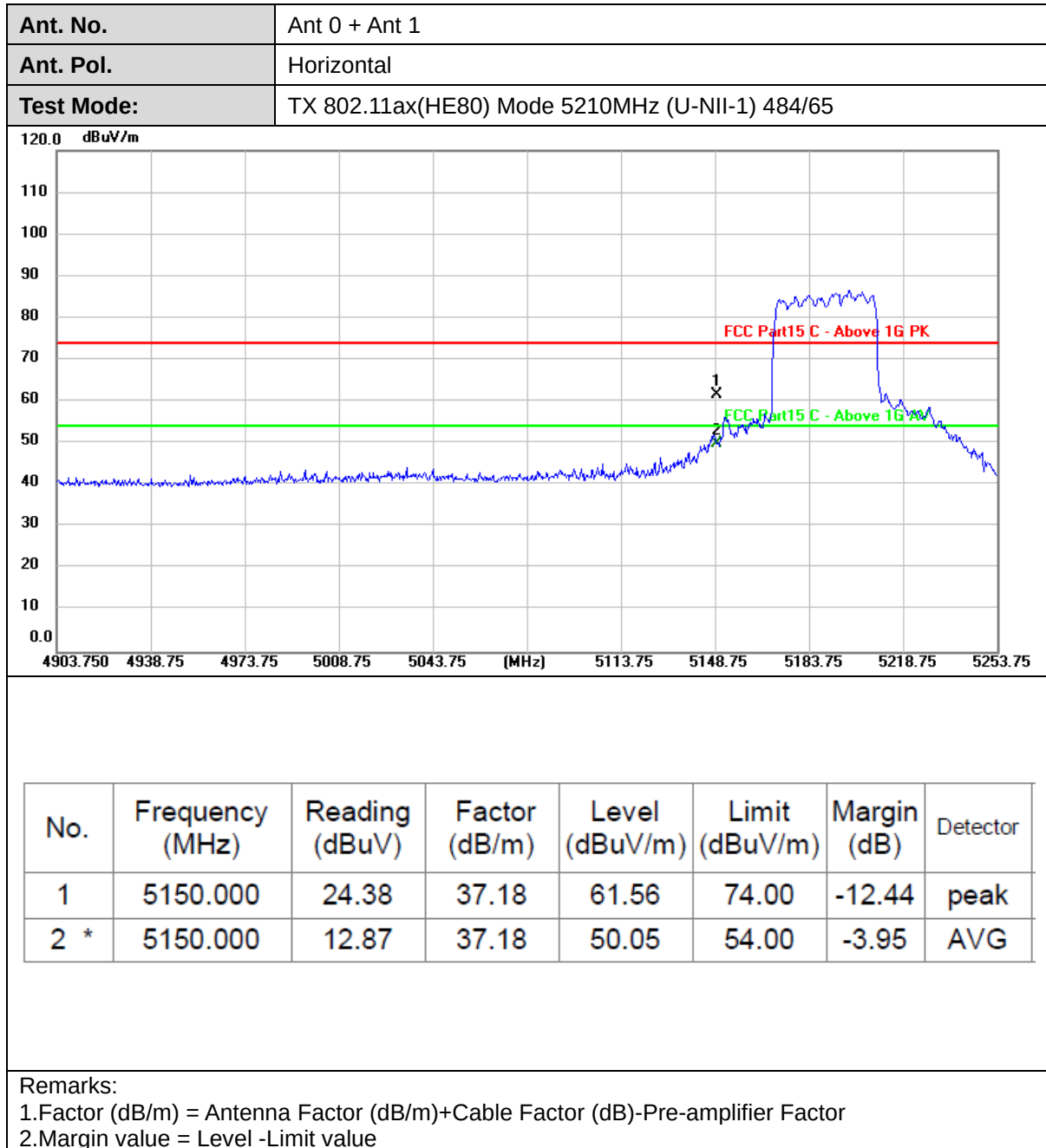
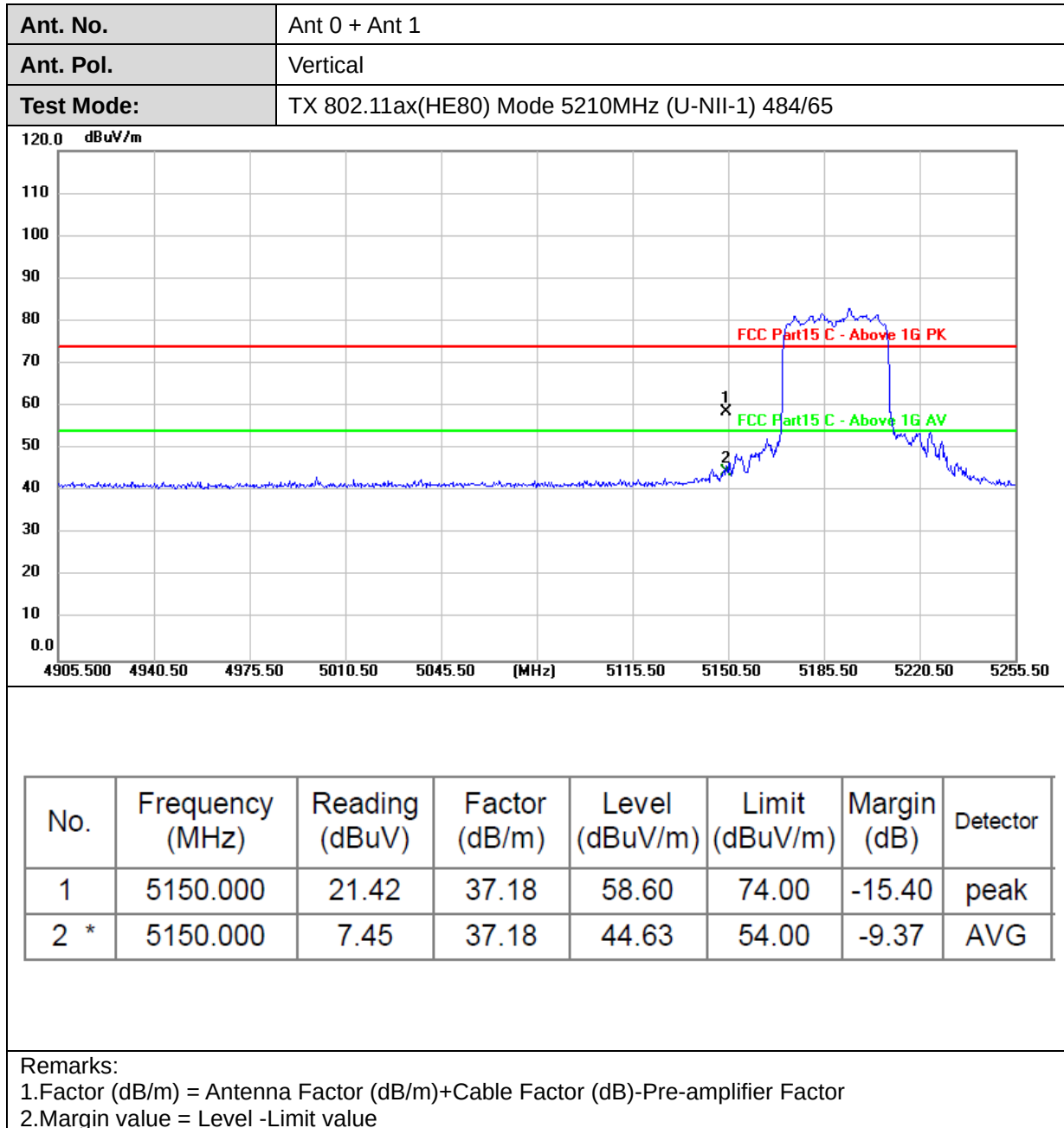
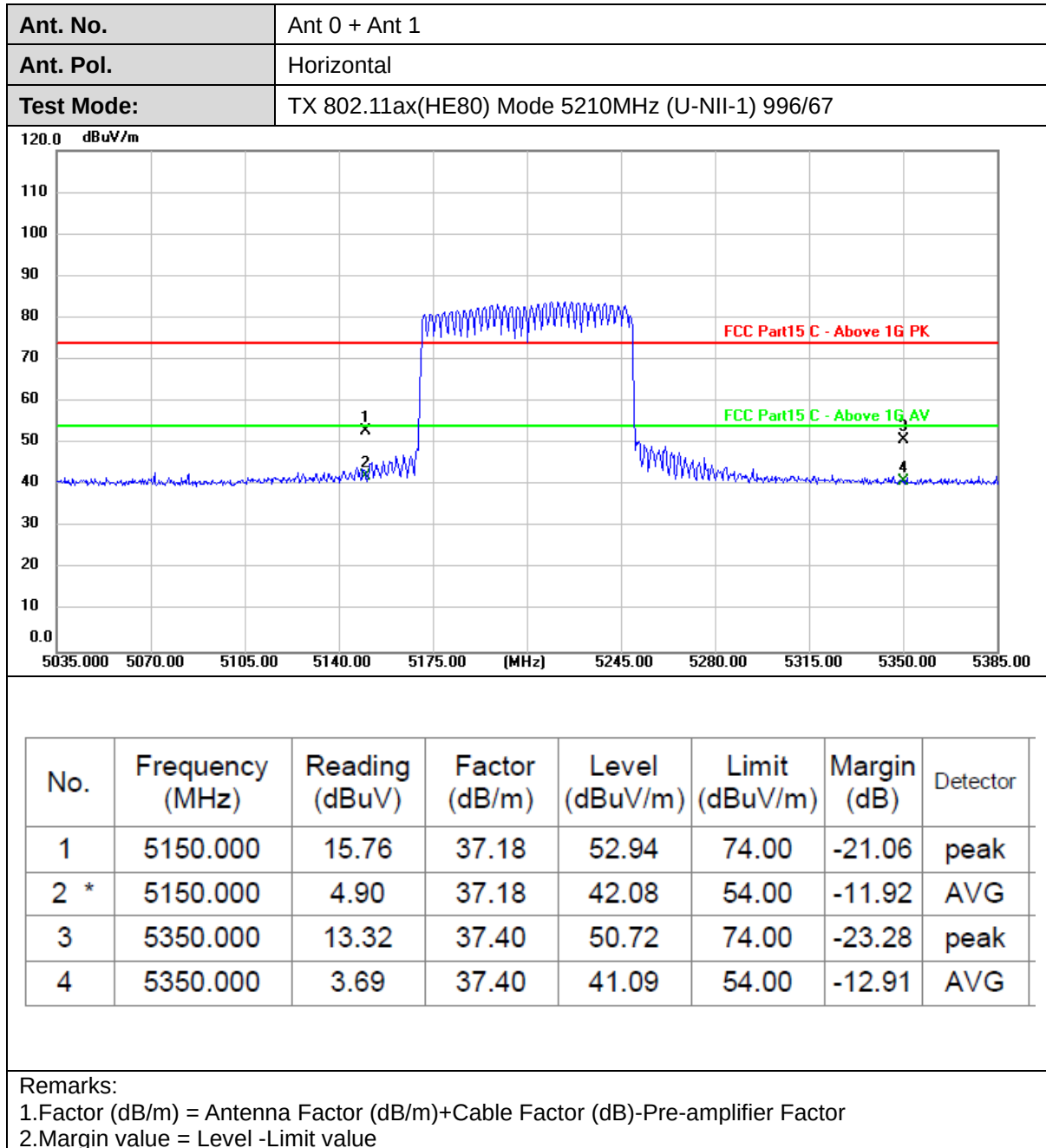
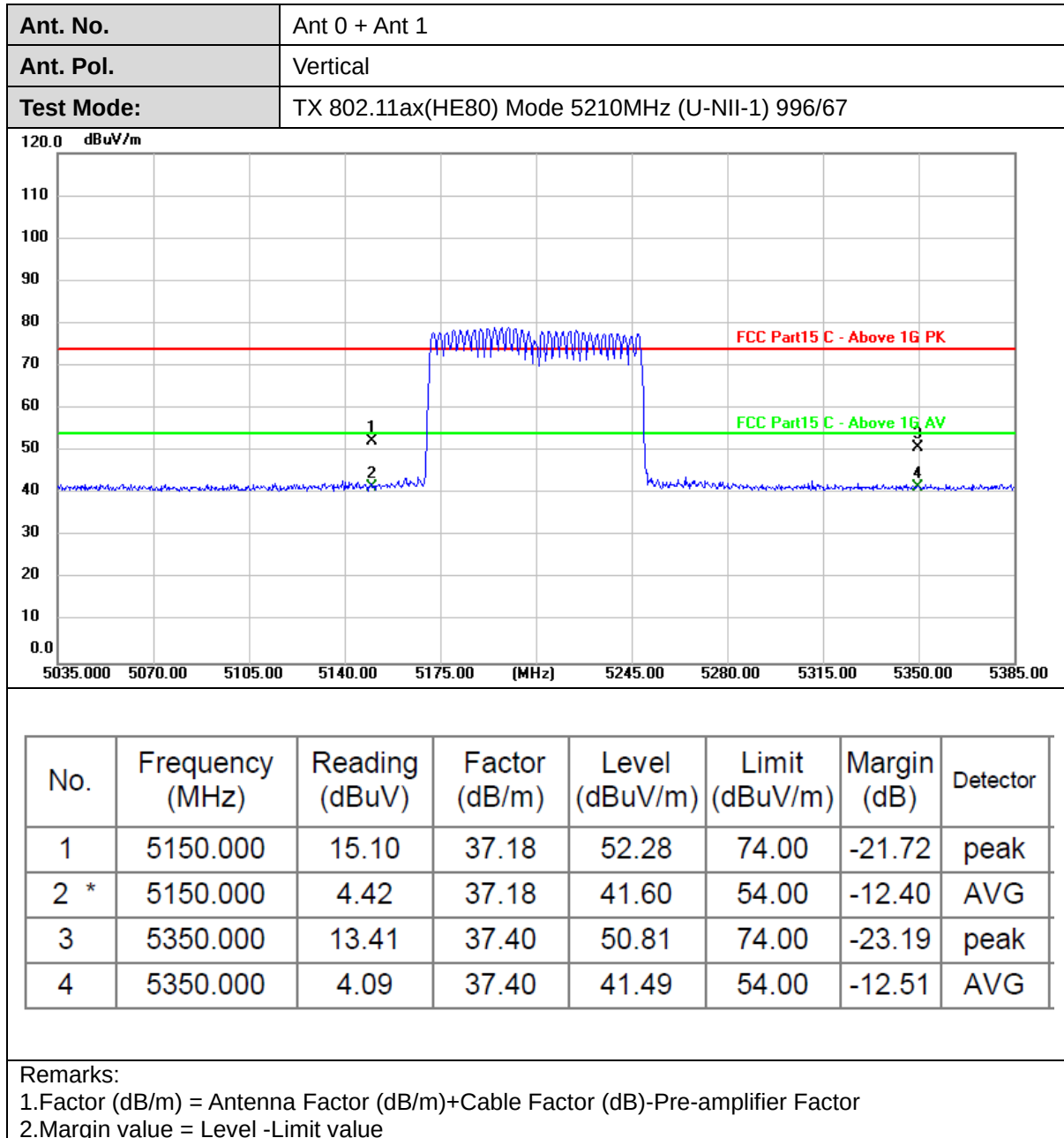
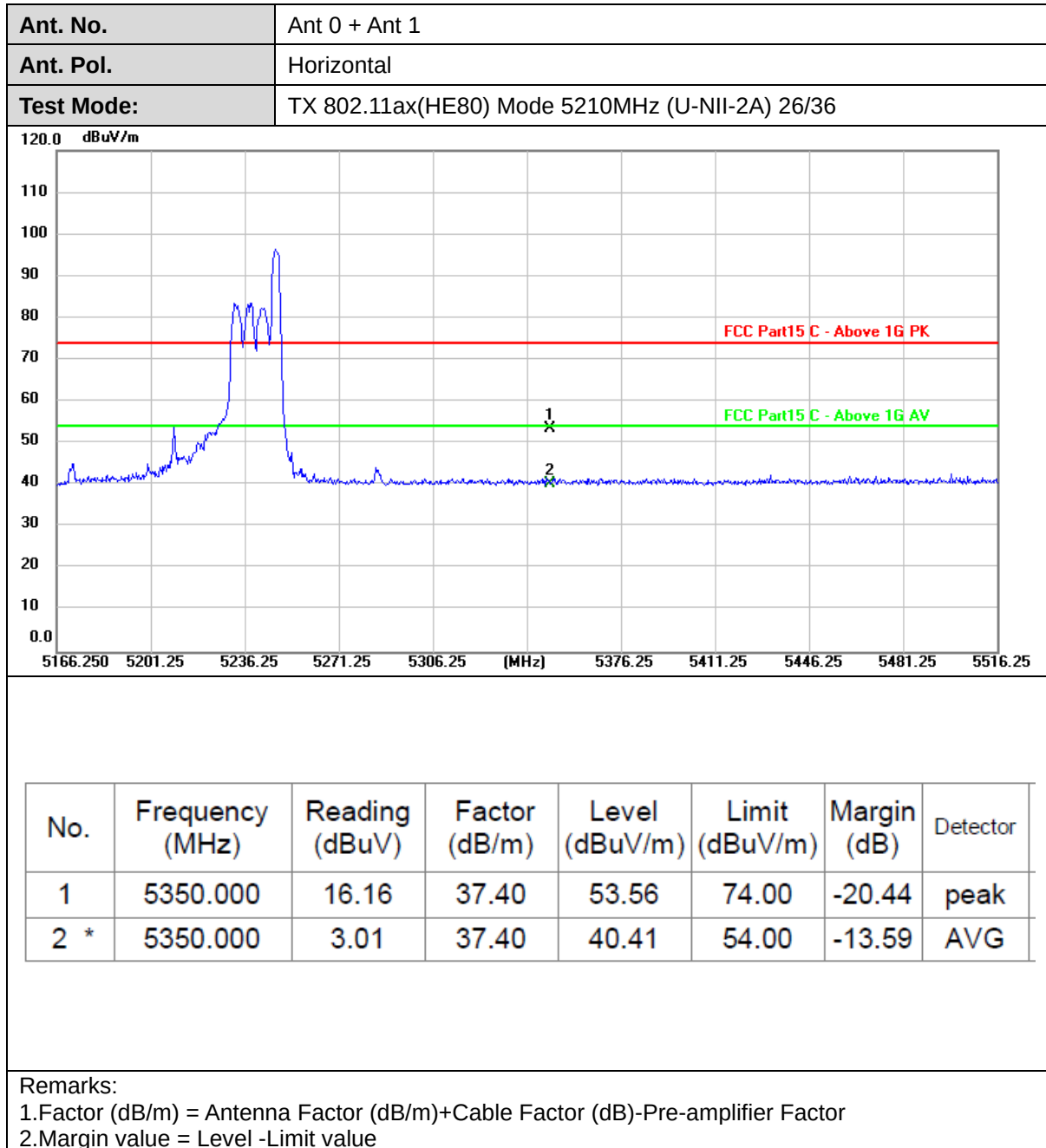


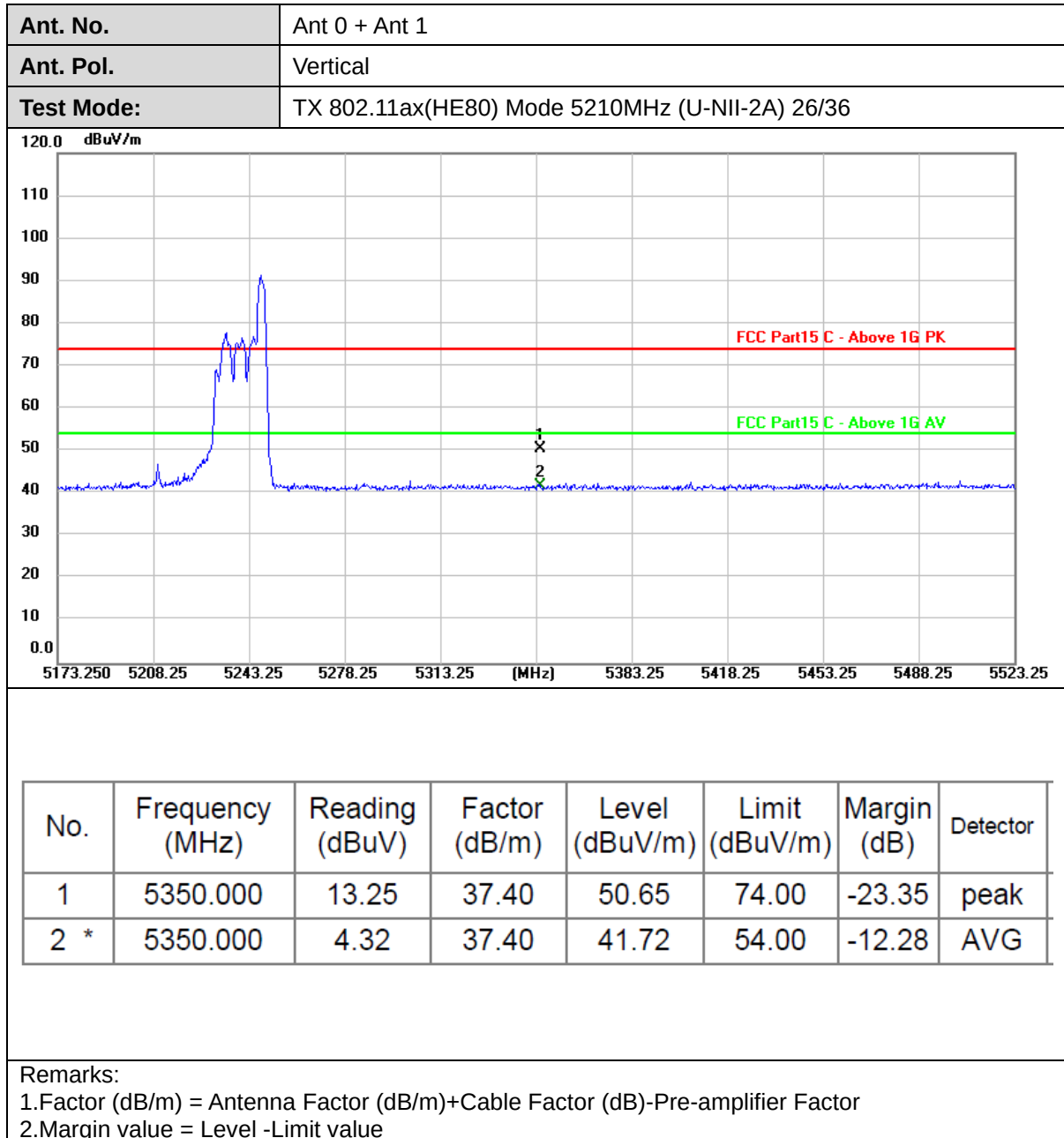


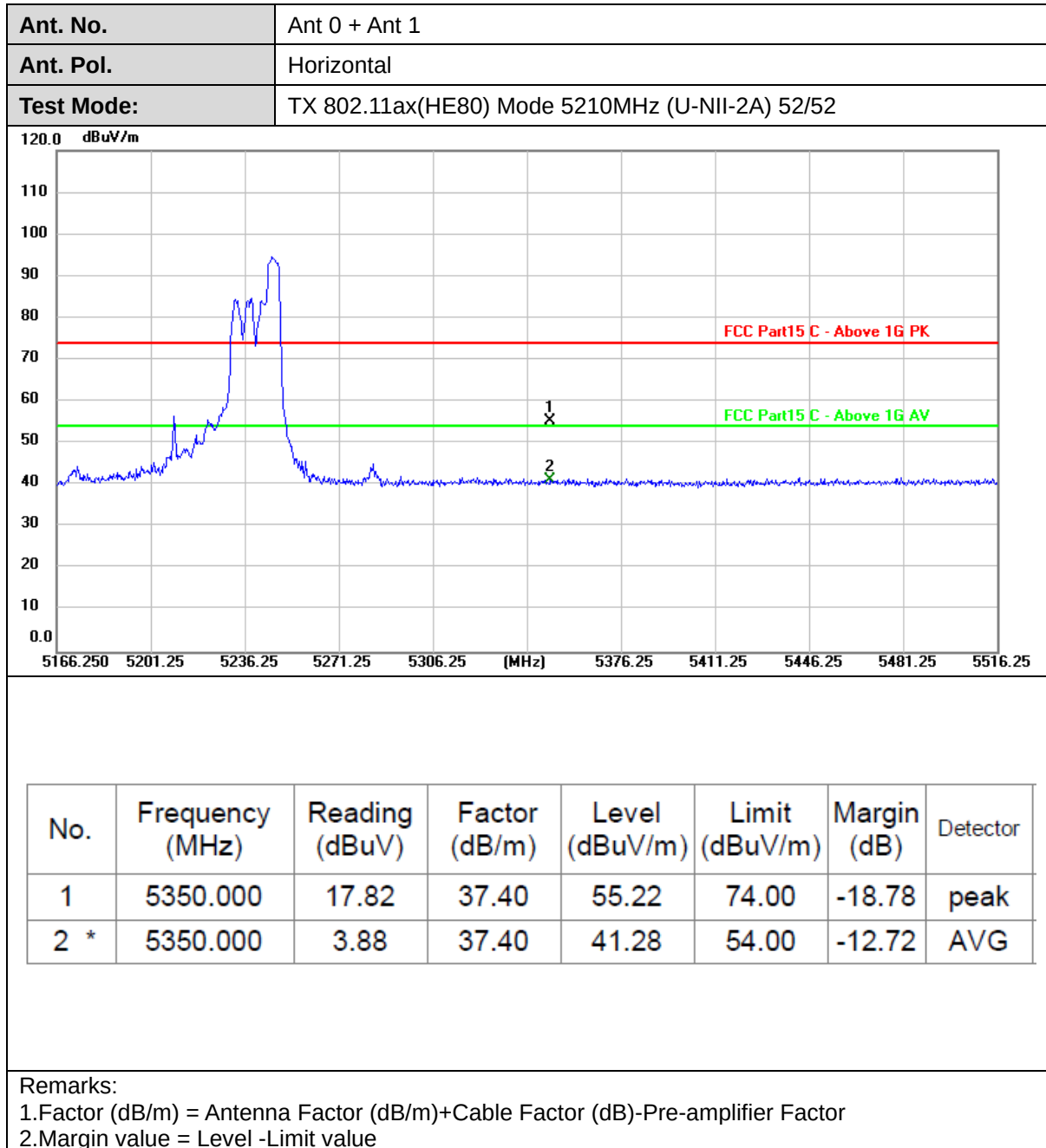


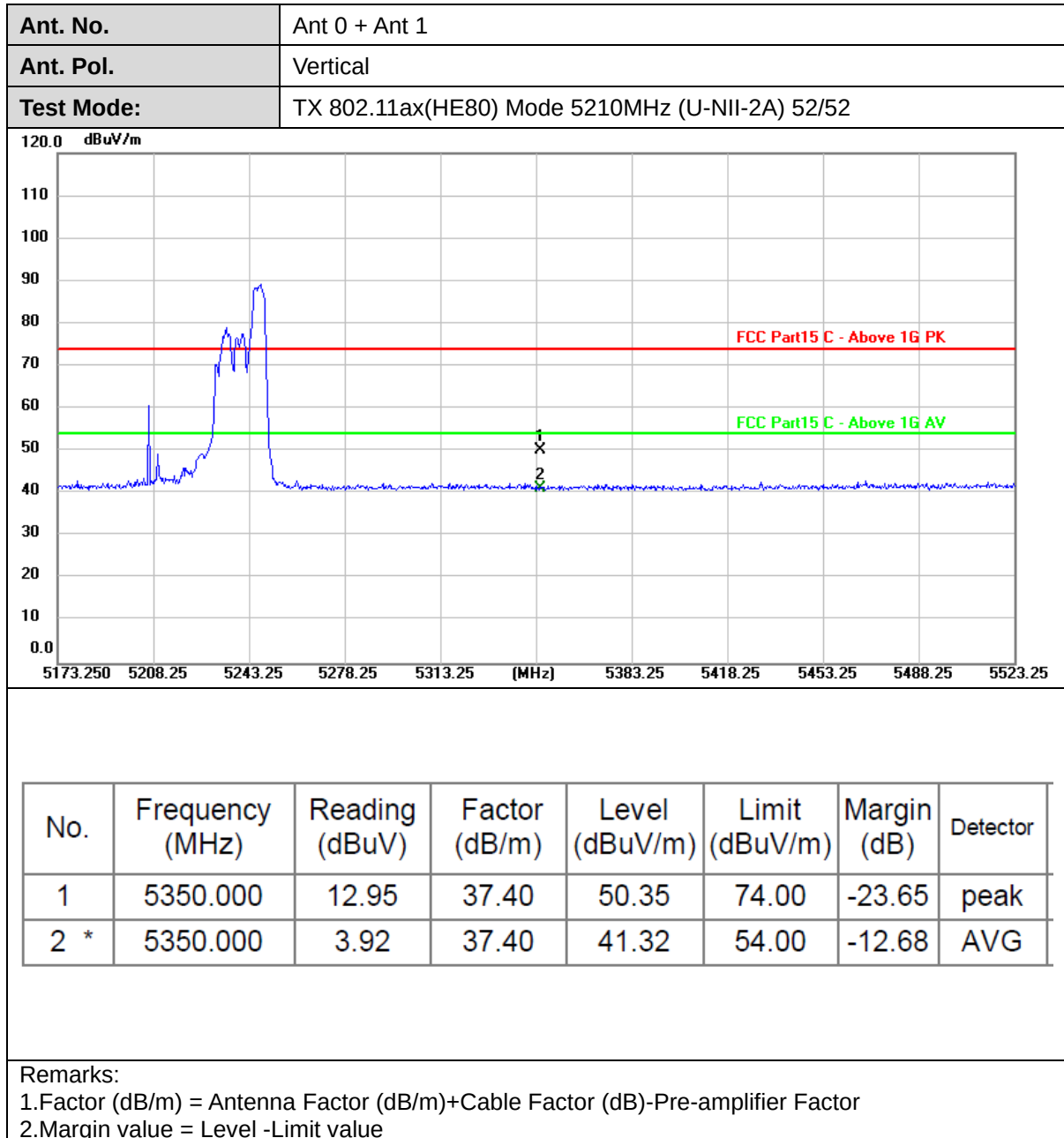


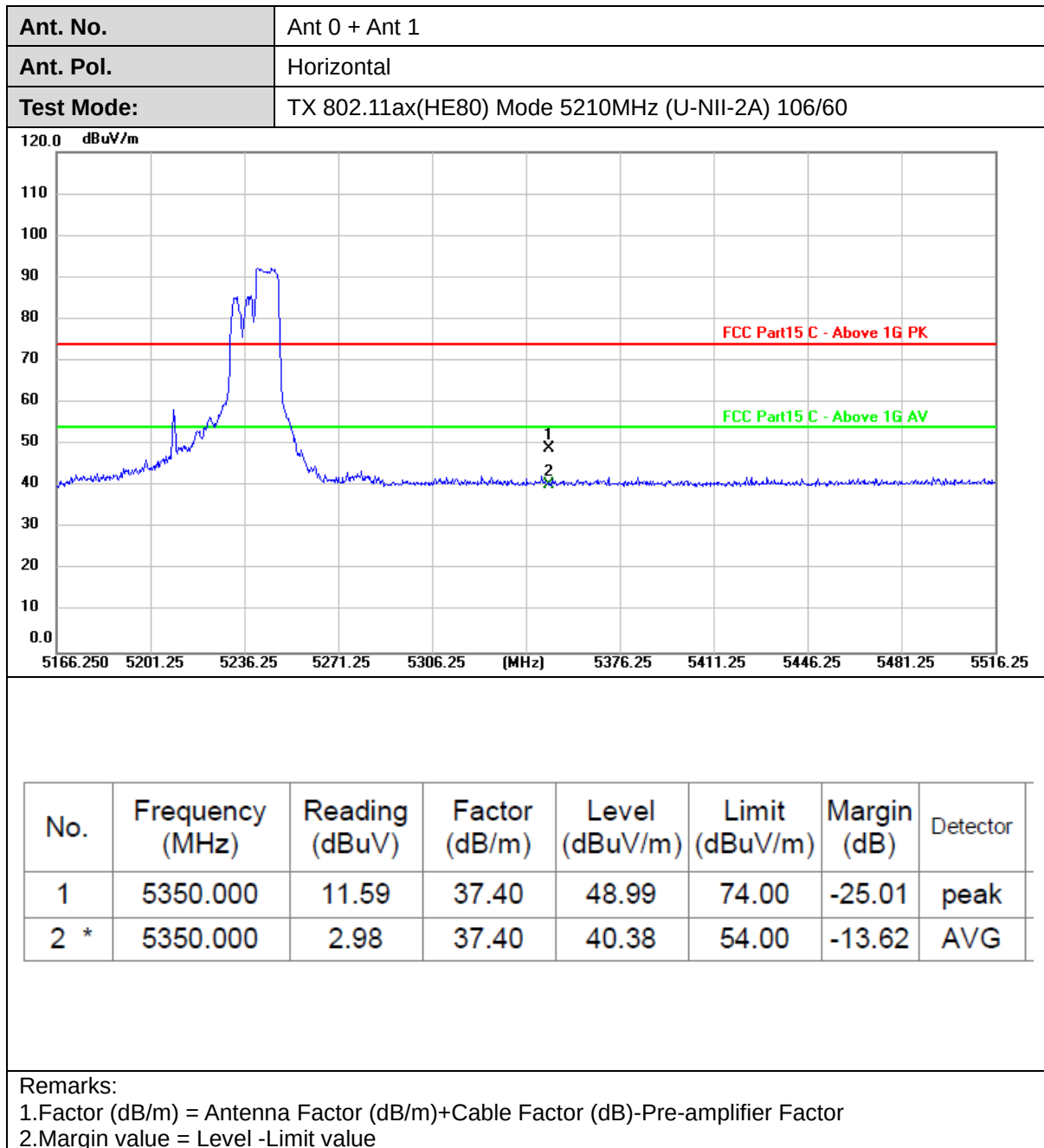


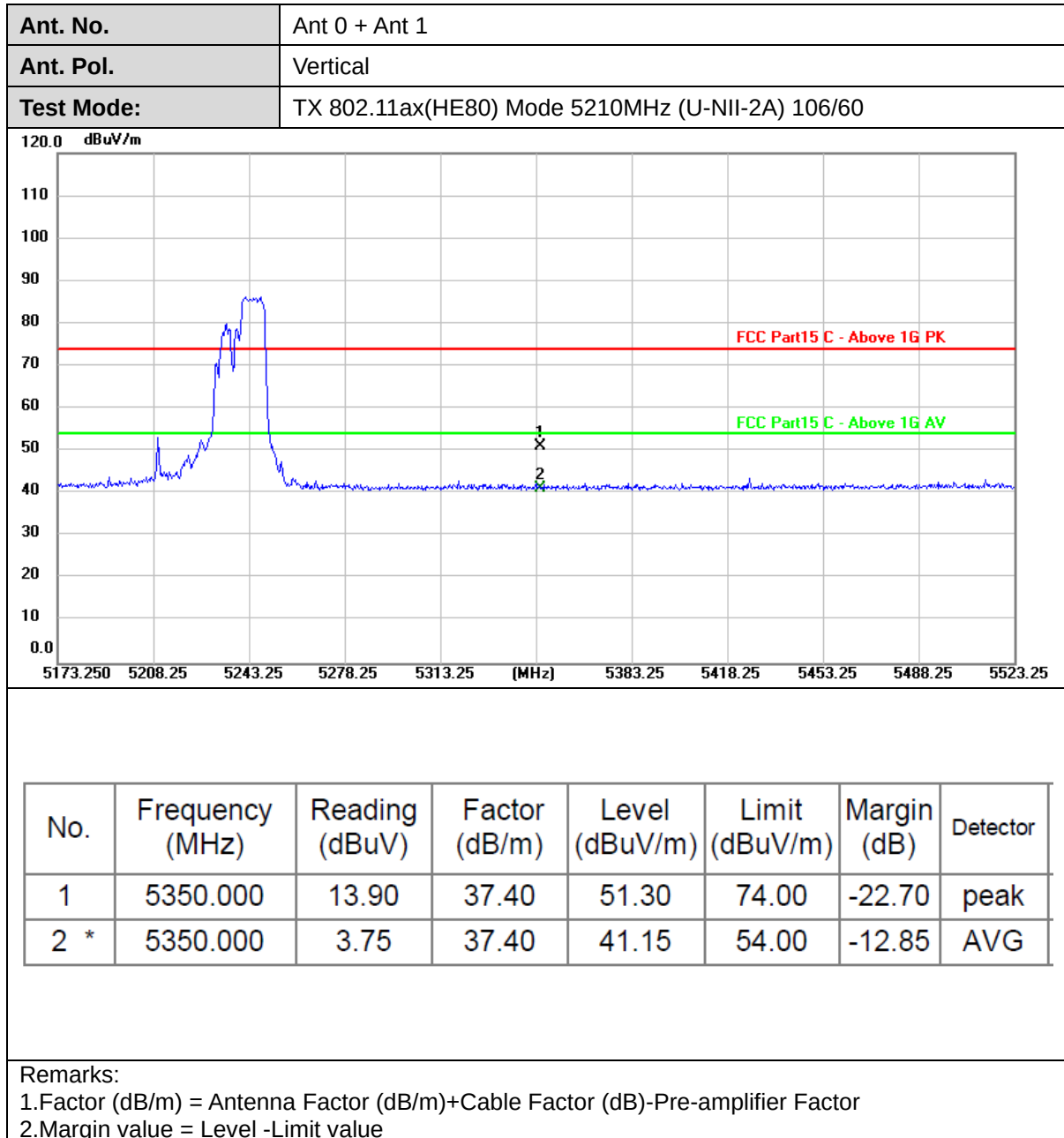


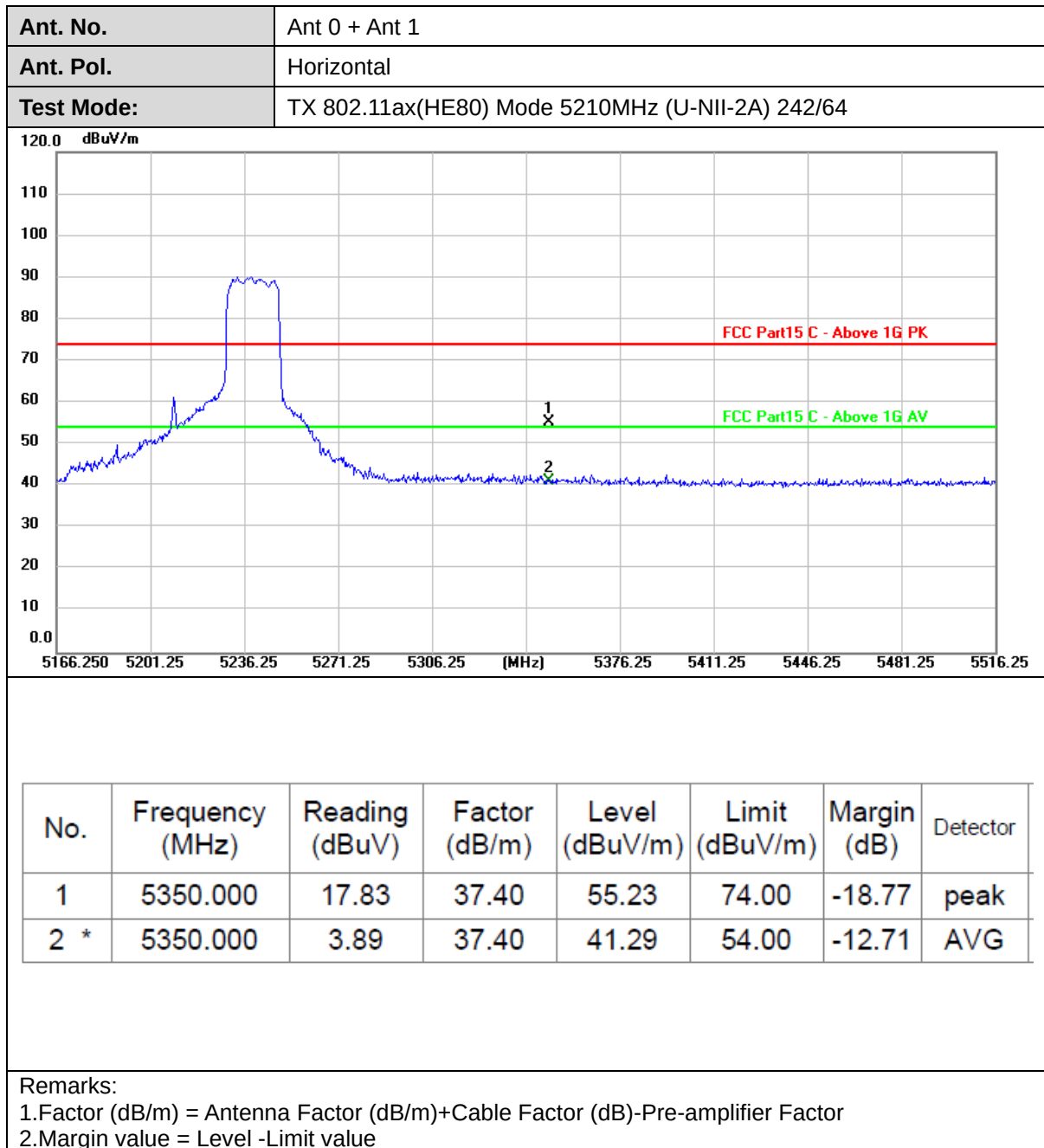


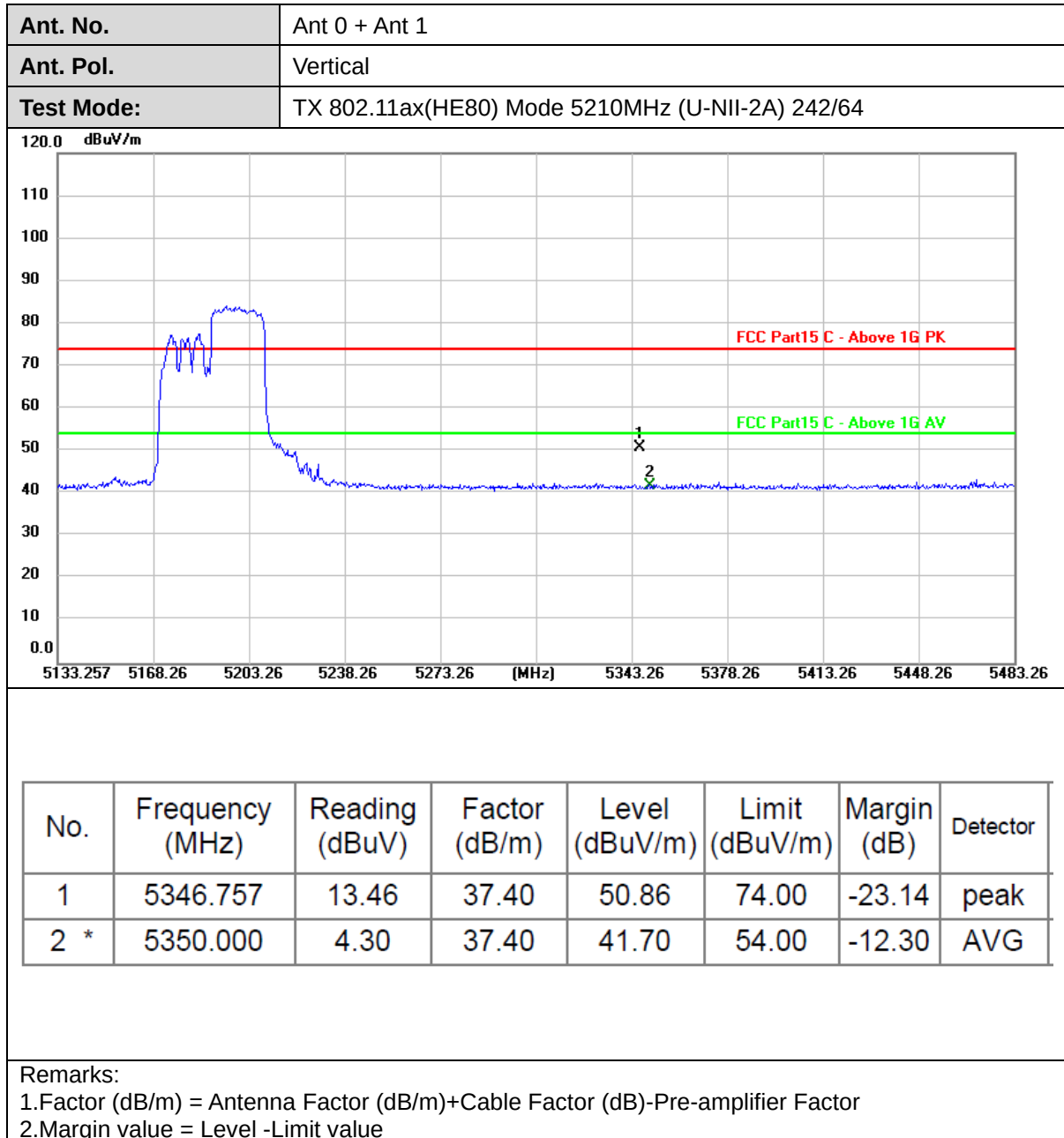


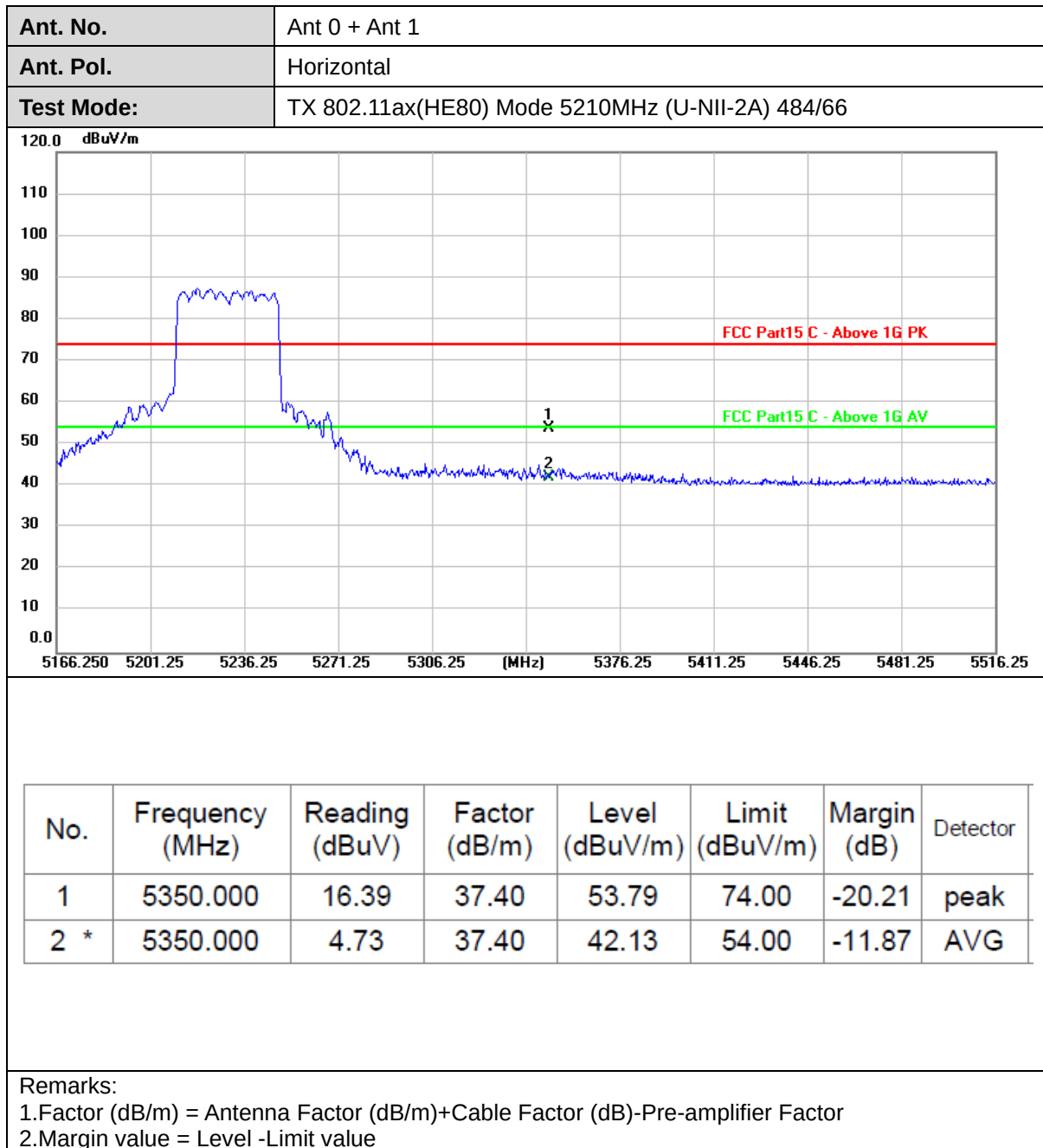


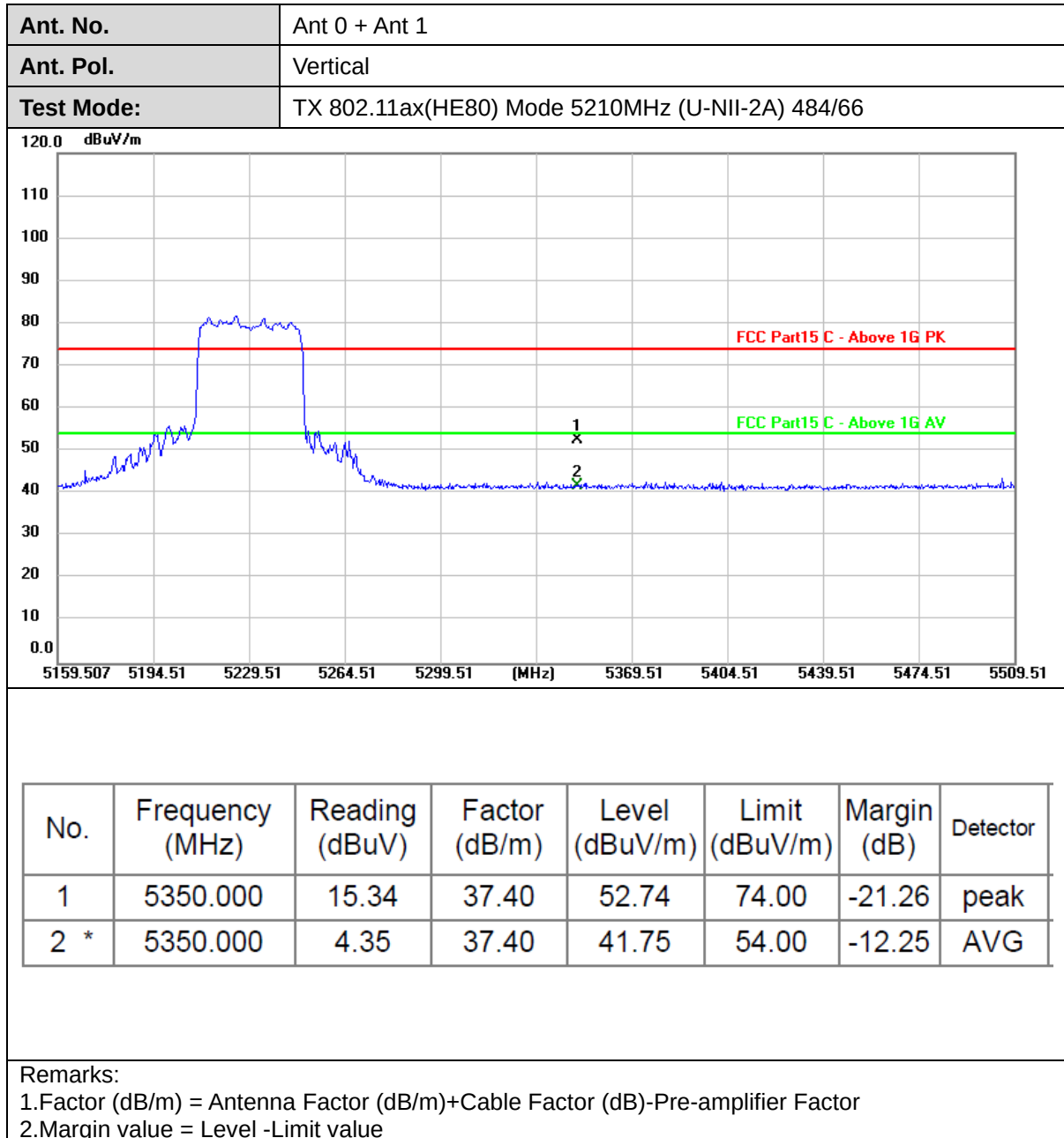


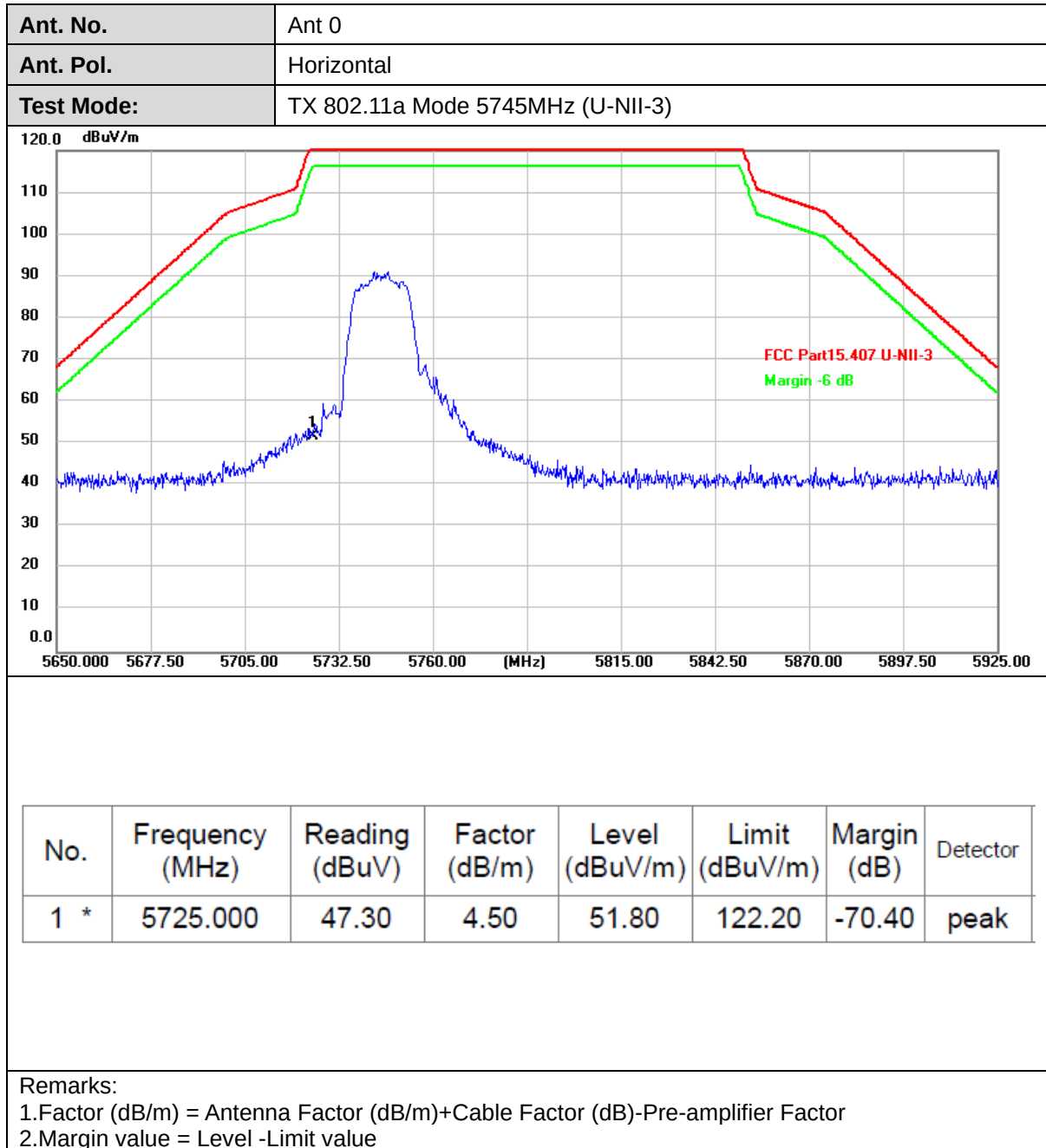


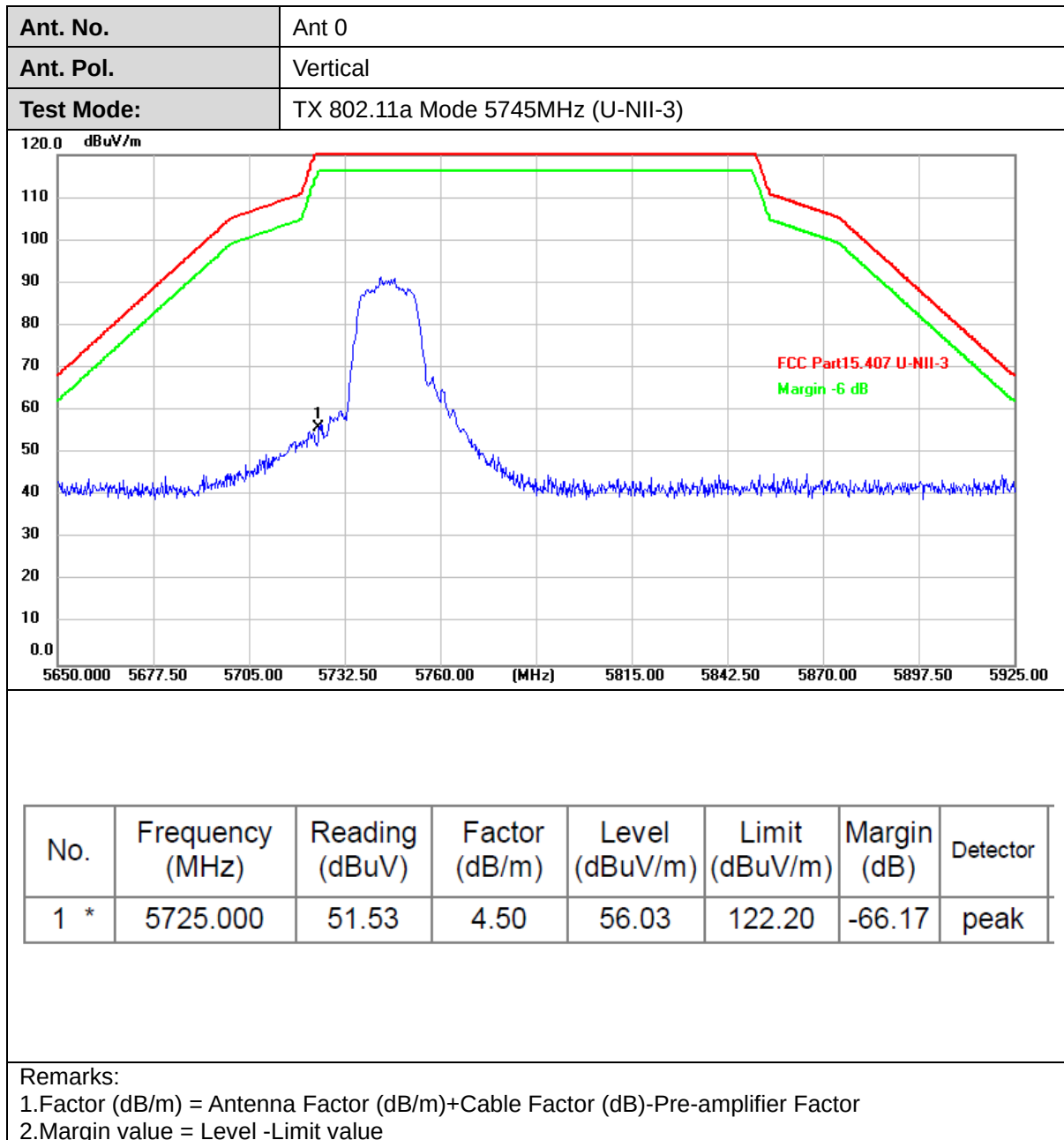


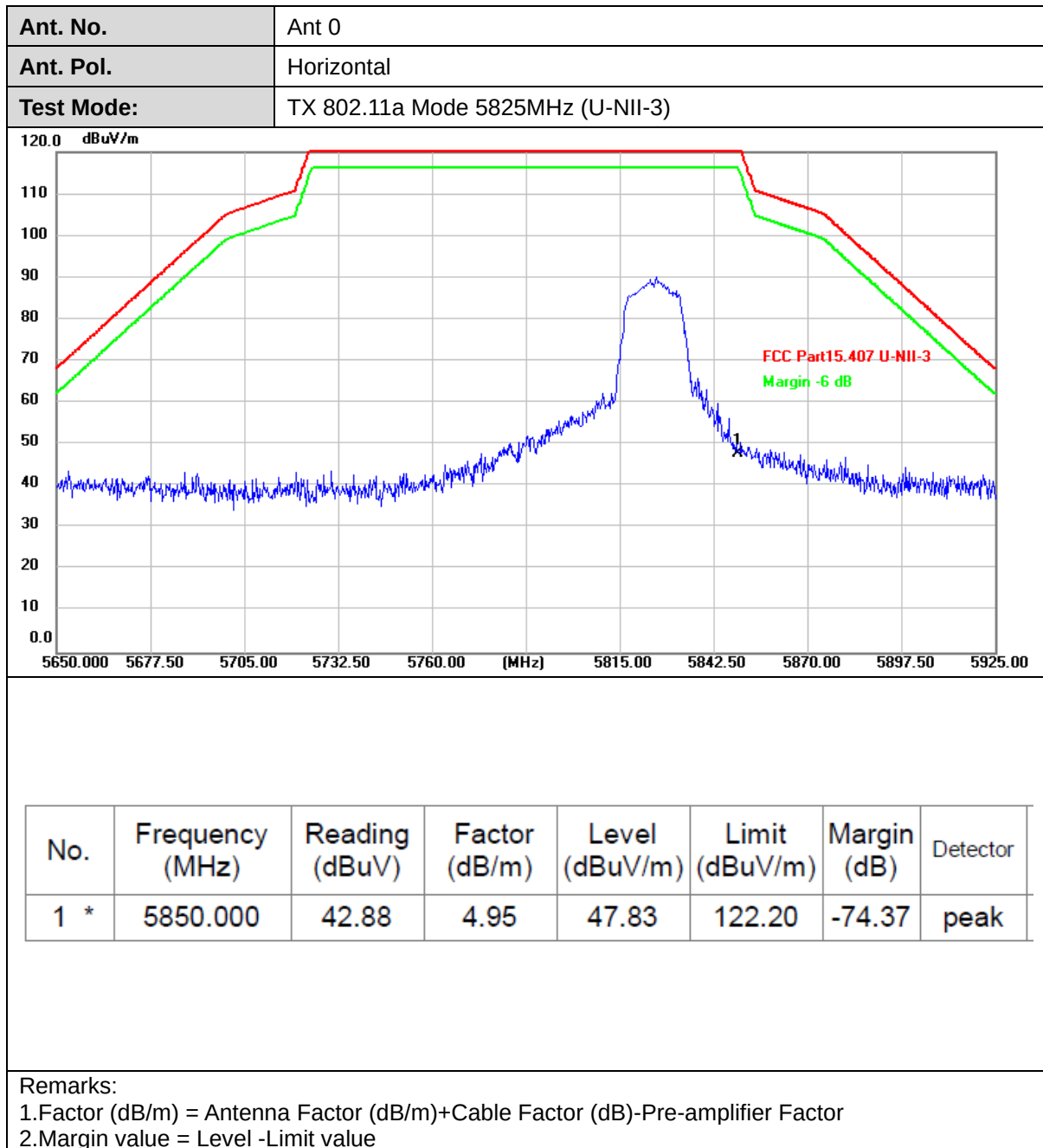


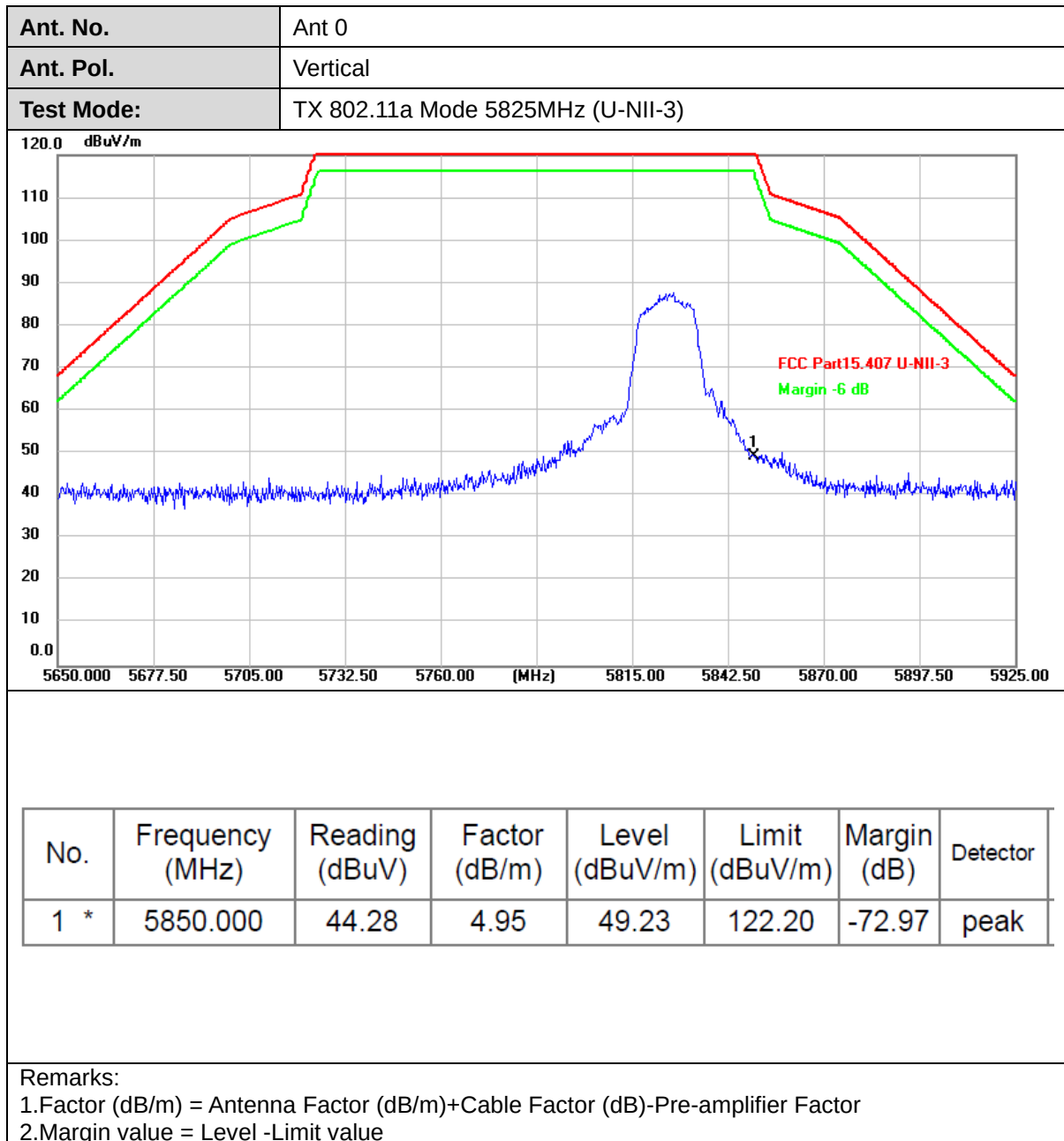


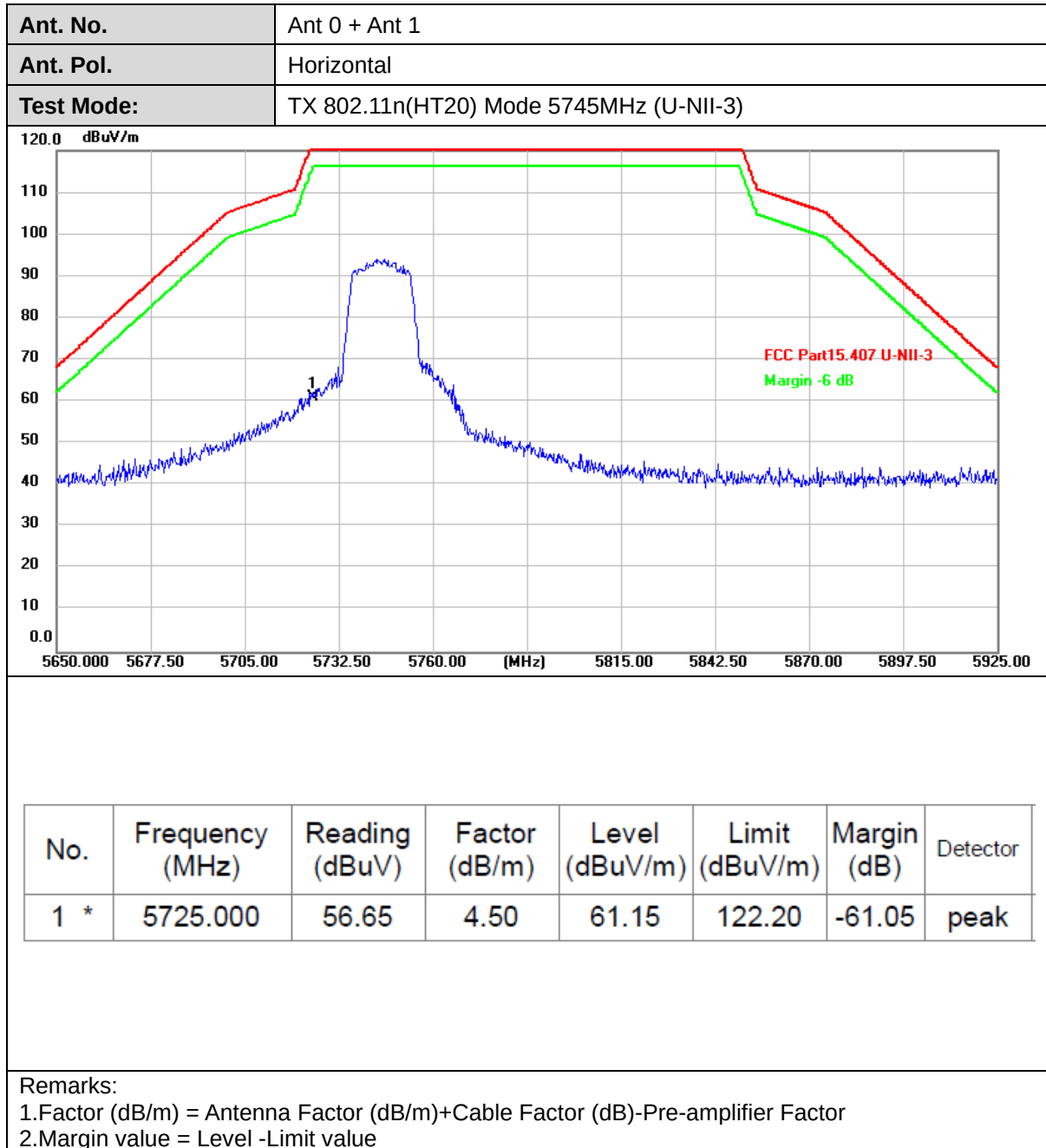


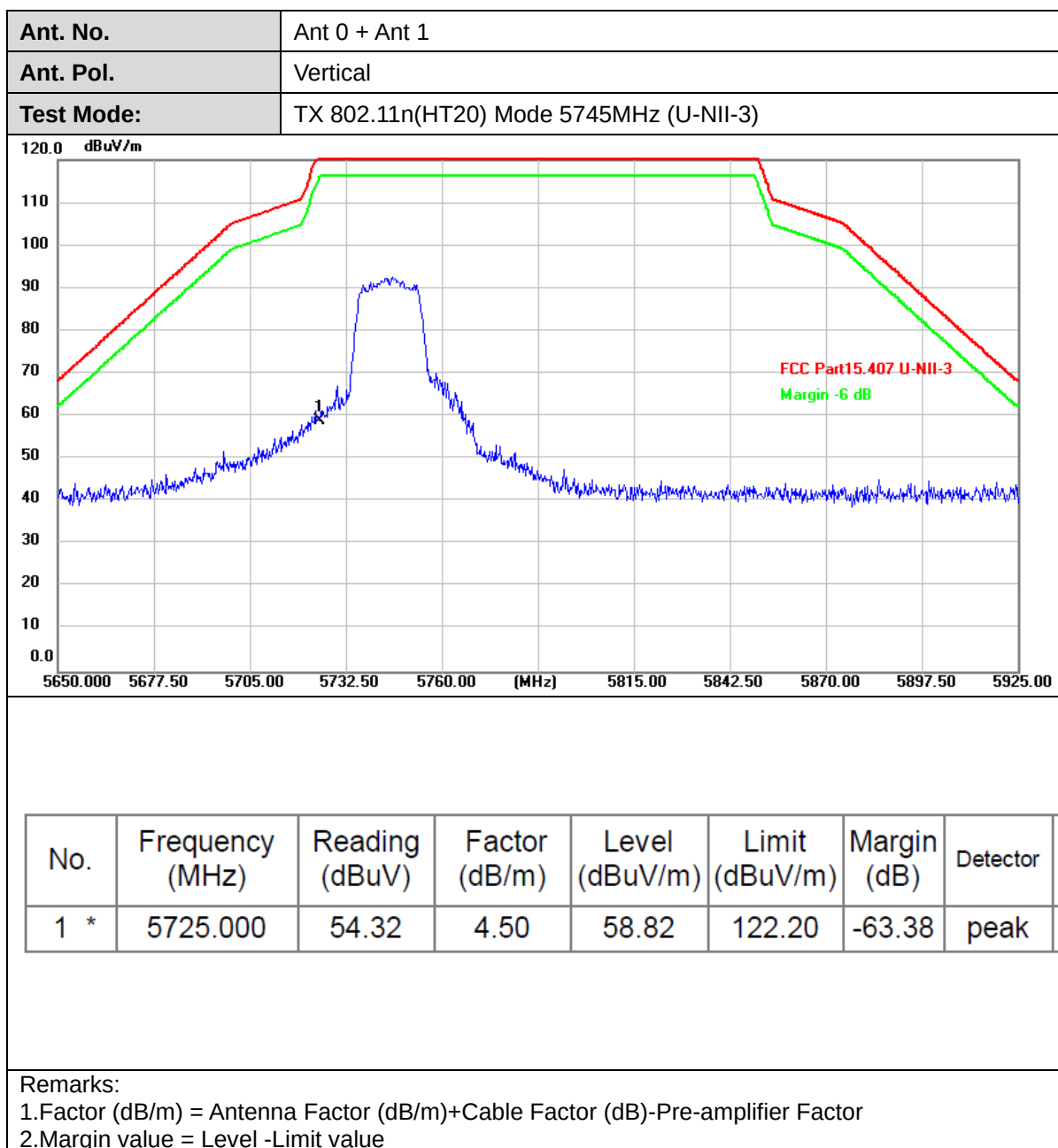


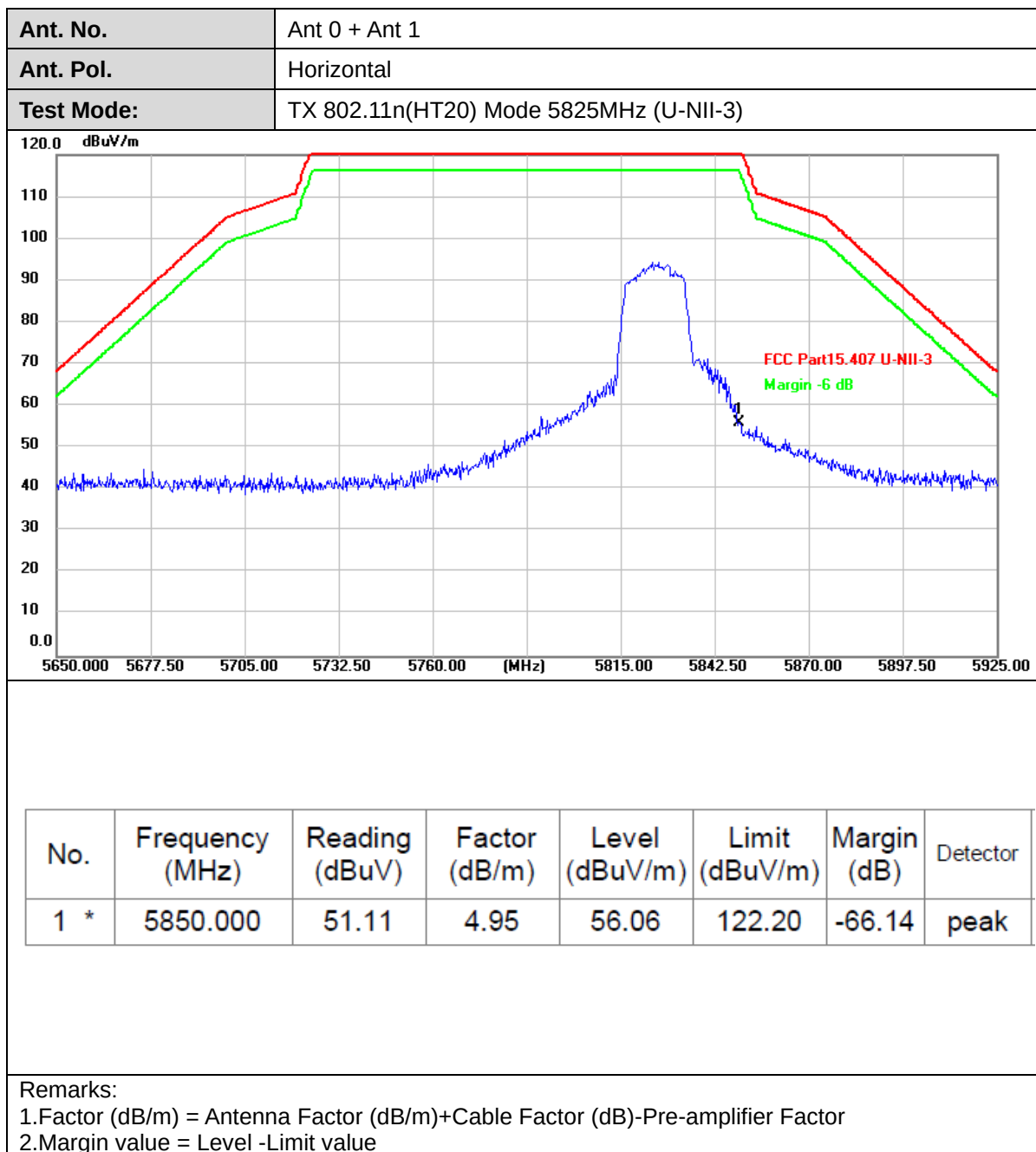


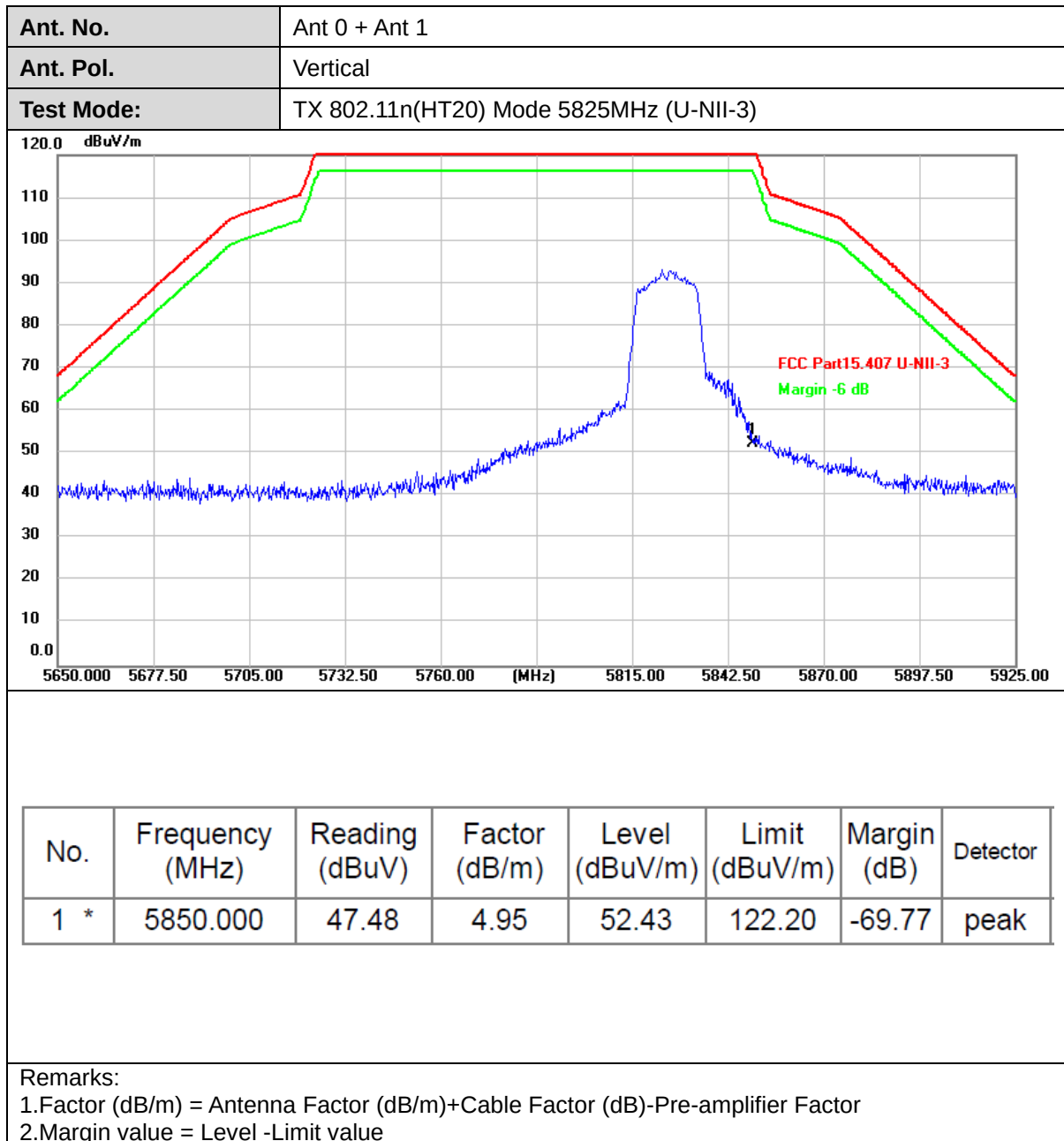


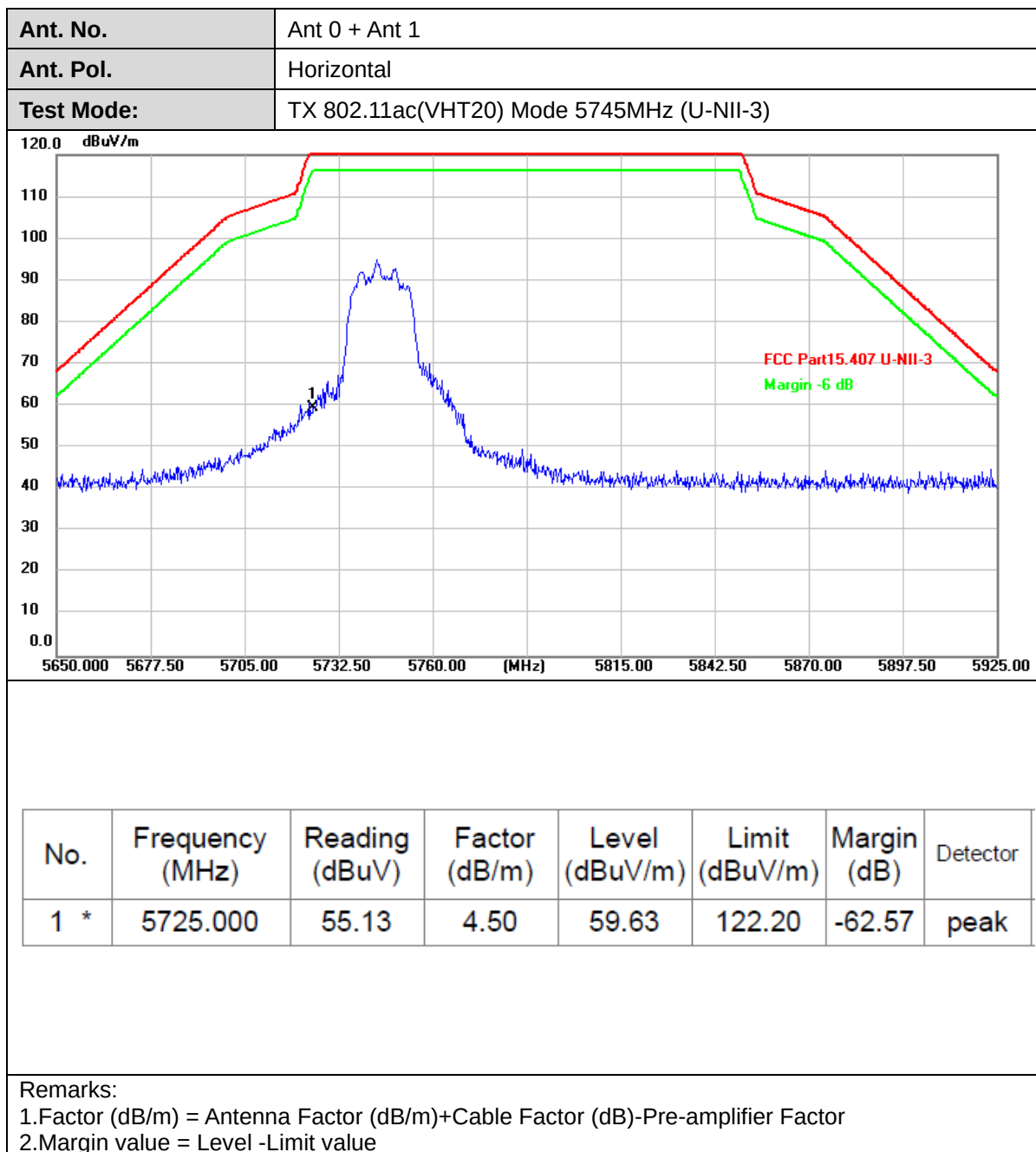


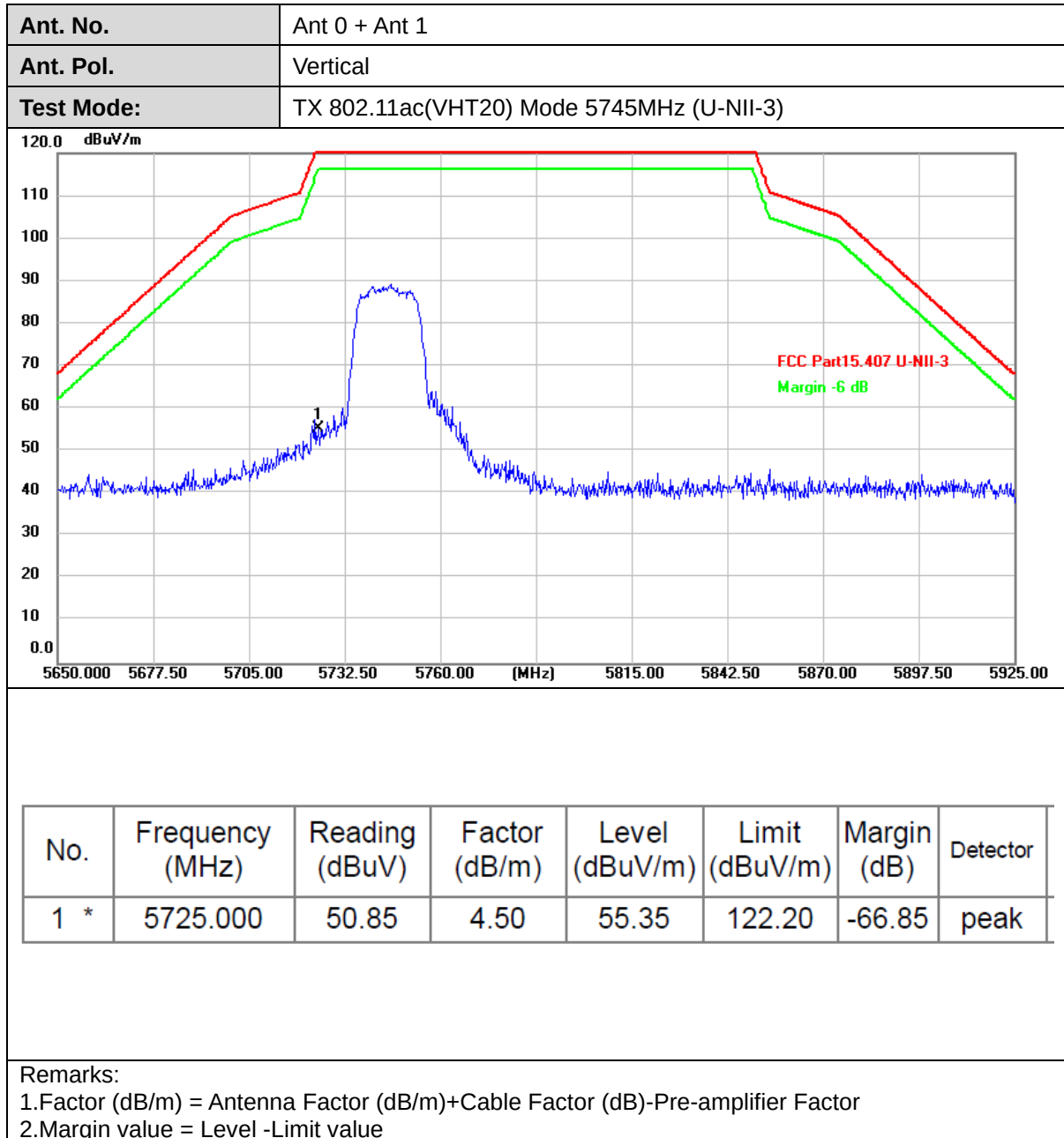


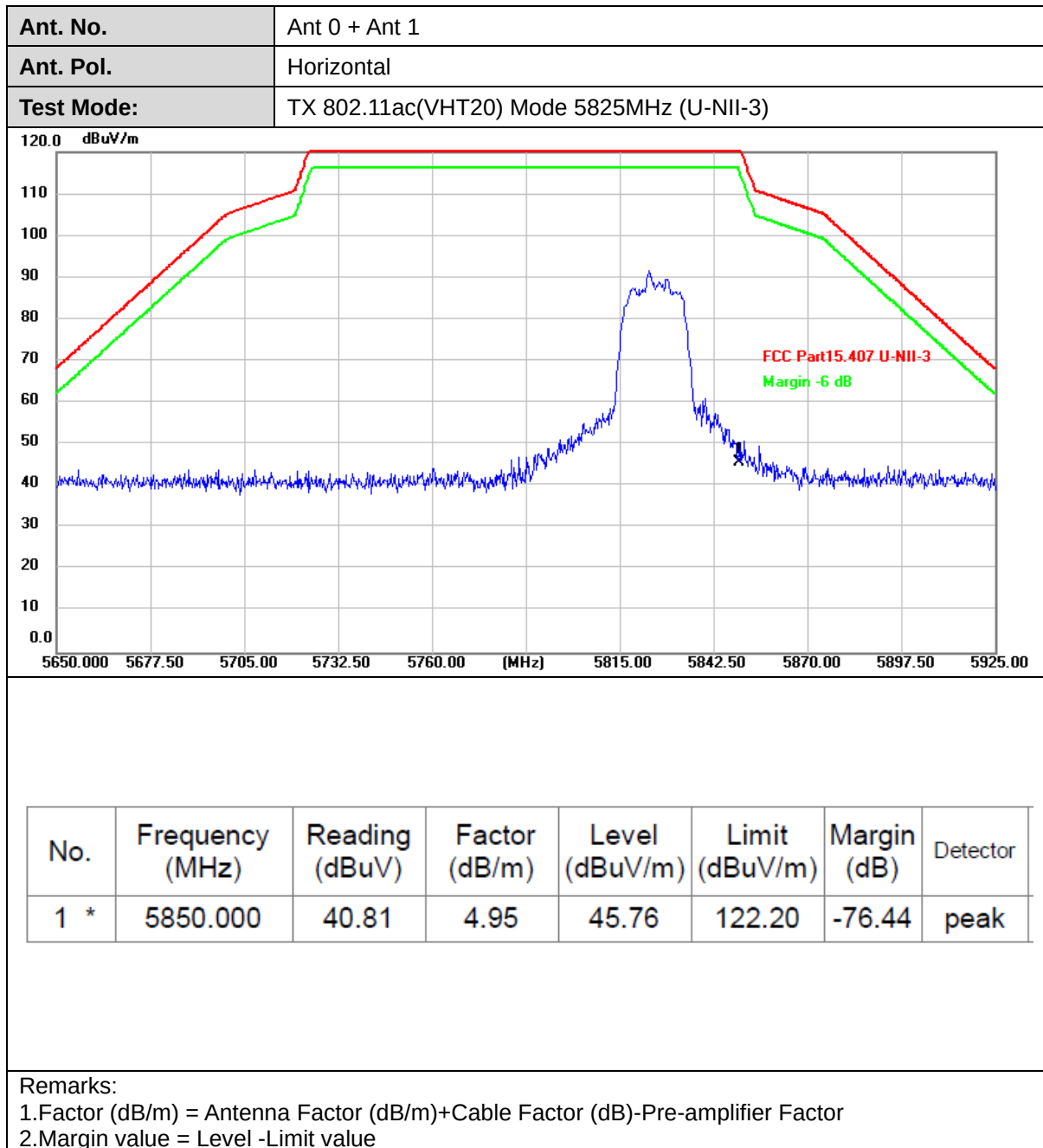


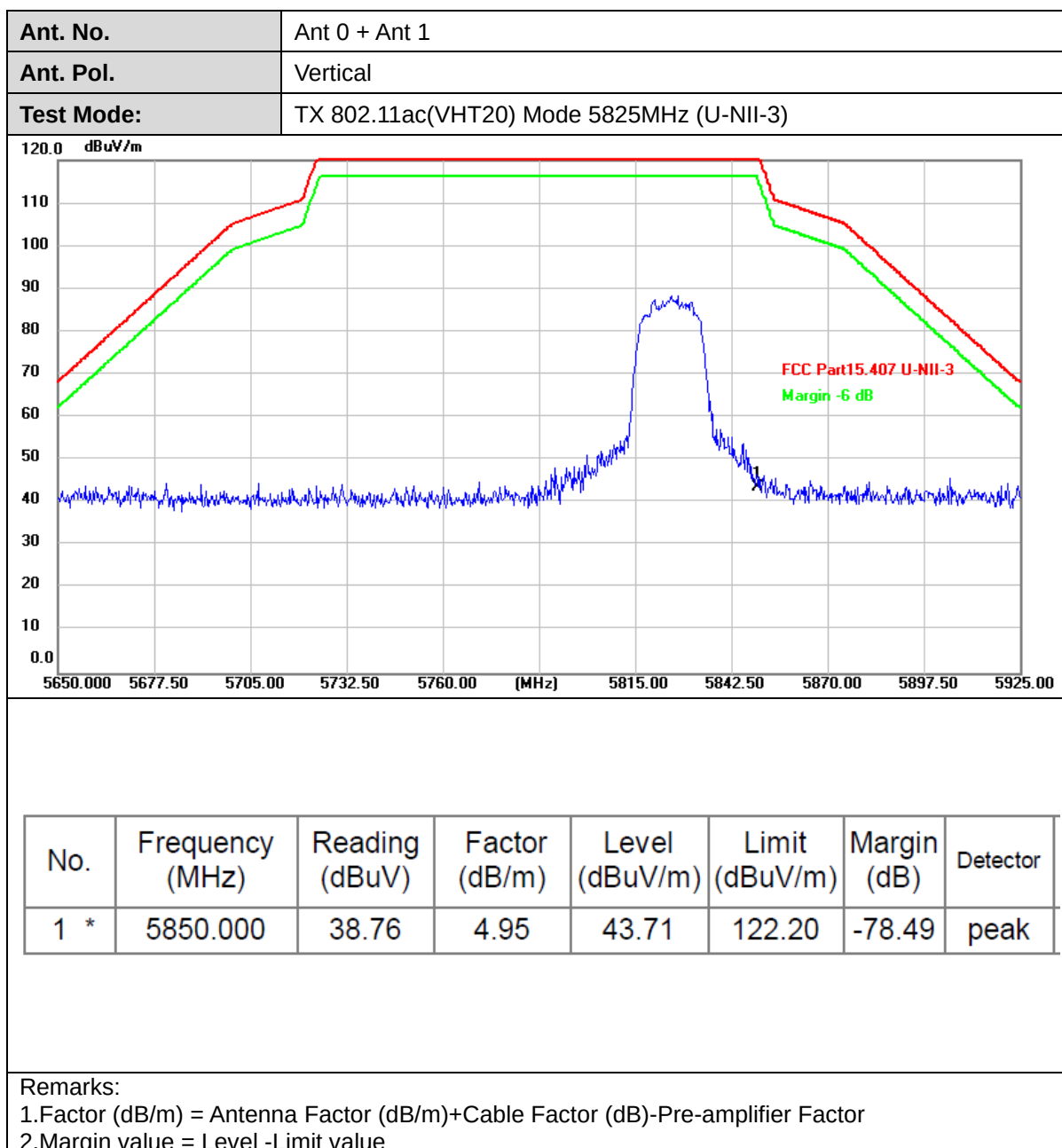


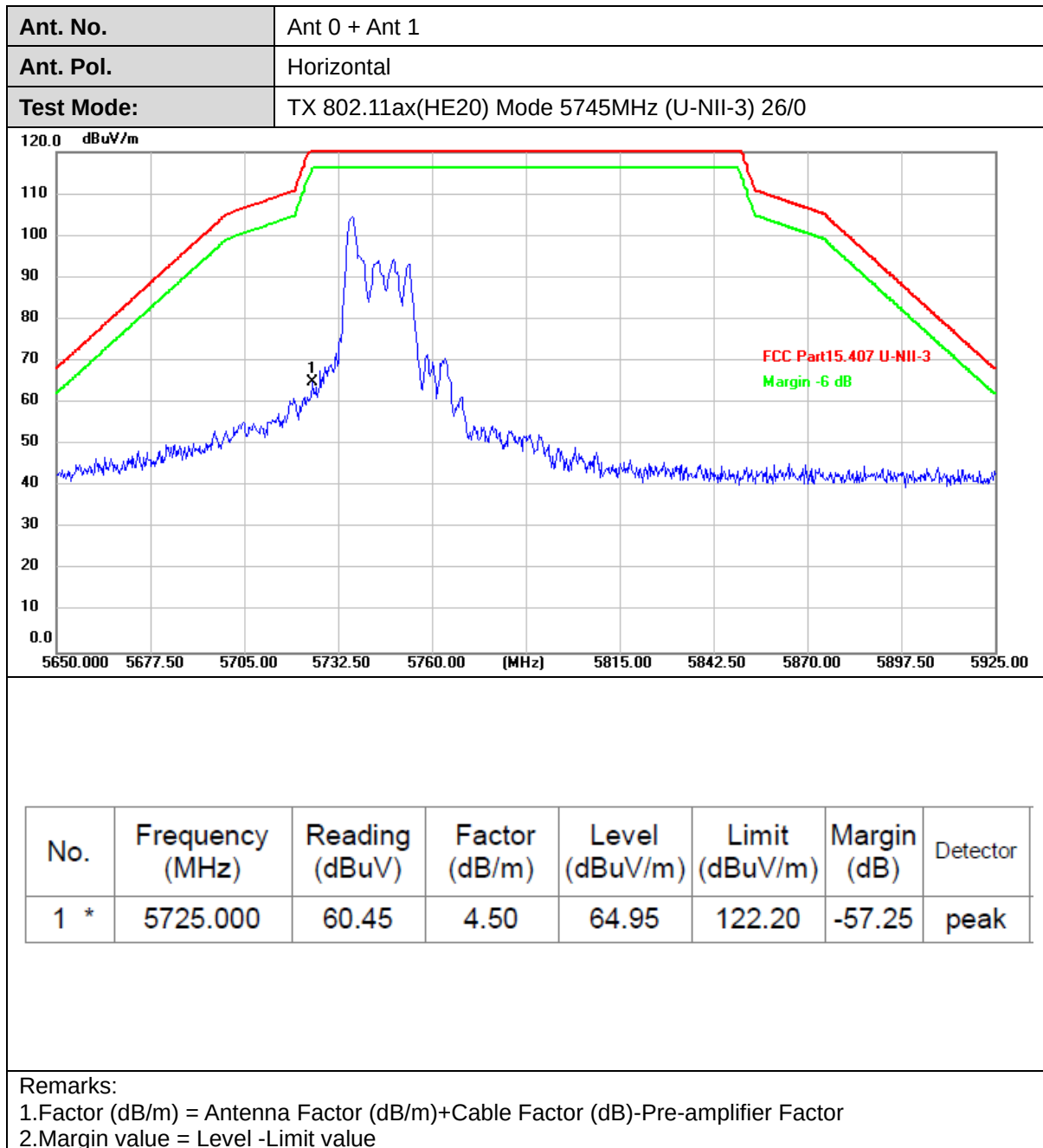


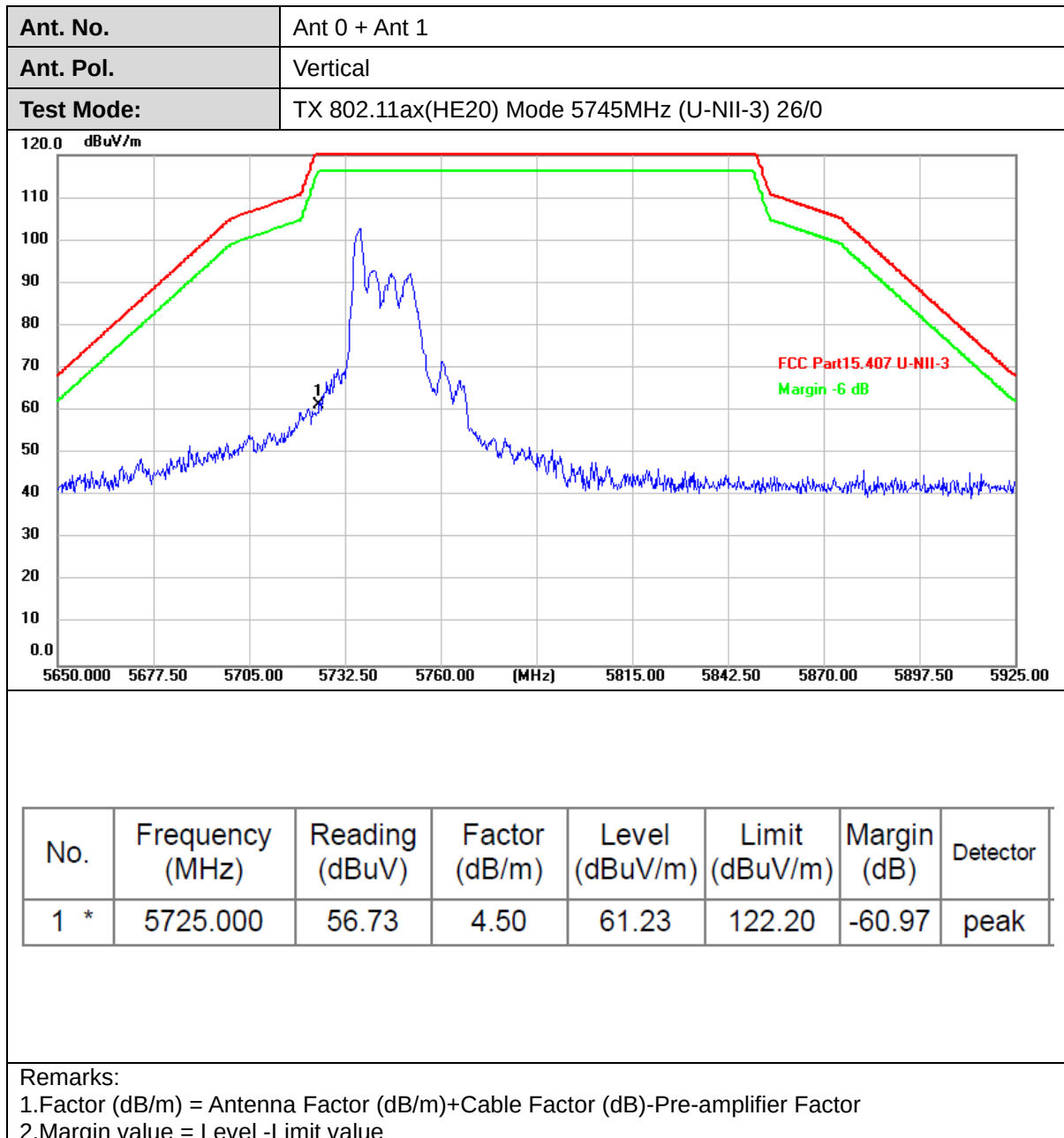


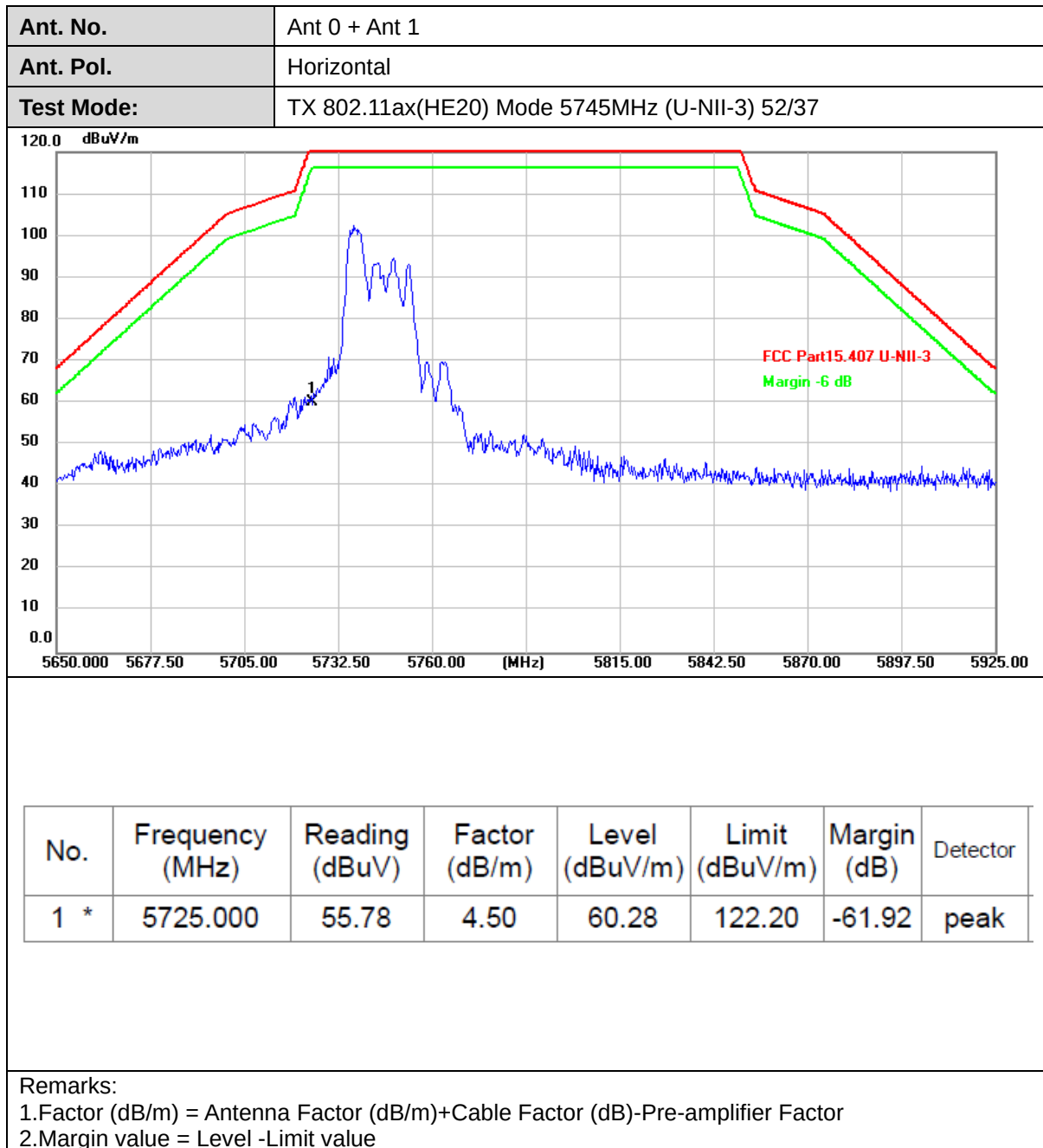


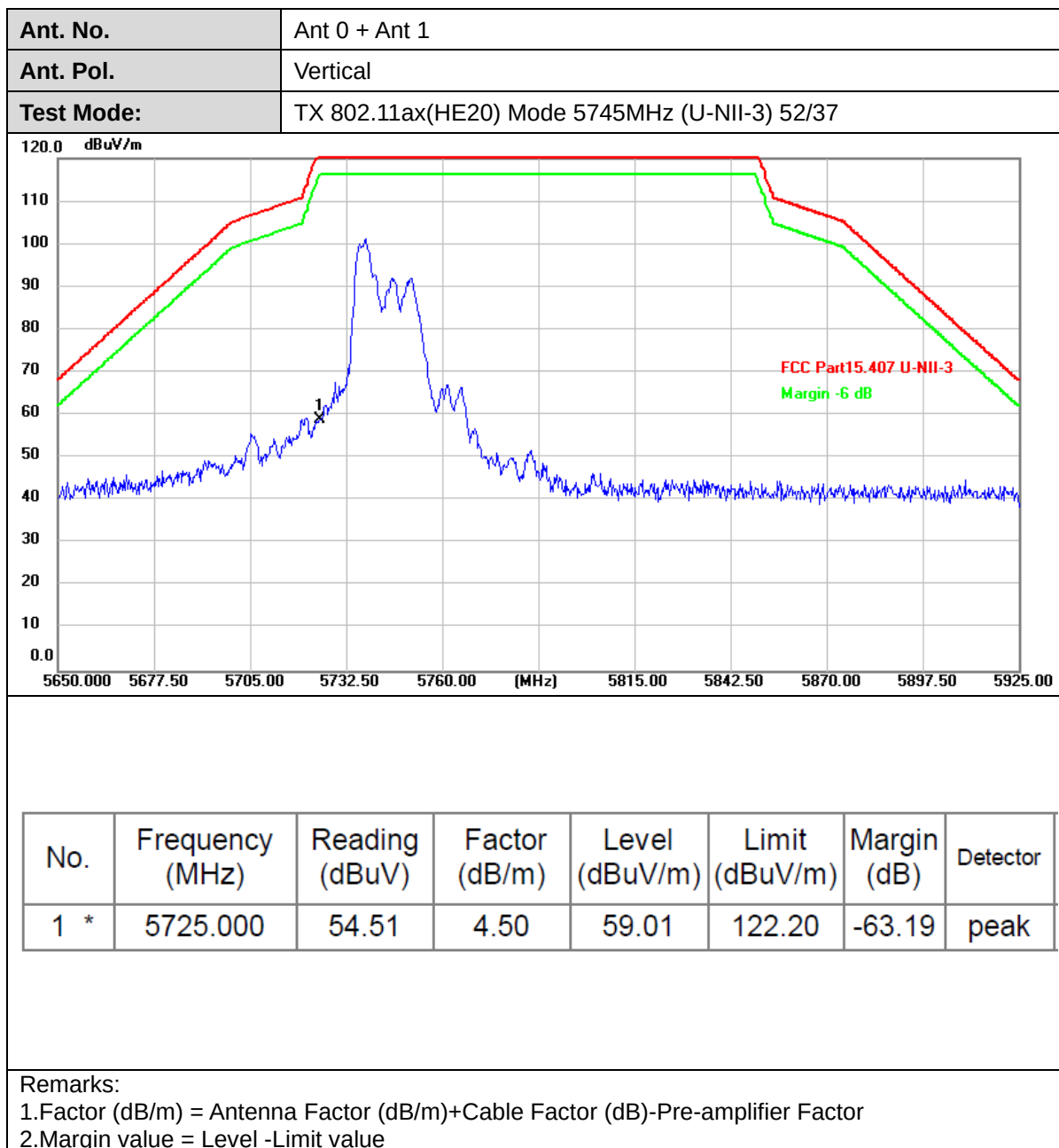


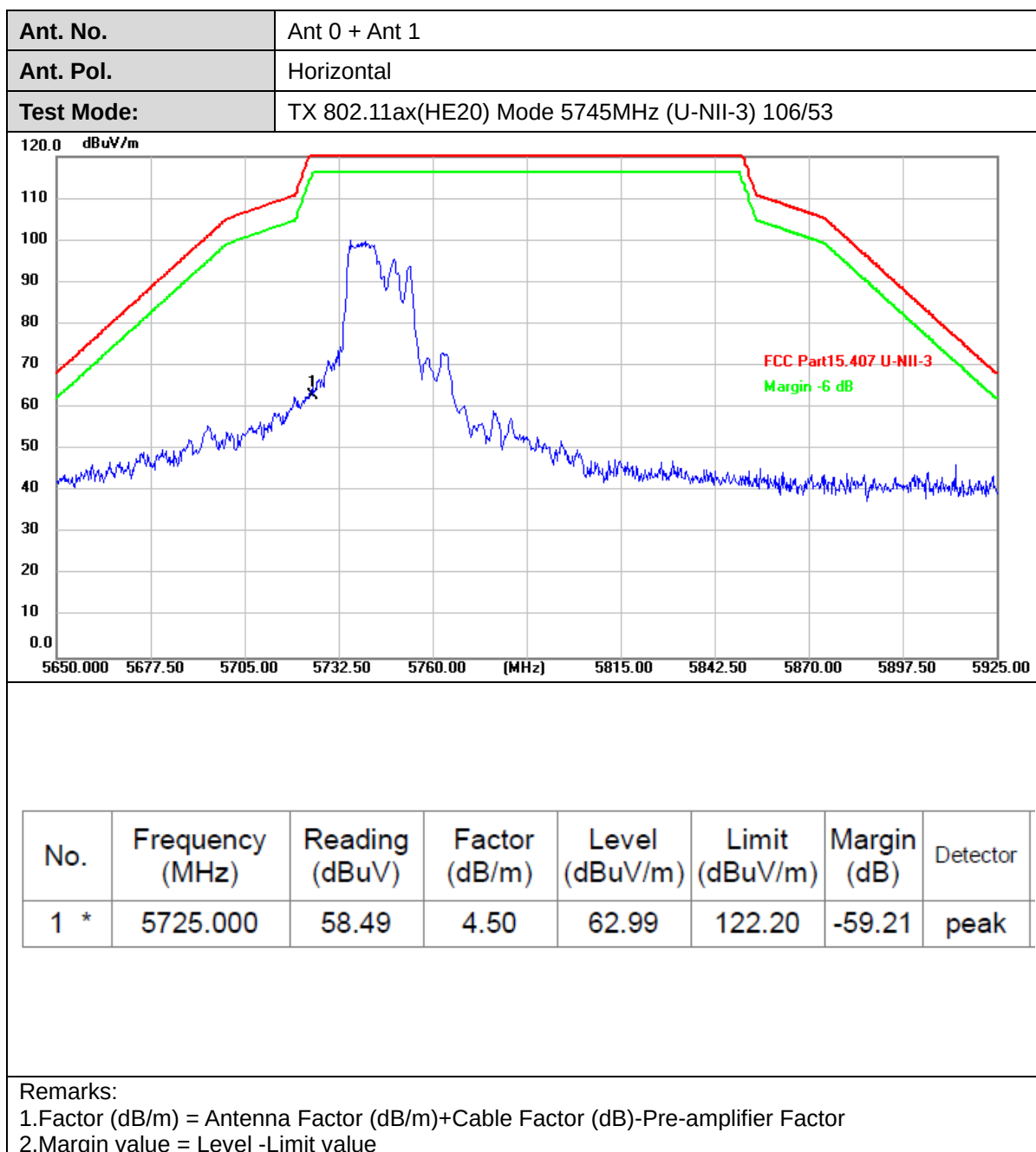


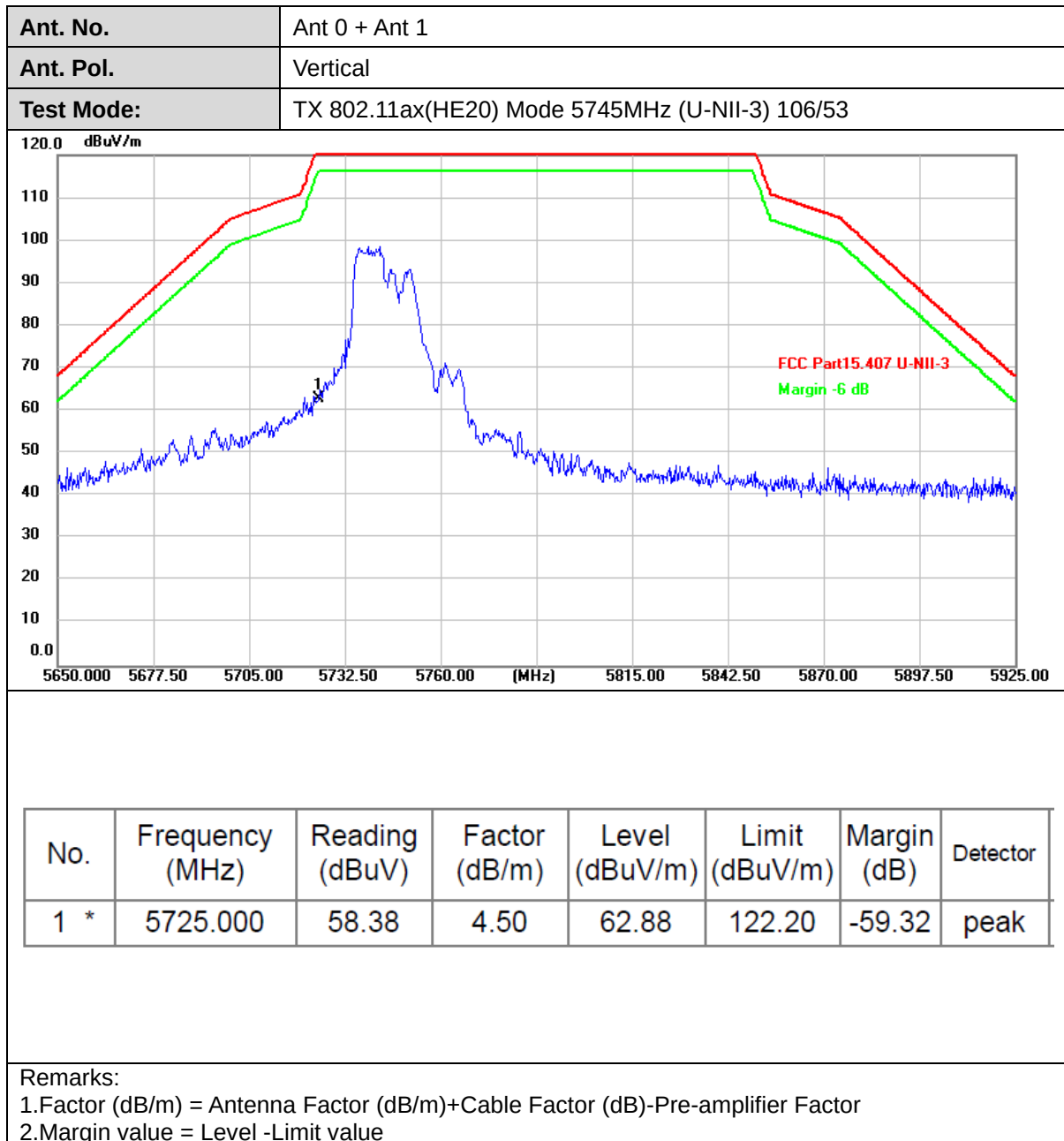


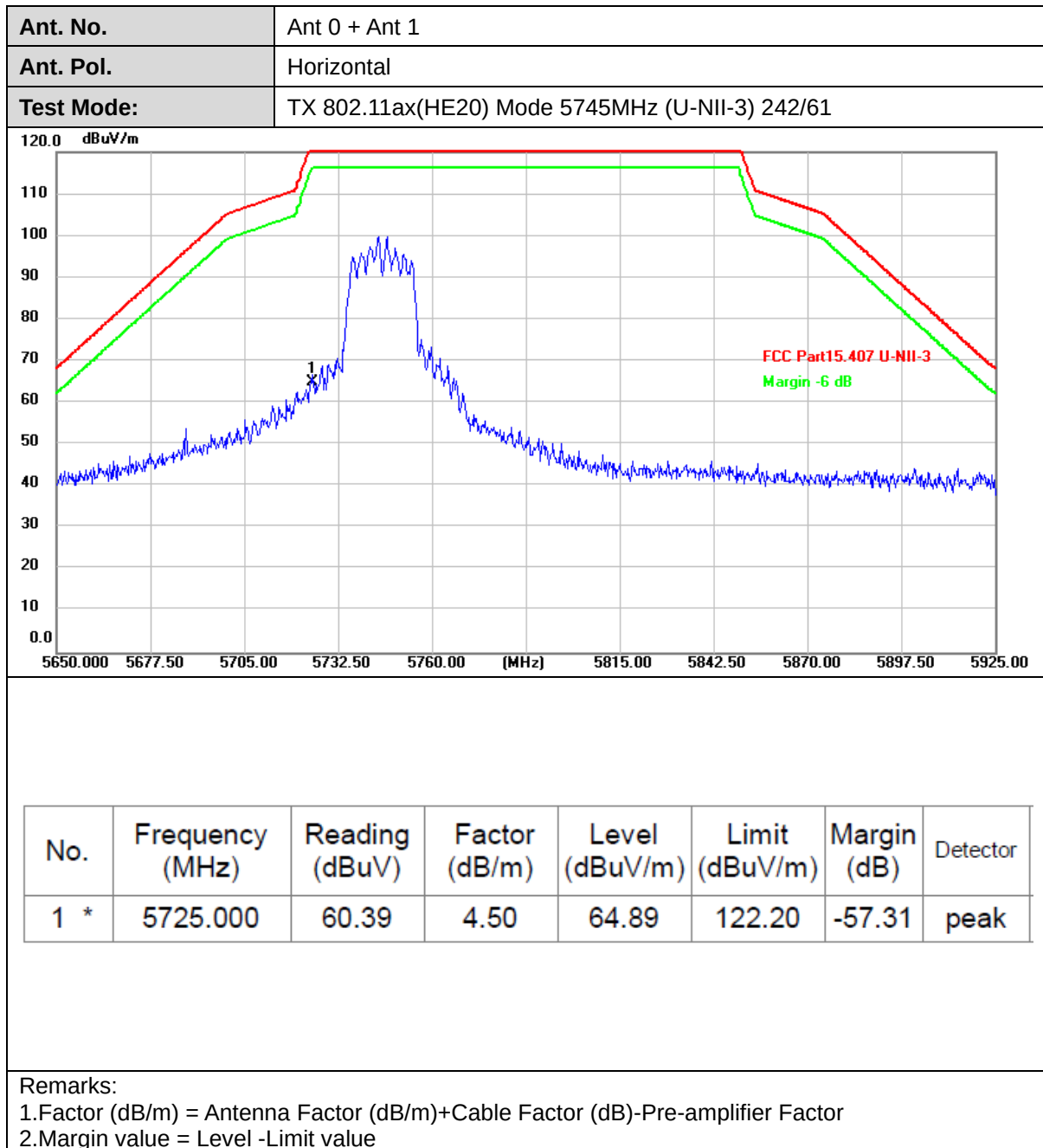


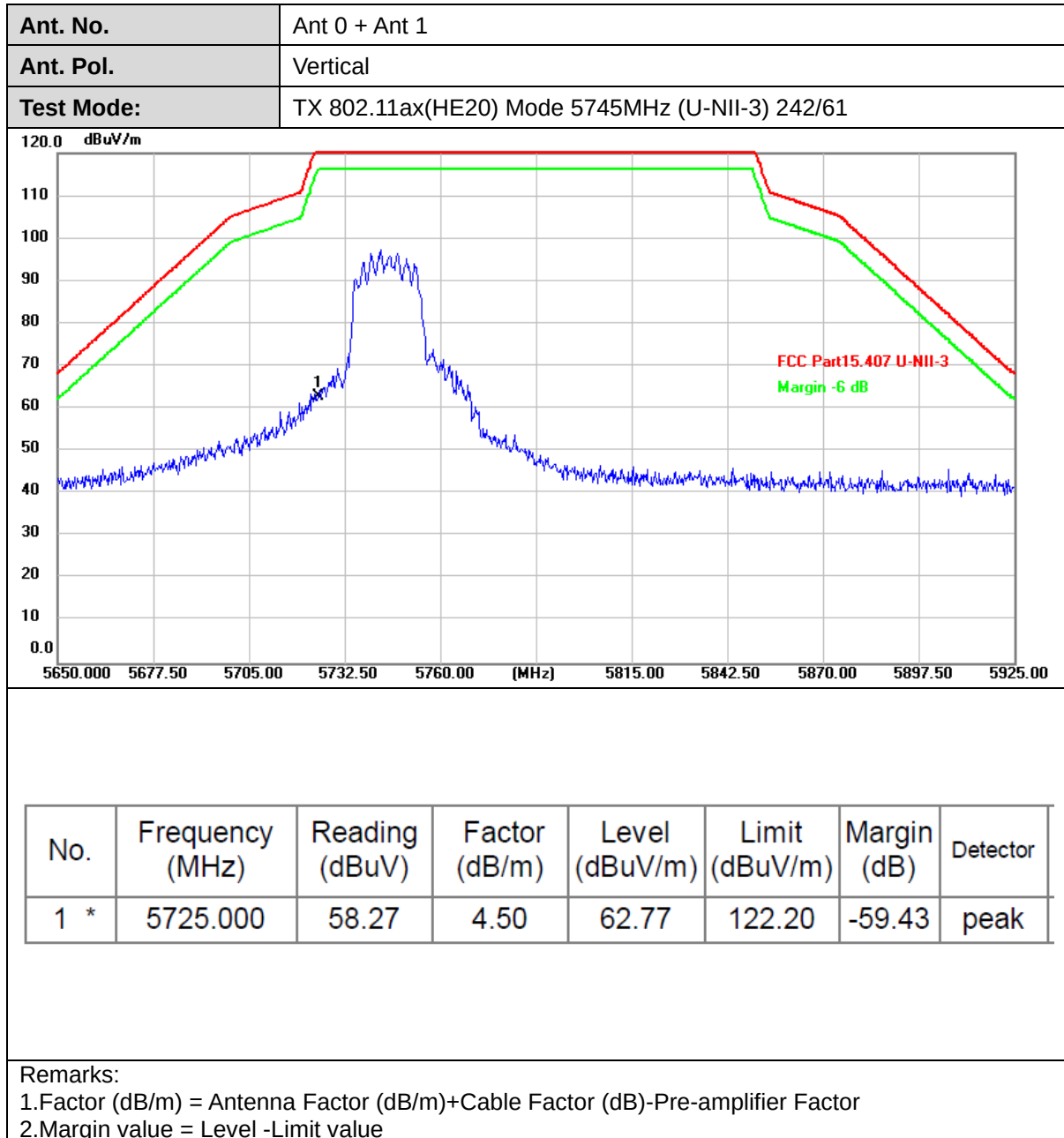


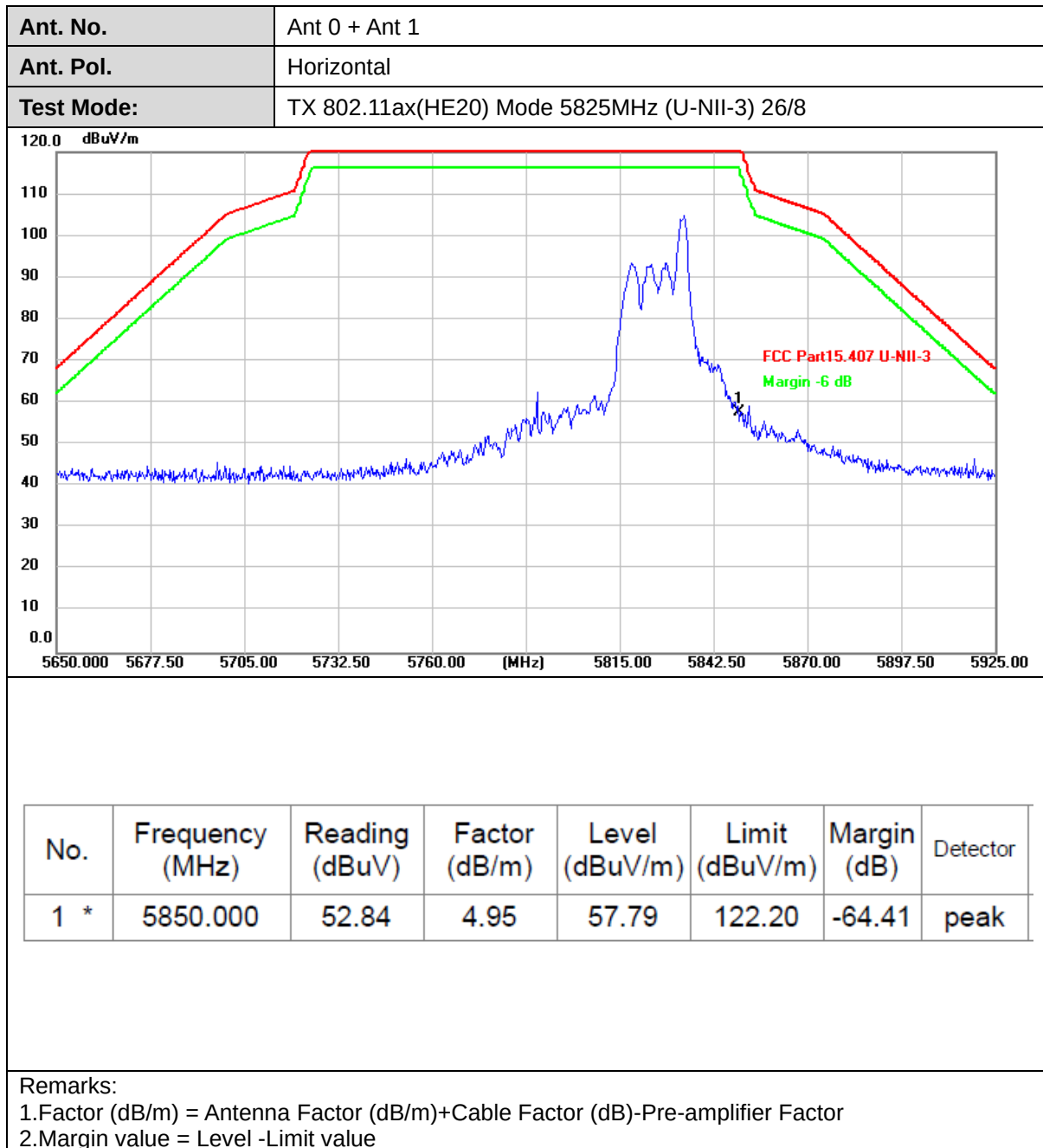


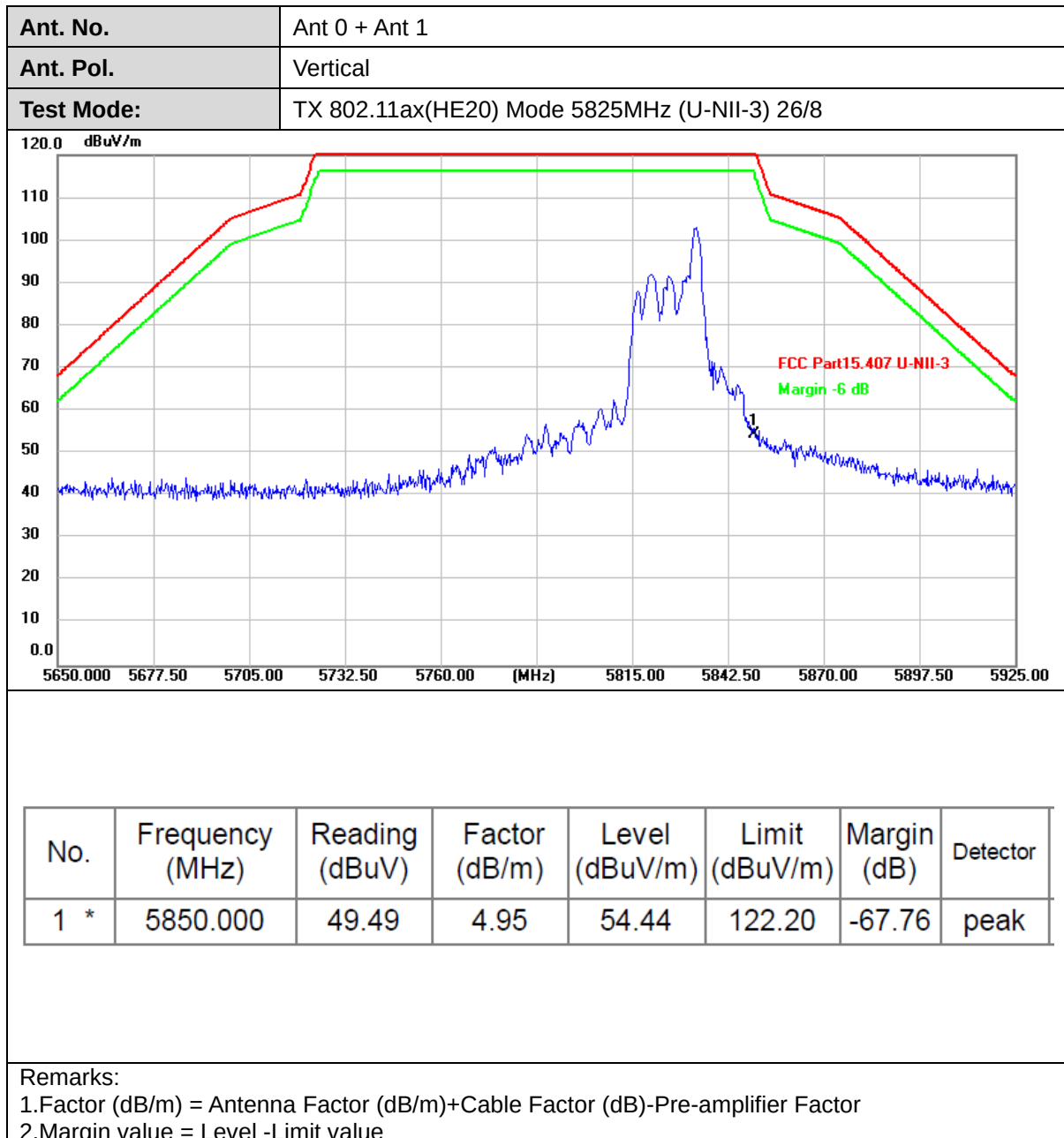


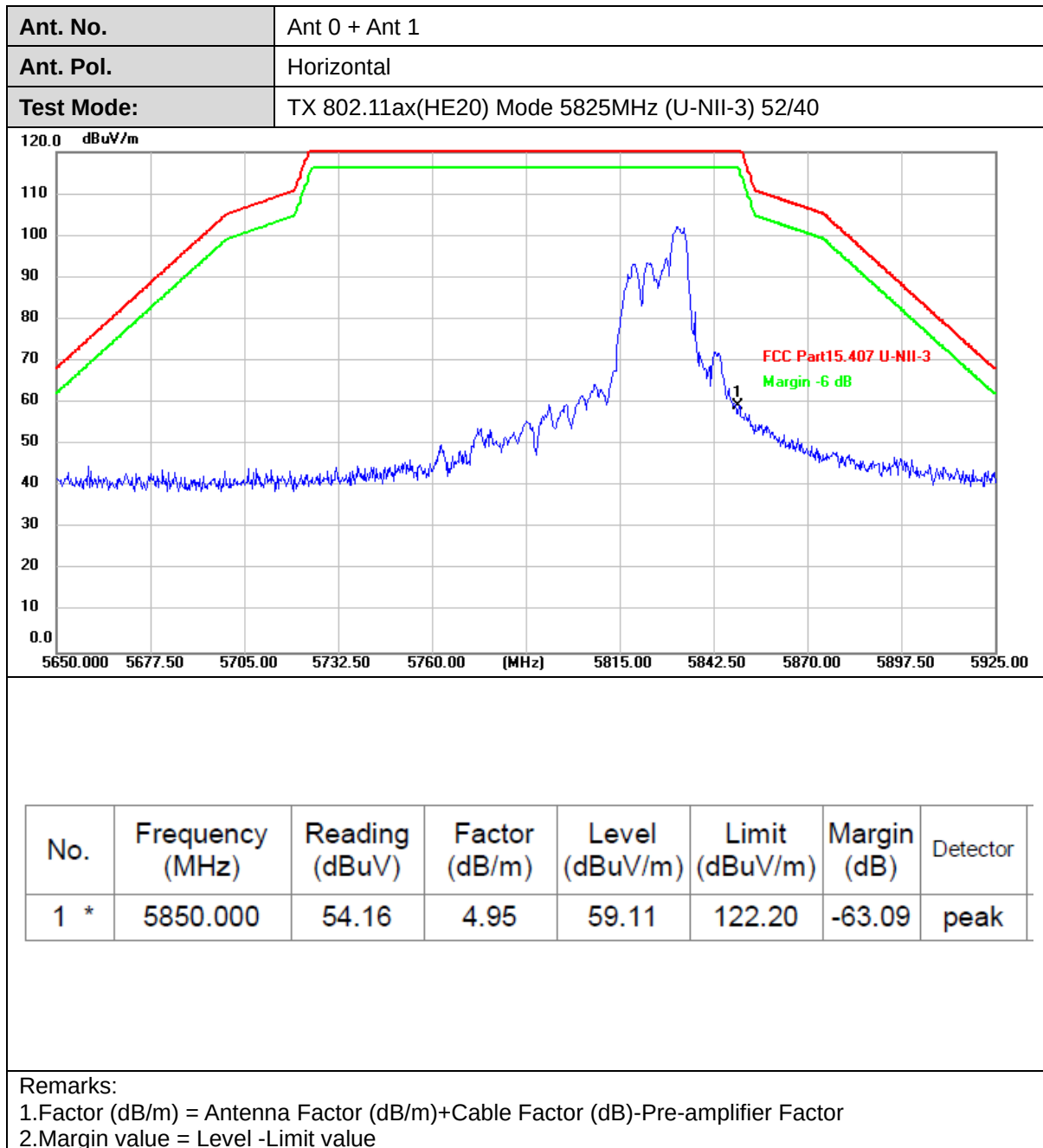


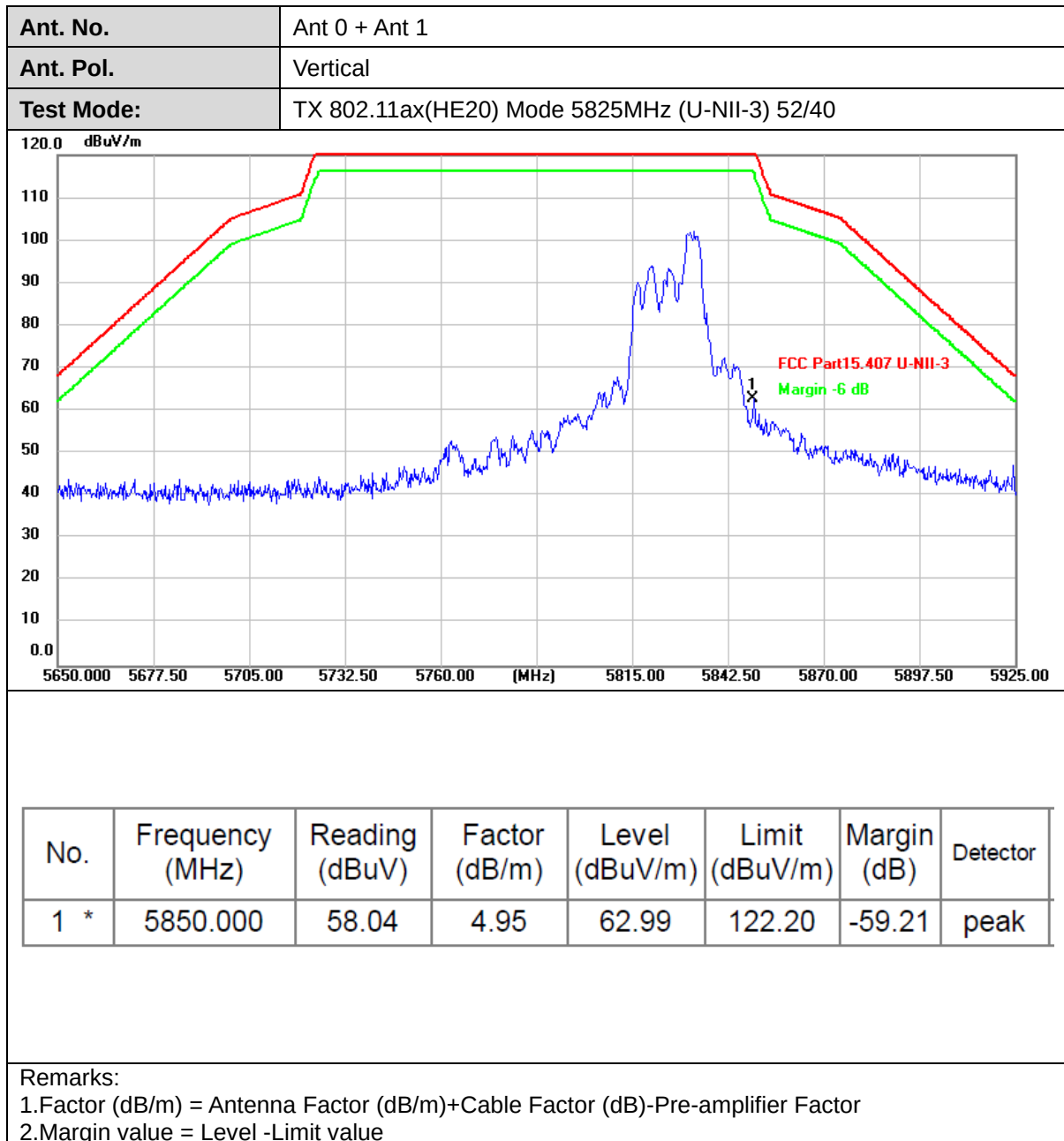


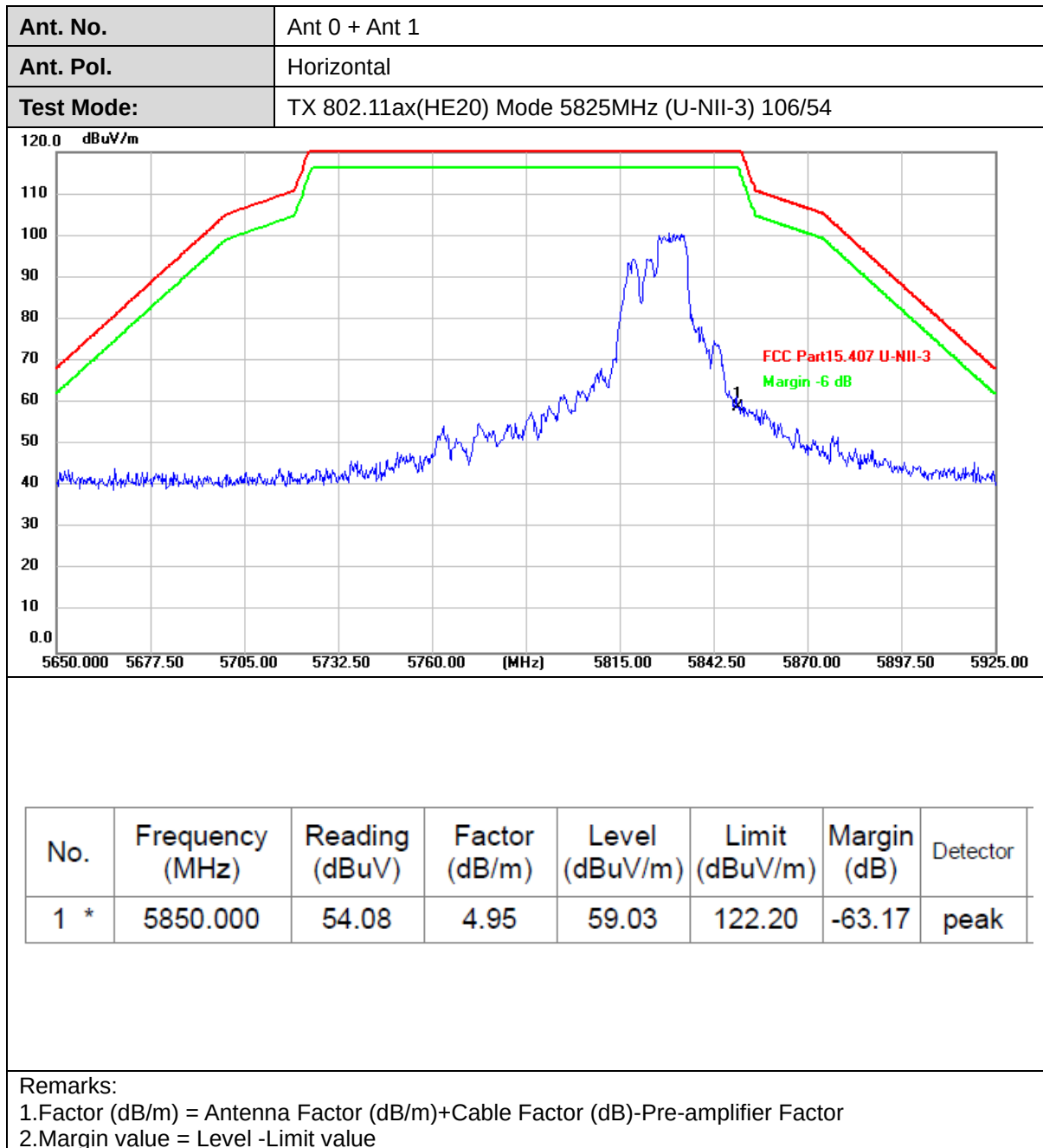


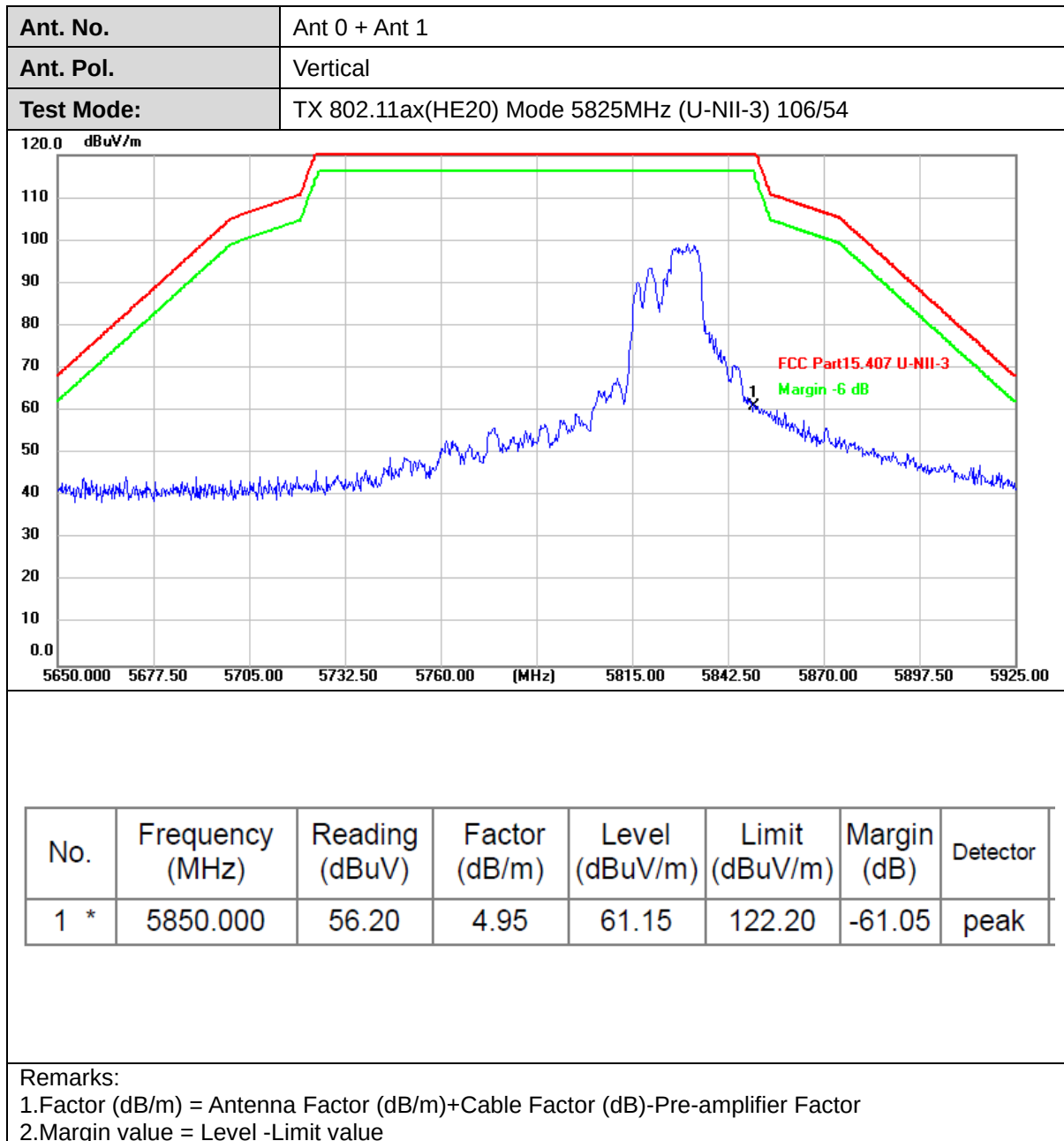


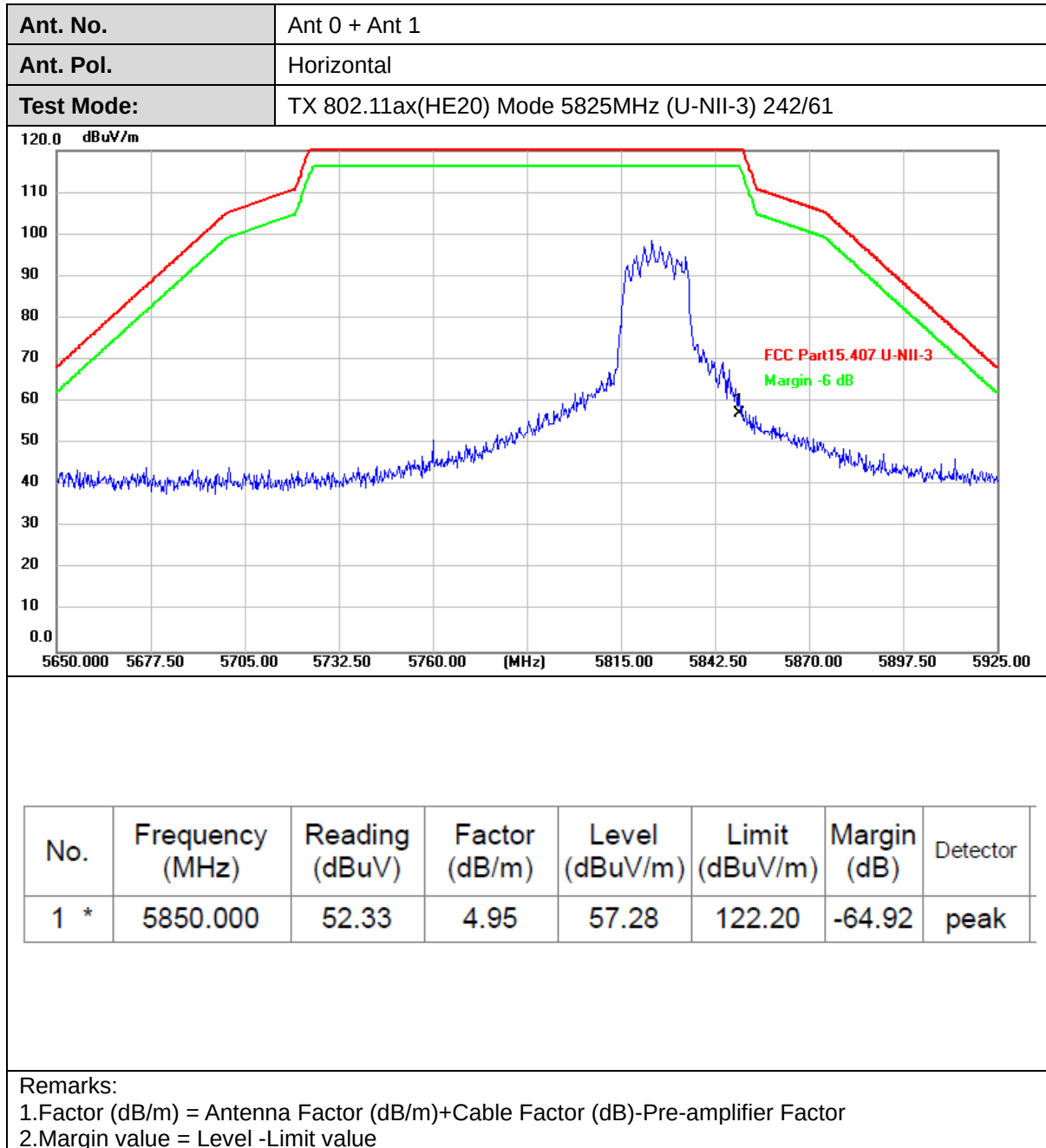


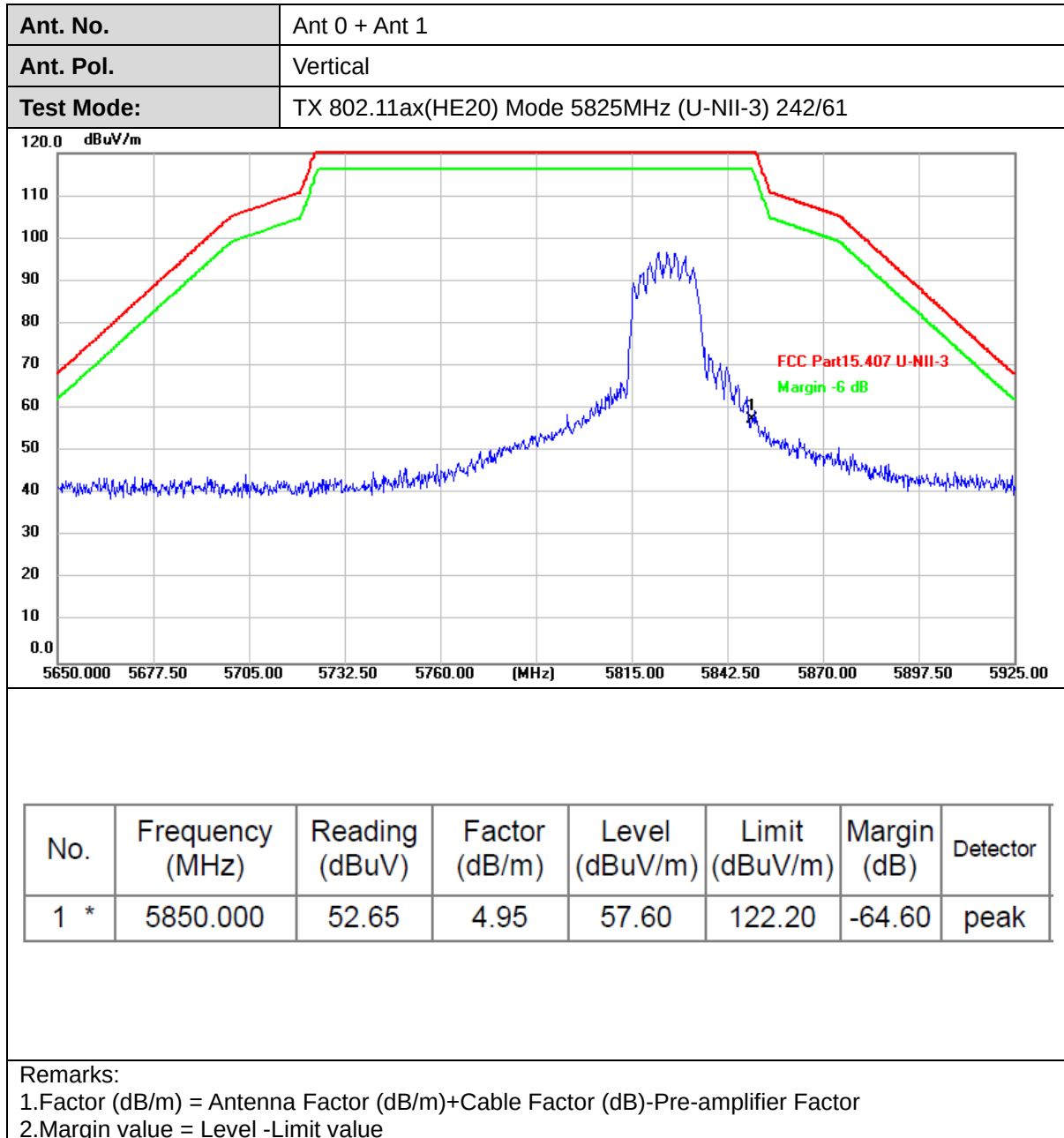


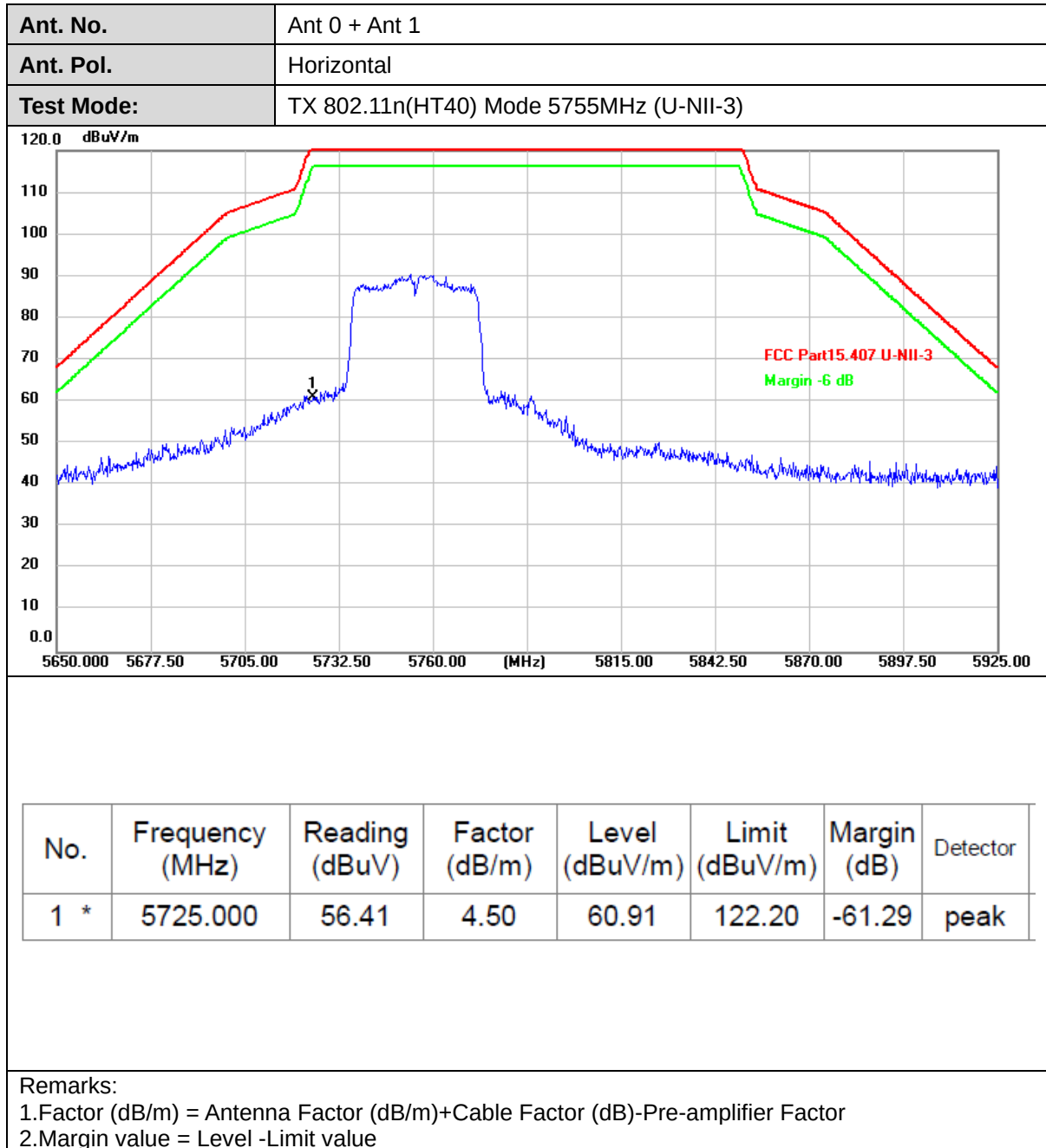


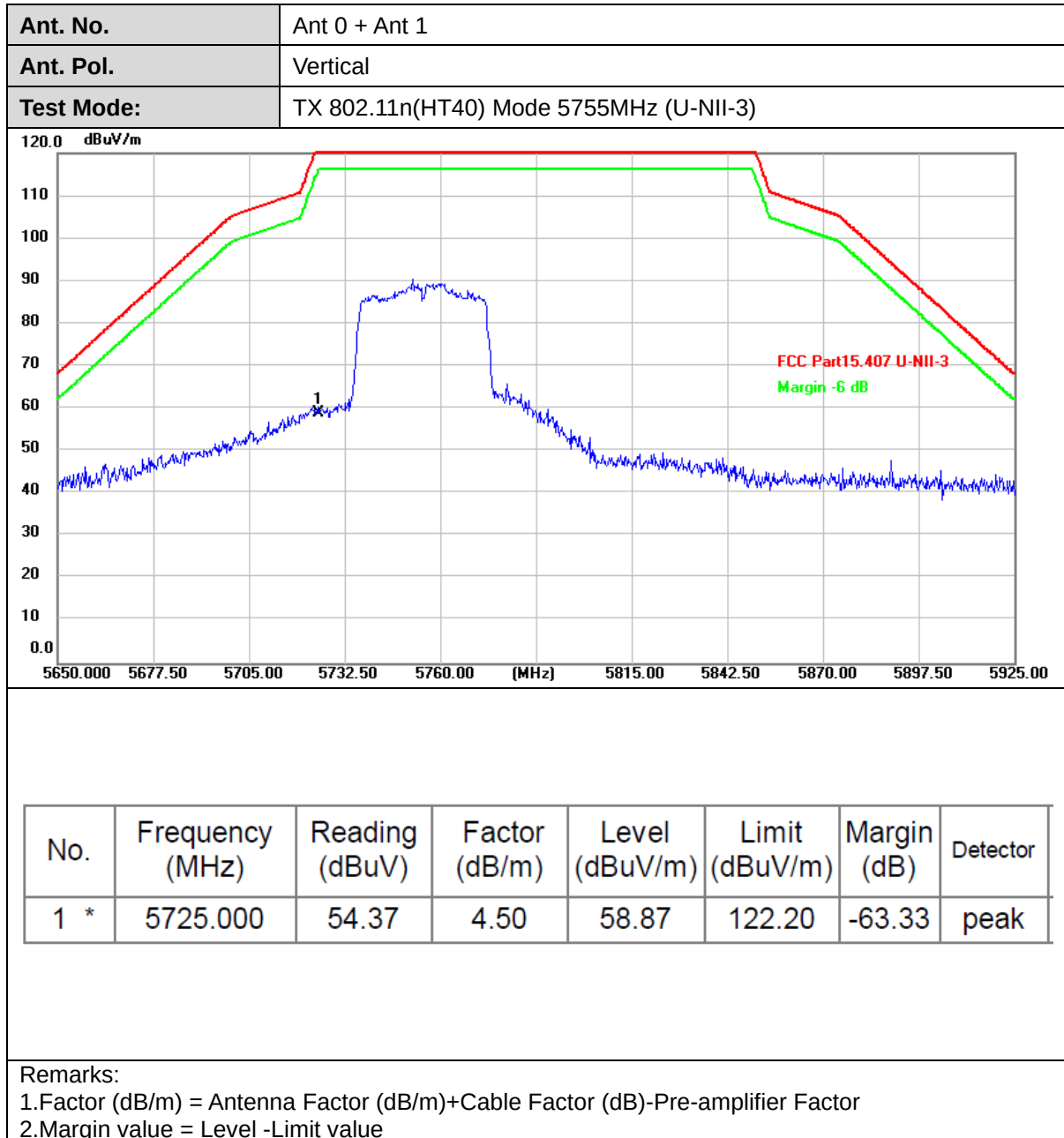


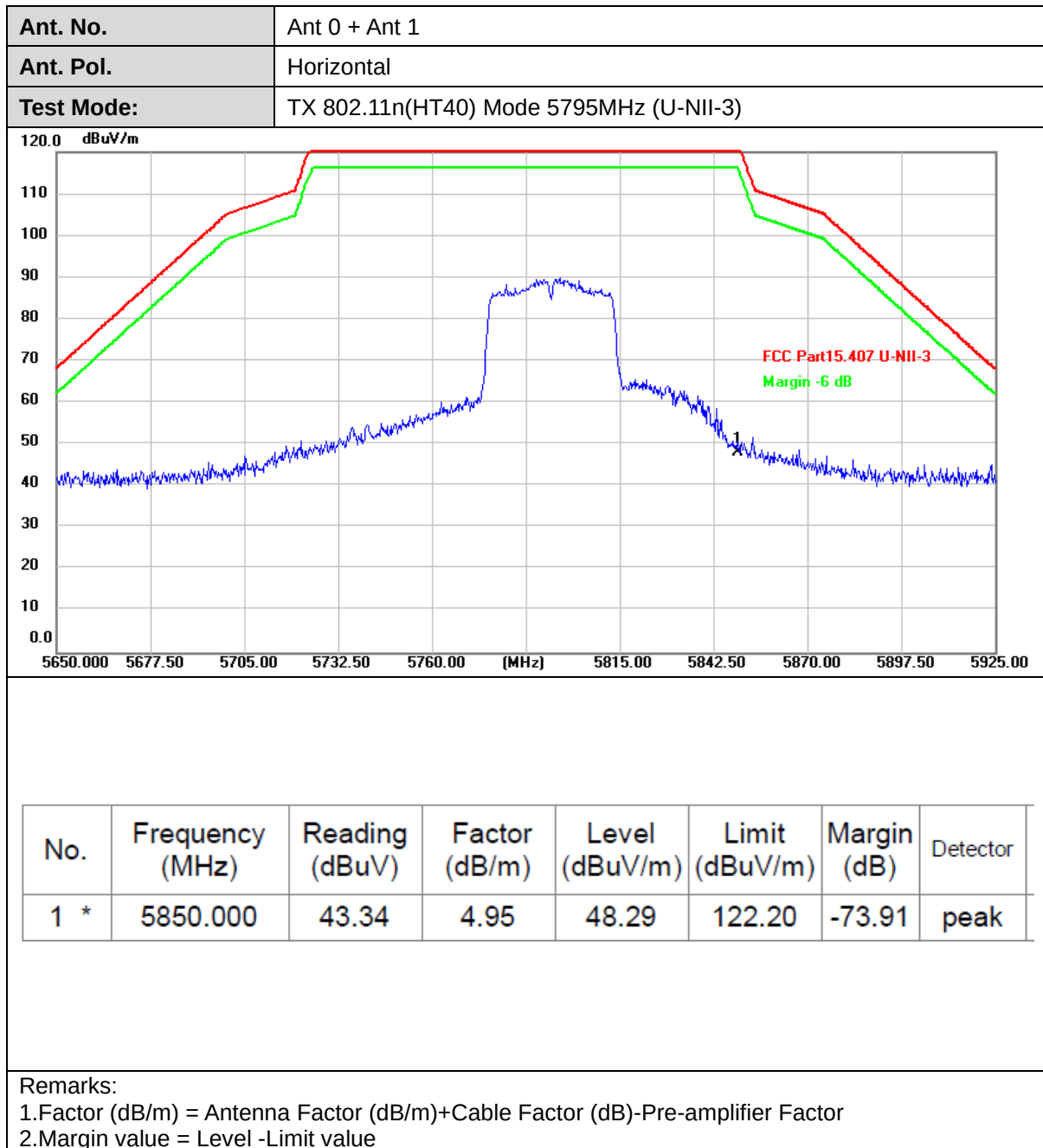


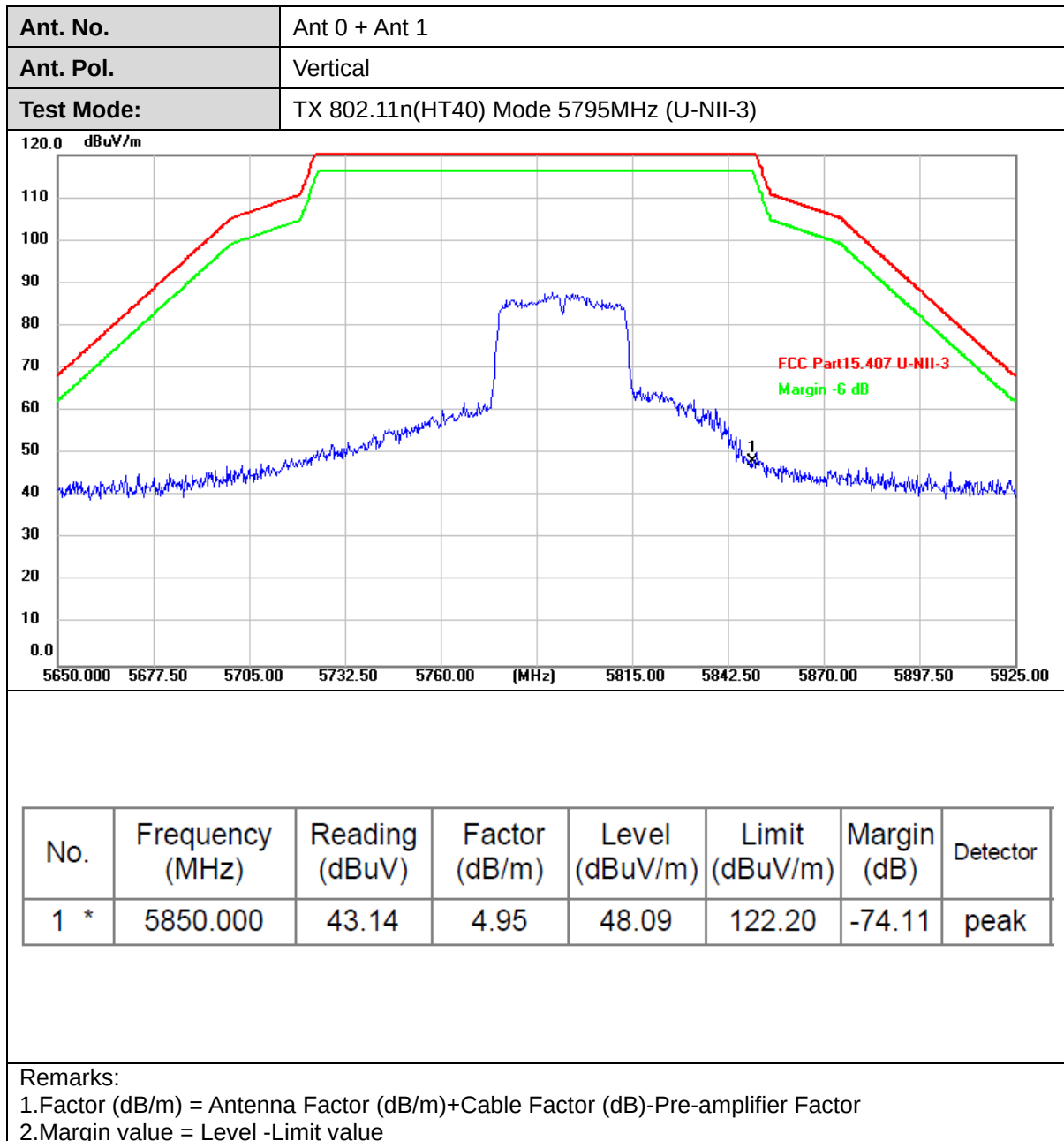


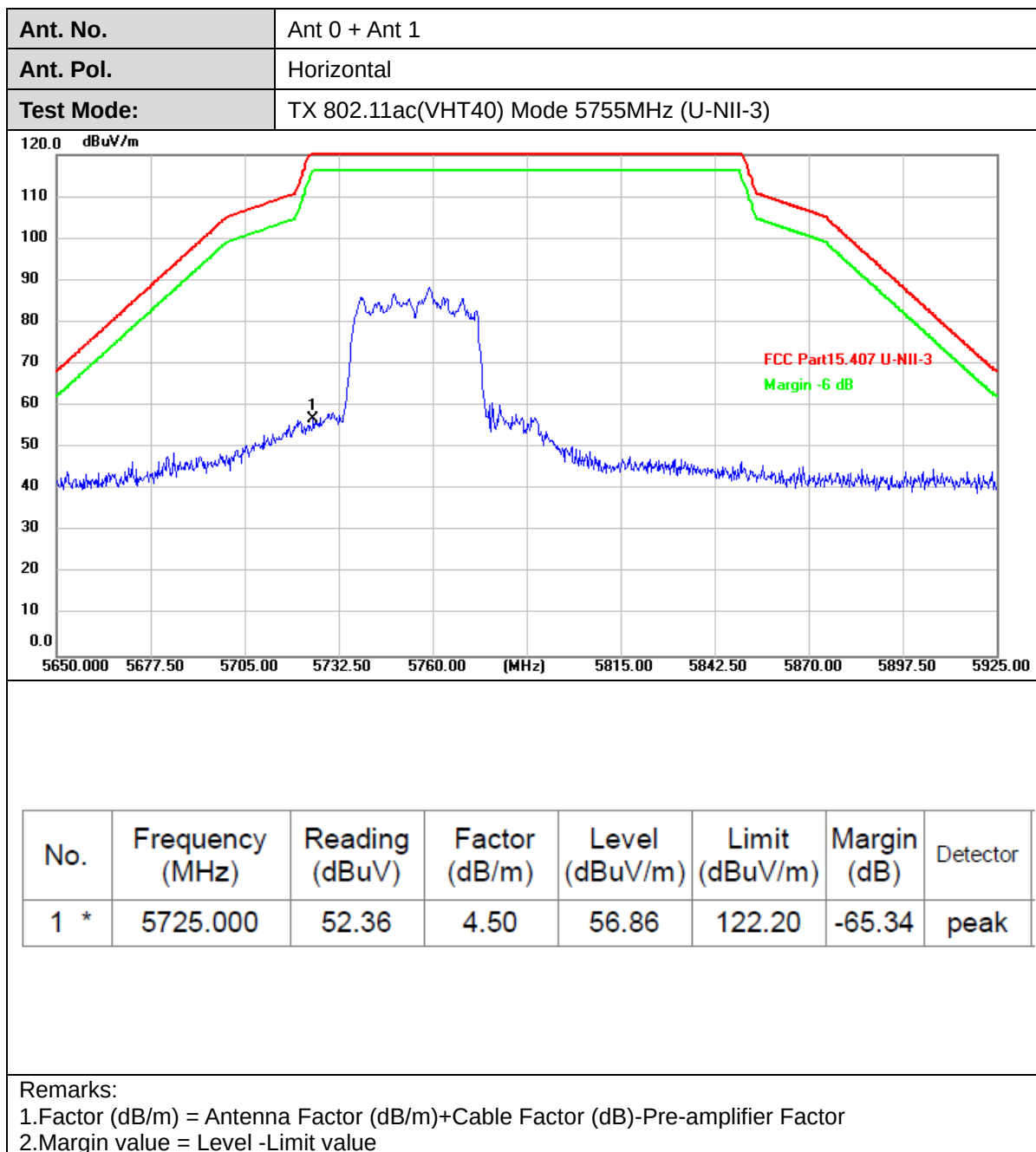


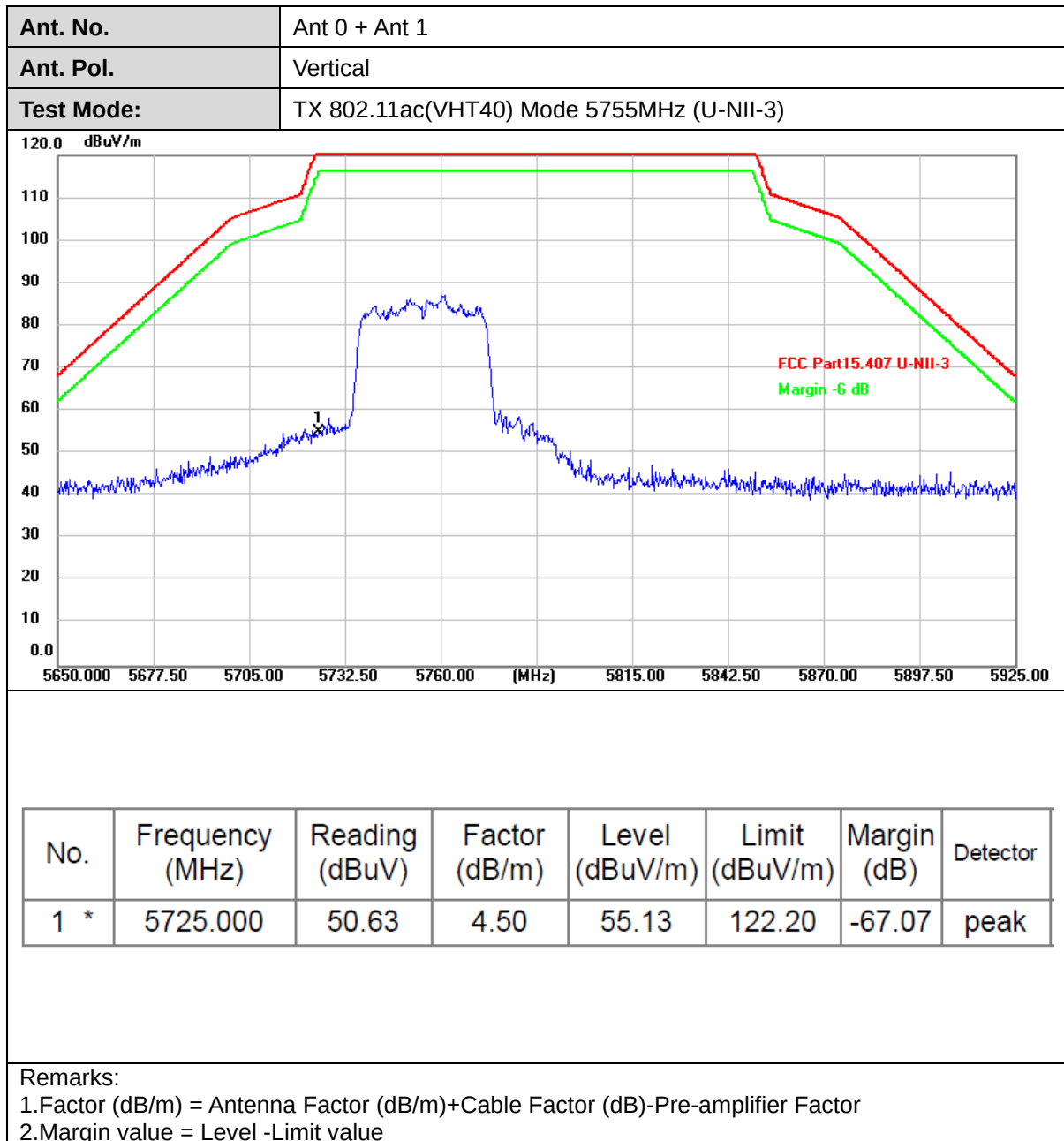


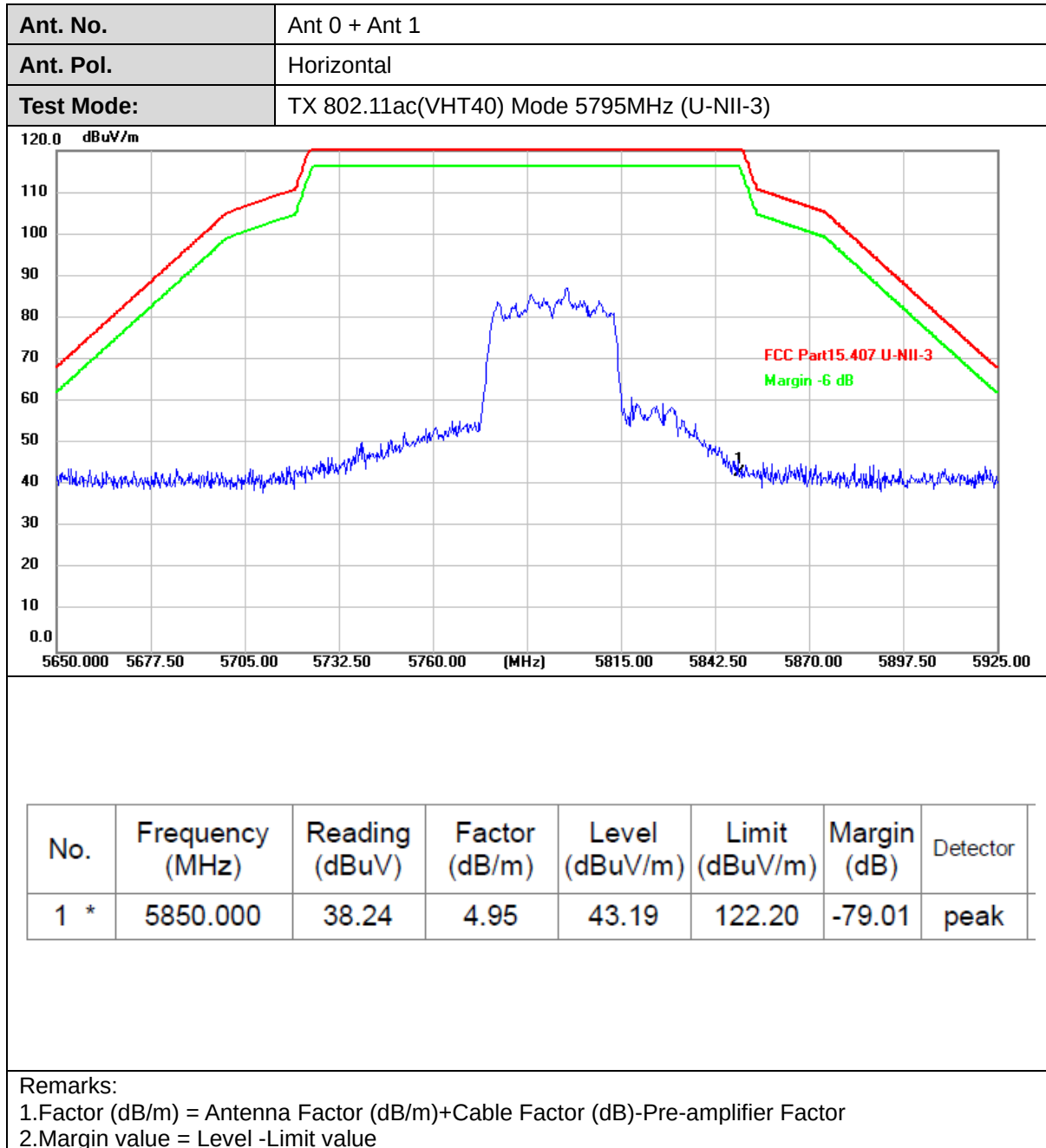


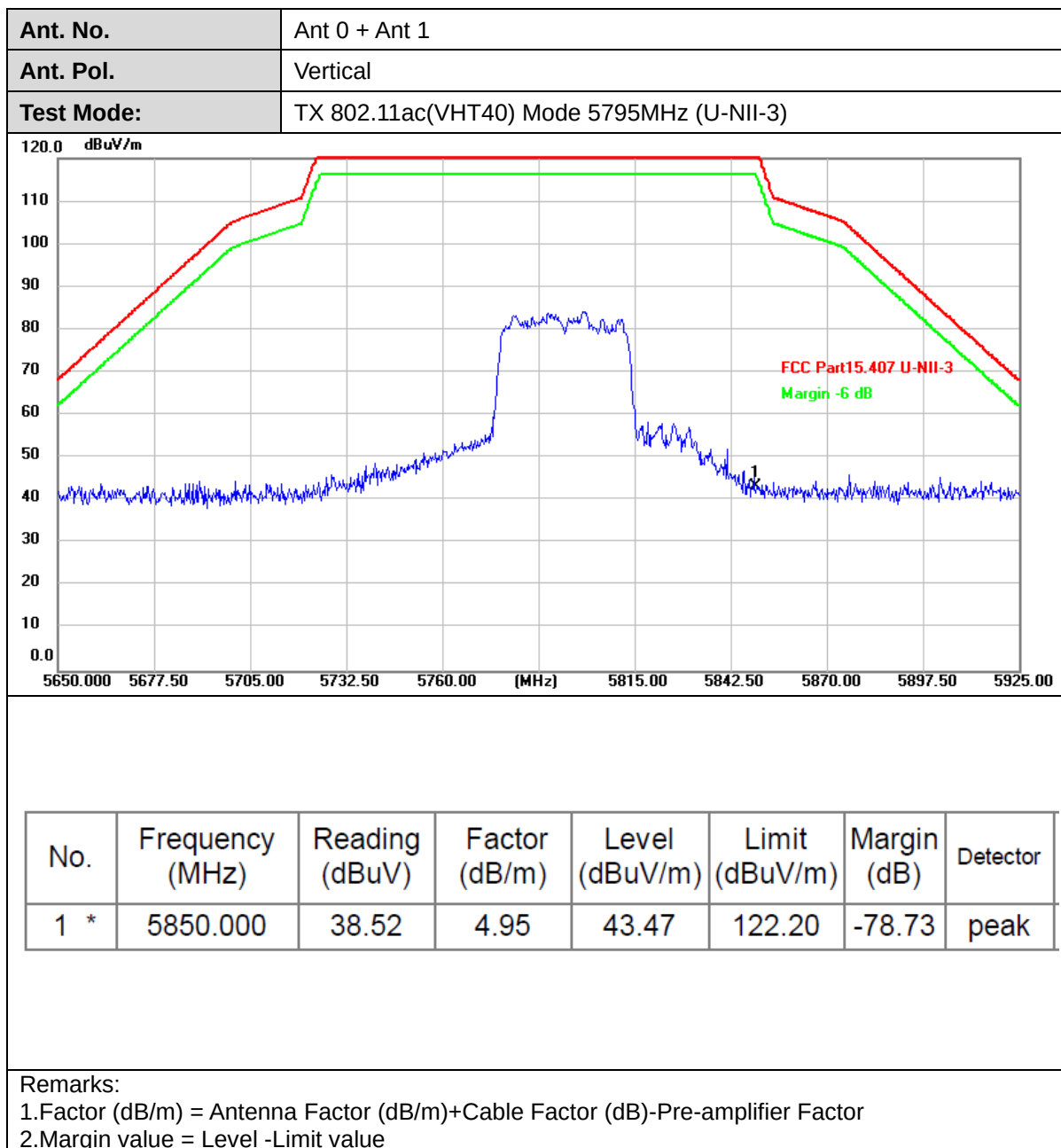


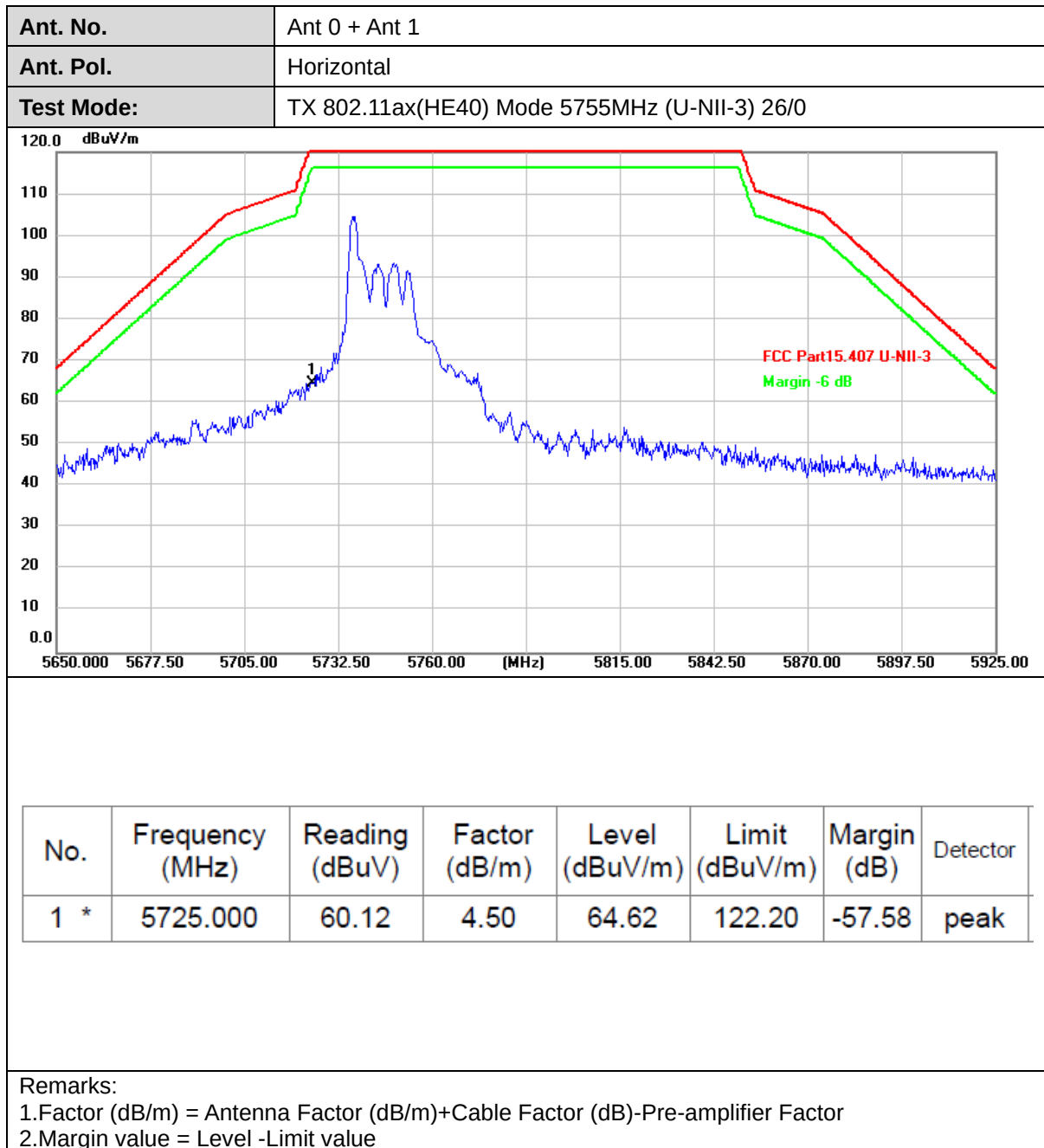


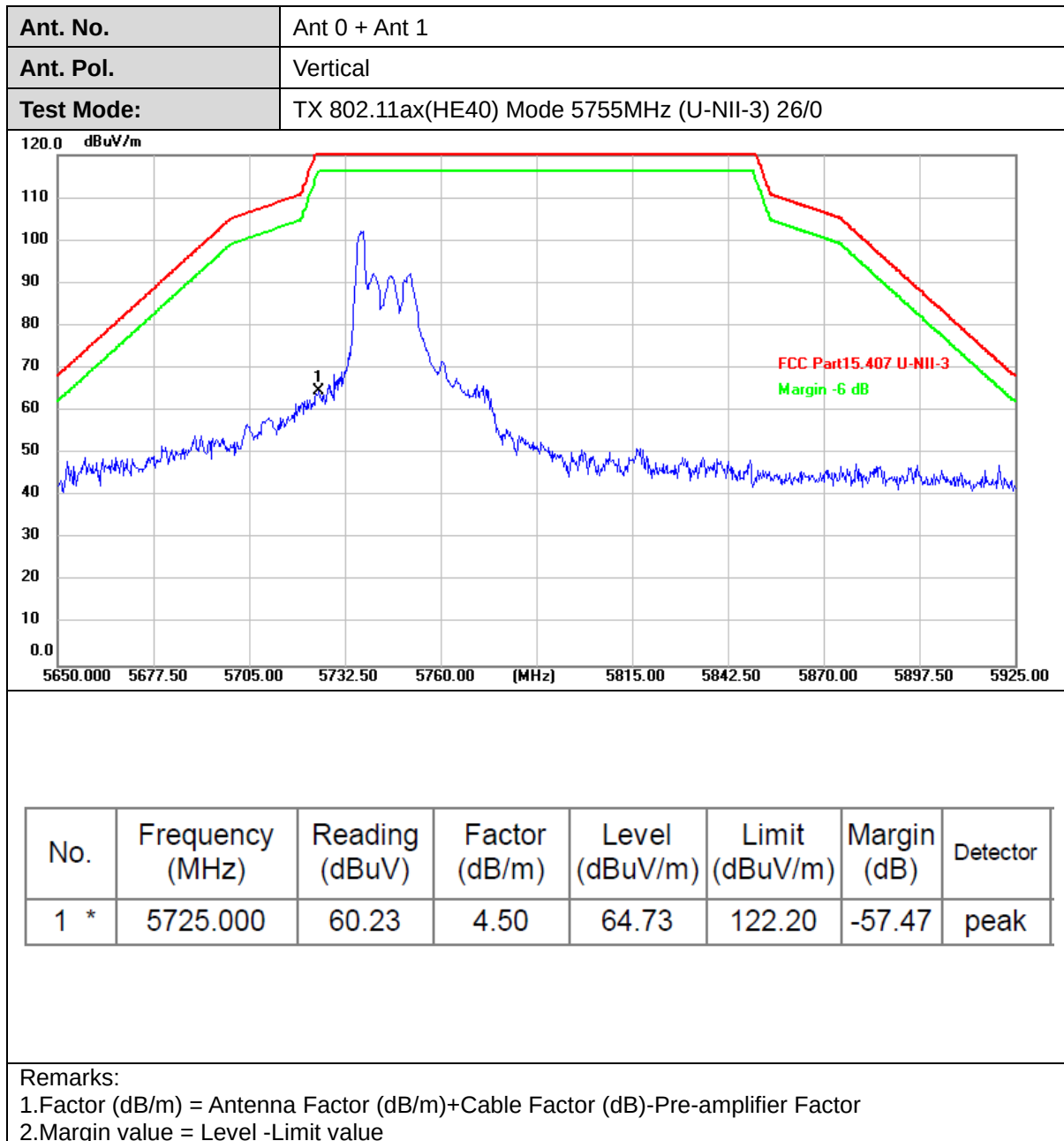


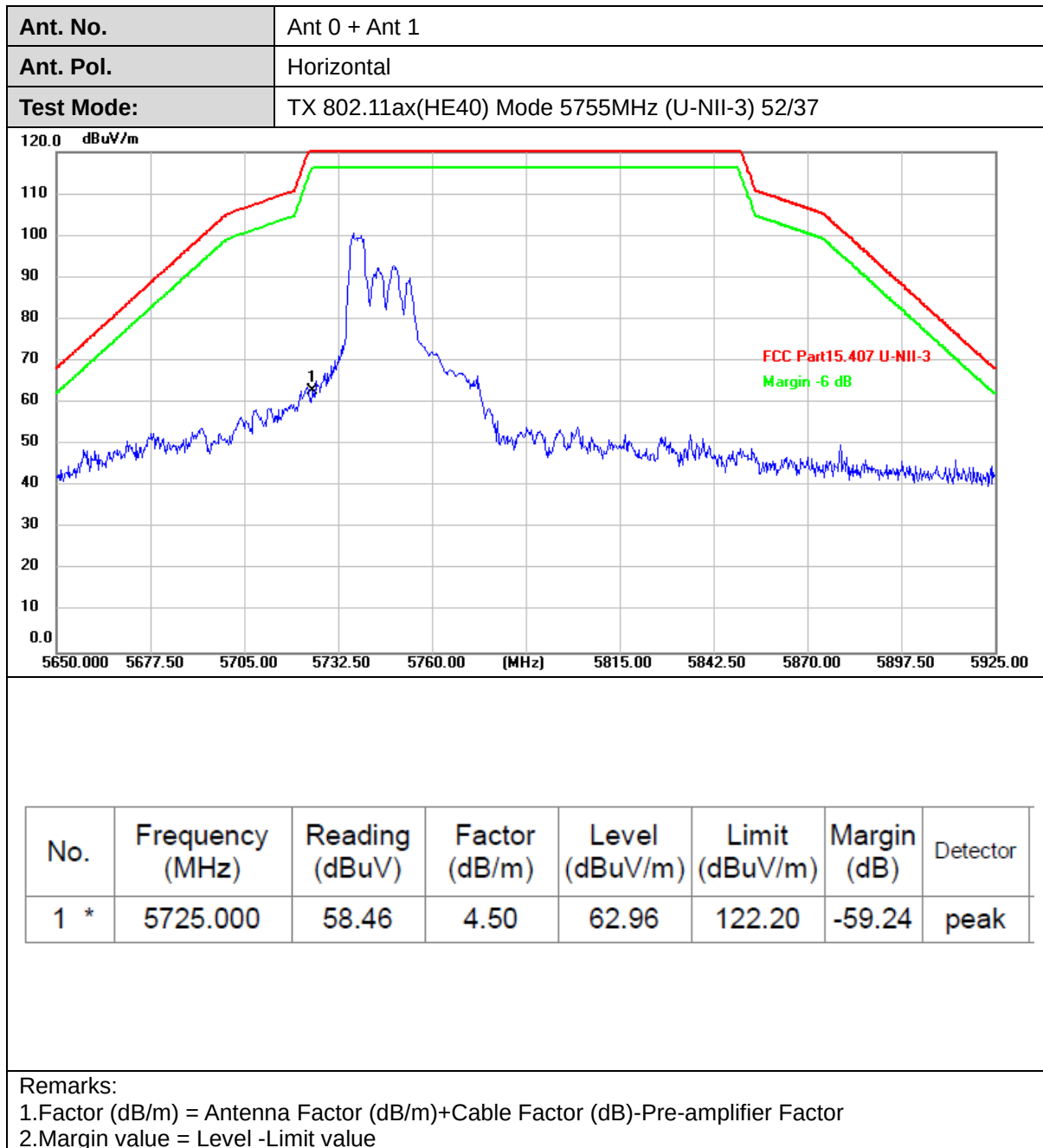


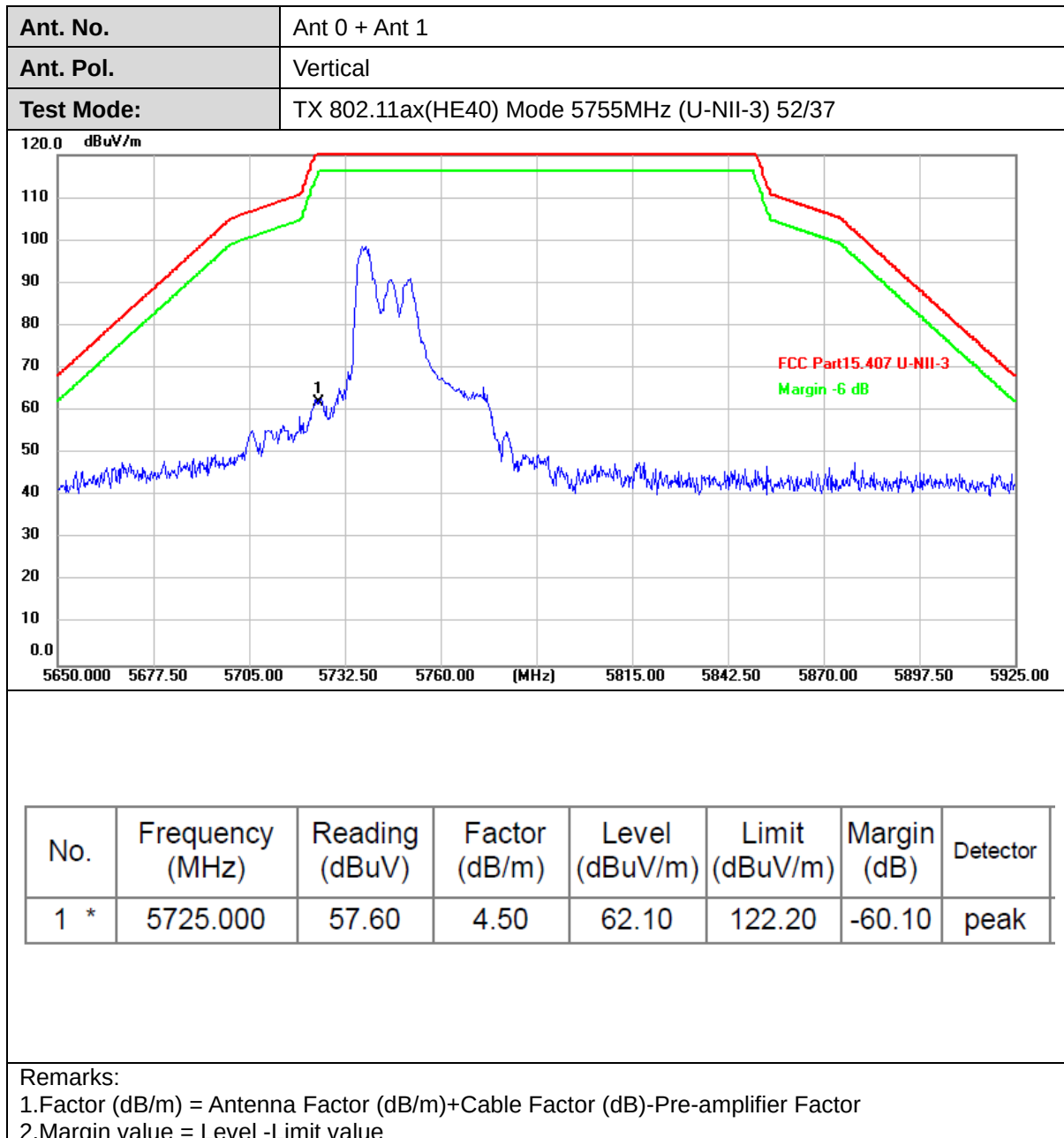


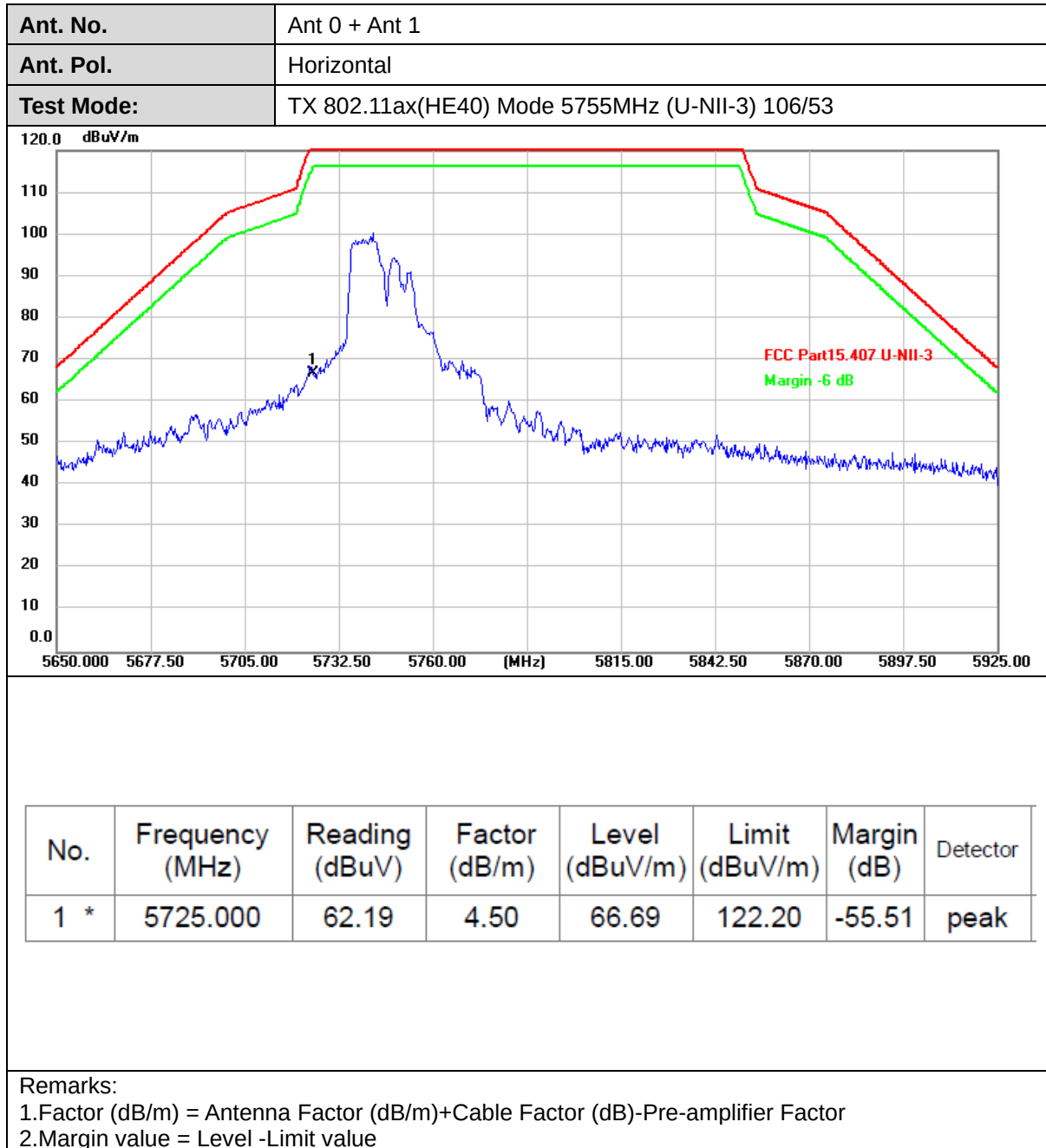


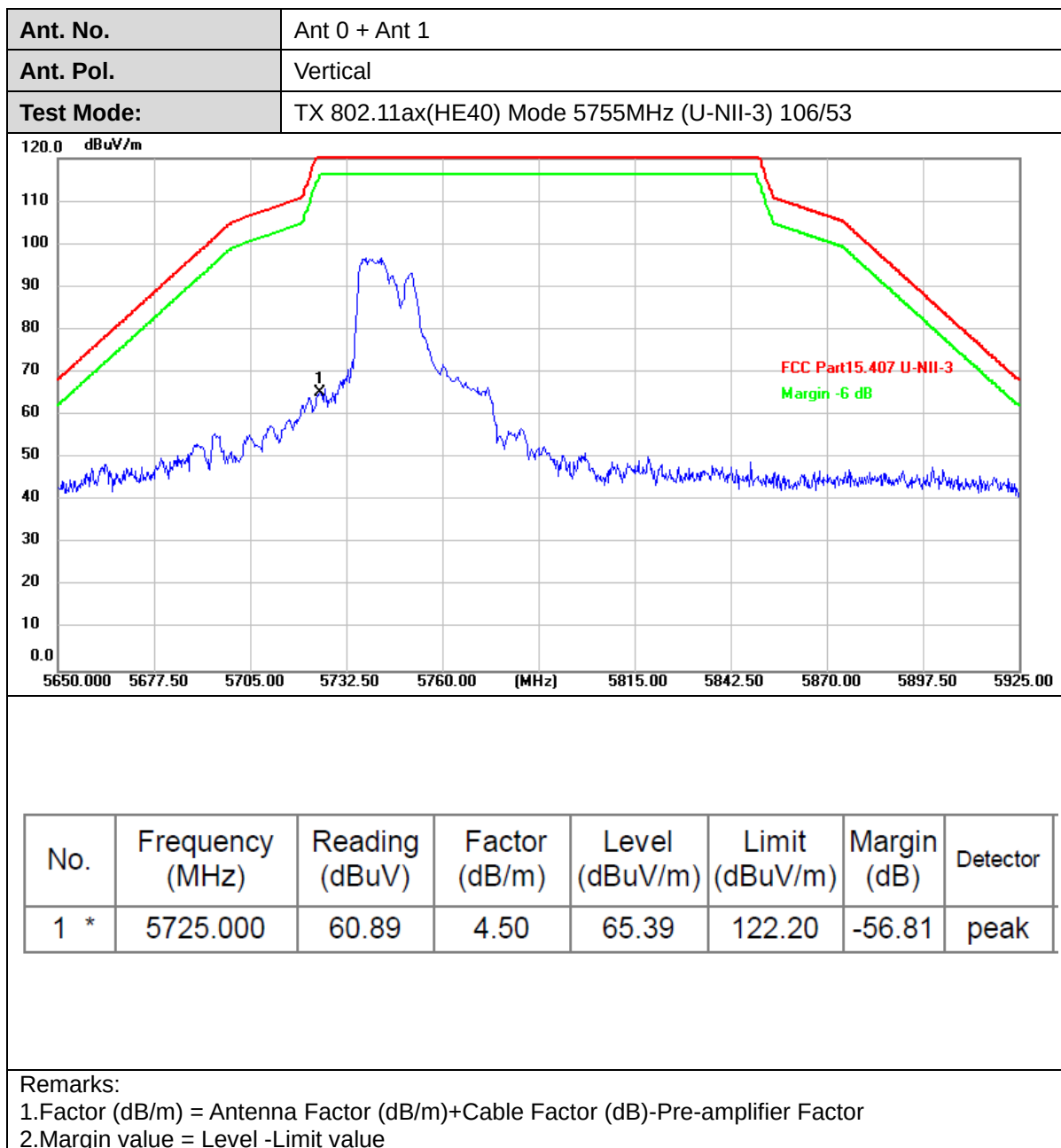


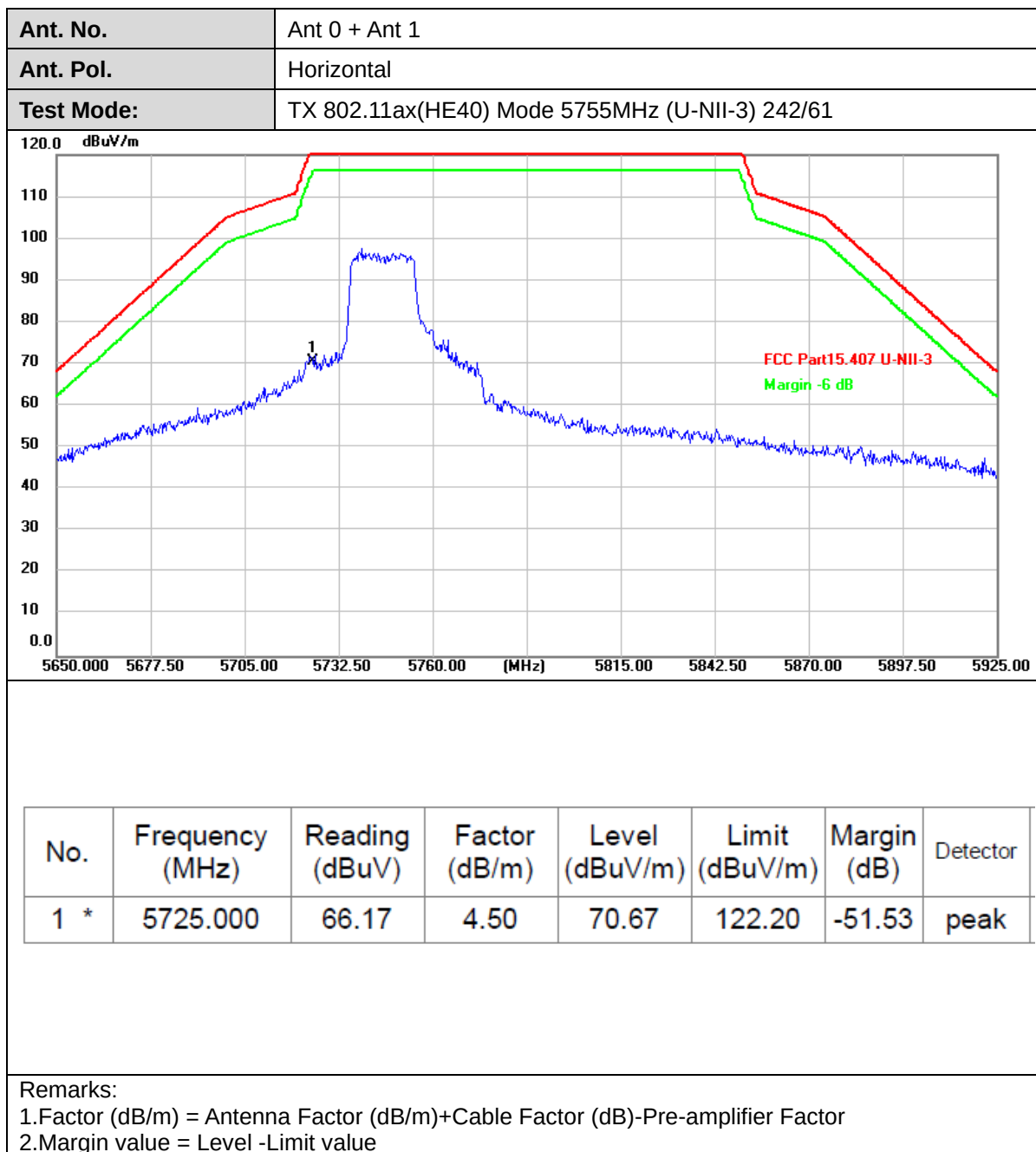


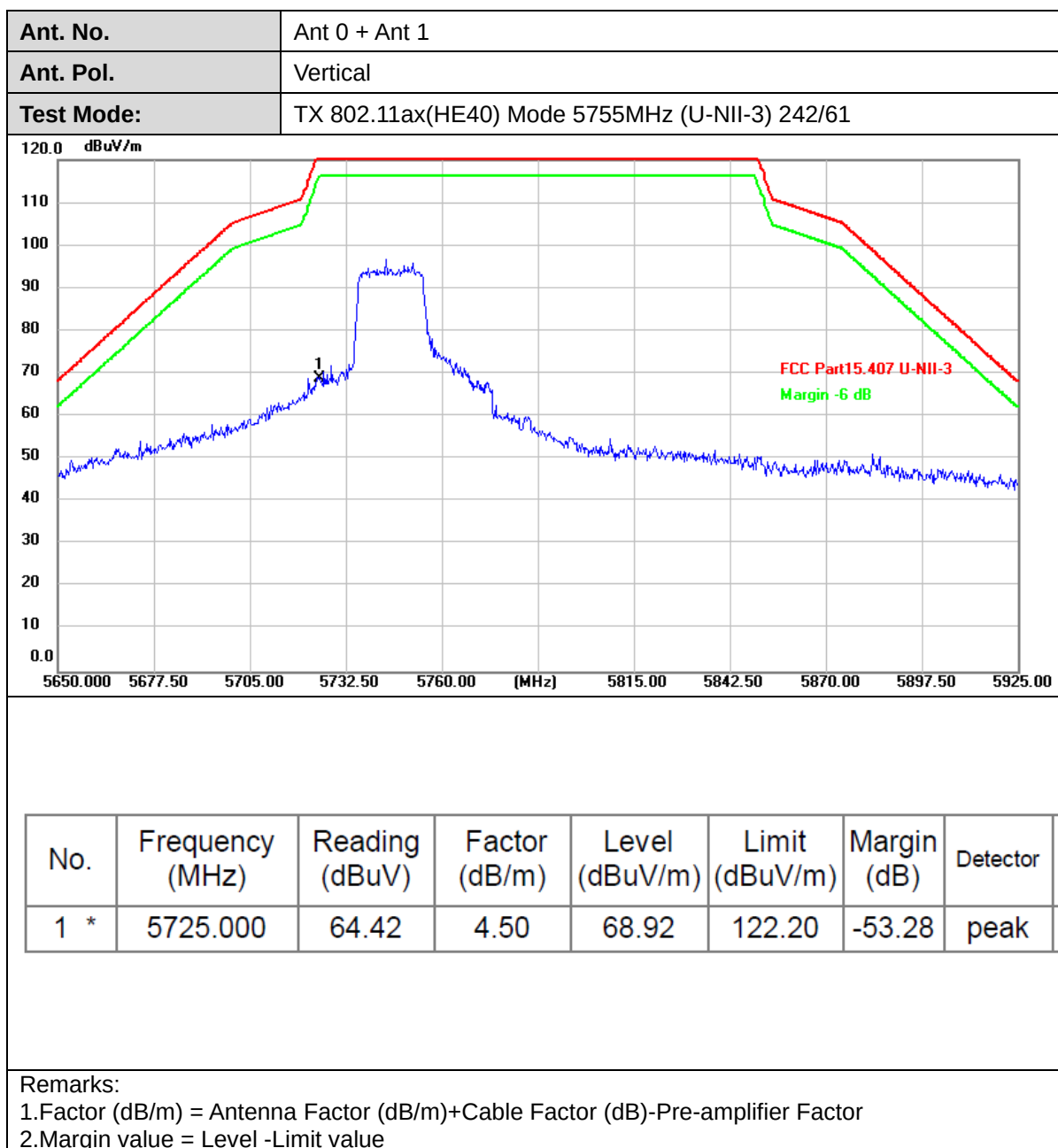


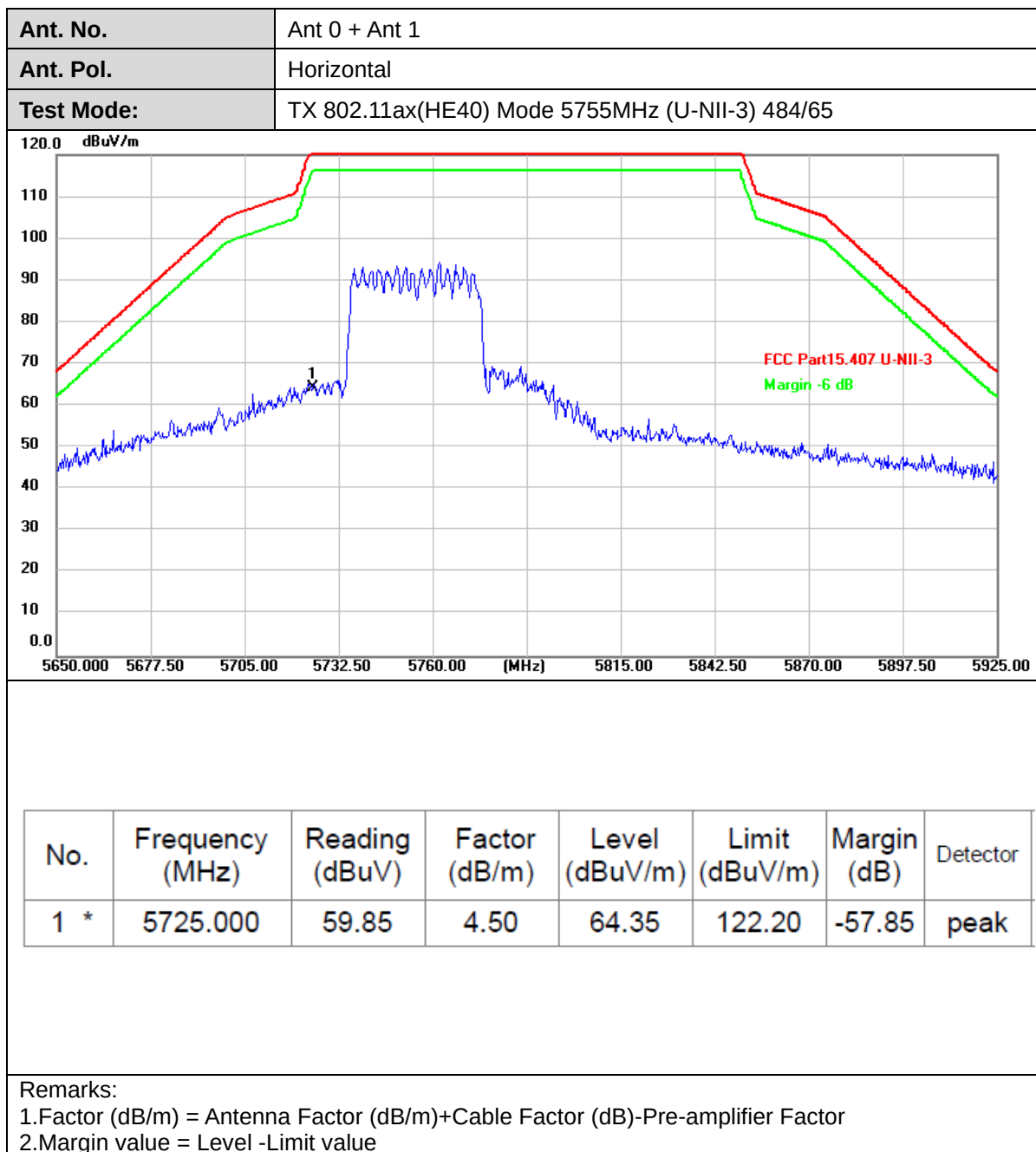


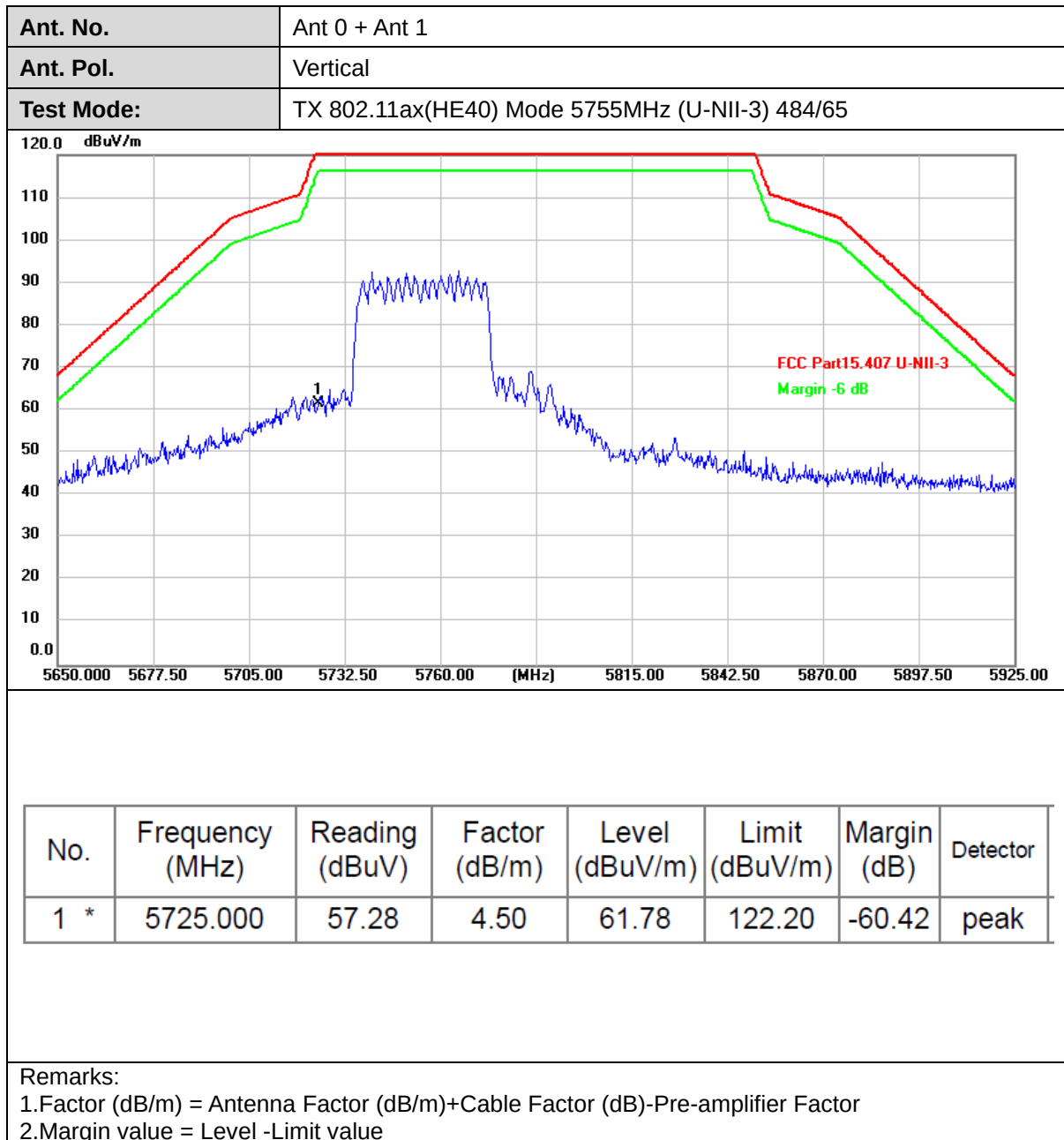


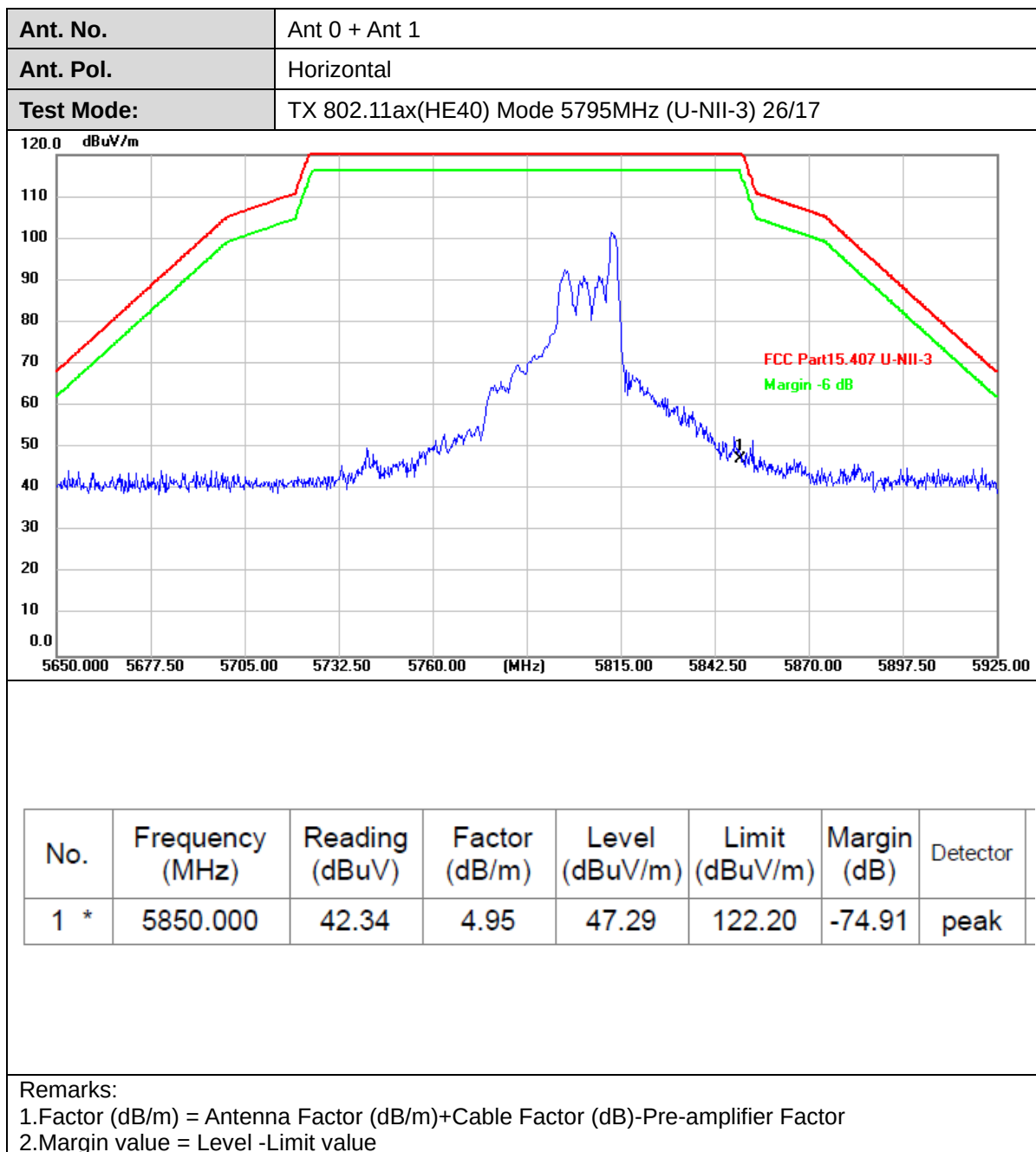


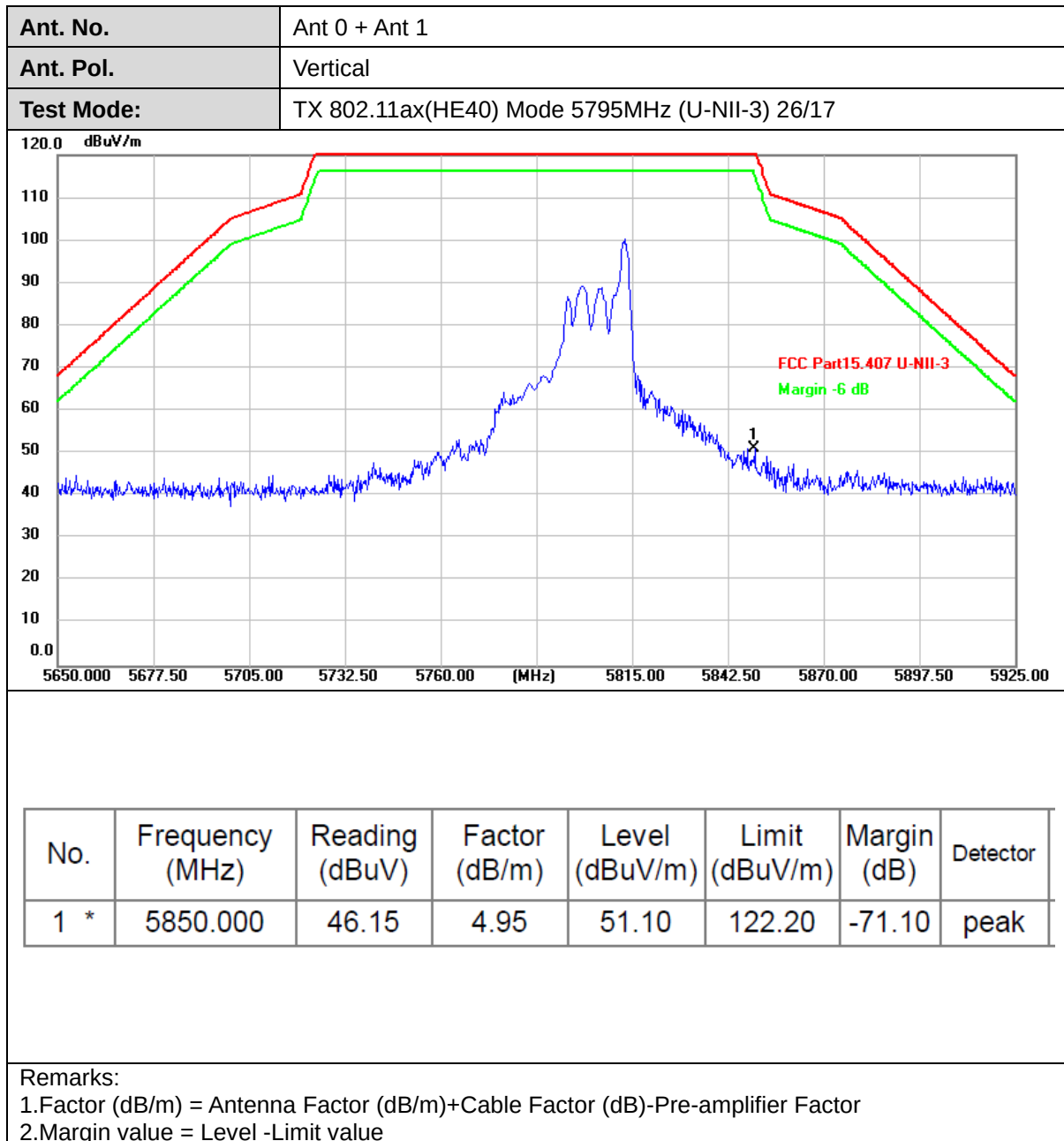


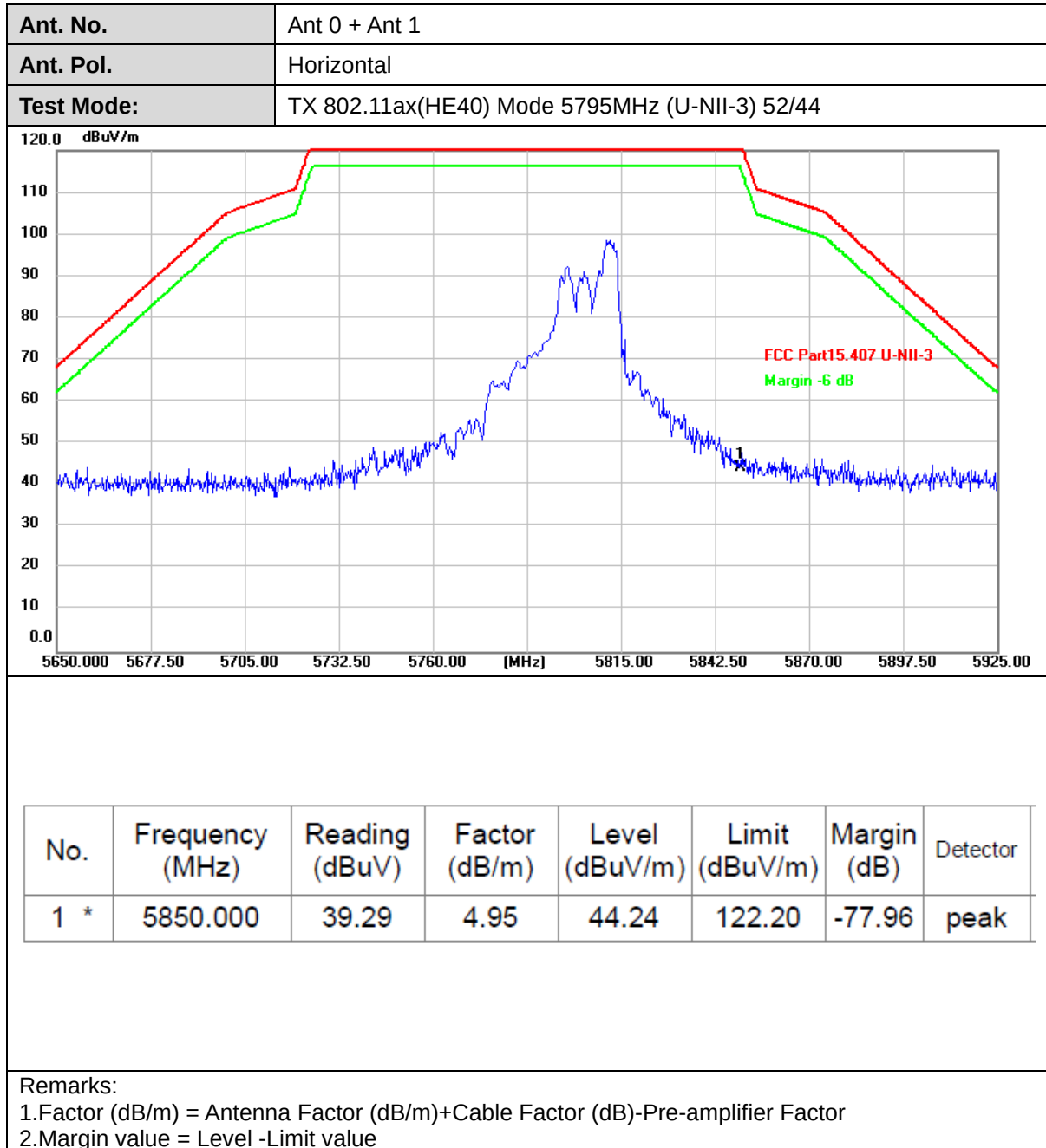


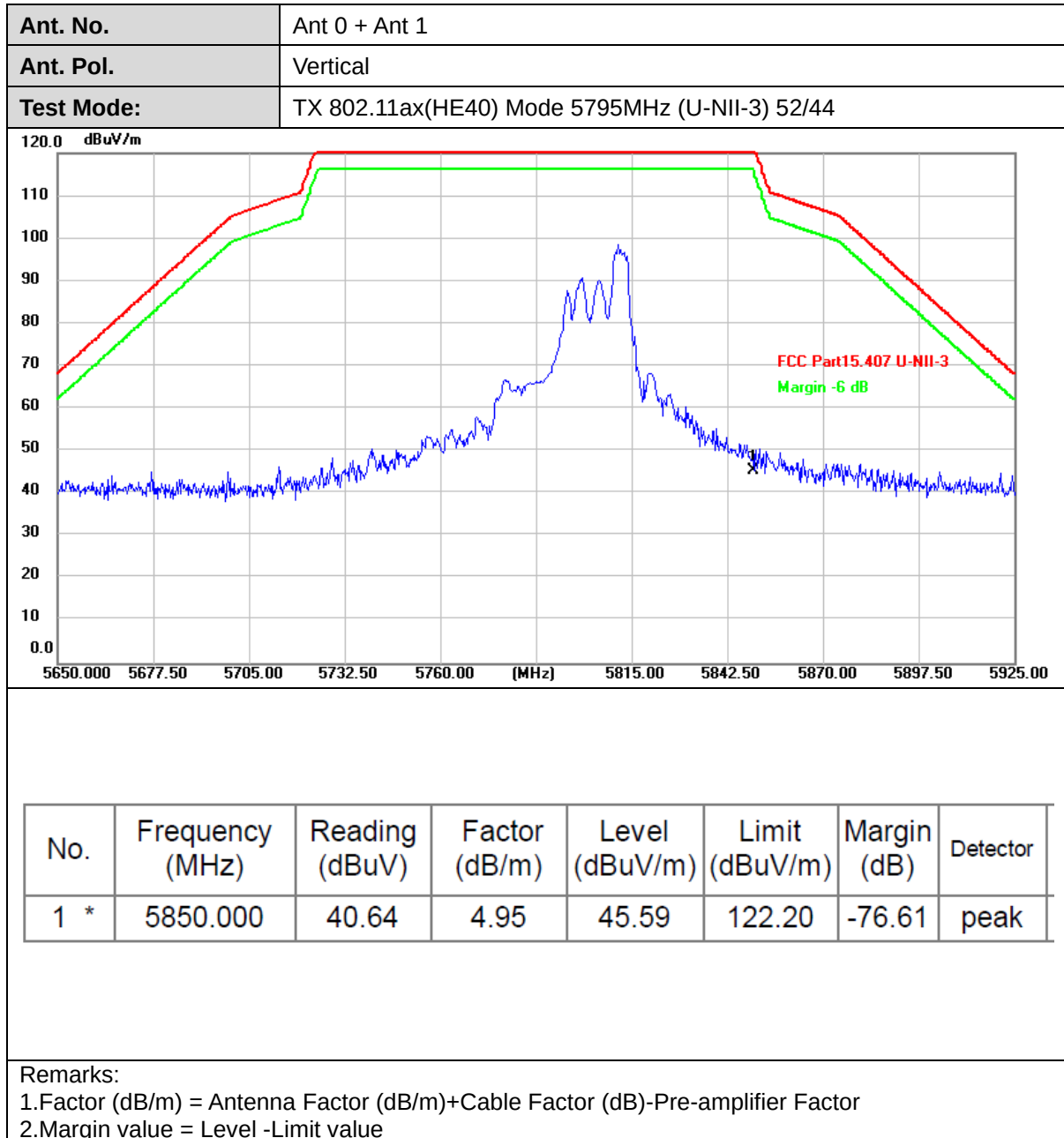


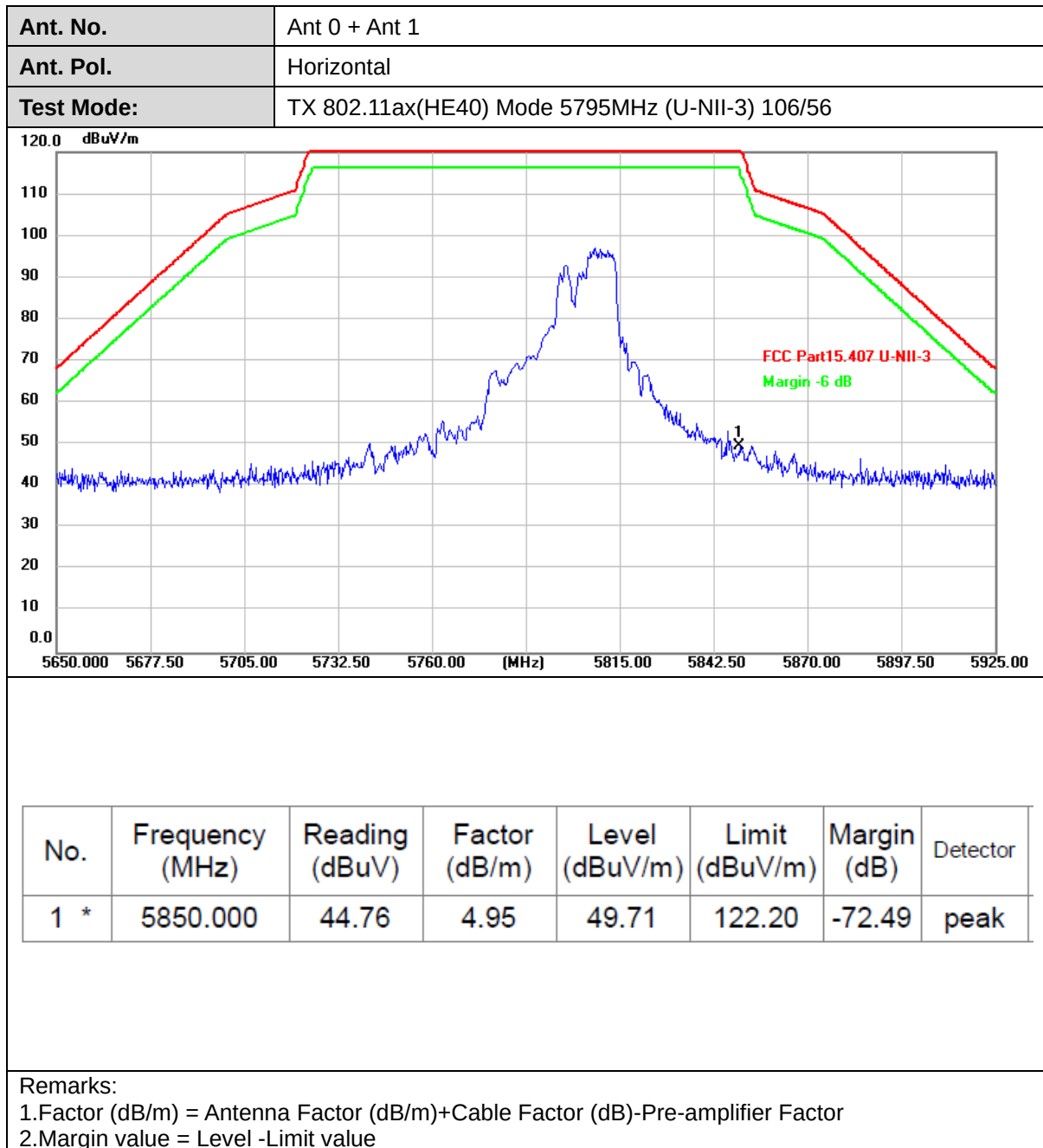


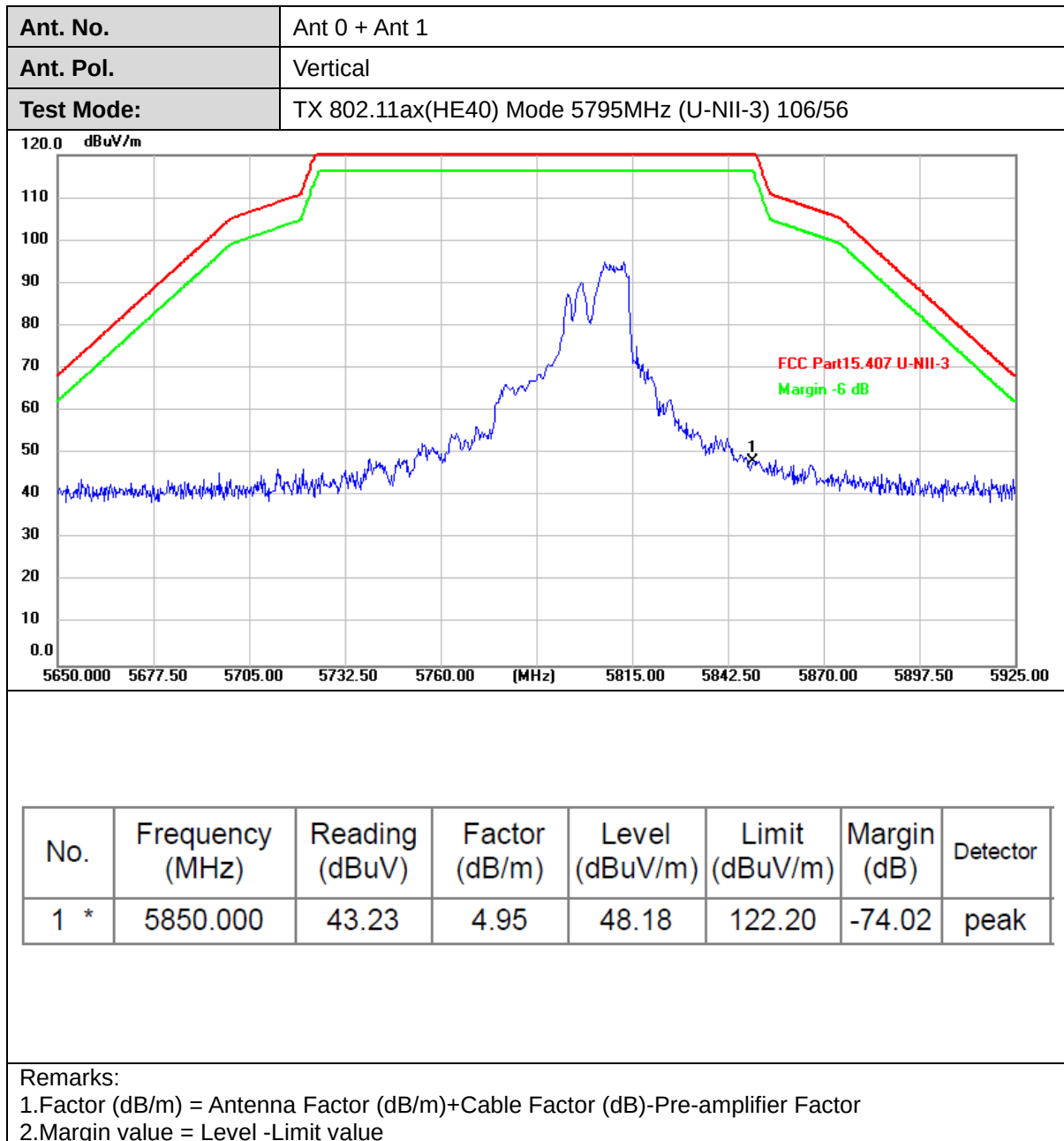


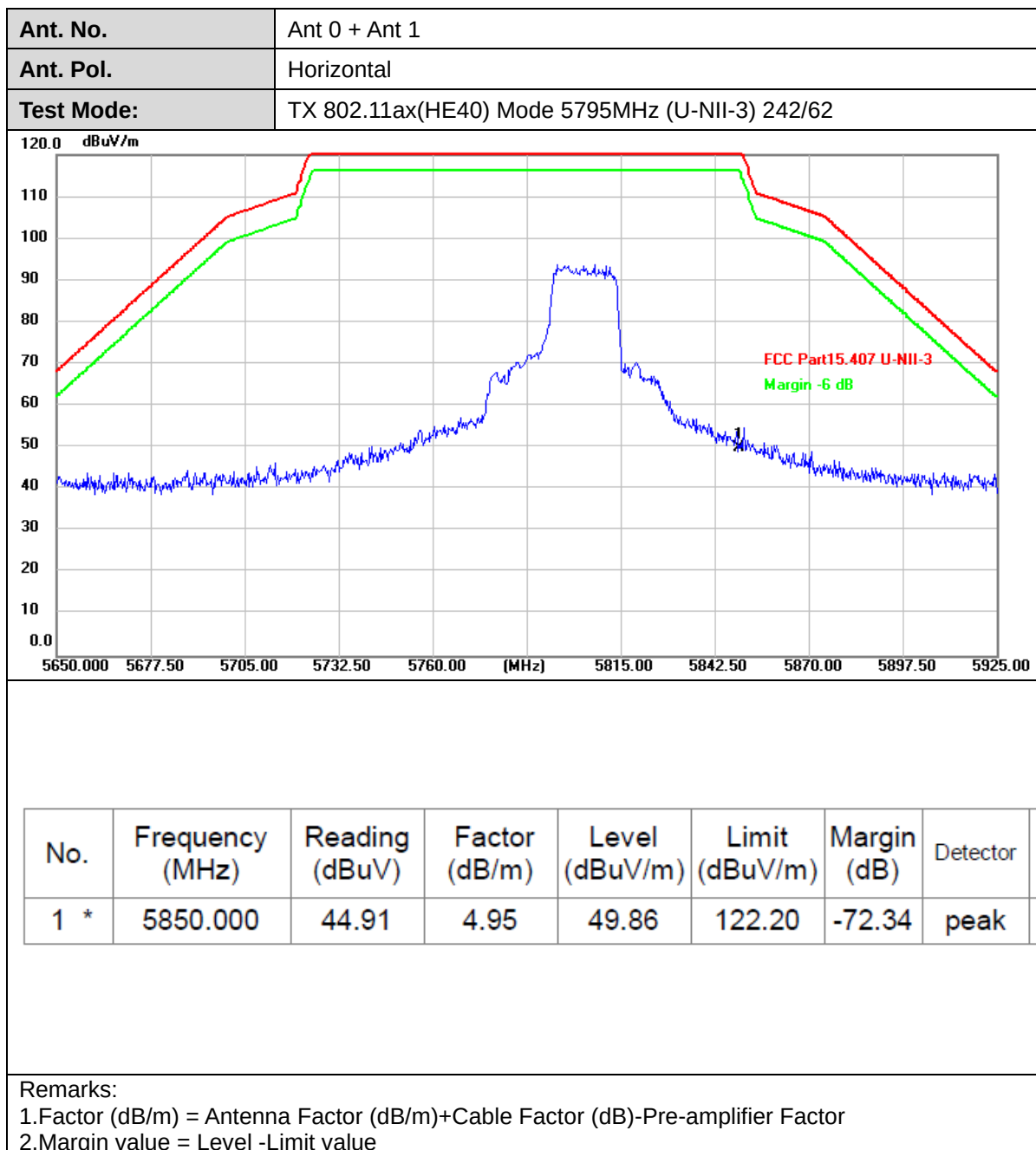


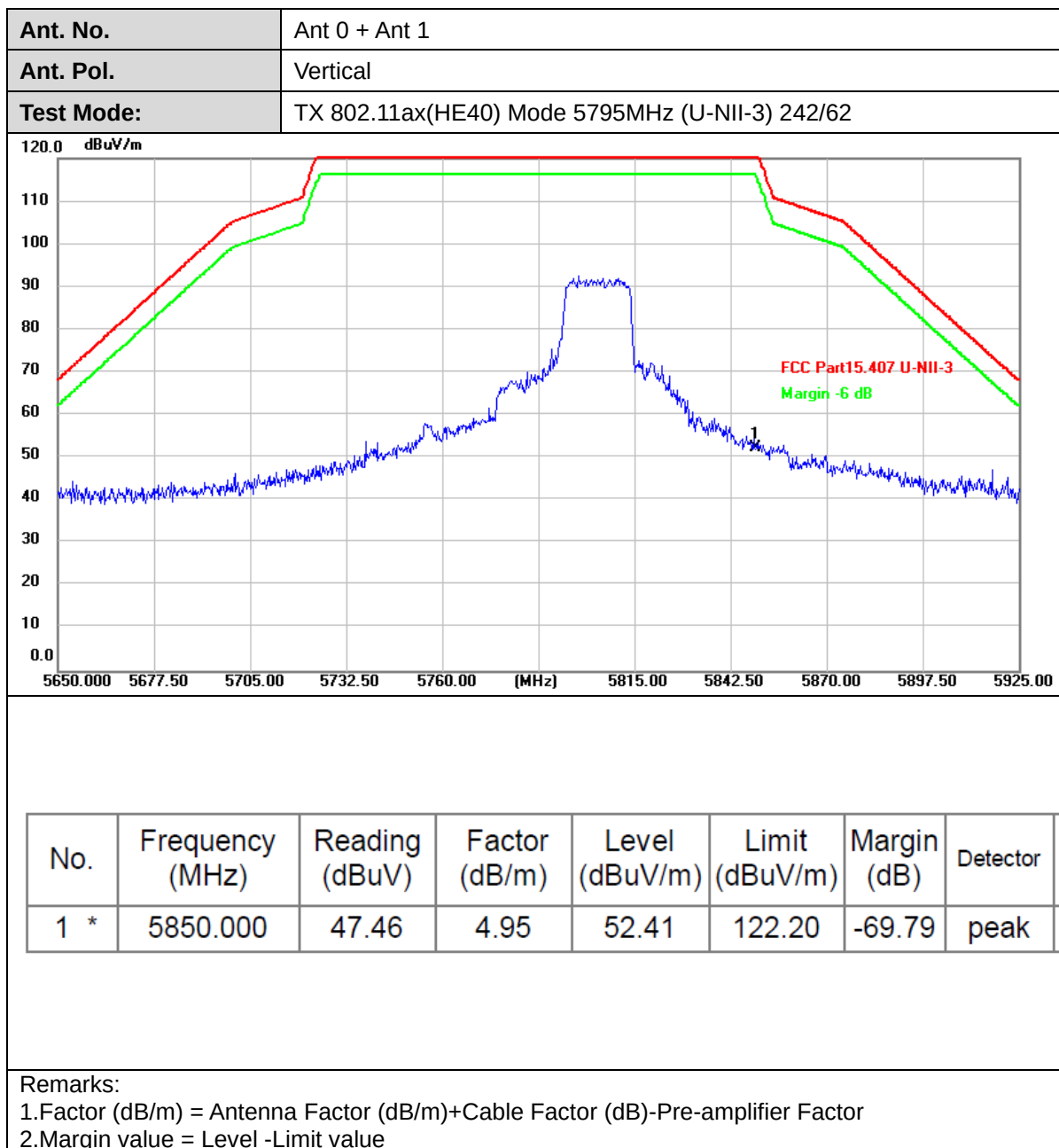


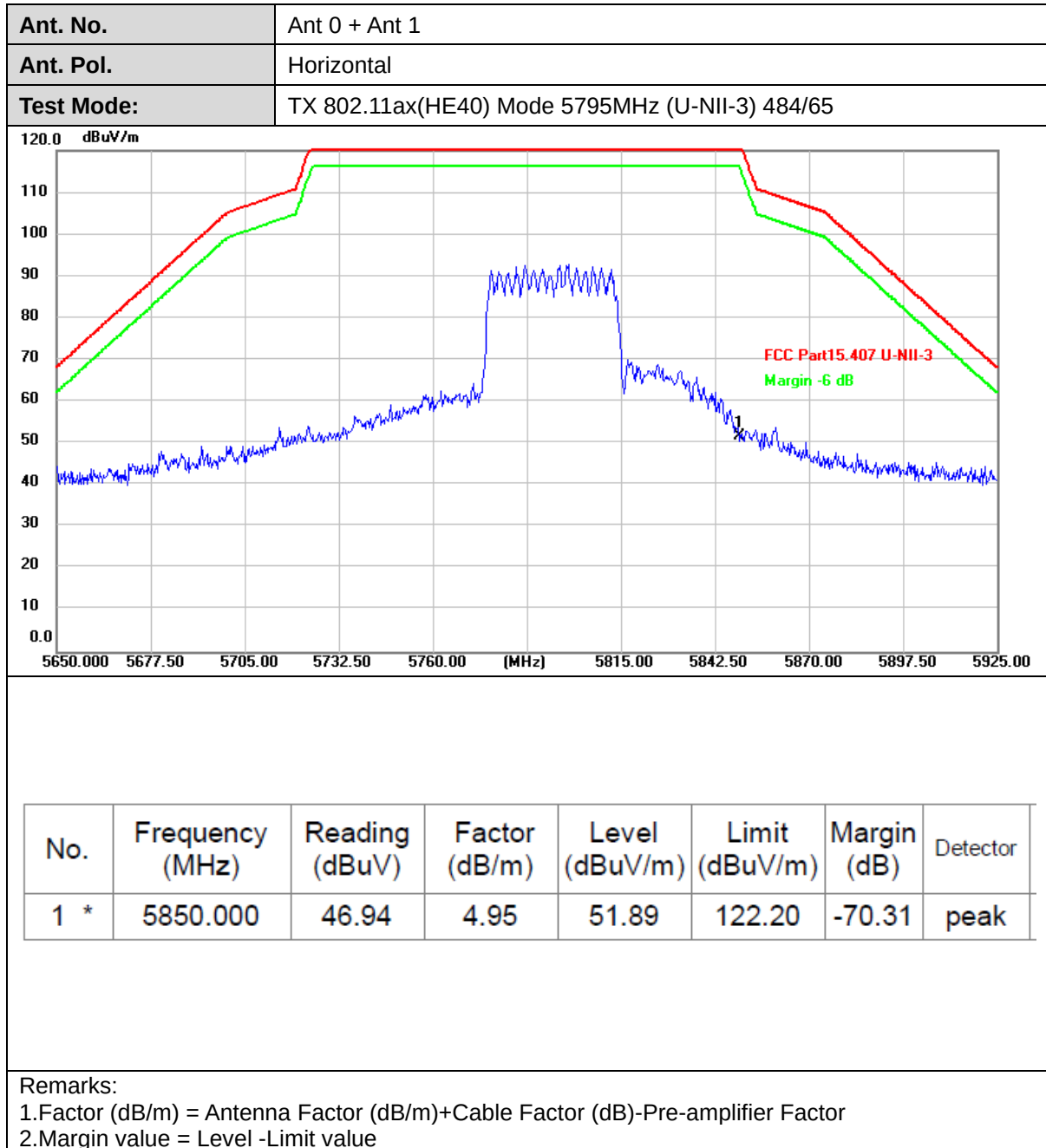


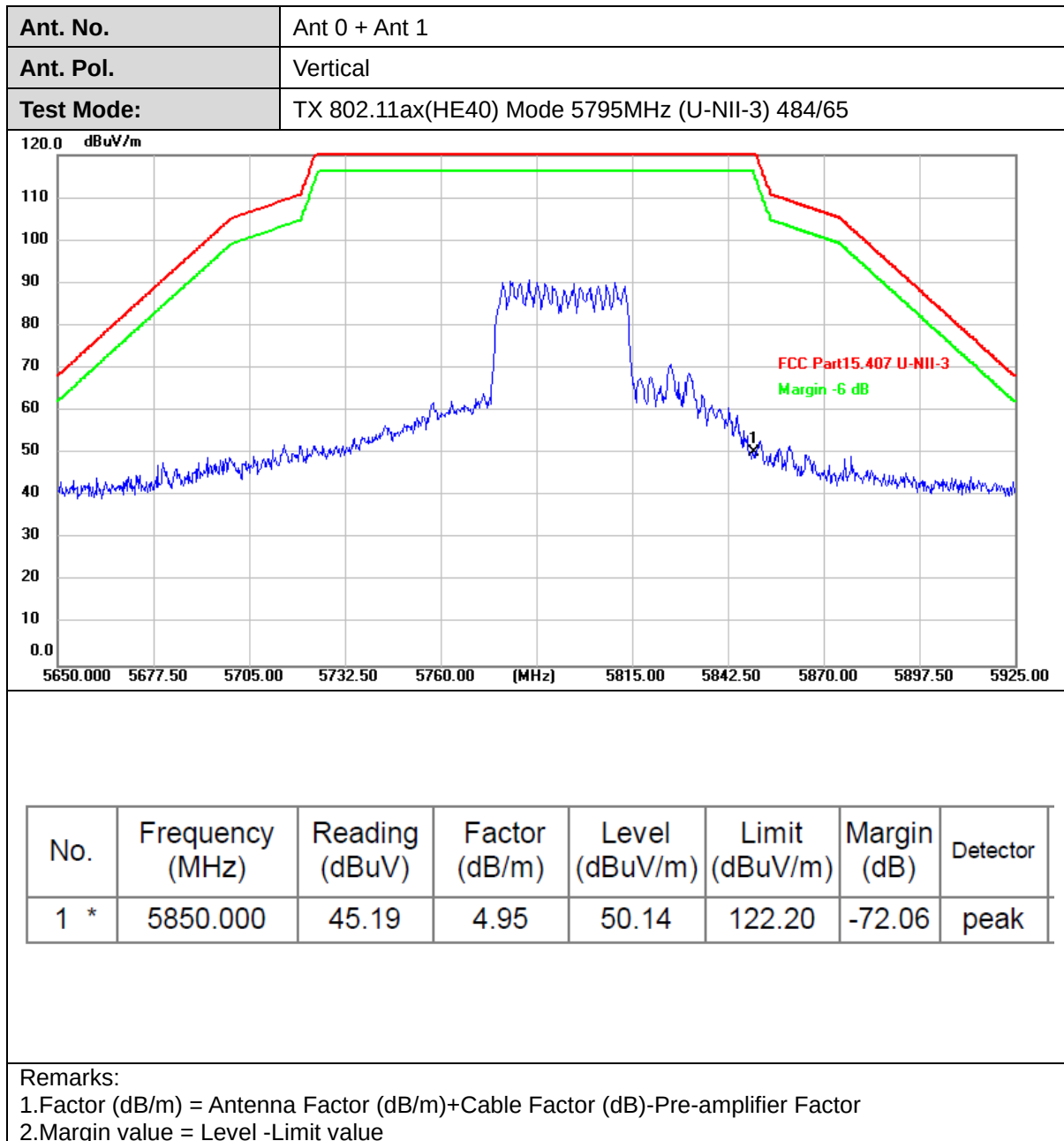


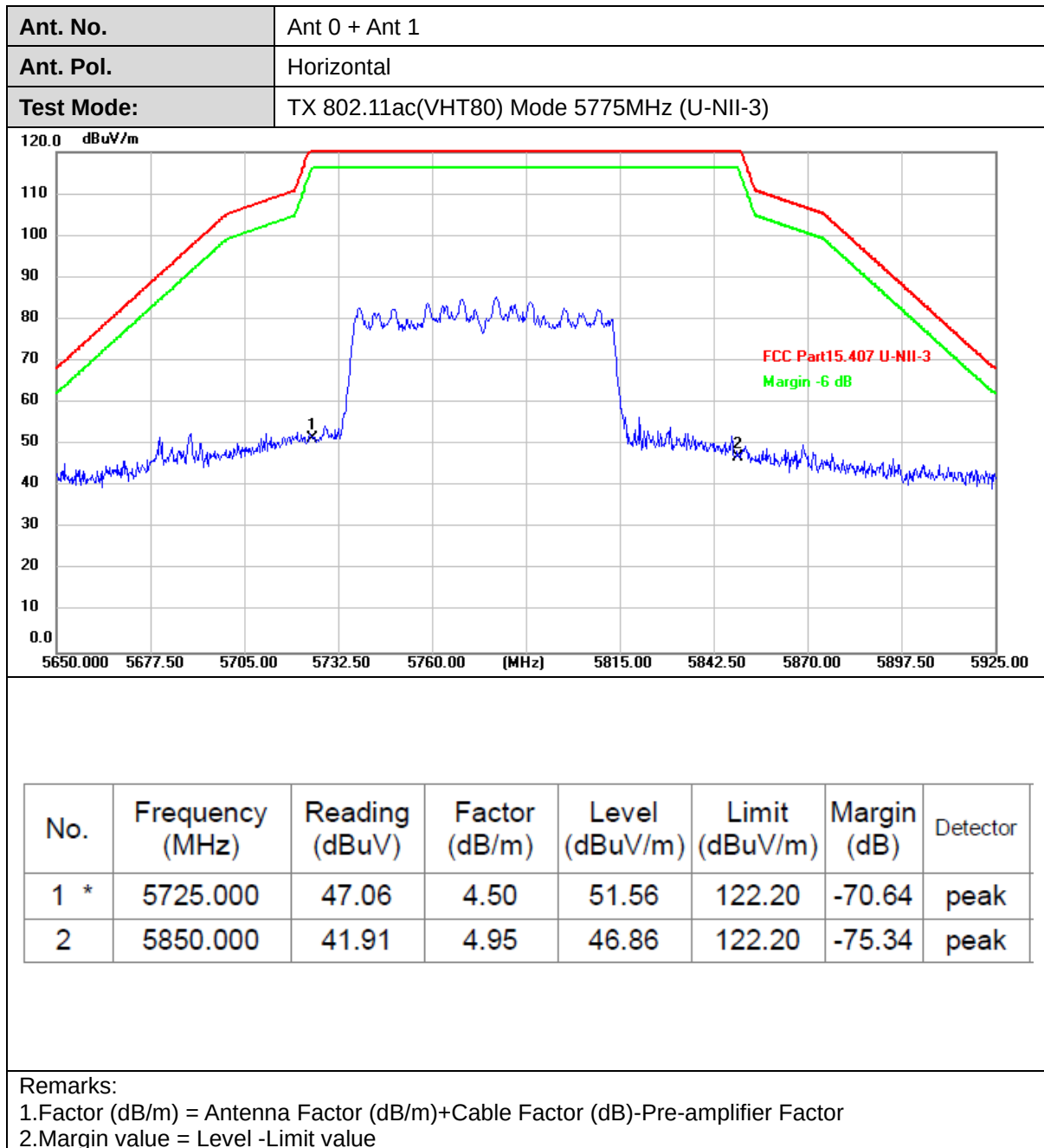


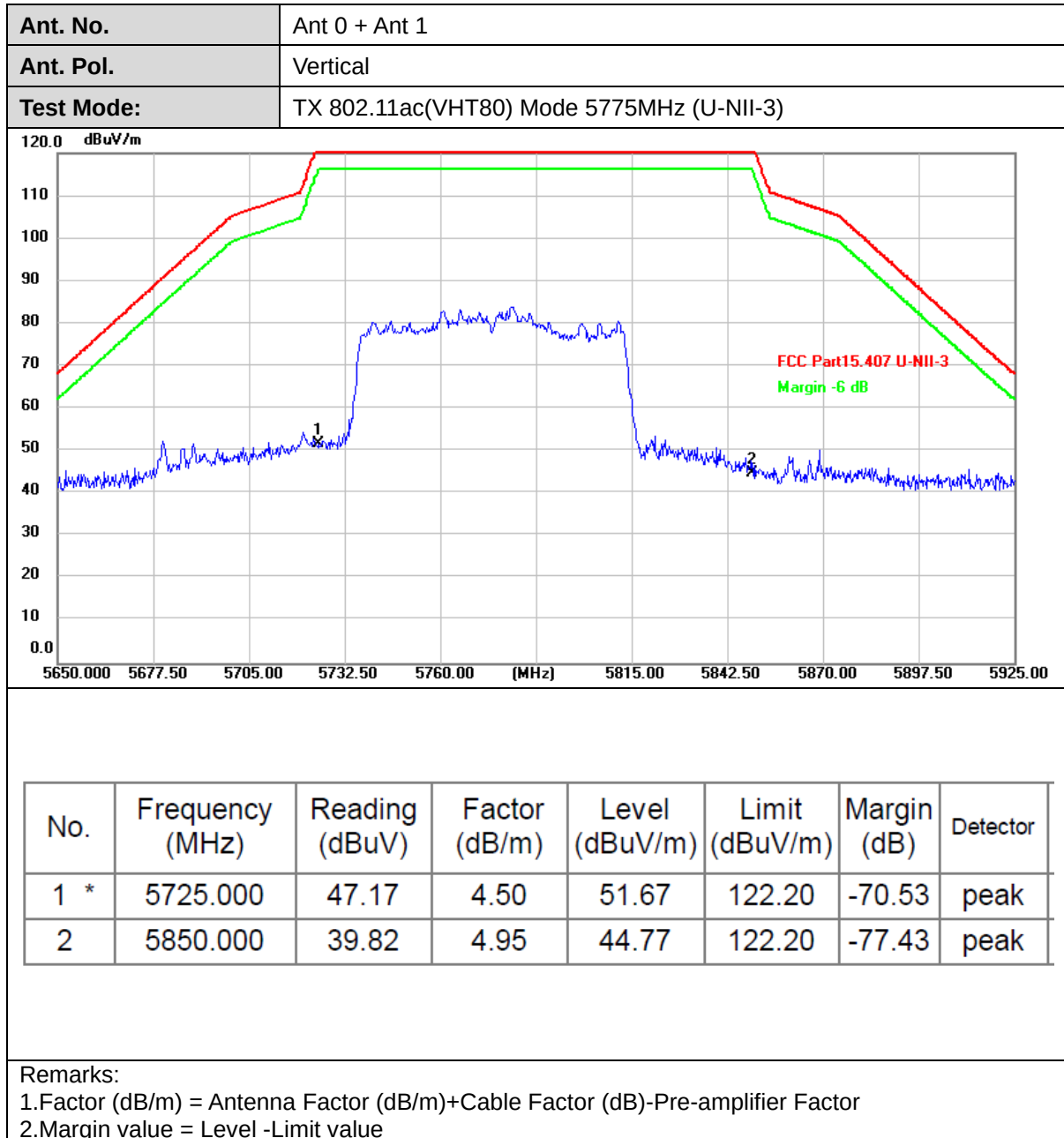


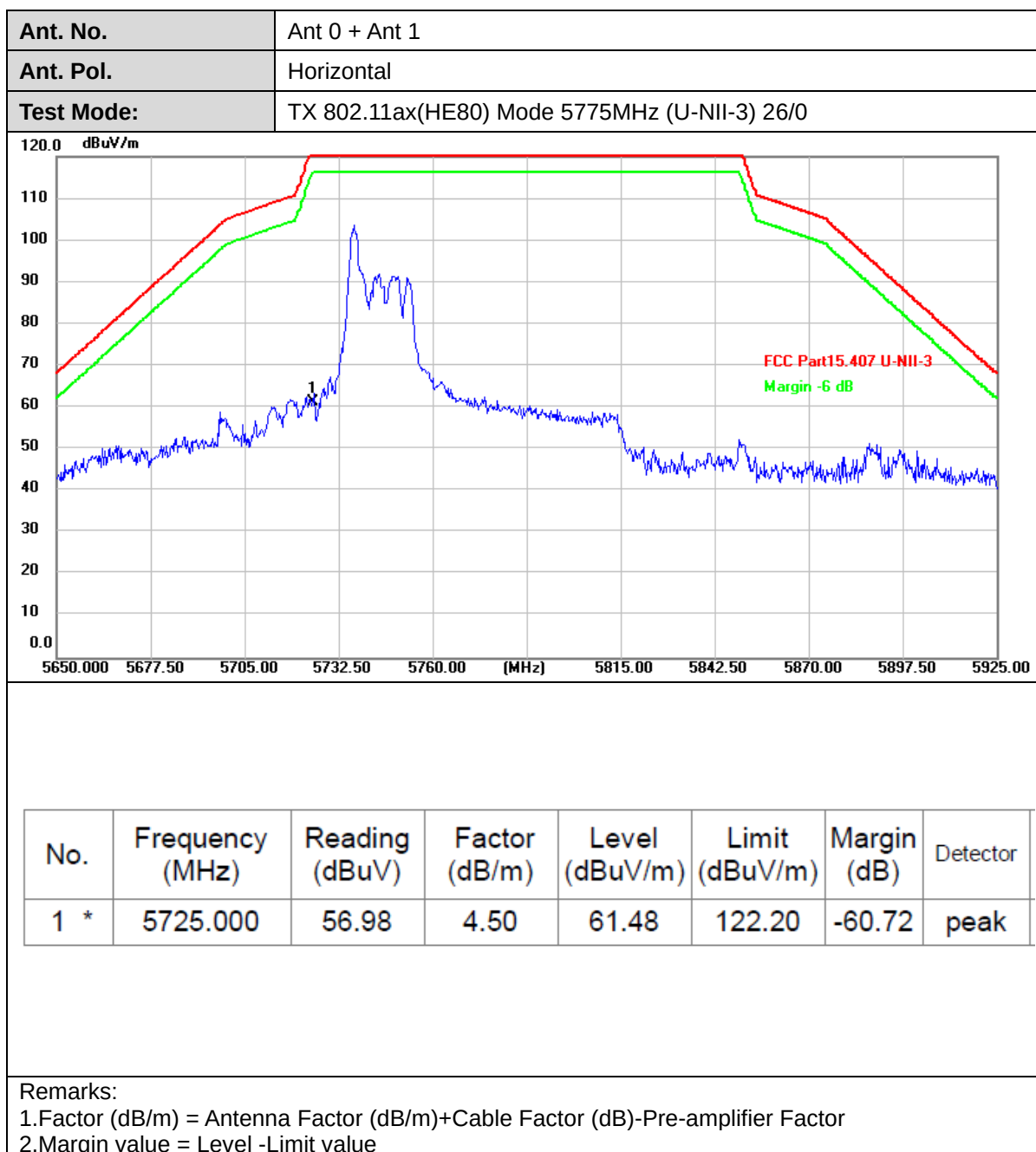


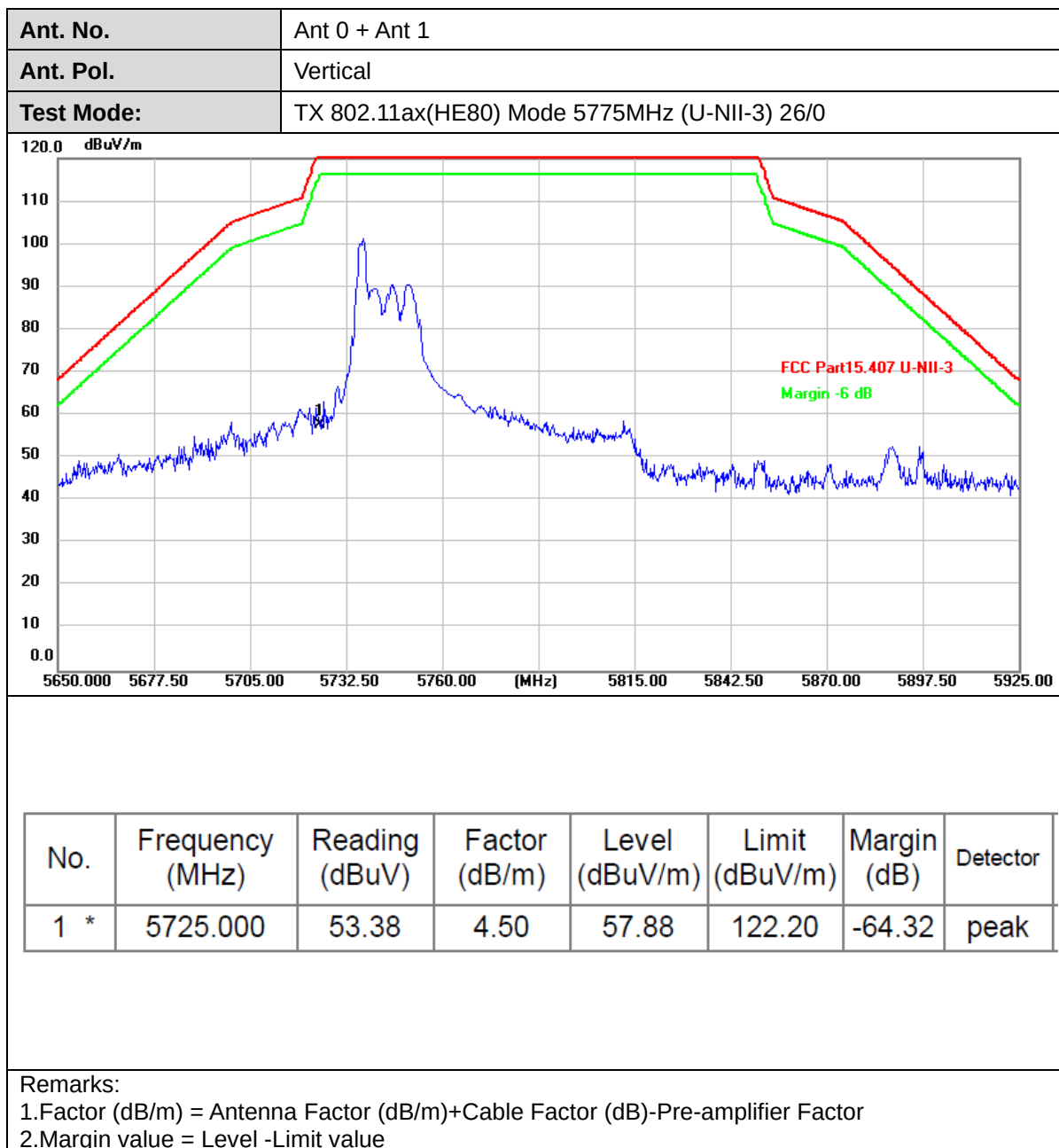


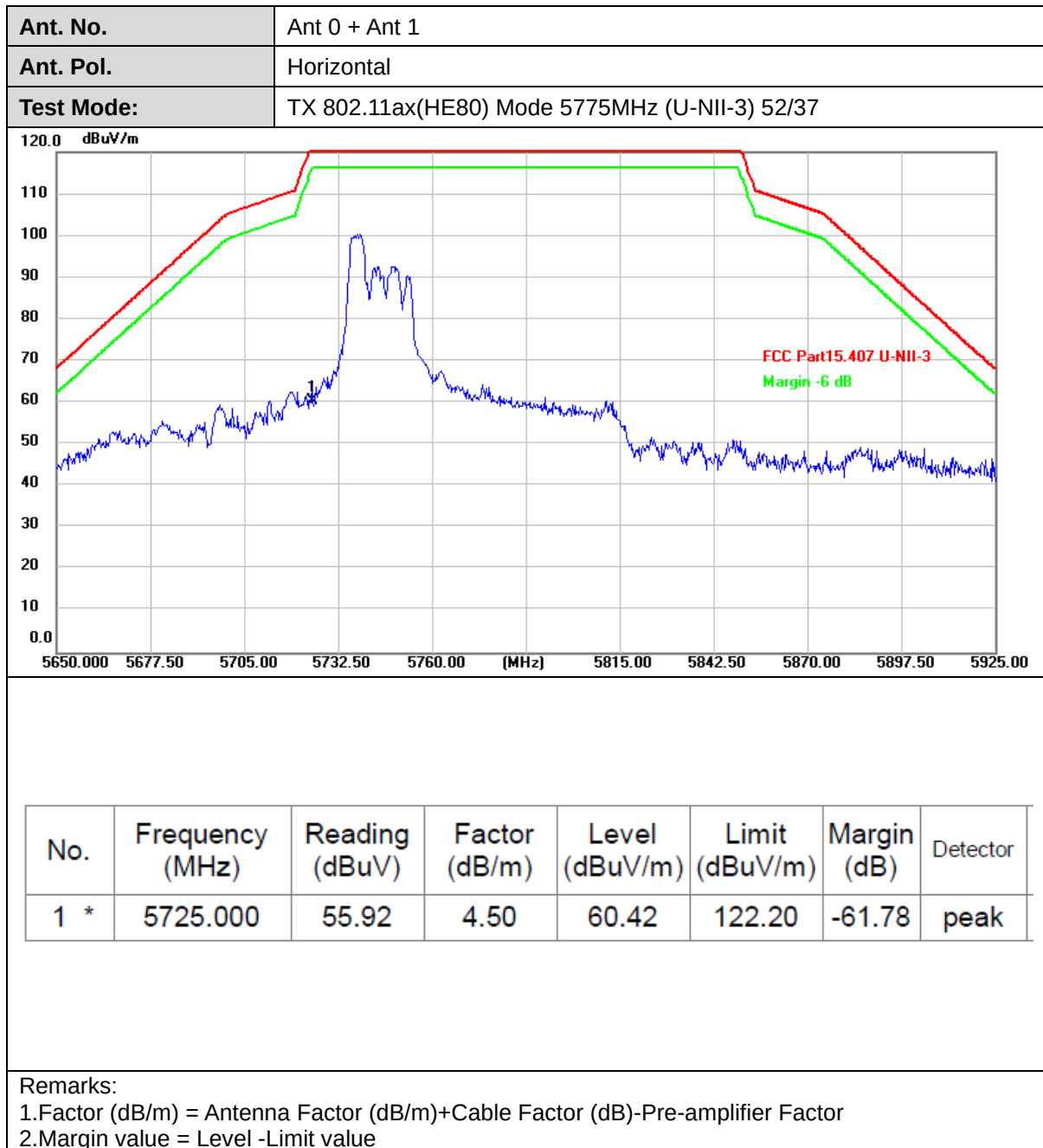


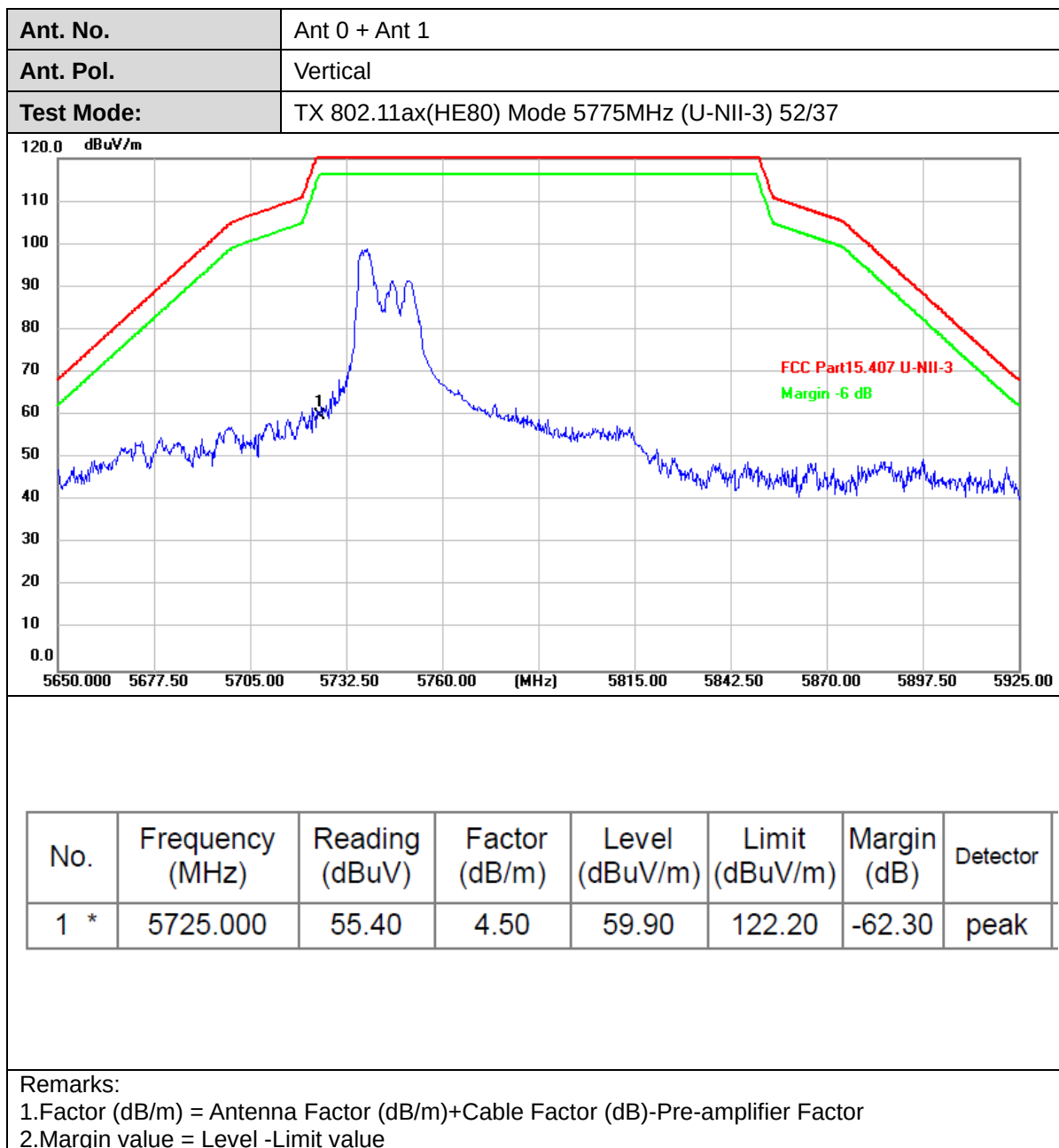


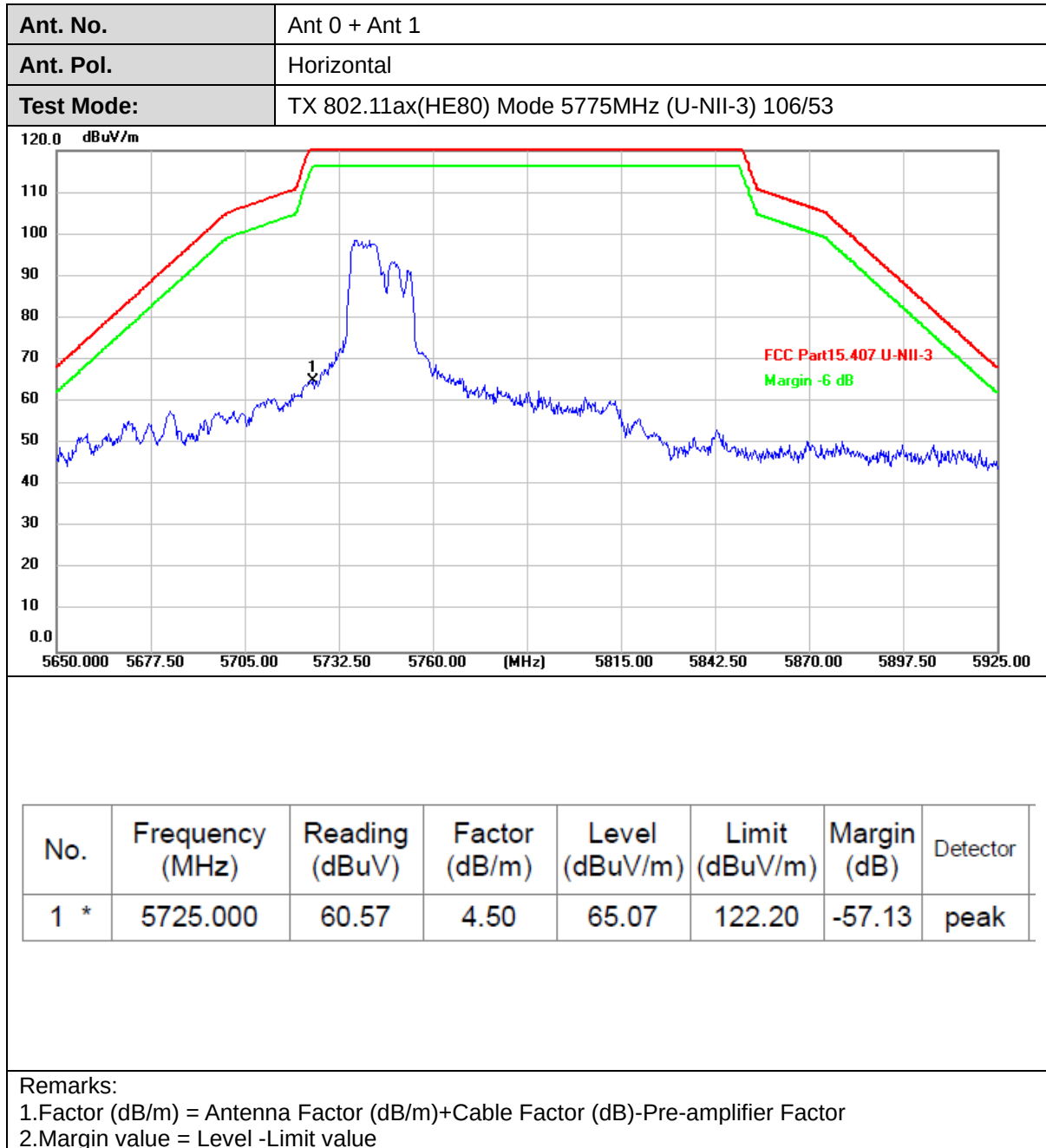


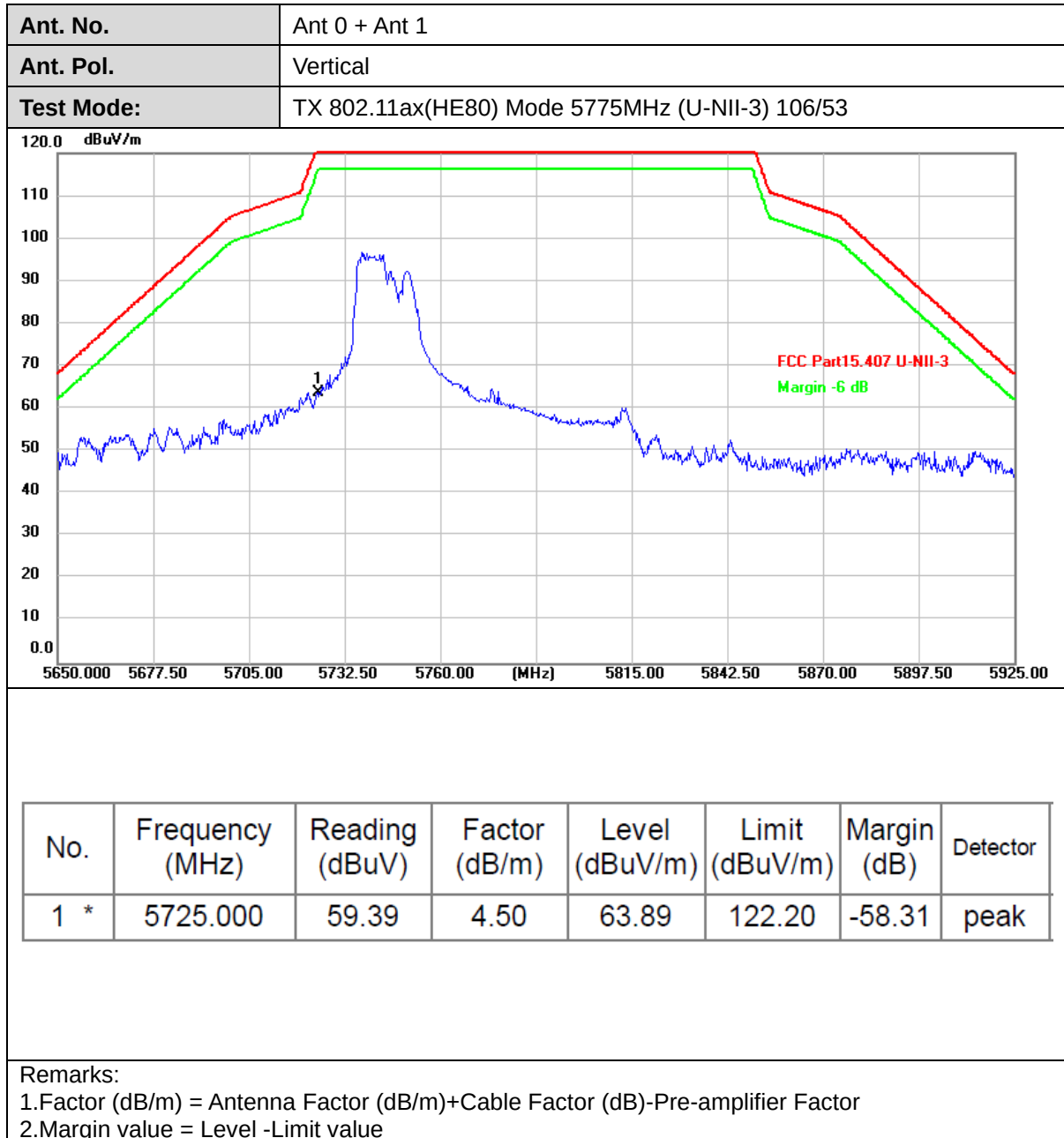


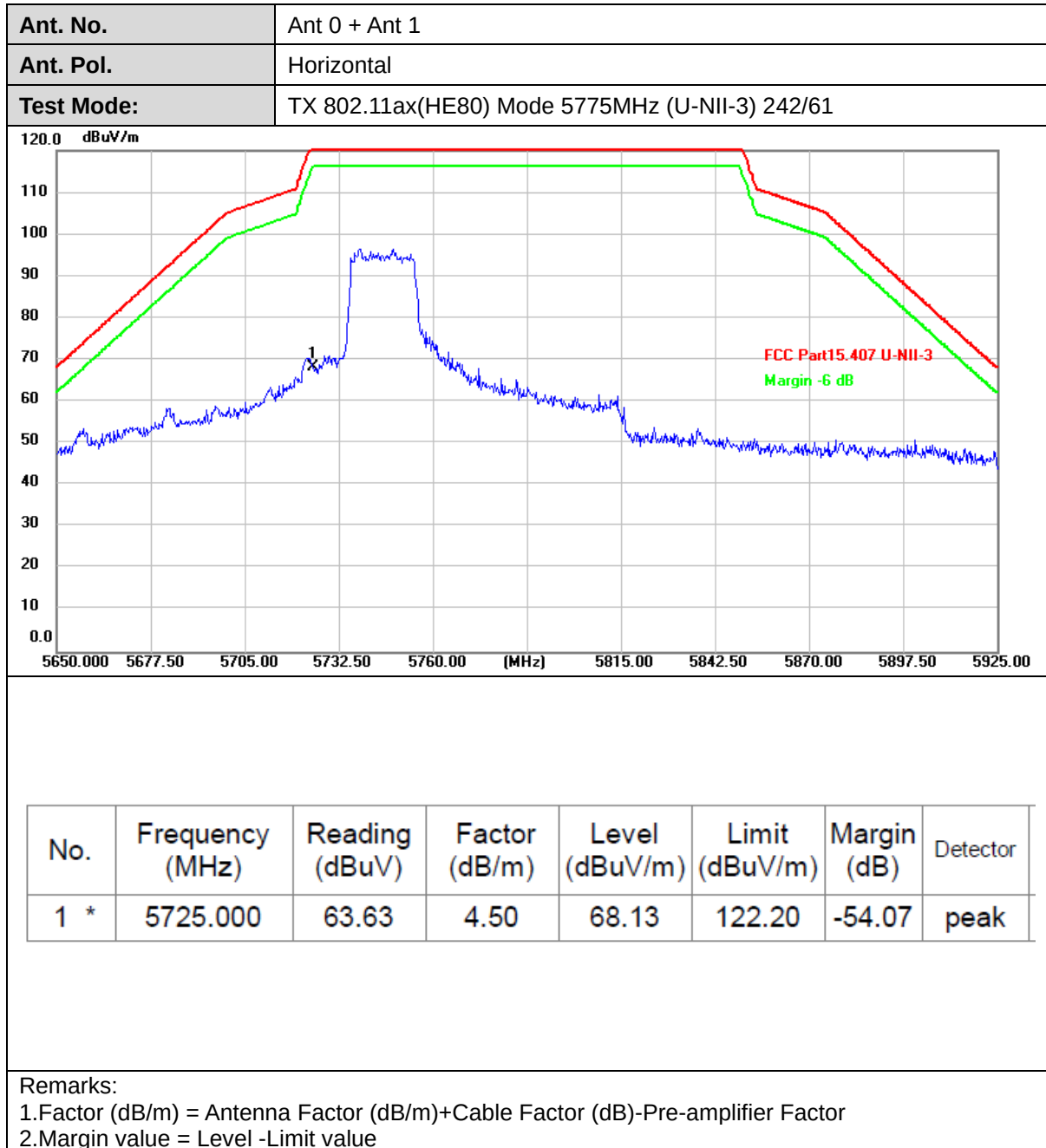


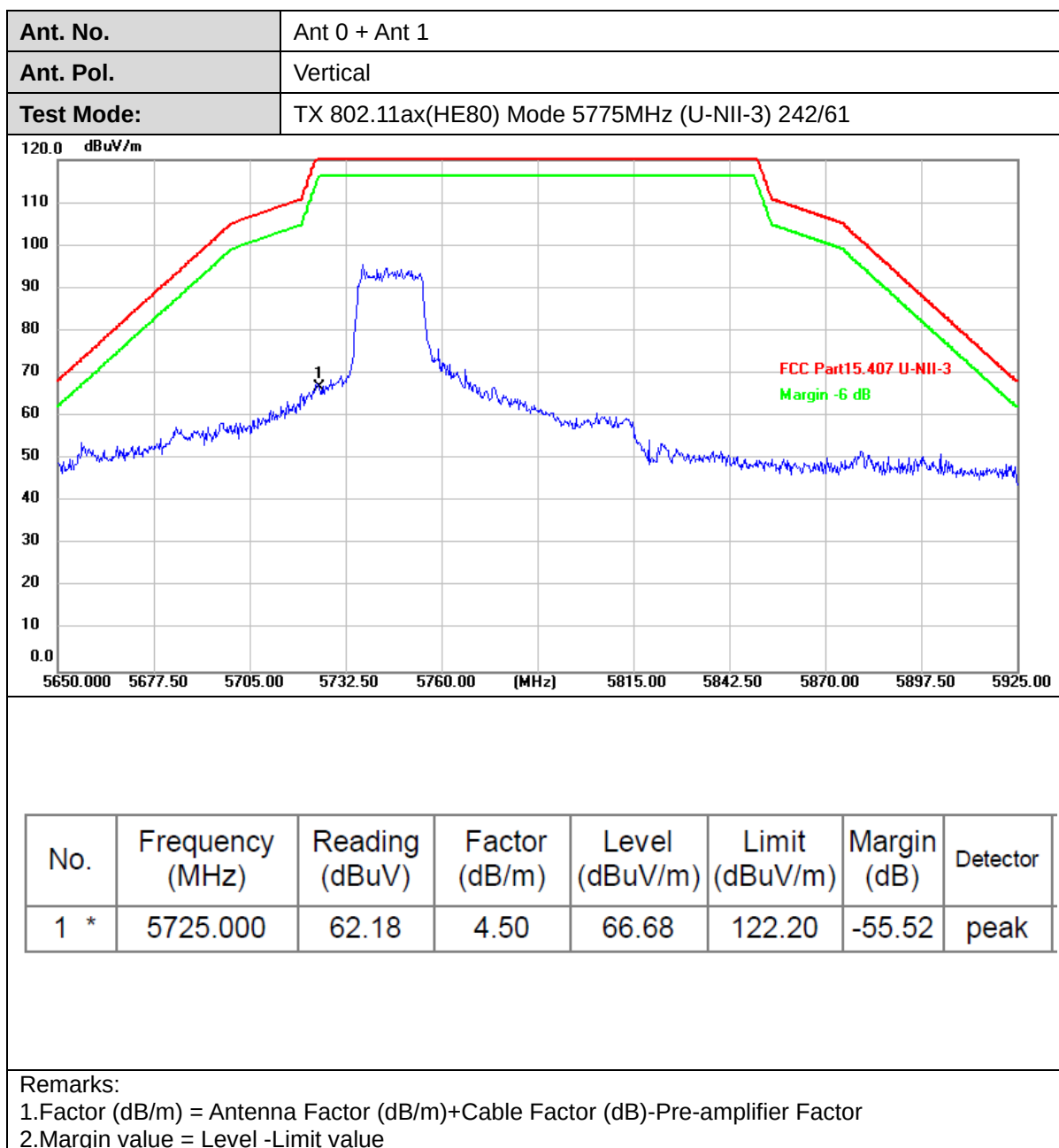


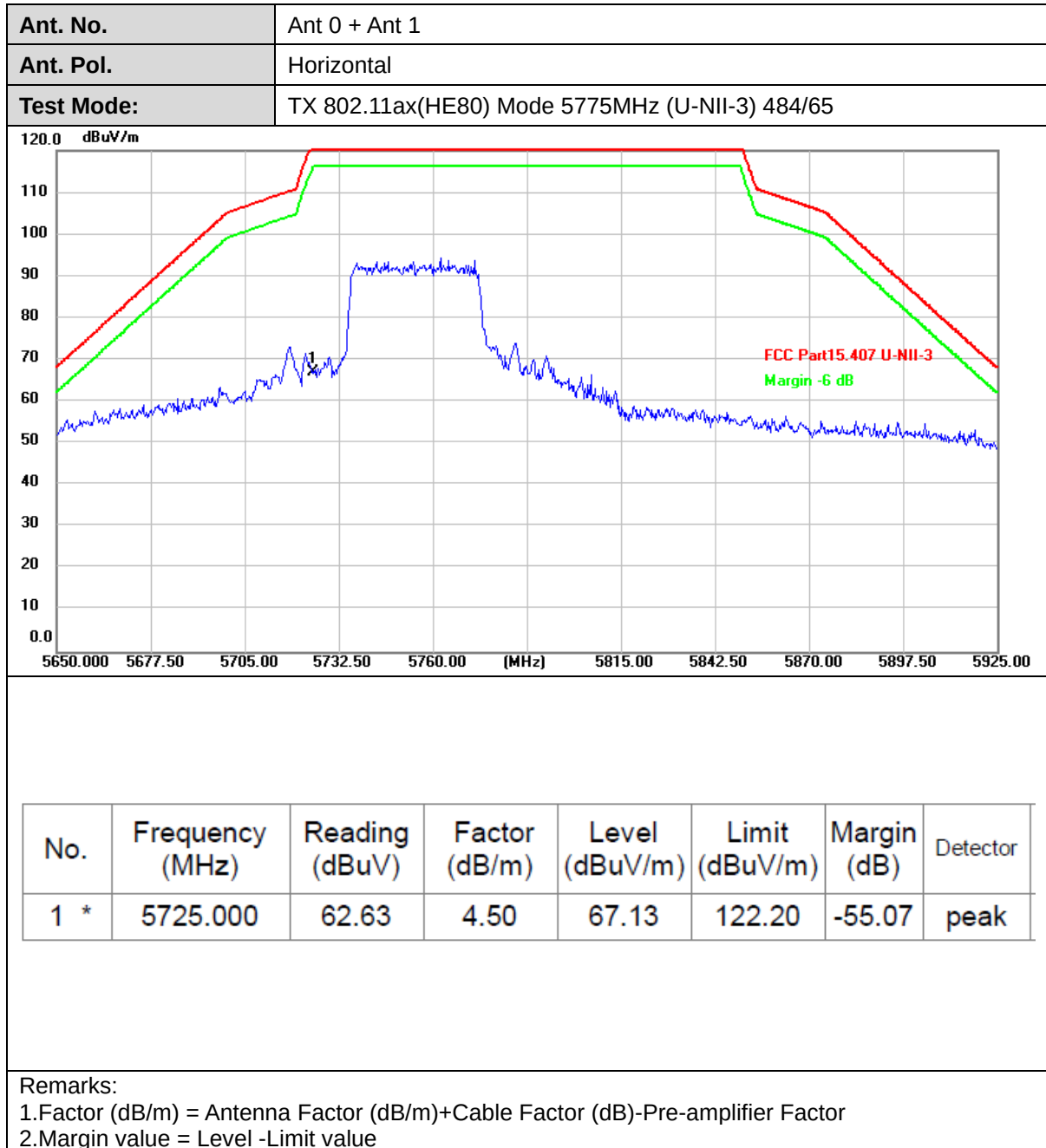


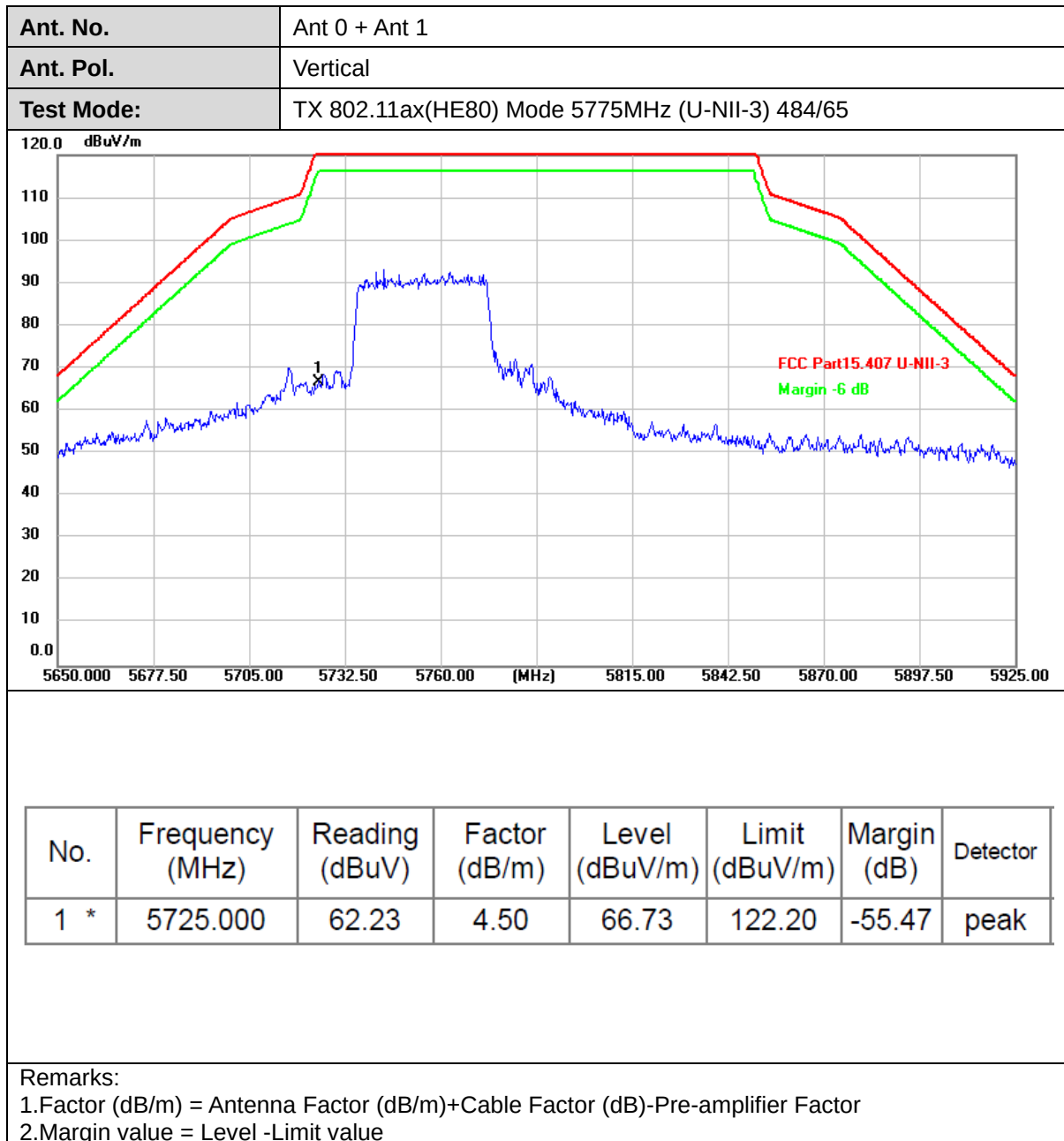


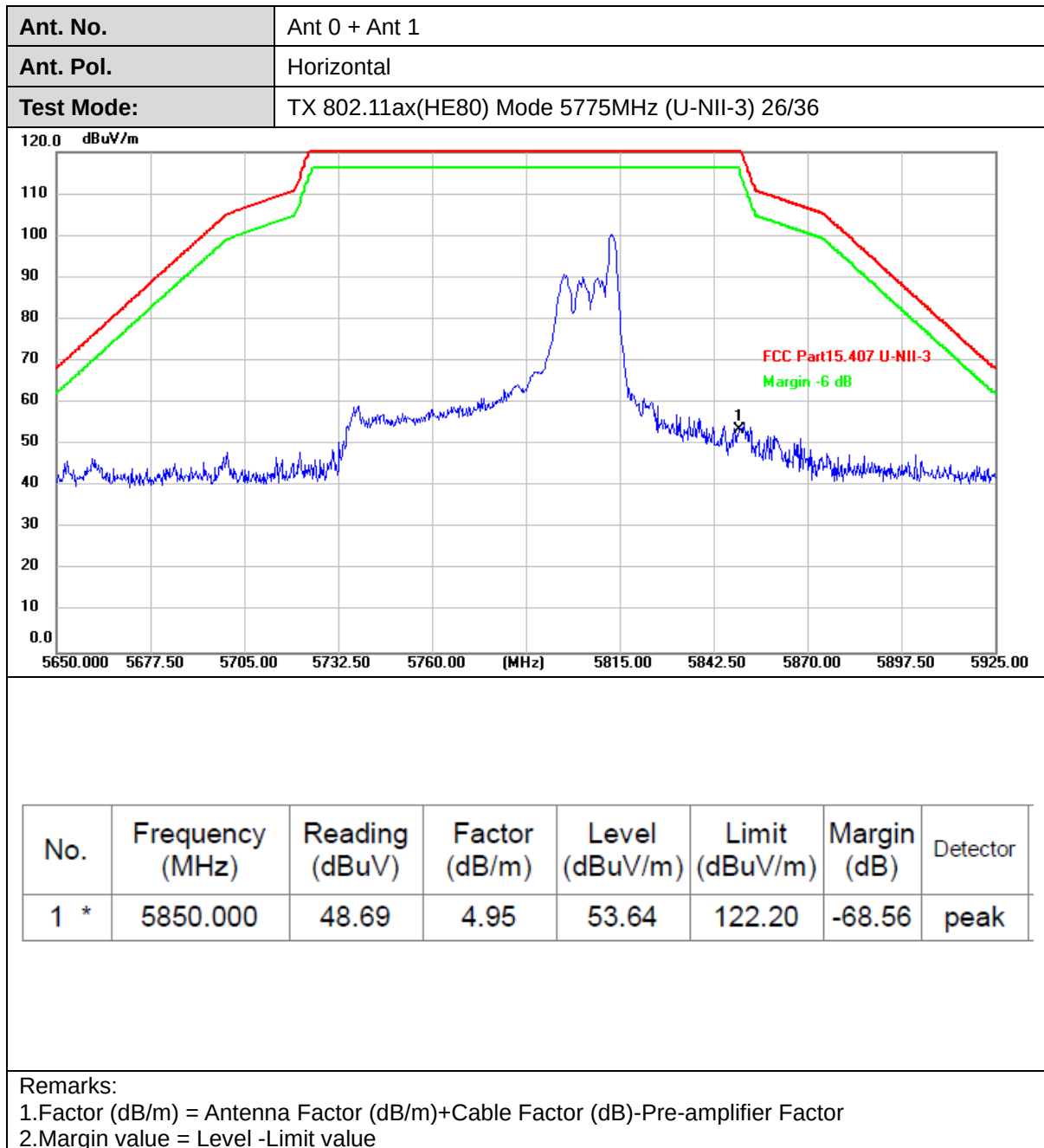


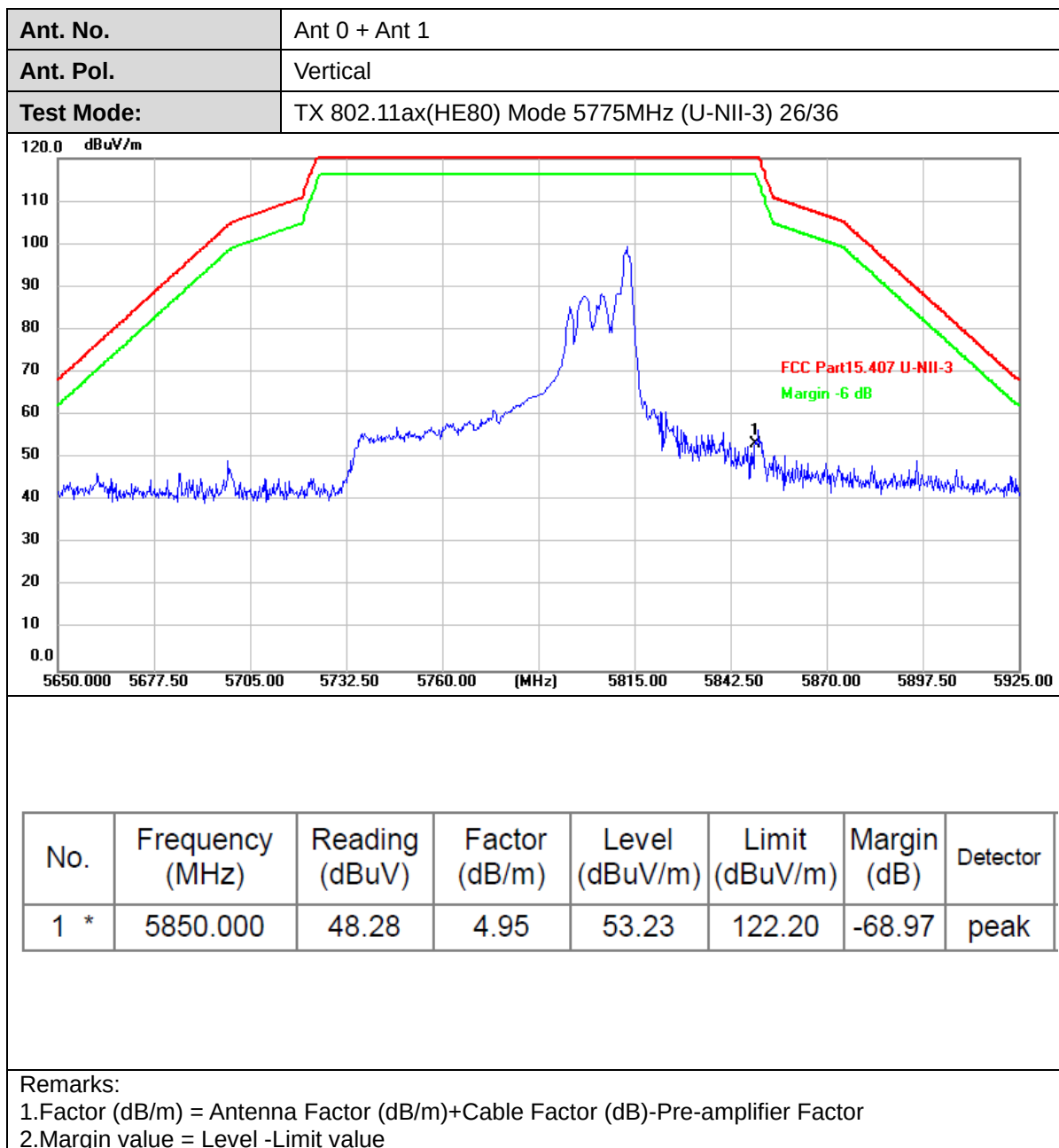


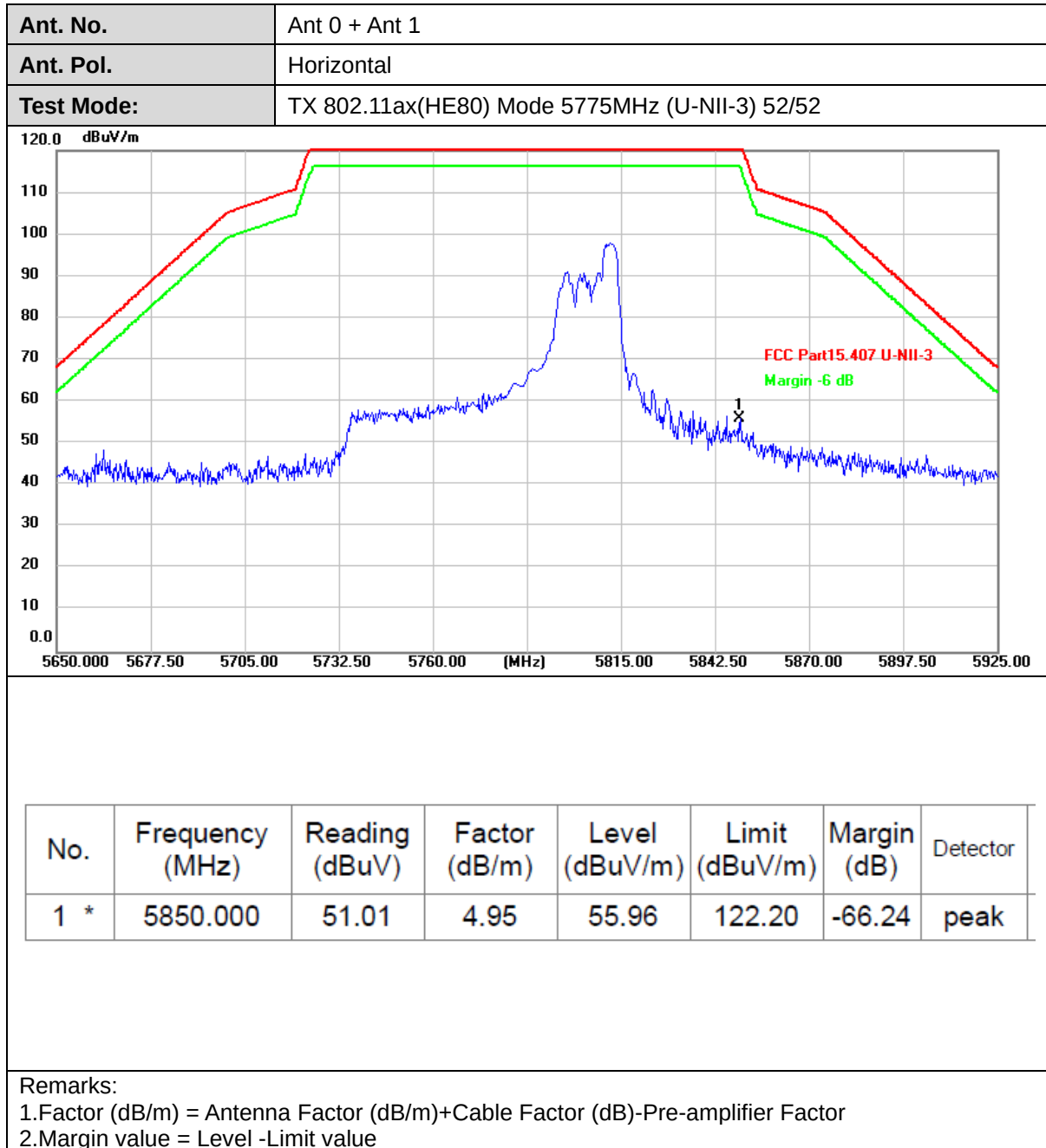


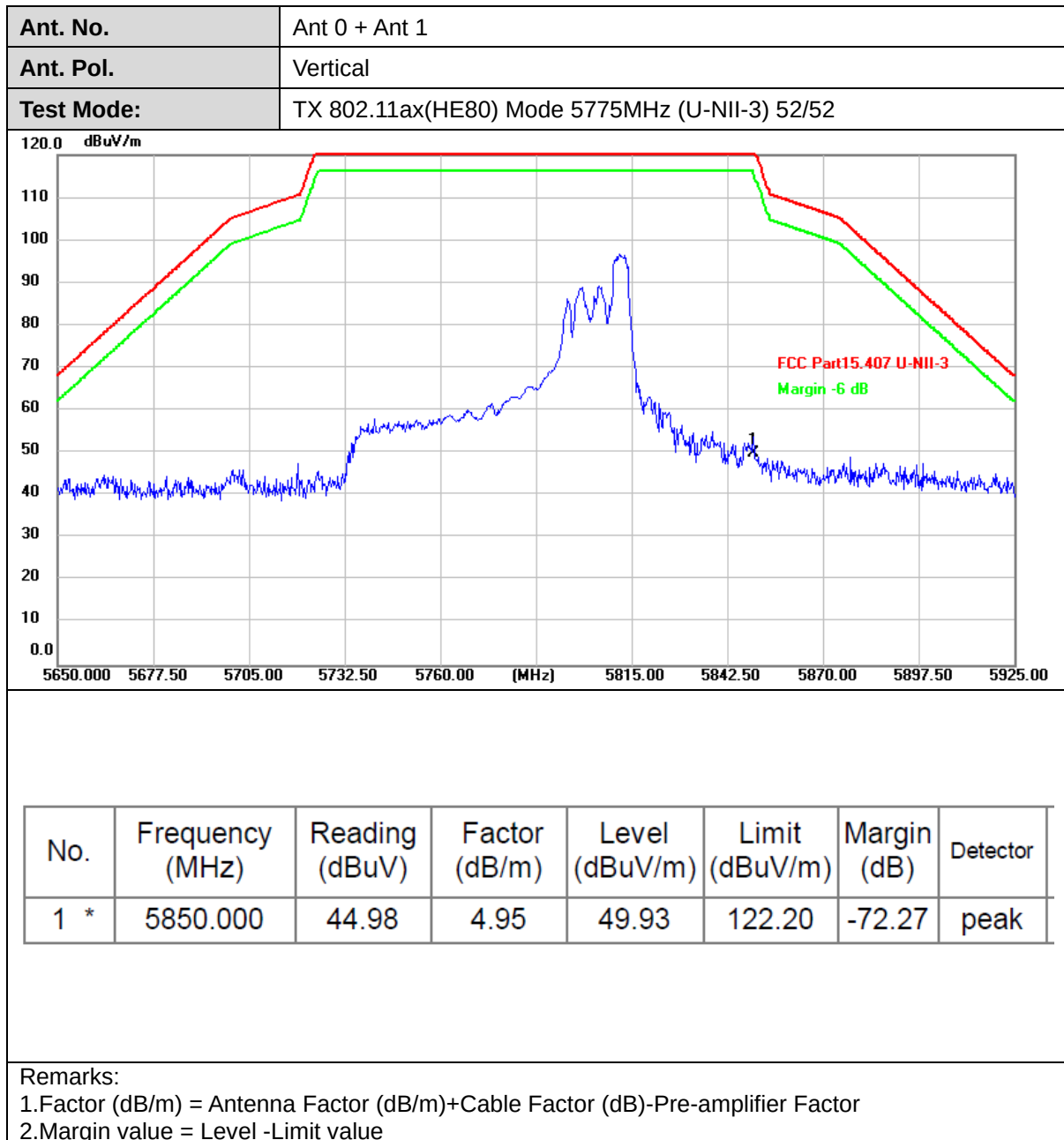


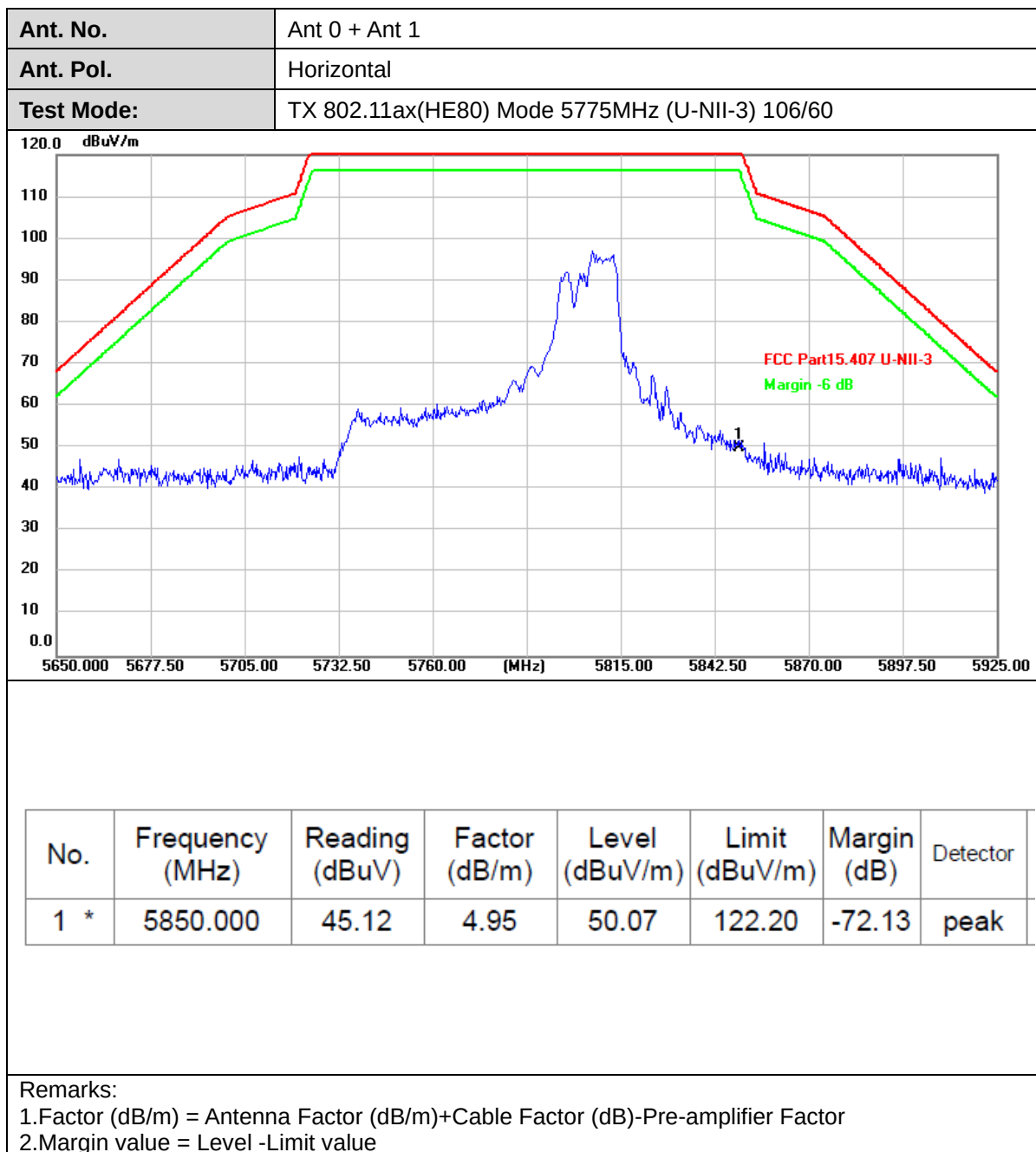


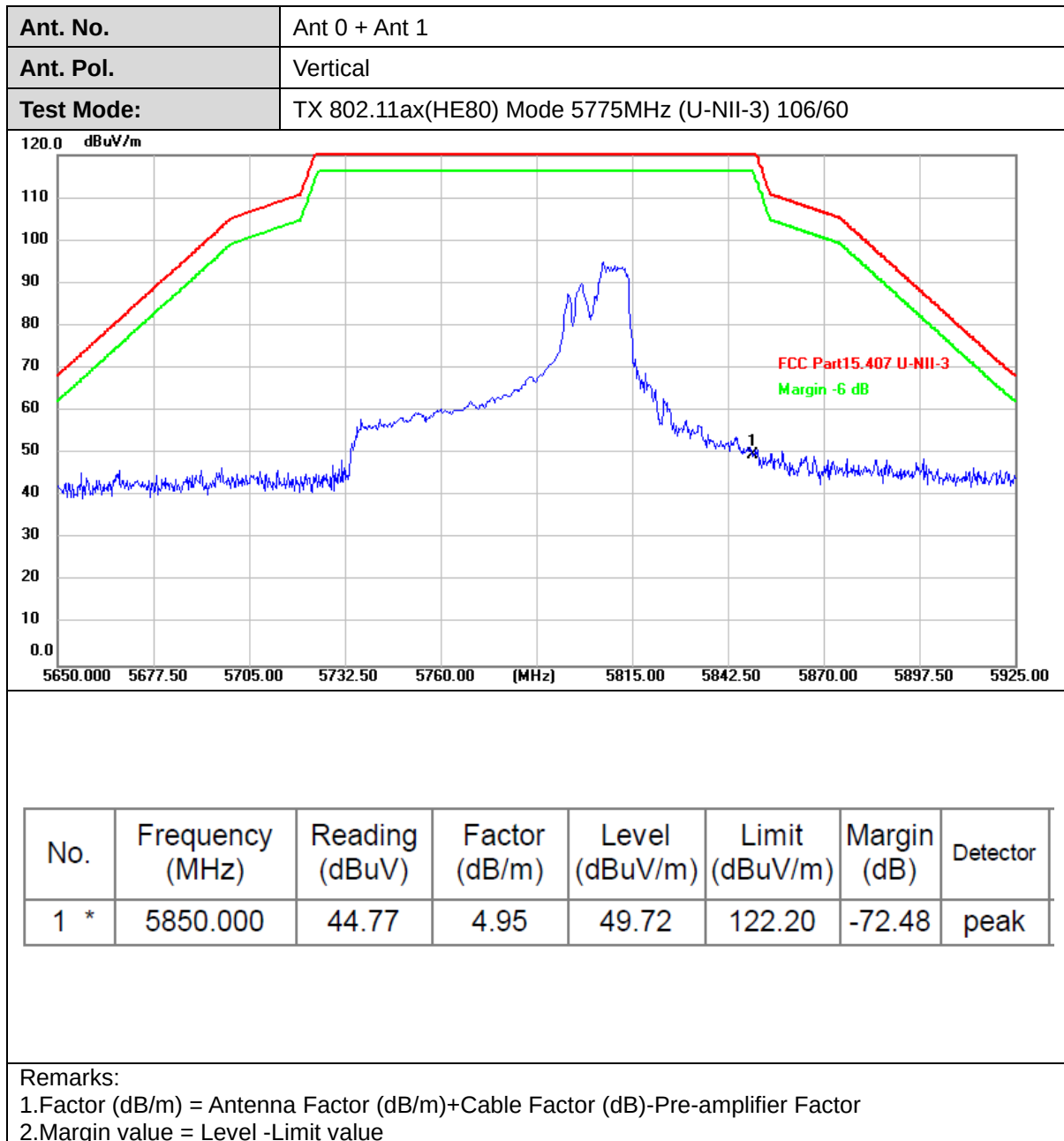


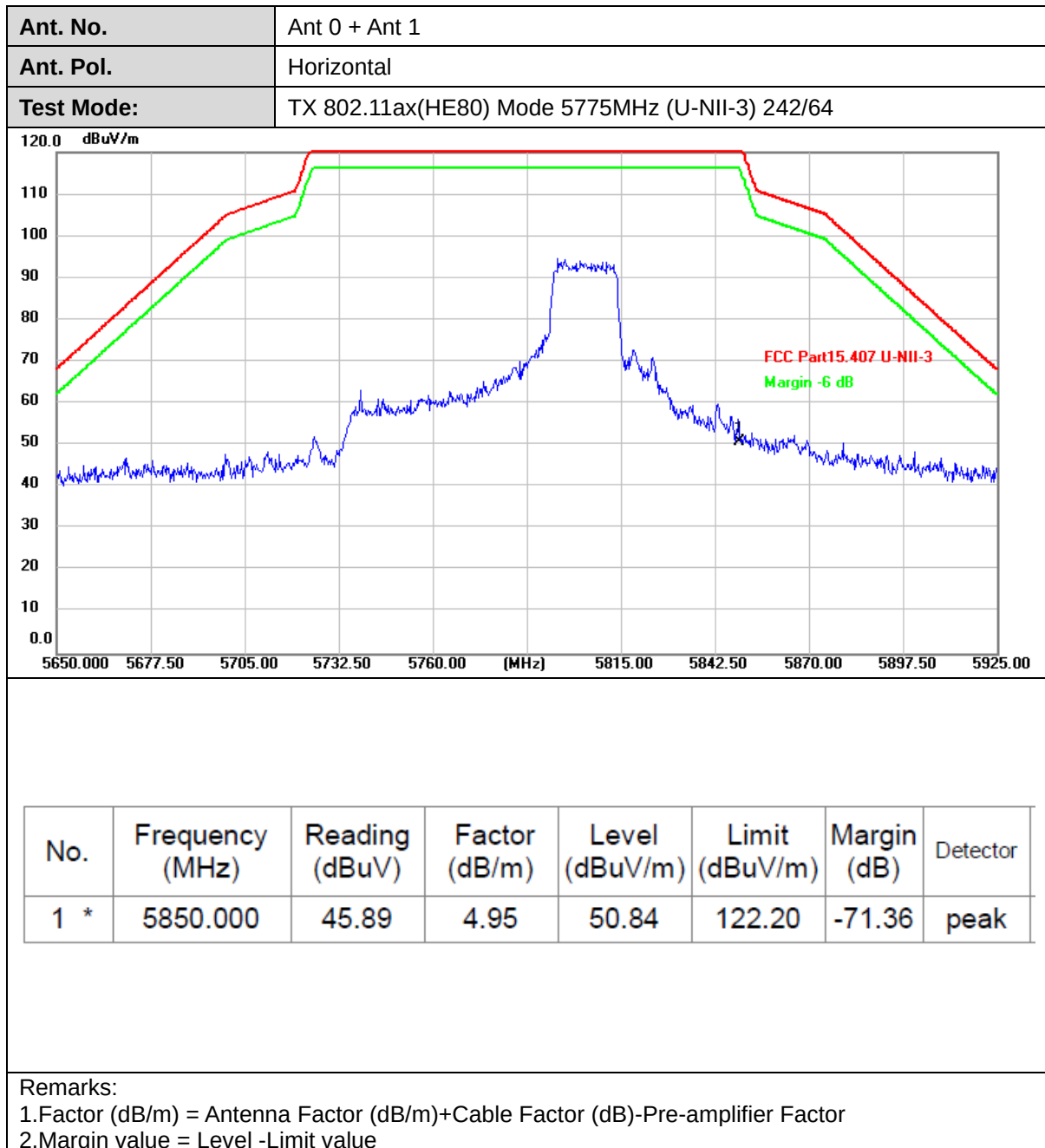


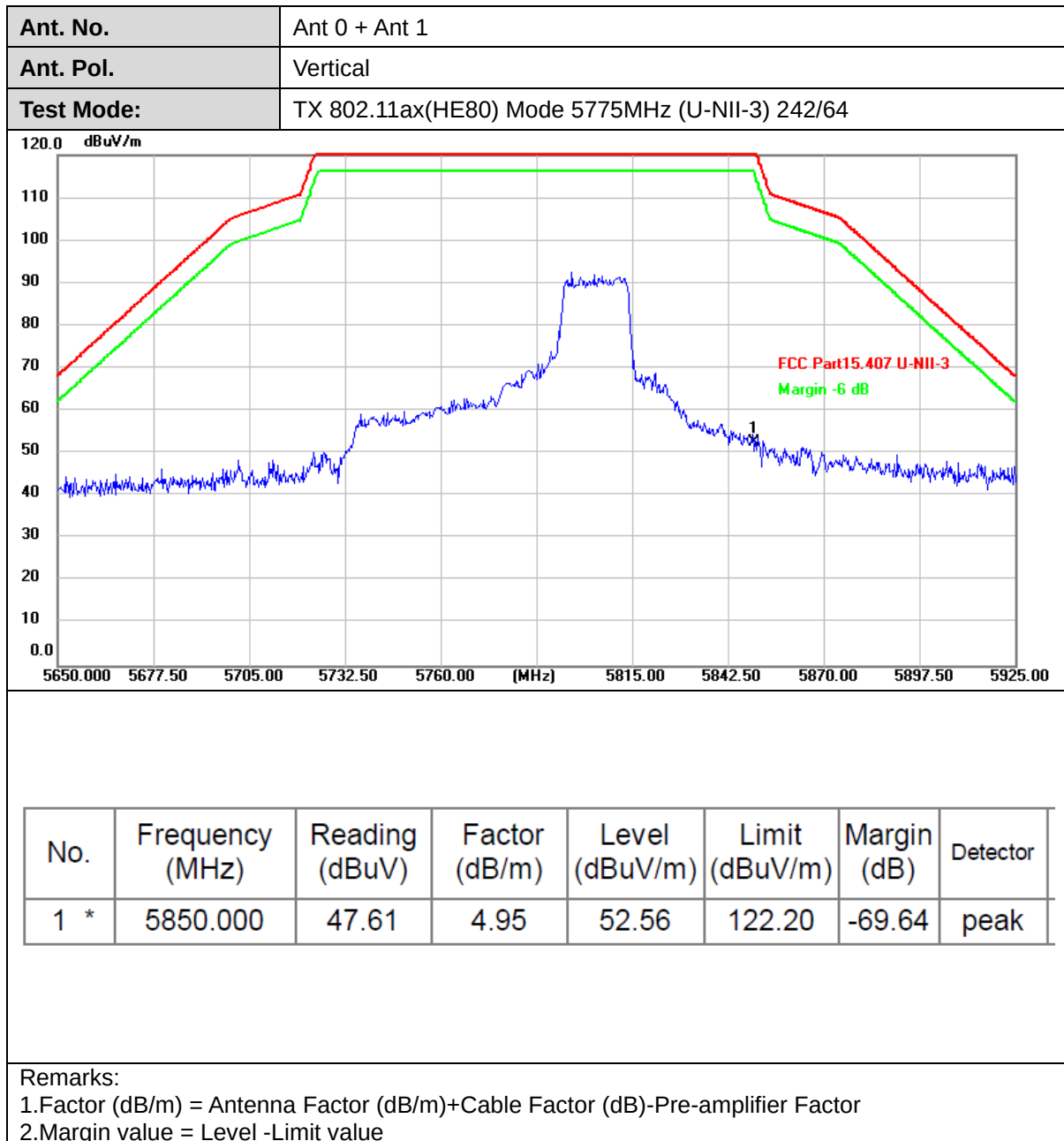


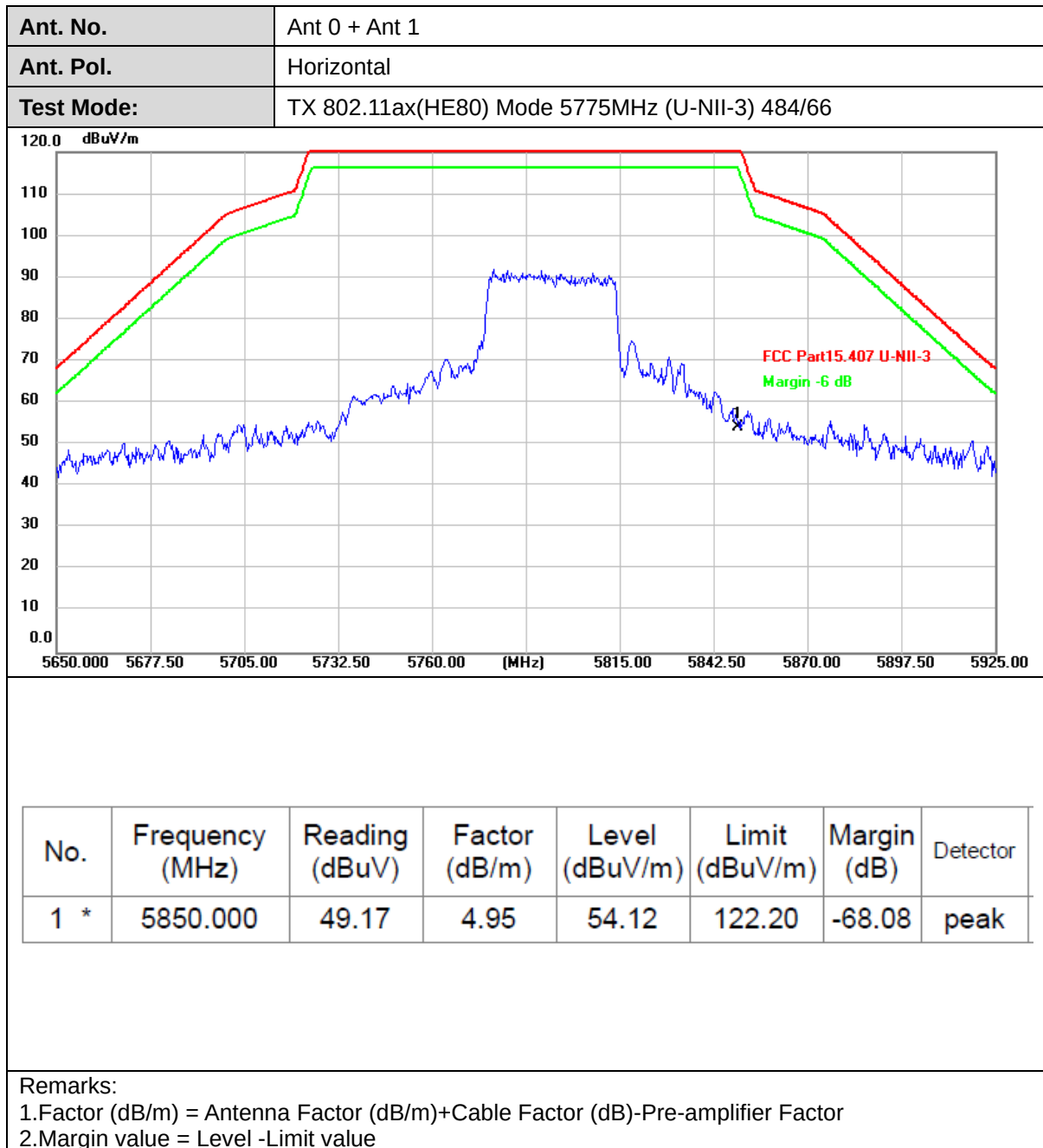


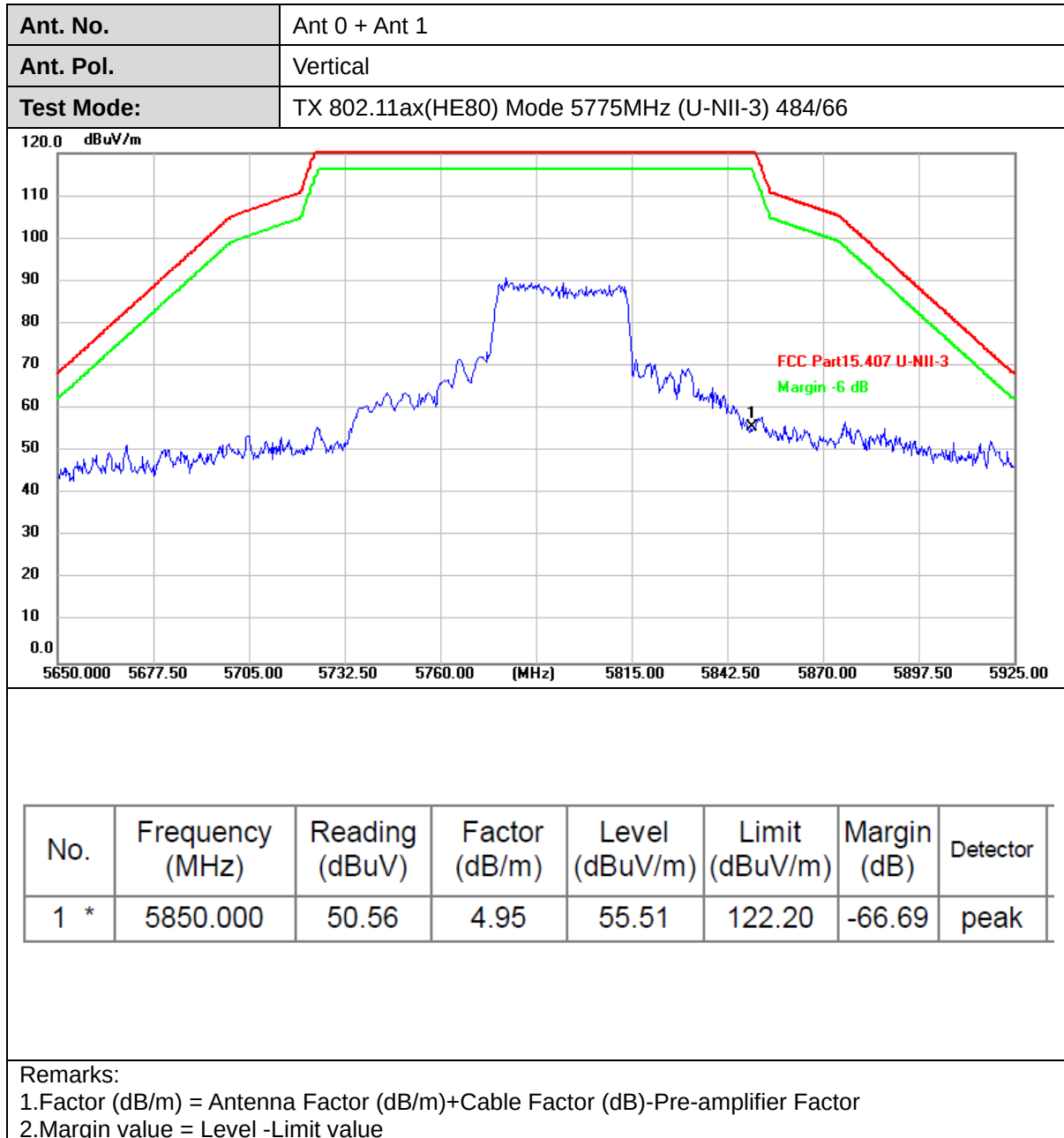


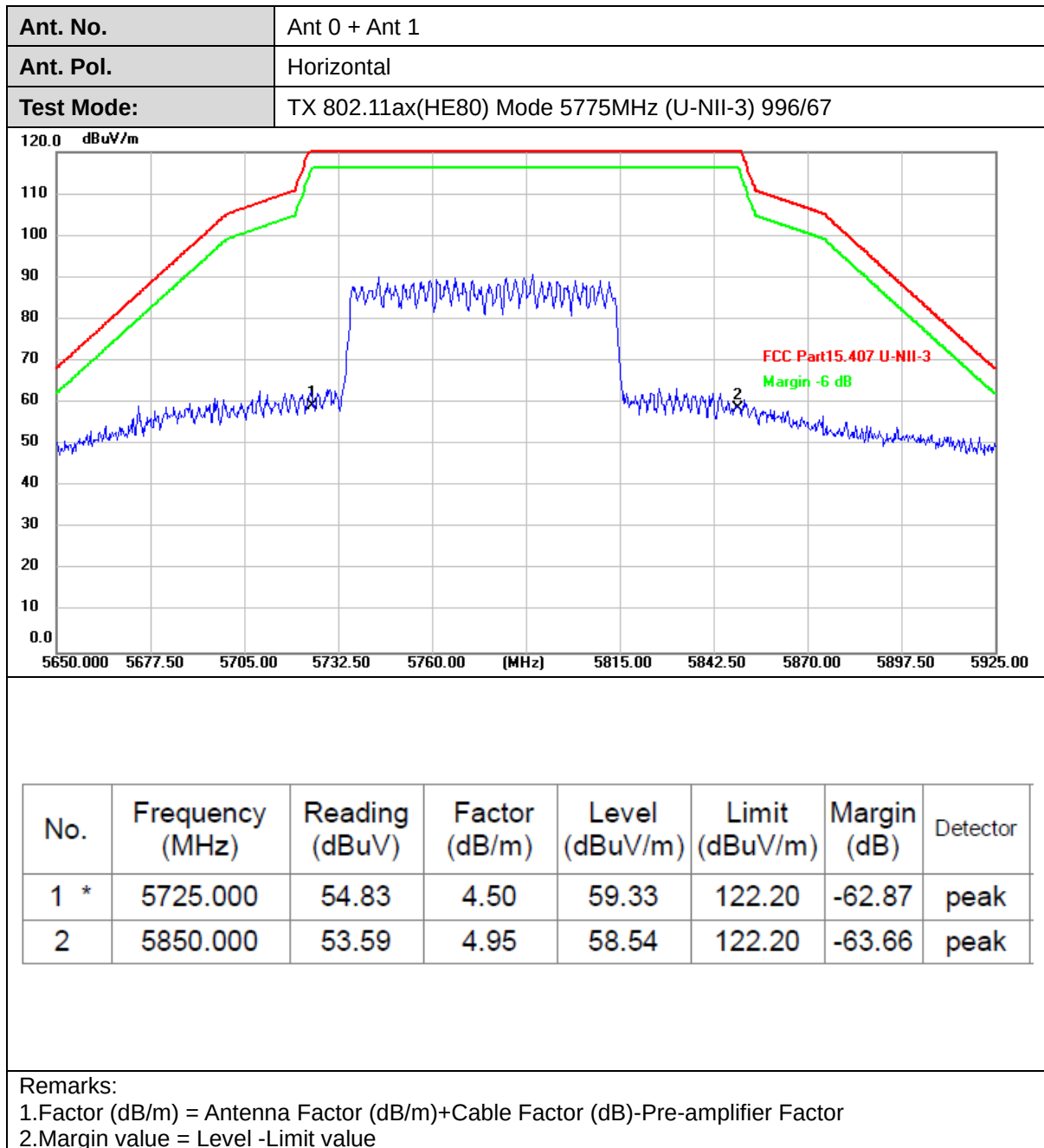


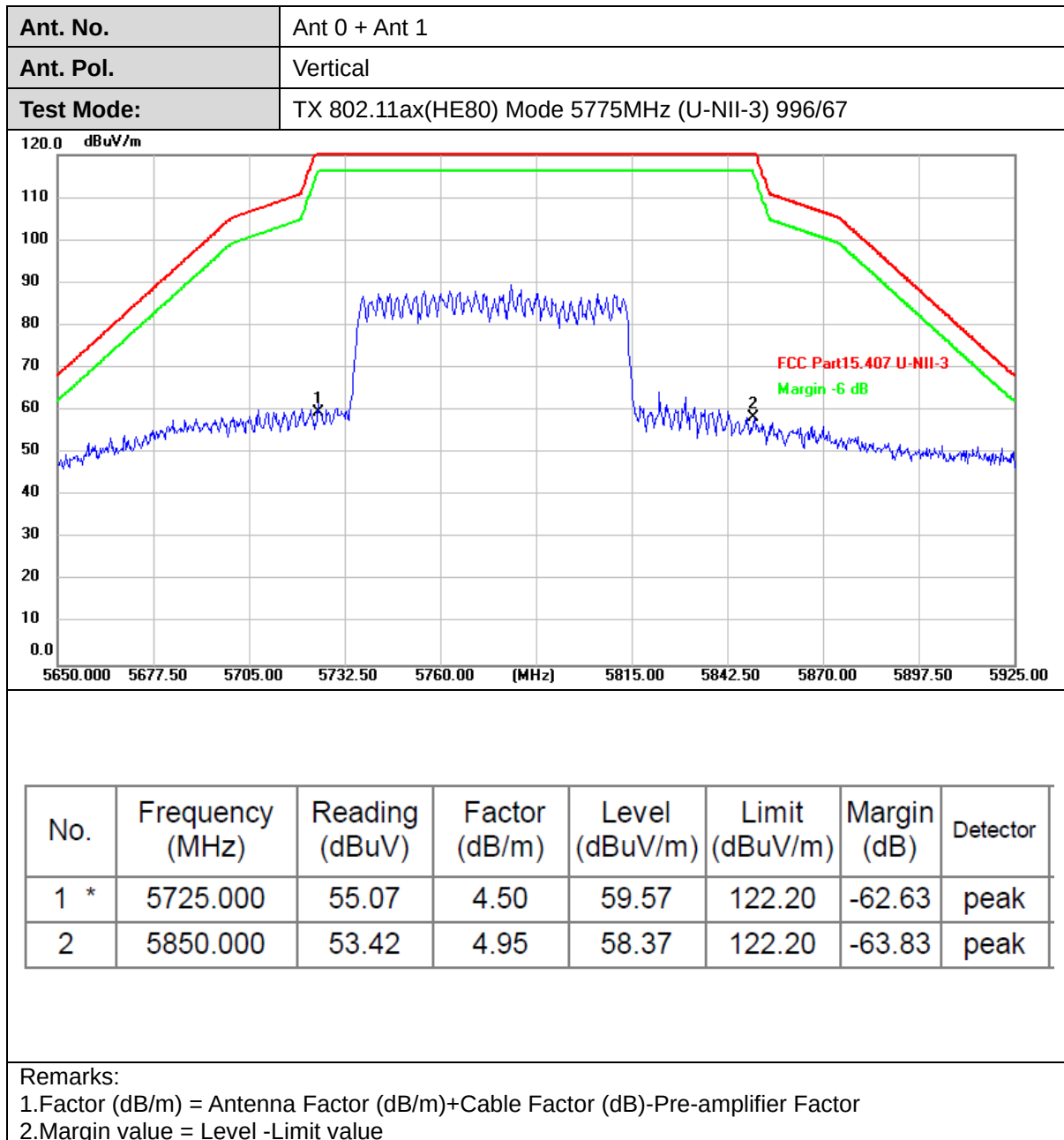














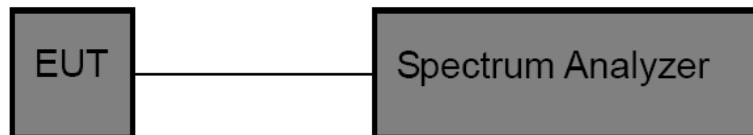
3.4. Bandwidth

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	16.801	23.91
			1	16.824	20.73
	40		0	16.793	21.25
			1	16.859	21.55
	48		0	16.874	21.75
			1	16.869	23.82
IEEE 802.11n_20	36		0	17.910	22.89
			1	17.853	21.93
	40		0	17.913	21.51
			1	17.846	24.04
	48		0	17.917	21.85
			1	17.860	21.86
IEEE 802.11n_40	38		0	36.330	49.45
	46		1	36.190	38.88
			0	36.210	39.21
			1	36.129	38.91
IEEE 802.11ac_20	36		0	17.936	21.37
			1	17.878	21.49
	40		0	17.970	22.21
			1	17.872	29.45
	48		0	17.916	21.53
			1	17.809	21.31
IEEE 802.11ac_40	38		0	36.243	39.64
	46		1	36.139	39.04
			0	36.215	39.59
			1	36.162	39.28
IEEE 802.11ac_80	42		0	75.654	81.15
IEEE 802.11ax_20	36		242RU61	0	18.914
		1		18.953	21.89
		26RU4	0	17.214	19.01
			1	17.144	18.24
		52RU38	0	17.364	20.32
			1	17.016	18.26
		106RU53	0	18.302	24.04
			1	18.251	20.07
	40	242RU61	0	18.959	23.03
			1	18.928	21.22
		26RU4	0	17.364	19.00
			1	17.090	18.00
		52RU38	0	17.182	19.62
			1	17.204	18.48
		106RU53	0	18.351	22.06
			1	18.310	20.74
	48	242RU61	0	18.969	23.02
			1	18.969	21.16
		26RU4	0	17.331	18.84
			1	17.103	18.12
		52RU38	0	17.388	20.24
			1	17.212	18.51
		106RU53	0	18.368	21.58
			1	18.228	22.13
IEEE 802.11ax_40	38	484RU65	0	37.617	42.59
			1	37.613	39.63
		26RU8	0	19.882	21.44
			1	20.136	21.89
		52RU40	0	19.420	22.11
			1	19.147	23.33

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		106RU54	0	19.095	24.53
			1	18.700	23.47
		242RU61	0	20.212	32.26
			1	19.042	28.05
	46	484RU65	0	37.554	40.05
			1	37.564	42.53
		26RU8	0	19.930	20.78
			1	20.249	21.14
		52RU40	0	19.452	22.50
			1	19.392	22.72
		106RU54	0	19.221	23.41
			1	18.795	24.02
		242RU61	0	19.594	27.81
			1	18.998	25.20
IEEE 802.11ax_80	42	996RU67	0	77.233	81.84
			1	77.094	80.67
		26RU17	0	20.465	21.79
			1	21.138	20.43
		52RU44	0	19.817	23.74
			1	20.139	21.43
		106RU56	0	19.052	23.55
			1	18.924	23.55
		242RU62	0	37.608	58.02
			1	37.415	44.36
		484RU65	0	38.483	77.23
			1	37.918	56.44



Mode	Channel	RU & Index	Ant.	99% BW (MHz)	26 dB Bandwidth (MHz)
IEEE 802.11a	149	N/A	0	16.800	23.34
			1	16.816	21.49
	157		0	16.837	23.97
			1	16.931	26.93
	165		0	16.797	23.63
			1	16.806	25.09
IEEE 802.11n_20	149		0	17.932	25.43
			1	17.831	21.31
	157		0	17.947	25.75
			1	17.910	25.76
	165		0	17.919	26.78
			1	17.888	22.39
IEEE 802.11n_40	151		0	36.265	48.64
			1	36.225	39.41
	159		0	36.280	51.19
			1	36.085	45.19
IEEE 802.11ac_20	149		0	17.893	21.45
			1	17.781	21.16
	157		0	17.921	21.55
			1	17.775	21.19
	165		0	17.891	21.67
			1	17.748	21.30
IEEE 802.11ac_40	151		0	36.227	39.65
			1	36.186	38.95
	159		0	36.204	39.55
			1	36.091	39.07
IEEE 802.11ac_80	155		0	75.621	86.53
			1	75.555	80.19
IEEE 802.11ax_20	149	242RU61	0	18.952	24.45
			1	18.983	21.23
		26RU4	0	17.244	18.84
			1	16.506	18.02
		52RU38	0	17.346	19.61
			1	17.247	18.77
		106RU53	0	18.300	21.16
			1	18.275	21.17
	157	242RU61	0	18.964	26.31
			1	18.891	21.78
		26RU4	0	17.295	19.15
			1	17.103	18.00
		52RU38	0	17.350	19.52
			1	17.272	18.40
		106RU53	0	18.383	21.01
			1	18.289	21.52
	165	242RU61	0	18.938	22.92
			1	18.931	20.94
		26RU4	0	17.212	18.76
			1	17.086	18.00
		52RU38	0	17.467	19.73
			1	17.176	18.31
		106RU53	0	18.352	20.91
			1	18.251	23.02
IEEE 802.11ax_40	151	484RU65	0	37.658	45.87
			1	37.572	42.31
		26RU8	0	19.709	20.88
			1	19.980	22.52
		52RU40	0	19.471	21.88
			1	19.252	22.70
		106RU54	0	18.990	24.42
			1	19.091	24.87

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	159	242RU61	0	19.460	32.41
			1	19.282	29.28
		484RU65	0	37.630	45.54
			1	37.560	49.12
		26RU8	0	19.586	21.23
			1	20.056	21.88
		52RU40	0	19.411	21.61
			1	19.628	22.60
		106RU54	0	19.048	24.82
			1	18.991	23.82
IEEE 802.11ax_80	155	242RU61	0	19.703	30.51
			1	19.466	34.45
		996RU67	0	77.247	81.54
			1	77.261	81.57
		26RU17	0	21.355	21.49
			1	20.780	22.14
		52RU44	0	20.493	22.27
			1	20.344	23.03
		106RU56	0	19.542	24.98
			1	19.182	21.97
		242RU62	0	37.661	42.18
			1	37.699	56.90
		484RU65	0	38.277	77.51
			1	40.578	78.07

**6dB Bandwidth**

Mode	Channel	RU & Index	Ant.	6 dB Bandwidth (MHz)	Limit (MHz)	Result
IEEE 802.11a	149	N/A	0	16.29	0.5	PASS
			1	15.99		PASS
	157		0	16.30		PASS
			1	16.33		PASS
	165		0	16.30		PASS
			1	16.29		PASS
IEEE 802.11n_20	149		0	17.06		PASS
			1	17.29		PASS
	157		0	17.25		PASS
			1	16.40		PASS
	165		0	15.40		PASS
			1	17.50		PASS
IEEE 802.11n_40	151		0	35.55		PASS
			1	36.27		PASS
	159		0	35.15		PASS
			1	35.36		PASS
IEEE 802.11ac_20	149		0	17.54		PASS
			1	17.59		PASS
	157		0	17.53		PASS
			1	17.57		PASS
	165		0	17.52		PASS
			1	17.55		PASS
IEEE 802.11ac_40	151		0	35.18		PASS
			1	36.04		PASS
	159		0	35.37		PASS
			1	35.79		PASS
IEEE 802.11ac_80	155		0	75.18		PASS
			1	75.41		PASS
IEEE 802.11ax_20	149	242RU61	0	17.37		PASS
			1	18.13		PASS
		26RU4	0	2.629		PASS
			1	2.662		PASS
		52RU38	0	12.52		PASS
			1	12.55		PASS
		106RU53	0	17.45		PASS
			1	17.09		PASS
	157	242RU61	0	18.01		PASS
			1	18.15		PASS
		26RU4	0	2.624		PASS
			1	2.608		PASS
		52RU38	0	15.05		PASS
			1	14.99		PASS
		106RU53	0	17.10		PASS
			1	17.15		PASS
	165	242RU61	0	17.63		PASS
			1	16.29		PASS
		26RU4	0	2.676		PASS
			1	2.639		PASS
		52RU38	0	15.01		PASS
			1	15.04		PASS
		106RU53	0	17.50		PASS
			1	17.08		PASS
IEEE 802.11ax_40	151	484RU65	0	37.60		PASS
			1	37.33		PASS
		26RU8	0	2.016		PASS
			1	2.060		PASS
		52RU40	0	15.98		PASS
			1	17.23		PASS
		106RU54	0	17.31		PASS
			1	17.27		PASS

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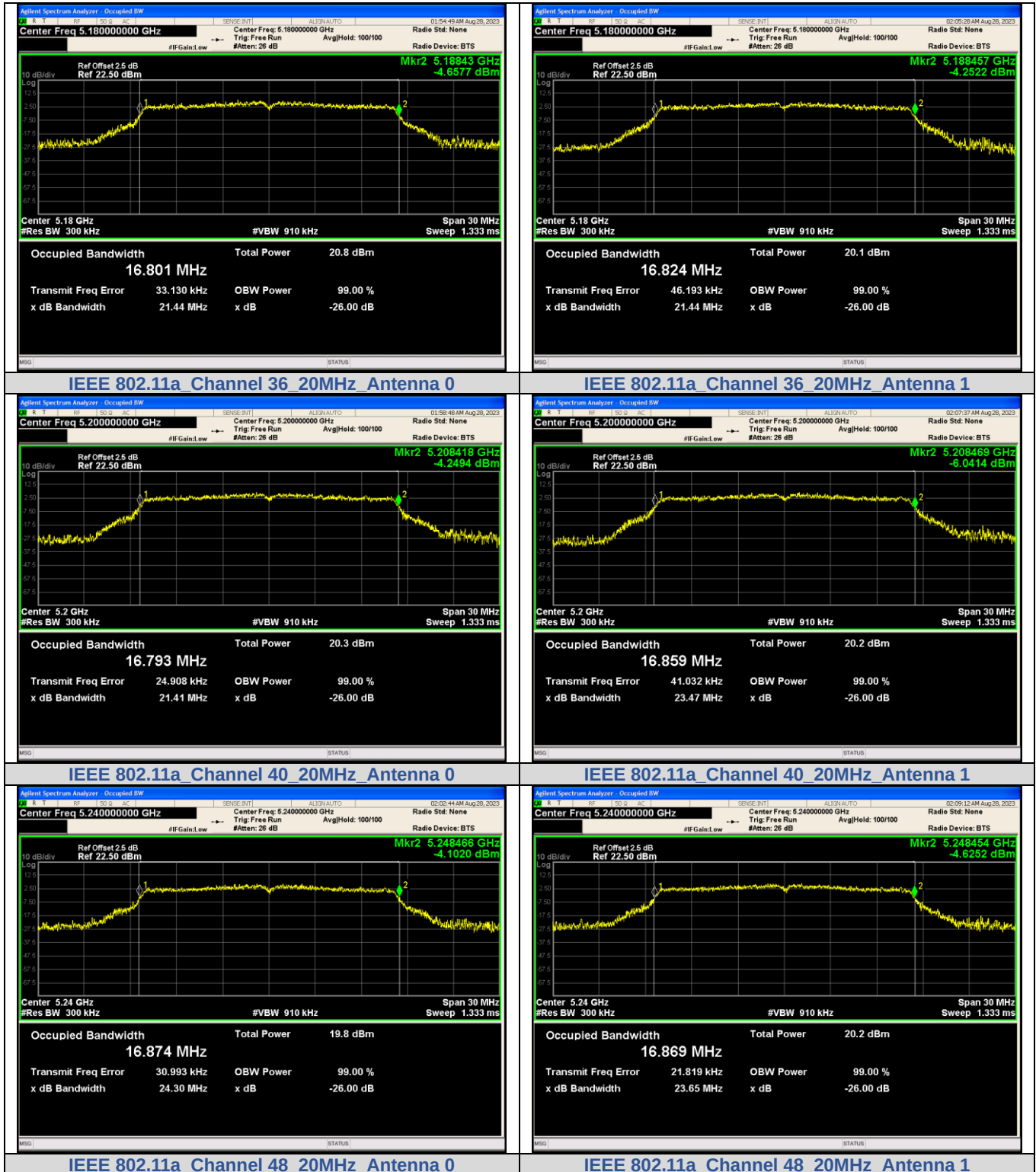
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	159	242RU61	0	18.44	PASS
			1	18.52	PASS
		484RU65	0	37.71	PASS
			1	36.91	PASS
		26RU8	0	1.990	PASS
			1	2.022	PASS
		52RU40	0	16.00	PASS
			1	17.24	PASS
		106RU54	0	17.32	PASS
			1	17.28	PASS
IEEE 802.11ax_80	155	242RU61	0	18.13	PASS
			1	18.54	PASS
		996RU67	0	77.34	PASS
			1	77.36	PASS
		26RU17	0	2.051	PASS
			1	2.052	PASS
		52RU44	0	16.15	PASS
			1	16.19	PASS
		106RU56	0	16.22	PASS
			1	16.21	PASS
		242RU62	0	36.43	PASS
			1	36.51	PASS
		484RU65	0	36.80	PASS
			1	37.08	PASS



99% Bandwidth:



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