

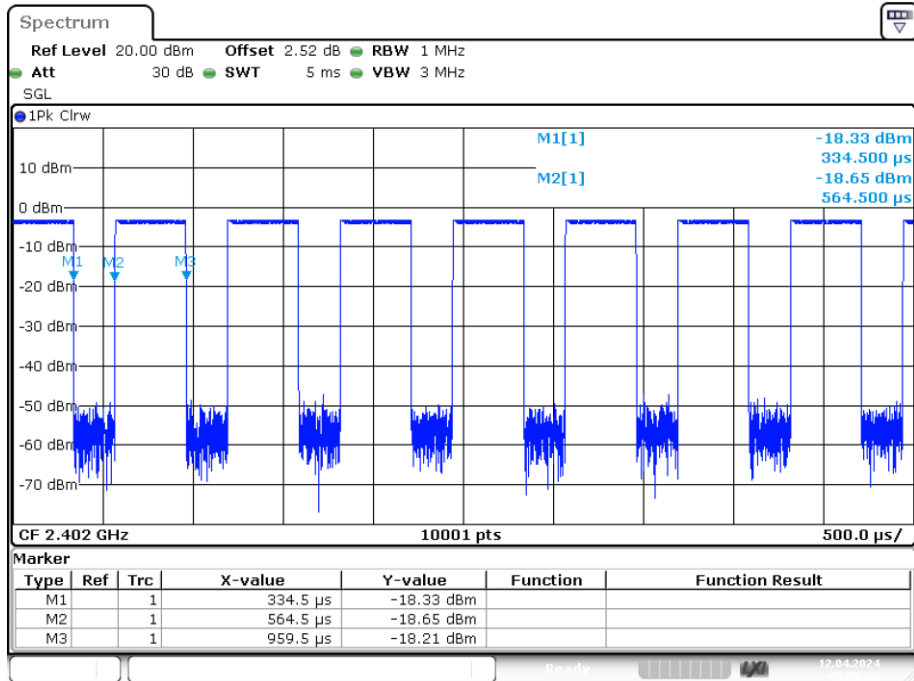
Appendix A

Duty Cycle

Condition	Mode	Frequency (MHz)	Antenna	On Time (ms)	Period (ms)	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)	Final settingFor VBW (kHz)
NVNT	BLE 1M	2402	Ant1	0.4	0.63	63.49	1.97	2.53	1
NVNT	BLE 1M	2440	Ant1	0.4	0.63	63.49	1.97	2.53	1
NVNT	BLE 1M	2480	Ant1	0.4	0.63	63.49	1.97	2.53	1

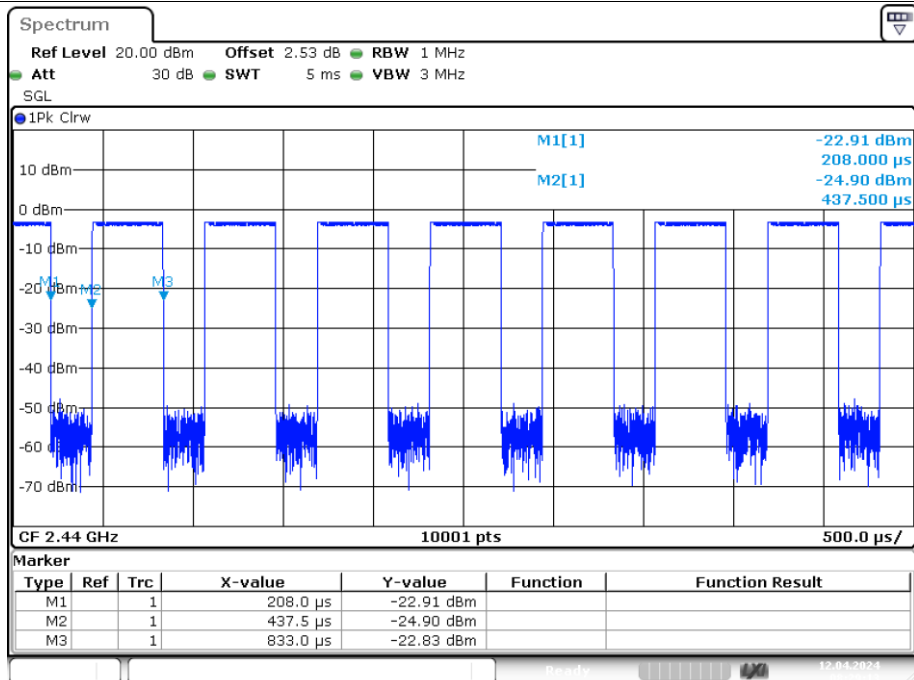
Test Graphs

Duty Cycle NVNT BLE 1M 2402MHz Ant1

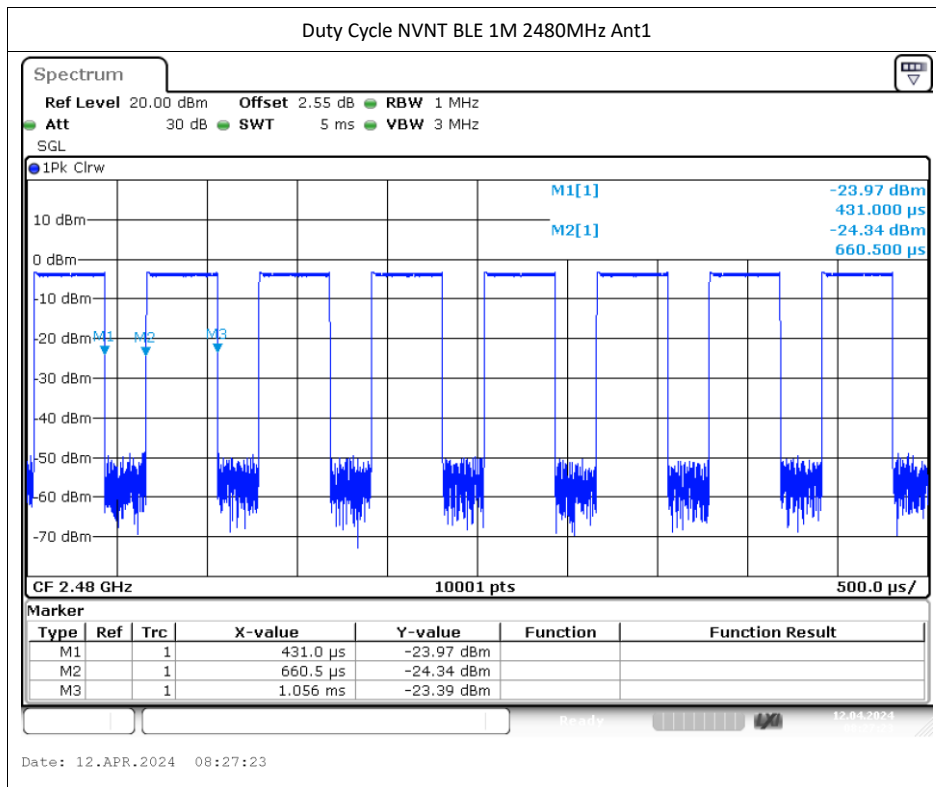


Date: 12.APR.2024 08:30:32

Duty Cycle NVNT BLE 1M 2440MHz Ant1



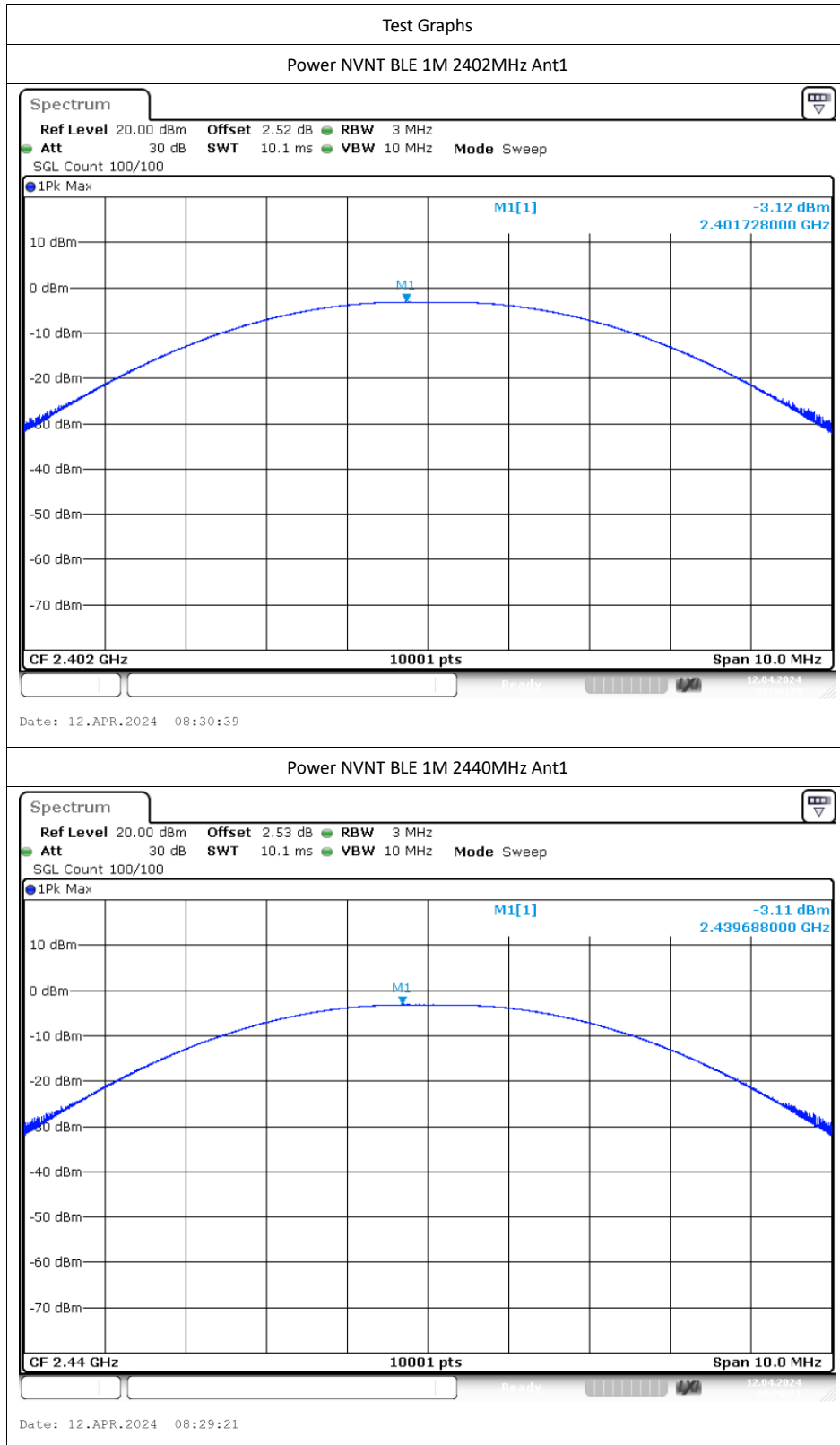
Date: 12.APR.2024 08:29:13

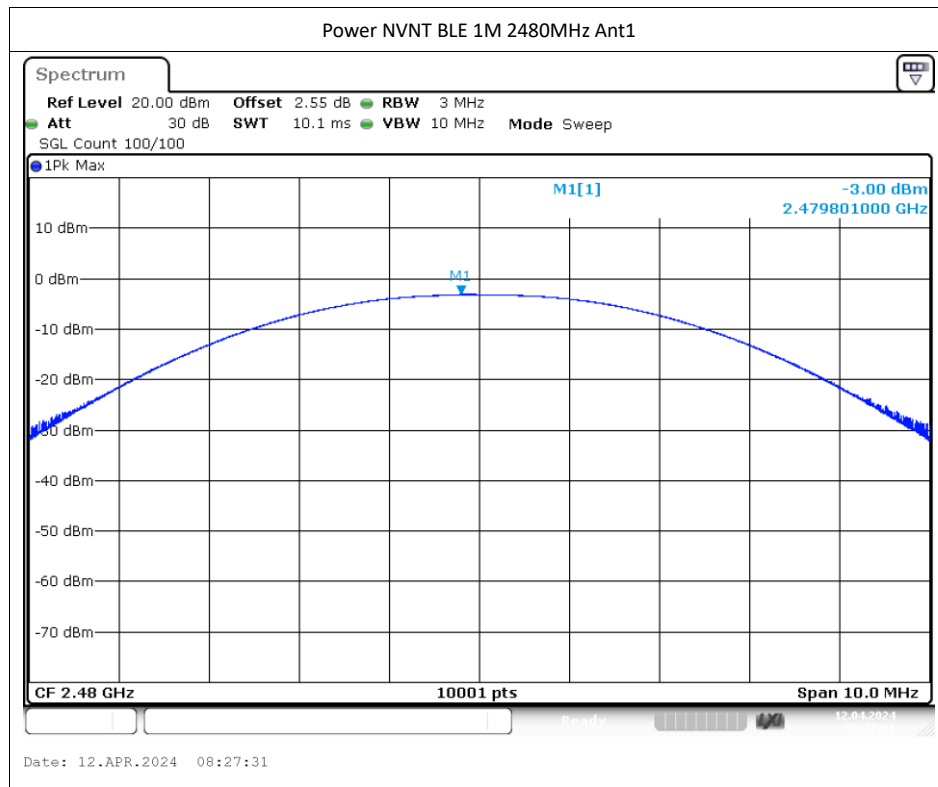


Maximum Conducted Output Power

Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Limit (dBm)	Verdict
NVNT	BLE 1M	2402	Ant1	-3.12	30	Pass
NVNT	BLE 1M	2440	Ant1	-3.11	30	Pass
NVNT	BLE 1M	2480	Ant1	-3	30	Pass

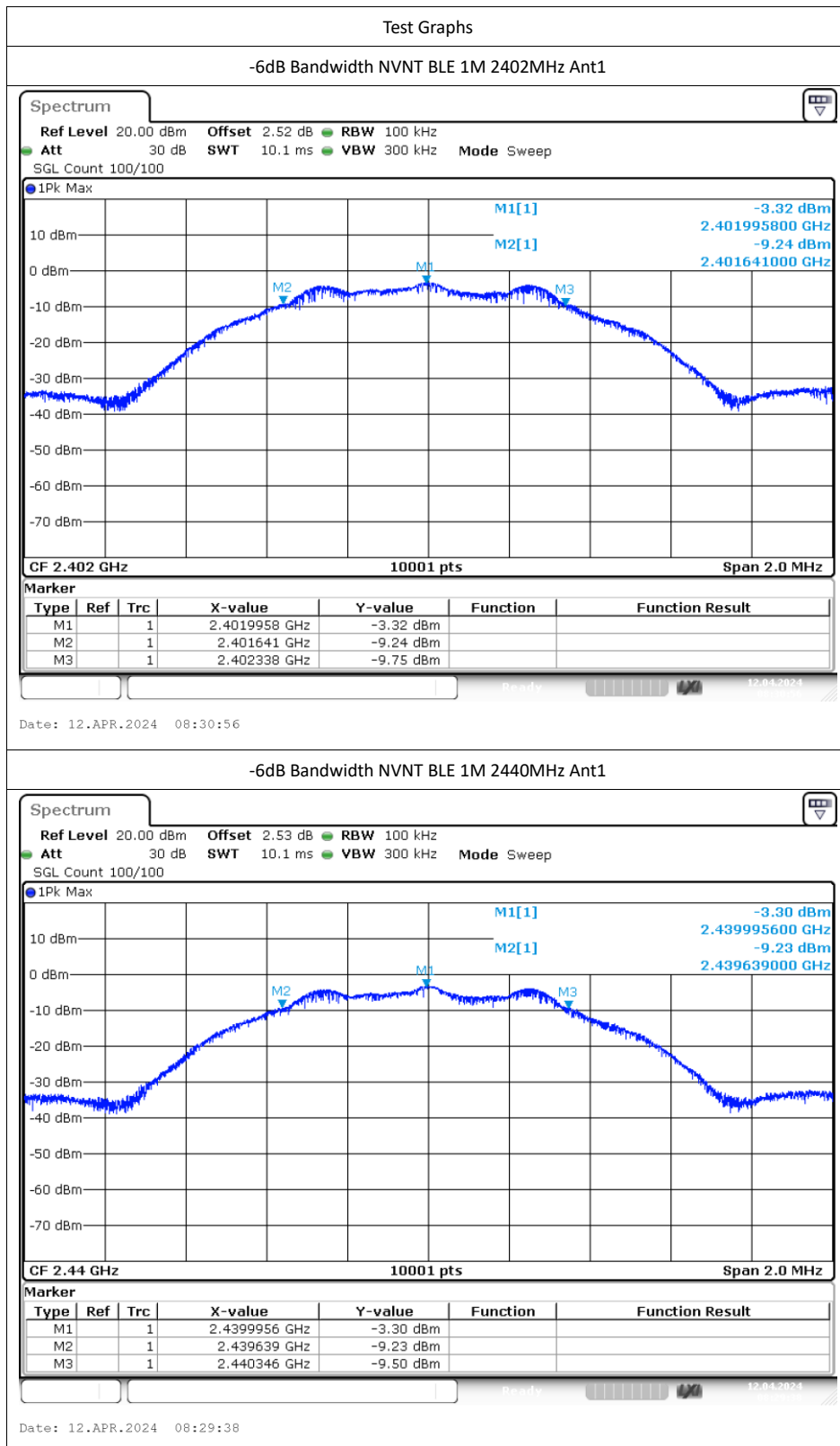
Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Antenna Gain (dBi)	E.i.r.p. (dBm)	Limit (dBm)	Verdict
NVNT	BLE 1M	2402	Ant1	-3.12	0.338	-2.782	36.02	Pass
NVNT	BLE 1M	2440	Ant1	-3.11	0.338	-2.772	36.02	Pass
NVNT	BLE 1M	2480	Ant1	-3	0.338	-2.662	36.02	Pass

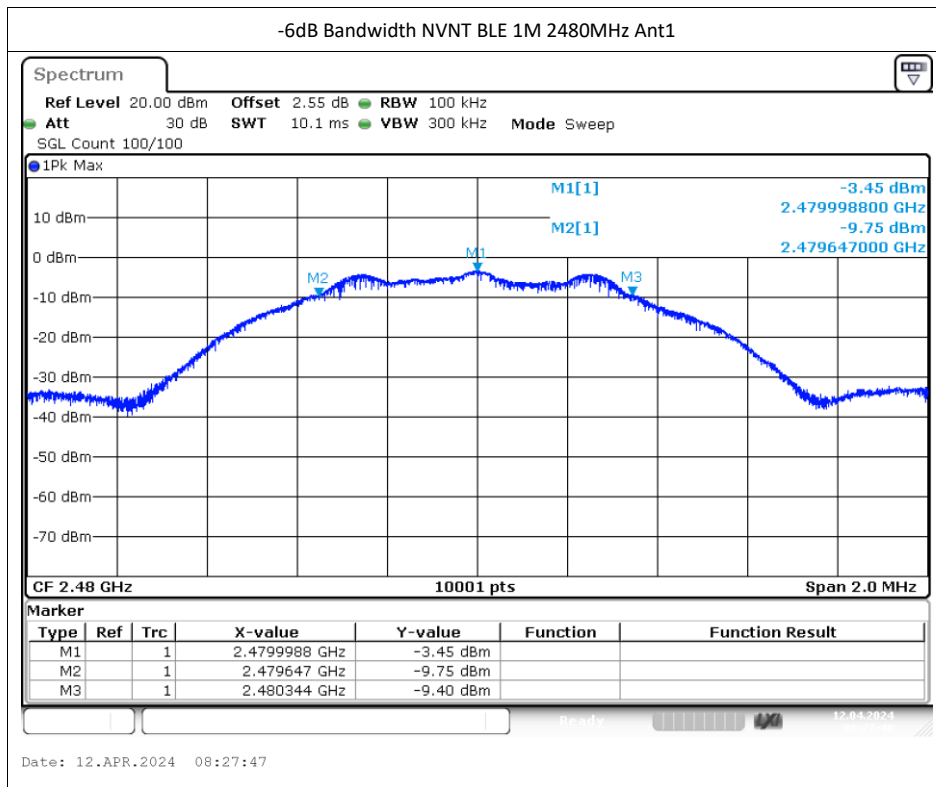




-6dB Bandwidth

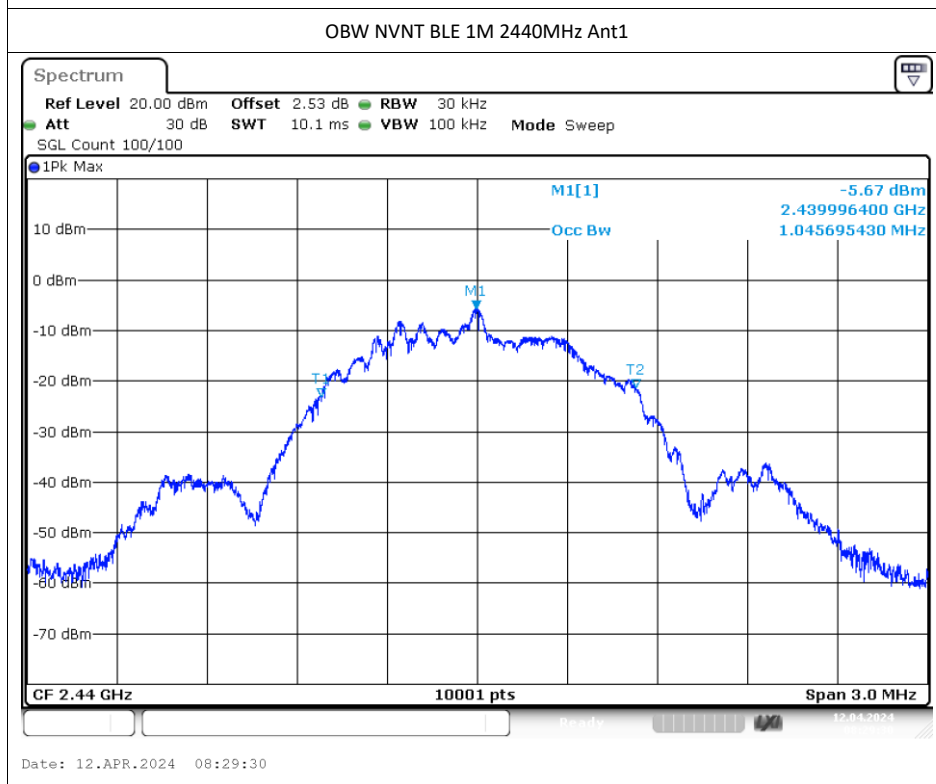
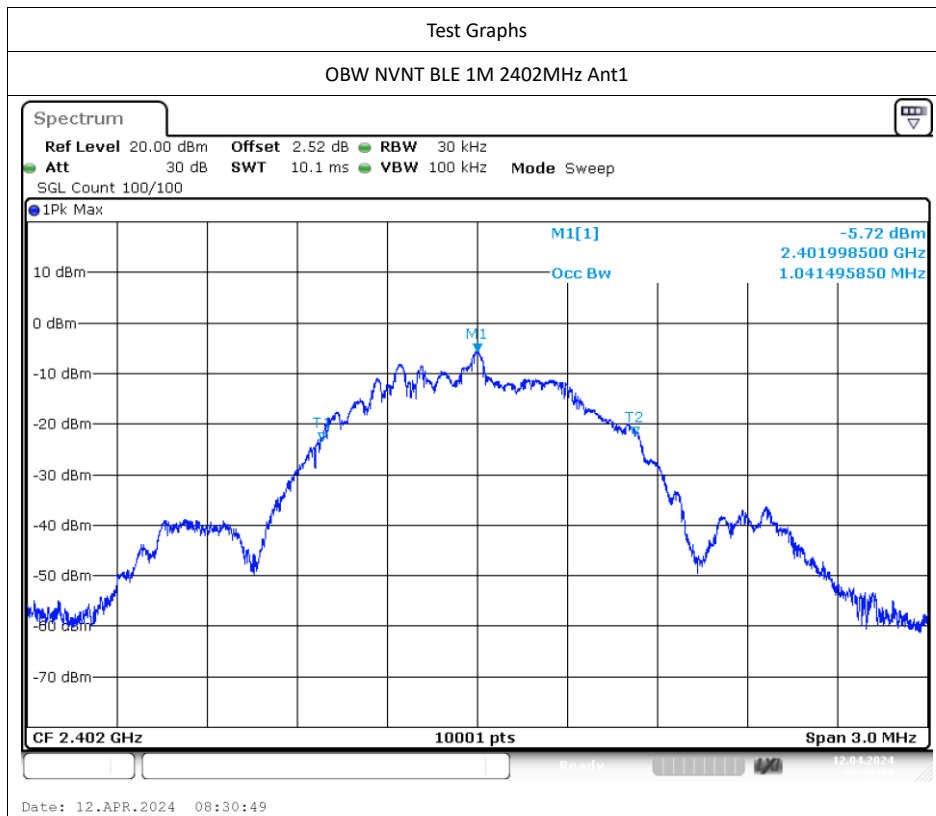
Condition	Mode	Frequency (MHz)	Antenna	-6 dB Bandwidth (MHz)	Limit -6 dB Bandwidth (MHz)	Verdict
NVNT	BLE 1M	2402	Ant1	0.7	0.5	Pass
NVNT	BLE 1M	2440	Ant1	0.71	0.5	Pass
NVNT	BLE 1M	2480	Ant1	0.7	0.5	Pass

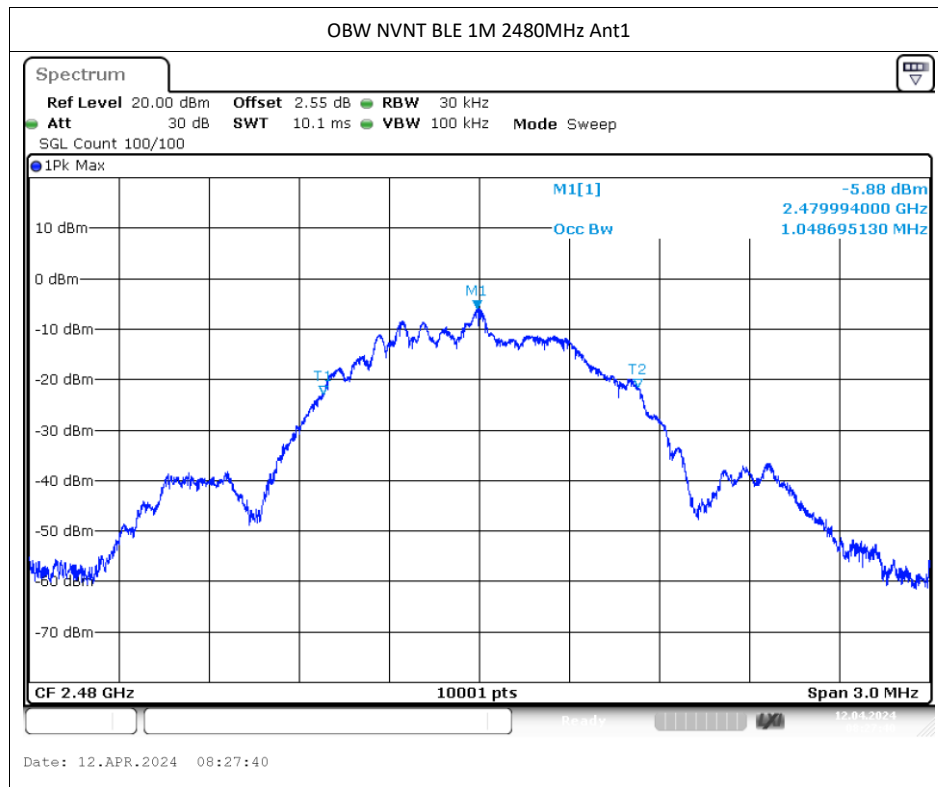




Occupied Channel Bandwidth

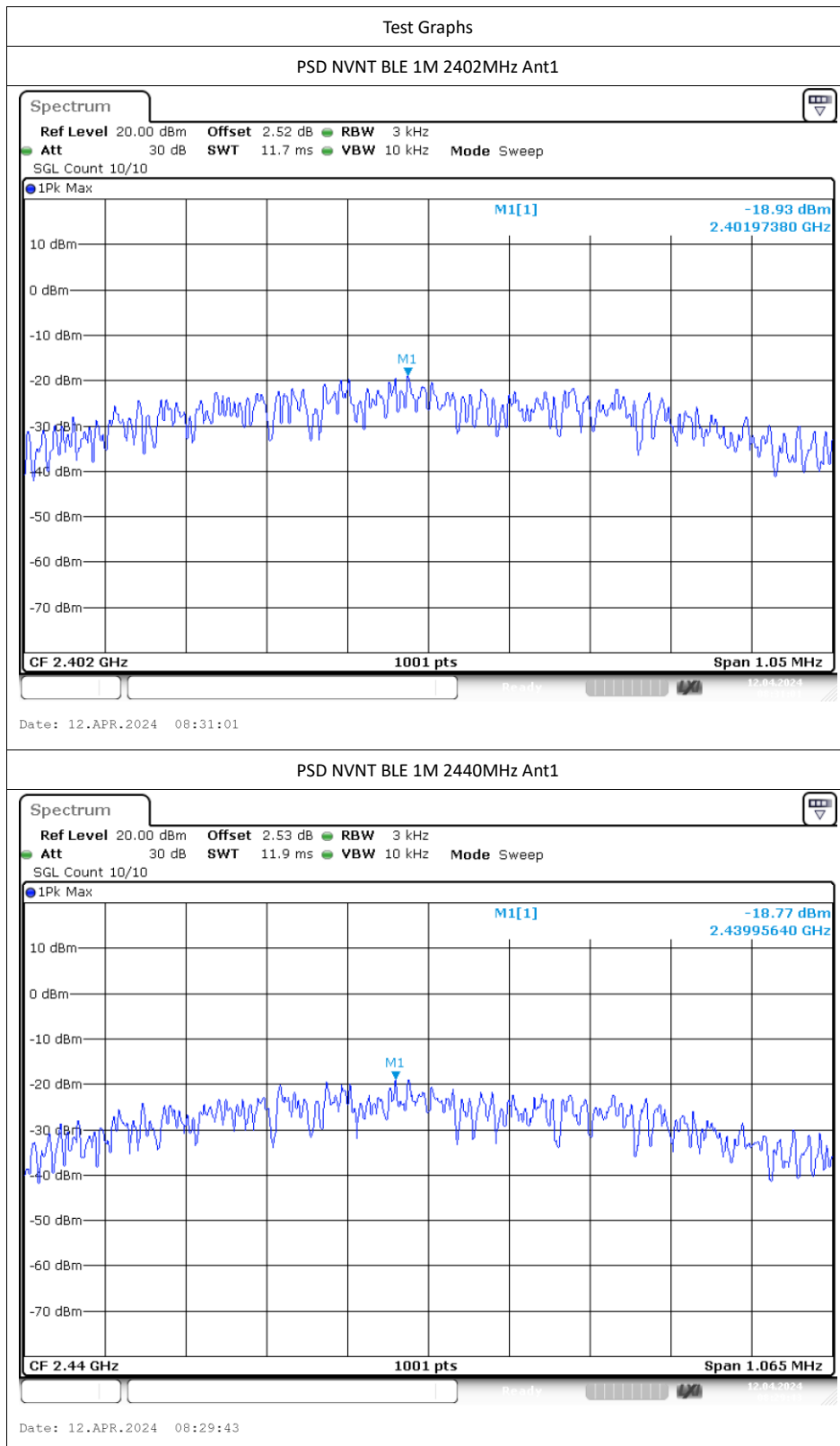
Condition	Mode	Frequency (MHz)	Antenna	99% OBW (MHz)
NVNT	BLE 1M	2402	Ant1	1.041
NVNT	BLE 1M	2440	Ant1	1.046
NVNT	BLE 1M	2480	Ant1	1.049

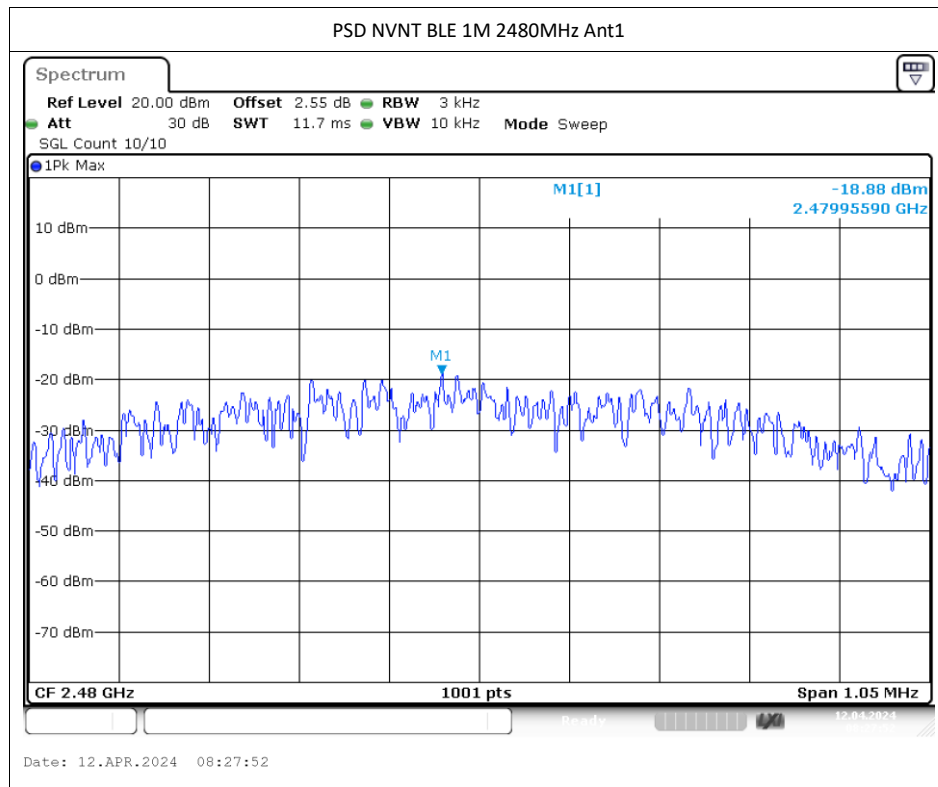




Maximum Power Spectral Density Level

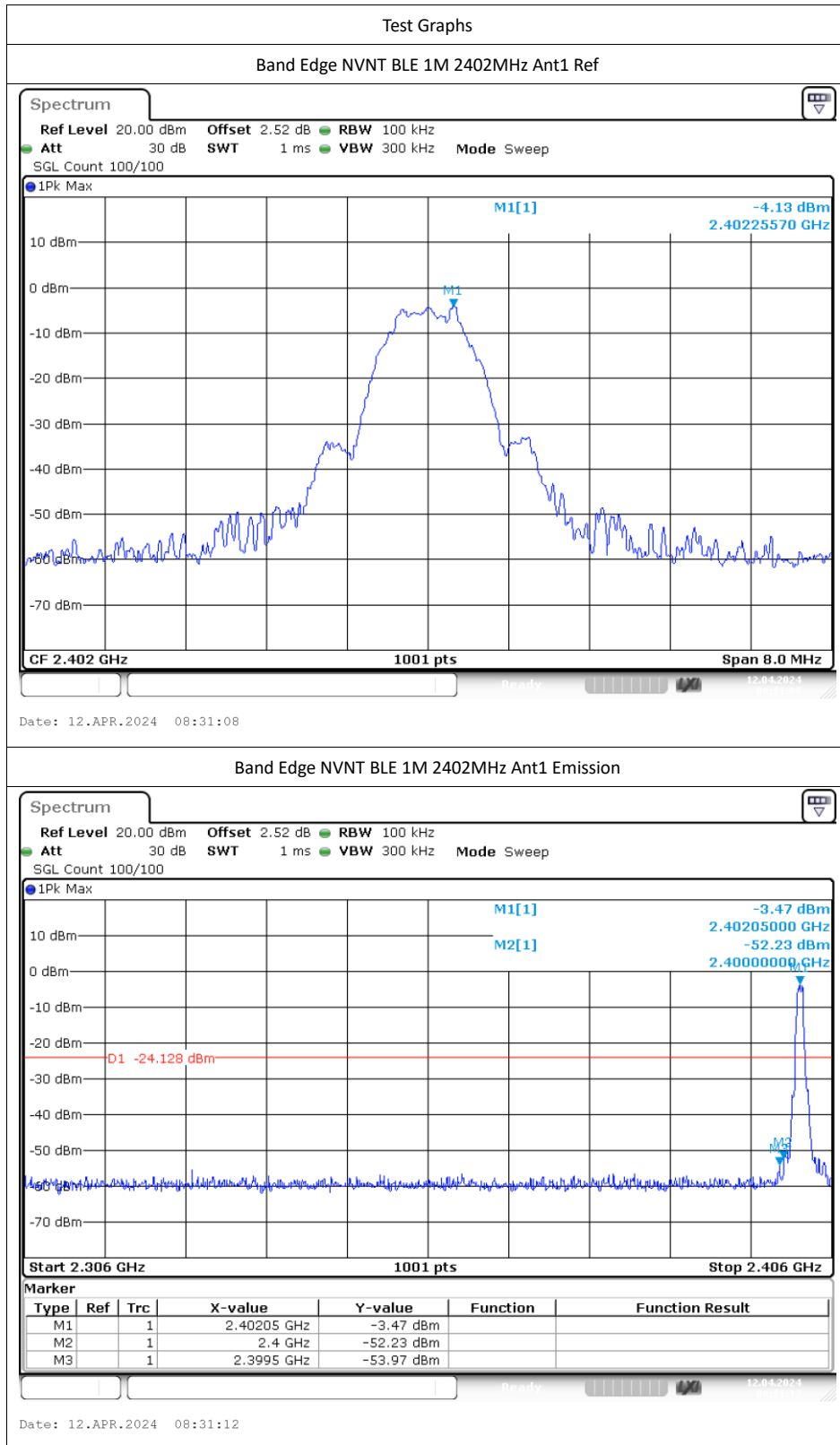
Condition	Mode	Frequency (MHz)	Antenna	Conducted PSD (dBm/3kHz)	Duty Factor (dB)	Total PSD (dBm/3kHz)	Limit (dBm/3kHz)	Verdict
NVNT	BLE 1M	2402	Ant1	-18.93	0	-18.93	8	Pass
NVNT	BLE 1M	2440	Ant1	-18.77	0	-18.77	8	Pass
NVNT	BLE 1M	2480	Ant1	-18.88	0	-18.88	8	Pass

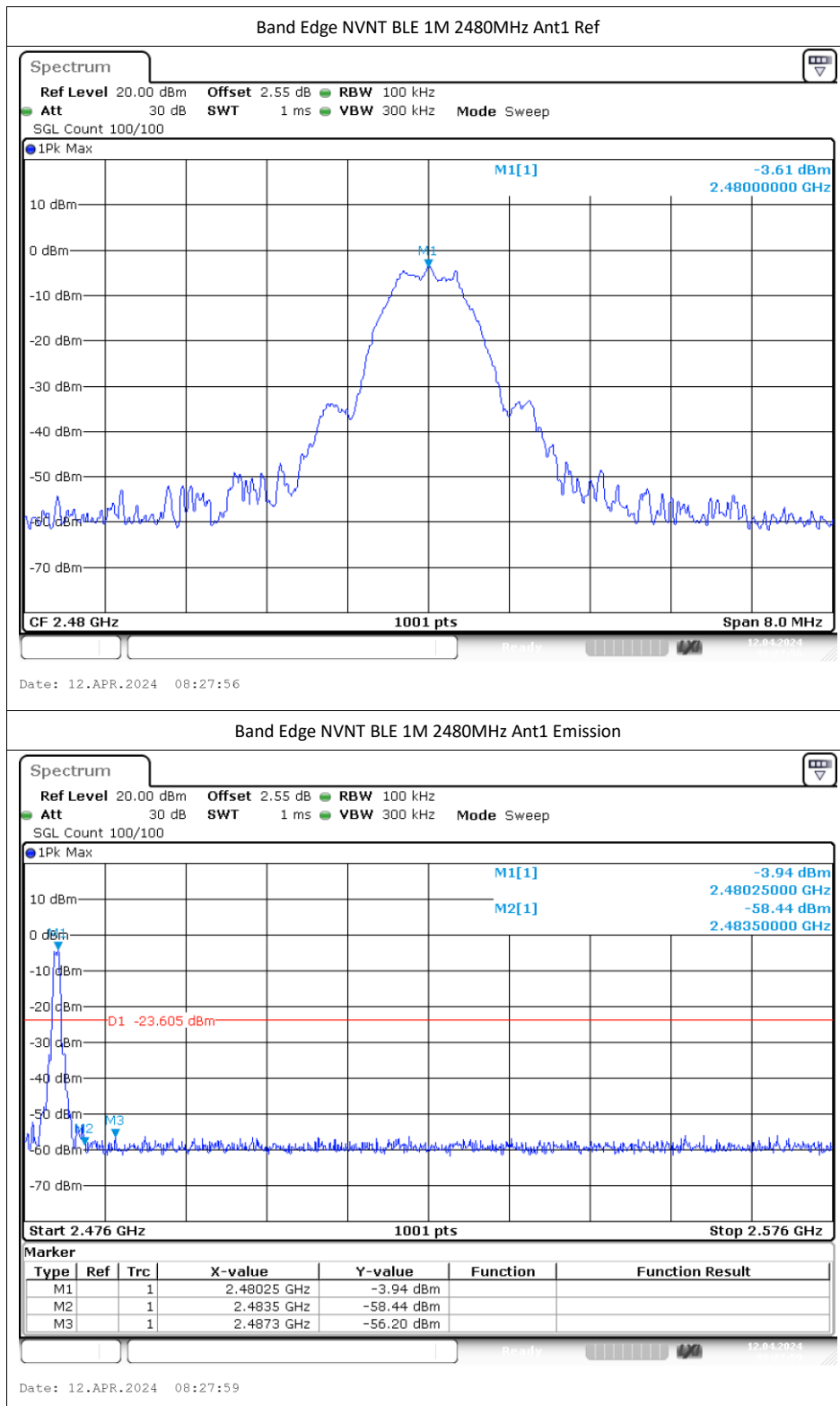




Band Edge

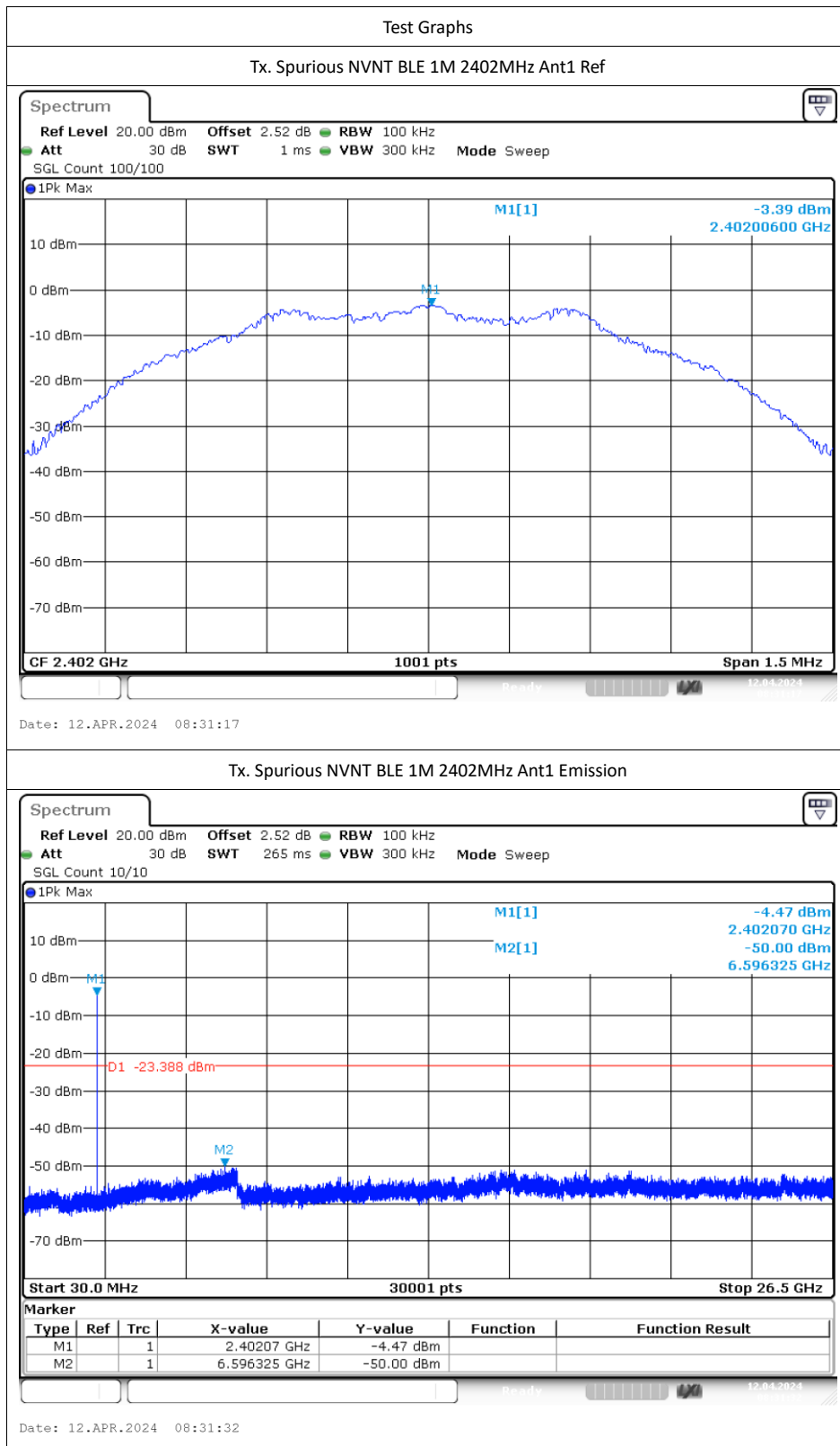
Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	BLE 1M	2402	Ant1	-48.1	-20	Pass
NVNT	BLE 1M	2480	Ant1	-52.59	-20	Pass

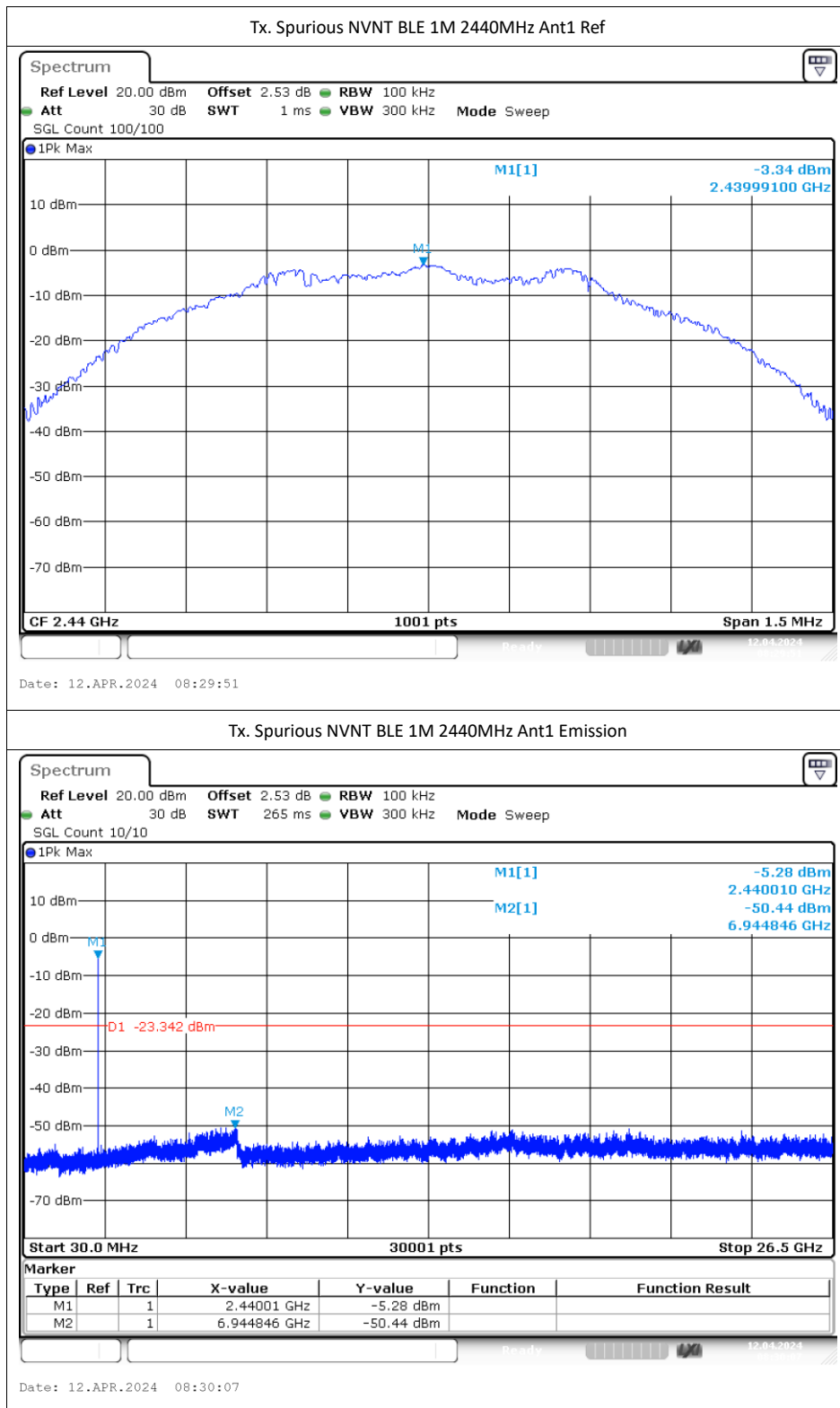


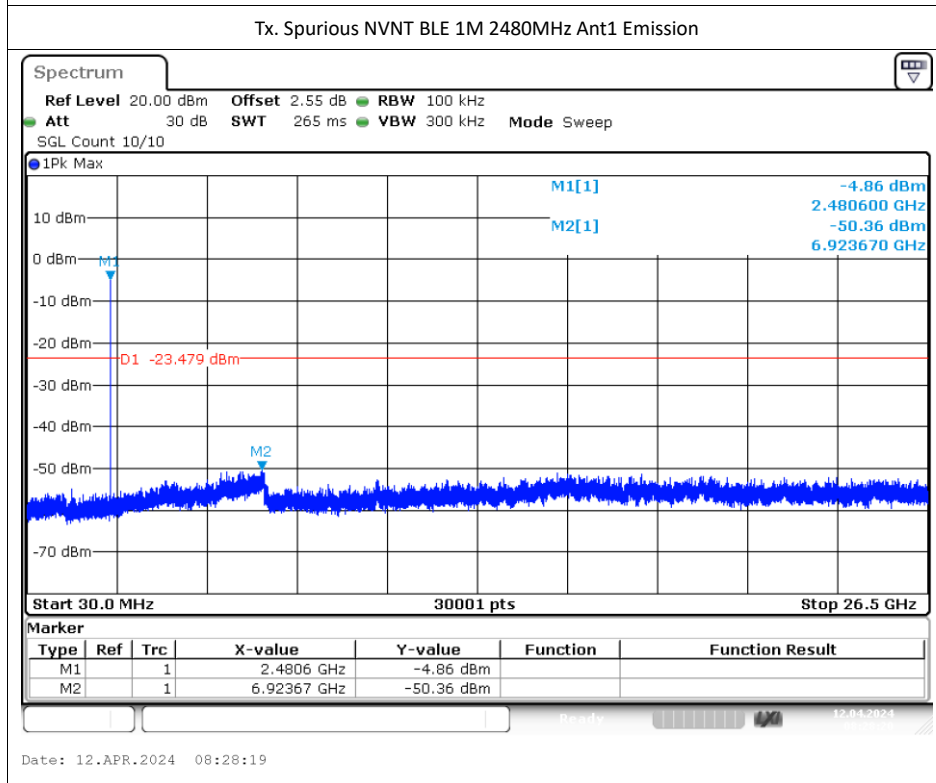
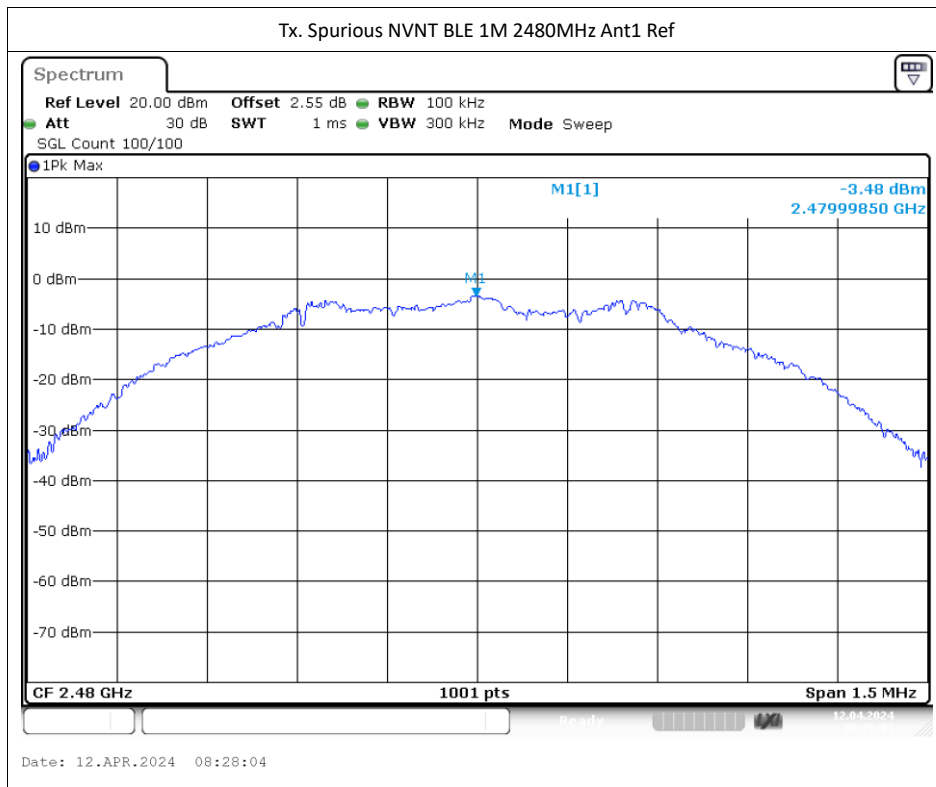


Conducted RF Spurious Emission

Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	BLE 1M	2402	Ant1	-46.61	-20	Pass
NVNT	BLE 1M	2440	Ant1	-47.1	-20	Pass
NVNT	BLE 1M	2480	Ant1	-46.88	-20	Pass





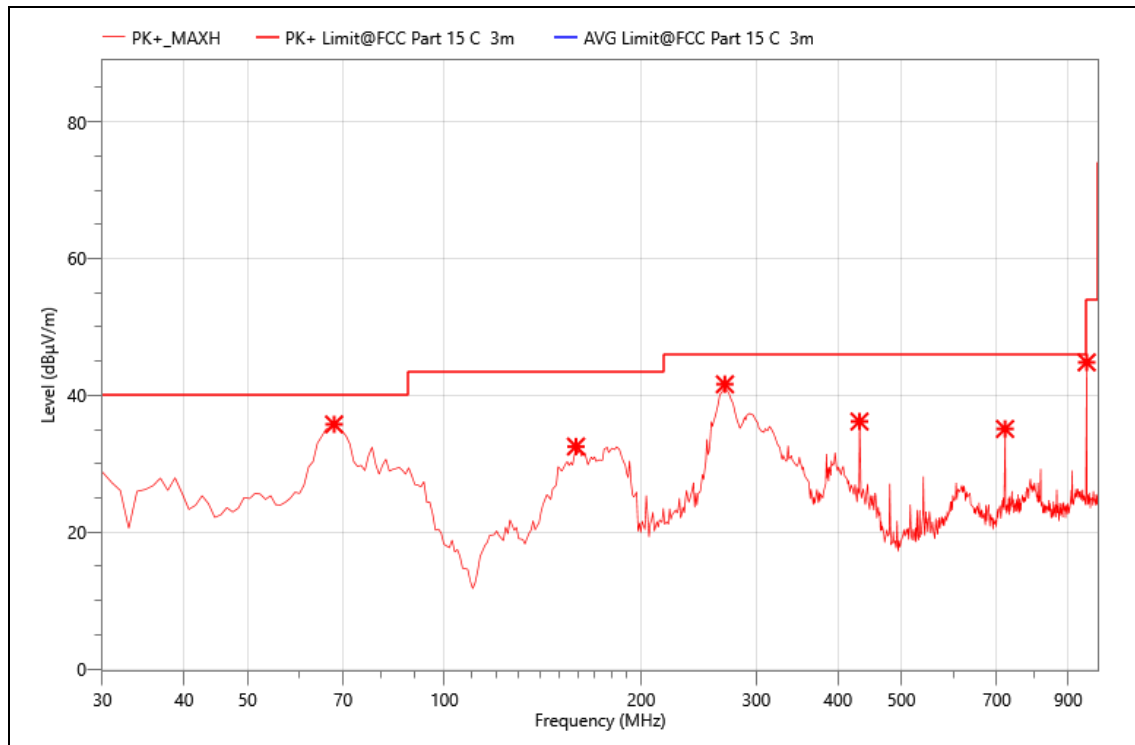


RADIATED TEST RESULTS

The data of the mode (BLE 1M 2402) are recorded in the following pages.

The worst result as bellow:

EUT :	Cabinet lock
MN:	D6PN-10-0B
Mode:	BLE 1M 2402
Power:	DC 12V
TE:	Big
Date	2024/04/11
T/A/P	23.2°C/51%/101Kpa

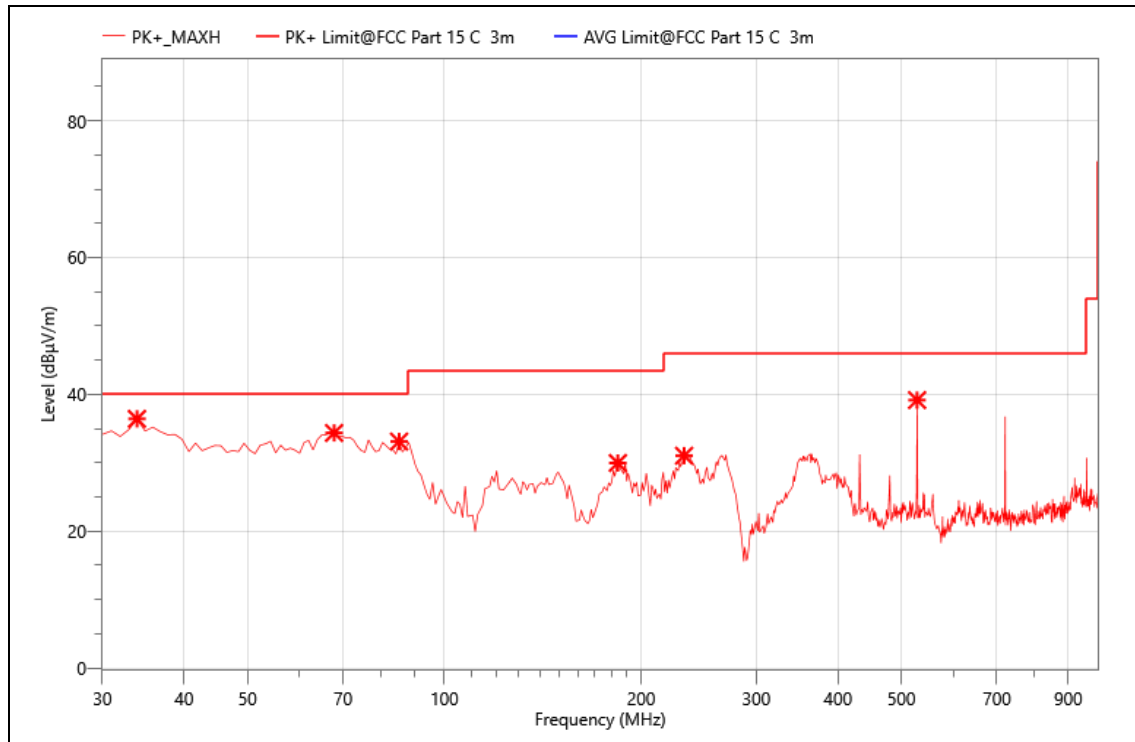


Critical_Freqs

No.	Freq. (MHz)	Reading (dBµV)	Corr. (dB)	Meas. (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Det.	Pol.
1	67.830	60.66	-24.91	35.75	40.00	4.25	PK+	H
2	159.010	54.16	-21.64	32.52	43.50	10.98	PK+	H
3	268.620	60.12	-18.5	41.62	46.00	4.38	PK+	H
4	431.580	50.33	-14.16	36.17	46.00	9.83	PK+	H
5	720.640	42.03	-6.94	35.09	46.00	10.91	PK+	H
6	960.230	48.64	-3.82	44.82	53.90	9.08	PK+	H

Note : [Margin=Limit-Meas.]; [Meas.=Reading+Corr.]

EUT :	Cabinet lock
MN:	D6PN-10-0B
Mode:	BLE 1M 2402
Power:	DC 12V
TE:	Big
Date	2024/04/11
T/A/P	23.2°C/51%/101Kpa

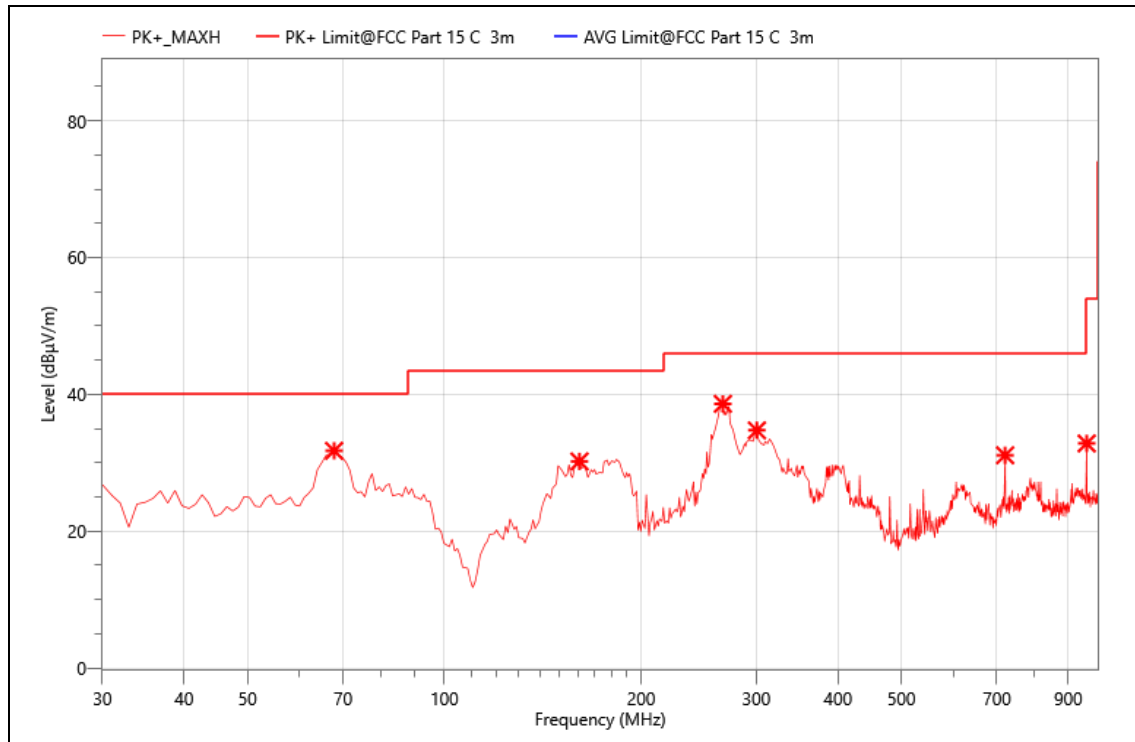


Critical_Freqs

No.	Freq. (MHz)	Reading (dBμV)	Corr. (dB)	Meas. (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Det.	Pol.
1	33.880	52.90	-16.49	36.41	40.00	3.59	PK+	V
2	67.830	59.27	-24.91	34.36	40.00	5.64	PK+	V
3	85.290	58.75	-25.65	33.10	40.00	6.90	PK+	V
4	184.230	52.33	-22.37	29.96	43.50	13.54	PK+	V
5	232.730	51.16	-20.13	31.03	46.00	14.97	PK+	V
6	528.580	49.95	-10.79	39.16	46.00	6.84	PK+	V

Note : [Margin=Limit-Meas.]; [Meas.=Reading+Corr.]

EUT :	Cabinet lock
MN:	D6PN-00-0P
Mode:	BLE 1M 2402
Power:	DC 12V
TE:	Big
Date	2024/04/11
T/A/P	23.2°C/51%/101Kpa

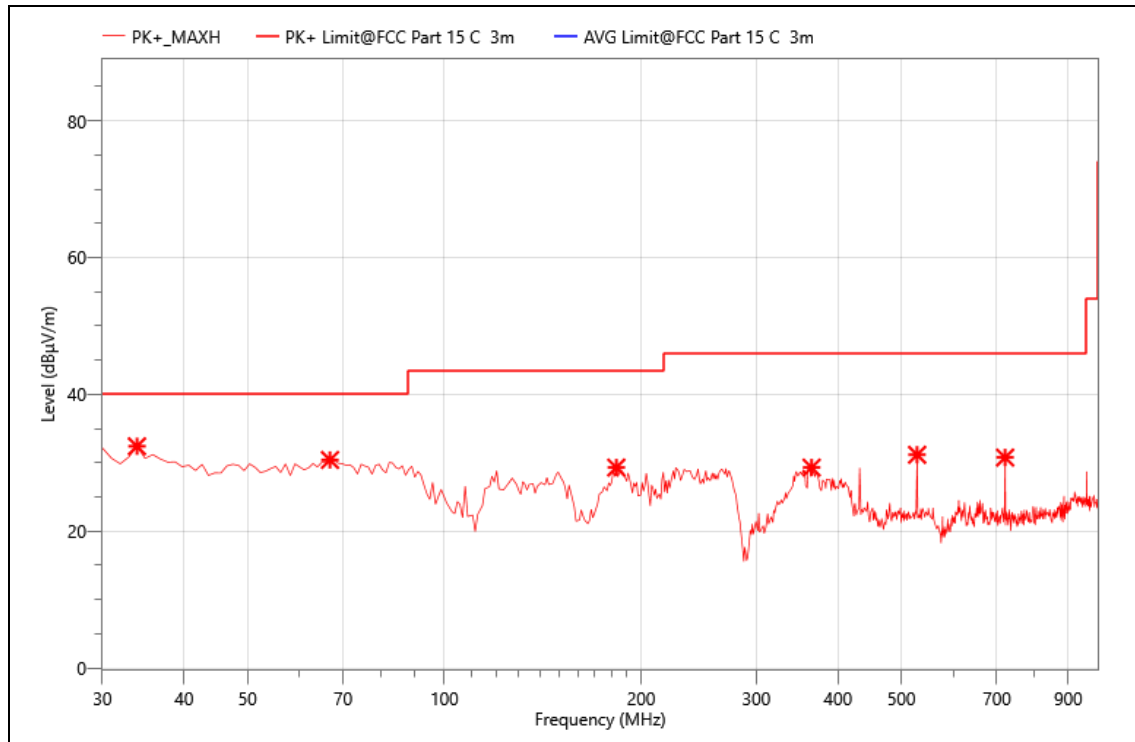


Critical_Freqs

No.	Freq. (MHz)	Reading (dBμV)	Corr. (dB)	Meas. (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Det.	Pol.
1	67.830	56.66	-24.91	31.75	40.00	8.25	PK+	H
2	160.950	52.20	-22	30.20	43.50	13.30	PK+	H
3	266.680	56.96	-18.35	38.61	46.00	7.39	PK+	H
4	300.630	53.57	-18.83	34.74	46.00	11.26	PK+	H
5	720.640	38.03	-6.94	31.09	46.00	14.91	PK+	H
6	960.230	36.64	-3.82	32.82	53.90	21.08	PK+	H

Note : [Margin=Limit-Meas.]; [Meas.=Reading+Corr.]

EUT :	Cabinet lock
MN:	D6PN-00-0P
Mode:	BLE 1M 2402
Power:	DC 12V
TE:	Big
Date	2024/04/11
T/A/P	23.2°C/51%/101Kpa



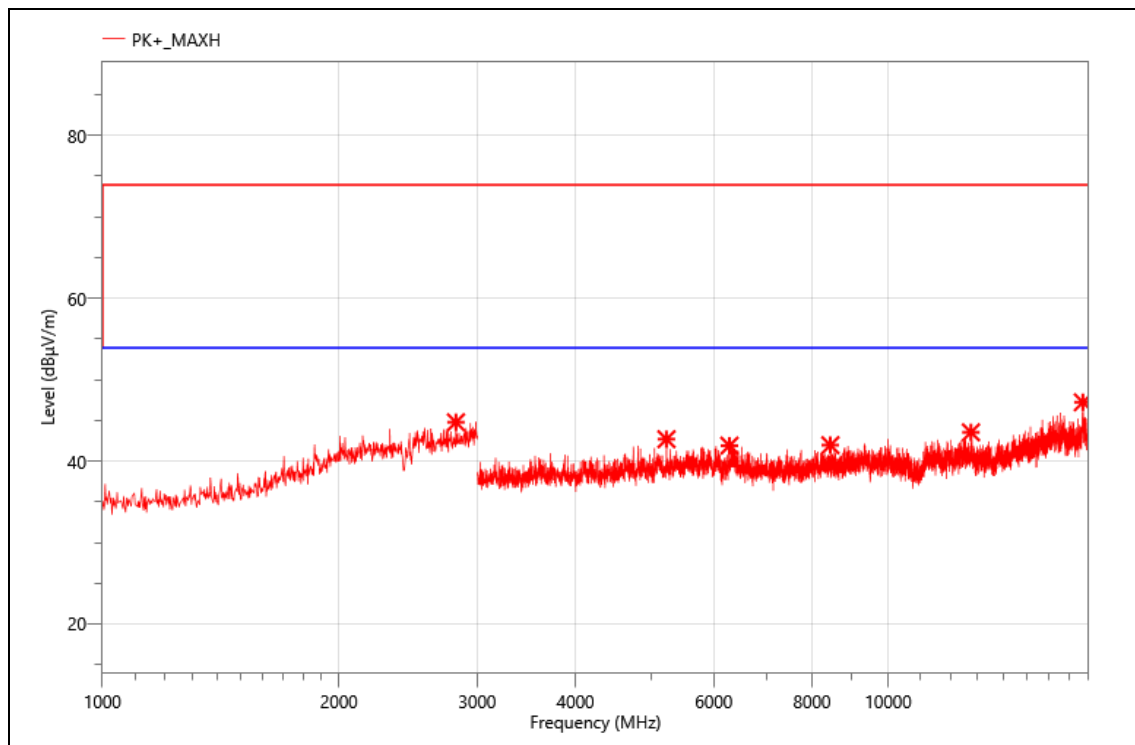
Critical_Freqs

No.	Freq. (MHz)	Reading (dBμV)	Corr. (dB)	Meas. (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Det.	Pol.
1	33.880	48.90	-16.49	32.41	40.00	7.59	PK+	V
2	66.860	55.29	-24.89	30.40	40.00	9.60	PK+	V
3	183.260	51.61	-22.31	29.30	43.50	14.20	PK+	V
4	364.650	44.88	-15.59	29.29	46.00	16.71	PK+	V
5	528.580	41.95	-10.79	31.16	46.00	14.84	PK+	V
6	720.640	37.70	-6.94	30.76	46.00	15.24	PK+	V

Note : [Margin=Limit-Meas.]; [Meas.=Reading+Corr.]

Above 1000MHz~10th Harmonics:

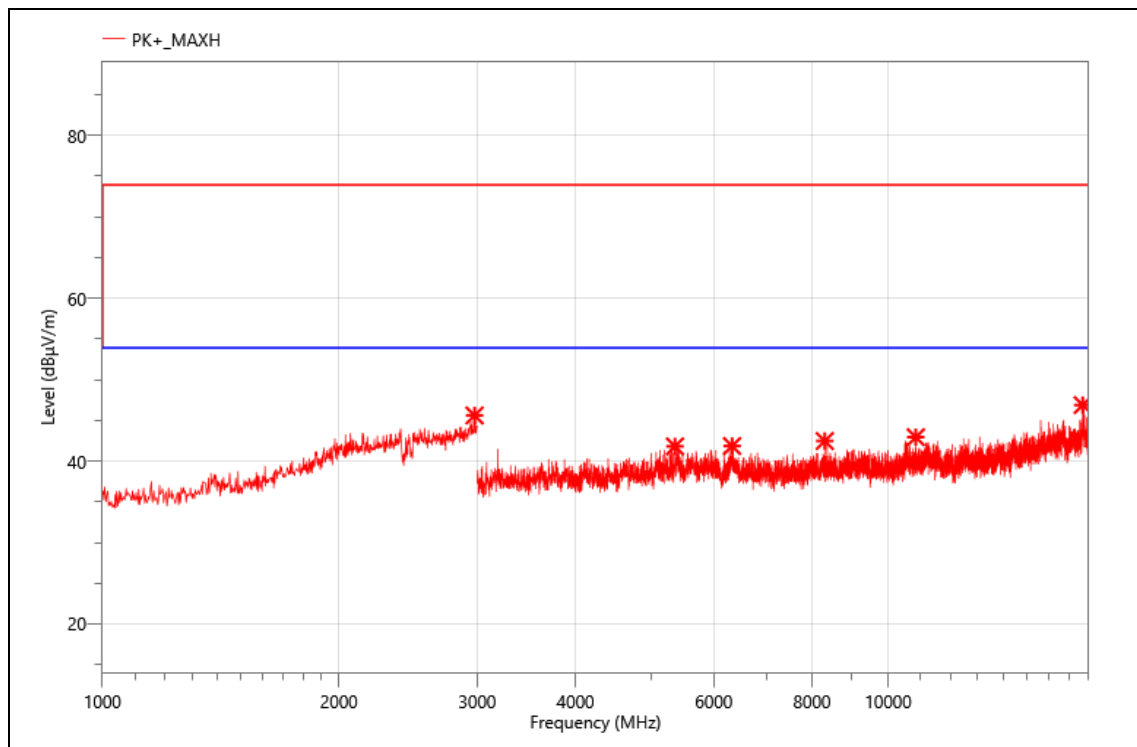
EUT :	Cabinet lock
MN:	D6PN-10-0B
Mode:	BLE 1M 2402
Power:	DC 12V
TE:	Big
Date	2024/04/11
T/A/P	23.2°C/51%/101Kpa



Critical_Freqs

No.	Freq. (MHz)	Reading (dBμV)	Corr. (dB)	Meas. (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Det.	Pol.
1	2818.000	52.85	-8.07	44.78	74.00	29.22	PK+	H
2	5223.000	52.97	-10.27	42.70	74.00	31.30	PK+	H
3	6280.500	50.16	-8.25	41.91	74.00	32.09	PK+	H
4	8442.000	50.01	-8.05	41.96	74.00	32.04	PK+	H
5	12747.000	47.87	-4.33	43.54	74.00	30.46	PK+	H
6	17694.000	47.02	0.21	47.23	74.00	26.77	PK+	H

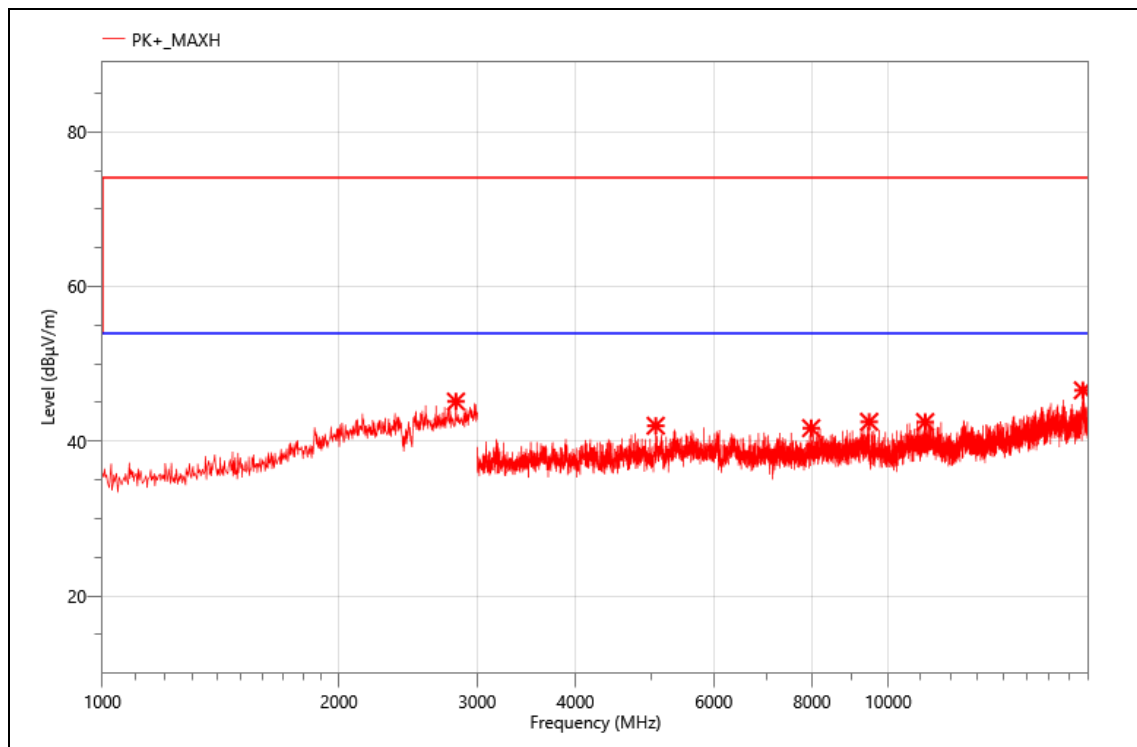
EUT :	Cabinet lock
MN:	D6PN-10-0B
Mode:	BLE 1M 2402
Power:	DC 12V
TE:	Big
Date	2024/04/11
T/A/P	23.2°C/51%/101Kpa



Critical_Freqs

No.	Freq. (MHz)	Reading (dBµV)	Corr. (dB)	Meas. (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Det.	Pol.
1	2976.000	52.67	-7.06	45.61	74.00	28.39	PK+	V
2	5355.000	51.43	-9.62	41.81	74.00	32.19	PK+	V
3	6330.000	49.84	-7.98	41.86	74.00	32.14	PK+	V
4	8305.500	50.35	-7.88	42.47	74.00	31.53	PK+	V
5	10845.000	48.06	-5.12	42.94	74.00	31.06	PK+	V
6	17685.000	46.63	0.26	46.89	74.00	27.11	PK+	V

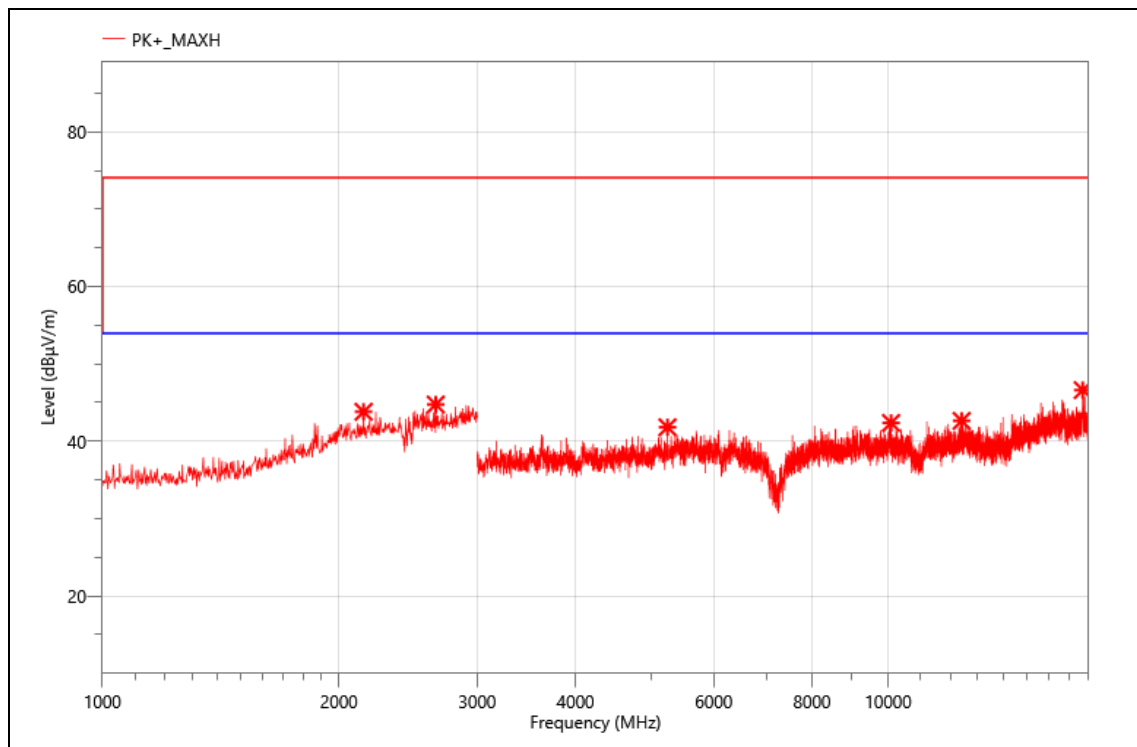
EUT :	Cabinet lock
MN:	D6PN-10-0B
Mode:	BLE 1M 2440
Power:	DC 12V
TE:	Big
Date	2024/04/11
T/A/P	23.2°C/51%/101Kpa



Critical_Freqs

No.	Freq. (MHz)	Reading (dBµV)	Corr. (dB)	Meas. (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Det.	Pol.
1	2818.000	53.20	-8.07	45.13	74.00	28.87	PK+	V
2	5061.000	52.52	-10.52	42.00	74.00	32.00	PK+	V
3	7981.500	49.71	-8.02	41.69	74.00	32.31	PK+	V
4	9459.000	49.11	-6.6	42.51	74.00	31.49	PK+	V
5	11146.500	46.72	-4.24	42.48	74.00	31.52	PK+	V
6	17695.500	46.37	0.21	46.58	74.00	27.42	PK+	V

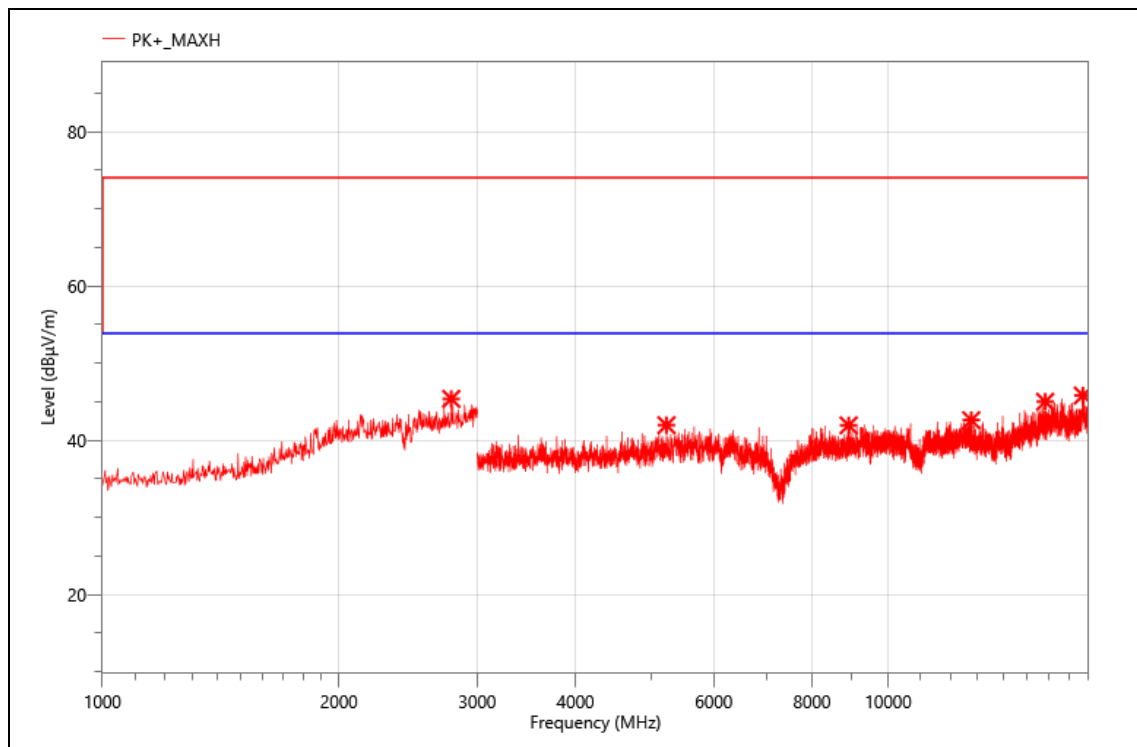
EUT :	Cabinet lock
MN:	D6PN-10-0B
Mode:	BLE 1M 2440
Power:	DC 12V
TE:	Big
Date	2024/04/11
T/A/P	23.2°C/51%/101Kpa



Critical_Freqs

No.	Freq. (MHz)	Reading (dBµV)	Corr. (dB)	Meas. (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Det.	Pol.
1	2150.000	52.86	-9.05	43.81	74.00	30.19	PK+	H
2	2656.000	53.51	-8.76	44.75	74.00	29.25	PK+	H
3	5238.000	51.99	-10.19	41.80	74.00	32.20	PK+	H
4	10087.500	49.08	-6.72	42.36	74.00	31.64	PK+	H
5	12405.000	47.34	-4.71	42.63	74.00	31.37	PK+	H
6	17688.000	46.36	0.25	46.61	74.00	27.39	PK+	H

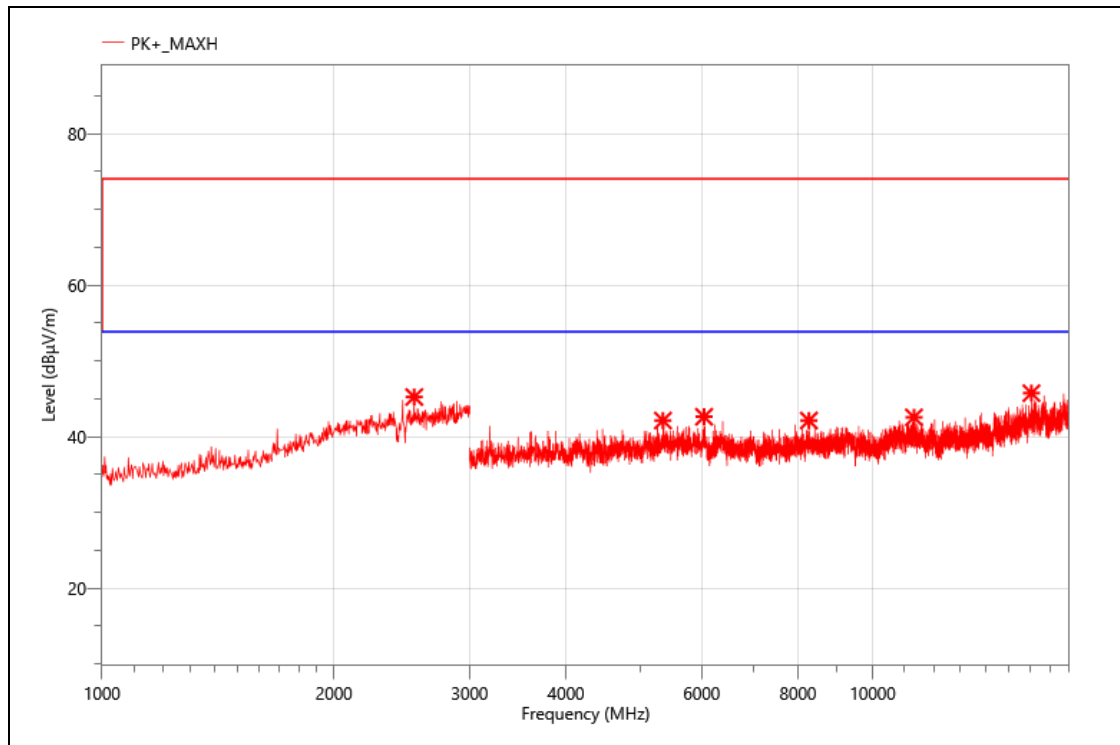
EUT :	Cabinet lock
MN:	D6PN-10-0B
Mode:	BLE 1M 2480
Power:	DC 12V
TE:	Big
Date	2024/04/11
T/A/P	23.2°C/51%/101Kpa



Critical_Freqs

No.	Freq. (MHz)	Reading (dBµV)	Corr. (dB)	Meas. (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Det.	Pol.
1	2780.000	53.76	-8.41	45.35	74.00	28.65	PK+	H
2	5223.000	52.21	-10.27	41.94	74.00	32.06	PK+	H
3	8907.000	49.73	-7.81	41.92	74.00	32.08	PK+	H
4	12757.500	46.96	-4.36	42.60	74.00	31.40	PK+	H
5	15844.500	47.04	-2.06	44.98	74.00	29.02	PK+	H
6	17697.000	45.58	0.2	45.78	74.00	28.22	PK+	H

EUT :	Cabinet lock
MN:	D6PN-10-0B
Mode:	BLE 1M 2480
Power:	DC 12V
TE:	Big
Date	2024/04/11
T/A/P	23.2°C/51%/101Kpa



Critical_Freqs

No.	Freq. (MHz)	Reading (dBµV)	Corr. (dB)	Meas. (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Det.	Pol.
1	2542.000	53.59	-8.37	45.22	74.00	28.78	PK+	V
2	5344.500	51.94	-9.82	42.12	74.00	31.88	PK+	V
3	6043.500	50.84	-8.22	42.62	74.00	31.38	PK+	V
4	8265.000	49.95	-7.83	42.12	74.00	31.88	PK+	V
5	11314.500	47.16	-4.62	42.54	74.00	31.46	PK+	V
6	16068.000	47.42	-1.69	45.73	74.00	28.27	PK+	V

No others harmonics emissions are higher than 20 dB below the limits of 47 CFR Part 15.247.

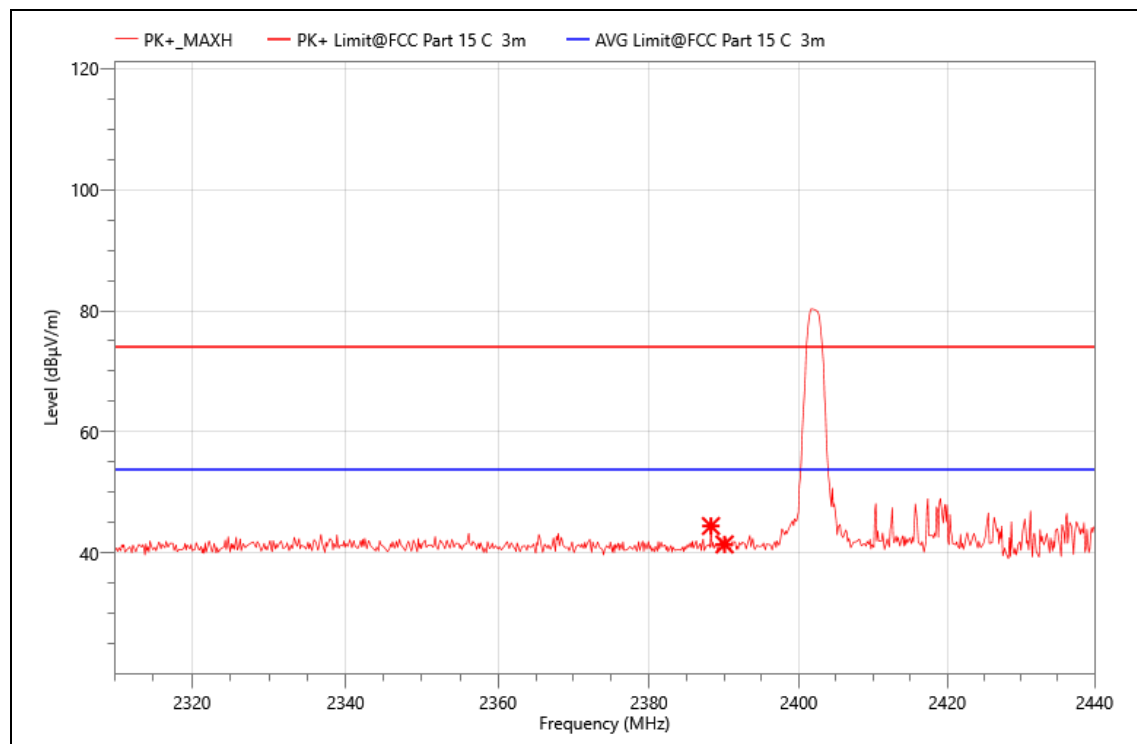
Note:

1. [Margin=Limit-Meas.]; [Meas.=Reading+Corr.]
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Peak: Peak detector.
4. Only the worst data was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.
5. Measuring frequencies from 1GHz to 25GHz.

Band edge:

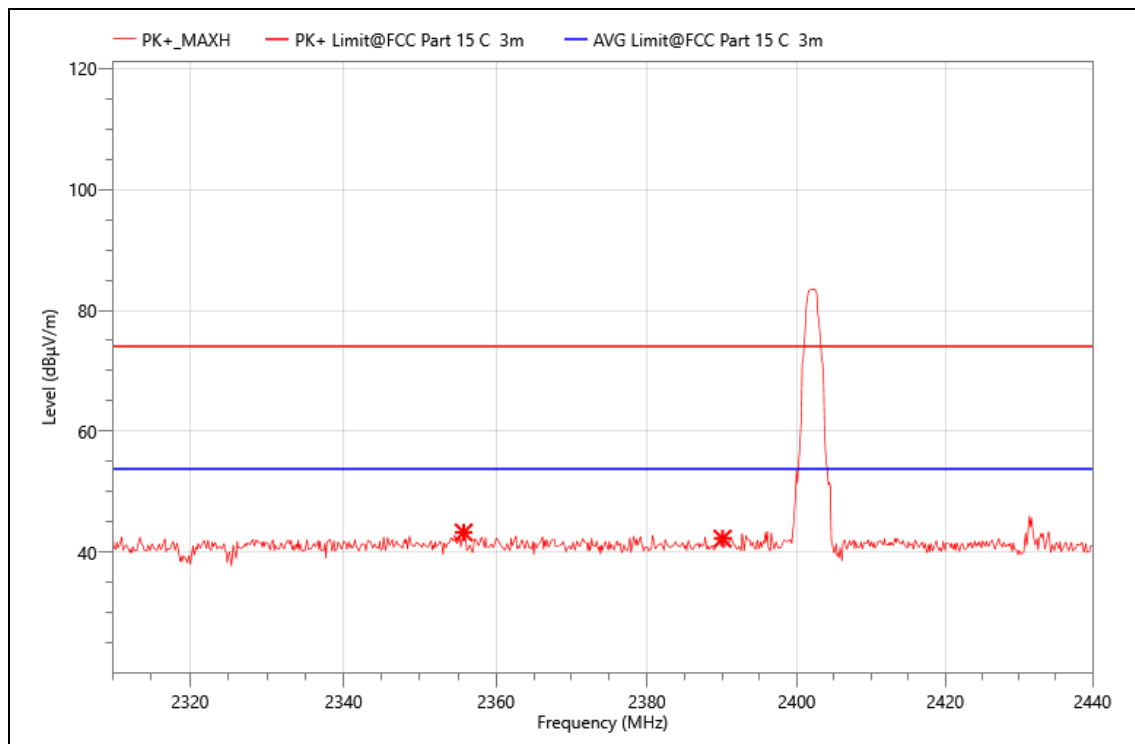
EUT :	Cabinet lock
MN:	D6PN-10-0B
Mode:	BLE 1M 2402
Power:	DC 12V
TE:	Big
Date	2024/04/11
T/A/P	23.2°C/51%/101Kpa



Critical_Freqs

No.	Freq. (MHz)	Reading (dBµV)	Corr. (dB)	Meas. (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Det.	Pol.
1	2388.260	21.78	22.69	44.47	74.00	29.53	PK+	V
2	2390.080	18.72	22.72	41.44	74.00	32.56	PK+	V

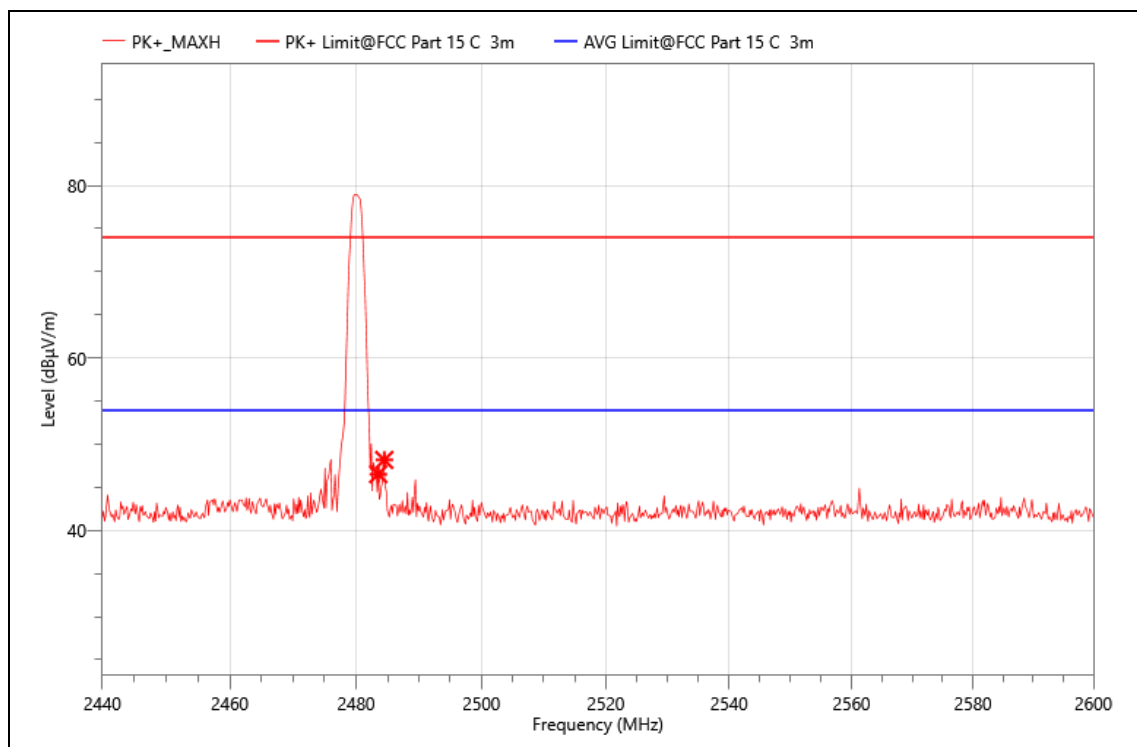
EUT :	Cabinet lock
MN:	D6PN-10-0B
Mode:	BLE 1M 2402
Power:	DC 12V
TE:	Big
Date	2024/04/11
T/A/P	23.2°C/51%/101Kpa



Critical_Freqs

No.	Freq. (MHz)	Reading (dBµV)	Corr. (dB)	Meas. (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Det.	Pol.
1	2355.760	20.52	22.77	43.29	74.00	30.71	PK+	H
2	2390.080	19.56	22.72	42.28	74.00	31.72	PK+	H

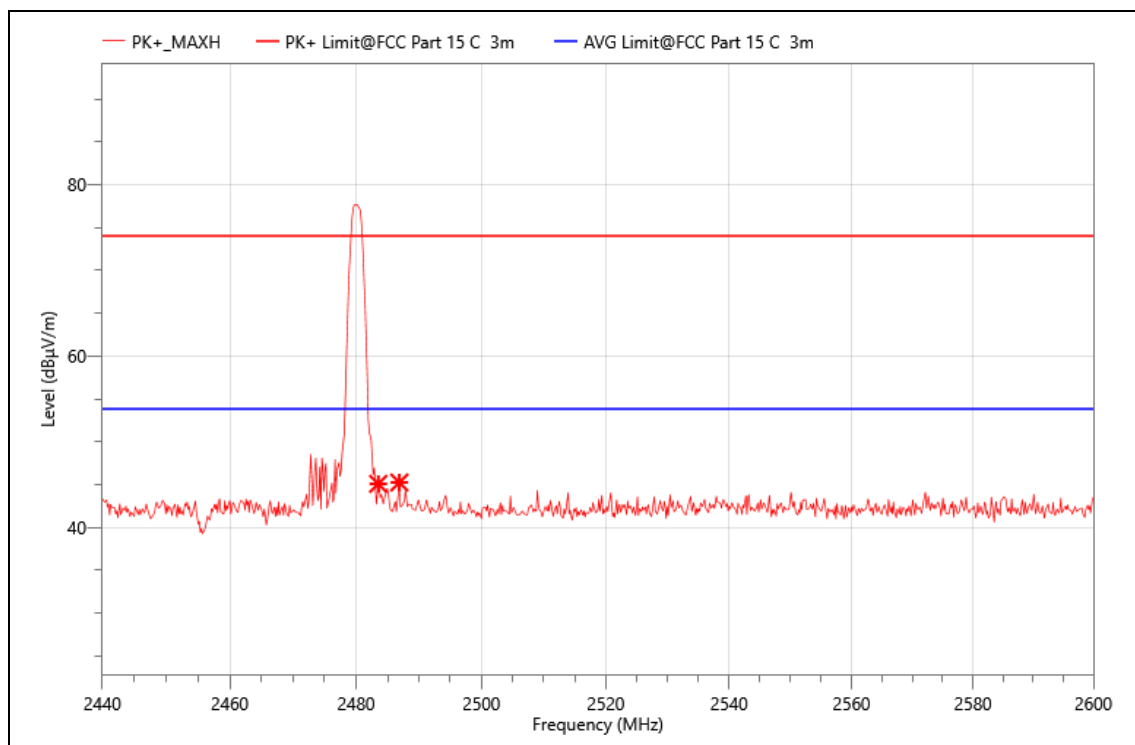
EUT :	Cabinet lock
MN:	D6PN-10-0B
Mode:	BLE 1M 2480
Power:	DC 12V
TE:	Big
Date	2024/04/11
T/A/P	23.2°C/51%/101Kpa



Critical_Freqs

No.	Freq. (MHz)	Reading (dBµV)	Corr. (dB)	Meas. (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Det.	Pol.
1	2483.520	23.36	23.15	46.51	74.00	27.49	PK+	V
2	2484.480	25.02	23.15	48.17	74.00	25.83	PK+	V

EUT :	Cabinet lock
MN:	D6PN-10-0B
Mode:	BLE 1M 2480
Power:	DC 12V
TE:	Big
Date	2024/04/11
T/A/P	23.2°C/51%/101Kpa



Critical_Freqs

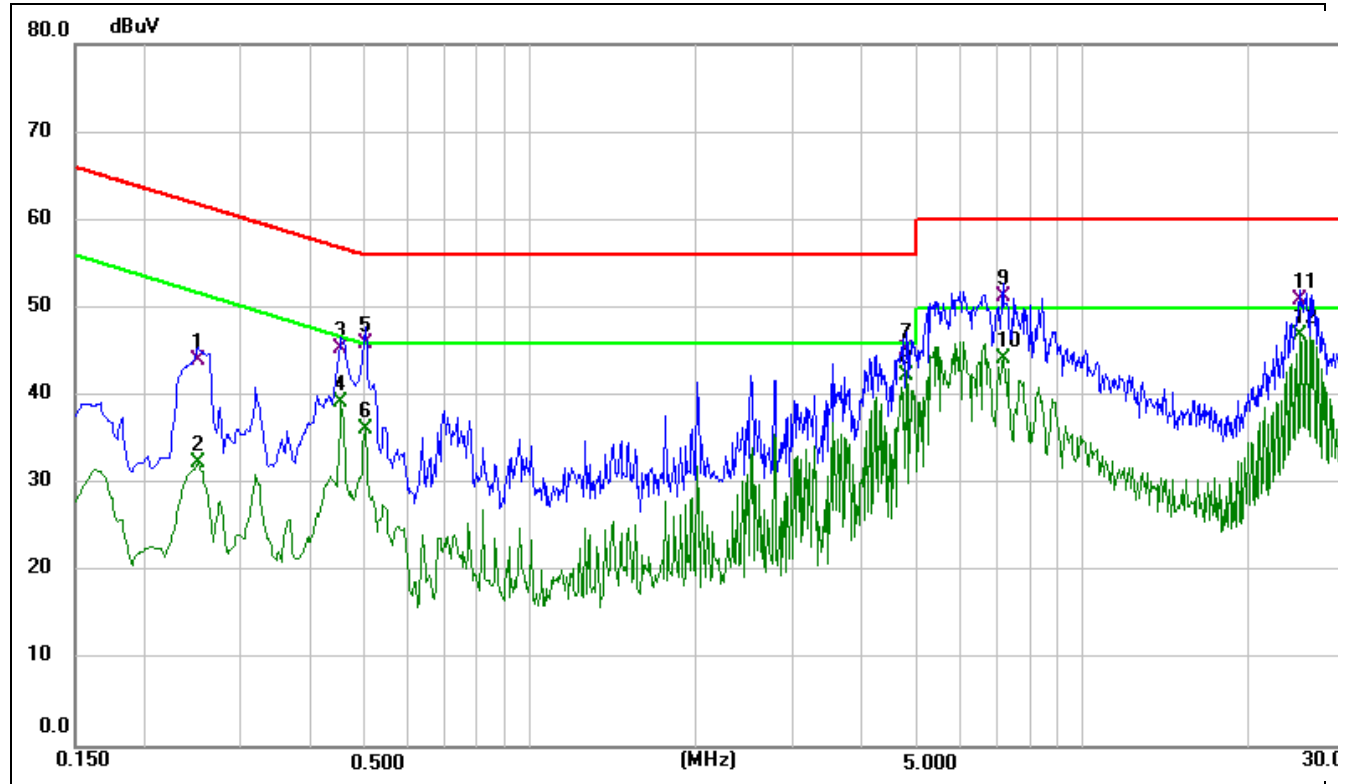
No.	Freq. (MHz)	Reading (dBμV)	Corr. (dB)	Meas. (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Det.	Pol.
1	2483.520	21.93	23.15	45.08	74.00	28.92	PK+	H
2	2486.880	22.10	23.14	45.24	74.00	28.76	PK+	H

Note:

1. [Margin=Limit-Meas.]; [Meas.=Reading+Corr.]
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
3. Peak: Peak detector.
4. Only the worst data was recorded, if it complies with the limit, the other emissions deemed to comply with the limit.

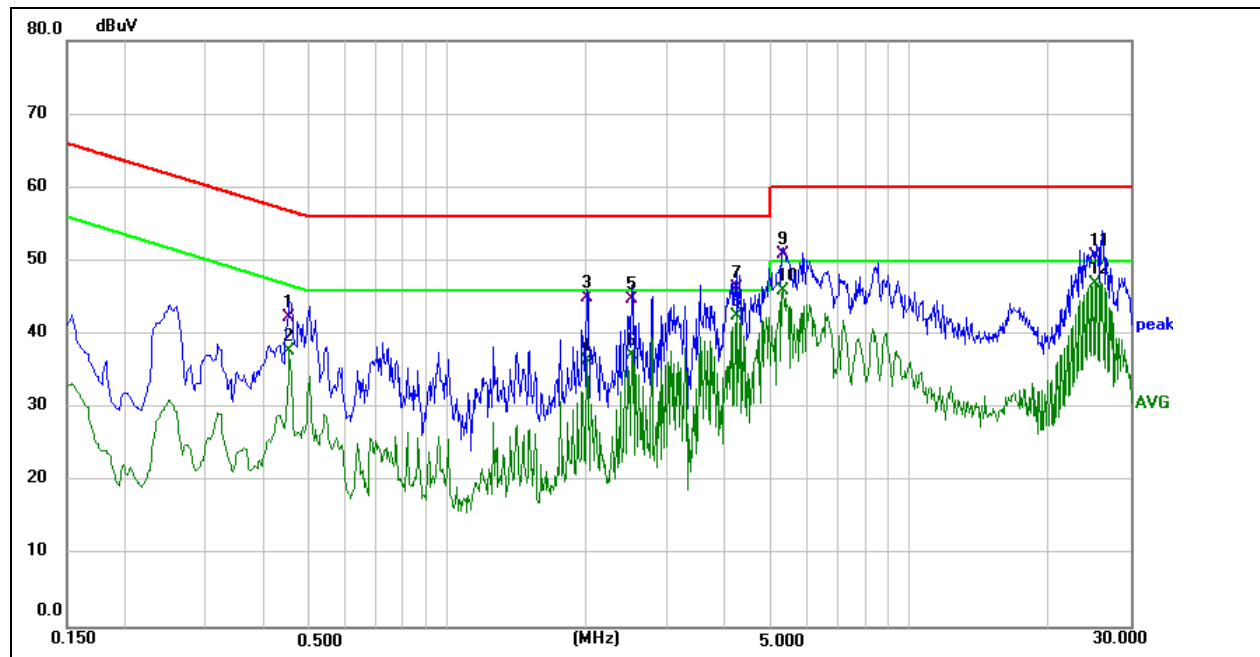
AC POWER LINE CONDUCTED EMISSIONS

LINE L1 RESULTS (Model: D6PN-10-0B, BLE 1M 2402)



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Remark
1	0.2500	33.22	10.78	44.00	61.76	-17.76	QP
2	0.2500	21.50	10.78	32.28	51.76	-19.48	AVG
3	0.4540	34.38	10.92	45.30	56.80	-11.50	QP
4	0.4540	28.34	10.92	39.26	46.80	-7.54	AVG
5	0.5020	35.17	10.83	46.00	56.00	-10.00	QP
6	0.5020	25.42	10.83	36.25	46.00	-9.75	AVG
7	4.7860	34.85	10.25	45.10	56.00	-10.90	QP
8	4.7860	31.95	10.25	42.20	46.00	-3.80	AVG
9	7.1540	40.16	11.14	51.30	60.00	-8.70	QP
10	7.1540	33.06	11.14	44.20	50.00	-5.80	AVG
11	24.6220	35.43	15.37	50.80	60.00	-9.20	QP
12 *	24.6220	31.41	15.37	46.78	50.00	-3.22	AVG

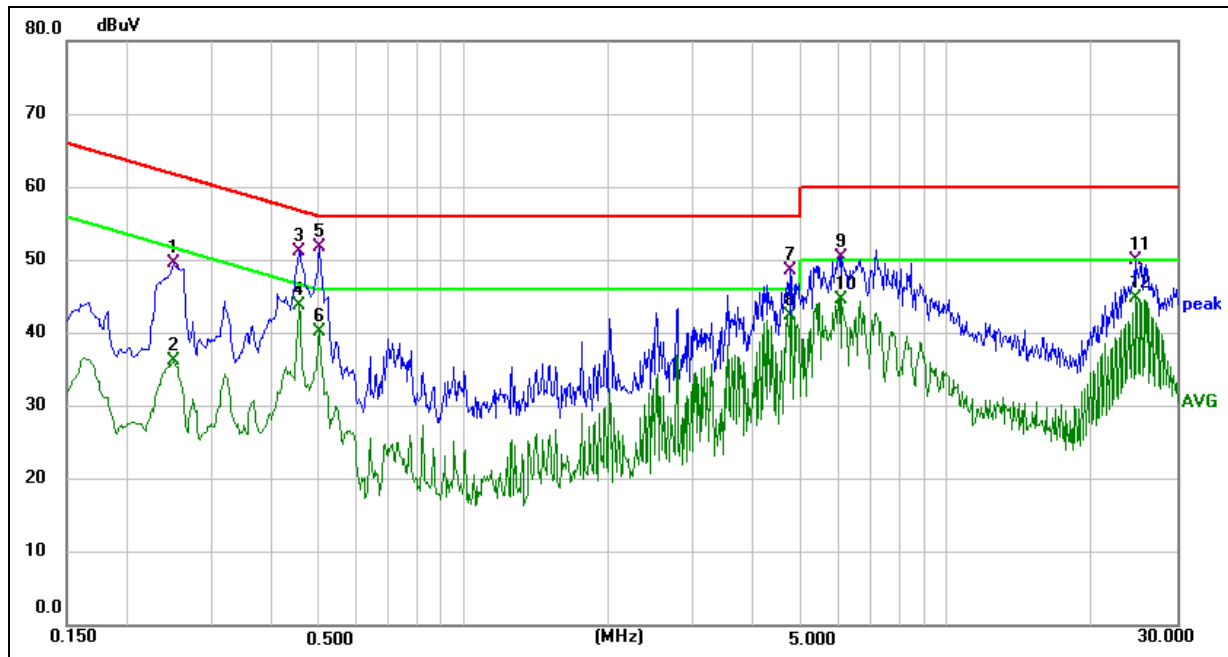
LINE N RESULTS (Model: D6PN-10-0B, BLE 1M 2402)



Phase: N

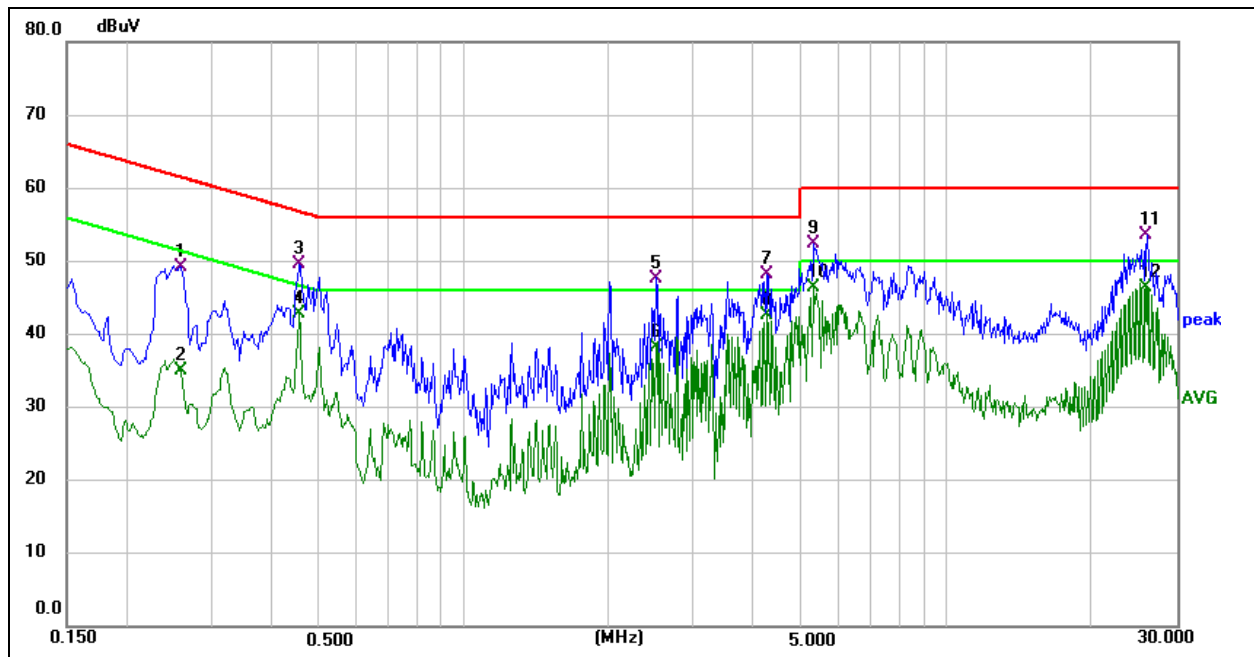
No.	Frequency (MHz)	Reading (dBuV)	Correct (dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Remark
1	0.4540	31.34	10.96	42.30	56.80	-14.50	QP
2	0.4540	26.75	10.96	37.71	46.80	-9.09	AVG
3	2.0100	34.84	10.16	45.00	56.00	-11.00	QP
4	2.0100	26.23	10.16	36.39	46.00	-9.61	AVG
5	2.5100	34.53	10.17	44.70	56.00	-11.30	QP
6	2.5100	27.00	10.17	37.17	46.00	-8.83	AVG
7	4.2380	36.04	10.26	46.30	56.00	-9.70	QP
8	4.2380	32.30	10.26	42.56	46.00	-3.44	AVG
9	5.3300	40.28	10.52	50.80	60.00	-9.20	QP
10	5.3300	35.39	10.52	45.91	50.00	-4.09	AVG
11	25.3779	35.36	15.34	50.70	60.00	-9.30	QP
12 *	25.3779	31.61	15.34	46.95	50.00	-3.05	AVG

LINE L1 RESULTS (Model: D6PN-00-0P, BLE 1M 2402)



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Remark
1	0.2500	38.75	10.78	49.53	61.76	-12.23	QP
2	0.2500	25.50	10.78	36.28	51.76	-15.48	AVG
3	0.4540	40.35	10.92	51.27	56.80	-5.53	QP
4 *	0.4540	32.84	10.92	43.76	46.80	-3.04	AVG
5	0.5020	40.92	10.83	51.75	56.00	-4.25	QP
6	0.5020	29.42	10.83	40.25	46.00	-5.75	AVG
7	4.7380	38.32	10.24	48.56	56.00	-7.44	QP
8	4.7380	32.13	10.24	42.37	46.00	-3.63	AVG
9	6.0620	39.63	10.73	50.36	60.00	-9.64	QP
10	6.0620	33.80	10.73	44.53	50.00	-5.47	AVG
11	24.6220	34.58	15.37	49.95	60.00	-10.05	QP
12	24.6220	29.41	15.37	44.78	50.00	-5.22	AVG

LINE N RESULTS (Model: D6PN-00-0P, BLE 1M 2402)



Phase: N

No.	Frequency (MHz)	Reading (dBuV)	Correct (dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Remark
1	0.2580	38.59	10.66	49.25	61.50	-12.25	QP
2	0.2580	24.27	10.66	34.93	51.50	-16.57	AVG
3	0.4540	38.67	10.96	49.63	56.80	-7.17	QP
4	0.4540	31.75	10.96	42.71	46.80	-4.09	AVG
5	2.5100	37.51	10.17	47.68	56.00	-8.32	QP
6	2.5100	28.00	10.17	38.17	46.00	-7.83	AVG
7	4.2380	37.96	10.26	48.22	56.00	-7.78	QP
8 *	4.2380	32.30	10.26	42.56	46.00	-3.44	AVG
9	5.3300	41.86	10.52	52.38	60.00	-7.62	QP
10	5.3300	35.89	10.52	46.41	50.00	-3.59	AVG
11	26.1299	38.24	15.37	53.61	60.00	-6.39	QP
12	26.1299	31.01	15.37	46.38	50.00	-3.62	AVG

Note: 1. Result = Reading +Correct Factor.

2. If QP Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. All test modes had been tested, only the worst data record in the report.