

# 1. Effective (Isotropic) Radiated Power Output Data

## 1.1 Test Result

### 1.1.1 Band5\_ERP

Band: 5								
ENV	Mode		Frequency (MHz)	Conducted Power (dBm)	Gain (dBi)	ERP (dBm)		Verdict
	Network	Subset				Result	Limit	
NTNV	RMC	12.2kbps RMC	826.4	23.73	-6.00	15.58	<=38.45	Pass
			836.6	23.67	-6.00	15.52	<=38.45	Pass
			846.6	23.53	-6.00	15.38	<=38.45	Pass

Note1: ERP=Conducted Power+Antenna Gain-2.15

# 2. Frequency Stability

## 2.1 Test Result

### 2.1.1 Band5

Band: 5								
Network	Frequency (MHz)	Temp. (°C)	Voltage (VDC)	Freq. Error (Hz)	Freq. vs. Rated (ppm)		Verdict	
					Result	Limit		
RMC	826.4	20	3.6	-2.425	-0.0029	-2.5 to 2.5	Pass	
			3.88	-2.697	-0.0033	-2.5 to 2.5	Pass	
			4.53	-1.516	-0.0018	-2.5 to 2.5	Pass	
		-30	3.88	-0.494	-0.0006	-2.5 to 2.5	Pass	
			-20	3.88	-0.937	-0.0011	-2.5 to 2.5	Pass
				-10	3.88	-0.386	-0.0005	-2.5 to 2.5
		0	3.88	-1.745	-0.0021	-2.5 to 2.5	Pass	
			10	3.88	-1.094	-0.0013	-2.5 to 2.5	Pass
		30	3.88	-0.501	-0.0006	-2.5 to 2.5	Pass	
	40	3.88	-0.443	-0.0005	-2.5 to 2.5	Pass		
	50	3.88	-1.903	-0.0023	-2.5 to 2.5	Pass		
	836.6	20	3.6	-1.152	-0.0014	-2.5 to 2.5	Pass	
			3.88	-0.758	-0.0009	-2.5 to 2.5	Pass	
			4.53	-0.973	-0.0012	-2.5 to 2.5	Pass	
		-30	3.88	-1.080	-0.0013	-2.5 to 2.5	Pass	
			-20	3.88	-1.745	-0.0021	-2.5 to 2.5	Pass
				-10	3.88	-1.216	-0.0015	-2.5 to 2.5
		0	3.88	-1.044	-0.0012	-2.5 to 2.5	Pass	
			10	3.88	-1.009	-0.0012	-2.5 to 2.5	Pass
		30	3.88	-1.044	-0.0012	-2.5 to 2.5	Pass	
	40	3.88	-0.501	-0.0006	-2.5 to 2.5	Pass		
	50	3.88	-0.358	-0.0004	-2.5 to 2.5	Pass		
	846.6	20	3.6	-0.193	-0.0002	-2.5 to 2.5	Pass	
			3.88	1.302	0.0015	-2.5 to 2.5	Pass	
			4.53	0.000	0.0000	-2.5 to 2.5	Pass	
		-30	3.88	0.787	0.0009	-2.5 to 2.5	Pass	
			-20	3.88	0.608	0.0007	-2.5 to 2.5	Pass
				-10	3.88	-0.644	-0.0008	-2.5 to 2.5
		0	3.88	-1.152	-0.0014	-2.5 to 2.5	Pass	
			10	3.88	0.300	0.0004	-2.5 to 2.5	Pass
30		3.88	-0.386	-0.0005	-2.5 to 2.5	Pass		
40	3.88	-0.672	-0.0008	-2.5 to 2.5	Pass			
50	3.88	0.336	0.0004	-2.5 to 2.5	Pass			

### 3. 99% & 26dB Bandwidth

#### 3.1 Test Result

##### 3.1.1 Band5\_OBW

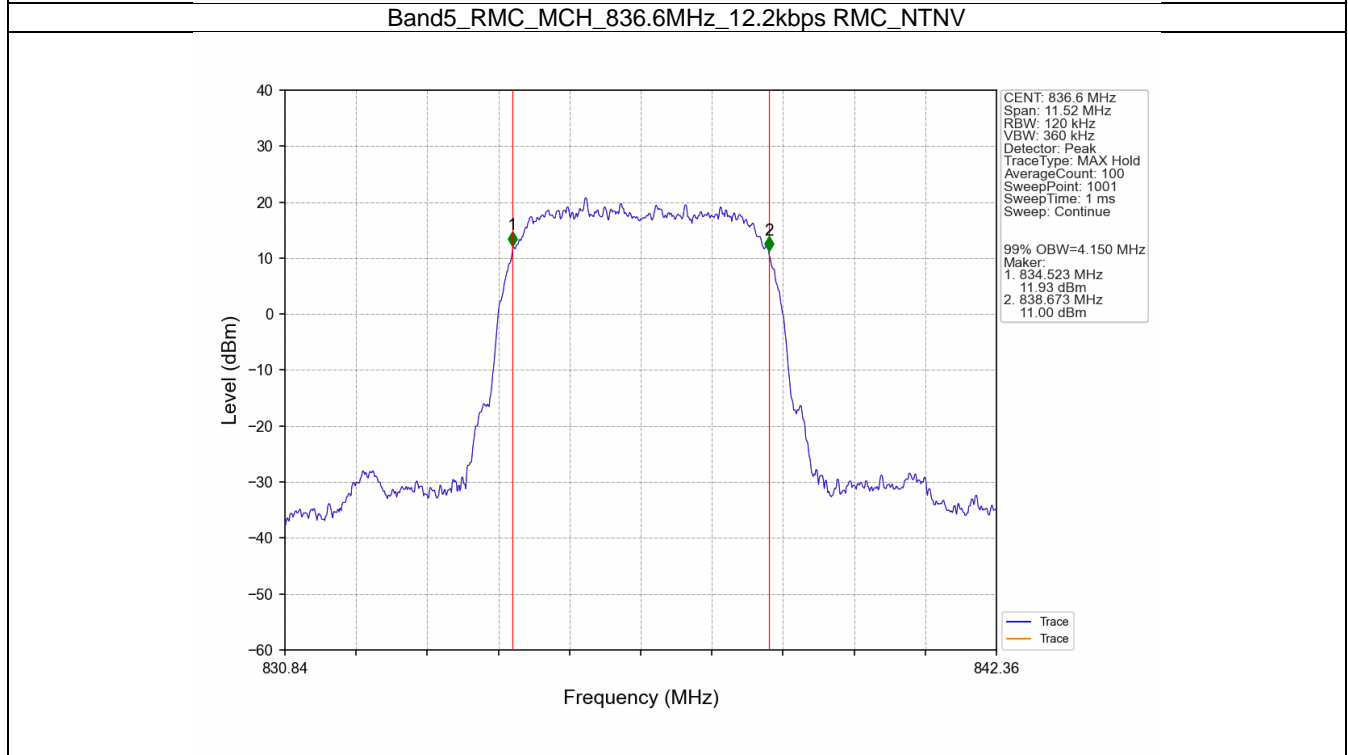
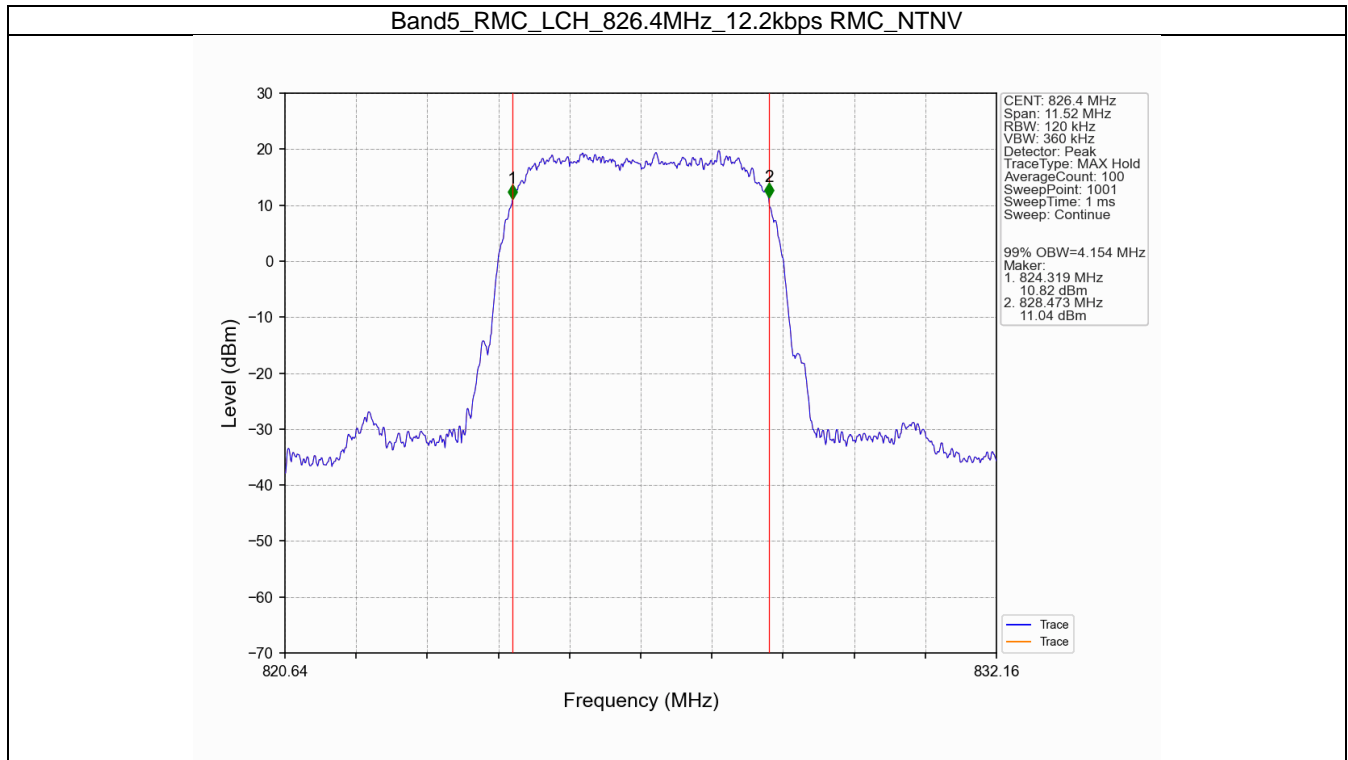
Band: 5						
ENV	Mode		Frequency (MHz)	99% Occupied Bandwidth (MHz)		Verdict
	Network	Subset		Result	Limit	
NTNV	RMC	12.2kbps RMC	826.4	4.154	/	Pass
			836.6	4.150	/	Pass
			846.6	4.150	/	Pass

##### 3.1.2 Band5\_XDB

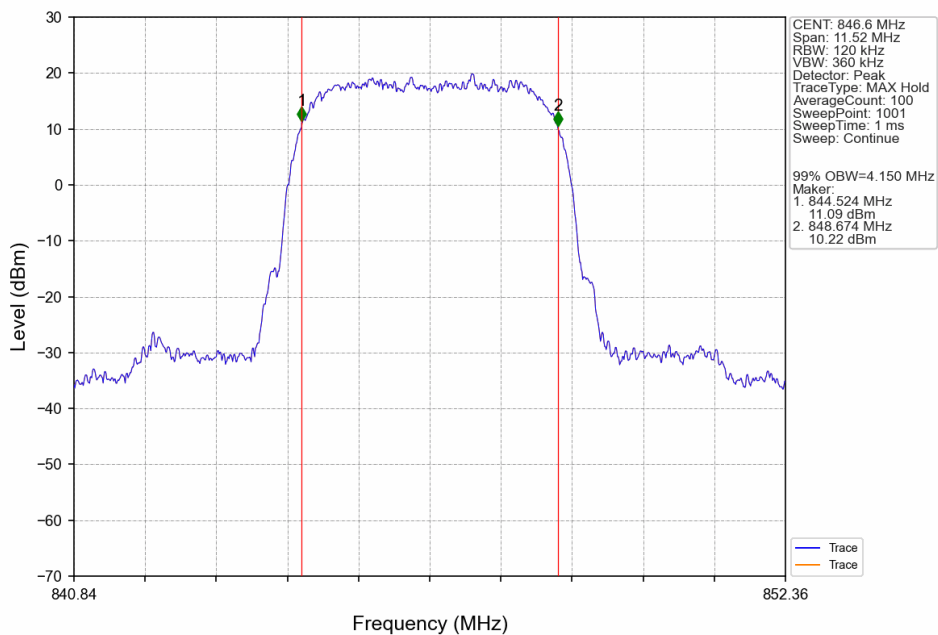
Band: 5						
ENV	Mode		Frequency (MHz)	26dB Bandwidth (MHz)		Verdict
	Network	Subset		Result	Limit	
NTNV	RMC	12.2kbps RMC	826.4	4.737	/	Pass
			836.6	4.705	/	Pass
			846.6	4.723	/	Pass

## 3.2 Test Graph

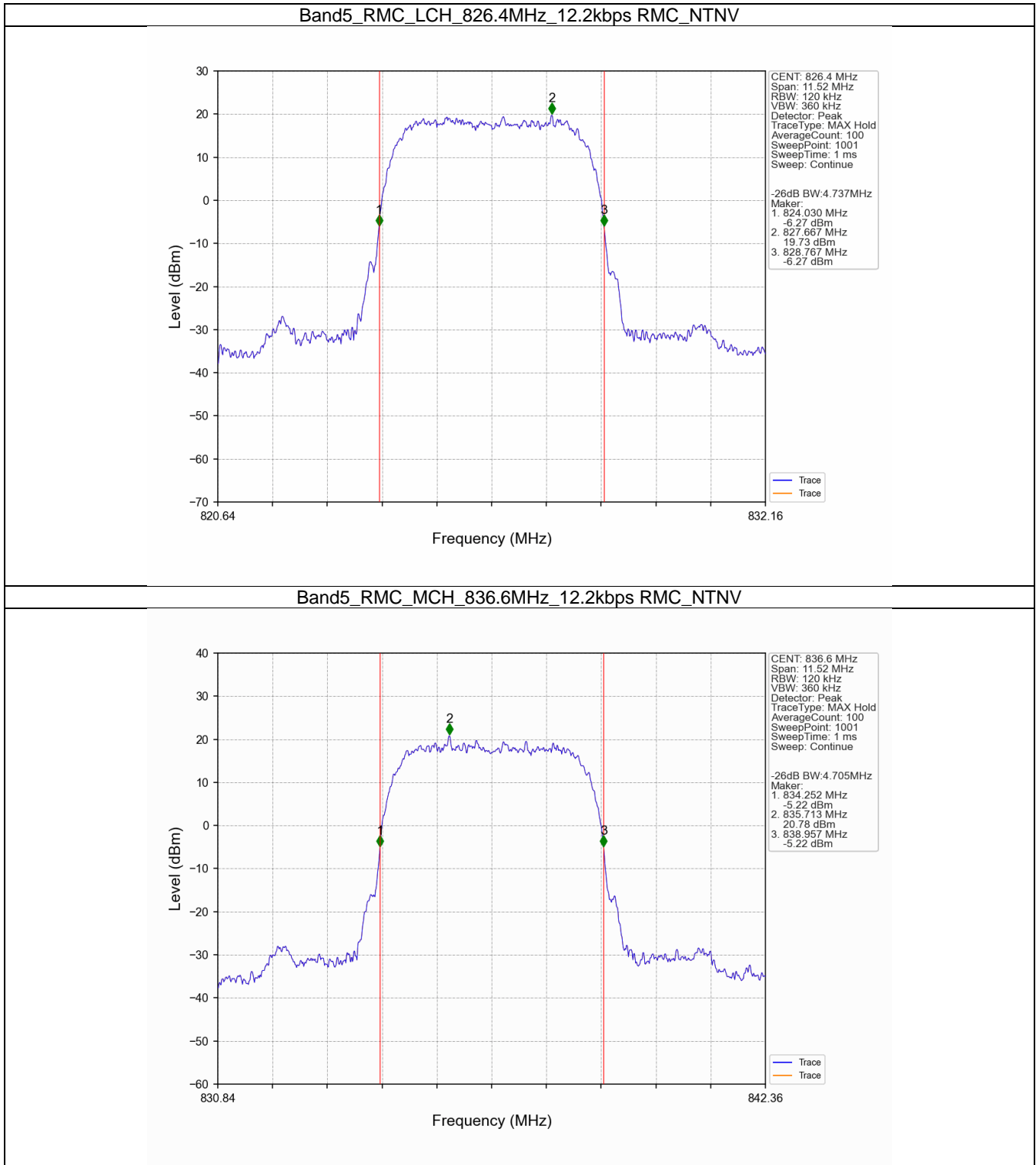
### 3.2.1 Band5\_OBW



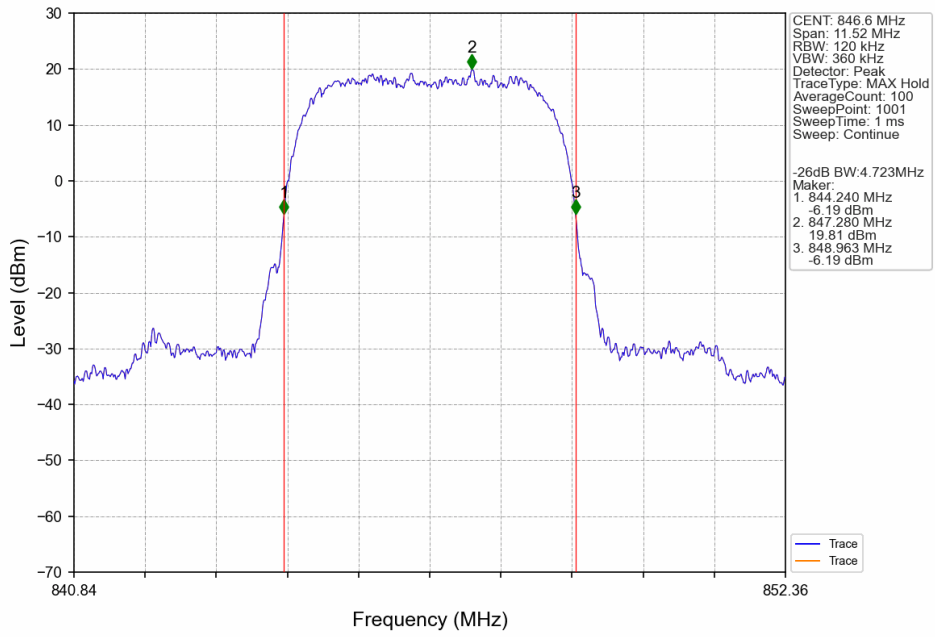
Band5\_RMC\_HCH\_846.6MHz\_12.2kbps RMC\_NTNV



### 3.2.2 Band5\_XDB



Band5\_RMC\_HCH\_846.6MHz\_12.2kbps RMC\_NTNV



## 4. Peak-Average Ratio

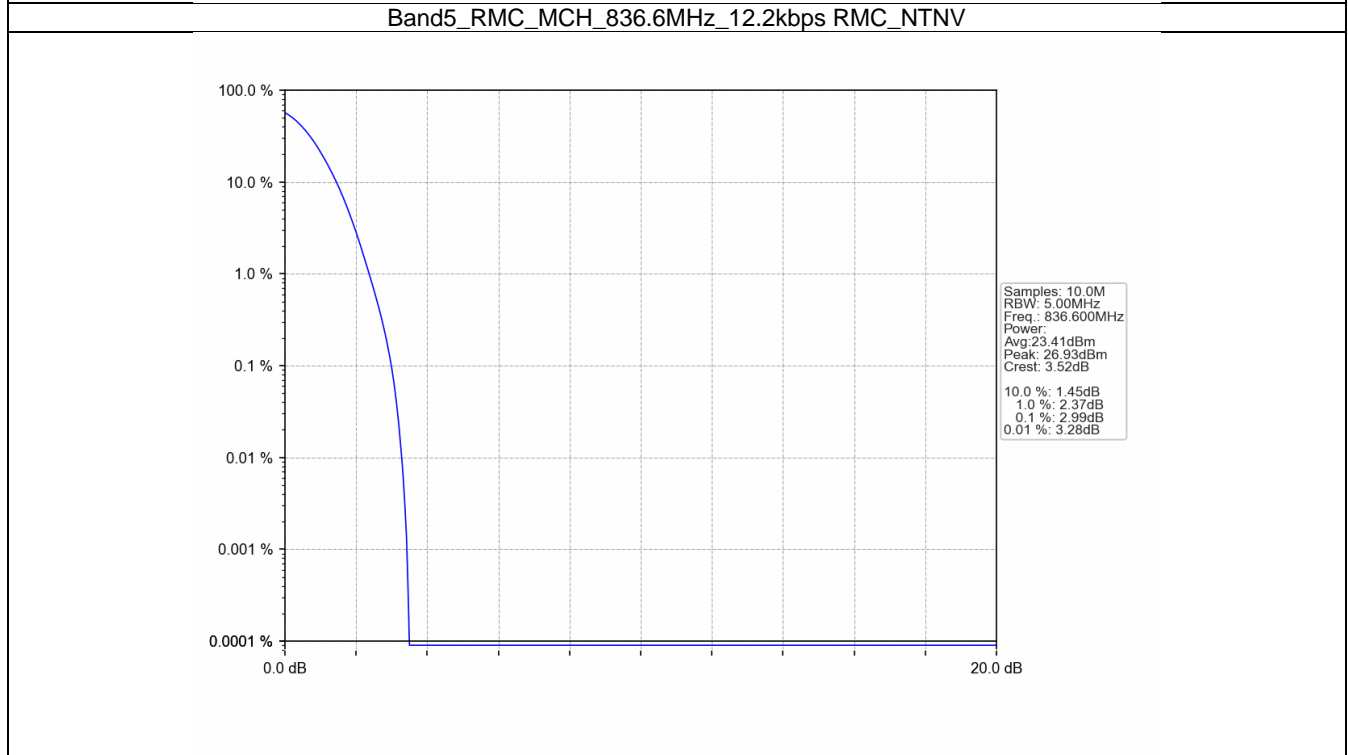
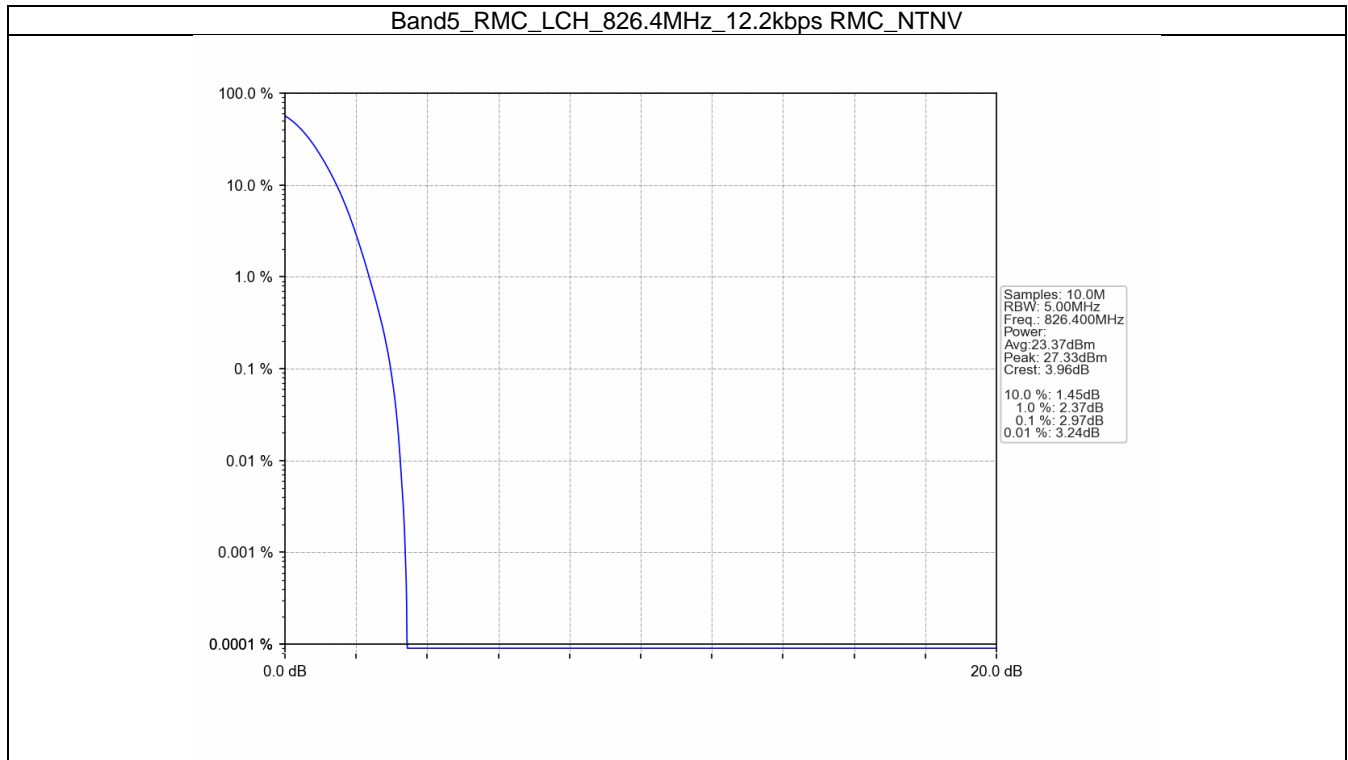
### 4.1 Test Result

#### 4.1.1 Band5

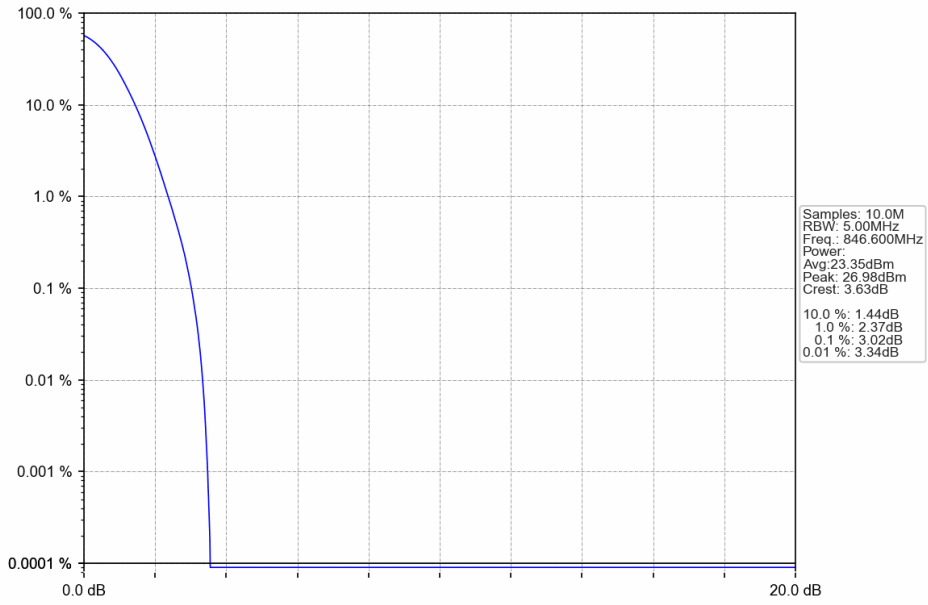
Band: 5						
ENV	Mode		Frequency (MHz)	Peak-Average Ratio (dB)		Verdict
	Network	Subset		Result	Limit	
NTNV	RMC	12.2kbps RMC	826.4	2.97	<=13	Pass
			836.6	2.99	<=13	Pass
			846.6	3.02	<=13	Pass

## 4.2 Test Graph

### 4.2.1 Band5



Band5\_RMC\_HCH\_846.6MHz\_12.2kbps RMC\_NTNV



## 5. Spurious Emission

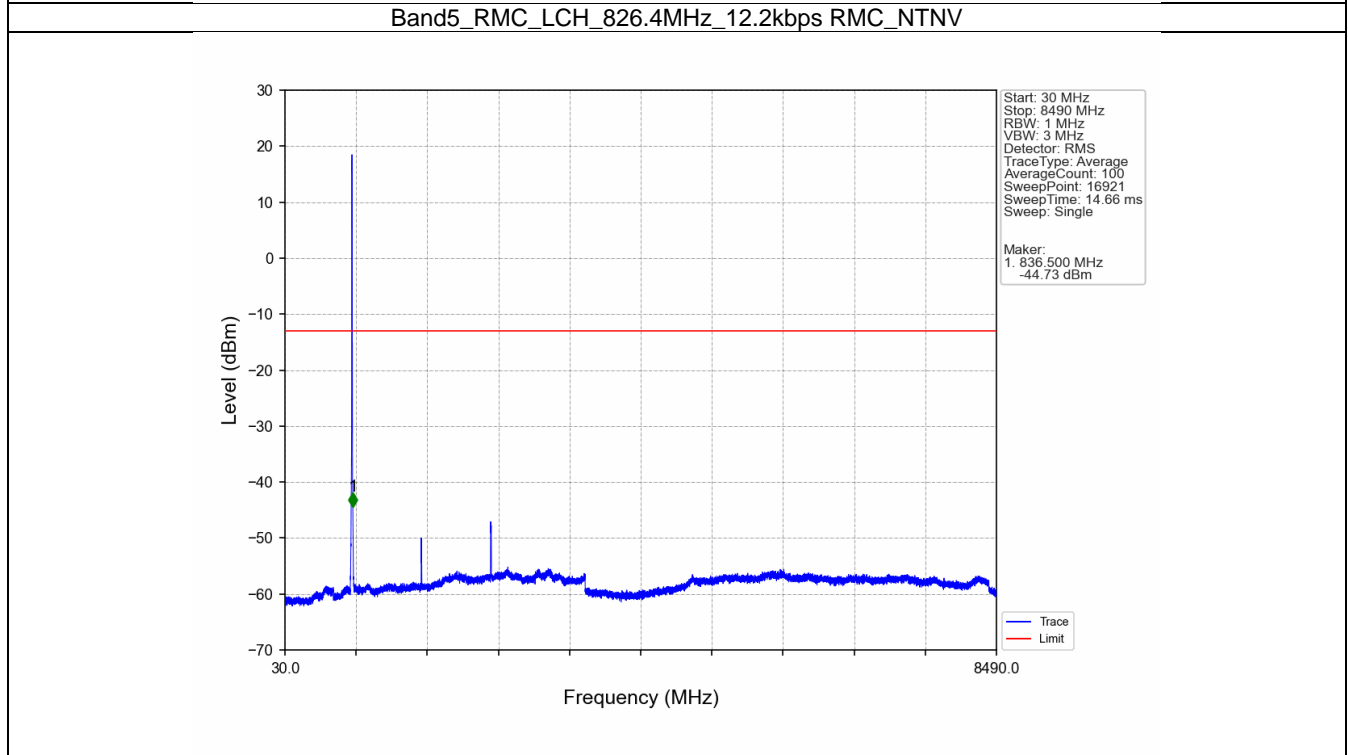
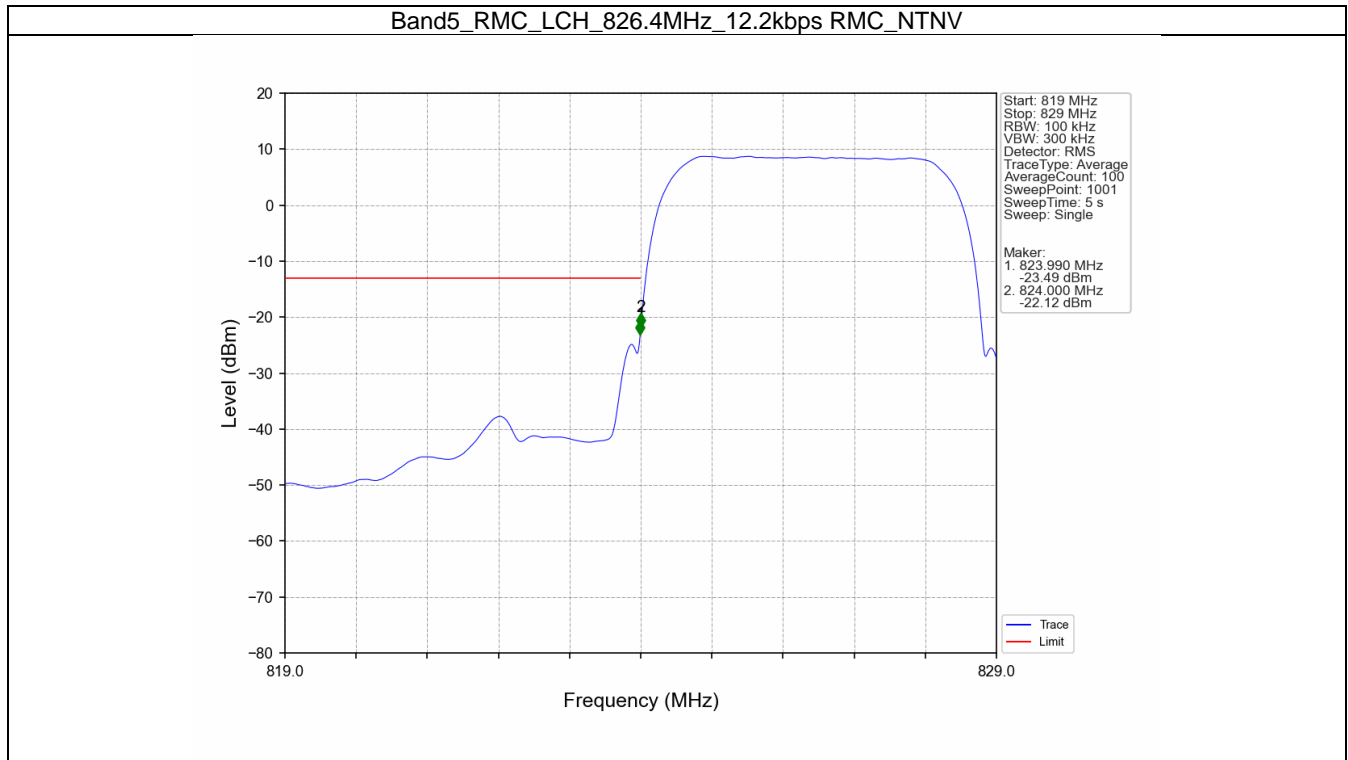
### 5.1 Test Result

#### 5.1.1 Band5

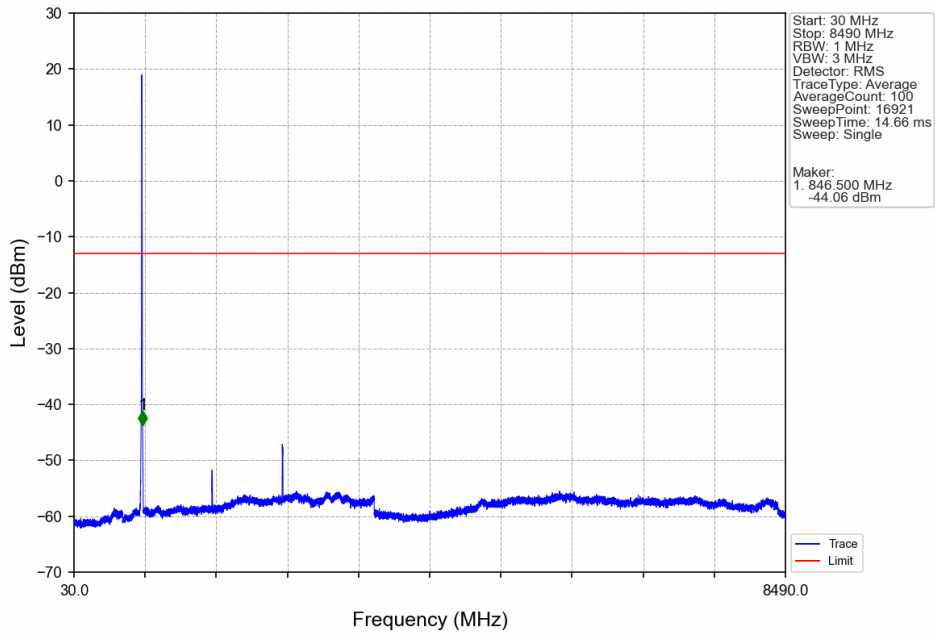
Band: 5						
ENV	Mode		Frequency (MHz)	Spurious Emission		Verdict
	Network	Subset		Result	Limit	
NTNV	RMC	12.2kbps RMC	826.4	Refer To Test Graph		Pass
			836.6	Refer To Test Graph		Pass
			846.6	Refer To Test Graph		Pass

## 5.2 Test Graph

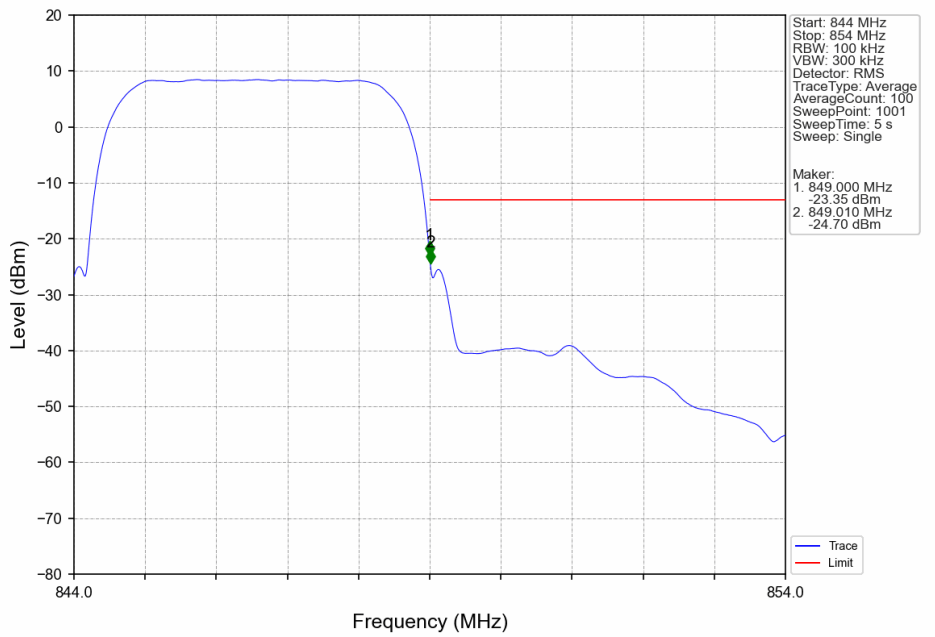
### 5.2.1 Band5



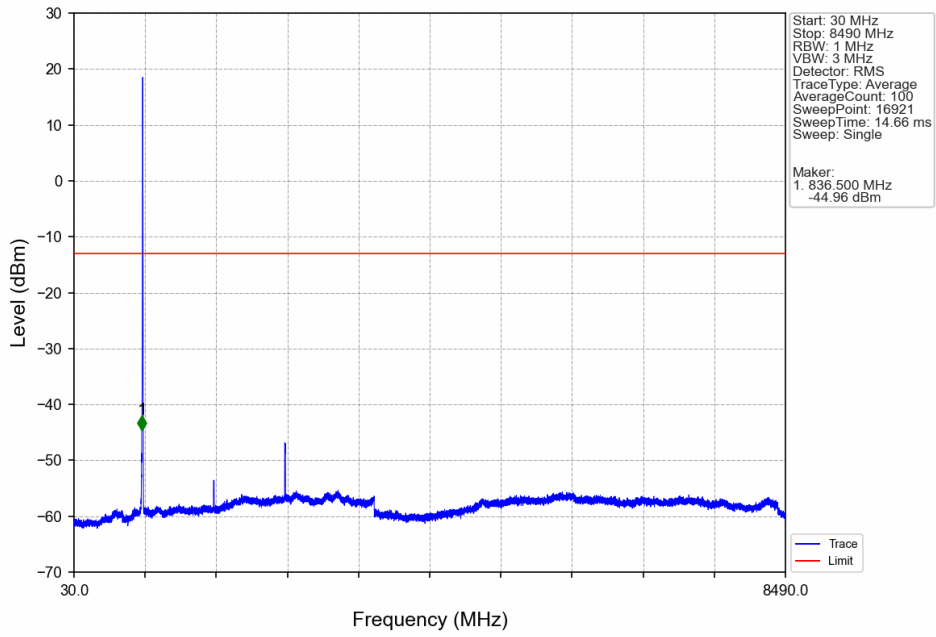
Band5\_RMC\_MCH\_836.6MHz\_12.2kbps RMC\_NTNV



Band5\_RMC\_HCH\_846.6MHz\_12.2kbps RMC\_NTNV



Band5\_RMC\_HCH\_846.6MHz\_12.2kbps RMC\_NTNV



## 6. Field Strength of Spurious Radiation

For Sample 1

**Test Band = WCDMA Band V\_ TM1**

**Test Channel = Low**

Final Data List								
NO.	Frequency [MHz]	Reading [dB $\mu$ V]	Factor [dB]	AF[dB/m]	Level [dBm]	Limit [dBm]	Margin [dB]	Polarity
1	1349.1429	43.57	-48.07	25.17	-74.58	-13.00	61.58	Horizontal
2	2395.4286	43.54	-47.45	26.99	-72.18	-13.00	59.18	Horizontal
3	2722.2857	43.50	-47.02	27.60	-71.18	-13.00	58.18	Horizontal
4	4123.4286	43.08	-45.91	29.70	-68.40	-13.00	55.40	Horizontal
5	4924.5714	42.46	-45.64	31.28	-67.16	-13.00	54.16	Horizontal
6	6344.5714	42.43	-44.67	33.57	-63.93	-13.00	50.93	Horizontal

Final Data List								
NO.	Frequency [MHz]	Reading [dB $\mu$ V]	Factor [dB]	AF[dB/m]	Level [dBm]	Limit [dBm]	Margin [dB]	Polarity
1	1317.7143	46.59	-48.11	25.16	-71.62	-13.00	58.62	Vertical
2	1650.8571	50.41	-48.22	25.45	-67.62	-13.00	54.62	Vertical
3	2523.4286	44.99	-47.19	27.24	-70.22	-13.00	57.22	Vertical
4	2900.5714	44.43	-46.57	27.92	-69.48	-13.00	56.48	Vertical
5	3805.7143	44.16	-46.16	29.09	-68.17	-13.00	55.17	Vertical
6	4941.7143	43.28	-45.68	31.31	-66.35	-13.00	53.35	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	1617.7143	43.76	-48.26	25.42	-74.34	-13.00	61.34	Horizontal
2	2262.2857	43.74	-47.57	26.72	-72.36	-13.00	59.36	Horizontal
3	2879.4286	43.26	-46.64	27.88	-70.76	-13.00	57.76	Horizontal
4	3668.5714	42.61	-46.21	28.87	-69.99	-13.00	56.99	Horizontal
5	4602.2857	42.65	-45.79	30.76	-67.64	-13.00	54.64	Horizontal
6	5697.7143	42.29	-44.59	32.34	-65.22	-13.00	52.22	Horizontal

Final Data List								
NO.	Frequency [MHz]	Reading [dBμV]	Factor [dB]	AF[dB/m]	Level [dBm]	Limit [dBm]	Margin [dB]	Polarity
1	1323.4286	46.60	-48.10	25.16	-71.60	-13.00	58.60	Vertical
2	1674.8571	51.49	-48.19	25.47	-66.49	-13.00	53.49	Vertical
3	2220.5714	45.12	-47.64	26.64	-71.14	-13.00	58.14	Vertical
4	2604.5714	44.54	-46.94	27.39	-70.27	-13.00	57.27	Vertical
5	3512	43.86	-46.52	28.62	-69.30	-13.00	56.30	Vertical
6	4726.8571	43.29	-45.76	30.96	-66.76	-13.00	53.76	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	1321.7143	44.80	-48.10	25.16	-73.40	-13.00	60.40	Horizontal
2	1944.5714	43.92	-47.98	26.03	-73.29	-13.00	60.29	Horizontal
3	2880	43.16	-46.64	27.88	-70.86	-13.00	57.86	Horizontal
4	3486.8571	42.93	-46.54	28.59	-70.28	-13.00	57.28	Horizontal
5	4273.7143	42.94	-45.83	30.06	-68.09	-13.00	55.09	Horizontal
6	5406.8571	42.59	-44.98	32.13	-65.52	-13.00	52.52	Horizontal

Final Data List								
NO.	Frequency [MHz]	Reading [dBμV]	Factor [dB]	AF[dB/m]	Level [dBm]	Limit [dBm]	Margin [dB]	Polarity
1	1324.5714	45.72	-48.10	25.16	-72.48	-13.00	59.48	Vertical
2	2120.5714	44.84	-47.70	26.44	-71.68	-13.00	58.68	Vertical
3	2558.2857	44.30	-47.07	27.30	-70.73	-13.00	57.73	Vertical
4	3501.7143	43.25	-46.54	28.60	-69.94	-13.00	56.94	Vertical
5	4470.2857	42.71	-45.69	30.53	-67.71	-13.00	54.71	Vertical
6	5900	42.83	-44.97	32.38	-65.02	-13.00	52.02	Vertical

Test on the worst case :

For Sample 2

**Test Band = WCDMD Band V\_ TM1**

**Test Channel = Low**

Final Data List								
NO.	Frequency [MHz]	Reading [dB $\mu$ V]	Factor [dB]	AF[dB/m]	Level [dBm]	Limit [dBm]	Margin [dB]	Polarity
1	1349.7143	39.89	-48.07	25.17	-78.26	-13.00	65.26	Horizontal
2	2069.7143	41.88	-47.77	26.34	-74.81	-13.00	61.81	Horizontal
3	2700.5714	41.69	-47.05	27.56	-73.06	-13.00	60.06	Horizontal
4	3486.2857	42.04	-46.54	28.59	-71.17	-13.00	58.17	Horizontal
5	4429.7143	42.01	-45.80	30.43	-68.62	-13.00	55.62	Horizontal
6	5233.1429	41.80	-45.09	31.82	-66.73	-13.00	53.73	Horizontal

Final Data List								
NO.	Frequency [MHz]	Reading [dB $\mu$ V]	Factor [dB]	AF[dB/m]	Level [dBm]	Limit [dBm]	Margin [dB]	Polarity
1	1483.4286	44.04	-48.27	25.28	-74.20	-13.00	61.20	Vertical
2	2030.8571	43.32	-47.84	26.26	-73.52	-13.00	60.52	Vertical
3	2372	43.25	-47.46	26.94	-72.53	-13.00	59.53	Vertical
4	2926.2857	42.52	-46.56	27.97	-71.33	-13.00	58.33	Vertical
5	3953.7143	42.66	-46.21	29.33	-69.49	-13.00	56.49	Vertical
6	5787.4286	41.69	-44.65	32.36	-65.86	-13.00	52.86	Vertical

**Test Band = WCDMD 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	1602.8571	39.89	-48.28	25.40	-78.24	-13.00	65.24	Horizontal
2	2402.8571	40.71	-47.44	27.01	-74.99	-13.00	61.99	Horizontal
3	3029.1429	41.15	-46.59	28.13	-72.57	-13.00	59.57	Horizontal
4	3820	41.14	-46.17	29.11	-71.18	-13.00	58.18	Horizontal
5	5411.4286	40.85	-44.99	32.14	-67.26	-13.00	54.26	Horizontal
6	6009.1429	41.04	-44.45	32.43	-66.24	-13.00	53.24	Horizontal

Final Data List								
NO.	Frequency [MHz]	Reading [dBμV]	Factor [dB]	AF[dB/m]	Level [dBm]	Limit [dBm]	Margin [dB]	Polarity
1	1585.7143	44.16	-48.29	25.39	-74.00	-13.00	61.00	Vertical
2	1882.8571	43.47	-48.03	25.85	-73.97	-13.00	60.97	Vertical
3	2242.2857	43.04	-47.60	26.68	-73.14	-13.00	60.14	Vertical
4	2731.4286	43.15	-47.01	27.62	-71.50	-13.00	58.50	Vertical
5	3644.5714	42.54	-46.26	28.83	-70.14	-13.00	57.14	Vertical
6	3680	42.38	-46.19	28.89	-70.18	-13.00	57.18	Vertical

**Test Band = WCDMD 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	1496.5714	40.14	-48.31	25.30	-78.13	-13.00	65.13	Horizontal
2	2068	41.00	-47.77	26.34	-75.69	-13.00	62.69	Horizontal
3	2729.1429	41.73	-47.01	27.61	-72.93	-13.00	59.93	Horizontal
4	3508	41.67	-46.52	28.61	-71.50	-13.00	58.50	Horizontal
5	4122.8571	41.61	-45.91	29.69	-69.87	-13.00	56.87	Horizontal
6	5734.2857	41.55	-44.60	32.35	-65.96	-13.00	52.96	Horizontal

Final Data List								
NO.	Frequency [MHz]	Reading [dBμV]	Factor [dB]	AF[dB/m]	Level [dBm]	Limit [dBm]	Margin [dB]	Polarity
1	1464	44.35	-48.20	25.26	-73.85	-13.00	60.85	Vertical
2	2031.4286	43.65	-47.84	26.26	-73.19	-13.00	60.19	Vertical
3	2368.5714	43.00	-47.47	26.94	-72.79	-13.00	59.79	Vertical
4	2820.5714	42.52	-46.85	27.78	-71.81	-13.00	58.81	Vertical
5	3477.1429	42.73	-46.54	28.58	-70.49	-13.00	57.49	Vertical
6	4296	42.44	-45.79	30.11	-68.50	-13.00	55.50	Vertical