

TEST REPORT

Product Name : MINI PC
Brand Name : N/A
Model : MS-03-S386H
Series Model : See page 6
FCC ID : 2A49R-MS-03-S386H
Applicant : **MICRO COMPUTER (HK) TECH LIMITED**
Address : RM 18, 28/F, Shui On Centre, 6-8 Harbour Road, WaterfRont,
Wan Chai, HK
Manufacturer : **MICRO COMPUTER (HK) TECH LIMITED**
Address : RM 18, 28/F, Shui On Centre, 6-8 Harbour Road, WaterfRont,
Wan Chai, HK
Standard(s) : FCC CFR Title 47 Part 15 Subpart C Section 15.247
Date of Receipt : April 29, 2026
Date of Test : April 29, 2026~ June 22, 2026
Issued Date : June 23, 2026

Issued By: **Dongguan Yaxu (AiT) Technology Limited**
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Note: This device has been tested and found to comply with the standard(s) listed, this test report merely corresponds to the test sample. It is not permitted to copy extracts of these test result without the written permission of the test laboratory. This report shall not be reproduced except in full, without the written approval of Dongguan Yaxu (AiT) Technology Limited. If there is a need to alter or revise this document, the right belongs to Dongguan Yaxu (AiT) Technology Limited, and it should give a prior written notice of the revision document. This test report must not be used by the client to claim product endorsement.



Report Revise Record

Report Version	Issued Date	Notes
M0	June 23, 2026	Initial Release

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1 TEST SUMMARY

1.1 Test Standards

The tests were performed according to following standards:

[FCC Rules Part 15.247](#): Frequency Hopping, Direct Spread Spectrum and Hybrid Systems that are in operation within the bands of 902-928 MHz, 2400-2483.5 MHz, and 5725-5850 MHz

[ANSI C63.10-2020+Cor. 1-2023+C63.10a-2024 + Errata to C63.10a-2024](#): American National Standard for Testing Unlicensed Wireless Devices

[KDB558074 D01 15.247 Meas Guidance v05r02](#): Guidance for Compliance Measurements on Digital Transmission System, Frequency Hopping Spread Spectrum System, and Hybrid System Devices Operating Under Section 15.247 of the FCC Rules

1.2 Test Summary

Test Item	Section in 47 CFR	Result
Maximum Conducted Output Power	§15.247(b)	Pass*
20dB Bandwidth	§15.247(a)	Pass*
Frequency Separation	§15.247(a)	Pass*
Number Of Hopping Frequency	§15.247(a)	Pass*
Time Of Occupancy (Dwell Time)	§15.247(a)	Pass*
Conducted Spurious Emissions and Band Edges Emissions	§15.205, §15.247(d)	Pass*
Radiated Spurious Emissions	§15.209, §15.247(d)	Pass
Emissions at Restricted Band	§15.205	Pass
AC Mains Conducted Emissions	§15.207(a)	Pass
Antenna Requirements	§15.203	Pass

Note: * means that this item refers to module report for FCC ID:PD9BE211NGW.

1.3 Test Facility

Test Laboratory: Dongguan Yaxu (AiT) Technology Limited

No.22, Jinqianling 3rd Street, Jitigang, Huangjiang, Dongguan, Guangdong, China

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

CNAS-Registration No: L6177

Dongguan Yaxu (AiT) technology Limited is accredited to ISO/IEC 17025:2017 general Requirements for the competence of testing and calibration laboratories (CNAS-CL01 Accreditation Criteria for the competence of testing and calibration laboratories) on April 18, 2022

FCC-Registration No.: 703111 Designation Number: CN1313

Dongguan Yaxu (AiT) Technology Limited has been registered and fully described in a report filed with the (FCC) Federal Communications Commission. The acceptance letter from the FCC is maintained in our files.

IC-Registration No.: 6819A CAB identifier: CN0122

The 3m Semi-anechoic chamber of Dongguan Yaxu (AiT) Technology Limited has been registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing with Registration No.: 6819A

A2LA-Lab Cert. No.: 6317.01

Dongguan Yaxu (AiT) Technology Limited has been accredited by A2LA for technical competence in the field of electrical testing, and proved to be in compliance with ISO/IEC 17025: 2017 General Requirements for the Competence of Testing and Calibration Laboratories and any additional program requirements in the identified field of testing.

1.4 Measurement uncertainty

The data and results referenced in this document are true and accurate. The reader is cautioned that there may be errors within the calibration limits of the equipment and facilities. The measurement uncertainty was calculated for all measurements listed in this test report according to CISPR 16 - 4"Specification for radio disturbance and immunity measuring apparatus and methods – Part 4: Uncertainty in EMC Measurements" and is documented in the Dongguan Yaxu (AiT) Technology Limited's quality system according to DIN EN ISO/IEC 17025. Furthermore, component and process variability of devices similar to that tested may result in additional deviation. The manufacturer has the sole responsibility of continued compliance of the device.

Hereafter the best measurement capability for Yaxu (AiT) laboratory is reported:

Test	Measurement Uncertainty	Notes
Power Line Conducted Emission	9KHz~30MHz ± 1.20 dB	(1)
Radiated Emission	9KHz~30MHz ± 3.10 dB	(1)
Radiated Emission	30MHz~1GHz ± 3.75 dB	(1)
Radiated Emission	1GHz~18GHz ± 3.88 dB	(1)
Radiated Emission	18GHz-40GHz ± 3.88 dB	(1)
RF power, conducted	30MHz~7.5GHz ± 0.16 dB	(1)
RF power density, conducted	± 0.24 dB	(1)
Spurious emissions, conducted	± 0.21 dB	(1)
Temperature	$\pm 1^{\circ}\text{C}$	(1)
Humidity	$\pm 3\%$	(1)
DC and low frequency voltages	$\pm 1.5\%$	(1)
Time	$\pm 2\%$	(1)
Duty cycle	$\pm 2\%$	(1)
Bandwidth	$\pm 1.5 \times 10^{-6}$	(1)

The report uncertainty of measurement $y \pm U$, where expended uncertainty U is based on a standard uncertainty Multiplied by a coverage factor of $k=2$, providing a level of confidence of approximately 95%.

2 GENERAL INFORMATION

2.1 Environmental conditions

During the measurement the environmental conditions were within the listed ranges:

Normal Temperature:	25°C
Relative Humidity:	55 %
Air Pressure:	101 kPa

2.2 General Description of EUT

Product Name:	MINI PC
Model/Type reference:	MS-03-S386H
Serial Model:	MS-03-S**** (where*="0-9","A-Z""a-z", ".", blank space, no character difference between each model is only due to the different model naming methods for different sales regions, other circuit principles, safety structures and key components are all the same, and the difference not affect the safety and electromagnetic compatibility performance of the product.)
Power Ratings:	Input: 19V=12.63A
Adapter information:	Model: SOY-1901263-244-B Input: 100-240V~ 50/60Hz 3.0A Max. Output: 19.0V=12.63A 239.97W
Hardware Version:	N/A
Software Version:	N/A
Sample(s) Status:	AiTDG-260429021-1(Normal sample) AiTDG-260429021-2(Engineer sample)
Bluetooth:	
Supported type:	Bluetooth BR/EDR
Modulation:	GFSK, $\pi/4$ DQPSK, 8DPSK
Operation frequency:	2402MHz~2480MHz
Channel number:	79
Channel separation:	1MHz
Antenna type:	FPC antenna
Antenna gain:	Antenna 1(A):2.41Bi, Antenna 2(B):2.29dBi
Remark:	
- The device used tow antenna and all transmit signals are completely uncorrelated with each other, Directional gain $=10*\log[(10^{G1/10}+10^{G2/10})/N_{ANT}]=10*\log[(10^{2.41/10}+10^{2.29/10})/2]=2.35dBi$. - The above DUT's information was declared by manufacturer. For more detailed features description, please refer to the manufacturer's specifications or the User's Manual.	

2.3 Description of Test Modes and Test Frequency

There are 79 channels provided to the EUT and Channel 00/39/78 were selected to test.

Operation Frequency List:

Channel	Frequency (MHz)
00	2402
01	2403
:	:
38	2440
39	2441
40	2442
:	:
77	2479
78	2480

Note: The line display in grey were the channel selected for testing

Power setting during the test:

During testing, Channel & Power Controlling Software provided by the customer was used to control the operating channel as well as the output power level. The RF output power selection is for the setting of RF output power expected by the customer and is going to be fixed on the firmware of the final end product.

Power Parameters:

Test Software Version	DRTU		
Frequency	2402MHz	2441MHz	2480MHz
BR/EDR	Default	Default	Default

2.4 Special Accessories

Follow auxiliary equipment(s) test with EUT that provided by the manufacturer or laboratory is listed as follow:

Description	Manufacturer	Model	Serial No.	Provided by	Other
/	/	/	/	/	/
/	/	/	/	/	/
/	/	/	/	/	/
/	/	/	/	/	/

2.5 Equipment List for the Test

Conducted Emission measurement						
Item	Test Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal.Due
☒ 1	EMI Test Receiver	R&S	ESCI	100124	2025.09.25	2026.09.24
☒ 2	LISN	R&S	ESH3-Z5	892785/016	2025.09.26	2026.09.25
☒ 3	LISN	KYORITSU	KNW-242	8-837-4	2025.09.26	2026.09.25
☒ 4	Pulse Limiter	R&S	ESH3-Z2	03578810.54	2025.09.25	2026.09.24
☒ 5	CE Software	EZ	EZ-EMC_CE	Ver.AIT-03A	N/A	N/A

Radiation Emission measurement						
Item	Test Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal.Due
☒ 1	Spectrum Analyzer	R&S	FSV40	101470	2025.09.26	2026.09.25
☒ 2	EMI Measuring Receiver	R&S	ESPI	100773	2025.09.25	2026.09.24
☒ 3	Low Noise Pre Amplifier	HP	HP8447E	1937A01855	2025.09.25	2026.09.24
☒ 4	Low Noise Pre Amplifier	Tsj	MLA-0120-A02-34	2648A04738	2025.09.25	2026.09.24
☒ 5	Passive Loop	ETS	6512	00165355	2024.09.04	2026.09.03
☒ 6	TRILOG Super Broadband test Antenna	SCHWARZBEC K	VULB-9160	9160-3206	2024.08.29	2026.08.28
☒ 7	Broadband Horn Antenna	SCHWARZBEC K	BBHA 9120D	452	2024.08.29	2026.08.28
☒ 8	SHF-EHF Horn Antenna 15-40GHz	SCHWARZBEC K	BBHA9170	BBHA9170367	2023.09.12	2026.09.11
☒ 9	6dB Attenuator	JFW	50FPE-006	4360846-949-1	2025.09.23	2026.09.22
☒ 10	Filter	COM-MW	ZBSF6-C2400-2483.5-1079	1079	2025.09.23	2026.09.22
☒ 11	Radiated Cable(9K-1G)	HUBER+SUHN ER	9K-1G	001	2025.09.25	2026.09.24
☒ 12	Radiated Cable(1G-18G)	HUBER+SUHN ER	1G-18G	002	2025.09.25	2026.09.24
☒ 13	Radiated Cable(18G-40G)	HUBER+SUHN ER	18G-40G	003	2025.09.25	2026.09.24
☒ 14	RE Software	EZ	EZ-EMC_RE	Ver.AIT-03A	N/A	N/A

RF Conducted measurement						
Item	Test Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal.Due
☐ 1	Spectrum Analyzer	Agilent	N9020A	MY53421570	2025.09.23	2026.09.22
☐ 2	Power Sensor	Agilent	U2021XA	MY54110007	2025.09.23	2026.09.22
☐ 3	Signal Generator	Agilent	N5182A	MY50143009	2025.09.26	2026.09.25
☐ 4	Analog signal generator	Agilent	E8257	MY51554256	2025.09.23	2026.09.22
☐ 5	Pro.Temp&Humi.chamber	MENTEK	MHP-150-1C	MAA08112501	2025.09.25	2026.09.24
☐ 6	Wideband Radio communication tester	R&S	CMW500	135866	2025.09.23	2026.09.22
☐ 7	DC power supply	ZHAOXIN	RXN-305D-2	28070002559	N/A	N/A
☐ 8	RF Test box	TST	TSTPASS	21033016	2025.09.23	2026.09.22
☐ 9	RF Software	TST	TSTPASS	Version 2.0	N/A	N/A

Note: ☐ is not applicable in this Test Report. ☒ is applicable in this Test Report.

3 TEST CONDITIONS AND RESULTS

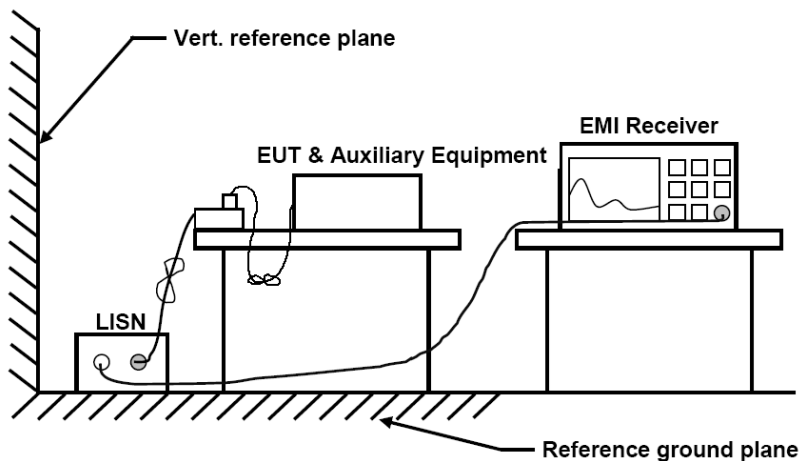
3.1 Conducted Emissions Test

LIMIT

Frequency range (MHz)	Limit (dBuV)	
	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.

TEST CONFIGURATION



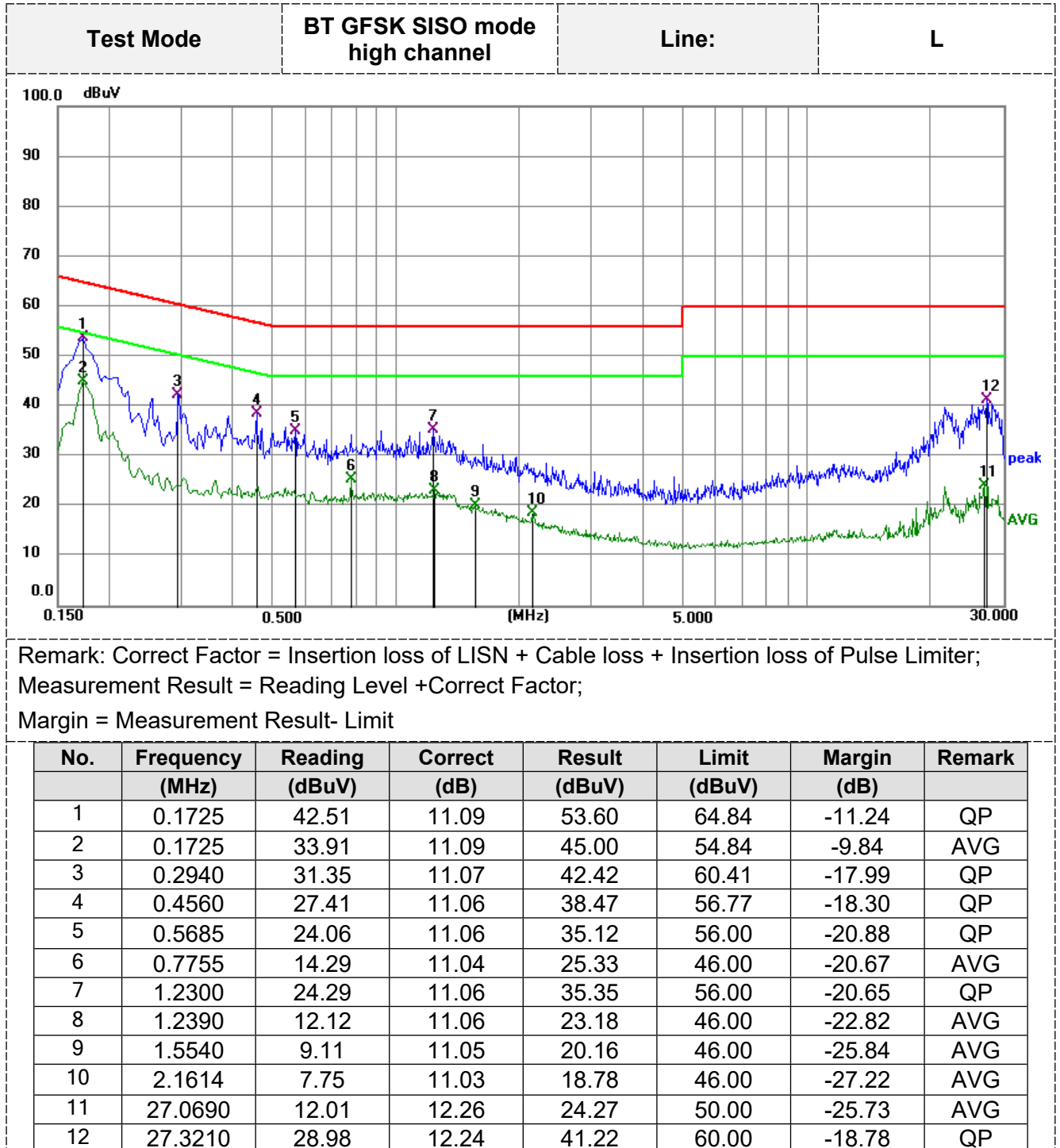
TEST PROCEDURE

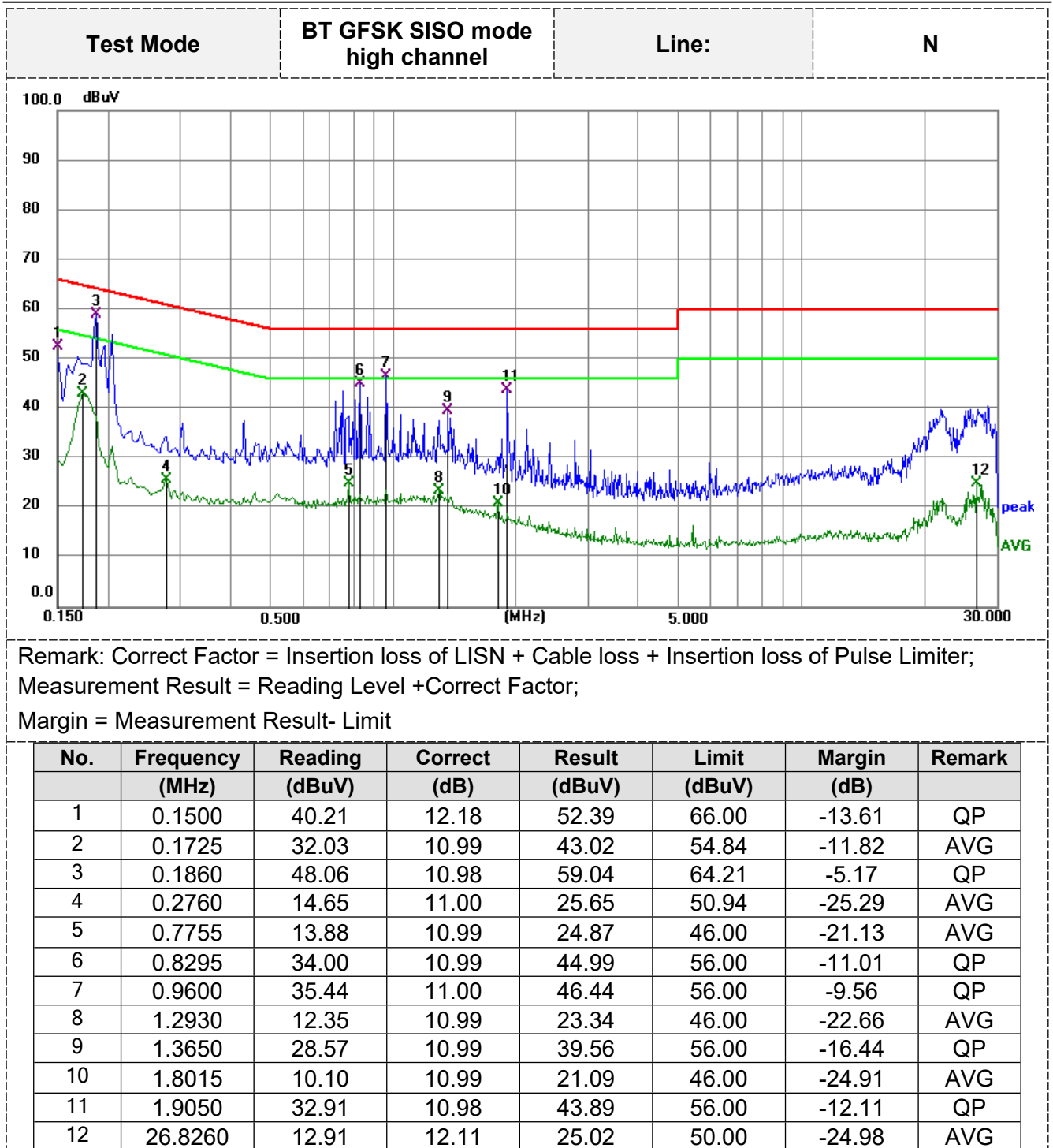
1. The equipment was set up as per the test configuration to simulate typical actual usage per the user's manual. The EUT is a tabletop system; a wooden table with a height of 0.8 meters is used and is placed on the ground plane as per ANSI C63.10.
2. Support equipment, if needed, was placed as per ANSI C63.10.
3. All I/O cables were positioned to simulate typical actual usage as per ANSI C63.10.
4. The adapter received AC120V/60Hz power through a Line Impedance Stabilization Network (LISN) which supplied power source and was grounded to the ground plane.
5. All support equipments received AC power from a second LISN, if any.
6. The EUT test program was started. Emissions were measured on each current carrying line of the EUT using a spectrum Analyzer / Receiver connected to the LISN powering the EUT. The LISN has two monitoring points: Line 1 (Hot Side) and Line 2 (Neutral Side). Two scans were taken: one with Line 1 connected to Analyzer / Receiver and Line 2 connected to a 50 ohm load; the second scan had Line 1 connected to a 50 ohm load and Line 2 connected to the Analyzer / Receiver.
7. Analyzer / Receiver scanned from 150 KHz to 30MHz for emissions in each of the test modes.
8. During the above scans, the emissions were maximized by cable manipulation.

TEST RESULTS

Remark:

1. Pre-scan all BT operation modes at Low, Middle, and High channel; only the worst result of BT GFSK SISO mode high channel at antenna 2 was reported as below:
2. Both 120 VAC, 50/60 Hz and 240 VAC, 50/60 Hz power supply have been tested, only the worst result of 120 VAC, 60 Hz was reported as below:





3.2 Radiated Emissions and Band Edge

Limit

For intentional device, according to § 15.209(a), the general requirement of field strength of radiated emission out of authorized band shall not exceed the following table at a 3 meters measurement distance.

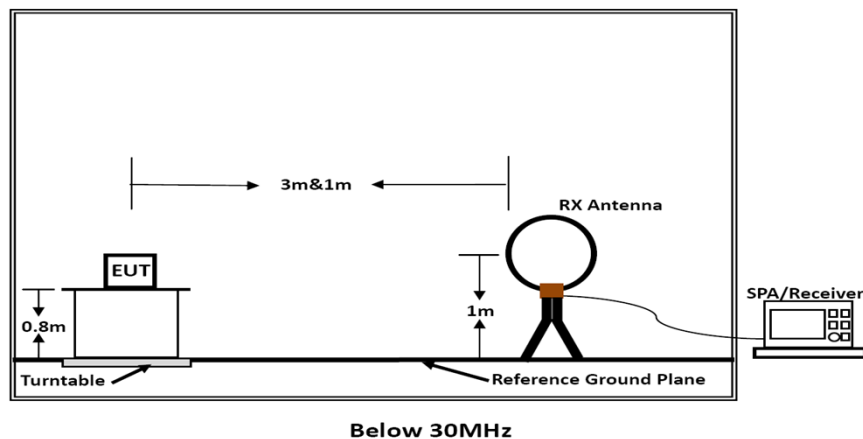
In addition, radiated emissions which fall in the restricted bands, as defined in §15.205(a), must also comply with the radiated emission limits specified in §15.209(a)

Radiated emission limits

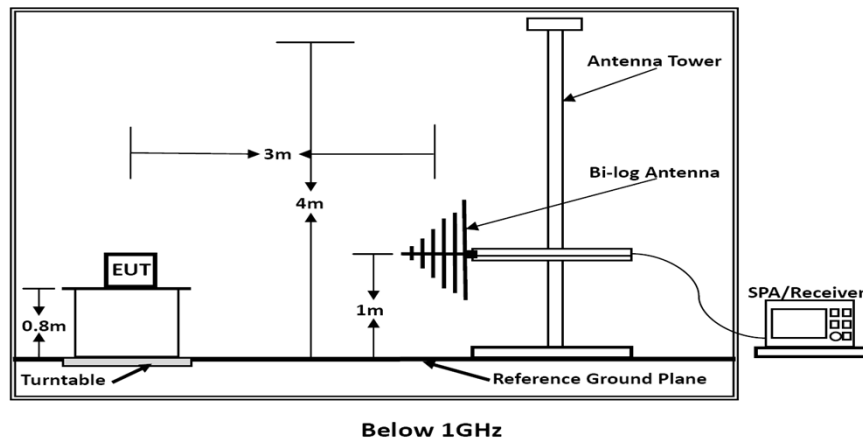
Frequency (MHz)	Distance (Meters)	Radiated (dBμV/m)	Radiated (μV/m)
0.009-0.49	3	$20\log(2400/F(\text{KHz}))+40\log(300/3)$	$2400/F(\text{KHz})$
0.49-1.705	3	$20\log(24000/F(\text{KHz}))+40\log(30/3)$	$24000/F(\text{KHz})$
1.705-30	3	$20\log(30)+40\log(30/3)$	30
30-88	3	40.0	100
88-216	3	43.5	150
216-960	3	46.0	200
Above 960	3	54.0	500

TEST CONFIGURATION

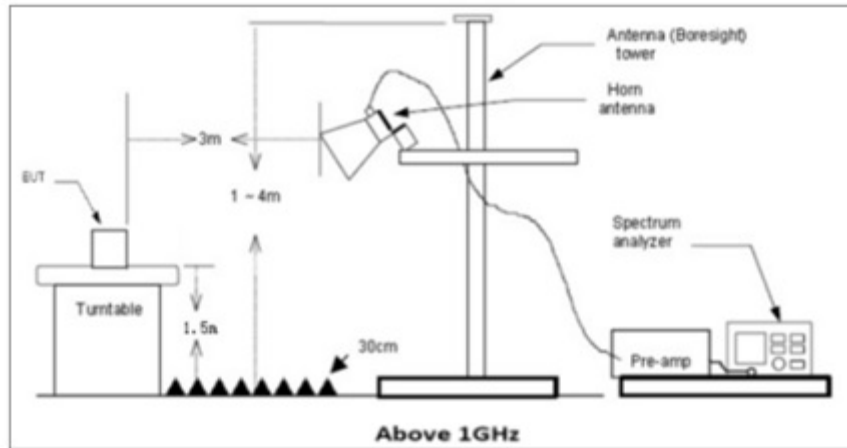
(A) Radiated Emission Test Set-Up, Frequency Below 30MHz



(B) Radiated Emission Test Set-Up, Frequency below 1000MHz



(C) Radiated Emission Test Set-Up, Frequency above 1000MHz



Test Procedure

- Below 1GHz measurement the EUT is placed on a turntable which is 0.8m above ground plane, and above 1GHz measurement EUT was placed on a low permittivity and low loss tangent turn table which is 1.5m above ground plane.
- Maximum procedure was performed by raising the receiving antenna from 1m to 4m and rotating the turn table from 0°C to 360°C to acquire the highest emissions from EUT
- And also, each emission was to be maximized by changing the polarization of receiving antenna both horizontal and vertical.
- Repeat above procedures until all frequency measurements have been completed.
- Radiated emission test frequency band from 9KHz to 25GHz.
- The distance between test antenna and EUT as following table states:

Test Frequency range	Test Antenna Type	Test Distance
9KHz-30MHz	Active Loop Antenna	3
30MHz-1GHz	Bilog Antenna	3
1GHz-26.5GHz	Horn Antenna	3

- Setting test receiver/spectrum as following table states:

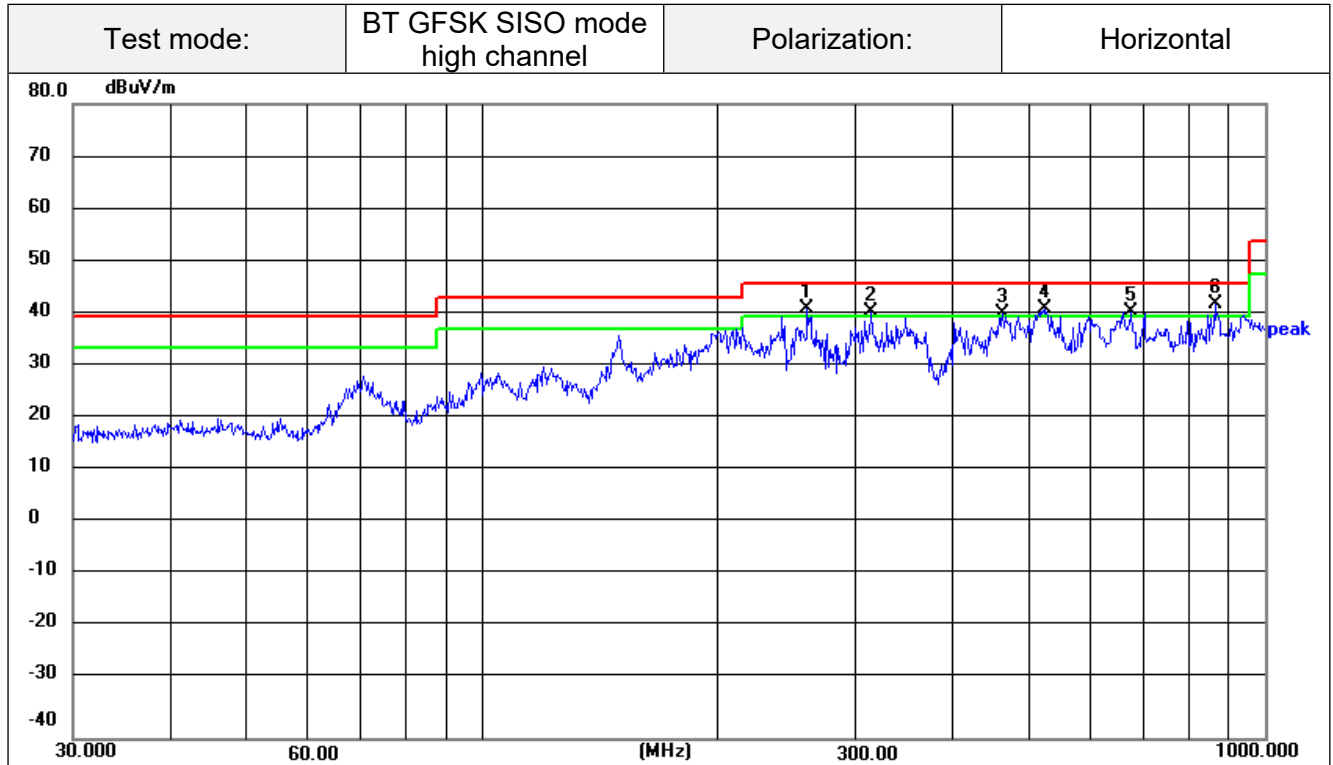
Test Frequency range	Test Receiver/Spectrum Setting	Detector
9KHz-150KHz	RBW=200Hz/VBW=3KHz, Sweep time=Auto	QP
150KHz-30MHz	RBW=9KHz/VBW=100KHz, Sweep time=Auto	QP
30MHz-1GHz	RBW=120KHz/VBW=1000KHz, Sweep time=Auto	QP
1GHz-26.5GHz	Peak Value: RBW=1MHz/VBW=3MHz, Sweep time=Auto Average Value: RBW=1MHz/VBW=10Hz, Sweep time=Auto	Peak

TEST RESULTS

Remark: Radiated emission test from 9 KHz to 10th harmonic of fundamental was verified, and The emission levels from 9kHz to 30MHz are attenuated 20dB below the limit and not recorded in report.

For 30MHz-1GHz

Remark: Pre-scan all BT operation modes at Low, Middle, and High channel; only the worst result of BT GFSK SISO mode high channel at antenna 2 was reported for 30MHz-1GHz test as below:



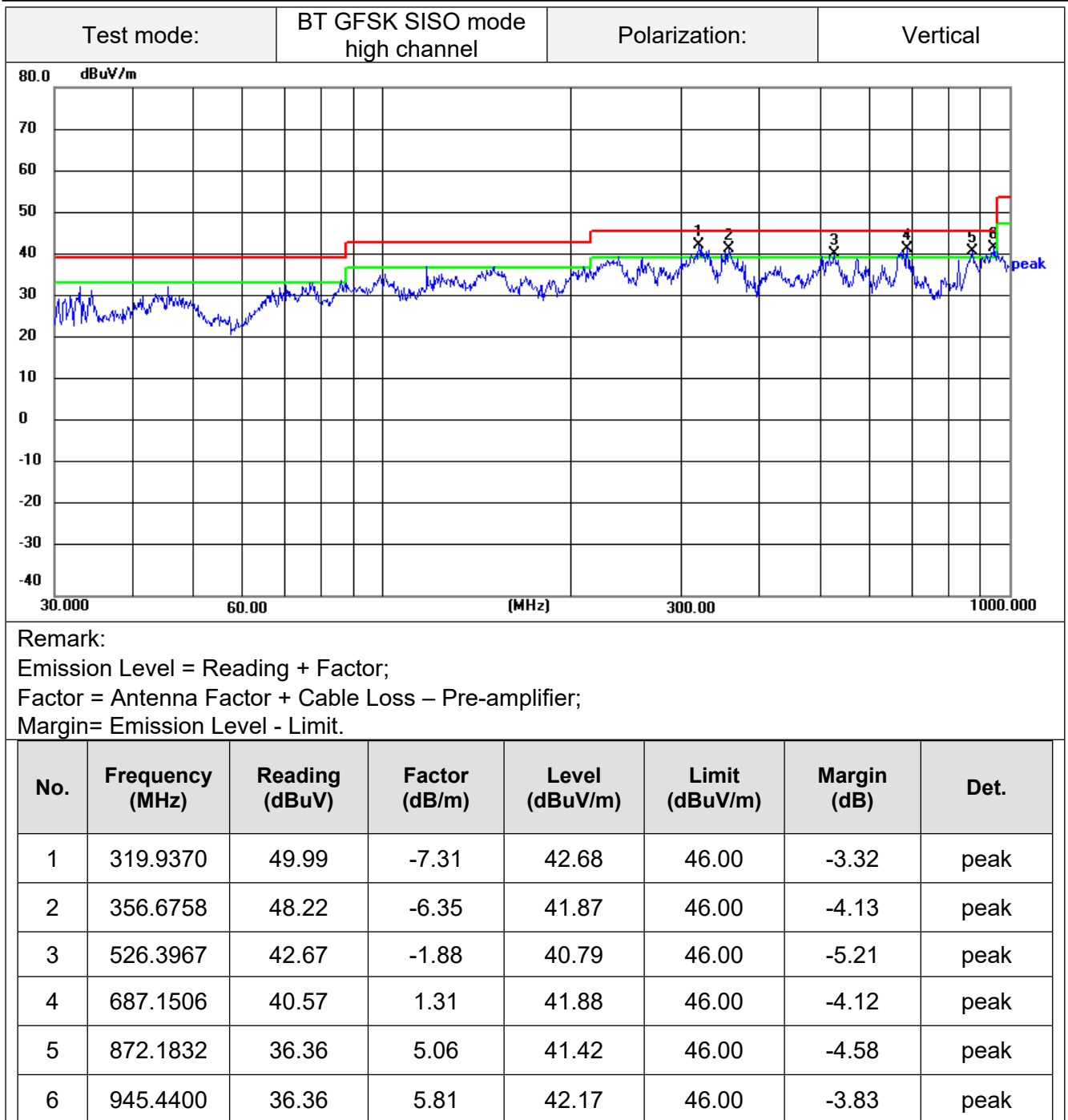
Remark:

Emission Level = Reading + Factor;

Factor = Antenna Factor + Cable Loss – Pre-amplifier;

Margin= Emission Level - Limit.

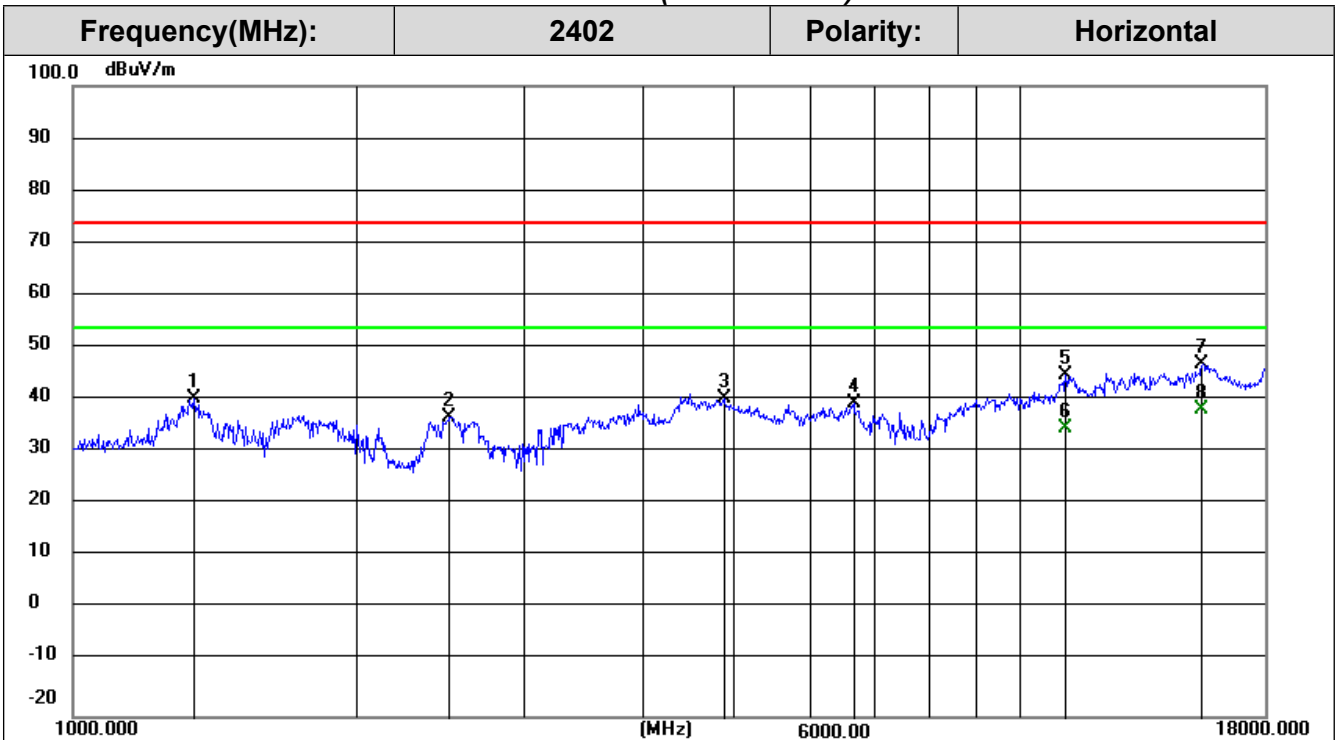
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.
1	260.1444	50.65	-9.33	41.32	46.00	-4.68	peak
2	314.3763	48.27	-7.47	40.80	46.00	-5.20	peak
3	462.3455	43.94	-3.44	40.50	46.00	-5.50	peak
4	524.5540	43.27	-1.82	41.45	46.00	-4.55	peak
5	675.2080	39.53	1.19	40.72	46.00	-5.28	peak
6	863.0561	37.11	5.20	42.31	46.00	-3.69	peak



For 1GHz to 18GHz

Note: All BT operation modes GFSK, Pi/4 DQPSK and 8DPSK have been tested, only worse case GFSK MIMO mode is reported as bellow:

GFSK MIMO (1GHz-18GHz)



Remark:

Filter is used

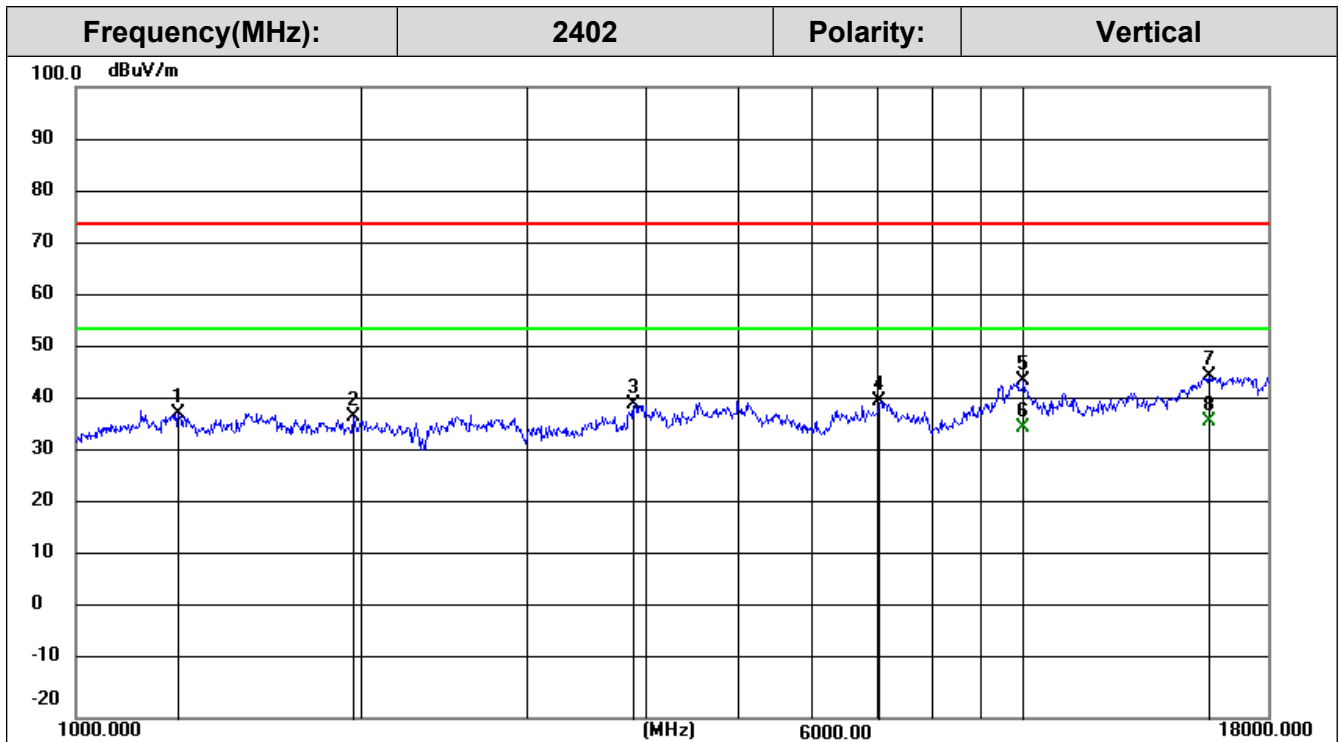
Emission Level = Reading + Factor;

Factor = Antenna Factor + Cable Loss – Pre-amplifier;

Margin= Emission Level - Limit.

No.	Frequency (MHz)	Reading (dBuV/m)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1346.380	66.51	-25.90	40.61	74.00	-33.39	peak
2	2495.561	58.67	-21.57	37.10	74.00	-36.90	peak
3	4858.571	54.68	-14.00	40.68	74.00	-33.32	peak
4	6655.914	48.46	-8.87	39.59	74.00	-34.41	peak
5	11108.157	45.89	-0.89	45.00	74.00	-29.00	peak
6	11108.157	35.89	-0.89	35.00	54.00	-19.00	AVG
7	15523.961	47.72	-0.58	47.14	74.00	-26.86	peak
8	15523.961	39.01	-0.58	38.43	54.00	-15.57	AVG

Note:A filter was used to exclude fundamental during the test to prevent overloading the testing equipment.



Remark:

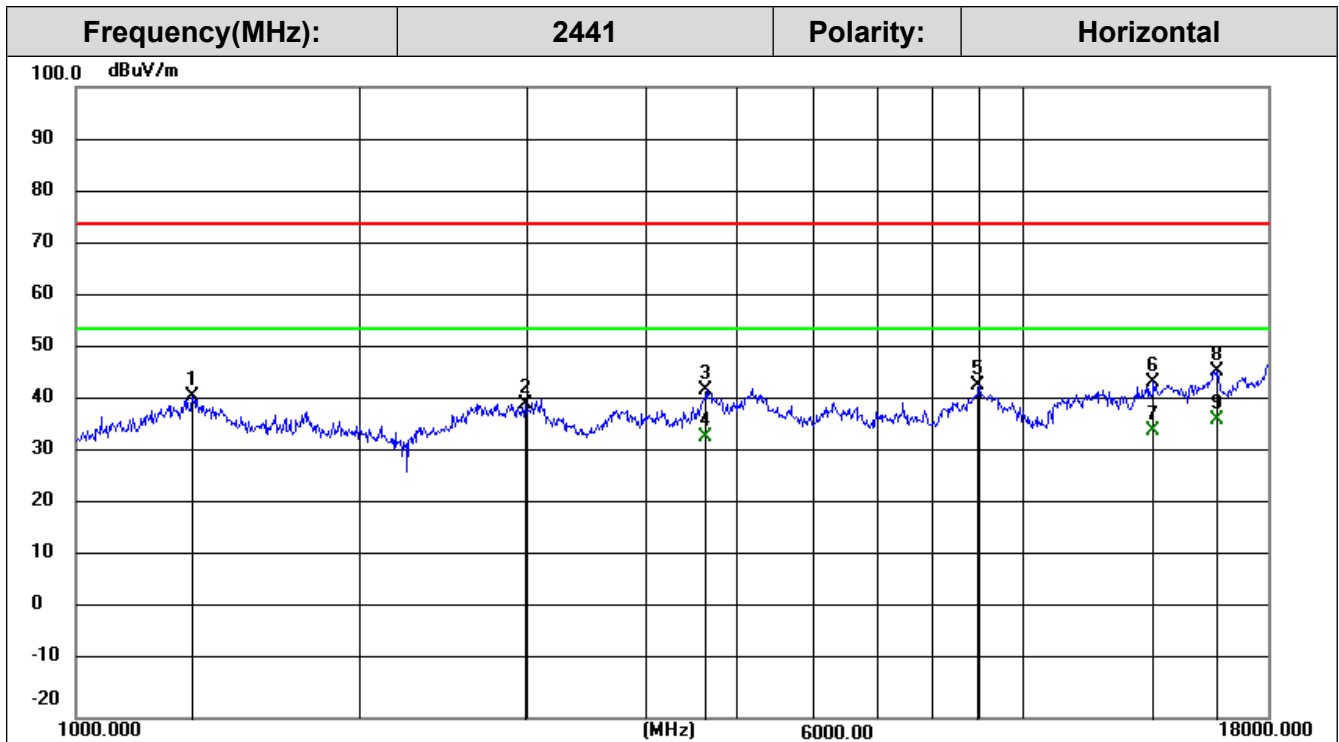
Emission Level = Reading + Factor;

Factor = Antenna Factor + Cable Loss – Pre-amplifier;

Margin= Emission Level - Limit.

No.	Frequency (MHz)	Reading (dBuV/m)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1285.533	63.74	-25.81	37.93	74.00	-36.07	peak
2	1971.233	60.46	-23.15	37.31	74.00	-36.69	peak
3	3883.514	57.14	-17.48	39.66	74.00	-34.34	peak
4	7054.052	47.88	-7.72	40.16	74.00	-33.84	peak
5	9984.411	47.12	-3.08	44.04	74.00	-29.96	peak
6	9984.411	38.17	-3.08	35.09	54.00	-18.91	AVG
7	15659.157	45.68	-0.56	45.12	74.00	-28.88	peak
8	15659.157	37.02	-0.56	36.46	54.00	-17.54	AVG

Note: A filter was used to exclude fundamental during the test to prevent overloading the testing equipment.



Remark:

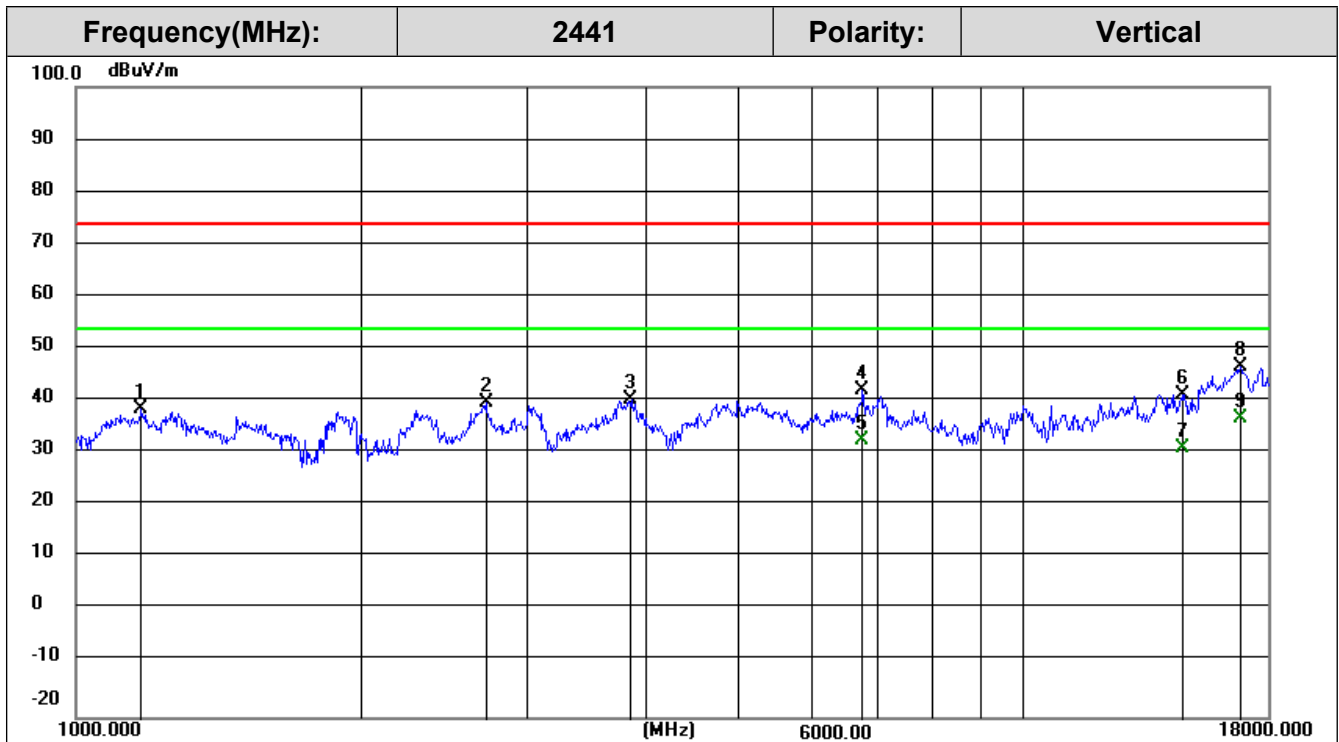
Emission Level = Reading + Factor;

Factor = Antenna Factor + Cable Loss – Pre-amplifier;

Margin= Emission Level - Limit.

No.	Frequency (MHz)	Reading (dBuV/m)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1329.365	67.09	-25.86	41.23	74.00	-32.77	peak
2	2981.038	59.31	-19.48	39.83	74.00	-34.17	peak
3	4624.272	57.55	-15.06	42.49	74.00	-31.51	peak
4	4624.272	48.49	-15.06	33.43	54.00	-20.57	AVG
5	8956.208	47.61	-4.24	43.37	74.00	-30.63	peak
6	13689.835	44.54	-0.76	43.78	74.00	-30.22	peak
7	13689.835	35.52	-0.76	34.76	54.00	-19.24	AVG
8	15923.882	46.38	-0.55	45.83	74.00	-28.17	peak
9	15923.882	37.28	-0.55	36.73	54.00	-17.27	AVG

Note: A filter was used to exclude fundamental during the test to prevent overloading the testing equipment.



Remark:

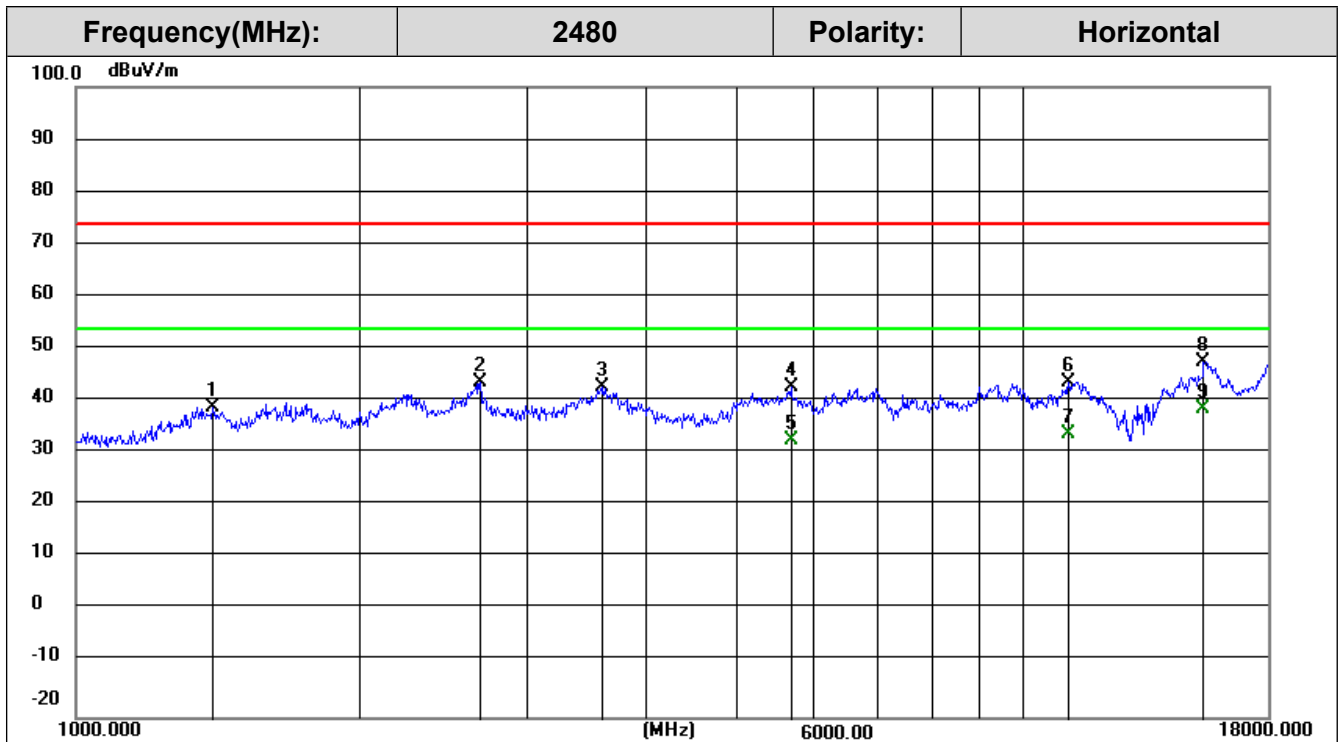
Emission Level = Reading + Factor;

Factor = Antenna Factor + Cable Loss – Pre-amplifier;

Margin= Emission Level - Limit.

No.	Frequency (MHz)	Reading (dBuV/m)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1173.999	64.61	-25.69	38.92	74.00	-35.08	peak
2	2713.758	60.48	-20.62	39.86	74.00	-34.14	peak
3	3853.325	58.12	-17.59	40.53	74.00	-33.47	peak
4	6750.851	50.98	-8.57	42.41	74.00	-31.59	peak
5	6750.851	41.29	-8.57	32.72	54.00	-21.28	AVG
6	14690.171	41.86	-0.38	41.48	74.00	-32.52	peak
7	14690.171	31.66	-0.38	31.28	54.00	-22.72	AVG
8	16852.033	47.54	-0.68	46.86	74.00	-27.14	peak
9	16852.033	37.84	-0.68	37.16	54.00	-16.84	AVG

Note: A filter was used to exclude fundamental during the test to prevent overloading the testing equipment.



Remark:

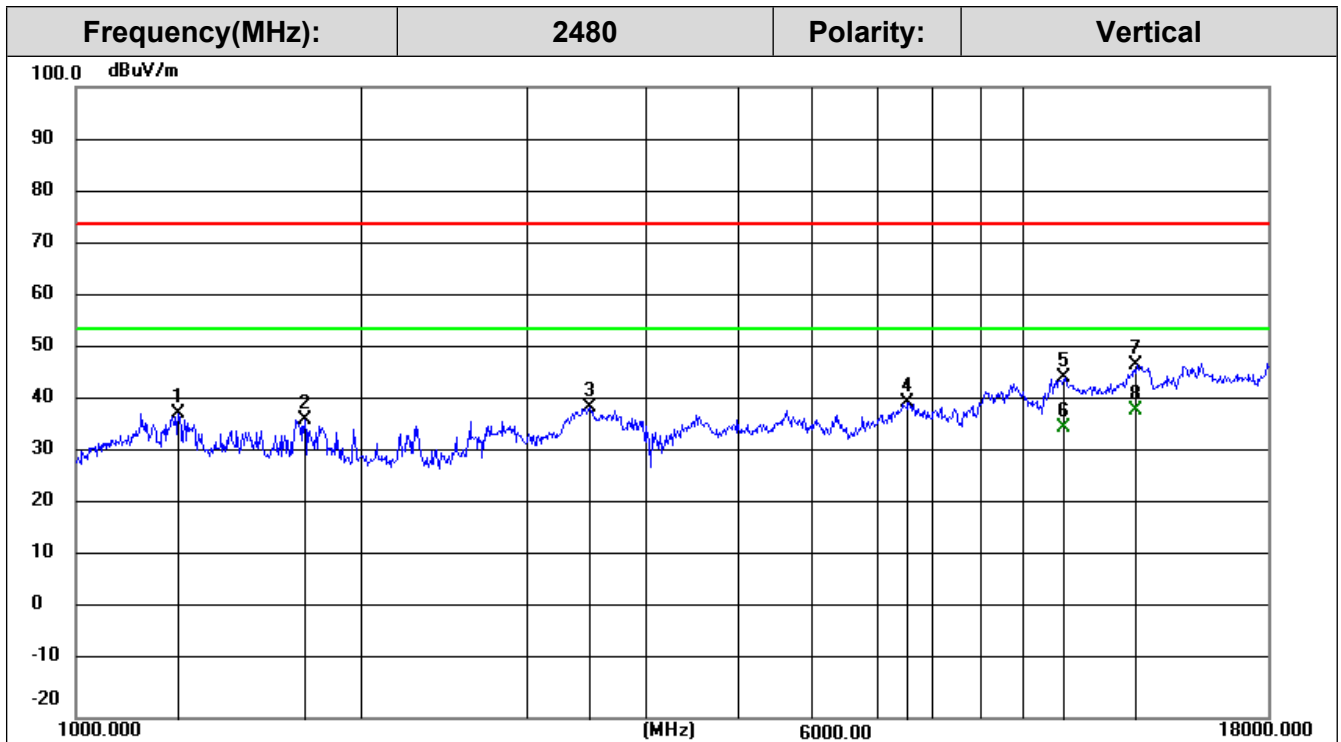
Emission Level = Reading + Factor;

Factor = Antenna Factor + Cable Loss – Pre-amplifier;

Margin= Emission Level - Limit.

No.	Frequency (MHz)	Reading (dBuV/m)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1398.336	65.20	-25.97	39.23	74.00	-34.77	peak
2	2671.731	64.66	-20.80	43.86	74.00	-30.14	peak
3	3584.709	61.33	-18.47	42.86	74.00	-31.14	peak
4	5664.525	54.94	-12.07	42.87	74.00	-31.13	peak
5	5664.525	44.99	-12.07	32.92	54.00	-21.08	AVG
6	11108.157	44.89	-0.89	44.00	74.00	-30.00	peak
7	11108.157	34.97	-0.89	34.08	54.00	-19.92	AVG
8	15456.802	48.23	-0.58	47.65	74.00	-26.35	peak
9	15456.802	39.30	-0.58	38.72	54.00	-15.28	AVG

Note: A filter was used to exclude fundamental during the test to prevent overloading the testing equipment.



Remark:

Emission Level = Reading + Factor;

Factor = Antenna Factor + Cable Loss – Pre-amplifier;

Margin= Emission Level - Limit.

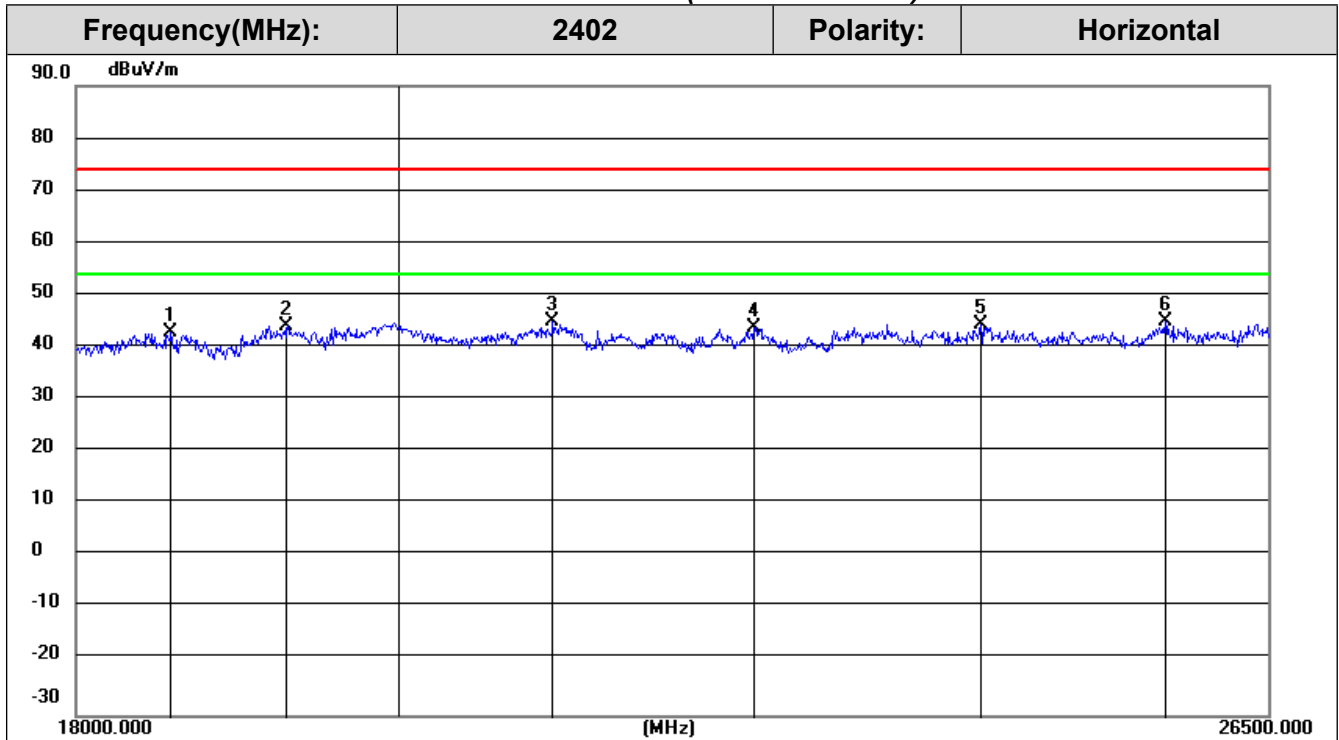
No.	Frequency (MHz)	Reading (dBuV/m)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	1285.533	63.74	-25.81	37.93	74.00	-36.07	peak
2	1744.375	61.03	-24.27	36.76	74.00	-37.24	peak
3	3481.574	57.80	-18.78	39.02	74.00	-34.98	peak
4	7528.047	47.11	-7.21	39.90	74.00	-34.10	peak
5	11031.367	45.39	-0.77	44.62	74.00	-29.38	peak
6	11031.367	35.96	-0.77	35.19	54.00	-18.81	AVG
7	13120.358	49.02	-2.01	47.01	74.00	-26.99	peak
8	13120.358	40.46	-2.01	38.45	54.00	-15.55	AVG

Note: A filter was used to exclude fundamental during the test to prevent overloading the testing equipment.

For above 18GHz

Remark: Pre-scan all GFSK, Pi/4 DQPSK and 8DPSK operation modes, and no spurious found, only one channel plots recorded below represent the worst scenario.

GFSK MIMO mode (18GHz-26.5GHz)



Remark:

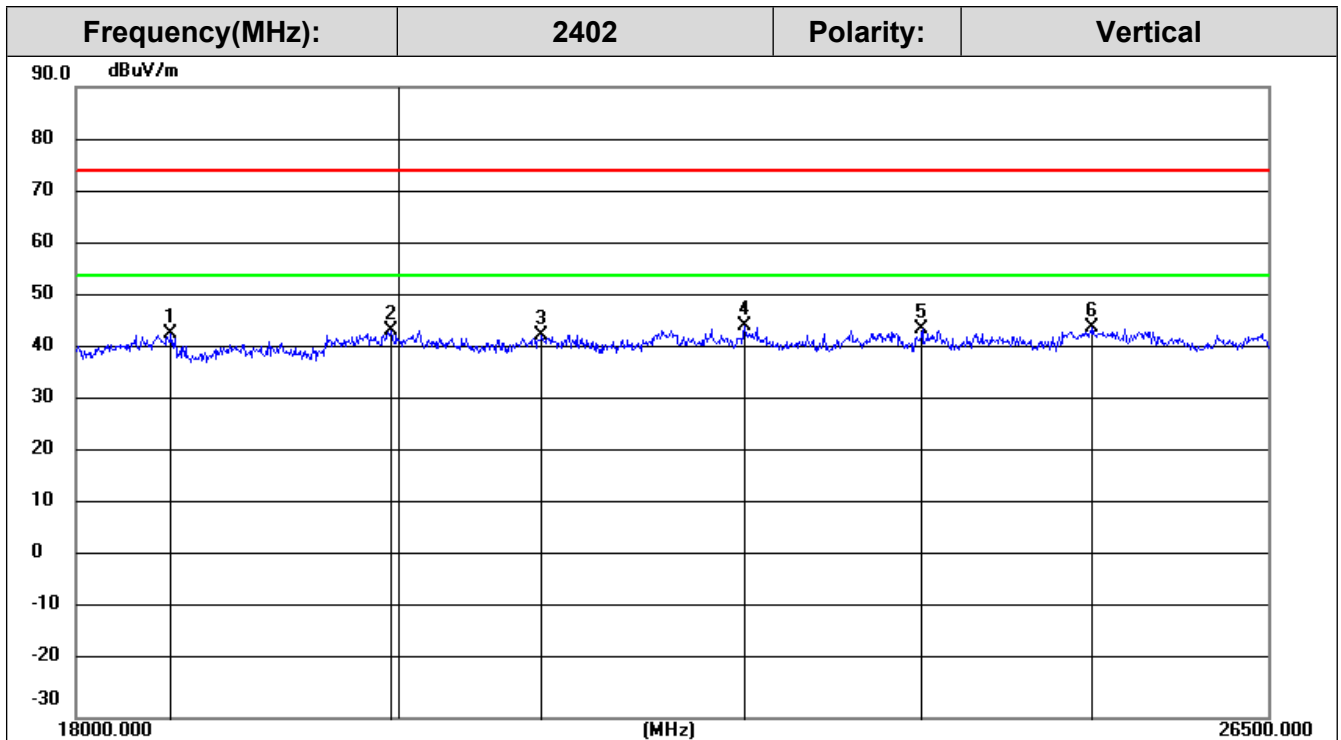
Filter is used

Emission Level = Reading + Factor;

Factor = Antenna Factor + Cable Loss – Pre-amplifier;

Margin= Emission Level - Limit.

No.	Frequency (MHz)	Reading (dBuV/m)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	18569.250	61.24	-18.18	43.06	74.00	-30.94	peak
2	19288.841	61.93	-17.55	44.38	74.00	-29.62	peak
3	21018.234	61.72	-16.40	45.32	74.00	-28.68	peak
4	22437.979	61.29	-17.24	44.05	74.00	-29.95	peak
5	24144.304	60.27	-15.62	44.65	74.00	-29.35	peak
6	25638.992	61.20	-16.13	45.07	74.00	-28.93	peak



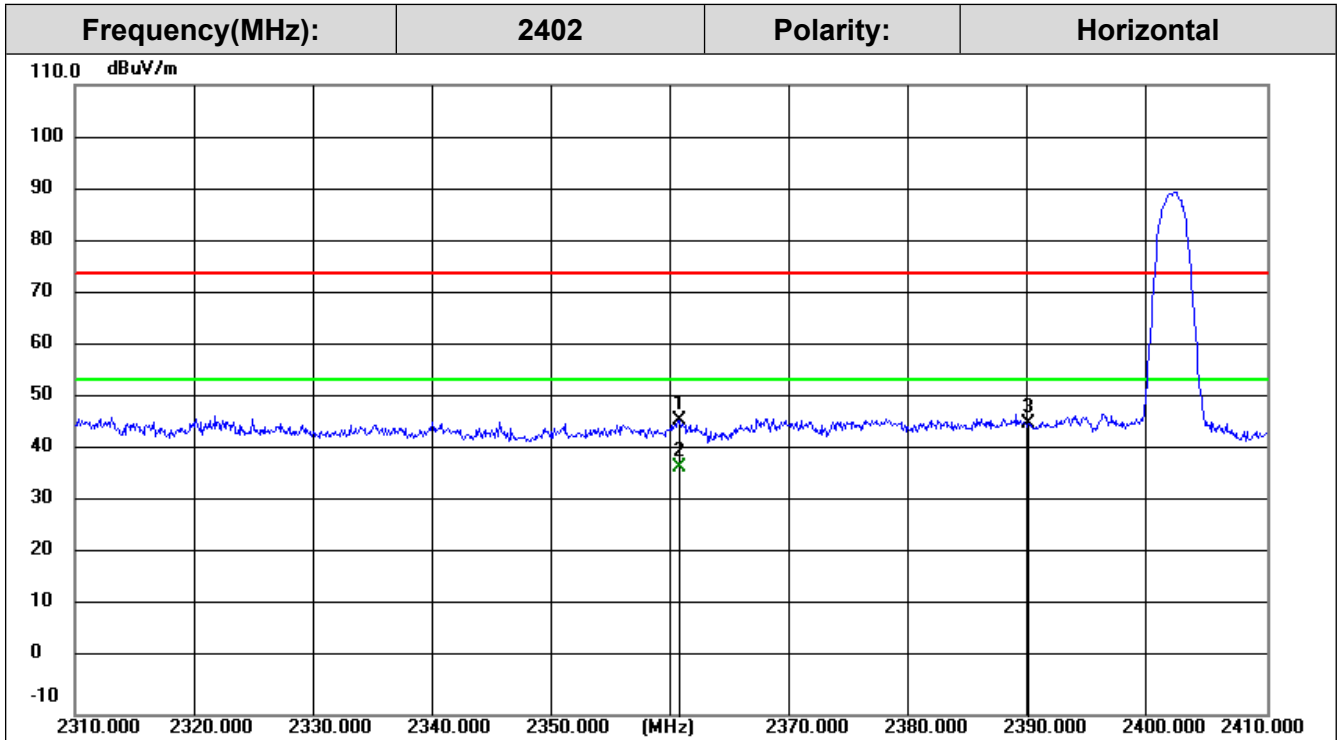
Remark:

Emission Level = Reading + Factor;

Factor = Antenna Factor + Cable Loss – Pre-amplifier;

Margin= Emission Level - Limit.

No.	Frequency (MHz)	Reading (dBuV/m)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	18570.686	61.39	-18.18	43.21	74.00	-30.79	peak
2	19943.540	60.60	-16.82	43.78	74.00	-30.22	peak
3	20939.528	59.30	-16.39	42.91	74.00	-31.09	peak
4	22368.659	61.73	-17.19	44.54	74.00	-29.46	peak
5	23690.116	59.82	-15.93	43.89	74.00	-30.11	peak
6	25043.105	60.88	-16.69	44.19	74.00	-29.81	peak

Radiation Restricted band
GFSK MIMO mode


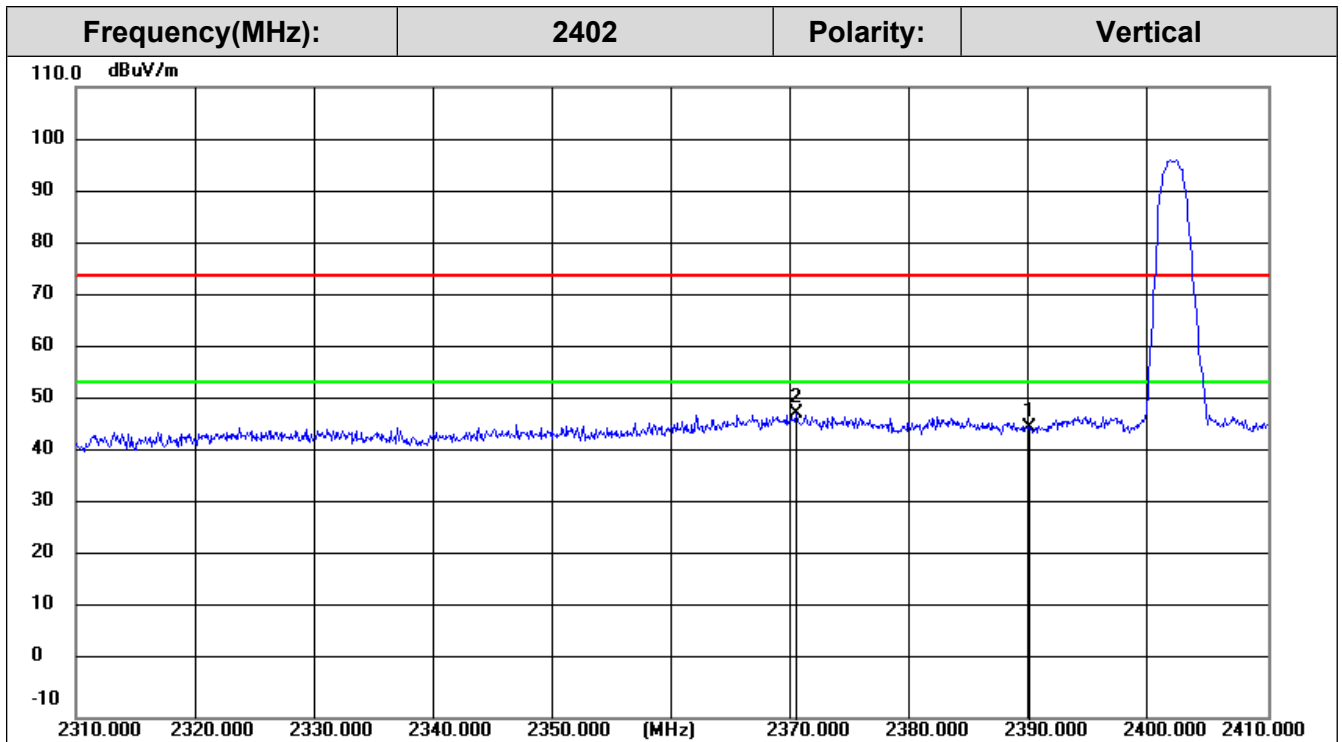
Remark:

Emission Level = Reading + Factor;

Factor = Antenna Factor + Cable Loss – Pre-amplifier;

Margin= Emission Level - Limit.

No.	Frequency (MHz)	Reading (dBuV/m)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2360.700	58.13	-11.95	46.18	74.00	-27.82	peak
2	2360.700	49.14	-11.95	37.19	54.00	-16.81	AVG
3	2390.000	57.33	-11.87	45.46	74.00	-28.54	peak



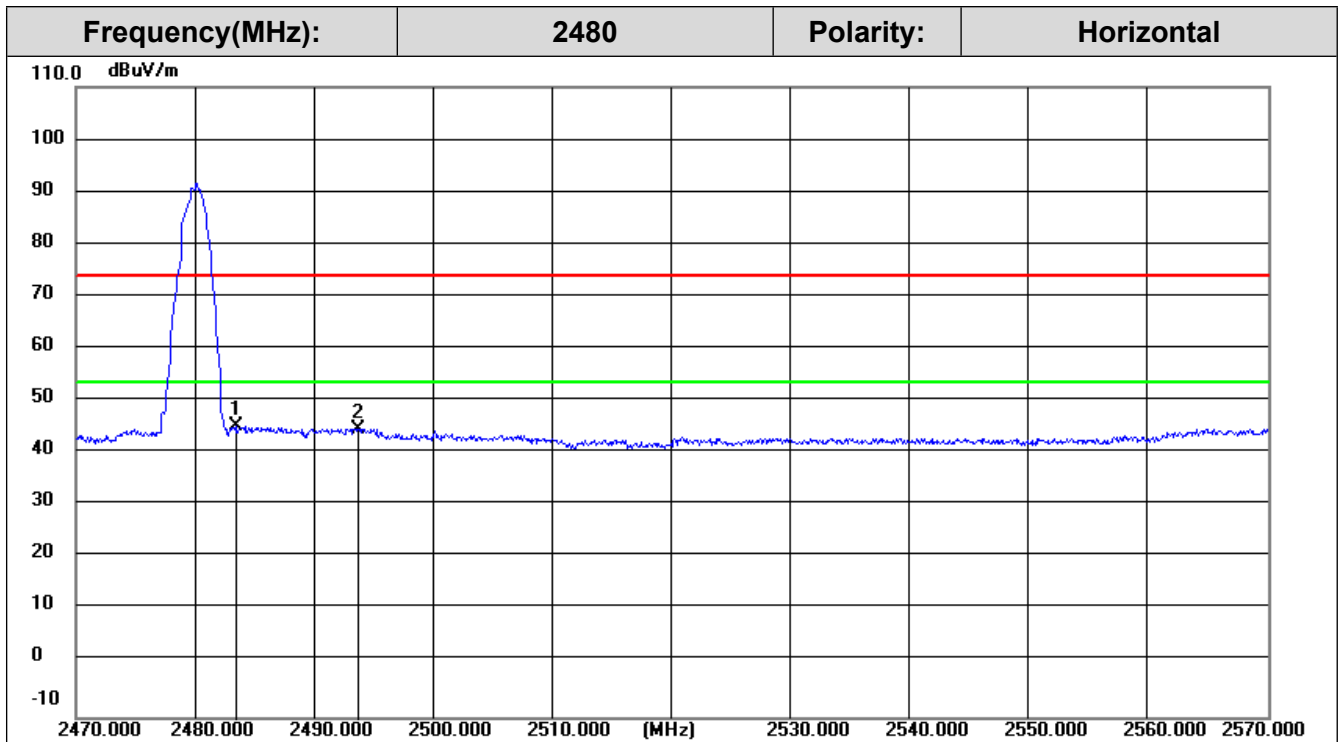
Remark:

Emission Level = Reading + Factor;

Factor = Antenna Factor + Cable Loss – Pre-amplifier;

Margin= Emission Level - Limit.

No.	Frequency (MHz)	Reading (dBuV/m)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2390.000	56.96	-11.87	45.09	74.00	-28.91	peak
2	2370.400	59.69	-11.92	47.77	74.00	-26.23	peak



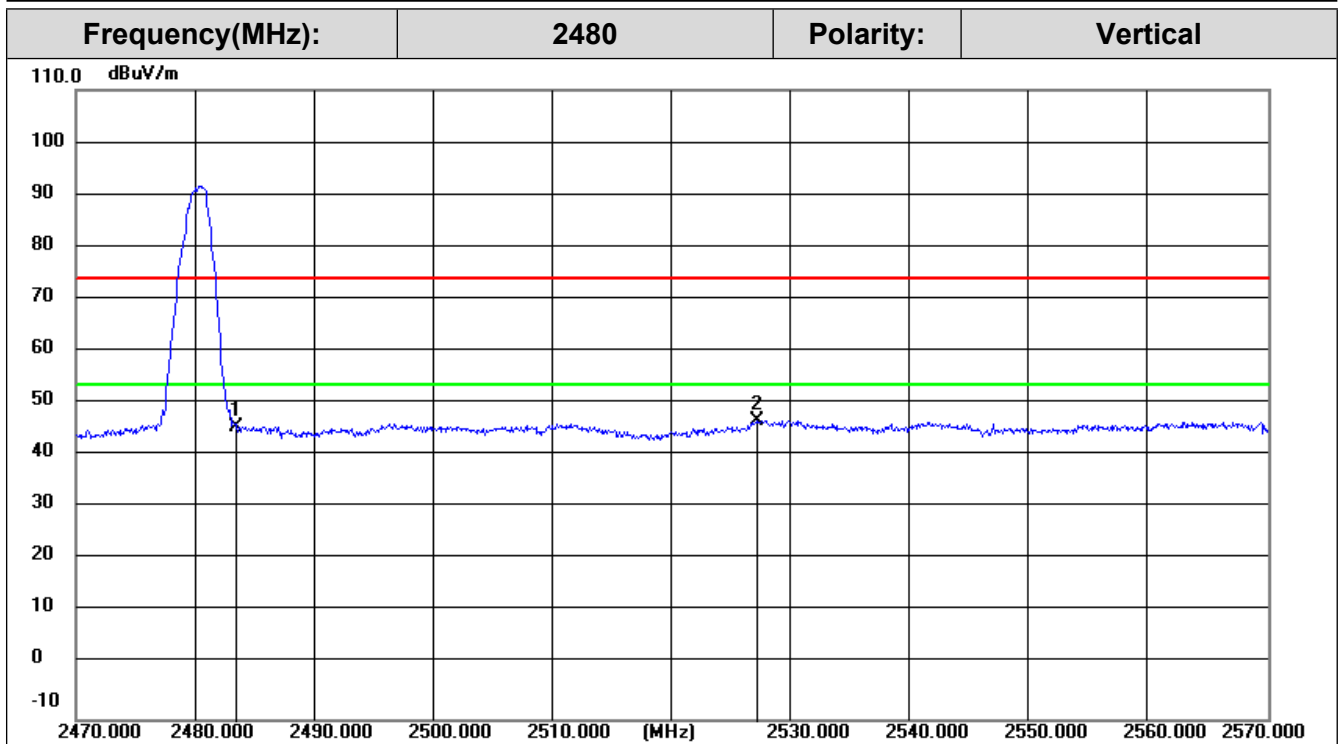
Remark:

Emission Level = Reading + Factor;

Factor = Antenna Factor + Cable Loss – Pre-amplifier;

Margin= Emission Level - Limit.

No.	Frequency (MHz)	Reading (dBuV/m)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2483.500	57.01	-11.60	45.41	74.00	-28.59	peak
2	2493.700	56.62	-11.57	45.05	74.00	-28.95	peak



Remark:

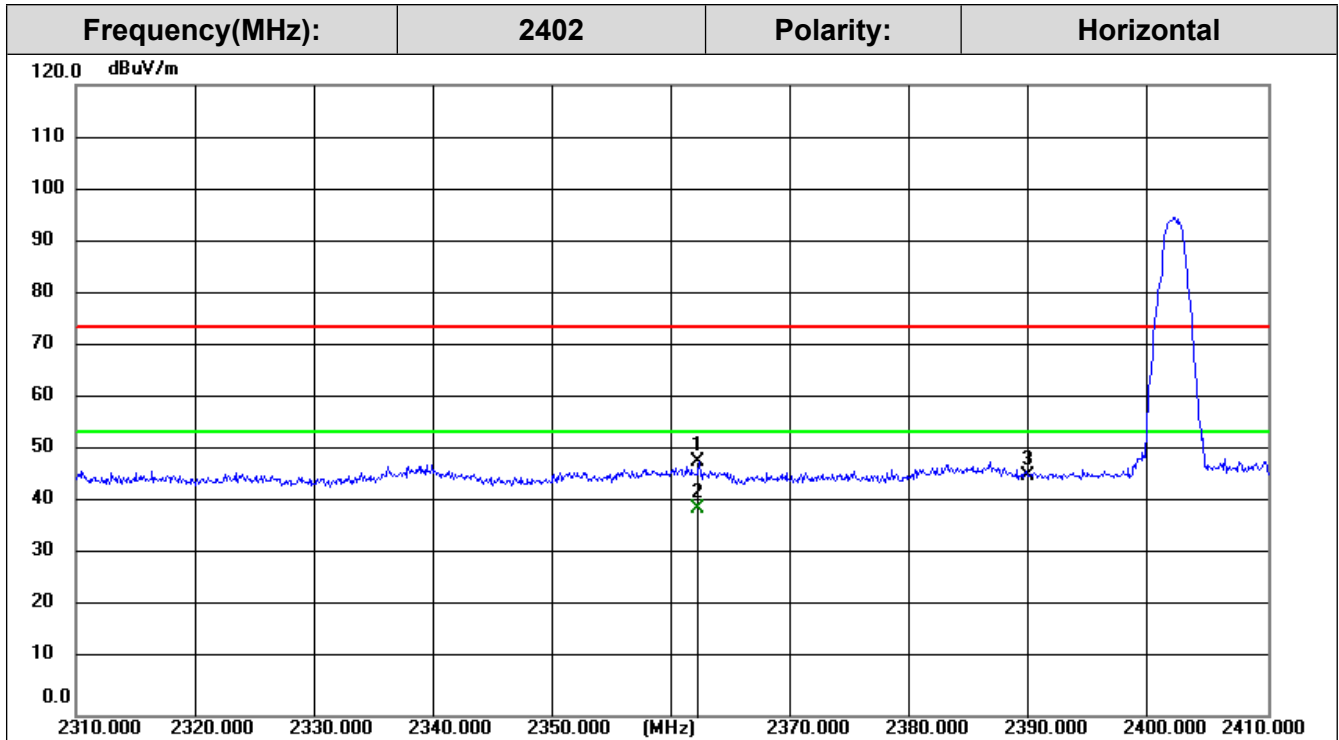
Emission Level = Reading + Factor;

Factor = Antenna Factor + Cable Loss – Pre-amplifier;

Margin= Emission Level - Limit.

No.	Frequency (MHz)	Reading (dBuV/m)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2483.500	57.38	-11.60	45.78	74.00	-28.22	peak
2	2527.200	58.60	-11.44	47.16	74.00	-26.84	peak

8DPSK MIMO mode



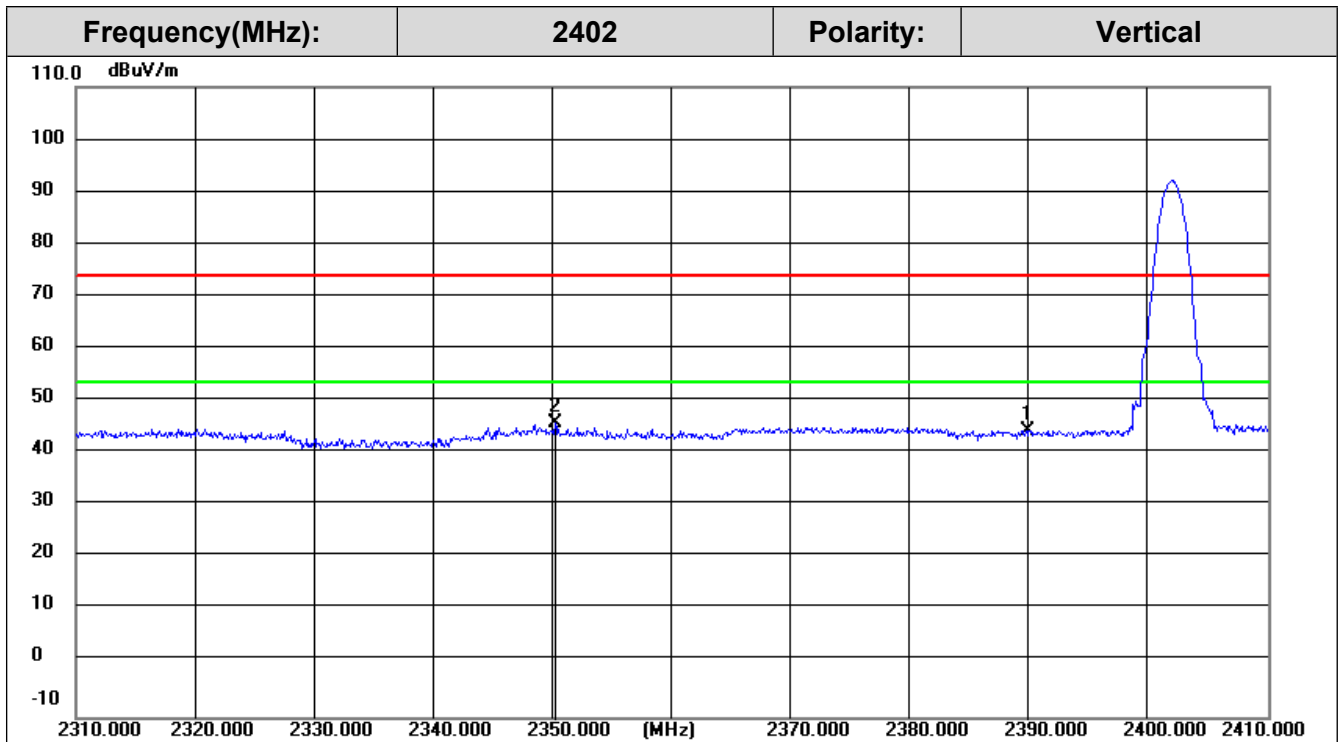
Remark:

Emission Level = Reading + Factor;

Factor = Antenna Factor + Cable Loss – Pre-amplifier;

Margin= Emission Level - Limit.

No.	Frequency (MHz)	Reading (dBuV/m)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2362.313	60.21	-11.95	48.26	74.00	-25.74	peak
2	2362.313	51.41	-11.95	39.46	54.00	-14.54	AVG
3	2390.000	57.56	-11.87	45.69	74.00	-28.31	peak



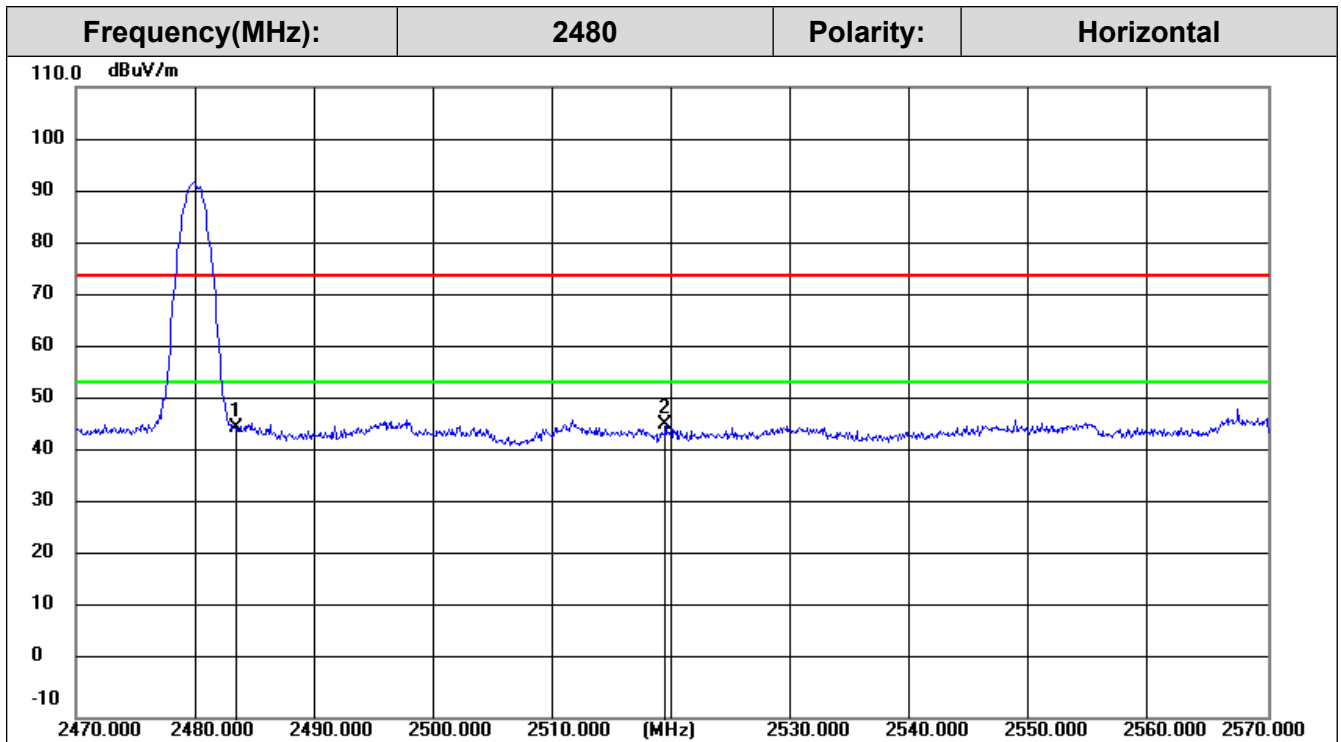
Remark:

Emission Level = Reading + Factor;

Factor = Antenna Factor + Cable Loss – Pre-amplifier;

Margin= Emission Level - Limit.

No.	Frequency (MHz)	Reading (dBuV/m)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2390.000	56.49	-11.87	44.62	74.00	-29.38	peak
2	2350.290	57.99	-11.98	46.01	74.00	-27.99	peak



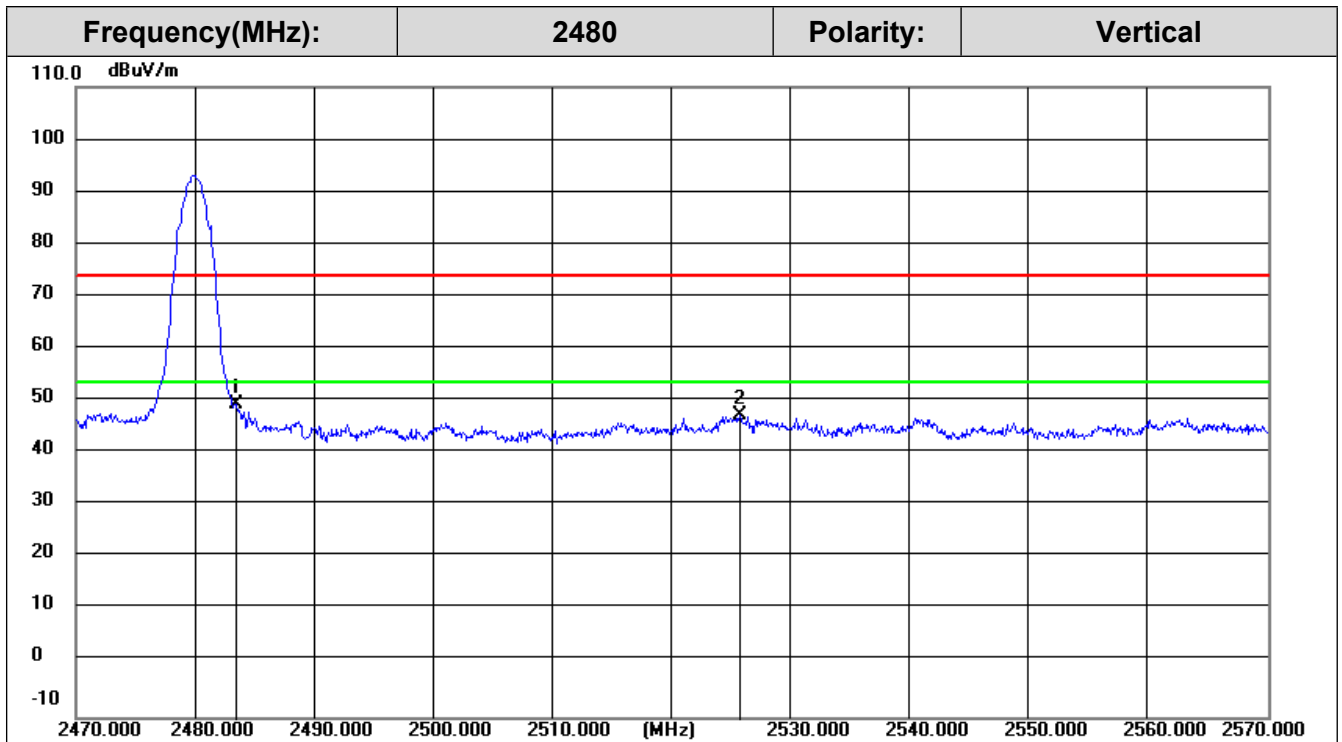
Remark:

Emission Level = Reading + Factor;

Factor = Antenna Factor + Cable Loss – Pre-amplifier;

Margin= Emission Level - Limit.

No.	Frequency (MHz)	Reading (dBuV/m)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2483.500	56.97	-11.60	45.37	74.00	-28.63	peak
2	2519.583	57.23	-11.47	45.76	74.00	-28.24	peak



Remark:

Emission Level = Reading + Factor;

Factor = Antenna Factor + Cable Loss – Pre-amplifier;

Margin= Emission Level - Limit.

No.	Frequency (MHz)	Reading (dBuV/m)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2483.500	61.35	-11.60	49.75	74.00	-24.25	peak
2	2525.727	58.92	-11.44	47.48	74.00	-26.52	peak

3.3 Antenna Requirement

Standard Applicable

For intentional device, according to FCC 47 CFR Section 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, 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

FCC CFR Title 47 Part 15 Subpart C Section 15.247(b) (4):

(4) The conducted output power limit specified in paragraph (b) of this section is based on the use of antennas with directional gains that do not exceed 6 dBi. Except as shown in paragraph (c) of this section, if transmitting antennas of directional gain greater than 6 dBi are used, the conducted output power from the intentional radiator shall be reduced below the stated values in paragraphs (b)(1), (b)(2), and (b)(3) of this section, as appropriate, by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

Test Result

The device used 50Ω FPC Antenna, the maximum gain of antenna is 2.41dBi. There is no consideration of replacement the antenna.

4 Test Setup Photographs of EUT

Please refer to separated files for Test Setup Photos of the EUT.

5 External Photographs of EUT

Please refer to separated files for External Photos of the EUT.

6 Internal Photographs of EUT

Please refer to separated files for Internal Photos of the EUT.

***** End of Report *****