

Channel 661



Channel 810

### 3. Emission Bandwidth

#### PCS1900

GSM MODE:

Carrier frequency (MHz)	Channel No.	Bandwidth of -26dB transmitter power(kHz)
1850.2	512	304.81
1880	661	313.89
1909.8	810	313.61

GPRS MODE:

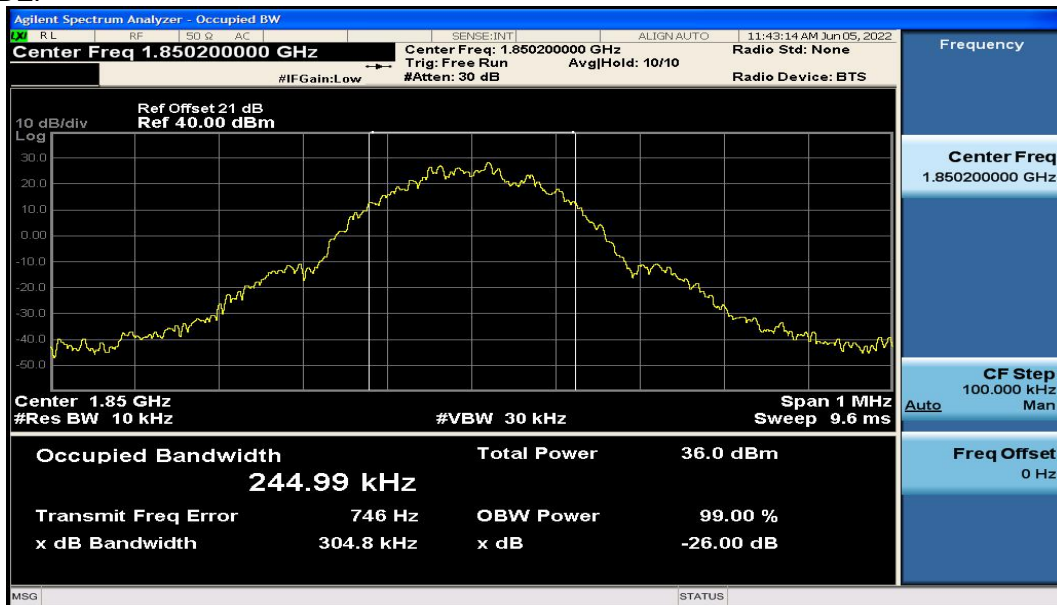
Carrier frequency (MHz)	Channel No.	Bandwidth of -26dB (kHz)
1850.2	512	321.05
1880	661	308.57
1909.8	810	314.04

EGPRS (8PSK) MODE:

Carrier frequency (MHz)	Channel No.	Bandwidth of -26dB transmitter power(kHz)
1850.2	512	309.89
1880	661	321.88
1909.8	810	307.20

#### PCS1900

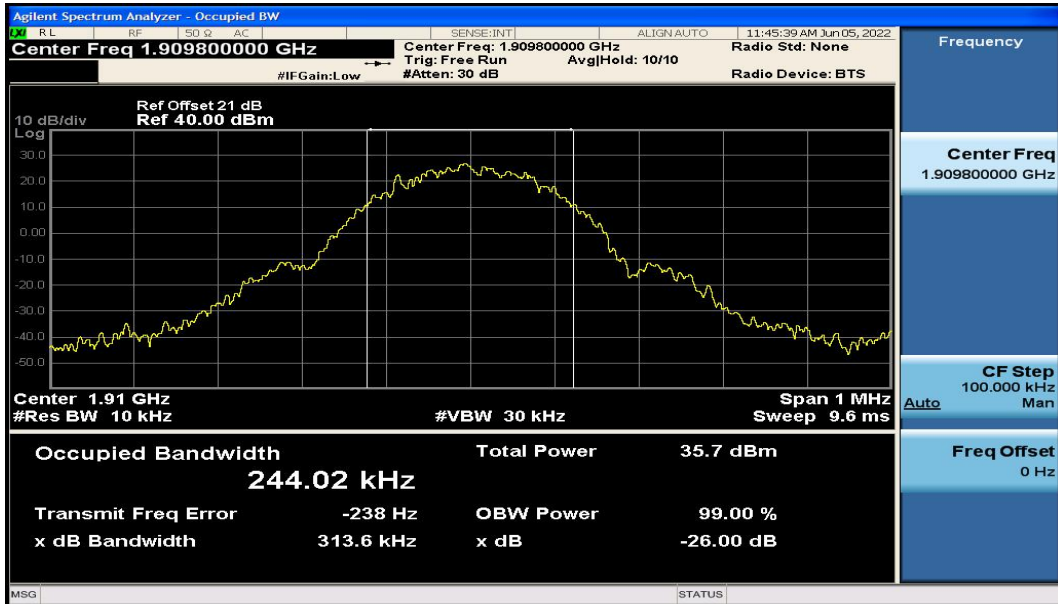
GSM MODE:



Channel 512

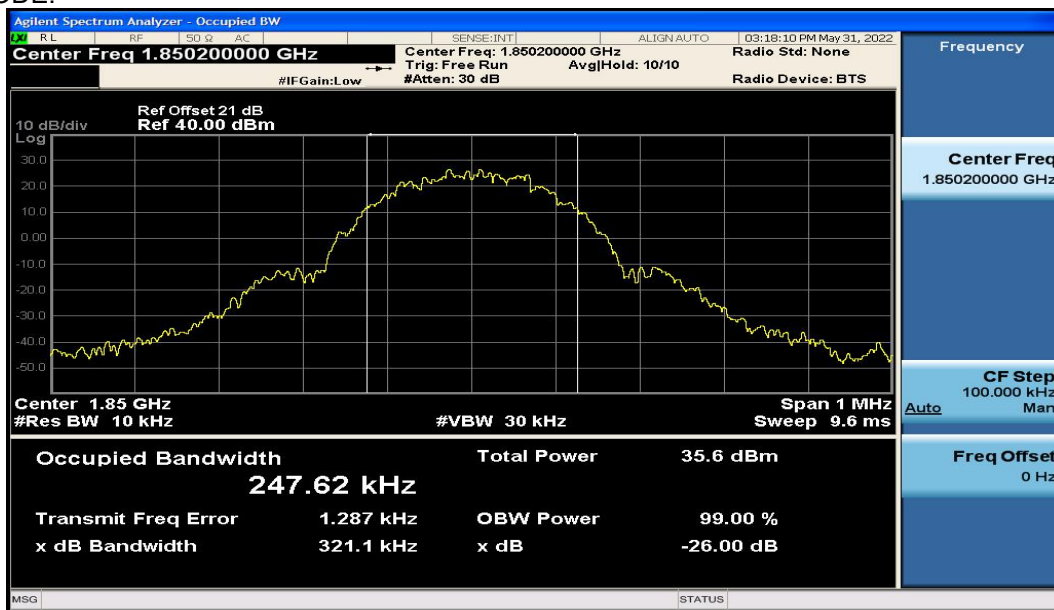


Channel 661



Channel 810

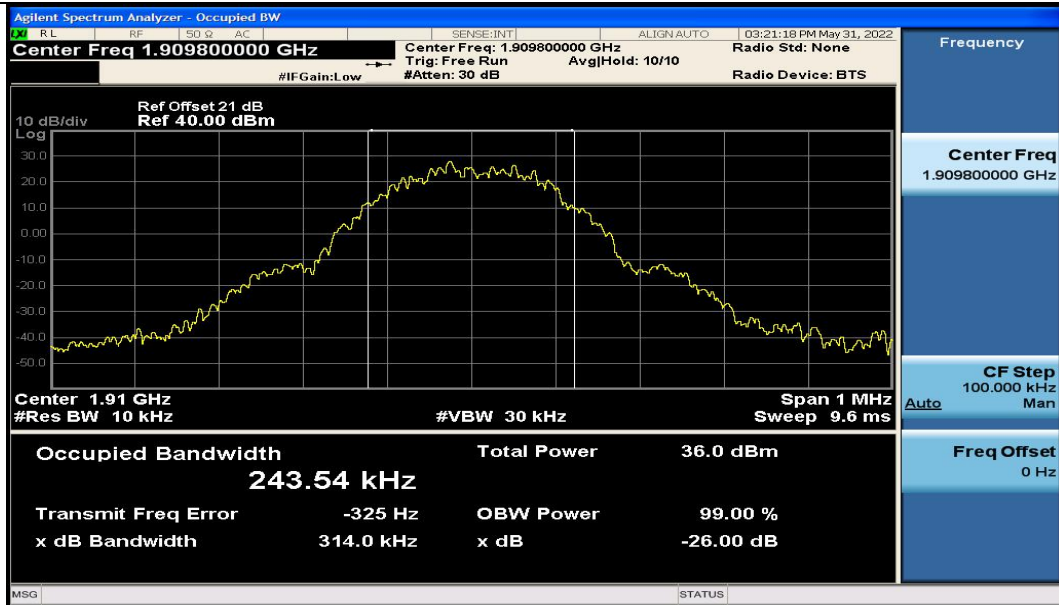
GPRS MODE:



Channel 512

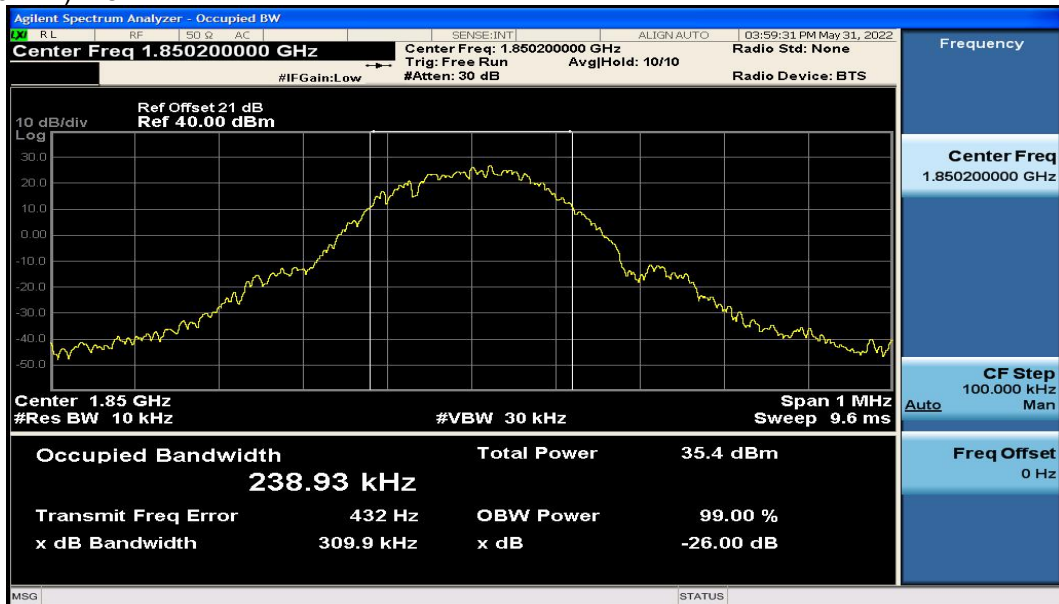


Channel 661

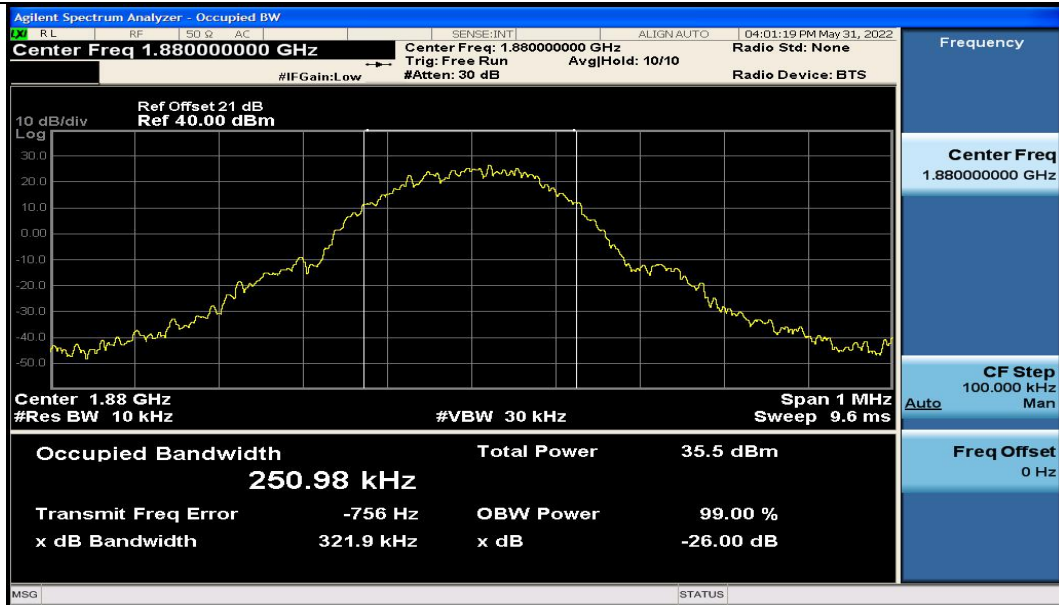


Channel 810

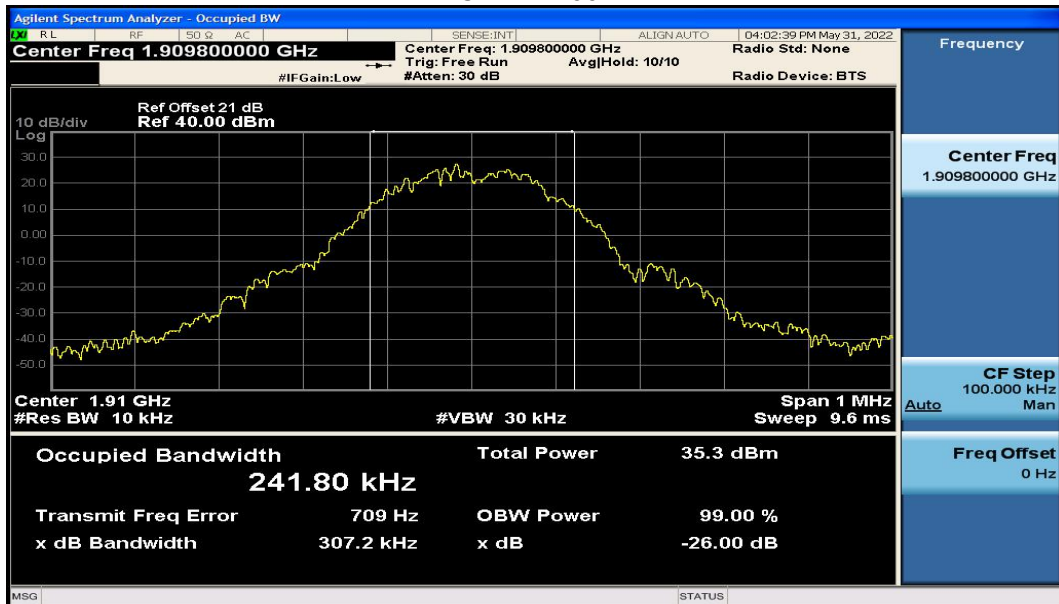
EGPRS (8PSK) MODE:



Channel 512



Channel 661



Channel 810

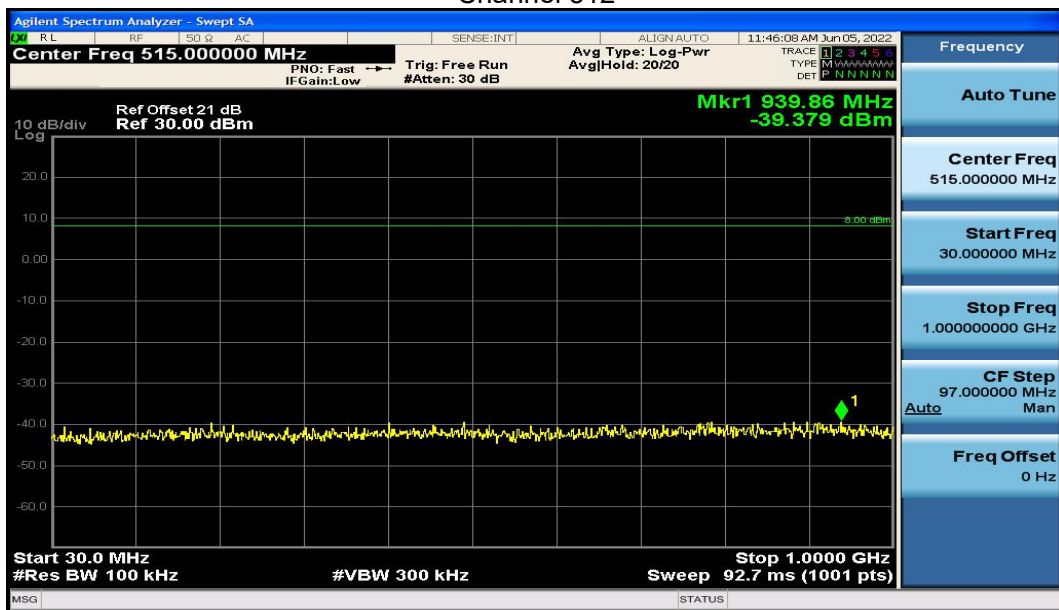
#### 4. Spurious Emissions at antenna terminal

PCS1900

GSM MODE:



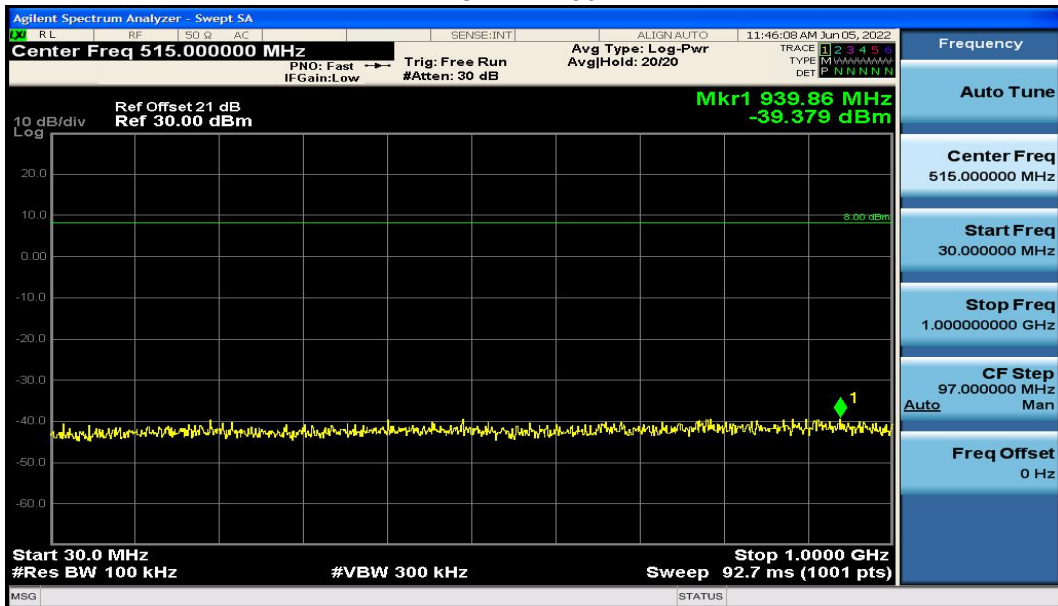
Channel 512



Channel 512



Channel 661



Channel 661



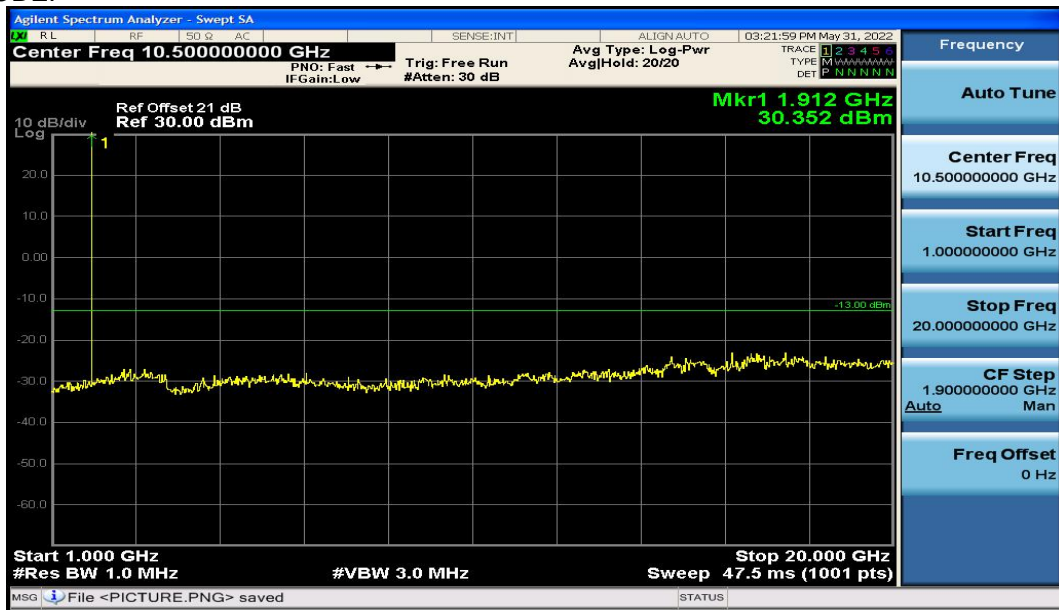


Channel 810

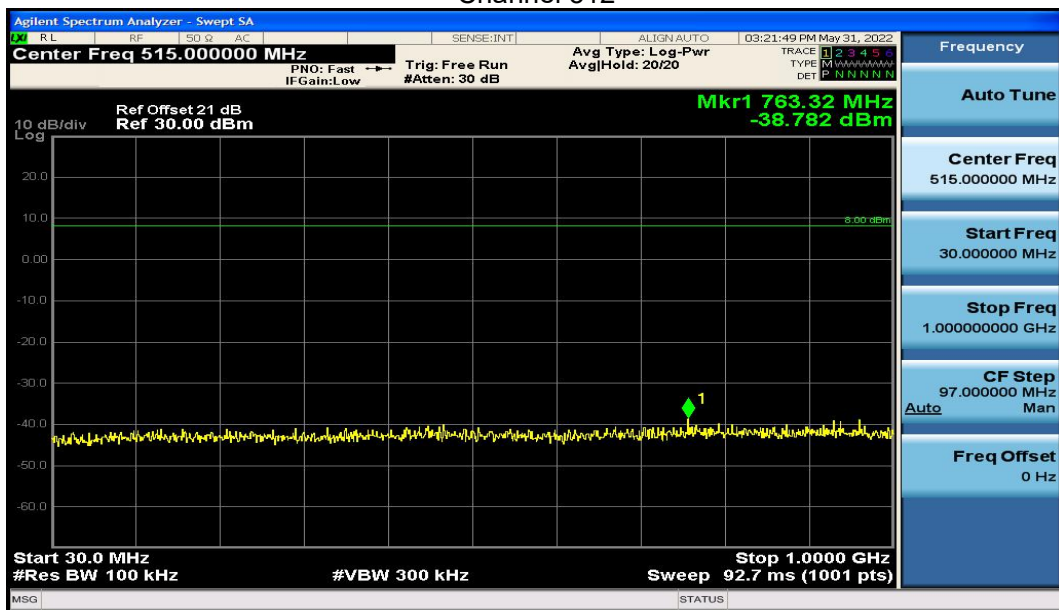


Channel 810

GPRS MODE:



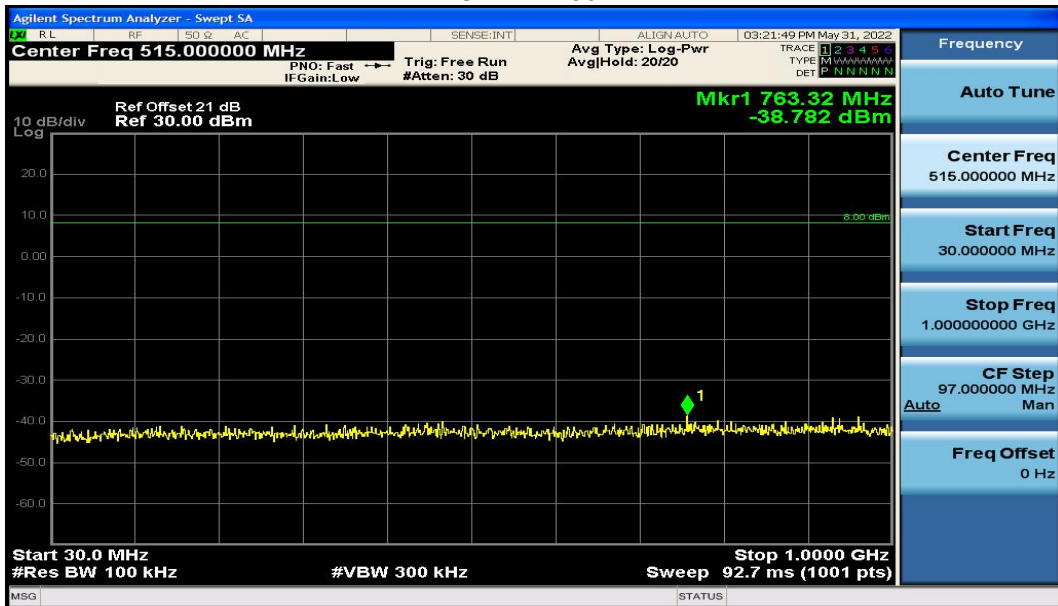
Channel 512



Channel 512



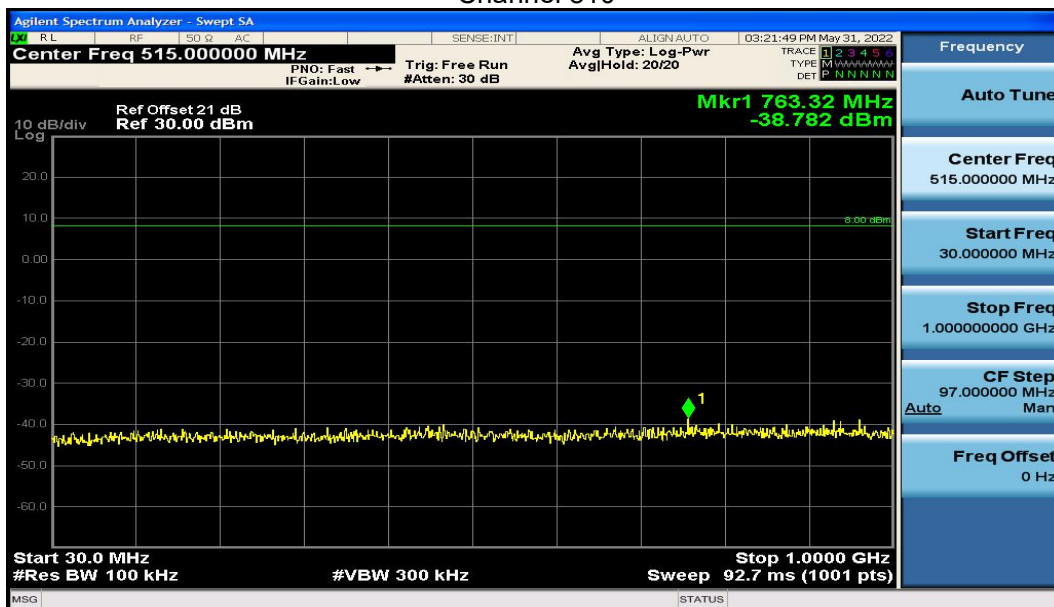
Channel 661



Channel 661



Channel 810

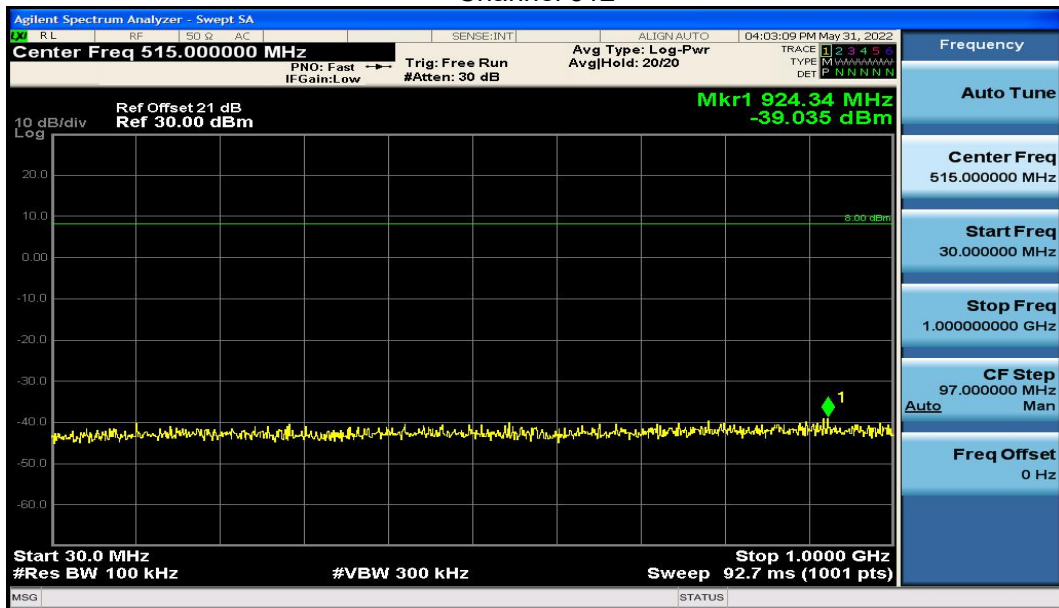


Channel 810

EGPRS (8PSK) MODE:



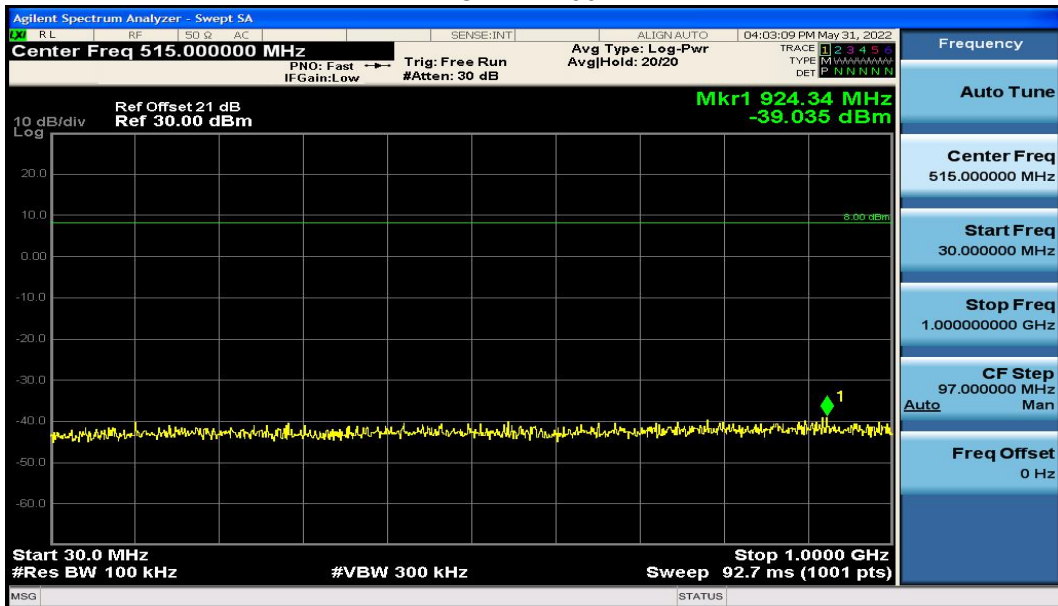
Channel 512



Channel 512



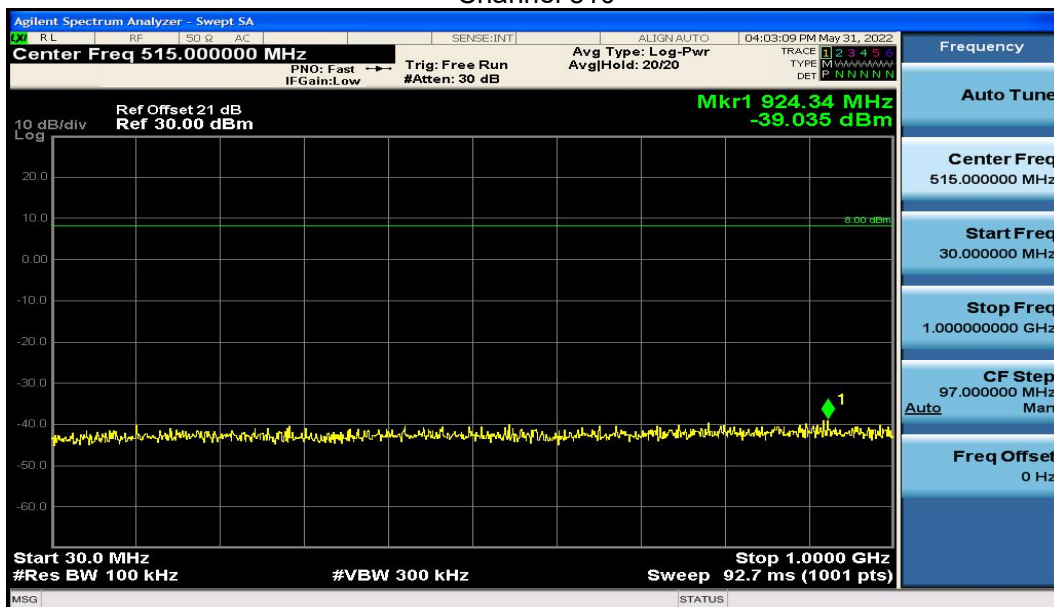
Channel 661



Channel 661



Channel 810

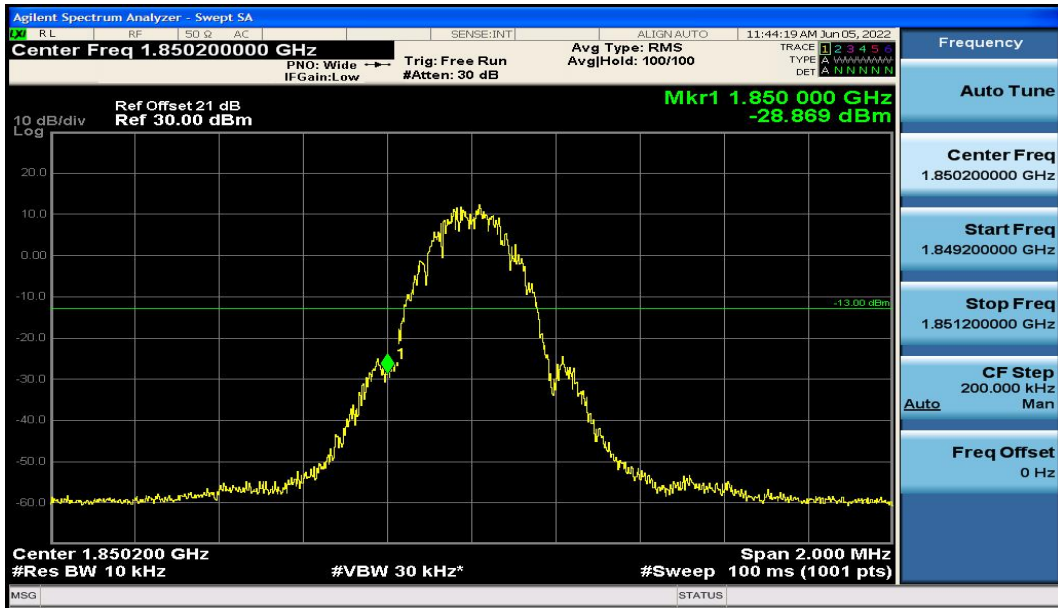


Channel 810

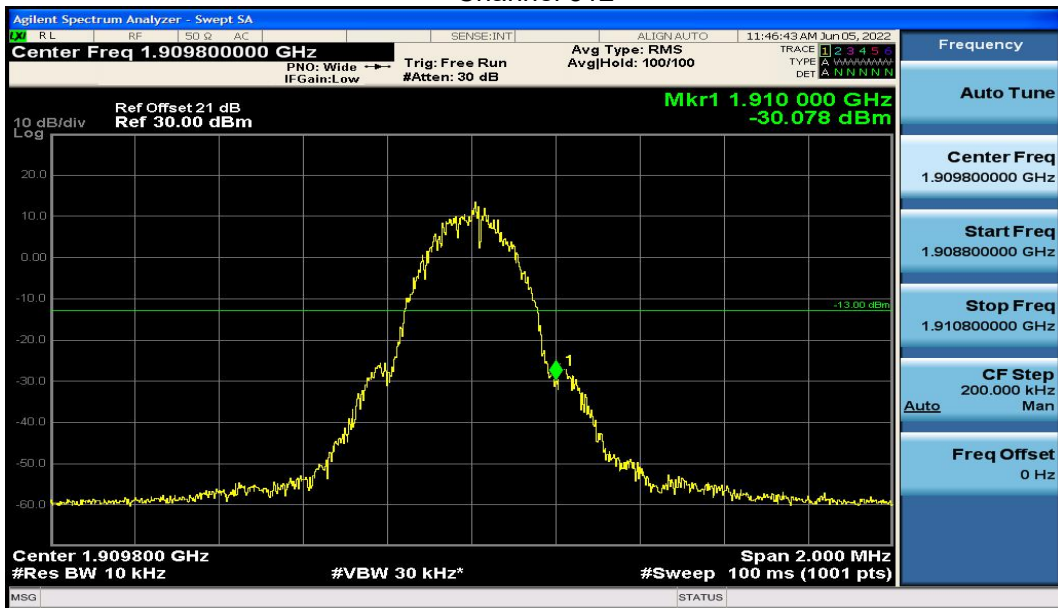
5. Band Edges Compliance

PCS1900

GSM MODE:



Channel 512



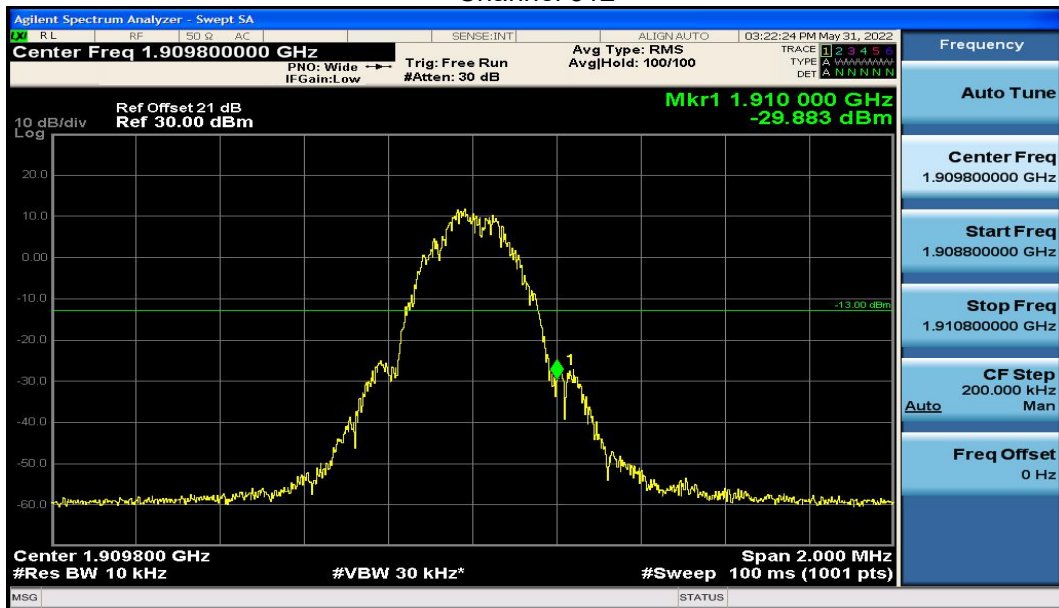
Channel 810



GPRS MODE:

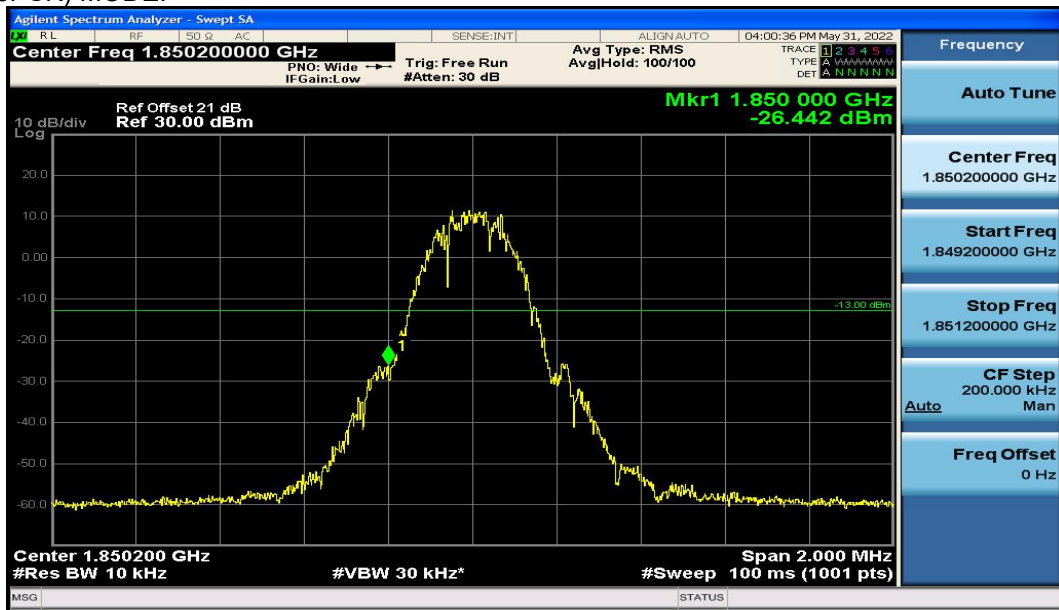


Channel 512

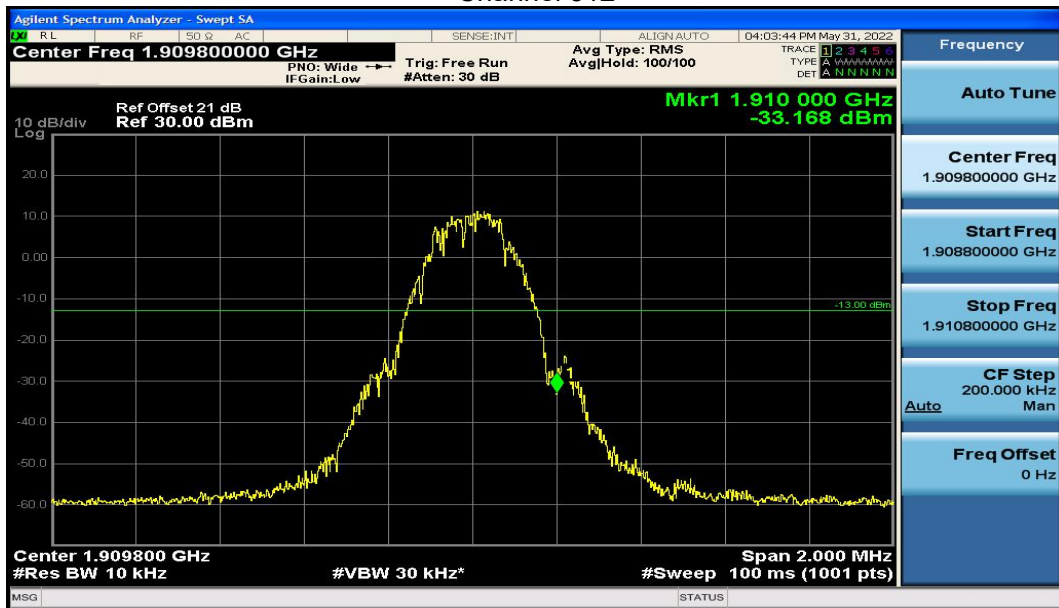


Channel 810

EGPRS (8PSK) MODE:



Channel 512



Channel 810

## 6. Frequency Stability

### PCS1900

GSM MODE:

Temperature(°C)	Test Result (ppm)@NV		
	Channel 512	Channel 661	Channel 810
0	0.003	-0.002	0.002
+10	0.003	-0.002	0.003
+20	0.000	-0.003	0.003
+30	0.007	-0.002	-0.003
+40	0.002	0.000	0.000
+50	0.000	0.001	0.002
+55	0.008	0.001	0.001
Voltage	Test Result (ppm)@NT		
	Channel 512	Channel 661	Channel 810
LV	0.006	0.000	0.003
HV	0.004	-0.002	0.003

GPRS MODE:

Temperature(°C)	Test Result (ppm)@NV		
	Channel 512	Channel 661	Channel 810
0	0.003	-0.002	0.005
+10	0.008	-0.008	0.005
+20	0.000	-0.007	0.009
+30	0.006	-0.005	0.006
+40	0.003	-0.007	0.007
+50	0.006	-0.002	0.008
+55	0.006	0.001	0.007
Voltage	Test Result (ppm)@NT		
	Channel 512	Channel 661	Channel 810
LV	0.002	-0.001	0.004
HV	0.007	-0.002	0.006

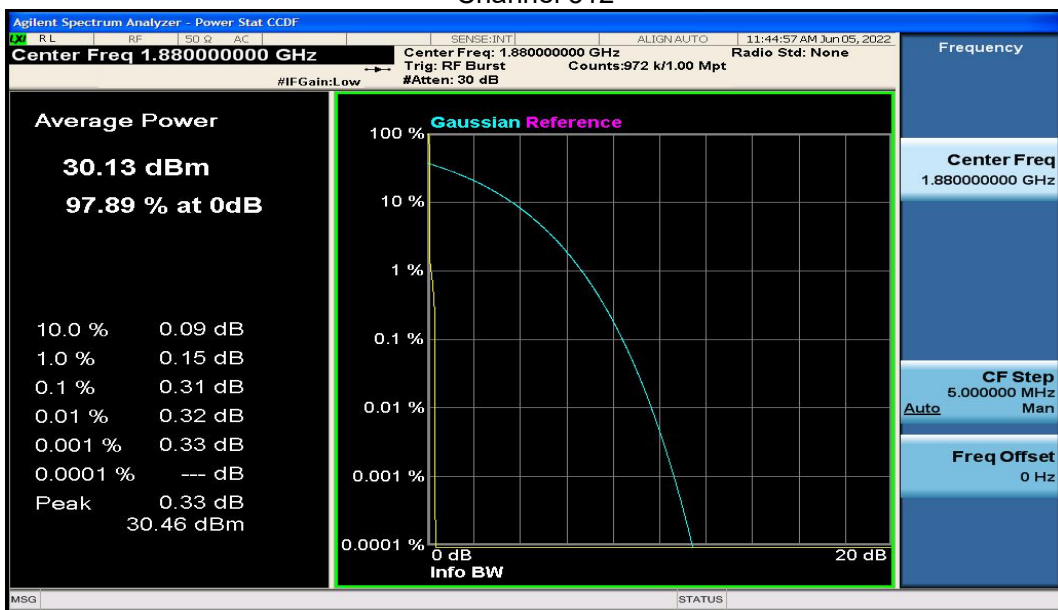
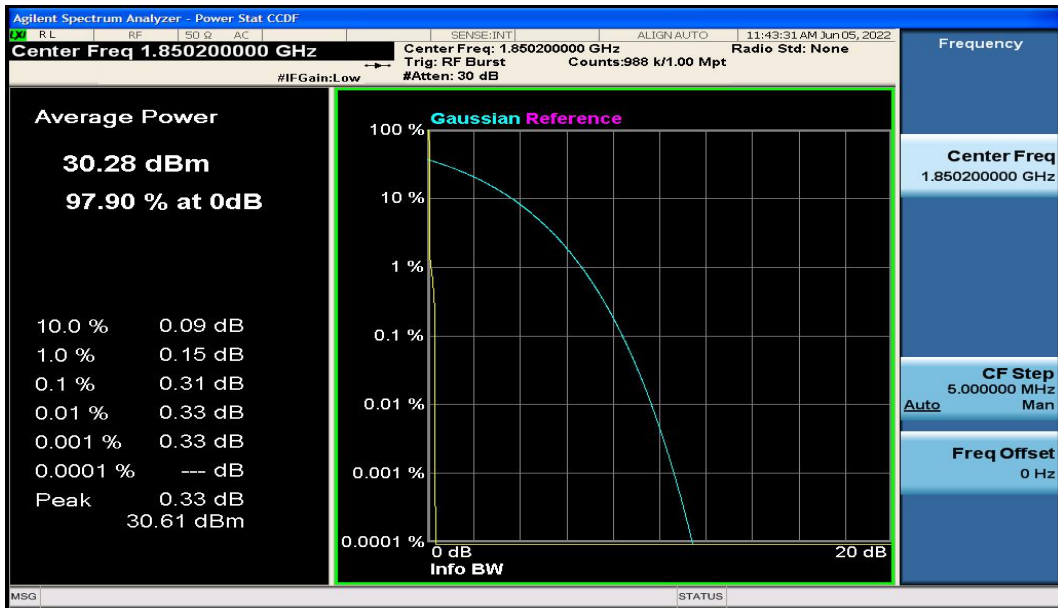
EGPRS (8PSK) MODE:

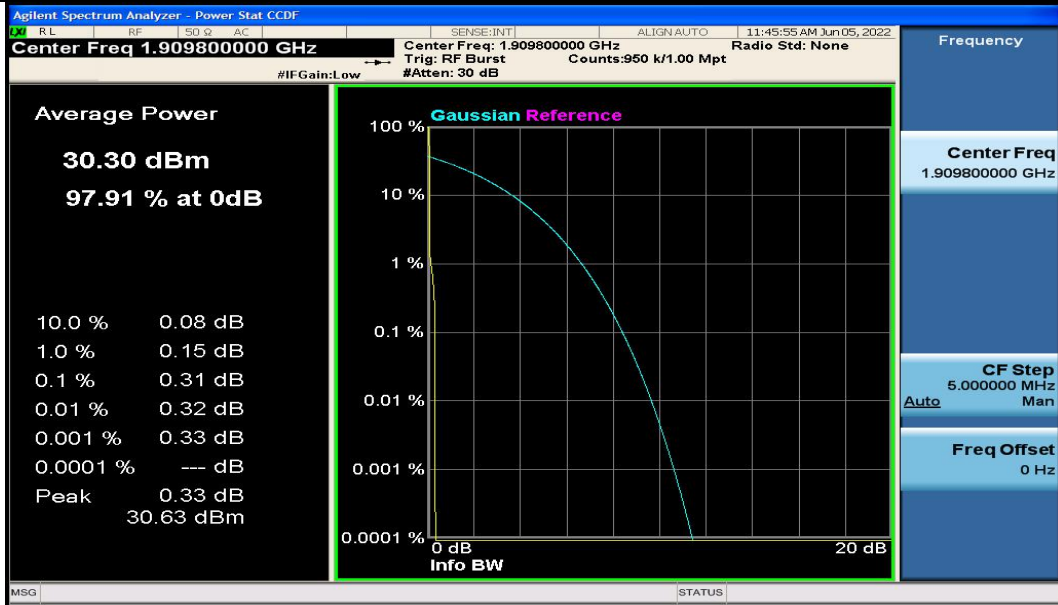
Temperature(°C)	Test Result (ppm)@NV		
	Channel 512	Channel 661	Channel 810
0	0.002	-0.002	0.003
+10	-0.004	0.001	0.001
+20	0.000	0.002	-0.004
+30	-0.002	0.003	0.002
+40	-0.005	0.003	0.000
+50	-0.004	0.004	-0.003
+55	0.002	0.008	-0.005
Voltage	Test Result (ppm)@NT		
	Channel 512	Channel 661	Channel 810
LV	0.000	0.005	-0.003
HV	0.003	0.006	-0.003

7. Peak-Average Ratio

PCS1900

GSM MODE:



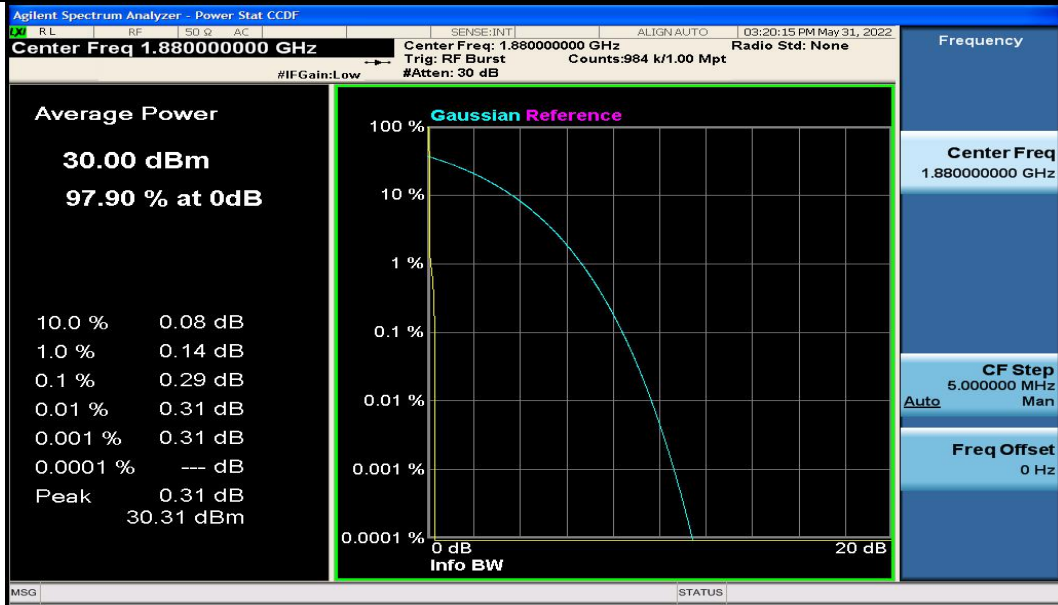


Channel 810

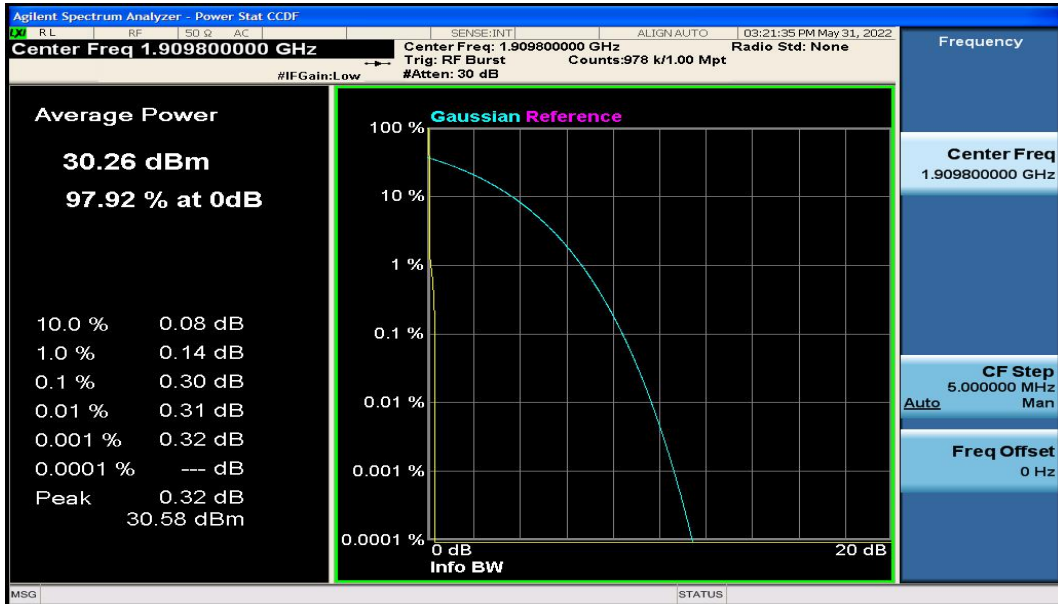
GPRS MODE:



Channel 512



Channel 661



Channel 810

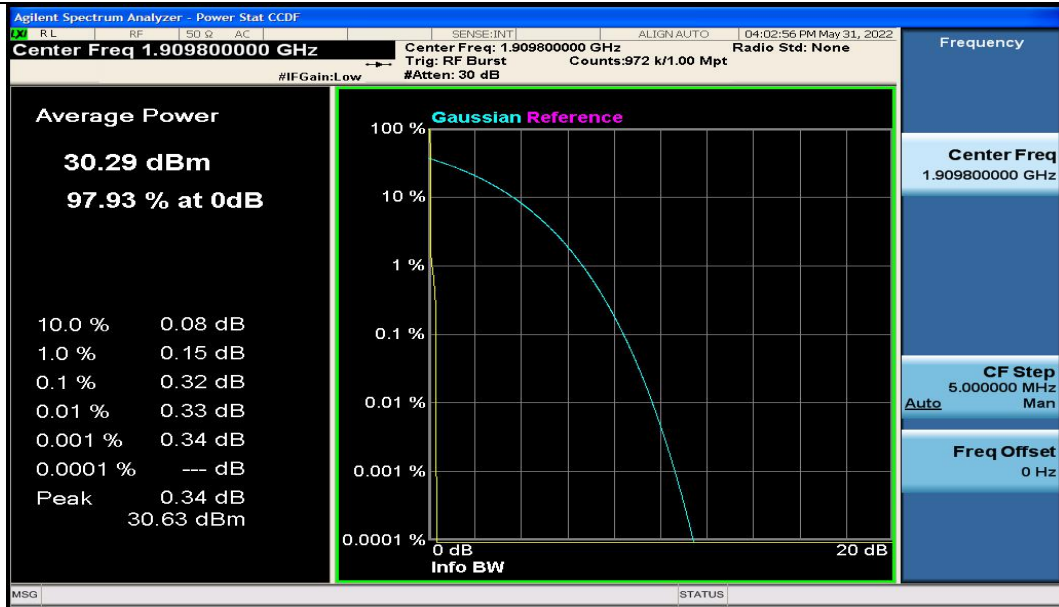
EGPRS (8PSK) MODE:



Channel 512



Channel 661



Channel 810



## 8. Effective Radiated Power and Effective Isotropic Radiated Power

### PCS1900

GSM Measured Power:

Carrier frequency (MHz)	Channel No.	Conducted Power (dBm)	ERP/EIRP (dBm)	ERP/EIRP (W)
1850.2	512	29.72	28.32	0.679
1880	661	29.46	28.06	0.640
1909.8	810	29.59	28.19	0.659

GPRS Measured Power:

Carrier frequency (MHz)	Channel No.	TX Mode	Conducted Power (dBm)	ERP/EIRP (dBm)	ERP/EIRP (W)
1850.2	512	4Down1Up	23.88	22.48	0.177
1880	661	4Down1Up	23.55	22.15	0.164
1909.8	810	4Down1Up	23.94	22.54	0.179
1850.2	512	3Down2Up	25.87	24.47	0.280
1880	661	3Down2Up	25.57	24.17	0.261
1909.8	810	3Down2Up	25.90	24.50	0.282
1850.2	512	2Down3Up	27.41	26.01	0.399
1880	661	2Down3Up	27.06	25.66	0.368
1909.8	810	2Down3Up	27.41	26.01	0.399
1850.2	512	1Down4Up	29.47	28.07	0.641
1880	661	1Down4Up	29.26	27.86	0.611
1909.8	810	1Down4Up	29.49	28.09	0.644

EGPRS (8PSK) Measured Power:

Carrier frequency (MHz)	Channel No.	TX Mode	Conducted Power (dBm)	ERP/EIRP (dBm)	ERP/EIRP (W)
1850.2	512	4Down1Up	23.96	22.56	0.180
1880	661	4Down1Up	23.60	22.20	0.166
1909.8	810	4Down1Up	23.93	22.53	0.179
1850.2	512	3Down2Up	25.92	24.52	0.283
1880	661	3Down2Up	25.58	24.18	0.262
1909.8	810	3Down2Up	25.89	24.49	0.281
1850.2	512	2Down3Up	27.43	26.03	0.401
1880	661	2Down3Up	27.09	25.69	0.371
1909.8	810	2Down3Up	27.42	26.02	0.400
1850.2	512	1Down4Up	29.50	28.10	0.646
1880	661	1Down4Up	29.31	27.91	0.618
1909.8	810	1Down4Up	29.51	28.11	0.647

## **APPENDIX B – TEST DATA OF RADIATED EMISSION**

### **Radiated Spurious Emissions**

Note: The worst channel results are reflected in the report.

Note: The scanned graph represents the maximum of both horizontal and vertical polarizations and is not a single horizontal or vertical polarization scan.

#### **850 Test result:**

##### **GSM/GPRS MODE Channel 128:**

Frequency (MHz)	Power (dBm)	Limited (dBm)	Polarization
1648.97	-53.30	-13	Vertical
1666.43	-51.76	-13	Vertical
2535.76	-44.36	-13	Vertical
2575.73	-44.11	-13	Vertical
8963.70	-39.66	-13	Vertical
9971.47	-36.36	-13	Vertical

##### **GSM/GPRS MODE Channel 189:**

Frequency (MHz)	Power (dBm)	Limited (dBm)	Polarization
1649.81	-53.31	-13	Vertical
1668.33	-51.15	-13	Vertical
2535.40	-44.61	-13	Vertical
2578.96	-44.29	-13	Vertical
8962.35	-39.06	-13	Vertical
9971.07	-36.85	-13	Vertical

##### **GSM/GPRS MODE Channel 251:**

Frequency (MHz)	Power (dBm)	Limited (dBm)	Polarization
1646.80	-52.70	-13	Vertical
1667.64	-50.82	-13	Vertical
2532.86	-44.24	-13	Vertical
2577.48	-44.57	-13	Vertical
8962.48	-39.70	-13	Vertical
9970.25	-36.26	-13	Vertical

**1900:**

Test result:

GSM/GPRS MODE Channel 512

Frequency (MHz)	Power (dBm)	Limited (dBm)	Polarization
2458.69	-49.46	-13	Vertical
2779.72	-47.44	-13	Vertical
3727.62	-40.47	-13	Vertical
6676.45	-39.67	-13	Vertical
9960.81	-37.63	-13	Vertical
17819.42	-34.42	-13	Vertical

GSM/GPRS MODE Channel 661:

Frequency (MHz)	Power (dBm)	Limited (dBm)	Polarization
2458.79	-48.91	-13	Vertical
2778.54	-47.37	-13	Vertical
3727.55	-40.96	-13	Vertical
6677.94	-39.51	-13	Vertical
9960.56	-36.92	-13	Vertical
17819.82	-33.89	-13	Vertical

GSM/GPRS MODE Channel 810:

Frequency (MHz)	Power (dBm)	Limited (dBm)	Polarization
2461.34	-48.61	-13	Vertical
2781.87	-47.18	-13	Vertical
3724.85	-40.90	-13	Vertical
6678.58	-39.46	-13	Vertical
9961.37	-37.13	-13	Vertical
17820.06	-34.00	-13	Vertical

---End of Test Report---