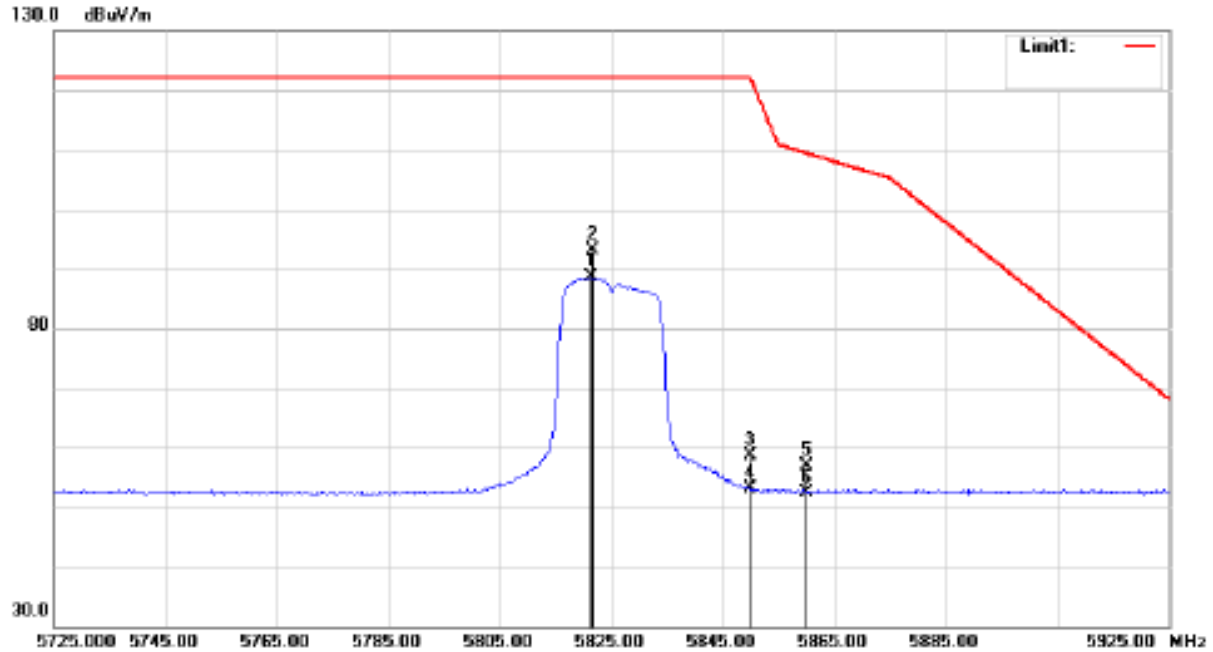
Date: Aug. 21, 2023



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector	Comment
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB		
1	*	11645.41	28.55	16.94	45.49	54.00	-8.51	AVG	
2		11653.57	39.91	16.94	56.85	74.00	-17.15	peak	



Antenna Polarization : Vertical



Mk.	No.	Frequency (MHz)	Reading (dBuV/m)	Corrected factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Comment
	1	5821.400	68.78	19.75	88.53	999.00	-910.4	AVG	
*	2	5821.600	73.26	19.75	93.01	122.20	-29.19	peak	
	3	5850.000	38.79	19.76	58.55	122.20	-63.65	peak	
	4	5850.000	33.36	19.76	53.12	999.00	-945.8	AVG	
	5	5860.000	37.20	19.79	56.99	109.40	-52.41	peak	
	6	5860.000	32.65	19.79	52.44	999.00	-946.5	AVG	



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No.167,Ln. 780, Shan-Tong Rd.,Ling 8, Shan-Tong Li, Chung-Li Dist., Taoyuan City 320, Taiwan (R.O.C.)

TEST REPORT

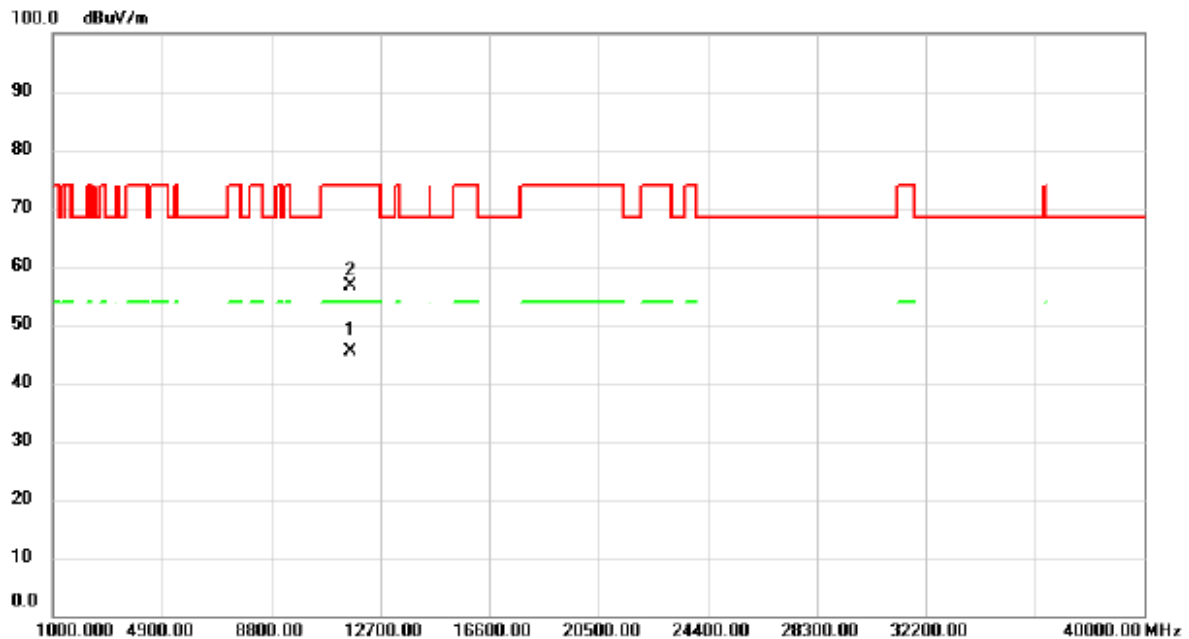
Reference No.: A23080102

Report No.: FCCA23080102-X0

FCC ID : 2AZ3ICC180W

Page: 70 of 99

Date: Aug. 21, 2023



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	*	11647.81	28.37	16.94	45.31	54.00	-8.69	AVG	
2		11654.02	39.63	16.94	56.57	74.00	-17.43	peak	

NOTE:

1. Measurement uncertainty is 4.04 dB.
2. Emission Level = Reading Value + Ant. Factor + Correct Factor (incl.:Cable Loss and Pre-Amplifier Gain)
3. The field strength of other emission frequencies were very low against the limit.
4. (F):The field strength of fundamental frequency.



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No.167,Ln. 780, Shan-Tong Rd.,Ling 8, Shan-Tong Li, Chung-Li Dist., Taoyuan City 320, Taiwan (R.O.C.)

TEST REPORT

Reference No.: A23080102

Report No.: FCCA23080102-X0

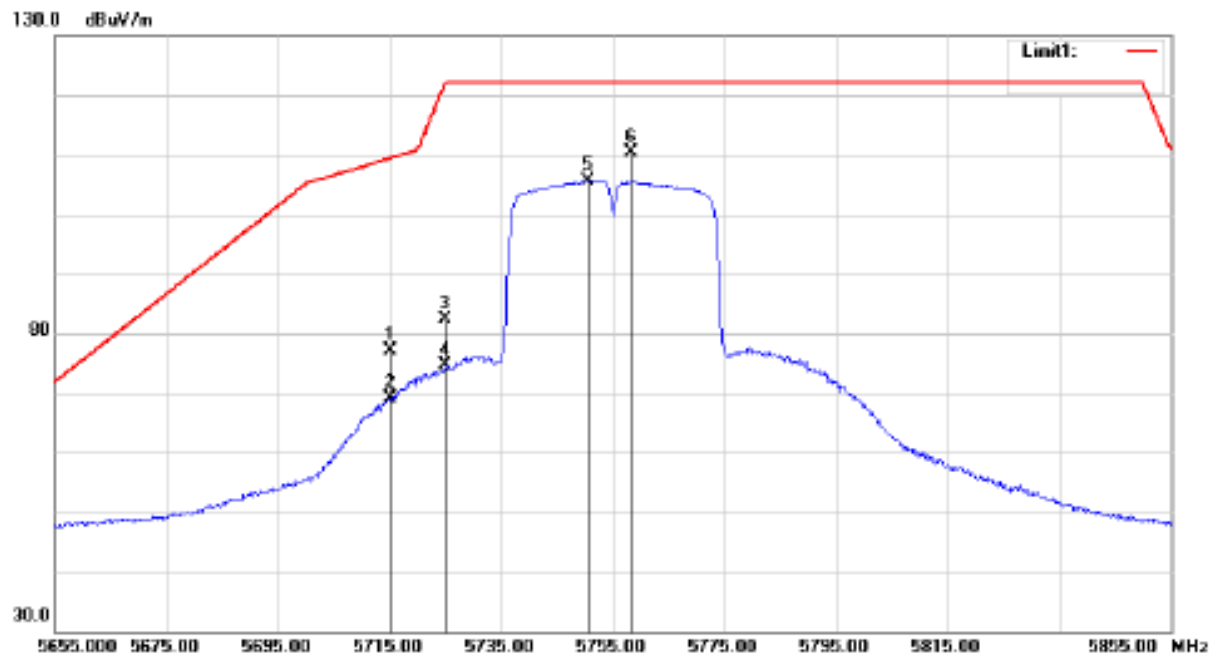
FCC ID : 2AZ3IC180W

Page: 71 of 99

Date: Aug. 21, 2023

Temperature:	28 °C	Humidity:	74 %RH
Frequency Range:	1 - 40 GHz	Test Mode:	11N40
Detector Type:	PK. and AV.	L.O.:	5755 MHz
IF Bandwidth:	1 MHz	Tested Date:	Aug. 07, 2023

Antenna Polarization : Horizontal



Mk.	No.	Frequency (MHz)	Reading (dBuV/m)	Corrected factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Comment
	1	5715.000	69.49	7.60	77.09	109.40	-32.31	peak	
	2	5715.000	61.49	7.60	69.09	999.00	-929.9	AVG	
	3	5725.000	74.89	7.60	82.49	122.20	-39.71	peak	
	4	5725.000	67.00	7.60	74.60	999.00	-924.4	AVG	
	5	5750.600	97.95	7.62	105.57	999.00	-893.4	AVG	
*	6	5758.200	102.62	7.64	110.26	122.20	-11.94	peak	



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TEST REPORT

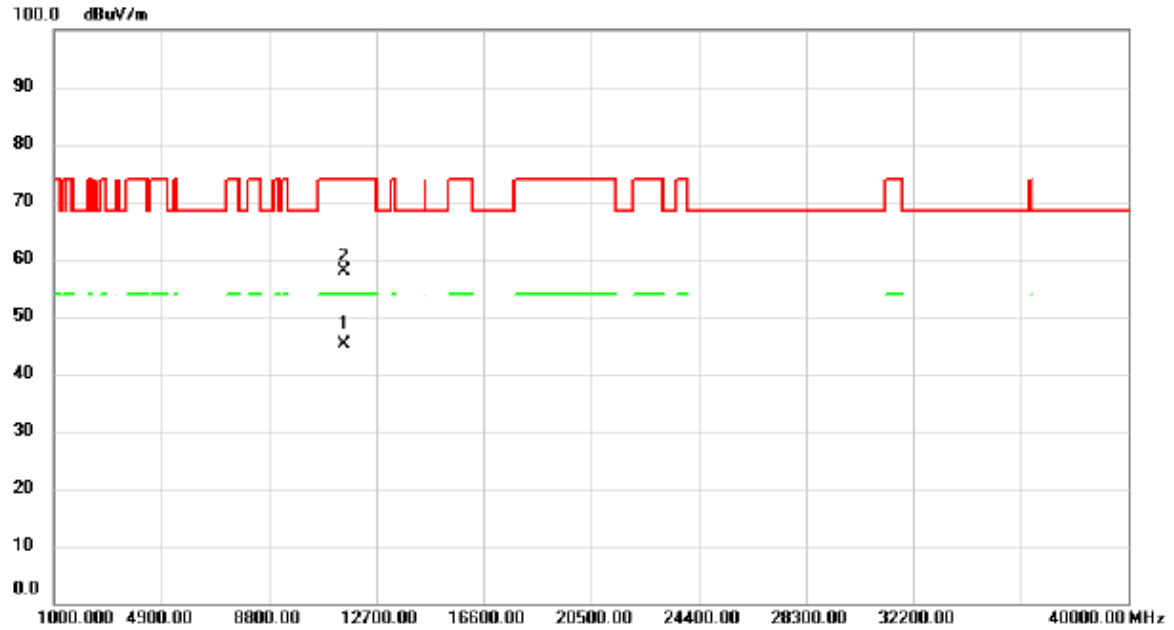
Reference No.: A23080102

Report No.: FCCA23080102-X0

FCC ID : 2AZ3ICC180W

Page: 72 of 99

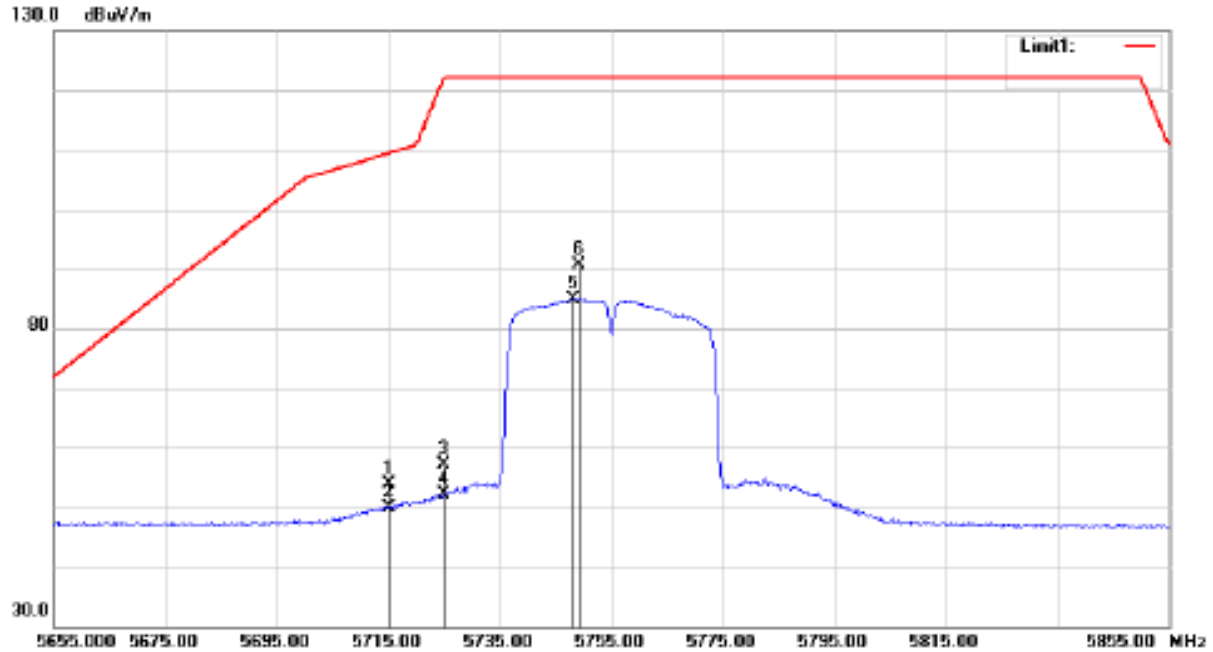
Date: Aug. 21, 2023



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	*	11508.80	28.54	16.52	45.06	54.00	-8.94	AVG	
2		11512.45	41.25	16.52	57.77	74.00	-16.23	peak	



Antenna Polarization : Vertical



Mk.	No.	Frequency (MHz)	Reading (dBuV/m)	Corrected factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Comment
	1	5715.000	46.30	7.60	53.90	109.40	-55.50	peak	
	2	5715.000	42.18	7.60	49.78	999.00	-949.2	AVG	
	3	5725.000	49.57	7.60	57.17	122.20	-65.03	peak	
	4	5725.000	44.42	7.60	52.02	999.00	-946.9	AVG	
	5	5748.200	77.28	7.61	84.89	999.00	-914.1	AVG	
*	6	5749.200	82.94	7.61	90.55	122.20	-31.65	peak	



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TEST REPORT

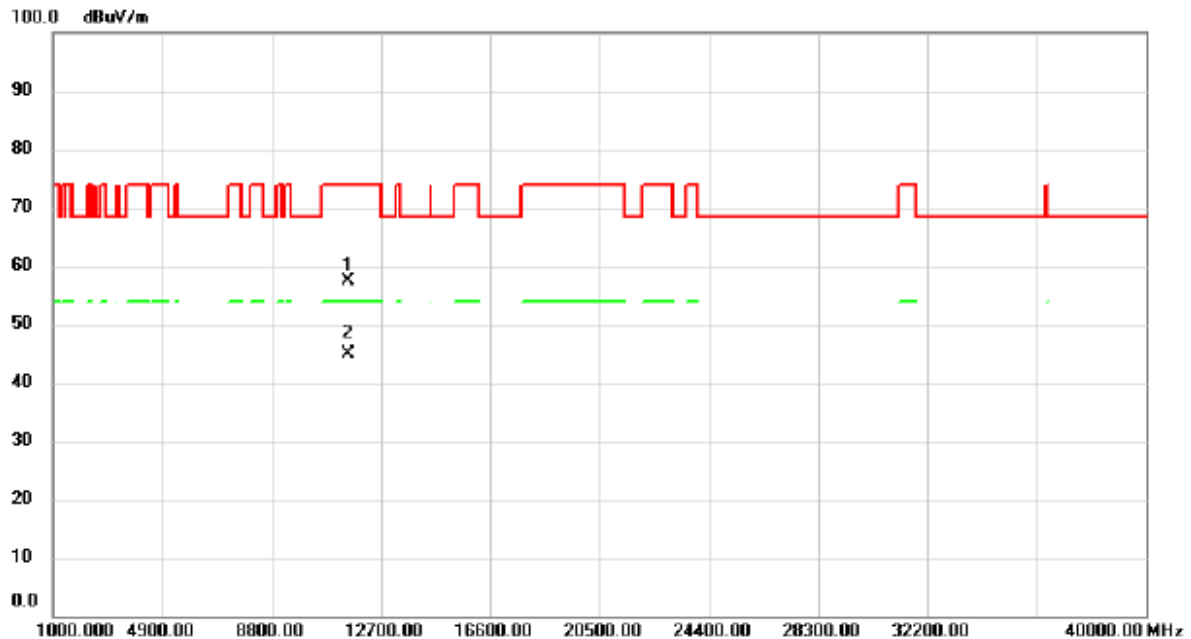
Reference No.: A23080102

Report No.: FCCA23080102-X0

FCC ID : 2AZ3ICC180W

Page: 74 of 99

Date: Aug. 21, 2023



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		11505.27	40.93	16.51	57.44	74.00	-16.56	peak	
2	*	11506.08	28.38	16.51	44.89	54.00	-9.11	AVG	

NOTE:

1. Measurement uncertainty is 4.04 dB.
2. Emission Level = Reading Value + Ant. Factor + Correct Factor (incl.:Cable Loss and Pre-Amplifier Gain)
3. The field strength of other emission frequencies were very low against the limit.
4. (F):The field strength of fundamental frequency.



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No.167,Ln. 780, Shan-Tong Rd.,Ling 8, Shan-Tong Li, Chung-Li Dist., Taoyuan City 320, Taiwan (R.O.C.)

TEST REPORT

Reference No.: A23080102

Report No.: FCCA23080102-X0

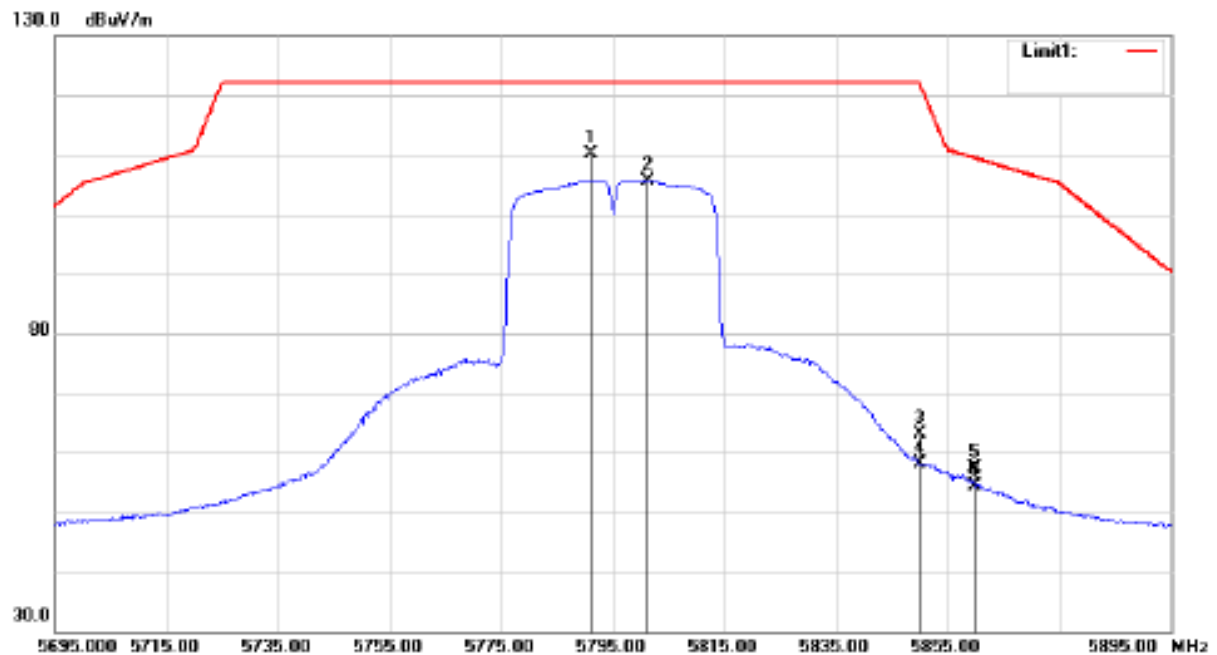
FCC ID : 2AZ3IC180W

Page: 75 of 99

Date: Aug. 21, 2023

Temperature:	28 °C	Humidity:	74 %RH
Frequency Range:	1 - 40 GHz	Test Mode:	11N40
Detector Type:	PK. and AV.	L.O.:	5795 MHz
IF Bandwidth:	1 MHz	Tested Date:	Aug. 07, 2023

Antenna Polarization : Horizontal



Mk.	No.	Frequency (MHz)	Reading (dBuV/m)	Corrected factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Comment
*	1	5791.200	102.52	7.72	110.24	122.20	-11.96	peak	
	2	5801.200	97.96	7.74	105.70	999.00	-893.3	AVG	
	3	5850.000	55.49	7.76	63.25	122.20	-58.95	peak	
	4	5850.000	50.43	7.76	58.19	999.00	-940.8	AVG	
	5	5860.000	49.47	7.79	57.26	109.40	-52.14	peak	
	6	5860.000	46.68	7.79	54.47	999.00	-944.5	AVG	



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TEST REPORT

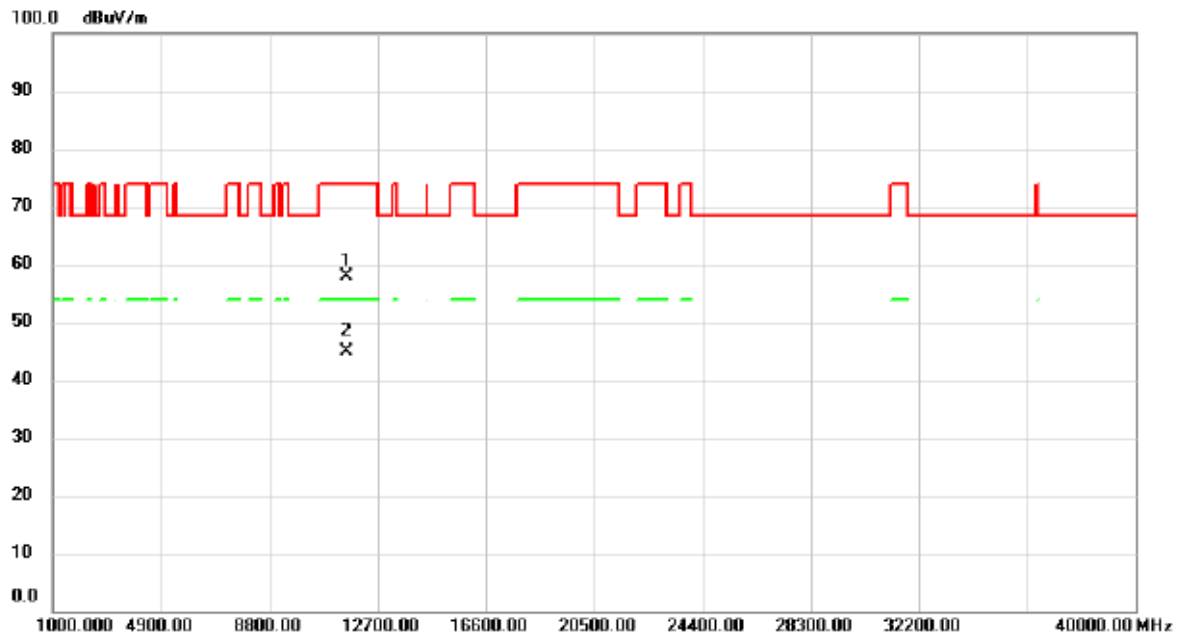
Reference No.: A23080102

Report No.: FCCA23080102-X0

FCC ID : 2AZ3ICC180W

Page: 76 of 99

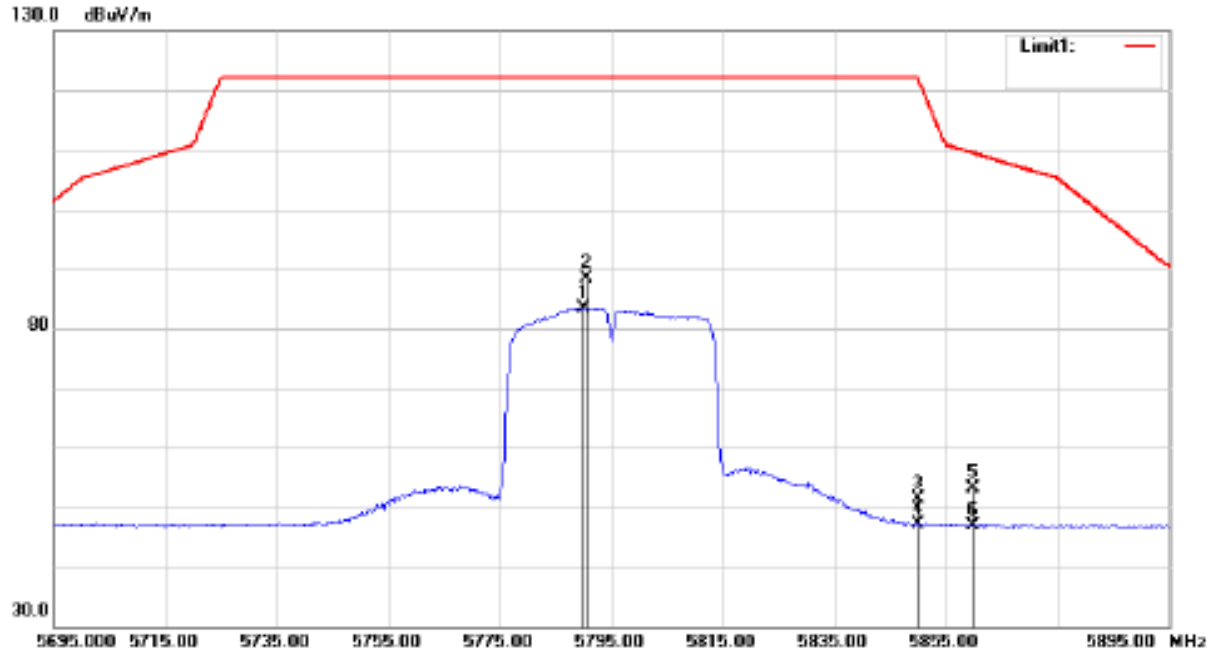
Date: Aug. 21, 2023



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		11587.91	41.21	16.79	58.00	74.00	-16.00	peak	
2	*	11592.51	28.12	16.80	44.92	54.00	-9.08	AVG	



Antenna Polarization : Vertical



Mk.	No.	Frequency (MHz)	Reading (dBuV/m)	Corrected factor(dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Comment
	1	5790.000	75.76	7.71	83.47	999.00	-915.5	AVG	
*	2	5790.600	80.76	7.72	88.48	122.20	-33.72	peak	
	3	5850.000	43.52	7.76	51.28	122.20	-70.92	peak	
	4	5850.000	39.43	7.76	47.19	999.00	-951.8	AVG	
	5	5860.000	45.29	7.79	53.08	109.40	-56.32	peak	
	6	5860.000	39.15	7.79	46.94	999.00	-952.0	AVG	



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No.167,Ln. 780, Shan-Tong Rd.,Ling 8, Shan-Tong Li, Chung-Li Dist., Taoyuan City 320, Taiwan (R.O.C.)

TEST REPORT

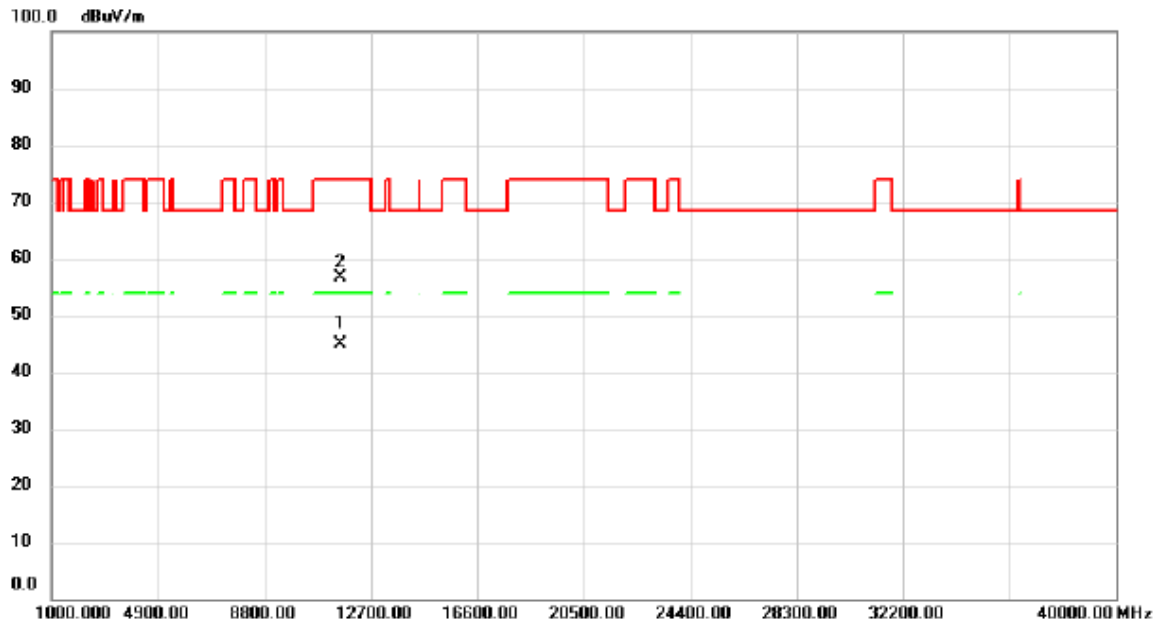
Reference No.: A23080102

Report No.: FCCA23080102-X0

FCC ID : 2AZ3IC180W

Page: 78 of 99

Date: Aug. 21, 2023



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	11586.30	28.06	16.78	44.84	54.00	-9.16	AVG	
2		11593.55	39.86	16.80	56.66	74.00	-17.34	peak	

NOTE:

1. Measurement uncertainty is 4.04 dB.
2. Emission Level = Reading Value + Ant. Factor + Correct Factor (incl.:Cable Loss and Pre-Amplifier Gain)
3. The field strength of other emission frequencies were very low against the limit.
4. (F):The field strength of fundamental frequency.

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6 PEAK CONDUCTED OUTPUT POWER TEST

6.1 LIMIT

FCC Part15, Subpart E Section 15.407(a)(1)(iv).

For mobile and portable client devices in the 5.15-5.25 GHz band, the maximum conducted output power over the frequency band of operation shall not exceed 250 mW provided the maximum antenna gain does not exceed 6 dBi.

FCC Part15, Subpart E Section 15.407(a)(3).

For the band 5.725-5.85 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W

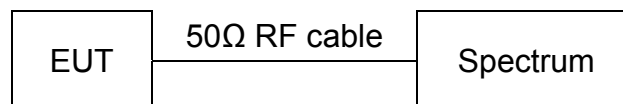
6.2 TEST EQUIPMENT

The following test equipment was used during the test :

Equipment/ Facilities	Specifications	Manufacturer	Model #/ Serial #	Due Date of Cal. & Cal. Center
EXA Signal Analyzer	10 Hz ~ 44 GHz	KEYSIGHT	N9010A / MY56480554	AUG. 24, 2023 ETC

NOTE : The calibration interval of the above test equipment is one year and the calibrations are traceable to NML/ROC and NIST/USA.

6.3 TEST SET-UP



6.4 TEST PROCEDURE

The EUT was operating in continuous transmission mode or could control its channel.
 Printed out the test result from the spectrum by hard copy function.

6.5 EUT OPERATING CONDITION

1. Set the EUT under continuous transmission condition.
2. The EUT was set to the highest available power level.

 Spectrum Research & Testing Lab., Inc. No.167,Ln. 780, Shan-Tong Rd.,Ling 8, Shan-Tong Li, Chung-Li Dist., Taoyuan City 320, Taiwan (R.O.C.)	TEST REPORT	Reference No.: A23080102 Report No.: FCCA23080102-X0 FCC ID : 2AZ3IC180W Page: 80 of 99 Date: Aug. 21, 2023
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6.6 TEST RESULT

Temperature	25°C	Humidity	60%RH
Detector	RMS	Test Mode	802.11a
RBW	1 MHz	VBW	3 MHz
Tested By	Jimmy Tseng	Tested Date	Aug. 01, 2023

Mode	Operation Band (s)	Frequency (MHz)	Total Power	Limit		Power setting
			Average	Average	Result	
			dBm	dBm		
802.11a	UNII-1	5180	19.12	23.98	PASS	0
		5200	19.25	23.98	PASS	0
		5240	19.03	23.98	PASS	0
	UNII-3	5745	19.34	30.00	PASS	0
		5785	19.24	30.00	PASS	0
		5825	19.47	30.00	PASS	0

 Spectrum Research & Testing Lab., Inc. No.167,Ln. 780, Shan-Tong Rd.,Ling 8, Shan-Tong Li, Chung-Li Dist., Taoyuan City 320, Taiwan (R.O.C.)	TEST REPORT	Reference No.: A23080102 Report No.: FCCA23080102-X0 FCC ID : 2AZ3ICC180W Page: 81 of 99 Date: Aug. 21, 2023
--	----------------------	--

Temperature	25°C	Humidity	60%RH
Detector	RMS	Test Mode	802.11N-20
RBW	1 MHz	VBW	3 MHz
Tested By	Jimmy Tseng	Tested Date	Aug. 01, 2023

Mode	Operation Band (s)	Frequency (MHz)	Total Power	Limit		Power setting
			Average	Average	Result	
			dBm	dBm		
802.11n20	UNII-1	5180	18.42	23.98	PASS	0
		5200	18.43	23.98	PASS	0
		5240	18.56	23.98	PASS	0
	UNII-3	5745	18.05	30.00	PASS	0
		5785	18.31	30.00	PASS	0
		5825	18.24	30.00	PASS	0

 Spectrum Research & Testing Lab., Inc. No.167,Ln. 780, Shan-Tong Rd.,Ling 8, Shan-Tong Li, Chung-Li Dist., Taoyuan City 320, Taiwan (R.O.C.)	TEST REPORT	Reference No.: A23080102 Report No.: FCCA23080102-X0 FCC ID : 2AZ3ICC180W Page: 82 of 99 Date: Aug. 21, 2023
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Temperature	25°C	Humidity	60%RH
Detector	RMS	Test Mode	802.11N-40
RBW	1 MHz	VBW	3 MHz
Tested By	Jimmy Tseng	Tested Date	Aug. 01, 2023

Mode	Operation Band (s)	Frequency (MHz)	Total Power	Limit		Power setting
			Average	Average	Result	
			dBm	dBm		
802.11n40	UNII-1	5190	15.10	23.98	PASS	0
		5230	17.74	23.98	PASS	0
	UNII-3	5755	17.54	30.00	PASS	0
		5795	17.57	30.00	PASS	0

 Spectrum Research & Testing Lab., Inc. No.167,Ln. 780, Shan-Tong Rd.,Ling 8, Shan-Tong Li, Chung-Li Dist., Taoyuan City 320, Taiwan (R.O.C.)	TEST REPORT	Reference No.: A23080102 Report No.: FCCA23080102-X0 FCC ID : 2AZ3ICC180W Page: 83 of 99 Date: Aug. 21, 2023
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6.7 26dB occupied bandwidth

Conducted

Temperature:	25 °C	Humidity:	60 %RH
Detector:	Peak	Test Mode	802.11A / N HT 20 / N HT 40
RBW:	1 MHz	VBW:	3 MHz
Tested By:	Jimmy Tseng	Tested Date:	Aug. 01, 2023

Test Mode	Data date/ MCS0	Freequency (MHz)	99% Bandwidth (MHz)	26dB Bandwidth (MHz)
802.11 A	6 Mbps	5180	16.709	28.15
		5200	16.709	24.82
		5240	16.622	27.69
		5745	16.694	15.44 / 6DB
		5785	16.549	16.40 / 6DB
		5825	16.702	16.40 / 6DB
802.11 N HT 20	MCS0	5180	17.701	25.83
		5200	17.740	22.77
		5240	17.682	24.63
		5745	17.795	17.36 / 6DB
		5785	17.767	17.71 / 6DB
		5825	17.748	17.01 / 6DB
802.11 N HT 40	MCS0	5190	36.159	41.37
		5230	36.169	57.55
		5755	36.167	34.44 / 6DB
		5795	36.266	34.57 / 6DB



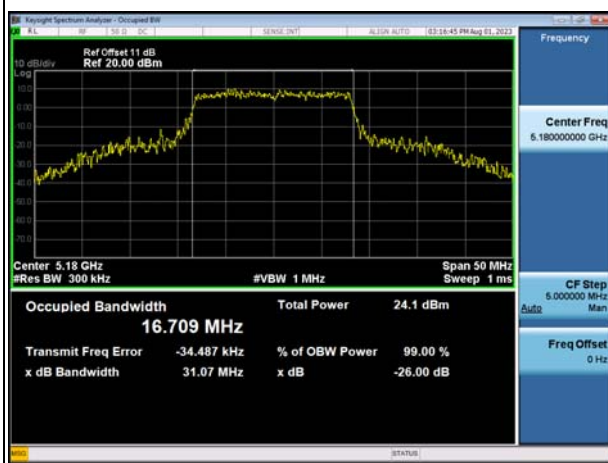
Spectrum Research & Testing Lab., Inc.
No.167,Ln. 780, Shan-Tong Rd.,Ling 8, Shan-Tong Li, Chung-Li Dist., Taoyuan City 320, Taiwan (R.O.C.)

TEST REPORT

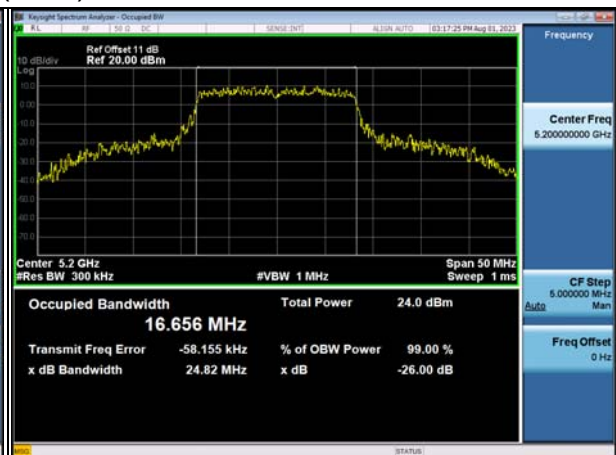
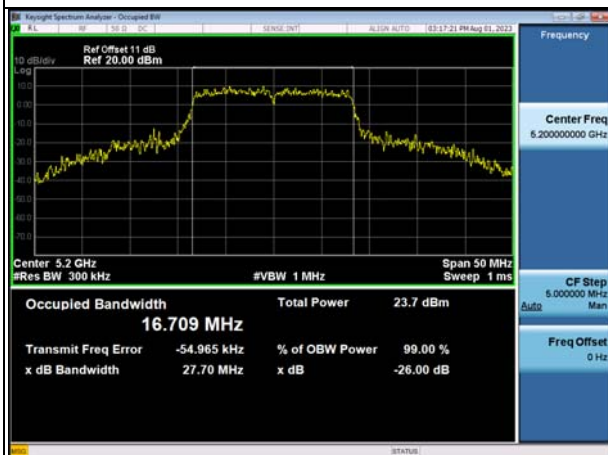
Reference No.: A23080102
Report No.: FCCA23080102-X0
FCC ID : 2AZ3ICC180W
Page: 84 of 99
Date: Aug. 21, 2023

802.11a 99% Bandwidth(MHz) & 26db Bandwidth(MHz)

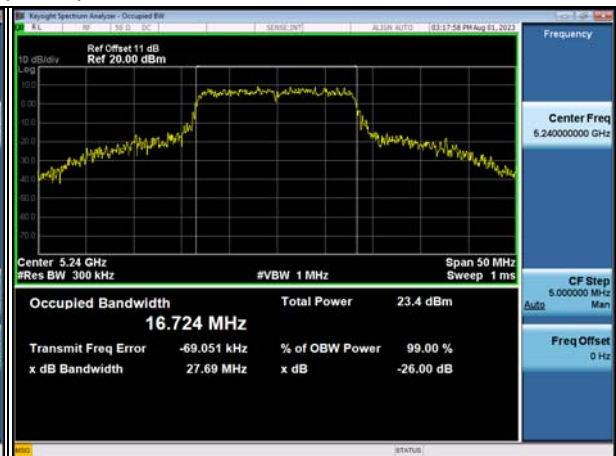
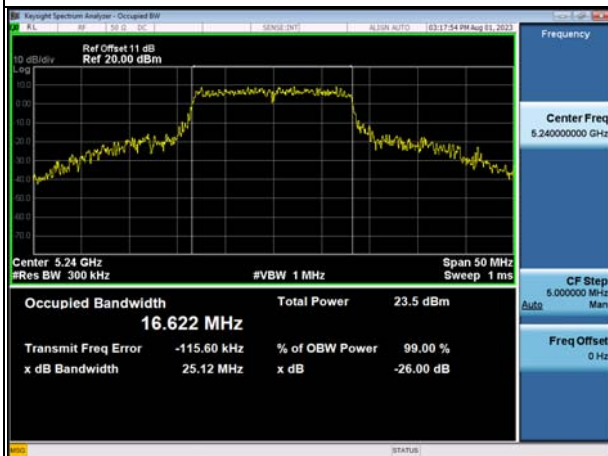
5180(MHz)



5200(MHz)



5240(MHz)





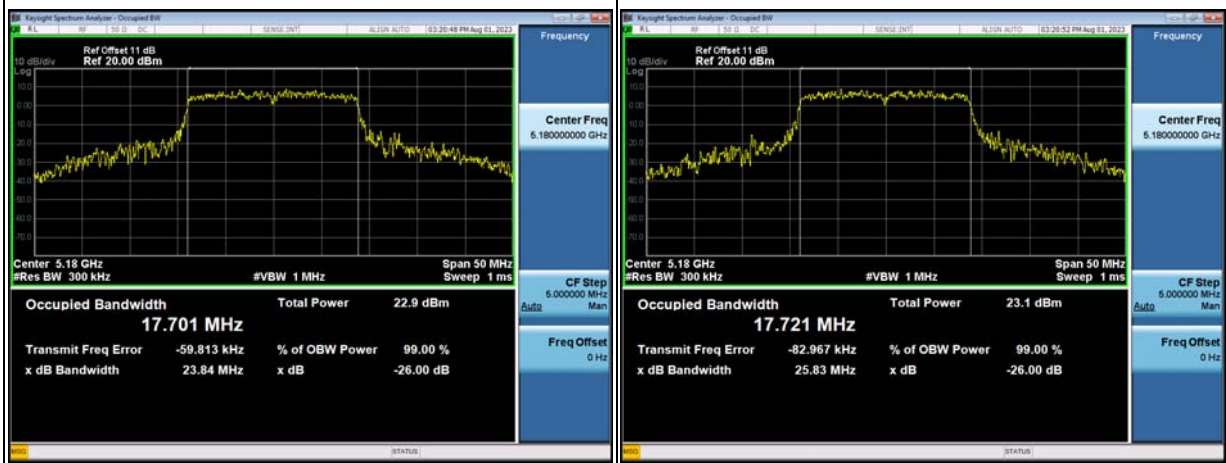
Spectrum Research & Testing Lab., Inc.
No.167,Ln. 780, Shan-Tong Rd.,Ling 8, Shan-Tong Li, Chung-Li Dist., Taoyuan City 320, Taiwan (R.O.C.)

TEST REPORT

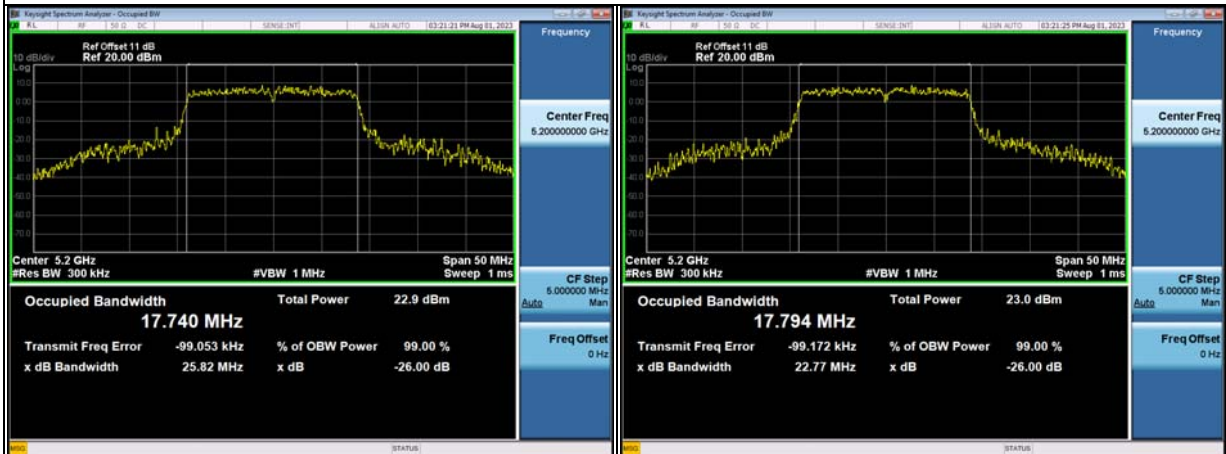
Reference No.: A23080102
Report No.: FCCA23080102-X0
FCC ID : 2AZ3ICC180W
Page: 85 of 99
Date: Aug. 21, 2023

802.11n20 99% Bandwidth(MHz) & 26db Bandwidth(MHz)

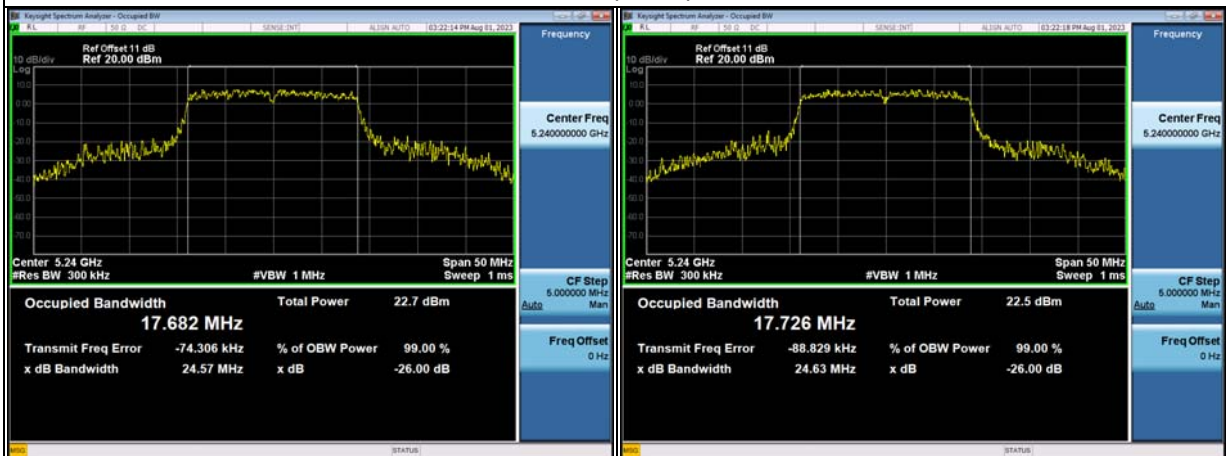
5180(MHz)



5200(MHz)



5240(MHz)





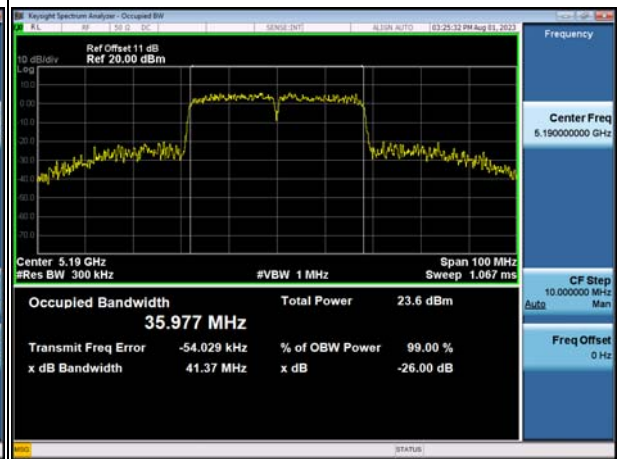
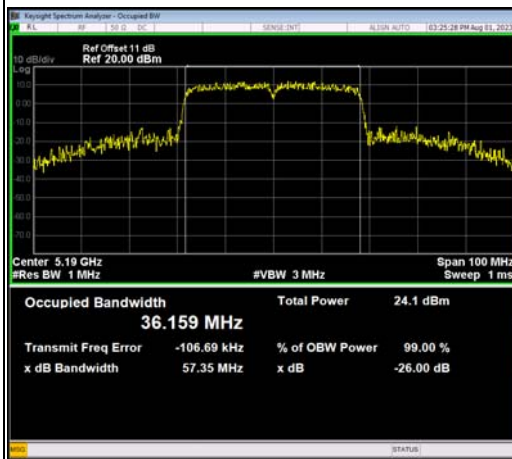
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No.167,Ln. 780, Shan-Tong Rd.,Ling 8, Shan-Tong Li, Chung-Li Dist., Taoyuan City 320, Taiwan (R.O.C.)

TEST REPORT

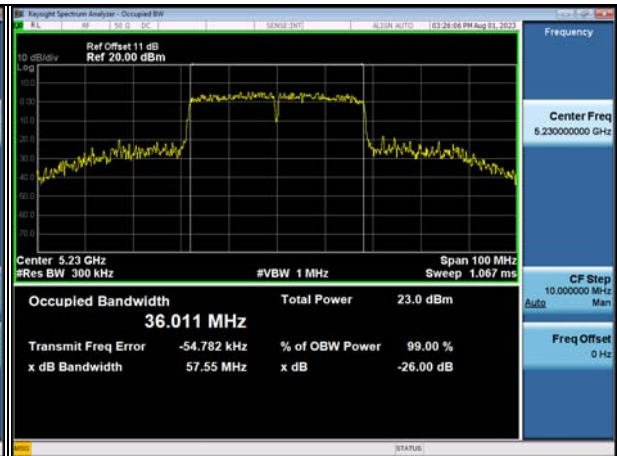
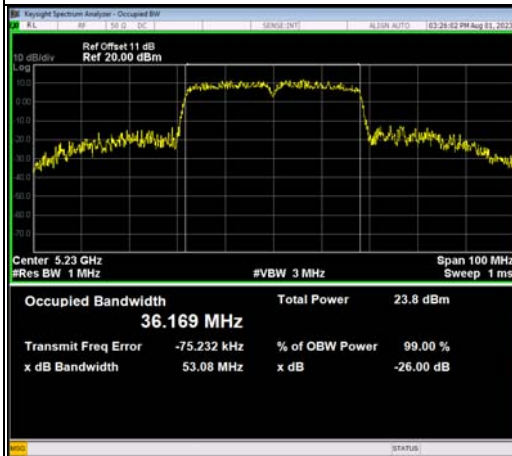
Reference No.: A23080102
Report No.: FCCA23080102-X0
FCC ID : 2AZ3ICC180W
Page: 86 of 99
Date: Aug. 21, 2023

802.11n40 99% Bandwidth(MHz) & 26db Bandwidth(MHz)

5190(MHz)



5230(MHz)





Spectrum Research & Testing Lab., Inc.

No.167,Ln. 780, Shan-Tong Rd.,Ling 8, Shan-Tong Li, Chung-Li Dist., Taoyuan City 320, Taiwan (R.O.C.)

TEST REPORT

Reference No.: A23080102

Report No.: FCCA23080102-X0

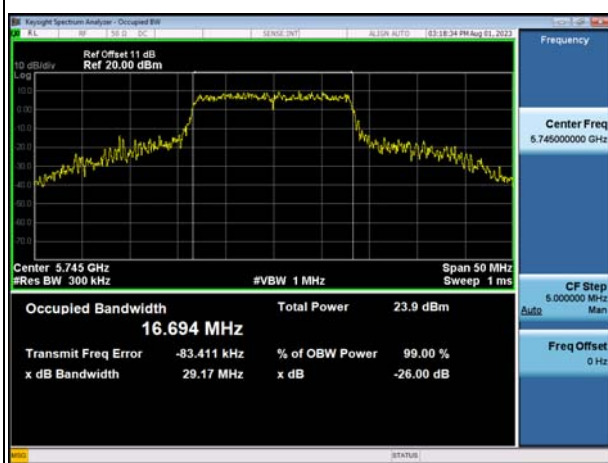
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Page: 87 of 99

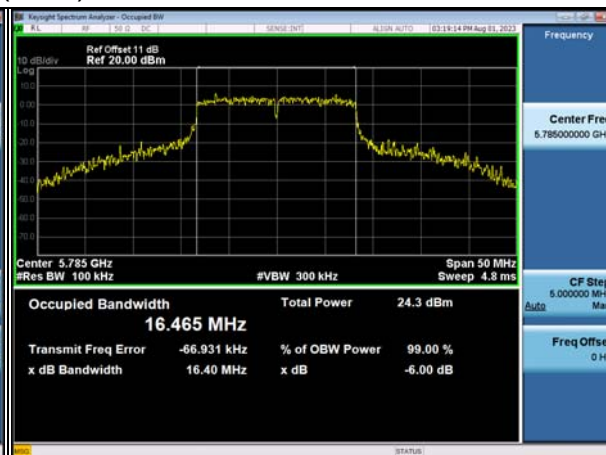
Date: Aug. 21, 2023

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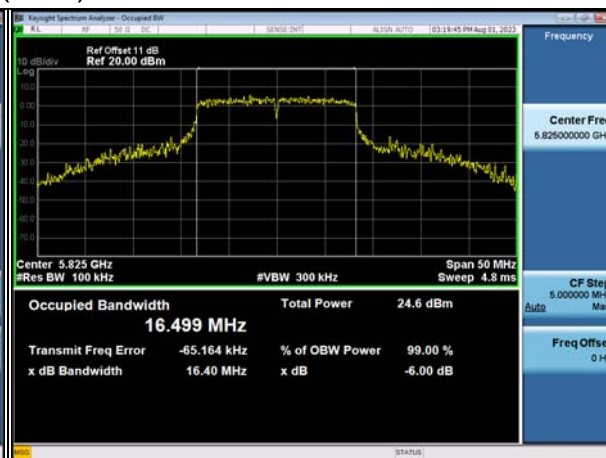
5745(MHz)



5785(MHz)



5825(MHz)





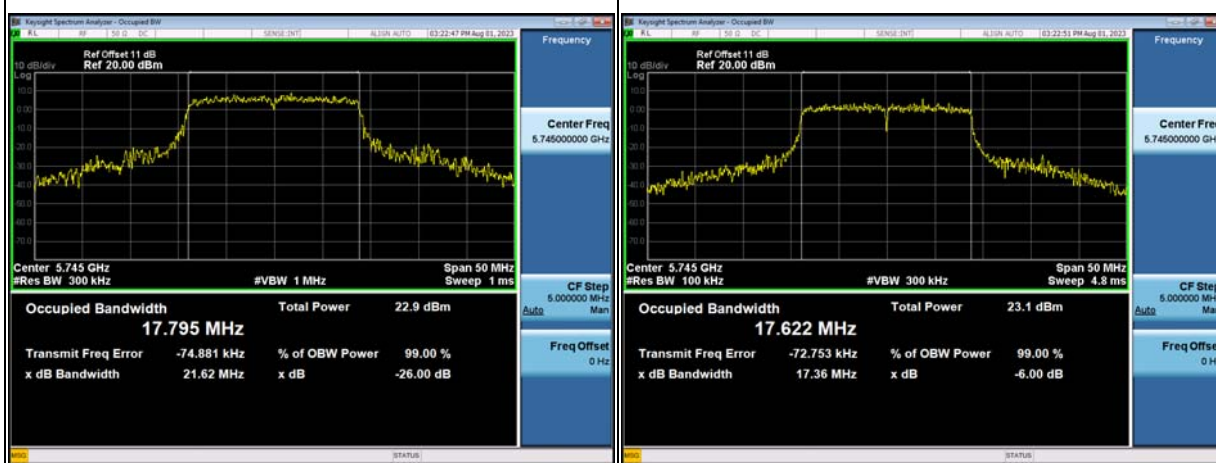
Spectrum Research & Testing Lab., Inc.
No.167,Ln. 780, Shan-Tong Rd.,Ling 8, Shan-Tong Li, Chung-Li Dist., Taoyuan City 320, Taiwan (R.O.C.)

TEST REPORT

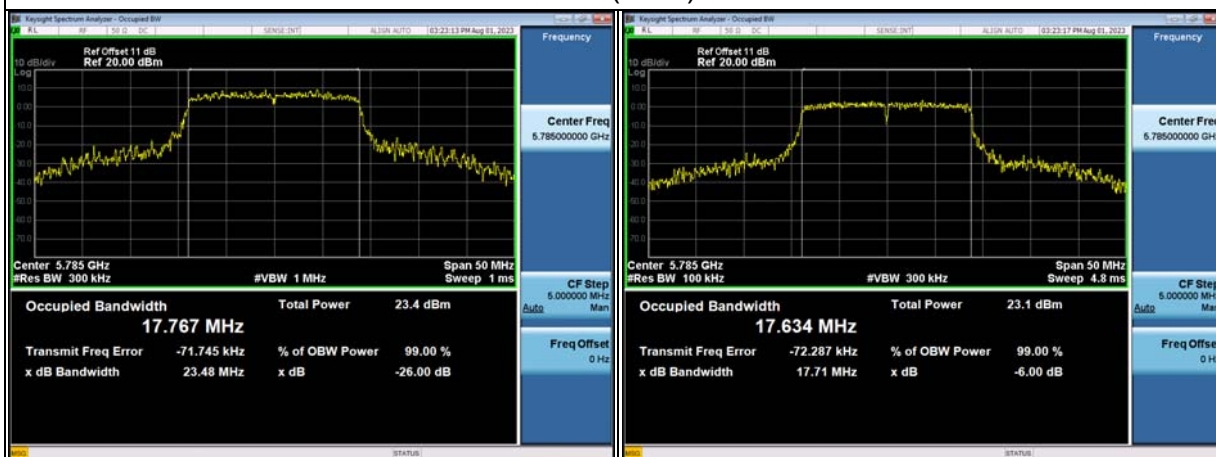
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Report No.: FCCA23080102-X0
FCC ID : 2AZ3ICC180W
Page: 88 of 99
Date: Aug. 21, 2023

802.11n20 99% Bandwidth(MHz) & 6db Bandwidth(MHz)

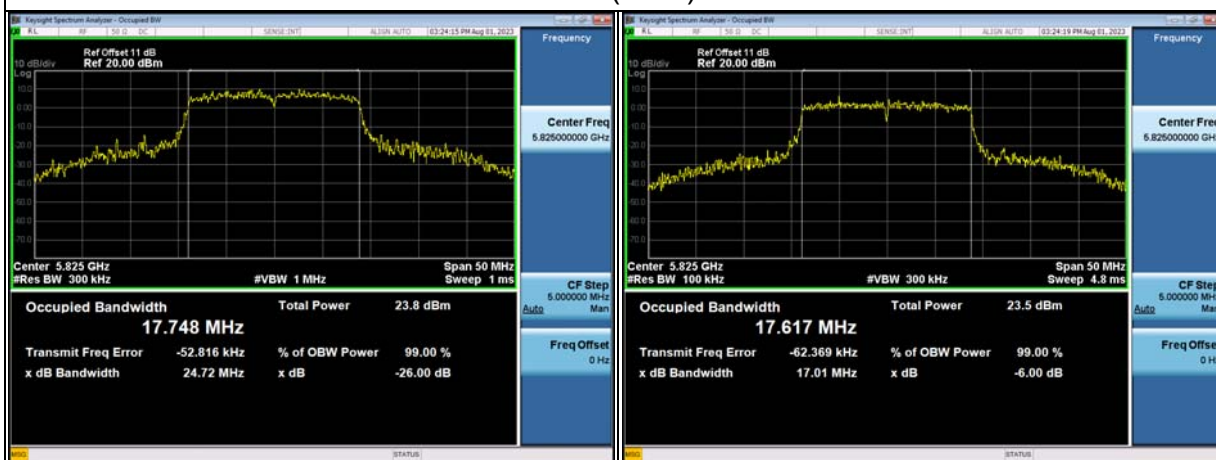
5745(MHz)



5785(MHz)



5825(MHz)





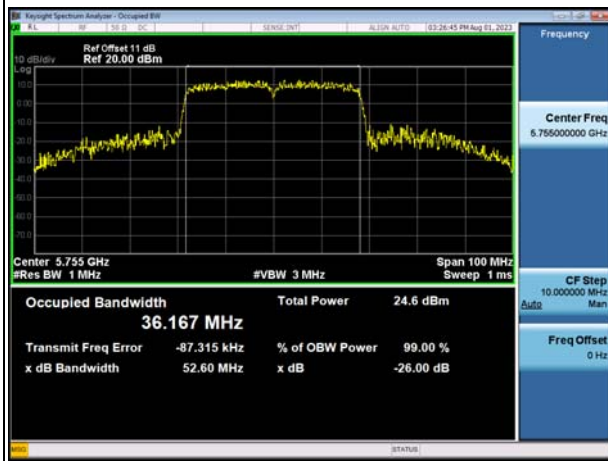
Spectrum Research & Testing Lab., Inc.
No.167,Ln. 780, Shan-Tong Rd.,Ling 8, Shan-Tong Li, Chung-Li Dist., Taoyuan City 320, Taiwan (R.O.C.)

TEST REPORT

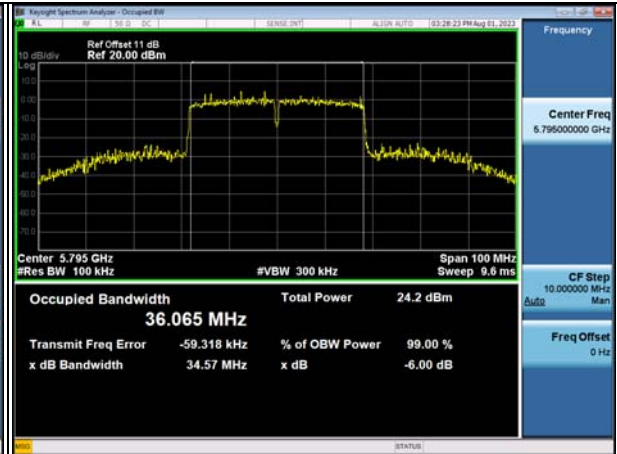
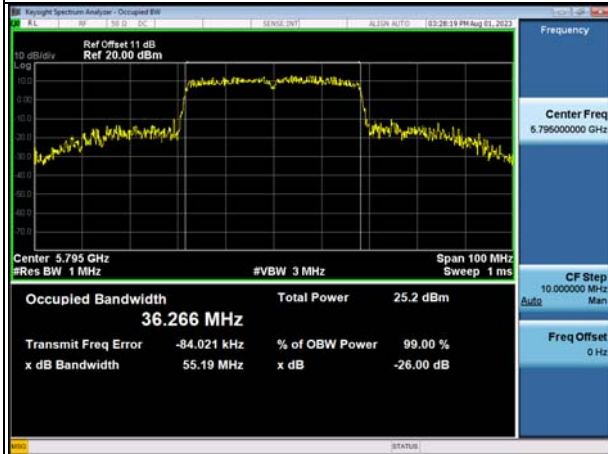
Reference No.: A23080102
Report No.: FCCA23080102-X0
FCC ID : 2AZ3ICC180W
Page: 89 of 99
Date: Aug. 21, 2023

802.11n40 99% Bandwidth(MHz) & 6db Bandwidth(MHz)

5755(MHz)



5795(MHz)



7 POWER SPECTRAL DENSITY TEST

7.1 LIMIT

FCC Part15, Subpart E Section 15.407(a)(1)(iv).

For mobile and portable client devices in the 5.15-5.25 GHz band, the maximum conducted output power over the frequency band of operation shall not exceed 250 mW provided the maximum antenna gain does not exceed 6 dBi. In addition, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band

FCC Part15, Subpart E Section 15.407(a)(3).

For the band 5.725-5.85 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. In addition, the maximum power spectral density shall not exceed 30 dBm in any 500 kHz band

FREQUENCY RANGE (MHz)	Limit
5150 – 5250 (For Client Device operation)	11 dBm / 1MHz
5250 – 5350 5470 -5725 (For Client Device operation)	11 dBm / 1MHz
5725 - 5850 (For Client Device operation)	30 dBm / 500kHz

If measurement bandwidth of Maximum PSD is specified in 500 kHz, add $10\log(500\text{kHz}/\text{RBW})$ to the measured result, whereas RBW (< 500 KHz) is the reduced resolution bandwidth of the spectrum analyzer set during measurement.

Note: $10\log(500\text{kHz}/100\text{kHz}) = 6.99$

 Spectrum Research & Testing Lab., Inc. No.167, Ln. 780, Shan-Tong Rd., Ling 8, Shan-Tong Li, Chung-Li Dist., Taoyuan City 320, Taiwan (R.O.C.)	TEST REPORT	Reference No.: A23080102 Report No.: FCCA23080102-X0 FCC ID : 2AZ3ICC180W Page: 91 of 99 Date: Aug. 21, 2023
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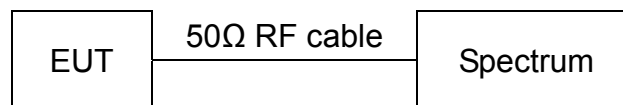
7.2 TEST EQUIPMENT

The following test equipment was used during the radiated emission test:

Equipment/ Facilities	Specifications	Manufacturer	Model #/ Serial #	Due Date of Cal. & Cal. Center
EXA Signal Analyzer	10 Hz ~ 44 GHz	KEYSIGHT	N9010A / MY56480554	AUG. 24, 2023 ETC

NOTE: The calibration interval of the above test equipment is one year and the calibrations are traceable to NML/ROC and NIST/USA.

7.3 TEST SET-UP



7.4 TEST PROCEDURE

The EUT was operating in transmitter mode and could be controlled its channel.
 Printed out the test result from the spectrum by hard copy function.

7.5 EUT OPERATING CONDITION

1. Set the EUT under continuous transmission condition.
2. The EUT was set to the highest available power level.



Spectrum Research & Testing Lab., Inc.
No.167,Ln. 780, Shan-Tong Rd.,Ling 8, Shan-Tong Li, Chung-Li Dist., Taoyuan City 320, Taiwan (R.O.C.)

TEST REPORT

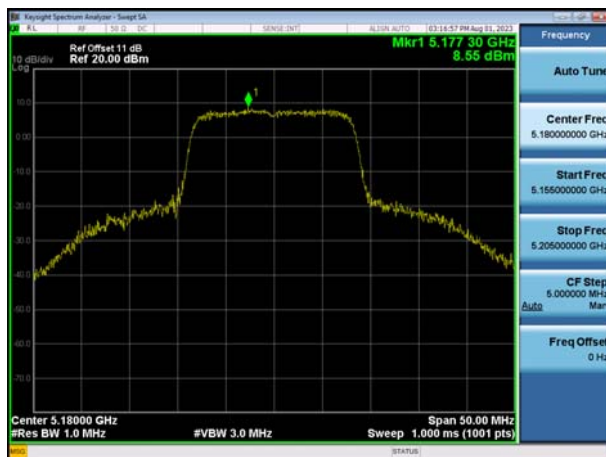
Reference No.: A23080102
Report No.: FCCA23080102-X0
FCC ID : 2AZ3ICC180W
Page: 92 of 99
Date: Aug. 21, 2023

7.6 TEST RESULT

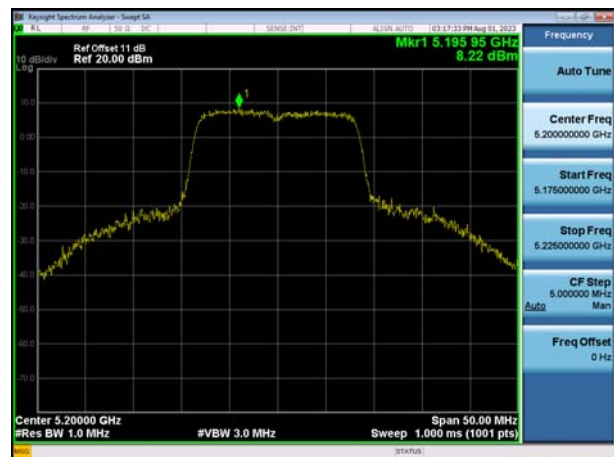
Temperature	25°C	Humidity	60%RH
Detector	Peak	Test Mode	802.11A
RBW	1 MHz	VBW	3 MHz
Tested By	Jimmy Tseng	Tested Date	Aug. 01, 2023

Channel Number	Channel Frequency (MHz)	Power Spectral Density (dBm/1MHz)	Maximum Limit (dBm/1MHz)
CH036	5180	8.55	11
CH040	5200	8.22	11
CH048	5240	8.22	11

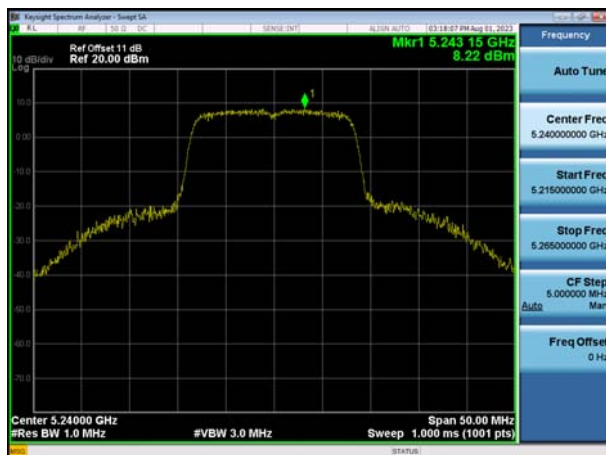
CH036 :



CH040 :



CH048 :





Spectrum Research & Testing Lab., Inc.

No.167, Ln. 780, Shan-Tong Rd., Ling 8, Shan-Tong Li, Chung-Li Dist., Taoyuan City 320, Taiwan (R.O.C.)

TEST REPORT

Reference No.: A23080102

Report No.: FCCA23080102-X0

FCC ID : 2AZ3ICC180W

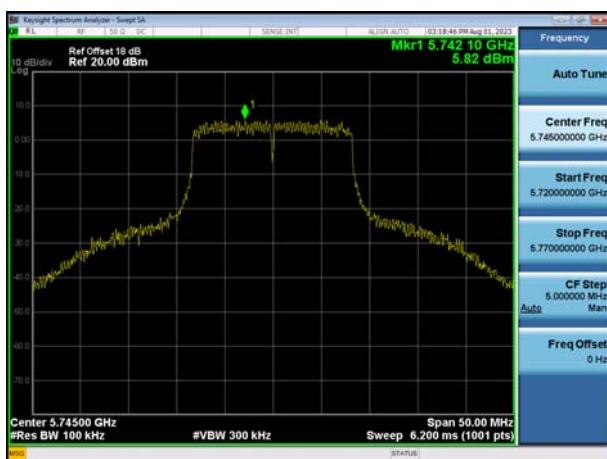
Page: 93 of 99

Date: Aug. 21, 2023

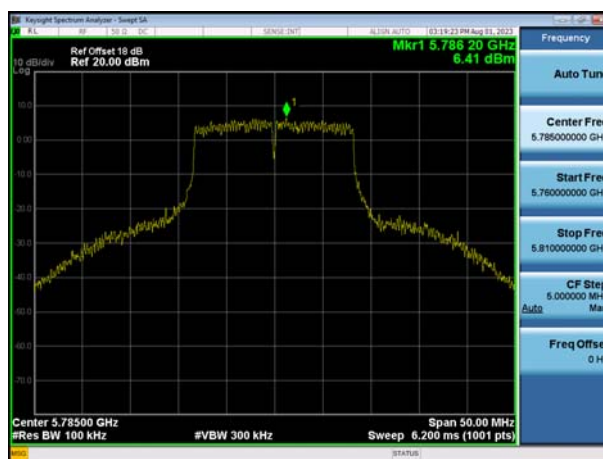
Temperature	25°C	Humidity	60%RH
Detector	Peak	Test Mode	802.11A
RBW	100 kHz	VBW	300 kHz
Tested By	Jimmy Tseng	Tested Date	Aug. 01, 2023

Channel Number	Channel Frequency (MHz)	Power Spectral Density (dBm/500kHz)	Maximum Limit (dBm/500kHz)
CH149	5745	5.82	30
CH157	5785	6.41	30
CH165	5825	6.45	30

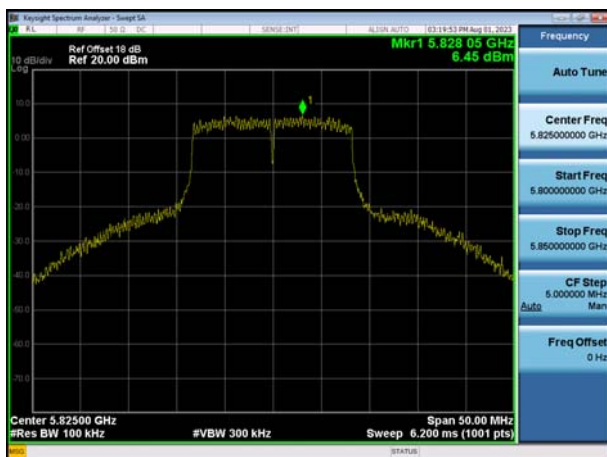
CH149 :



CH157 :



CH165 :





Spectrum Research & Testing Lab., Inc.
No.167,Ln. 780, Shan-Tong Rd.,Ling 8, Shan-Tong Li, Chung-Li Dist., Taoyuan City 320, Taiwan (R.O.C.)

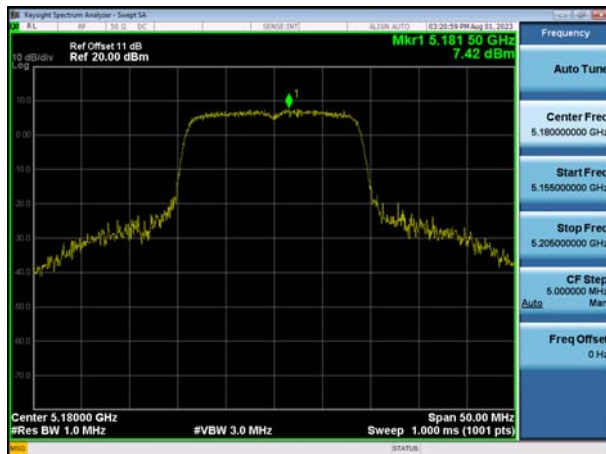
TEST REPORT

Reference No.: A23080102
Report No.: FCCA23080102-X0
FCC ID : 2AZ3ICC180W
Page: 94 of 99
Date: Aug. 21, 2023

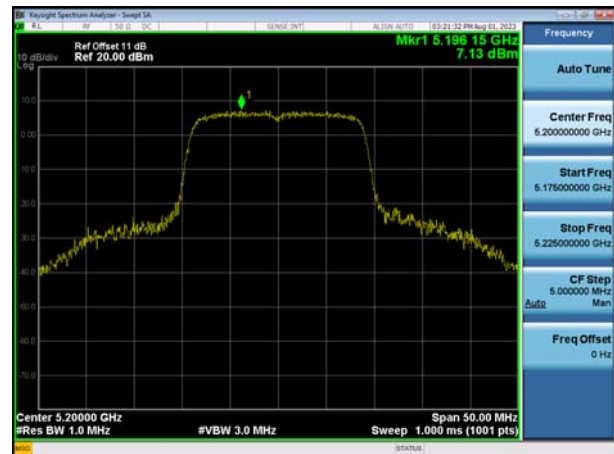
Temperature	25°C	Humidity	60%RH
Detector	Peak	Test Mode	802.11N 20
RBW	1 MHz	VBW	3 MHz
Tested By	Jimmy Tseng	Tested Date	Aug. 01, 2023

CHANNEL NUMBER	Channel Frequency (MHz)	Power Spectral Density (dBm/1 MHz)	Maximum Limit (dBm/1 MHz)
CH036	5180	7.42	11
CH040	5200	7.13	11
CH048	5240	7.02	11

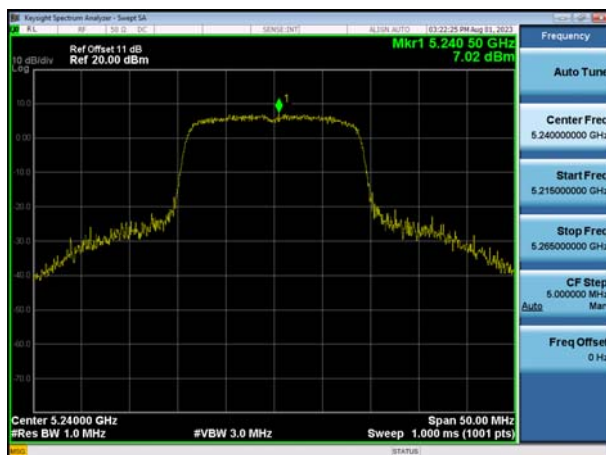
CH036 :



CH040 :



CH048 :





Spectrum Research & Testing Lab., Inc.

No.167,Ln. 780, Shan-Tong Rd.,Ling 8, Shan-Tong Li, Chung-Li Dist., Taoyuan City 320, Taiwan (R.O.C.)

TEST REPORT

Reference No.: A23080102

Report No.: FCCA23080102-X0

FCC ID : 2AZ3IC180W

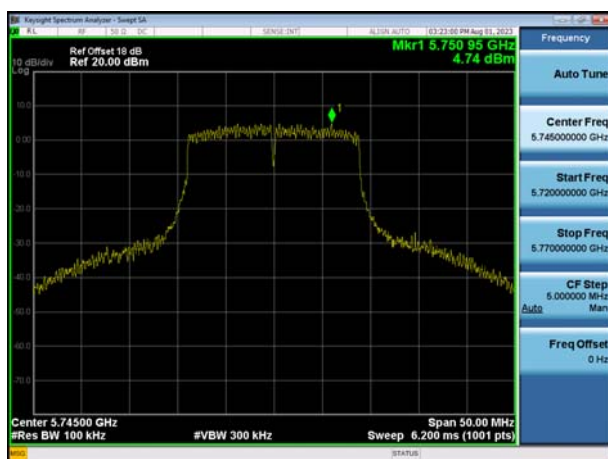
Page: 95 of 99

Date: Aug. 21, 2023

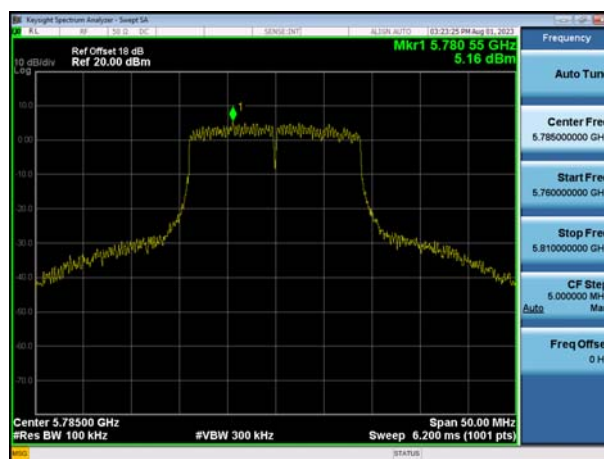
Temperature	25°C	Humidity	60%RH
Detector	Peak	Test Mode	802.11N 20
RBW	100 kHz	VBW	300 kHz
Tested By	Jimmy Tseng	Tested Date	Aug. 01, 2023

Channel Number	Channel Frequency (MHz)	Power Spectral Density (dBm/500kHz)	Maximum Limit (dBm/500kHz)
CH149	5745	4.74	30
CH157	5785	5.16	30
CH165	5825	5.07	30

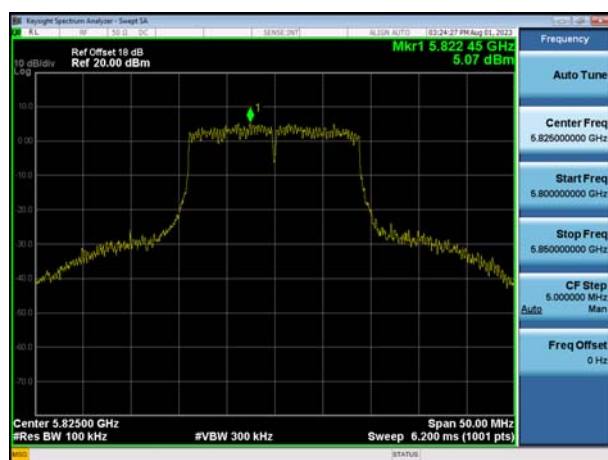
CH149 :



CH157 :



CH155 :





Spectrum Research & Testing Lab., Inc.
No.167,Ln. 780, Shan-Tong Rd.,Ling 8, Shan-Tong Li, Chung-Li Dist., Taoyuan City 320, Taiwan (R.O.C.)

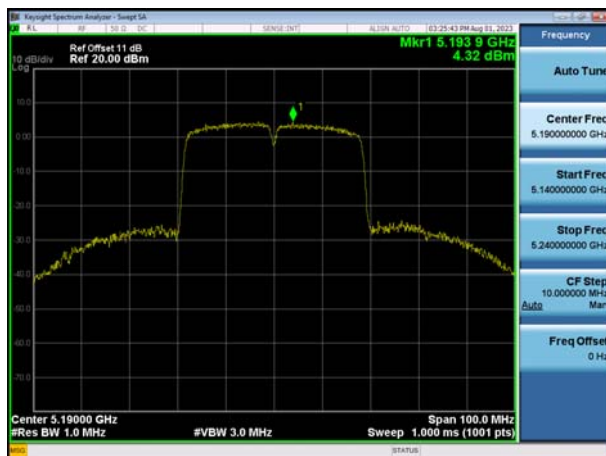
TEST REPORT

Reference No.: A23080102
Report No.: FCCA23080102-X0
FCC ID : 2AZ3ICC180W
Page: 96 of 99
Date: Aug. 21, 2023

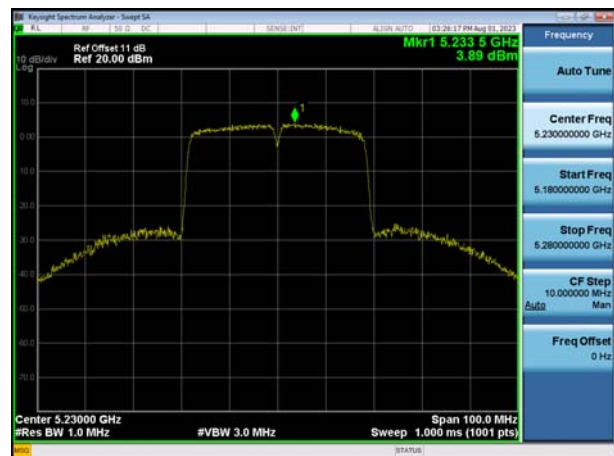
Temperature	25°C	Humidity	60%RH
Detector	Peak	Test Mode	802.11N 40
RBW	1 MHz	VBW	3 MHz
Tested By	Jimmy Tseng	Tested Date	Aug. 01, 2023

Channel Number	Channel Frequency (MHz)	Power Spectral Density (dBm/1MHz)	Maximum Limit (dBm/1MHz)
CH038	5190	4.32	11
CH046	5230	3.89	11

CH038 :



CH046 :





Spectrum Research & Testing Lab., Inc.
No.167,Ln. 780, Shan-Tong Rd.,Ling 8, Shan-Tong Li, Chung-Li Dist., Taoyuan City 320, Taiwan (R.O.C.)

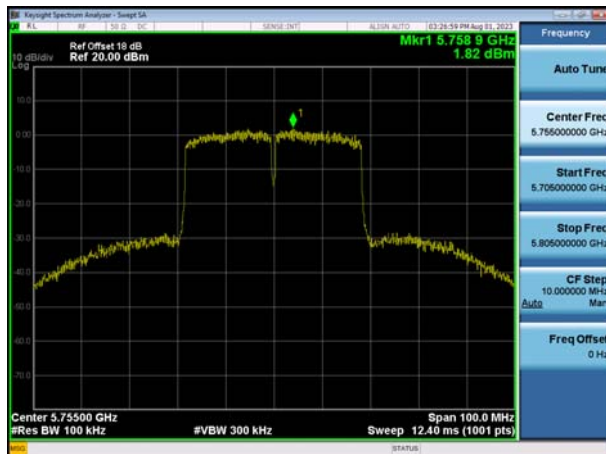
TEST REPORT

Reference No.: A23080102
Report No.: FCCA23080102-X0
FCC ID : 2AZ3IC180W
Page: 97 of 99
Date: Aug. 21, 2023

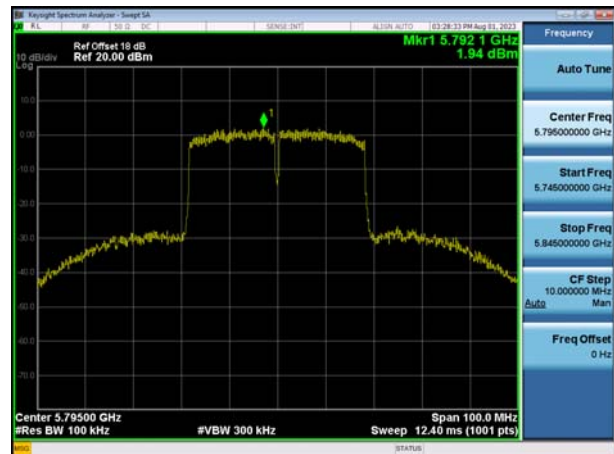
Temperature	25°C	Humidity	60%RH
Detector	Peak	Test Mode	802.11N 40
RBW	100 kHz	VBW	300 kHz
Tested By	Jimmy Tseng	Tested Date	Aug. 01, 2023

Channel Number	Channel Frequency (MHz)	Power Spectral Density (dBm/500kHz)	Maximum Limit (dBm/500kHz)
CH151	5755	1.82	30
CH159	5795	1.94	30

CH151 :



CH159 :



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8 Antenna application

8.1 Antenna requirement

FCC Part 15E section 15.407 requirement:

For the band 5.725-5.85 GHz, If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

8.2 Result

The EUT's antenna used a FPC Antenna . Gain of 5.1G & 5.8G antenna types is 2.99 dBi that meet the requirement.

8.3 Description of RF Exposure

SAR compliance has been evaluated in the product(s), and can be used in host product(s) with substantially similar physical dimensions, construction, and electrical and RF characteristics. End-users must be provided with specific information required to satisfy RF exposure compliance for all final host devices. Compliance of this device in all final host configurations is the responsibility of the Grantee.

- The separation distance -20 cm must be clearly stated in the operating and/or installation manual that is supplied to the User.
- This application is being made on behalf of the "Grantee".

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9 TERMS OF ABBREVIATION

AV.	Average detection
AZ(°)	Turn table azimuth
Correct.	Correction
EL(m)	Antenna height (meter)
EUT	Equipment Under Test
Horiz.	Horizontal direction
LISN	Line Impedance Stabilization Network
NSA	Normalized Site Attenuation
Q.P.	Quasi-peak detection
SRT Lab	Spectrum Research & Testing Laboratory, Inc.
Vert.	Vertical direction