

Appendix - WCDMA_band_2

1. Effective (Isotropic) Radiated Power Output Data

1.1 Test Result

1.1.1 Band2_EIRP

Band: 2									
ENV	Mode		Frequency (MHz)	Conducted Power (dBm)	Gain (dBi)	EIRP (dBm)		Verdict	
	Network	Subset				Result	Limit		
NTNV	RMC	12.2kbps RMC	1852.4	20.40	1.55	21.95	<=33.01	Pass	
			1880	20.82	1.55	22.37	<=33.01	Pass	
			1907.6	21.27	1.55	22.82	<=33.01	Pass	
	HSDPA	Subtest 1	1852.4	20.00	1.55	21.55	<=33.01	Pass	
		Subtest 2	1852.4	20.06	1.55	21.61	<=33.01	Pass	
		Subtest 3	1852.4	20.10	1.55	21.65	<=33.01	Pass	
		Subtest 4	1852.4	20.06	1.55	21.61	<=33.01	Pass	
		Subtest 1	1880	19.64	1.55	21.19	<=33.01	Pass	
		Subtest 2	1880	19.62	1.55	21.17	<=33.01	Pass	
		Subtest 3	1880	19.66	1.55	21.21	<=33.01	Pass	
		Subtest 4	1880	19.67	1.55	21.22	<=33.01	Pass	
		Subtest 1	1907.6	19.86	1.55	21.41	<=33.01	Pass	
		Subtest 2	1907.6	19.86	1.55	21.41	<=33.01	Pass	
		Subtest 3	1907.6	19.88	1.55	21.43	<=33.01	Pass	
		Subtest 4	1907.6	19.84	1.55	21.39	<=33.01	Pass	
		HSUPA	Subtest 1	1852.4	18.00	1.55	19.55	<=33.01	Pass
			Subtest 2	1852.4	17.99	1.55	19.54	<=33.01	Pass
			Subtest 3	1852.4	18.20	1.55	19.75	<=33.01	Pass
			Subtest 4	1852.4	18.17	1.55	19.72	<=33.01	Pass
			Subtest 5	1852.4	18.16	1.55	19.71	<=33.01	Pass
			Subtest 1	1880	17.26	1.55	18.81	<=33.01	Pass
			Subtest 2	1880	17.23	1.55	18.78	<=33.01	Pass
			Subtest 3	1880	17.05	1.55	18.60	<=33.01	Pass
	Subtest 4		1880	17.49	1.55	19.04	<=33.01	Pass	
	Subtest 5		1880	17.03	1.55	18.58	<=33.01	Pass	
	Subtest 1		1907.6	17.44	1.55	18.99	<=33.01	Pass	
	Subtest 2		1907.6	17.26	1.55	18.81	<=33.01	Pass	
	Subtest 3		1907.6	17.33	1.55	18.88	<=33.01	Pass	
	Subtest 4		1907.6	17.28	1.55	18.83	<=33.01	Pass	
	Subtest 5		1907.6	17.77	1.55	19.32	<=33.01	Pass	

Note1: EIRP=Conducted Power+Antenna Gain

2. Frequency Stability

2.1 Test Result

2.1.1 Band2

Band: 2							
Network	Frequency (MHz)	Temp. (°C)	Voltage (VDC)	Freq. Error (Hz)	Freq. vs. Rated (ppm)		Verdict
					Result	Limit	
RMC	1852.4	20	3.27	-2.797	-0.0015	-2.5 to 2.5	Pass

Total or partial reproduction of this document without permission of the Laboratory is not allowed.

Page 1 of 50

			3.85	1.259	0.0007	-2.5 to 2.5	Pass		
			4.43	-6.359	-0.0034	-2.5 to 2.5	Pass		
		-30	3.85	-0.858	-0.0005	-2.5 to 2.5	Pass		
		-20	3.85	-5.815	-0.0031	-2.5 to 2.5	Pass		
		-10	3.85	-7.489	-0.0040	-2.5 to 2.5	Pass		
		0	3.85	2.010	0.0011	-2.5 to 2.5	Pass		
		10	3.85	-1.981	-0.0011	-2.5 to 2.5	Pass		
		30	3.85	-6.294	-0.0034	-2.5 to 2.5	Pass		
		40	3.85	0.343	0.0002	-2.5 to 2.5	Pass		
		50	3.85	4.249	0.0023	-2.5 to 2.5	Pass		
		1880	20		3.27	-4.091	-0.0022	-2.5 to 2.5	Pass
					3.85	-1.502	-0.0008	-2.5 to 2.5	Pass
					4.43	6.888	0.0037	-2.5 to 2.5	Pass
			-30	3.85	3.247	0.0017	-2.5 to 2.5	Pass	
	-20		3.85	9.241	0.0049	-2.5 to 2.5	Pass		
	-10		3.85	2.789	0.0015	-2.5 to 2.5	Pass		
	0		3.85	-2.918	-0.0016	-2.5 to 2.5	Pass		
	10		3.85	3.591	0.0019	-2.5 to 2.5	Pass		
	30		3.85	-0.594	-0.0003	-2.5 to 2.5	Pass		
	40		3.85	-4.463	-0.0024	-2.5 to 2.5	Pass		
	50		3.85	14.083	0.0075	-2.5 to 2.5	Pass		
	1907.6		20		3.27	3.233	0.0017	-2.5 to 2.5	Pass
					3.85	-5.558	-0.0029	-2.5 to 2.5	Pass
					4.43	-2.682	-0.0014	-2.5 to 2.5	Pass
		-30	3.85	1.295	0.0007	-2.5 to 2.5	Pass		
		-20	3.85	3.104	0.0016	-2.5 to 2.5	Pass		
		-10	3.85	-4.871	-0.0026	-2.5 to 2.5	Pass		
		0	3.85	-0.730	-0.0004	-2.5 to 2.5	Pass		
10		3.85	1.273	0.0007	-2.5 to 2.5	Pass			
30		3.85	2.747	0.0014	-2.5 to 2.5	Pass			
40		3.85	-5.114	-0.0027	-2.5 to 2.5	Pass			
50		3.85	-2.904	-0.0015	-2.5 to 2.5	Pass			
HSDPA		1852.4	20		3.27	8.276	0.0045	-2.5 to 2.5	Pass
					3.85	6.123	0.0033	-2.5 to 2.5	Pass
					4.43	7.975	0.0043	-2.5 to 2.5	Pass
	-30		3.85	-1.624	-0.0009	-2.5 to 2.5	Pass		
	-20		3.85	12.045	0.0065	-2.5 to 2.5	Pass		
	-10		3.85	12.188	0.0066	-2.5 to 2.5	Pass		
	0		3.85	12.803	0.0069	-2.5 to 2.5	Pass		
	10		3.85	11.995	0.0065	-2.5 to 2.5	Pass		
	30		3.85	10.500	0.0057	-2.5 to 2.5	Pass		
	40		3.85	4.227	0.0023	-2.5 to 2.5	Pass		
	50		3.85	1.187	0.0006	-2.5 to 2.5	Pass		
	1880		20		3.27	12.560	0.0067	-2.5 to 2.5	Pass
					3.85	13.082	0.0070	-2.5 to 2.5	Pass
					4.43	11.315	0.0060	-2.5 to 2.5	Pass
		-30	3.85	2.782	0.0015	-2.5 to 2.5	Pass		
		-20	3.85	3.519	0.0019	-2.5 to 2.5	Pass		
		-10	3.85	11.423	0.0061	-2.5 to 2.5	Pass		
		0	3.85	14.942	0.0079	-2.5 to 2.5	Pass		
		10	3.85	9.212	0.0049	-2.5 to 2.5	Pass		
		30	3.85	6.337	0.0034	-2.5 to 2.5	Pass		
		40	3.85	8.669	0.0046	-2.5 to 2.5	Pass		
		50	3.85	7.732	0.0041	-2.5 to 2.5	Pass		
		1907.6	20		3.27	8.676	0.0045	-2.5 to 2.5	Pass
					3.85	18.969	0.0099	-2.5 to 2.5	Pass
					4.43	17.281	0.0091	-2.5 to 2.5	Pass
	-30		3.85	11.272	0.0059	-2.5 to 2.5	Pass		

		-20	3.85	7.846	0.0041	-2.5 to 2.5	Pass	
		-10	3.85	7.875	0.0041	-2.5 to 2.5	Pass	
		0	3.85	11.101	0.0058	-2.5 to 2.5	Pass	
		10	3.85	9.270	0.0049	-2.5 to 2.5	Pass	
		30	3.85	9.220	0.0048	-2.5 to 2.5	Pass	
		40	3.85	9.949	0.0052	-2.5 to 2.5	Pass	
		50	3.85	2.425	0.0013	-2.5 to 2.5	Pass	
HSUPA	1852.4	20	3.27	10.607	0.0057	-2.5 to 2.5	Pass	
			3.85	1.781	0.0010	-2.5 to 2.5	Pass	
			4.43	7.625	0.0041	-2.5 to 2.5	Pass	
		-30	3.85	4.470	0.0024	-2.5 to 2.5	Pass	
		-20	3.85	2.854	0.0015	-2.5 to 2.5	Pass	
		-10	3.85	7.181	0.0039	-2.5 to 2.5	Pass	
		0	3.85	-2.131	-0.0012	-2.5 to 2.5	Pass	
		10	3.85	0.222	0.0001	-2.5 to 2.5	Pass	
		30	3.85	0.072	0.0000	-2.5 to 2.5	Pass	
		40	3.85	1.910	0.0010	-2.5 to 2.5	Pass	
		50	3.85	-8.647	-0.0047	-2.5 to 2.5	Pass	
		1880	20	3.27	5.550	0.0030	-2.5 to 2.5	Pass
				3.85	6.394	0.0034	-2.5 to 2.5	Pass
				4.43	-3.669	-0.0020	-2.5 to 2.5	Pass
	-30		3.85	10.507	0.0056	-2.5 to 2.5	Pass	
	-20		3.85	-0.243	-0.0001	-2.5 to 2.5	Pass	
	-10		3.85	0.594	0.0003	-2.5 to 2.5	Pass	
	0		3.85	4.177	0.0022	-2.5 to 2.5	Pass	
	10		3.85	4.935	0.0026	-2.5 to 2.5	Pass	
	30		3.85	3.505	0.0019	-2.5 to 2.5	Pass	
	40		3.85	-0.122	-0.0001	-2.5 to 2.5	Pass	
	50		3.85	6.723	0.0036	-2.5 to 2.5	Pass	
	1907.6		20	3.27	3.011	0.0016	-2.5 to 2.5	Pass
				3.85	-2.182	-0.0011	-2.5 to 2.5	Pass
				4.43	-4.499	-0.0024	-2.5 to 2.5	Pass
		-30	3.85	2.875	0.0015	-2.5 to 2.5	Pass	
		-20	3.85	9.120	0.0048	-2.5 to 2.5	Pass	
		-10	3.85	9.398	0.0049	-2.5 to 2.5	Pass	
		0	3.85	1.602	0.0008	-2.5 to 2.5	Pass	
		10	3.85	-1.695	-0.0009	-2.5 to 2.5	Pass	
		30	3.85	-2.131	-0.0011	-2.5 to 2.5	Pass	
		40	3.85	8.919	0.0047	-2.5 to 2.5	Pass	
		50	3.85	7.603	0.0040	-2.5 to 2.5	Pass	

3. Modulation Characteristics

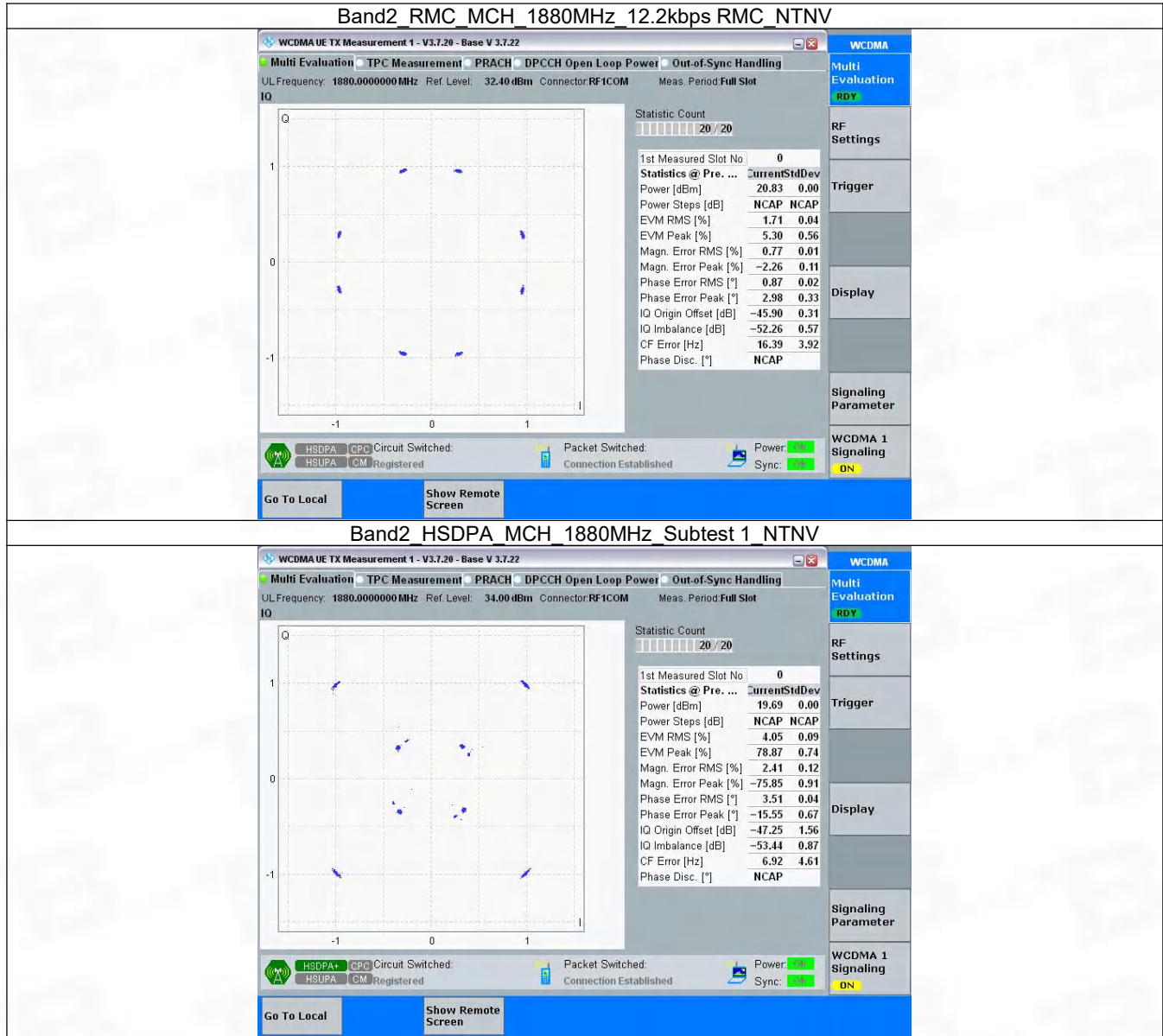
3.1 Test Result

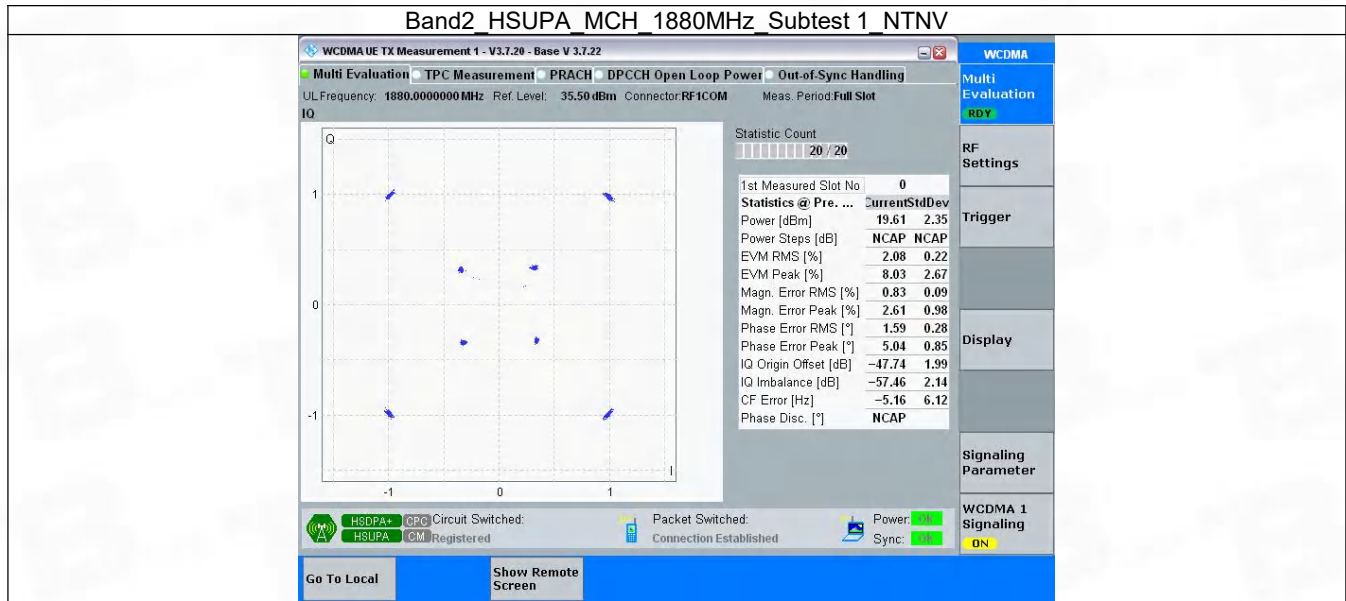
3.1.1 Band2

Band: 2						
ENV	Mode		Frequency (MHz)	Modulation Characteristics		Verdict
	Network	Subset		Result	Limit	
NTNV	RMC	12.2kbps RMC	1880	Refer To Test Graph		Pass
	HSDPA	Subtest 1	1880	Refer To Test Graph		Pass
	HSUPA	Subtest 1	1880	Refer To Test Graph		Pass

3.2 Test Graph

3.2.1 Band2





4. 99% & 26dB Bandwidth

4.1 Test Result

4.1.1 Band2_OBW

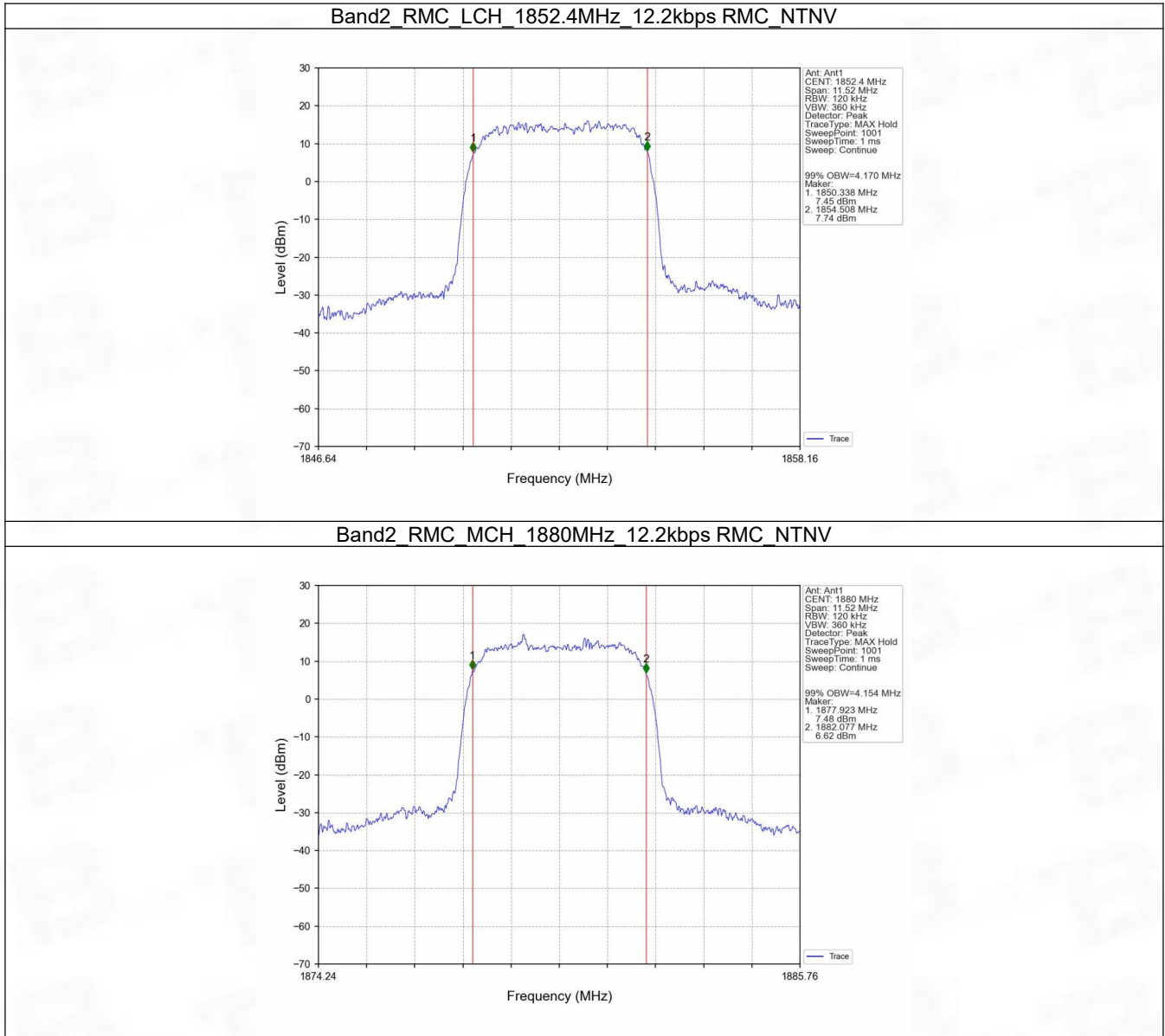
Band: 2						
ENV	Mode		Frequency (MHz)	99% Occupied Bandwidth (MHz)		Verdict
	Network	Subset		Result	Limit	
NTNV	RMC	12.2kbps RMC	1852.4	4.170	/	Pass
			1880	4.154	/	Pass
			1907.6	4.155	/	Pass
	HSDPA	Subtest 1	1852.4	4.158	/	Pass
			1880	4.176	/	Pass
			1907.6	4.162	/	Pass
	HSUPA	Subtest 1	1852.4	4.157	/	Pass
			1880	4.161	/	Pass
			1907.6	4.170	/	Pass

4.1.2 Band2_XDB

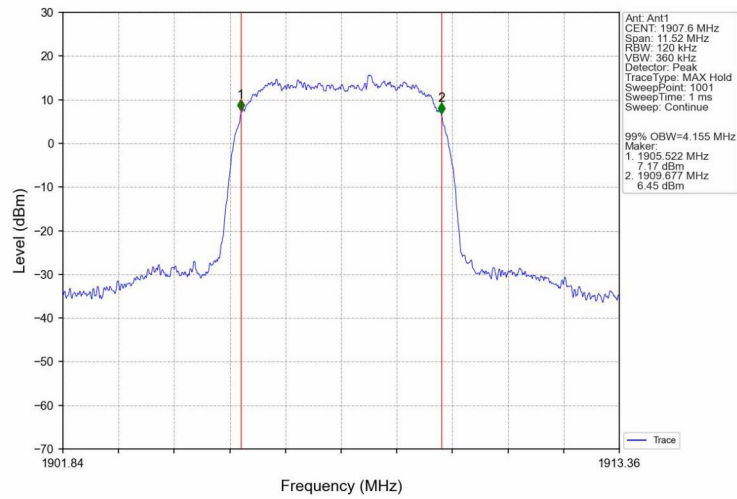
Band: 2						
ENV	Mode		Frequency (MHz)	26dB Bandwidth (MHz)		Verdict
	Network	Subset		Result	Limit	
NTNV	RMC	12.2kbps RMC	1852.4	4.713	/	Pass
			1880	4.682	/	Pass
			1907.6	4.708	/	Pass
	HSDPA	Subtest 1	1852.4	4.700	/	Pass
			1880	4.697	/	Pass
			1907.6	4.719	/	Pass
	HSUPA	Subtest 1	1852.4	4.707	/	Pass
			1880	4.700	/	Pass
			1907.6	4.722	/	Pass

4.2 Test Graph

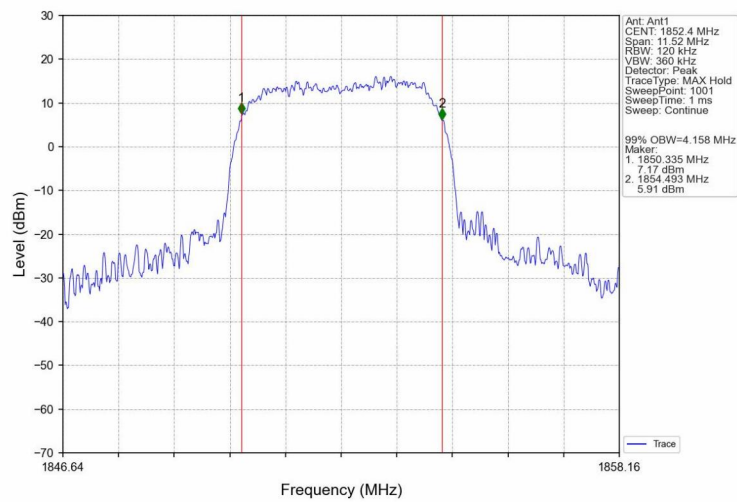
4.2.1 Band2_OBW



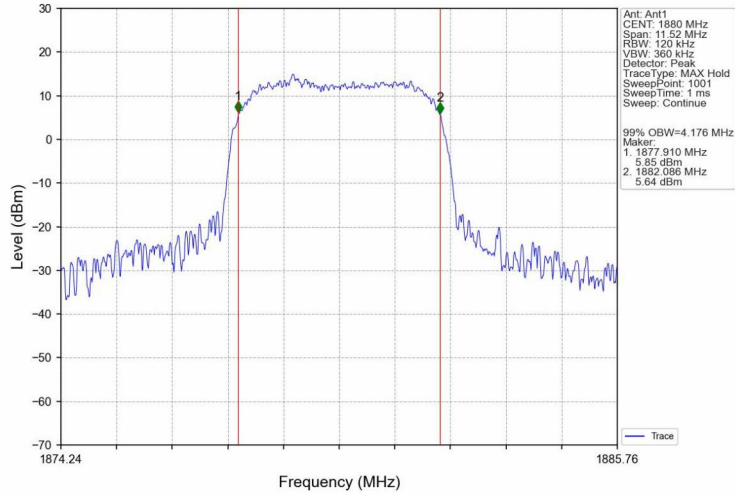
Band2_RMC_HCH_1907.6MHz_12.2kbps_RMC_NTNV



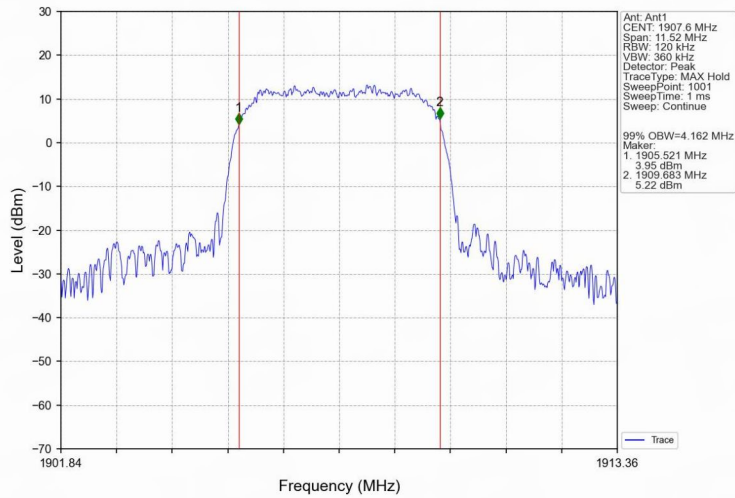
Band2_HSDPA_LCH_1852.4MHz_Subtest 1_NTNV



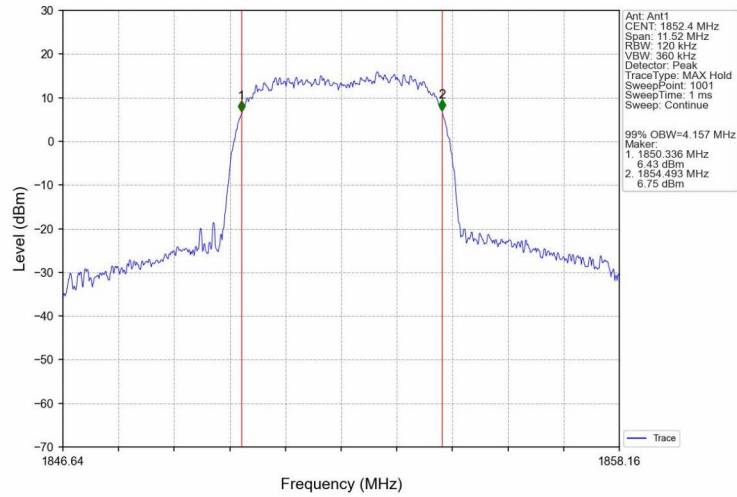
Band2_HSDPA_MCH_1880MHz_Subtest 1_NTNV



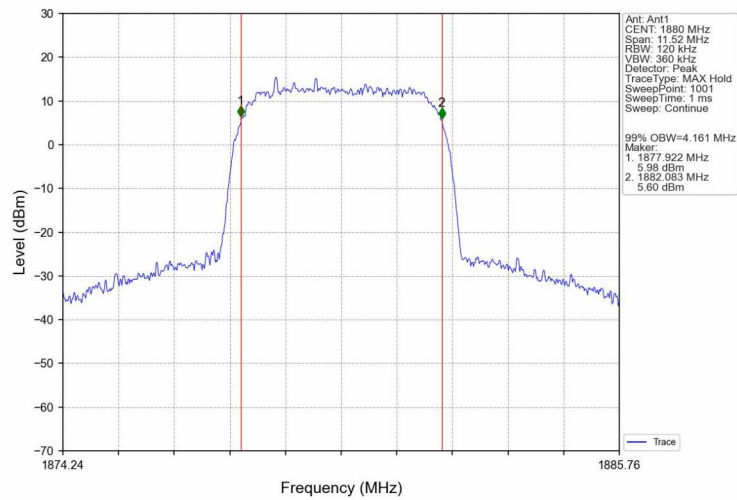
Band2_HSDPA_HCH_1907.6MHz_Subtest 1_NTNV



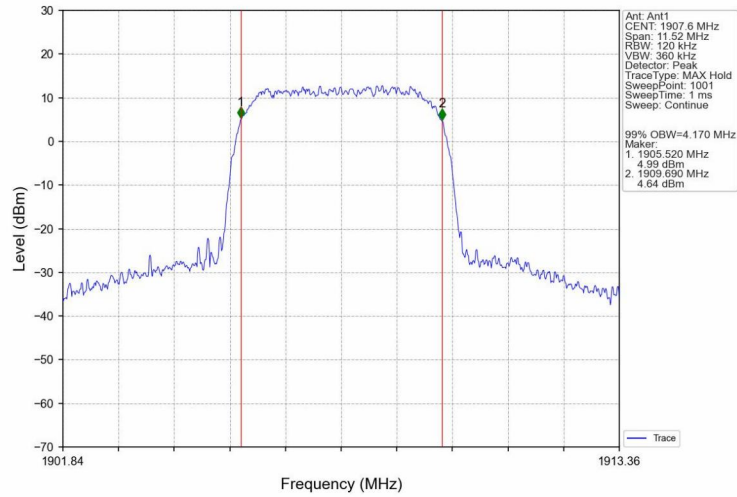
Band2_HSUPA_LCH_1852.4MHz_Subtest 1_NTNV



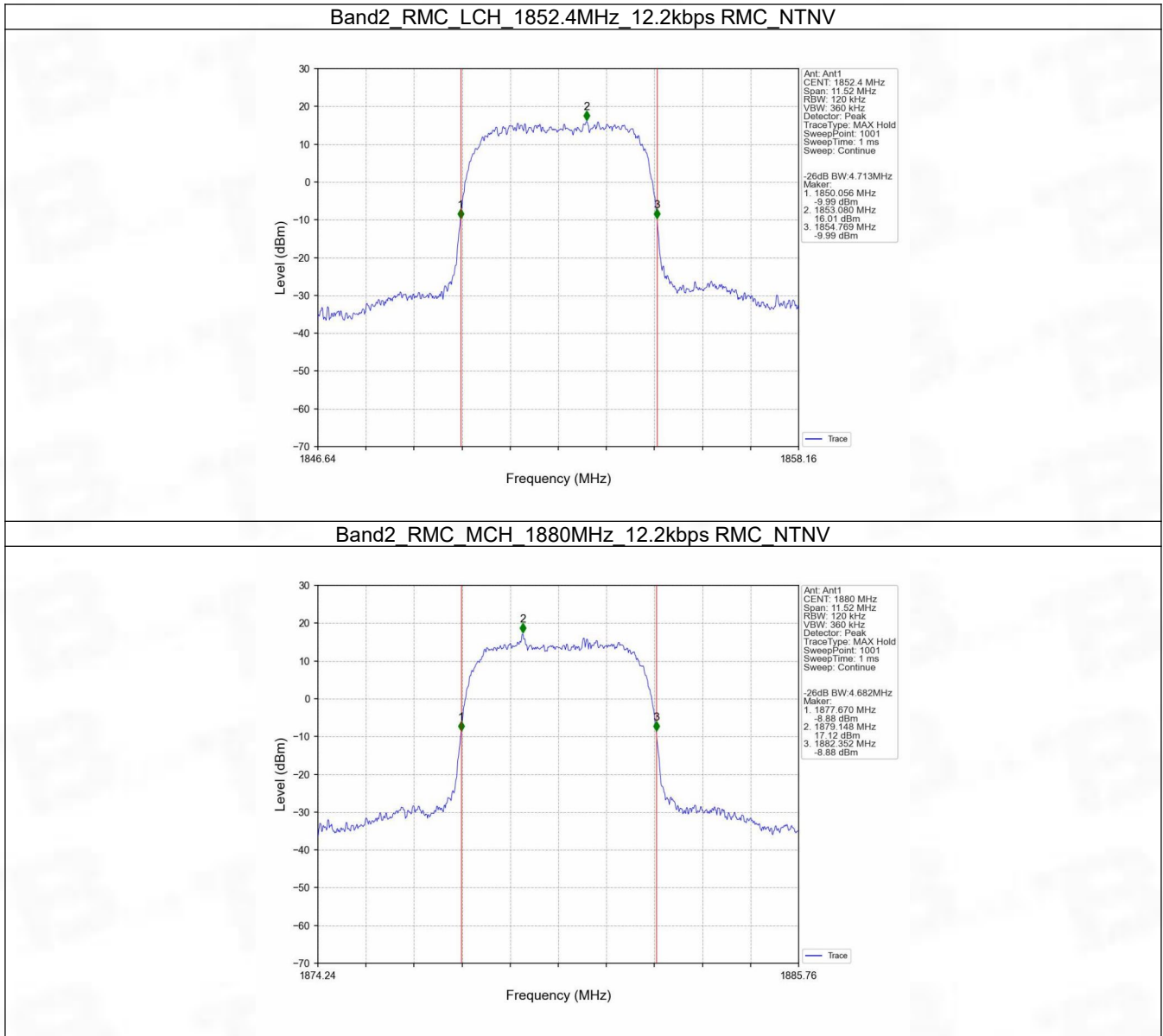
Band2_HSUPA_MCH_1880MHz_Subtest 1_NTNV



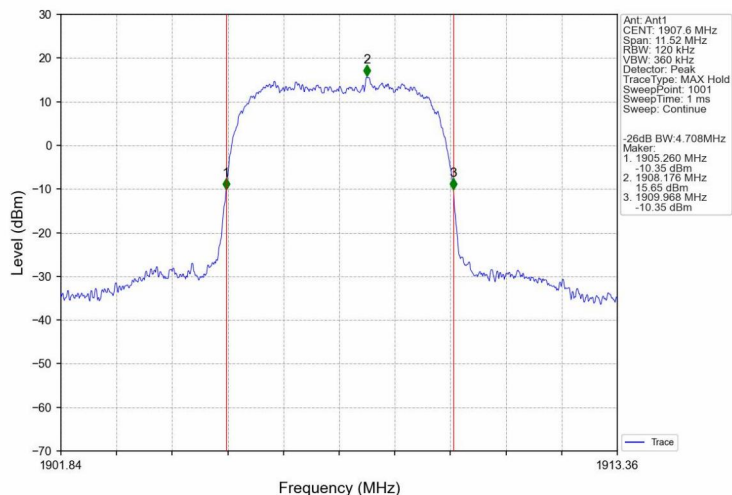
Band2_HSUPA_HCH_1907.6MHz_Subtest 1_NTNV



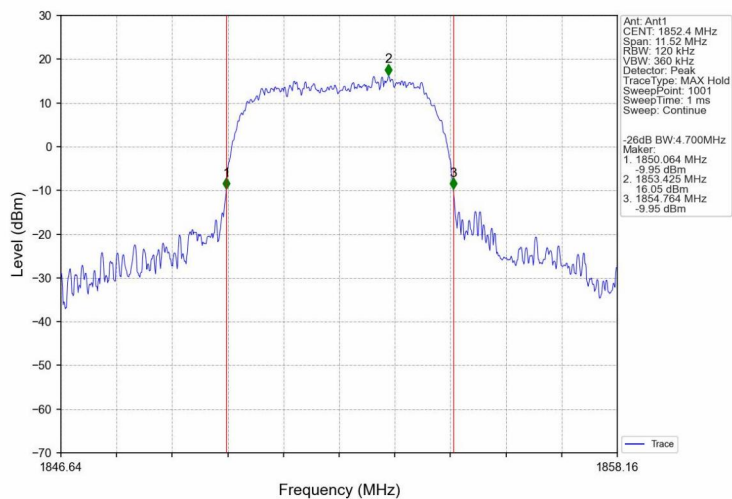
4.2.2 Band2_XDB



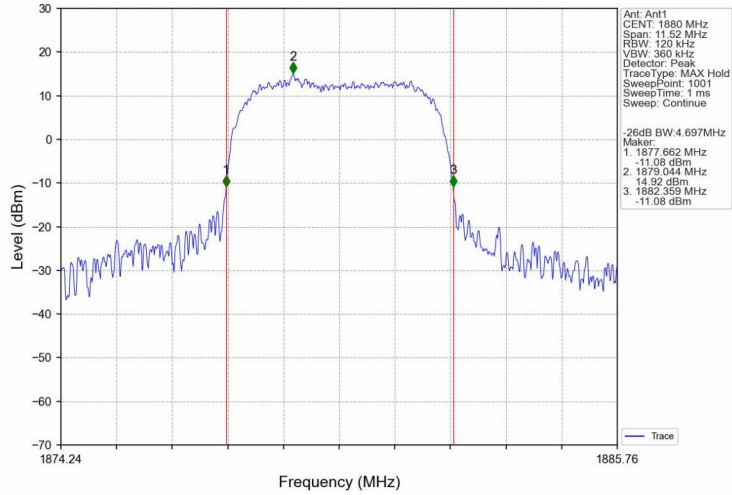
Band2_RMC_HCH_1907.6MHz_12.2kbps_RMC_NTNV



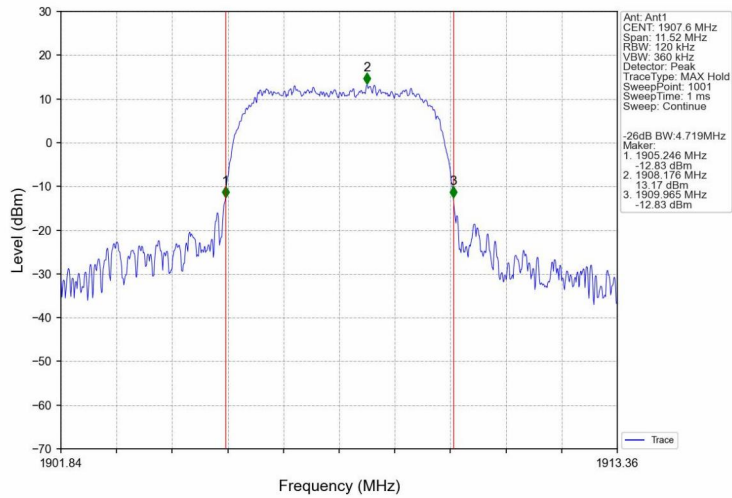
Band2_HSDPA_LCH_1852.4MHz_Subtest 1_NTNV



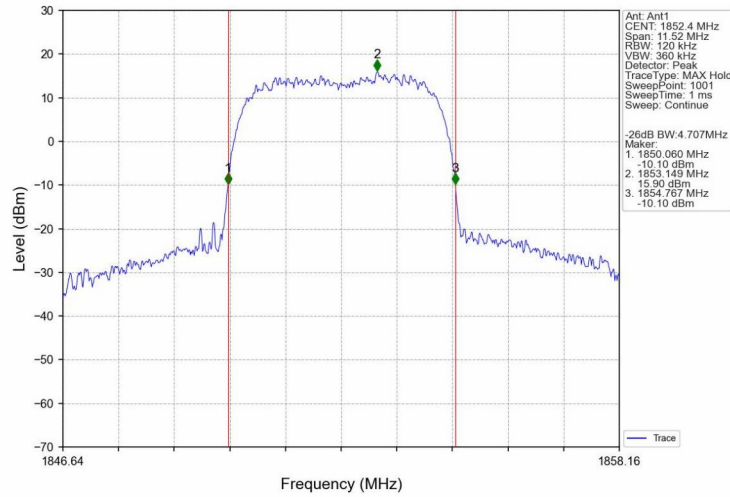
Band2_HSDPA_MCH_1880MHz_Subtest 1_NTNV



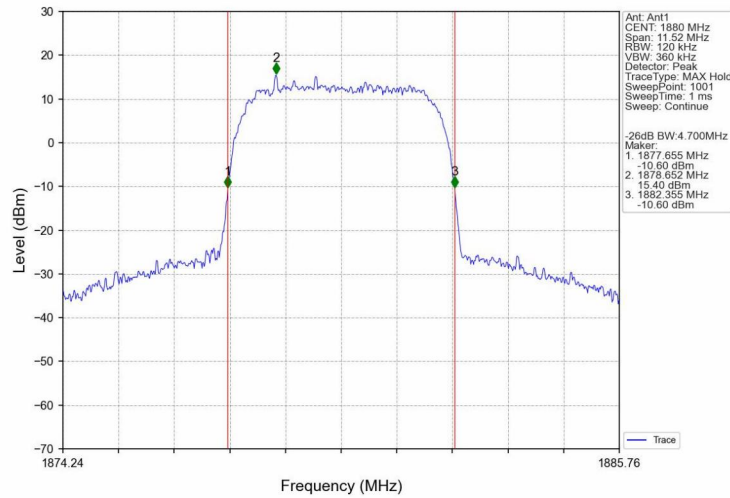
Band2_HSDPA_HCH_1907.6MHz_Subtest 1_NTNV

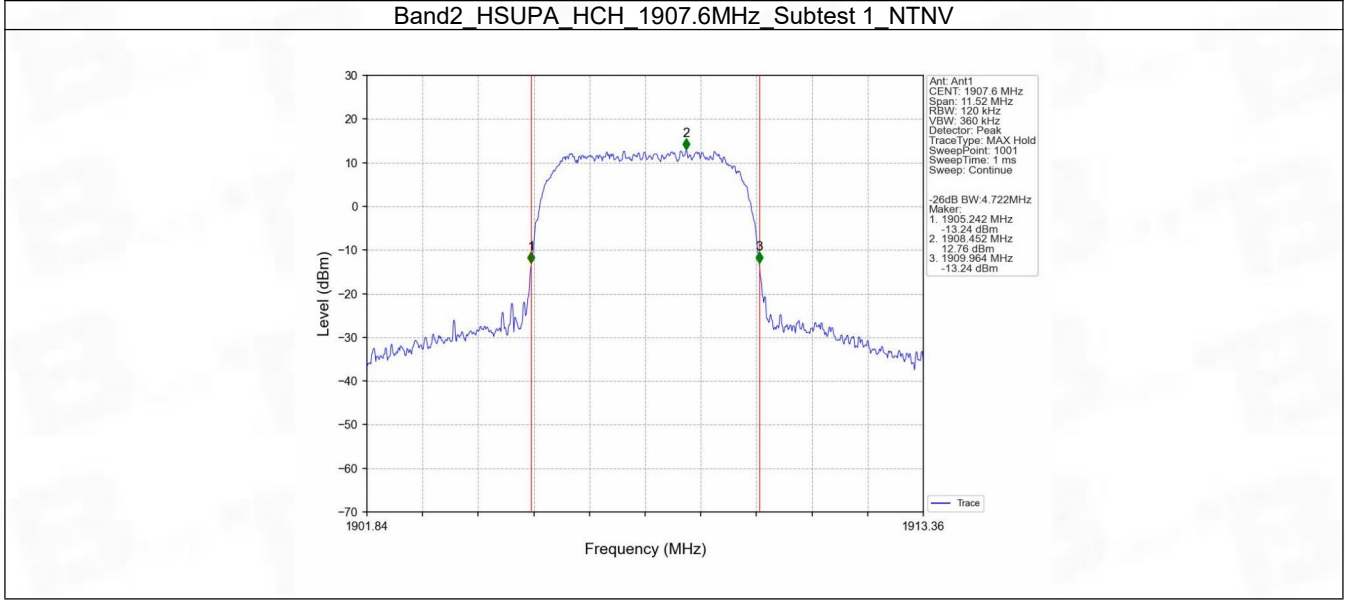


Band2_HSUPA_LCH_1852.4MHz_Subtest 1_NTNV



Band2_HSUPA_MCH_1880MHz_Subtest 1_NTNV





5. Peak-Average Ratio

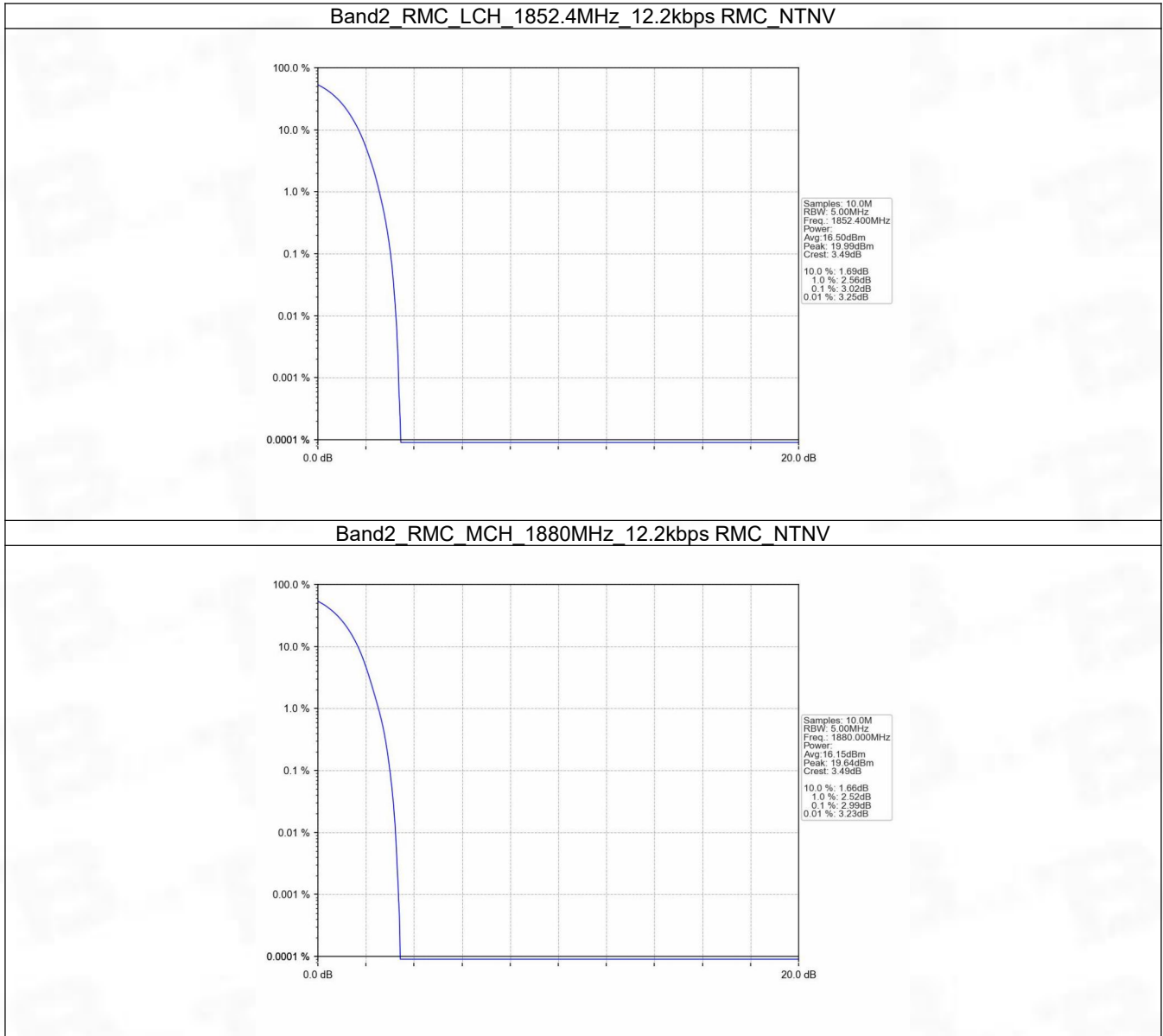
5.1 Test Result

5.1.1 Band2

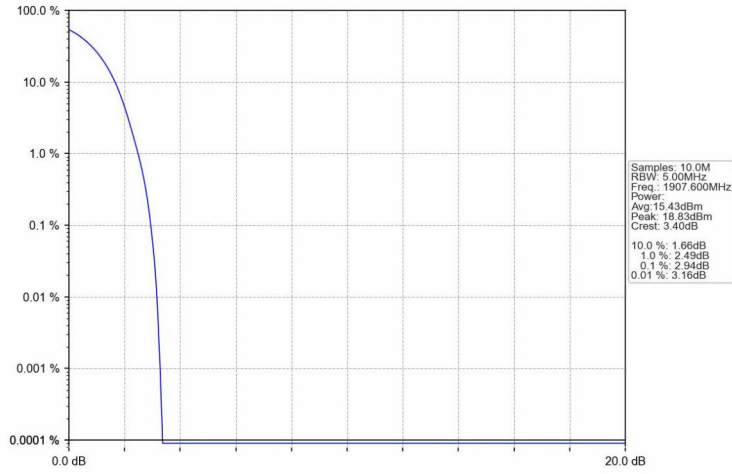
Band: 2						
ENV	Mode		Frequency (MHz)	Peak-Average Ratio (dB)		Verdict
	Network	Subset		Result	Limit	
NTNV	RMC	12.2kbps RMC	1852.4	3.02	<=13	Pass
			1880	2.99	<=13	Pass
			1907.6	2.94	<=13	Pass
	HSDPA	Subtest 1	1852.4	5.81	<=13	Pass
			1880	5.71	<=13	Pass
			1907.6	5.67	<=13	Pass
	HSUPA	Subtest 1	1852.4	6.55	<=13	Pass
			1880	6.74	<=13	Pass
			1907.6	6.61	<=13	Pass

5.2 Test Graph

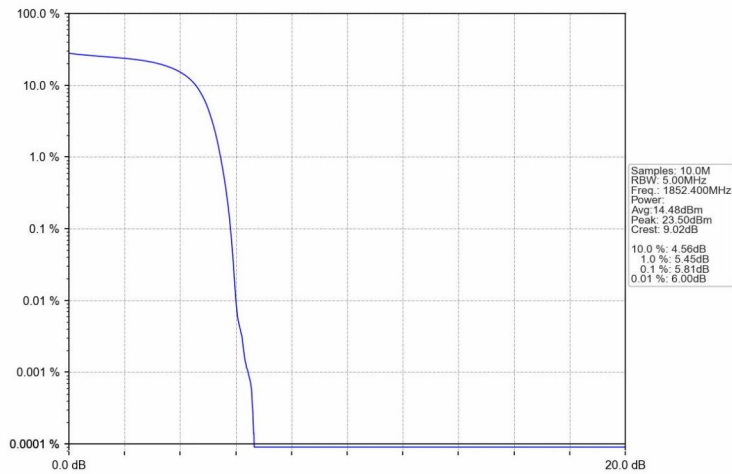
5.2.1 Band2



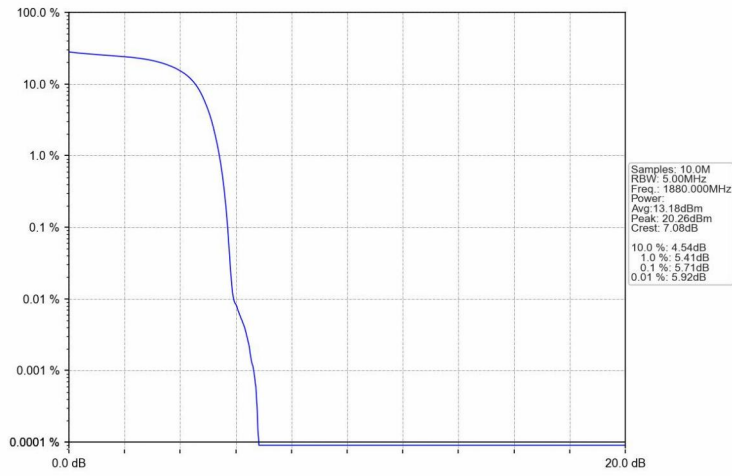
Band2_RMC_HCH_1907.6MHz_12.2kbps_RMC_NTNV



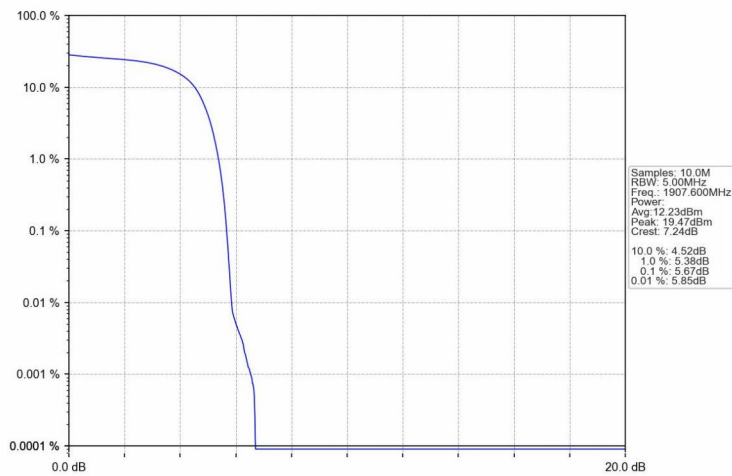
Band2_HSDPA_LCH_1852.4MHz_Subtest 1_NTNV



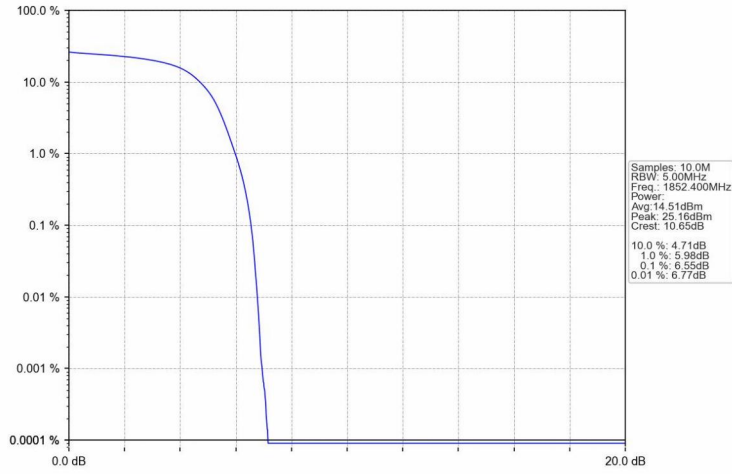
Band2_HSDPA_MCH_1880MHz_Subtest 1_NTNV



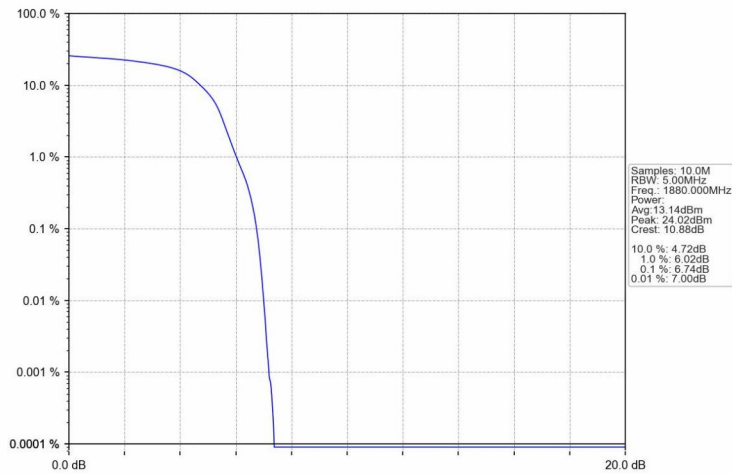
Band2_HSDPA_HCH_1907.6MHz_Subtest 1_NTNV



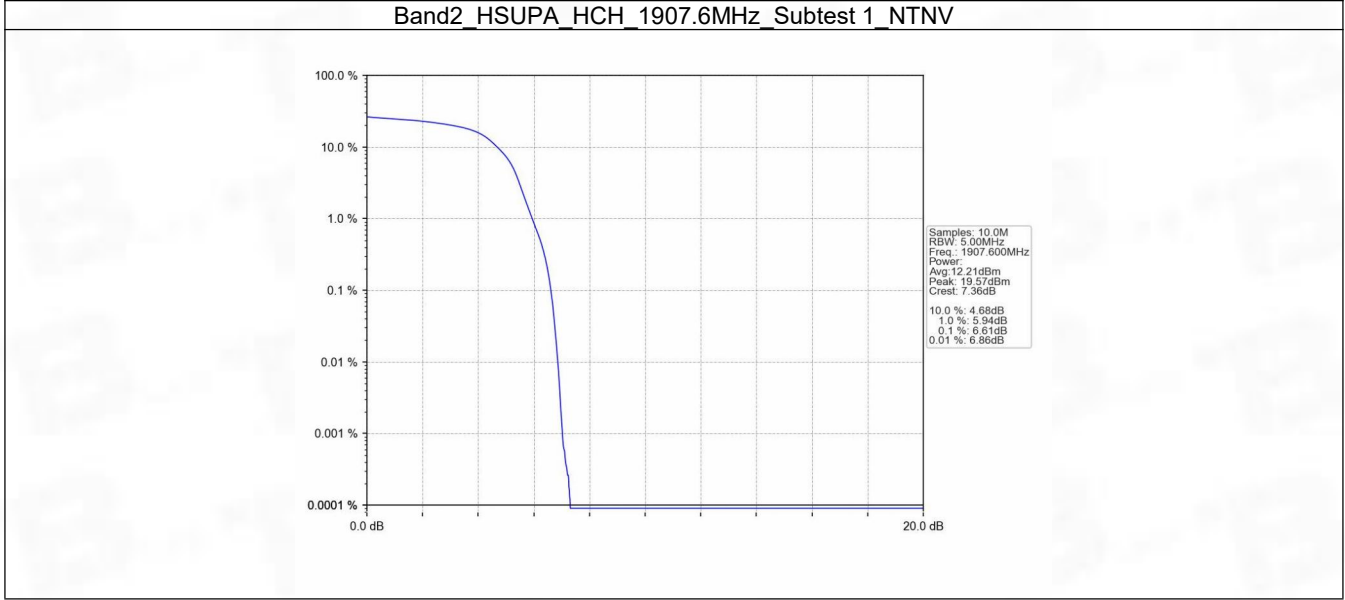
Band2_HSUPA_LCH_1852.4MHz_Subtest 1_NTNV



Band2_HSUPA_MCH_1880MHz_Subtest 1_NTNV



Band2_HSUPA_HCH_1907.6MHz_Subtest 1_NTNV



6. Spurious Emission

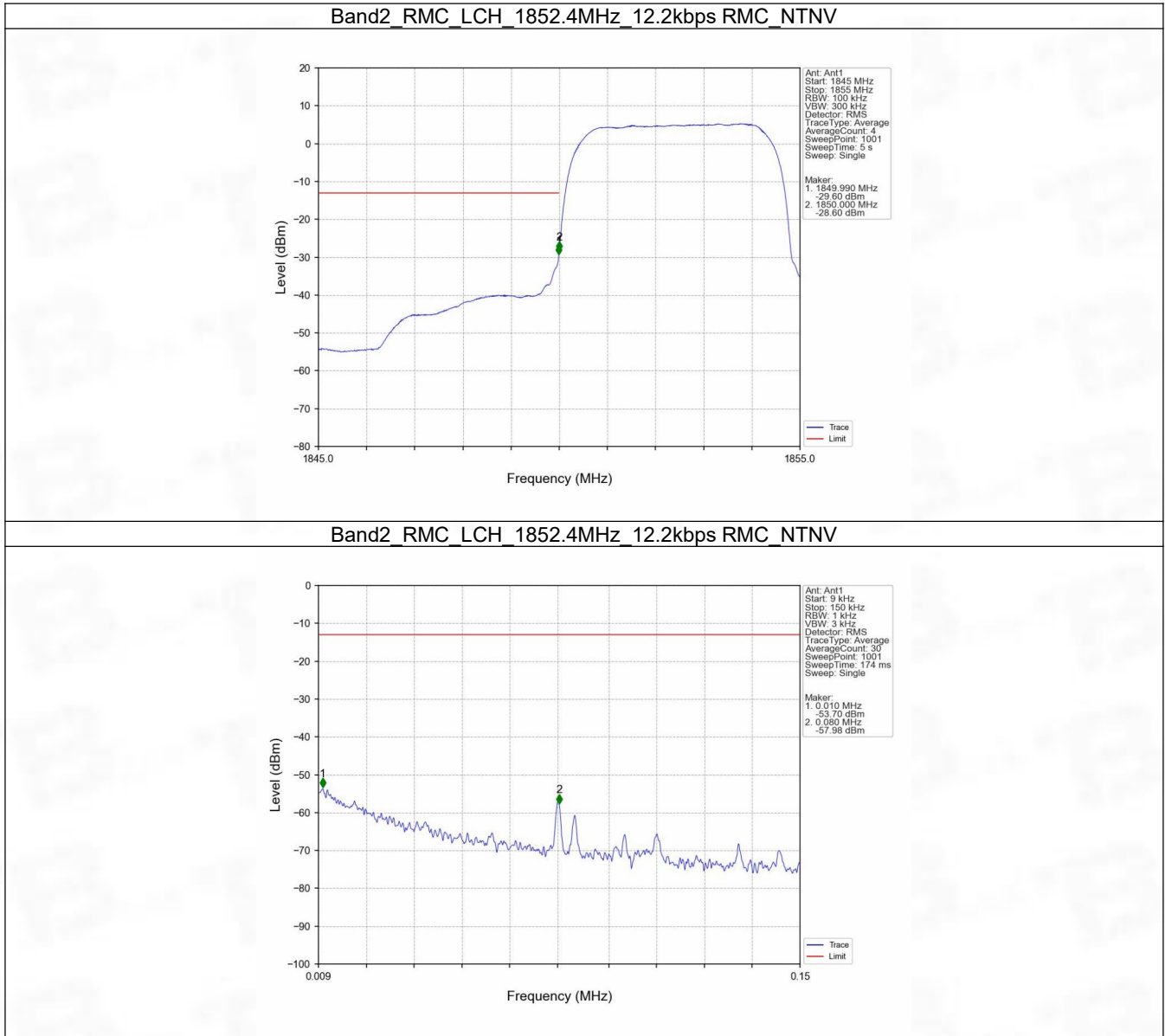
6.1 Test Result

6.1.1 Band2

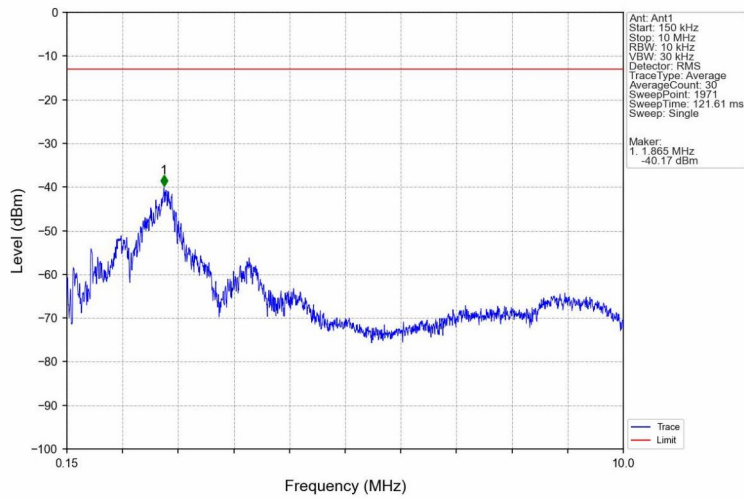
Band: 2						
ENV	Mode		Frequency (MHz)	Spurious Emission		Verdict
	Network	Subset		Result	Limit	
NTNV	RMC	12.2kbps RMC	1852.4	Refer To Test Graph		Pass
			1880	Refer To Test Graph		Pass
			1907.6	Refer To Test Graph		Pass
	HSDPA	Subtest 1	1852.4	Refer To Test Graph		Pass
			1880	Refer To Test Graph		Pass
			1907.6	Refer To Test Graph		Pass
	HSUPA	Subtest 1	1852.4	Refer To Test Graph		Pass
			1880	Refer To Test Graph		Pass
			1907.6	Refer To Test Graph		Pass

6.2 Test Graph

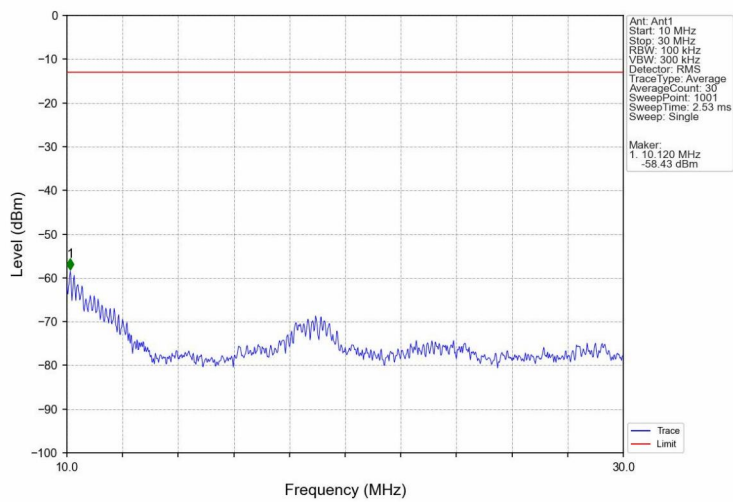
6.2.1 Band2



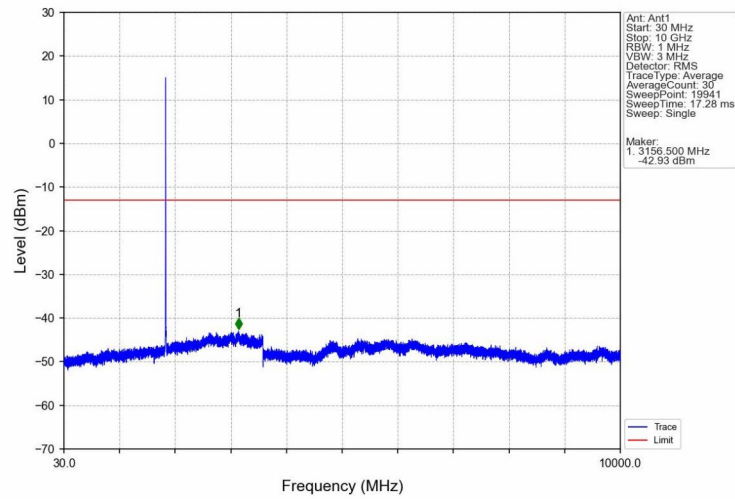
Band2_RMC_LCH_1852.4MHz_12.2kbps_RMC_NTNV



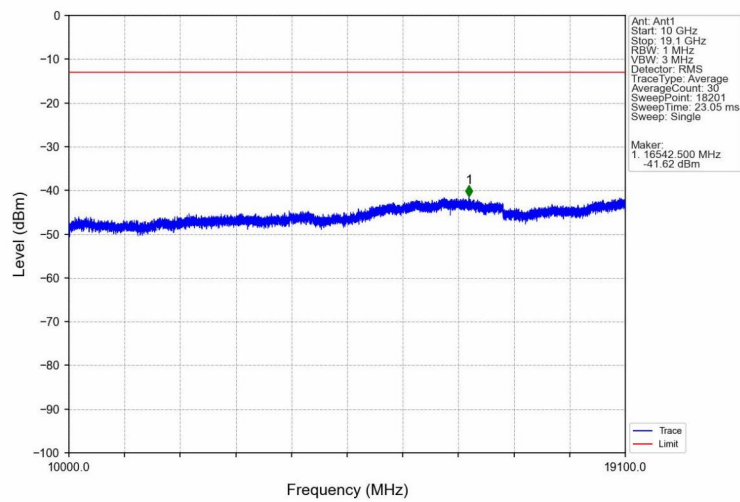
Band2_RMC_LCH_1852.4MHz_12.2kbps_RMC_NTNV



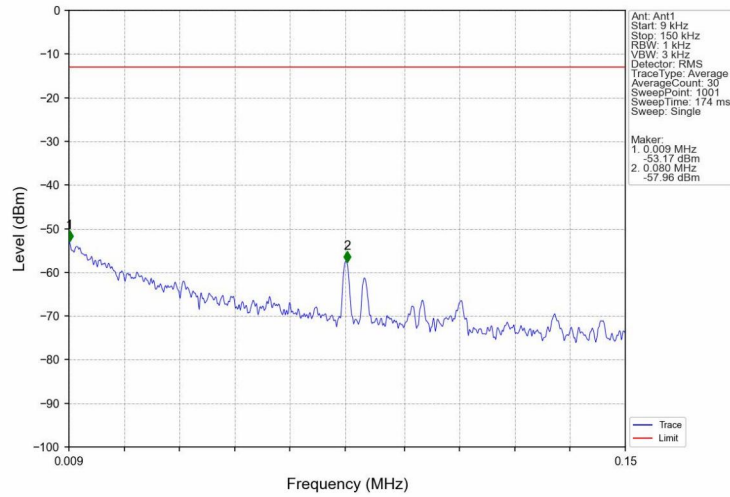
Band2_RMC_LCH_1852.4MHz_12.2kbps_RMC_NTNV



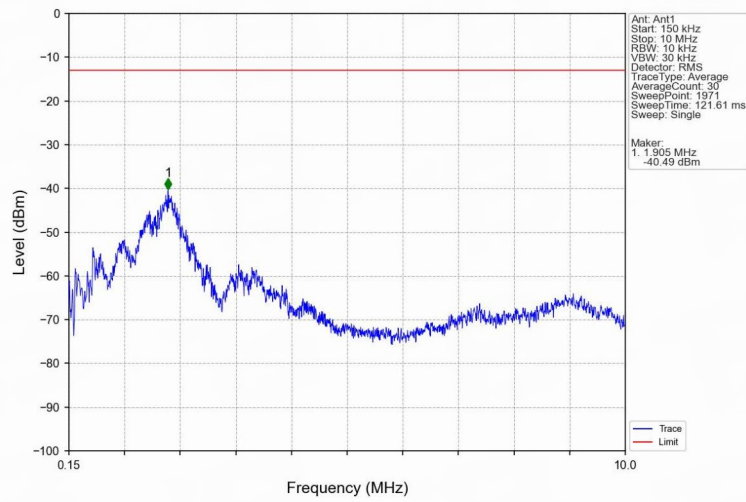
Band2_RMC_LCH_1852.4MHz_12.2kbps_RMC_NTNV



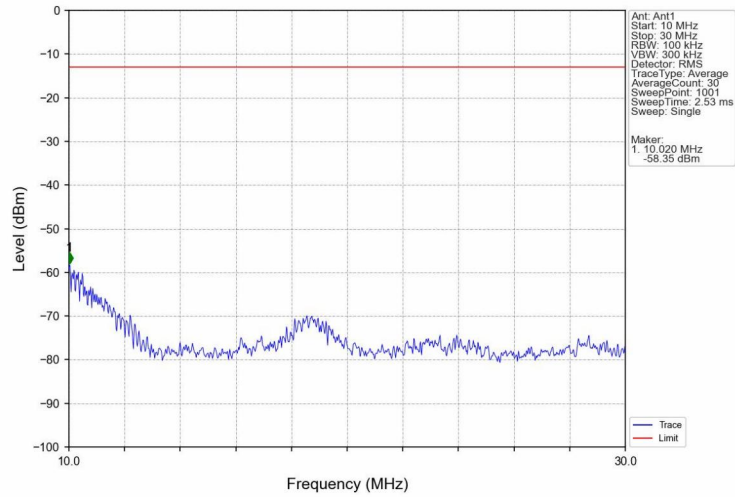
Band2_RMC_MCH_1880MHz_12.2kbps_RMC_NTNV



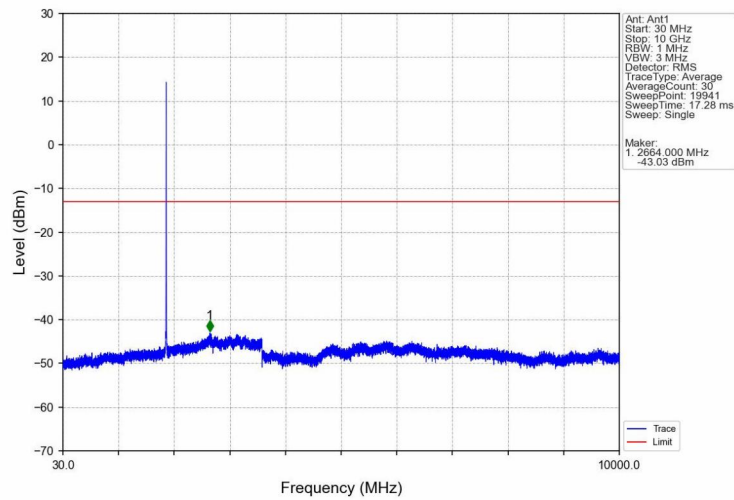
Band2_RMC_MCH_1880MHz_12.2kbps_RMC_NTNV



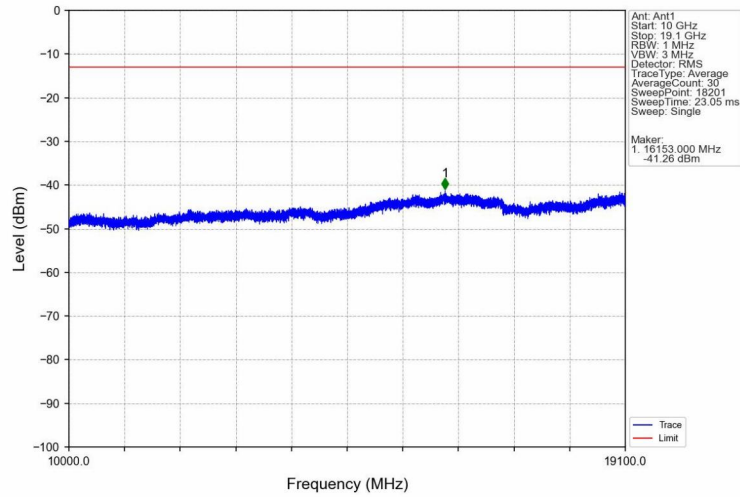
Band2_RMC_MCH_1880MHz_12.2kbps_RMC_NTNV



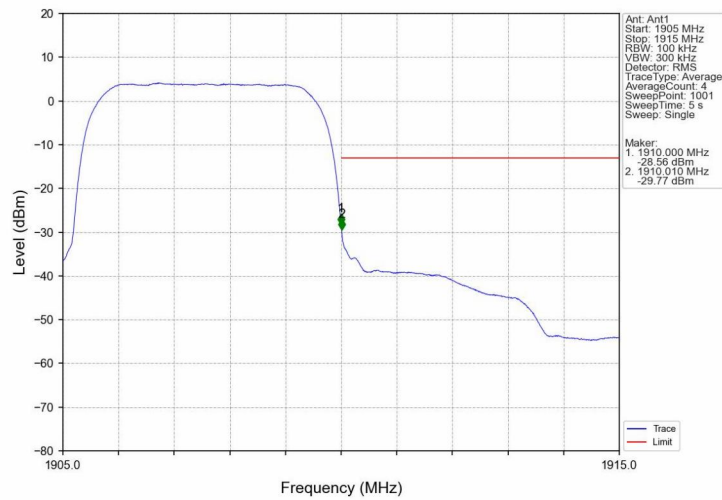
Band2_RMC_MCH_1880MHz_12.2kbps_RMC_NTNV



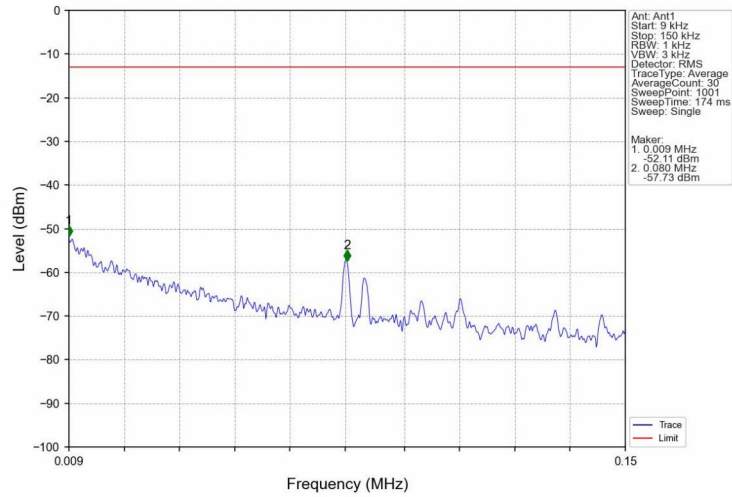
Band2_RMC_MCH_1880MHz_12.2kbps_RMC_NTNV



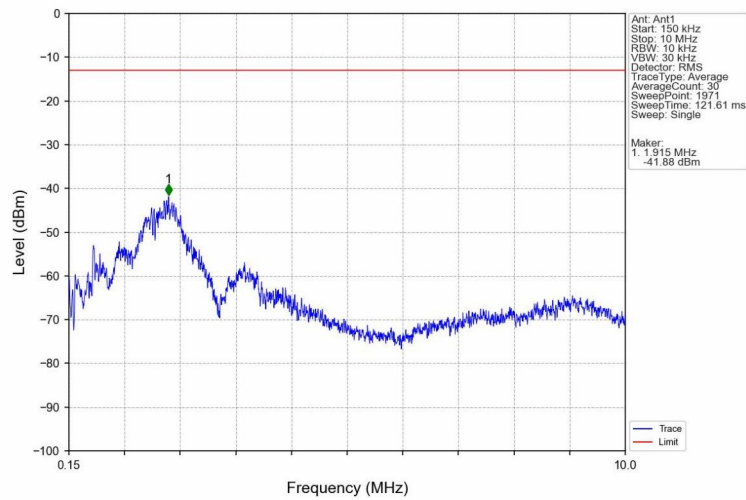
Band2_RMC_HCH_1907.6MHz_12.2kbps_RMC_NTNV



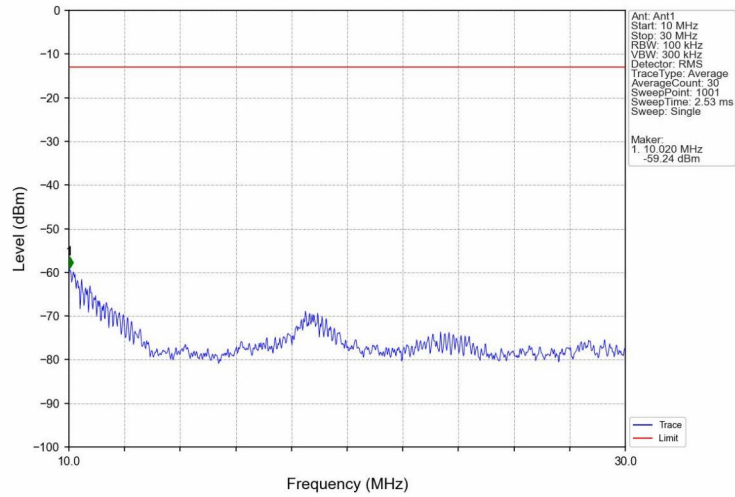
Band2_RMC_HCH_1907.6MHz_12.2kbps_RMC_NTNV



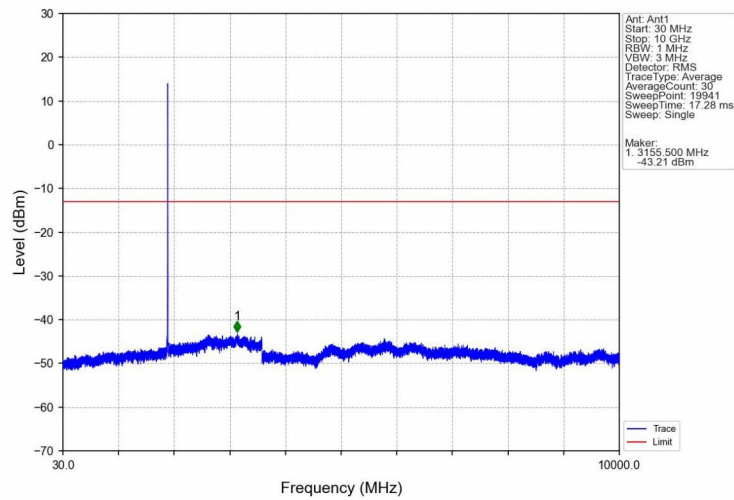
Band2_RMC_HCH_1907.6MHz_12.2kbps_RMC_NTNV



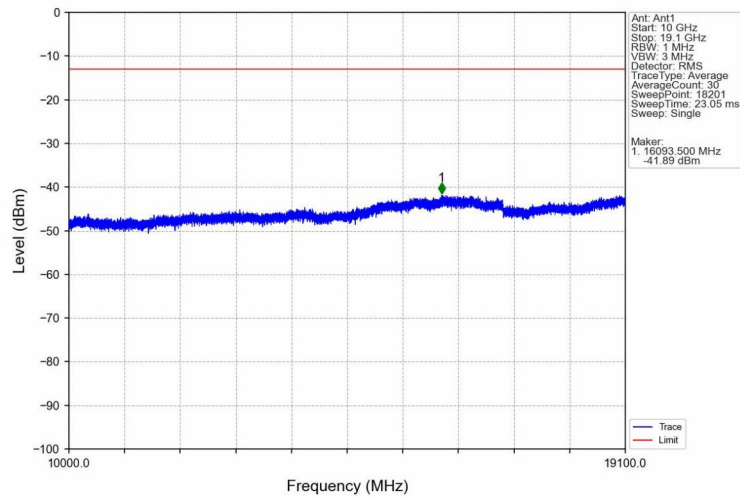
Band2_RMC_HCH_1907.6MHz_12.2kbps_RMC_NTNV



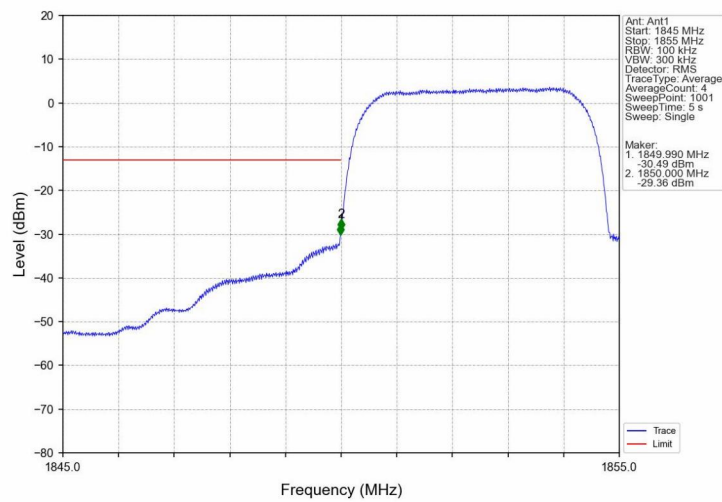
Band2_RMC_HCH_1907.6MHz_12.2kbps_RMC_NTNV



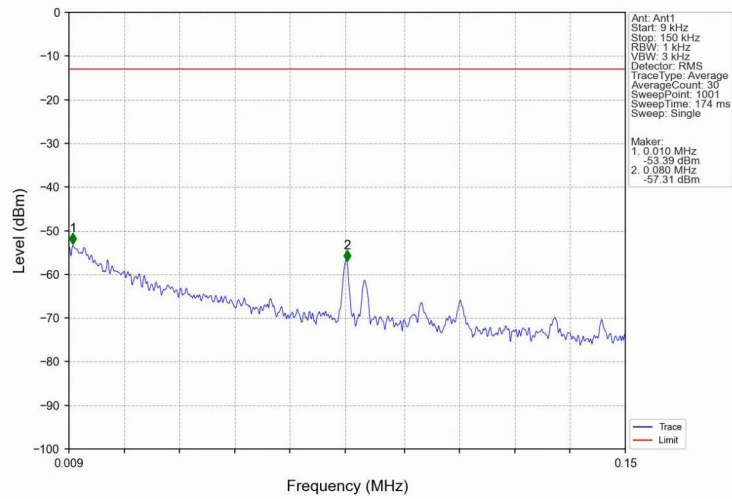
Band2_RMC_HCH_1907.6MHz_12.2kbps_RMC_NTNV



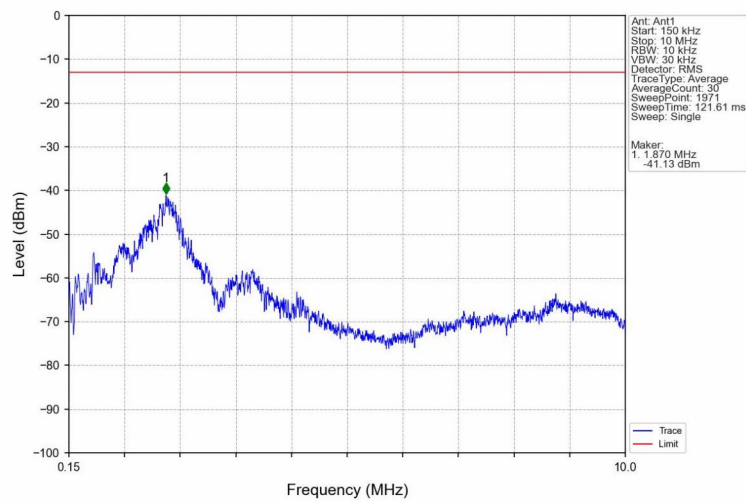
Band2_HSDPA_LCH_1852.4MHz_Subtest 1_NTNV



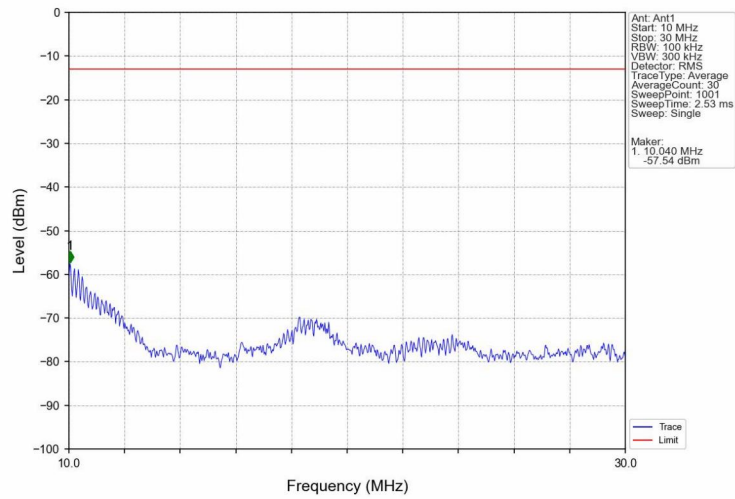
Band2_HSDPA_LCH_1852.4MHz_Subtest 1_NTNV



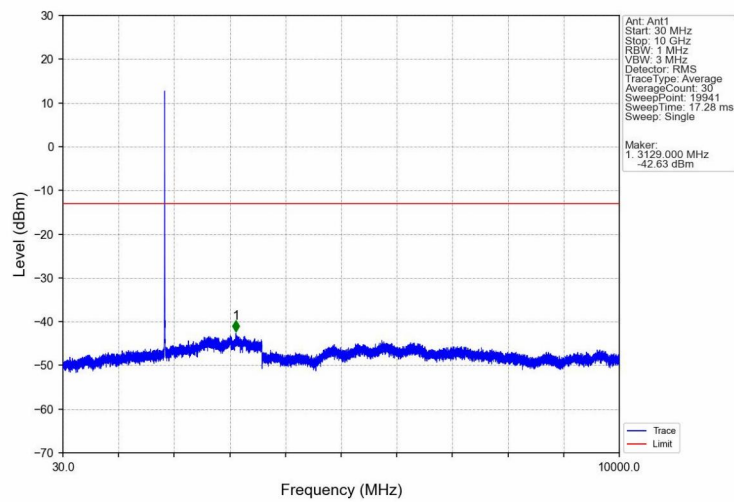
Band2_HSDPA_LCH_1852.4MHz_Subtest 1_NTNV



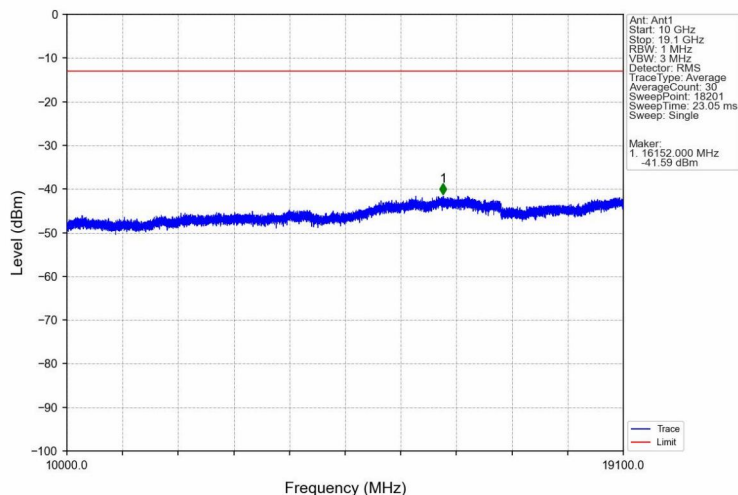
Band2_HSDPA_LCH_1852.4MHz_Subtest 1_NTNV



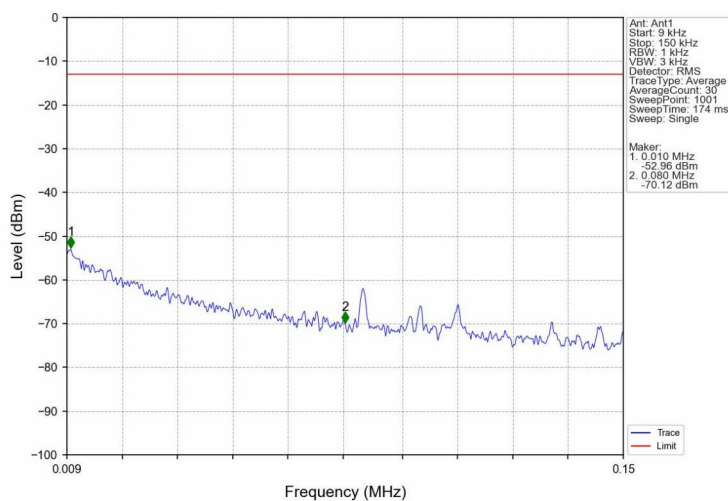
Band2_HSDPA_LCH_1852.4MHz_Subtest 1_NTNV



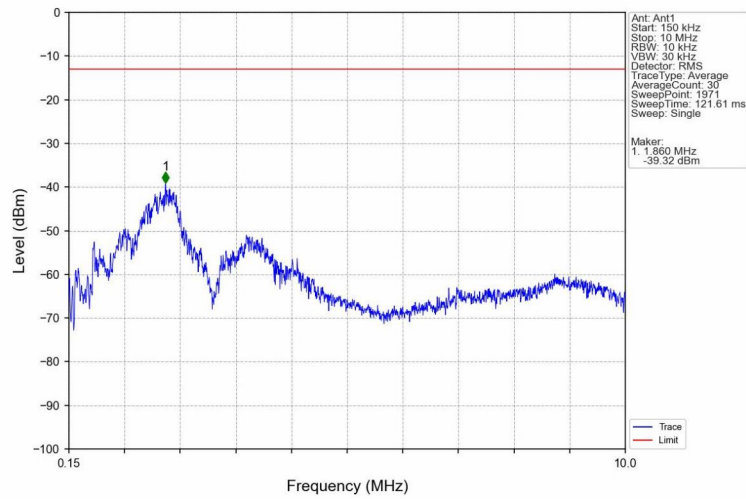
Band2_HSDPA_LCH_1852.4MHz_Subtest 1_NTNV



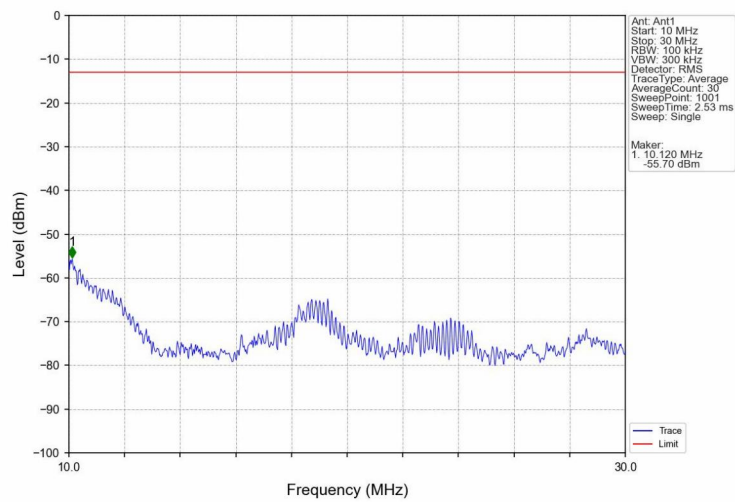
Band2_HSDPA_MCH_1880MHz_Subtest 1_NTNV



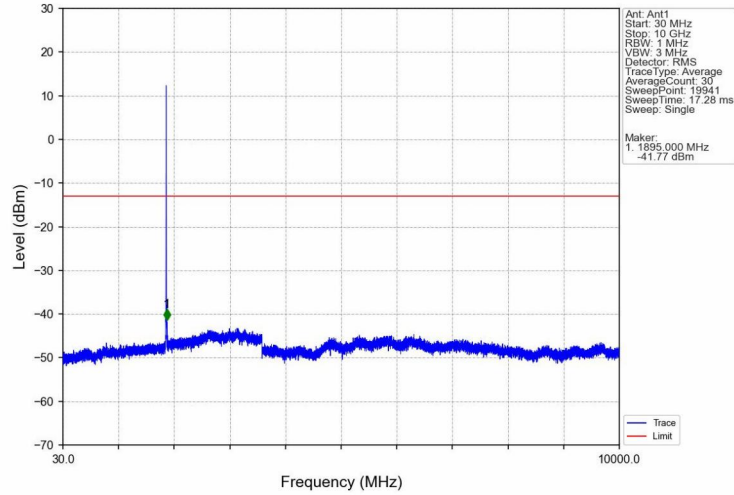
Band2_HSDPA_MCH_1880MHz_Subtest 1_NTNV



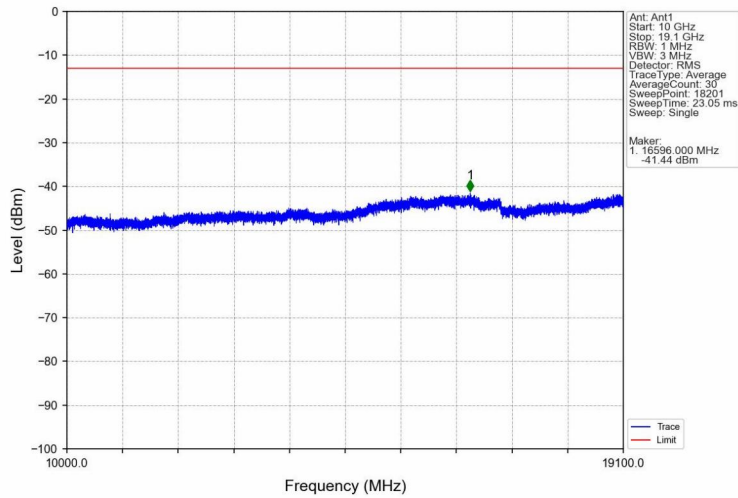
Band2_HSDPA_MCH_1880MHz_Subtest 1_NTNV



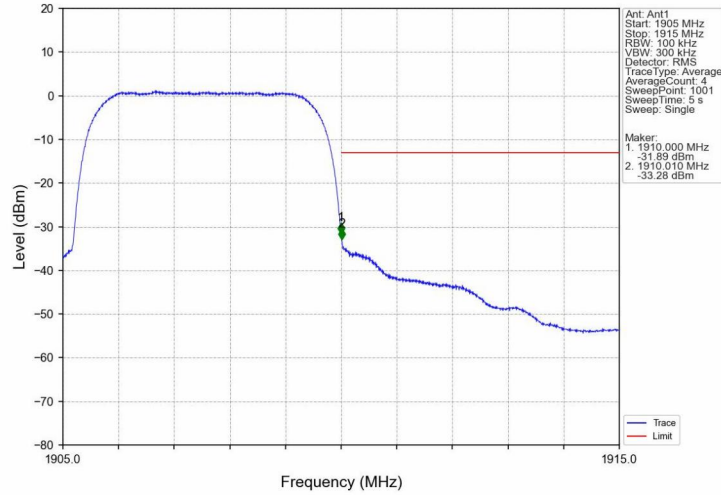
Band2_HSDPA_MCH_1880MHz_Subtest 1_NTNV



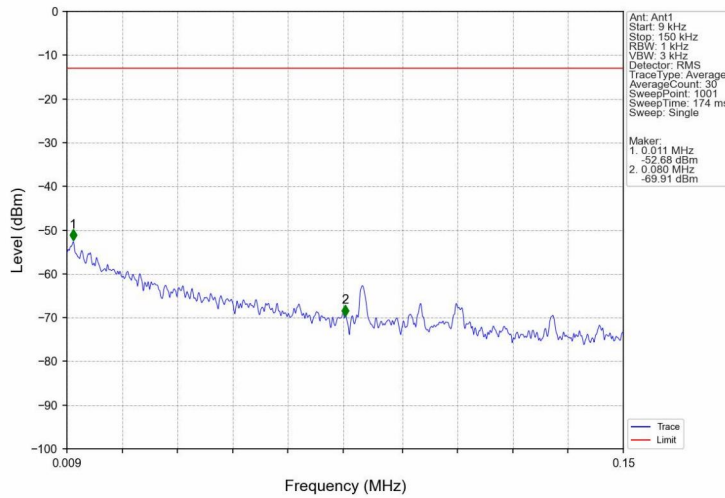
Band2_HSDPA_MCH_1880MHz_Subtest 1_NTNV



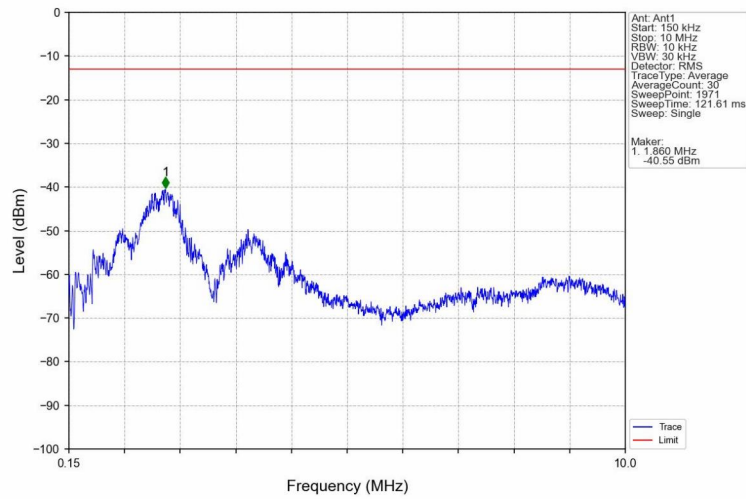
Band2_HSDPA_HCH_1907.6MHz_Subtest 1_NTNV



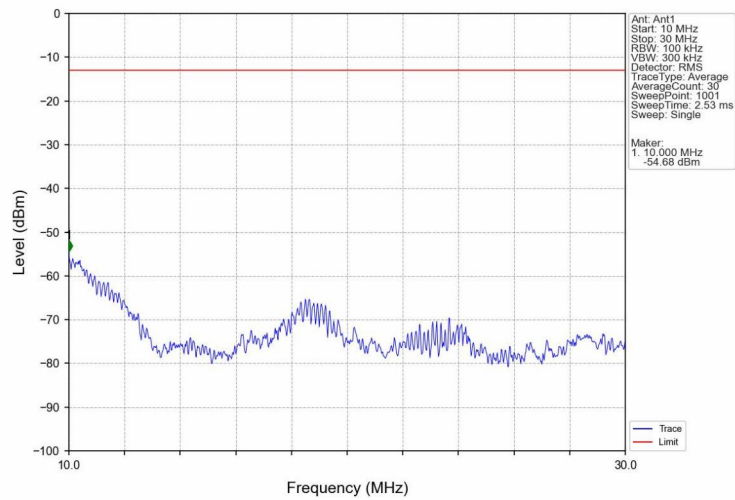
Band2_HSDPA_HCH_1907.6MHz_Subtest 1_NTNV



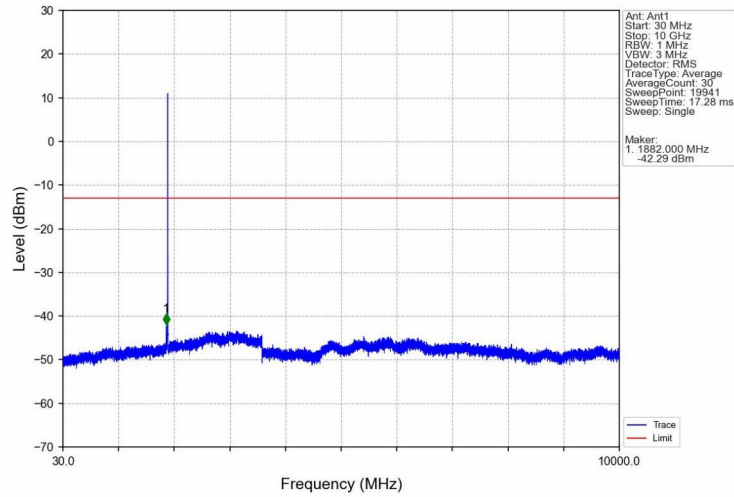
Band2_HSDPA_HCH_1907.6MHz_Subtest 1_NTNV



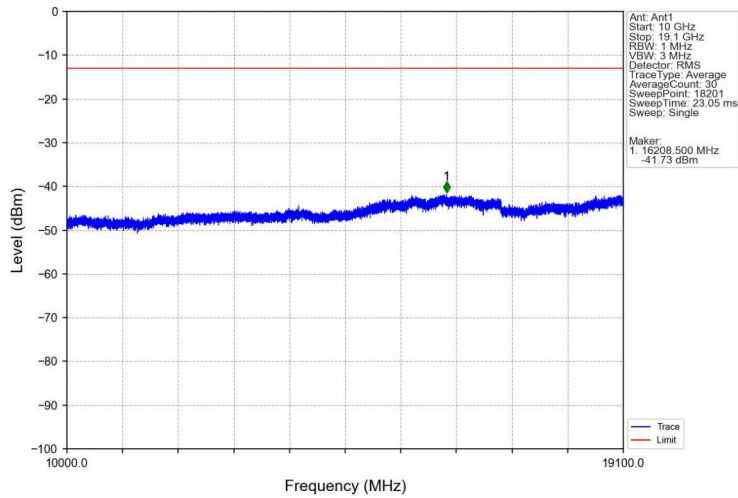
Band2_HSDPA_HCH_1907.6MHz_Subtest 1_NTNV



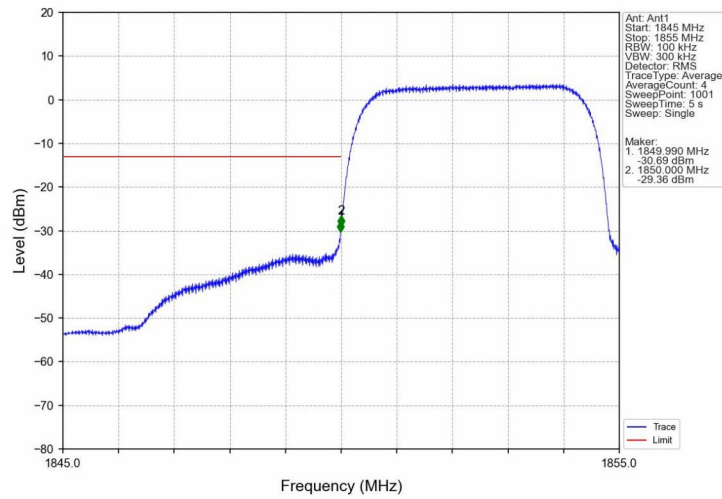
Band2_HSDPA_HCH_1907.6MHz_Subtest 1_NTNV



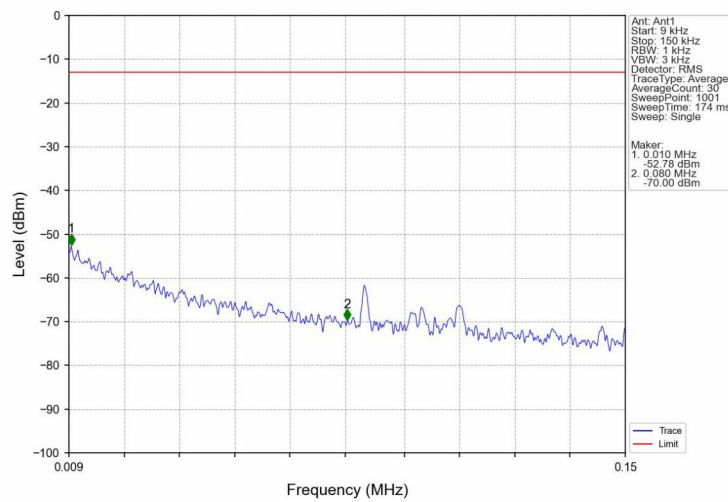
Band2_HSDPA_HCH_1907.6MHz_Subtest 1_NTNV



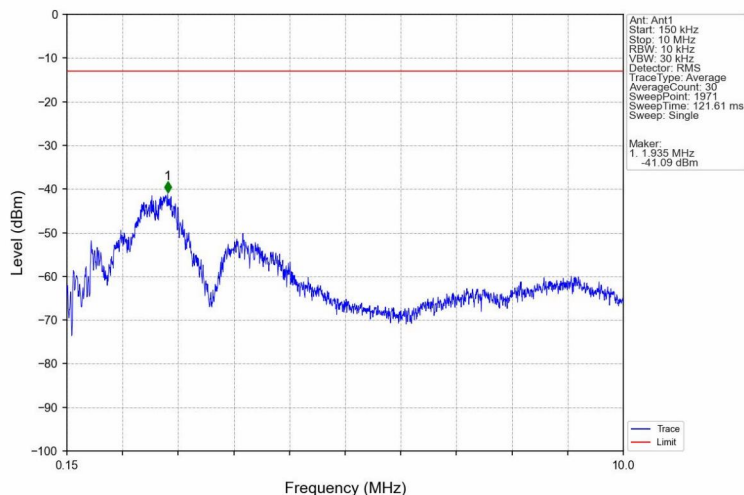
Band2_HSUPA_LCH_1852.4MHz_Subtest 1_NTNV



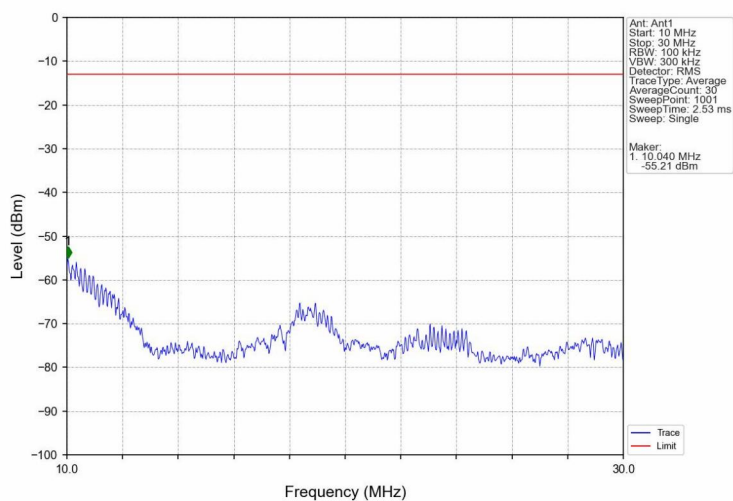
Band2_HSUPA_LCH_1852.4MHz_Subtest 1_NTNV



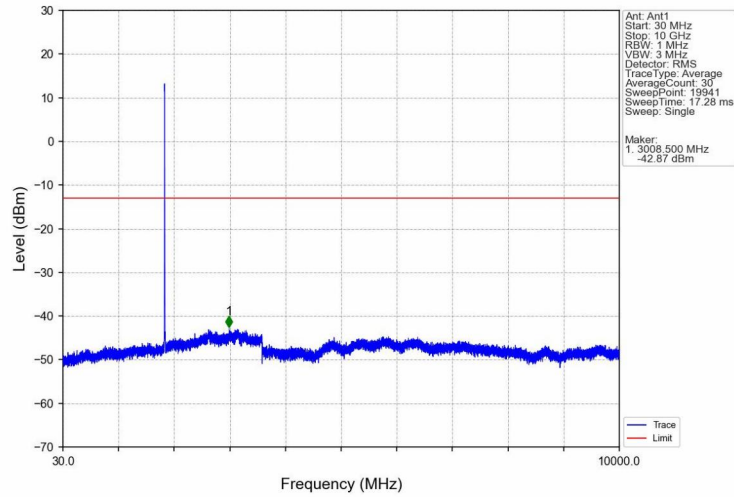
Band2_HSUPA_LCH_1852.4MHz_Subtest 1_NTNV



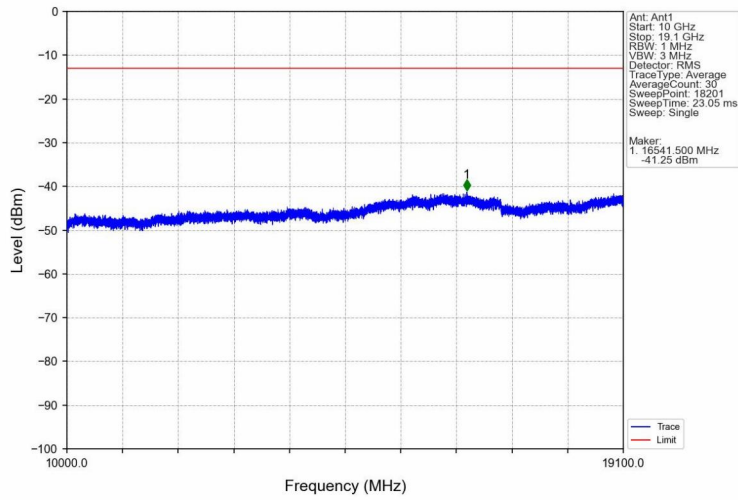
Band2_HSUPA_LCH_1852.4MHz_Subtest 1_NTNV



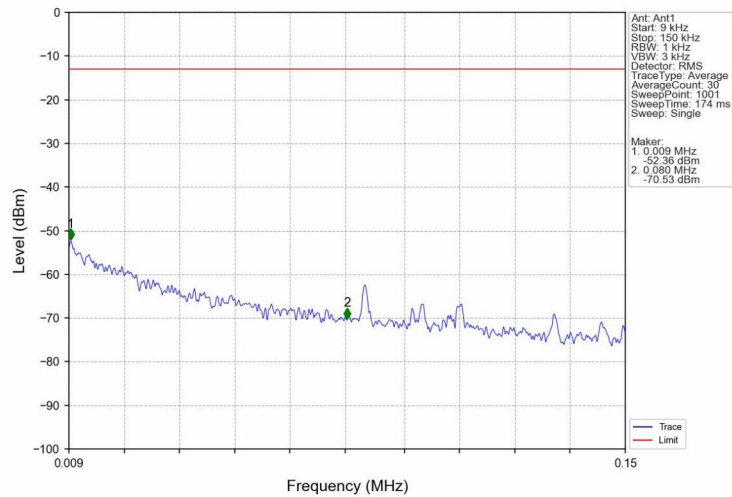
Band2_HSUPA_LCH_1852.4MHz_Subtest 1_NTNV



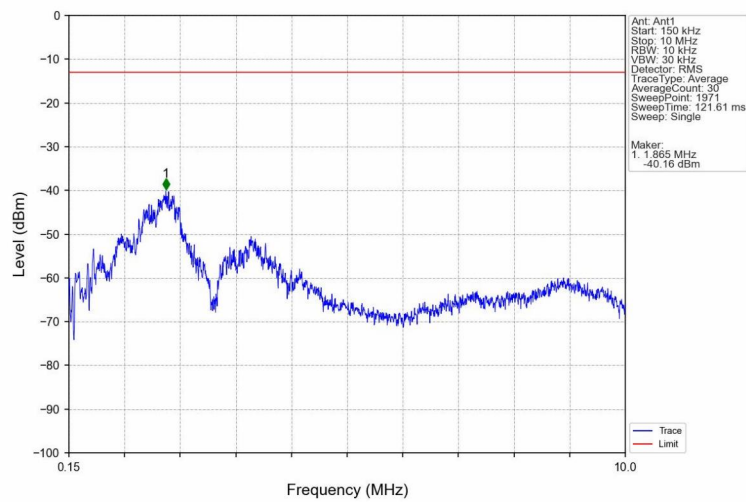
Band2_HSUPA_LCH_1852.4MHz_Subtest 1_NTNV



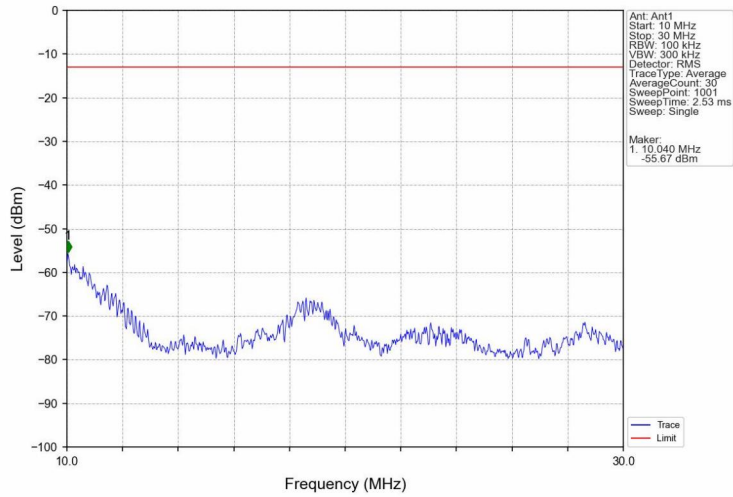
Band2_HSUPA_MCH_1880MHz_Subtest 1_NTNV



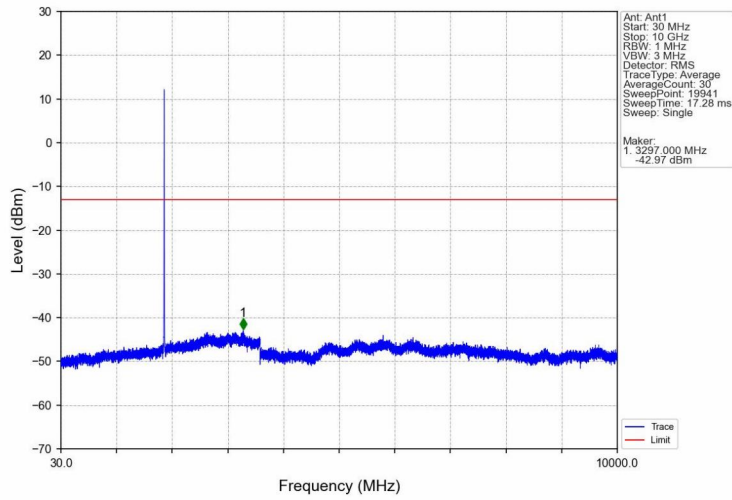
Band2_HSUPA_MCH_1880MHz_Subtest 1_NTNV



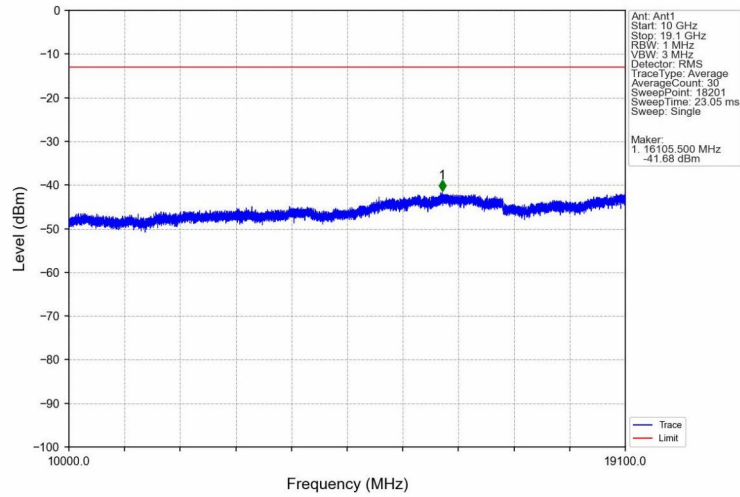
Band2_HSUPA_MCH_1880MHz_Subtest 1_NTNV



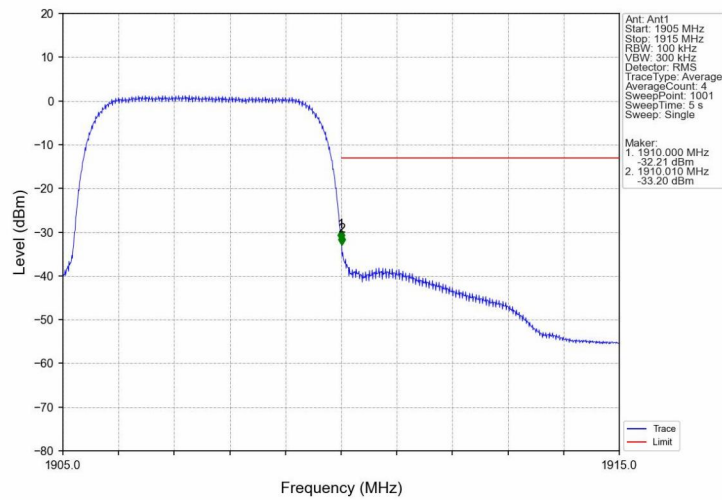
Band2_HSUPA_MCH_1880MHz_Subtest 1_NTNV



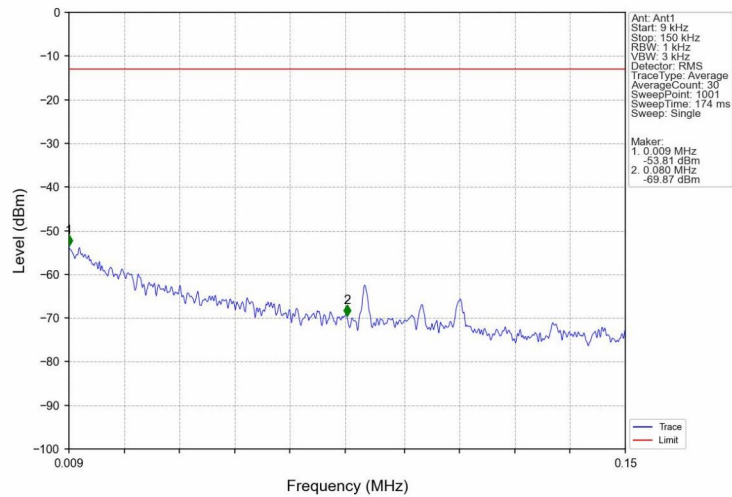
Band2_HSUPA_MCH_1880MHz_Subtest 1_NTNV



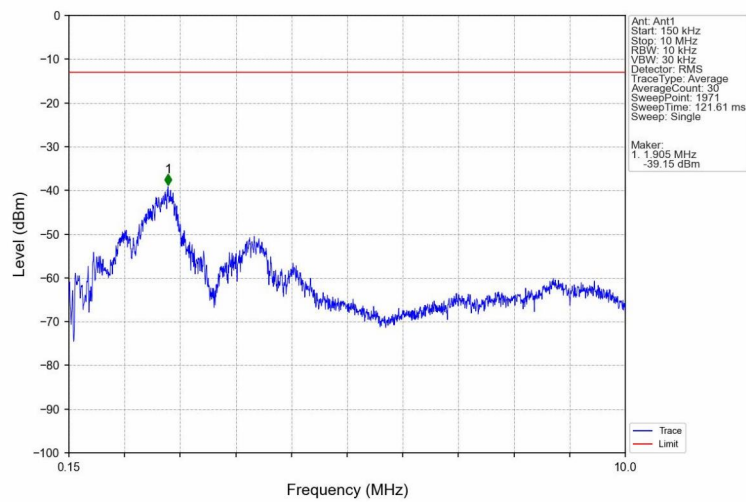
Band2_HSUPA_HCH_1907.6MHz_Subtest 1_NTNV



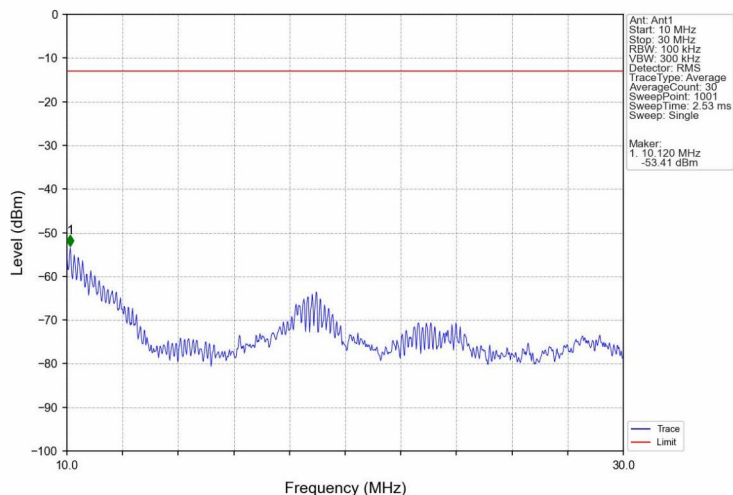
Band2_HSUPA_HCH_1907.6MHz_Subtest 1_NTNV



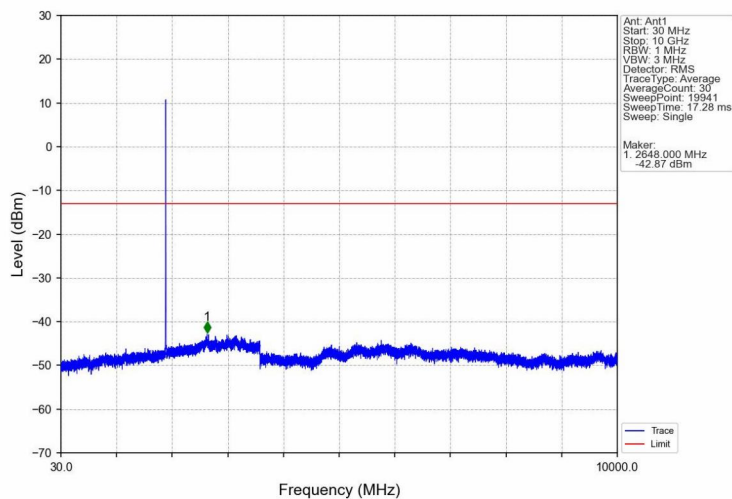
Band2_HSUPA_HCH_1907.6MHz_Subtest 1_NTNV

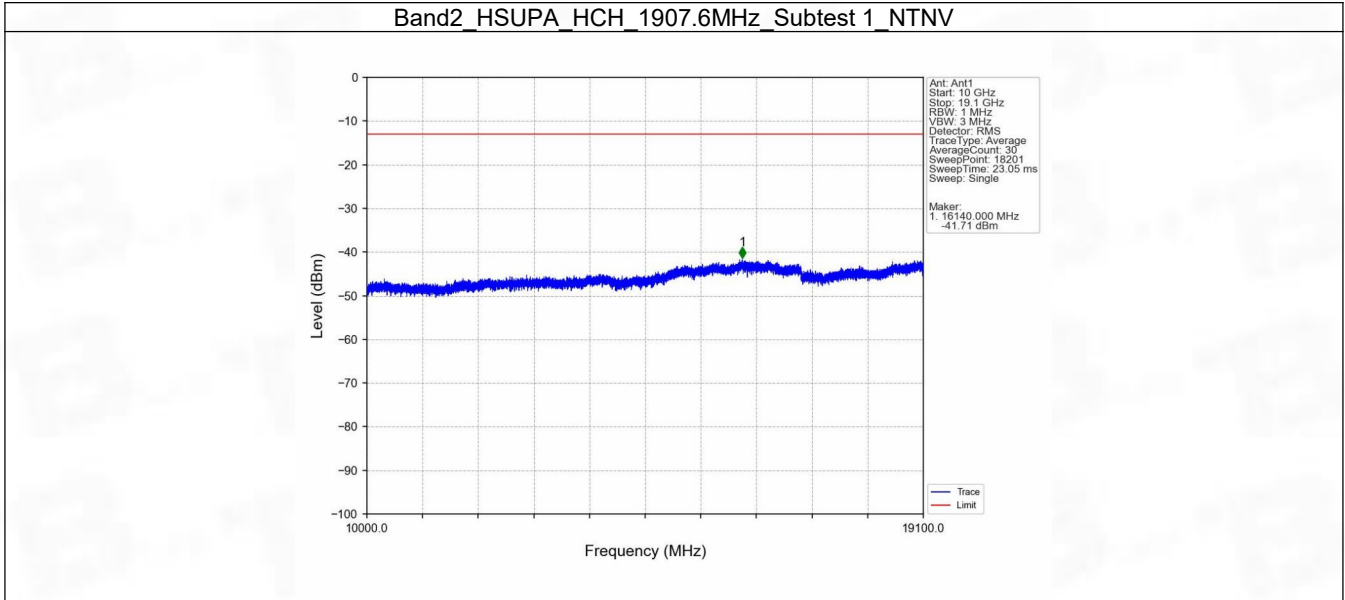


Band2_HSUPA_HCH_1907.6MHz_Subtest 1_NTNV



Band2_HSUPA_HCH_1907.6MHz_Subtest 1_NTNV





7. Form731

7.1 Test Result

7.1.1 Form731_Power

Band	BW	Lower Freq	High Freq	MAX Power (W)	Value	Hz/ppm	Emission Designator	Rule Parts	MAX Power (dBm)
2	3.84	1852.4	1907.6	0.1340	0.0099	ppm	4M18F9W	24E	21.27

7.1.2 Form731_EIRP

Band	BW	Lower Freq	High Freq	MAX Power (W)	Value	Hz/ppm	Emission Designator	Rule Parts	MAX Power (dBm)
2	3.84	1852.4	1907.6	0.1914	0.0099	ppm	4M18F9W	24E	22.82