TEST REPORT

Product Name	:	Set-Top Box
Brand Mark	:	Infomir
Model No.	:	MAG540w3
Extension model	:	MAG544w3, MAG555A
Report Number	:	BLA-EMC-202210-A8203
FCC ID	:	2AUIR-IM010DXXX1
Date of Sample Receipt	:	2022/11/1
Date of Test	:	2022/11/3 to 2023/1/9
Date of Issue	:	2023/1/10
Test Standard	:	47 CFR Part 15, Subpart E 15.407
Test Result	:	Pass
Product Name	:	WIFI Module

Prepared for:

TELECOMMUNICATION TECHNOLOGIES, LLC
1, Mytna Sq., Odesa, 65026, Ukraine

Prepared by:

BlueAsia Technical Services(Shenzhen) Co.,Ltd.
No.41, South of Beihuan Road, Shangwu Community, Shiyan Subdistrict, Bao'an District, Shenzhen,Guangdong ,China
TEL: +86-755-23059481

Compiled by: Jozu Review by: Sweet

Approved by: Blue.Zheng Date: 2023/1/10

BlueAsia of Technical Services(Shenzhen) Co., Ltd. BLA

REPORT REVISE RECORD

Version No.	Date	Description
00	2023/1/10	Original

BlueAsia

TABLE OF CONTENTS

1 TEST SUMMARY 6
2 GENERAL INFORMATION 7
3 GENERAL DESCRIPTION OF E.U.T. 7
4 TEST ENVIRONMENT 9
5 TEST MODE 9
6 MEASUREMENT UNCERTAINTY 9
7 DESCRIPTION OF SUPPORT UNIT 10
8 LABORATORY LOCATION 10
9 TEST INSTRUMENTS LIST 11
10 FREQUENCY STABILITY 13
10.1 LIMITS 13
10.2 BLOCK DIAGRAM OF TEST SETUP 13
10.3 TEST DATA 13
11 RADIATED EMISSIONS WHICH FALL IN THE RESTRICTED BANDS 14
11.1 LIMITS 14
11.2 BLOCK DIAGRAM OF TEST SETUP 15
11.3 PROCEDURE 15
11.4 TEST DATA 17
12 RADIATED EMISSIONS 34
12.1 BLOCK DIAGRAM OF TEST SETUP 34
12.2 PROCEDURE 34
12.3 TEST DATA 36
13 DFS: CHANNEL CLOSING TRANSMISSION TIME 63
13.1 LIMITS 63
13.2 BLOCK DIAGRAM OF TEST SETUP 63
13.3 PROCEDURE 63
13.4 TEST DATA 65
14 DFS: NON-OCCUPANCY PERIOD 66
14.1 LIMITS 66
14.2 BLOCK DIAGRAM OF TEST SETUP 66

BlueAsia

14.3 PROCEDURE 66
14.4 TEST DATA 68

15 PEAK POWER SPECTRUM DENSITY 69

15.1 LIMITS 69
15.2 BLOCK DIAGRAM OF TEST SETUP 69
15.3 TEST DATA 70

16 MAXIMUM CONDUCTED OUTPUT POWER 71

16.1 LIMITS 71
16.2 BLOCK DIAGRAM OF TEST SETUP 71
16.3 TEST DATA 72

17 MINIMUM 6 DB BANDWIDTH (5.725-5.85 GHZ BAND) 73

17.1 LIMITS 73
17.2 BLOCK DIAGRAM OF TEST SETUP 73
17.3 TEST DATA 73

18 26DB EMISSION BANDWIDTH 74

18.1 BLOCK DIAGRAM OF TEST SETUP 74
18.2 TEST DATA 74

19 99% BANDWIDTH 75

19.1 BLOCK DIAGRAM OF TEST SETUP 75
19.2 TEST DATA 75

20 DUTY CYCLE 76

20.1 BLOCK DIAGRAM OF TEST SETUP 76
20.2 TEST DATA 76

21 CONDUCTED EMISSIONS AT AC POWER LINE (150KHZ-30MHZ) 77

21.1 LIMITS 77
21.2 BLOCK DIAGRAM OF TEST SETUP 77
21.3 PROCEDURE 77
21.4 TEST DATA 79

22 ANTENNA REQUIREMENT 81

22.1 CONCLUSION 81

23 APPENDIX 82

BlueAsia

23.1 MAXIMUM CONDUCTED OUTPUT POWER 82
23.2 -26DB BANDWIDTH 146
23.3 OCCUPIED CHANNEL BANDWIDTH 194
23.4 MAXIMUM POWER SPECTRAL DENSITY LEVEL 257
23.5 BAND EDGE 321
23.6 FREQUENCY STABILITY 369
23.7 CONDUCTED RF SPURIOUS EMISSION 407
23.8 -6DB BANDWIDTH 470

APPENDIX A: PHOTOGRAPHS OF TEST SETUP 485

APPENDIX B: PHOTOGRAPHS OF EUT 487

BlueAsia

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

BlueAsia

2 GENERAL INFORMATION

Applicant	TELECOMMUNICATION TECHNOLOGIES, LLC
Address	1, Mytna Sq., Odesa, 65026, Ukraine
Manufacturer	TELECOMMUNICATION TECHNOLOGIES, LLC
Address	1, Mytna Sq., Odesa, 65026, Ukraine
Factory	TELECOMMUNICATION TECHNOLOGIES, LLC
Address	1, Mytna Sq., Odesa, 65026, Ukraine
Product Name	Set-Top Box
Test Model No.	MAG540w3
Extension model	MAG544w3, MAG555A
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	540-06C
Software Version	v.2.20.21-pub-540
Operation Frequency:	Band 1 : 5180MHz-5240MHz; Band 2:5260MHz~5320MHz Band 3: 5470MHz-5725 MHz; Band 4:5725MHz~5850MHz
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/802.11n(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: 3.11dBi, Antenna 2: 3.11dBi
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) Directional gain of MIMO mode:3.11+10log2=6.12dBi
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 = 6.12dB > 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 - (3.11 + 3.01 - 6) dBi = 23.88dBm

Powe band4:

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

= 30 dBm - (3.3 + 3.01 - 6) dBi = 29.88dBm

P.S.D band1/band2/band3:

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

= 11 dBm - (3.3 + 3.01 - 6) dBi = 10.88dBm

Powe band4:

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

= 30 dBm - (3.3 + 3.01 - 6) dBi = 29.88dBm

BlueAsia

4 TEST ENVIRONMENT

Environment	Temperature	Voltage
Normal	25℃	DC5V

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

BlueAsia

7 DESCRIPTION OF SUPPORT UNIT

Device Type	Manufacturer	Model Name	Serial No.	Remark
N/A	N/A	N/A	N/A	N/A

8 LABORATORY LOCATION

All tests were performed at:
BlueAsia Technical Services(Shenzhen) Co.,Ltd.
No.41, South of Beihuan Road, Shangwu Community, Shiyan Subdistrict, Bao'an District, Shenzhen,Guangdong ,China
Telephone: TEL: +86-755-28682673 FAX: +86-755-28682673

BlueAsia

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
Spectrum	KEYSIGHT	N9010A	MY54330814	2022/07/01	2023/06/30
Signal Generator	Agilent	N5182A	MY47420955	2022/09/07	2023/09/06
Signal Generator	Agilent	E8257D	MY44320250	2022/07/01	2023/06/30
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 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
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
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
Filter group	SKET	2.4G/5G Filter group r	N/A	2022/07/16	2023/07/15
EMI software	EZ	EZ-EMC	EEMC-3A1	N/A	N/A
Loop antenna	SCHNARZBECK	FMZB1519B	00102	2022/9/14	2025/9/13

BlueAsia

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

BlueAsia

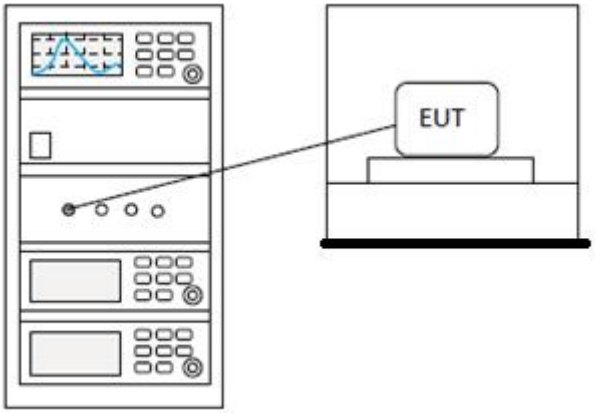
10 FREQUENCY STABILITY

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%

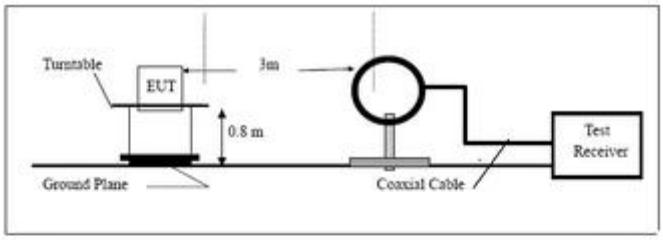
11.1 LIMITS

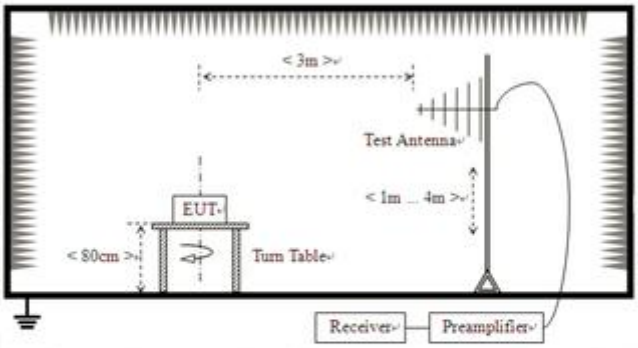
Frequency(MHz)	Field strength(microvolts/meter)	Measurement distance(meters)
0.009-0.490	2400/F(kHz)	300
0.490-1.705	24000/F(kHz)	30
1.705-30.0	30	30
30-88	100	3
88-216	150	3
216-960	200	3
Above 960	500	3

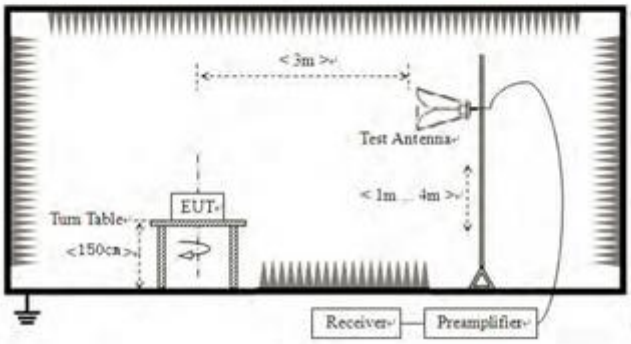
Remark: The emission limits shown in the above table are based on measurements employing a CISPR quasi-peak detector except for the frequency bands 9-90kHz, 110-490kHz and above 1000 MHz. Radiated emission limits in these three bands are based on measurements employing an average detector, the peak field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

BlueAsia

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.

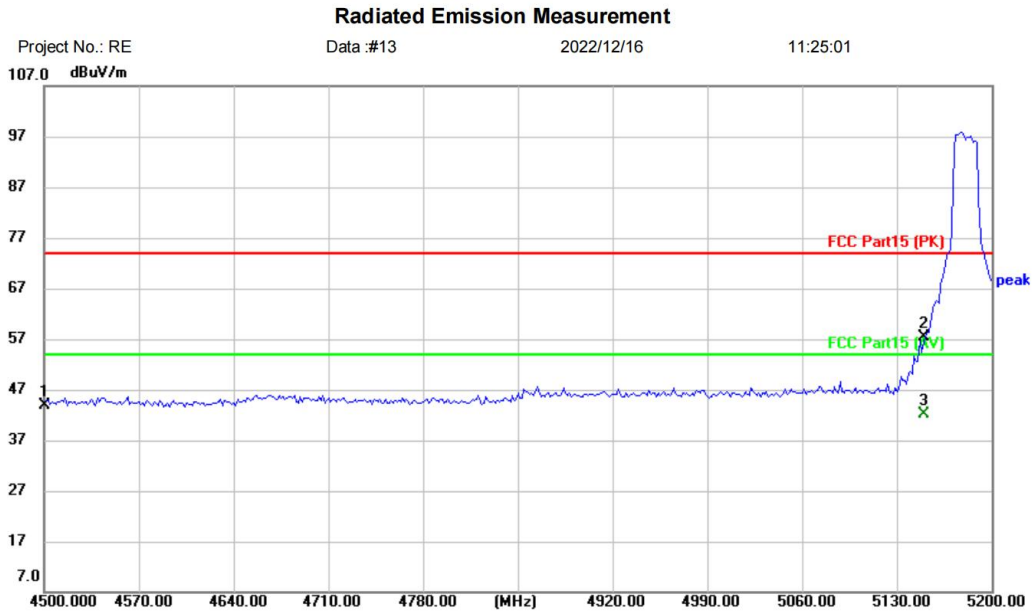
h. Test the EUT in the lowest channel, the middle channel, the Highest channel.
i. The radiation measurements are performed in X, Y, Z axis positioning for Transmitting mode, and found the X axis positioning which it is the worst case.
j. Repeat above procedures until all frequencies measured was complete.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

BlueAsia

11.4 TEST DATA

Remark: During the test, pre-scan the 802.11a/n/ac 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: Set-Top Box
M/N: MAG540w3
Mode: 5G band1 TX-L
Note:

Polarization: ***Horizontal***
Power:

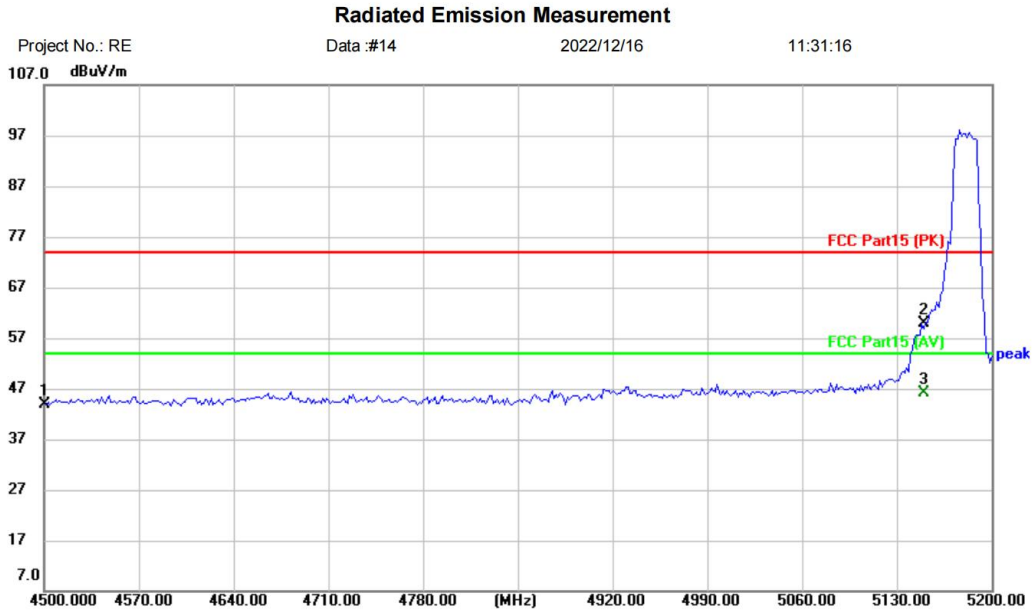
Temperature: (C)
Humidity: %RH

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector	Comment
1		4500.000	43.63	0.37	44.00	74.00	-30.00	peak	
2		5150.000	53.68	3.66	57.34	74.00	-16.66	peak	
3	*	5150.000	38.43	3.66	42.09	54.00	-11.91	AVG	

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

Test Result: Pass

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



Site
Limit: FCC Part15 (PK)
EUT: Set-Top Box
M/N: MAG540w3
Mode: 5G band1 TX-L
Note:

Polarization: ***Vertical***
Power:

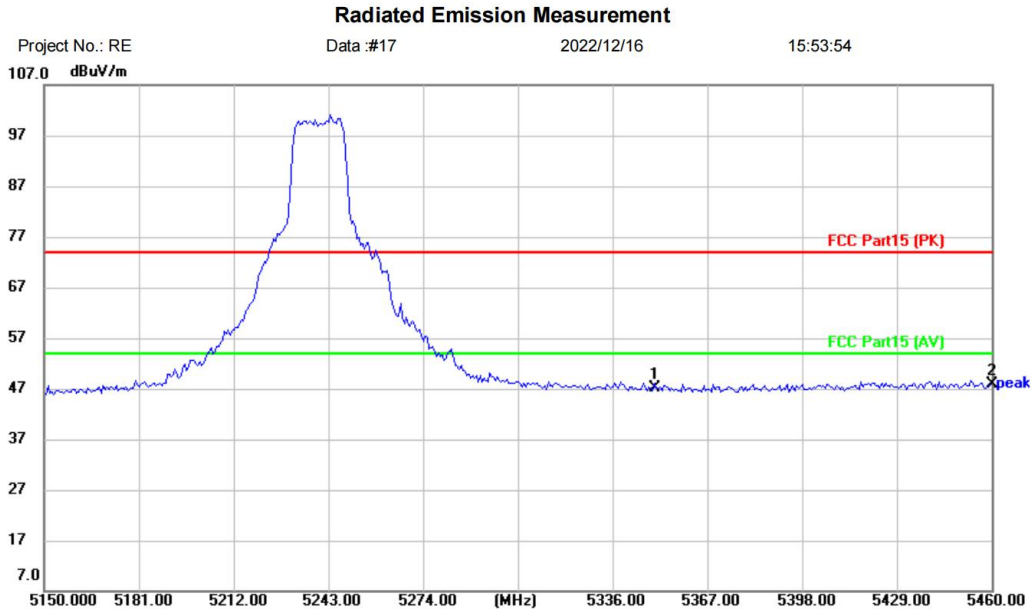
Temperature: (C)
Humidity: %RH

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector	Comment
1		4500.000	43.47	0.37	43.84	74.00	-30.16	peak	
2		5150.000	56.32	3.66	59.98	74.00	-14.02	peak	
3	*	5150.000	42.53	3.66	46.19	54.00	-7.81	AVG	

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

Test Result: Pass

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



Site
Limit: FCC Part15 (PK)
EUT: Set-Top Box
M/N: MAG540w3
Mode: 5G band1 TX-H
Note:

Polarization: ***Horizontal***
Power:

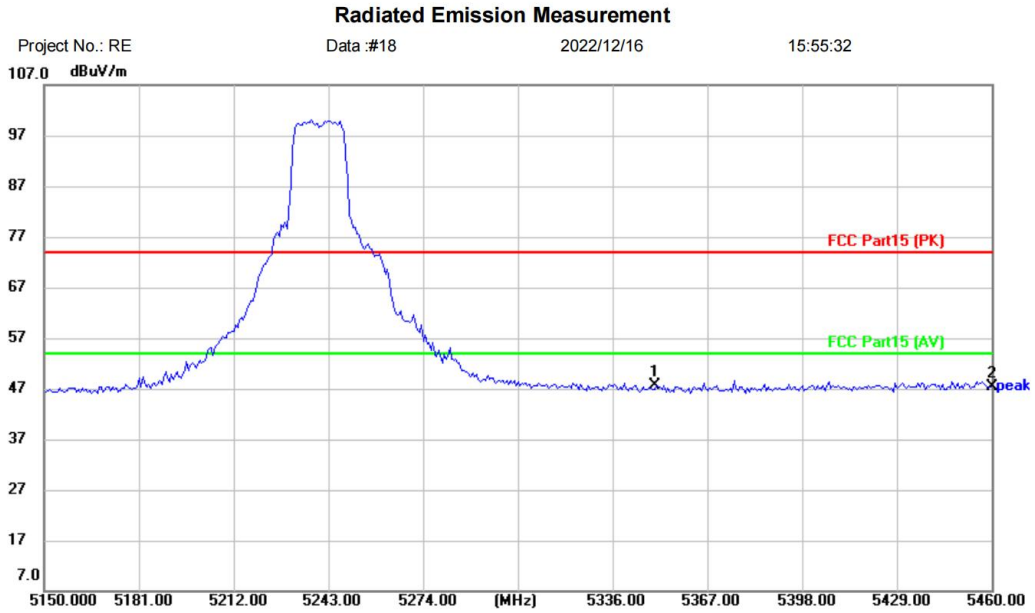
Temperature: (C)
Humidity: %RH

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector	Comment
1		5350.000	42.83	4.18	47.01	74.00	-26.99	peak	
2	*	5460.000	43.49	4.48	47.97	74.00	-26.03	peak	

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

Test Result: Pass

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



Site
Limit: FCC Part15 (PK)
EUT: Set-Top Box
M/N: MAG540w3
Mode: 5G band1 TX-H
Note:

Polarization: ***Vertical***
Power:

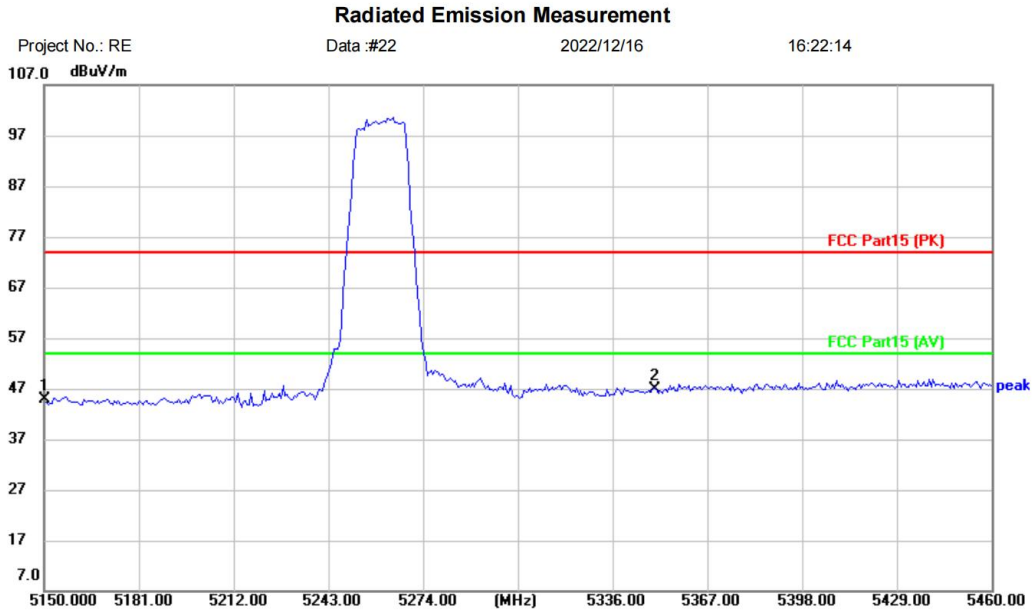
Temperature: (C)
Humidity: %RH

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	5350.000	43.42	4.18	47.60	74.00	-26.40	peak	
2		5460.000	42.86	4.48	47.34	74.00	-26.66	peak	

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

Test Result: Pass

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



Site
Limit: FCC Part15 (PK)
EUT: Set-Top Box
M/N: MAG540w3
Mode: 5G band2 TX-L
Note:

Polarization: ***Vertical***
Power:

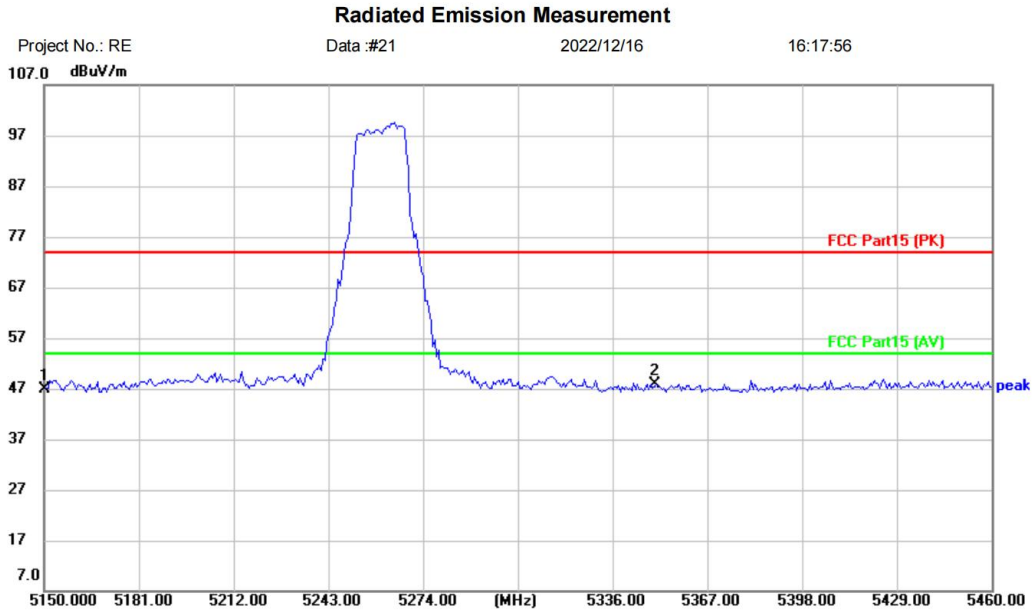
Temperature: (C)
Humidity: %RH

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector	Comment
1		5150.000	41.10	3.66	44.76	74.00	-29.24	peak	
2	*	5350.000	42.74	4.18	46.92	74.00	-27.08	peak	

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

Test Result: Pass

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



Site
Limit: FCC Part15 (PK)
EUT: Set-Top Box
M/N: MAG540w3
Mode: 5G band2 TX-L
Note:

Polarization: ***Horizontal***
Power:

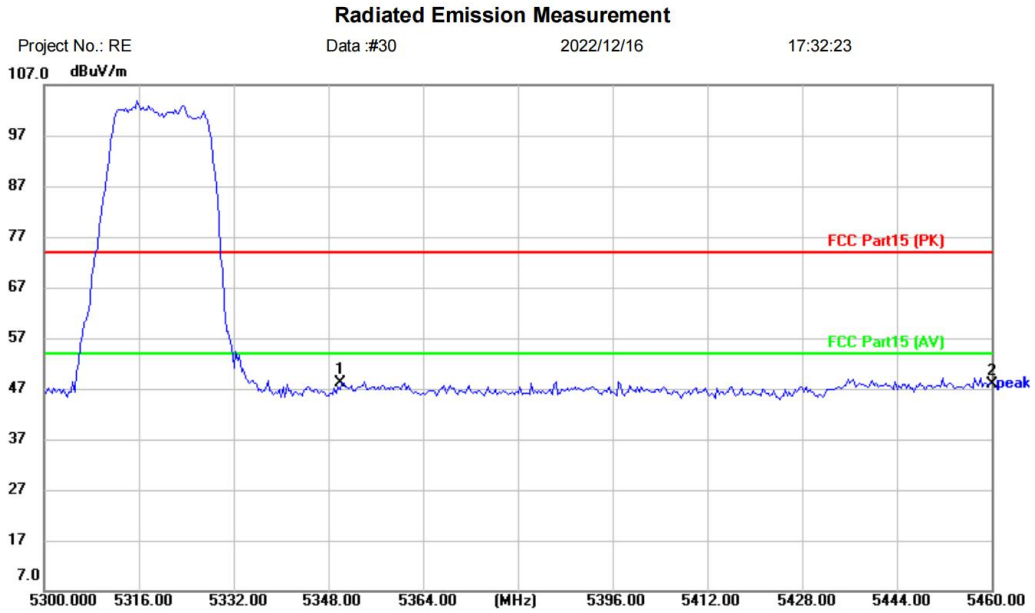
Temperature: (C)
Humidity: %RH

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector	Comment
1		5150.000	43.19	3.66	46.85	74.00	-27.15	peak	
2	*	5350.000	43.63	4.18	47.81	74.00	-26.19	peak	

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

Test Result: Pass

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



Site
Limit: FCC Part15 (PK)
EUT: Set-Top Box
M/N: MAG540w3
Mode: 5G band2 TX-H
Note:

Polarization: ***Vertical***
Power:

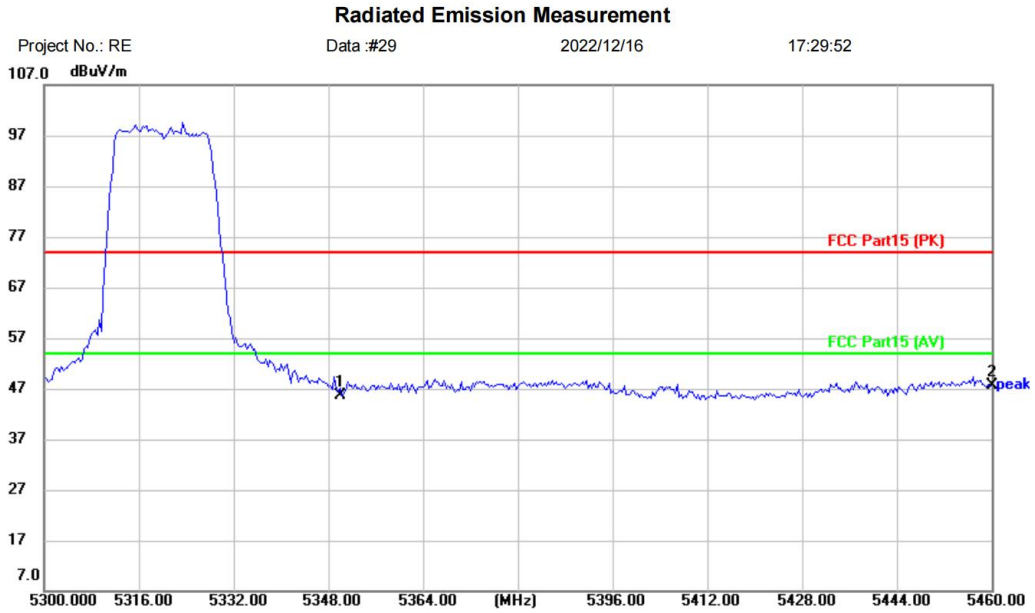
Temperature: (C)
Humidity: %RH

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	5350.000	43.85	4.18	48.03	74.00	-25.97	peak	
2		5460.000	43.50	4.48	47.98	74.00	-26.02	peak	

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

Test Result: Pass

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



Site
Limit: FCC Part15 (PK)
EUT: Set-Top Box
M/N: MAG540w3
Mode: 5G band2 TX-H
Note:

Polarization: ***Horizontal***
Power:

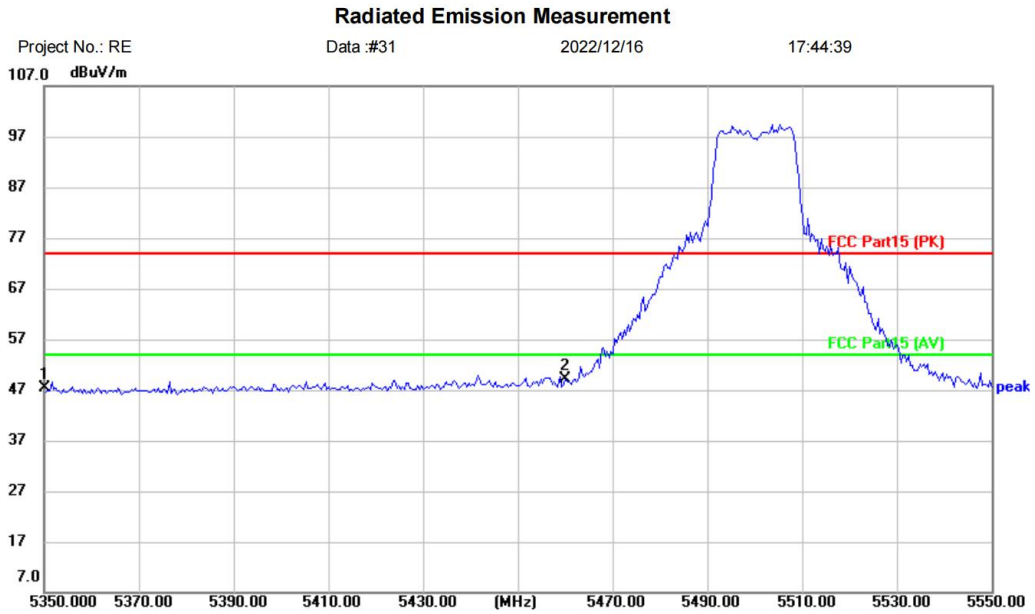
Temperature: (C)
Humidity: %RH

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector	Comment
1		5350.000	41.41	4.18	45.59	74.00	-28.41	peak	
2	*	5460.000	43.23	4.48	47.71	74.00	-26.29	peak	

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

Test Result: Pass

[TestMode: TX band 3 a 5500 channel]; [Polarity: Horizontal]



Site
Limit: FCC Part15 (PK)
EUT: Set-Top Box
M/N: MAG540w3
Mode: 5G band3 TX-L
Note:

Polarization: ***Horizontal***
Power:

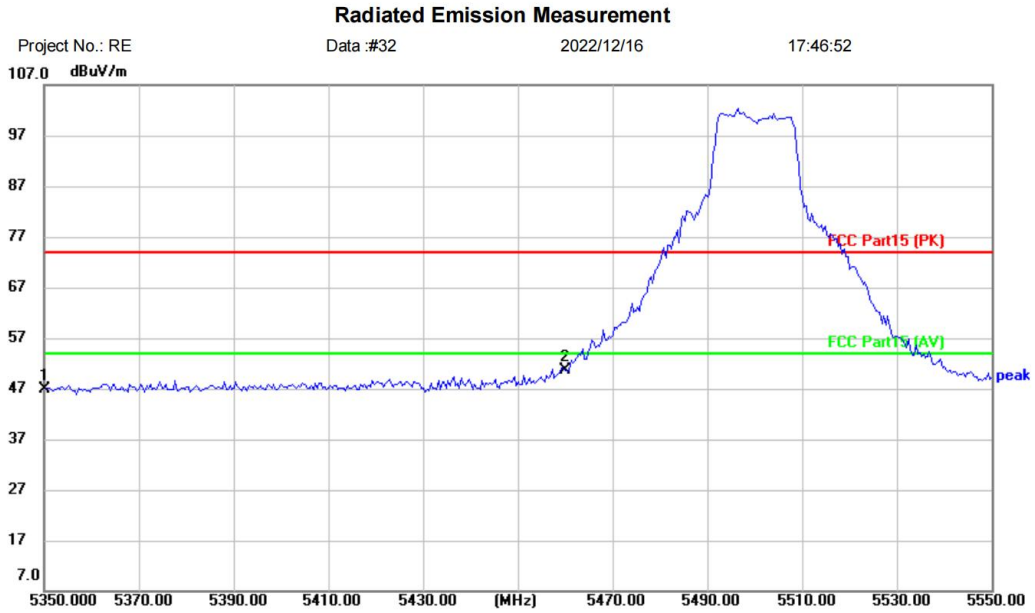
Temperature: (C)
Humidity: %RH

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector	Comment
1		5350.000	43.12	4.18	47.30	74.00	-26.70	peak	
2	*	5460.000	44.65	4.48	49.13	74.00	-24.87	peak	

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

Test Result: Pass

[TestMode: TX band 3 a 5500 channel]; [Polarity: Vertical]



Site
Limit: FCC Part15 (PK)
EUT: Set-Top Box
M/N: MAG540w3
Mode: 5G band3 TX-L
Note:

Polarization: ***Vertical***
Power:

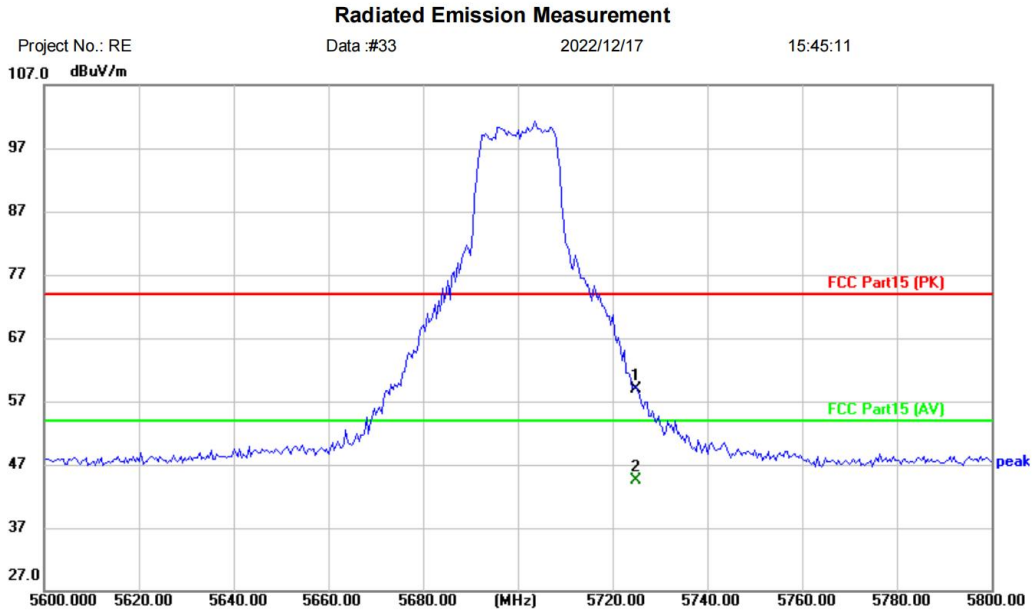
Temperature: (C)
Humidity: %RH

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector	Comment
1		5350.000	42.78	4.18	46.96	74.00	-27.04	peak	
2	*	5460.000	46.11	4.48	50.59	74.00	-23.41	peak	

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

Test Result: Pass

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



Site
Limit: FCC Part15 (PK)
EUT: Set-Top Box
M/N: MAG540w3
Mode: 5G band3 TX-H
Note:

Polarization: ***Horizontal***
Power:

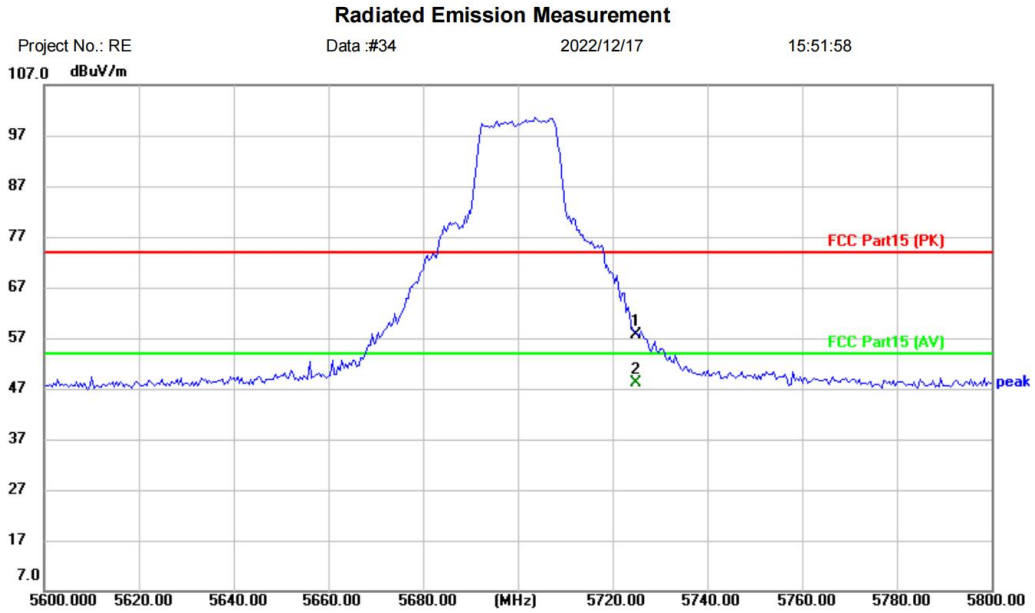
Temperature: (C)
Humidity: %RH

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector	Comment
1		5725.000	54.28	4.66	58.94	74.00	-15.06	peak	
2	*	5725.000	39.81	4.66	44.47	54.00	-9.53	AVG	

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

Test Result: Pass

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



Site
Limit: FCC Part15 (PK)
EUT: Set-Top Box
M/N: MAG540w3
Mode: 5G band3 TX-H
Note:

Polarization: ***Vertical***
Power:

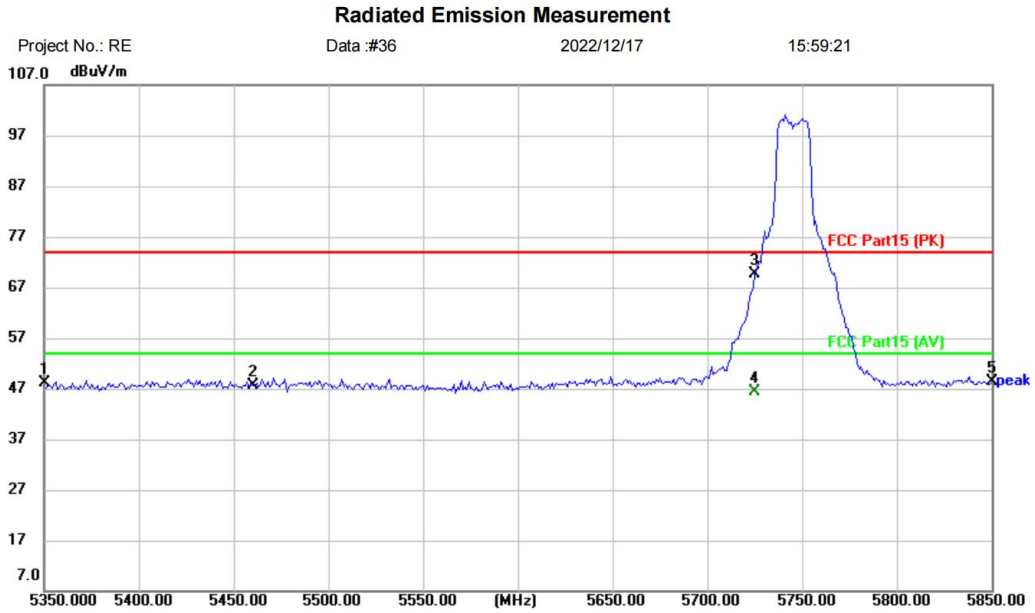
Temperature: (C)
Humidity: %RH

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector	Comment
1		5725.000	52.88	4.66	57.54	74.00	-16.46	peak	
2	*	5725.000	43.43	4.66	48.09	54.00	-5.91	AVG	

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

Test Result: Pass

[TestMode: TX band4 a 5745 channel]; [Polarity: Vertical]



Site
Limit: FCC Part15 (PK)
EUT: Set-Top Box
M/N: MAG540w3
Mode: 5G band4 TX-L
Note:

Polarization: ***Vertical***
Power:

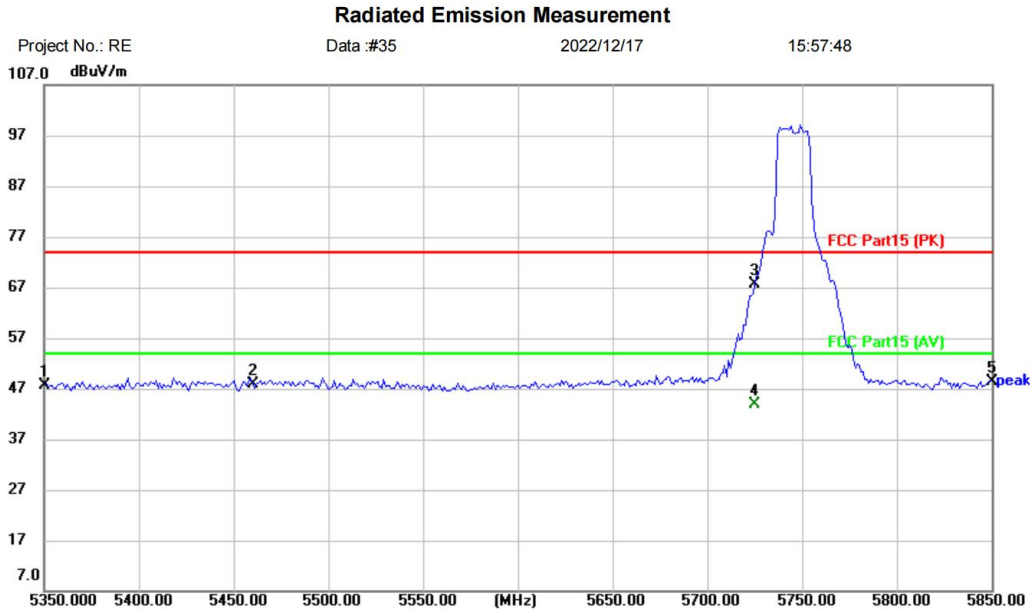
Temperature: (C)
Humidity: %RH

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector	Comment
1		5350.000	43.84	4.18	48.02	74.00	-25.98	peak	
2		5460.000	43.13	4.48	47.61	74.00	-26.39	peak	
3	*	5725.000	64.99	4.66	69.65	74.00	-4.35	peak	
4		5725.000	41.81	4.66	46.47	54.00	-7.53	AVG	
5		5850.000	43.80	4.69	48.49	74.00	-25.51	peak	

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

Test Result: Pass

[TestMode: TX band4 a 5745 channel]; [Polarity: Horizontal]



Site
Limit: FCC Part15 (PK)
EUT: Set-Top Box
M/N: MAG540w3
Mode: 5G band4 TX-L
Note:

Polarization: ***Horizontal***
Power:

Temperature: (C)
Humidity: %RH

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector	Comment
1		5350.000	43.34	4.18	47.52	74.00	-26.48	peak	
2		5460.000	43.32	4.48	47.80	74.00	-26.20	peak	
3	*	5725.000	63.09	4.66	67.75	74.00	-6.25	peak	
4		5725.000	39.15	4.66	43.81	54.00	-10.19	AVG	
5		5850.000	43.62	4.69	48.31	74.00	-25.69	peak	

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

Test Result: Pass