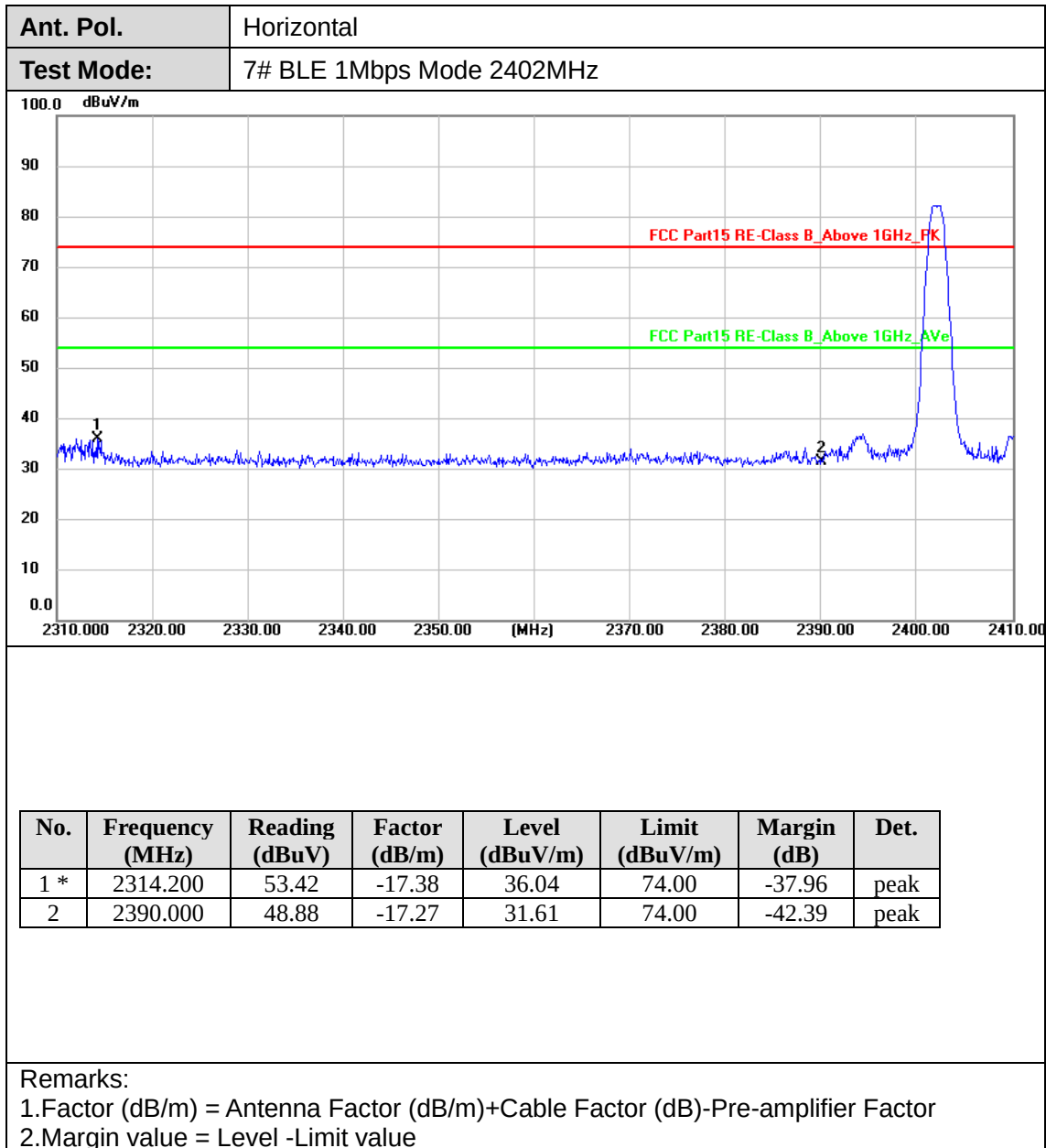
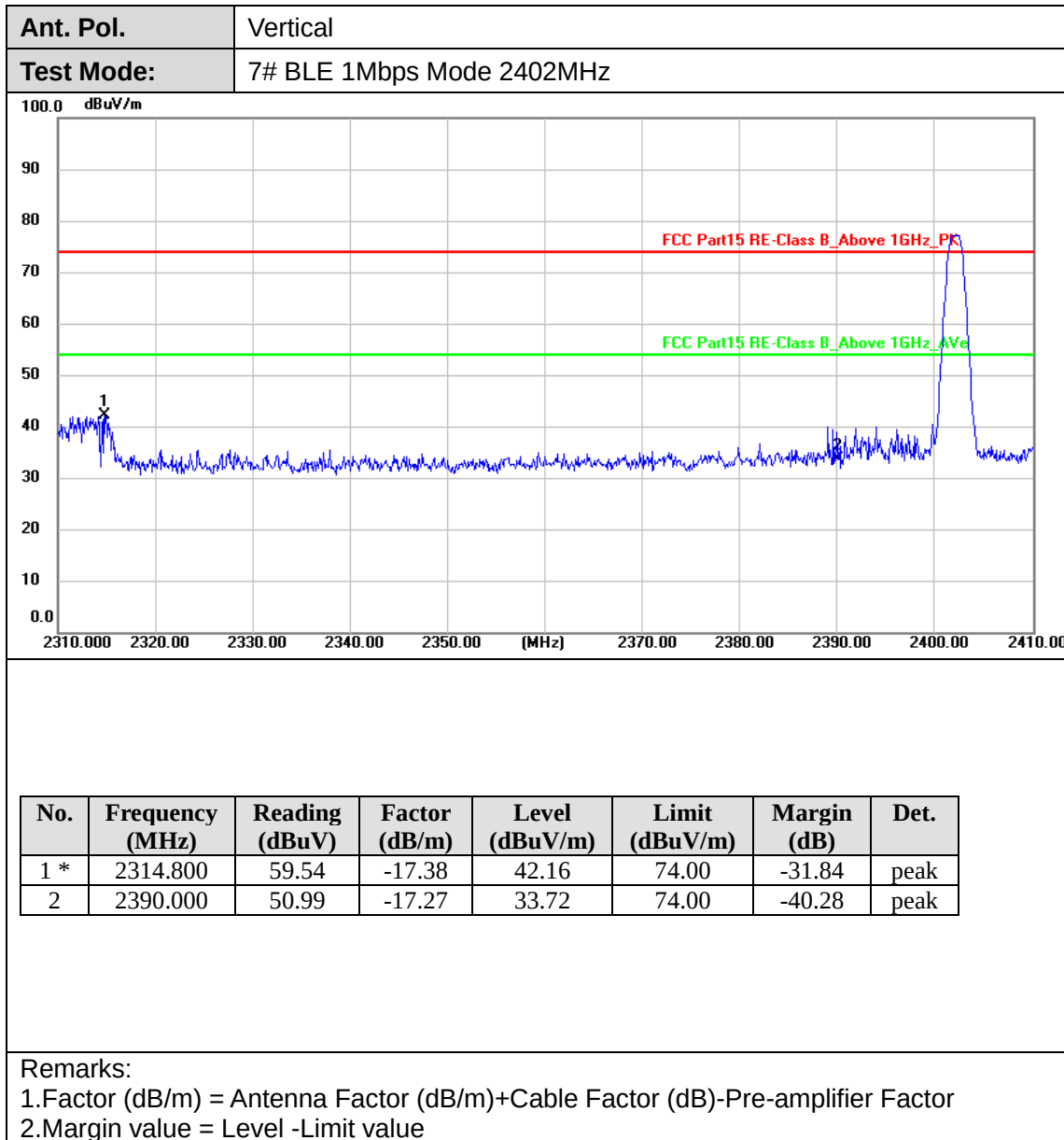
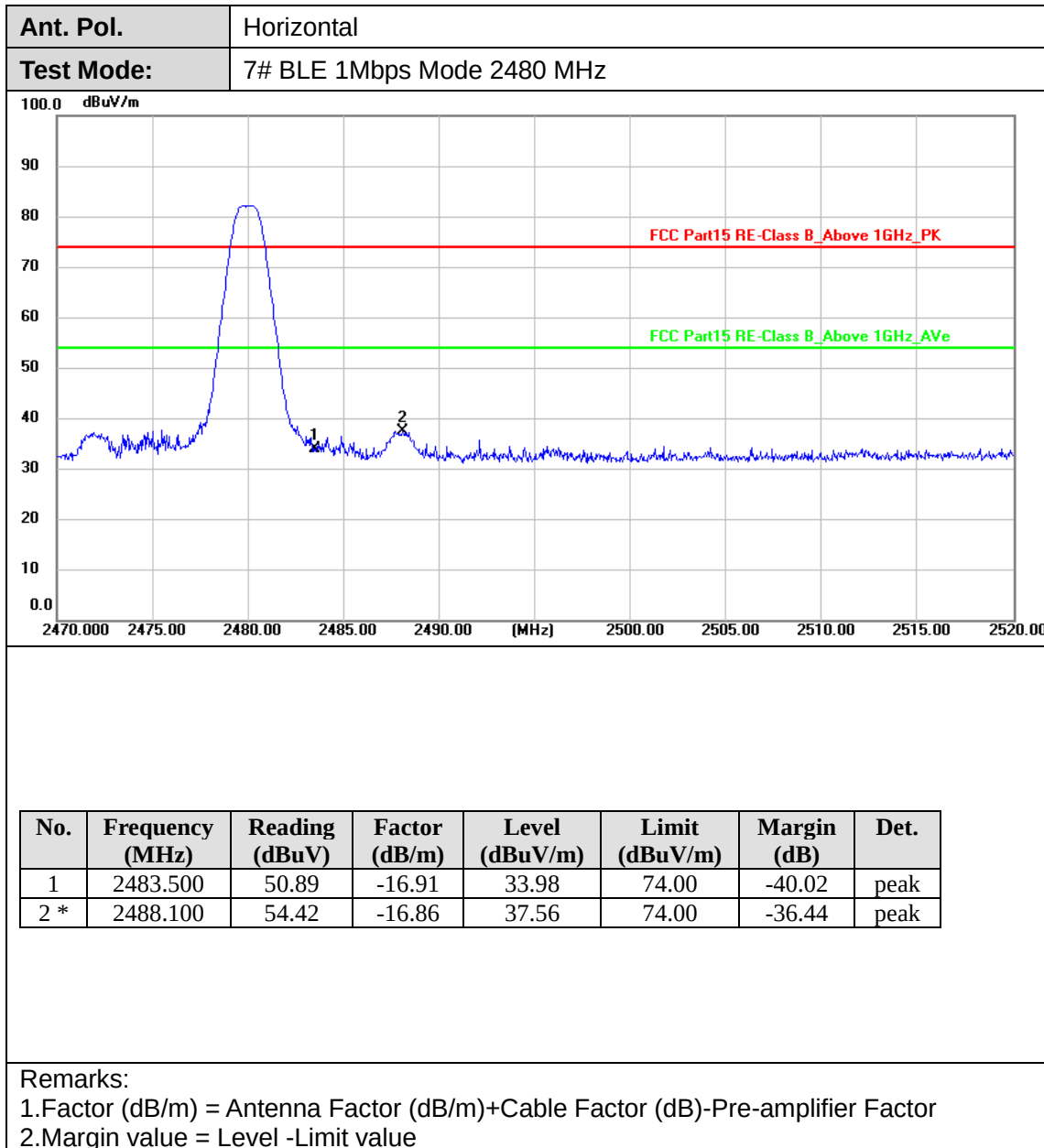
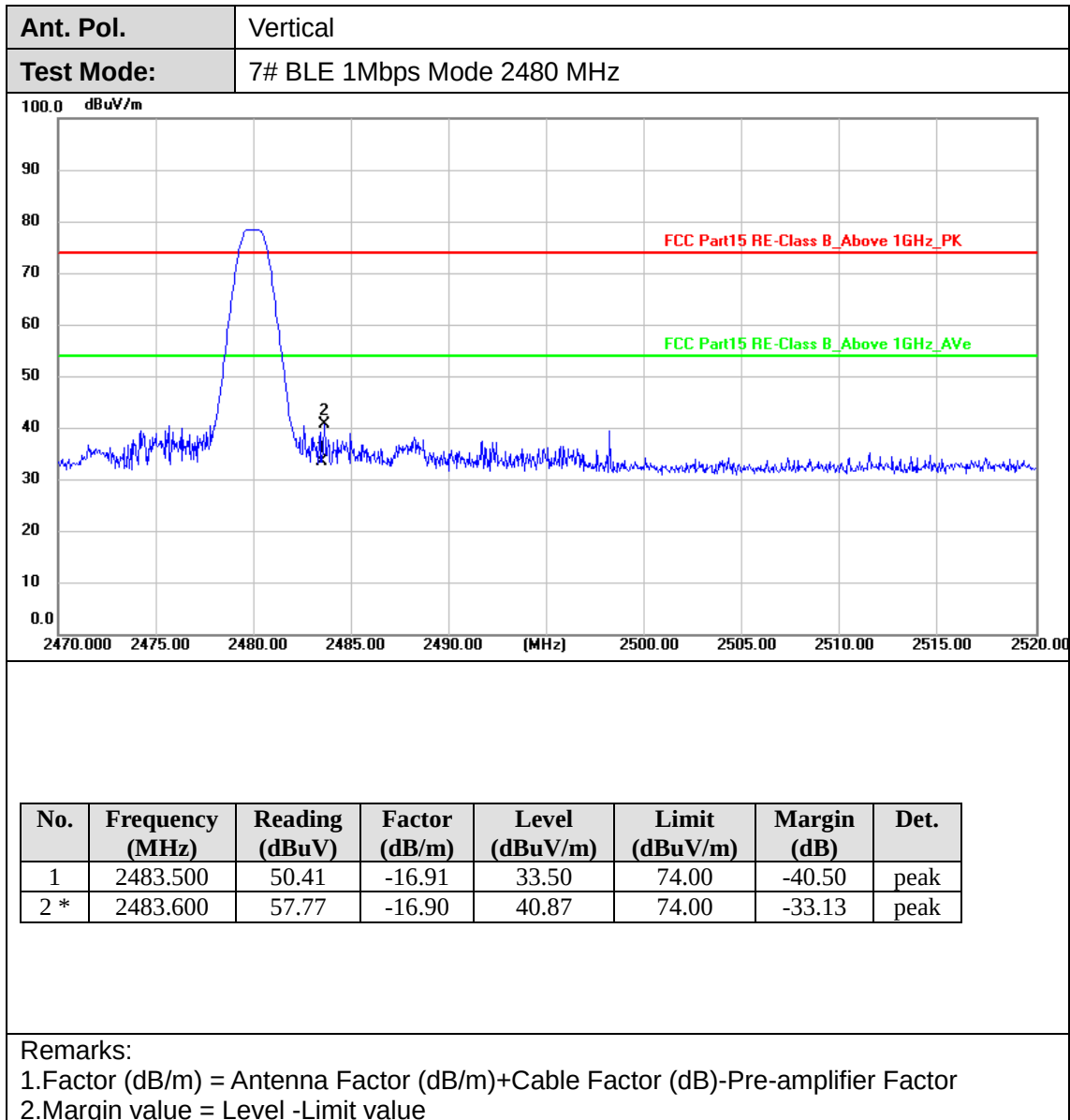
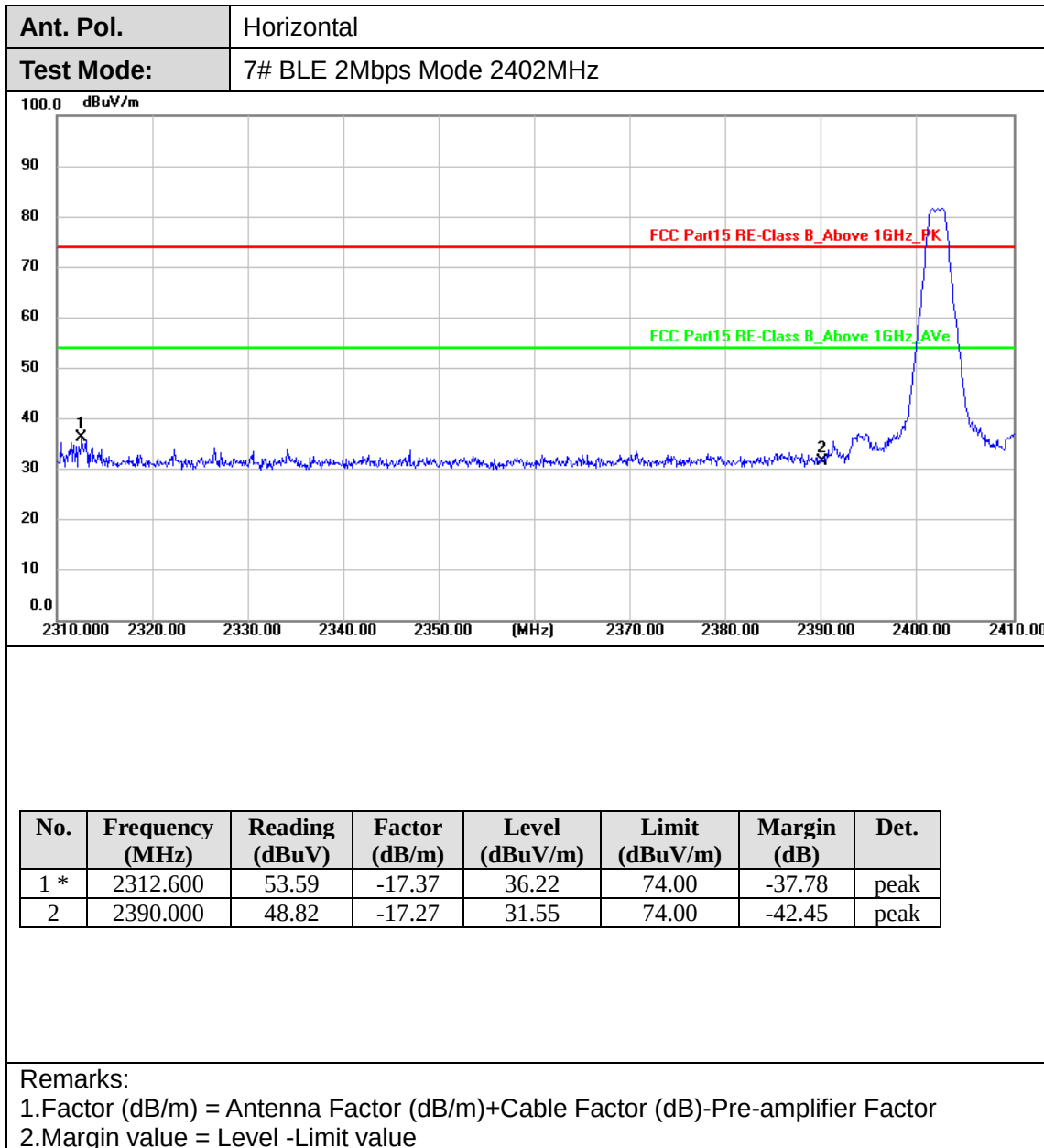


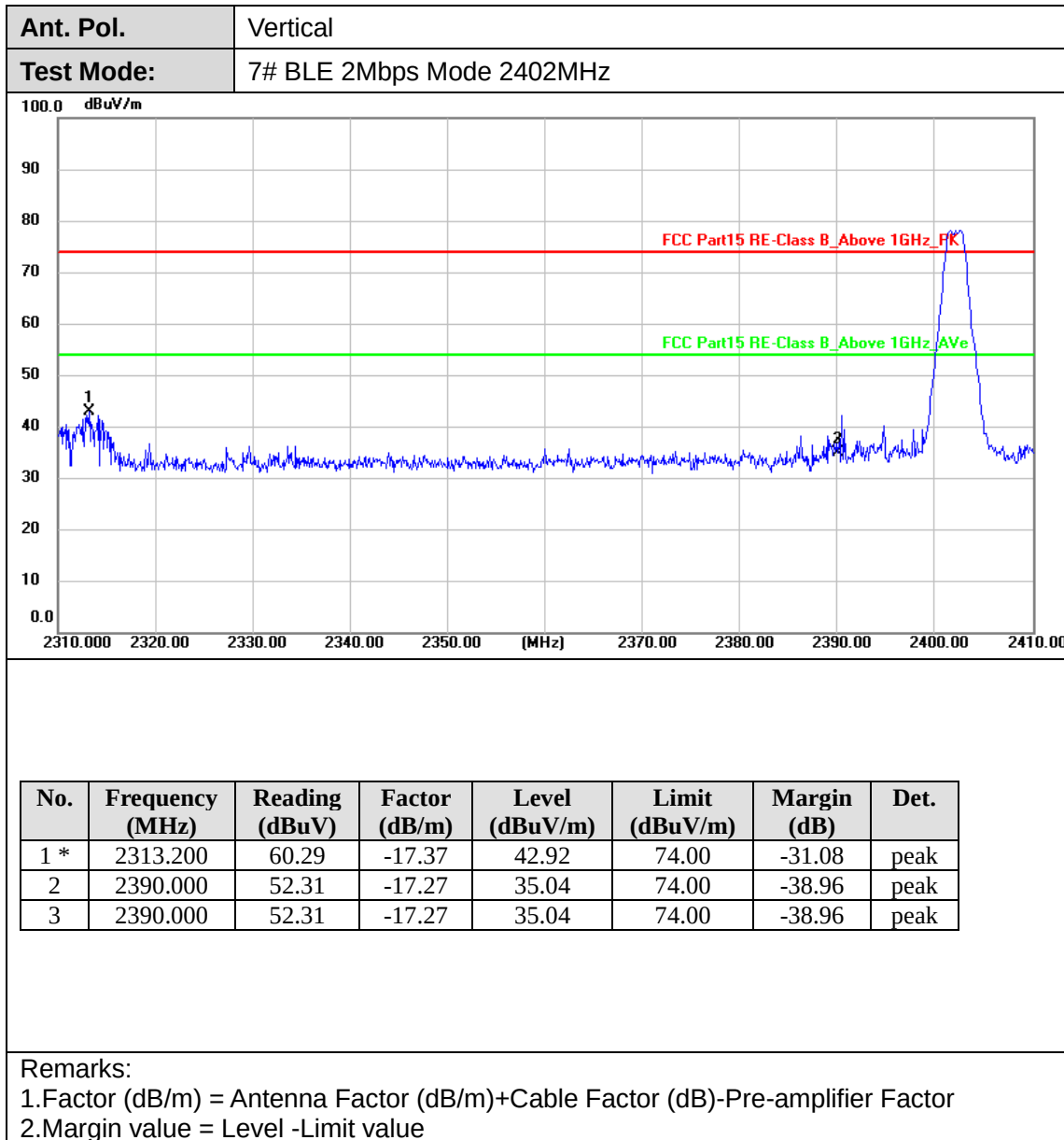


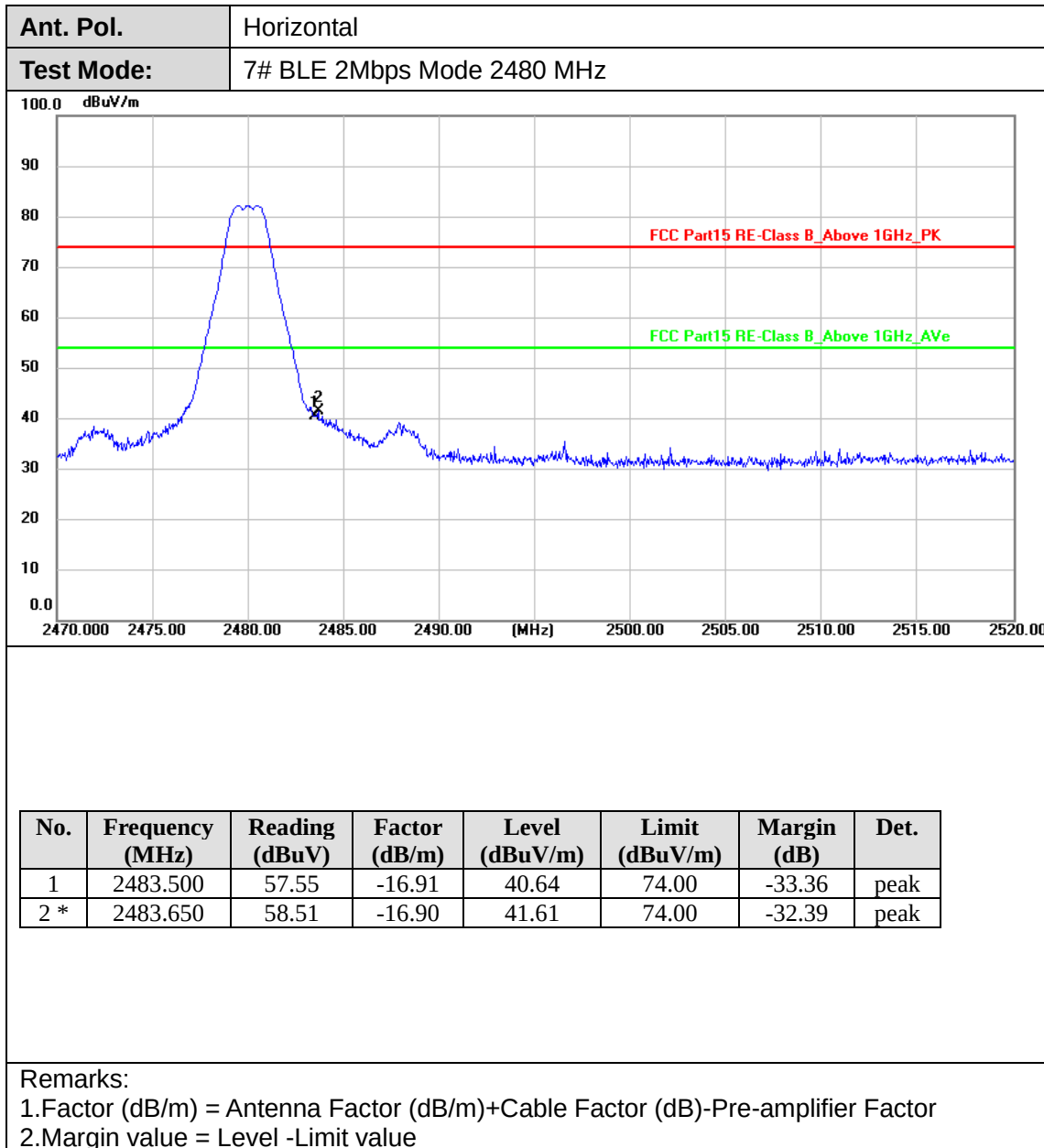


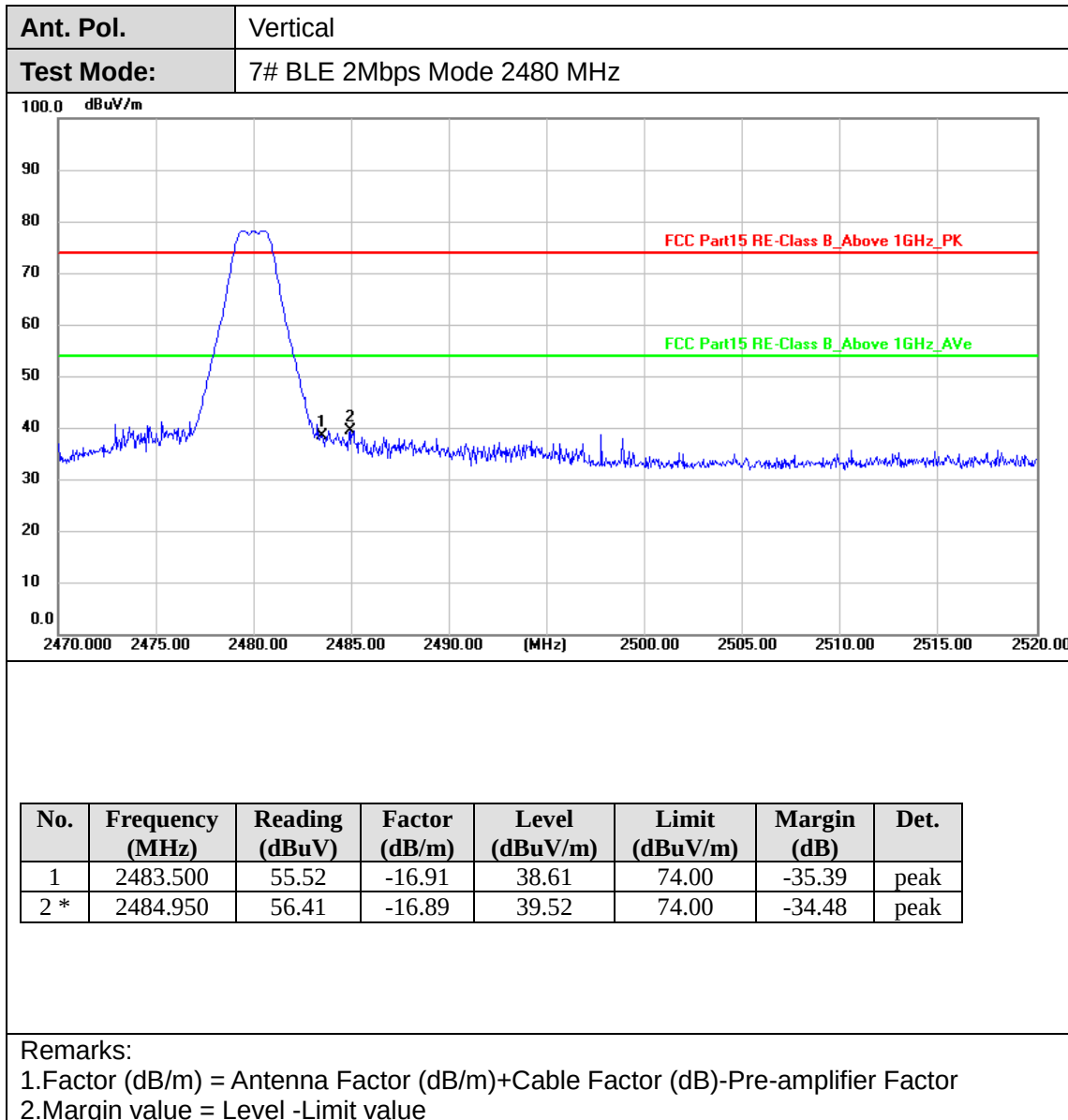


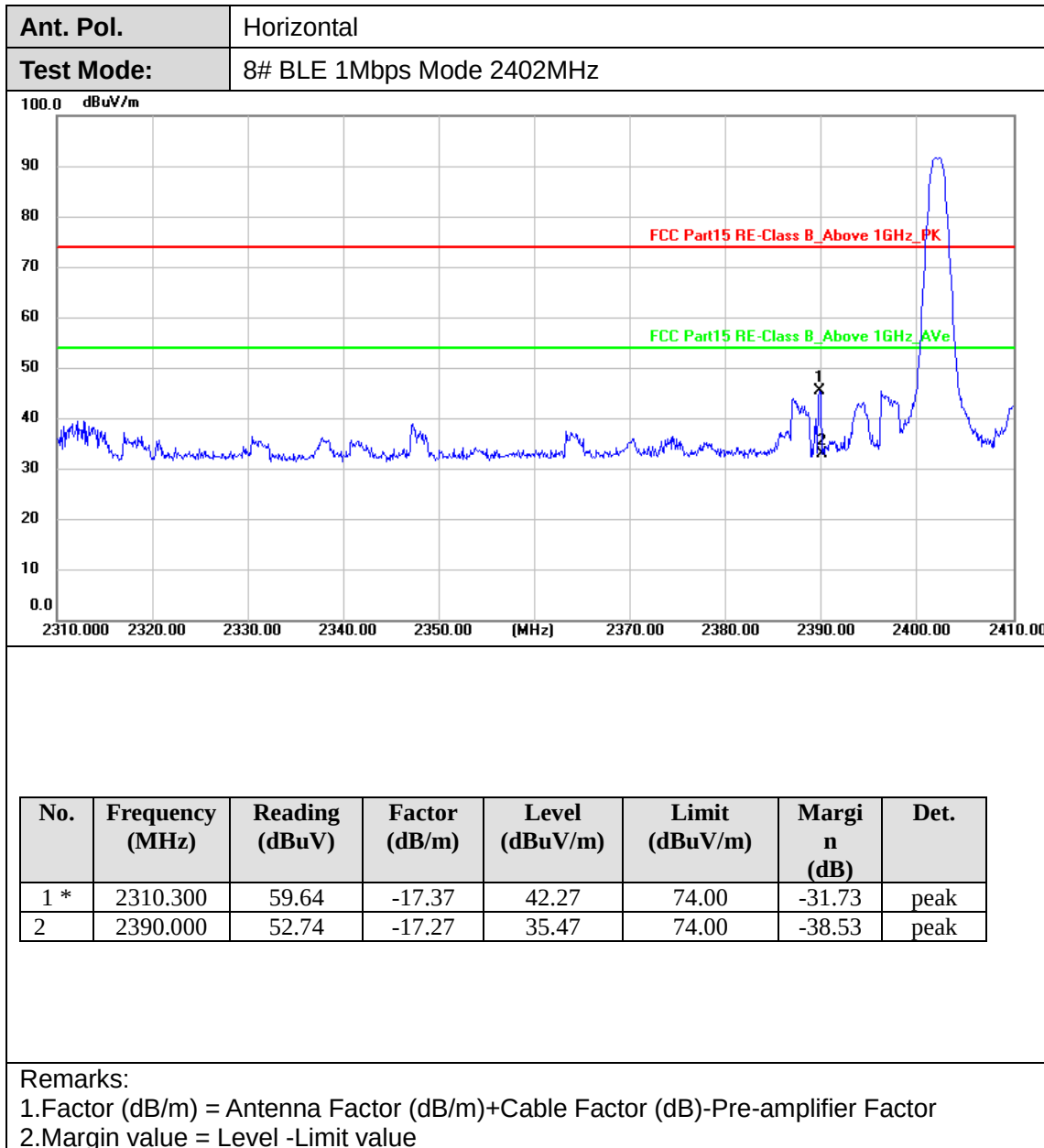


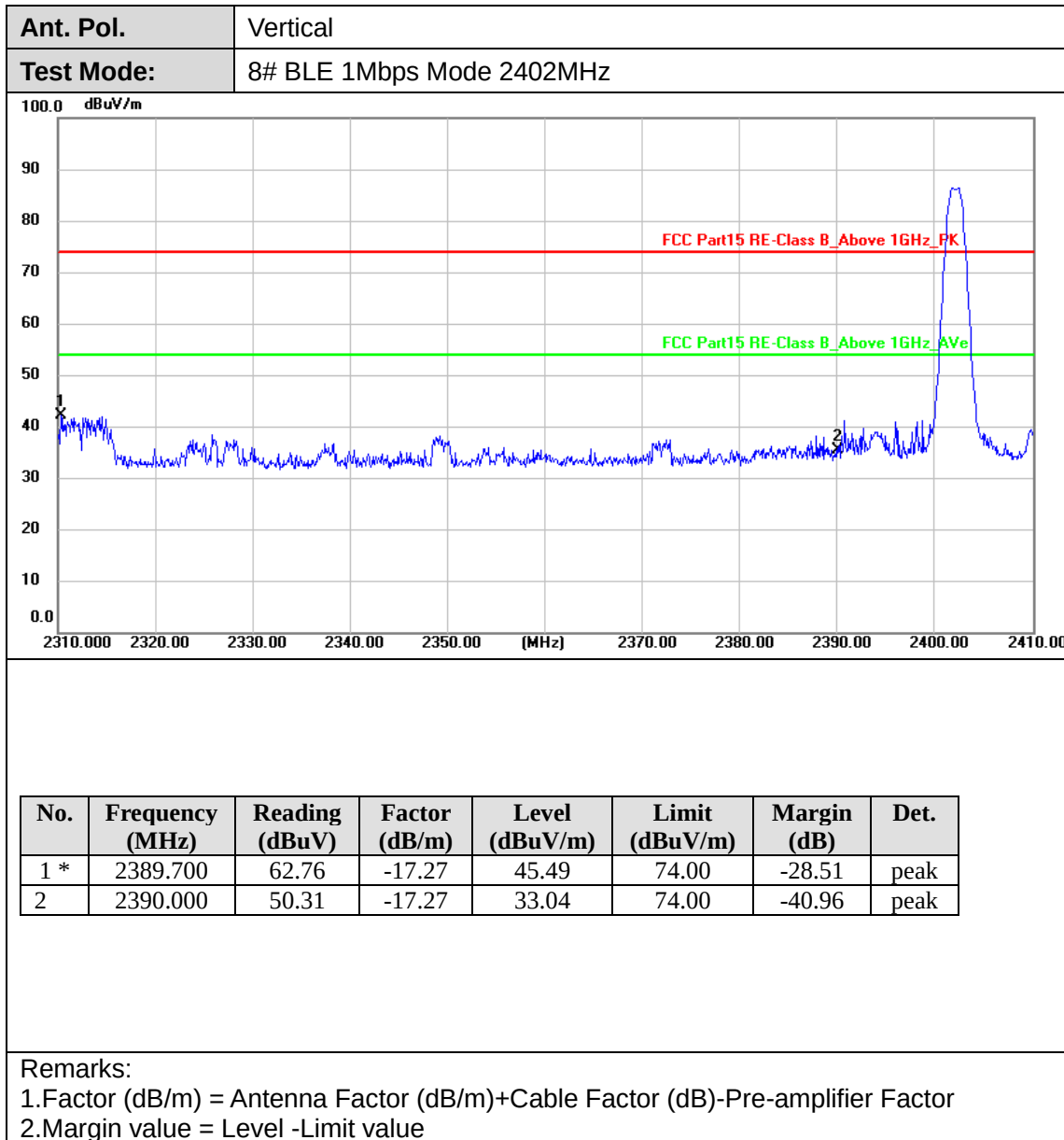


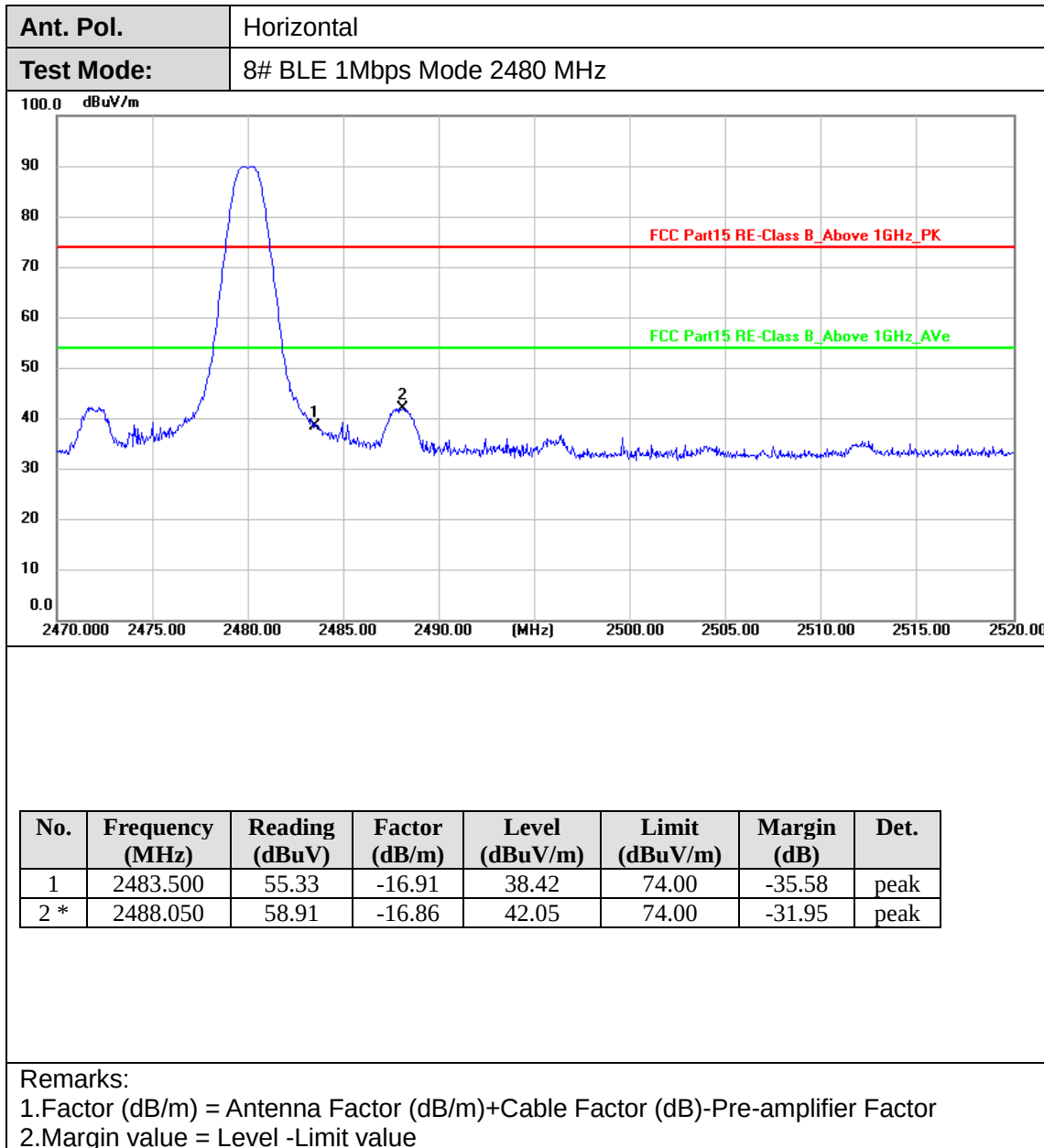


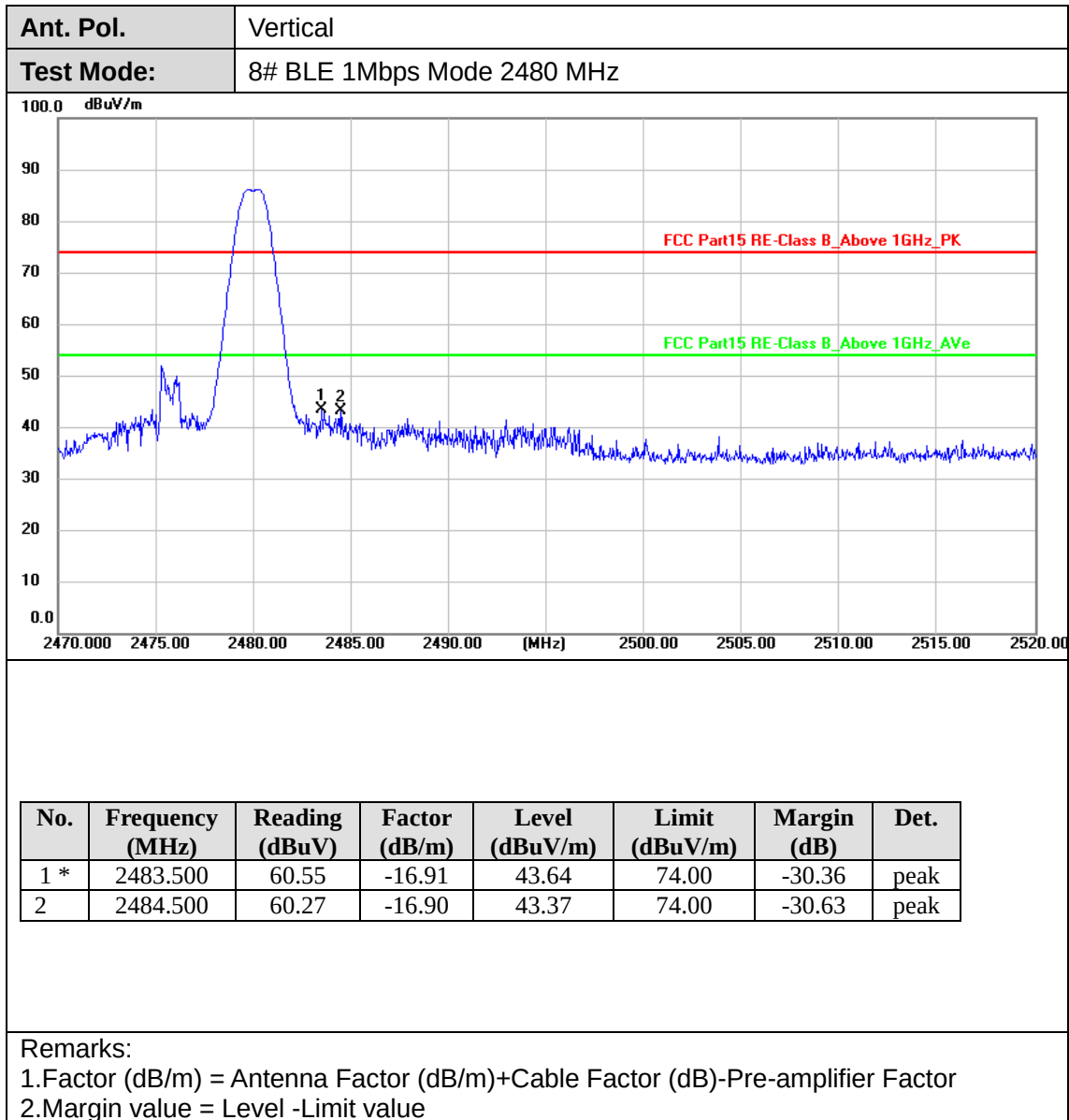


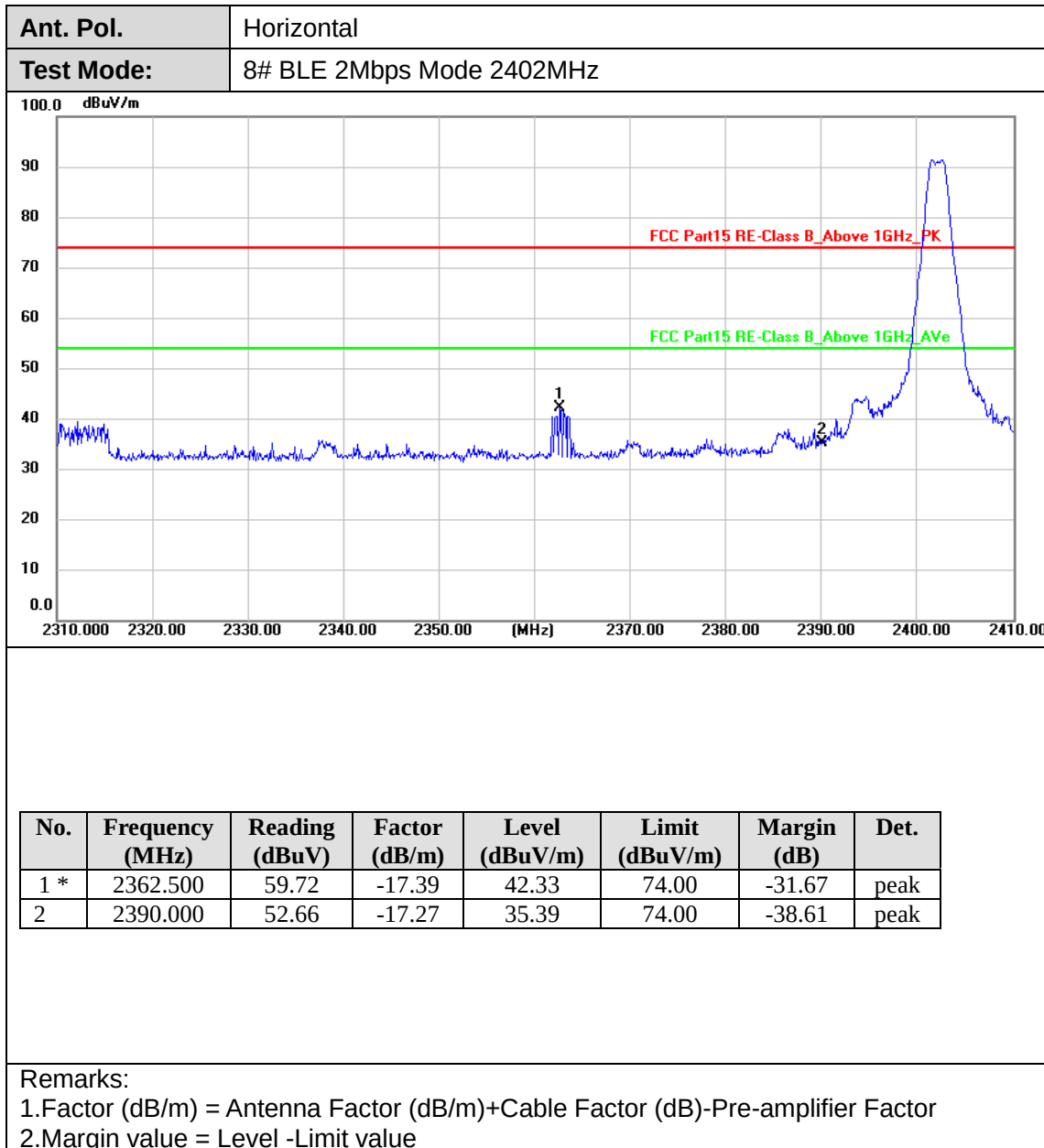


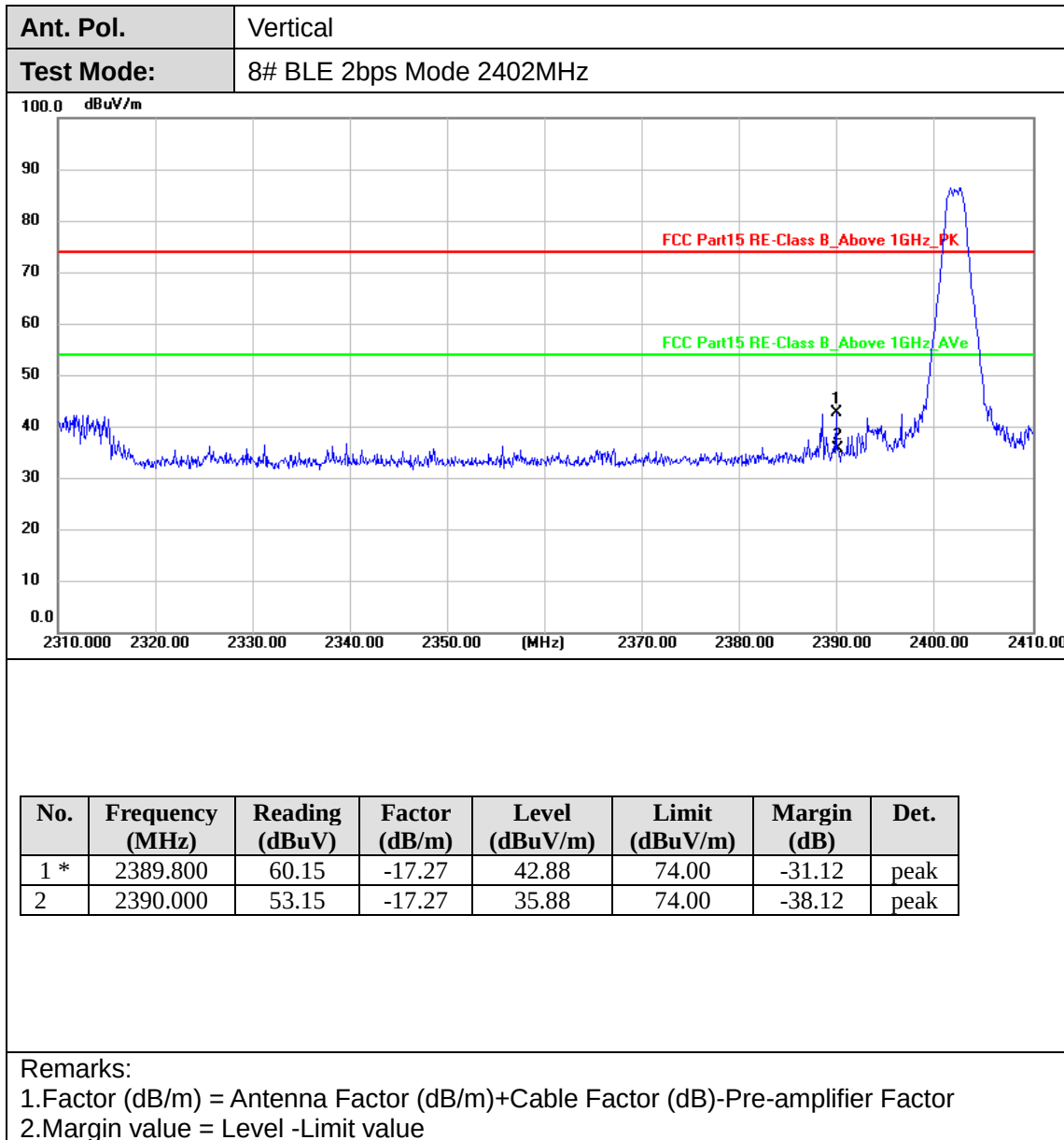


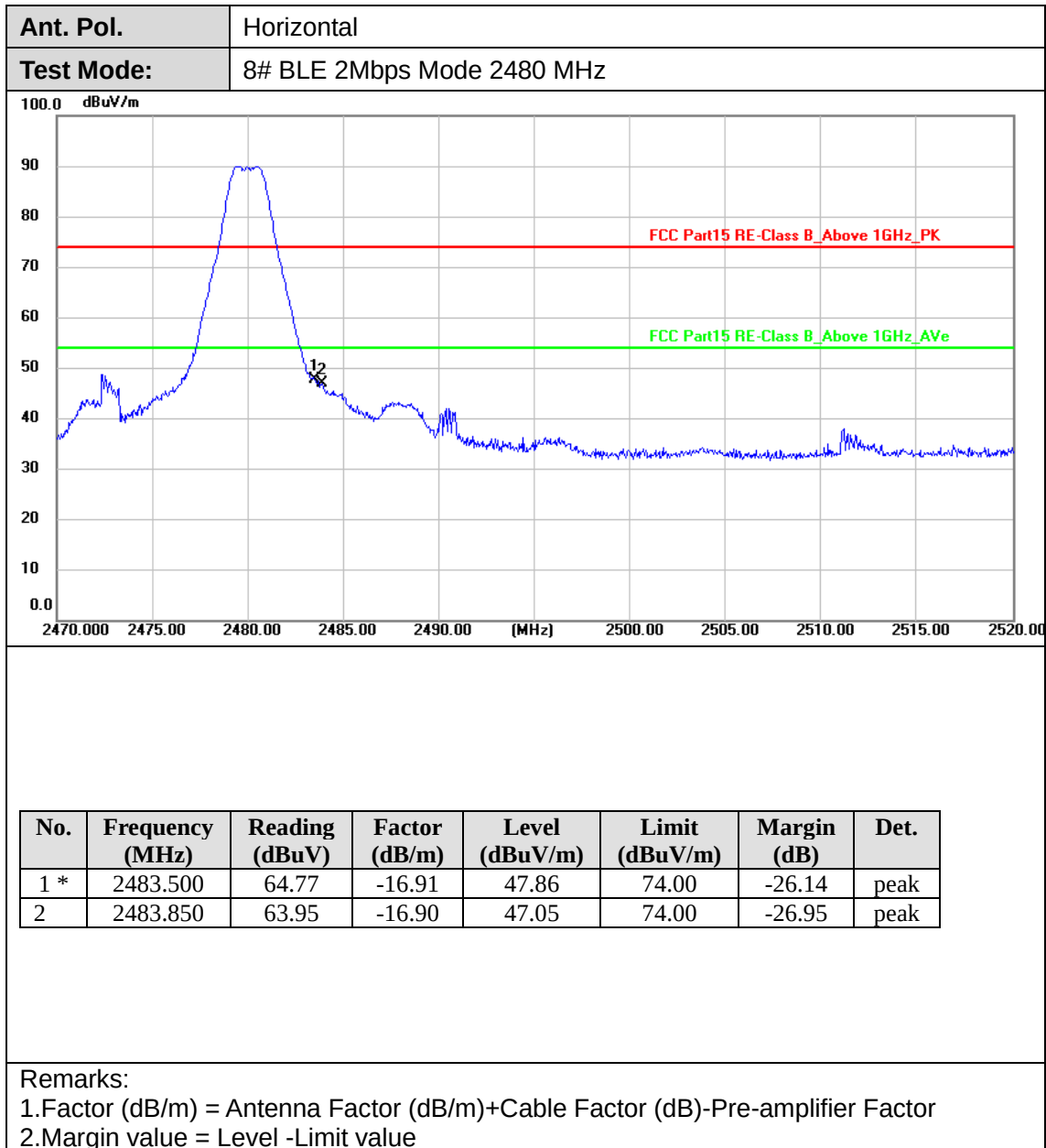


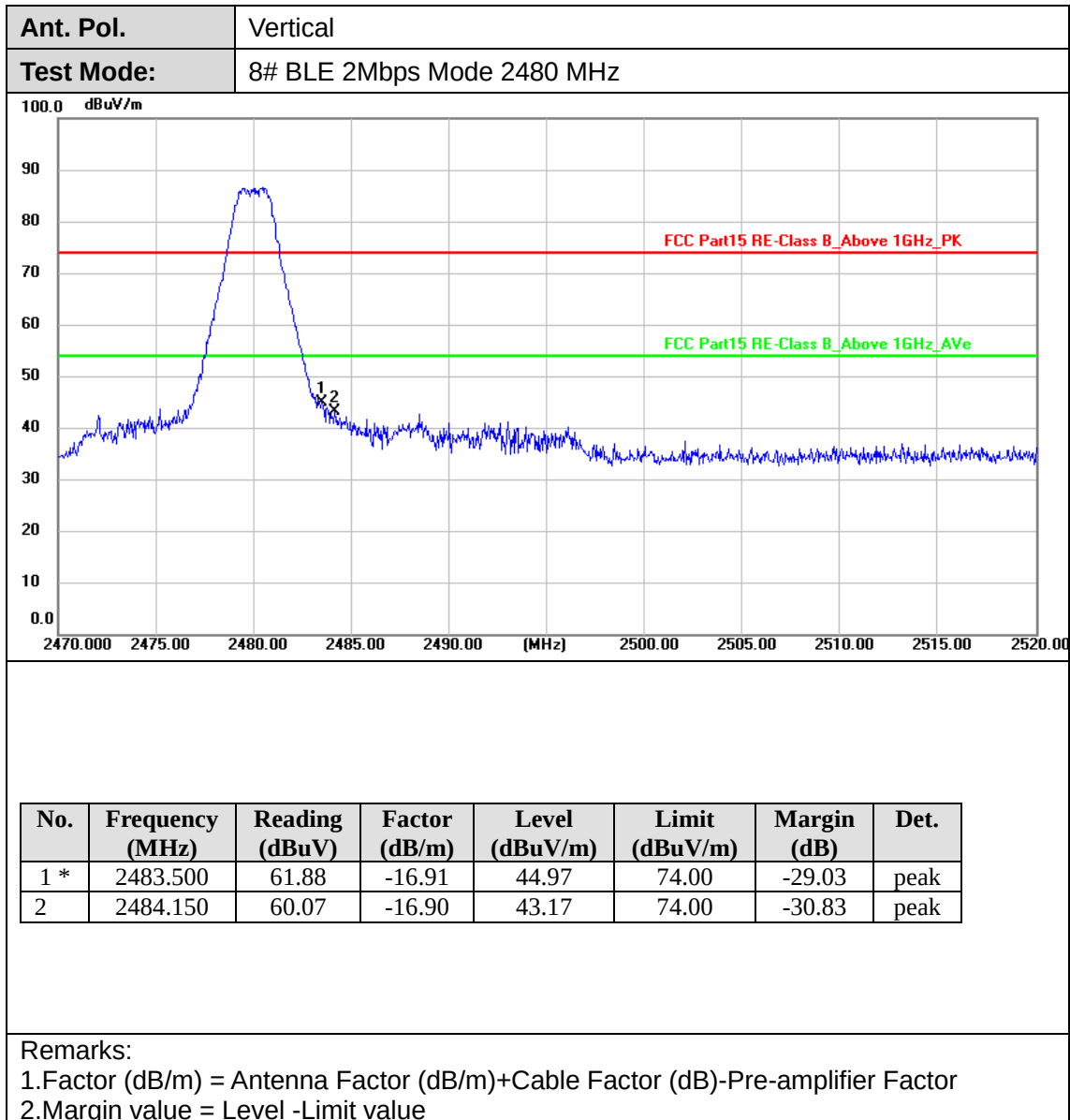


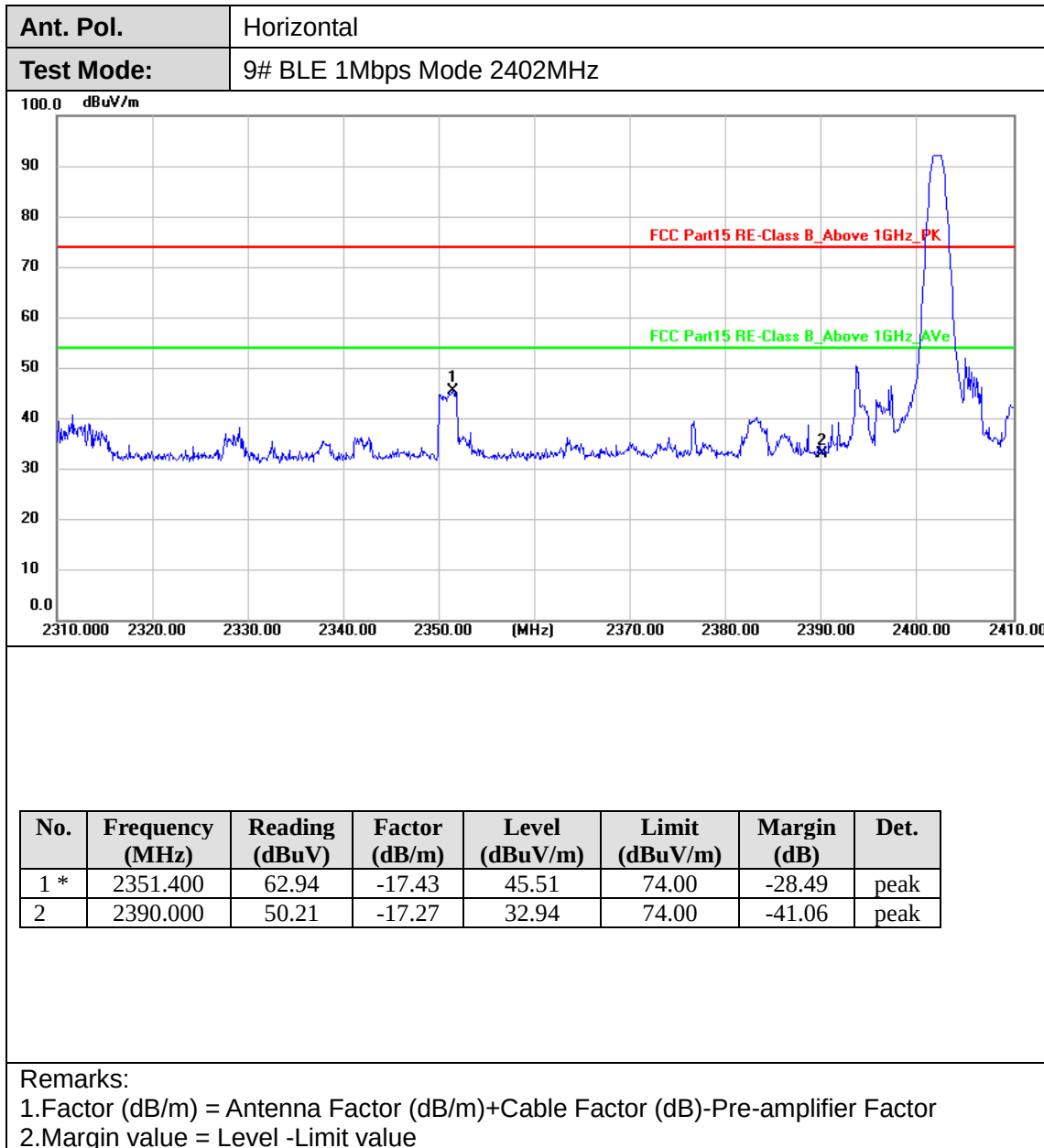


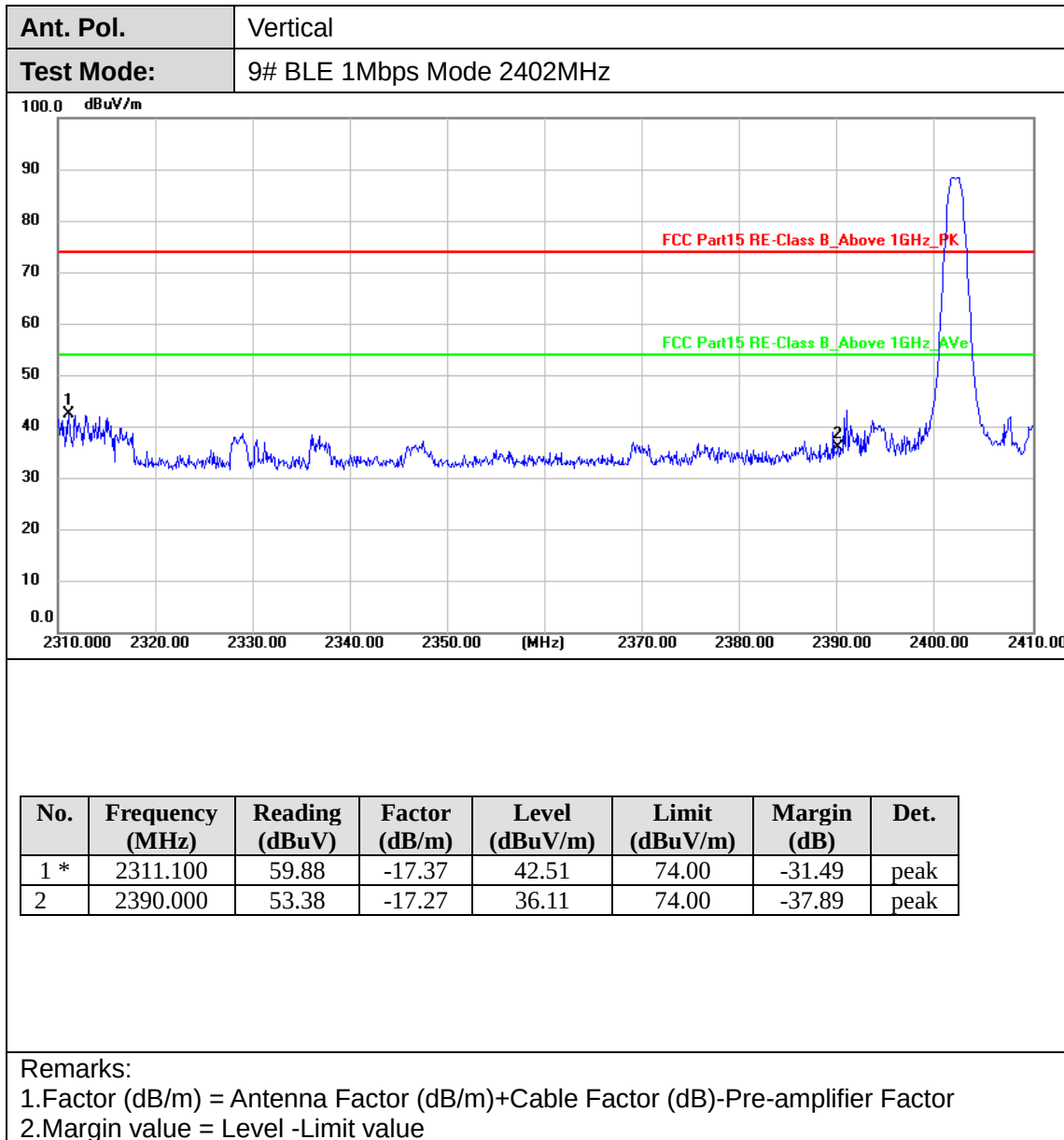


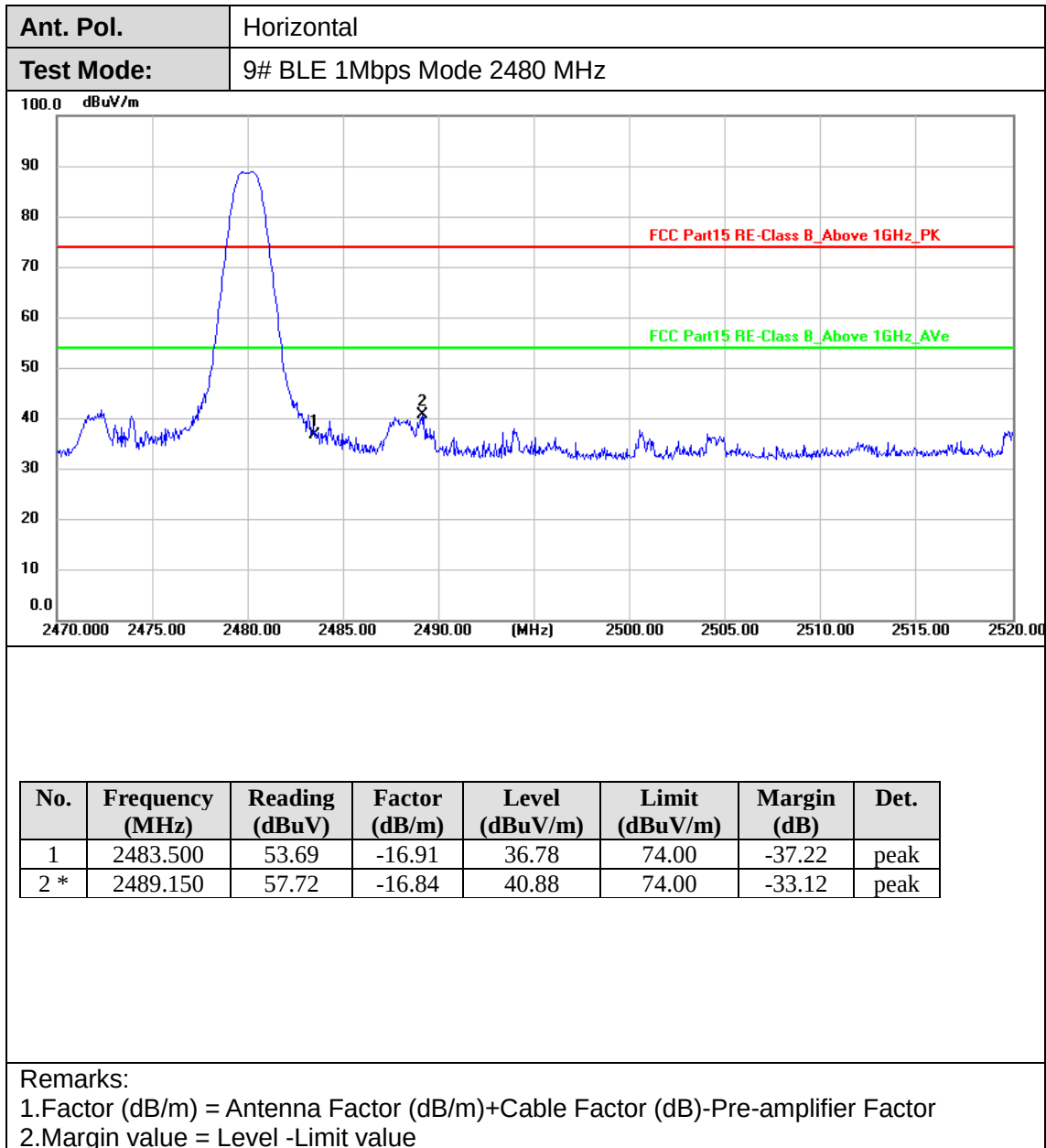


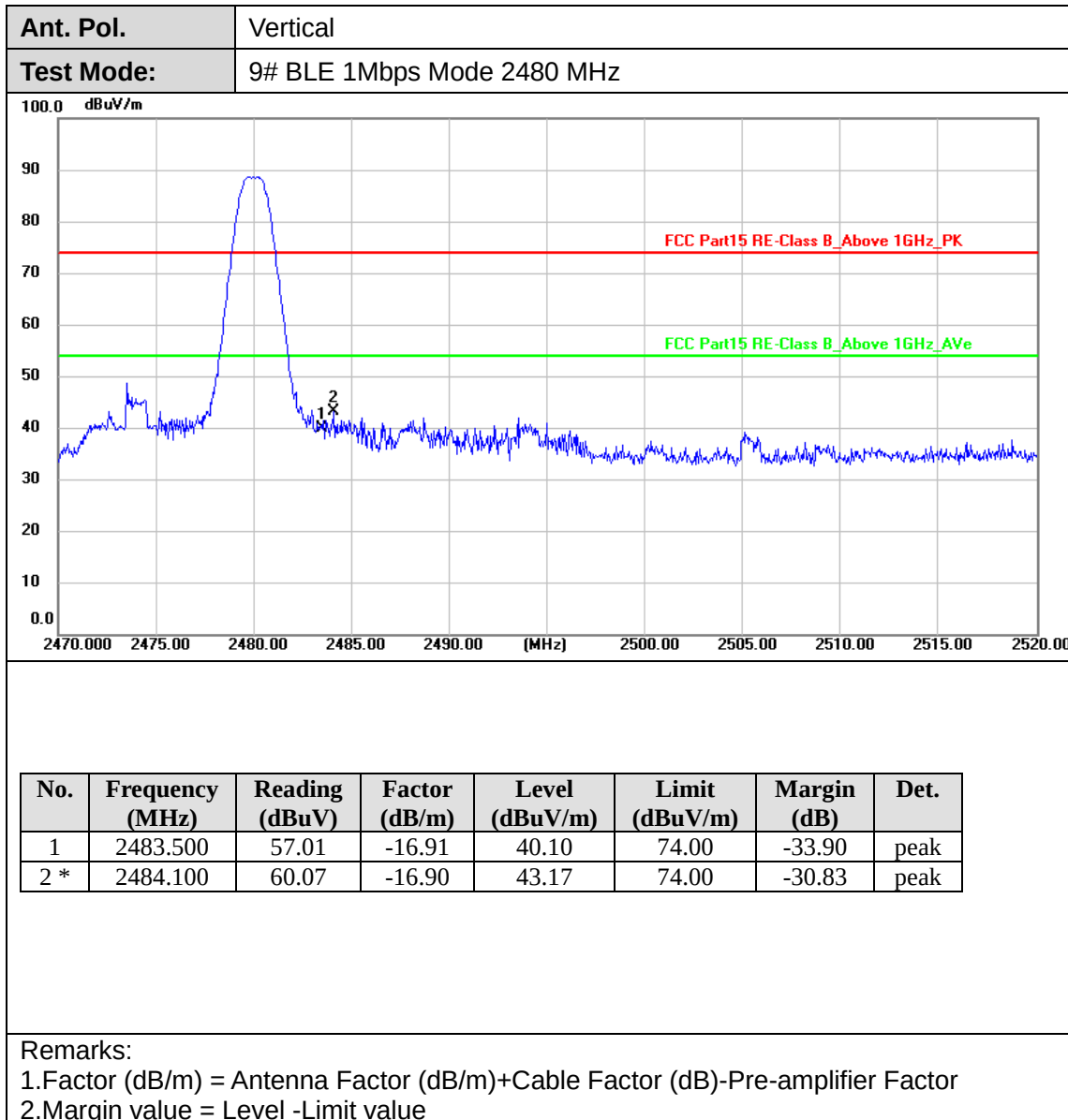


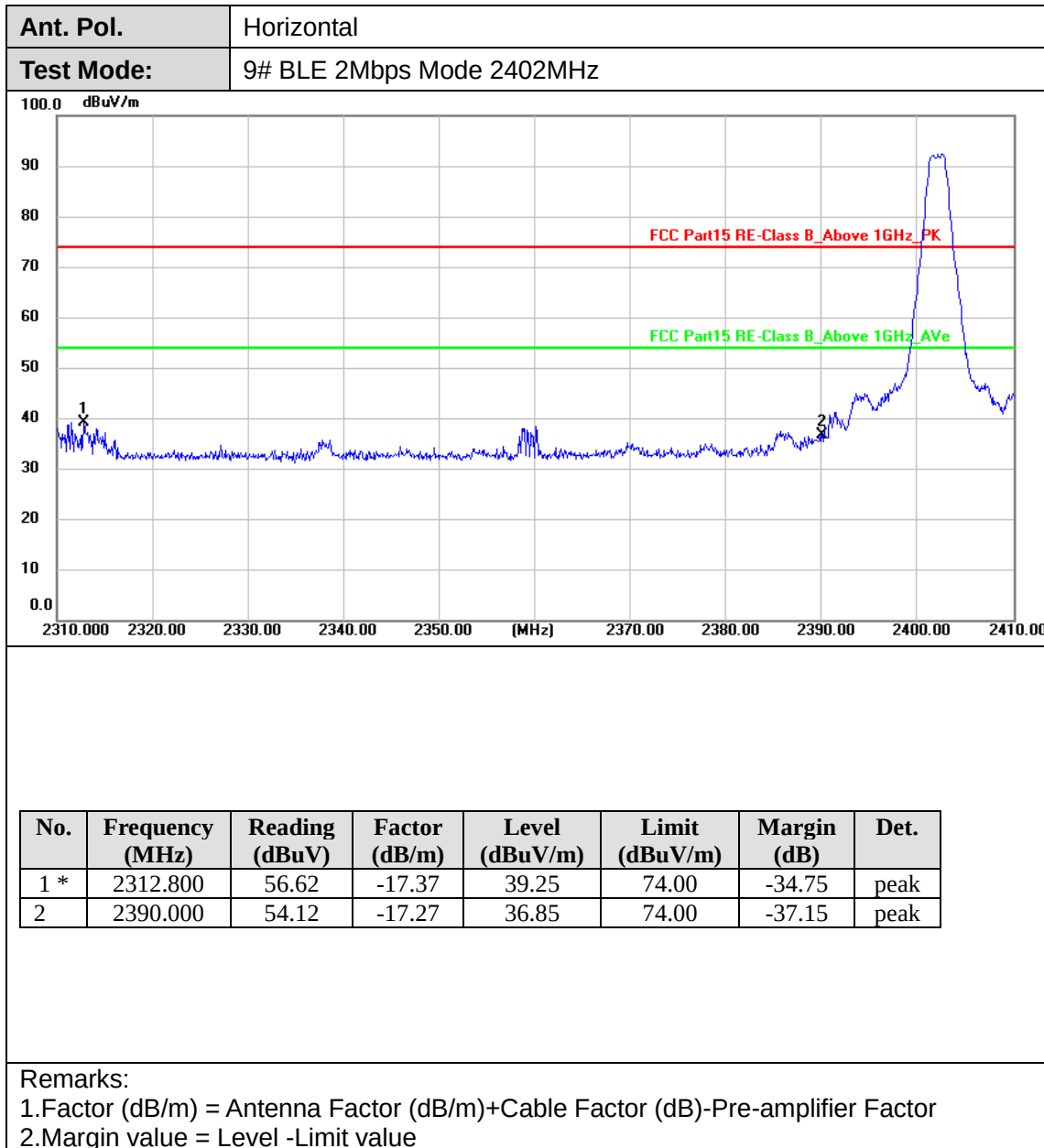


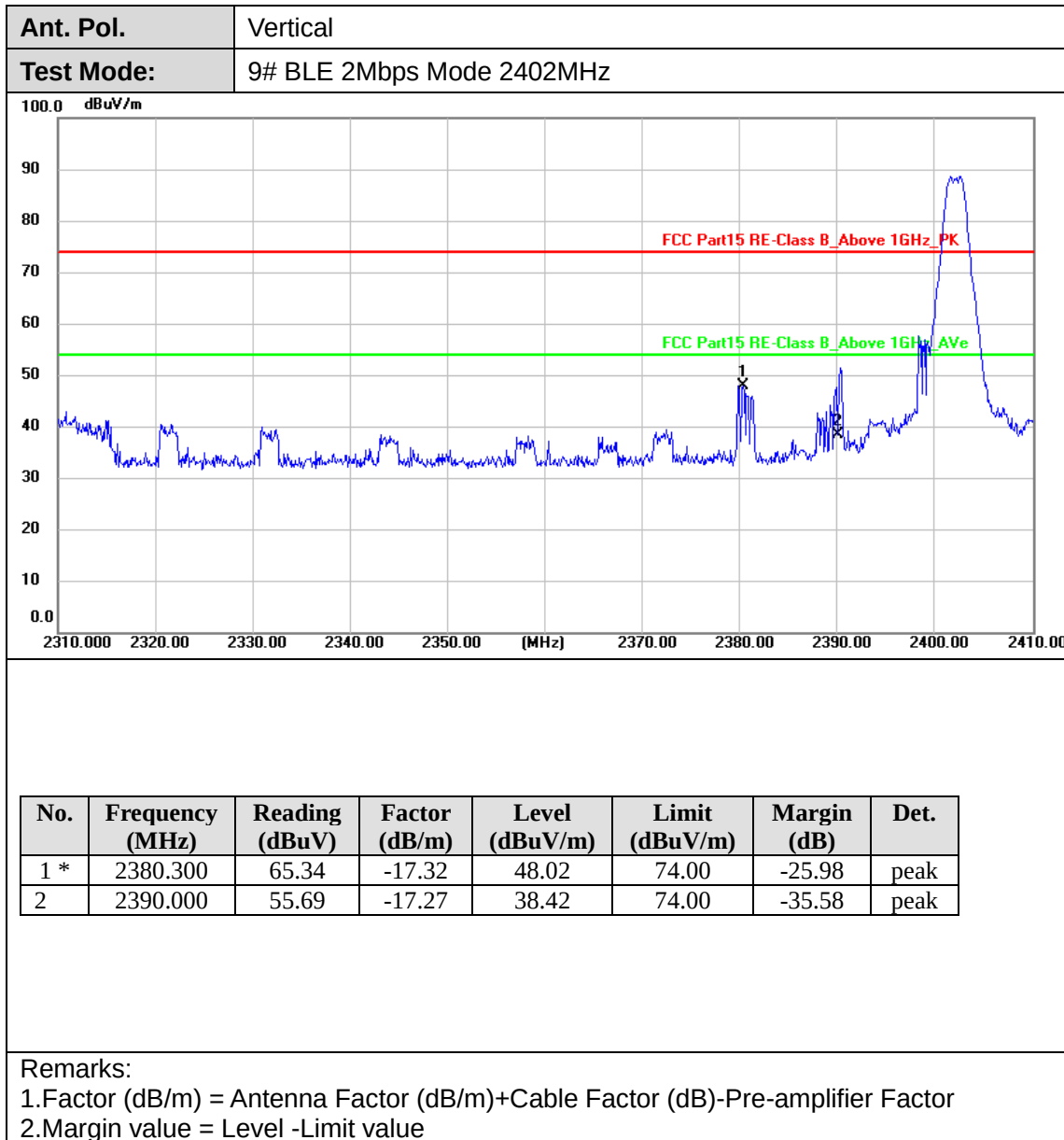


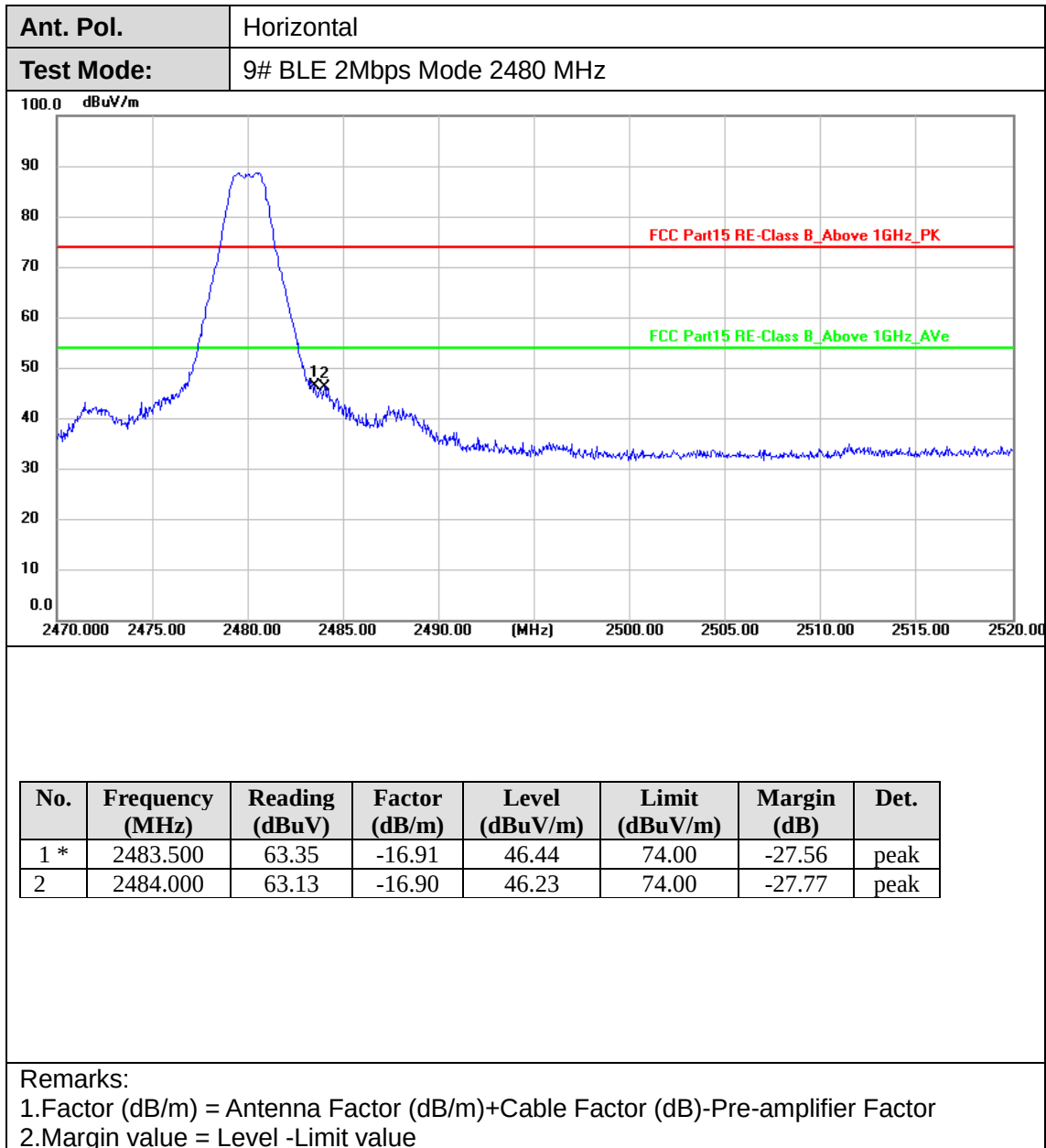


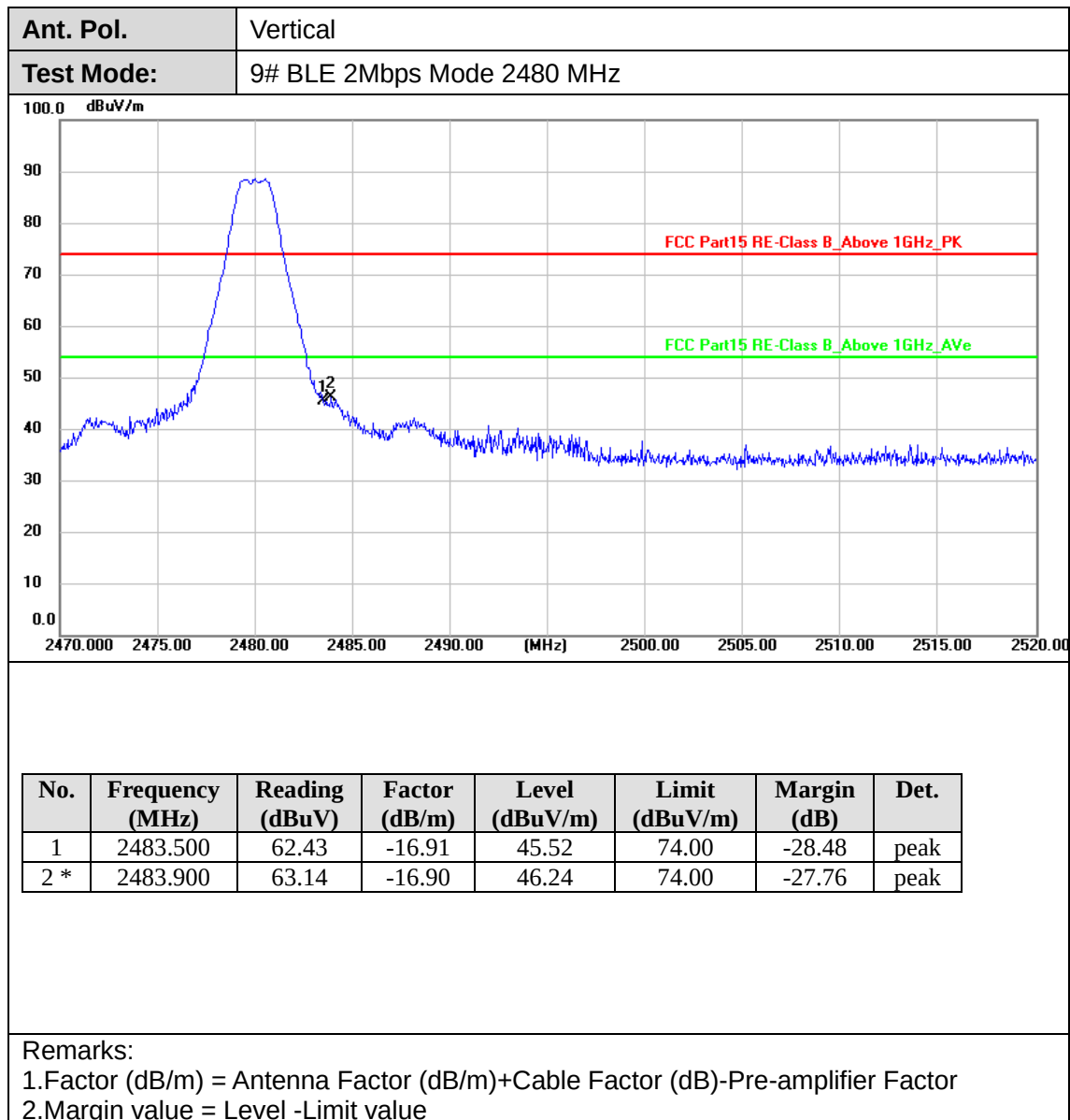


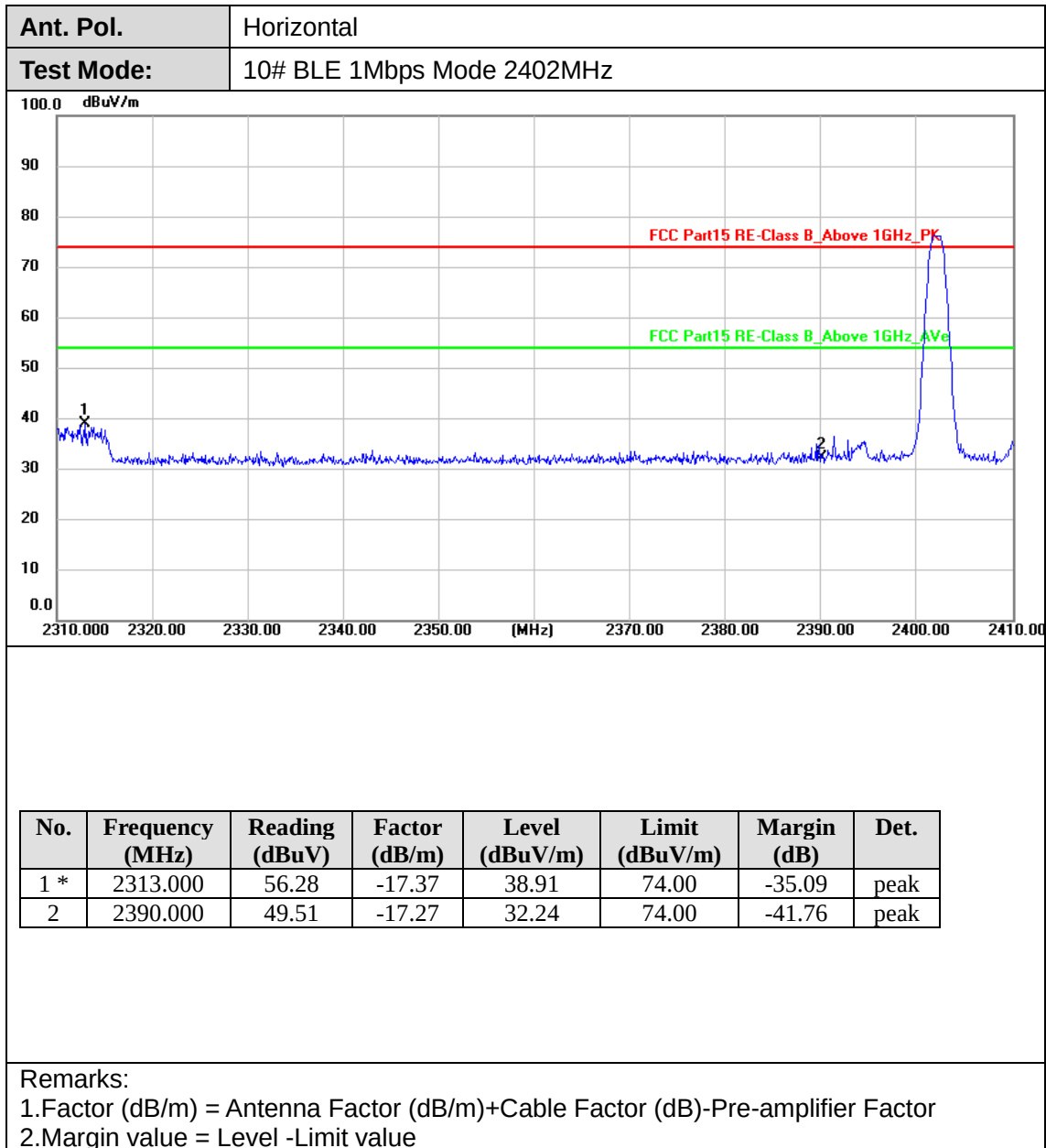


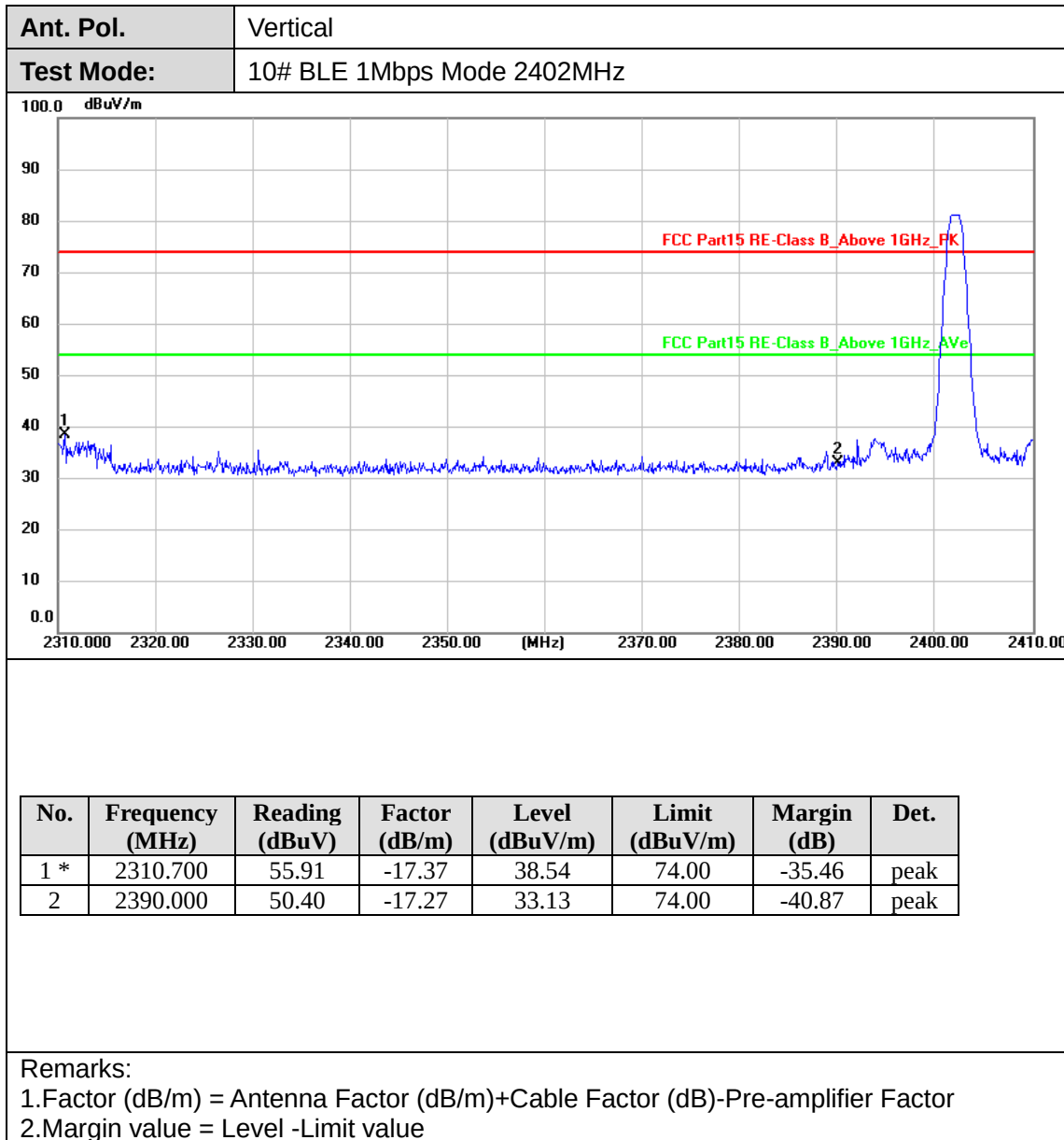


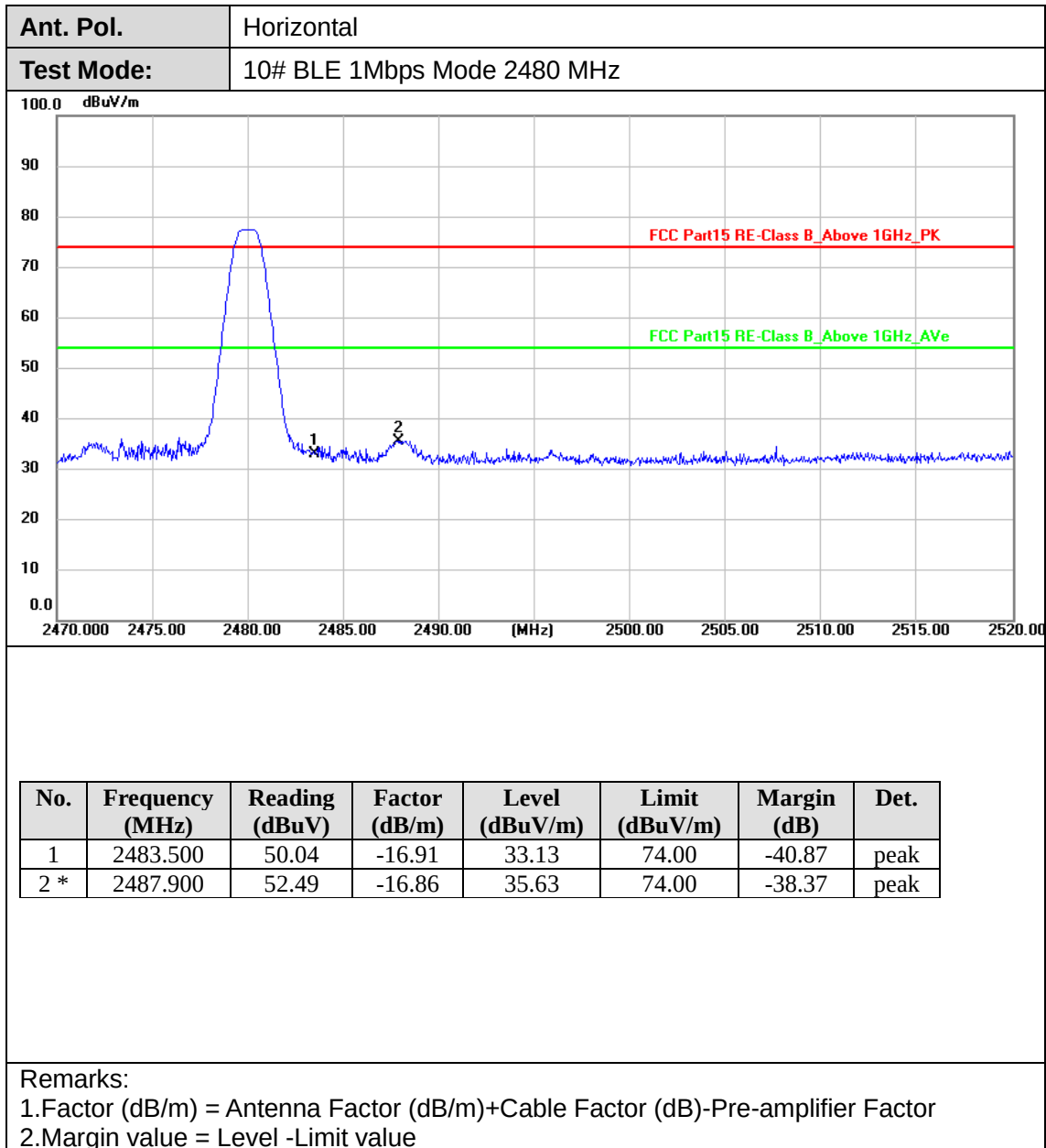


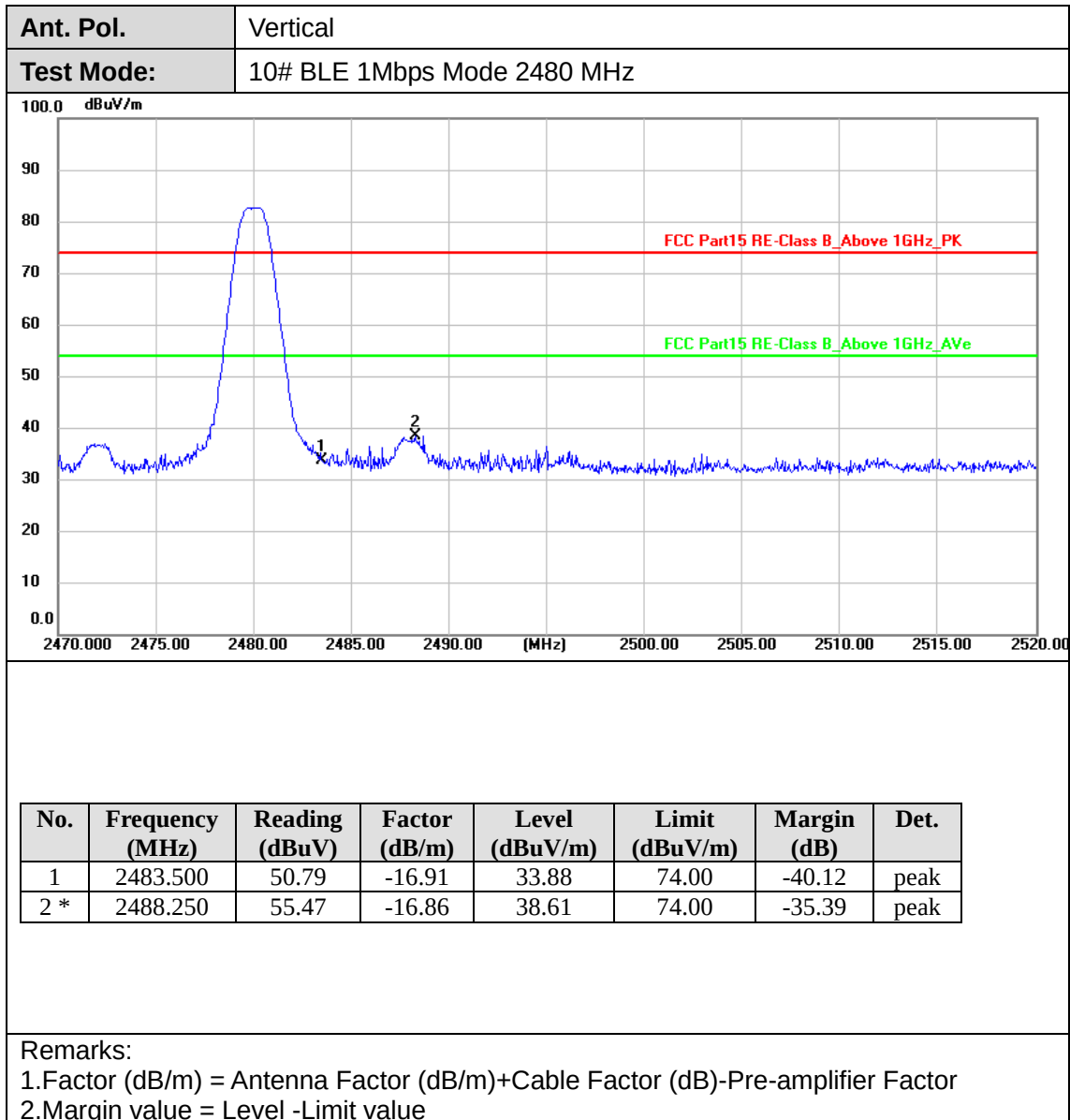


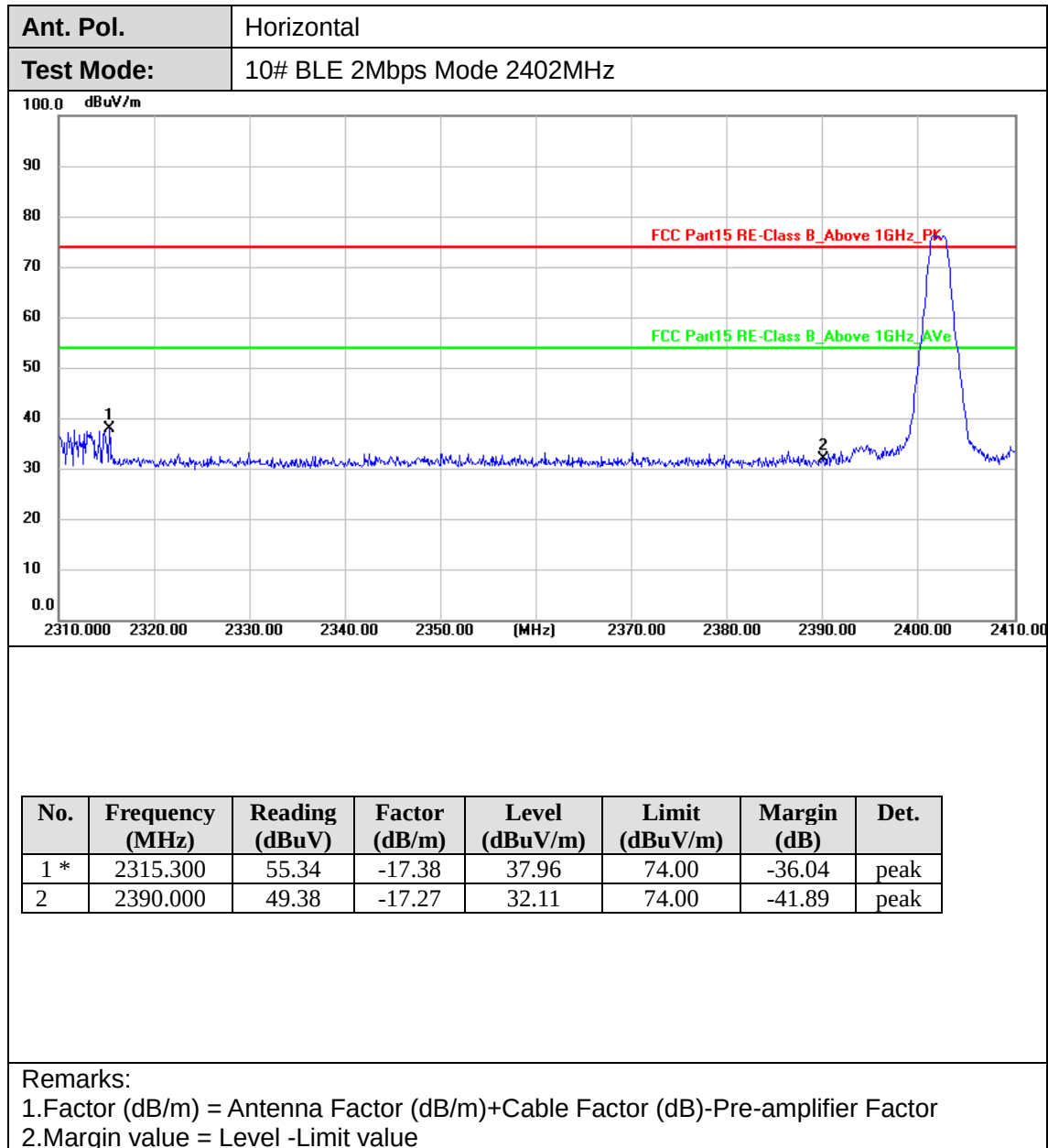


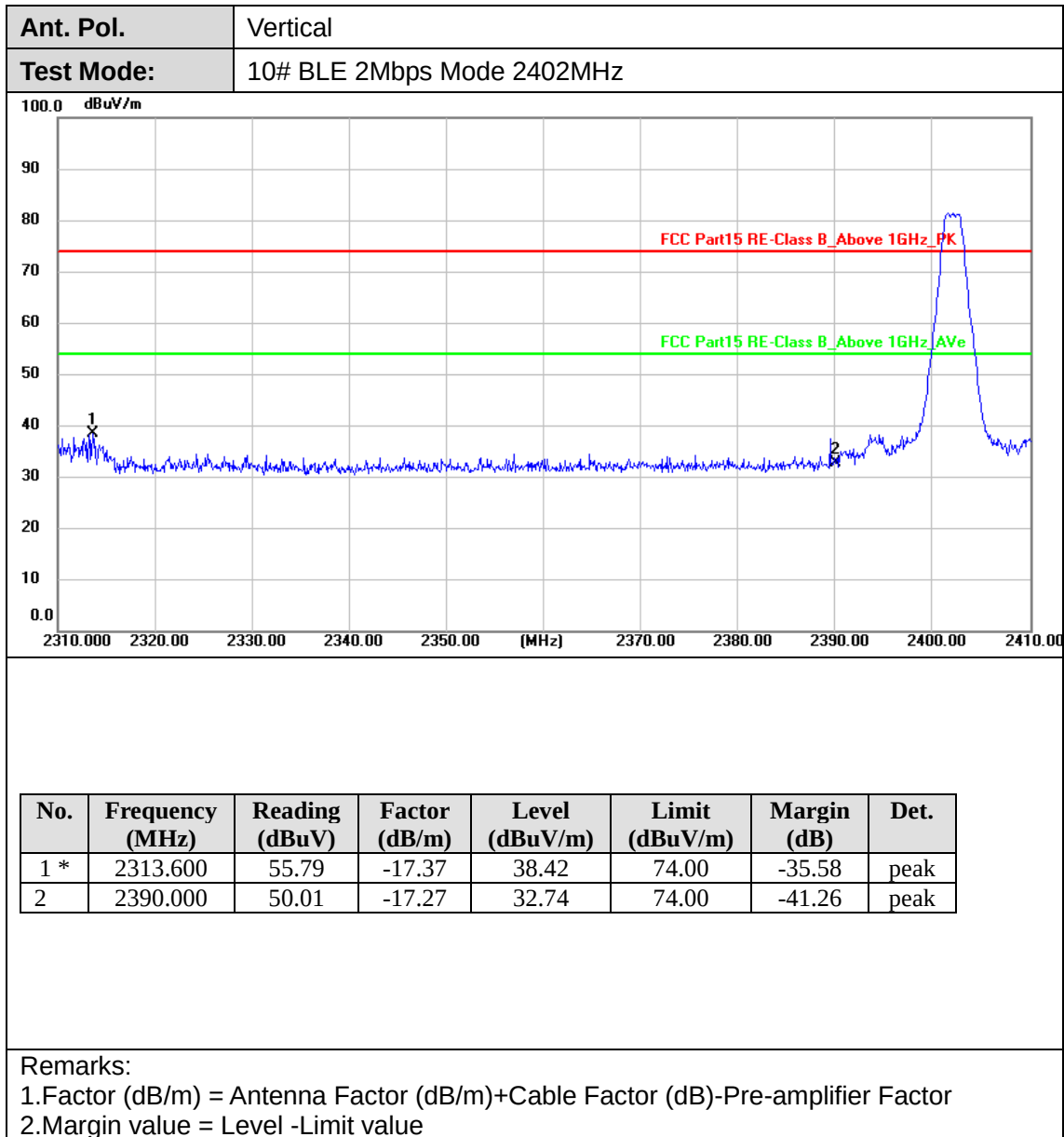


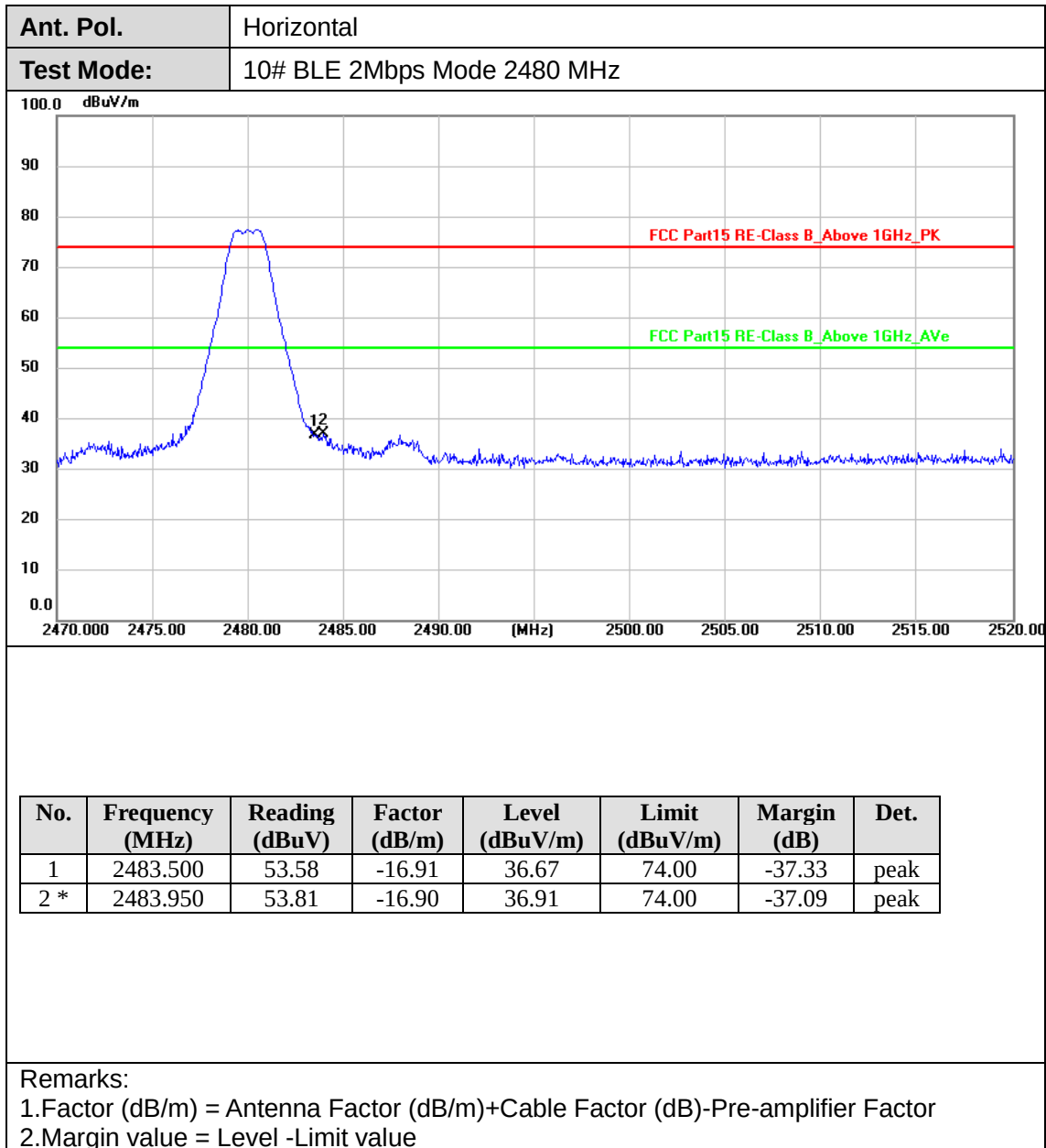


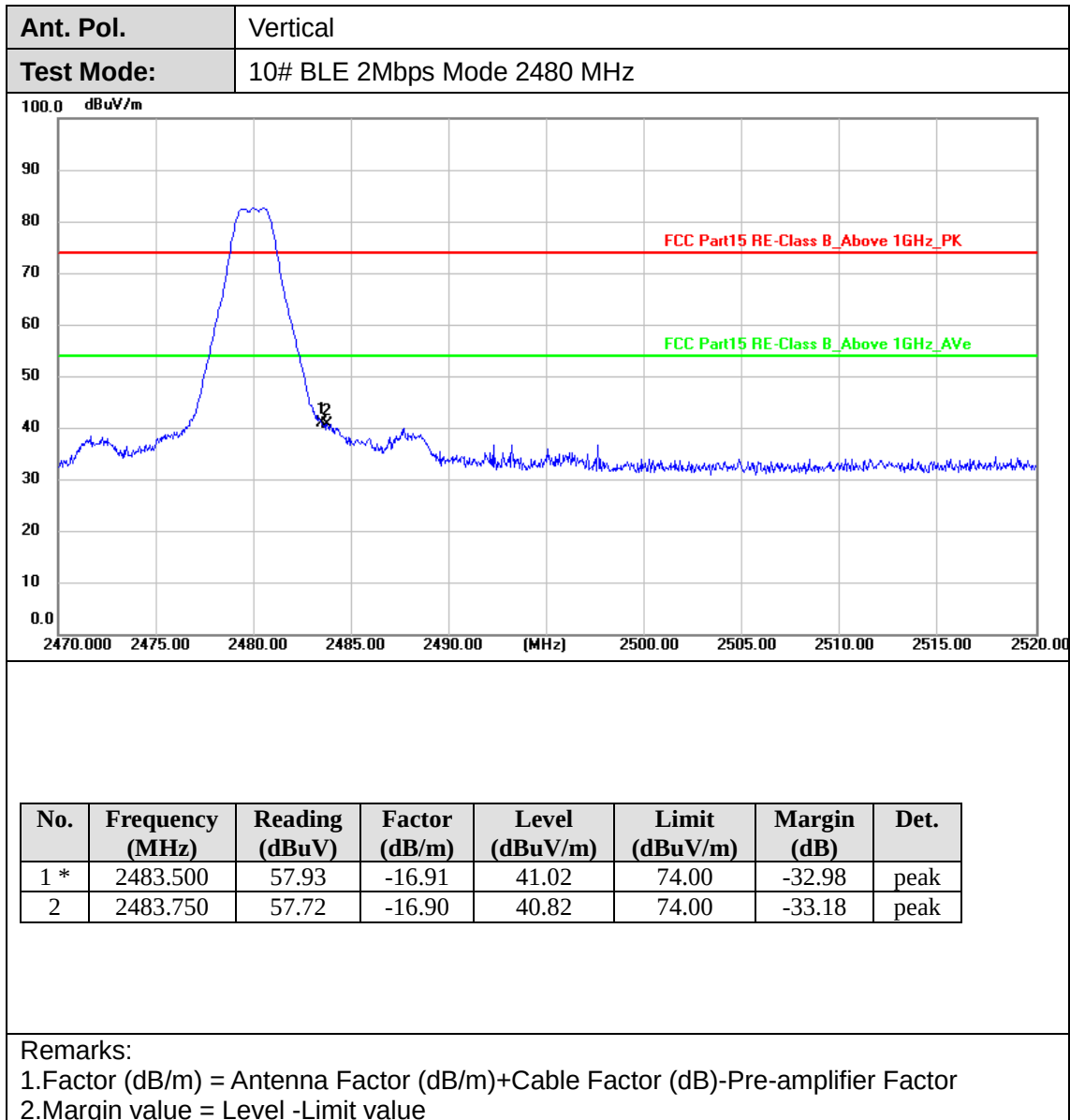


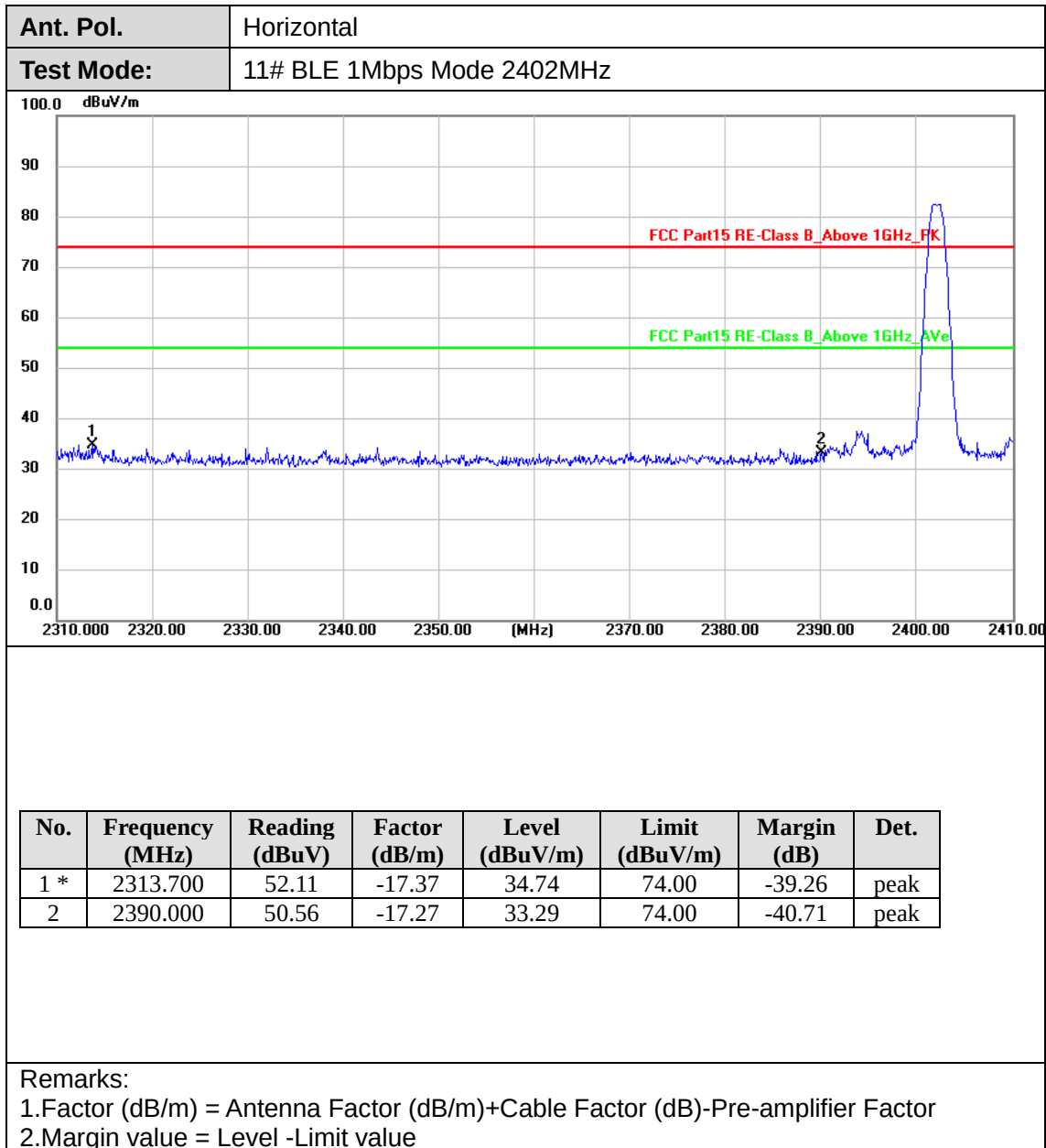


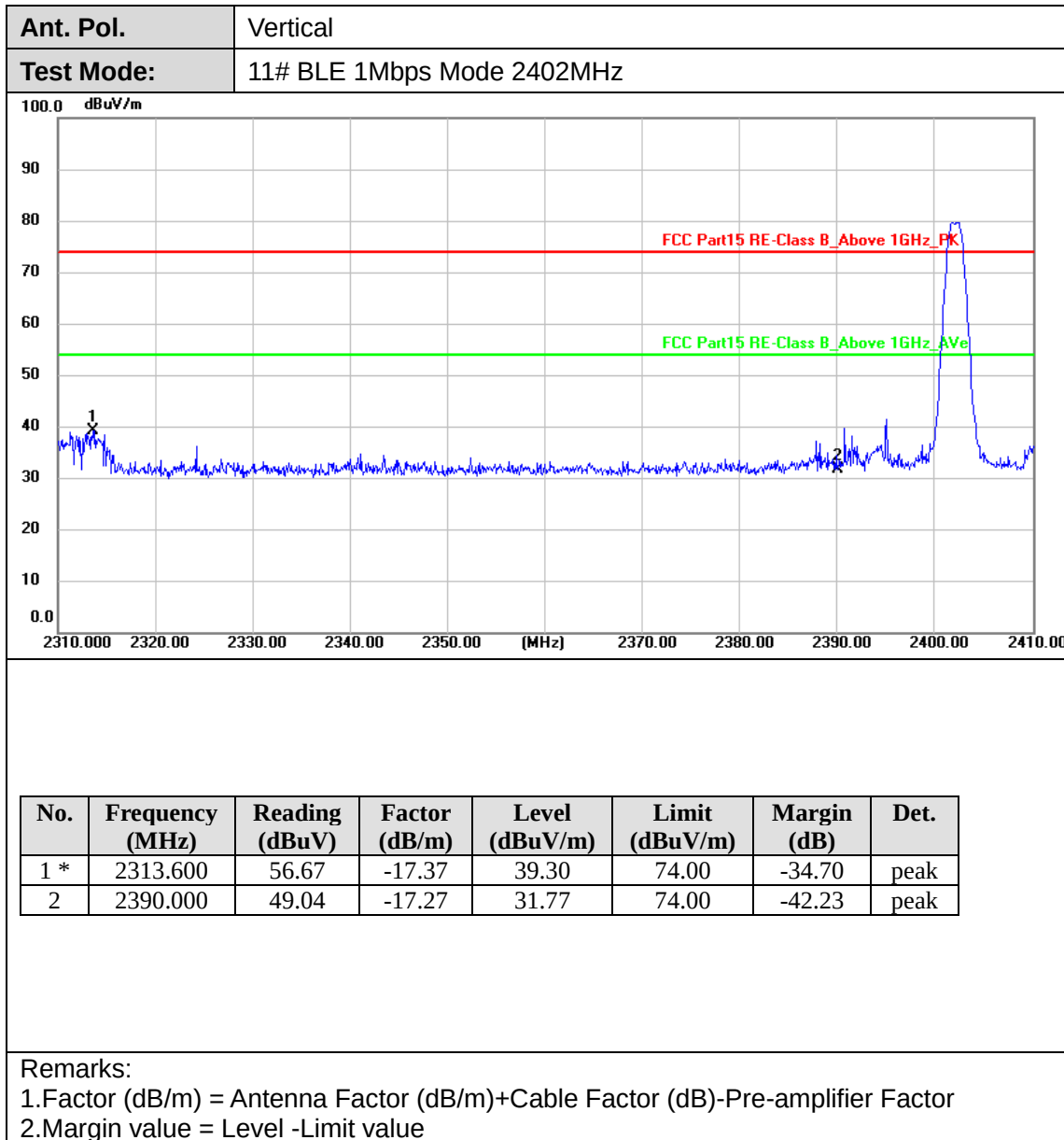


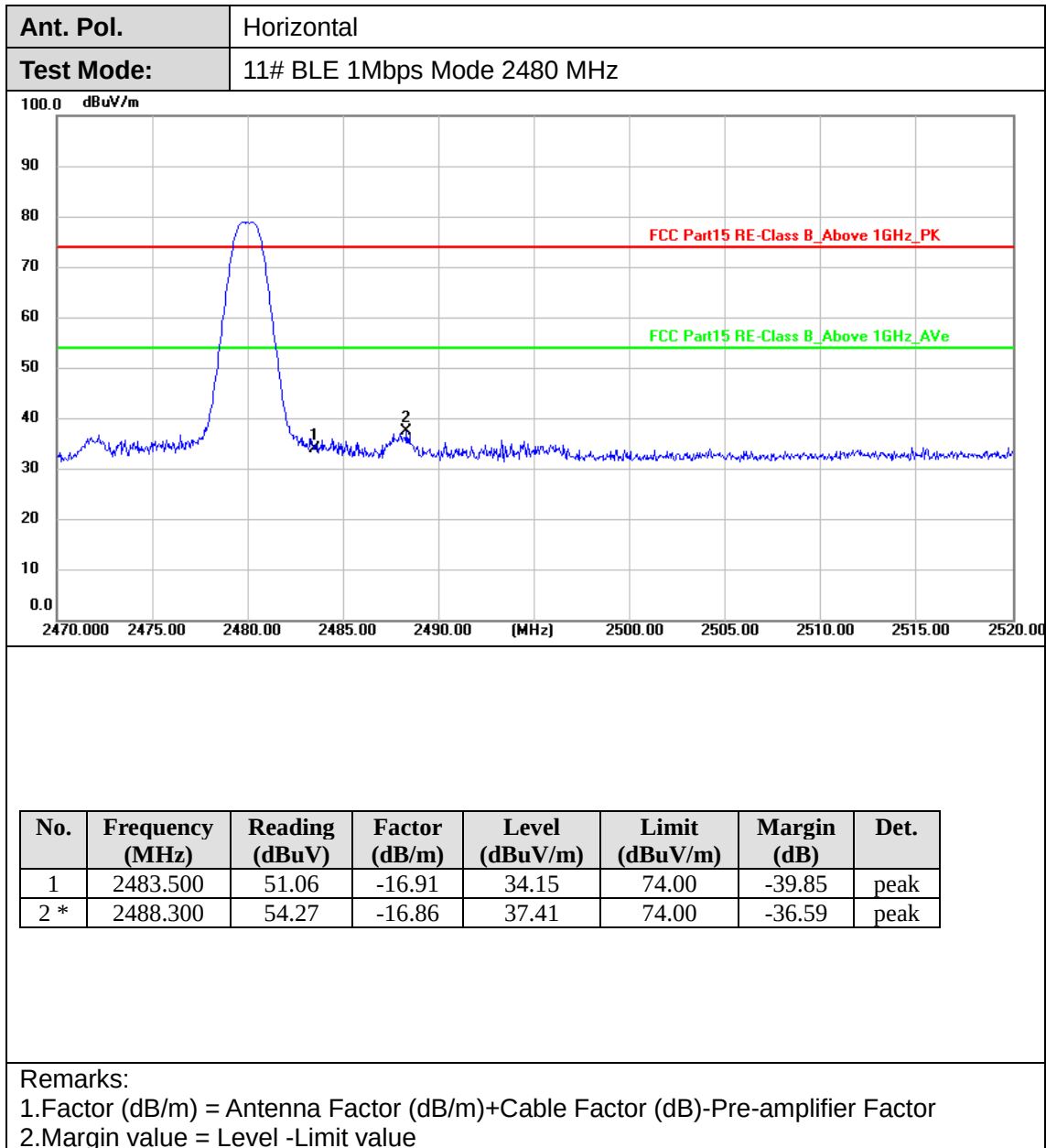


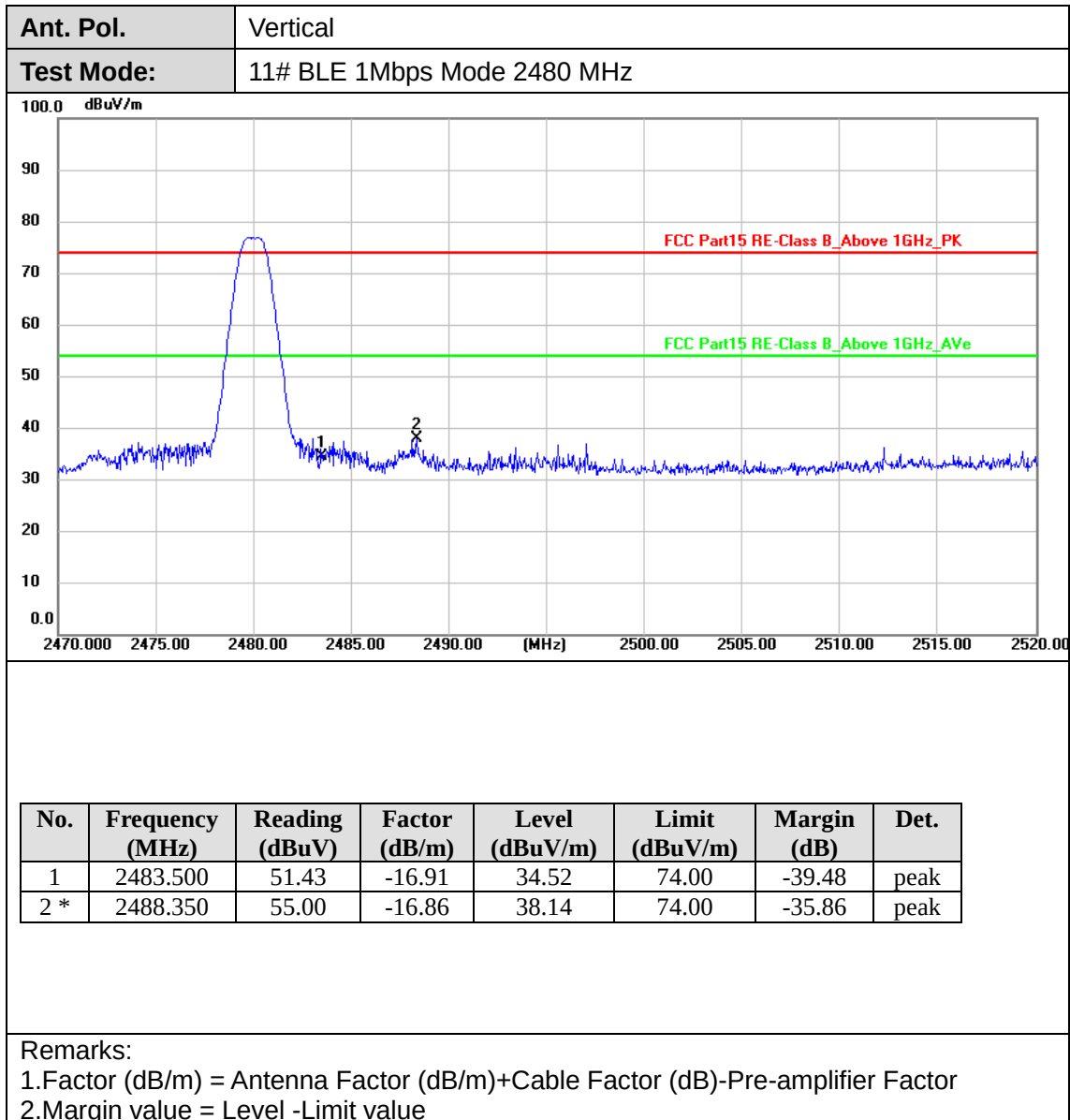


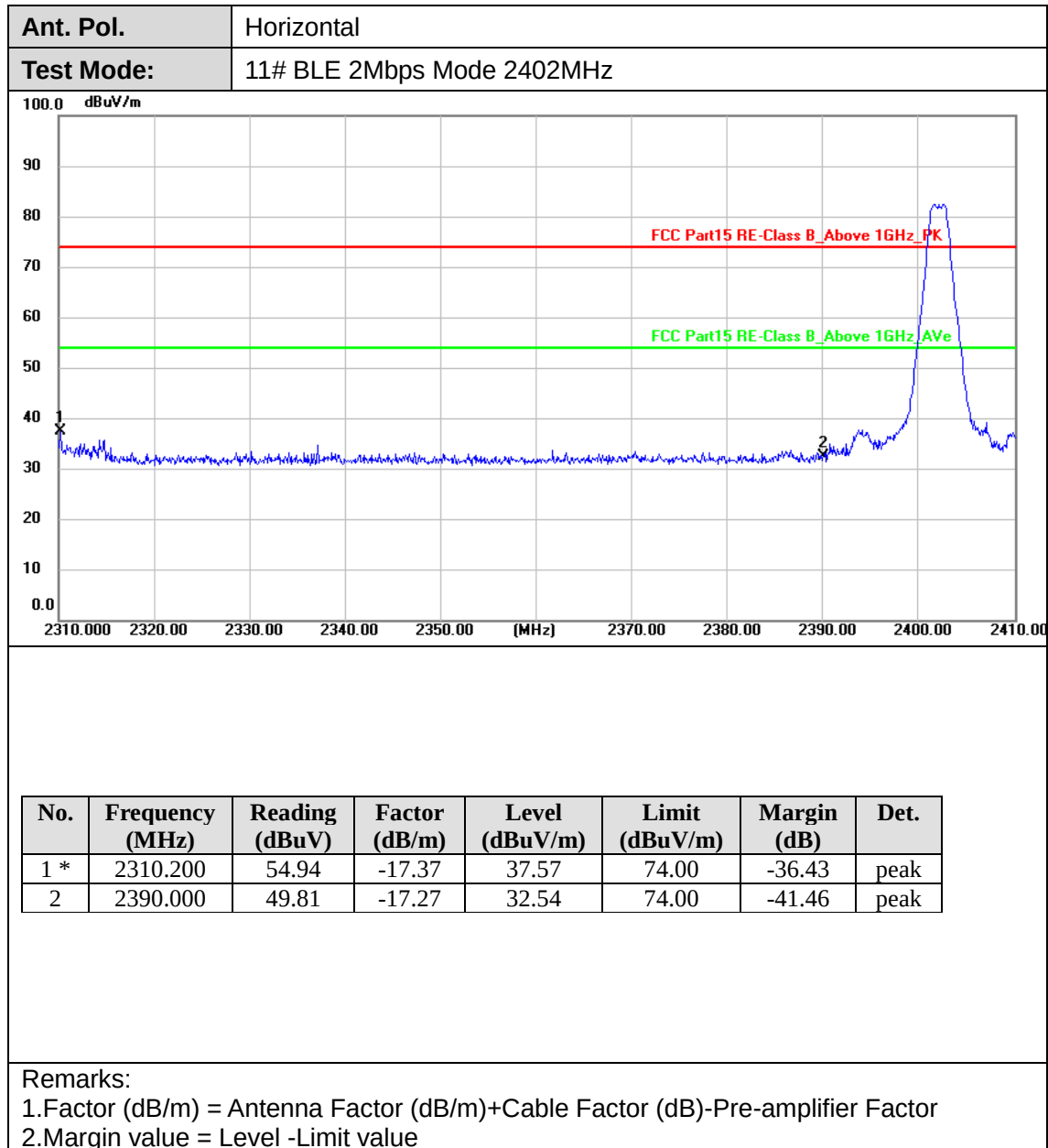


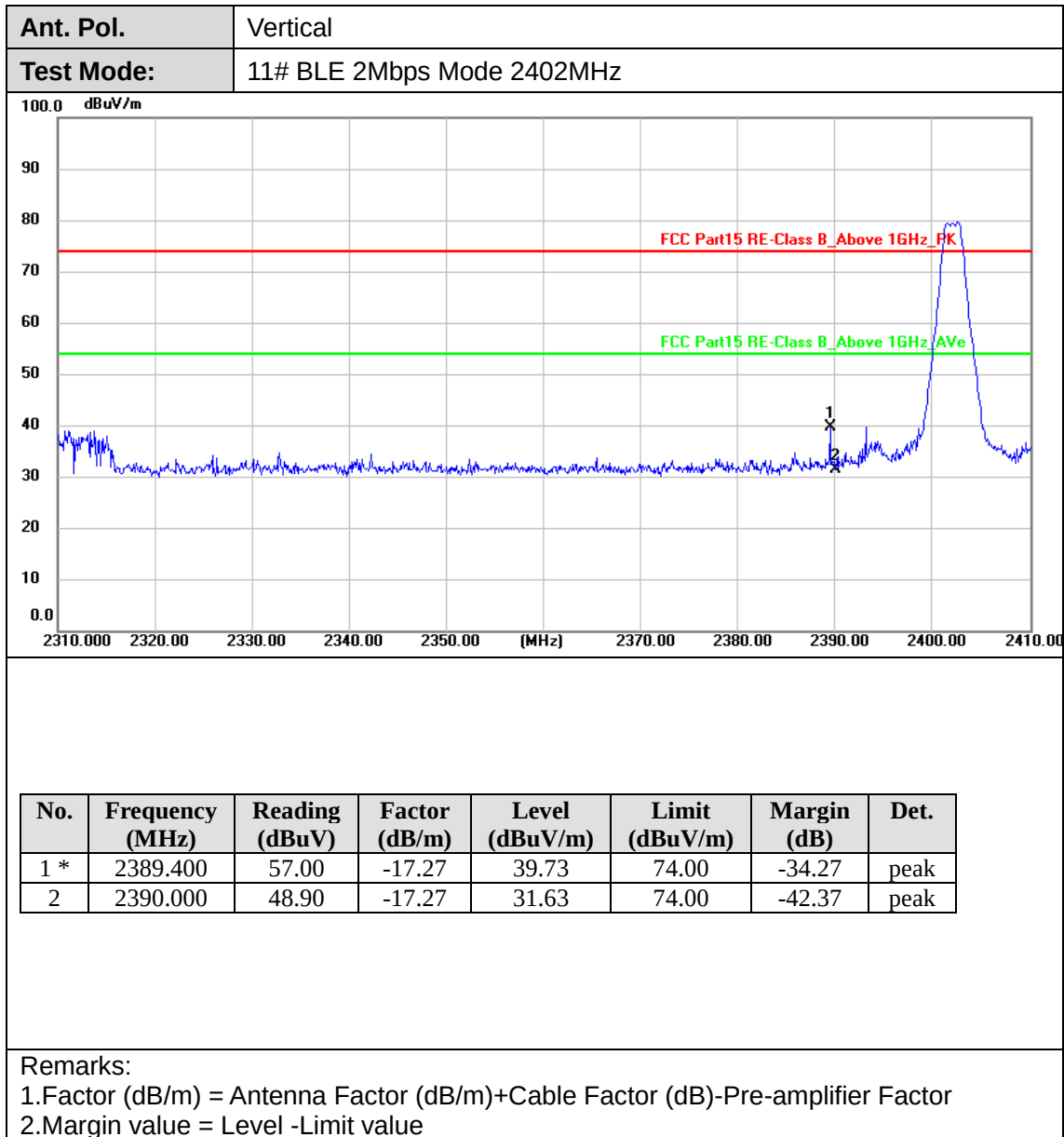


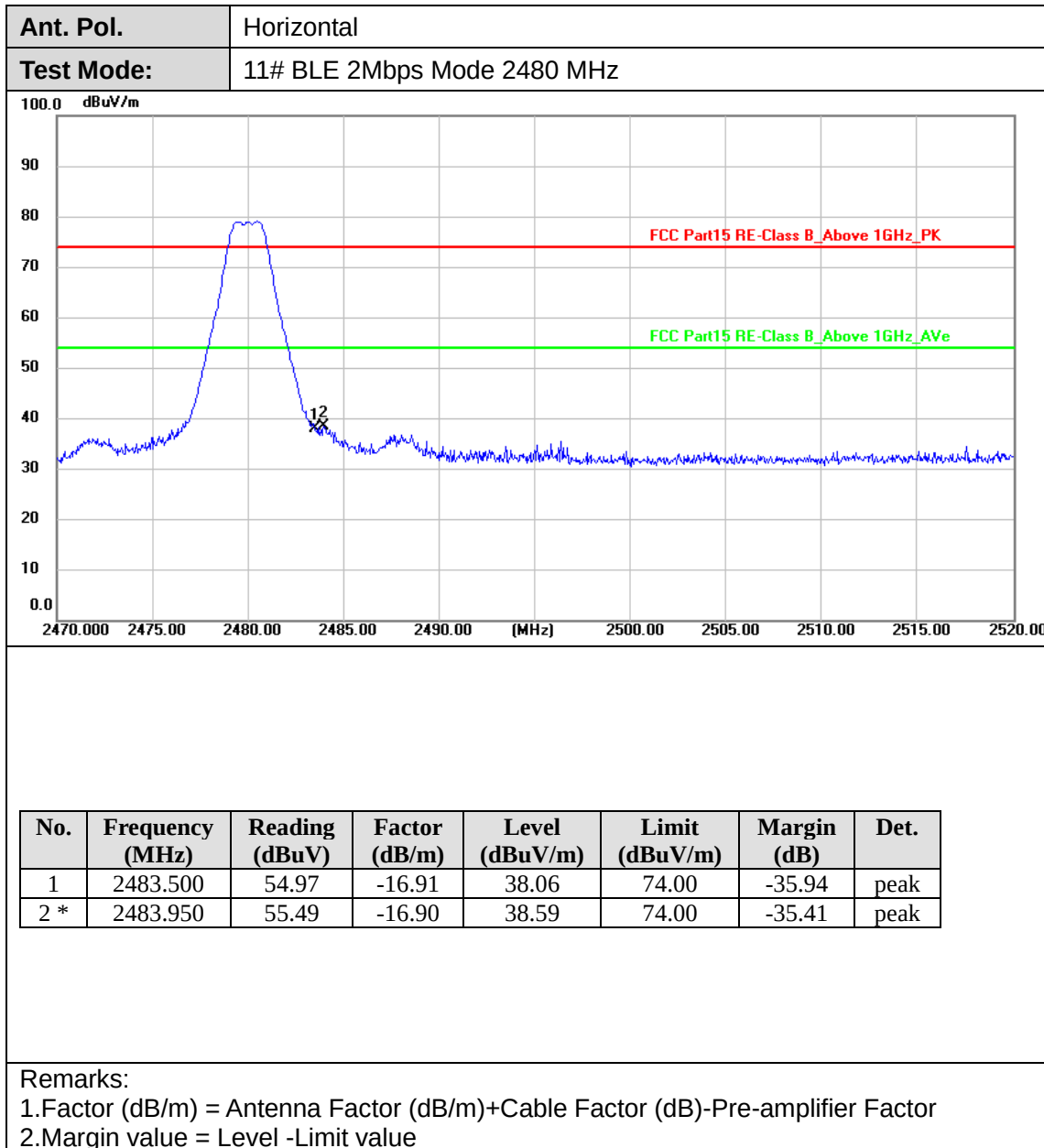


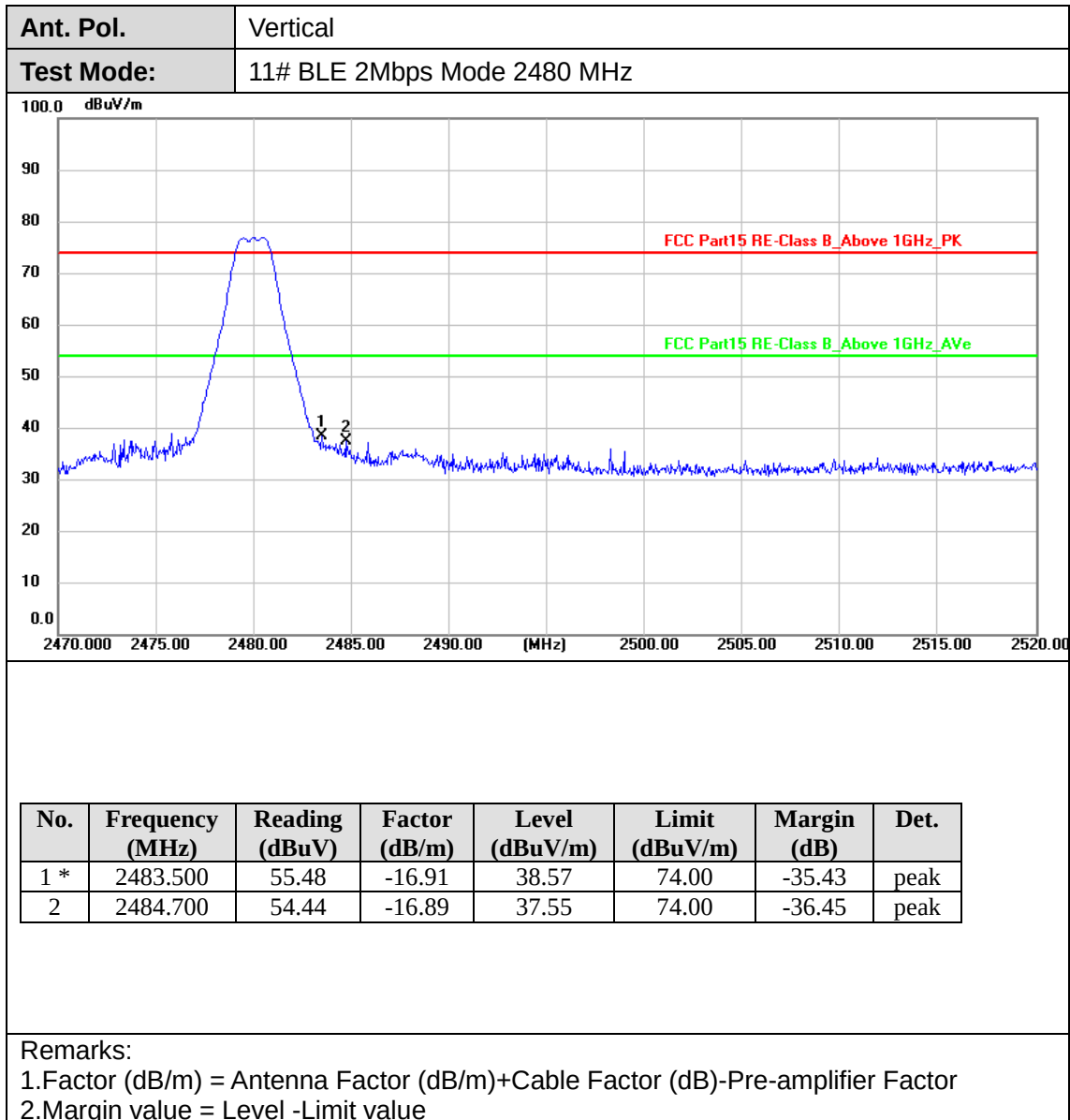


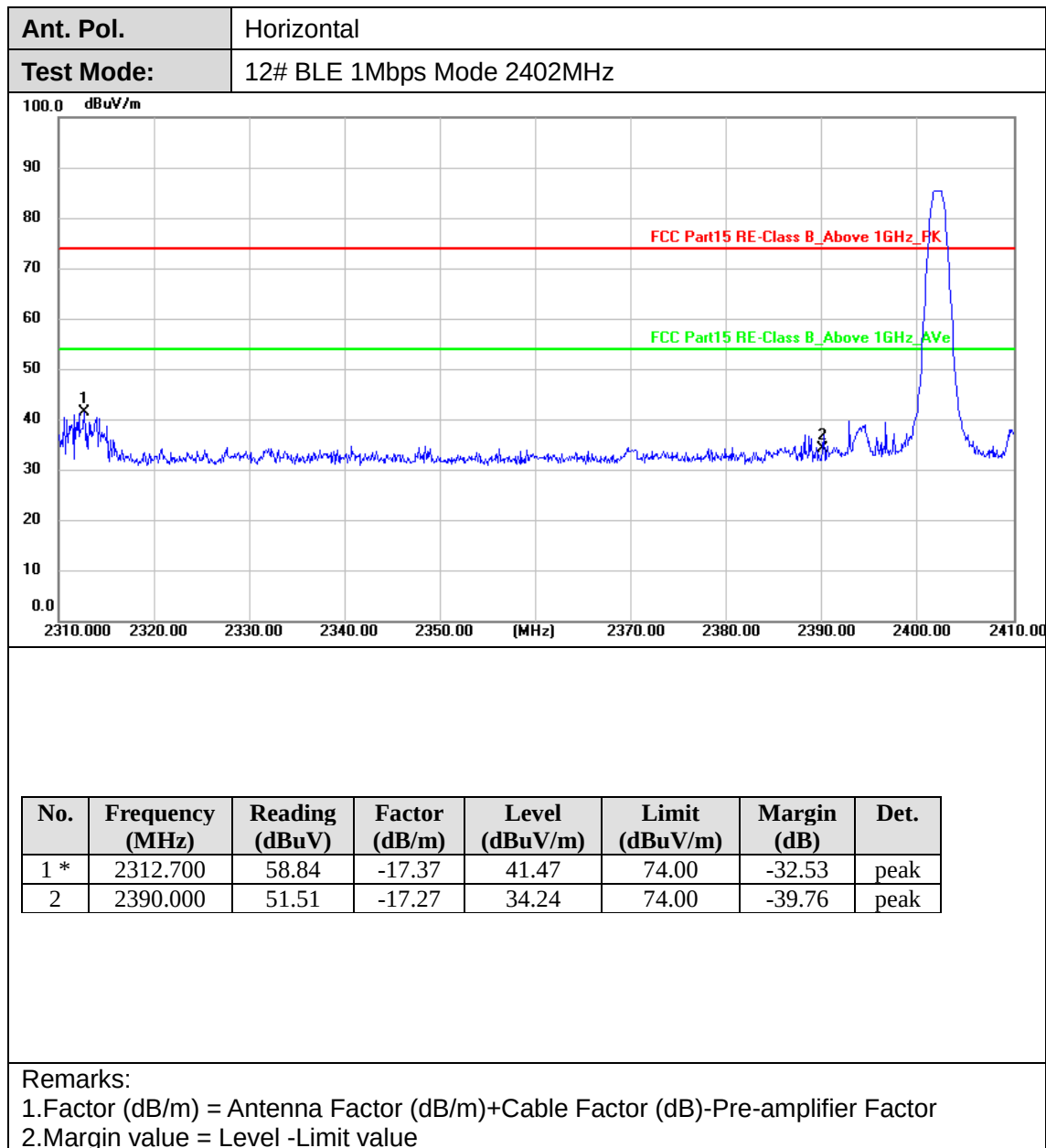


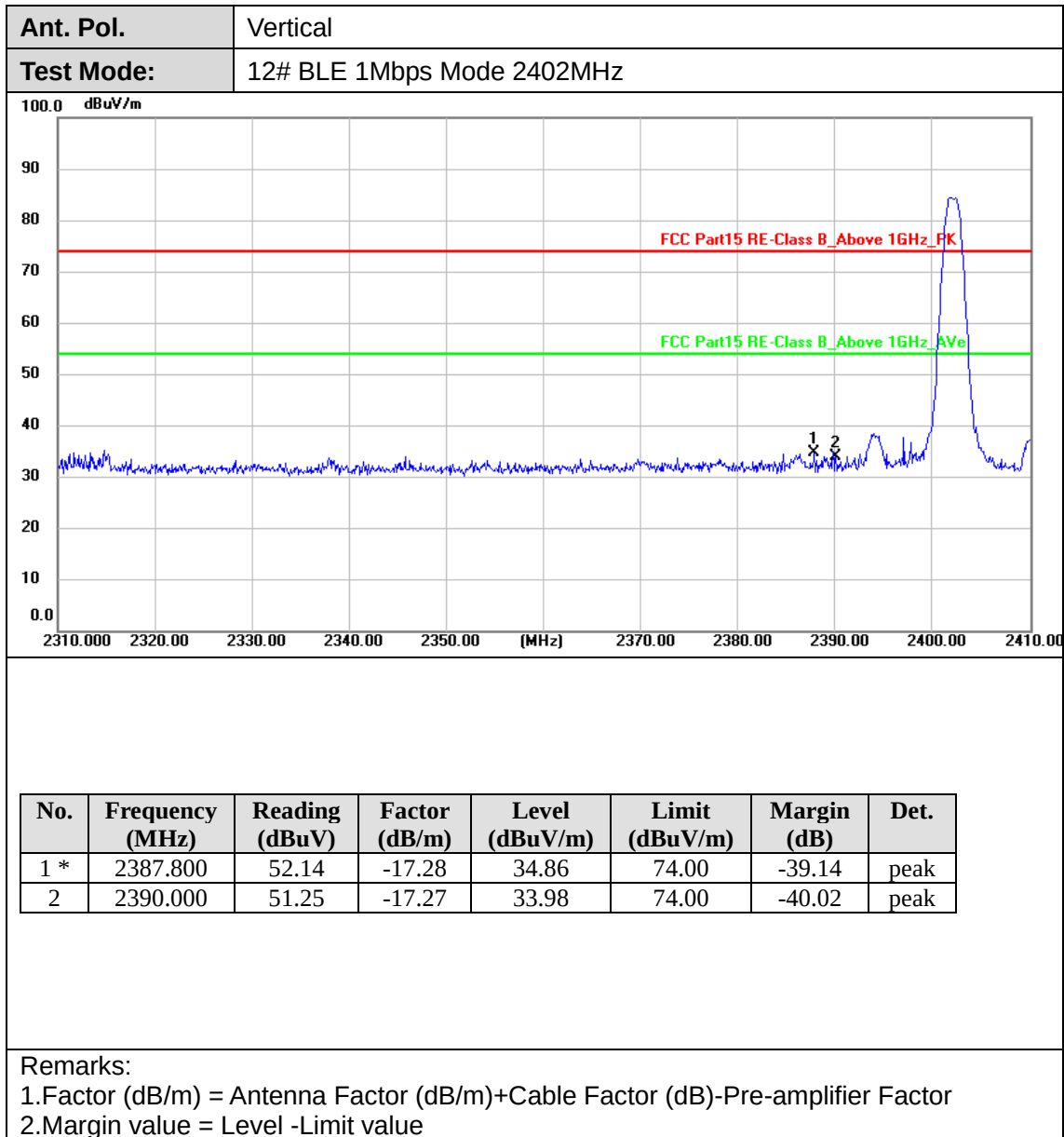


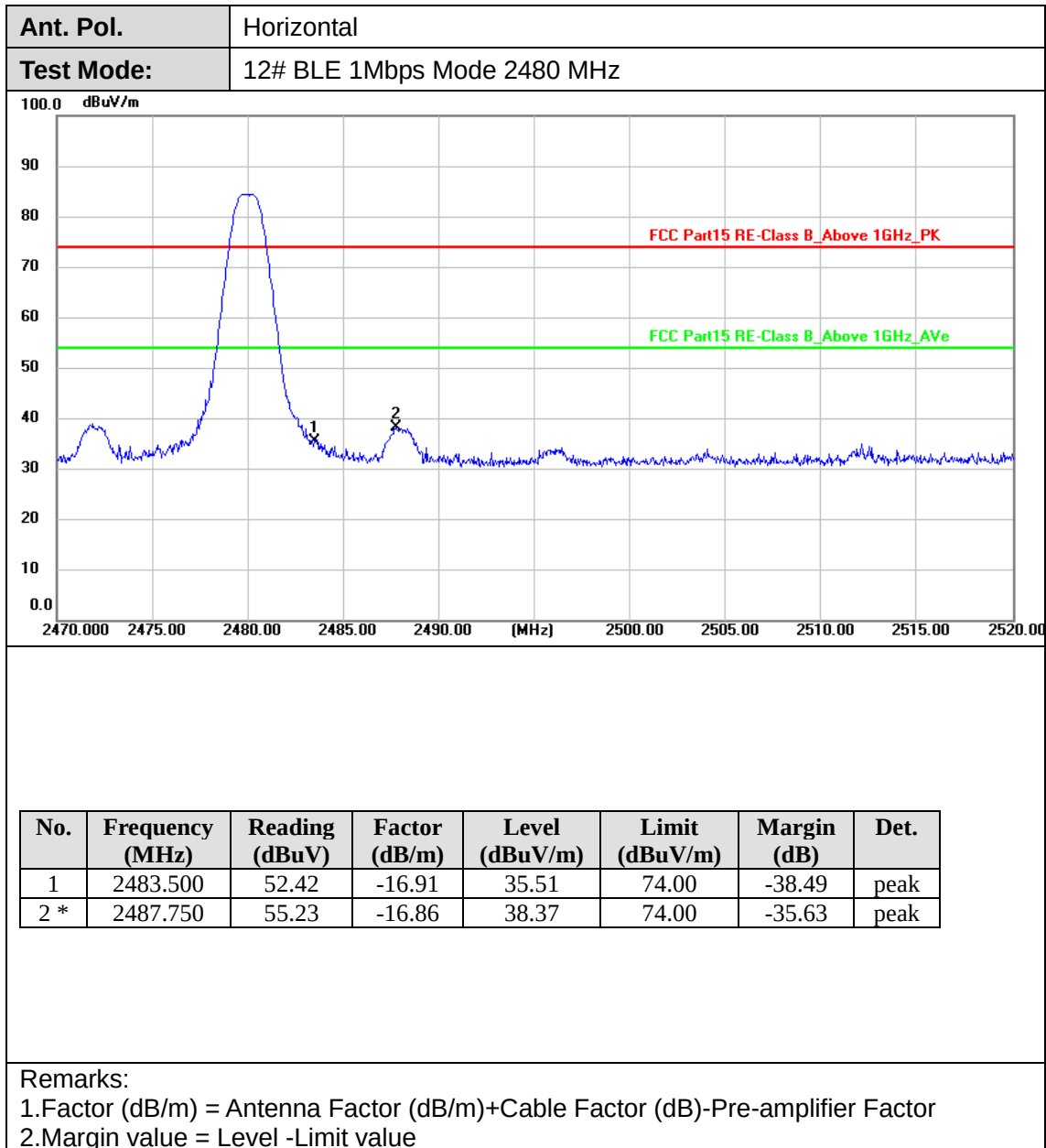


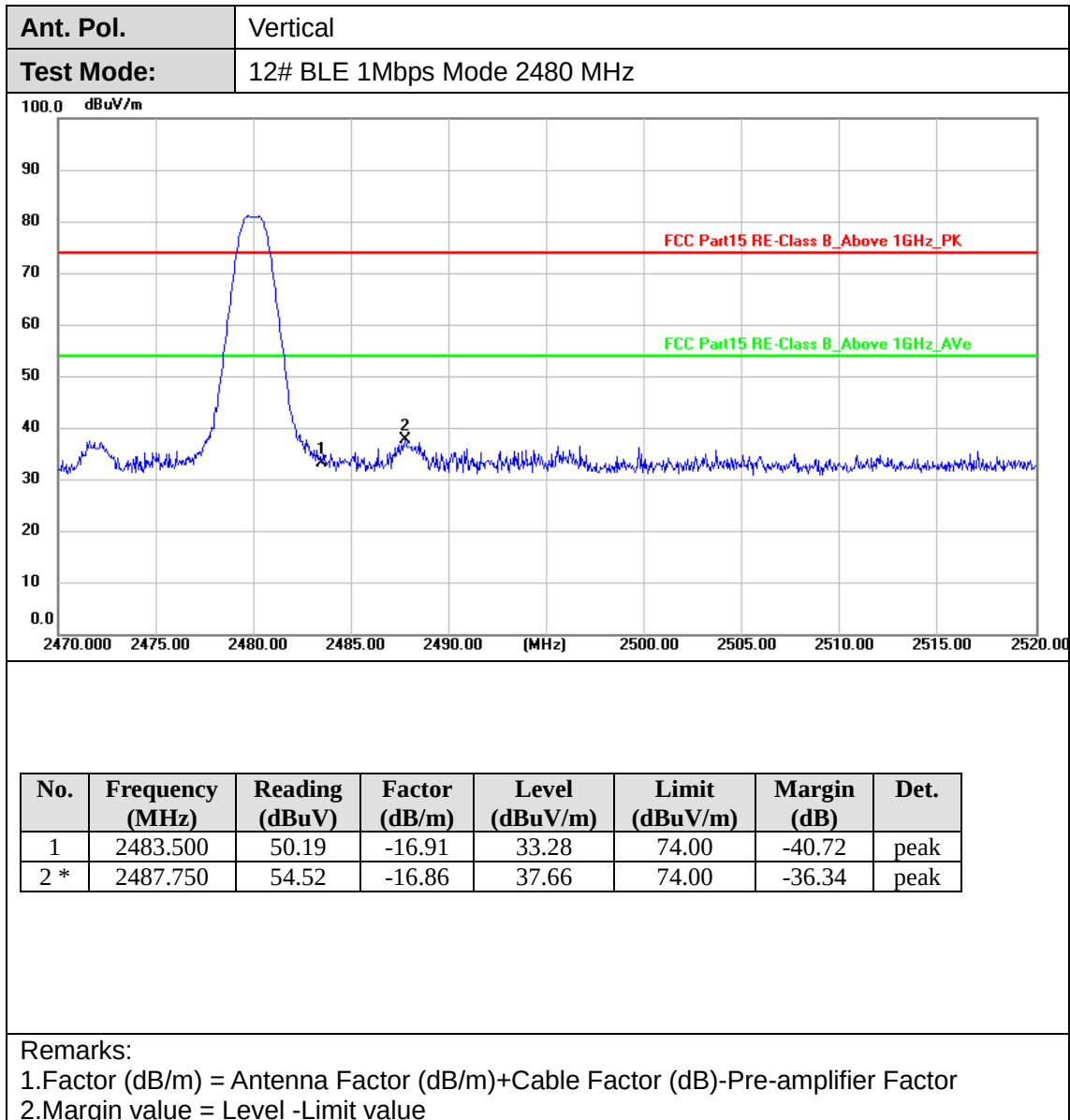


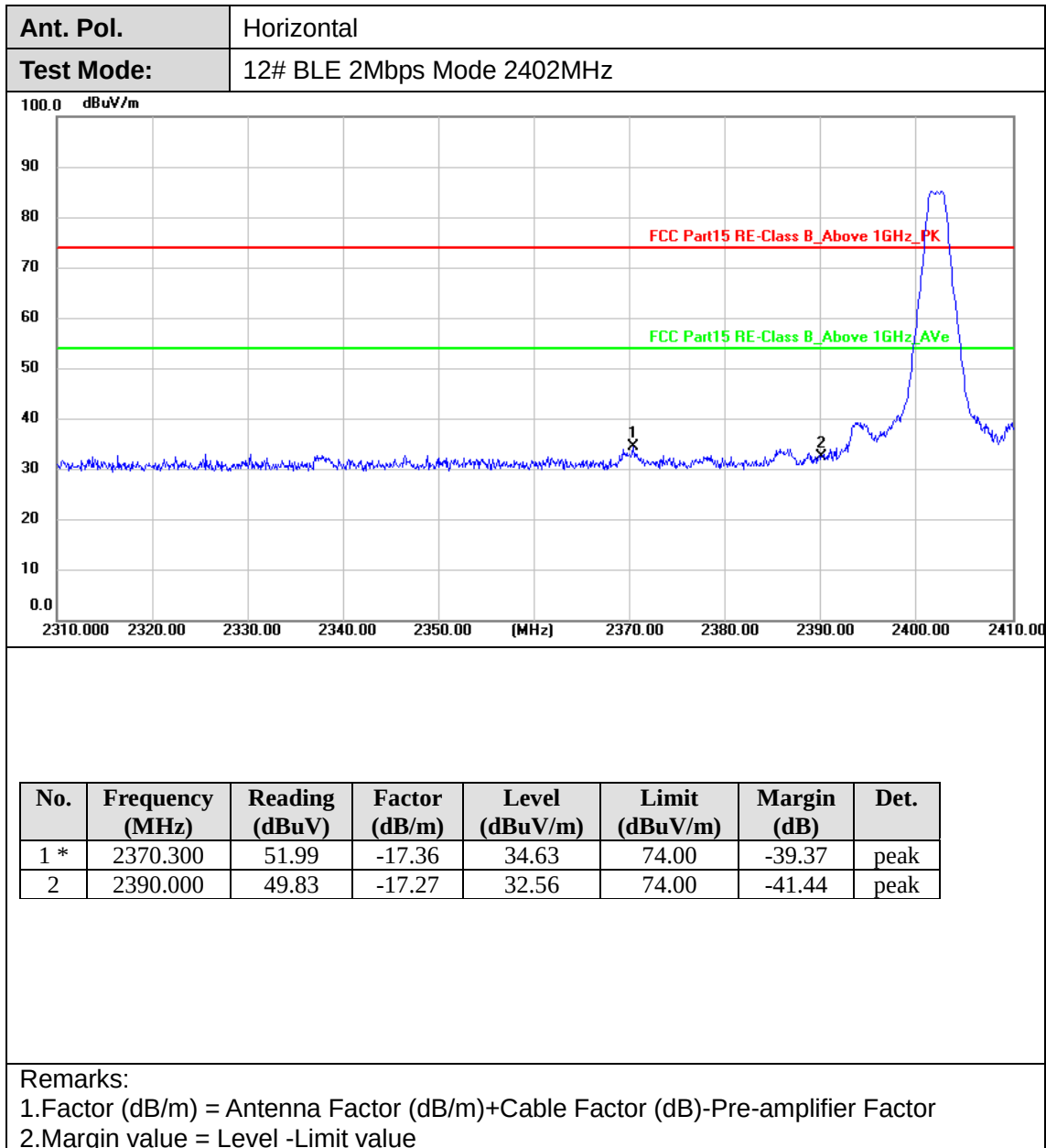


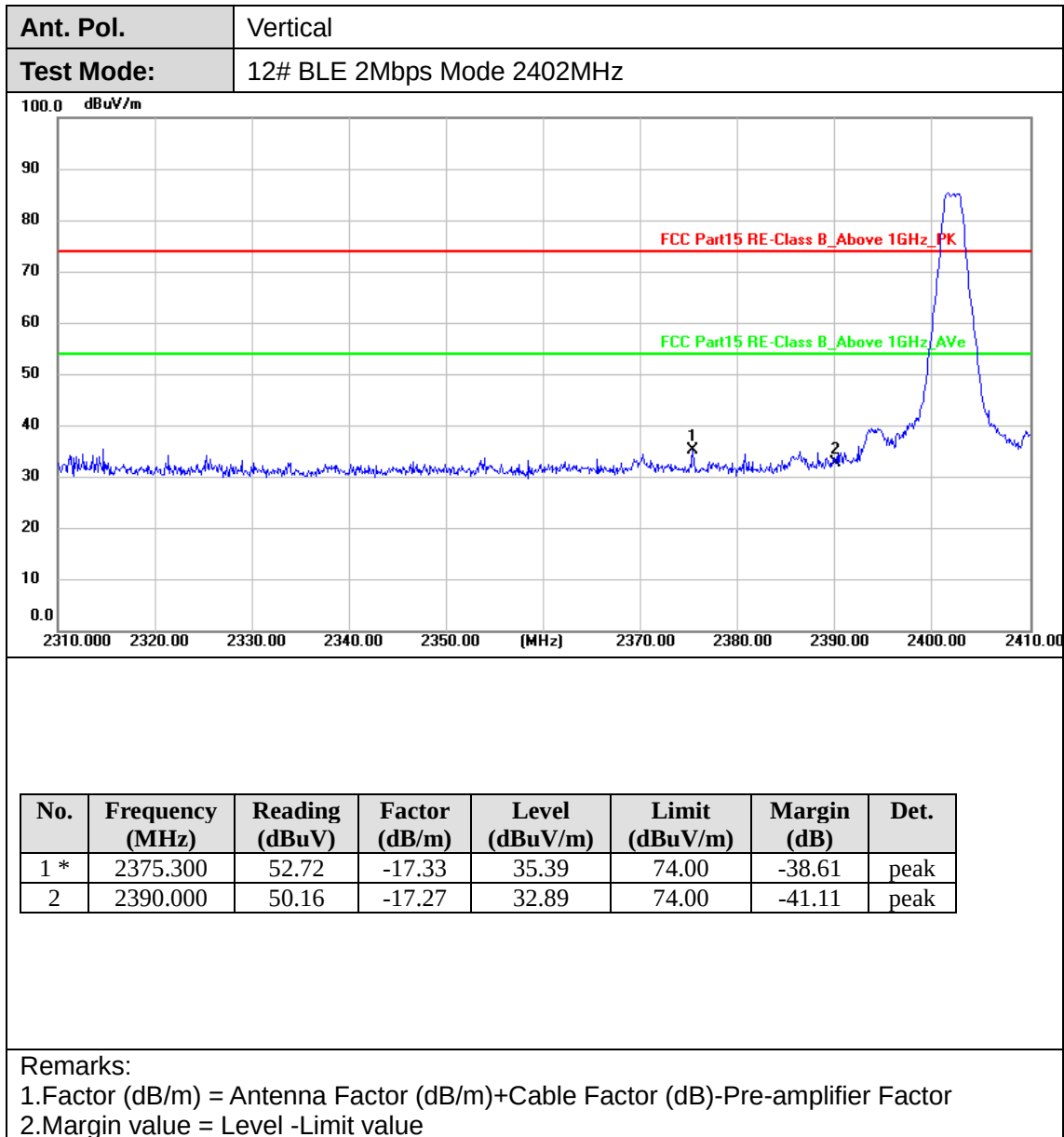


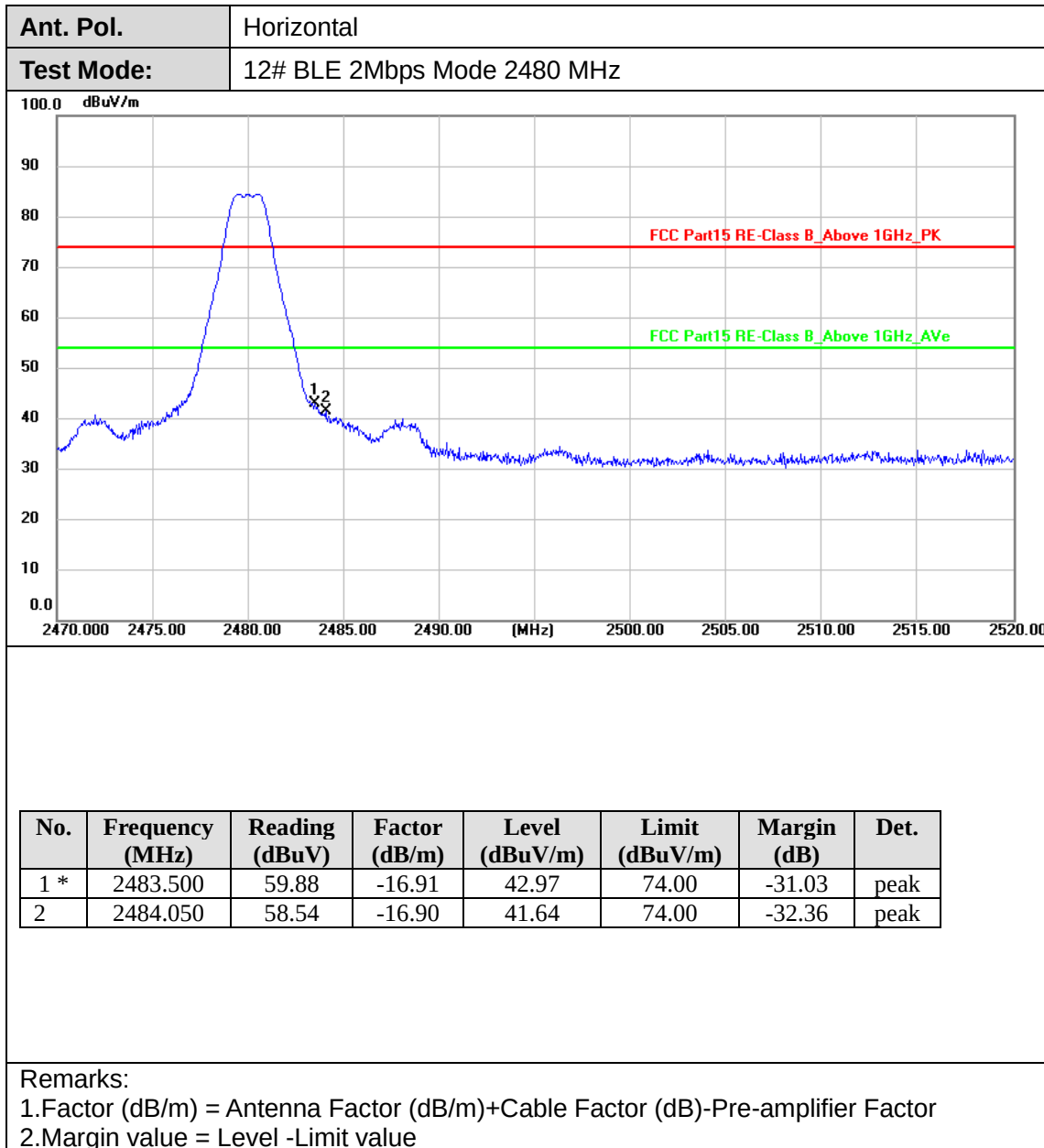


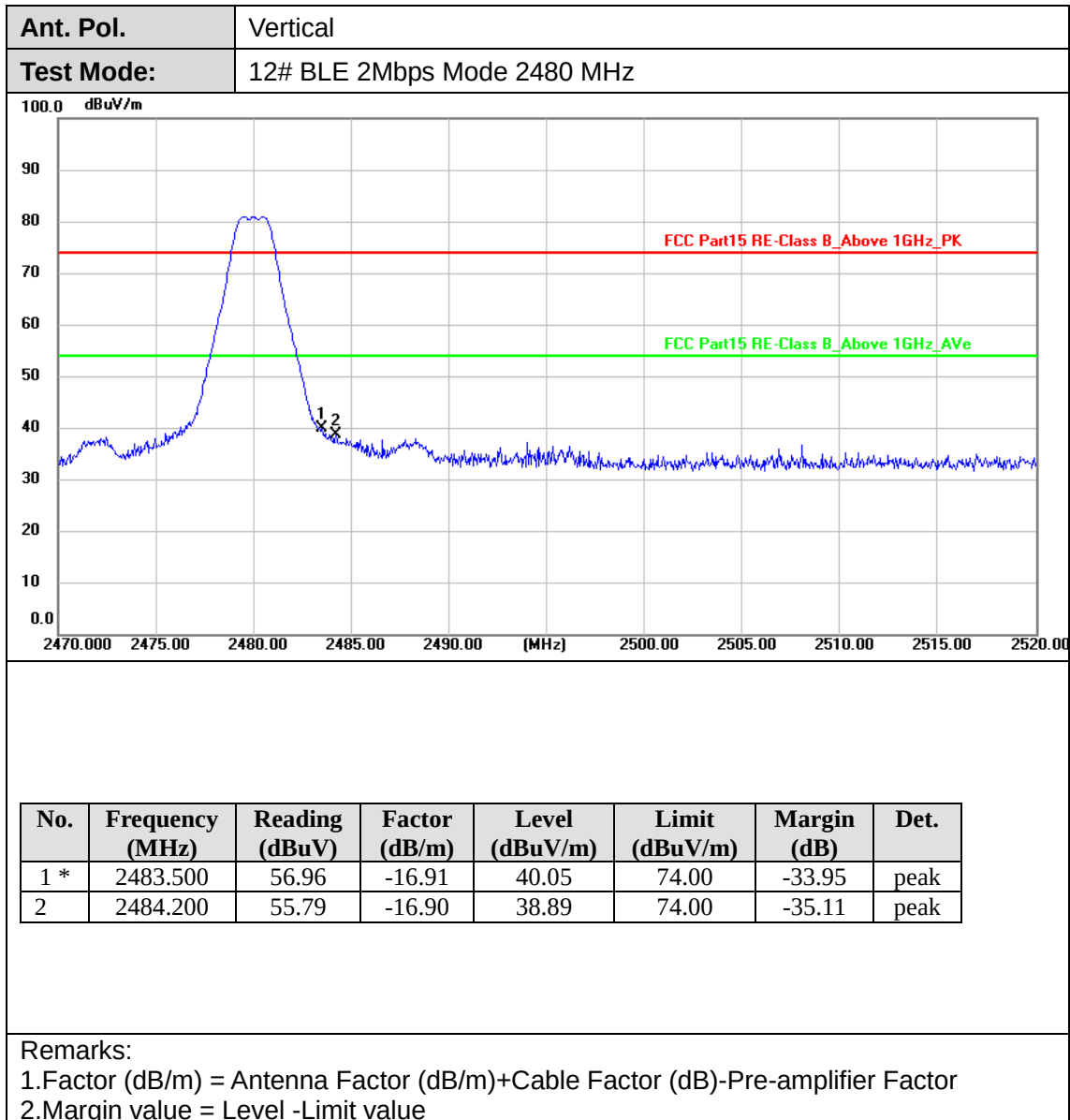


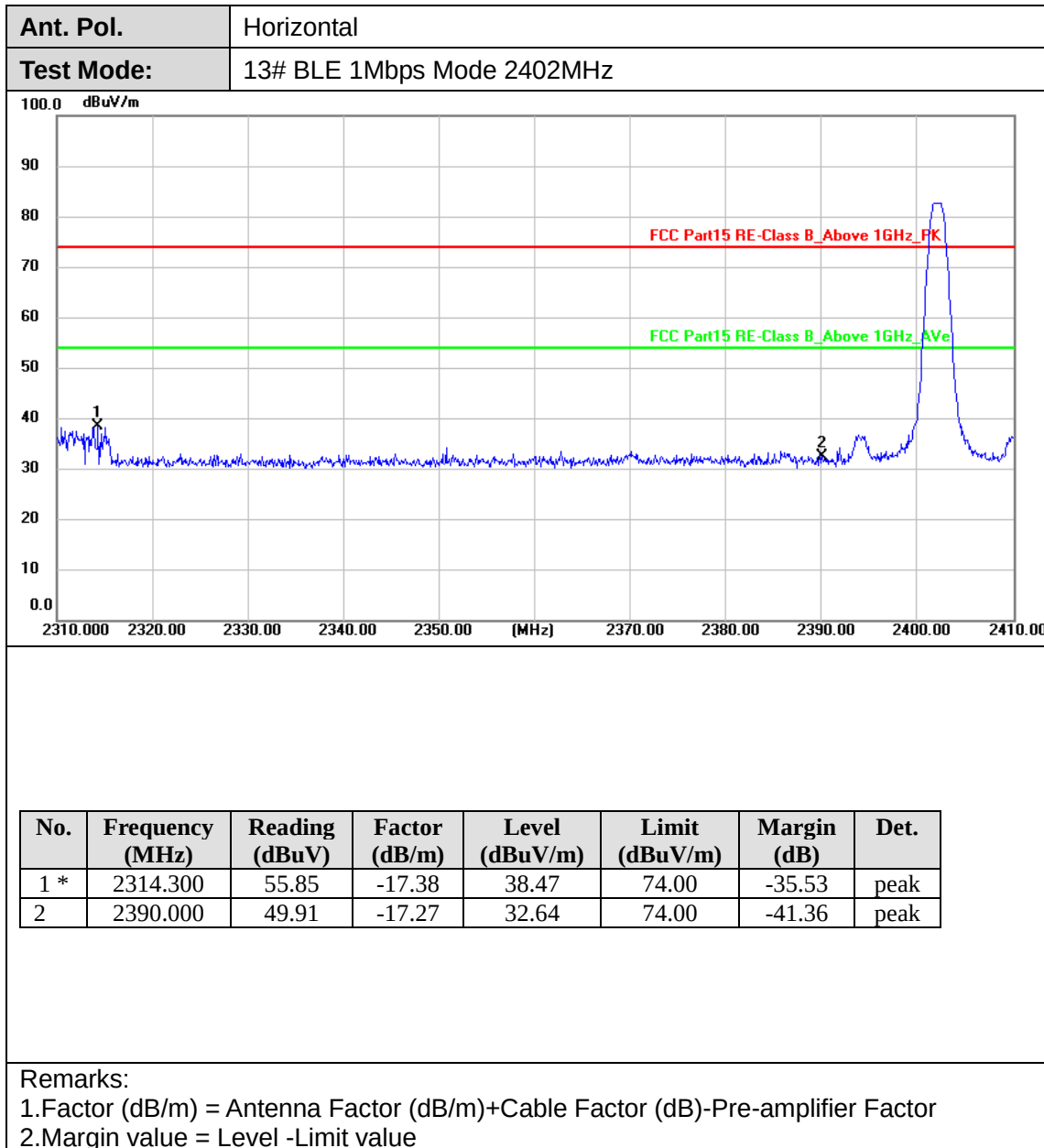


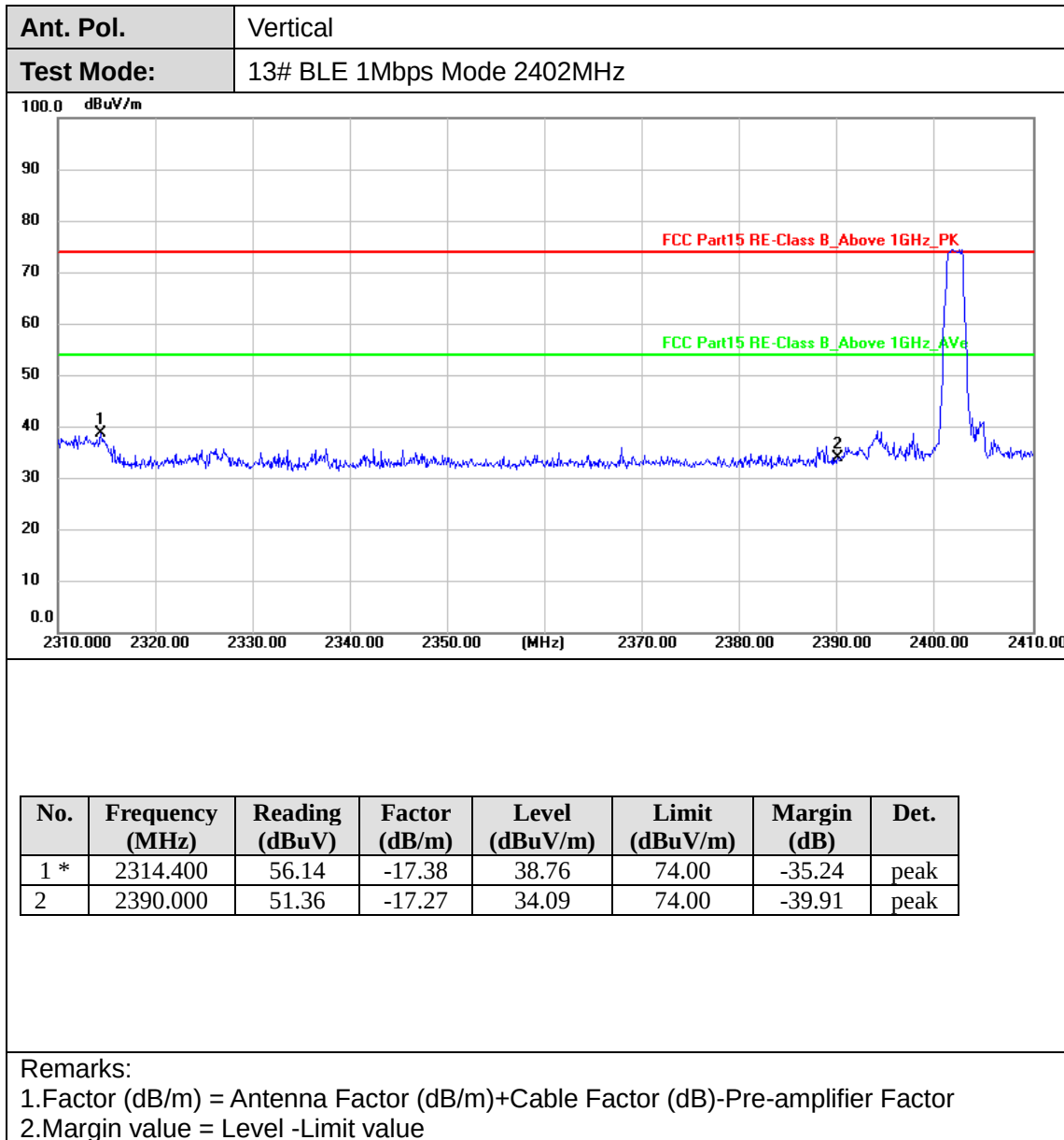


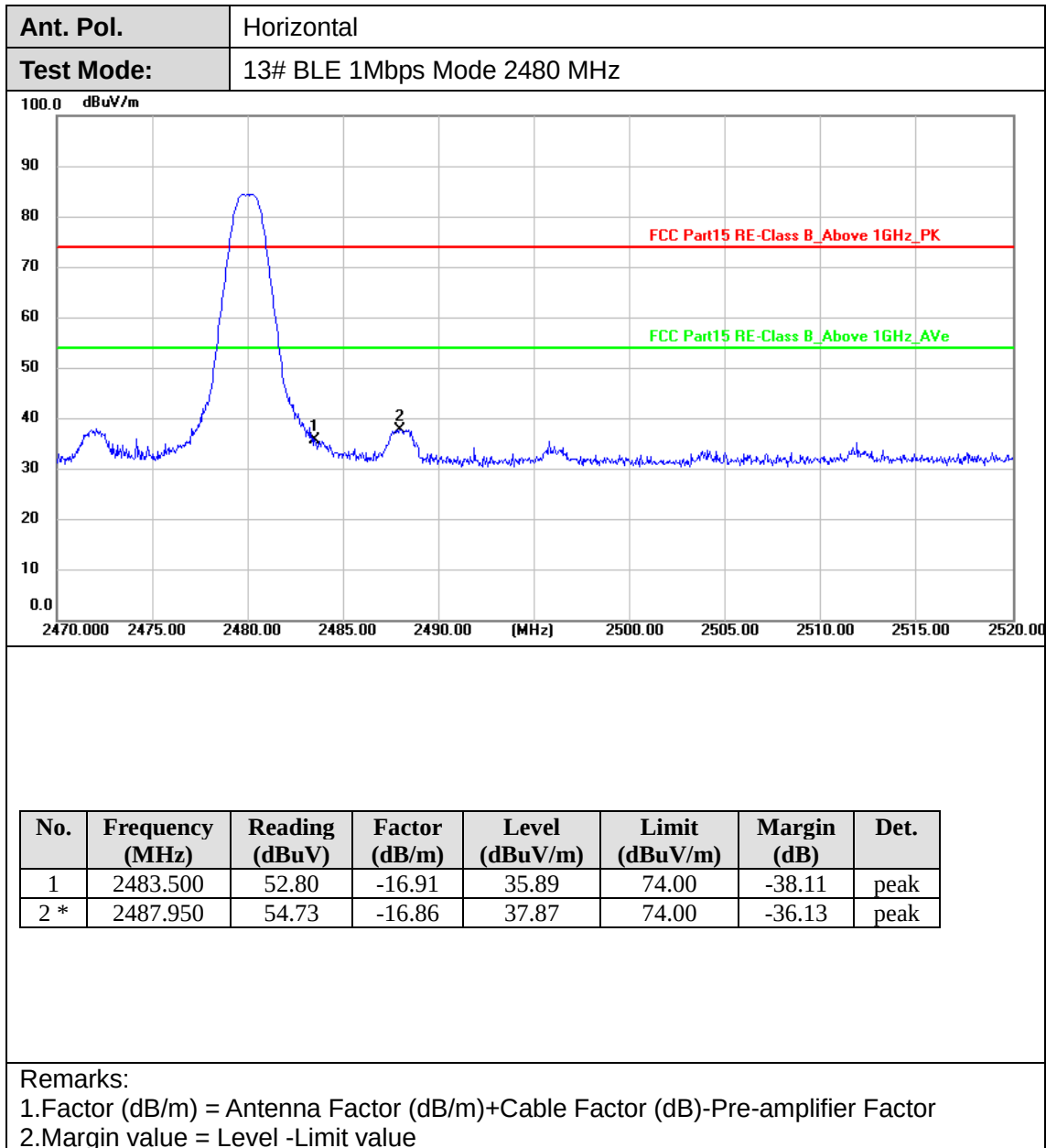


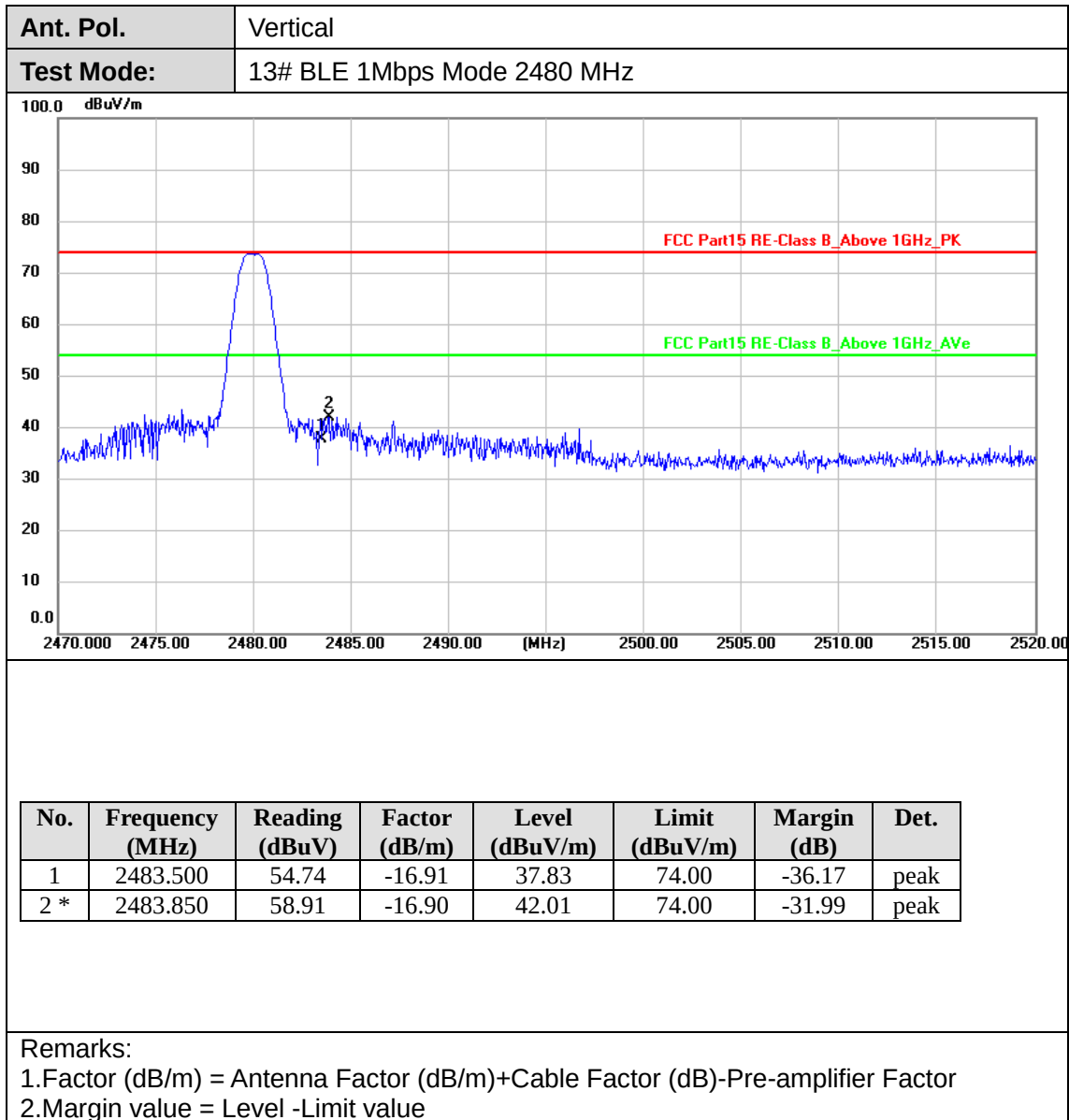


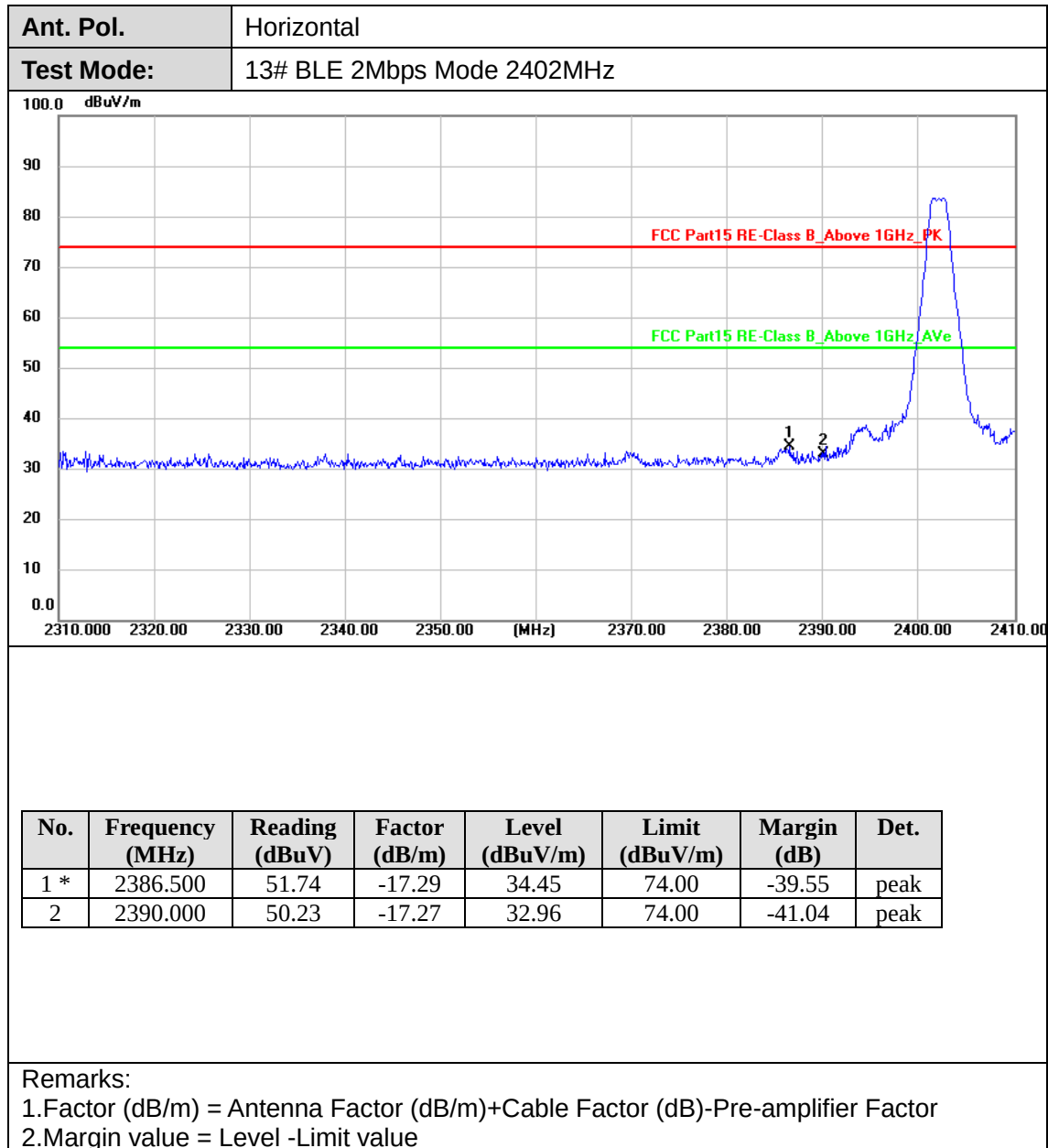


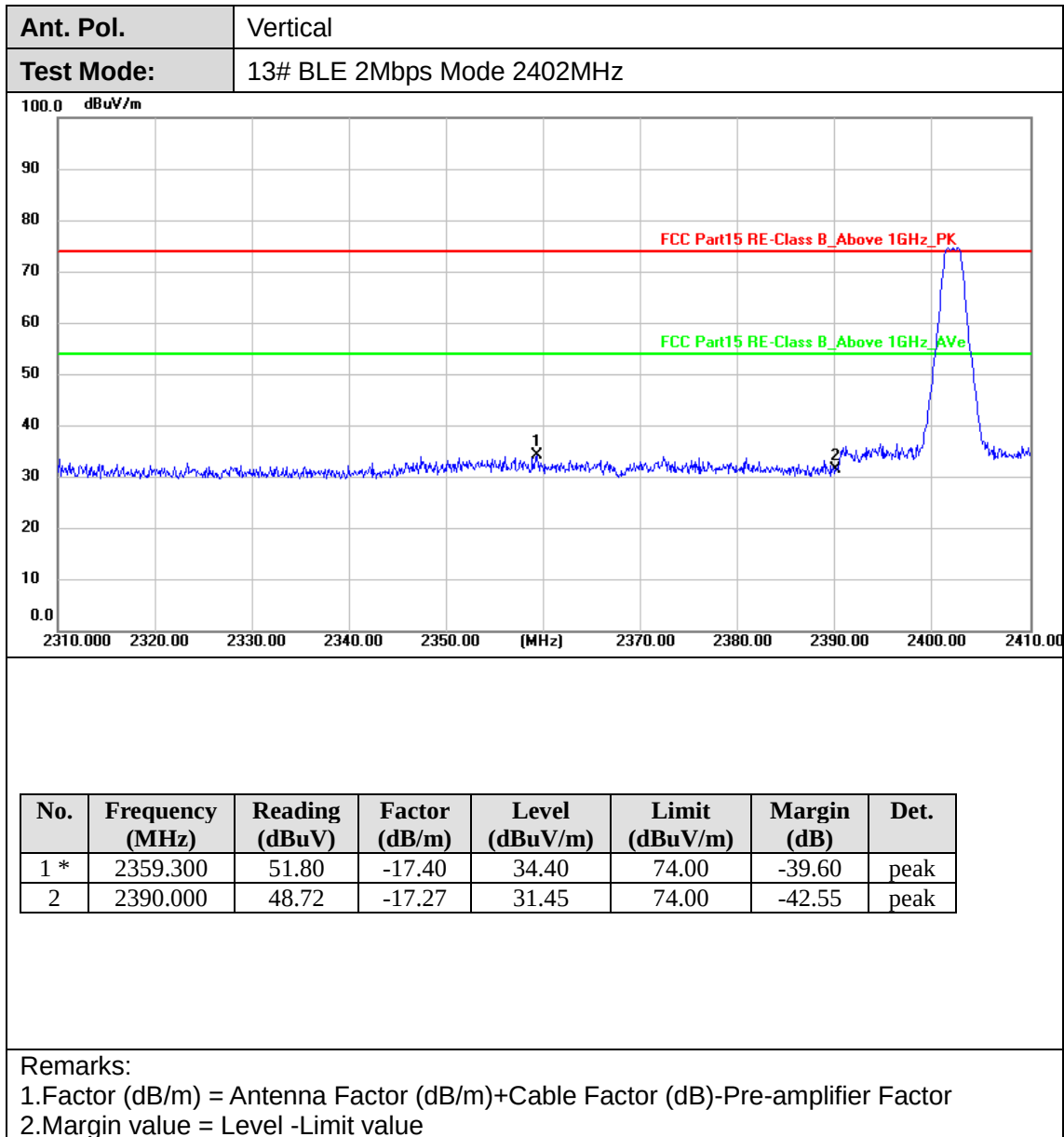


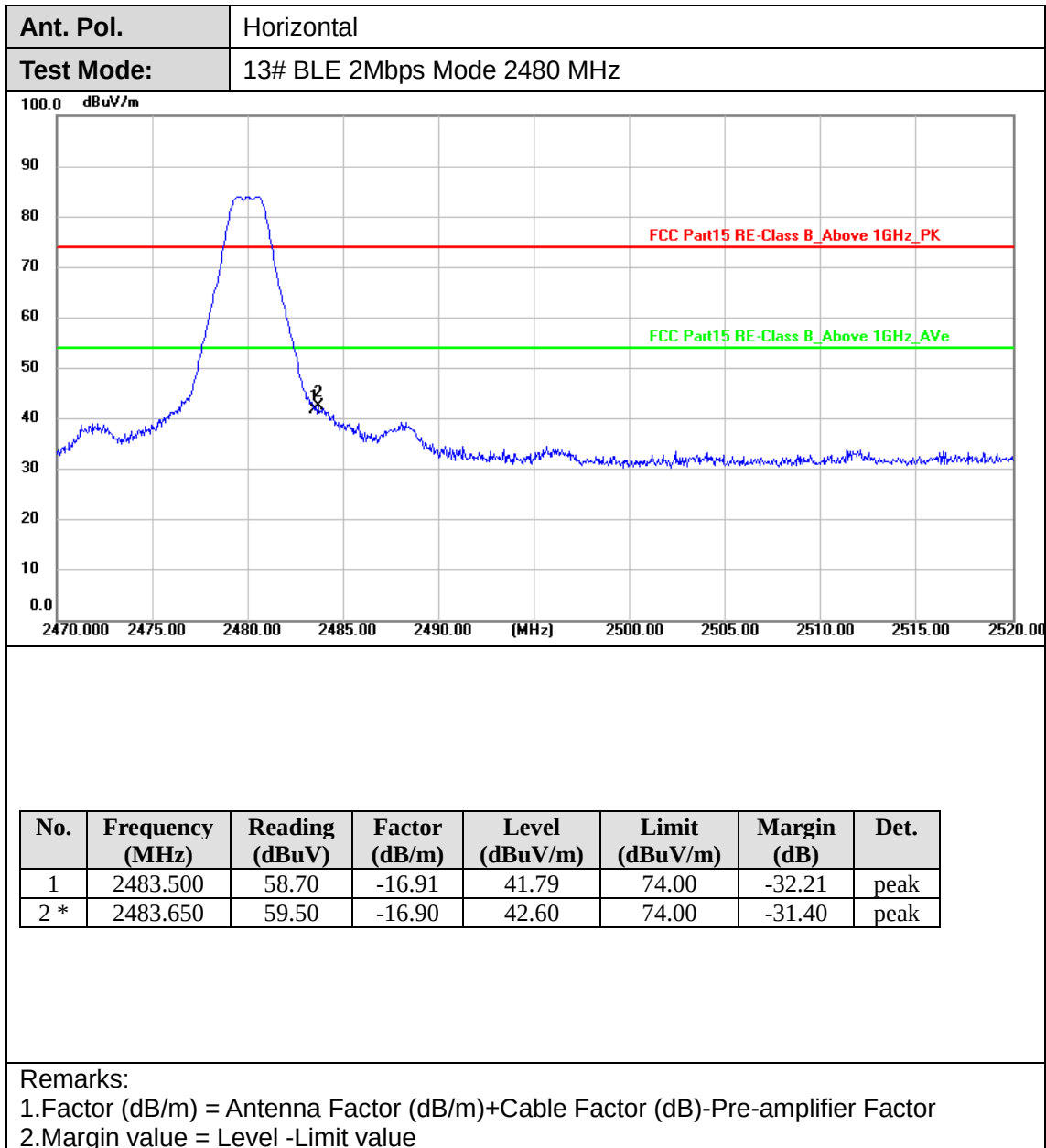


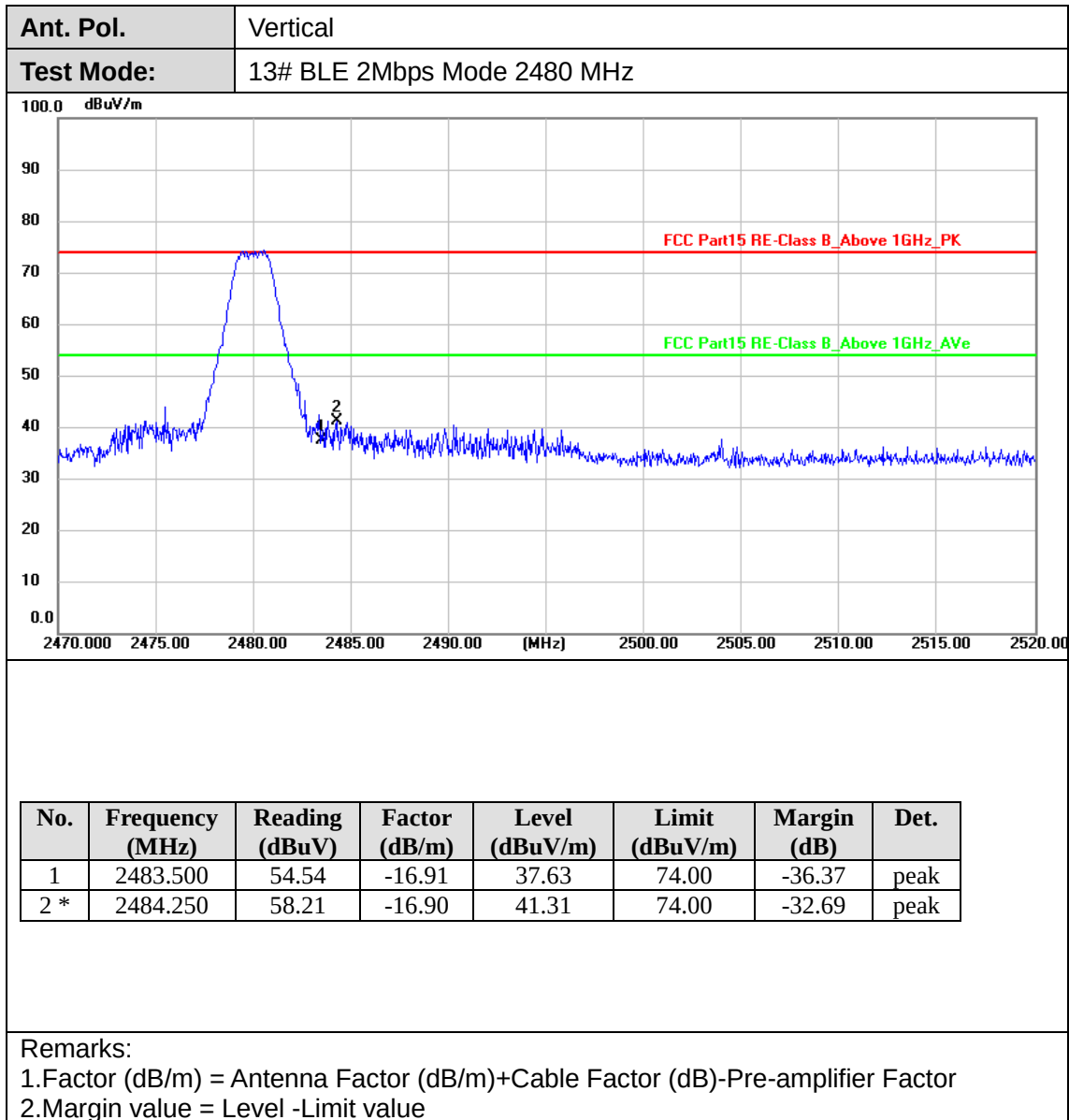


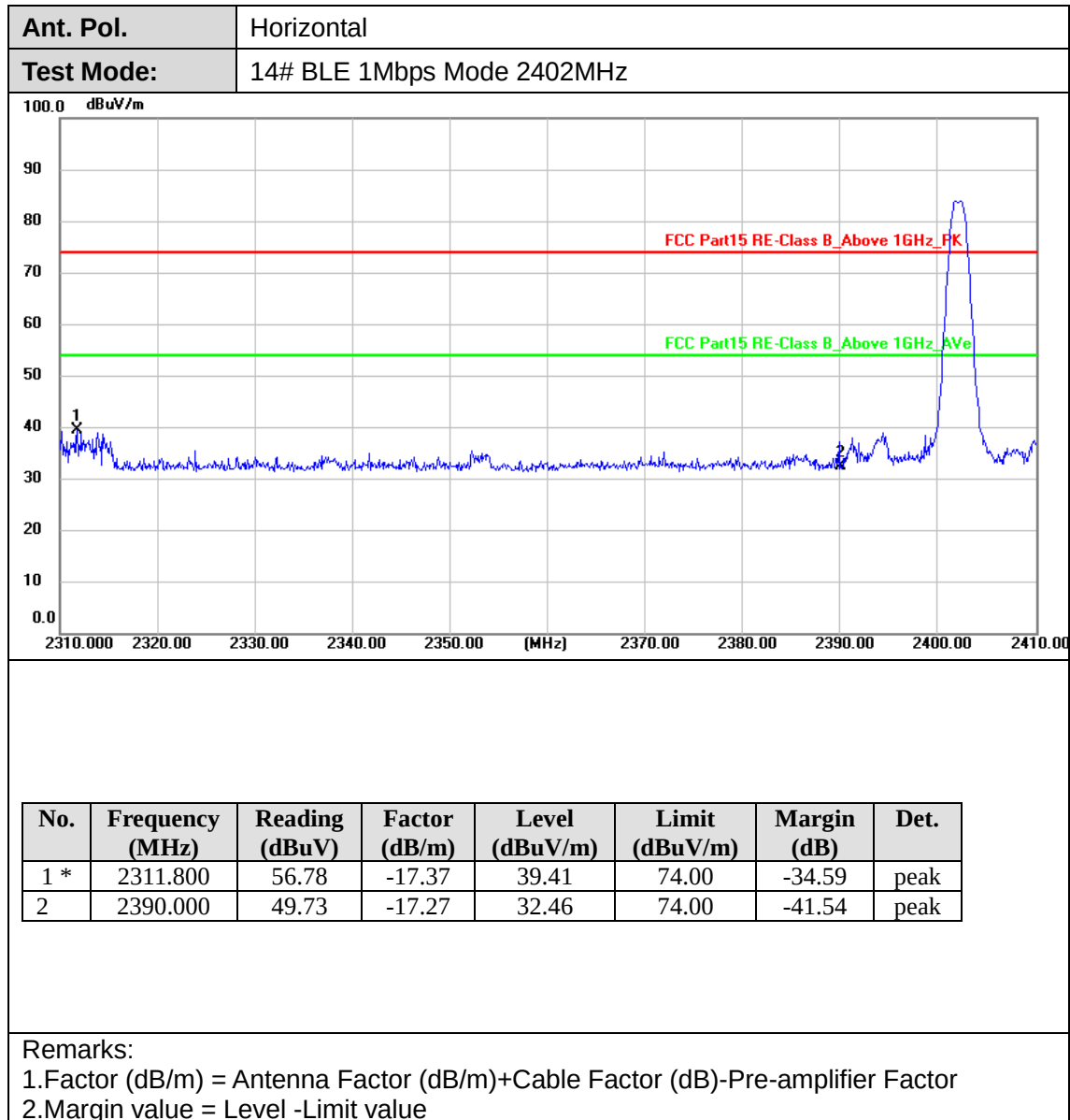


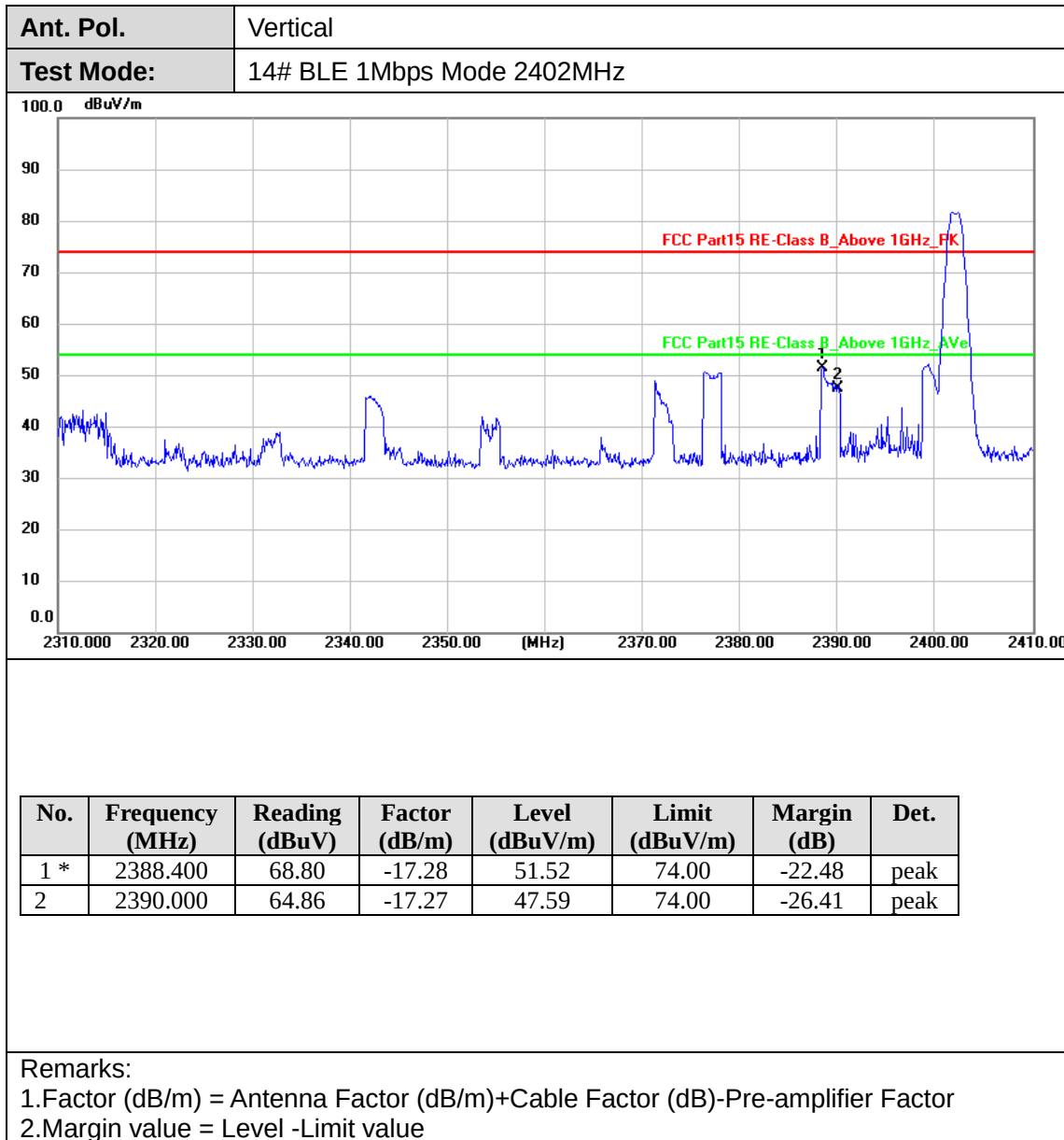


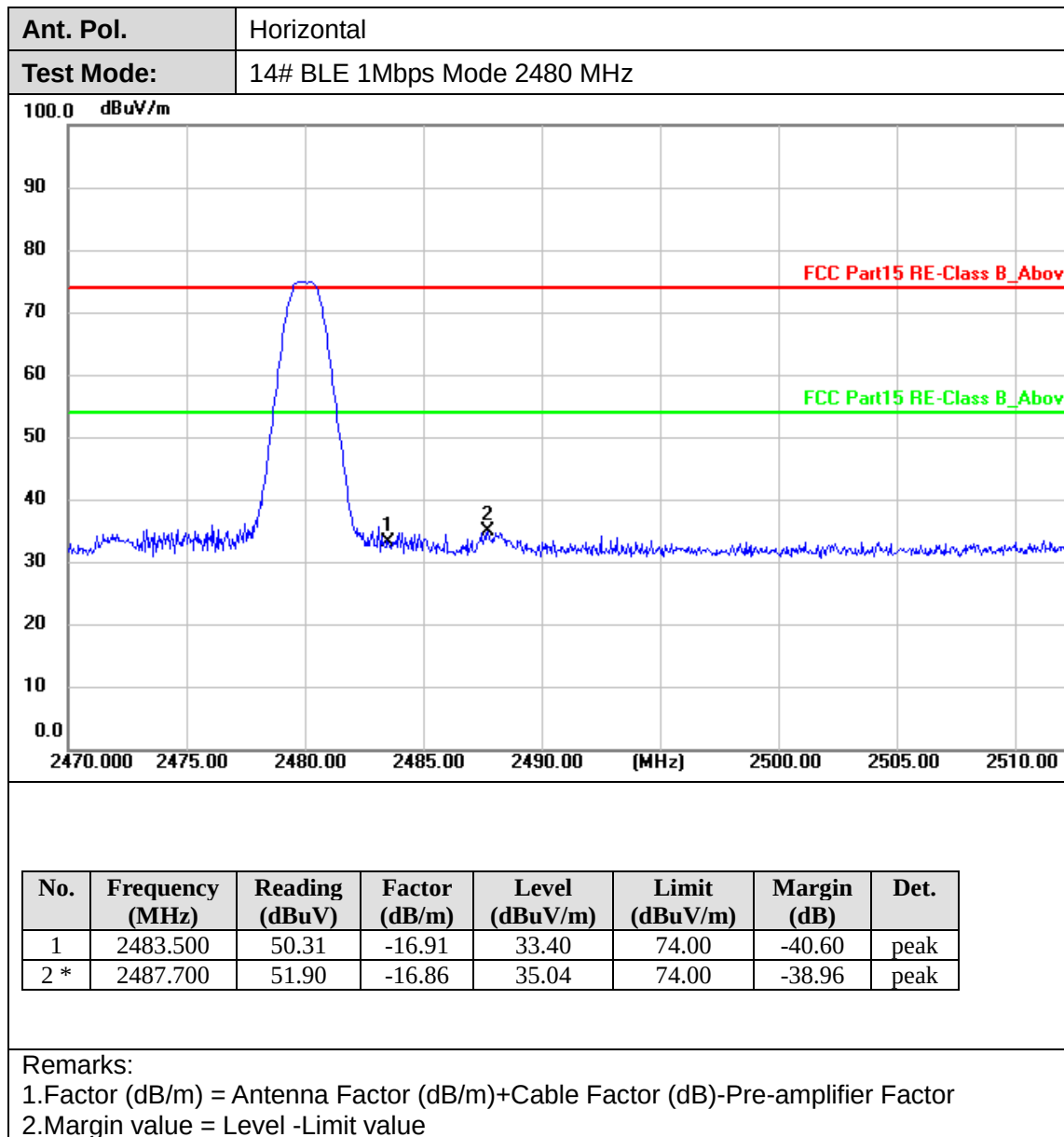


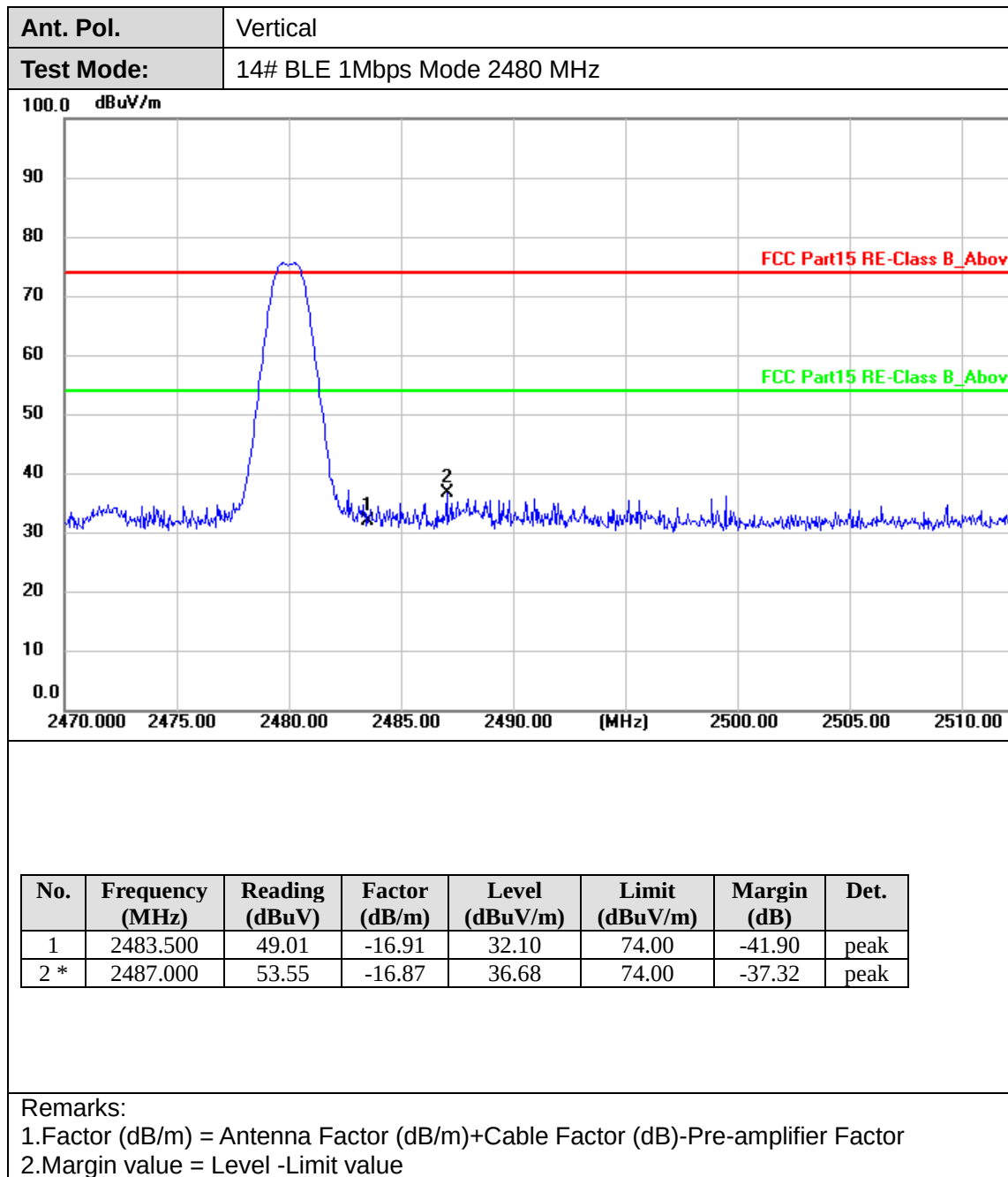


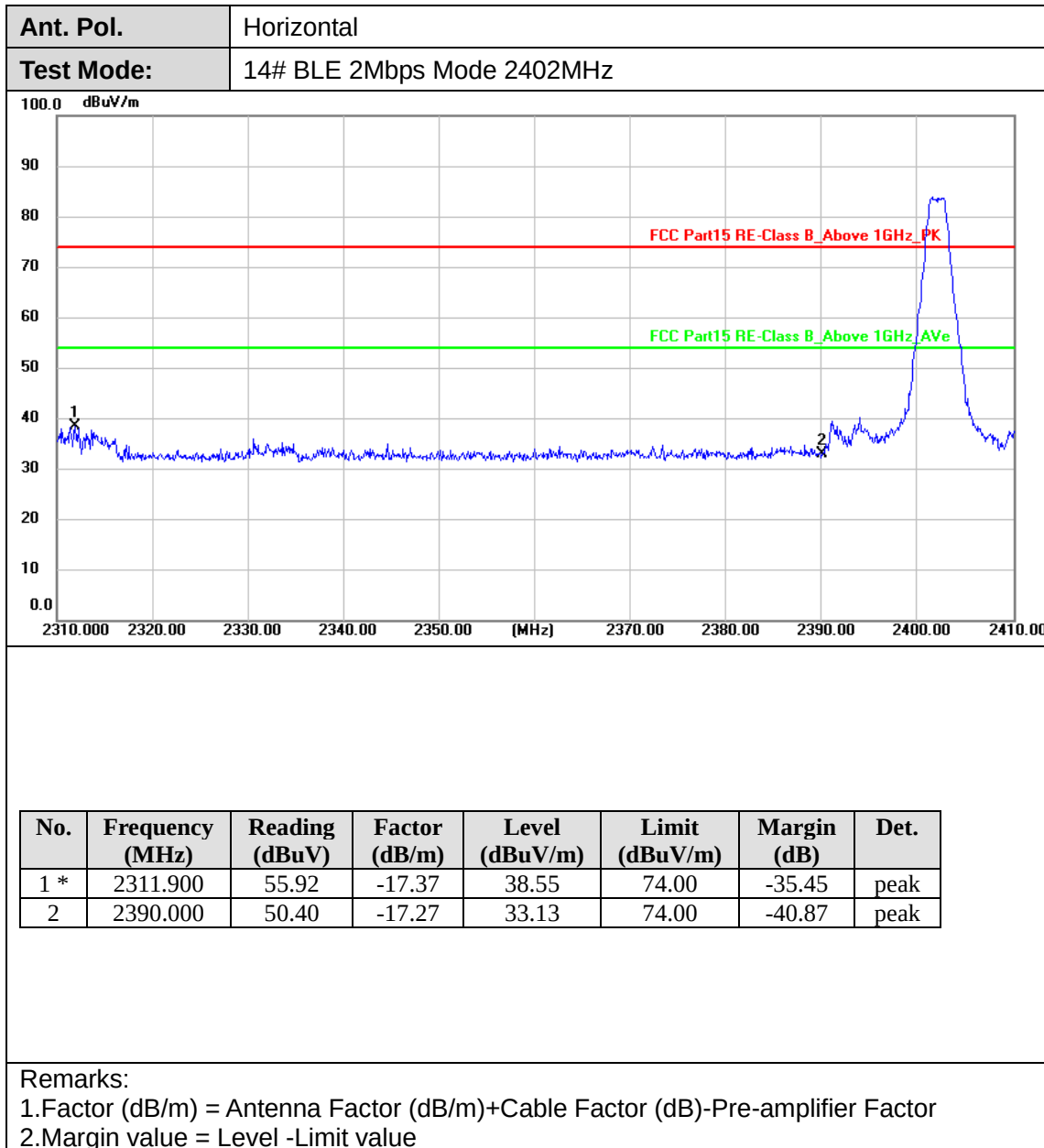


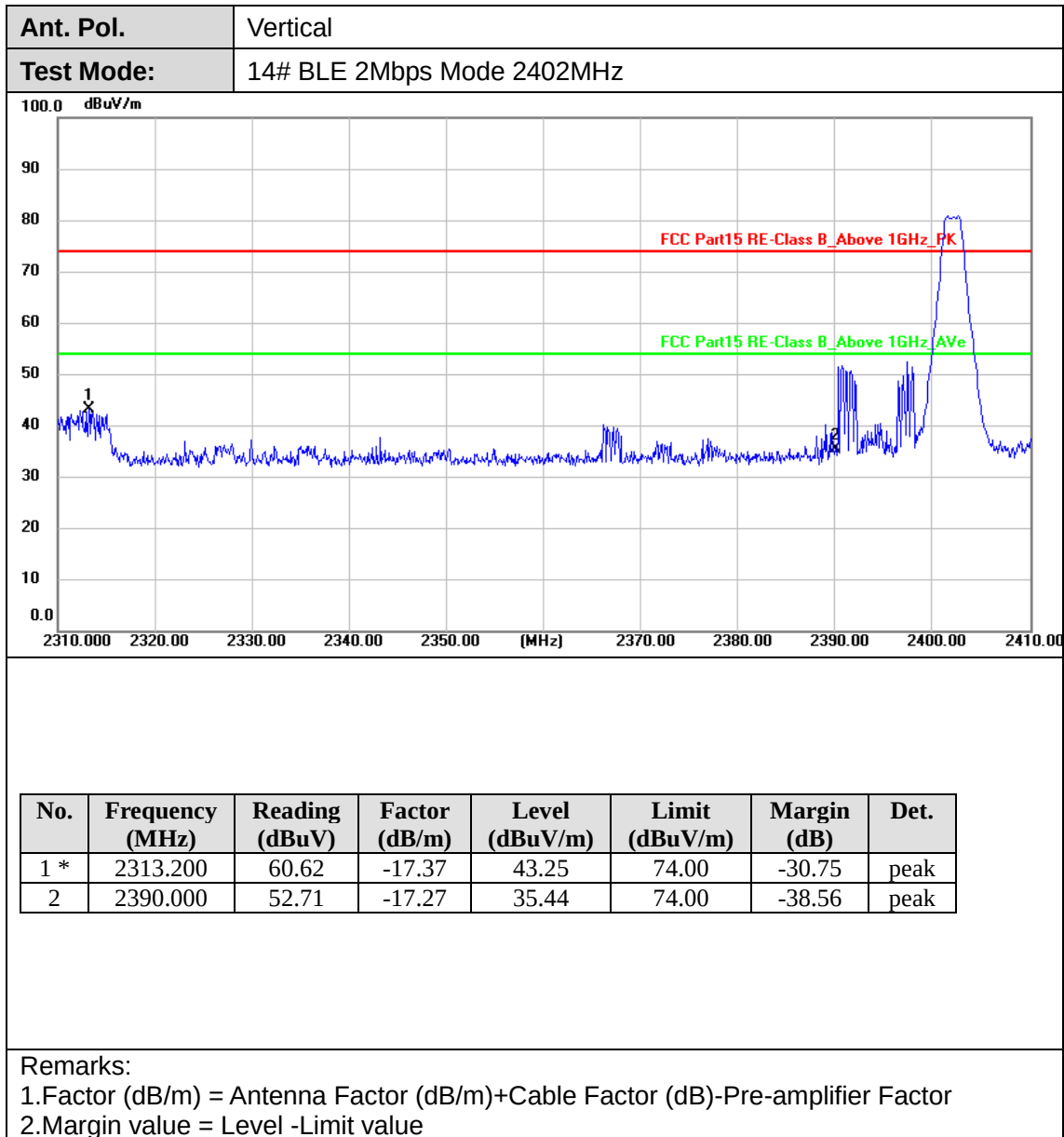


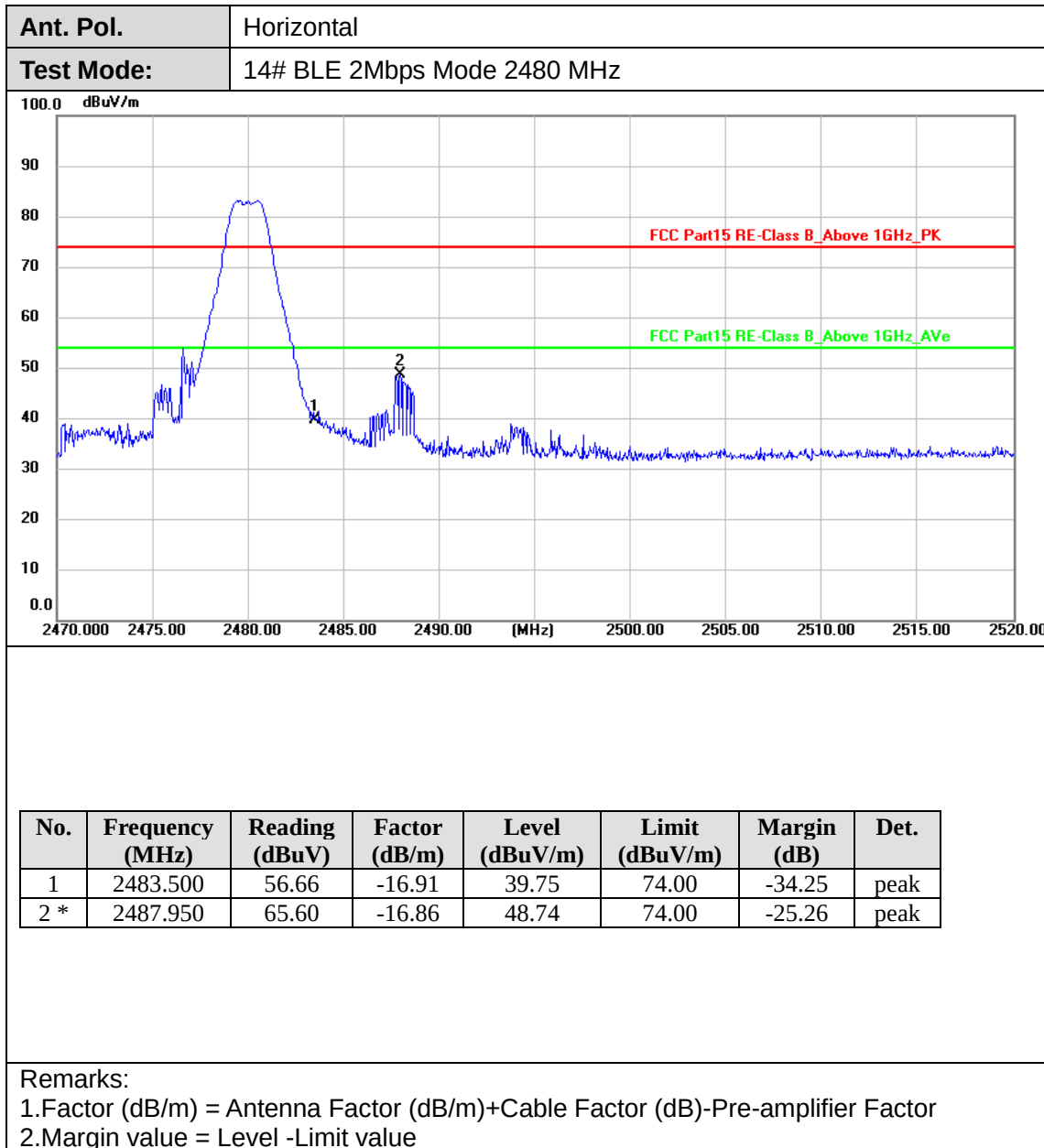


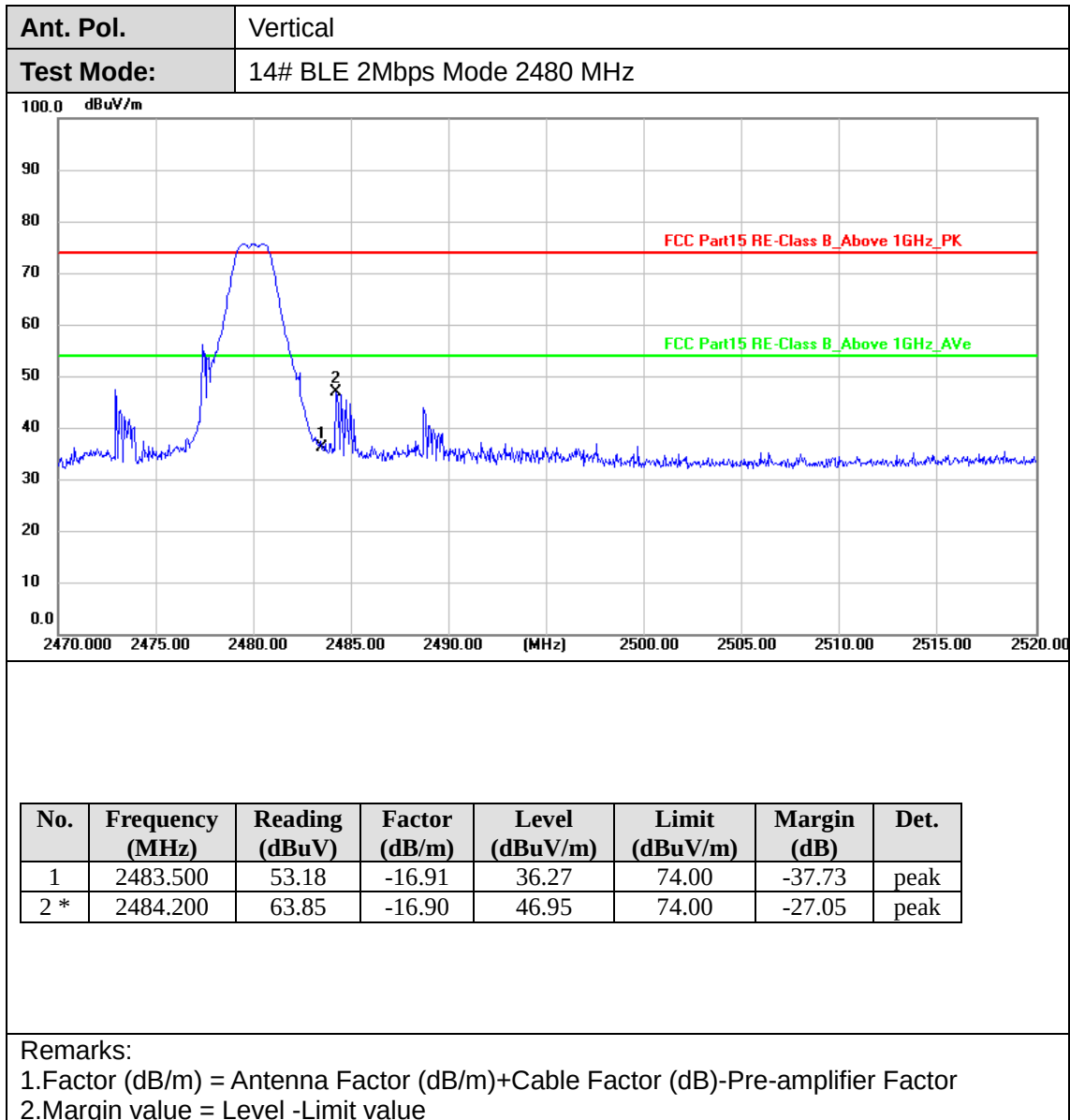


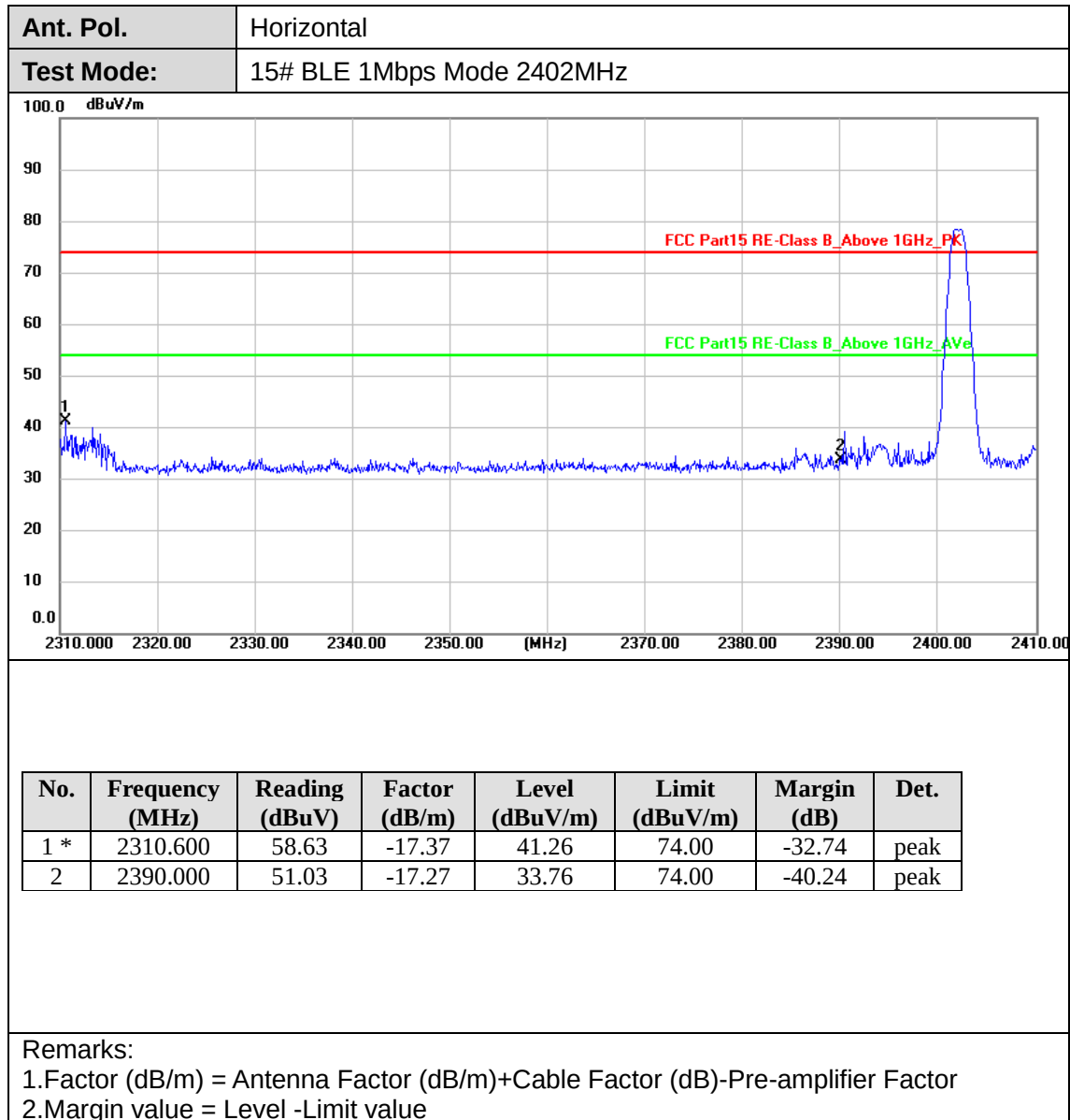


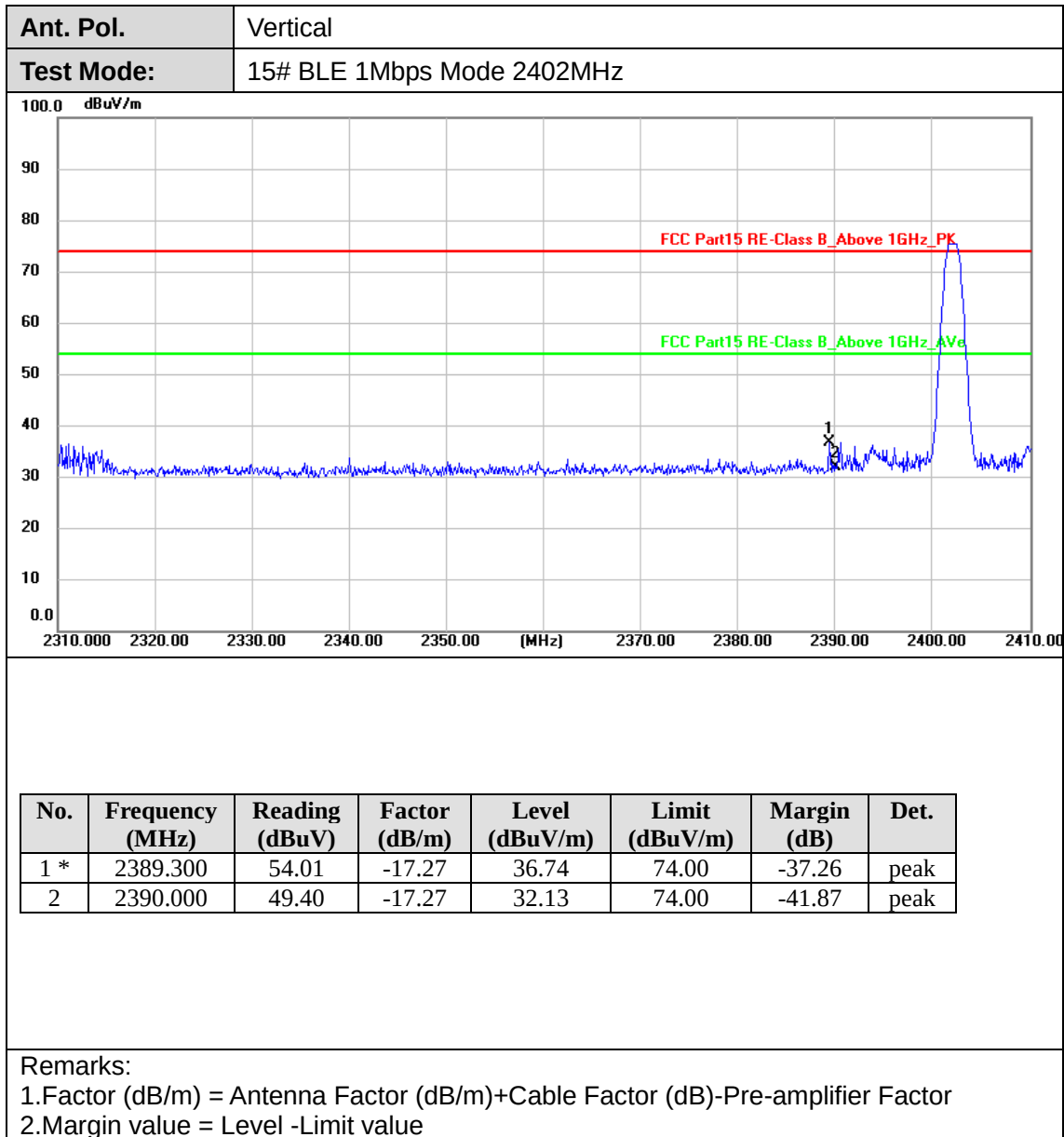


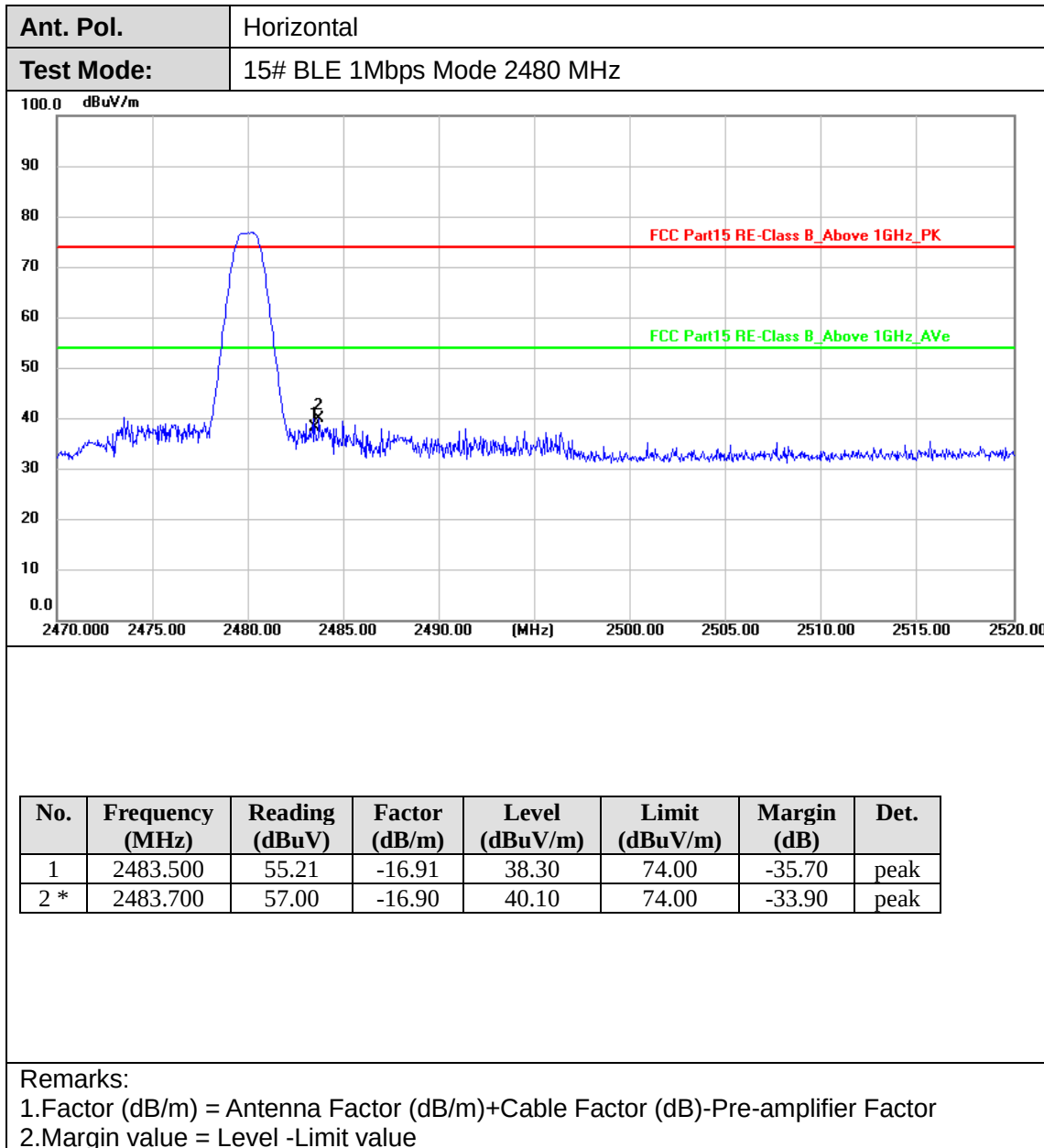


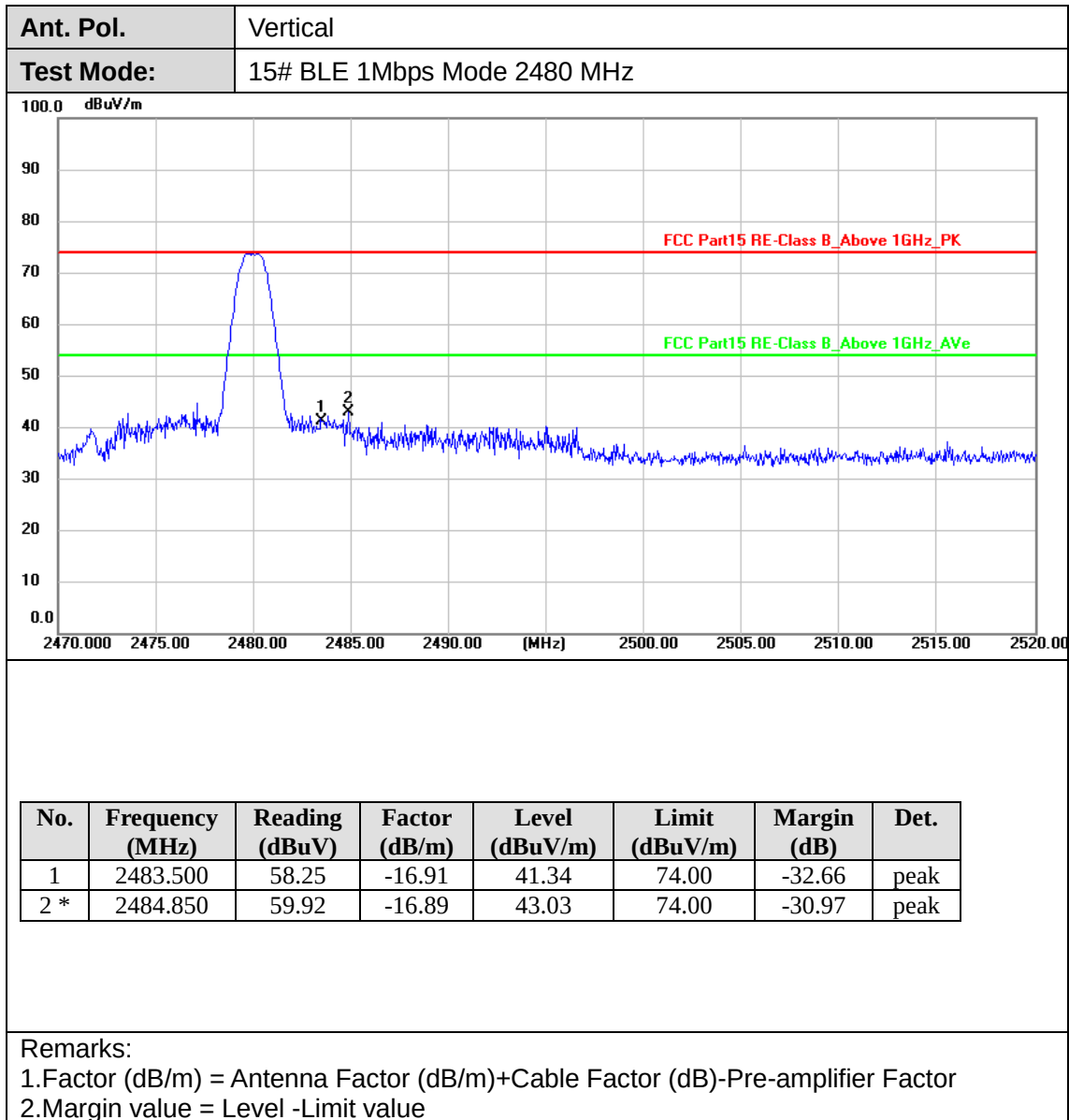


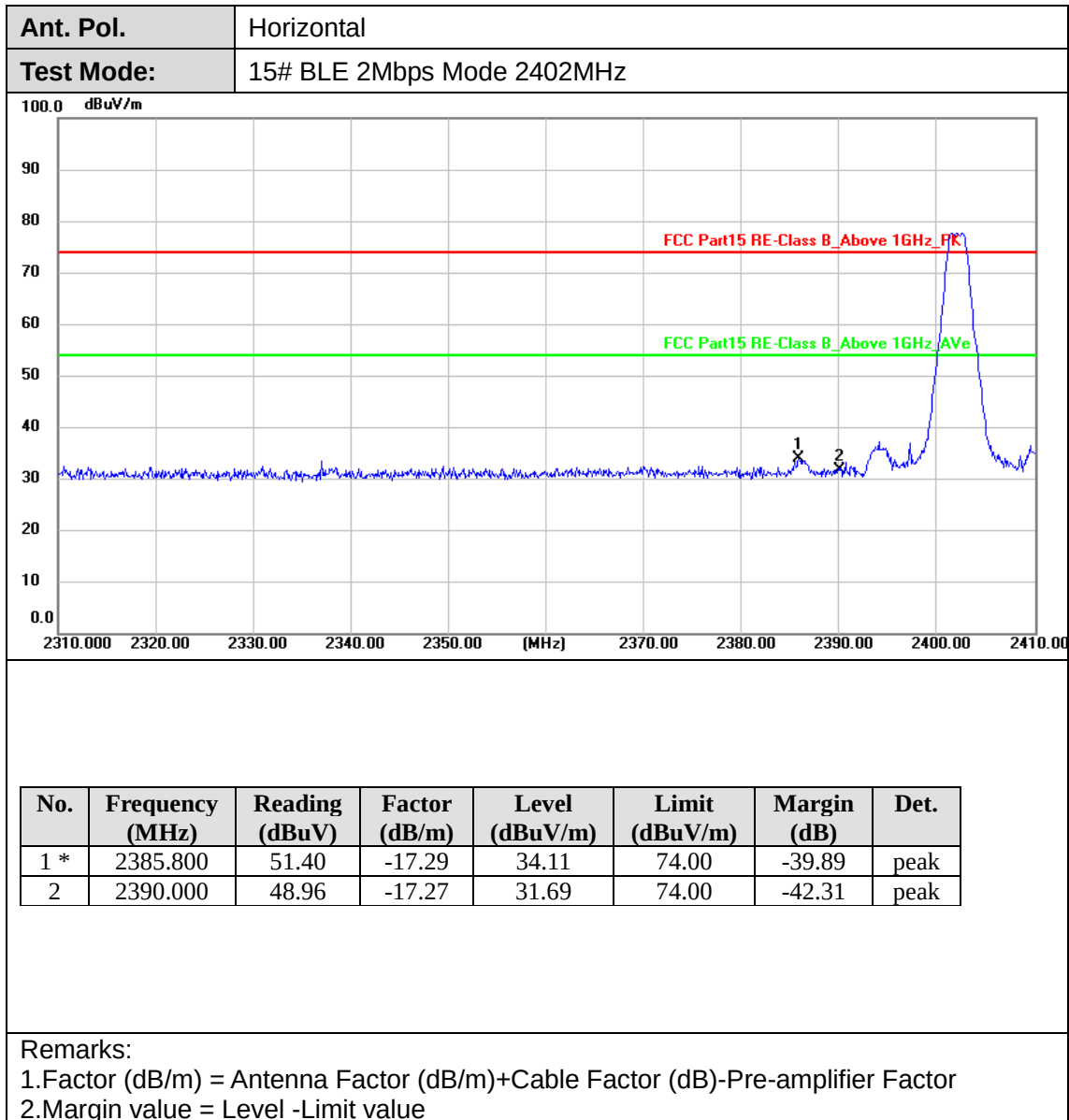


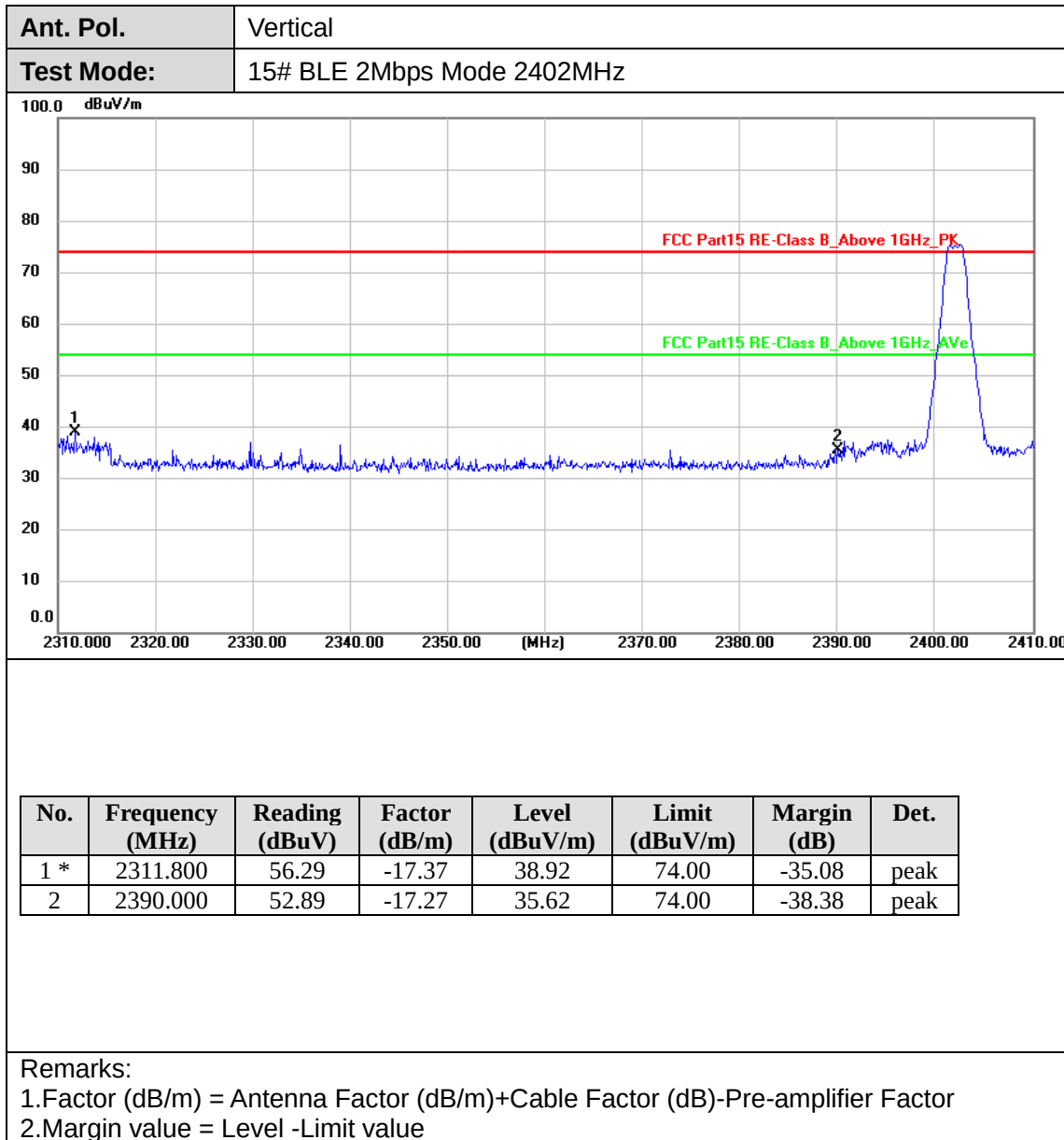


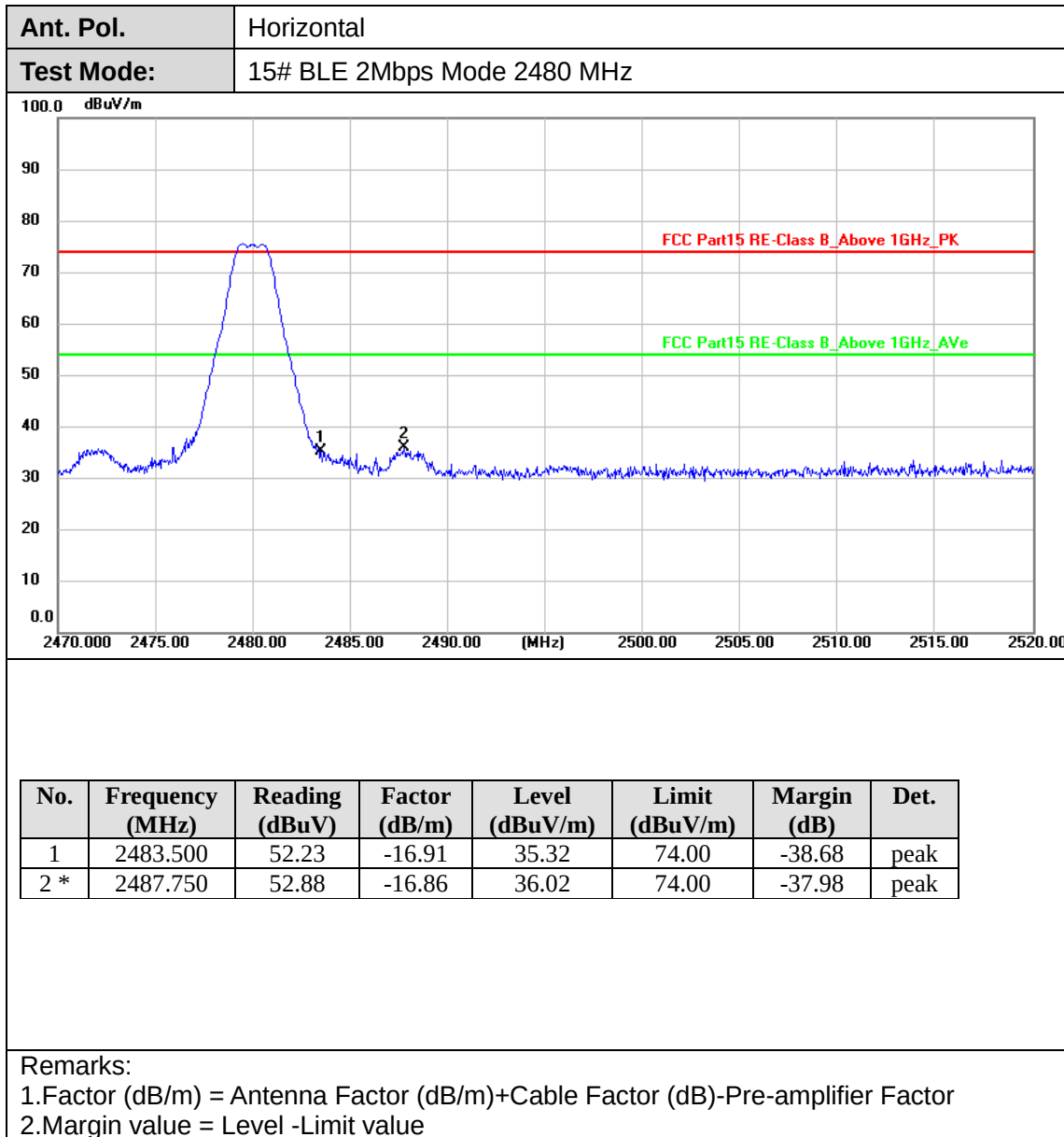


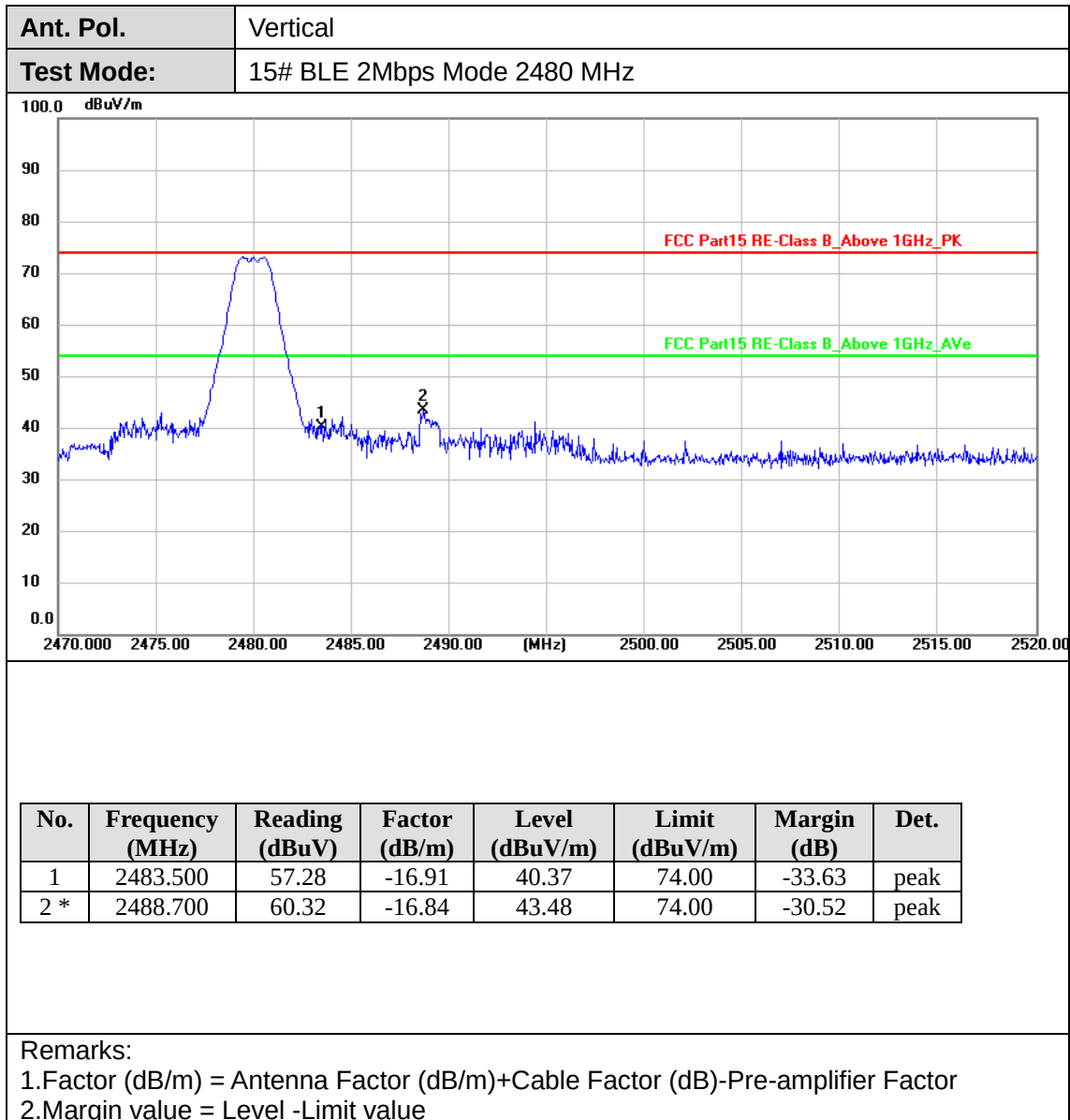












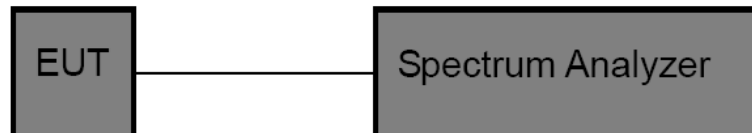


3.4. Band edge and Spurious Emissions (Conducted)

Limit

FCC CFR Title 47 Part 15 Subpart C Section 15.247 (d): In any 100 kHz bandwidth outside the frequency band in which the spread spectrum intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement.

Test Configuration



Test Procedure

1. The transmitter output was connected to the spectrum analyzer through an attenuator, the path loss was compensated to the results for each measurement.
2. Set to the maximum power setting and enable the EUT transmit continuously
3. Use the following spectrum analyzer settings:
RBW = 100 kHz, VBW ≥ RBW, scan up through 10th harmonic.
Sweep = auto, Detector function = peak, Trace = max hold
4. Measure and record the results in the test report.

Test Mode

Please refer to the clause 2.4.

Test Results

(1) Band edge Conducted Test

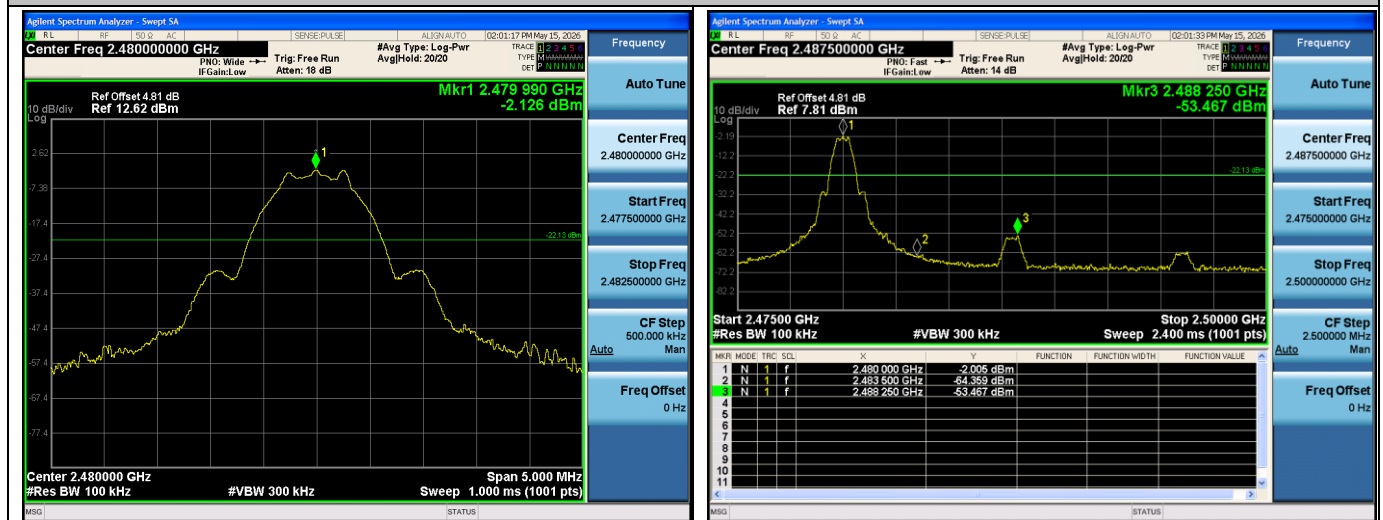
Test Mode	Frequency[MHz]	Ref Level[dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE 1Mbps	2402	-2.494	-53.713	-22.494	PASS
	2480	-2.126	-53.467	-22.126	PASS
BLE 2Mbps	2402	-2.481	-33.140	-22.481	PASS
	2480	-2.162	-52.642	-22.162	PASS



BLE_1Mbps_Low_2402



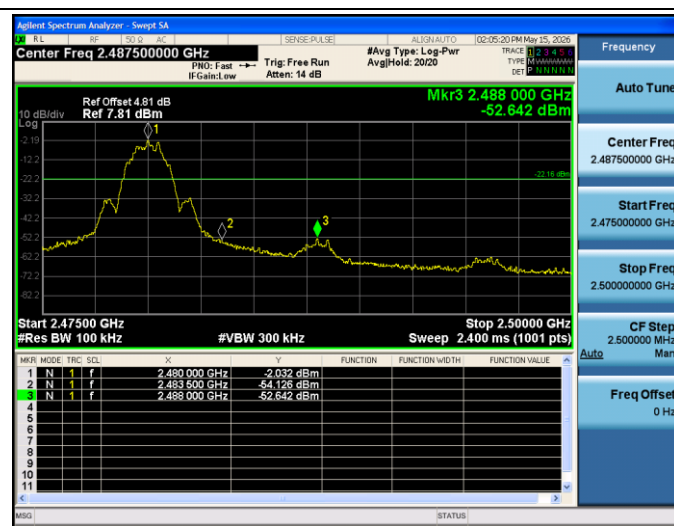
BLE_1Mbps_High_2480



BLE_2Mbpsbps_Low_2402



BLE_2Mbpsbps_High_2480

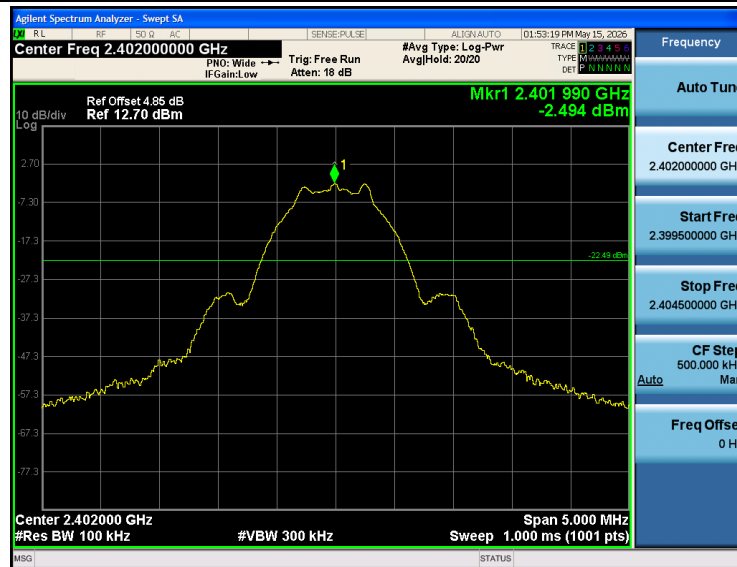


**(2) Conducted Spurious Emissions Test**

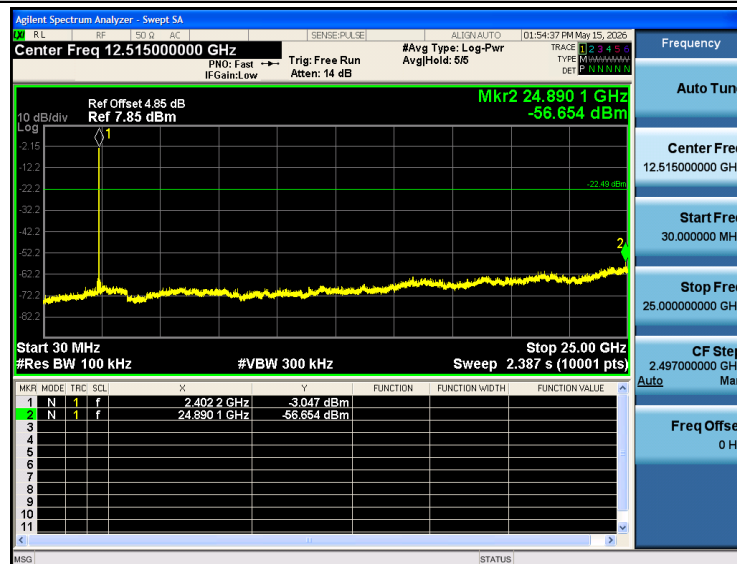
Test Mode	Frequency [MHz]	Ref Level [dBm]	Spurious level[dBm]	Limit[dBm]	Verdict
BLE 1Mbps	2402	-2.494	-56.654	-22.494	PASS
	2440	-2.391	-57.558	-22.391	PASS
	2480	-2.126	-58.330	-22.126	PASS
BLE 2Mbps	2402	-2.481	-58.123	-22.481	PASS
	2440	-2.504	-58.183	-22.504	PASS
	2480	-2.162	-57.630	-22.162	PASS



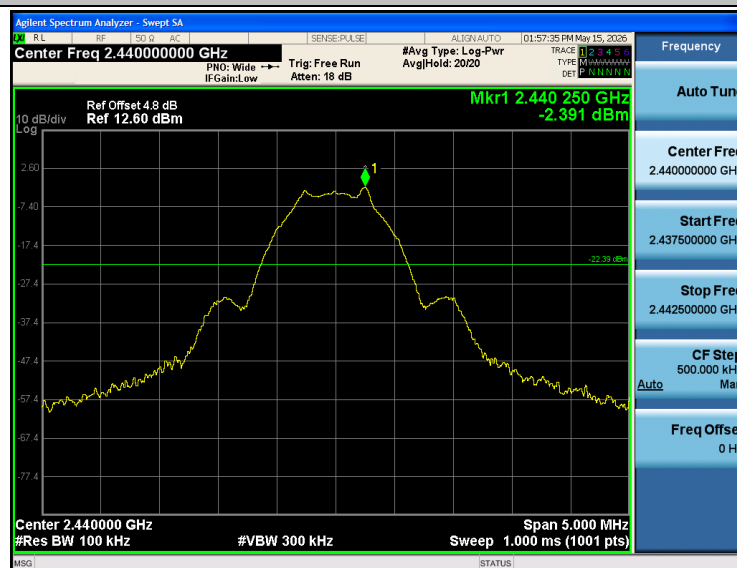
BLE_1Mbps_2402_Reference



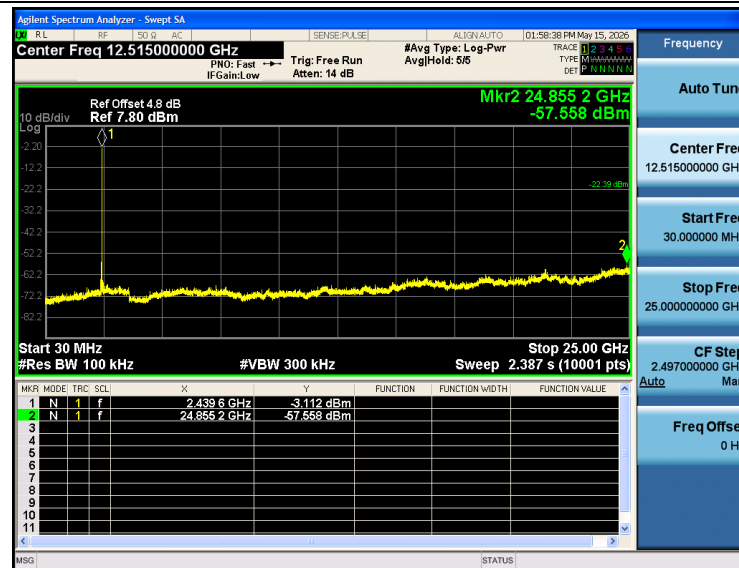
BLE_1Mbps_2402_30~25000



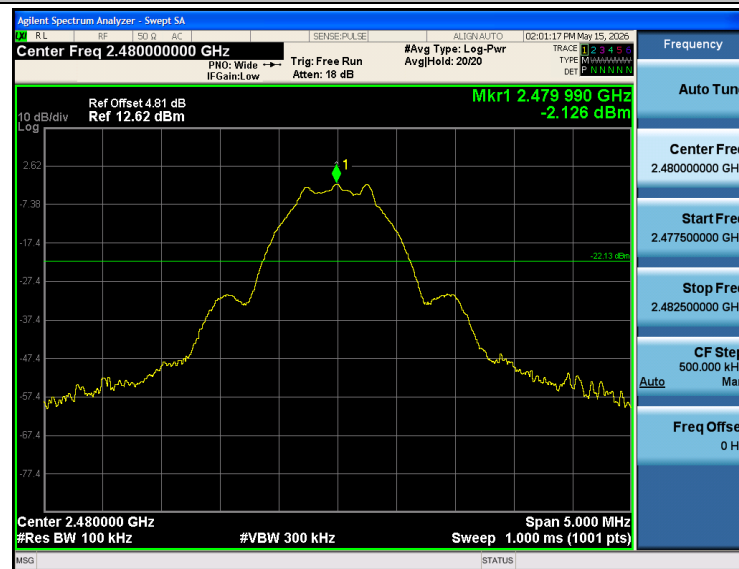
BLE_1Mbps_2440_Reference



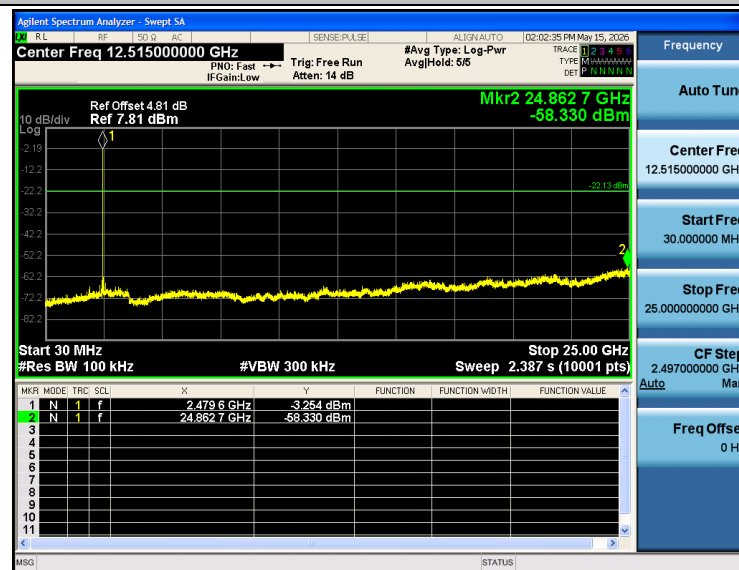
BLE_1Mbps_2440_30~25000



BLE_1Mbps_2480_0-Reference



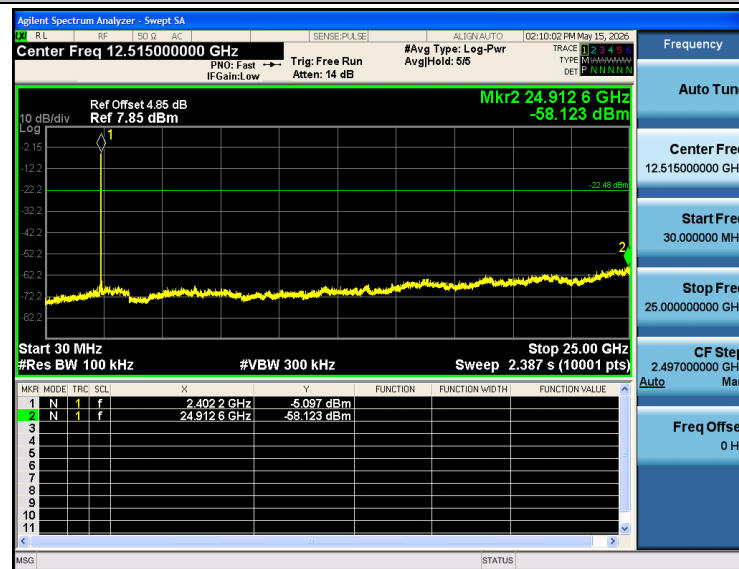
BLE_1Mbps_2480_30-25000



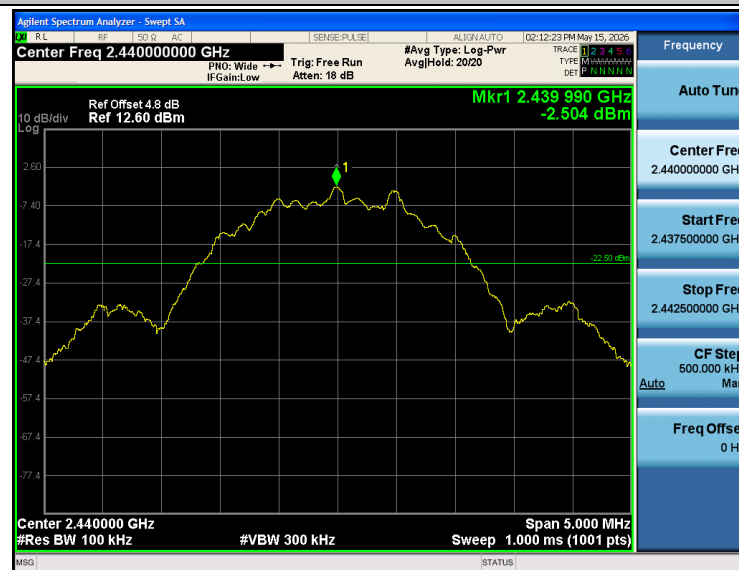
BLE_2Mbps_2402_0-Reference



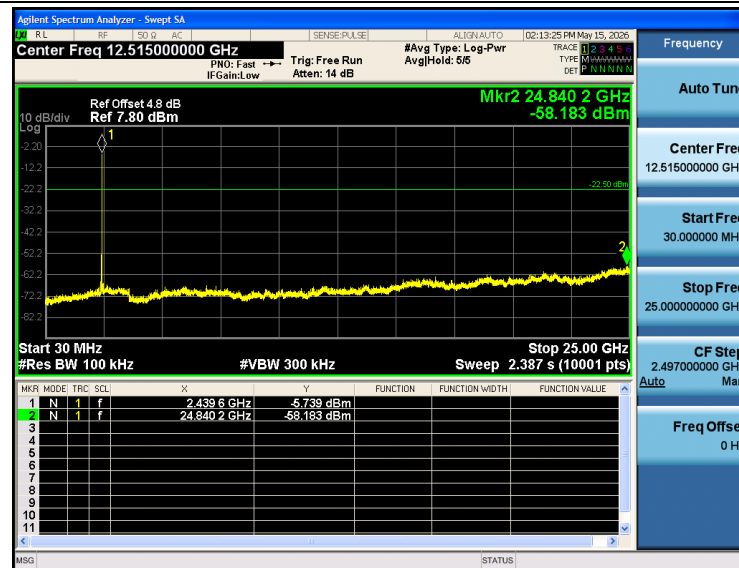
BLE_2Mbps_2402_30~25000



BLE_2Mbps_2440_0~Reference



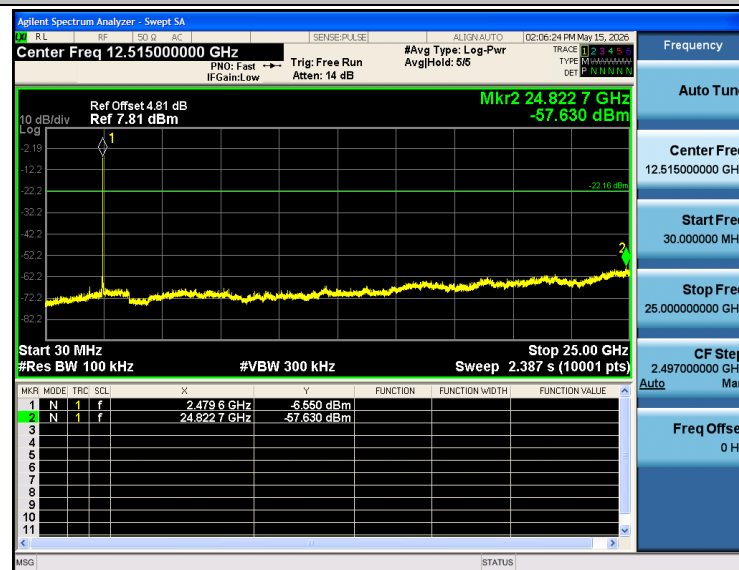
BLE_2Mbps_2440_30~25000



BLE_2Mbps_2480_0-Reference



BLE_2Mbps_2480_30-25000





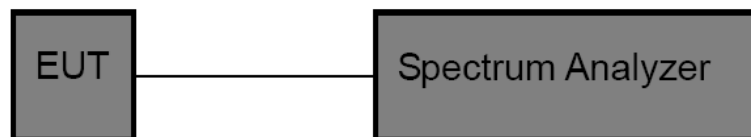
3.5. DTS Bandwidth

Limit

FCC CFR Title 47 Part 15 Subpart C Section 15.247 (a)(2):

Test Item	Limit	Frequency Range(MHz)
DTS Bandwidth	≥ 500 KHz (6dB bandwidth)	2400~2483.5

Test Configuration



Test Procedure

1. The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram above.
2. DTS Spectrum Setting:
 - (1) Set RBW = 100 kHz.
 - (2) Set the video bandwidth (VBW) ≥ 3 RBW.
 - (3) Detector = Peak.
 - (4) Trace mode = Max hold.
 - (5) Sweep = Auto couple.OCB Spectrum Setting:
 - (1) Set RBW = 1% ~ 5% occupied bandwidth.
 - (2) Set the video bandwidth (VBW) ≥ 3 RBW.
 - (3) Detector = Peak.
 - (4) Trace mode = Max hold.
 - (5) Sweep = Auto couple.

Test Mode

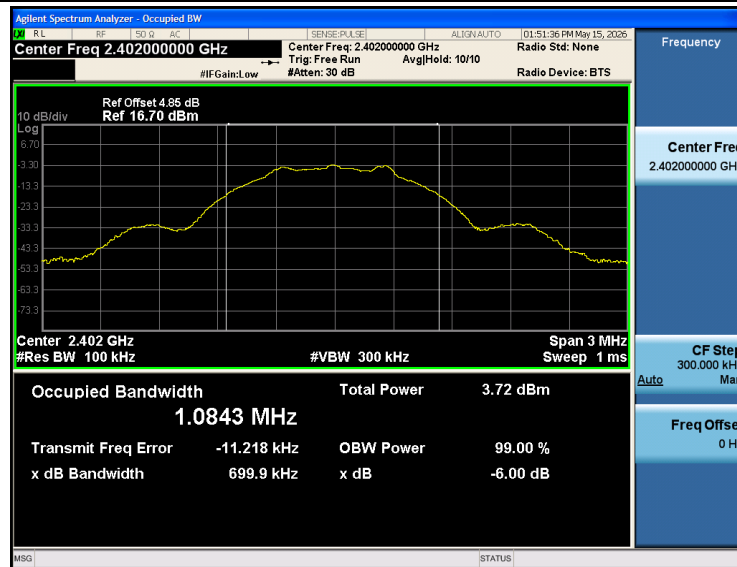
Please refer to the clause 2.4.

Test Results

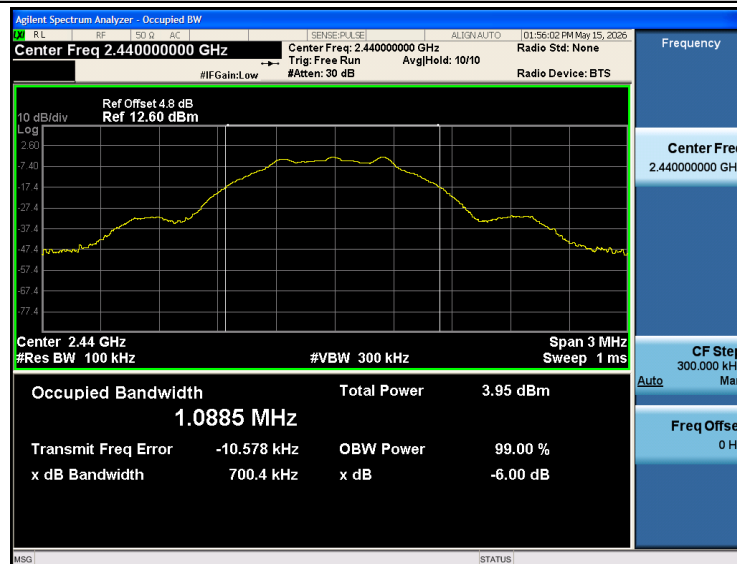
Test Mode	Frequency[MHz]	DTS BW[kHz]	Limit[kHz]	Verdict
BLE 1Mbps	2402	699.92	>500	PASS
	2440	700.43	>500	PASS
	2480	707.19	>500	PASS
BLE 2Mbps	2402	1146.10	>500	PASS
	2440	1137.41	>500	PASS
	2480	1148.08	>500	PASS



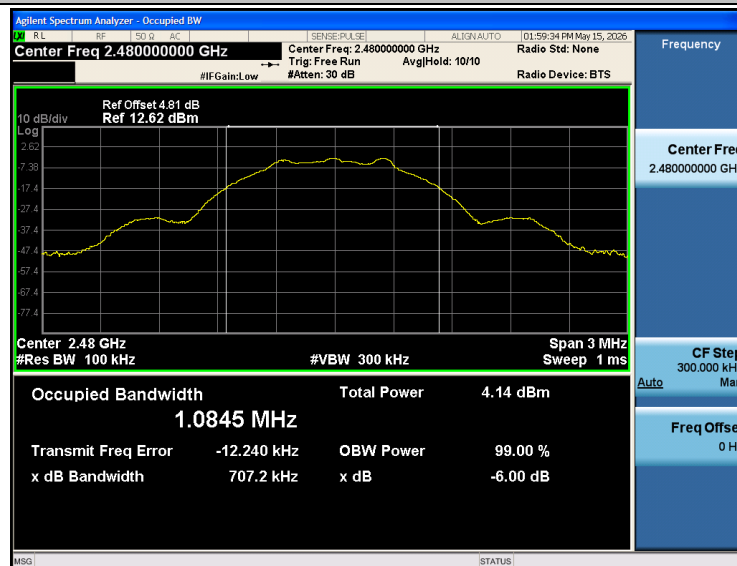
BLE_1Mbps_DTS_2402



BLE_1Mbps_DTS_2440



BLE_1Mbps_DTS_2480



BLE_2Mbps_DTS_2402