

1. Effective (Isotropic) Radiated Power Output Data

1.1 PCS1900_EIRP

1.1.1 Test Result

Band: PCS1900									
ENV	Mode		Frequency (MHz)	Conducted Power (dBm)	Gain (dBi)	EIRP (dBm)		Verdict	
	Network	Subset				Result	Limit		
NTNV	GSM	GSM	1850.2	29.20	0.82	30.02	<=33.01	Pass	
			1880	29.14	0.82	29.96	<=33.01	Pass	
			1909.8	29.09	0.82	29.91	<=33.01	Pass	
	GPRS	1 TX Slot	1850.2	29.21	0.82	30.03	<=33.01	Pass	
		2 TX Slots	1850.2	26.95	0.82	27.77	<=33.01	Pass	
		3 TX Slots	1850.2	25.46	0.82	26.28	<=33.01	Pass	
		4 TX Slots	1850.2	23.55	0.82	24.37	<=33.01	Pass	
		1 TX Slot	1880	29.13	0.82	29.95	<=33.01	Pass	
		2 TX Slots	1880	27.08	0.82	27.90	<=33.01	Pass	
		3 TX Slots	1880	25.62	0.82	26.44	<=33.01	Pass	
		4 TX Slots	1880	23.69	0.82	24.51	<=33.01	Pass	
		1 TX Slot	1909.8	29.07	0.82	29.89	<=33.01	Pass	
		2 TX Slots	1909.8	26.96	0.82	27.78	<=33.01	Pass	
		3 TX Slots	1909.8	25.48	0.82	26.30	<=33.01	Pass	
		4 TX Slots	1909.8	23.53	0.82	24.35	<=33.01	Pass	
		EGPRS	1 TX Slot	1850.2	25.21	0.82	26.03	<=33.01	Pass
			2 TX Slots	1850.2	23.91	0.82	24.73	<=33.01	Pass
			3 TX Slots	1850.2	21.26	0.82	22.08	<=33.01	Pass
			4 TX Slots	1850.2	19.41	0.82	20.23	<=33.01	Pass
	1 TX Slot		1880	25.42	0.82	26.24	<=33.01	Pass	
	2 TX Slots		1880	24.01	0.82	24.83	<=33.01	Pass	
	3 TX Slots		1880	22.75	0.82	23.57	<=33.01	Pass	
	4 TX Slots		1880	19.79	0.82	20.61	<=33.01	Pass	
	1 TX Slot		1909.8	25.17	0.82	25.99	<=33.01	Pass	
	2 TX Slots		1909.8	24.00	0.82	24.82	<=33.01	Pass	
	3 TX Slots		1909.8	21.58	0.82	22.40	<=33.01	Pass	
	4 TX Slots		1909.8	19.98	0.82	20.80	<=33.01	Pass	

Note1: EIRP=Conducted Power+Antenna Gain

2. Frequency Stability

2.1 PCS1900

2.1.1 Test Result

Band: PCS1900							
Network	Frequency (MHz)	Temp. (°C)	Voltage (VDC)	Freq. Error (Hz)	Freq. vs. Rated (ppm)		Verdict
					Result	Limit	
GSM	1850.2	20	3.27	27.830	0.0150	-2.5 to 2.5	Pass
			3.85	15.691	0.0085	-2.5 to 2.5	Pass
			4.43	4.068	0.0022	-2.5 to 2.5	Pass
		-30	3.85	9.331	0.0050	-2.5 to 2.5	Pass
		-20	3.85	8.782	0.0047	-2.5 to 2.5	Pass

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	1880	-10	3.85	6.845	0.0037	-2.5 to 2.5	Pass	
		0	3.85	4.359	0.0024	-2.5 to 2.5	Pass	
		10	3.85	4.585	0.0025	-2.5 to 2.5	Pass	
		30	3.85	3.810	0.0021	-2.5 to 2.5	Pass	
		40	3.85	0.032	0.0000	-2.5 to 2.5	Pass	
		50	3.85	-3.907	-0.0021	-2.5 to 2.5	Pass	
	1880	20	3.27	13.237	0.0070	-2.5 to 2.5	Pass	
			3.85	6.845	0.0036	-2.5 to 2.5	Pass	
			4.43	9.072	0.0048	-2.5 to 2.5	Pass	
		-30	3.85	6.715	0.0036	-2.5 to 2.5	Pass	
		-20	3.85	6.328	0.0034	-2.5 to 2.5	Pass	
		-10	3.85	6.586	0.0035	-2.5 to 2.5	Pass	
		0	3.85	3.745	0.0020	-2.5 to 2.5	Pass	
		10	3.85	1.227	0.0007	-2.5 to 2.5	Pass	
		30	3.85	2.938	0.0016	-2.5 to 2.5	Pass	
		40	3.85	5.101	0.0027	-2.5 to 2.5	Pass	
		50	3.85	1.162	0.0006	-2.5 to 2.5	Pass	
		1909.8	20	3.27	4.165	0.0022	-2.5 to 2.5	Pass
	3.85			-5.715	-0.0030	-2.5 to 2.5	Pass	
	4.43			-5.004	-0.0026	-2.5 to 2.5	Pass	
	-30		3.85	-1.517	-0.0008	-2.5 to 2.5	Pass	
	-20		3.85	7.361	0.0039	-2.5 to 2.5	Pass	
	-10		3.85	8.975	0.0047	-2.5 to 2.5	Pass	
	0		3.85	7.200	0.0038	-2.5 to 2.5	Pass	
	10		3.85	8.717	0.0046	-2.5 to 2.5	Pass	
	30		3.85	12.979	0.0068	-2.5 to 2.5	Pass	
	40		3.85	3.907	0.0020	-2.5 to 2.5	Pass	
	50		3.85	11.106	0.0058	-2.5 to 2.5	Pass	
	GPRS		1850.2	20	3.27	31.705	0.0171	-2.5 to 2.5
		3.85			29.994	0.0162	-2.5 to 2.5	Pass
4.43		30.607			0.0165	-2.5 to 2.5	Pass	
-30		3.85		30.155	0.0163	-2.5 to 2.5	Pass	
-20		3.85		32.318	0.0175	-2.5 to 2.5	Pass	
-10		3.85		30.478	0.0165	-2.5 to 2.5	Pass	
0		3.85		25.506	0.0138	-2.5 to 2.5	Pass	
10		3.85		28.993	0.0157	-2.5 to 2.5	Pass	
30		3.85		31.834	0.0172	-2.5 to 2.5	Pass	
40		3.85		27.508	0.0149	-2.5 to 2.5	Pass	
50		3.85		27.411	0.0148	-2.5 to 2.5	Pass	
1880		20		3.27	28.896	0.0154	-2.5 to 2.5	Pass
			3.85	31.640	0.0168	-2.5 to 2.5	Pass	
			4.43	28.605	0.0152	-2.5 to 2.5	Pass	
		-30	3.85	34.223	0.0182	-2.5 to 2.5	Pass	
		-20	3.85	33.900	0.0180	-2.5 to 2.5	Pass	
		-10	3.85	35.159	0.0187	-2.5 to 2.5	Pass	
		0	3.85	33.190	0.0177	-2.5 to 2.5	Pass	
		10	3.85	30.833	0.0164	-2.5 to 2.5	Pass	
		30	3.85	31.382	0.0167	-2.5 to 2.5	Pass	
		40	3.85	28.702	0.0153	-2.5 to 2.5	Pass	
		50	3.85	37.096	0.0197	-2.5 to 2.5	Pass	
		1909.8	20	3.27	36.838	0.0193	-2.5 to 2.5	Pass
3.85				36.870	0.0193	-2.5 to 2.5	Pass	
4.43				36.515	0.0191	-2.5 to 2.5	Pass	
-30			3.85	36.741	0.0192	-2.5 to 2.5	Pass	
-20			3.85	33.351	0.0175	-2.5 to 2.5	Pass	
-10			3.85	29.735	0.0156	-2.5 to 2.5	Pass	
0		3.85	26.668	0.0140	-2.5 to 2.5	Pass		

		10	3.85	36.838	0.0193	-2.5 to 2.5	Pass
		30	3.85	33.642	0.0176	-2.5 to 2.5	Pass
		40	3.85	34.288	0.0180	-2.5 to 2.5	Pass
		50	3.85	34.675	0.0182	-2.5 to 2.5	Pass
EGPRS	1850.2	20	3.27	19.888	0.0107	-2.5 to 2.5	Pass
			3.85	-1605.091	-0.8675	-2.5 to 2.5	Pass
			4.43	-3161.237	-1.7086	-2.5 to 2.5	Pass
		-30	3.85	20.598	0.0111	-2.5 to 2.5	Pass
		-20	3.85	9.815	0.0053	-2.5 to 2.5	Pass
		-10	3.85	-1665.692	-0.9003	-2.5 to 2.5	Pass
		0	3.85	-1691.326	-0.9141	-2.5 to 2.5	Pass
		10	3.85	-3572.946	-1.9311	-2.5 to 2.5	Pass
		30	3.85	-1608.416	-0.8693	-2.5 to 2.5	Pass
		40	3.85	-3.325	-0.0018	-2.5 to 2.5	Pass
		50	3.85	12.495	0.0068	-2.5 to 2.5	Pass
		1880	20	3.27	-1685.289	-0.8964	-2.5 to 2.5
	3.85			-3193.103	-1.6985	-2.5 to 2.5	Pass
	4.43			18.145	0.0097	-2.5 to 2.5	Pass
	-30		3.85	-3358.213	-1.7863	-2.5 to 2.5	Pass
	-20		3.85	-3352.046	-1.7830	-2.5 to 2.5	Pass
	-10		3.85	-3402.218	-1.8097	-2.5 to 2.5	Pass
	0		3.85	13.495	0.0072	-2.5 to 2.5	Pass
	10		3.85	14.238	0.0076	-2.5 to 2.5	Pass
	30		3.85	-3923.958	-2.0872	-2.5 to 2.5	Pass
	40		3.85	12.139	0.0065	-2.5 to 2.5	Pass
	50		3.85	17.531	0.0093	-2.5 to 2.5	Pass
	1909.8		20	3.27	9.621	0.0050	-2.5 to 2.5
		3.85		1.582	0.0008	-2.5 to 2.5	Pass
		4.43		-3179.736	-1.6650	-2.5 to 2.5	Pass
		-30	3.85	-1686.193	-0.8829	-2.5 to 2.5	Pass
		-20	3.85	3.196	0.0017	-2.5 to 2.5	Pass
		-10	3.85	19.598	0.0103	-2.5 to 2.5	Pass
		0	3.85	8.491	0.0044	-2.5 to 2.5	Pass
		10	3.85	-1690.584	-0.8852	-2.5 to 2.5	Pass
		30	3.85	-3496.041	-1.8306	-2.5 to 2.5	Pass
		40	3.85	9.524	0.0050	-2.5 to 2.5	Pass
		50	3.85	17.854	0.0093	-2.5 to 2.5	Pass

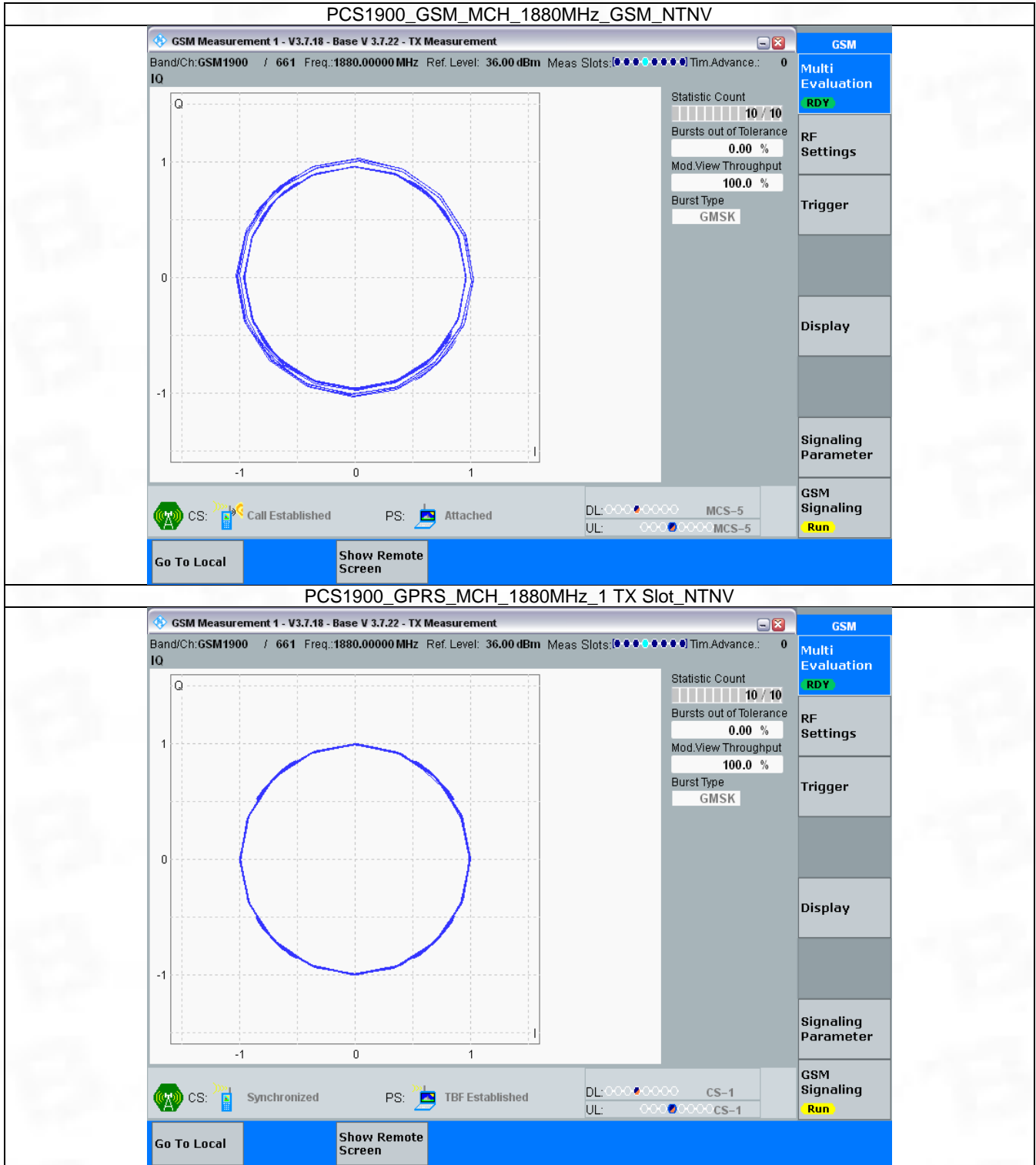
3. Modulation Characteristics

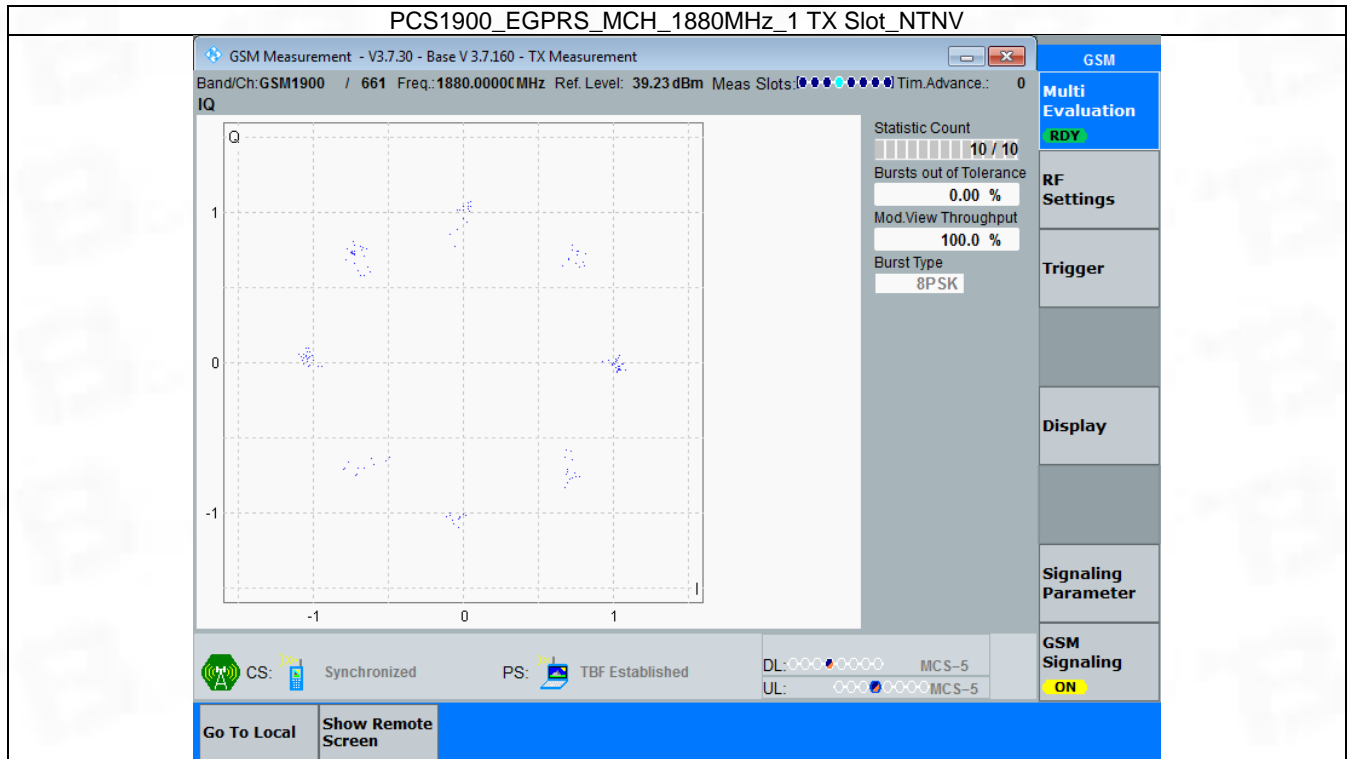
3.1 PCS1900

3.1.1 Test Result

Band: PCS1900						
ENV	Mode		Frequency (MHz)	Modulation Characteristics		Verdict
	Network	Subset		Result	Limit	
NTNV	GSM	GSM	1880	Refer To Test Graph		Pass
	GPRS	1 TX Slot	1880	Refer To Test Graph		Pass
	EGPRS	1 TX Slot	1880	Refer To Test Graph		Pass

3.1.2 Test Graph





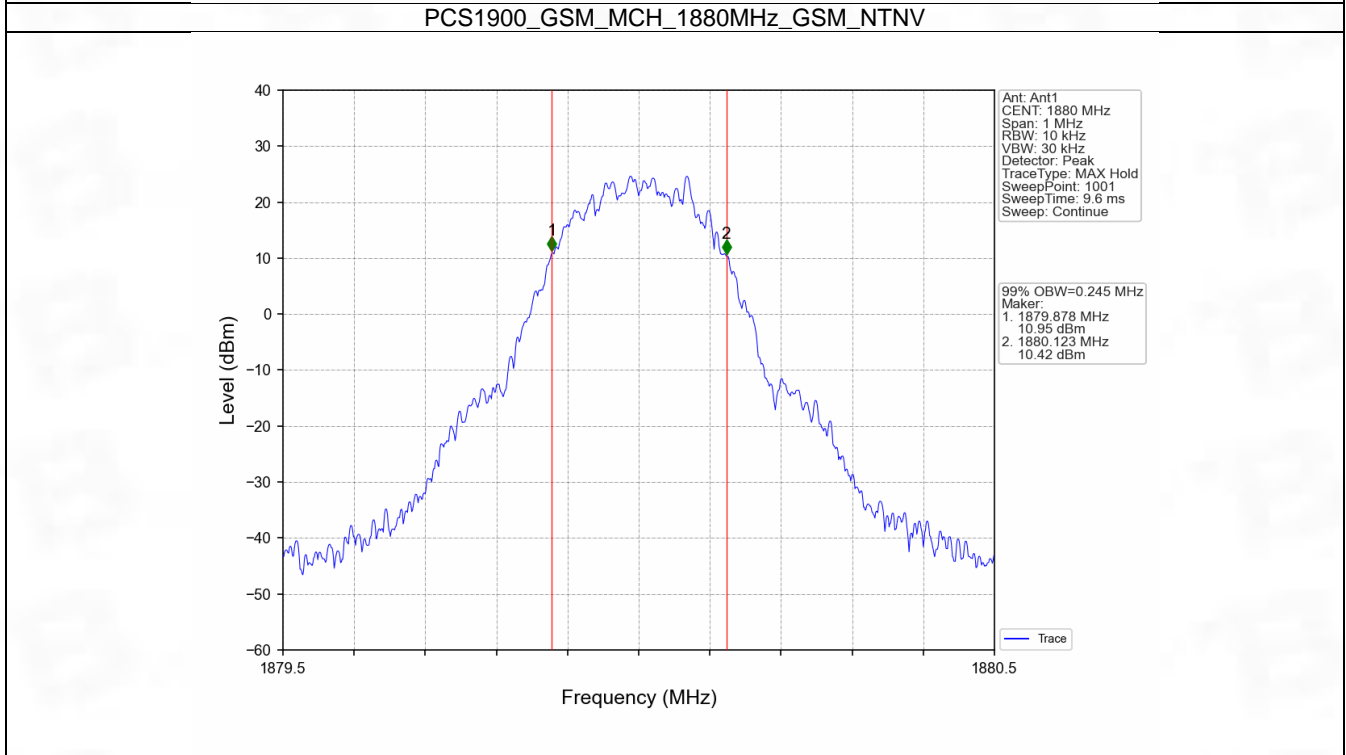
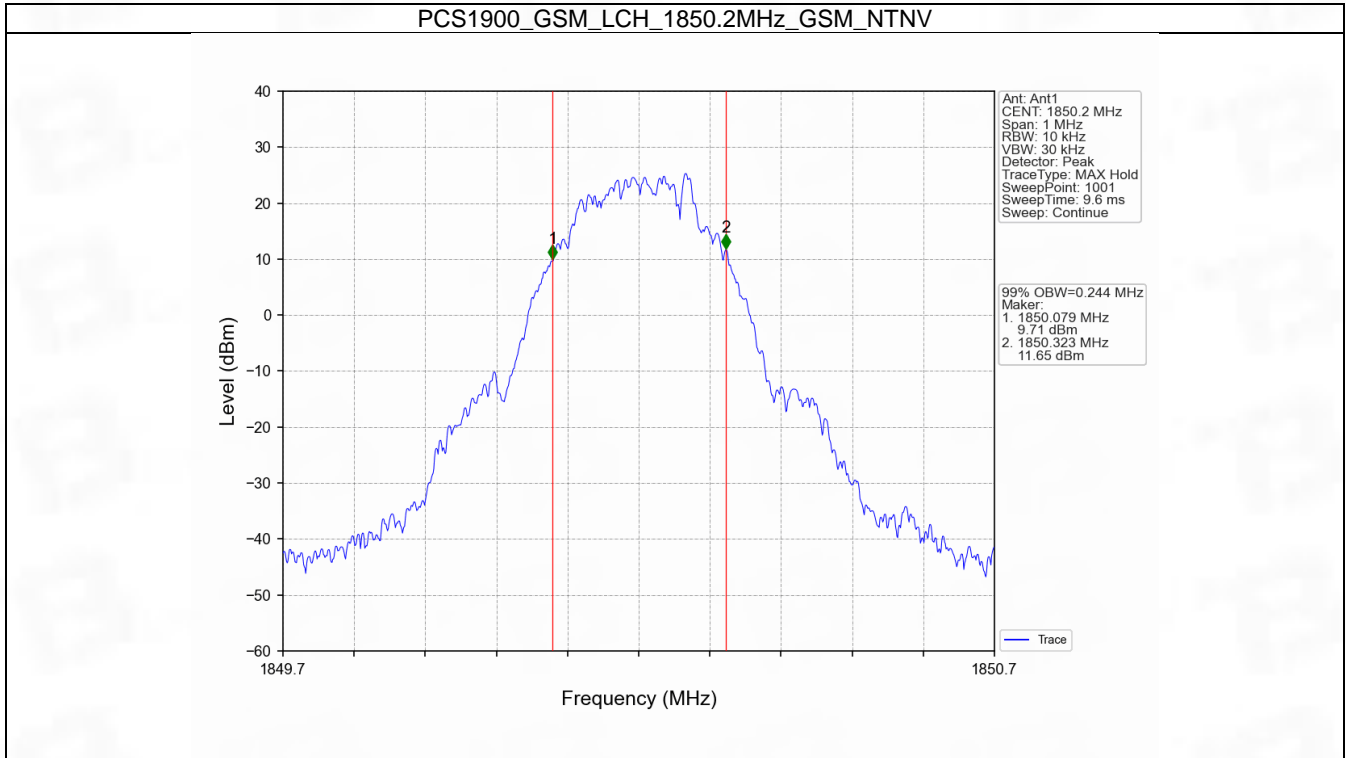
4. 99% & 26dB Bandwidth

4.1 PCS1900_OBW

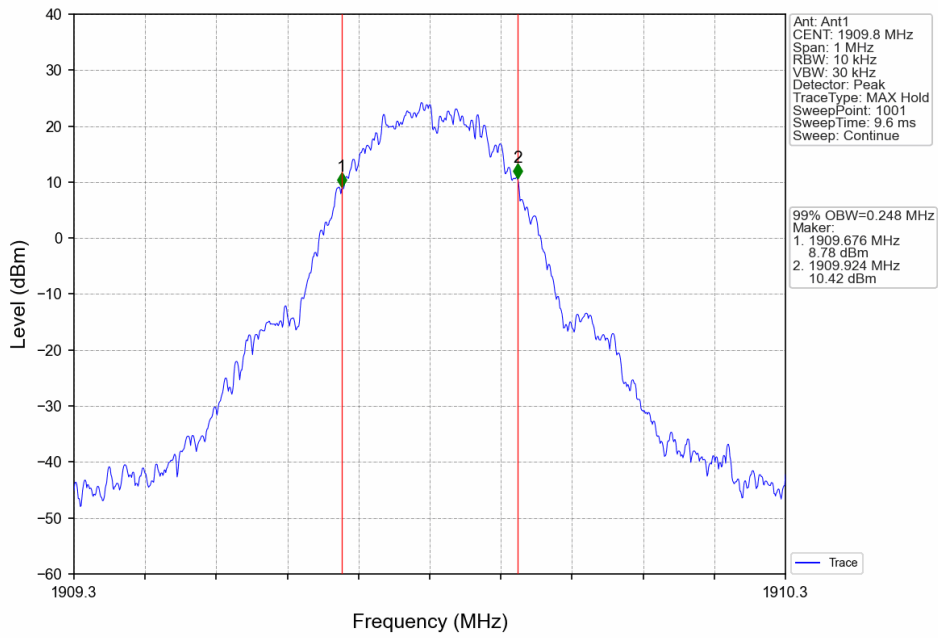
4.1.1 Test Result

Band: PCS1900						
ENV	Mode		Frequency (MHz)	99% Occupied Bandwidth (MHz)		Verdict
	Network	Subset		Result	Limit	
NTNV	GSM	GSM	1850.2	0.244	/	Pass
			1880	0.245	/	Pass
			1909.8	0.248	/	Pass
	GPRS	1 TX Slot	1850.2	0.248	/	Pass
			1880	0.242	/	Pass
			1909.8	0.243	/	Pass
	EGPRS	1 TX Slot	1850.2	0.450	/	Pass
			1880	0.453	/	Pass
			1909.8	0.449	/	Pass

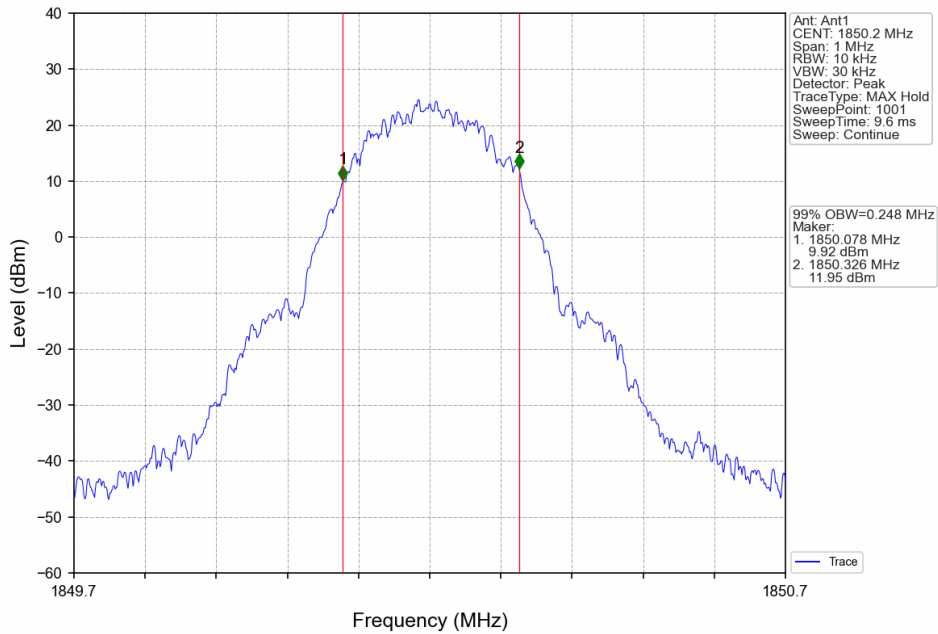
4.1.2 Test Graph



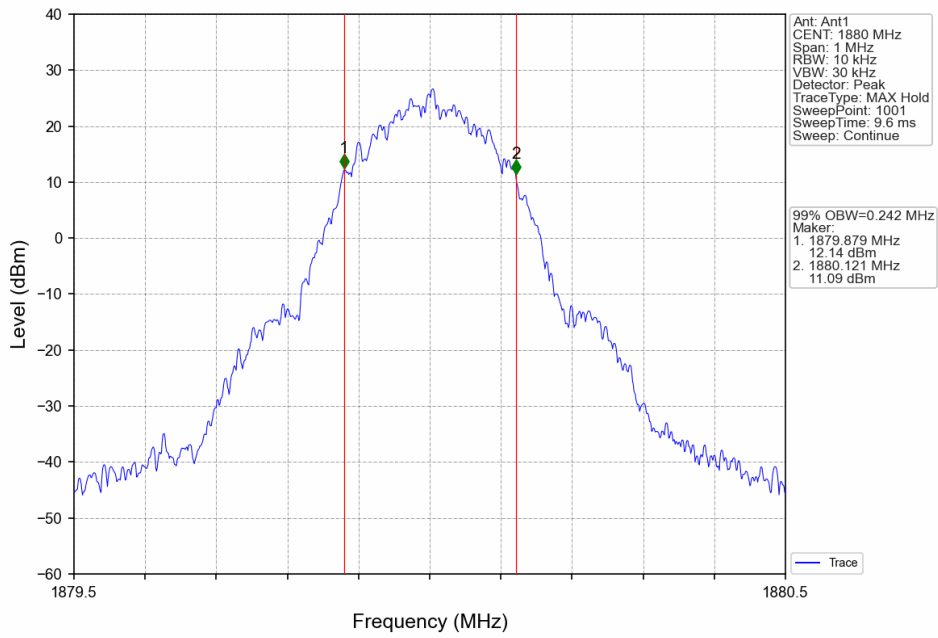
PCS1900_GSM_HCH_1909.8MHz_GSM_NTNV



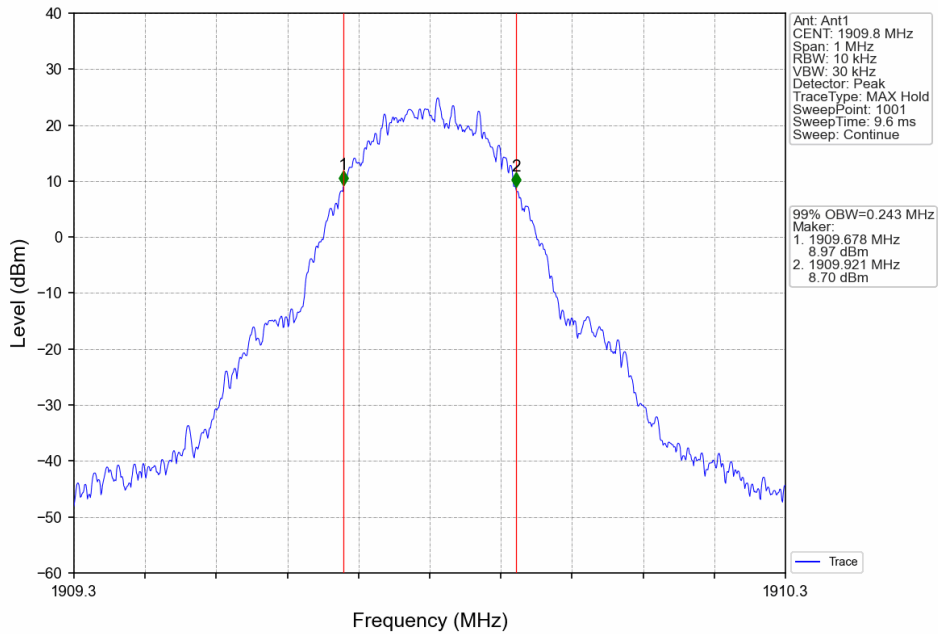
PCS1900_GPRS_LCH_1850.2MHz_1 TX Slot_NTNV



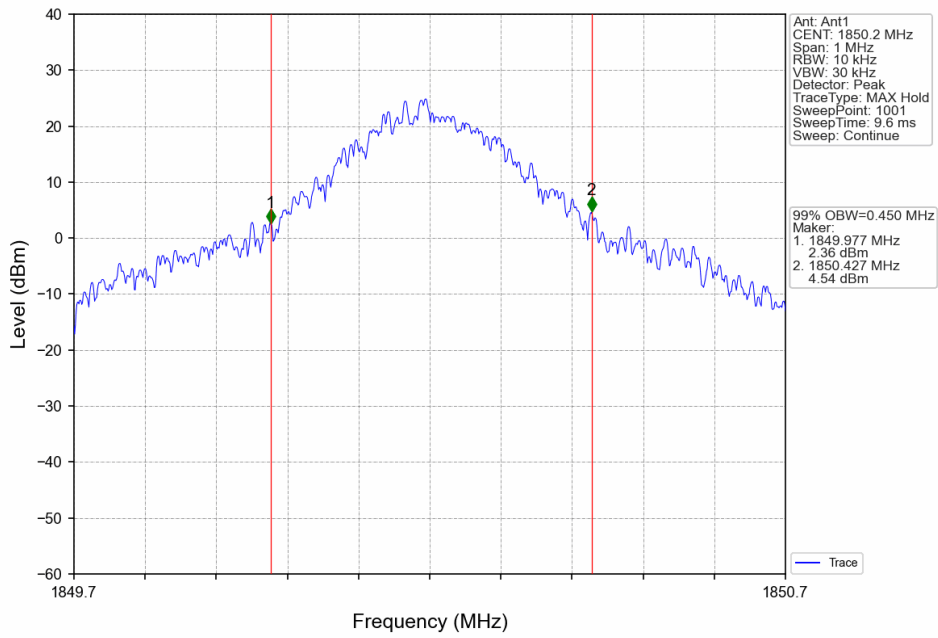
PCS1900_GPRS_MCH_1880MHz_1 TX Slot_NTNV



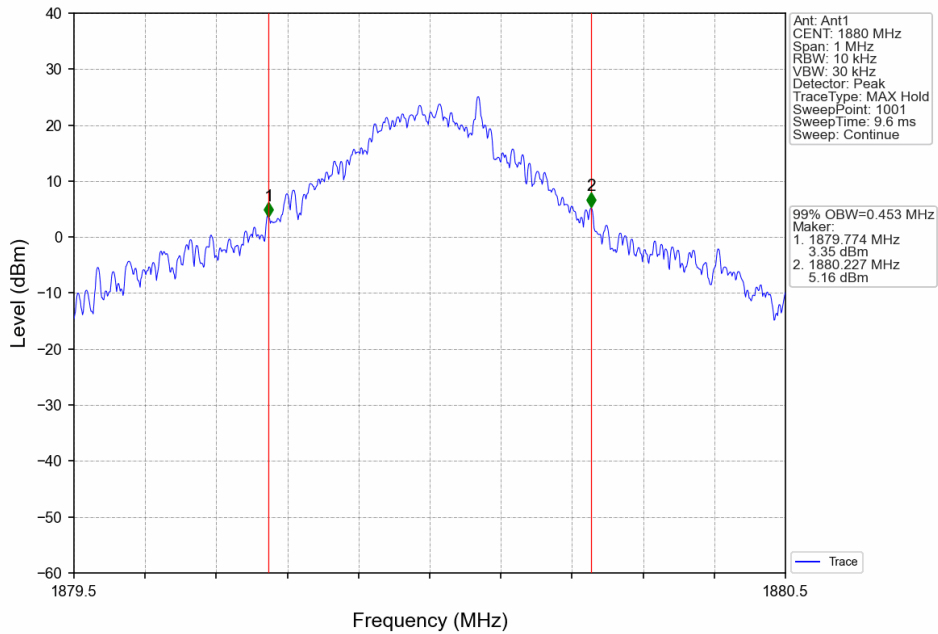
PCS1900_GPRS_HCH_1909.8MHz_1 TX Slot_NTNV

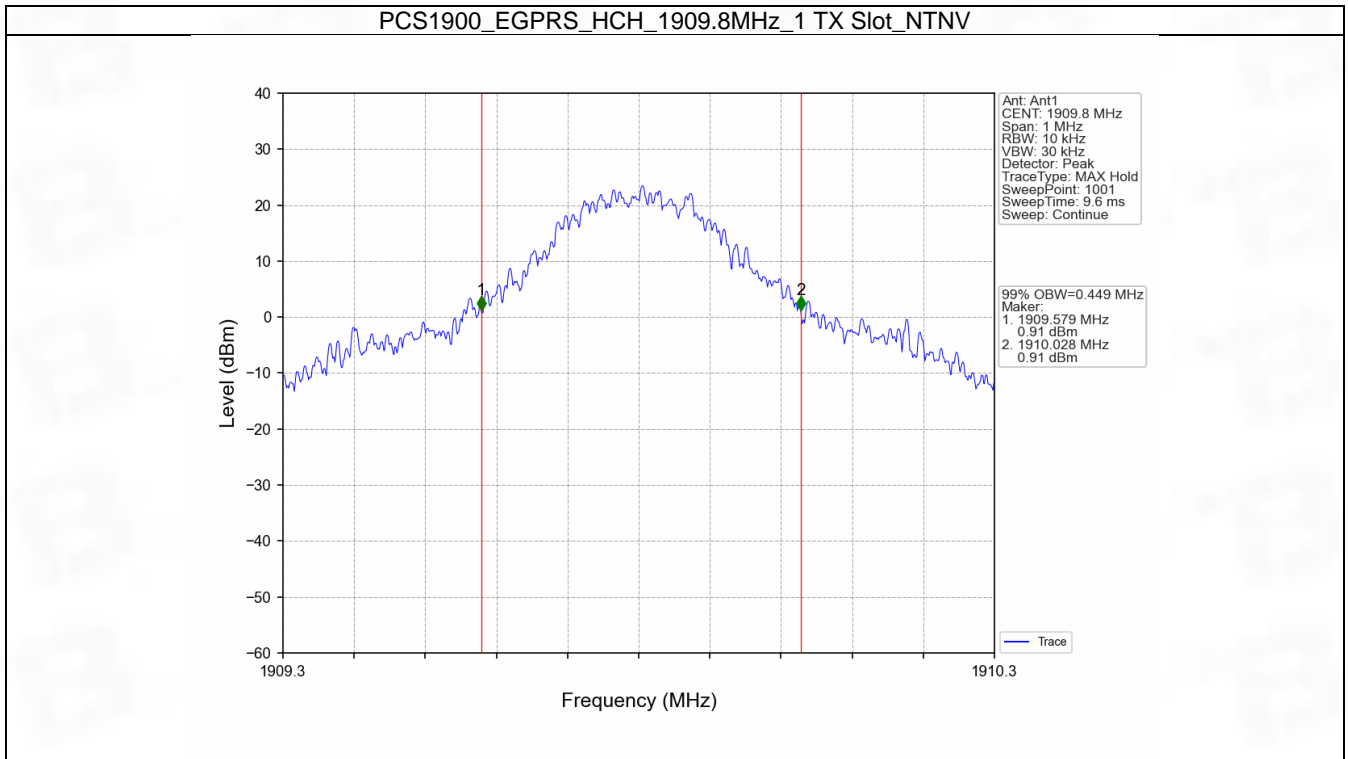


PCS1900_EGPRS_LCH_1850.2MHz_1 TX Slot_NTNV



PCS1900_EGPRS_MCH_1880MHz_1 TX Slot_NTNV



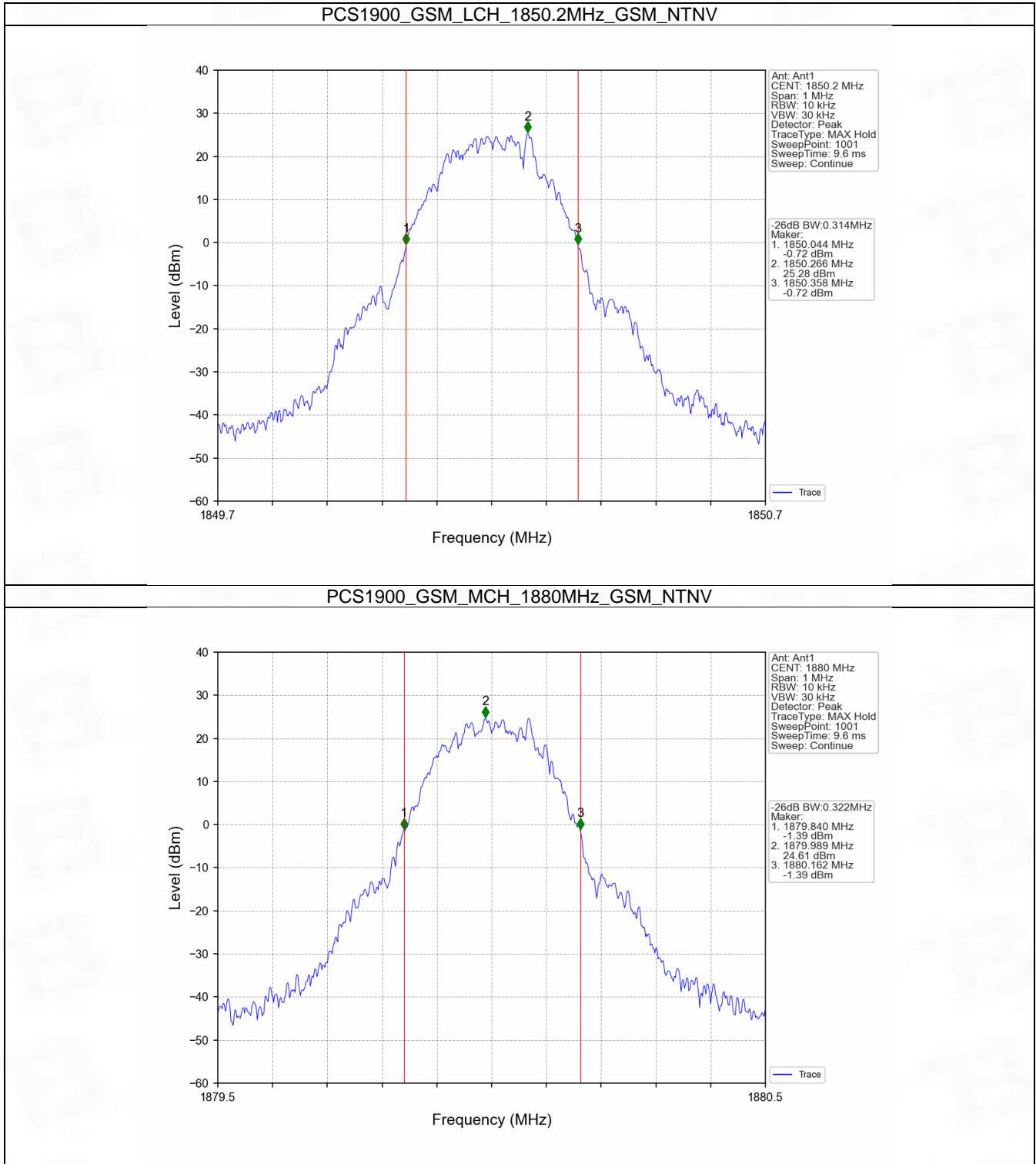


4.2 PCS1900_XDB

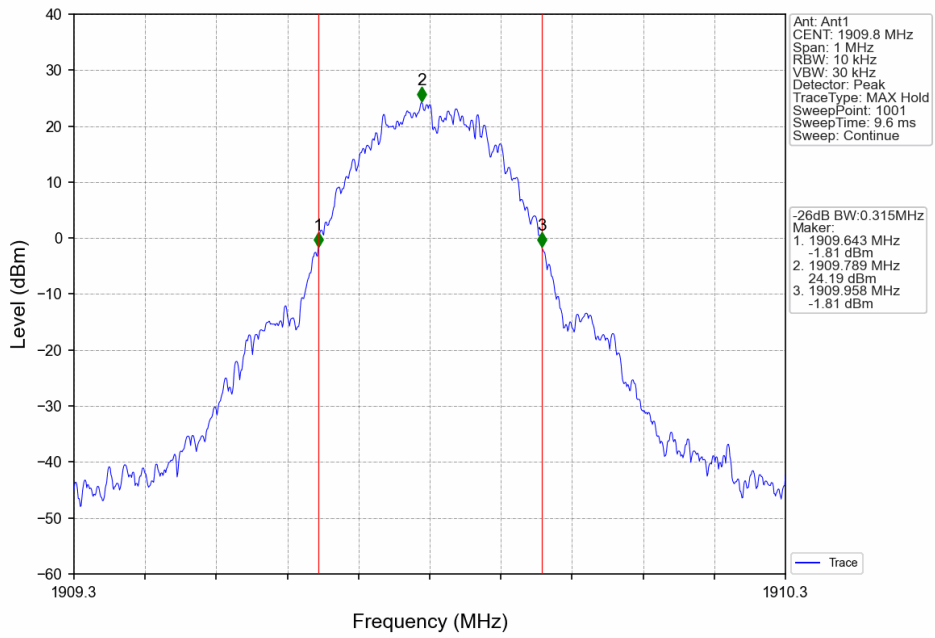
4.2.1 Test Result

Band: PCS1900						
ENV	Mode		Frequency (MHz)	26dB Bandwidth (MHz)		Verdict
	Network	Subset		Result	Limit	
NTNV	GSM	GSM	1850.2	0.314	/	Pass
			1880	0.322	/	Pass
			1909.8	0.315	/	Pass
	GPRS	1 TX Slot	1850.2	0.320	/	Pass
			1880	0.304	/	Pass
			1909.8	0.310	/	Pass
	EGPRS	1 TX Slot	1850.2	0.637	/	Pass
			1880	0.655	/	Pass
			1909.8	0.783	/	Pass

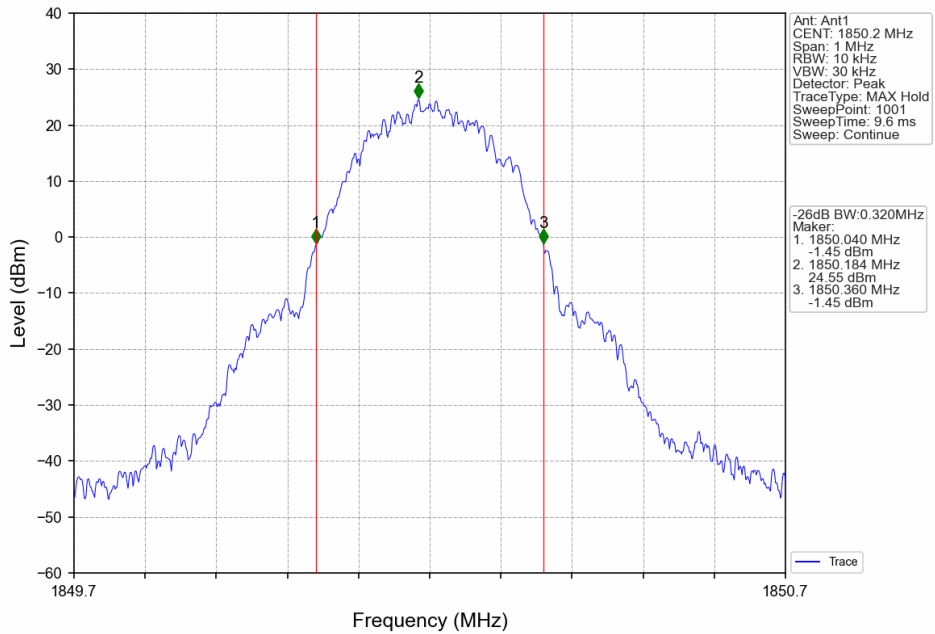
4.2.2 Test Graph



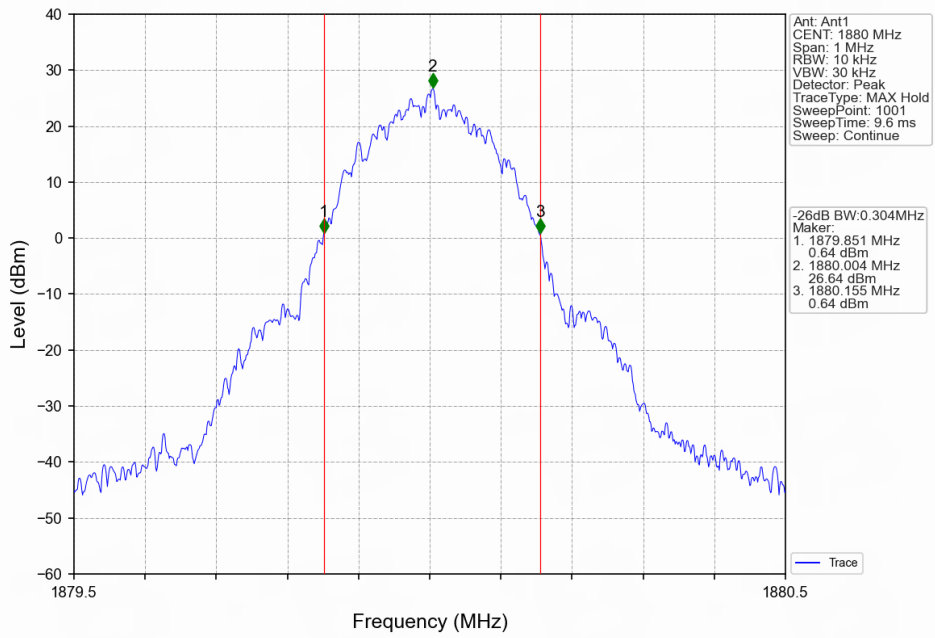
PCS1900_GSM_HCH_1909.8MHz_GSM_NTNV



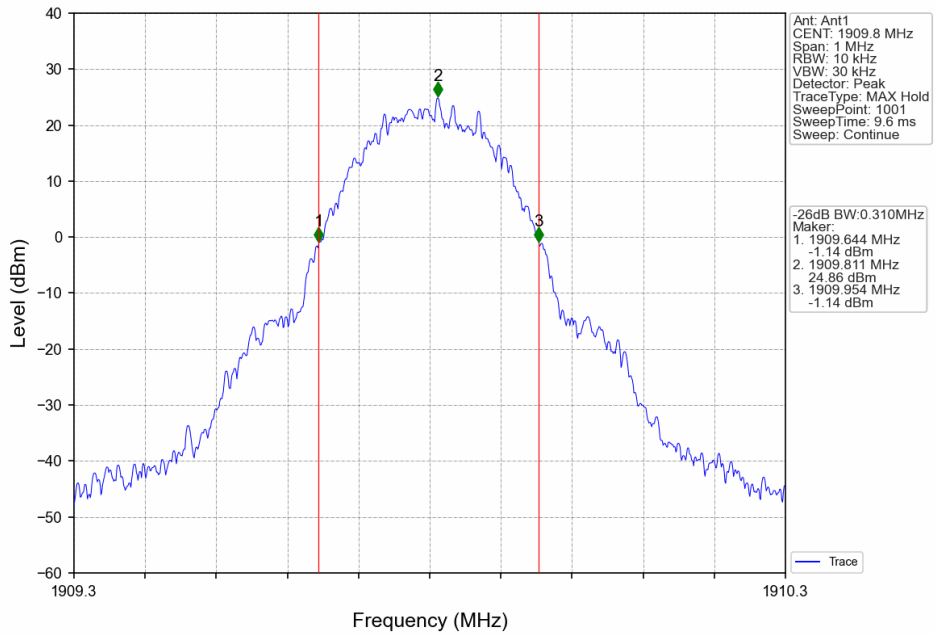
PCS1900_GPRS_LCH_1850.2MHz_1 TX Slot_NTNV



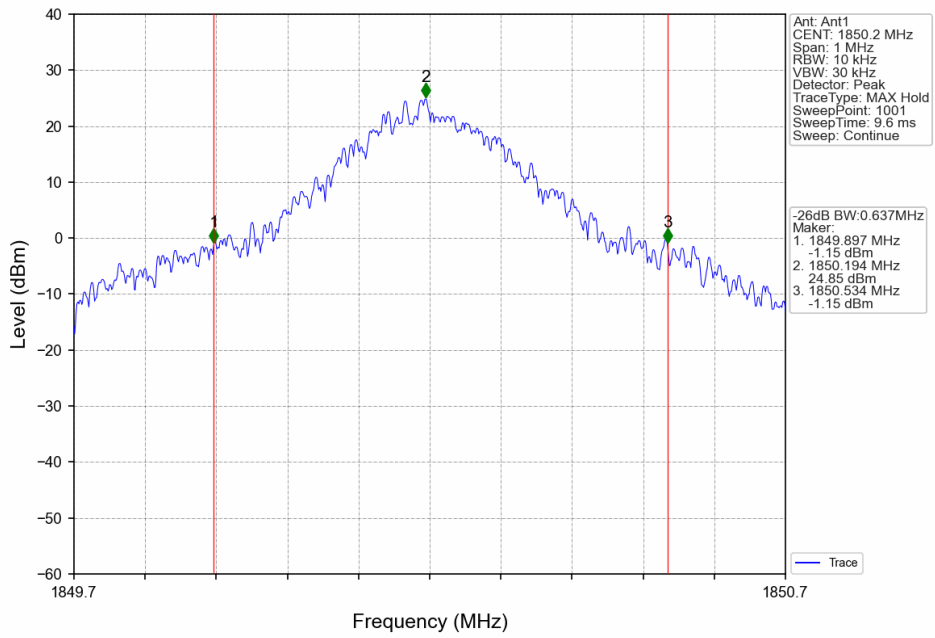
PCS1900_GPRS_MCH_1880MHz_1 TX Slot_NTNV



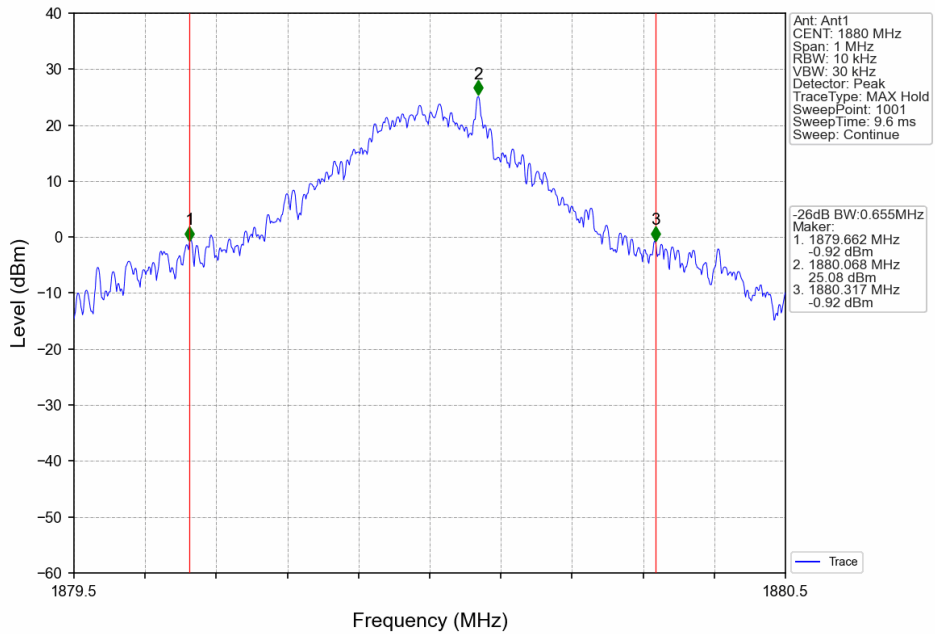
PCS1900_GPRS_HCH_1909.8MHz_1 TX Slot_NTNV

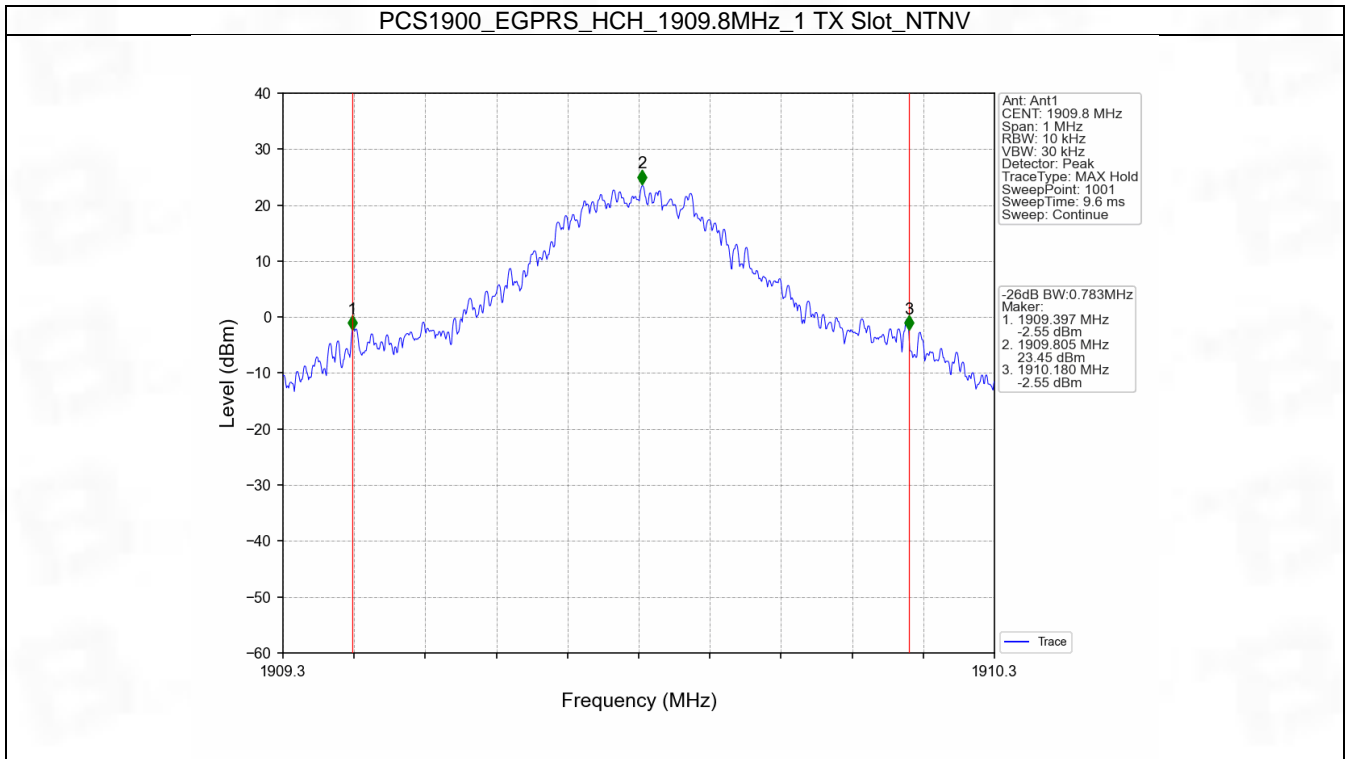


PCS1900_EGPRS_LCH_1850.2MHz_1 TX Slot_NTNV



PCS1900_EGPRS_MCH_1880MHz_1 TX Slot_NTNV





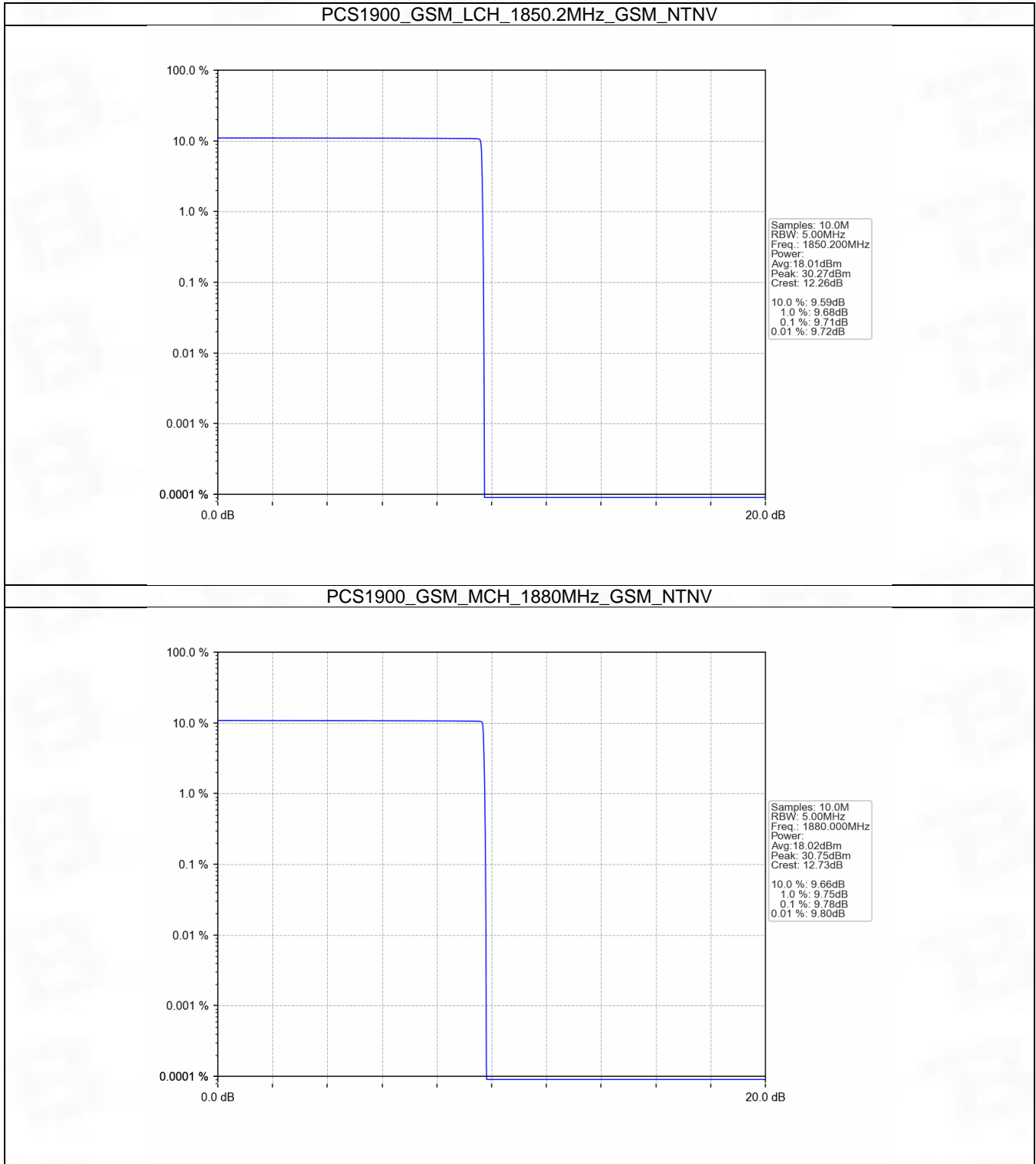
5. Peak-Average Ratio

5.1 PCS1900

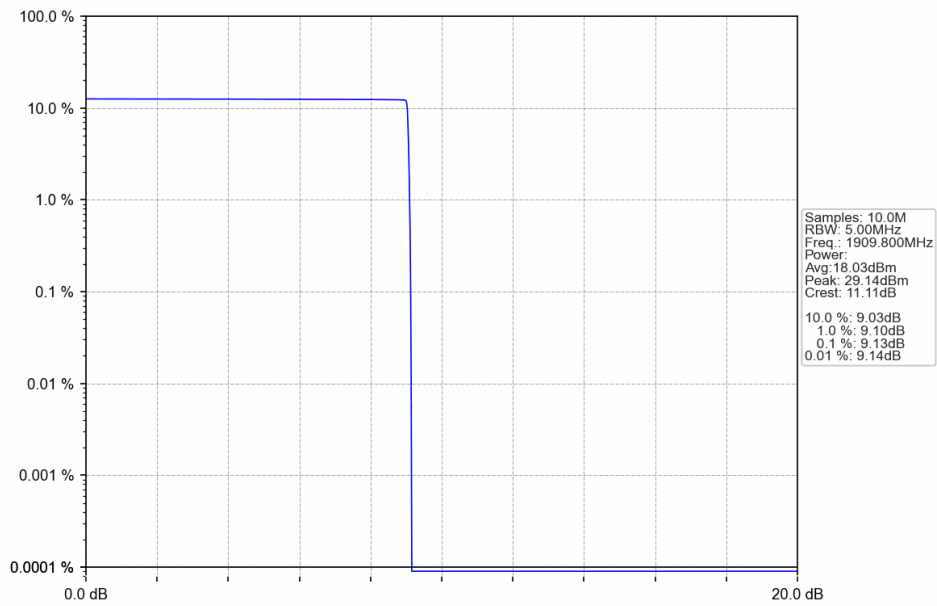
5.1.1 Test Result

Band: PCS1900						
ENV	Mode		Frequency (MHz)	Peak-Average Ratio (dB)		Verdict
	Network	Subset		Result	Limit	
NTNV	GSM	GSM	1850.2	9.71	<=13	Pass
			1880	9.78	<=13	Pass
			1909.8	9.13	<=13	Pass
	GPRS	4 TX Slots	1850.2	3.74	<=13	Pass
			1880	3.86	<=13	Pass
			1909.8	3.80	<=13	Pass
	EGPRS	4 TX Slots	1850.2	4.22	<=13	Pass
			1880	4.33	<=13	Pass
			1909.8	4.51	<=13	Pass

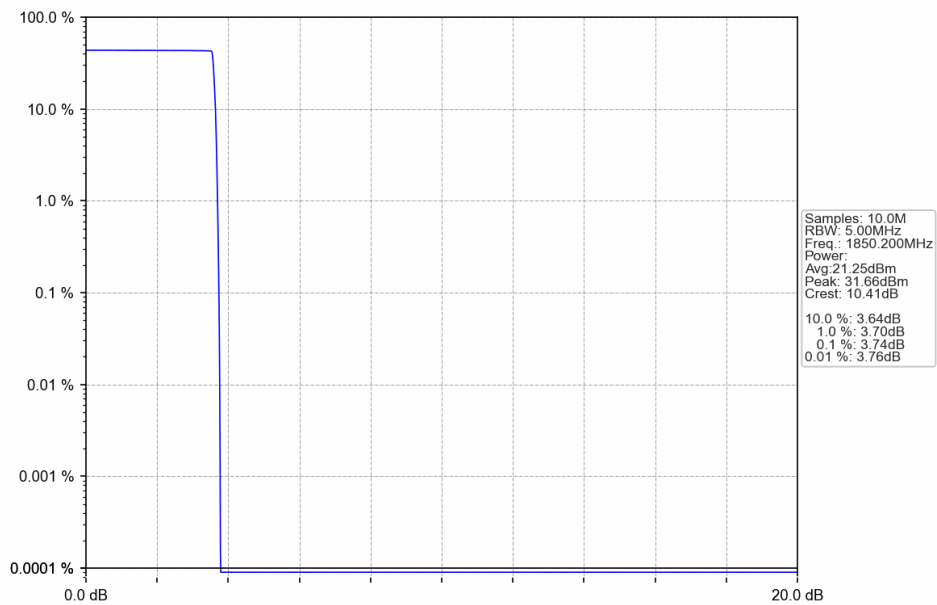
5.1.2 Test Graph



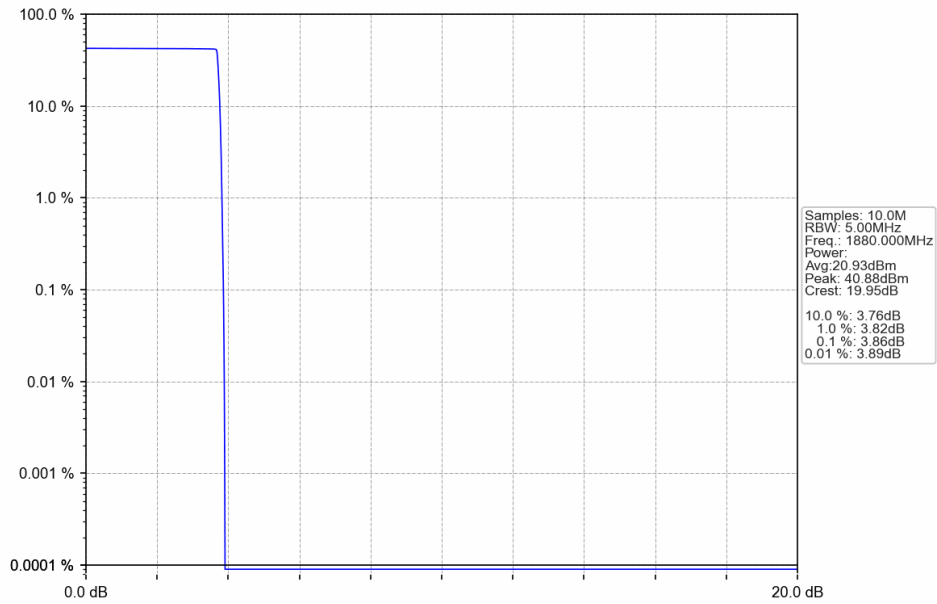
PCS1900_GSM_HCH_1909.8MHz_GSM_NTNV



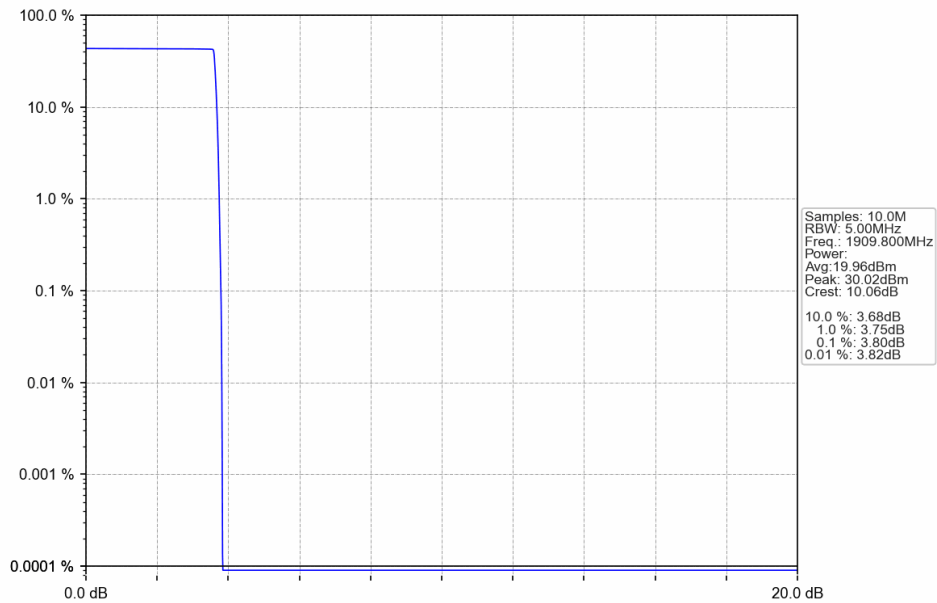
PCS1900_GPRS_LCH_1850.2MHz_4 TX Slots_NTNV



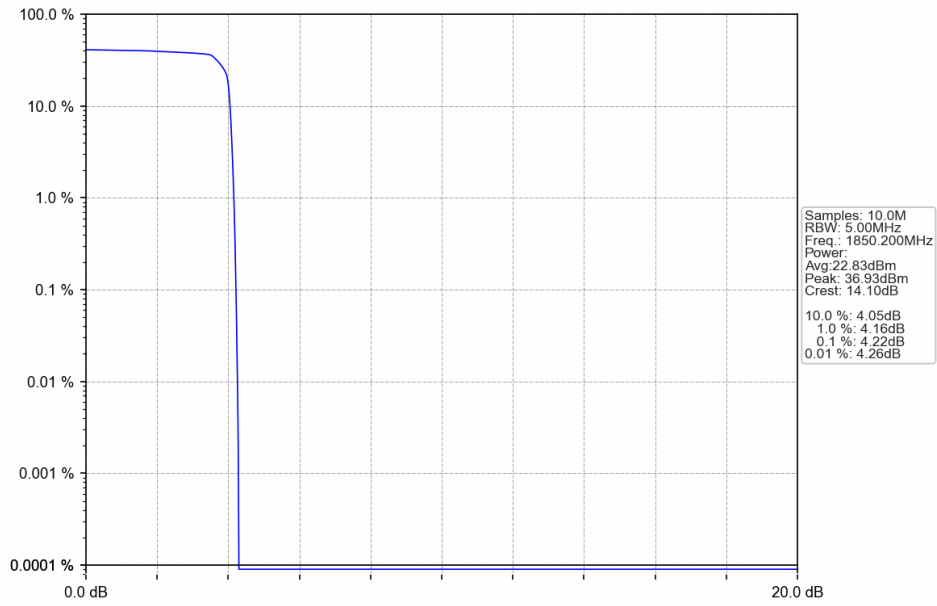
PCS1900_GPRS_MCH_1880MHz_4 TX Slots_NTNV



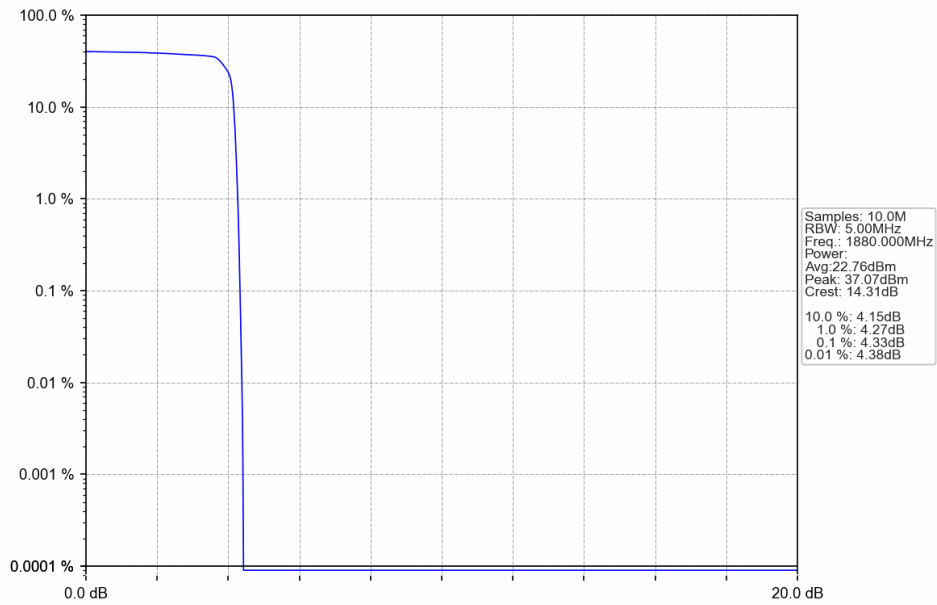
PCS1900_GPRS_HCH_1909.8MHz_4 TX Slots_NTNV

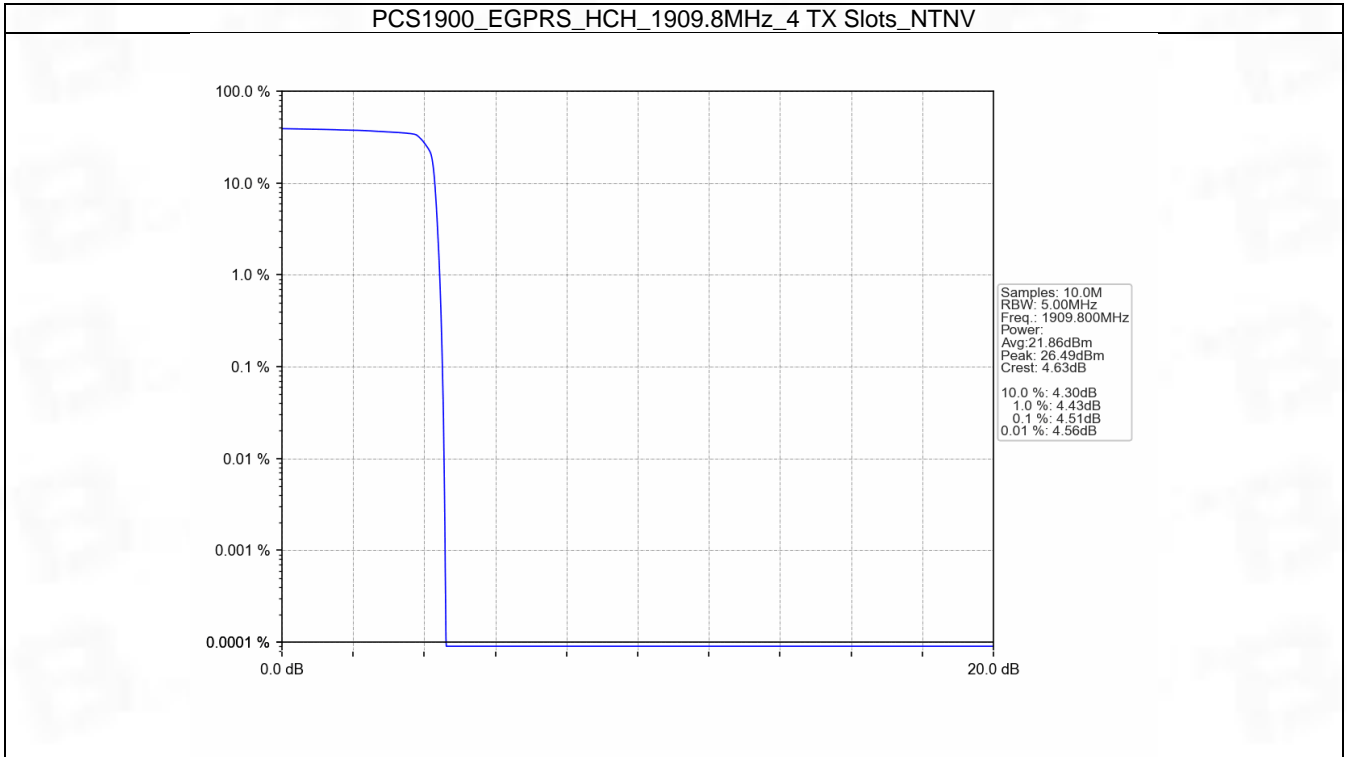


PCS1900_EGPRS_LCH_1850.2MHz_4 TX Slots_NTNV



PCS1900_EGPRS_MCH_1880MHz_4 TX Slots_NTNV





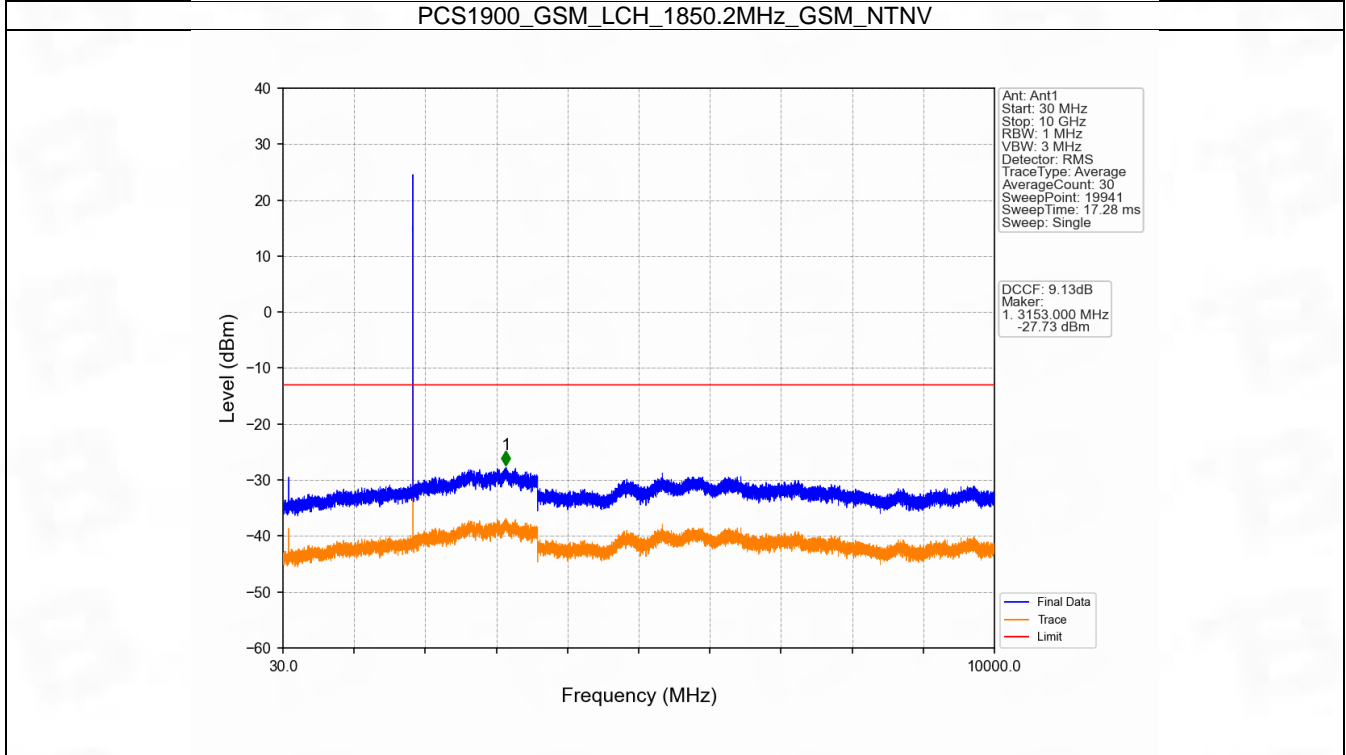
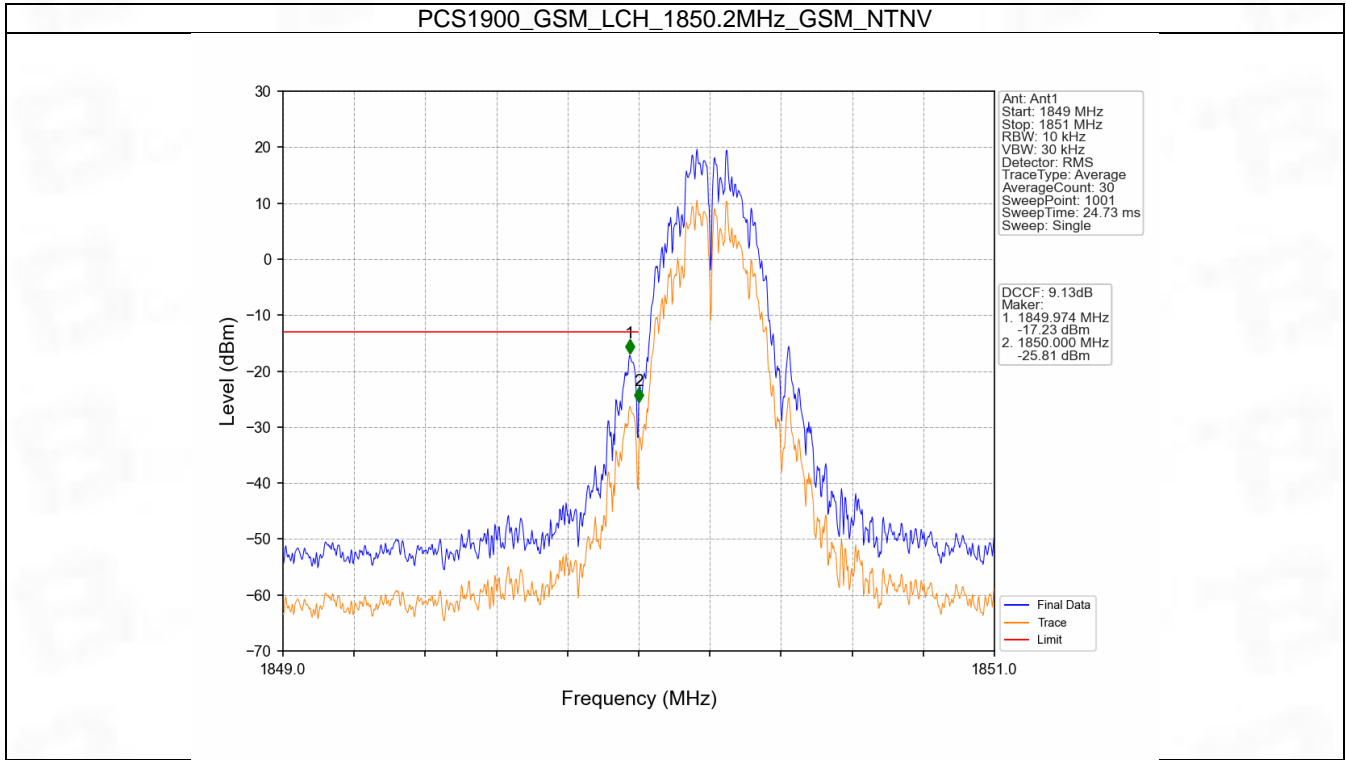
6. Spurious Emission

6.1 PCS1900

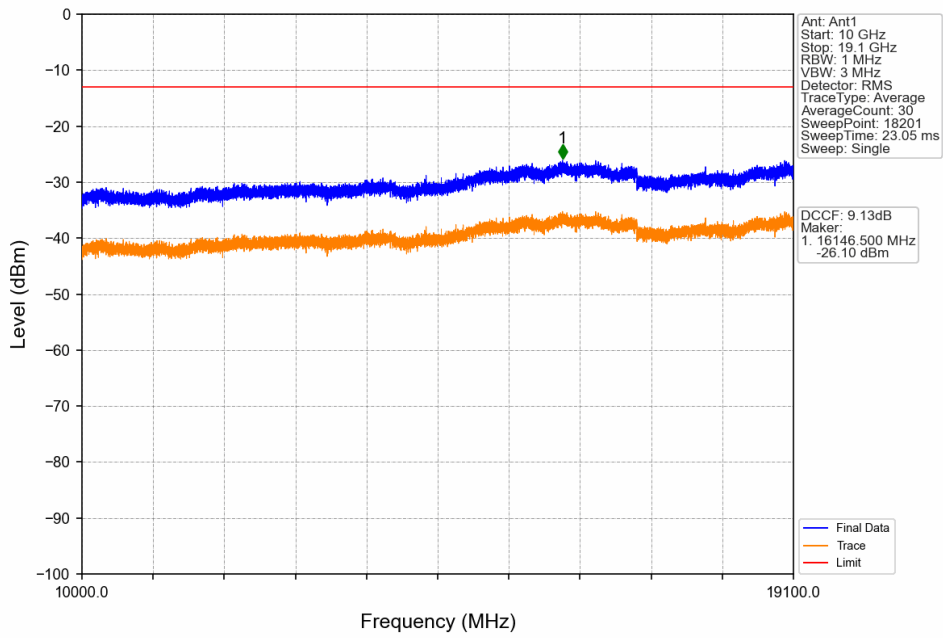
6.1.1 Test Result

Band: PCS1900						
ENV	Mode		Frequency (MHz)	Spurious Emission		Verdict
	Network	Subset		Result	Limit	
NTNV	GSM	GSM	1850.2	Refer To Test Graph		Pass
			1880	Refer To Test Graph		Pass
			1909.8	Refer To Test Graph		Pass
	GPRS	1 TX Slot	1850.2	Refer To Test Graph		Pass
			1880	Refer To Test Graph		Pass
			1909.8	Refer To Test Graph		Pass
	EGPRS	1 TX Slot	1850.2	Refer To Test Graph		Pass
			1880	Refer To Test Graph		Pass
			1909.8	Refer To Test Graph		Pass

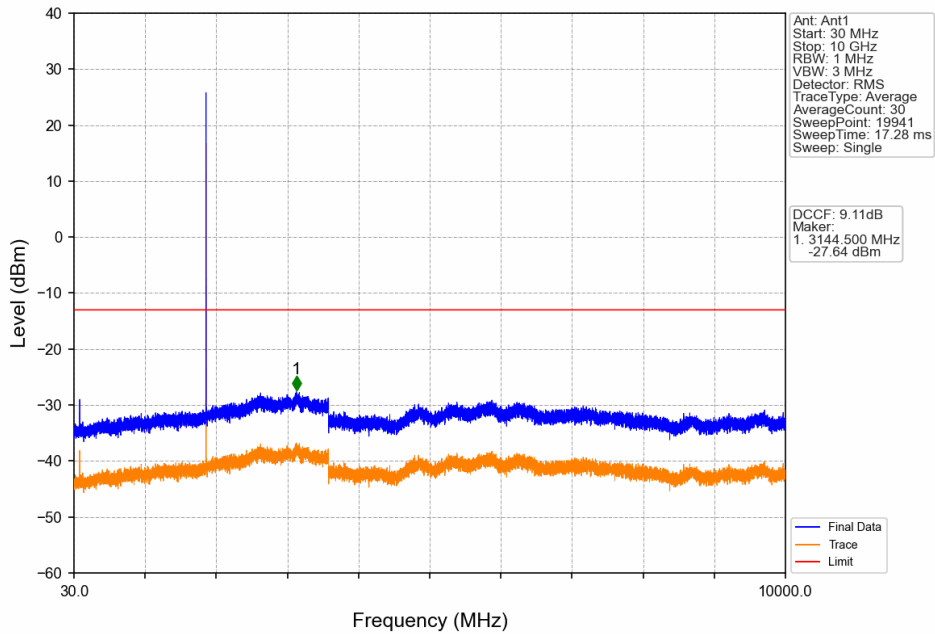
6.1.2 Test Graph



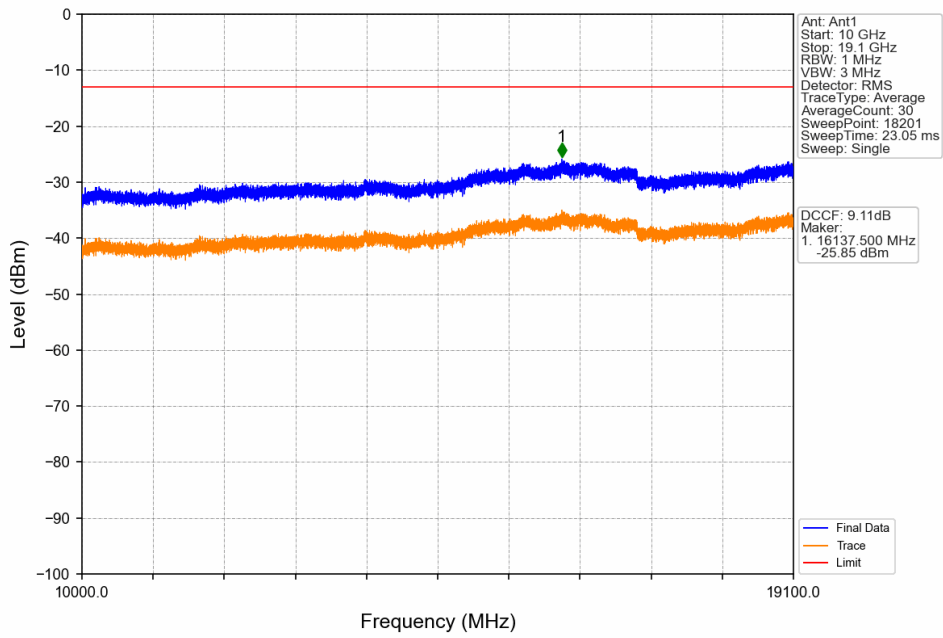
PCS1900_GSM_LCH_1850.2MHz_GSM_NTNV



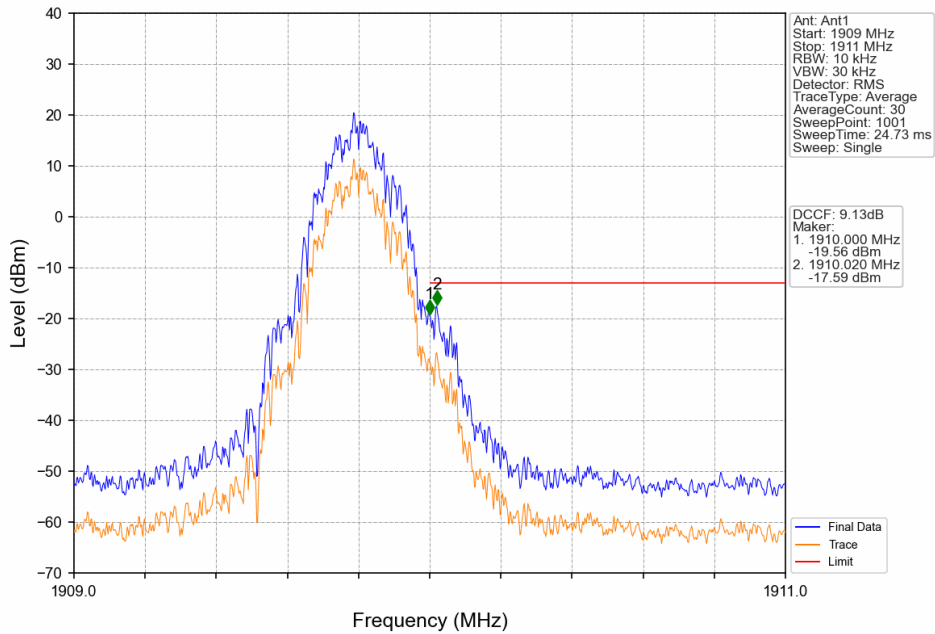
PCS1900_GSM_MCH_1880MHz_GSM_NTNV



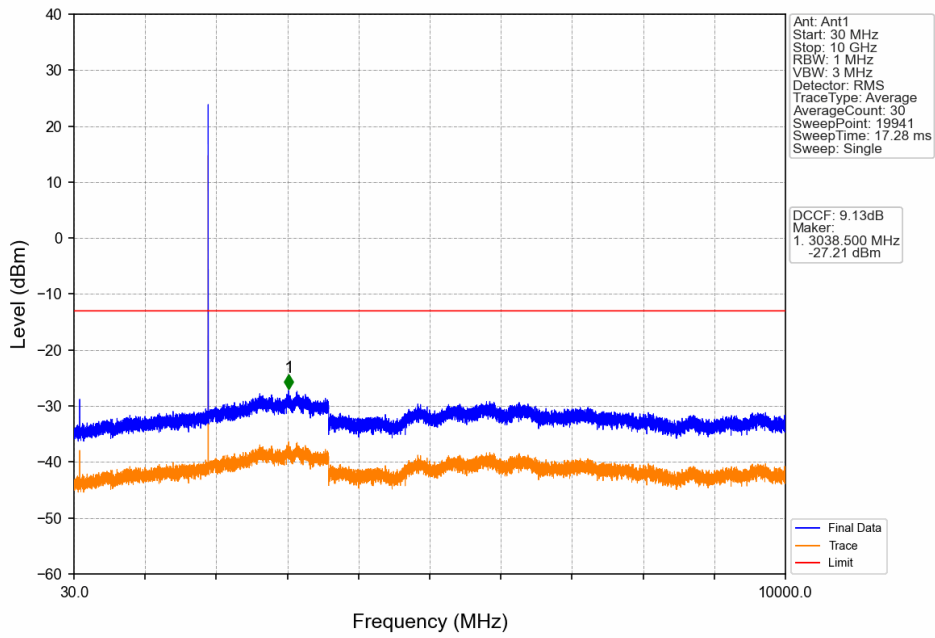
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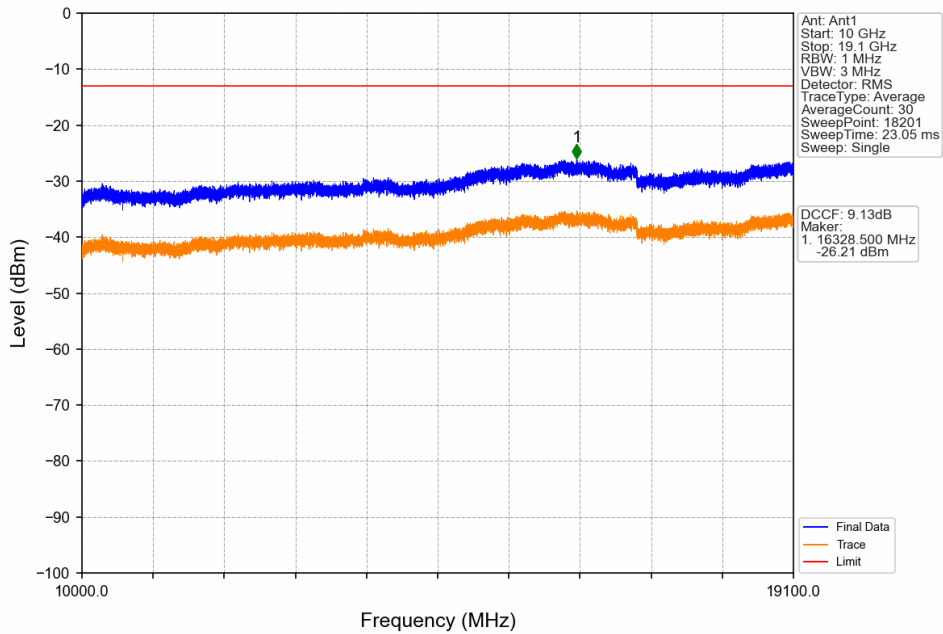
PCS1900_GSM_HCH_1909.8MHz_GSM_NTNV



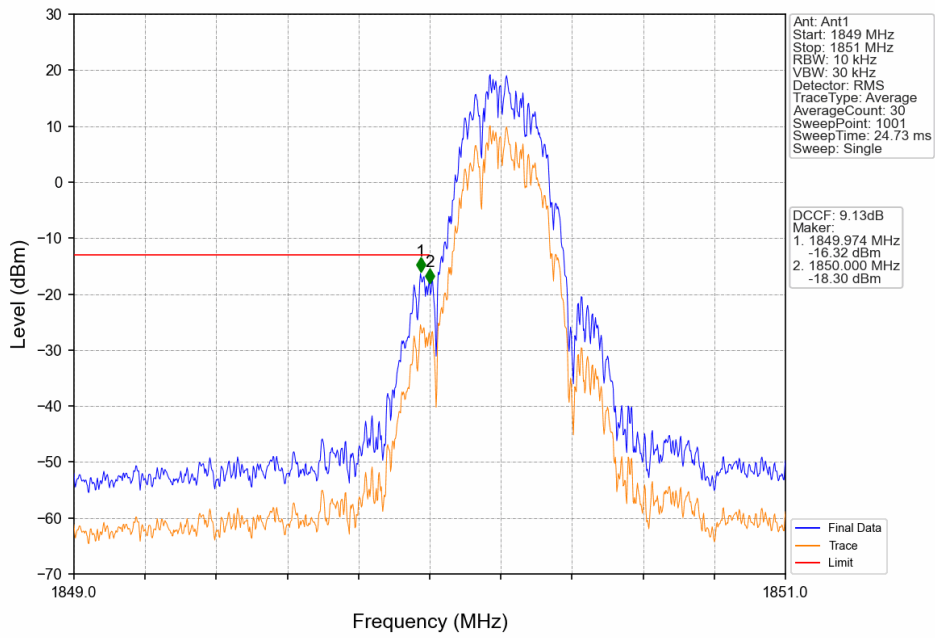
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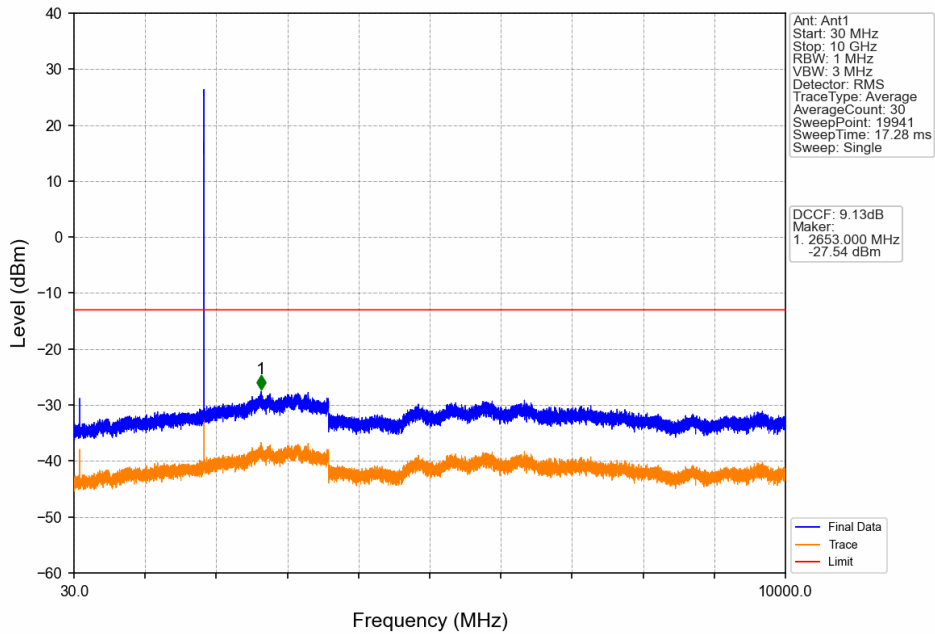
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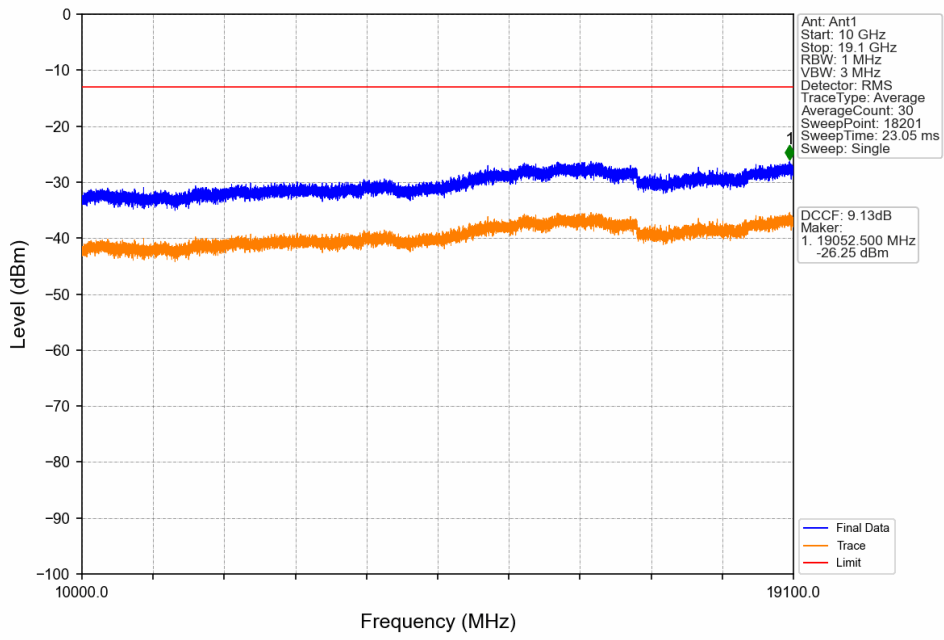
PCS1900_GPRS_LCH_1850.2MHz_1 TX Slot_NTNV



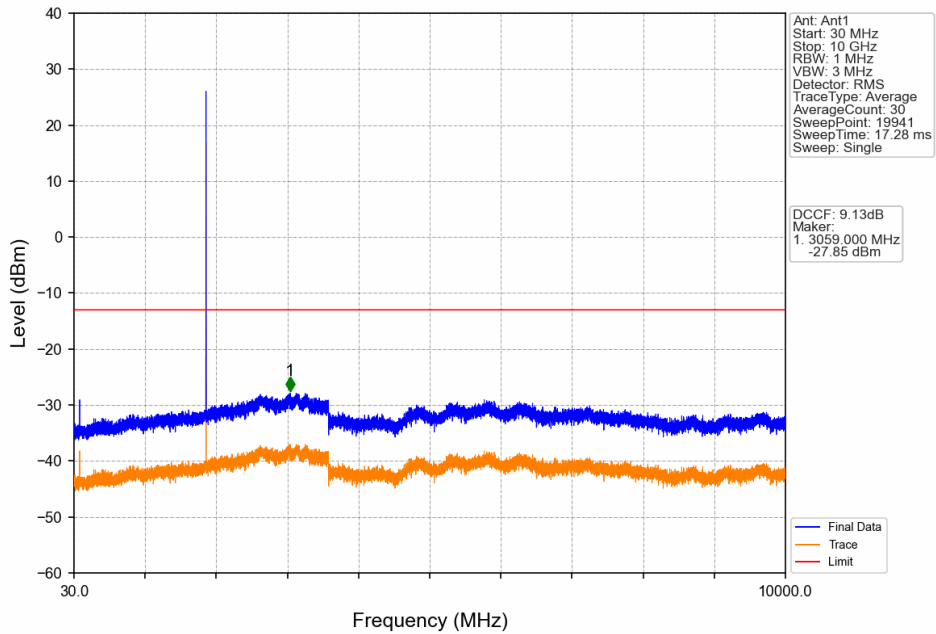
PCS1900_GPRS_LCH_1850.2MHz_1 TX Slot_NTNV



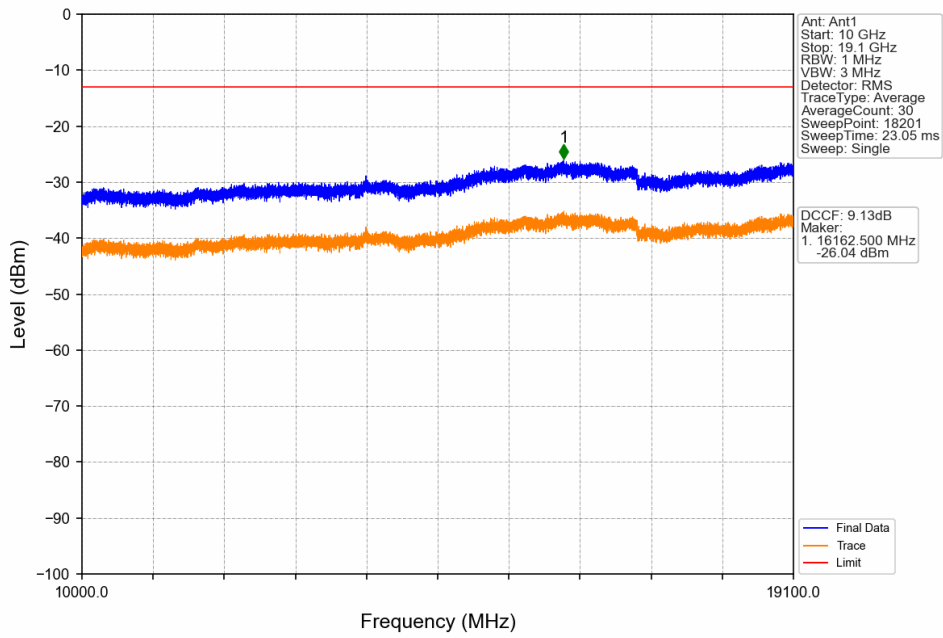
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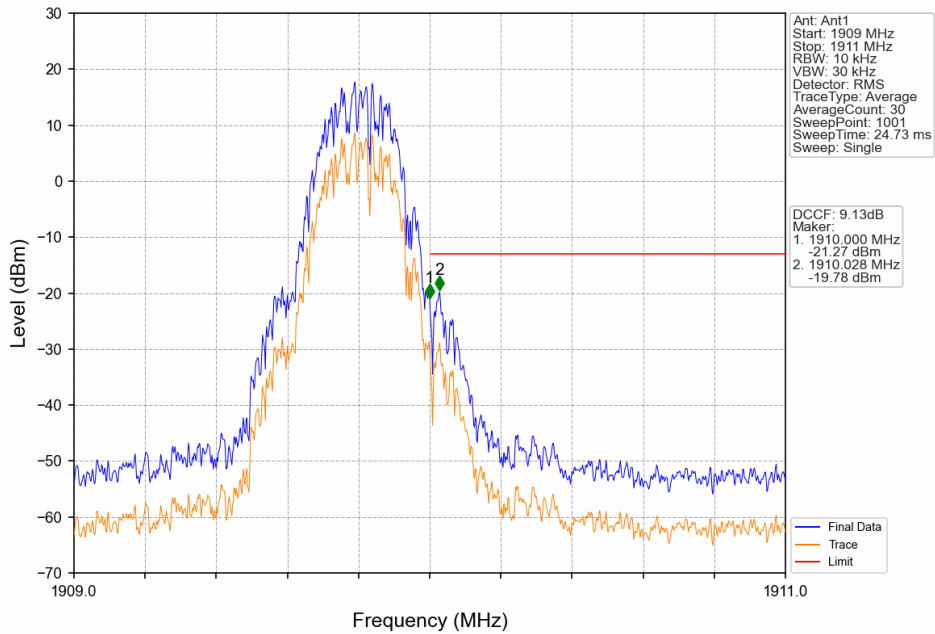
PCS1900_GPRS_MCH_1880MHz_1 TX Slot_NTNV



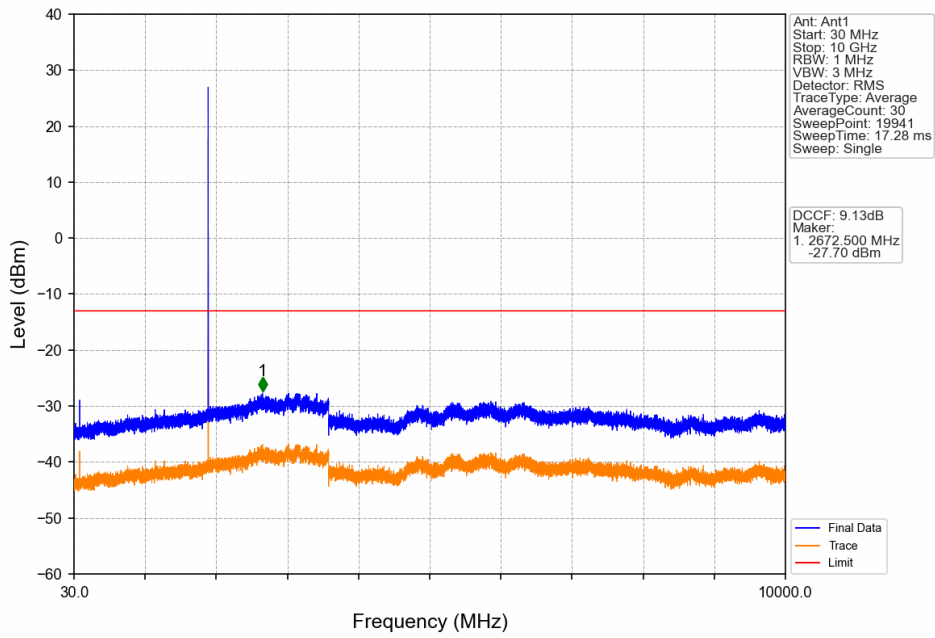
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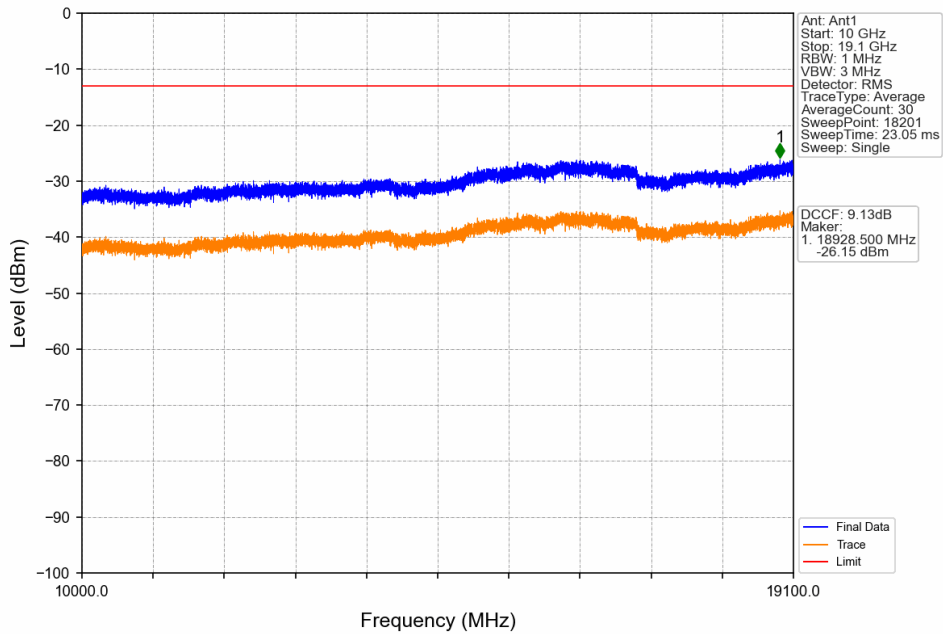
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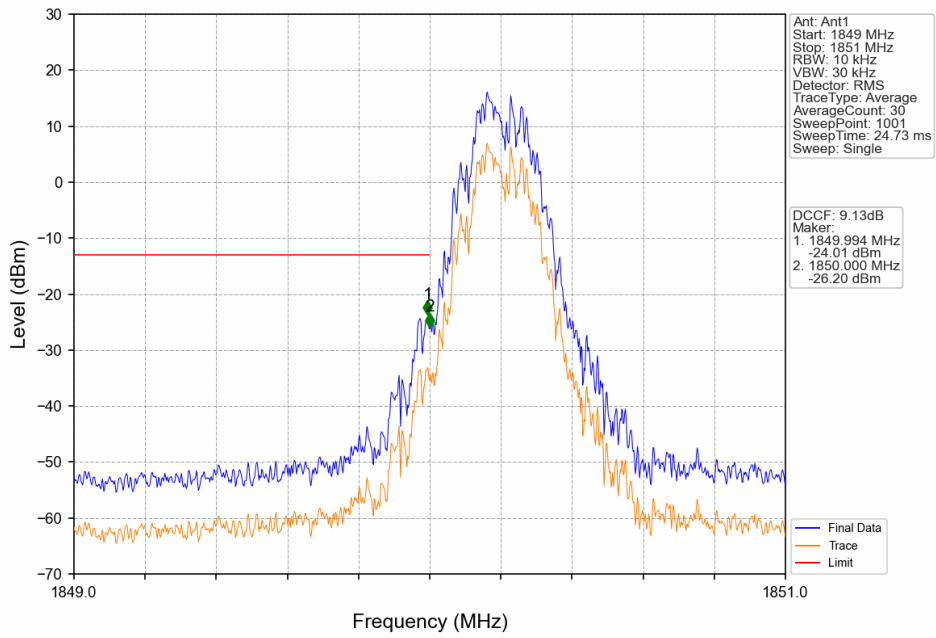
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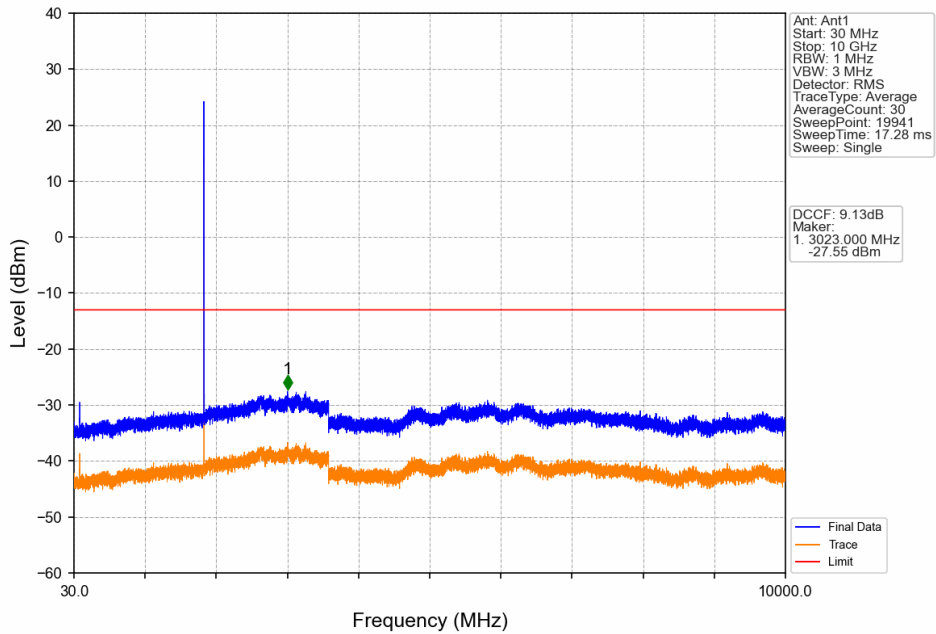
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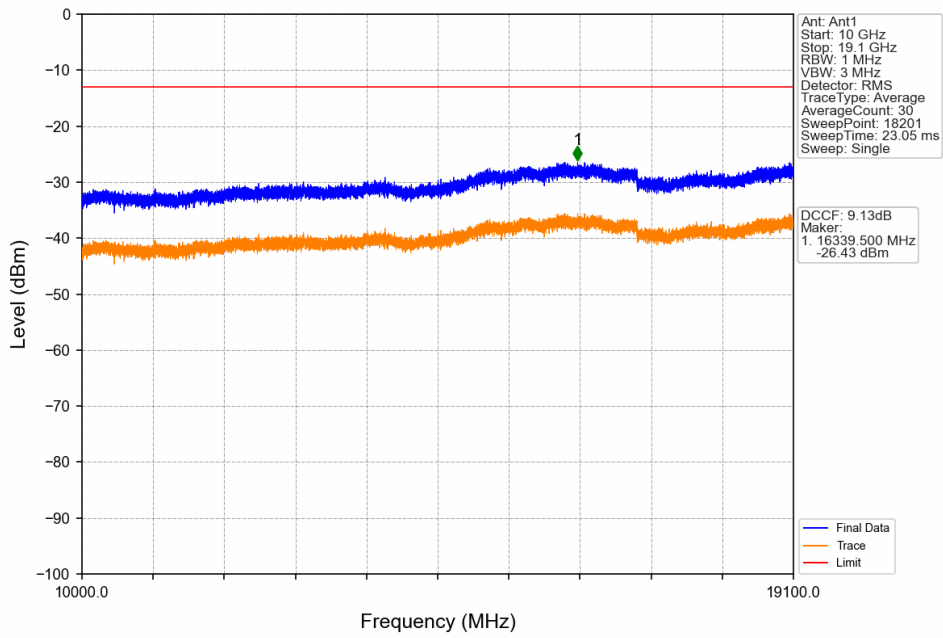
PCS1900_EGPRS_LCH_1850.2MHz_1 TX Slot_NTNV



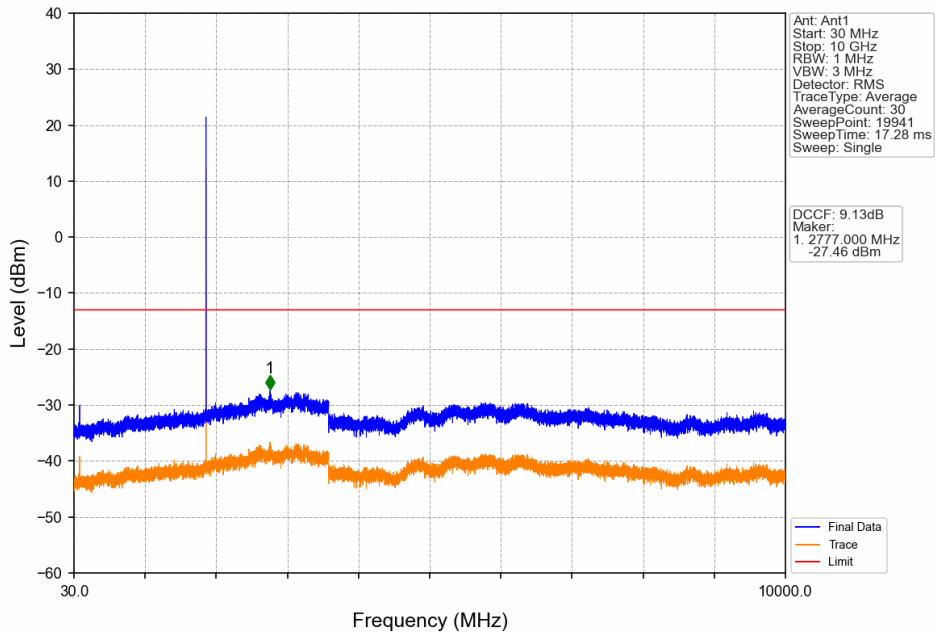
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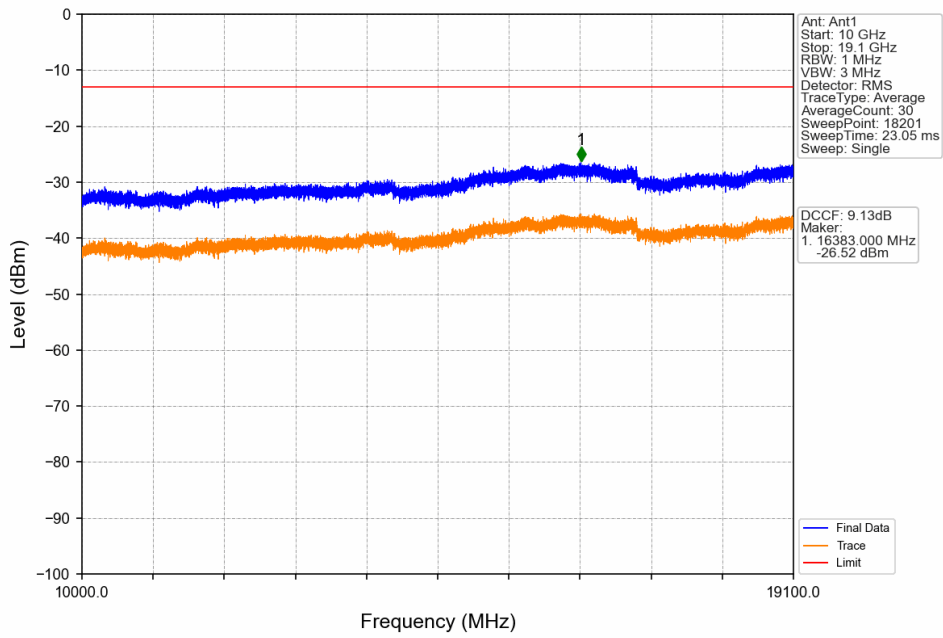
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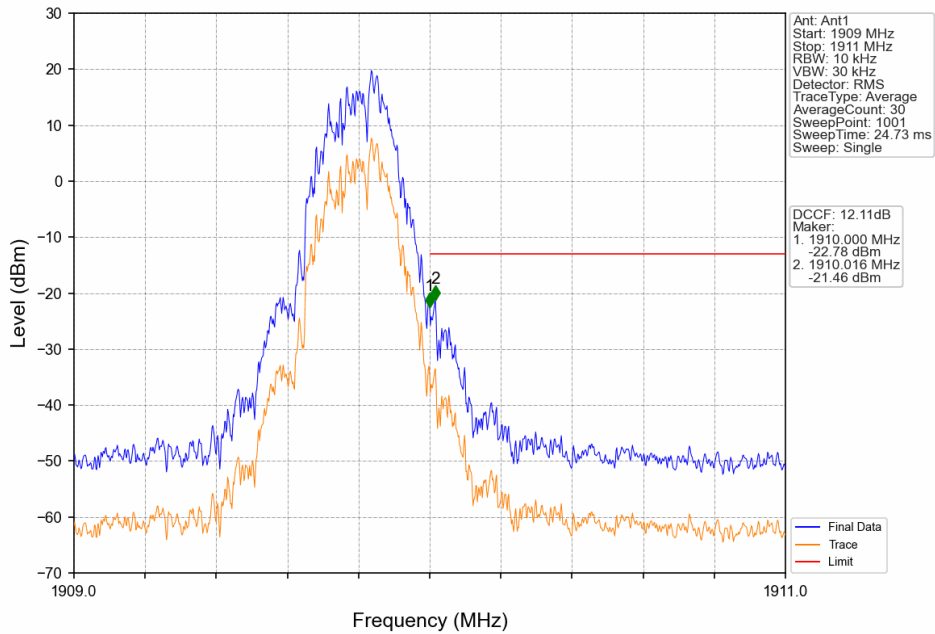
PCS1900_EGPRS_MCH_1880MHz_1 TX Slot_NTNV



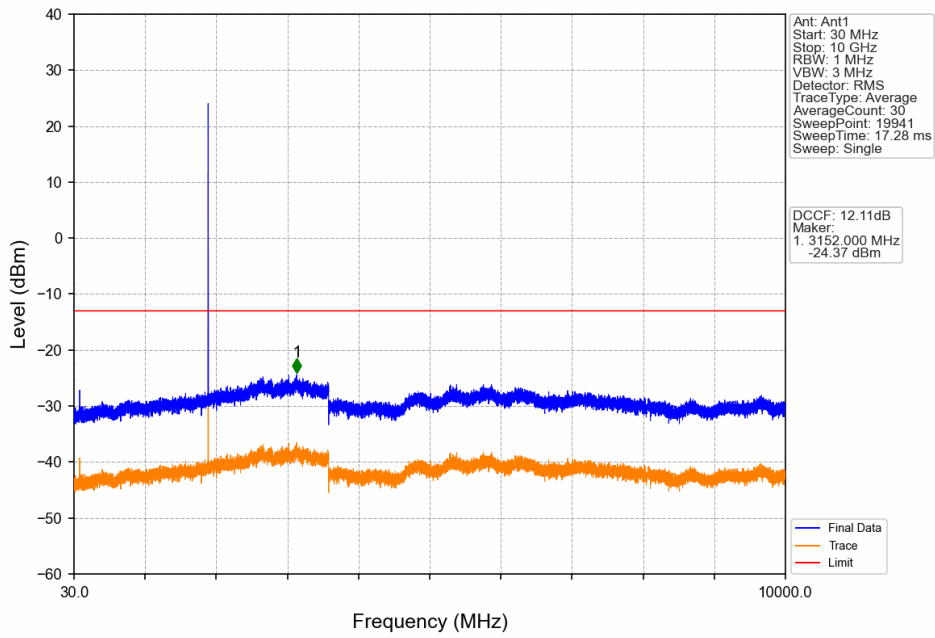
PCS1900_EGPRS_MCH_1880MHz_1 TX Slot_NTNV



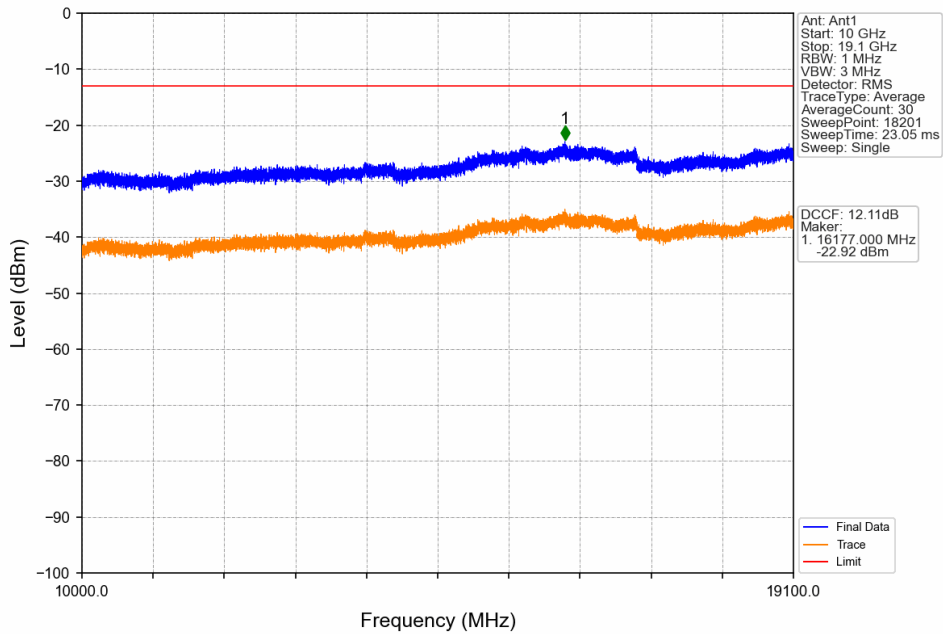
PCS1900_EGPRS_HCH_1909.8MHz_1 TX Slot_NTNV



PCS1900_EGPRS_HCH_1909.8MHz_1 TX Slot_NTNV



PCS1900_EGPRS_HCH_1909.8MHz_1 TX Slot_NTNV



7. Form731

7.1 Form731_Power

7.1.1 Test Result

Band	BW	Lower Freq	High Freq	MAX Power (W)	Value	Hz/ppm	Emission Designator	Rule Parts	MAX Power (dBm)
PCS1900	0.2	1850.2	1909.8	0.8337	0.0197	ppm	248KGXW	24E	29.21
PCS1900	0.2	1850.2	1909.8	0.3483	2.0872	ppm	453KG7W	24E	25.42

7.2 Form731_EIRP

7.2.1 Test Result

Band	BW	Lower Freq	High Freq	MAX Power (W)	Value	Hz/ppm	Emission Designator	Rule Parts	MAX Power (dBm)
PCS1900	0.2	1850.2	1909.8	1.0069	0.0197	ppm	248KGXW	24E	30.03
PCS1900	0.2	1850.2	1909.8	0.4207	2.0872	ppm	453KG7W	24E	26.24