



RADIO TEST REPORT

Report No.: STS2005286W01

Issued for

CabinAir Tech (Shenzhen) Co., Ltd.

Unit 1A, Building B5, Guangming Science Park, #3009
Guanguang Road, Guangming, Shenzhen, China

Product Name:	Nordzone™ System – Active Air Quality System
Brand Name:	Nordzone™ System
Model Name:	9001 011 01
Series Model:	9001 011 02, 9001 011 03, 9001 011 04, 9001 011 05, 9001 011 06, 9001 011 07, 9001 011 08, 9001 011 09, 9001 011 10, 9001 011 11, 9001 011 12, 9001 011 13, 9001 011 14, 9001 011 15, 9001 011 16, 9001 011 17
FCC ID:	2AXCNNZAQS1STD
Test Standard:	CFR47 FCC Part 15: Subpart C Section 15.247 CFR47 FCC Part 15: Subpart C Section 15.209

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TEST RESULT CERTIFICATION

Applicant's name : CabinAir Tech (Shenzhen) Co., Ltd
Address : Unit 1A, Building B5, Merchants Guangming Science Park, #3009
 Guanguang Road, Guangming, Shenzhen
Manufacture's Name : CabinAir Tech (Shenzhen) Co., Ltd
Address : Unit 1A, Building B5, Merchants Guangming Science Park, #3009
 Guanguang Road, Guangming, Shenzhen

Product description

Product Name : Nordzone™ System – Active Air Quality System
Brand Name : Nordzone™ System
Model Name : 9001 011 01
 9001 011 02, 9001 011 03, 9001 011 04, 9001 011 05, 9001 011
Series Model..... : 06, 9001 011 07, 9001 011 08, 9001 011 09, 9001 011 10,
 9001 011 11, 9001 011 12, 9001 011 13, 9001 011 14, 9001
 011 15, 9001 011 16, 9001 011 17
Test Standards : CFR47 FCC Part 15: Subpart C Section 15.247
 CFR47 FCC Part 15: Subpart C Section 15.209
Test procedure..... : ANSI C63.10: 2013

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

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Date of Test..... :
Date (s) of performance of tests..... : 29 May 2020 - 16 June 2020
Date of Issue..... : 16 June 2020
Test Result..... : **Pass**

Testing Engineer : Chris Chen
 (Chris Chen)

Technical Manager : Sean She
 (Sean she)

Authorized Signatory : Vita Li
 (Vita Li)

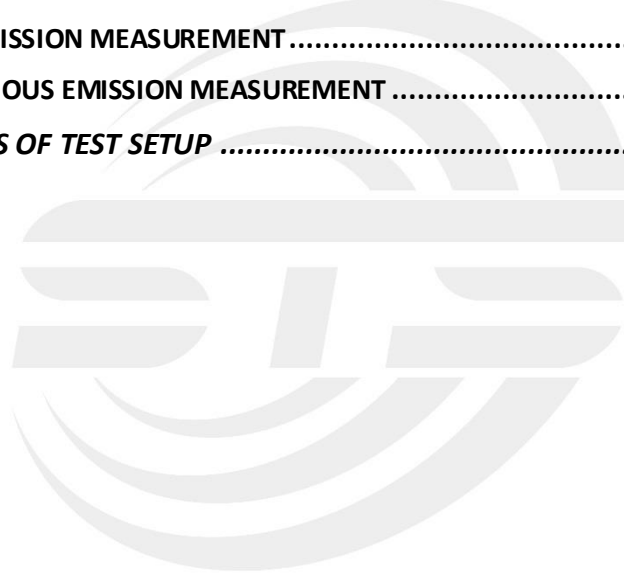




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Revision History

Rev.	Issue Date	Report NO.	Effect Page	Contents
00	16 June 2020	STS2005286W01	ALL	Initial Issue





1 SUMMARY OF TEST RESULTS

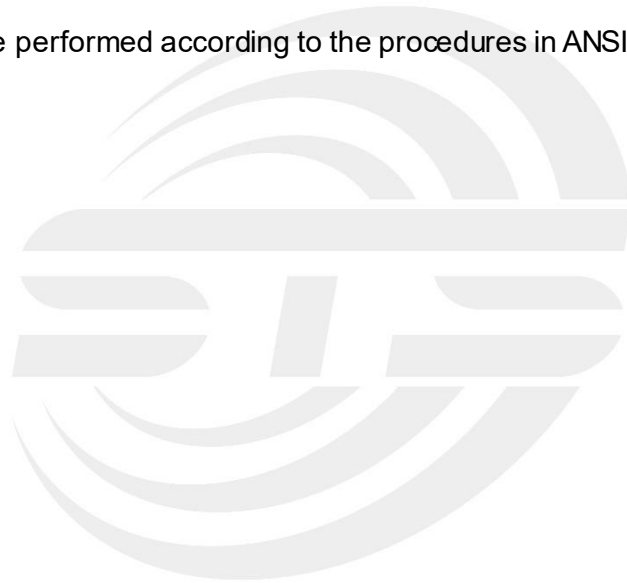
Test procedures according to the technical standards:

KDB 558074 D01 15.247 Meas Guidance v05r02.

FCC Part 15, Subpart C			
Standard Section	Test Item	Judgment	Remark
FCC Part 15.207(a)	Conducted Emission	N/A	
FCC Part 15.247(d)	Radiated Spurious Emission	PASS	
FCC Part 15.205	Restricted Band Edge Emission	PASS	

NOTE:

- 1) 'N/A' denotes test is not applicable in this test report
- 2) All tests were performed according to the procedures in ANSI C63.10: 2013.





1.1 TEST FACTORY

SHENZHEN STS TEST SERVICES CO., LTD
Add. : A 1/F, Building B, Zhuoke Science Park, No.190 Chongqing Road, HepingShequ,
Fuyong Sub-District, Bao'an District, Shenzhen, Guang Dong, China
FCC test Firm Registration Number: 625569
IC test Firm Registration Number: 12108A
A2LA Certificate No.: 4338.01

1.2 MEASUREMENT UNCERTAINTY

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

No.	Item	Uncertainty
1	RF output power, conducted	$\pm 0.68\text{dB}$
2	Unwanted Emissions, conducted	$\pm 2.988\text{dB}$
3	All emissions, radiated 30-1GHz	$\pm 6.7\text{dB}$
4	All emissions, radiated 1G-6GHz	$\pm 5.5\text{dB}$
5	All emissions, radiated >6G	$\pm 5.8\text{dB}$
6	Conducted Emission (9KHz-150KHz)	$\pm 4.43\text{dB}$
7	Conducted Emission (150KHz-30MHz)	$\pm 5\text{dB}$



2 GENERAL INFORMATION

2.1 GENERAL DESCRIPTION OF EUT

Product Name	Nordzone™ System – Active Air Quality System	
Trade Name	Nordzone™ System	
Model Name	9001 011 01	
Series Model	9001 011 02, 9001 011 03, 9001 011 04, 9001 011 05, 9001 011 06, 9001 011 07, 9001 011 08, 9001 011 09, 9001 011 10, 9001 011 11, 9001 011 12, 9001 011 13, 9001 011 14, 9001 011 15, 9001 011 16, 9001 011 17	
Model Difference	All models are fully identical except model name.	
Product Description	The EUT is a Nordzone™ System – Active Air Quality System, which provides air purification solutions for cars, and supports Bluetooth 5.0 technology.	
	Operation Frequency:	2402 - 2480 MHz
	Modulation Type:	GFSK
	Bit Rate of Transmitter:	1 Mbps, 2 Mbps
	Number Of Channel:	40 channels
	Antenna Designation:	Please see Note 4
	Antenna Gain (dBi):	0.716dBi
	Duty Cycle:	>98%
Channel List	Please refer to the Note 2.	
Power Rating	Input DC 12.0V	
Hardware version	N/A	
Software version	N/A	
Connecting I/O Port(s)	Please refer to the User's Manual	



Note:

- 1 For a more detailed features description, please refer to the manufacturer's specifications or the User's Manual.

2

RF Channel and Frequency of BLE			
RF Channel	Freq.(MHz)	RF Channel	Freq.(MHz)
00	2402	20	2442
01	2404	21	2444
02	2406	22	2446
03	2408	23	2448
04	2410	24	2450
05	2412	25	2452
06	2414	26	2454
07	2416	27	2456
08	2418	28	2458
09	2420	29	2460
10	2422	30	2462
11	2424	31	2464
12	2426	32	2466
13	2428	33	2468
14	2430	34	2470
15	2432	35	2472
16	2434	36	2474
17	2436	37	2476
18	2438	38	2478
19	2440	39	2480

3 Note:

- 1) In section 15.31(m), regards to the operating frequency range over 10 MHz, the Lowest frequency, the middle frequency, and the highest frequency of channel were selected to perform the test;
- 2) Test frequencies are lowest channel: 2402 MHz, middle channel: 2442 MHz and highest channel: 2480 MHz.

4

Ant	Brand	Model Name	Antenna Type	Connector	Gain (dBi)	NOTE
1	NordZone ™ System	9001 011 01	Chip antenna	N/A	-0.716	BLE Antenna



2.2 DESCRIPTION OF TEST MODES

Each of these EUT operation mode(s) or test configuration mode(s) mentioned above was evaluated respectively.

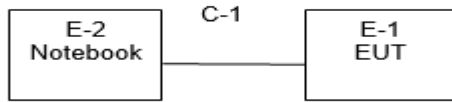
Worst Mode	Description	Data Rate
Mode 1	TX BLE CH00	1 Mbps
Mode 2	TX BLE CH19	1 Mbps
Mode 3	TX BLE CH39	1 Mbps
Mode 4	TX BLE CH00	2 Mbps
Mode 5	TX BLE CH19	2 Mbps
Mode 6	TX BLE CH39	2 Mbps

Note:

- 1) The measurements are performed at all Bit Rate of Transmitter, the worst data was reported.
- 2) We have be tested for all avaiable U.S. voltage and frequencies(For 120V,50/60Hz and 240V, 50/60Hz) for which the device is capable of operation , and the worst case of 120V/60Hz is shown in the report.
- 3) Controlled using a bespoke application on the laptop PC supplied by the customer. The application was used to enable a continuous transmission mode and to select the test channels, data rates and modulation schemes as required.

2.3 BLOCK DIGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED

Radiation Test Set



2.4 DESCRIPTION OF SUPPORT UNITS

The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

Item	Equipment	Mfr/Brand	Model/Type No.	Serial No.	Note
E-2	Notebook	DELL	VOSTRO.3800	N/A	N/A

Item	Shielded Type	Ferrite Core	Length	Note
C-1	USB Cable	NO	100cm	N/A

Note:

- 1) The support equipment was authorized by Declaration of Confirmation.
- 2) For detachable type I/O cable should be specified the length in cm in 『Length』 column.
- 3) “YES” is means “shielded” “with core”; “NO” is means “unshielded” “without core”.



2.5 EQUIPMENTS LIST FOR ALL TEST ITEMS

Radiation Test equipment

Kind of Equipment	Manufacturer	Type No.	Serial No.	Last calibration	Calibrated until
Test Receiver	R&S	ESCI	101427	2019.07.29	2020.07.28
Signal Analyzer	Agilent	N9020A	MY51110105	2020.03.05	2021.03.04
Active loop Antenna	ZHINAN	ZN30900C	16035	2018.03.11	2021.03.10
Bilog Antenna	TESEQ	CBL6111D	34678	2017.11.02	2020.11.01
Horn Antenna	SCHWARZBECK	BBHA 9120D(1201)	9120D-1343	2018.10.19	2021.10.18
SHF-EHF Horn Antenna (18G-40GHz)	A-INFO	LB-180400-KF	J211020657	2018.03.11	2021.03.10
Pre-Amplifier(0.1M- 3GHz)	EM	EM330	060665	2019.10.09	2020.10.08
Pre-Amplifier (1G- 18GHz)	SKET	LNPA-01018G-45	SK201808090 1	2019.10.12	2020.10.11
Pre-Amplifier (18G-40G)	SKET	LNPA_1840-50	SK201810180 1	2019.10.22	2020.10.21
Temperature & Humidity	HH660	Mieo	N/A	2019.10.12	2020.10.11
Turn table	EM	SC100_1	60531	N/A	N/A
Antenna mast	EM	SC100	N/A	N/A	N/A
Test SW	FARAD	EZ-EMC(Ver.STSLAB-03A1 RE)			



3 EMC EMISSION TEST

3.1 CONDUCTED EMISSION MEASUREMENT

3.1.1 POWER LINE CONDUCTED EMISSION LIMITS

operating frequency band. In case the emission fall within the restricted band specified on Part 15. 207(a) limit in the table below has to be followed.

This item was performed according to the procedures in ANSI C63.10: 2013

FREQUENCY (MHz)	Conducted Emission limit (dBuV)	
	Quasi-peak	Average
0.15 -0.5	66 - 56 *	56 - 46 *
0.50 -5.0	56.00	46.00
5.0 -30.0	60.00	50.00

Note:

- 1) The tighter limit applies at the band edges.
- 2) The limit of " * " marked band means the limitation decreases linearly with the logarithm of the frequency in the range.

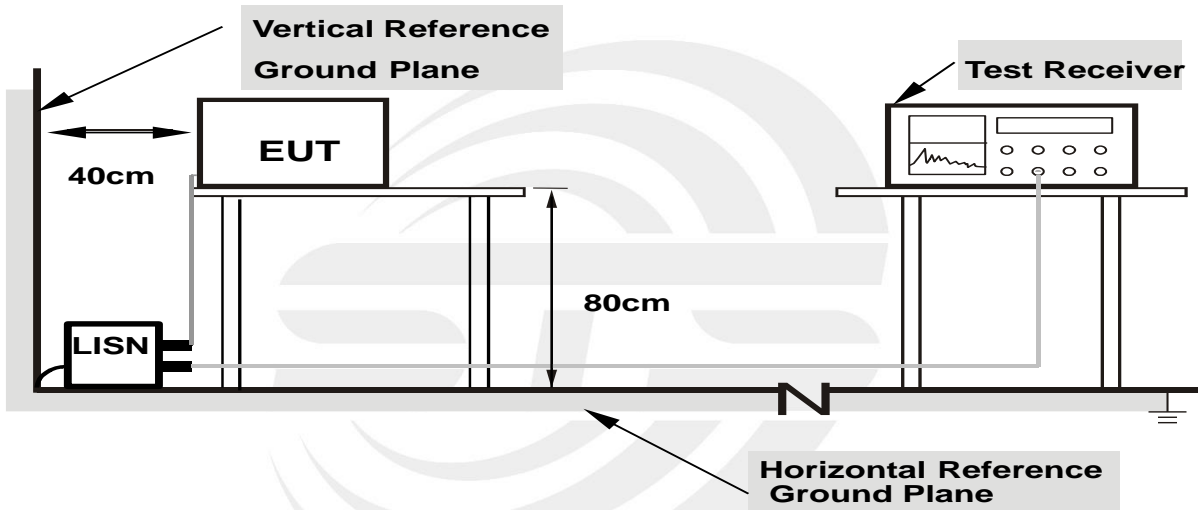
The following table is the setting of the receiver

Receiver Parameters	Setting
Attenuation	10 dB
Start Frequency	0.15 MHz
Stop Frequency	30 MHz
IF Bandwidth	9 kHz

3.1.2 TEST PROCEDURE

- a. The EUT was 0.8 meters from the horizontal ground plane and 0.4 meters from the vertical 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.
- b. 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.
- c. 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.
- d. LISN at least 80 cm from nearest part of EUT chassis.
- e. For the actual test configuration, please refer to the related Item –EUT Test Photos.

3.1.3 TEST SETUP



- Note: 1.Support units were connected to second LISN.**
2.Both of LISNs (AMN) are 80 cm from EUT and at least 80 from other units and other metal planes

3.1.4 TEST RESULT

Temperature:	23.2 °C	Relative Humidity:	52%
Test Voltage:	N/A	Phase:	L/N
Test Mode:	N/A		

Note: EUT is only power by DC Power, So it is not applicable for this test.



3.2 RADIATED SPURIOUS EMISSION MEASUREMENT

3.2.1 RADIATED EMISSION LIMITS

in any 100 kHz bandwidth outside the operating frequency band. In case the emission fall within the Restricted band specified on Part15.205(a)&209(a) limit in the table and according to ANSI C63.10-2013 below has to be followed.

LIMITS OF RADIATED EMISSION MEASUREMENT (0.009MHz - 1000MHz)

Frequencies (MHz)	Field Strength (micorvolts/meter)	Measurement Distance (meters)
0.009~0.490	2400/F(KHz)	300
0.490~1.705	24000/F(KHz)	30
1.705~30.0	30	30
30~88	100	3
88~216	150	3
216~960	200	3
Above 960	500	3

LIMITS OF RADIATED EMISSION MEASUREMENT (1000MHz-25GHz)

FREQUENCY (MHz)	(dBuV/m) (at 3M)	
	PEAK	AVERAGE
Above 1000	74	54

Notes:

- (1) The limit for radiated test was performed according to FCC PART 15C.
- (2) The tighter limit applies at the band edges.
- (3) Emission level (dBuV/m)=20log Emission level (uV/m).

For Radiated Emission

Spectrum Parameter	Setting
Attenuation	Auto
Detector	Peak/QP/AV
Start Frequency	9 KHz/150KHz(Peak/QP/AV)
Stop Frequency	150KHz/30MHz(Peak/QP/AV)
RB / VB (emission in restricted band)	200Hz (From 9kHz to 0.15MHz)/ 9KHz (From 0.15MHz to 30MHz); 200Hz (From 9kHz to 0.15MHz)/ 9KHz (From 0.15MHz to 30MHz)



Spectrum Parameter	Setting
Attenuation	Auto
Detector	Peak/QP
Start Frequency	30 MHz(Peak/QP)
Stop Frequency	1000 MHz (Peak/QP)
RB / VB (emission in restricted band)	120 KHz / 300 KHz

Spectrum Parameter	Setting
Attenuation	Auto
Detector	Peak/AV
Start Frequency	1000 MHz(Peak/AV)
Stop Frequency	10th carrier hamonic(Peak/AV)
RB / VB (emission in restricted band)	1 MHz / 3 MHz(Peak) 1 MHz/1/T MHz(AVG)

For Band edge

Spectrum Parameter	Setting
Detector	Peak/AV
Start/Stop Frequency	Lower Band Edge: 2310 to 2410 MHz Upper Band Edge: 2475 to 2500 MHz
RB / VB	1 MHz / 3 MHz(Peak) 1 MHz/1/T MHz(AVG)

Receiver Parameter	Setting
Start ~ Stop Frequency	9kHz~90kHz / RB 200Hz for PK & AV
Start ~ Stop Frequency	90kHz~110kHz / RB 200Hz for QP
Start ~ Stop Frequency	110kHz~490kHz / RB 200Hz for PK & AV
Start ~ Stop Frequency	490kHz~30MHz / RB 9kHz for QP
Start ~ Stop Frequency	30MHz~1000MHz / RB 120kHz for QP

3.2.2 TEST PROCEDURE

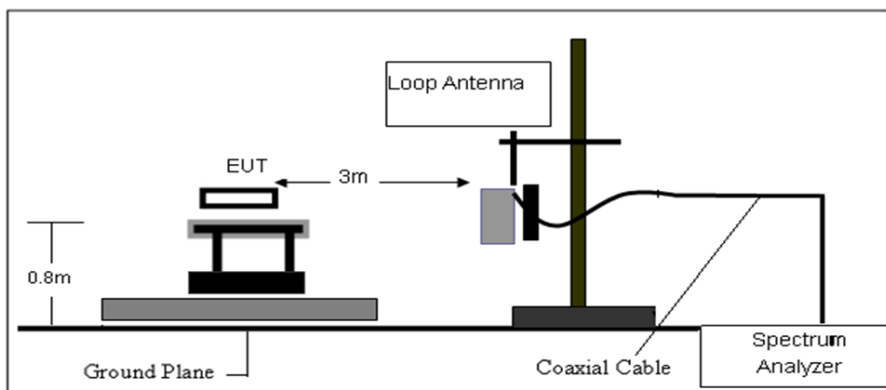
- a) The measuring distance of at 3 m shall be used for measurements at frequency 0.009MHz up to 1GHz. For frequencies above 1GHz, any suitable measuring distance may be used.
- b) The EUT was placed on the top of a rotating table 0.8 meters (above 1GHz is 1.5 m) above the ground at a 3 meter anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.
- c) The height of the equipment shall be 0.8 m (above 1GHz is 1.5 m); the height of the test antenna shall vary between 1 m to 4 m. Horizontal and vertical polarizations of the antenna are set to make the measurement
- d) The initial step in collecting conducted emission data is a spectrum analyzer peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak detector mode re-measured.
- e) If the Peak Mode measured value compliance with and lower than Quasi Peak Mode Limit, the EUT shall be deemed to meet QP Limits and then no additional QP Mode measurement performed.
- f) For the actual test configuration, please refer to the related Item –EUT Test Photos.

Note:

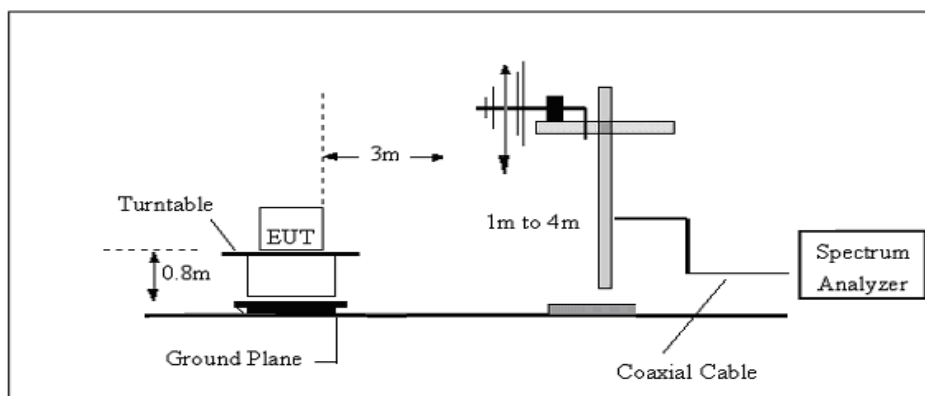
Both horizontal and vertical antenna polarities were tested and performed test to three orthogonal axis. The worst case emissions were reported

3.2.3 TEST SETUP

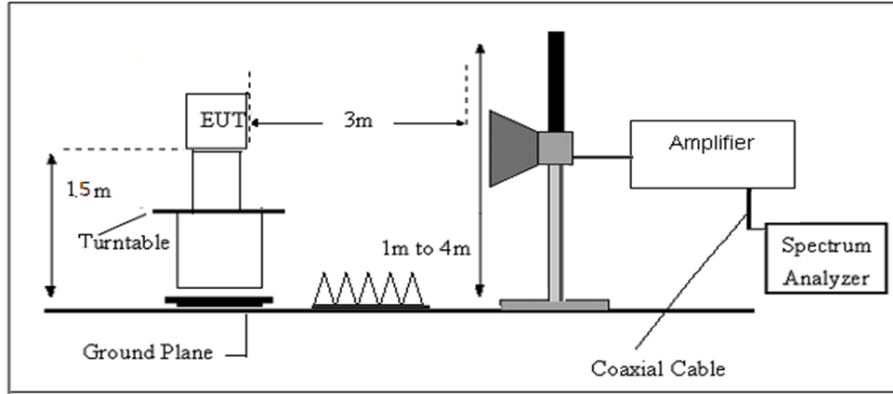
- a) Radiated Emission Test-Up Frequency Below 30MHz



- b) Radiated Emission Test-Up Frequency 30MHz~1GHz



c) Radiated Emission Test-Up Frequency Above 1GHz



3.2.4 EUT OPERATING CONDITIONS

The EUT tested system was configured as the statements of 2.3 Unless otherwise a special operating condition is specified in the follows during the testing.

3.2.5 FIELD STRENGTH CALCULATION

The field strength is calculated by adding the Antenna Factor and Cable Factor and subtracting the Amplifier Gain and Duty Cycle Correction Factor (if any) from the measured reading. The basic equation with a sample calculation is as follows:

$$FS = RA + AF + CL - AG$$

Where

FS = Field Strength

CL = Cable Attenuation Factor (Cable Loss)

RA = Reading Amplitude

AG = Amplifier Gain

AF = Antenna Factor

For example

Frequency (MHz)	FS (dBμV/m)	RA (dBμV/m)	AF (dB)	CL (dB)	AG (dB)	Factor (dB)
300	40	58.1	12.2	1.6	31.9	-18.1

$$\text{Factor} = \text{AF} + \text{CL} - \text{AG}$$



3.2.6 TEST RESULT

9KHz-30MHz

Temperature :	23.8 °C	Relative Humidity :	55%
Test Voltage :	DC 12V	Polarization :	--
Test Mode :	TX Mode		

Freq. (MHz)	Reading (dBuV/m)	Limit (dBuV/m)	Margin (dB)	State P/F	Test Result
--	--	--	--	--	PASS
--	--	--	--	--	PASS

Note:

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

Distance extrapolation factor = $40 \log(\text{specific distance}/\text{test distance})$ (dB);

Limit line = specific limits(dBuv) + distance extrapolation factor.



(30MHz - 1000MHz)

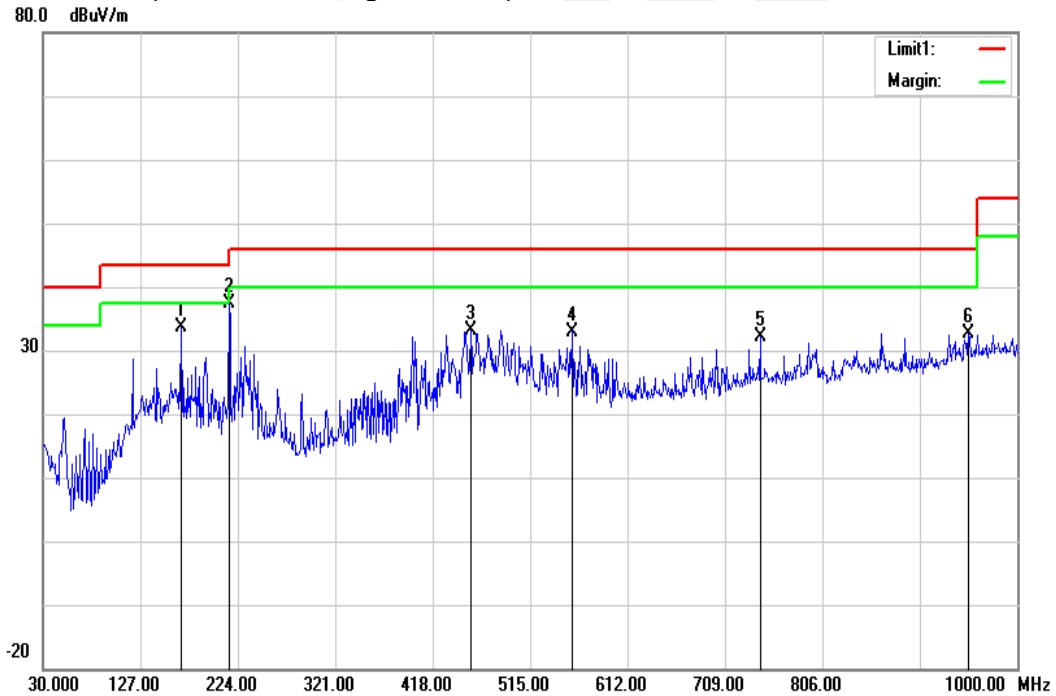
1M PHY

Temperature:	23.8 °C	Relative Humidity:	55%
Test Voltage :	DC 12V	Polarization :	Horizontal
Test Mode:	Mode 1/2/3 (Mode 1 worst case)		

Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
167.7400	53.32	-19.58	33.74	43.50	-9.76	QP
215.2700	57.50	-20.17	37.33	43.50	-6.17	QP
455.8300	42.58	-9.55	33.03	46.00	-12.97	QP
556.7100	38.58	-5.58	33.00	46.00	-13.00	QP
743.9200	34.14	-2.13	32.01	46.00	-13.99	QP
951.5000	30.93	1.62	32.55	46.00	-13.45	QP

Remark:

1. Margin = Result (Result = Reading + Factor) - Limit



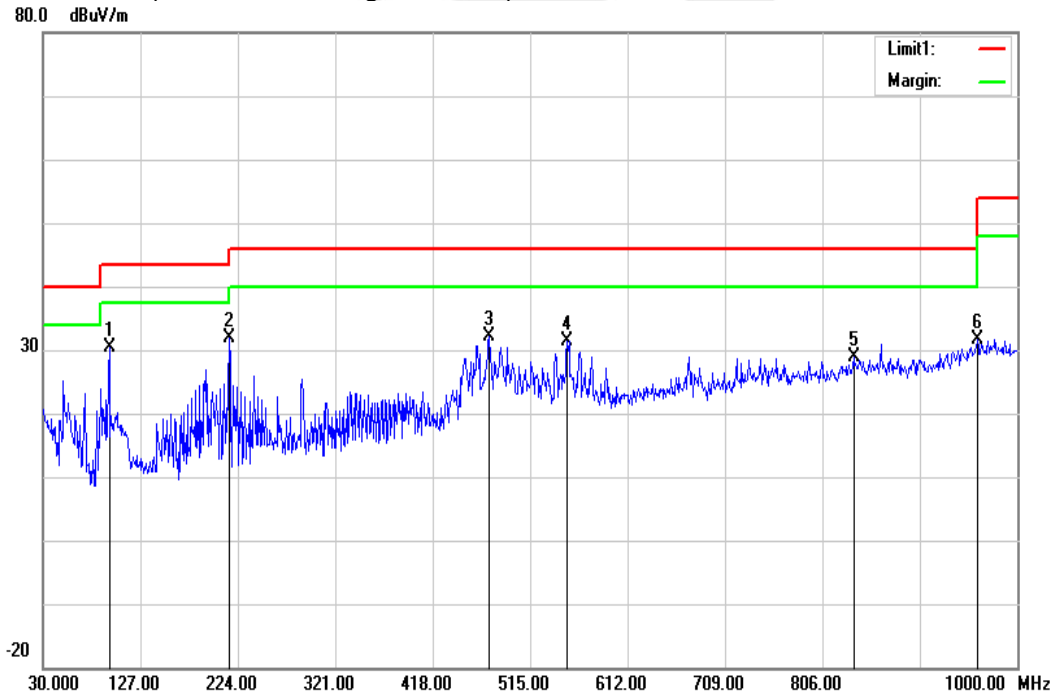


Temperature:	23.8 °C	Relative Humidity:	55%
Test Voltage :	DC 12V	Polarization :	Vertical
Test Mode:	Mode 1/2/3 (Mode 1 worst case)		

Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
95.9600	50.94	-20.67	30.27	43.50	-13.23	QP
215.2700	52.11	-20.17	31.94	43.50	-11.56	QP
474.2600	41.04	-8.85	32.19	46.00	-13.81	QP
551.8600	37.21	-5.72	31.49	46.00	-14.51	QP
837.0400	29.45	-0.46	28.99	46.00	-17.01	QP
960.2300	29.98	1.76	31.74	54.00	-22.26	QP

Remark:.

1. Margin = Result (Result =Reading + Factor)–Limit





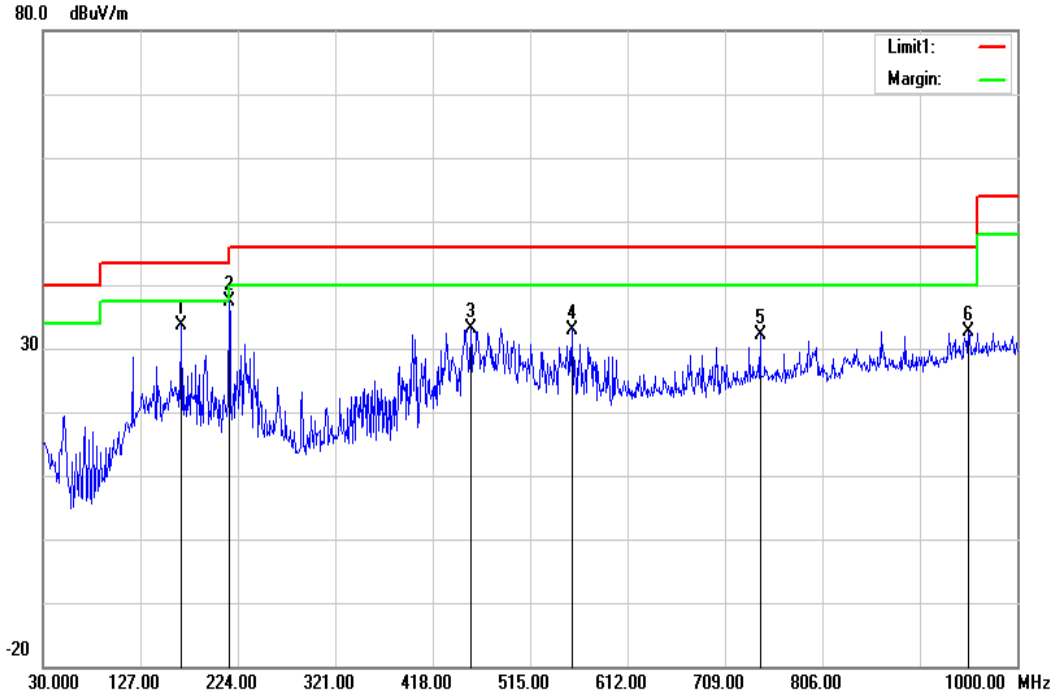
2M PHY

Temperature:	23.8 °C	Relative Humidity:	55%
Test Voltage :	DC 12V	Polarization :	Horizontal
Test Mode:	Mode 4/5/6 (Mode 4 worst case)		

Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
167.7400	53.32	-19.58	33.74	43.50	-9.76	QP
215.2700	57.50	-20.17	37.33	43.50	-6.17	QP
455.8300	42.58	-9.55	33.03	46.00	-12.97	QP
556.7100	38.58	-5.58	33.00	46.00	-13.00	QP
743.9200	34.14	-2.13	32.01	46.00	-13.99	QP
951.5000	30.93	1.62	32.55	46.00	-13.45	QP

Remark:

1. Margin = Result (Result =Reading + Factor)–Limit



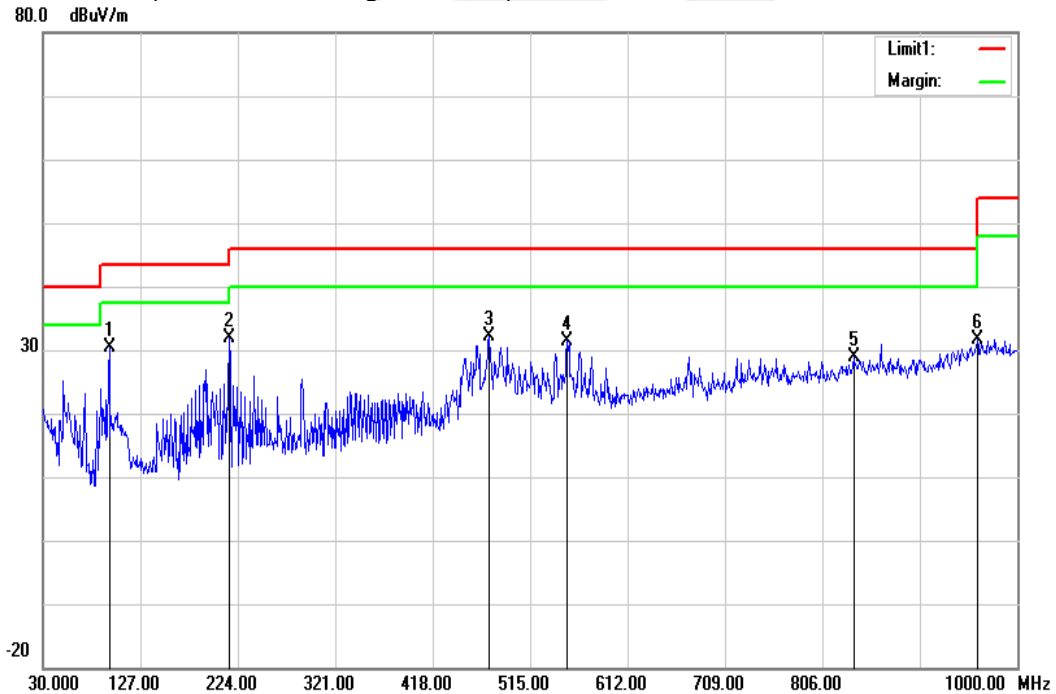


Temperature:	23.8 °C	Relative Humidity:	55%
Test Voltage :	DC 12V	Polarization :	Vertical
Test Mode:	Mode 4/5/6 (Mode 4 worst case)		

Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
95.9600	50.94	-20.67	30.27	43.50	-13.23	QP
215.2700	52.11	-20.17	31.94	43.50	-11.56	QP
474.2600	41.04	-8.85	32.19	46.00	-13.81	QP
551.8600	37.21	-5.72	31.49	46.00	-14.51	QP
837.0400	29.45	-0.46	28.99	46.00	-17.01	QP
960.2300	29.98	1.76	31.74	54.00	-22.26	QP

Remark:.

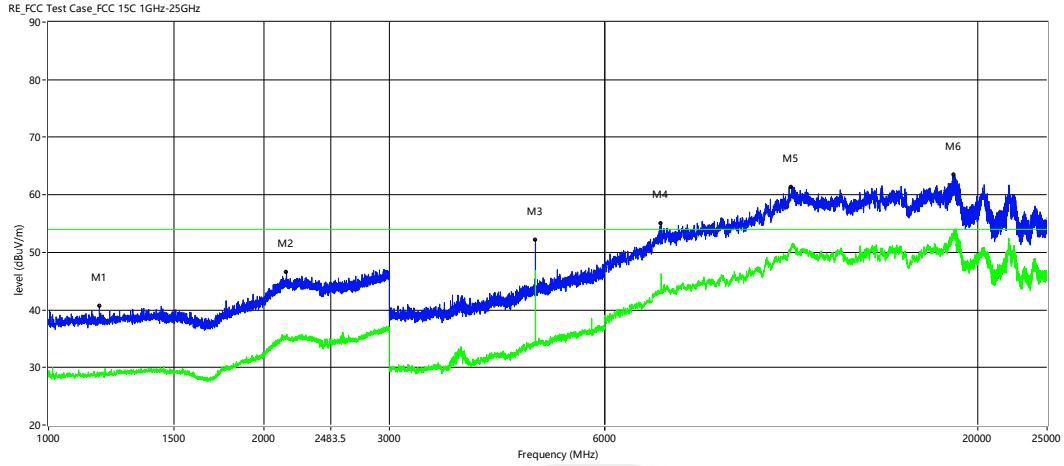
1. Margin = Result (Result =Reading + Factor)–Limit





(1000MHz-25GHz) Restricted band and Spurious emission Requirements

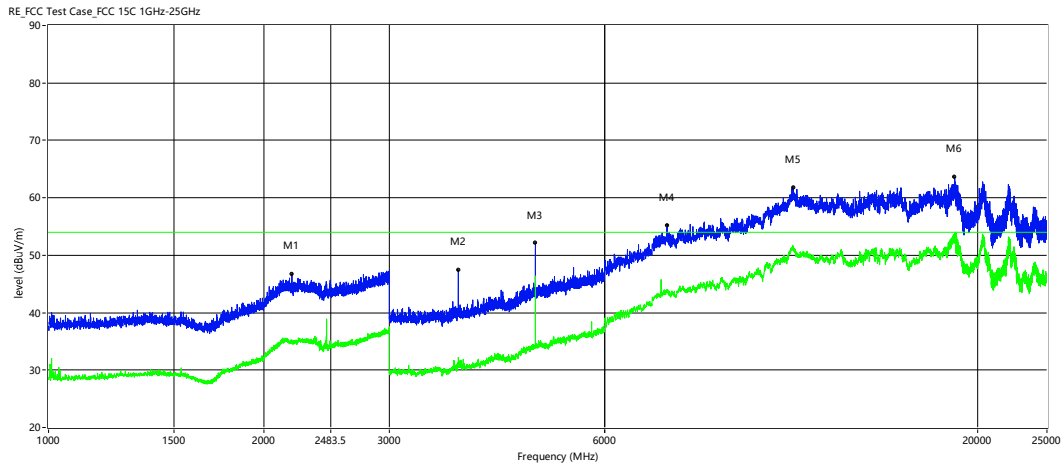
1M PHY
GFSK Low Channel
Horizontal



Frequency (MHz)	Peak Reading (dBuV/m)	Average Reading (dBuV/m)	Factor (dB)	Peak Level (dBuV/m)	Average Level (dBuV/m)	PK Limit (dBuV/m)	AV Limit (dBuV/m)	PK Over Limit (dB)	AV Over Limit (dB)	Min Margin (dB)	ANT
1178	41.90	30.07	-1.29	40.61	28.78	74.00	54.00	-33.39	-25.22	-25.22	Horizontal
2154	41.91	30.71	4.59	46.50	35.30	74.00	54.00	-27.50	-18.70	-18.70	Horizontal
4805.25	59.04	52.52	-6.95	52.09	45.57	74.00	54.00	-21.91	-8.43	-8.43	Horizontal
7203	52.27	43.63	2.68	54.95	46.31	74.00	54.00	-19.05	-7.69	-7.69	Horizontal
10968.001	51.35	41.33	9.97	61.32	51.30	74.00	54.00	-12.68	-2.70	-2.70	Horizontal
18491.75	52.93	42.59	10.5	63.43	53.09	74.00	54.00	-10.57	-0.91	-0.91	Horizontal



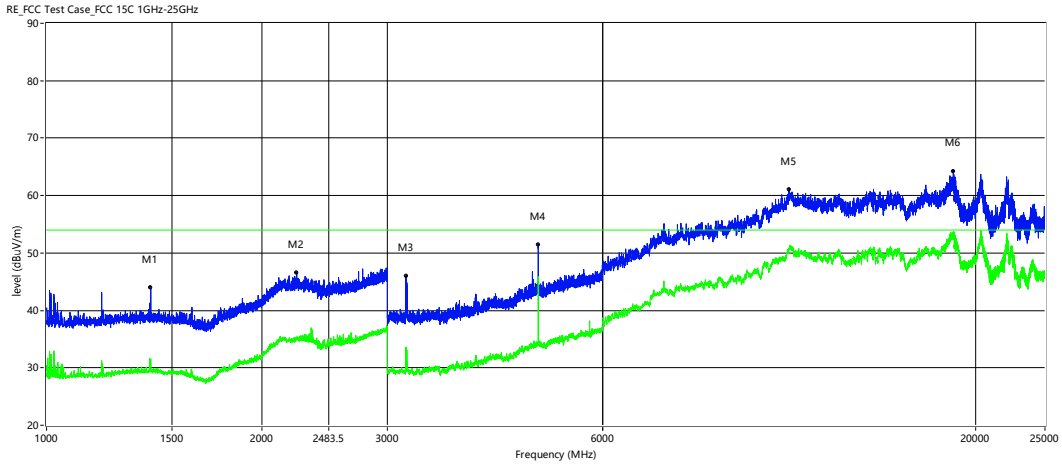
Vertical



Frequency (MHz)	Peak Reading (dBuV/m)	Average Level (dBuV/m)	Factor (dB)	Peak Level (dBuV/m)	Average Level (dBuV/m)	PK Limit (dBuV/m)	AV Limit (dBuV/m)	PK Over Limit (dB)	AV Over Limit (dB)	Min Margin(dB)	ANT
2191.5	42.51	30.81	4.19	46.70	35.00	74.00	54.00	-27.30	-19.00	-19.00	Vertical
3747	58.57	43.41	-11.2	47.37	32.21	74.00	54.00	-26.63	-21.79	-21.79	Vertical
4805.25	59.01	52.73	-6.95	52.06	45.78	74.00	54.00	-21.94	-8.22	-8.22	Vertical
7353	52.03	40.65	3.18	55.21	43.83	74.00	54.00	-18.79	-10.17	-10.17	Vertical
11037	51.71	41.52	10.02	61.73	51.54	74.00	54.00	-12.27	-2.46	-2.46	Vertical
18568.749	53.03	42.90	10.56	63.59	53.46	74.00	54.00	-10.41	-0.54	-0.54	Vertical



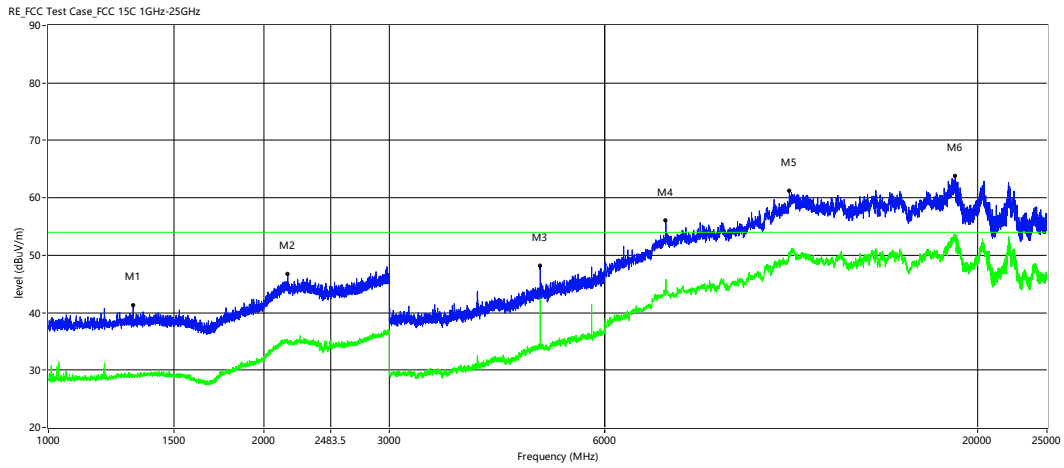
GFSK Mid Channel
Horizontal



Frequency (MHz)	Peak Reading (dBuV/m)	Average Reading (dBuV/m)	Factor (dB)	Peak Level (dBuV/m)	Average Level (dBuV/m)	PK Limit (dBuV/m)	AV Limit (dBuV/m)	PK Over Limit (dB)	AV Over Limit (dB)	Min Margin (dB)	ANT
1399.5	44.57	32.21	-0.66	43.91	31.55	74.00	54.00	-30.09	-22.45	-22.45	Horizontal
2240.5	42.04	30.52	4.54	46.58	35.06	74.00	54.00	-27.42	-18.94	-18.94	Horizontal
3186	58.16	45.81	-12.17	45.99	33.64	74.00	54.00	-28.01	-20.36	-20.36	Horizontal
4881	57.95	51.73	-6.5	51.45	45.23	74.00	54.00	-22.55	-8.77	-8.77	Horizontal
10968.001	51.12	40.94	9.97	61.09	50.91	74.00	54.00	-12.91	-3.09	-3.09	Horizontal
18603.749	53.62	43.10	10.6	64.22	53.70	74.00	54.00	-9.78	-0.30	-0.30	Horizontal



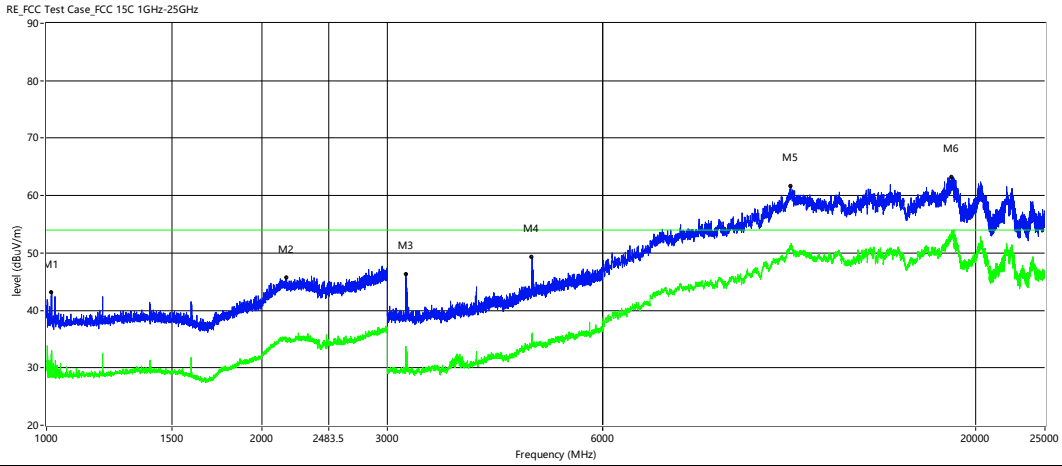
Vertical



Frequency (MHz)	Peak Reading (dBuV/m)	Average Level (dBuV/m)	Factor (dB)	Peak Level (dBuV/m)	Average Level (dBuV/m)	PK Limit (dBuV/m)	AV Limit (dBuV/m)	PK Over Limit (dB)	AV Over Limit (dB)	Min Margin (dB)	ANT
1313.5	42.10	30.22	-0.9	41.20	29.32	74.00	54.00	-32.80	-24.68	-24.68	Vertical
2162.5	42.14	30.35	4.5	46.64	34.85	74.00	54.00	-27.36	-19.15	-19.15	Vertical
4881	54.57	47.64	-6.5	48.07	41.14	74.00	54.00	-25.93	-12.86	-12.86	Vertical
7317	52.65	42.11	3.34	55.99	45.45	74.00	54.00	-18.01	-8.55	-8.55	Vertical
10896	51.80	40.47	9.4	61.20	49.87	74.00	54.00	-12.80	-4.13	-4.13	Vertical
18598.5	53.18	42.33	10.6	63.78	52.93	74.00	54.00	-10.22	-1.07	-1.07	Vertical



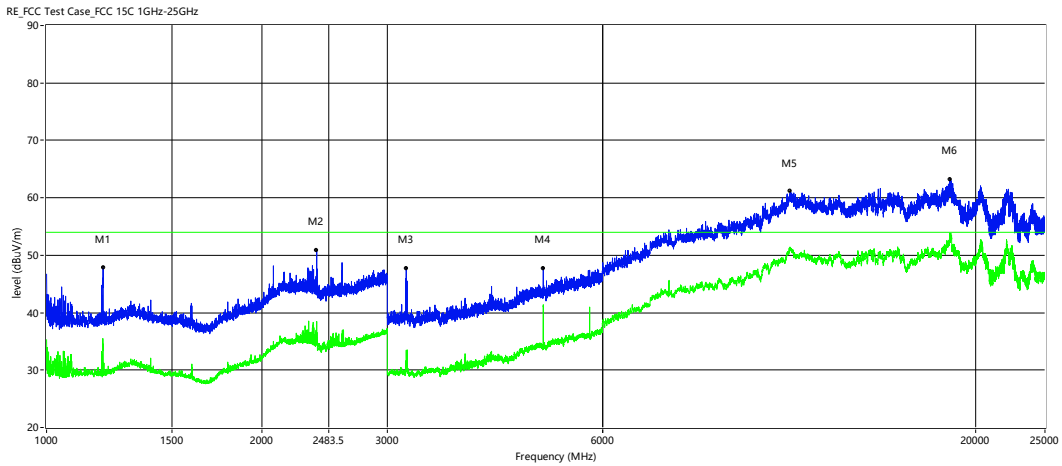
GFSK High Channel Horizontal



Frequency (MHz)	Peak Reading (dBuV/m)	Average Reading (dBuV/m)	Factor (dB)	Peak Level (dBuV/m)	Average Level (dBuV/m)	PK Limit (dBuV/m)	AV Limit (dBuV/m)	PK Over Limit (dB)	AV Over Limit (dB)	Min Margin (dB)	ANT
1000	40.58	31.36	-1.95	38.63	29.41	74.00	54.00	-35.37	-24.59	-24.59	Horizontal
2168	41.21	30.35	4.44	45.65	34.79	74.00	54.00	-28.35	-19.21	-19.21	Horizontal
3185.25	58.41	45.95	-12.18	46.23	33.77	74.00	54.00	-27.77	-20.23	-20.23	Horizontal
4783.5	56.34	42.90	-7.05	49.29	35.85	74.00	54.00	-24.71	-18.15	-18.15	Horizontal
11019	51.45	40.76	10.12	61.57	50.88	74.00	54.00	-12.43	-3.12	-3.12	Horizontal
18526.751	52.70	42.58	10.51	63.21	53.09	74.00	54.00	-10.79	-0.91	-0.91	Horizontal



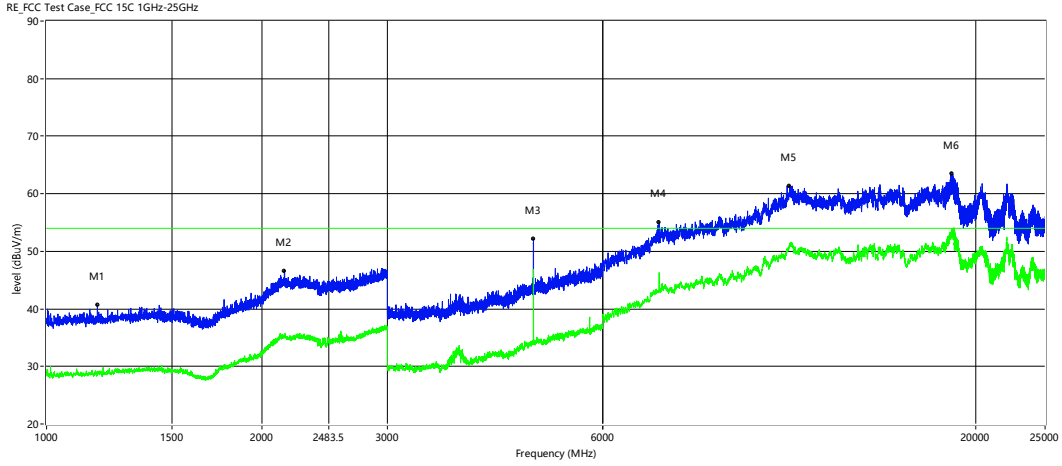
Vertical



Frequency (MHz)	Peak Reading (dBuV/m)	Average Level (dBuV/m)	Factor (dB)	Peak Level (dBuV/m)	Average Level (dBuV/m)	PK Limit (dBuV/m)	AV Limit (dBuV/m)	PK Over Limit (dB)	AV Over Limit (dB)	Min Margin(dB)	ANT
1200	49.05	35.78	-1.21	47.84	34.57	74.00	54.00	-26.16	-19.43	-19.43	Vertical
2389	46.77	34.43	4.05	50.82	38.48	74.00	54.00	-23.18	-15.52	-15.52	Vertical
3188.25	59.88	45.62	-12.16	47.72	33.46	74.00	54.00	-26.28	-20.54	-20.54	Vertical
4959	54.10	47.57	-6.38	47.72	41.19	74.00	54.00	-26.28	-12.81	-12.81	Vertical
11001	50.90	40.70	10.21	61.11	50.91	74.00	54.00	-12.89	-3.09	-3.09	Vertical
18393.75	52.40	41.77	10.75	63.15	52.52	74.00	54.00	-10.85	-1.48	-1.48	Vertical



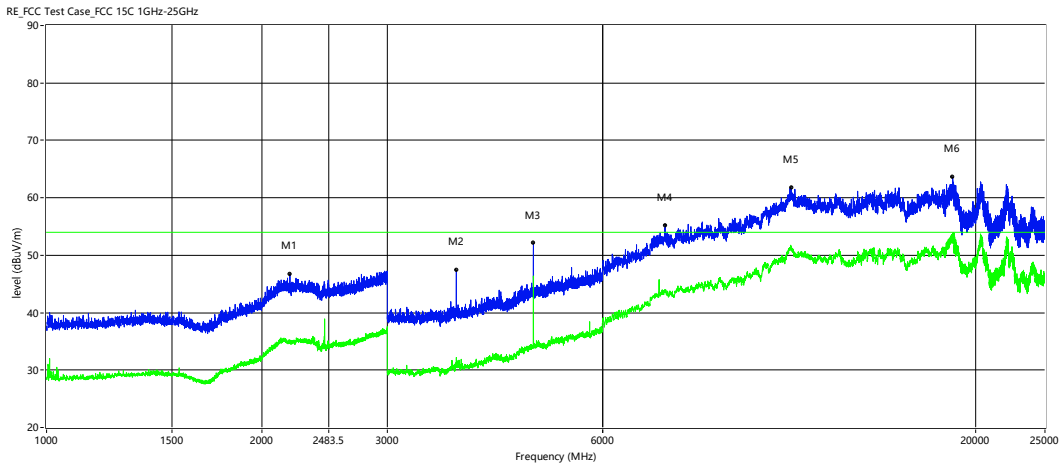
2M PHY
GFSK Low Channel
Horizontal



Frequency (MHz)	Peak Reading (dBuV/m)	Average Reading (dBuV/m)	Factor (dB)	Peak Level (dBuV/m)	Average Level (dBuV/m)	PK Limit (dBuV/m)	AV Limit (dBuV/m)	PK Over Limit (dB)	AV Over Limit (dB)	Min Margin (dB)	ANT
1178	41.90	30.07	-1.29	40.61	28.78	74.00	54.00	-33.39	-25.22	-25.22	Horizontal
2154	41.91	30.71	4.59	46.50	35.30	74.00	54.00	-27.50	-18.70	-18.70	Horizontal
4805.25	59.04	52.52	-6.95	52.09	45.57	74.00	54.00	-21.91	-8.43	-8.43	Horizontal
7203	52.27	43.63	2.68	54.95	46.31	74.00	54.00	-19.05	-7.69	-7.69	Horizontal
10968.001	51.35	41.33	9.97	61.32	51.30	74.00	54.00	-12.68	-2.70	-2.70	Horizontal
18491.75	52.93	42.59	10.5	63.43	53.09	74.00	54.00	-10.57	-0.91	-0.91	Horizontal



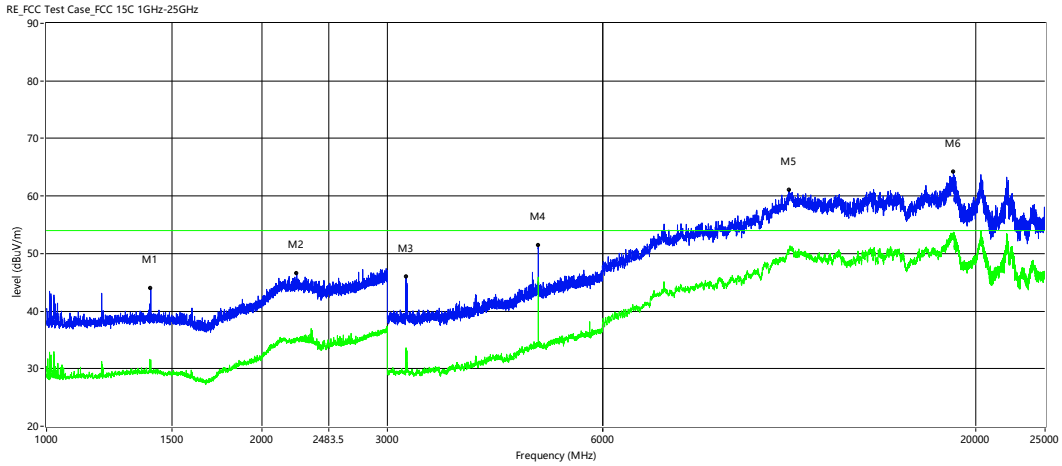
Vertical



Frequency (MHz)	Peak Reading (dBuV/m)	Average Level (dBuV/m)	Factor (dB)	Peak Level (dBuV/m)	Average Level (dBuV/m)	PK Limit (dBuV/m)	AV Limit (dBuV/m)	PK Over Limit (dB)	AV Over Limit (dB)	Min Margin(dB)	ANT
2191.5	42.51	30.81	4.19	46.70	35.00	74.00	54.00	-27.30	-19.00	-19.00	Vertical
3747	58.57	43.41	-11.2	47.37	32.21	74.00	54.00	-26.63	-21.79	-21.79	Vertical
4805.25	59.01	52.73	-6.95	52.06	45.78	74.00	54.00	-21.94	-8.22	-8.22	Vertical
7353	52.03	40.65	3.18	55.21	43.83	74.00	54.00	-18.79	-10.17	-10.17	Vertical
11037	51.71	41.52	10.02	61.73	51.54	74.00	54.00	-12.27	-2.46	-2.46	Vertical
18568.749	53.03	42.90	10.56	63.59	53.46	74.00	54.00	-10.41	-0.54	-0.54	Vertical



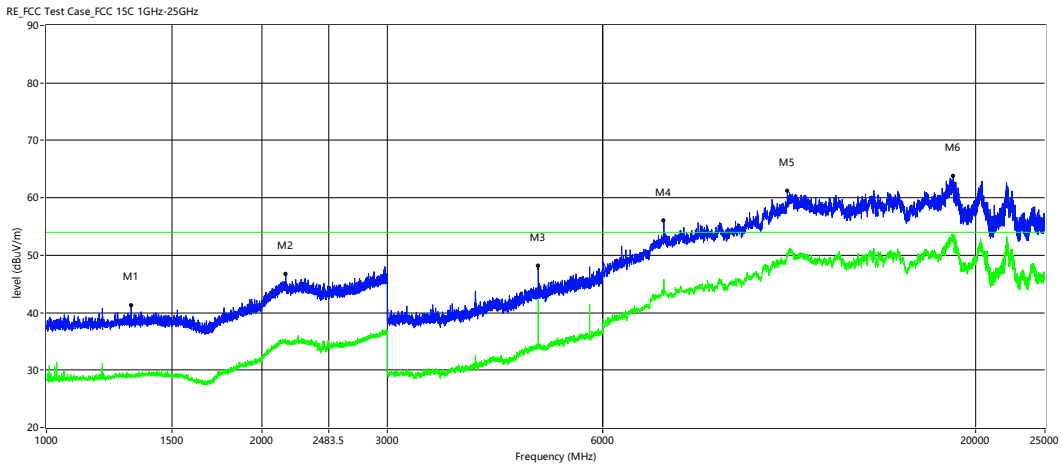
GFSK Mid Channel
Horizontal



Frequency (MHz)	Peak Reading (dBuV/m)	Average Reading (dBuV/m)	Factor (dB)	Peak Level (dBuV/m)	Average Level (dBuV/m)	PK Limit (dBuV/m)	AV Limit (dBuV/m)	PK Over Limit (dB)	AV Over Limit (dB)	Min Margin (dB)	ANT
1399.5	44.57	32.21	-0.66	43.91	31.55	74.00	54.00	-30.09	-22.45	-22.45	Horizontal
2240.5	42.04	30.52	4.54	46.58	35.06	74.00	54.00	-27.42	-18.94	-18.94	Horizontal
3186	58.16	45.81	-12.17	45.99	33.64	74.00	54.00	-28.01	-20.36	-20.36	Horizontal
4881	57.95	51.73	-6.5	51.45	45.23	74.00	54.00	-22.55	-8.77	-8.77	Horizontal
10968.001	51.12	40.94	9.97	61.09	50.91	74.00	54.00	-12.91	-3.09	-3.09	Horizontal
18603.749	53.62	43.10	10.6	64.22	53.70	74.00	54.00	-9.78	-0.30	-0.30	Horizontal



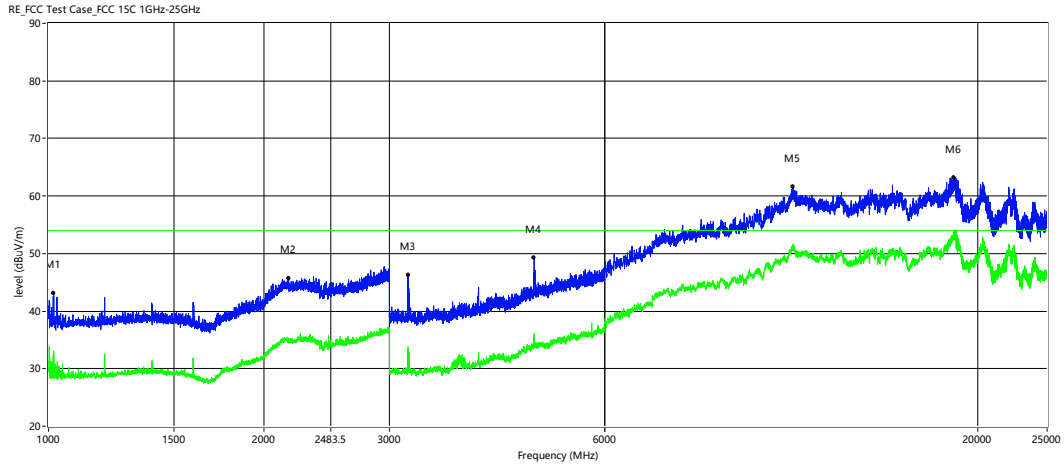
Vertical



Frequency (MHz)	Peak Reading (dBuV/m)	Average Level (dBuV/m)	Factor (dB)	Peak Level (dBuV/m)	Average Level (dBuV/m)	PK Limit (dBuV/m)	AV Limit (dBuV/m)	PK Over Limit (dB)	AV Over Limit (dB)	Min Margin (dB)	ANT
1313.5	42.10	30.22	-0.9	41.20	29.32	74.00	54.00	-32.80	-24.68	-24.68	Vertical
2162.5	42.14	30.35	4.5	46.64	34.85	74.00	54.00	-27.36	-19.15	-19.15	Vertical
4881	54.57	47.64	-6.5	48.07	41.14	74.00	54.00	-25.93	-12.86	-12.86	Vertical
7317	52.65	42.11	3.34	55.99	45.45	74.00	54.00	-18.01	-8.55	-8.55	Vertical
10896	51.80	40.47	9.4	61.20	49.87	74.00	54.00	-12.80	-4.13	-4.13	Vertical
18598.5	53.18	42.33	10.6	63.78	52.93	74.00	54.00	-10.22	-1.07	-1.07	Vertical



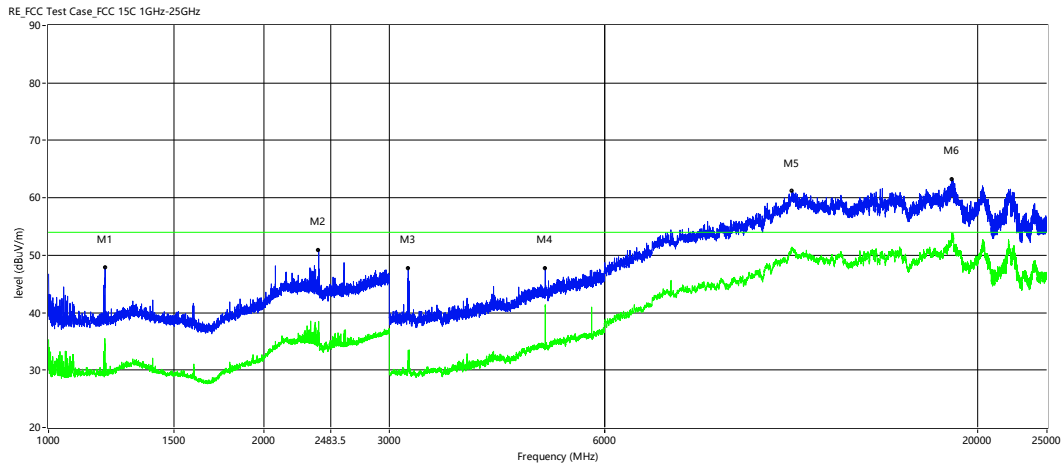
GFSK High Channel
Horizontal



Frequency (MHz)	Peak Reading (dBuV/m)	Average Reading (dBuV/m)	Factor (dB)	Peak Level (dBuV/m)	Average Level (dBuV/m)	PK Limit (dBuV/m)	AV Limit (dBuV/m)	PK Over Limit (dB)	AV Over Limit (dB)	Min Margin (dB)	ANT
1000	40.58	31.36	-1.95	38.63	29.41	74.00	54.00	-35.37	-24.59	-24.59	Horizontal
2168	41.21	30.35	4.44	45.65	34.79	74.00	54.00	-28.35	-19.21	-19.21	Horizontal
3185.25	58.41	45.95	-12.18	46.23	33.77	74.00	54.00	-27.77	-20.23	-20.23	Horizontal
4783.5	56.34	42.90	-7.05	49.29	35.85	74.00	54.00	-24.71	-18.15	-18.15	Horizontal
11019	51.45	40.76	10.12	61.57	50.88	74.00	54.00	-12.43	-3.12	-3.12	Horizontal
18526.751	52.70	42.58	10.51	63.21	53.09	74.00	54.00	-10.79	-0.91	-0.91	Horizontal



Vertical

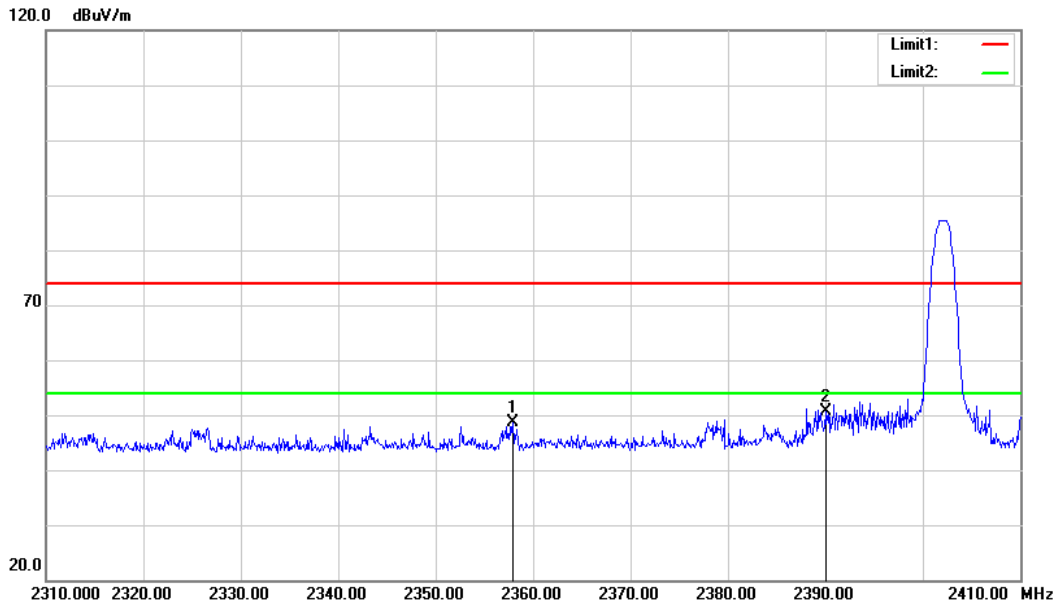


Frequency (MHz)	Peak Reading (dBuV/m)	Average Level (dBuV/m)	Factor (dB)	Peak Level (dBuV/m)	Average Level (dBuV/m)	PK Limit (dBuV/m)	AV Limit (dBuV/m)	PK Over Limit (dB)	AV Over Limit (dB)	Min Margin(dB)	ANT
1200	49.05	35.78	-1.21	47.84	34.57	74.00	54.00	-26.16	-19.43	-19.43	Vertical
2389	46.77	34.43	4.05	50.82	38.48	74.00	54.00	-23.18	-15.52	-15.52	Vertical
3188.25	59.88	45.62	-12.16	47.72	33.46	74.00	54.00	-26.28	-20.54	-20.54	Vertical
4959	54.10	47.57	-6.38	47.72	41.19	74.00	54.00	-26.28	-12.81	-12.81	Vertical
11001	50.90	40.70	10.21	61.11	50.91	74.00	54.00	-12.89	-3.09	-3.09	Vertical
18393.75	52.40	41.77	10.75	63.15	52.52	74.00	54.00	-10.85	-1.48	-1.48	Vertical



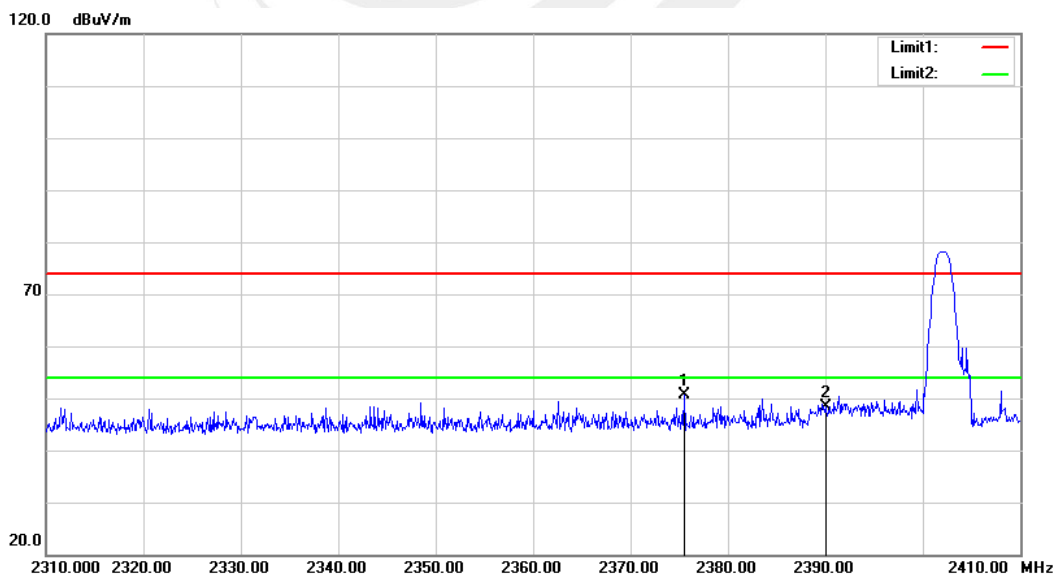
3.2.7 TEST RESULTS (RESTRICTED BAND)

1M PHY
GFSK-Low
Horizontal



No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2357.900	44.65	3.86	48.51	74.00	-25.49	peak
2	2390.000	46.38	4.34	50.72	74.00	-23.28	peak

Vertical

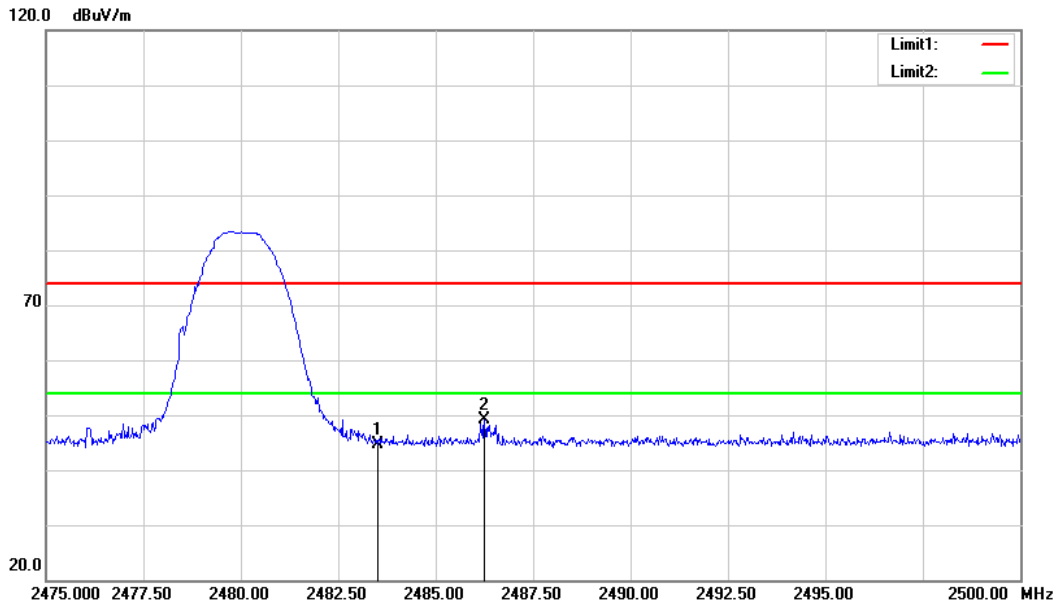


No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Lim it (dBuV/m)	Margin (dB)	Remark
1	2375.500	46.43	4.13	50.56	74.00	-23.44	peak
2	2390.000	44.16	4.34	48.50	74.00	-25.50	peak

GFSK-High

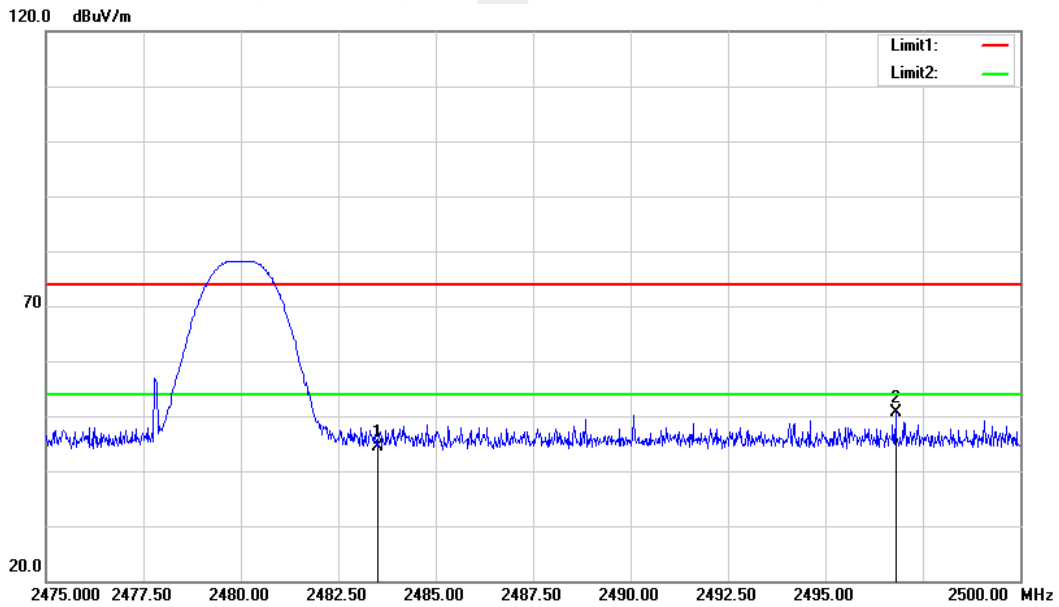


Horizontal



No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2483.500	40.05	4.60	44.65	74.00	-29.35	peak
2	2486.250	44.46	4.61	49.07	74.00	-24.93	peak

Vertical

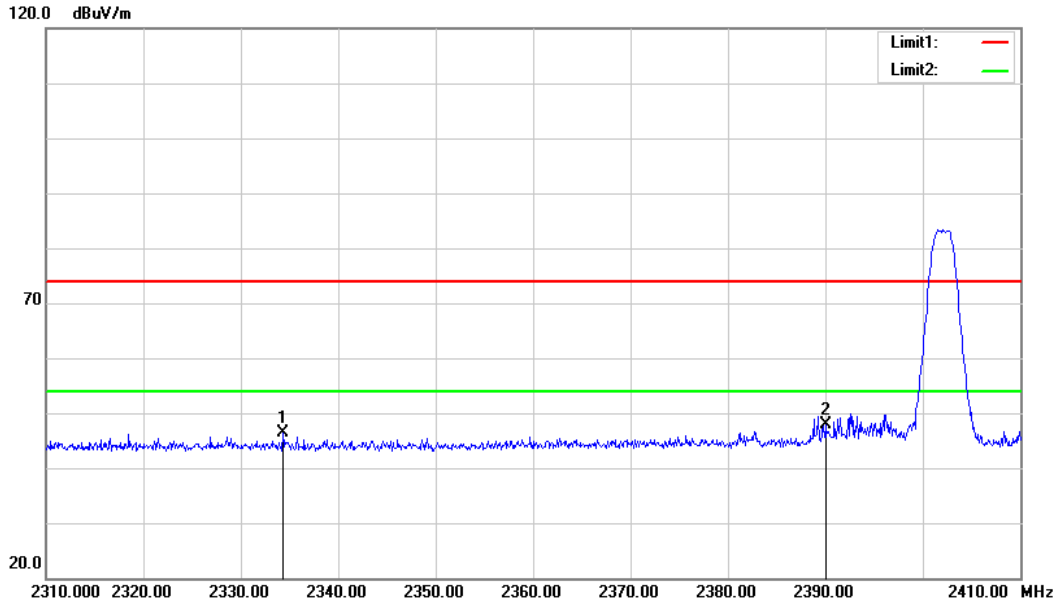


No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2483.500	39.69	4.60	44.29	74.00	-29.71	peak
2	2496.800	45.95	4.64	50.59	74.00	-23.41	peak

2M PHY

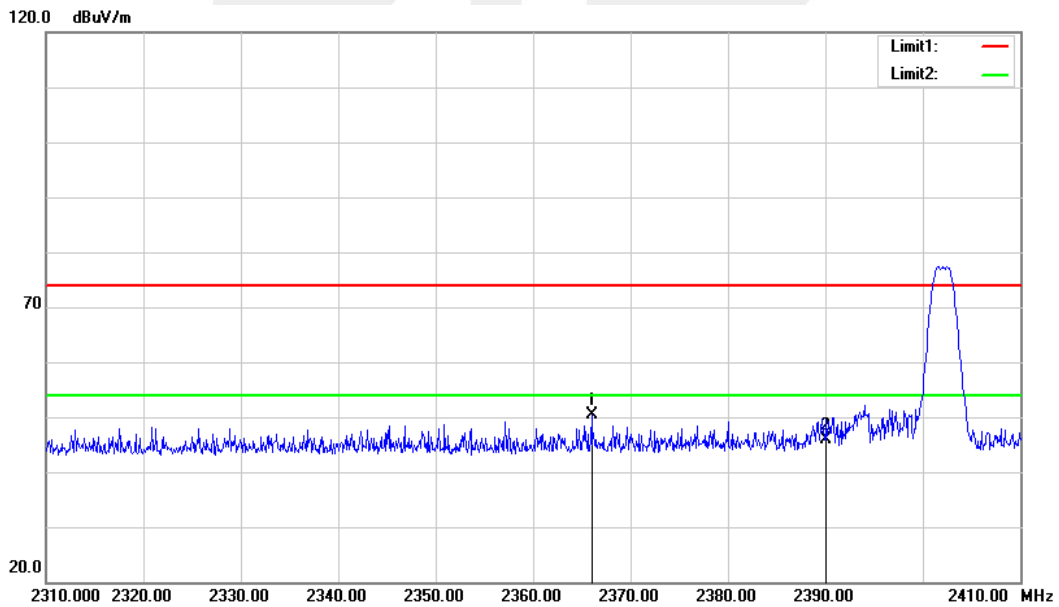


GFSK-Low
Horizontal



No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2334.300	42.75	3.66	46.41	74.00	-27.59	peak
2	2390.000	43.57	4.34	47.91	74.00	-26.09	peak

Vertical

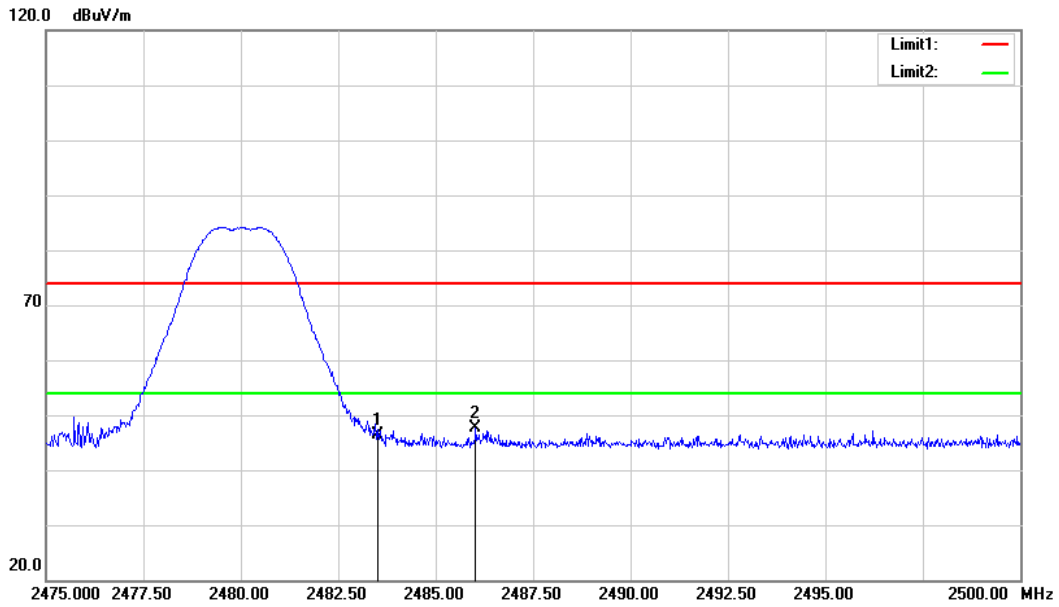


No.	Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2366.000	46.32	3.98	50.30	74.00	-23.70	peak
2	2390.000	41.54	4.34	45.88	74.00	-28.12	peak

GFSK-High

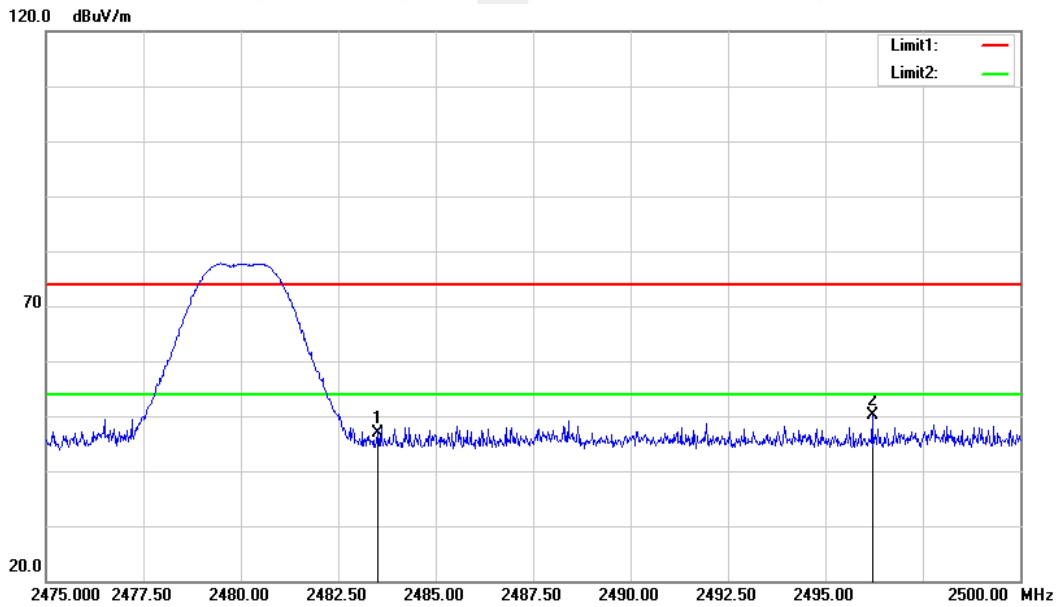


Horizontal



No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2483.500	41.88	4.60	46.48	74.00	-27.52	peak
2	2486.025	43.09	4.61	47.70	74.00	-26.30	peak

Vertical



No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark
1	2483.500	42.23	4.60	46.83	74.00	-27.17	peak
2	2496.200	45.42	4.64	50.06	74.00	-23.94	peak