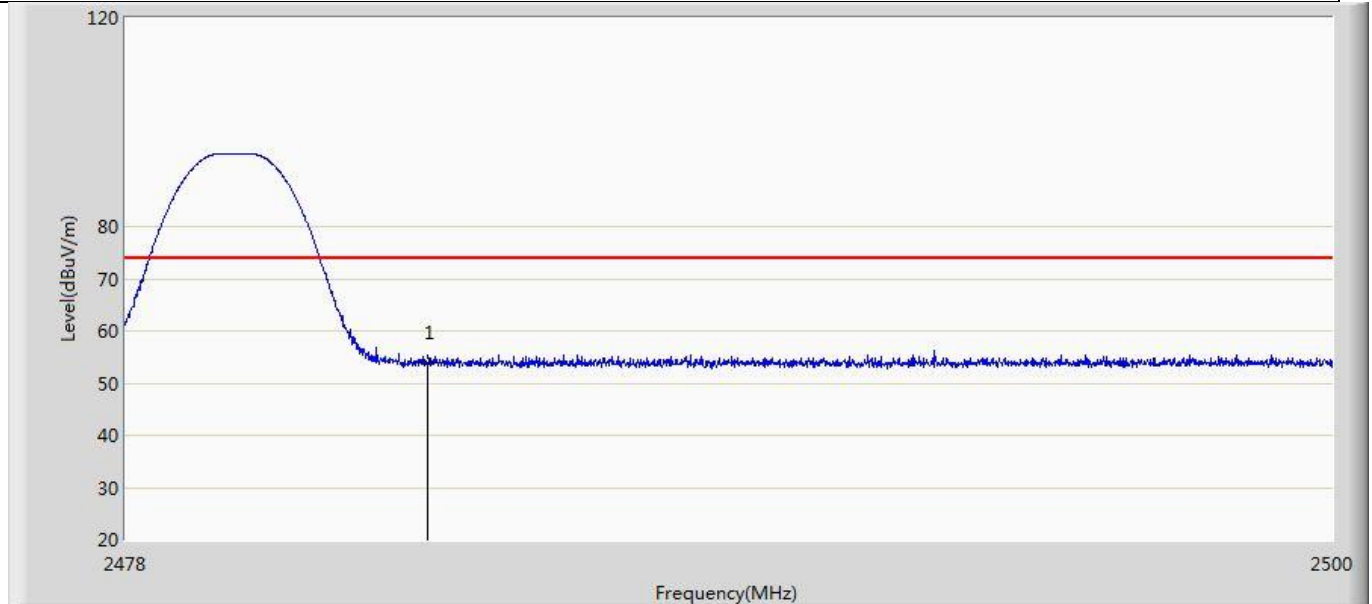
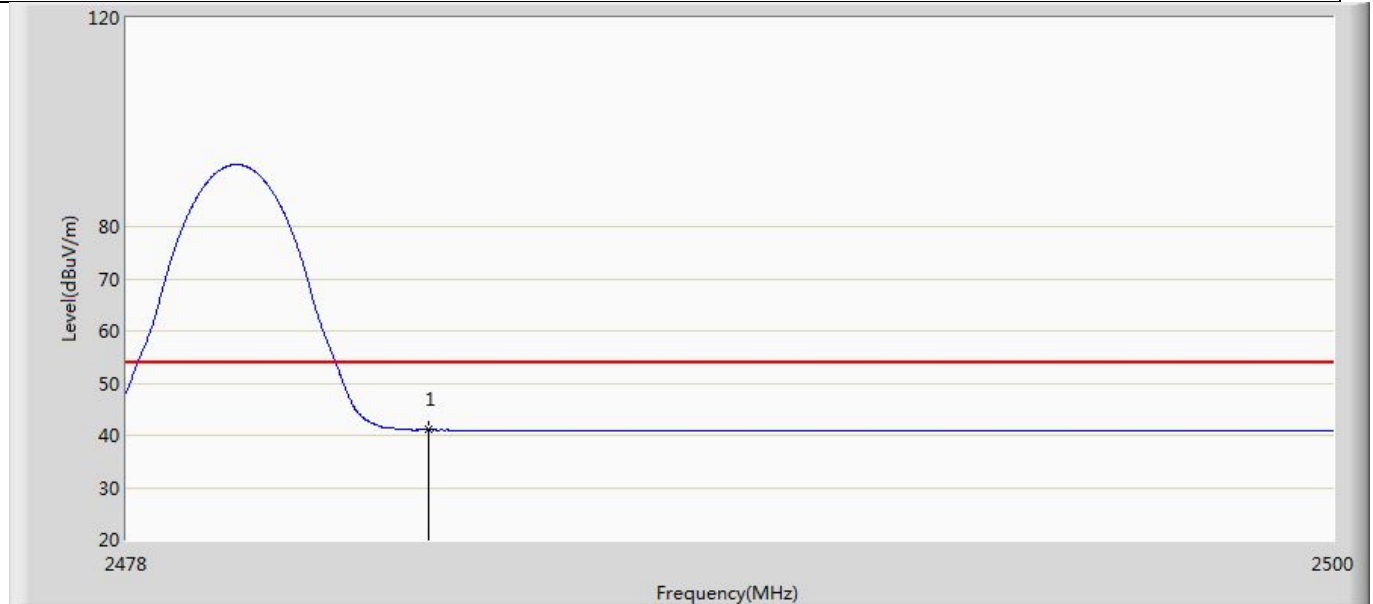


Profile: 2210511R	Page No.: 30
Engineer: Carlos. Shen	
Site: AC5	Time: 2022/03/17 - 21:55
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00123988_(1-18GHz)	Polarity: Horizontal
EUT: SRTL-NA	Power: AC 120V/60Hz
Note: Mode 4:Transmit at 2480MHz by LE_coded S=8	



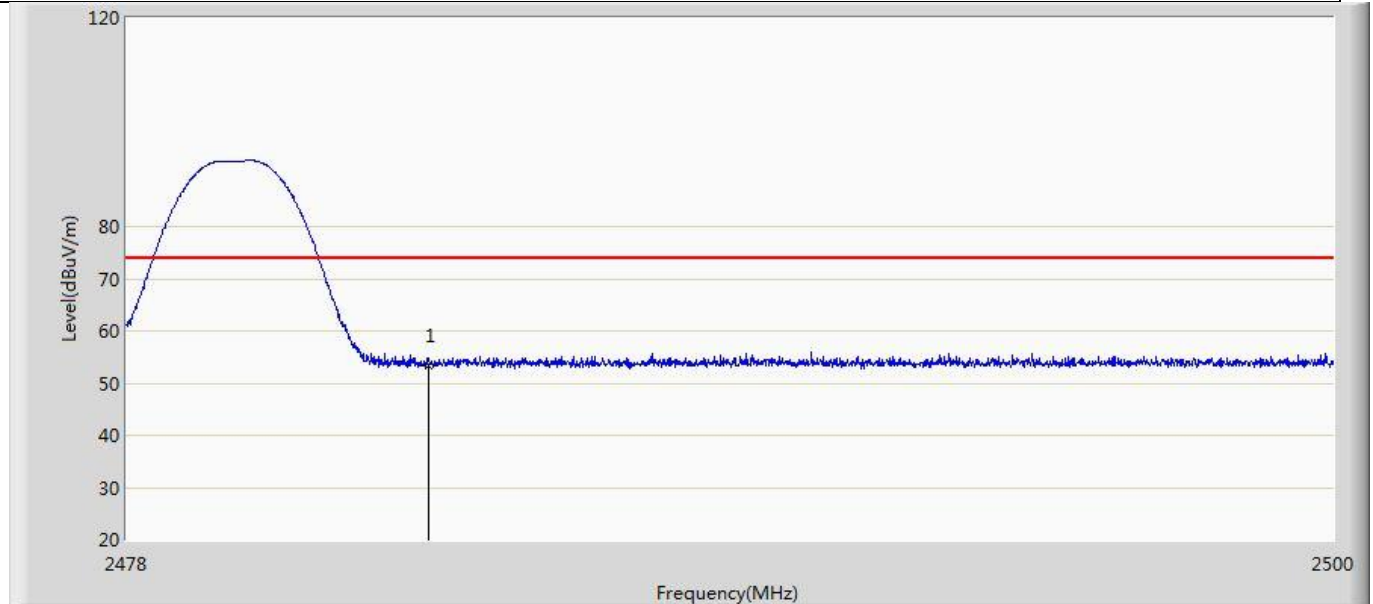
No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2483.500	53.891	15.437	-20.109	74.000	38.453	PK

Profile: 2210511R	Page No.: 31
Engineer: Carlos. Shen	
Site: AC5	Time: 2022/03/17 - 21:56
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00123988_(1-18GHz)	Polarity: Vertical
EUT: SRTL-NA	Power: AC 120V/60Hz
Note: Mode 4:Transmit at 2480MHz by LE_coded S=8	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2483.500	41.120	2.666	-12.880	54.000	38.453	AV

Profile: 2210511R	Page No.: 32
Engineer: Carlos. Shen	
Site: AC5	Time: 2022/03/17 - 21:57
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: Horn_3117_00123988_(1-18GHz)	Polarity: Vertical
EUT: SRTL-NA	Power: AC 120V/60Hz
Note: Mode 4:Transmit at 2480MHz by LE_coded S=8	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1	*	2483.500	53.216	14.762	-20.784	74.000	38.453	PK

Note:

1. Measured Level = Reading Level + Factor.
2. As the radiated emission was performed, so conducted emission was not tested.

4.6 DTS Bandwidth

VERDICT: PASS

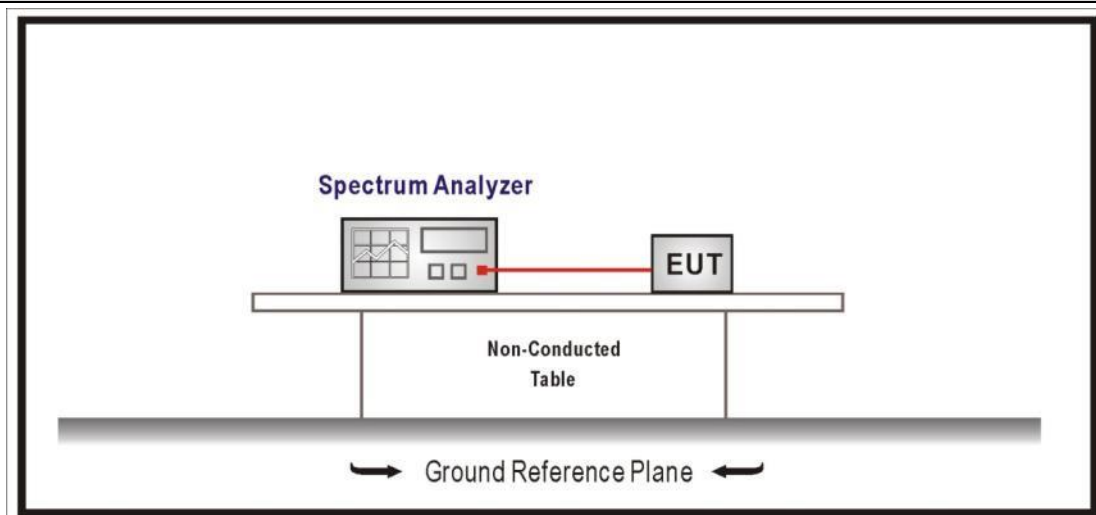
4.6.1 Limit

Standard

FCC Part 15 Subpart C Paragraph 15.247 (a)(2)

Systems using digital modulation techniques operate in the 2400-2483.5 MHz. The minimum 6 dB bandwidth shall be at least 500 kHz

4.6.2 Test Setup



4.6.3 Test Procedure

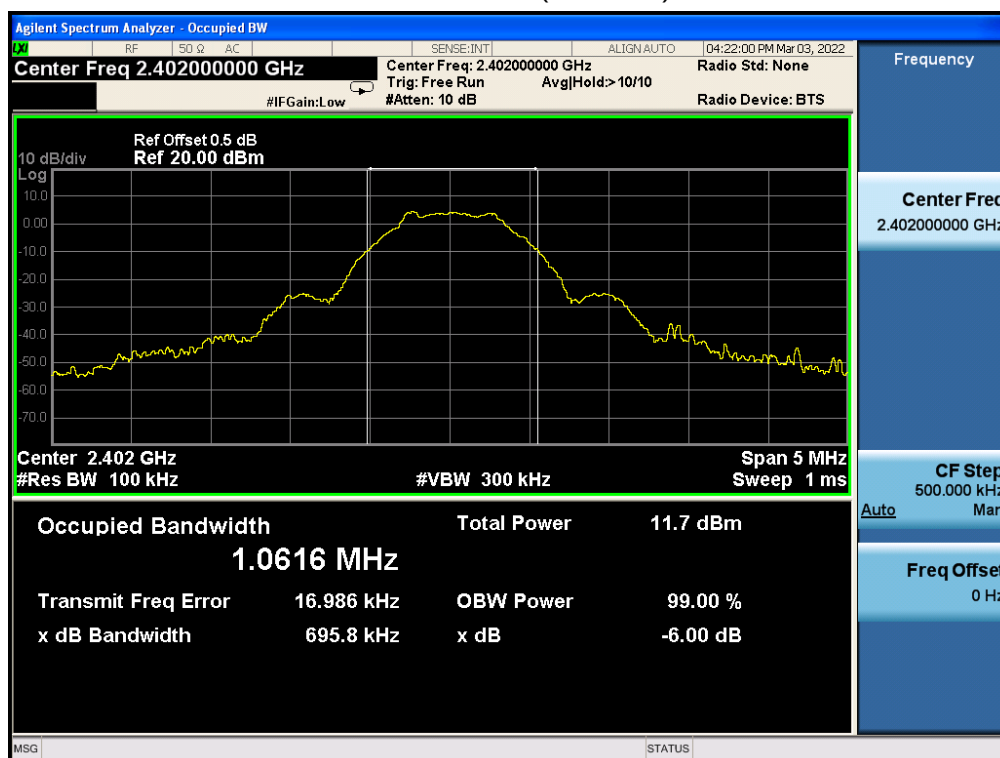
	Reference Rule	Chapter	Description
☒	ANSI C63.10	11.8	DTS bandwidth
☐	ANSI C63.10	11.8.1	Option 1
☒	ANSI C63.10	11.8.2	Option 2

4.6.4 Test Data

Mode	CH.	Test Freq. (MHz)	6dB Occupied Bandwidth (kHz)	Limit (kHz)	Result
1	00	2402	706.3	>500	Pass
	19	2440	720.4	>500	Pass
	39	2480	750.1	>500	Pass
2	00	2402	1332.0	>500	Pass
	19	2440	13620	>500	Pass
	39	2480	1502.0	>500	Pass
3	00	2402	695.8	>500	Pass
	19	2440	696.1	>500	Pass
	39	2480	725.7	>500	Pass
4	00	2402	712.4	>500	Pass
	19	2440	719.3	>500	Pass
	39	2480	753.6	>500	Pass

Note : The worst case of Occupied Bandwidth as below:

6dB Occupied Bandwidth
Mode 3 / CH00 (2402MHz)

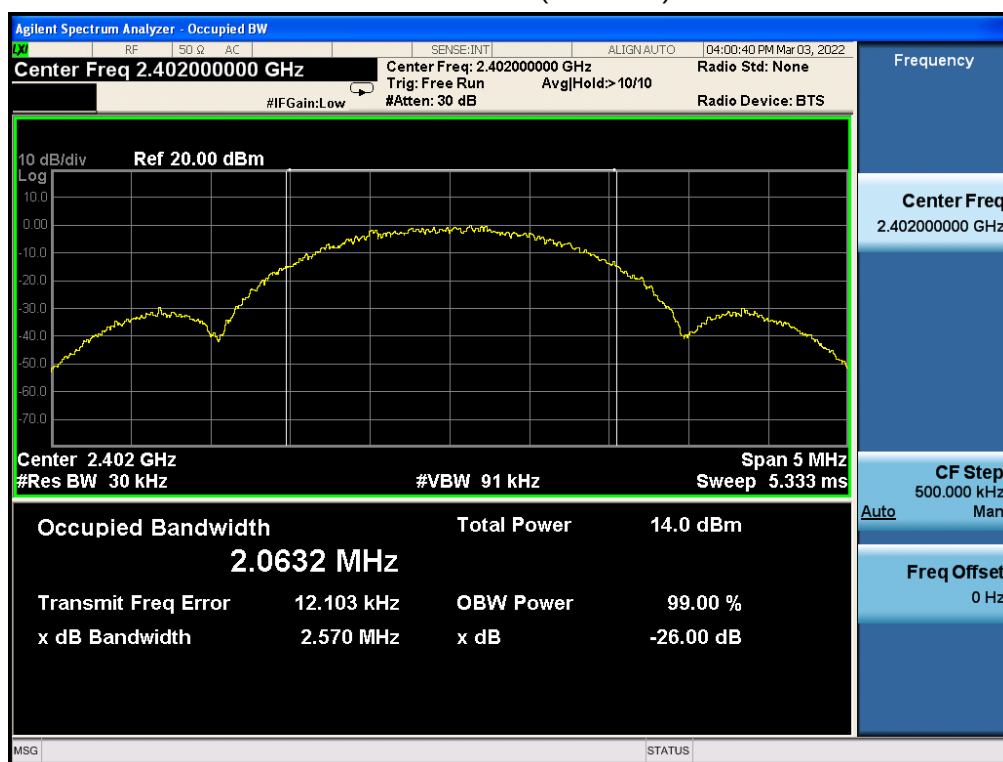


Mode	CH.	Test Freq. (MHz)	99% Occupied Bandwidth (kHz)	Limit	Result
1	00	2402	1049.1	Within frequency range	Pass
	19	2440	1057.3	Within frequency range	Pass
	39	2480	1075.0	Within frequency range	Pass
2	00	2402	2063.2	Within frequency range	Pass
	19	2440	2083.4	Within frequency range	Pass
	39	2480	2090.1	Within frequency range	Pass
3	00	2402	1039.7	Within frequency range	Pass
	19	2440	1036.8	Within frequency range	Pass
	39	2480	1055.0	Within frequency range	Pass
4	00	2402	1074.6	Within frequency range	Pass
	19	2440	1081.1	Within frequency range	Pass
	39	2480	1090.8	Within frequency range	Pass

Note : The worst case of Occupied Bandwidth as below:

99% Occupied Bandwidth

Mode 2 / CH00 (2402MHz)



4.7 Fundamental emission output power

VERDICT: PASS

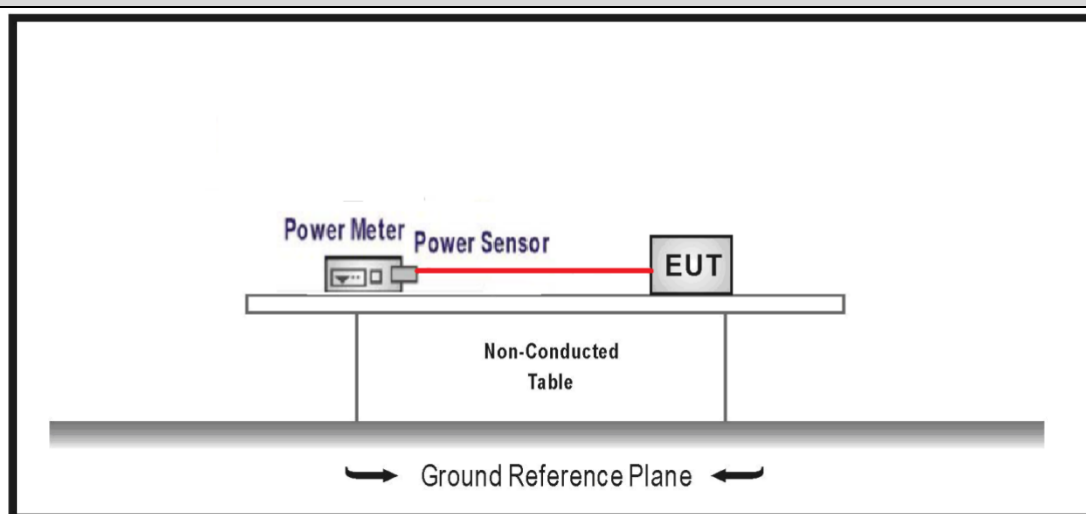
4.7.1 Limit

Standard		FCC Part 15 Subpart C Paragraph 15.247 (b)(3)
☒	GTX < 6dBi	$P_{out} \leq 30 \text{ dBm}$
☐	GTX > 6dBi	
☐	Non-Fix point-point	$P_{out} \leq 30 - (GTX - 6)$
☐	Fix point-point	$P_{out} \leq 30 - [(GTX - 6)]/3$
☐	Point-to-multipoint	$P_{out} \leq 30 - (GTX - 6)$
☐	Overlap Beams	$P_{out} \leq 30 - [(GTX - 6)]/3$
☐	Aggregate power transmitted simultaneously on all beams	$P_{out} \leq 30 - [(GTX - 6)]/3$
☐	single directional beam	$P_{out} \leq 30 - [(GTX - 6)]/3 + 8 \text{ dB}$

Note 1 : GTX directional gain of transmitting antennas.

Note 2 : Pout is maximum peak conducted output power .

4.7.2 Test Setup



4.7.3 Test Procedure

	References Rule		Chapter	Description
☒	ANSI C63.10		11.9	Fundamental emission output power
	☒	ANSI C63.10		11.9.1 Maximum peak conducted output power
	☐	☐	ANSI C63.10	11.9.1.1 RBW $\geq$ DTS bandwidth
		☐	ANSI C63.10	11.9.1.2 Integrated band power method
		☐	ANSI C63.10	11.9.1.3 PKPM1 Peak power meter method
	☐	ANSI C63.10		11.9.2 Maximum conducted (average) output power
	☐	☐	ANSI C63.10	11.9.2.2 Measurement using a spectrum analyzer (SA)
		☐	ANSI C63.10	11.9.2.2.2 Method AVGSA-1(Duty cycle $\geq 98\%$)
		☐	ANSI C63.10	11.9.2.2.3 Method AVGSA-1A(Duty cycle $\geq 98\%$)
		☐	ANSI C63.10	11.9.2.2.4 Method AVGSA-2(Duty cycle $\leq 98\%$)
		☐	ANSI C63.10	11.9.2.2.5 Method AVGSA-2A(Duty cycle $\leq 98\%$)
		☐	ANSI C63.10	11.9.2.2.4 Method AVGSA-3
		☐	ANSI C63.10	11.9.2.2.5 Method AVGSA-3A
		☒	ANSI C63.10	11.9.2.3 Measurement using a power meter (PM)
		☒	ANSI C63.10	11.9.2.3.1 Method AVGPM
		☐	ANSI C63.10	11.9.2.3.2 Method AVGPM-G

4.7.4 Test Data

Mode	Channel	Test Frequency (MHz)	Power Output (dBm)	Limit (dBm)	Result
Mode 1	00	2402	6.12	≤30	Pass
	19	2440	6.19	≤30	Pass
	39	2480	6.21	≤30	Pass
Mode 2	00	2402	6.15	≤30	Pass
	19	2440	6.19	≤30	Pass
	39	2480	6.14	≤30	Pass
Mode 3	00	2402	6.05	≤30	Pass
	19	2440	6.09	≤30	Pass
	39	2480	6.08	≤30	Pass
Mode 4	00	2402	6.07	≤30	Pass
	19	2440	6.09	≤30	Pass
	39	2480	6.07	≤30	Pass

4.8 Power Density

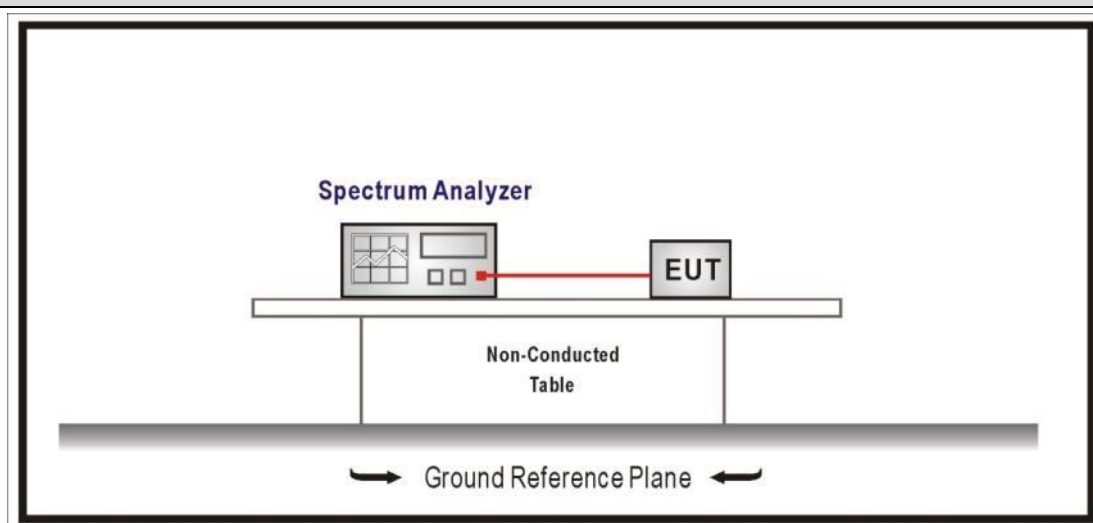
VERDICT: PASS

4.8.1 Limit:

Standard	FCC Part 15 Subpart C Paragraph 15.247 (b)(3)
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Power Spectral Density $\leq 8\text{dBm}/3\text{kHz}$

4.8.2 Test Setup



4.8.3 Test Procedure

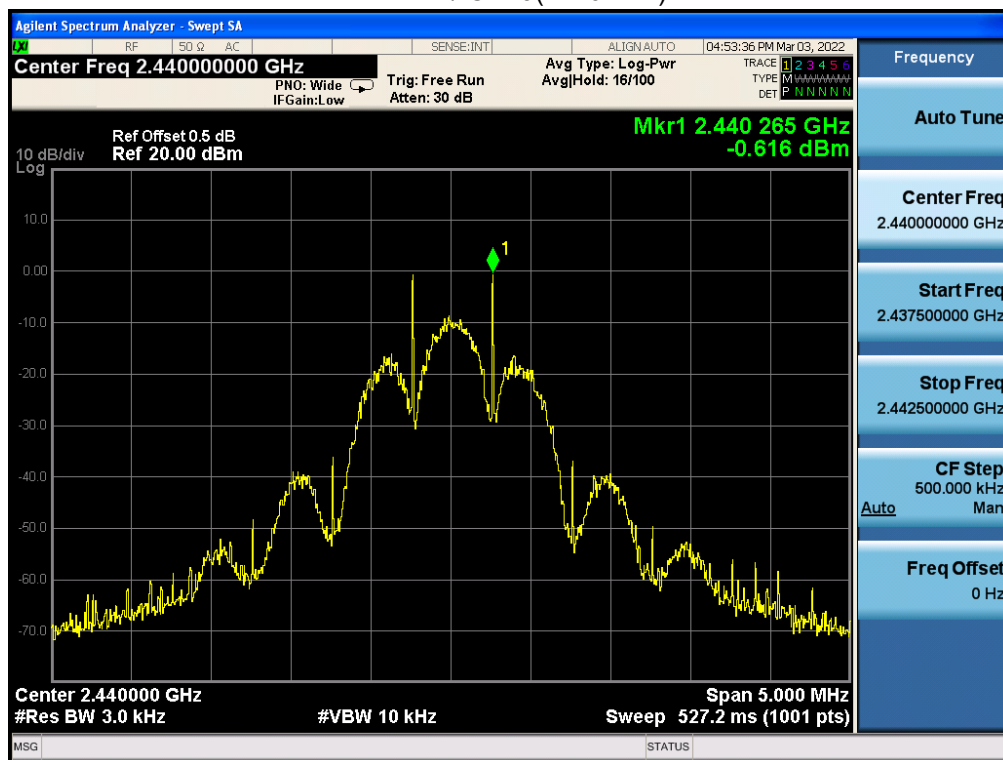
	References Rule		Chapter	Description
☒	ANSI C63.10		11.10	Maximum power spectral density level in the fundamental emission
	☒	ANSI C63.10	11.10.2	Method PKPSD (peak PSD)
	☐	ANSI C63.10	11.10.3	Method AVGPSD-1(Duty cycle $\geq 98\%$)
	☐	ANSI C63.10	11.10.4	Method AVGPSD-1A(Duty cycle $\geq 98\%$)
	☐	ANSI C63.10	11.10.5	Method AVGPSD-2(Duty cycle $< 98\%$)
	☐	ANSI C63.10	11.10.6	Method AVGPSD-2A(Duty cycle $< 98\%$)
	☐	ANSI C63.10	11.10.7	Method AVGPSD-3
	☐	ANSI C63.10	11.10.8	Method AVGPSD-3A

4.8.4 Test Data

Mode	Channel	Test Frequency (MHz)	Measurement PSD (dBm/3kHz)	Limit (dBm/3kHz)	Result
Mode 1	00	2402	-5.598	≤8	Pass
	19	2440	-6.281	≤8	Pass
	39	2480	-5.066	≤8	Pass
Mode 2	00	2402	-9.146	≤8	Pass
	19	2440	-10.140	≤8	Pass
	39	2480	-10.287	≤8	Pass
Mode 3	00	2402	-6.997	≤8	Pass
	19	2440	-8.023	≤8	Pass
	39	2480	-8.043	≤8	Pass
Mode 4	00	2402	-0.840	≤8	Pass
	19	2440	-0.616	≤8	Pass
	39	2480	-0.749	≤8	Pass

Note : The worst case of PSD as below:

Mode 4 / CH19(2440MHz)



4.9 Antenna Requirement**VERDICT: PASS****4.9.1 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.

4.9.2 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 _____

S