

1. Effective (Isotropic) Radiated Power Output Data

1.1 Test Result

1.1.1 BandV_ERP

Band: V								
ENV	Mode		Frequency (MHz)	Conducted Power (dBm)	Gain (dBi)	ERP (dBm)		Verdict
	Network	Subset				Result	Limit	
NTNV	RMC	12.2kbps RMC	826.4	23.20	2.72	23.77	<=38.45	Pass
			836.6	23.40	2.72	23.97	<=38.45	Pass
			846.6	23.42	2.72	23.99	<=38.45	Pass

Note1: ERP=Conducted Power+Antenna Gain-2.15

2. Frequency Stability

2.1 Test Result

2.1.1 BandV

Band: V							
Network	Frequency (MHz)	Temp. (°C)	Voltage (VDC)	Freq. Error (Hz)	Freq. vs. Rated (ppm)		Verdict
					Result	Limit	
RMC	826.4	20	3.4	4.246	0.0051	-2.5 to 2.5	Pass
			3.8	4.378	0.0053	-2.5 to 2.5	Pass
			4.2	4.856	0.0059	-2.5 to 2.5	Pass
		-30	3.8	4.063	0.0049	-2.5 to 2.5	Pass
		-20	3.8	4.956	0.0060	-2.5 to 2.5	Pass
		-10	3.8	4.492	0.0054	-2.5 to 2.5	Pass
		0	3.8	3.987	0.0048	-2.5 to 2.5	Pass
		10	3.8	4.042	0.0049	-2.5 to 2.5	Pass
		30	3.8	4.911	0.0059	-2.5 to 2.5	Pass
		40	3.8	3.928	0.0048	-2.5 to 2.5	Pass
		50	3.8	3.512	0.0042	-2.5 to 2.5	Pass
	836.6	20	3.4	-0.426	-0.0005	-2.5 to 2.5	Pass
			3.8	-0.508	-0.0006	-2.5 to 2.5	Pass
			4.2	-0.854	-0.0010	-2.5 to 2.5	Pass
		-30	3.8	-0.634	-0.0008	-2.5 to 2.5	Pass
		-20	3.8	-0.708	-0.0008	-2.5 to 2.5	Pass
		-10	3.8	-0.170	-0.0002	-2.5 to 2.5	Pass
		0	3.8	-0.288	-0.0003	-2.5 to 2.5	Pass
		10	3.8	-0.637	-0.0008	-2.5 to 2.5	Pass
		30	3.8	-0.473	-0.0006	-2.5 to 2.5	Pass
		40	3.8	-0.834	-0.0010	-2.5 to 2.5	Pass
		50	3.8	-0.124	-0.0001	-2.5 to 2.5	Pass
	846.6	20	3.4	-5.130	-0.0061	-2.5 to 2.5	Pass
			3.8	-4.691	-0.0055	-2.5 to 2.5	Pass
			4.2	-4.535	-0.0054	-2.5 to 2.5	Pass
		-30	3.8	-4.704	-0.0056	-2.5 to 2.5	Pass
		-20	3.8	-4.241	-0.0050	-2.5 to 2.5	Pass
		-10	3.8	-5.051	-0.0060	-2.5 to 2.5	Pass
		0	3.8	-5.014	-0.0059	-2.5 to 2.5	Pass
		10	3.8	-4.783	-0.0056	-2.5 to 2.5	Pass
		30	3.8	-4.291	-0.0051	-2.5 to 2.5	Pass
		40	3.8	-5.278	-0.0062	-2.5 to 2.5	Pass
		50	3.8	-4.880	-0.0058	-2.5 to 2.5	Pass

3. 99% & 26dB Bandwidth

3.1 Test Result

3.1.1 BandV_OBW

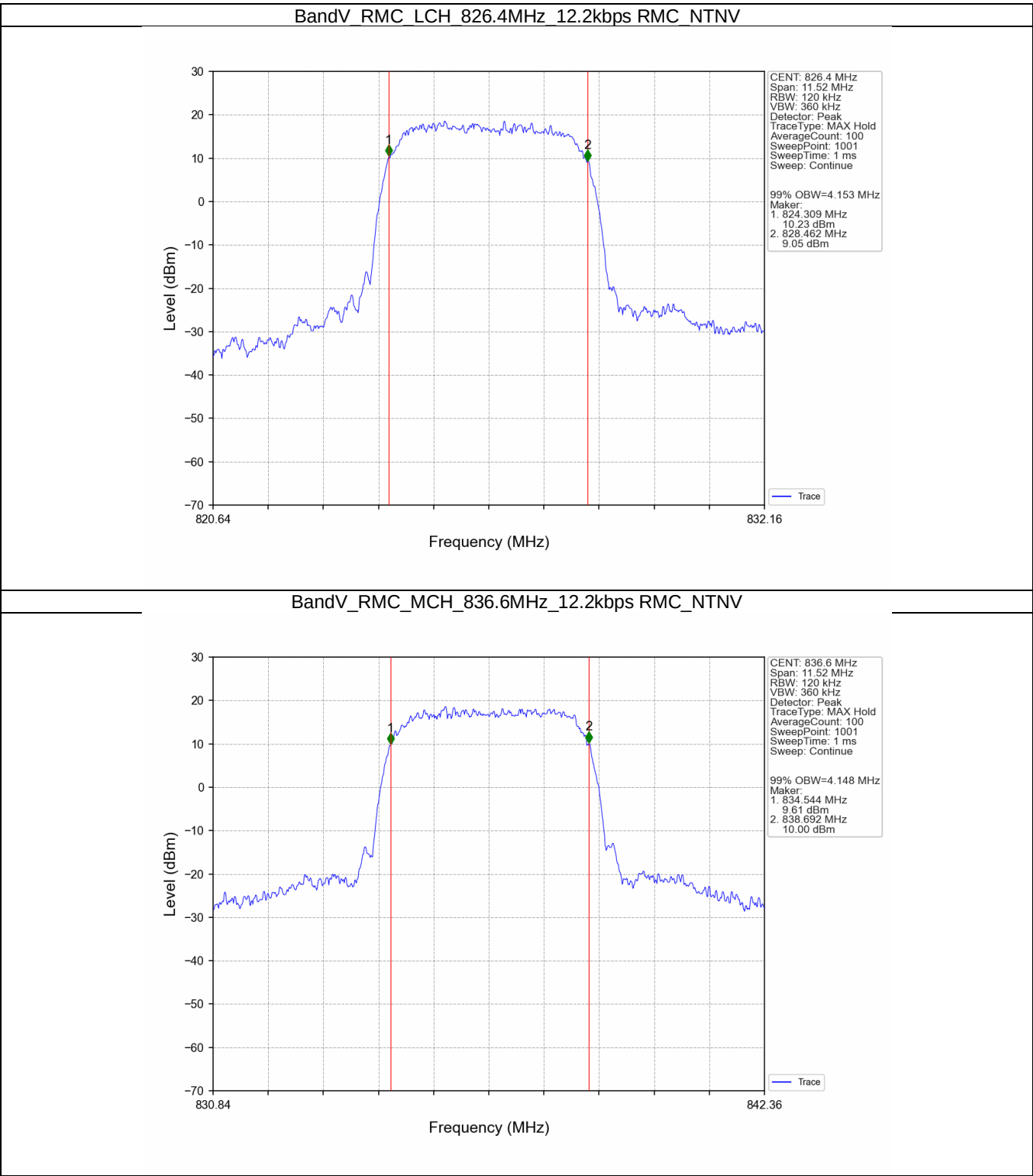
Band: V						
ENV	Mode		Frequency (MHz)	99% Occupied Bandwidth (MHz)		Verdict
	Network	Subset		Result	Limit	
NTNV	RMC	12.2kbps RMC	826.4	4.153	/	Pass
			836.6	4.148	/	Pass
			846.6	4.128	/	Pass

3.1.2 BandV_XDB

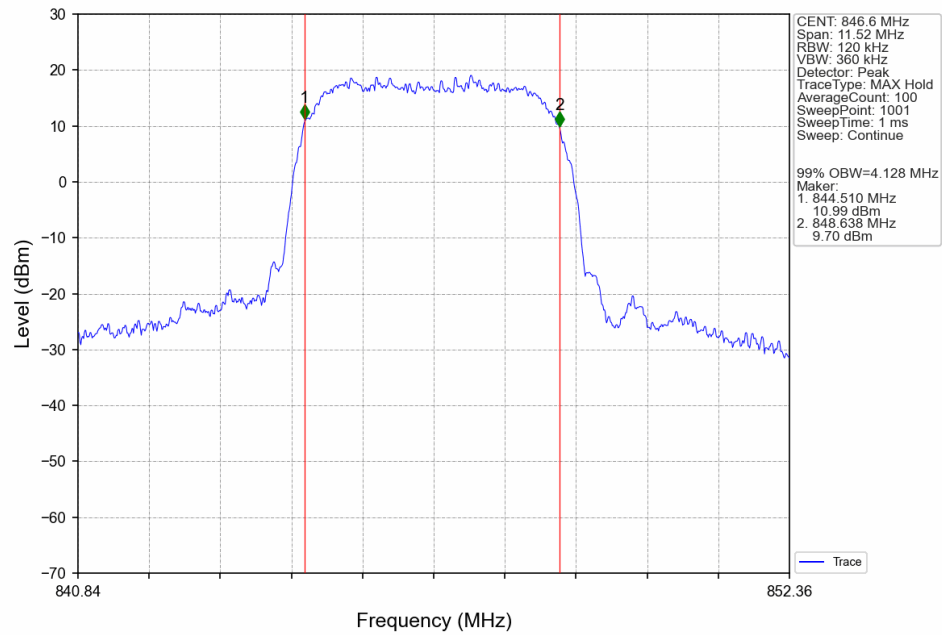
Band: V						
ENV	Mode		Frequency (MHz)	26dB Bandwidth (MHz)		Verdict
	Network	Subset		Result	Limit	
NTNV	RMC	12.2kbps RMC	826.4	4.745	/	Pass
			836.6	4.735	/	Pass
			846.6	4.726	/	Pass

3.2 Test Graph

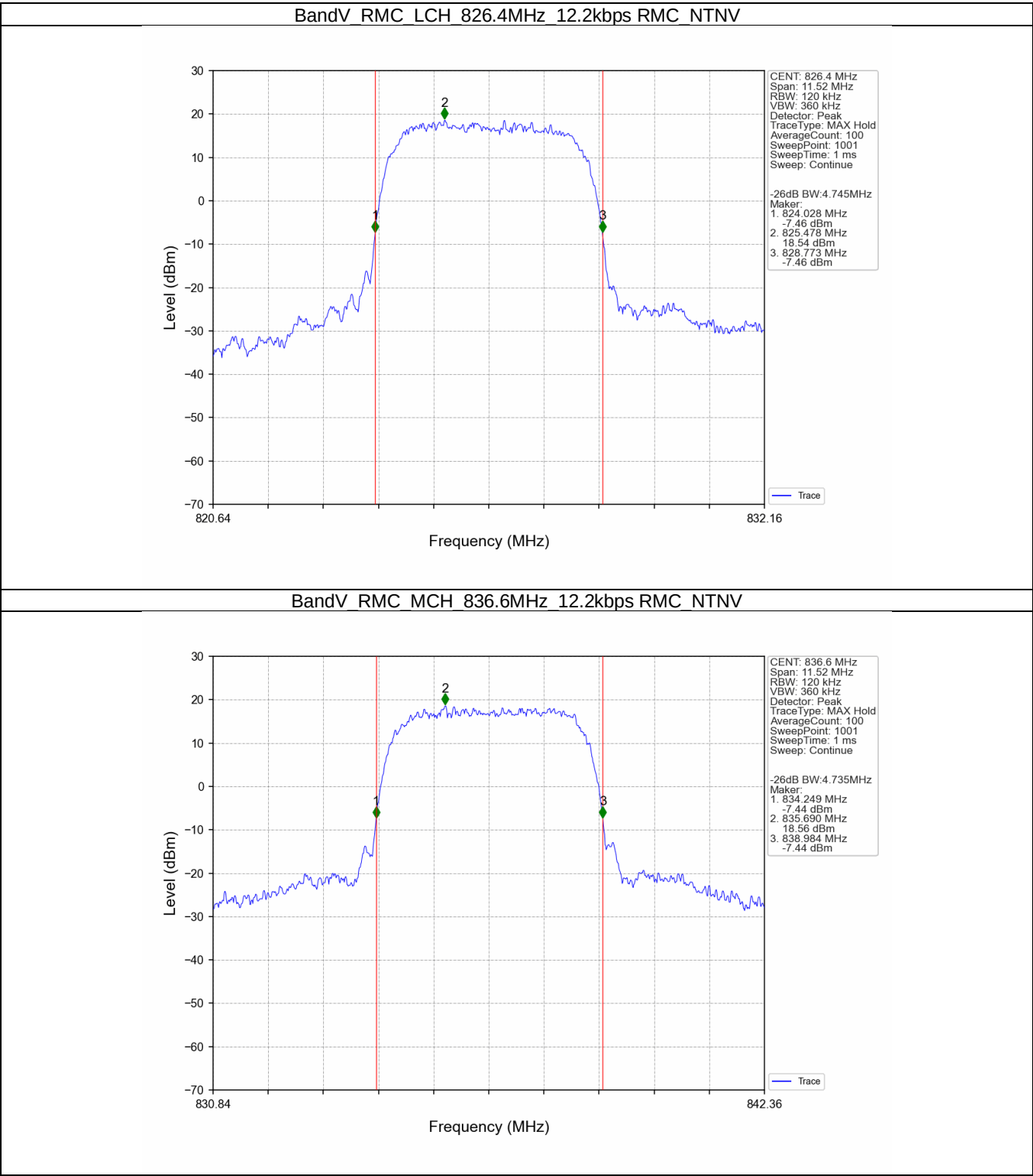
3.2.1 BandV_OBW



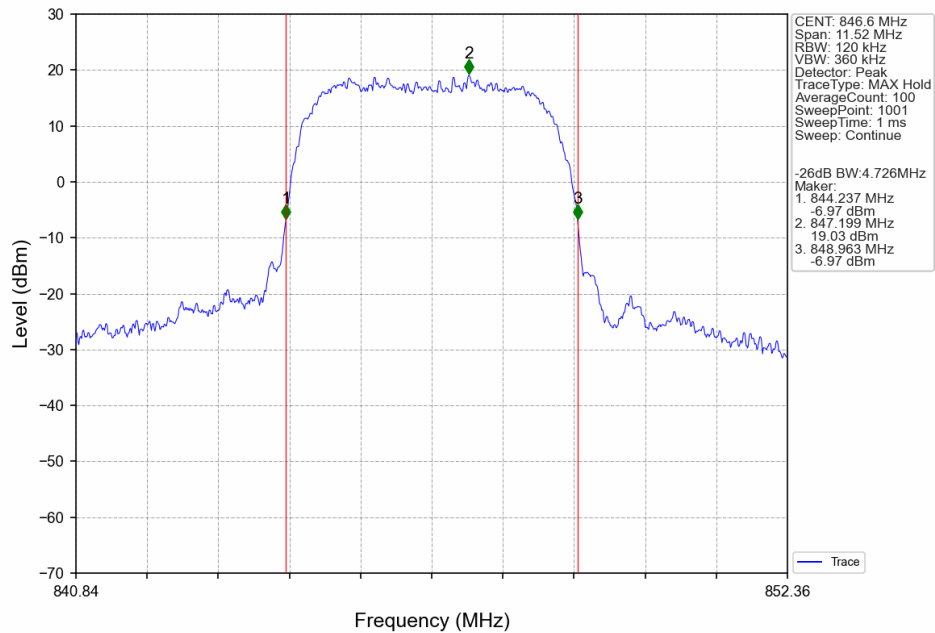
BandV_RMC_HCH_846.6MHz_12.2kbps_RMC_NTNV



3.2.2 BandV_XDB



BandV_RMC_HCH_846.6MHz_12.2kbps_RMC_NTNV



4. Peak-Average Ratio

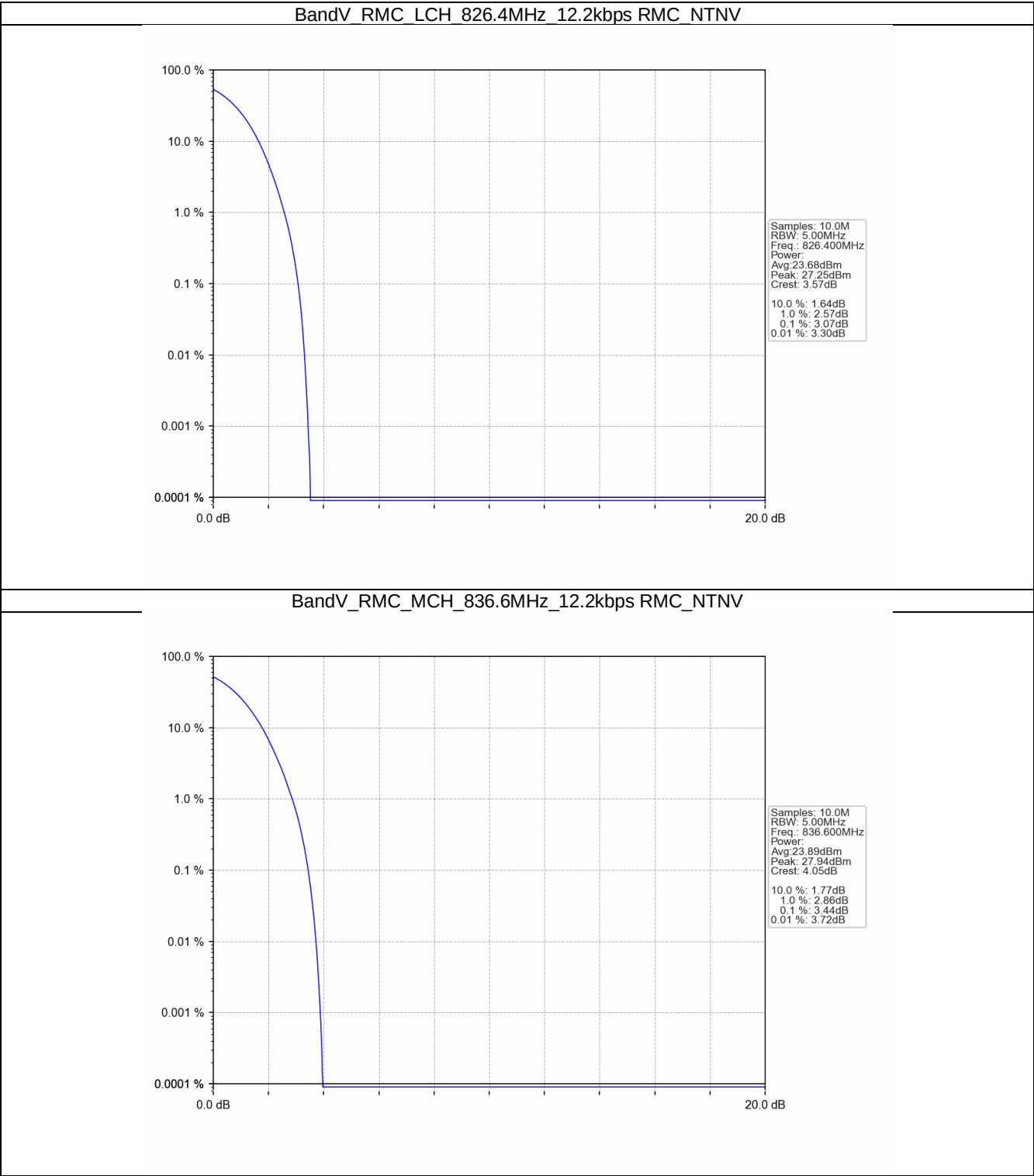
4.1 Test Result

4.1.1 BandV

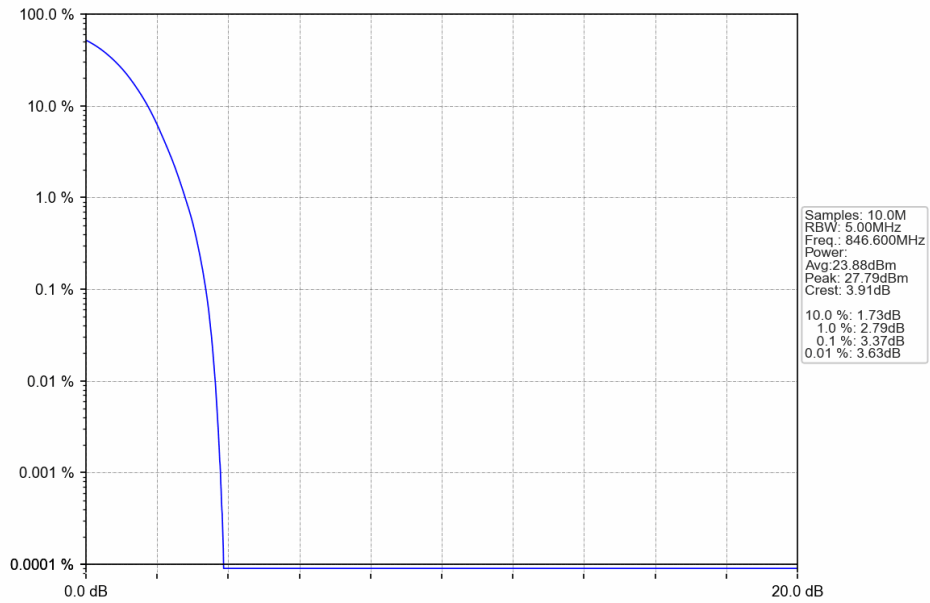
Band: V						
ENV	Mode		Frequency (MHz)	Peak-Average Ratio (dB)		Verdict
	Network	Subset		Result	Limit	
NTNV	RMC	12.2kbps RMC	826.4	3.07	<=13	Pass
			836.6	3.44	<=13	Pass
			846.6	3.37	<=13	Pass

4.2 Test Graph

4.2.1 BandV



BandV_RMC_HCH_846.6MHz_12.2kbps_RMC_NTNV



5. Spurious Emission & Band Edges

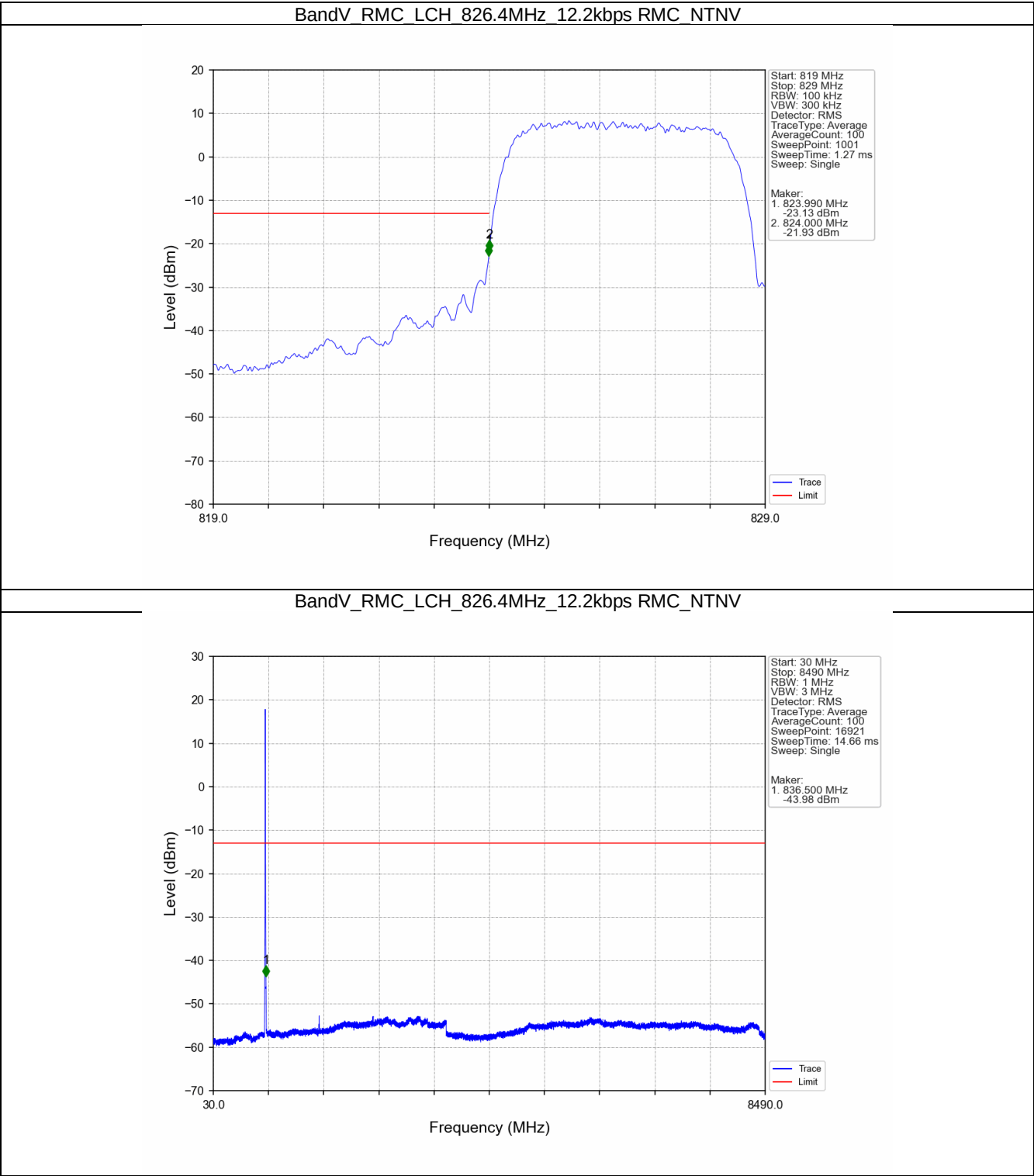
5.1 Test Result

5.1.1 BandV

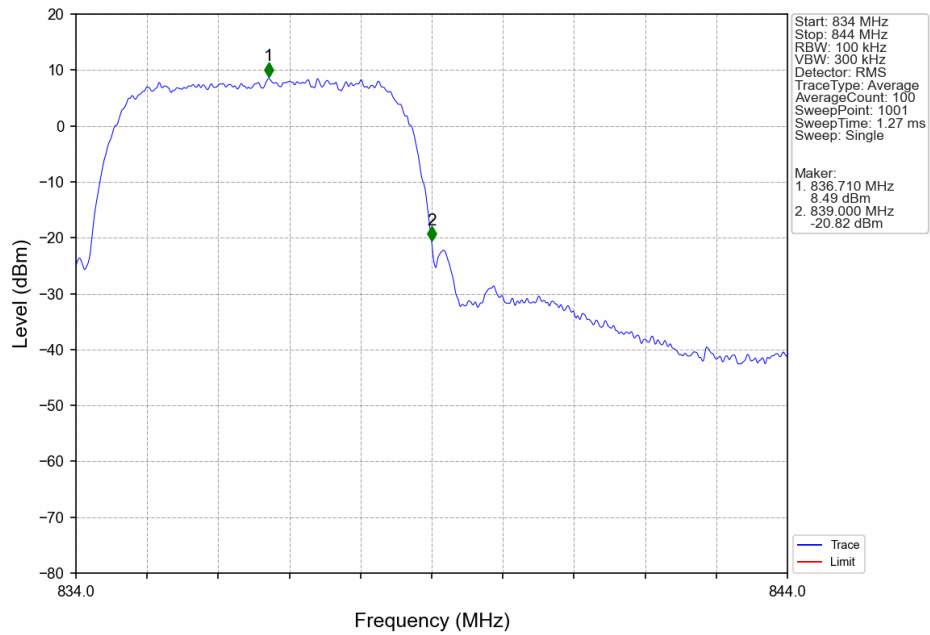
Band: V						
ENV	Mode		Frequency (MHz)	Spurious Emission		Verdict
	Network	Subset		Result	Limit	
NTNV	RMC	12.2kbps RMC	826.4	Refer To Test Graph		Pass
			836.6	Refer To Test Graph		Pass
			846.6	Refer To Test Graph		Pass

5.2 Test Graph

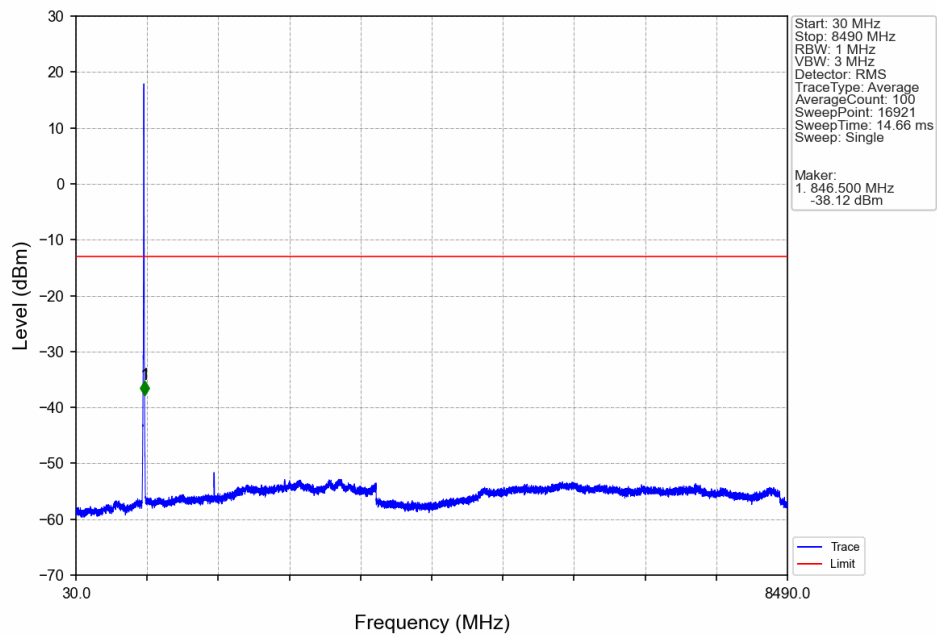
5.2.1 BandV



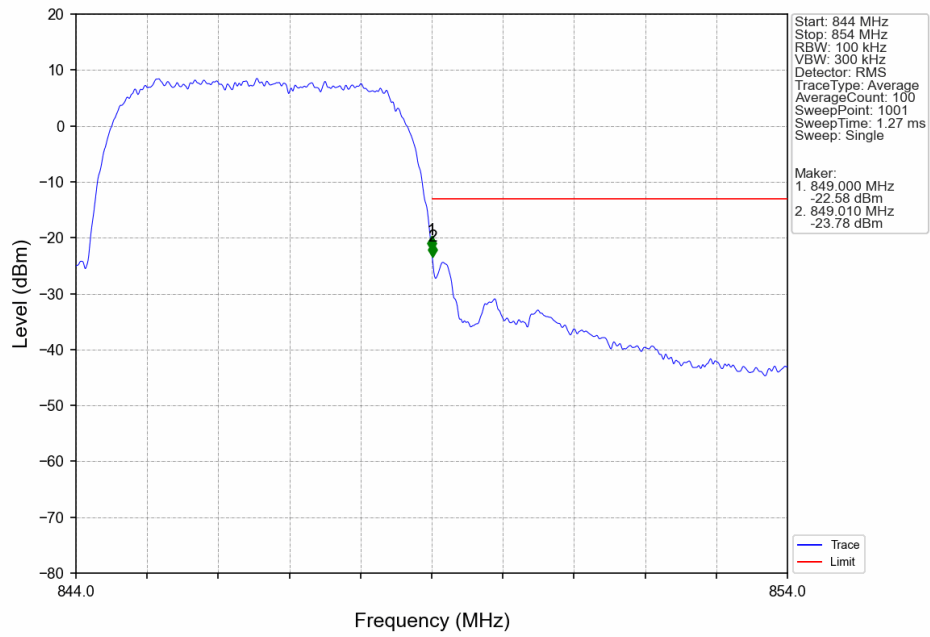
BandV_RMC_MCH_836.6MHz_12.2kbps_RMC_NTNV



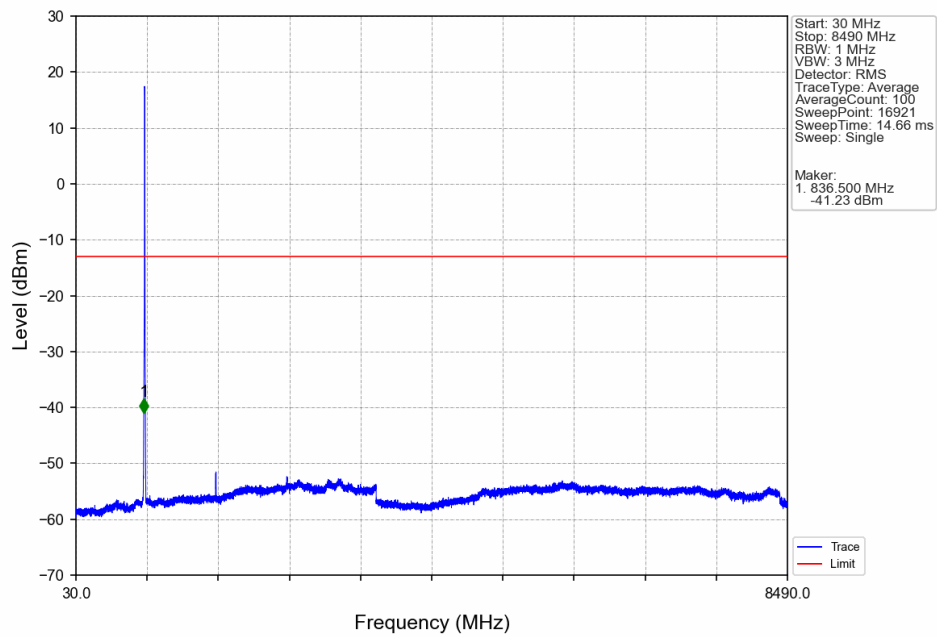
BandV_RMC_MCH_836.6MHz_12.2kbps_RMC_NTNV



BandV_RMC_HCH_846.6MHz_12.2kbps_RMC_NTNV



BandV_RMC_HCH_846.6MHz_12.2kbps_RMC_NTNV



6. Field Strength of Spurious Radiation

Test Band = WCDMA Band V _ TM1

Test Channel = Low

Final Data List								
NO.	Frequency [MHz]	Reading [dBμV]	Factor [dB]	AF[dB/m]	Level [dBm]	Limit [dBm]	Margin [dB]	Polarity
1	1651.4286	71.51	-48.22	25.45	-46.52	-13.00	33.52	Horizontal
2	2034.2857	45.77	-47.83	26.27	-71.06	-13.00	58.06	Horizontal
3	2476	53.42	-47.31	27.15	-62.00	-13.00	49.00	Horizontal
4	3310.2857	50.84	-46.67	28.41	-62.68	-13.00	49.68	Horizontal
5	4732.5714	43.33	-45.75	30.97	-66.71	-13.00	53.71	Horizontal
6	6244	43.11	-44.77	33.23	-63.69	-13.00	50.69	Horizontal

Final Data List								
NO.	Frequency [MHz]	Reading [dBμV]	Factor [dB]	AF[dB/m]	Level [dBm]	Limit [dBm]	Margin [dB]	Polarity
1	1650.8571	64.97	-48.22	25.45	-53.06	-13.00	40.06	Vertical
2	2369.7143	45.78	-47.47	26.94	-70.01	-13.00	57.01	Vertical
3	3013.1429	44.65	-46.55	28.11	-69.05	-13.00	56.05	Vertical
4	3309.1429	47.81	-46.67	28.41	-65.71	-13.00	52.71	Vertical
5	4279.4286	43.13	-45.82	30.07	-67.88	-13.00	54.88	Vertical
6	5437.7143	43.58	-45.03	32.19	-64.53	-13.00	51.53	Vertical

Test Band = WCDMA Band V _ TM1
Test Channel = Mid

Final Data List								
NO.	Frequency [MHz]	Reading [dBμV]	Factor [dB]	AF[dB/m]	Level [dBm]	Limit [dBm]	Margin [dB]	Polarity
1	1674.8571	68.28	-48.19	25.47	-49.70	-13.00	36.70	Horizontal
2	2183.4286	46.01	-47.68	26.57	-70.37	-13.00	57.37	Horizontal
3	2506.2857	58.97	-47.25	27.21	-56.33	-13.00	43.33	Horizontal
4	3119.4286	44.36	-46.66	28.22	-69.34	-13.00	56.34	Horizontal
5	3342.2857	50.64	-46.62	28.44	-62.80	-13.00	49.80	Horizontal
6	4452.5714	43.81	-45.74	30.49	-66.70	-13.00	53.70	Horizontal

Final Data List								
NO.	Frequency [MHz]	Reading [dBμV]	Factor [dB]	AF[dB/m]	Level [dBm]	Limit [dBm]	Margin [dB]	Polarity
1	1674.2857	62.51	-48.19	25.47	-55.47	-13.00	42.47	Vertical
2	2506.2857	51.48	-47.25	27.21	-63.82	-13.00	50.82	Vertical
3	3342.2857	47.75	-46.62	28.44	-65.69	-13.00	52.69	Vertical
4	4404	43.39	-45.88	30.37	-67.38	-13.00	54.38	Vertical
5	6037.1429	43.17	-44.53	32.53	-64.09	-13.00	51.09	Vertical
6	7673.7143	41.30	-43.24	36.64	-60.56	-13.00	47.56	Vertical

Test Band = WCDMA Band V _ TM1
Test Channel = High

Final Data List								
NO.	Frequency [MHz]	Reading [dBμV]	Factor [dB]	AF[dB/m]	Level [dBm]	Limit [dBm]	Margin [dB]	Polarity
1	1694.8571	65.38	-48.17	25.49	-52.55	-13.00	39.55	Horizontal
2	2537.1429	52.84	-47.14	27.27	-62.30	-13.00	49.30	Horizontal
3	3383.4286	53.10	-46.56	28.48	-60.24	-13.00	47.24	Horizontal
4	4750.2857	43.76	-45.72	31.00	-66.22	-13.00	53.22	Horizontal
5	5168.5714	42.99	-45.11	31.70	-65.68	-13.00	52.68	Horizontal
6	6058.8571	43.76	-44.58	32.60	-63.48	-13.00	50.48	Horizontal

Final Data List								
NO.	Frequency [MHz]	Reading [dBμV]	Factor [dB]	AF[dB/m]	Level [dBm]	Limit [dBm]	Margin [dB]	Polarity
1	1228.5714	46.69	-48.44	25.11	-71.90	-13.00	58.90	Vertical
2	1691.4286	61.17	-48.17	25.49	-56.77	-13.00	43.77	Vertical
3	2536.5714	48.92	-47.15	27.27	-66.22	-13.00	53.22	Vertical
4	3383.4286	50.24	-46.56	28.48	-63.10	-13.00	50.10	Vertical
5	5340	43.63	-45.16	32.01	-64.78	-13.00	51.78	Vertical
6	6295.4286	42.75	-44.62	33.40	-63.73	-13.00	50.73	Vertical

Remark:

1) The field strength is calculated by adding the Antenna Factor, Cable Factor & AMP. The basic equation with a sample calculation is as follows:

AF = Antenna Factor(dB/m)

Factor = Cable Factor(dB) - Preamplifier (dB)

Level = Reading Level + AF + Factor -95.26

Margin = Limit – Level

---End of Attachment---