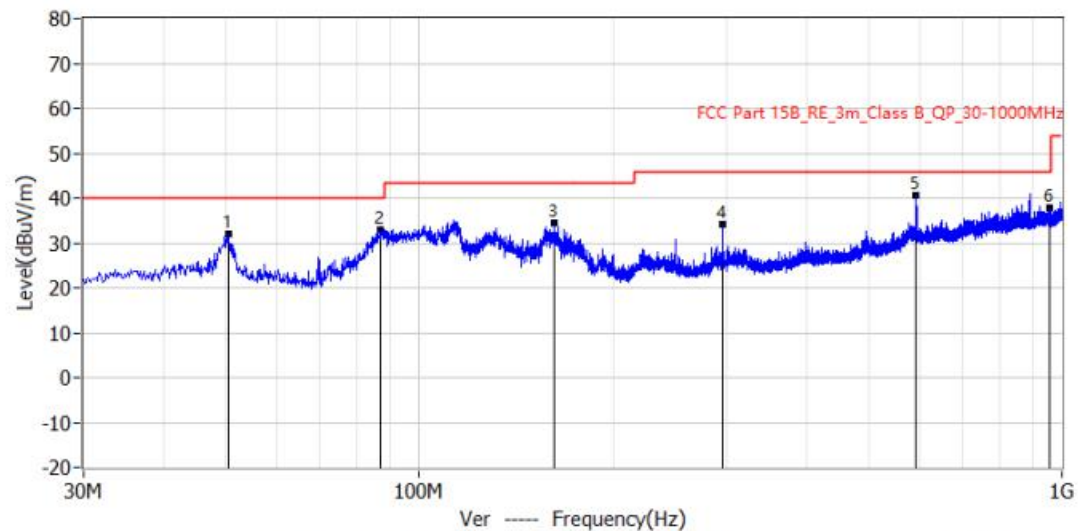


[TestMode: TX band1 below 1G]; [Polarity: Vertical]

Test Lab: BlueAsia EMC Lab (RE #1)	Project: BLA-EMC-202112-A76
EUT: OTT+Speaker	Test Engineer: York
M/N: SK330LA	Temperature:
S/N:	Humidity:
Test Mode: 5.1Gwifi mode	Test Voltage:
Note:	Test Data: 2021-12-22 09:33:06

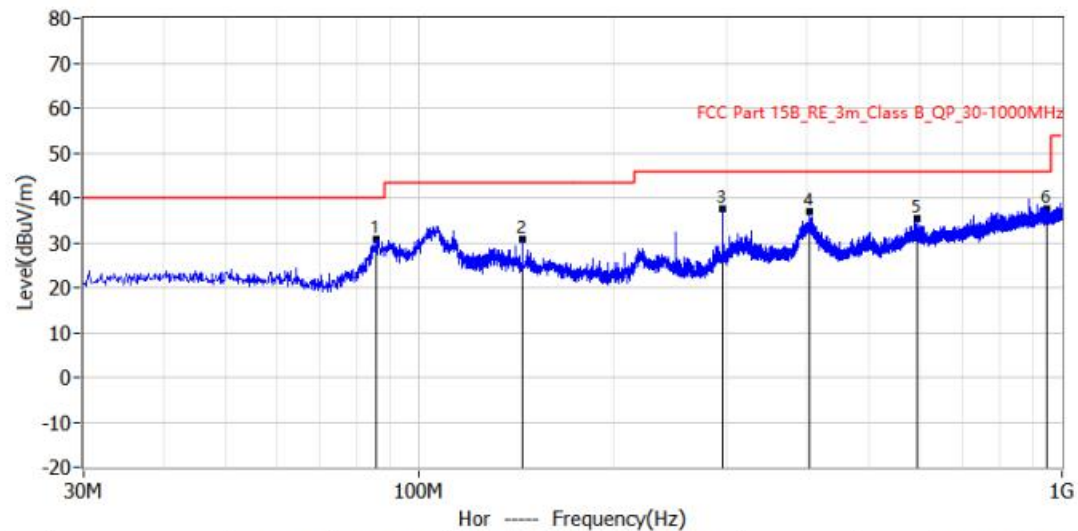


No.	Frequency	Limit dBuV/m	Level dBuV/m	Delta dB	Reading dBuV	Factor dB/m	Detector	Polar	Height cm	Angle deg
1*	50.491MHz	40.0	32.1	-7.9	8.3	23.8	QP	Ver	100.0	74.0
2*	86.988MHz	40.0	32.8	-7.2	13.4	19.4	QP	Ver	100.0	40.0
3*	161.799MHz	43.5	34.4	-9.1	11.3	23.1	QP	Ver	100.0	193.0
4*	296.508MHz	46.0	34.1	-11.9	10.1	24.0	QP	Ver	100.0	155.0
5*	593.449MHz	46.0	40.5	-5.5	9.4	31.1	QP	Ver	100.0	189.0
6*	958.169MHz	46.0	37.7	-8.3	2.0	35.7	QP	Ver	100.0	93.0

Test Result: Pass

[TestMode: TX band4 below 1G]; [Polarity: Horizontal]

Test Lab: BlueAsia EMC Lab (RE #1)	Project: BLA-EMC-202112-A76
EUT: OTT +Speaker	Test Engineer: York
M/N: SK330LA	Temperature:
S/N:	Humidity:
Test Mode: 5.8Gwifi mode	Test Voltage:
Note:	Test Data: 2021-12-22 09:35:42

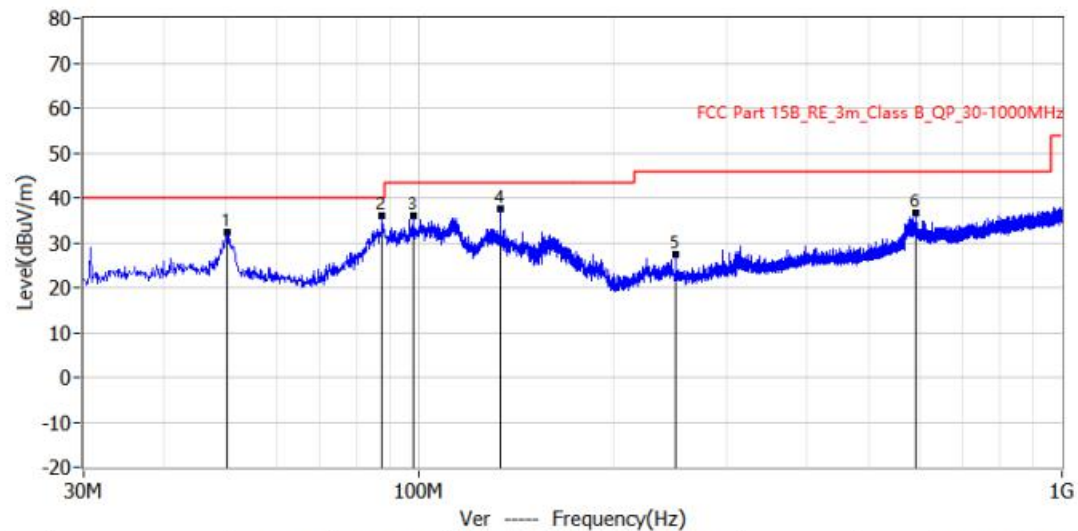


No.	Frequency	Limit dBuV/m	Level dBuV/m	Delta dB	Reading dBuV	Factor dB/m	Detector	Polar	Height cm	Angle deg
1*	85.411MHz	40.0	30.8	-9.2	11.3	19.5	QP	Hor	100.0	356.0
2*	144.703MHz	43.5	30.9	-12.6	7.3	23.6	QP	Hor	100.0	334.0
3*	296.508MHz	46.0	37.5	-8.5	13.5	24.0	QP	Hor	100.0	356.0
4*	404.056MHz	46.0	36.8	-9.2	9.5	27.3	QP	Hor	100.0	0.0
5*	593.691MHz	46.0	35.4	-10.6	4.3	31.1	QP	Hor	100.0	193.0
6*	945.559MHz	46.0	37.5	-8.5	2.0	35.5	QP	Hor	100.0	62.0

Test Result: Pass

[TestMode: TX band4 below 1G]; [Polarity: Vertical]

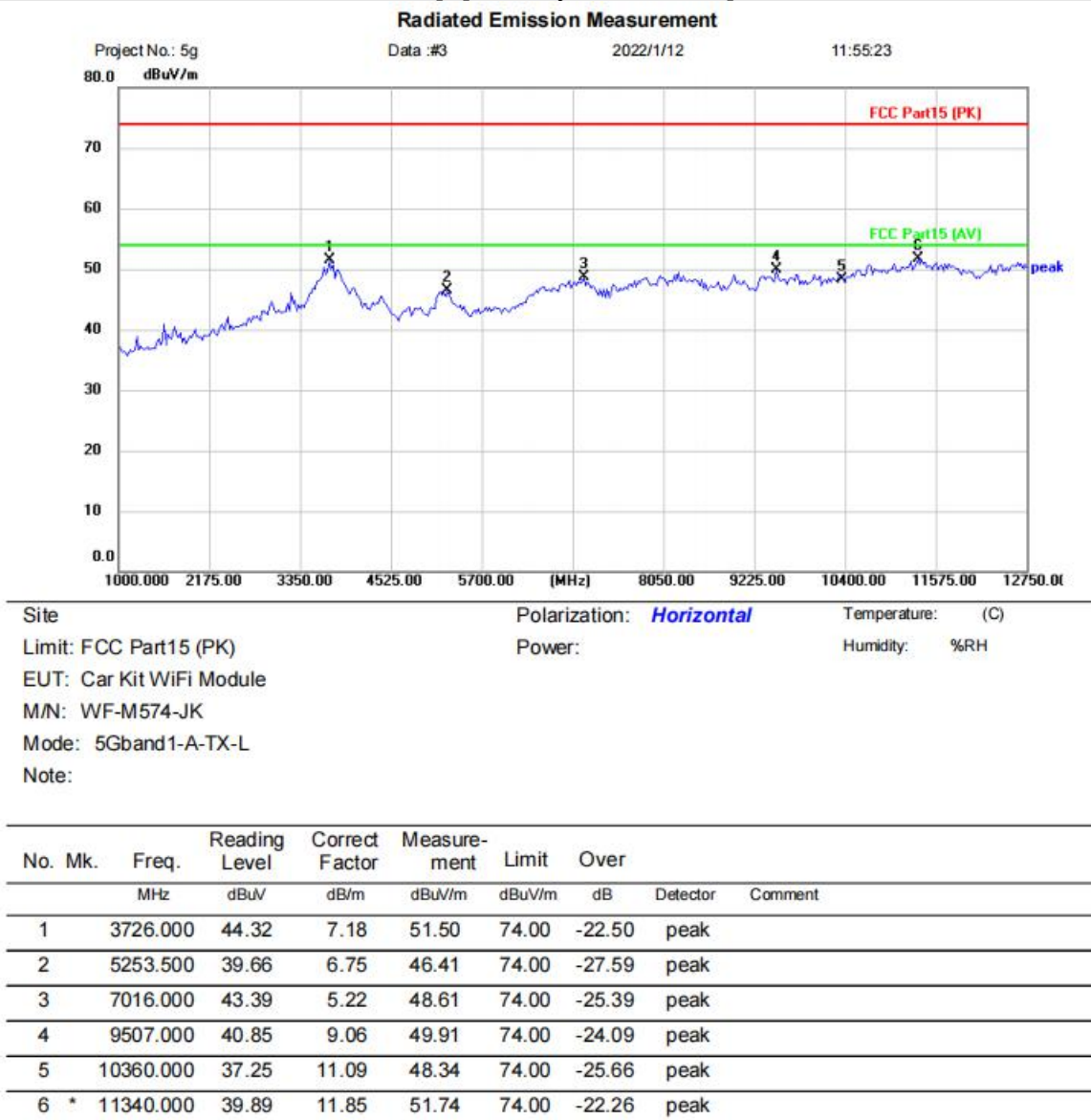
Test Lab: BlueAsia EMC Lab (RE #1)	Project: BLA-EMC-202112-A76
EUT: OTT+Speaker	Test Engineer: York
M/N: SK330LA	Temperature:
S/N:	Humidity:
Test Mode: 5.8Gwifi mode	Test Voltage:
Note:	Test Data: 2021-12-22 09:46:12



No.	Frequency	Limit dBuV/m	Level dBuV/m	Delta dB	Reading dBuV	Factor dB/m	Detector	Polar	Height cm	Angle deg
1*	50.249MHz	40.0	32.3	-7.7	8.5	23.8	QP	Ver	100.0	55.0
2*	87.351MHz	40.0	35.9	-4.1	16.5	19.4	QP	Ver	100.0	24.0
3*	97.658MHz	43.5	35.9	-7.6	15.6	20.3	QP	Ver	100.0	0.0
4*	133.790MHz	43.5	37.6	-5.9	14.2	23.4	QP	Ver	100.0	334.0
5*	249.948MHz	46.0	27.5	-18.5	4.8	22.7	QP	Ver	100.0	305.0
6*	593.449MHz	46.0	36.6	-9.4	5.5	31.1	QP	Ver	100.0	18.0

Test Result: Pass

[TestMode: TX band1 A low channel]; [Polarity: Horizontal]

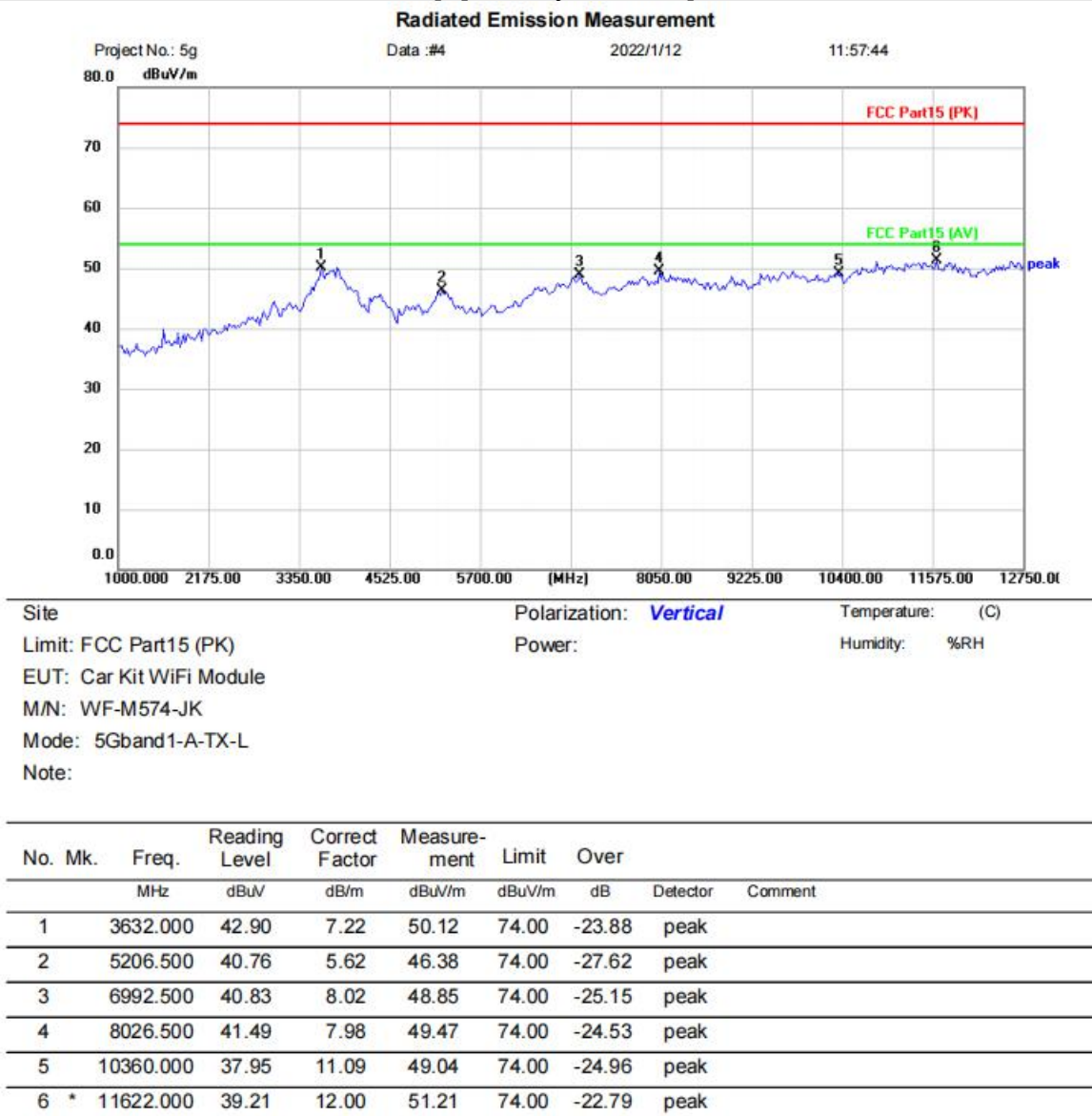


*:Maximum data x:Over limit !:over margin

(Reference Only)

Test Result: Pass

[TestMode: TX band1 A low channel]; [Polarity: Vertical]

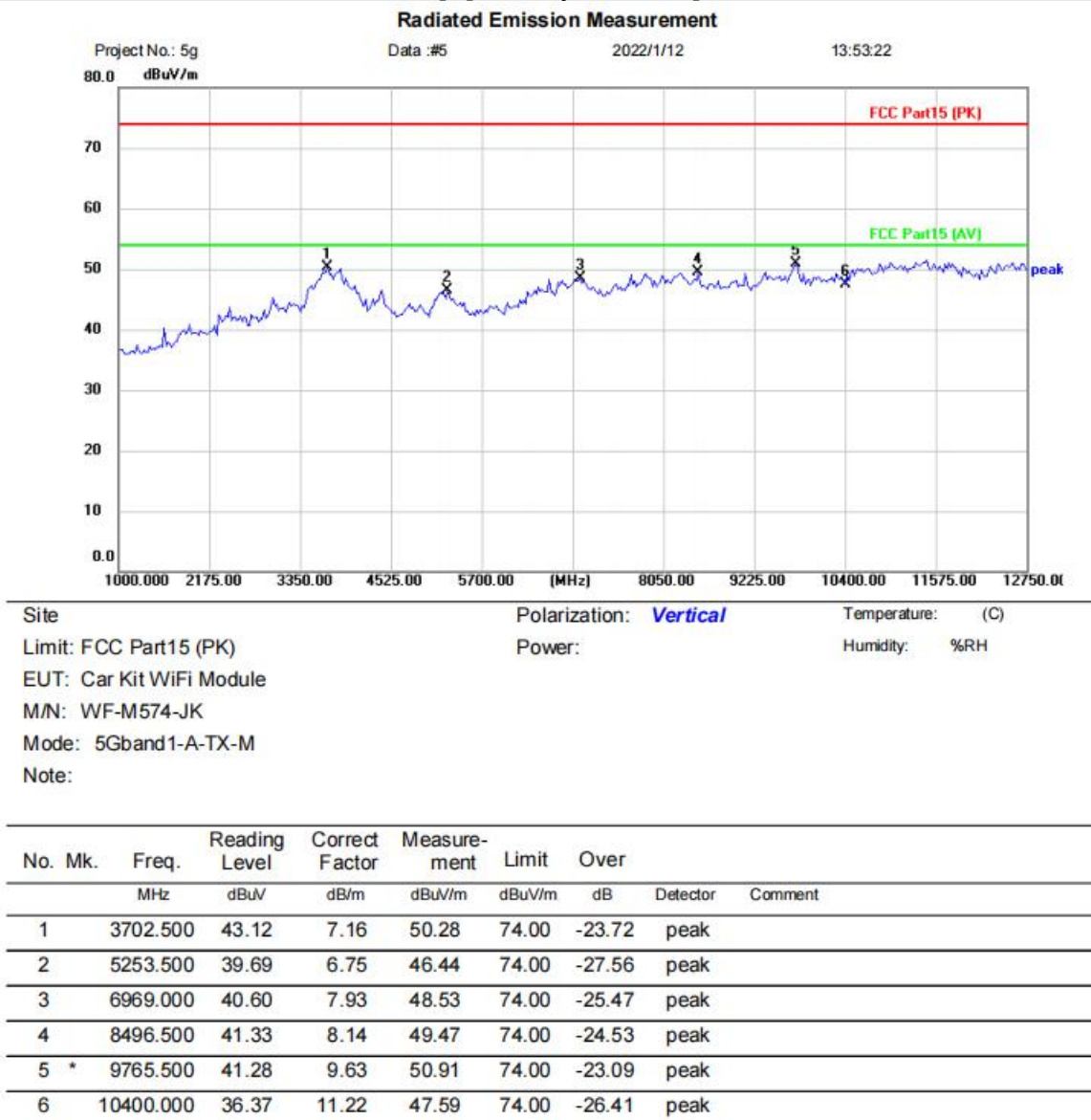


*:Maximum data x:Over limit !:over margin

(Reference Only)

Test Result: Pass

[TestMode: TX band1 A mid channel]; [Polarity: Vertical]

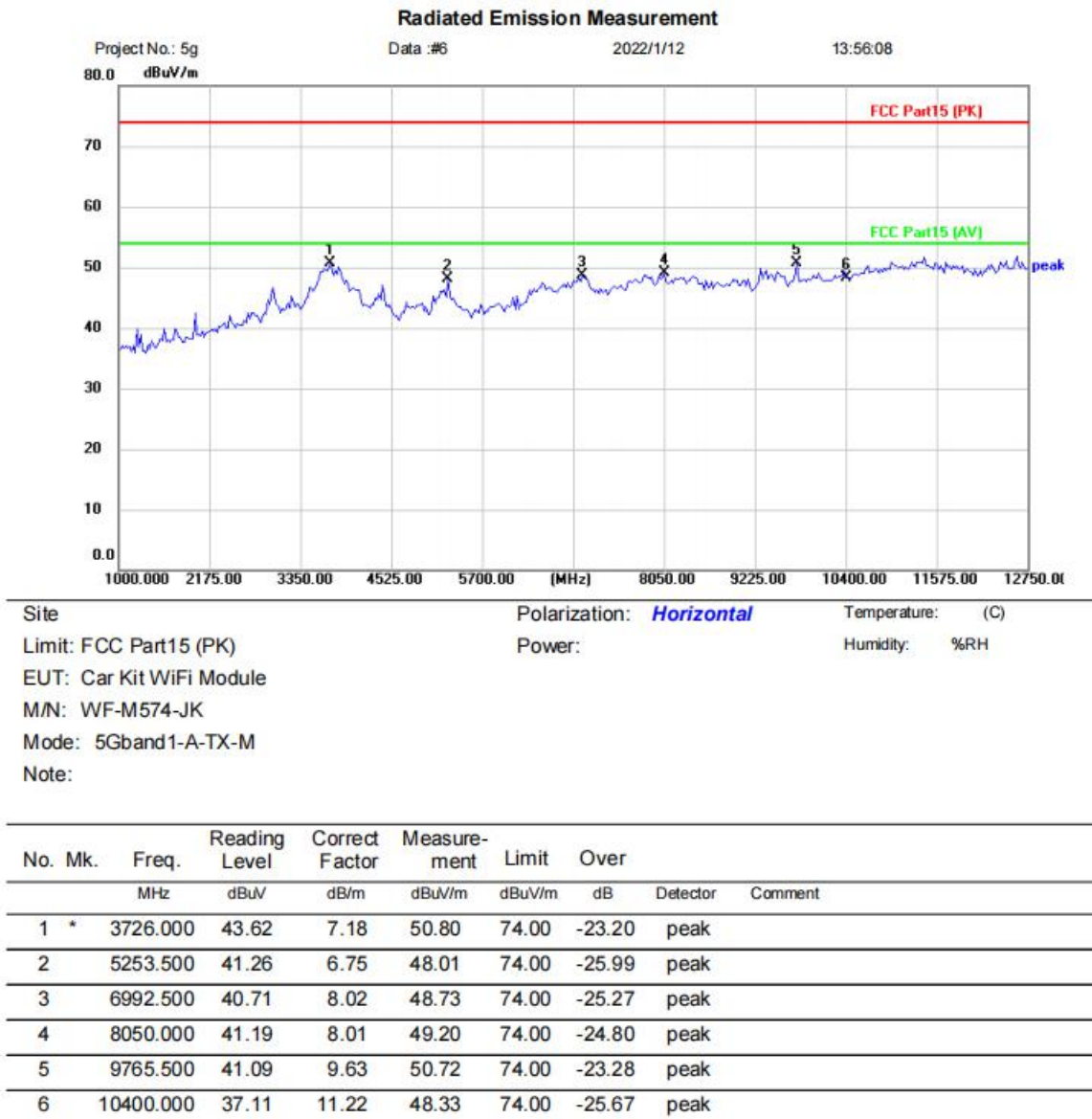


*:Maximum data x:Over limit !:over margin

(Reference Only)

Test Result: Pass

[TestMode: TX band1 A mid channel]; [Polarity: Horizontal]

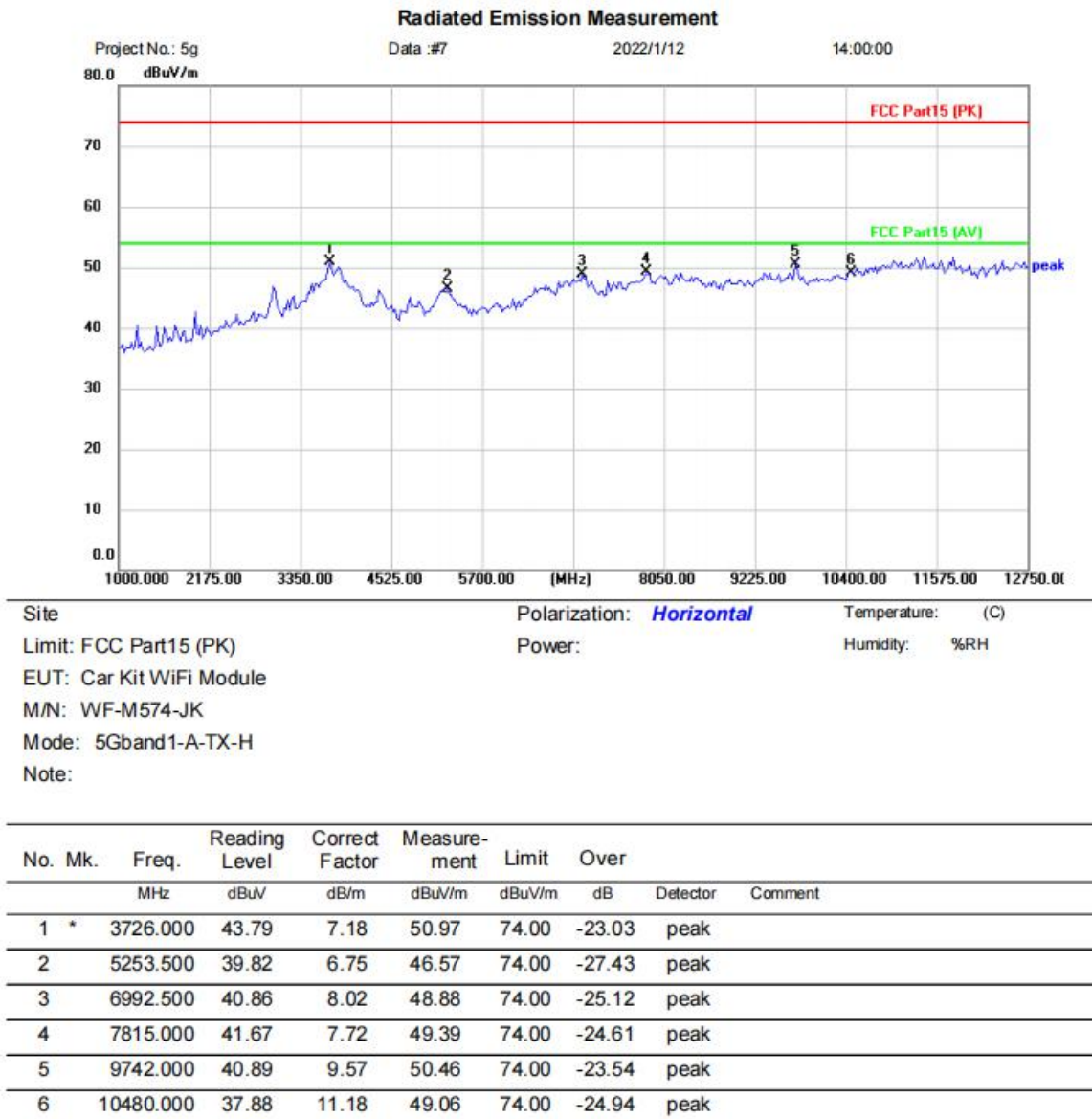


*:Maximum data x:Over limit !:over margin

(Reference Only)

Test Result: Pass

[TestMode: TX band1 A high channel]; [Polarity: Horizontal]

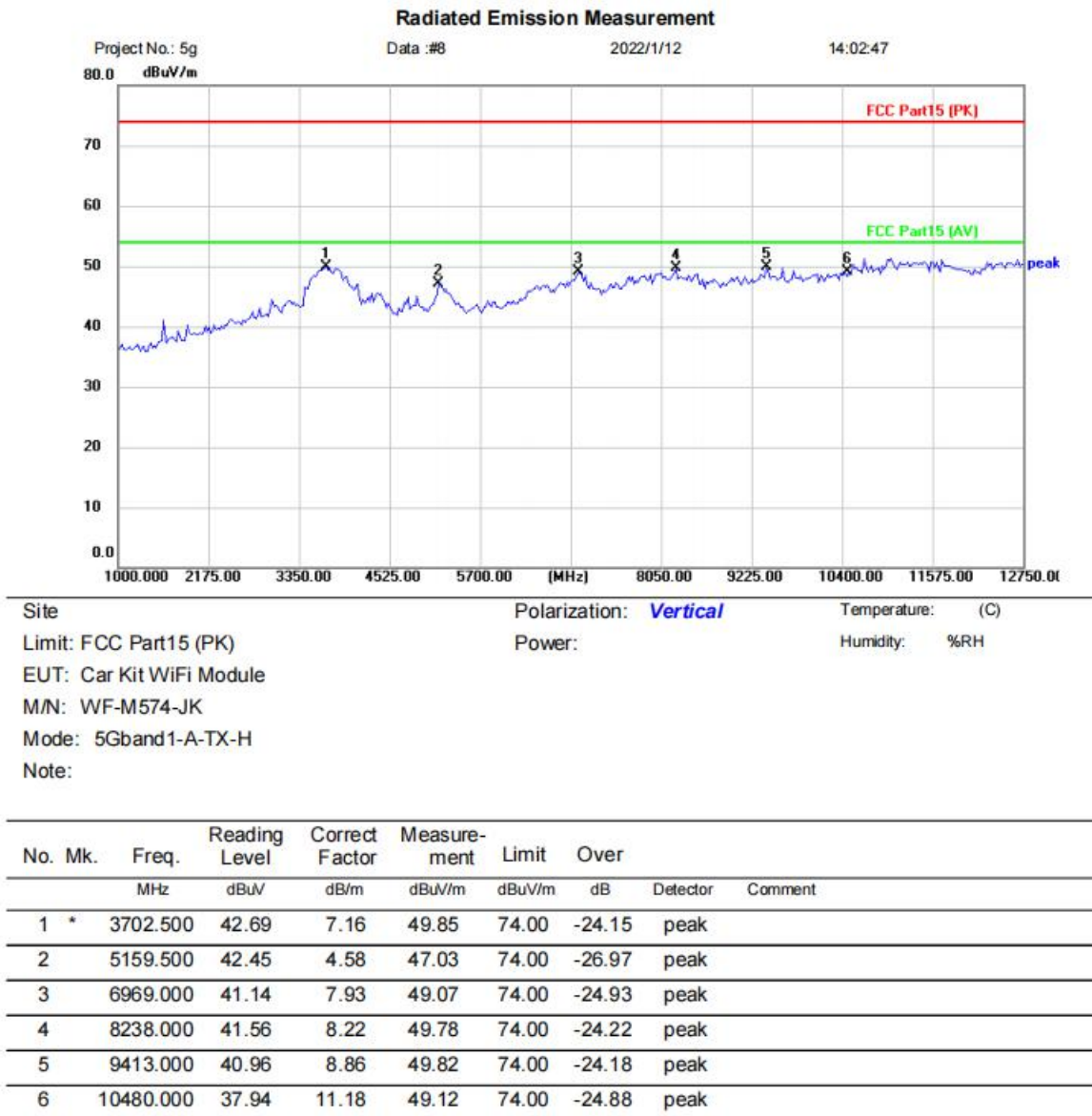


*:Maximum data x:Over limit !:over margin

(Reference Only)

Test Result: Pass

[TestMode: TX band1 A high channel]; [Polarity: Vertical]

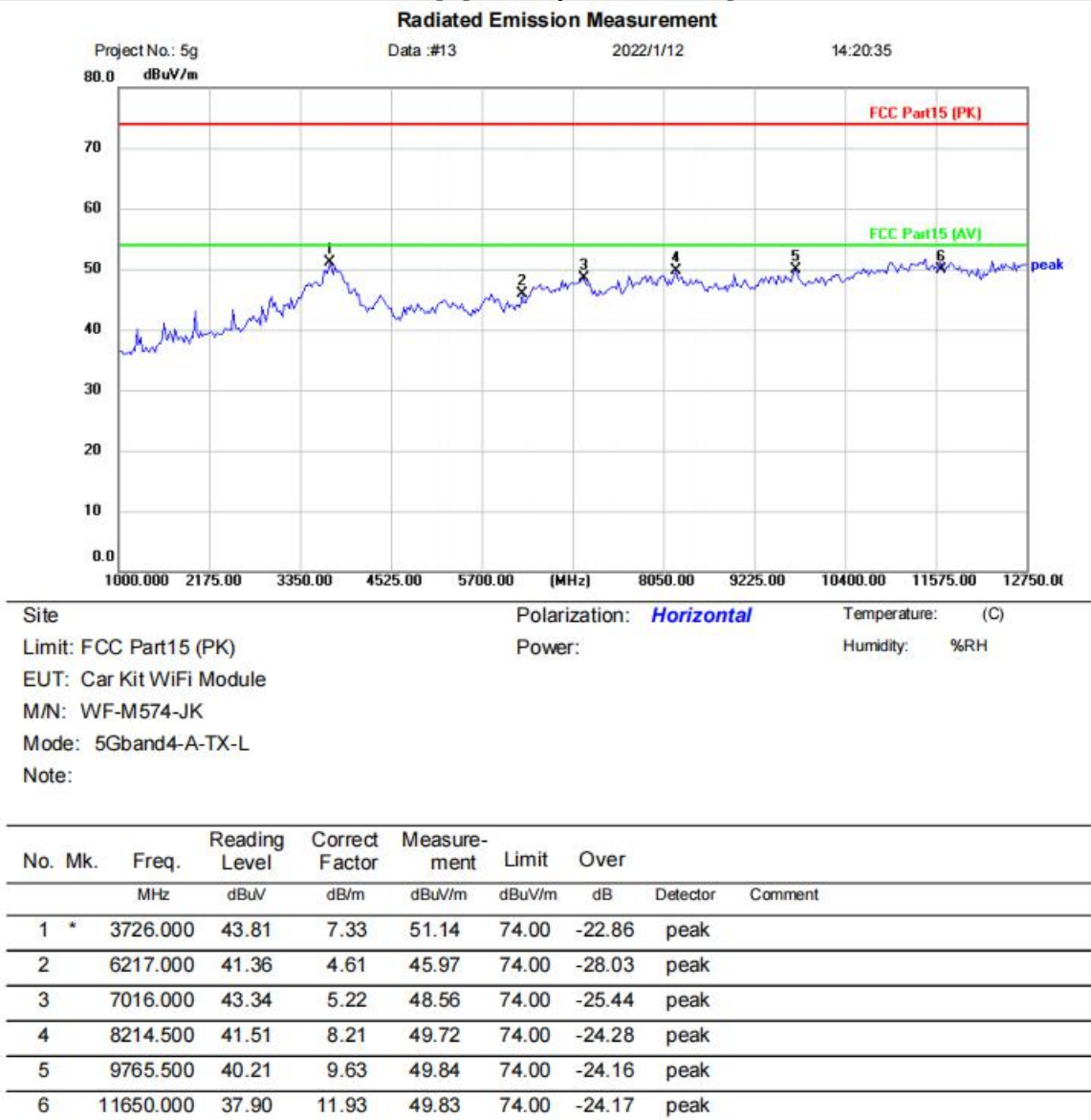


*:Maximum data x:Over limit !:over margin

(Reference Only)

Test Result: Pass

[TestMode: TX band4 A low channel]; [Polarity: Horizontal]

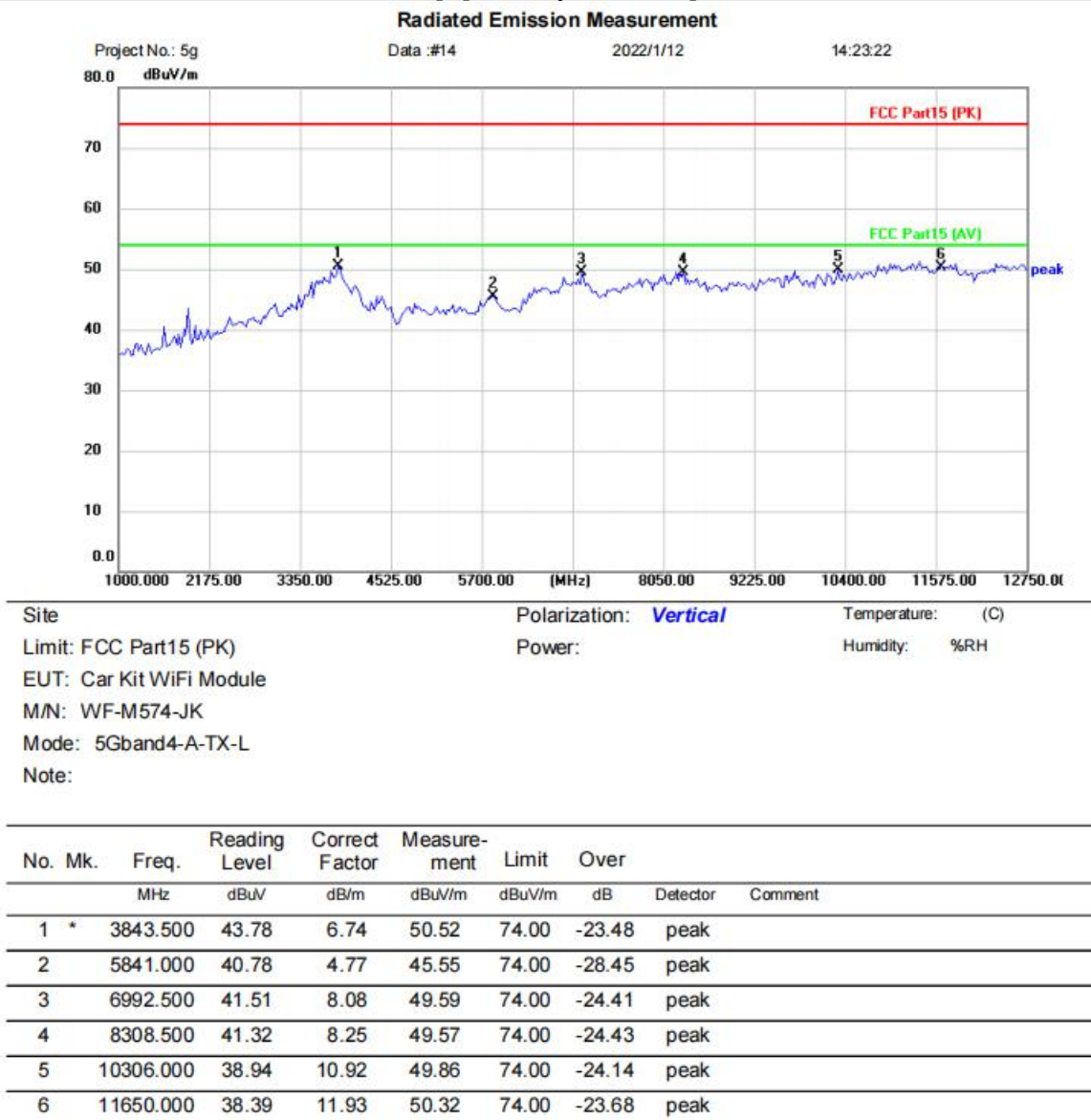


*:Maximum data x:Over limit !:over margin

(Reference Only)

Test Result: Pass

[TestMode: TX band4 A low channel]; [Polarity: Vertical]

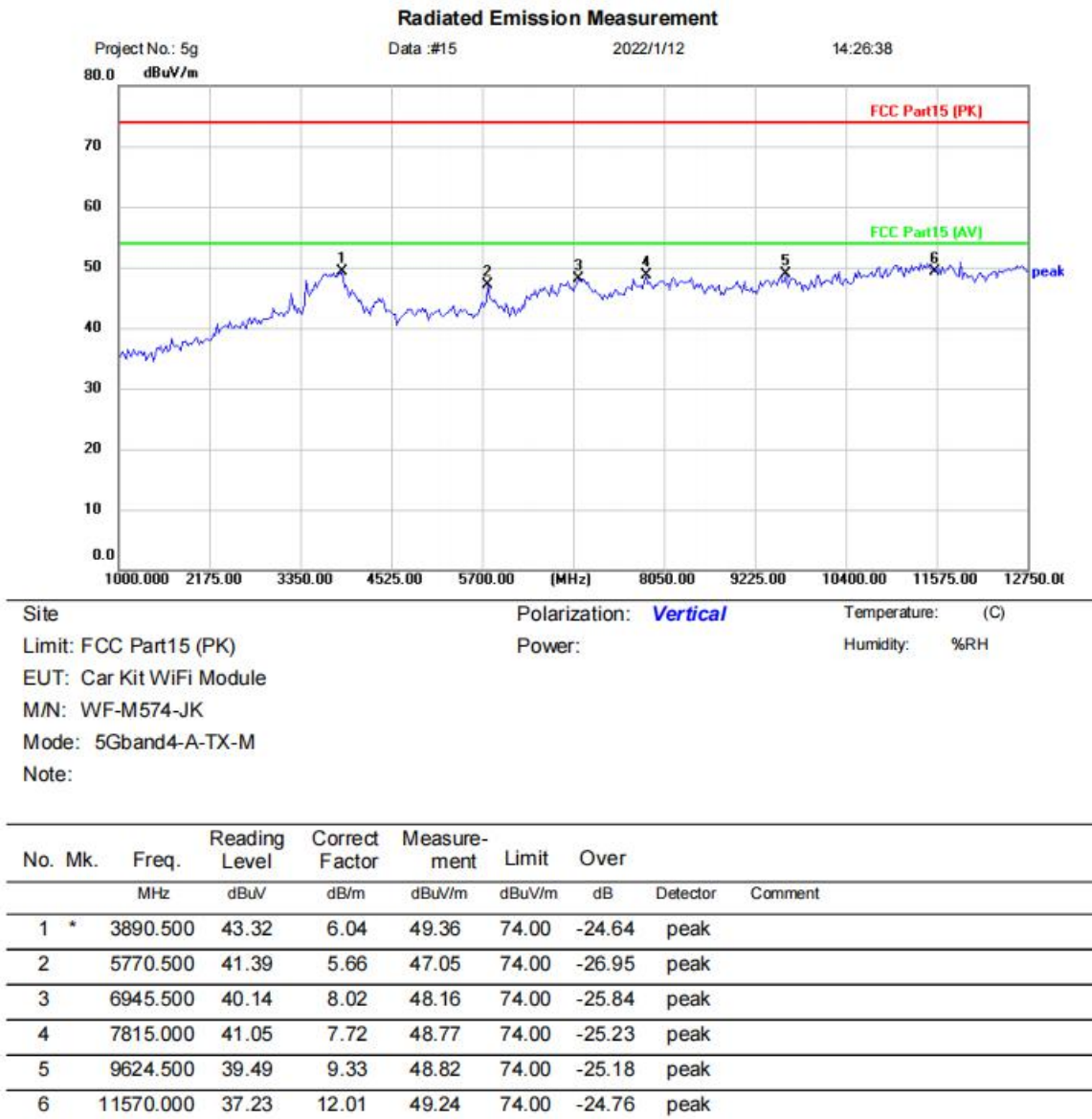


*:Maximum data x:Over limit !:over margin

(Reference Only)

Test Result: Pass

[TestMode: TX band4 A mid channel]; [Polarity: Vertical]

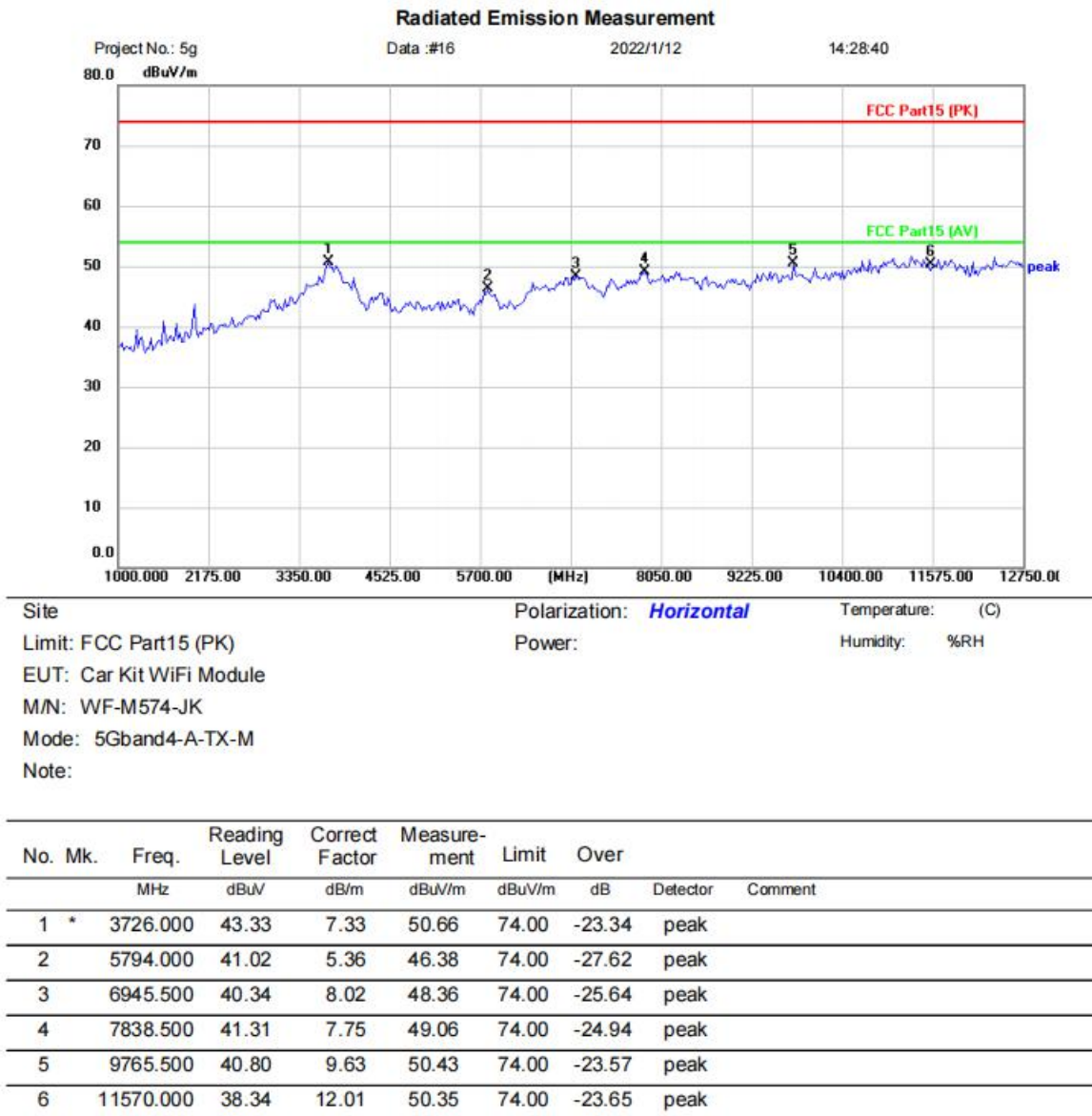


*:Maximum data x:Over limit !:over margin

(Reference Only)

Test Result: Pass

[TestMode: TX band4 A mid channel]; [Polarity: Horizontal]

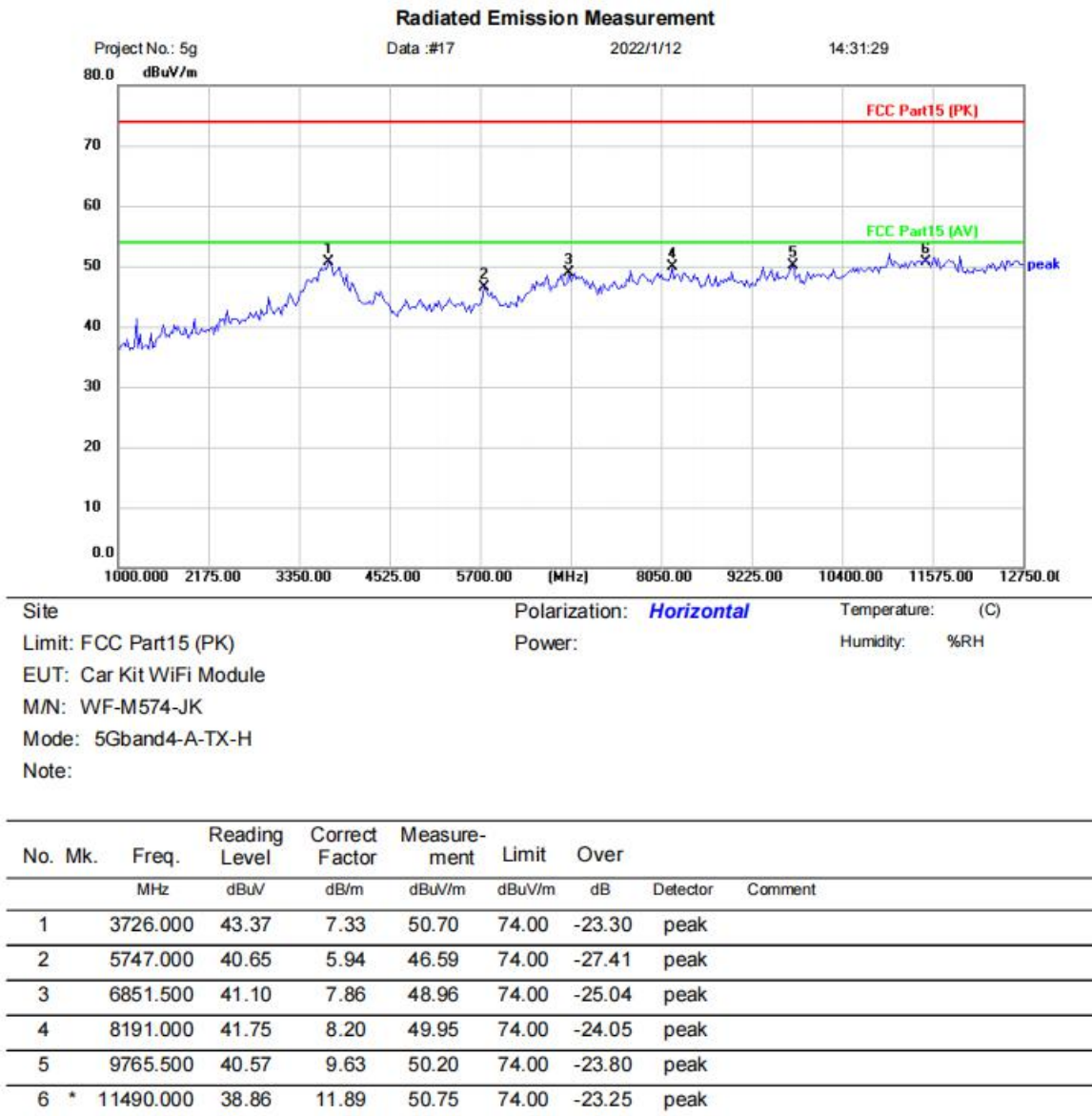


*:Maximum data x:Over limit !:over margin

(Reference Only)

Test Result: Pass

[TestMode: TX band4 A high channel]; [Polarity: Horizontal]

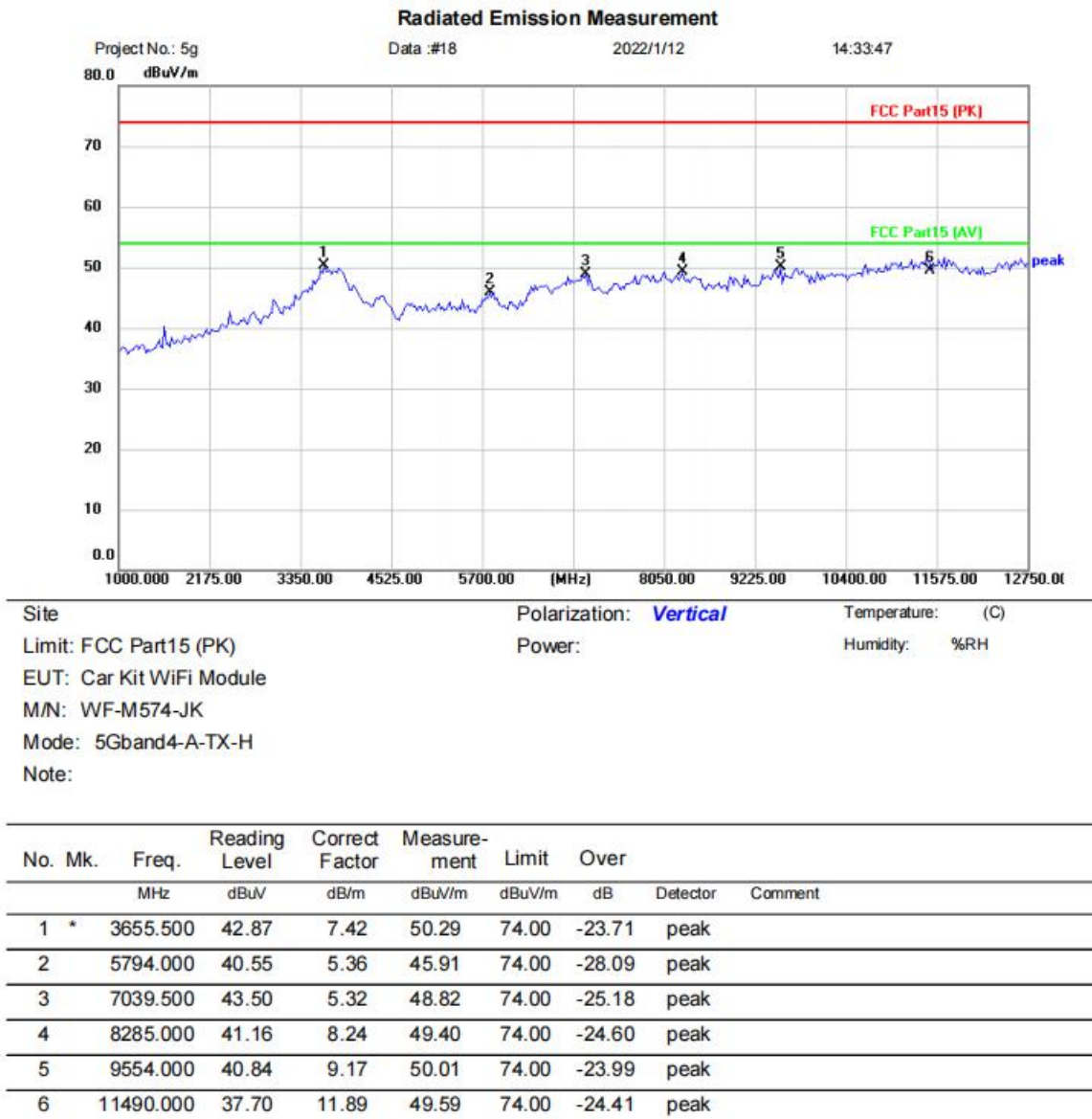


*:Maximum data x:Over limit !:over margin

(Reference Only)

Test Result: Pass

[TestMode: TX band4 A high channel]; [Polarity: Vertical]



*:Maximum data x:Over limit !:over margin

(Reference Only)

Test Result: Pass

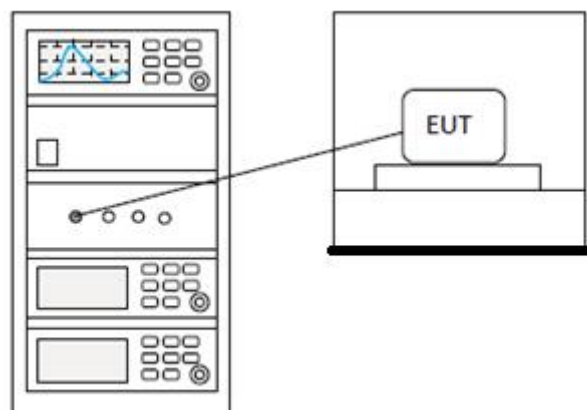
13 PEAK POWER SPECTRUM DENSITY

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

13.1 LIMITS

Frequency band(MHz)	Limit
5150-5250	≤17dBm in 1MHz for master device
	≤11dBm in 1MHz for client device
5250-5350	≤11dBm in 1MHz for client device
5470-5725	≤11dBm in 1MHz for client device
5725-5850	≤30dBm in 500 kHz
Remark:	The maximum power spectral density is measured as a conducted emission by direct connection of a calibrated test instrument to the equipment under test.

13.2 BLOCK DIAGRAM OF TEST SETUP



13.3 TEST DATA

Pass: Please Refer To Appendix: Appendix1 For Details

BlueAsia

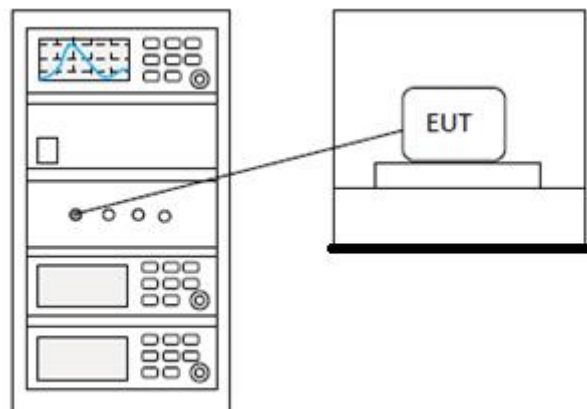
14 MAXIMUM CONDUCTED OUTPUT POWER

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

14.1 LIMITS

Frequency band(MHz)	Limit
5150-5250	$\leq 1\text{W}(30\text{dBm})$ for master device
	$\leq 250\text{mW}(24\text{dBm})$ for client device
5250-5350	$\leq 250\text{mW}(24\text{dBm})$ for client device or $11\text{dBm}+10\log B^*$
5470-5725	$\leq 250\text{mW}(24\text{dBm})$ for client device or $11\text{dBm}+10\log B^*$
5725-5850	$\leq 1\text{W}(30\text{dBm})$
Remark:	* Where B is the 26dB emission bandwidth in MHz. The maximum conducted output power must be measured over any interval of continuous transmission using instrumentation calibrated in terms of an rms-equivalent voltage.

14.2 BLOCK DIAGRAM OF TEST SETUP



14.3 TEST DATA

Pass: Please Refer To Appendix: Appendix1 For Details

BlueAsia

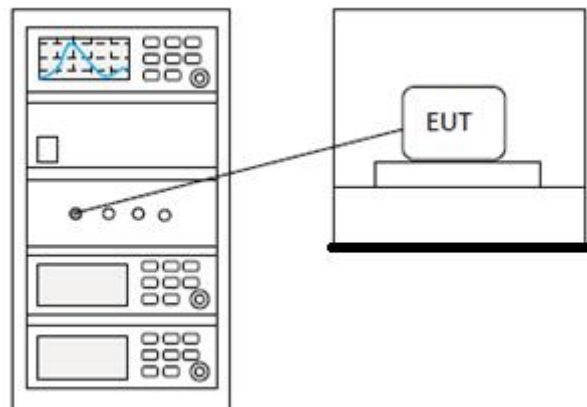
15 MINIMUM 6 DB BANDWIDTH (5.725-5.85 GHZ BAND)

Test Standard	47 CFR Part 15, Subpart E 15.407
Test Method	KDB 789033 D02 II C 2
Test Mode (Pre-Scan)	TX
Test Mode (Final Test)	TX
Tester	Jozu
Temperature	25℃
Humidity	60%

15.1 LIMITS

Limit:	≥ 500 kHz
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15.2 BLOCK DIAGRAM OF TEST SETUP



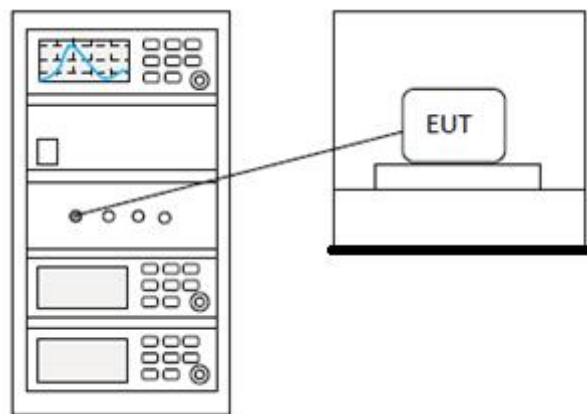
15.3 TEST DATA

Pass: Please Refer To Appendix: Appendix1 For Details

16 99% BANDWIDTH

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

16.1 BLOCK DIAGRAM OF TEST SETUP



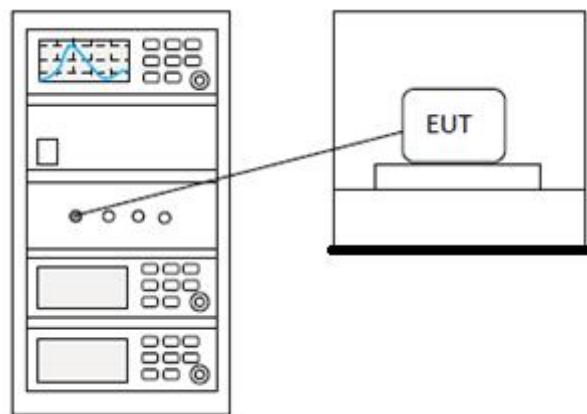
16.2 TEST DATA

Pass: Please Refer To Appendix: Appendix1 For Details

17 DUTY CYCLE

Test Standard	47 CFR Part 15, Subpart E 15.407
Test Method	KDB 789033 II B 1
Test Mode (Pre-Scan)	TX
Test Mode (Final Test)	TX
Tester	Jozu
Temperature	25℃
Humidity	60%

17.1 BLOCK DIAGRAM OF TEST SETUP



17.2 TEST DATA

Pass: Please Refer To Appendix: Appendix1 For Details

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

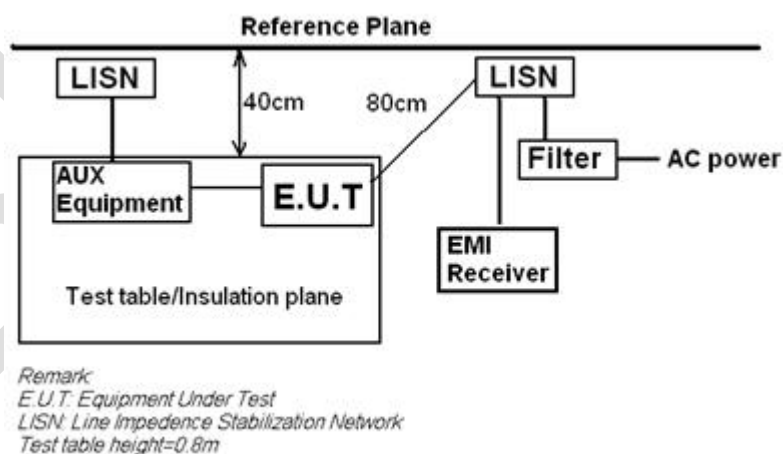
Test Standard	47 CFR Part 15, Subpart E 15.407
Test Method	ANSI C63.10 (2013) Section 6.2
Test Mode (Pre-Scan)	TX
Test Mode (Final Test)	TX
Tester	Jozu
Temperature	25℃
Humidity	60%

18.1 LIMITS

Frequency of emission(MHz)	Conducted limit(dBμV)	
	Quasi-peak	Average
0.15-0.5	66 to 56*	56 to 46*
0.5-5	56	46
5-30	60	50

*Decreases with the logarithm of the frequency.

18.2 BLOCK DIAGRAM OF TEST SETUP



18.3 PROCEDURE

- 1) The mains terminal disturbance voltage test was conducted in a shielded room.
- 2) The EUT was connected to AC power source through a LISN 1 (Line Impedance Stabilization Network) which provides a 50ohm/50H + 5ohm linear impedance. The power cables of all other units of the EUT were connected to a second LISN 2, which was bonded to the ground reference plane in the same way as the LISN 1 for the unit being measured. A multiple socket outlet strip was used to connect multiple power cables to a single LISN provided the rating of the LISN was not exceeded.

3) The tabletop EUT was placed upon a non-metallic table 0.8m above the ground reference plane. And for floor-standing arrangement, the EUT was placed on the horizontal ground reference plane,

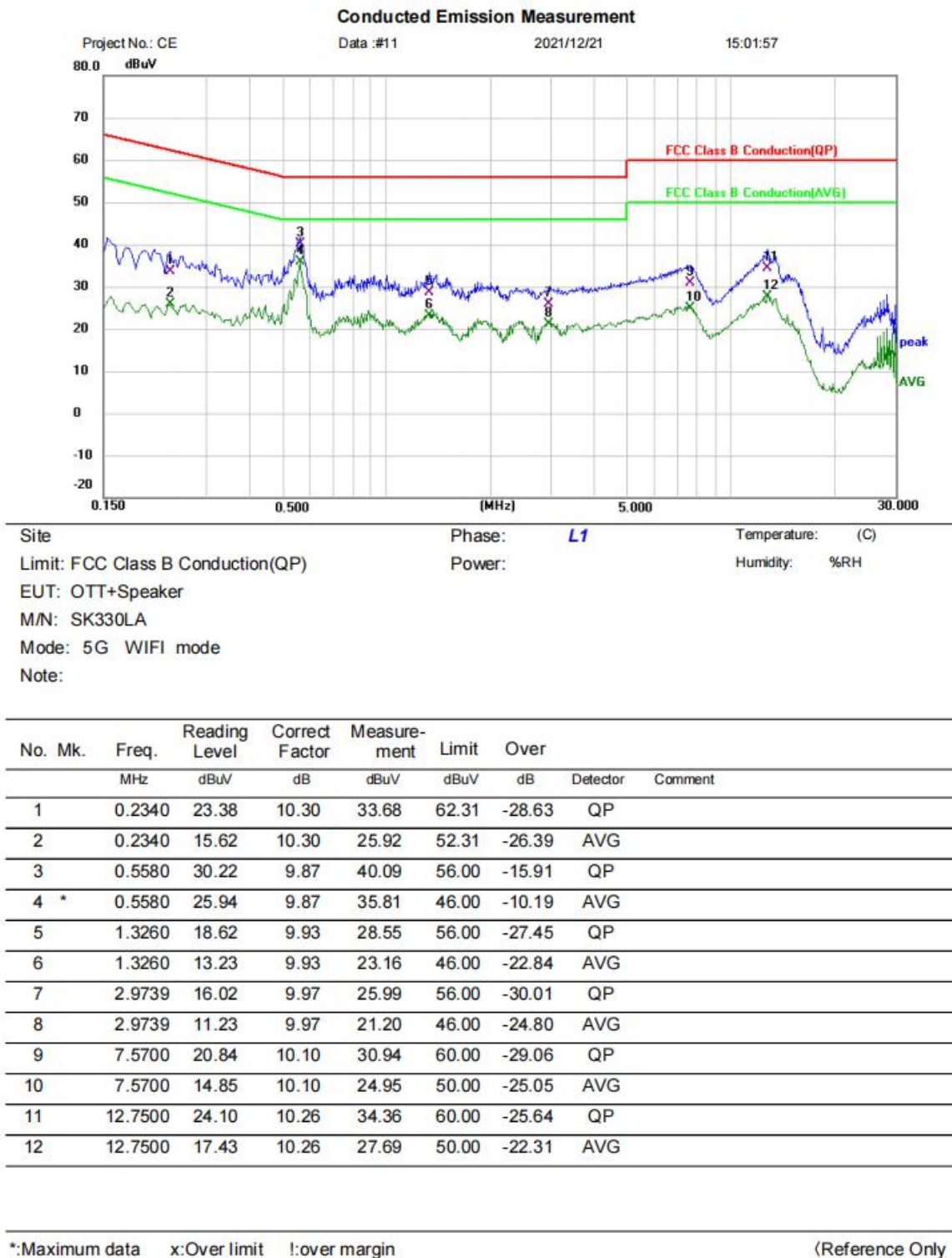
4) The test was performed with a vertical ground reference plane. The rear of the EUT shall be 0.4 m from the vertical ground reference plane. The vertical ground reference plane was bonded to the horizontal ground reference plane. The LISN 1 was placed 0.8 m from the boundary of the unit under test and bonded to a ground reference plane for LISNs mounted on top of the ground reference plane. This distance was between the closest points of the LISN 1 and the EUT. All other units of the EUT and associated equipment was at least 0.8 m from the LISN 2.

5) In order to find the maximum emission, the relative positions of equipment and all of the interface cables must be changed according to ANSI C63.10 on conducted measurement.

Remark: $LISN = Read\ Level + Cable\ Loss + LISN\ Factor$

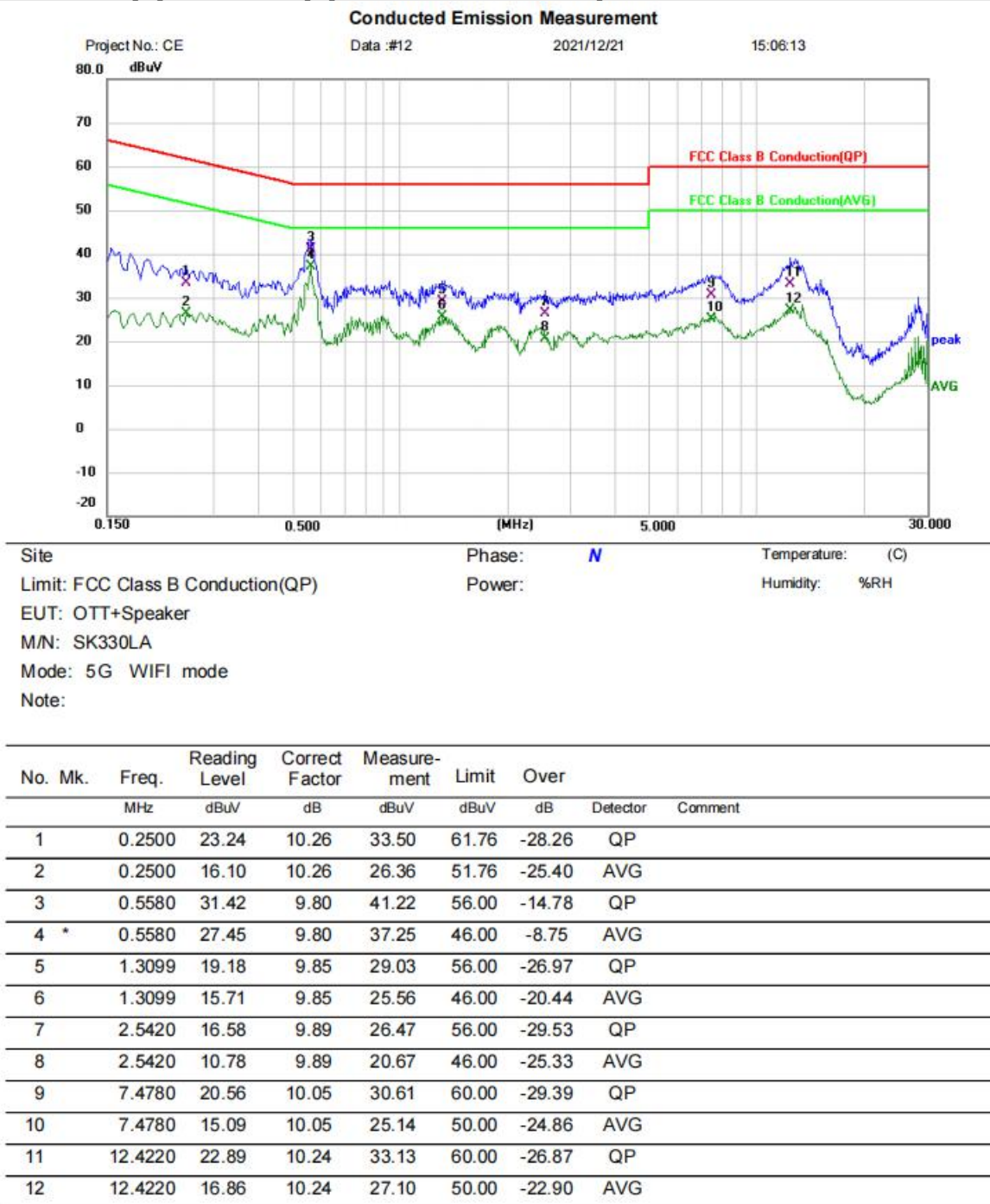
18.4 TEST DATA

[TestMode: TX]; [Line: Line] ;[Power:AC120V/60Hz]



Test Result: Pass

[TestMode: TX]; [Line: Nutral] ;[Power:AC120V/60Hz]



*:Maximum data x:Over limit !:over margin

(Reference Only)

Test Result: Pass

19 ANTENNA REQUIREMENT

Test Standard	47 CFR Part 15, Subpart E 15.407
Test Method	N/A

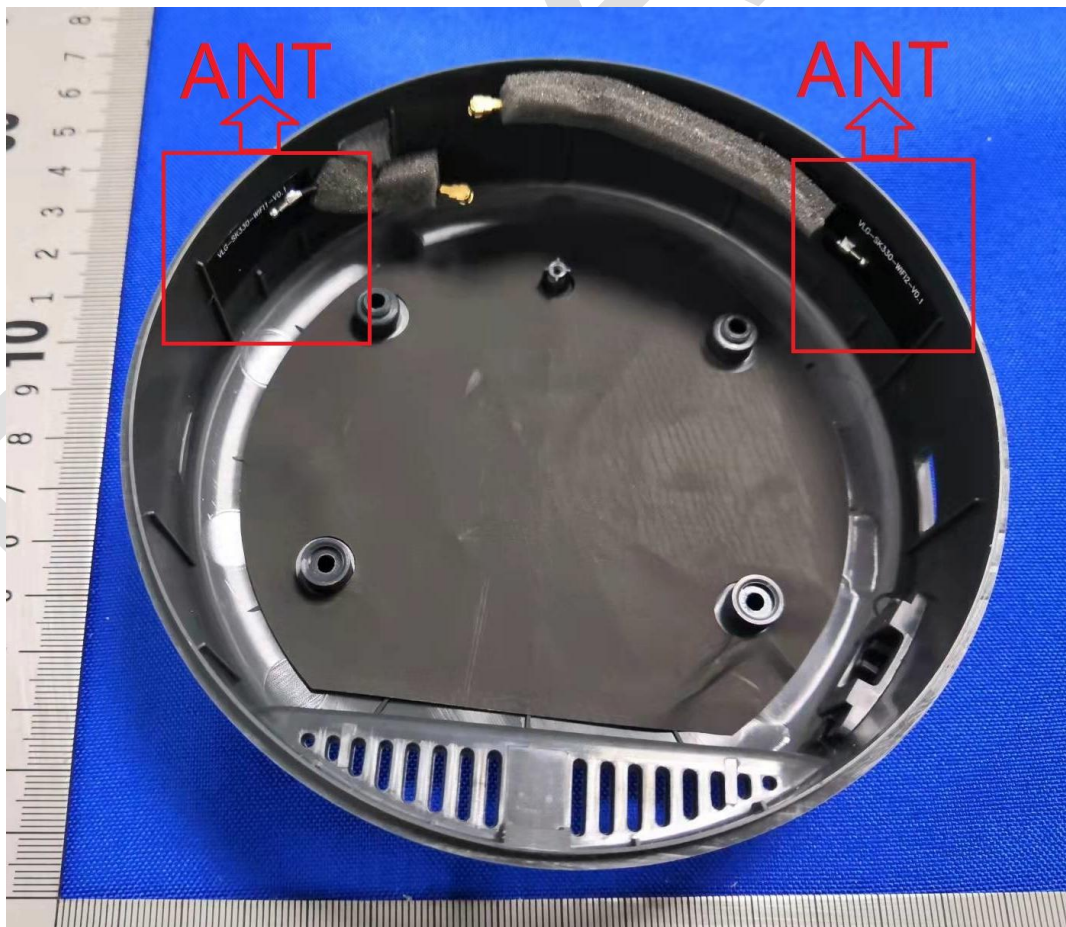
19.1 CONCLUSION

Standard Requirement:

An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of an antenna that uses a unique coupling to the intentional radiator, the manufacturer may design the unit permanently attached antenna or of an so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited.

EUT Antenna:

The antenna is integrated on the main PCB and no consideration of replacement. The best case gain of the antenna is 5dBi.



19.1 CONCLUSION

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