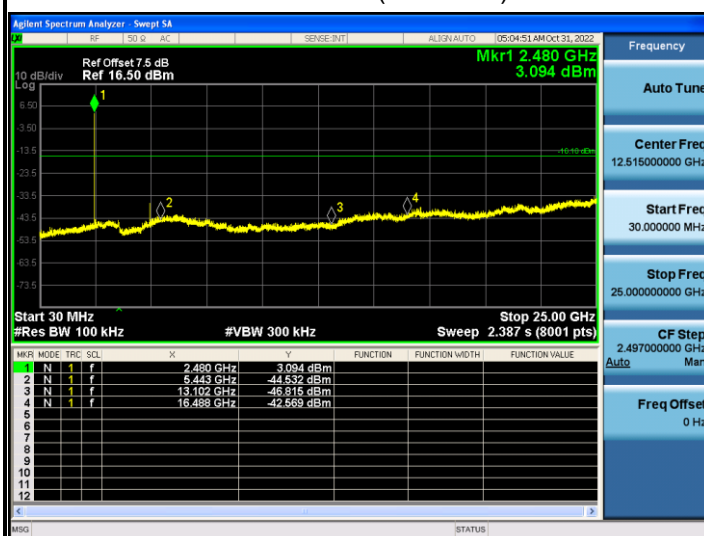
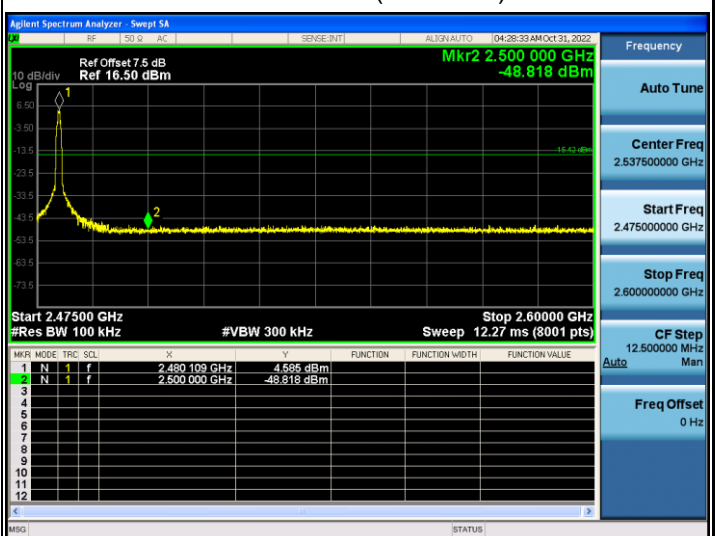


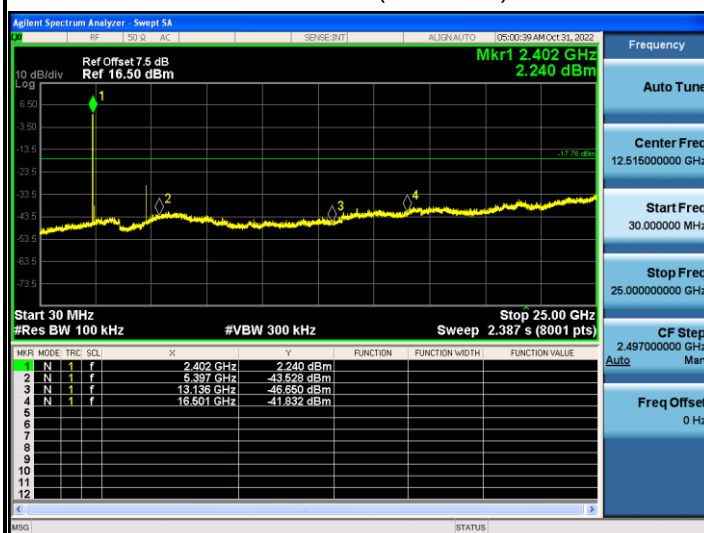
Mode 2 CH78(2480MHz)



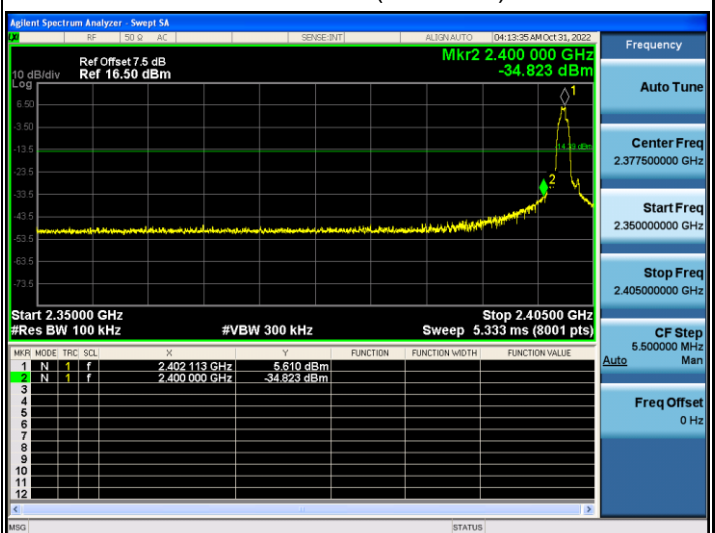
Mode 2 CH78(2480MHz)



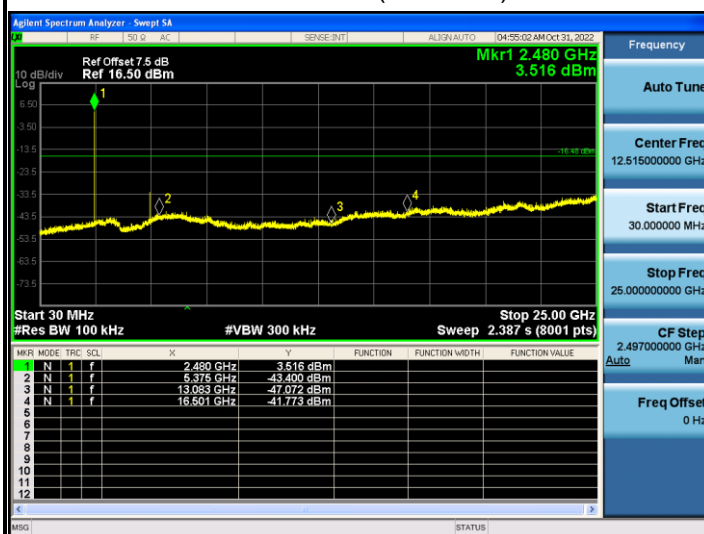
Mode 3 CH00(2402MHz)



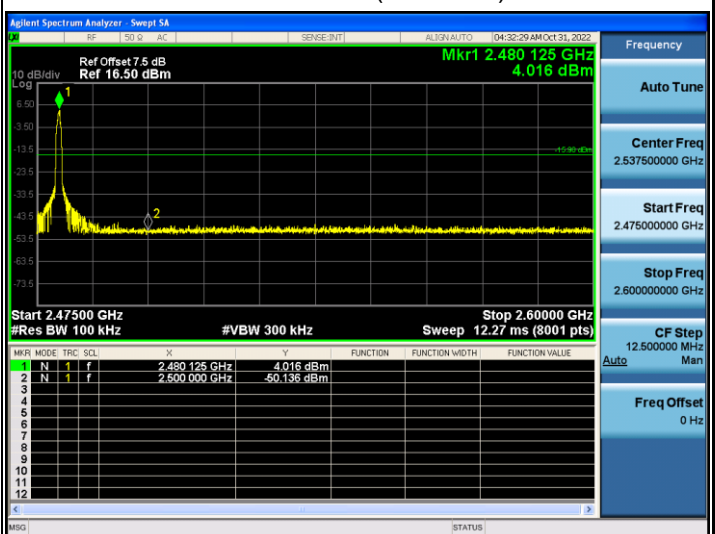
Mode 3 CH00(2402MHz)



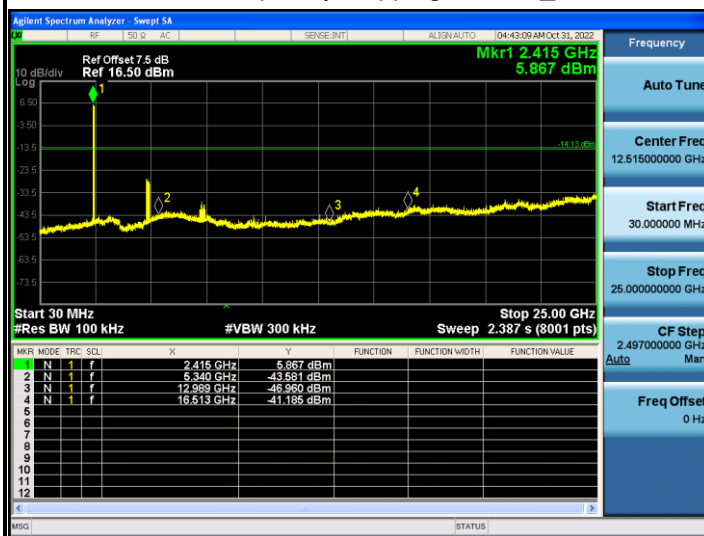
Mode 3 CH78(2480MHz)



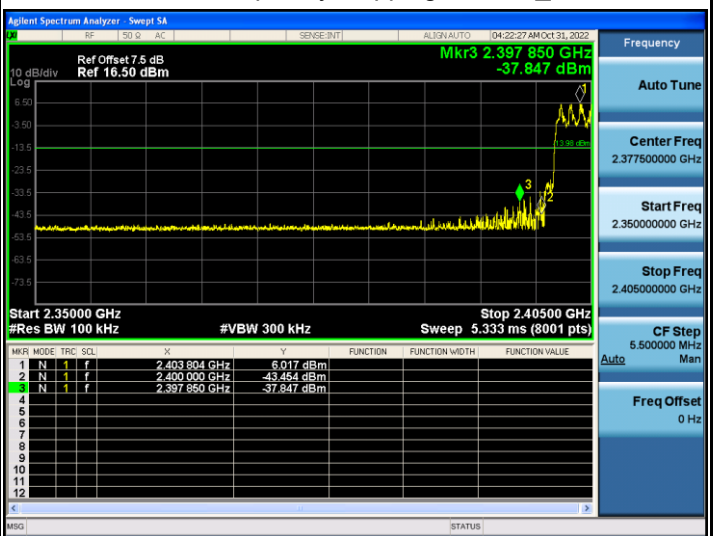
Mode 3 CH78(2480MHz)



Mode 4 Frequency Hopping - GFSK_DH5



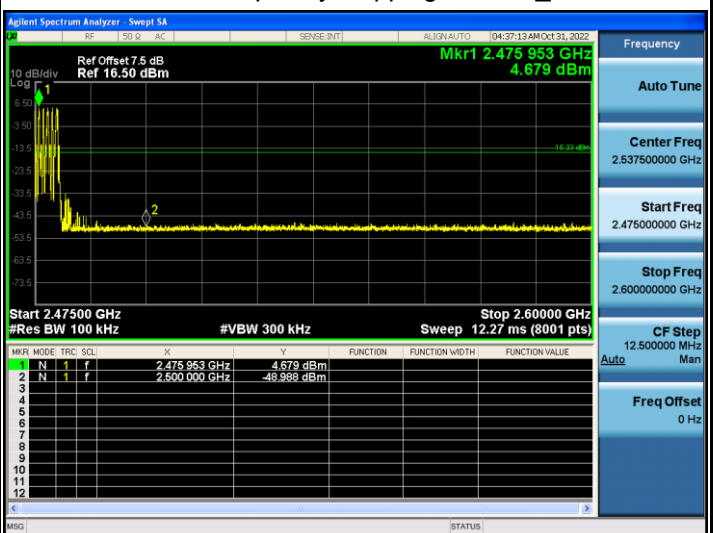
Mode 4 Frequency Hopping - GFSK_DH5



Mode 4 Frequency Hopping - GFSK_DH5



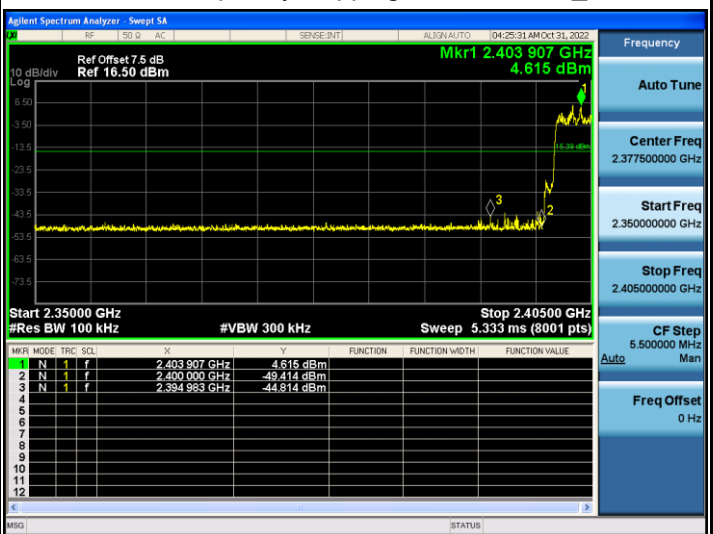
Mode 4 Frequency Hopping - GFSK_DH5

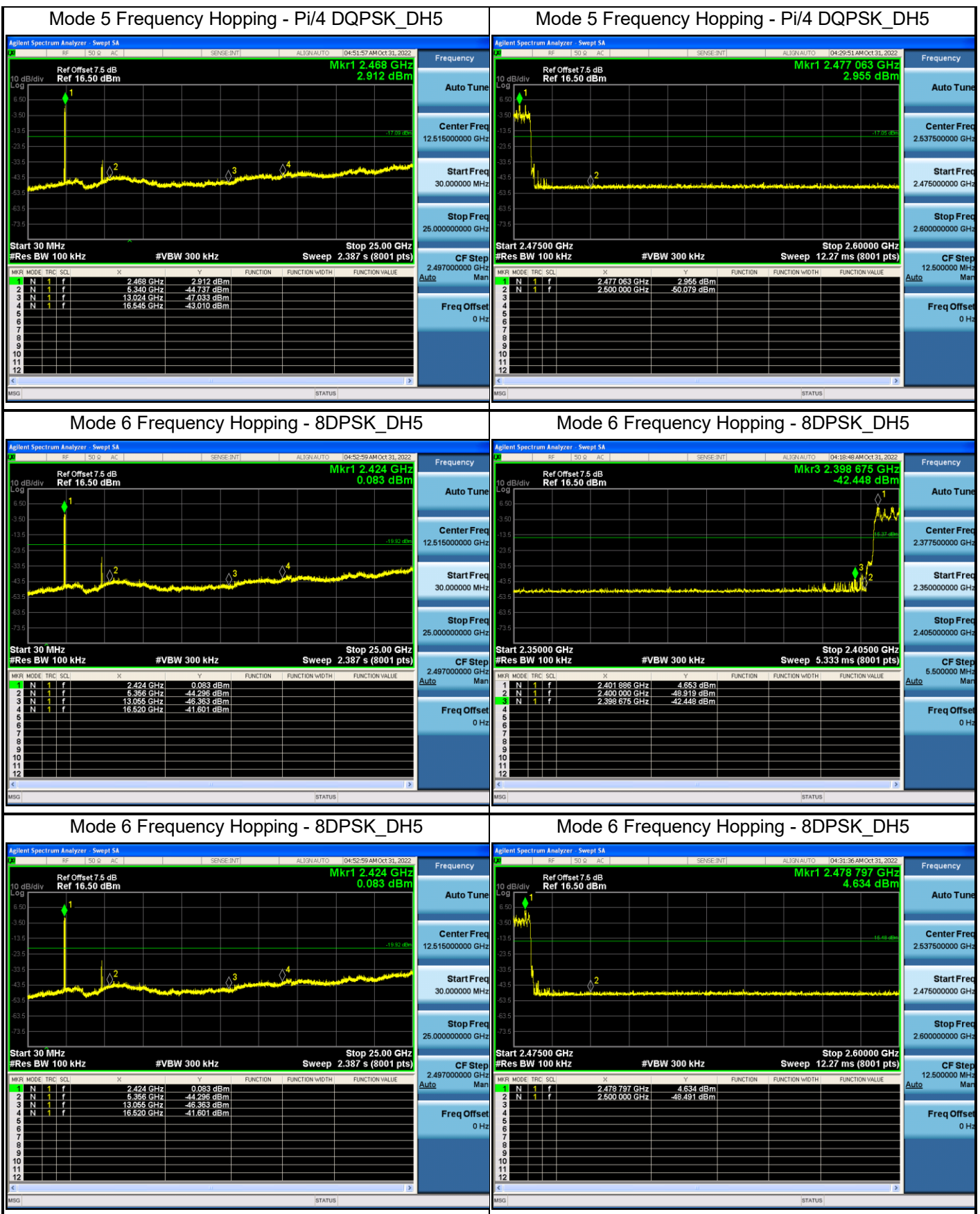


Mode 5 Frequency Hopping - Pi/4 DQPSK_DH5



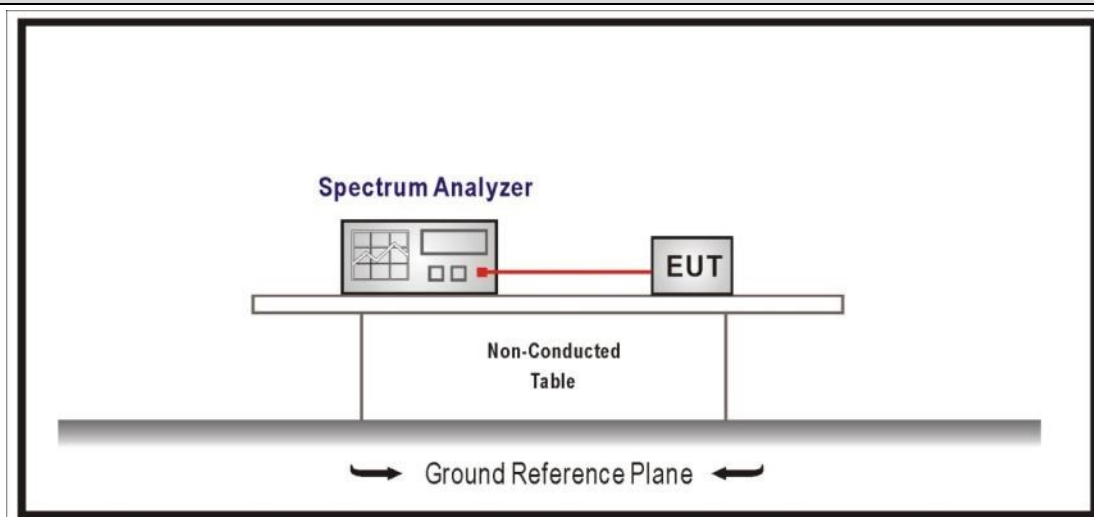
Mode 5 Frequency Hopping - Pi/4 DQPSK_DH5





4.9 Duty cycle**VERDICT: PASS****4.9.1 Limit**

N/A

4.9.2 Test Setup**4.9.3 Test Procedure**

References Rule		Chapter	Description
☒	ANSI C63.10	11.6	Duty cycle (D), transmission duration (T), and maximum power control level

4.9.4 Test Data

Test Mode	Tx On (ms)	Tx Off (ms)	VBW (kHz)	Tx On + Tx Off (ms)	Duty Cycle (%)
Mode 1	2.89	0.86	0.35	3.75	77.07
Mode 2	2.89	0.87	0.35	3.76	76.86
Mode 3	2.89	0.86	0.35	3.75	77.07

Note 1: T means the minimum transmission duration over which the transmitter is on and is transmitting at its maximum power control level for the tested mode of operation.

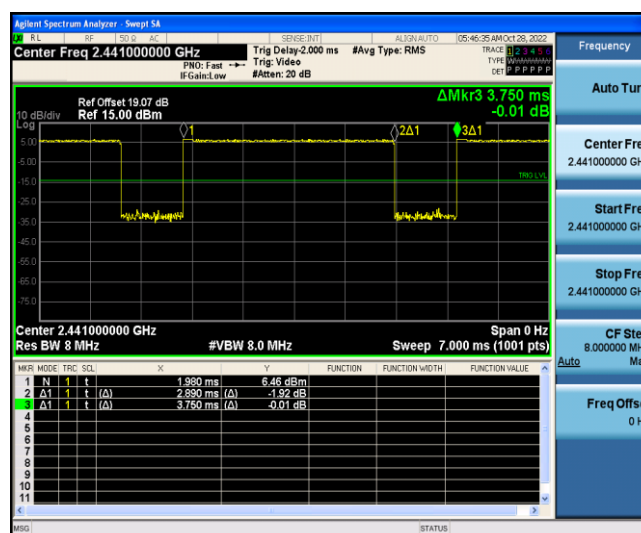
Note 2: According to KDB 558074, when test for Radiated Emission Band Edge and Radiated Emission, for average detector set: $VBW \geq 1/T$ will be used.

Mode 1 CH39 2441MHz

Mode 2 CH39 2441MHz



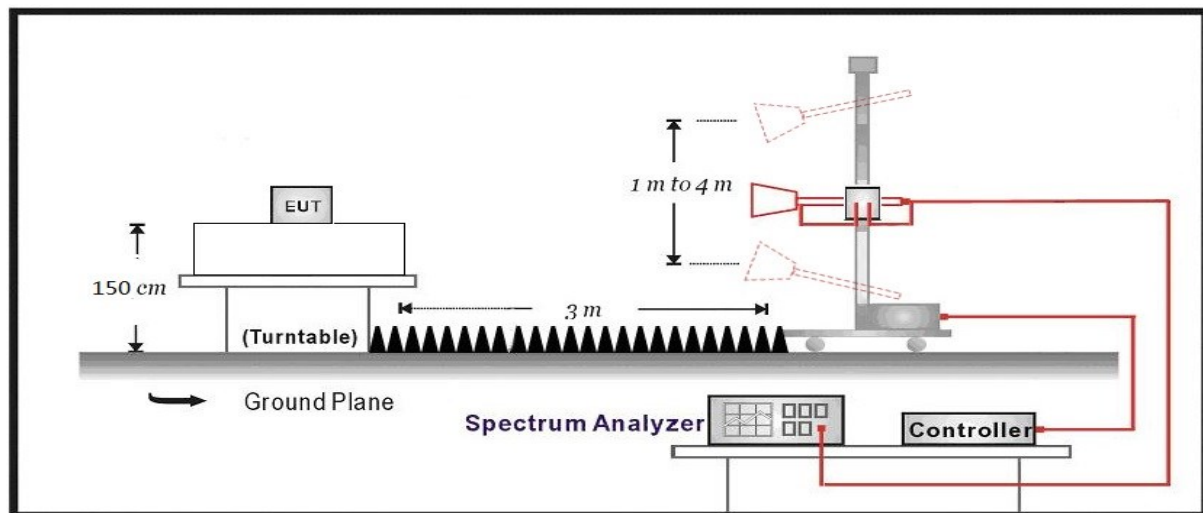
Mode 3 CH39 2441MHz



4.10 Band Edge**VERDICT: PASS****4.10.1 Limit**

Standard		FCC Part 15 Subpart C Paragraph 15.247(d) ,15.209		
Frequency bands (MHz)	Detector	Limit (dB μ V/m)	RBW (MHz)	Distance (m)
2310-2390	PK	74	1	3
2483.5-2500	AV	54	1	3

Note: The field strength of emissions appearing within these frequency bands shall not exceed the limits.

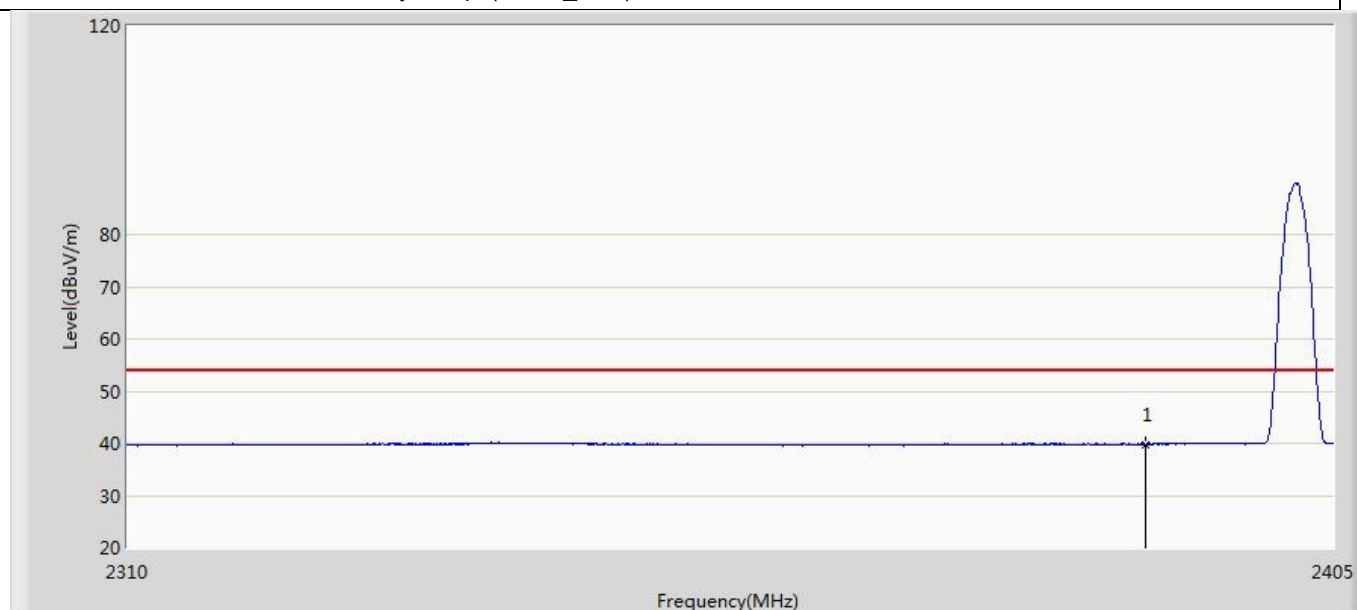
4.10.2 Test Setup**4.10.3 Test Procedure**

Test Method

	References Rule	Chapter	Description
☐	DA 00-705	N/A	duty cycle correction factor
☒	ANSI C63.10	6.10	Band-edge testing
☒	ANSI C63.10	6.10.5	Restricted-band band-edge measurements
☐	ANSI C63.10	6.10.6	Marker-delta method
☐	ANSI C63.10	6.4	Radiated emissions from unlicensed wireless devices below 30 MHz
☐	ANSI C63.10	6.5	Radiated emissions from unlicensed wireless devices in the frequency range of 30 MHz to 1000 MHz
☐	ANSI C63.10	6.6	Radiated emissions from unlicensed wireless devices above 1 GHz

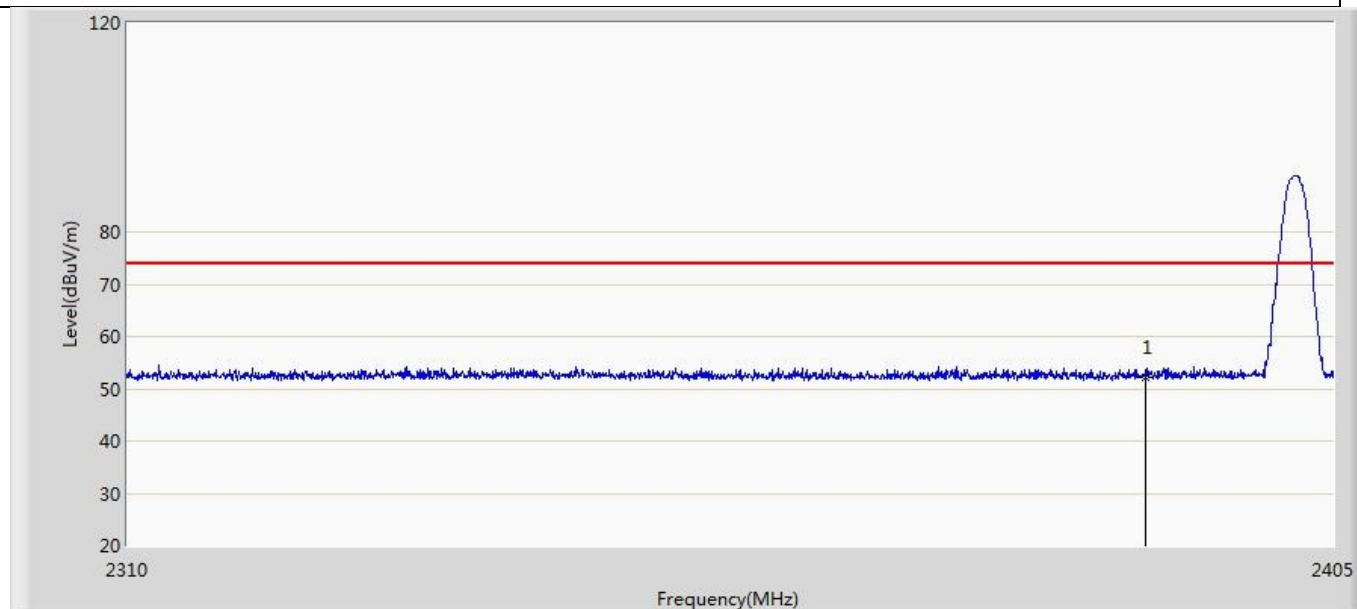
4.10.4 Test Data

Profile: 2290946R	Page No.: 1
Engineer: Yuliu	
Site: AC5	Time: 2023/01/05 - 23:46
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: BT24	Power: DC 3.3V
Note: Mode 1: Transmit at 2402MHz by 1Mbps(GFSK_DH5)	



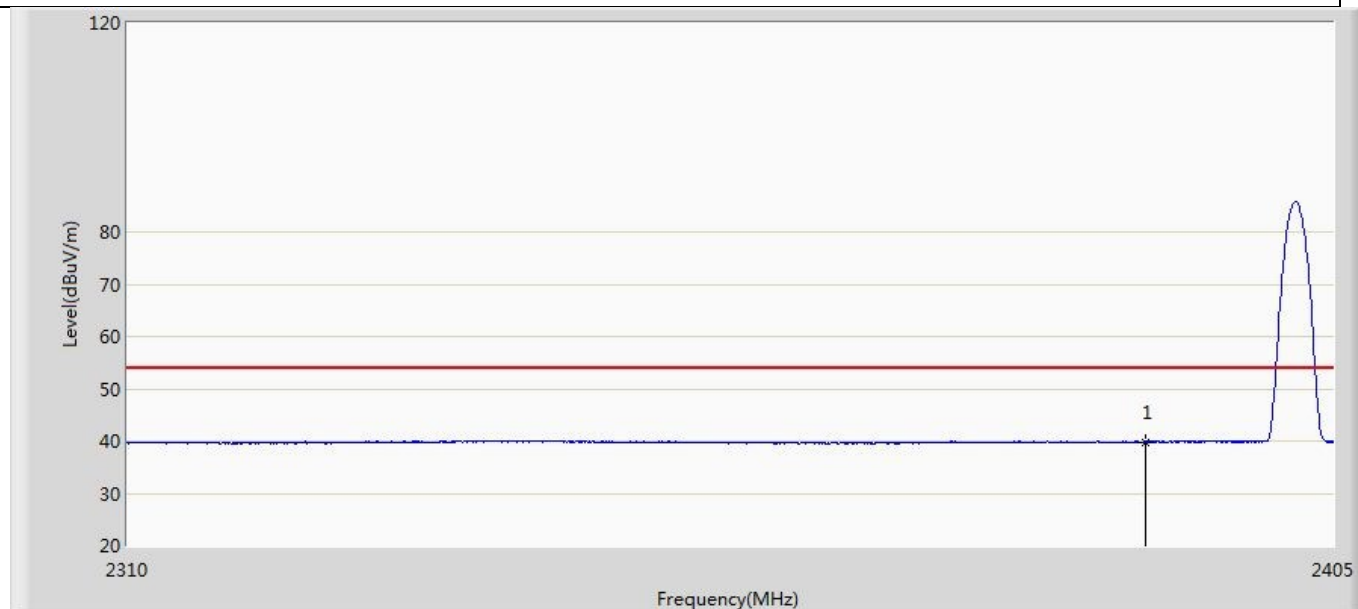
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2390.000	39.788	4.329	-14.212	54.000	35.459	AV

Profile: 2290946R	Page No.: 2
Engineer: Yuliu	
Site: AC5	Time: 2023/01/05 - 23:48
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: BT24	Power: DC 3.3V
Note: Mode 1: Transmit at 2402MHz by 1Mbps(GFSK_DH5)	



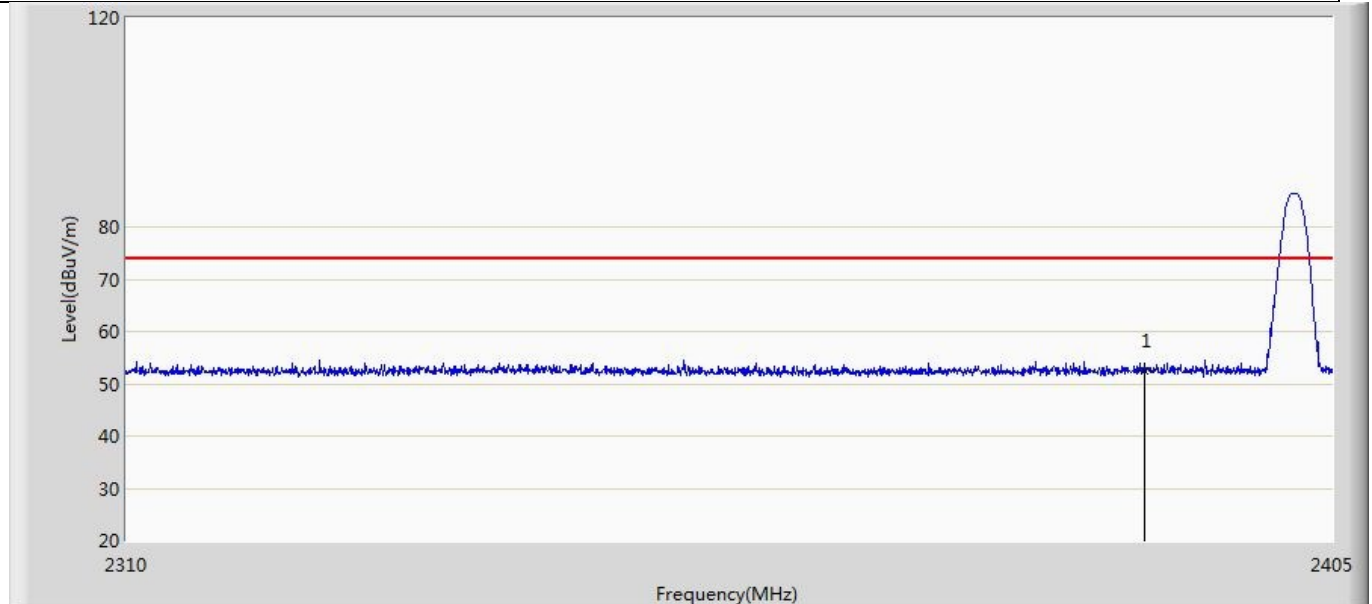
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2390.000	52.176	16.717	-21.824	74.000	35.459	PK

Profile: 2290946R	Page No.: 3
Engineer: Yuliu	
Site: AC5	Time: 2023/01/05 - 23:50
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: BT24	Power: DC 3.3V
Note: Mode 1: Transmit at 2402MHz by 1Mbps(GFSK_DH5)	



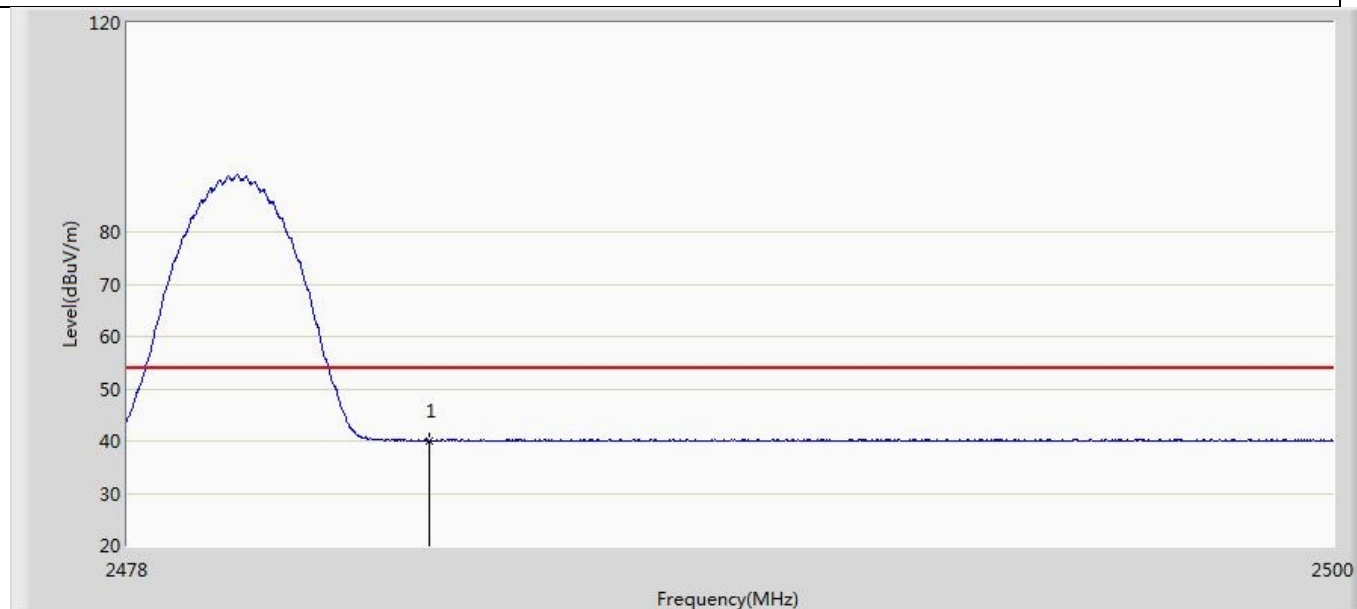
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2390.000	39.811	4.352	-14.189	54.000	35.459	AV

Profile: 2290946R	Page No.: 4
Engineer: Yuliu	
Site: AC5	Time: 2023/01/05 - 23:53
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: BT24	Power: DC 3.3V
Note: Mode 1: Transmit at 2402MHz by 1Mbps(GFSK_DH5)	



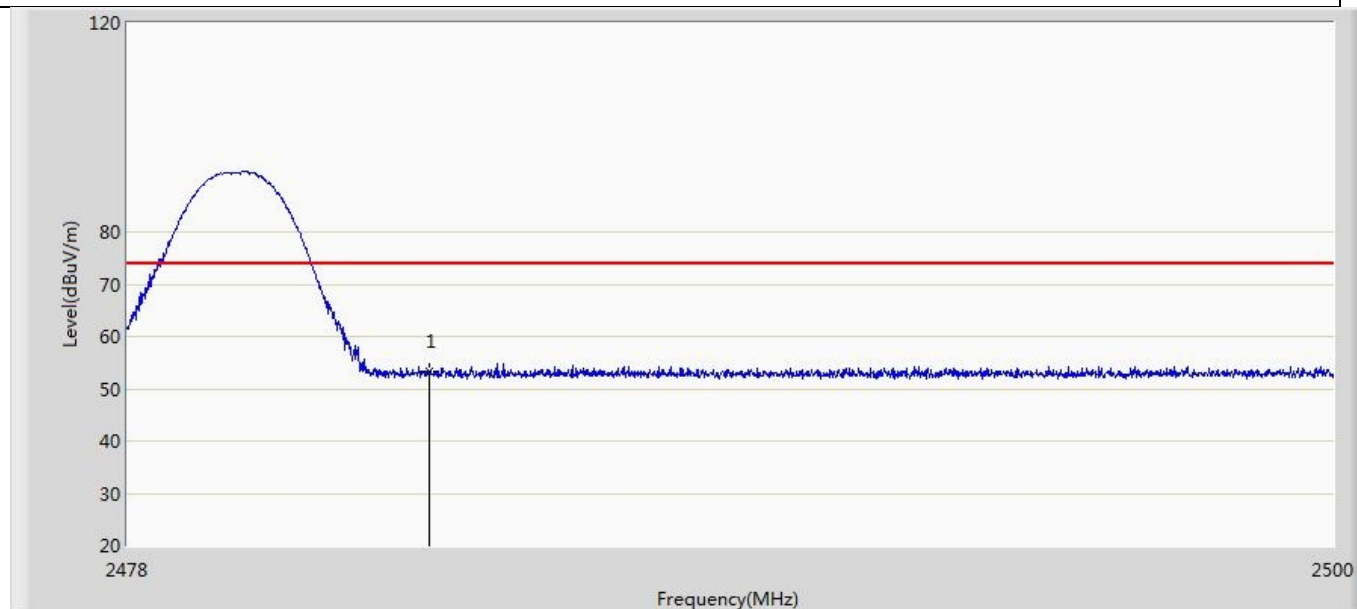
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2390.000	52.326	16.867	-21.674	74.000	35.459	PK

Profile: 2290946R	Page No.: 5
Engineer: Yuliu	
Site: AC5	Time: 2023/01/05 - 23:55
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: BT24	Power: DC 3.3V
Note: Mode 1: Transmit at 2480MHz by 1Mbps(GFSK_DH5)	



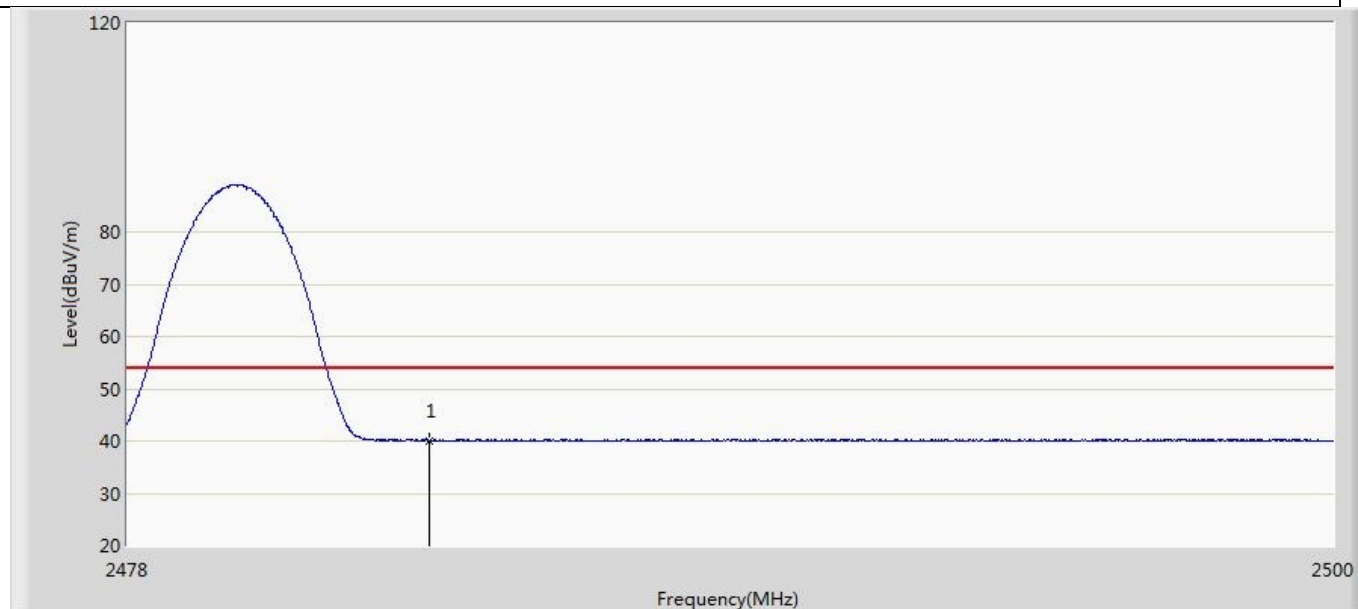
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2483.500	40.098	4.423	-13.902	54.000	35.675	AV

Profile: 2290946R	Page No.: 6
Engineer: Yuliu	
Site: AC5	Time: 2023/01/05 - 23:58
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: BT24	Power: DC 3.3V
Note: Mode 1: Transmit at 2480MHz by 1Mbps(GFSK_DH5)	



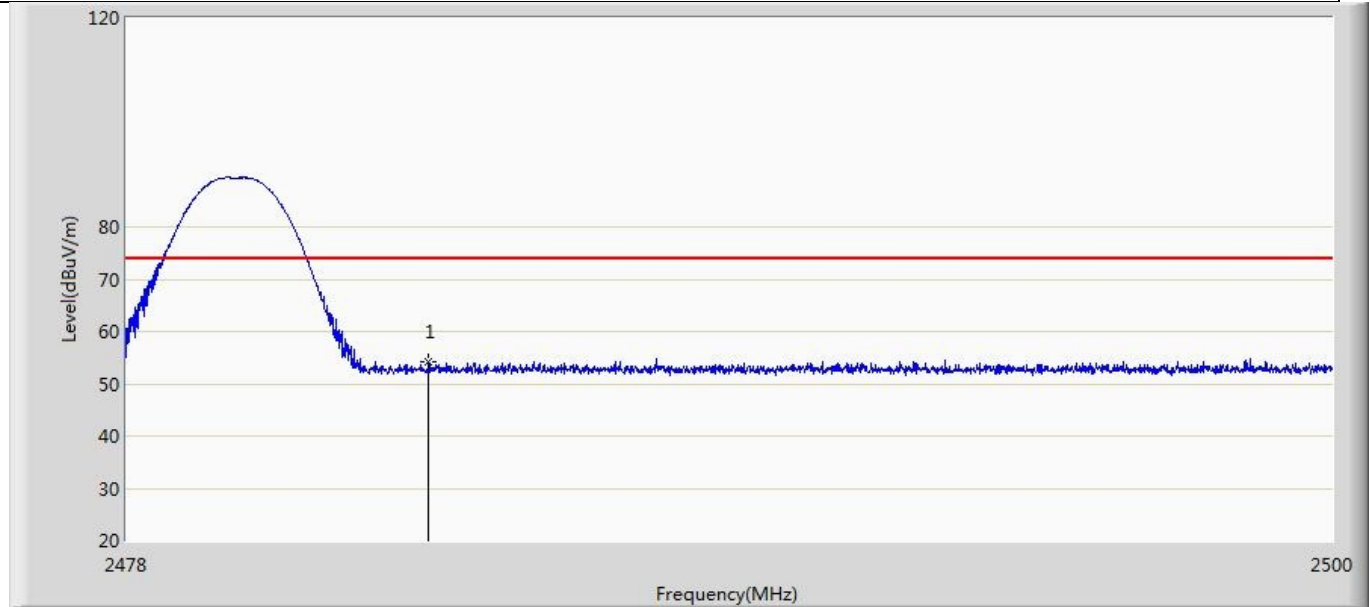
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2483.500	53.279	17.604	-20.721	74.000	35.675	PK

Profile: 2290946R	Page No.: 7
Engineer: Yuliu	
Site: AC5	Time: 2023/01/05 - 00:02
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: BT24	Power: DC 3.3V
Note: Mode 1: Transmit at 2480MHz by 1Mbps(GFSK_DH5)	



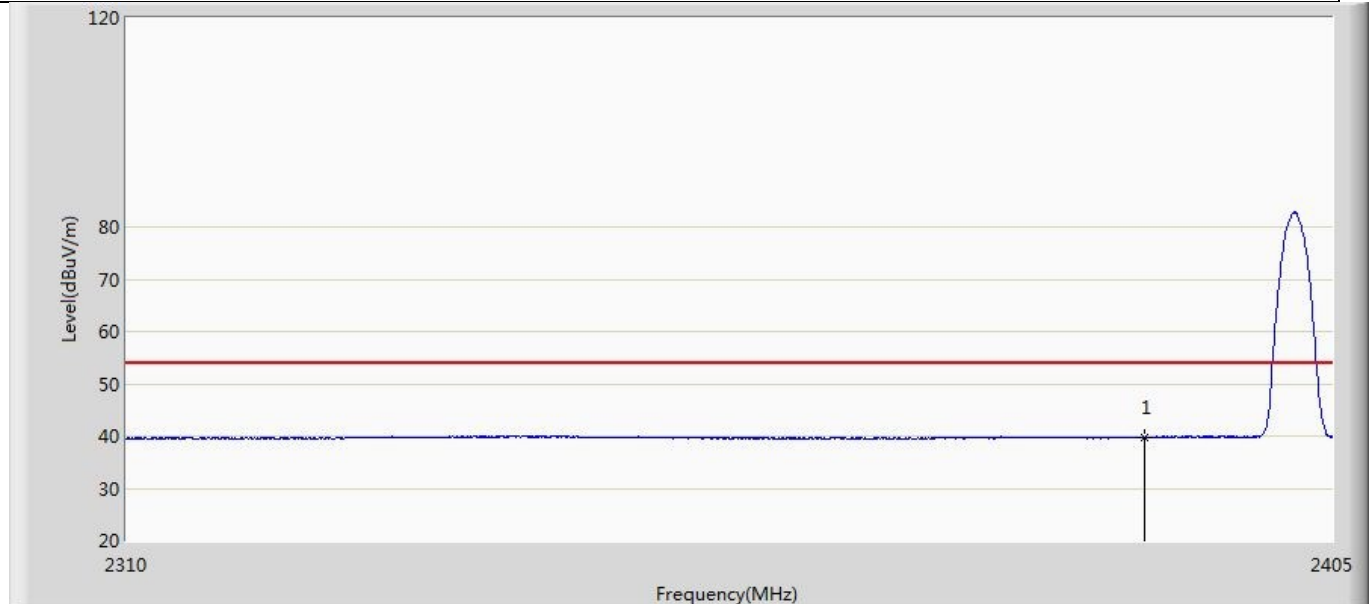
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2483.500	40.059	4.384	-13.941	54.000	35.675	AV

Profile: 2290946R	Page No.: 8
Engineer: Yuliu	
Site: AC5	Time: 2023/01/05 - 00:04
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: BT24	Power: DC 3.3V
Note: Mode 1: Transmit at 2480MHz by 1Mbps(GFSK_DH5)	



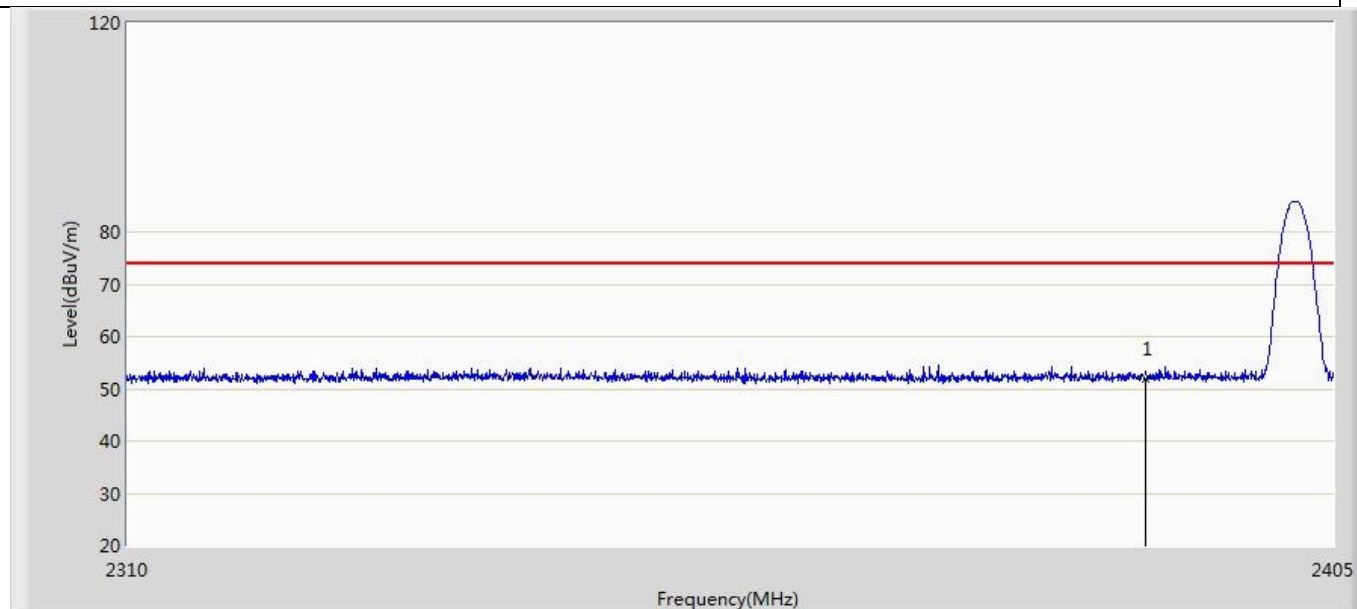
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2483.500	54.158	18.483	-19.842	74.000	35.675	PK

Profile: 2290946R	Page No.: 9
Engineer: Yuliu	
Site: AC5	Time: 2023/01/05 - 00:07
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: BT24	Power: DC 3.3V
Note: Mode 2: Transmit at 2402MHz by 2Mbps(Pi/4 DQPSK_DH5)	



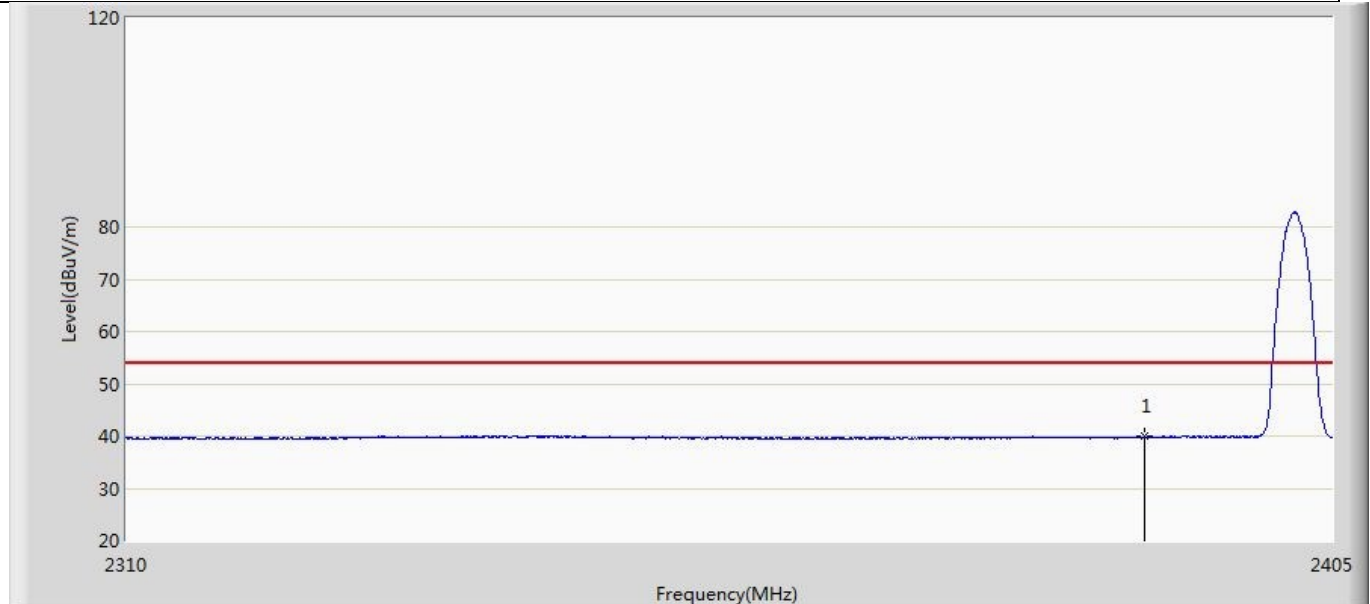
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2390.000	39.772	4.313	-14.228	54.000	35.459	AV

Profile: 2290946R	Page No.: 10
Engineer: Yuliu	
Site: AC5	Time: 2023/01/05 - 00:09
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: BT24	Power: DC 3.3V
Note: Mode 2: Transmit at 2402MHz by 2Mbps(Pi/4 DQPSK_DH5)	



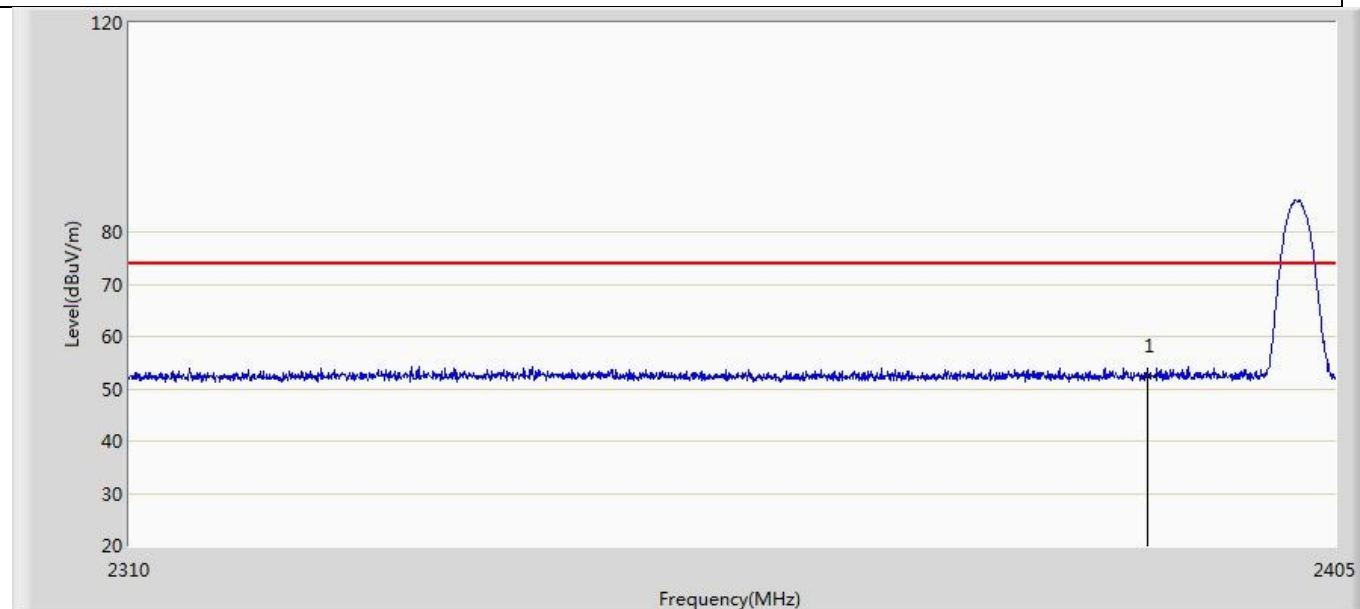
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2390.000	51.879	16.420	-22.121	74.000	35.459	PK

Profile: 2290946R	Page No.: 11
Engineer: Yuliu	
Site: AC5	Time: 2023/01/05 - 00:11
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: BT24	Power: DC 3.3V
Note: Mode 2: Transmit at 2402MHz by 2Mbps(Pi/4 DQPSK_DH5)	



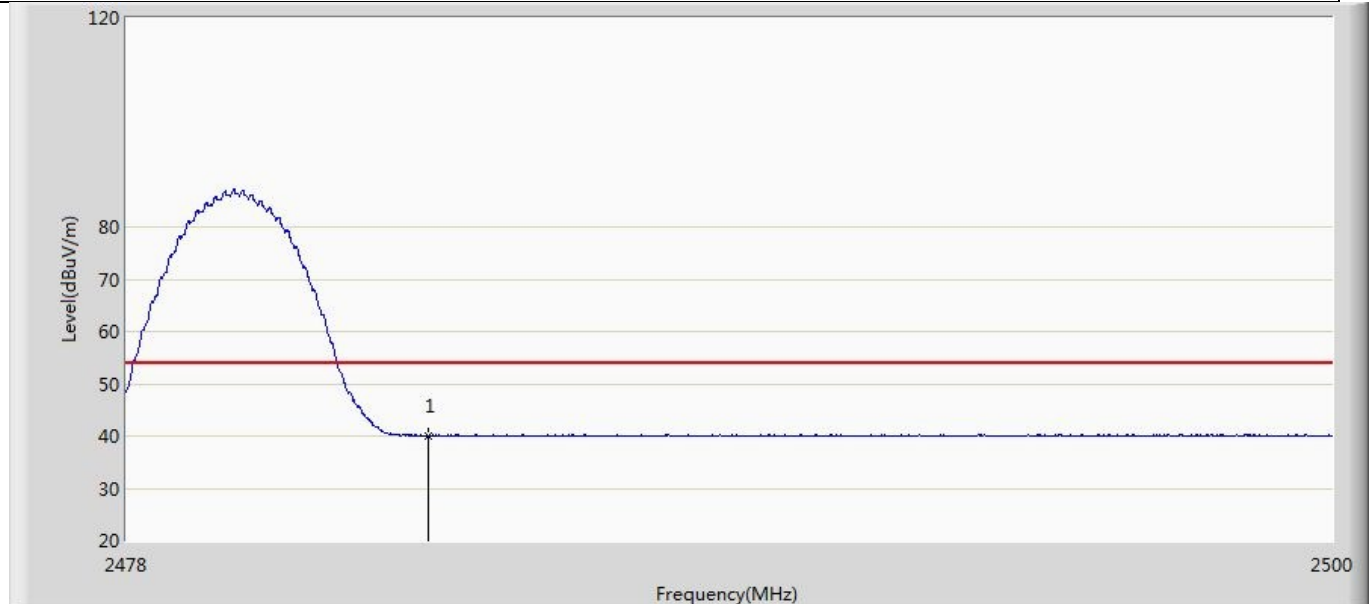
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2390.000	39.910	4.451	-14.090	54.000	35.459	AV

Profile: 2290946R	Page No.: 12
Engineer: Yuliu	
Site: AC5	Time: 2023/01/05 - 00:12
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: BT24	Power: DC 3.3V
Note: Mode 2: Transmit at 2402MHz by 2Mbps(Pi/4 DQPSK_DH5)	



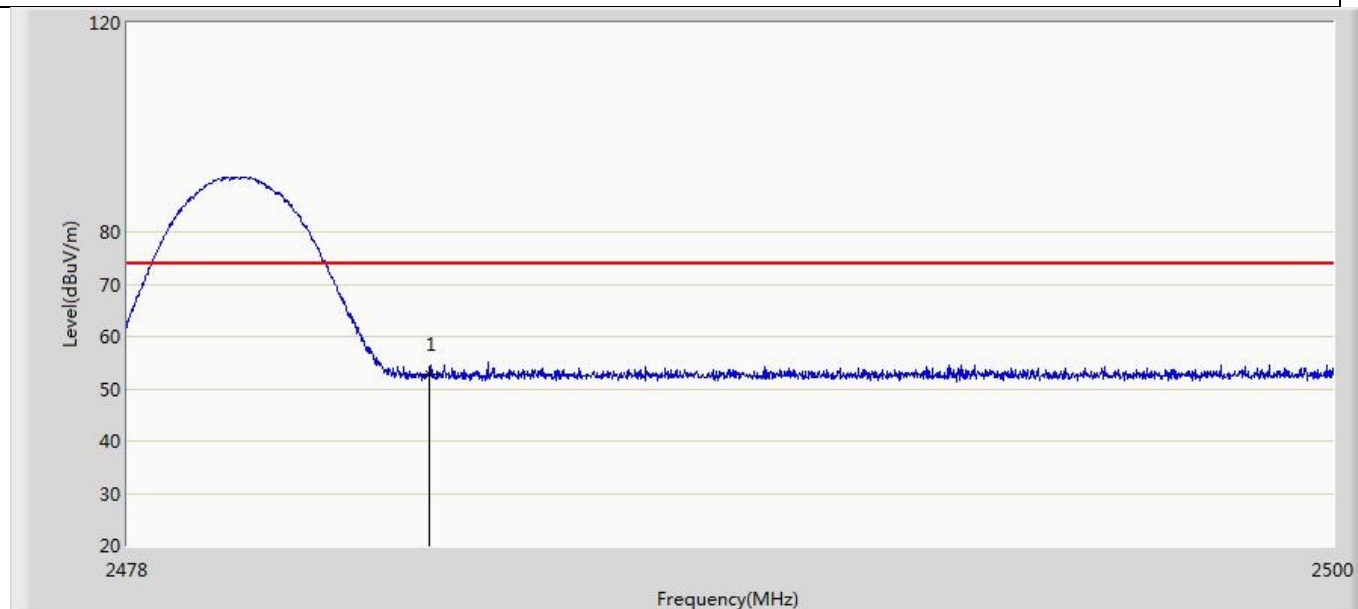
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2390.000	52.334	16.875	-21.666	74.000	35.459	PK

Profile: 2290946R	Page No.: 13
Engineer: Yuliu	
Site: AC5	Time: 2023/01/05 - 00:14
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: BT24	Power: DC 3.3V
Note: Mode 2: Transmit at 2480MHz by 2Mbps(Pi/4 DQPSK_DH5)	



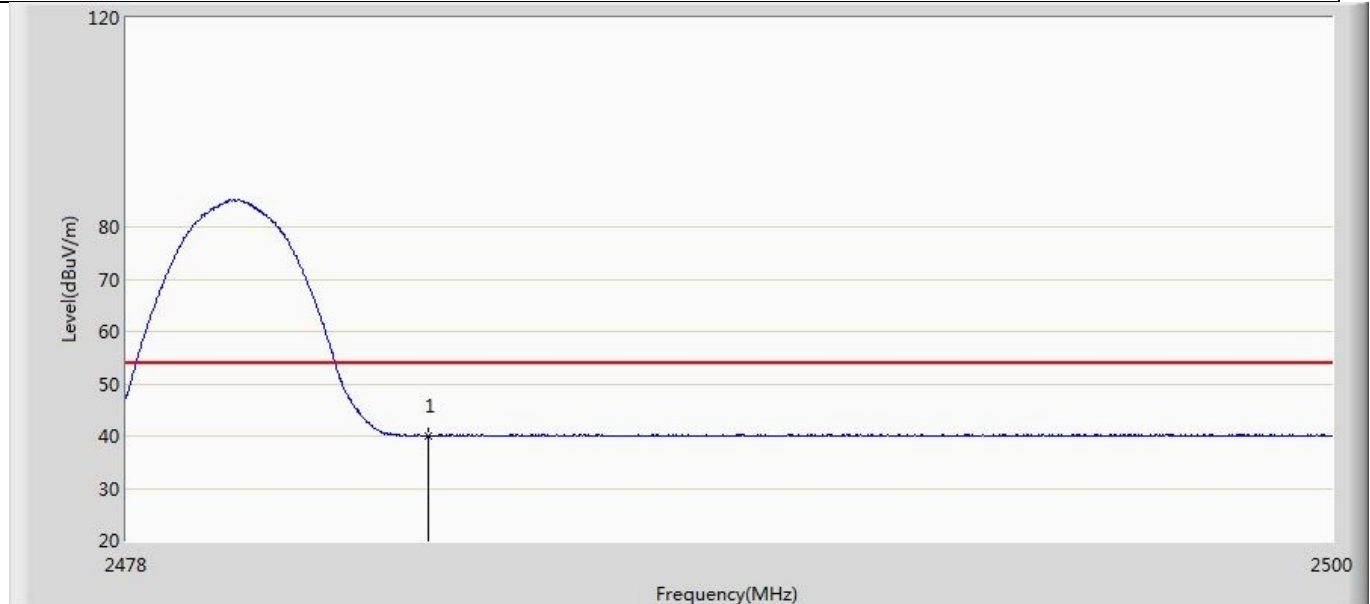
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2483.500	39.997	4.322	-14.003	54.000	35.675	AV

Profile: 2290946R	Page No.: 14
Engineer: Yuliu	
Site: AC5	Time: 2023/01/05 - 00:16
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: BT24	Power: DC 3.3V
Note: Mode 2: Transmit at 2480MHz by 2Mbps(Pi/4 DQPSK_DH5)	



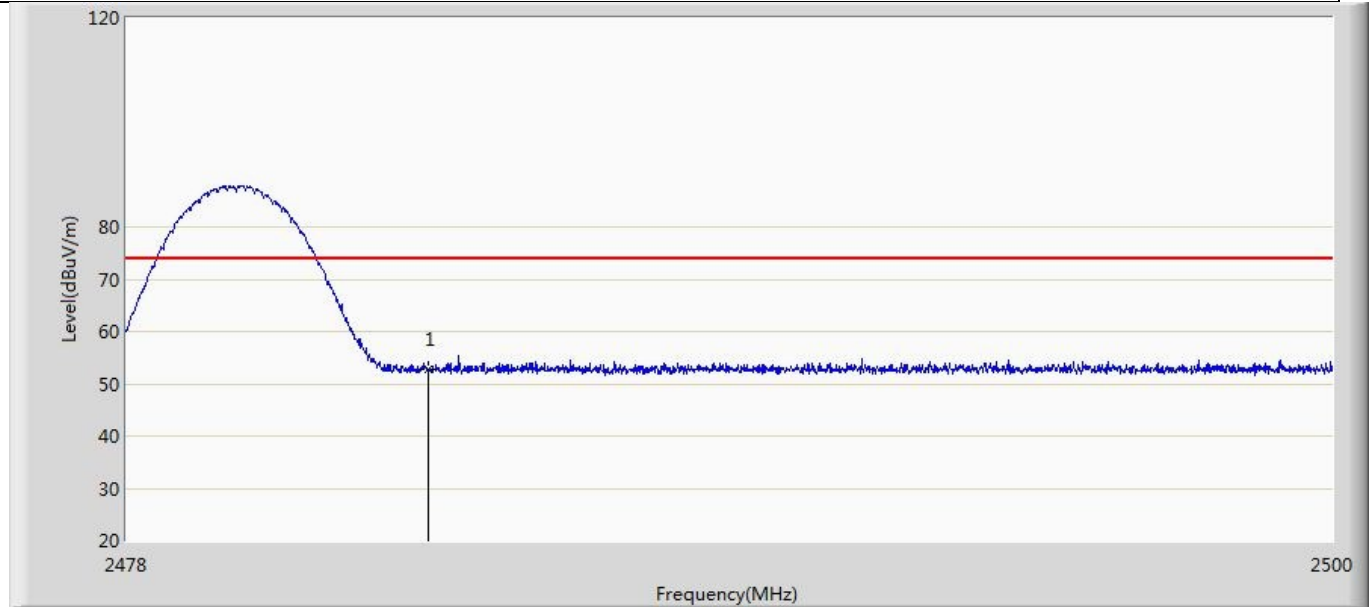
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2483.500	52.743	17.068	-21.257	74.000	35.675	PK

Profile: 2290946R	Page No.: 15
Engineer: Yuliu	
Site: AC5	Time: 2023/01/05 - 00:18
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: BT24	Power: DC 3.3V
Note: Mode 2: Transmit at 2480MHz by 2Mbps(Pi/4 DQPSK_DH5)	



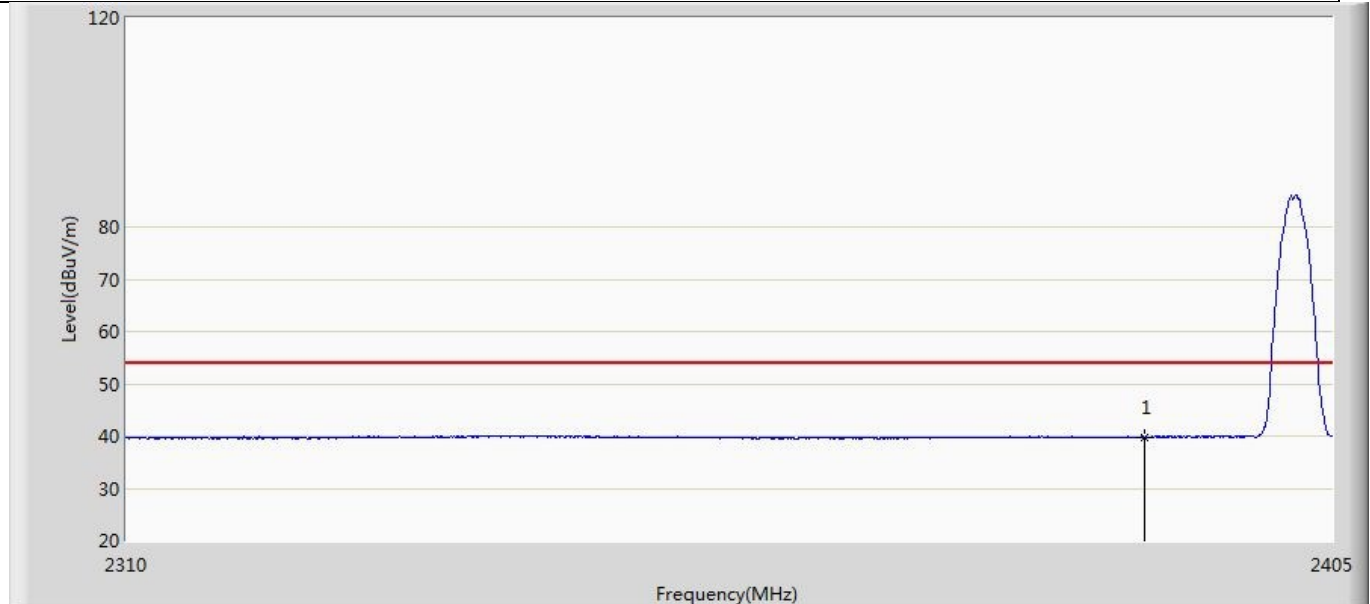
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2483.500	40.101	4.426	-13.899	54.000	35.675	AV

Profile: 2290946R	Page No.: 16
Engineer: Yuliu	
Site: AC5	Time: 2023/01/05 - 00:21
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: BT24	Power: DC 3.3V
Note: Mode 2: Transmit at 2480MHz by 2Mbps(Pi/4 DQPSK_DH5)	



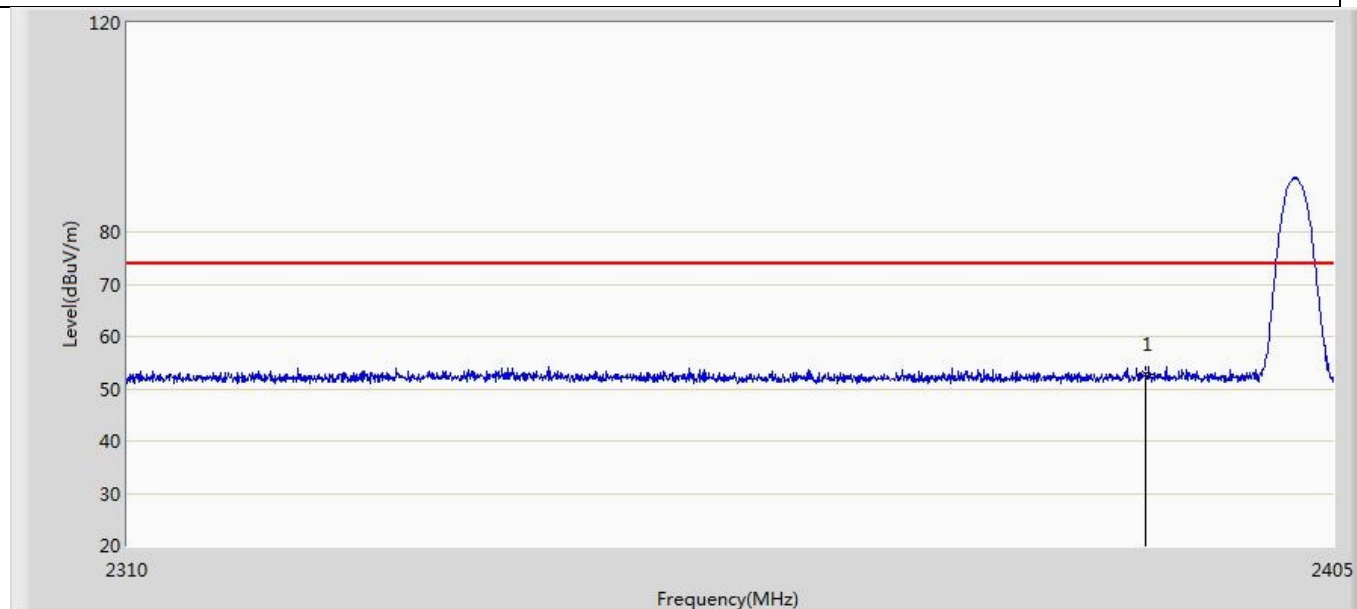
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2483.500	52.838	17.163	-21.162	74.000	35.675	PK

Profile: 2290946R	Page No.: 17
Engineer: Yuliu	
Site: AC5	Time: 2023/01/05 - 00:23
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: BT24	Power: DC 3.3V
Note: Mode 3: Transmit at 2402MHz by 3Mbps(8DPSK_DH5)	



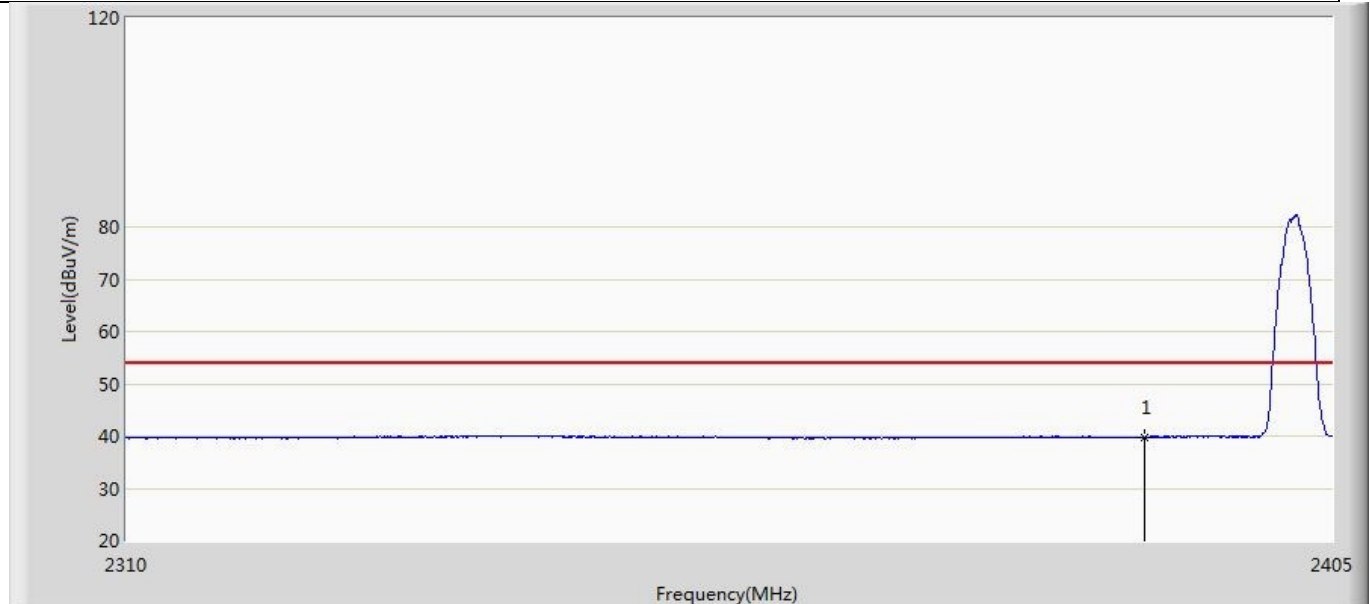
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2390.000	39.818	4.359	-14.182	54.000	35.459	AV

Profile: 2290946R	Page No.: 18
Engineer: Yuliu	
Site: AC5	Time: 2023/01/05 - 00:25
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: BT24	Power: DC 3.3V
Note: Mode 3: Transmit at 2402MHz by 3Mbps(8DPSK_DH5)	



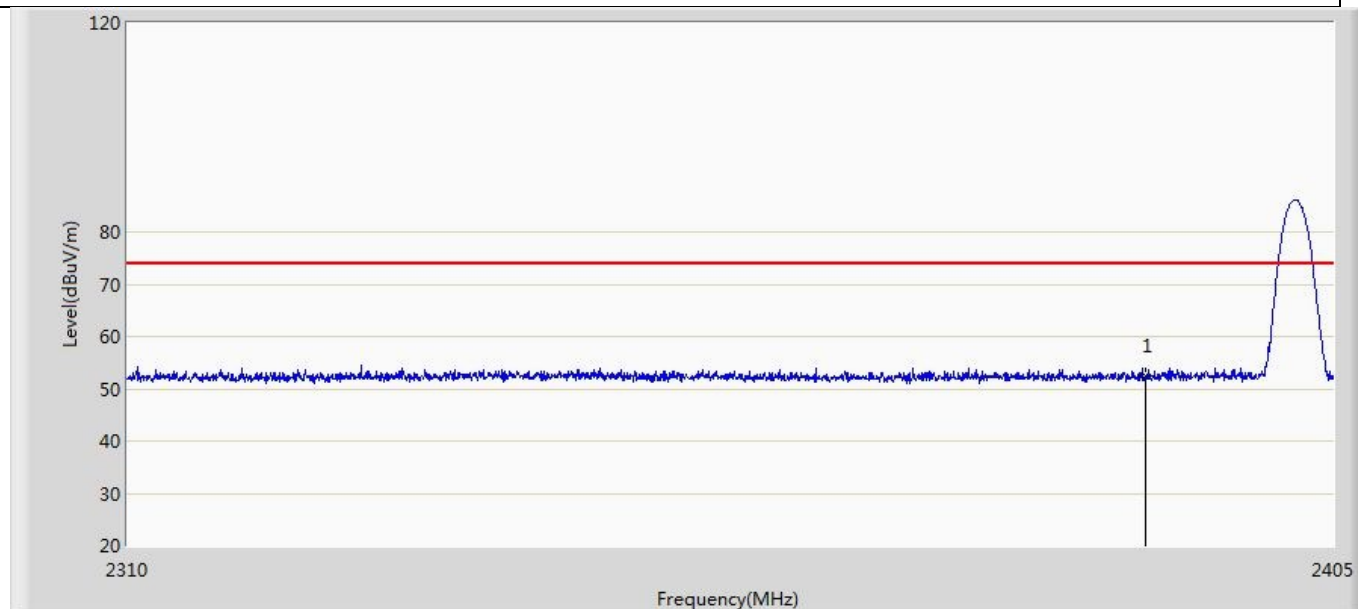
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2390.000	52.647	17.188	-21.353	74.000	35.459	PK

Profile: 2290946R	Page No.: 19
Engineer: Yuliu	
Site: AC5	Time: 2023/01/05 - 00:28
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: BT24	Power: DC 3.3V
Note: Mode 3: Transmit at 2402MHz by 3Mbps(8DPSK_DH5)	



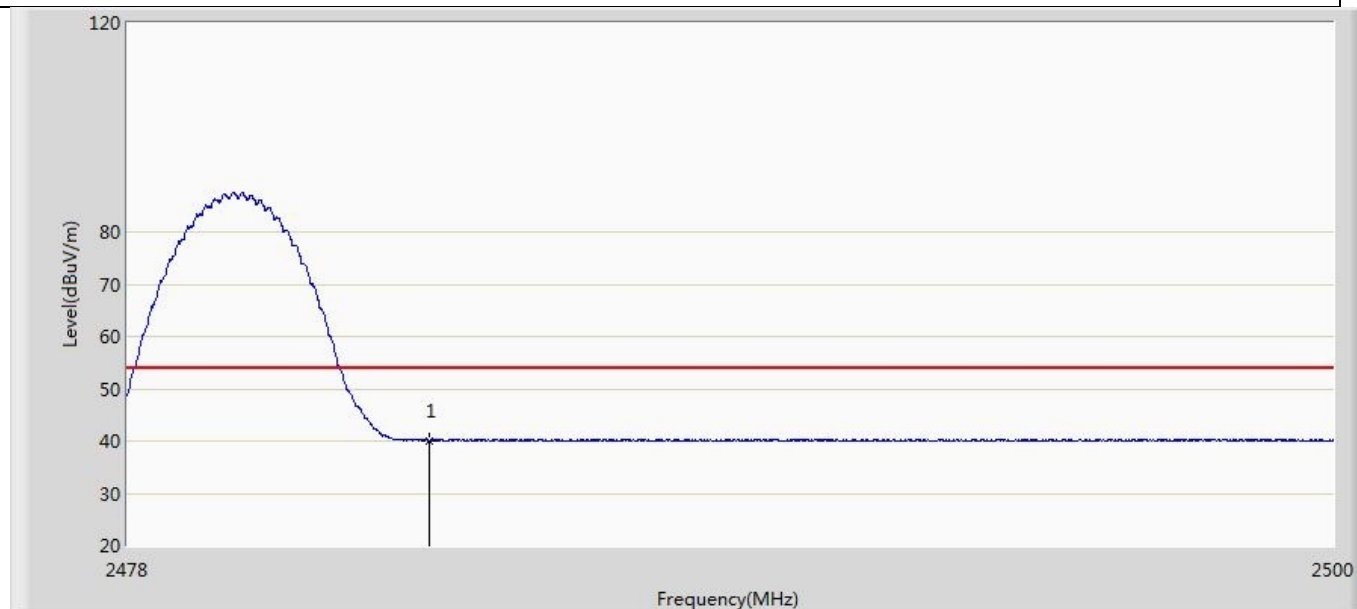
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2390.000	39.751	4.292	-14.249	54.000	35.459	AV

Profile: 2290946R	Page No.: 20
Engineer: Yuliu	
Site: AC5	Time: 2023/01/05 - 00:30
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: BT24	Power: DC 3.3V
Note: Mode 3: Transmit at 2402MHz by 3Mbps(8DPSK_DH5)	



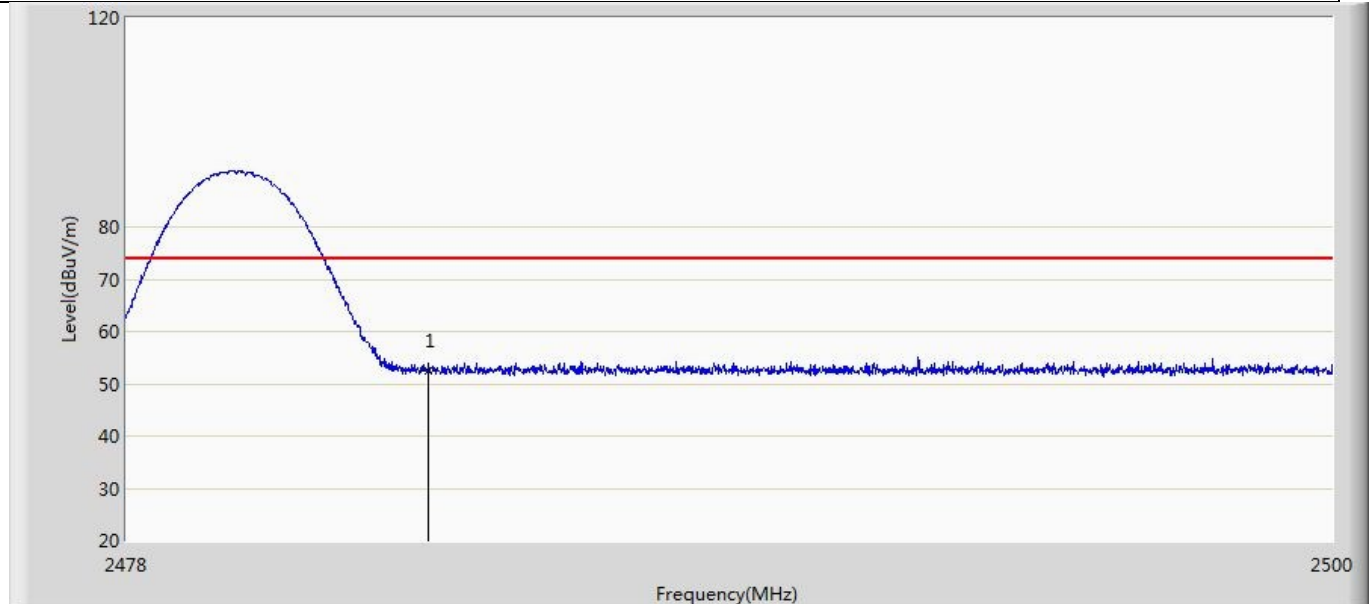
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2390.000	52.336	16.877	-21.664	74.000	35.459	PK

Profile: 2290946R	Page No.: 21
Engineer: Yuliu	
Site: AC5	Time: 2023/01/05 - 00:32
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: BT24	Power: DC 3.3V
Note: Mode 3: Transmit at 2480MHz by 3Mbps(8DPSK_DH5)	



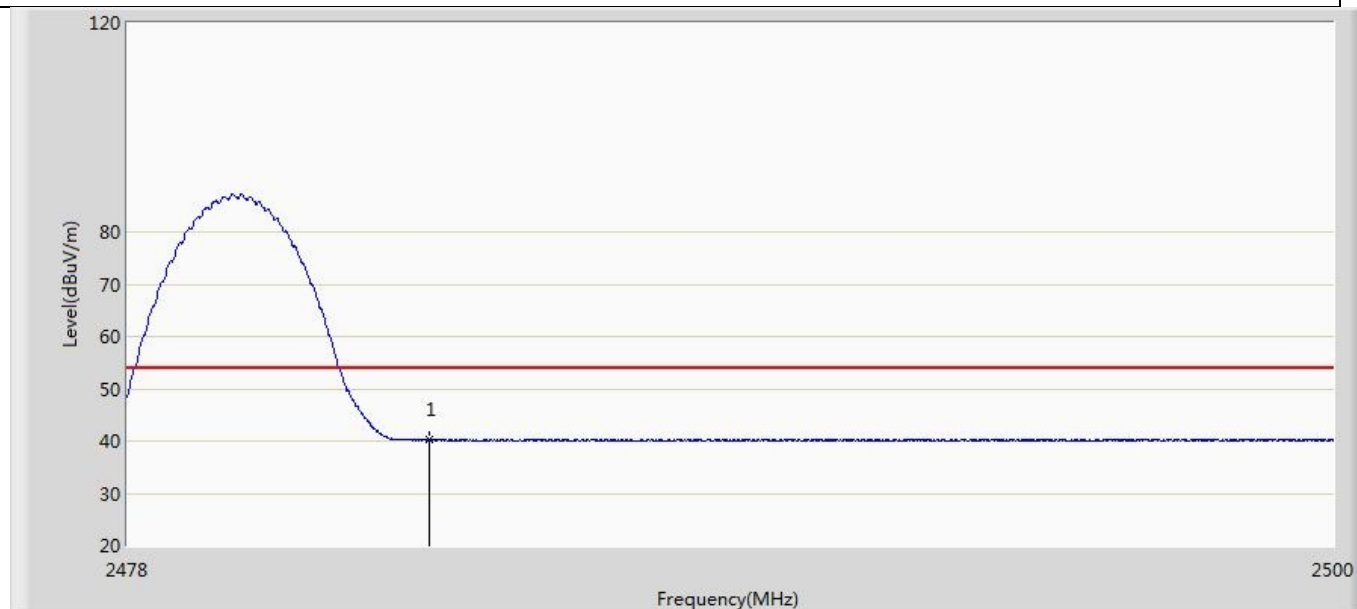
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2483.500	40.093	4.418	-13.907	54.000	35.675	AV

Profile: 2290946R	Page No.: 22
Engineer: Yuliu	
Site: AC5	Time: 2023/01/05 - 00:35
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Horizontal
EUT: BT24	Power: DC 3.3V
Note: Mode 3: Transmit at 2480MHz by 3Mbps(8DPSK_DH5)	



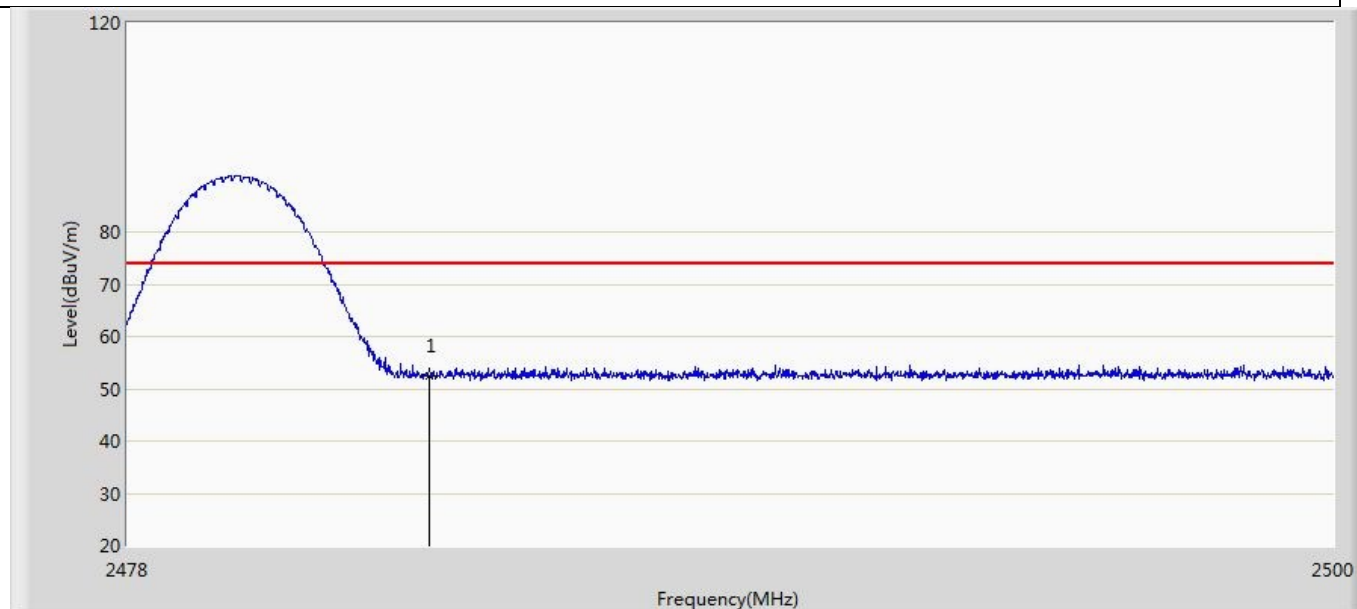
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2483.500	52.593	16.918	-21.407	74.000	35.675	PK

Profile: 2290946R	Page No.: 23
Engineer: Yuliu	
Site: AC5	Time: 2023/01/05 - 00:38
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: BT24	Power: DC 3.3V
Note: Mode 3: Transmit at 2480MHz by 3Mbps(8DPSK_DH5)	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2483.500	40.182	4.507	-13.818	54.000	35.675	AV

Profile: 2290946R	Page No.: 24
Engineer: Yuliu	
Site: AC5	Time: 2023/01/05 - 00:40
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00167055(1-18GHz)	Polarity: Vertical
EUT: BT24	Power: DC 3.3V
Note: Mode 3: Transmit at 2480MHz by 3Mbps(8DPSK_DH5)	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2483.500	52.564	16.889	-21.436	74.000	35.675	PK

Note:

1. " * ", means this data is the worst emission level.
2. Measurement Level = Reading Level + Factor(Probe+Cable-Amp)

4.11 Antenna Requirement**VERDICT: PASS****4.11.1 Limit:****Standard**

FCC Part 15 Subpart C Paragraph 15.203

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 a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this section. The manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited. This requirement does not apply to carrier current devices or to devices operated under the provisions of §15.211, §15.213, §15.217, §15.219, or §15.221. Further, this requirement does not apply to intentional radiators that must be professionally installed, such as perimeter protection systems and some field disturbance sensors, or to other intentional radiators which, in accordance with §15.31(d), must be measured at the installation site. However, the installer shall be responsible for ensuring that the proper antenna is employed so that the limits in this part are not exceeded.

4.11.2 Antenna Connector Construction:

- | | |
|-------------------------------------|--|
| ☐ | The use of a permanently attached antenna |
| ☐ | The antenna use of a unique coupling to the intentional radiator |
| ☒ | The use of a nonstandard antenna jack or electrical connector |

Please refer to the attached document "Internal Photograph" to show the antenna connector.

5 TEST SETUP PHOTO AND EUT PHOTO

Remark: The test setup photo and EUT Photo please see appendix.

_____ The End _____