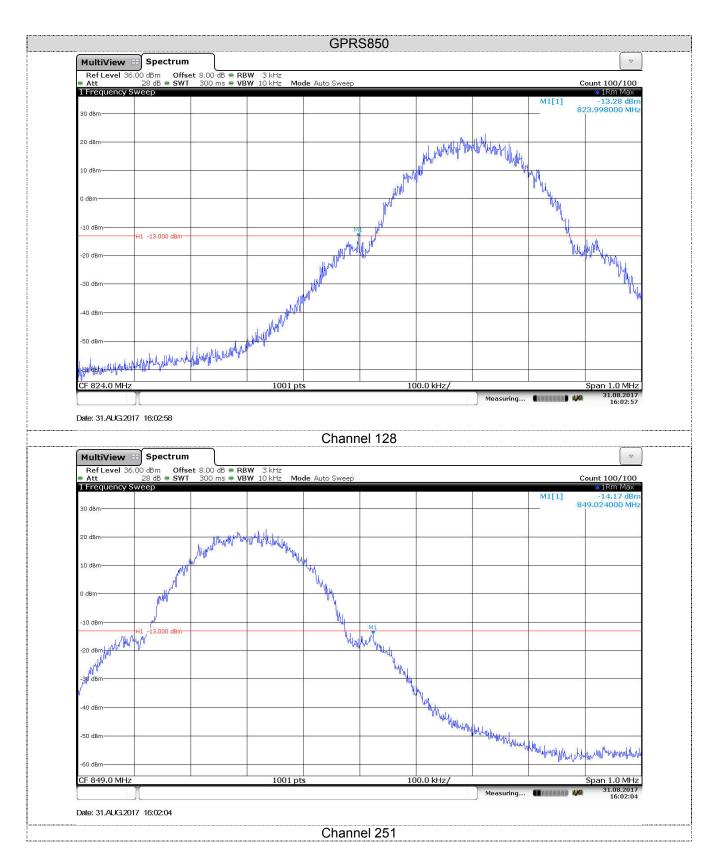
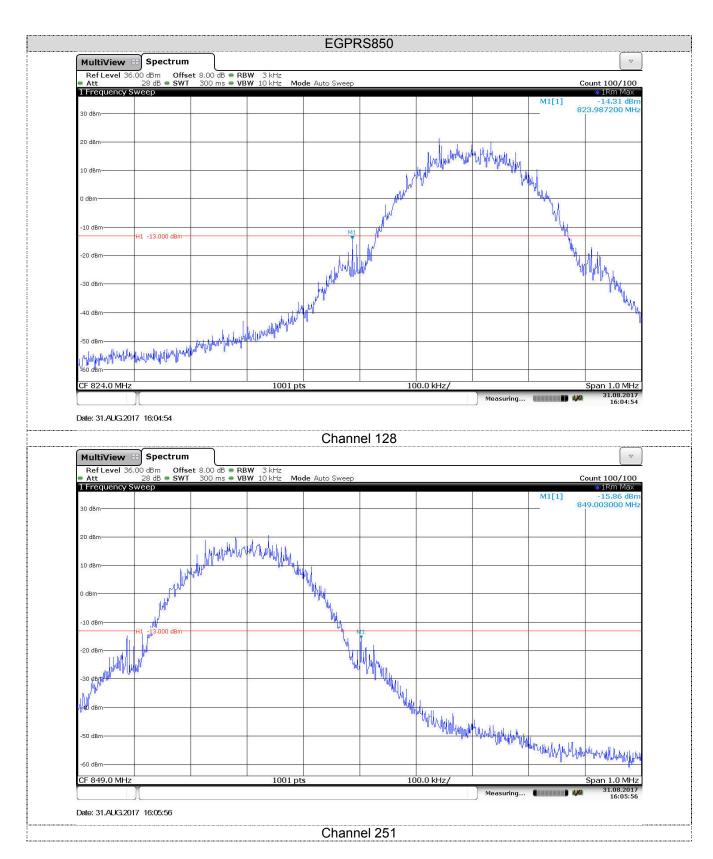
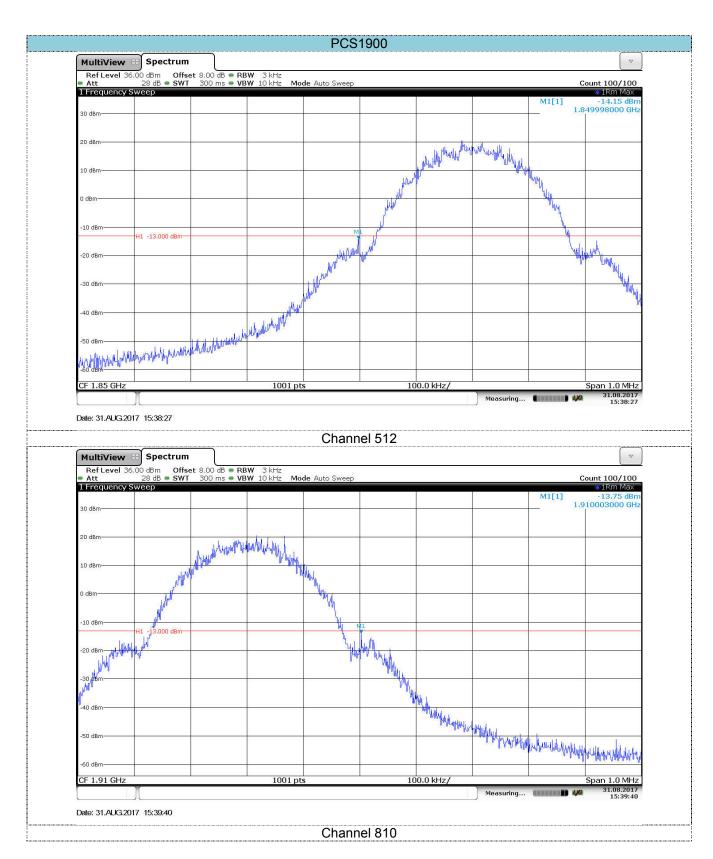
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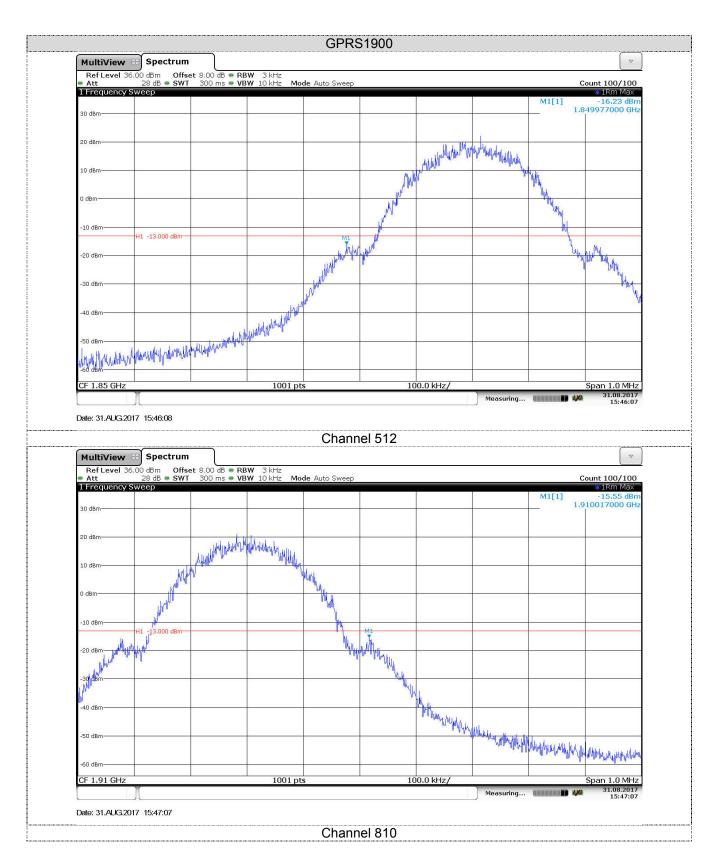
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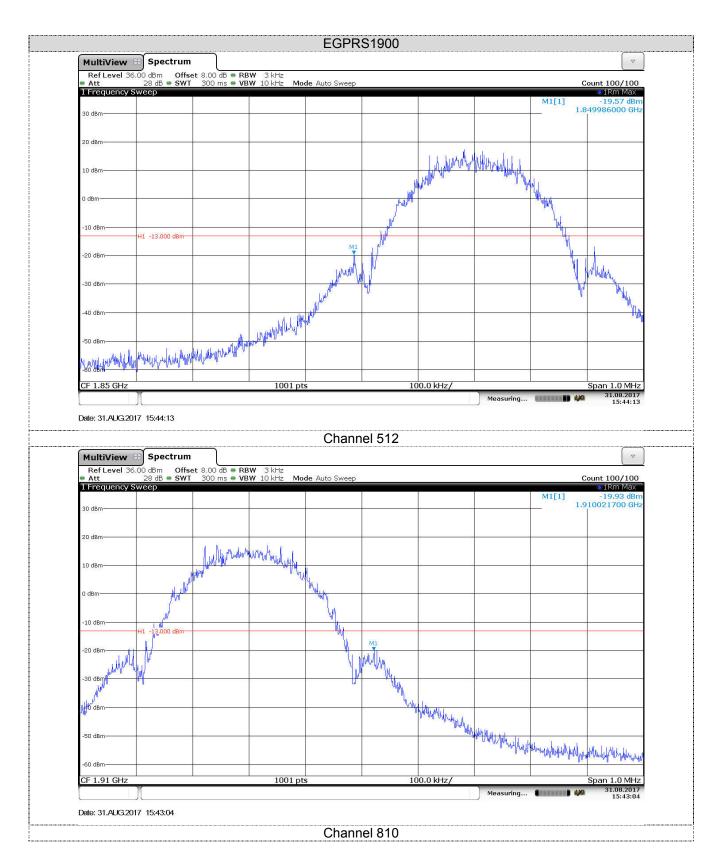
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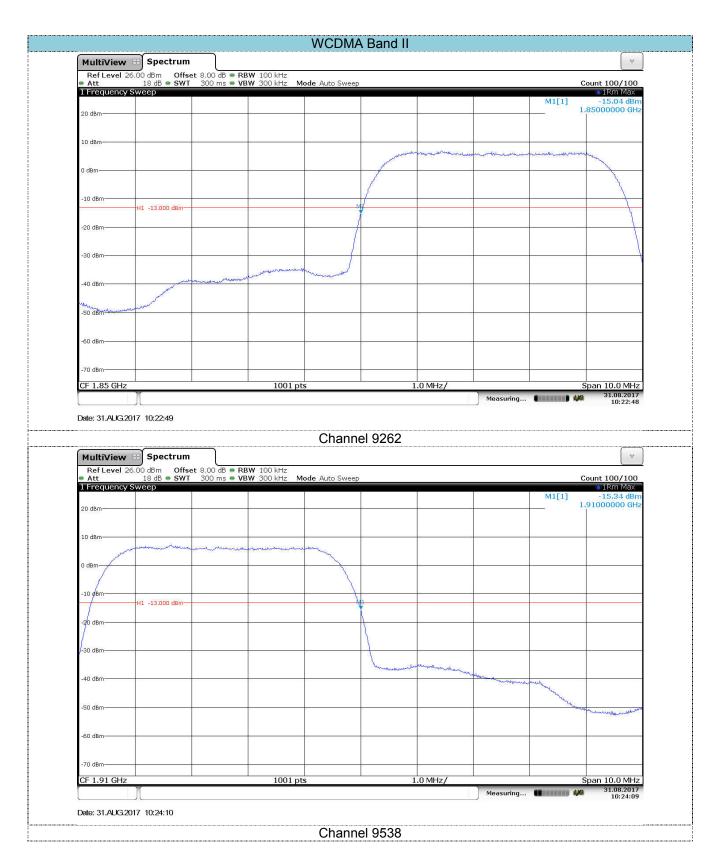
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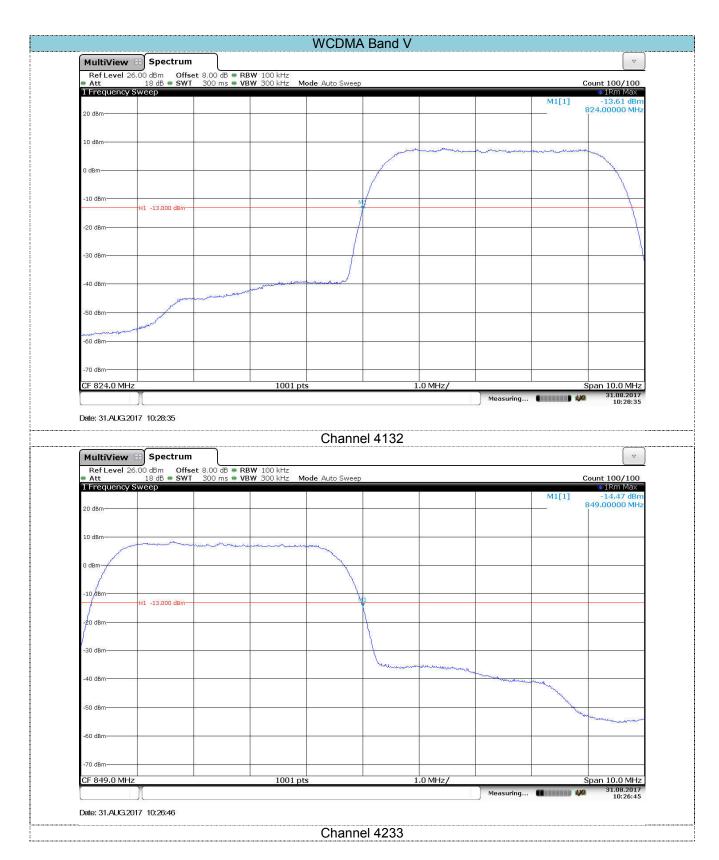
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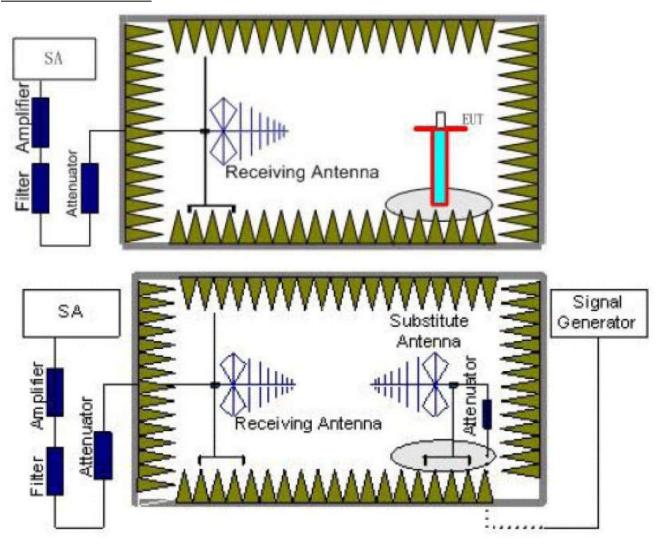
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5.5. ERP and EIRP

LIMIT

GSM850/WCDMA Band V: 7W ERP PCS1900/WCDMA Band II: 2W EIRP

WCDMA Band V: 1W EIRP **TEST CONFIGURATION**



TEST PROCEDURE

- 1. EUT was placed on a 0.8 meter high non-conductive stand at a 3 meter test distance from the receive antenna. A receiving antenna was placed on the antenna mast 3 meters from the EUT for emission measurements. The height of receiving antenna is 1.0m. Detected emissions were maximized at each frequency by rotating the EUT through 360° and adjusting the receiving antenna polarization. The radiated emission measurements of all transmit frequencies in three channels (High, Middle, Low) were measured with peak detector.
- 2. A log-periodic antenna or double-ridged waveguide horn antenna shall be substituted in place of the EUT. The log-periodic antenna will be driven by a signal generator and the level will be adjusted till the same power value on the spectrum analyzer or receiver. The level of the spurious emissions can be calculated through the level of the signal generator, cable loss, the gain of the substitution antenna and the reading of the spectrum analyzer or receiver.
- 3. The EUT is then put into continuously transmitting mode at its maximum power level during the test.Set Test Receiver or Spectrum RBW=1MHz,VBW=3MHz for above 1GHz and RBW=100kHz,VBW=300kHz for 30MHz to 1GHz,, And the maximum value of the receiver should be recorded as (Pr).
- 4. The EUT shall be replaced by a substitution antenna. In the chamber, an substitution antenna for the

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frequency band of interest is placed at the reference point of the chamber. An RF Signal source for the frequency band of interest isconnected to the substitution antenna with a cable that has been constructed to not interfere with the radiation pattern of the antenna. A power (PMea) is applied to the input of the substitution antenna, and adjust the level of the signal generator output until the value of the receiver reach the previously recorded (Pr). The power of signal source (PMea) is recorded. The test should be performed by rotating the test item and adjusting the receiving antenna polarization.

- 5. A amplifier should be connected to the Signal Source output port. And the cable should be connect between the Amplifier and the Substitution Antenna. The cable loss (PcI) ,the Substitution Antenna Gain (Ga) and the Amplifier Gain (PAg) should be recorded after test.
- 6. The measurement results are obtained as described below: Power(EIRP)=PMea- PAg - Pcl + Ga We used SMF100A micowave signal generator which signal level can up to 33dBm,so we not used power Amplifier for substituation test; The measurement results are amend as described below: Power(EIRP)=PMea- Pcl + Ga
- 7. This value is EIRP since the measurement is calibrated using an antenna of known gain (2.15 dBi) and known input power.

ERP can be calculated from EIRP by subtracting the gain of the dipole, ERP = EIRP-2.15dBi.

TEST MODE:

Please refer to the clause 3.3

TEST RESULTS

Mode	Channel	Antenna Pol.	ERP	Limit (dBm)	Result
	128	V	31.34		
	120	Н	28.52		
GSM850	190	V	31.47	38.45	Pass
COMOSO	190	Н	28.35	30.43	1 833
	251	V	31.55		
	231	Н	28.36		
	128	V	31.43		Pass
	120	Н	28.25	38.45	
GPRS850	190	V	31.33		
OI 110000		Н	28.42		
	251	V	31.26		
	231	Н	28.55		
	128	V	26.45		
	120	Н	23.64		
EGPRS850	190	V	26.52	38.45	Pass
LOI 110000	100	Н	23.38	30.43	1 433
	251	V	26.33		
	201	Н	23.47		

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Mode	Channel	Antenna Pol.	EIRP	Limit (dBm)	Result
	512	V	27.34		
	512	Н	23.22		
PCS1900	661	V	27.64	33.00	Pass
1 031900	001	Н	23.64	33.00	F 433
	810	V	27.66		
	010	Н	23.34		
	512	V	27.46		Pass
	012	Н	23.22	33.00	
GPRS1900	661 810	V	27.38		
01101900		Н	27.28	33.00	
		V	27.55		
	010	Н	23.64		
	512	V	24.58		
	012	Н	20.65		
EGPRS1900	661	V	24.65	33.00	Pass
	001	Н	20.36	33.00	1 433
	810	V	24.36		
	610	Н	20.66		

Mode	Channel	Antenna Pol.	EIRP	Limit (dBm)	Result
	9262	V	20.65		
	0202	Н	18.59		
WCDMA Band II	9400	V	20.65	33.00	Pass
	9400	Н	18.74	00.00	. 6.66
	9538 —	V	20.64		
		Н	18.77		

Mode	Channel	Antenna Pol.	EIRP	Limit (dBm)	Result
	1313	V	20.84		Pass
	1313	Н	18.52		
WCDMA Band IV	1450	V	20.65	30.00	
WODIVIA Ballu IV	1430	Н	18.64	30.00	
	1512	V	20.65	_	
		Н	18.74		

Mode	Channel	Antenna Pol.	ERP	Limit (dBm)	Result
	4132	V	22.15		Pass
	4132	Н	20.36		
WCDMA Band V	4183 4233	V	22.47	38.45	
WCDIVIA Bariu V		Н	20.58	30.43	
		V	22.45	_	
		Н	20.64		

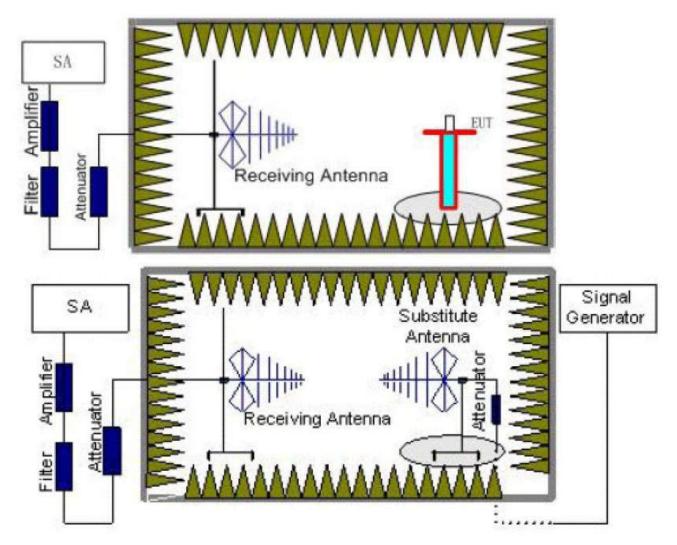
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5.6. Radiated Spurious Emission

LIMIT

-13dBm

TEST CONFIGURATION



TEST RESULTS

- 1. EUT was placed on a 0.8 meter high non-conductive stand at a 3 meter test distance from the receive antenna. A receiving antenna was placed on the antenna mast 3 meters from the EUT for emission measurements. The height of receiving antenna is 1.0m. Detected emissions were maximized at each frequency by rotating the EUT through 360° and adjusting the receiving antenna polarization. The radiated emission measurements of all transmit frequencies in three channels (High, Middle, Low) were measured with peak detector.
- 2. A log-periodic antenna or double-ridged waveguide horn antenna shall be substituted in place of the EUT. The log-periodic antenna will be driven by a signal generator and the level will be adjusted till the same power value on the spectrum analyzer or receiver. The level of the spurious emissions can be calculated through the level of the signal generator, cable loss, the gain of the substitution antenna and the reading of the spectrum analyzer or receiver.
- 3. The EUT is then put into continuously transmitting mode at its maximum power level during the test.Set Test Receiver or Spectrum RBW=1MHz,VBW=3MHz for above 1GHz and RBW=100kHz,VBW=300kHz for 30MHz to 1GHz, And the maximum value of the receiver should be recorded as (Pr).
- 4. The EUT shall be replaced by a substitution antenna. In the chamber, an substitution antenna for the frequency band of interest is placed at the reference point of the chamber. An RF Signal source for the frequency band of interest isconnected to the substitution antenna with a cable that has been constructed to not interfere with the radiation pattern of the antenna. A power (PMea) is applied to the input of the substitution antenna, and adjust the level of the signal generator output until the value of the receiver reach the previously recorded (Pr). The power of signal source (PMea) is recorded. The test should be

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performed by rotating the test item and adjusting the receiving antenna polarization.

- 5. A amplifier should be connected to the Signal Source output port. And the cable should be connect between the Amplifier and the Substitution Antenna. The cable loss (PcI) ,the Substitution Antenna Gain (Ga) and the Amplifier Gain (PAg) should be recorded after test.
- 6. The measurement results are obtained as described below: Power(EIRP)=PMea- PAg - Pcl + Ga We used SMF100A micowave signal generator which signal level can up to 33dBm,so we not used power Amplifier for substituation test; The measurement results are amend as described below: Power(EIRP)=PMea- Pcl + Ga
- 7. This value is EIRP since the measurement is calibrated using an antenna of known gain (2.15 dBi) and known input power.
 - ERP can be calculated from EIRP by subtracting the gain of the dipole, ERP = EIRP-2.15dBi.

TEST MODE:

Please refer to the clause 3.3

TEST RESULTS

Note: Worst case at GSM850/PCS1900

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		GS	M850		
Channel	Frequency	Spurious	Emission	Limit (dBm)	Result
Charmer	(MHz)	Polarization	Level (dBm)	Limit (ubin)	Result
	55.32	Vertical	-62.90		
	259.91	V	-53.91		
	1648.51	V	-39.45	12.00	Dese
	2472.57	V	-35.94	-13.00	Pass
	3295.11	V	-42.75		
400	4945.67	V	-45.55		
128	55.12	Horizontal	-70.75		
	259.91	Н	-63.25		
	1648.51	Н	-43.73	40.00	Dana
	2472.57	Н	-40.92	-13.00	Pass
	3295.11	Н	-45.25		
	4945.67	Н	-48.18		
	55.12	Vertical	-64.16		
	259.91	V	-53.59		
	1674.06	V	-41.72	-13.00	5
	1903.68	V	-38.82		Pass
	3343.25	V	-47.48		
400	5017.92	V	-45.18		
190	55.32	Horizontal	-64.84		Pass
	259.91	Н	-53.59		
	1674.06	Н	-43.25	40.00	
	2510.89	Н	-43.54	-13.00	
	3343.25	Н	-45.86		
	7412.26	Н	-46.89		
	54.54	Vertical	-63.15		
	259.91	V	-52.89		
	1698.14	V	-50.36	40.00	Dana
	2547.01	V	-40.02	-13.00	Pass
	4179.88	V	-52.39		
054	7820.86	V	-44.80		
251	55.12	Horizontal	-65.76		
	259.91	Н	-57.43		
	1698.14	Н	-41.19	40.00	D
	2547.01	Н	-37.15	-13.00	Pass
	4179.88	Н	-52.00		
	7466.20	Н	-46.90		

- 1.
- The emission behaviour belongs to narrowband spurious emission. The emission levels of not record in the report are very lower than the limit and not show in test report. 2.

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		PCS	S1900		
Channel	Frequency	Spurious	Emission	Limit (dBm)	Result
Chamilei	(MHz)	Polarization	Level (dBm)	Limit (ubin)	Result
	156.09	Vertical	-63.63		
	259.91	V	-62.82		
	1429.11	V	-54.65	-13.00	Dese
	2402.94	V	-50.34	-13.00	Pass
	3700.48	V	-24.95		
512	5554.08	V	-37.65		
512	156.09	Horizontal	-63.63		
	233.89	Н	-61.33		
	1408.84	Н	-53.76	12.00	Daga
	2124.74	Н	-51.09	-13.00	Pass
	3700.48	Н	-27.38		
	5554.08	Н	-37.23		
	156.09	Vertical	-63.63		
	442.01	V	-69.16		
	1360.17	V	-54.31	-13.00	Pass
	2294.58	V	-50.47	-13.00	Fa55
	3759.98	V	-23.72		
661	5635.22	V	-35.52		
001	54.54	Horizontal	-70.65		Pass
	259.91	Н	-62.82		
	1524.81	Н	-53.73	-13.00	
	2259.56	Н	-51.13	-13.00	
	3759.98	Н	-23.51		
	5643.40	Н	-43.21		
	58.31	Vertical	-70.60		
	233.89	V	-58.39		
	1138.41	V	-56.19	-13.00	Pass
	2440.18	V	-42.23	-13.00	F a 5 5
	3820.45	V	-17.23		
810	5725.84	V	-29.47		
010	85.85	Horizontal	-69.60		
	279.83	Н	-67.37		
	1572.44	Н	-52.19	-13.00	Pass
	2350.72	Н	-50.74	-13.00	гаээ
	3820.45	Н	-26.89		
	11469.17	Н	-31.13		

- 1.
- The emission behaviour belongs to narrowband spurious emission. The emission levels of not record in the report are very lower than the limit and not show in test report. 2.

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		WCDM	A Band II		
Channel	Frequency	Spurious	Emission	Limit (dDm)	Dogult
Channel	(MHz)	Polarization	Level (dBm)	Limit (dBm)	Result
	59.56	Vertical	-62.11		
	266.39	V	-56.34		
	1229.42	V	-54.43	12.00	Door
	1933.18	V	-45.22	-13.00	Pass
	3700.48	V	-49.70		
9262	5150.64	V	-49.38		
9202	59.56	Horizontal	-63.54		
	266.39	Н	-56.81		
	1776.37	Н	-45.91	42.00	Dana
	2580.81	Н	-46.84	-13.00	Pass
	3700.48	Н	-49.70		
	7969.71	Н	-44.99		
	59.56	Vertical	-62.11		
	266.39	V	-60.34		Pace
	1229.42	V	-54.43	12.00	
	1933.18	V	-45.22	-13.00	Pass
	3754.53	V	-49.22		
0.400	7531.45	V	-45.63		
9400	266.39	Horizontal	-59.81		Pass
	328.96	Н	-62.93		
	1776.37	Н	-45.91	42.00	
	2519.18	Н	-47.39	-13.00	
	3765.44	Н	-48.70		
	6804.40	Н	-48.05		
	54.35	Vertical	-63.87		
	429.75	V	-64.74		
	1421.28	V	-55.18	-13.00	Daga
	1933.18	V	-45.22	-13.00	Pass
	3814.91	V	-47.20		
0530	7630.40	V	-46.08		
9538	59.56	Horizontal	-63.54		
	328.96	Н	-62.93		
	1776.37	Н	-45.91	12.00	Door
	2580.81	Н	-46.84	-13.00	Pass
	3814.91	Н	-47.29		
	7630.40	Н	-45.84		

- 1. 2. The emission behaviour belongs to narrowband spurious emission.

 The emission levels of not record in the report are very lower than the limit and not show in test report.

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Channel Frequency (MHz) Spurious Emission Polarization Level (dBm) Limit (dBm) Result 1838 70 1838 1838 1838 1833.18 <		WCDMA Band IV							
1313	Channal	Frequency	Spurious	Emission	Limit (dDm)	Docult			
1313 266.39	Channel		Polarization	Level (dBm)	LIIIII (UBIII)	Result			
1313 1313 1314 1315 1316 1317 1318 1317 1318 1318 1318 1318 1318 1319 1319 1319 1319 1319 1319 1319 1319 1319 1319 1319 1319 1319 1319 1319 1319 1319 1319 1318 1319 1318 1319 1318 1319 1318 1319 1318 1319 1318 1319 1318 1319 1310 1310 1310 1310 1310 1310 1310 1310 1310 1310 1310		59.56	Vertical	-62.11					
1933.18		266.39	V	-56.34					
1933.18		1229.42	V	-54.43	40.00	Dana			
1313 5150.64		1933.18	V	-45.22	-13.00	Pass			
1313 59.56		3421.73	V	-47.25					
1450	4040	5150.64	V	-49.38					
1933.18	1313	59.56	Horizontal	-63.54					
2519.18		266.39	Н	-56.81					
2519.18 H -47.39 3421.73 H -47.56 5150.64 H -49.38 159.98 Vertical -71.42 429.75 V -64.74 1076.38 V -55.79 2580.81 V -48.58 3481.80 V -46.37 6393.03 V -49.43 62.78 Horizontal -65.02 245.69 H -62.00 1895.33 H -45.68 2580.81 H -46.84 3481.80 H -49.37 7531.45 H -45.63 54.35 Vertical -63.87 429.75 V -64.74 1290.30 V -53.61 1933.18 V -43.98 3502.06 V -46.45 5128.28 V -50.34 62.78 Horizontal -65.02 266.39 H -59.81 1229.42 H -54.43 1907.86 H -45.61 3502.06 H -44.34		1933.18	Н	-43.98	40.00	Dana			
1510.64		2519.18	Н	-47.39	-13.00	Pass			
159.98		3421.73	Н	-47.56					
1450		5150.64	Н	-49.38					
1450		159.98	Vertical	-71.42					
2580.81		429.75	V	-64.74		Door			
1450 2580.81		1076.38	V	-55.79	10.00				
1450 6393.03 V -49.43 62.78 Horizontal -65.02 245.69 H -62.00 1895.33 H -45.68 2580.81 H -46.84 3481.80 H -49.37 7531.45 H -45.63 54.35 Vertical -63.87 429.75 V -64.74 1290.30 V -53.61 1933.18 V -43.98 3502.06 V -46.45 5128.28 V -50.34 62.78 Horizontal -65.02 266.39 H -59.81 1229.42 H -54.43 1907.86 H -44.34		2580.81	V	-48.58	-13.00	Pass			
1450 62.78		3481.80	V	-46.37					
1512	4.450	6393.03	V	-49.43					
1895.33	1450	62.78	Horizontal	-65.02		Pass			
1512		245.69	Н	-62.00					
1512		1895.33	Н	-45.68	40.00				
1512		2580.81	Н	-46.84	-13.00				
1512		3481.80	Н	-49.37					
1512		7531.45	Н	-45.63					
1290.30 V -53.61 1933.18 V -43.98 3502.06 V -46.45 5128.28 V -50.34 62.78 Horizontal -65.02 266.39 H -59.81 1229.42 H -54.43 1907.86 H -45.61 3502.06 H -44.34		54.35	Vertical	-63.87					
1933.18		429.75	V	-64.74					
1933.18 V -43.98 3502.06 V -46.45 5128.28 V -50.34 62.78 Horizontal -65.02 266.39 H -59.81 1229.42 H -54.43 1907.86 H -45.61 3502.06 H -44.34		1290.30	V	-53.61	1	_			
1512 5128.28 V -50.34 62.78 Horizontal -65.02 266.39 H -59.81 1229.42 H -54.43 1907.86 H -45.61 3502.06 H -44.34		1933.18	V	-43.98	-13.00	Pass			
1512 62.78 Horizontal -65.02 266.39 H -59.81 1229.42 H -54.43 1907.86 H -45.61 3502.06 H -44.34		3502.06	V	-46.45					
62.78 Horizontal -65.02 266.39 H -59.81 1229.42 H -54.43 1907.86 H -45.61 3502.06 H -44.34		5128.28	V	-50.34					
266.39 H -59.81 1229.42 H -54.43 1907.86 H -45.61 3502.06 H -44.34	1512	62.78	Horizontal	-65.02					
1229.42 H -54.43 1907.86 H -45.61 3502.06 H -44.34									
1907.86 H -45.61 -13.00 Pass 3502.06 H -44.34									
3502.06 H -44.34					-13.00	Pass			
		5717.54	Н	-48.86					

- 1.
- The emission behaviour belongs to narrowband spurious emission.

 The emission levels of not record in the report are very lower than the limit and not show in test report. 2.

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		WCDM.	A Band V		
Channel	Frequency	Spurious	Emission	Limit (dBm)	Dooult
Channel	(MHz)	Polarization	Level (dBm)	Limit (dbin)	Result
	62.56	Vertical	-65.42		
	266.39	V	-58.29		
	1780.28	V	-34.60	-13.00	Pass
	2055.85	V	-49.90	-13.00	газэ
	3309.48	V	-51.81		
4132	4137.66	V	-51.14		
4132	62.56	Horizontal	-65.42		
	340.74	Н	-58.47		
	1776.37	Н	-30.19	-13.00	Door
	2055.85	Н	-49.86	-13.00	Pass
	3309.48	Н	-51.81		
	4137.66	Н	-51.14		
	62.56	Vertical	-65.42		
	266.39	V	-58.29		
	1672.22	V	-44.19	-13.00	Dana
	1780.28	V	-34.60		Pass
	3309.48	V	-51.81		
4400	4137.66	V	-51.14		
4183	62.56	Horizontal	-65.42		Pass
	340.74	Н	-58.47		
	1672.22	Н	-43.77	40.00	
	2055.85	Н	-49.86	-13.00	
	3309.48	Н	-51.81		
	4137.66	Н	-51.14		
	59.35	Vertical	-64.62		
	245.69	V	-61.69		
	1524.81	V	-53.65	12.00	Door
	2124.74	V	-50.84	-13.00	Pass
	3382.26	V	-52.27		
4233	4107.77	V	-50.94		
4233	59.35	Horizontal	-65.58		
	266.39	Н	-58.34		
	1696.27	Н	-52.07	12.00	Daga
	2335.27	Н	-49.18	-13.00	Pass
	3382.26	Н	-52.27		
	4107.77	Н	-50.94		

- 3. The emission behaviour belongs to narrowband spurious emission.
- 4. The emission levels of not record in the report are very lower than the limit and not show in test report.

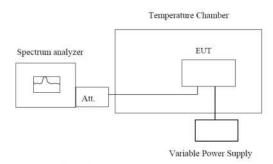
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5.7. Frequency stability V.S. Temperature measurement

LIMIT

2.5ppm

TEST CONFIGURATION



Note: Measurement setup for testing on Antenna connector

TEST PROCEDURE

- 1. The equipment under test was connected to an external DC power supply and input rated voltage.
- 2. RF output was connected to a frequency counter or spectrum analyzer via feed through attenuators.
- 3. The EUT was placed inside the temperature chamber.
- Set the spectrum analyzer RBW low enough to obtain the desired frequency resolution and measure EUT 25°Coperating frequency as reference frequency.
- 5. Turn EUT off and set the chamber temperature to -30°C. After the temperature stabilized for approximately 30 minutes recorded the frequency.
- 6. Repeat step measure with 10°C increased per stage until the highest temperature of +50°C reached.

TEST MODE:

Please refer to the clause 3.3

TEST RESULTS

Note:Worst case at GSM850/PCS1900/WCDMA B2/B4/B5 mid channel

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Reference Frequency: GSM850 Middle channel=190 channel=836.6MHz									
Power supplied	Tomporature (°C)	Frequen	icy error	Limit (nnm)	Result				
(Vdc)	Temperature (°C)	Hz	ppm	Limit (ppm)	Resuit				
	-30	1.29	0.002						
	-20	1.9	0.002						
	-10	1.49	0.002						
	0	3.78	0.005						
3.80	10	2.07	0.002	2.50	Pass				
	20	6.3	0.008						
	30	5.55	0.007						
	40	9.56	0.011						
	50	6.65	0.008						
Ref	erence Frequency: P(CS1900 Middle ch	annel=661 chanr	nel=1880MHz					
Power supplied	Temperature (°C)	Frequen	cy error	Limit (ppm)	Result				
(Vdc)	remperature (C)	Hz	ppm	Limit (ppin)	Result				
	-30	7.59	0.004						
	-20	1.07	0.001						
	-10	6.39	0.003						
	0	7.14	0.004						
3.80	10	2.94	0.002	2.50	Pass				
	20	6.52	0.003						
	30	1.9	0.001						
	40	10.72	0.006						
	50	18.53	0.010						

Reference Frequency: WCDMA Band II Middle channel=9400 channel=1880MHz								
Power supplied	Temperature (°C)	Frequency error		Limit (ppm)	Result			
(Vdc)	remperature (C)	Hz	ppm	Limit (ppin)	Result			
	-30	6.29	0.003					
	-20	11.9	0.006					
	-10	13.49	0.007					
	0	5.78	0.003					
3.80	10	2.07	0.001	2.50	Pass			
	20	5.64	0.003					
	30	4.91	0.003					
	40	7.27	0.004					
	50	12.26	0.007					
Reference	ce Frequency: WCDM	A Band IV Middle	channel=1450 c	hannel=1740MH	Z			
Power supplied	Temperature (°C) Frequency error		Limit (nnm)	Result				
(Vdc)	Temperature (C)	Hz	ppm	Limit (ppm)	Result			
	-30	17.36	0.010					
	-20	13.17	0.008					
	-10	14.43	0.008					
	0	17.16	0.010					
3.80	10	16.48	0.009	2.50	Pass			
	20	15.59	0.009					
	30	14.64	0.008					
	40	14.59	0.008					
	50	15.97	0.009					

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Reference Frequency: WCDMA Band V Middle channel=4182 channel=836.6MHz						
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (nnm)	Result	
		Hz	ppm	Limit (ppm)	Result	
	-30	7.56	0.009	2.50	Pass	
	-20	3.07	0.004			
3.80	-10	4.93	0.006			
	0	7.16	0.009			
	10	6.48	0.008			
	20	5.59	0.007			
	30	4.64	0.006			
	40	4.59	0.005			
	50	5.77	0.007			

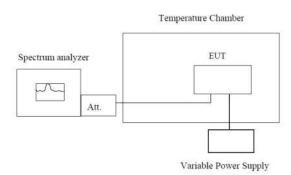
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5.8. Frequency stability V.S. Voltage measurement

LIMIT

2.5ppm

TEST CONFIGURATION



Note: Measurement setup for testing on Antenna connector

TEST PROCEDURE

- 1. Set chamber temperature to 25°C. Use a variable DC power source topower the EUT and set the voltage to rated voltage.
- 2. Set the spectrum analyzer RBW lowenough to obtain the desired frequency resolution and recorded the frequency.
- 3. Reduce the input voltage to specified extreme voltage variation (+/- 15%) and endpoint, recordthe maximum frequency change.

TEST MODE:

Please refer to the clause 3.3

TEST RESULTS

 $oxed{oxed}$ Passed $oxed{oxed}$ Not Applicable

Note: Worst case at GSM850/PCS1900/WCDMA B2/B4/B5 mid channel

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Reference	Frequency: GSM85	0 (GSM link) Mido	lle channel=190 d	channel=836.6Ml	Нz	
Tomporature (°C)	Power supplied	Frequency error			D 14	
Temperature (°C)	(Vdc)	Hz	ppm	Limit (ppm)	Result	
25	4.35	6.3	0.008	2.50	Pass	
	3.80	5.55	0.007			
	3.60	9.56	0.011			
Reference	Frequency: PCS190	00 (GSM link) Mid	dle channel=661	channel=1880Ml	Нz	
Tomporature (°C)	Power supplied	Frequency error		Limit (mmm)	Danill	
Temperature (°C)	(Vdc)	Hz	ppm	Limit (ppm)	Result	
	4.35	6.52	0.003		Pass	
25	3.80	1.9	0.001	2.50		
	3.60	10.72	0.006			
Reference Frequency: WCDMA Band II Middle channel=9400 channel=1880MHz						
Temperature (°C)	Power supplied	Frequency error		Limit (ppm)		
remperature (C)	(Vdc)	Hz	ppm	Res	sult	
	4.35	5.64	0.003			
25	3.80	4.91	0.003	2.50	Pass	
	3.60	7.27	0.004			
Reference	ce Frequency: WCDM	AA Band IV Middle	channel=1450 c	hannel=1740MH	z	
Tomporature (°C)	Power supplied	Frequency error		Limit (nnm)	Result	
Temperature (°C)	(Vdc)	Hz	ppm	Limit (ppm)	Result	
25	4.35	15.59	0.009	2.50	Pass	
	3.80	14.64	0.008			
	3.60	14.59	0.008			
Reference Frequency: WCDMA Band V Middle channel=4183 channel=836.6MHz						
Temperature (°C)	Power supplied	Frequen	cy error	Limit (nnm)	Result	
	(Vdc)	Hz	ppm	Limit (ppm)	Result	
25	4.35	5.59	0.007	2.50	Pass	
	3.80	4.64	0.006			
	3.60	4.59	0.005			

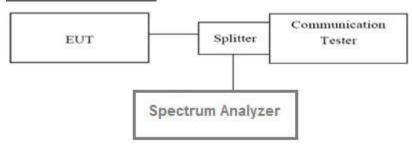
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5.9. Peak-Average Ratio

LIMIT

13dB

TEST CONFIGURATION



TEST PROCEDURE

According with KDB 971168

- 1. The signal analyzer's CCDF measurement profile is enabled
- 2. Frequency = carrier center frequency
- 3. Measurement BW > Emission bandwidth of signal
- 4. The signal analyzer was set to collect one million samples to generate the CCDF curve
- 5. The measurement interval was set depending on the type of signal analyzed. Forcontinuoussignals(>98% duty cycle), the measurement interval was set to 1ms. For bursttransmissions, the spectrum analyzer is set to use an internal "RF Burst" trigger that issynced with an incoming pulse and the measurement interval is set to less than the duration of the "on time" of one burst to ensure that energy is only captured during a time in which the transmitter is operating at maximum power

TEST MODE:

Please refer to the clause 3.3

TEST RESULTS

Note: Worst case PCS1900, WCDMA BAND1900, WCDMA BAND1700

Band	Channel	Frequency(MHz)	PAR	Limit(dB)	Result
PCS1900	512	1850.2	2.52	13.00	Pass
	661	1880.0	2.47	13.00	Pass
	810	1909.8	2.35	13.00	Pass

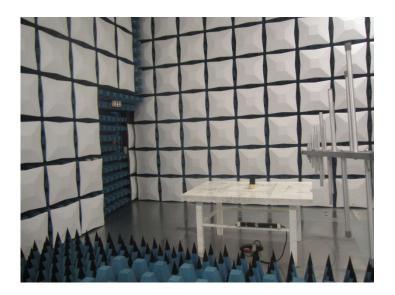
Band	Channel	Frequency(MHz)	PAR	Limit(dB)	Result
WCDMA BAND	9262	1852.4	2.72	13.00	Pass
	9400	1880.0	2.8	13.00	Pass
	9538	1907.6	2.62	13.00	Pass

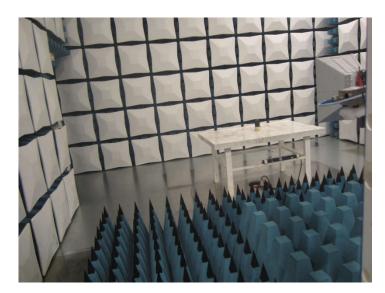
Band	Channel	Frequency(MHz)	PAR	Limit(dB)	Result
WCDMA BAND	1313	1712.6	2.88	13.00	Pass
	1450	1740.0	2.86	13.00	Pass
	1512	1752.4	2.82	13.00	Pass

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6. Test Setup Photos of the EUT

Radiated emission:

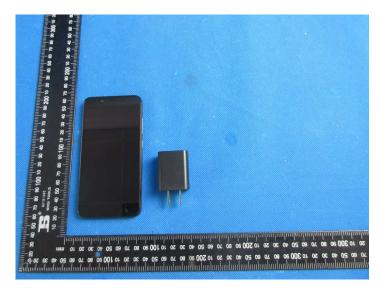


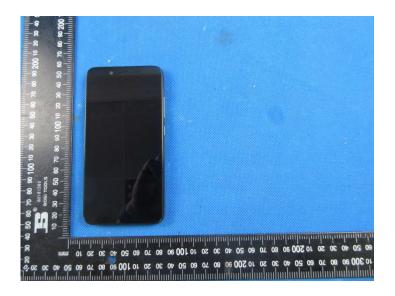


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7. External and Internal Photos of the EUT

External photos of the EUT







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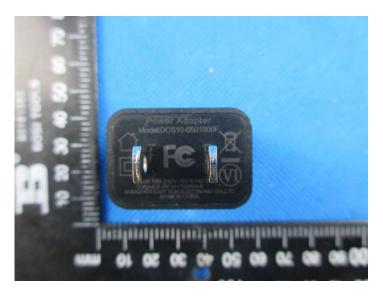


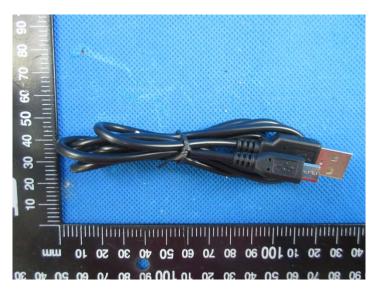




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Internal photos of the EUT



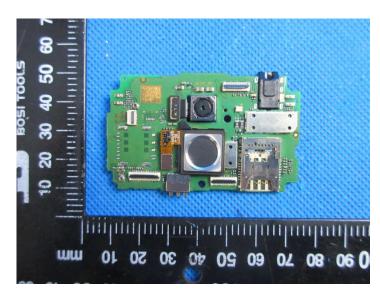




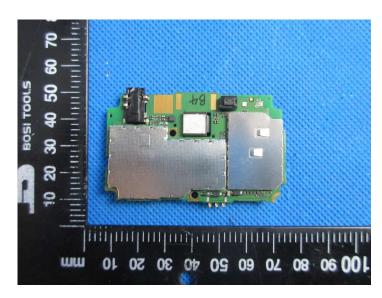
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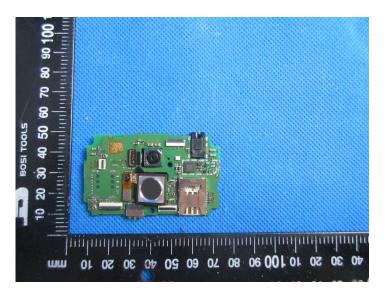


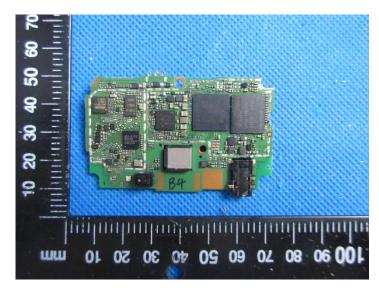




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