

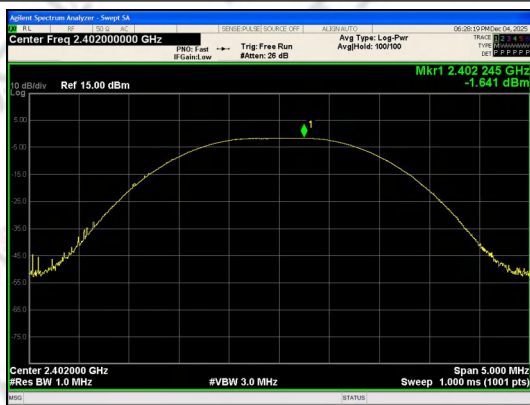
Appendix B of data

B1.Maximum Peak Conducted Output Power

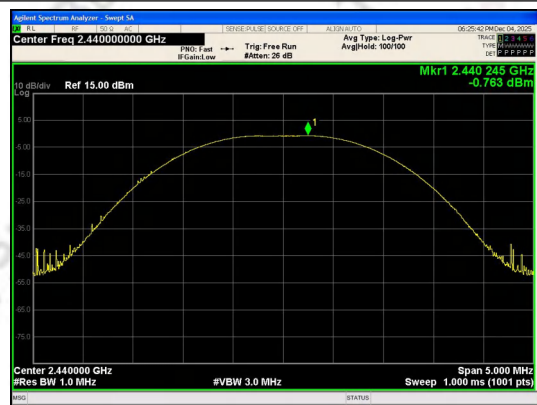
Test Result

Mode	Channel	Peak Output Power (dBm)	Peak Output Power (mW)	Limit (dBm)	Result
BLE 1M	0	-1.64	0.69	≤30	PASS
	19	-0.76	0.84	≤30	PASS
	39	-2.59	0.55	≤30	PASS
BLE 2M	0	-1.62	0.69	≤30	PASS
	19	-0.69	0.85	≤30	PASS
	39	-2.53	0.56	≤30	PASS

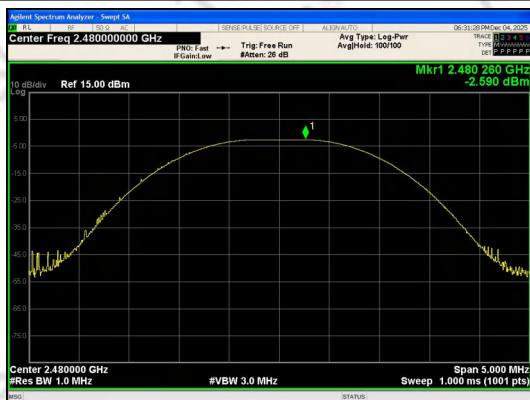
Test Graphs



Peak Output Power
BLE 1M_Channel 0



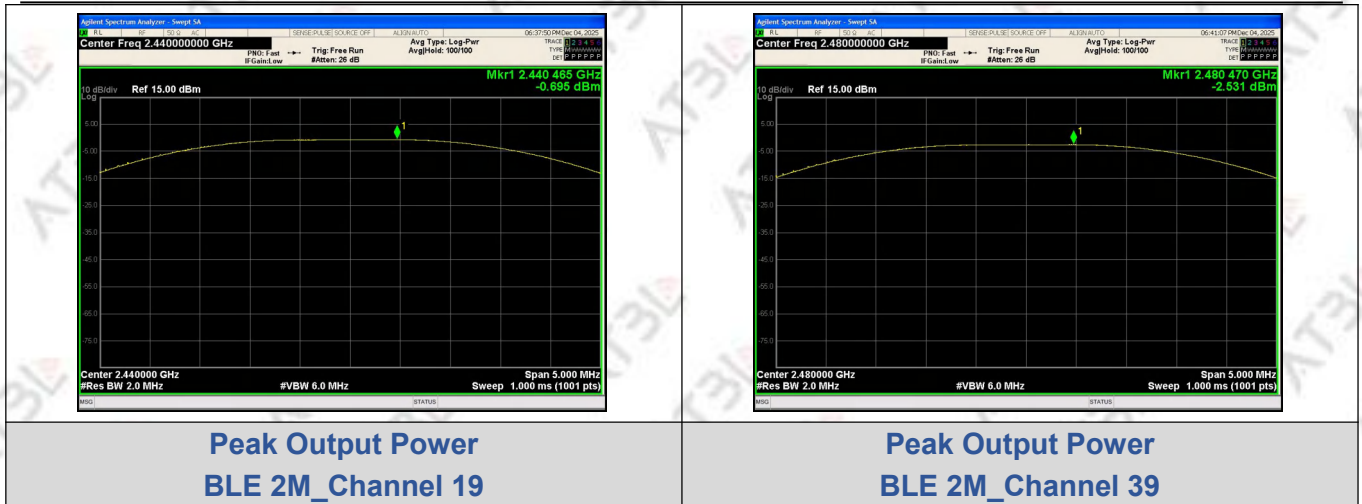
Peak Output Power
BLE 1M_Channel 19



Peak Output Power
BLE 1M_Channel 39



Peak Output Power
BLE 2M_Channel 0

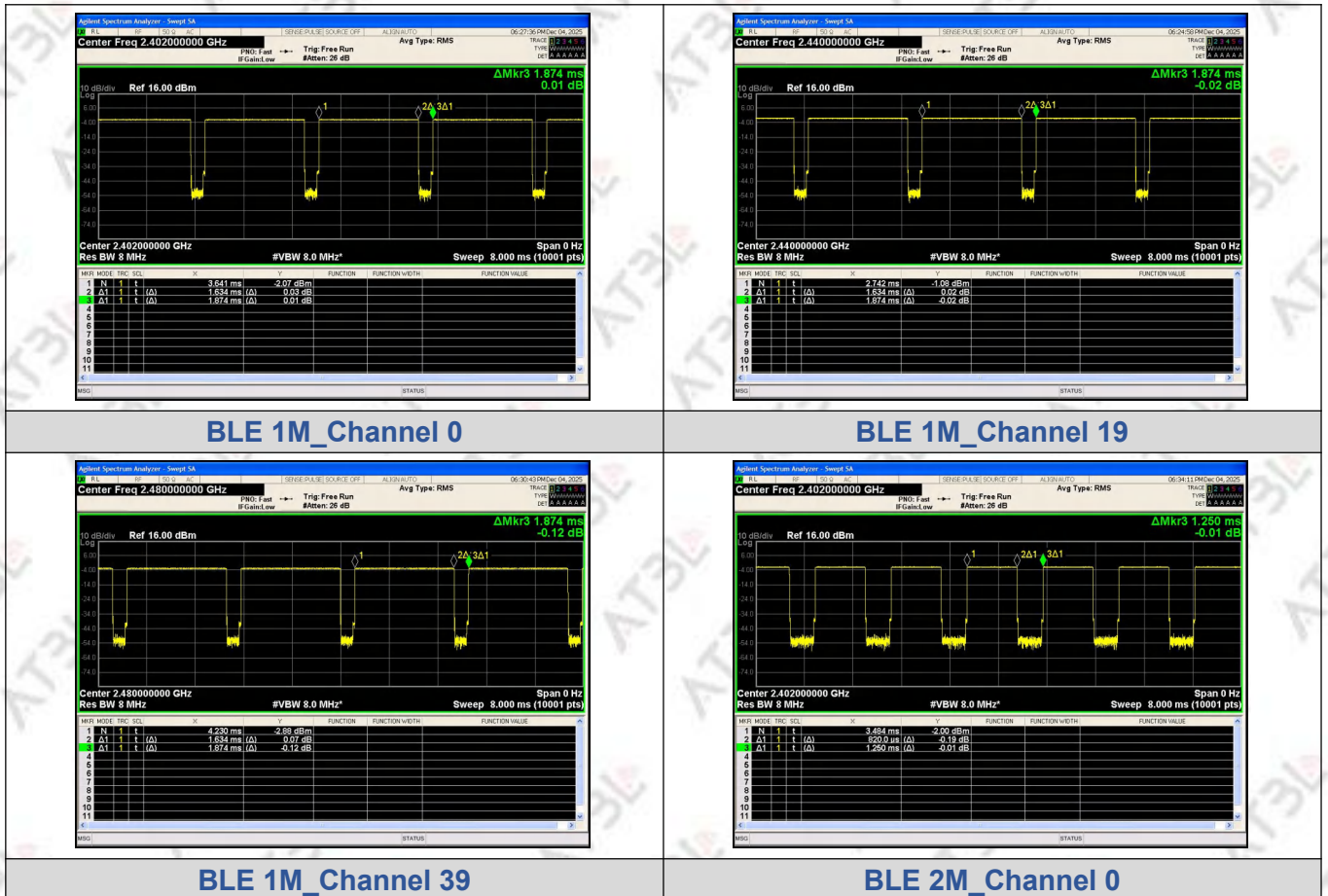


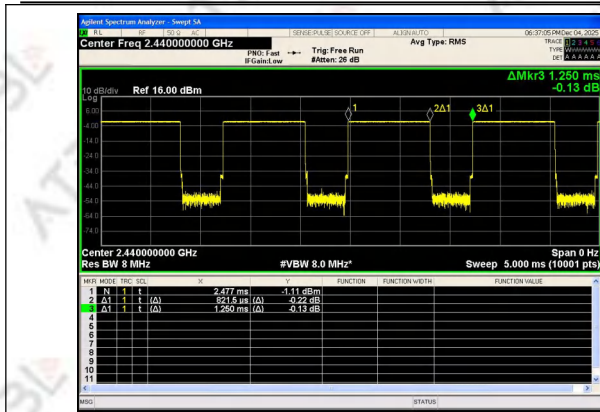
B2.Duty Cycle

Test Result

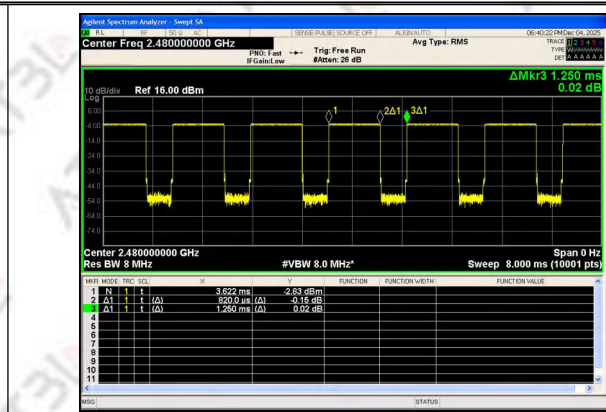
Mode	Channel	On Time (ms)	Period (ms)	Duty Cycle (%)	Duty Cycle (linear)	Duty Cycle Factor (dB)
BLE 1M	0	1.634	1.874	87.15	0.8715	0.5973
	19	1.634	1.874	87.15	0.8715	0.5973
	39	1.634	1.874	87.20	0.8720	0.5948
BLE 2M	0	0.820	1.250	65.62	0.6562	1.8296
	19	0.822	1.250	65.75	0.6575	1.821
	39	0.820	1.250	65.62	0.6562	1.8296

Test Graphs





BLE 2M_Channel 19



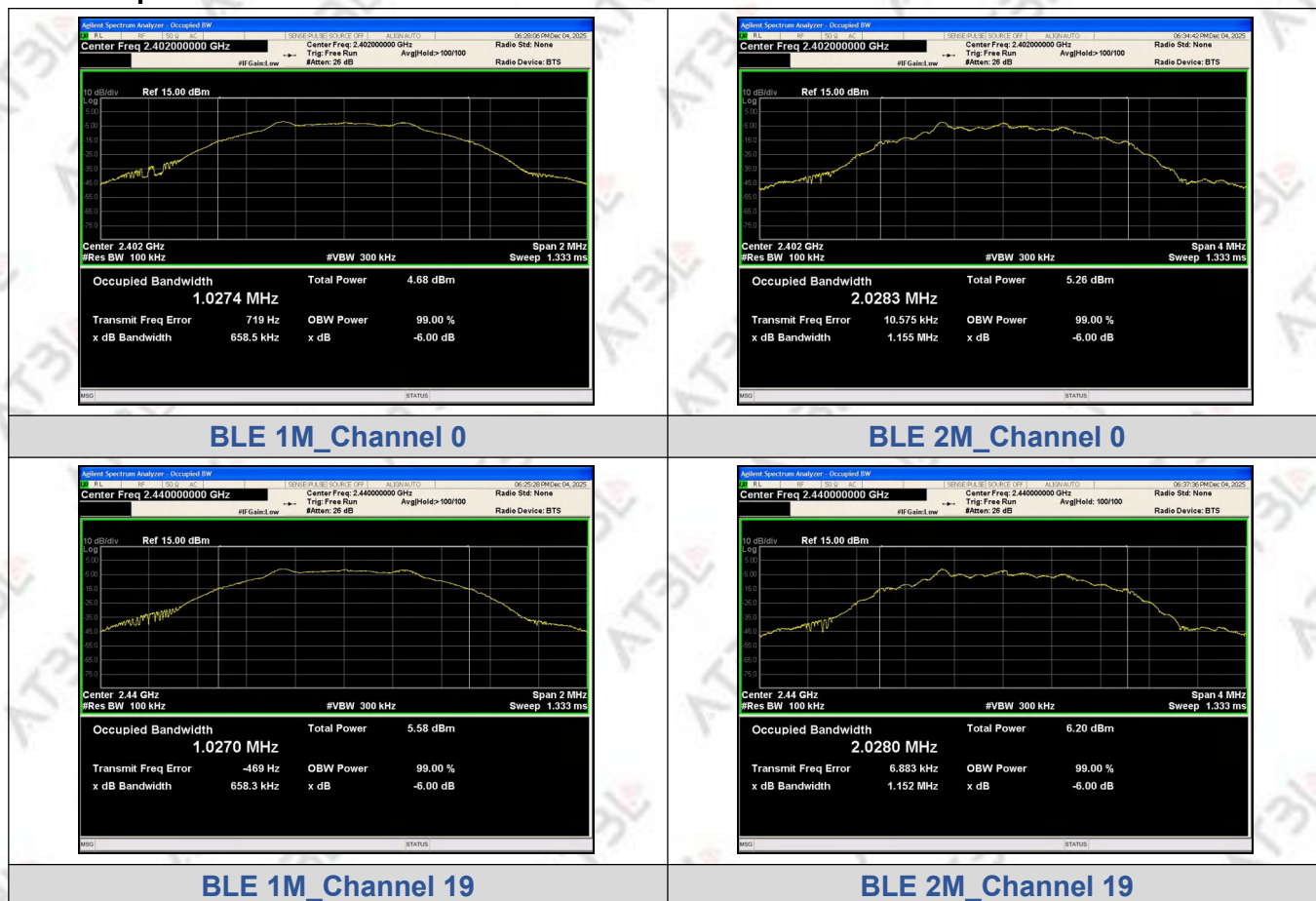
BLE 2M_Channel 39

B3.6dB Bandwidth and 99% Bandwidth

6dB Bandwidth Test Result

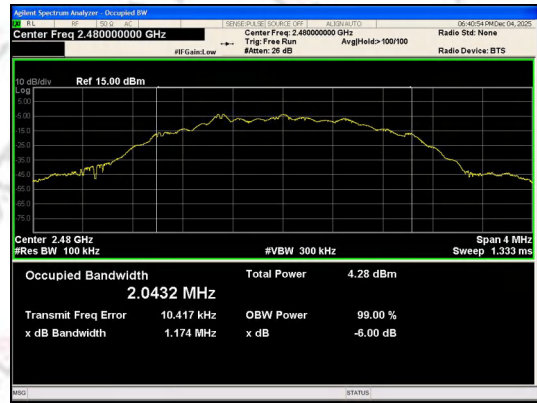
Mode	Channel	Center Frequency (MHz)	6 dB Bandwidth (MHz)	Limit (MHz)	Result
BLE 1M	0	2402	0.6585	≥0.5	PASS
	19	2440	0.6583		PASS
	39	2480	0.6591		PASS
BLE 2M	0	2402	1.155		PASS
	19	2440	1.152		PASS
	39	2480	1.174		PASS

Test Graphs





BLE 1M_Channel 39

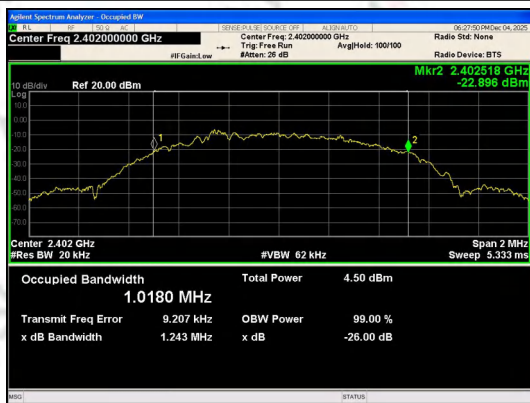


BLE 2M_Channel 39

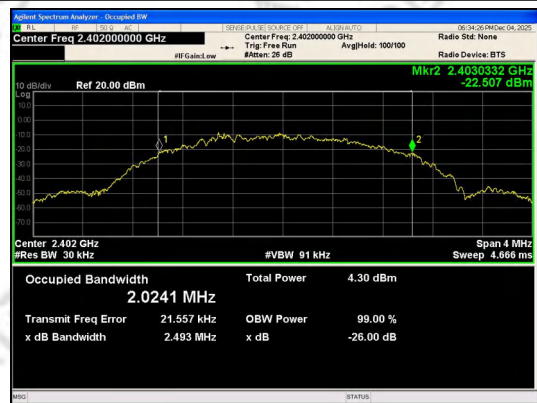
99%dB Bandwidth Test Result

Mode	Channel	Center Frequency (MHz)	99% BW (MHz)
BLE 1M	0	2402	1.0180
	19	2440	1.0161
	39	2480	1.0196
BLE 2M	0	2402	2.0241
	19	2440	2.0246
	39	2480	2.0273

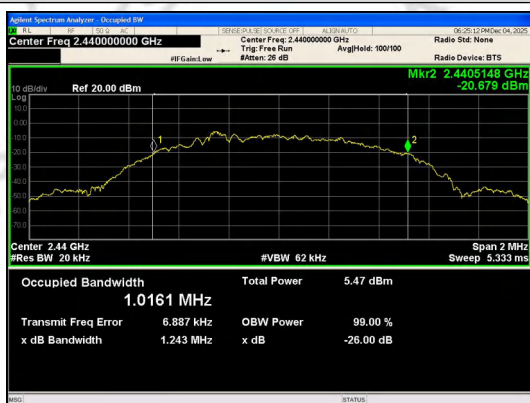
Test Graphs



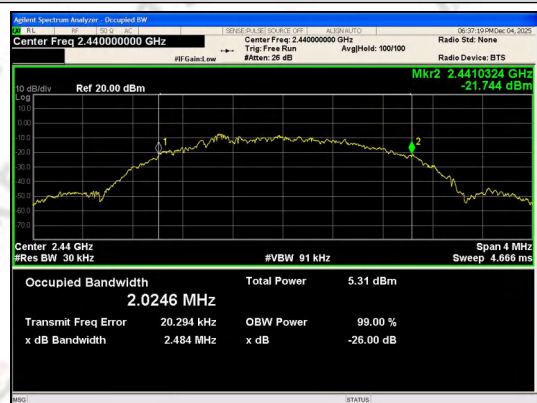
BLE 1M_Channel 0



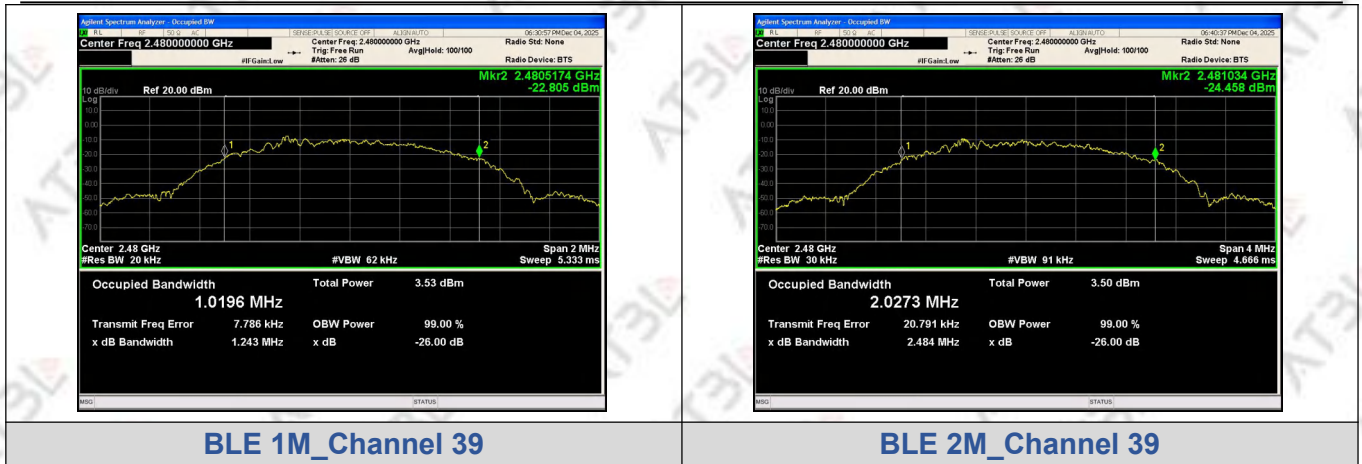
BLE 2M_Channel 0



BLE 1M_Channel 19



BLE 2M_Channel 19

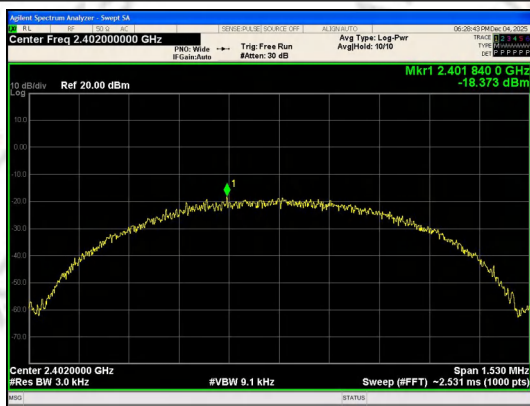


B4.Power Spectral Density

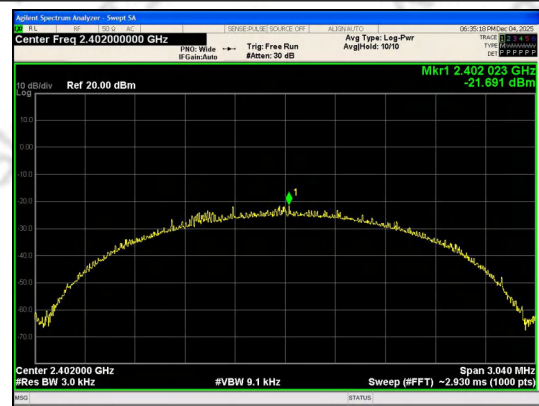
Test Result

Mode	Channel	PSD (dBm/3kHz)	Limit (dBm/3kHz)	Result
BLE 1M	0	-18.370	≤8	PASS
	19	-17.510	≤8	PASS
	39	-19.220	≤8	PASS
BLE 2M	0	-21.690	≤8	PASS
	19	-20.780	≤8	PASS
	39	-22.430	≤8	PASS

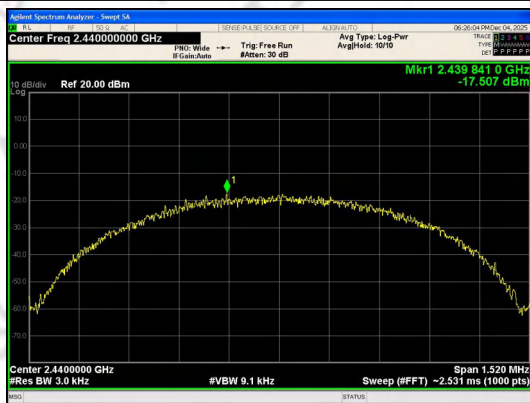
Test Graphs



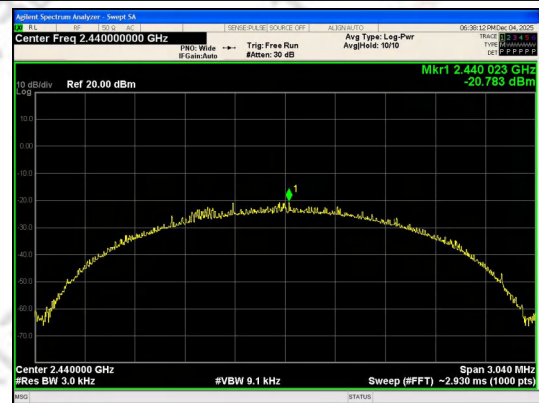
BLE 1M_Channel 0



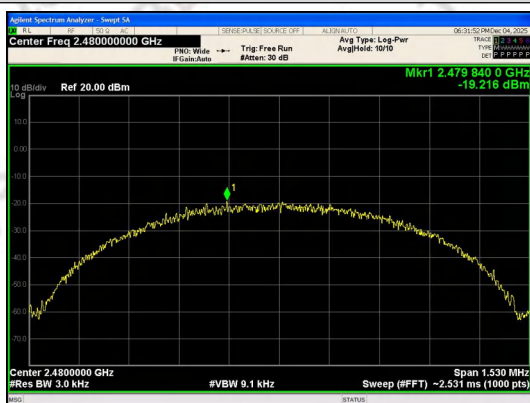
BLE 2M_Channel 0



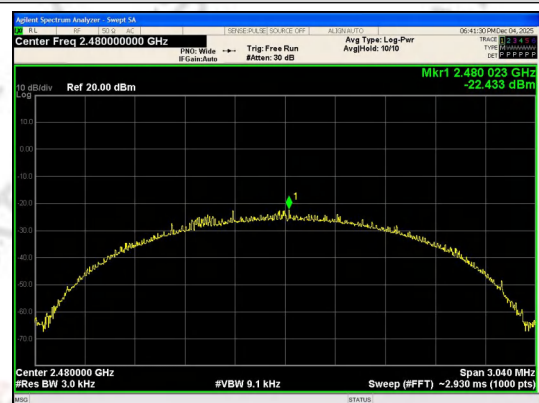
BLE 1M_Channel 19



BLE 2M_Channel 19



BLE 1M_Channel 39



BLE 2M_Channel 39

B5. Conducted Band Edge and Conducted Spurious Emission

Test Result

Mode	Channel	OOB Emission Frequency (MHz)	OOB Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result
BLE 1M	0	2398.66	-58.906	-22.0	-36.906	PASS
		2400.00	-59.459	-22.0	-37.459	PASS
		24159.1	-46.441	-22.0	-24.441	PASS
	19	24018.7	-46.448	-21.04	-25.408	PASS
	39	2483.50	-60.074	-22.89	-37.184	PASS
		23674.7	-46.427	-22.89	-23.537	PASS
BLE 2M	0	2400.00	-48.496	-22.34	-26.156	PASS
		23735.9	-46.071	-22.34	-23.731	PASS
	19	24265.9	-46.353	-21.32	-25.033	PASS
	39	2483.50	-60.347	-23.13	-37.217	PASS
		23710.3	-46.315	-23.13	-23.185	PASS

Note: input compensation coefficient (dB)= Cable Loss (dB)

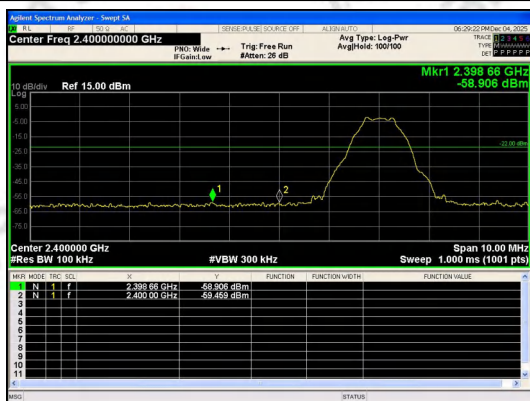
Test Graphs



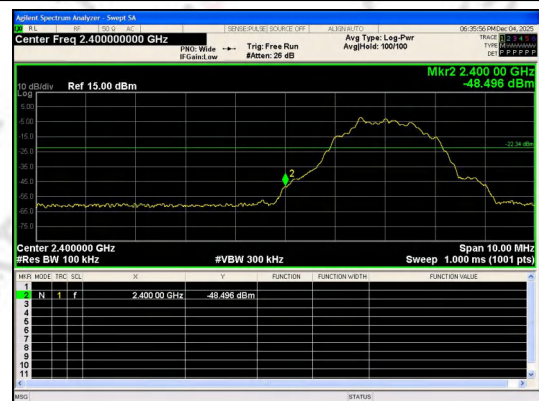
In-Band Reference Level
BLE 1M_Channel 0



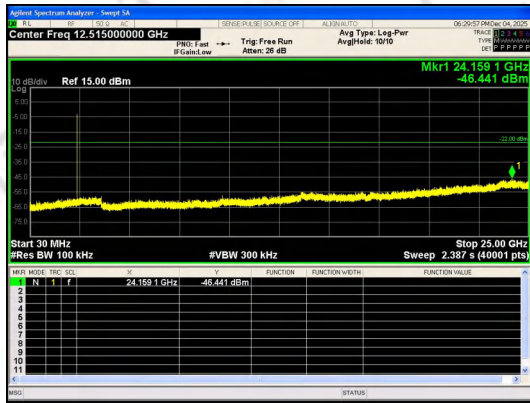
In-Band Reference Level
BLE 2M_Channel 0



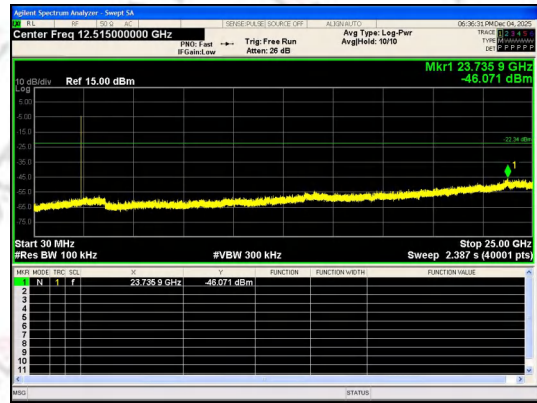
Out Of Band Emission
BLE 1M_Channel 0



Out Of Band Emission
BLE 2M_Channel 0



30.0 MHz - 25000.0 MHz
BLE 1M_Channel 0



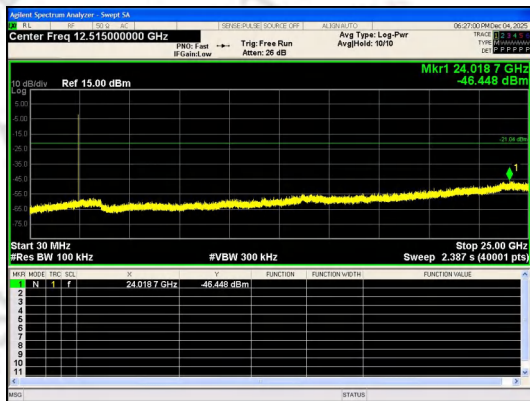
30.0 MHz - 25000.0 MHz
BLE 2M_Channel 0



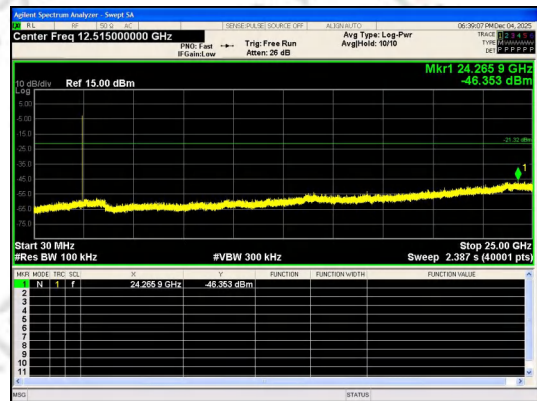
In-Band Reference Level
BLE 1M_Channel 19



In-Band Reference Level
BLE 2M_Channel 19



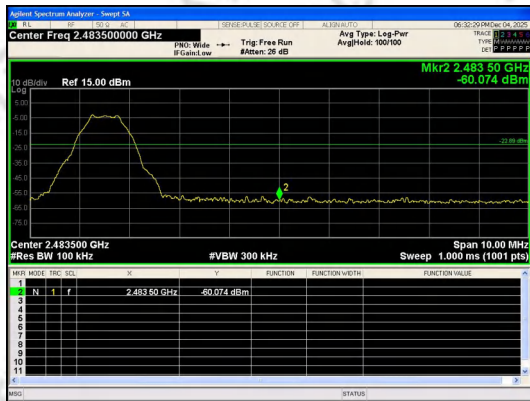
30.0 MHz - 25000.0 MHz
BLE 1M_Channel 19



30.0 MHz - 25000.0 MHz
BLE 2M_Channel 19



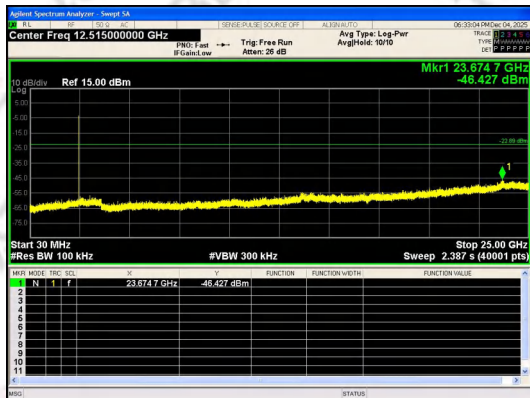
In-Band Reference Level BLE 1M_Channel 39



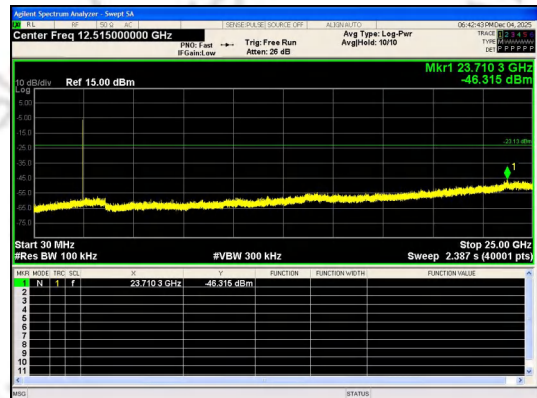
In-Band Reference Level BLE 2M_Channel 39



Out Of Band Emission BLE 1M_Channel 39



Out Of Band Emission BLE 2M_Channel 39



30.0 MHz - 25000.0 MHz BLE 1M_Channel 39

30.0 MHz - 25000.0 MHz BLE 2M_Channel 39

B6.Radiated Spurious Emission and Restricted Band

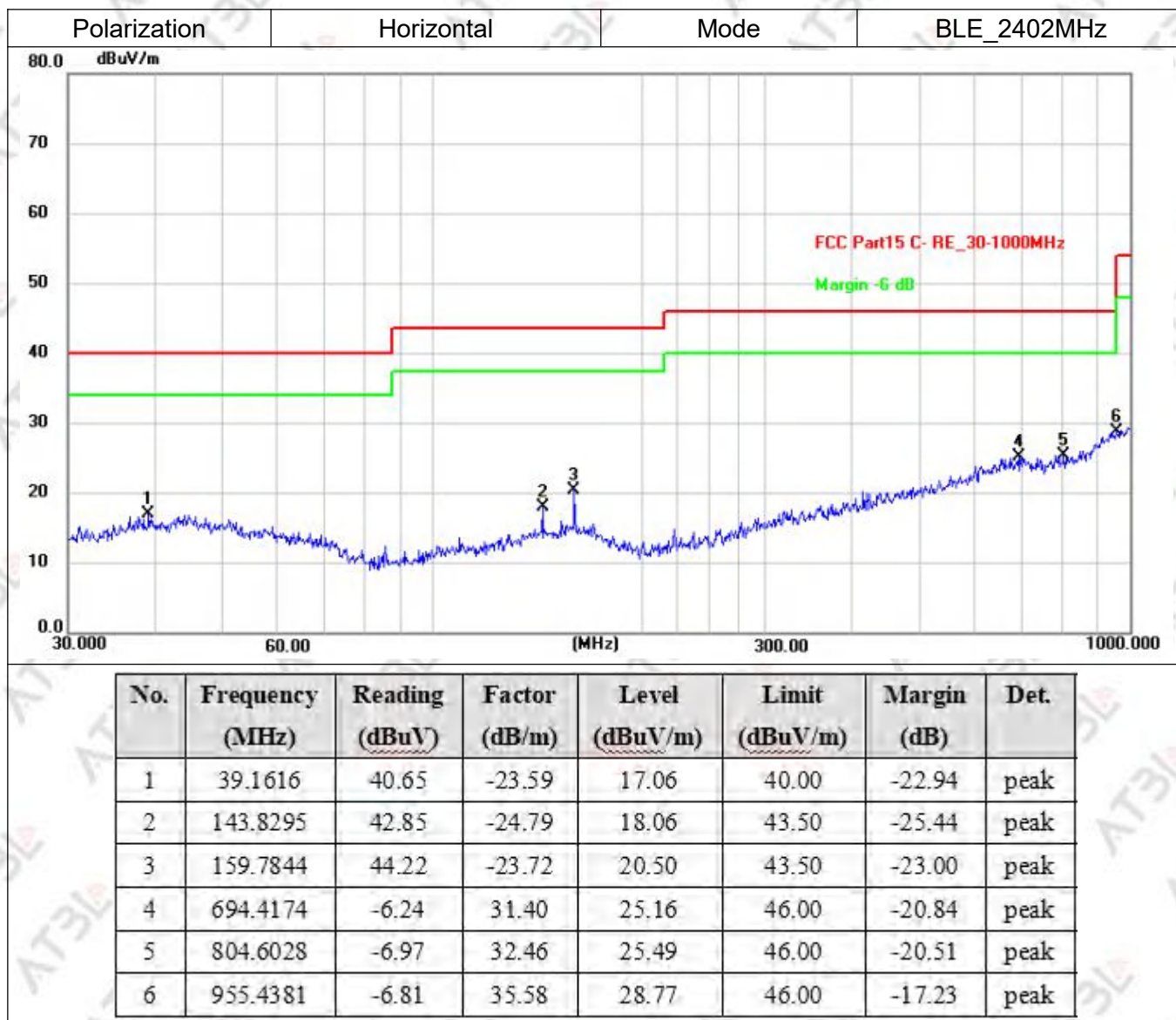
For 9 kHz ~ 30 MHz

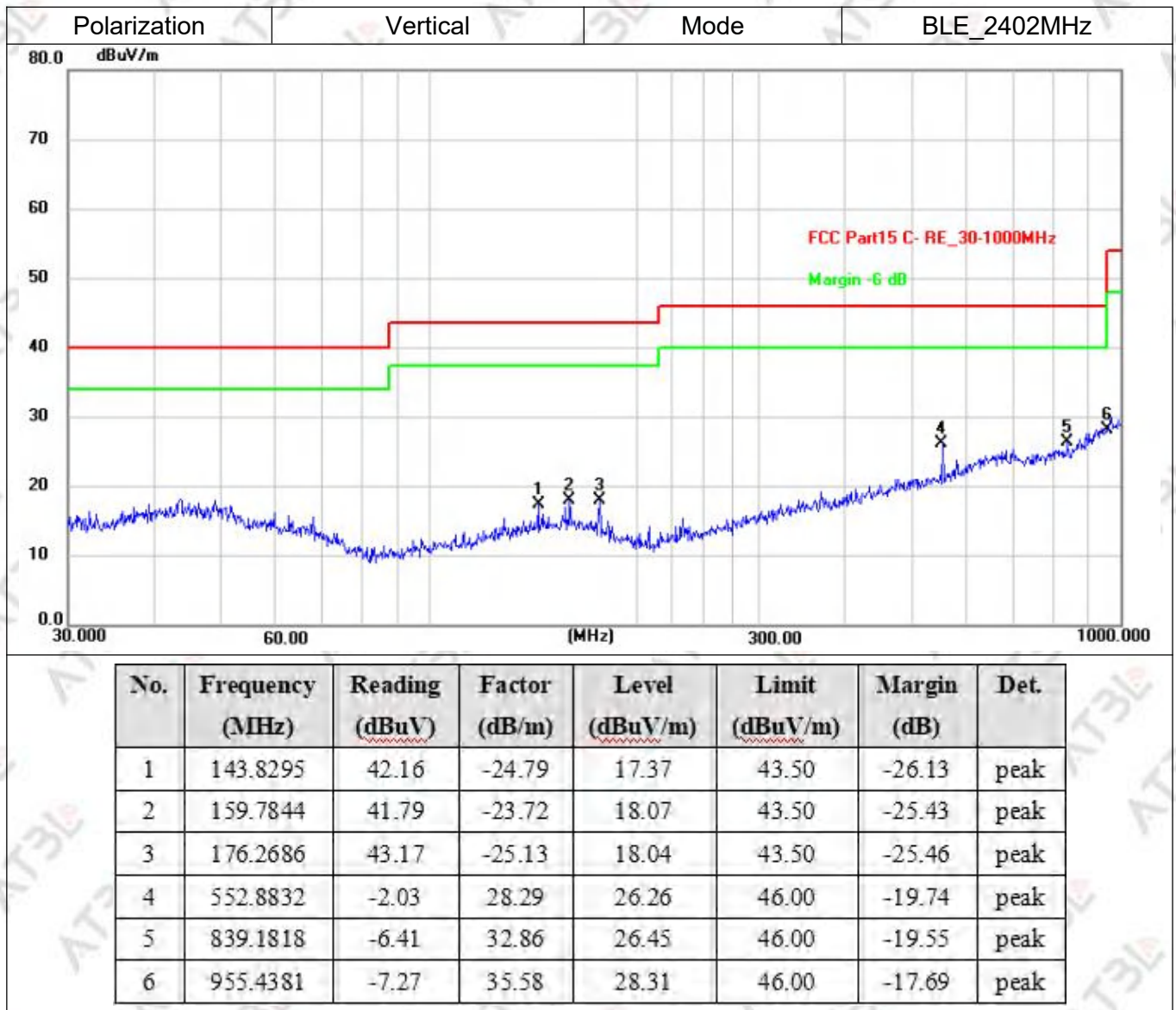
The low frequency, which started from 9 kHz to 30MHz, was pre-scanned and the result which was 20dB lower than the limit line was not reported.

For 30 MHz ~ 1 GHz:

Note:

- 1.All modes have been tested, only worst (BLE_2402MHz)mode was recorded in the test report.
- 2.Emission Level (dBuV/m) = Reading Value (dBuV) + Correction Factor (dB/m).
3. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)-Amplifier Gain.
4. The emission levels of other frequencies were less than 20dB margin against the limit.
5. Margin value = Emission level-Limit value.

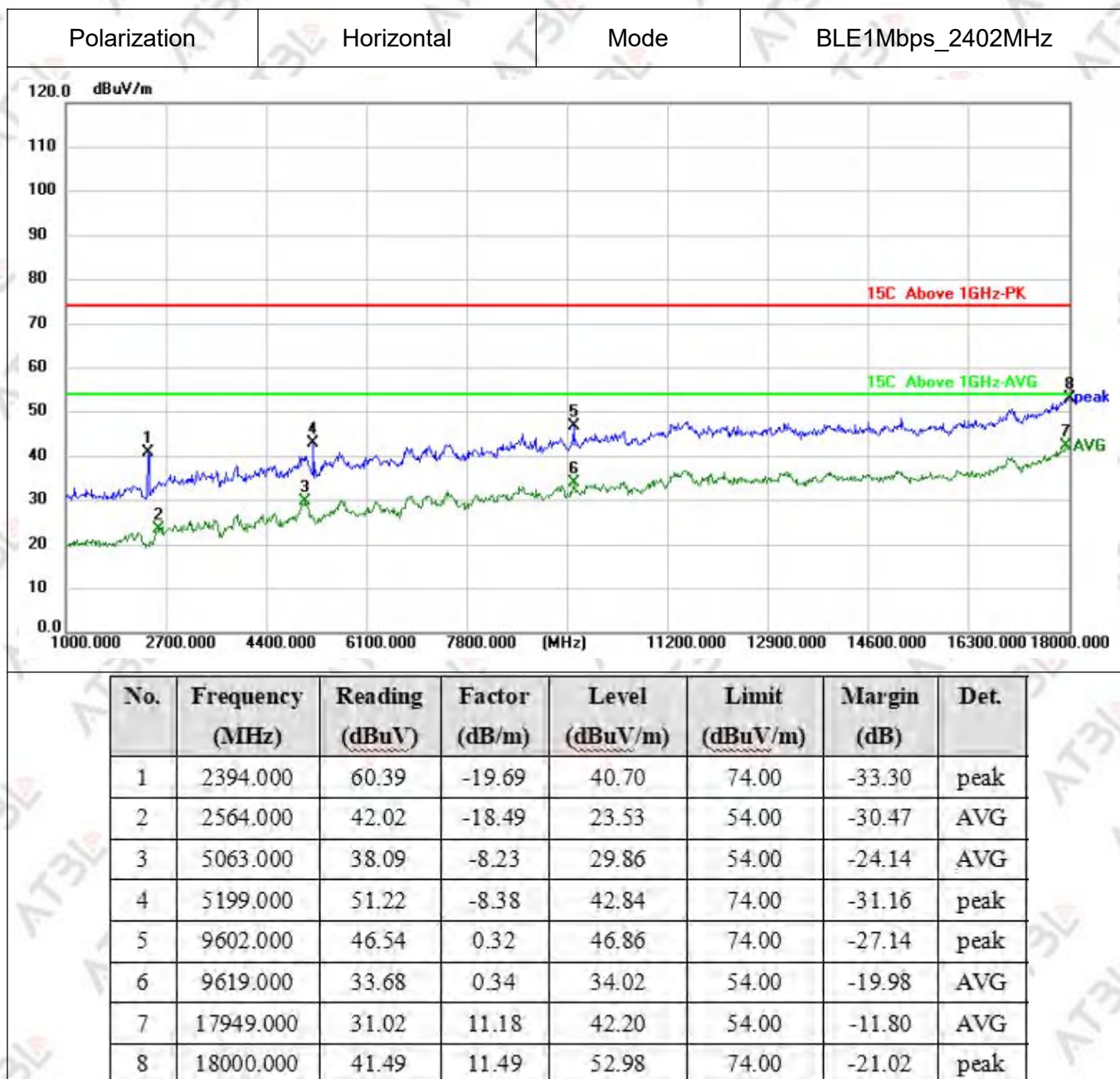


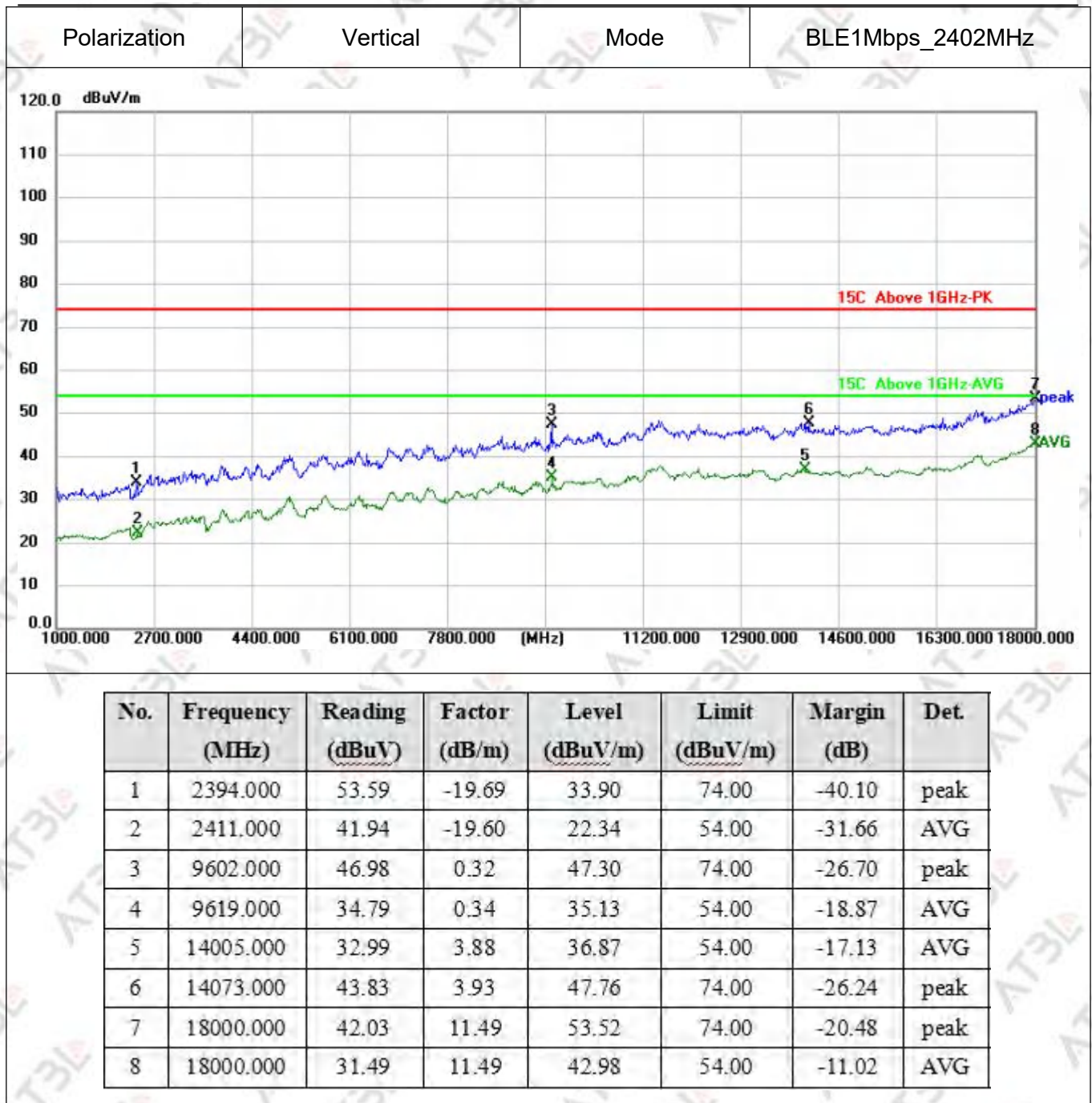


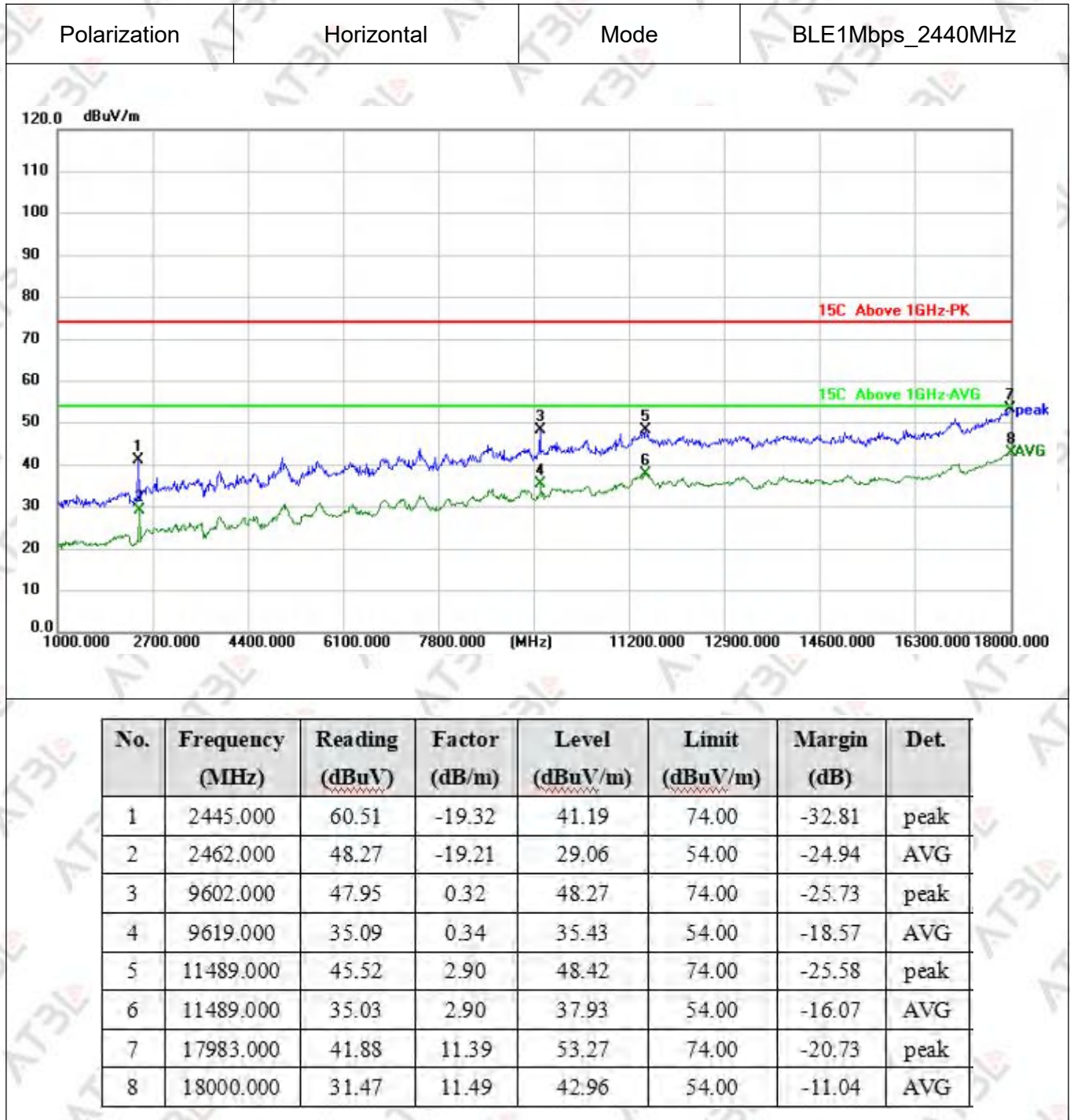
For 1 GHz ~ 18GHz:

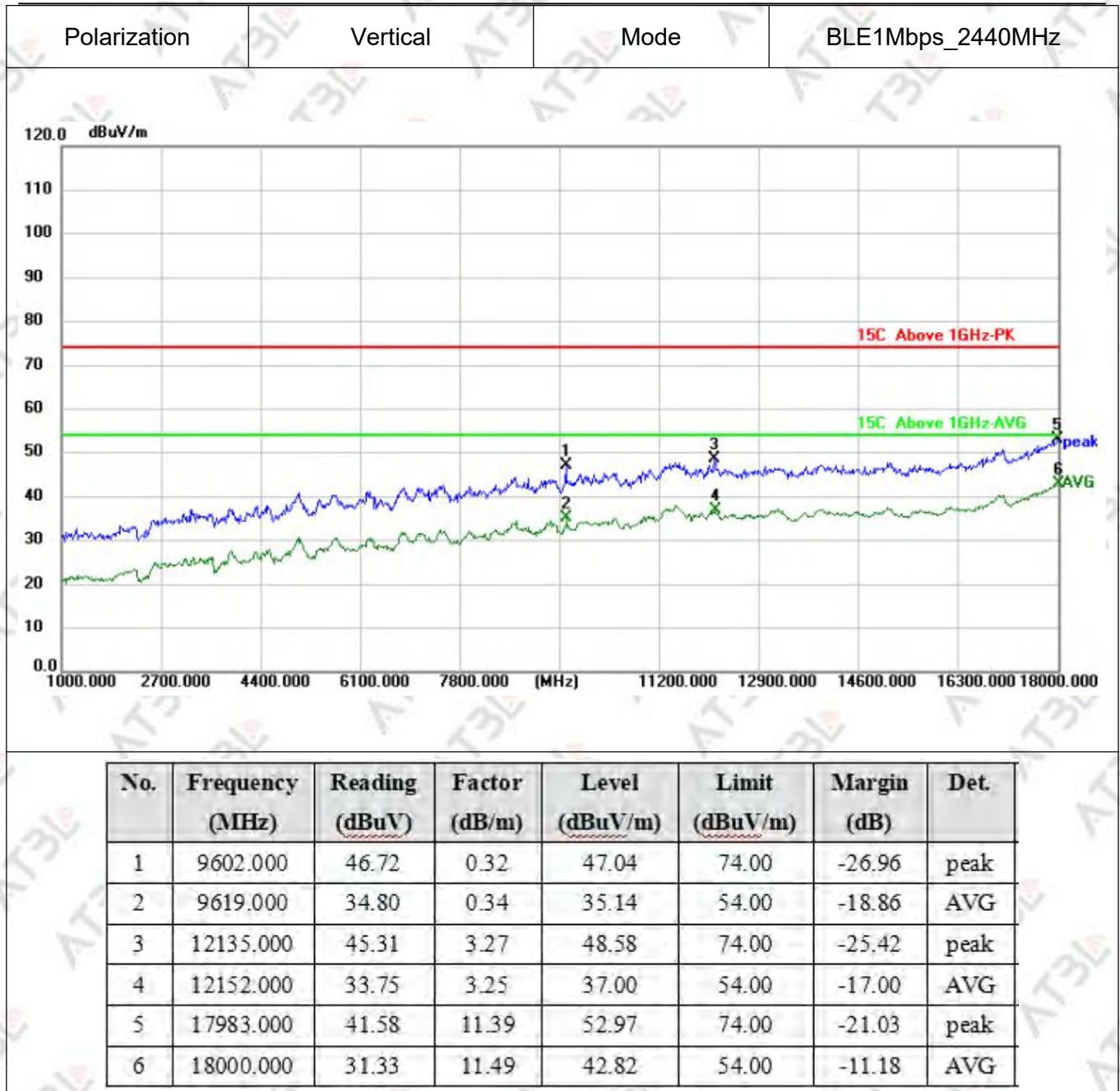
Note:

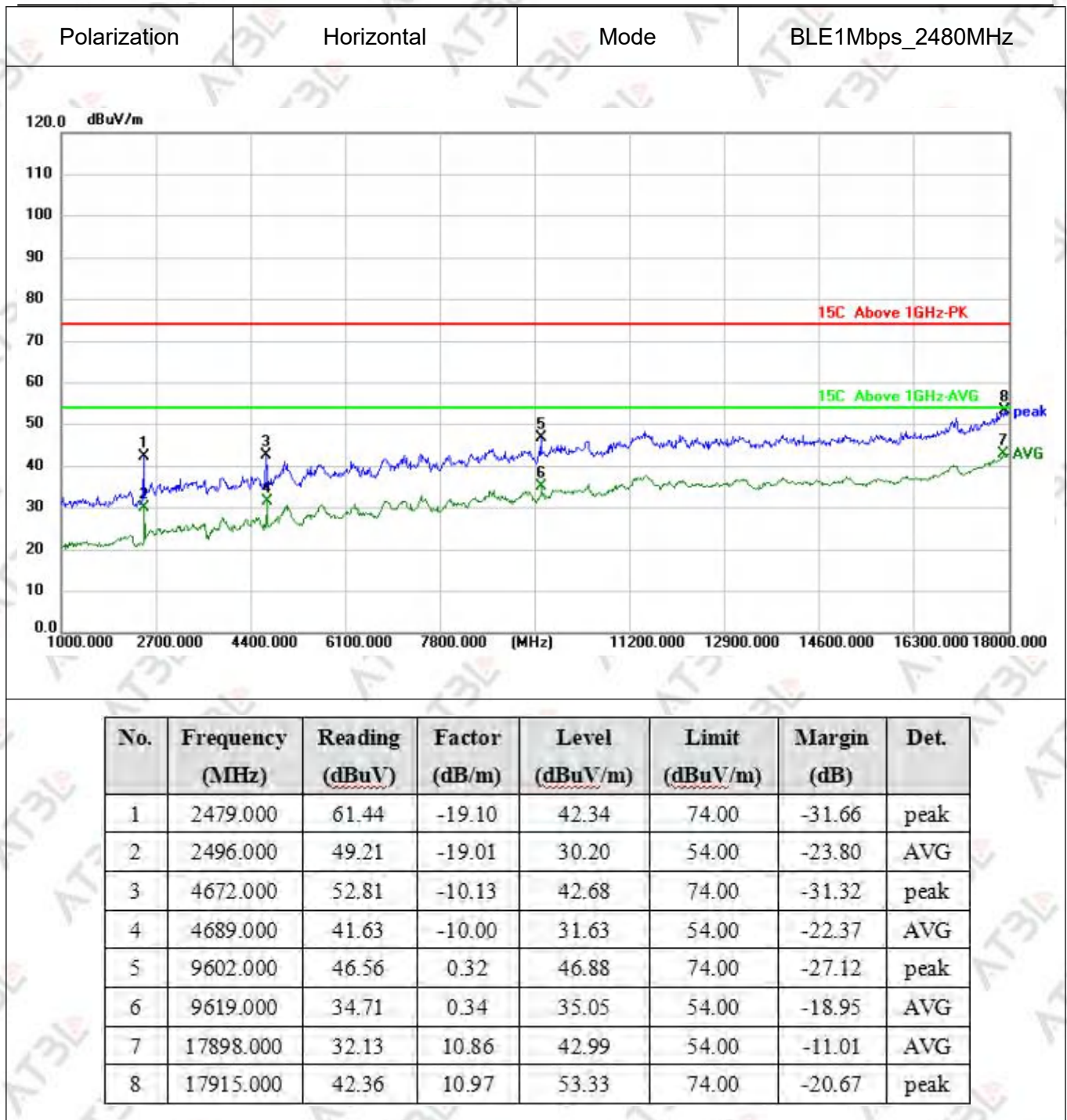
1. In frequency ranges 18 ~25GHz no any other harmonic emissions detected which are tested to compliance with the limit. No recording in the test report. No any other emissions level which are attenuated less than 20dB below the limit. No recording in the test report.
2. We used the filter to test and the main frequency was filtered out.
3. Emission Level (dBuV/m) = Reading Value (dBuV) + Correction Factor (dB/m).
4. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)-Amplifier Gain.
5. The emission levels of other frequencies were less than 20dB margin against the limit.
6. Margin value = Emission level-Limit value.
7. All modes have been tested, only worst mode(BLE1Mbps and BLE2Mbps) was recorded in the test report.

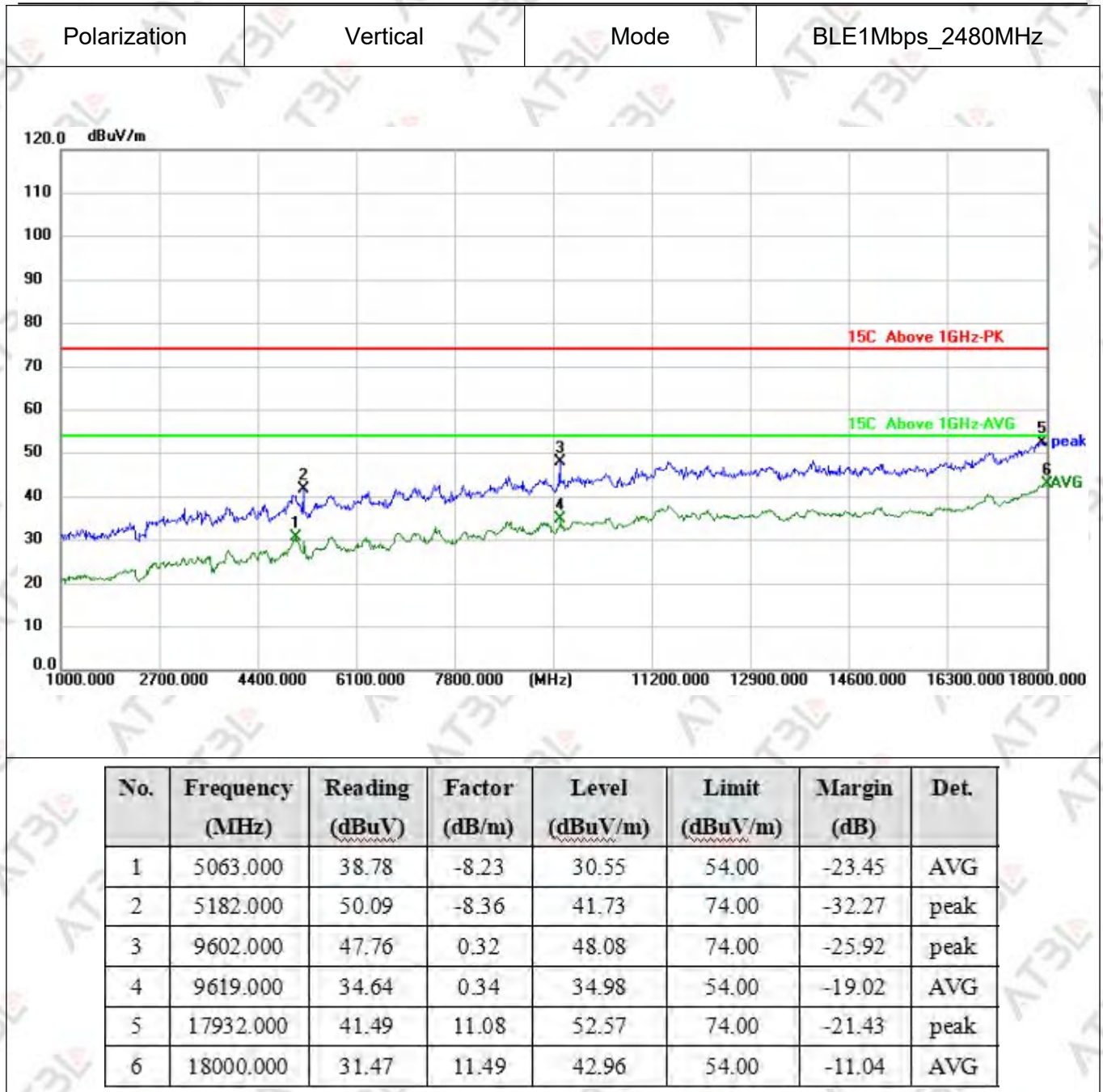


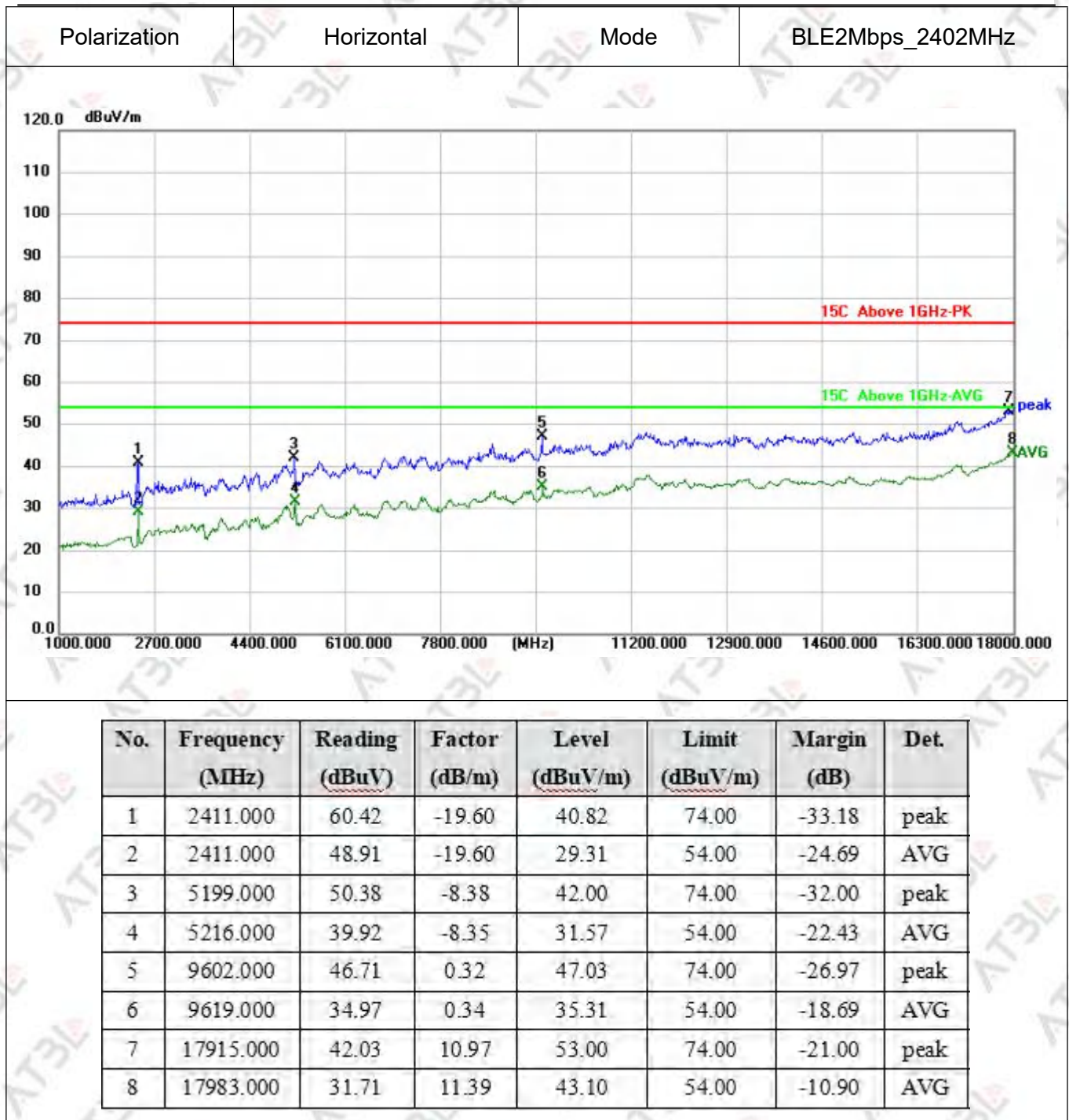


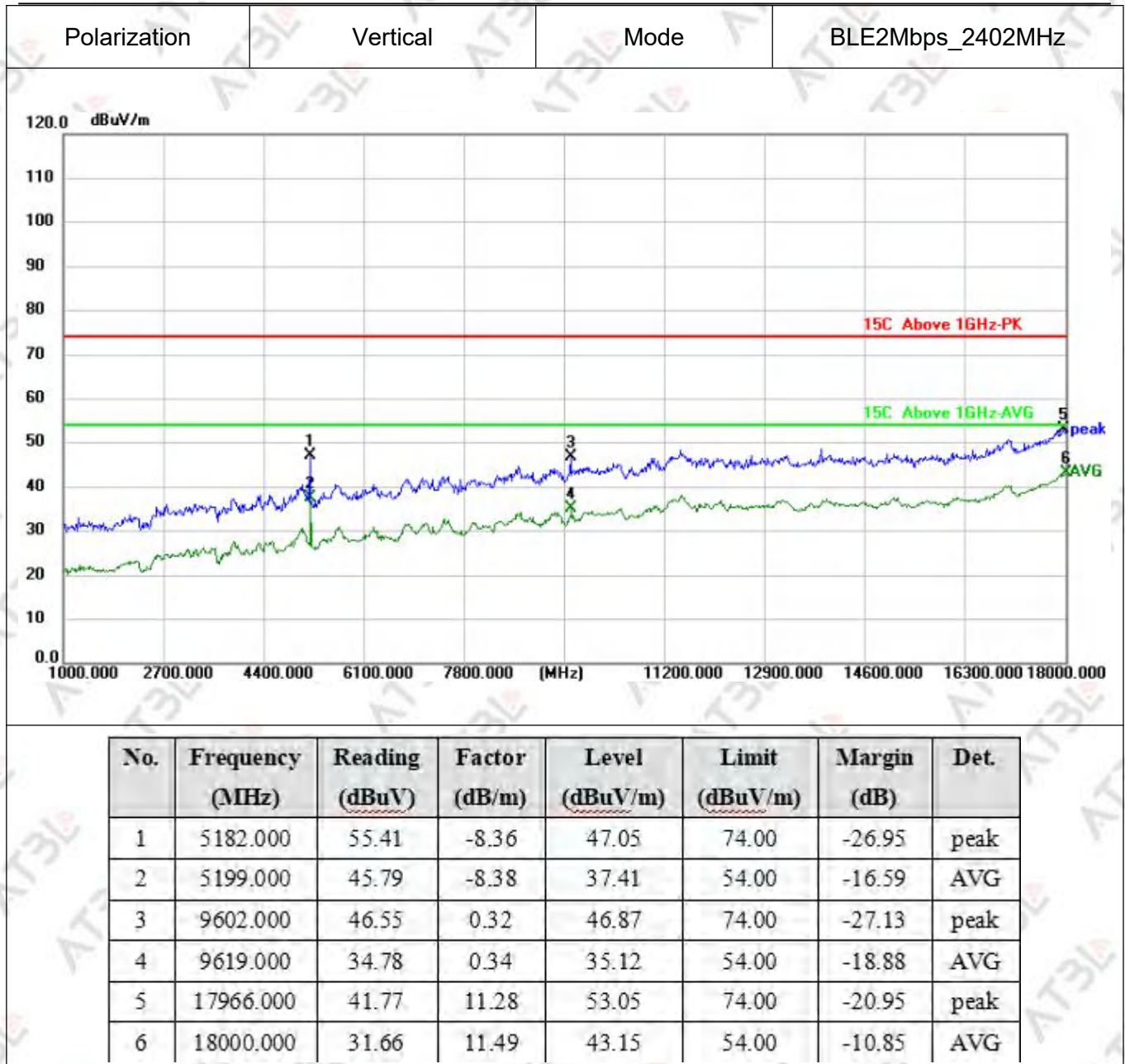


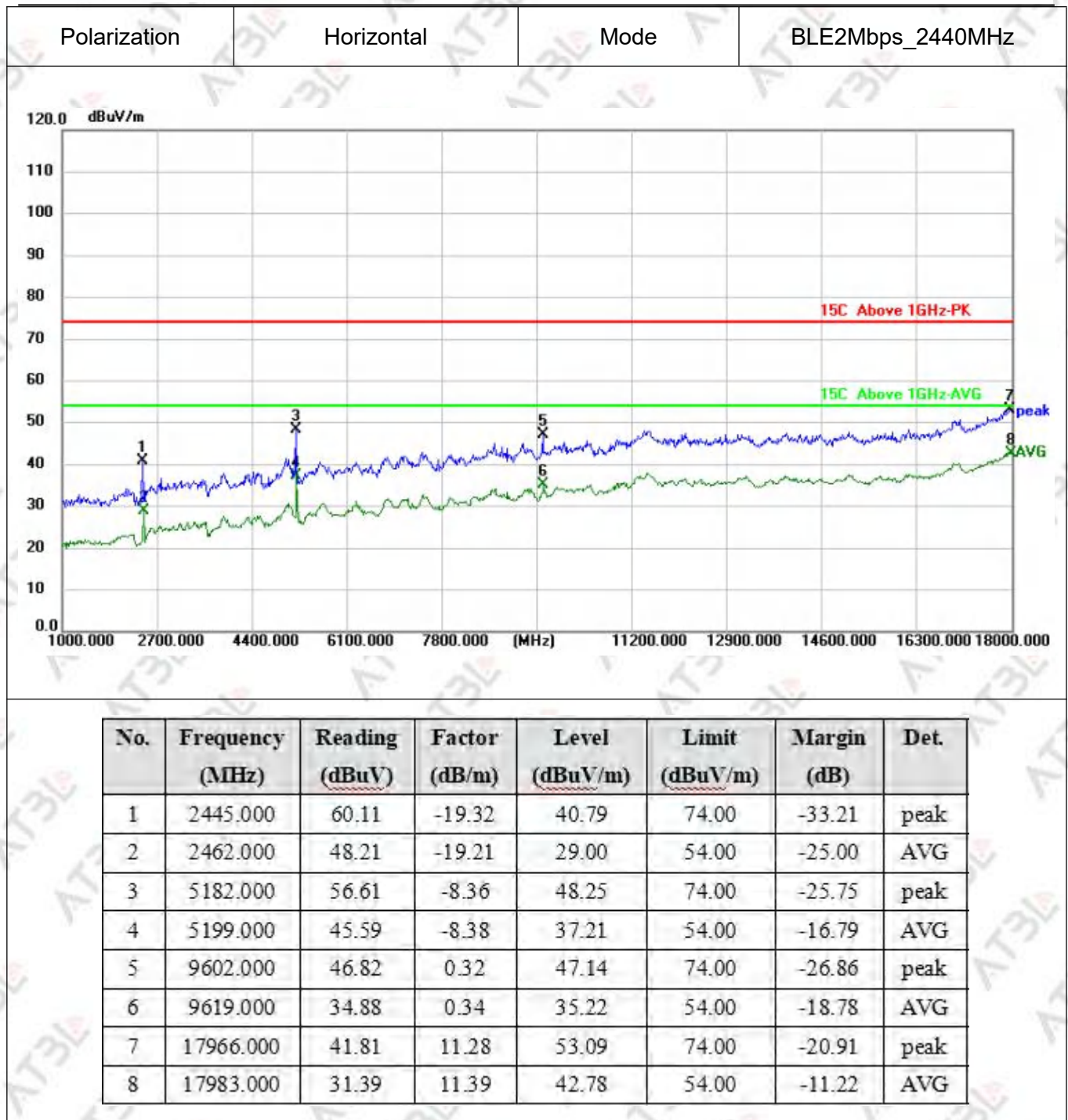


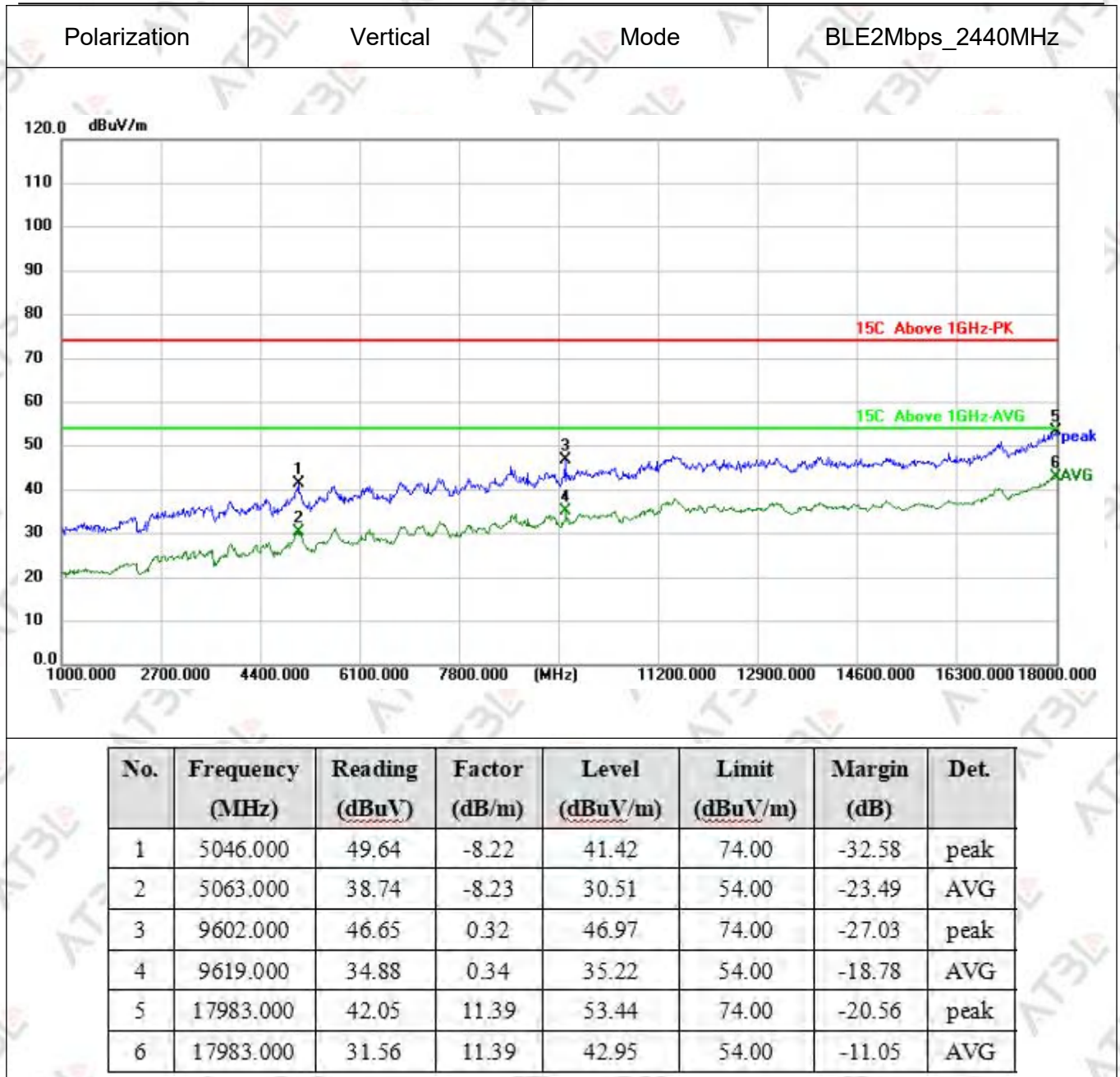


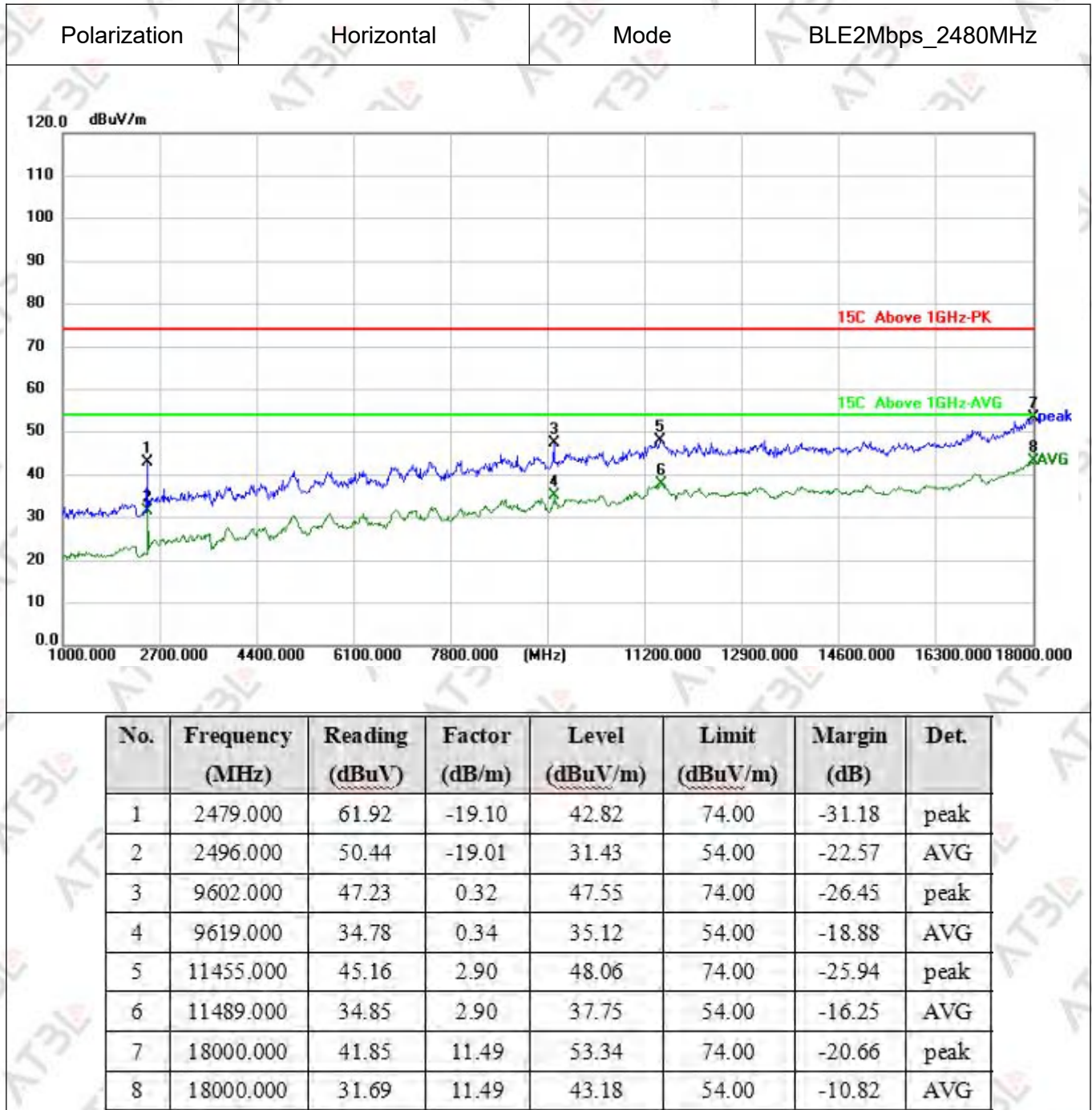


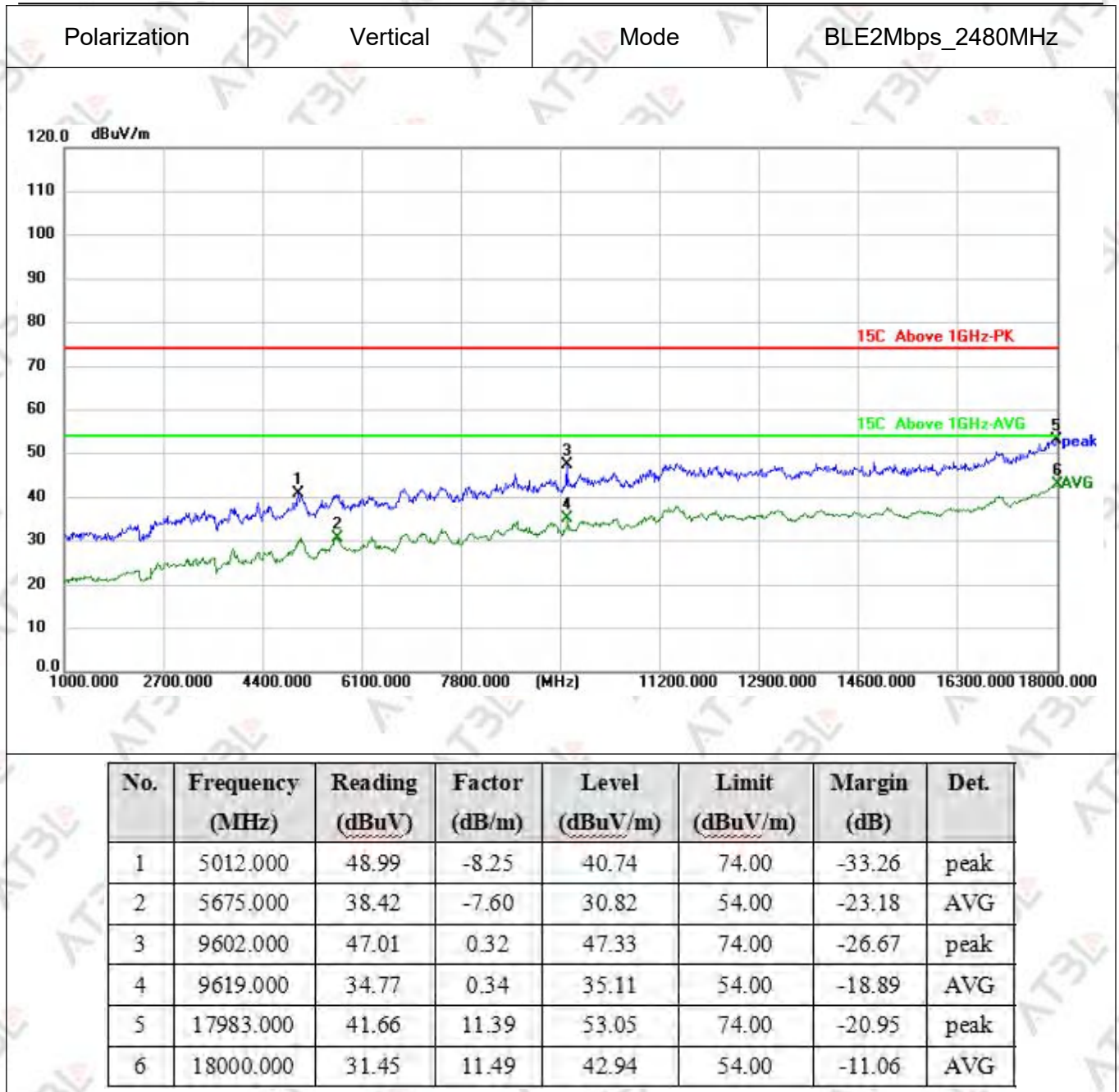








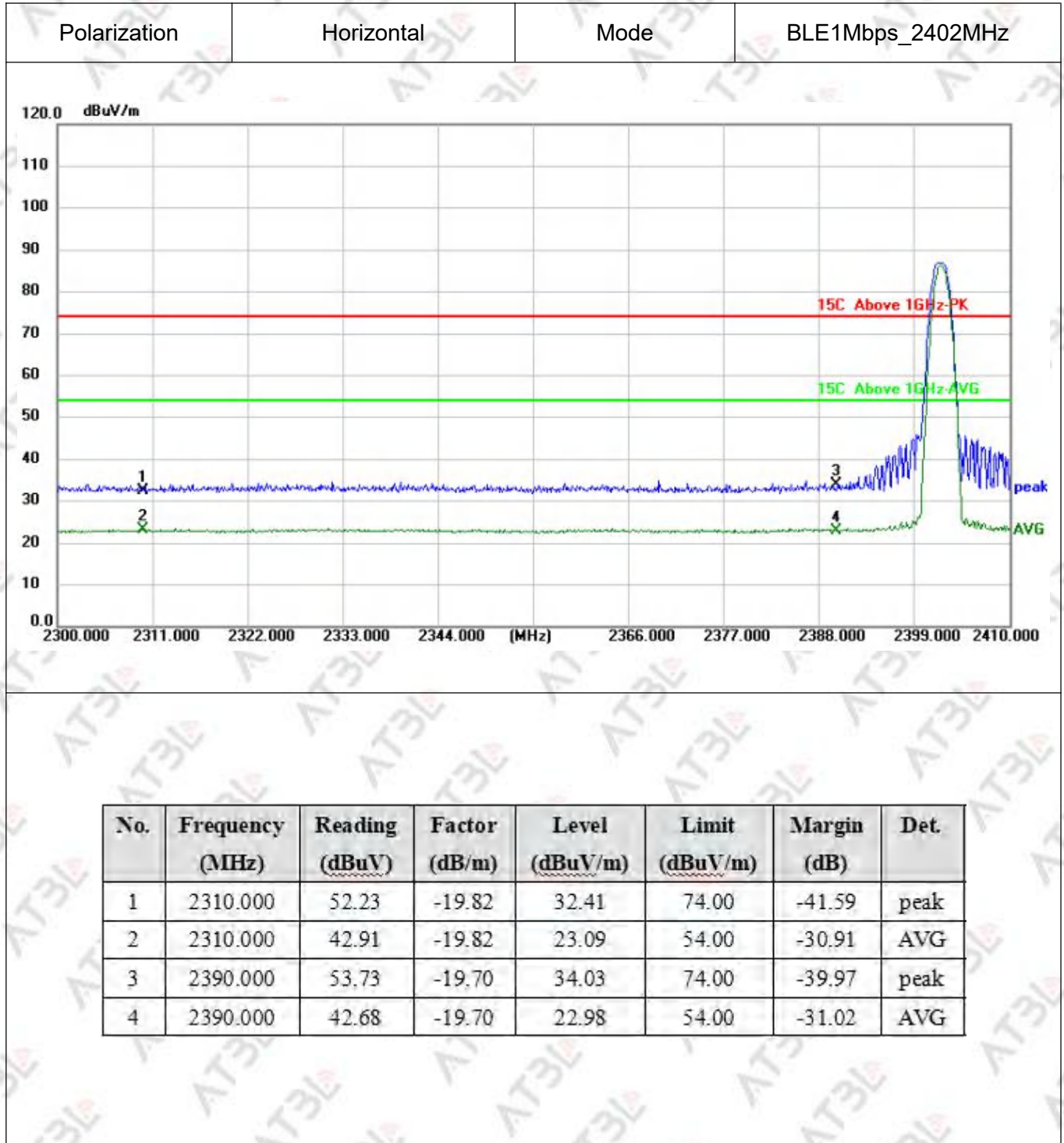


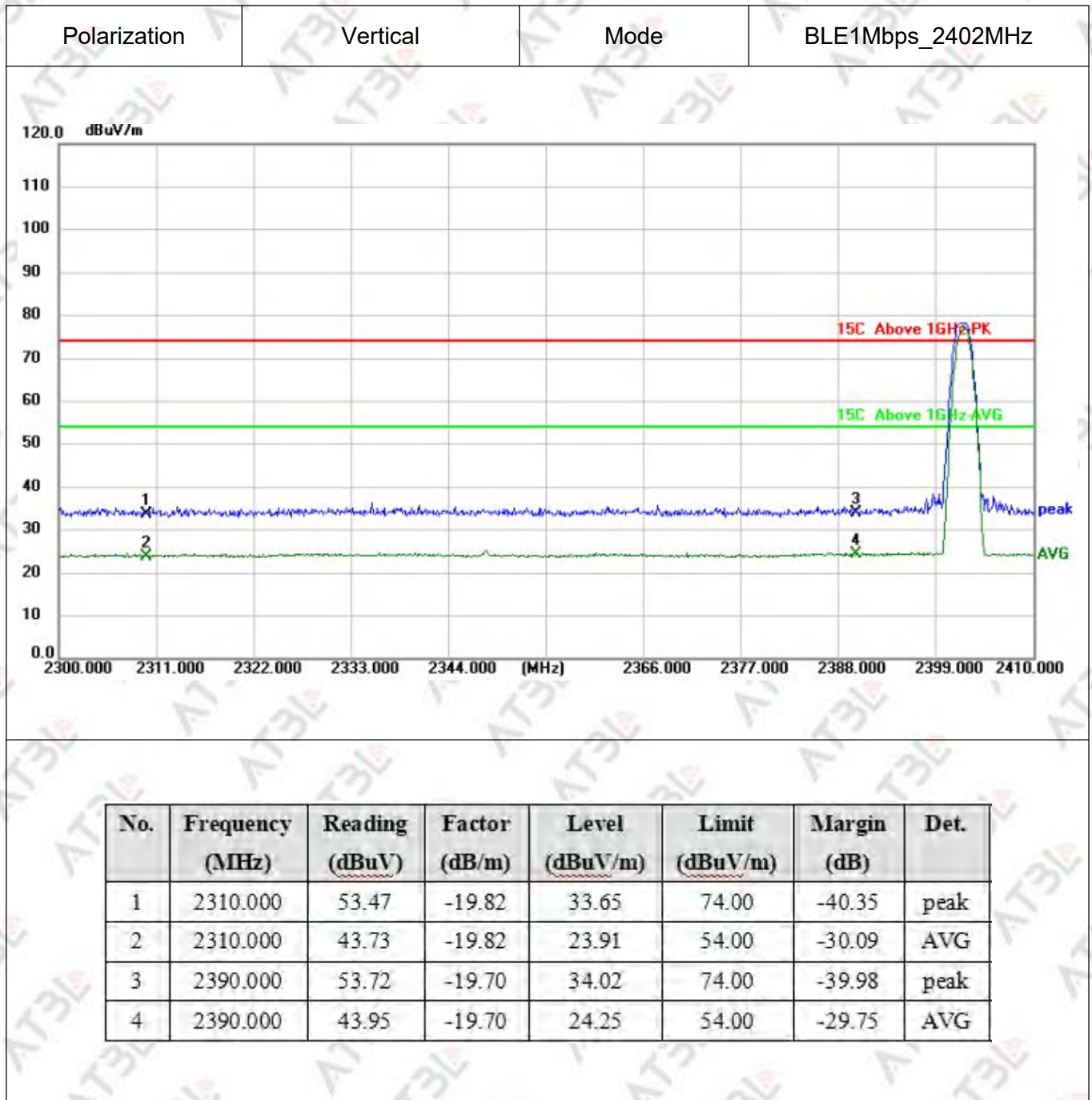


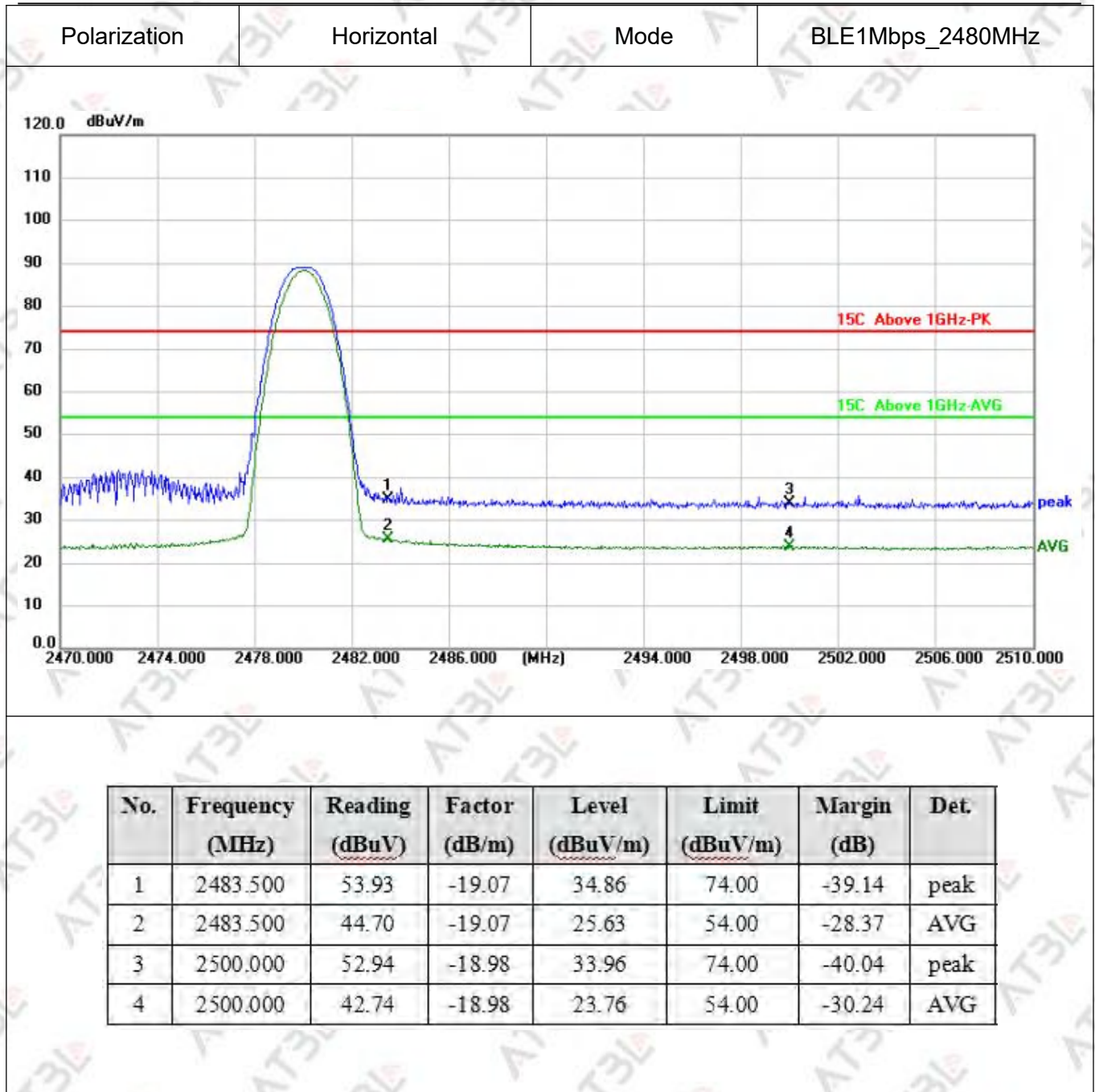
Test Result of Restricted Band

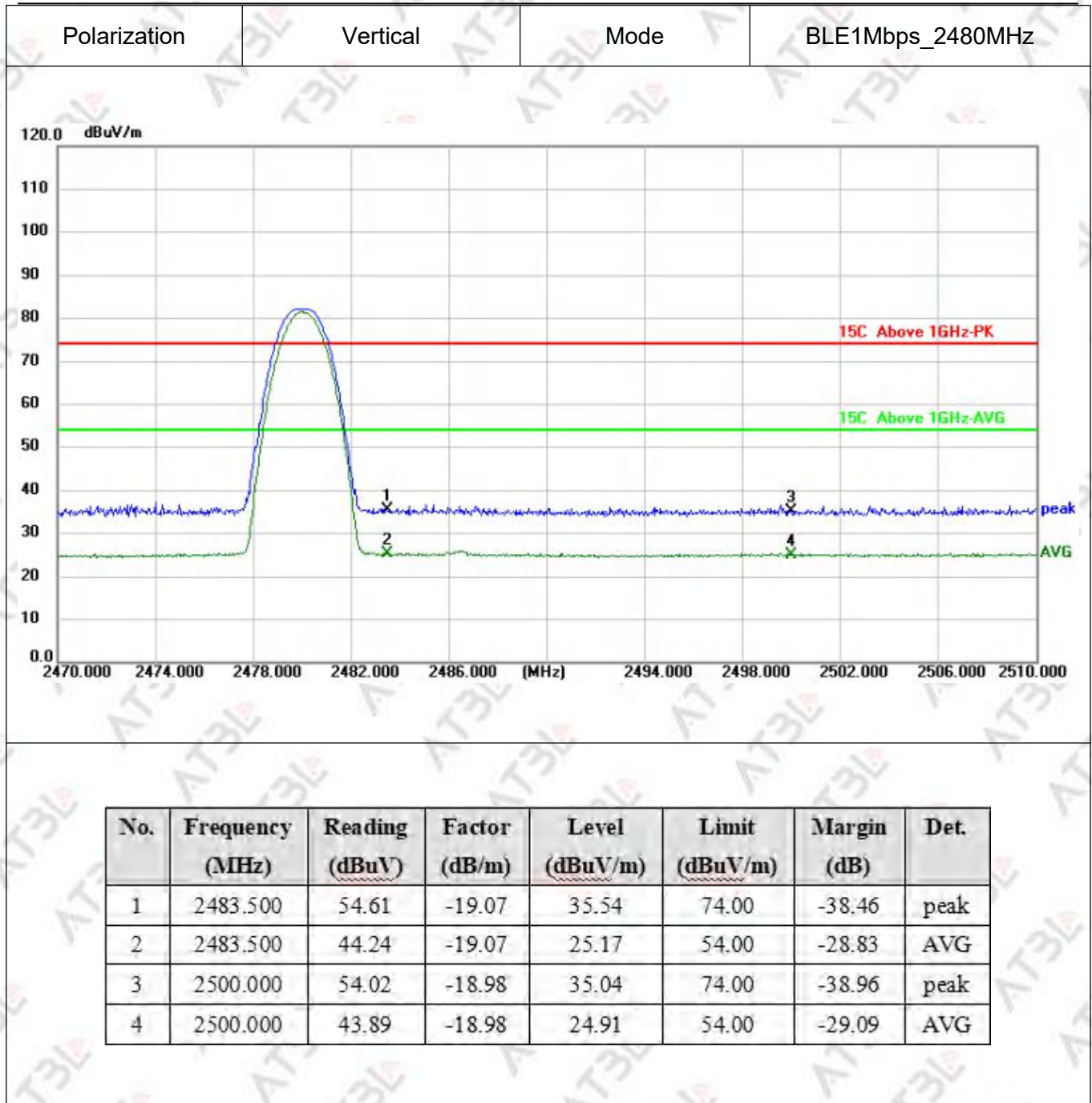
Note:

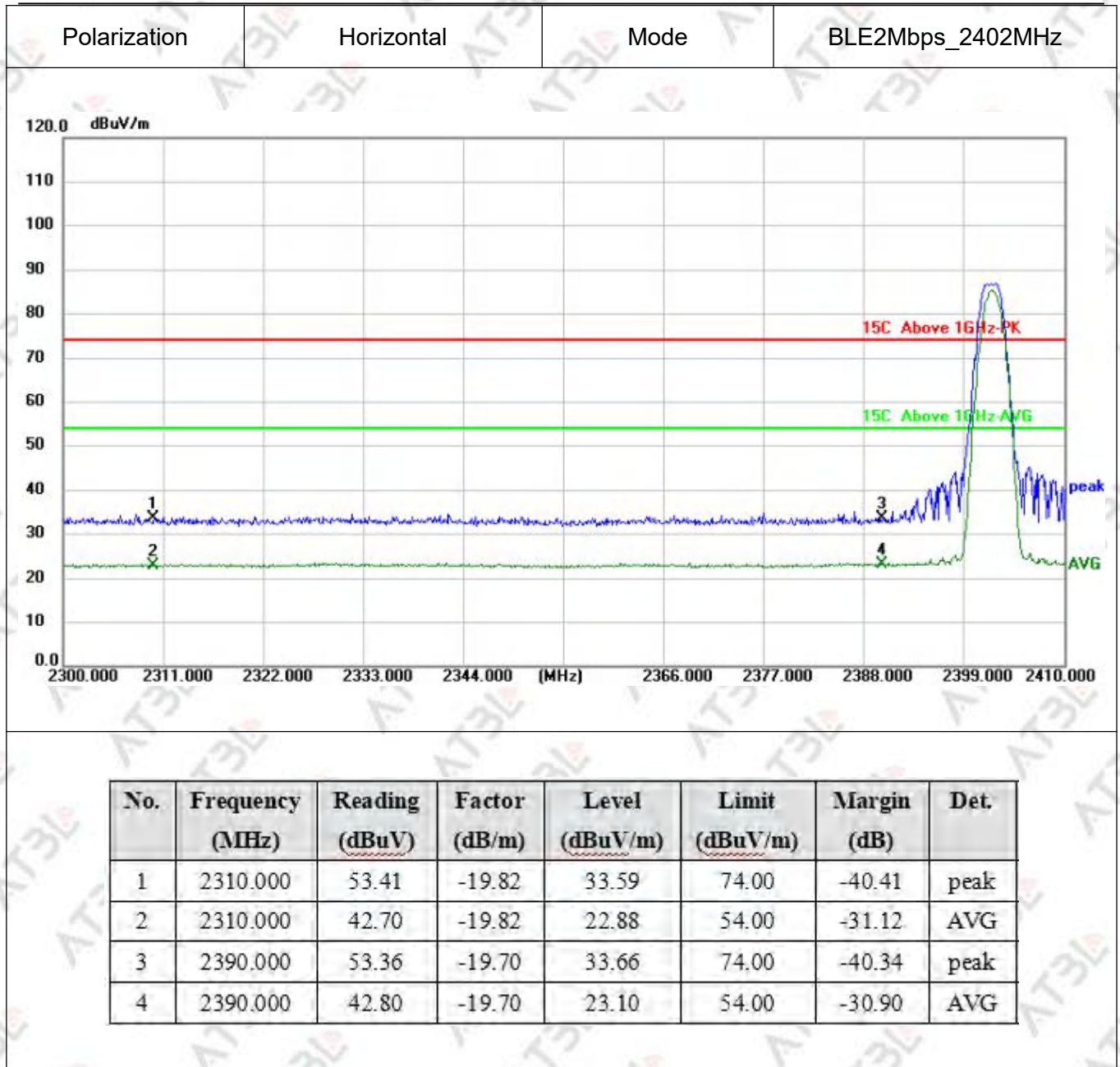
All modes have been tested, only worst case(BLE1Mbps and BLE2Mbps)mode was recorded in the test report.

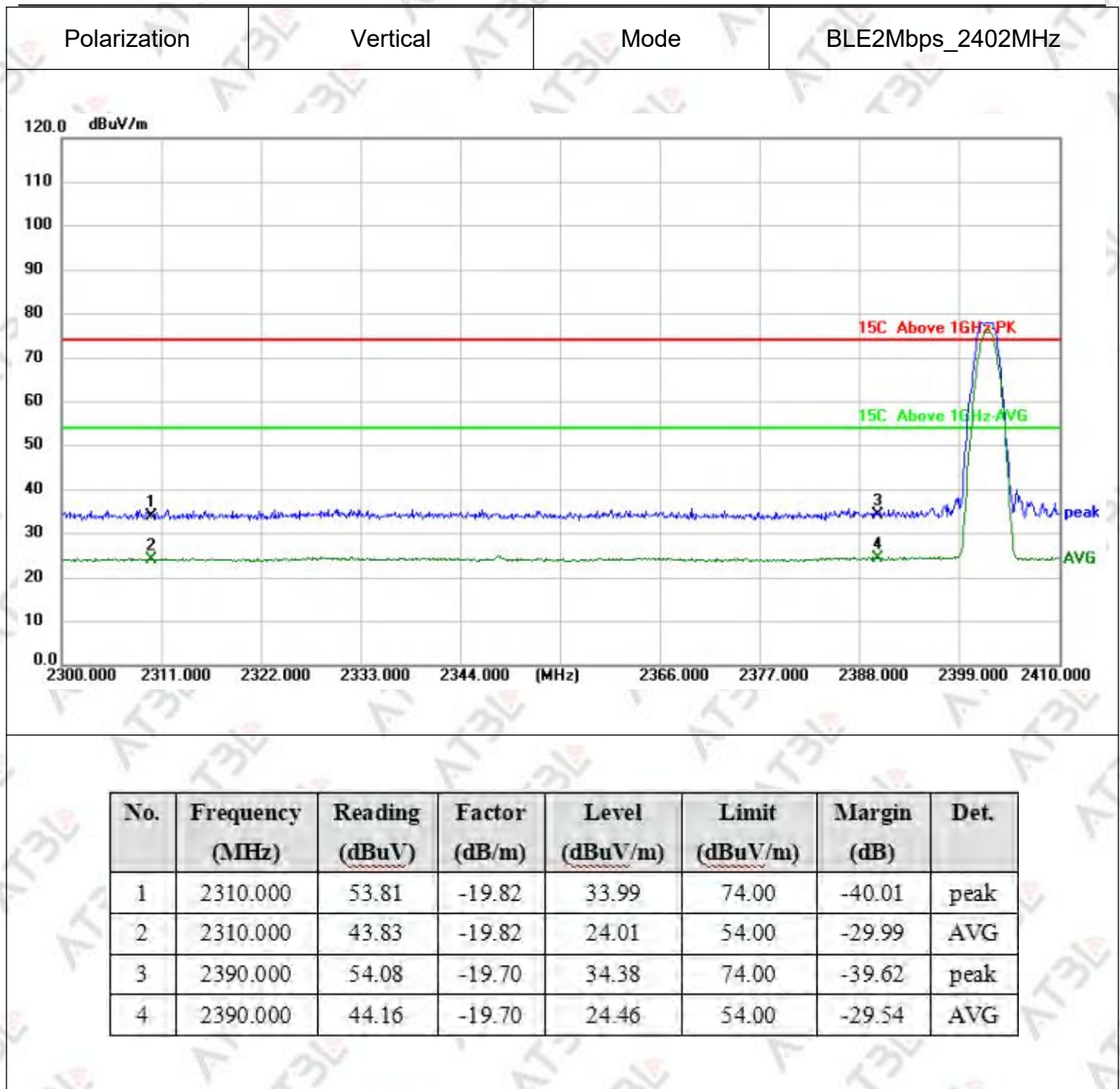


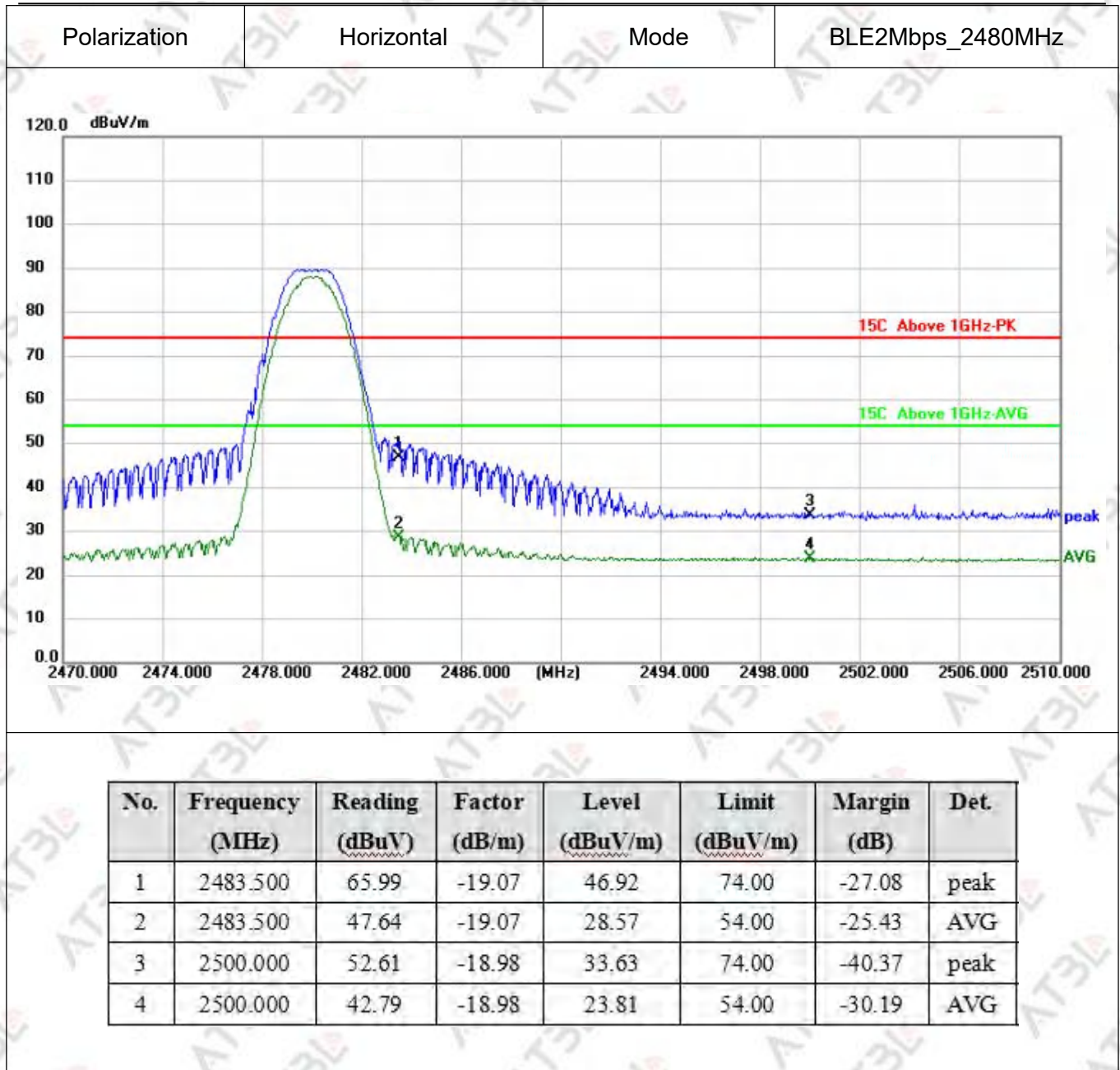










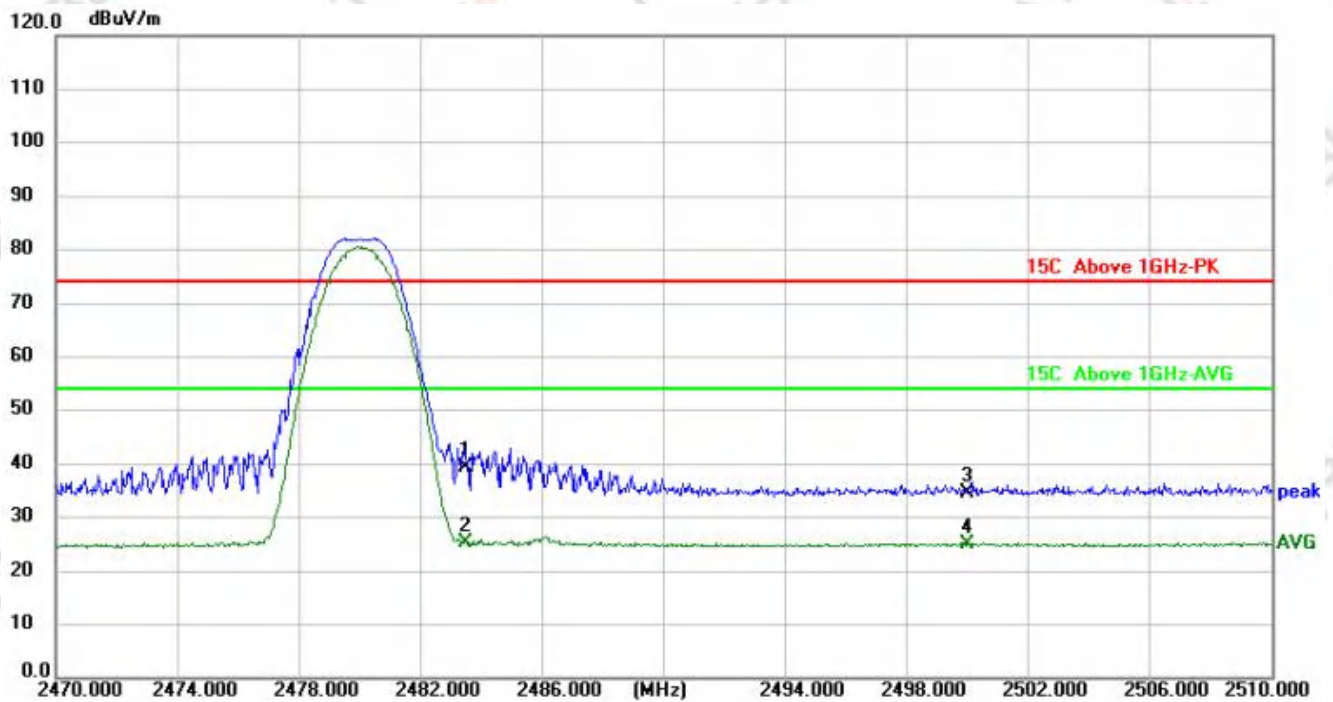


Polarization

Vertical

Mode

BLE2Mbps_2480MHz

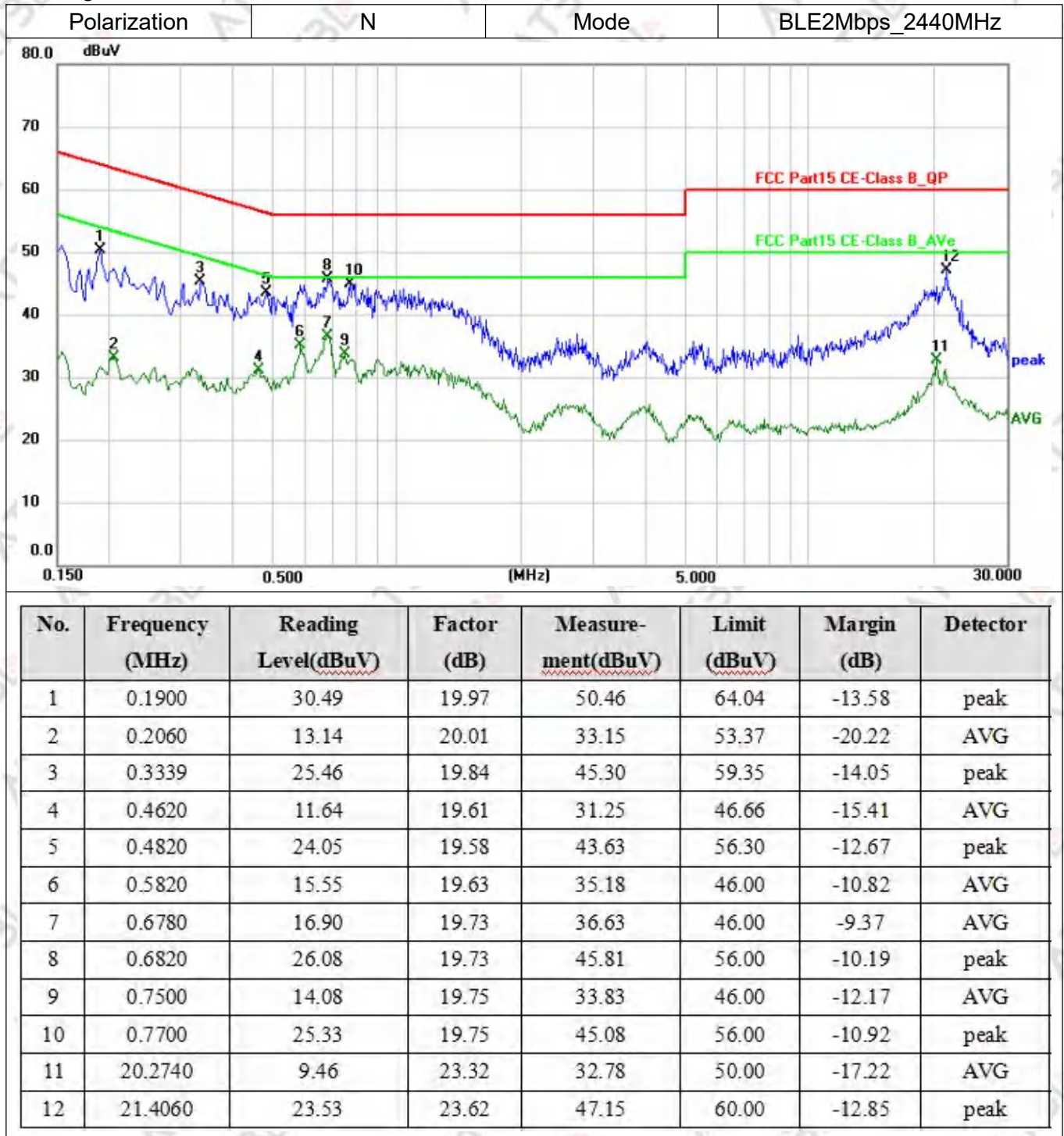


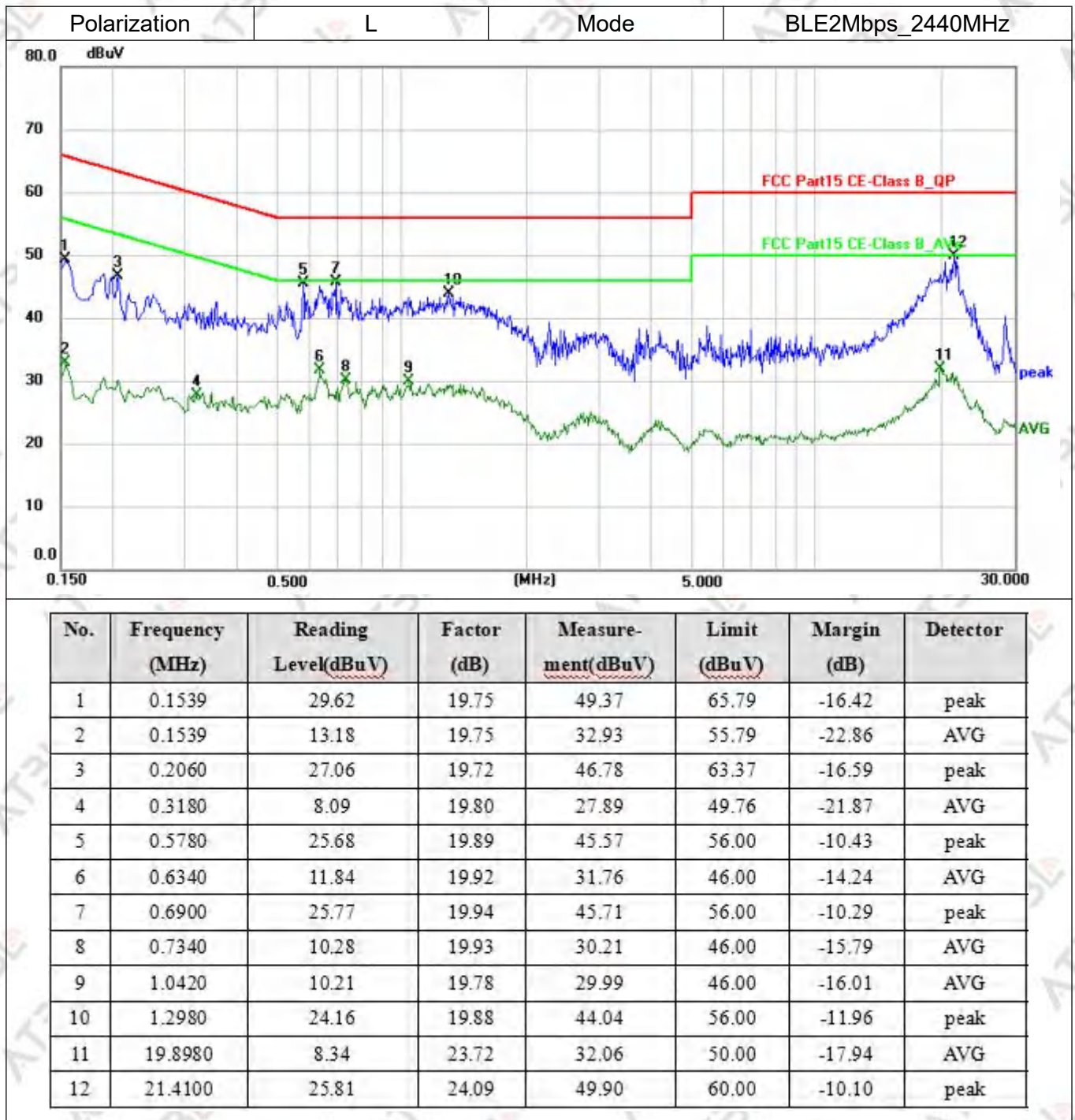
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.
1	2483.500	58.40	-19.07	39.33	74.00	-34.67	peak
2	2483.500	44.36	-19.07	25.29	54.00	-28.71	AVG
3	2500.000	53.66	-18.98	34.68	74.00	-39.32	peak
4	2500.000	43.92	-18.98	24.94	54.00	-29.06	AVG

B7.AC Power-Line Conducted Emission

Note:

- 1.All modes have been tested, only worst mode(BLE2Mbps_2440MHz) was recorded in the test report.
- 2.Emission Level (dBUV/m) = Reading Value (dBUV) + Correction Factor (dB/m).
3. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
4. The emission levels of other frequencies were less than 20dB margin against the limit.
5. Margin value = Emission level-Limit value.





*****END*****