

# 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	28.44	0.53	28.97	<=33.01	Pass
			1880	28.18	0.53	28.71	<=33.01	Pass
			1909.8	28.25	0.53	28.78	<=33.01	Pass
	GPRS	1 TX Slot	1850.2	28.47	0.53	29.00	<=33.01	Pass
		2 TX Slots	1850.2	27.88	0.53	28.41	<=33.01	Pass
		3 TX Slots	1850.2	26.49	0.53	27.02	<=33.01	Pass
		4 TX Slots	1850.2	25.57	0.53	26.10	<=33.01	Pass
		1 TX Slot	1880	28.17	0.53	28.70	<=33.01	Pass
		2 TX Slots	1880	27.68	0.53	28.21	<=33.01	Pass
		3 TX Slots	1880	26.39	0.53	26.92	<=33.01	Pass
		4 TX Slots	1880	25.53	0.53	26.06	<=33.01	Pass
		1 TX Slot	1909.8	28.25	0.53	28.78	<=33.01	Pass
		2 TX Slots	1909.8	27.77	0.53	28.30	<=33.01	Pass
		3 TX Slots	1909.8	26.48	0.53	27.01	<=33.01	Pass
		4 TX Slots	1909.8	25.62	0.53	26.15	<=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	15.982	0.0086	-2.5 to 2.5	Pass	
			3.85	7.523	0.0041	-2.5 to 2.5	Pass	
			4.43	3.422	0.0018	-2.5 to 2.5	Pass	
		-30	3.85	17.499	0.0095	-2.5 to 2.5	Pass	
			-20	3.85	16.401	0.0089	-2.5 to 2.5	Pass
				3.85	11.494	0.0062	-2.5 to 2.5	Pass
			0	3.85	8.653	0.0047	-2.5 to 2.5	Pass
				3.85	11.494	0.0062	-2.5 to 2.5	Pass
			3.85	8.039	0.0043	-2.5 to 2.5	Pass	
	40	3.85	9.847	0.0053	-2.5 to 2.5	Pass		
		3.85	20.017	0.0108	-2.5 to 2.5	Pass		
	1880	20	3.27	16.498	0.0088	-2.5 to 2.5	Pass	
			3.85	22.988	0.0122	-2.5 to 2.5	Pass	
			4.43	1.130	0.0006	-2.5 to 2.5	Pass	
		-30	3.85	-1.356	-0.0007	-2.5 to 2.5	Pass	
			3.85	1.485	0.0008	-2.5 to 2.5	Pass	
		-10	3.85	17.079	0.0091	-2.5 to 2.5	Pass	
			3.85	20.179	0.0107	-2.5 to 2.5	Pass	
3.85		10.590	0.0056	-2.5 to 2.5	Pass			
3.85		16.918	0.0090	-2.5 to 2.5	Pass			

		40	3.85	15.659	0.0083	-2.5 to 2.5	Pass
		50	3.85	12.107	0.0064	-2.5 to 2.5	Pass
	1909.8	20	3.27	12.817	0.0067	-2.5 to 2.5	Pass
			3.85	5.166	0.0027	-2.5 to 2.5	Pass
			4.43	10.557	0.0055	-2.5 to 2.5	Pass
		-30	3.85	1.808	0.0009	-2.5 to 2.5	Pass
		-20	3.85	5.844	0.0031	-2.5 to 2.5	Pass
		-10	3.85	2.841	0.0015	-2.5 to 2.5	Pass
		0	3.85	-7.297	-0.0038	-2.5 to 2.5	Pass
		10	3.85	27.895	0.0146	-2.5 to 2.5	Pass
		30	3.85	5.521	0.0029	-2.5 to 2.5	Pass
		40	3.85	8.459	0.0044	-2.5 to 2.5	Pass
	50	3.85	-6.780	-0.0036	-2.5 to 2.5	Pass	
	GPRS	1850.2	20	3.27	21.115	0.0114	-2.5 to 2.5
3.85				23.859	0.0129	-2.5 to 2.5	Pass
4.43				17.531	0.0095	-2.5 to 2.5	Pass
-30			3.85	13.205	0.0071	-2.5 to 2.5	Pass
-20			3.85	15.626	0.0084	-2.5 to 2.5	Pass
-10			3.85	2.615	0.0014	-2.5 to 2.5	Pass
0			3.85	22.406	0.0121	-2.5 to 2.5	Pass
10			3.85	32.802	0.0177	-2.5 to 2.5	Pass
30			3.85	30.801	0.0166	-2.5 to 2.5	Pass
40			3.85	32.157	0.0174	-2.5 to 2.5	Pass
50		3.85	17.176	0.0093	-2.5 to 2.5	Pass	
1880		20	3.27	13.689	0.0073	-2.5 to 2.5	Pass
			3.85	21.180	0.0113	-2.5 to 2.5	Pass
			4.43	18.209	0.0097	-2.5 to 2.5	Pass
		-30	3.85	3.099	0.0016	-2.5 to 2.5	Pass
		-20	3.85	25.861	0.0138	-2.5 to 2.5	Pass
		-10	3.85	19.501	0.0104	-2.5 to 2.5	Pass
		0	3.85	-0.581	-0.0003	-2.5 to 2.5	Pass
		10	3.85	7.200	0.0038	-2.5 to 2.5	Pass
		30	3.85	18.048	0.0096	-2.5 to 2.5	Pass
		40	3.85	11.009	0.0059	-2.5 to 2.5	Pass
50		3.85	24.634	0.0131	-2.5 to 2.5	Pass	
1909.8		20	3.27	10.202	0.0053	-2.5 to 2.5	Pass
			3.85	5.263	0.0028	-2.5 to 2.5	Pass
			4.43	13.818	0.0072	-2.5 to 2.5	Pass
		-30	3.85	24.796	0.0130	-2.5 to 2.5	Pass
		-20	3.85	11.494	0.0060	-2.5 to 2.5	Pass
		-10	3.85	17.886	0.0094	-2.5 to 2.5	Pass
		0	3.85	16.369	0.0086	-2.5 to 2.5	Pass
		10	3.85	5.844	0.0031	-2.5 to 2.5	Pass
	30	3.85	7.426	0.0039	-2.5 to 2.5	Pass	
	40	3.85	28.573	0.0150	-2.5 to 2.5	Pass	
50	3.85	22.536	0.0118	-2.5 to 2.5	Pass		

### 3. Modulation Characteristics

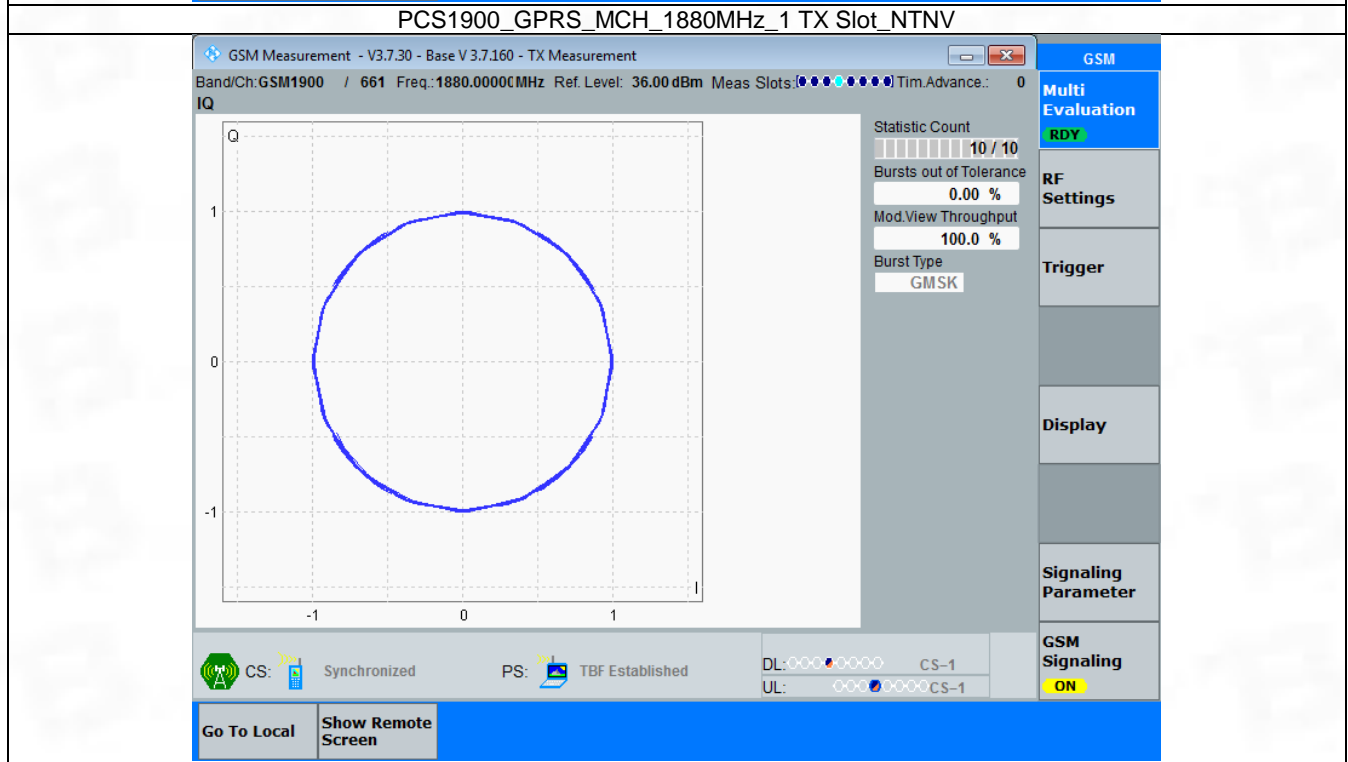
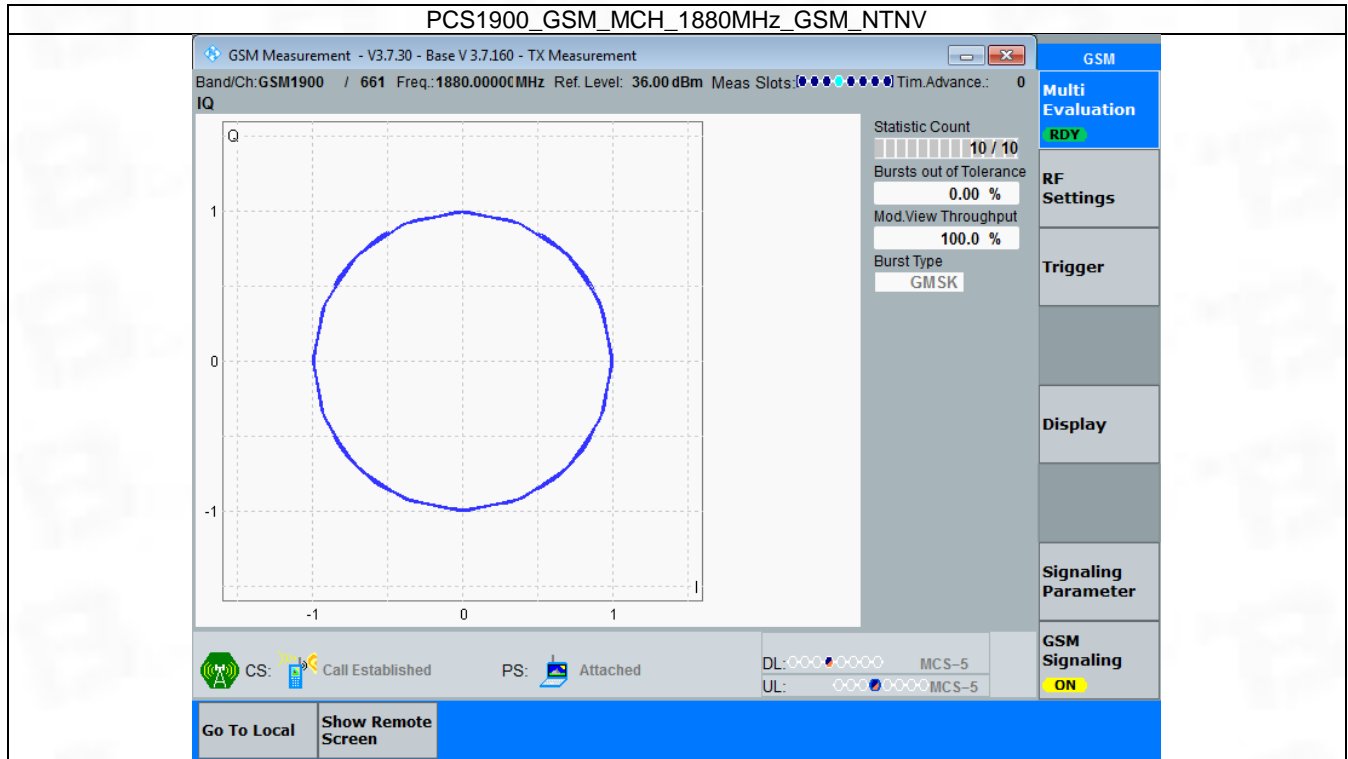
#### 3.1 PCS1900

##### 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

### 3.1.2 Test Graph



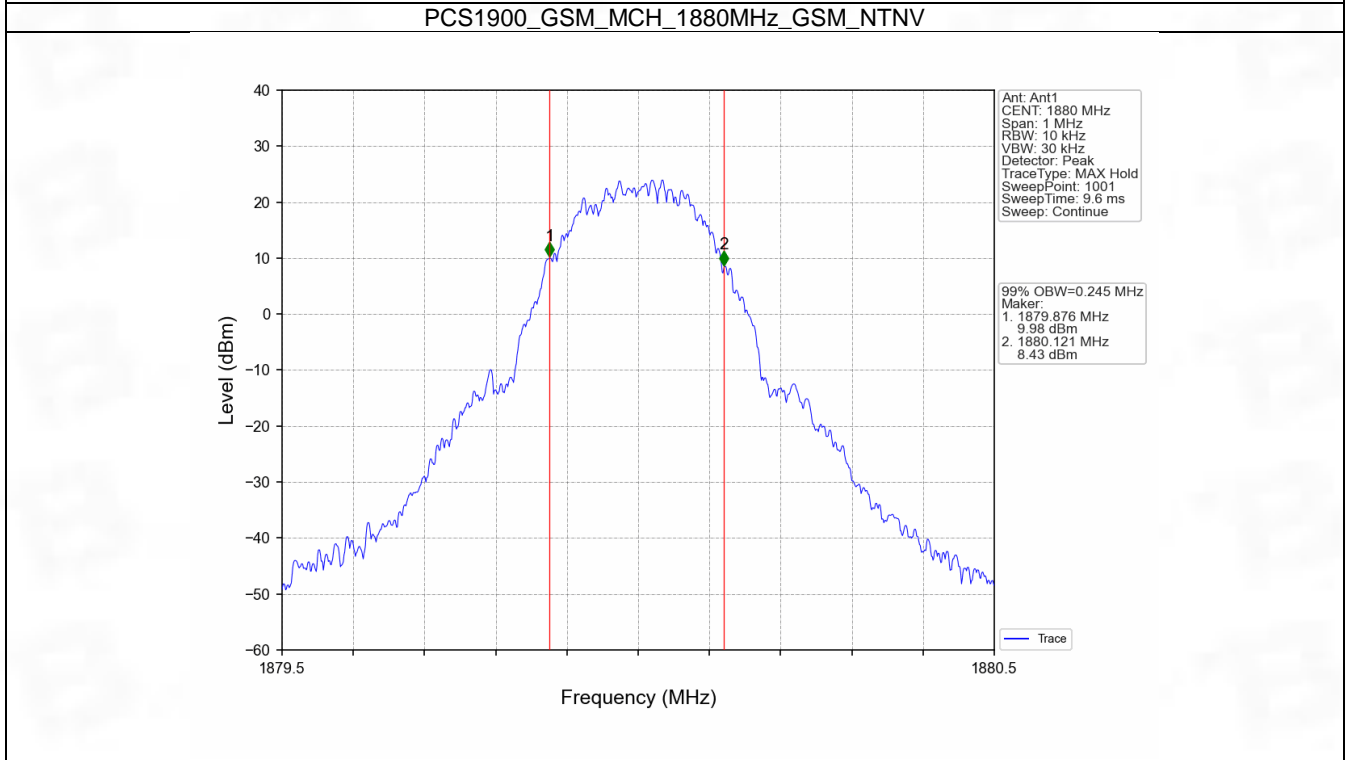
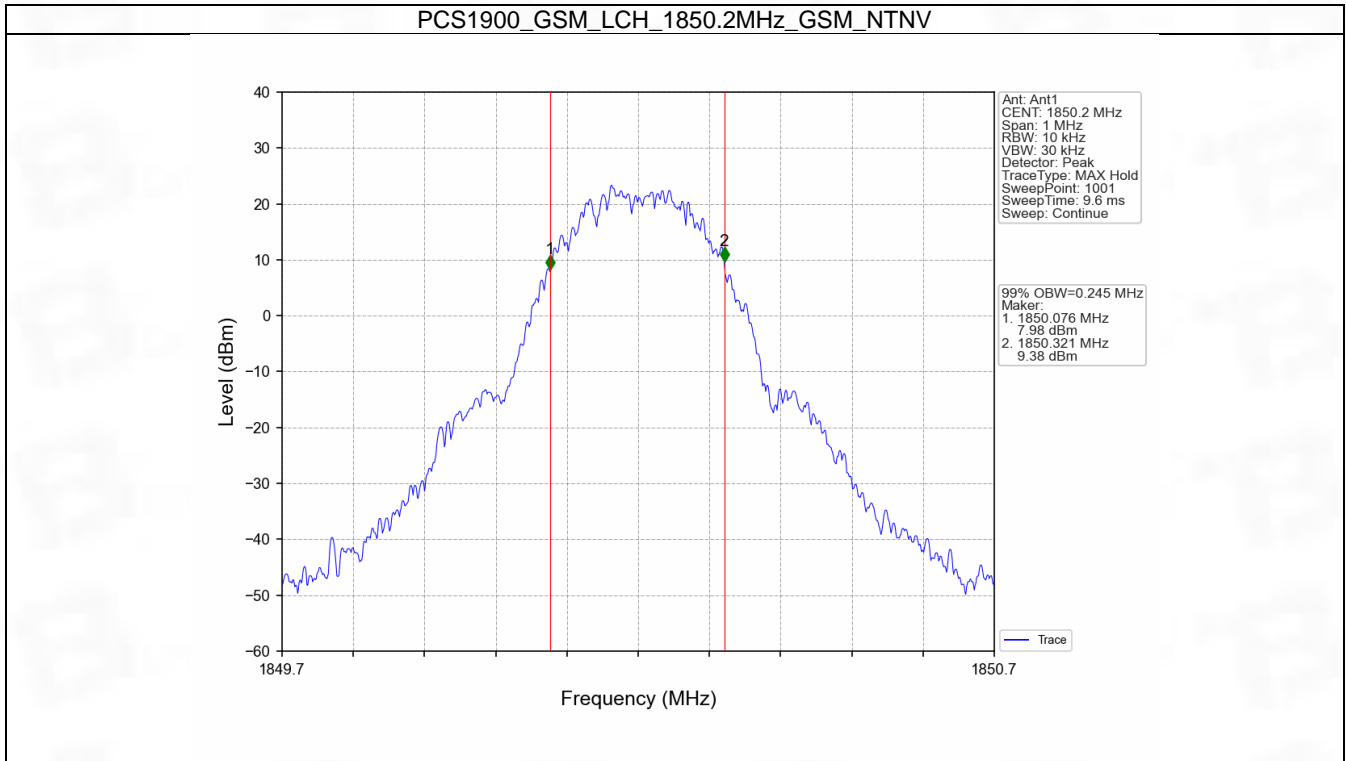
## 4. 99% & 26dB Bandwidth

### 4.1 PCS1900\_OBW

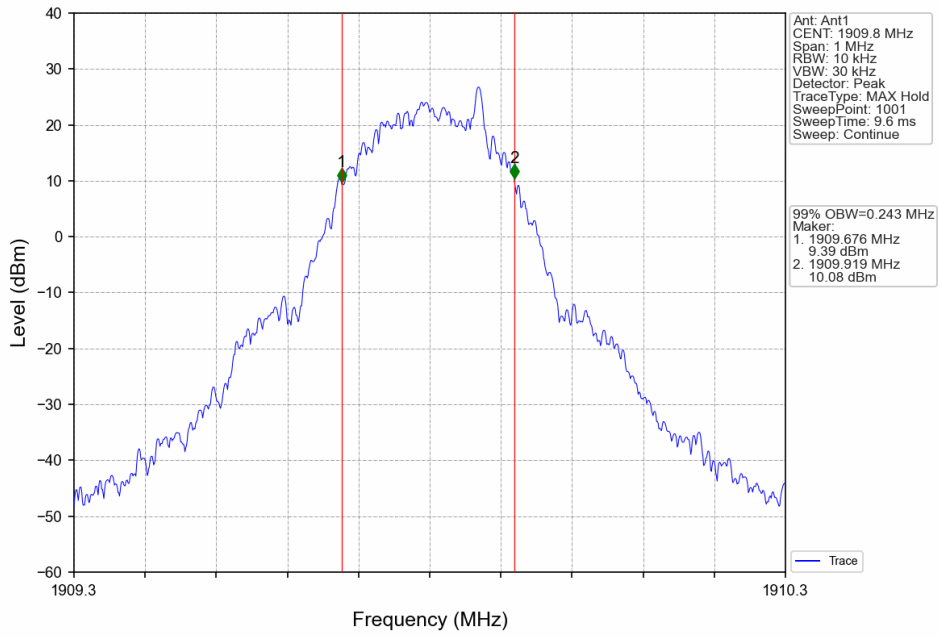
#### 4.1.1 Test Result

Band: PCS1900						
ENV	Mode		Frequency (MHz)	99% Occupied Bandwidth (MHz)		Verdict
	Network	Subset		Result	Limit	
NTNV	GSM	GSM	1850.2	0.245	/	Pass
			1880	0.245	/	Pass
			1909.8	0.243	/	Pass
	GPRS	1 TX Slot	1850.2	0.242	/	Pass
			1880	0.246	/	Pass
			1909.8	0.245	/	Pass

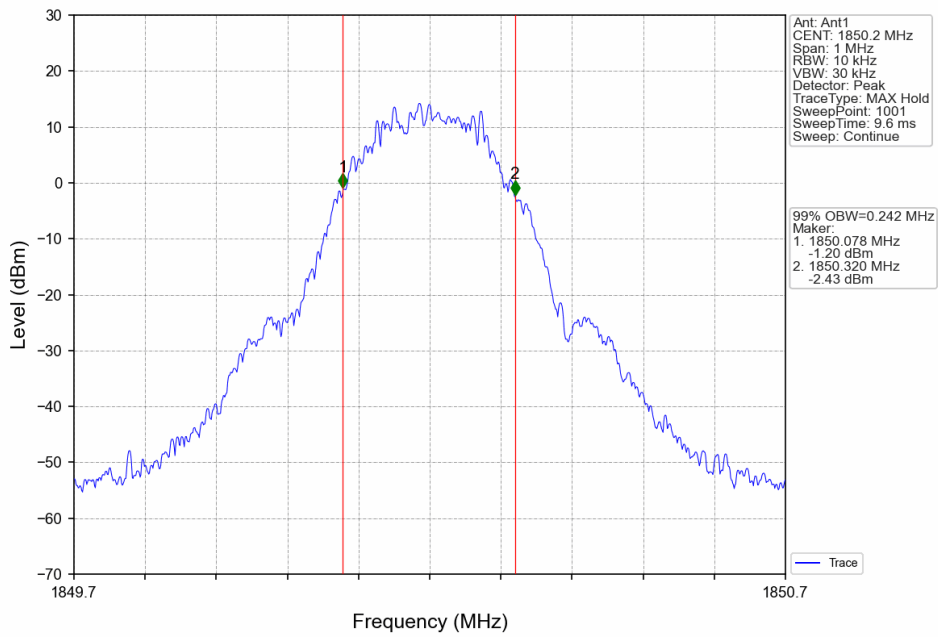
### 4.1.2 Test Graph



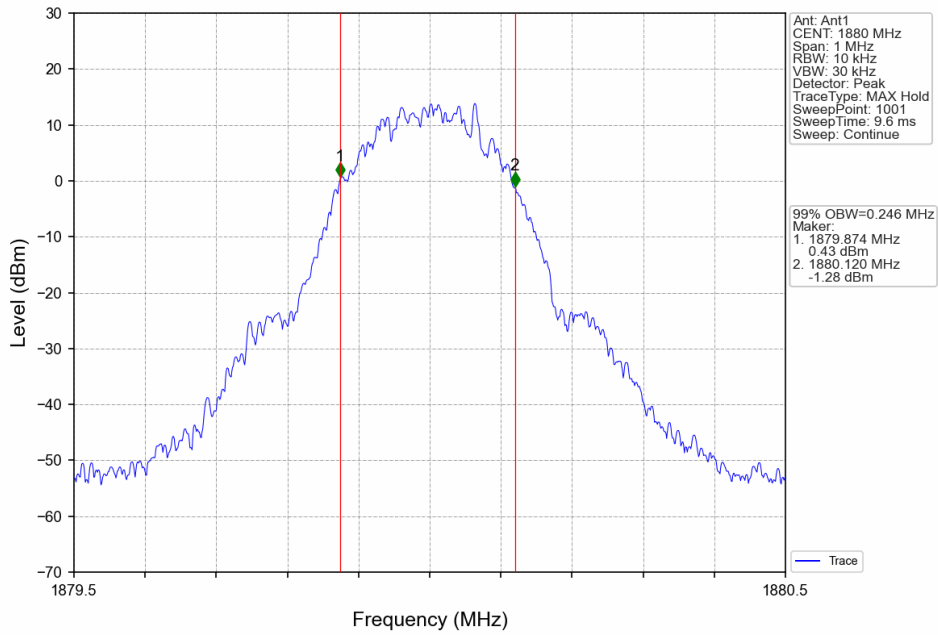
PCS1900\_GSM\_HCH\_1909.8MHz\_GSM\_NTNV



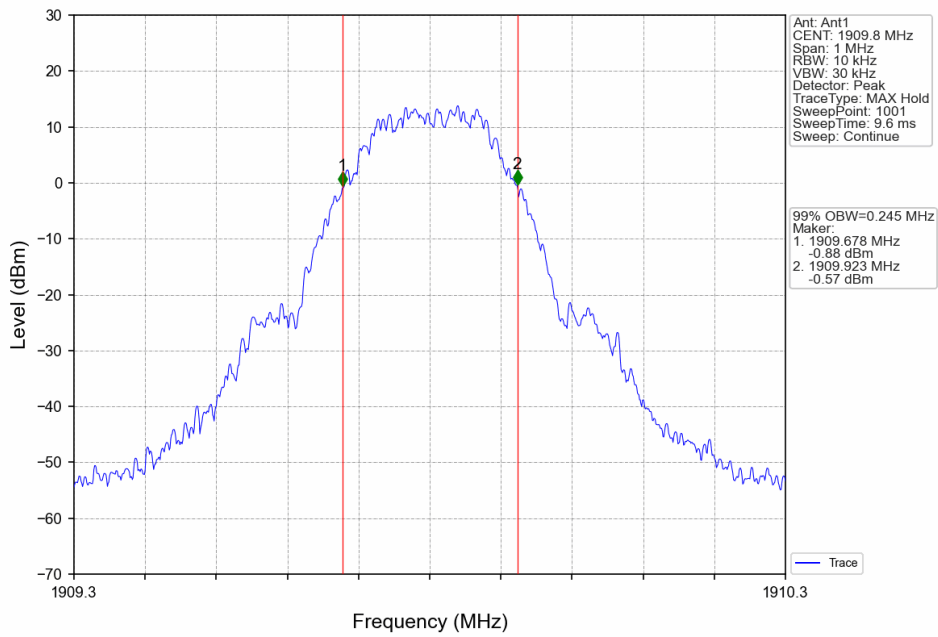
PCS1900\_GPRS\_LCH\_1850.2MHz\_1 TX Slot\_NTNV



PCS1900\_GPRS\_MCH\_1880MHz\_1 TX Slot\_NTNV



PCS1900\_GPRS\_HCH\_1909.8MHz\_1 TX Slot\_NTNV



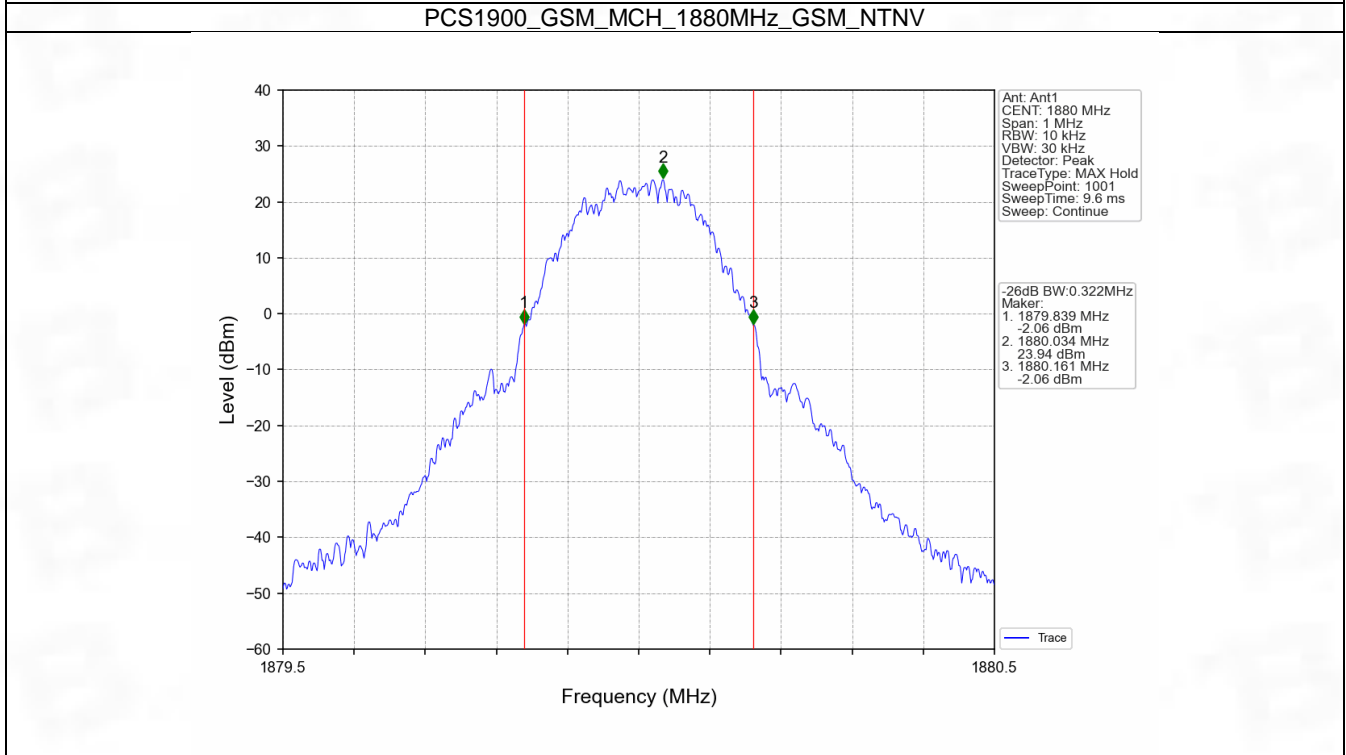
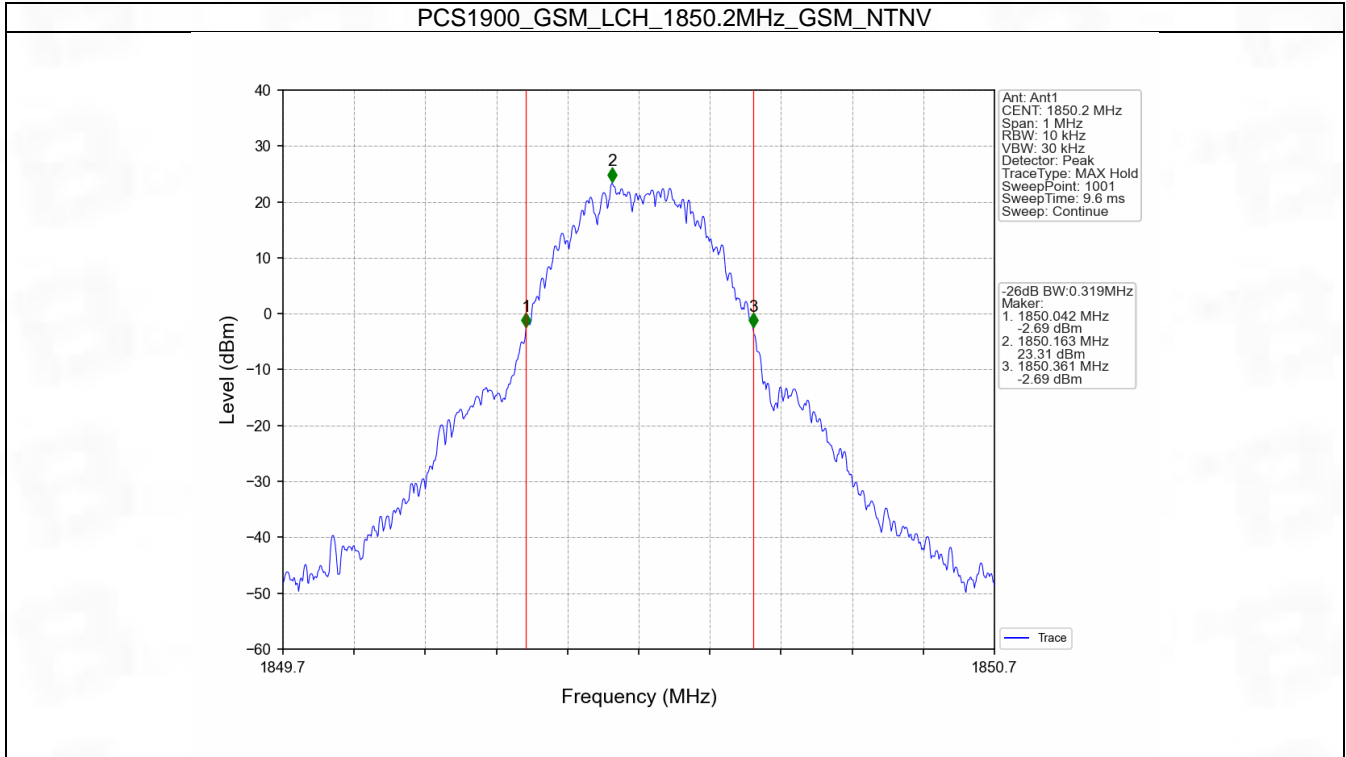


## 4.2 PCS1900\_XDB

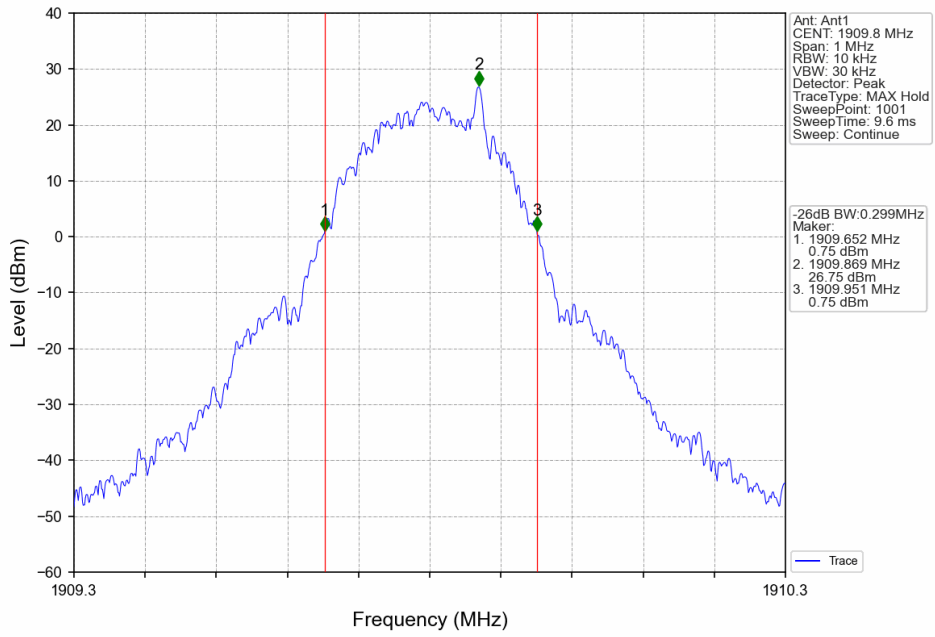
### 4.2.1 Test Result

Band: PCS1900						
ENV	Mode		Frequency (MHz)	26dB Bandwidth (MHz)		Verdict
	Network	Subset		Result	Limit	
NTNV	GSM	GSM	1850.2	0.319	/	Pass
			1880	0.322	/	Pass
			1909.8	0.299	/	Pass
	GPRS	1 TX Slot	1850.2	0.310	/	Pass
			1880	0.313	/	Pass
			1909.8	0.324	/	Pass

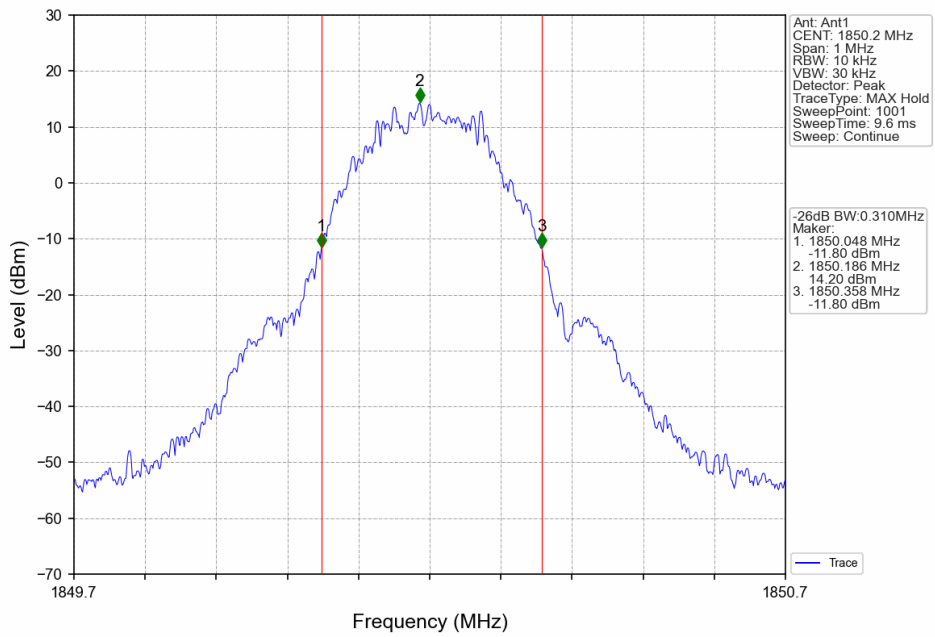
### 4.2.2 Test Graph



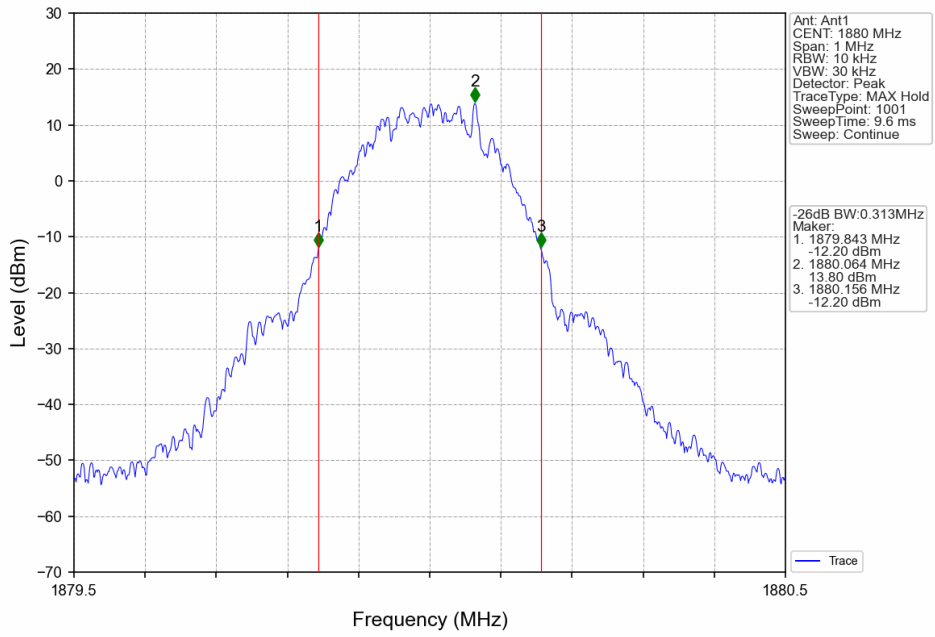
PCS1900\_GSM\_HCH\_1909.8MHz\_GSM\_NTNV



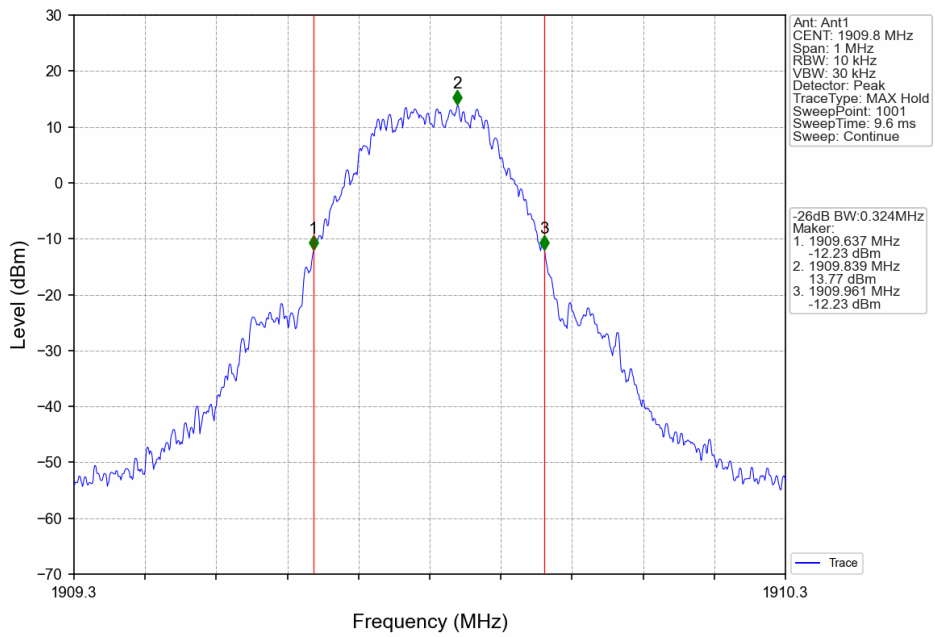
PCS1900\_GPRS\_LCH\_1850.2MHz\_1 TX Slot\_NTNV



PCS1900\_GPRS\_MCH\_1880MHz\_1 TX Slot\_NTNV



PCS1900\_GPRS\_HCH\_1909.8MHz\_1 TX Slot\_NTNV



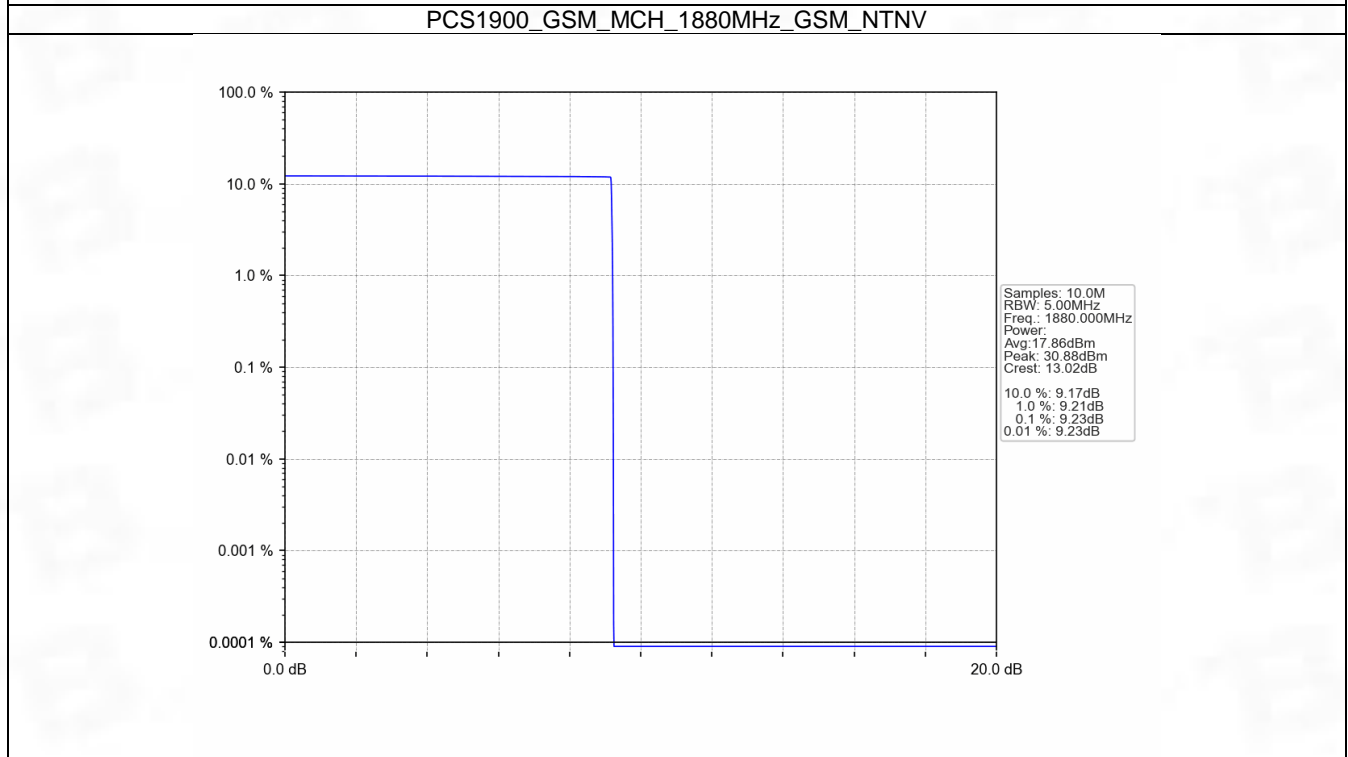
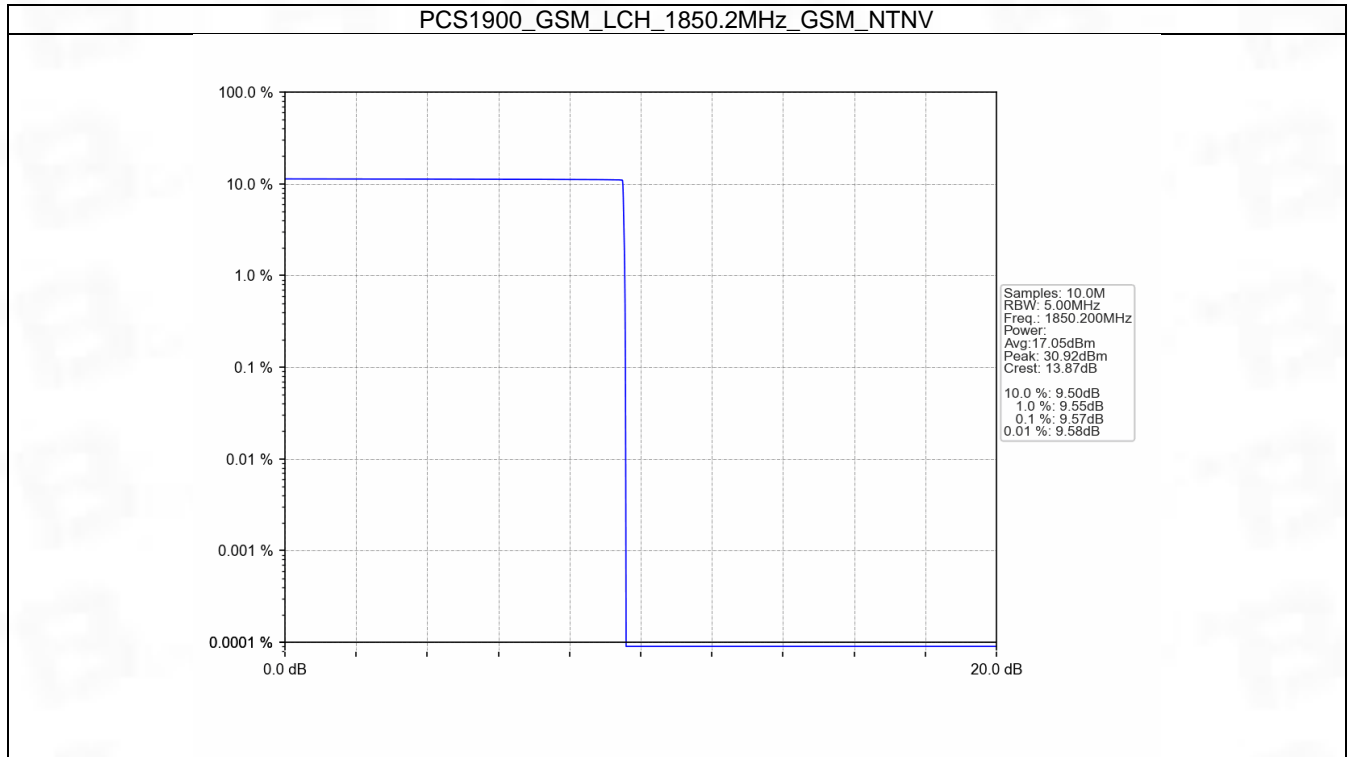
## 5. Peak-Average Ratio

### 5.1 PCS1900

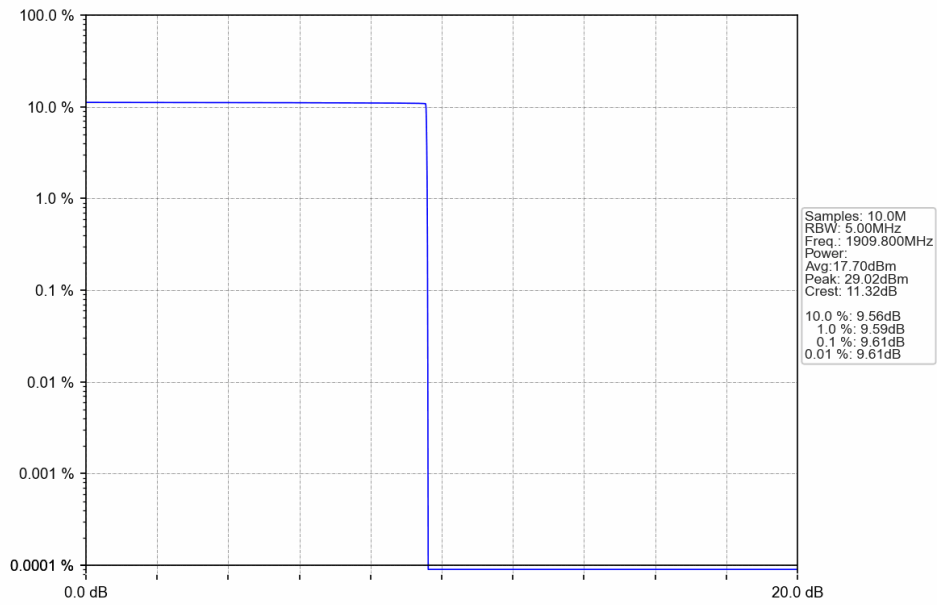
#### 5.1.1 Test Result

Band: PCS1900						
ENV	Mode		Frequency (MHz)	Peak-Average Ratio (dB)		Verdict
	Network	Subset		Result	Limit	
NTNV	GSM	GSM	1850.2	9.57	<=13	Pass
			1880	9.23	<=13	Pass
			1909.8	9.61	<=13	Pass
	GPRS	4 TX Slots	1850.2	9.17	<=13	Pass
			1880	3.59	<=13	Pass
			1909.8	3.78	<=13	Pass

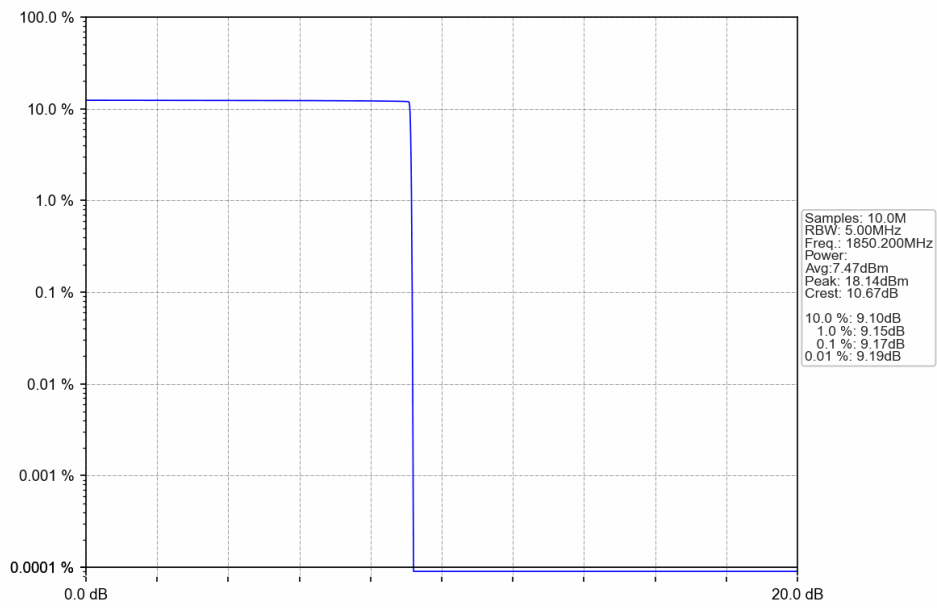
## 5.1.2 Test Graph



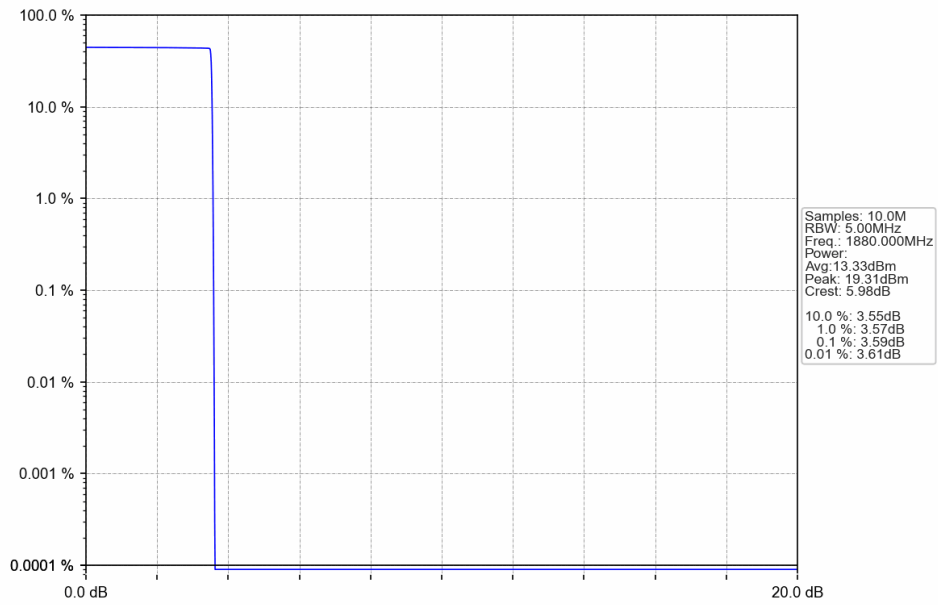
PCS1900\_GSM\_HCH\_1909.8MHz\_GSM\_NTNV



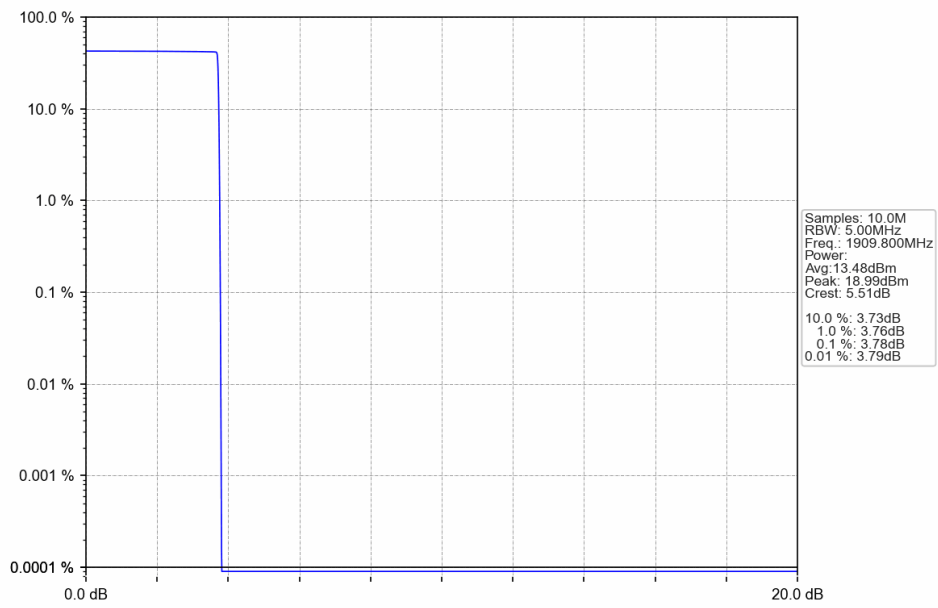
PCS1900\_GPRS\_LCH\_1850.2MHz\_4 TX Slots\_NTNV



PCS1900\_GPRS\_MCH\_1880MHz\_4 TX Slots\_NTNV



PCS1900\_GPRS\_HCH\_1909.8MHz\_4 TX Slots\_NTNV





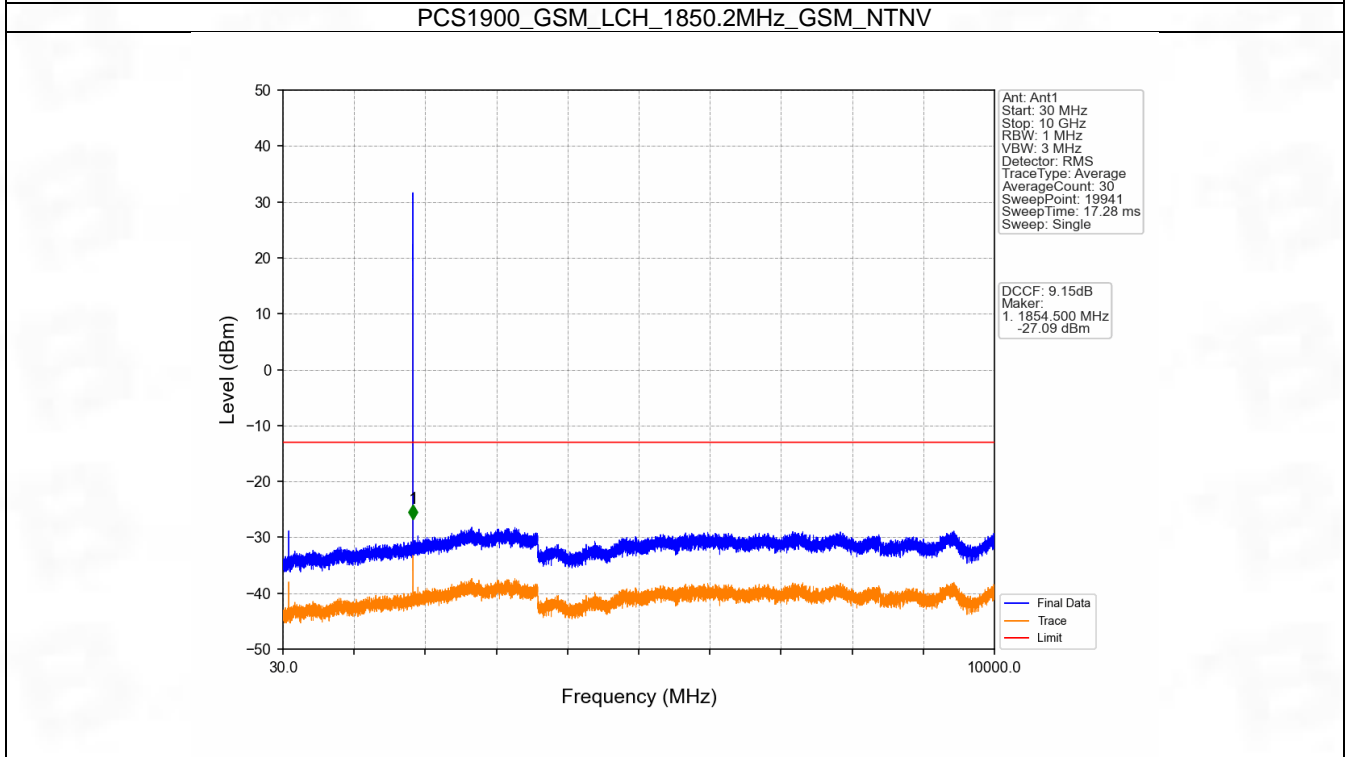
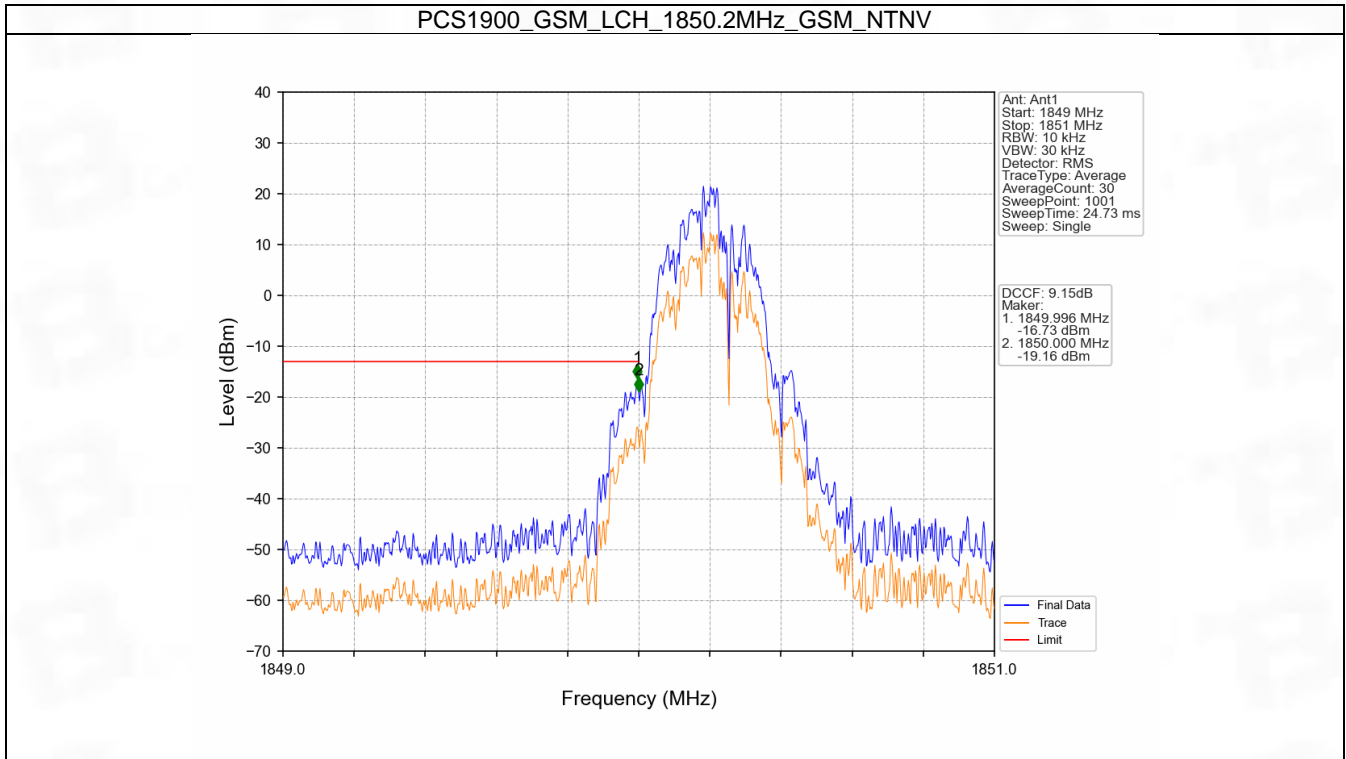
## 6. Spurious Emission

### 6.1 PCS1900

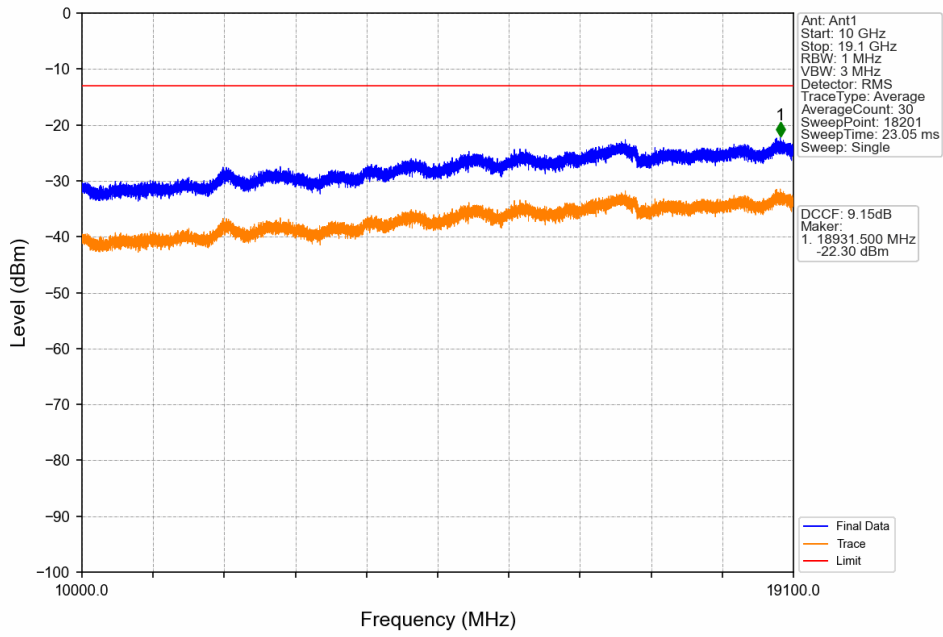
#### 6.1.1 Test Result

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	

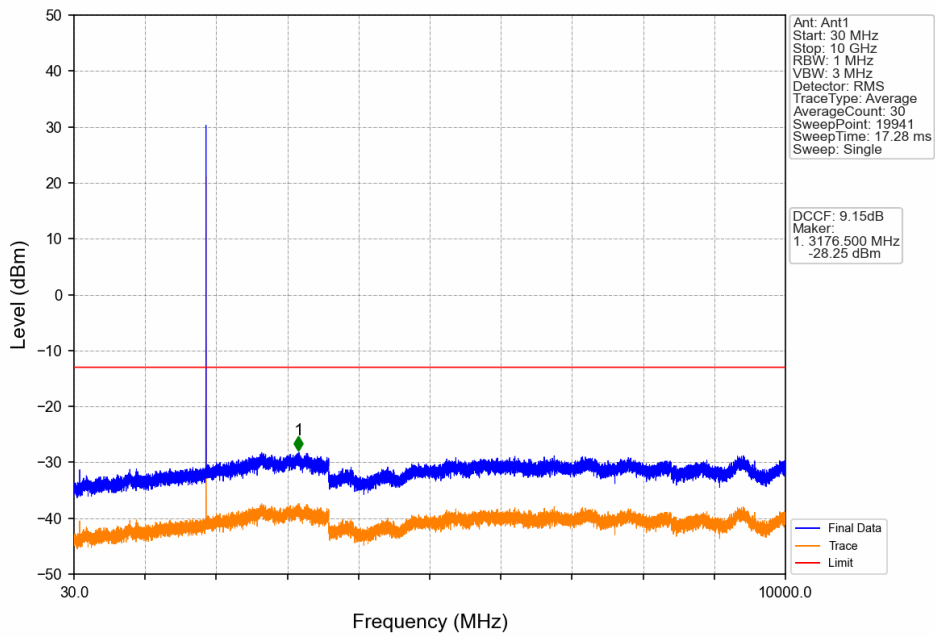
### 6.1.2 Test Graph



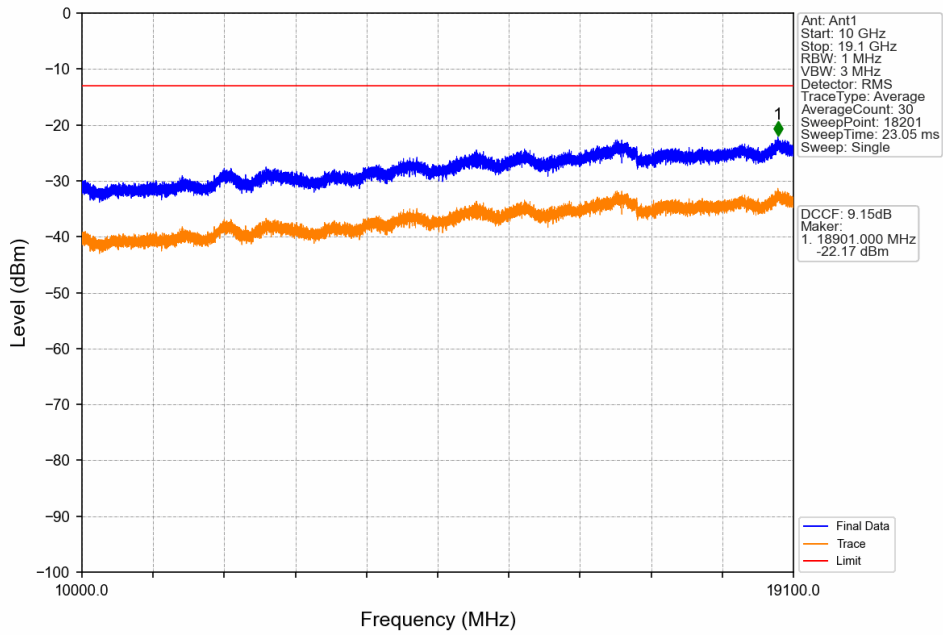
PCS1900\_GSM\_LCH\_1850.2MHz\_GSM\_NTNV



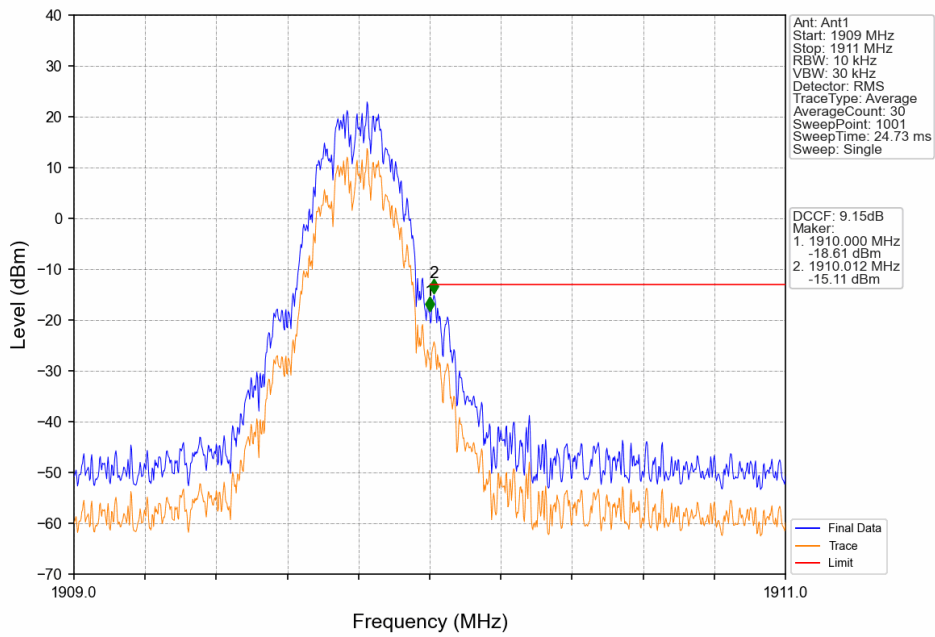
PCS1900\_GSM\_MCH\_1880MHz\_GSM\_NTNV



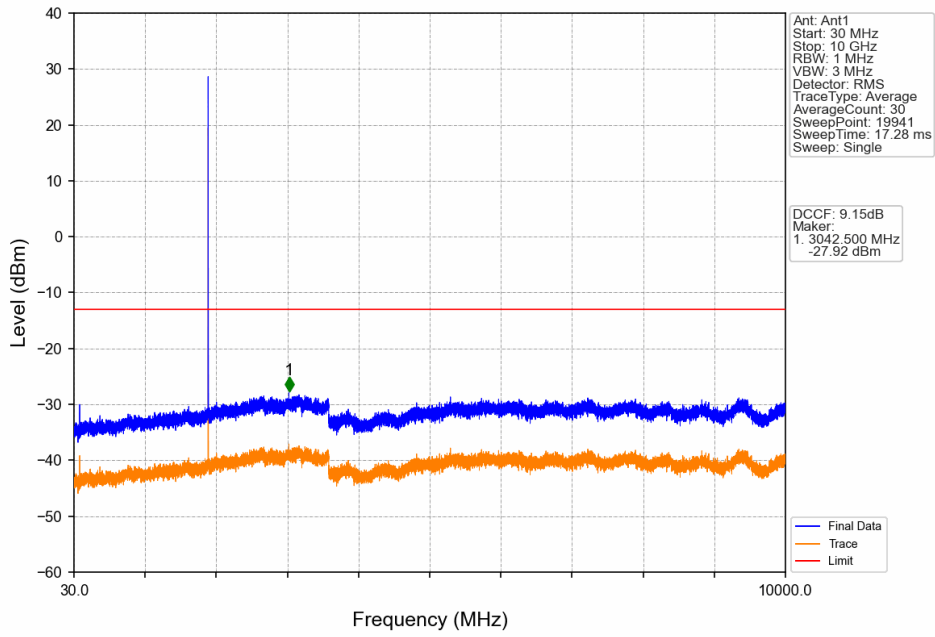
PCS1900\_GSM\_MCH\_1880MHz\_GSM\_NTNV



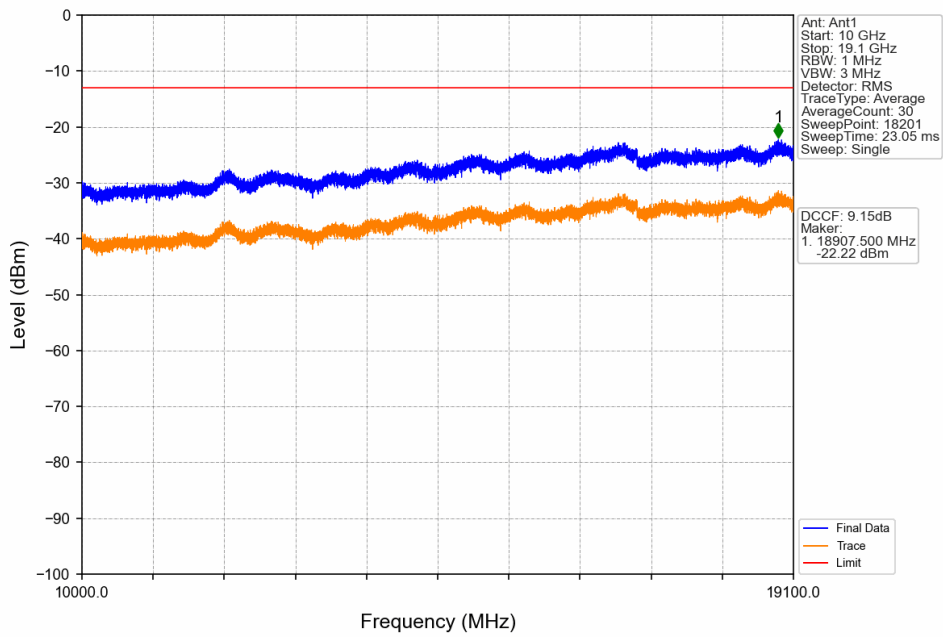
PCS1900\_GSM\_HCH\_1909.8MHz\_GSM\_NTNV



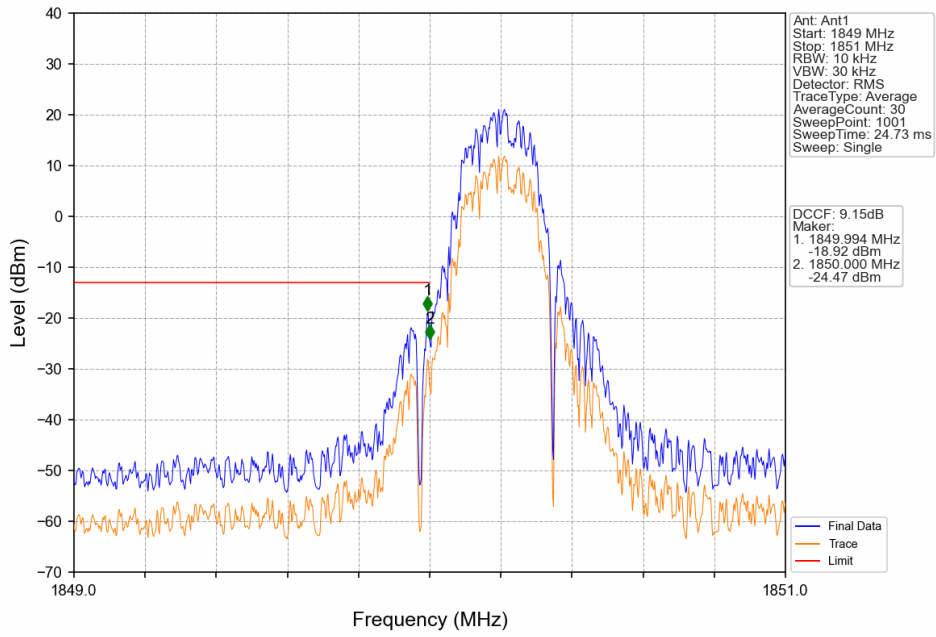
PCS1900\_GSM\_HCH\_1909.8MHz\_GSM\_NTNV



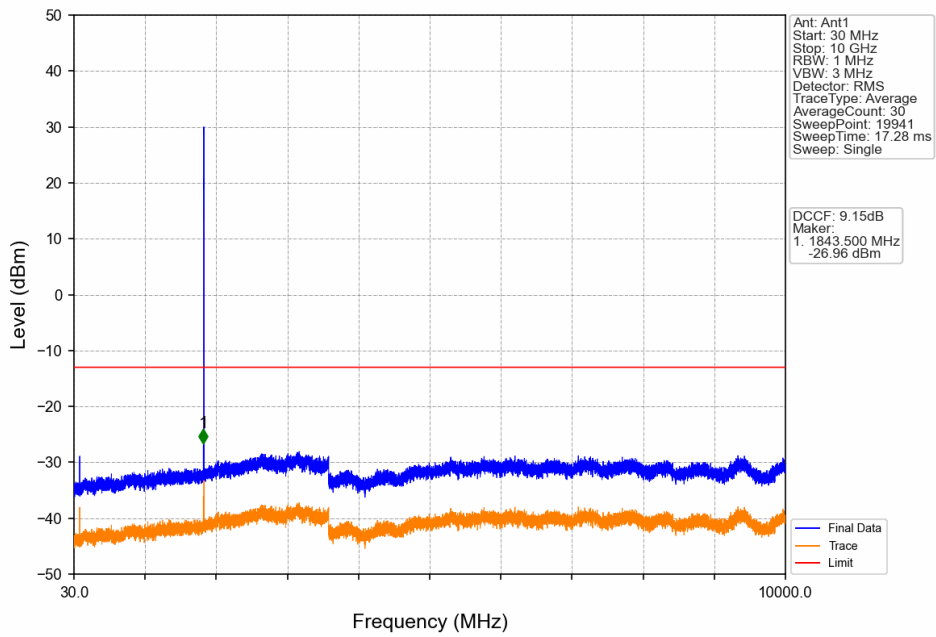
PCS1900\_GSM\_HCH\_1909.8MHz\_GSM\_NTNV



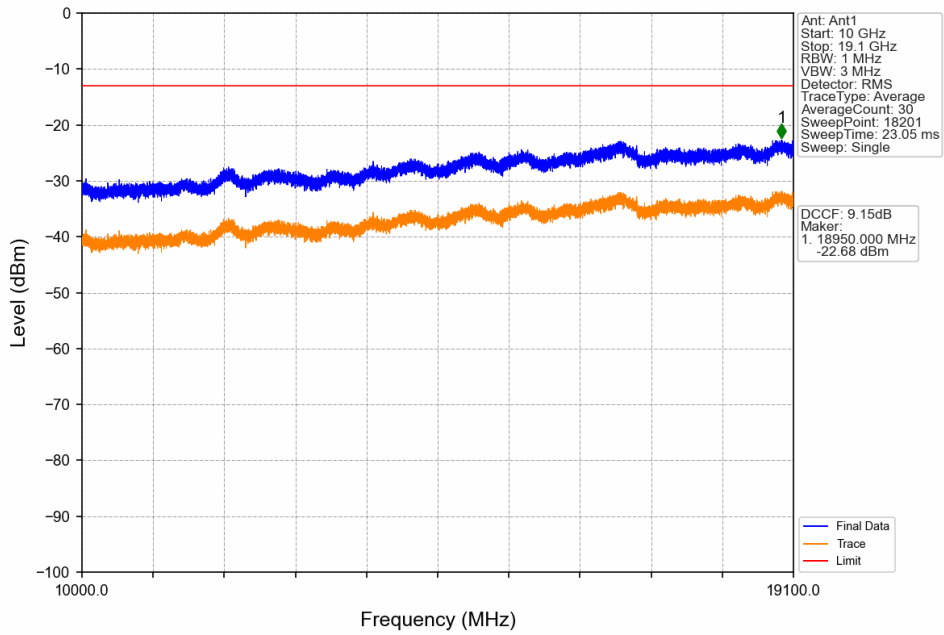
PCS1900\_GPRS\_LCH\_1850.2MHz\_1 TX Slot\_NTNV



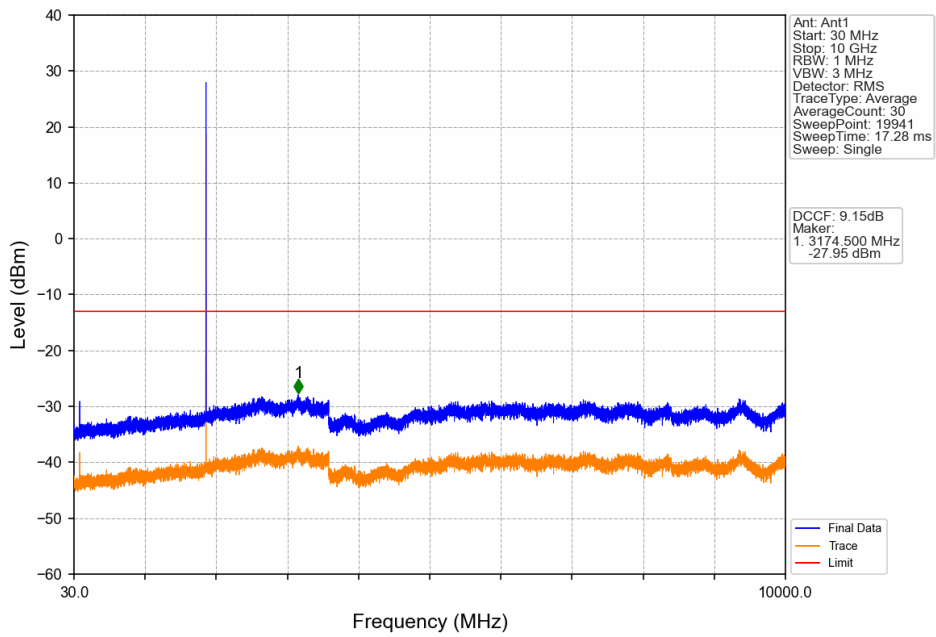
PCS1900\_GPRS\_LCH\_1850.2MHz\_1 TX Slot\_NTNV



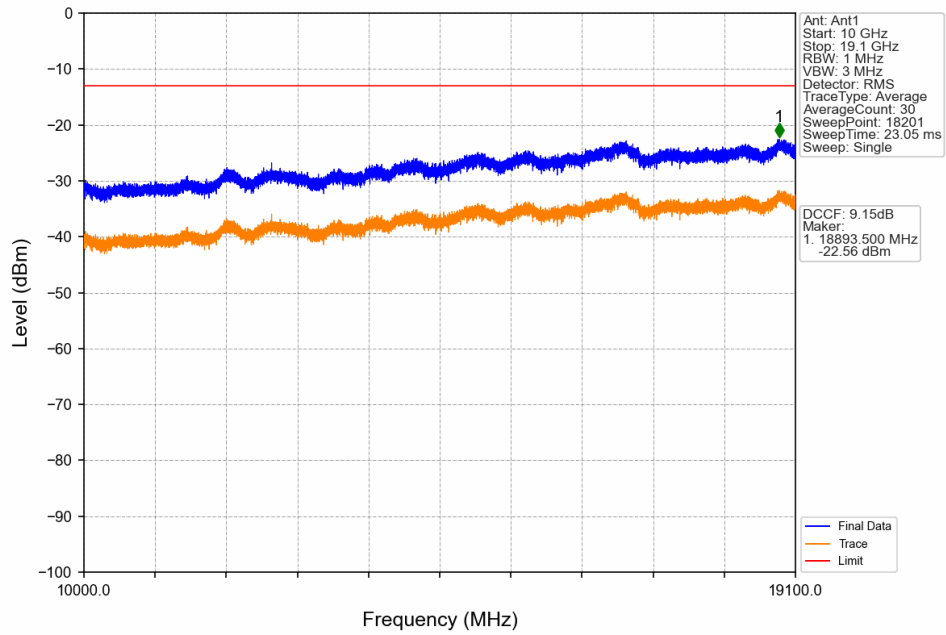
PCS1900\_GPRS\_LCH\_1850.2MHz\_1 TX Slot\_NTNV



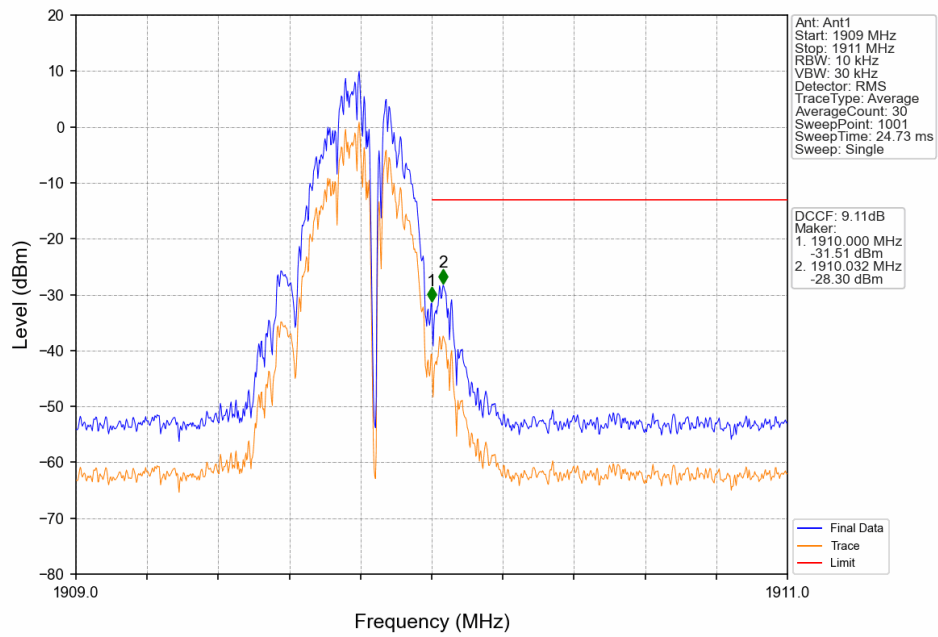
PCS1900\_GPRS\_MCH\_1880MHz\_1 TX Slot\_NTNV



PCS1900\_GPRS\_MCH\_1880MHz\_1 TX Slot\_NTNV

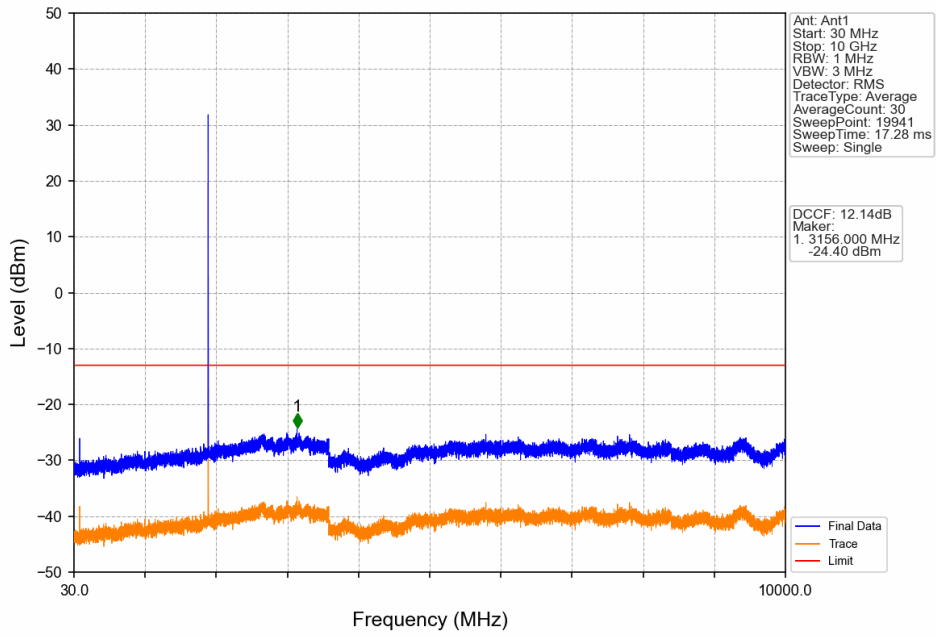


PCS1900\_GPRS\_HCH\_1909.8MHz\_1 TX Slot\_NTNV

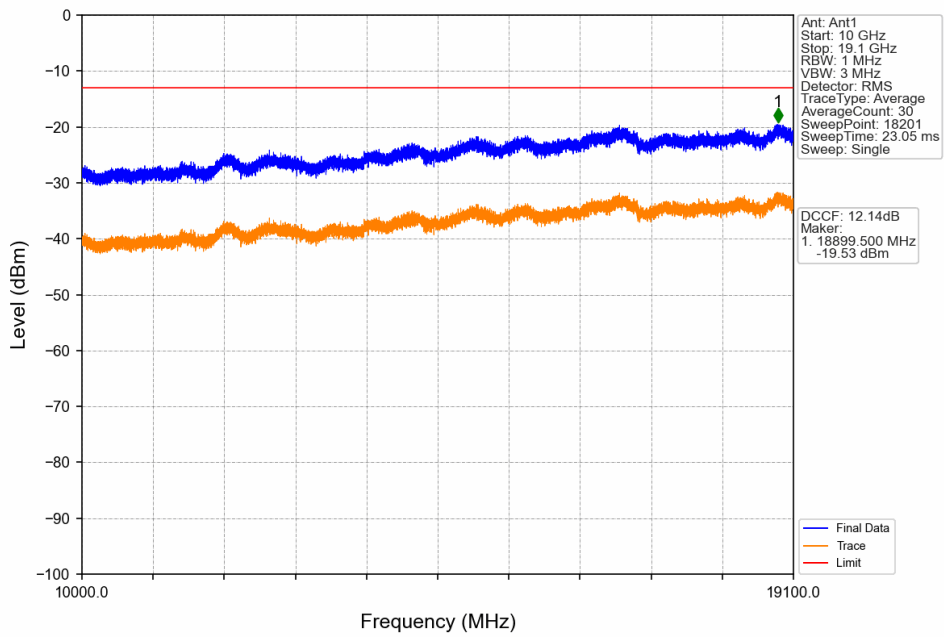




PCS1900\_GPRS\_HCH\_1909.8MHz\_1 TX Slot\_NTNV



PCS1900\_GPRS\_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	0.7031	0.0177	ppm	246KGXW	24E	28.47

### 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	0.7943	0.0177	ppm	246KGXW	24E	29.00