

TEST REPORT

Applicant : Zhongshan Polono Electronic Technology Co., Ltd.

Address : No. 132, Tanlong North Road, Tanzhou Town, Zhongshan City, 4th and 5th floors, Building 2, 4th and 5th floors, Building 3, China

Manufacturer : Zhongshan Polono Electronic Technology Co., Ltd.

Address : No. 132, Tanlong North Road, Tanzhou Town, Zhongshan City, 4th and 5th floors, Building 2, 4th and 5th floors, Building 3, China

Product Name : Portable Inkjet Photo Printer

Model Number : PP02

Trademark : N/A

FCC ID : 2BQIW-PP02

Test Date : Jan. 04, 2026 to Jan. 14, 2026

Date of Report : Jan. 14, 2026

Test Result : This device described above has been tested by BKC, and the test results show that the equipment under test (EUT) is in compliance with the Standard requirements. And it is applicable only to the tested sample identified in the report.

Test Procedure Used:

Standards : FCC CFR Title 47 Part 15 Subpart C Section 15.249
ANSI C63.10-2020+Cor.1-2023

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Approved(Manager):
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1. General Information

1.1. Description of Device (EUT)

EUT Name : Portable Inkjet Photo Printer
Model No. : PP02
Model Difference : N/A
Power supply : Rating(s): 5V
Battery: 3.7V
Operation frequency : 2402-2480MHz
Max. Field Strength : 101.45dBuV/m
Modulation : GFSK, Pi/4 DQPSK, 8DPSK
Antenna Type : PCB Antenna, Maximum Gain is 4.05dBi
Hardware Version : V1.0
Software Version : V2.4.0
Intend use environment : Residential, commercial and light industrial environment

1.2. Channel List

Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
0	2402	1	2403	2	2404	3	2405
4	2406	5	2407	6	2408	7	2409
8	2410	9	2411	10	2412	11	2413
12	2414	13	2415	14	2416	15	2417
16	2418	17	2419	18	2420	19	2421
20	2422	21	2423	22	2424	23	2425
24	2426	25	2427	26	2428	27	2429
28	2430	29	2431	30	2432	31	2433
32	2434	33	2435	34	2436	35	2437
36	2438	37	2439	38	2440	39	2441
40	2442	41	2443	42	2444	43	2445
44	2446	45	2447	46	2448	47	2449
48	2450	49	2451	50	2452	51	2453
52	2454	53	2455	54	2456	55	2457
56	2458	57	2459	58	2460	59	2461
60	2462	61	2463	62	2464	63	2465
64	2466	65	2467	66	2468	67	2469
68	2470	69	2471	70	2472	71	2473
72	2474	73	2475	74	2476	75	2477
76	2478	77	2479	78	2480	-	-

1.3.Summary of test result

RF PART		
Test Items	Test Requirement	Result
Antenna requirement	FCC part 15.203	PASS
AC Power Line Conducted Emission	FCC part 15.207	PASS
Field strength of the fundamental signal	FCC part 15.249 (a)	PASS
Spurious emissions	FCC part 15.249 (a) (d)/15.209	PASS
Band edge	FCC part 15.249 (d)/15.205	PASS
20dB Occupied Bandwidth	FCC part 15.215 (c)	PASS
Remark: N/A is an abbreviation for Not Applicable. Measurement Uncertainty is not taken into account for conformity statement		

1.4.Special Accessories and Auxiliary Equipment

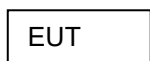
Description	Manufacturer	Model No.	Hardware Version	Software Version
Serial port board	-	USB-TTL-01	-	-
Adapter	-	WH088	-	-

1.5.Block Diagram

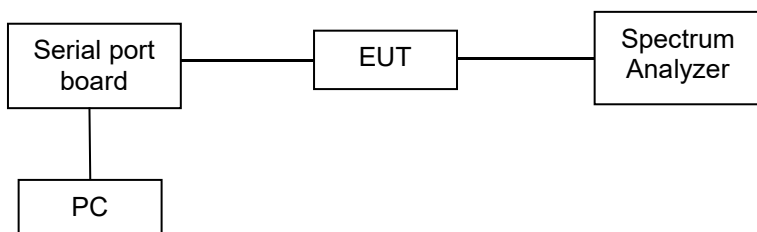
Conducted Emission



Radiated Emission



RF Conducted Test



1.6.Test mode

The special RF test software was used to control EUT work in Continuous BT TX mode, and select test channel, wireless mode.

Test mode	Low channel	Middle channel	High channel
GFSK	2402MHz	2441MHz	2480MHz
PI/4 DQPSK	2402MHz	2441MHz	2480MHz
8DPSK	2402MHz	2441MHz	2480MHz
Note:/			

1.7.Test configuration

Test Software	FCCTestTool V2.4.0
Power level setup	Maximum

1.8.Test Conditions

Category	Normal Conditions	Extreme Conditions
Temperature range	15-35℃	N/A
Humidity range	20-75%	N/A
Pressure range	86-106kPa	N/A
Power supply	Rating(s): 5V Battery: 3.7V	N/A
Note: N/A is an abbreviation for Not Applicable.		

1.9.Measurement Uncertainty (95% confidence levels, k=2)

Item	MU	Remark
Uncertainty for radio frequency	$\pm 7 \times 10^{-8}$	
Conducted Emissions (150kHz~30MHz)	$\pm 2.54\text{dB}$	
Radiated Emission(9KHz~30MHz)	$\pm 1.6\text{ dB}$	
Radiated Emission(30MHz~1GHz)	Vertical: $\pm 4.14\text{dB}$ Horizontal: $\pm 4.25\text{dB}$	
Radiated Emission(1GHz~6GHz)	$\pm 3.9\text{dB}$	
Radiated Emission(6GHz~18GHz)	$\pm 4.3\text{dB}$	
Radiated Emission(18GHz~40GHz)	$\pm 3.38\text{dB}$	
Uncertainty for conducted RF Power	$\pm 0.20\text{dB}$	
Conducted spurious emissions	$\pm 0.24\text{dB}$	
Uncertainty for temperature	0.6℃	
Uncertainty for humidity	1%	
Bandwidth	$\pm 1.5 \times 10^{-6}$	
Time	$\pm 2\%$	
Duty Cycle	$\pm 2\%$	
Remark: The coverage Factor (k=2), and measurement Uncertainty for a level of Confidence of 95%		

1.10. Test Facility

Site Description		
Name of Firm	:	Shenzhen BKC Testing Co., Ltd.
Site Location	:	Room 103, 1/F, Huaya Building, Huaya Industrial Park, Longhua Community, Longhua District, Shenzhen, Guangdong, China.
ISED CAB identifier	:	CN0188
ISED Company Number	:	34333
FCC Designation Number	:	CN1416
FCC Test Firm Registration Number	:	701543

1.11. Test Equipment

Conducted Test Site

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Last calibration	Calibrated until
1	LISN	R&S	ENV216	102762	Mar. 10. 2025	Mar. 09. 2026
2	EMI Test Receiver	R&S	ESCI	101424	Mar. 10. 2025	Mar. 09. 2026
3	Rf cables	HTEC	HCE 2M-CE	N/A	Mar. 10. 2025	Mar. 09. 2026
4	Coupling/ Decoupling Network	Diamond	CX210	N/A	Mar. 10. 2025	Mar. 09. 2026
5	CE Testing software	EZ	EZ-EMC	/	/	/

Radiated Test Site(Below 1G and Above 1G)

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Last calibration	Calibrated until
1	Antenna	Schwarzbeck	VULB 9168	01321	Mar. 20. 2025	Mar. 19. 2028
2	EMI Test Receiver	R&S	ESRP	101478	Mar. 10. 2025	Mar. 09. 2026
3	Preamplifier	HP	8447D	2727A05345	Mar. 10. 2025	Mar. 09. 2026
4	Double Ridged Broadband	SCHWARZBECK	BBHA 9120D	02621	Mar. 10. 2025	Mar. 19. 2028
5	Preamplifier	Schwarzbeck	BBV 9718D	00041	Mar. 10. 2025	Mar. 09. 2026
6	Rf cables	HUBER+SUHNER	8M-RE	N/A	Mar. 10. 2025	Mar. 09. 2026
7	Rf cables	HUBER+SUHNER	1.5M-RE	N/A	Mar. 10. 2025	Mar. 09. 2026
8	Rf cables	HUBER+SUHNER	1.5M-AP-RE	N/A	Mar. 10. 2025	Mar. 09. 2026
9	Loop antenna	TESEQ	HLA6121	58357	Mar. 09. 2025	Mar. 10. 2026
10	Spectrum analyzer	R&S	FSP40	200061	Feb. 13. 2025	Feb. 12. 2026

11	Double Ridged Broadband Horn Antenna	COM-POWER	AH-1840	10100009	Mar. 10. 2025	Mar. 09. 2026
12	Spectrum	Agilent	N9020A	MY50510311	Mar. 09. 2025	Mar. 10. 2026
13	Band Stop Filter	Bafang	BSF5G	2024052610	Mar. 09. 2025	Mar. 10. 2026
14	RE Testing software	EZ	EZ-EMC	/		/

RF Test Site

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Last calibration	Calibrated until
1	Spectrum	Agilent	N9020A	MY50510311	Mar. 09. 2025	Mar. 10. 2026
2	Vector source	Agilent	N5182A	MY47420223	Mar. 09. 2025	Mar. 10. 2026
3	All instrument	Rohde & Schwarz	CMW 500	101131	Mar. 09. 2025	Mar. 10. 2026
4	control unit	MW	MW100-RFCB	MW200411BK-34	Mar. 09. 2025	Mar. 10. 2026
5	RF Testing software	MW	MTS 8310	/	Mar. 09. 2025	/
6	Spectrum analyzer	R&S	FSP40	200061	Feb. 13. 2025	Feb. 12. 2026

Test software

Software name	RF Testing software
Software version	2.0.0.0
Software name	RE Testing software
Software version	EMEC-03A2 RE+
Software name	CE Testing software
Software version	EMEC-3A1+

2. Conducted emission at the mains terminals test

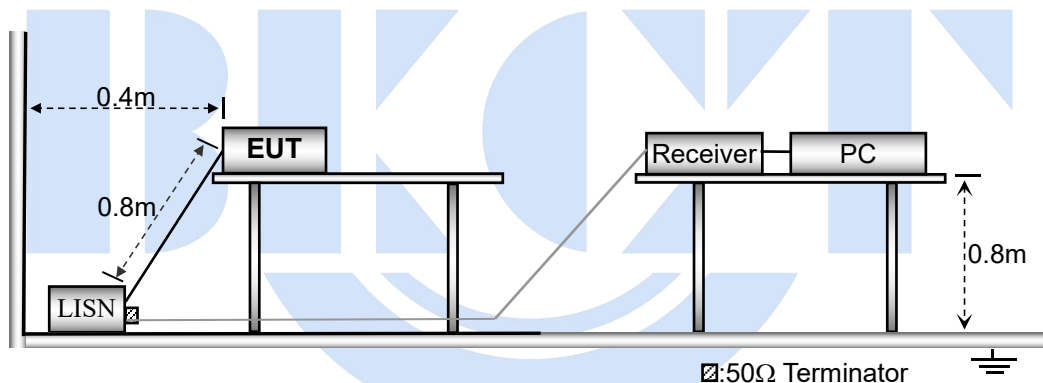
2.1.Limit

Test Requirement:	FCC Part15 C Section 15.207
Test Method:	ANSI C63.10-2020+Cor.1-2023
Test Frequency Range:	150KHz to 30MHz
Receiver setup:	RBW=9KHz, VBW=30KHz, Sweep time=auto

Frequency MHz	Limits dB(μ V)	
	Quasi-peak Level	Average Level
0.15 ~ 0.50	66 ~ 56*	56 ~ 46*
0.50 ~ 5.00	56	46
5.00 ~ 30.00	60	50

Notes: 1. *Decreasing linearly with logarithm of frequency.
2. The lower limit shall apply at the transition frequencies.

2.2.Test Setup

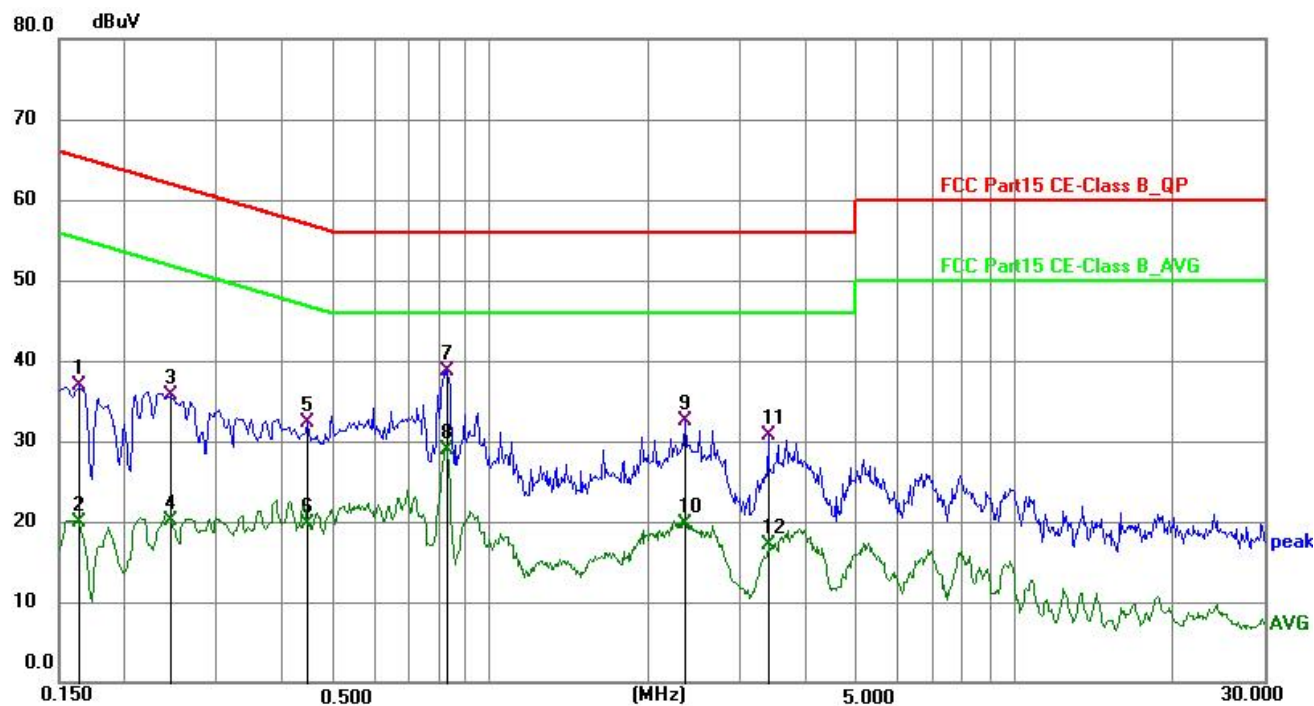


2.3.Test Procedure

1. The EUT was placed 0.8 meters from the horizontal ground plane with EUT being connected to the power mains through a line impedance stabilization network (LISN). All other support equipments powered from additional LISN(s). The LISN provide 50 Ohm/ 50uH of coupling impedance for the measuring instrument.
2. Interconnecting cables that hang closer than 40 cm to the ground plane shall be folded back and forth in the center forming a bundle 30 to 40 cm long.
3. I/O cables that are not connected to a peripheral shall be bundled in the center. The end of the cable may be terminated, if required, using the correct terminating impedance. The overall length shall not exceed 1 m.
4. LISN at least 80 cm from nearest part of EUT chassis.
5. For the actual test configuration, please refer to the related Item - EUT Test Photos.

2.4.Test Result

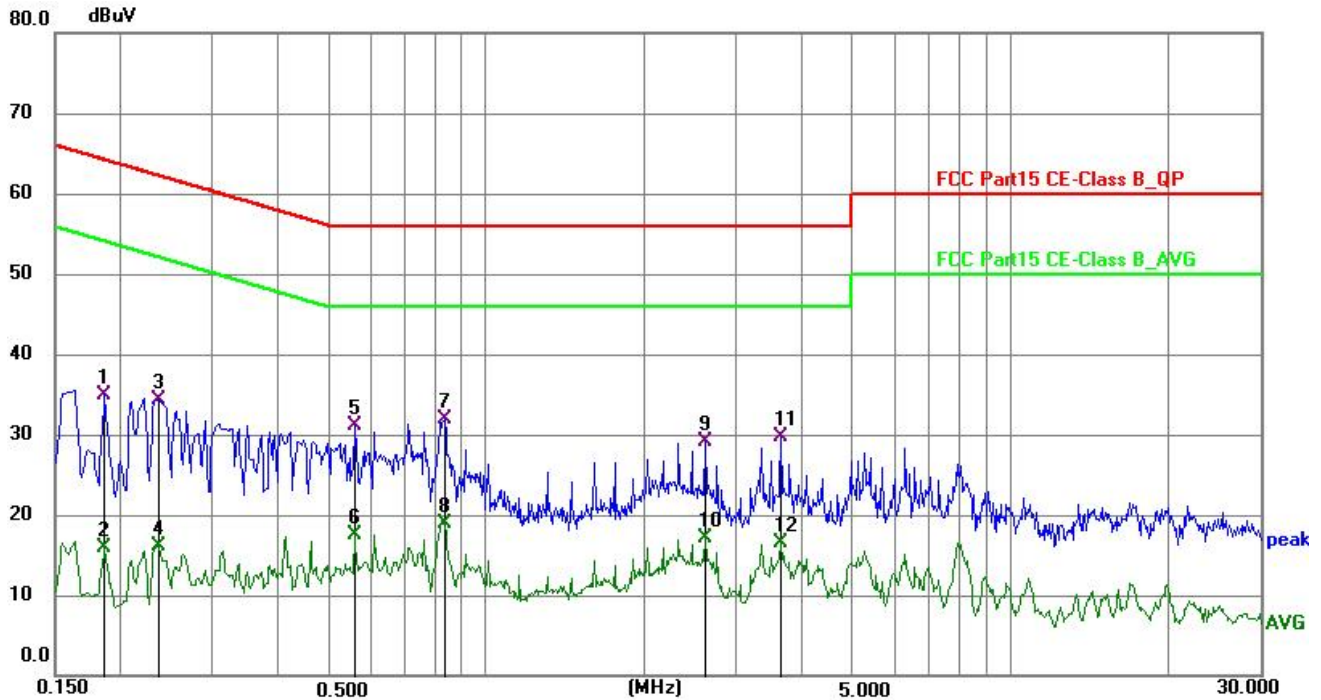
Conducted Emission At The Mains Terminals Test Data			
Temperature:	25.1℃	Relative Humidity:	56%
Pressure:	1008hPa	Phase :	Line
Test Voltage :	AC 120V/60Hz	Test Mode:	BT transmitting



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector
1	0.1635	27.08	9.78	36.86	65.28	-28.42	QP
2	0.1635	10.09	9.78	19.87	55.28	-35.41	AVG
3	0.2445	25.91	9.80	35.71	61.94	-26.23	QP
4	0.2445	10.27	9.80	20.07	51.94	-31.87	AVG
5	0.4470	22.45	9.77	32.22	56.93	-24.71	QP
6	0.4470	9.92	9.77	19.69	46.93	-27.24	AVG
7	0.8295	29.00	9.76	38.76	56.00	-17.24	QP
8 *	0.8295	19.08	9.76	28.84	46.00	-17.16	AVG
9	2.3550	22.72	9.77	32.49	56.00	-23.51	QP
10	2.3550	9.88	9.77	19.65	46.00	-26.35	AVG
11	3.3855	20.91	9.79	30.70	56.00	-25.30	QP
12	3.3855	7.27	9.79	17.06	46.00	-28.94	AVG

Conducted Emission At The Mains Terminals Test Data

Temperature:	25.1℃	Relative Humidity:	56%
Pressure:	1008hPa	Phase :	Neutral
Test Voltage :	AC 120V/60Hz	Test Mode:	BT transmitting



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F
1	0.1860	25.30	9.70	35.00	64.21	-29.21	QP	P
2	0.1860	6.17	9.70	15.87	54.21	-38.34	AVG	P
3	0.2355	24.63	9.71	34.34	62.25	-27.91	QP	P
4	0.2355	6.49	9.71	16.20	52.25	-36.05	AVG	P
5	0.5595	21.40	9.69	31.09	56.00	-24.91	QP	P
6	0.5595	7.77	9.69	17.46	46.00	-28.54	AVG	P
7 *	0.8340	22.26	9.69	31.95	56.00	-24.05	QP	P
8	0.8340	9.26	9.69	18.95	46.00	-27.05	AVG	P
9	2.6160	19.30	9.71	29.01	56.00	-26.99	QP	P
10	2.6160	7.39	9.71	17.10	46.00	-28.90	AVG	P
11	3.6465	19.99	9.73	29.72	56.00	-26.28	QP	P
12	3.6465	6.86	9.73	16.59	46.00	-29.41	AVG	P

Note: Only the worst Data GFSK/2402MHz mode Record in the report

3. Radiated Spurious Emissions

3.1.Limit

Test Requirement: FCC CFR47 Part 15 Section 15.209 & 15.249

Test Result: PASS

Measurement Distance: 3m

Frequency	Detector	RBW	VBW	Value
9KHz-150KHz	Quasi-peak	200Hz	600Hz	Quasi-peak
150KHz-30MHz	Quasi-peak	9KHz	30KHz	Quasi-peak
30MHz-1GHz	Quasi-peak	100KHz	300KHz	Quasi-peak
Above 1GHz	Peak	1MHz	3MHz	Peak
	Peak	1MHz	10Hz	Average

Standard FCC15.249

Fundamental Frequency	Field Strength of Fundamental (millivolts/meter)	Field Strength of Harmonics (microvolts/meter)
900-928MHz	50	500
2400-2483.5MHz	50	500
5725-5875MHz	50	500
24.0-24.25GHz	250	2500

Limit:

Frequency (MHz)	Field Strength		Field Strength Limit at 3m Measurement Dist	
	uV/m	Distance (m)	uV/m	dBuV/m
0.009 ~ 0.490	2400/F(kHz)	300	10000 * 2400/F(kHz)	20log(2400/F(kHz)) + 80
0.490 ~ 1.705	24000/F(kHz)	30	100 * 24000/F(kHz)	20log(24000/F(kHz)) + 40
1.705 ~ 30	30	30	100 * 30	20log(30) + 40
30 ~ 88	100	3	100	20log(100)
88 ~ 216	150	3	150	20log(150)
216 ~ 960	200	3	200	20log(200)
Above 960	500	3	500	20log(500)

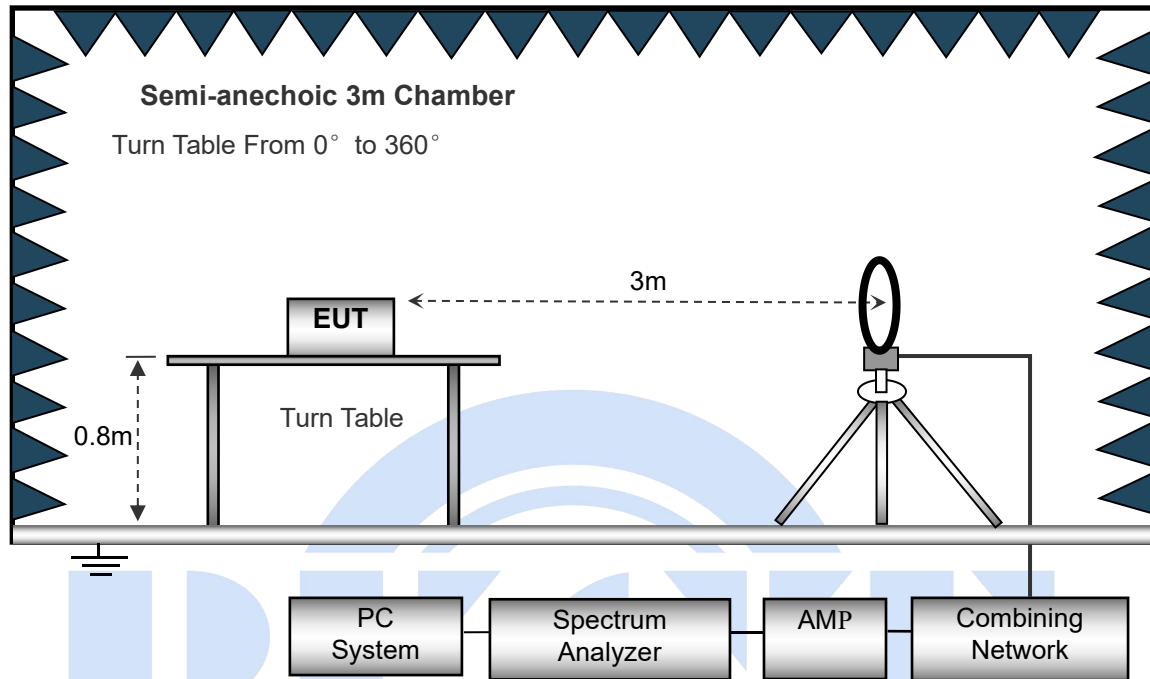
Limit 2:

§ 15.249(d) Emissions radiated outside of the specified frequency bands, except for harmonics, shall be attenuated by at least 50 dB below the level of the fundamental or to the general radiated emission limits in § 15.209, whichever is the lesser attenuation.

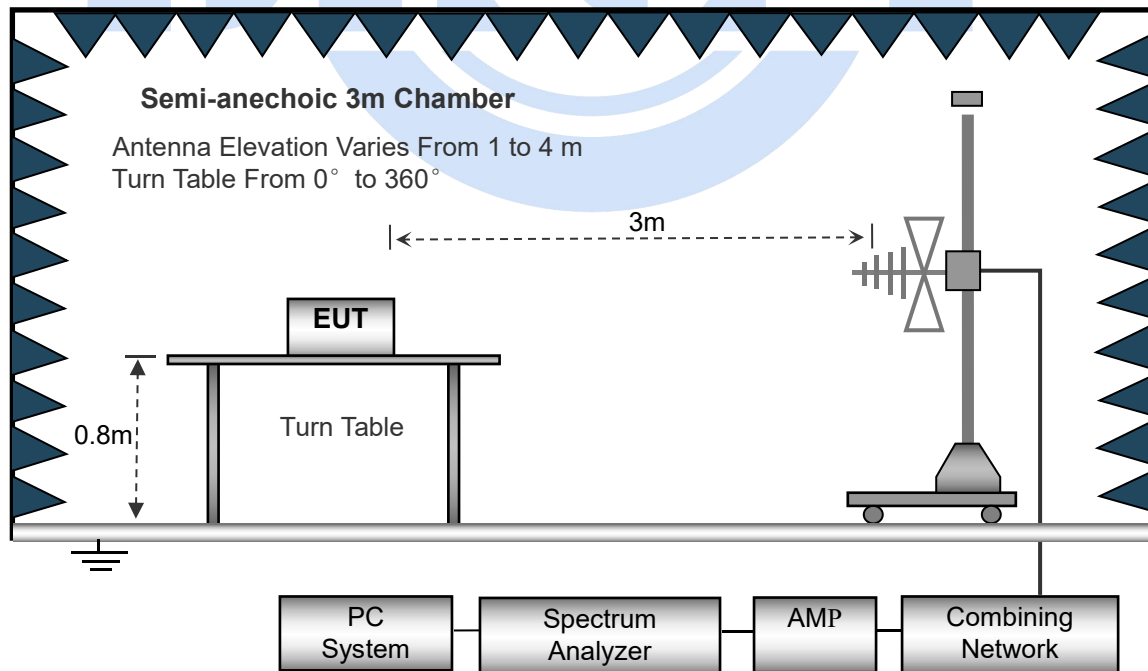
3.2. Test Setup

The radiated emission tests were performed in the 3m Semi- Anechoic Chamber test site, using the setup accordance with the ANSI C63.10-2020+Cor.1-2023.

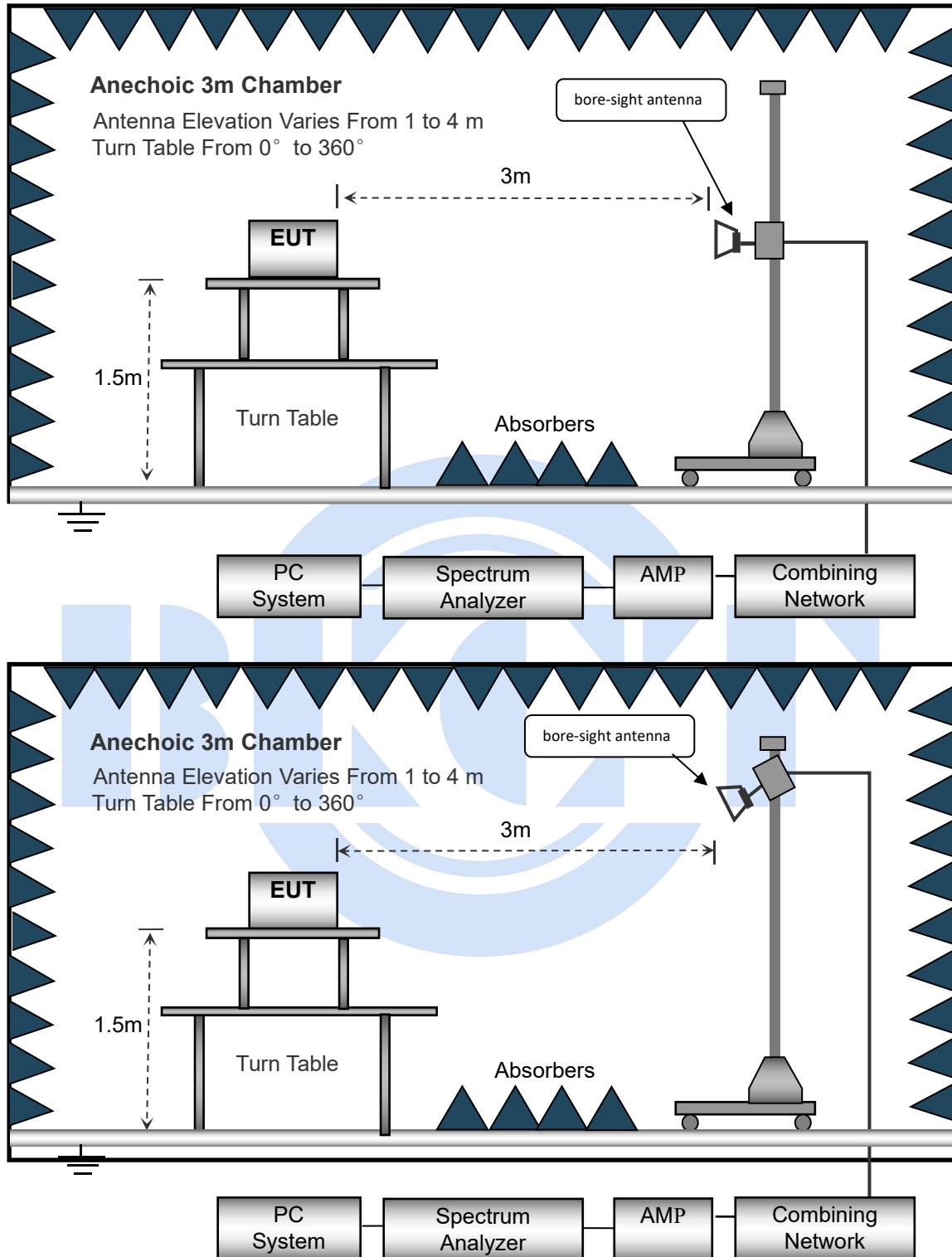
The test setup for emission measurement below 30MHz.



The test setup for emission measurement from 30 MHz to 1 GHz.



The test setup for emission measurement above 1 GHz.



3.3. Test Procedure

1. The EUT is placed on a turntable, which is 0.8m above ground plane for below 1GHz and 1.5m for above 1GHz.
2. The turntable shall be rotated for 360 degrees to determine the position of maximum emission level.
3. EUT is set 3m away from the receiving antenna, which is moved from 1m to 4m to find out the maximum emissions.
4. Maximum procedure was performed on the six highest emissions to ensure EUT compliance.
5. And also, each emission was to be maximized by changing the polarization of receiving antenna both horizontal and vertical.
6. Repeat above procedures until the measurements for all frequencies are complete.
7. The radiation measurements are performed in X,Y and Z axis positioning(X denotes lying on the table, Y denotes side stand and Z denotes vertical stand),the worst condition was tested putting the eut in Z axis,so the worst data were shown as follow.
8. A 2.4GHz high - pass filter is used during radiated emissions above 1GHz measurement.



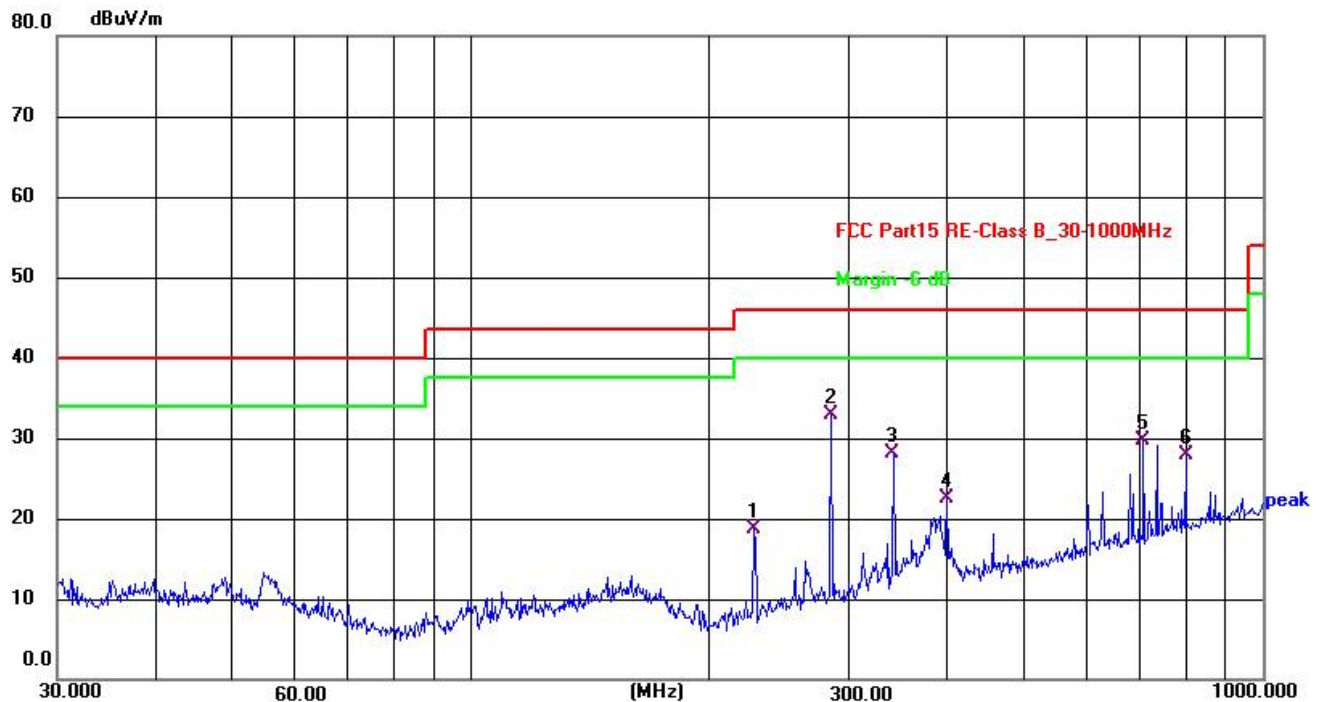
3.4. Test Result

Test Frequency: 9KHz~30MHz

The measurements were more than 20 dB below the limit and not reported.

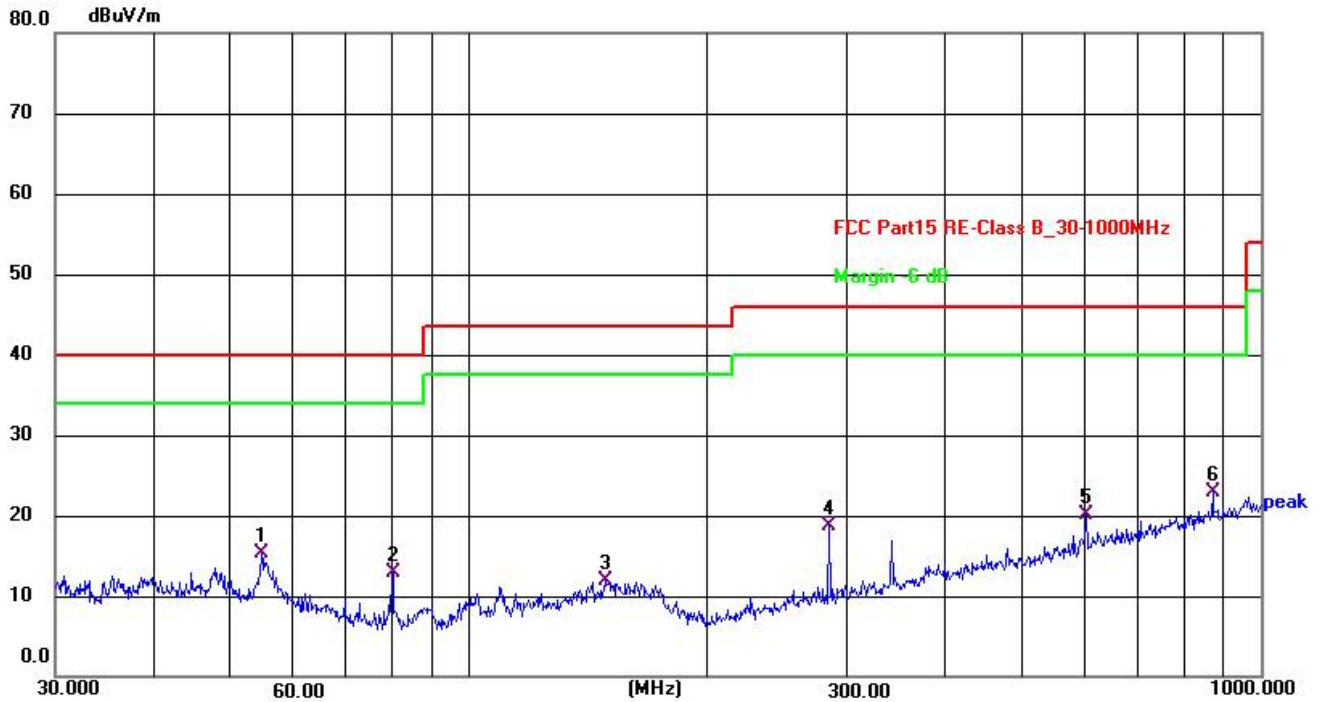
Test Frequency : 30MHz ~ 1GHz

Radiation Emission Test Data			
Temperature:	25.1 °C	Relative Humidity:	56%
Pressure:	1008hPa	Phase :	Horizontal
Test Voltage :	DC 3.7V	Test Mode	BT transmitting



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	227.6906	37.36	-18.75	18.61	46.00	-27.39	QP
2 *	284.9767	49.76	-16.85	32.91	46.00	-13.09	QP
3	341.9786	43.76	-15.69	28.07	46.00	-17.93	QP
4	399.0302	37.16	-14.73	22.43	46.00	-23.57	QP
5	706.6999	39.87	-10.12	29.75	46.00	-16.25	QP
6	798.9797	36.71	-8.82	27.89	46.00	-18.11	QP

Radiation Emission Test Data			
Temperature:	25.1°C	Relative Humidity:	56%
Pressure:	1008hPa	Phase :	Vertical
Test Voltage :	DC 3.7V	Test Mode	BT transmitting



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	54.6428	32.26	-17.01	15.25	40.00	-24.75	QP
2	80.0805	33.70	-20.86	12.84	40.00	-27.16	QP
3	148.4410	27.90	-15.98	11.92	43.50	-31.58	QP
4	284.9767	35.64	-16.85	18.79	46.00	-27.21	QP
5	601.4265	31.61	-11.56	20.05	46.00	-25.95	QP
6 *	869.1302	31.03	-8.03	23.00	46.00	-23.00	QP

Note: Only the worst Data GFSK/2402MHz mode Record in the report



Test Frequency 1GHz-25GHz:

Polar (H/V)	Frequency	Meter Reading	Pre-ampli fier	Cable Loss	Antenna Factor	Emission Level	Limits	Margin	Detector Type
	(MHz)	(dBuV)	(dB)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
Low Channel:2402MHz									
V	4804.00	52.77	30.55	5.77	24.66	52.65	74.00	-21.35	Pk
V	4804.00	43.68	30.55	5.77	24.66	43.56	54.00	-10.44	AV
V	7206.00	51.84	30.33	6.32	24.55	52.38	74.00	-21.62	Pk
V	7206.00	43.54	30.33	6.32	24.55	44.08	54.00	-9.92	AV
V	9608.00	53.64	30.85	7.45	24.69	54.93	74.00	-19.07	Pk
V	9608.00	43.39	30.85	7.45	24.69	44.68	54.00	-9.32	AV
V	12010.00	54.20	31.02	8.99	25.57	57.74	74.00	-16.26	Pk
V	12010.00	43.27	31.02	8.99	25.57	46.81	54.00	-7.19	AV
H	4804.00	50.93	30.55	5.77	24.66	50.81	74.00	-23.19	Pk
H	4804.00	43.54	30.55	5.77	24.66	43.42	54.00	-10.58	AV
H	7206.00	53.60	30.33	6.32	24.55	54.14	74.00	-19.86	Pk
H	7206.00	43.83	30.33	6.32	24.55	44.37	54.00	-9.63	AV
H	9608.00	52.02	30.85	7.45	24.69	53.31	74.00	-20.69	Pk
H	9608.00	43.33	30.85	7.45	24.69	44.62	54.00	-9.38	AV
H	12010.00	50.76	31.02	8.99	25.57	54.30	74.00	-19.70	Pk
H	12010.00	43.51	31.02	8.99	25.57	47.05	54.00	-6.95	AV

Polar (H/V)	Frequency	Meter Reading	Pre-ampli fier	Cable Loss	Antenna Factor	Emission Level	Limits	Margin	Detector Type
	(MHz)	(dBuV)	(dB)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
Middle Channel:2441MHz									
V	4880.00	50.64	30.55	5.77	24.66	50.52	74.00	-23.48	Pk
V	4880.00	43.45	30.55	5.77	24.66	43.33	54.00	-10.67	AV
V	7320.00	52.99	30.33	6.32	24.55	53.53	74.00	-20.47	Pk
V	7320.00	43.63	30.33	6.32	24.55	44.17	54.00	-9.83	AV
V	9760.00	50.27	30.85	7.45	24.69	51.56	74.00	-22.44	Pk
V	9760.00	43.50	30.85	7.45	24.69	44.79	54.00	-9.21	AV
V	12200.00	50.33	31.02	8.99	25.57	53.87	74.00	-20.13	Pk
V	12200.00	43.64	31.02	8.99	25.57	47.18	54.00	-6.82	AV
H	4880.00	50.65	30.55	5.77	24.66	50.53	74.00	-23.47	Pk
H	4880.00	43.76	30.55	5.77	24.66	43.64	54.00	-10.36	AV
H	7320.00	52.88	30.33	6.32	24.55	53.42	74.00	-20.58	Pk
H	7320.00	43.04	30.33	6.32	24.55	43.58	54.00	-10.42	AV
H	9760.00	54.60	30.85	7.45	24.69	55.89	74.00	-18.11	Pk
H	9760.00	43.88	30.85	7.45	24.69	45.17	54.00	-8.83	AV
H	12200.00	51.92	31.02	8.99	25.57	55.46	74.00	-18.54	Pk
H	12200.00	43.22	31.02	8.99	25.57	46.76	54.00	-7.24	AV

Polar (H/V)	Frequency	Meter Reading	Pre-ampli fier	Cable Loss	Antenna Factor	Emission Level	Limits	Margin	Detector Type
	(MHz)	(dBuV)	(dB)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
High Channel:2480MHz									
V	4960.00	50.50	30.55	5.77	24.66	50.38	74.00	-23.62	Pk
V	4960.00	43.46	30.55	5.77	24.66	43.34	54.00	-10.66	AV
V	7440.00	51.06	30.33	6.32	24.55	51.60	74.00	-22.40	Pk
V	7440.00	43.61	30.33	6.32	24.55	44.15	54.00	-9.85	AV
V	9920.00	50.07	30.85	7.45	24.69	51.36	74.00	-22.64	Pk
V	9920.00	43.59	30.85	7.45	24.69	44.88	54.00	-9.12	AV
V	12400.00	54.26	31.02	8.99	25.57	57.80	74.00	-16.20	Pk
V	12400.00	43.13	31.02	8.99	25.57	46.67	54.00	-7.33	AV
H	4960.00	52.55	30.55	5.77	24.66	52.43	74.00	-21.57	Pk
H	4960.00	43.86	30.55	5.77	24.66	43.74	54.00	-10.26	AV
H	7440.00	54.58	30.33	6.32	24.55	55.12	74.00	-18.88	Pk
H	7440.00	43.46	30.33	6.32	24.55	44.00	54.00	-10.00	AV
H	9920.00	54.88	30.85	7.45	24.69	56.17	74.00	-17.83	Pk
H	9920.00	43.80	30.85	7.45	24.69	45.09	54.00	-8.91	AV
H	12400.00	53.38	31.02	8.99	25.57	56.92	74.00	-17.08	Pk
H	12400.00	43.40	31.02	8.99	25.57	46.94	54.00	-7.06	AV

Note: 1. Emission Level = Meter Reading + Antenna Factor + Cable Loss – Pre-amplifier,
Margin= Emission Level - Limit

2. If peak below the average limit, the average emission was no test.

3. The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.

4.Only the worst Data GFSK mode Record in the report



Band Edge:

	Polar (H/V)	Frequenc y (MHz)	Meter Reading (dBuV)	Pre- amplifier (dB)	Cable Loss (dB)	Antenna Factor (dB/m)	Emission level (dBuV/m)	Limit (dBuV /m)	Detec tor Type	Result
GFSK	Low Channel: 2402MHz									
	H	2310.00	55.01	30.22	4.85	23.98	53.62	74.00	Pk	PASS
	H	2310.00	44.15	30.22	4.85	23.98	42.76	54.00	AV	PASS
	H	2390.00	54.20	30.22	4.85	23.98	52.81	74.00	Pk	PASS
	H	2390.00	44.72	30.22	4.85	23.98	43.33	54.00	AV	PASS
	H	2400.00	54.85	30.22	4.85	23.98	53.46	74.00	PK	PASS
	H	2400.00	44.31	30.22	4.85	23.98	42.92	54.00	AV	PASS
	V	2310.00	53.81	30.22	4.85	23.98	52.42	74.00	PK	PASS
	V	2310.00	44.01	30.22	4.85	23.98	42.62	54.00	AV	PASS
	V	2390.00	54.86	30.22	4.85	23.98	53.47	74.00	PK	PASS
	V	2390.00	44.23	30.22	4.85	23.98	42.84	54.00	AV	PASS
	V	2400.00	53.44	30.22	4.85	23.98	52.05	74.00	PK	PASS
	V	2400.00	44.99	30.22	4.85	23.98	43.60	54.00	AV	PASS
	High Channel: 2480MHz									
	H	2483.50	54.03	30.22	4.85	23.98	52.64	74.00	PK	PASS
	H	2483.50	44.07	30.22	4.85	23.98	42.68	54.00	AV	PASS
	H	2500.00	53.48	30.22	4.85	23.98	52.09	74.00	PK	PASS
	H	2500.00	44.90	30.22	4.85	23.98	43.51	54.00	AV	PASS
	V	2483.50	53.25	30.22	4.85	23.98	51.86	74.00	PK	PASS
	V	2483.50	44.75	30.22	4.85	23.98	43.36	54.00	AV	PASS
	V	2500.00	53.72	30.22	4.85	23.98	52.33	74.00	PK	PASS
	V	2500.00	44.72	30.22	4.85	23.98	43.33	54.00	AV	PASS
Remark:										
1. Emission Level = Meter Reading + Antenna Factor + Cable Loss – Pre-amplifier, Margin= Emission Level - Limit										
2.Only the worst Data GFSK mode Record in the report										



Field Strength of The Fundamental Signal Data

GFSK

Frequency	Receiver Reading	Detector	Turn table Angle	RX Antenna		Corrected Factor	Corrected Amplitude	Limit	Margin
				Height	Polar				
(MHz)	(dBμV)	(PK/QP/Ave)	Degree	(m)	(H/V)	(dB)	(dBμV/m)	(dBμV/m)	(dB)
Low Channel: 2402MHz									
2402	102.39	PK	230	1.8	V	-1.06	101.33	114.00	-12.67
2402	85.92	Ave	289	1.9	V	-1.06	84.86	94.00	-9.14
2402	102.12	PK	130	1.4	H	-1.06	101.06	114.00	-12.94
2402	86.33	Ave	130	1.4	H	-1.06	85.27	94.00	-8.73

Mid CH

Frequency	Receiver Reading	Detector	Turn table Angle	RX Antenna		Corrected Factor	Corrected Amplitude	Limit	Margin
				Height	Polar				
(MHz)	(dBμV)	(PK/QP/Ave)	Degree	(m)	(H/V)	(dB)	(dBμV/m)	(dBμV/m)	(dB)
Middle Channel: 2441MHz									
2441	102.77	PK	229	1.3	V	-1.32	101.45	114.00	-12.55
2441	87.02	Ave	229	1.3	V	-1.32	85.7	94.00	-8.3
2441	102.03	PK	156	1.6	H	-1.32	100.71	114.00	-13.29
2441	86.84	Ave	156	1.6	H	-1.32	85.52	94.00	-8.48

High CH

Frequency	Receiver Reading	Detector	Turn table Angle	RX Antenna		Corrected Factor	Corrected Amplitude	Limit	Margin
				Height	Polar				
(MHz)	(dBμV)	(PK/QP/Ave)	Degree	(m)	(H/V)	(dB)	(dBμV/m)	(dBμV/m)	(dB)
High Channel: 2480MHz									
2480	101.95	PK	164	1.7	V	-1.78	100.17	114.00	-13.83
2480	85.63	Ave	164	1.7	V	-1.78	83.85	94.00	-10.15
2480	101.77	PK	264	1.9	H	-1.78	99.99	114.00	-14.01
2480	84.99	Ave	264	1.9	H	-1.78	83.21	94.00	-10.79



PI/4 DQPSK

Frequency	Receiver Reading	Detector	Turn table Angle	RX Antenna		Corrected Factor	Corrected Amplitude	Limit	Margin
				Height	Polar				
(MHz)	(dBμV)	(PK/QP/Ave)	Degree	(m)	(H/V)	(dB)	(dBμV/m)	(dBμV/m)	(dB)
Low Channel: 2402MHz									
2402	102.33	PK	230	1.8	V	-1.06	101.27	114.00	-12.73
2402	86.74	Ave	289	1.9	V	-1.06	85.68	94.00	-8.32
2402	101.81	PK	130	1.4	H	-1.06	100.75	114.00	-13.25
2402	86.33	Ave	130	1.4	H	-1.06	85.27	94.00	-8.73

Mid CH

Frequency	Receiver Reading	Detector	Turn table Angle	RX Antenna		Corrected Factor	Corrected Amplitude	Limit	Margin
				Height	Polar				
(MHz)	(dBμV)	(PK/QP/Ave)	Degree	(m)	(H/V)	(dB)	(dBμV/m)	(dBμV/m)	(dB)
Middle Channel:2441MHz									
2441	101.65	PK	229	1.3	V	-1.32	100.33	114.00	-13.67
2441	85.31	Ave	229	1.3	V	-1.32	83.99	94.00	-10.01
2441	101.41	PK	156	1.6	H	-1.32	100.09	114.00	-13.91
2441	85.09	Ave	156	1.6	H	-1.32	83.77	94.00	-10.23

High CH

Frequency	Receiver Reading	Detector	Turn table Angle	RX Antenna		Corrected Factor	Corrected Amplitude	Limit	Margin
				Height	Polar				
(MHz)	(dBμV)	(PK/QP/Ave)	Degree	(m)	(H/V)	(dB)	(dBμV/m)	(dBμV/m)	(dB)
High Channel: 2480MHz									
2480	102.40	PK	164	1.7	V	-1.78	100.62	114.00	-13.38
2480	85.55	Ave	164	1.7	V	-1.78	83.77	94.00	-10.23
2480	101.77	PK	264	1.9	H	-1.78	99.99	114.00	-14.01
2480	84.90	Ave	264	1.9	H	-1.78	83.12	94.00	-10.88



8DPSK

Frequency	Receiver Reading	Detector	Turn table Angle	RX Antenna		Corrected Factor	Corrected Amplitude	Limit	Margin
				Height	Polar				
(MHz)	(dBμV)	(PK/QP/Ave)	Degree	(m)	(H/V)	(dB)	(dBμV/m)	(dBμV/m)	(dB)
Low Channel: 2402MHz									
2402	102.24	PK	230	1.8	V	-1.06	101.18	114.00	-12.82
2402	86.30	Ave	289	1.9	V	-1.06	85.24	94.00	-8.76
2402	102.01	PK	130	1.4	H	-1.06	100.95	114.00	-13.05
2402	86.81	Ave	130	1.4	H	-1.06	85.75	94.00	-8.25

Mid CH

Frequency	Receiver Reading	Detector	Turn table Angle	RX Antenna		Corrected Factor	Corrected Amplitude	Limit	Margin
				Height	Polar				
(MHz)	(dBμV)	(PK/QP/Ave)	Degree	(m)	(H/V)	(dB)	(dBμV/m)	(dBμV/m)	(dB)
Middle Channel:2441MHz									
2441	101.92	PK	229	1.3	V	-1.32	100.6	114.00	-13.4
2441	86.39	Ave	229	1.3	V	-1.32	85.07	94.00	-8.93
2441	101.47	PK	156	1.6	H	-1.32	100.15	114.00	-13.85
2441	86.15	Ave	156	1.6	H	-1.32	84.83	94.00	-9.17

High CH

Frequency	Receiver Reading	Detector	Turn table Angle	RX Antenna		Corrected Factor	Corrected Amplitude	Limit	Margin
				Height	Polar				
(MHz)	(dBμV)	(PK/QP/Ave)	Degree	(m)	(H/V)	(dB)	(dBμV/m)	(dBμV/m)	(dB)
High Channel: 2480MHz									
2480	100.84	PK	164	1.7	V	-1.78	99.06	114.00	-14.94
2480	84.39	Ave	164	1.7	V	-1.78	82.61	94.00	-11.39
2480	100.81	PK	264	1.9	H	-1.78	99.03	114.00	-14.97
2480	85.32	Ave	264	1.9	H	-1.78	83.54	94.00	-10.46

4. -20 dB Bandwidth Measurement

4.1.Limit

Test Requirement: FCC CFR47 Part 15 Section 15.215

4.2.Test Setup

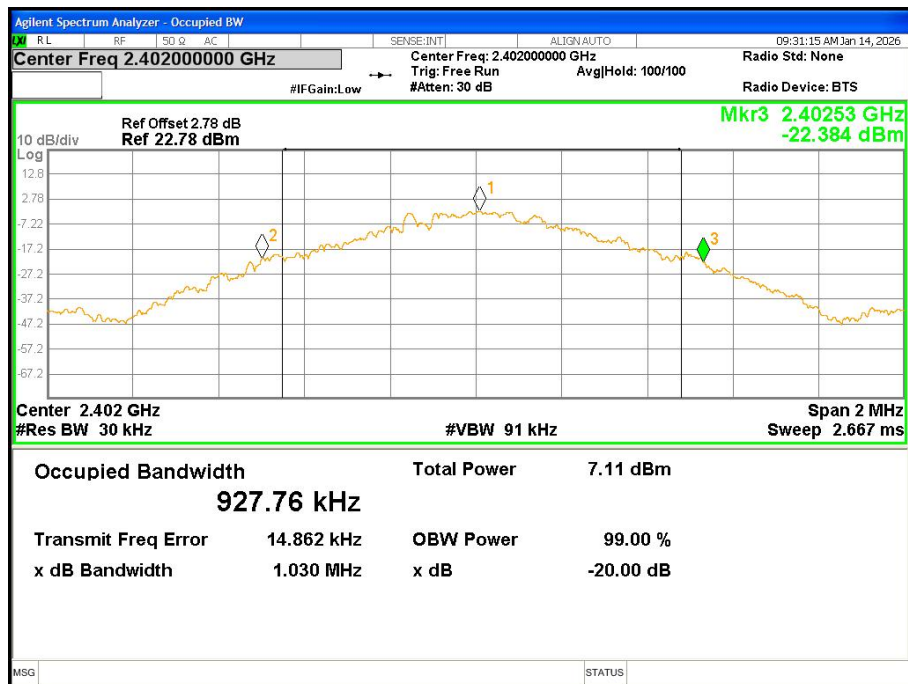


4.3.Test Procedure

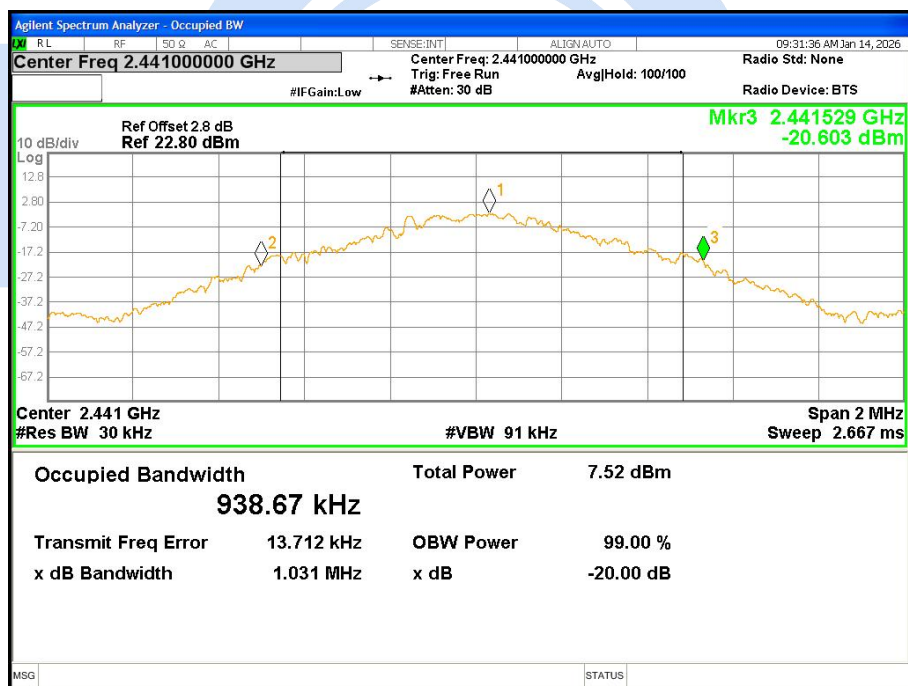
1. Set the spectrum analyzer: RBW = 1%-5% OBW
2. Set the video bandwidth (VBW) $\geq 3 \times$ RBW.
3. Detector = Peak.
4. Trace mode = max hold.
5. Sweep = auto couple.
6. Allow the trace to stabilize.
7. Measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by -20 dB relative to the maximum level measured in the fundamental emission

4.4.Test Result

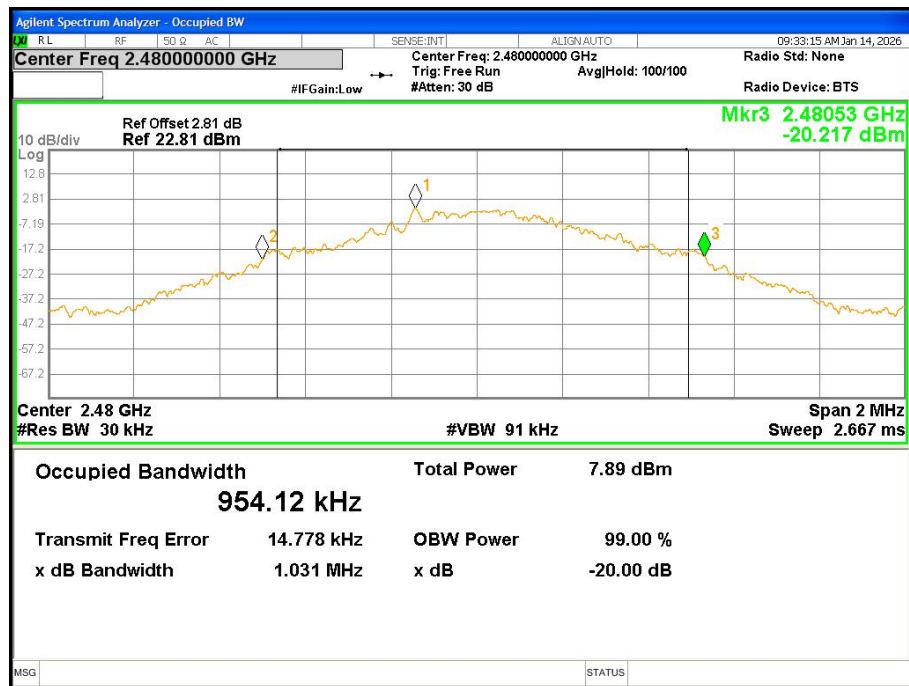
Mode	Frequency (MHz)	Antenna	99% OBW (MHz)	-20dB OBW (MHz)
DH5	2402	Ant1	0.928	1.030
	2441	Ant1	0.939	1.031
	2480	Ant1	0.954	1.031
2-DH5	2402	Ant1	1.194	1.302
	2441	Ant1	1.219	1.324
	2480	Ant1	1.216	1.313
3-DH5	2402	Ant1	1.220	1.349
	2441	Ant1	1.222	1.347
	2480	Ant1	1.220	1.286



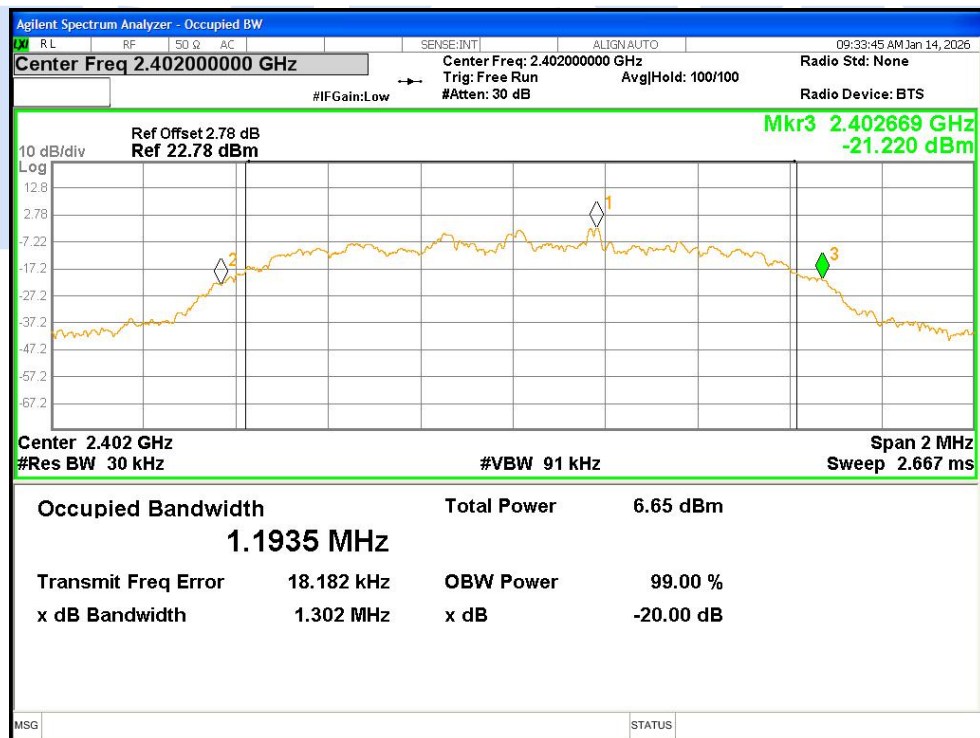
-20dB Bandwidth NVNT 1-DH5 2402MHz Ant1



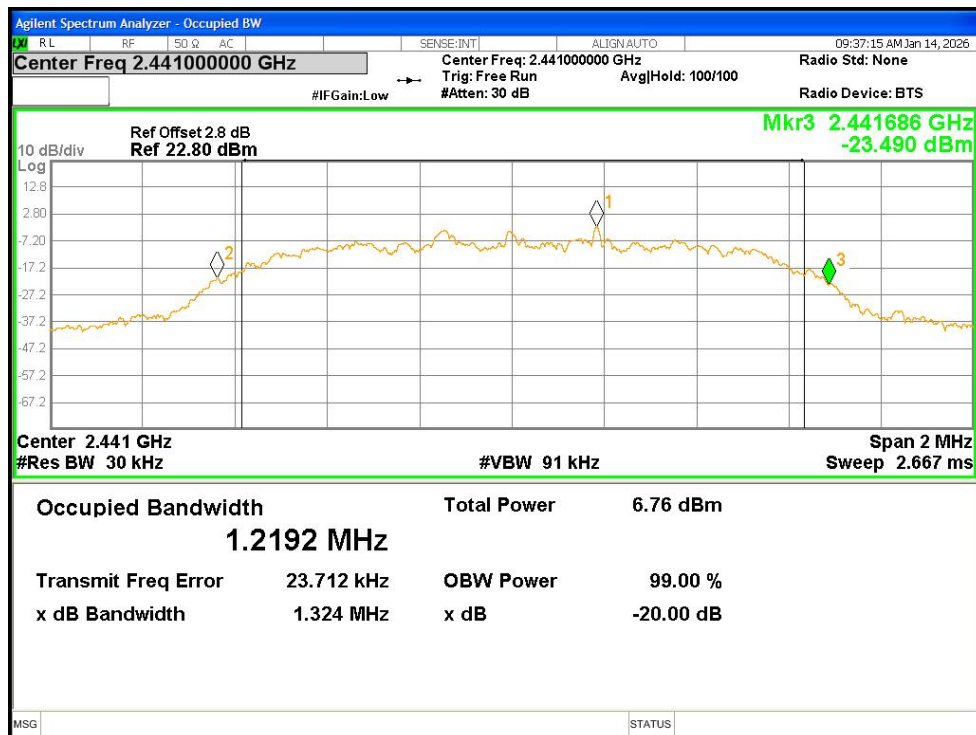
-20dB Bandwidth NVNT 1-DH5 2441MHz Ant1



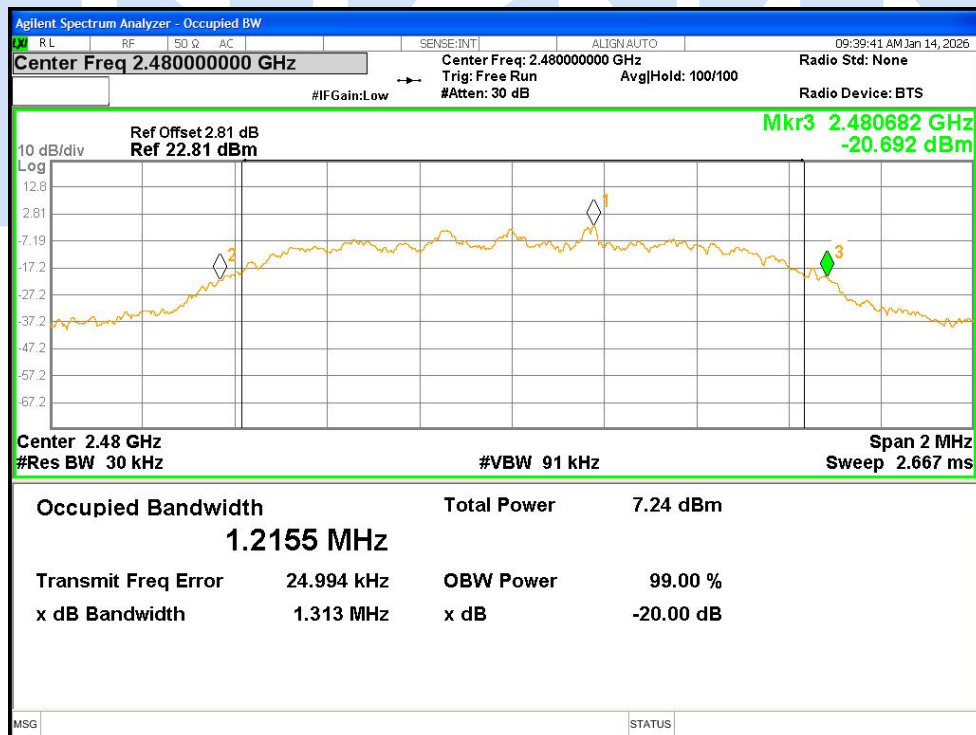
-20dB Bandwidth NVNT 1-DH5 2480MHz Ant1



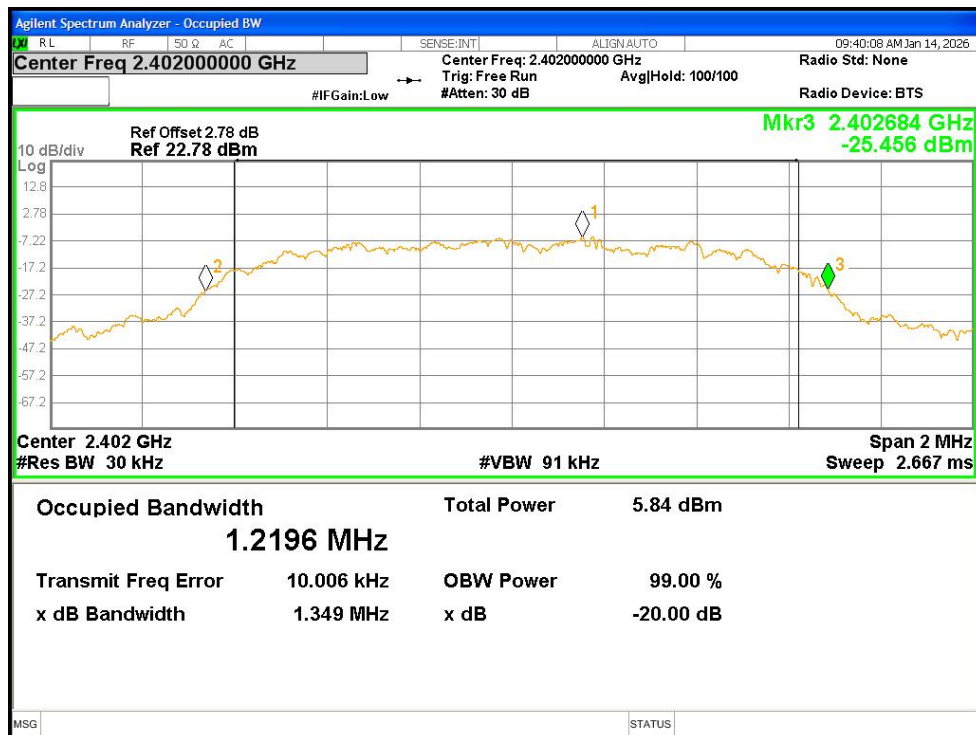
-20dB Bandwidth NVNT 2-DH5 2402MHz Ant1



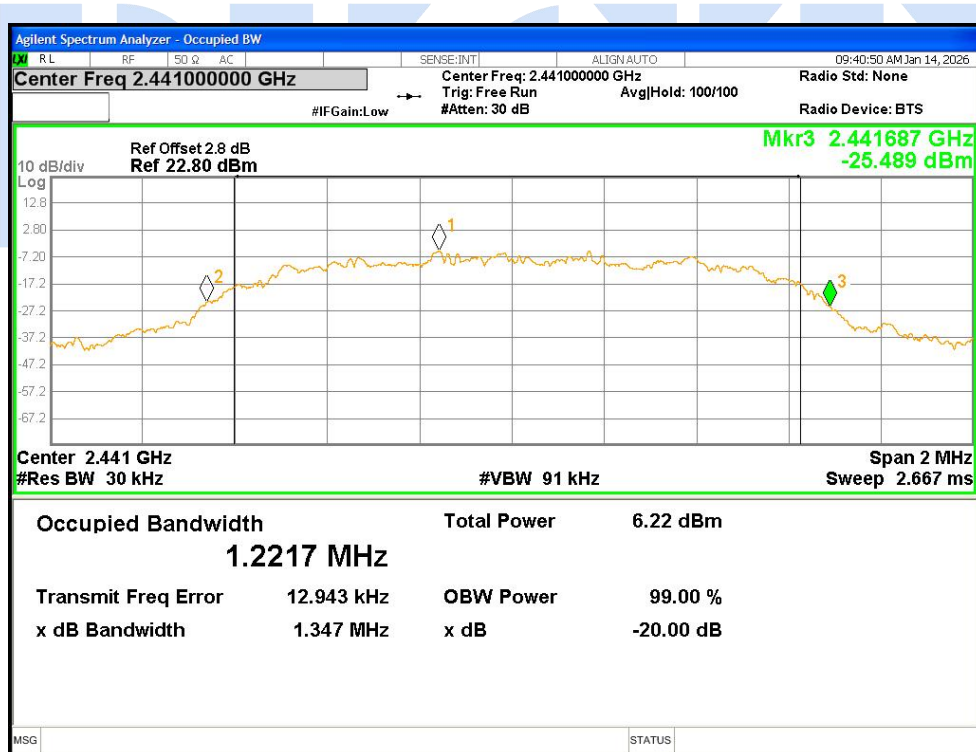
-20dB Bandwidth NVNT 2-DH5 2441MHz Ant1



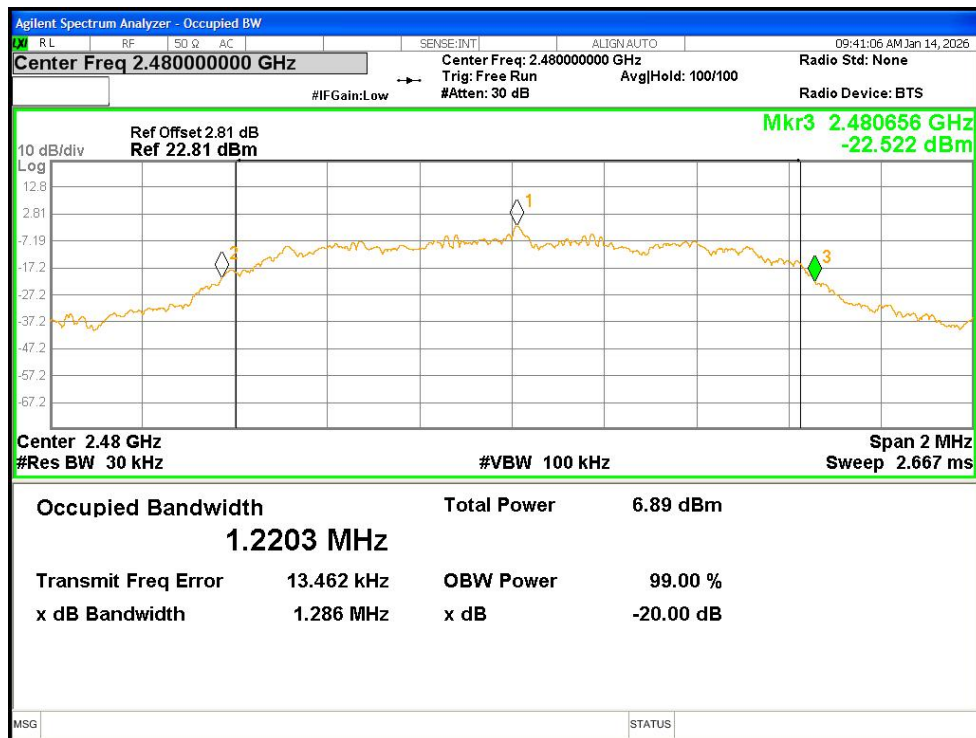
-20dB Bandwidth NVNT 2-DH5 2480MHz Ant1



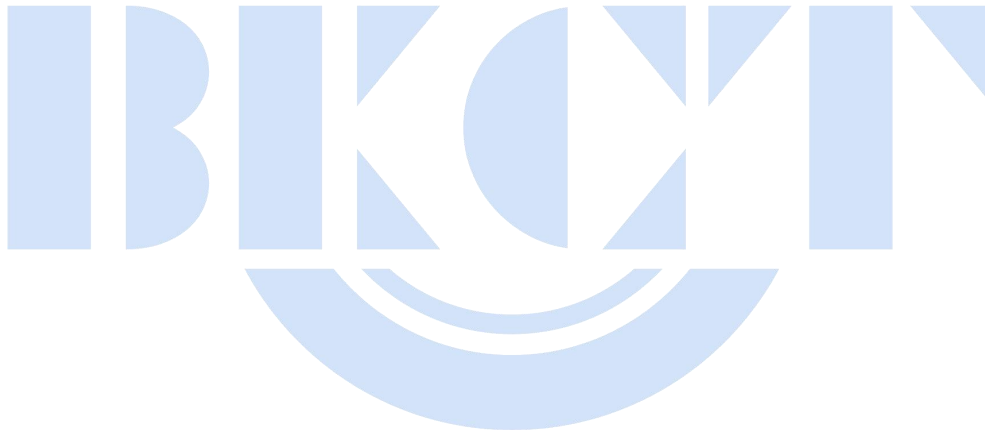
-20dB Bandwidth NVNT 3-DH5 2402MHz Ant1



-20dB Bandwidth NVNT 3-DH5 2441MHz Ant1



-20dB Bandwidth NVNT 3-DH5 2480MHz Ant1



5. Antenna Requirement

According to the FCC Part 15 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 antenna is PCB antenna which permanently attached, and the best case gain of the antenna is 4.05 dBi. It complies with the standard requirement.



6. Test Photographs

Please see Attachment BKC26010002AE-3.

7. Appendix I: Photos of the EUT

Please see Attachment BKC26010002AE-4 and BKC26010002AE-5.

