Test Report

Applicant	:	Shenzhen Topwise Communication Co., Ltd
Address	:	Floor 5, Tiandiyuan Shengtang Mansion East Block, No.1 Tairan 9th Rd, Futian District, Shenzhen 518042, Guangdong, P.R.China
Product Name	:	Barcode scanner
Brand Mark	:	TOPWISE
Model	:	G2-B
FCC ID	:	2BBKD-G2-B
Report Number	:	BLA-EMC-202404-A6803
Date of Receipt	:	2024.04.22
Date of Test	:	2024.04.22 to 2024.07.22
Test Standard	:	47 CFR Part 15, Subpart C 15.249
Test Result	:	Pass

Compiled by: Hugh **Review by:** Sweely **Approved by:** Blue Zheng

Issued Date: 2024.07.22

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

Address: Building C, No. 107, Shihuan Road, Shiyan Sub-District, Baoan District, Shenzhen, Guangdong Province, China

BlueAsia Technical Services (ShenZhen) Co., Ltd. BLA

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Revise Record

Version No.	Date	Description
01	2024.07.22	Original

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1 General information

1.1 General information

Applicant	Shenzhen Topwise Communication Co., Ltd
Address	Floor 5, Tiandiyuan Shengtang Mansion East Block, No.1 Tairan 9th Rd, Futian District, Shenzhen 518042, Guangdong, P.R.China
Manufacturer	Shenzhen Topwise Communication Co., Ltd
Address	Floor 5, Tiandiyuan Shengtang Mansion East Block, No.1 Tairan 9th Rd, Futian District, Shenzhen 518042, Guangdong, P.R.China
Factory	Shenzhen Topwise Communication Co., Ltd
Address	Floor 5, Tiandiyuan Shengtang Mansion East Block, No.1 Tairan 9th Rd, Futian District, Shenzhen 518042, Guangdong, P.R.China

1.2 General description of EUT

Product Name	Barcode scanner
Model No.	G2-B
Series model	N/A
Operation Frequency:	2402MHz-2480MHz
Modulation Type:	GFSK
Antenna Type:	Metal antenna
Antenna Gain:	0dBi(Provided by customer)
Power supply or adapter information	DC3.7V
Hardware Version	N/A
Software Version	N/A
Note: For a more detailed description, please refer to Specification or User's Manual supplied by the applicant and/or manufacturer.	

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2 Test summary

No.	Test item	Result	Remark
1	Antenna Requirement	Pass	
2	Conducted Emissions at AC Power Line (150kHz-30MHz)	Pass	
3	Field Strength of the Fundamental Signal (15.249(a))	Pass	
4	20dB Bandwidth	Pass	
5	Radiated Emissions	Pass	
6	Restricted Band Around Fundamental Frequency	Pass	

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3 Test Configuration

3.1 Test mode

Test Mode [Note 1]	Description
TX	Keep the EUT in continuously transmitting with modulation mode.
RX	Keep the EUT in receiving mode
TX Low channel	Keep the EUT in continuously transmitting mode in low channel
TX middle channel	Keep the EUT in continuously transmitting mode in middle channel
TX high channel	Keep the EUT in continuously transmitting mode in high channel

Note 1: The EUT was configured to measure its highest possible emission and/or immunity level. The test modes were adapted according to the operation manual for use; the EUT was operated in the engineering mode [Note 2] to fix the TX or Rx frequency that was for the purpose of the measurements.

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3.2 Operation Frequency each of channel

Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
0	2402MHz	20	2422MHz	40	2442MHz	60	2462MHz
1	2404MHz	21	2423MHz	41	2443MHz	61	2463MHz
…	…	…	…	…	…	…	…
18	2420MHz	38	2440MHz	58	2460MHz	78	2480MHz
19	2421MHz	39	2441MHz	59	2461MHz		

3.3 Test channel

Channel	Frequency
The lowest channel	2402MHz
The middle channel	2440MHz
The Highest channel	2480MHz

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3.4 Auxiliary equipment

Device Type	Manufacturer	Model Name	Serial No.	Remark
PC	Lenovo	E460C	N/A	From lab (No.BLA-ZC-BS-2022005)

Note:
"--" mean no any auxiliary device during testing.

3.5 Test environment

Environment	Temperature	Voltage
Normal	25°C	DC 3.7V

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4 Laboratory information

4.1 Laboratory and accreditations

The test facility is recognized, certified, or accredited by the following organizations:

Company name:	BlueAsia of Technical Services(Shenzhen) Co., Ltd.
Address:	Building C, No. 107, Shihuan Road, Shiyan Sub-District, Baoan District, Shenzhen, Guangdong Province, China
CNAS accredited No.:	L9788
A2LA Cert. No.:	5071.01
FCC Designation No.:	CN1252
ISED CAB identifier No.:	CN0028
Telephone:	+86-755-28682673
FAX:	+86-755-28682673

4.2 Measurement uncertainty

This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=1.96.

Parameter	Expanded Uncertainty
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
Occupied Channel Bandwidth	±5 %
RF output power, conducted	±1.5 dB
Power Spectral Density, conducted	±3.0 dB
Unwanted Emissions, conducted	±3.0 dB
Temperature	±3 °C
Supply voltages	±3 %
Time	±5 %

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5 Test equipment

Equipment No.	Equipment Name	Model No.	Manufacture	S/N	Cal. Date	Next Cal. Date
BLA-EMC-008	Spectrum	FSP40	R&S	100817	2023/08/30	2024/08/29
BLA-EMC-009	EMI Receiver	ESR7	R&S	101199	2023/08/30	2024/08/29
BLA-EMC-011	LISN	ENV216	R&S	101372	2023/08/30	2024/08/29
BLA-EMC-012	broad band Antenna	VULB9168	Schwarz beck	00836 P:00227	2022/10/12	2025/10/11
BLA-EMC-013	Horn Antenna	BBHA9120D	Schwarz beck	01892	2022/09/13	2025/09/12
BLA-EMC-014	Amplifier	PA_000318G-45	SKET	PA2018043003	2023/08/30	2024/08/29
BLA-EMC-016	Signal Generator	N5182A	Agilent	MY52420567	2023/11/16	2024/11/15
BLA-EMC-028	Spectrum	N9020A	Agilent	MY53420839	2023/11/16	2024/11/15
BLA-EMC-038	Spectrum	N9020A	Agilent	MY49100060	2023/08/30	2024/08/29
BLA-EMC-041	LISN	AT166-2	ATTEN	AKK1806000003	2023/08/30	2024/08/29
BLA-EMC-042	Power sensor	RPR3006W	DARE	14I00889SN042	2023/09/01	2024/08/31
BLA-EMC-043	Loop antenna	FMZB1519B	SCHNARZBECK	00102	2022/09/14	2025/09/13
BLA-EMC-044	Wideband radio communication tester	CMW500	R&S	132429	2023/08/30	2024/08/29
BLA-EMC-045	Impedance stable network	ISNT8-cat6	TESEQ	53580	2023/08/30	2024/08/29
BLA-EMC-046	Filter bank	2.4G/5G Filter bank	SKET	N/A	2024/07/07	2025/07/06
BLA-EMC-061	Receiver	ESPI7	R&S	101477	2024/07/07	2025/07/06
BLA-EMC-062	Signal Generator	N5181A	Agilent	MY46240904	2024/07/07	2025/07/06
BLA-EMC-064	Signal Generator	N5182B	KEYSIGHT	MY58108892	2024/07/07	2025/07/06
BLA-EMC-065	broadband Antenna	VULB9168	Schwarz beck	01065P	2022/12/12	2025/12/11
BLA-EMC-066	Amplifier	LNPA_30M01G-30	SKET	SK2021060801	2024/07/07	2025/07/06
BLA-EMC-079	Spectrum	N9020A	Agilent	MY54420161	2023/08/30	2024/08/29
BLA-EMC-080	Signal Generator	N5182A	Agilent	MY47420955	2023/08/30	2024/08/29
BLA-EMC-086	Amplifier	LNPA_18G40G-50dB	SKET	SK2022071301	2023/08/14	2024/08/13

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6 Test result

6.1 Antenna requirement

Test Standard	47 CFR Part 15, Subpart C 15.249
Test Method	N/A

6.1.1 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 a 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 0 dBi.

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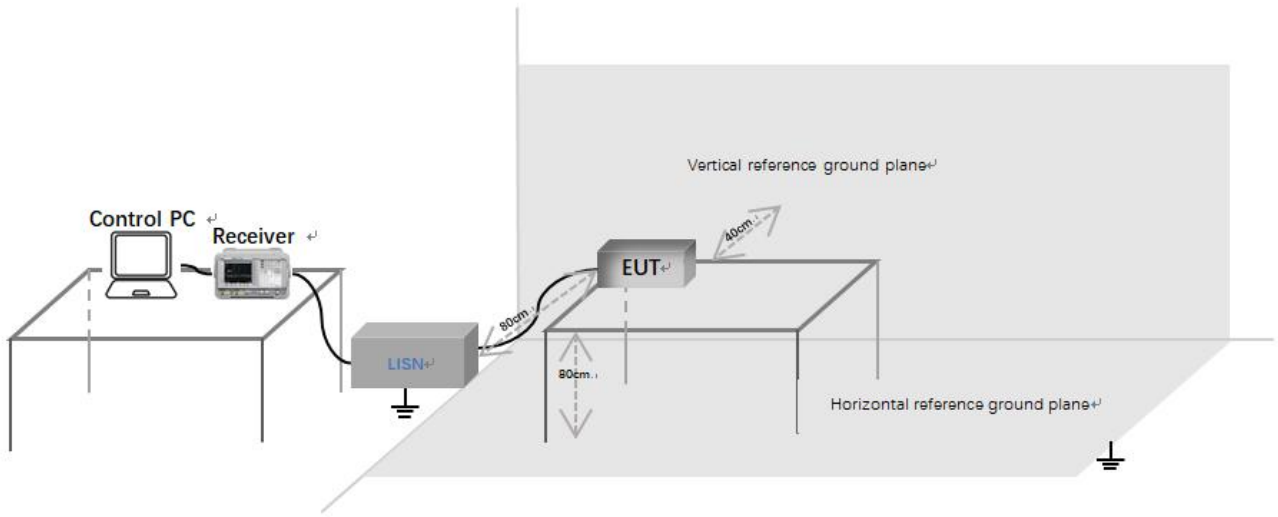
6.2 Conducted emissions at AC power line (150 kHz-30 MHz)

Test Standard	47 CFR Part 15, Subpart C 15.249
Test Method	ANSI C63.10 (2013) Section 6.2
Test Mode (Pre-Scan)	TX
Test Mode (Final Test)	TX

6.2.1 Limit

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.		

6.2.2 Test setup



Description of test setup connection:

a) *Connect the control PC to the receiver through a USB to GPIB cable;*

b) *The receiver is connected to the LISN through a coaxial line;*

c) *Connect the power port of LISN to the EUT.*

6.2.3 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.

LISN=Read Level+ Cable Loss+ LISN Factor

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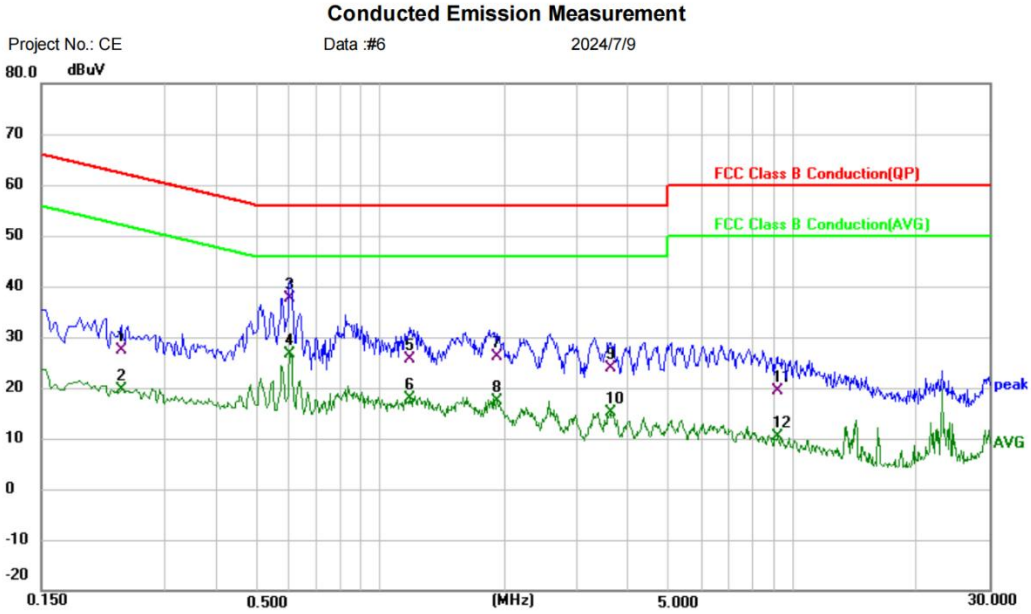
6.2.4 Test data

[Test mode: TX]; [Line: Line];[Power:AC120V/60Hz]

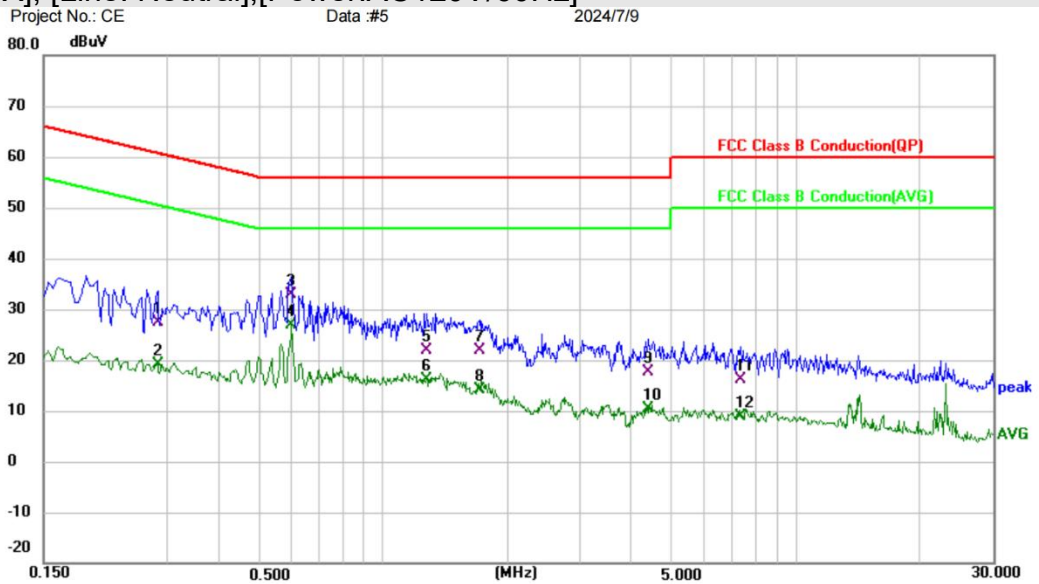


Site		Phase:	L1	Temperature: (C)
Limit: FCC Class B Conduction(QP)		Power:		Humidity: %RH
EUT: Barcode scanner		Distance:	RBW: 9 KHz	
M/N: G2-B			VBW: 30 KHz	Sweep Time: 10 ms
Mode: 2.4G TX Mode				
Note:				

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	cm	degree	Comment
1		0.2340	16.91	10.47	27.38	62.31	-34.93	QP			
2		0.2340	9.11	10.47	19.58	52.31	-32.73	AVG			
3	*	0.6020	27.62	9.93	37.55	56.00	-18.45	QP			
4		0.6020	16.70	9.93	26.63	46.00	-19.37	AVG			
5		1.1740	15.67	9.85	25.52	56.00	-30.48	QP			
6		1.1740	8.06	9.85	17.91	46.00	-28.09	AVG			
7		1.9180	16.10	10.12	26.22	56.00	-29.78	QP			
8		1.9180	7.17	10.12	17.29	46.00	-28.71	AVG			
9		3.6220	13.99	10.00	23.99	56.00	-32.01	QP			
10		3.6220	5.10	10.00	15.10	46.00	-30.90	AVG			
11		9.1860	8.01	11.34	19.35	60.00	-40.65	QP			
12		9.1860	-1.04	11.34	10.30	50.00	-39.70	AVG			

Test Result: Pass

[Test mode: TX]; [Line: Neutral];[Power:AC120V/60Hz]



Site		Phase:	N	Temperature:	(C)
Limit:	FCC Class B Conduction(QP)	Power:		Humidity:	%RH
EUT:	Barcode scanner	Distance:	RBW: 9 KHz		
M/N:	G2-B		VBW: 30 KHz	Sweep Time: 10 ms	
Mode:	2.4G TX Mode				
Note:					

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	cm	degree	Comment
1		0.2819	17.41	9.92	27.33	60.76	-33.43	QP			
2		0.2819	9.27	9.92	19.19	50.76	-31.57	AVG			
3		0.5980	23.00	9.86	32.86	56.00	-23.14	QP			
4	*	0.5980	16.93	9.86	26.79	46.00	-19.21	AVG			
5		1.2740	11.96	9.90	21.86	56.00	-34.14	QP			
6		1.2740	6.31	9.90	16.21	46.00	-29.79	AVG			
7		1.7100	11.86	9.97	21.83	56.00	-34.17	QP			
8		1.7100	4.12	9.97	14.09	46.00	-31.91	AVG			
9		4.3859	7.37	10.17	17.54	56.00	-38.46	QP			
10		4.3859	0.32	10.17	10.49	46.00	-35.51	AVG			
11		7.3460	5.17	11.05	16.22	60.00	-43.78	QP			
12		7.3460	-2.16	11.05	8.89	50.00	-41.11	AVG			

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

Test Result: Pass

6.3 Field strength of the fundamental signal (15.249(A))

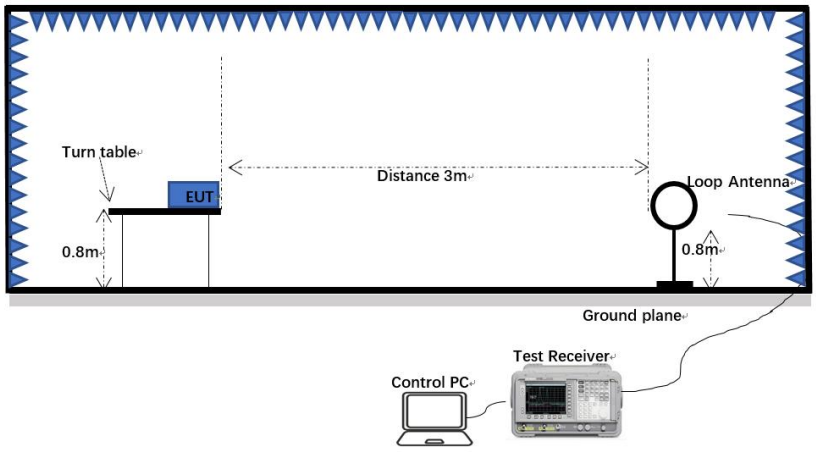
Test Standard	47 CFR Part 15, Subpart C 15.249
Test Method	ANSI C63.10 (2013) Section 6.5&6.6
Test Mode (Pre-Scan)	TX
Test Mode (Final Test)	TX

6.3.1 Limit

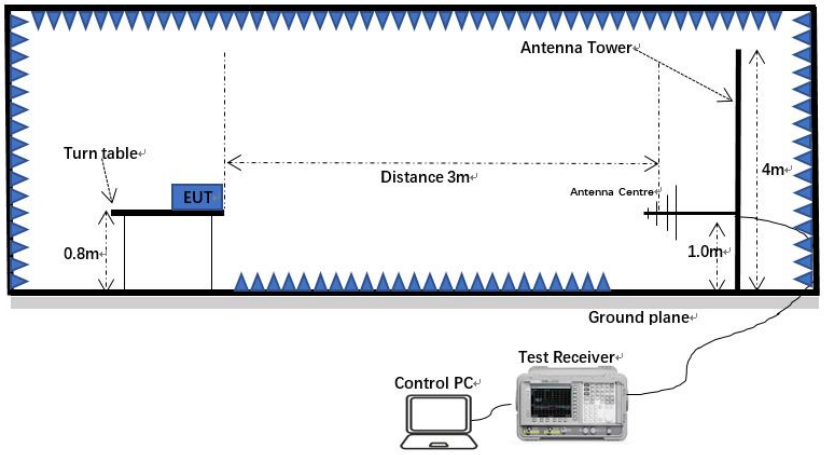
Fundamental frequency(MHz)	Field strength of fundamental(microvolts/meter)	Field strength of harmonics(microvolts/meter)
902-928	50	500
2400-2483.5	50	500
5725-5875	50	500
24000-24250	250	2500
Remark: The frequencies above 1000MHz are based on average limits. However, the peak field strength of any emission shall not exceed the maximum permitted average limits specified above by more than 20 dB under any condition of modulation.		

6.3.2 Test setup

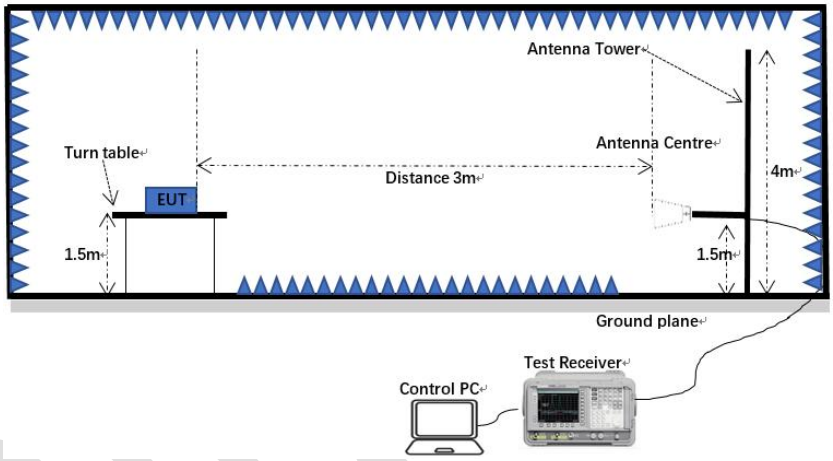
Below 1GHz：



30MHz-1GHz：



Above 1GHz：



6.3.3 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.

k) Level (dBμV/m) = Reading Level(dBuV) + Correct Factor (dB)

l) *SA setting: RBW=3MHz, VBW=10MHz， PK detector is for PK value ,RMS detector is for AV value.*

6.3.4 Test data

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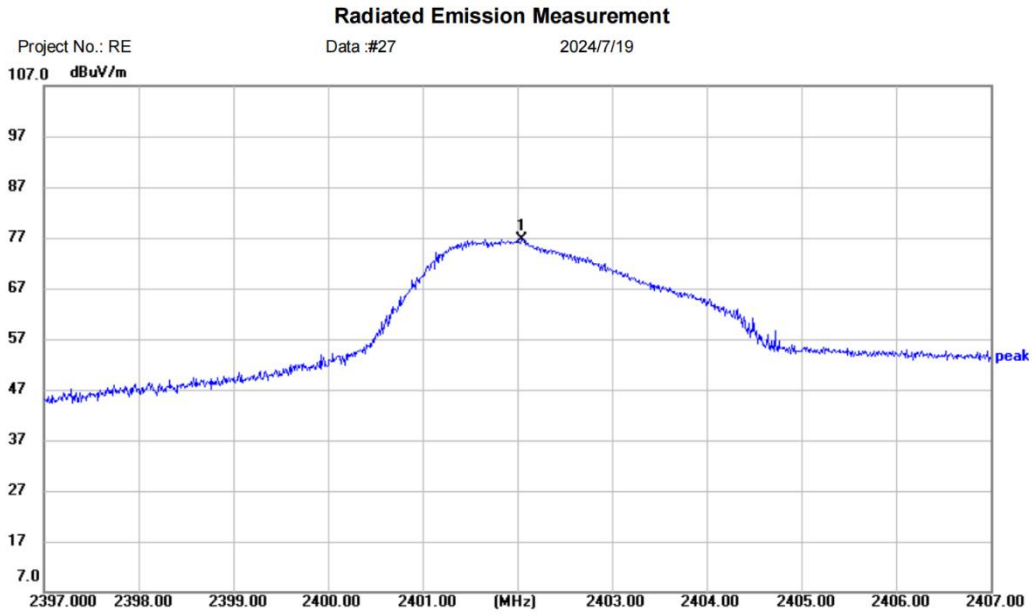
Peak:

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



Site
Limit:
EUT: Barcode scanner
M/N: G2-B
Mode: 2.4G-2402
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	*	2402.050	79.37	-2.68	76.69			peak	

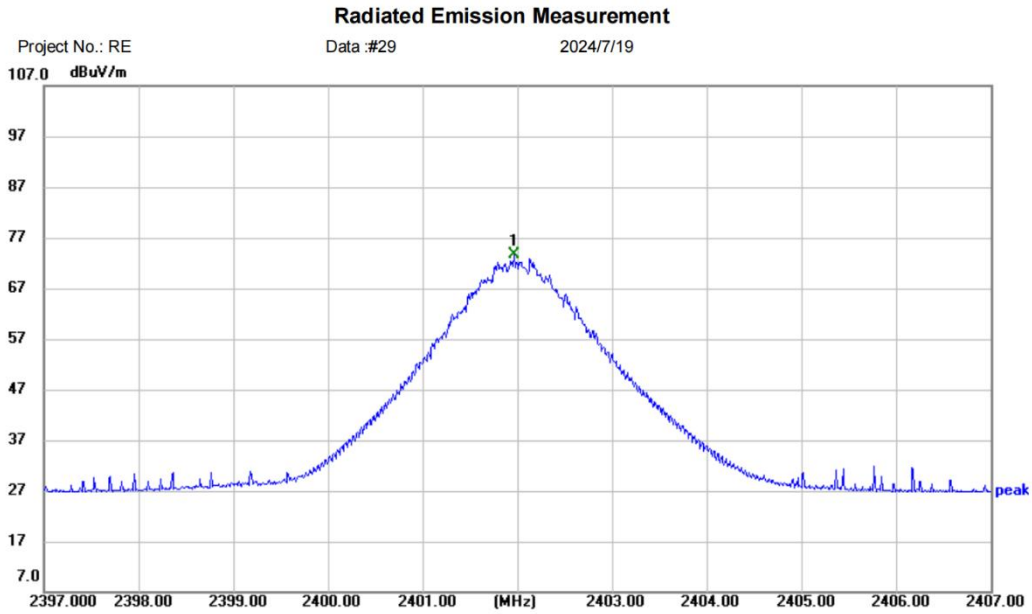
*:Maximum data x:Over limit !:over margin 〈Reference Only

Receiver: ESR_1
Antenna: EZ 9120D 1G-18G
Spectrum Analyzer: FSP40
Engineer Signature:

Test Result: Pass, limit=114 dBuV/m

AVG:

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



Site
Limit:
EUT: Barcode scanner
M/N: G2-B
Mode: 2.4G-2402
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	*	2401.960	76.28	-2.68	73.60			AVG	

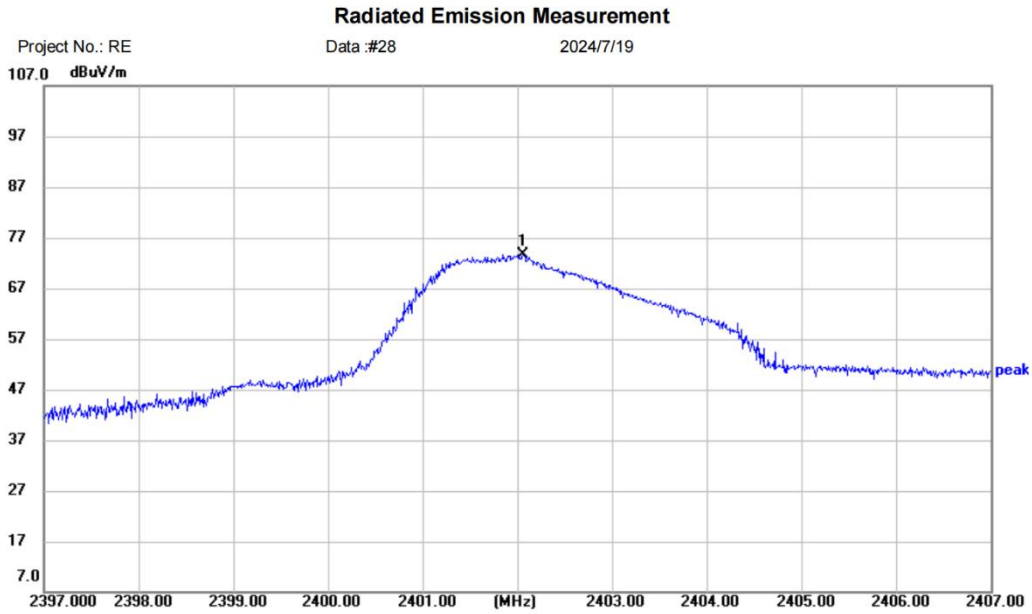
*:Maximum data x:Over limit !:over margin 〈Reference Only

Receiver: ESR_1
Antenna: EZ 9120D 1G-18G
Spectrum Analyzer: FSP40
Engineer Signature:

Test Result: Pass, limit=94 dBuV/m

PEAK:

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



Site
Limit:
EUT: Barcode scanner
M/N: G2-B
Mode: 2.4G-2402
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	*	2402.060	76.31	-2.68	73.63			peak	

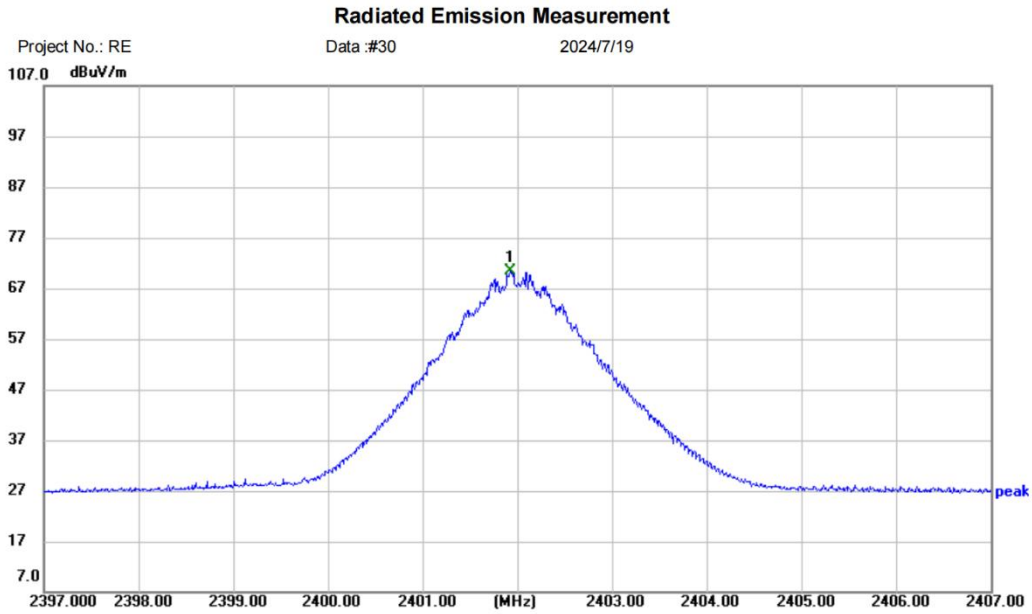
*:Maximum data x:Over limit !:over margin 〈Reference Only

Receiver: ESR_1
Antenna: EZ 9120D 1G-18G
Spectrum Analyzer: FSP40
Engineer Signature:

Test Result: Pass, limit=114 dBuV/m

AVG:

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



Site
Limit:
EUT: Barcode scanner
M/N: G2-B
Mode: 2.4G-2402
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	*	2401.920	73.11	-2.68	70.43			AVG	

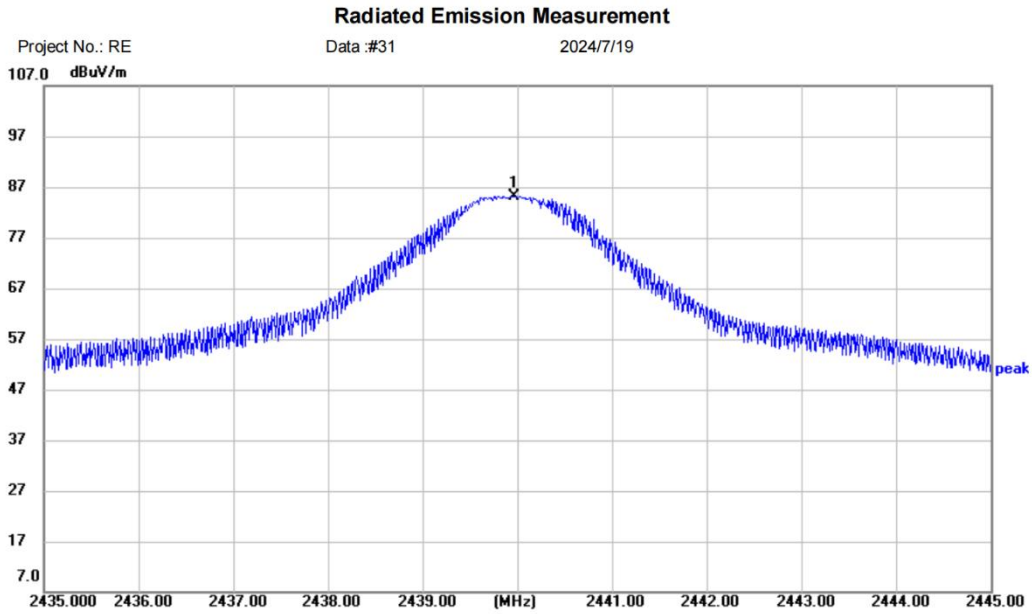
*:Maximum data x:Over limit !:over margin 〈Reference Only

Receiver: ESR_1
Antenna: EZ 9120D 1G-18G
Spectrum Analyzer: FSP40
Engineer Signature:

Test Result: Pass, limit=94 dBuV/m

Peak:

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



Site
Limit:
EUT: Barcode scanner
M/N: G2-B
Mode: 2.4G-2440
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	*	2439.970	87.94	-2.72	85.22			peak	

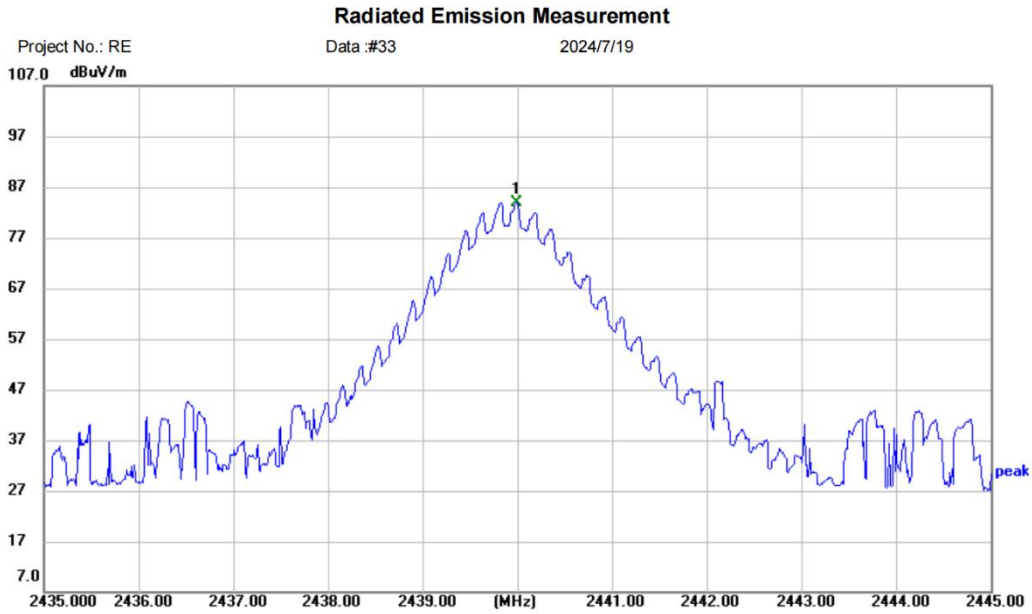
*:Maximum data x:Over limit !:over margin 〈Reference Only

Receiver: ESR_1
Antenna: EZ 9120D 1G-18G
Spectrum Analyzer: FSP40
Engineer Signature:

Test Result: Pass, limit=114 dBuV/m

AVG:

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



Site
Limit:
EUT: Barcode scanner
M/N: G2-B
Mode: 2.4G-2440
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	*	2439.990	86.54	-2.72	83.82			AVG	

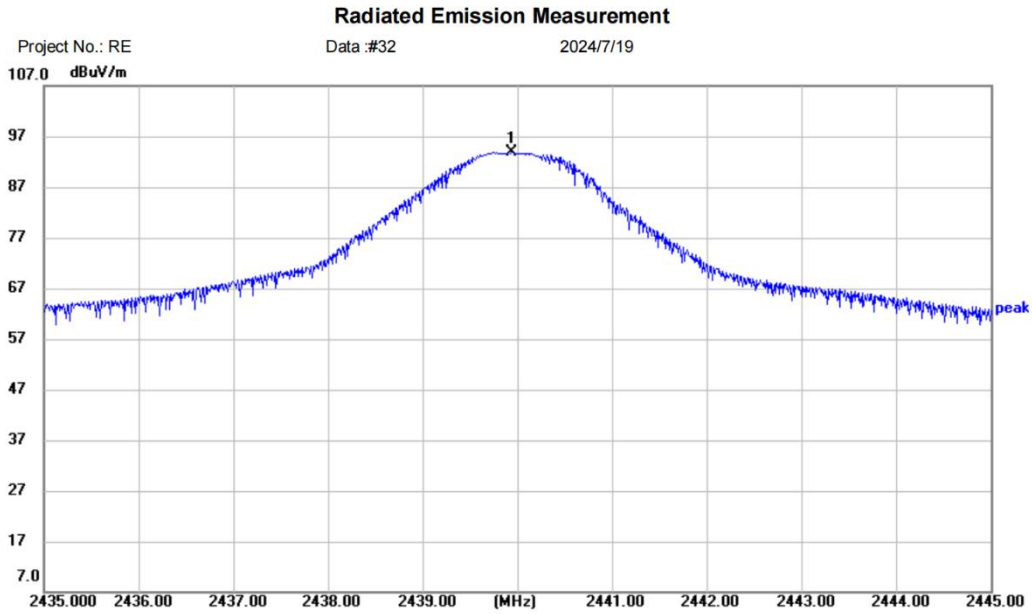
*:Maximum data x:Over limit !:over margin 〈Reference Only

Receiver: ESR_1
Antenna: EZ 9120D 1G-18G
Spectrum Analyzer: FSP40
Engineer Signature:

Test Result: Pass, limit=94 dBuV/m

PEAK:

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



Site
Limit:
EUT: Barcode scanner
M/N: G2-B
Mode: 2.4G-2440
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	*	2439.940	96.51	-2.72	93.79			peak	

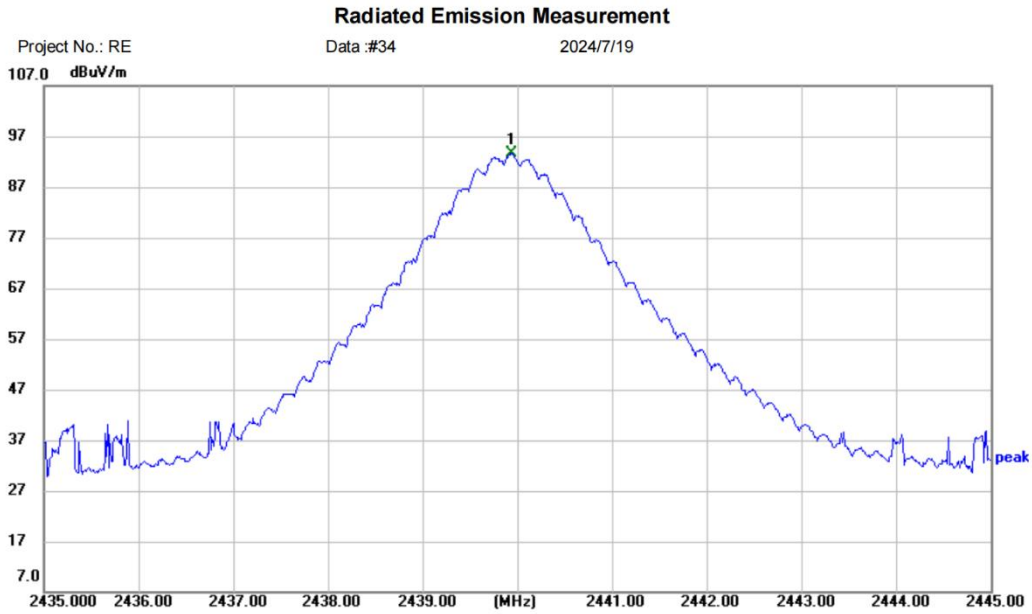
*:Maximum data x:Over limit !:over margin 〈Reference Only

Receiver: ESR_1
Antenna: EZ 9120D 1G-18G
Spectrum Analyzer: FSP40
Engineer Signature:

Test Result: Pass, limit=114 dBuV/m

AVG:

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



Site
Limit:
EUT: Barcode scanner
M/N: G2-B
Mode: 2.4G-2440
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	*	2439.940	96.37	-2.72	93.65			AVG	

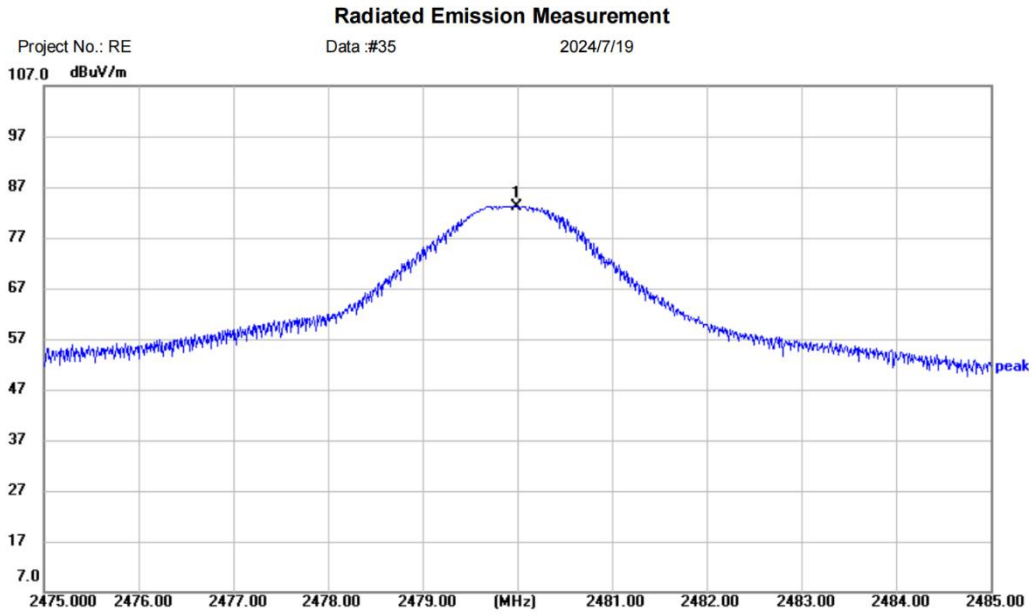
*:Maximum data x:Over limit !:over margin 〈Reference Only

Receiver: ESR_1
Antenna: EZ 9120D 1G-18G
Spectrum Analyzer: FSP40
Engineer Signature:

Test Result: Pass, limit=94 dBuV/m

Peak:

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



Site
Limit:
EUT: Barcode scanner
M/N: G2-B
Mode: 2.4G-2480
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	*	2479.990	86.08	-2.90	83.18			peak	

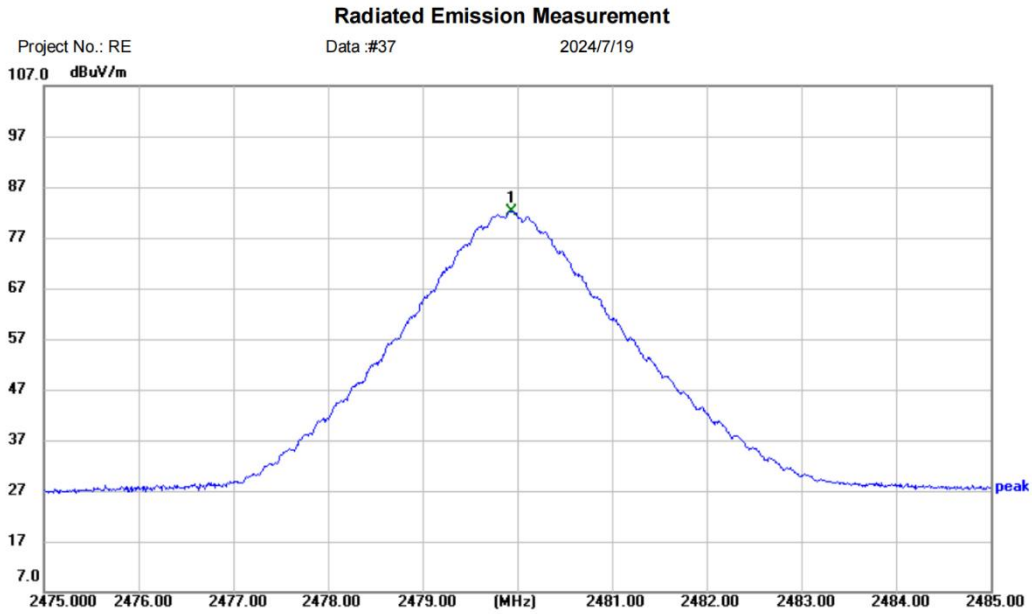
*:Maximum data x:Over limit !:over margin 〈Reference Only

Receiver: ESR_1
Antenna: EZ 9120D 1G-18G
Spectrum Analyzer: FSP40
Engineer Signature:

Test Result: Pass, limit=114 dBuV/m

AVG:

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



Site
Limit:
EUT: Barcode scanner
M/N: G2-B
Mode: 2.4G-2480
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	*	2479.940	85.04	-2.90	82.14			AVG	

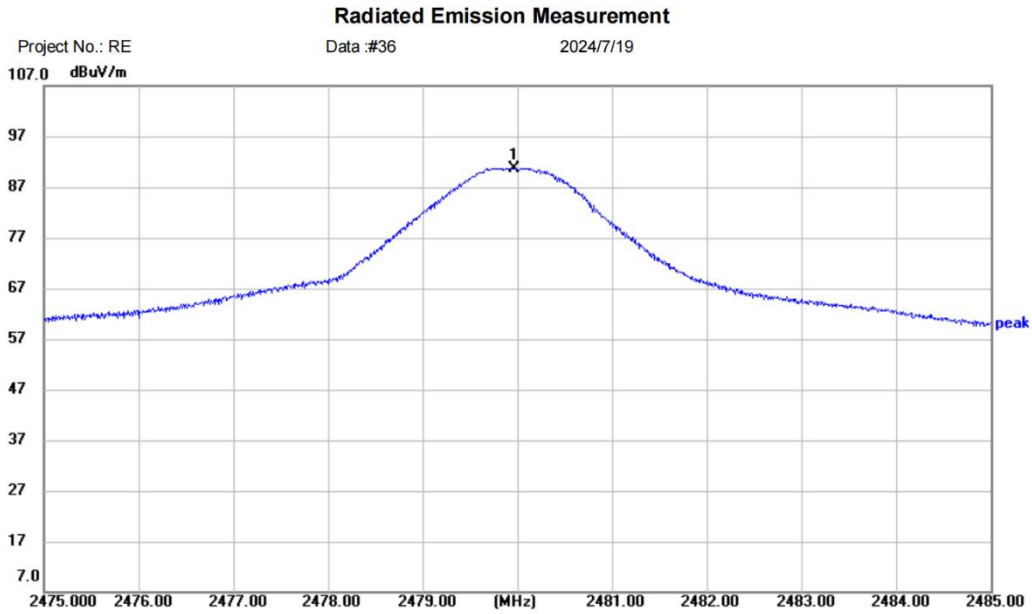
*:Maximum data x:Over limit !:over margin 〈Reference Only

Receiver: ESR_1
Antenna: EZ 9120D 1G-18G
Spectrum Analyzer: FSP40
Engineer Signature:

Test Result: Pass, limit=94 dBuV/m

PEAK:

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



Site
Limit:
EUT: Barcode scanner
M/N: G2-B
Mode: 2.4G-2480
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	*	2479.970	93.63	-2.90	90.73			peak	

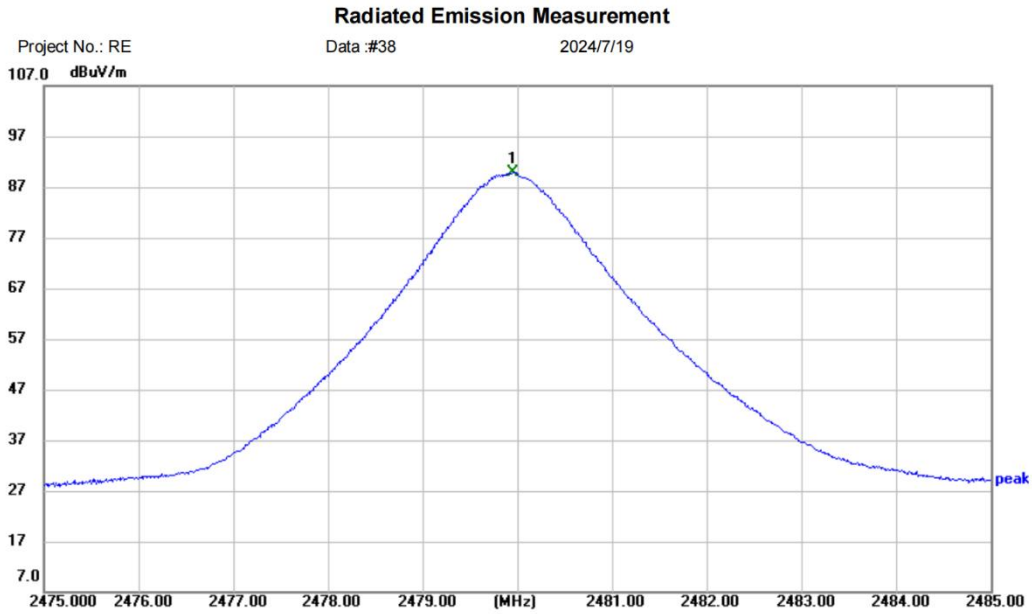
*:Maximum data x:Over limit !:over margin 〈Reference Only

Receiver: ESR_1
Antenna: EZ 9120D 1G-18G
Spectrum Analyzer: FSP40
Engineer Signature:

Test Result: Pass, limit=114 dBuV/m

AVG:

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



Site
Limit:
EUT: Barcode scanner
M/N: G2-B
Mode: 2.4G-2480
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	*	2479.950	92.75	-2.90	89.85			AVG	

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

Receiver: ESR_1
Antenna: EZ 9120D 1G-18G
Spectrum Analyzer: FSP40
Engineer Signature:

Test Result: Pass, limit=94 dBuV/m