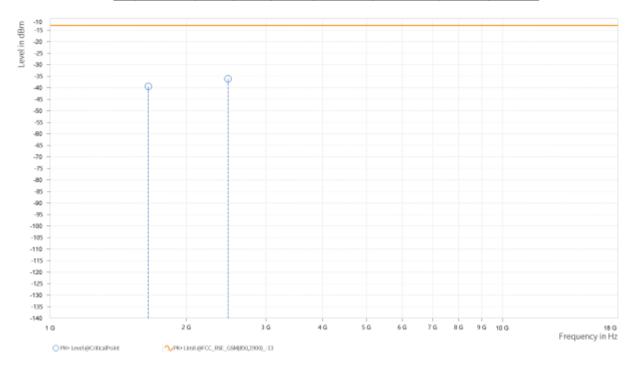


# EDGE 850(Ant0) (DOWN):

#### CH 128:

MODE	TX channel 128	FREQUENCY RANGE	Above 1000MHz					
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	AC 120V/60HZ					
TESTED BY	Jace Hu							
ANTEN	ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M							

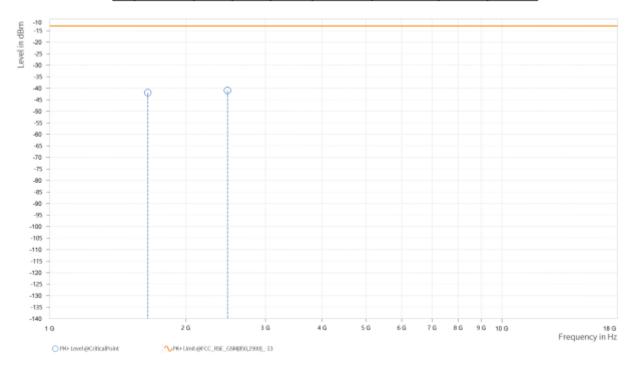
Rg	Frequency [MHz]	Level	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
2	1,648.000	-39.42	-13.00	26.42	17.43	Η	358.2	1
3	2,472.000	-36.13	-13.00	23.13	22.41	Н	197	2





MODE	TX channel 128	FREQUENCY RANGE	Above 1000MHz			
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	AC 120V/60HZ			
TESTED BY	Jace Hu					
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M						

Rg	Frequency [MHz]	Level	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
2	1,648.000	-41.90	-13.00	28.90	17.05	V	271.1	2
3	2,472.000	-40.92	-13.00	27.92	22.66	V	359.1	1

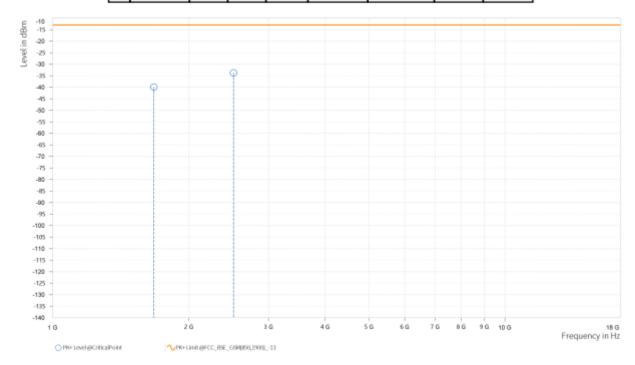




#### CH 189:

MODE	TX channel 189	FREQUENCY RANGE	Above 1000MHz			
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	AC 120V/60HZ			
TESTED BY	Jace Hu					
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M						

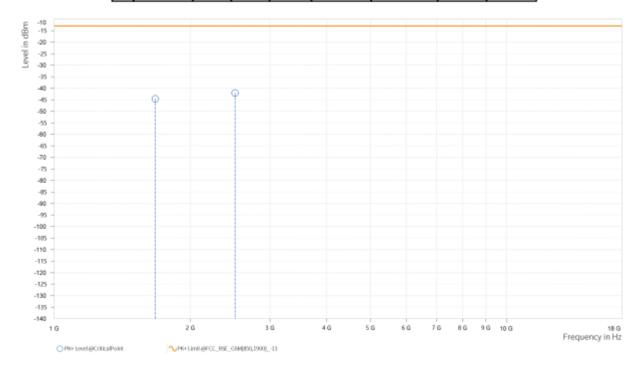
Rg		Level	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
2	1,673.000	-39.92	-13.00	26.92	18.25	Н	272.2	2
3	2,510.000	-33.77	-13.00	20.77	22.44	Н	161.9	1





MODE	TX channel 189	FREQUENCY RANGE	Above 1000MHz			
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	AC 120V/60HZ			
TESTED BY	Jace Hu					
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M						

Rg	Frequency [MHz]	PK+ Level [dBm]		PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
2	1,673.000	-44.55	-13.00	31.55	17.14	V	1	1
3	2,509.500	-42.04	-13.00	29.04	23.07	V	359	1

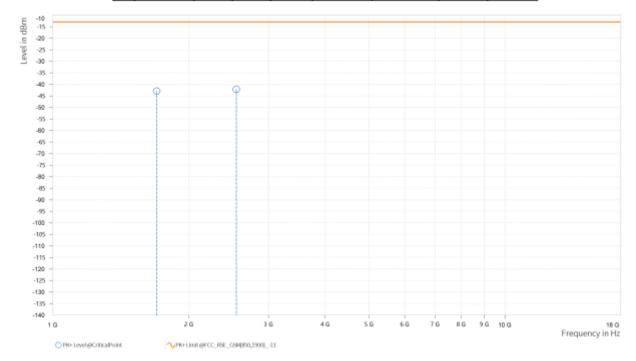




#### CH 251:

MODE	TX channel 251	FREQUENCY RANGE	Above 1000MHz			
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	AC 120V/60HZ			
TESTED BY	Jace Hu					
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M						

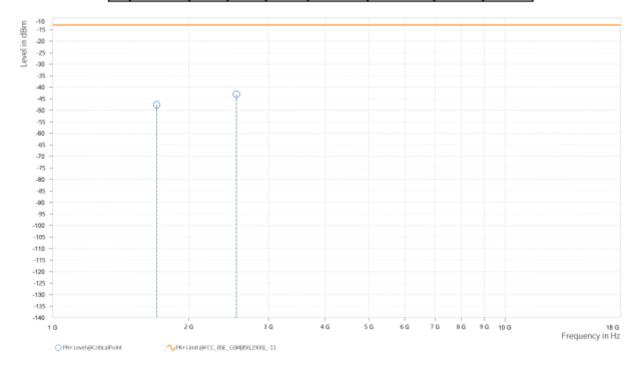
Rg	Frequency [MHz]	Level	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
2	1,698.000	-42.87	-13.00	29.87	18.61	Н	1.8	2
3	2,546.500	-42.12	-13.00	29.12	22.51	Н	163	1





MODE	TX channel 251	FREQUENCY RANGE	Above 1000MHz			
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	AC 120V/60HZ			
TESTED BY	Jace Hu	ce Hu				
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M						

Rg	Frequency [MHz]	Level	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
2	1,697.500	-47.62	-13.00	34.62	17.84	V	358.2	1
3	2,546.000	-43.03	-13.00	30.03	23.11	V	359	1



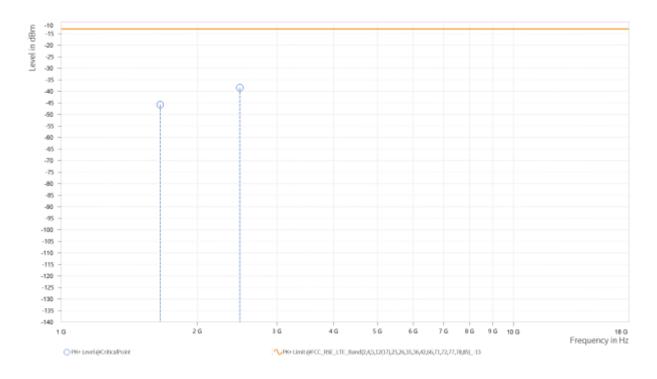


## WCDMA Band V(Ant0) (DOWN):

#### CH 4132:

MODE	TX channel 4132	FREQUENCY RANGE	Above 1000MHz					
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	AC 120V/60HZ					
TESTED BY	Jace Hu							
ANTENN	ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M							

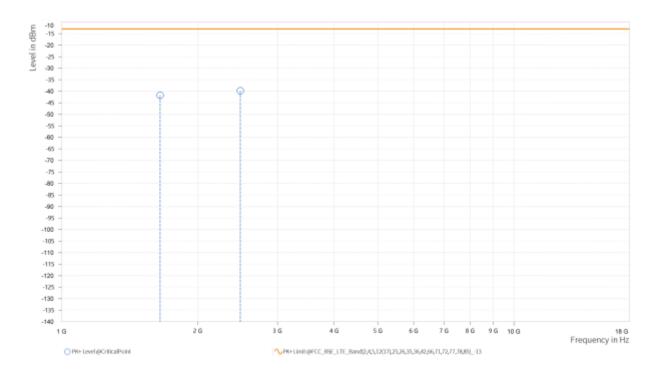
Rg	Frequency [MHz]	Level	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
2	1,654.000	-45.70	-13.00	32.70	15.64	Η	1	1
3	2,481.500	-38.38	-13.00	25.38	20.93	Н	359	1





MODE	TX channel 4132	FREQUENCY RANGE	Above 1000MHz			
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	AC 120V/60HZ			
TESTED BY	Jace Hu					
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M						

Rg	Frequency [MHz]	Level	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth	Antenna Height [m]
2	1,651.000	-41.77	-13.00	28.77	14.93	V	0.9	2
3	2,481.500	-39.77	-13.00	26.77	21.17	V	100.9	1

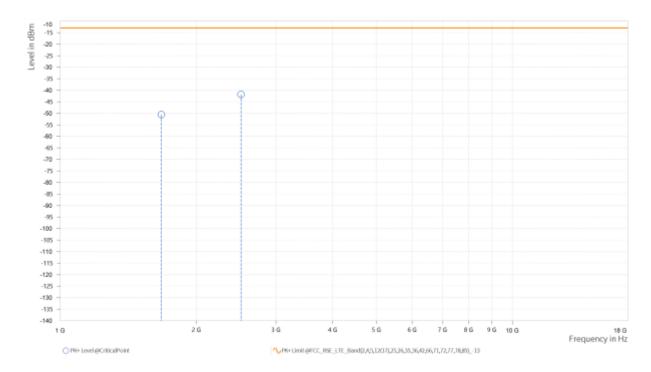




#### CH 4182:

MODE	TX channel 4182	FREQUENCY RANGE	Above 1000MHz					
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	AC 120V/60HZ					
TESTED BY	Jace Hu	ace Hu						
ANTENN	ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M							

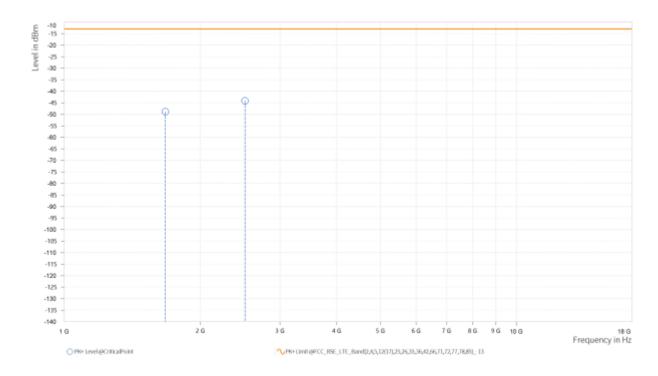
Rg	Frequency [MHz]	Level	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
2	1,673.000	-50.56	-13.00	37.56	16.08	Η	359	2
3	2,510.000	-41.84	-13.00	28.84	21.18	Н	1	1





MODE	TX channel 4182	FREQUENCY RANGE	Above 1000MHz					
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	AC 120V/60HZ					
TESTED BY	Jace Hu							
ANTEN	ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M							

Rg	Frequency [MHz]	Level	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
2	1,673.000	-48.83	-13.00	35.83	14.97	V	352.2	1
3	2,509.500	-44.14	-13.00	31.14	21.80	V	359	2

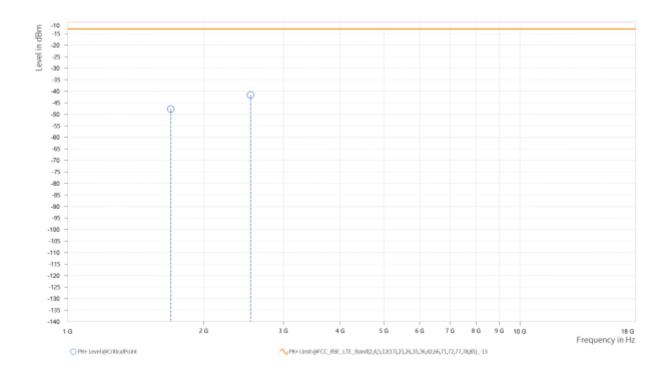




#### CH 4233:

MODE	TX channel 4233	FREQUENCY RANGE	Above 1000MHz			
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	AC 120V/60HZ			
TESTED BY	Jace Hu					
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M						

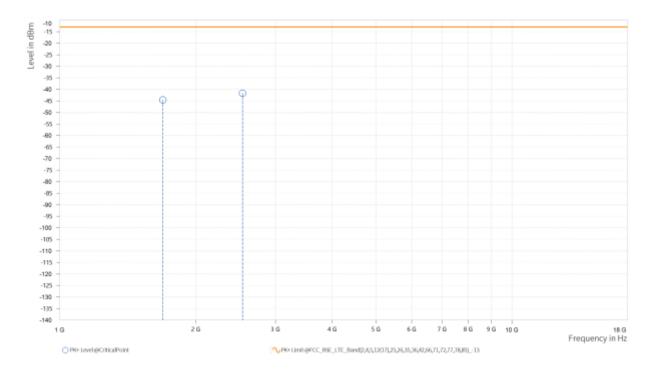
	Rg	Frequency [MHz]		PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth	Antenna Height [m]
	2	1,691.000	-47.72	-13.00	34.72	16.48	Η	1	1
Ī	3	2,536.000	-41.62	-13.00	28.62	21.01	Н	359	2





MODE	TX channel 4233	FREQUENCY RANGE	Above 1000MHz			
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	AC 120V/60HZ			
TESTED BY	Jace Hu					
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M						

Rg	Frequency [MHz]	Level	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
2	1,691.000	-44.54	-13.00	31.54	15.48	V	8.3	2
3	2,536.500	-41.66	-13.00	28.66	21.71	V	100.9	1



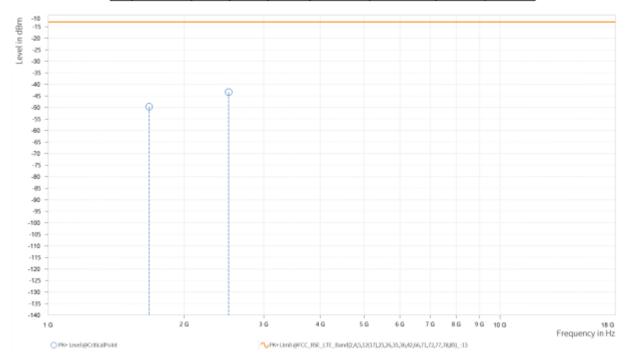


## LTE Band 26(Ant0) (DOWN):

#### **CHANNEL BANDWIDTH: 1.4MHz/QPSK**

MODE	TX channel 26915	FREQUENCY RANGE	Above 1000MHz			
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	AC 120V/60HZ			
TESTED BY	Jace Hu	ace Hu				
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M						

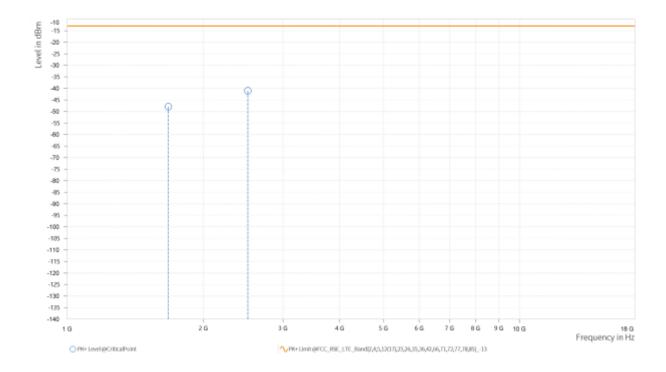
Rg	Frequency [MHz]	Level	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
2	1,672.000	-49.62	-13.00	36.62	16.06	Η	1	1
3	2,508.500	-43.31	-13.00	30.31	21.17	Н	1.5	2





MODE	TX channel 26915	FREQUENCY RANGE	Above 1000MHz		
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	AC 120V/60HZ		
TESTED BY	Jace Hu				
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M					

Rg	Frequency [MHz]	Level	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
2	1,672.000	-47.91	-13.00	34.91	14.96	V	309.2	2
3	2,508.000	-41.03	-13.00	28.03	21.75	V	305.3	1

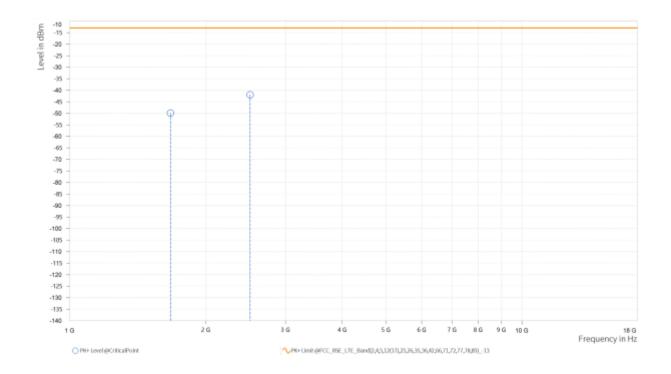




#### **CHANNEL BANDWIDTH: 3MHz / QPSK**

MODE	TX channel 26915	FREQUENCY RANGE	Above 1000MHz			
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	AC 120V/60HZ			
TESTED BY	TESTED BY Jace Hu					
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M						

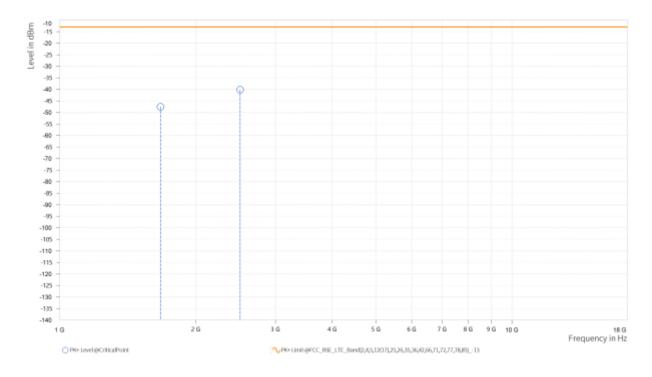
Rg	Frequency [MHz]	Level	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
2	1,670.500	-49.84	-13.00	36.84	16.04	H	1	1
3	2,506.000	-41.95	-13.00	28.95	21.16	Н	359	2





MODE	TX channel 26915	FREQUENCY RANGE	Above 1000MHz			
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	AC 120V/60HZ			
TESTED BY	Jace Hu					
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M						

Rg	Frequency [MHz]		PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth	Antenna Height [m]
2	1,670.500	-47.52	-13.00	34.52	14.93	V	359	2
3	2,505.500	-40.16	-13.00	27.16	21.67	V	359	2

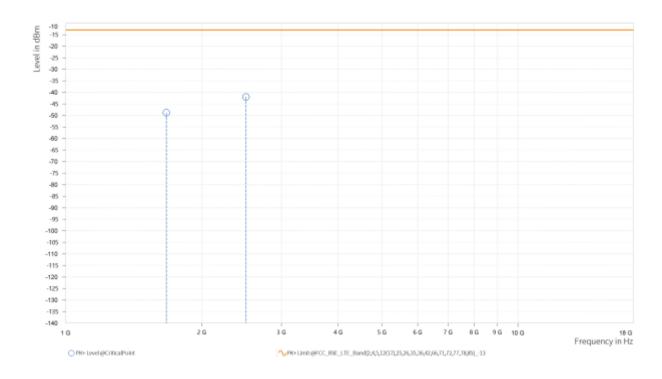




#### **CHANNEL BANDWIDTH: 5MHz/QPSK**

MODE	TX channel 26915	FREQUENCY RANGE	Above 1000MHz		
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	AC 120V/60HZ		
TESTED BY	TESTED BY Jace Hu				
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M					

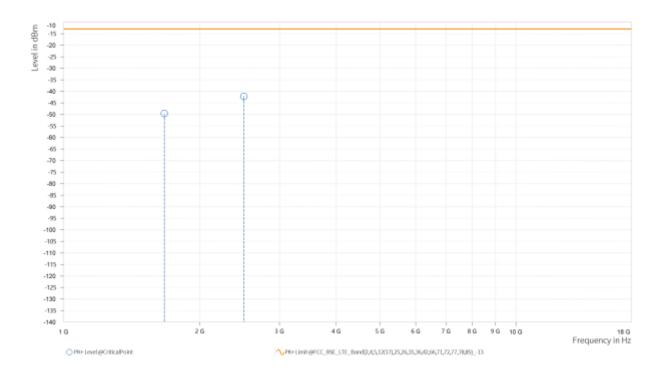
Rg	Frequency [MHz]		PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
2	1,668.500	-48.80	-13.00	35.80	16.01	Η	308.1	2
3	2,503.000	-41.93	-13.00	28.93	21.14	Н	326.9	1





MODE	TX channel 26915	FREQUENCY RANGE	Above 1000MHz		
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	AC 120V/60HZ		
TESTED BY	Jace Hu				
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M					

Rg	Frequency [MHz]	Level	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
2	1,668.500	-49.59	-13.00	36.59	14.90	V	1	1
3	2,502.500	-42.15	-13.00	29.15	21.58	V	1.1	2

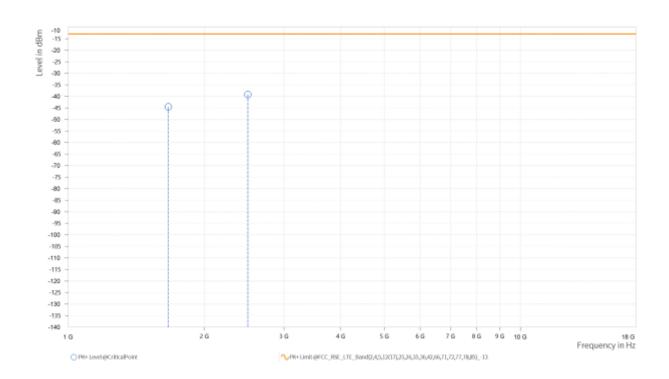




#### **CHANNEL BANDWIDTH: 10MHz / QPSK**

MODE	TX channel 26915	FREQUENCY RANGE	Above 1000MHz				
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	AC 120V/60HZ				
TESTED BY	Jace Hu	ace Hu					
ANTENN	ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M						

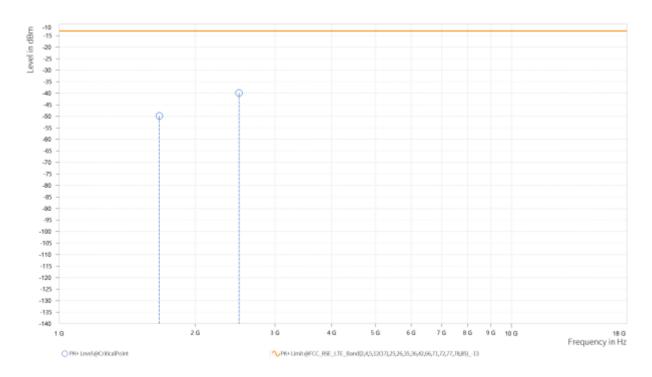
Rg	Frequency [MHz]		PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
2	1,664.500	-44.53	-13.00	31.53	15.95	Η	359	2
3	2,496.000	-39.19	-13.00	26.19	21.20	Н	1.4	2





MODE	TX channel 26915	FREQUENCY RANGE	Above 1000MHz			
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	AC 120V/60HZ			
TESTED BY	Jace Hu					
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M						

Rg	Frequency [MHz]		PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
2	1,664.000	-49.83	-13.00	36.83	14.82	V	2.1	2
3	2,496.500	-39.83	-13.00	26.83	21.48	V	54.7	2



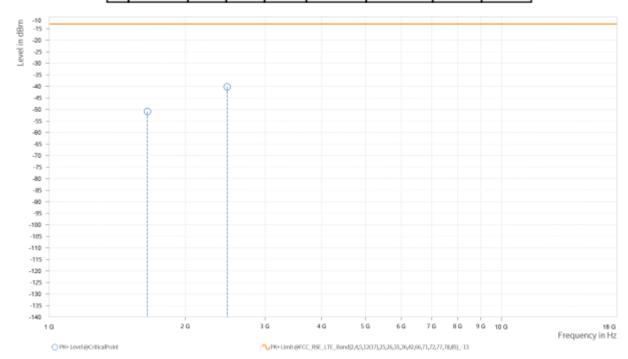


#### **CHANNEL BANDWIDTH: 15MHz / QPSK**

#### CH 26865

MODE	TX channel 26865	FREQUENCY RANGE	Above 1000MHz			
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	AC 120V/60HZ			
TESTED BY	Jace Hu					
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M						

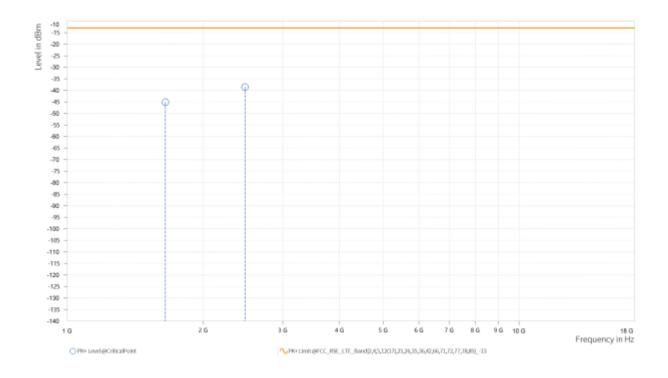
Rg	Frequency [MHz]	Level	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
2	1,649.500	-50.91	-13.00	37.91	15.43	Н	1.9	2
3	2,474.500	-40.19	-13.00	27.19	20.83	Н	313.7	1





MODE	TX channel 26865	FREQUENCY RANGE	Above 1000MHz				
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	AC 120V/60HZ				
TESTED BY	Jace Hu						
ANTEN	ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M						

Rg	Frequency [MHz]	Level	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
2	1,649.500	-45.04	-13.00	32.04	14.95	V	1	1
3	2,474.500	-38.52	-13.00	25.52	21.08	V	318.5	1

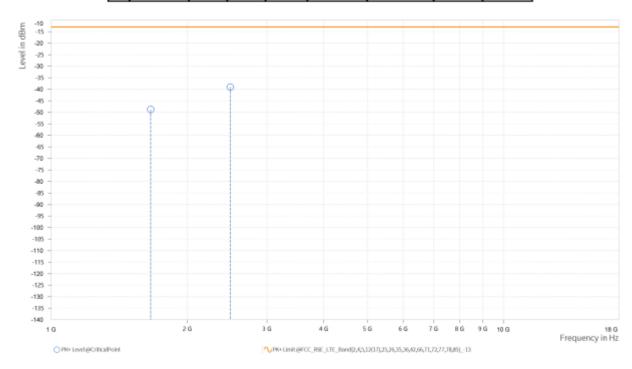




#### CH 26915

MODE	TX channel 26915	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	AC 120V/60HZ
TESTED BY	Jace Hu		
ANTENN	A POLARITY & TEST DIST	ANCE: HORIZONTAL A	T 3 M

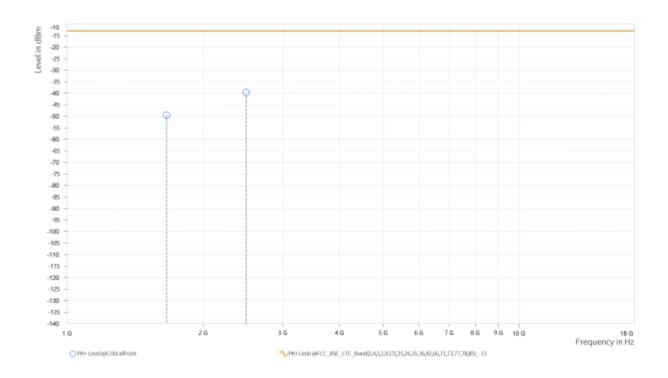
Rg	Frequency [MHz]	Level	PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
2	1,659.500	-48.78	-13.00	35.78	15.88	Η	359	2
3	2,489.500	-39.02	-13.00	26.02	21.14	Н	307.7	1





MODE	TX channel 26915	FREQUENCY RANGE	Above 1000MHz				
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	AC 120V/60HZ				
TESTED BY	Jace Hu						
ANTEN	ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M						

Rg	Frequency [MHz]		PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth	Antenna Height [m]
2	1,659.500	-49.48	-13.00	36.48	14.76	V	2	2
3	2,489.500	-39.72	-13.00	26.72	21.37	V	325.6	1

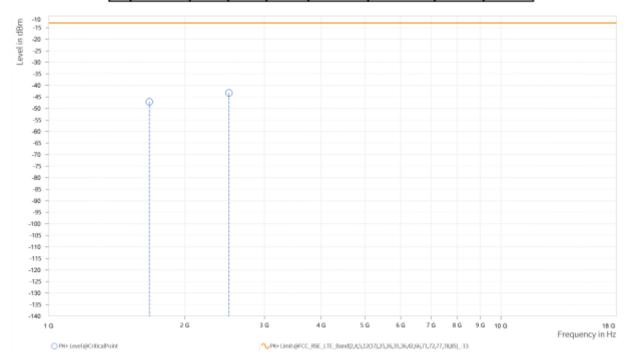




#### CH 26965

MODE	TX channel 26965	FREQUENCY RANGE	Above 1000MHz		
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	AC 120V/60HZ		
TESTED BY	Jace Hu				
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M					

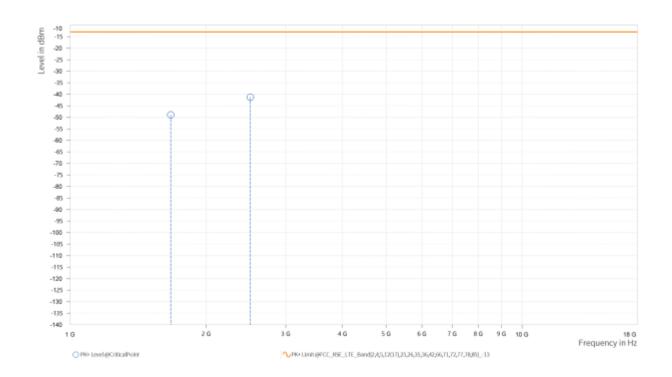
Rg	Frequency [MHz]		PK+ Limit [dBm]	PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
2	1,669.500	-47.10	-13.00	34.10	16.02	Η	67.8	2
3	2,504.500	-43.28	-13.00	30.28	21.15	Н	1	1





MODE	TX channel 26965	FREQUENCY RANGE	Above 1000MHz		
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	AC 120V/60HZ		
TESTED BY	Jace Hu				
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M					

Rg		PK+ Level [dBm]		PK+ Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
2	1,669.500	-48.95	-13.00	35.95	14.91	٧	1	1
3	2,504.500	-41.29	-13.00	28.29	21.64	V	1	1



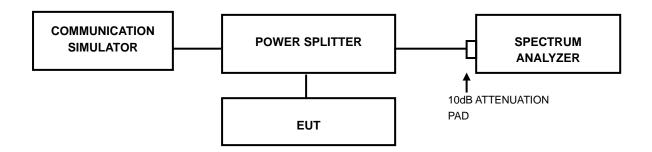


#### 3.7 PEAK TO AVERAGE RATIO

## 3.7.1 LIMITS OF PEAK TO AVERAGE RATIO MEASUREMENT

In measuring transmissions in this band using an average power technique, the peak to-average ratio (PAR) of the transmission may not exceed 13 dB

#### 3.7.2 TEST SETUP



#### 3.7.3 TEST PROCEDURES

- 1. Set resolution/measurement bandwidth ≥ signal's occupied bandwidth.
- 2. Set the number of counts to a value that stabilizes the measured CCDF curve.
- 3. Record the maximum PAPR level associated with a probability of 0.1%.



# 3.7.4 TEST RESULTS

Please Refer to Appendix Of this test report.



# 4 PHOTOGRAPHS OF THE TEST CONFIGURATION

Please refer to the attached file (Test Setup Photo).



## 5 INFORMATION ON THE TESTING LABORATORIES

We, **Huarui 7layers High Technology (Suzhou) Co., Ltd.** were founded in 2020 to provide our best service in EMC, Radio, Telecom and Safety consultation. Our laboratories are accredited and approved according to ISO/IEC 17025.

If you have any comments, please feel free to contact us at the following:

#### Suzhou EMC/RF Lab:

Tel: +86 (0557) 368 1008



# 6 MODIFICATIONS RECORDERS FOR ENGINEERING CHANGES TO THE EUT BY THE LAB

No any modifications are made to the EUT by the lab during the test.



# 7 APPENDIX

## **GSM 850**

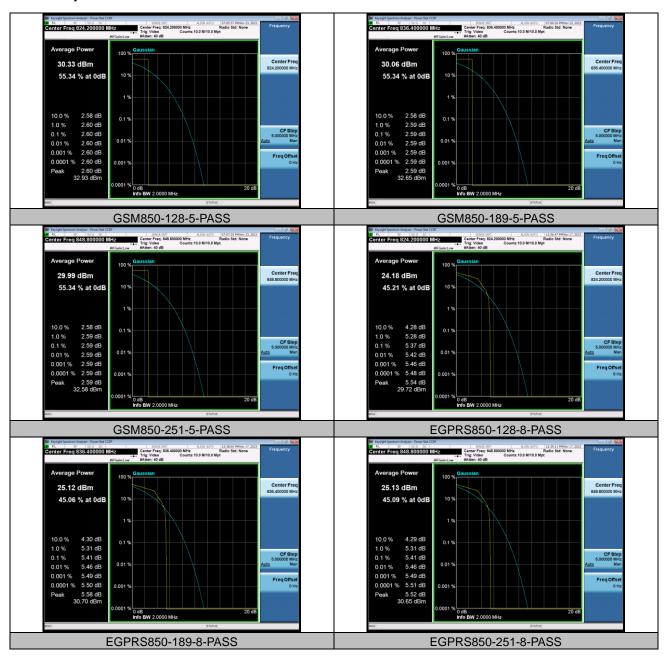
# PEAK-TO-AVERAGE RATIO(CCDF)

## **Test Result**

Band	Channel	Result(dB)	Limit(dB)	Verdict
GSM850	128	2.60	13	PASS
GSM850	189	2.59	13	PASS
GSM850	251	2.59	13	PASS
EGPRS850	128	5.37	13	PASS
EGPRS850	189	5.41	13	PASS
EGPRS850	251	5.41	13	PASS



## **Test Graphs**





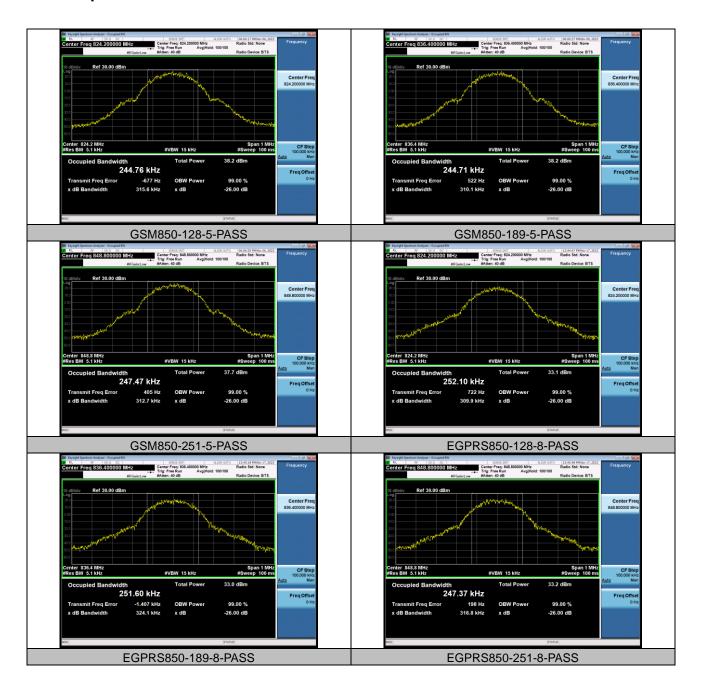
## **26DB BANDWIDTH AND OCCUPIED BANDWIDTH**

## **Test Result**

Band	Channel	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Limit (MHz)	Verdict
GSM850	128	0.24476	0.3156		PASS
GSM850	189	0.24471	0.3101		PASS
GSM850	251	0.24747	0.3127		PASS
EGPRS850	128	0.25210	0.3099		PASS
EGPRS850	189	0.25160	0.3241		PASS
EGPRS850	251	0.24737	0.3168		PASS



## **Test Graphs**





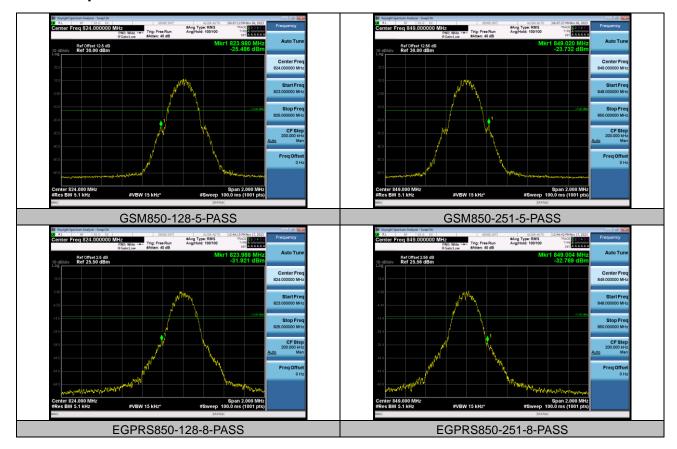
## **BAND EDGE**

## **Test Result**

Band	Channel	Freq (MHz)	Result (dBm)	Limit(dBm)	Verdict
GSM850	128	823.98	-25.49	-13	PASS
GSM850	251	849.02	-23.73	-13	PASS
EGPRS850	128	823.99	-31.92	-13	PASS
EGPRS850	251	849.00	-32.77	-13	PASS



# **Test Graphs**





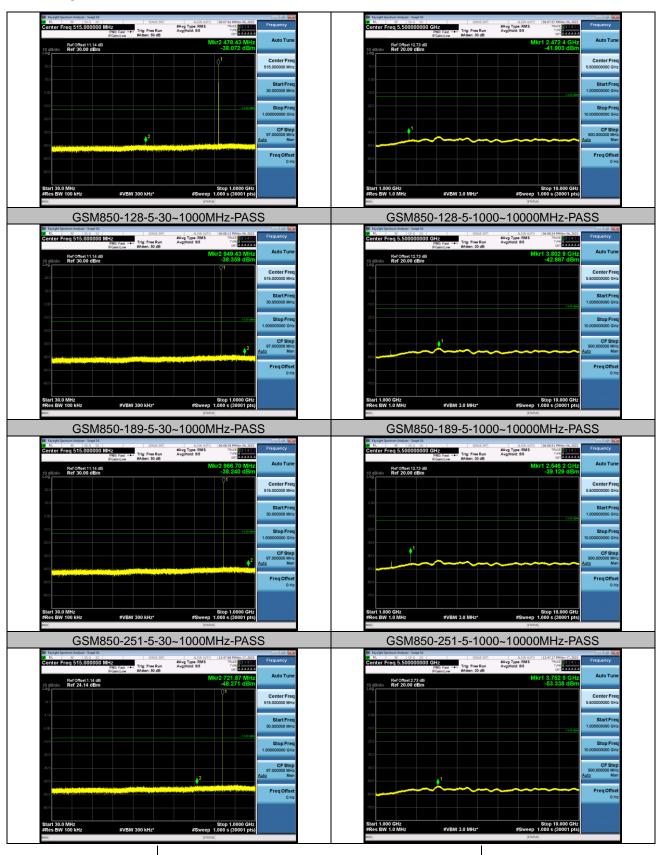
## **CONDUCTED SPURIOUS EMISSION**

## **Test Result**

Band	Channel	Frequency Range(MHz)	Max.Freq. (MHz)	Result (dBm)	Limit (dBm)	Verdict
GSM850	128	30~1000MHz	478.43	-38.07	-13	PASS
GSM850	128	1000~10000MHz	2472.4	-41.9	-13	PASS
GSM850	189	30~1000MHz	949.43	-38.36	-13	PASS
GSM850	189	1000~10000MHz	3802.9	-42.87	-13	PASS
GSM850	251	30~1000MHz	966.7	-38.24	-13	PASS
GSM850	251	1000~10000MHz	2546.2	-39.13	-13	PASS
EGPRS850	128	30~1000MHz	721.87	-48.27	-13	PASS
EGPRS850	128	1000~10000MHz	3752.5	-53.34	-13	PASS
EGPRS850	189	30~1000MHz	970.8	-48.85	-13	PASS
EGPRS850	189	1000~10000MHz	2509.6	-39.15	-13	PASS
EGPRS850	251	30~1000MHz	954.22	-48.31	-13	PASS
EGPRS850	251	1000~10000MHz	2546.2	-31.84	-13	PASS



## **Test Graphs**



Huarui 7Layers High Technology (Suzhou) Co., Ltd Tower N, Innovation Center, 88 Zhuyi Road, High-tech District, Suzhou City, Anhui Province

Tel: +86(0557) 368 1008