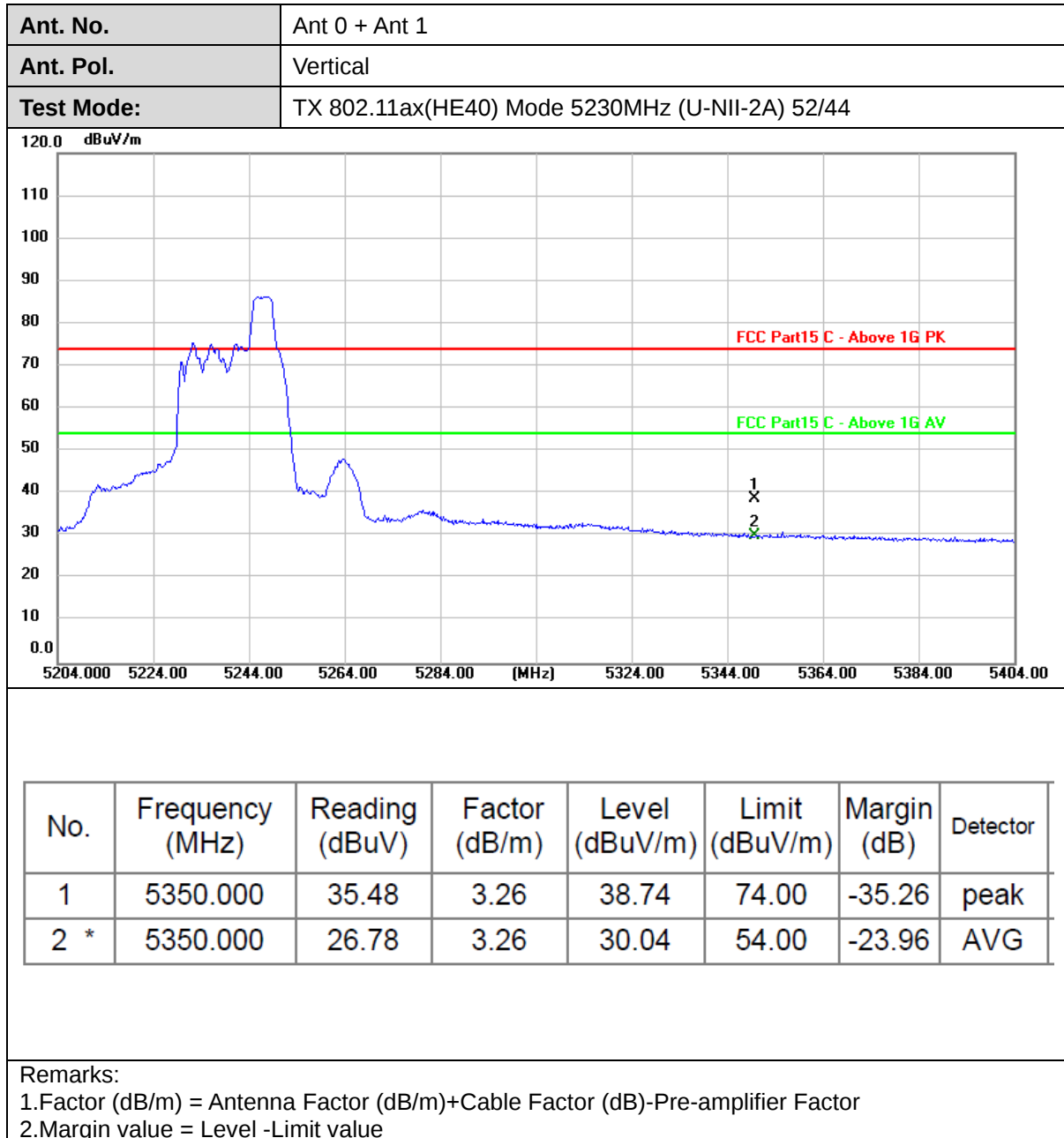
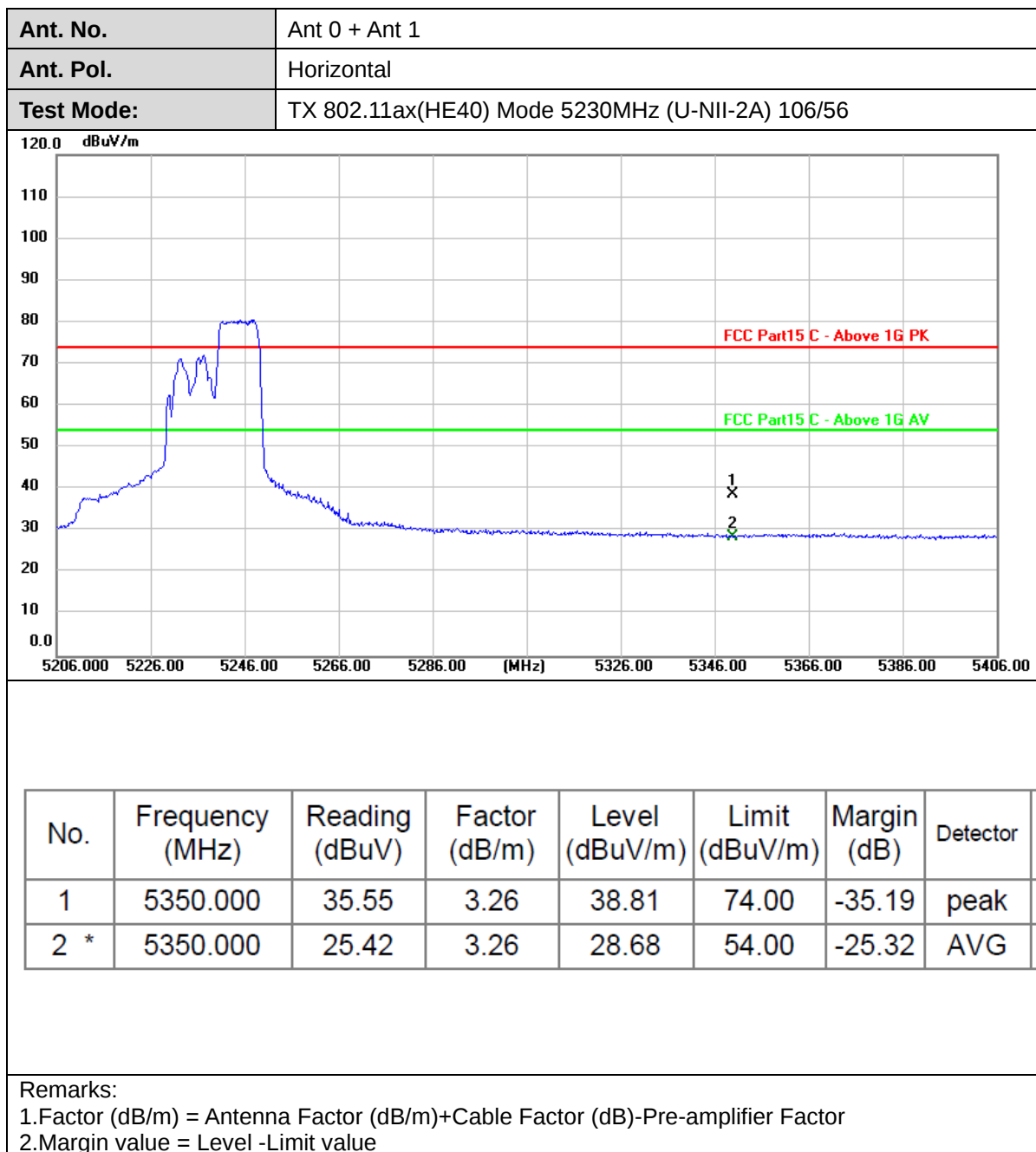
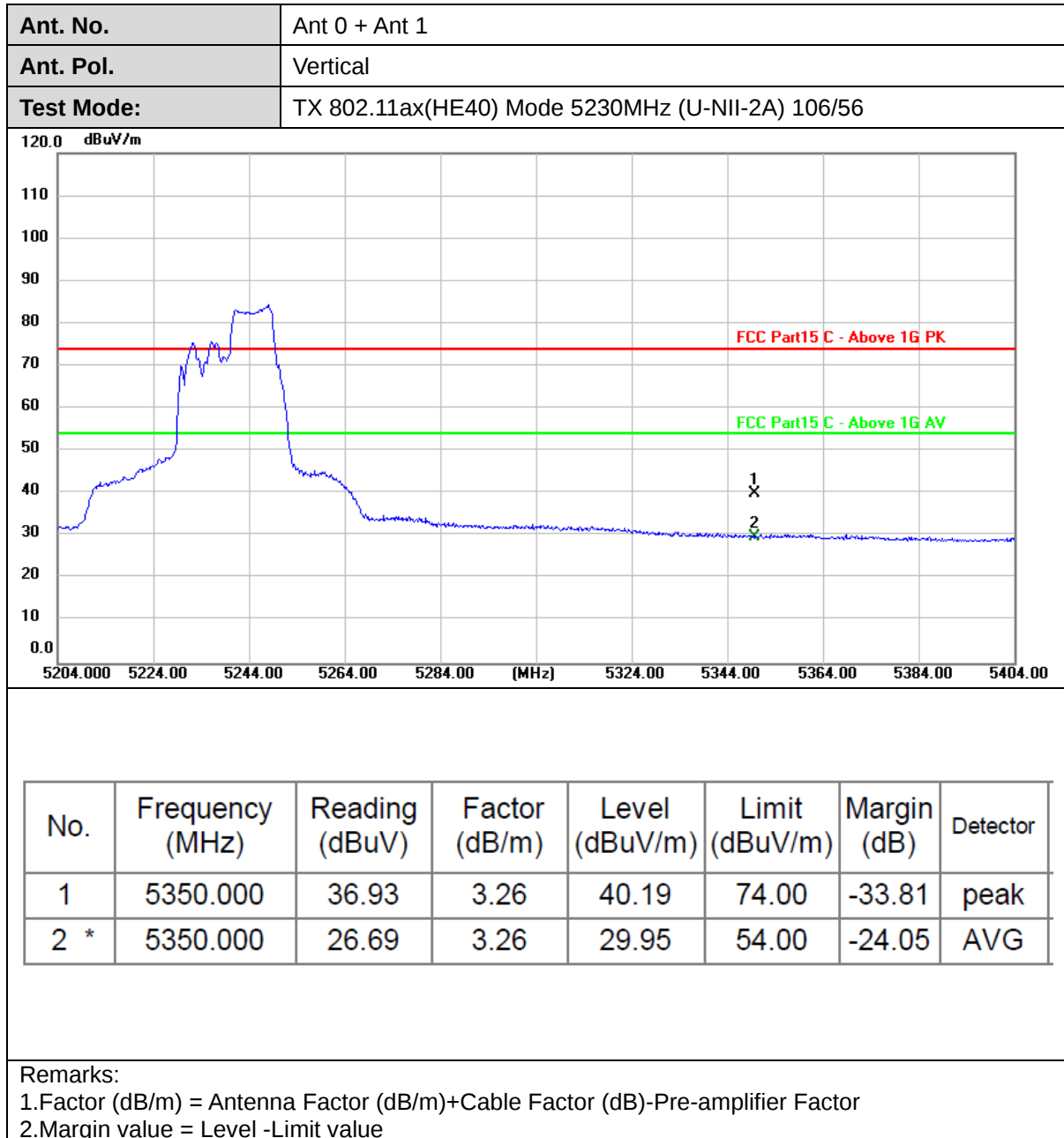
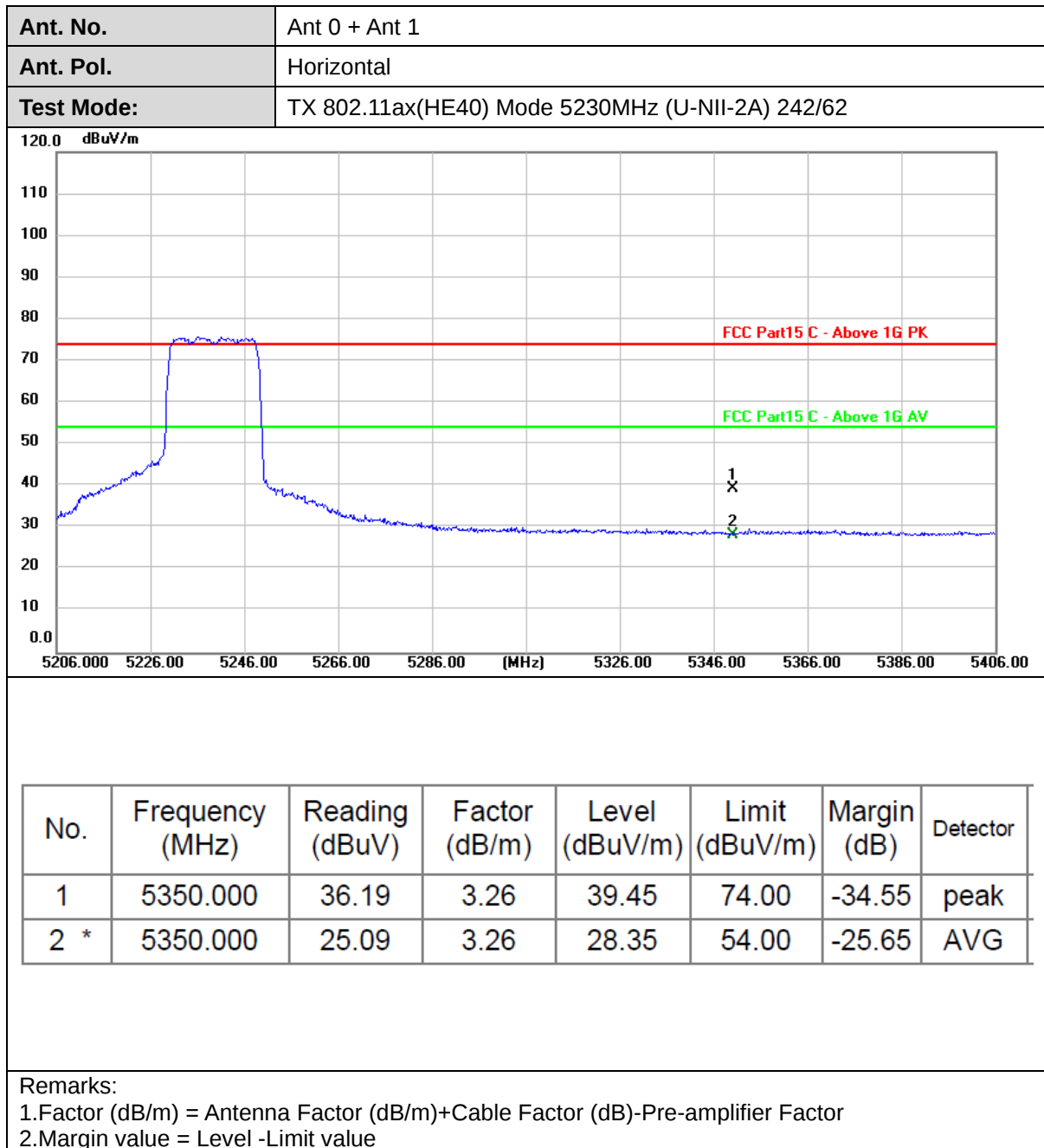
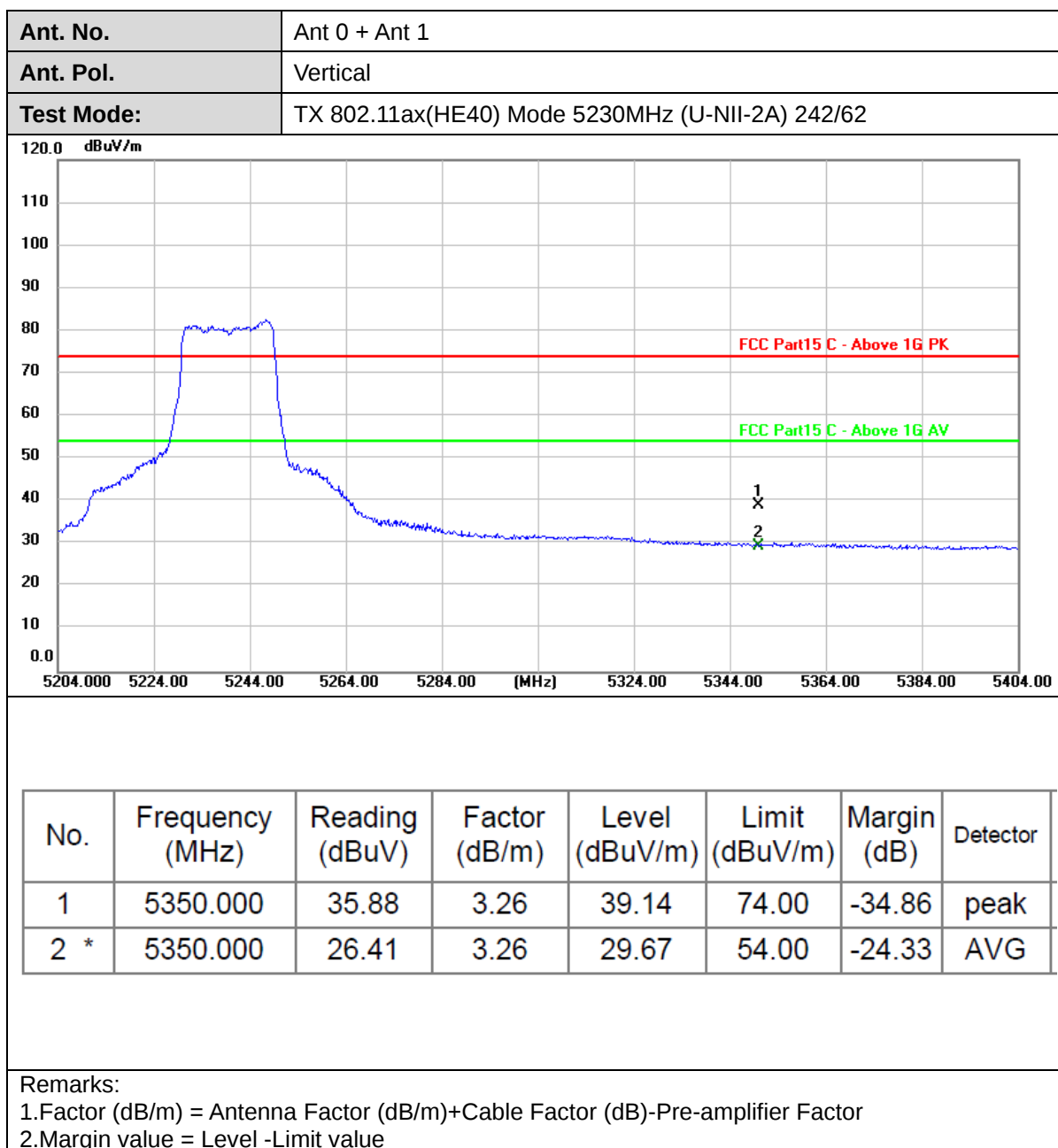


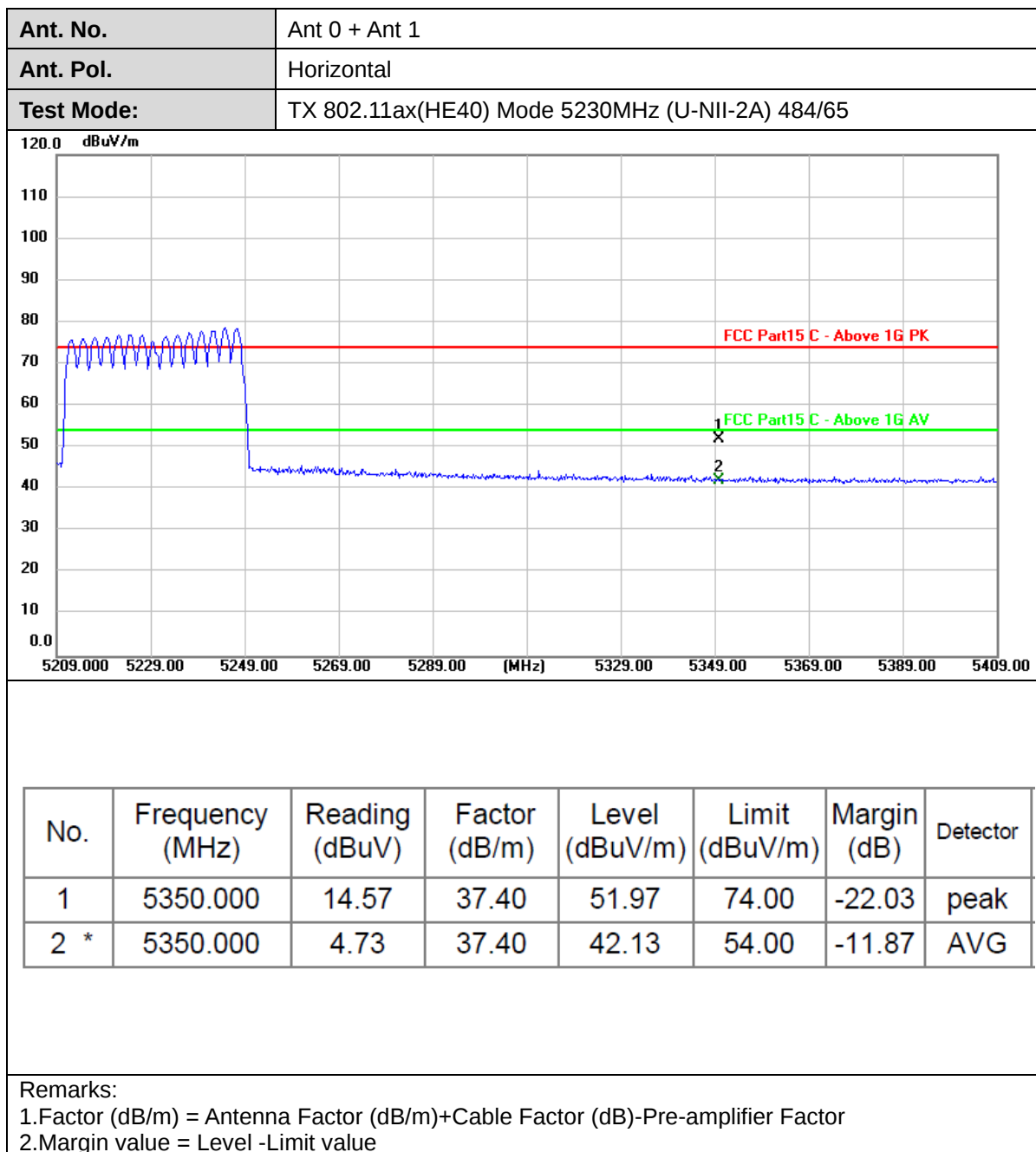


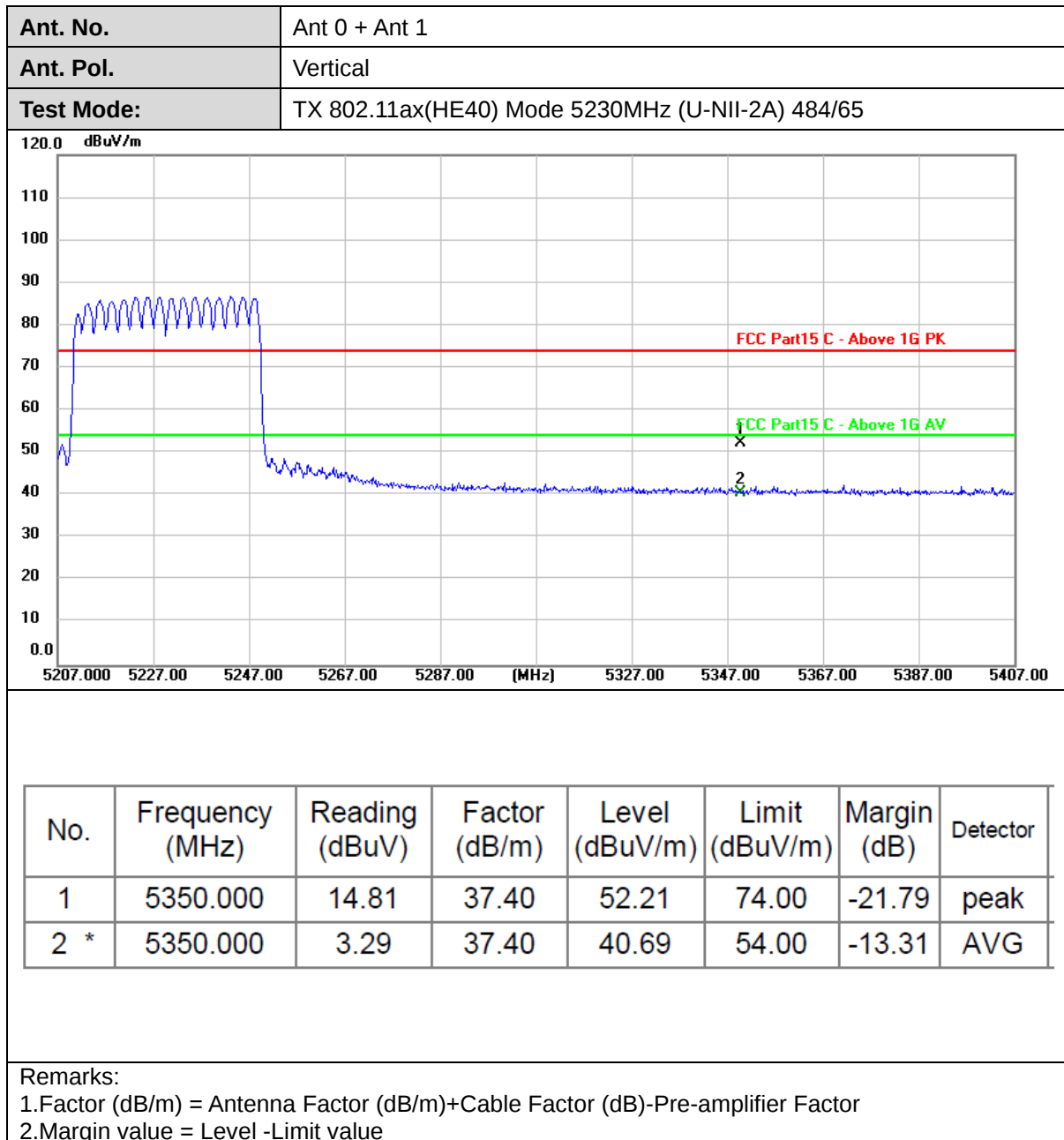


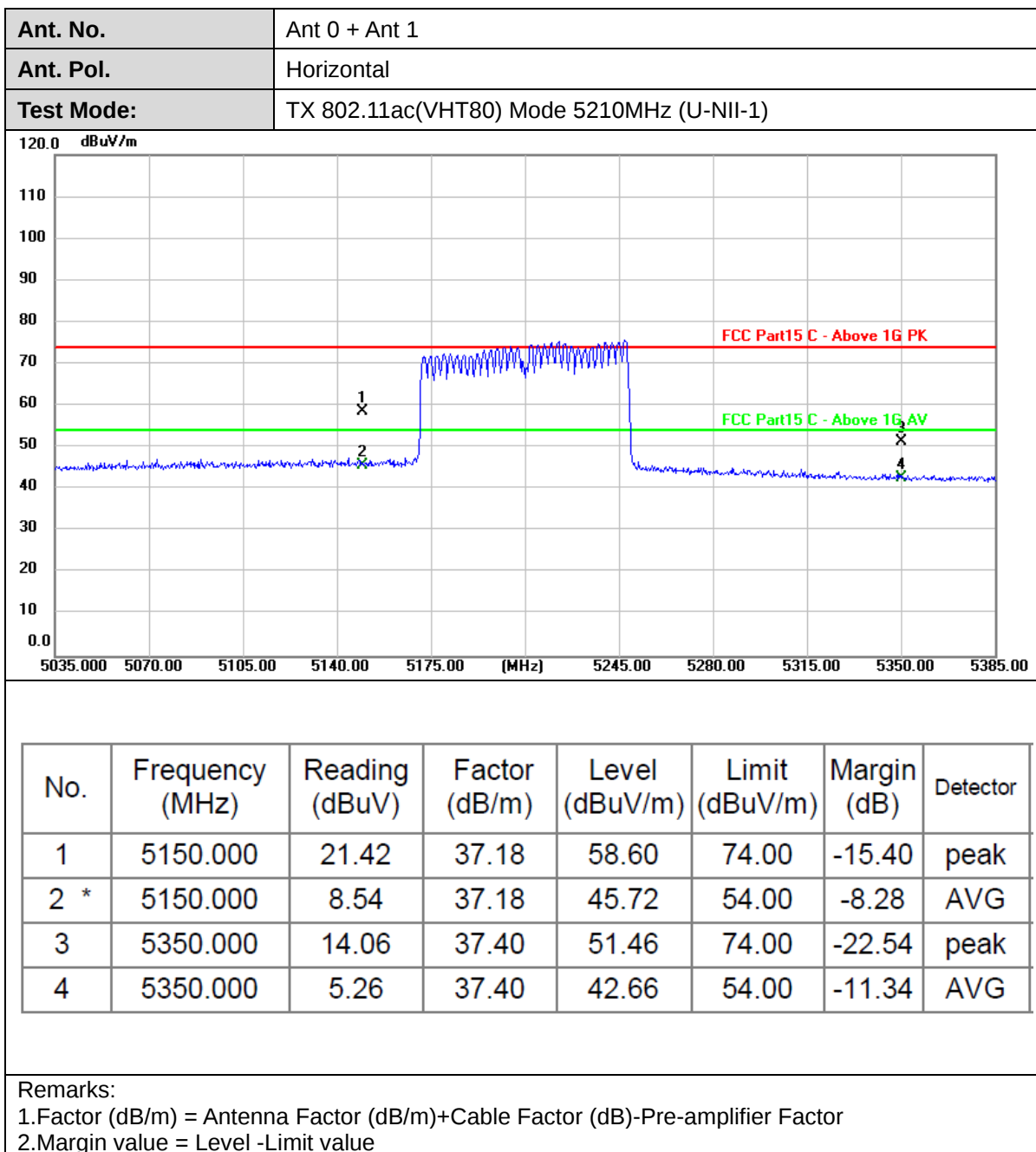


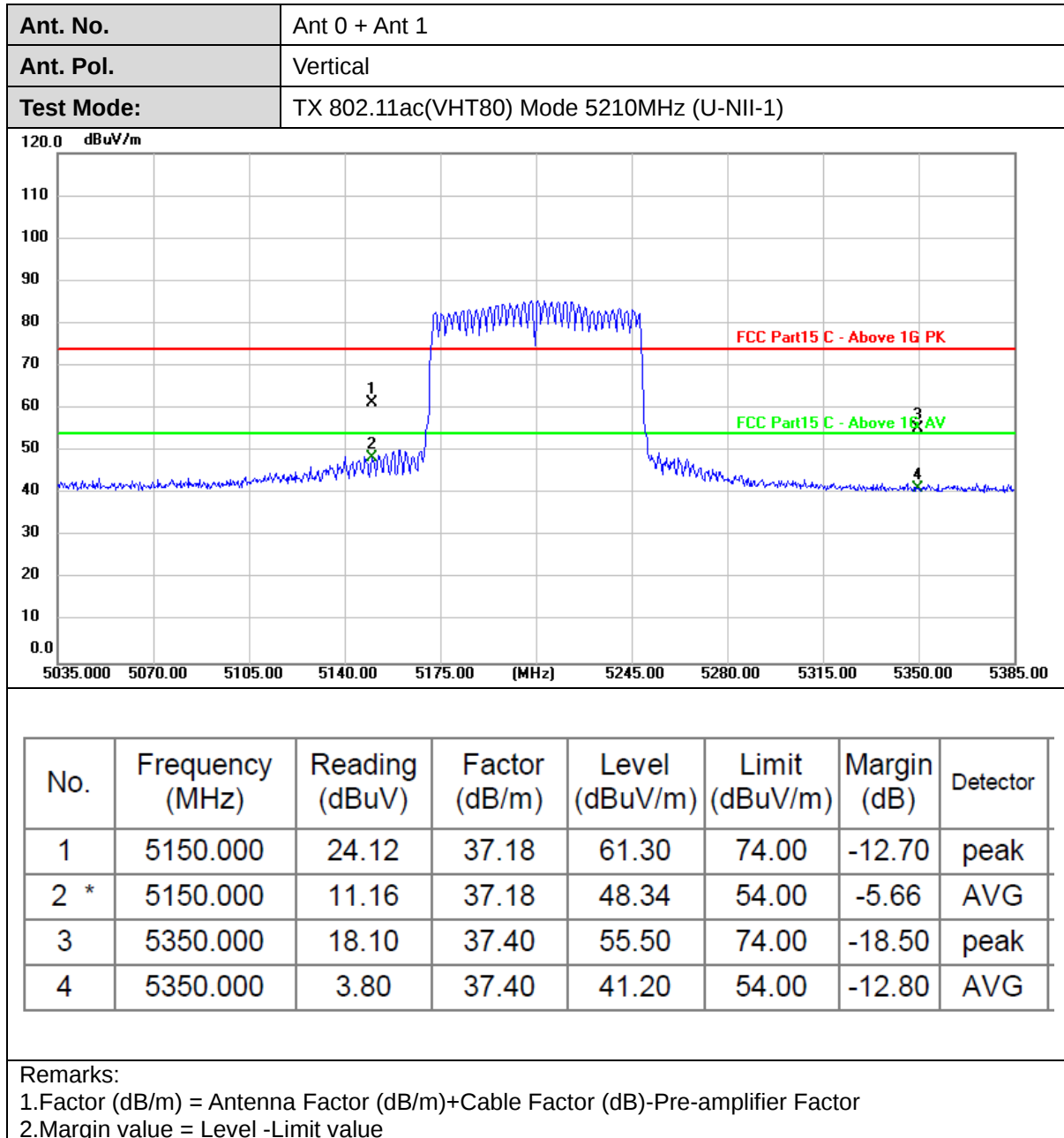


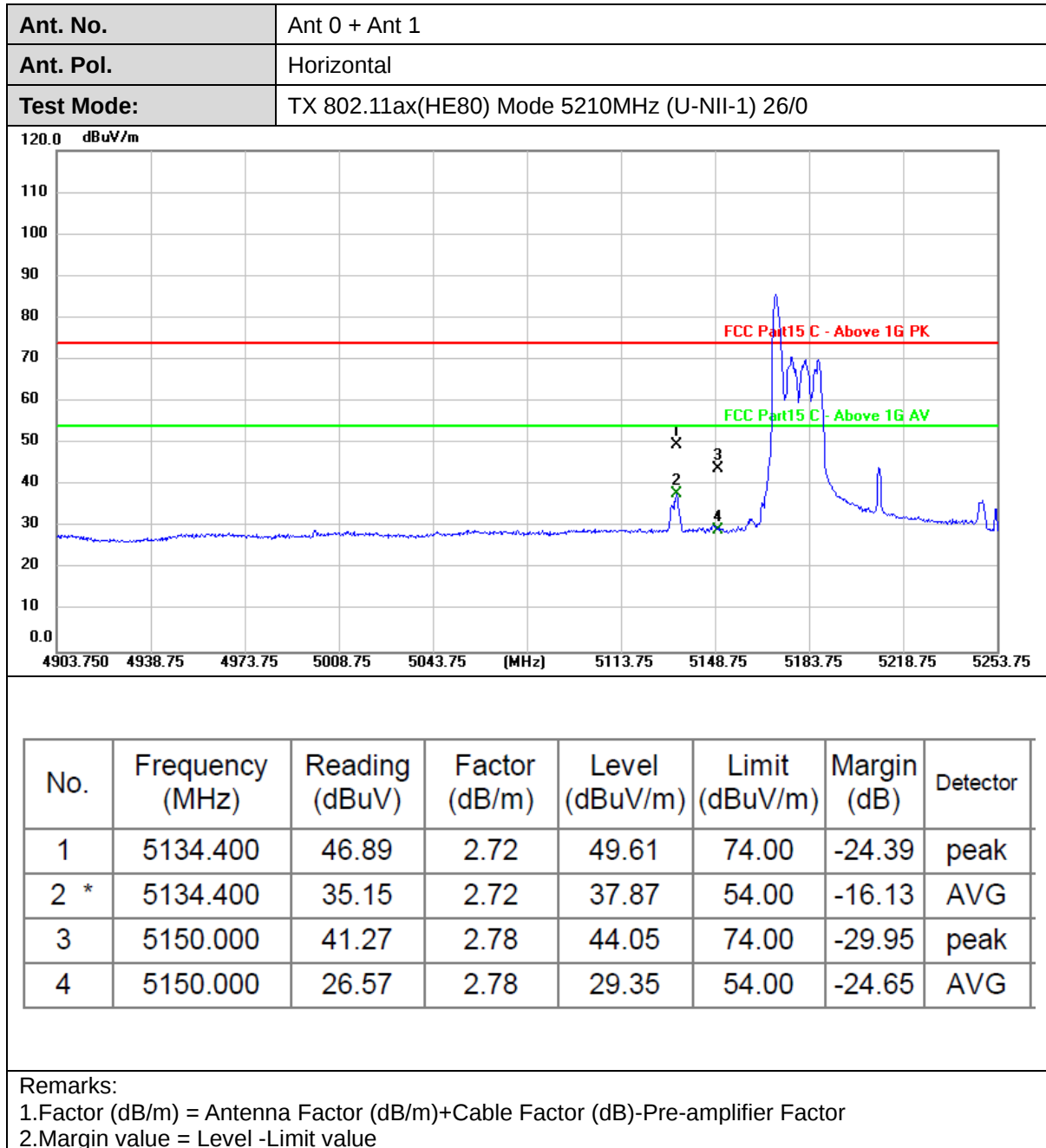


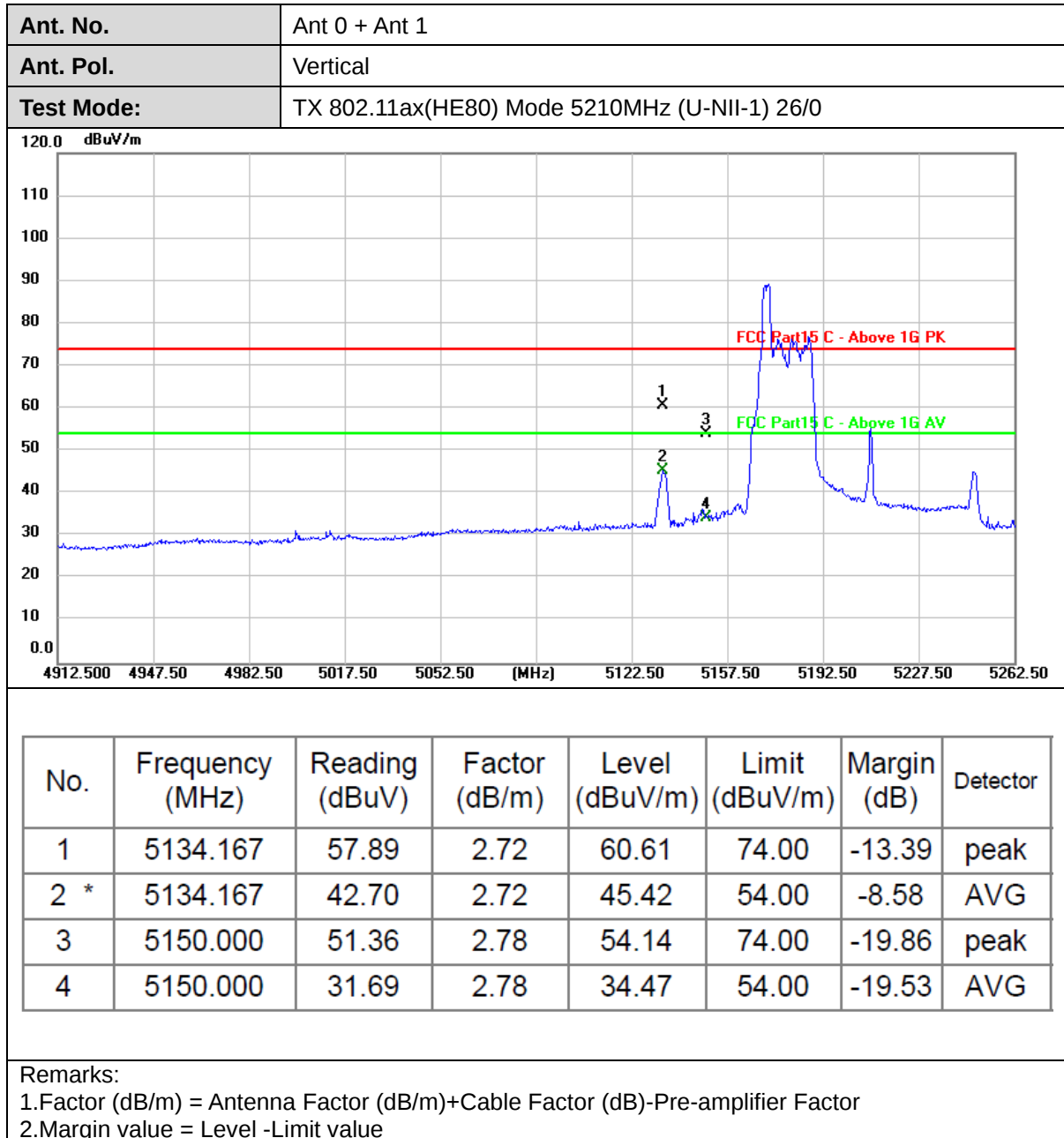


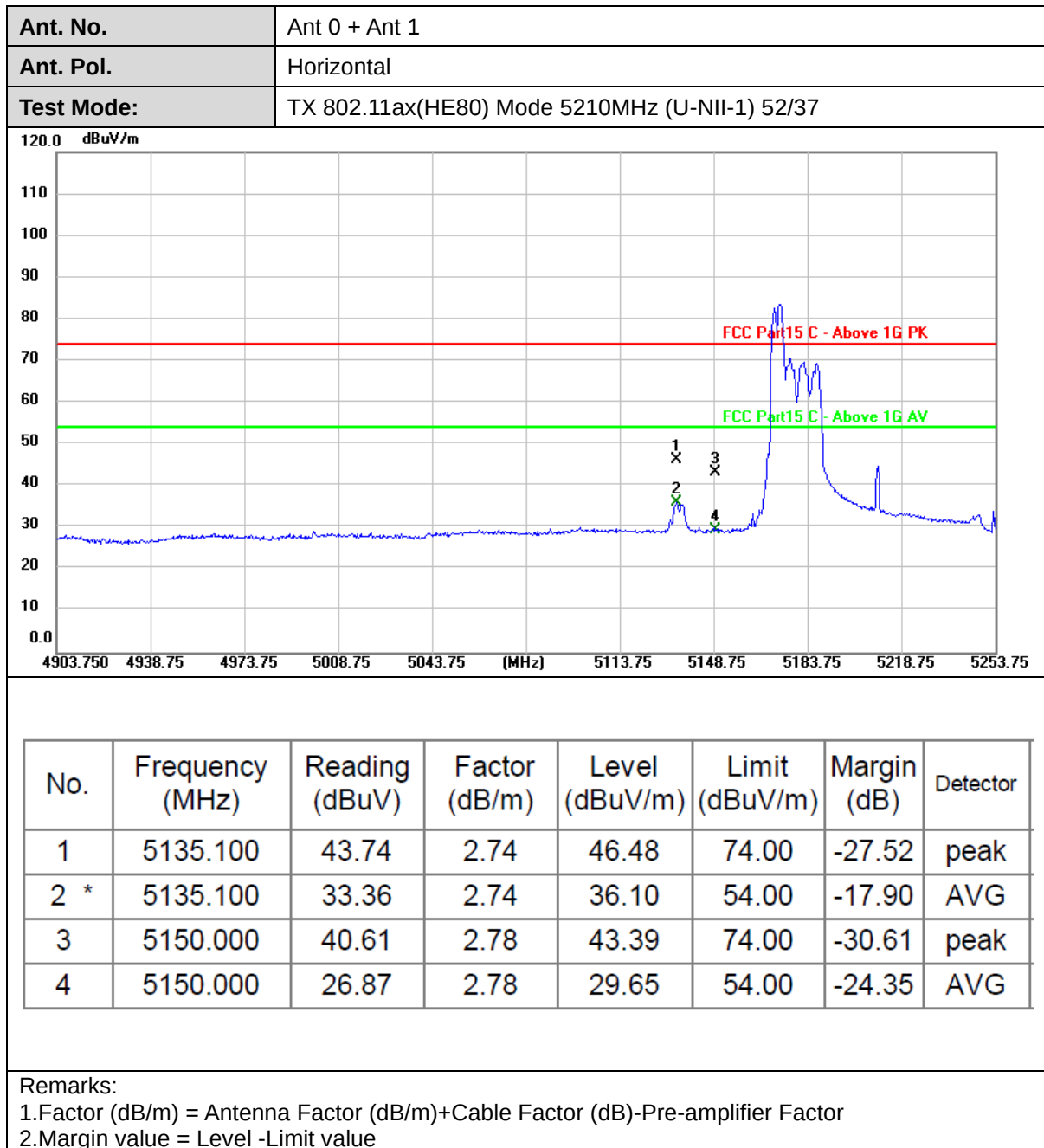


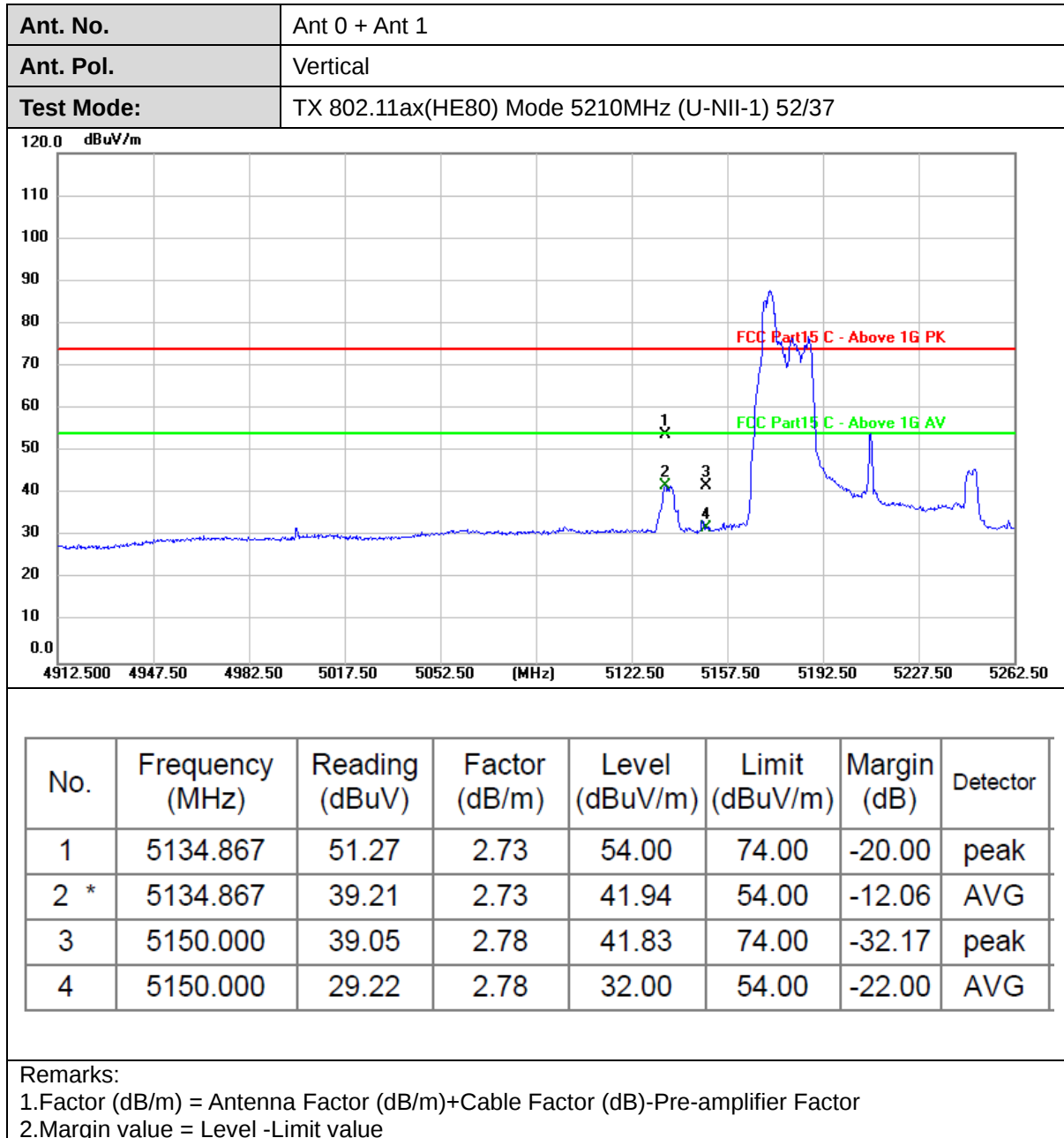


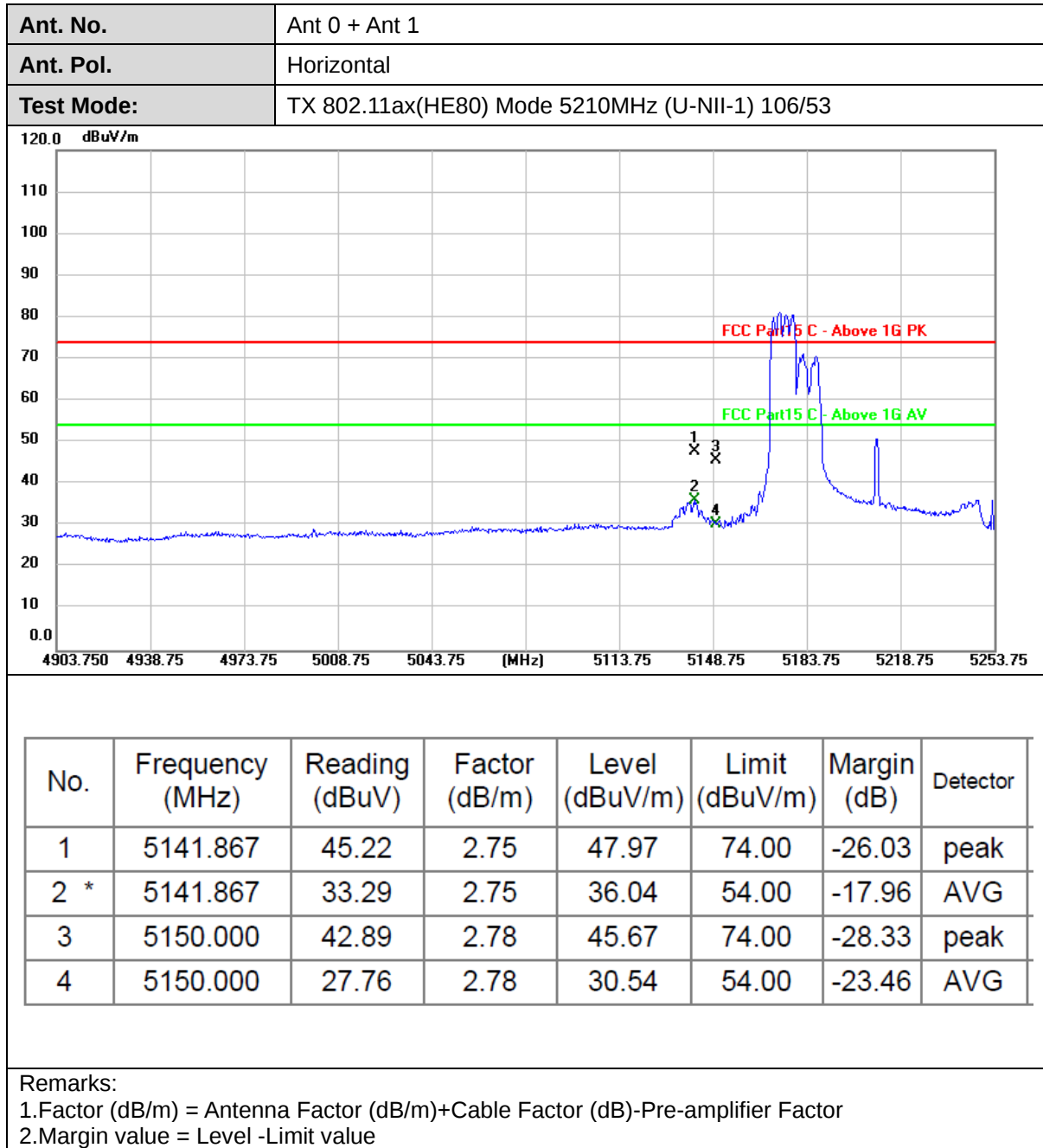


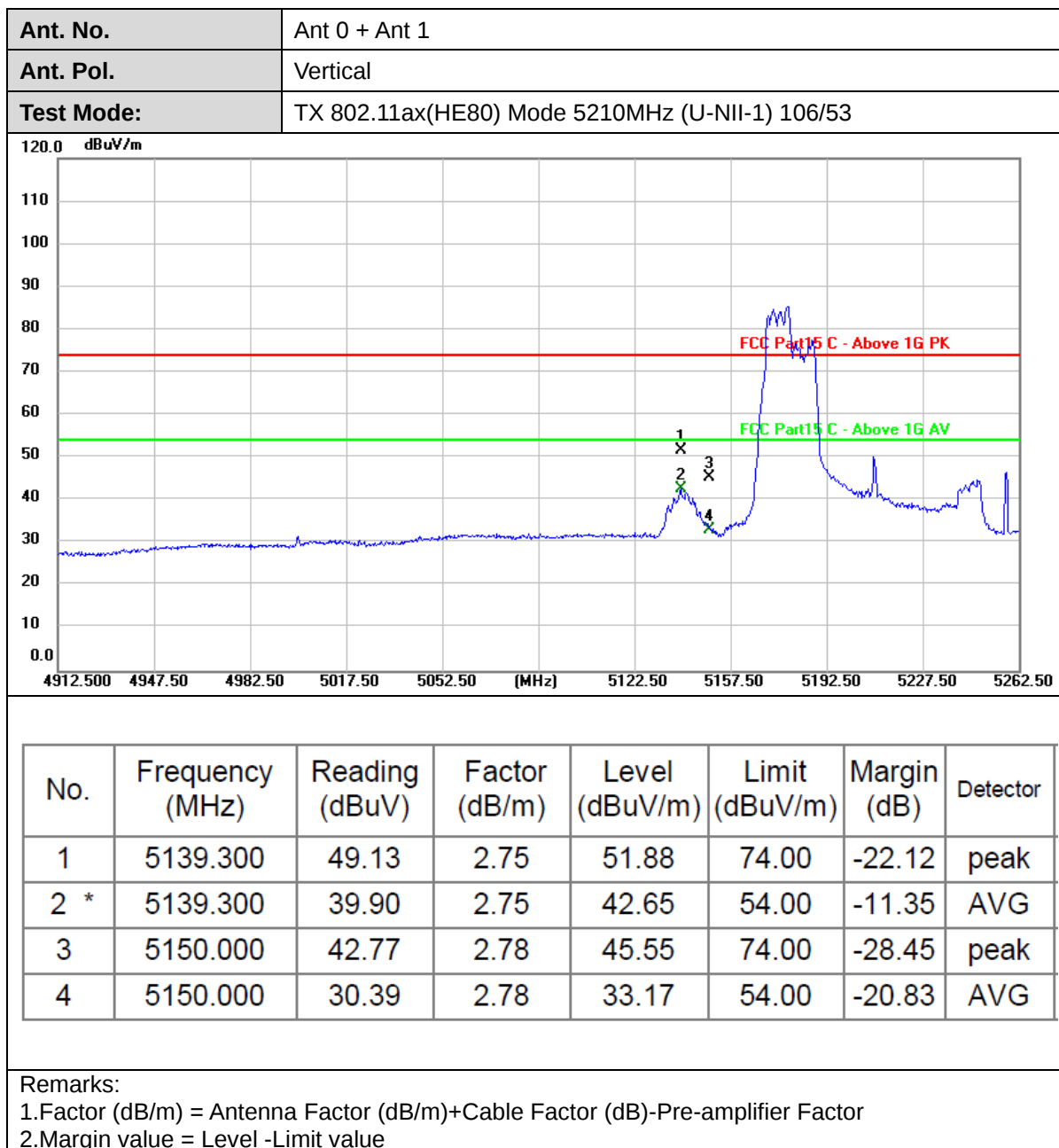


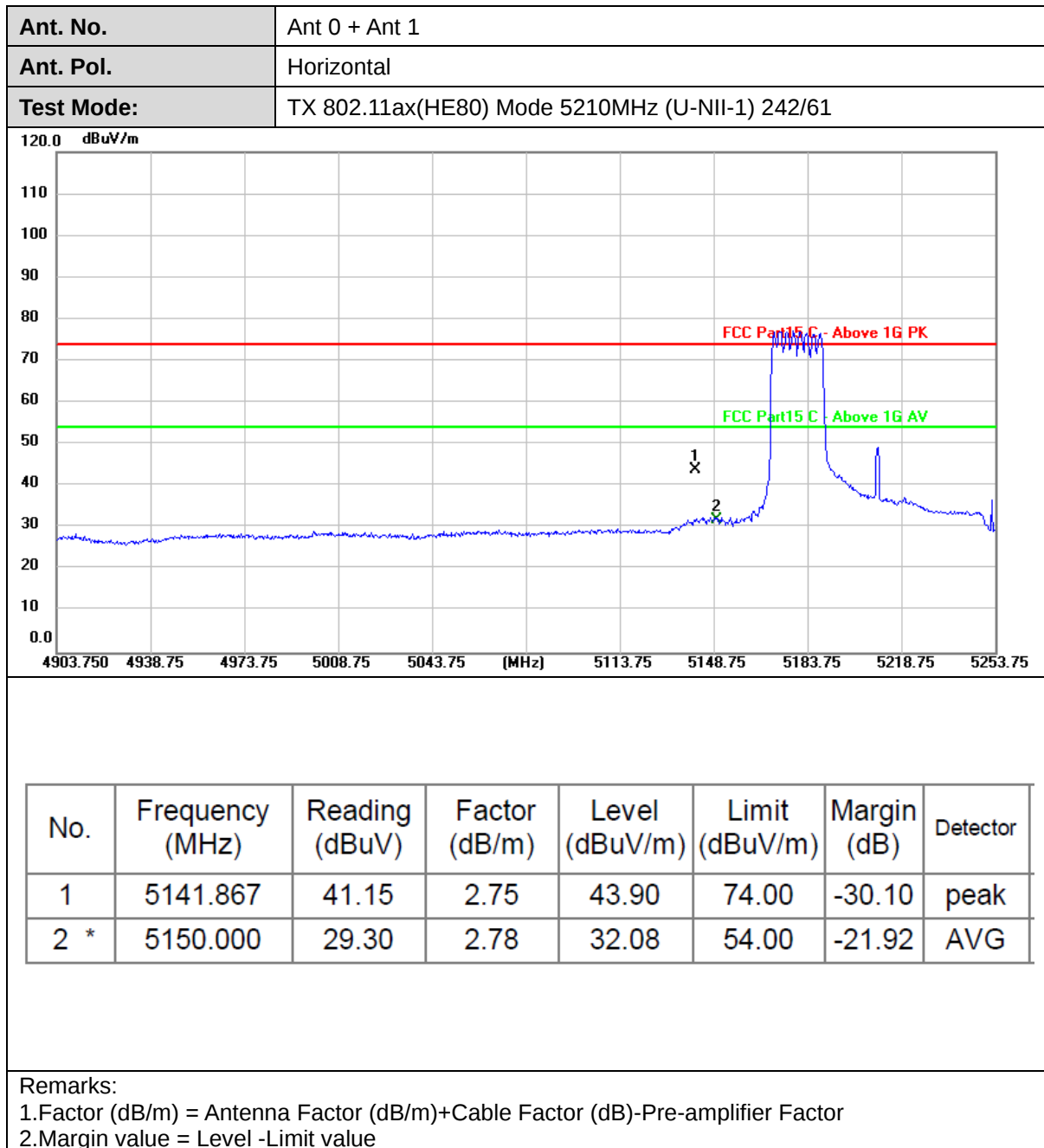


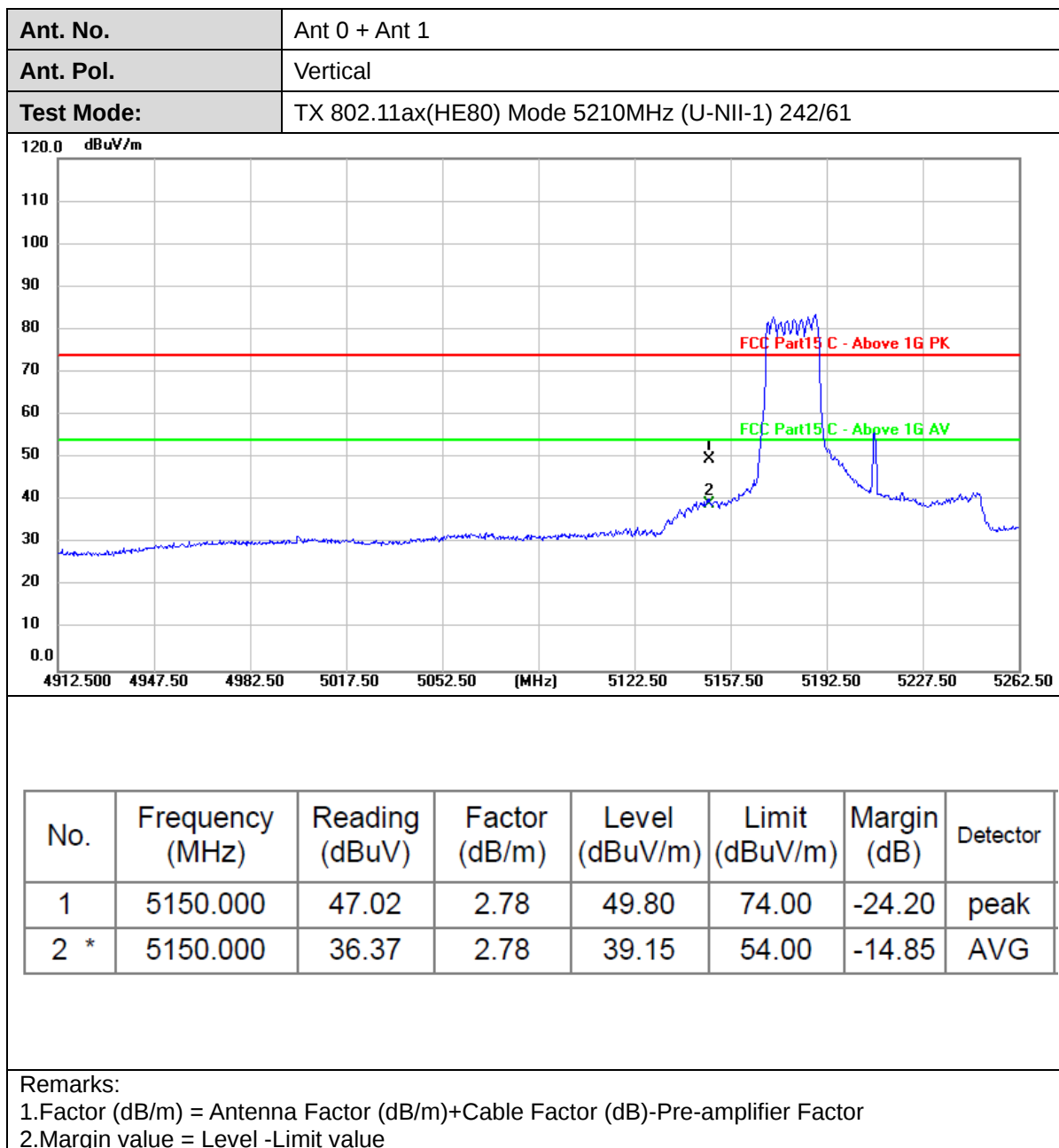


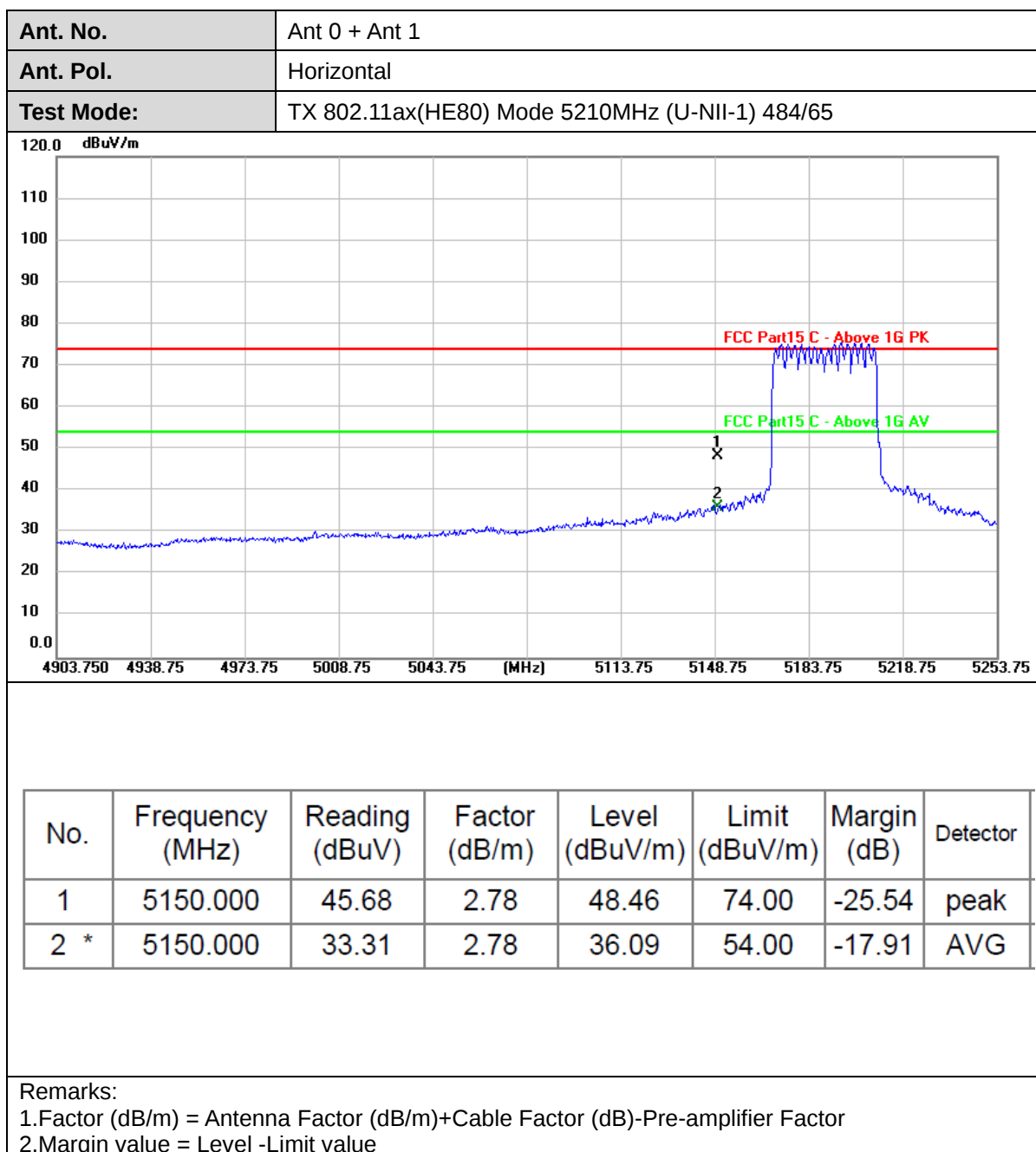


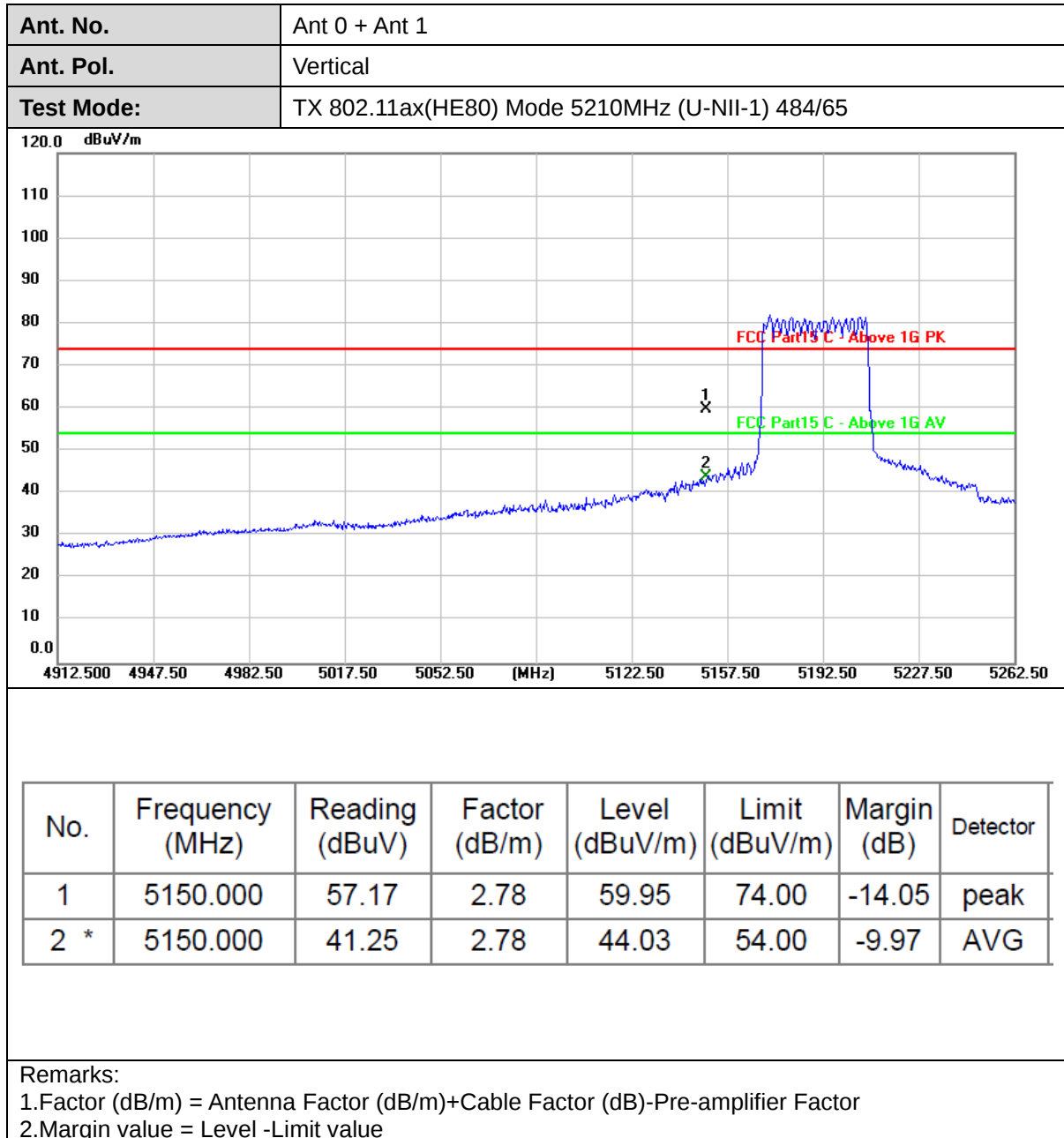


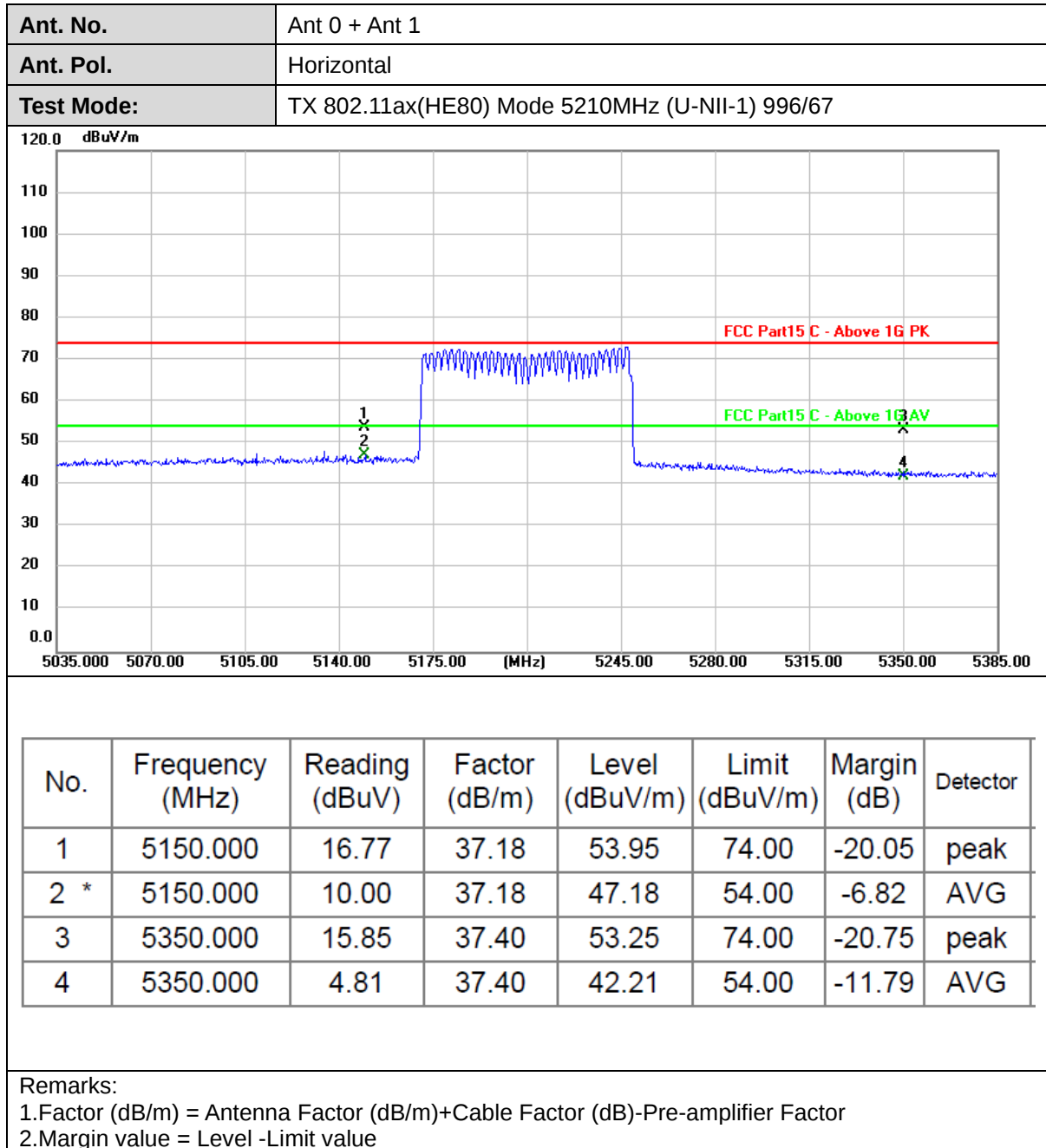


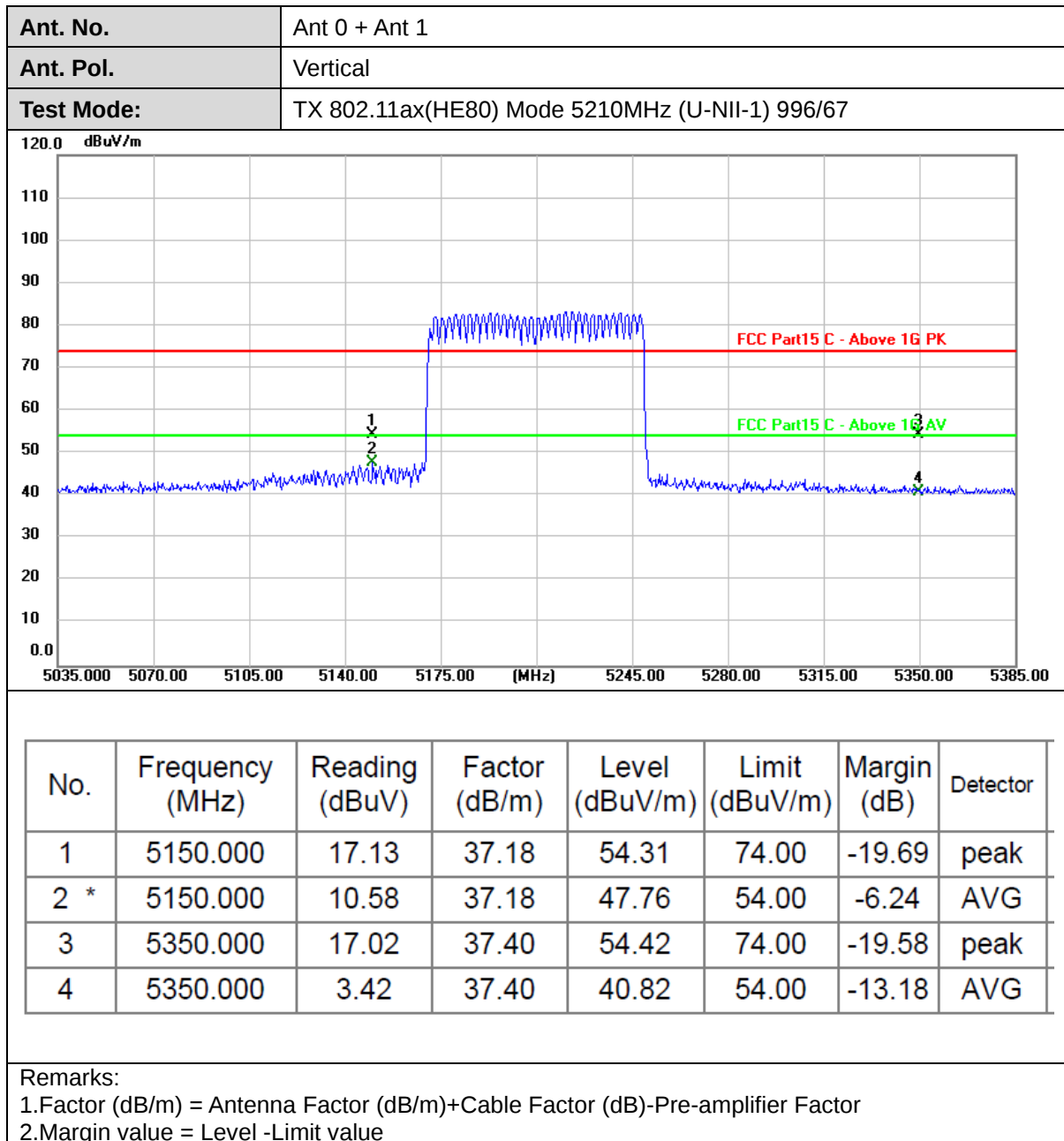


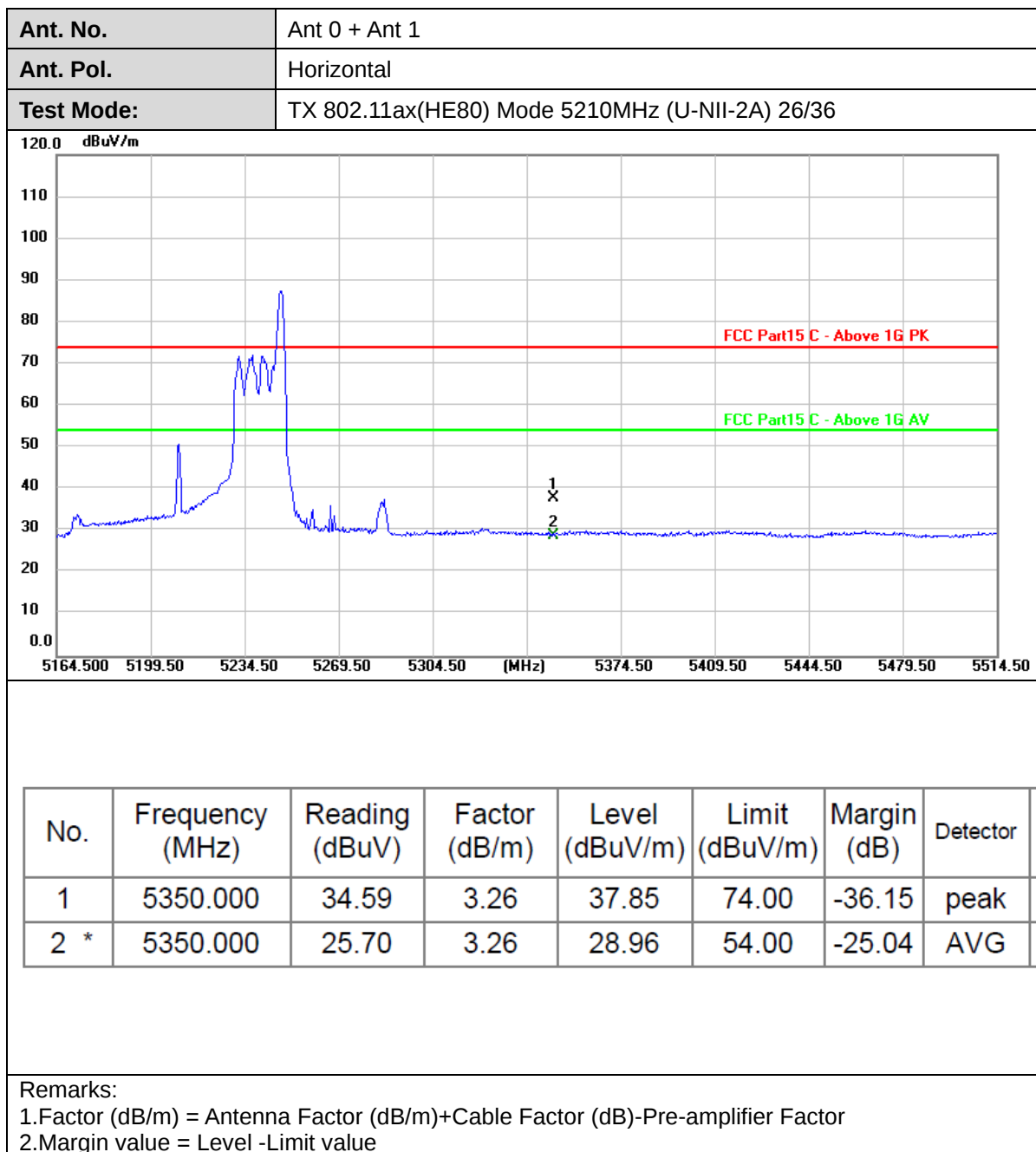


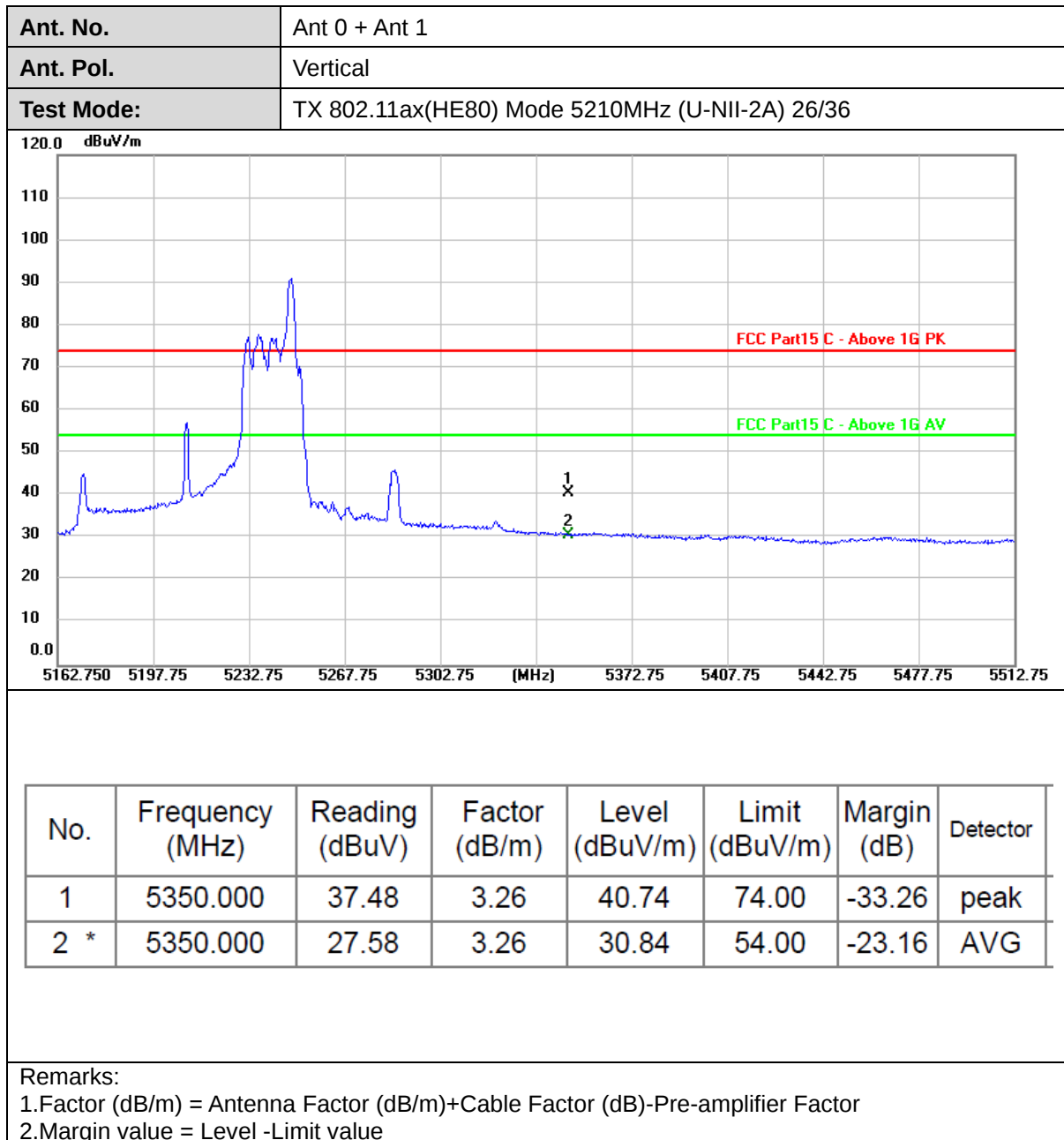


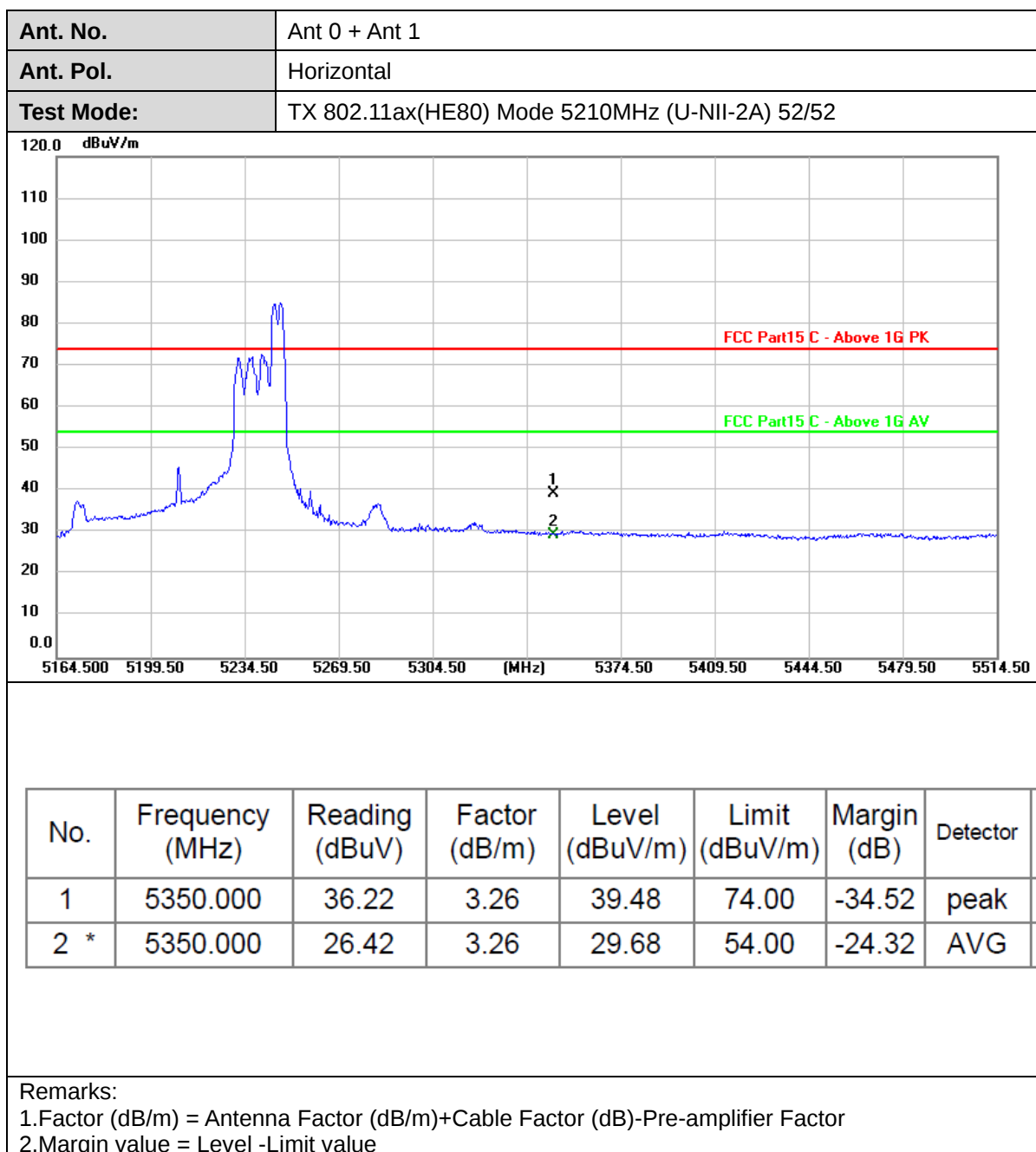


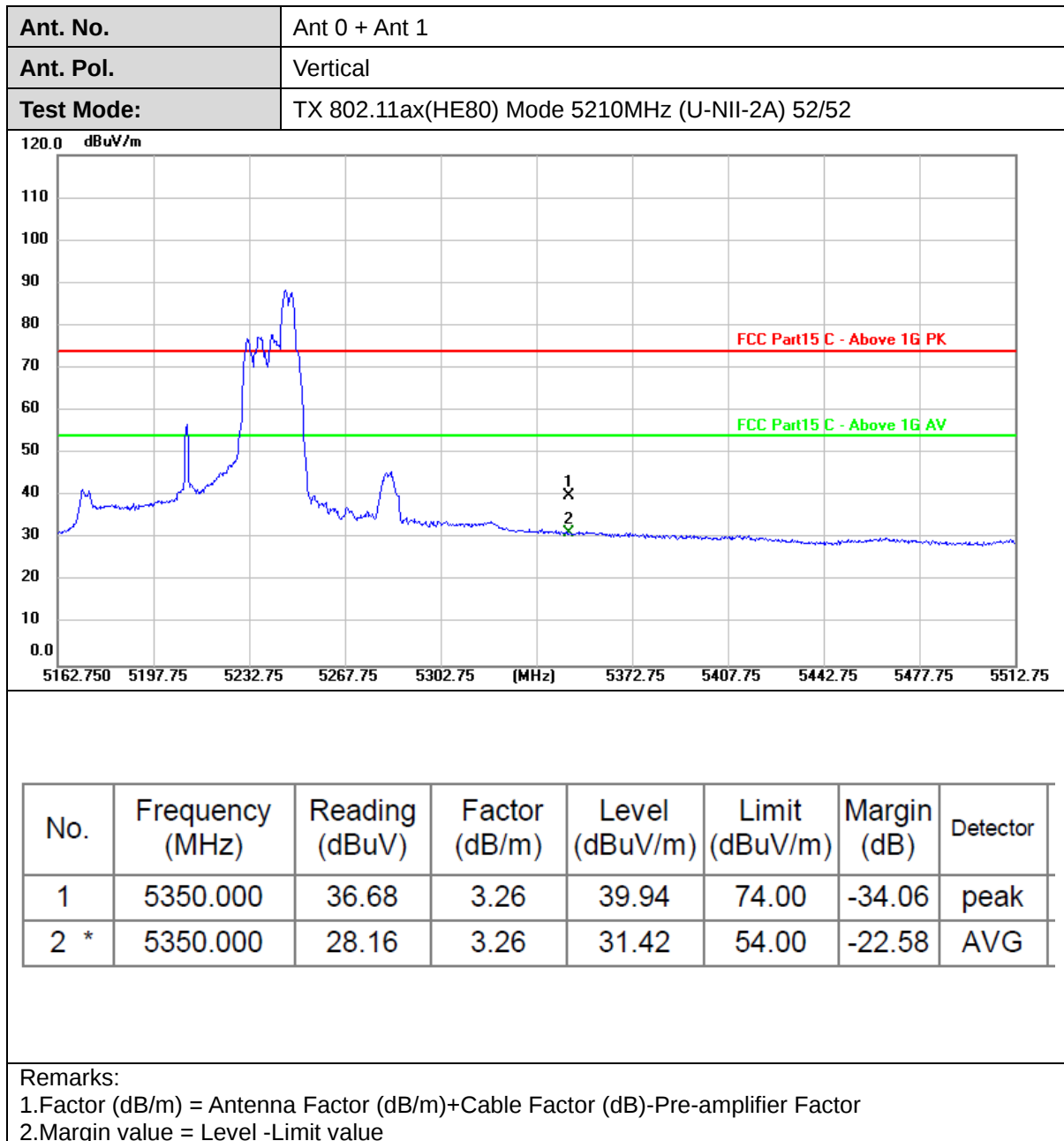


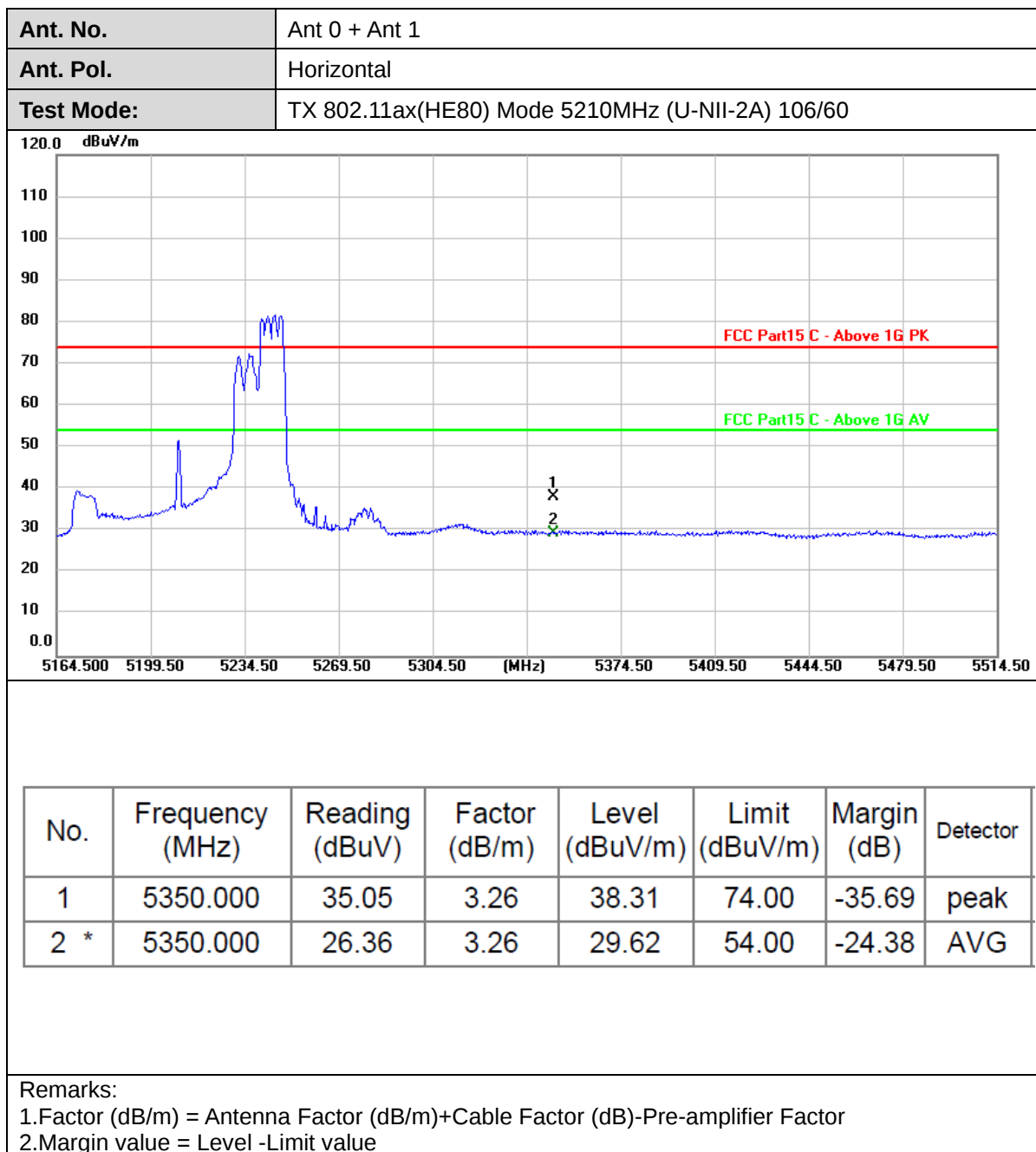


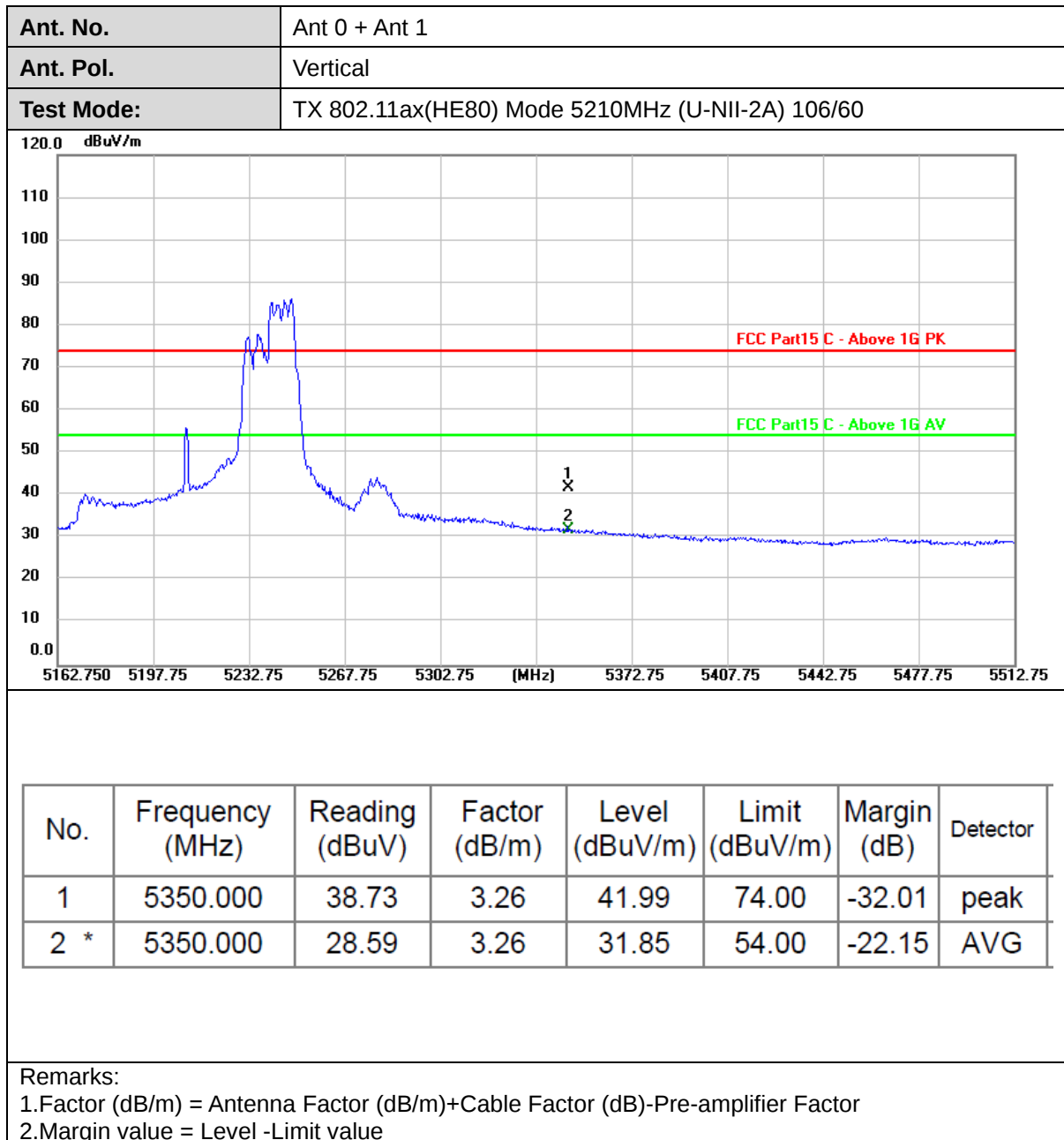


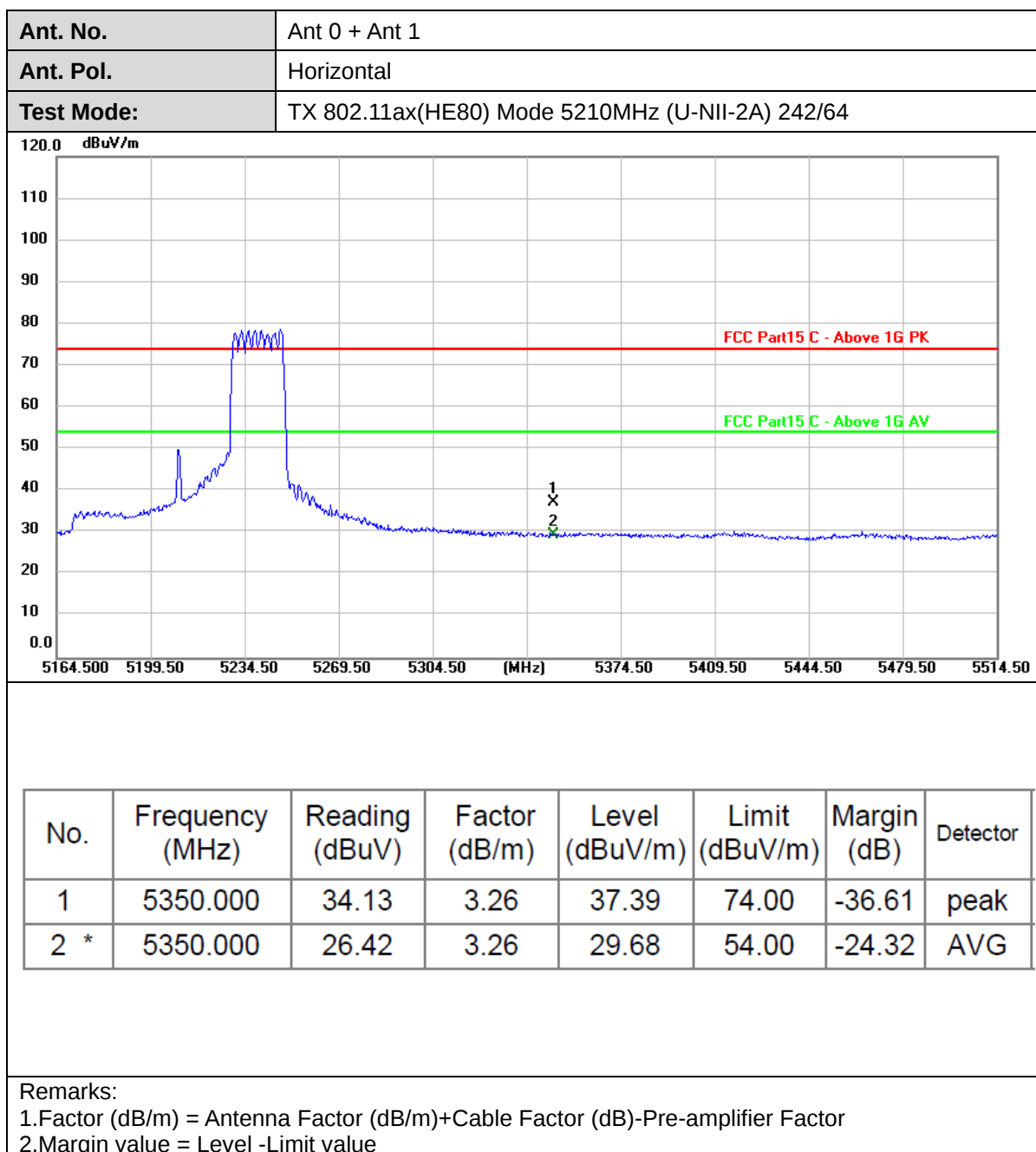


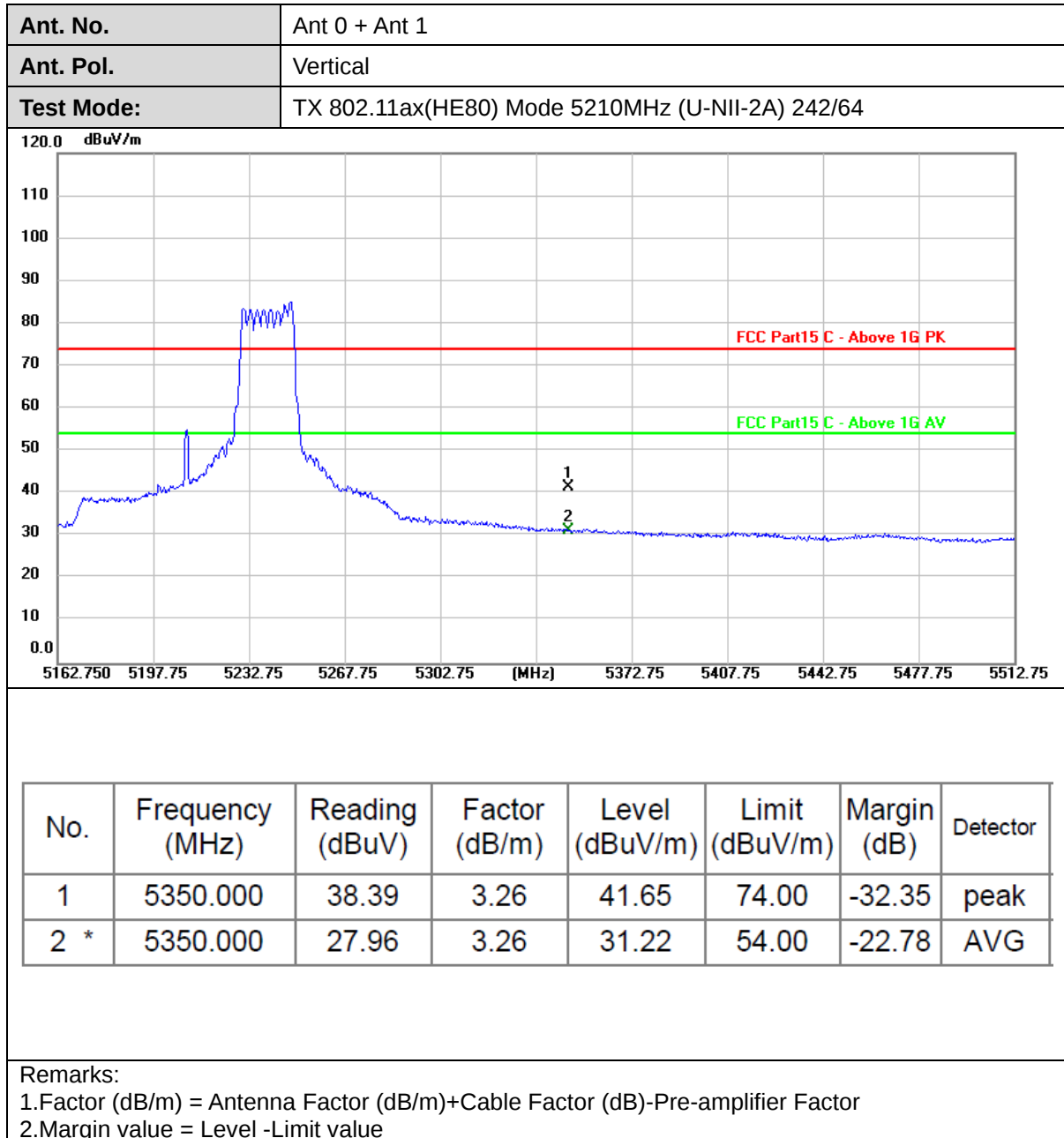


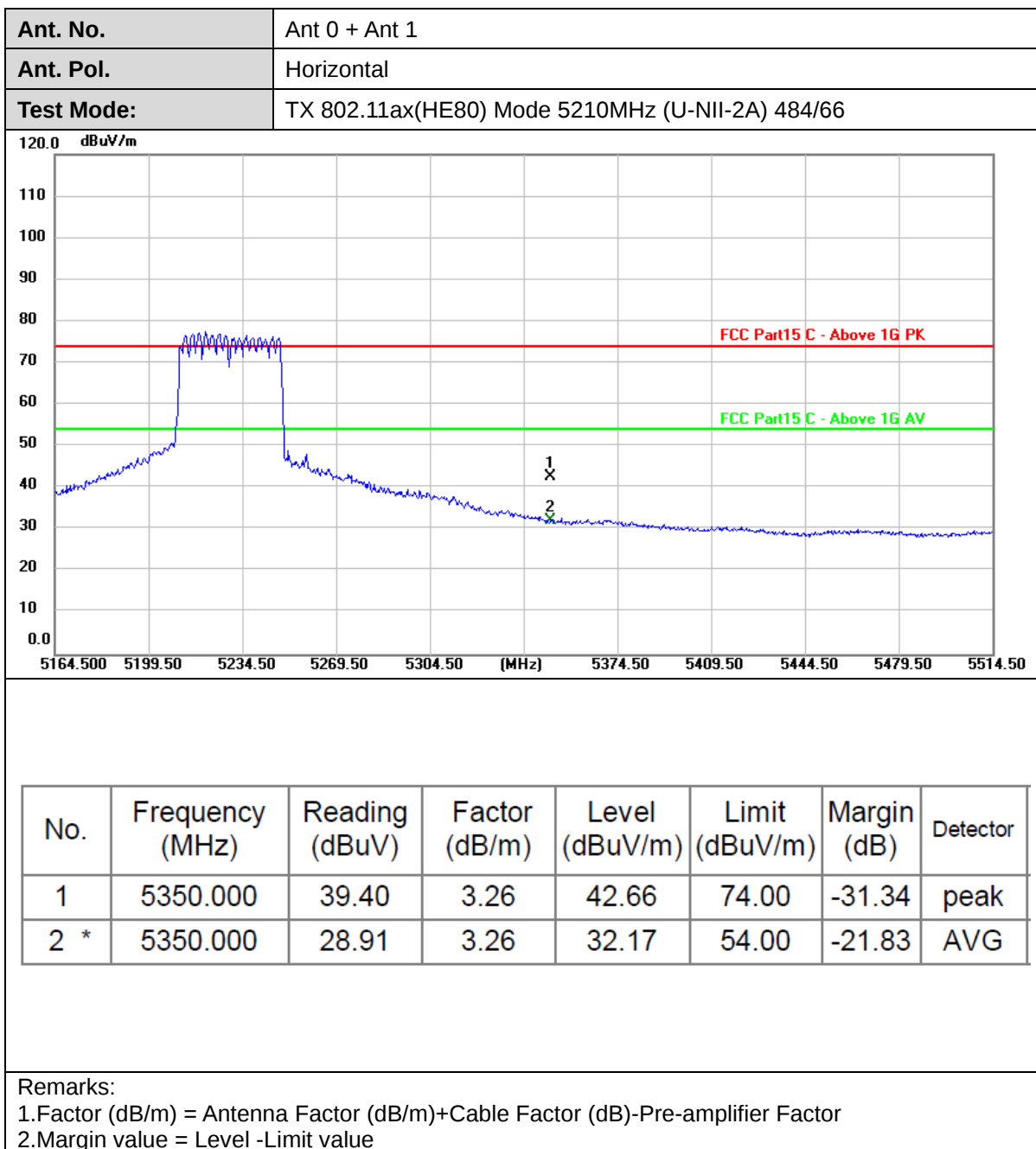


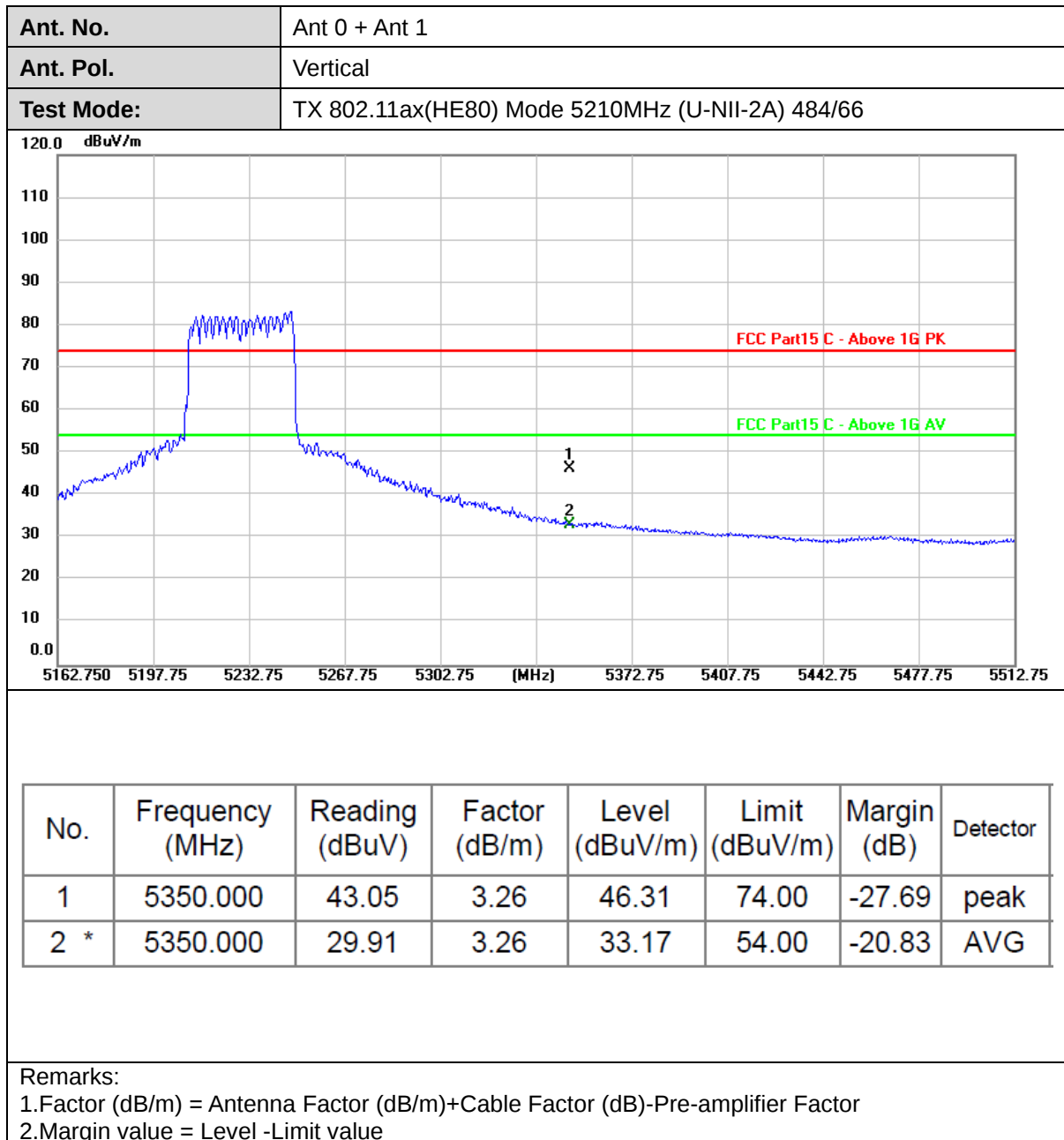


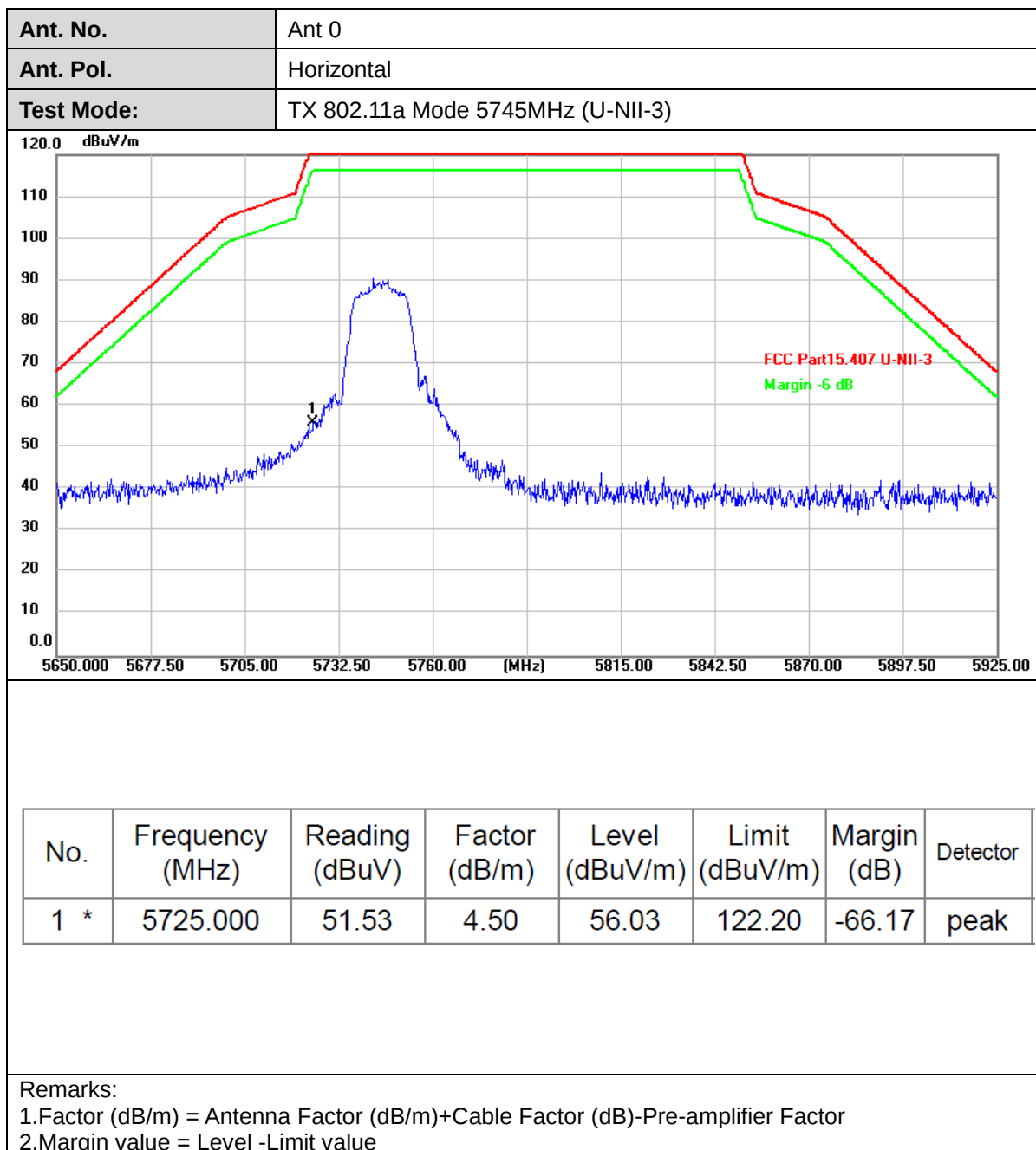






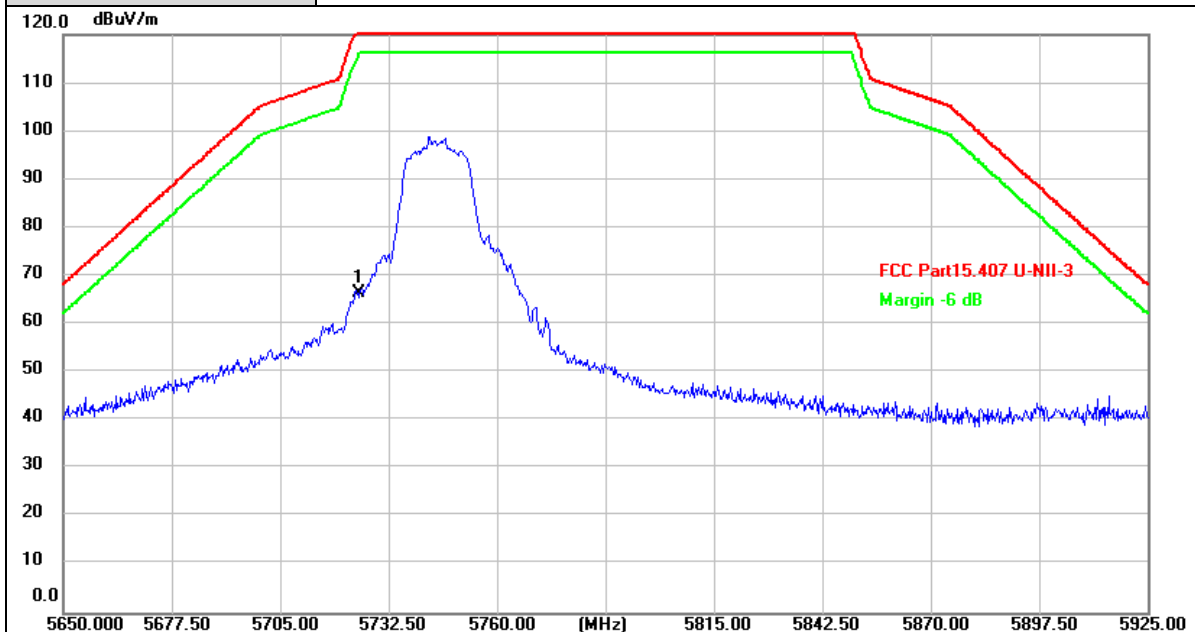








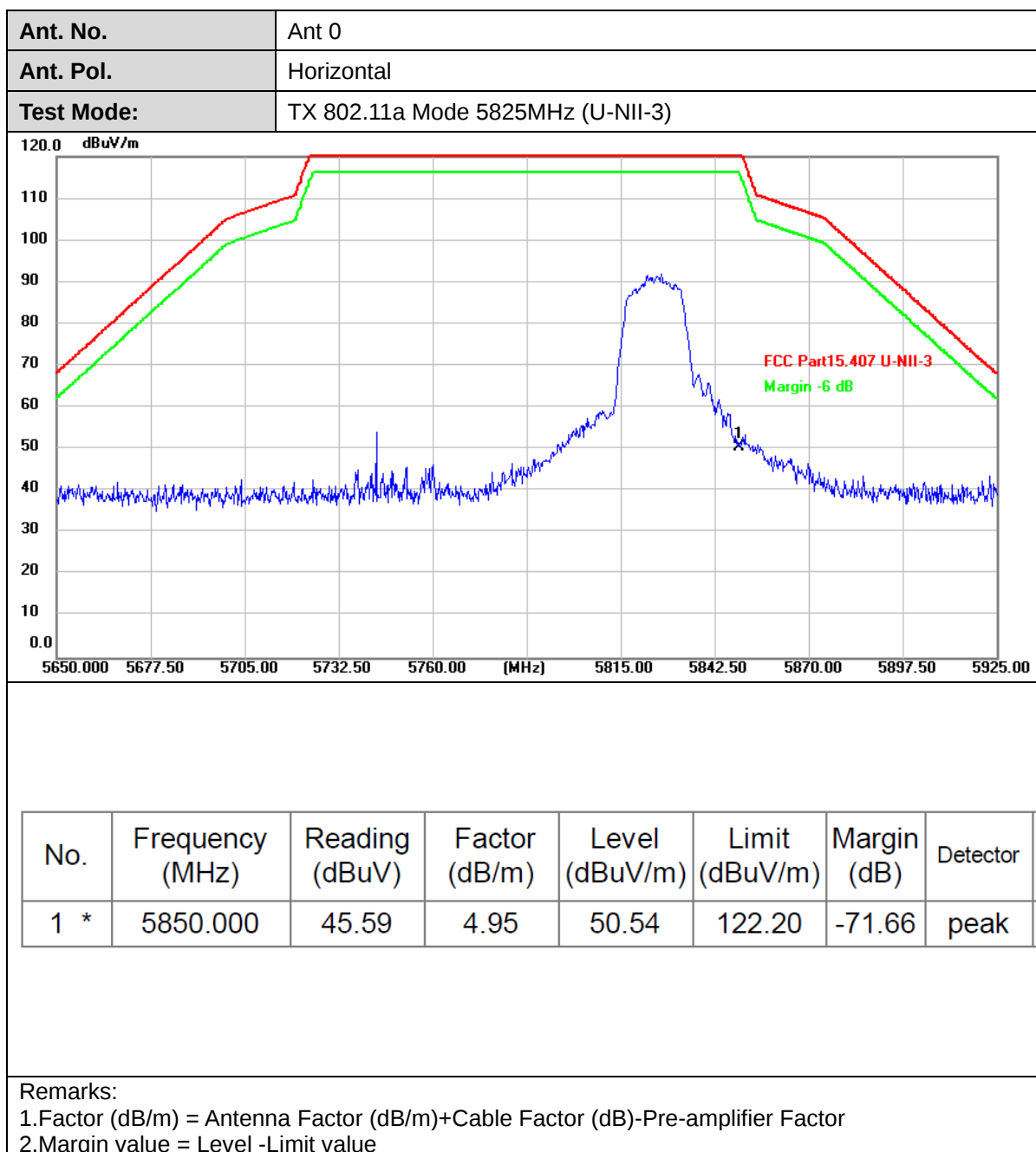
Ant. No.	Ant 0
Ant. Pol.	Vertical
Test Mode:	TX 802.11a Mode 5745MHz (U-NII-3)

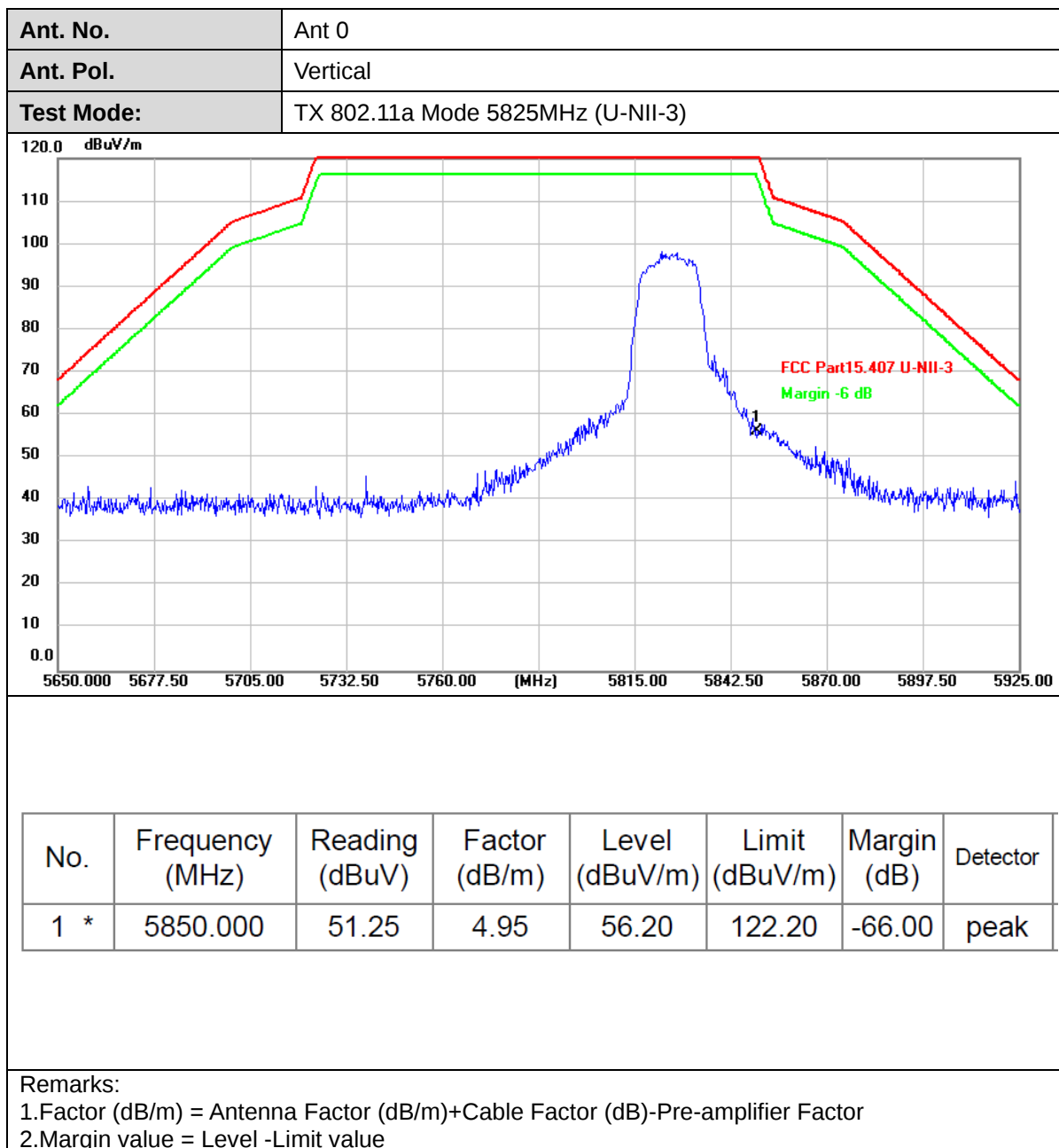


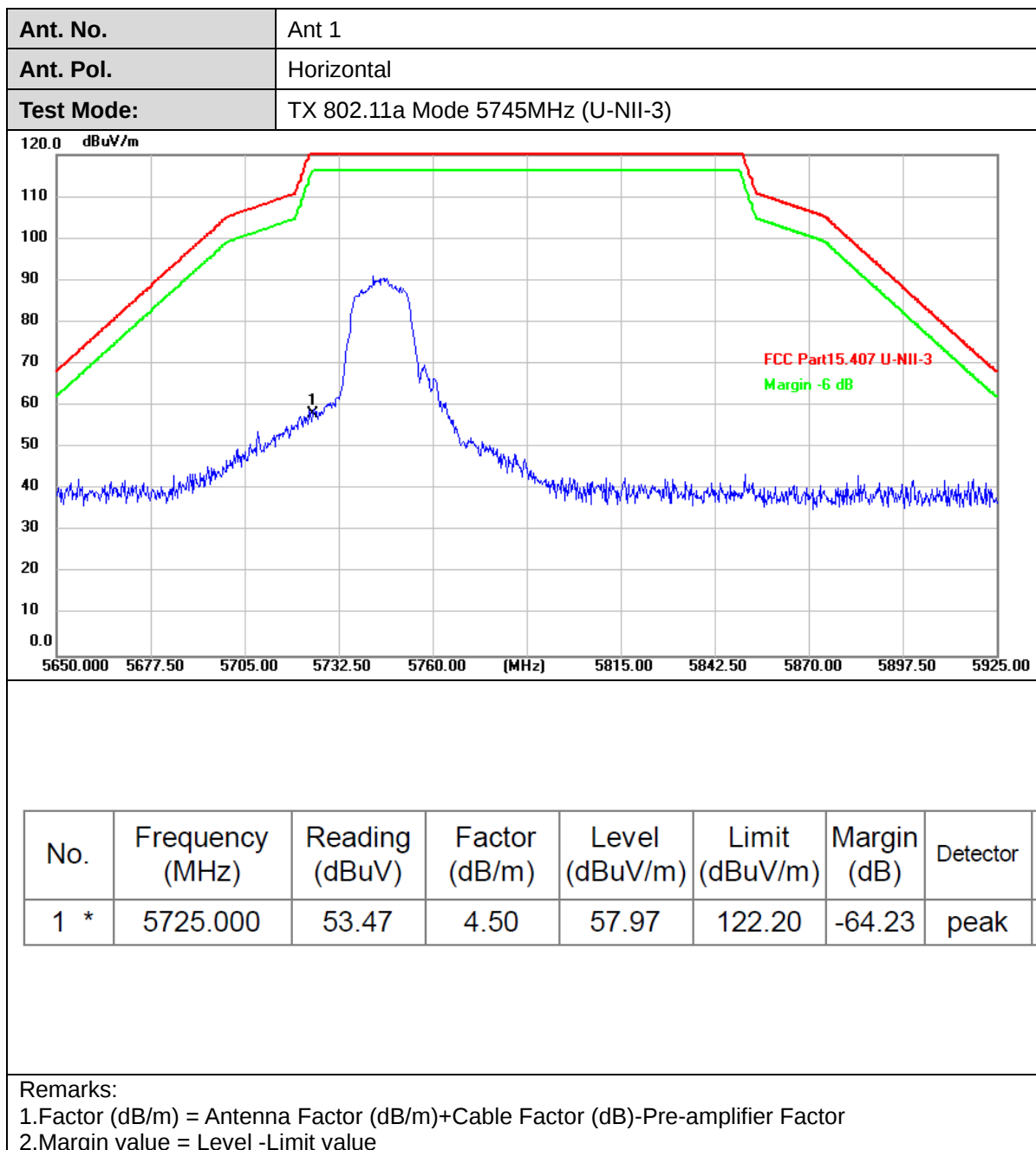
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1 *	5725.000	62.09	4.50	66.59	122.20	-55.61	peak

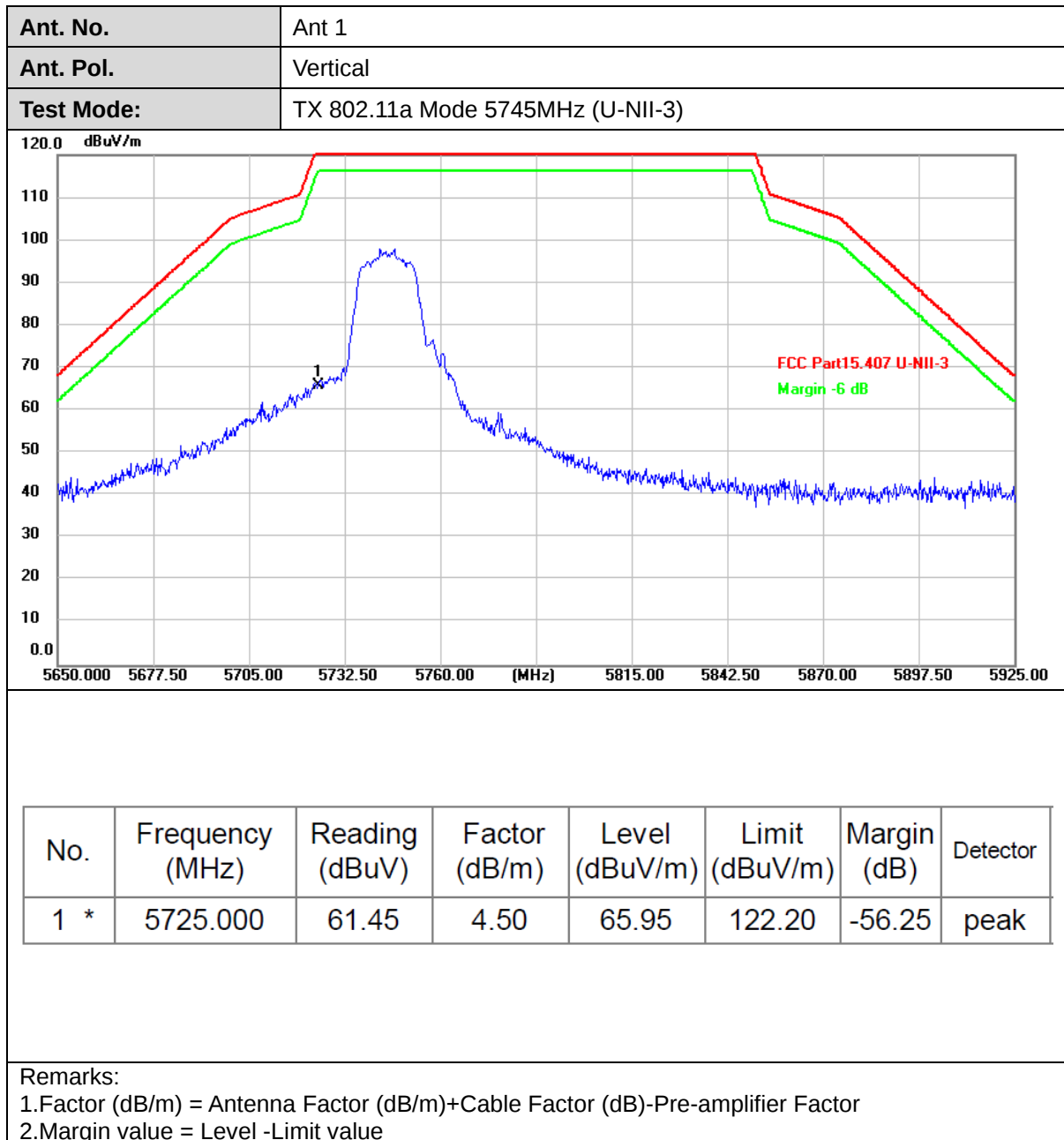
Remarks:

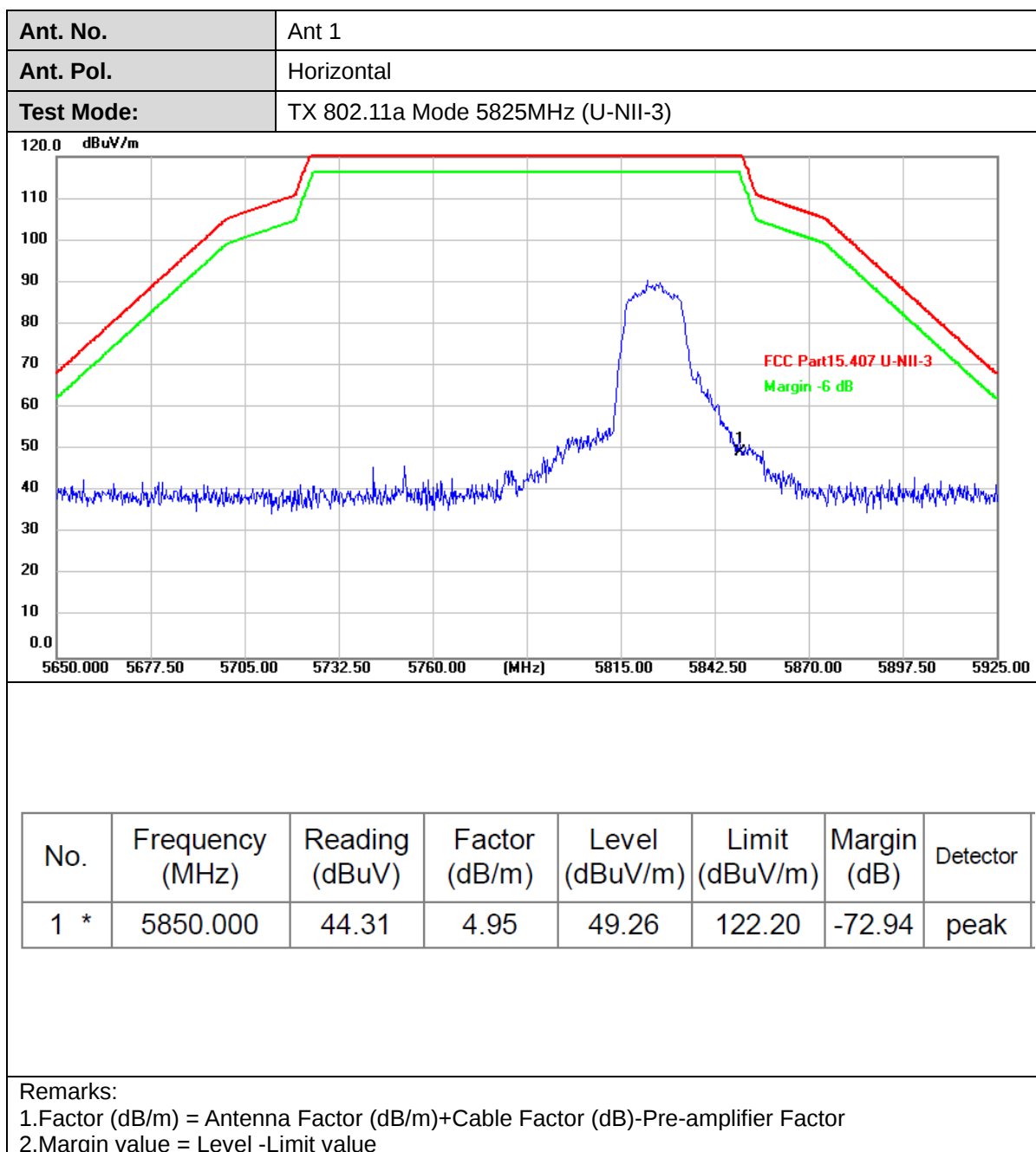
- 1.Factor (dB/m) = Antenna Factor (dB/m)+Cable Factor (dB)-Pre-amplifier Factor
- 2.Margin value = Level -Limit value

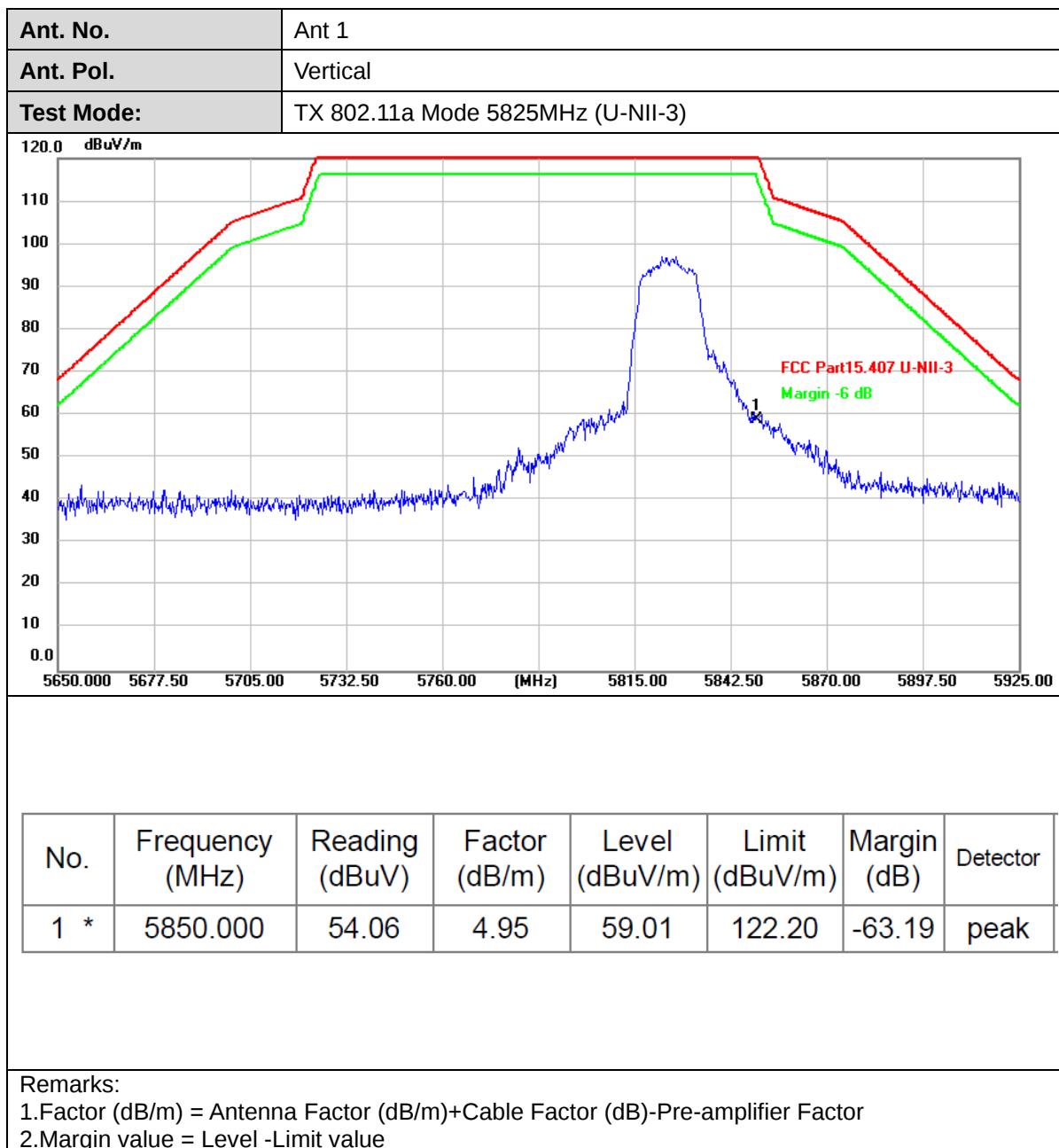


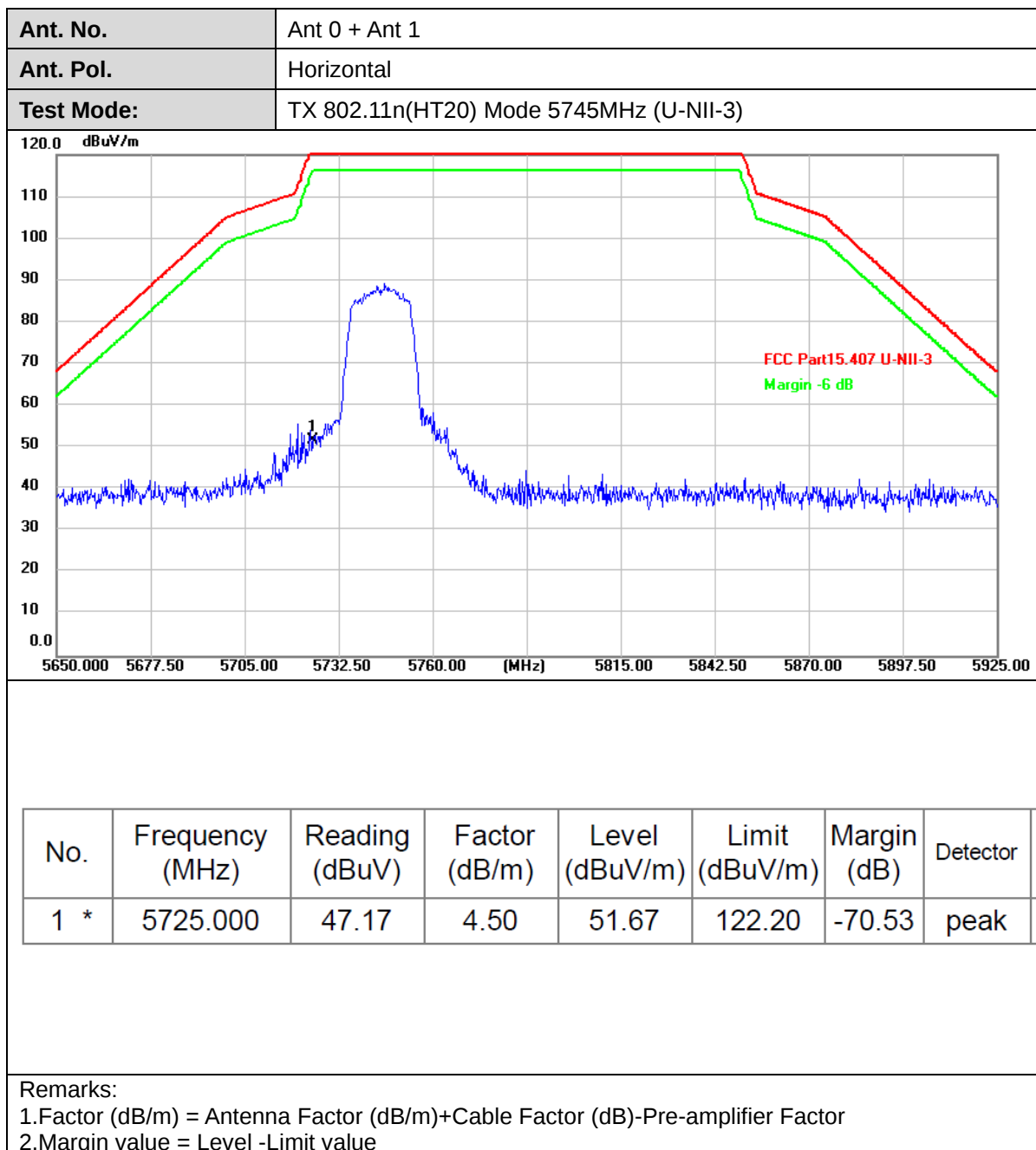


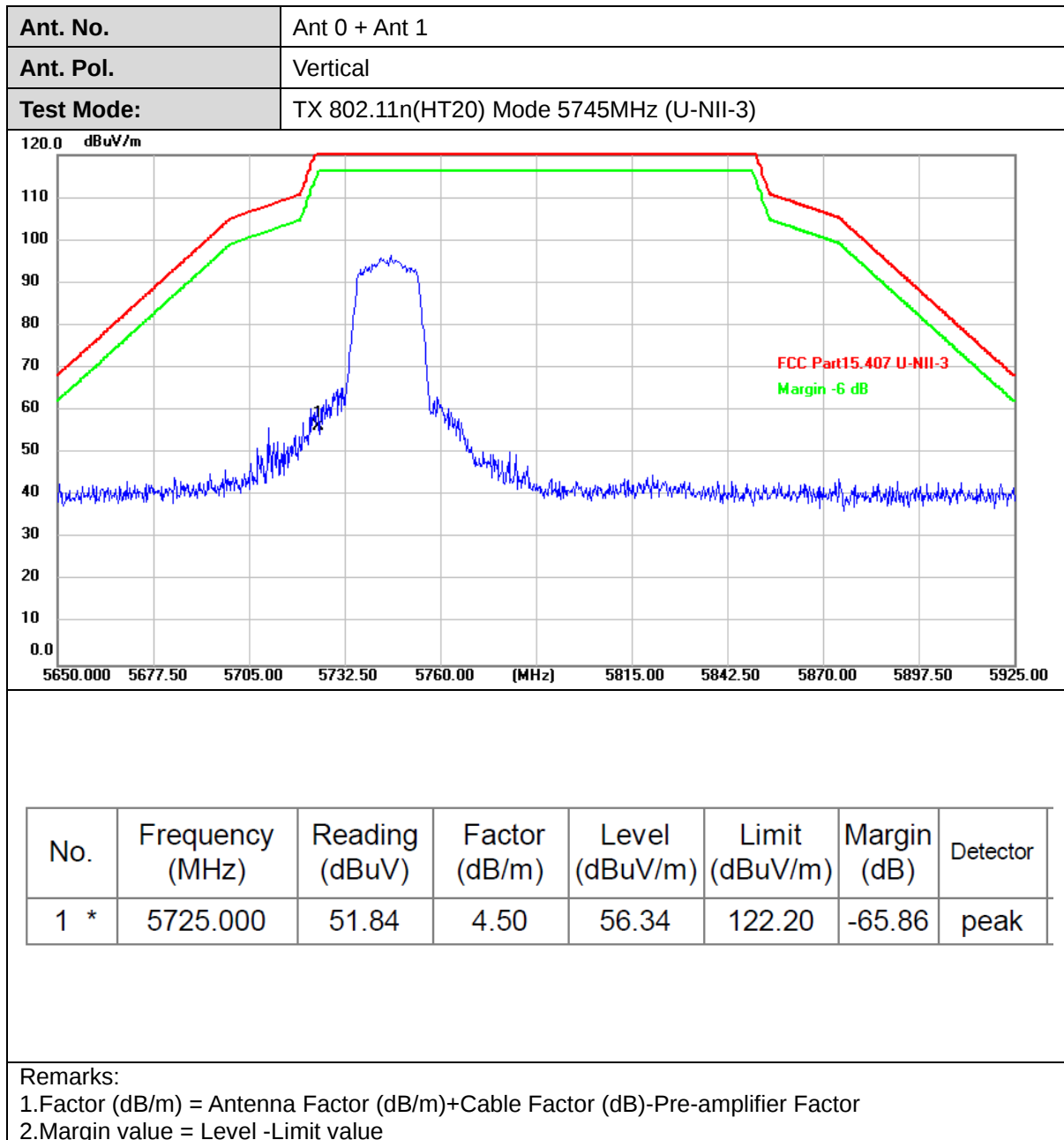


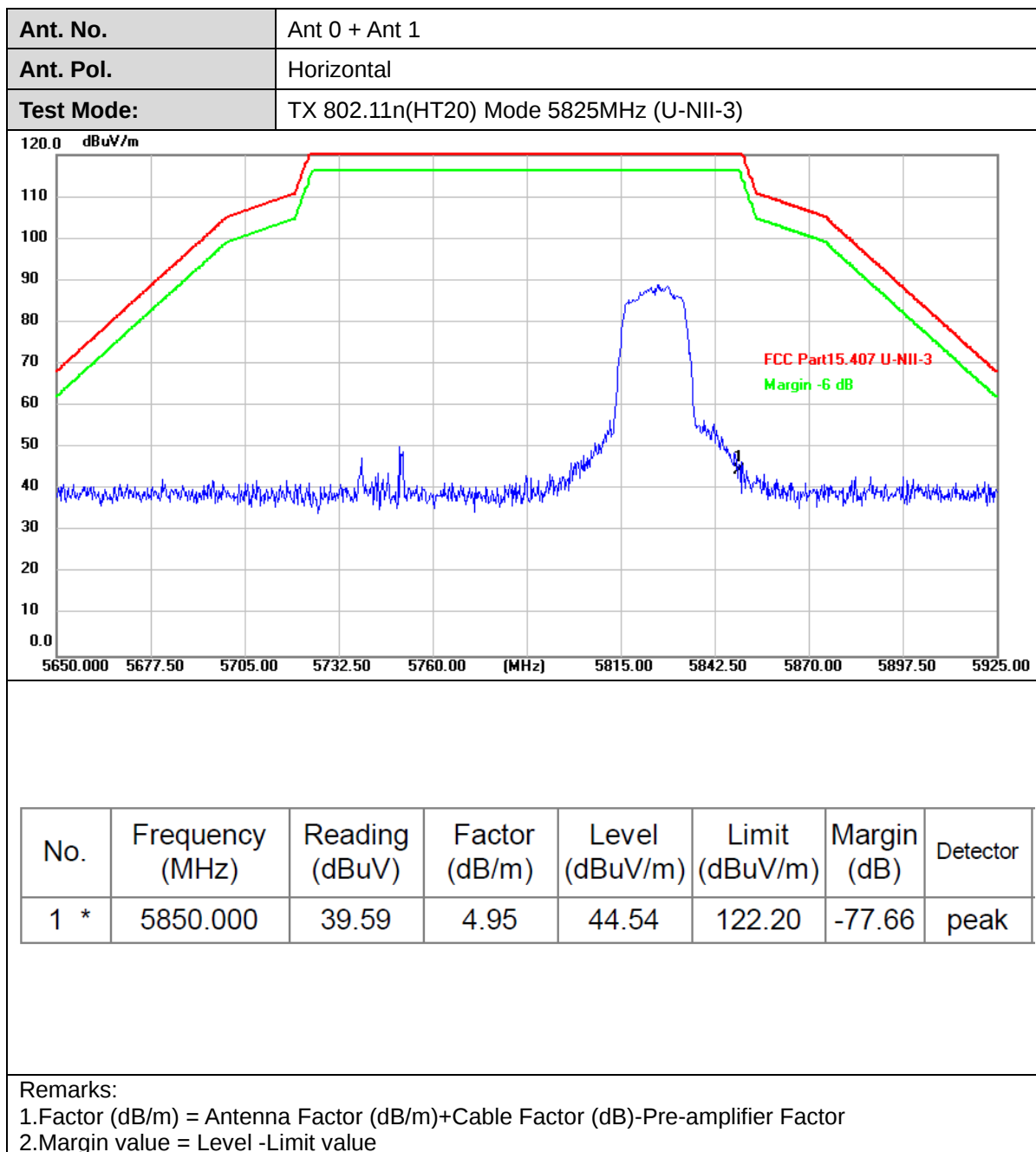


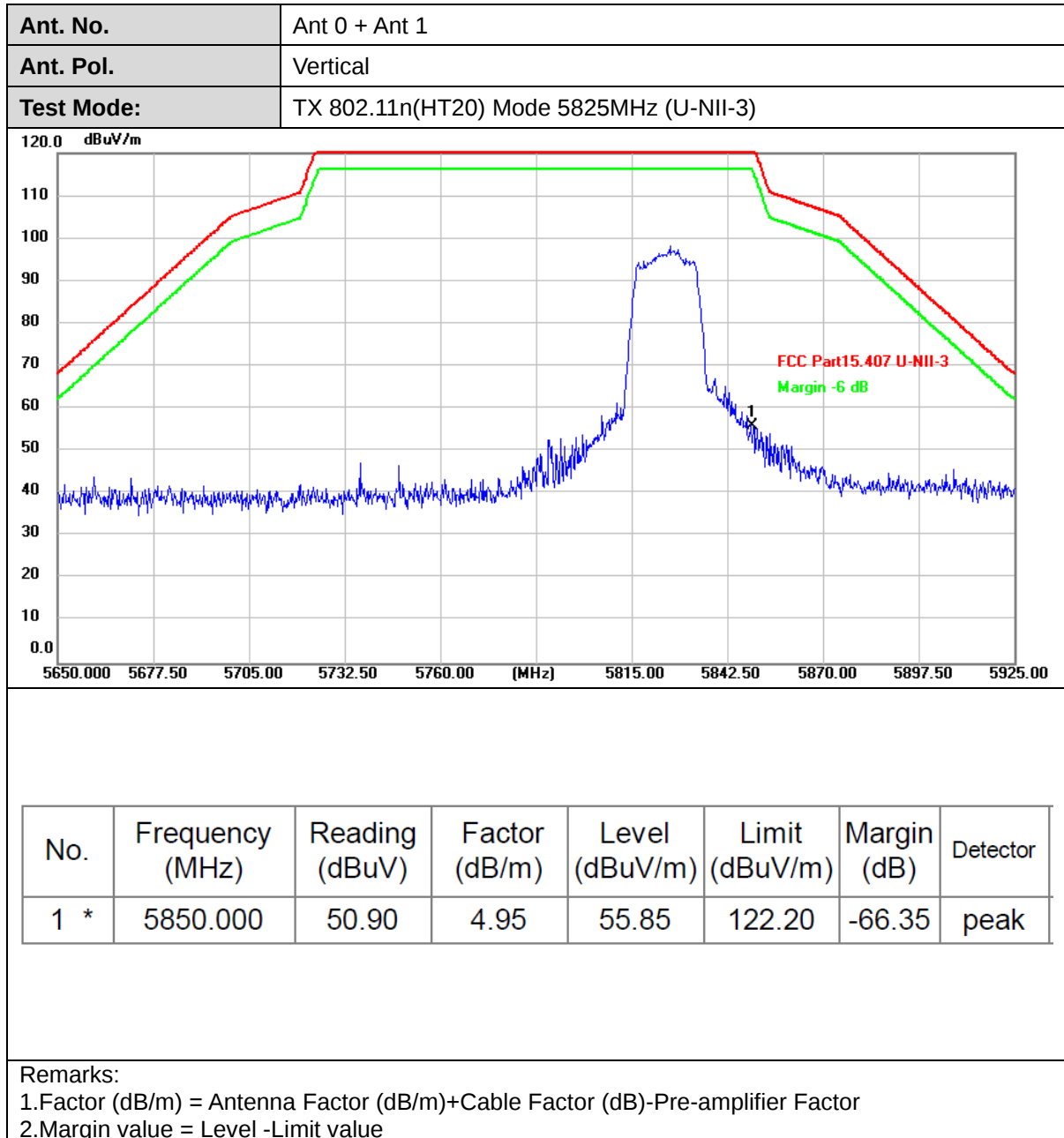


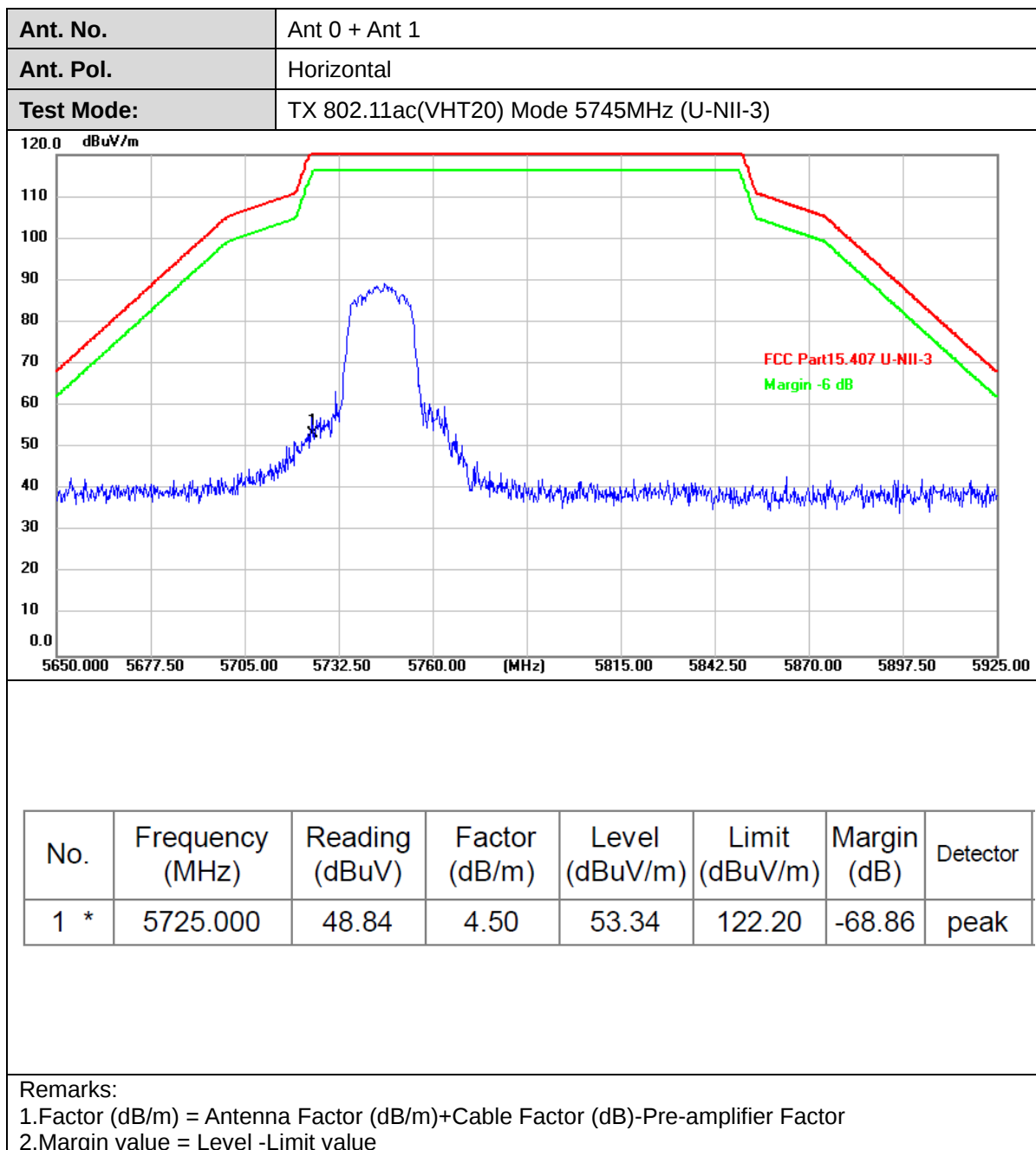


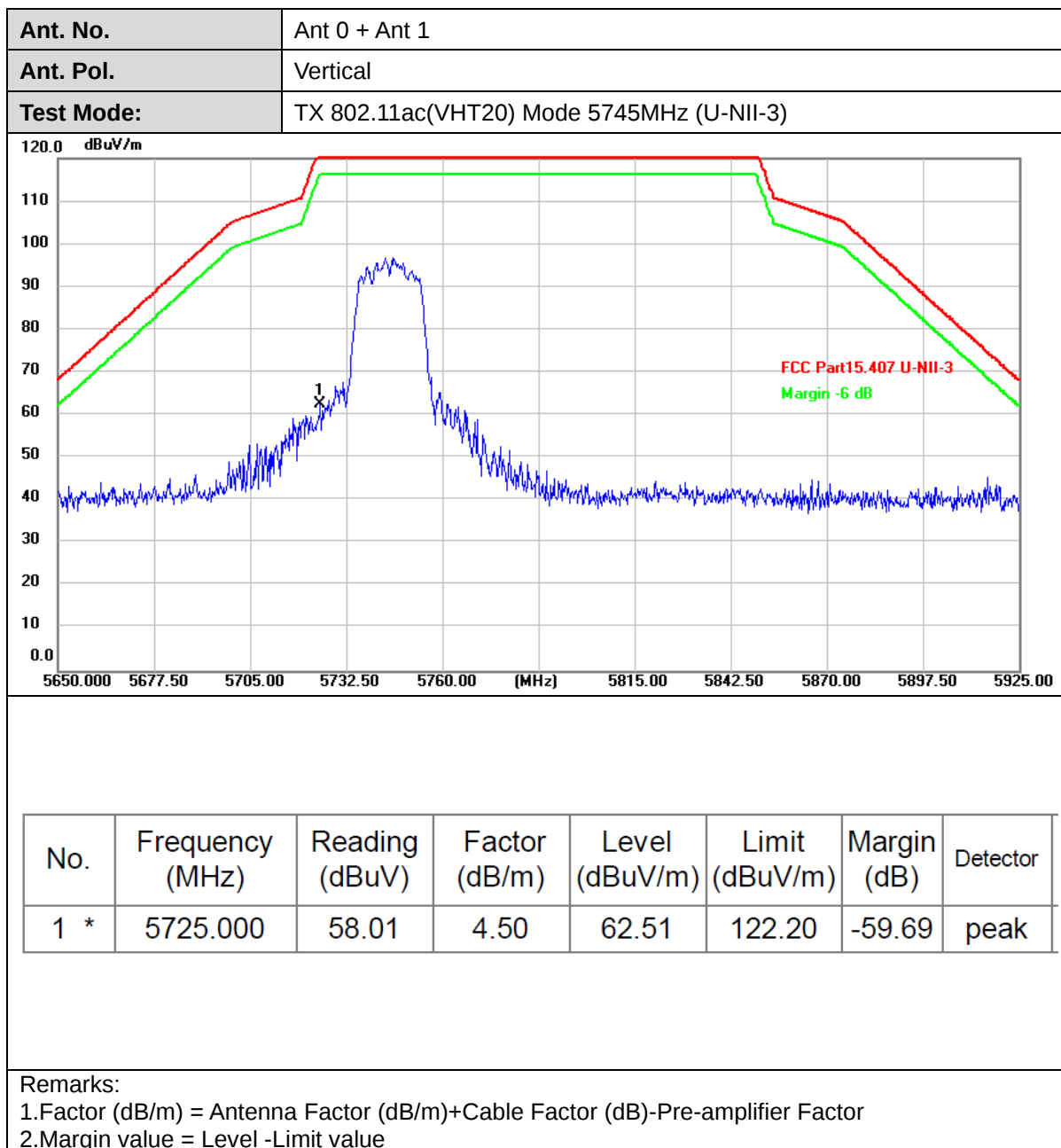


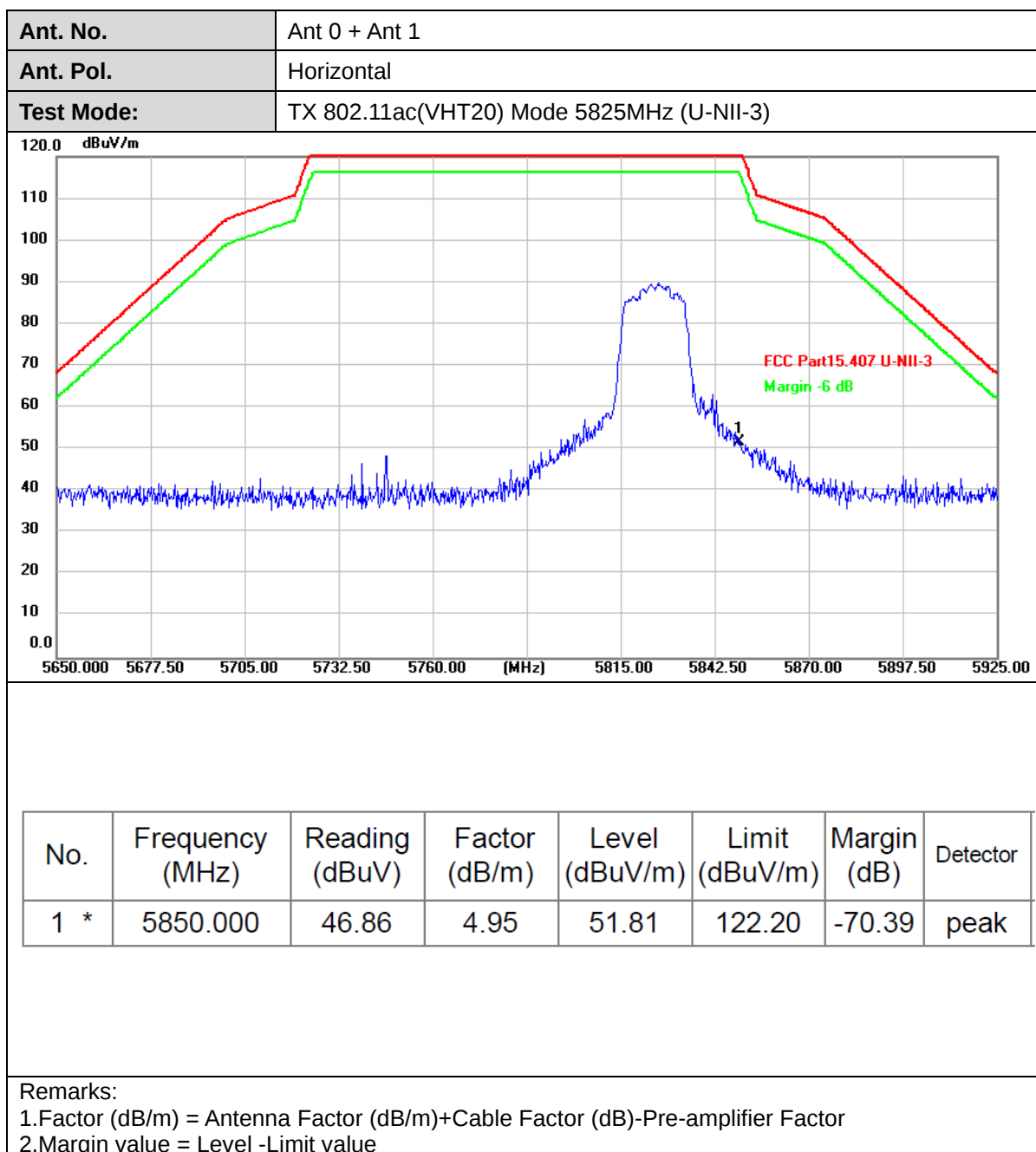






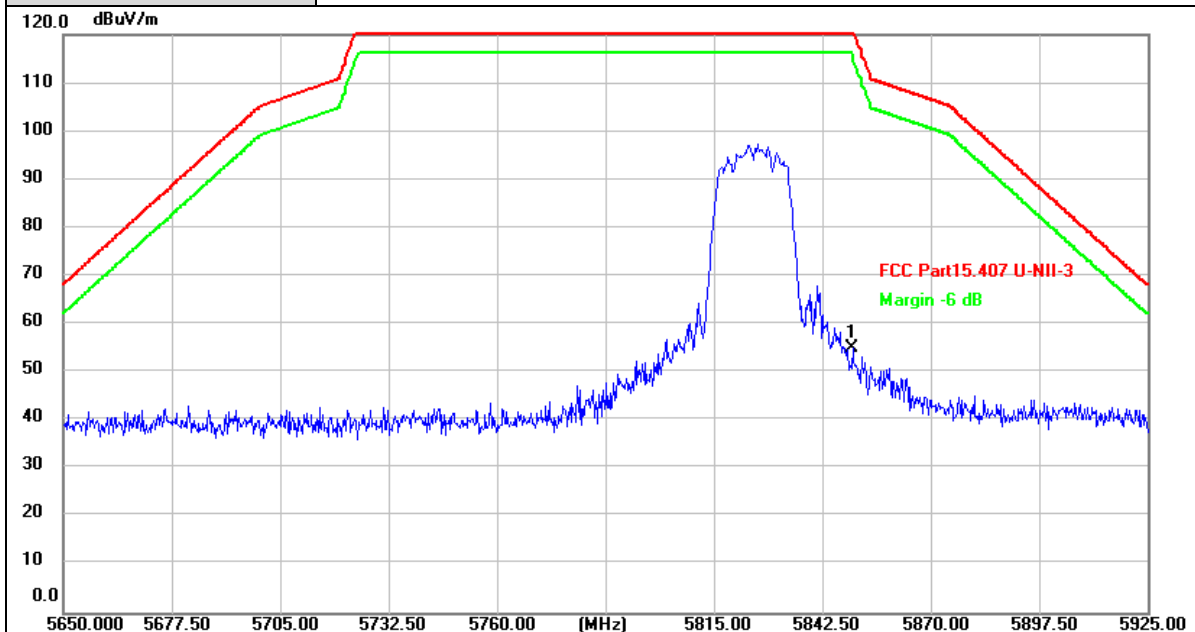








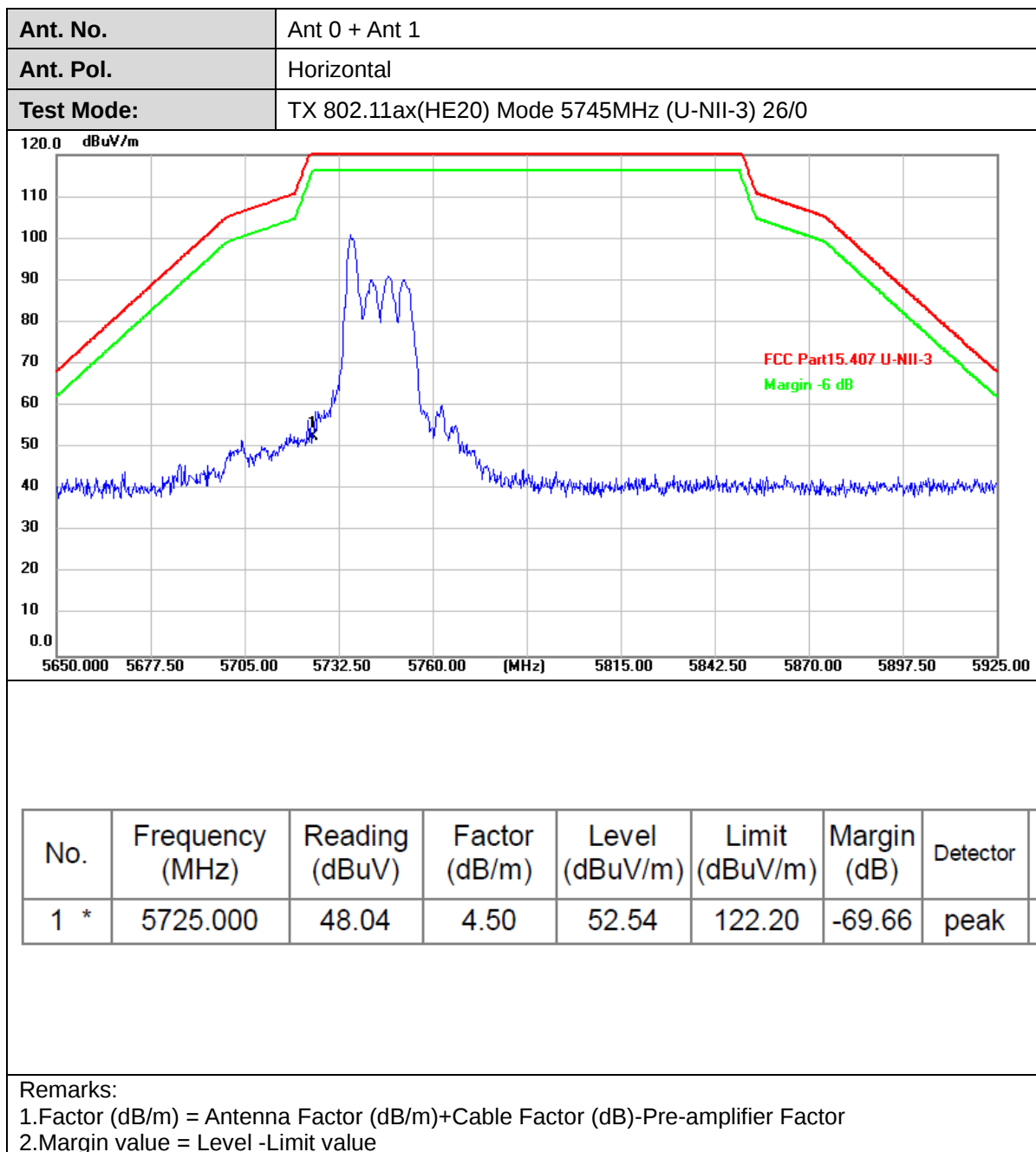
Ant. No.	Ant 0 + Ant 1
Ant. Pol.	Vertical
Test Mode:	TX 802.11ac(VHT20) Mode 5825MHz (U-NII-3)

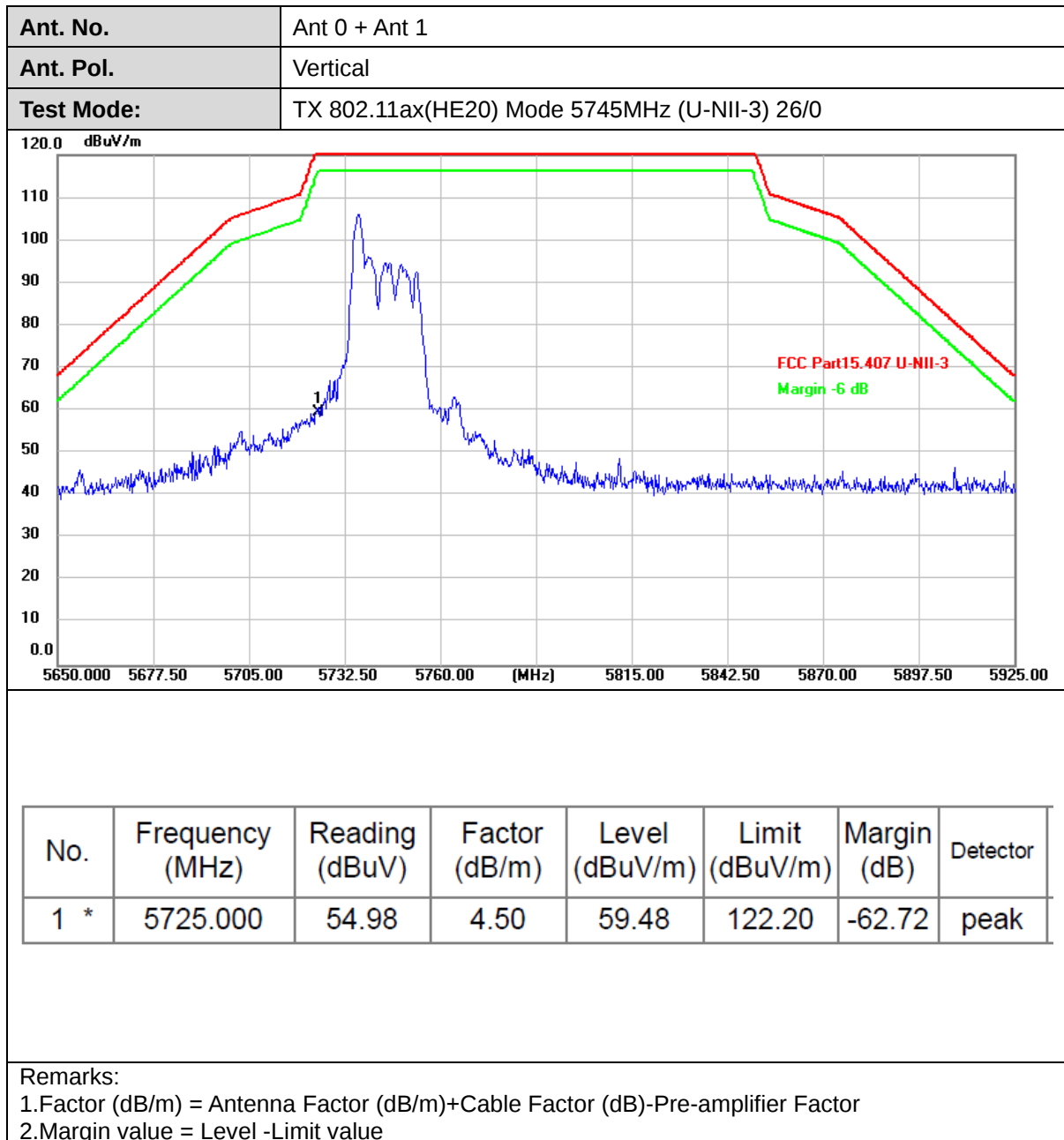


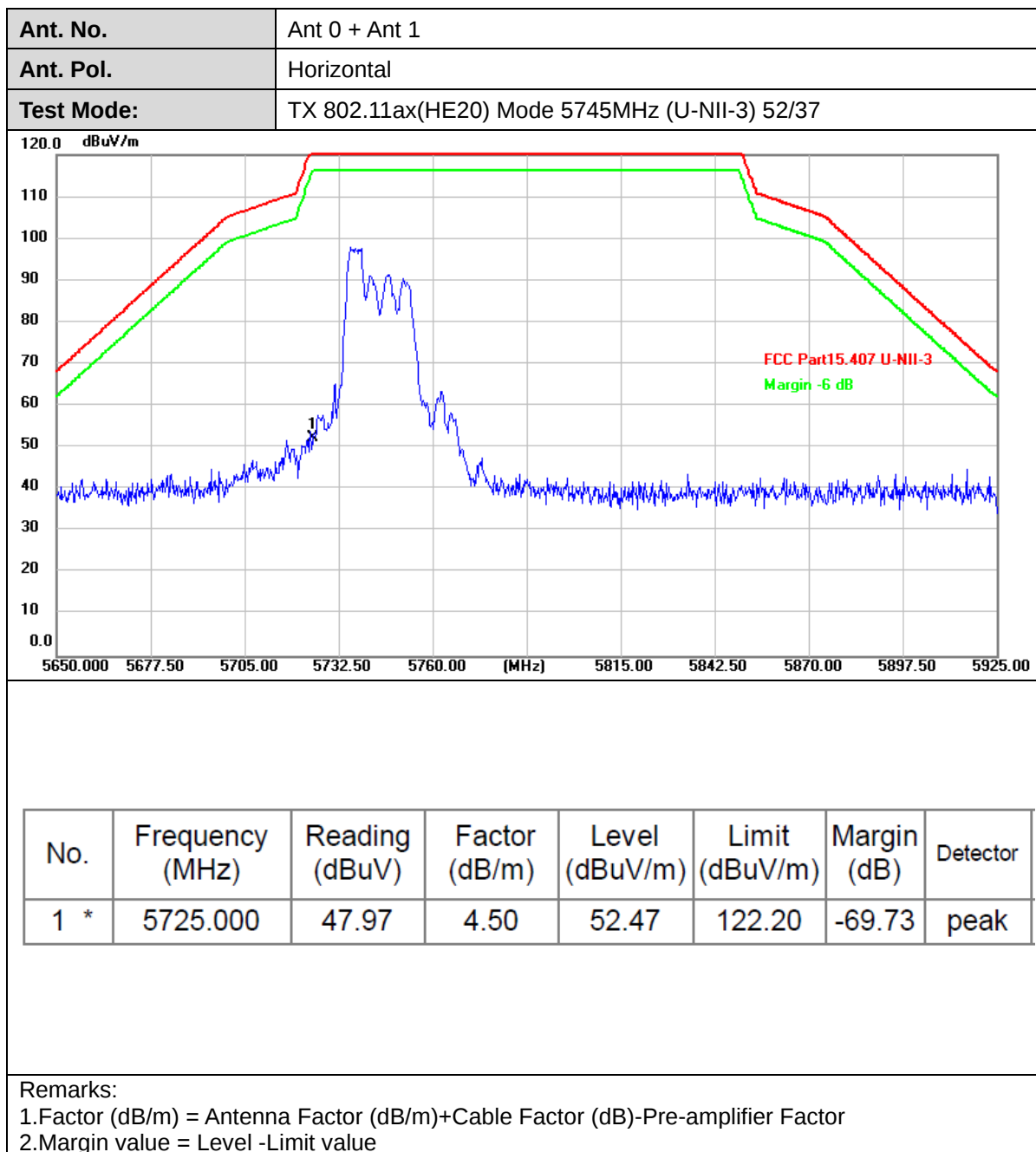
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1 *	5850.000	50.10	4.95	55.05	122.20	-67.15	peak

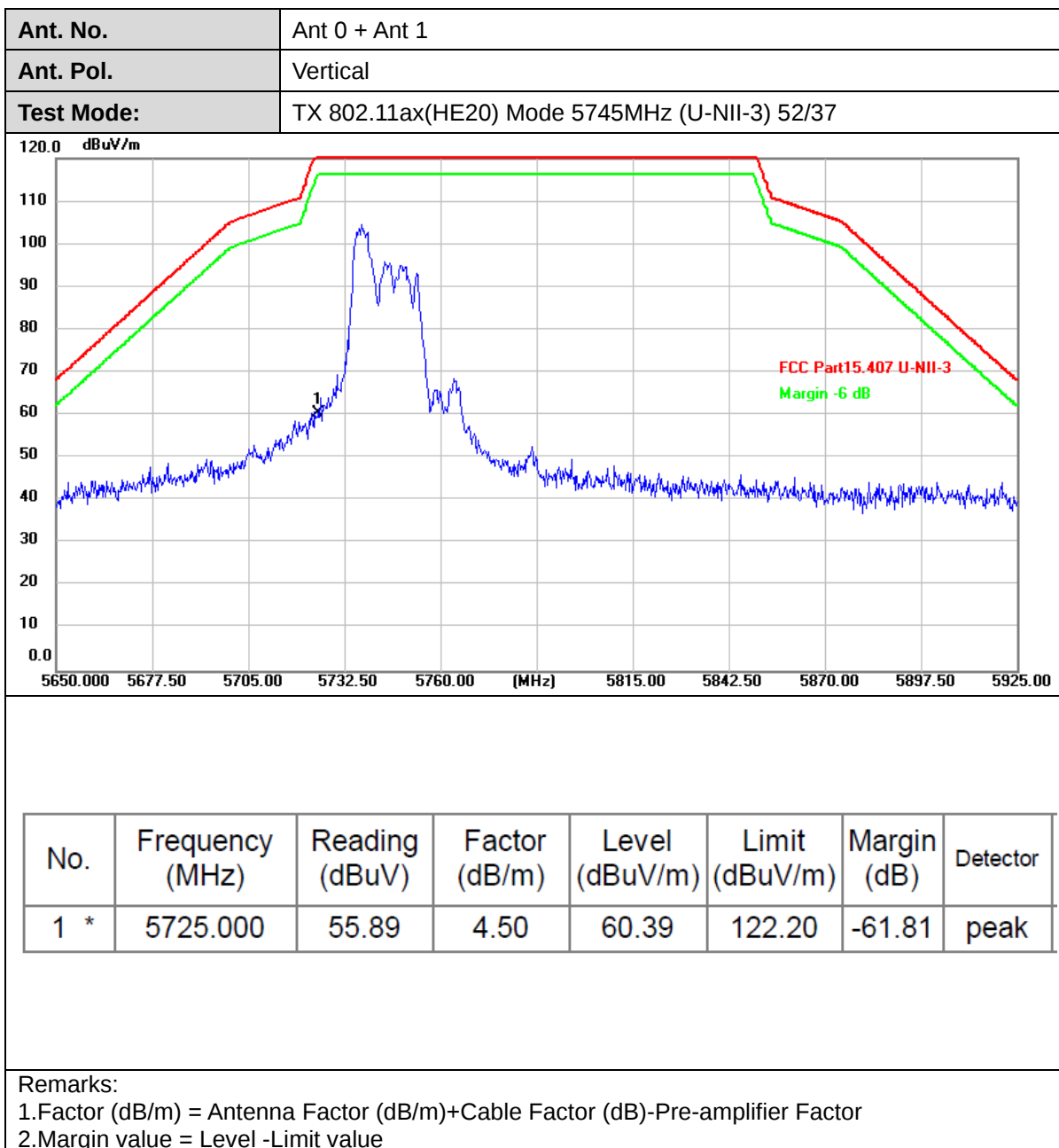
Remarks:

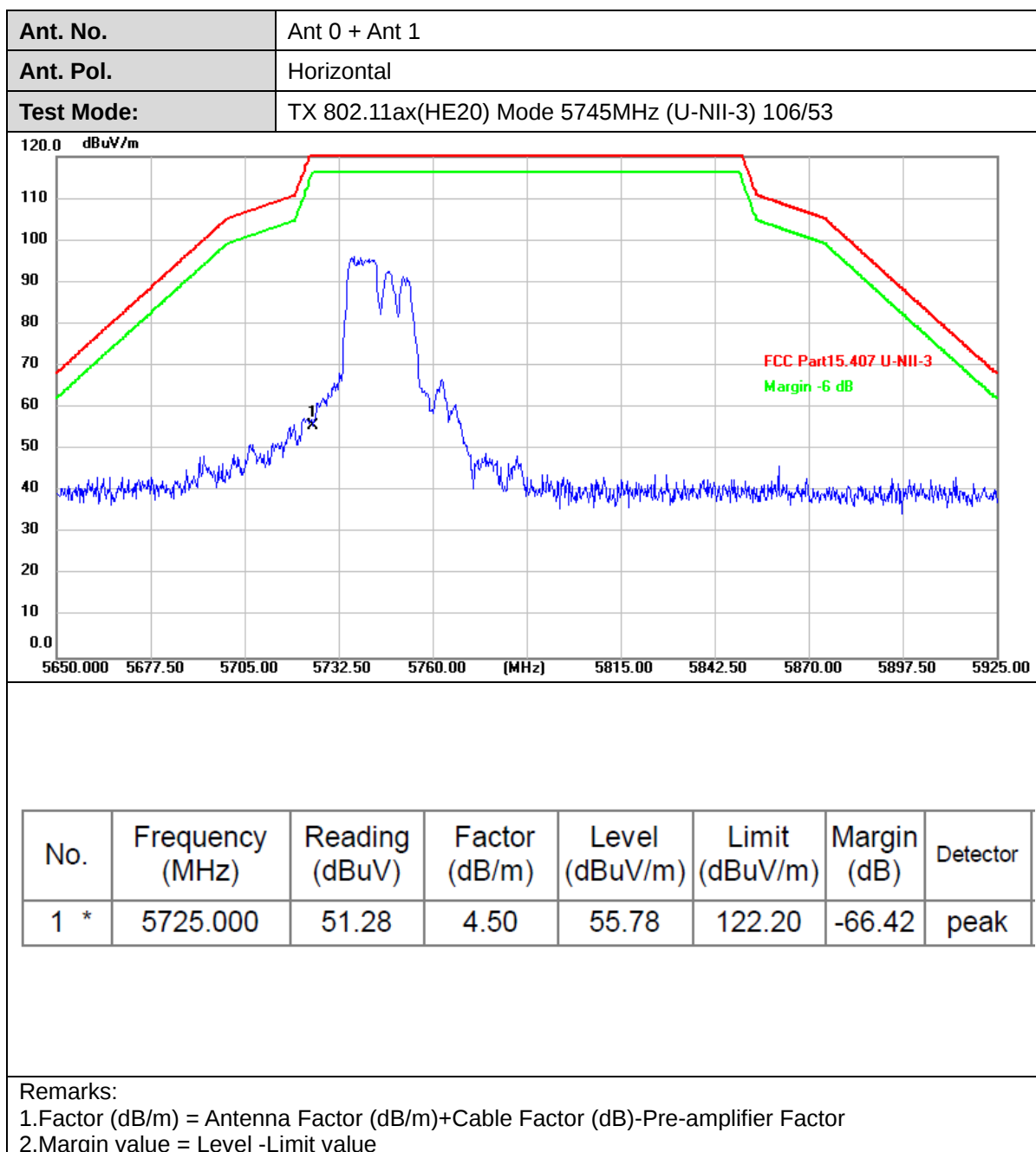
1. Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB) - Pre-amplifier Factor
2. Margin value = Level - Limit value

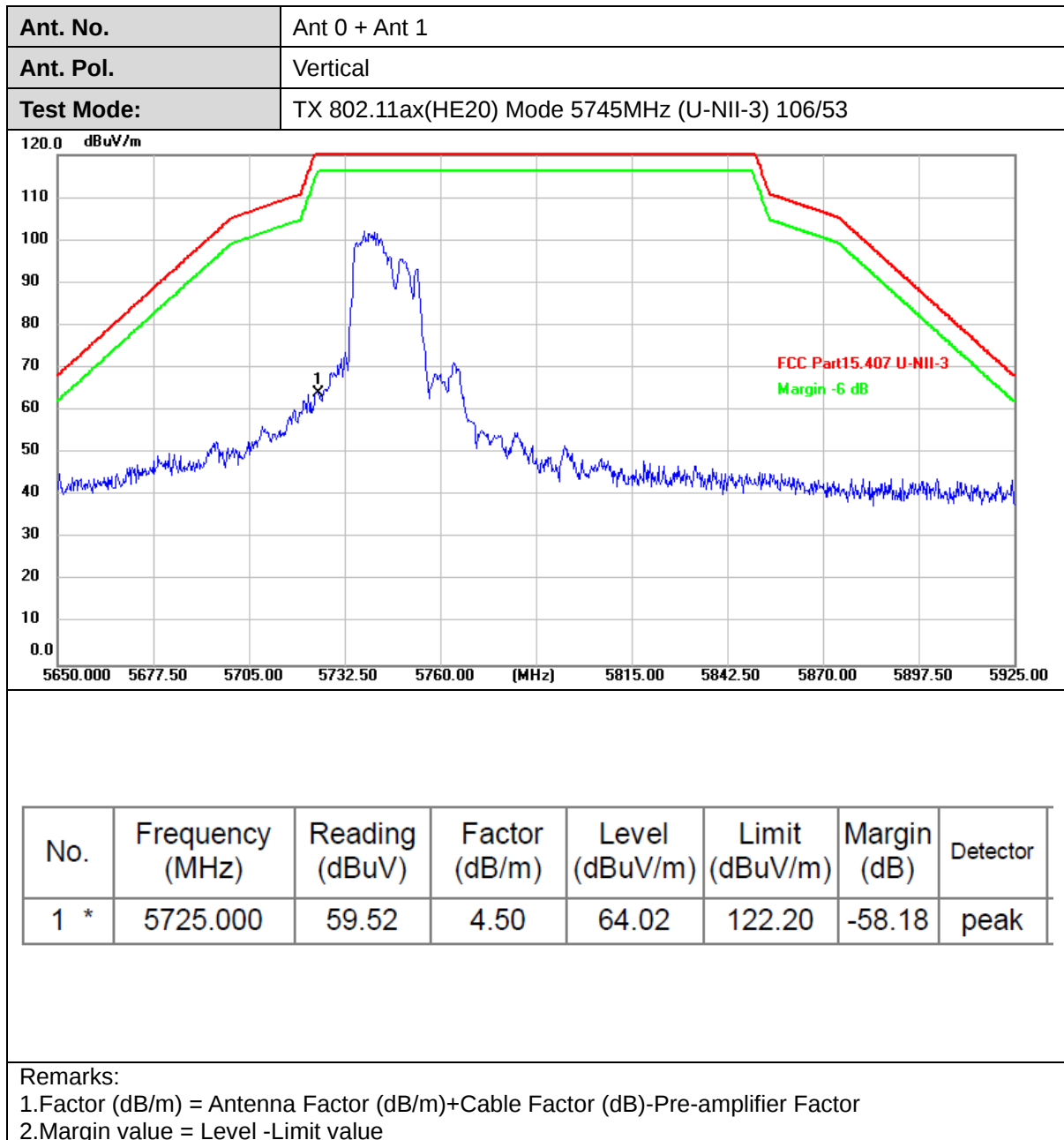


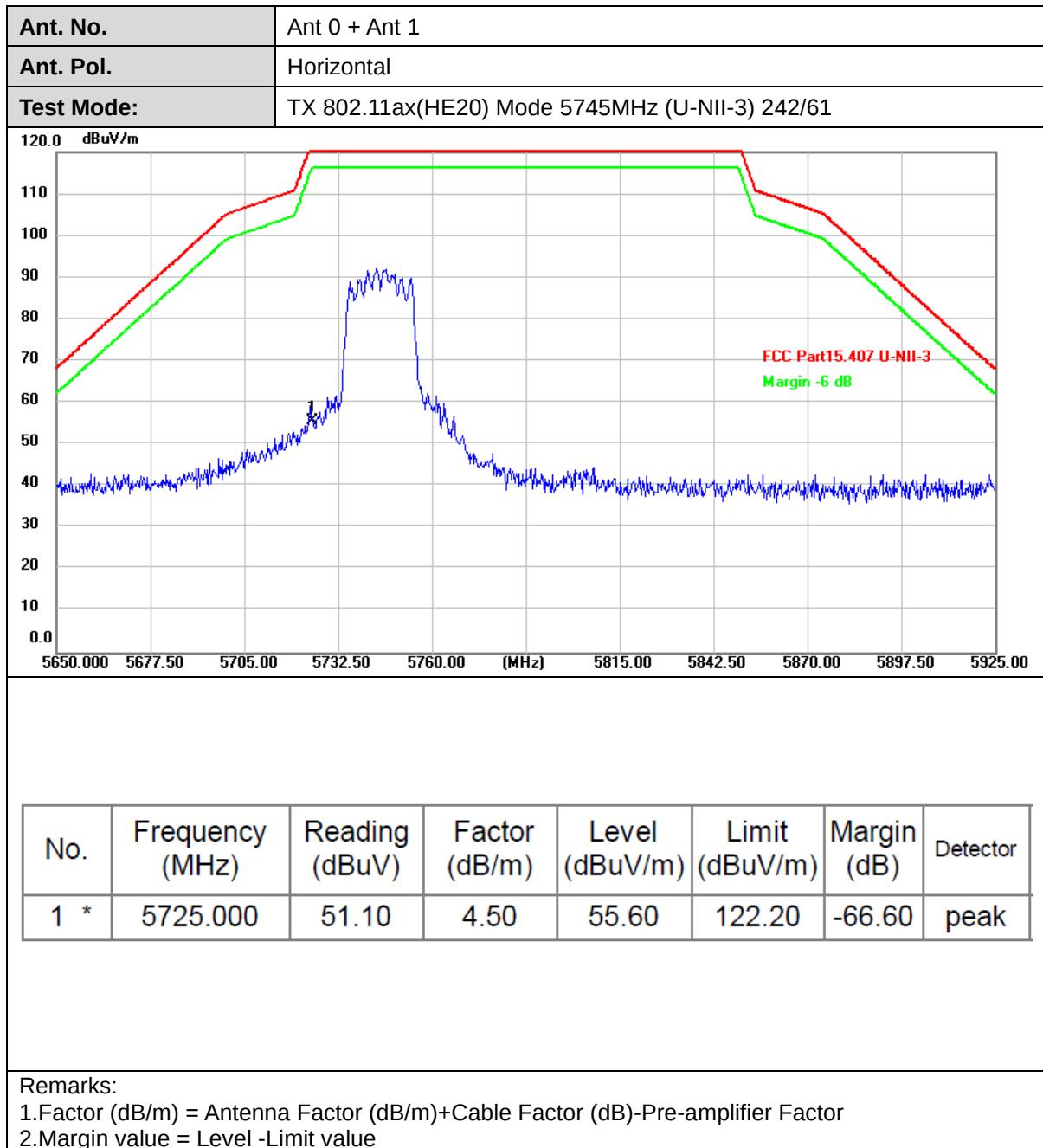


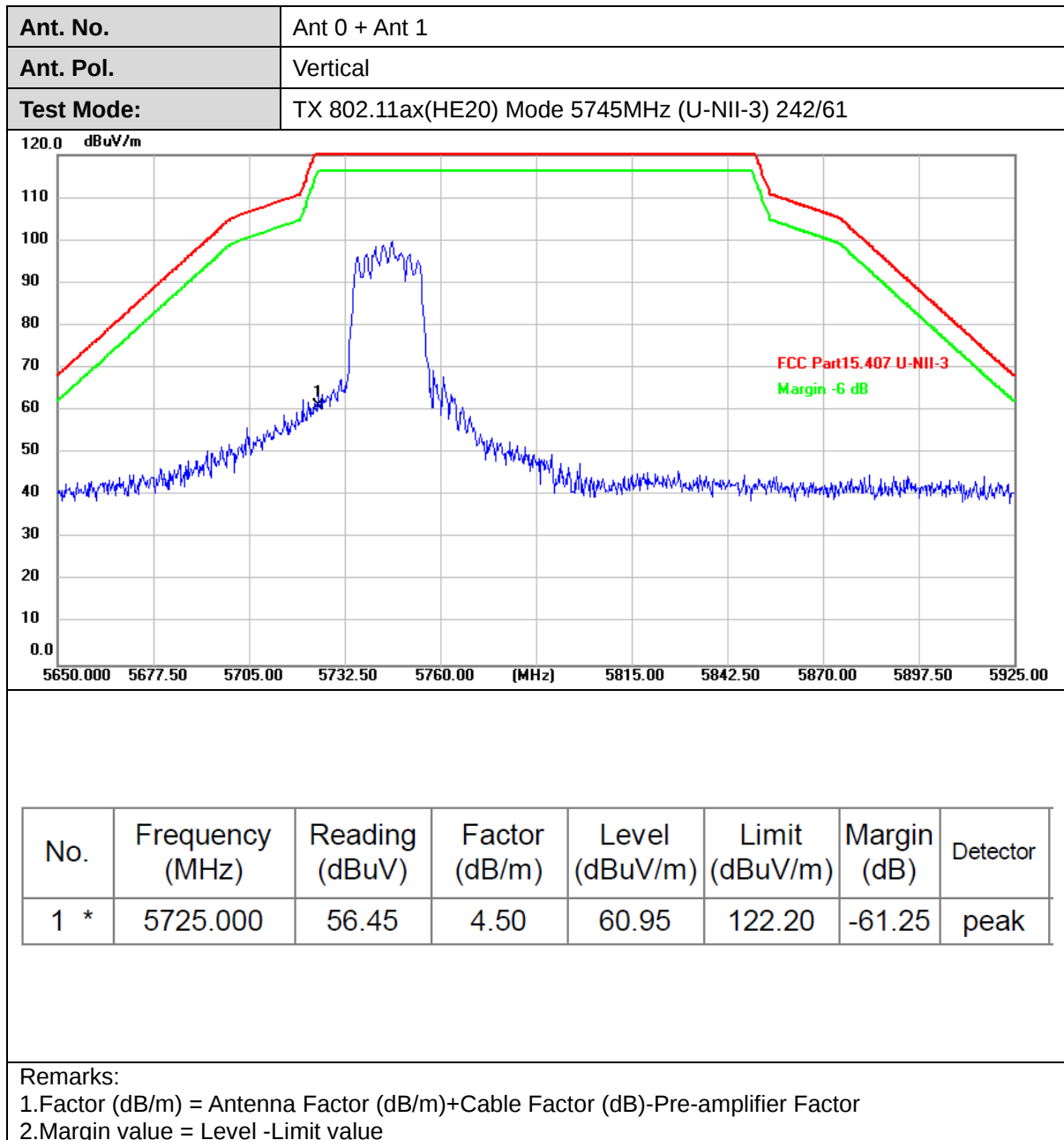


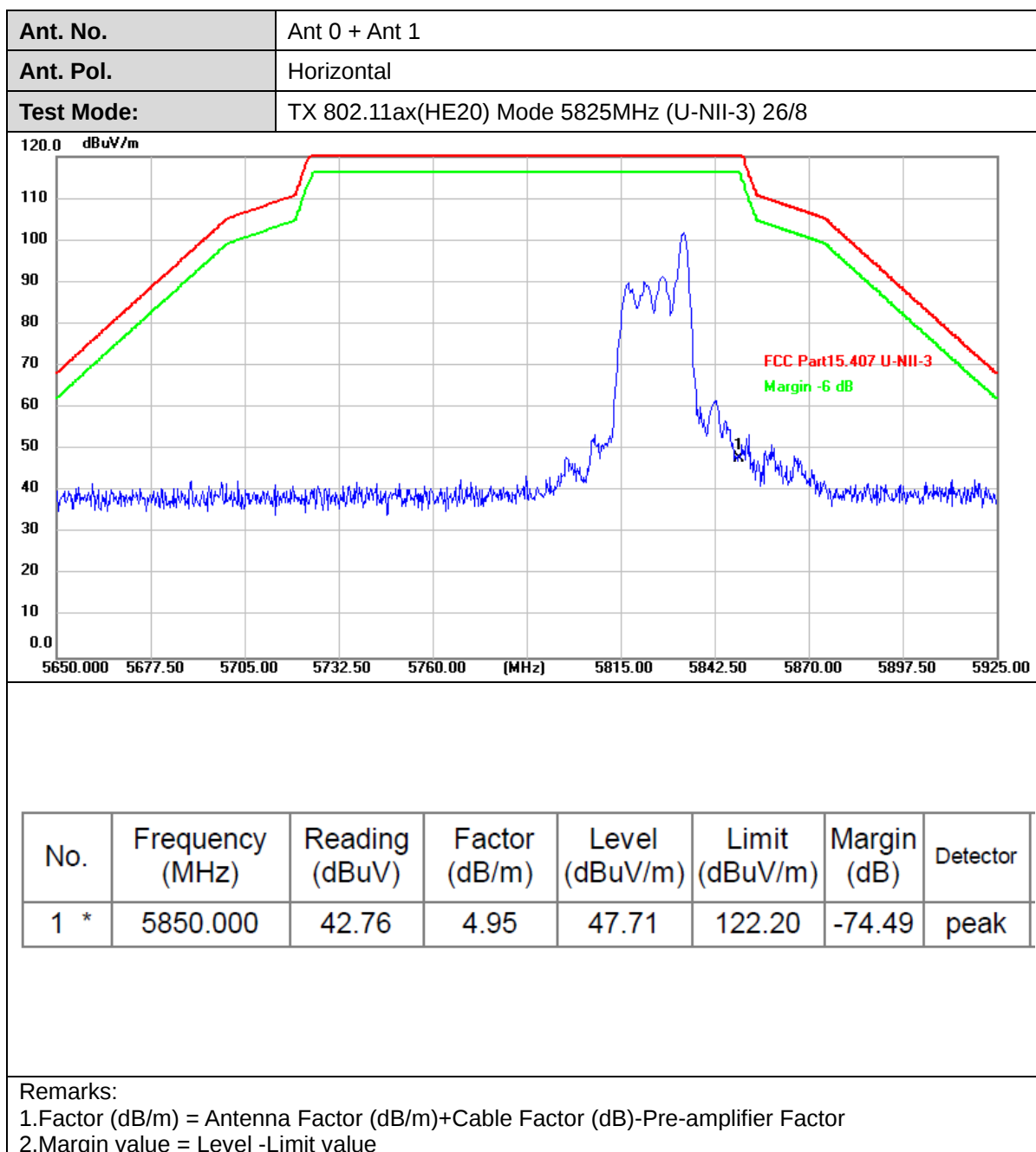


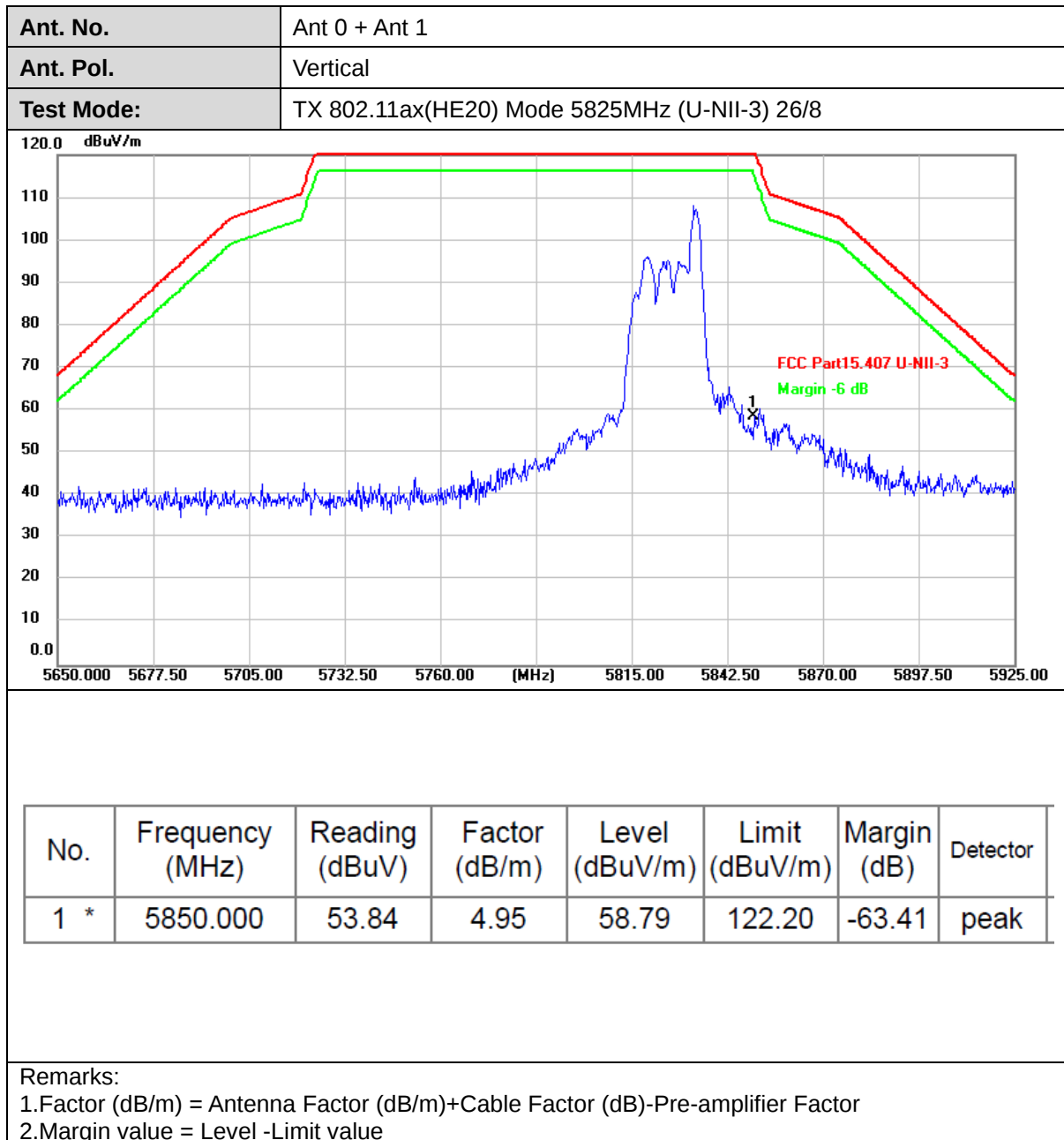


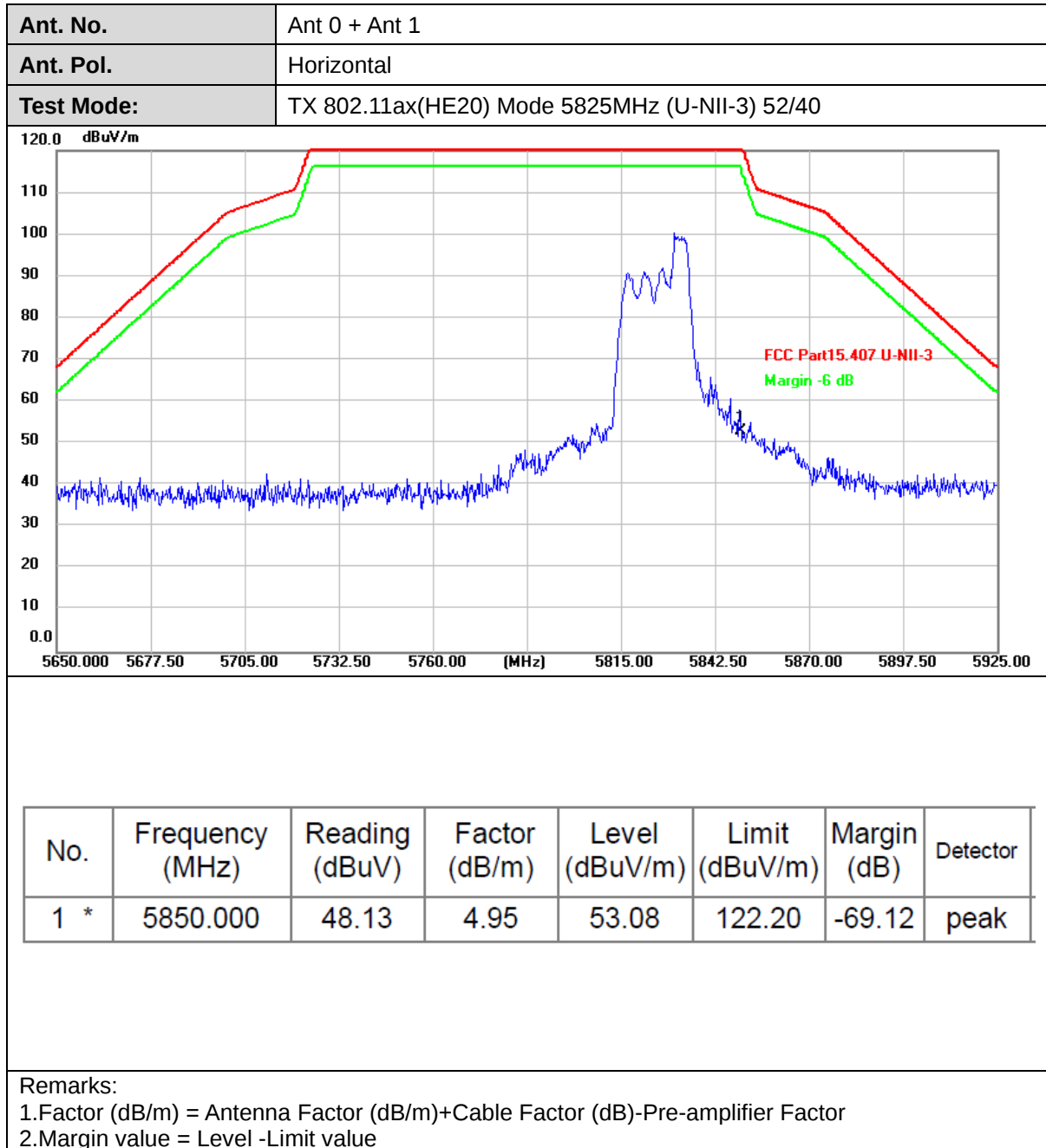


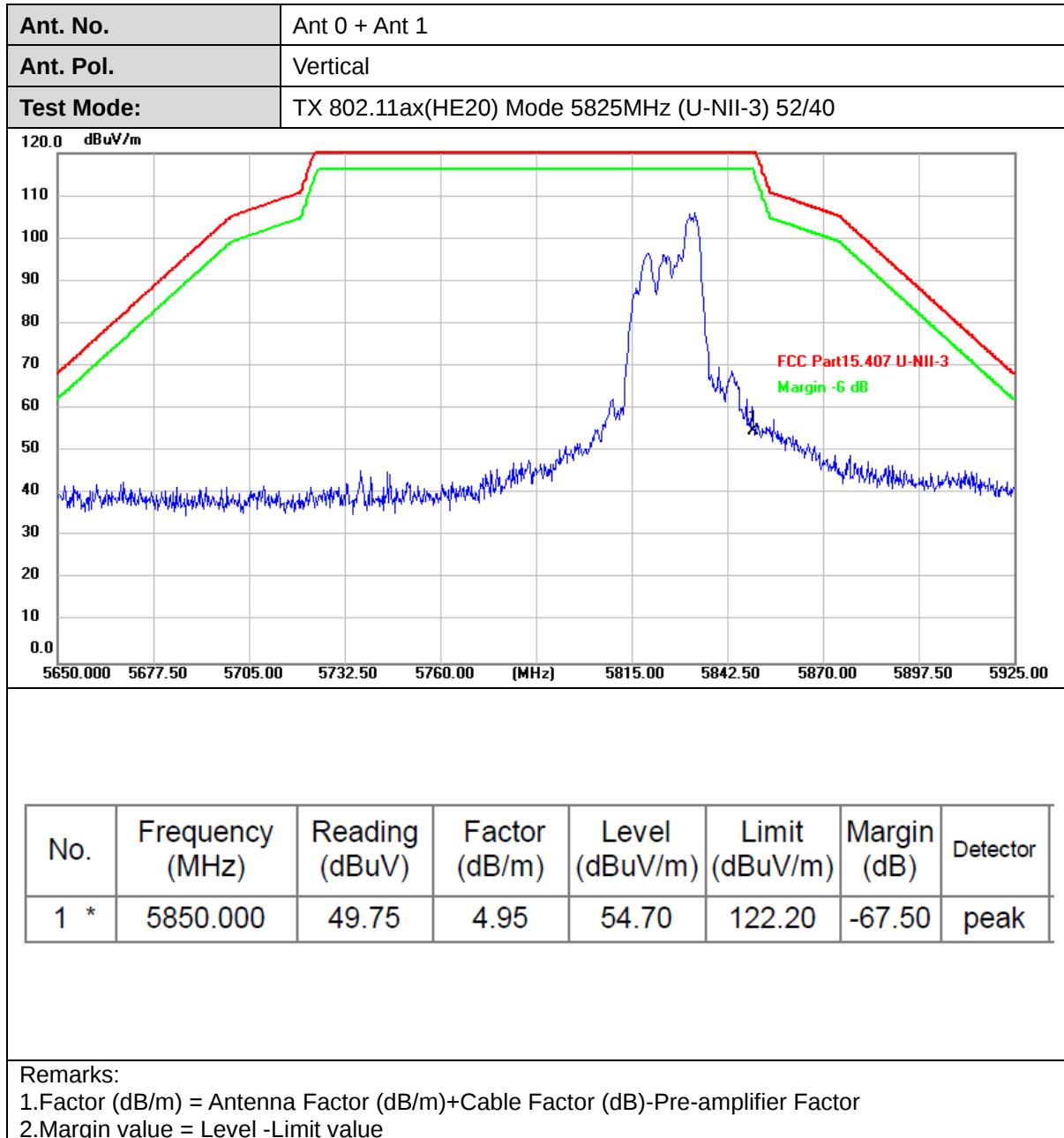


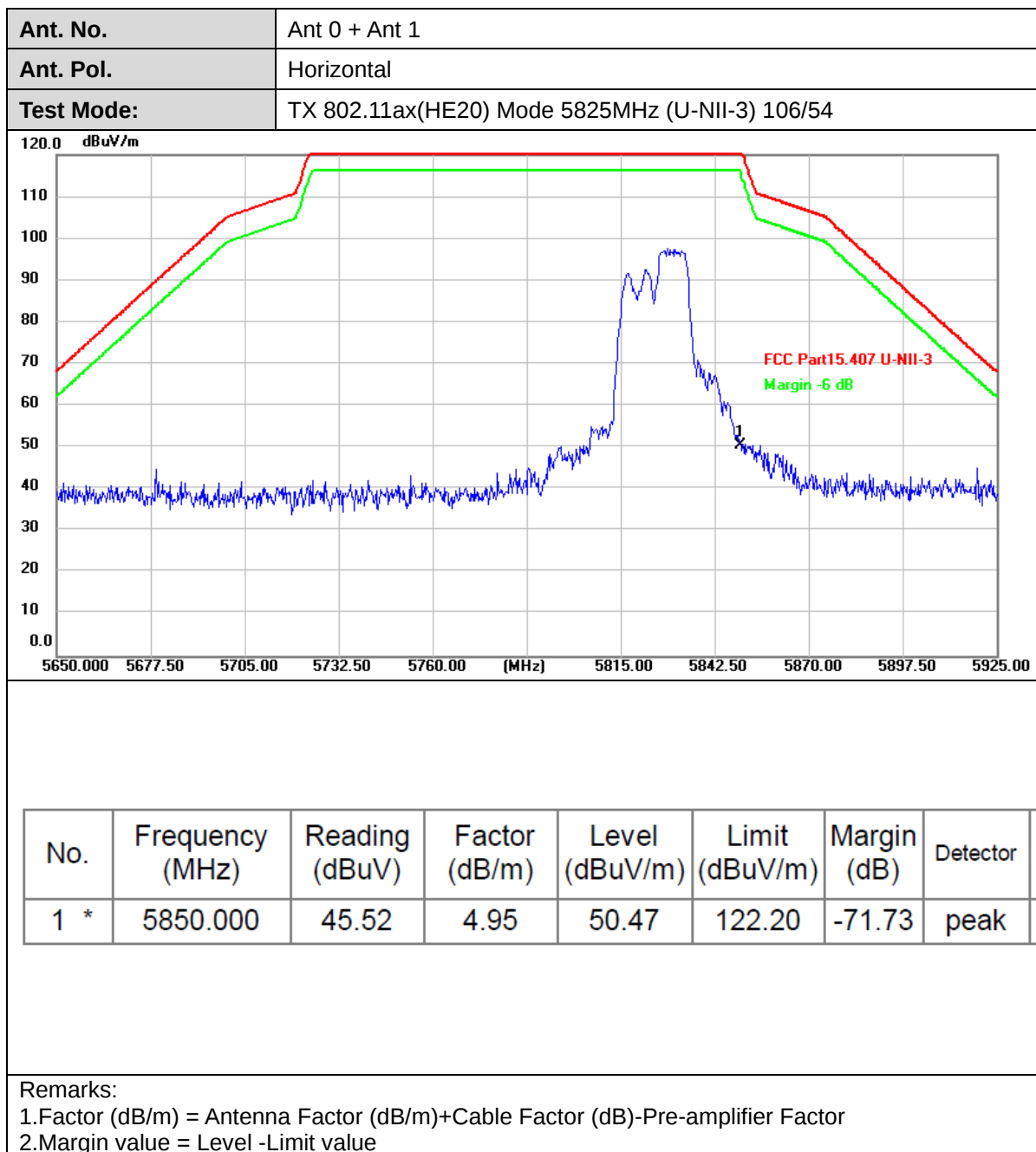


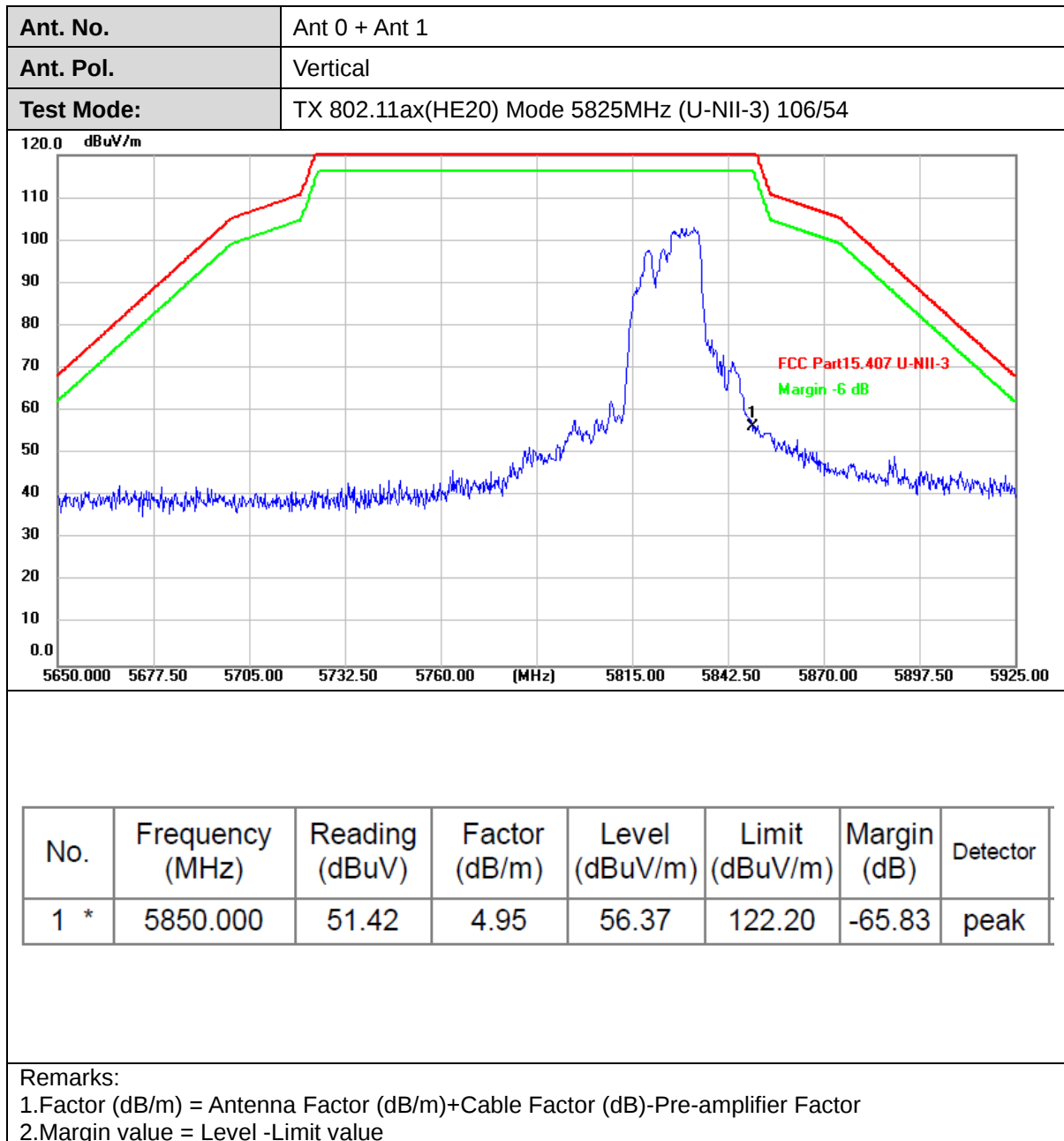


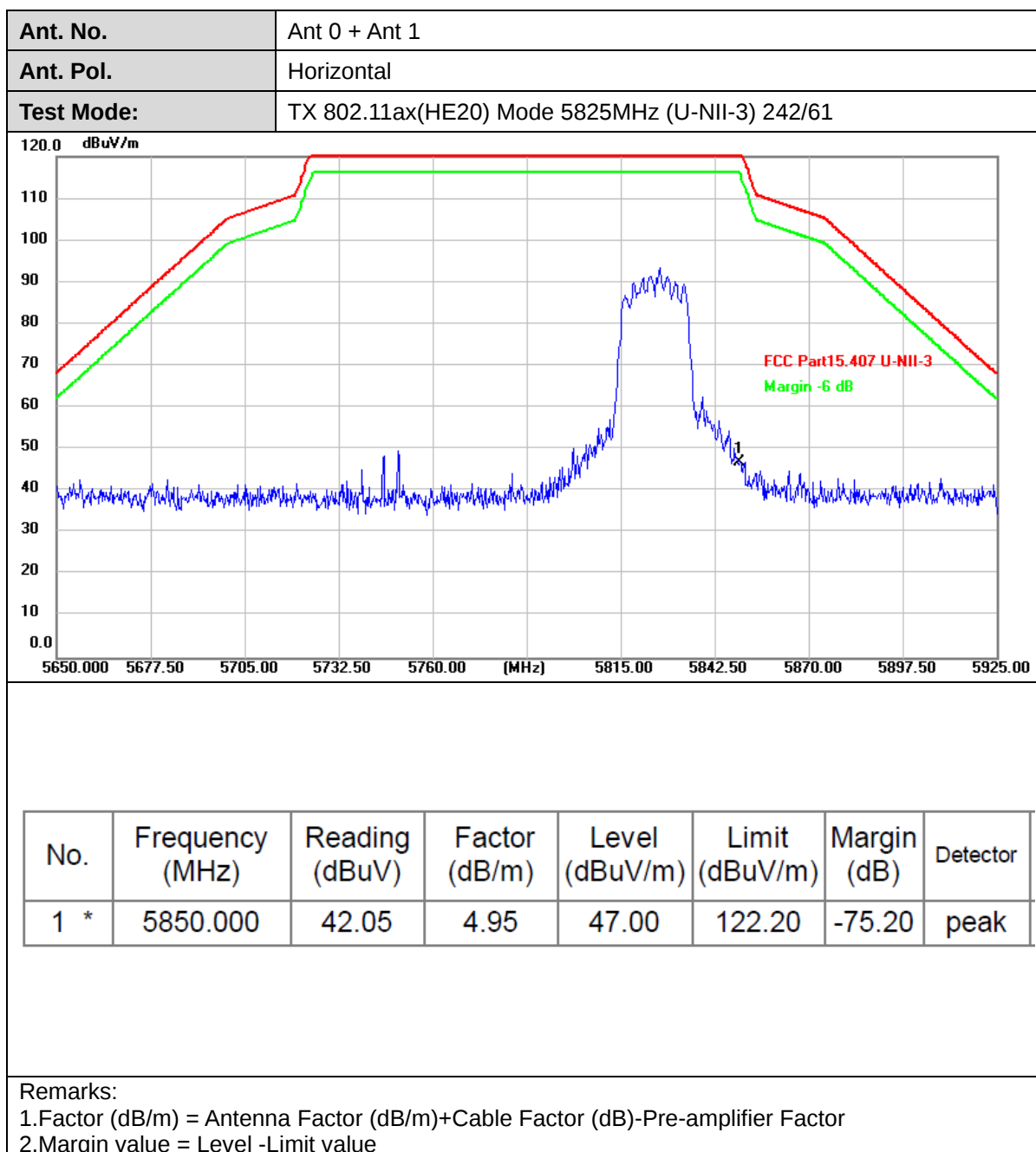


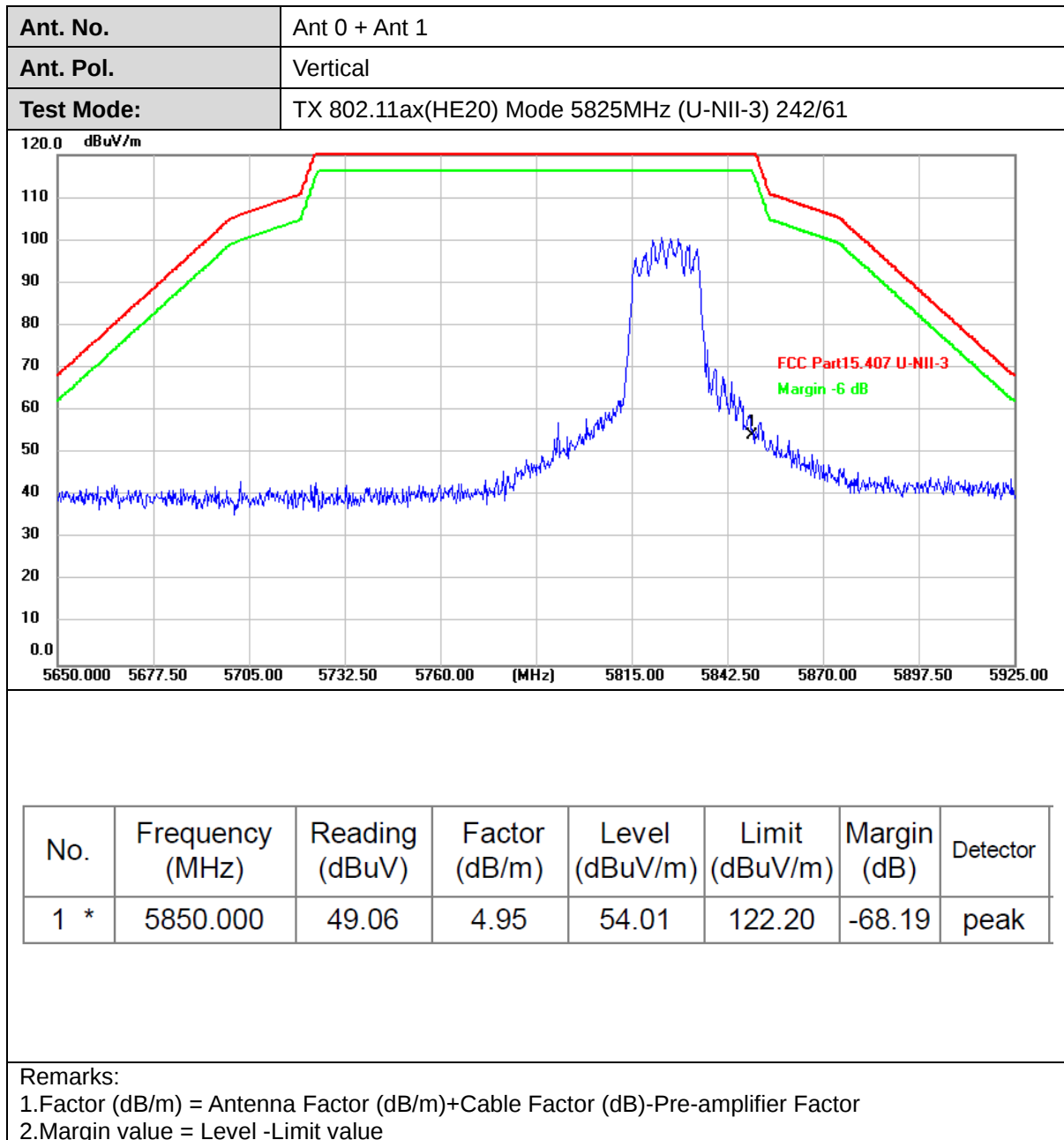


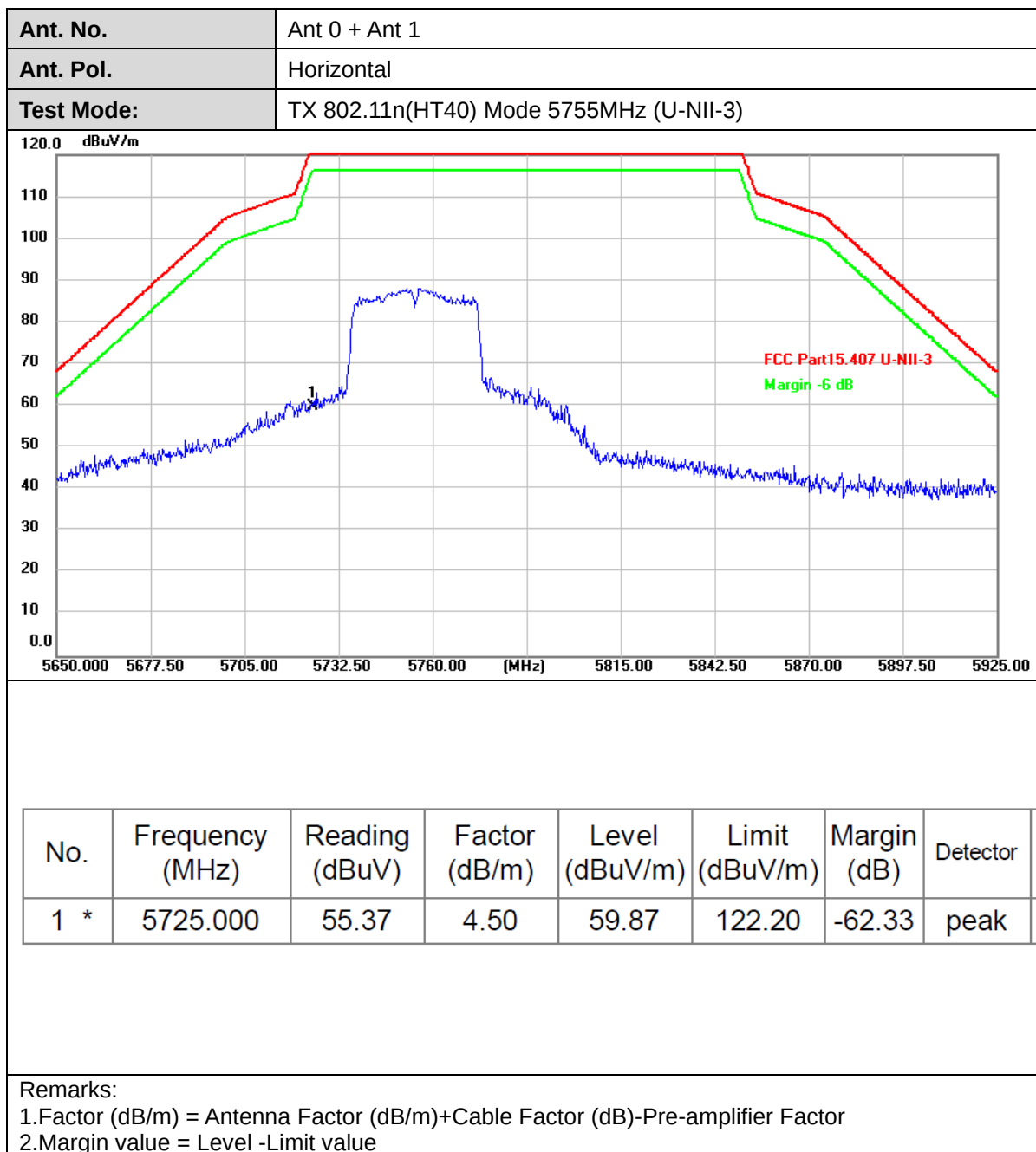


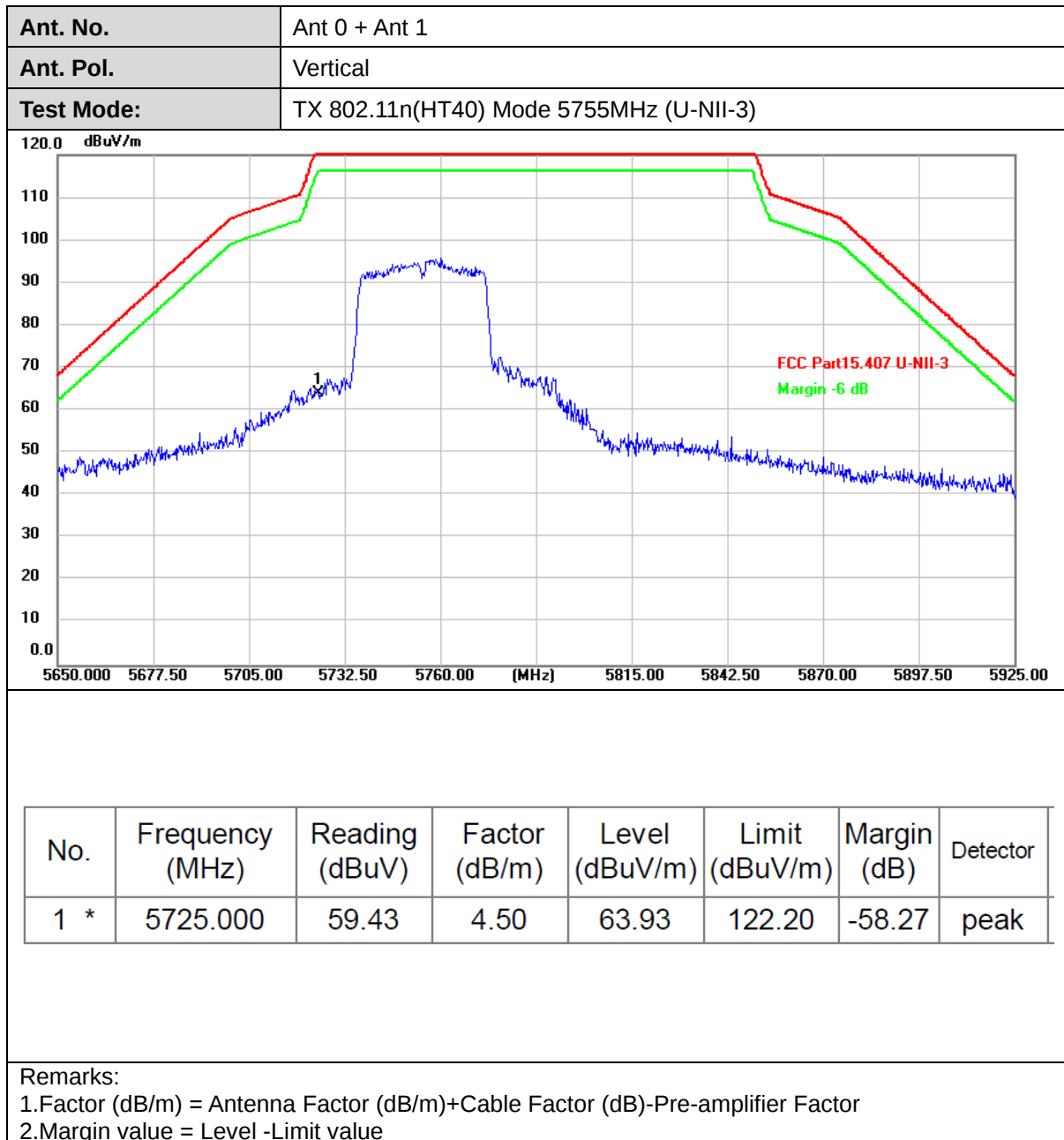


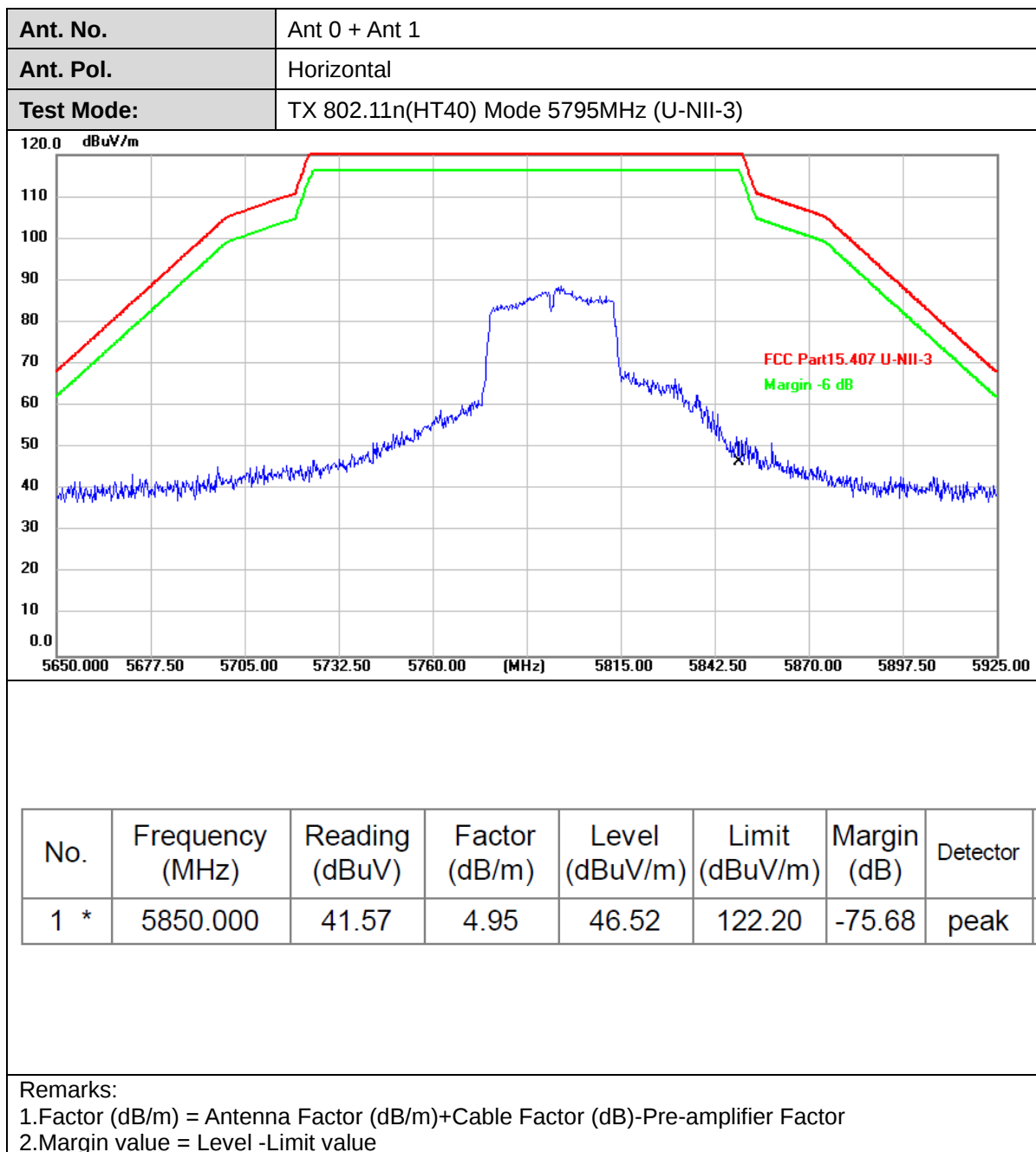


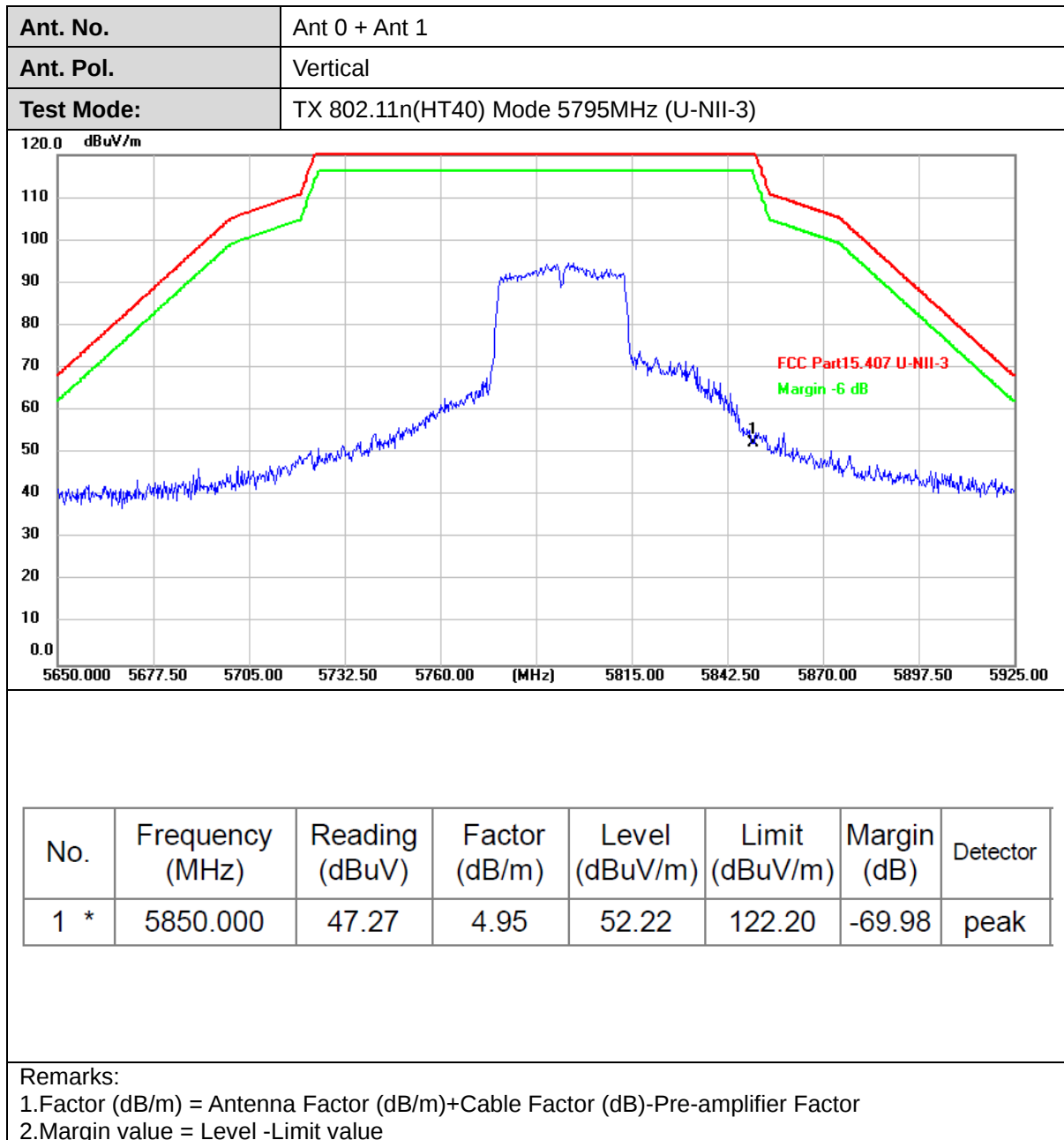


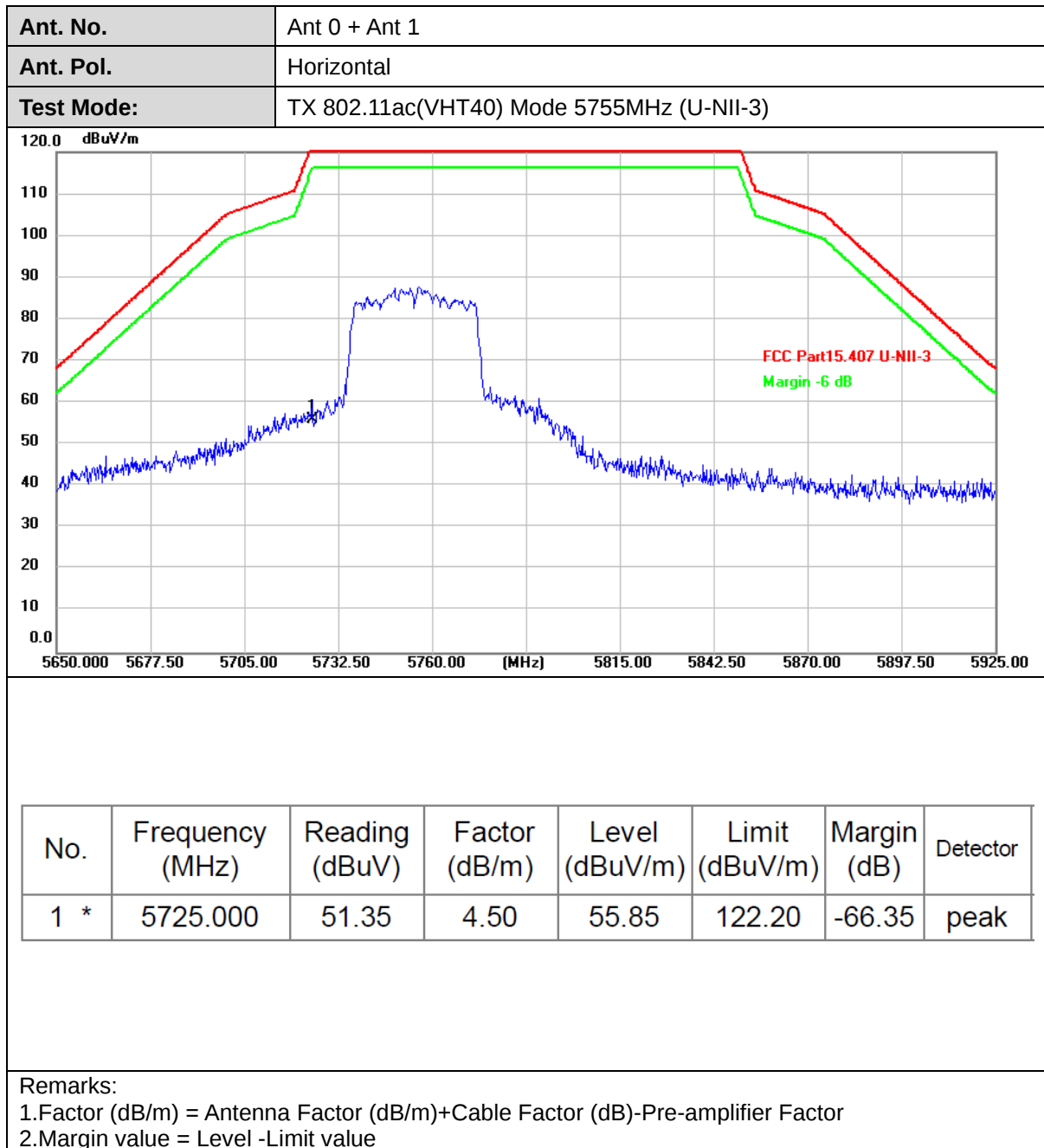


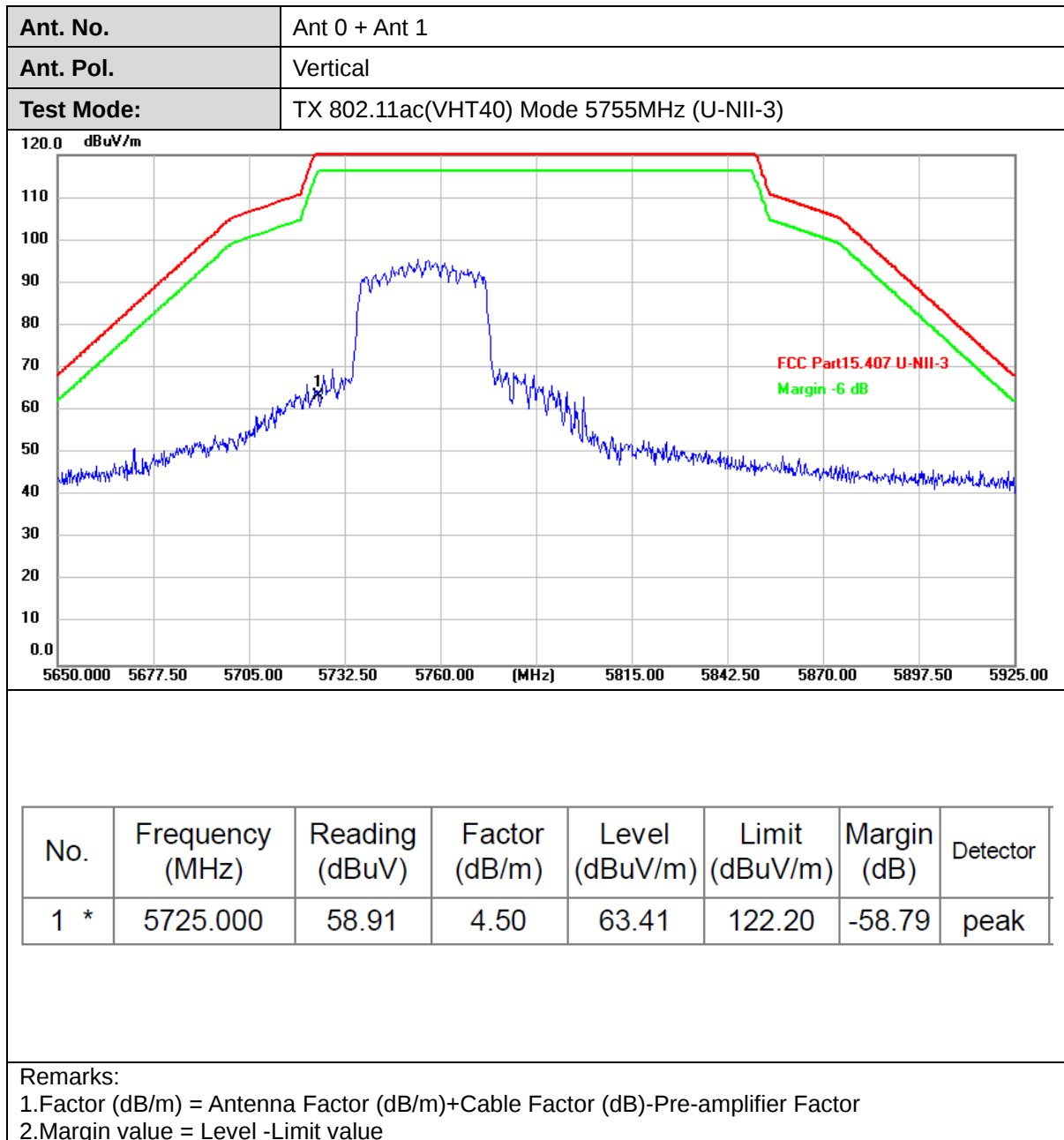


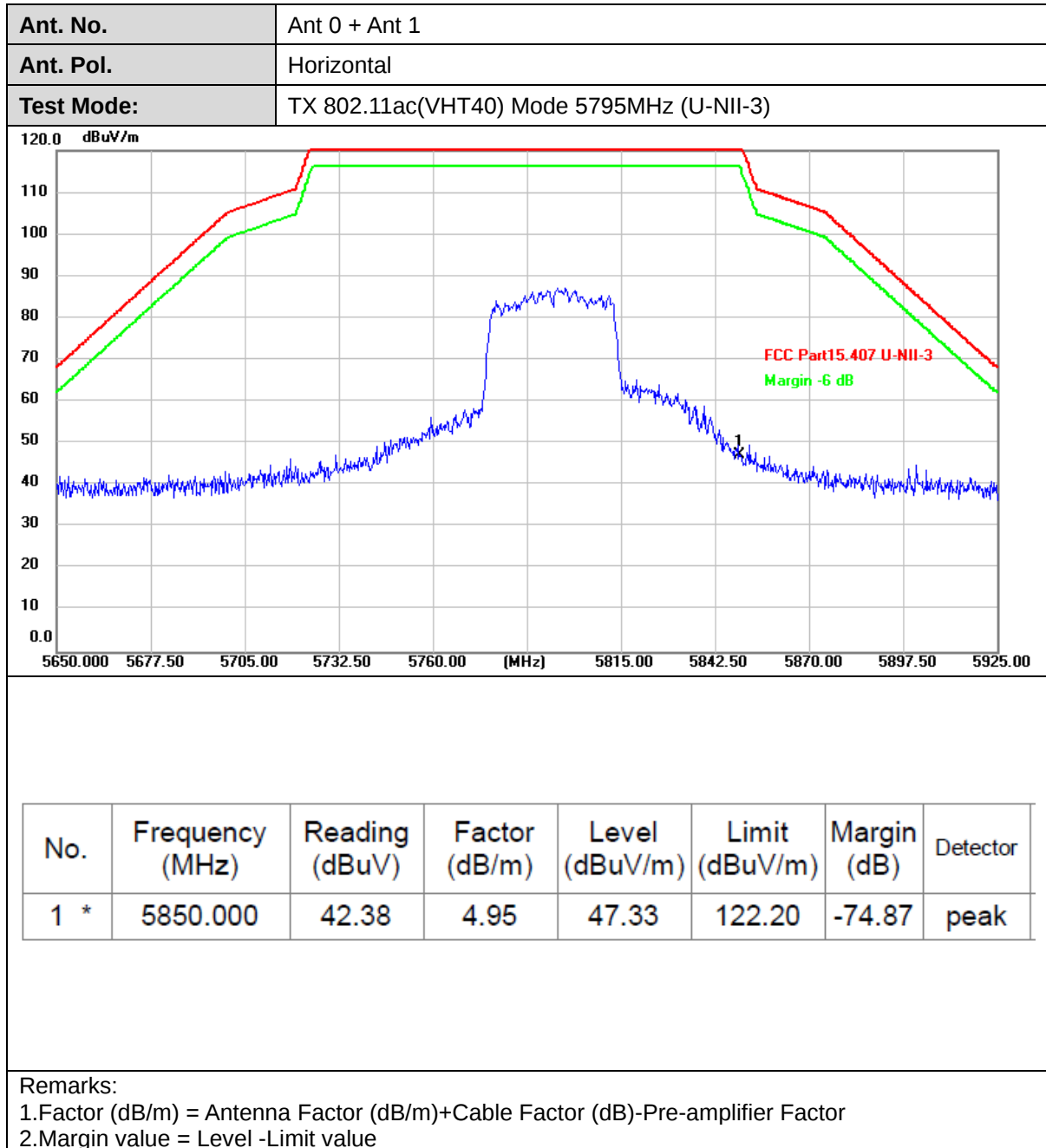


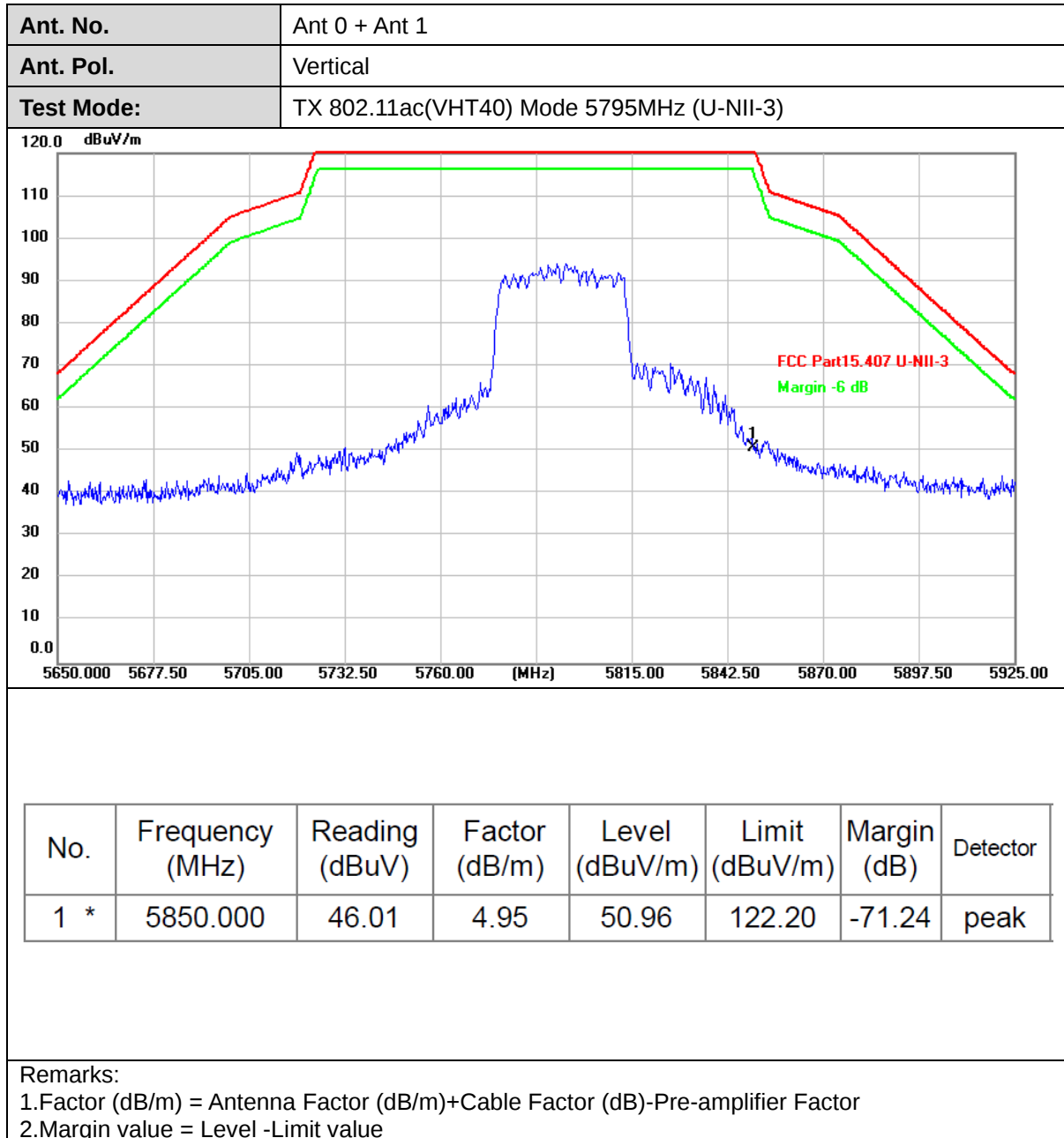


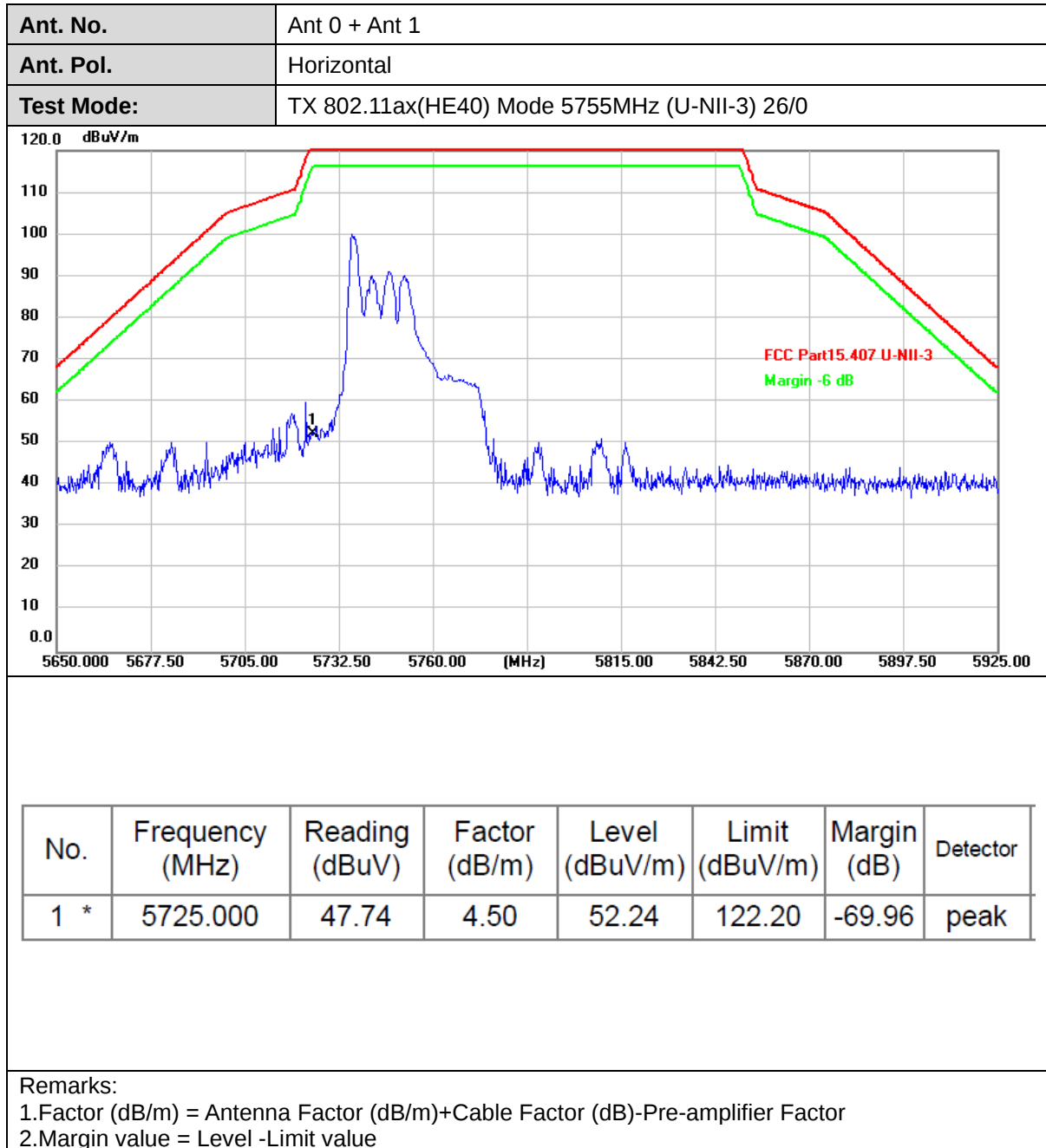


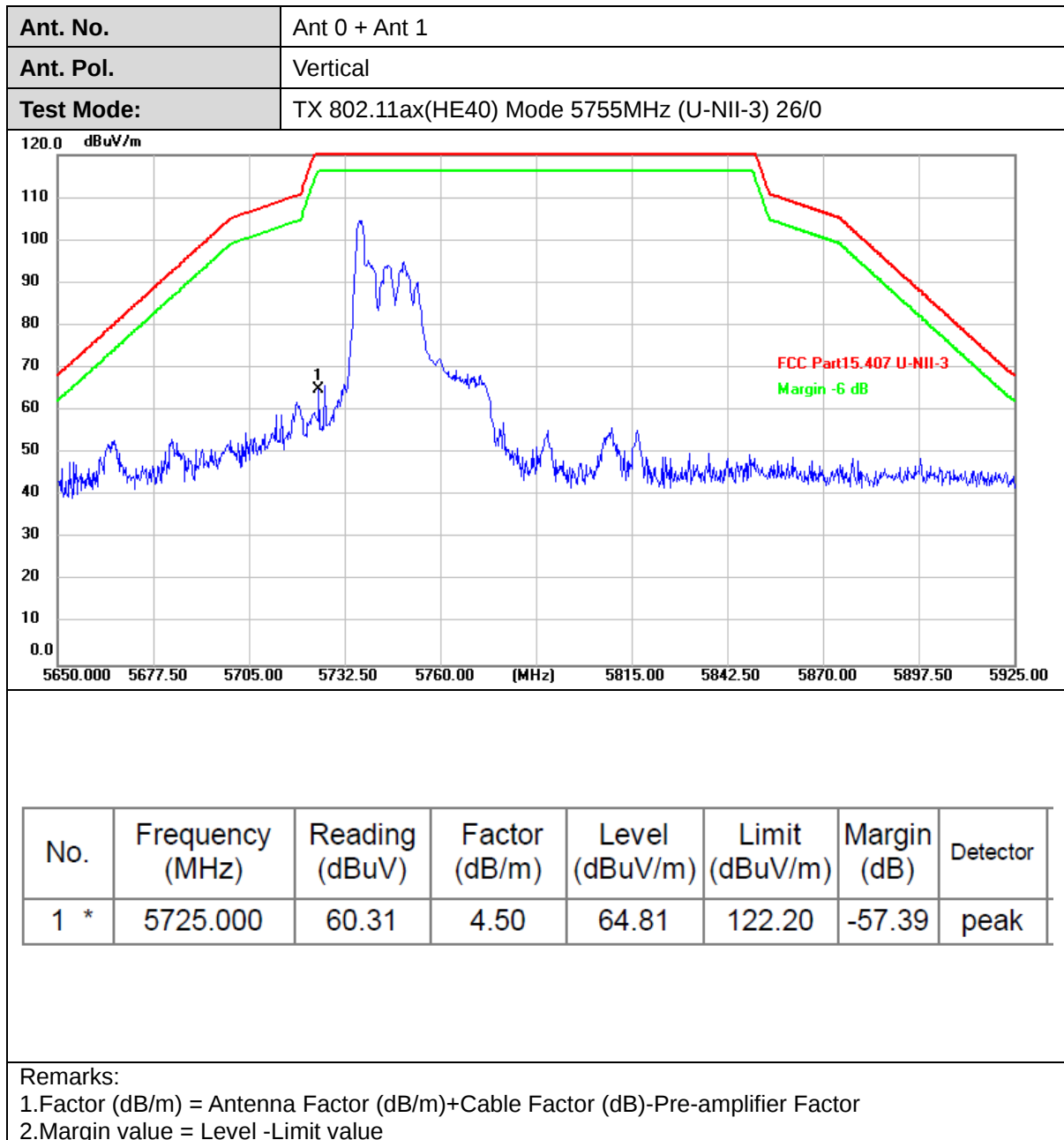


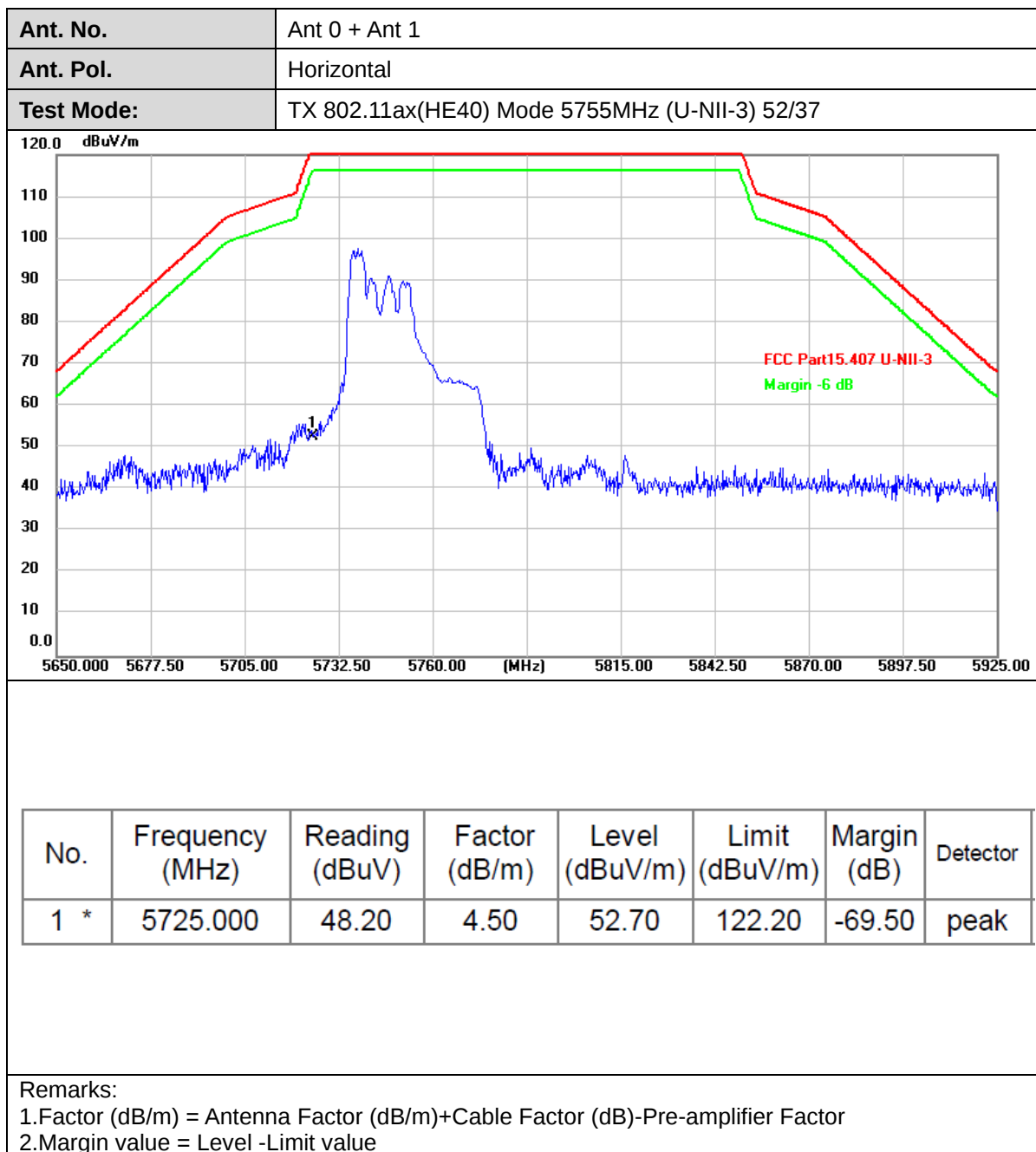


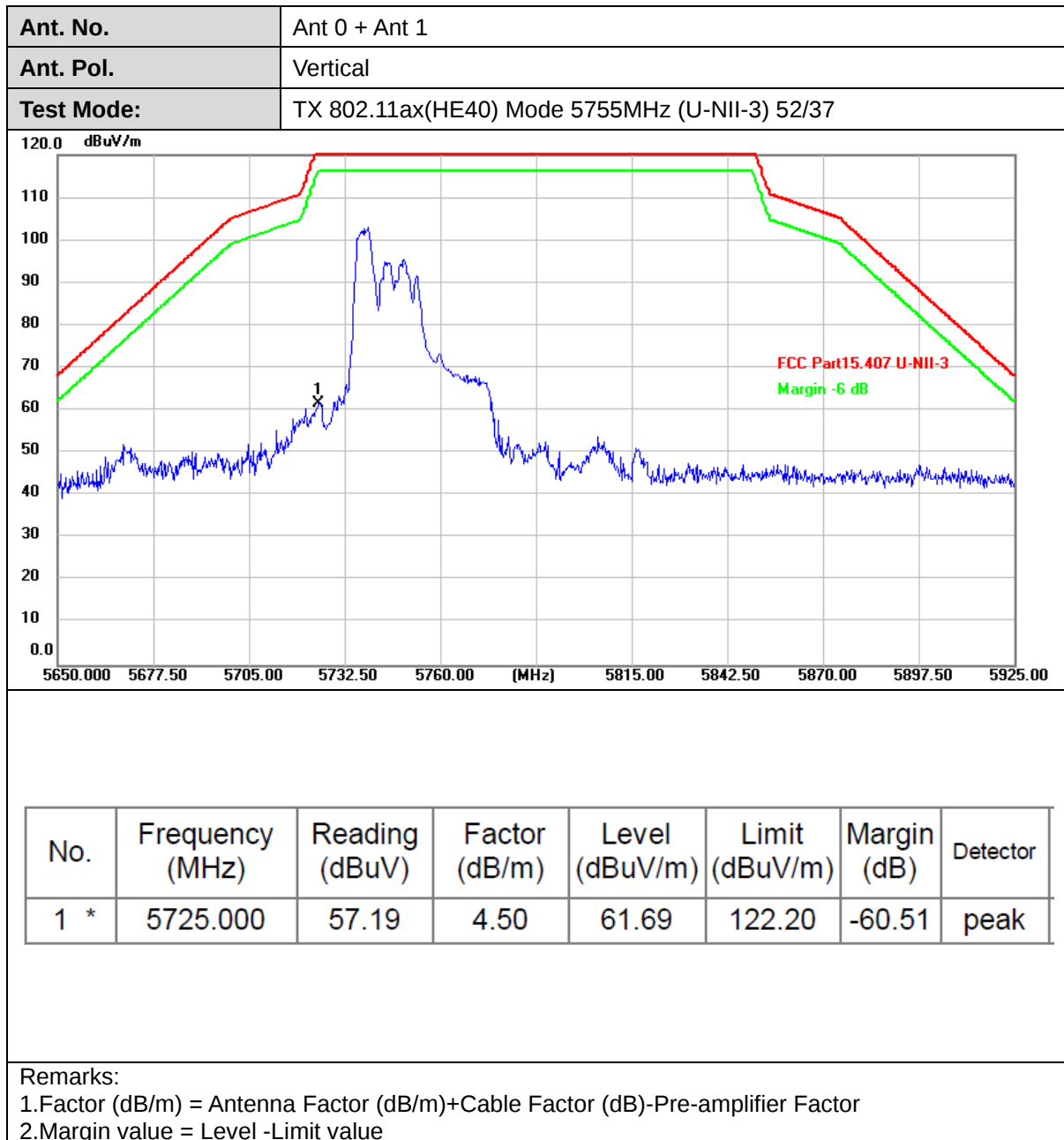


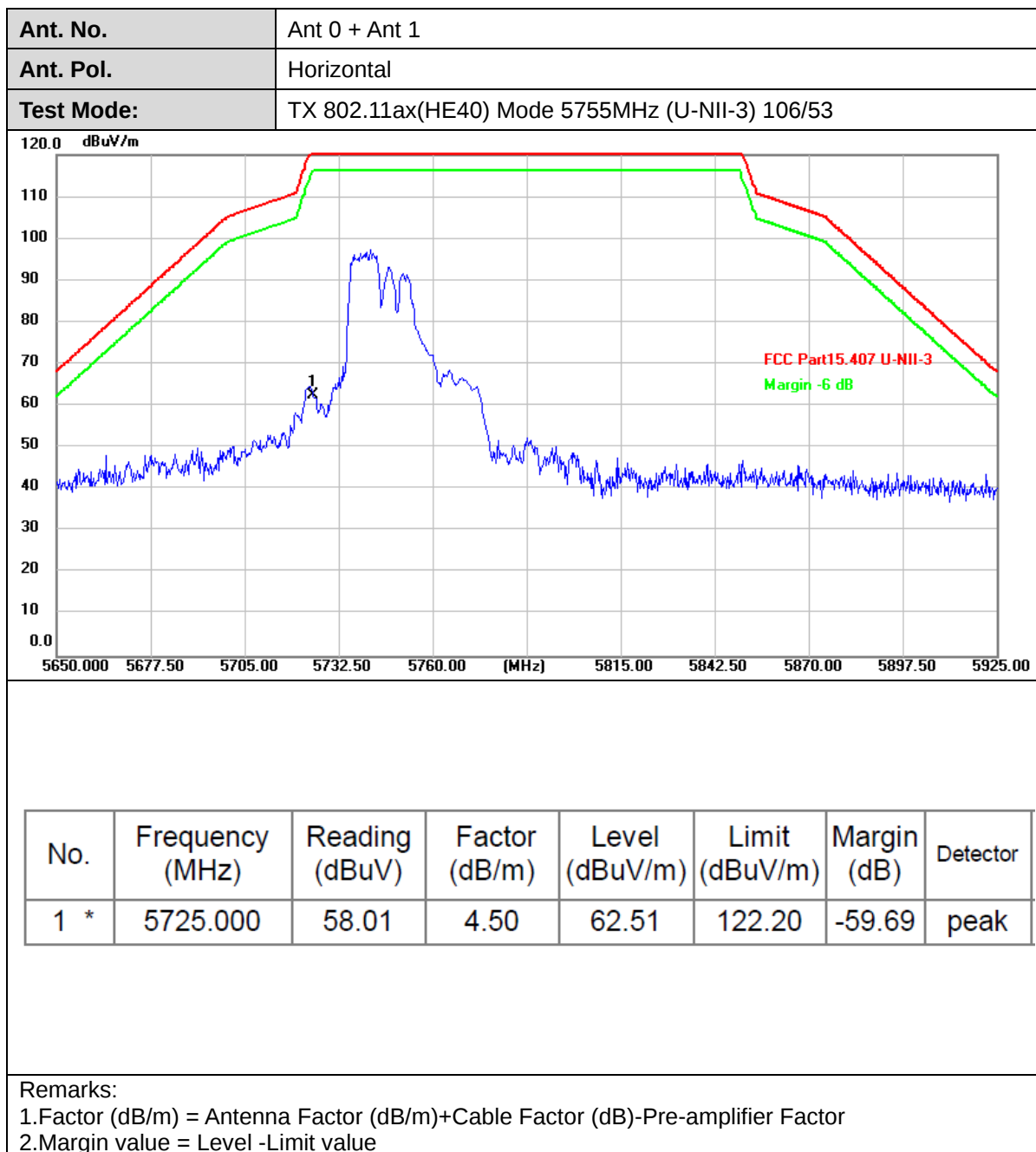


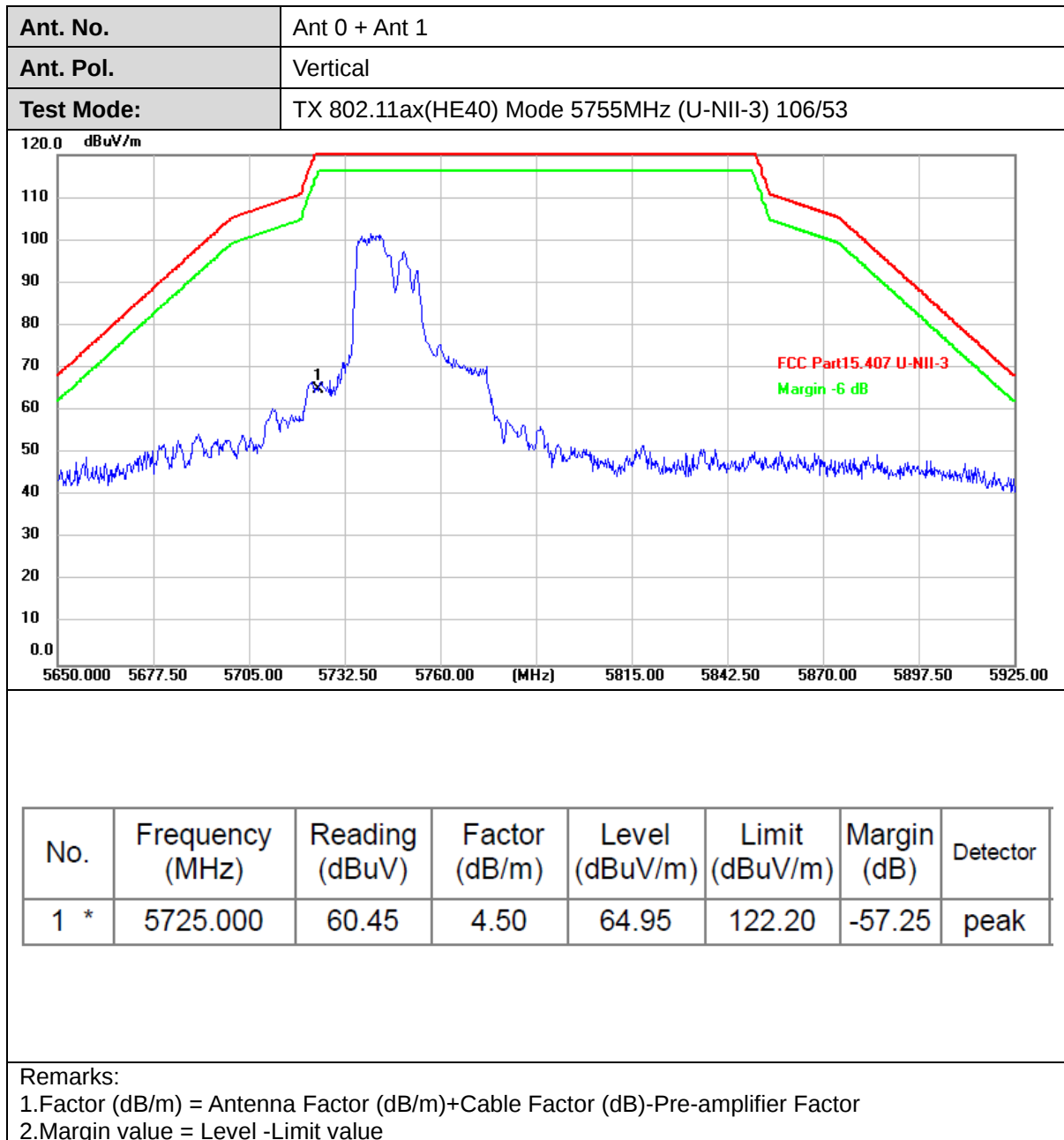


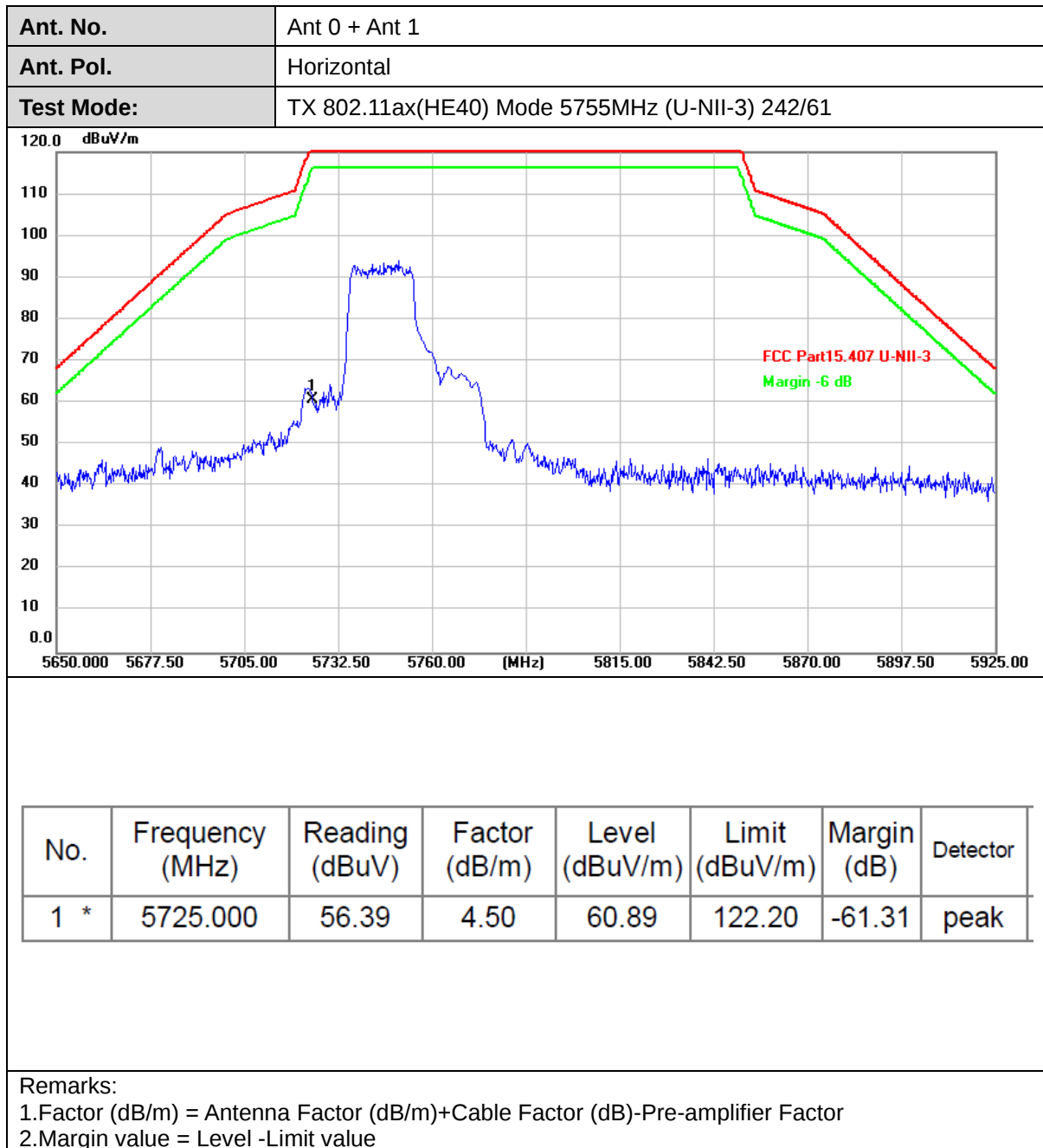


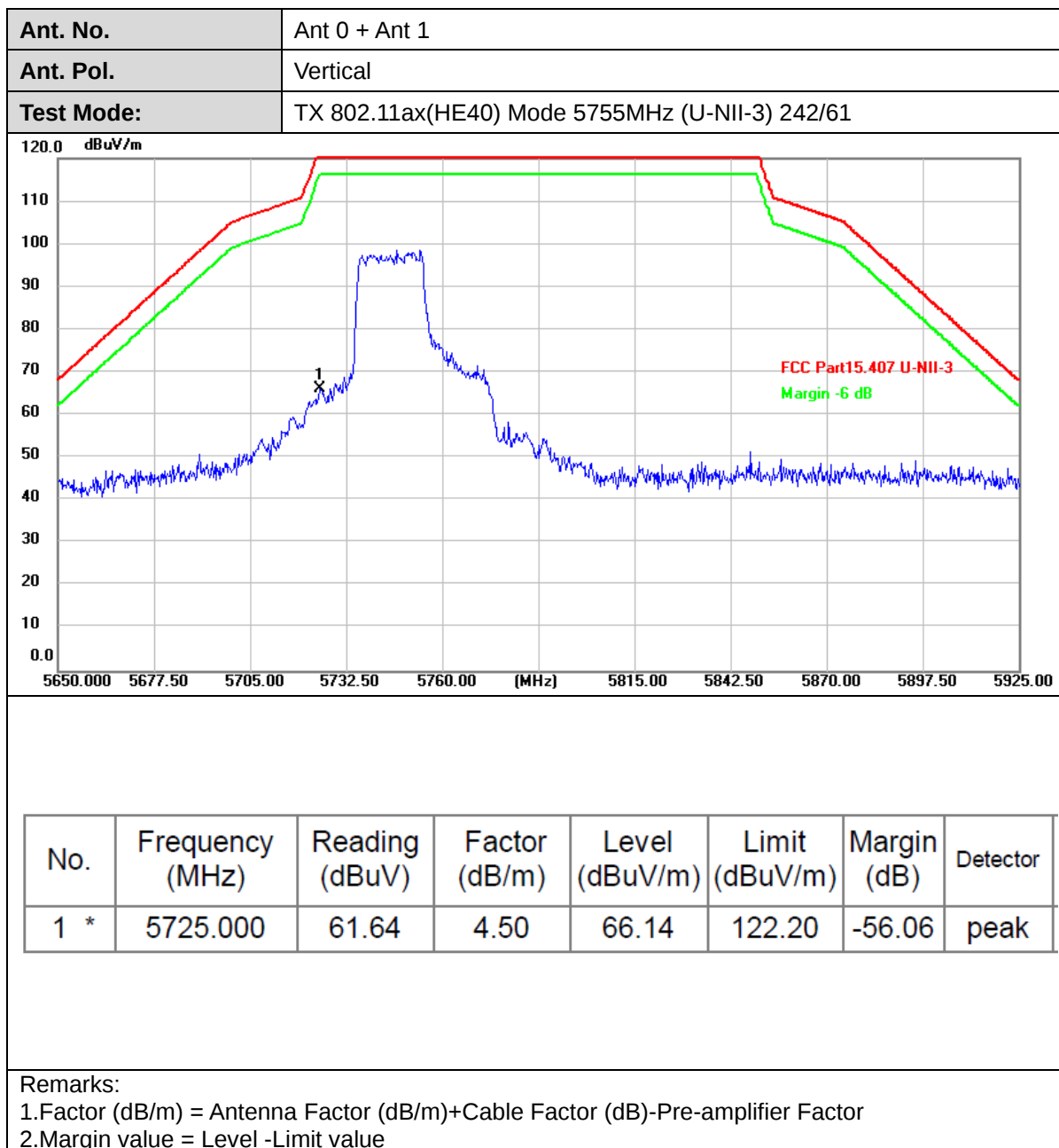


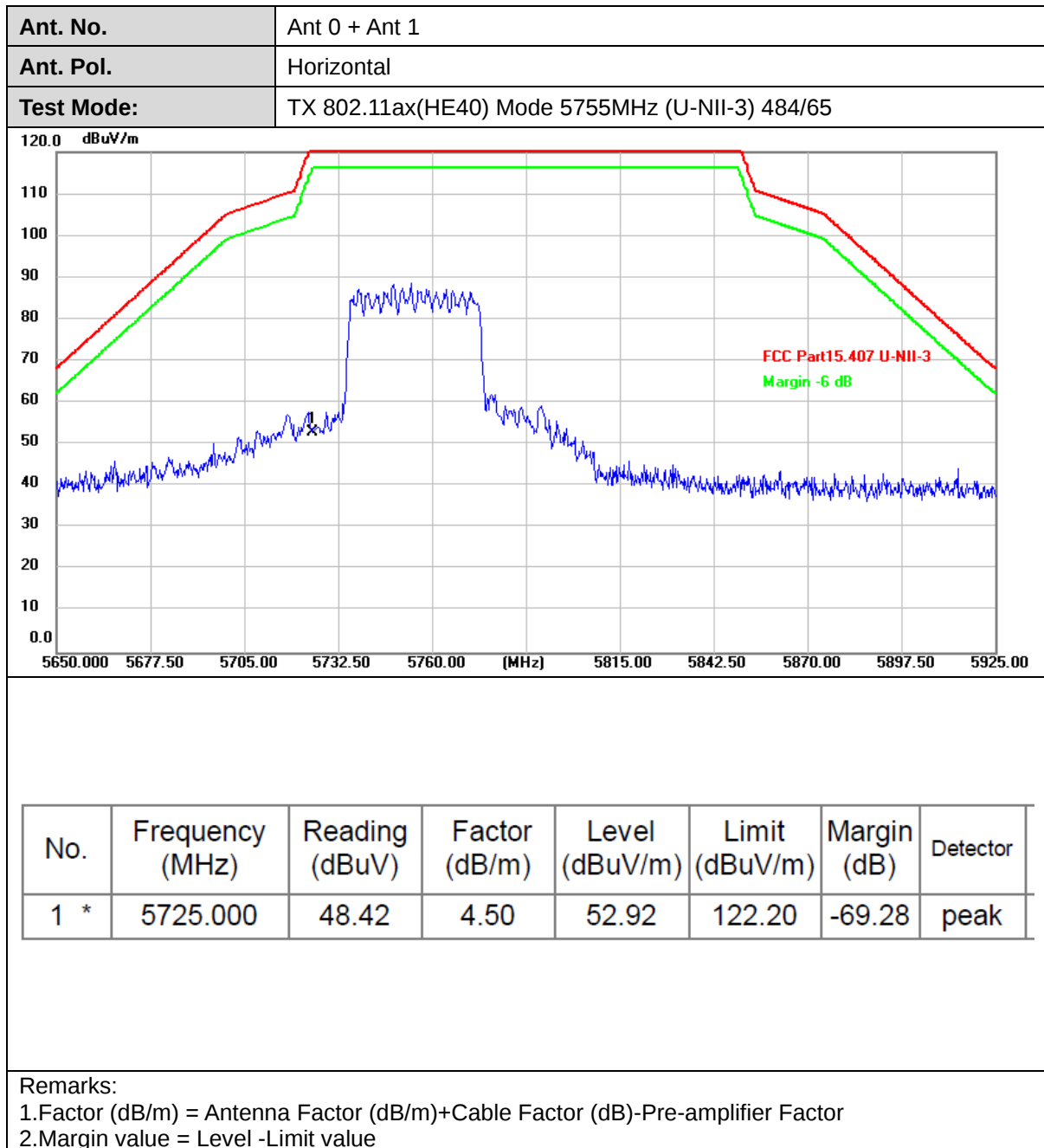


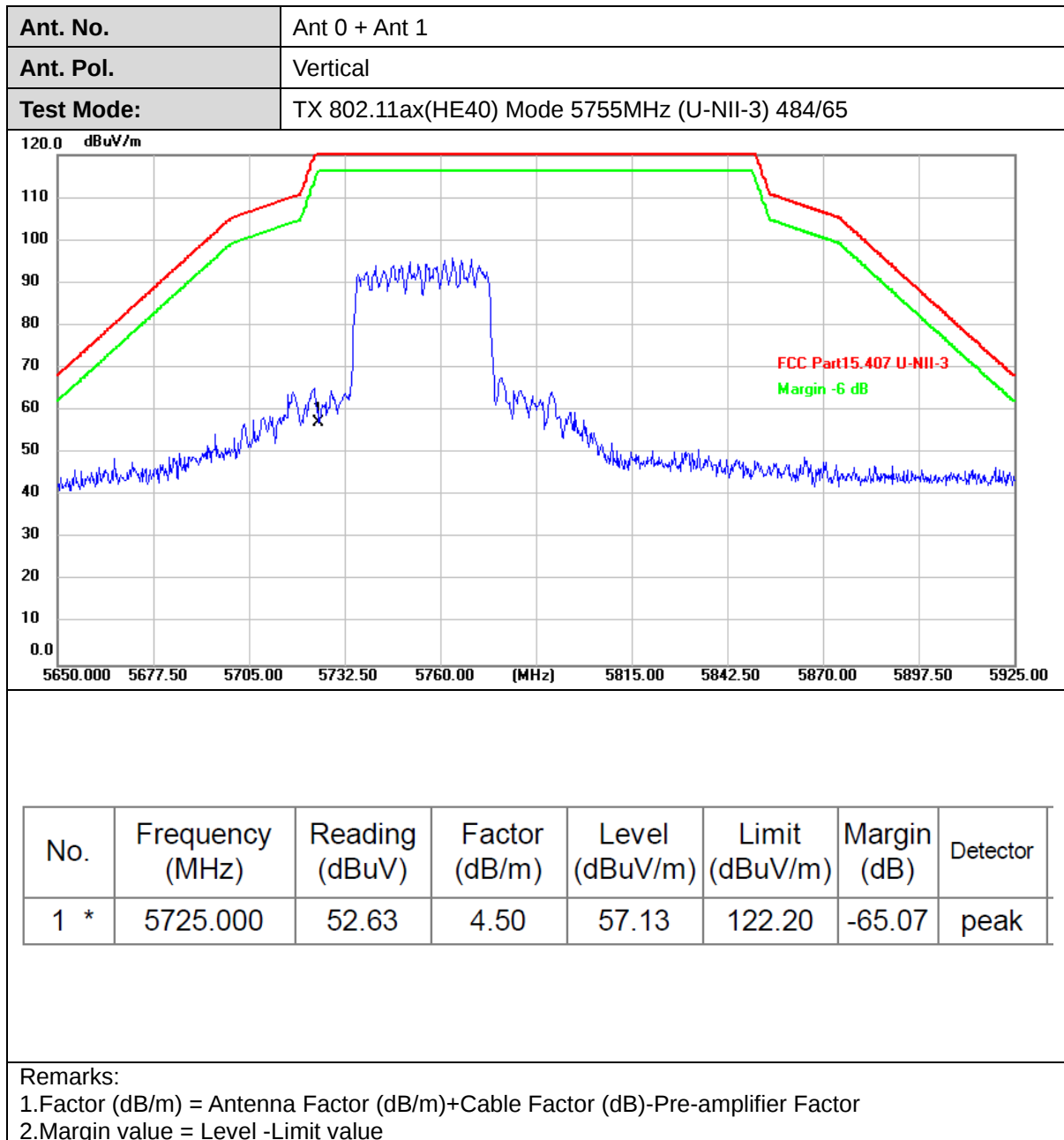


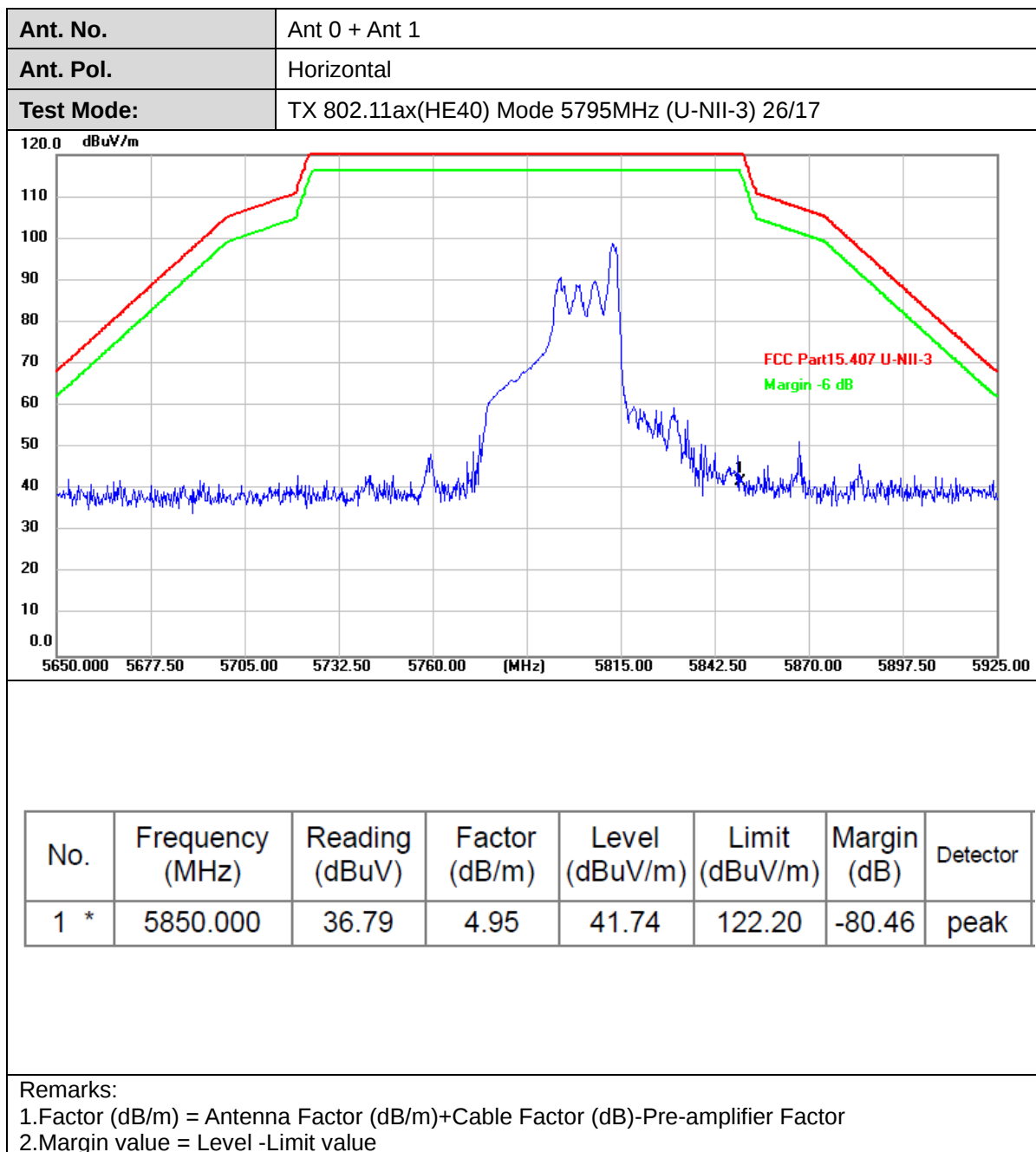


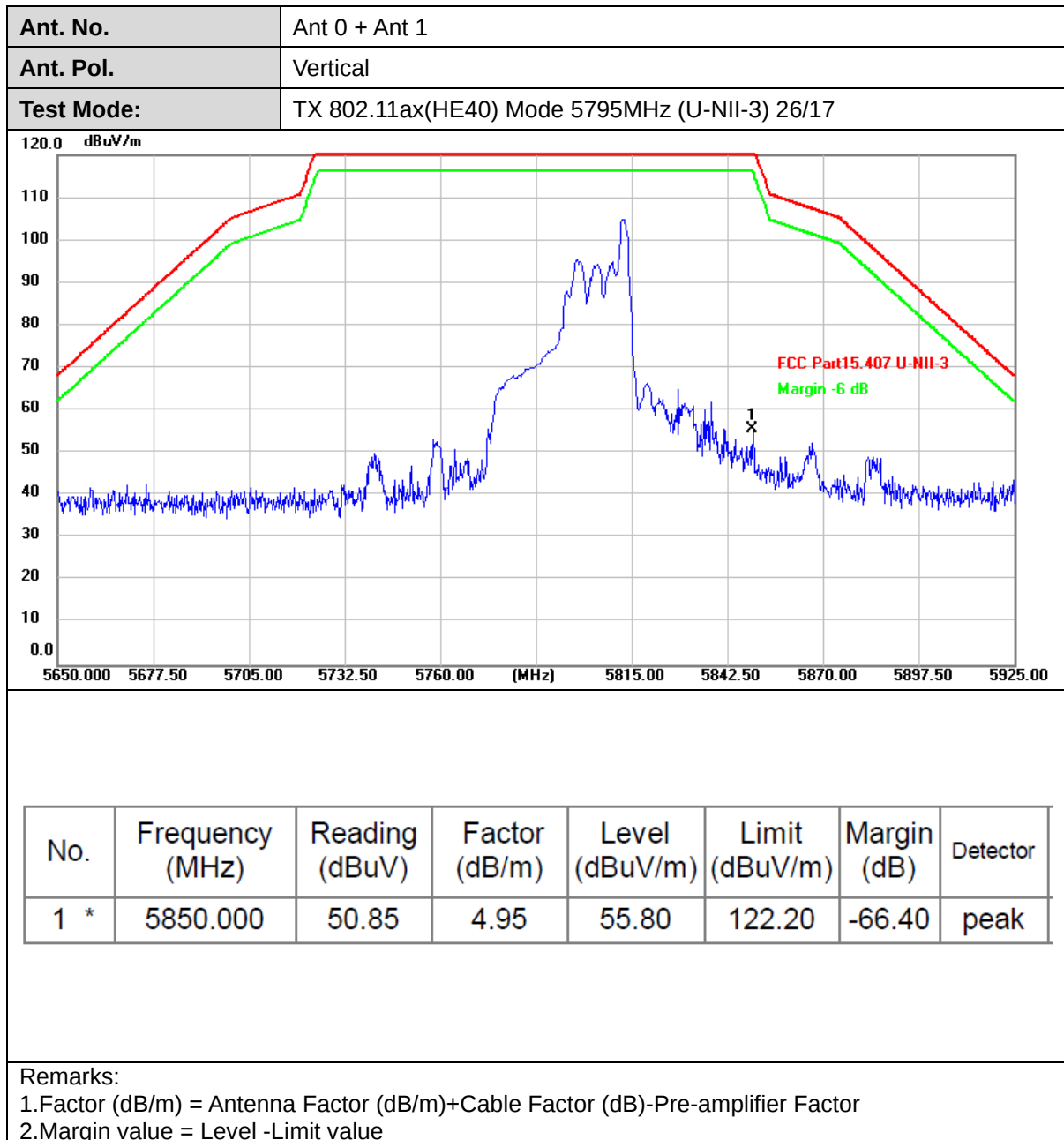


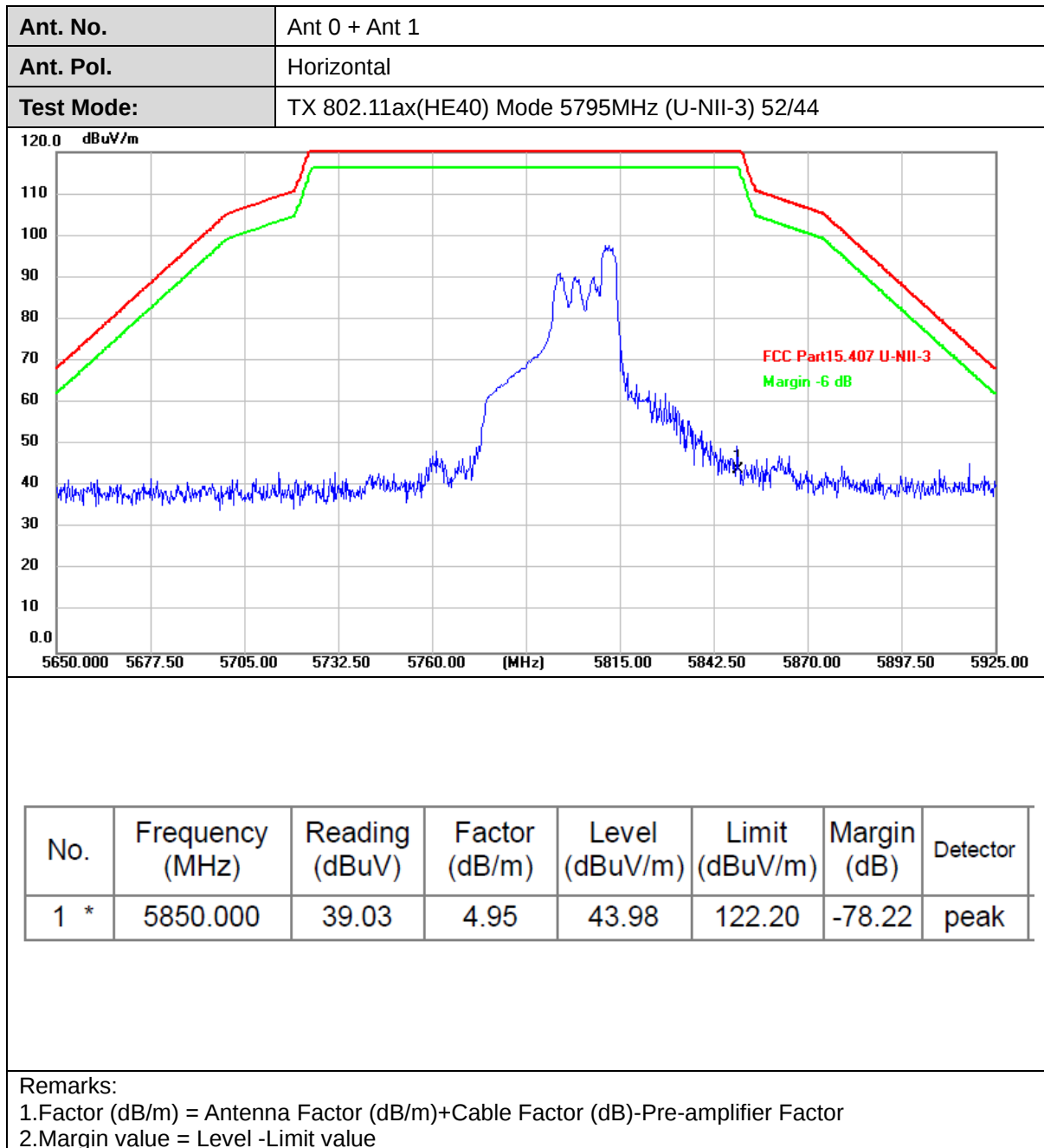


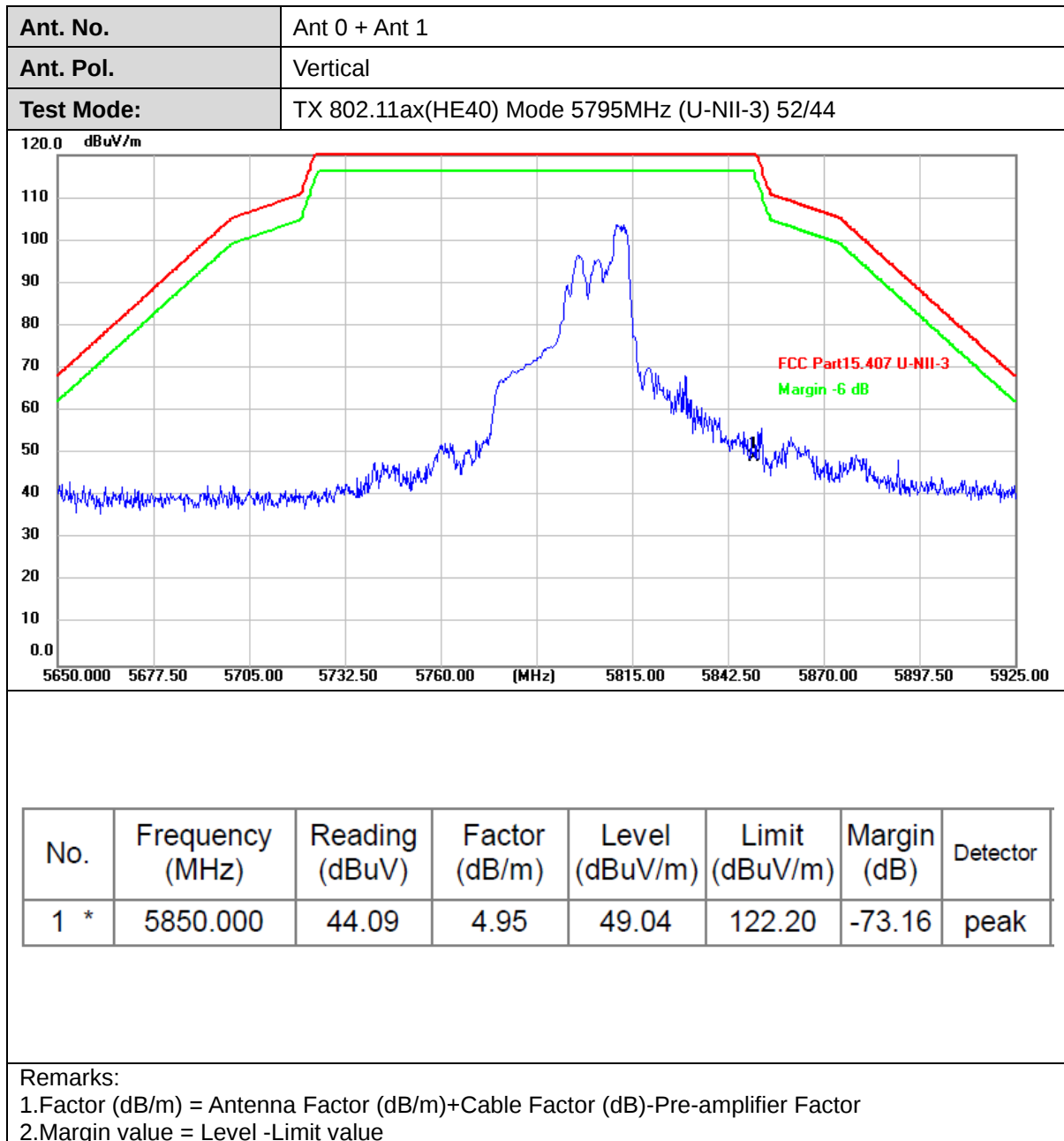


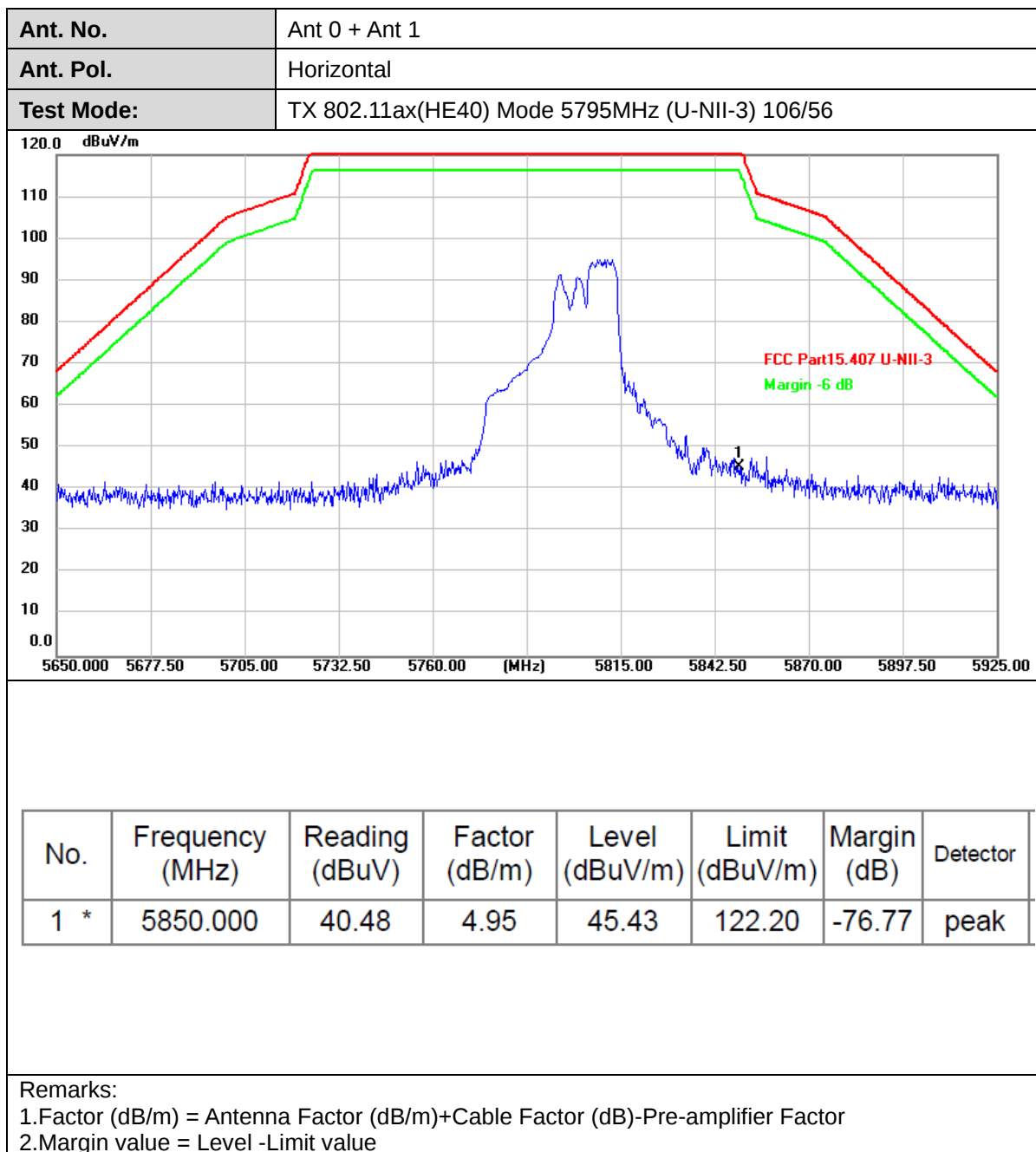


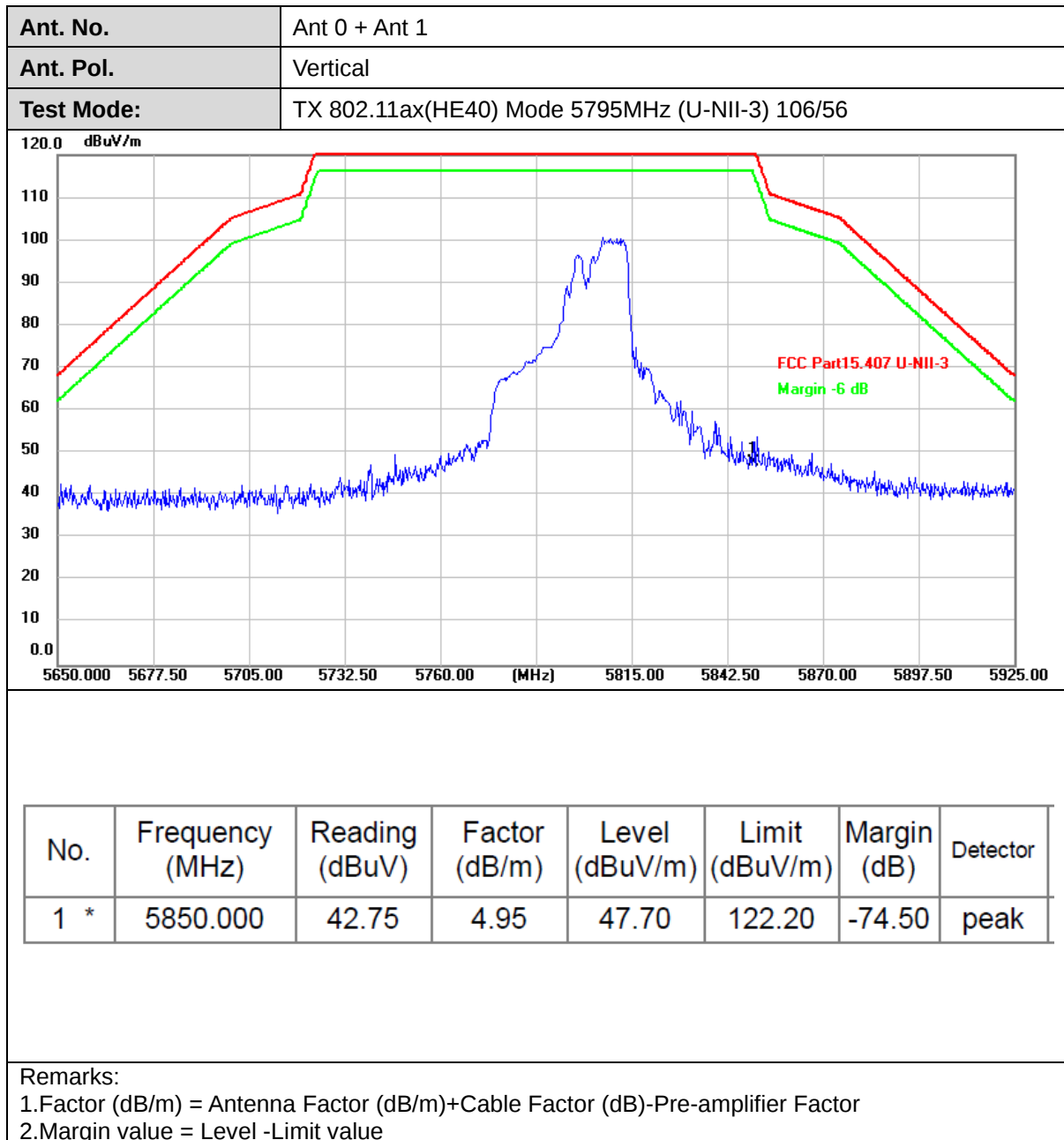


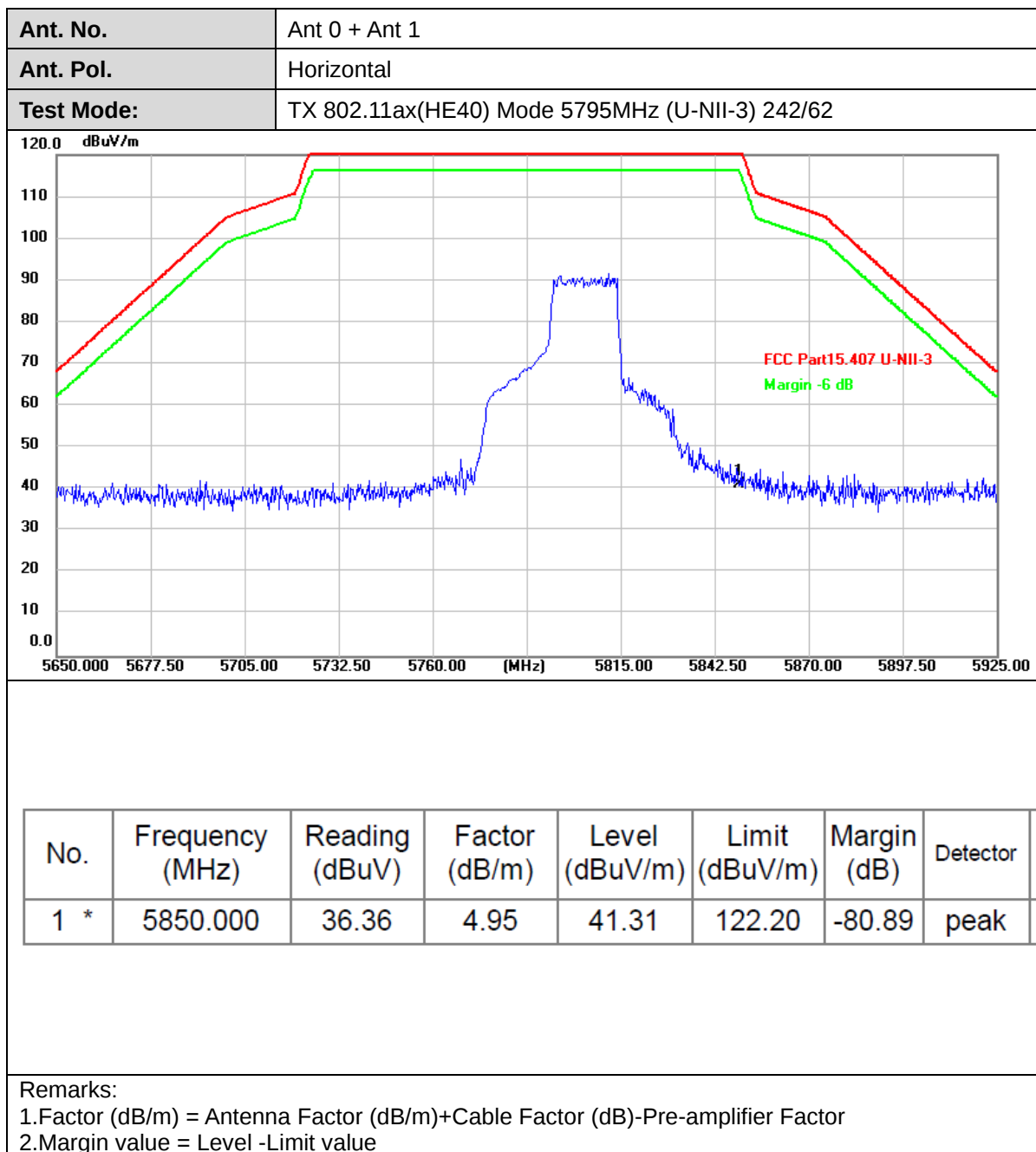


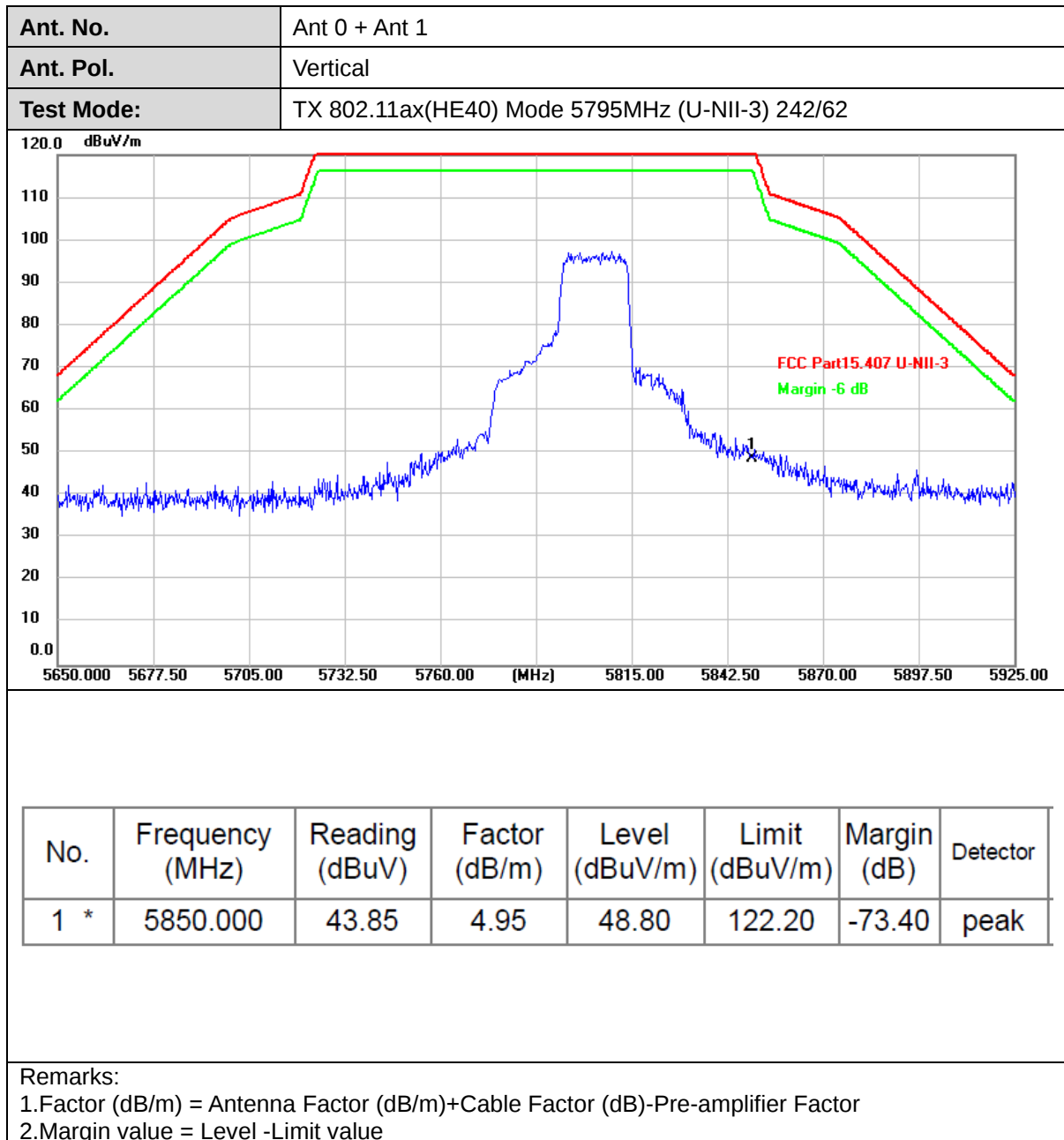


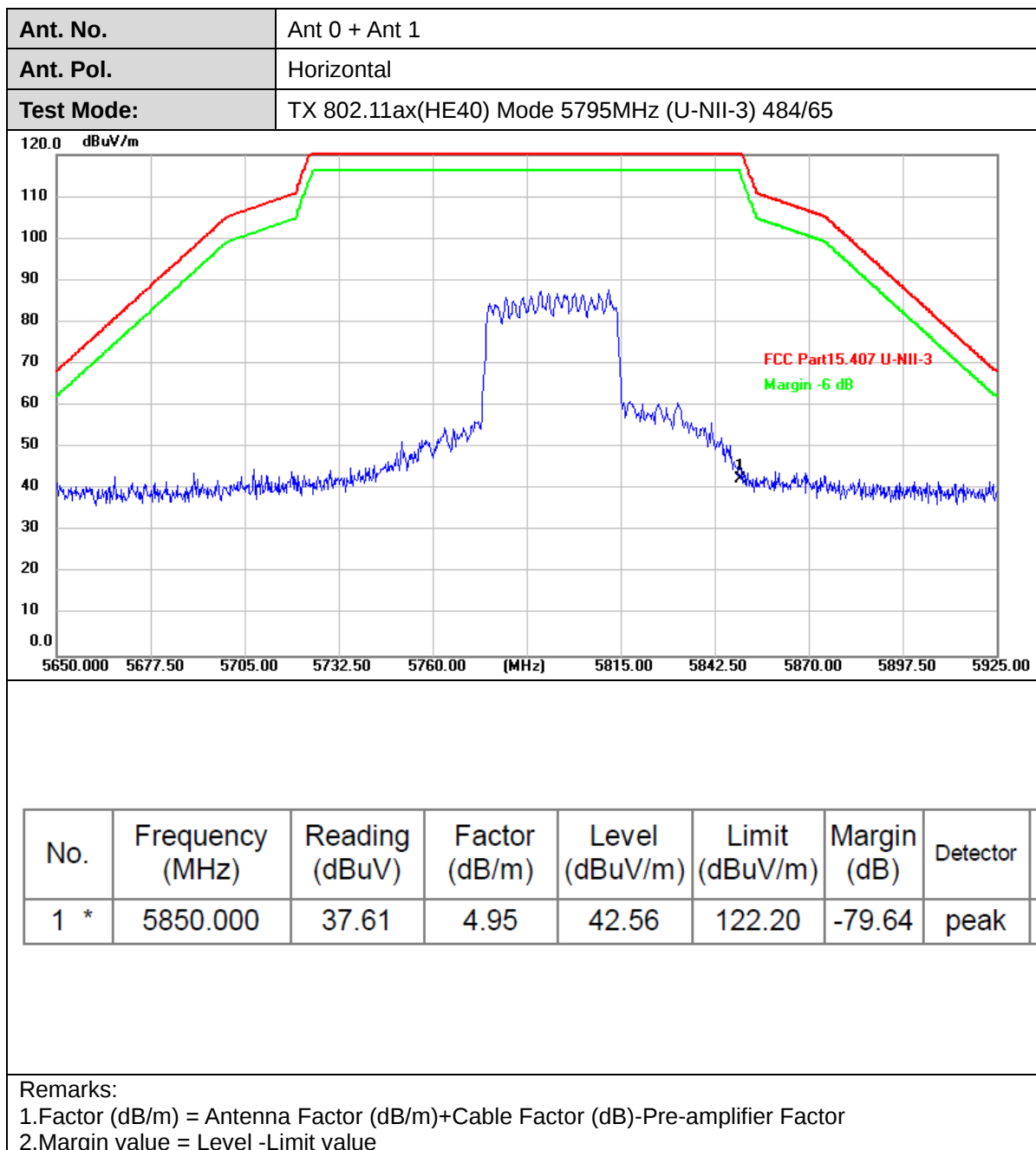


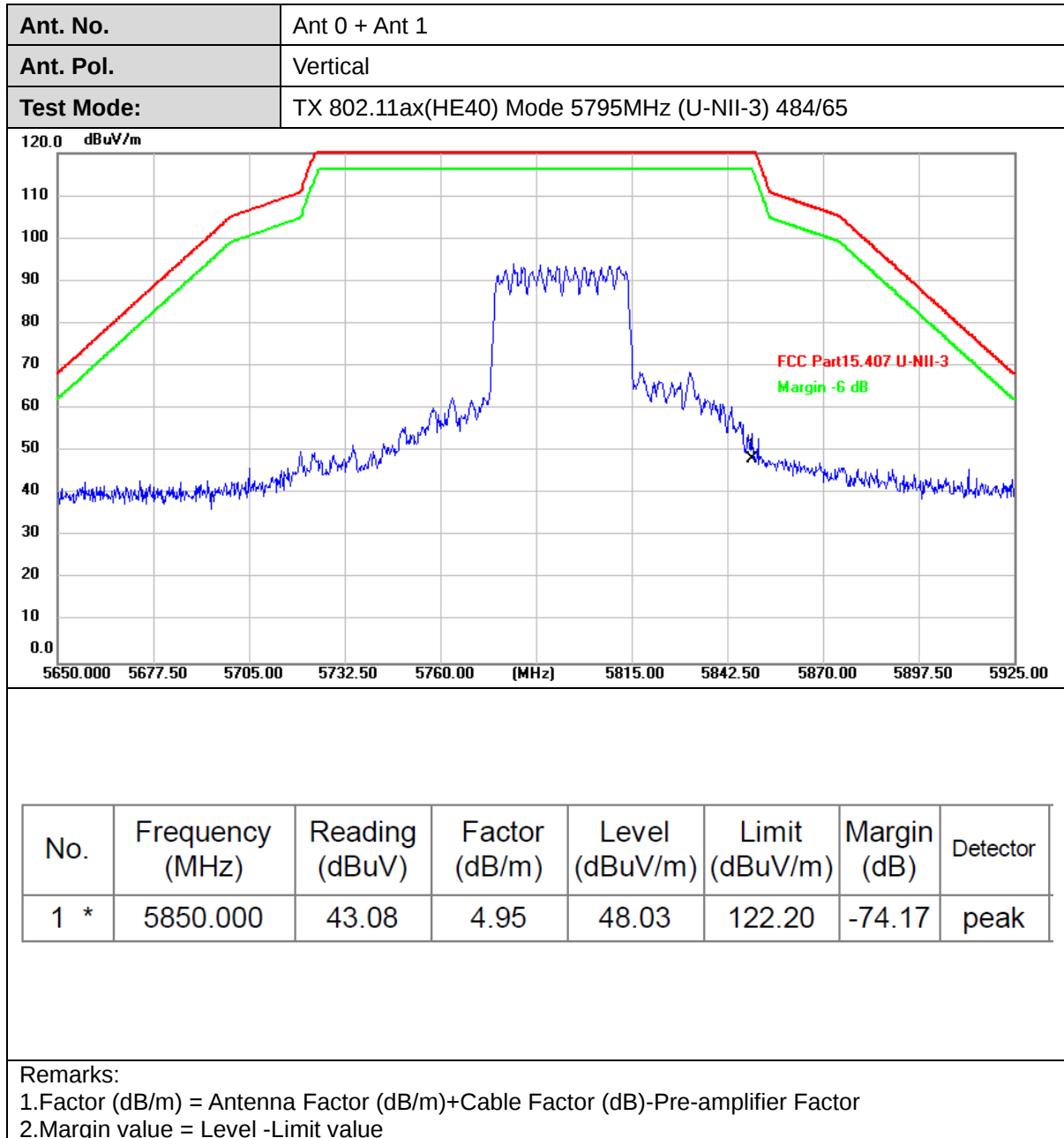


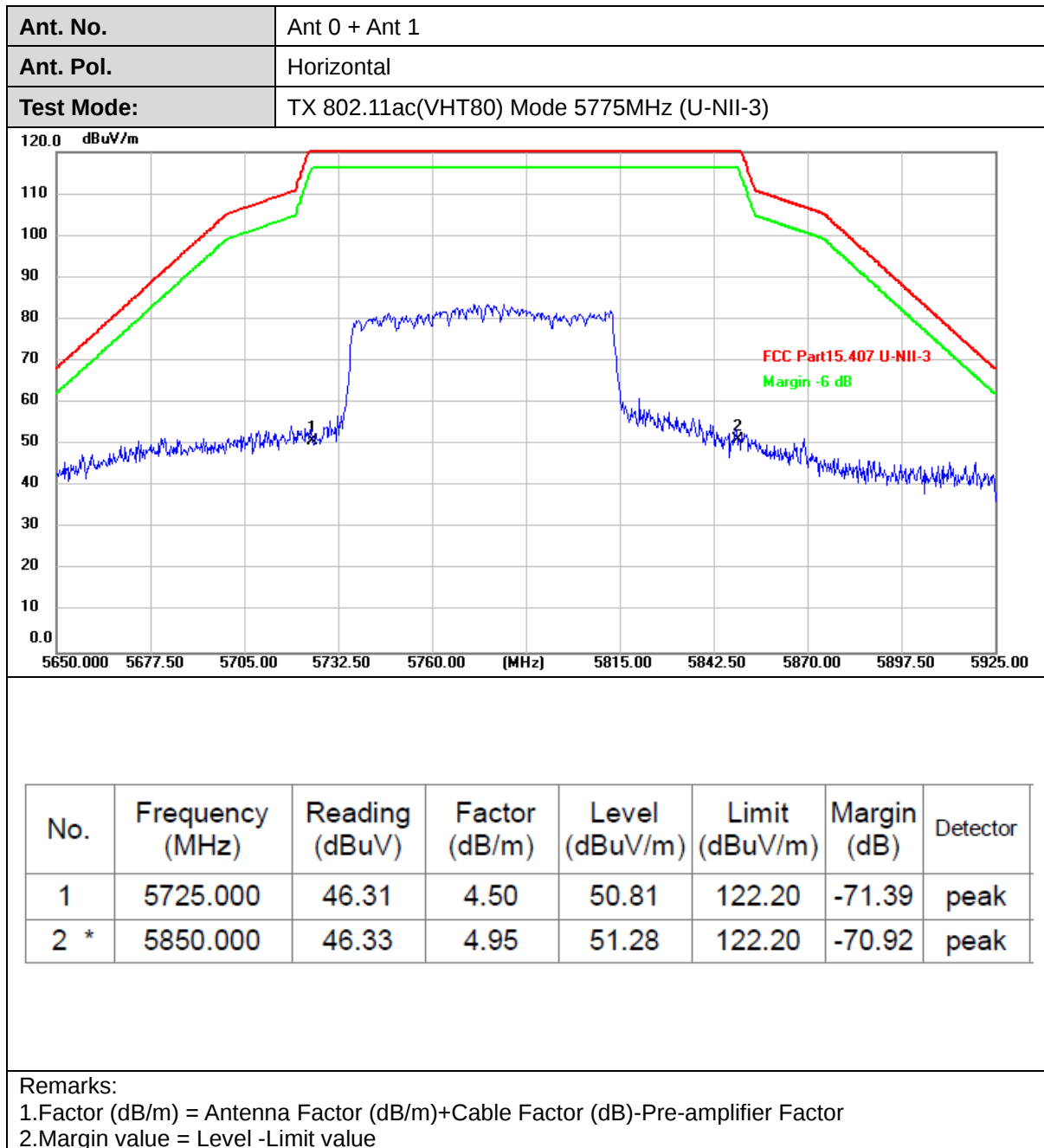


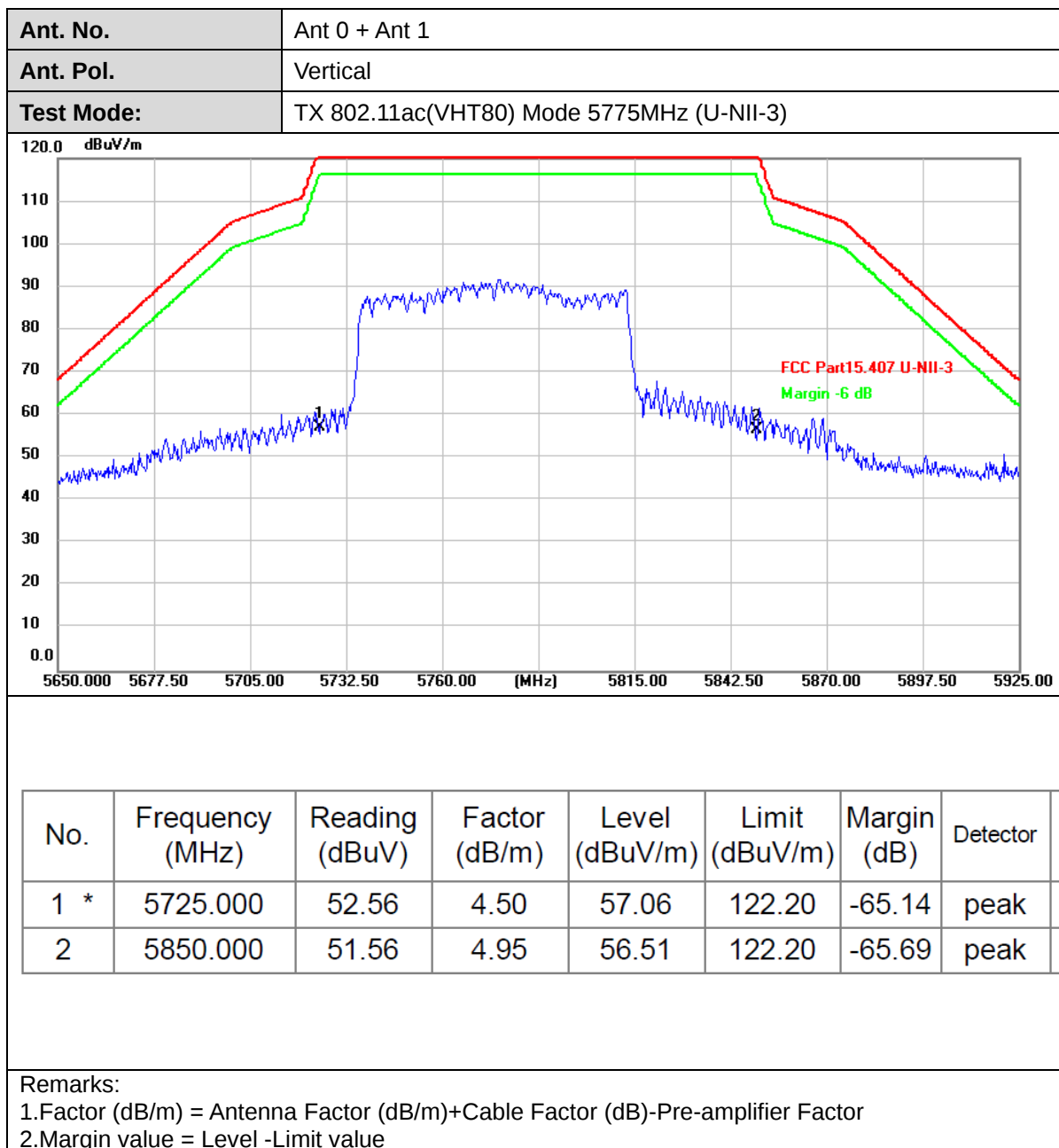


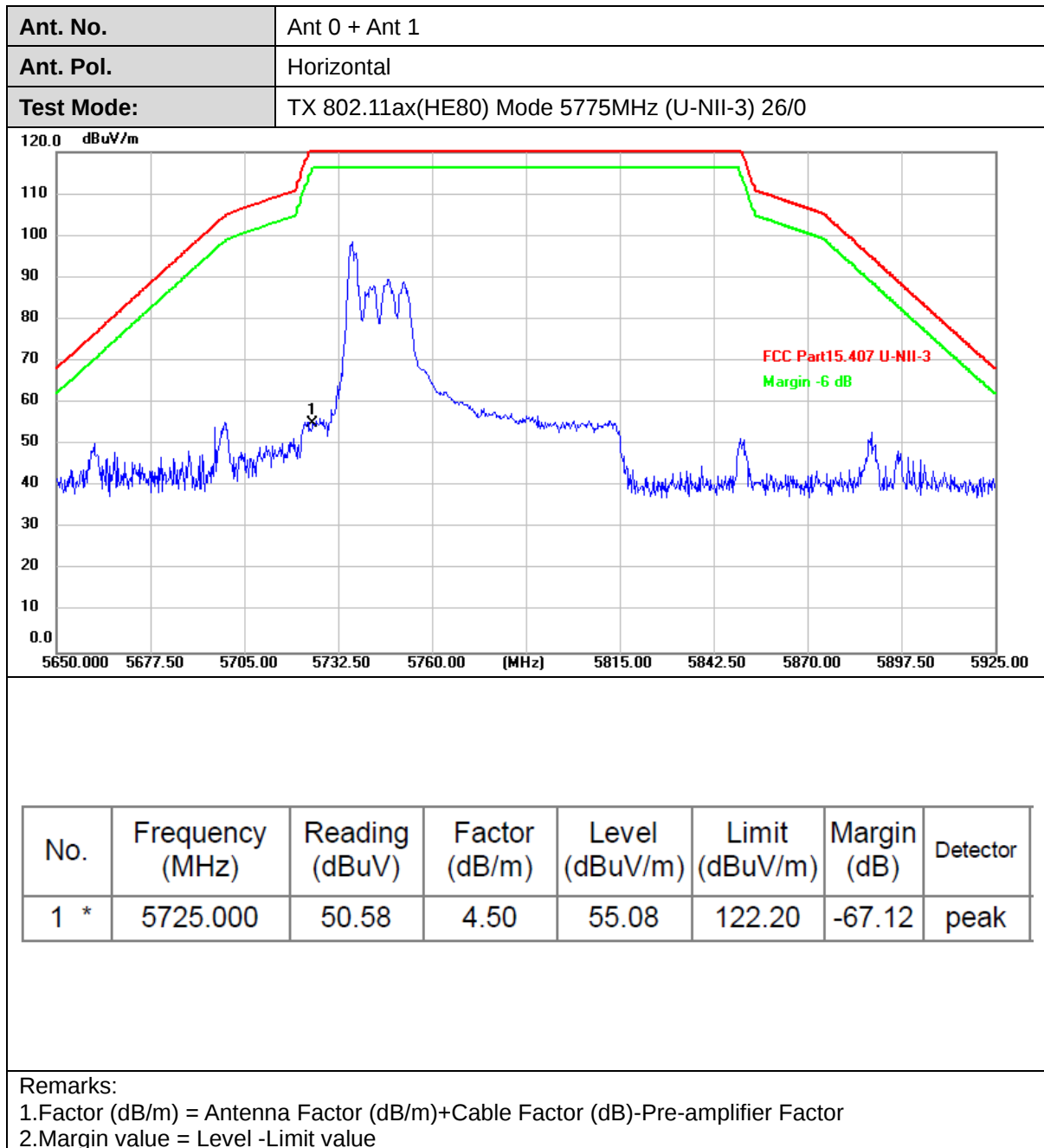


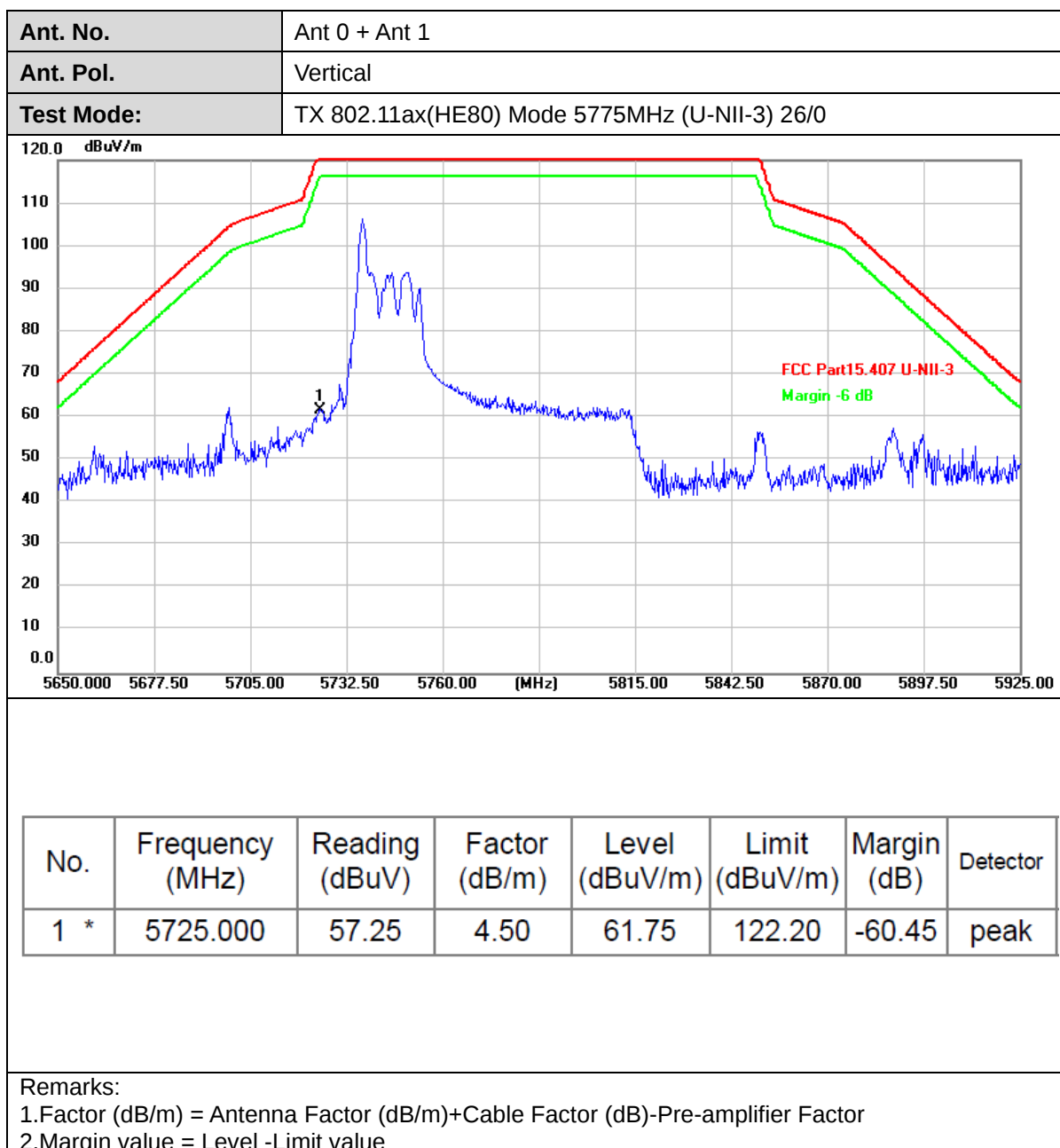


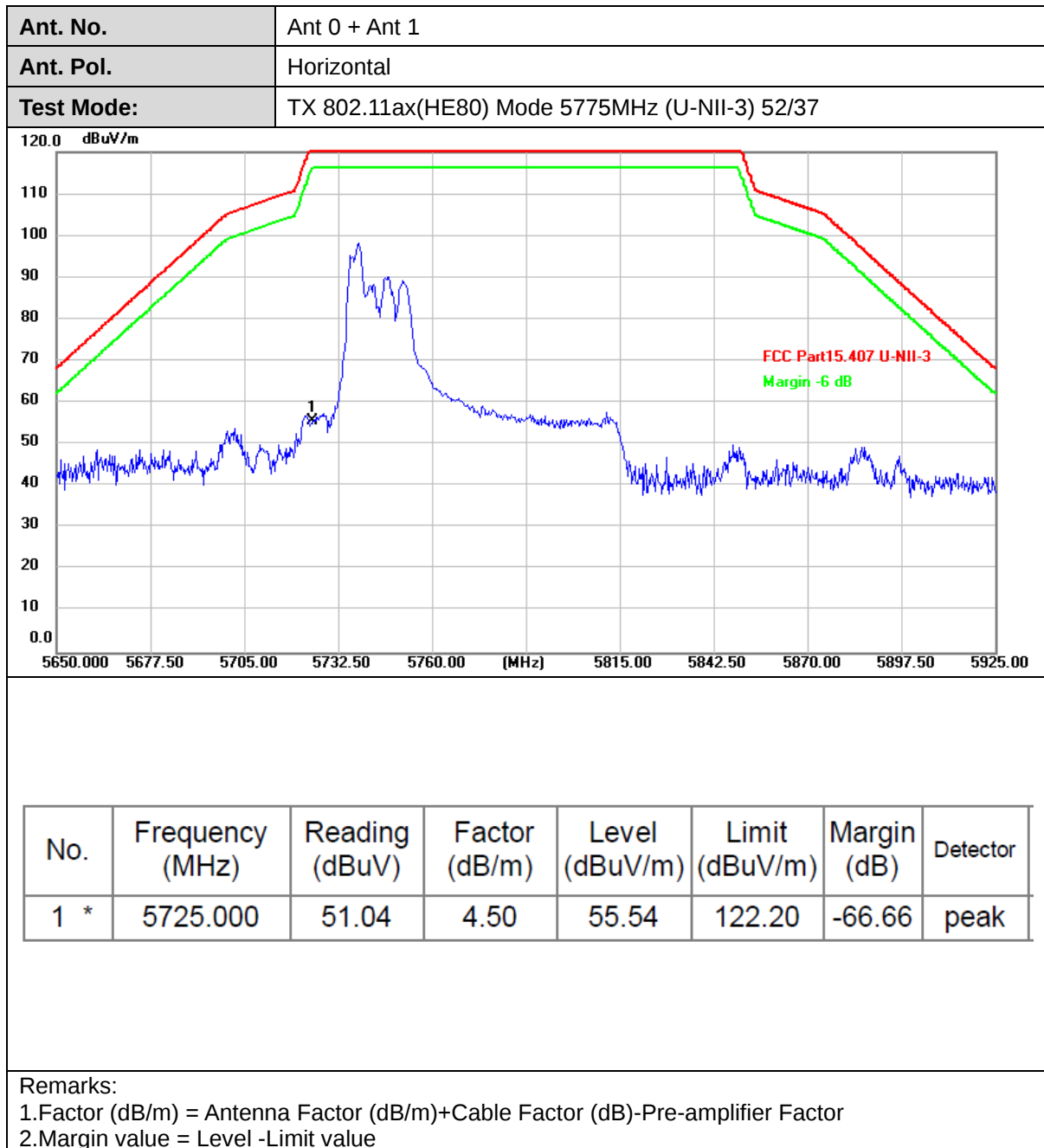


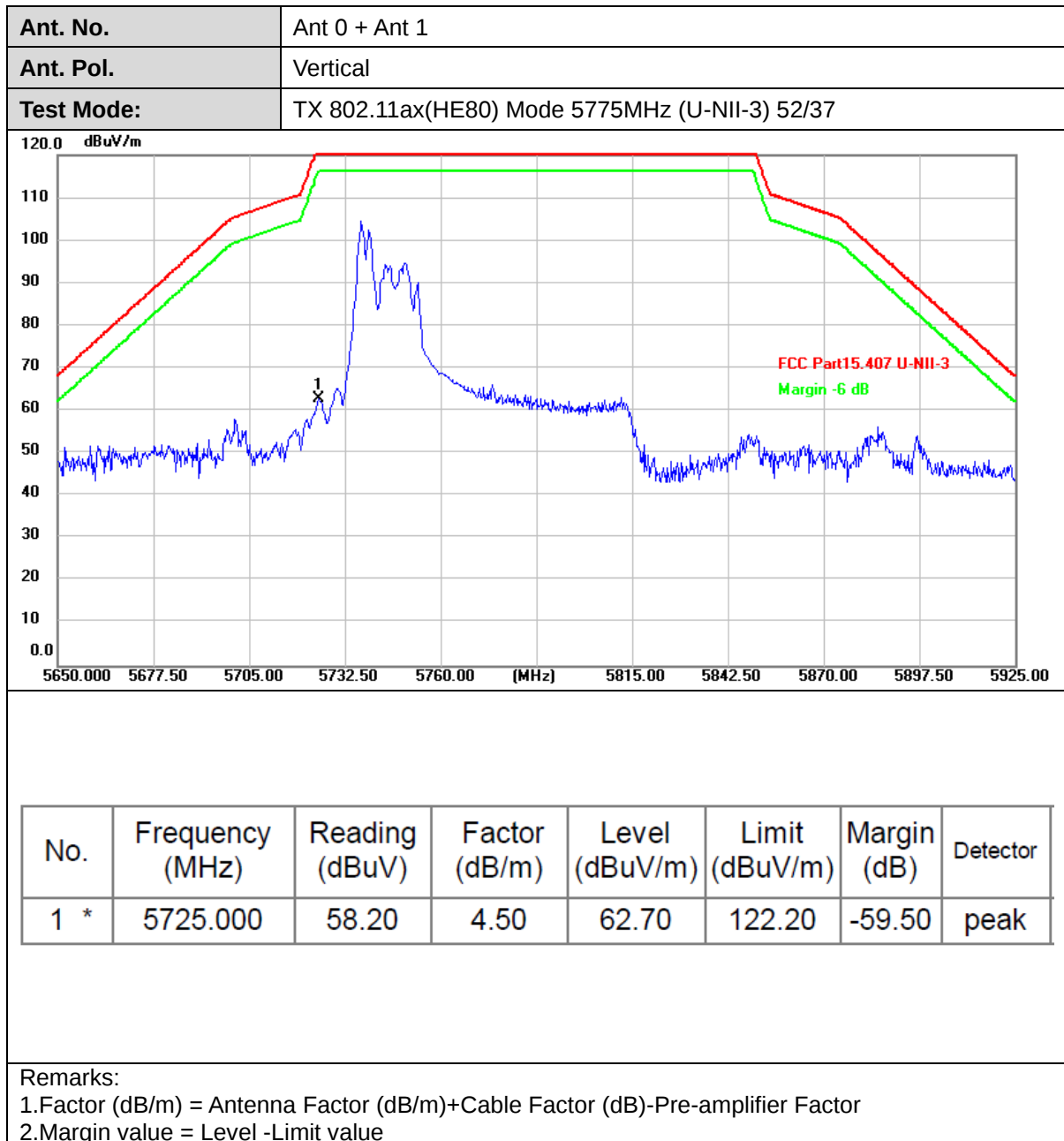


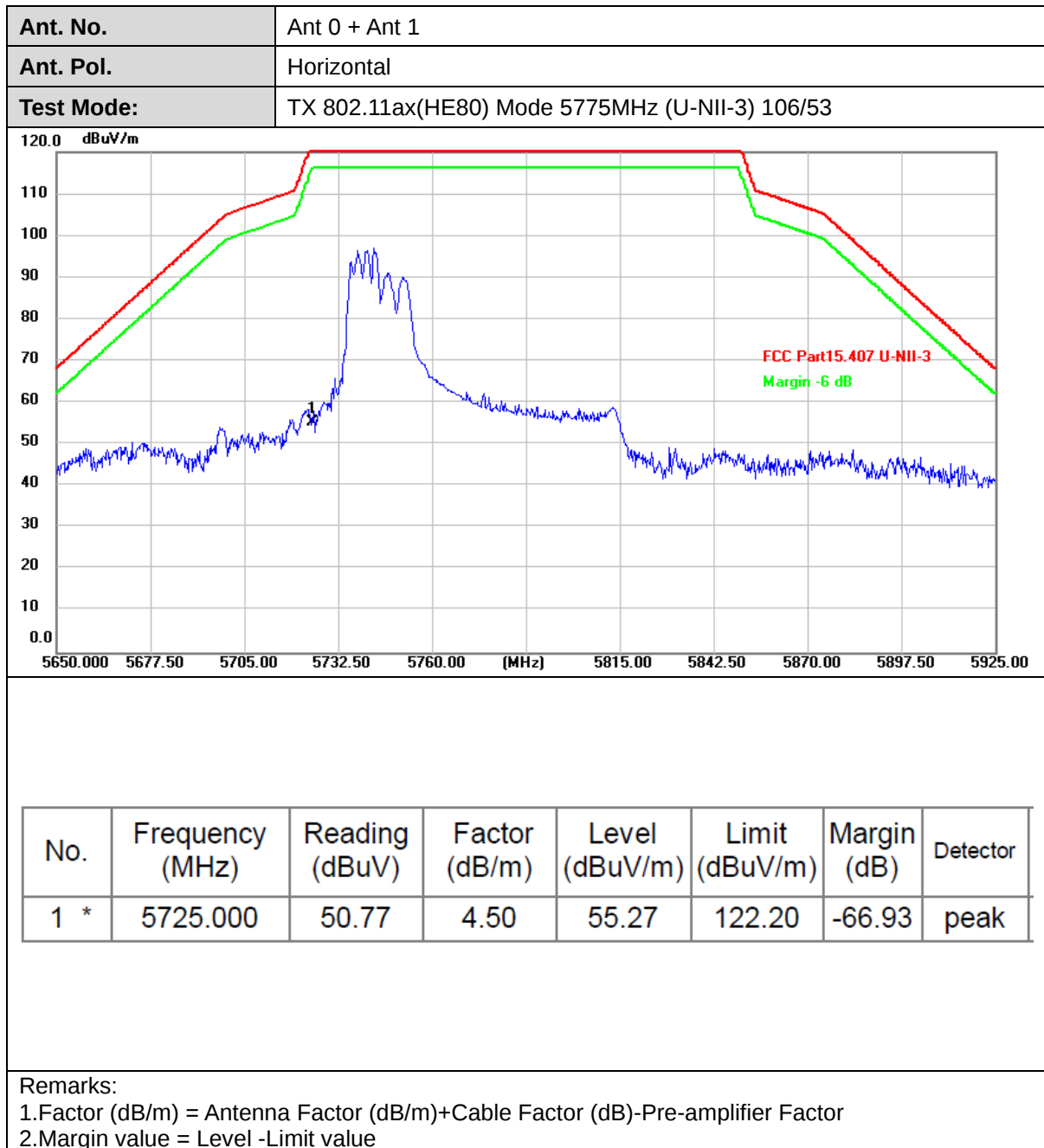


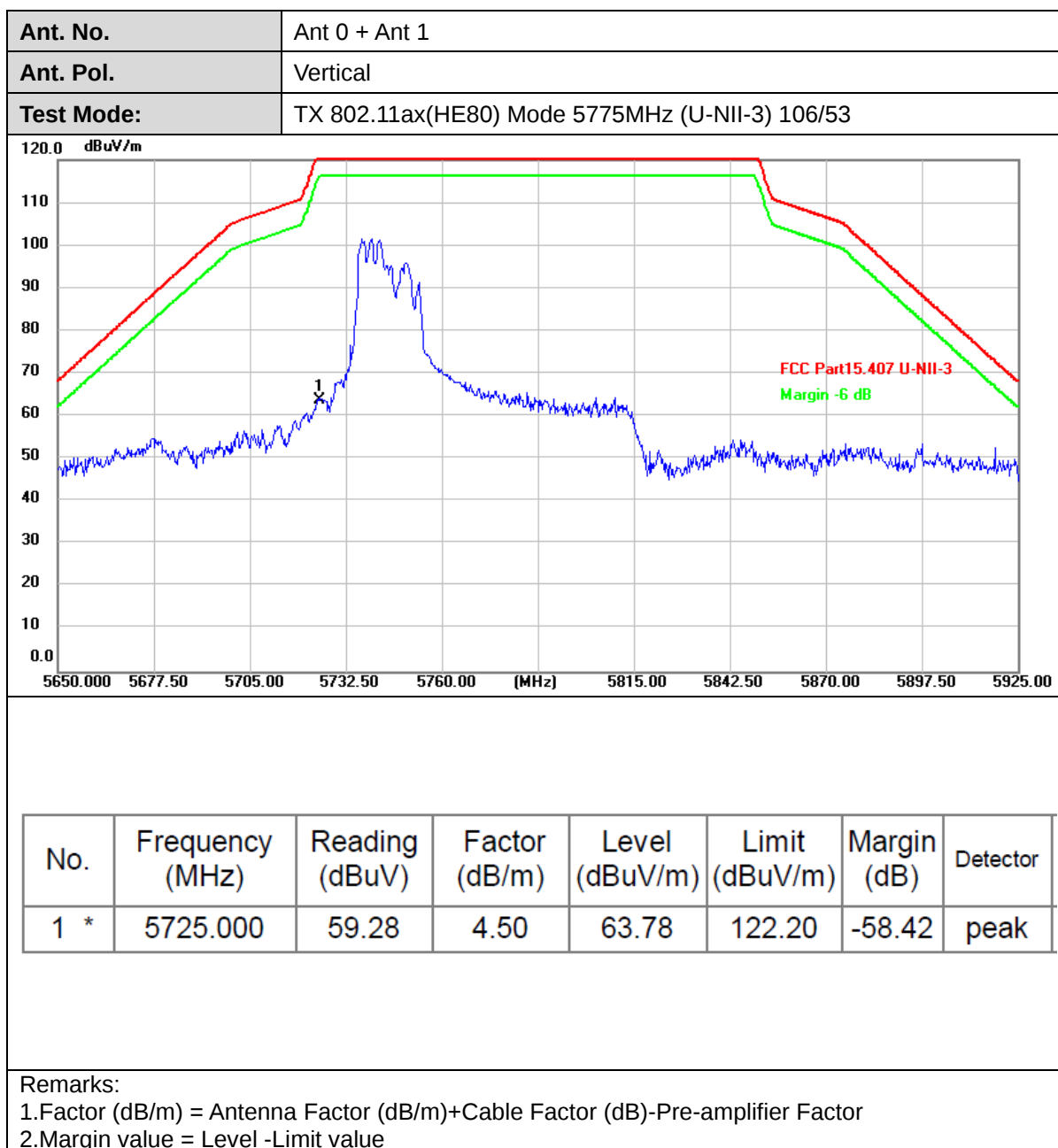


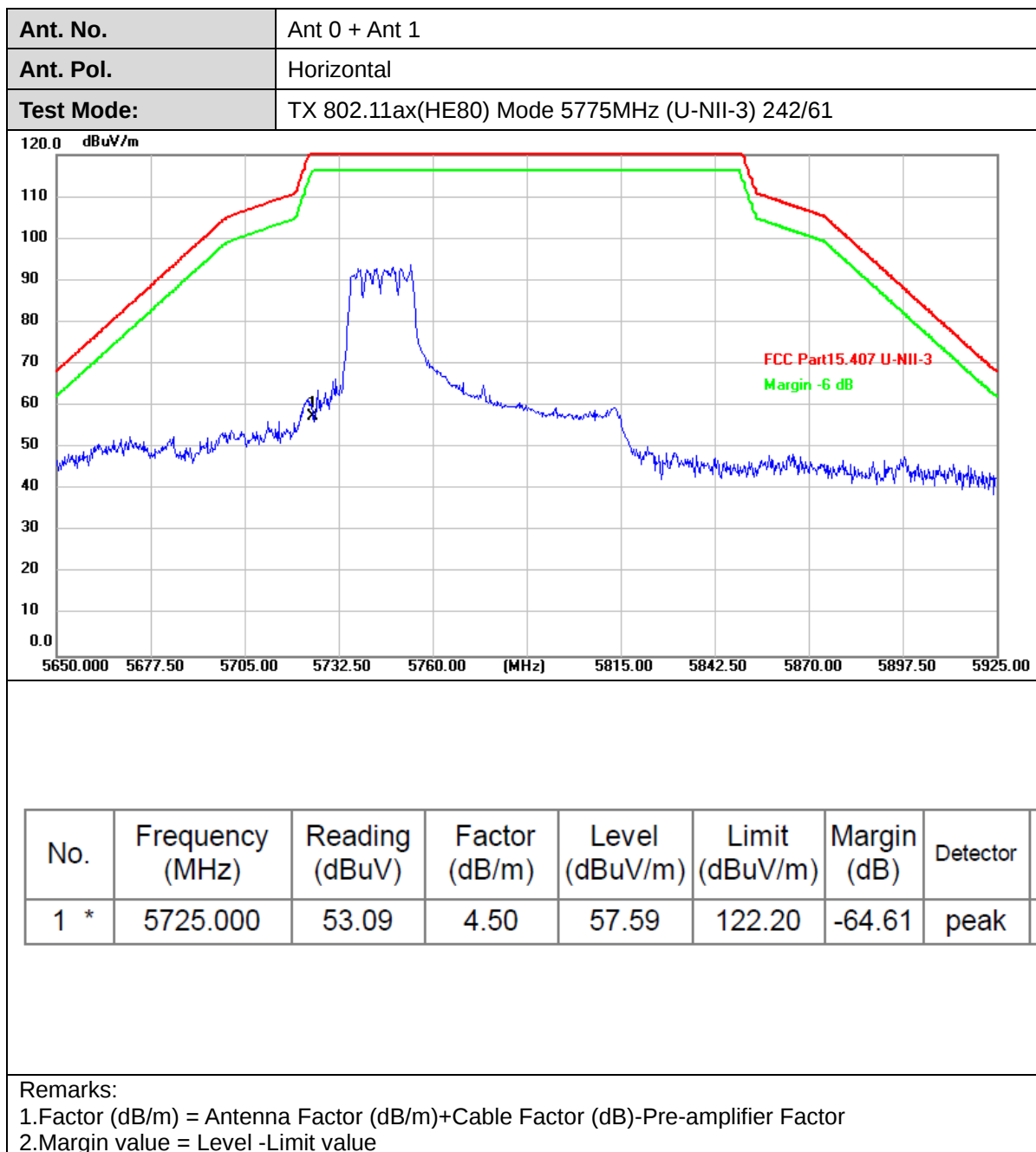


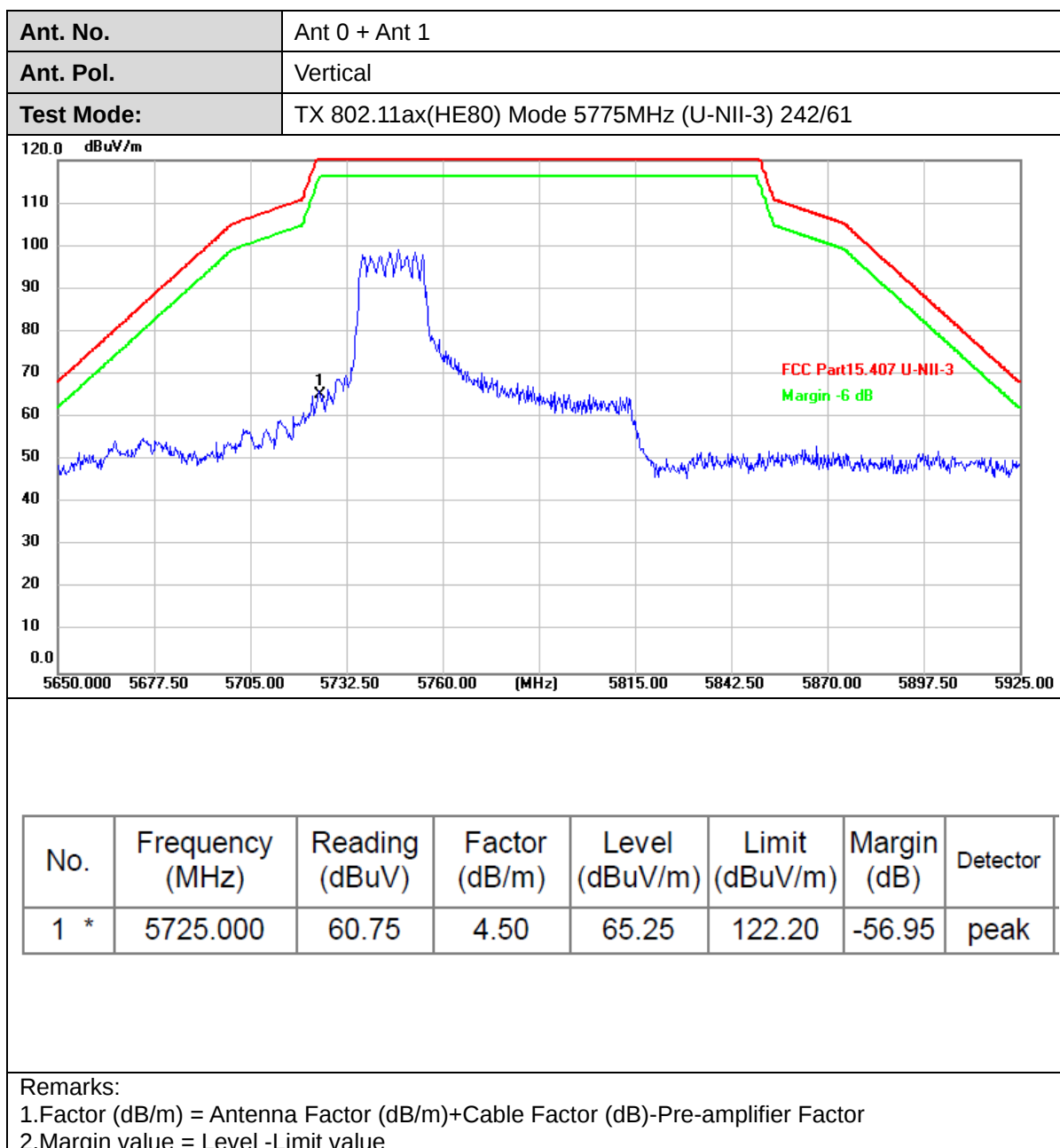


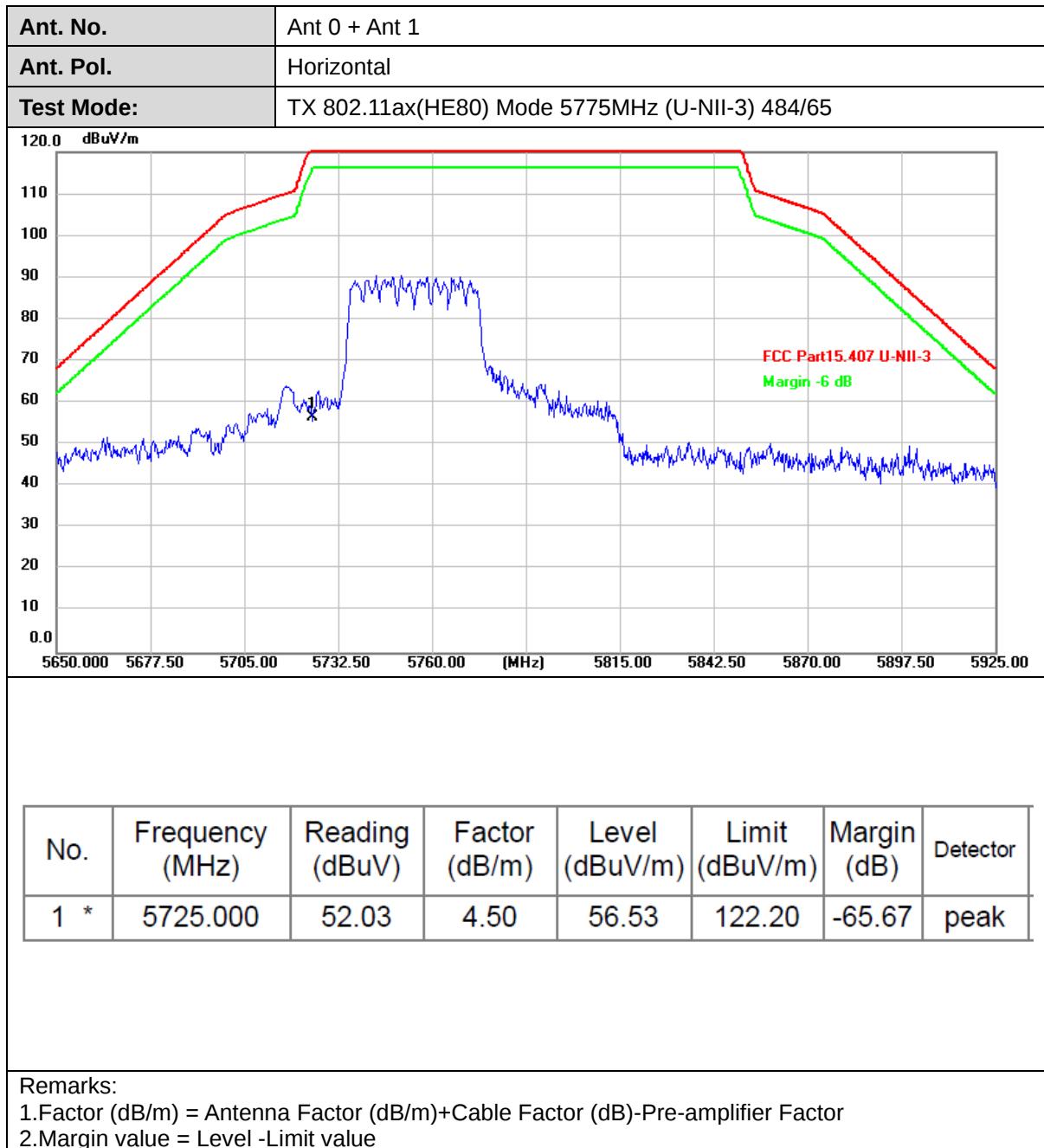


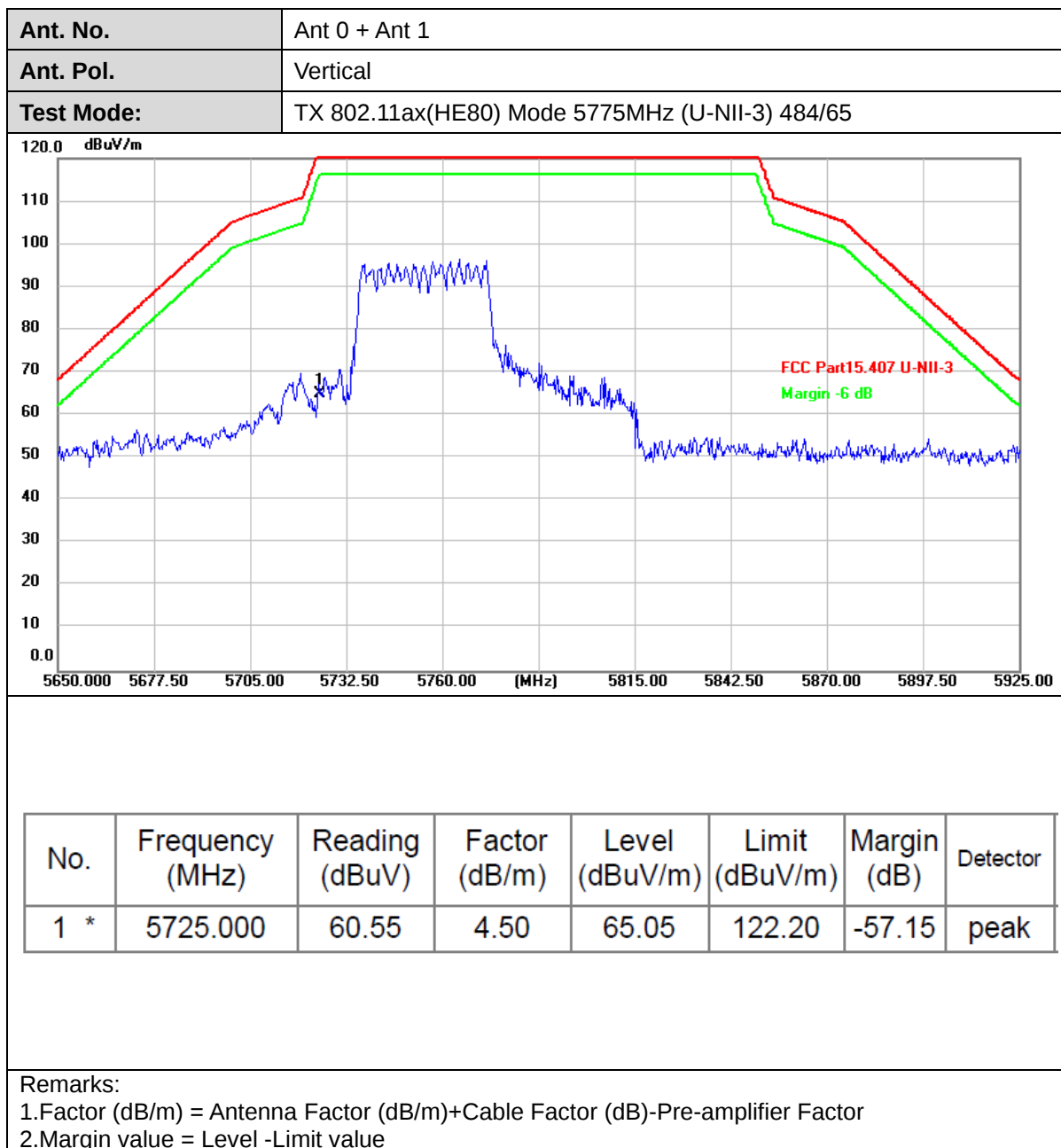


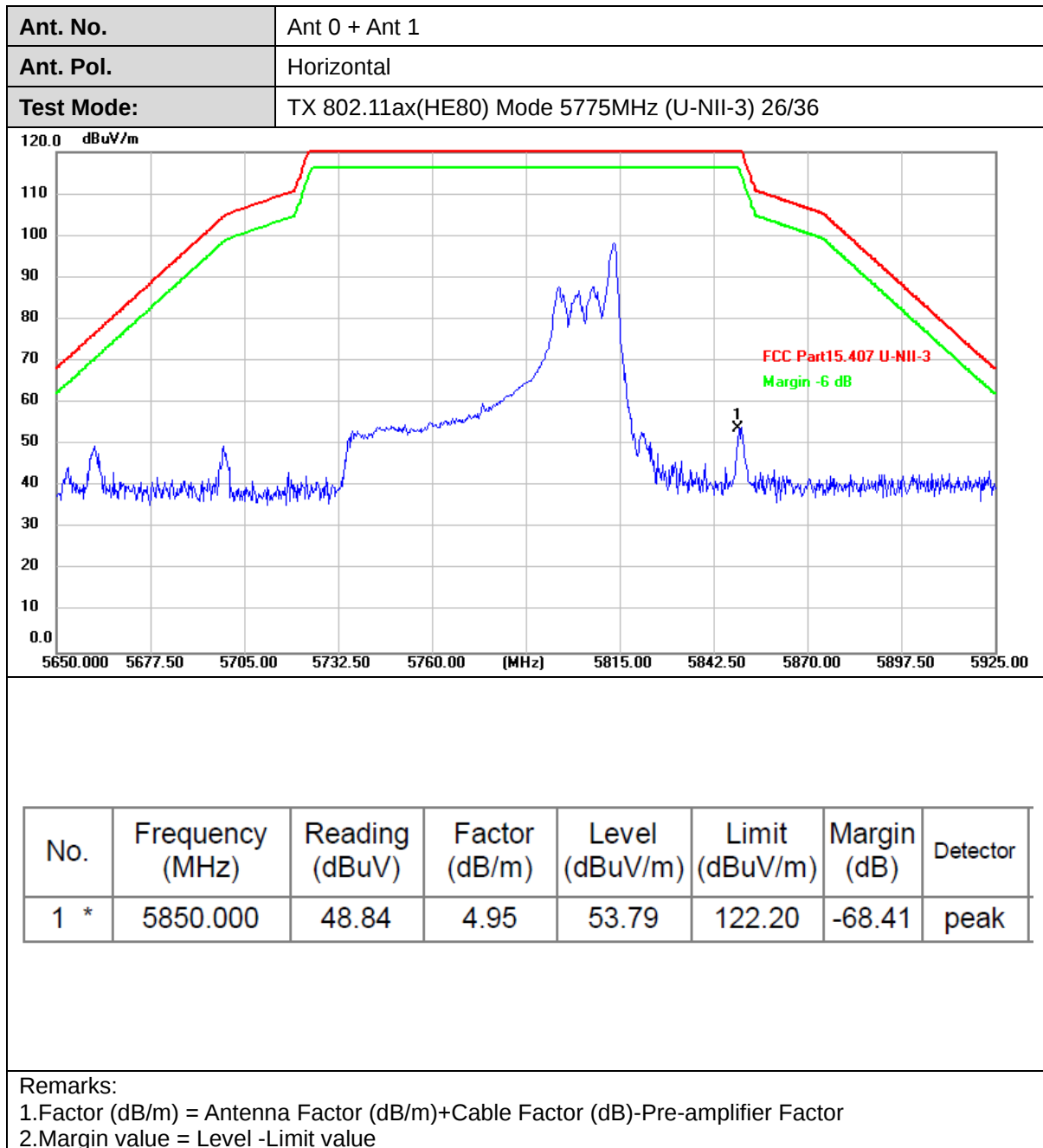


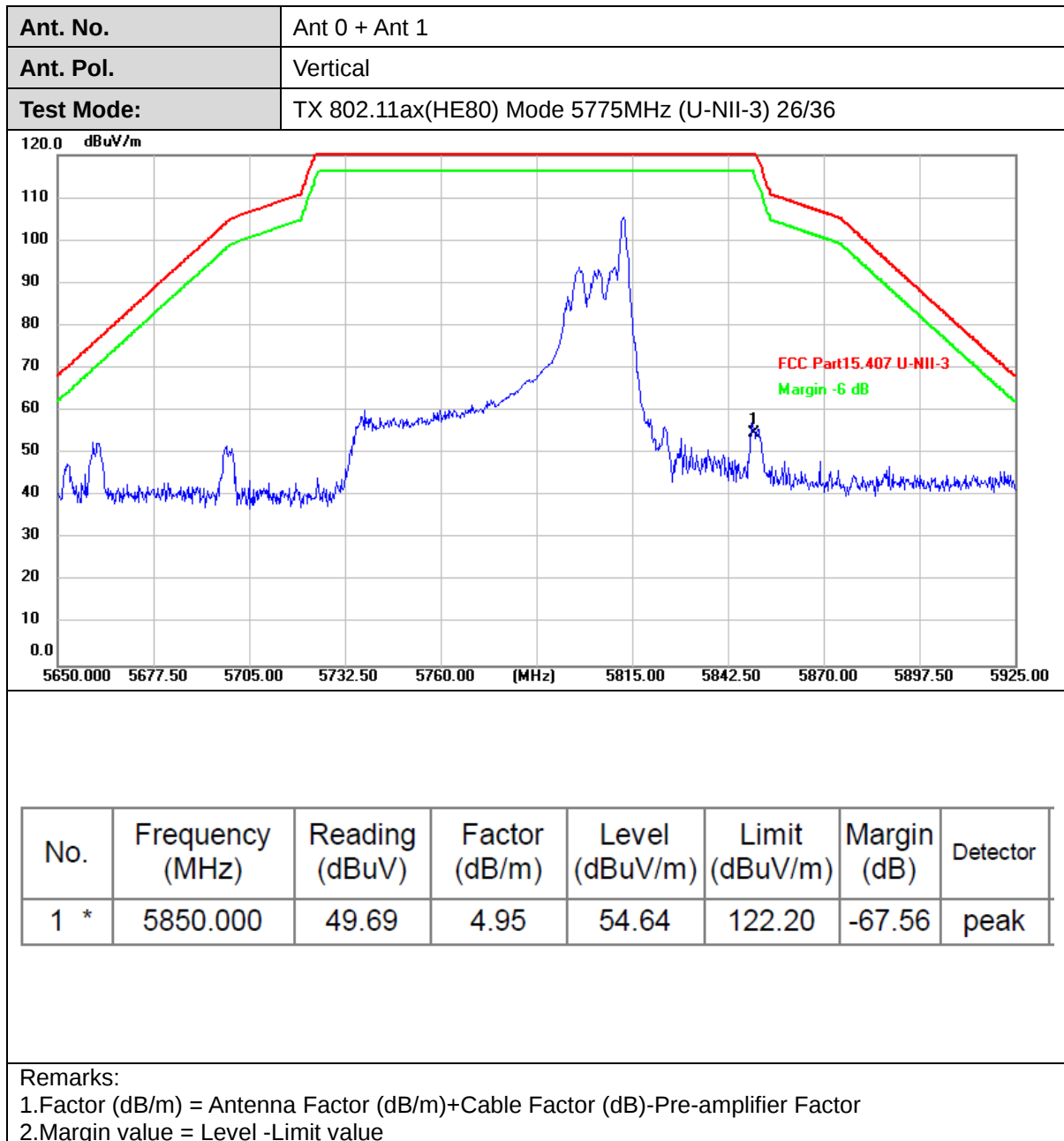


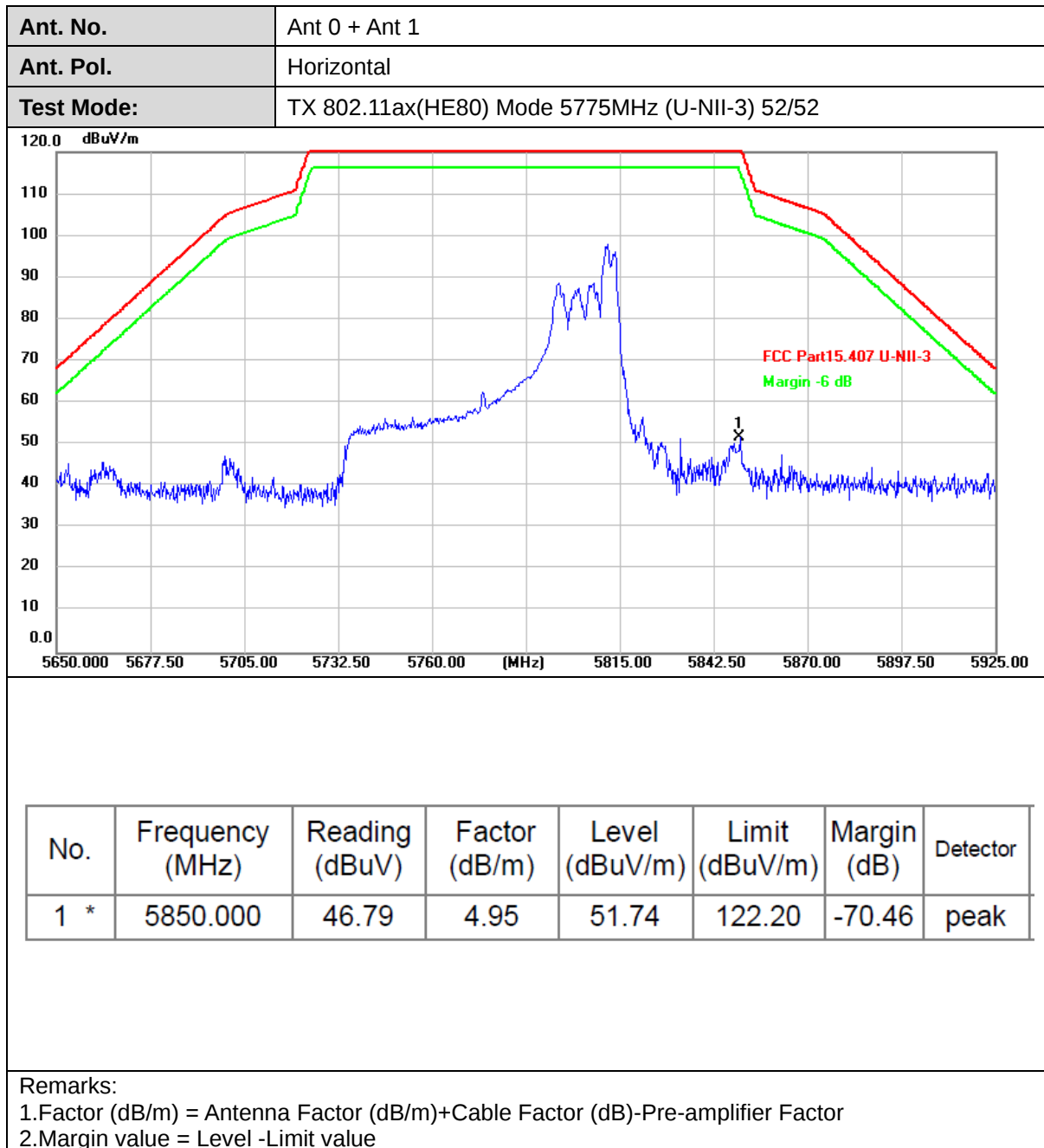


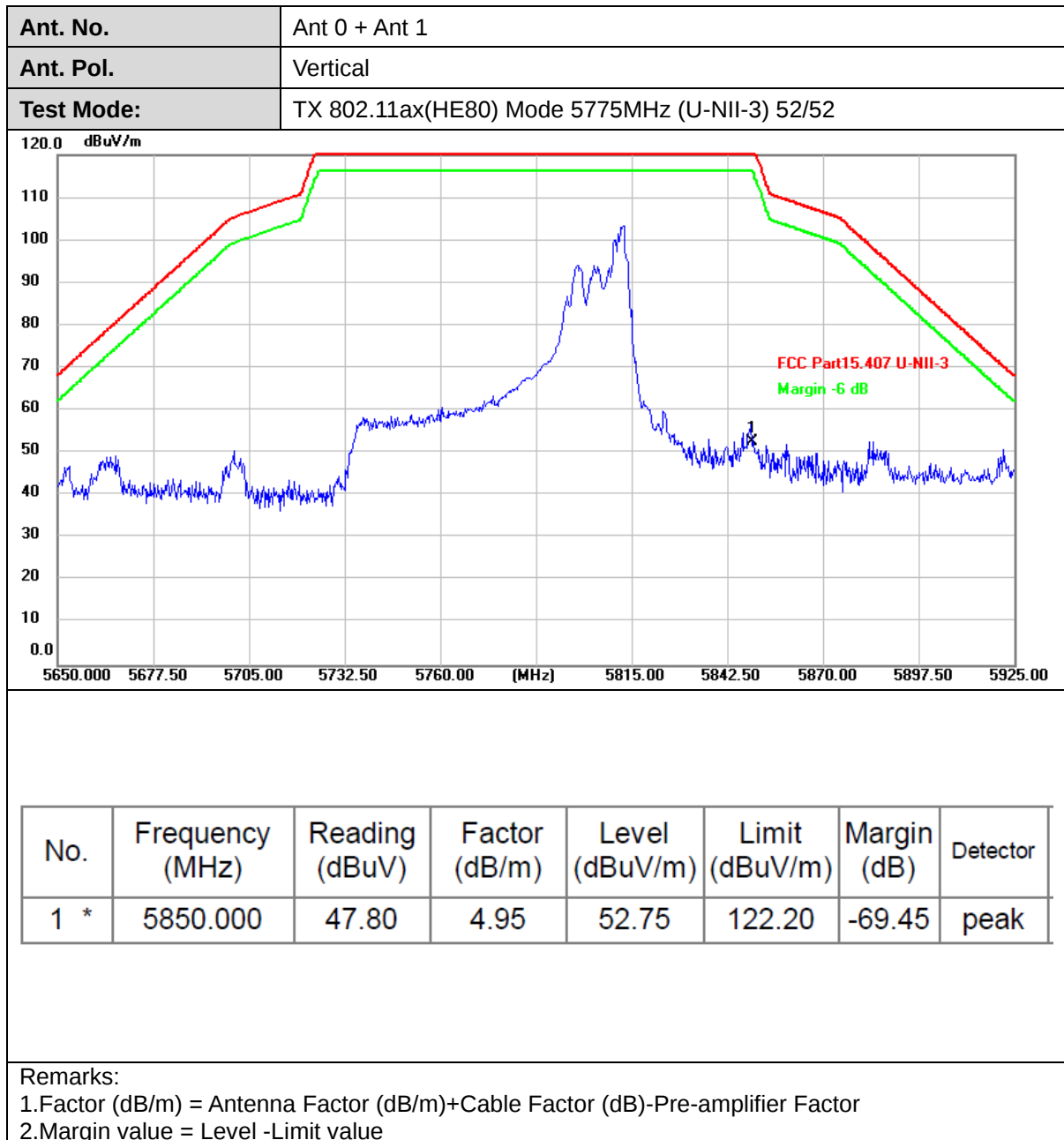


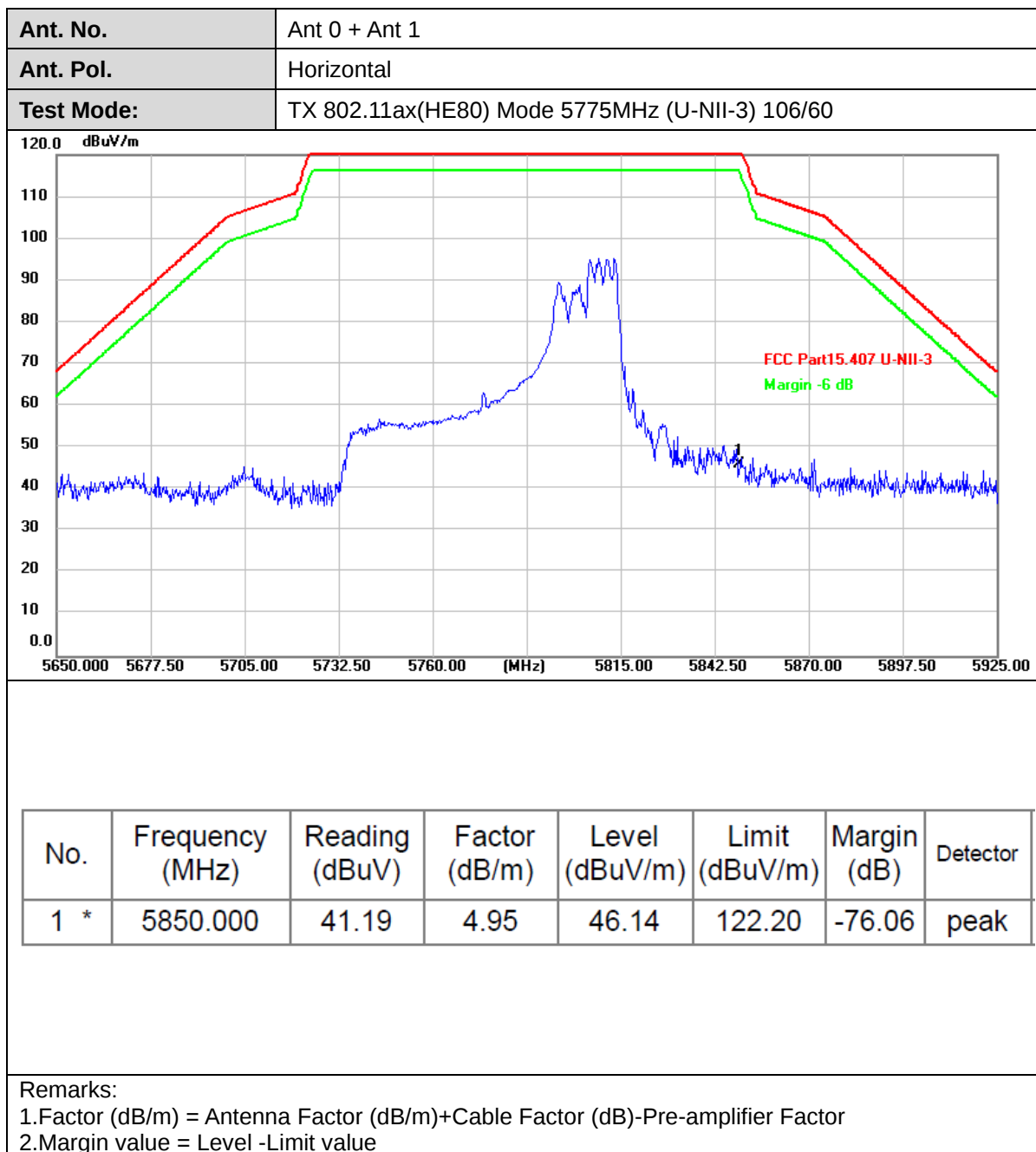


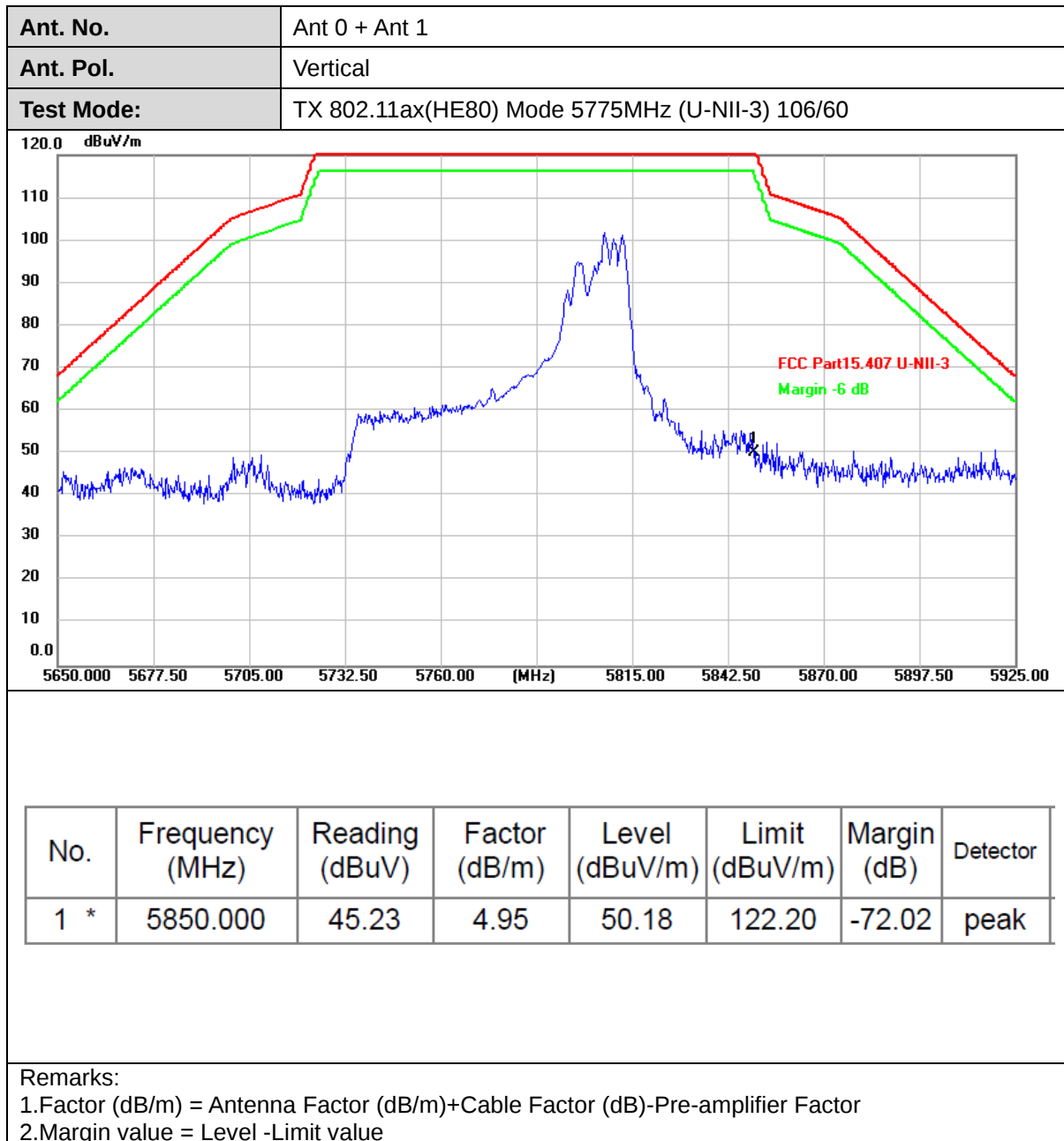


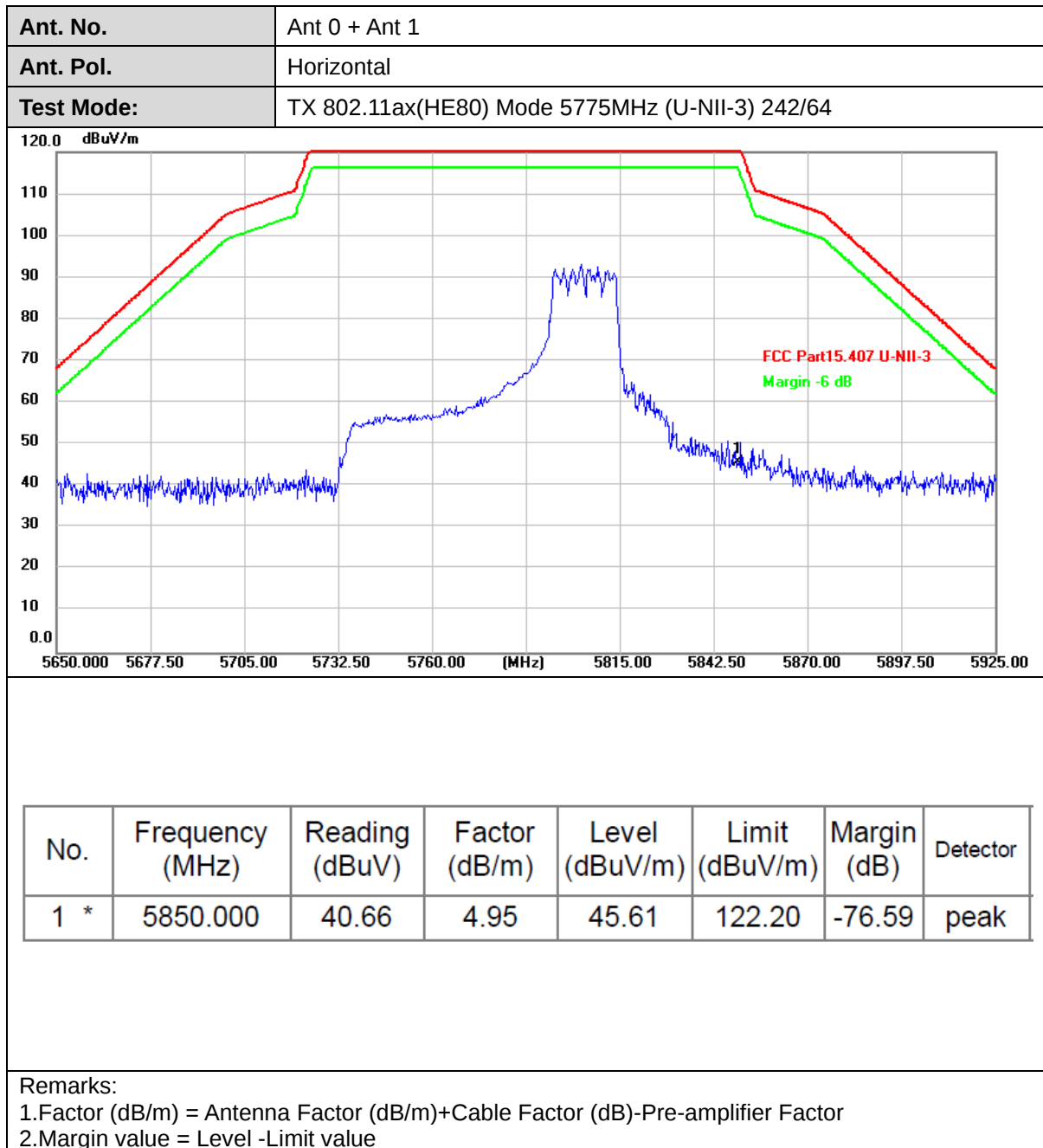


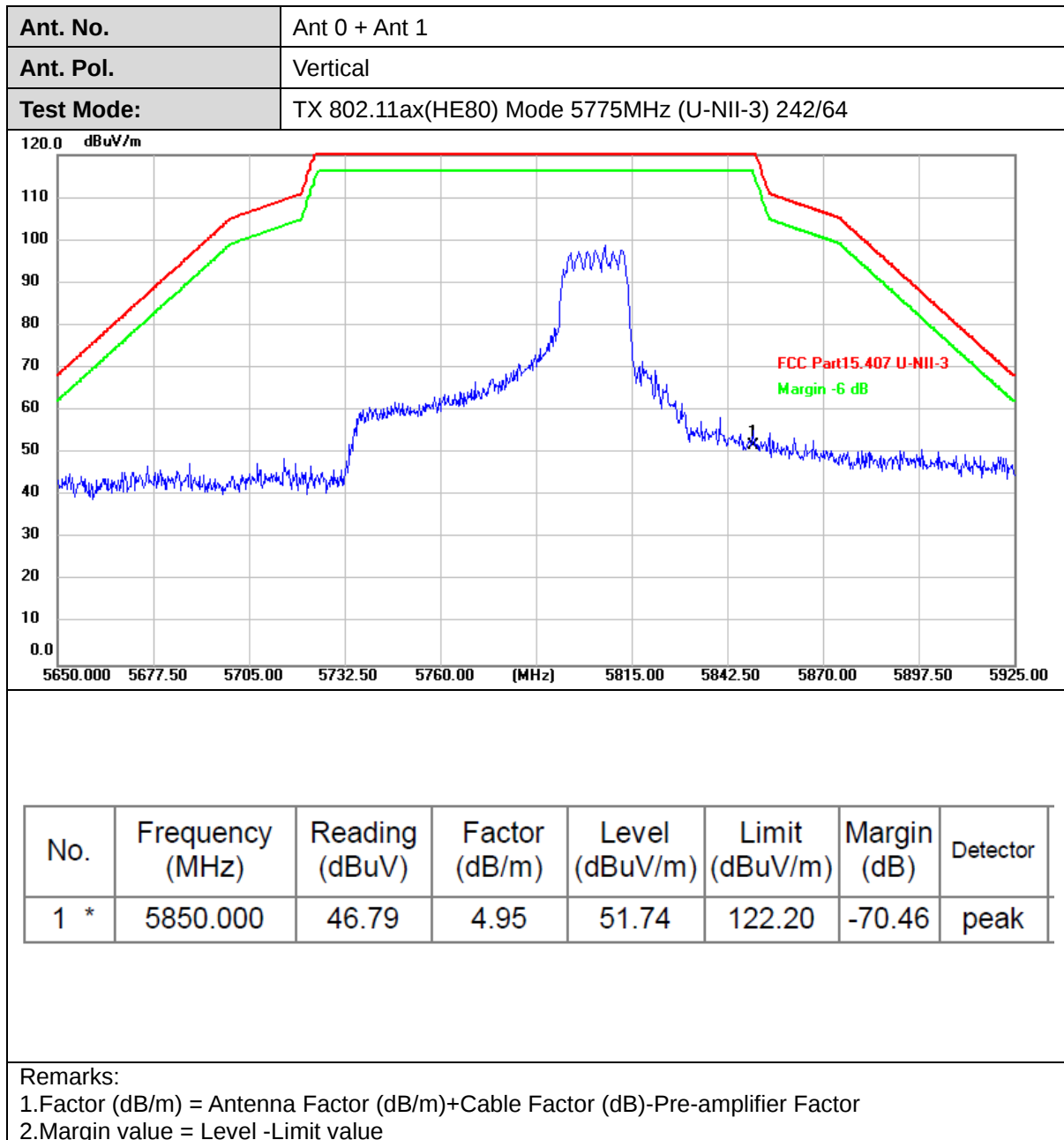


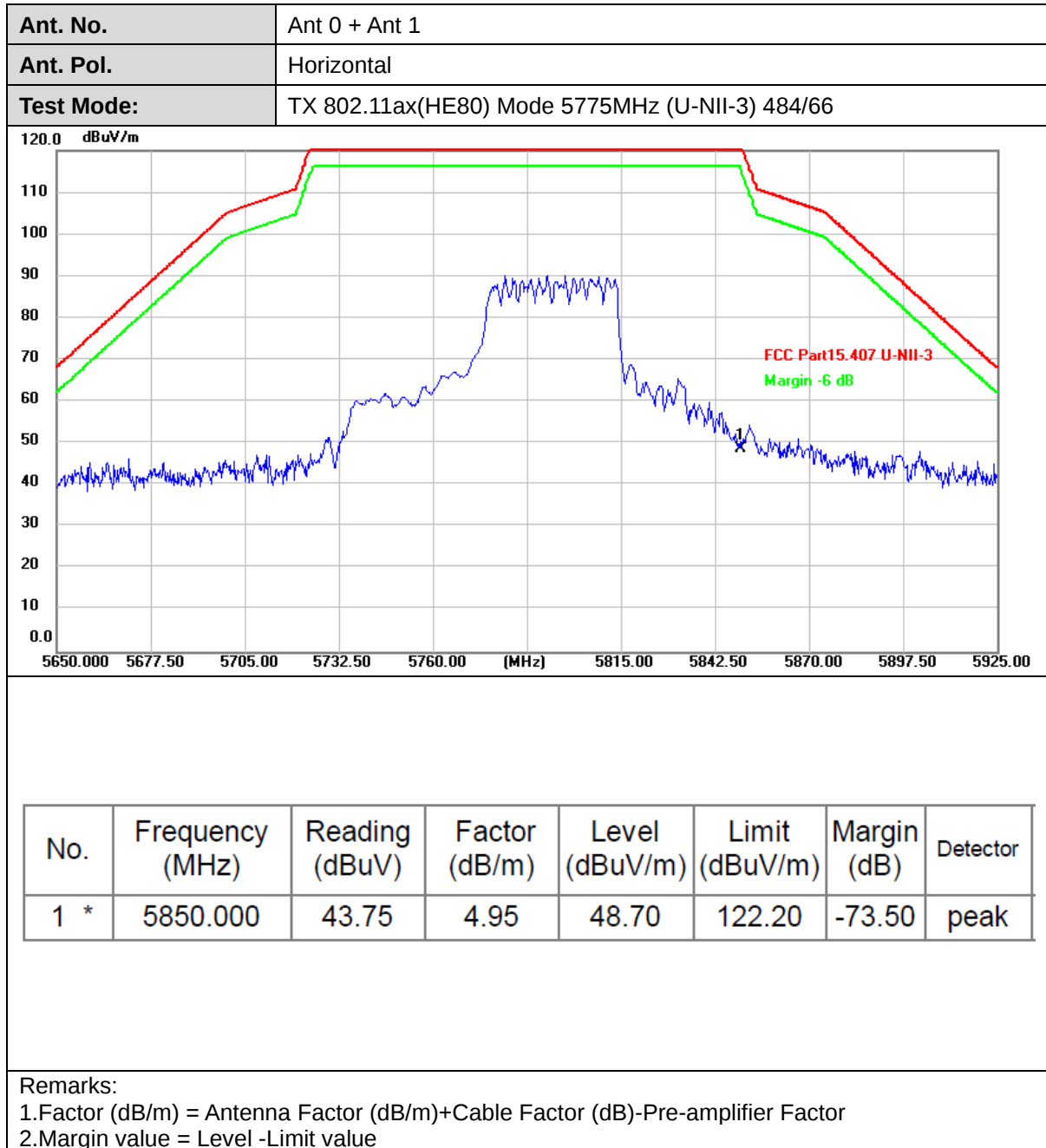


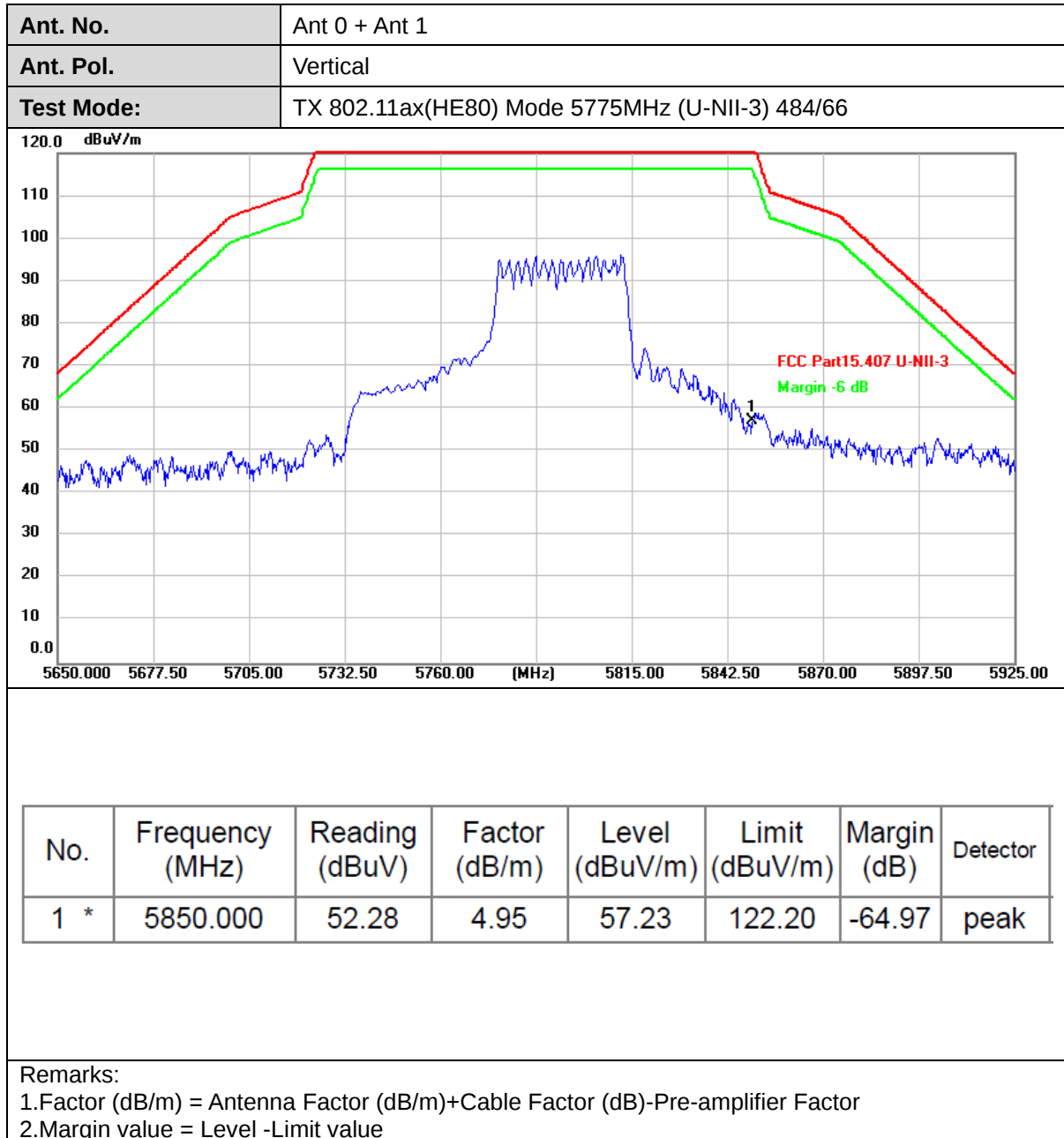


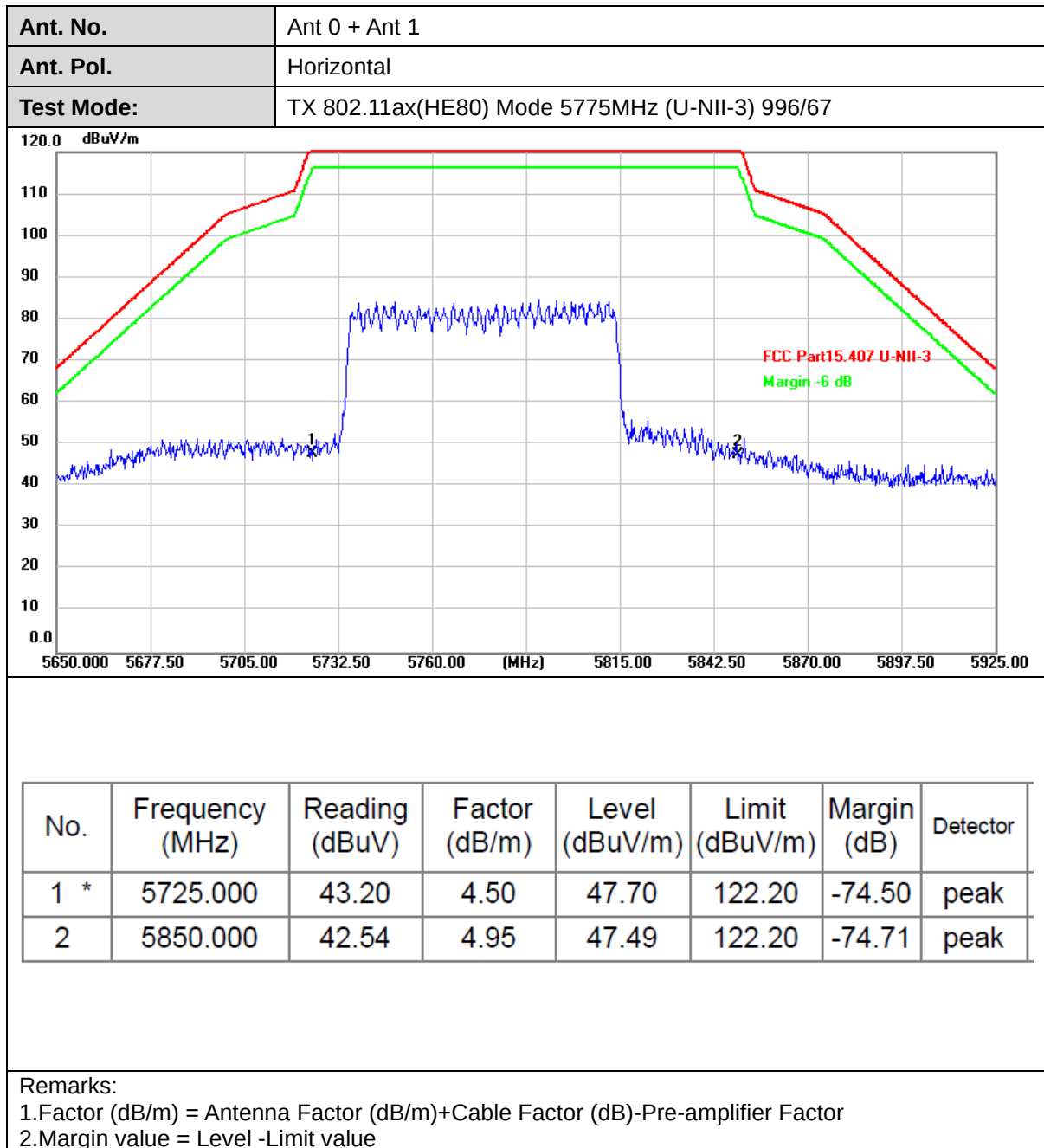


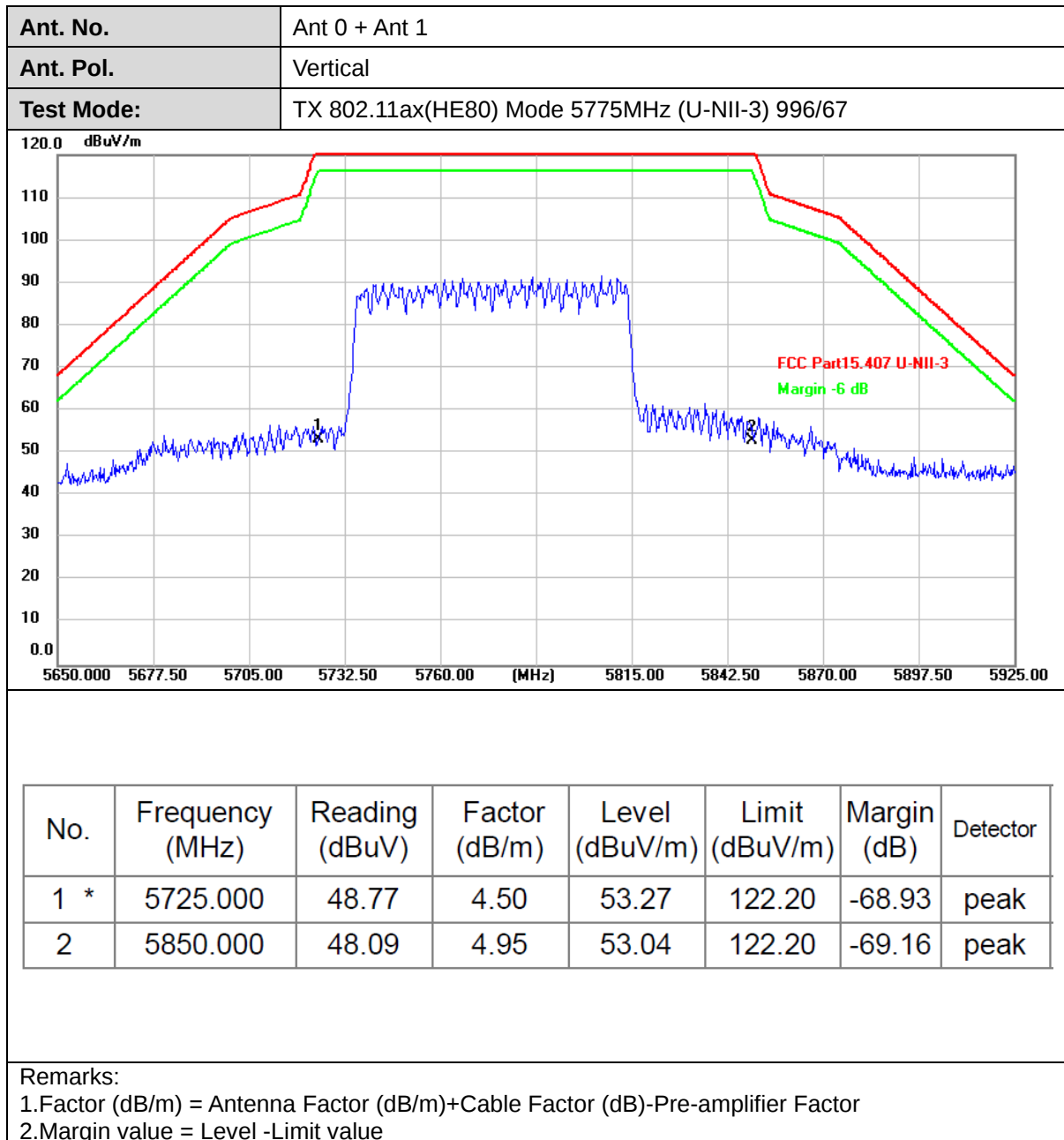














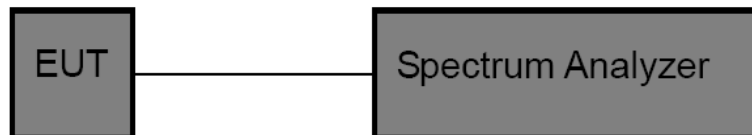
3.4. Bandwidth

Limit

FCC CFR Title 47 Part 15 Subpart E Section 15.407(a) & (e)

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****26dB Bandwidth & 99% Bandwidth**

Mode	Channel	RU & Index	Ant.	99% BW (MHz)	26 dB Bandwidth (MHz)
IEEE 802.11a	36	N/A	0	16.874	21.47
			1	16.828	21.12
	40		0	16.863	21.30
			1	16.871	23.43
	48		0	16.918	27.71
			1	16.814	22.83
IEEE 802.11n_20	36		0	17.959	27.10
			1	17.832	21.33
	40		0	17.901	21.43
			1	17.790	21.25
	48		0	17.958	21.80
			1	17.857	21.27
IEEE 802.11n_40	38		0	36.310	49.32
	46		1	36.148	39.00
			0	36.381	45.22
			1	36.109	39.01
IEEE 802.11ac_20	36		0	17.932	23.57
			1	17.861	22.35
	40		0	17.830	26.81
			1	17.846	21.49
	48		0	17.924	21.35
			1	17.862	22.42
IEEE 802.11ac_40	38		0	36.258	43.23
			1	36.199	39.46
	46		0	36.285	42.19
			1	36.124	39.16
IEEE 802.11ac_80	42		0	75.686	94.21
IEEE 802.11ax_20	36		242RU61	0	18.904
		1		18.931	20.99
		26RU4	0	17.296	19.43
			1	17.072	18.19
		52RU38	0	17.302	20.47
			1	17.248	18.47
		106RU53	0	18.334	21.13
			1	18.234	20.27
	40	242RU61	0	19.040	27.00
			1	18.915	20.87
		26RU4	0	17.335	19.47
			1	17.131	17.92
		52RU38	0	17.428	20.29
			1	17.088	18.49
		106RU53	0	18.363	22.49
			1	18.229	20.30
	48	242RU61	0	19.005	22.34
			1	18.915	21.25
		26RU4	0	17.084	19.69
			1	17.084	18.24
		52RU38	0	17.368	20.07
			1	17.052	18.37
		106RU53	0	18.331	20.98
			1	18.237	20.03
IEEE 802.11ax_40	38	484RU65	0	37.590	40.06
			1	37.601	42.62
		26RU8	0	20.150	21.89
			1	20.307	20.58
		52RU40	0	19.745	23.41
			1	19.728	23.30

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		106RU54	0	19.263	26.75
			1	18.776	20.99
		242RU61	0	20.694	37.01
			1	19.007	25.80
	46	484RU65	0	37.753	44.00
			1	37.569	39.97
		26RU8	0	20.198	22.15
			1	20.301	21.05
		52RU40	0	19.629	24.65
			1	19.726	23.11
		106RU54	0	19.075	23.51
			1	18.902	22.14
		242RU61	0	19.218	25.72
			1	19.056	23.98
IEEE 802.11ax_80	42	996RU67	0	77.379	93.90
			1	77.154	80.58
		26RU17	0	19.573	20.84
			1	21.085	20.70
		52RU44	0	19.932	22.47
			1	20.114	20.04
		106RU56	0	19.288	27.09
			1	19.135	23.75
		242RU62	0	37.499	48.49
			1	37.389	42.60
		484RU65	0	38.011	61.39
			1	37.775	47.38



Mode	Channel	RU & Index	Ant.	99% BW (MHz)	26 dB Bandwidth (MHz)	
IEEE 802.11a	149	N/A	0	16.772	21.13	
			1	16.826	23.63	
	157		0	16.792	21.06	
			1	16.826	24.19	
	165		0	16.824	23.17	
			1	16.802	23.93	
IEEE 802.11n_20	149		0	17.870	21.38	
			1	17.788	21.22	
	157		0	17.878	21.52	
			1	17.824	21.32	
	165		0	17.817	20.99	
			1	17.791	20.91	
IEEE 802.11n_40	151		0	36.193	39.40	
	159		1	36.171	39.04	
			0	36.092	39.38	
			1	36.044	38.78	
IEEE 802.11ac_20	149		0	17.960	21.24	
			1	17.824	21.42	
	157		0	17.876	21.34	
			1	17.778	21.03	
	165		0	17.877	21.44	
			1	17.751	21.28	
IEEE 802.11ac_40	151		0	36.253	44.80	
			1	36.246	39.20	
	159		0	36.113	44.65	
			1	36.073	38.97	
IEEE 802.11ac_80	155		0	75.618	85.91	
				1	75.633	80.77
IEEE 802.11ax_20	149	242RU61	0	18.892	20.87	
			1	18.964	20.96	
		26RU4	0	17.136	19.05	
			1	17.104	18.27	
		52RU38	0	17.361	20.04	
			1	17.235	18.42	
		106RU53	0	18.332	21.00	
			1	18.204	20.29	
		157	242RU61	0	18.911	20.58
				1	18.932	20.69
	26RU4		0	17.291	19.21	
			1	17.122	17.98	
	52RU38		0	17.322	19.94	
			1	17.037	18.21	
	106RU53		0	18.303	21.03	
			1	18.255	20.18	
	165		242RU61	0	18.923	21.12
				1	18.926	20.73
		26RU4	0	17.264	19.28	
			1	17.024	18.03	
		52RU38	0	17.546	20.07	
			1	17.159	18.31	
		106RU53	0	18.303	21.01	
			1	18.230	20.09	
IEEE 802.11ax_40		151	484RU65	0	37.628	39.96
				1	37.591	39.79
	26RU8		0	19.914	21.65	
			1	19.626	21.17	
	52RU40		0	19.790	21.58	
			1	19.713	21.09	
	106RU54		0	18.900	22.85	
			1	18.766	24.15	
	242RU61		0	19.278	25.62	
			0	19.278	25.62	

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	159		1	18.997	25.04
		484RU65	0	37.482	39.89
			1	37.516	39.59
			0	19.452	21.71
		26RU8	1	20.025	21.71
			0	19.765	22.21
		52RU40	1	19.272	21.96
			0	19.061	22.81
		106RU54	1	18.518	22.32
			0	19.548	30.52
IEEE 802.11ax_80	155	242RU61	1	19.037	28.56
			0	77.150	80.88
		996RU67	1	77.134	80.86
			0	20.999	20.18
		26RU17	1	20.563	19.81
			0	20.396	22.68
		52RU44	1	20.012	21.09
			0	19.352	25.06
		106RU56	1	19.423	21.95
			0	37.447	44.81
		242RU62	1	37.428	48.70
			0	37.885	49.19
		484RU65	1	37.780	49.68
			0		

**6dB Bandwidth**

Mode	Channel	RU & Index	Ant.	6 dB Bandwidth (MHz)	Limit (MHz)	Result	
IEEE 802.11a	149	N/A	0	16.07	0.5	PASS	
			1	16.29		PASS	
	157		0	16.30		PASS	
			1	15.76		PASS	
	165		0	16.28		PASS	
			1	16.30		PASS	
IEEE 802.11n_20	149		0	16.90		PASS	
			1	17.56		PASS	
	157		0	17.25		PASS	
			1	17.56		PASS	
	165		0	16.92		PASS	
			1	17.53		PASS	
IEEE 802.11n_40	151		0	35.37		PASS	
			1	35.74		PASS	
	159		0	35.10		PASS	
			1	35.10		PASS	
IEEE 802.11ac_20	149		0	17.27		PASS	
			1	17.57		PASS	
	157		0	17.14		PASS	
			1	17.17		PASS	
	165		0	16.94		PASS	
			1	16.94		PASS	
IEEE 802.11ac_40	151		0	35.81		PASS	
			1	35.55		PASS	
	159		0	35.16		PASS	
			1	35.43		PASS	
IEEE 802.11ac_80	155		0	75.32		PASS	
			1	75.35		PASS	
IEEE 802.11ax_20	149	242RU61	0	18.28		PASS	
			1	17.68		PASS	
		26RU4	0	2.634		PASS	
			1	2.653		PASS	
		52RU38	0	15.06		PASS	
			1	15.05		PASS	
		106RU53	0	17.12		PASS	
			1	17.13		PASS	
		157	242RU61	0		18.37	PASS
				1		16.99	PASS
	26RU4		0	2.613		PASS	
			1	2.655		PASS	
	52RU38		0	15.07		PASS	
			1	13.79		PASS	
	106RU53		0	17.11		PASS	
			1	17.14		PASS	
	165	242RU61	0	17.71		PASS	
			1	17.54		PASS	
		26RU4	0	2.611		PASS	
			1	2.655		PASS	
		52RU38	0	15.10		PASS	
			1	15.01		PASS	
		106RU53	0	17.15		PASS	
			1	17.08		PASS	
IEEE 802.11ax_40	151	484RU65	0	37.71		PASS	
			1	37.28		PASS	
		26RU8	0	2.042		PASS	
			1	2.016		PASS	
		52RU40	0	17.23		PASS	
			1	17.26		PASS	
		106RU54	0	17.31		PASS	
			1	17.54		PASS	
		242RU61	0	18.24		PASS	
			0	18.24		PASS	

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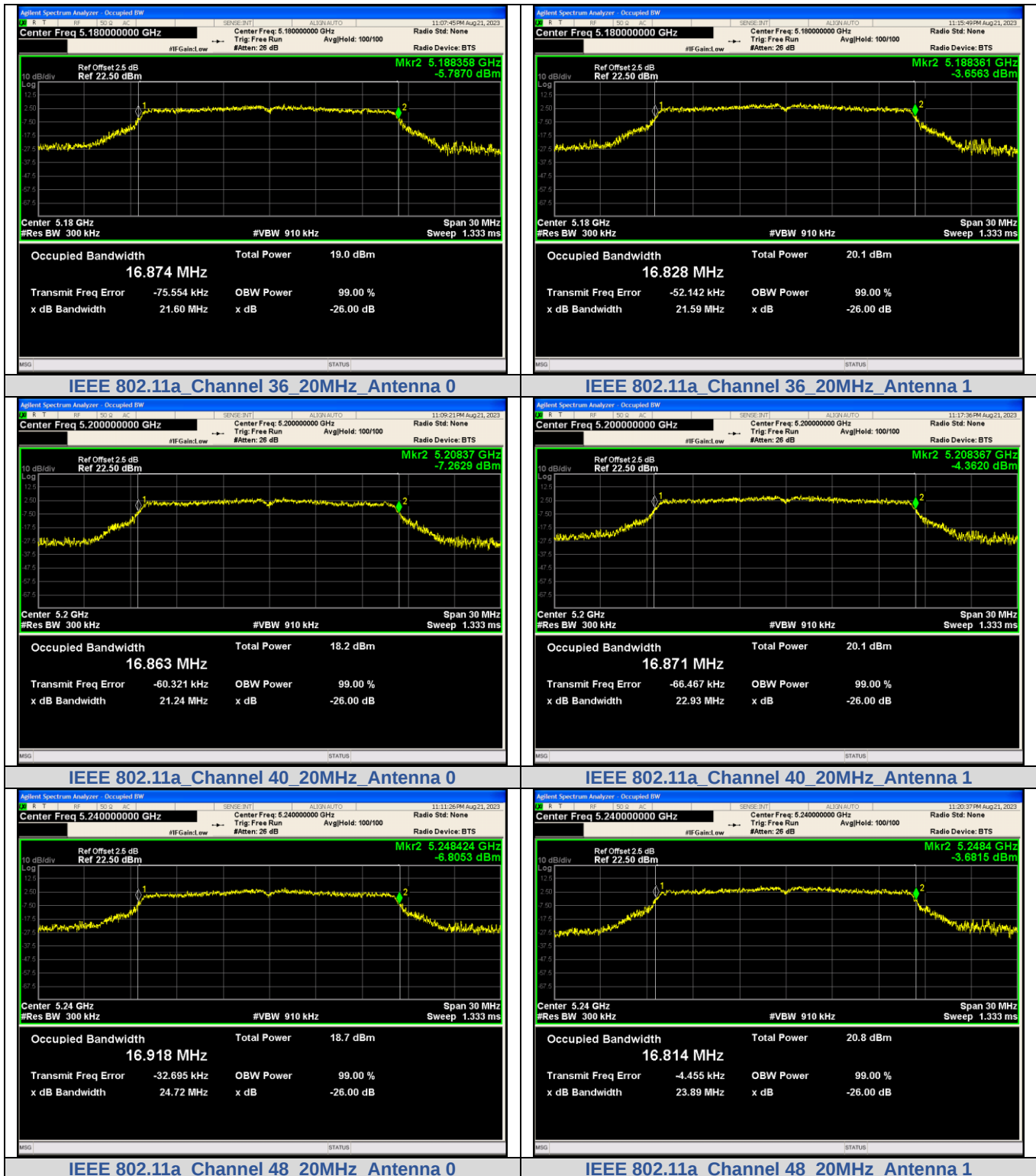
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	159	484RU65	1	18.63	PASS
			0	37.56	PASS
		26RU8	1	36.83	PASS
			0	2.077	PASS
		52RU40	1	2.099	PASS
			0	15.97	PASS
		106RU54	1	14.76	PASS
			0	17.27	PASS
		242RU61	1	17.20	PASS
			0	18.07	PASS
IEEE 802.11ax_80	155	996RU67	1	17.65	PASS
			0	76.88	PASS
		26RU17	1	76.68	PASS
			0	2.044	PASS
		52RU44	1	2.037	PASS
			0	16.13	PASS
		106RU56	1	16.16	PASS
			0	16.23	PASS
		242RU62	1	16.11	PASS
			0	36.33	PASS
		484RU65	1	36.23	PASS
			0	37.53	PASS
			1	37.18	PASS
			0	37.18	PASS



99% Bandwidth:



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