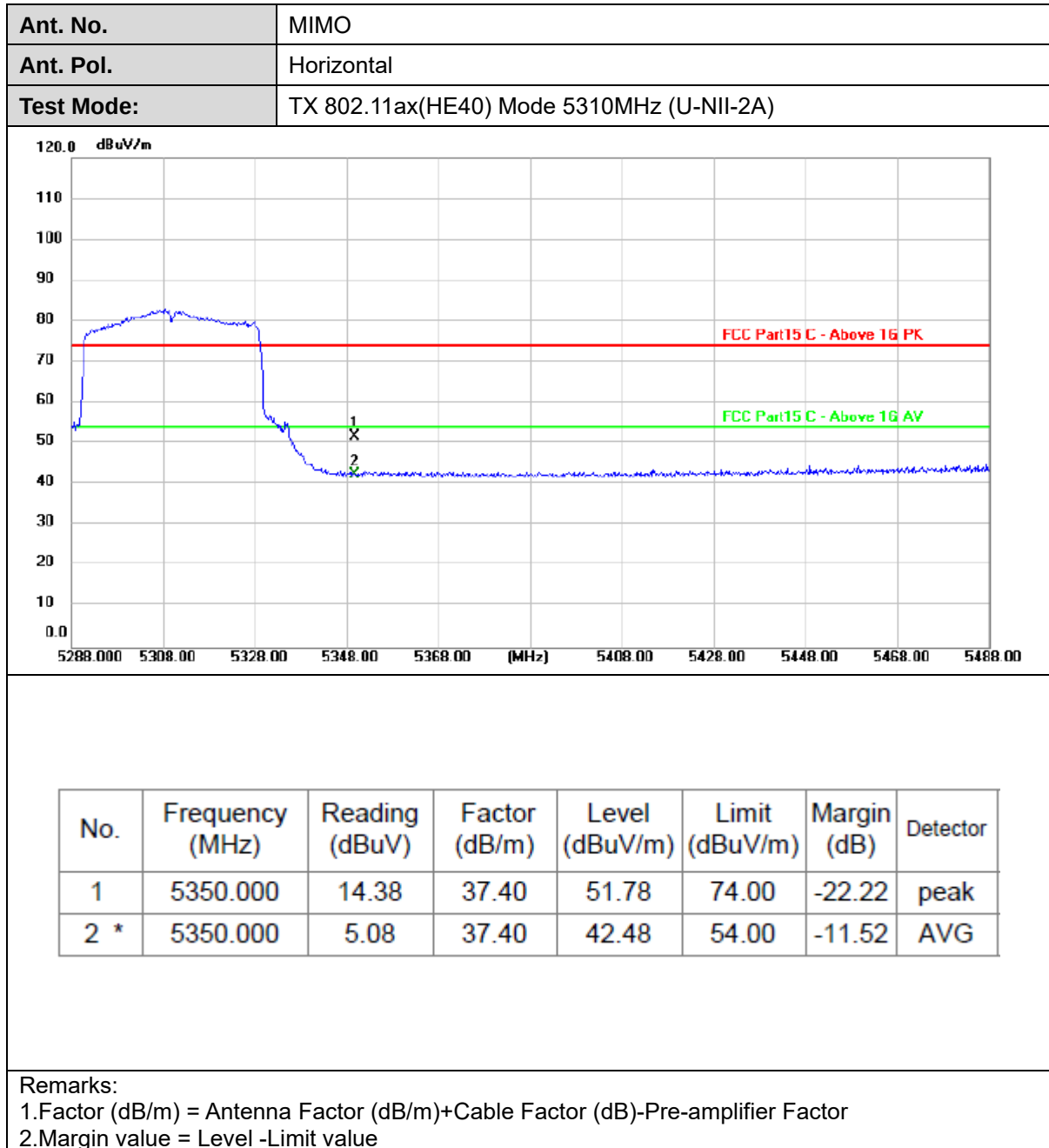
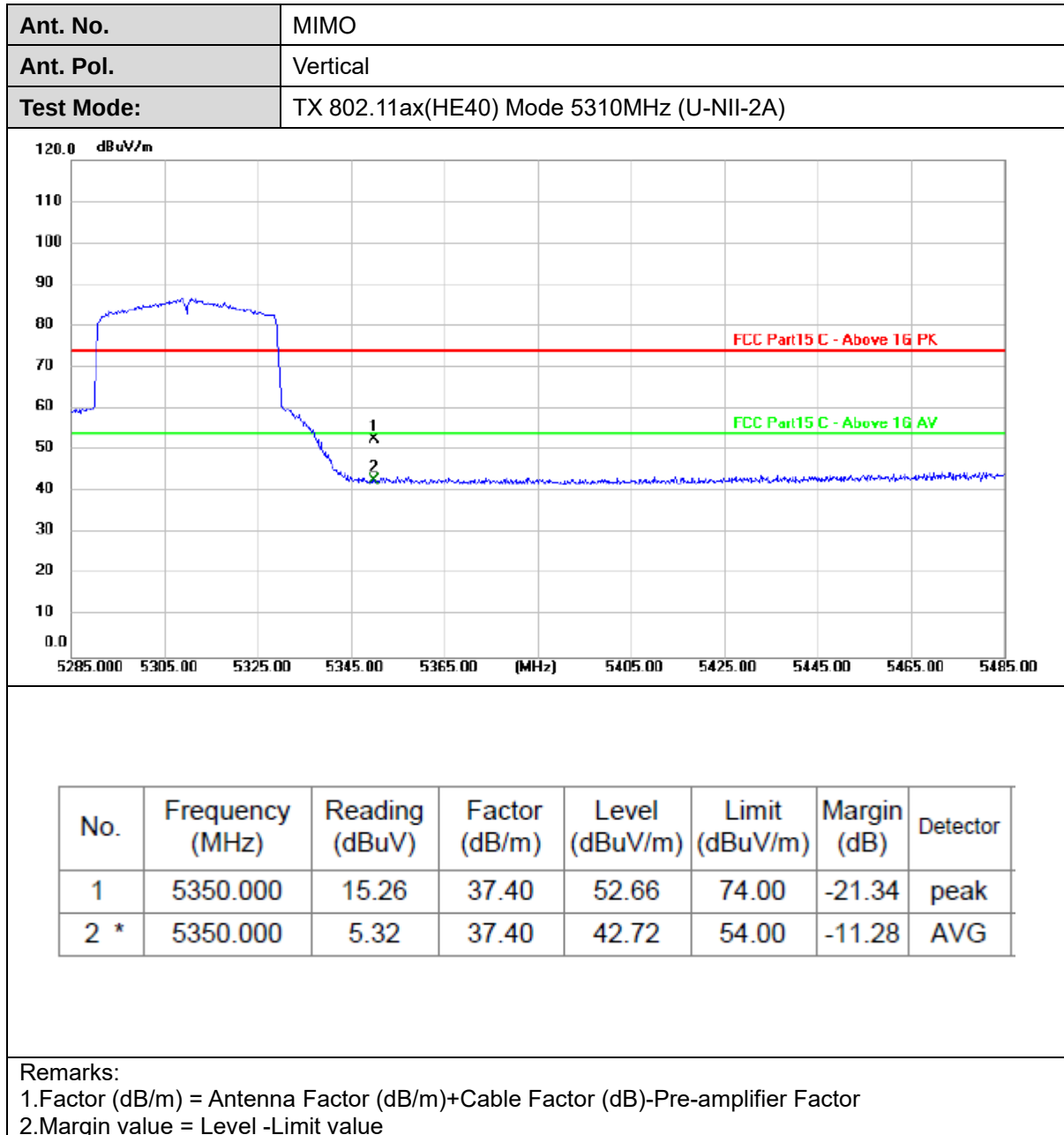
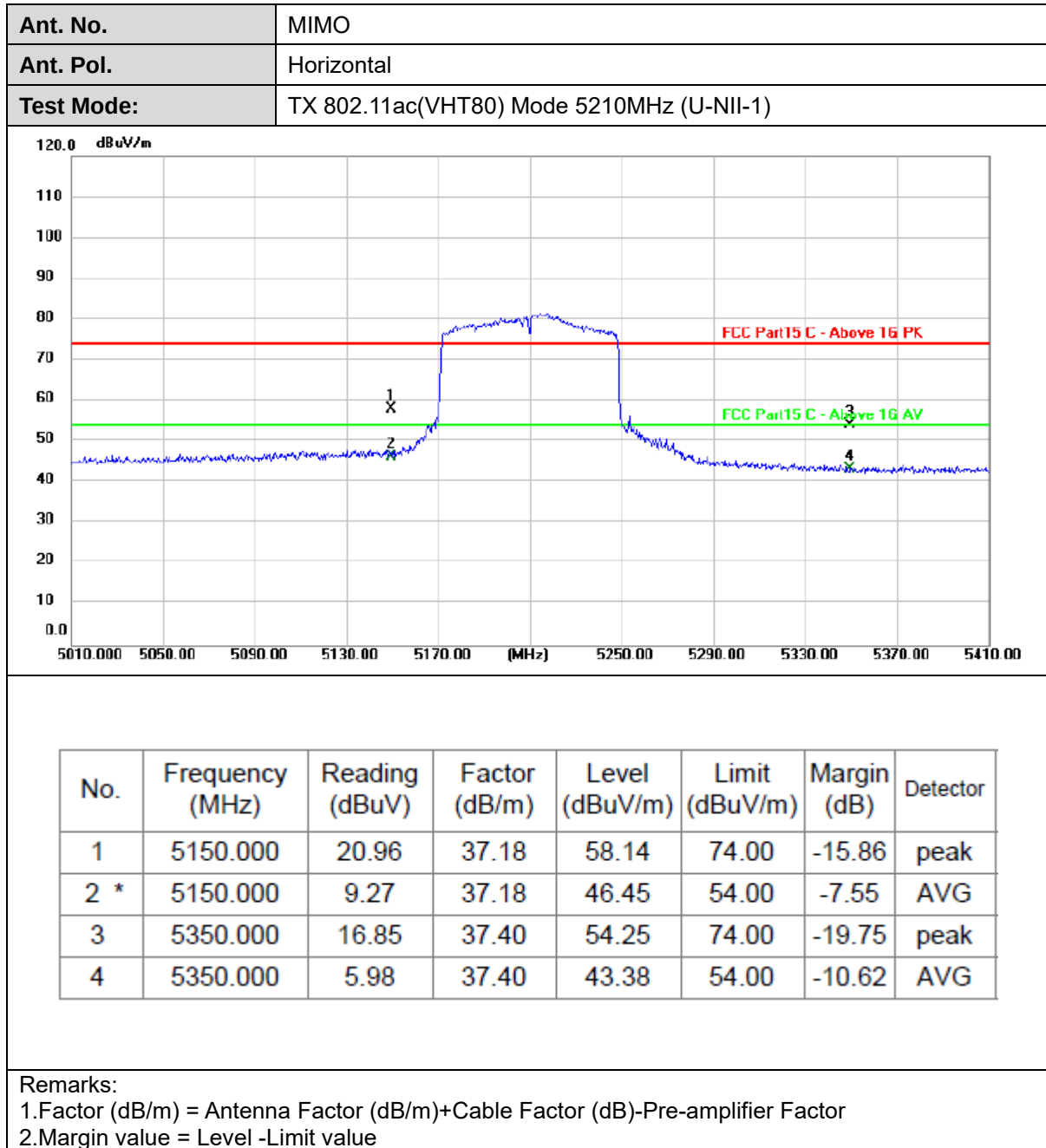
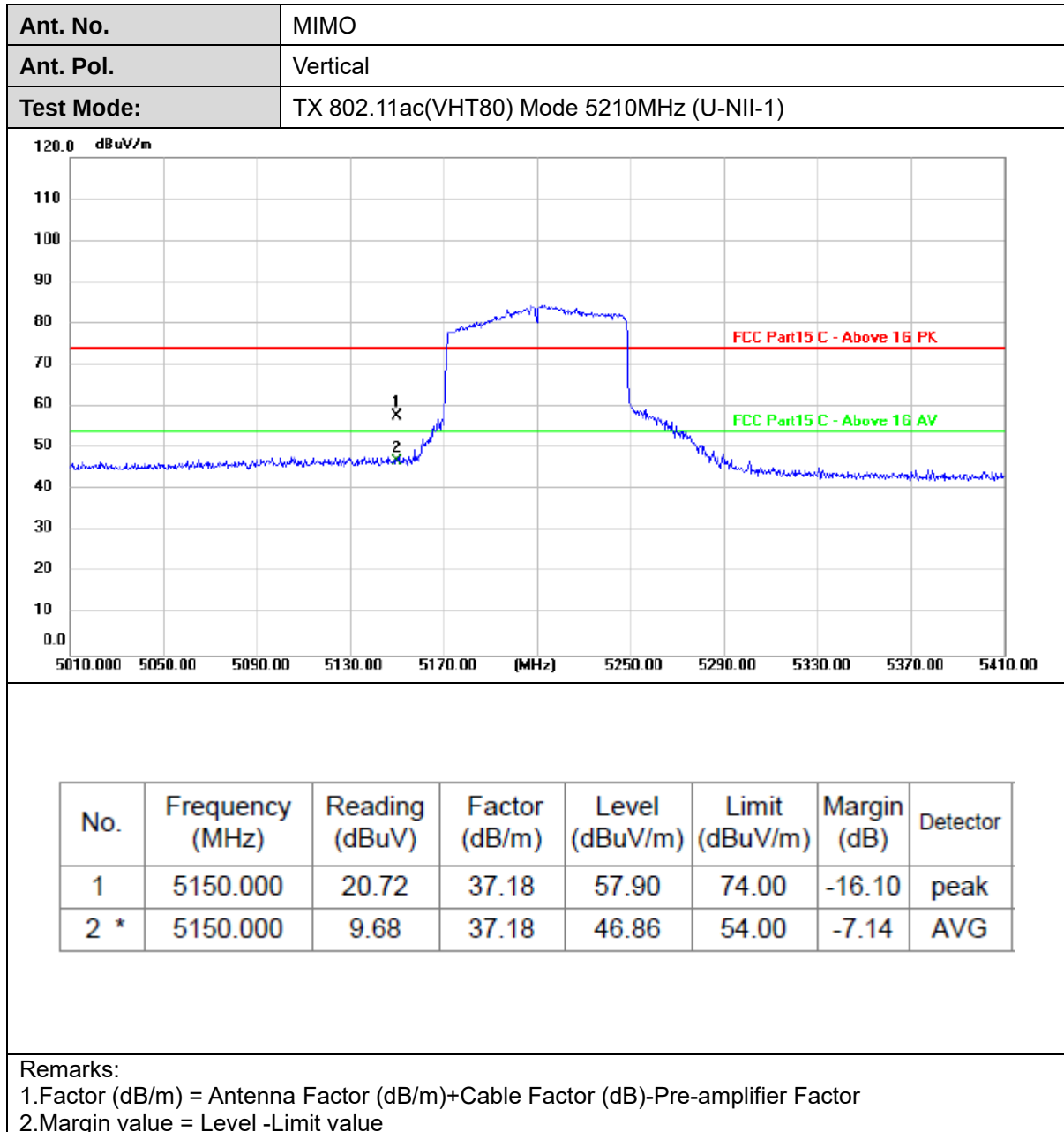
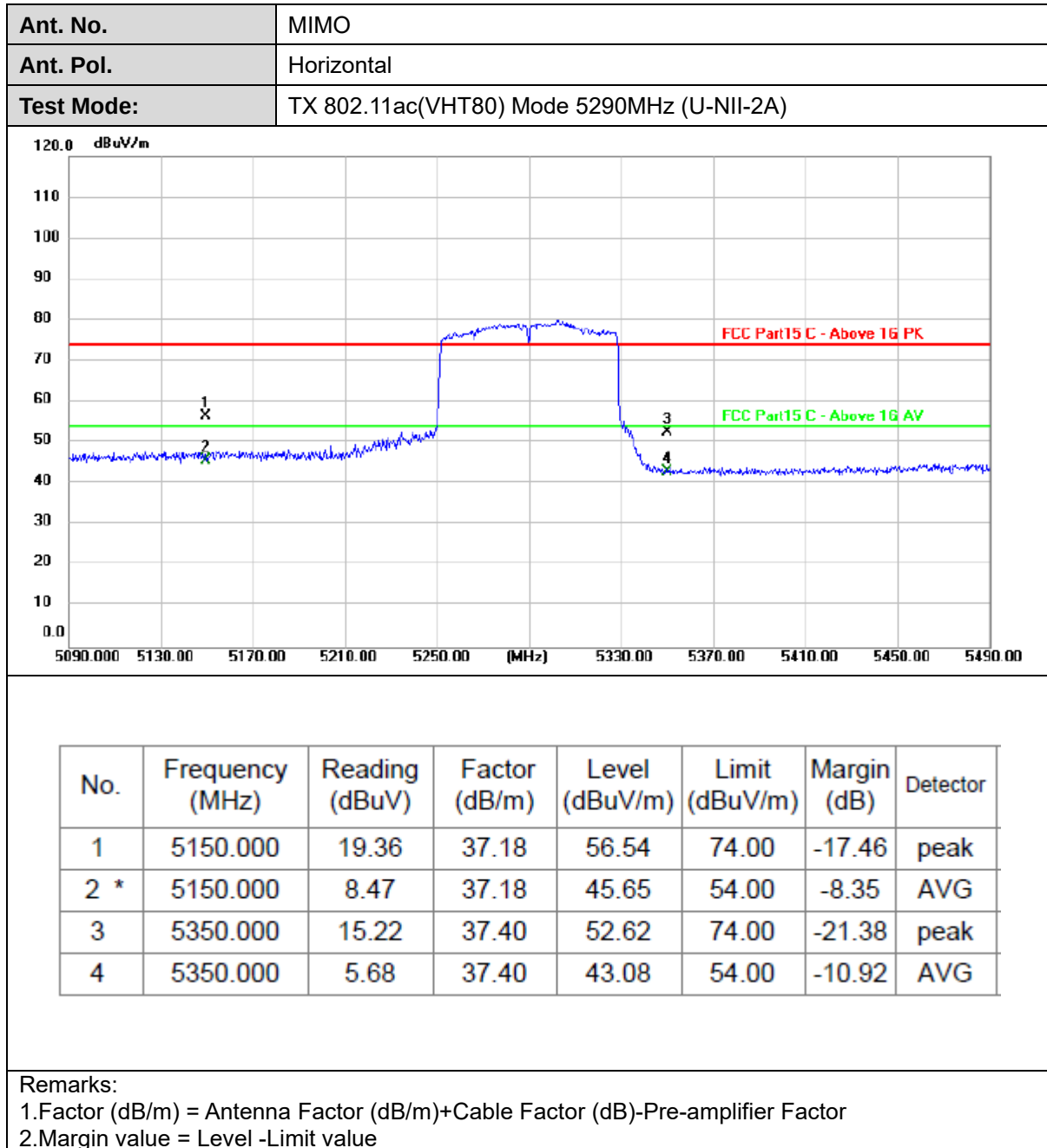


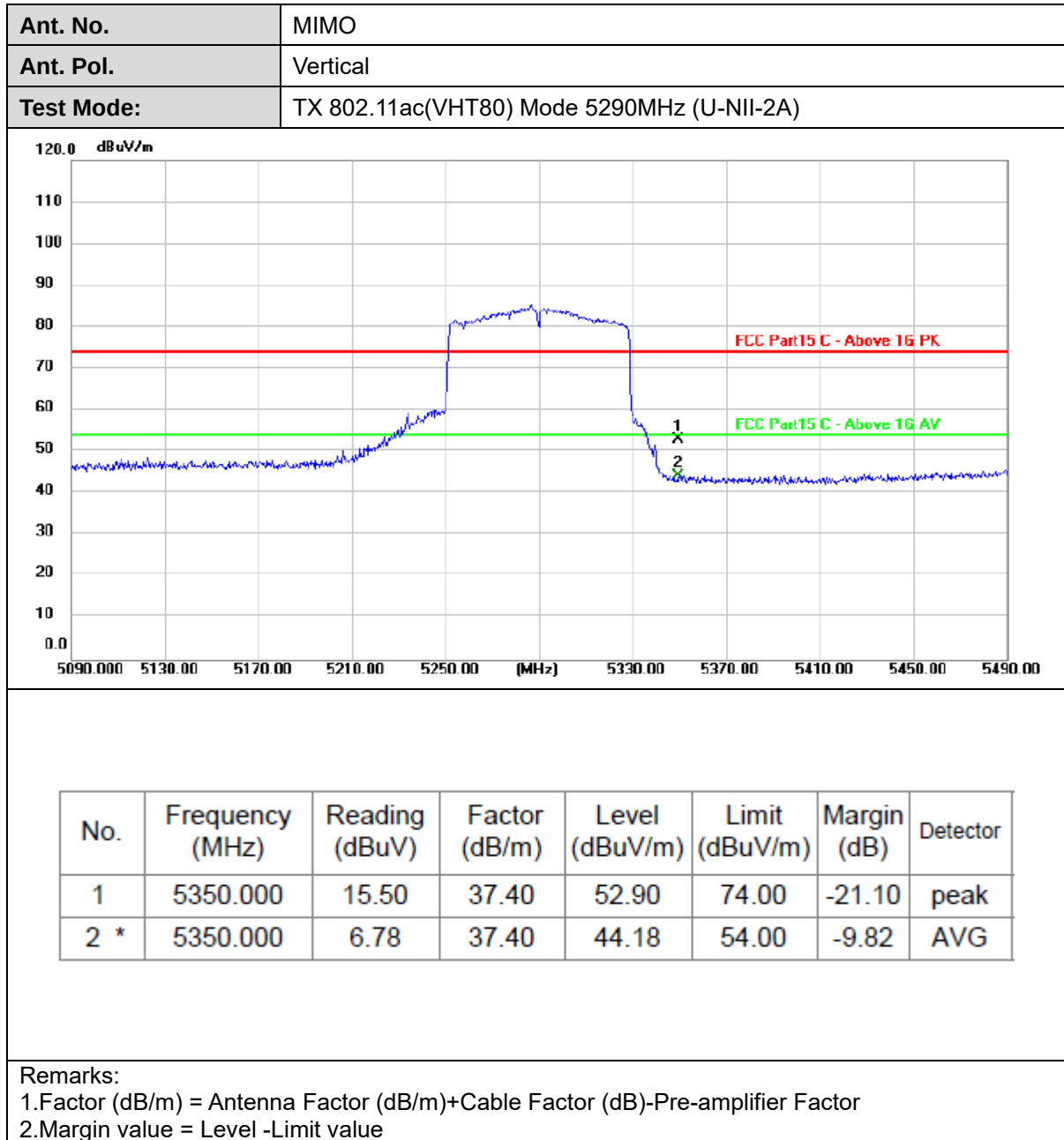


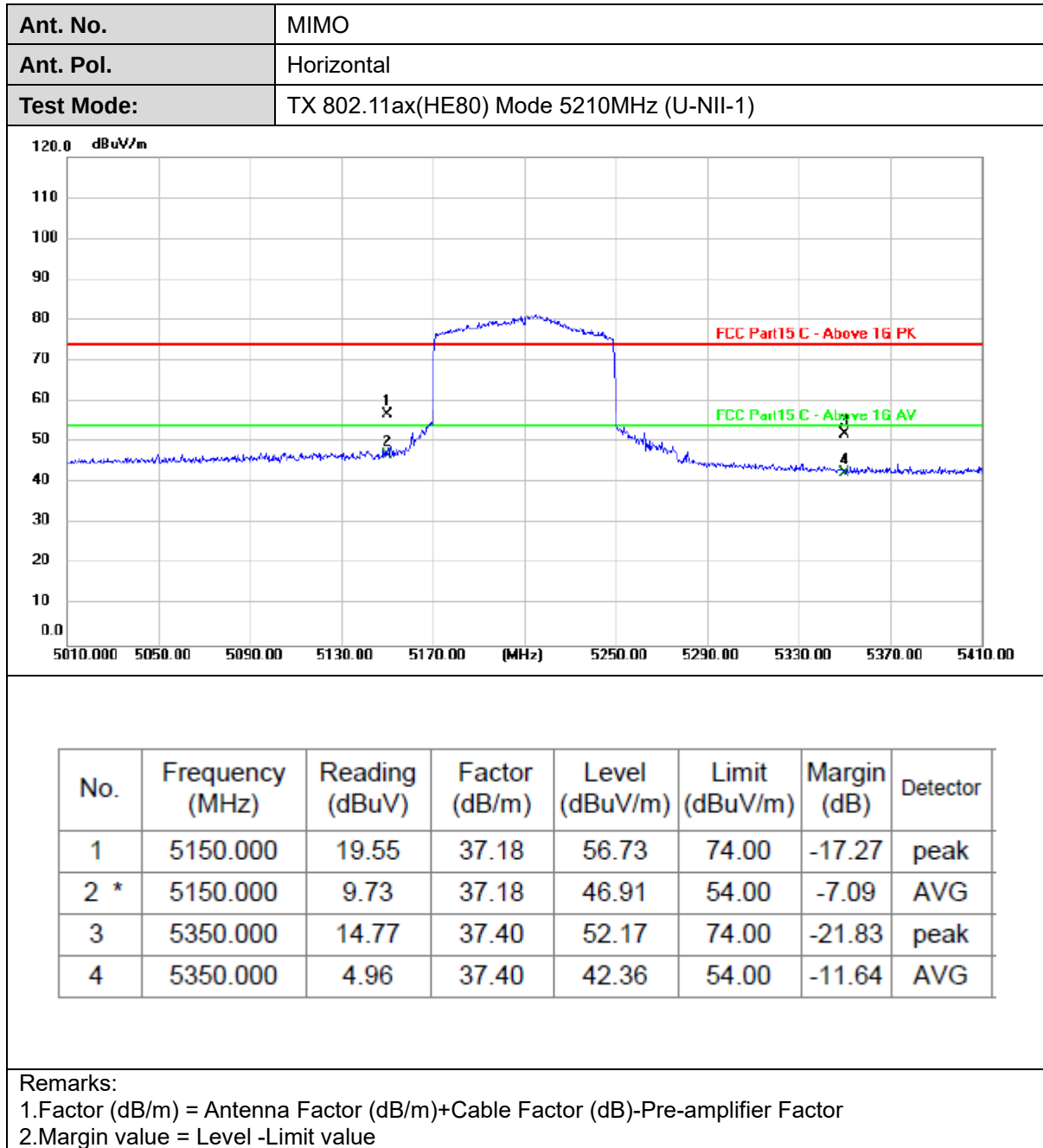


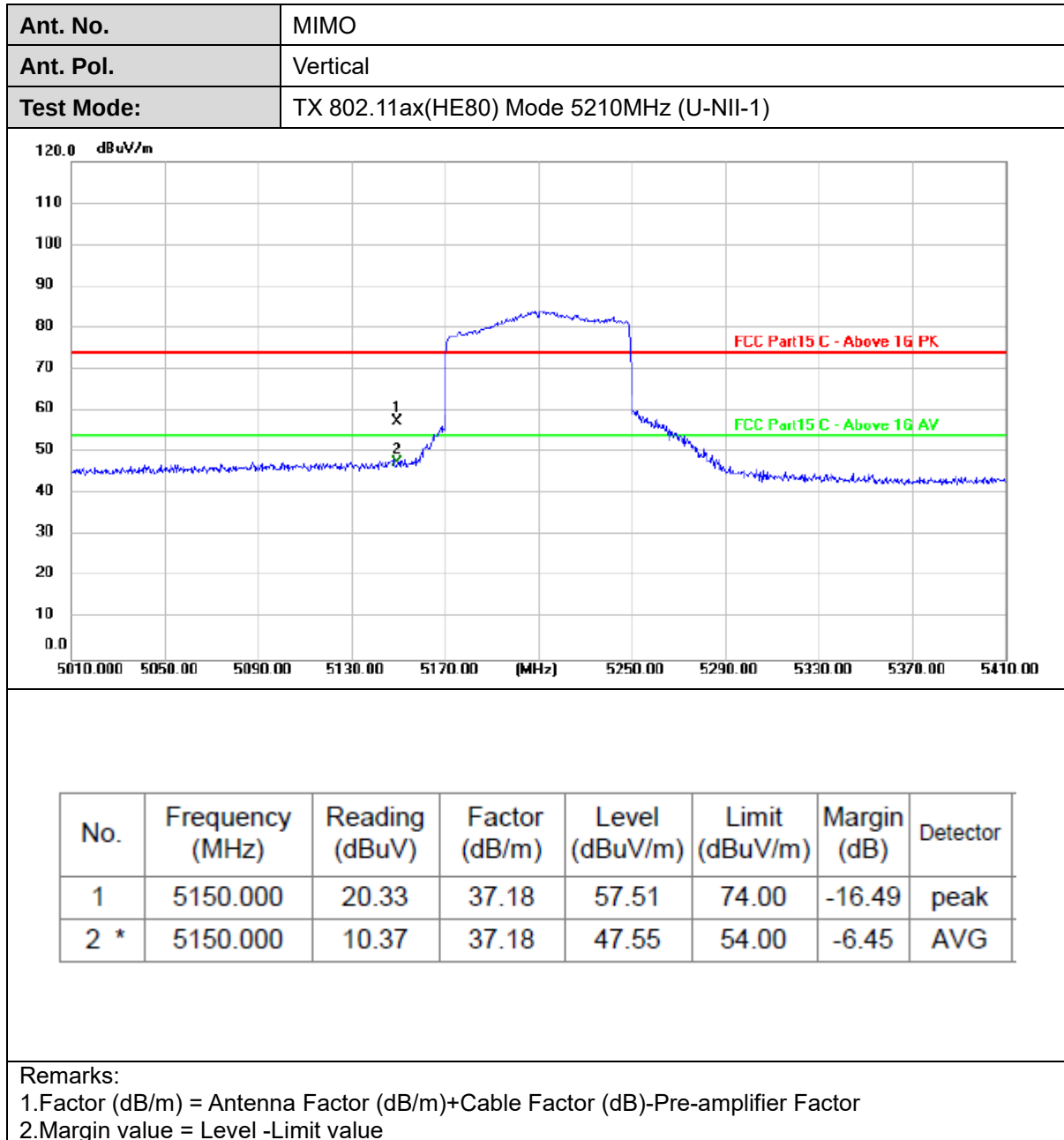


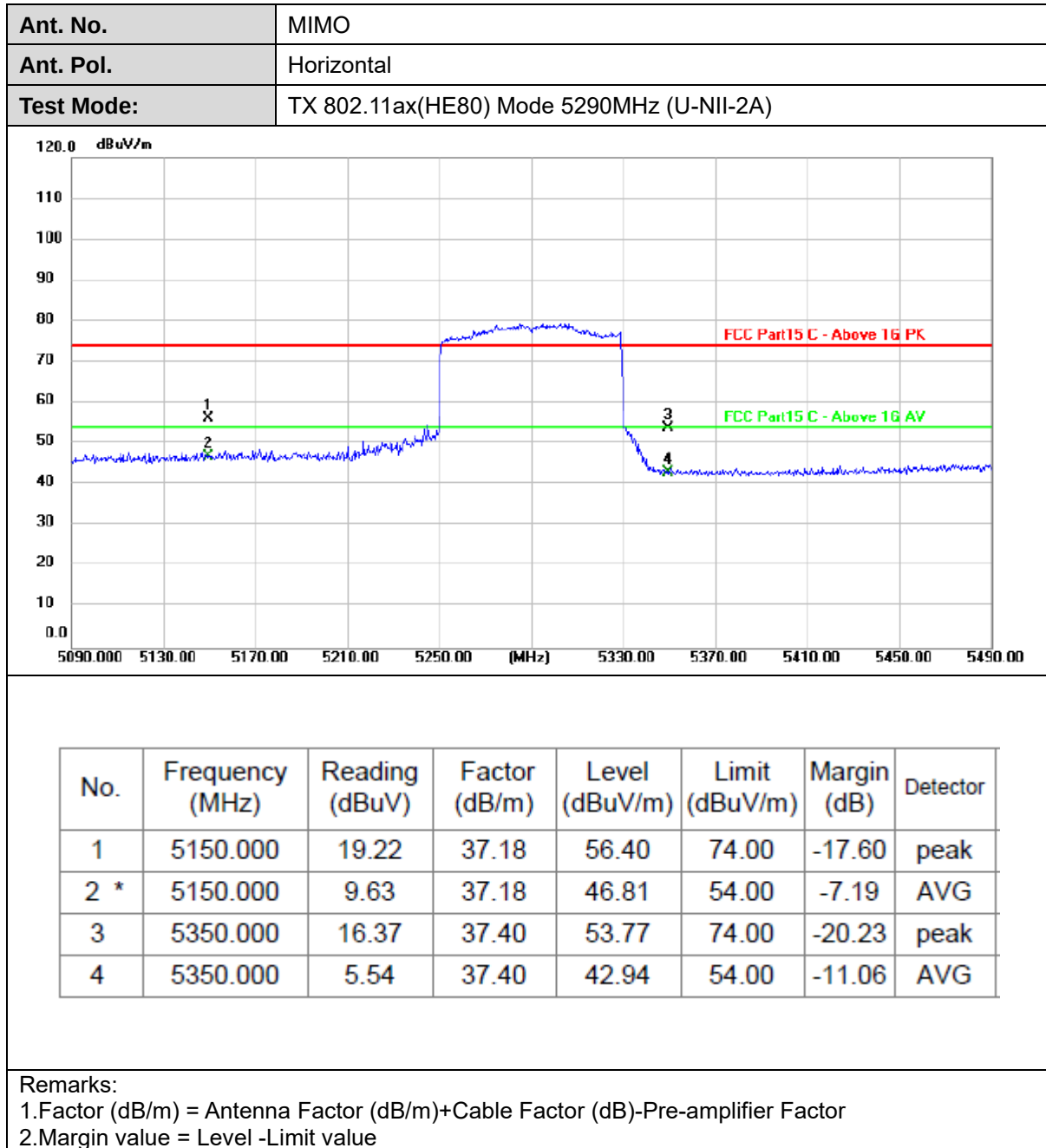


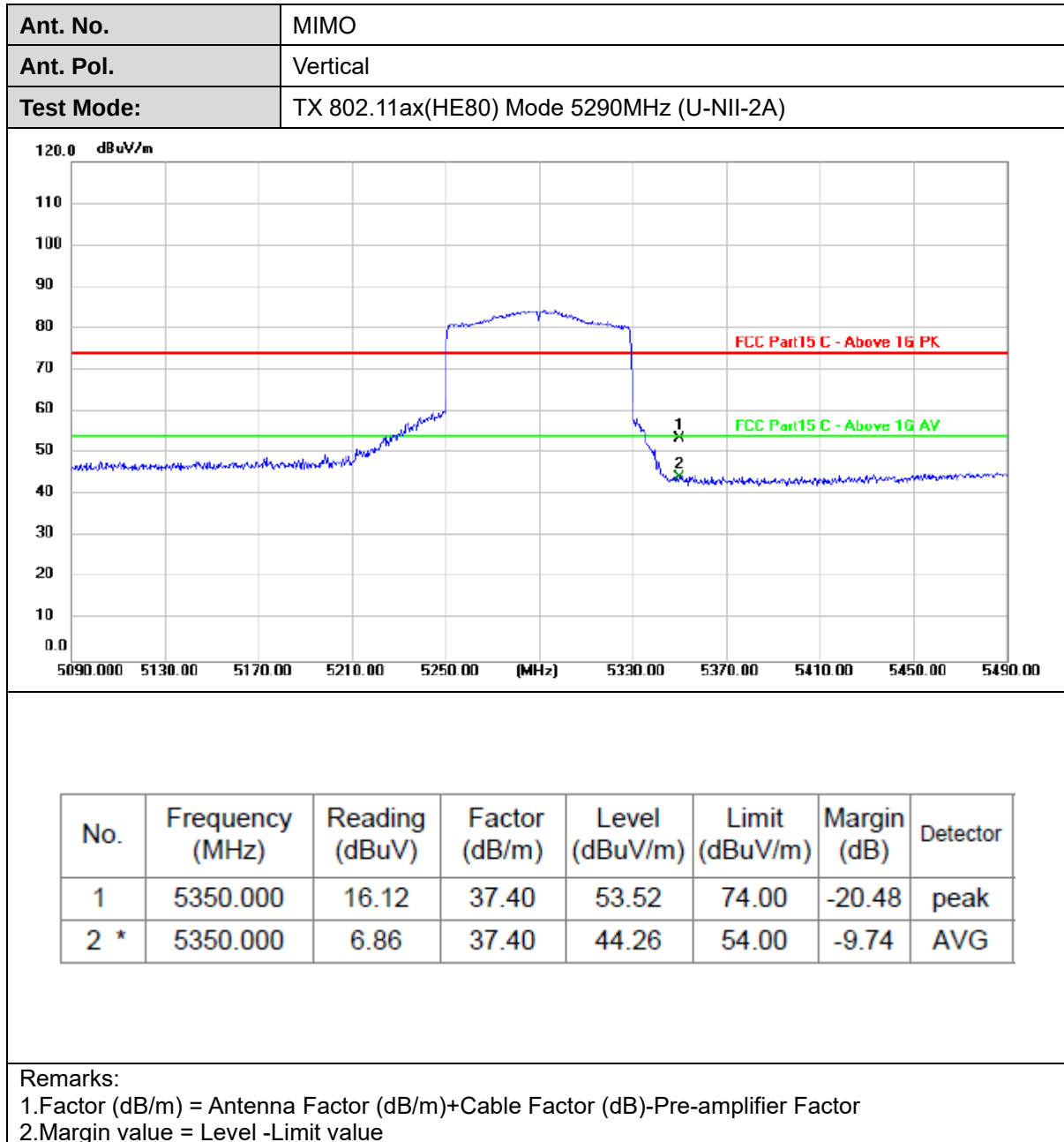






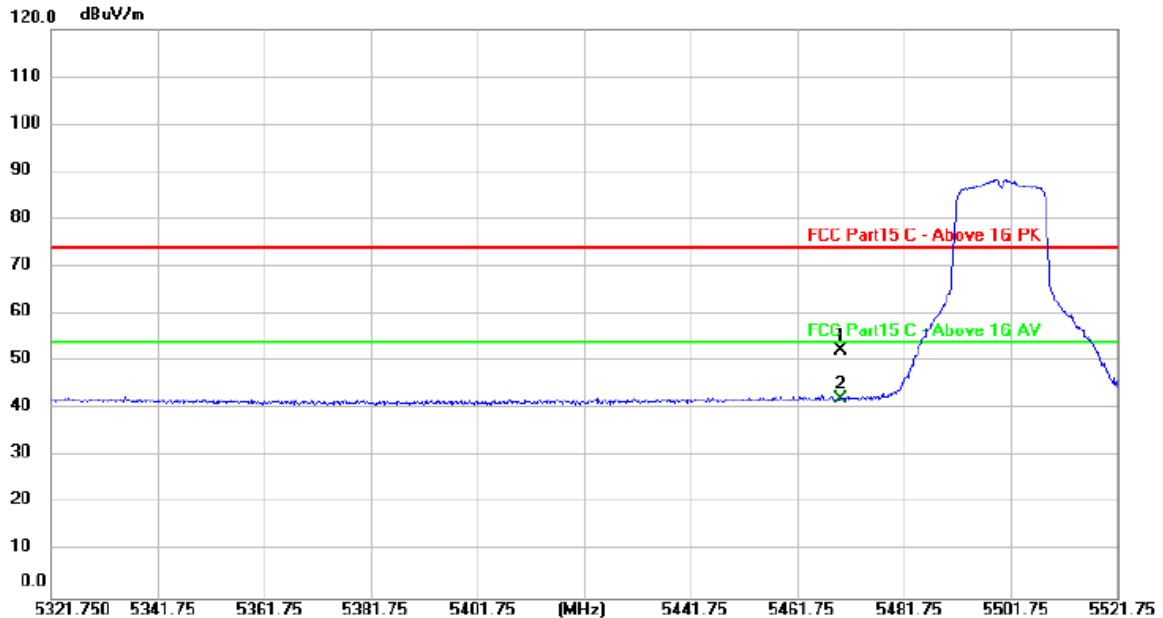








Ant. No.	Ant 2
Ant. Pol.	Horizontal
Test Mode:	TX 802.11a Mode 5500MHz (U-NII-2C)
Remark:	Pre-scan Ant 1 and Ant 2, and found the Ant 2 mode which it is worse case, so only show the test data for worse case.



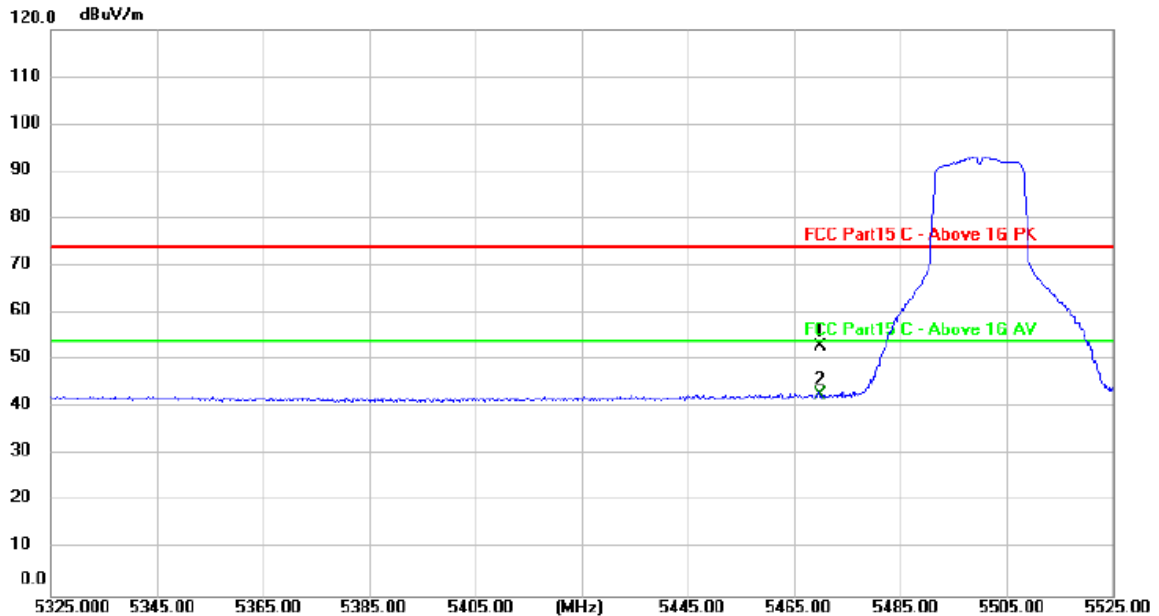
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	5470.000	14.64	37.59	52.23	74.00	-21.77	peak
2 *	5470.000	4.67	37.59	42.26	54.00	-11.74	AVG

Remarks:

- Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor
- Margin value = Level -Limit value



Ant. No.	Ant 2
Ant. Pol.	Vertical
Test Mode:	TX 802.11a Mode 5500MHz (U-NII-2C)
Remark:	Pre-scan Ant 1 and Ant 2, and found the Ant 2 mode which it is worse case, so only show the test data for worse case.



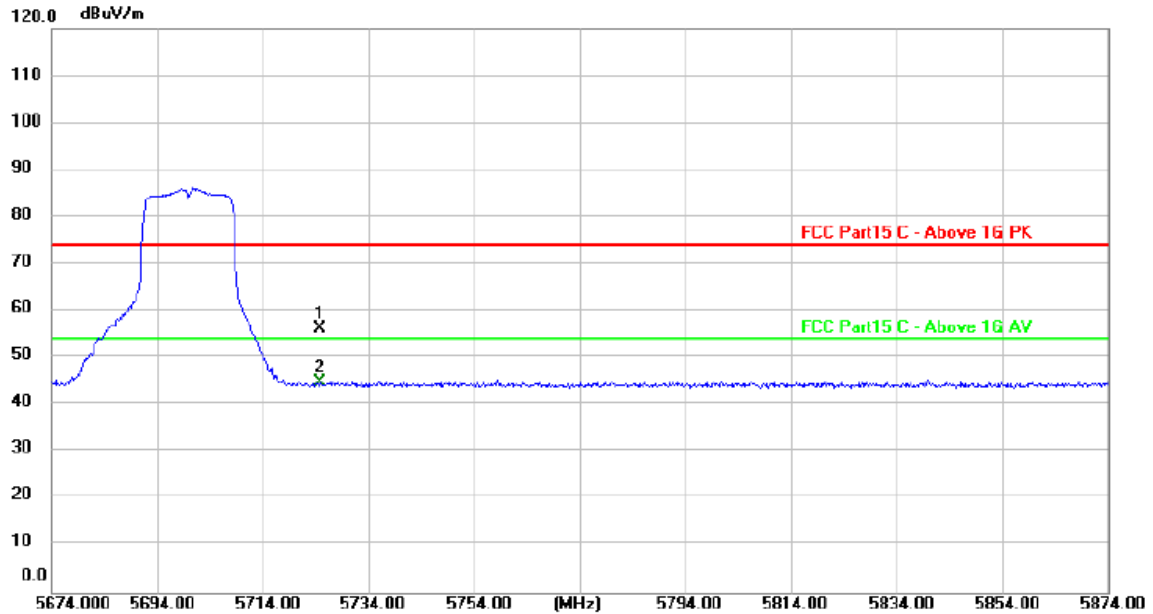
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	5470.000	15.46	37.59	53.05	74.00	-20.95	peak
2 *	5470.000	5.10	37.59	42.69	54.00	-11.31	AVG

Remarks:

1. Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB) - Pre-amplifier Factor
2. Margin value = Level - Limit value



Ant. No.	Ant 2
Ant. Pol.	Horizontal
Test Mode:	TX 802.11a Mode 5700MHz (U-NII-2C)
Remark:	Pre-scan Ant 1 and Ant 2, and found the Ant 2 mode which it is worse case, so only show the test data for worse case.



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	5725.000	18.05	38.16	56.21	74.00	-17.79	peak
2 *	5725.000	6.59	38.16	44.75	54.00	-9.25	AVG

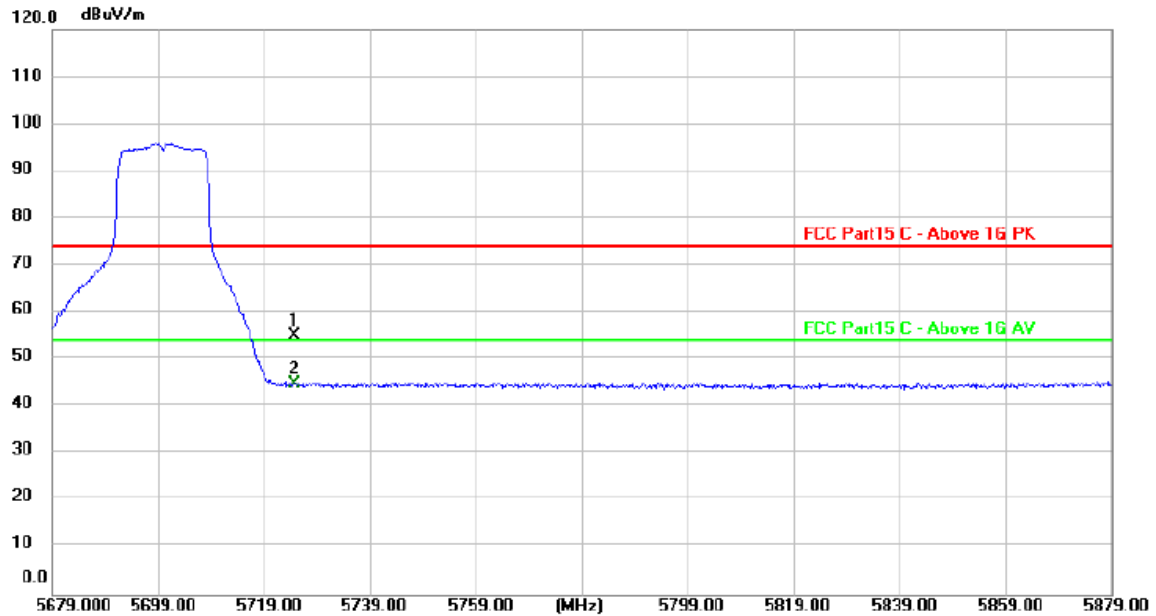
Remarks:

1. Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB) - Pre-amplifier Factor

2. Margin value = Level - Limit value



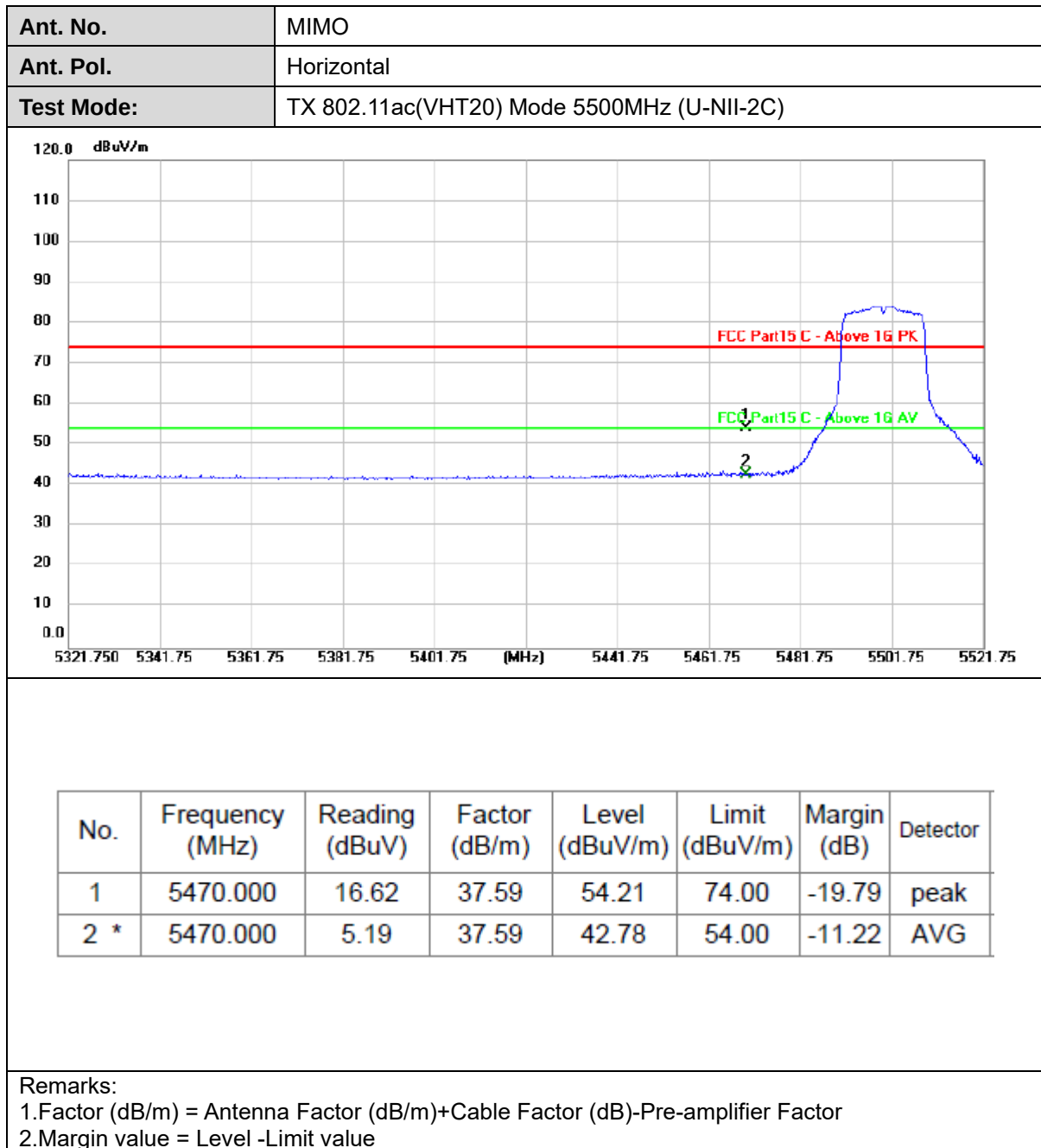
Ant. No.	Ant 2
Ant. Pol.	Vertical
Test Mode:	TX 802.11a Mode 5700MHz (U-NII-2C)
Remark:	Pre-scan Ant 1 and Ant 2, and found the Ant 2 mode which it is worse case, so only show the test data for worse case.

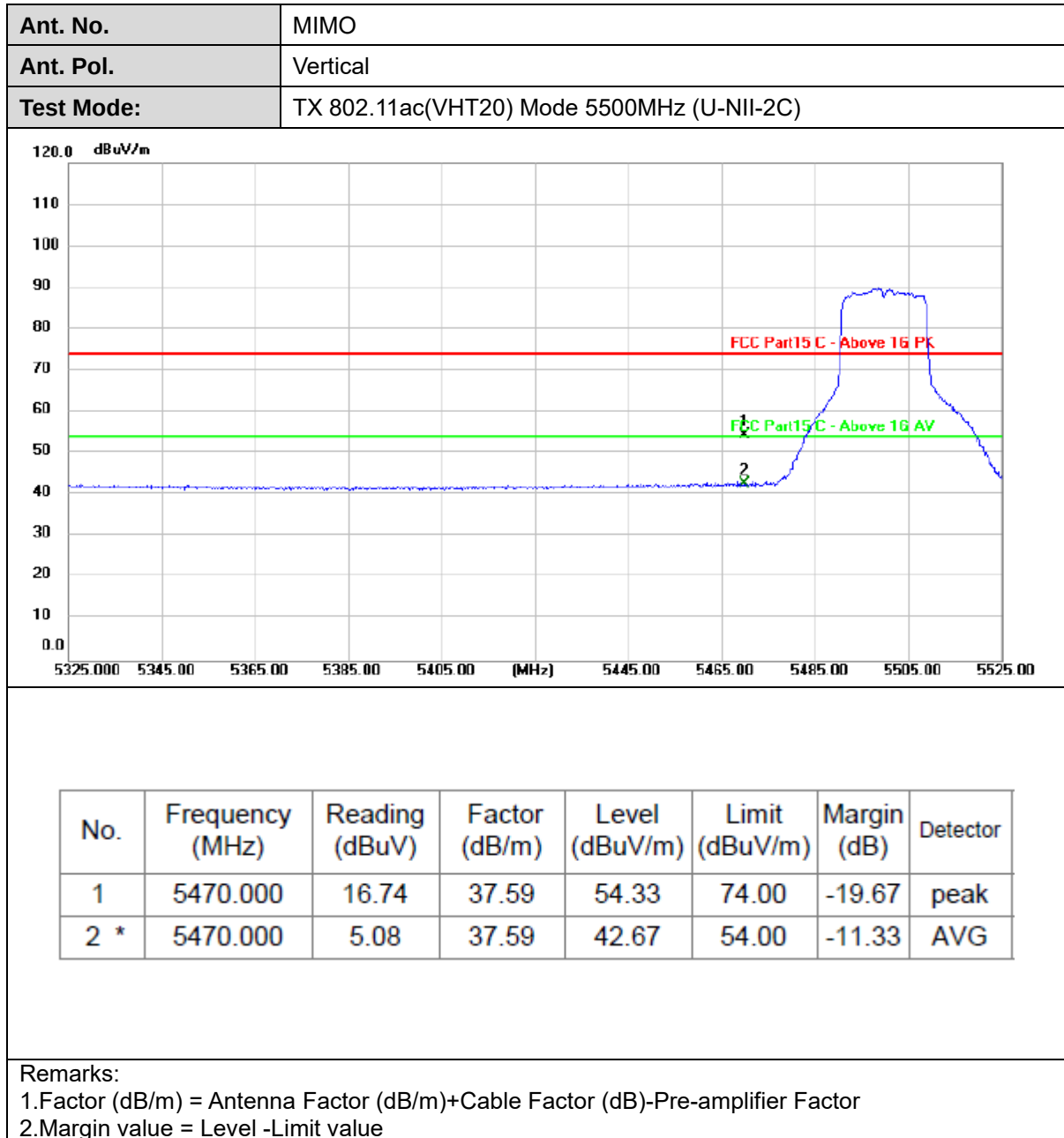


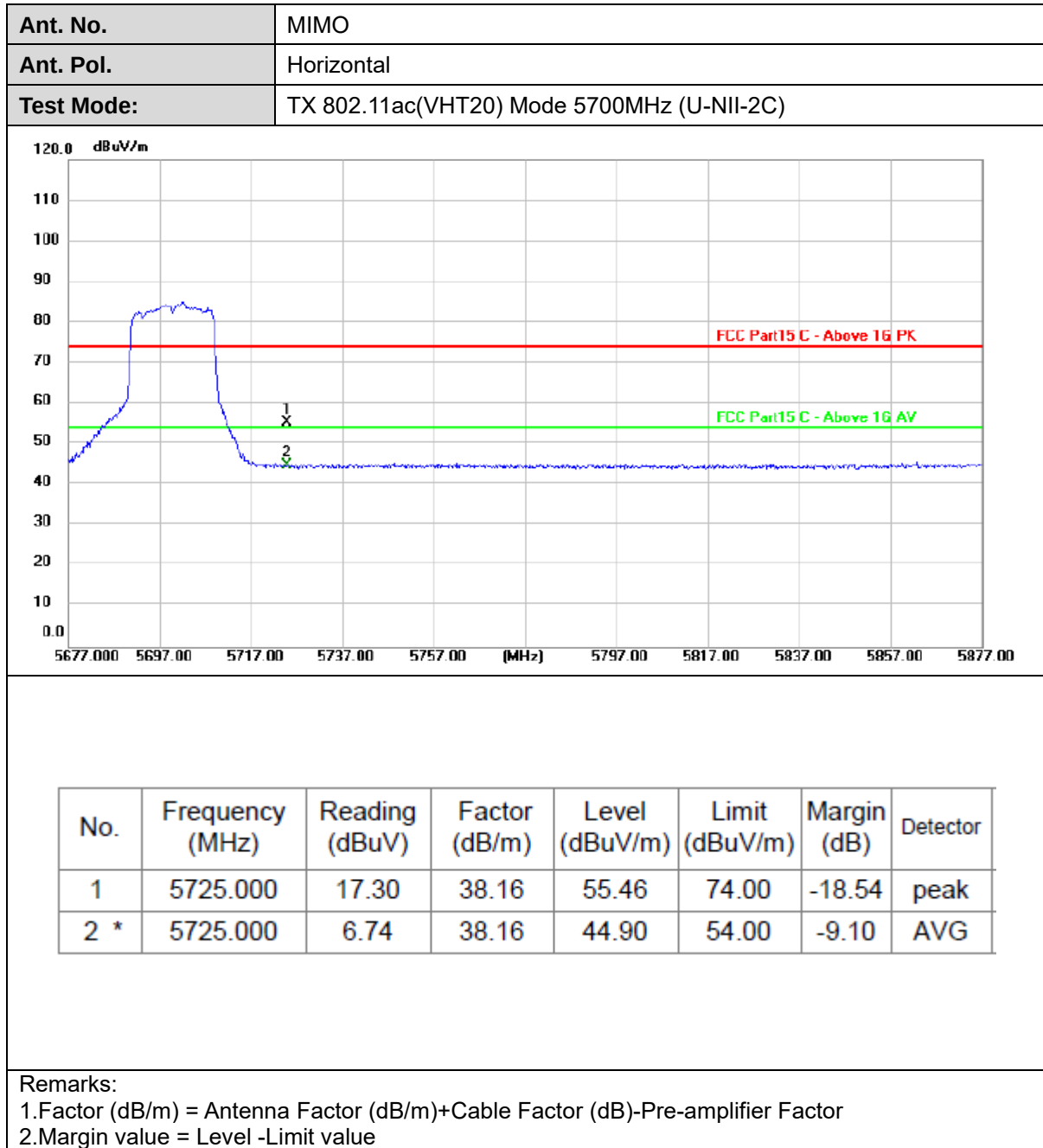
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	5725.000	16.87	38.16	55.03	74.00	-18.97	peak
2 *	5725.000	6.71	38.16	44.87	54.00	-9.13	AVG

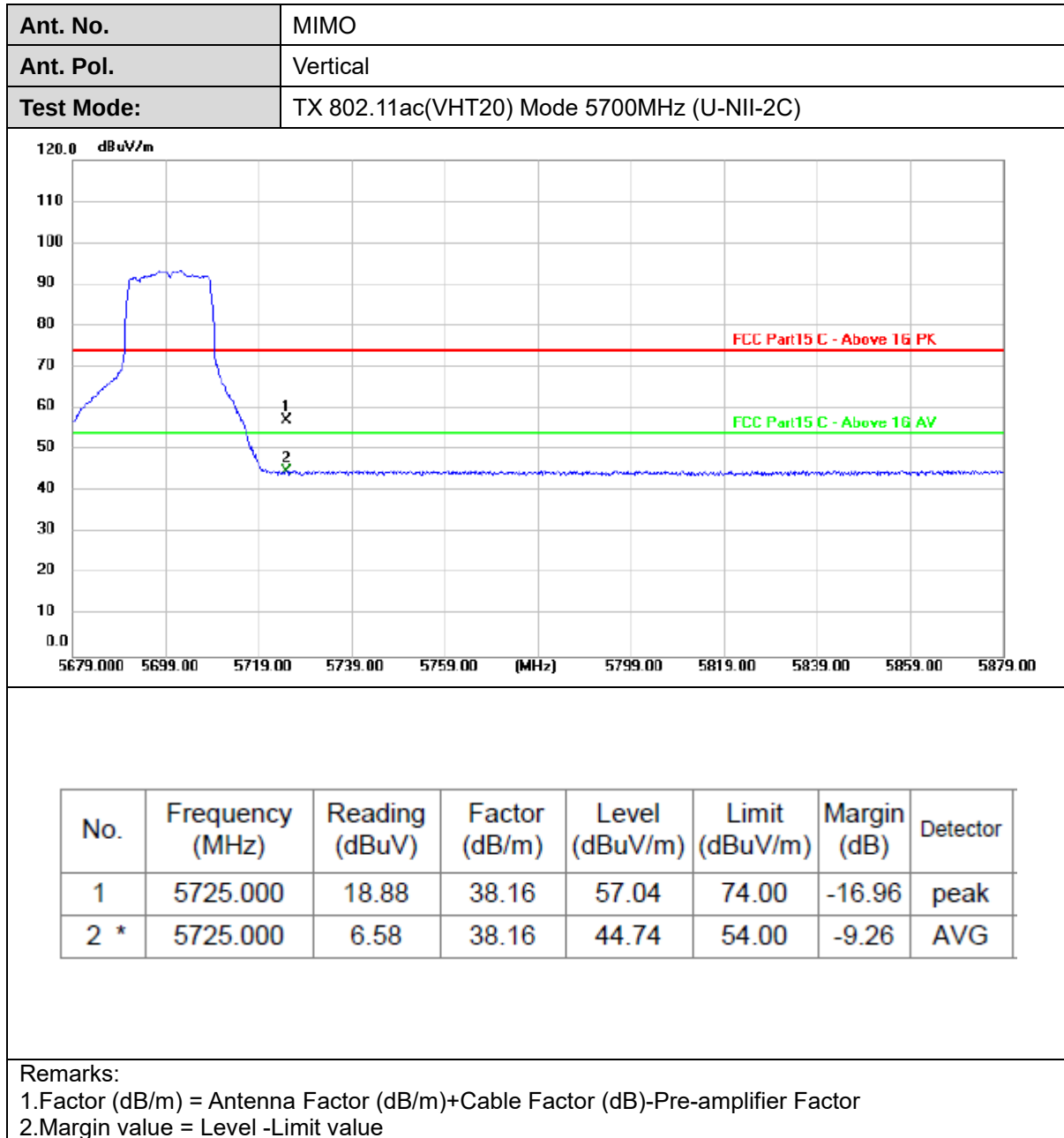
Remarks:

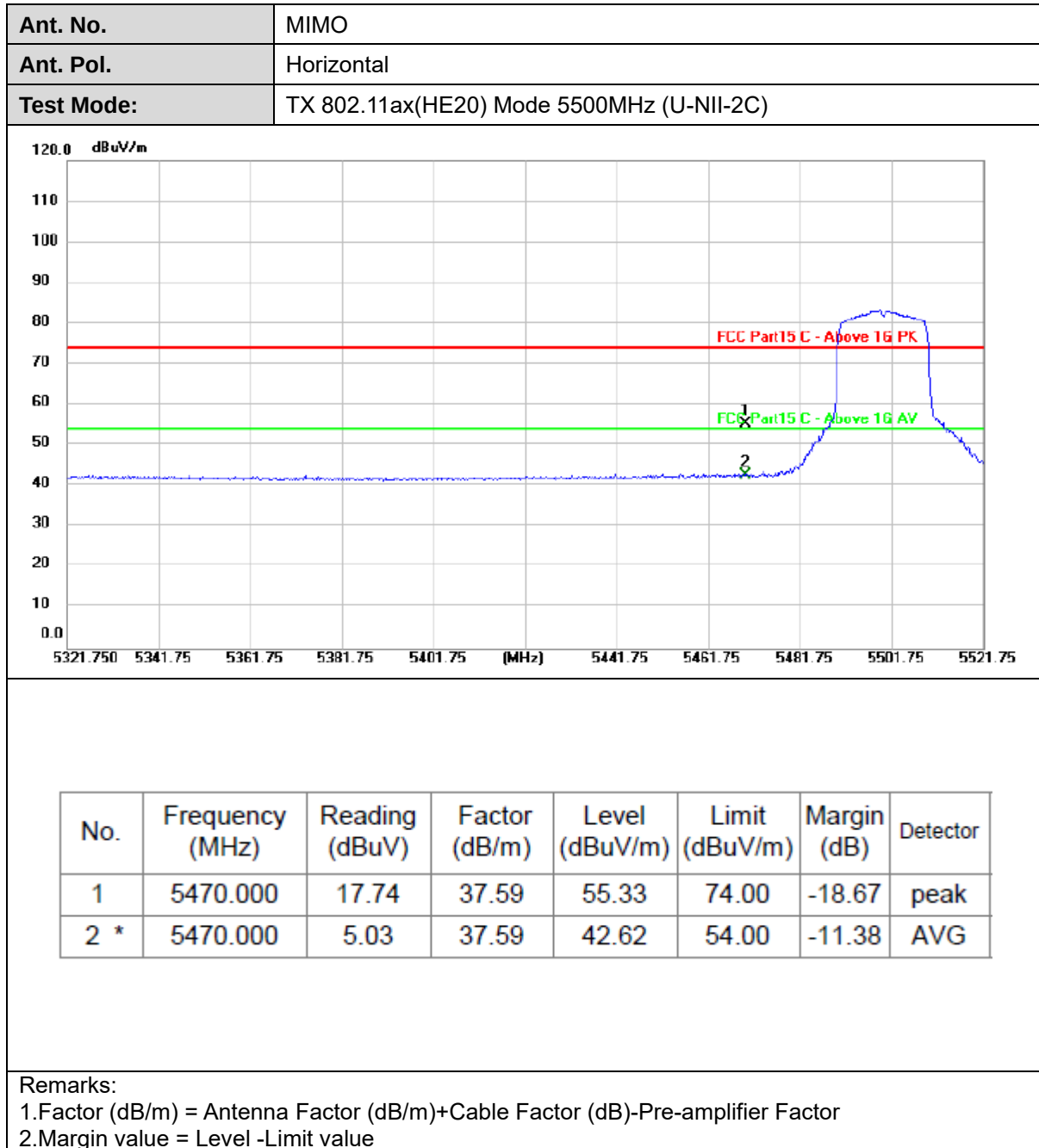
1. Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB) - Pre-amplifier Factor
2. Margin value = Level - Limit value

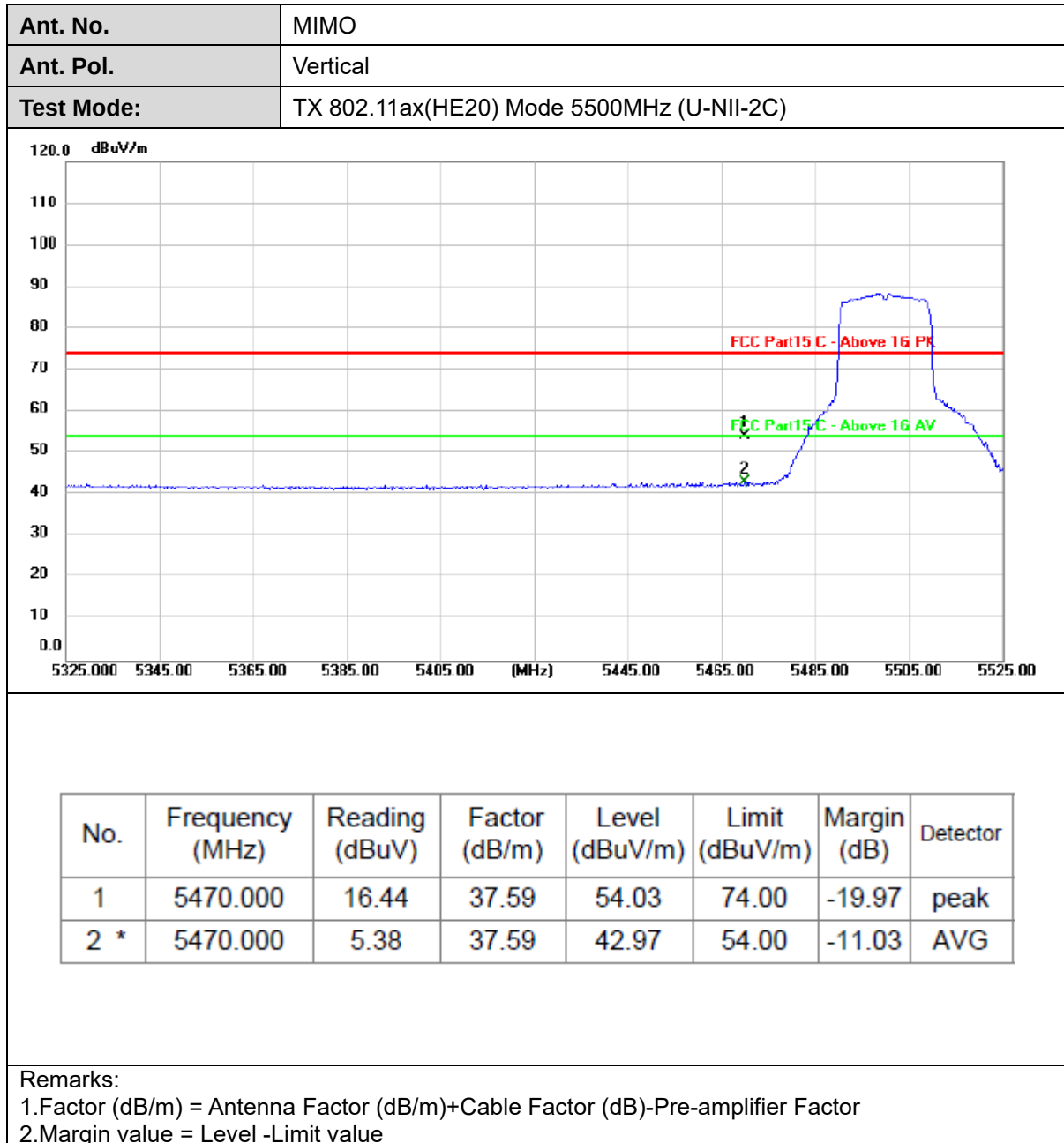


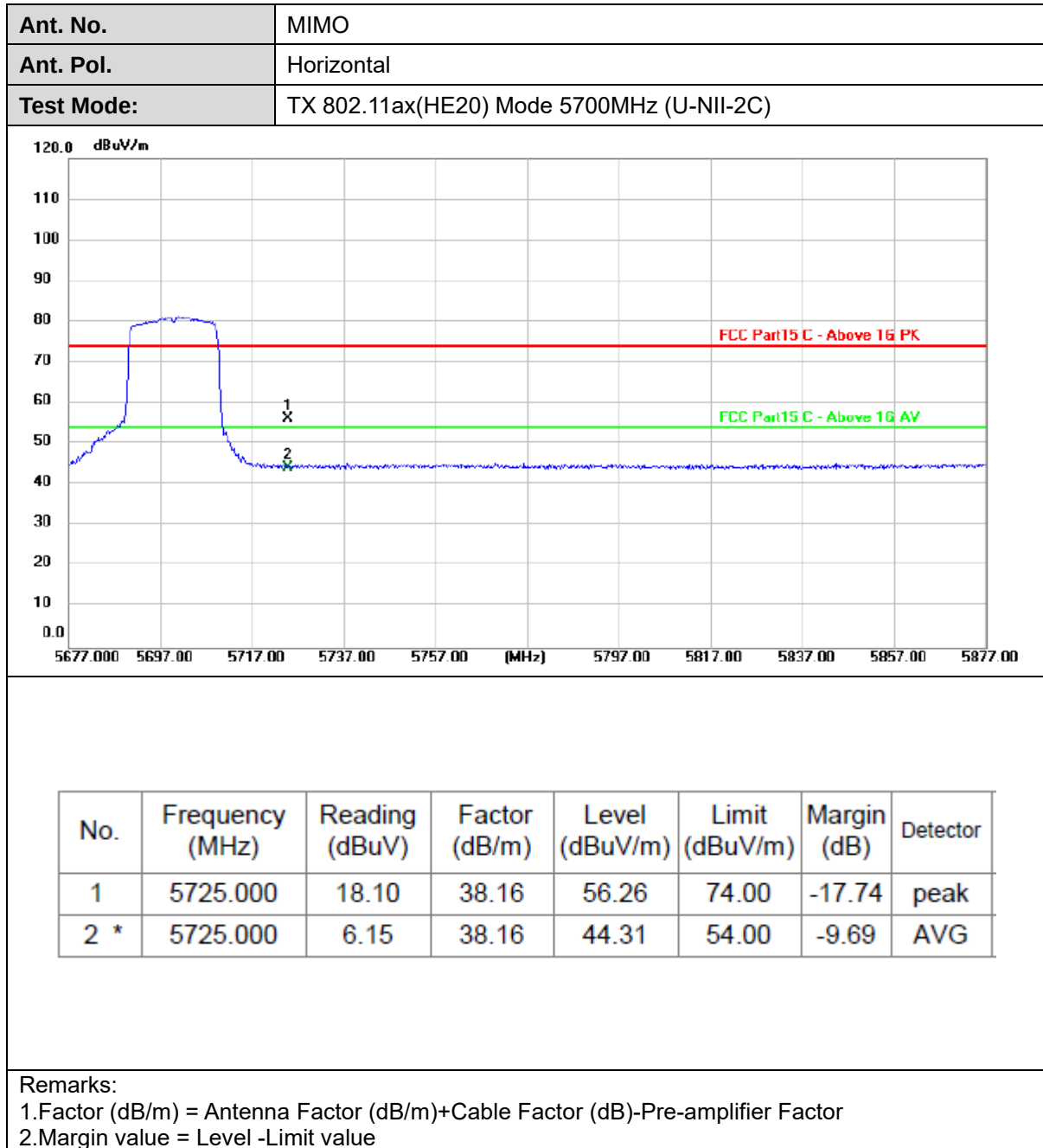


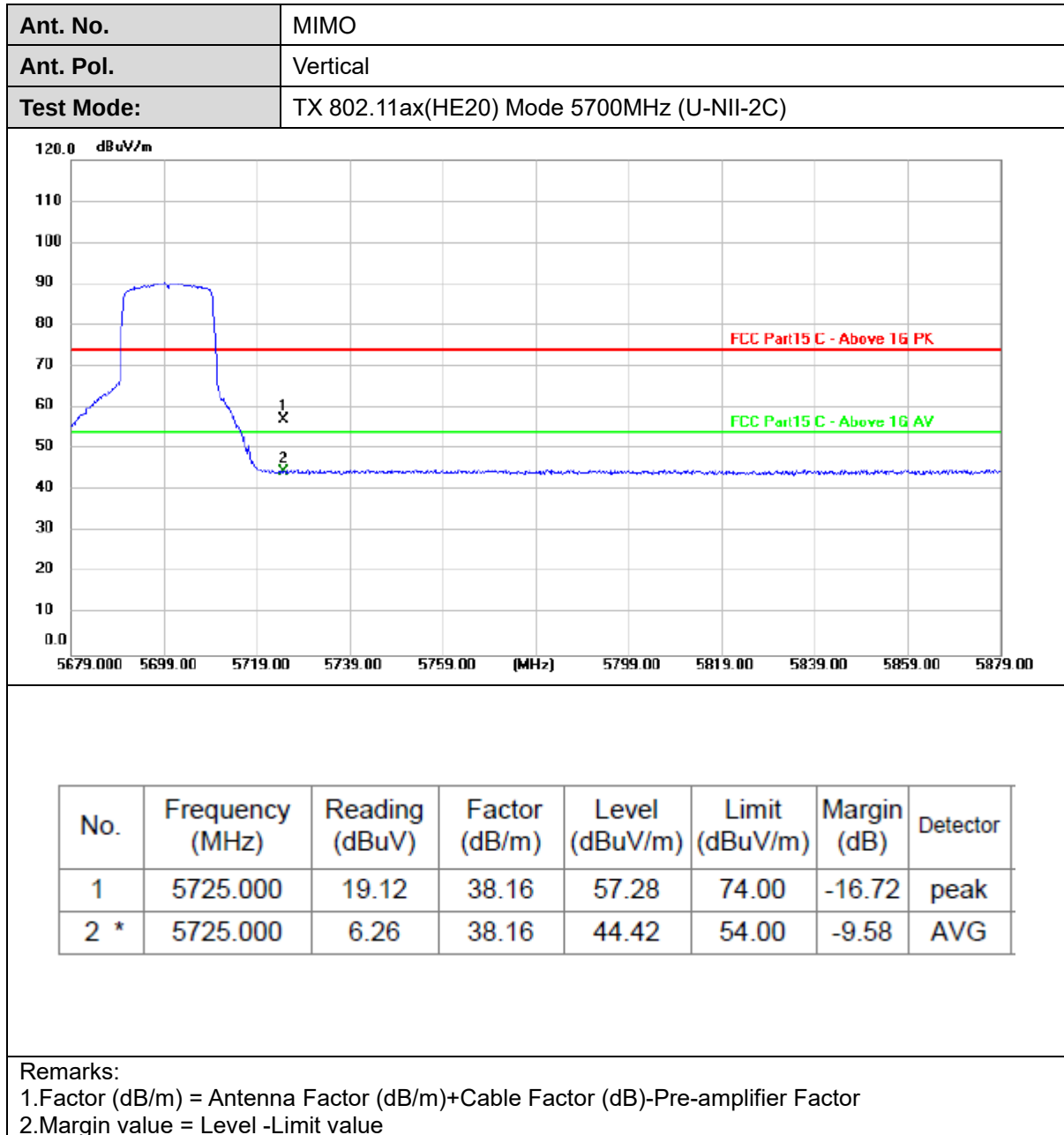


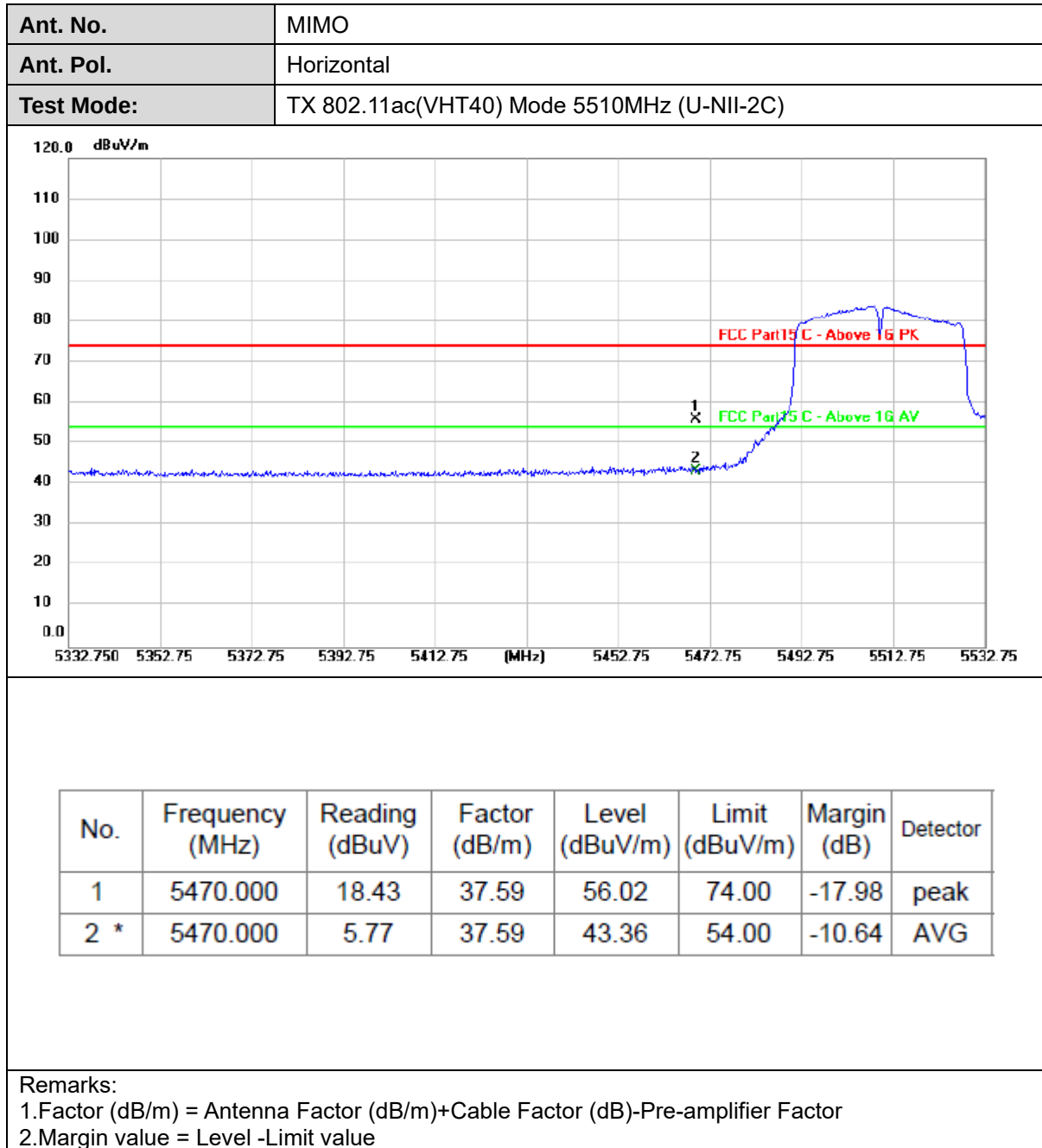


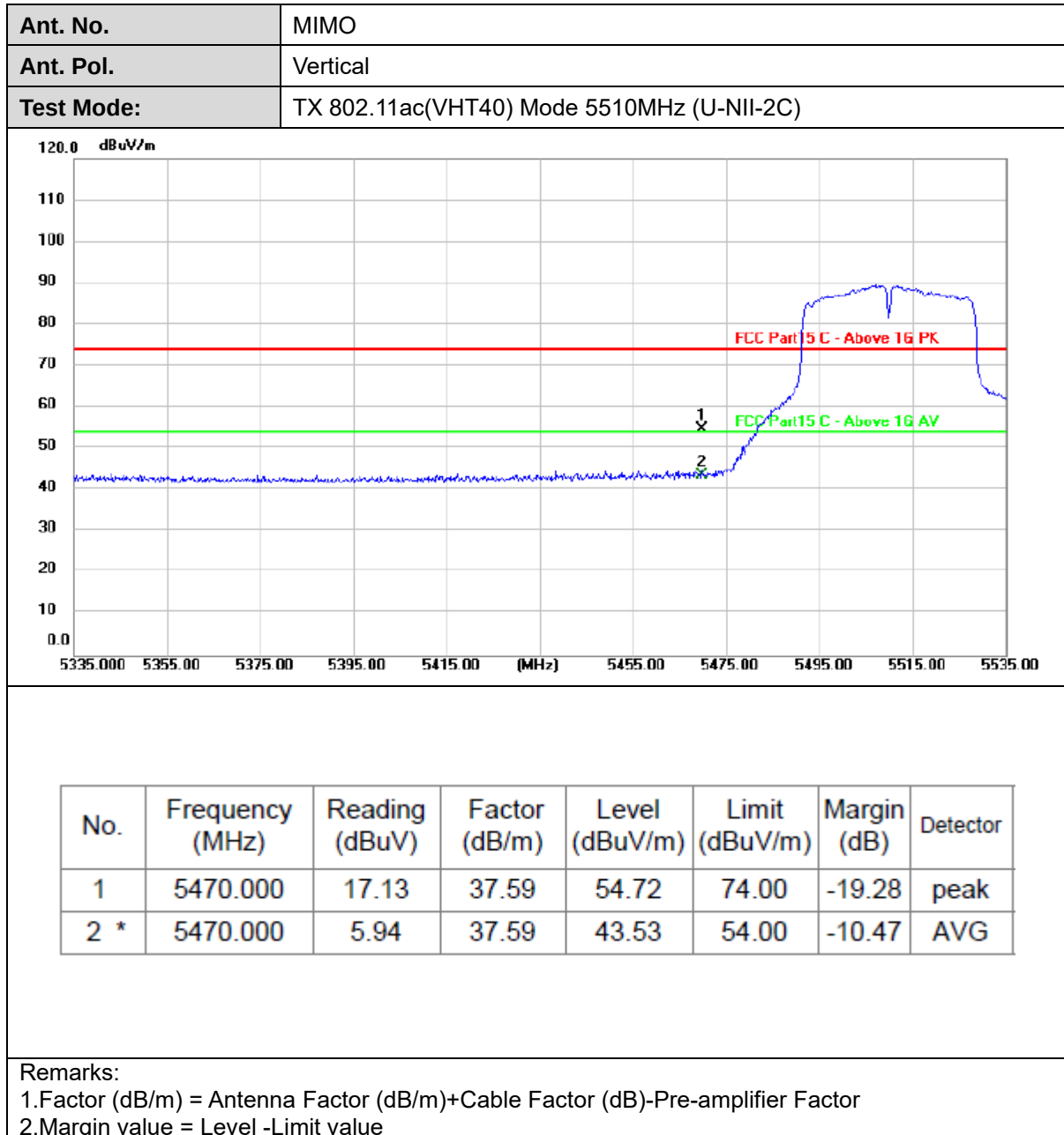


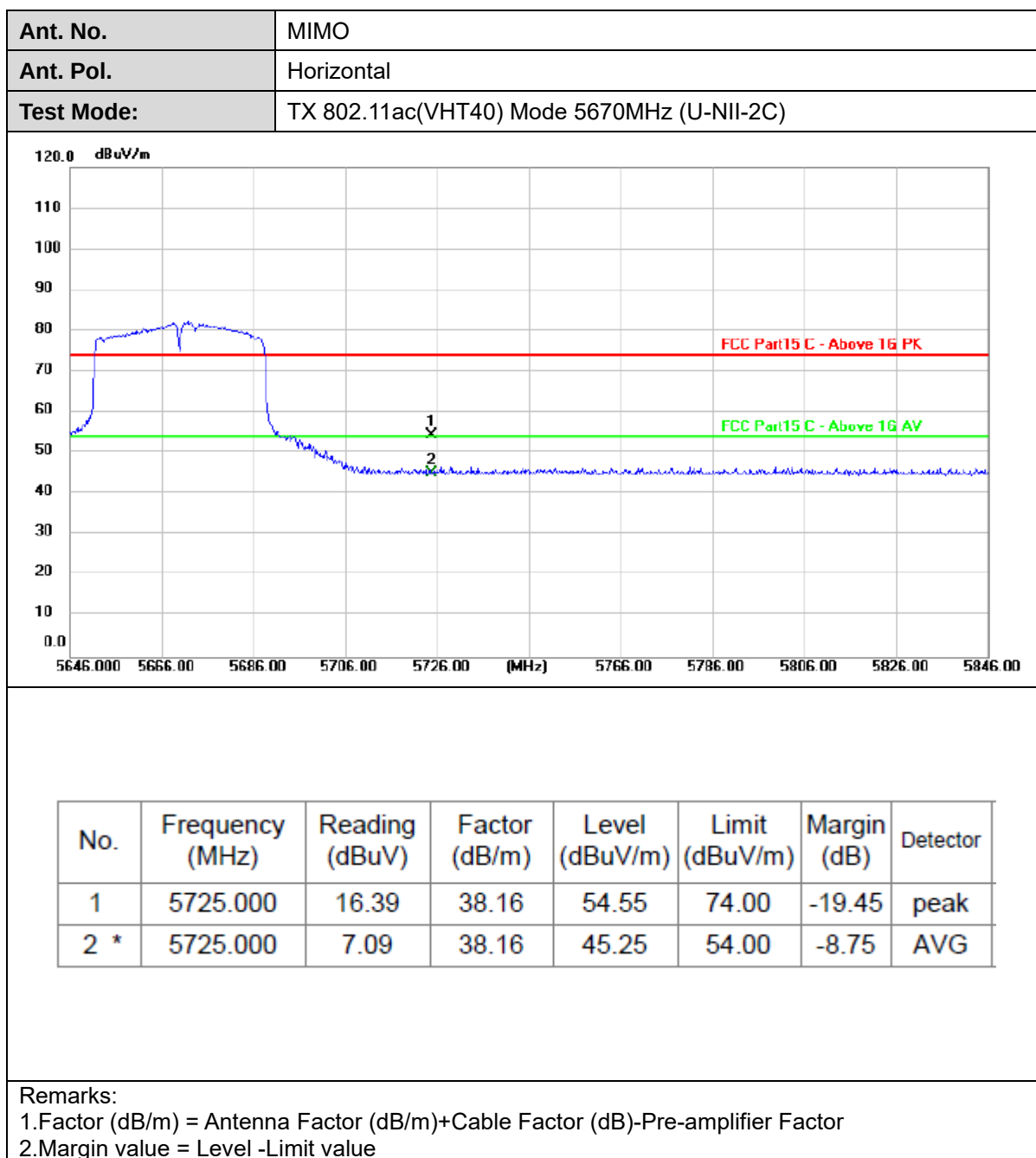


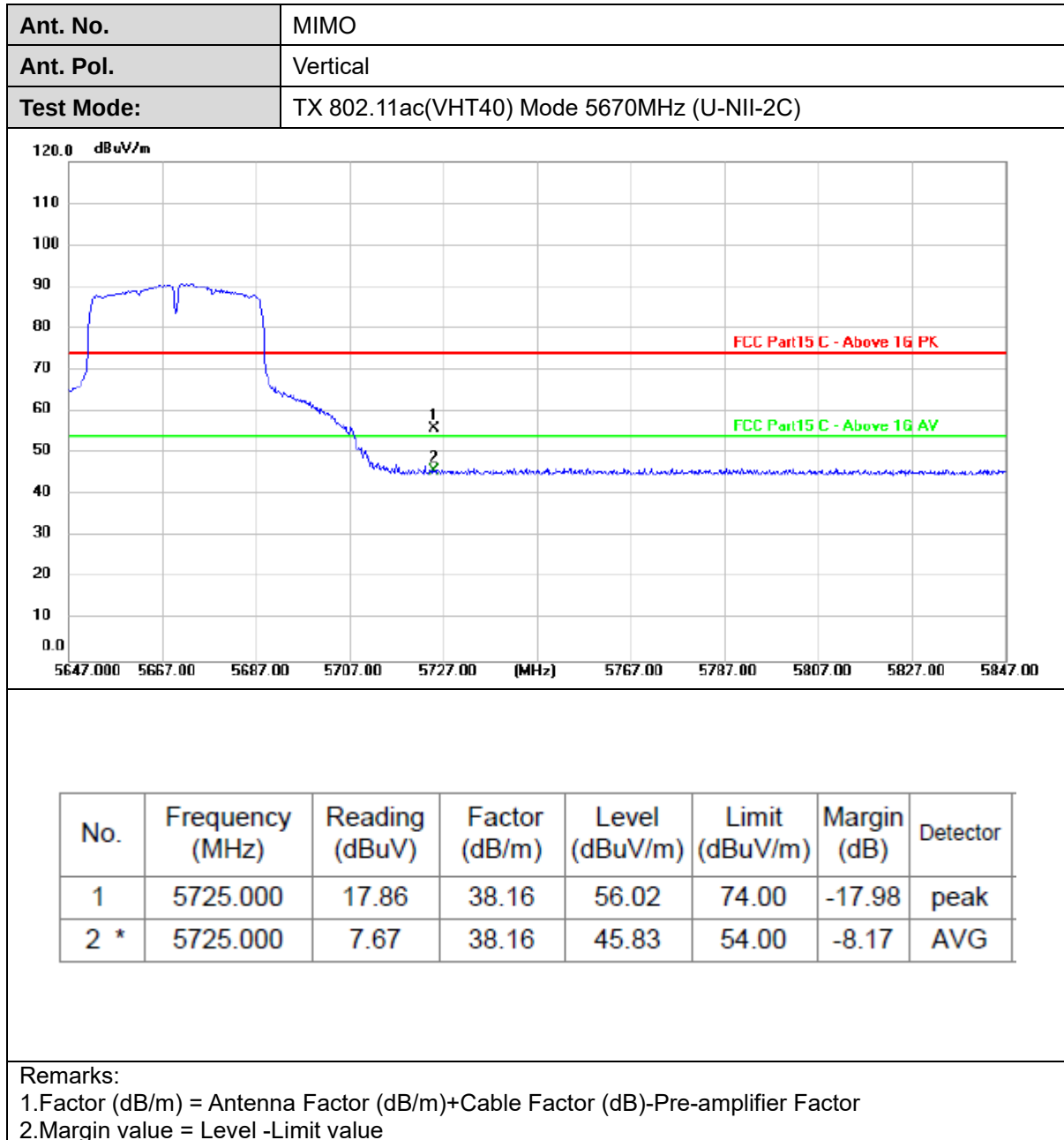


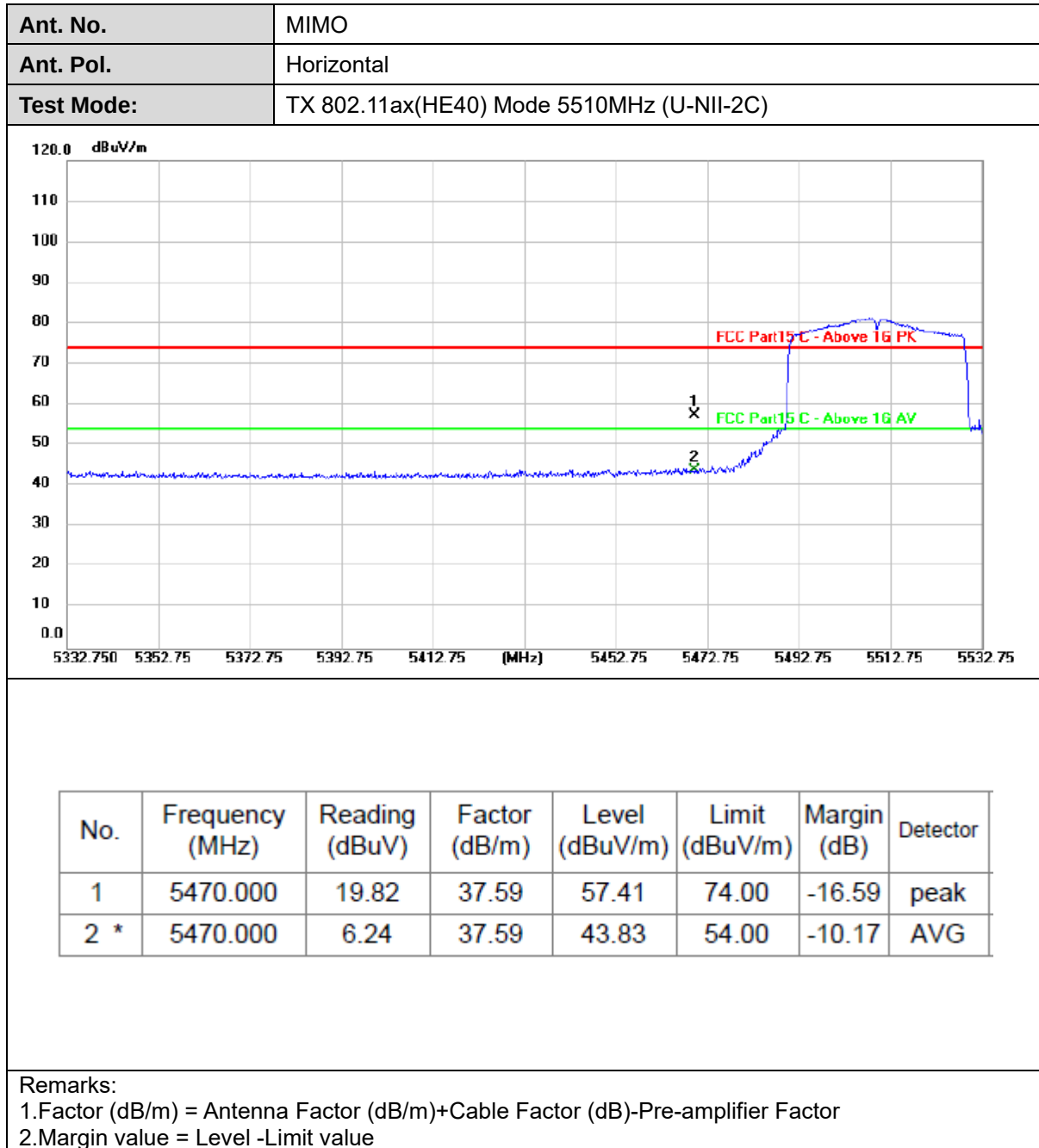


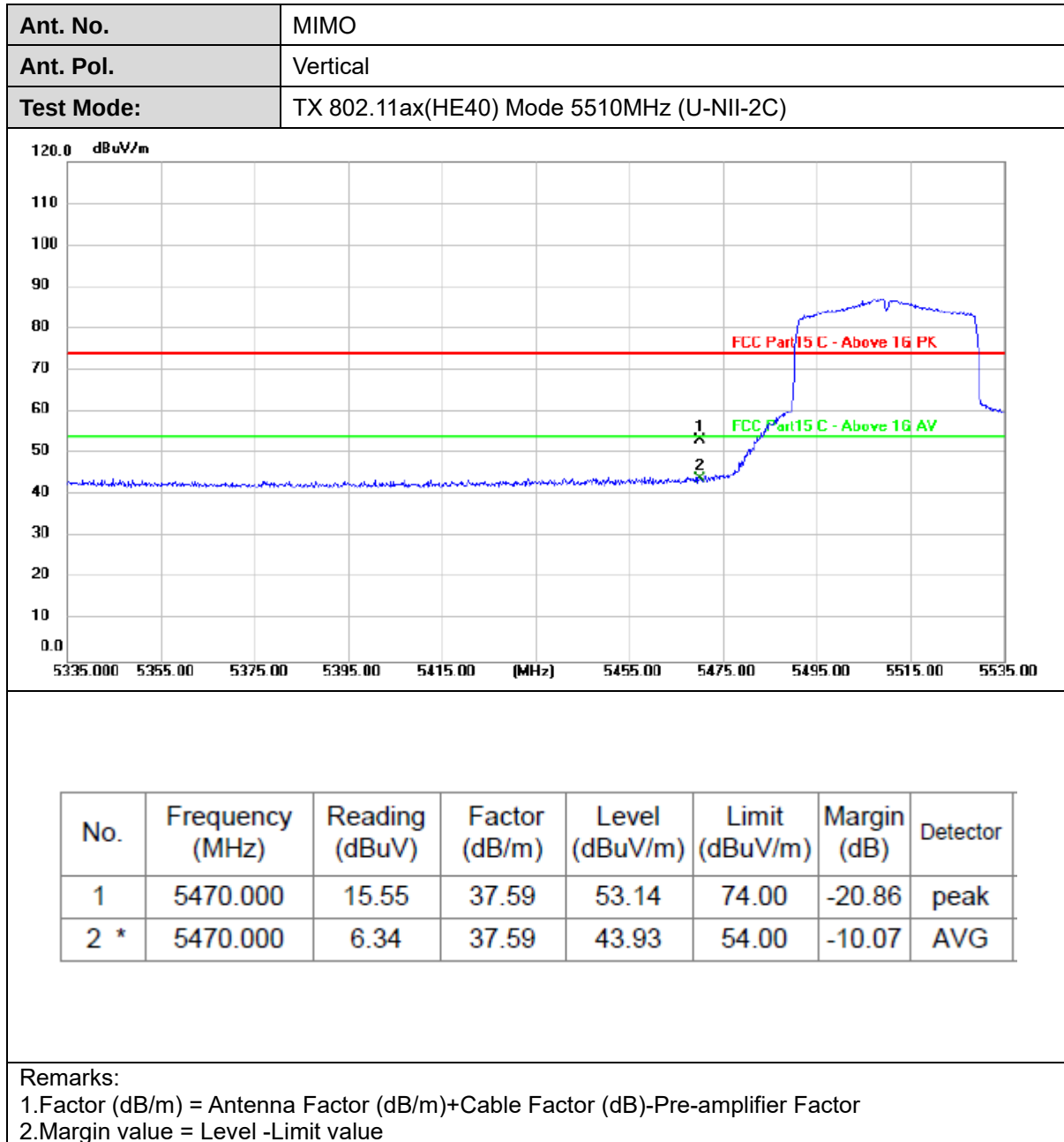


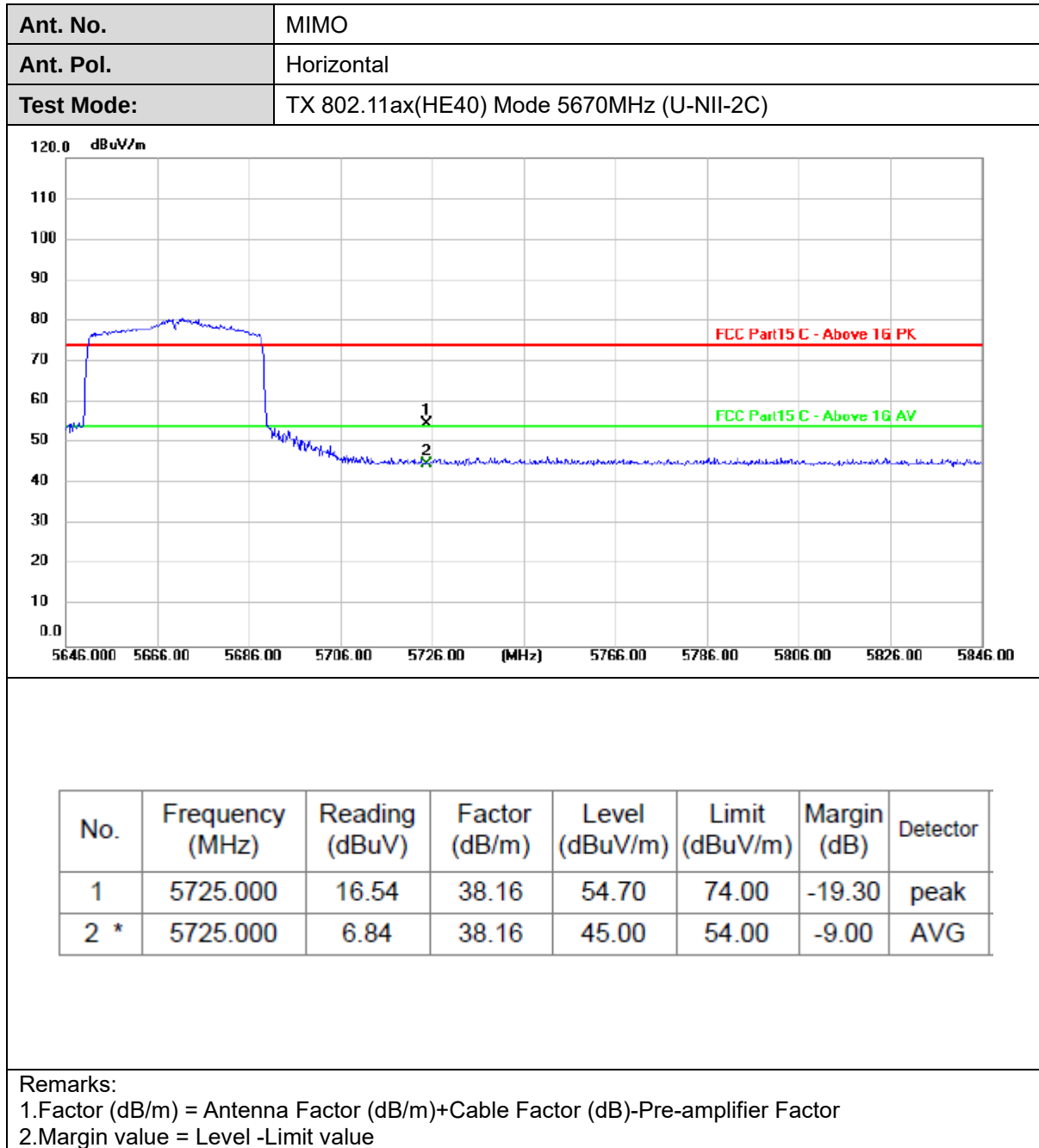


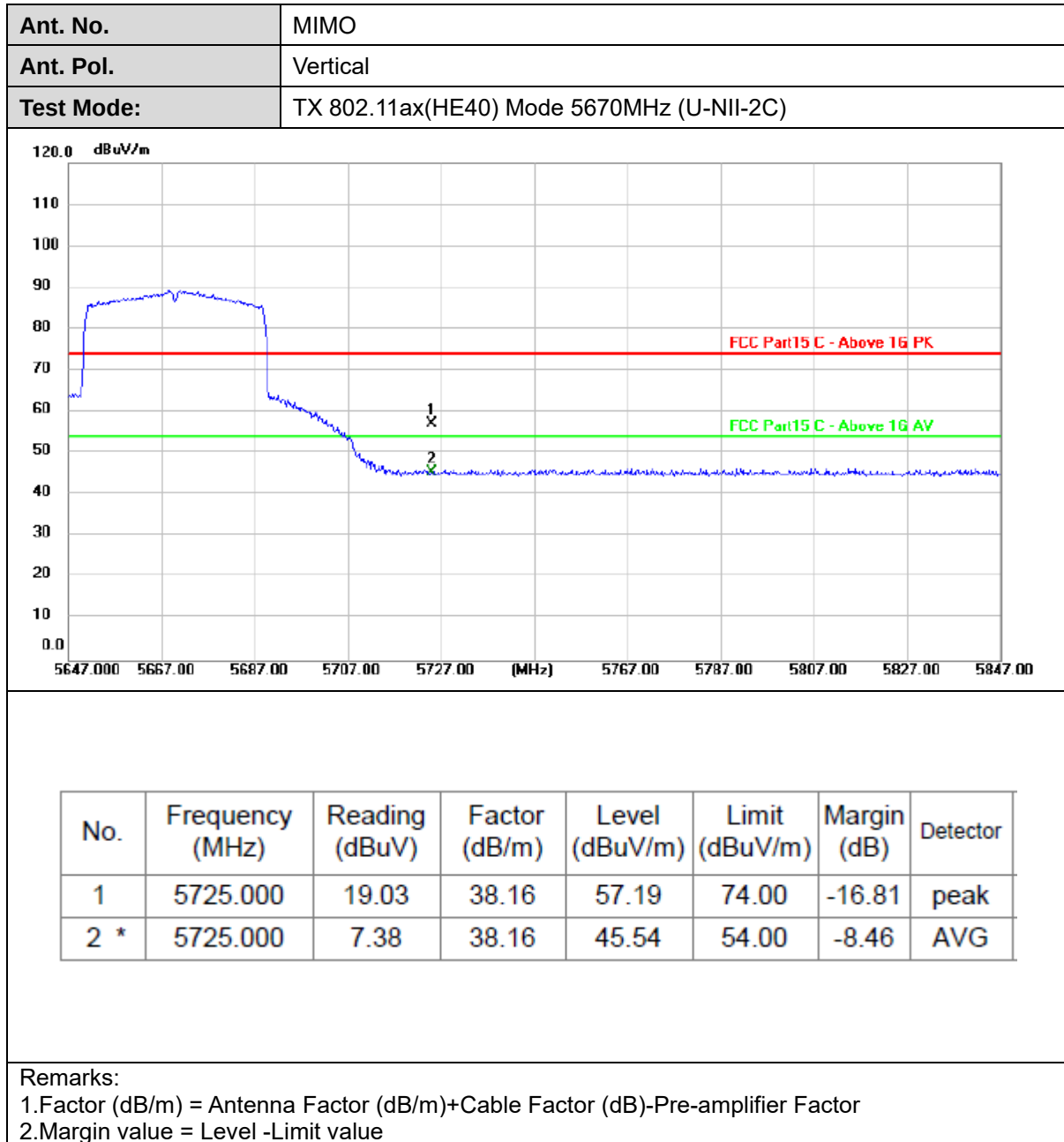


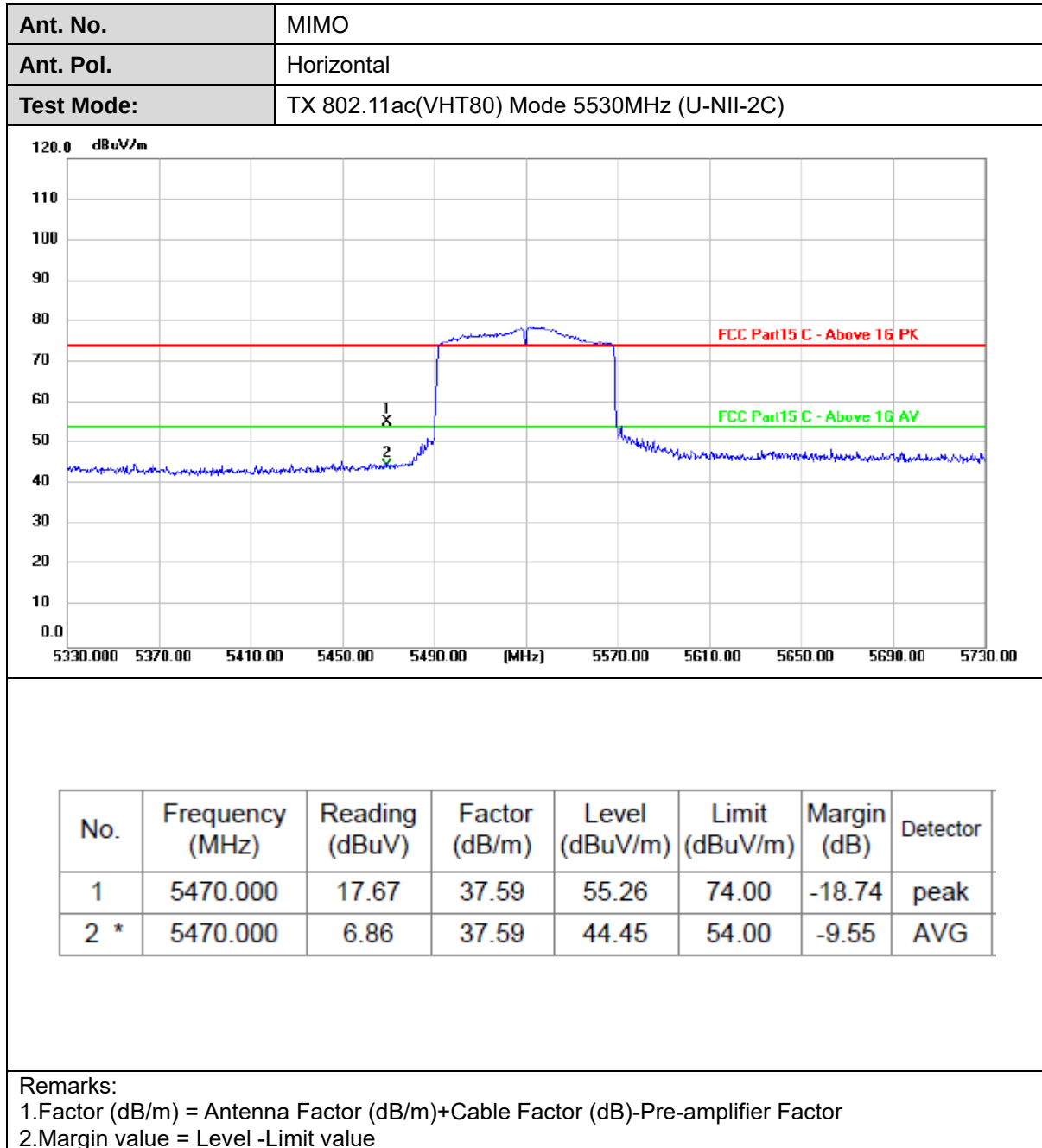


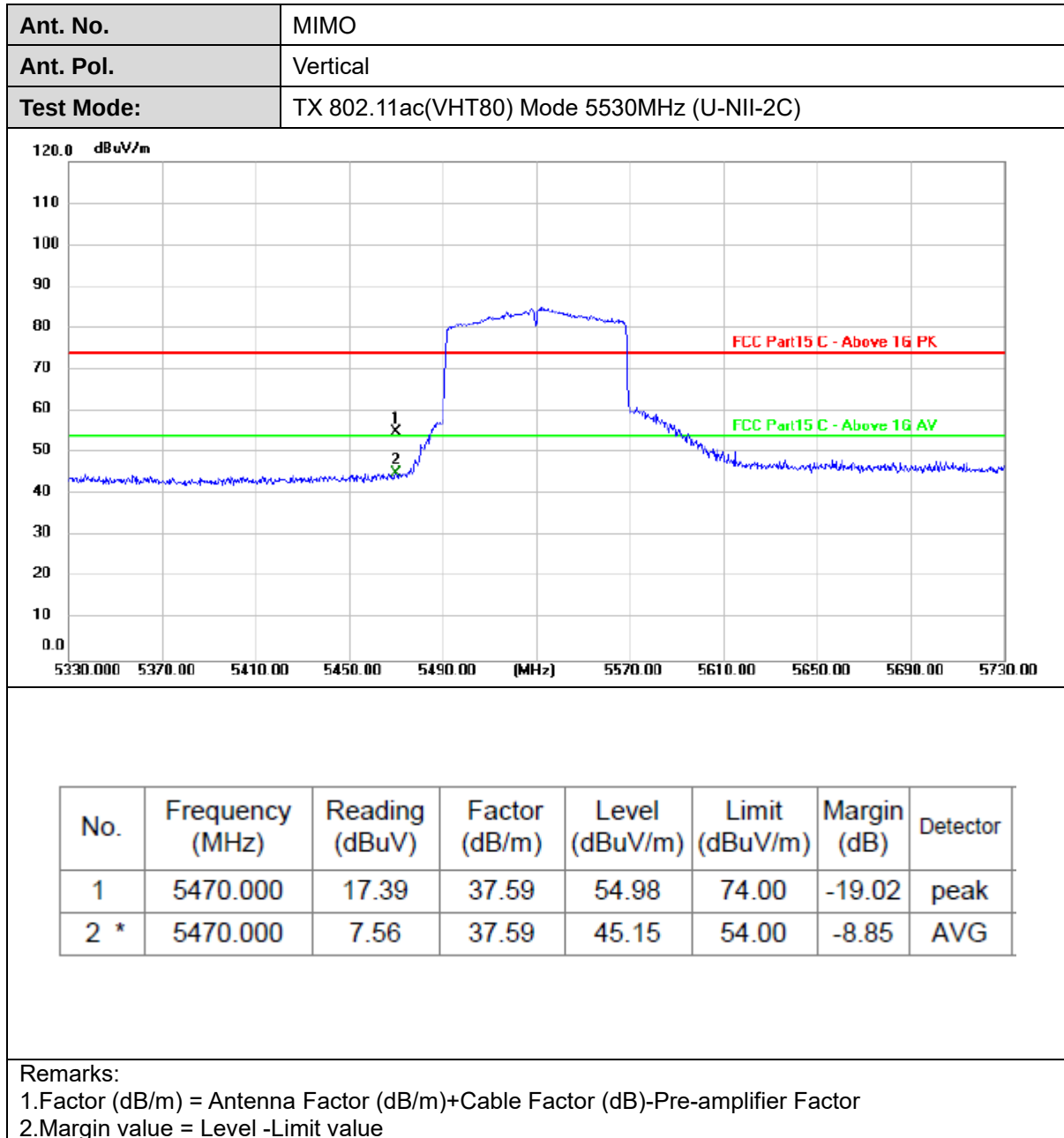


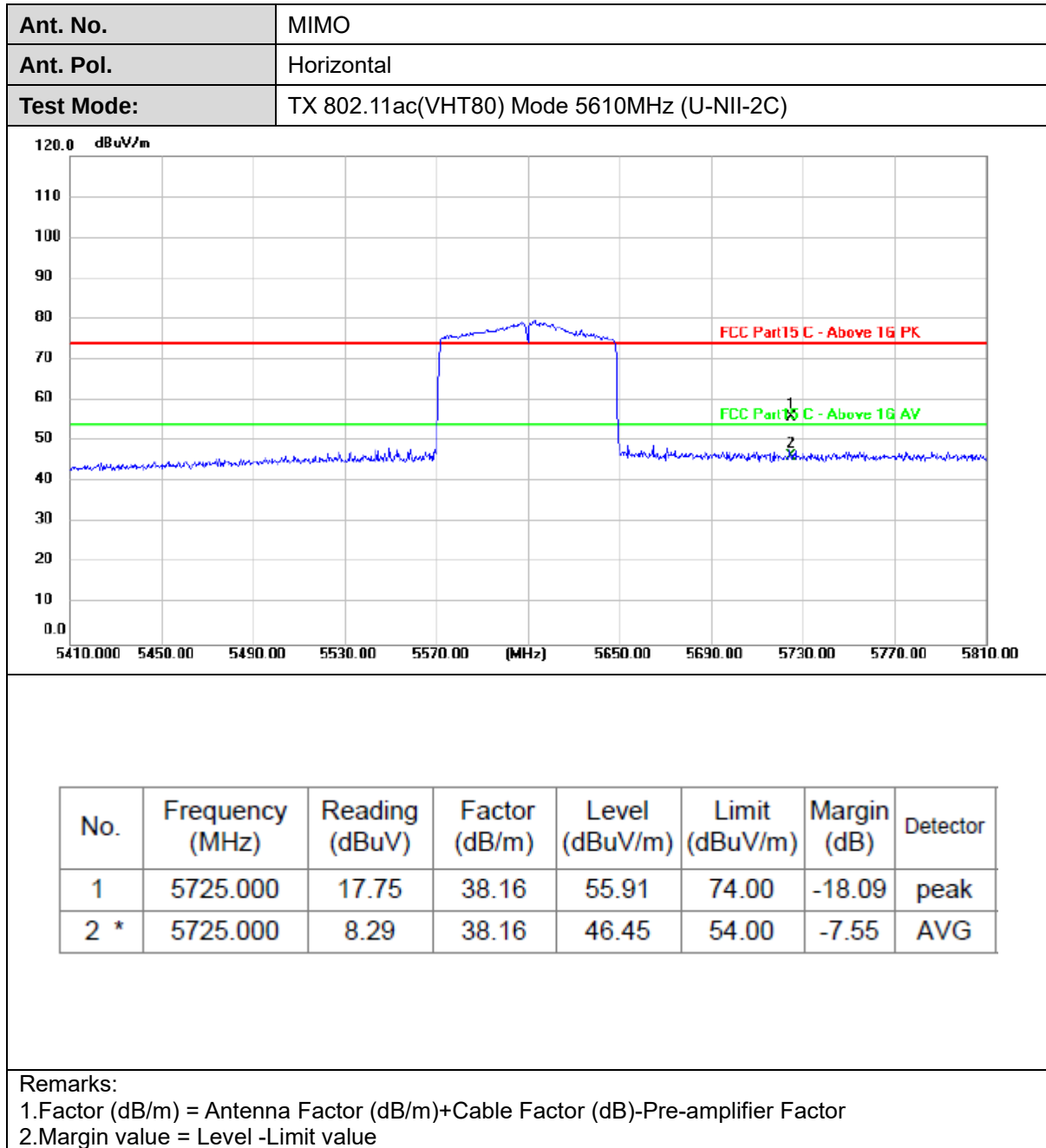


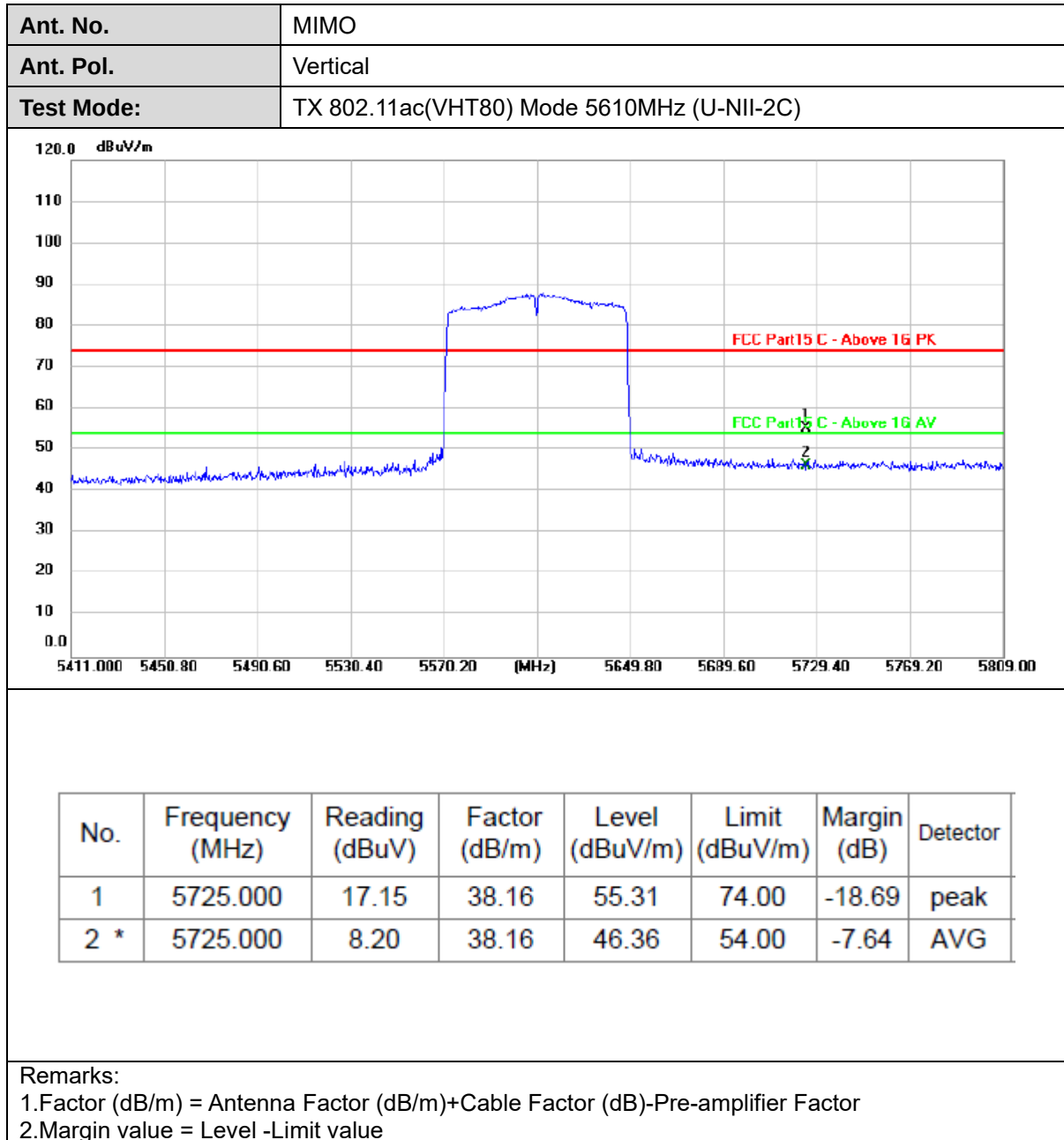


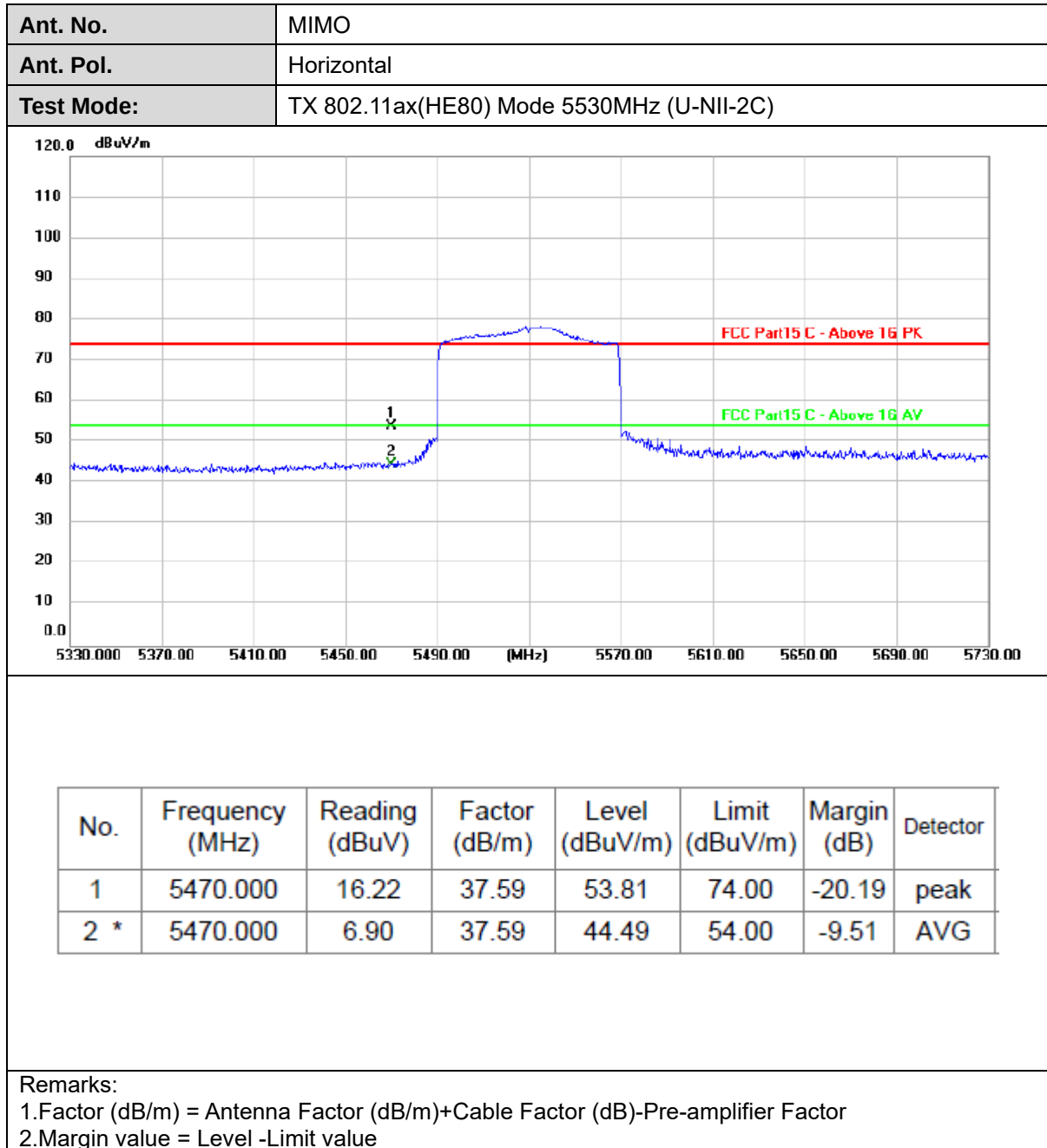


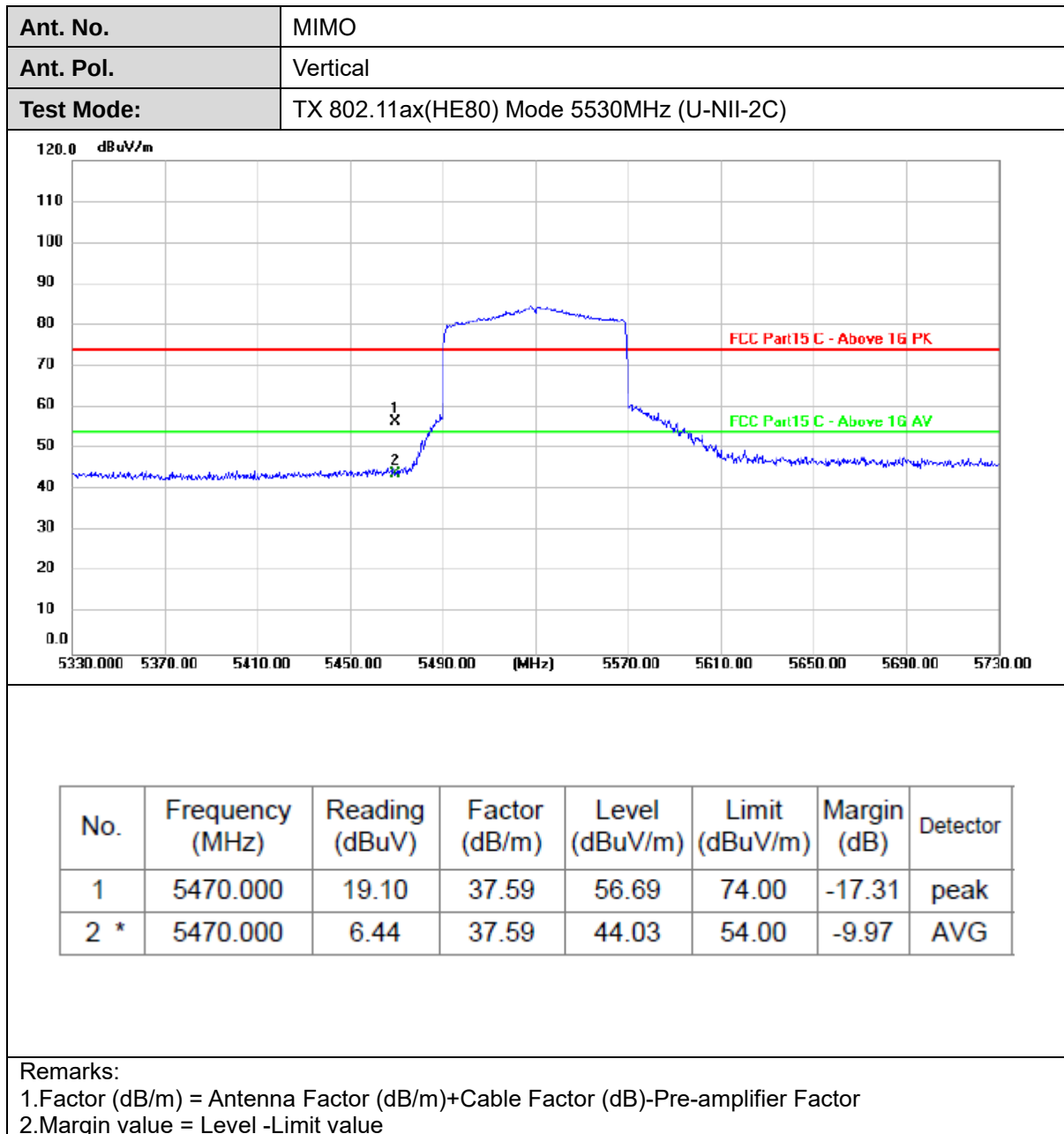


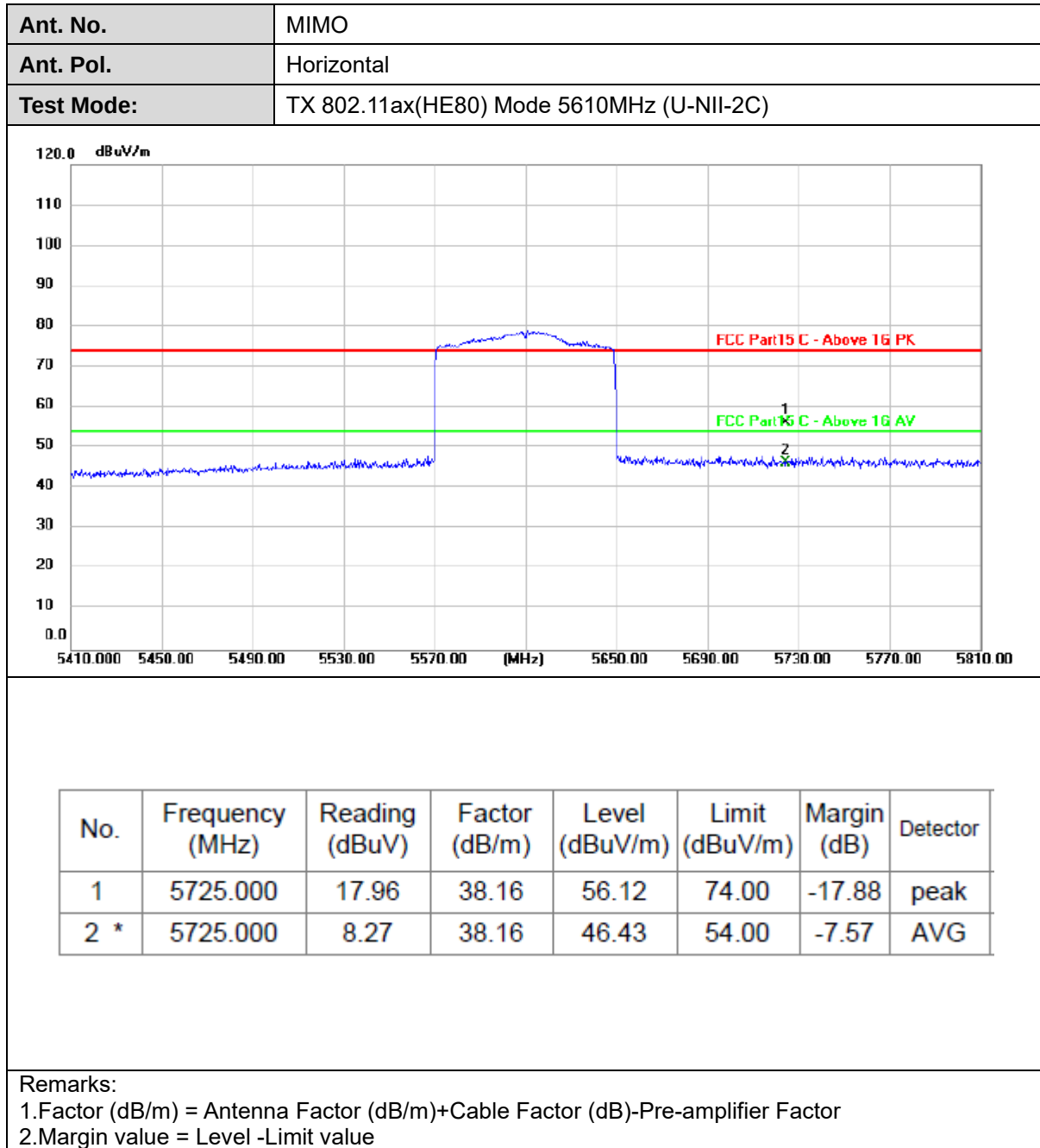


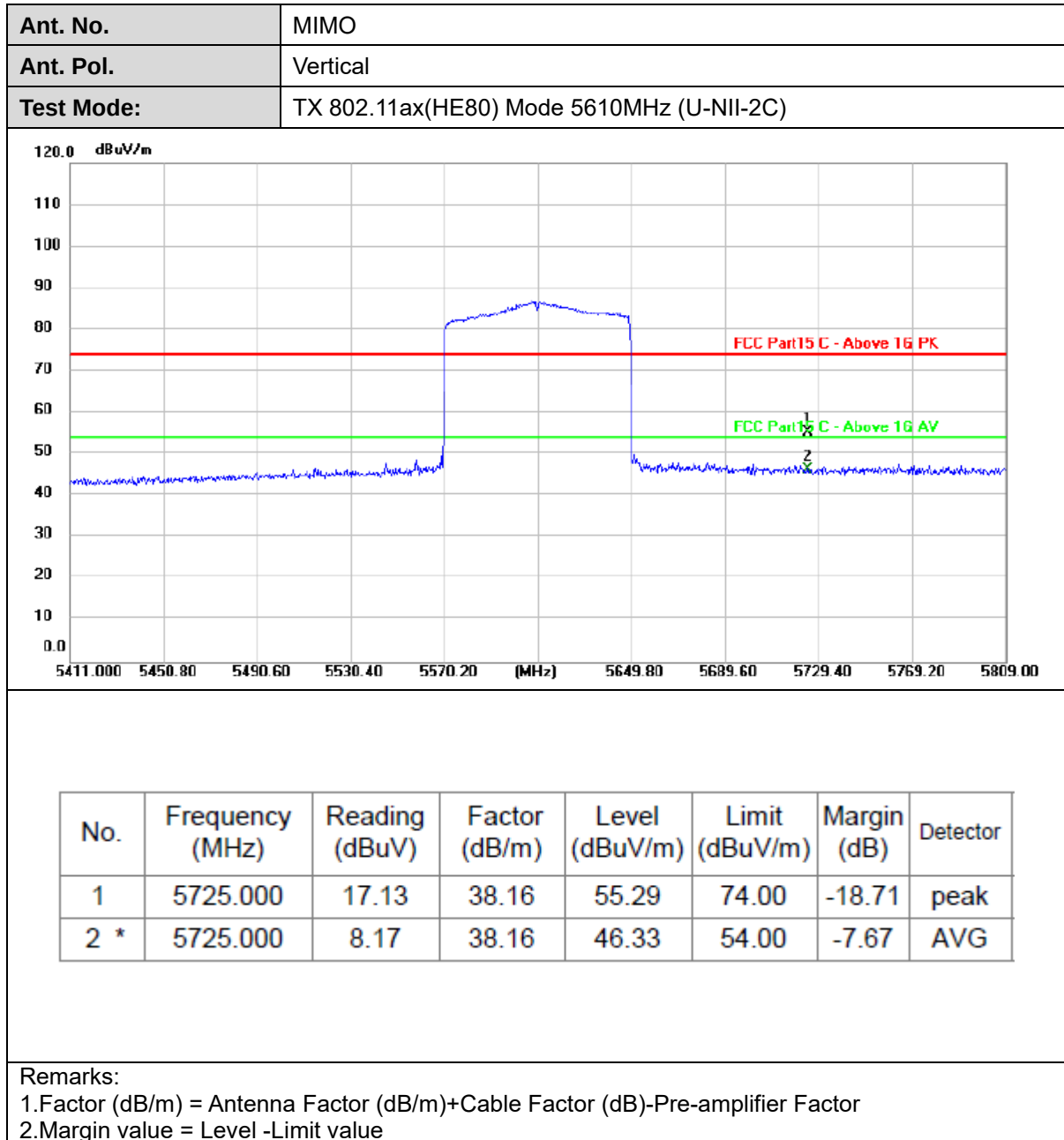






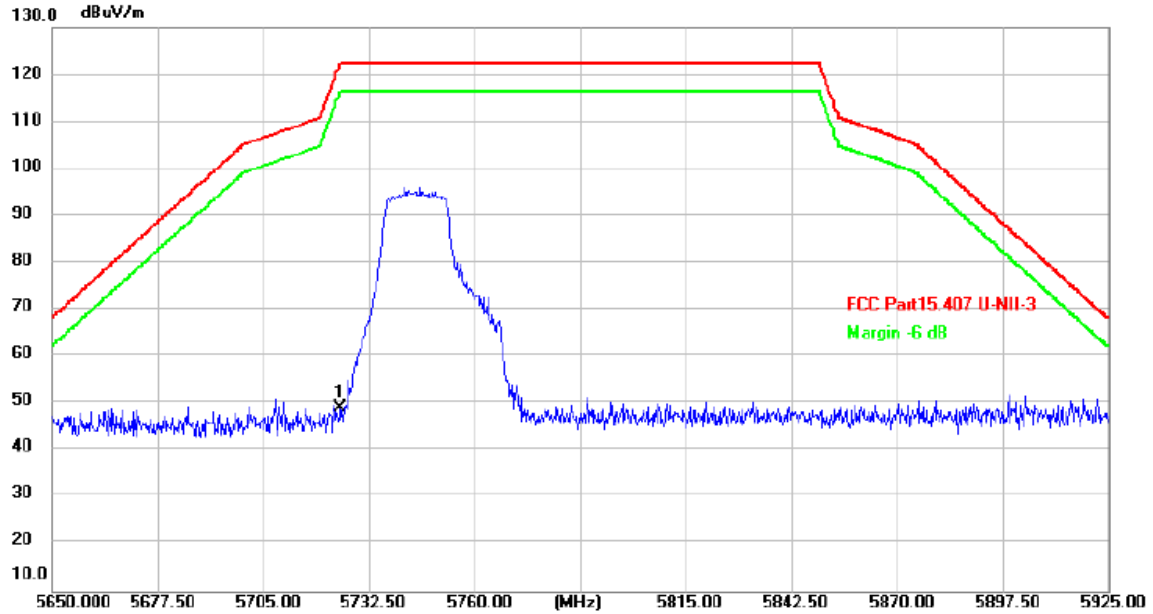








Ant. No.	Ant 2
Ant. Pol.	Horizontal
Test Mode:	TX 802.11a Mode 5745MHz (U-NII-3)
Remark:	Pre-scan Ant 1 and Ant 2, and found the Ant 2 mode which it is worse case, so only show the test data for worse case.



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1 *	5725.000	11.01	38.16	49.17	122.20	-73.03	peak

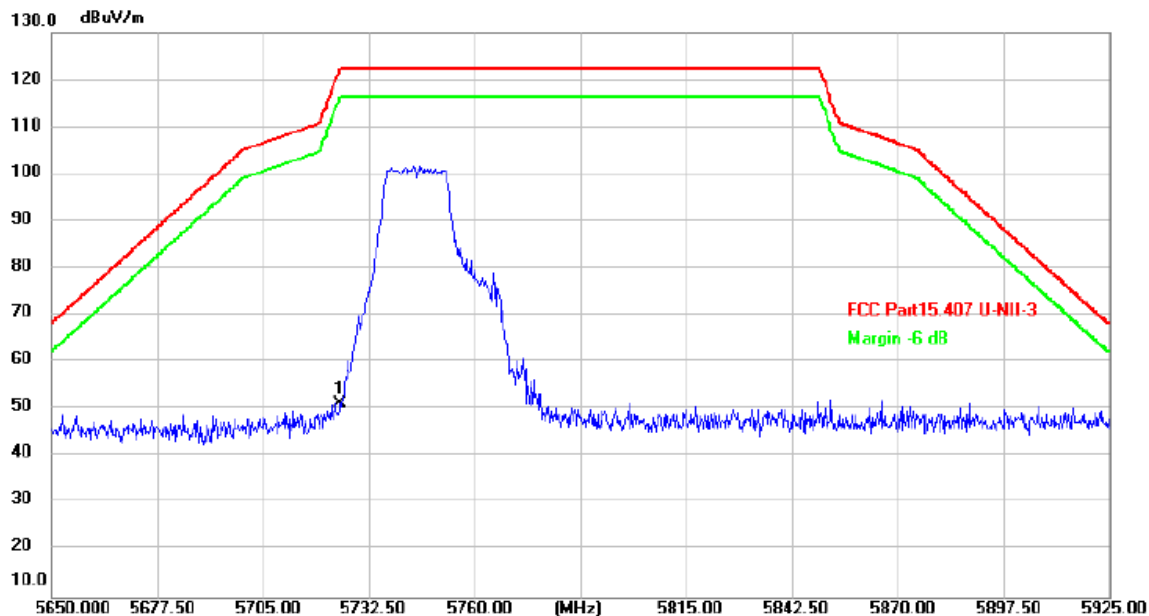
Remarks:

1. Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB) - Pre-amplifier Factor

2. Margin value = Level - Limit value



Ant. No.	Ant 2
Ant. Pol.	Vertical
Test Mode:	TX 802.11a Mode 5745MHz (U-NII-3)
Remark:	Pre-scan Ant 1 and Ant 2, and found the Ant 2 mode which it is worse case, so only show the test data for worse case.



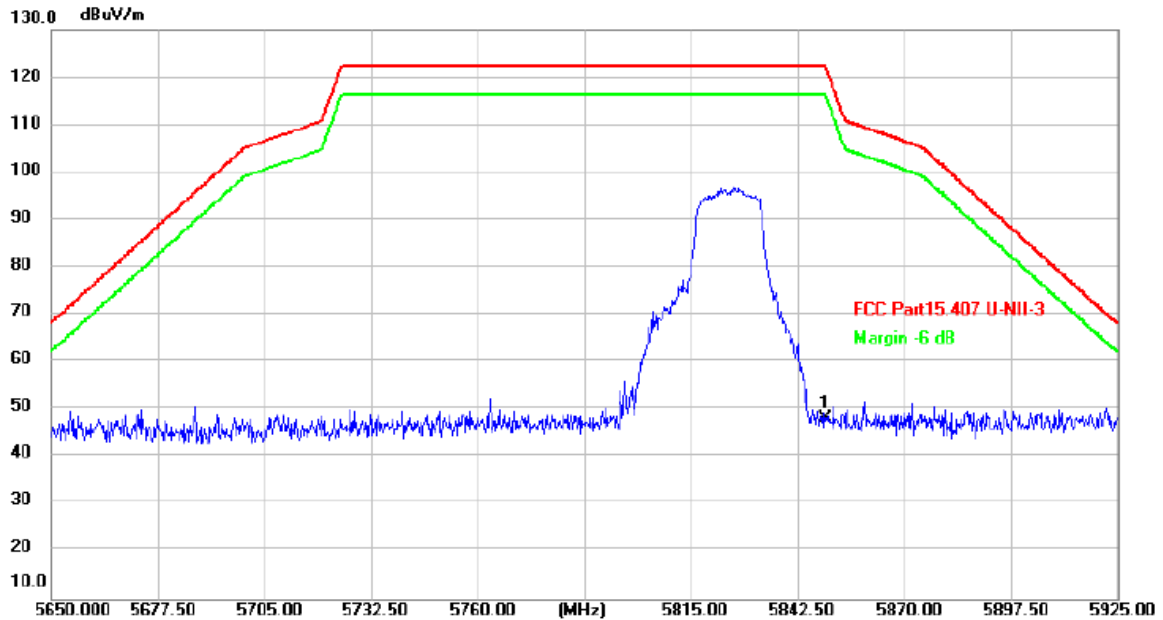
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1 *	5725.000	13.16	38.16	51.32	122.20	-70.88	peak

Remarks:

- 1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor
- 2.Margin value = Level -Limit value



Ant. No.	Ant 2
Ant. Pol.	Horizontal
Test Mode:	TX 802.11a Mode 5825MHz (U-NII-3)
Remark:	Pre-scan Ant 1 and Ant 2, and found the Ant 2 mode which it is worse case, so only show the test data for worse case.



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1 *	5850.000	9.81	38.44	48.25	122.20	-73.95	peak

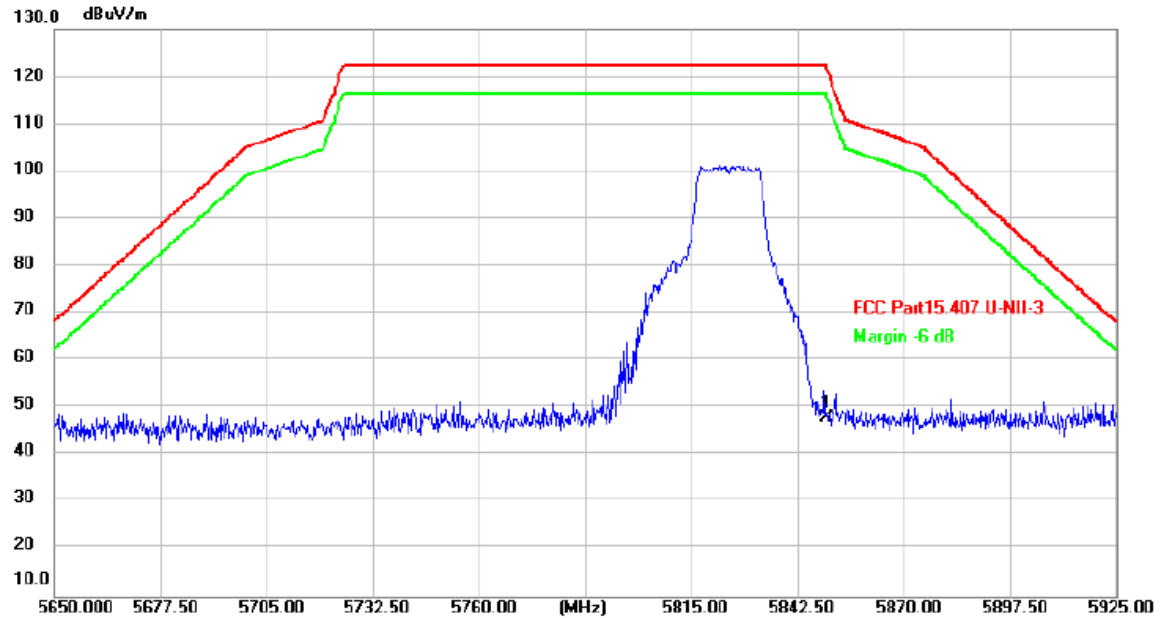
Remarks:

1. Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB) - Pre-amplifier Factor

2. Margin value = Level - Limit value



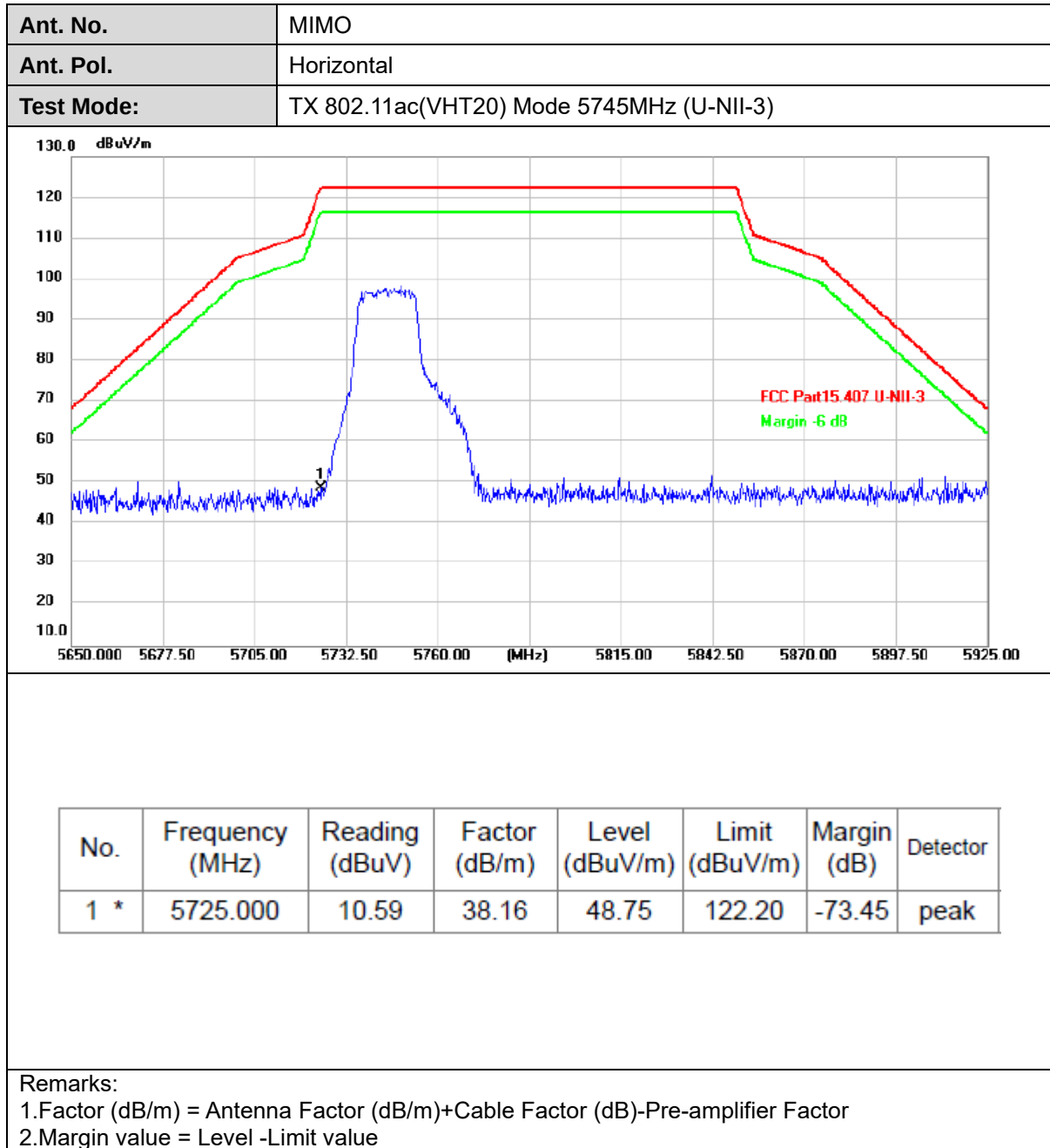
Ant. No.	Ant 2
Ant. Pol.	Vertical
Test Mode:	TX 802.11a Mode 5825MHz (U-NII-3)
Remark:	Pre-scan Ant 1 and Ant 2, and found the Ant 2 mode which it is worse case, so only show the test data for worse case.

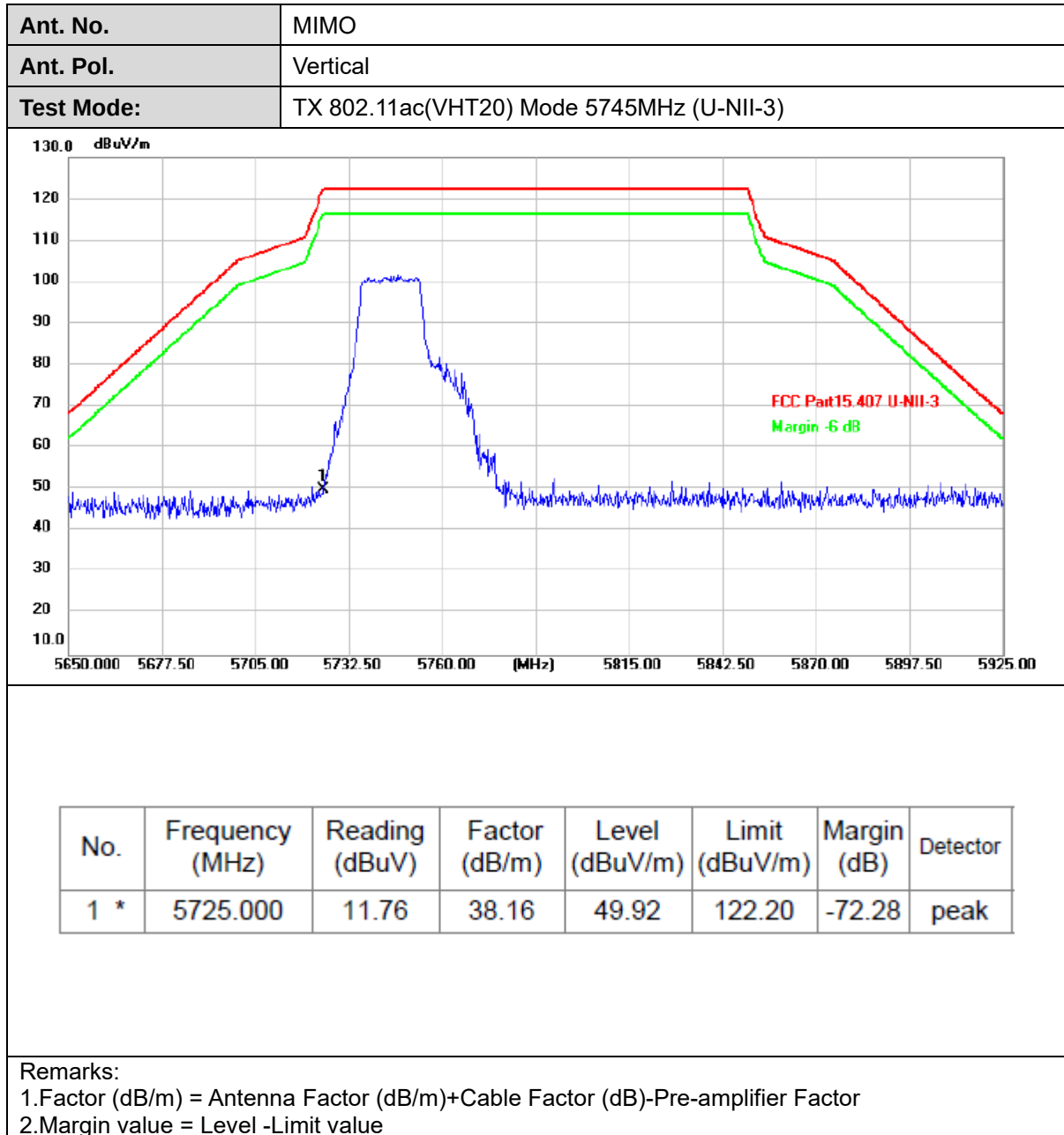


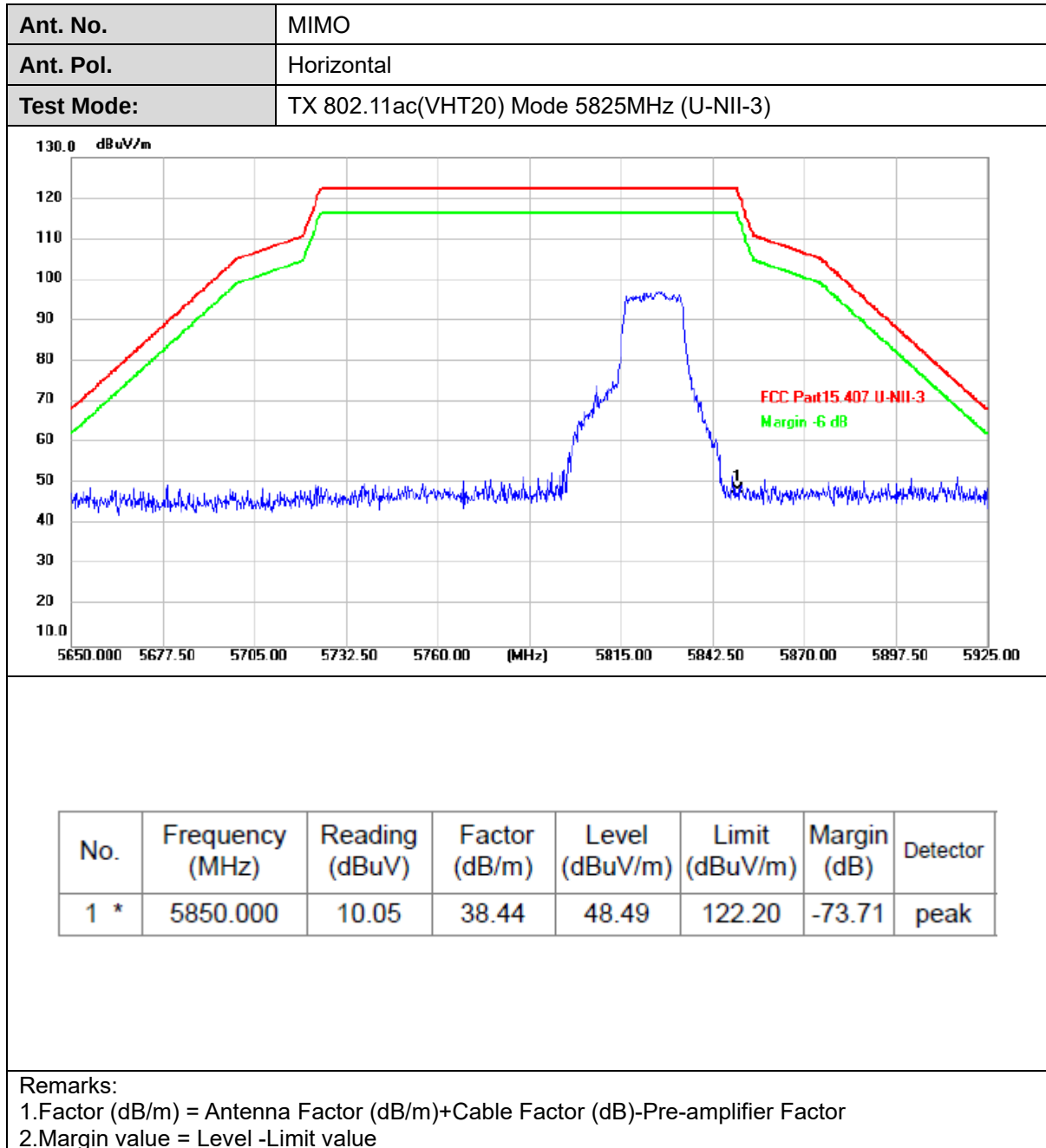
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1 *	5850.000	9.57	38.44	48.01	122.20	-74.19	peak

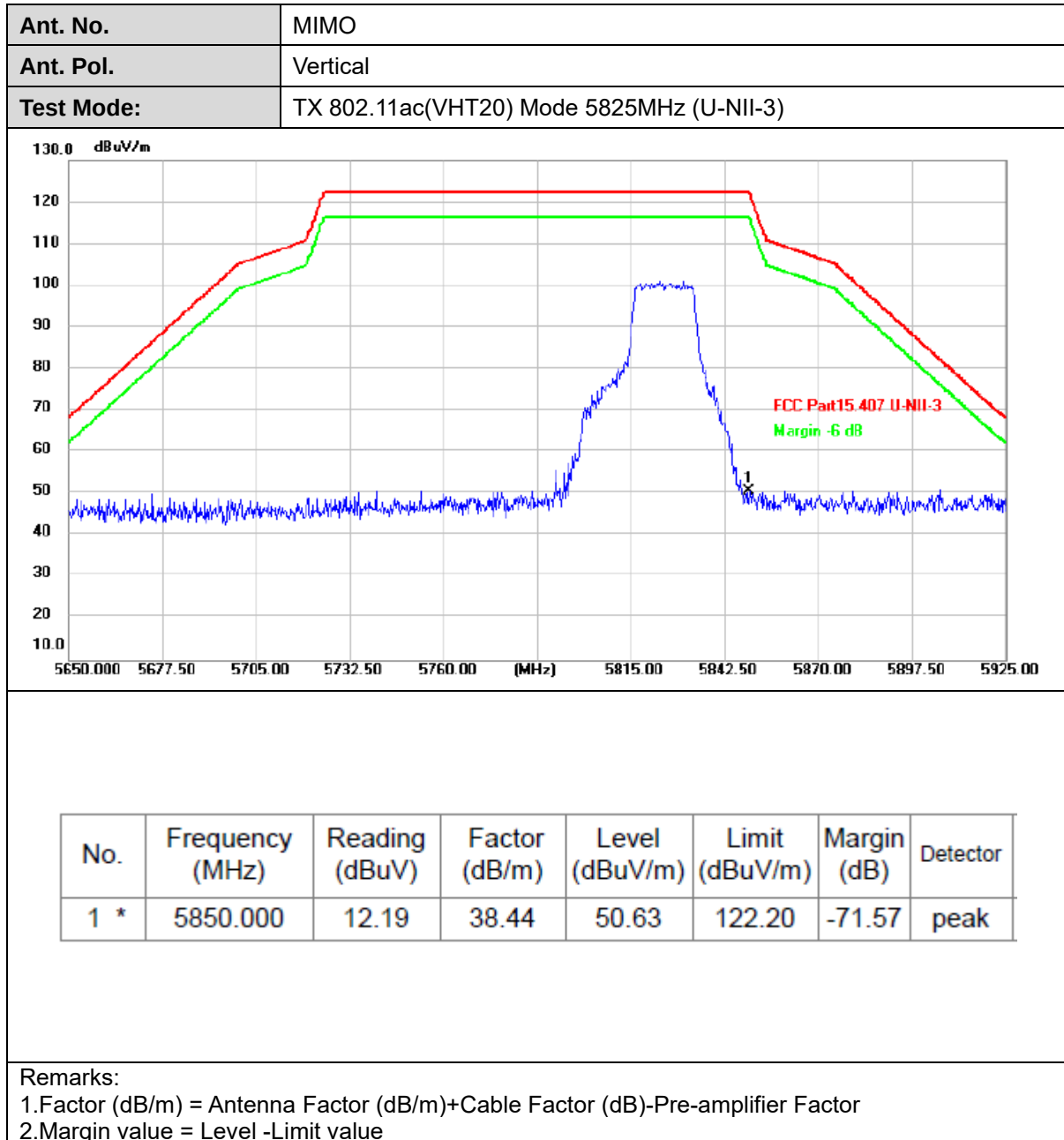
Remarks:

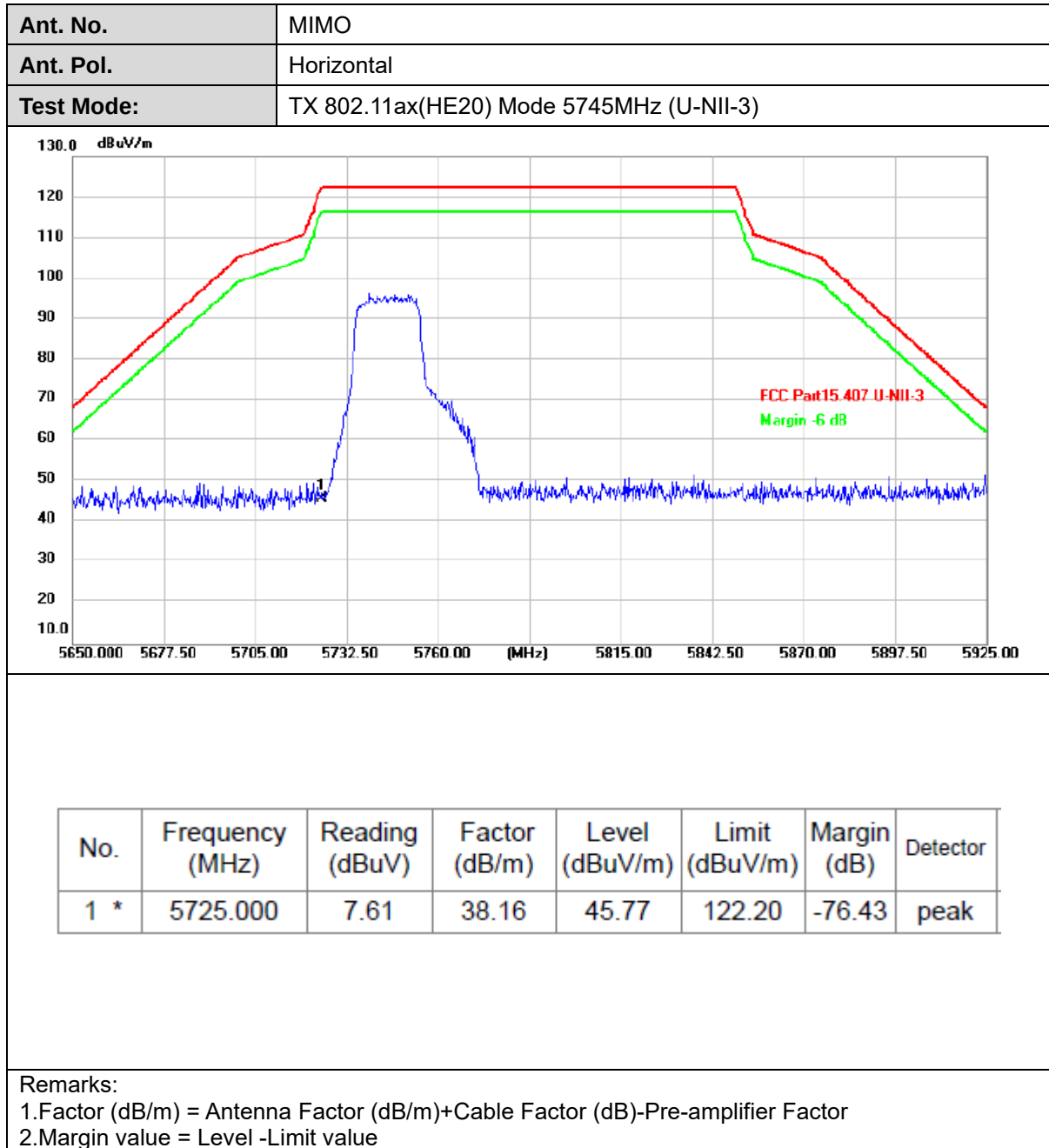
- Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor
- Margin value = Level -Limit value

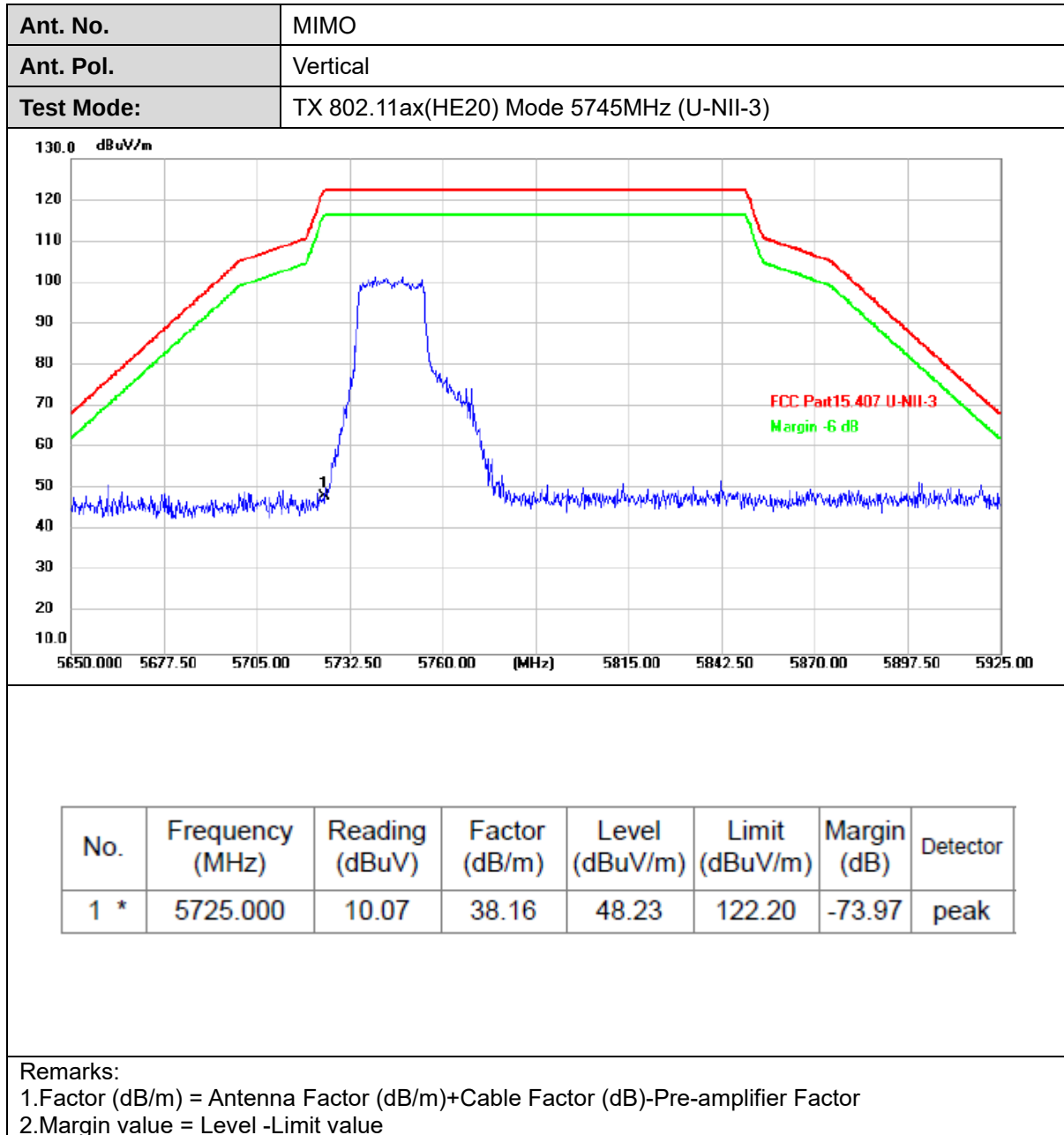


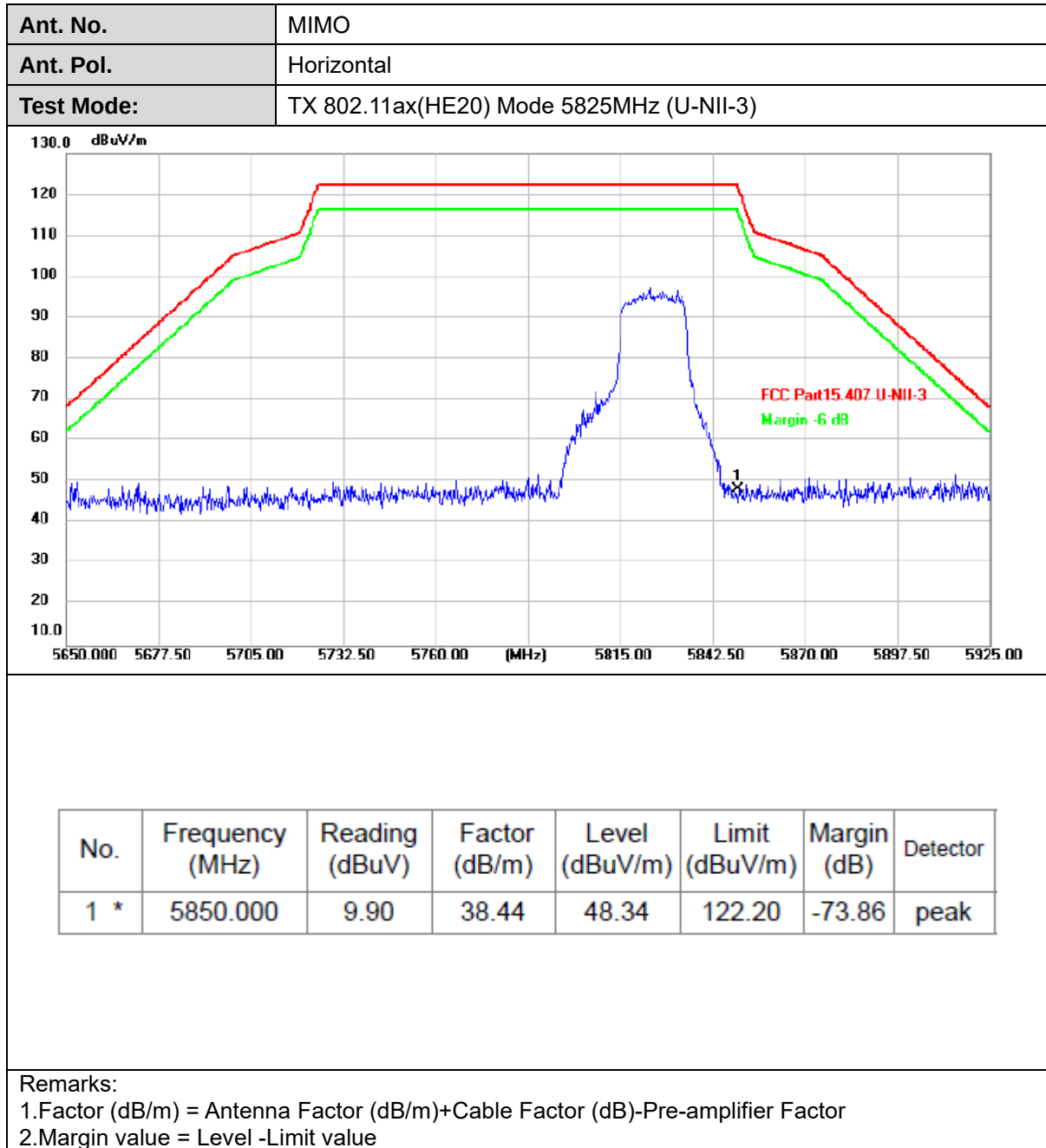


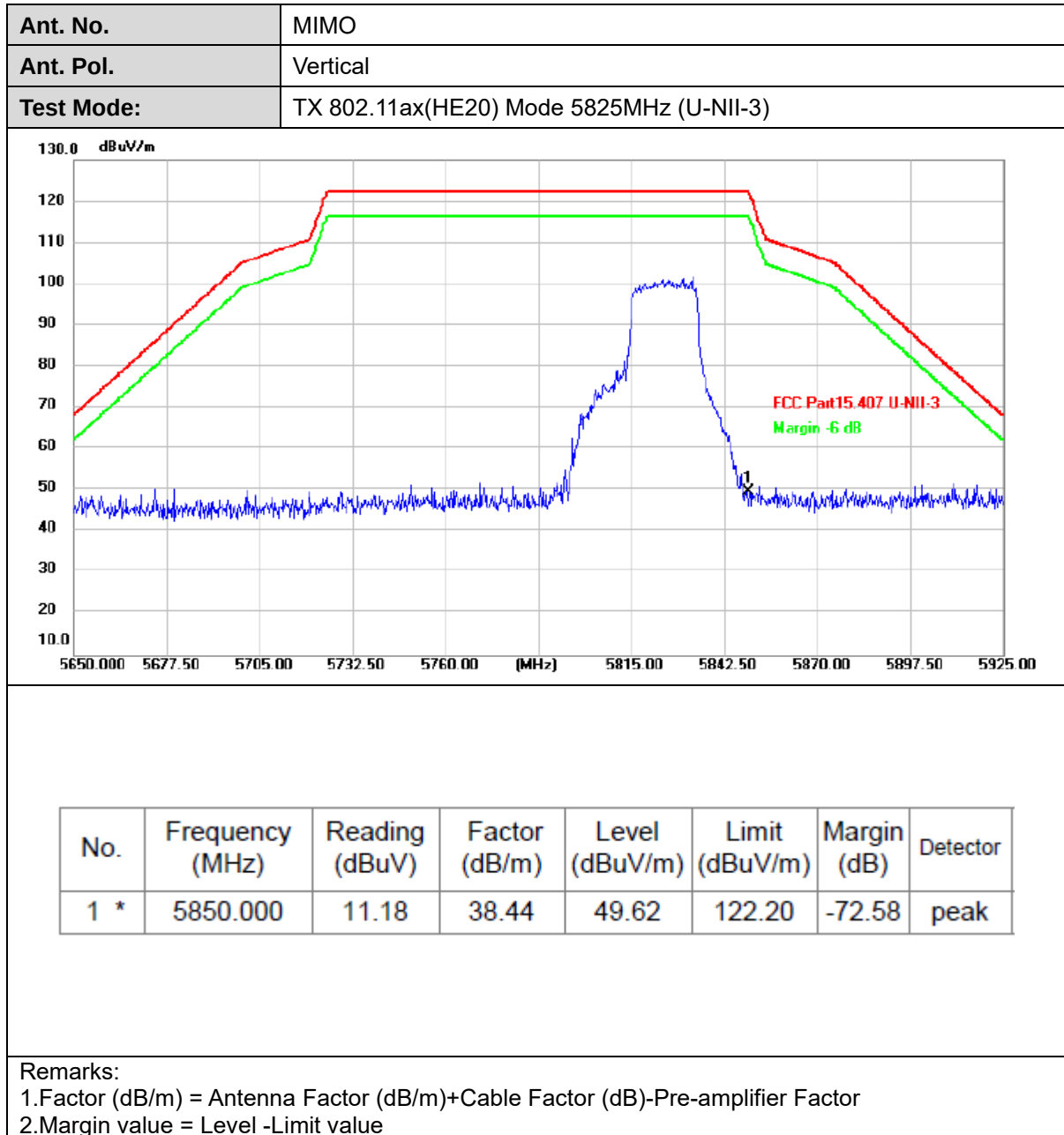


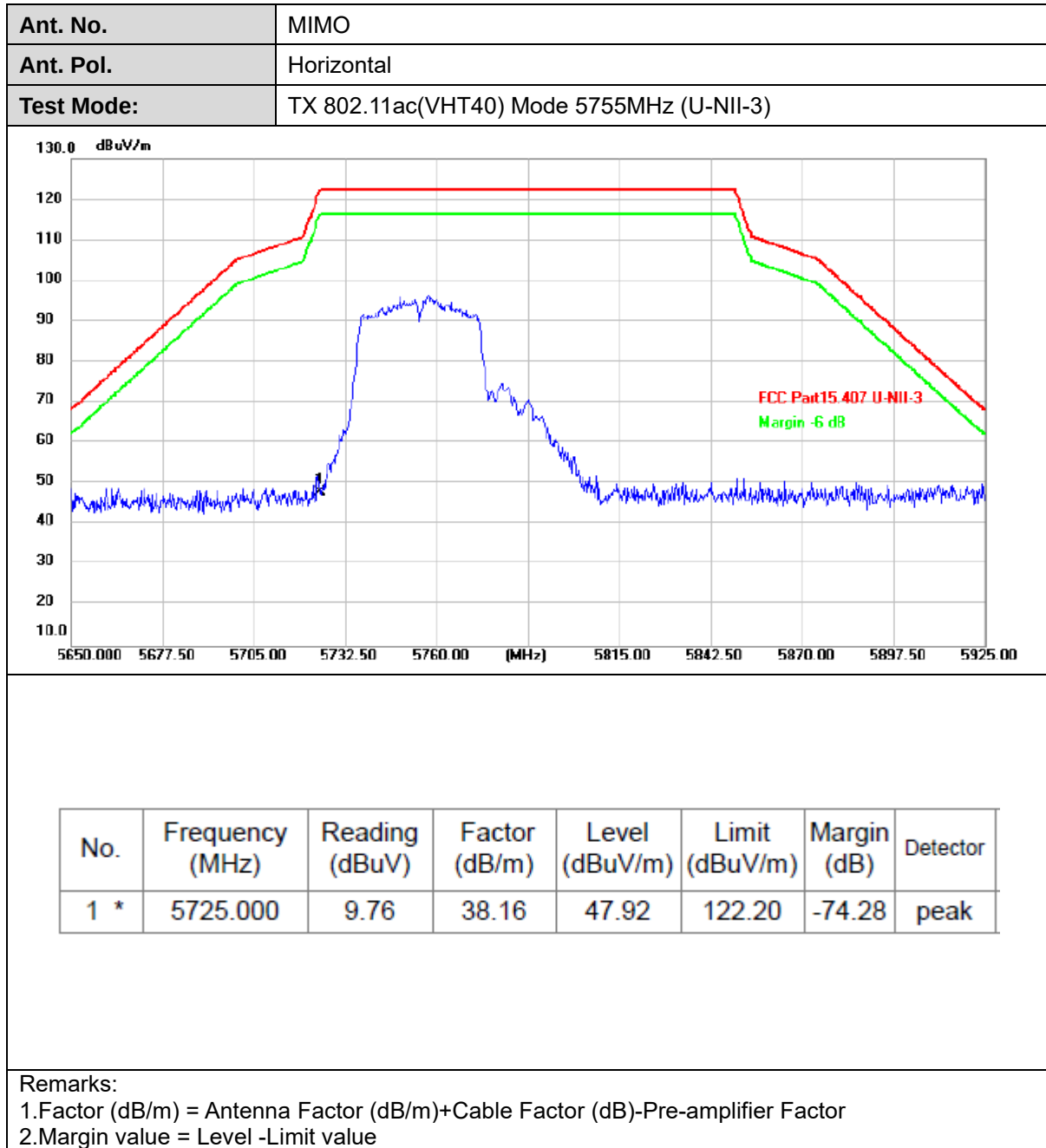


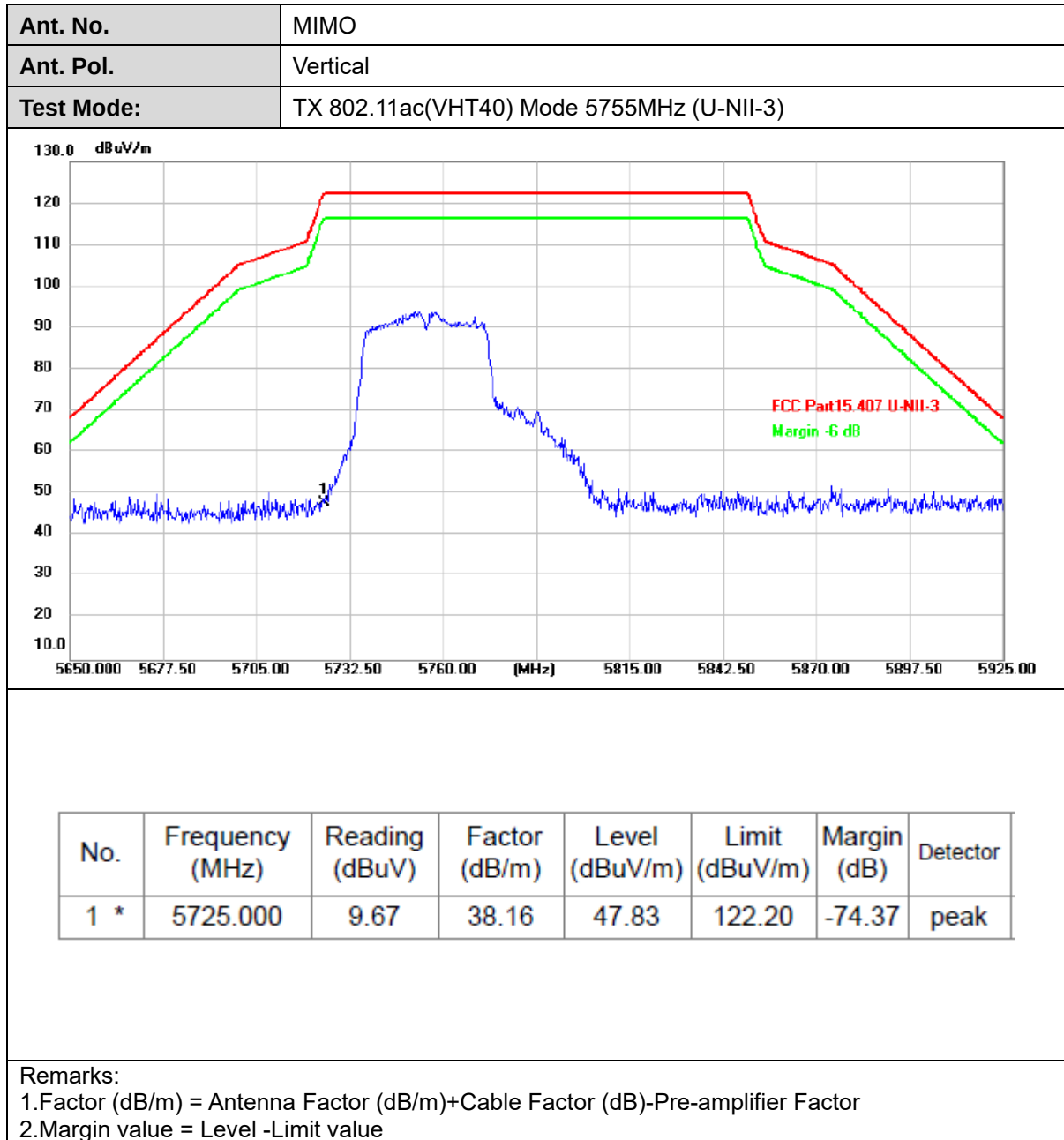


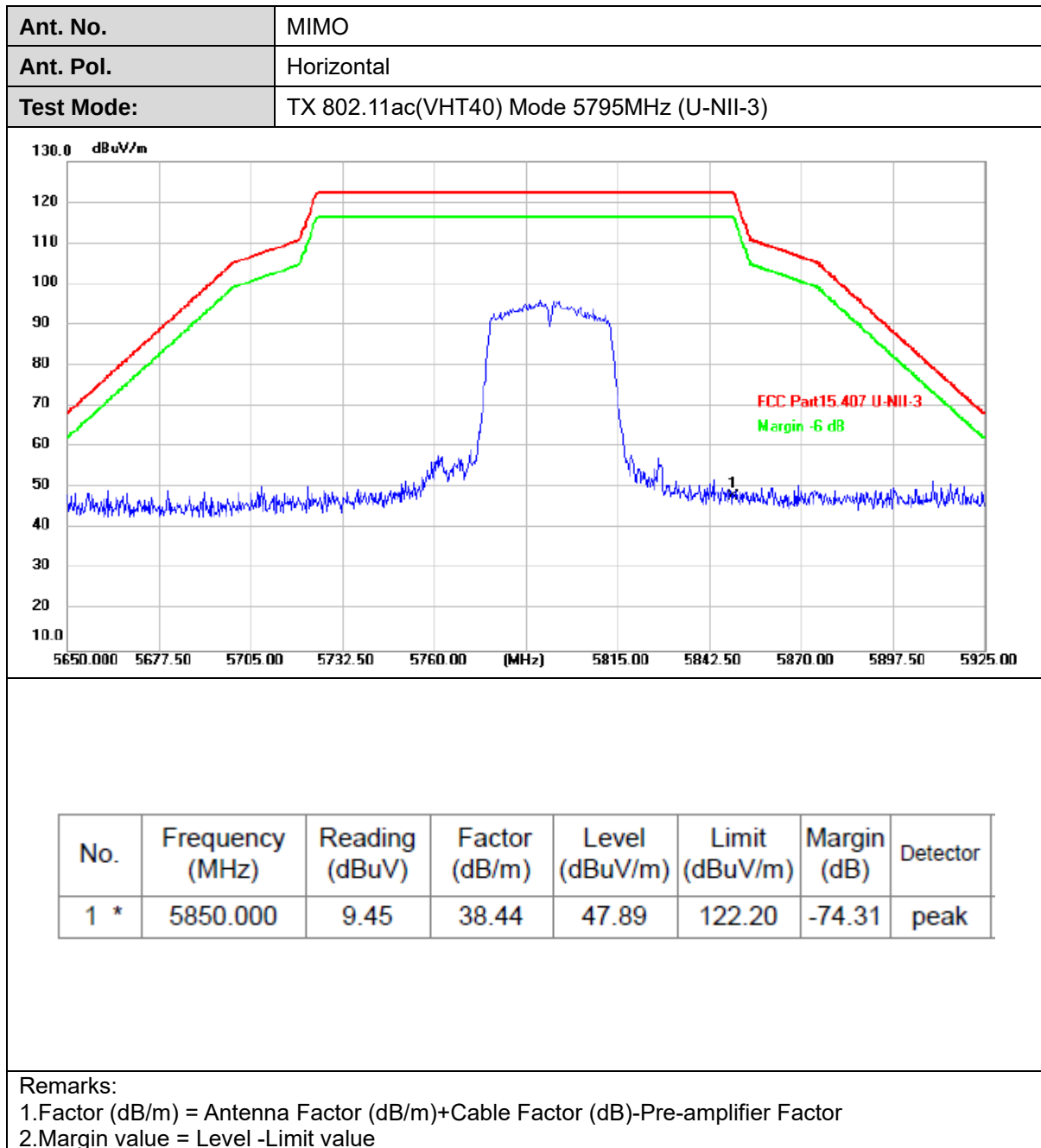


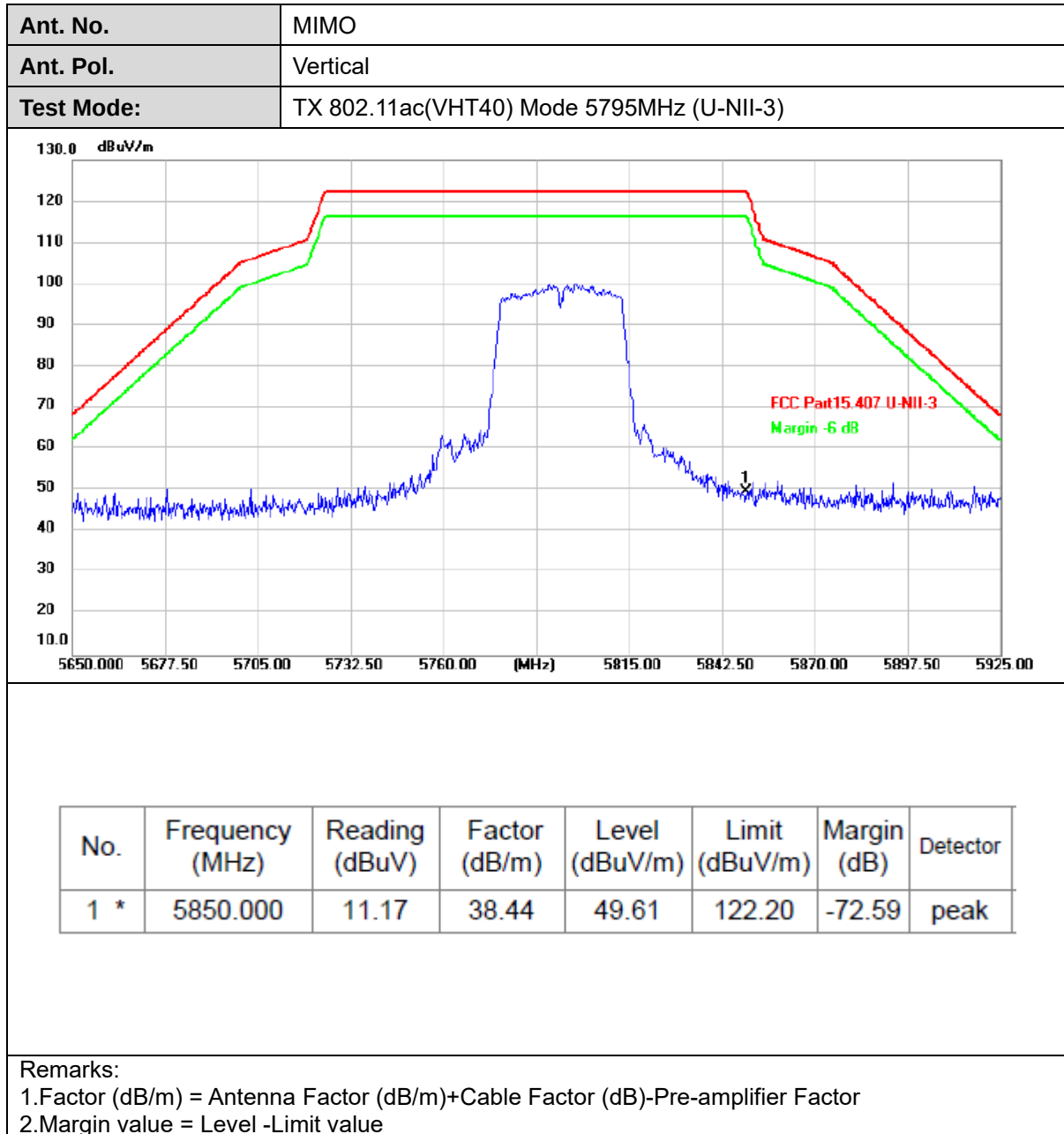


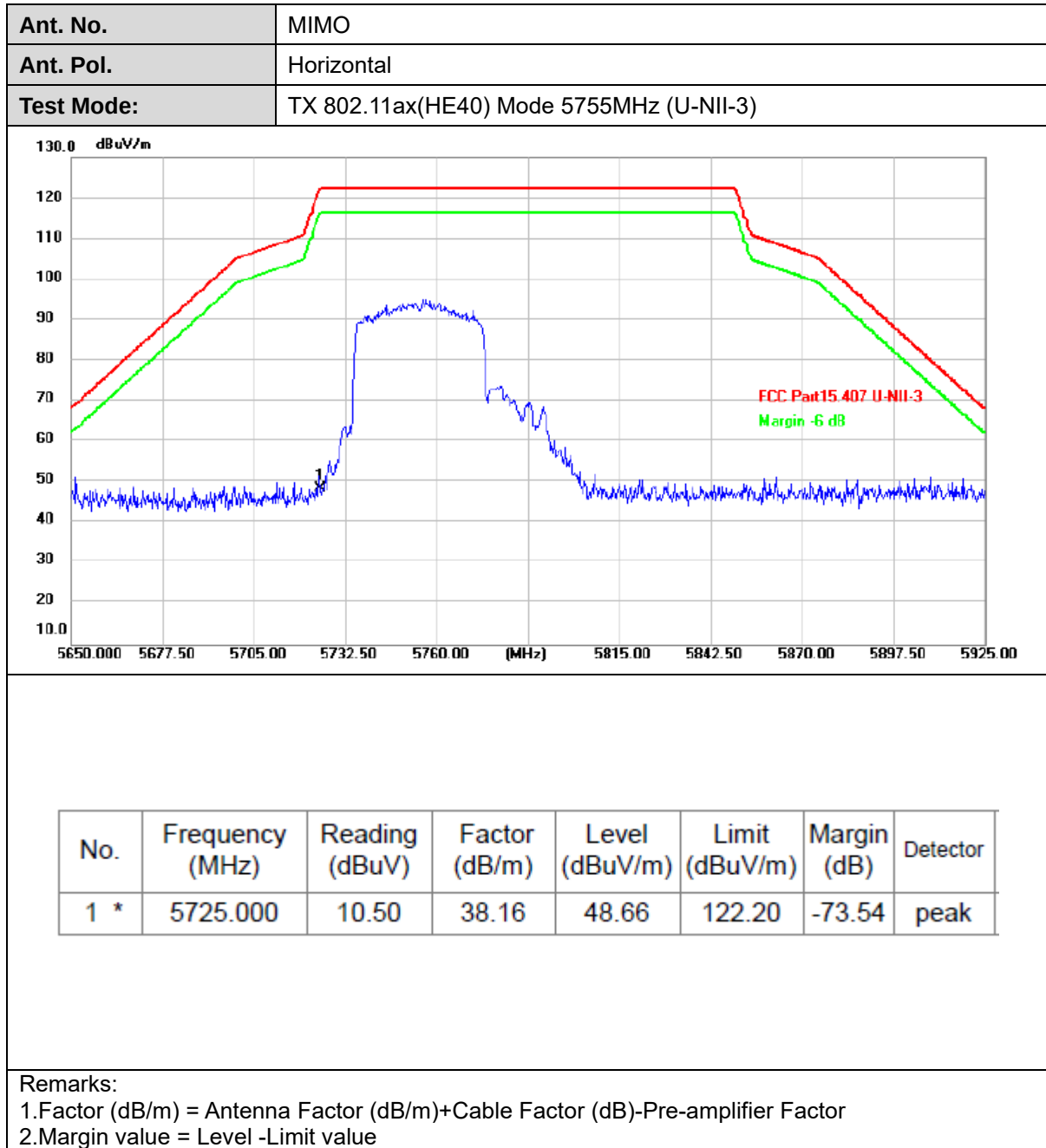


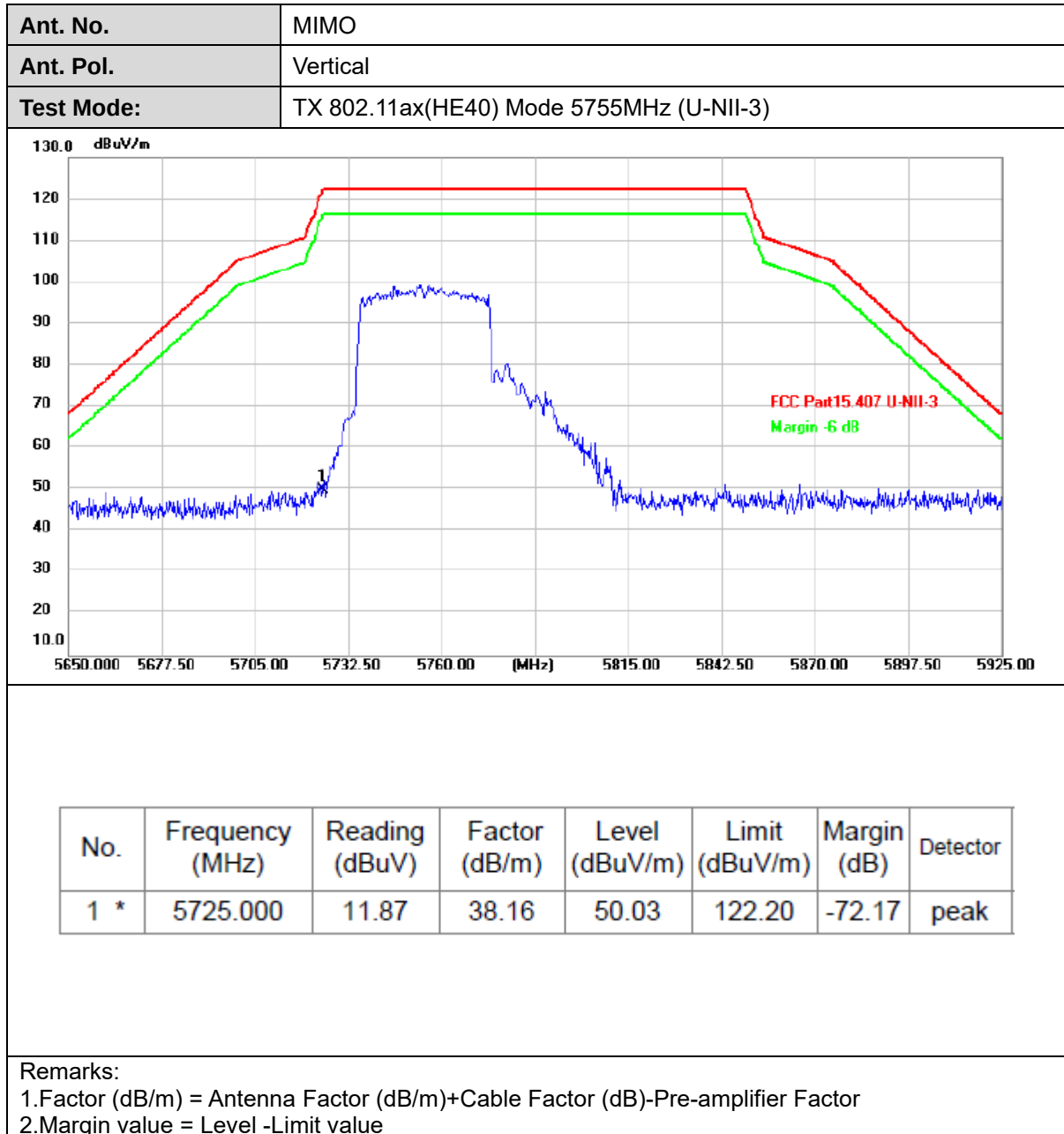


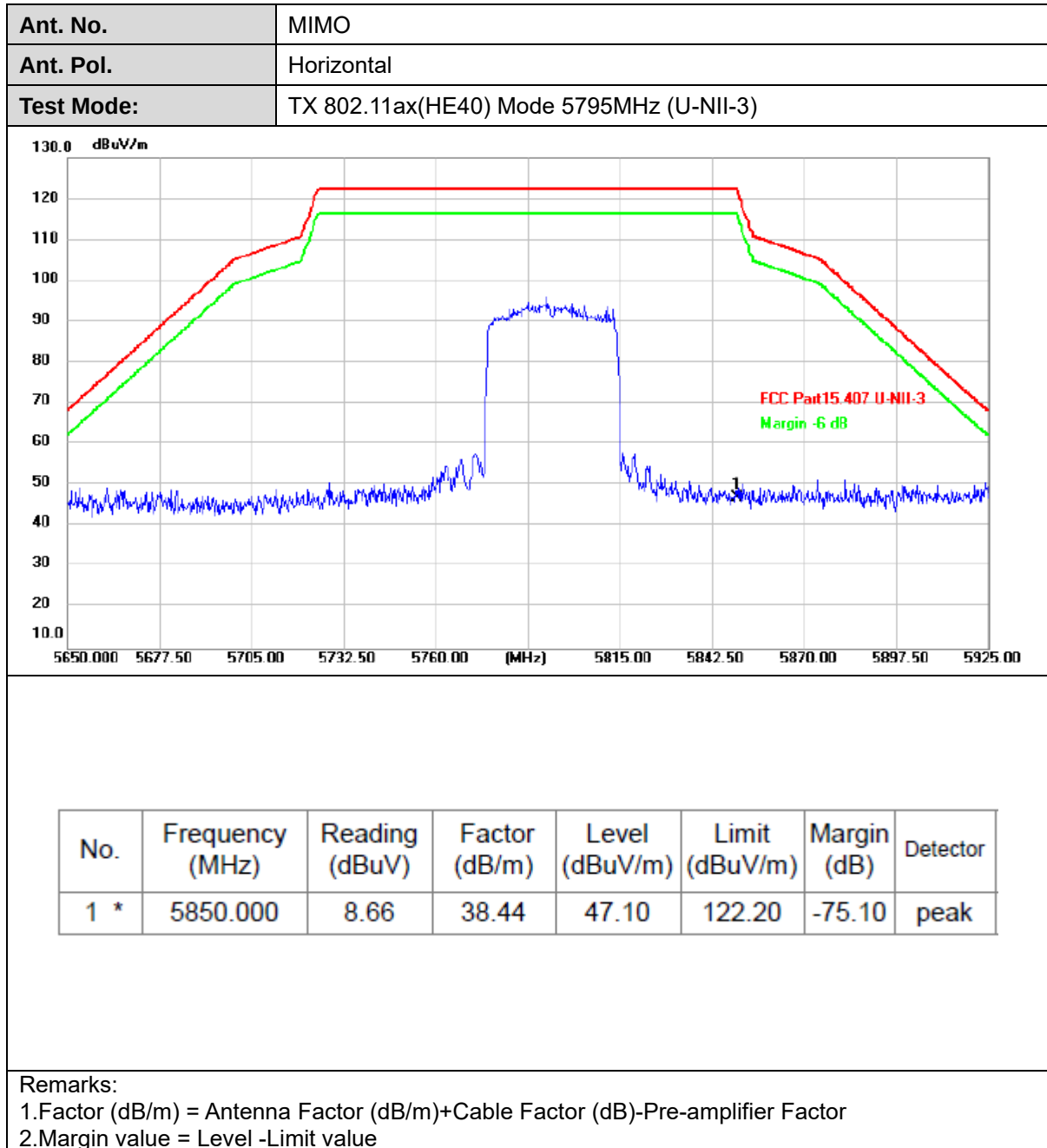


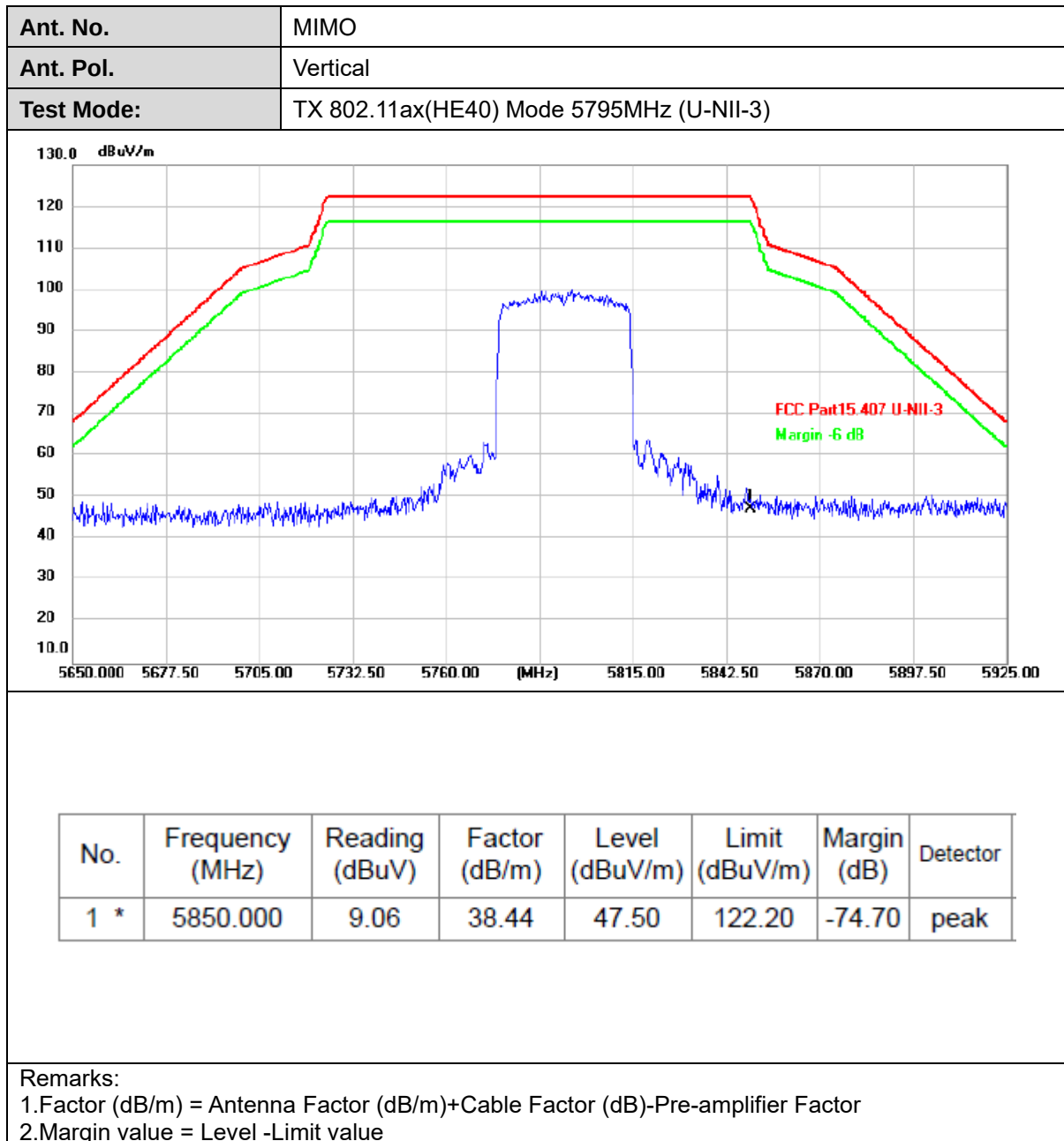


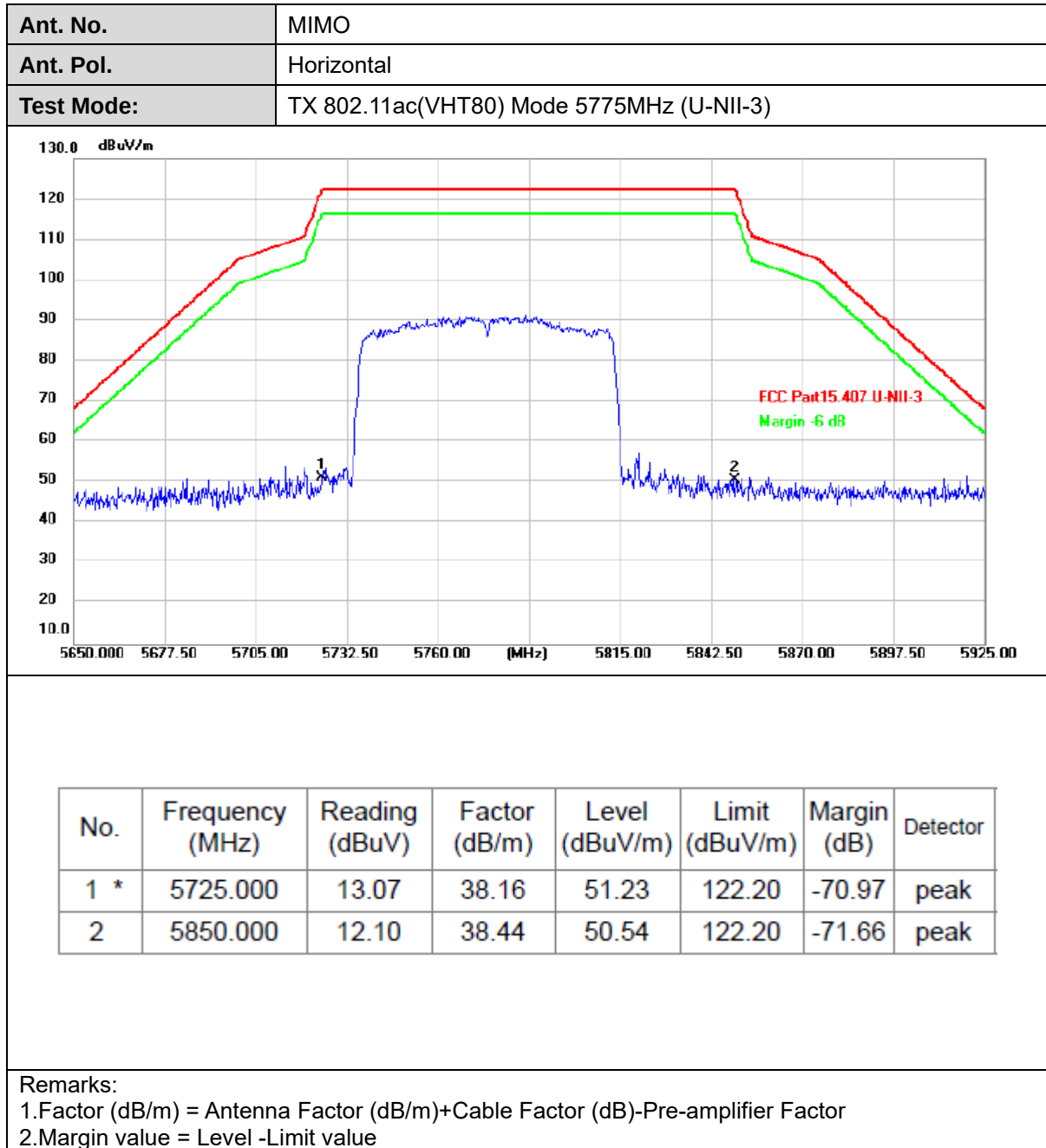


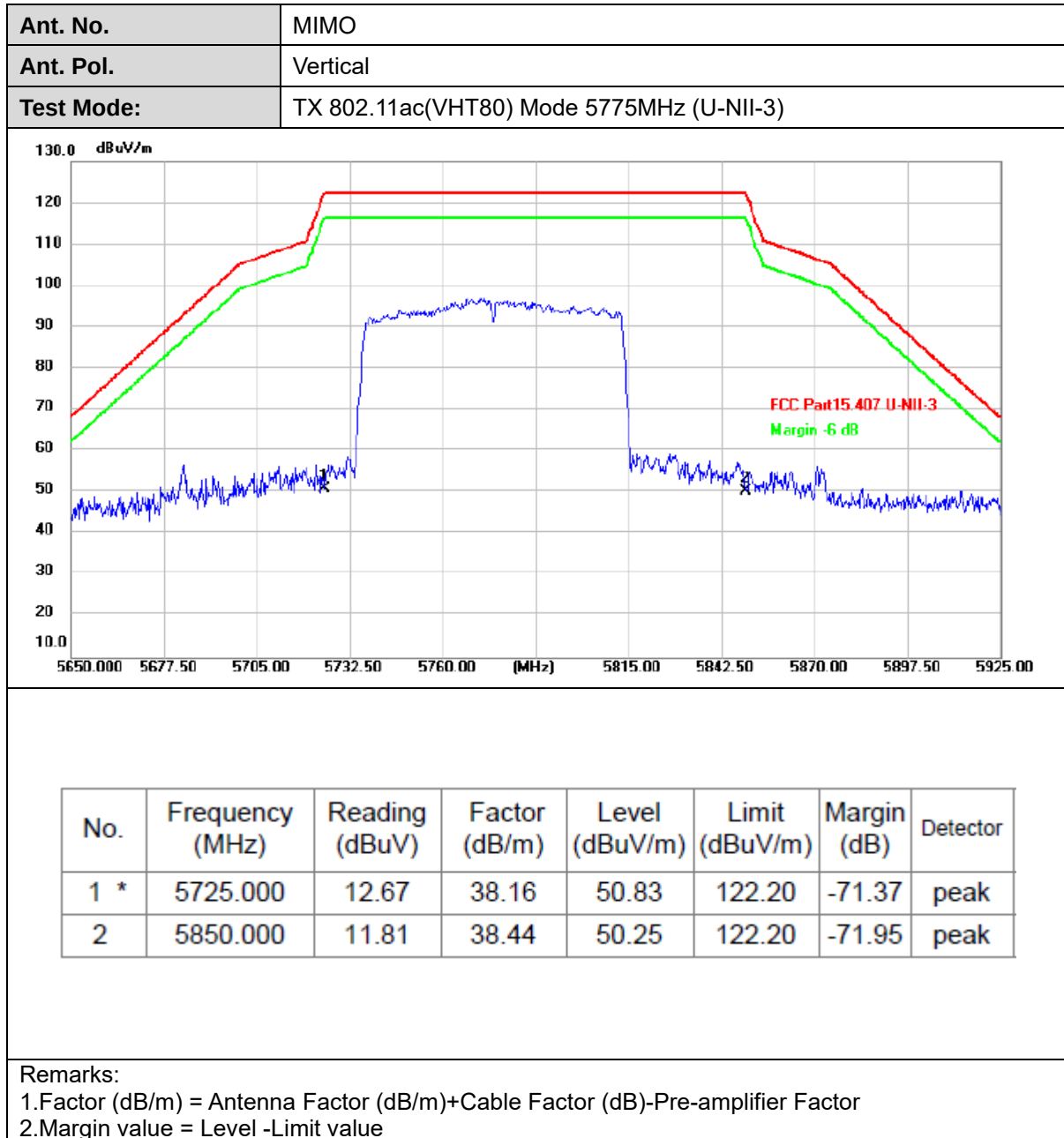


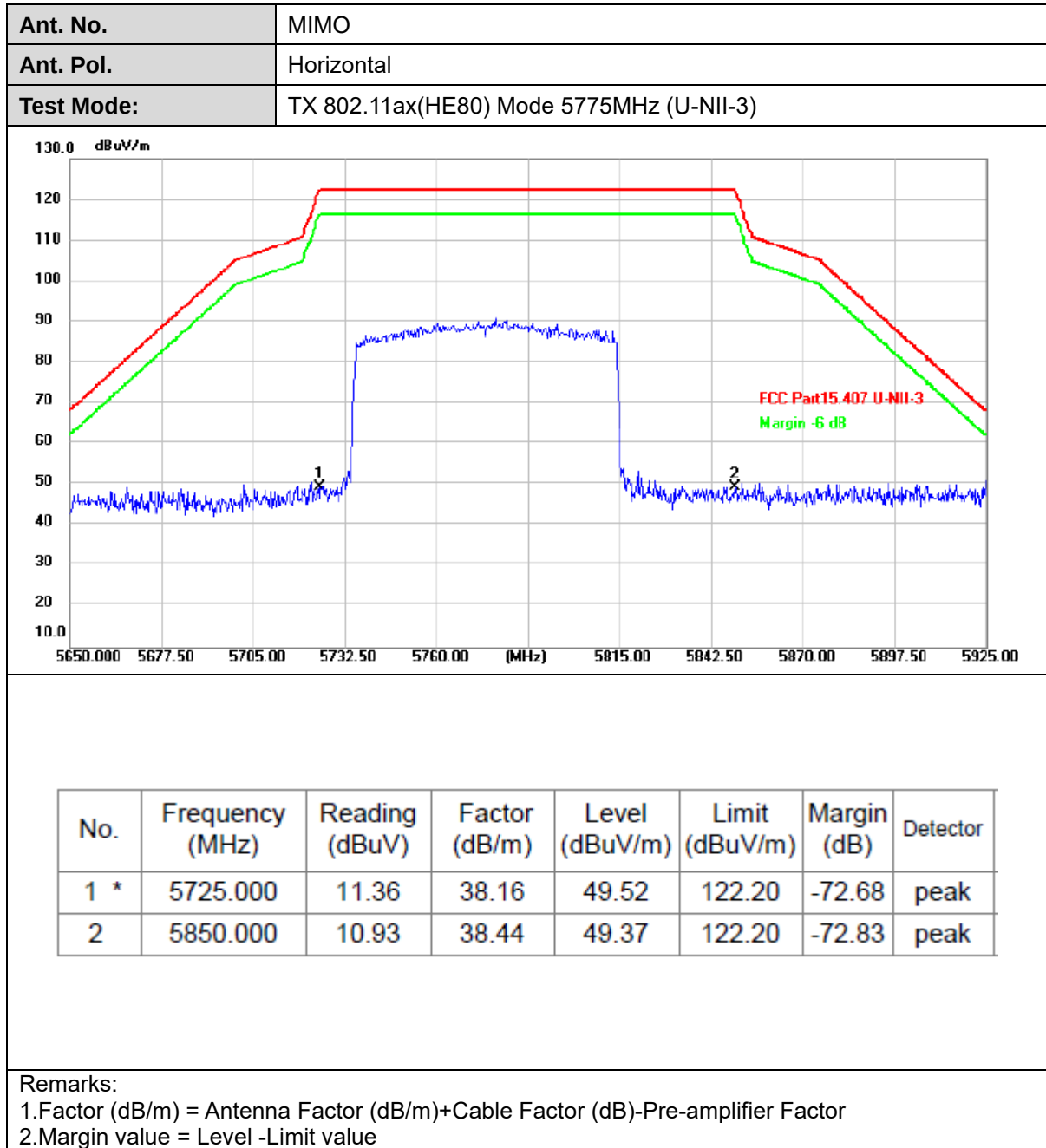














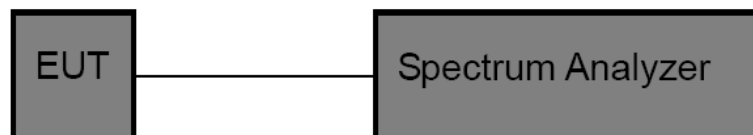
3.4. Bandwidth

Limit

FCC CFR Title 47 Part 15 Subpart E Section 15.407(a) & (e) / RSS-247 6.2.1.2 & 6.2.4.1

Test Item	Limit	Frequency Range (MHz)
26dB Bandwidth& 99% Bandwidth	N/A	5150~5250
		5250~5350
		5500~5700
6 dB Bandwidth	≥500 kHz	5725~5850

Test Configuration



Test Procedure

Please refer to KDB789033 D02 for the measurement methods.

The setting of the spectrum analyzer as below:

26dB Bandwidth Test	
Spectrum Parameters	Setting
Attenuation	Auto
Span	>26 dB Bandwidth
RBW	Approximately 1% of the emission bandwidth
VBW	>RBW
Detector	Peak
Trace	Max Hold
Sweep Time	Auto



6dB Bandwidth Test	
Spectrum Parameters	Setting
Attenuation	Auto
Span	>6 dB Bandwidth
RBW	100 kHz
VBW	$\geq 3 \times \text{RBW}$
Detector	Peak
Trace	Max Hold
Sweep Time	Auto
99% Occupied Bandwidth Test	
Spectrum Parameters	Setting
Attenuation	Auto
RBW	1% to 5% of the OBW
VBW	$\geq 3 \times \text{RBW}$
Detector	Peak
Trace	Max Hold

NOTE: The EUT was set to continuously transmitting in each mode and low, middle and high channel for the test.

Test Mode

Please refer to the clause 2.4.

**Test Result****99% Bandwidth**

Test Mode	Antenna	Freq(MHz)	OCB [MHz]	Limit[MHz]	Verdict
11A	Ant1	5180	16.897	---	---
	Ant2	5180	17.014	---	---
	Ant1	5200	16.371	---	---
	Ant2	5200	16.385	---	---
	Ant1	5240	16.389	---	---
	Ant2	5240	16.388	---	---
	Ant1	5260	16.404	---	---
	Ant2	5260	16.404	---	---
	Ant1	5280	16.380	---	---
	Ant2	5280	16.398	---	---
	Ant1	5320	16.380	---	---
	Ant2	5320	16.421	---	---
	Ant1	5500	16.401	---	---
	Ant2	5500	16.588	---	---
	Ant1	5580	16.419	---	---
	Ant2	5580	16.534	---	---
	Ant1	5700	16.564	---	---
	Ant2	5700	16.432	---	---
	Ant1	5745	16.451	---	---
	Ant2	5745	16.419	---	---
	Ant1	5785	16.416	---	---
	Ant2	5785	16.430	---	---
	Ant1	5825	16.403	---	---
	Ant2	5825	16.431	---	---
11AC20MIMO	Ant1	5180	17.621	---	---
	Ant2	5180	17.556	---	---
	Ant1	5200	17.796	---	---
	Ant2	5200	17.538	---	---
	Ant1	5240	17.667	---	---
	Ant2	5240	17.529	---	---
	Ant1	5260	17.554	---	---
	Ant2	5260	17.541	---	---
	Ant1	5280	17.548	---	---
	Ant2	5280	17.538	---	---
	Ant1	5320	17.544	---	---
	Ant2	5320	17.539	---	---
	Ant1	5500	17.533	---	---
	Ant2	5500	17.830	---	---
	Ant1	5580	17.698	---	---
	Ant2	5580	17.538	---	---
	Ant1	5700	17.661	---	---
	Ant2	5700	17.538	---	---
	Ant1	5745	17.550	---	---
	Ant2	5745	17.546	---	---
	Ant1	5785	17.547	---	---
	Ant2	5785	17.535	---	---
	Ant1	5825	17.554	---	---
	Ant2	5825	17.539	---	---
11AC40MIMO	Ant1	5190	36.022	---	---
	Ant2	5190	36.084	---	---
	Ant1	5230	36.139	---	---
	Ant2	5230	36.007	---	---
	Ant1	5270	36.048	---	---

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	Ant2	5270	36.061	---	---
	Ant1	5310	36.016	---	---
	Ant2	5310	36.054	---	---
	Ant1	5510	36.051	---	---
	Ant2	5510	36.035	---	---
	Ant1	5550	36.018	---	---
	Ant2	5550	36.146	---	---
	Ant1	5670	36.027	---	---
	Ant2	5670	36.024	---	---
	Ant1	5755	36.041	---	---
	Ant2	5755	36.027	---	---
	Ant1	5795	36.059	---	---
	Ant2	5795	36.029	---	---
11AC80MIMO	Ant1	5210	76.515	---	---
	Ant2	5210	76.275	---	---
	Ant1	5290	76.329	---	---
	Ant2	5290	75.845	---	---
	Ant1	5530	76.285	---	---
	Ant2	5530	76.354	---	---
	Ant1	5610	76.208	---	---
	Ant2	5610	76.393	---	---
	Ant1	5775	76.290	---	---
	Ant2	5775	76.159	---	---
11AX20MIMO	Ant1	5180	18.897	---	---
	Ant2	5180	19.041	---	---
	Ant1	5200	19.025	---	---
	Ant2	5200	18.905	---	---
	Ant1	5240	18.902	---	---
	Ant2	5240	18.911	---	---
	Ant1	5260	18.916	---	---
	Ant2	5260	18.910	---	---
	Ant1	5280	18.896	---	---
	Ant2	5280	18.936	---	---
	Ant1	5320	18.906	---	---
	Ant2	5320	18.937	---	---
	Ant1	5500	18.907	---	---
	Ant2	5500	18.912	---	---
	Ant1	5580	18.953	---	---
	Ant2	5580	18.988	---	---
	Ant1	5700	18.944	---	---
	Ant2	5700	18.933	---	---
	Ant1	5745	18.936	---	---
	Ant2	5745	18.911	---	---
	Ant1	5785	18.892	---	---
	Ant2	5785	18.910	---	---
	Ant1	5825	18.893	---	---
	Ant2	5825	18.980	---	---
11AX40MIMO	Ant1	5190	37.721	---	---
	Ant2	5190	37.632	---	---
	Ant1	5230	37.639	---	---
	Ant2	5230	37.782	---	---
	Ant1	5270	37.640	---	---
	Ant2	5270	37.671	---	---
	Ant1	5310	37.672	---	---
	Ant2	5310	37.641	---	---
	Ant1	5510	37.710	---	---
	Ant2	5510	37.655	---	---
	Ant1	5550	37.903	---	---
	Ant2	5550	37.636	---	---

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	Ant1	5630	37.813	---	---
	Ant2	5630	37.723	---	---
	Ant1	5670	37.721	---	---
	Ant2	5670	37.632	---	---
	Ant1	5755	37.800	---	---
	Ant2	5755	37.667	---	---
	Ant1	5795	37.742	---	---
	Ant2	5795	37.648	---	---
11AX80MIMO	Ant1	5210	77.691	---	---
	Ant2	5210	77.356	---	---
	Ant1	5290	76.881	---	---
	Ant2	5290	77.361	---	---
	Ant1	5530	77.402	---	---
	Ant2	5530	77.293	---	---
	Ant1	5610	77.256	---	---
	Ant2	5610	77.413	---	---
	Ant1	5775	77.203	---	---
	Ant2	5775	77.239	---	---

**26dB Bandwidth**

Test Mode	Antenna	Freq(MHz)	26dB EBW [MHz]	Limit[MHz]	Verdict
11A	Ant1	5180	29.94	---	---
	Ant2	5180	29.94	---	---
	Ant1	5200	18.21	---	---
	Ant2	5200	18.29	---	---
	Ant1	5240	18.35	---	---
	Ant2	5240	18.23	---	---
	Ant1	5260	18.26	---	---
	Ant2	5260	18.16	---	---
	Ant1	5280	18.28	---	---
	Ant2	5280	18.27	---	---
	Ant1	5320	18.21	---	---
	Ant2	5320	18.22	---	---
	Ant1	5500	18.31	---	---
	Ant2	5500	28.77	---	---
	Ant1	5580	18.42	---	---
	Ant2	5580	26.08	---	---
	Ant1	5700	27.36	---	---
	Ant2	5700	18.19	---	---
	Ant1	5745	23.27	---	---
	Ant2	5745	18.39	---	---
	Ant1	5785	18.43	---	---
	Ant2	5785	18.27	---	---
	Ant1	5825	18.24	---	---
	Ant2	5825	18.49	---	---
11AC20MIMO	Ant1	5180	24.50	---	---
	Ant2	5180	19.24	---	---
	Ant1	5200	29.93	---	---
	Ant2	5200	19.32	---	---
	Ant1	5240	28.97	---	---
	Ant2	5240	19.39	---	---
	Ant1	5260	19.39	---	---
	Ant2	5260	19.42	---	---
	Ant1	5280	19.50	---	---
	Ant2	5280	19.27	---	---
	Ant1	5320	19.31	---	---
	Ant2	5320	19.34	---	---
	Ant1	5500	19.26	---	---
	Ant2	5500	29.84	---	---
	Ant1	5580	29.22	---	---
	Ant2	5580	19.30	---	---
	Ant1	5700	28.87	---	---
	Ant2	5700	19.23	---	---
	Ant1	5745	19.42	---	---
	Ant2	5745	19.27	---	---
	Ant1	5785	19.35	---	---
	Ant2	5785	19.41	---	---
	Ant1	5825	19.33	---	---
	Ant2	5825	19.30	---	---
11AC40MIMO	Ant1	5190	38.98	---	---
	Ant2	5190	45.39	---	---
	Ant1	5230	46.95	---	---
	Ant2	5230	39.02	---	---
	Ant1	5270	39.01	---	---
	Ant2	5270	39.08	---	---
	Ant1	5310	38.94	---	---

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	Ant2	5310	39.03	---	---
	Ant1	5510	38.93	---	---
	Ant2	5510	38.97	---	---
	Ant1	5550	38.88	---	---
	Ant2	5550	49.31	---	---
	Ant1	5670	38.99	---	---
	Ant2	5670	39.05	---	---
	Ant1	5755	39.06	---	---
	Ant2	5755	39.00	---	---
	Ant1	5795	39.04	---	---
11AC80MIMO	Ant2	5795	39.04	---	---
	Ant1	5210	88.48	---	---
	Ant2	5210	88.18	---	---
	Ant1	5290	88.37	---	---
	Ant2	5290	85.47	---	---
	Ant1	5530	86.92	---	---
	Ant2	5530	88.36	---	---
	Ant1	5610	87.30	---	---
11AX20MIMO	Ant2	5610	87.45	---	---
	Ant1	5775	87.57	---	---
	Ant2	5775	86.22	---	---
	Ant1	5180	20.38	---	---
	Ant2	5180	29.56	---	---
	Ant1	5200	29.72	---	---
	Ant2	5200	20.41	---	---
	Ant1	5240	20.30	---	---
	Ant2	5240	20.03	---	---
	Ant1	5260	20.22	---	---
	Ant2	5260	20.21	---	---
	Ant1	5280	20.34	---	---
	Ant2	5280	20.47	---	---
	Ant1	5320	20.08	---	---
	Ant2	5320	20.26	---	---
	Ant1	5500	20.39	---	---
	Ant2	5500	20.40	---	---
	Ant1	5580	21.32	---	---
	Ant2	5580	28.44	---	---
	Ant1	5700	21.93	---	---
	Ant2	5700	20.28	---	---
	Ant1	5745	20.26	---	---
	Ant2	5745	20.12	---	---
11AX40MIMO	Ant1	5785	20.19	---	---
	Ant2	5785	20.20	---	---
	Ant1	5825	20.37	---	---
	Ant2	5825	26.10	---	---
	Ant1	5190	51.77	---	---
	Ant2	5190	39.62	---	---
	Ant1	5230	39.58	---	---
	Ant2	5230	44.92	---	---
	Ant1	5270	39.70	---	---
	Ant2	5270	39.79	---	---
	Ant1	5310	39.76	---	---
	Ant2	5310	39.72	---	---
	Ant1	5510	42.52	---	---
	Ant2	5510	39.57	---	---
	Ant1	5550	57.82	---	---
	Ant2	5550	39.57	---	---
	Ant1	5670	57.58	---	---
	Ant2	5670	52.82	---	---

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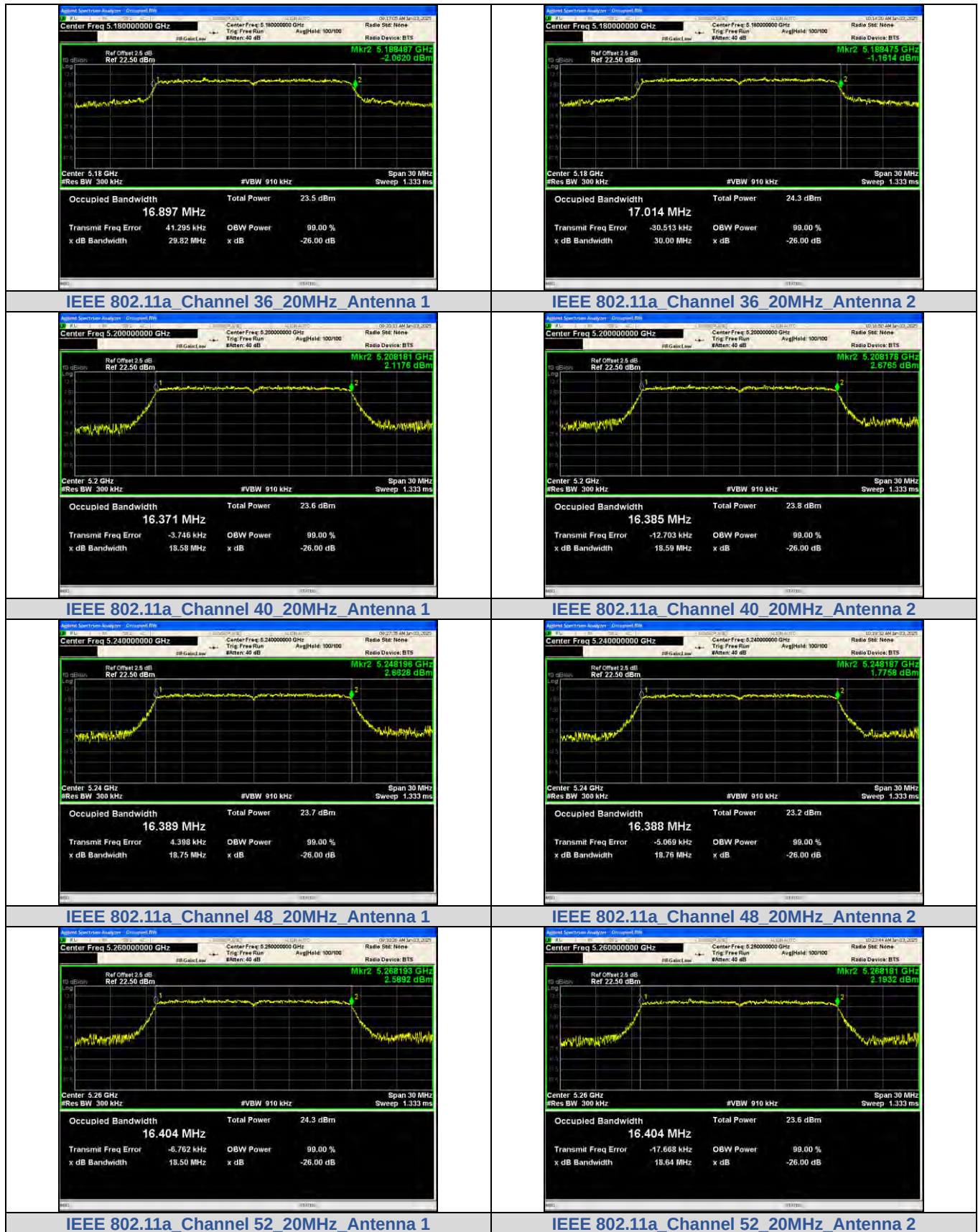
	Ant1	5755	52.38	---	---
	Ant2	5755	39.79	---	---
	Ant1	5795	39.72	---	---
	Ant2	5795	39.70	---	---
11AX80MIMO	Ant1	5210	100.19	---	---
	Ant2	5210	81.14	---	---
	Ant1	5290	80.60	---	---
	Ant2	5290	81.15	---	---
	Ant1	5530	85.62	---	---
	Ant2	5530	81.53	---	---
	Ant1	5610	81.01	---	---
	Ant2	5610	86.91	---	---
	Ant1	5775	80.37	---	---
	Ant2	5775	80.29	---	---

**6dB Bandwidth**

Test Mode	Antenna	Freq(MHz)	6dB EBW [MHz]	Limit[MHz]	Verdict
11A	Ant1	5745	16.04	0.5	PASS
	Ant2	5745	16.30	0.5	PASS
	Ant1	5785	16.28	0.5	PASS
	Ant2	5785	16.32	0.5	PASS
	Ant1	5825	16.26	0.5	PASS
	Ant2	5825	16.29	0.5	PASS
11AC20MIMO	Ant1	5745	17.31	0.5	PASS
	Ant2	5745	17.53	0.5	PASS
	Ant1	5785	17.18	0.5	PASS
	Ant2	5785	17.19	0.5	PASS
	Ant1	5825	17.05	0.5	PASS
	Ant2	5825	17.07	0.5	PASS
11AC40MIMO	Ant1	5755	35.33	0.5	PASS
	Ant2	5755	35.67	0.5	PASS
	Ant1	5795	35.66	0.5	PASS
	Ant2	5795	35.49	0.5	PASS
11AC80MIMO	Ant1	5775	75.95	0.5	PASS
	Ant2	5775	75.69	0.5	PASS
11AX20MIMO	Ant1	5745	17.98	0.5	PASS
	Ant2	5745	18.59	0.5	PASS
	Ant1	5785	18.03	0.5	PASS
	Ant2	5785	18.05	0.5	PASS
	Ant1	5825	18.11	0.5	PASS
	Ant2	5825	18.47	0.5	PASS
11AX40MIMO	Ant1	5755	37.28	0.5	PASS
	Ant2	5755	37.71	0.5	PASS
	Ant1	5795	37.51	0.5	PASS
	Ant2	5795	37.90	0.5	PASS
11AX80MIMO	Ant1	5775	75.02	0.5	PASS
	Ant2	5775	77.28	0.5	PASS



99% Bandwidth:



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