TEST REPORT

Product Name	:	WIFI&BT Module
Brand Mark	:	N/A
Model No.	:	AW65S1-50B1
Extension model	:	AW65S1-50B2, AW65S1-50B2, AW65S1-50B3, AW65S1-50B4, AW65S1-50B5, AW65S1-50B6, AW65S1-50B7, AW65S1-50B8
Report Number	:	BLA-EMC-202305-A10904
FCC ID	:	VYV-AW65S1-50B1
Date of Sample Receipt	:	2023/5/31
Date of Test	:	2023/6/1 to 2023/7/27
Date of Issue	:	2023/7/27
Test Standard	:	47 CFR Part 15, Subpart E 15.407
Test Result	:	Pass

Prepared for:

Iton Technology Corp.
7 Floor East, Building C, Shenzhen International Innovation Center, No.1006 Shennan Rd. Futian Dist

Prepared by:

BlueAsia of Technical Services(Shenzhen) Co.,Ltd.
Building C, No. 107, Shihuan Road, Shiyan Sub-District, Baoan District, Shenzhen, Guangdong Province, China
TEL: +86-755-23059481

Compiled by: Jozu

Review by: Sweely

Approved by: Blue Zheng

Date: 2023/7/25

REPORT REVISE RECORD

Version No.	Date	Description
00	2023/7/27	Original

TABLE OF CONTENTS

1 TEST SUMMARY 6
2 GENERAL INFORMATION 7
3 GENERAL DESCRIPTION OF E.U.T. 7
4 TEST ENVIRONMENT 11
5 TEST MODE 11
6 MEASUREMENT UNCERTAINTY 11
7 DESCRIPTION OF SUPPORT UNIT 12
8 LABORATORY LOCATION 12
9 TEST INSTRUMENTS LIST 13
10 FREQUENCY STABILITY 15
10.1 LIMITS 15
10.2 BLOCK DIAGRAM OF TEST SETUP 15
10.3 TEST DATA 15
11 RADIATED EMISSIONS WHICH FALL IN THE RESTRICTED BANDS 16
11.1 LIMITS 16
11.2 BLOCK DIAGRAM OF TEST SETUP 17
11.3 PROCEDURE 17
11.4 TEST DATA 19
12 RADIATED EMISSIONS 36
12.1 BLOCK DIAGRAM OF TEST SETUP 36
12.2 PROCEDURE 36
12.3 TEST DATA 38
13 DFS: CHANNEL CLOSING TRANSMISSION TIME 65
13.1 LIMITS 65
13.2 BLOCK DIAGRAM OF TEST SETUP 65
13.3 PROCEDURE 65
13.4 TEST DATA 67
14 DFS: NON-OCCUPANCY PERIOD 68
14.1 LIMITS 68
14.2 BLOCK DIAGRAM OF TEST SETUP 68

14.3 PROCEDURE 68
14.4 TEST DATA 70

15 PEAK POWER SPECTRUM DENSITY 71

15.1 LIMITS 71
15.2 BLOCK DIAGRAM OF TEST SETUP 71
15.3 TEST DATA 72

16 MAXIMUM CONDUCTED OUTPUT POWER 73

16.1 LIMITS 73
16.2 BLOCK DIAGRAM OF TEST SETUP 73
16.3 TEST DATA 74

17 MINIMUM 6 DB BANDWIDTH (5.725-5.85 GHZ BAND) 75

17.1 LIMITS 75
17.2 BLOCK DIAGRAM OF TEST SETUP 75
17.3 TEST DATA 75

18 26DB EMISSION BANDWIDTH 76

18.1 BLOCK DIAGRAM OF TEST SETUP 76
18.2 TEST DATA 76

19 99% BANDWIDTH 77

19.1 BLOCK DIAGRAM OF TEST SETUP 77
19.2 TEST DATA 77

20 DUTY CYCLE 78

20.1 BLOCK DIAGRAM OF TEST SETUP 78
20.2 TEST DATA 78

21 CONDUCTED EMISSIONS AT AC POWER LINE (150KHZ-30MHZ) 79

21.1 LIMITS 79
21.2 BLOCK DIAGRAM OF TEST SETUP 79
21.3 PROCEDURE 79
21.4 TEST DATA 81

22 ANTENNA REQUIREMENT 84

22.1 CONCLUSION 84

23 APPENDIX 85

23.1 801.11A/N/AC: 85
23.1.1 Maximum Conducted Output Power *85*
23.1.2 -26dB Bandwidth *148*
23.1.3 Occupied Channel Bandwidth *195*
23.1.4 Maximum Power Spectral Density Level *257*
23.1.5 Band Edge *320*
23.1.6 Frequency Stability *368*
23.1.7 Conducted RF Spurious Emission *406*
23.1.8 -6dB Bandwidth *468*
23.2 802.11AX: 483
23.2.1 Maximum Conducted Output Power *483*
23.2.2 -26dB Bandwidth *511*
23.2.3 Occupied Channel Bandwidth *532*
23.2.4 Maximum Power Spectral Density Level *560*
23.2.5 Band Edge *588*
23.2.6 Frequency Stability *611*
23.2.7 Conducted RF Spurious Emission *625*
23.2.8 -6dB Bandwidth *653*
APPENDIX A: PHOTOGRAPHS OF TEST SETUP **660**
APPENDIX B: PHOTOGRAPHS OF EUT **662**

1 TEST SUMMARY

Test item	Test Requirement	Test Method	Class/Severity	Result
Frequency Stability	47 CFR Part 15, Subpart E 15.407	ANSI C63.10 (2013) Section 6.8	47 CFR Part 15, Subpart C 15.407 (g)	Pass
Radiated Emissions which fall in the restricted bands	47 CFR Part 15, Subpart E 15.407	KDB 789033 D02 II G	47 CFR Part 15, Subpart C 15.209 & 15.407(b)	Pass
Radiated Emissions	47 CFR Part 15, Subpart E 15.407	KDB 789033 D02 II G	47 CFR Part 15, Subpart C 15.209 & 15.407(b)	Pass
DFS: Channel Closing Transmission Time	47 CFR Part 15, Subpart E 15.407	KDB 905462 D02 Section 7.8.3	KDB 905462 D02 Section 5.1	Pass
DFS: Non-occupancy period	47 CFR Part 15, Subpart E 15.407	KDB 905462 D02 Section 7.8.3	KDB 905462 D02 Section 5.1	Pass
Peak Power spectrum density	47 CFR Part 15, Subpart E 15.407	KDB 789033 D02 II F	47 CFR Part 15, Subpart C 15.407 (a)	Pass
Transmitter Power Control	47 CFR Part 15, Subpart E 15.407	KDB 789033 D02 II E	47 CFR Part 15, Subpart C 15.407 (h)(1)	N/A
Maximum Conducted output power	47 CFR Part 15, Subpart E 15.407	KDB 789033 D02 II E	47 CFR Part 15, Subpart C 15.407 (a)	Pass
Minimum 6 dB bandwidth (5.725-5.85 GHz band)	47 CFR Part 15, Subpart E 15.407	KDB 789033 D02 II C 2	47 CFR Part 15, Subpart C 15.407 (e)	Pass
26dB Emission bandwidth	47 CFR Part 15, Subpart E 15.407	KDB 789033 D02 II C 1	47 CFR Part 15, Subpart C 15.407 (a)	Pass
99% Bandwidth	47 CFR Part 15, Subpart E 15.407	KDB 789033 II D	N/A	Pass
Duty Cycle	47 CFR Part 15, Subpart E 15.407	KDB 789033 II B 1	KDB 789033 D02 II B 1	Pass
Conducted Emissions at AC Power Line (150kHz-30MHz)	47 CFR Part 15, Subpart E 15.407	ANSI C63.10 (2013) Section 6.2	47 CFR Part 15, Subpart C 15.207 & 15.407 b(6)	Pass
Antenna Requirement	47 CFR Part 15, Subpart E 15.407	N/A	47 CFR Part 15, Subpart C 15.203	Pass

Remark:

N/A: Not Applicable

2 GENERAL INFORMATION

Applicant	Iton Technology Corp.
Address	7 Floor East, Building C, Shenzhen International Innovation Center, No.1006 Shennan Rd. Futian Dist
Manufacturer	Iton Technology Corp.
Address	7th Floor, Building C, Shenzhen International Innovation Center (Futian Science and Technology Plaza), 1006 Shennan Road, Huafu Street, Futian District, Shenzhen City, Guangdong Province, China
Factory	Huizhou Langda Industrial Co.
Address	6/F, No.1 Plant, Langhua Smart New City Project, No.2, Shuiwei 3rd Road, Qingchun Village, Chenjiang Sub-district, Zhongkai High-Tech Industry Development Zone, Huizhou
Product Name	WIFI&BT Module
Test Model No.	AW65S1-50B1
Extension model	AW65S1-50B2, AW65S1-50B2, AW65S1-50B3, AW65S1-50B4, AW65S1-50B5, AW65S1-50B6, AW65S1-50B7, AW65S1-50B8
Note	All above models are identical in the same PCB layout, interior structure and electrical circuits. The differences are model name for commercial purpose.

3 GENERAL DESCRIPTION OF E.U.T.

Hardware Version	V1.0
Software Version	20230313
Operation Frequency:	Band 1 : 5180MHz-5240MHz; Band 2:5260MHz~5320MHz Band 3: 5500MHz~5700MHz; Band 4 : 5745MHz-5825MHz
Channel numbers:	Band 1: 802.11a/802.11n(HT20)/802.11ac(HT20)/802.11ax(HT20): 4, 802.11n(HT40)/802.11ac(HT40)/802.11ax(HT40):2 802.11ac(HT80)/802.11ax(HT80): 1
	Band 2: 802.11a/802.11n(HT20)/802.11ac(HT20)/802.11ax(HT20): 4, 802.11n(HT40)/802.11ac(HT40)/802.11ax(HT40):2 802.11ac(HT80)/802.11ax(HT80): 1
	Band 3: 802.11a/802.11n(HT20)/802.11ac(HT20)/802.11ax(HT20): 11, 802.11n(HT40)/802.11ac(HT40)/802.11ax(HT40):5 802.11ac(HT80)/802.11ax(HT80): 3
	Band 4: 802.11a/802.11(HT20)/802.11ac(HT20)/802.11ax(HT20): 5, 802.11n(HT40)/802.11ac(HT40)/802.11ax(HT40): 2, 802.11ac(HT80)/802.11ax(HT80): 1
Channel separation:	802.11a/n/ac(HT20)/ ax(HT20): 20MHz, 802.11n/ac(HT40)/ax(HT40): 40MHz, 802.11ac(HT80)/ax(HT80): 80MHz
Modulation technology: (IEEE 802.11a/n/ac/ax)	BPSK, QPSK,16-QAM, 64-QAM, 256QAM, OFDMA
Data speed(IEEE 802.11a)	6Mbps, 9Mbps,12Mbps,18Mbps, 24Mbps,36Mbps,48Mbps, 54Mbps
Data speed (IEEE 802.11n/ac):	Up to 866.7Mbps
Antenna Type:	External antenna

Antenna gain:	Antenna 1: 3dBi, Antenna 2: 3dBi
Note:	Antenna number : 2 SISO mode： 802.11a MIMO mode： 802.11n(HT20)/ 802.11n(HT40)/ 802.11ac(HT20)/ 802.11ac(HT40)/ 802.11ac(HT80)/ 802.11ax(HT20)/ 802.11ax(HT40)/ 802.11ax(HT80) Directional gain of MIMO mode:3+10log2=6.01dBi
Remark:The Antenna Gain is supplied by the customer.BlueAsia is not responsible for this data	

Note: if transmitting antennas of directional gain greater than 6 dBi are used, then the limit should be reduced.

Because the directional gain = 6.01dB > 6.0 dBi, the limit should be calculated as below:

Power band1/band2/band3:

Limit = 24 dBm - (ANT Gain + 10*Log(N=2) - 6dBi)

= 24 dBm - (3 + 3.01 - 6) dBi = 23.99dBm

Powe band4:

Limit = 30 dBm - (ANT Gain + 10*Log(N=2) - 6dBi)

= 30 dBm - (3 + 3.01 - 6) dBi = 29.99dBm

P.S.D band1/band2/band3:

Limit = 11 dBm - (ANT Gain + 10*Log(N=2) - 6dBi)

= 11 dBm - (3 + 3.01 - 6) dBi = 10.99dBm

Powe band4:

Limit = 30 dBm - (ANT Gain + 10*Log(N=2) - 6dBi)

= 30 dBm - (3+ 3.01 - 6) dBi = 29.99dBm

Operation Frequency each of channel

Band 1: 5150-5250MHz					
802.11a/802.11n20		802.11n40		802.11ac80	
Channel	Frequency	Channel	Frequency	Channel	Frequency
36	5180MHz	38	5190MHz	42	5210MHz
40	5200MHz	46	5230MHz		
44	5220MHz				
48	5240MHz				
Band 2: 5250-5350MHz					
802.11a/802.11n20		802.11n40		802.11ac80	
Channel	Frequency	Channel	Frequency	Channel	Frequency
52	5260MHz	54	5270MHz	58	5290MHz
56	5280MHz	62	5310MHz		
64	5320MHz				
Band 3: 5470-5725MHz					
802.11a/802.11n20		802.11n40		802.11ac80	
Channel	Frequency	Channel	Frequency	Channel	Frequency
100	5500MHz	102	5510MHz	106	5530MHz
104	5520MHz	110	5550MHz	122	5610MHz
108	5540MHz	114	5570MHz		
112	5560MHz	118	5590MHz		
116	5580MHz	126	5630MHz		
120	5600MHz	134	5670MHz		
124	5620MHz				
128	5640MHz				
132	5660MHz				
136	5680MHz				
140	5700MHz				
Band 4					
802.11a/802.11n20		802.11n40		802.11ac80	
Channel	Frequency	Channel	Frequency	Channel	Frequency
149	5745MHz	151	5755MHz	155	5775MHz
153	5765MHz	159	5795MHz		
157	5785MHz				
161	5805MHz				
165	5825MHz				

Band 1: 5150-5250MHz					
802.11ax20		802.11ax40		802.11ax80	
Channel	Frequency	Channel	Frequency	Channel	Frequency
36	5180MHz	38	5190MHz	42	5210MHz
40	5200MHz	46	5230MHz		
44	5220MHz				
48	5240MHz				
Band 2: 5250-5350MHz					
802.11ax20		802.11ax40		802.11ax80	
Channel	Frequency	Channel	Frequency	Channel	Frequency
52	5260MHz	54	5270MHz	58	5290MHz
56	5280MHz	62	5310MHz		
64	5320MHz				
Band 3: 5470-5725MHz					
802.11ax20		802.11ax40		802.11ax80	
Channel	Frequency	Channel	Frequency	Channel	Frequency
100	5500MHz	102	5510MHz	106	5530MHz
104	5520MHz	110	5550MHz	122	5610MHz
108	5540MHz	114	5570MHz		
112	5560MHz	118	5590MHz		
116	5580MHz	126	5630MHz		
120	5600MHz	134	5670MHz		
124	5620MHz				
128	5640MHz				
132	5660MHz				
136	5680MHz				
140	5700MHz				
Band 4					
802.11ax20		802.11ax40		802.11ax80	
Channel	Frequency	Channel	Frequency	Channel	Frequency
149	5745MHz	151	5755MHz	155	5775MHz
153	5765MHz	159	5795MHz		
157	5785MHz				
161	5805MHz				
165	5825MHz				

Note:

In section 15.31(m), regards to the operating frequency range over 10 MHz, the Lowest frequency, the middle frequency, and the highest frequency of channel were selected to perform the test, and the selected channel see below:

4 TEST ENVIRONMENT

Environment	Temperature	Voltage
Normal	25℃	DC3.3V

5 TEST MODE

TEST MODE	TEST MODE DESCRIPTION
Transmitting mode	Keep the EUT in continuously transmitting mode with modulation.
Remark: Only the data of the worst mode would be recorded in this report.	

6 MEASUREMENT UNCERTAINTY

Parameter	Expanded Uncertainty (Confidence of 95%)
Radiated Emission(9kHz-30MHz)	±4.34dB
Radiated Emission(30Mz-1000MHz)	±4.24dB
Radiated Emission(1GHz-18GHz)	±4.68dB
AC Power Line Conducted Emission(150kHz-30MHz)	±3.45dB

7 DESCRIPTION OF SUPPORT UNIT

Device Type	Manufacturer	Model Name	Serial No.	Remark
AC adaptor	From client	RJ35-W120150US	/	/

8 LABORATORY LOCATION

All tests were performed at:
BlueAsia of Technical Services(Shenzhen) Co., Ltd.
Building C, No. 107, Shihuan Road, Shiyan Sub-District, Baoan District, Shenzhen, Guangdong Province, China
Telephone: TEL: +86-755-28682673 FAX: +86-755-28682673
No tests were sub-contracted.

9 TEST INSTRUMENTS LIST

Test Equipment Of RF Conducted Test					
Equipment	**Manufacturer**	**Model**	**S/N**	**Cal.Date**	**Cal.Due**
Spectrum	R&S	FSP40	100817	2022/09/15	2023/09/14
Spectrum	Agilent	N9020A	MY49100060	2022/09/07	2023/09/06
Spectrum	KEYSIGHT	N9030A	MY52350152	2022/07/01	2023/06/30
				2023/06/29	2024/06/28
Spectrum	KEYSIGHT	N9010A	MY54330814	2022/07/01	2023/06/30
				2023/06/29	2024/06/28
Signal Generator	Agilent	N5182A	MY47420955	2022/09/07	2023/09/06
Signal Generator	Agilent	E8257D	MY44320250	2022/07/01	2023/06/30
				2023/06/29	2024/06/28
Signal Generator	Agilent	N5181A	MY46240904	2022/08/02	2023/08/01
Signal Generator	R&S	CMW500	132429	2022/09/07	2023/09/06
BluetoothTester	Anritsu	MT8852B	06262047872	2022/09/07	2023/09/06
Power probe	DARE	RPR3006W	14I00889SN042	2022/09/07	2023/09/06
DCPowersupply	zhaoxin	KXN-305D	20K305D1221363	2022/09/14	2023/09/13
DCPowersupply	zhaoxin	RXN-1505D	19R1505D050168	2022/09/14	2023/09/13

Test Equipment Of Conducted Emissions at AC Power Line (150kHz-30MHz)					
Equipment	**Manufacturer**	**Model**	**S/N**	**Cal.Date**	**Cal.Due**
Shield room	SKET	833	N/A	2020/11/25	2023/11/24
Receiver	R&S	ESPI3	101082	2022/09/14	2023/09/13
LISN	R&S	ENV216	3560.6550.15	2022/09/14	2023/09/13
LISN	AT	AT166-2	AKK1806000003	2022/09/14	2023/09/13
ISN	TESEQ	ISNT8-cat6	53580	2022/09/14	2023/09/13
Single-channel vehicle artificial power network	Schwarzbeck	NNBM 8124	01045	2022/08/17	2023/08/16
Single-channel vehicle artificial power network	Schwarzbeck	NNBM 8124	01075	2022/08/17	2023/08/16
EMI software	EZ	EZ-EMC	EEMC-3A1	N/A	N/A

Test Equipment Of Radiated Spurious Emissions					
Equipment	**Manufacturer**	**Model**	**S/N**	**Cal.Date**	**Cal.Due**
Chamber 1	SKET	966	N/A	2020/11/10	2023/11/9
Chamber 2	SKET	966	N/A	2021/07/20	2024/07/19
Spectrum	R&S	FSP40	100817	2022/09/15	2023/09/14
Receiver	R&S	ESR7	101199	2022/09/15	2023/09/14
Receiver	R&S	ESPI7	101477	2022/07/16	2023/07/15
				2023/07/14	2024/07/13
broadband Antenna	Schwarzbeck	VULB9168	00836 P:00227	2022/09/15	2023/09/14
Horn Antenna	Schwarzbeck	BBHA9120D	01892 P:00331	2022/09/13	2025/09/12
Amplifier	SKET	LNPA_30M01G-30	SK2021060801	2022/07/16	2023/07/15
				2023/07/14	2024/07/13
Amplifier	SKET	PA-000318G-45	N/A	2022/09/13	2023/09/12
Amplifier	SKET	LNPA_18G40G-50	SK2022071301	2022/07/14	2023/07/13
				2023/07/14	2024/07/13
Filter group	SKET	2.4G/5G Filter group r	N/A	2022/07/16	2023/07/15
				2023/07/14	2024/07/13
EMI software	EZ	EZ-EMC	EEMC-3A1	N/A	N/A
Loop antenna	SCHNARZBECK	FMZB1519B	00102	2022/9/14	2025/9/13
Controller	SKET	N/A	N/A	N/A	N/A
Coaxial Cable	BlueAsia	BLA-XC-02	N/A	N/A	N/A
Coaxial Cable	BlueAsia	BLA-XC-03	N/A	N/A	N/A
Coaxial Cable	BlueAsia	BLA-XC-01	N/A	N/A	N/A

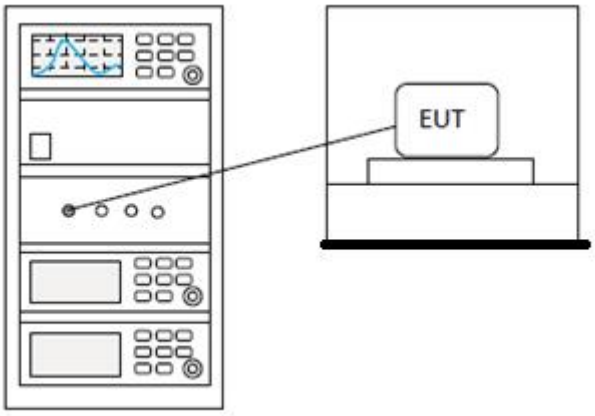
10 FREQUENCY STABILITY

Test Standard	47 CFR Part 15, Subpart E 15.407
Test Method	ANSI C63.10 (2013) Section 6.8
Test Mode (Pre-Scan)	TX
Test Mode (Final Test)	TX
Tester	Jozu
Temperature	25℃
Humidity	60%

10.1 LIMITS

Limit:	The frequency tolerance shall be maintained within the band of operation frequency over a temperature variation of 0 degrees to 35 degrees C at normal supply voltage, and for a variation in the primary supply voltage from 85% to 115% of the rated supply voltage at a temperature of 20 degrees C.

10.2 BLOCK DIAGRAM OF TEST SETUP



10.3 TEST DATA

Pass: Please Refer To Appendix: Appendix1 For Details

11 RADIATED EMISSIONS WHICH FALL IN THE RESTRICTED BANDS

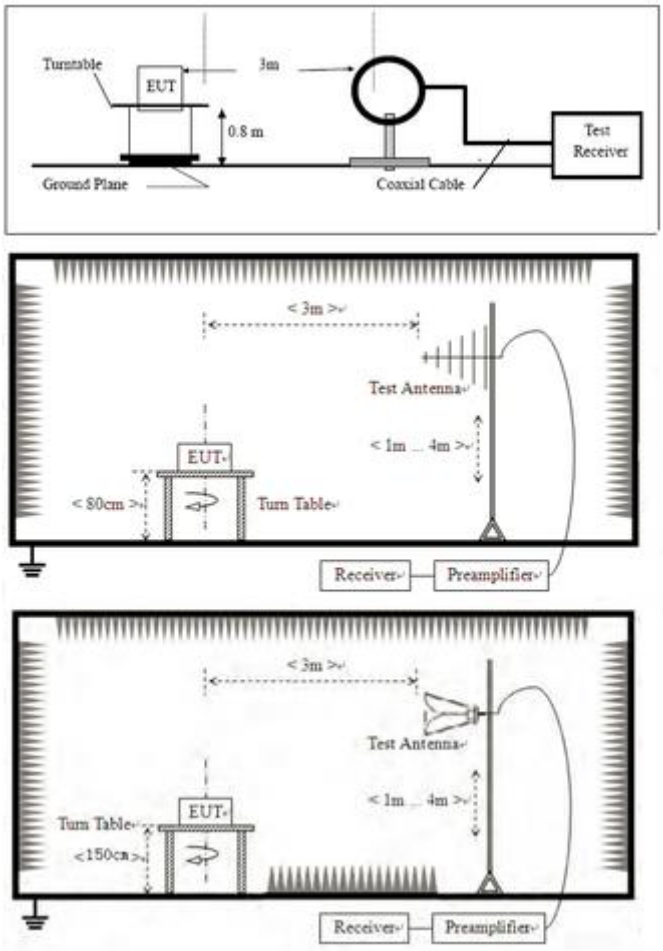
Test Standard	47 CFR Part 15, Subpart E 15.407
Test Method	KDB 789033 D02 II G
Test Mode (Pre-Scan)	TX
Test Mode (Final Test)	TX
Tester	Jozu
Temperature	25℃
Humidity	60%

11.1 LIMITS

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
Above 960	500	3

Remark: The emission limits shown in the above table are based on measurements employing a CISPR quasi-peak detector except for the frequency bands 9-90kHz, 110-490kHz and above 1000 MHz. Radiated emission limits in these three bands are based on measurements employing an average detector, the peak field strength of any emission shall not exceed the maximum permitted average limits specified above by more than 20 dB under any condition of modulation.

11.2 BLOCK DIAGRAM OF TEST SETUP



11.3 PROCEDURE

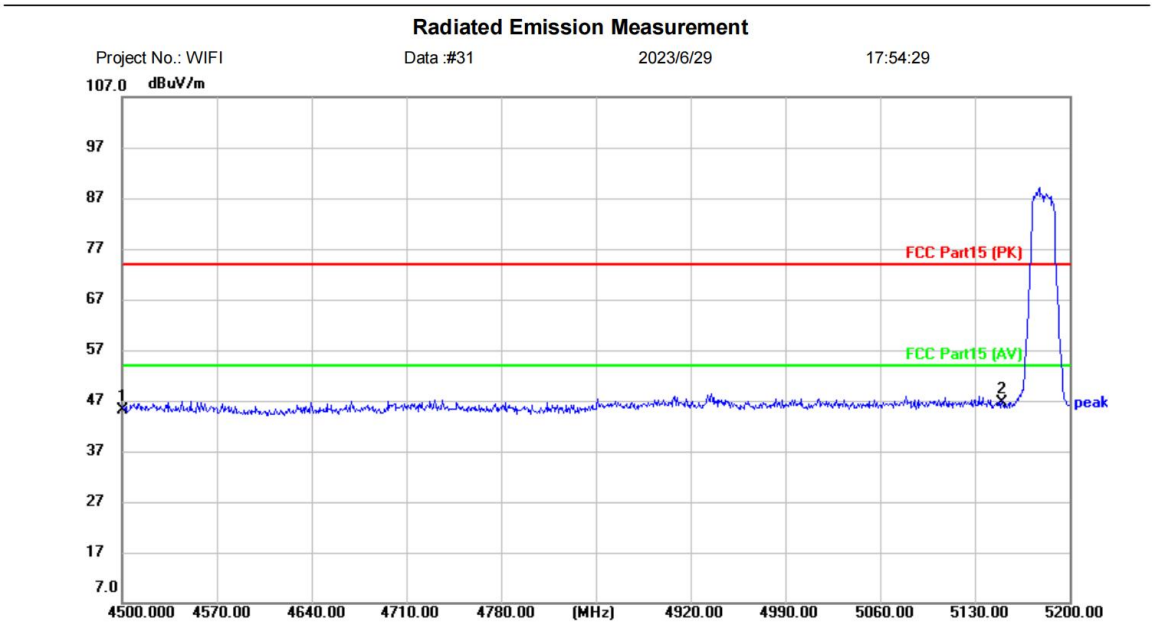
a. For below 1GHz, the EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 or 10 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.
b. For above 1GHz, the EUT was placed on the top of a rotating table 1.5 meters above the ground at a 3 meter fully-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.
c. The EUT was set 3 or 10 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
d. The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
e. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters (for the test frequency of below 30MHz, the antenna was tuned to heights 1 meter) and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
f. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.
g. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.

h. Test the EUT in the lowest channel, the middle channel, the Highest channel.
i. The radiation measurements are performed in X, Y, Z axis positioning for Transmitting mode, and found the X axis positioning which it is the worst case.
j. Repeat above procedures until all frequencies measured was complete.
Remark: Level= Read Level+ Cable Loss+ Antenna Factor- Preamp Factor

11.4 TEST DATA

Remark: During the test, pre-scan the 802.11a/n/ac/ax mode, and found the 802.11a mode which it is worse case.

[TestMode: TX band 1 a 5180 channel]; [Polarity: Horizontal]



Site
Limit: FCC Part15 (PK)
EUT: WIFI&BT Module
M/N: AW65S1-50B1
Mode: 5Gwifi-band1-A-TX-L
Note:

Polarization: *Vertical*
Power:

Temperature: (C)
Humidity: %RH

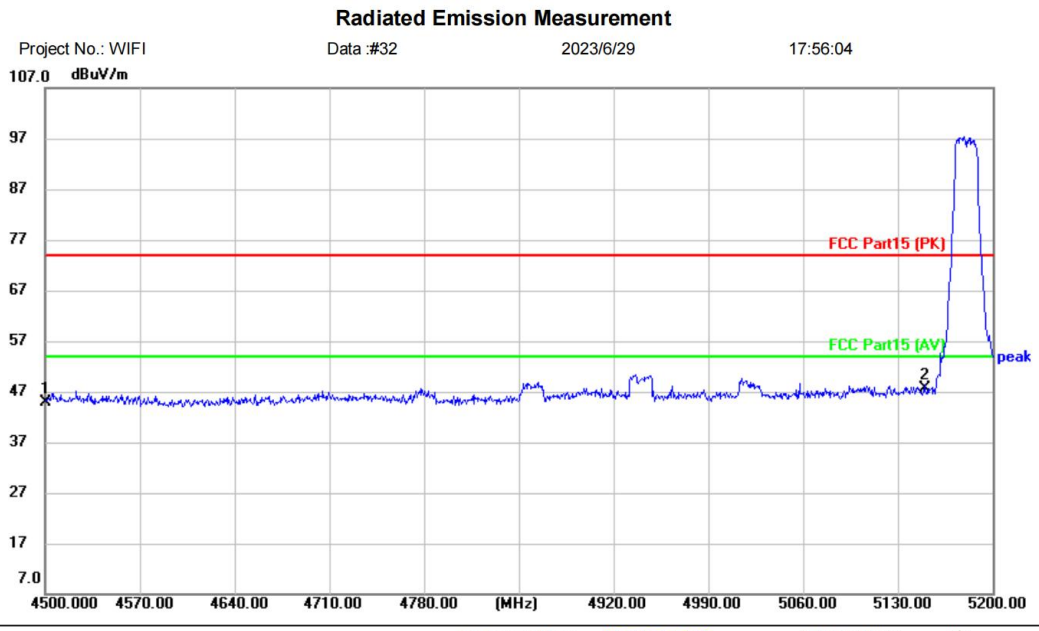
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		4500.000	43.65	1.39	45.04	74.00	-28.96	peak	
2	*	5150.000	43.39	3.20	46.59	74.00	-27.41	peak	

*:Maximum data x:Over limit !:over margin 〈Reference Only

Receiver: ESPI_1
Antenna: EZ 9120D 1G-18G new
Spectrum Analyzer: FSP40
Engineer Signature:

Test Result: Pass

[TestMode: TX band 1 a 5180 channel]; [Polarity: Vertical]



Site
Limit: FCC Part15 (PK)
EUT: WIFI&BT Module
M/N: AW65S1-50B1
Mode: 5Gwifi-band1-A-TX-L
Note:

Polarization: ***Horizontal***
Power:

Temperature: (C)
Humidity: %RH

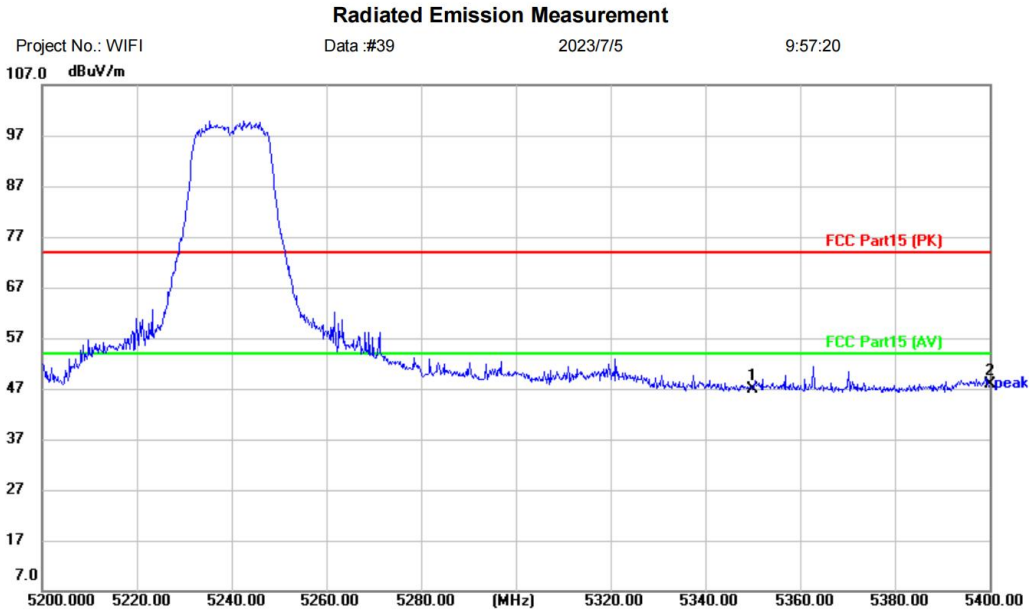
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		4500.000	43.43	1.39	44.82	74.00	-29.18	peak	
2	*	5150.000	44.46	3.20	47.66	74.00	-26.34	peak	

*:Maximum data x:Over limit !:over margin 〈Reference Only

Receiver: ESPI_1
Antenna: EZ 9120D 1G-18G new
Spectrum Analyzer: FSP40
Engineer Signature:

Test Result: Pass

[TestMode: TX band1 a 5240 channel]; [Polarity: Horizontal]



Site
Limit: FCC Part15 (PK)
EUT: WIFI&BT Module
M/N: AW65S1-50B1
Mode: 5Gwifi-band1-A-TX-H
Note:

Polarization: ***Horizontal***
Power:

Temperature: (C)
Humidity: %RH

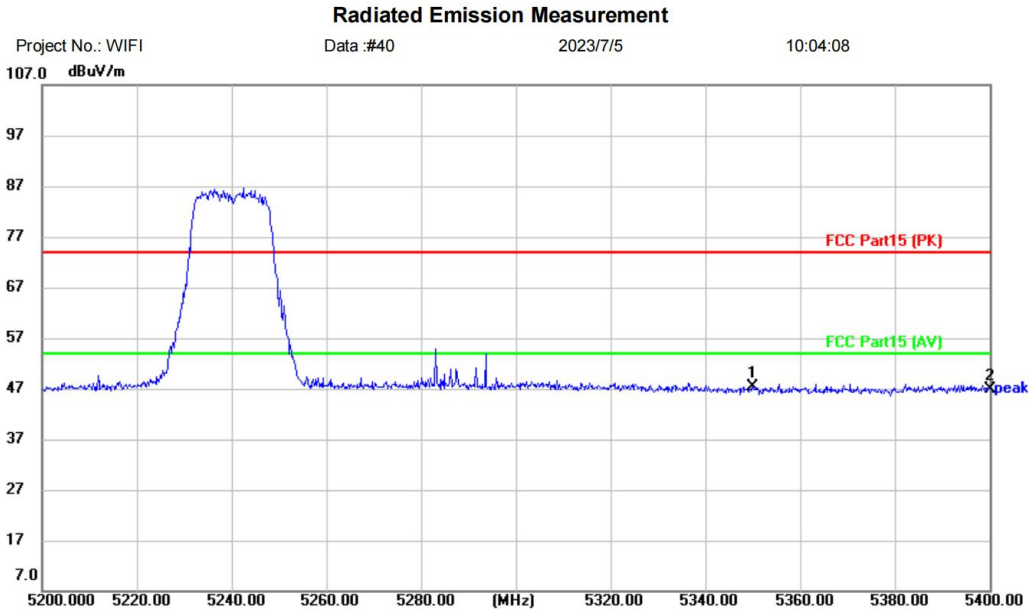
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		5350.000	43.20	3.58	46.78	74.00	-27.22	peak	
2	*	5400.000	44.23	3.70	47.93	74.00	-26.07	peak	

*:Maximum data x:Over limit !:over margin 〈Reference Only

Receiver: ESPI_1
Antenna: EZ 9120D 1G-18G new
Spectrum Analyzer: FSP40
Engineer Signature:

Test Result: Pass

[TestMode: TX band1 a 5240 channel]; [Polarity: Vertical]



Site
Limit: FCC Part15 (PK)
EUT: WIFI&BT Module
M/N: AW65S1-50B1
Mode: 5Gwifi-band1-A-TX-H
Note:

Polarization: *Vertical*
Power:

Temperature: (C)
Humidity: %RH

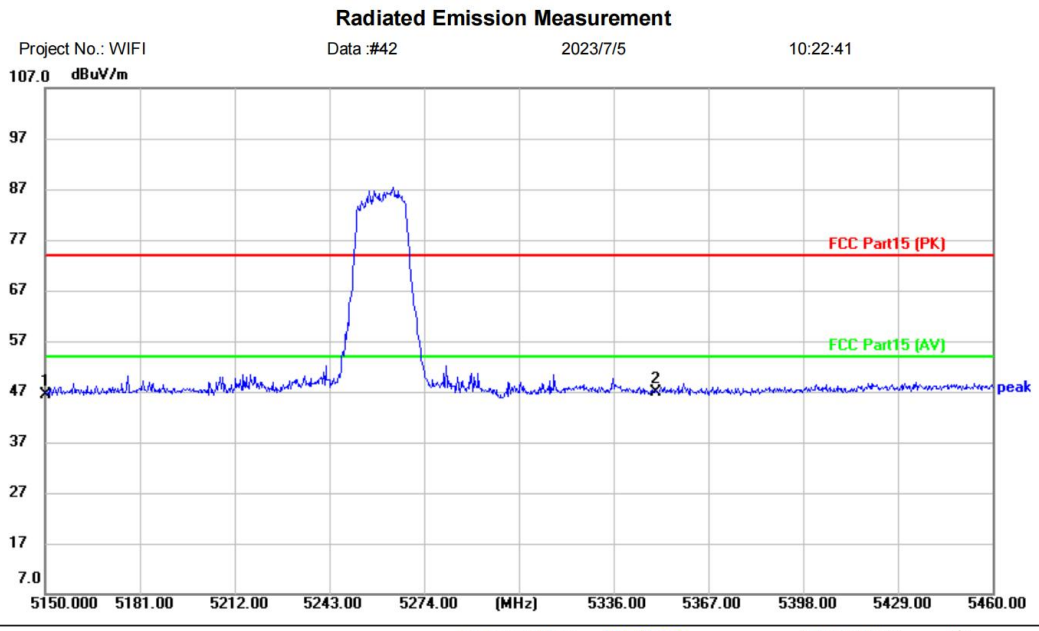
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	5350.000	43.83	3.58	47.41	74.00	-26.59	peak	
2		5400.000	43.15	3.70	46.85	74.00	-27.15	peak	

*:Maximum data x:Over limit !:over margin 〈Reference Only

Receiver: ESPI_1
Antenna: EZ 9120D 1G-18G new
Spectrum Analyzer: FSP40
Engineer Signature:

Test Result: Pass

[TestMode: TX band2 a 5260 channel]; [Polarity: Vertical]



Site
Limit: FCC Part15 (PK)
EUT: WIFI&BT Module
M/N: AW65S1-50B1
Mode: 5Gwifi-band2-A-TX-L
Note:

Polarization: *Vertical*
Power:

Temperature: (C)
Humidity: %RH

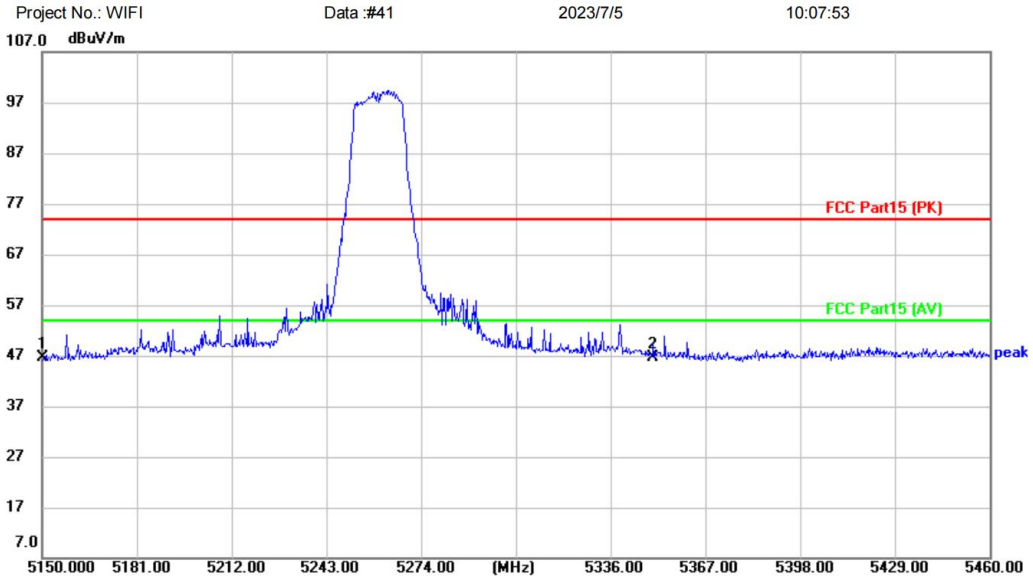
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		5150.000	43.16	3.20	46.36	74.00	-27.64	peak	
2	*	5350.000	43.37	3.58	46.95	74.00	-27.05	peak	

*:Maximum data x:Over limit !:over margin 〈Reference Only

Receiver: ESPI_1
Antenna: EZ 9120D 1G-18G new
Spectrum Analyzer: FSP40
Engineer Signature:

Test Result: Pass

[TestMode: TX band2 a 5260 channel]; [Polarity: Horizontal]



Site
Limit: FCC Part15 (PK)
EUT: WIFI&BT Module
M/N: AW65S1-50B1
Mode: 5Gwifi-band2-A-TX-L
Note:

Polarization: ***Horizontal***
Power:

Temperature: (C)
Humidity: %RH

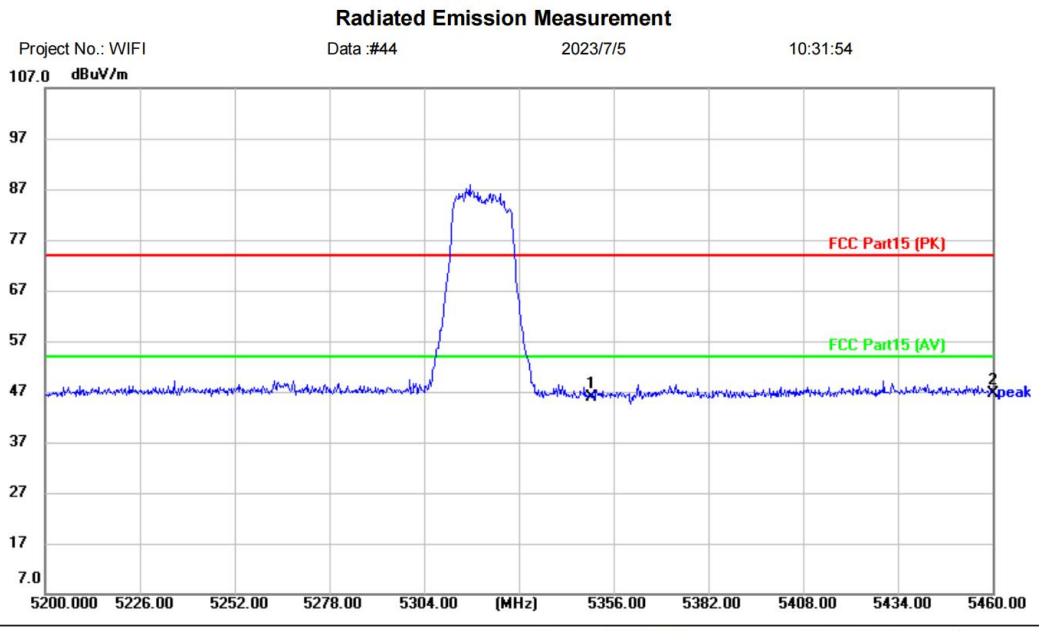
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		5150.000	43.50	3.20	46.70	74.00	-27.30	peak	
2	*	5350.000	43.13	3.58	46.71	74.00	-27.29	peak	

*:Maximum data x:Over limit !:over margin 〈Reference Only

Receiver: ESPI_1
Antenna: EZ 9120D 1G-18G new
Spectrum Analyzer: FSP40
Engineer Signature:

Test Result: Pass

[TestMode: TX band2 a 5320 channel]; [Polarity: Vertical]



Site
Limit: FCC Part15 (PK)
EUT: WIFI&BT Module
M/N: AW65S1-50B1
Mode: 5Gwifi-band2-A-TX-H
Note:

Polarization: *Vertical*
Power:

Temperature: (C)
Humidity: %RH

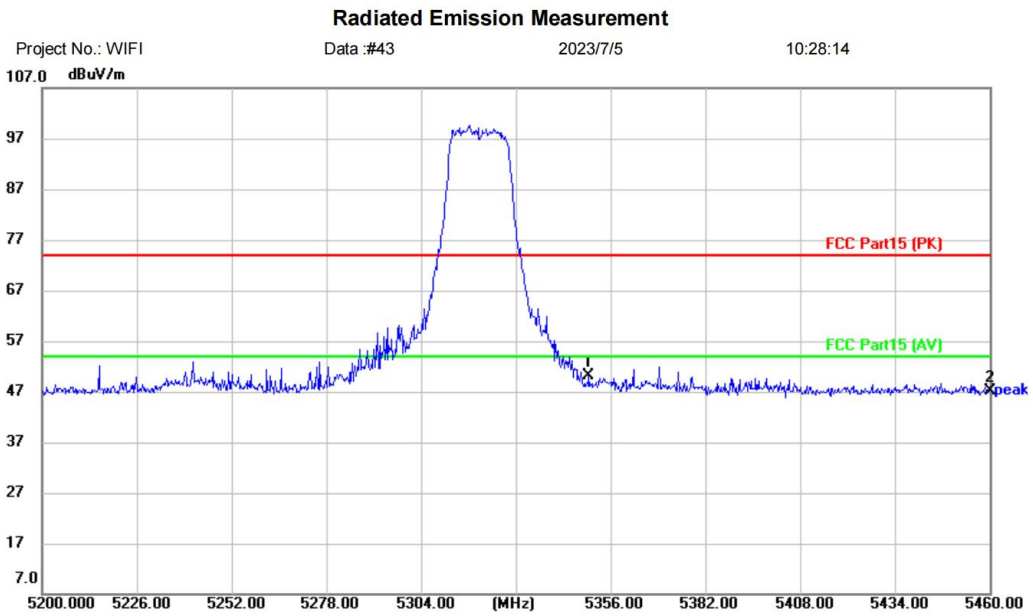
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		5350.000	42.36	3.58	45.94	74.00	-28.06	peak	
2	*	5460.000	42.91	3.84	46.75	74.00	-27.25	peak	

*:Maximum data x:Over limit !:over margin 〈Reference Only

Receiver: ESPI_1
Antenna: EZ 9120D 1G-18G new
Spectrum Analyzer: FSP40
Engineer Signature:

Test Result: Pass

[TestMode: TX band2 a 5320 channel]; [Polarity: Horizontal]



Site
Limit: FCC Part15 (PK)
EUT: WIFI&BT Module
M/N: AW65S1-50B1
Mode: 5Gwifi-band2-A-TX-H
Note:

Polarization: ***Horizontal***
Power:

Temperature: (C)
Humidity: %RH

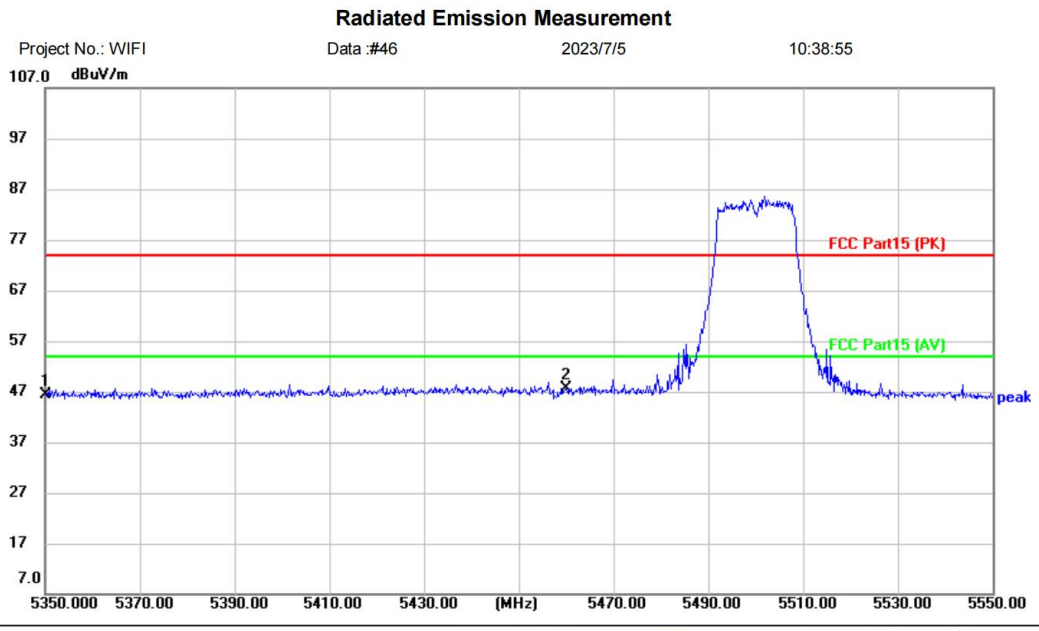
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	5350.000	46.62	3.58	50.20	74.00	-23.80	peak	
2		5460.000	43.26	3.84	47.10	74.00	-26.90	peak	

*:Maximum data x:Over limit !:over margin 〈Reference Only

Receiver: ESPI_1
Antenna: EZ 9120D 1G-18G new
Spectrum Analyzer: FSP40
Engineer Signature:

Test Result: Pass

[TestMode: TX band3 a 5500 channel]; [Polarity: Vertical]



Site
Limit: FCC Part15 (PK)
EUT: WIFI&BT Module
M/N: AW65S1-50B1
Mode: 5Gwifi-band3-A-TX-L
Note:

Polarization: *Vertical*
Power:

Temperature: (C)
Humidity: %RH

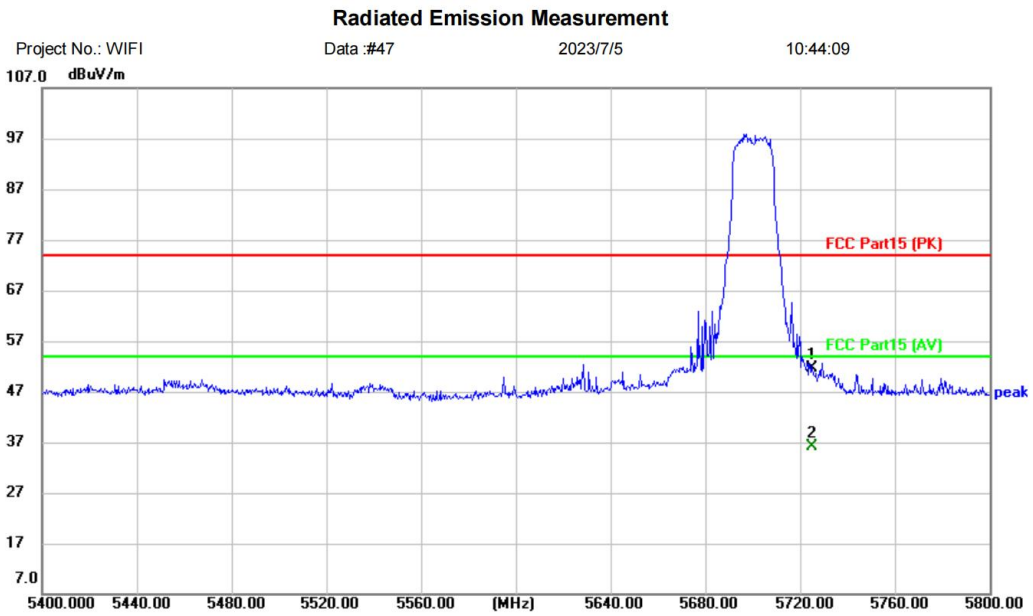
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		5350.000	42.77	3.58	46.35	74.00	-27.65	peak	
2	*	5460.000	43.74	3.84	47.58	74.00	-26.42	peak	

*:Maximum data x:Over limit !:over margin 〈Reference Only

Receiver: ESPI_1
Antenna: EZ 9120D 1G-18G new
Spectrum Analyzer: FSP40
Engineer Signature:

Test Result: Pass

[TestMode: TX band3 a 5500 channel]; [Polarity: Horizontal]



Site
Limit: FCC Part15 (PK)
EUT: WIFI&BT Module
M/N: AW65S1-50B1
Mode: 5Gwifi-band3-A-TX-H
Note:

Polarization: ***Horizontal***
Power:

Temperature: (C)
Humidity: %RH

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		5725.000	47.28	4.29	51.57	74.00	-22.43	peak	
2	*	5725.000	31.88	4.29	36.17	54.00	-17.83	AVG	

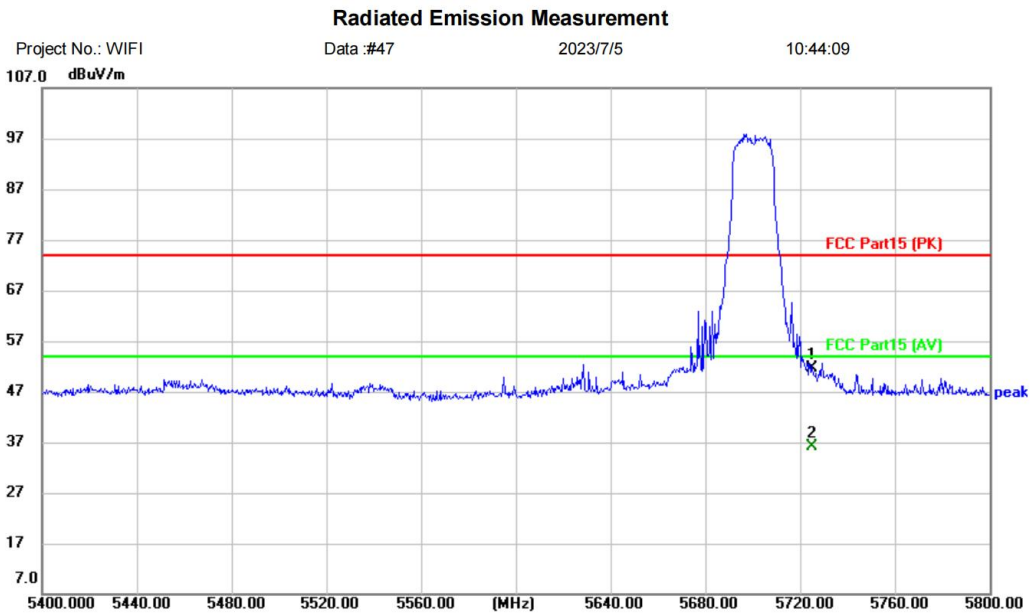
*:Maximum data x:Over limit !:over margin 〈Reference Only

Receiver: ESPI_1
Antenna: EZ 9120D 1G-18G new

Spectrum Analyzer: FSP40
Engineer Signature:

Test Result: Pass

[TestMode: TX band3 a 5700 channel]; [Polarity: Horizontal]



Site
Limit: FCC Part15 (PK)
EUT: WIFI&BT Module
M/N: AW65S1-50B1
Mode: 5Gwifi-band3-A-TX-H
Note:

Polarization: ***Horizontal***
Power:

Temperature: (C)
Humidity: %RH

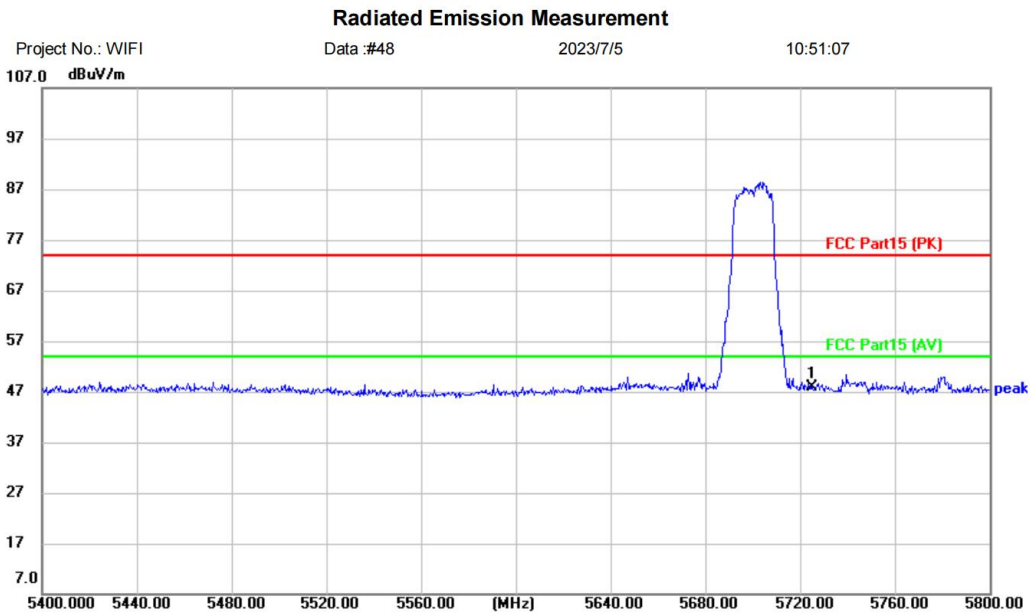
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		5725.000	47.28	4.29	51.57	74.00	-22.43	peak	
2	*	5725.000	31.88	4.29	36.17	54.00	-17.83	AVG	

*:Maximum data x:Over limit !:over margin 〈Reference Only

Receiver: ESPI_1
Antenna: EZ 9120D 1G-18G new
Spectrum Analyzer: FSP40
Engineer Signature:

Test Result: Pass

[TestMode: TX band3 a 5700 channel]; [Polarity: Vertical]



Site
Limit: FCC Part15 (PK)
EUT: WIFI&BT Module
M/N: AW65S1-50B1
Mode: 5Gwifi-band3-A-TX-H
Note:

Polarization: *Vertical*
Power:

Temperature: (C)
Humidity: %RH

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	5725.000	43.50	4.29	47.79	74.00	-26.21	peak	

*:Maximum data x:Over limit !:over margin 〈Reference Only

Receiver: ESPI_1
Antenna: EZ 9120D 1G-18G new
Spectrum Analyzer: FSP40
Engineer Signature:

Test Result: Pass