

--- The antenna height is 1.0 meter.

--- At each turntable position the analyzer sweeps with peak detection to find the maximum of all emissions

Final measurement:

--- Identified emissions during the pre measurement the software maximizes by rotating the turntable position (0 °to 360 °) and by rotating the elevation axes (0 °to 360 °).

--- The final measurement will be done in the position (turntable and elevation) causing the highest emissions with QP detector.

--- The final levels, frequency, measuring time, bandwidth, turntable position, correction factor, margin to the limit and limit will be recorded. Also a plot with the graph of the pre measurement and the limit will be stored.

2) Sequence of testing 30 MHz to 1 GHz

Setup:

--- The equipment was set up to simulate a typical usage like described in the user manual or described by manufacturer.

--- If the EUT is a tabletop system, a table with 0.8 m height is used, which is placed on the ground plane.

--- If the EUT is a floor standing device, it is placed on the ground plane with insulation between both.

--- Auxiliary equipment and cables were positioned to simulate normal operation conditions

--- The AC power port of the EUT (if available) is connected to a power outlet below the turntable.

--- The measurement distance is 3 meter.

--- The EUT was set into operation.

Pre measurement:

--- The turntable rotates from 0 °to 360 °.

--- The antenna is polarized vertical and horizontal.

--- The antenna height changes from 1 to 4 meter.

--- At each turntable position, antenna polarization and height the analyzer sweeps three times in peak to find the maximum of all emissions.

Final measurement:

--- The final measurement will be performed with minimum the six highest peaks.

--- According to the maximum antenna and turntable positions of premeasurement the software maximize the peaks by changing turntable rotates from 0 °to 360 °and antenna movement between 1 and 4 meter.

--- The final measurement will be done with QP detector with an EMI receiver.

--- The final levels, frequency, measuring time, bandwidth, antenna height, antenna

polarization, turntable angle, correction factor, margin to the limit and limit will be recorded. Also a plot with the graph of the premeasurement with marked maximum final measurements and the limit will be stored.

3) Sequence of testing 1 GHz to 18 GHz

Setup:

- The equipment was set up to simulate a typical usage like described in the user manual or described by manufacturer.
- If the EUT is a tabletop system, a rotatable table with 1.5 m height is used.
- If the EUT is a floor standing device, it is placed on the ground plane with insulation between both.
- Auxiliary equipment and cables were positioned to simulate normal operation conditions
- The AC power port of the EUT (if available) is connected to a power outlet below the turntable.
- The measurement distance is 3 meter.
- The EUT was set into operation.

Pre measurement:

- The turntable rotates from 0 °to 360 °.
- The antenna is polarized vertical and horizontal.
- The antenna height scan range is 1 meter to 4 meter.
- At each turntable position and antenna polarization the analyzer sweeps with peak detection to find the maximum of all emissions.

Final measurement:

- The final measurement will be performed with minimum the six highest peaks.
- According to the maximum antenna and turntable positions of premeasurement the software maximize the peaks by changing turntable rotates from 0 °to 360 °and antenna movement between 1 and 4 meter. This procedure is repeated for both antenna polarizations.
- The final measurement will be done in the position (turntable, EUT-table and antenna polarization) causing the highest emissions with Peak and Average detector.
- The final levels, frequency, measuring time, bandwidth, turntable position, EUT-table position, antenna polarization, correction factor, margin to the limit and limit will be recorded. Also a plot with the graph of the pre measurement with marked maximum final measurements and the limit will be stored.

4) Sequence of testing above 18 GHz

Setup:

- The equipment was set up to simulate a typical usage like described in the user manual or described by manufacturer.
- If the EUT is a tabletop system, a rotatable table with 1.5 m height is used.
- If the EUT is a floor standing device, it is placed on the ground plane with insulation between both.
- Auxiliary equipment and cables were positioned to simulate normal operation conditions
- The AC power port of the EUT (if available) is connected to a power outlet below the turntable.
- The measurement distance is 1 meter.
- The EUT was set into operation.

Pre measurement:

- The antenna is moved spherical over the EUT in different polarisations of the antenna.

Final measurement:

- The final measurement will be performed at the position and antenna orientation for all detected emissions that were found during the premeasurements with Peak and Average detector.
- The final levels, frequency, measuring time, bandwidth, correction factor, margin to the limit and limit will be recorded. Also a plot with the graph of the premeasurement and the limit will be stored.

NOTE:

- (a).The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and the video bandwidth is 3MHz for Unwanted Maximum Emissions Measurements above 1000MHz.
- (b).If the EUT is configured to transmit with duty cycle $\geq 98\%$, set $VBW \leq RBW/100$ (i.e.,10kHz) but not less than 10 Hz.
- (c). If the EUT duty cycle is $< 98\%$, set $VBW \geq 1/T$, Where T is defined in section 2.7.

6.9.3 TEST SETUP

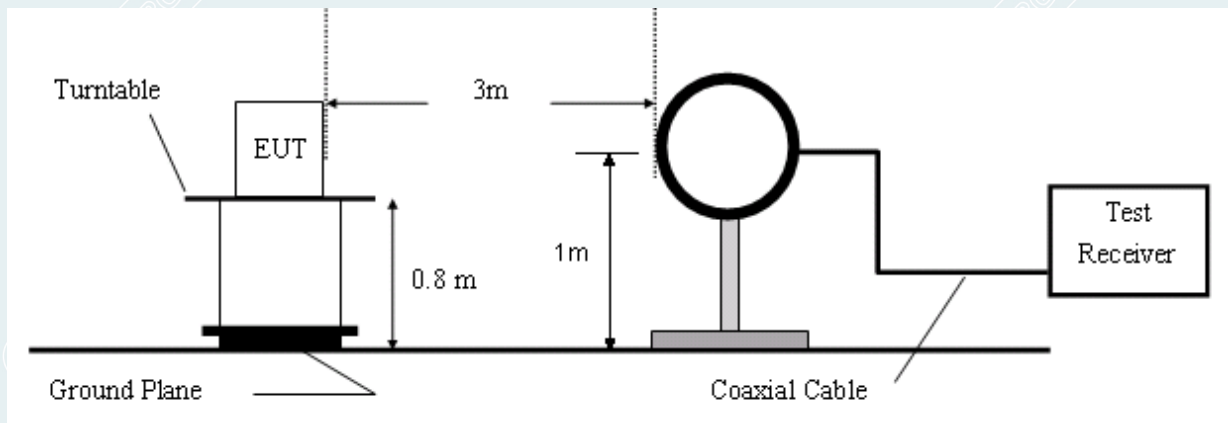


Figure 1. 9 kHz to 30MHz radiated emissions test configuration

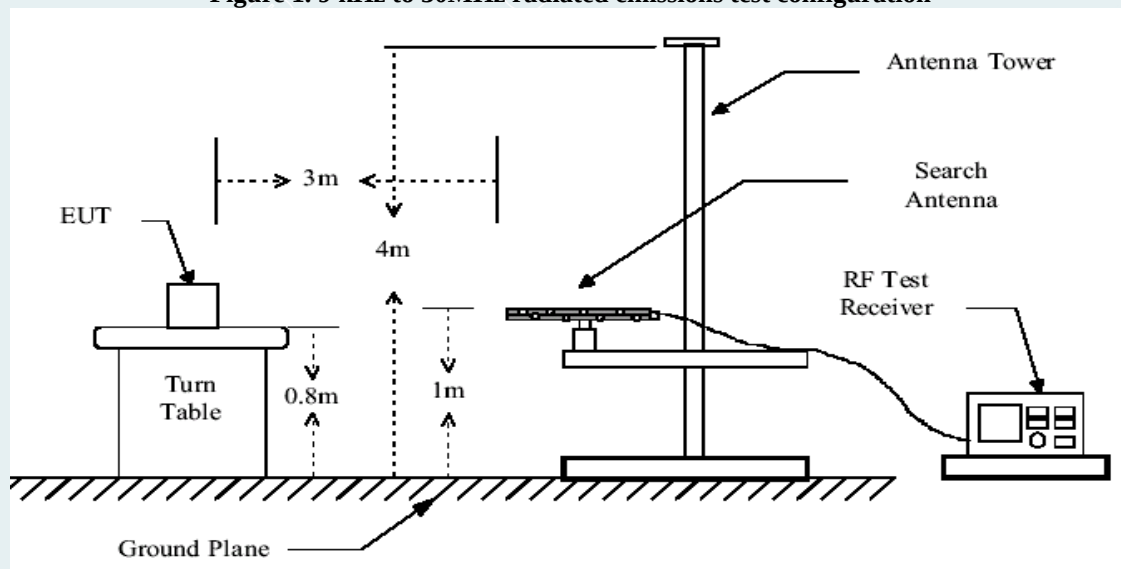


Figure 2. 30MHz to 1GHz radiated emissions test configuration

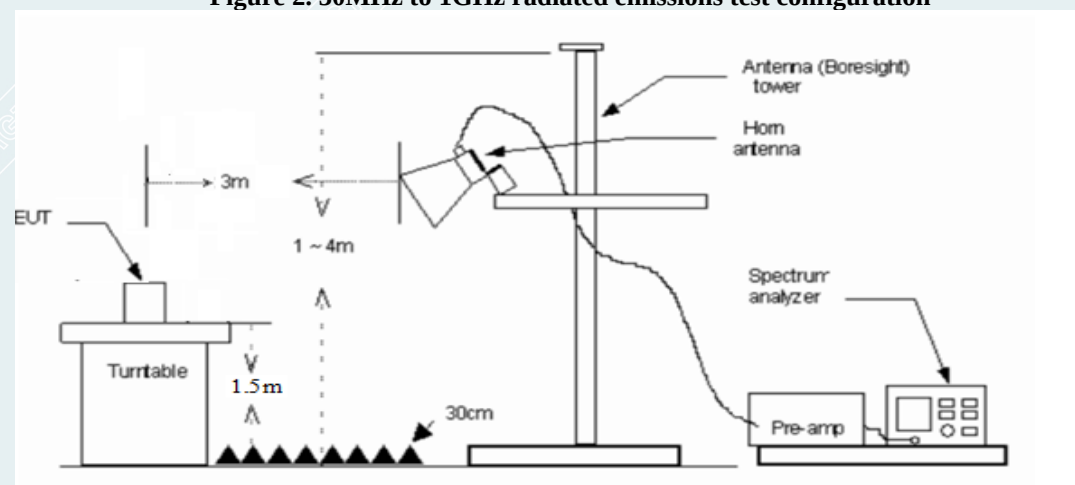


Figure 3. 1GH to 18GHz radiated emissions test configuration

6.9.4 DATA SAMPLE

30MHz to 1GHz

No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark	Pole
xxx	xxx	37.06	-15.48	21.58	40.00	-18.42	QP	Vertical

Above 1GHz-18GHz

No.	Frequency (MHz)	Reading (dBuV/m)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark	Pole
xxx	xxx	65.45	-11.12	54.33	74.00	-19.67	peak	Vertical
xxx	xxx	63.00	-11.12	51.88	54.00	-2.12	AVG	Vertical

Frequency (MHz)

= Emission frequency in MHz

Ant.Pol. (H/V)

= Antenna polarization

Reading (dBuV)

= Uncorrected Analyzer / Receiver reading

Correction Factor (dB/m)

= Antenna factor + Cable loss – Amplifier gain

Result (dBuV/m)

= Reading (dBuV) + Correction Factor (dB/m)

Limit (dBuV/m)

= Limit stated in standard

Margin (dB)

= Remark Result (dBuV/m) – Limit (dBuV/m)

Peak

= Peak Reading

QP

= Quasi-peak Reading

AVG

= Average Reading

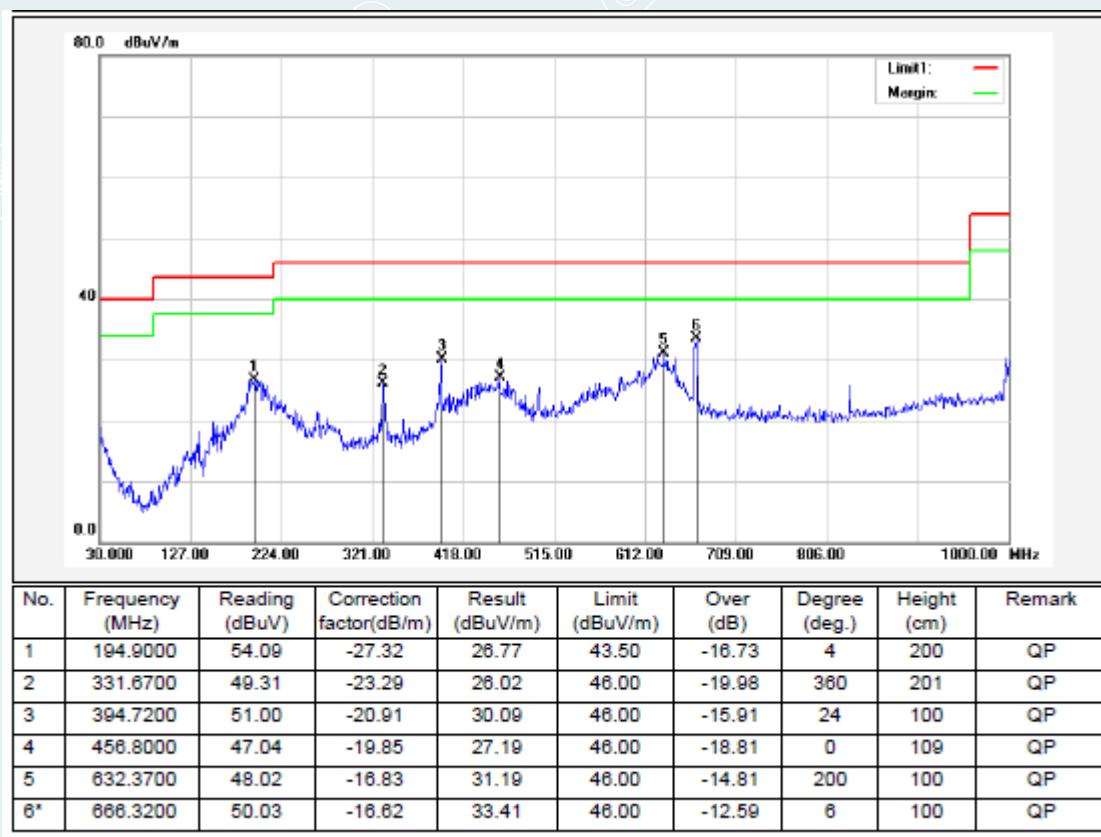
6.9.5 TEST RESULTS

9kHz to 1GHz:

Mode: TX/1Mbps

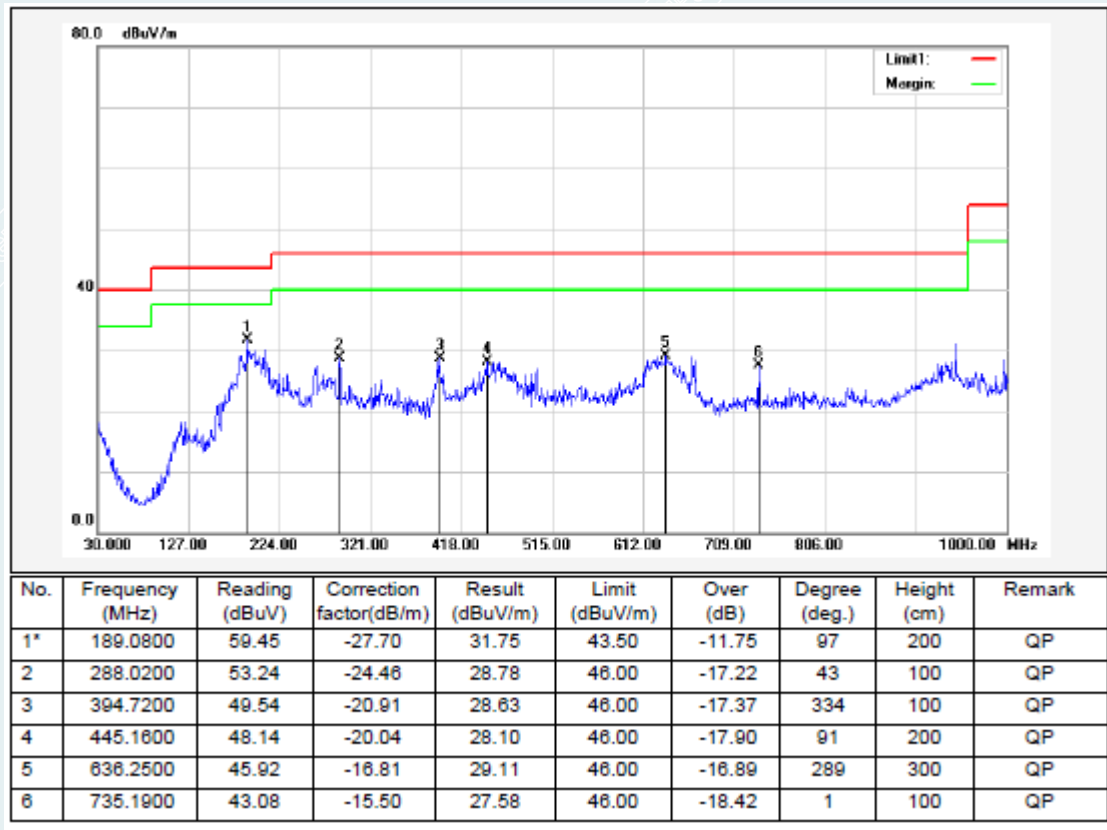
Highest Frequency (2480MHz)

Date: 2021/10/20



Mode: TX/1Mbps
Highest Frequency (2480MHz)

Date: 2021/10/20

**Remark:**

- 1 No emission found between lowest internal used/generated frequency to 30MHz.
- 2 Pre-scan all mode and recorded the worst case results in this report (TX-High Channel(1Mbps))
- 3 Measuring frequencies from 9kHz to the 1GHz.
- 4 Radiated emissions measured in frequency range from 30MHz to 1GHz were made with an instrument using Peak/Quasi-peak detector mode.
- 5 Data of measurement within this frequency range shown “ --- ” in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 6 The IF bandwidth of SPA between 30MHz to 1GHz was 120kHz.

Above 1GHz:

Mode: TX/1Mbps

Lowest Frequency (2402MHz)

Date: 2021/10/20

Suspected Data List									
NO.	Freq. [MHz]	Reading [dBμV/m]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	1598.8000	75.41	52.49	-22.92	74.00	21.51	100	229	Vertical
2	1995.6000	63.76	42.18	-21.58	74.00	31.82	100	305	Vertical
3	3000.0000	65.73	49.12	-16.61	74.00	24.88	200	321	Vertical
4	3195.0000	64.03	48.09	-15.94	74.00	25.91	100	284	Vertical
5	4995.0000	54.37	44.60	-9.77	74.00	29.40	200	321	Vertical
6	7206.0000	57.50	54.31	-3.19	74.00	19.69	100	193	Vertical

AV Final Data List									
NO.	Freq. [MHz]	Factor [dB]	AV Reading [dBμV/m]	AV Value [dBμV/m]	AV Limit [dBμV/m]	AV Margin [dB]	Height [cm]	Angle [°]	Polarity
1	1596.5537	-22.92	43.47	20.55	54.00	33.45	137	12	Vertical
2	2993.0850	-17.66	41.56	23.90	54.00	30.10	200	262	Vertical
3	3201.6296	-15.94	41.62	25.68	54.00	28.32	102	17	Vertical
4	7206.1081	-3.19	40.05	36.86	54.00	17.14	107	126	Vertical

Suspected Data List									
NO.	Freq. [MHz]	Reading [dBμV/m]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	1595.0000	74.26	51.35	-22.91	74.00	22.65	200	264	Horizontal
2	1796.2000	64.37	42.28	-22.09	74.00	31.72	200	257	Horizontal
3	3000.0000	66.61	50.00	-16.61	74.00	24.00	200	262	Horizontal
4	3985.5000	58.20	43.59	-14.61	74.00	30.41	200	110	Horizontal
5	4978.5000	54.28	44.40	-9.88	74.00	29.60	100	124	Horizontal
6	7207.5000	50.22	47.01	-3.21	74.00	26.99	100	181	Horizontal

AV Final Data List									
NO.	Freq. [MHz]	Factor [dB]	AV Reading [dBμV/m]	AV Value [dBμV/m]	AV Limit [dBμV/m]	AV Margin [dB]	Height [cm]	Angle [°]	Polarity
1	1595.4466	-22.92	52.04	29.12	54.00	24.88	198	101	Horizontal
2	2993.9550	-17.66	46.08	28.42	54.00	25.58	151	264	Horizontal
3	4978.5000	-9.88	37.44	27.56	54.00	26.44	160	87	Horizontal

Mode: TX/1Mbps
Middle Frequency (2441MHz)

Date: 2021/10/21

Suspected Data List									
NO.	Freq. [MHz]	Reading [dBμV/m]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	1195.4000	74.67	50.13	-24.54	74.00	23.87	200	230	Vertical
2	1470.2000	67.01	43.96	-23.05	74.00	30.04	200	310	Vertical
3	1661.6000	64.28	41.79	-22.49	74.00	32.21	200	130	Vertical
4	2659.0000	66.00	47.49	-18.51	74.00	26.51	100	140	Vertical
5	3982.5000	58.74	44.17	-14.57	74.00	29.83	100	150	Vertical
6	6000.0000	55.27	47.78	-7.49	74.00	26.22	100	280	Vertical

AV Final Data List									
NO.	Freq. [MHz]	Factor [dB]	AV Reading [dBμV/m]	AV Value [dBμV/m]	AV Limit [dBμV/m]	AV Margin [dB]	Height [cm]	Angle [°]	Polarity
1	1196.7030	-24.53	56.95	32.42	54.00	21.58	160	270	Vertical
2	1469.9795	-23.05	50.60	27.55	54.00	26.45	197	3	Vertical

Suspected Data List									
NO.	Freq. [MHz]	Reading [dBμV/m]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	1195.8000	69.10	44.56	-24.54	74.00	29.44	100	250	Horizontal
2	1330.2000	68.81	44.99	-23.82	74.00	29.01	200	80	Horizontal
3	1746.2000	62.27	39.84	-22.43	74.00	34.16	200	150	Horizontal
4	2310.0000	64.24	44.08	-20.16	74.00	29.92	200	270	Horizontal
5	3333.0000	56.62	40.45	-16.17	74.00	33.55	100	200	Horizontal
6	7753.5000	46.88	44.94	-1.94	74.00	29.06	100	100	Horizontal

AV Final Data List									
NO.	Freq. [MHz]	Factor [dB]	AV Reading [dBμV/m]	AV Value [dBμV/m]	AV Limit [dBμV/m]	AV Margin [dB]	Height [cm]	Angle [°]	Polarity
1	1194.0960	-24.53	54.72	30.19	54.00	23.81	107	308	Horizontal
2	1332.1221	-23.83	49.95	26.12	54.00	27.88	168	224	Horizontal

Mode: TX/1Mbps
Highest Frequency (2480MHz)

Date: 2021/10/21

Suspected Data List									
NO.	Freq. [MHz]	Reading [dBμV/m]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	1055.5069	57.12	32.07	-25.05	74.00	41.93	100	110	Vertical
2	1747.0934	59.69	37.25	-22.44	74.00	36.75	200	250	Vertical
3	4153.2692	52.28	38.85	-13.43	74.00	35.15	200	320	Vertical
4	5840.9801	48.70	40.90	-7.80	74.00	33.10	200	160	Vertical
5	8383.7980	45.91	44.75	-1.16	74.00	29.25	200	200	Vertical
6	17885.6107	36.74	53.39	16.65	74.00	20.61	200	230	Vertical

AV Final Data List									
NO.	Freq. [MHz]	Factor [dB]	AV Reading [dBμV/m]	AV Value [dBμV/m]	AV Limit [dBμV/m]	AV Margin [dB]	Height [cm]	Angle [°]	Polarity
1	17875.4159	16.66	28.94	45.60	54.00	8.40	138	172	Vertical

Suspected Data List									
NO.	Freq. [MHz]	Reading [dBμV/m]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	1252.5316	56.58	32.43	-24.15	74.00	41.57	200	120	Horizontal
2	1744.5931	55.80	33.37	-22.43	74.00	40.63	200	200	Horizontal
3	3765.0956	52.24	37.75	-14.49	74.00	36.25	200	260	Horizontal
4	7194.8994	46.88	43.75	-3.13	74.00	30.25	100	260	Horizontal
5	13900.7376	39.23	48.34	9.11	74.00	25.66	100	260	Horizontal
6	17864.9831	37.02	53.66	16.64	74.00	20.34	100	60	Horizontal

AV Final Data List									
NO.	Freq. [MHz]	Factor [dB]	AV Reading [dBμV/m]	AV Value [dBμV/m]	AV Limit [dBμV/m]	AV Margin [dB]	Height [cm]	Angle [°]	Polarity
1	17869.2707	16.64	28.83	45.47	54.00	8.53	151	22	Horizontal

Mode: TX/3Mbps
Lowest Frequency (2402MHz)

Date: 2021/10/21

Suspected Data List									
NO.	Freq. [MHz]	Reading [dBμV/m]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	1009.5012	57.17	32.03	-25.14	74.00	41.97	100	240	Vertical
2	1280.0350	56.34	32.31	-24.03	74.00	41.69	200	200	Vertical
3	1775.8470	61.35	39.11	-22.24	74.00	34.89	200	100	Vertical
4	7193.0241	47.56	44.42	-3.14	74.00	29.58	100	240	Vertical
5	13936.3670	40.14	49.21	9.07	74.00	24.79	100	250	Vertical
6	17911.8640	39.00	55.52	16.52	74.00	18.48	100	160	Vertical

AV Final Data List									
NO.	Freq. [MHz]	Factor [dB]	AV Reading [dBμV/m]	AV Value [dBμV/m]	AV Limit [dBμV/m]	AV Margin [dB]	Height [cm]	Angle [°]	Polarity
1	17975.2816	16.52	29.28	45.80	54.00	8.20	103	166	Vertical

Suspected Data List									
NO.	Freq. [MHz]	Reading [dBμV/m]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	1106.2633	56.32	31.48	-24.84	74.00	42.52	100	360	Horizontal
2	1579.0724	55.88	32.99	-22.89	74.00	41.01	200	260	Horizontal
3	4368.9211	52.44	39.95	-12.49	74.00	34.05	100	220	Horizontal
4	7200.5251	47.76	44.63	-3.13	74.00	29.37	100	0	Horizontal
5	13921.3652	40.19	49.27	9.08	74.00	24.73	100	0	Horizontal
6	17898.7373	38.56	55.22	16.66	74.00	18.78	100	20	Horizontal

AV Final Data List									
NO.	Freq. [MHz]	Factor [dB]	AV Reading [dBμV/m]	AV Value [dBμV/m]	AV Limit [dBμV/m]	AV Margin [dB]	Height [cm]	Angle [°]	Polarity
1	17869.2044	16.66	29.52	46.18	54.00	7.82	168	90	Horizontal

Mode: TX/ 3Mbps
Middle Frequency (2441MHz)

Date: 2021/10/21

Suspected Data List									
NO.	Freq. [MHz]	Reading [dBμV/m]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	1278.0348	57.41	33.37	-24.04	74.00	40.63	100	350	Vertical
2	1766.3458	59.51	37.19	-22.32	74.00	36.81	200	100	Vertical
3	3225.0281	53.19	36.96	-16.23	74.00	37.04	200	210	Vertical
4	6660.4576	48.58	42.85	-5.73	74.00	31.15	200	170	Vertical
5	7198.6498	47.41	44.29	-3.12	74.00	29.71	100	10	Vertical
6	14103.2629	38.99	48.53	9.54	74.00	25.47	100	260	Vertical

AV Final Data List									
NO.	Freq. [MHz]	Factor [dB]	AV Reading [dBμV/m]	AV Value [dBμV/m]	AV Limit [dBμV/m]	AV Margin [dB]	Height [cm]	Angle [°]	Polarity
1	1759.1214	-22.32	44.85	22.53	54.00	31.47	131	7	Vertical
2	14054.1835	9.55	29.59	39.14	54.00	14.86	200	2	Vertical

Suspected Data List									
NO.	Freq. [MHz]	Reading [dBμV/m]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	1753.5942	59.67	37.26	-22.41	74.00	36.74	100	30	Horizontal
2	3723.8405	52.84	38.11	-14.73	74.00	35.89	200	20	Horizontal
3	4312.6641	51.13	38.17	-12.96	74.00	35.83	200	50	Horizontal
4	7787.4734	46.88	45.01	-1.87	74.00	28.99	200	140	Horizontal
5	9411.4264	43.90	45.46	1.56	74.00	28.54	200	150	Horizontal
6	13919.4899	39.92	49.01	9.09	74.00	24.99	100	200	Horizontal

AV Final Data List									
NO.	Freq. [MHz]	Factor [dB]	AV Reading [dBμV/m]	AV Value [dBμV/m]	AV Limit [dBμV/m]	AV Margin [dB]	Height [cm]	Angle [°]	Polarity
1	1745.9310	-22.42	48.89	26.47	54.00	27.53	198	22	Horizontal
2	13928.1200	9.09	30.04	39.13	54.00	14.87	194	345	Horizontal

Mode: TX/3Mbps
Highest Frequency (2480MHz)

Date: 2021/10/21

Suspected Data List									
NO.	Freq. [MHz]	Reading [dBμV/m]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	1763.8455	66.30	43.97	-22.33	74.00	30.03	100	110	Vertical
2	3296.2870	53.11	37.23	-15.88	74.00	36.77	200	240	Vertical
3	4166.3958	51.47	38.14	-13.33	74.00	35.86	200	320	Vertical
4	7748.0935	46.24	44.26	-1.98	74.00	29.74	200	220	Vertical
5	10815.9770	42.48	46.34	3.86	74.00	27.66	100	90	Vertical
6	14093.8867	39.11	48.62	9.51	74.00	25.38	100	210	Vertical

AV Final Data List									
NO.	Freq. [MHz]	Factor [dB]	AV Reading [dBμV/m]	AV Value [dBμV/m]	AV Limit [dBμV/m]	AV Margin [dB]	Height [cm]	Angle [°]	Polarity
1	1761.8524	-22.33	65.23	42.90	54.00	11.10	192	242	Vertical

Suspected Data List									
NO.	Freq. [MHz]	Reading [dBμV/m]	Level [dBμV/m]	Factor [dB]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity
1	1206.5258	56.82	32.34	-24.48	74.00	41.66	200	10	Horizontal
2	1797.5997	55.61	33.53	-22.08	74.00	40.47	100	340	Horizontal
3	3487.5609	52.76	37.35	-15.41	74.00	36.65	200	320	Horizontal
4	5893.4867	48.91	41.25	-7.66	74.00	32.75	200	250	Horizontal
5	10215.9020	43.04	45.49	2.45	74.00	28.51	200	310	Horizontal
6	13928.8661	39.10	48.18	9.08	74.00	25.82	100	160	Horizontal

AV Final Data List									
NO.	Freq. [MHz]	Factor [dB]	AV Reading [dBμV/m]	AV Value [dBμV/m]	AV Limit [dBμV/m]	AV Margin [dB]	Height [cm]	Angle [°]	Polarity
1	13934.2984	9.07	30.05	39.12	54.00	14.88	145	141	Horizontal

Remark:

- Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- The amplitude of 18GHz to 26.5GHz spurious emission that is attenuated by more than 20dB below the permissible limit has no need to be reported.
- Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
- Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
- Spectrum setting:
a. Peak Setting 1GHz – 26.5GHz, RBW = 1MHz, VBW = 1MHz, Sweep time = auto.
b. AV Setting 1GHz - 26.5GHz, RBW = 1MHz, VBW = 10Hz (if the EUT duty cycle is < 98% , set VBW≥1/T), Sweep time = auto.
- As the Transmit Power of GFSK and 8DPSK is larger than $\pi/4$ -DQPSK, Therefore, radiated spurious emissions recorded the worst case results in this report.

Test result: The unit does meet the requirements.

6.10 RESTRICTED BANDS OF OPERATION

6.10.1 LIMITS

Section 15.247(d) In addition, Radiated emissions which fall in the restricted bands, as defined in §15.205(a), must also comply with the radiated emission limits specified in §15.209(a) (see §15.205(c)).

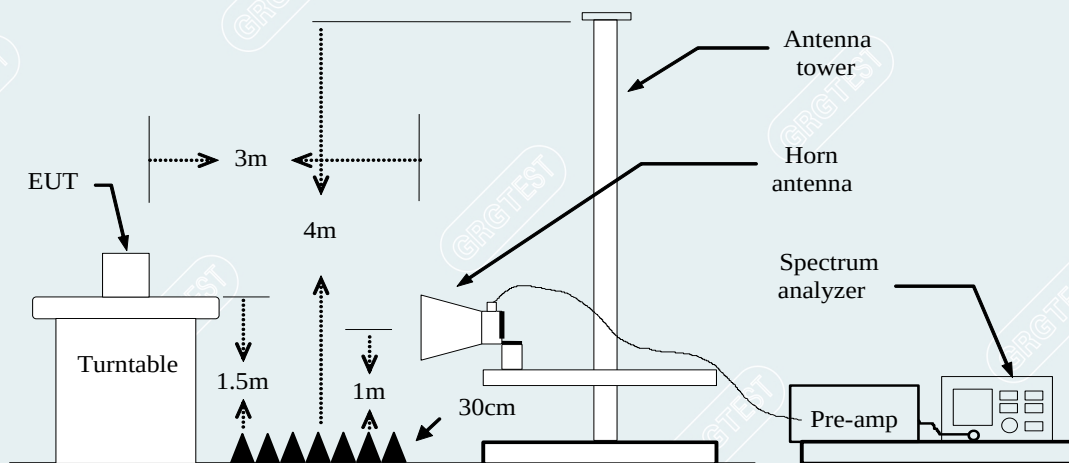
MHz	MHz	MHz	GHz
0.090 - 0.110	16.42 - 16.423	399.9 - 410	4.5 - 5.15
¹ 0.495 - 0.505	16.69475 -	608 - 614	5.35 - 5.46
2.1735 - 2.1905	16.69525	960 - 1240	7.25 - 7.75
4.125 - 4.128	16.80425 -	1300 - 1427	8.025 - 8.5
4.17725 - 4.17775	16.80475	1435 - 1626.5	9.0 - 9.2
4.20725 - 4.20775	25.5 - 25.67	1645.5 - 1646.5	9.3 - 9.5
6.215 - 6.218	37.5 - 38.25	1660 - 1710	10.6 - 12.7
6.26775 - 6.26825	73 - 74.6	1718.8 - 1722.2	13.25 - 13.4
6.31175 - 6.31225	74.8 - 75.2	2200 - 2300	14.47 - 14.5
8.291 - 8.294	108 - 121.94	2310 - 2390	15.35 - 16.2
8.362 - 8.366	123 - 138	2483.5 - 2500	17.7 - 21.4
8.37625 - 8.38675	149.9 - 150.05	2655 - 2900	22.01 - 23.12
8.41425 - 8.41475	156.52475 -	3260 - 3267	23.6 - 24.0
12.29 - 12.293	156.52525	3332 - 3339	31.2 - 31.8
12.51975 -	156.7 - 156.9	3345.8 - 3358	36.43 - 36.5
12.52025	162.0125 - 167.17	3600 - 4400	
12.57675 -	167.72 - 173.2		
12.57725	240 - 285		
13.36 - 13.41	322 - 335.4		

Frequency (MHz)	Quasi-peak(μ V/m)	Measurement distance(m)	Quasi-peak(dB μ V/m)@distance 3m
0.009-0.490	2400/F(kHz)	300	53.8~88.5
0.490-1.705	24000/F(kHz)	30	43~53.8
1.705-30.0	30	30	49.5
30 ~ 88	100	3	40
88~216	150	3	43.5
216 ~ 960	200	3	46
Above 960	500	3	54

6.10.2 TEST PROCEDURES

- 1) The EUT is placed on a turntable, which is 1.5m above the ground plane.
- 2) The turntable shall be rotated for 360 degrees to determine the position of maximum emission level.
- 3) EUT is set 3m away from the receiving antenna, which is varied from 1m to 4m to find out the highest emission.
- 4) Set the spectrum analyzer in the following setting in order to capture the lower and upper band-edges of the emission:
 - a) PEAK: RBW=1MHz / VBW=1MHz / Sweep=AUTO
 - b) AVERAGE: RBW=1MHz / VBW=1/T / Sweep=AUTO
- 5) Repeat the procedures until all the PEAK and AVERAGE versus polarization are measured.

6.10.3 TEST SETUP



6.10.4 TEST RESULTS

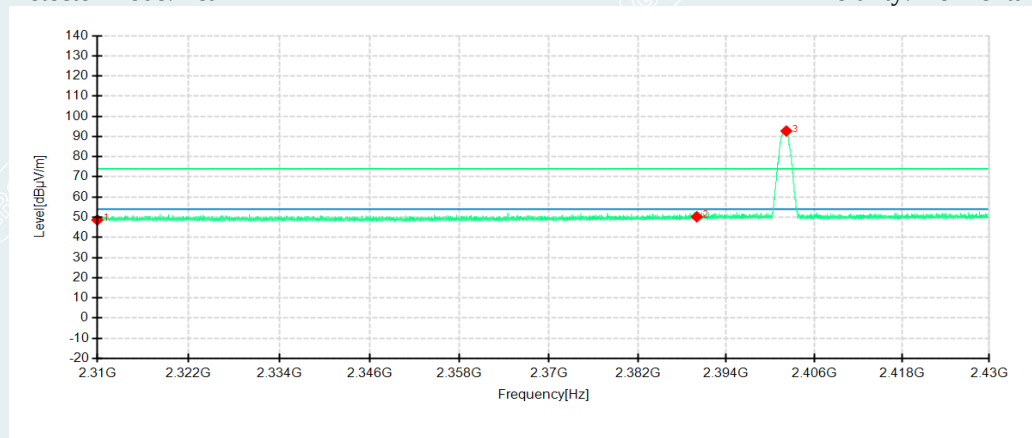
GFSK

Lowest Channel

Frequency 2402MHz

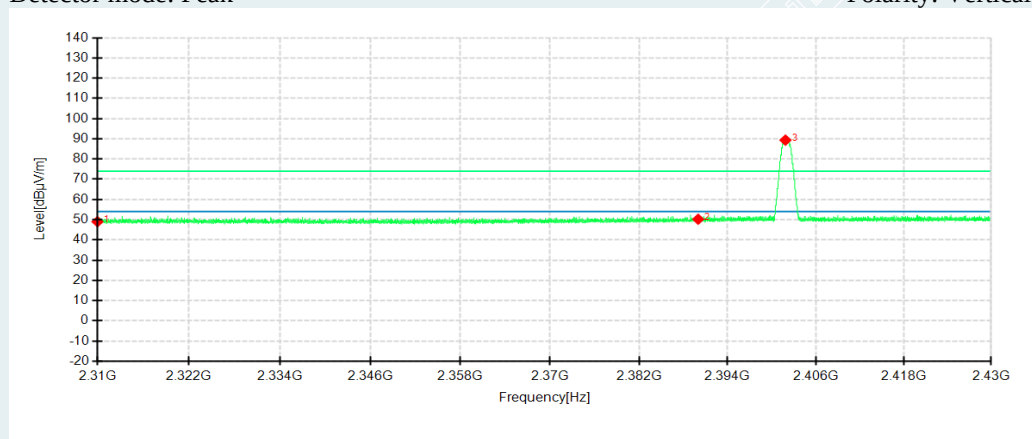
Detector mode: Peak

Polarity: Horizontal



Detector mode: Peak

Polarity: Vertical



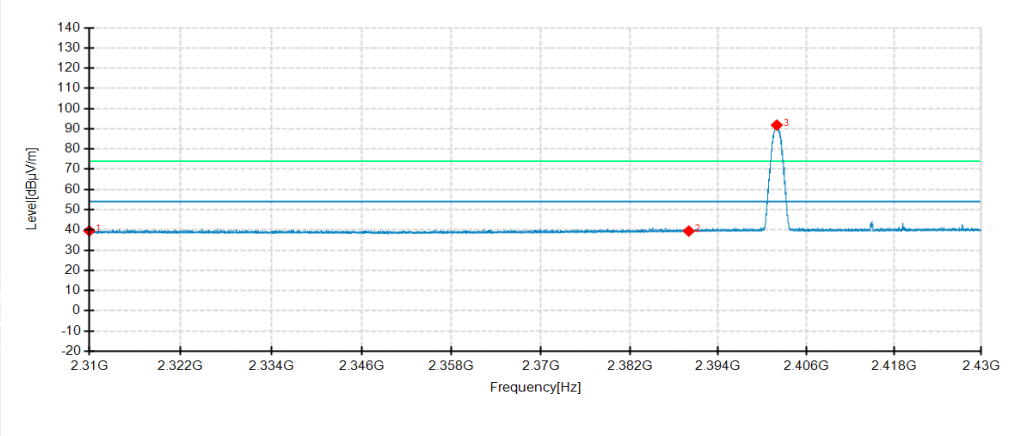
No.	Frequency MHz	Reading dBμV/m	Level dBμV/m	Factor dB	Limit dBμV/m	Margin dB	Height cm	Angle °	Pole	Remark
1	2310.0000	45.13	48.61	3.48	74.00	25.39	100	193	Horizontal	/
2	2390.0000	46.38	50.19	3.81	74.00	23.81	100	193	Horizontal	/
3	2402.1840	88.76	92.75	3.99	74.00	-18.75	100	193	Horizontal	No limit
1	2310.0000	45.52	49.00	3.48	74.00	25.00	100	175	Vertical	/
2	2390.0000	46.41	50.22	3.81	74.00	23.78	100	175	Vertical	/
3	2401.8600	85.35	89.34	3.99	74.00	-15.34	200	193	Vertical	No limit

Lowest Channel

Frequency 2402MHz

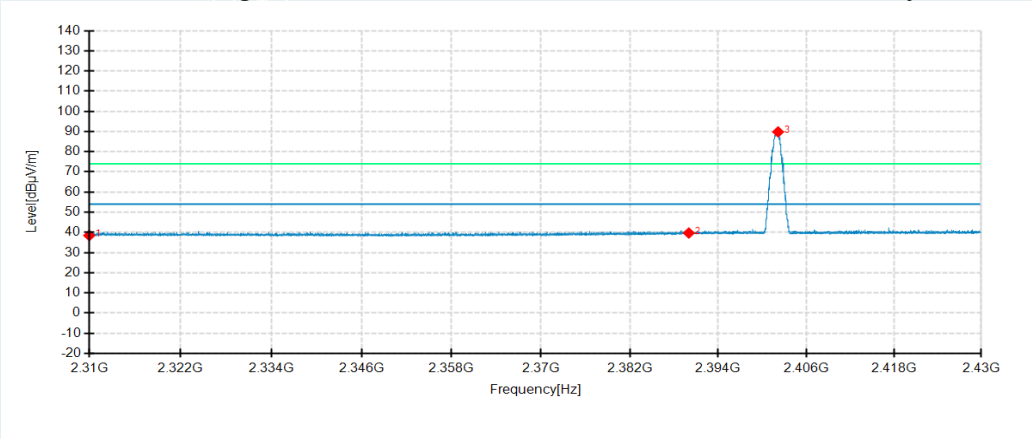
Detector mode: Average

Polarity: Horizontal



Detector mode: Average

Polarity: Vertical



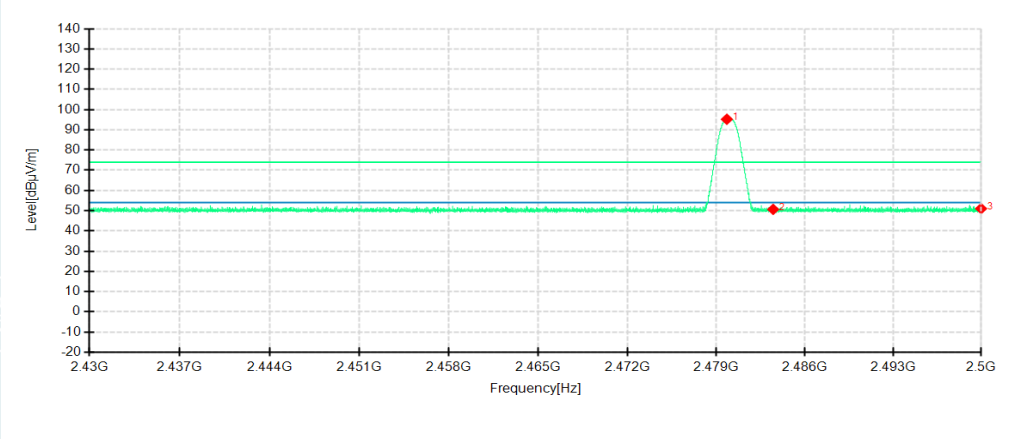
No.	Frequency MHz	Reading dBμV/m	Level dBμV/m	Factor dB	Limit dBμV/m	Margin dB	Height cm	Angle °	Pole	Remark
1	2310.0000	36.02	39.50	3.48	54.00	14.50	100	193	Horizontal	/
2	2390.0000	35.60	39.41	3.81	54.00	14.59	200	208	Horizontal	/
3	2401.9680	87.83	91.82	3.99	54.00	-37.82	100	193	Horizontal	No limit
1	2310.0000	34.97	38.45	3.48	54.00	15.55	200	193	Vertical	/
2	2390.0000	35.88	39.69	3.81	54.00	14.31	200	193	Vertical	/
3	2402.1480	85.81	89.80	3.99	54.00	-35.80	200	193	Vertical	No limit

Highest Channel

Frequency 2480MHz

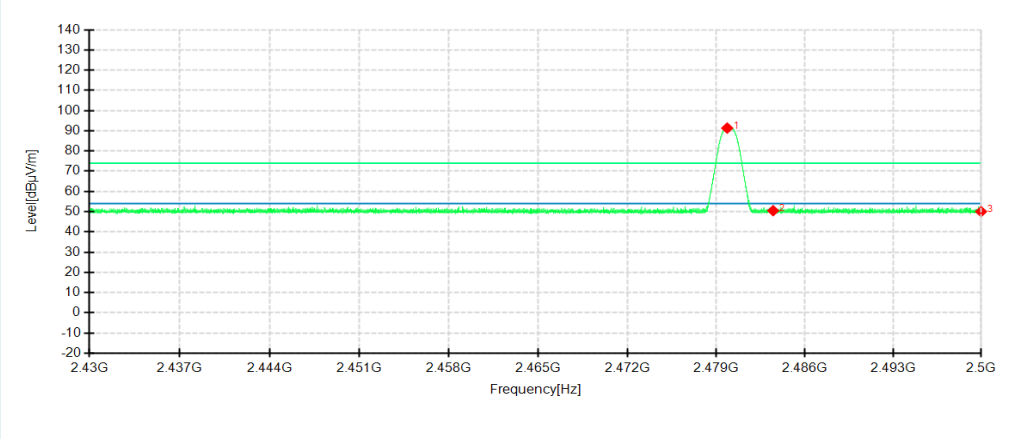
Detector mode: Peak

Polarity: Horizontal



Detector mode: Peak

Polarity: Vertical



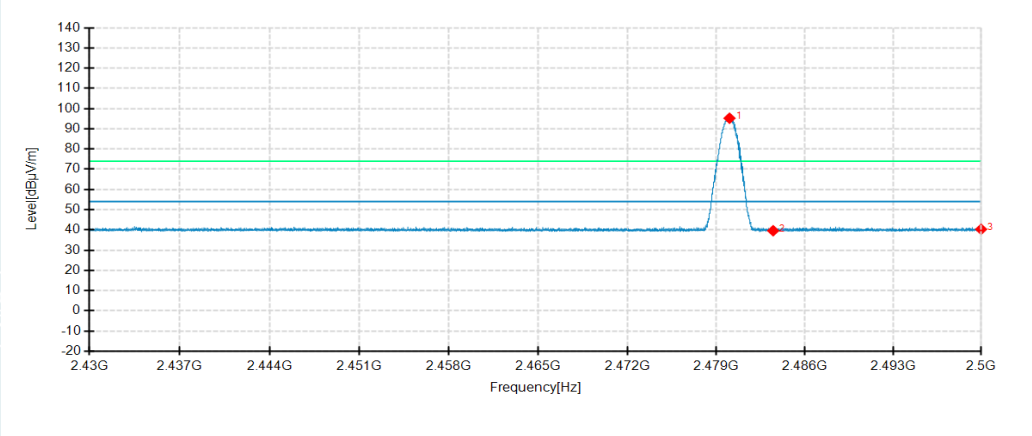
No.	Frequency MHz	Reading dBμV/m	Level dBμV/m	Factor dB	Limit dBuV/m	Margin dB	Height cm	Angle °	Pole	Remark
1	2479.8400	90.89	95.21	4.32	74.00	-21.21	100	10	Horizontal	No limit
2	2483.5000	46.31	50.64	4.33	74.00	23.36	100	10	Horizontal	/
3	2500.0000	46.64	51.02	4.38	74.00	22.98	200	330	Horizontal	/
1	2479.8680	87.02	91.34	4.32	74.00	-17.34	100	350	Vertical	No limit
2	2483.5000	46.16	50.49	4.33	74.00	23.51	200	20	Vertical	/
3	2500.0000	45.65	50.03	4.38	74.00	23.97	100	350	Vertical	/

Highest Channel

Frequency 2480MHz

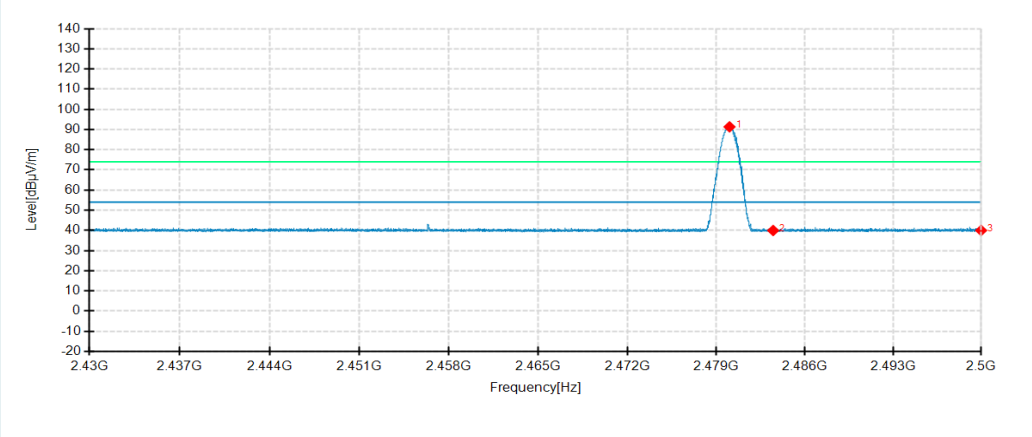
Detector mode: Average

Polarity: Horizontal



Detector mode: Average

Polarity: Vertical



No.	Frequency MHz	Reading dBμV/m	Level dBμV/m	Factor dB	Limit dBμV/m	Margin dB	Height cm	Angle °	Pole	Remark
1	2480.0500	90.90	95.22	4.32	54.00	-41.22	100	10	Horizontal	No limit
2	2483.5000	35.26	39.59	4.33	54.00	14.41	100	200	Horizontal	/
3	2500.0000	35.93	40.31	4.38	54.00	13.69	200	350	Horizontal	/
1	2480.0500	87.01	91.33	4.32	54.00	-37.33	100	350	Vertical	No limit
2	2483.5000	35.60	39.93	4.33	54.00	14.07	200	10	Vertical	/
3	2500.0000	35.57	39.95	4.38	54.00	14.05	100	120	Vertical	/

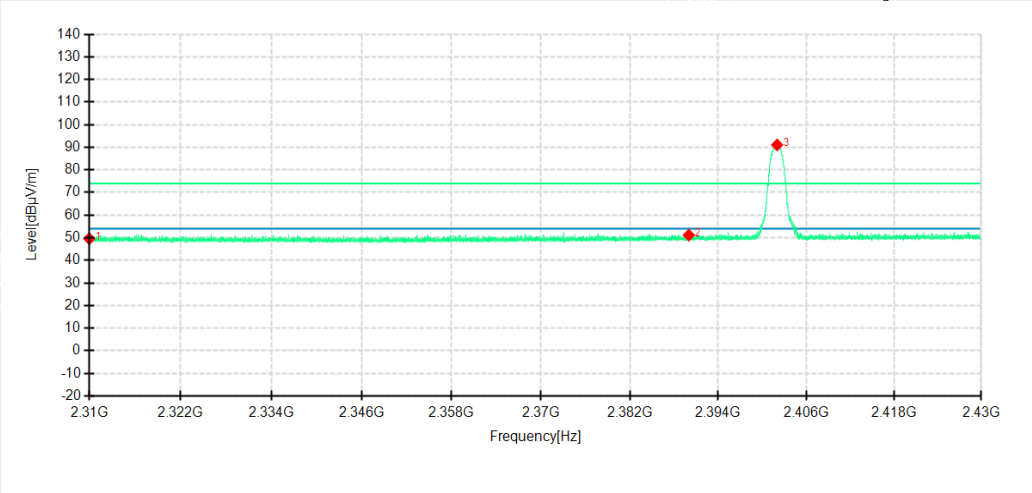
8DPSK

Lowest Channel

Frequency 2402MHz

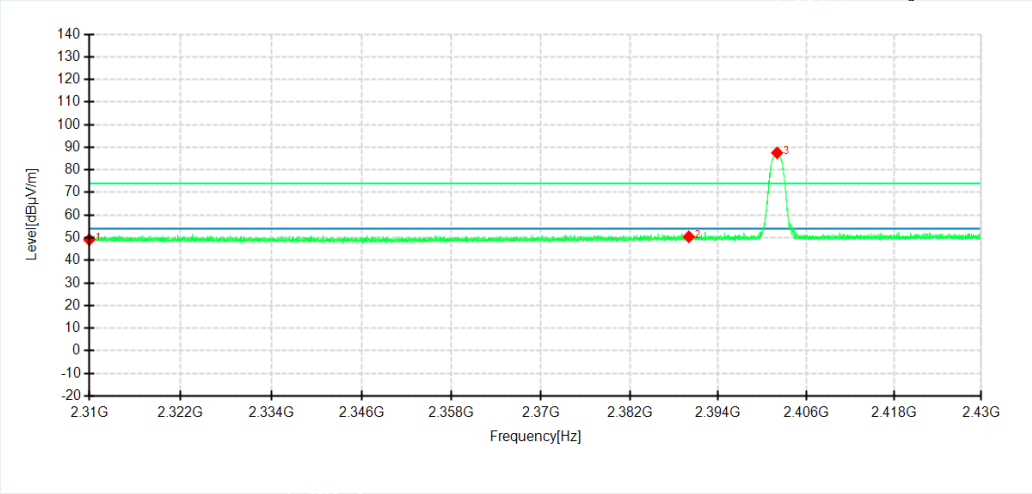
Detector mode: Peak

Polarity: Horizontal



Detector mode: Peak

Polarity: Vertical



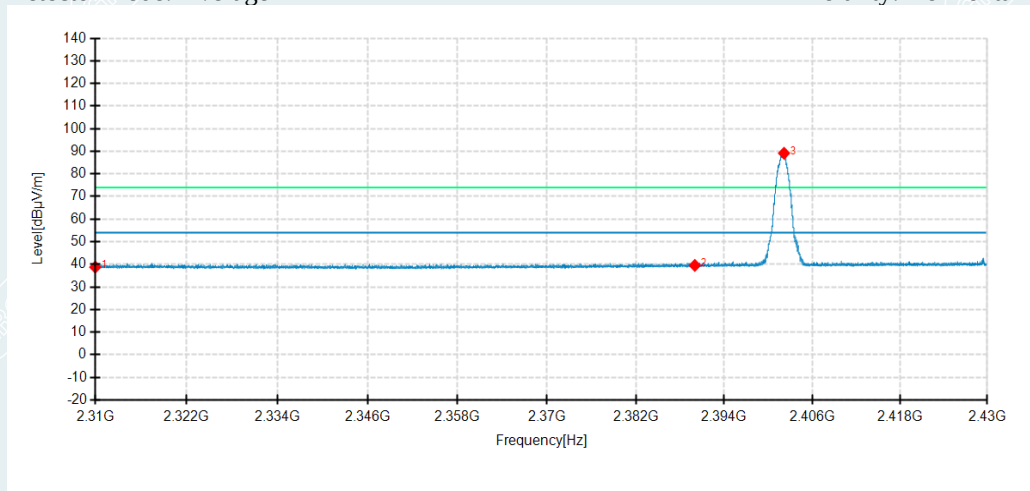
No.	Frequency MHz	Reading dBμV/m	Level dBμV/m	Factor dB	Limit dBμV/m	Margin dB	Height cm	Angle °	Pole	Remark
1	2310.0000	46.07	49.55	3.48	74.00	24.45	100	330	Horizontal	/
2	2390.0000	47.33	51.14	3.81	74.00	22.86	200	350	Horizontal	/
3	2402.0160	87.07	91.06	3.99	74.00	-17.06	100	10	Horizontal	No limit
1	2310.0000	45.63	49.11	3.48	74.00	24.89	200	310	Vertical	/
2	2390.0000	46.60	50.41	3.81	74.00	23.59	200	200	Vertical	/
3	2402.0160	83.55	87.54	3.99	74.00	-13.54	200	10	Vertical	No limit

Lowest Channel

Frequency 2402MHz

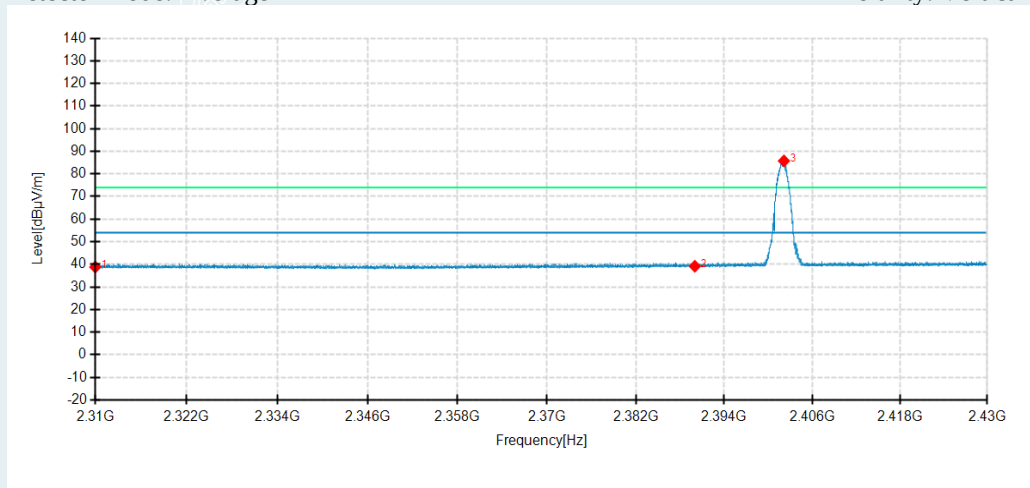
Detector mode: Average

Polarity: Horizontal



Detector mode: Average

Polarity: Vertical



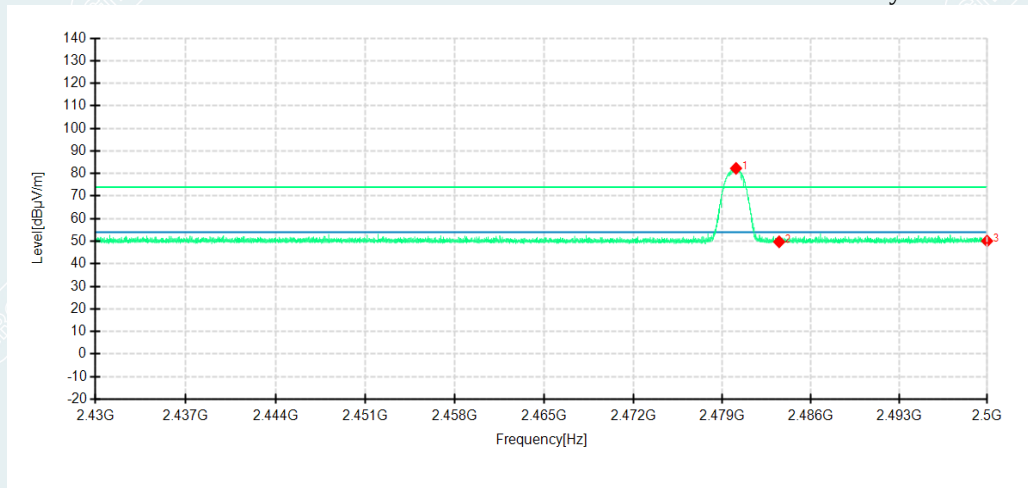
No.	Frequency MHz	Reading dBμV/m	Level dBμV/m	Factor dB	Limit dBμV/m	Margin dB	Height cm	Angle °	Pole	Remark
1	2310.0000	35.26	38.74	3.48	54.00	15.26	100	220	Horizontal	/
2	2390.0000	35.69	39.50	3.81	54.00	14.50	100	190	Horizontal	/
3	2402.1360	85.15	89.14	3.99	54.00	-35.14	100	260	Horizontal	No limit
1	2310.0000	35.30	38.78	3.48	54.00	15.22	100	350	Vertical	/
2	2390.0000	35.32	39.13	3.81	54.00	14.87	100	270	Vertical	/
3	2402.1240	81.73	85.72	3.99	54.00	-31.72	200	10	Vertical	No limit

Highest Channel

Frequency 2480MHz

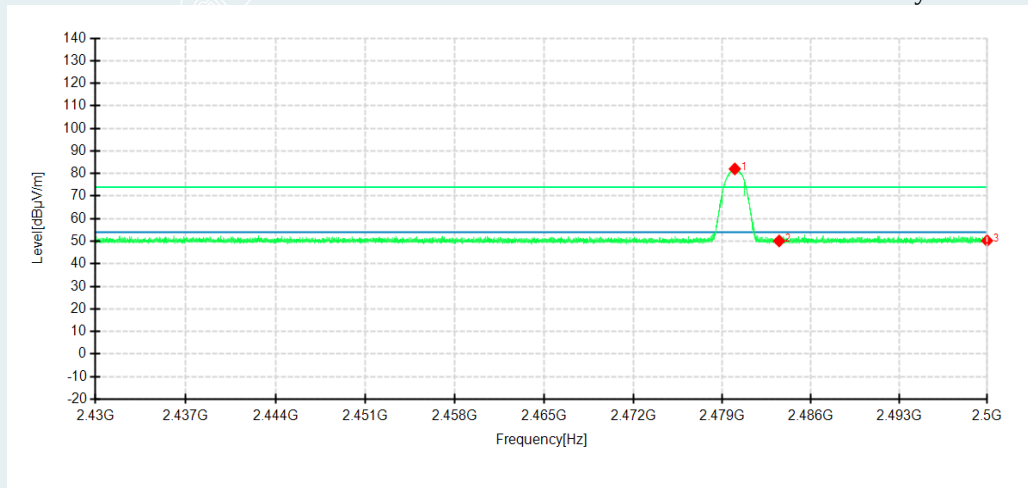
Detector mode: Peak

Polarity: Horizontal



Detector mode: Peak

Polarity: Vertical



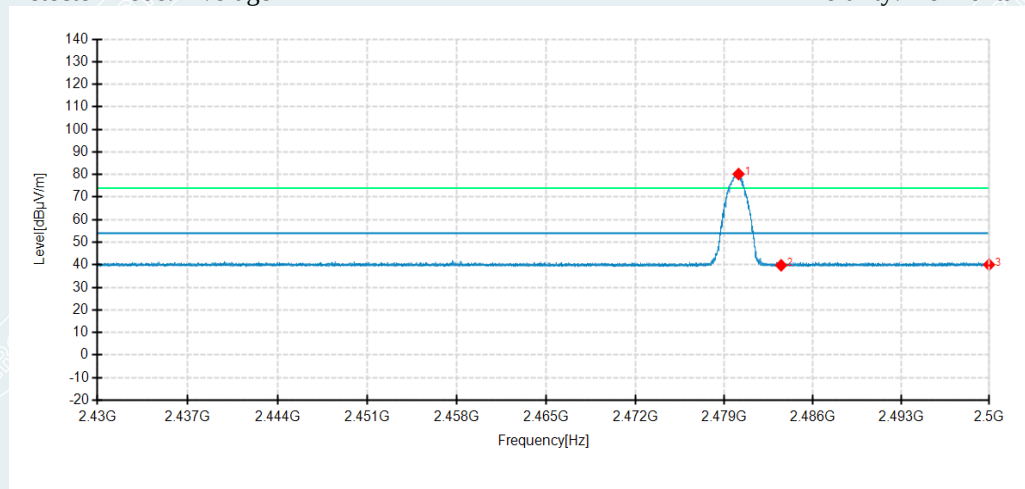
No.	Frequency MHz	Reading dBμV/m	Level dBμV/m	Factor dB	Limit dBμV/m	Margin dB	Height cm	Angle °	Pole	Remark
1	2480.0920	77.97	82.29	4.32	74.00	-8.29	100	320	Horizontal	No limit
2	2483.5000	45.39	49.72	4.33	74.00	24.28	100	10	Horizontal	/
3	2500.0000	45.70	50.08	4.38	74.00	23.92	100	40	Horizontal	/
1	2479.9940	77.73	82.05	4.32	74.00	-8.05	200	320	Vertical	No limit
2	2483.5000	45.80	50.13	4.33	74.00	23.87	200	130	Vertical	/
3	2500.0000	45.83	50.21	4.38	74.00	23.79	100	350	Vertical	/

Highest Channel

Frequency 2480MHz

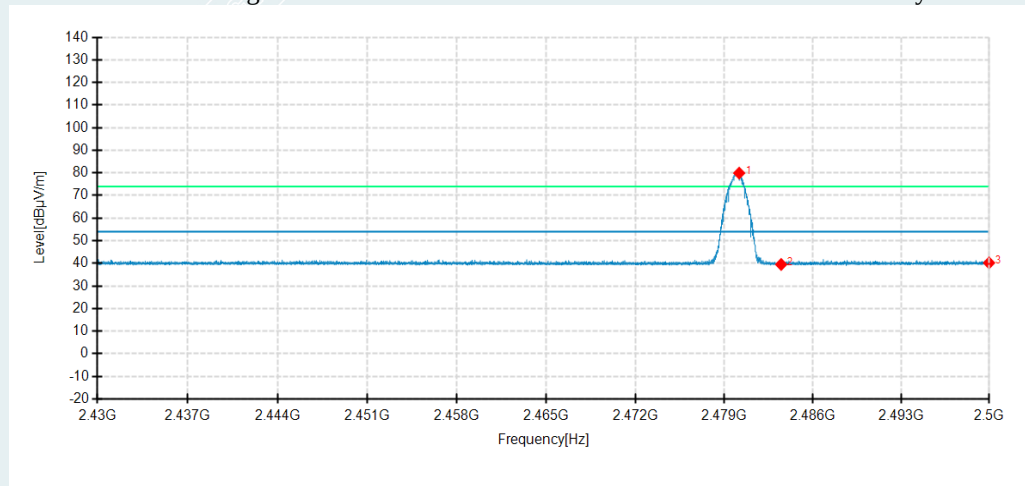
Detector mode: Average

Polarity: Horizontal



Detector mode: Average

Polarity: Vertical



No.	Frequency MHz	Reading dBμV/m	Level dBμV/m	Factor dB	Limit dBμV/m	Margin dB	Height cm	Angle °	Pole	Remark
1	2480.1340	75.89	80.21	4.32	54.00	-26.21	100	320	Horizontal	No limit
2	2483.5000	35.42	39.75	4.33	54.00	14.25	200	350	Horizontal	/
3	2500.0000	35.65	40.03	4.38	54.00	13.97	100	10	Horizontal	/
1	2480.1830	75.57	79.89	4.32	54.00	-25.89	200	10	Vertical	No limit
2	2483.5000	35.15	39.48	4.33	54.00	14.52	100	350	Vertical	/
3	2500.0000	35.80	40.18	4.38	54.00	13.82	100	20	Vertical	/

Remark:

- 1) Max field strength in 3m distance. No any other emission which falls in restricted bands can be detected and be reported.
- 2) As the Transmit Power of GFSK and 8DPSK is larger than $\pi/4$ -DQPSK, Therefore, restricted bands of operation recorded the worst case results in this report.

APPENDIX A. PHOTOGRAPH OF THE TEST CONNECTION DIAGRAM

Please refer to the attached document Test setup photo.

APPENDIX B. PHOTOGRAPH OF THE EUT

Please refer to the attached document EUT Photo.

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