

FCC 15B Test Report

Equipment : Bluetooth Dual Mode UART AT featuring smartBASIC

Model No. : BT900-SA, BT900-SC
(please refer to 1.1.1 for more details.)

Brand Name : Laird Technologies

Applicant : Laird Technologies

Address : 11160 Thompson Ave., Lenexa, Kansas 66219, USA

Standard : FCC Part 15, Subpart B, Class B
ICES-003 Issue 5
ANSI C63.4:2009

Received Date : Apr. 28, 2014

Tested Date : Apr. 29 ~ May 15, 2014

We, International Certification Corp., would like to declare that the tested sample has been evaluated and in compliance with the requirement of the above standards. It may be duplicated completely for legal use with the approval of the applicant. It shall not be reproduced except in full without the written approval of our laboratory.

Approved & Reviewed by:

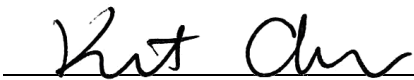

Kent Chen / Assistant Manager



Table of Contents

1	GENERAL DESCRIPTION	5
1.1	Information.....	5
1.2	The Equipment List	6
1.3	Testing Applied Standards	7
1.4	Measurement Uncertainty	7
2	TEST CONFIGURATION	8
2.1	Testing Condition	8
2.2	The Worst Test Modes and Channel Details	8
2.3	Local Support Equipment List	8
2.4	Test Setup Chart	9
2.5	Test Software and Operating Condition	9
3	EMISSION TESTS RESULTS	10
3.1	Conducted Emissions.....	10
3.2	Radiated Emissions.....	19
4	PHOTOGRAPHS OF THE TEST CONFIGURATION	69
5	TEST LABORATORY INFORMATION	77

Release Record

Report No.	Version	Description	Issued Date
FD442807	Rev. 01	Initial issue	May 28, 2014

Summary of Test Results

FCC Part 15, Subpart B Emission Tests				
Ref. Std. Clause	Test Standard	Test Items	Measured	Result
15.107	FCC Part 15, Subpart B, Class B	Conducted Emissions	-8.43dB AV@ 0.152MHz.	Pass
15.109	FCC Part 15, Subpart B, Class B	Radiated Emissions	-7.10dB PK@ 797.38MHz.	Pass

1 General Description

1.1 Information

1.1.1 Product Details

The following models are provided to this EUT.

Brand Name	Model Name	Product Name	Description
Laird Technologies	BT900-SA	Bluetooth Dual Mode UART AT featuring smartBASIC	Integrated antenna onboard
	BT900-SC		No integrated antenna, only IPEX connector for external antenna

1.1.2 Specification of the Equipment under Test (EUT)

Operating Frequency	2402 MHz ~ 2480 MHz
Antenna Type	Refer to section 1.1.3
Modulation Type	GFSK / $\pi/4$ -DQPSK / 8DPSK

1.1.3 Antenna Details

Ant. No.	EUT Model	Type	Ant. Brand / Model	Gain (dBi)	Connector
1	BT900-SC	Dipole	Nearson S181FL-L-RMM-2450S	2	UFL
2		PCB Dipole	Laird EBL2449A1-15UFL	2	
3		Dipole	Laird MAF94190	2	
4		Dipole	Laird WRR2400- IP04-B(MAF94019)	1.5	
5	BT900-SA	Chip	ACX AT3216-B2R7HAA_3216	0.5	N/A

Note: 3 dipole antennas are used for this device, and highest gain antenna is selected to perform radiated emission test. After pre-test with antenna 1 & 3, **antenna 1** was found as the worst case and was shown in this report.

1.1.4 Power Supply Type of Equipment under Test (EUT)

Power Supply Type	3.3Vdc from host.
-------------------	-------------------

1.1.5 Accessories

N/A

1.2 The Equipment List

Test Item	Conducted Emission				
Test Site	Conduction room 1 / (CO01-WS)				
Instrument	Manufacturer	Model No.	Serial No.	Calibration Date	Calibration Until
EMC Receiver	R&S	ESCS 30	100169	Oct. 15, 2013	Oct. 14, 2014
LISN	SCHWARZBECK	Schwarzbeck 8127	8127-667	Nov. 23, 2013	Nov. 22, 2014
LISN (Support Unit)	SCHWARZBECK	Schwarzbeck 8127	8127-666	Dec. 04, 2013	Dec. 03, 2014
RF Cable-CON	Woken	CFD200-NL	CFD200-NL-001	Apr. 23, 2014	Apr. 22, 2015
50 ohm terminal (Support Unit)	NA	50	04	Apr. 18, 2014	Apr. 17, 2015
Note: Calibration Interval of instruments listed above is one year.					

Test Item	Radiated Emission below 1GHz				
Test Site	966 chamber 2 / (03CH02-WS)				
Instrument	Manufacturer	Model No.	Serial No.	Calibration Date	Calibration Until
Receiver	R&S	ESR3	101657	Jan. 18, 2014	Jan. 17, 2015
Bilog Antenna	SCHWARZBECK	VULB9168	VULB9168-524	Jan. 08, 2014	Jan. 07, 2015
Preamplifier	Burgeon	BPA-530	100218	Dec. 09, 2013	Dec. 08, 2014
LF cable 3M	Woken	CFD400NL-LW	CFD400NL-003	Dec. 17, 2013	Dec. 16, 2014
LF cable 10M	Woken	CFD400NL-LW	CFD400NL-004	Dec. 17, 2013	Dec. 16, 2014
Note: Calibration Interval of instruments listed above is one year.					

Test Item	Radiated Emission above 1GHz				
Test Site	966 chamber 2 / (03CH02-WS)				
Instrument	Manufacturer	Model No.	Serial No.	Calibration Date	Calibration Until
Spectrum Analyzer	R&S	FSV40	101499	Feb. 08, 2014	Feb. 07, 2015
Horn Antenna 1G-18G	SCHWARZBECK	BBHA 9120 D	BBHA 9120 D 1095	Jan. 07, 2014	Jan. 06, 2015
Horn Antenna 18G-40G	SCHWARZBECK	BBHA 9170	BBHA 9170517	Dec. 27, 2013	Dec. 26, 2014
Preamplifier	Agilent	83017A	MY39501309	Dec. 09, 2013	Dec. 08, 2014
Preamplifier	EM	EM18G40G	060572	Jun. 20, 2013	Jun. 19, 2014
RF Cable	HUBER+SUHNER	SUCOFLEX104	MY16140/4	Dec. 17, 2013	Dec. 16, 2014
RF Cable	HUBER+SUHNER	SUCOFLEX104	MY16018/4	Dec. 17, 2013	Dec. 16, 2014
RF Cable	HUBER+SUHNER	SUCOFLEX104	MY16015/4	Dec. 17, 2013	Dec. 16, 2014
Note: Calibration Interval of instruments listed above is one year.					

1.3 Testing Applied Standards

According to the specifications of the manufacturer, the EUT must comply with the requirements of the following standards:

FCC Part 15, Subpart B, Class B
ICES-003 Issue 5
ANSI C63.4:2009

1.4 Measurement Uncertainty

CISPR 16-4-2 requires that an estimate of the measurement uncertainties associated with the emissions test results be included in the report. The measurement uncertainties given below are based on a 95% confidence level (based on a coverage factor ($k=2$))

Measurement Uncertainty		
Test Item	Frequency	Uncertainty
Conducted Emissions	150kHz ~ 30MHz	± 2.92 dB
Radiated Emissions	30MHz ~ 1GHz	± 3.56 dB
	Above 1GHz	± 4.94 dB

2 Test Configuration

2.1 Testing Condition

Test Item	Test Site	Ambient Condition	Tested By
AC Conduction	CO01-WS	21°C / 70%	Skys Huang
Radiated Emissions	03CH02-WS	22-23°C / 60-67%	Aska Huang

2.2 The Worst Test Modes and Channel Details

Test item	Modulation Mode	Test Frequency (MHz)	Data rate (Mbps / MCS)	Test Configuration
Conducted Emissions	GFSK	2480	1Mbps	1, 2, 5, 6
Radiated Emissions (below 1GHz)	GFSK	2480	1Mbps	1, 2, 3, 4, 5, 6
Radiated Emissions (above 1GHz)	GFSK	2402, 2441, 2480	1Mbps	1, 2, 3, 4, 5, 6

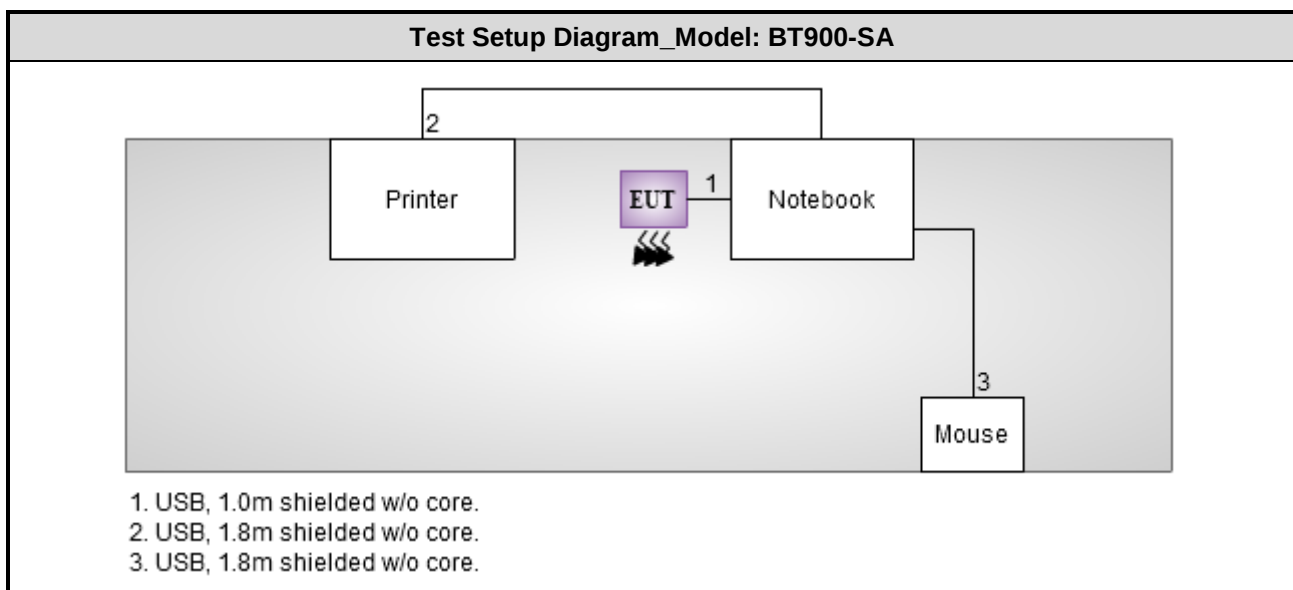
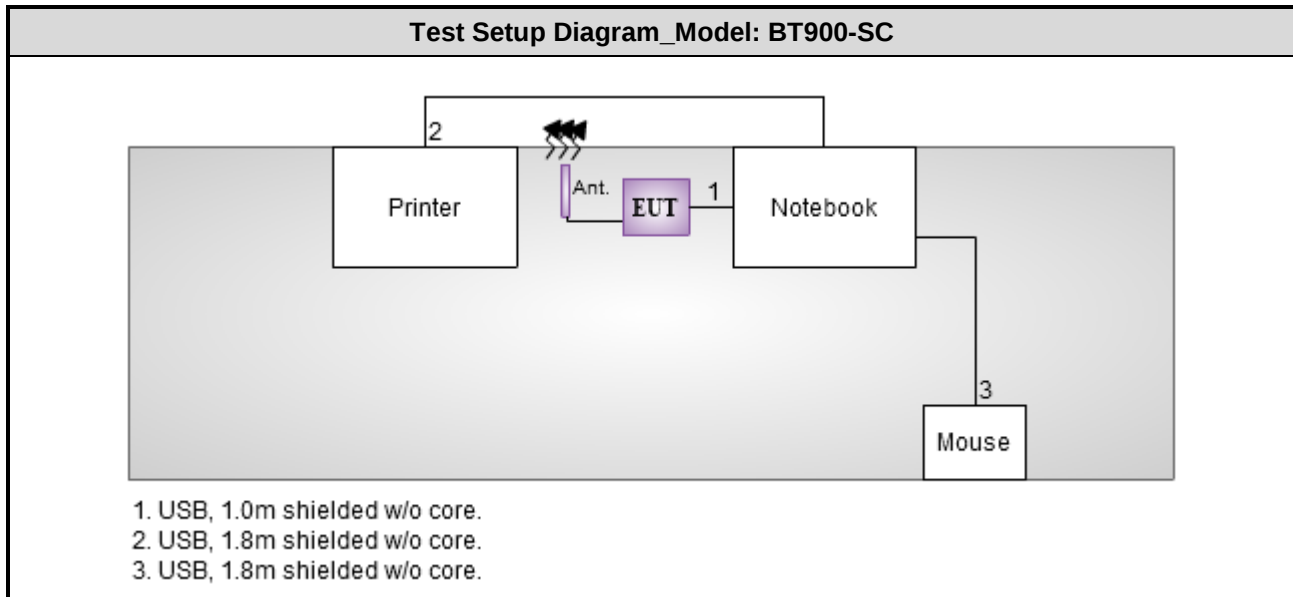
NOTE:

1. This device supports BT EDR and BT LE function, each function is selected to perform tests as below test configuration.
2. 3 types antenna are used for this device, each type is selected to perform radiated emission test as below test configuration.
3. Test Configuration:
 - 1) Configuration 1 : BT900-SC with Antenna 1 (Dipole antenna), BT EDR mode.
 - 2) Configuration 2 : BT900-SC with Antenna 1 (Dipole antenna), BT LE mode.
 - 3) Configuration 3 : BT900-SC with Antenna 2 (PCB Dipole) BT EDR mode.
 - 4) Configuration 4 : BT900-SC with Antenna 2 (PCB Dipole) BT LE mode.
 - 5) Configuration 5 : BT900-SA with Antenna 5 (Chip antenna) BT EDR mode.
 - 6) Configuration 6 : BT900-SA with Antenna 5 (Chip antenna) BT LE mode.

2.3 Local Support Equipment List

Support Equipment List						
No.	Equipment	Brand	Model	S/N	FCC ID	Signal cable / Length (m)
1	Notebook	DELL	Latitude E5430	6R4RWW1	DoC	---
2	Printer	EPSON	XP-30	QSDK0024 10	---	USB, 1.8m shielded w/o core.
3	Mouse	DELL	MS111-L	2C3-00MM	---	USB, 1.8m shielded w/o core.

2.4 Test Setup Chart



2.5 Test Software and Operating Condition

- a. To enable all functions of test system.
- b. The EUT was set to receive BT signal continuously.
- c. The notebook ran "EMCTest.exe" to send "H" patterns to its monitor and the monitor displayed them.
- d. The notebook ran "EMCTest.exe" to send "H" patterns to the printer.

3 Emission Tests Results

3.1 Conducted Emissions

3.1.1 Limit of Conducted Emissions

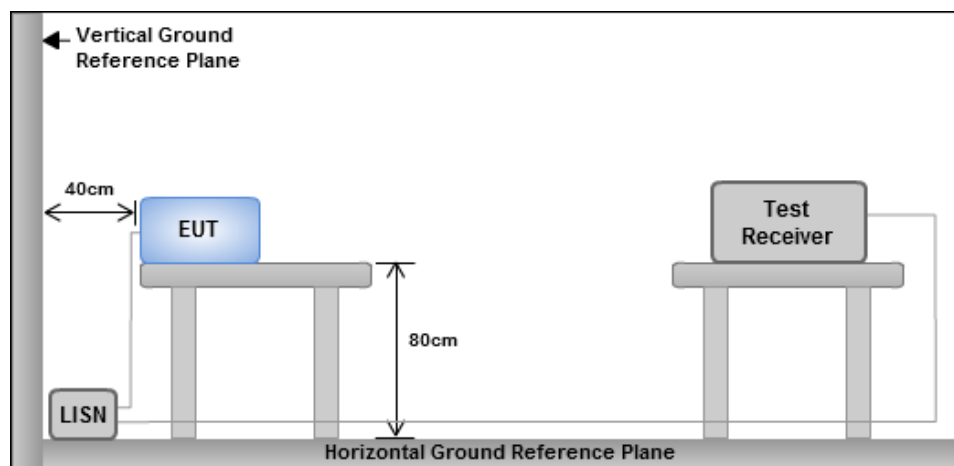
Conducted Emissions Limit		
Frequency Emission (MHz)	Quasi-Peak	Average
0.15-0.5	66 - 56 *	56 - 46 *
0.5-5	56	46
5-30	60	50

Note 1: * Decreases with the logarithm of the frequency.

3.1.2 Test Procedures

- The device is placed on a test table, raised 80 cm above the reference ground plane. The vertical conducting plane is located 40 cm to the rear of the device.
- The device is connected to line impedance stabilization network (LISN) and other accessories are connected to other LISN. Measured levels of AC power line conducted emission are across the 50 Ω LISN port.
- AC conducted emission measurements is made over frequency range from 150 kHz to 30 MHz.
- This measurement was performed with AC 120V / 60Hz.

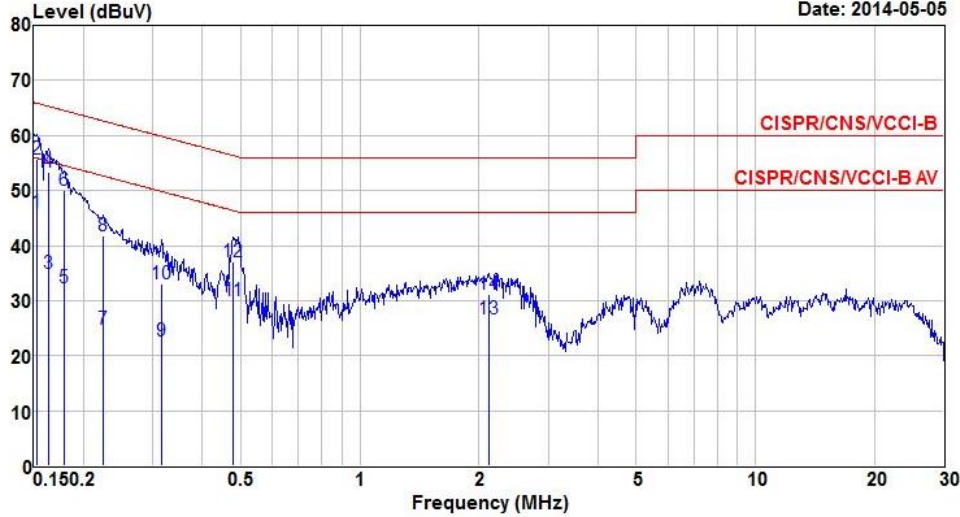
3.1.3 Test Setup



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

3.1.4 Test Result of Conducted Emissions

Modulation Mode	GFSK	Test Freq. (MHz)	2480
Power Phase	Line	Test Configuration	1



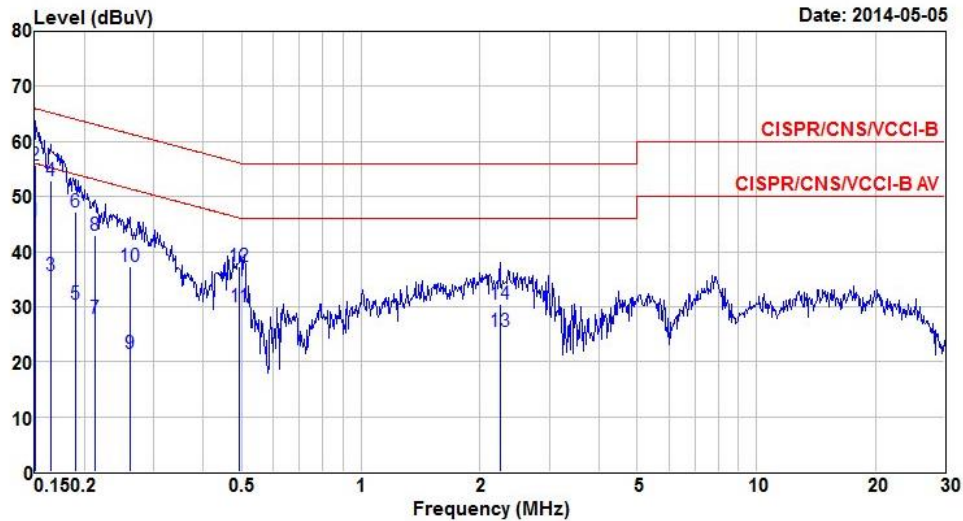
The graph shows the conducted emission level in dBuV versus frequency in MHz. The y-axis ranges from 0 to 80 dBuV, and the x-axis ranges from 0.15 to 30 MHz. A blue line represents the measured emission, which starts at approximately 60 dBuV at 0.15 MHz and decreases to about 25 dBuV at 30 MHz. Two red lines represent the CISPR/CNS/VCCI-B and CISPR/CNS/VCCI-B AV limits. The measured emission is below the limits for most of the frequency range, with some peaks near 0.15 MHz and 0.5 MHz.

Date: 2014-05-05

	Freq MHz	Level dBuV	Limit Line dBuV	Over Limit dB	Read Level dBuV	LISN factor dB	cable loss dB	Remark
1*	0.152	46.11	55.87	-9.76	45.69	0.40	0.02	Average
2	0.152	55.76	65.87	-10.11	55.34	0.40	0.02	QP
3	0.163	34.85	55.30	-20.45	34.43	0.40	0.02	Average
4	0.163	53.32	65.30	-11.98	52.90	0.40	0.02	QP
5	0.179	32.27	54.55	-22.28	31.87	0.39	0.01	Average
6	0.179	50.05	64.55	-14.50	49.65	0.39	0.01	QP
7	0.224	24.84	52.66	-27.82	24.44	0.39	0.01	Average
8	0.224	41.88	62.66	-20.78	41.48	0.39	0.01	QP
9	0.315	22.64	49.84	-27.20	22.23	0.39	0.02	Average
10	0.315	33.09	59.84	-26.75	32.68	0.39	0.02	QP
11	0.479	29.92	46.36	-16.44	29.47	0.39	0.06	Average
12	0.479	37.16	56.36	-19.20	36.71	0.39	0.06	QP
13	2.121	26.61	46.00	-19.39	26.15	0.43	0.03	Average
14	2.121	31.23	56.00	-24.77	30.77	0.43	0.03	QP

Note 1: Level (dBuV) = Read Level (dBuV) + LISN Factor (dB) + Cable Loss (dB).
 Note 2: Over Limit (dB) = Level (dBuV) – Limit Line (dBuV).

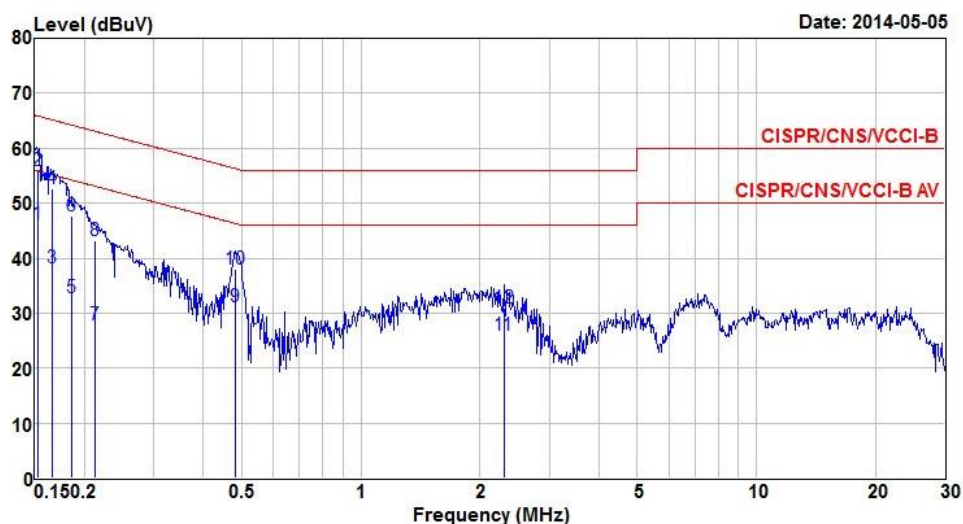
Modulation Mode	GFSK	Test Freq. (MHz)	2480
Power Phase	Neutral	Test Configuration	1



	Freq	Level	Limit	Over	Read	LISN	cable	Remark
	MHz	dBuV	Line	Limit	Level	factor	loss	
			dBuV	dB	dBuV	dB	dB	
1	0.151	45.48	55.96	-10.48	44.98	0.48	0.02	Average
2*	0.151	55.81	65.96	-10.15	55.31	0.48	0.02	QP
3	0.164	35.72	55.25	-19.53	35.22	0.48	0.02	Average
4	0.164	52.91	65.25	-12.34	52.41	0.48	0.02	QP
5	0.190	30.55	54.02	-23.47	30.06	0.48	0.01	Average
6	0.190	47.10	64.02	-16.92	46.61	0.48	0.01	QP
7	0.213	27.91	53.10	-25.19	27.42	0.48	0.01	Average
8	0.213	43.06	63.10	-20.04	42.57	0.48	0.01	QP
9	0.260	21.53	51.42	-29.89	21.04	0.48	0.01	Average
10	0.260	37.37	61.42	-24.05	36.88	0.48	0.01	QP
11	0.494	29.99	46.10	-16.11	29.46	0.47	0.06	Average
12	0.494	37.33	56.10	-18.77	36.80	0.47	0.06	QP
13	2.249	25.54	46.00	-20.46	25.00	0.50	0.04	Average
14	2.249	30.56	56.00	-25.44	30.02	0.50	0.04	QP

Note 1: Level (dBuV) = Read Level (dBuV) + LISN Factor (dB) + Cable Loss (dB).
 2: Over Limit (dB) = Level (dBuV) – Limit Line (dBuV).

Modulation Mode	GFSK	Test Freq. (MHz)	2480
Power Phase	Line	Test Configuration	2

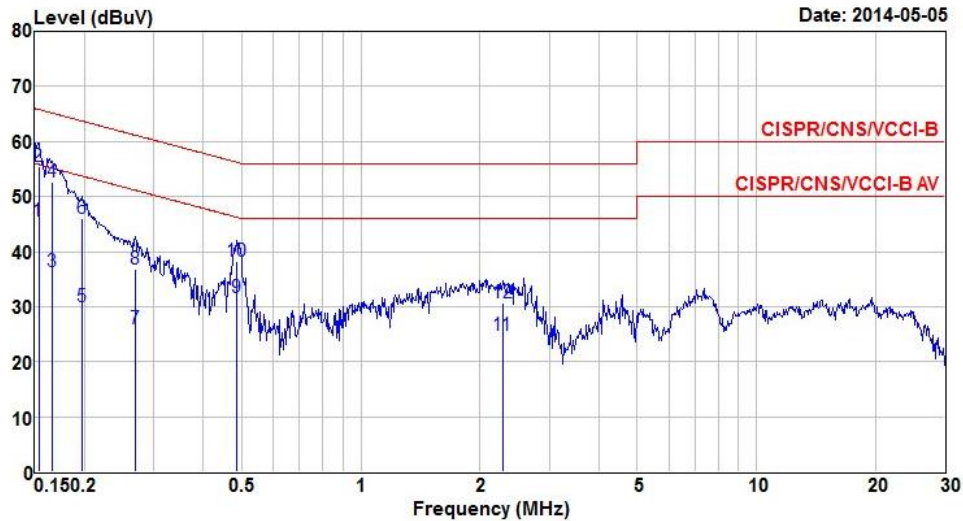


	Freq MHz	Level dBuV	Limit Line dBuV	Over Limit dB	Read Level dBuV	LISN factor dB	cable loss dB	Remark
1*	0.152	46.23	55.87	-9.64	45.81	0.40	0.02	Average
2	0.152	55.94	65.87	-9.93	55.52	0.40	0.02	QP
3	0.166	38.17	55.16	-16.99	37.75	0.40	0.02	Average
4	0.166	52.63	65.16	-12.53	52.21	0.40	0.02	QP
5	0.185	32.76	54.24	-21.48	32.36	0.39	0.01	Average
6	0.185	47.65	64.24	-16.59	47.25	0.39	0.01	QP
7	0.213	27.87	53.10	-25.23	27.47	0.39	0.01	Average
8	0.213	43.18	63.10	-19.92	42.78	0.39	0.01	QP
9	0.481	31.27	46.32	-15.05	30.82	0.39	0.06	Average
10	0.481	37.95	56.32	-18.37	37.50	0.39	0.06	QP
11	2.297	26.01	46.00	-19.99	25.52	0.44	0.05	Average
12	2.297	30.87	56.00	-25.13	30.38	0.44	0.05	QP

Note 1: Level (dBuV) = Read Level (dBuV) + LISN Factor (dB) + Cable Loss (dB).

2: Over Limit (dB) = Level (dBuV) – Limit Line (dBuV).

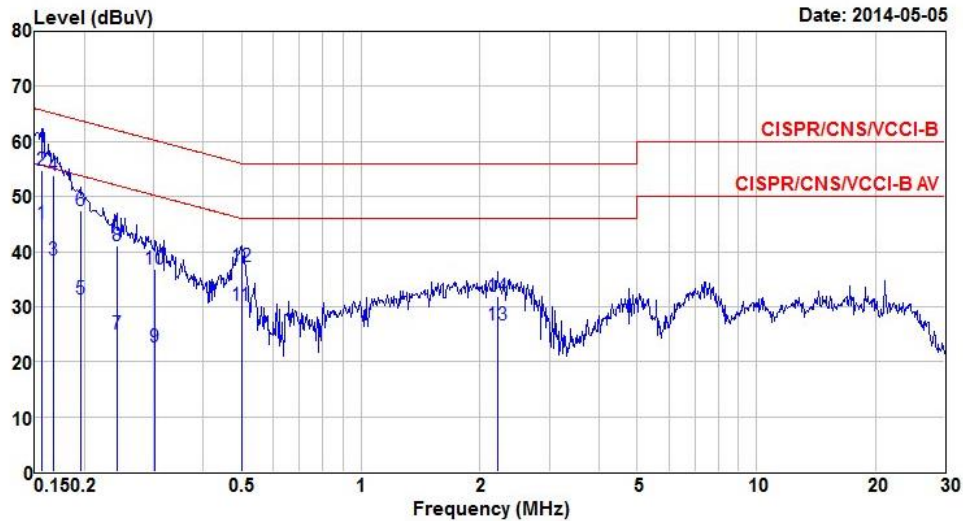
Modulation Mode	GFSK	Test Freq. (MHz)	2480
Power Phase	Neutral	Test Configuration	2



	Freq	Level	Limit	Over	Read	LISN	cable	
	MHz	dBuV	Line	Limit	Level	factor	loss	Remark
			dBuV	dB	dBuV	dB	dB	
1*	0.153	45.55	55.82	-10.27	45.05	0.48	0.02	Average
2	0.153	55.52	65.82	-10.30	55.02	0.48	0.02	QP
3	0.166	36.47	55.16	-18.69	35.97	0.48	0.02	Average
4	0.166	52.61	65.16	-12.55	52.11	0.48	0.02	QP
5	0.198	29.98	53.71	-23.73	29.49	0.48	0.01	Average
6	0.198	46.11	63.71	-17.60	45.62	0.48	0.01	QP
7	0.269	25.98	51.16	-25.18	25.49	0.48	0.01	Average
8	0.269	36.94	61.16	-24.22	36.45	0.48	0.01	QP
9	0.484	31.67	46.27	-14.60	31.14	0.47	0.06	Average
10	0.484	38.33	56.27	-17.94	37.80	0.47	0.06	QP
11	2.285	24.83	46.00	-21.17	24.28	0.50	0.05	Average
12	2.285	30.59	56.00	-25.41	30.04	0.50	0.05	QP

Note 1: Level (dBuV) = Read Level (dBuV) + LISN Factor (dB) + Cable Loss (dB).
 2: Over Limit (dB) = Level (dBuV) – Limit Line (dBuV).

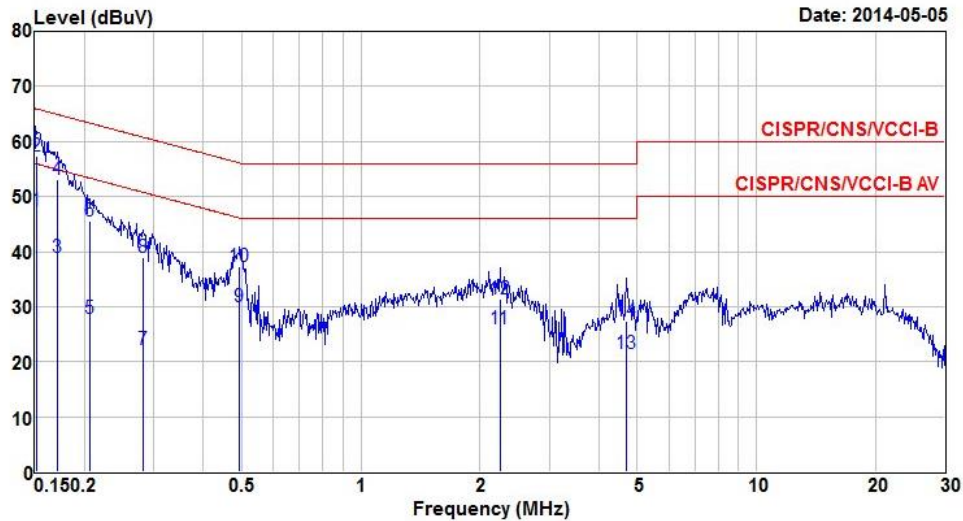
Modulation Mode	GFSK	Test Freq. (MHz)	2480
Power Phase	Line	Test Configuration	5



	Freq	Level	Limit	Over	Read	LISN	cable	Remark
	MHz	dBuV	Line	Limit	Level	factor	loss	
			dBuV	dB	dBuV	dB	dB	
1*	0.156	45.16	55.69	-10.53	44.74	0.40	0.02	Average
2	0.156	54.82	65.69	-10.87	54.40	0.40	0.02	QP
3	0.168	38.46	55.08	-16.62	38.04	0.40	0.02	Average
4	0.168	53.88	65.08	-11.20	53.46	0.40	0.02	QP
5	0.195	31.28	53.80	-22.52	30.88	0.39	0.01	Average
6	0.195	47.54	63.80	-16.26	47.14	0.39	0.01	QP
7	0.242	25.05	52.04	-26.99	24.65	0.39	0.01	Average
8	0.242	41.18	62.04	-20.86	40.78	0.39	0.01	QP
9	0.302	22.65	50.19	-27.54	22.24	0.39	0.02	Average
10	0.302	36.90	60.19	-23.29	36.49	0.39	0.02	QP
11	0.499	30.22	46.01	-15.79	29.77	0.39	0.06	Average
12	0.499	37.28	56.01	-18.73	36.83	0.39	0.06	QP
13	2.213	26.78	46.00	-19.22	26.31	0.43	0.04	Average
14	2.213	31.78	56.00	-24.22	31.31	0.43	0.04	QP

Note 1: Level (dBuV) = Read Level (dBuV) + LISN Factor (dB) + Cable Loss (dB).
 2: Over Limit (dB) = Level (dBuV) – Limit Line (dBuV).

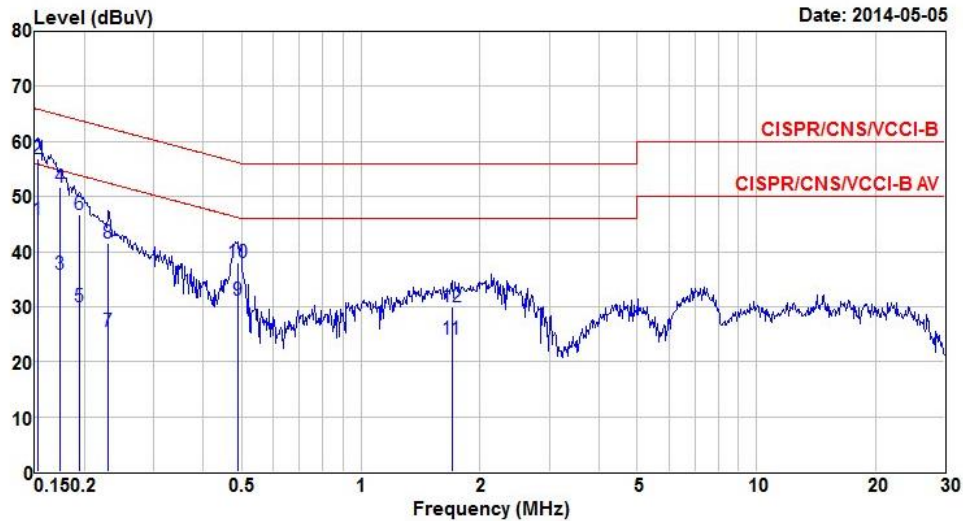
Modulation Mode	GFSK	Test Freq. (MHz)	2480
Power Phase	Neutral	Test Configuration	5



	Freq MHz	Level dBuV	Limit Line dBuV	Over Limit dB	Read Level dBuV	LISN factor dB	cable loss dB	Remark
1*	0.152	47.48	55.91	-8.43	46.98	0.48	0.02	Average
2	0.152	57.41	65.91	-8.50	56.91	0.48	0.02	QP
3	0.171	38.88	54.90	-16.02	38.38	0.48	0.02	Average
4	0.171	53.17	64.90	-11.73	52.67	0.48	0.02	QP
5	0.206	27.91	53.36	-25.45	27.42	0.48	0.01	Average
6	0.206	45.47	63.36	-17.89	44.98	0.48	0.01	QP
7	0.282	22.13	50.76	-28.63	21.65	0.47	0.01	Average
8	0.282	39.06	60.76	-21.70	38.58	0.47	0.01	QP
9	0.494	30.09	46.10	-16.01	29.56	0.47	0.06	Average
10	0.494	37.22	56.10	-18.88	36.69	0.47	0.06	QP
11	2.249	26.01	46.00	-19.99	25.47	0.50	0.04	Average
12	2.249	31.37	56.00	-24.63	30.83	0.50	0.04	QP
13	4.696	21.51	46.00	-24.49	20.81	0.53	0.17	Average
14	4.696	27.45	56.00	-28.55	26.75	0.53	0.17	QP

Note 1: Level (dBuV) = Read Level (dBuV) + LISN Factor (dB) + Cable Loss (dB).
 2: Over Limit (dB) = Level (dBuV) – Limit Line (dBuV).

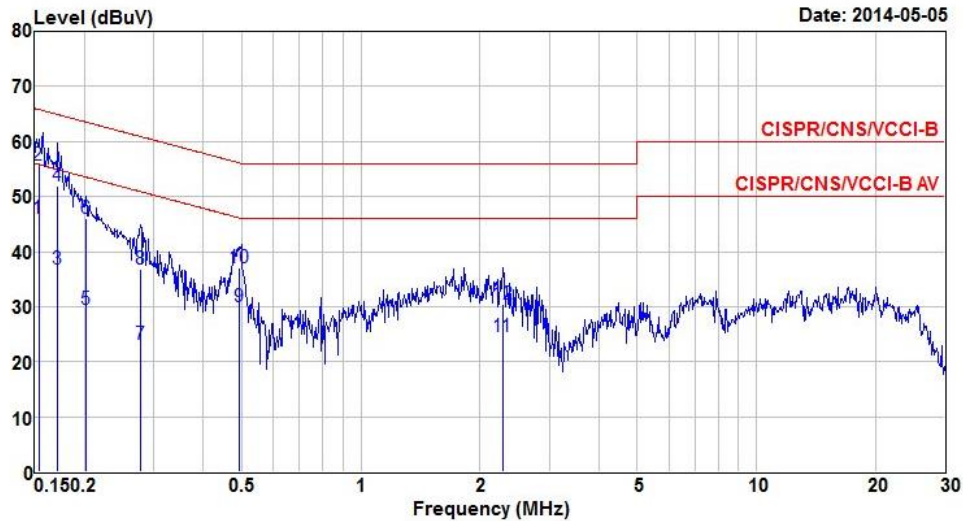
Modulation Mode	GFSK	Test Freq. (MHz)	2480
Power Phase	Line	Test Configuration	6



	Freq	Level	Limit	Over	Read	LISN	cable	
	MHz	dBuV	Line	Limit	Level	factor	loss	Remark
			dBuV	dB	dBuV	dB	dB	
1	0.152	45.91	55.87	-9.96	45.49	0.40	0.02	Average
2*	0.152	56.86	65.87	-9.01	56.44	0.40	0.02	QP
3	0.173	35.96	54.81	-18.85	35.54	0.40	0.02	Average
4	0.173	51.72	64.81	-13.09	51.30	0.40	0.02	QP
5	0.194	29.88	53.84	-23.96	29.48	0.39	0.01	Average
6	0.194	46.76	63.84	-17.08	46.36	0.39	0.01	QP
7	0.230	25.45	52.44	-26.99	25.05	0.39	0.01	Average
8	0.230	41.56	62.44	-20.88	41.16	0.39	0.01	QP
9	0.489	31.27	46.19	-14.92	30.82	0.39	0.06	Average
10	0.489	38.03	56.19	-18.16	37.58	0.39	0.06	QP
11	1.698	24.06	46.00	-21.94	23.57	0.43	0.06	Average
12	1.698	29.98	56.00	-26.02	29.49	0.43	0.06	QP

Note 1: Level (dBuV) = Read Level (dBuV) + LISN Factor (dB) + Cable Loss (dB).
 2: Over Limit (dB) = Level (dBuV) – Limit Line (dBuV).

Modulation Mode	GFSK	Test Freq. (MHz)	2480
Power Phase	Neutral	Test Configuration	6



	Freq	Level	Limit	Over	Read	LISN	cable	
	MHz	dBuV	Line	Limit	Level	factor	loss	Remark
			dBuV	dB	dBuV	dB	dB	
1*	0.153	46.01	55.82	-9.81	45.51	0.48	0.02	Average
2	0.153	55.71	65.82	-10.11	55.21	0.48	0.02	QP
3	0.171	36.77	54.90	-18.13	36.27	0.48	0.02	Average
4	0.171	52.00	64.90	-12.90	51.50	0.48	0.02	QP
5	0.202	29.49	53.54	-24.05	29.00	0.48	0.01	Average
6	0.202	46.10	63.54	-17.44	45.61	0.48	0.01	QP
7	0.277	23.23	50.90	-27.67	22.74	0.48	0.01	Average
8	0.277	36.82	60.90	-24.08	36.33	0.48	0.01	QP
9	0.494	29.89	46.10	-16.21	29.36	0.47	0.06	Average
10	0.494	37.08	56.10	-19.02	36.55	0.47	0.06	QP
11	2.285	24.63	46.00	-21.37	24.08	0.50	0.05	Average
12	2.285	30.39	56.00	-25.61	29.84	0.50	0.05	QP

Note 1: Level (dBuV) = Read Level (dBuV) + LISN Factor (dB) + Cable Loss (dB).
 2: Over Limit (dB) = Level (dBuV) – Limit Line (dBuV).

3.2 Radiated Emissions

3.2.1 Limit of Radiated Emissions

According to FCC Part 15, Subpart B §15.109, the field strength of radiated emissions from unintentional radiators at a distance of 3 meters shall not exceed the following values:

Frequency of Emission (MHz)	Field Strength (uV/m)	Field Strength (dBuV/m)	Measure Distance (m)
30 - 88	100	40	3
88 - 216	150	43.5	3
216 - 960	200	46	3
Above 960	500	54	3

Highest frequency generated or used in the device or on which the device operates or tunes (MHz)	Upper frequency of measurement range (MHz)
Below 1.705	30
1.705-108	1000
108-500	2000
500-1000	5000
Above 1000	5th harmonic of the highest frequency or 40 GHz, whichever is lower

Note: According to FCC Part 15, Subpart B §15.33: For an unintentional radiator is shown in the table above.

3.2.2 Test Procedures

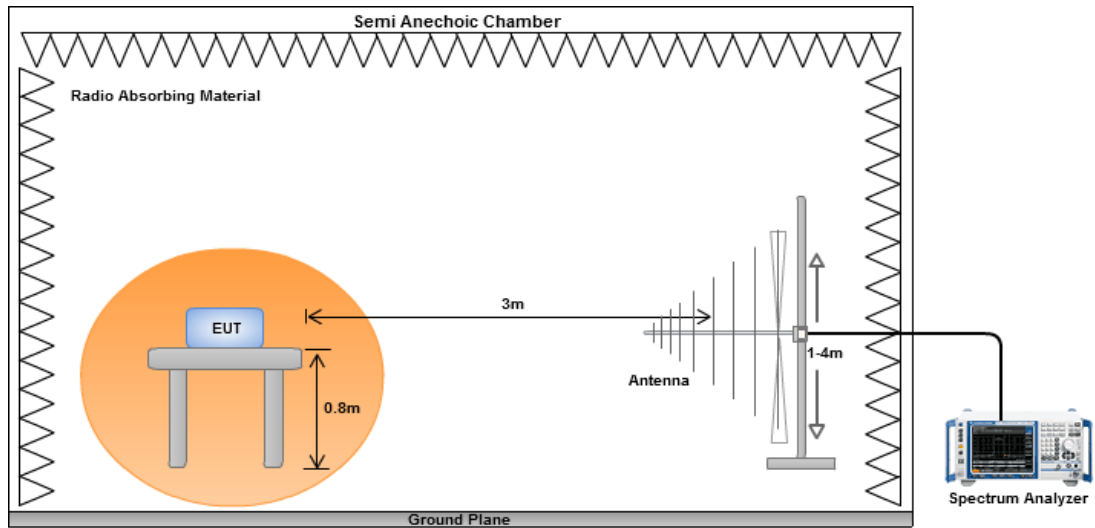
1. Measurement is made at a semi-anechoic chamber that incorporates a turntable allowing a EUT rotation of 360°. A continuously-rotating, remotely-controlled turntable is installed at the test site to support the EUT and facilitate determination of the direction of maximum radiation for each EUT emission frequency. The EUT is placed at a height of 0.8 m test table above the ground plane.
2. Measurement is made with the antenna positioned in both the horizontal and vertical planes of polarization. The measurement antenna is varied in height (1m ~ 4m) above the reference ground plane to obtain the maximum signal strength. Distance between EUT and antenna is 3 m.
3. This investigation is performed with the EUT rotated 360°, the antenna height scanned between 1 m and 4 m, and the antenna rotated to repeat the measurements for both the horizontal and vertical antenna polarizations.

Note:

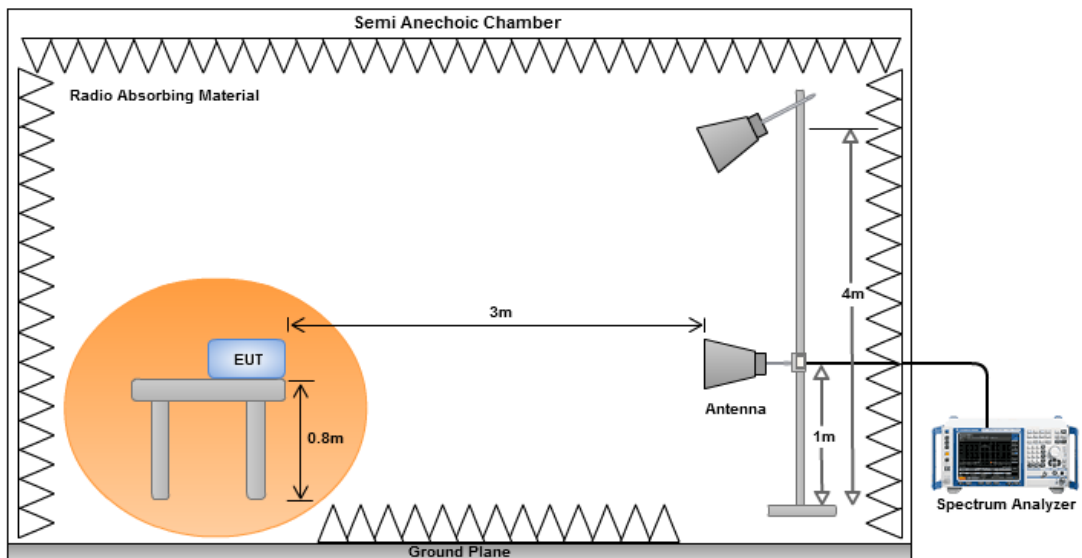
1. 120kHz measurement bandwidth of test receiver and Quasi-peak detector is for radiated emission below 1GHz.
2. RBW=1MHz, VBW=3MHz and Peak detector is for peak measured value of radiated emission above 1GHz.
3. RBW=1MHz, VBW=3MHz and RMS detector is for average measured value of radiated emission above 1GHz.

3.2.3 Test Setup

Radiated Emissions below 1 GHz

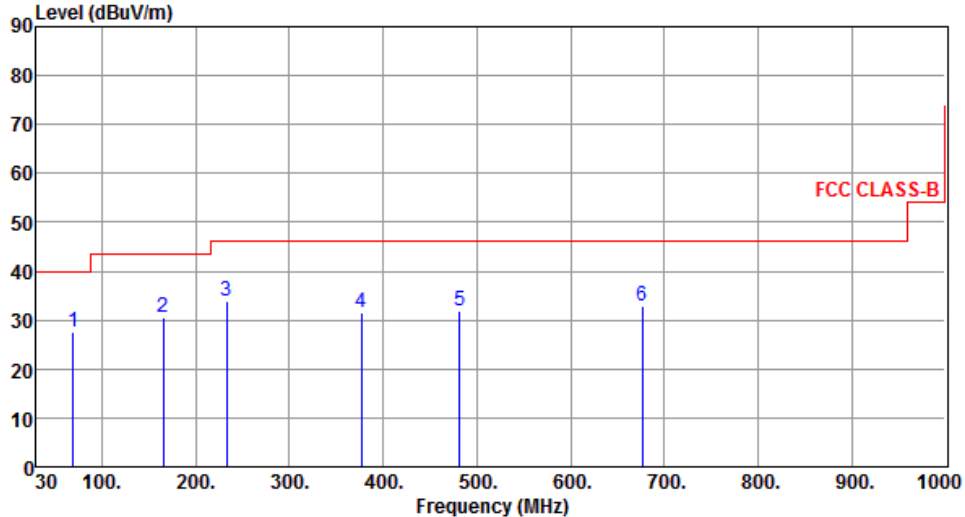


Radiated Emissions above 1 GHz



3.2.4 Transmitter Radiated Unwanted Emissions (Below 1GHz)

Modulation	GFSK	Test Freq. (MHz)	2480
Polarization	Horizontal	Test Configuration	1

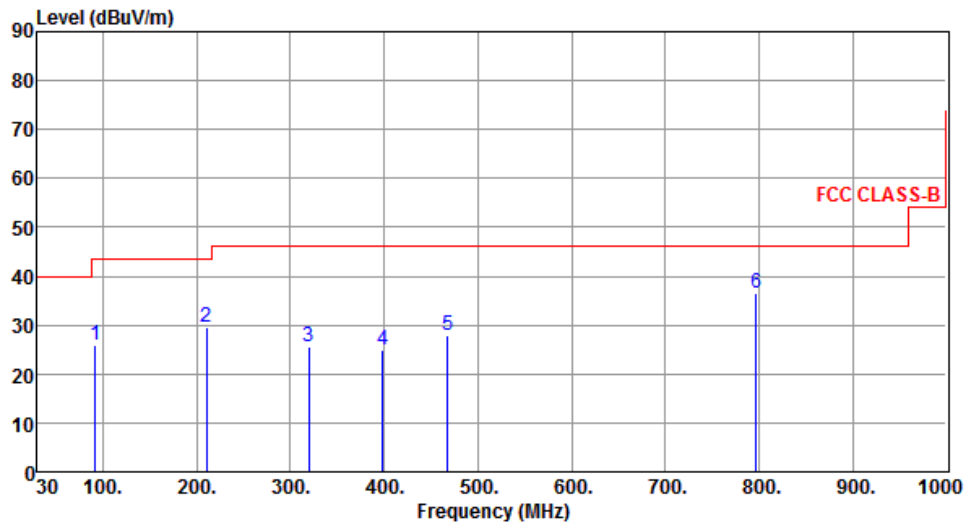


The graph displays the radiated unwanted emissions level in dBuV/m across a frequency range from 30 MHz to 1000 MHz. A red line represents the FCC CLASS-B limit, which is 40 dBuV/m from 30 MHz to 100 MHz, 45 dBuV/m from 100 MHz to 200 MHz, and 55 dBuV/m from 200 MHz to 1000 MHz. Six emission peaks are identified and labeled with blue numbers 1 through 6. The data for these peaks is provided in the table below.

	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	69.45	27.58	40.00	-12.42	46.51	-18.93	Peak	---	---
2	165.43	30.42	43.50	-13.08	47.55	-17.13	Peak	---	---
3	232.64	33.78	46.00	-12.22	52.38	-18.60	Peak	---	---
4	376.91	31.53	46.00	-14.47	45.90	-14.37	Peak	---	---
5	481.24	31.96	46.00	-14.04	43.96	-12.00	Peak	---	---
6	676.74	32.81	46.00	-13.19	41.47	-8.66	Peak	---	---

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
 *Factor includes antenna factor , cable loss and amplifier gain
 Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

Modulation	GFSK	Test Freq. (MHz)	2480
Polarization	Vertical	Test Configuration	1



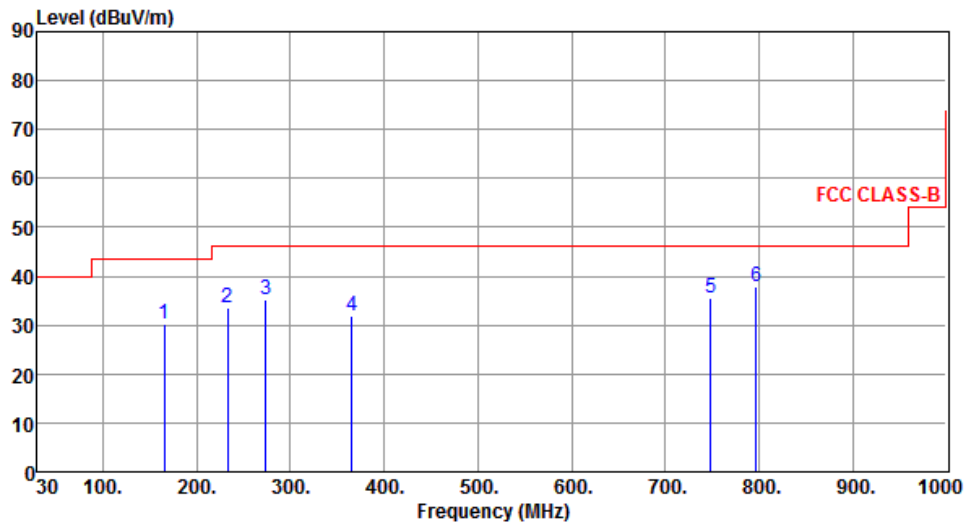
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	91.64	25.87	43.50	-17.63	48.72	-22.85	Peak	---	---
2	210.61	29.68	43.50	-13.82	49.13	-19.45	Peak	---	---
3	319.25	25.49	46.00	-20.51	41.28	-15.79	Peak	---	---
4	398.51	24.83	46.00	-21.17	38.59	-13.76	Peak	---	---
5	468.19	27.88	46.00	-18.12	40.10	-12.22	Peak	---	---
6	796.60	36.57	46.00	-9.43	43.30	-6.73	Peak	---	---

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

Modulation	GFSK	Test Freq. (MHz)	2480
Polarization	Horizontal	Test Configuration	2



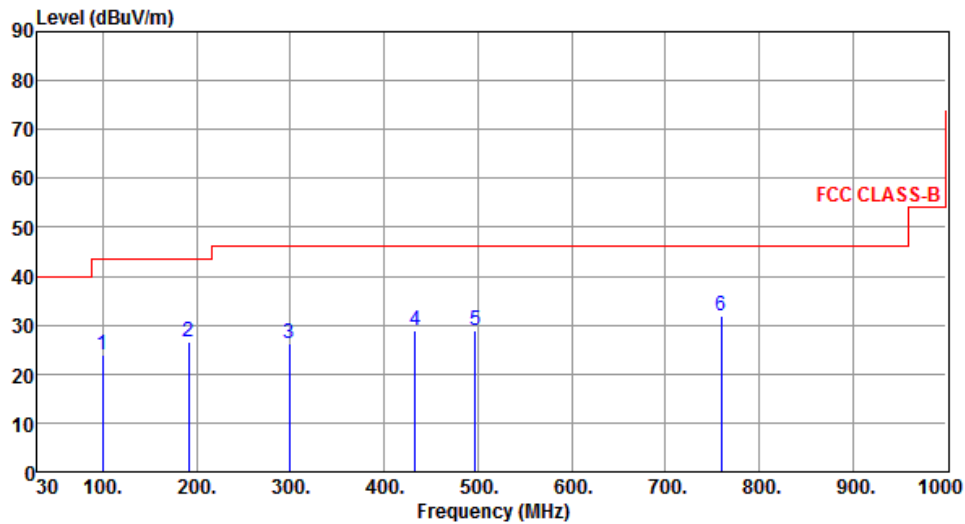
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	165.10	30.25	43.50	-13.25	47.36	-17.11	Peak	---	---
2	232.61	33.58	46.00	-12.42	52.18	-18.60	Peak	---	---
3	273.68	35.23	46.00	-10.77	52.28	-17.05	Peak	---	---
4	365.49	31.79	46.00	-14.21	46.48	-14.69	Peak	---	---
5	748.72	35.52	46.00	-10.48	42.95	-7.43	Peak	---	---
6	797.13	37.89	46.00	-8.11	44.61	-6.72	Peak	---	---

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)

*Factor includes antenna factor, cable loss and amplifier gain

Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

Modulation	GFSK	Test Freq. (MHz)	2480
Polarization	Vertical	Test Configuration	2



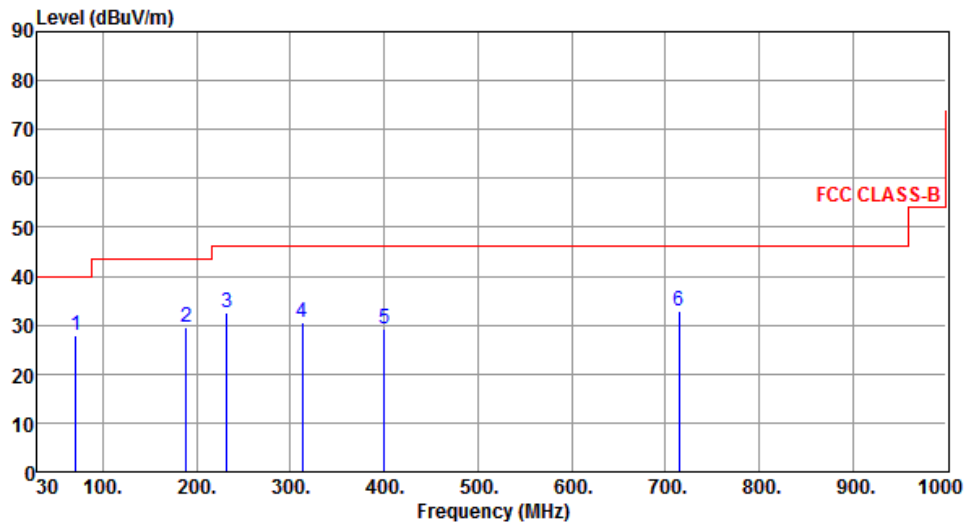
	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	99.92	23.89	43.50	-19.61	45.54	-21.65	Peak	---	---
2	191.45	26.54	43.50	-16.96	46.11	-19.57	Peak	---	---
3	298.76	26.31	46.00	-19.69	42.55	-16.24	Peak	---	---
4	432.87	28.75	46.00	-17.25	41.67	-12.92	Peak	---	---
5	497.32	28.98	46.00	-17.02	40.72	-11.74	Peak	---	---
6	759.37	31.74	46.00	-14.26	39.01	-7.27	Peak	---	---

Note 1: Emission Level (dBUV/m) = SA Reading (dBUV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

Note 2: Margin (dB) = Emission level (dBUV/m) – Limit (dBUV/m).

Modulation	GFSK	Test Freq. (MHz)	2480
Polarization	Horizontal	Test Configuration	3



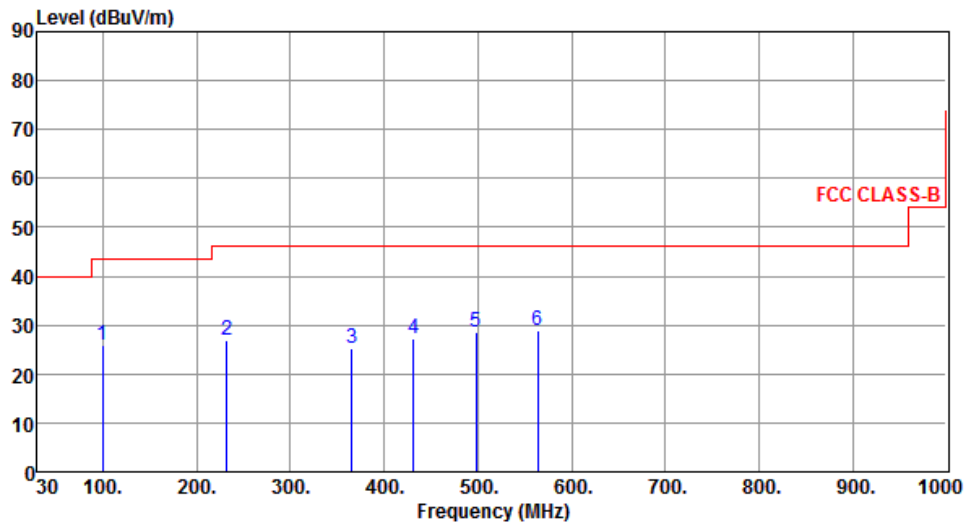
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	71.35	27.88	40.00	-12.12	47.25	-19.37	Peak	---	---
2	188.43	29.64	43.50	-13.86	49.01	-19.37	Peak	---	---
3	232.35	32.43	46.00	-13.57	51.05	-18.62	Peak	---	---
4	312.67	30.58	46.00	-15.42	46.52	-15.94	Peak	---	---
5	399.84	29.14	46.00	-16.86	42.86	-13.72	Peak	---	---
6	714.64	32.75	46.00	-13.25	40.81	-8.06	Peak	---	---

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

Modulation	GFSK	Test Freq. (MHz)	2480
Polarization	Vertical	Test Configuration	3



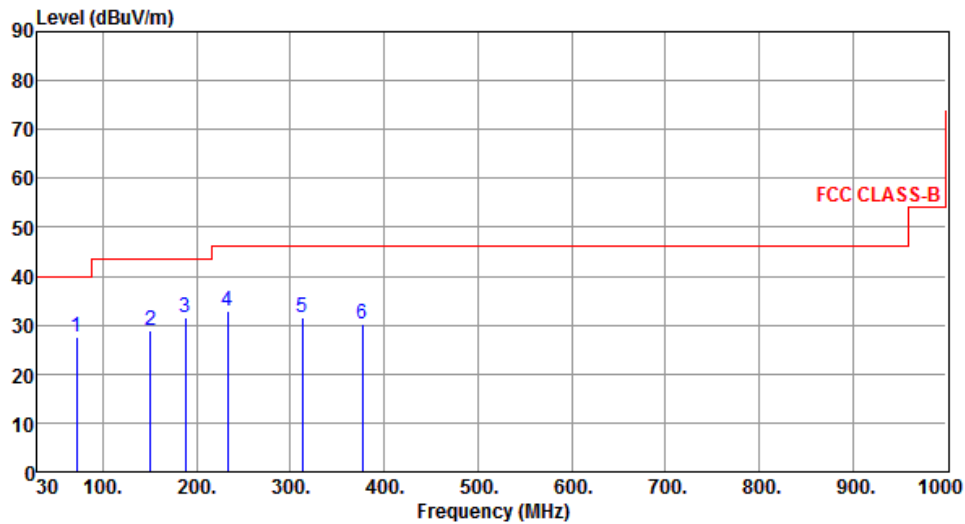
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	99.47	25.86	43.50	-17.64	47.57	-21.71	Peak	---	---
2	232.38	26.84	46.00	-19.16	45.46	-18.62	Peak	---	---
3	365.18	25.26	46.00	-20.74	39.96	-14.70	Peak	---	---
4	431.62	27.35	46.00	-18.65	40.29	-12.94	Peak	---	---
5	497.72	28.45	46.00	-17.55	40.18	-11.73	Peak	---	---
6	564.31	28.96	46.00	-17.04	39.27	-10.31	Peak	---	---

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

Modulation	GFSK	Test Freq. (MHz)	2480
Polarization	Horizontal	Test Configuration	4



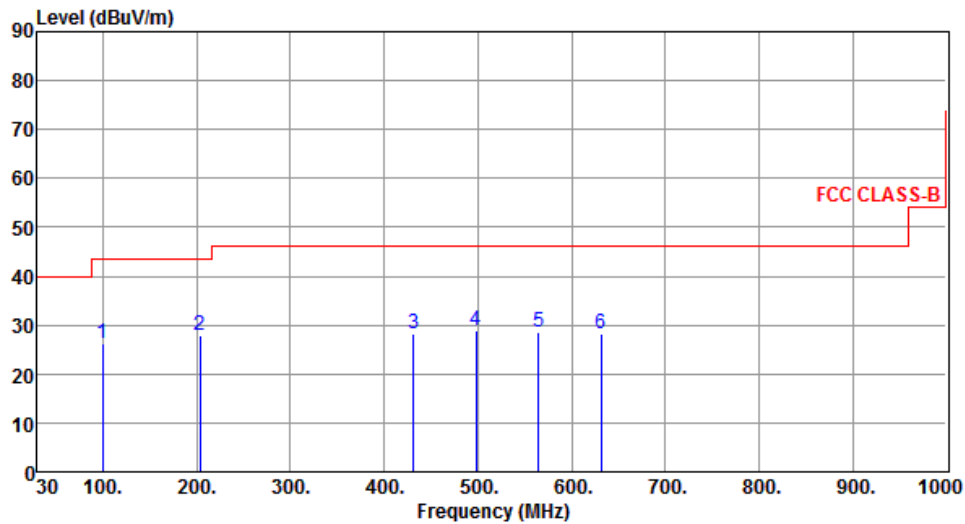
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	71.57	27.59	40.00	-12.41	47.01	-19.42	Peak	---	---
2	150.46	28.91	43.50	-14.59	45.65	-16.74	Peak	---	---
3	188.32	31.54	43.50	-11.96	50.90	-19.36	Peak	---	---
4	232.97	32.89	46.00	-13.11	51.46	-18.57	Peak	---	---
5	312.63	31.57	46.00	-14.43	47.51	-15.94	Peak	---	---
6	376.45	30.18	46.00	-15.82	44.56	-14.38	Peak	---	---

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

Modulation	GFSK	Test Freq. (MHz)	2480
Polarization	Vertical	Test Configuration	4



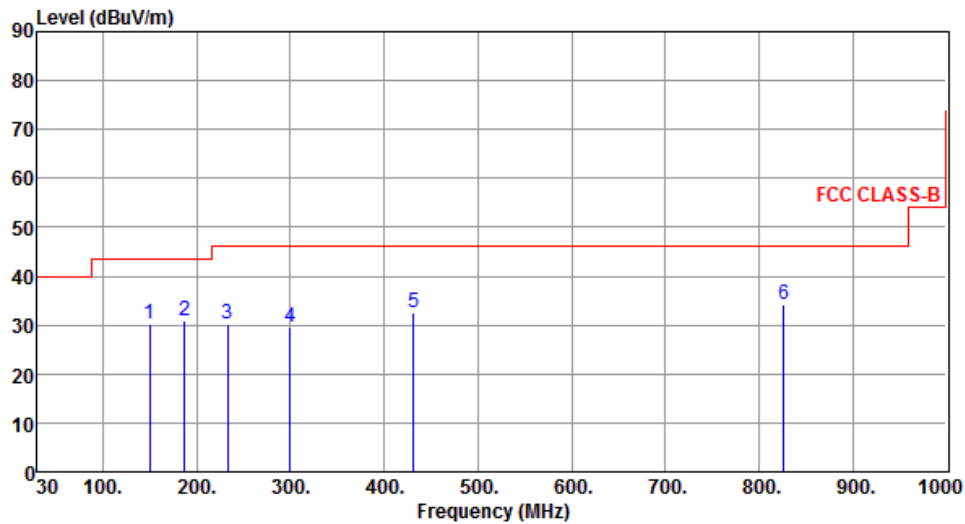
	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	99.43	26.11	43.50	-17.39	47.83	-21.72	Peak	---	---
2	203.53	27.89	43.50	-15.61	47.62	-19.73	Peak	---	---
3	431.18	28.13	46.00	-17.87	41.08	-12.95	Peak	---	---
4	498.36	28.94	46.00	-17.06	40.66	-11.72	Peak	---	---
5	565.07	28.43	46.00	-17.57	38.73	-10.30	Peak	---	---
6	631.56	28.18	46.00	-17.82	37.42	-9.24	Peak	---	---

Note 1: Emission Level (dBUV/m) = SA Reading (dBUV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

Note 2: Margin (dB) = Emission level (dBUV/m) – Limit (dBUV/m).

Modulation	GFSK	Test Freq. (MHz)	2480
Polarization	Horizontal	Test Configuration	5



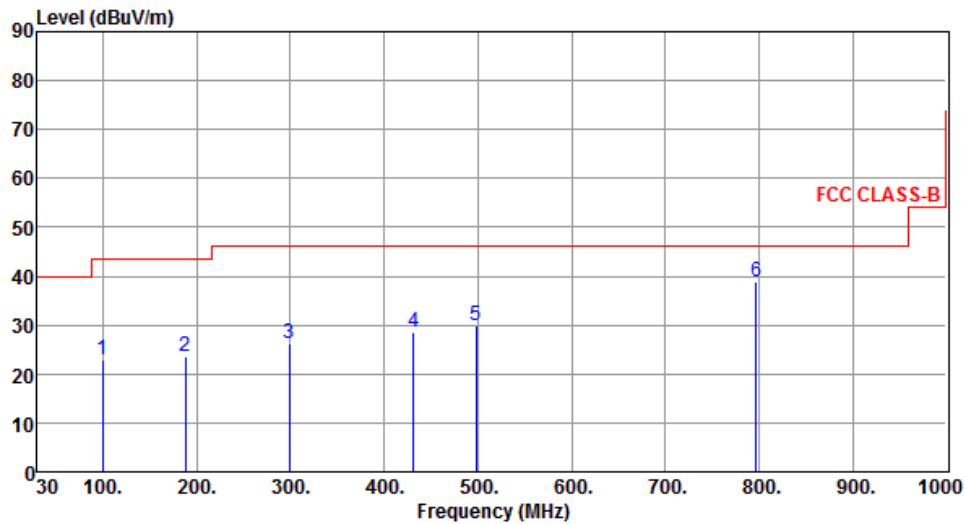
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	150.28	30.10	43.50	-13.40	46.84	-16.74	Peak	---	---
2	187.14	30.74	43.50	-12.76	50.00	-19.26	Peak	---	---
3	232.73	30.06	46.00	-15.94	48.65	-18.59	Peak	---	---
4	299.66	29.65	46.00	-16.35	45.88	-16.23	Peak	---	---
5	431.58	32.44	46.00	-13.56	45.39	-12.95	Peak	---	---
6	826.37	34.16	46.00	-11.84	40.63	-6.47	Peak	---	---

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)

*Factor includes antenna factor, cable loss and amplifier gain

Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

Modulation	GFSK	Test Freq. (MHz)	2480
Polarization	Vertical	Test Configuration	5



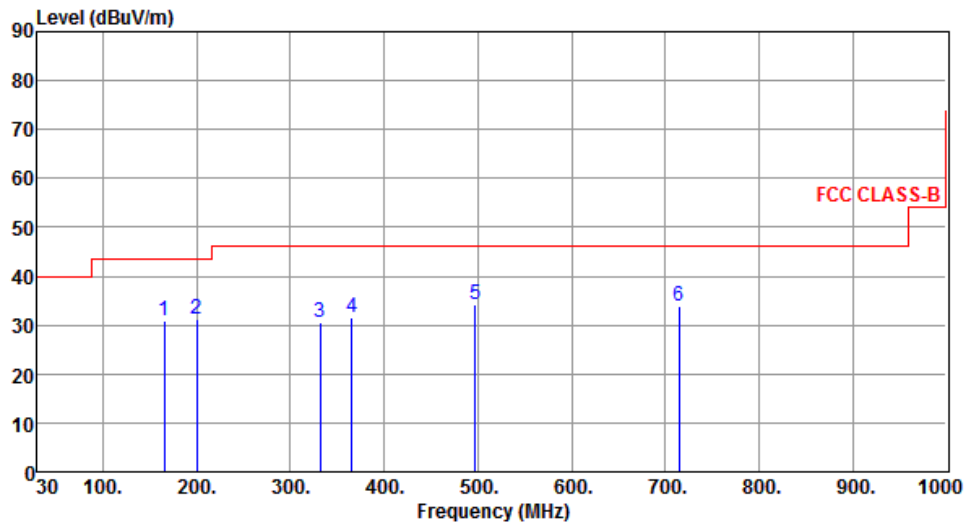
	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	99.75	22.94	43.50	-20.56	41.06	-18.12	Peak	---	---
2	188.25	23.65	43.50	-19.85	39.57	-15.92	Peak	---	---
3	298.69	26.24	46.00	-19.76	39.22	-12.98	Peak	---	---
4	431.25	28.60	46.00	-17.40	38.17	-9.57	Peak	---	---
5	498.15	29.77	46.00	-16.23	38.06	-8.29	Peak	---	---
6	797.38	38.90	46.00	-7.10	41.75	-2.85	Peak	---	---

Note 1: Emission Level (dBUV/m) = SA Reading (dBUV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

Note 2: Margin (dB) = Emission level (dBUV/m) – Limit (dBUV/m).

Modulation	GFSK	Test Freq. (MHz)	2480
Polarization	Horizontal	Test Configuration	6



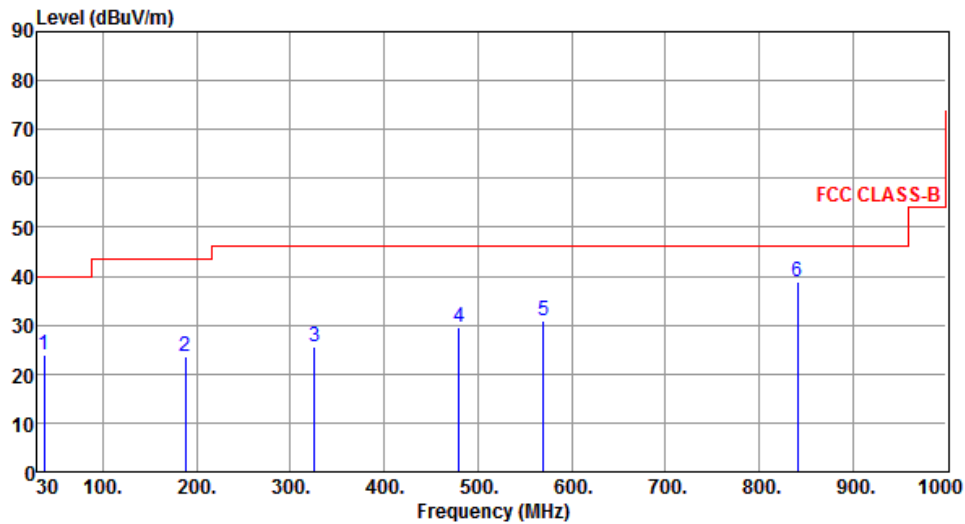
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	165.73	30.79	43.50	-12.71	47.95	-17.16	Peak	---	---
2	199.78	31.08	43.50	-12.42	50.95	-19.87	Peak	---	---
3	331.56	30.56	46.00	-15.44	46.08	-15.52	Peak	---	---
4	365.42	31.58	46.00	-14.42	46.27	-14.69	Peak	---	---
5	497.54	34.06	46.00	-11.94	45.79	-11.73	Peak	---	---
6	714.85	33.72	46.00	-12.28	41.77	-8.05	Peak	---	---

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

Modulation	GFSK	Test Freq. (MHz)	2480
Polarization	Vertical	Test Configuration	6



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	37.68	23.84	40.00	-16.16	41.07	-17.23	Peak	---	---
2	188.26	23.73	43.50	-19.77	43.08	-19.35	Peak	---	---
3	325.76	25.42	46.00	-20.58	41.06	-15.64	Peak	---	---
4	480.12	29.55	46.00	-16.45	41.57	-12.02	Peak	---	---
5	570.44	30.75	46.00	-15.25	40.93	-10.18	Peak	---	---
6	840.92	38.76	46.00	-7.24	45.11	-6.35	Peak	---	---

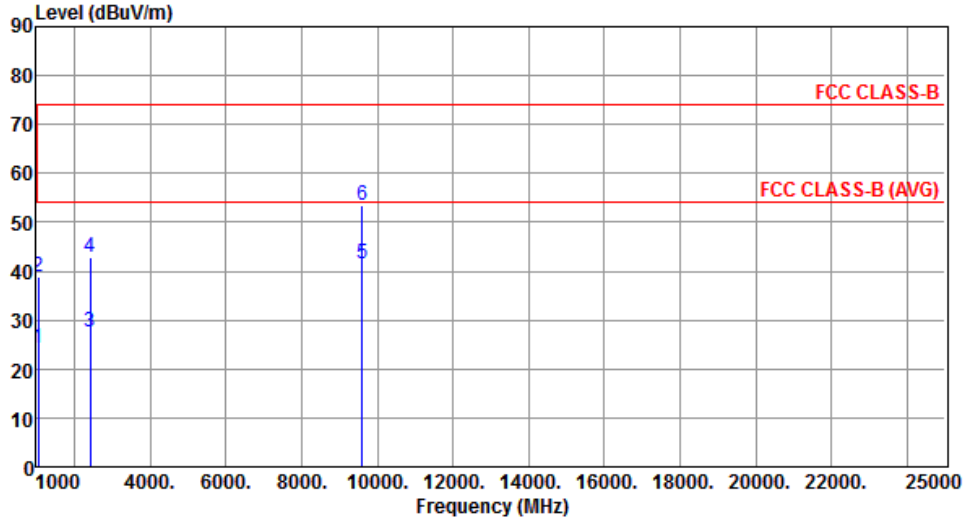
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

3.2.5 Transmitter Radiated Unwanted Emissions (Above 1GHz)

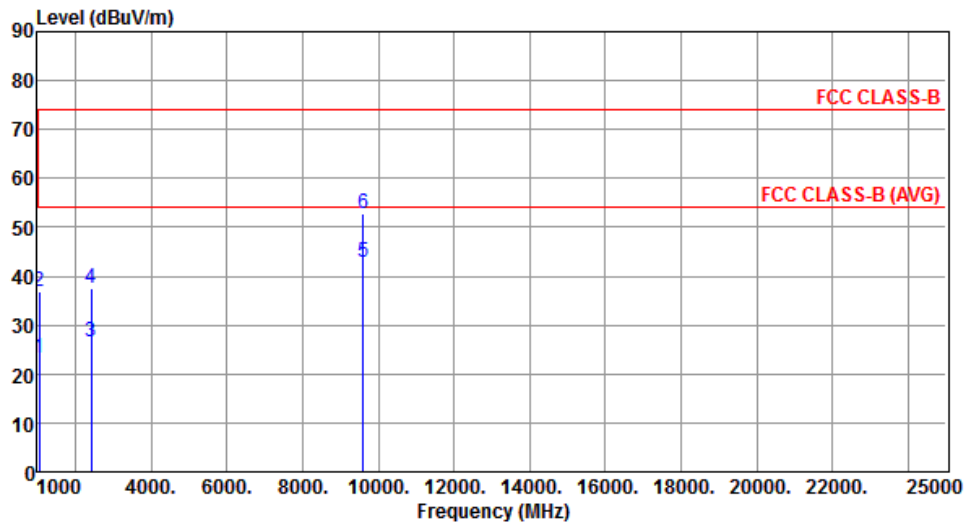
Modulation	GFSK	Test Freq. (MHz)	2402
Polarization	Horizontal	Test Configuration	1



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	1050.00	24.38	54.00	-29.62	33.84	-9.46	Average	---	---
2	1050.00	38.91	74.00	-35.09	48.37	-9.46	Peak	---	---
3	2417.00	27.47	54.00	-26.53	30.17	-2.70	Average	---	---
4	2417.00	42.83	74.00	-31.17	45.53	-2.70	Peak	---	---
5	9608.00	41.65	54.00	-12.35	28.06	13.59	Average	---	---
6	9608.00	53.48	74.00	-20.52	39.89	13.59	Peak	---	---

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)
 *Factor includes antenna factor , cable loss and amplifier gain
 Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

Modulation	GFSK	Test Freq. (MHz)	2402
Polarization	Vertical	Test Configuration	1



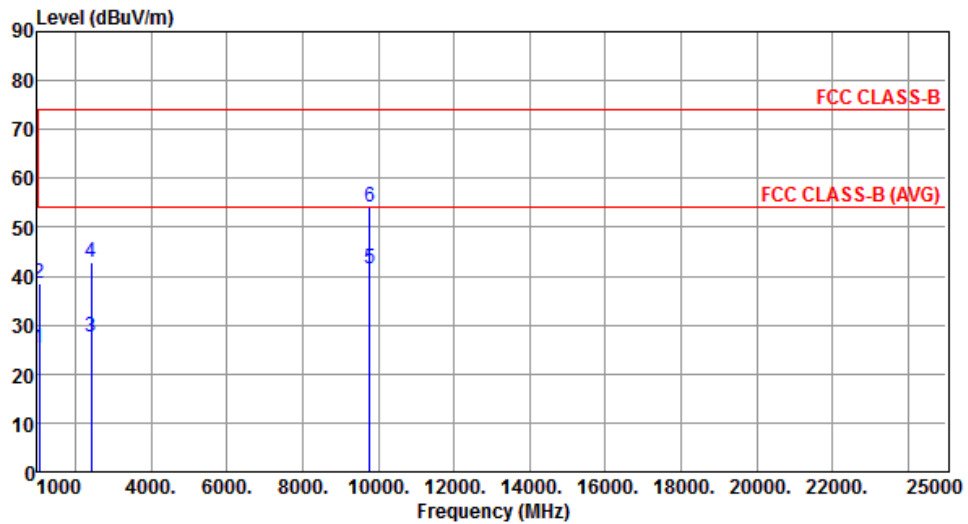
	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	1050.00	23.18	54.00	-30.82	32.64	-9.46	Average	---	---
2	1050.00	36.88	74.00	-37.12	46.34	-9.46	Peak	---	---
3	2417.00	26.51	54.00	-27.49	29.21	-2.70	Average	---	---
4	2417.00	37.45	74.00	-36.55	40.15	-2.70	Peak	---	---
5	9608.00	42.83	54.00	-11.17	29.24	13.59	Average	---	---
6	9608.00	52.67	74.00	-21.33	39.08	13.59	Peak	---	---

Note 1: Emission Level (dBUV/m) = SA Reading (dBUV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

Note 2: Margin (dB) = Emission level (dBUV/m) – Limit (dBUV/m).

Modulation	GFSK	Test Freq. (MHz)	2441
Polarization	Horizontal	Test Configuration	1



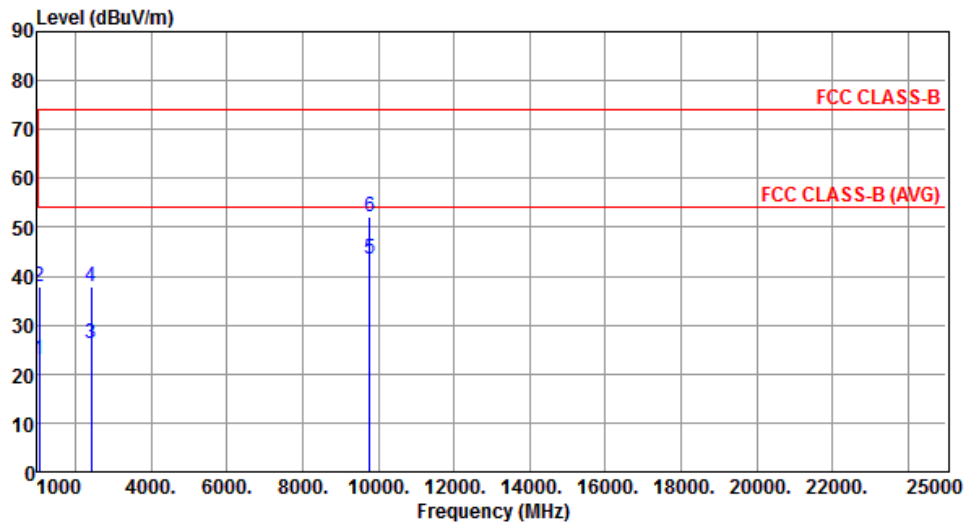
	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	1050.00	25.19	54.00	-28.81	34.65	-9.46	Average	---	---
2	1050.00	38.36	74.00	-35.64	47.82	-9.46	Peak	---	---
3	2417.00	27.51	54.00	-26.49	30.21	-2.70	Average	---	---
4	2417.00	42.96	74.00	-31.04	45.66	-2.70	Peak	---	---
5	9764.00	41.58	54.00	-12.42	27.88	13.70	Average	---	---
6	9764.00	54.24	74.00	-19.76	40.54	13.70	Peak	---	---

Note 1: Emission Level (dBUV/m) = SA Reading (dBUV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

Note 2: Margin (dB) = Emission level (dBUV/m) – Limit (dBUV/m).

Modulation	GFSK	Test Freq. (MHz)	2441
Polarization	Vertical	Test Configuration	1



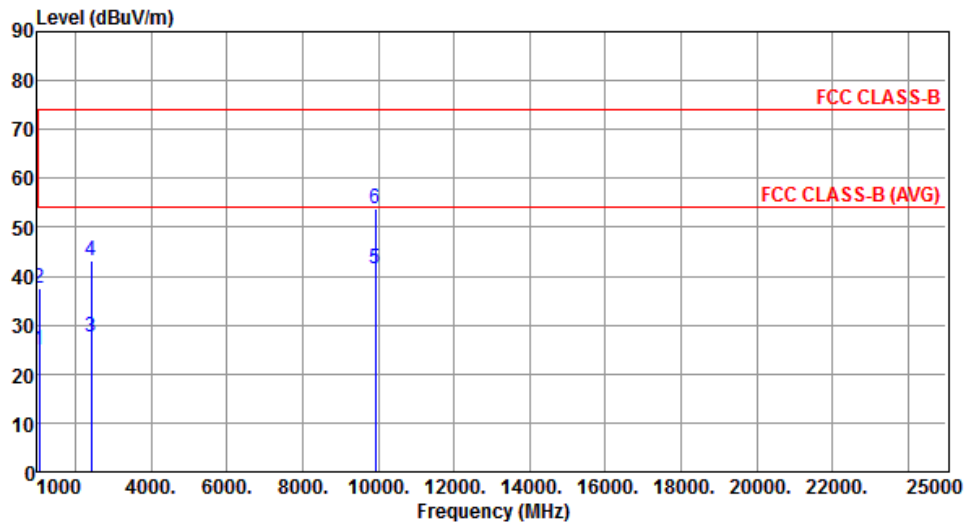
	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	1050.00	22.93	54.00	-31.07	32.39	-9.46	Average	---	---
2	1050.00	37.76	74.00	-36.24	47.22	-9.46	Peak	---	---
3	2417.00	26.28	54.00	-27.72	28.98	-2.70	Average	---	---
4	2417.00	37.84	74.00	-36.16	40.54	-2.70	Peak	---	---
5	9764.00	43.65	54.00	-10.35	29.95	13.70	Average	---	---
6	9764.00	52.19	74.00	-21.81	38.49	13.70	Peak	---	---

Note 1: Emission Level (dBUV/m) = SA Reading (dBUV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

Note 2: Margin (dB) = Emission level (dBUV/m) – Limit (dBUV/m).

Modulation	GFSK	Test Freq. (MHz)	2480
Polarization	Horizontal	Test Configuration	1



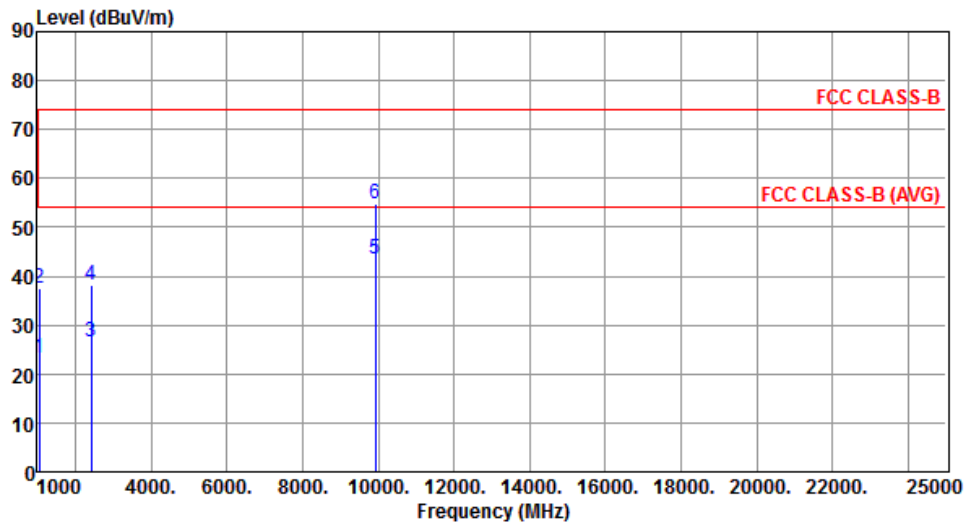
	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	1050.00	24.85	54.00	-29.15	34.31	-9.46	Average	---	---
2	1050.00	37.67	74.00	-36.33	47.13	-9.46	Peak	---	---
3	2417.00	27.46	54.00	-26.54	30.16	-2.70	Average	---	---
4	2417.00	43.18	74.00	-30.82	45.88	-2.70	Peak	---	---
5	9920.00	41.59	54.00	-12.41	27.79	13.80	Average	---	---
6	9920.00	53.87	74.00	-20.13	40.07	13.80	Peak	---	---

Note 1: Emission Level (dBUV/m) = SA Reading (dBUV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

Note 2: Margin (dB) = Emission level (dBUV/m) – Limit (dBUV/m).

Modulation	GFSK	Test Freq. (MHz)	2480
Polarization	Vertical	Test Configuration	1



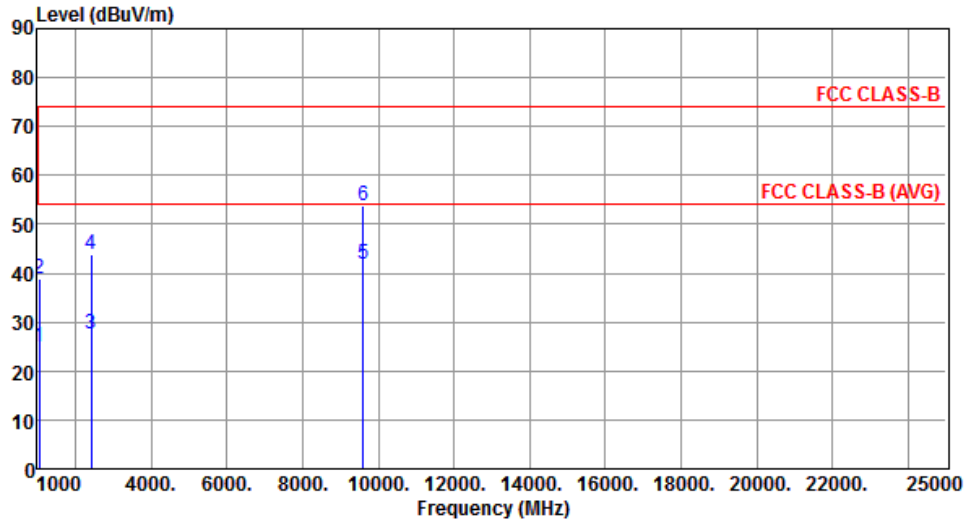
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	1050.00	23.24	54.00	-30.76	32.70	-9.46	Average	---	---
2	1050.00	37.65	74.00	-36.35	47.11	-9.46	Peak	---	---
3	2417.00	26.41	54.00	-27.59	29.11	-2.70	Average	---	---
4	2417.00	38.32	74.00	-35.68	41.02	-2.70	Peak	---	---
5	9920.00	43.59	54.00	-10.41	29.79	13.80	Average	---	---
6	9920.00	54.87	74.00	-19.13	41.07	13.80	Peak	---	---

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

Modulation	GFSK	Test Freq. (MHz)	2402
Polarization	Horizontal	Test Configuration	2



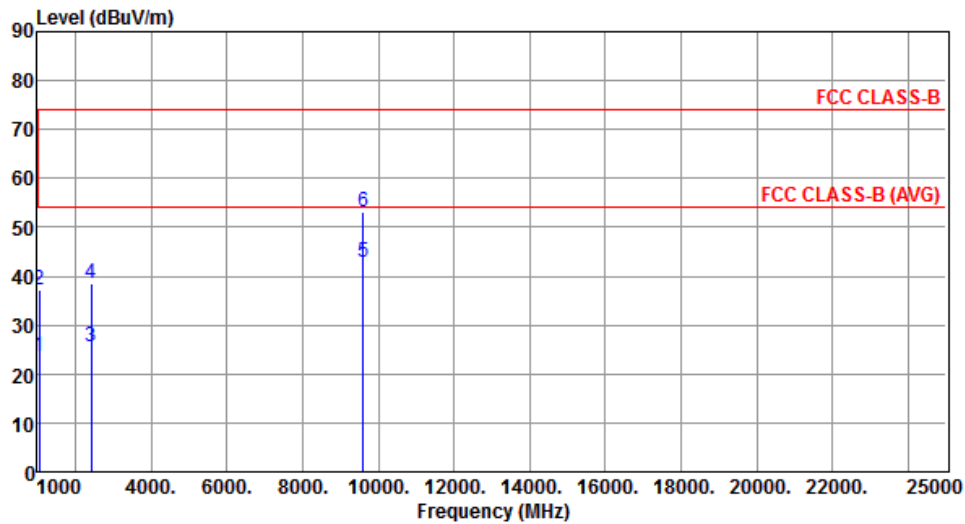
	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	1050.00	25.03	54.00	-28.97	34.49	-9.46	Average	---	---
2	1050.00	38.94	74.00	-35.06	48.40	-9.46	Peak	---	---
3	2417.00	27.68	54.00	-26.32	30.38	-2.70	Average	---	---
4	2417.00	43.75	74.00	-30.25	46.45	-2.70	Peak	---	---
5	9608.00	41.98	54.00	-12.02	28.39	13.59	Average	---	---
6	9608.00	53.79	74.00	-20.21	40.20	13.59	Peak	---	---

Note 1: Emission Level (dBUV/m) = SA Reading (dBUV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

Note 2: Margin (dB) = Emission level (dBUV/m) – Limit (dBUV/m).

Modulation	GFSK	Test Freq. (MHz)	2402
Polarization	Vertical	Test Configuration	2



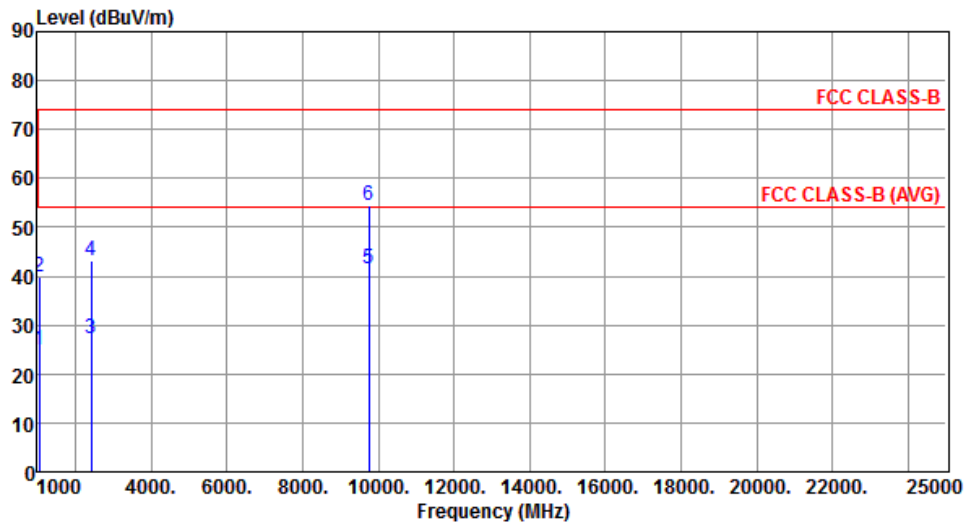
	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	1050.00	23.68	54.00	-30.32	33.14	-9.46	Average	---	---
2	1050.00	37.32	74.00	-36.68	46.78	-9.46	Peak	---	---
3	2417.00	25.48	54.00	-28.52	28.18	-2.70	Average	---	---
4	2417.00	38.56	74.00	-35.44	41.26	-2.70	Peak	---	---
5	9608.00	42.83	54.00	-11.17	29.24	13.59	Average	---	---
6	9608.00	53.16	74.00	-20.84	39.57	13.59	Peak	---	---

Note 1: Emission Level (dBUV/m) = SA Reading (dBUV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

Note 2: Margin (dB) = Emission level (dBUV/m) – Limit (dBUV/m).

Modulation	GFSK	Test Freq. (MHz)	2441
Polarization	Horizontal	Test Configuration	2



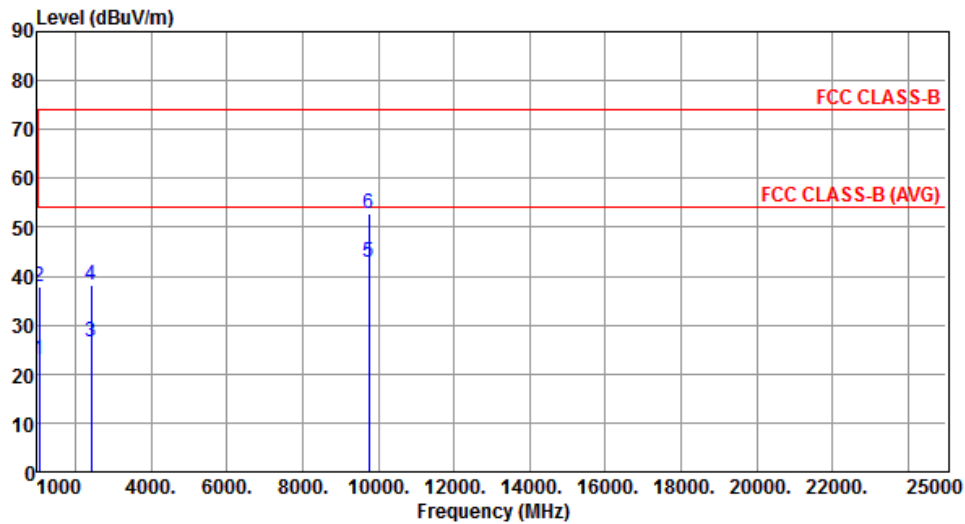
	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	1050.00	24.88	54.00	-29.12	34.34	-9.46	Average	---	---
2	1050.00	39.71	74.00	-34.29	49.17	-9.46	Peak	---	---
3	2417.00	27.29	54.00	-26.71	29.99	-2.70	Average	---	---
4	2417.00	43.31	74.00	-30.69	46.01	-2.70	Peak	---	---
5	9760.00	41.62	54.00	-12.38	27.91	13.71	Average	---	---
6	9760.00	54.55	74.00	-19.45	40.84	13.71	Peak	---	---

Note 1: Emission Level (dBUV/m) = SA Reading (dBUV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

Note 2: Margin (dB) = Emission level (dBUV/m) – Limit (dBUV/m).

Modulation	GFSK	Test Freq. (MHz)	2441
Polarization	Vertical	Test Configuration	2



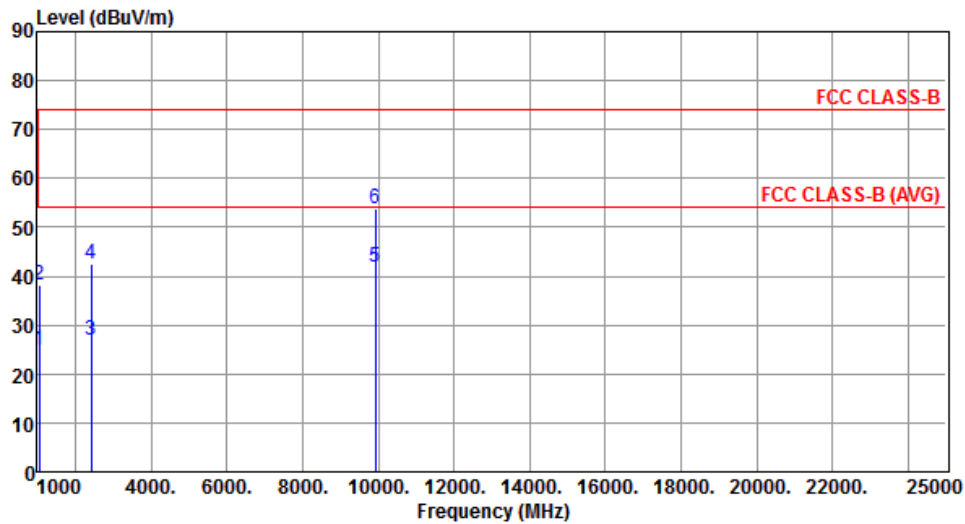
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	1050.00	22.76	54.00	-31.24	32.22	-9.46	Average	---	---
2	1050.00	37.83	74.00	-36.17	47.29	-9.46	Peak	---	---
3	2417.00	26.41	54.00	-27.59	29.11	-2.70	Average	---	---
4	2417.00	38.17	74.00	-35.83	40.87	-2.70	Peak	---	---
5	9760.00	42.89	54.00	-11.11	29.18	13.71	Average	---	---
6	9760.00	52.96	74.00	-21.04	39.25	13.71	Peak	---	---

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

Modulation	GFSK	Test Freq. (MHz)	2480
Polarization	Horizontal	Test Configuration	2



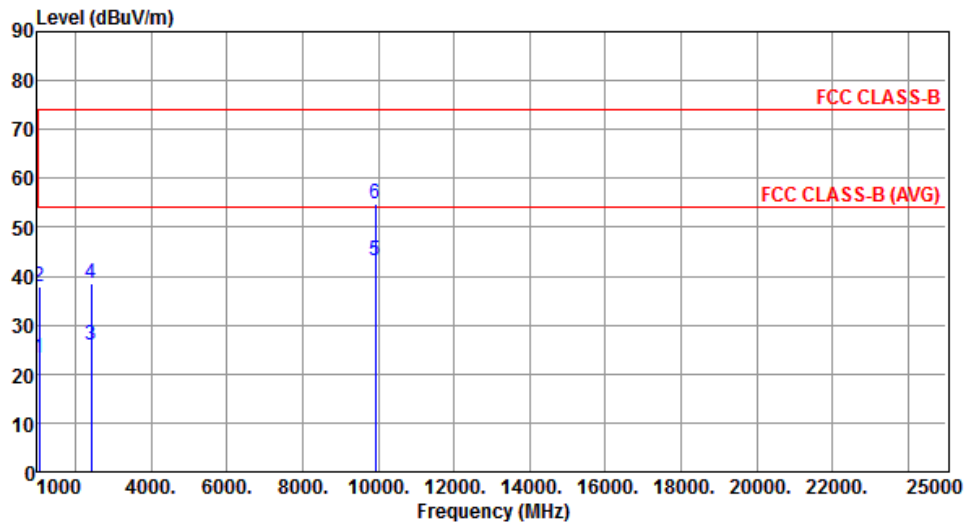
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	1050.00	24.88	54.00	-29.12	34.34	-9.46	Average	---	---
2	1050.00	38.06	74.00	-35.94	47.52	-9.46	Peak	---	---
3	2417.00	26.93	54.00	-27.07	29.63	-2.70	Average	---	---
4	2417.00	42.47	74.00	-31.53	45.17	-2.70	Peak	---	---
5	9920.00	41.76	54.00	-12.24	27.96	13.80	Average	---	---
6	9920.00	53.84	74.00	-20.16	40.04	13.80	Peak	---	---

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

Modulation	GFSK	Test Freq. (MHz)	2480
Polarization	Vertical	Test Configuration	2



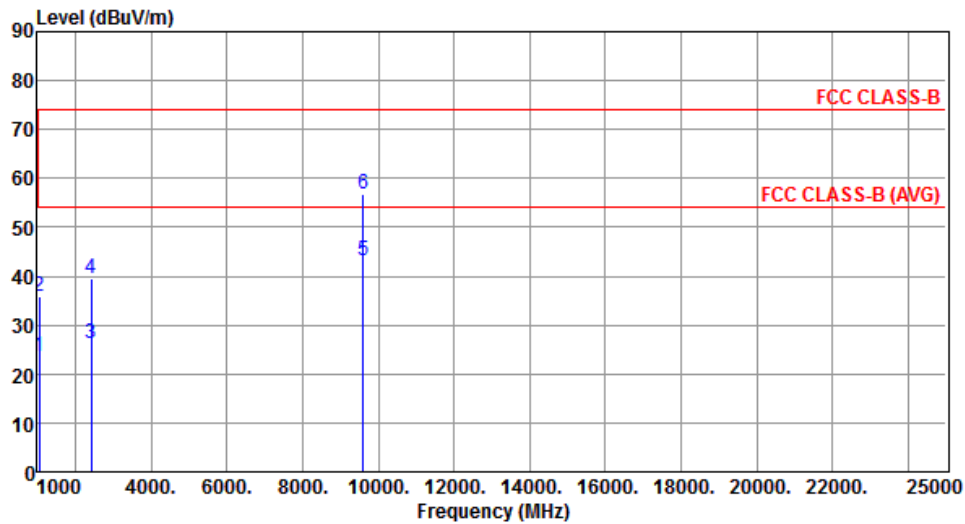
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	1050.00	23.22	54.00	-30.78	32.68	-9.46	Average	---	---
2	1050.00	37.75	74.00	-36.25	47.21	-9.46	Peak	---	---
3	2417.00	25.97	54.00	-28.03	28.67	-2.70	Average	---	---
4	2417.00	38.52	74.00	-35.48	41.22	-2.70	Peak	---	---
5	9920.00	43.17	54.00	-10.83	29.37	13.80	Average	---	---
6	9920.00	54.89	74.00	-19.11	41.09	13.80	Peak	---	---

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

Modulation	GFSK	Test Freq. (MHz)	2402
Polarization	Horizontal	Test Configuration	3



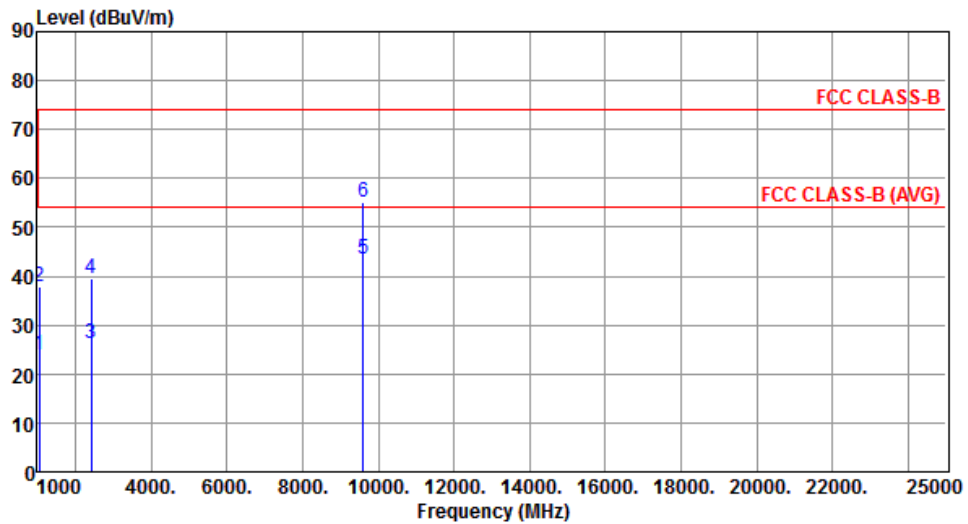
	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	1050.00	23.67	54.00	-30.33	33.13	-9.46	Average	---	---
2	1050.00	35.84	74.00	-38.16	45.30	-9.46	Peak	---	---
3	2417.00	26.23	54.00	-27.77	28.93	-2.70	Average	---	---
4	2417.00	39.42	74.00	-34.58	42.12	-2.70	Peak	---	---
5	9606.00	43.18	54.00	-10.82	29.59	13.59	Average	---	---
6	9606.00	56.87	74.00	-17.13	43.28	13.59	Peak	---	---

Note 1: Emission Level (dBUV/m) = SA Reading (dBUV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

Note 2: Margin (dB) = Emission level (dBUV/m) – Limit (dBUV/m).

Modulation	GFSK	Test Freq. (MHz)	2402
Polarization	Vertical	Test Configuration	3



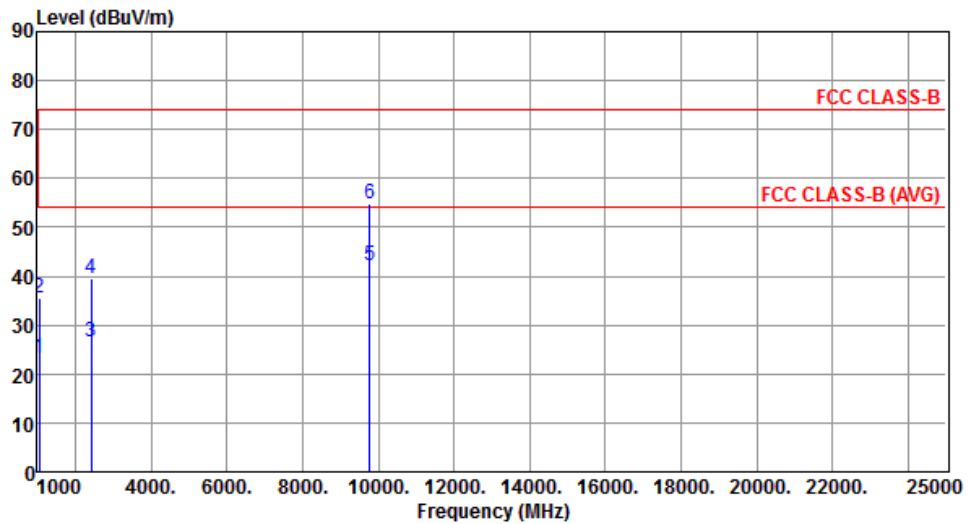
	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	1050.00	23.85	54.00	-30.15	33.31	-9.46	Average	---	---
2	1050.00	37.96	74.00	-36.04	47.42	-9.46	Peak	---	---
3	2417.00	26.22	54.00	-27.78	28.92	-2.70	Average	---	---
4	2417.00	39.47	74.00	-34.53	42.17	-2.70	Peak	---	---
5	9606.00	43.45	54.00	-10.55	29.86	13.59	Average	---	---
6	9606.00	55.18	74.00	-18.82	41.59	13.59	Peak	---	---

Note 1: Emission Level (dBUV/m) = SA Reading (dBUV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

Note 2: Margin (dB) = Emission level (dBUV/m) – Limit (dBUV/m).

Modulation	GFSK	Test Freq. (MHz)	2441
Polarization	Horizontal	Test Configuration	3



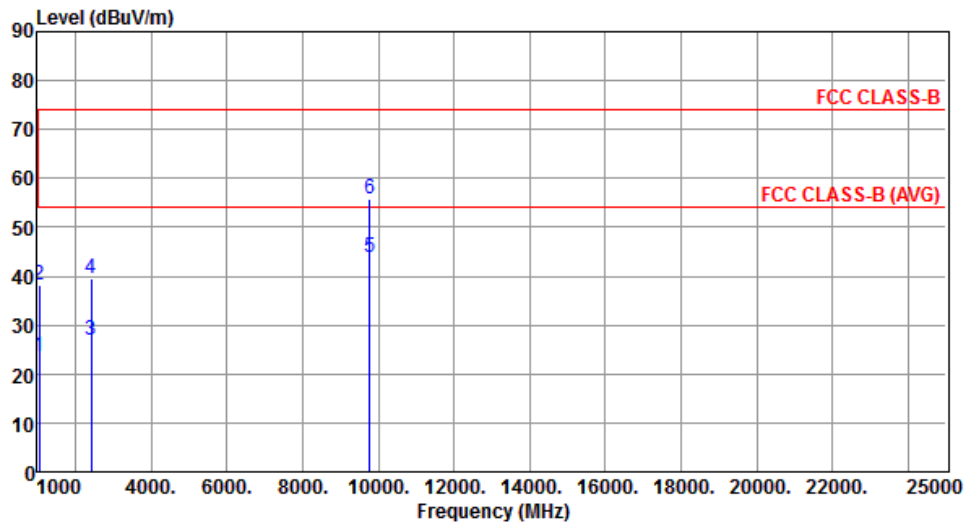
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	1050.00	23.34	54.00	-30.66	32.80	-9.46	Average	---	---
2	1050.00	35.68	74.00	-38.32	45.14	-9.46	Peak	---	---
3	2417.00	26.47	54.00	-27.53	29.17	-2.70	Average	---	---
4	2417.00	39.43	74.00	-34.57	42.13	-2.70	Peak	---	---
5	9764.00	42.18	54.00	-11.82	28.48	13.70	Average	---	---
6	9764.00	54.96	74.00	-19.04	41.26	13.70	Peak	---	---

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

Modulation	GFSK	Test Freq. (MHz)	2441
Polarization	Vertical	Test Configuration	3



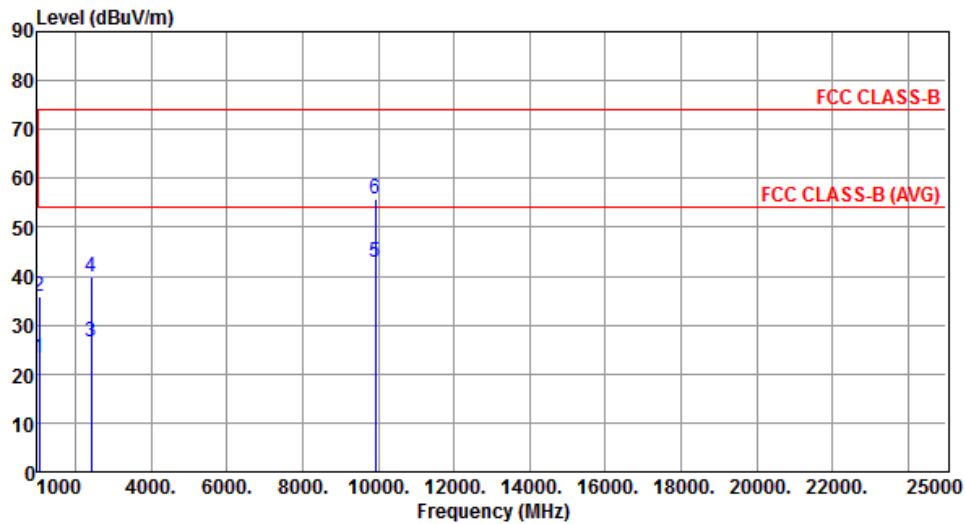
	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	1050.00	23.45	54.00	-30.55	32.91	-9.46	Average	---	---
2	1050.00	38.29	74.00	-35.71	47.75	-9.46	Peak	---	---
3	2417.00	26.74	54.00	-27.26	29.44	-2.70	Average	---	---
4	2417.00	39.57	74.00	-34.43	42.27	-2.70	Peak	---	---
5	9764.00	43.68	54.00	-10.32	29.98	13.70	Average	---	---
6	9764.00	55.84	74.00	-18.16	42.14	13.70	Peak	---	---

Note 1: Emission Level (dBUV/m) = SA Reading (dBUV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

Note 2: Margin (dB) = Emission level (dBUV/m) – Limit (dBUV/m).

Modulation	GFSK	Test Freq. (MHz)	2480
Polarization	Horizontal	Test Configuration	3



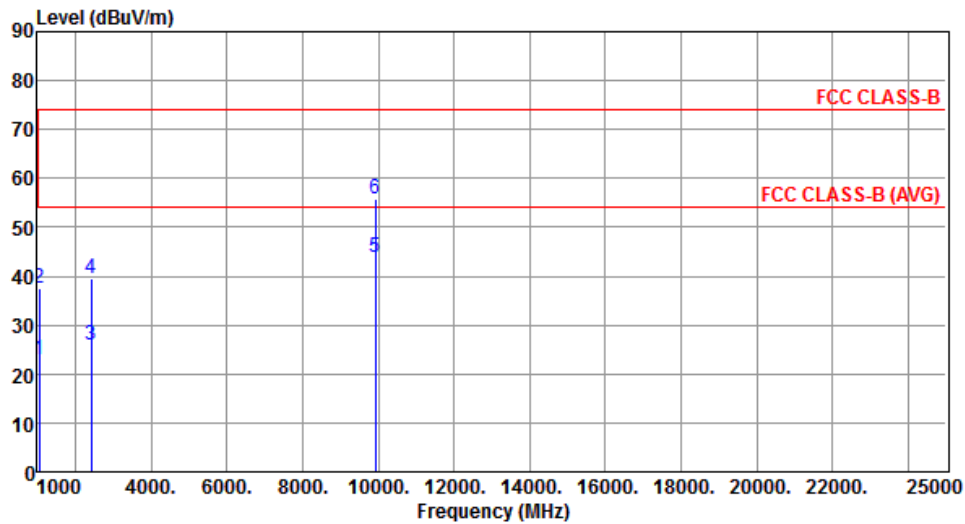
	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	1050.00	23.16	54.00	-30.84	32.62	-9.46	Average	---	---
2	1050.00	35.82	74.00	-38.18	45.28	-9.46	Peak	---	---
3	2417.00	26.53	54.00	-27.47	29.23	-2.70	Average	---	---
4	2417.00	39.91	74.00	-34.09	42.61	-2.70	Peak	---	---
5	9920.00	42.81	54.00	-11.19	29.01	13.80	Average	---	---
6	9920.00	55.67	74.00	-18.33	41.87	13.80	Peak	---	---

Note 1: Emission Level (dBUV/m) = SA Reading (dBUV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

Note 2: Margin (dB) = Emission level (dBUV/m) – Limit (dBUV/m).

Modulation	GFSK	Test Freq. (MHz)	2480
Polarization	Vertical	Test Configuration	3



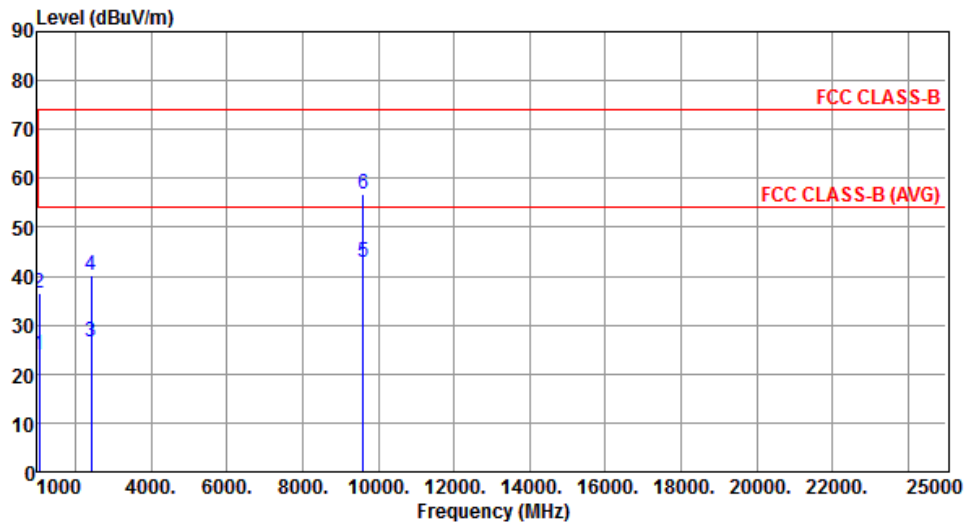
	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	1050.00	22.94	54.00	-31.06	32.40	-9.46	Average	---	---
2	1050.00	37.51	74.00	-36.49	46.97	-9.46	Peak	---	---
3	2417.00	25.83	54.00	-28.17	28.53	-2.70	Average	---	---
4	2417.00	39.46	74.00	-34.54	42.16	-2.70	Peak	---	---
5	9920.00	43.87	54.00	-10.13	30.07	13.80	Average	---	---
6	9920.00	55.71	74.00	-18.29	41.91	13.80	Peak	---	---

Note 1: Emission Level (dBUV/m) = SA Reading (dBUV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

Note 2: Margin (dB) = Emission level (dBUV/m) – Limit (dBUV/m).

Modulation	GFSK	Test Freq. (MHz)	2402
Polarization	Horizontal	Test Configuration	4



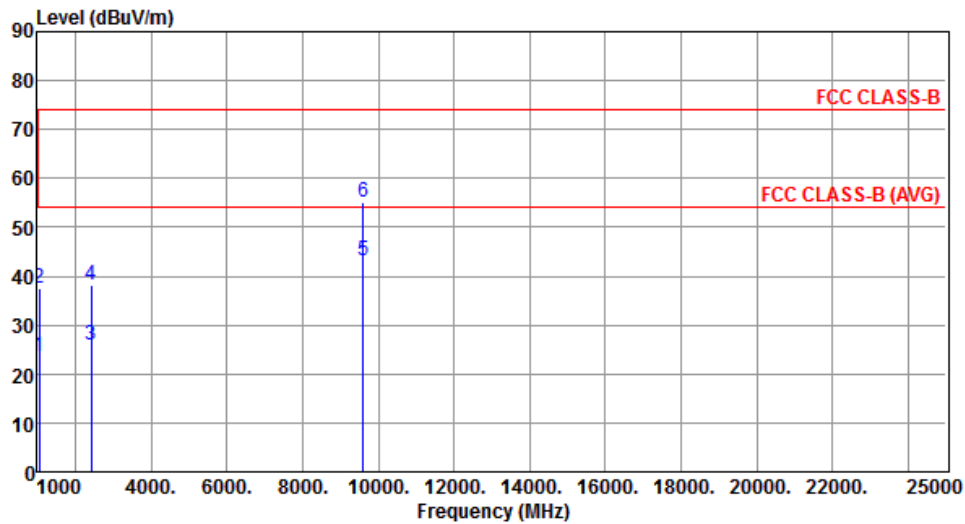
	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	1050.00	23.84	54.00	-30.16	33.30	-9.46	Average	---	---
2	1050.00	36.52	74.00	-37.48	45.98	-9.46	Peak	---	---
3	2417.00	26.73	54.00	-27.27	29.43	-2.70	Average	---	---
4	2417.00	40.18	74.00	-33.82	42.88	-2.70	Peak	---	---
5	9606.00	42.91	54.00	-11.09	29.32	13.59	Average	---	---
6	9606.00	56.75	74.00	-17.25	43.16	13.59	Peak	---	---

Note 1: Emission Level (dBUV/m) = SA Reading (dBUV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

Note 2: Margin (dB) = Emission level (dBUV/m) – Limit (dBUV/m).

Modulation	GFSK	Test Freq. (MHz)	2402
Polarization	Vertical	Test Configuration	4



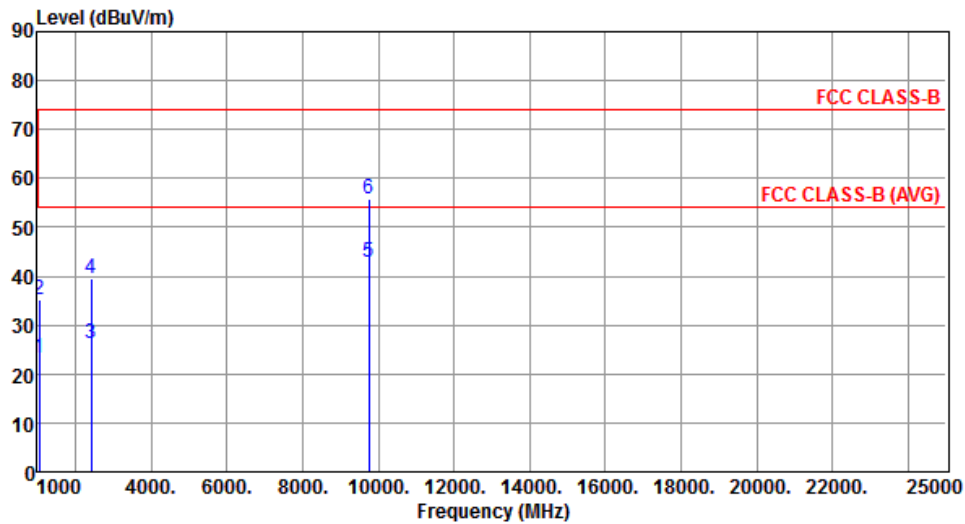
	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	1050.00	23.45	54.00	-30.55	32.91	-9.46	Average	---	---
2	1050.00	37.59	74.00	-36.41	47.05	-9.46	Peak	---	---
3	2417.00	25.74	54.00	-28.26	28.44	-2.70	Average	---	---
4	2417.00	38.16	74.00	-35.84	40.86	-2.70	Peak	---	---
5	9606.00	43.27	54.00	-10.73	29.68	13.59	Average	---	---
6	9606.00	55.18	74.00	-18.82	41.59	13.59	Peak	---	---

Note 1: Emission Level (dBUV/m) = SA Reading (dBUV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

Note 2: Margin (dB) = Emission level (dBUV/m) – Limit (dBUV/m).

Modulation	GFSK	Test Freq. (MHz)	2441
Polarization	Horizontal	Test Configuration	4



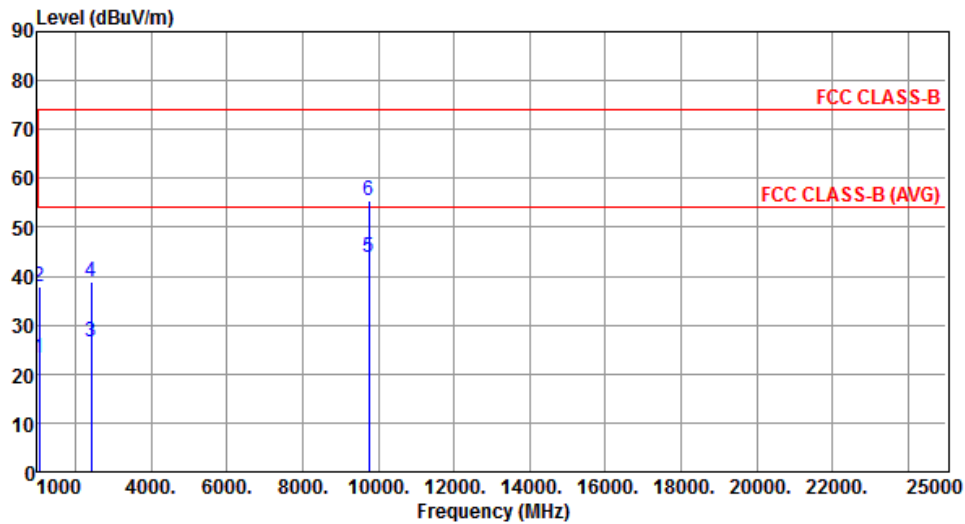
	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	1050.00	23.37	54.00	-30.63	32.83	-9.46	Average	---	---
2	1050.00	35.18	74.00	-38.82	44.64	-9.46	Peak	---	---
3	2417.00	26.28	54.00	-27.72	28.98	-2.70	Average	---	---
4	2417.00	39.51	74.00	-34.49	42.21	-2.70	Peak	---	---
5	9760.00	42.83	54.00	-11.17	29.12	13.71	Average	---	---
6	9760.00	55.76	74.00	-18.24	42.05	13.71	Peak	---	---

Note 1: Emission Level (dBUV/m) = SA Reading (dBUV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

Note 2: Margin (dB) = Emission level (dBUV/m) – Limit (dBUV/m).

Modulation	GFSK	Test Freq. (MHz)	2441
Polarization	Vertical	Test Configuration	4



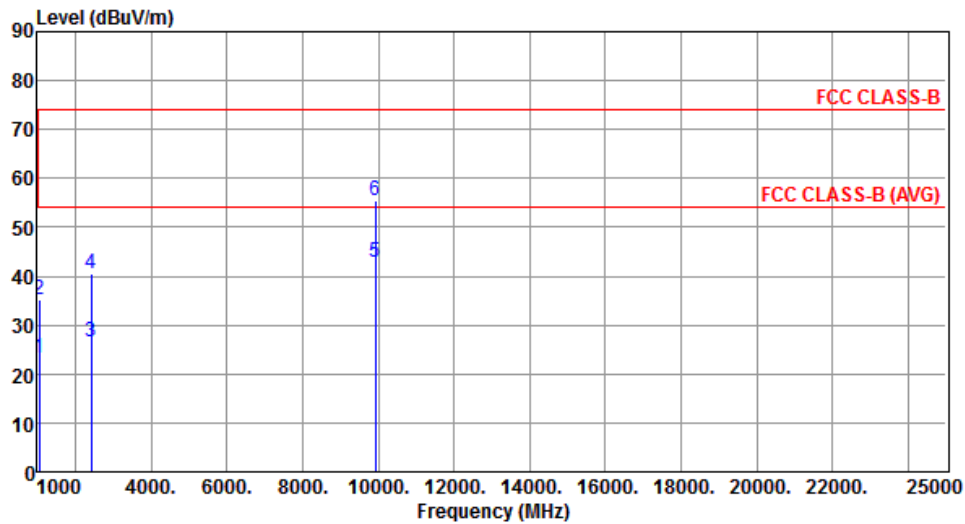
	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	1050.00	23.25	54.00	-30.75	32.71	-9.46	Average	---	---
2	1050.00	37.84	74.00	-36.16	47.30	-9.46	Peak	---	---
3	2417.00	26.57	54.00	-27.43	29.27	-2.70	Average	---	---
4	2417.00	38.91	74.00	-35.09	41.61	-2.70	Peak	---	---
5	9760.00	43.83	54.00	-10.17	30.12	13.71	Average	---	---
6	9760.00	55.42	74.00	-18.58	41.71	13.71	Peak	---	---

Note 1: Emission Level (dBUV/m) = SA Reading (dBUV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

Note 2: Margin (dB) = Emission level (dBUV/m) – Limit (dBUV/m).

Modulation	GFSK	Test Freq. (MHz)	2480
Polarization	Horizontal	Test Configuration	4



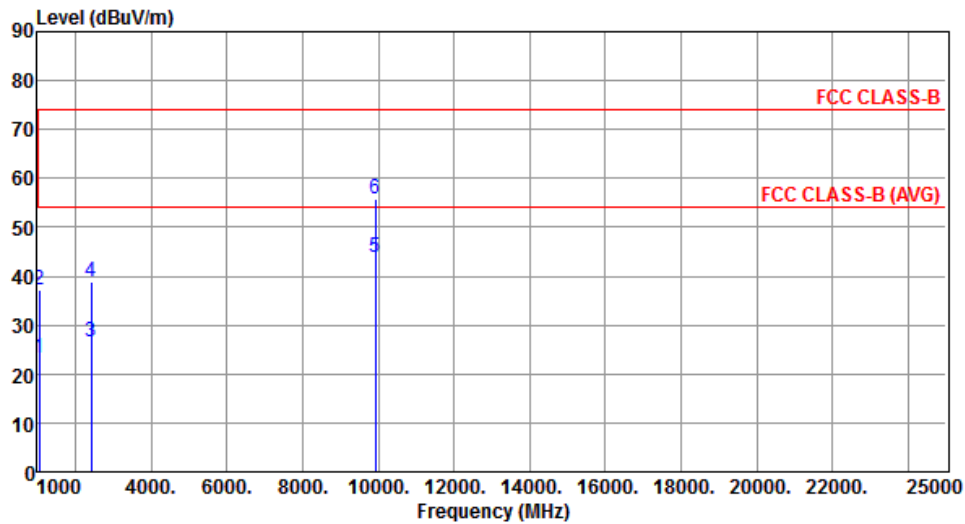
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	1050.00	23.18	54.00	-30.82	32.64	-9.46	Average	---	---
2	1050.00	35.34	74.00	-38.66	44.80	-9.46	Peak	---	---
3	2417.00	26.72	54.00	-27.28	29.42	-2.70	Average	---	---
4	2417.00	40.53	74.00	-33.47	43.23	-2.70	Peak	---	---
5	9920.00	42.87	54.00	-11.13	29.07	13.80	Average	---	---
6	9920.00	55.36	74.00	-18.64	41.56	13.80	Peak	---	---

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

Modulation	GFSK	Test Freq. (MHz)	2480
Polarization	Vertical	Test Configuration	4



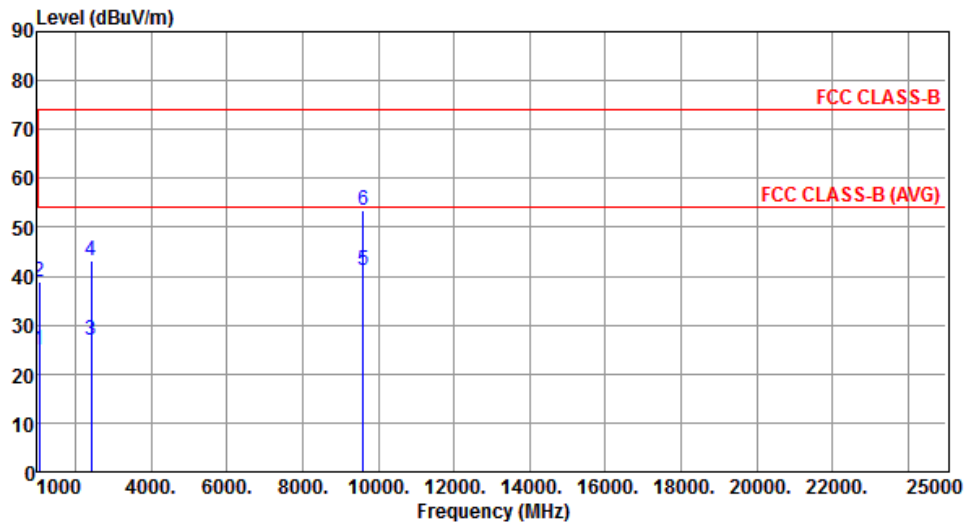
	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	1050.00	23.25	54.00	-30.75	32.71	-9.46	Average	---	---
2	1050.00	37.14	74.00	-36.86	46.60	-9.46	Peak	---	---
3	2417.00	26.59	54.00	-27.41	29.29	-2.70	Average	---	---
4	2417.00	38.96	74.00	-35.04	41.66	-2.70	Peak	---	---
5	9920.00	43.87	54.00	-10.13	30.07	13.80	Average	---	---
6	9920.00	55.91	74.00	-18.09	42.11	13.80	Peak	---	---

Note 1: Emission Level (dBUV/m) = SA Reading (dBUV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

Note 2: Margin (dB) = Emission level (dBUV/m) – Limit (dBUV/m).

Modulation	GFSK	Test Freq. (MHz)	2402
Polarization	Horizontal	Test Configuration	5



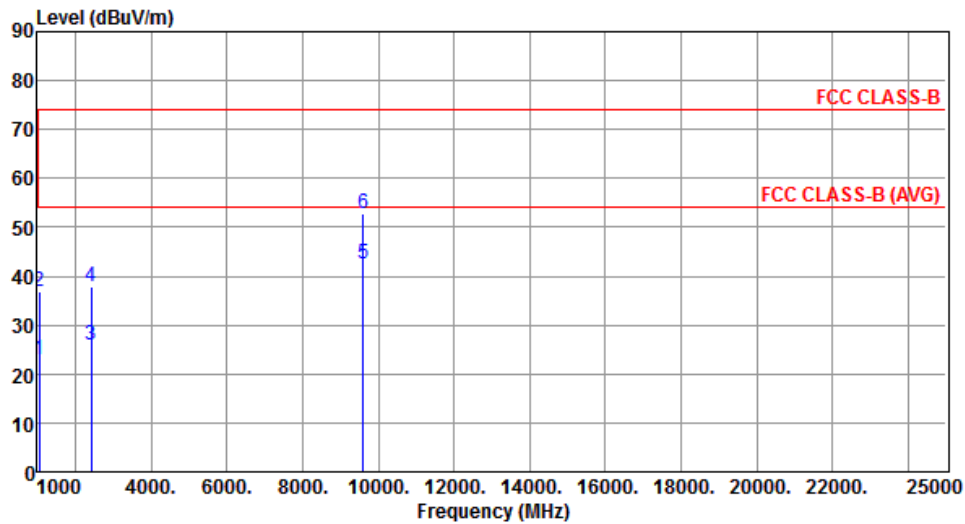
	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	1050.00	25.04	54.00	-28.96	34.50	-9.46	Average	---	---
2	1050.00	39.00	74.00	-35.00	48.46	-9.46	Peak	---	---
3	2417.00	27.04	54.00	-26.96	29.74	-2.70	Average	---	---
4	2417.00	43.03	74.00	-30.97	45.73	-2.70	Peak	---	---
5	9608.00	41.31	54.00	-12.69	27.72	13.59	Average	---	---
6	9608.00	53.35	74.00	-20.65	39.76	13.59	Peak	---	---

Note 1: Emission Level (dBUV/m) = SA Reading (dBUV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

Note 2: Margin (dB) = Emission level (dBUV/m) – Limit (dBUV/m).

Modulation	GFSK	Test Freq. (MHz)	2402
Polarization	Vertical	Test Configuration	5



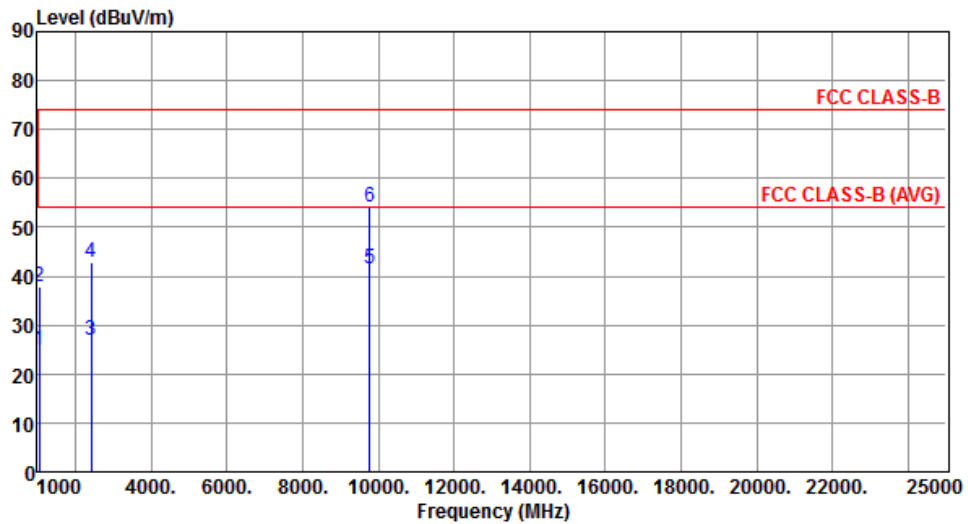
	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	1050.00	22.91	54.00	-31.09	32.37	-9.46	Average	---	---
2	1050.00	37.00	74.00	-37.00	46.46	-9.46	Peak	---	---
3	2417.00	25.91	54.00	-28.09	28.61	-2.70	Average	---	---
4	2417.00	37.74	74.00	-36.26	40.44	-2.70	Peak	---	---
5	9608.00	42.35	54.00	-11.65	28.76	13.59	Average	---	---
6	9608.00	52.70	74.00	-21.30	39.11	13.59	Peak	---	---

Note 1: Emission Level (dBUV/m) = SA Reading (dBUV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

Note 2: Margin (dB) = Emission level (dBUV/m) – Limit (dBUV/m).

Modulation	GFSK	Test Freq. (MHz)	2441
Polarization	Horizontal	Test Configuration	5



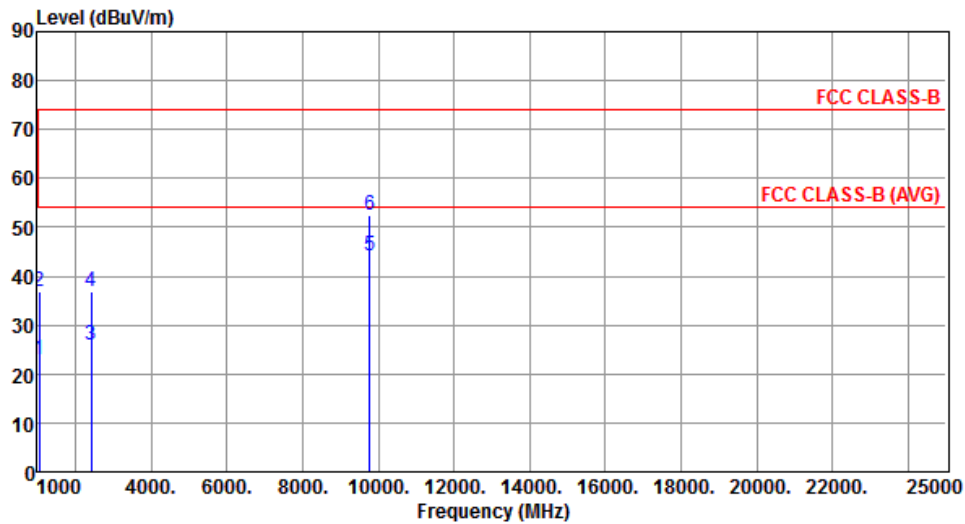
	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	1050.00	25.06	54.00	-28.94	34.52	-9.46	Average	---	---
2	1050.00	37.76	74.00	-36.24	47.22	-9.46	Peak	---	---
3	2417.00	26.92	54.00	-27.08	29.62	-2.70	Average	---	---
4	2417.00	42.73	74.00	-31.27	45.43	-2.70	Peak	---	---
5	9764.00	41.38	54.00	-12.62	27.68	13.70	Average	---	---
6	9764.00	54.20	74.00	-19.80	40.50	13.70	Peak	---	---

Note 1: Emission Level (dBUV/m) = SA Reading (dBUV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

Note 2: Margin (dB) = Emission level (dBUV/m) – Limit (dBUV/m).

Modulation	GFSK	Test Freq. (MHz)	2441
Polarization	Vertical	Test Configuration	5



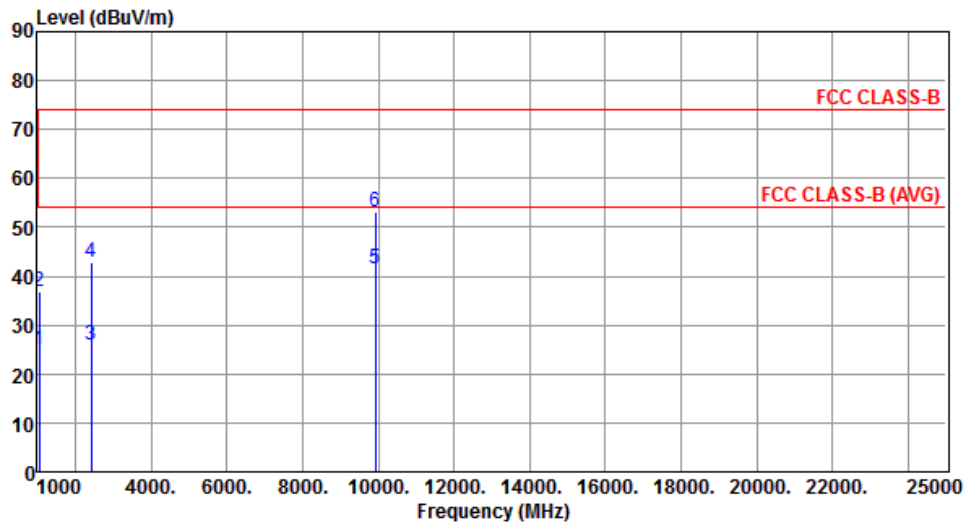
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	1050.00	23.07	54.00	-30.93	32.53	-9.46	Average	---	---
2	1050.00	36.90	74.00	-37.10	46.36	-9.46	Peak	---	---
3	2417.00	25.98	54.00	-28.02	28.68	-2.70	Average	---	---
4	2417.00	36.82	74.00	-37.18	39.52	-2.70	Peak	---	---
5	9764.00	44.05	54.00	-9.95	30.35	13.70	Average	---	---
6	9764.00	52.37	74.00	-21.63	38.67	13.70	Peak	---	---

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

Modulation	GFSK	Test Freq. (MHz)	2480
Polarization	Horizontal	Test Configuration	5



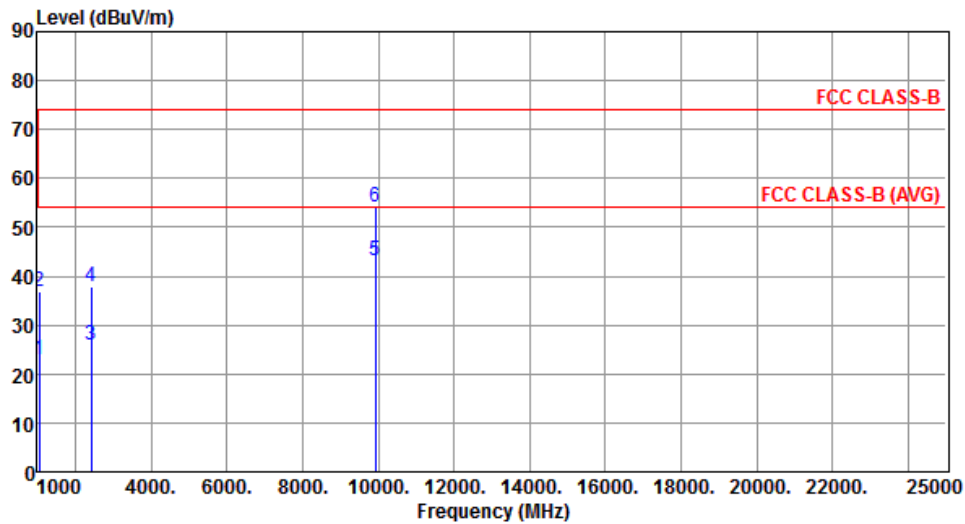
	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	1050.00	25.00	54.00	-29.00	34.46	-9.46	Average	---	---
2	1050.00	36.99	74.00	-37.01	46.45	-9.46	Peak	---	---
3	2417.00	26.05	54.00	-27.95	28.75	-2.70	Average	---	---
4	2417.00	42.94	74.00	-31.06	45.64	-2.70	Peak	---	---
5	9920.00	41.47	54.00	-12.53	27.67	13.80	Average	---	---
6	9920.00	53.28	74.00	-20.72	39.48	13.80	Peak	---	---

Note 1: Emission Level (dBUV/m) = SA Reading (dBUV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

Note 2: Margin (dB) = Emission level (dBUV/m) – Limit (dBUV/m).

Modulation	GFSK	Test Freq. (MHz)	2480
Polarization	Vertical	Test Configuration	5



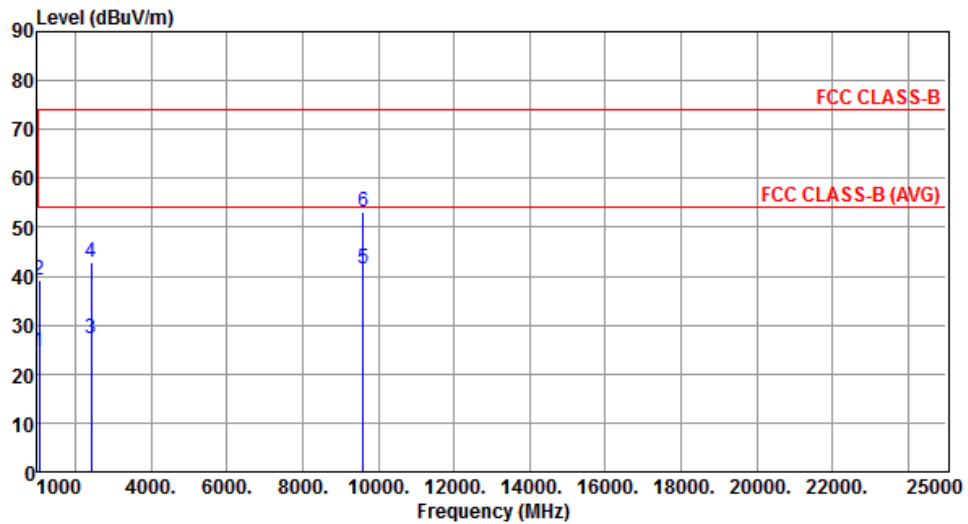
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	1050.00	22.96	54.00	-31.04	32.42	-9.46	Average	---	---
2	1050.00	37.00	74.00	-37.00	46.46	-9.46	Peak	---	---
3	2417.00	26.02	54.00	-27.98	28.72	-2.70	Average	---	---
4	2417.00	37.74	74.00	-36.26	40.44	-2.70	Peak	---	---
5	9920.00	43.27	54.00	-10.73	29.47	13.80	Average	---	---
6	9920.00	54.23	74.00	-19.77	40.43	13.80	Peak	---	---

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

Modulation	GFSK	Test Freq. (MHz)	2402
Polarization	Horizontal	Test Configuration	6



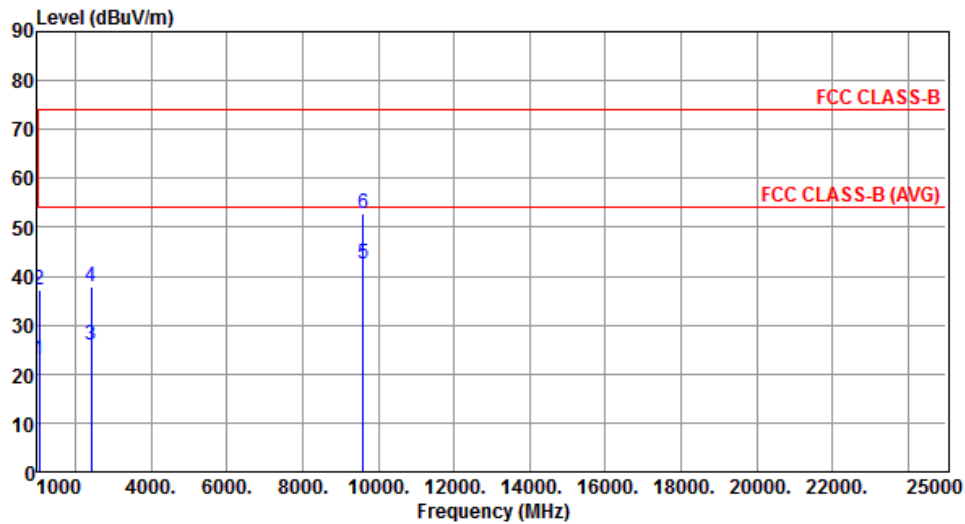
	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	1050.00	24.69	54.00	-29.31	34.15	-9.46	Average	---	---
2	1050.00	39.21	74.00	-34.79	48.67	-9.46	Peak	---	---
3	2417.00	27.34	54.00	-26.66	30.04	-2.70	Average	---	---
4	2417.00	42.89	74.00	-31.11	45.59	-2.70	Peak	---	---
5	9608.00	41.55	54.00	-12.45	27.96	13.59	Average	---	---
6	9608.00	53.18	74.00	-20.82	39.59	13.59	Peak	---	---

Note 1: Emission Level (dBUV/m) = SA Reading (dBUV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

Note 2: Margin (dB) = Emission level (dBUV/m) – Limit (dBUV/m).

Modulation	GFSK	Test Freq. (MHz)	2402
Polarization	Vertical	Test Configuration	6



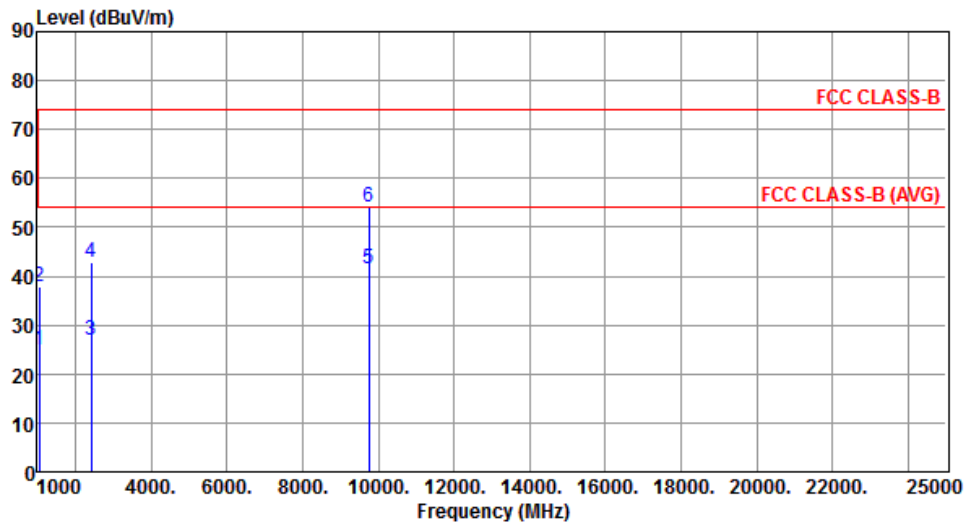
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	1050.00	23.04	54.00	-30.96	32.50	-9.46	Average	---	---
2	1050.00	37.04	74.00	-36.96	46.50	-9.46	Peak	---	---
3	2417.00	25.98	54.00	-28.02	28.68	-2.70	Average	---	---
4	2417.00	37.91	74.00	-36.09	40.61	-2.70	Peak	---	---
5	9608.00	42.68	54.00	-11.32	29.09	13.59	Average	---	---
6	9608.00	52.76	74.00	-21.24	39.17	13.59	Peak	---	---

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

Modulation	GFSK	Test Freq. (MHz)	2441
Polarization	Horizontal	Test Configuration	6



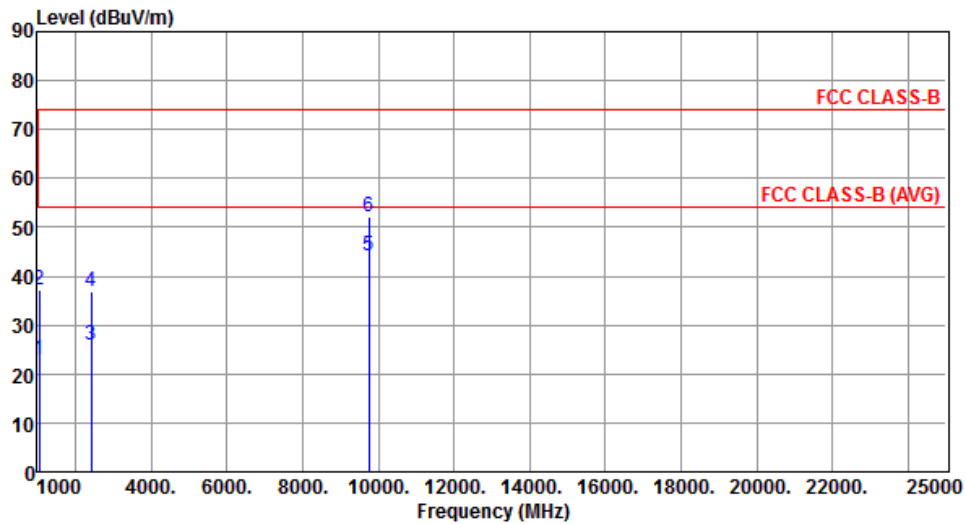
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	1050.00	24.94	54.00	-29.06	34.40	-9.46	Average	---	---
2	1050.00	37.90	74.00	-36.10	47.36	-9.46	Peak	---	---
3	2417.00	26.88	54.00	-27.12	29.58	-2.70	Average	---	---
4	2417.00	42.89	74.00	-31.11	45.59	-2.70	Peak	---	---
5	9760.00	41.43	54.00	-12.57	27.72	13.71	Average	---	---
6	9760.00	54.11	74.00	-19.89	40.40	13.71	Peak	---	---

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

Modulation	GFSK	Test Freq. (MHz)	2441
Polarization	Vertical	Test Configuration	6



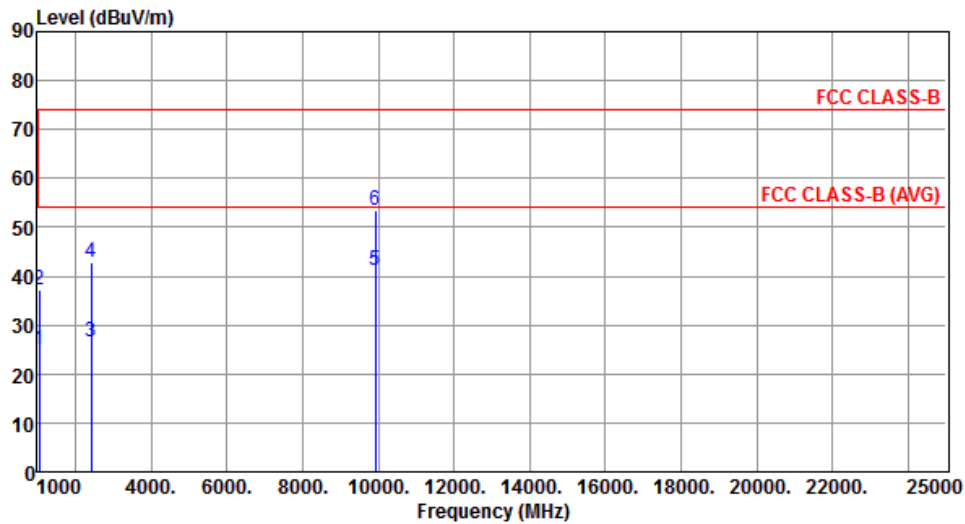
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	1050.00	22.94	54.00	-31.06	32.40	-9.46	Average	---	---
2	1050.00	37.34	74.00	-36.66	46.80	-9.46	Peak	---	---
3	2417.00	25.89	54.00	-28.11	28.59	-2.70	Average	---	---
4	2417.00	36.90	74.00	-37.10	39.60	-2.70	Peak	---	---
5	9760.00	44.25	54.00	-9.75	30.54	13.71	Average	---	---
6	9760.00	52.25	74.00	-21.75	38.54	13.71	Peak	---	---

Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

Modulation	GFSK	Test Freq. (MHz)	2480
Polarization	Horizontal	Test Configuration	6



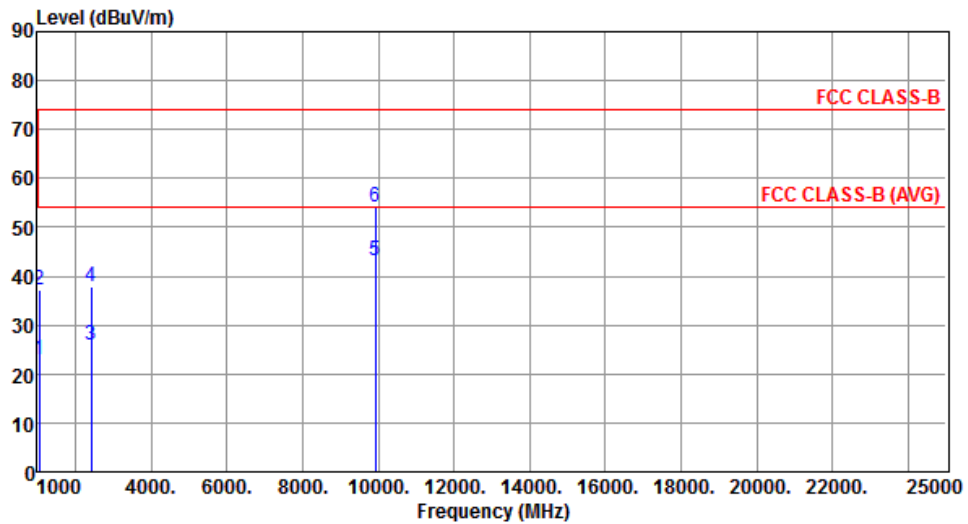
	Freq. MHz	Emission level dBUV/m	Limit dBUV/m	Margin dB	SA reading dBUV	Factor dB	Remark	ANT High cm	Turn Table deg
1	1050.00	25.00	54.00	-29.00	34.46	-9.46	Average	---	---
2	1050.00	37.34	74.00	-36.66	46.80	-9.46	Peak	---	---
3	2417.00	26.71	54.00	-27.29	29.41	-2.70	Average	---	---
4	2417.00	42.71	74.00	-31.29	45.41	-2.70	Peak	---	---
5	9920.00	41.17	54.00	-12.83	27.37	13.80	Average	---	---
6	9920.00	53.42	74.00	-20.58	39.62	13.80	Peak	---	---

Note 1: Emission Level (dBUV/m) = SA Reading (dBUV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

Note 2: Margin (dB) = Emission level (dBUV/m) – Limit (dBUV/m).

Modulation	GFSK	Test Freq. (MHz)	2480
Polarization	Vertical	Test Configuration	6



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	1050.00	23.05	54.00	-30.95	32.51	-9.46	Average	---	---
2	1050.00	37.34	74.00	-36.66	46.80	-9.46	Peak	---	---
3	2417.00	25.99	54.00	-28.01	28.69	-2.70	Average	---	---
4	2417.00	37.72	74.00	-36.28	40.42	-2.70	Peak	---	---
5	9920.00	43.31	54.00	-10.69	29.51	13.80	Average	---	---
6	9920.00	54.21	74.00	-19.79	40.41	13.80	Peak	---	---

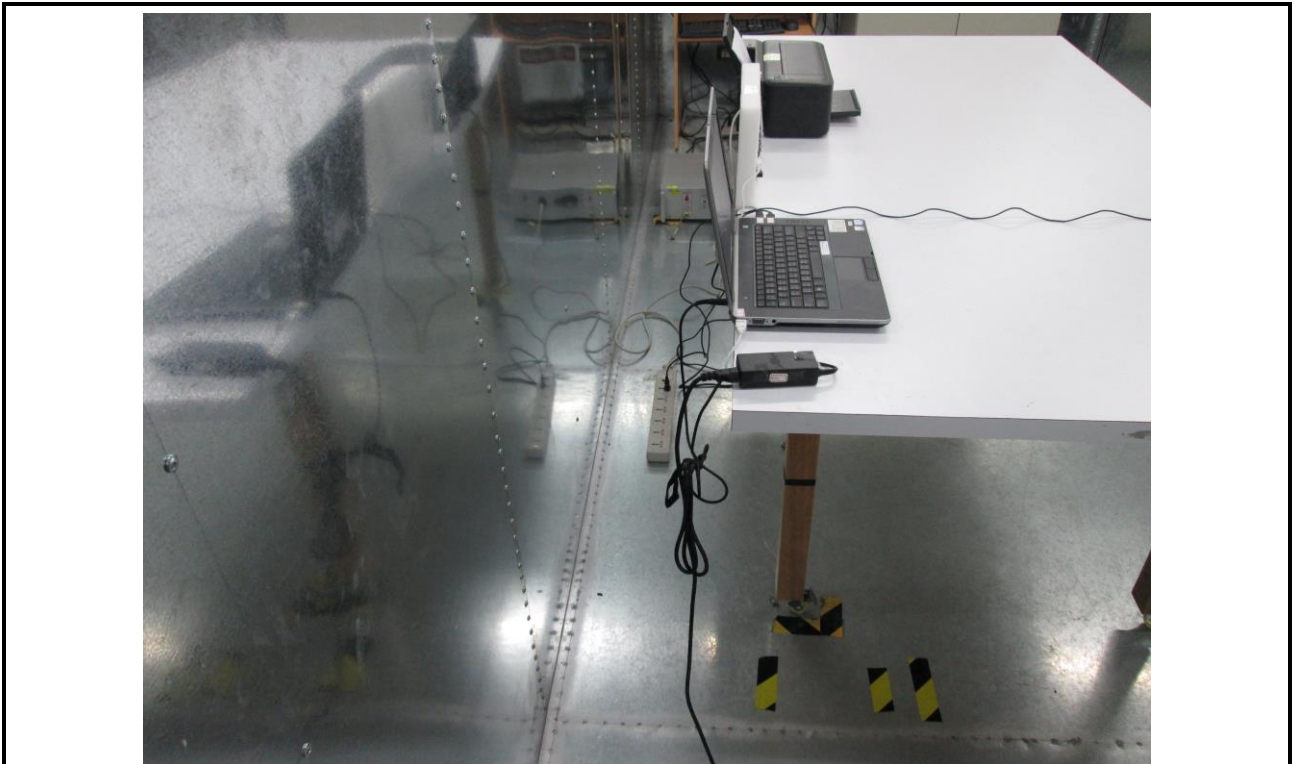
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor* (dB)

*Factor includes antenna factor , cable loss and amplifier gain

Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

4 Photographs of the Test Configuration

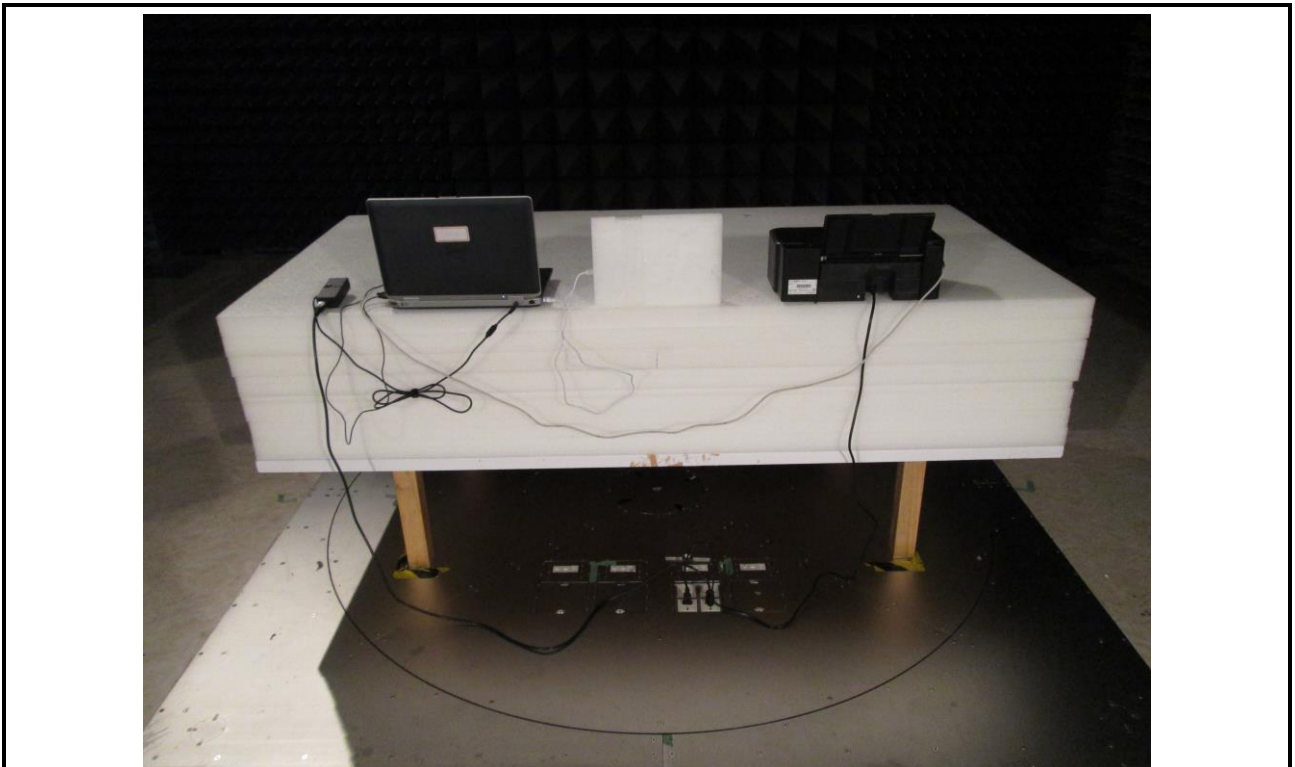
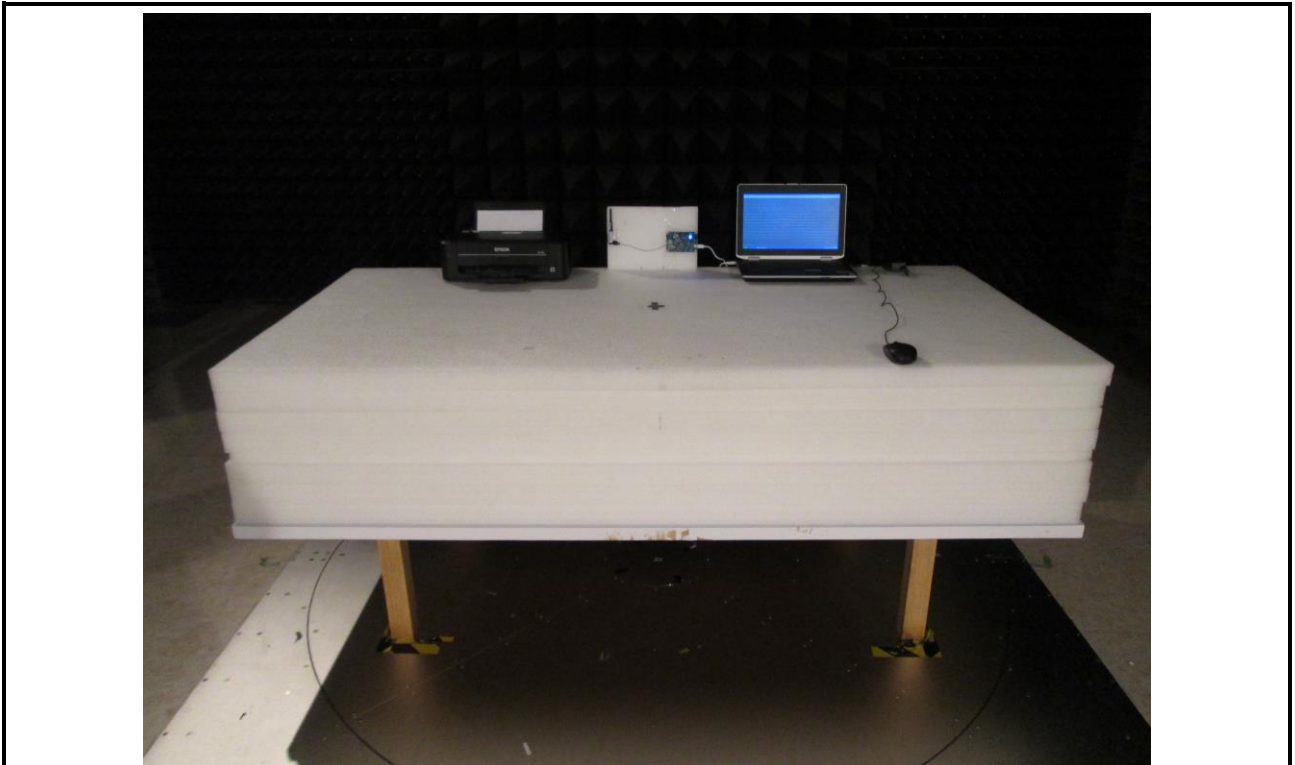
Conducted Emission Test (Model: BT900-SC with antenna 1)



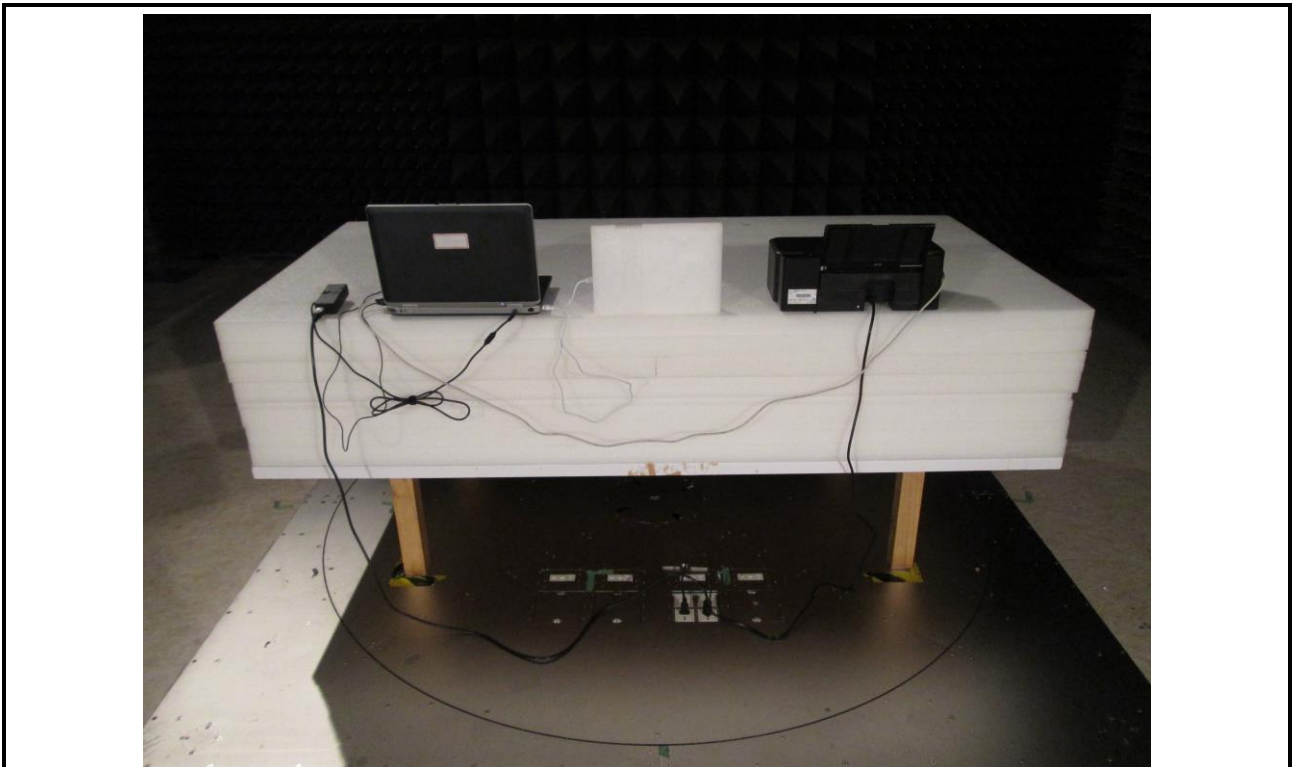
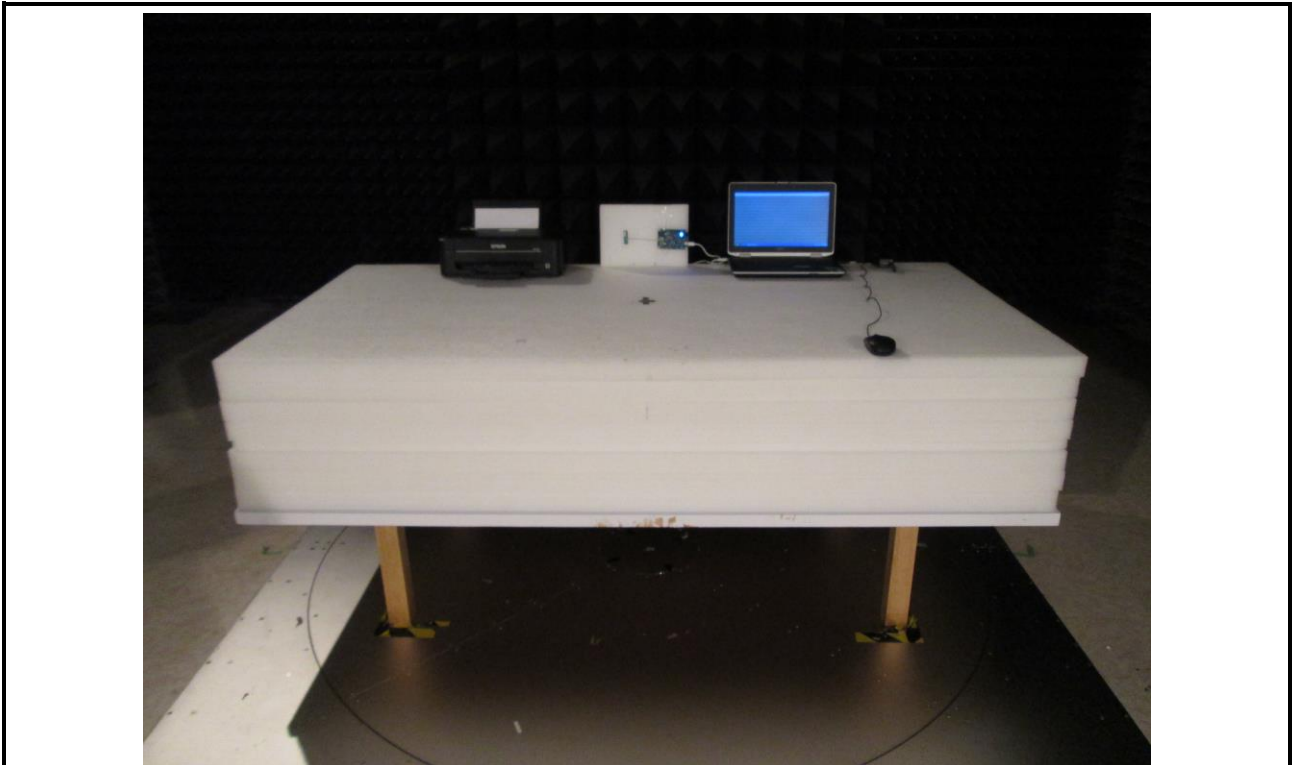
Conducted Emission Test (Model: BT900-SA with antenna 5)



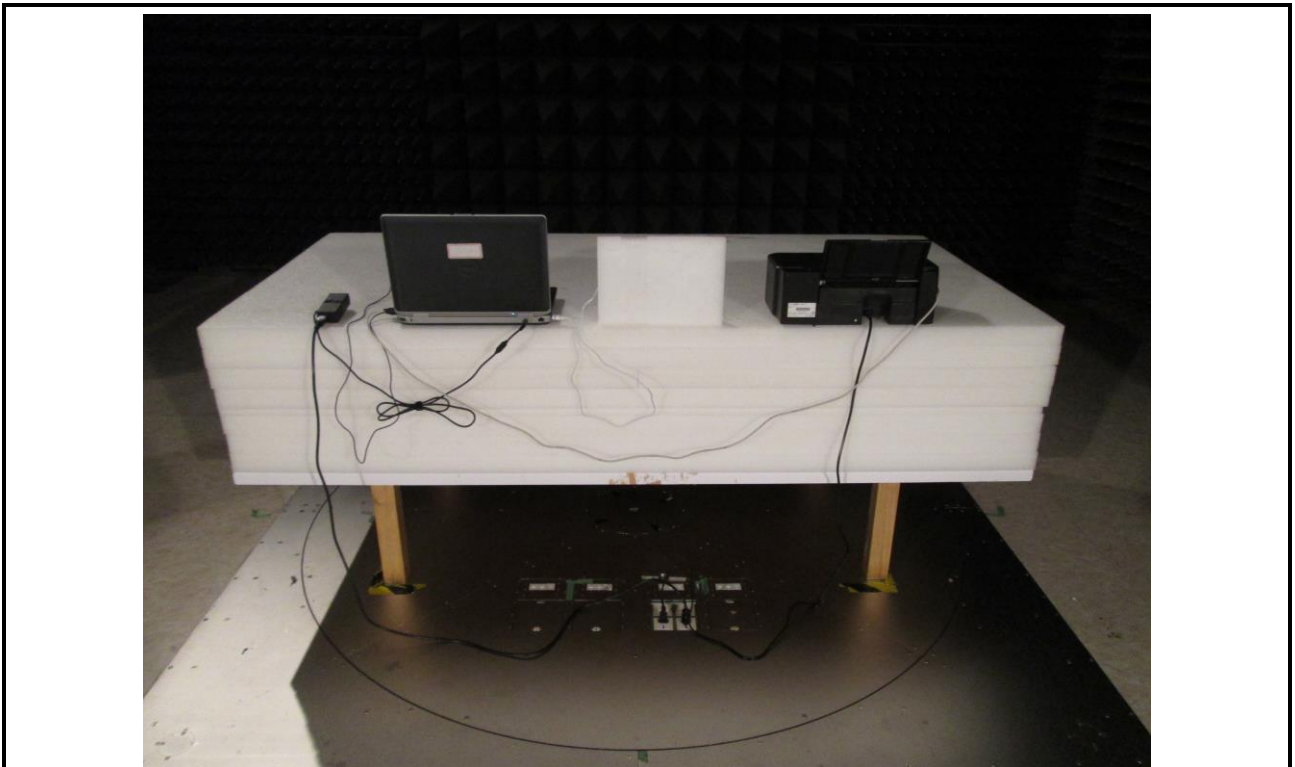
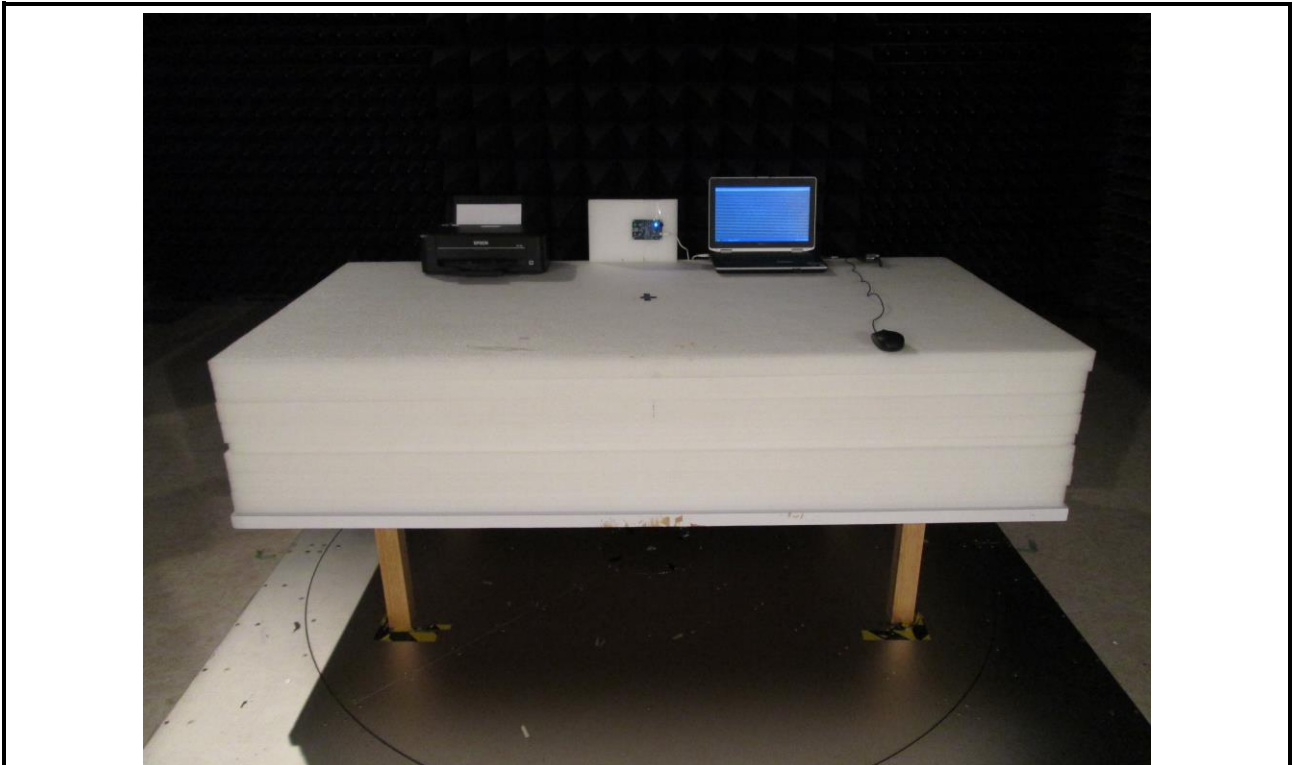
Radiated Emission below 1GHz Test (Model: BT900-SC with antenna 1)



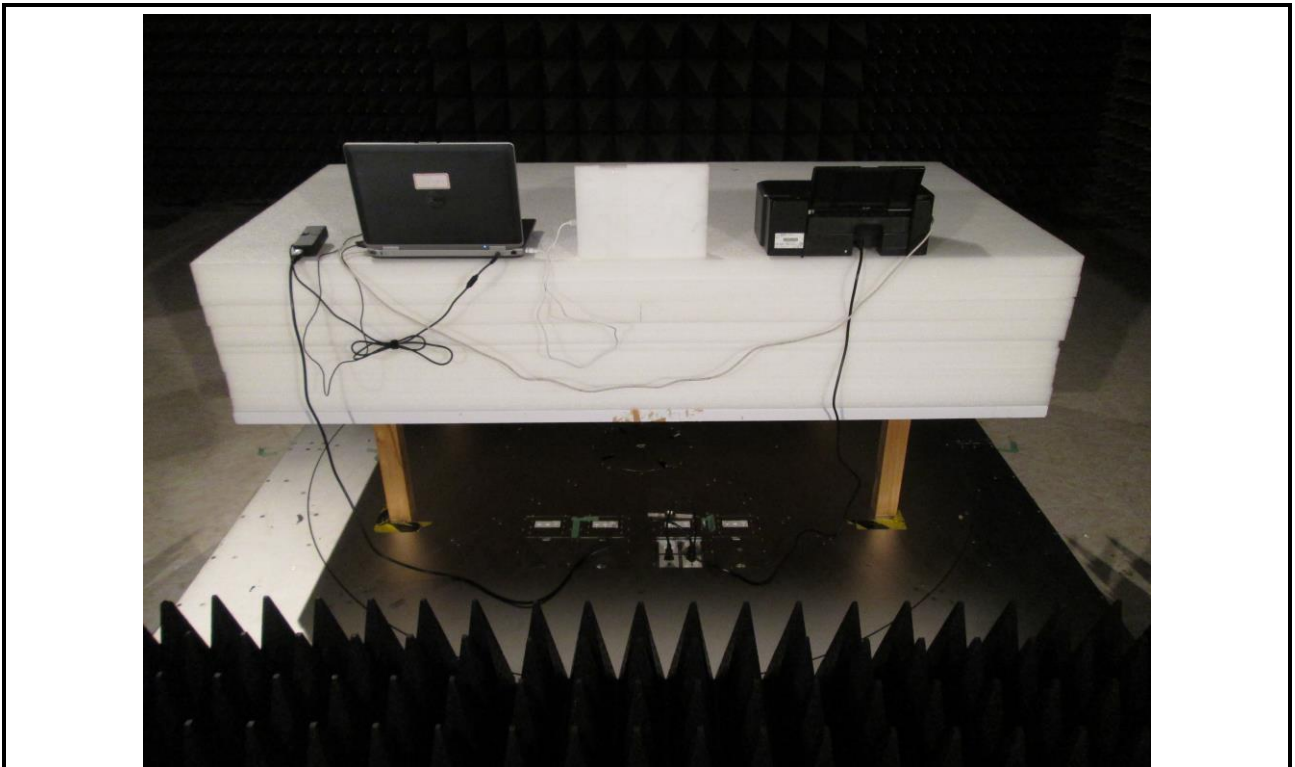
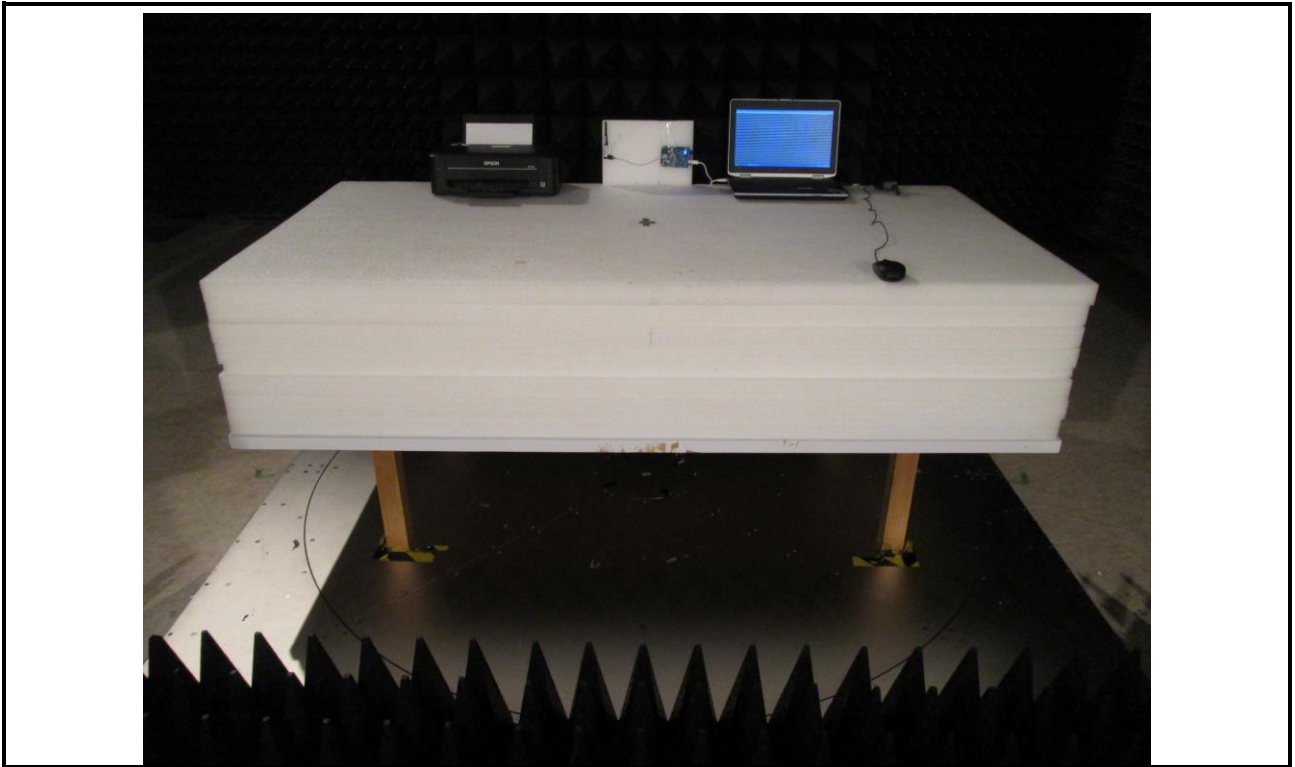
Radiated Emission below 1GHz Test (Model: BT900-SC with antenna 2)



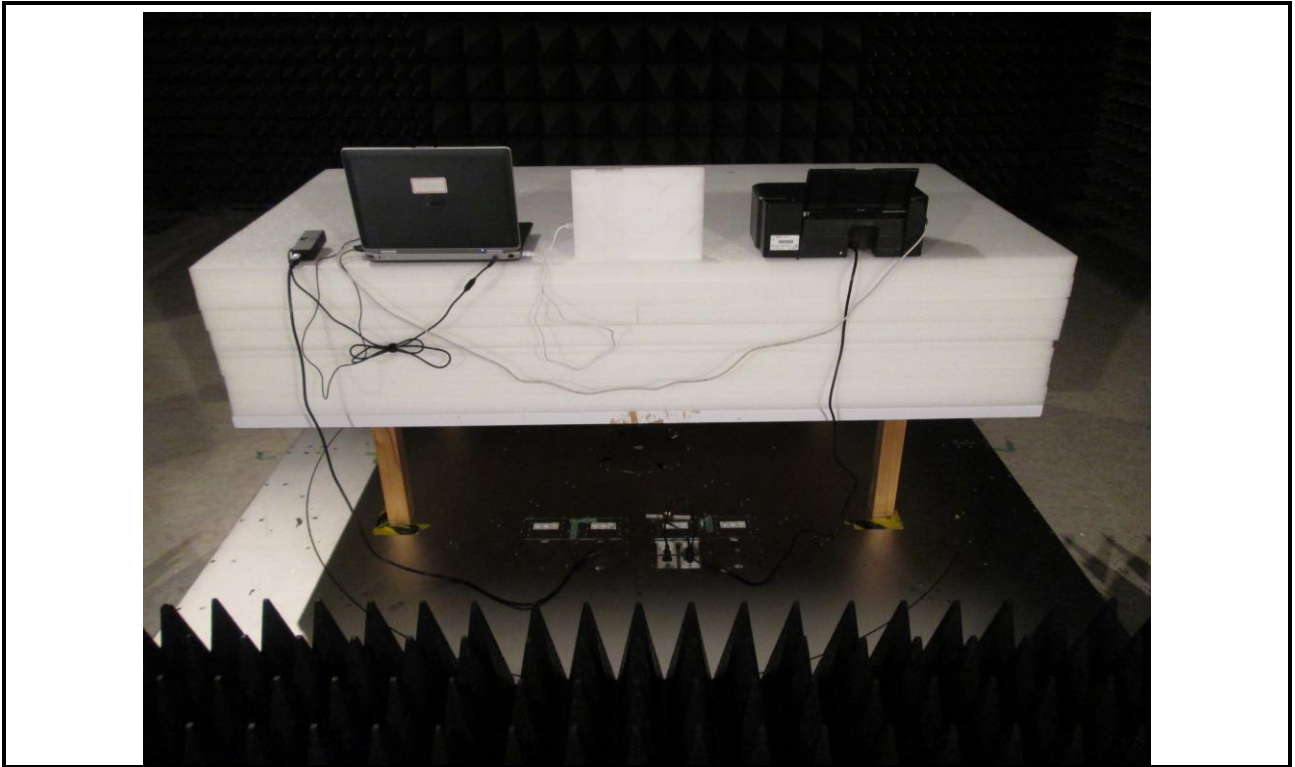
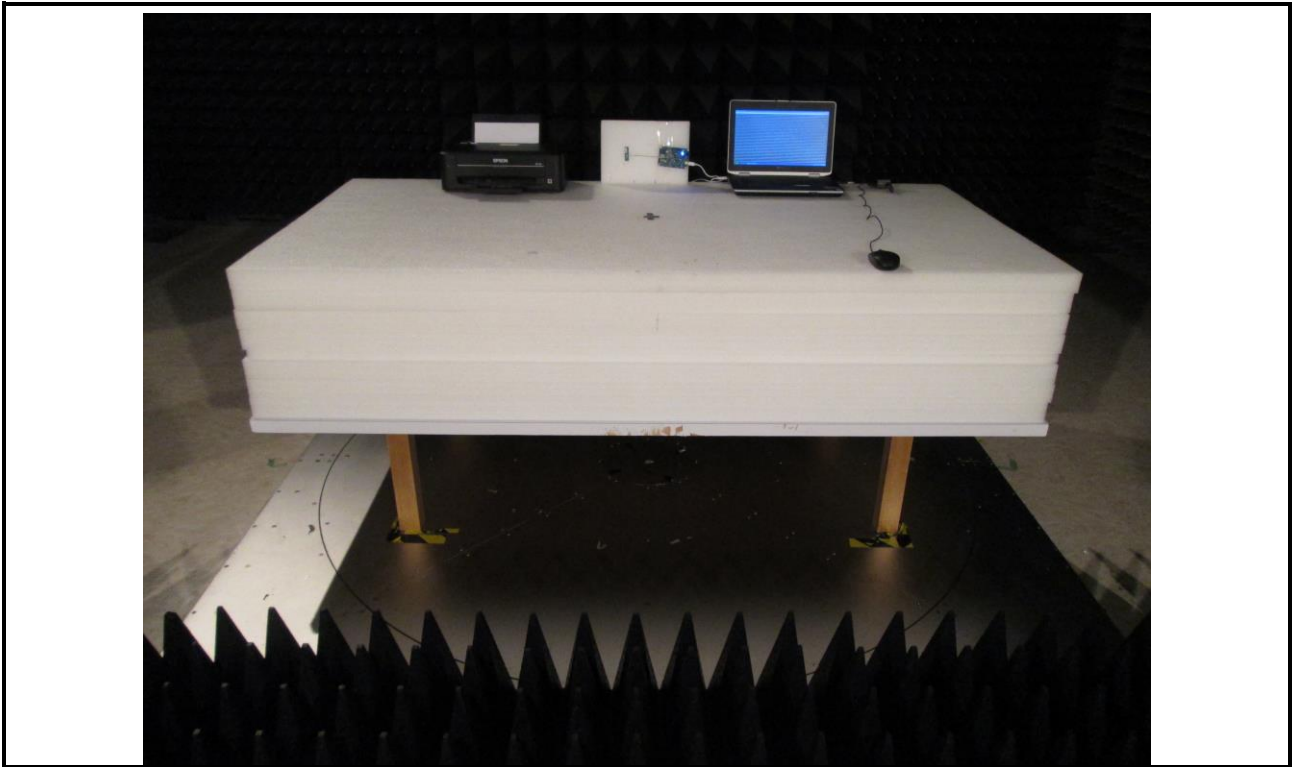
Radiated Emission below 1GHz Test (Model: BT900-SA with antenna 5)



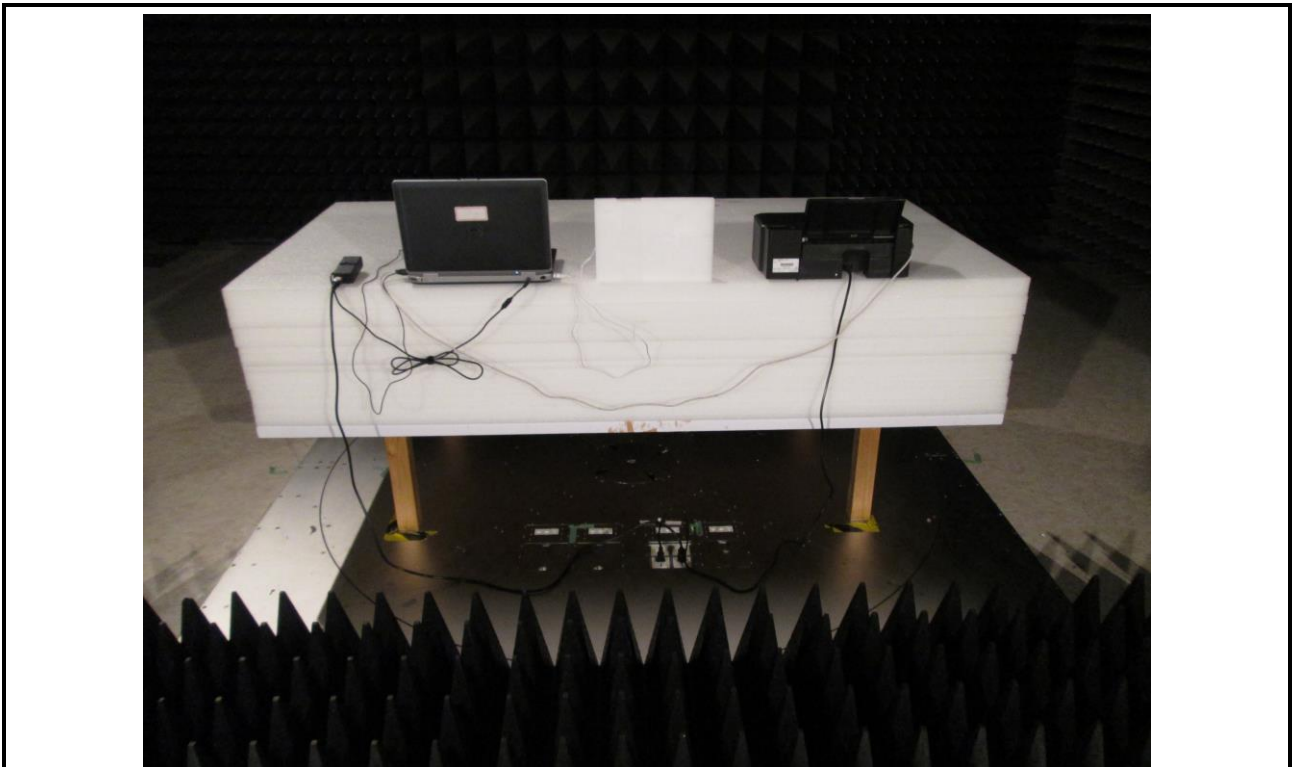
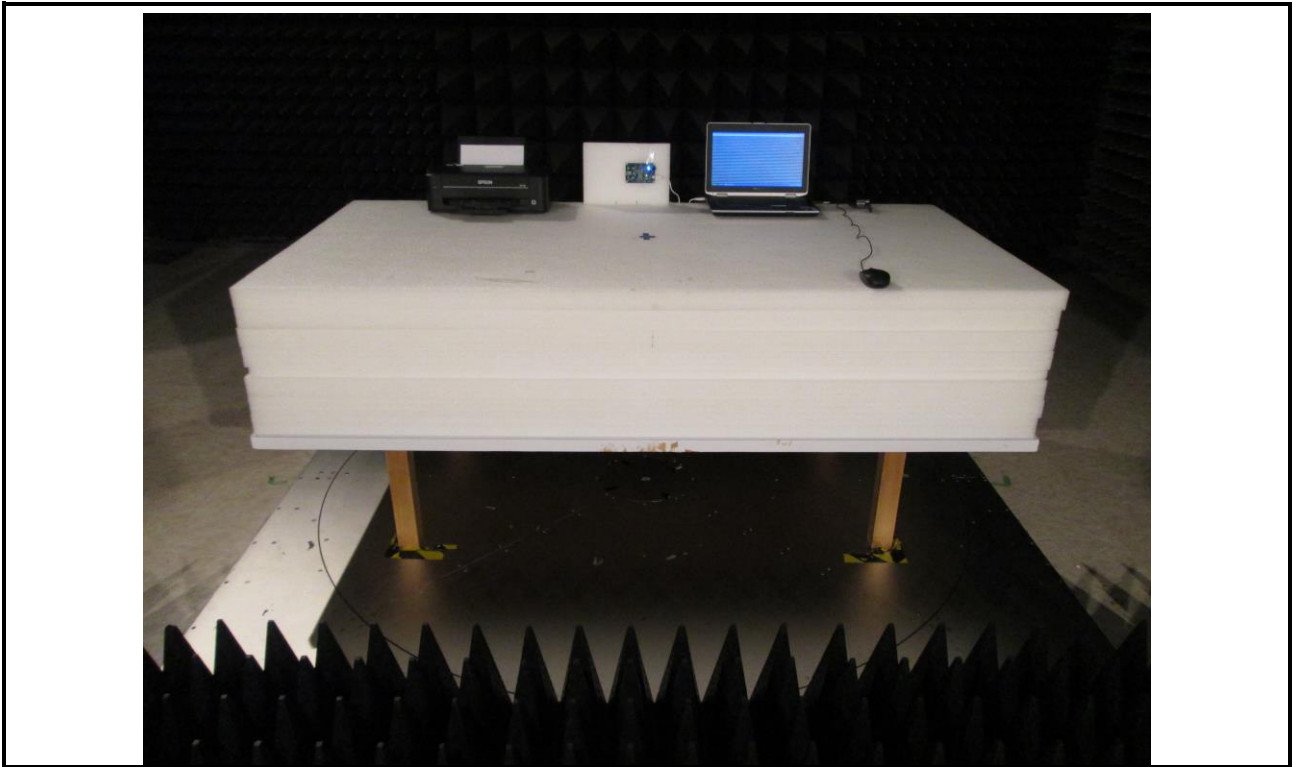
Radiated Emission above 1GHz Test (Model: BT900-SC with antenna 1)



Radiated Emission above 1GHz Test (Model: BT900-SC with antenna 2)



Radiated Emission above 1GHz Test (Model: BT900-SA with antenna 5)



5 Test laboratory information

Established in 2012, ICC provides foremost EMC & RF Testing and advisory consultation services by our skilled engineers and technicians. Our services employ a wide variety of advanced edge test equipment and one of the widest certification extents in the business.

International Certification Corp, it is our definitive objective is to institute long term, trust-based associations with our clients. The expectation we set up with our clients is based on outstanding service, practical expertise and devotion to a certified value structure. Our passion is to grant our clients with best EMC / RF services by oriented knowledgeable and accommodating staff.

Our Test sites are located at Linkou District and Kwei Shan Hsiang. Location map can be found on our website <http://www.icertifi.com.tw>.

Linkou

Tel: 886-2-2601-1640

No. 30-2, Ding Fwu Tsuen, Lin Kou District, New Taipei City, Taiwan, R.O.C.

Kwei Shan

Tel: 886-3-271-8666

No. 3-1, Lane 6, Wen San 3rd St., Kwei Shan Hsiang, Tao Yuan Hsien 333, Taiwan, R.O.C.

If you have any suggestion, please feel free to contact us as below information

Tel: 886-3-271-8666

Fax: 886-3-318-0155

Email: ICC_Service@icertifi.com.tw

==END==