

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	26.94	0.45	27.39	<=33.01	Pass
			1880	26.73	0.45	27.18	<=33.01	Pass
			1909.8	26.24	0.45	26.69	<=33.01	Pass
	GPRS	1 TX Slot	1850.2	27.00	0.45	27.45	<=33.01	Pass
		2 TX Slots	1850.2	25.50	0.45	25.95	<=33.01	Pass
		3 TX Slots	1850.2	21.03	0.45	21.48	<=33.01	Pass
		4 TX Slots	1850.2	19.84	0.45	20.29	<=33.01	Pass
		1 TX Slot	1880	26.74	0.45	27.19	<=33.01	Pass
		2 TX Slots	1880	25.49	0.45	25.94	<=33.01	Pass
		3 TX Slots	1880	21.03	0.45	21.48	<=33.01	Pass
		4 TX Slots	1880	19.81	0.45	20.26	<=33.01	Pass
		1 TX Slot	1909.8	26.29	0.45	26.74	<=33.01	Pass
		2 TX Slots	1909.8	25.41	0.45	25.86	<=33.01	Pass
		3 TX Slots	1909.8	21.22	0.45	21.67	<=33.01	Pass
		4 TX Slots	1909.8	19.99	0.45	20.44	<=33.01	Pass
	EGPRS	1 TX Slot	1850.2	23.61	0.45	24.06	<=33.01	Pass
		2 TX Slots	1850.2	22.53	0.45	22.98	<=33.01	Pass
		3 TX Slots	1850.2	20.49	0.45	20.94	<=33.01	Pass
		4 TX Slots	1850.2	19.35	0.45	19.80	<=33.01	Pass
		1 TX Slot	1880	23.40	0.45	23.85	<=33.01	Pass
		2 TX Slots	1880	22.27	0.45	22.72	<=33.01	Pass
		3 TX Slots	1880	20.17	0.45	20.62	<=33.01	Pass
		4 TX Slots	1880	19.10	0.45	19.55	<=33.01	Pass
		1 TX Slot	1909.8	22.84	0.45	23.29	<=33.01	Pass
		2 TX Slots	1909.8	21.91	0.45	22.36	<=33.01	Pass
		3 TX Slots	1909.8	19.75	0.45	20.20	<=33.01	Pass
		4 TX Slots	1909.8	18.54	0.45	18.99	<=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	4.294	0.0023	-2.5 to 2.5	Pass
			3.85	18.887	0.0102	-2.5 to 2.5	Pass
			4.43	20.276	0.0110	-2.5 to 2.5	Pass

		-30	3.85	23.407	0.0127	-2.5 to 2.5	Pass
		-20	3.85	24.828	0.0134	-2.5 to 2.5	Pass
		-10	3.85	25.570	0.0138	-2.5 to 2.5	Pass
		0	3.85	25.861	0.0140	-2.5 to 2.5	Pass
		10	3.85	31.543	0.0170	-2.5 to 2.5	Pass
		30	3.85	27.152	0.0147	-2.5 to 2.5	Pass
		40	3.85	28.670	0.0155	-2.5 to 2.5	Pass
	1880	50	3.85	27.701	0.0150	-2.5 to 2.5	Pass
		20	3.27	23.924	0.0127	-2.5 to 2.5	Pass
			3.85	24.150	0.0128	-2.5 to 2.5	Pass
			4.43	24.279	0.0129	-2.5 to 2.5	Pass
		-30	3.85	25.506	0.0136	-2.5 to 2.5	Pass
		-20	3.85	23.666	0.0126	-2.5 to 2.5	Pass
		-10	3.85	25.764	0.0137	-2.5 to 2.5	Pass
		0	3.85	23.278	0.0124	-2.5 to 2.5	Pass
		10	3.85	24.053	0.0128	-2.5 to 2.5	Pass
		30	3.85	20.179	0.0107	-2.5 to 2.5	Pass
		40	3.85	22.439	0.0119	-2.5 to 2.5	Pass
		50	3.85	23.698	0.0126	-2.5 to 2.5	Pass
	1909.8	20	3.27	25.344	0.0133	-2.5 to 2.5	Pass
			3.85	30.865	0.0162	-2.5 to 2.5	Pass
			4.43	28.670	0.0150	-2.5 to 2.5	Pass
		-30	3.85	28.734	0.0150	-2.5 to 2.5	Pass
		-20	3.85	31.059	0.0163	-2.5 to 2.5	Pass
		-10	3.85	28.960	0.0152	-2.5 to 2.5	Pass
		0	3.85	25.441	0.0133	-2.5 to 2.5	Pass
		10	3.85	28.831	0.0151	-2.5 to 2.5	Pass
		30	3.85	29.864	0.0156	-2.5 to 2.5	Pass
		40	3.85	29.864	0.0156	-2.5 to 2.5	Pass
		50	3.85	30.575	0.0160	-2.5 to 2.5	Pass
GPRS	1850.2	20	3.27	25.926	0.0140	-2.5 to 2.5	Pass
			3.85	28.605	0.0155	-2.5 to 2.5	Pass
			4.43	48.687	0.0263	-2.5 to 2.5	Pass
		-30	3.85	55.080	0.0298	-2.5 to 2.5	Pass
		-20	3.85	58.534	0.0316	-2.5 to 2.5	Pass
		-10	3.85	52.561	0.0284	-2.5 to 2.5	Pass
		0	3.85	53.917	0.0291	-2.5 to 2.5	Pass
		10	3.85	53.433	0.0289	-2.5 to 2.5	Pass
		30	3.85	52.884	0.0286	-2.5 to 2.5	Pass
		40	3.85	51.302	0.0277	-2.5 to 2.5	Pass
		50	3.85	53.078	0.0287	-2.5 to 2.5	Pass
	1880	20	3.27	49.688	0.0264	-2.5 to 2.5	Pass
			3.85	55.564	0.0296	-2.5 to 2.5	Pass
			4.43	52.949	0.0282	-2.5 to 2.5	Pass
		-30	3.85	55.435	0.0295	-2.5 to 2.5	Pass
		-20	3.85	53.627	0.0285	-2.5 to 2.5	Pass
		-10	3.85	54.595	0.0290	-2.5 to 2.5	Pass
		0	3.85	52.852	0.0281	-2.5 to 2.5	Pass
		10	3.85	52.368	0.0279	-2.5 to 2.5	Pass
		30	3.85	54.499	0.0290	-2.5 to 2.5	Pass
		40	3.85	48.493	0.0258	-2.5 to 2.5	Pass
		50	3.85	54.143	0.0288	-2.5 to 2.5	Pass
	1909.8	20	3.27	50.431	0.0264	-2.5 to 2.5	Pass
			3.85	48.429	0.0254	-2.5 to 2.5	Pass
			4.43	53.853	0.0282	-2.5 to 2.5	Pass

		-30	3.85	49.074	0.0257	-2.5 to 2.5	Pass
		-20	3.85	51.205	0.0268	-2.5 to 2.5	Pass
		-10	3.85	49.236	0.0258	-2.5 to 2.5	Pass
		0	3.85	54.757	0.0287	-2.5 to 2.5	Pass
		10	3.85	52.206	0.0273	-2.5 to 2.5	Pass
		30	3.85	45.394	0.0238	-2.5 to 2.5	Pass
		40	3.85	50.205	0.0263	-2.5 to 2.5	Pass
		50	3.85	50.431	0.0264	-2.5 to 2.5	Pass
EGPRS	1850.2	20	3.27	63.700	0.0344	-2.5 to 2.5	Pass
			3.85	60.149	0.0325	-2.5 to 2.5	Pass
			4.43	65.476	0.0354	-2.5 to 2.5	Pass
		-30	3.85	62.021	0.0335	-2.5 to 2.5	Pass
		-20	3.85	63.474	0.0343	-2.5 to 2.5	Pass
		-10	3.85	65.121	0.0352	-2.5 to 2.5	Pass
		0	3.85	60.988	0.0330	-2.5 to 2.5	Pass
		10	3.85	61.505	0.0332	-2.5 to 2.5	Pass
		30	3.85	56.371	0.0305	-2.5 to 2.5	Pass
		40	3.85	55.629	0.0301	-2.5 to 2.5	Pass
		50	3.85	58.534	0.0316	-2.5 to 2.5	Pass
	1880	20	3.27	60.342	0.0321	-2.5 to 2.5	Pass
			3.85	58.244	0.0310	-2.5 to 2.5	Pass
			4.43	62.828	0.0334	-2.5 to 2.5	Pass
		-30	3.85	59.858	0.0318	-2.5 to 2.5	Pass
		-20	3.85	66.380	0.0353	-2.5 to 2.5	Pass
		-10	3.85	61.505	0.0327	-2.5 to 2.5	Pass
		0	3.85	63.442	0.0337	-2.5 to 2.5	Pass
		10	3.85	61.537	0.0327	-2.5 to 2.5	Pass
		30	3.85	62.505	0.0332	-2.5 to 2.5	Pass
		40	3.85	64.765	0.0344	-2.5 to 2.5	Pass
		50	3.85	55.112	0.0293	-2.5 to 2.5	Pass
	1909.8	20	3.27	62.118	0.0325	-2.5 to 2.5	Pass
			3.85	66.477	0.0348	-2.5 to 2.5	Pass
			4.43	67.122	0.0351	-2.5 to 2.5	Pass
		-30	3.85	60.084	0.0315	-2.5 to 2.5	Pass
		-20	3.85	56.436	0.0296	-2.5 to 2.5	Pass
		-10	3.85	63.603	0.0333	-2.5 to 2.5	Pass
		0	3.85	66.186	0.0347	-2.5 to 2.5	Pass
		10	3.85	65.250	0.0342	-2.5 to 2.5	Pass
		30	3.85	61.989	0.0325	-2.5 to 2.5	Pass
		40	3.85	56.952	0.0298	-2.5 to 2.5	Pass
		50	3.85	64.378	0.0337	-2.5 to 2.5	Pass

3. Modulation Characteristics

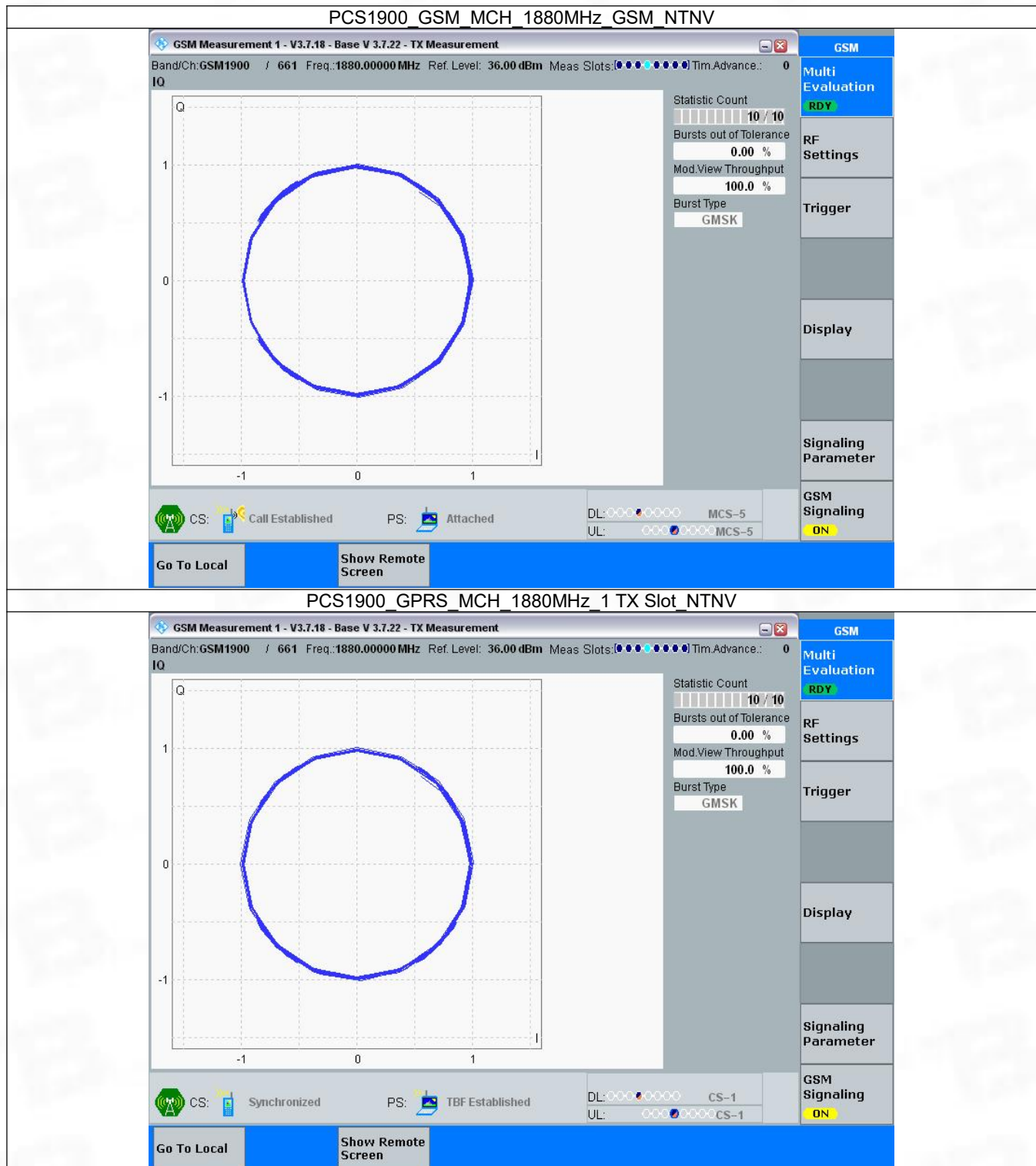
3.1 PCS1900

3.1.1 Test Result

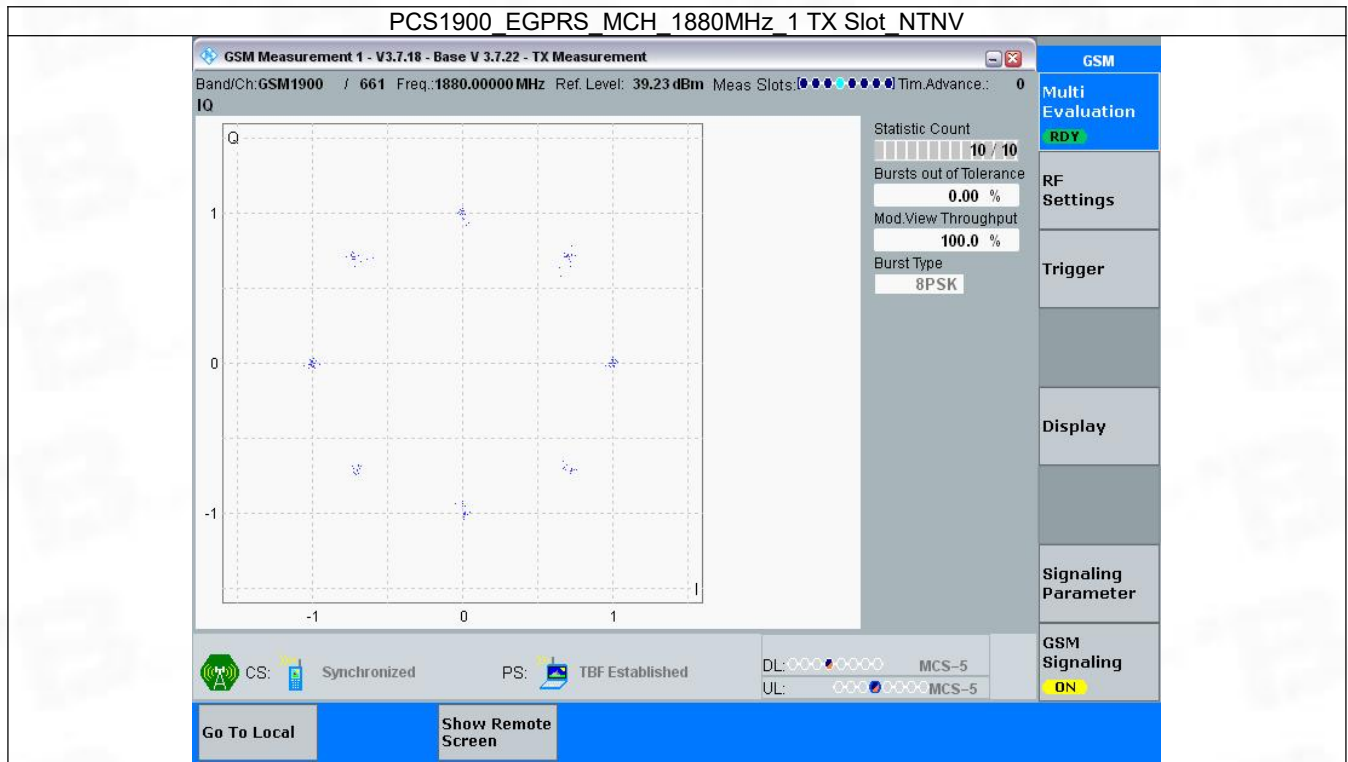
Band: PCS1900						
ENV	Mode		Frequency (MHz)	Modulation Characteristics		Verdict
	Network	Subset		Result	Limit	
NTNV	GSM	GSM	1880	Refer To Test Graph		Pass

	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



PCS1900 EGPRS MCH 1880MHz 1 TX Slot NTV



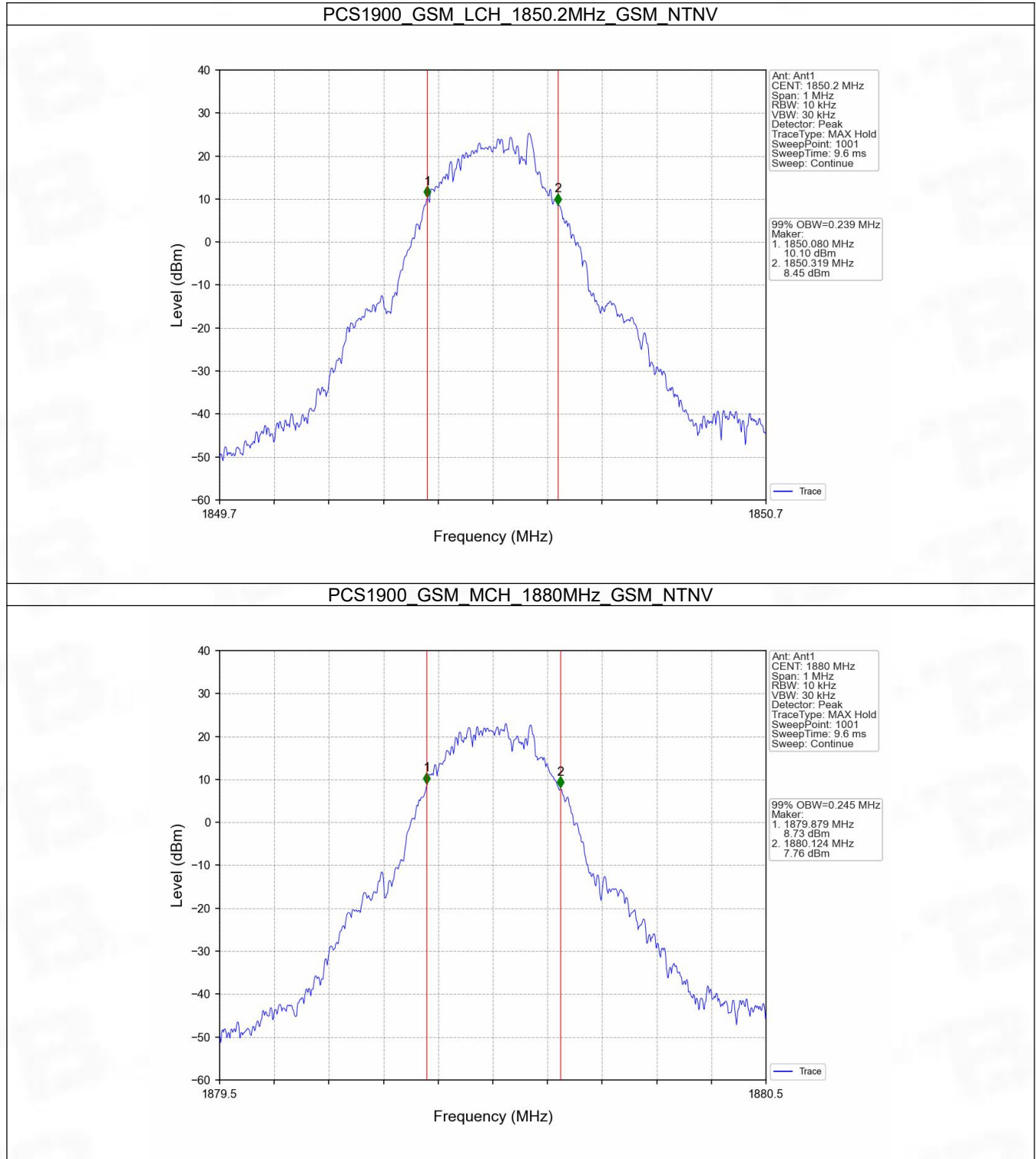
4. 99% & 26dB Bandwidth

4.1 PCS1900_OBW

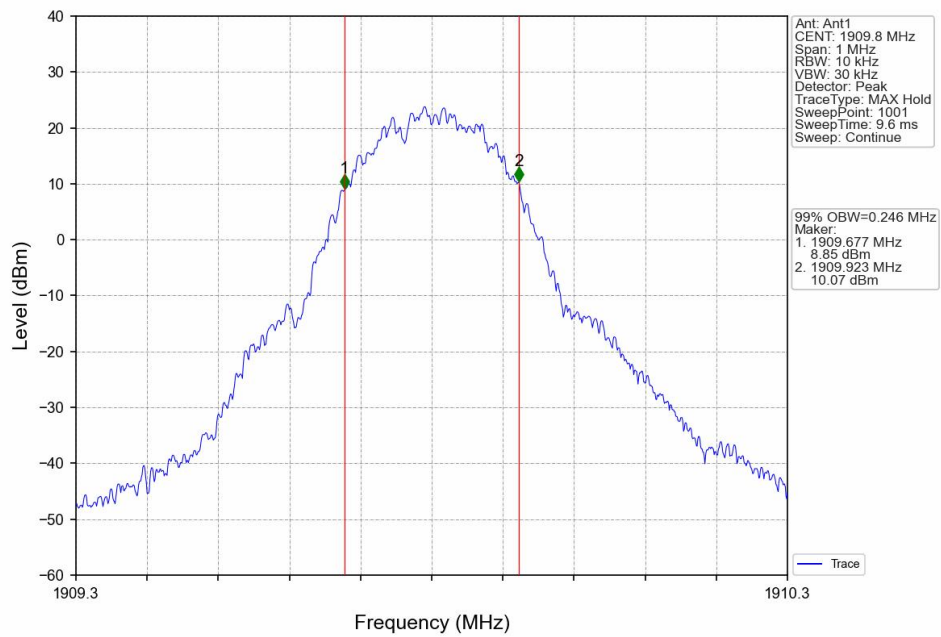
4.1.1 Test Result

Band: PCS1900					
ENV	Mode		Frequency (MHz)	99% Occupied Bandwidth (MHz)	Verdict
	Network	Subset		Result	
NTNV	GSM	GSM	1850.2	0.239	Pass
			1880	0.245	Pass
			1909.8	0.246	Pass
	GPRS	1 TX Slot	1850.2	0.244	Pass
			1880	0.246	Pass
			1909.8	0.249	Pass
	EGPRS	1 TX Slot	1850.2	0.469	Pass
			1880	0.449	Pass
			1909.8	0.435	Pass

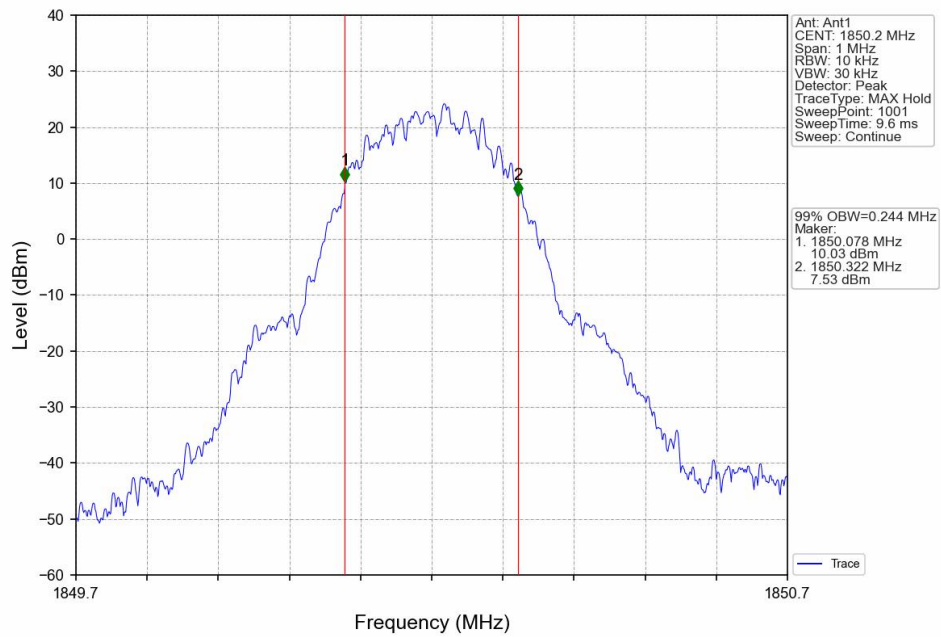
4.1.2 Test Graph



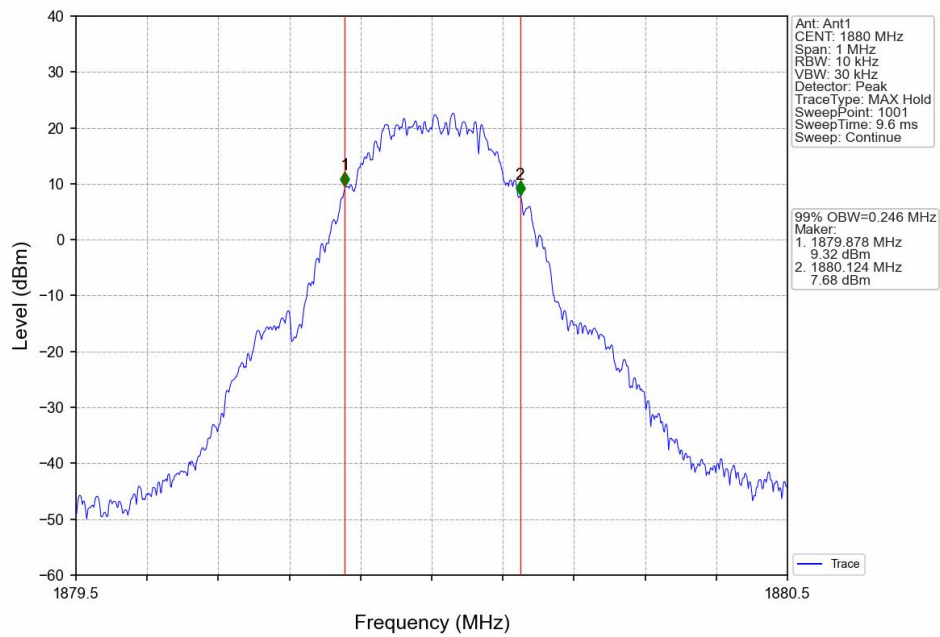
PCS1900_GSM_HCH_1909.8MHz_GSM_NTNV



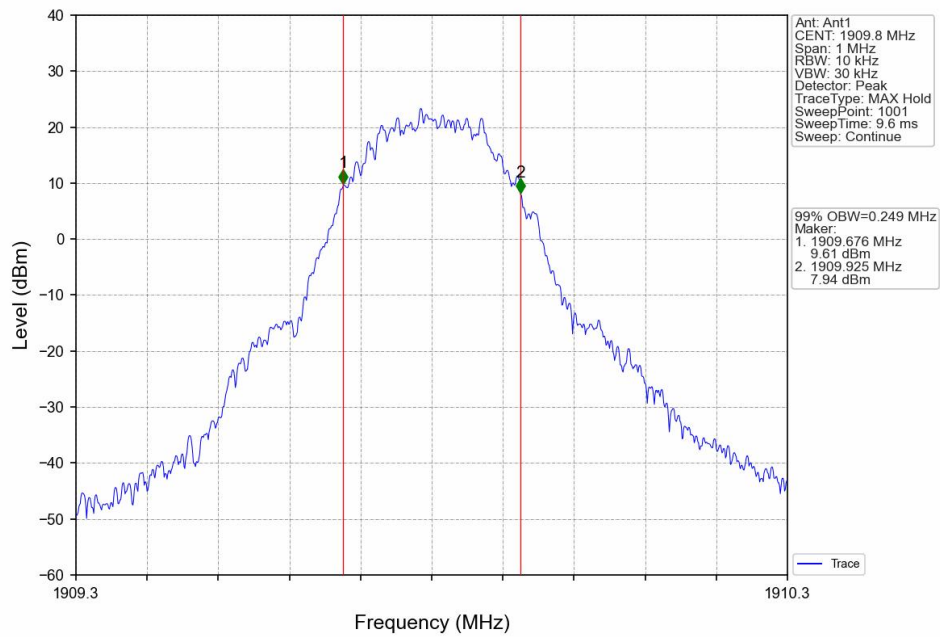
PCS1900_GPRS_LCH_1850.2MHz_1 TX Slot_NTNV



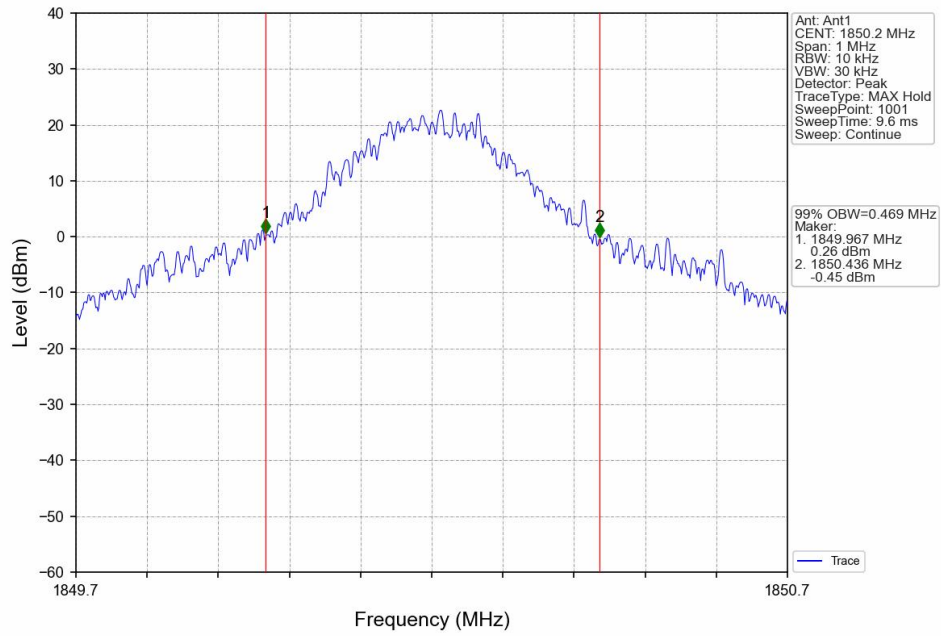
PCS1900_GPRS_MCH_1880MHz_1 TX Slot_NTNV



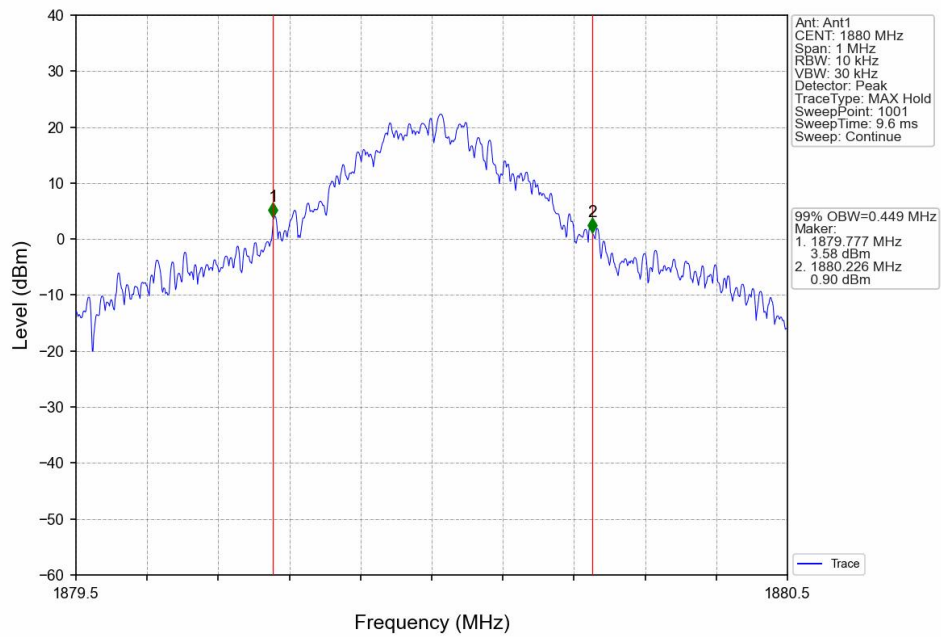
PCS1900_GPRS_HCH_1909.8MHz_1 TX Slot_NTNV



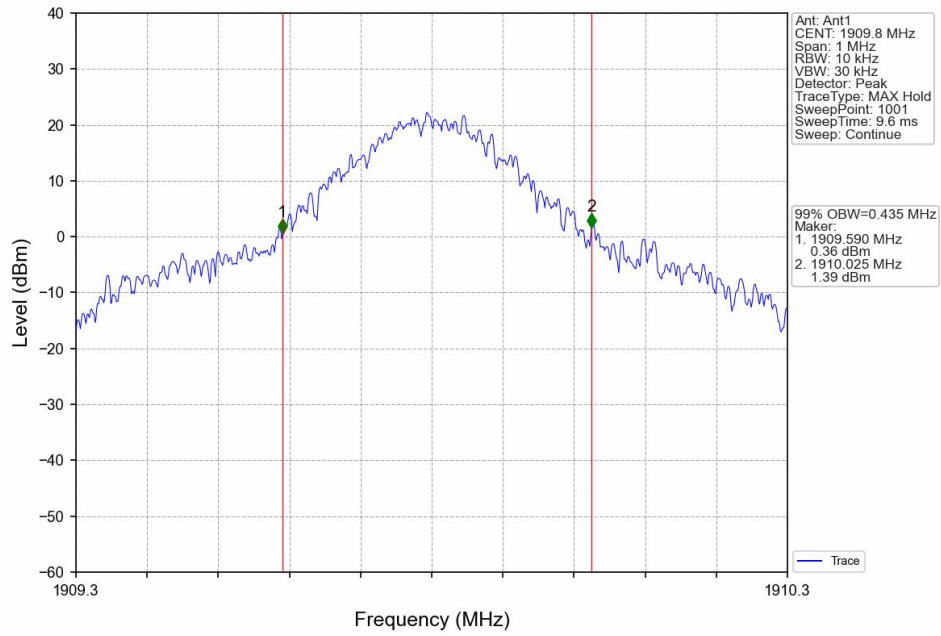
PCS1900_EGPRS_LCH_1850.2MHz_1 TX Slot_NTNV



PCS1900_EGPRS_MCH_1880MHz_1 TX Slot_NTNV



PCS1900_EGPRS_HCH_1909.8MHz_1 TX Slot_NTNV

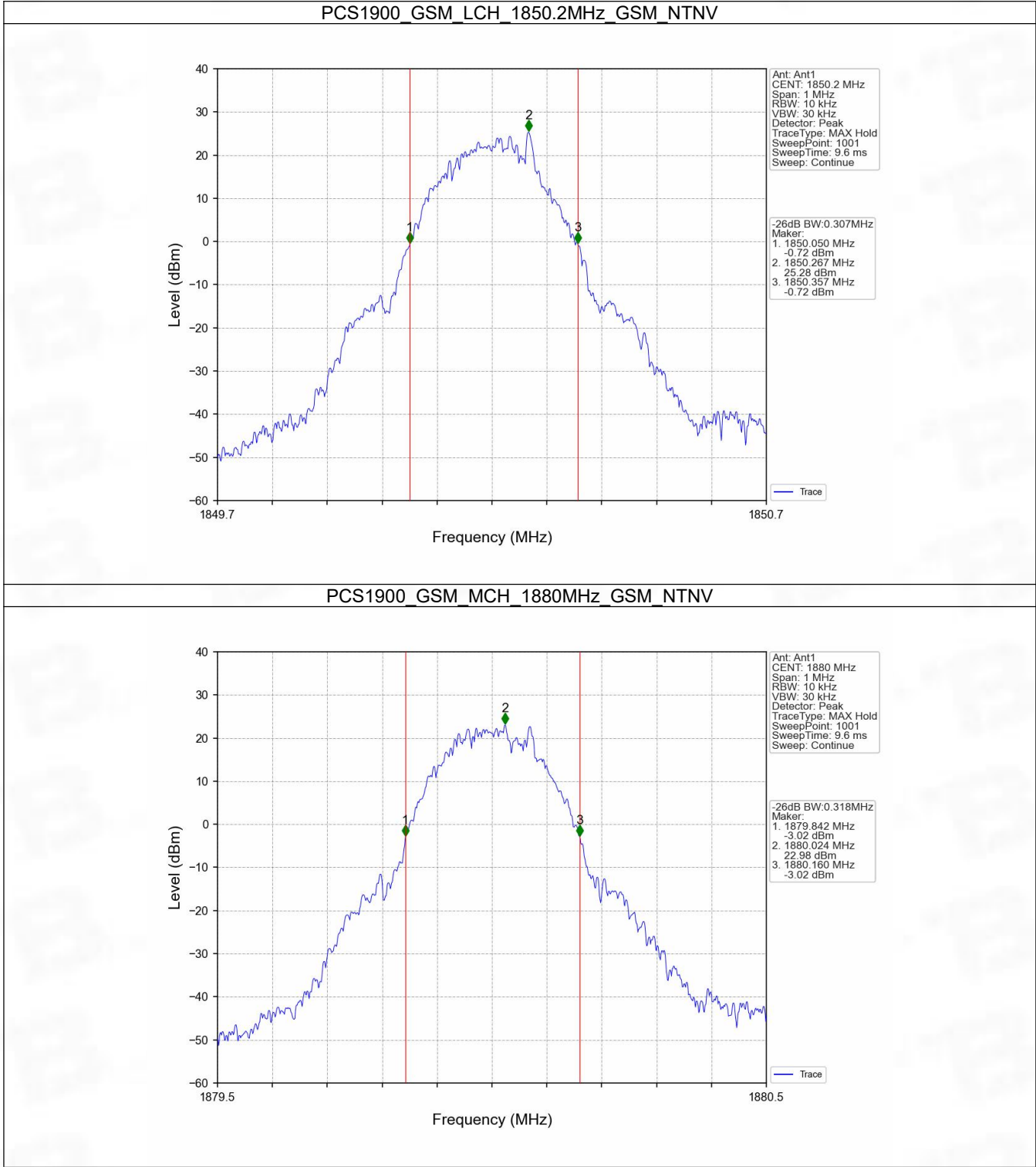


4.2 PCS1900_XDB

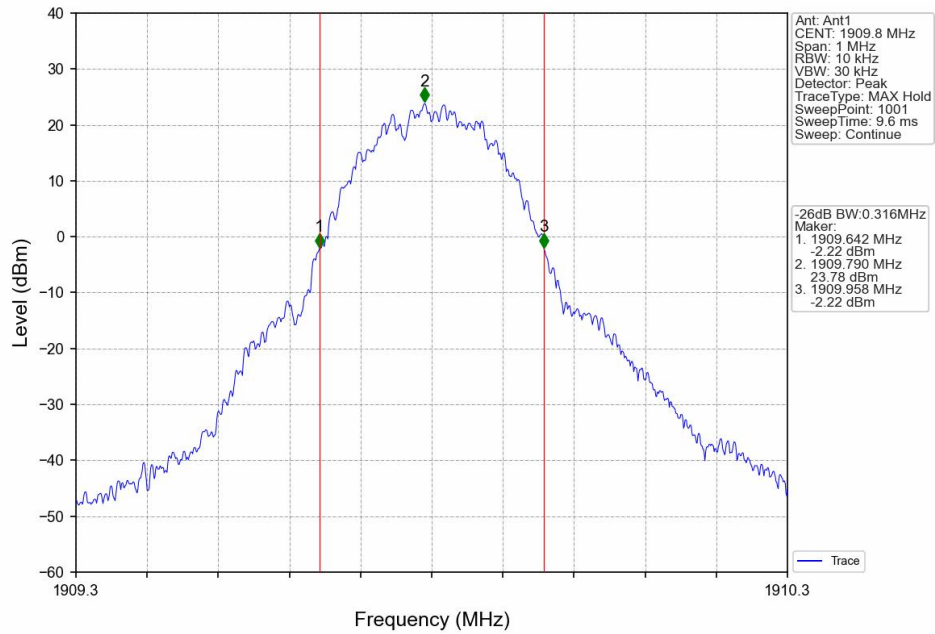
4.2.1 Test Result

Band: PCS1900					
ENV	Mode		Frequency (MHz)	26dB Bandwidth (MHz)	Verdict
	Network	Subset		Result	
NTNV	GSM	GSM	1850.2	0.307	Pass
			1880	0.318	Pass
			1909.8	0.316	Pass
	GPRS	1 TX Slot	1850.2	0.314	Pass
			1880	0.322	Pass
			1909.8	0.317	Pass
	EGPRS	1 TX Slot	1850.2	0.792	Pass
			1880	0.690	Pass
			1909.8	0.668	Pass

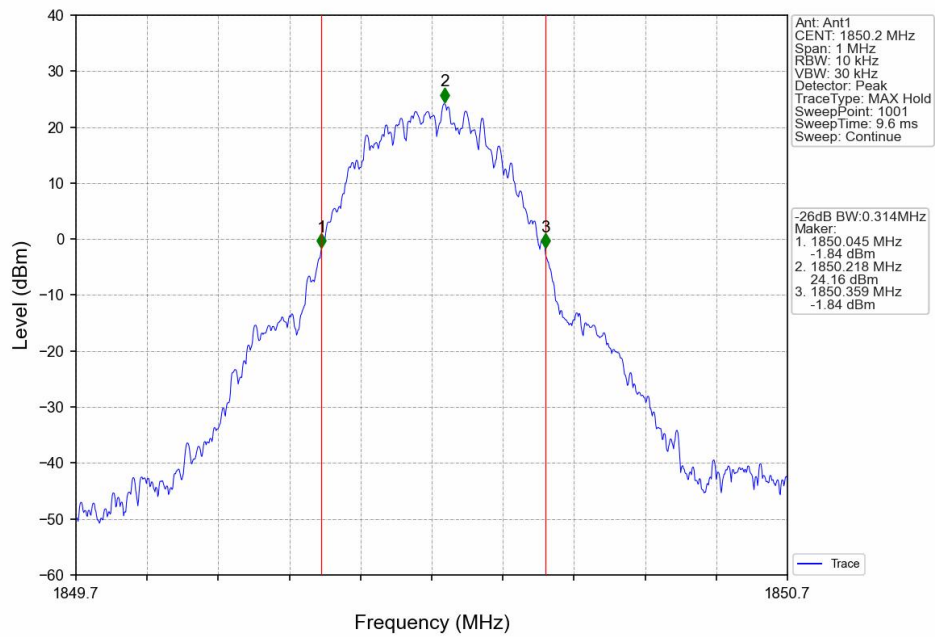
4.2.2 Test Graph



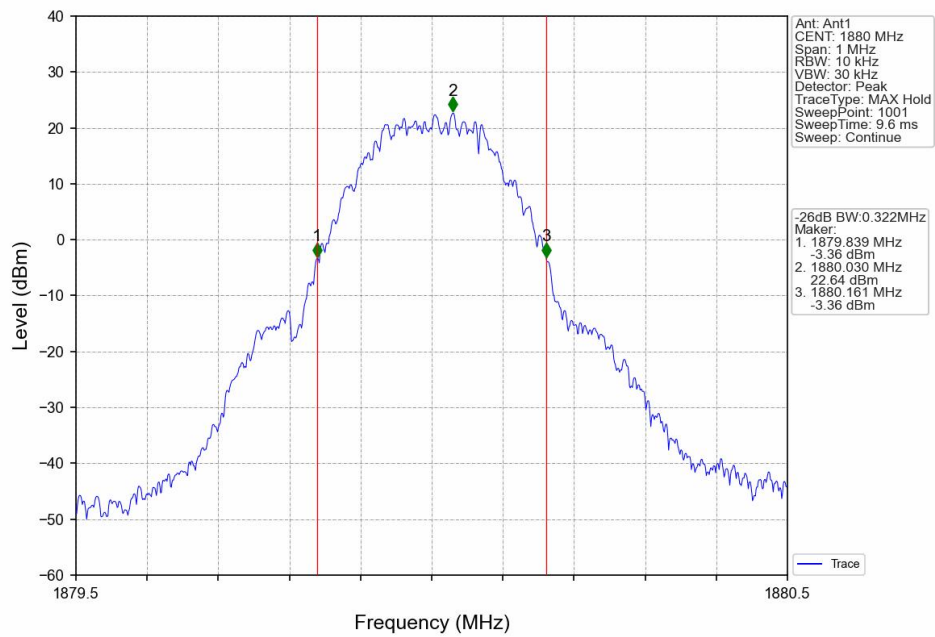
PCS1900_GSM_HCH_1909.8MHz_GSM_NTNV



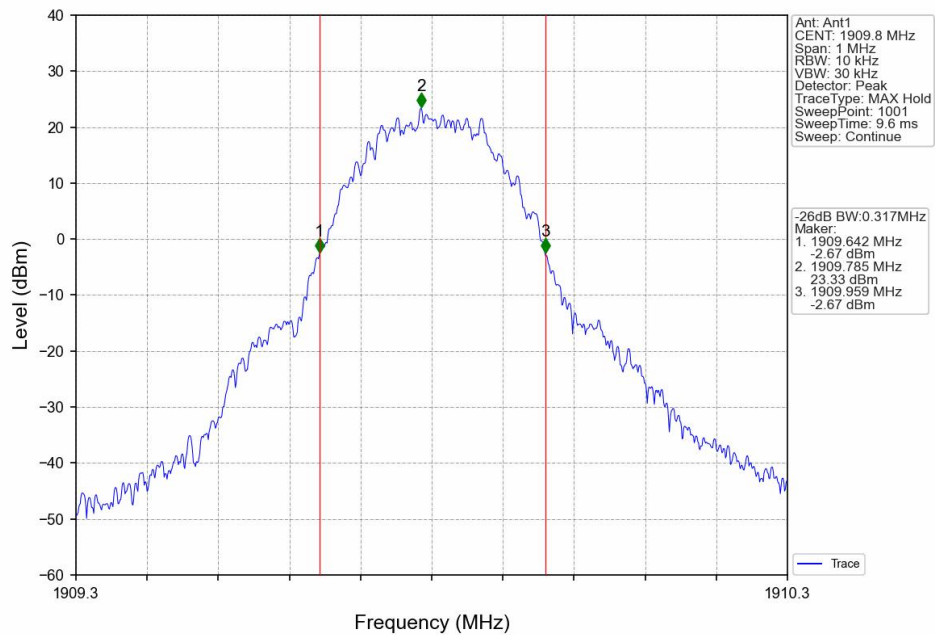
PCS1900_GPRS_LCH_1850.2MHz_1 TX Slot_NTNV



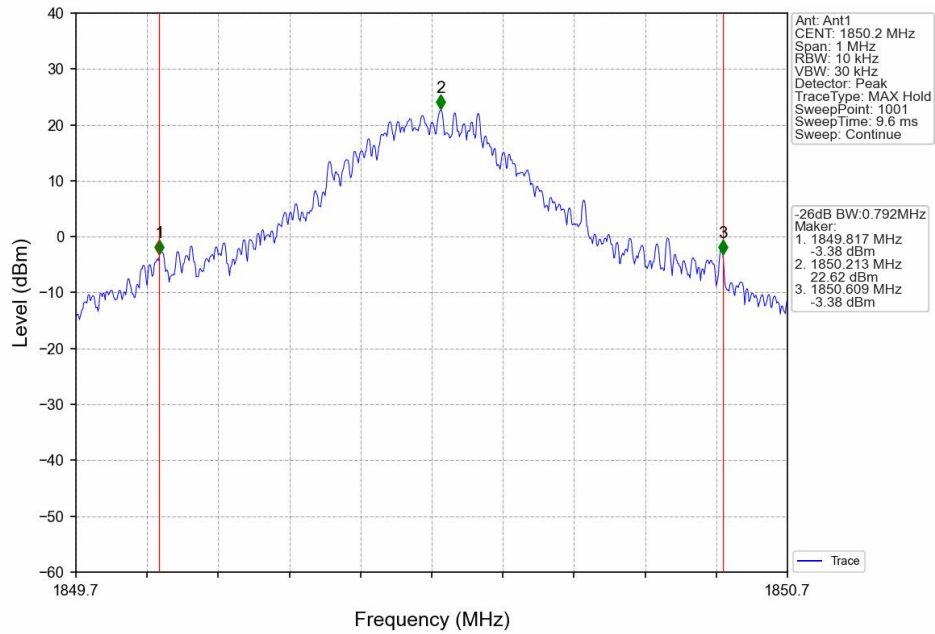
PCS1900_GPRS_MCH_1880MHz_1 TX Slot_NTNV



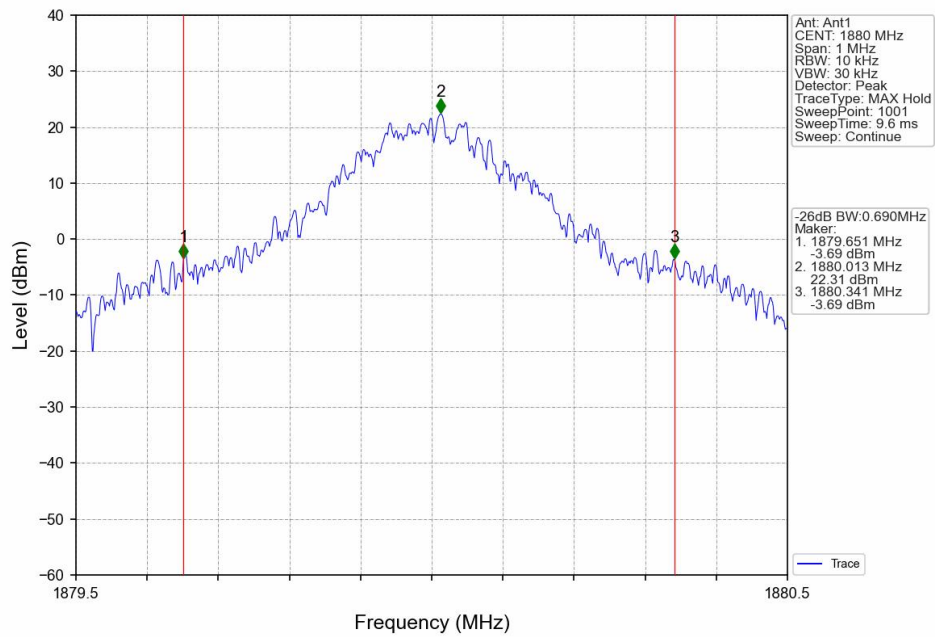
PCS1900_GPRS_HCH_1909.8MHz_1 TX Slot_NTNV



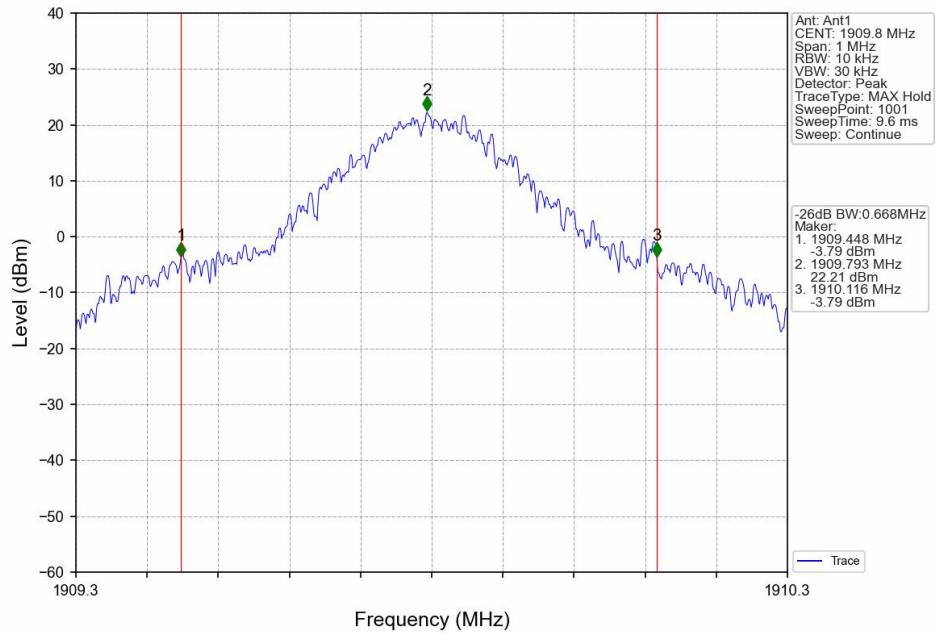
PCS1900_EGPRS_LCH_1850.2MHz_1 TX Slot_NTNV



PCS1900_EGPRS_MCH_1880MHz_1 TX Slot_NTNV



PCS1900_EGPRS_HCH_1909.8MHz_1 TX Slot_NTNV



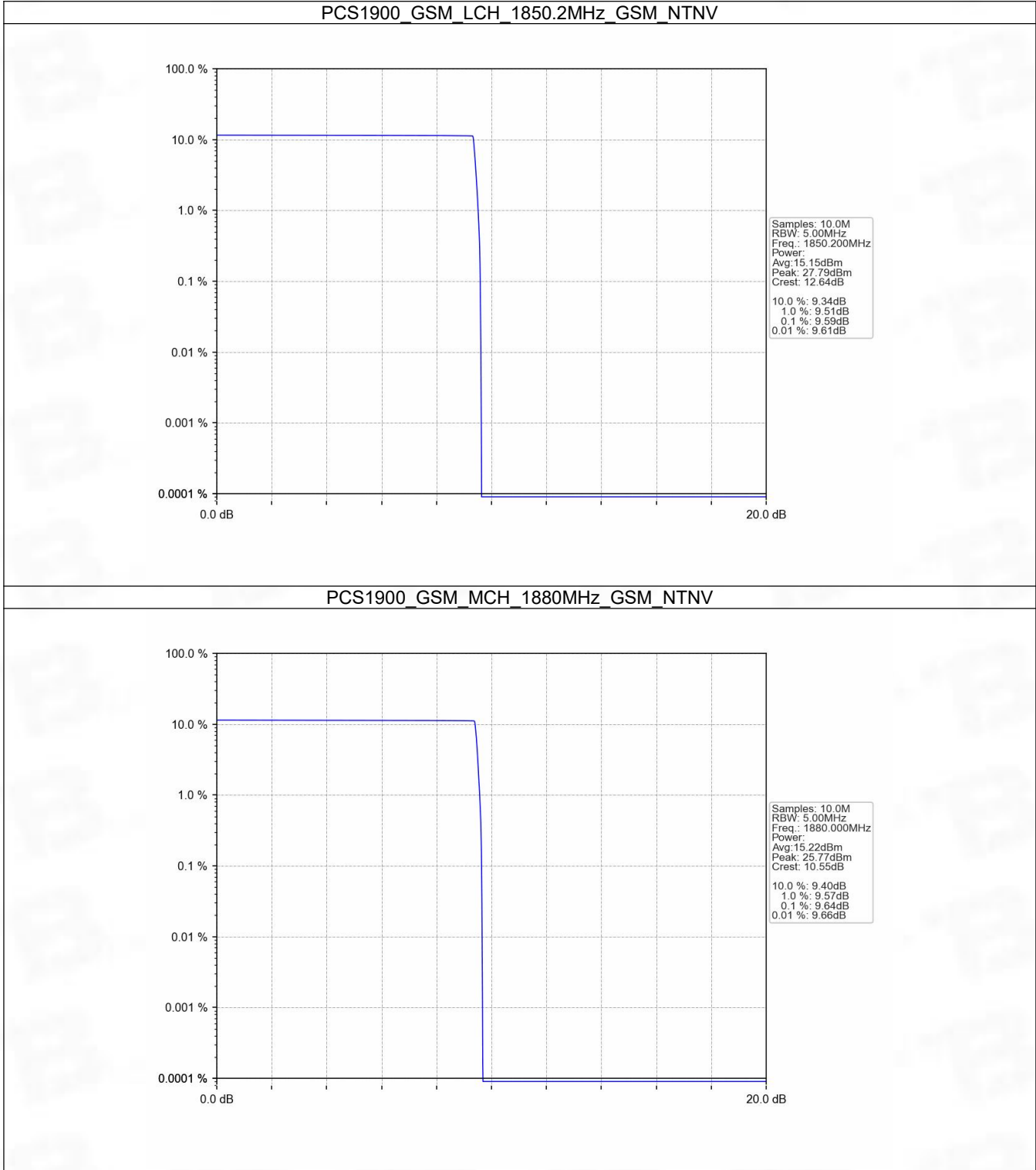
5. Peak-Average Ratio

5.1 PCS1900

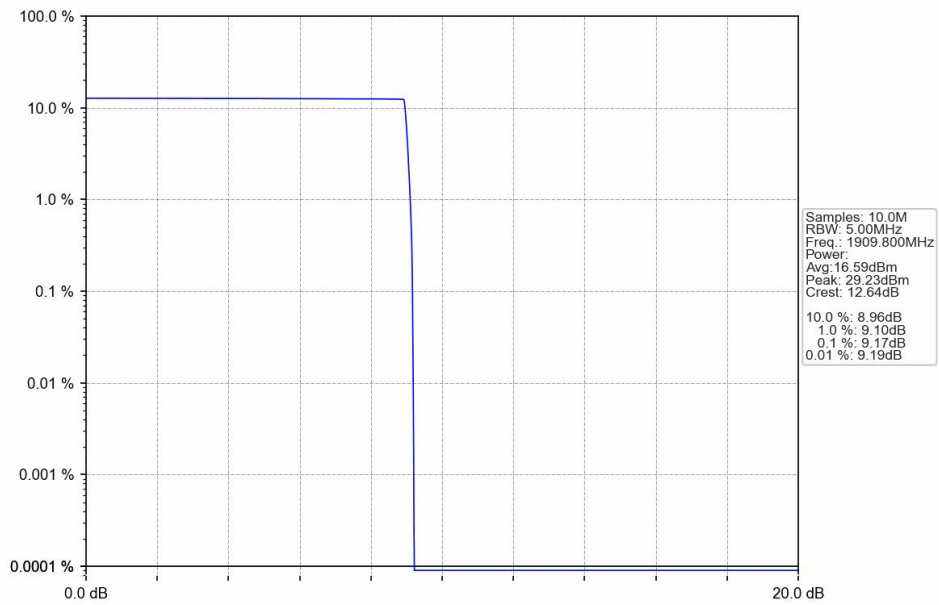
5.1.1 Test Result

Band: PCS1900						
ENV	Mode		Frequency (MHz)	Peak-Average Ratio (dB)		Verdict
	Network	Subset		Result	Limit	
NTNV	GSM	GSM	1850.2	9.59	<=13	Pass
			1880	9.64	<=13	Pass
			1909.8	9.17	<=13	Pass
	GPRS	4 TX Slots	1850.2	3.62	<=13	Pass
			1880	3.72	<=13	Pass
			1909.8	3.62	<=13	Pass
	EGPRS	4 TX Slots	1850.2	7.50	<=13	Pass
			1880	7.32	<=13	Pass
			1909.8	7.17	<=13	Pass

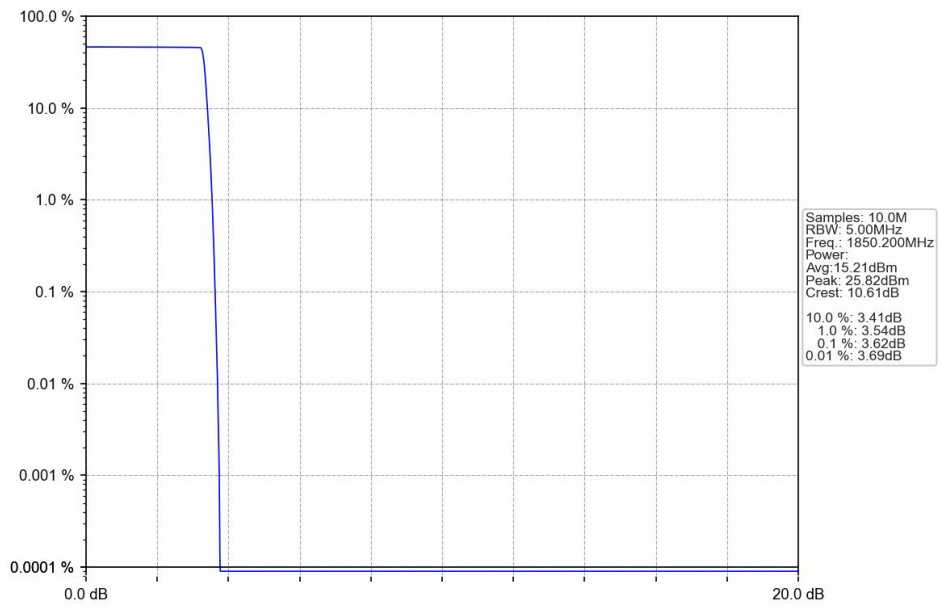
5.1.2 Test Graph



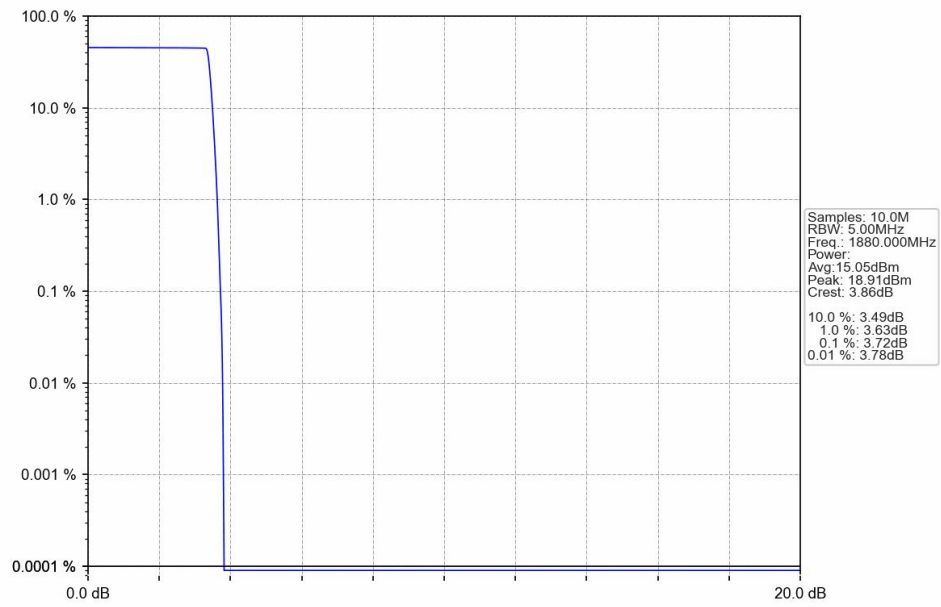
PCS1900_GSM_HCH_1909.8MHz_GSM_NTNV



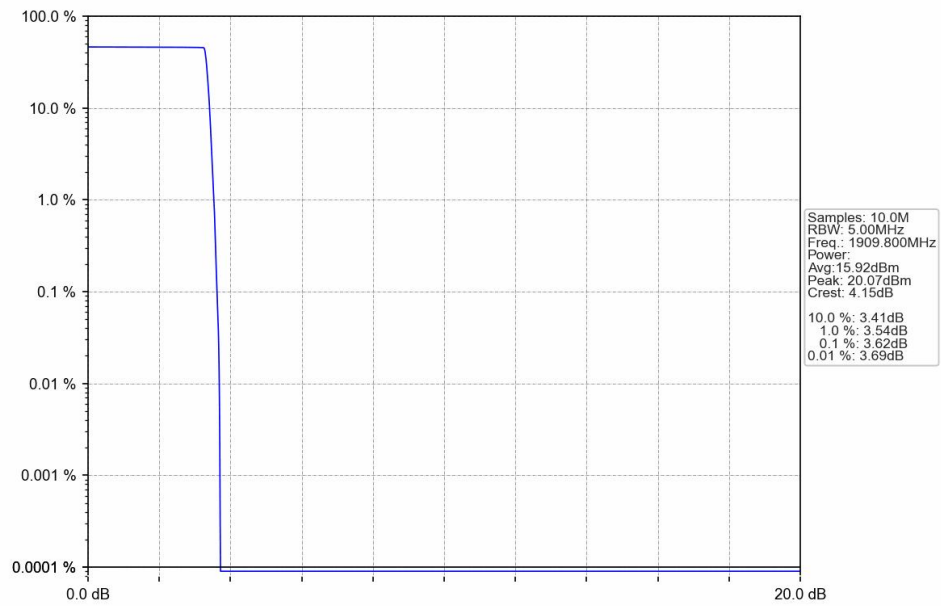
PCS1900_GPRS_LCH_1850.2MHz_4 TX Slots_NTNV



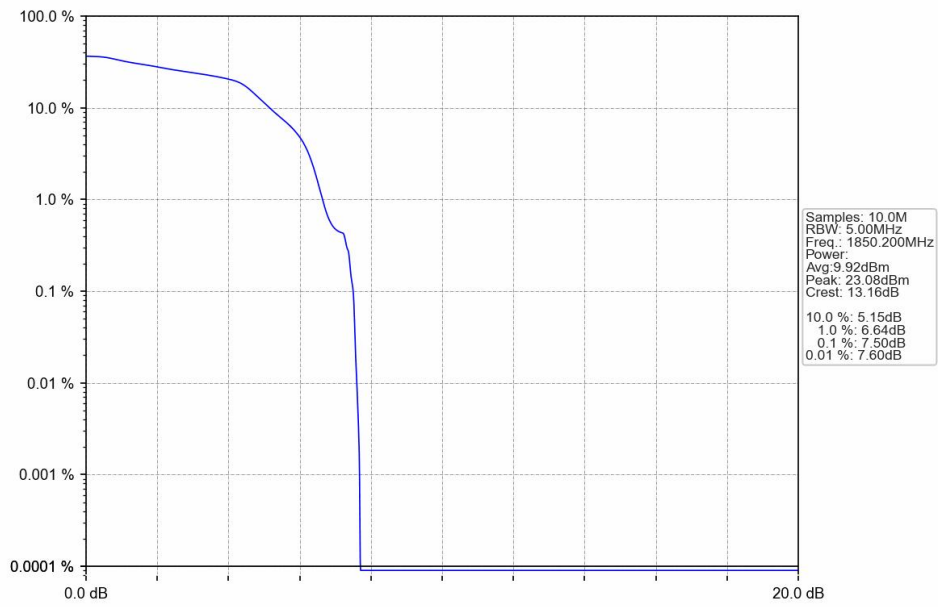
PCS1900_GPRS_MCH_1880MHz_4 TX Slots_NTNV



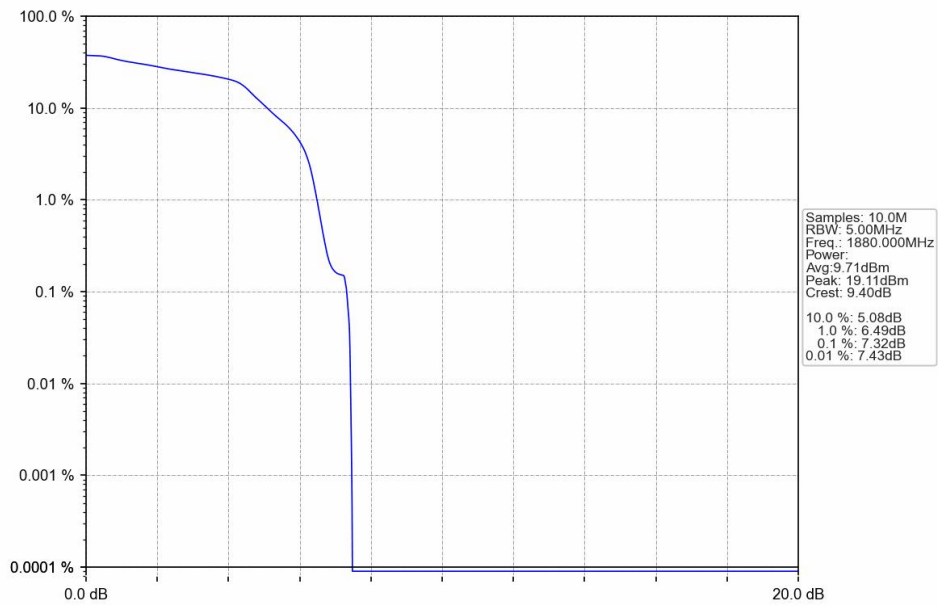
PCS1900_GPRS_HCH_1909.8MHz_4 TX Slots_NTNV



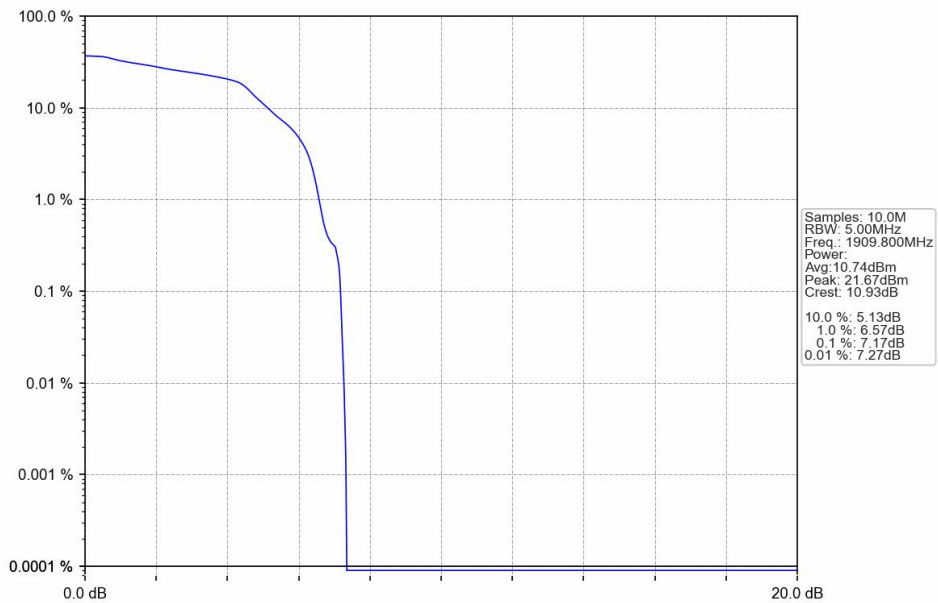
PCS1900_EGPRS_LCH_1850.2MHz_4 TX Slots_NTNV



PCS1900_EGPRS_MCH_1880MHz_4 TX Slots_NTNV



PCS1900_EGPRS_HCH_1909.8MHz_4 TX Slots_NTNV



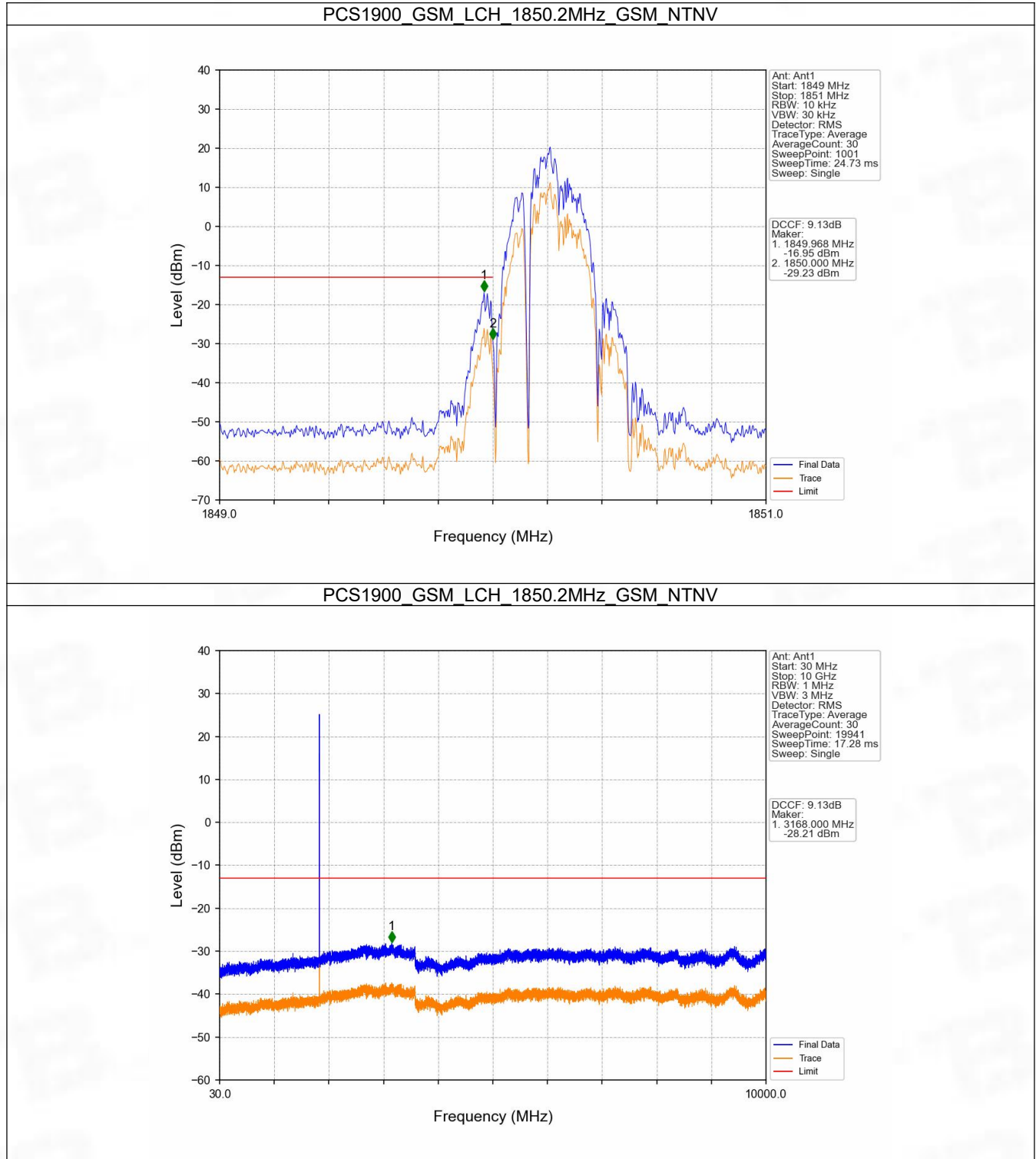
6. Spurious Emission

6.1 PCS1900

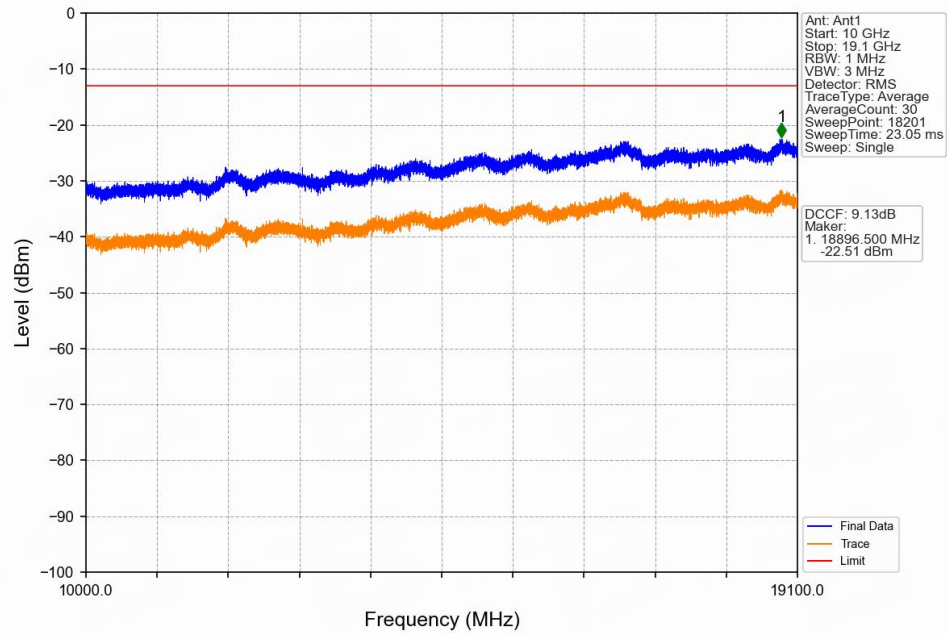
6.1.1 Test Result

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

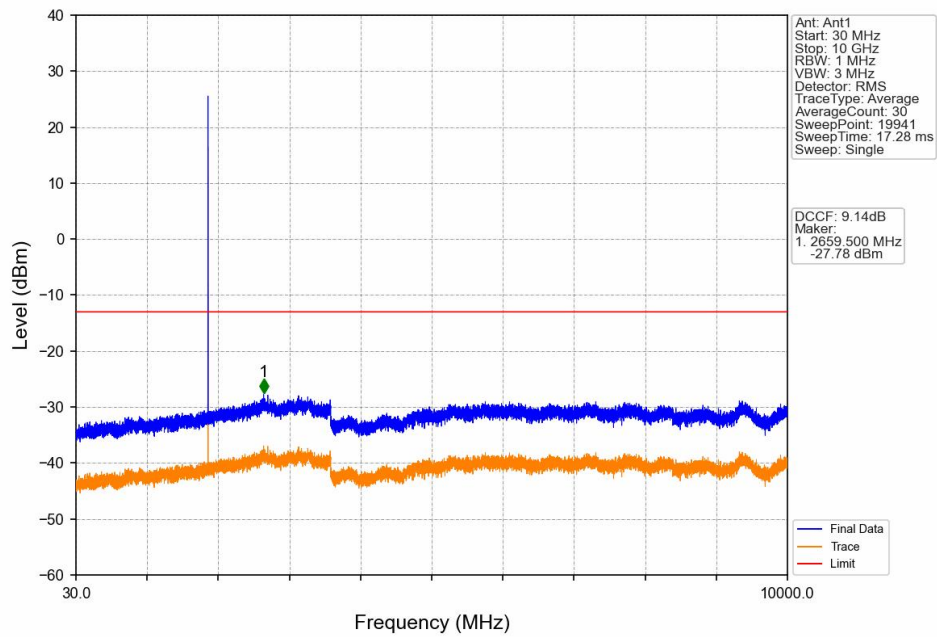
6.1.2 Test Graph



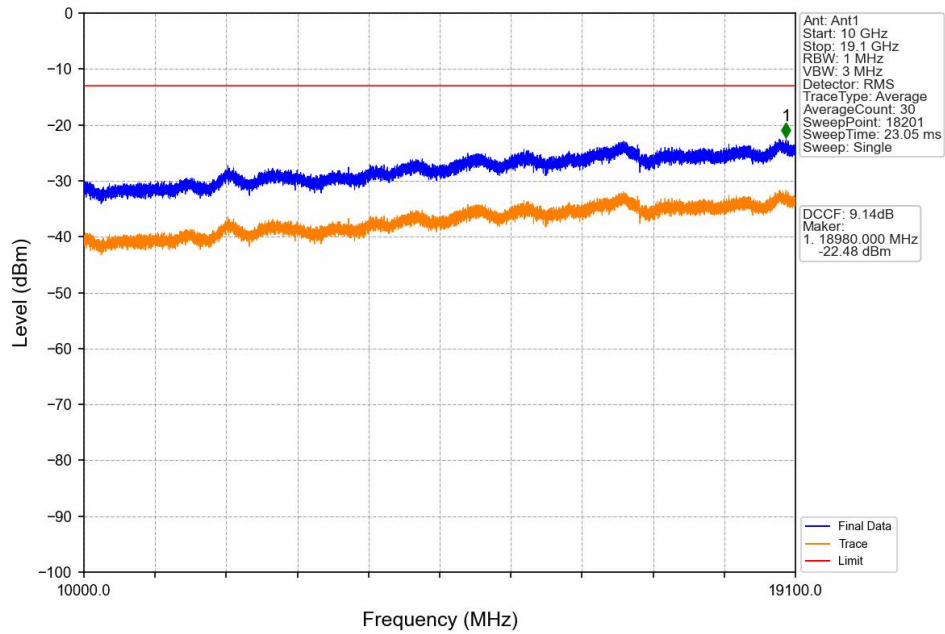
PCS1900_GSM_LCH_1850.2MHz_GSM_NTNV



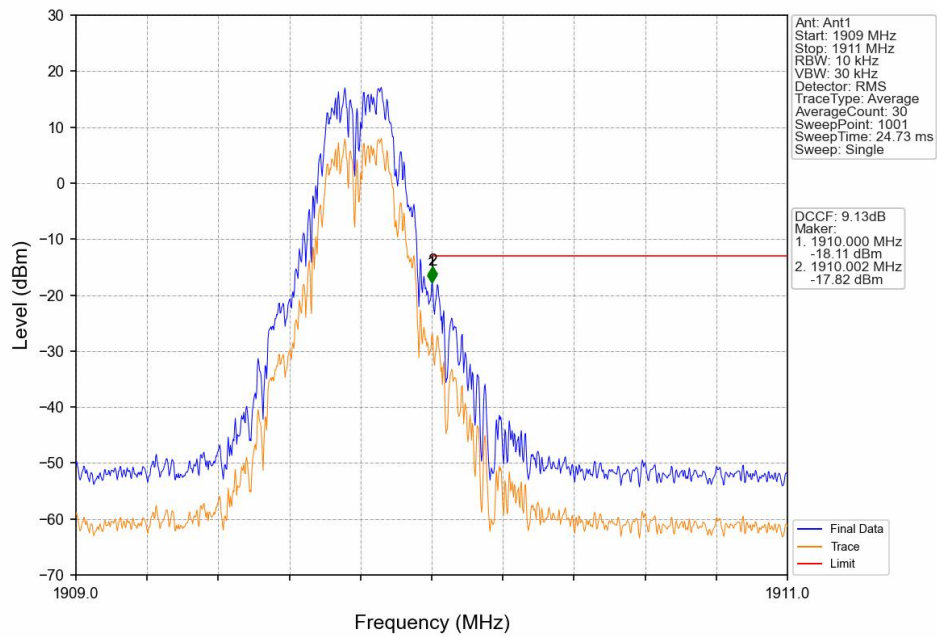
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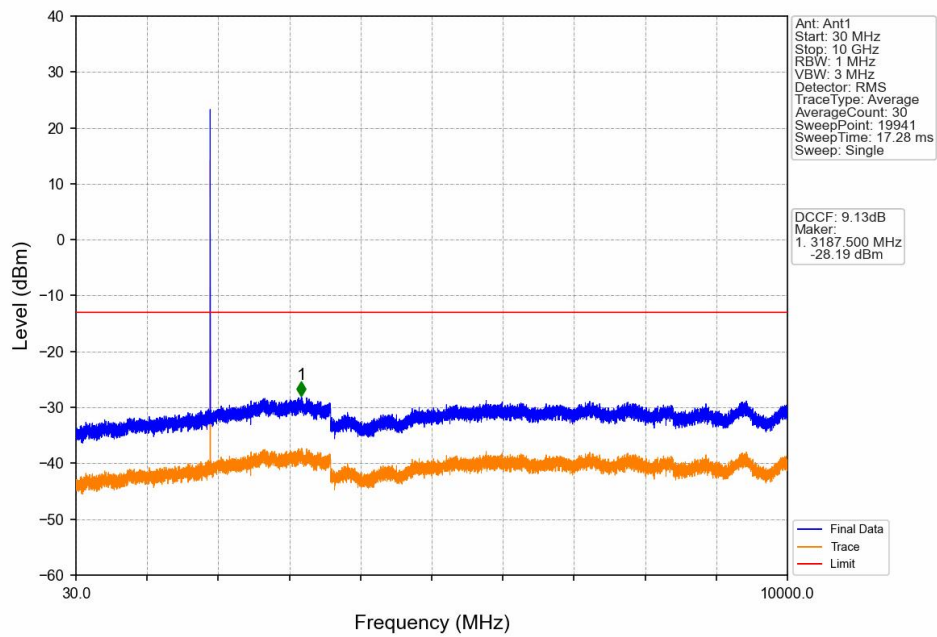
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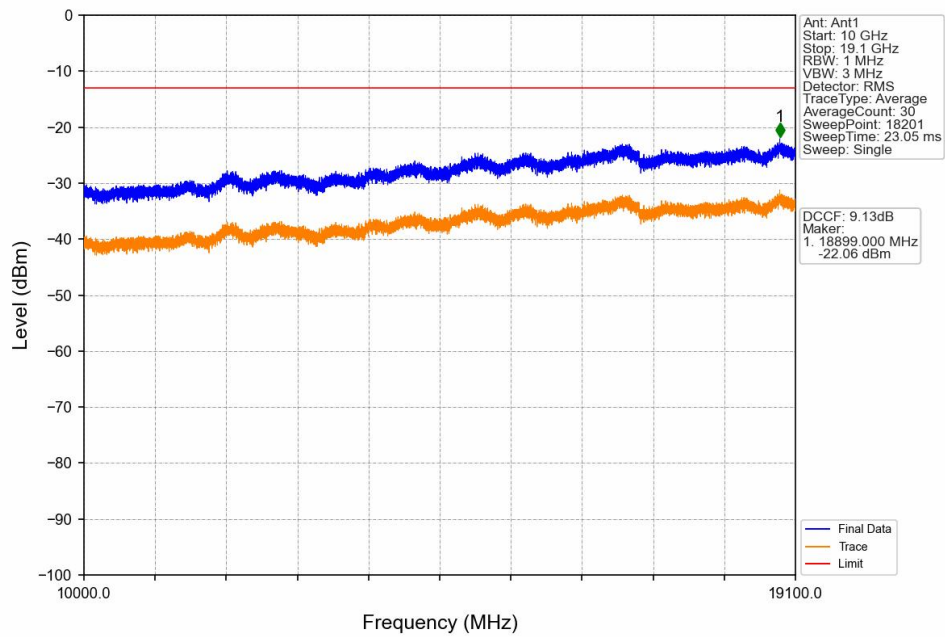
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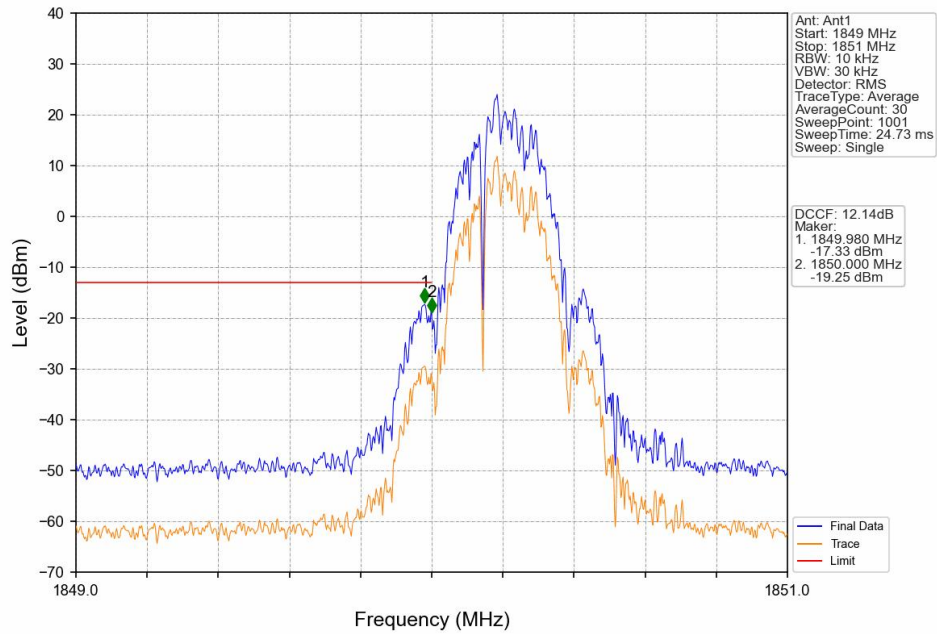
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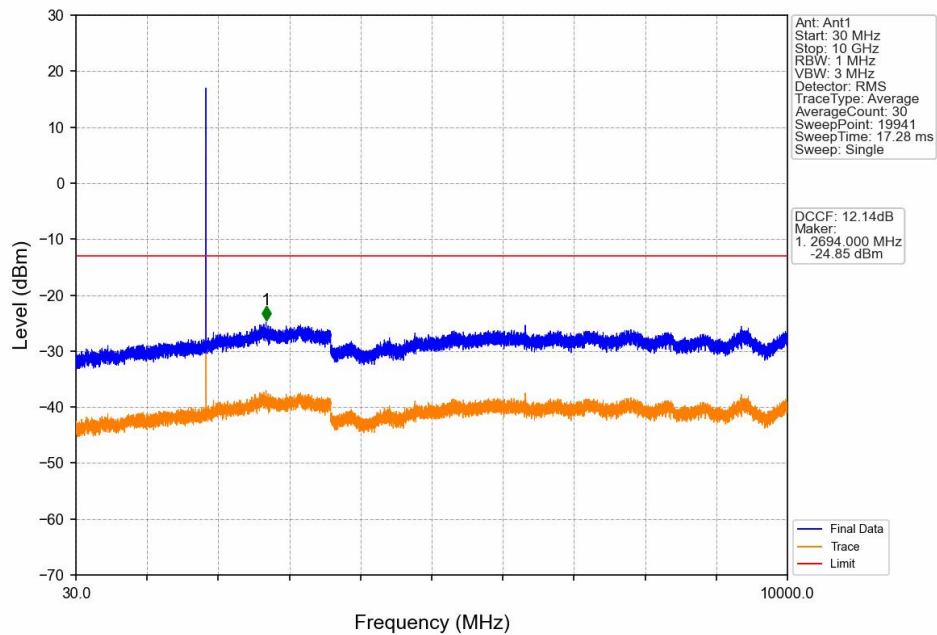
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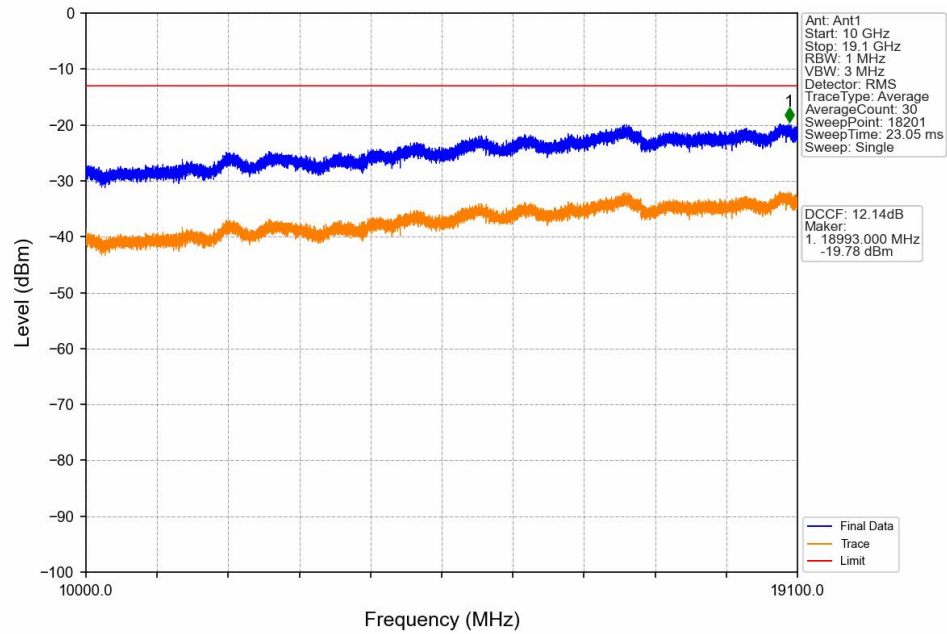
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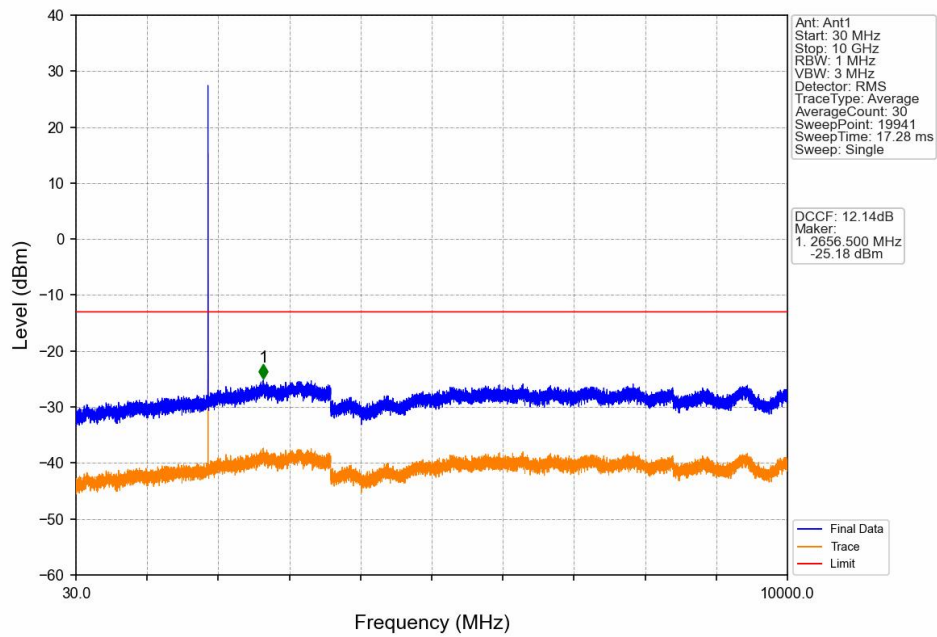
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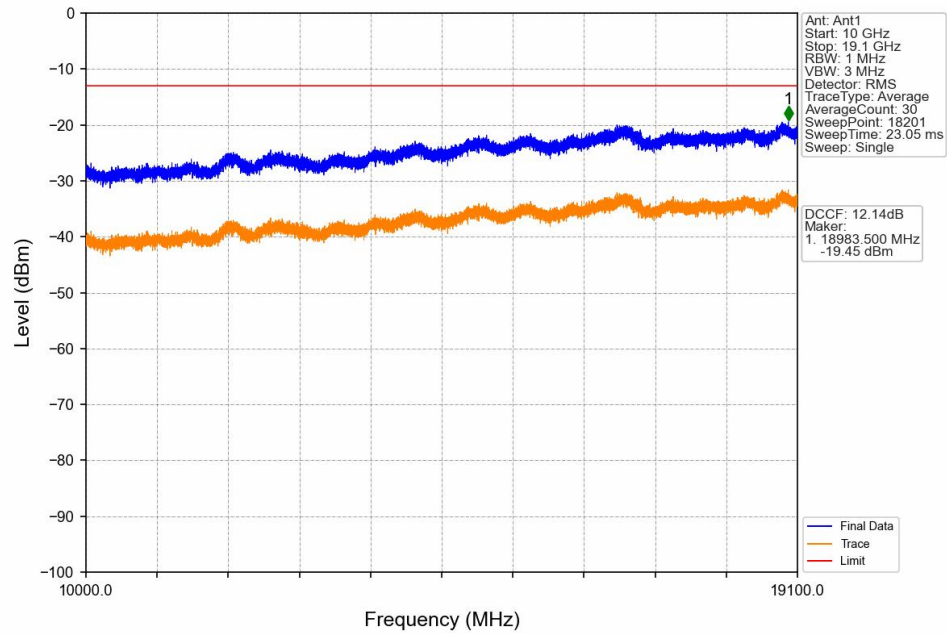
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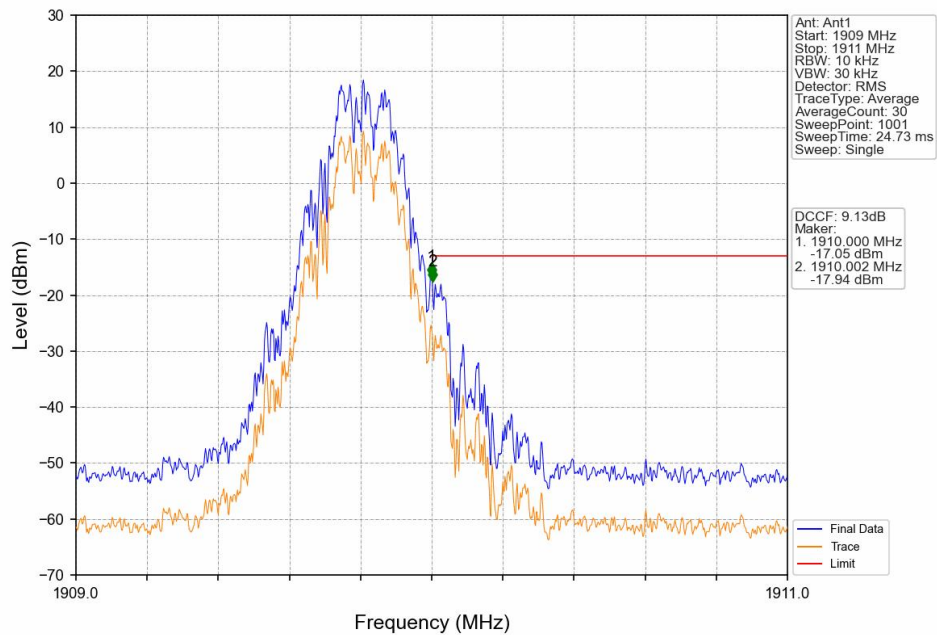
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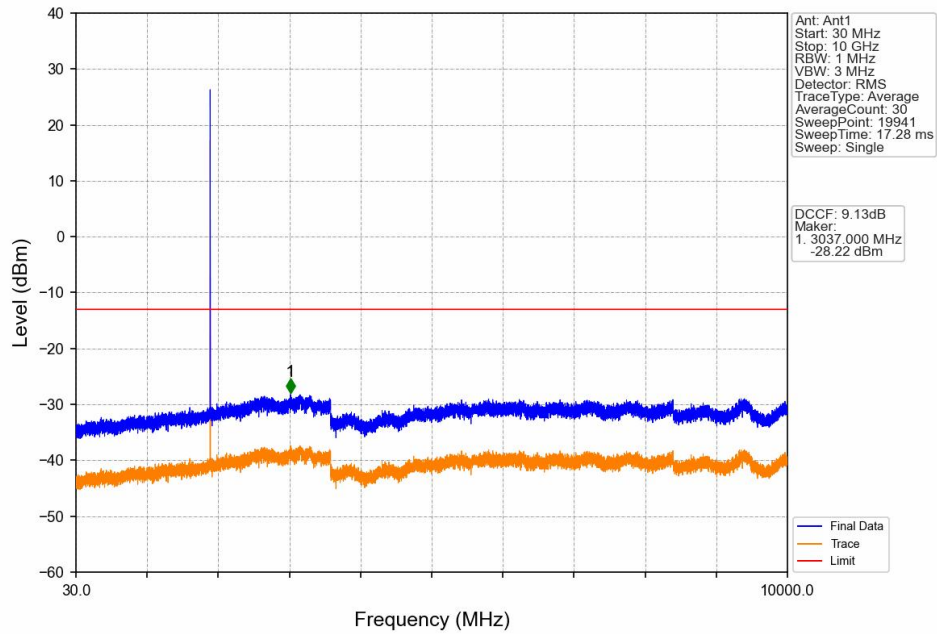
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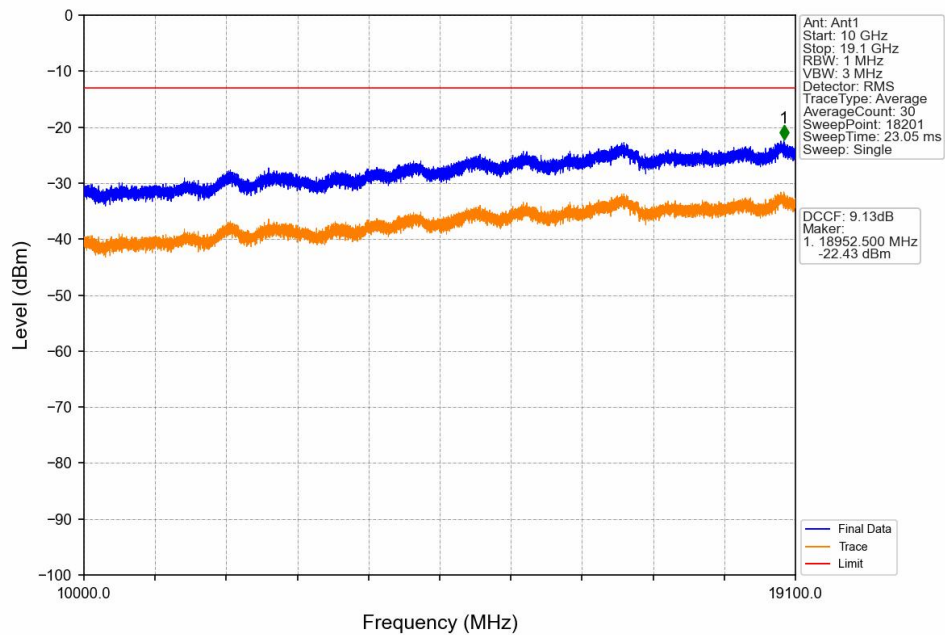
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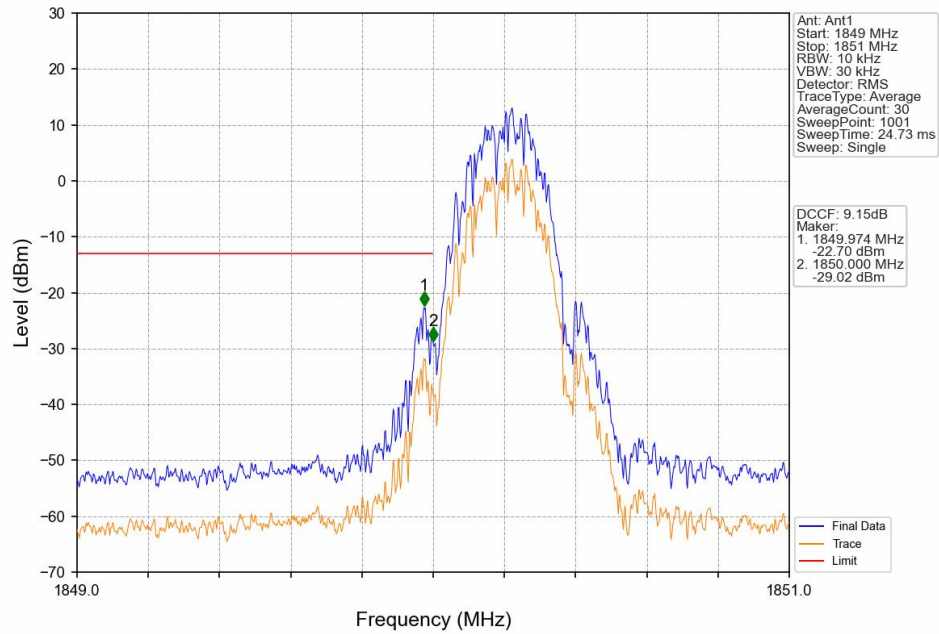
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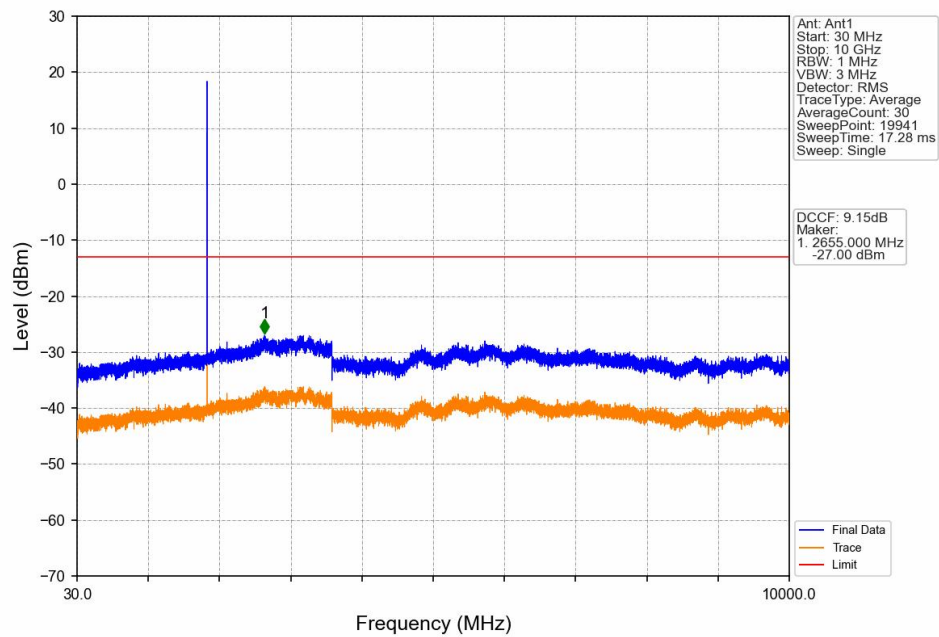
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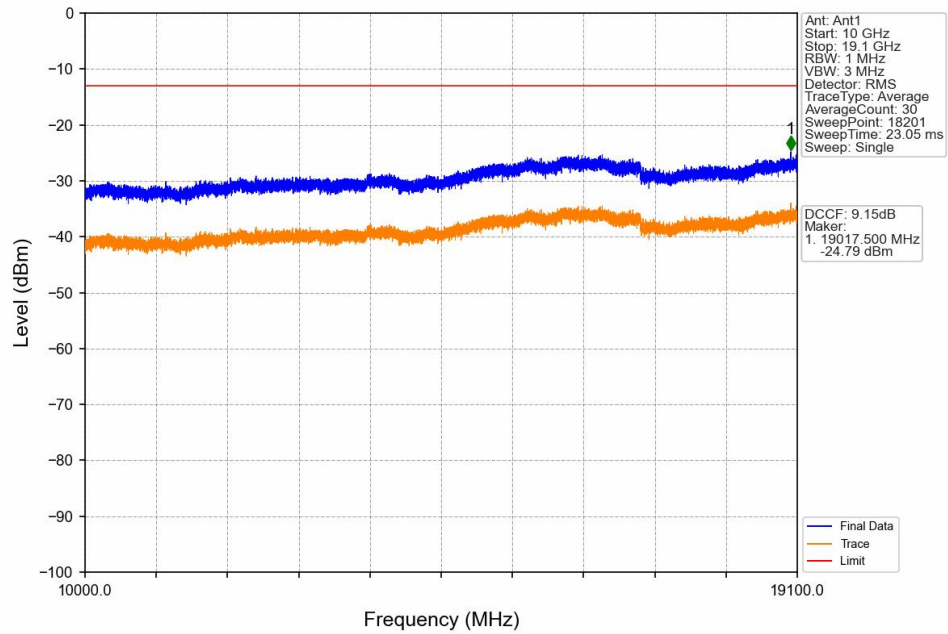
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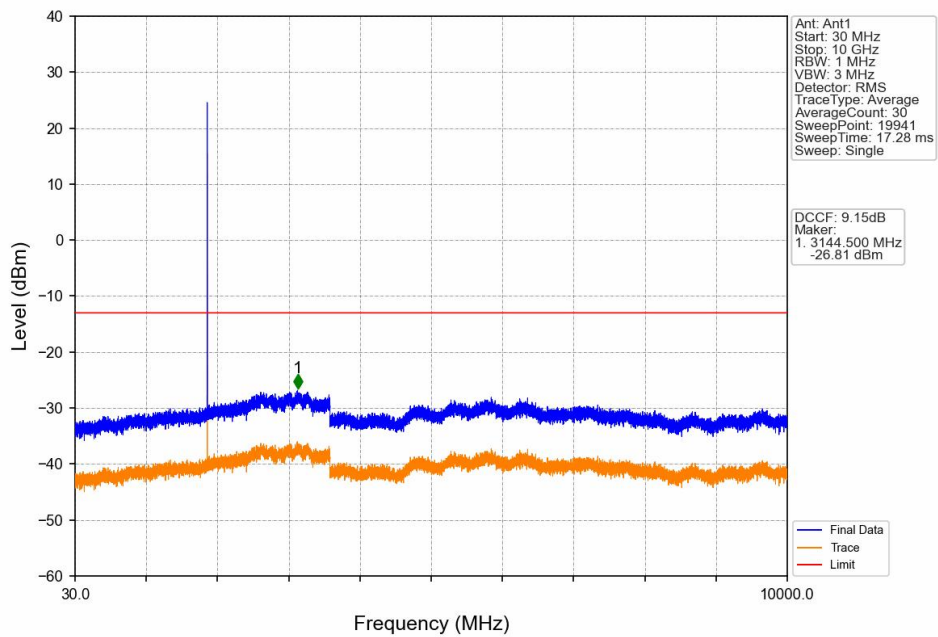
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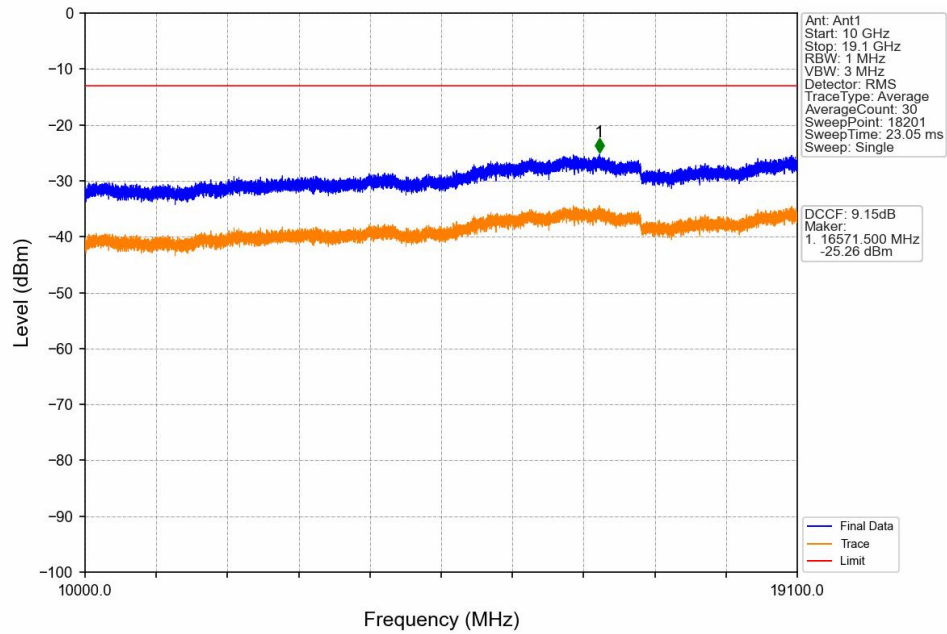
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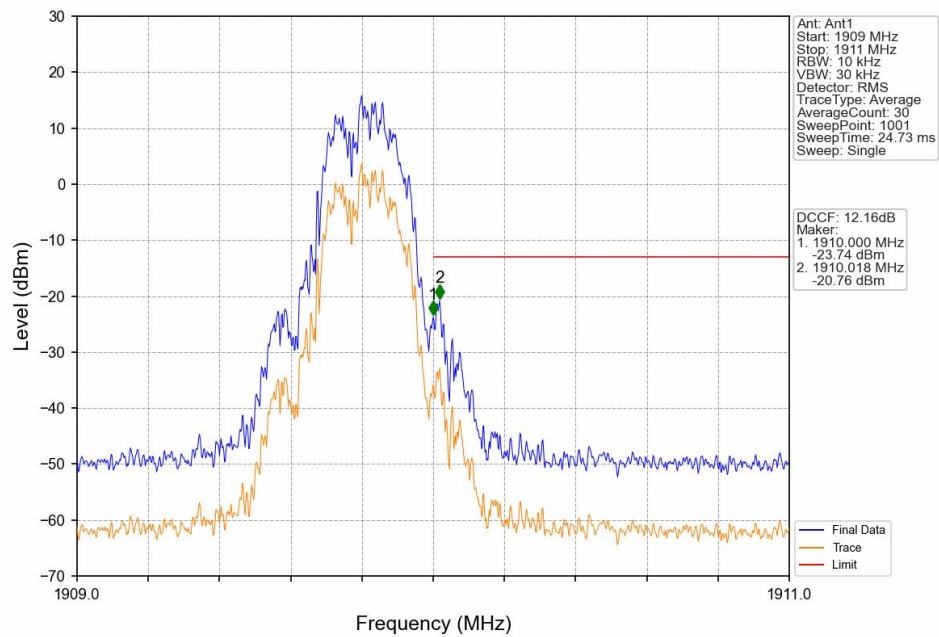
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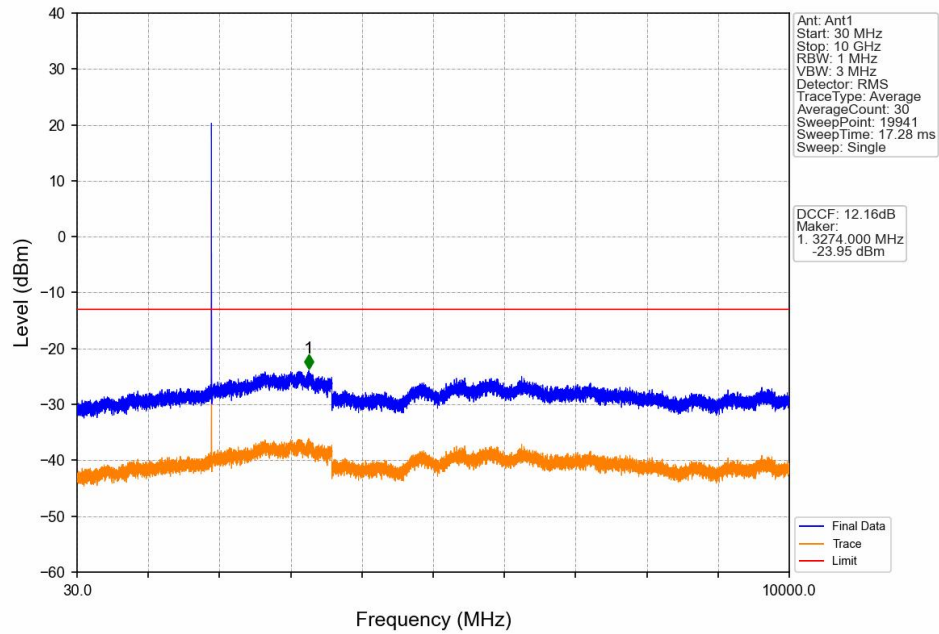
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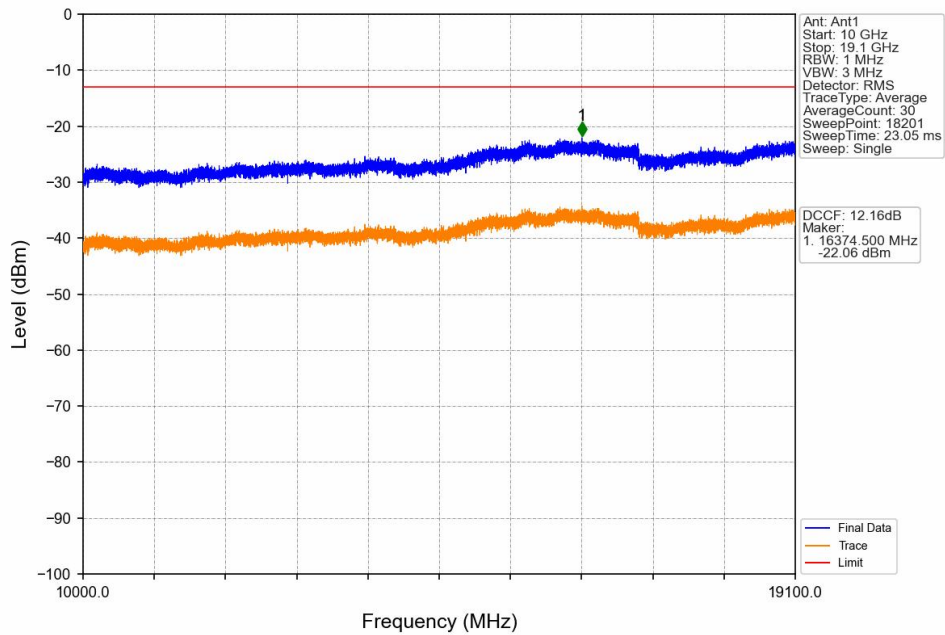
PCS1900_EGPRS_HCH_1909.8MHz_1 TX Slot_NTNV



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	0.5012	0.0316	ppm	249KGXW	24E	27.00
PCS1900	0.2	1850.2	1909.8	0.2296	0.0354	ppm	469KG7W	24E	23.61

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	0.5559	0.0316	ppm	249KGXW	24E	27.45
PCS1900	0.2	1850.2	1909.8	0.2547	0.0354	ppm	469KG7W	24E	24.06