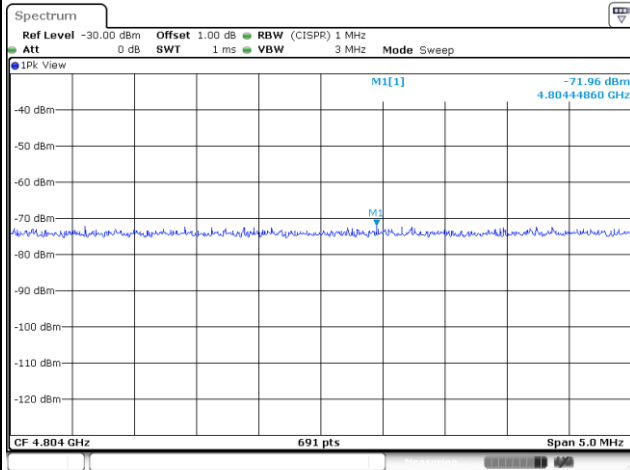
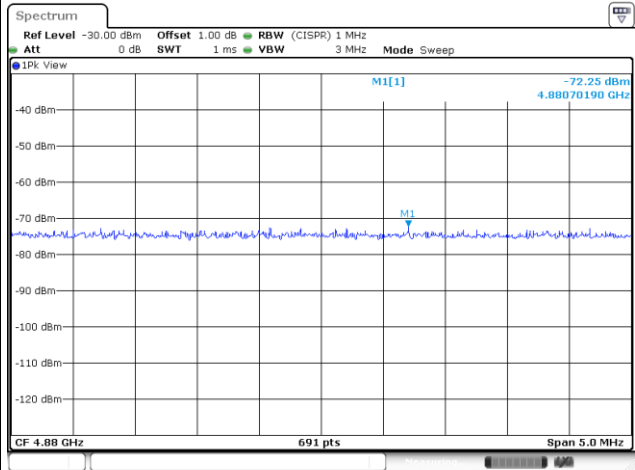


### BT LE-1Mbps - Test Plots

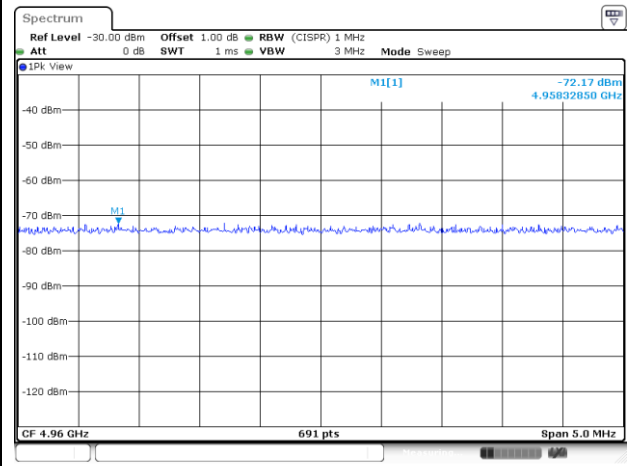
**2402MHz - 4804MHz - PK**



**2440MHz 4880MHz - PK**



**2480 MHz - 4960MHz - PK**



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Transmitter Conducted Unwanted Emissions Results in Restricted Frequency Band							
Modulation Mode		BT LE-2Mbps			Frequency		2402MHz
Freq. (MHz)	Remark	Max Value (dBm)	DG (dBi)	EIRP (dBm)	E-Field* (dBuV/m)	E-Field Limit (dBuV/m)	E-Field Margin (dB)
4804.00	PK	-71.82	2.00	-69.82	25.44	74.00	-48.56
4804.00	AV	-	2.00	-	-	54.00	-

Transmitter Conducted Unwanted Emissions Results in Restricted Frequency Band							
Modulation Mode		BT LE-2Mbps			Frequency		2440MHz
Freq. (MHz)	Remark	Max Value (dBm)	DG (dBi)	EIRP (dBm)	E-Field* (dBuV/m)	E-Field Limit (dBuV/m)	E-Field Margin (dB)
4880.00	PK	-72.32	2.00	-70.32	24.94	74.00	-49.06
4880.00	AV	-	2.00	-	-	54.00	-

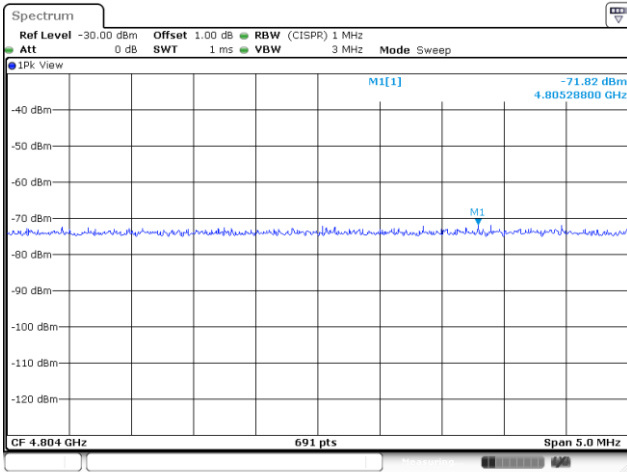
Transmitter Conducted Unwanted Emissions Results in Restricted Frequency Band							
Modulation Mode		BT LE-2Mbps			Frequency		2480MHz
Freq. (MHz)	Remark	Max Value (dBm)	DG (dBi)	EIRP (dBm)	E-Field* (dBuV/m)	E-Field Limit (dBuV/m)	E-Field Margin (dB)
4960.00	PK	-72.22	2.00	-70.22	25.04	74.00	-48.96
4960.00	AV	-	2.00	-	-	54.00	-

Note:

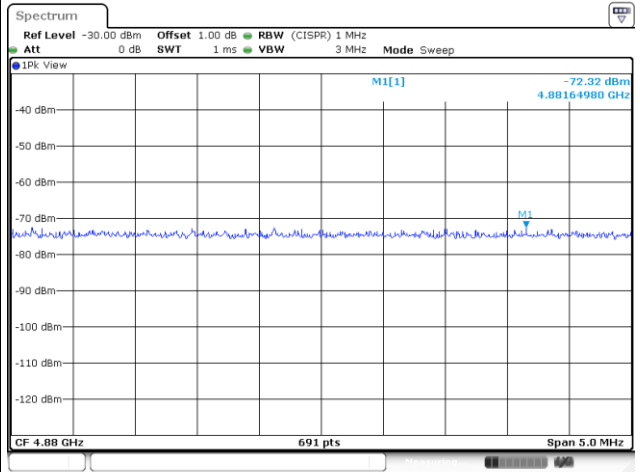
1. If the PK margin greater than 20 dB, there is no need to get AVG reading.
2. DG = Directional Gain
3. E-Field = EIRP – 20log(3) + 104.8

### BT LE-2Mbps - Test Plots

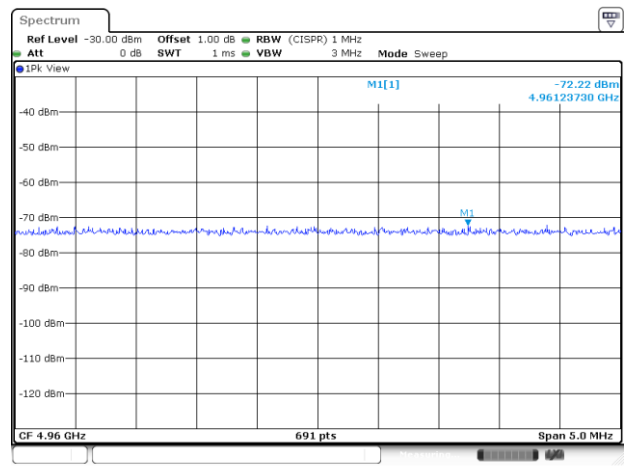
#### 2402MHz - 4804MHz - PK



#### 2440MHz 4880MHz - PK



#### 2480 MHz - 4960MHz - PK



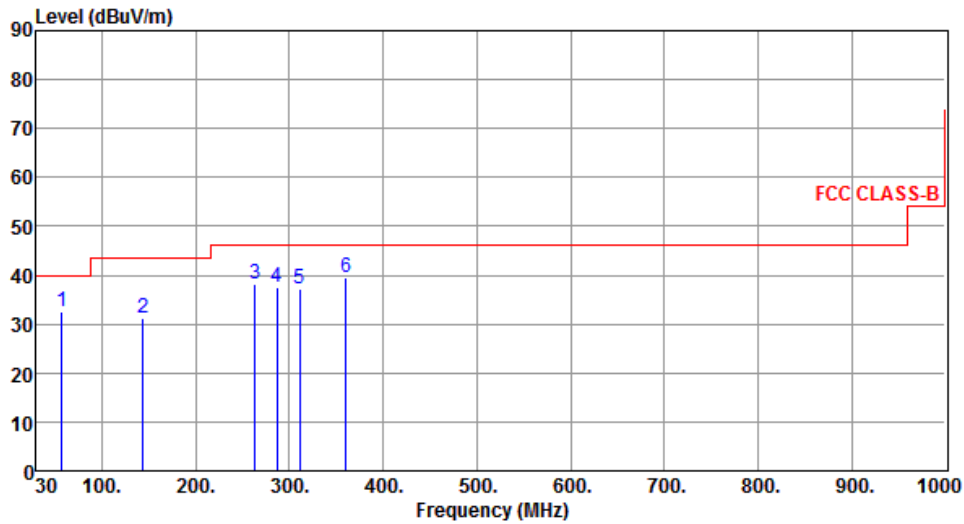
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**Highest power level - Configuration 7: Laird NFC + 50Ω terminator**

**3.5.8 Transmitter Radiated Unwanted Emissions (Below 1GHz)**

<b>Modulation</b>	GFSK/125kbps	<b>Test Freq. (MHz)</b>	2480
<b>Polarization</b>	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	57.21	32.47	40.00	-7.53	41.53	-9.06	Peak	---	---
2	143.49	31.35	43.50	-12.15	40.34	-8.99	Peak	---	---
3	263.66	38.26	46.00	-7.74	48.03	-9.77	Peak	---	---
4	287.12	37.54	46.00	-8.46	46.32	-8.78	Peak	---	---
5	311.10	37.35	46.00	-8.65	45.42	-8.07	Peak	---	---
6	360.68	39.58	46.00	-6.42	46.53	-6.95	Peak	---	---

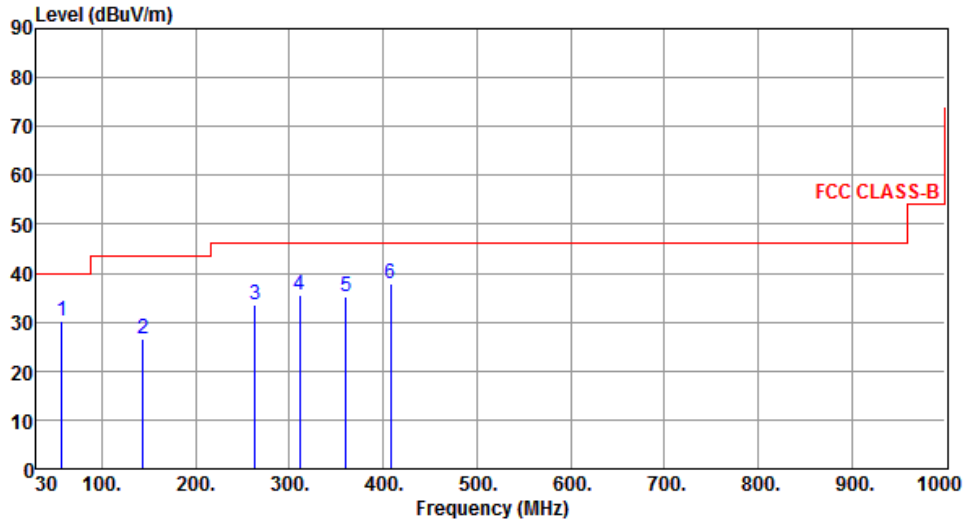
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor\* (dB)

\*Factor includes antenna factor , cable loss and amplifier gain

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

Note 3: All spurious emissions below 30MHz are more than 20 dB below the limit.

<b>Modulation</b>	GFSK/125kbps	<b>Test Freq. (MHz)</b>	2480
<b>Polarization</b>	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	57.21	30.26	40.00	-9.74	39.32	-9.06	Peak	---	---
2	143.49	26.43	43.50	-17.07	35.42	-8.99	Peak	---	---
3	263.66	33.41	46.00	-12.59	43.18	-9.77	Peak	---	---
4	311.25	35.57	46.00	-10.43	43.63	-8.06	Peak	---	---
5	360.69	35.16	46.00	-10.84	42.11	-6.95	Peak	---	---
6	408.30	37.88	46.00	-8.12	43.50	-5.62	Peak	---	---

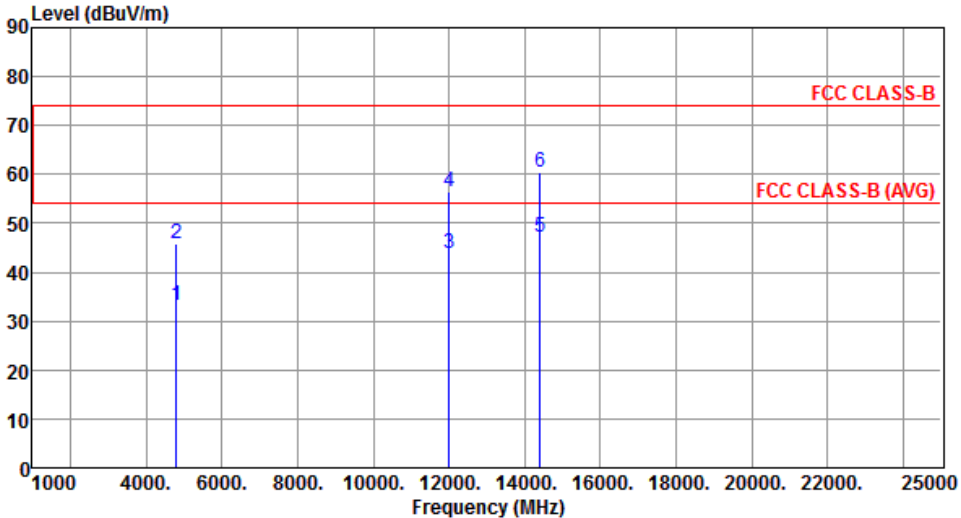
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor\* (dB)

\*Factor includes antenna factor , cable loss and amplifier gain

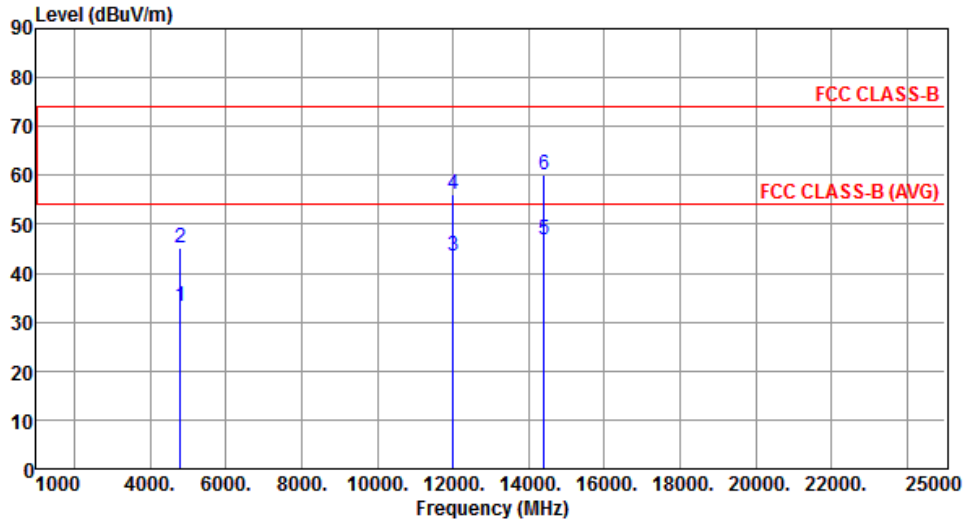
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

Note 3: All spurious emissions below 30MHz are more than 20 dB below the limit.

### 3.5.9 Transmitter Radiated Unwanted Emissions (Above 1GHz) for GFSK

Modulation	GFSK/125kbps	Test Freq. (MHz)	2402						
Polarization	Horizontal								
									
	Freq.	Emission level	Limit	Margin	SA reading	Factor	Remark	ANT High	Turn Table
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB		cm	deg
1	4804.00	33.22	54.00	-20.78	28.42	4.80	Average	100	303
2	4804.00	45.86	74.00	-28.14	41.06	4.80	Peak	100	303
3	12010.00	43.92	54.00	-10.08	29.12	14.80	Average	100	30
4	12010.00	56.39	74.00	-17.61	41.59	14.80	Peak	100	30
5	14412.00	47.11	54.00	-6.89	29.23	17.88	Average	100	50
6	14412.00	60.44	74.00	-13.56	42.56	17.88	Peak	100	50
<p>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).</p>									

<b>Modulation</b>	GFSK/125kbps	<b>Test Freq. (MHz)</b>	2402
<b>Polarization</b>	Vertical		



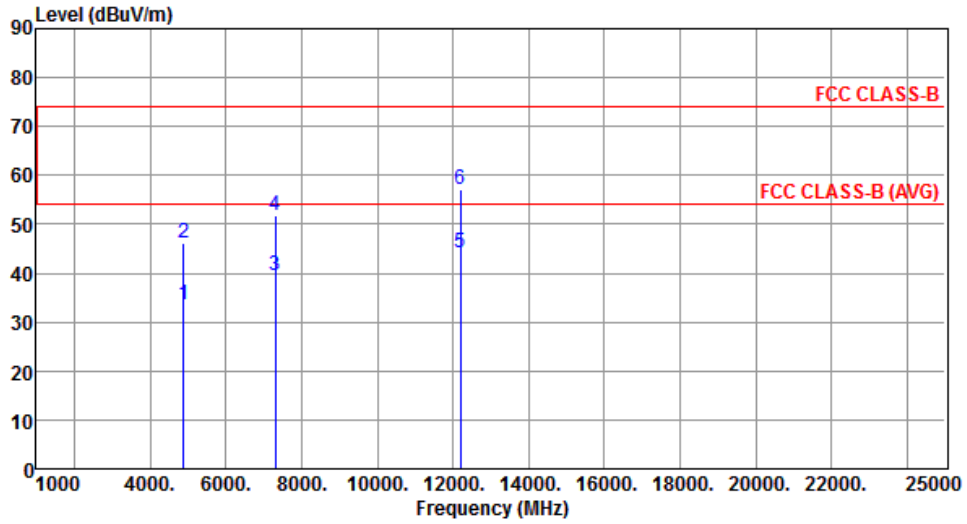
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	4804.00	33.05	54.00	-20.95	28.25	4.80	Average	100	70
2	4804.00	45.07	74.00	-28.93	40.27	4.80	Peak	100	70
3	12010.00	43.37	54.00	-10.63	28.57	14.80	Average	100	40
4	12010.00	56.08	74.00	-17.92	41.28	14.80	Peak	100	40
5	14412.00	46.90	54.00	-7.10	29.02	17.88	Average	100	70
6	14412.00	60.19	74.00	-13.81	42.31	17.88	Peak	100	70

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).

<b>Modulation</b>	GFSK/125kbps	<b>Test Freq. (MHz)</b>	2440
<b>Polarization</b>	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	4880.00	33.44	54.00	-20.56	28.53	4.91	Average	100	309
2	4880.00	46.07	74.00	-27.93	41.16	4.91	Peak	100	309
3	7320.00	39.38	54.00	-14.62	29.06	10.32	Average	100	306
4	7320.00	51.90	74.00	-22.10	41.58	10.32	Peak	100	306
5	12200.00	44.04	54.00	-9.96	29.20	14.84	Average	100	30
6	12200.00	57.12	74.00	-16.88	42.28	14.84	Peak	100	30

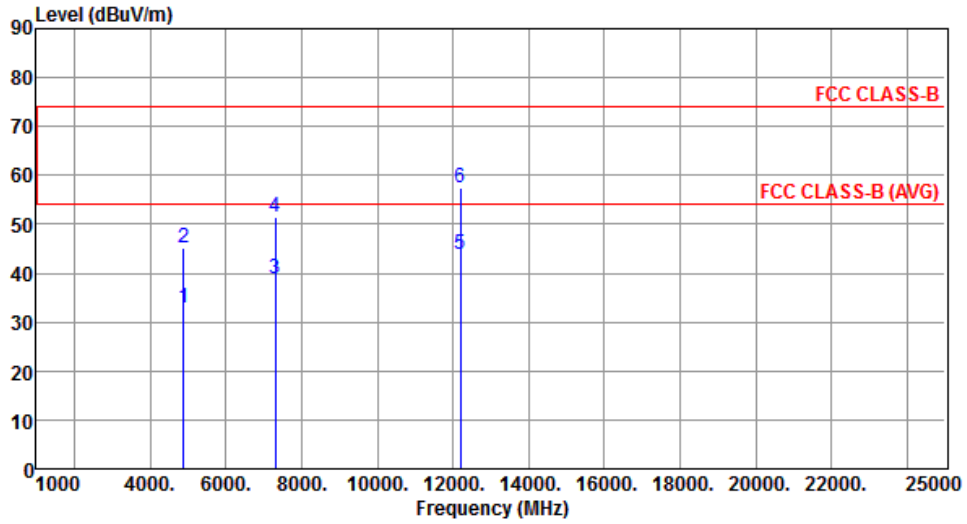
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor\* (dB)

\*Factor includes antenna factor , cable loss and amplifier gain

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



<b>Modulation</b>	GFSK/125kbps	<b>Test Freq. (MHz)</b>	2440
<b>Polarization</b>	Vertical		



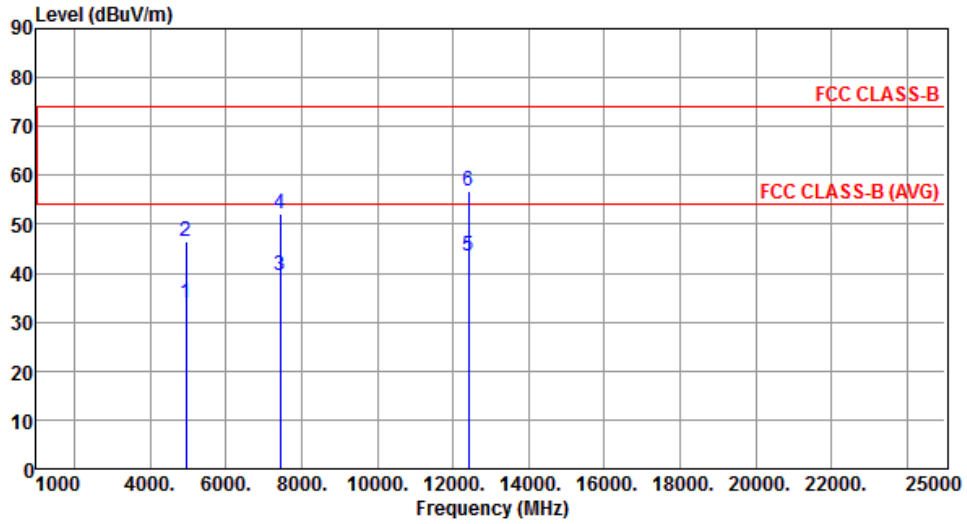
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	4880.00	33.03	54.00	-20.97	28.12	4.91	Average	100	40
2	4880.00	45.16	74.00	-28.84	40.25	4.91	Peak	100	40
3	7320.00	38.74	54.00	-15.26	28.42	10.32	Average	100	50
4	7320.00	51.60	74.00	-22.40	41.28	10.32	Peak	100	50
5	12200.00	43.89	54.00	-10.11	29.05	14.84	Average	100	70
6	12200.00	57.38	74.00	-16.62	42.54	14.84	Peak	100	70

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).

<b>Modulation</b>	GFSK/125kbps	<b>Test Freq. (MHz)</b>	2480
<b>Polarization</b>	Horizontal		



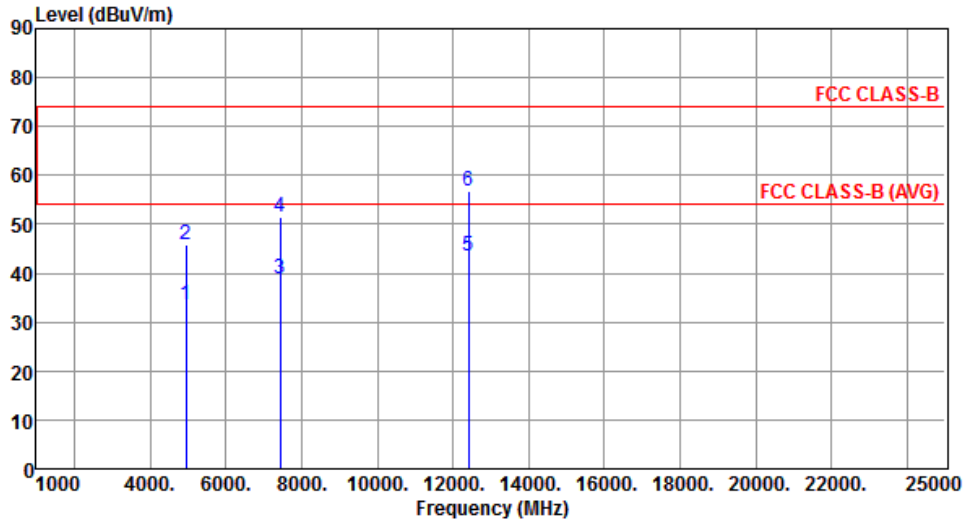
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	4960.00	33.94	54.00	-20.06	28.75	5.19	Average	100	305
2	4960.00	46.53	74.00	-27.47	41.34	5.19	Peak	100	305
3	7440.00	39.59	54.00	-14.41	29.24	10.35	Average	100	308
4	7440.00	52.03	74.00	-21.97	41.68	10.35	Peak	100	308
5	12400.00	43.34	54.00	-10.66	29.05	14.29	Average	100	50
6	12400.00	56.65	74.00	-17.35	42.36	14.29	Peak	100	50

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).

<b>Modulation</b>	GFSK/125kbps	<b>Test Freq. (MHz)</b>	2480
<b>Polarization</b>	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	4960.00	33.45	54.00	-20.55	28.26	5.19	Average	100	30
2	4960.00	45.76	74.00	-28.24	40.57	5.19	Peak	100	30
3	7440.00	38.91	54.00	-15.09	28.56	10.35	Average	100	70
4	7440.00	51.58	74.00	-22.42	41.23	10.35	Peak	100	70
5	12400.00	43.42	54.00	-10.58	29.13	14.29	Average	100	60
6	12400.00	56.73	74.00	-17.27	42.44	14.29	Peak	100	60

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

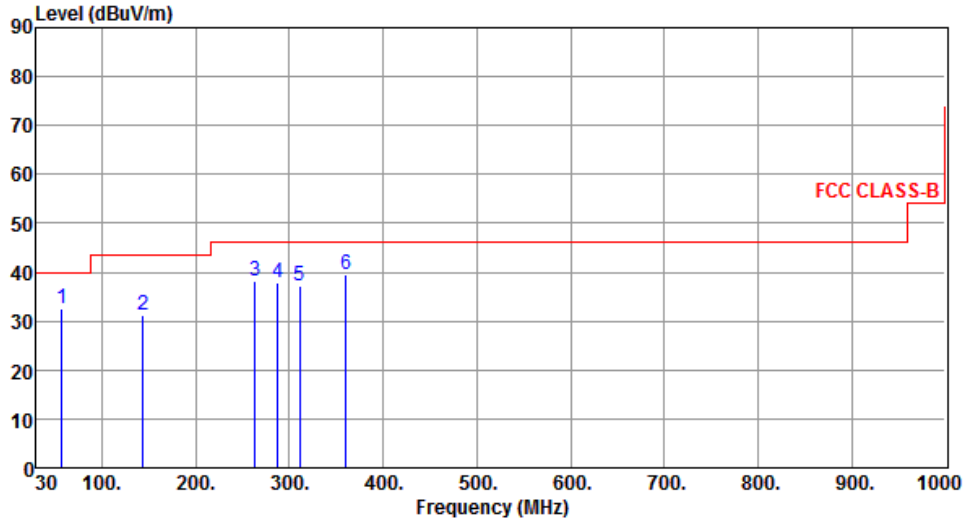
\*Factor includes antenna factor , cable loss and amplifier gain

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

### 3.5.10 Transmitter Radiated Unwanted Emissions (Below 1GHz)

<b>Modulation</b>	GFSK/1Mbps	<b>Test Freq. (MHz)</b>	2480
<b>Polarization</b>	Horizontal		



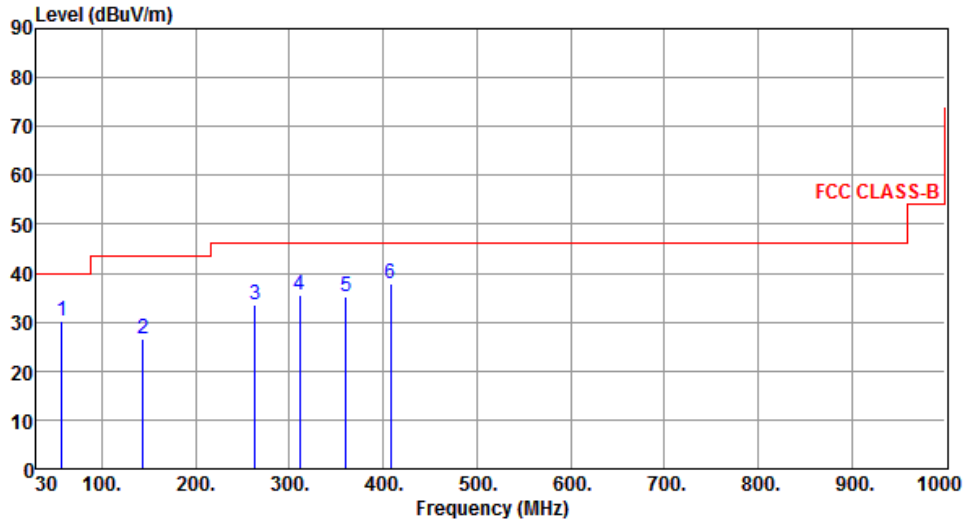
The graph plots Level (dBuV/m) on the y-axis (0 to 90) against Frequency (MHz) on the x-axis (30 to 1000). A red line represents the FCC CLASS-B limit, which is 40 dBuV/m from 30 MHz to 100 MHz, 45 dBuV/m from 100 MHz to 300 MHz, 46 dBuV/m from 300 MHz to 900 MHz, and 55 dBuV/m from 900 MHz to 1000 MHz. Six blue vertical lines represent measured peaks labeled 1 through 6, with their corresponding data 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	57.25	32.48	40.00	-7.52	41.55	-9.07	Peak	---	---
2	143.49	31.36	43.50	-12.14	40.35	-8.99	Peak	---	---
3	263.69	38.18	46.00	-7.82	47.95	-9.77	Peak	---	---
4	287.21	37.85	46.00	-8.15	46.63	-8.78	Peak	---	---
5	311.25	37.34	46.00	-8.66	45.40	-8.06	Peak	---	---
6	360.77	39.58	46.00	-6.42	46.53	-6.95	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).  
 Note 3: All spurious emissions below 30MHz are more than 20 dB below the limit.

<b>Modulation</b>	GFSK/1Mbps	<b>Test Freq. (MHz)</b>	2480
<b>Polarization</b>	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	57.21	30.28	40.00	-9.72	39.34	-9.06	Peak	---	---
2	143.52	26.49	43.50	-17.01	35.48	-8.99	Peak	---	---
3	263.65	33.68	46.00	-12.32	43.45	-9.77	Peak	---	---
4	311.30	35.58	46.00	-10.42	43.64	-8.06	Peak	---	---
5	360.64	35.12	46.00	-10.88	42.07	-6.95	Peak	---	---
6	408.28	37.87	46.00	-8.13	43.49	-5.62	Peak	---	---

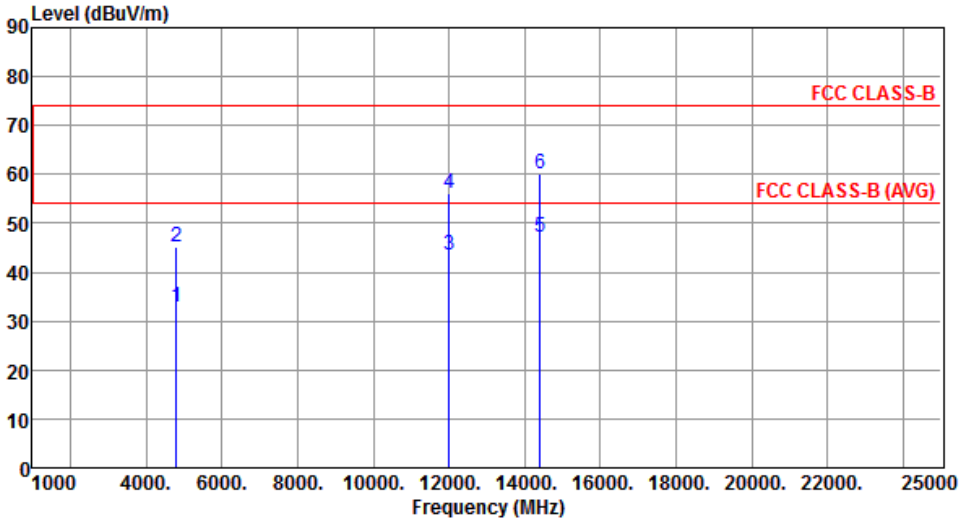
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor\* (dB)

\*Factor includes antenna factor , cable loss and amplifier gain

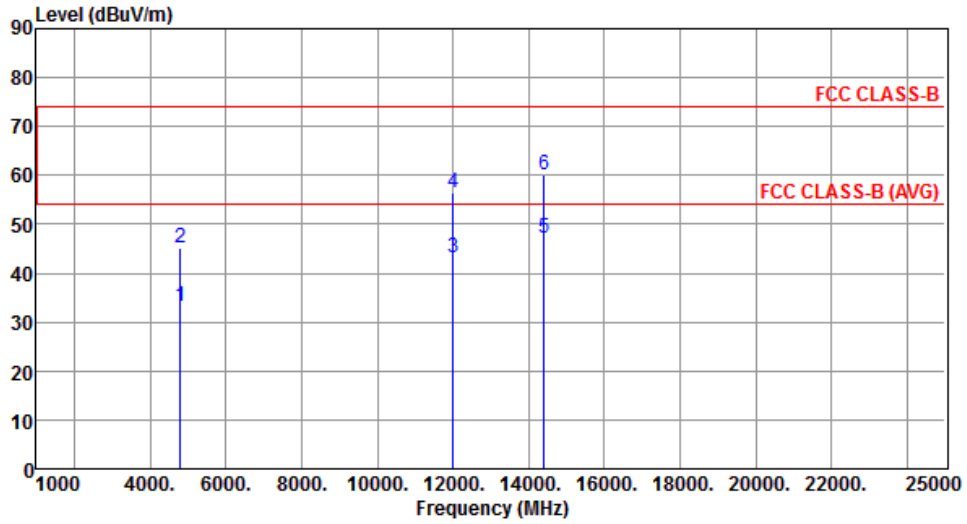
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

Note 3: All spurious emissions below 30MHz are more than 20 dB below the limit.

### 3.5.11 Transmitter Radiated Unwanted Emissions (Above 1GHz) for GFSK

Modulation	GFSK/1Mbps	Test Freq. (MHz)	2402						
Polarization	Horizontal								
									
	Freq.	Emission level	Limit	Margin	SA reading	Factor	Remark	ANT High	Turn Table
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB		cm	deg
1	4804.00	32.93	54.00	-21.07	28.13	4.80	Average	100	50
2	4804.00	45.06	74.00	-28.94	40.26	4.80	Peak	100	50
3	12010.00	43.49	54.00	-10.51	28.69	14.80	Average	100	30
4	12010.00	56.08	74.00	-17.92	41.28	14.80	Peak	100	30
5	14412.00	47.12	54.00	-6.88	29.24	17.88	Average	100	70
6	14412.00	60.26	74.00	-13.74	42.38	17.88	Peak	100	70
<p>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).</p>									

<b>Modulation</b>	GFSK/1Mbps	<b>Test Freq. (MHz)</b>	2402
<b>Polarization</b>	Vertical		



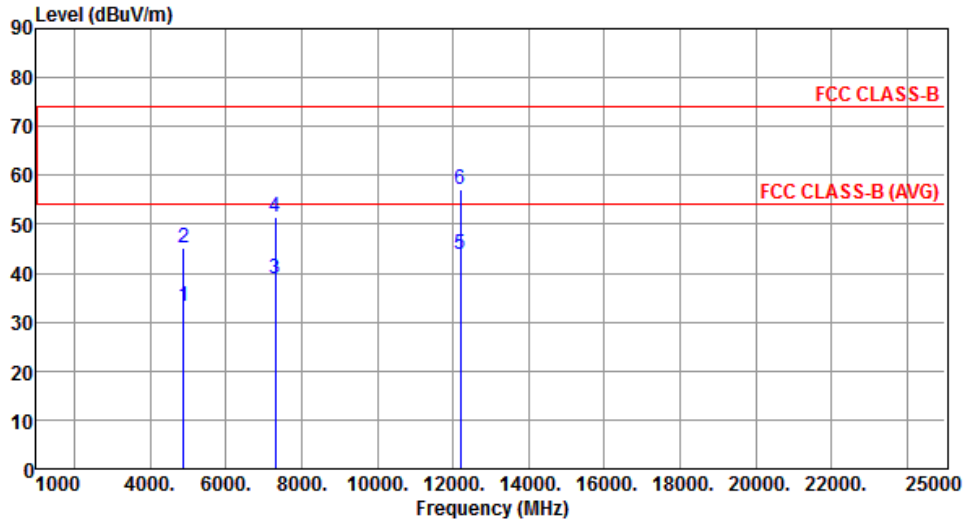
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	4804.00	33.10	54.00	-20.90	28.30	4.80	Average	100	60
2	4804.00	45.19	74.00	-28.81	40.39	4.80	Peak	100	60
3	12010.00	43.33	54.00	-10.67	28.53	14.80	Average	100	70
4	12010.00	56.34	74.00	-17.66	41.54	14.80	Peak	100	70
5	14412.00	47.13	54.00	-6.87	29.25	17.88	Average	100	30
6	14412.00	60.23	74.00	-13.77	42.35	17.88	Peak	100	30

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).

<b>Modulation</b>	GFSK/1Mbps	<b>Test Freq. (MHz)</b>	2440
<b>Polarization</b>	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	4880.00	33.16	54.00	-20.84	28.25	4.91	Average	100	50
2	4880.00	45.30	74.00	-28.70	40.39	4.91	Peak	100	50
3	7320.00	38.97	54.00	-15.03	28.65	10.32	Average	100	80
4	7320.00	51.55	74.00	-22.45	41.23	10.32	Peak	100	80
5	12200.00	43.90	54.00	-10.10	29.06	14.84	Average	100	40
6	12200.00	57.16	74.00	-16.84	42.32	14.84	Peak	100	40

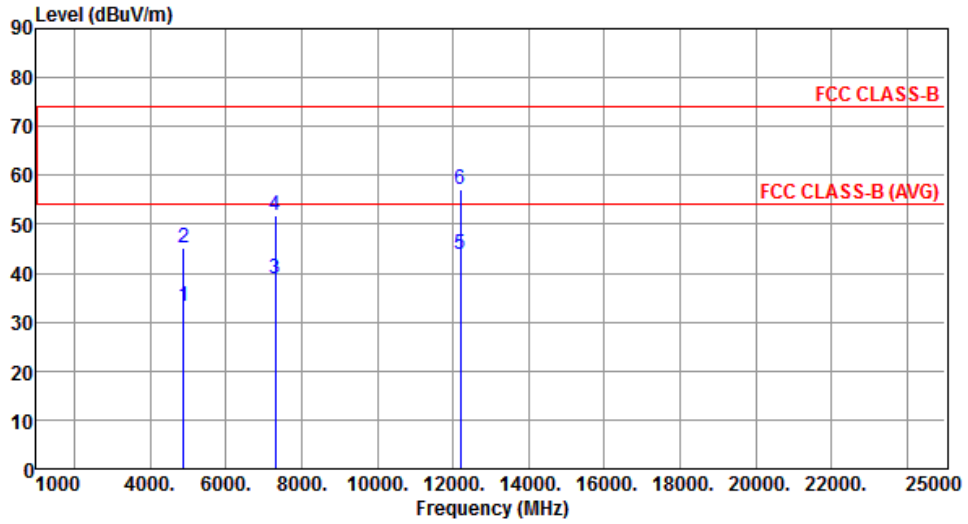
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor\* (dB)

\*Factor includes antenna factor , cable loss and amplifier gain

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



<b>Modulation</b>	GFSK/1Mbps	<b>Test Freq. (MHz)</b>	2440
<b>Polarization</b>	Vertical		



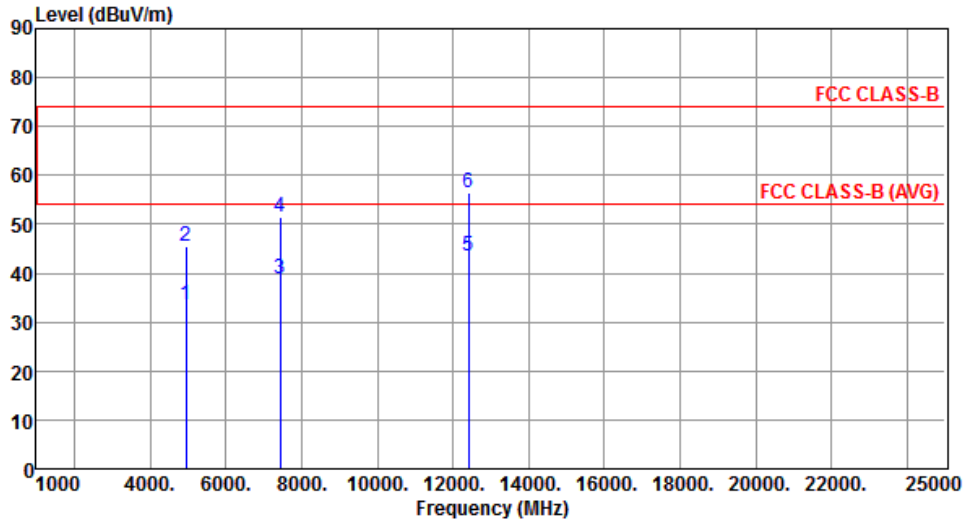
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	4880.00	33.12	54.00	-20.88	28.21	4.91	Average	100	30
2	4880.00	45.27	74.00	-28.73	40.36	4.91	Peak	100	30
3	7320.00	38.77	54.00	-15.23	28.45	10.32	Average	100	50
4	7320.00	51.88	74.00	-22.12	41.56	10.32	Peak	100	50
5	12200.00	43.89	54.00	-10.11	29.05	14.84	Average	100	70
6	12200.00	57.10	74.00	-16.90	42.26	14.84	Peak	100	70

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).

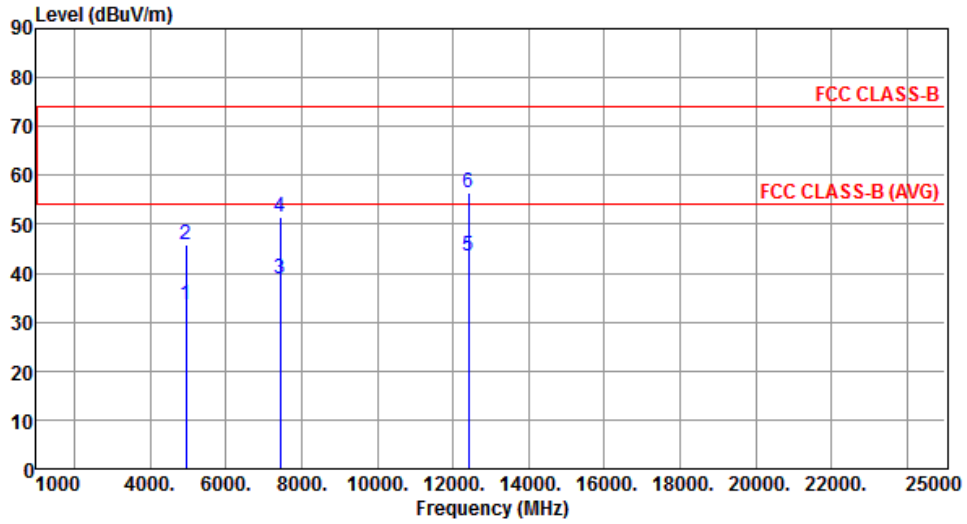
<b>Modulation</b>	GFSK/1Mbps	<b>Test Freq. (MHz)</b>	2480
<b>Polarization</b>	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	4960.00	33.44	54.00	-20.56	28.25	5.19	Average	100	20
2	4960.00	45.56	74.00	-28.44	40.37	5.19	Peak	100	20
3	7440.00	38.87	54.00	-15.13	28.52	10.35	Average	100	100
4	7440.00	51.60	74.00	-22.40	41.25	10.35	Peak	100	100
5	12400.00	43.34	54.00	-10.66	29.05	14.29	Average	100	60
6	12400.00	56.56	74.00	-17.44	42.27	14.29	Peak	100	60

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).

<b>Modulation</b>	GFSK/1Mbps	<b>Test Freq. (MHz)</b>	2480
<b>Polarization</b>	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	4960.00	33.42	54.00	-20.58	28.23	5.19	Average	100	30
2	4960.00	45.75	74.00	-28.25	40.56	5.19	Peak	100	30
3	7440.00	39.01	54.00	-14.99	28.66	10.35	Average	100	50
4	7440.00	51.61	74.00	-22.39	41.26	10.35	Peak	100	50
5	12400.00	43.36	54.00	-10.64	29.07	14.29	Average	100	90
6	12400.00	56.49	74.00	-17.51	42.20	14.29	Peak	100	90

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

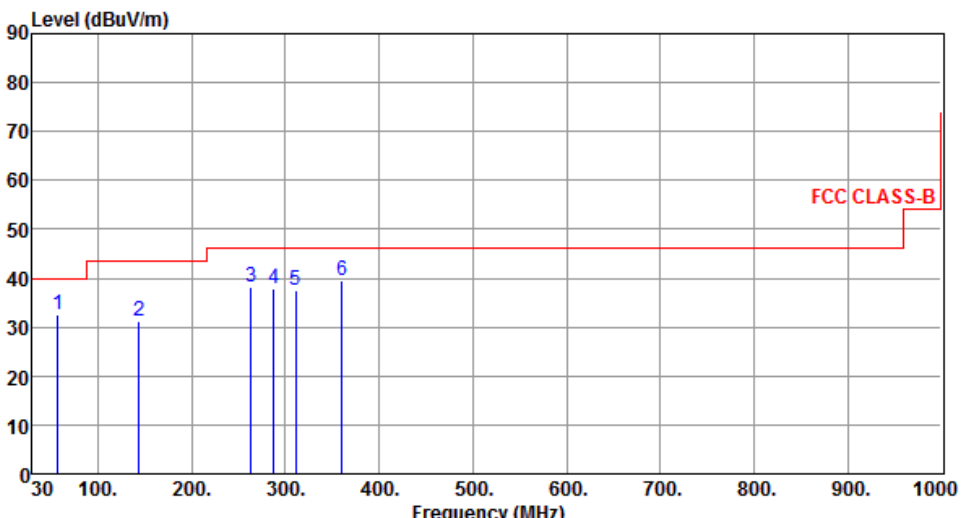
\*Factor includes antenna factor , cable loss and amplifier gain

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

### 3.5.12 Transmitter Radiated Unwanted Emissions (Below 1GHz)

<b>Modulation</b>	GFSK/2Mbps	<b>Test Freq. (MHz)</b>	2480
<b>Polarization</b>	Horizontal		



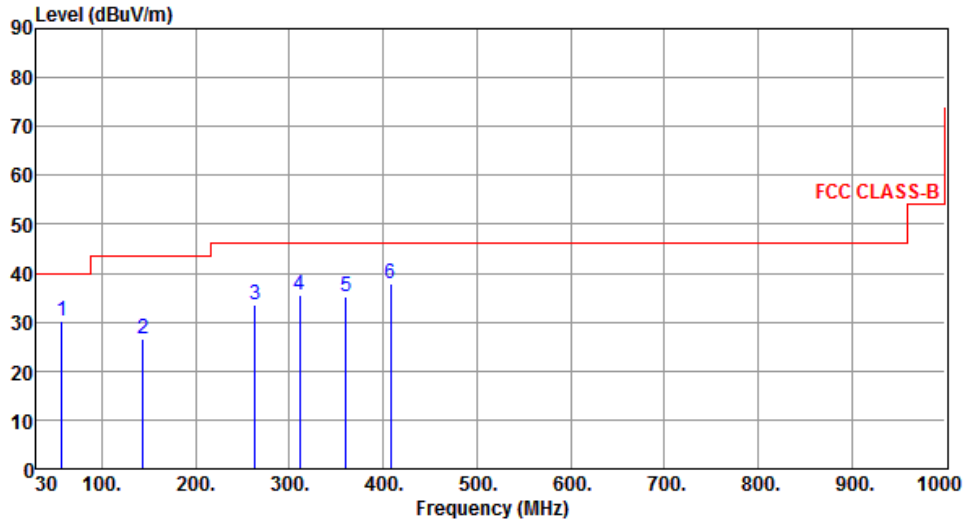
The graph plots Level (dBuV/m) on the y-axis (0 to 90) against Frequency (MHz) on the x-axis (30 to 1000). A red line represents the FCC CLASS-B limit, which is 40 dBuV/m from 30 to 100 MHz, 45 dBuV/m from 100 to 300 MHz, 46 dBuV/m from 300 to 1000 MHz, and 55 dBuV/m from 1000 to 10000 MHz. Six blue vertical lines represent emission peaks labeled 1 through 6, with their respective frequencies and levels indicated 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	57.23	32.68	40.00	-7.32	41.75	-9.07	Peak	---	---
2	143.49	31.36	43.50	-12.14	40.35	-8.99	Peak	---	---
3	263.69	38.25	46.00	-7.75	48.02	-9.77	Peak	---	---
4	287.48	37.86	46.00	-8.14	46.63	-8.77	Peak	---	---
5	311.25	37.38	46.00	-8.62	45.44	-8.06	Peak	---	---
6	360.77	39.57	46.00	-6.43	46.52	-6.95	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).  
 Note 3: All spurious emissions below 30MHz are more than 20 dB below the limit.

<b>Modulation</b>	GFSK/2Mbps	<b>Test Freq. (MHz)</b>	2480
<b>Polarization</b>	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	57.16	30.28	40.00	-9.72	39.33	-9.05	Peak	---	---
2	143.40	26.48	43.50	-17.02	35.48	-9.00	Peak	---	---
3	263.63	33.48	46.00	-12.52	43.25	-9.77	Peak	---	---
4	311.30	35.49	46.00	-10.51	43.55	-8.06	Peak	---	---
5	360.69	35.12	46.00	-10.88	42.07	-6.95	Peak	---	---
6	408.25	37.85	46.00	-8.15	43.47	-5.62	Peak	---	---

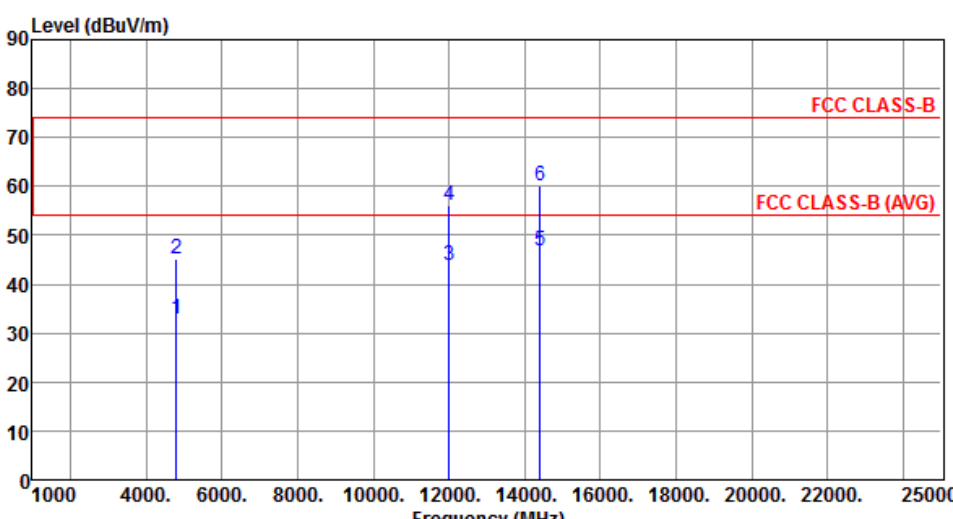
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor\* (dB)

\*Factor includes antenna factor , cable loss and amplifier gain

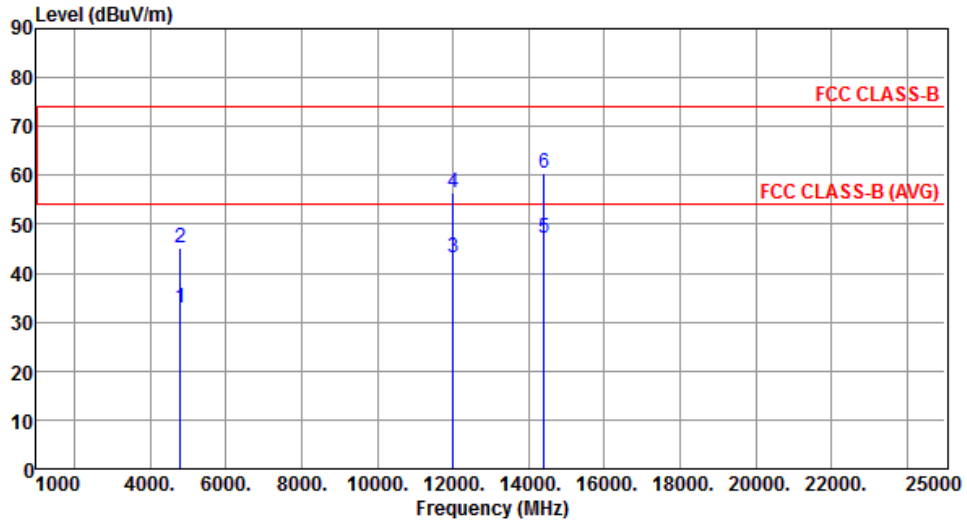
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

Note 3: All spurious emissions below 30MHz are more than 20 dB below the limit.

### 3.5.13 Transmitter Radiated Unwanted Emissions (Above 1GHz) for GFSK

Modulation	GFSK/2Mbps	Test Freq. (MHz)	2402						
Polarization	Horizontal								
									
	Freq.	Emission level	Limit	Margin	SA reading	Factor	Remark	ANT High	Turn Table
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB		cm	deg
1	4804.00	32.95	54.00	-21.05	28.15	4.80	Average	100	30
2	4804.00	45.07	74.00	-28.93	40.27	4.80	Peak	100	30
3	12010.00	43.83	54.00	-10.17	29.03	14.80	Average	100	25
4	12010.00	56.18	74.00	-17.82	41.38	14.80	Peak	100	25
5	14412.00	46.93	54.00	-7.07	29.05	17.88	Average	100	70
6	14412.00	60.26	74.00	-13.74	42.38	17.88	Peak	100	70
<p>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).</p>									

<b>Modulation</b>	GFSK/2Mbps	<b>Test Freq. (MHz)</b>	2402
<b>Polarization</b>	Vertical		



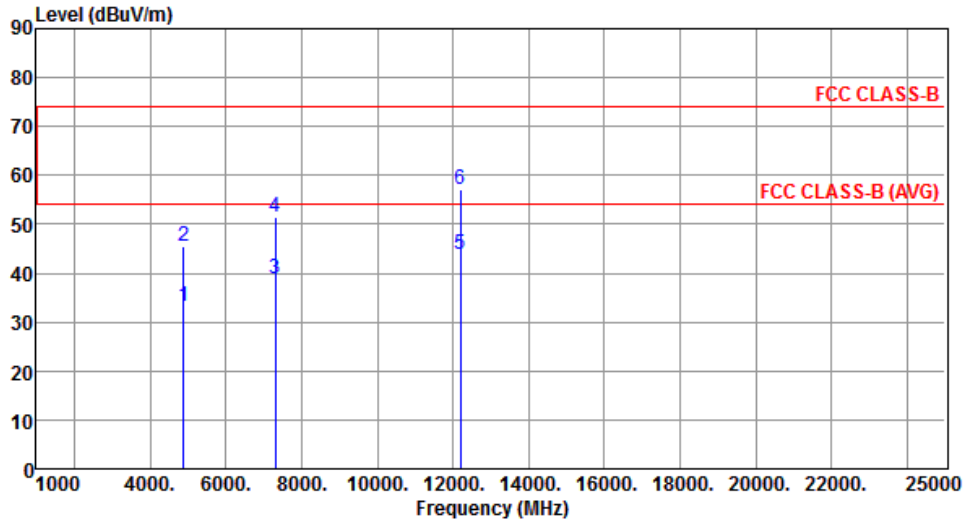
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	4804.00	32.98	54.00	-21.02	28.18	4.80	Average	100	60
2	4804.00	45.16	74.00	-28.84	40.36	4.80	Peak	100	60
3	12010.00	43.23	54.00	-10.77	28.43	14.80	Average	100	20
4	12010.00	56.36	74.00	-17.64	41.56	14.80	Peak	100	20
5	14412.00	47.02	54.00	-6.98	29.14	17.88	Average	100	35
6	14412.00	60.43	74.00	-13.57	42.55	17.88	Peak	100	35

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).

<b>Modulation</b>	GFSK/2Mbps	<b>Test Freq. (MHz)</b>	2440
<b>Polarization</b>	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	4880.00	33.14	54.00	-20.86	28.23	4.91	Average	100	20
2	4880.00	45.47	74.00	-28.53	40.56	4.91	Peak	100	20
3	7320.00	38.95	54.00	-15.05	28.63	10.32	Average	100	35
4	7320.00	51.60	74.00	-22.40	41.28	10.32	Peak	100	35
5	12200.00	43.92	54.00	-10.08	29.08	14.84	Average	100	40
6	12200.00	57.16	74.00	-16.84	42.32	14.84	Peak	100	40

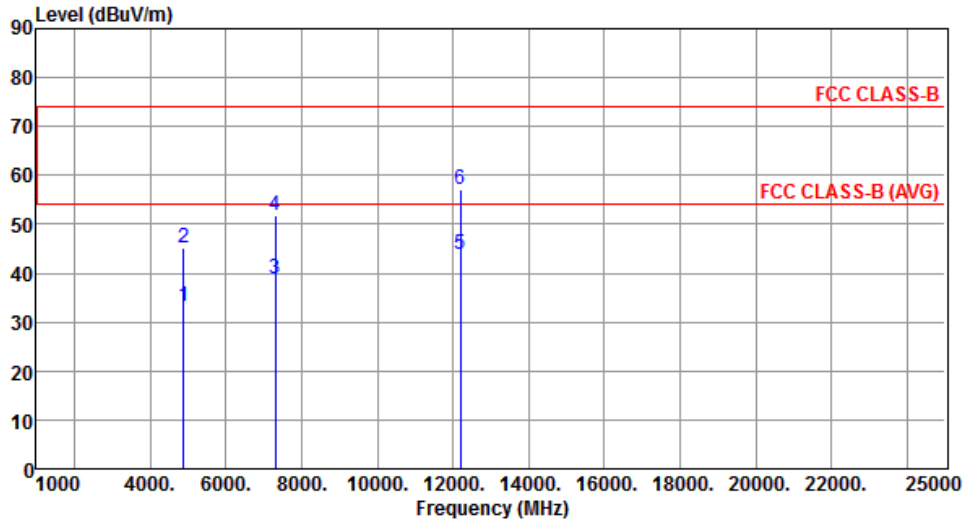
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor\* (dB)

\*Factor includes antenna factor , cable loss and amplifier gain

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



<b>Modulation</b>	GFSK/2Mbps	<b>Test Freq. (MHz)</b>	2440
<b>Polarization</b>	Vertical		



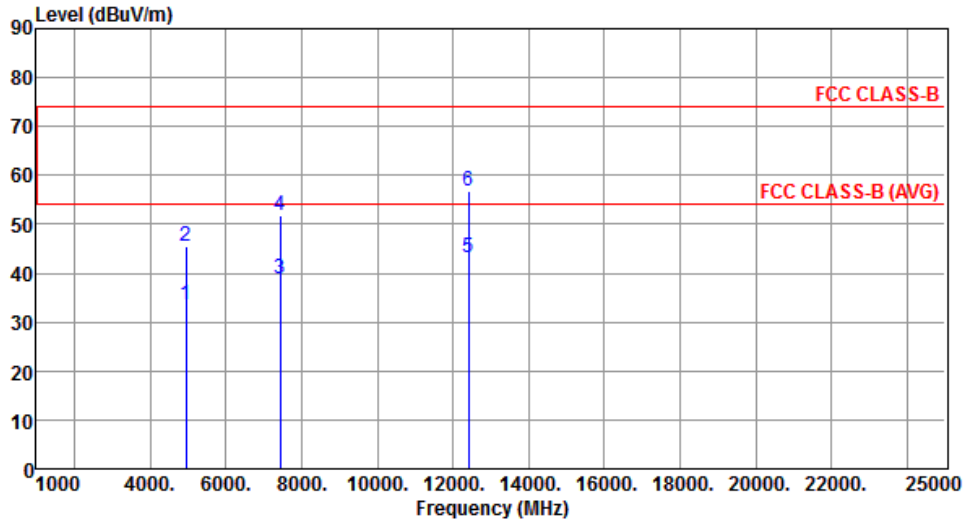
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	4880.00	33.17	54.00	-20.83	28.26	4.91	Average	100	80
2	4880.00	45.29	74.00	-28.71	40.38	4.91	Peak	100	80
3	7320.00	38.87	54.00	-15.13	28.55	10.32	Average	100	25
4	7320.00	51.70	74.00	-22.30	41.38	10.32	Peak	100	25
5	12200.00	43.98	54.00	-10.02	29.14	14.84	Average	100	50
6	12200.00	57.19	74.00	-16.81	42.35	14.84	Peak	100	50

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).

<b>Modulation</b>	GFSK/2Mbps	<b>Test Freq. (MHz)</b>	2480
<b>Polarization</b>	Horizontal		



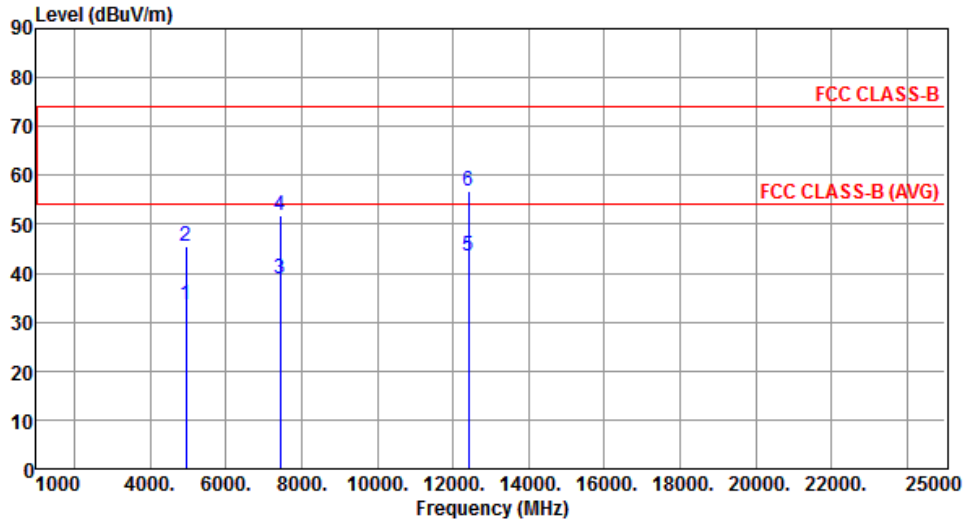
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	4960.00	33.60	54.00	-20.40	28.41	5.19	Average	100	30
2	4960.00	45.54	74.00	-28.46	40.35	5.19	Peak	100	30
3	7440.00	38.89	54.00	-15.11	28.54	10.35	Average	100	70
4	7440.00	51.71	74.00	-22.29	41.36	10.35	Peak	100	70
5	12400.00	43.33	54.00	-10.67	29.04	14.29	Average	100	20
6	12400.00	56.74	74.00	-17.26	42.45	14.29	Peak	100	20

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).

<b>Modulation</b>	GFSK/2Mbps	<b>Test Freq. (MHz)</b>	2480
<b>Polarization</b>	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	4960.00	33.39	54.00	-20.61	28.20	5.19	Average	100	20
2	4960.00	45.56	74.00	-28.44	40.37	5.19	Peak	100	20
3	7440.00	38.77	54.00	-15.23	28.42	10.35	Average	100	30
4	7440.00	51.72	74.00	-22.28	41.37	10.35	Peak	100	30
5	12400.00	43.45	54.00	-10.55	29.16	14.29	Average	100	50
6	12400.00	56.66	74.00	-17.34	42.37	14.29	Peak	100	50

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

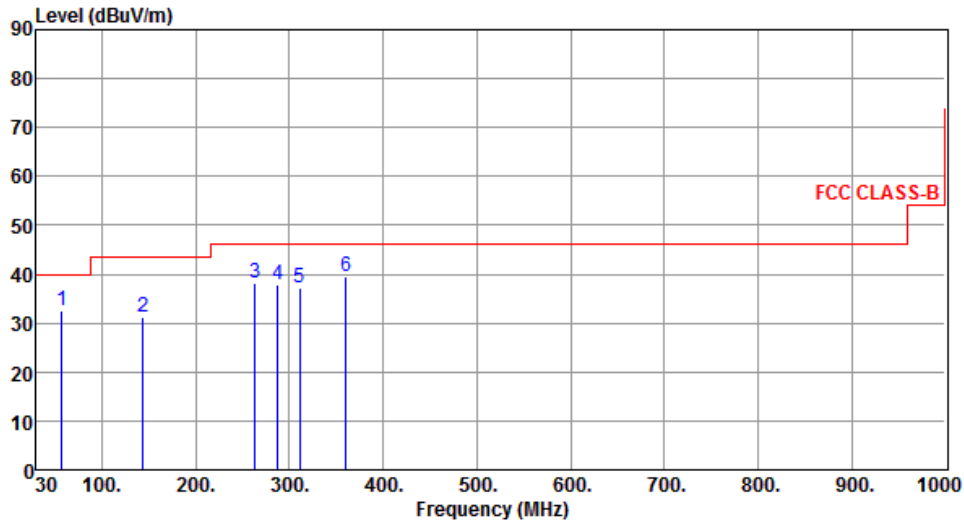
\*Factor includes antenna factor , cable loss and amplifier gain

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

**Lowest power level- Configuration 7: Laird NFC + 50Ω terminator**

**3.5.14 Transmitter Radiated Unwanted Emissions (Below 1GHz)**

<b>Modulation</b>	GFSK/125kbps	<b>Test Freq. (MHz)</b>	2480
<b>Polarization</b>	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	57.16	32.41	40.00	-7.59	41.46	-9.05	Peak	---	---
2	143.51	31.36	43.50	-12.14	40.35	-8.99	Peak	---	---
3	263.69	38.15	46.00	-7.85	47.92	-9.77	Peak	---	---
4	287.18	37.85	46.00	-8.15	46.63	-8.78	Peak	---	---
5	311.30	37.31	46.00	-8.69	45.37	-8.06	Peak	---	---
6	360.66	39.57	46.00	-6.43	46.52	-6.95	Peak	---	---

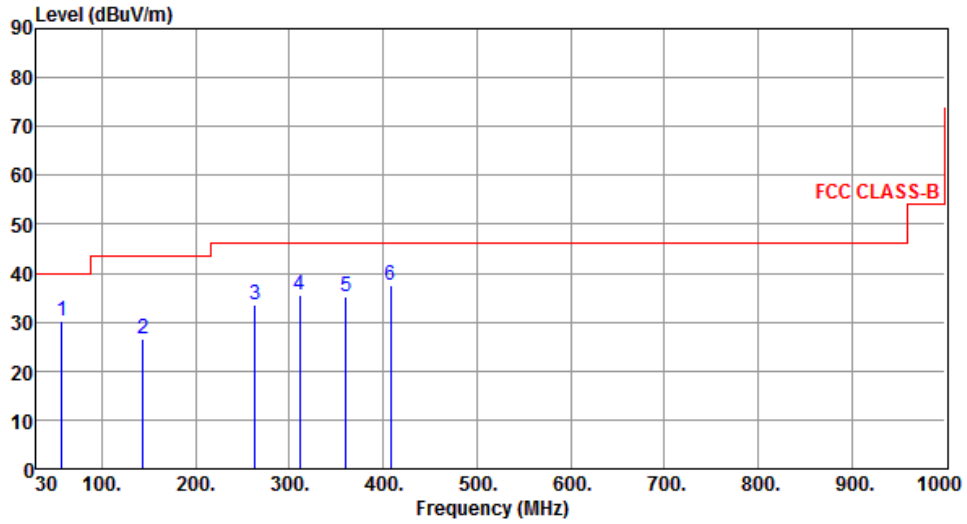
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor\* (dB)

\*Factor includes antenna factor , cable loss and amplifier gain

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

Note 3: All spurious emissions below 30MHz are more than 20 dB below the limit.

<b>Modulation</b>	GFSK/125kbps	<b>Test Freq. (MHz)</b>	2480
<b>Polarization</b>	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	57.24	30.21	40.00	-9.79	39.28	-9.07	Peak	---	---
2	143.49	26.48	43.50	-17.02	35.47	-8.99	Peak	---	---
3	263.66	33.47	46.00	-12.53	43.24	-9.77	Peak	---	---
4	311.25	35.47	46.00	-10.53	43.53	-8.06	Peak	---	---
5	360.77	35.32	46.00	-10.68	42.27	-6.95	Peak	---	---
6	408.28	37.64	46.00	-8.36	43.26	-5.62	Peak	---	---

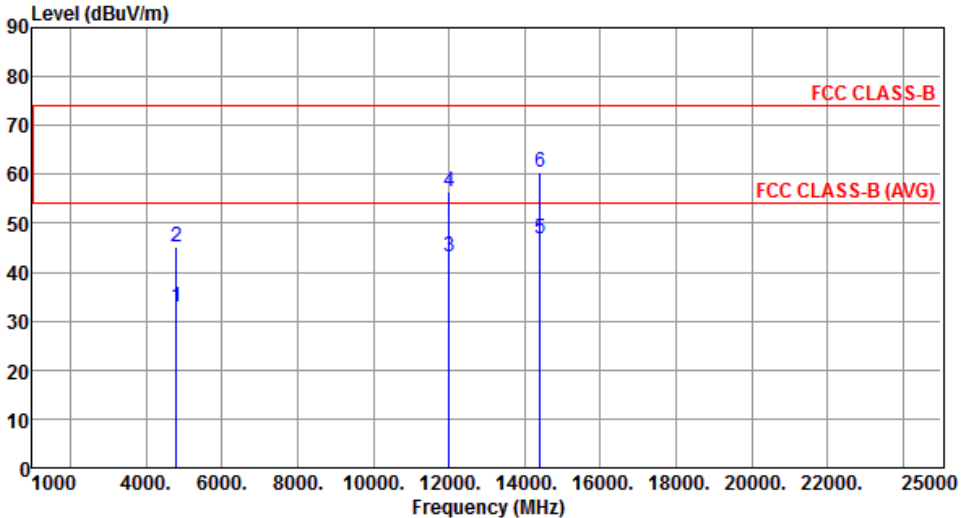
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor\* (dB)

\*Factor includes antenna factor , cable loss and amplifier gain

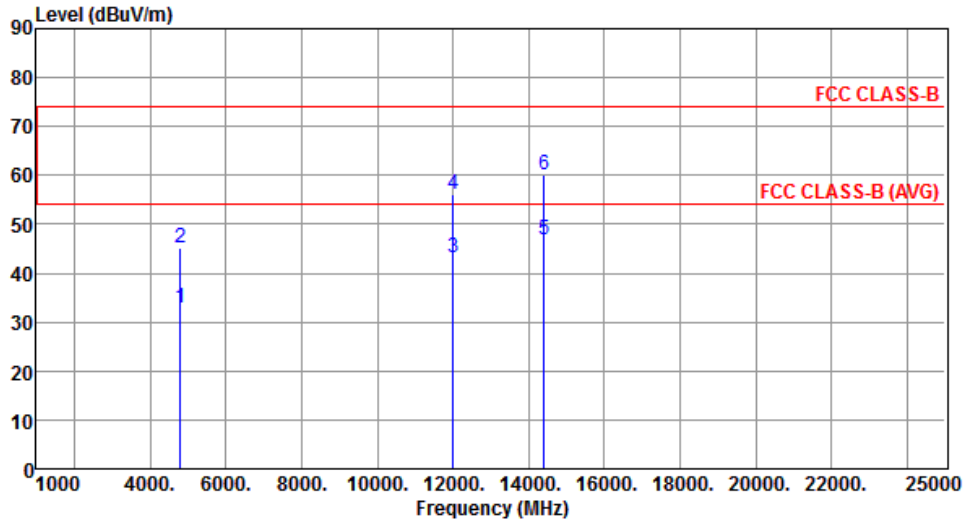
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

Note 3: All spurious emissions below 30MHz are more than 20 dB below the limit.

### 3.5.15 Transmitter Radiated Unwanted Emissions (Above 1GHz) for GFSK

Modulation	GFSK/125kbps	Test Freq. (MHz)	2402						
Polarization	Horizontal								
									
	Freq.	Emission level	Limit	Margin	SA reading	Factor	Remark	ANT High	Turn Table
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB		cm	deg
1	4804.00	32.93	54.00	-21.07	28.13	4.80	Average	100	120
2	4804.00	45.13	74.00	-28.87	40.33	4.80	Peak	100	120
3	12010.00	43.25	54.00	-10.75	28.45	14.80	Average	100	25
4	12010.00	56.43	74.00	-17.57	41.63	14.80	Peak	100	25
5	14412.00	46.99	54.00	-7.01	29.11	17.88	Average	100	50
6	14412.00	60.50	74.00	-13.50	42.62	17.88	Peak	100	50
<p>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).</p>									

<b>Modulation</b>	GFSK/125kbps	<b>Test Freq. (MHz)</b>	2402
<b>Polarization</b>	Vertical		



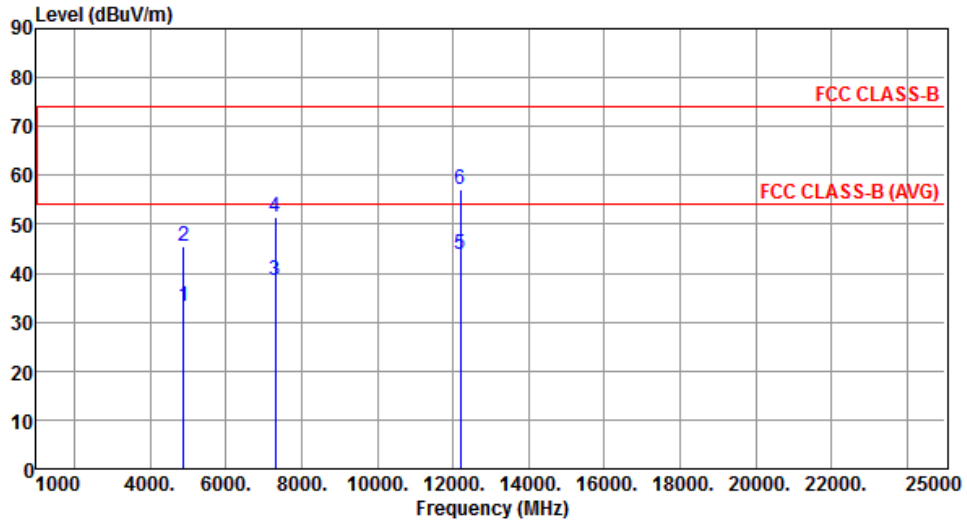
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	4804.00	32.98	54.00	-21.02	28.18	4.80	Average	100	70
2	4804.00	45.14	74.00	-28.86	40.34	4.80	Peak	100	70
3	12010.00	43.22	54.00	-10.78	28.42	14.80	Average	100	35
4	12010.00	56.15	74.00	-17.85	41.35	14.80	Peak	100	35
5	14412.00	46.95	54.00	-7.05	29.07	17.88	Average	100	65
6	14412.00	60.13	74.00	-13.87	42.25	17.88	Peak	100	65

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).

<b>Modulation</b>	GFSK/125kbps	<b>Test Freq. (MHz)</b>	2440
<b>Polarization</b>	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	4880.00	33.05	54.00	-20.95	28.14	4.91	Average	100	100
2	4880.00	45.44	74.00	-28.56	40.53	4.91	Peak	100	100
3	7320.00	38.66	54.00	-15.34	28.34	10.32	Average	100	90
4	7320.00	51.55	74.00	-22.45	41.23	10.32	Peak	100	90
5	12200.00	43.99	54.00	-10.01	29.15	14.84	Average	100	25
6	12200.00	57.20	74.00	-16.80	42.36	14.84	Peak	100	25

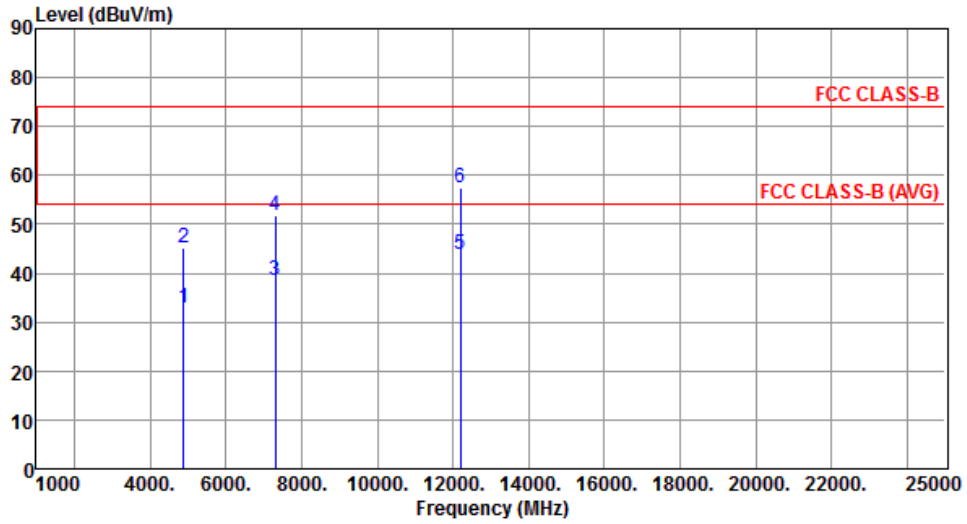
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor\* (dB)

\*Factor includes antenna factor , cable loss and amplifier gain

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



<b>Modulation</b>	GFSK/125kbps	<b>Test Freq. (MHz)</b>	2440
<b>Polarization</b>	Vertical		



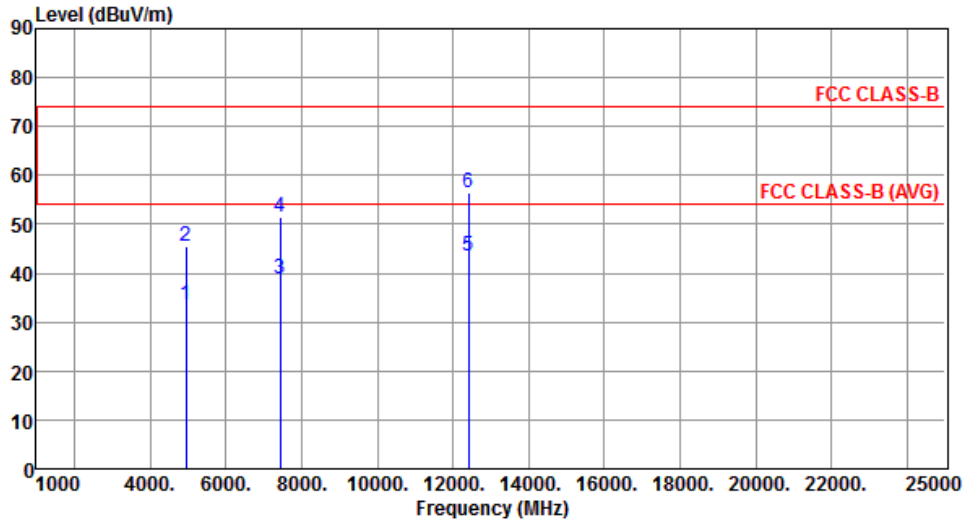
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	4880.00	32.97	54.00	-21.03	28.06	4.91	Average	100	40
2	4880.00	45.30	74.00	-28.70	40.39	4.91	Peak	100	40
3	7320.00	38.65	54.00	-15.35	28.33	10.32	Average	100	50
4	7320.00	51.71	74.00	-22.29	41.39	10.32	Peak	100	50
5	12200.00	43.88	54.00	-10.12	29.04	14.84	Average	100	70
6	12200.00	57.47	74.00	-16.53	42.63	14.84	Peak	100	70

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).

<b>Modulation</b>	GFSK/125kbps	<b>Test Freq. (MHz)</b>	2480
<b>Polarization</b>	Horizontal		



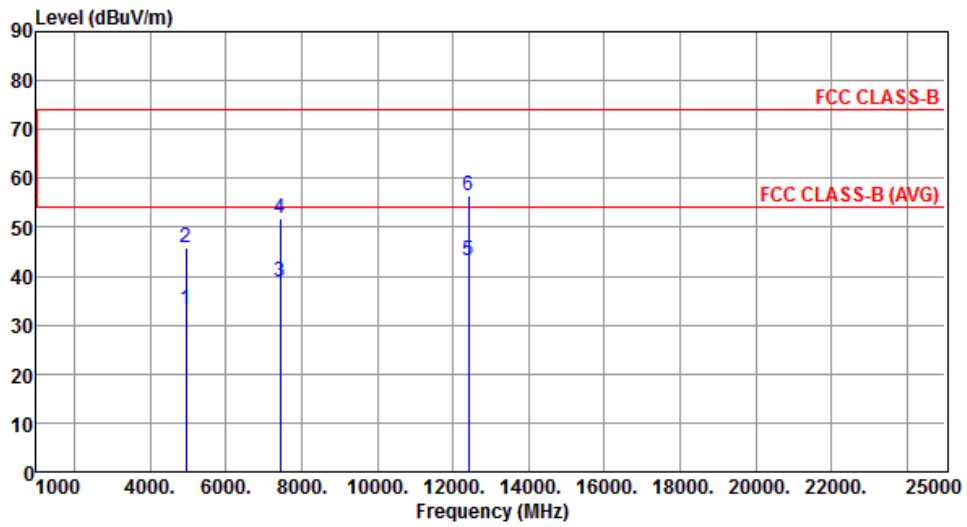
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	4960.00	33.41	54.00	-20.59	28.22	5.19	Average	100	20
2	4960.00	45.54	74.00	-28.46	40.35	5.19	Peak	100	20
3	7440.00	38.88	54.00	-15.12	28.53	10.35	Average	100	60
4	7440.00	51.56	74.00	-22.44	41.21	10.35	Peak	100	60
5	12400.00	43.47	54.00	-10.53	29.18	14.29	Average	100	50
6	12400.00	56.54	74.00	-17.46	42.25	14.29	Peak	100	50

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).

<b>Modulation</b>	GFSK/125kbps	<b>Test Freq. (MHz)</b>	2480
<b>Polarization</b>	Vertical		



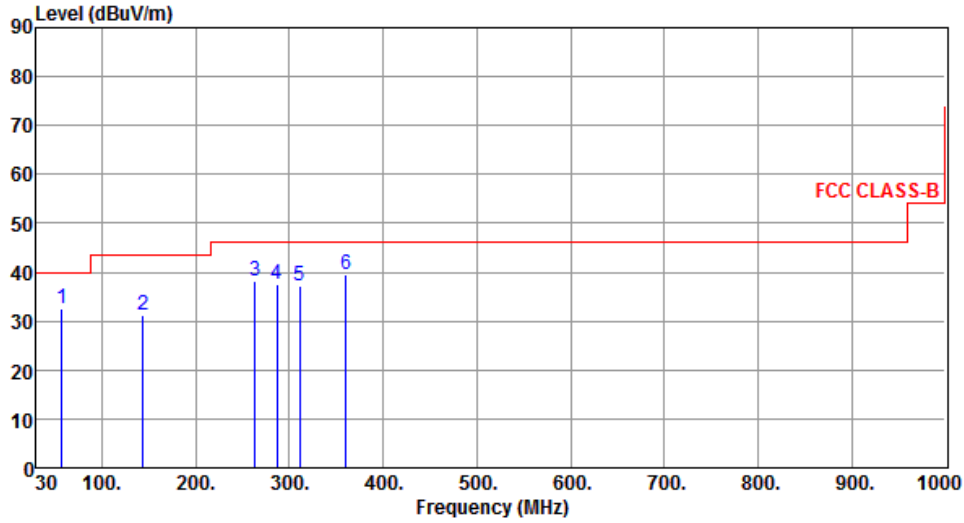
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	4960.00	33.33	54.00	-20.67	28.14	5.19	Average	100	20
2	4960.00	45.87	74.00	-28.13	40.68	5.19	Peak	100	20
3	7440.00	38.76	54.00	-15.24	28.41	10.35	Average	100	65
4	7440.00	51.68	74.00	-22.32	41.33	10.35	Peak	100	65
5	12400.00	43.31	54.00	-10.69	29.02	14.29	Average	100	60
6	12400.00	56.60	74.00	-17.40	42.31	14.29	Peak	100	60

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

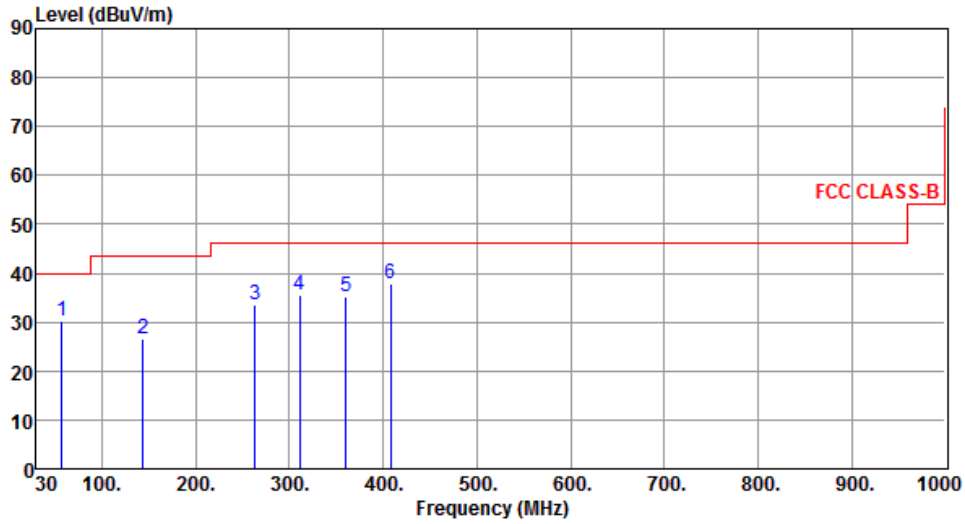
\*Factor includes antenna factor , cable loss and amplifier gain

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

### 3.5.16 Transmitter Radiated Unwanted Emissions (Below 1GHz)

Modulation	GFSK/1Mbps	Test Freq. (MHz)	2480																																																																								
Polarization	Horizontal																																																																										
 <p>The graph plots Level (dBuV/m) on the y-axis (0 to 90) against Frequency (MHz) on the x-axis (30 to 1000). A red step function represents the FCC CLASS-B limit, starting at 40 dBuV/m from 30 MHz to 100 MHz, rising to 45 dBuV/m at 100 MHz, 48 dBuV/m at 200 MHz, and 50 dBuV/m from 200 MHz to 1000 MHz. Six blue vertical lines represent emission peaks labeled 1 through 6, with their respective frequencies and levels indicated in the table below.</p>																																																																											
	<table border="1"> <thead> <tr> <th>Freq.</th> <th>Emission level</th> <th>Limit</th> <th>Margin</th> <th>SA reading</th> <th>Factor</th> <th>Remark</th> <th>ANT High cm</th> <th>Turn Table deg</th> </tr> <tr> <th>MHz</th> <th>dBuV/m</th> <th>dBuV/m</th> <th>dB</th> <th>dBuV</th> <th>dB</th> <th></th> <th></th> <th></th> </tr> </thead> <tbody> <tr> <td>1</td> <td>57.18</td> <td>32.56</td> <td>40.00</td> <td>-7.44</td> <td>41.62</td> <td>-9.06</td> <td>Peak</td> <td>---</td> </tr> <tr> <td>2</td> <td>143.49</td> <td>31.35</td> <td>43.50</td> <td>-12.15</td> <td>40.34</td> <td>-8.99</td> <td>Peak</td> <td>---</td> </tr> <tr> <td>3</td> <td>263.69</td> <td>38.27</td> <td>46.00</td> <td>-7.73</td> <td>48.04</td> <td>-9.77</td> <td>Peak</td> <td>---</td> </tr> <tr> <td>4</td> <td>287.12</td> <td>37.63</td> <td>46.00</td> <td>-8.37</td> <td>46.41</td> <td>-8.78</td> <td>Peak</td> <td>---</td> </tr> <tr> <td>5</td> <td>311.25</td> <td>37.35</td> <td>46.00</td> <td>-8.65</td> <td>45.41</td> <td>-8.06</td> <td>Peak</td> <td>---</td> </tr> <tr> <td>6</td> <td>360.77</td> <td>39.53</td> <td>46.00</td> <td>-6.47</td> <td>46.48</td> <td>-6.95</td> <td>Peak</td> <td>---</td> </tr> </tbody> </table>	Freq.	Emission level	Limit	Margin	SA reading	Factor	Remark	ANT High cm	Turn Table deg	MHz	dBuV/m	dBuV/m	dB	dBuV	dB				1	57.18	32.56	40.00	-7.44	41.62	-9.06	Peak	---	2	143.49	31.35	43.50	-12.15	40.34	-8.99	Peak	---	3	263.69	38.27	46.00	-7.73	48.04	-9.77	Peak	---	4	287.12	37.63	46.00	-8.37	46.41	-8.78	Peak	---	5	311.25	37.35	46.00	-8.65	45.41	-8.06	Peak	---	6	360.77	39.53	46.00	-6.47	46.48	-6.95	Peak	---		
Freq.	Emission level	Limit	Margin	SA reading	Factor	Remark	ANT High cm	Turn Table deg																																																																			
MHz	dBuV/m	dBuV/m	dB	dBuV	dB																																																																						
1	57.18	32.56	40.00	-7.44	41.62	-9.06	Peak	---																																																																			
2	143.49	31.35	43.50	-12.15	40.34	-8.99	Peak	---																																																																			
3	263.69	38.27	46.00	-7.73	48.04	-9.77	Peak	---																																																																			
4	287.12	37.63	46.00	-8.37	46.41	-8.78	Peak	---																																																																			
5	311.25	37.35	46.00	-8.65	45.41	-8.06	Peak	---																																																																			
6	360.77	39.53	46.00	-6.47	46.48	-6.95	Peak	---																																																																			
<p>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).            Note 3: All spurious emissions below 30MHz are more than 20 dB below the limit.</p>																																																																											

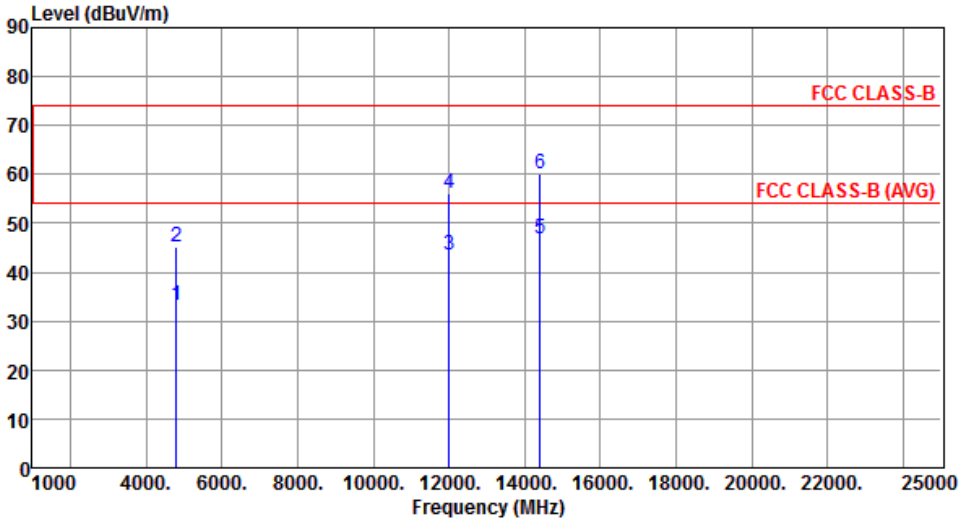
<b>Modulation</b>	GFSK/1Mbps	<b>Test Freq. (MHz)</b>	2480
<b>Polarization</b>	Vertical		



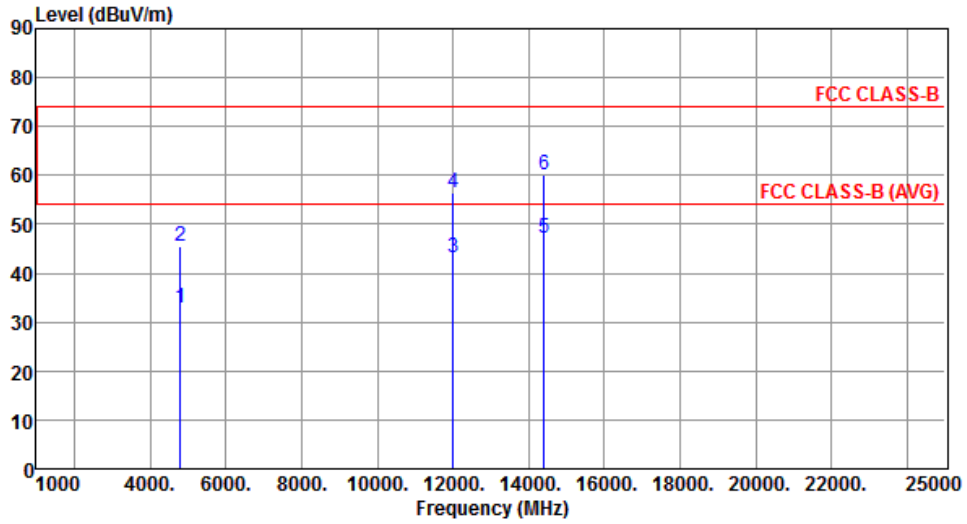
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	57.11	30.24	40.00	-9.76	39.28	-9.04	Peak	---	---
2	143.52	26.48	43.50	-17.02	35.47	-8.99	Peak	---	---
3	263.66	33.67	46.00	-12.33	43.44	-9.77	Peak	---	---
4	311.30	35.58	46.00	-10.42	43.64	-8.06	Peak	---	---
5	360.77	35.26	46.00	-10.74	42.21	-6.95	Peak	---	---
6	408.28	37.81	46.00	-8.19	43.43	-5.62	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).  
 Note 3: All spurious emissions below 30MHz are more than 20 dB below the limit.

### 3.5.17 Transmitter Radiated Unwanted Emissions (Above 1GHz) for GFSK

Modulation	GFSK/1Mbps	Test Freq. (MHz)	2402						
Polarization	Horizontal								
									
	Freq.	Emission level	Limit	Margin	SA reading	Factor	Remark	ANT High	Turn Table
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB		cm	deg
1	4804.00	33.06	54.00	-20.94	28.26	4.80	Average	100	50
2	4804.00	45.17	74.00	-28.83	40.37	4.80	Peak	100	50
3	12010.00	43.36	54.00	-10.64	28.56	14.80	Average	100	30
4	12010.00	56.13	74.00	-17.87	41.33	14.80	Peak	100	30
5	14412.00	46.99	54.00	-7.01	29.11	17.88	Average	100	70
6	14412.00	60.22	74.00	-13.78	42.34	17.88	Peak	100	70
<p>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).</p>									

<b>Modulation</b>	GFSK/1Mbps	<b>Test Freq. (MHz)</b>	2402
<b>Polarization</b>	Vertical		



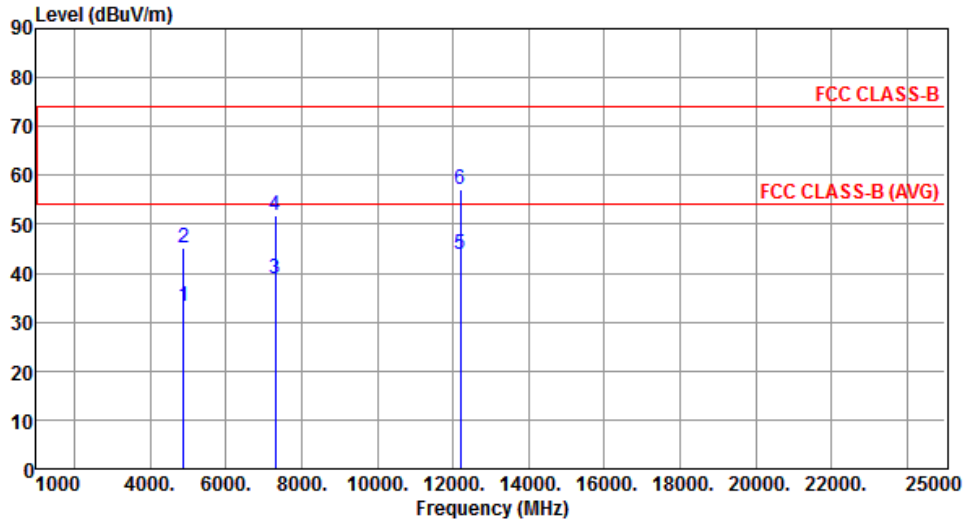
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	4804.00	32.98	54.00	-21.02	28.18	4.80	Average	100	55
2	4804.00	45.34	74.00	-28.66	40.54	4.80	Peak	100	55
3	12010.00	43.21	54.00	-10.79	28.41	14.80	Average	100	70
4	12010.00	56.43	74.00	-17.57	41.63	14.80	Peak	100	70
5	14412.00	47.01	54.00	-6.99	29.13	17.88	Average	100	60
6	14412.00	60.10	74.00	-13.90	42.22	17.88	Peak	100	60

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).

<b>Modulation</b>	GFSK/1Mbps	<b>Test Freq. (MHz)</b>	2440
<b>Polarization</b>	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	4880.00	33.07	54.00	-20.93	28.16	4.91	Average	100	50
2	4880.00	45.26	74.00	-28.74	40.35	4.91	Peak	100	50
3	7320.00	38.86	54.00	-15.14	28.54	10.32	Average	100	80
4	7320.00	51.66	74.00	-22.34	41.34	10.32	Peak	100	80
5	12200.00	43.96	54.00	-10.04	29.12	14.84	Average	100	40
6	12200.00	57.12	74.00	-16.88	42.28	14.84	Peak	100	40

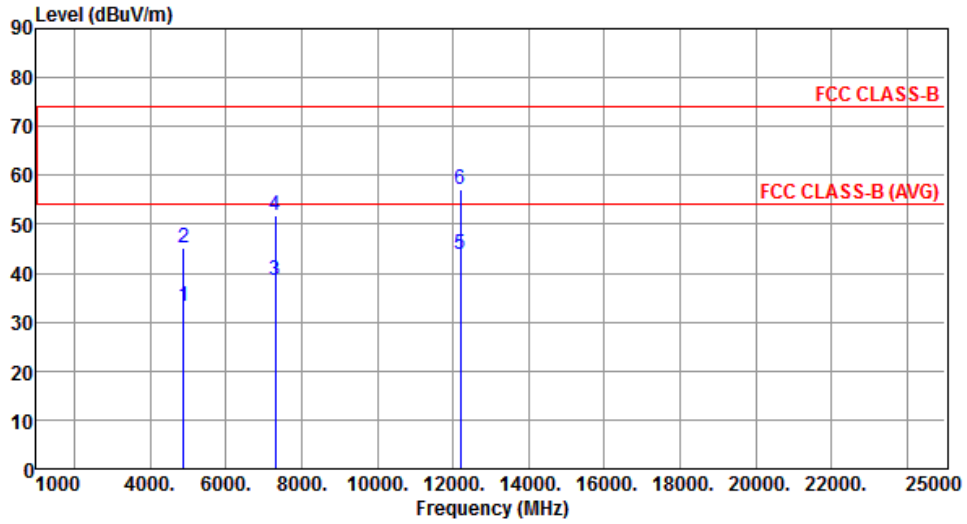
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor\* (dB)

\*Factor includes antenna factor , cable loss and amplifier gain

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



<b>Modulation</b>	GFSK/1Mbps	<b>Test Freq. (MHz)</b>	2440
<b>Polarization</b>	Vertical		



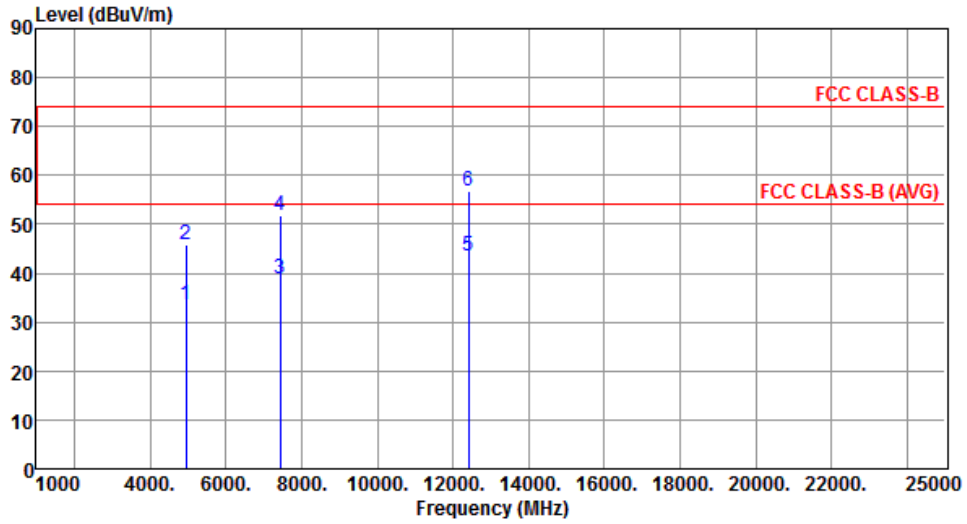
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	4880.00	33.07	54.00	-20.93	28.16	4.91	Average	100	30
2	4880.00	45.16	74.00	-28.84	40.25	4.91	Peak	100	30
3	7320.00	38.68	54.00	-15.32	28.36	10.32	Average	100	60
4	7320.00	51.78	74.00	-22.22	41.46	10.32	Peak	100	60
5	12200.00	43.96	54.00	-10.04	29.12	14.84	Average	100	50
6	12200.00	57.15	74.00	-16.85	42.31	14.84	Peak	100	50

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).

<b>Modulation</b>	GFSK/1Mbps	<b>Test Freq. (MHz)</b>	2480
<b>Polarization</b>	Horizontal		



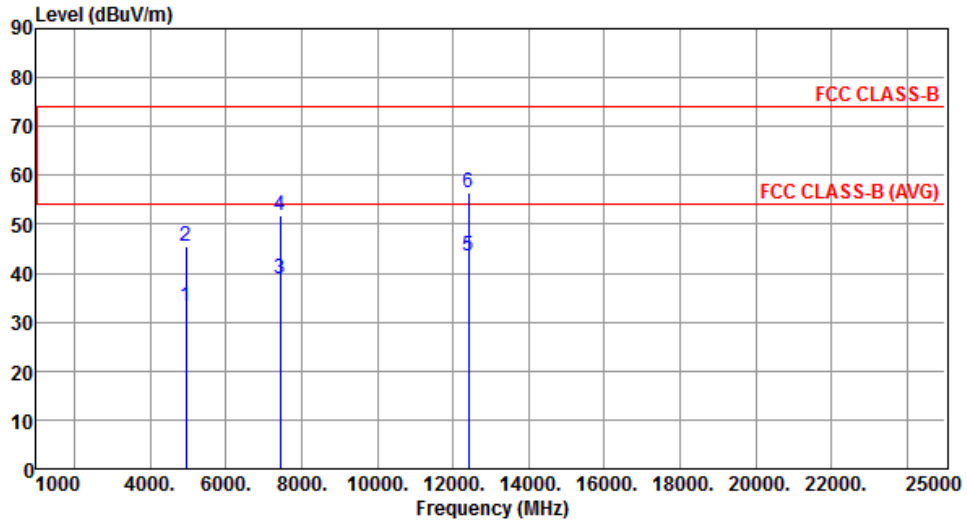
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	4960.00	33.43	54.00	-20.57	28.24	5.19	Average	100	40
2	4960.00	45.74	74.00	-28.26	40.55	5.19	Peak	100	40
3	7440.00	38.77	54.00	-15.23	28.42	10.35	Average	100	100
4	7440.00	51.66	74.00	-22.34	41.31	10.35	Peak	100	100
5	12400.00	43.38	54.00	-10.62	29.09	14.29	Average	100	55
6	12400.00	56.65	74.00	-17.35	42.36	14.29	Peak	100	55

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).

<b>Modulation</b>	GFSK/1Mbps	<b>Test Freq. (MHz)</b>	2480
<b>Polarization</b>	Vertical		



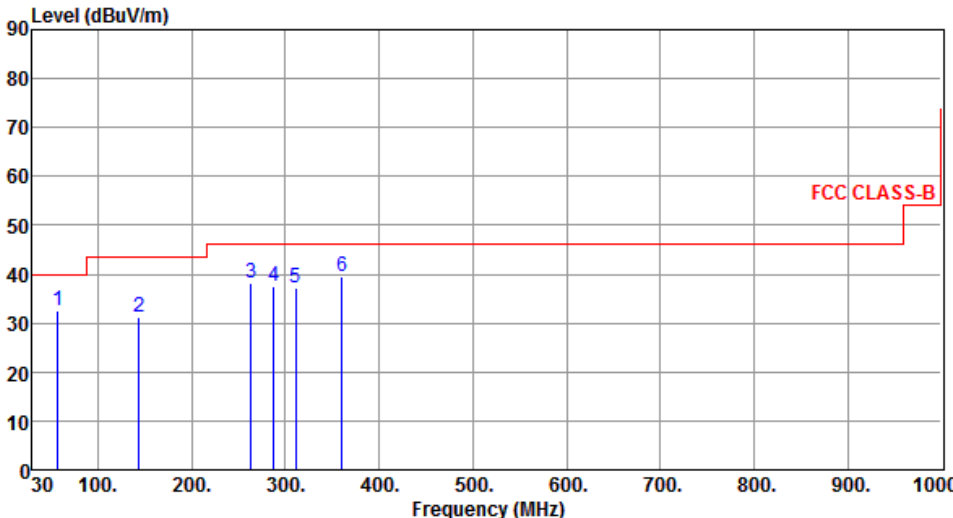
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	4960.00	33.32	54.00	-20.68	28.13	5.19	Average	100	30
2	4960.00	45.61	74.00	-28.39	40.42	5.19	Peak	100	30
3	7440.00	38.89	54.00	-15.11	28.54	10.35	Average	100	50
4	7440.00	51.74	74.00	-22.26	41.39	10.35	Peak	100	50
5	12400.00	43.53	54.00	-10.47	29.24	14.29	Average	100	90
6	12400.00	56.60	74.00	-17.40	42.31	14.29	Peak	100	90

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

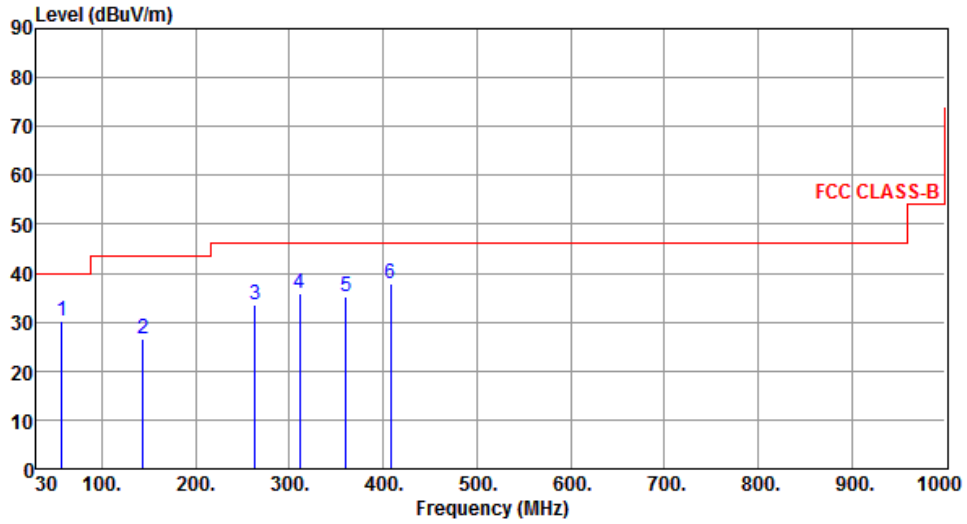
\*Factor includes antenna factor , cable loss and amplifier gain

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

### 3.5.18 Transmitter Radiated Unwanted Emissions (Below 1GHz)

Modulation	GFSK/2Mbps	Test Freq. (MHz)	2480						
Polarization	Horizontal								
									
	Freq.	Emission level	Limit	Margin	SA reading	Factor	Remark	ANT High cm	Turn Table deg
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB			
1	57.22	32.46	40.00	-7.54	41.52	-9.06	Peak	---	---
2	143.51	31.38	43.50	-12.12	40.37	-8.99	Peak	---	---
3	263.77	38.15	46.00	-7.85	47.92	-9.77	Peak	---	---
4	287.19	37.64	46.00	-8.36	46.42	-8.78	Peak	---	---
5	311.25	37.31	46.00	-8.69	45.37	-8.06	Peak	---	---
6	360.66	39.58	46.00	-6.42	46.53	-6.95	Peak	---	---
<p>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).            Note 3: All spurious emissions below 30MHz are more than 20 dB below the limit.</p>									

<b>Modulation</b>	GFSK/2Mbps	<b>Test Freq. (MHz)</b>	2480
<b>Polarization</b>	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	57.11	30.13	40.00	-9.87	39.17	-9.04	Peak	---	---
2	143.50	26.54	43.50	-16.96	35.53	-8.99	Peak	---	---
3	263.77	33.46	46.00	-12.54	43.23	-9.77	Peak	---	---
4	311.26	35.87	46.00	-10.13	43.93	-8.06	Peak	---	---
5	360.63	35.23	46.00	-10.77	42.18	-6.95	Peak	---	---
6	408.27	37.84	46.00	-8.16	43.46	-5.62	Peak	---	---

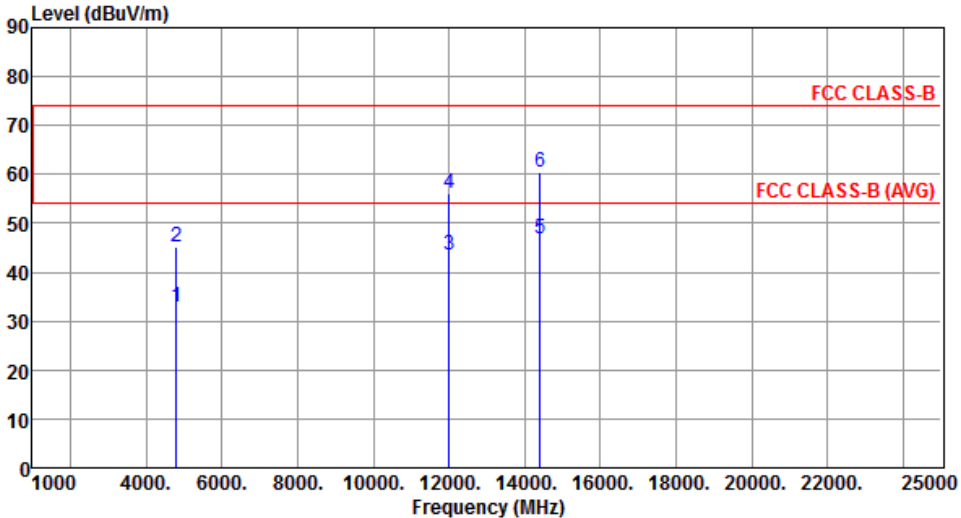
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor\* (dB)

\*Factor includes antenna factor , cable loss and amplifier gain

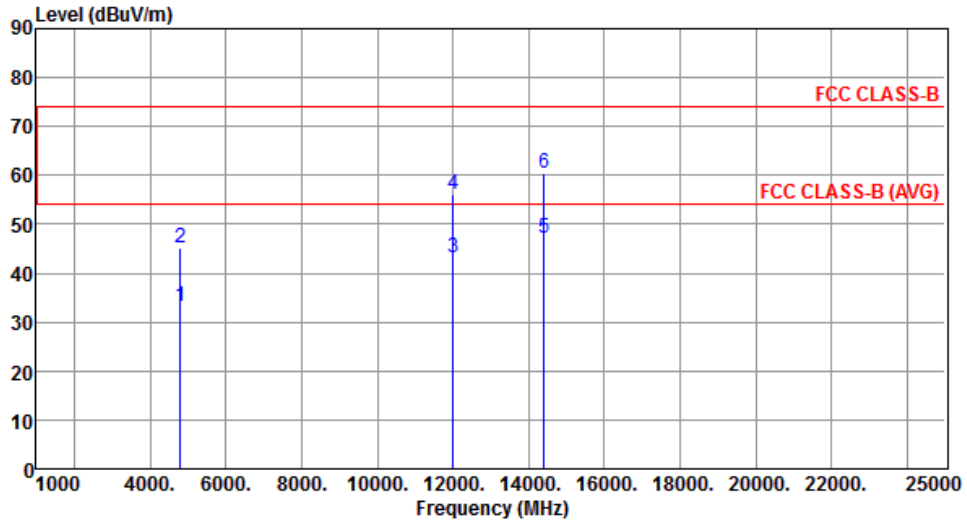
Note 2: Margin (dB) = Emission level (dBuV/m) – Limit (dBuV/m).

Note 3: All spurious emissions below 30MHz are more than 20 dB below the limit.

### 3.5.19 Transmitter Radiated Unwanted Emissions (Above 1GHz) for GFSK

Modulation	GFSK/2Mbps	Test Freq. (MHz)	2402						
Polarization	Horizontal								
									
	Freq.	Emission level	Limit	Margin	SA reading	Factor	Remark	ANT High	Turn Table
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB		cm	deg
1	4804.00	33.04	54.00	-20.96	28.24	4.80	Average	100	25
2	4804.00	45.12	74.00	-28.88	40.32	4.80	Peak	100	25
3	12010.00	43.49	54.00	-10.51	28.69	14.80	Average	100	30
4	12010.00	56.16	74.00	-17.84	41.36	14.80	Peak	100	30
5	14412.00	46.91	54.00	-7.09	29.03	17.88	Average	100	70
6	14412.00	60.28	74.00	-13.72	42.40	17.88	Peak	100	70
<p>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).</p>									

<b>Modulation</b>	GFSK/2Mbps	<b>Test Freq. (MHz)</b>	2402
<b>Polarization</b>	Vertical		



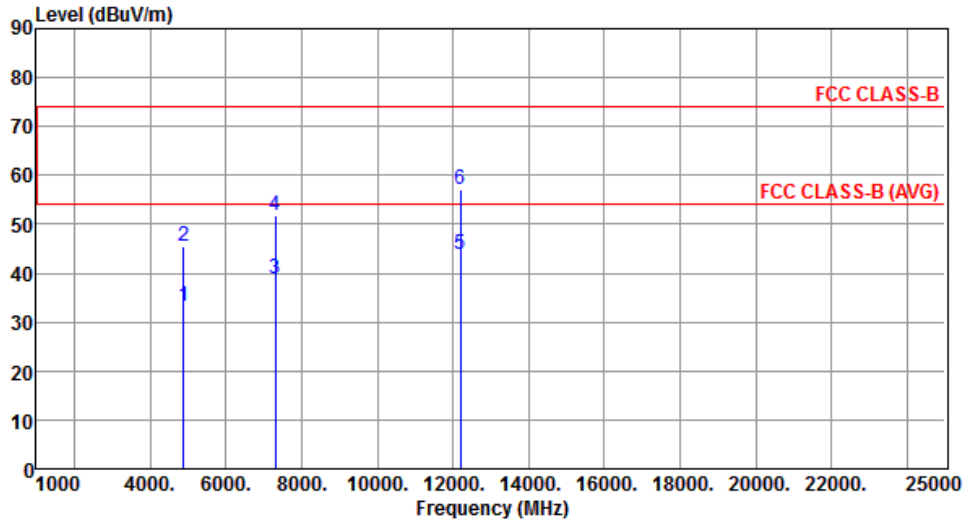
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	4804.00	33.07	54.00	-20.93	28.27	4.80	Average	100	60
2	4804.00	45.19	74.00	-28.81	40.39	4.80	Peak	100	60
3	12010.00	43.17	54.00	-10.83	28.37	14.80	Average	100	20
4	12010.00	56.22	74.00	-17.78	41.42	14.80	Peak	100	20
5	14412.00	47.05	54.00	-6.95	29.17	17.88	Average	100	40
6	14412.00	60.50	74.00	-13.50	42.62	17.88	Peak	100	40

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).

<b>Modulation</b>	GFSK/2Mbps	<b>Test Freq. (MHz)</b>	2440
<b>Polarization</b>	Horizontal		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	4880.00	33.27	54.00	-20.73	28.36	4.91	Average	100	20
2	4880.00	45.60	74.00	-28.40	40.69	4.91	Peak	100	20
3	7320.00	38.86	54.00	-15.14	28.54	10.32	Average	100	35
4	7320.00	51.67	74.00	-22.33	41.35	10.32	Peak	100	35
5	12200.00	43.96	54.00	-10.04	29.12	14.84	Average	100	30
6	12200.00	57.00	74.00	-17.00	42.16	14.84	Peak	100	30

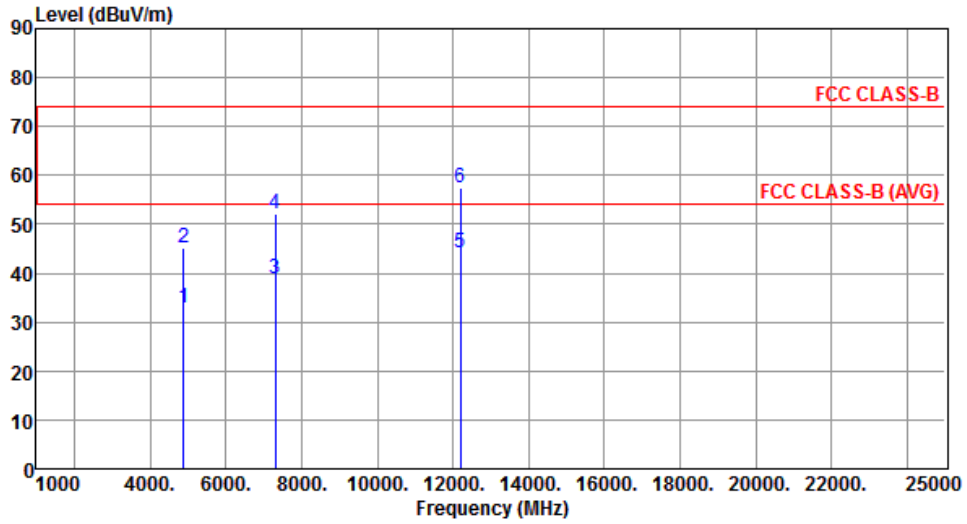
Note 1: Emission Level (dBuV/m) = SA Reading (dBuV/m) + Factor\* (dB)

\*Factor includes antenna factor , cable loss and amplifier gain

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



<b>Modulation</b>	GFSK/2Mbps	<b>Test Freq. (MHz)</b>	2440
<b>Polarization</b>	Vertical		



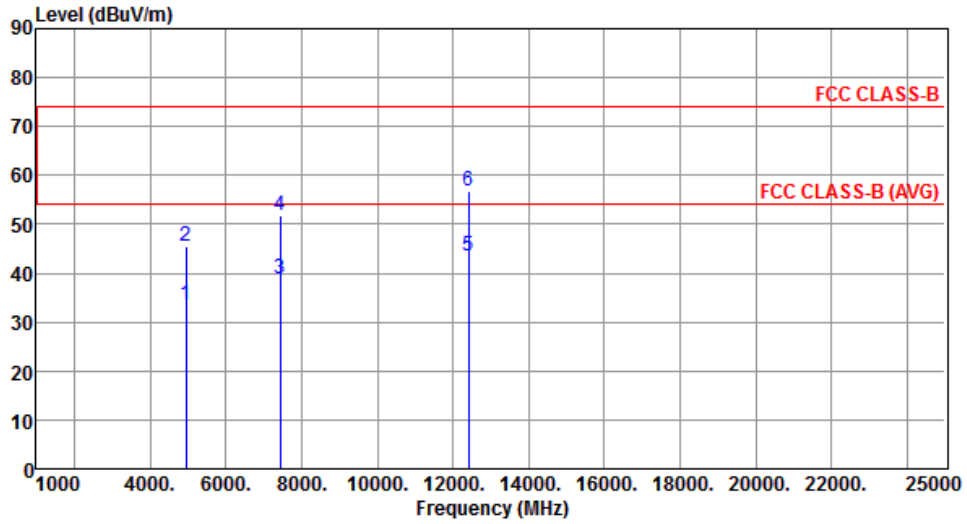
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	4880.00	33.03	54.00	-20.97	28.12	4.91	Average	100	70
2	4880.00	45.17	74.00	-28.83	40.26	4.91	Peak	100	70
3	7320.00	38.78	54.00	-15.22	28.46	10.32	Average	100	40
4	7320.00	52.01	74.00	-21.99	41.69	10.32	Peak	100	40
5	12200.00	44.12	54.00	-9.88	29.28	14.84	Average	100	60
6	12200.00	57.30	74.00	-16.70	42.46	14.84	Peak	100	60

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).

<b>Modulation</b>	GFSK/2Mbps	<b>Test Freq. (MHz)</b>	2480
<b>Polarization</b>	Horizontal		



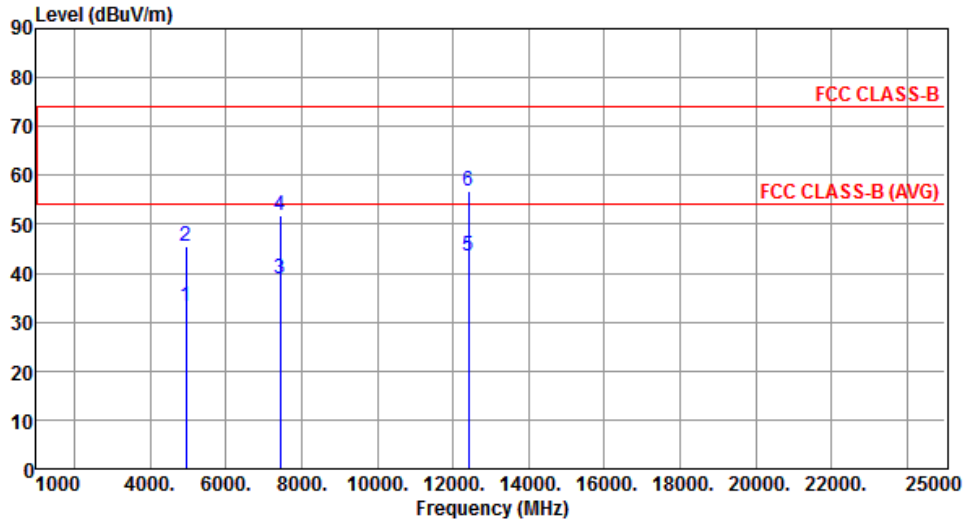
	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	4960.00	33.40	54.00	-20.60	28.21	5.19	Average	100	30
2	4960.00	45.64	74.00	-28.36	40.45	5.19	Peak	100	30
3	7440.00	38.77	54.00	-15.23	28.42	10.35	Average	100	70
4	7440.00	51.69	74.00	-22.31	41.34	10.35	Peak	100	70
5	12400.00	43.45	54.00	-10.55	29.16	14.29	Average	100	20
6	12400.00	56.94	74.00	-17.06	42.65	14.29	Peak	100	20

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).

<b>Modulation</b>	GFSK/2Mbps	<b>Test Freq. (MHz)</b>	2480
<b>Polarization</b>	Vertical		



	Freq. MHz	Emission level dBuV/m	Limit dBuV/m	Margin dB	SA reading dBuV	Factor dB	Remark	ANT High cm	Turn Table deg
1	4960.00	33.35	54.00	-20.65	28.16	5.19	Average	100	20
2	4960.00	45.59	74.00	-28.41	40.40	5.19	Peak	100	20
3	7440.00	38.90	54.00	-15.10	28.55	10.35	Average	100	30
4	7440.00	51.68	74.00	-22.32	41.33	10.35	Peak	100	30
5	12400.00	43.50	54.00	-10.50	29.21	14.29	Average	100	50
6	12400.00	56.85	74.00	-17.15	42.56	14.29	Peak	100	50

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).

## 3.6 Emissions in non-restricted Frequency Bands

### 3.6.1 Emissions in non-restricted frequency bands limit

Peak power in any 100 kHz bandwidth outside of the authorized frequency band shall be attenuated by at least 30 dB relative to the maximum in-band peak PSD level in 100 kHz.

### 3.6.2 Test Procedures

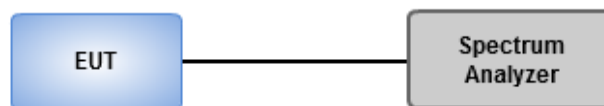
#### Reference level measurement

1. Set RBW=100kHz, VBW = 300kHz , Detector = Peak, Sweep time = Auto
2. Trace = max hold , Allow Trace to fully stabilize
3. Use the peak marker function to determine the maximum PSD level

#### Emission level measurement

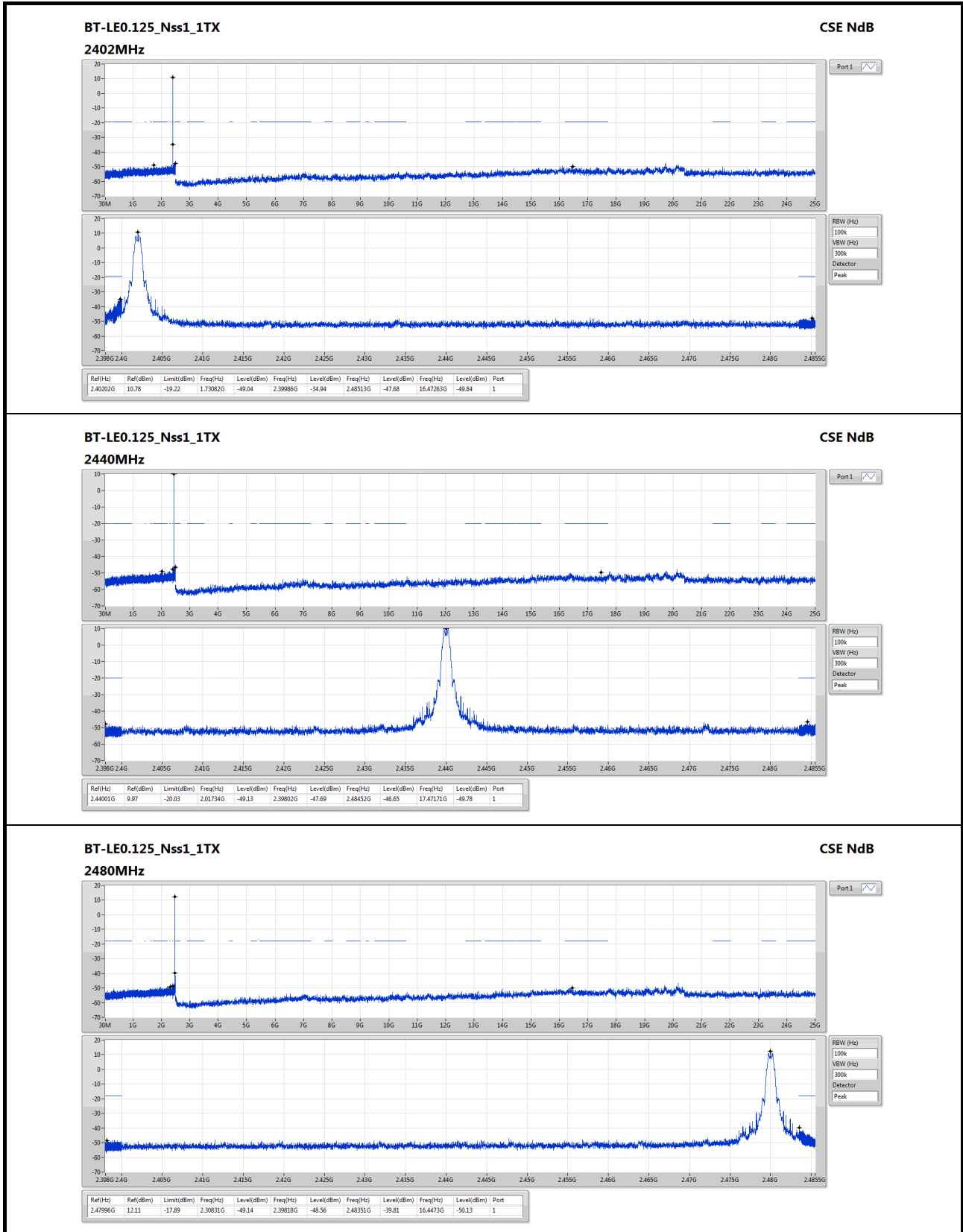
1. Set RBW=100kHz, VBW = 300kHz , Detector = Peak, Sweep time = Auto
2. Trace = max hold , Allow Trace to fully stabilize
3. Scan Frequency range is up to 25GHz
4. Use the peak marker function to determine the maximum amplitude level

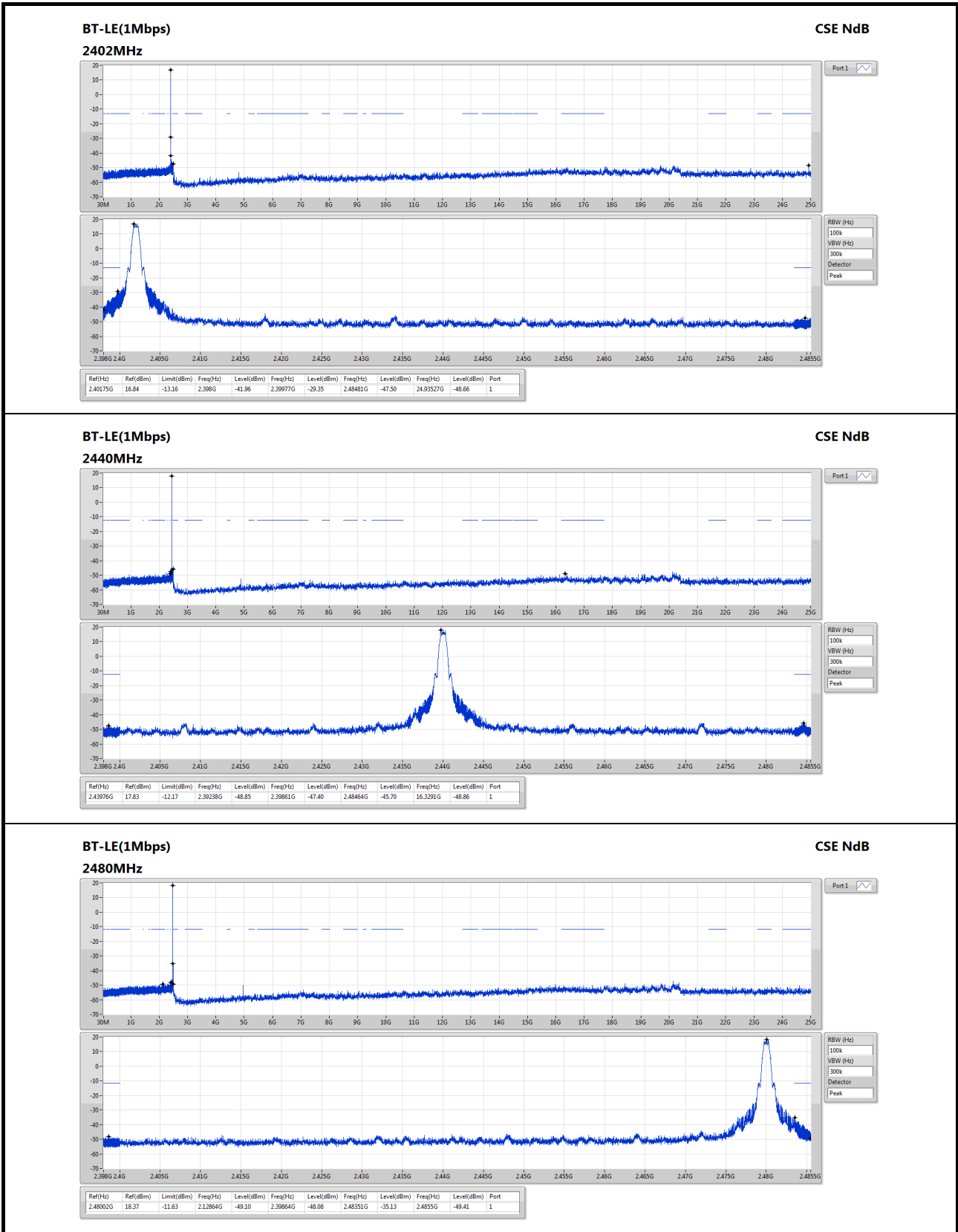
### 3.6.3 Test Setup

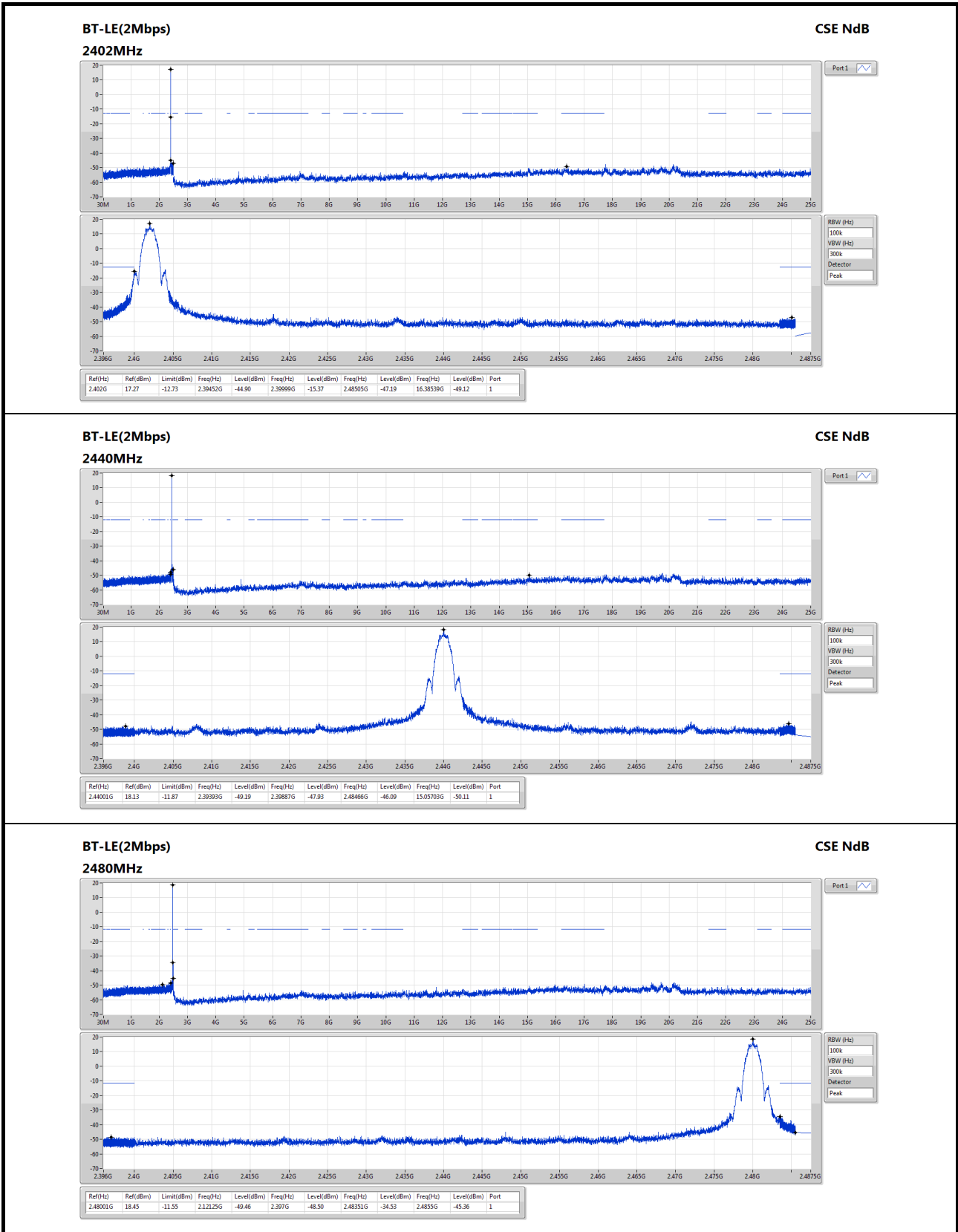


## Highest power level

### 3.6.4 Test Result of Emissions in non-restricted Frequency Bands

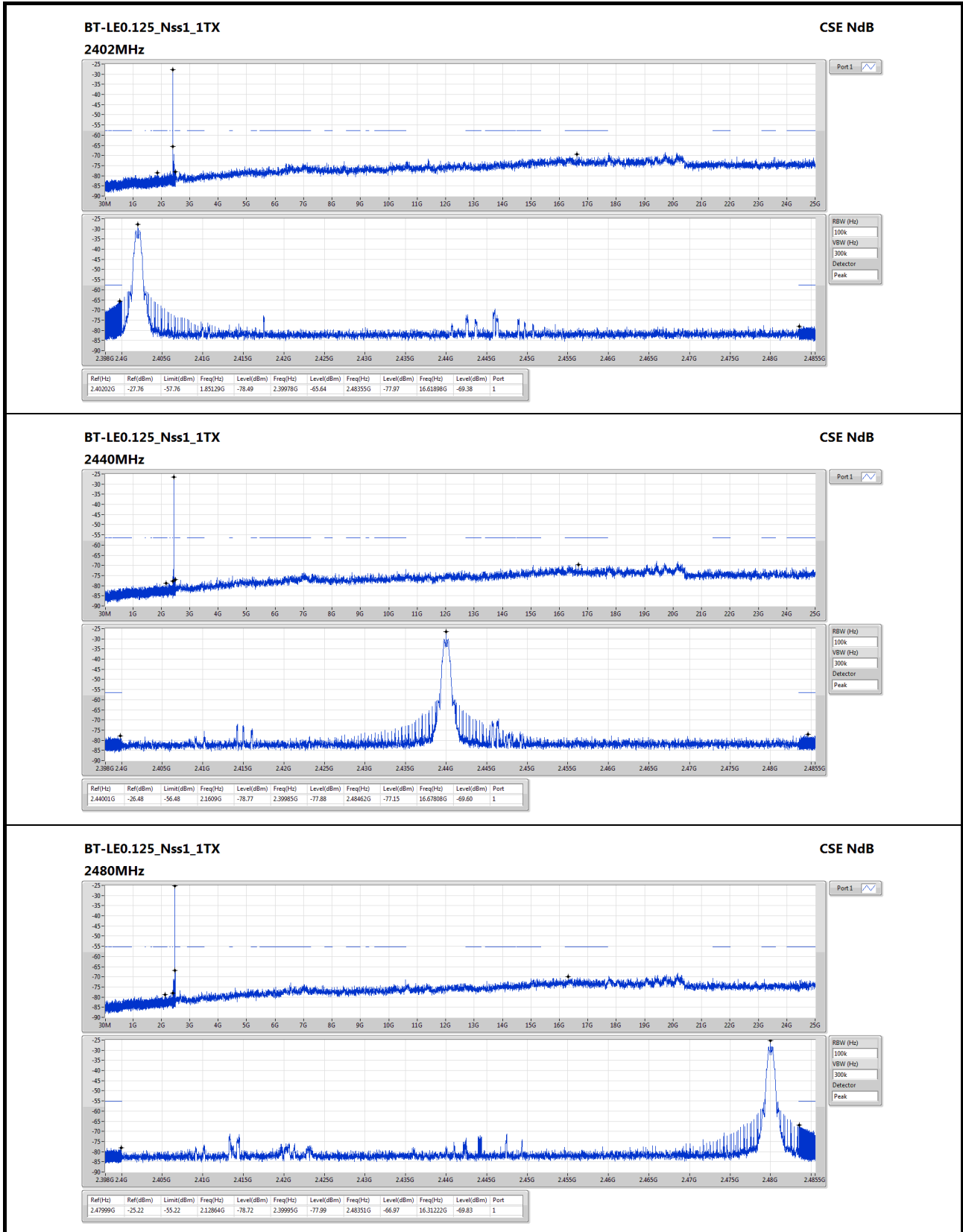




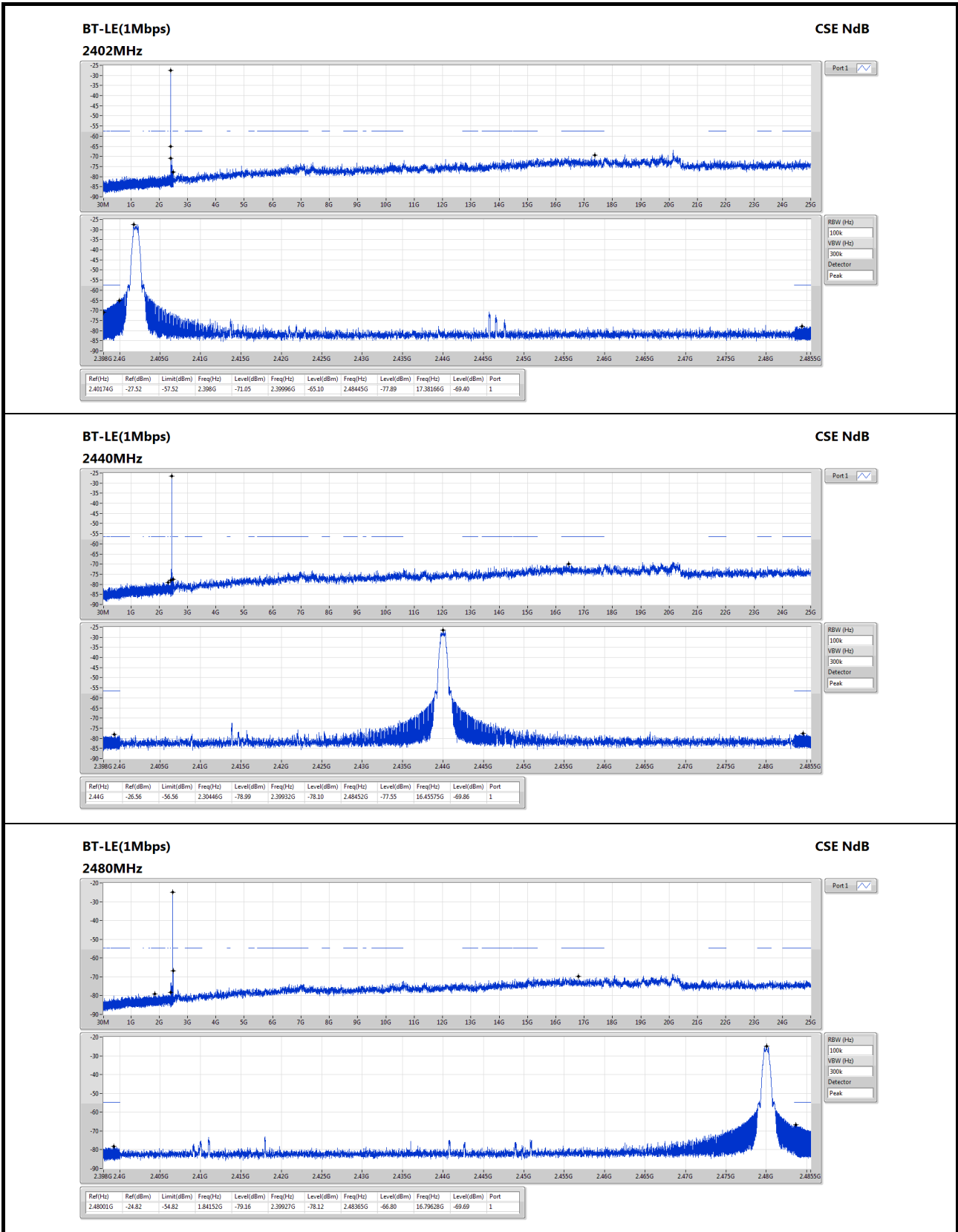


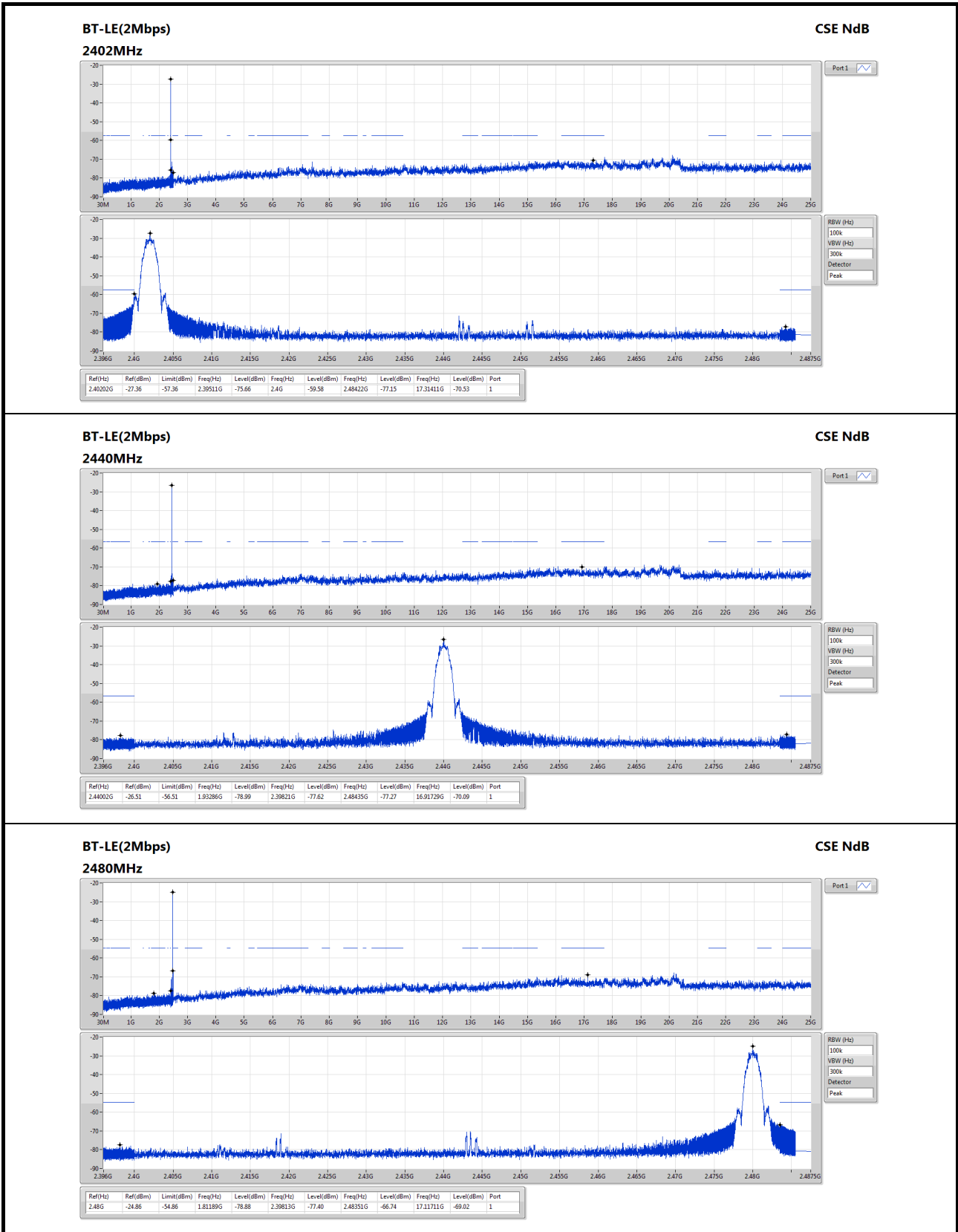
## Lowest power level

### 3.6.5 Test Result of Emissions in non-restricted Frequency Bands


**BT-LE0.125\_Nss1\_1TX**
**CSE NdB**
**2480MHz**







## 4 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 (EMC and Wireless Communication Laboratory), 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 District. 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 District, Tao Yuan City  
333, Taiwan, R.O.C.

### **Kwei Shan Site II**

Tel: 886-3-271-8640

No. 14-1, Lane 19, Wen San 3rd  
St., Kwei Shan District, Tao Yuan  
City 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](mailto:ICC_Service@icertifi.com.tw)

==END==