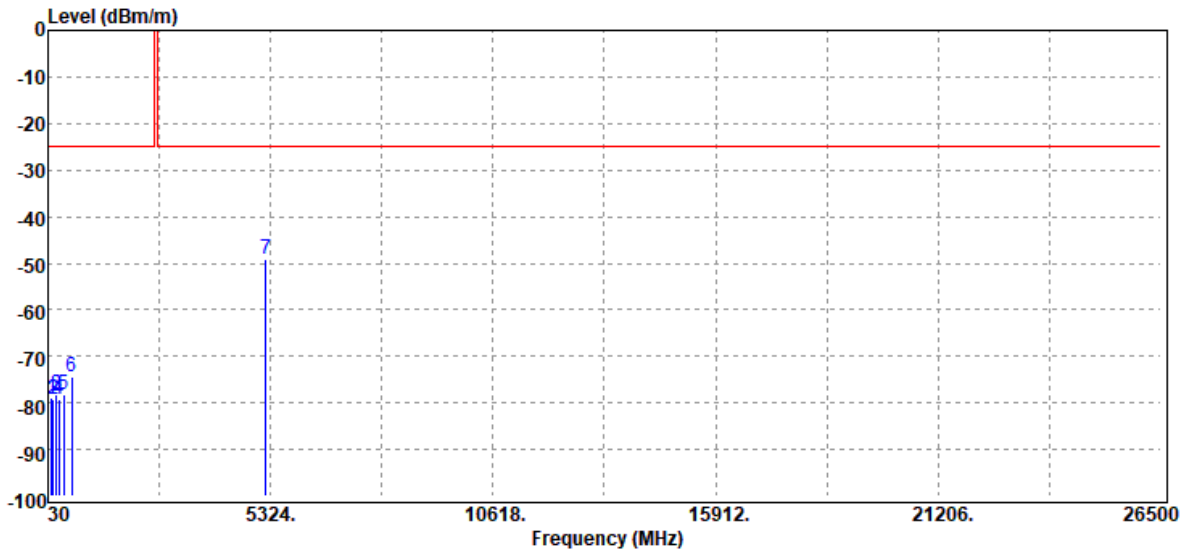


Report Number :ER-2019-A0103  
Operation Mode :LTE B38  
Test Mode :Tx CH High  
EUT Pol :H Plane  
Test Channel :2610.0 MHz

Test Date :2019-11-04  
Temp./Humi. :22.3/70  
Antenna Pol. :VERTICAL  
Engineer. : Nick



Freq. MHz	EIRP/ERP dBm	SG Output Level dBm	Antenna Gain dBi/dBd	Cable Loss dB	Limit dBm	Margin dB
117.30	-78.82	-70.71	-7.09	-1.02	-25.00	-53.82
151.25	-79.22	-70.35	-7.64	-1.23	-25.00	-54.22
236.61	-78.27	-75.15	-1.66	-1.46	-25.00	-53.27
296.75	-79.26	-75.84	-1.73	-1.69	-25.00	-54.26
406.36	-78.07	-74.55	-1.59	-1.93	-25.00	-53.07
602.30	-74.27	-69.98	-1.94	-2.35	-25.00	-49.27
5220.00	-49.03	-54.30	12.46	-7.19	-25.00	-24.03

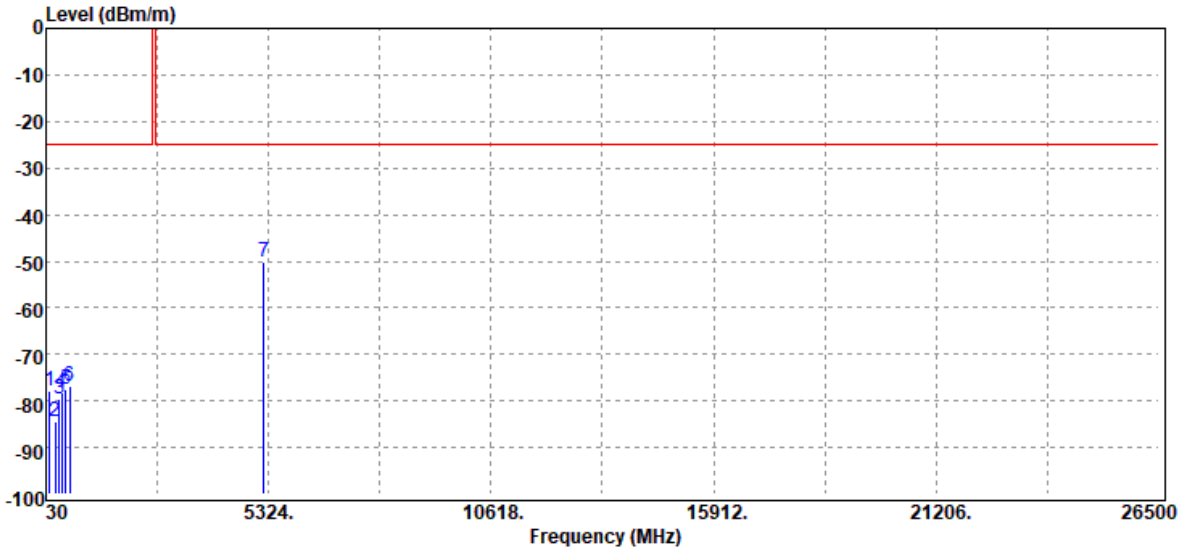
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Report Number :ER-2019-A0103  
 Operation Mode :LTE B38  
 Test Mode :Tx CH High  
 EUT Pol :H Plane  
 Test Channel :2610.0 MHz

Test Date :2019-11-04  
 Temp./Humi. :22.3/70  
 Antenna Pol. :HORIZONTAL  
 Engineer. : Nick



Freq. MHz	EIRP/ERP dBm	SG Output Level dBm	Antenna Gain dBi/dBd	Cable Loss dB	Limit dBm	Margin dB
124.09	-77.93	-69.81	-7.07	-1.05	-25.00	-52.93
256.01	-84.53	-81.34	-1.62	-1.57	-25.00	-59.53
350.10	-79.75	-76.39	-1.46	-1.90	-25.00	-54.75
400.54	-78.20	-74.68	-1.60	-1.92	-25.00	-53.20
493.66	-77.65	-73.84	-1.55	-2.26	-25.00	-52.65
585.81	-76.96	-73.39	-1.62	-1.95	-25.00	-51.96
5220.00	-50.21	-55.48	12.46	-7.19	-25.00	-25.21

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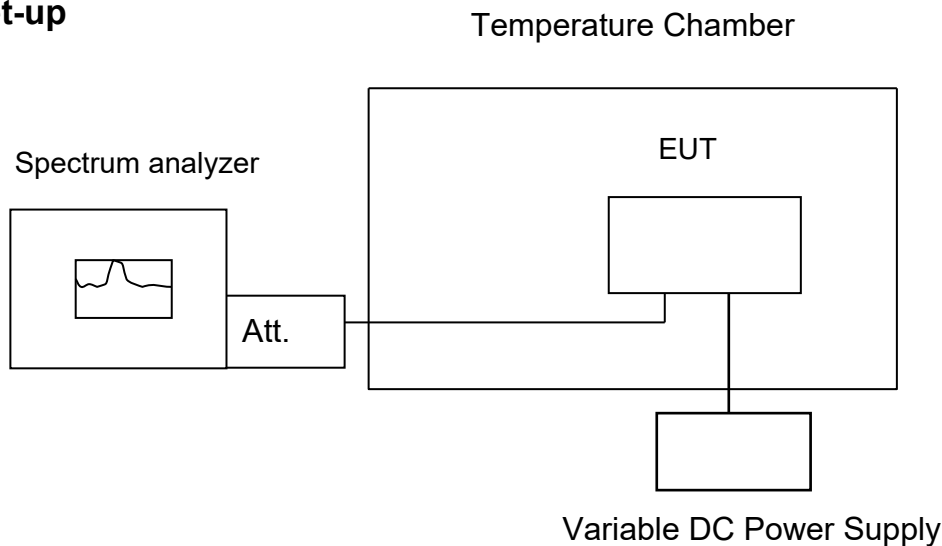
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## 10. FREQUENCY STABILITY MEASUREMENT

### 10.1. Standard Applicabl

The frequency stability shall be sufficient to ensure that the fundamental emission stays within the authorized frequency block.

### 10.2. Test Set-up



**Note:** Measurement setup for testing on Antenna connector

### 10.3. Measurement Procedure

The equipment under test was connected to an external AC or DC power supply and input rated voltage. RF output was connected to a frequency counter or spectrum analyzer via feed through attenuators. 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°C operating frequency as reference frequency. Turn EUT off and set the chamber temperature to -30°C. After the temperature stabilized for approximately 30 minutes recorded the frequency. Repeat step measure with 10°C increased per stage until the highest temperature of +50°C reached.

Set chamber temperature to 25 . Use a variable AC power supply / DC power source to power the EUT and set the voltage to rated voltage. Set the spectrum analyzer RBW low enough to obtain the desired frequency resolution and recorded the frequency. Reduce the input voltage to specify extreme voltage variation (+/- 15%) and endpoint as declared by the manufacturer, record the maximum frequency change.

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#### 10.4. Measurement Equipment Used

EQUIPMENT TYPE	MFR	MODEL NUMBER	SERIAL NUMBER	LAST CAL.	CAL DUE.
EXA Spectrum Analyzer	Agilent	N9010A	MY50420195	05/02/2019	05/01/2020
Radio Communication Analyzer	Anritsu	MT8815B	6200711454	04/01/2019	03/31/2020
Radio Communication Analyzer	Anritsu	MT8820C	6200995019	04/01/2019	03/31/2020
DC Power Supply	Agilent	E3640A	MY52410006	12/04/2018	12/03/2019
Attenuator	Mini-Circuit	BW-S10W2+	2	01/02/2019	01/01/2020
DC Block	Mini-Circuits	BLK-18-S+	1	01/02/2019	01/01/2020
Splitter	RF-LAMBAD	RFLT2W1G18G	11-JSPF412-018	01/02/2019	01/01/2020

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### 10.5. Measurement Result

GPRS 850 Mid Channel 836.6 MHz				
Limit: +/- 2.5 ppm				
Vdc	Temp. ( )	Freq. (MHz)	Delta (Hz)	Limit (Hz)
FREQUENCY ERROR vs. VOLTAGE				
4	20	836.599992	-8	2091
3.85	20	836.599999	-10	2091
3.7	20	836.599992	-8	2091
3.1	20	836.600001	1	2091
FREQUENCY ERROR vs. Temp.				
3.85	50	836.600009	9	2091
3.85	40	836.599991	-9	2091
3.85	30	836.600004	4	2091
3.85	20	836.600004	4	2091
3.85	10	836.599999	-1	2091
3.85	0	836.600002	2	2091
3.85	-10	836.600007	7	2091
3.85	-20	836.600004	4	2091
3.85	-30	836.600007	7	2091

GPRS 1900 Mid Channel 1880 MHz				
Limit: +/- 2.5 ppm				
Vdc	Temp. ( )	Freq. (MHz)	Delta (Hz)	Limit (Hz)
FREQUENCY ERROR vs. VOLTAGE				
4	20	1880.000005	5	4700
3.85	20	1879.999991	-9	4700
3.7	20	1879.999998	-2	4700
3.1	20	1879.999999	-10	4700
FREQUENCY ERROR vs. Temp.				
3.85	50	1880.000003	3	4700
3.85	40	1879.999992	-8	4700
3.85	30	1880.000001	10	4700
3.85	20	1879.999997	-3	4700
3.85	10	1879.999999	-1	4700
3.85	0	1879.999998	-2	4700
3.85	-10	1880.000002	2	4700
3.85	-20	1879.999994	-6	4700
3.85	-30	1880.000002	2	4700

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WCDMA II Mid Channel 1880 MHz				
Limit: +/- 2.5 ppm				
Vdc	Temp. ( )	Freq. (MHz)	Delta (Hz)	Limit (Hz)
FREQUENCY ERROR vs. VOLTAGE				
4	20	1880.000009	9	4700
3.85	20	1880.000007	7	4700
3.7	20	1880.000003	3	4700
3.1	20	1880.000009	9	4700
FREQUENCY ERROR vs. Temp.				
3.85	50	1880.000004	4	4700
3.85	40	1880.000002	2	4700
3.85	30	1879.999996	-4	4700
3.85	20	1879.999995	-5	4700
3.85	10	1880.000001	1	4700
3.85	0	1879.999998	-2	4700
3.85	-10	1880.000002	2	4700
3.85	-20	1879.999995	-5	4700
3.85	-30	1880.000009	9	4700

WCDMA IV Mid Channel 1732.6 MHz				
Limit: +/- 2.5 ppm				
Vdc	Temp. ( )	Freq. (MHz)	Delta (Hz)	Limit (Hz)
FREQUENCY ERROR vs. VOLTAGE				
4	20	1732.599991	-9	4331
3.85	20	1732.600006	6	4331
3.7	20	1732.599999	-1	4331
3.1	20	1732.599994	-6	4331
FREQUENCY ERROR vs. Temp.				
3.85	50	1732.599995	-5	4331
3.85	40	1732.600009	9	4331
3.85	30	1732.600004	4	4331
3.85	20	1732.600009	9	4331
3.85	10	1732.599992	-8	4331
3.85	0	1732.599993	-7	4331
3.85	-10	1732.599997	-3	4331
3.85	-20	1732.600008	8	4331
3.85	-30	1732.600005	5	4331

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WCDMA V Mid Channel 836.6 MHz				
Limit: +/- 2.5 ppm				
Vdc	Temp. ( )	Freq. (MHz)	Delta (Hz)	Limit (Hz)
FREQUENCY ERROR vs. VOLTAGE				
4	20	836.600007	7	2091
3.85	20	836.599991	-9	2091
3.7	20	836.600001	1	2091
3.1	20	836.600004	4	2091
FREQUENCY ERROR vs. Temp.				
3.85	50	836.599991	-9	2091
3.85	40	836.600001	1	2091
3.85	30	836.599999	-1	2091
3.85	20	836.599999	-1	2091
3.85	10	836.600007	7	2091
3.85	0	836.599995	-5	2091
3.85	-10	836.599995	-5	2091
3.85	-20	836.600006	6	2091
3.85	-30	836.600009	9	2091

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Reference Freq.: LTE B2 Mid Channel 1880 MHz 20M QPSK CH 18900				
Power Supply Vdc	Temp. ( )	Freq. (MHz)	Delta (Hz)	Limit = +/- 2.5 ppm (Hz)
<b>Freq. ERROR vs. VOLTAGE</b>				
4	25	1879.999992	-8	4700
3.85	25	1880.000001	1	4700
3.7	25	1880.000006	6	4700
3.1 (End Point)	25	1879.999996	-4	4700
<b>Freq. ERROR vs. Temp.</b>				
3.85	-30	1880.000002	2	4700
3.85	-20	1879.999992	-8	4700
3.85	-10	1879.999991	-9	4700
3.85	0	1879.999998	-2	4700
3.85	10	1879.999998	-2	4700
3.85	20	1879.999993	-7	4700
3.85	30	1879.999991	-9	4700
3.85	40	1879.999990	-10	4700
3.85	50	1879.999990	-10	4700

Reference Freq.: LTE B4 Mid Channel 1732.5 MHz 20M QPSK CH 20175				
Power Supply Vdc	Temp. ( )	Freq. (MHz)	Delta (Hz)	Limit = +/- 2.5 ppm (Hz)
<b>Freq. ERROR vs. VOLTAGE</b>				
4	25	1732.499993	-7	4331
3.85	25	1732.499992	-8	4331
3.7	25	1732.499993	-7	4331
3.1 (End Point)	25	1732.499997	-3	4331
<b>Freq. ERROR vs. Temp.</b>				
3.85	-30	1732.500010	10	4331
3.85	-20	1732.499993	-7	4331
3.85	-10	1732.499995	-5	4331
3.85	0	1732.500004	4	4331
3.85	10	1732.500006	6	4331
3.85	20	1732.500007	7	4331
3.85	30	1732.500006	6	4331
3.85	40	1732.499993	-7	4331
3.85	50	1732.500004	4	4331

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Reference Freq.: LTE B5 Mid Channel 836.5 MHz 10M QPSK CH 20525				
Power Supply Vdc	Temp. ( )	Freq. (MHz)	Delta (Hz)	Limit = +/- 2.5 ppm (Hz)
<b>Freq. ERROR vs. VOLTAGE</b>				
4	25	836.499994	-6	2091
3.85	25	836.499993	-7	2091
3.7	25	836.499996	-4	2091
3.1 (End Point)	25	836.500006	6	2091
<b>Freq. ERROR vs. Temp.</b>				
3.85	-30	836.499999	-1	2091
3.85	-20	836.500007	7	2091
3.85	-10	836.500002	2	2091
3.85	0	836.500003	3	2091
3.85	10	836.500008	8	2091
3.85	20	836.500008	8	2091
3.85	30	836.499991	-9	2091
3.85	40	836.500003	3	2091
3.85	50	836.500002	2	2091

Reference Freq.: LTE B7 Mid Channel 2535 MHz 10M QPSK CH 21100				
Power Supply Vdc	Temp. ( )	Freq. (MHz)	Delta (Hz)	Limit = +/- 2.5 ppm (Hz)
<b>Freq. ERROR vs. VOLTAGE</b>				
4	25	2535.000006	6	6338
3.85	25	2535.000003	3	6338
3.7	25	2534.999990	-10	6338
3.1 (End Point)	25	2535.000004	4	6338
<b>Freq. ERROR vs. Temp.</b>				
3.85	-30	2535.000001	1	6338
3.85	-20	2534.999999	-1	6338
3.85	-10	2534.999996	-4	6338
3.85	0	2534.999997	-3	6338
3.85	10	2535.000008	8	6338
3.85	20	2534.999992	-8	6338
3.85	30	2535.000005	5	6338
3.85	40	2535.000004	4	6338
3.85	50	2535.000008	8	6338

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Reference Freq.: LTE B12 Mid Channel 707.5 MHz 10M QPSK CH 23095				
Power Supply Vdc	Temp. ( )	Freq. (MHz)	Delta (Hz)	Limit = +/- 2.5 ppm (Hz)
<b>Freq. ERROR vs. VOLTAGE</b>				
4	25	707.499997	-3	1769
3.85	25	707.499998	-2	1769
3.7	25	707.499993	-7	1769
3.1 (End Point)	25	707.500005	5	1769
<b>Freq. ERROR vs. Temp.</b>				
3.85	-30	707.500000	0	1769
3.85	-20	707.500006	6	1769
3.85	-10	707.499996	-4	1769
3.85	0	707.500008	8	1769
3.85	10	707.500004	4	1769
3.85	20	707.499992	-8	1769
3.85	30	707.499997	-3	1769
3.85	40	707.500001	1	1769
3.85	50	707.499994	-6	1769

Reference Freq.: LTE B13 Mid Channel 782 MHz 10M QPSK CH 23230				
Power Supply Vdc	Temp. ( )	Freq. (MHz)	Delta (Hz)	Limit = +/- 2.5 ppm (Hz)
<b>Freq. ERROR vs. VOLTAGE</b>				
4	25	781.999991	-9	1955
3.85	25	781.999998	-2	1955
3.7	25	782.000004	4	1955
3.1 (End Point)	25	782.000001	1	1955
<b>Freq. ERROR vs. Temp.</b>				
3.85	-30	782.000006	6	1955
3.85	-20	781.999999	-1	1955
3.85	-10	782.000006	6	1955
3.85	0	782.000004	4	1955
3.85	10	781.999992	-8	1955
3.85	20	782.000009	9	1955
3.85	30	782.000006	6	1955
3.85	40	782.000001	1	1955
3.85	50	782.000004	4	1955

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Reference Freq.: LTE B17 Mid Channel 710 MHz 10M QPSK CH 23790				
Power Supply Vdc	Temp. ( )	Freq. (MHz)	Delta (Hz)	Limit = +/- 2.5 ppm (Hz)
<b>Freq. ERROR vs. VOLTAGE</b>				
4	25	710.000003	3	1775
3.85	25	710.000001	1	1775
3.7	25	709.999996	-4	1775
3.1 (End Point)	25	709.999997	-3	1775
<b>Freq. ERROR vs. Temp.</b>				
3.85	-30	709.999995	-5	1775
3.85	-20	709.999993	-7	1775
3.85	-10	709.999997	-3	1775
3.85	0	710.000000	0	1775
3.85	10	709.999993	-7	1775
3.85	20	709.999997	-3	1775
3.85	30	709.999999	-1	1775
3.85	40	710.000009	9	1775
3.85	50	709.999997	-3	1775

Reference Freq.: LTE B38 Mid Channel 2595 MHz 10M QPSK CH 38000				
Power Supply Vdc	Temp. ( )	Freq. (MHz)	Delta (Hz)	Limit = +/- 2.5 ppm (Hz)
<b>Freq. ERROR vs. VOLTAGE</b>				
4	25	2594.999997	-3	6488
3.85	25	2594.999994	-6	6488
3.7	25	2594.999993	-7	6488
3.1 (End Point)	25	2595.000005	5	6488
<b>Freq. ERROR vs. Temp.</b>				
3.85	-30	2595.000005	5	6488
3.85	-20	2594.999996	-4	6488
3.85	-10	2595.000002	2	6488
3.85	0	2594.999992	-8	6488
3.85	10	2594.999999	-1	6488
3.85	20	2594.999990	-10	6488
3.85	30	2595.000001	1	6488
3.85	40	2594.999993	-7	6488
3.85	50	2595.000003	3	6488

**Note: The battery is rated 3.85Vdc.**

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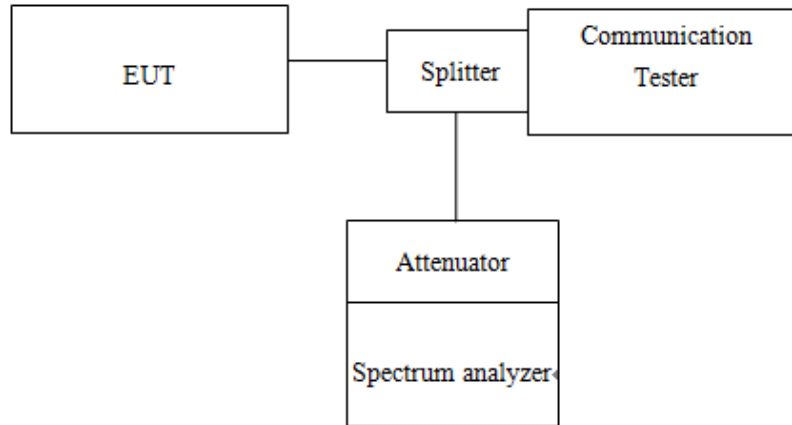
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## 11. PEAK TO AVERAGE RATIO

### 11.1. Standard Applicable

The peak-to-average ratio (PAR) of the transmission may not exceed 13dB.

### 11.2. Test SET-UP



### 11.3. Measurement Procedure

1. KDB 971168 D01 is employed as the following procedure is proper adjusted accordingly:
2. Set resolution/measurement bandwidth  $\geq$  signal's occupied bandwidth; & internal = 1ms
3. Set the number of counts to a value that stabilizes the measured CCDF curve.

### 11.4. Measurement Equipment Used

EQUIPMENT TYPE	MFR	MODEL NUMBER	SERIAL NUMBER	LAST CAL.	CAL DUE.
EXA Spectrum Analyzer	Agilent	N9010A	MY50420195	05/02/2019	05/01/2020
Radio Communication Analyzer	Anritsu	MT8815B	6200711454	04/01/2019	03/31/2020
Radio Communication Analyzer	Anritsu	MT8820C	6200995019	04/01/2019	03/31/2020
DC Power Supply	Agilent	E3640A	MY52410006	12/04/2018	12/03/2019
Attenuator	Mini-Circuit	BW-S10W2+	2	01/02/2019	01/01/2020
DC Block	Mini-Circuits	BLK-18-S+	1	01/02/2019	01/01/2020
Splitter	RF-LAMBAD	RFLT2W1G18G	11-JSPF412-018	01/02/2019	01/01/2020

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## 11.5. Measurement Result

### Tabular Results:

Freq. (MHz)	CH	Peak-to-Average Ratio (dB)	
		GSM 850	GPRS 850
824.2	128	8.06	11.51
836.6	190	9.74	8.24
848.8	251	10.05	8.73

Freq. (MHz)	CH	Peak-to-Average Ratio (dB)	
		GSM 1900	GPRS 1900
1850.2	512	9.75	10.35
1880	661	9.75	10.27
1909.8	810	10.22	11.66

Freq. (MHz)	CH	Peak-to-Average Ratio (dB)		
		WCDMA II	HSDPA II	HSUPA II
1852.4	9262	3.04	3.73	3.67
1880	9400	3.07	3.80	3.06
1907.6	9538	3.03	3.87	4.04

Freq. (MHz)	CH	Peak-to-Average Ratio (dB)		
		WCDMA IV	HSDPA IV	HSUPA IV
1712.4	1312	3.04	3.82	3.92
1732.6	1413	2.92	3.48	3.73
1752.6	1513	3.06	3.67	3.65

Freq. (MHz)	CH	Peak-to-Average Ratio (dB)		
		WCDMA V	HSDPA V	HSUPA V
826.4	4132	3.03	3.83	4.09
836.6	4183	3.08	3.43	3.88
846.6	4233	3.02	3.79	3.96

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LTE BAND 2							
Channel bandwidth: 1.4MHz				Channel bandwidth: 3MHz			
Freq. (MHz)	CH	PAPR (dB)		Freq. (MHz)	CH	PAPR (dB)	
		64QAM	Limit			64QAM	Limit
1850.7	18607	6.64	13	1851.5	18615	6.48	13
1880.0	18900	6.77	13	1880.0	18900	6.33	13
1909.3	19193	6.87	13	1908.5	19185	6.54	13

LTE BAND 2							
Channel bandwidth: 5MHz				Channel bandwidth: 10MHz			
Freq. (MHz)	CH	PAPR (dB)		Freq. (MHz)	CH	PAPR (dB)	
		64QAM	Limit			64QAM	Limit
1852.5	18625	6.50	13	1855.0	18650	6.49	13
1880.0	18900	5.89	13	1880.0	18900	6.52	13
1907.5	19175	6.63	13	1905.0	19150	6.56	13

LTE BAND 2							
Channel bandwidth: 15MHz				Channel bandwidth: 20MHz			
Freq. (MHz)	CH	PAPR (dB)		Freq. (MHz)	CH	PAPR (dB)	
		64QAM	Limit			64QAM	Limit
1857.5	18675	6.39	13	1860.0	18700	6.51	13
1880.0	18900	6.46	13	1880.0	18900	6.54	13
1902.5	19125	6.54	13	1900.0	19100	6.54	13

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LTE BAND 4							
Channel bandwidth: 1.4MHz				Channel bandwidth: 3MHz			
Freq. (MHz)	CH	PAPR (dB)		Freq. (MHz)	CH	PAPR (dB)	
		64QAM	Limit			64QAM	Limit
1710.7	19957	6.99	13	1711.5	19965	6.63	13
1732.5	20175	6.63	13	1732.5	20175	6.49	13
1754.3	20393	6.65	13	1753.5	20385	6.65	13

LTE BAND 4							
Channel bandwidth: 5MHz				Channel bandwidth: 10MHz			
Freq. (MHz)	CH	PAPR (dB)		Freq. (MHz)	CH	PAPR (dB)	
		64QAM	Limit			64QAM	Limit
1712.5	19957	6.53	13	1715.0	20000	6.60	13
1732.5	20175	6.57	13	1732.5	20175	6.50	13
1752.5	20375	6.62	13	1750.0	20350	6.62	13

LTE BAND 4							
Channel bandwidth: 15MHz				Channel bandwidth: 20MHz			
Freq. (MHz)	CH	PAPR (dB)		Freq. (MHz)	CH	PAPR (dB)	
		64QAM	Limit			64QAM	Limit
1717.5	20025	6.57	13	1720.0	20050	6.44	13
1732.5	20175	6.46	13	1732.5	20175	6.38	13
1747.5	20325	6.47	13	1745.0	20300	6.55	13

LTE BAND 5							
Channel bandwidth: 1.4MHz				Channel bandwidth: 3MHz			
Freq. (MHz)	CH	PAPR (dB)		Freq. (MHz)	CH	PAPR (dB)	
		64QAM	Limit			64QAM	Limit
824.7	20407	6.61	13	825.5	20415	6.50	13
836.5	20525	6.60	13	836.5	20525	6.32	13
848.3	20643	6.48	13	847.5	20635	6.51	13

LTE BAND 5							
Channel bandwidth: 5MHz				Channel bandwidth: 10MHz			
Freq. (MHz)	CH	PAPR (dB)		Freq. (MHz)	CH	PAPR (dB)	
		64QAM	Limit			64QAM	Limit
826.5	20425	6.42	13	829.0	20450	6.49	13
836.5	20525	6.48	13	836.5	20525	6.36	13
846.5	20625	6.44	13	844.0	20600	6.55	13

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LTE BAND 7							
Channel bandwidth: 5MHz				Channel bandwidth: 10MHz			
Freq. (MHz)	CH	PAPR (dB)		Freq. (MHz)	CH	PAPR (dB)	
		64QAM	Limit			64QAM	Limit
2502.5	20775	6.60	13	2505.0	20800	6.48	13
2535.0	21100	6.53	13	2535.0	21100	6.48	13
2567.5	21375	6.50	13	2565.0	21350	6.49	13

LTE BAND 7							
Channel bandwidth: 15MHz				Channel bandwidth: 20MHz			
Freq. (MHz)	CH	PAPR (dB)		Freq. (MHz)	CH	PAPR (dB)	
		64QAM	Limit			64QAM	Limit
2507.5	20825	6.50	13	2510	20850	6.59	13
2535.0	21100	6.48	13	2535	21100	6.52	13
2562.5	21375	6.42	13	2560	21350	6.61	13

LTE BAND 12							
Channel bandwidth: 1.4MHz				Channel bandwidth: 3MHz			
Freq. (MHz)	CH	PAPR (dB)		Freq. (MHz)	CH	PAPR (dB)	
		64QAM	Limit			64QAM	Limit
699.7	23017	6.69	13	700.5	23025	6.67	13
707.5	23095	6.69	13	707.5	23095	6.62	13
715.3	23173	6.80	13	714.5	23165	6.61	13

LTE BAND 12							
Channel bandwidth: 5MHz				Channel bandwidth: 10MHz			
Freq. (MHz)	CH	PAPR (dB)		Freq. (MHz)	CH	PAPR (dB)	
		64QAM	Limit			64QAM	Limit
701.5	23035	6.56	13	704.0	23060	6.52	13
707.5	23095	6.54	13	707.5	23095	6.50	13
713.5	23155	6.58	13	711.0	23130	6.48	13

LTE BAND 13							
Channel bandwidth: 5MHz				Channel bandwidth: 10MHz			
Freq. (MHz)	CH	PAPR (dB)		Freq. (MHz)	CH	PAPR (dB)	
		64QAM	Limit			64QAM	Limit
779.5	23205	6.64	13	782.0	23230	6.56	13
782.0	23230	6.73	13				
784.5	23255	6.71	13				

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LTE BAND 17							
Channel bandwidth: 1.4MHz				Channel bandwidth: 3MHz			
Freq. (MHz)	CH	PAPR (dB)		Freq. (MHz)	CH	PAPR (dB)	
		64QAM	Limit			64QAM	Limit
706.5	23755	6.47	13	709.0	23780	6.41	13
710.0	23790	6.48	13	710.0	23790	6.50	13
713.5	23825	6.54	13	711.0	23800	6.41	13

LTE BAND 38							
Channel bandwidth: 5MHz				Channel bandwidth: 10MHz			
Freq. (MHz)	CH	PAPR (dB)		Freq. (MHz)	CH	PAPR (dB)	
		64QAM	Limit			64QAM	Limit
2572.5	37775	11.59	13	2575	37800	11.07	13
2595.0	38000	10.83	13	2595	38000	9.96	13
2617.5	38225	9.31	13	2615	38200	11.95	13

LTE BAND 38							
Channel bandwidth: 15MHz				Channel bandwidth: 20MHz			
Freq. (MHz)	CH	PAPR (dB)		Freq. (MHz)	CH	PAPR (dB)	
		64QAM	Limit			64QAM	Limit
2577.5	37825	10.14	13	2580.0	37850	10.10	13
2595.0	38000	11.07	13	2595.0	38000	10.28	13
2612.5	38175	12.42	13	2610.0	38150	8.18	13

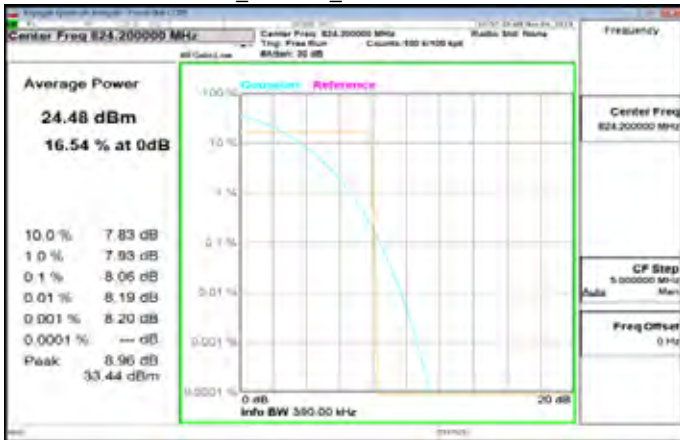
**Please refer to next page for test plots.**

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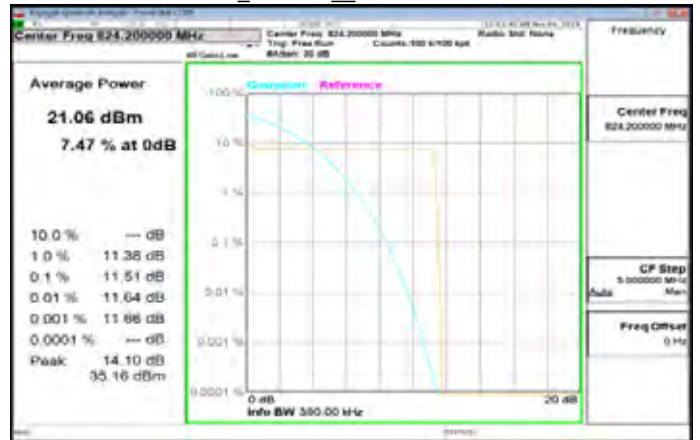
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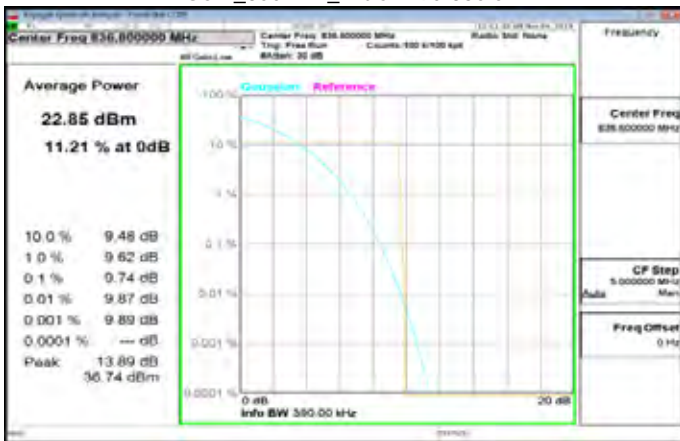
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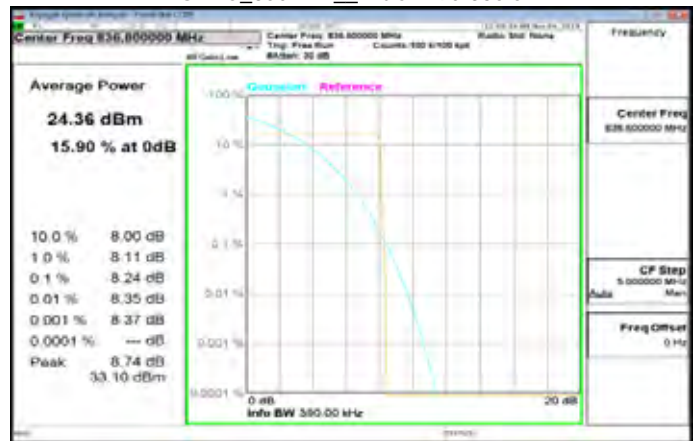
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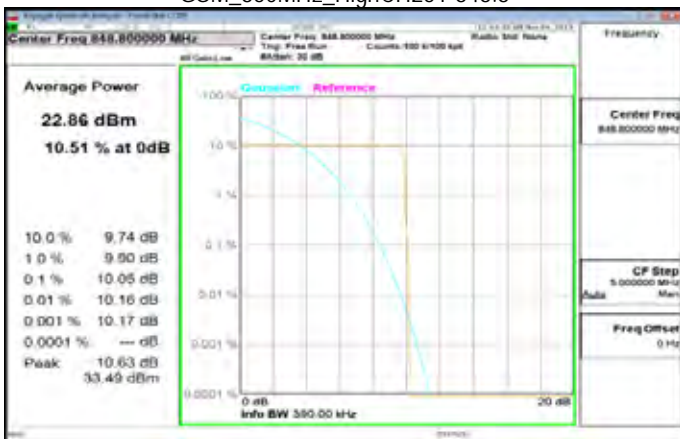
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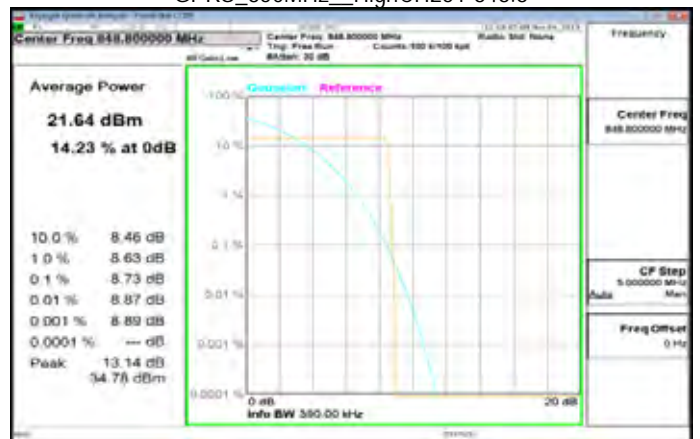
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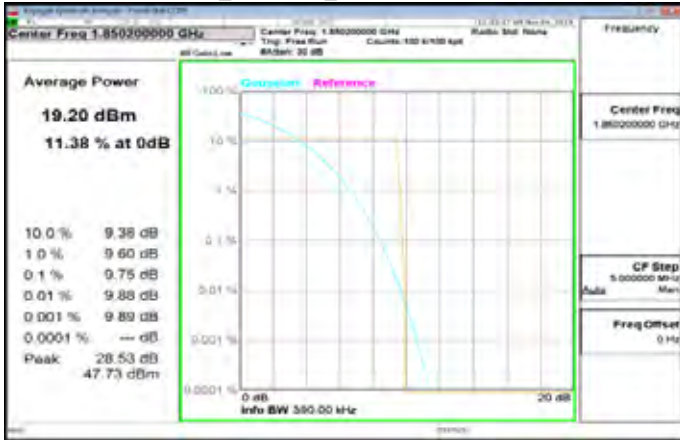


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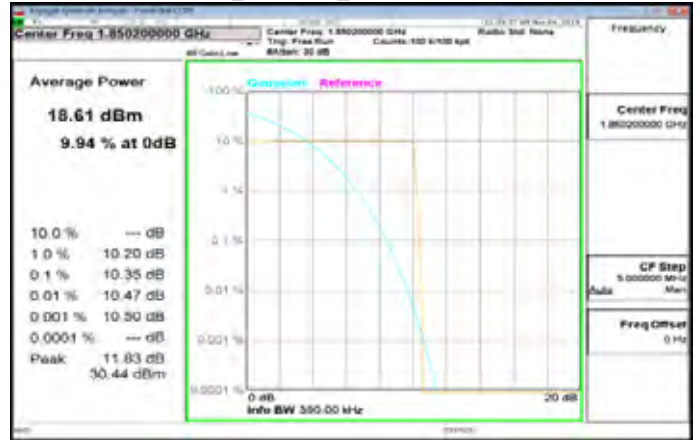
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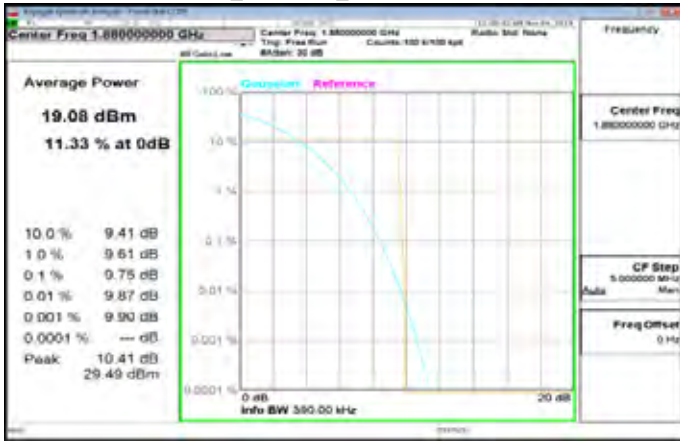
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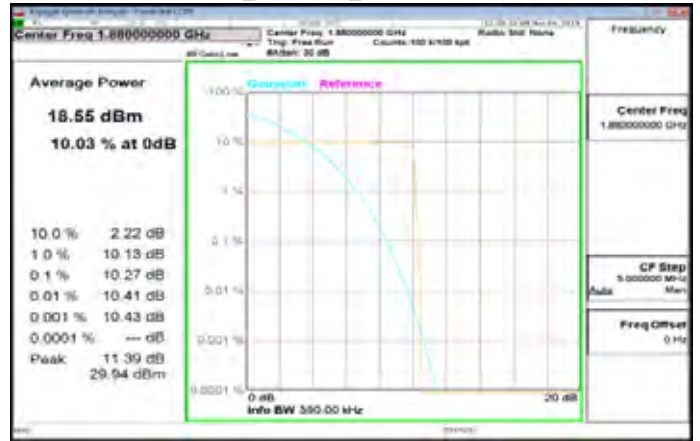
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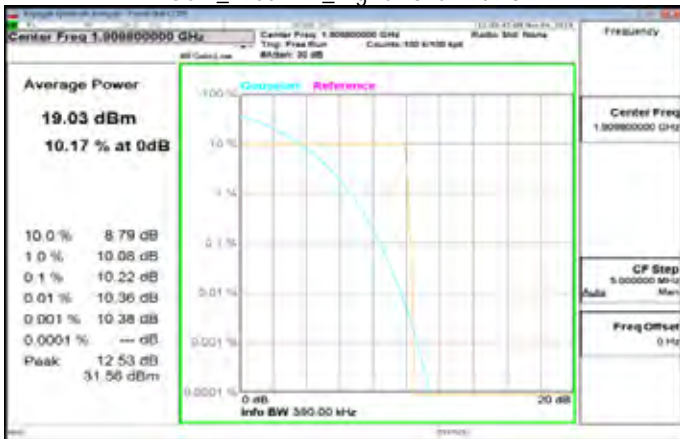
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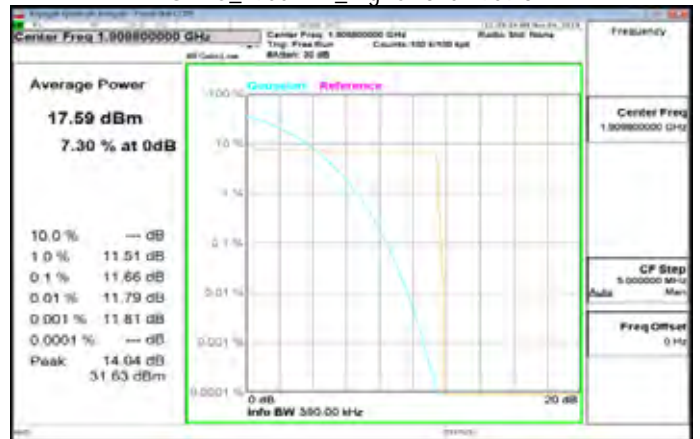
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GSM\_1900MHz\_HighCH810-1909.8



GRPS\_1900MHz\_HighCH810-1909.8



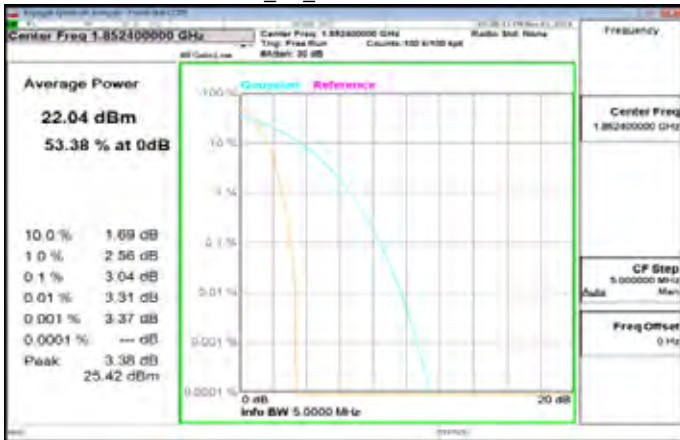
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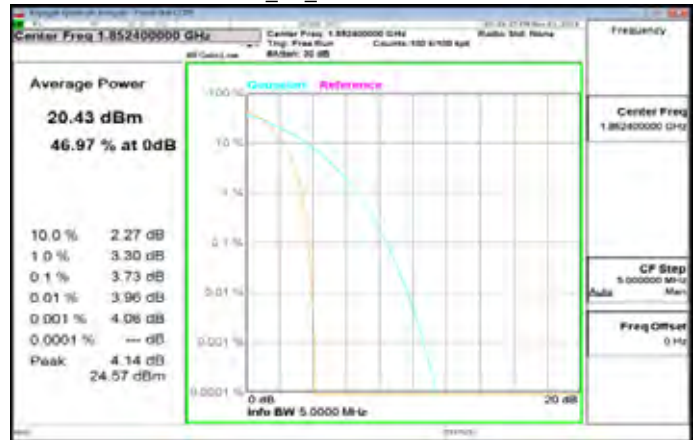
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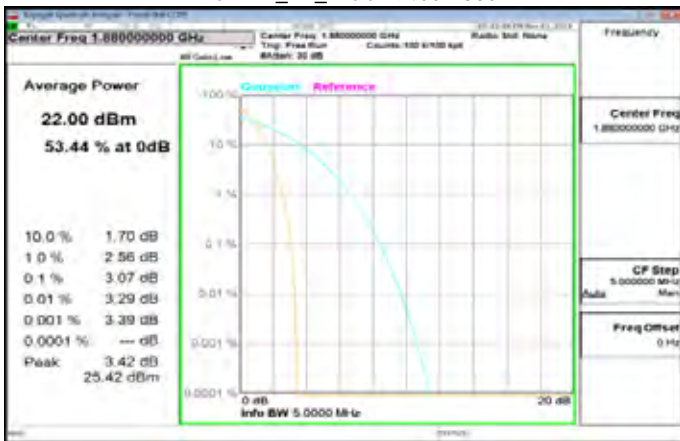
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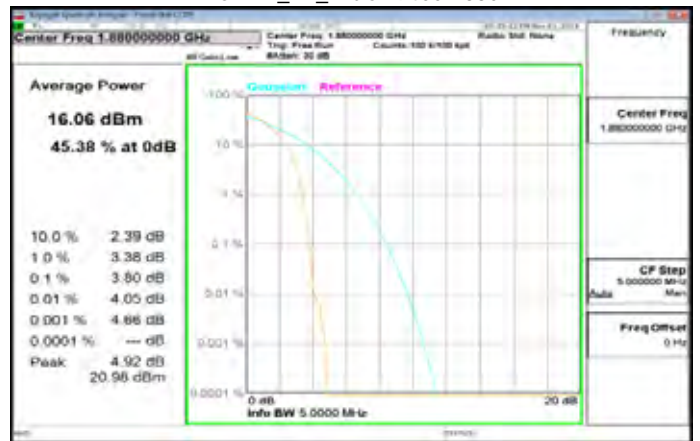
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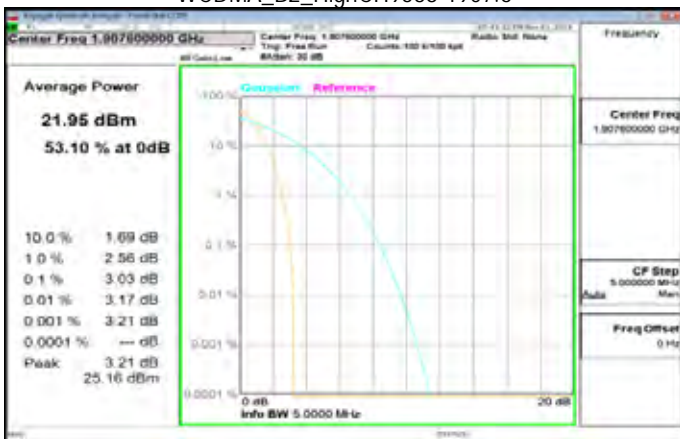
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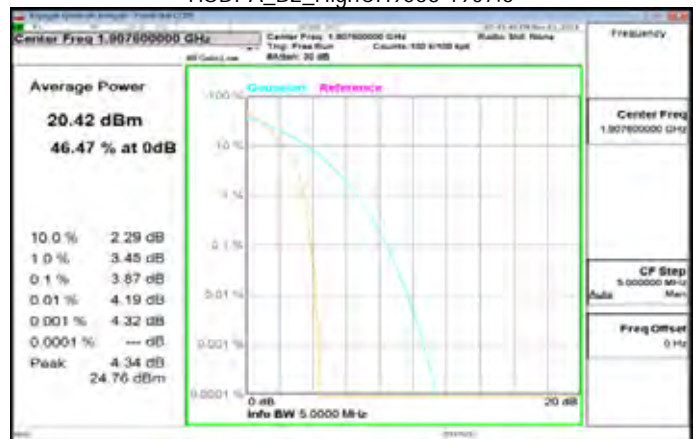
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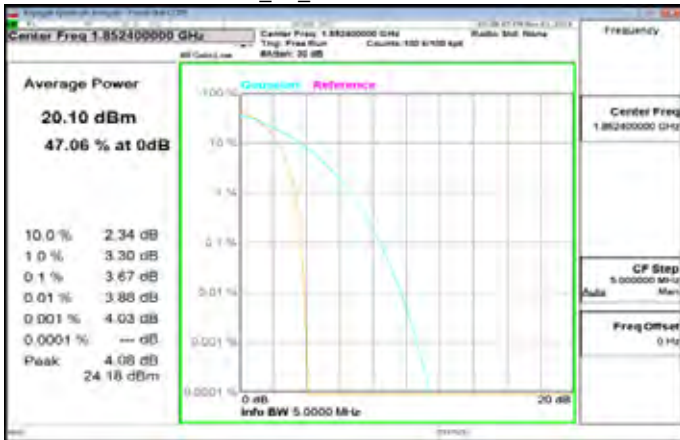


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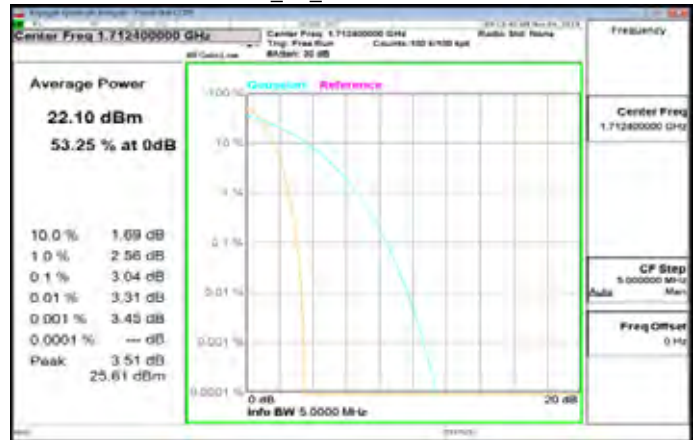
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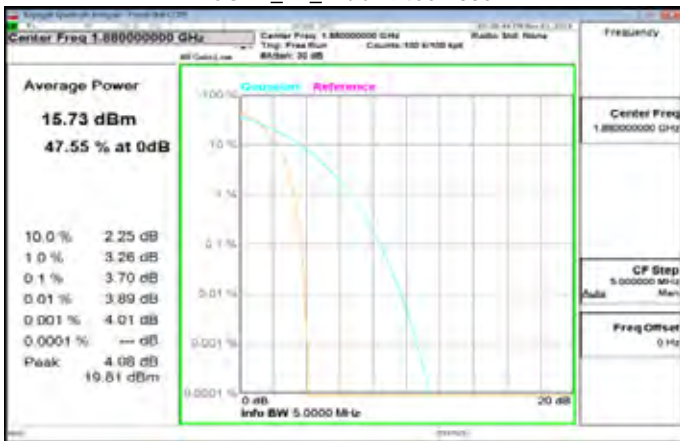
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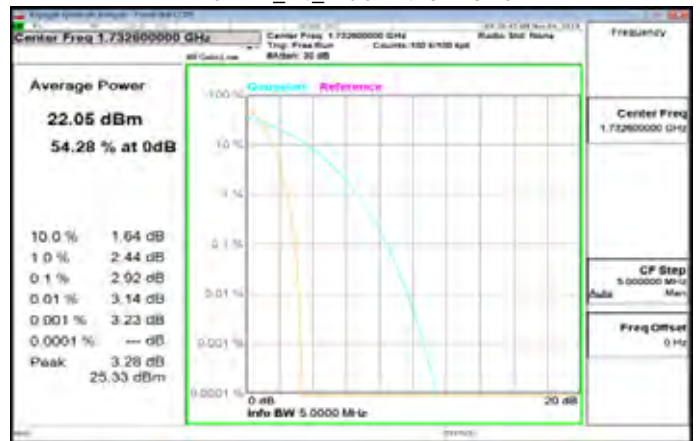
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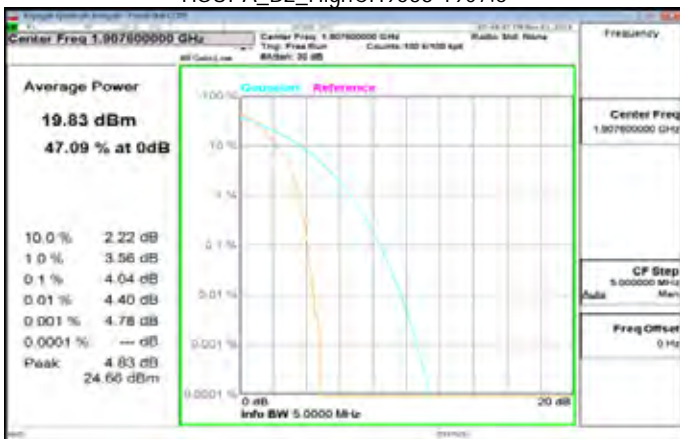
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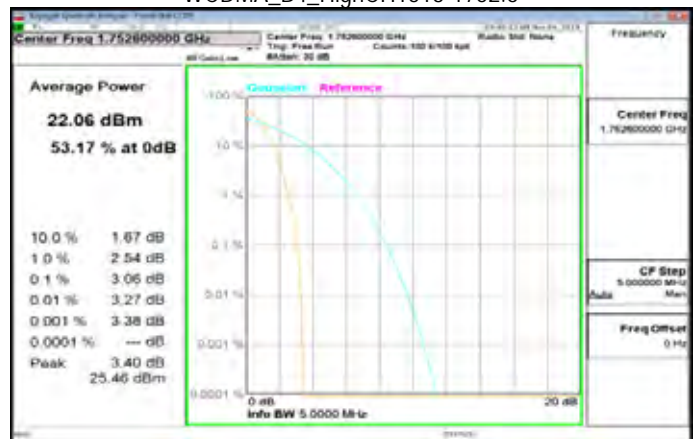
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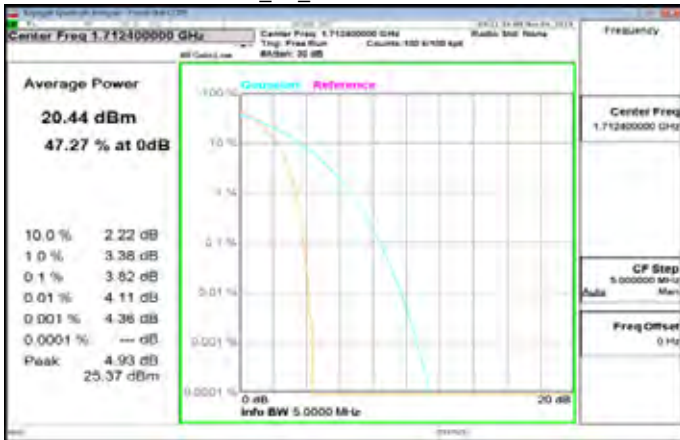
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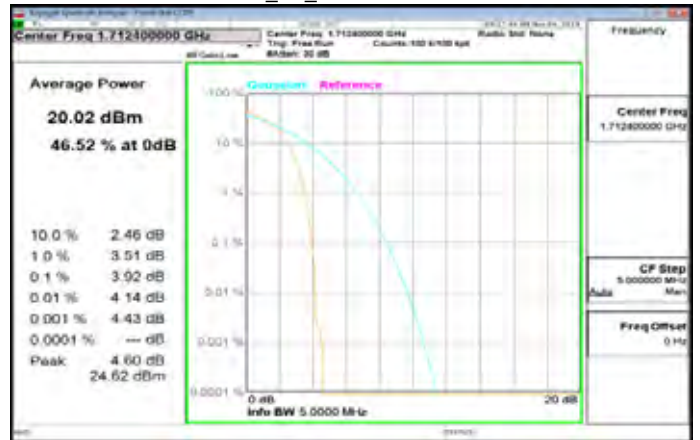
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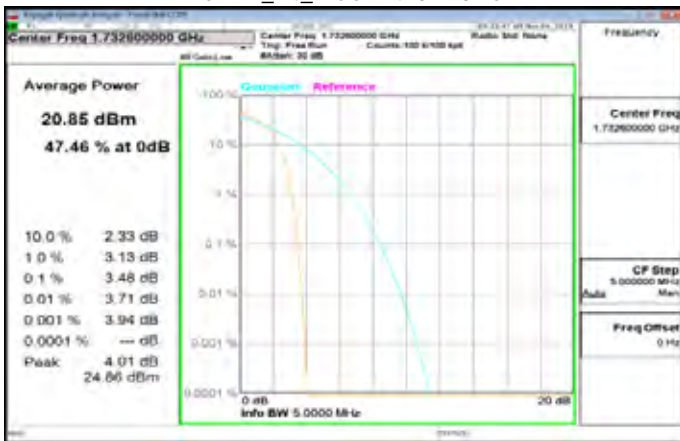
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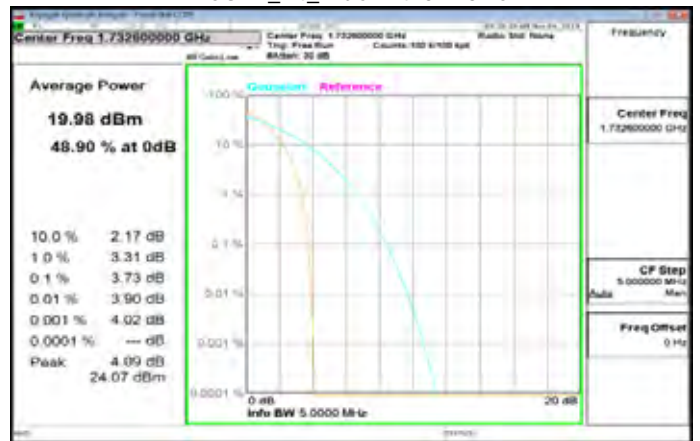
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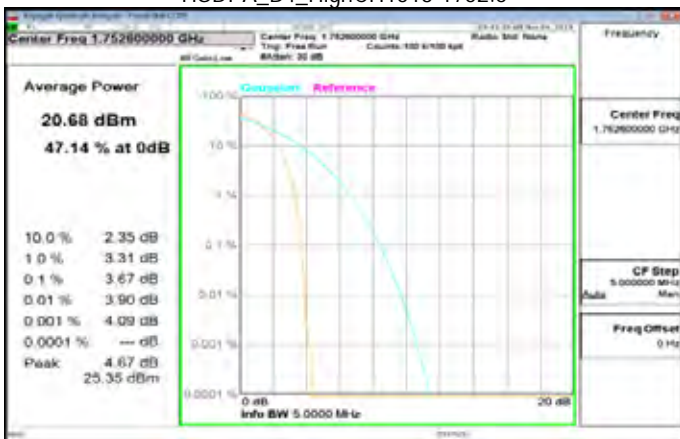
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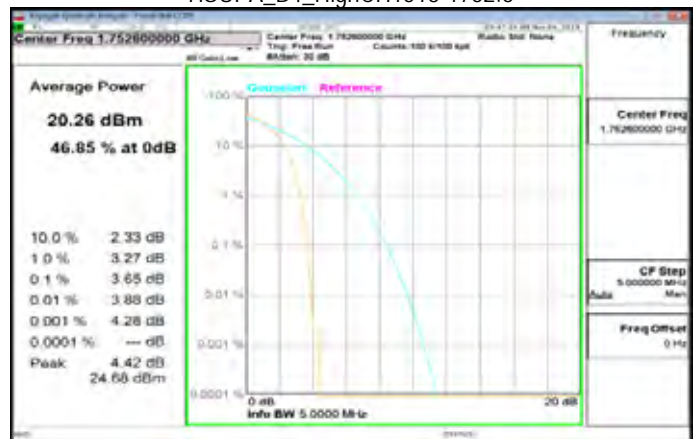
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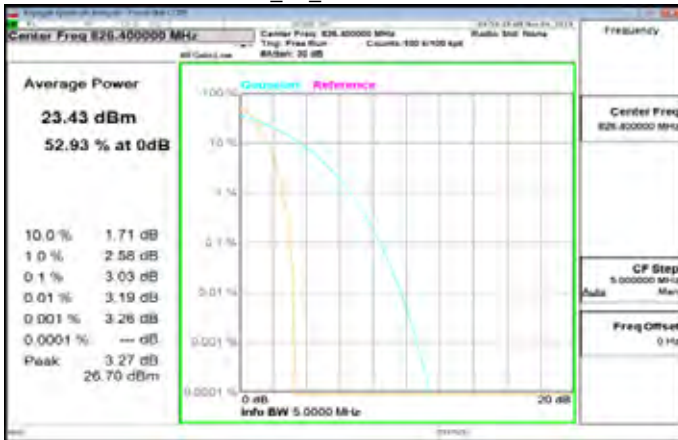


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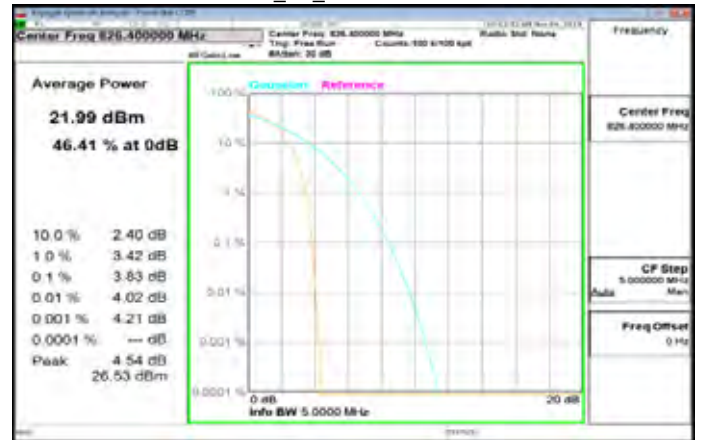
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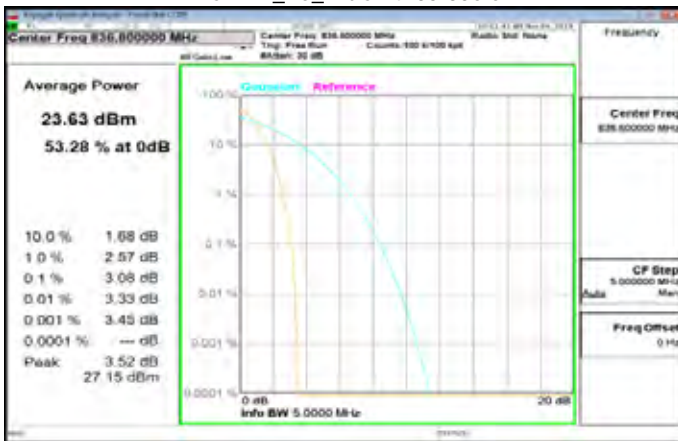
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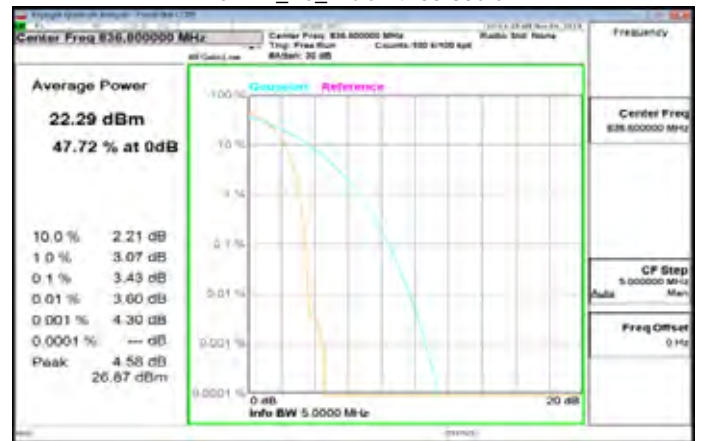
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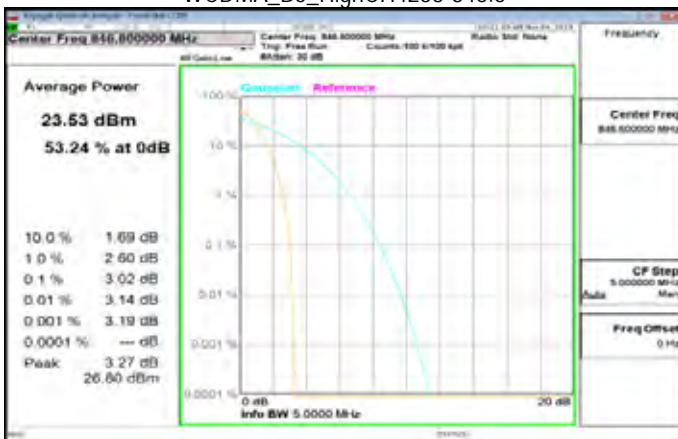
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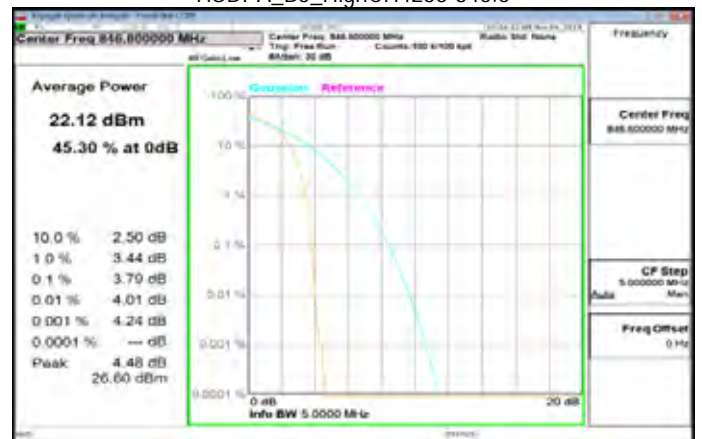
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HSDPA\_B5\_HighCH4233-846.6



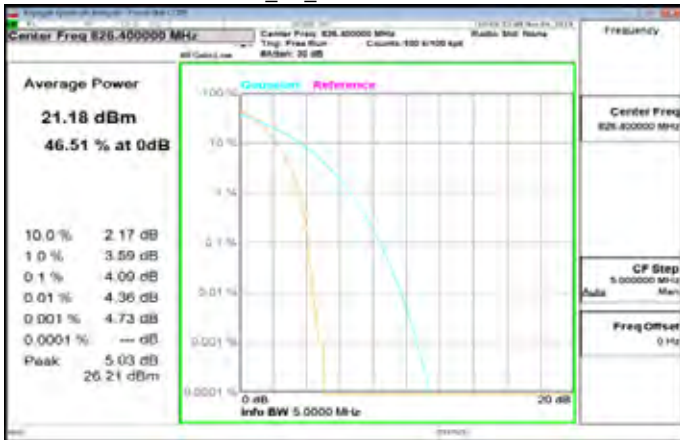
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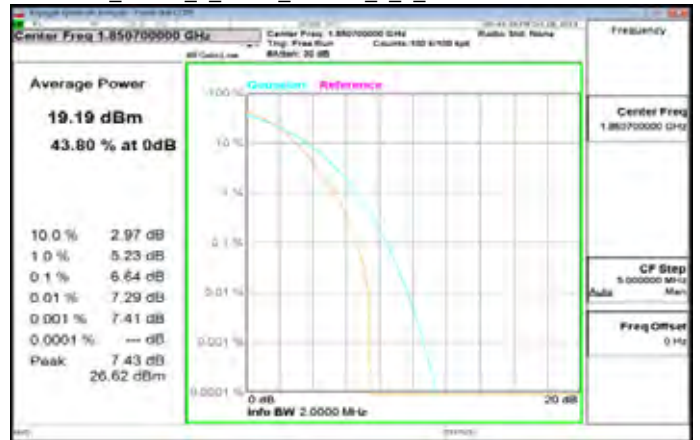
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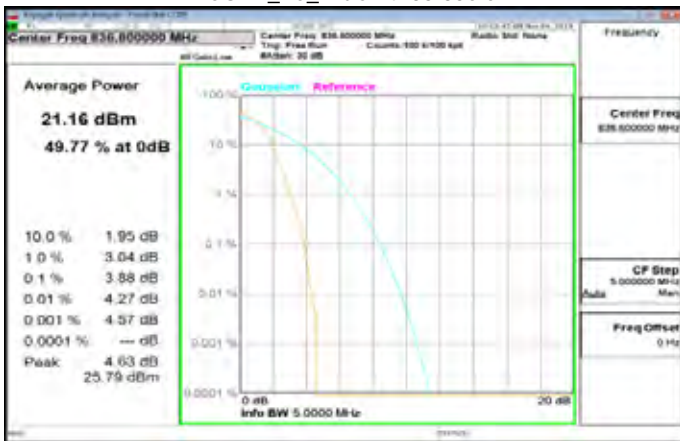
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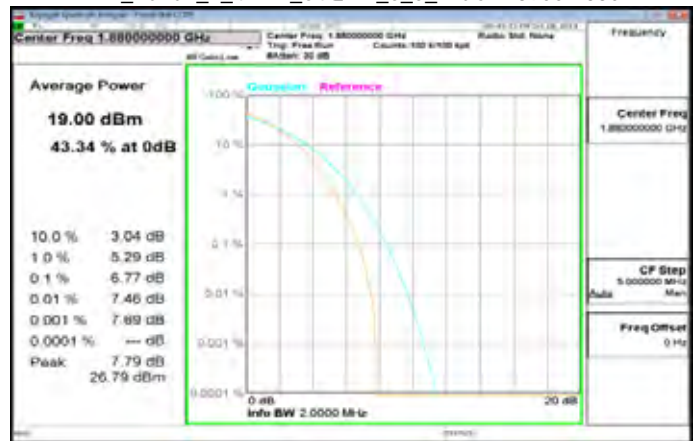
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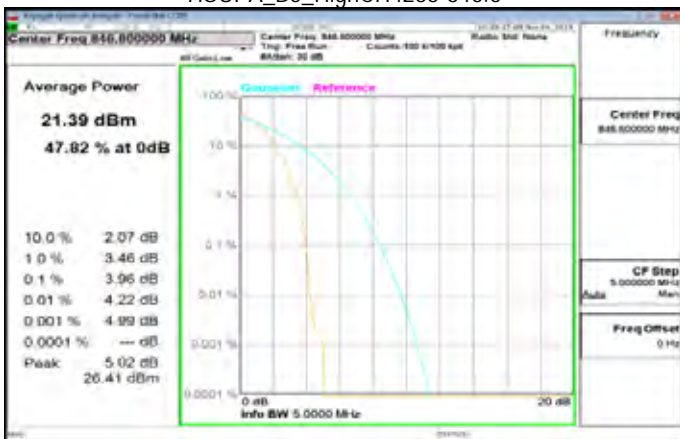
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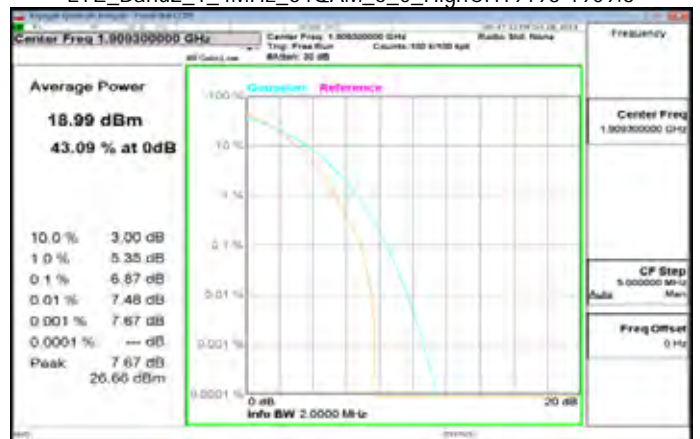
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HSUPA\_B5\_HighCH4233-846.6



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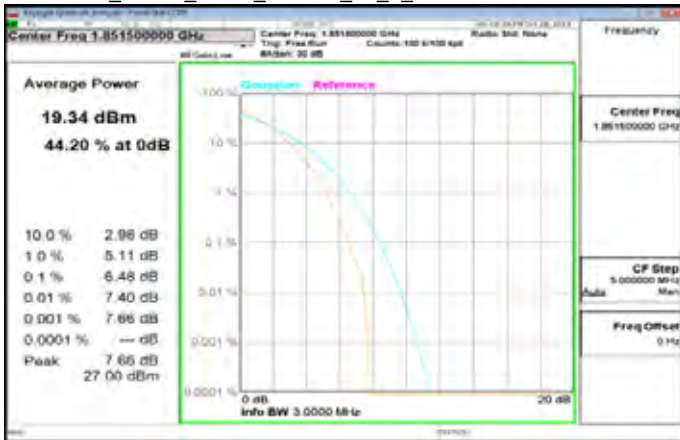
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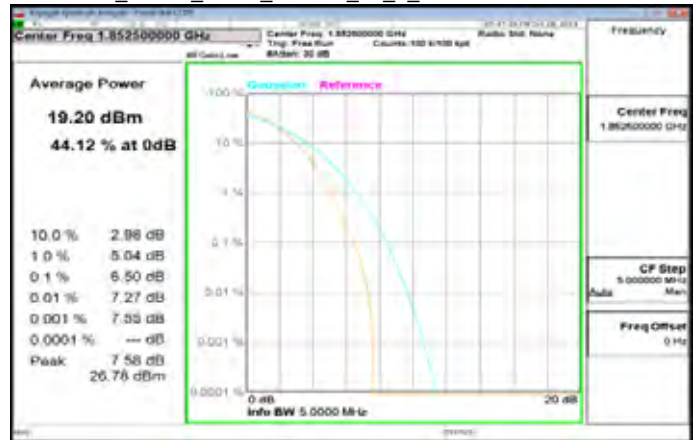
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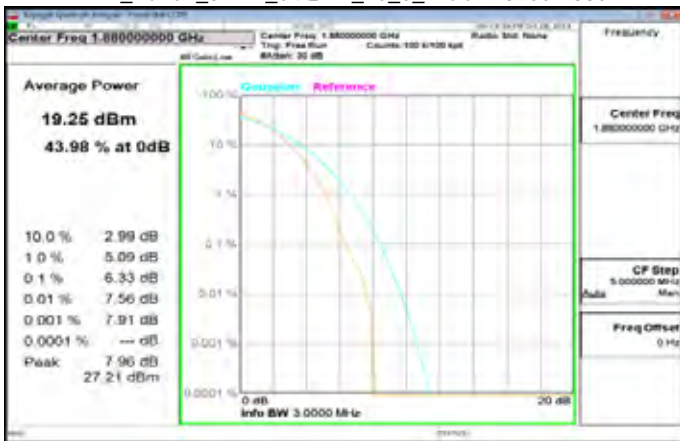
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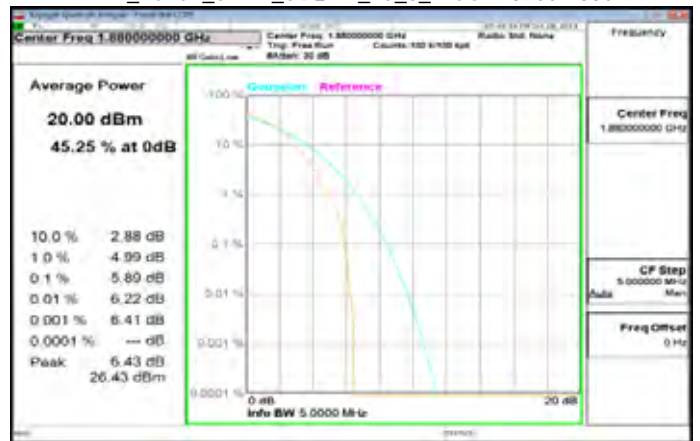
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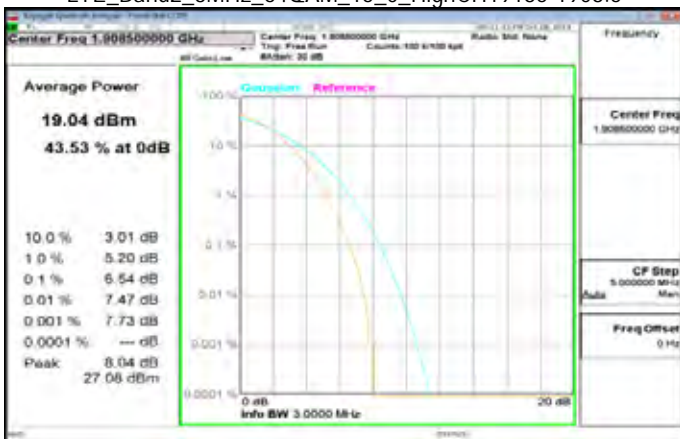
LTE\_Band2\_3MHz\_64QAM\_15\_0\_MidCH18900-1880



LTE\_Band2\_5MHz\_64QAM\_25\_0\_MidCH18900-1880



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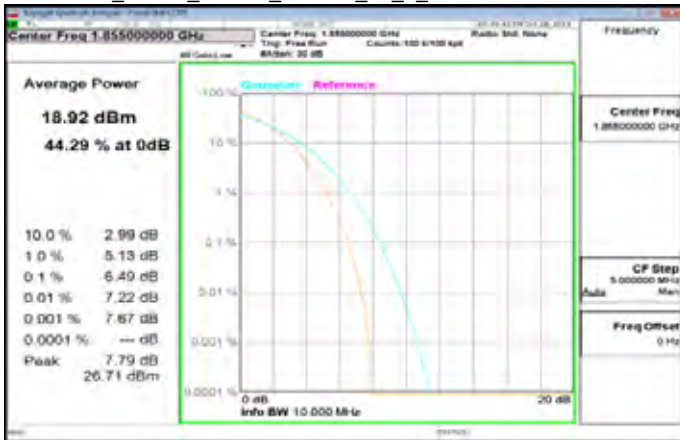


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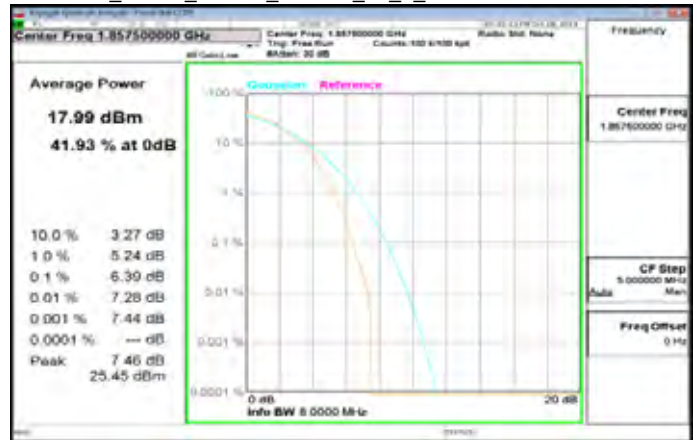
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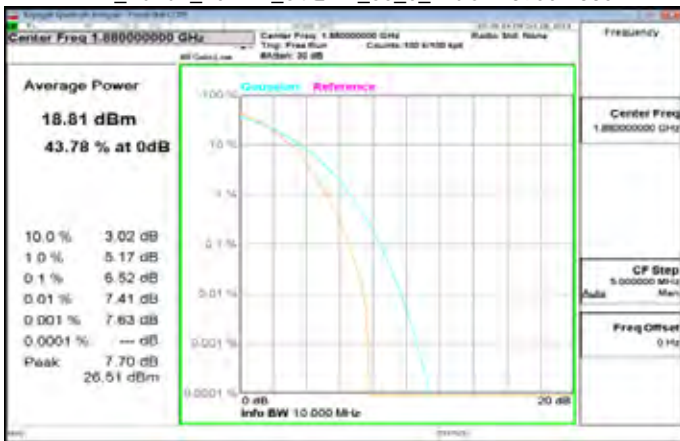
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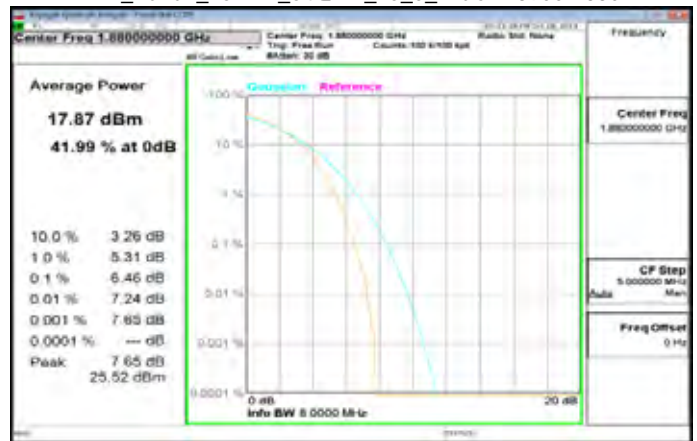
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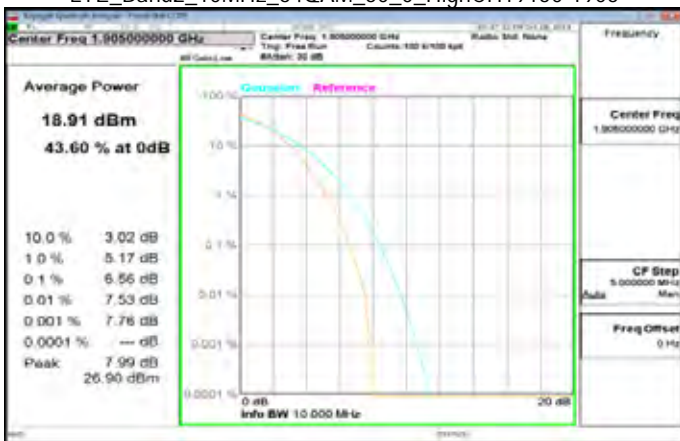
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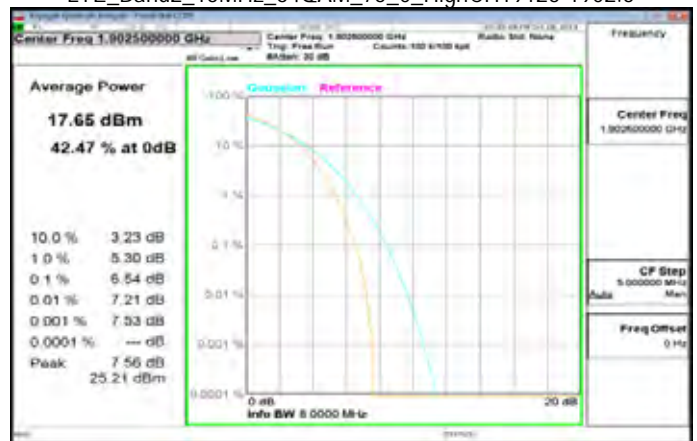
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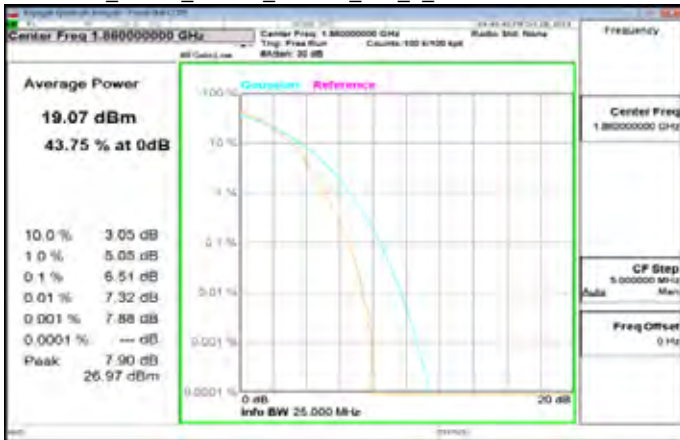
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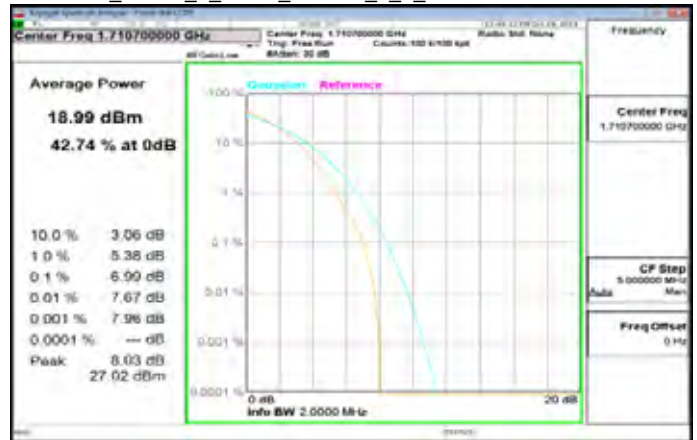
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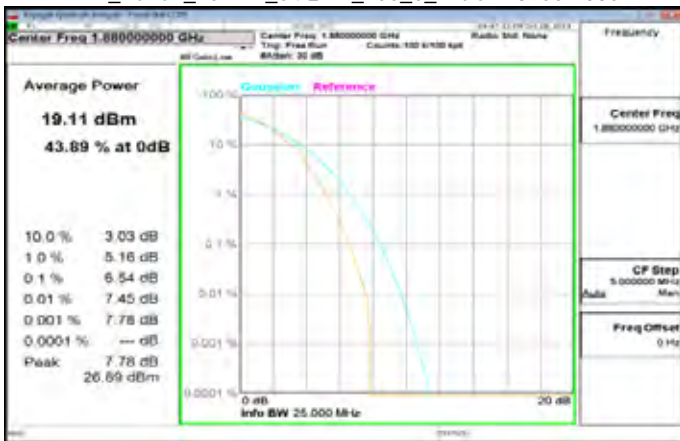
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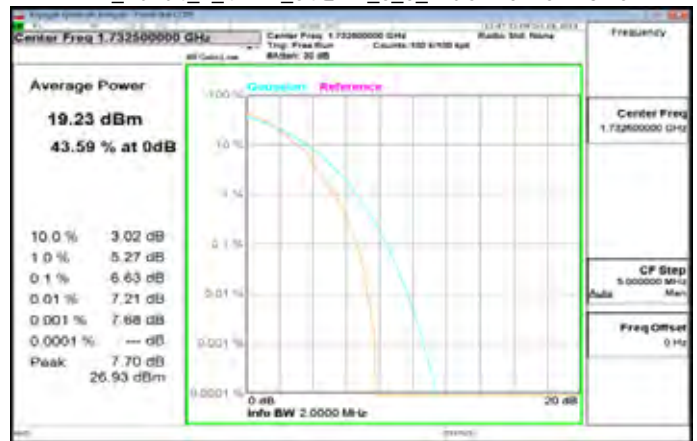
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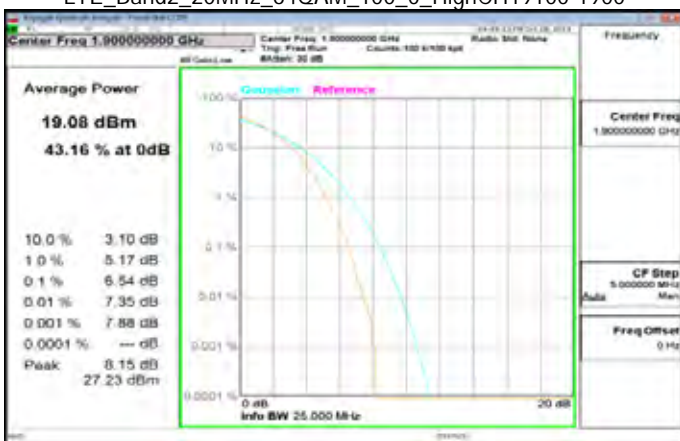
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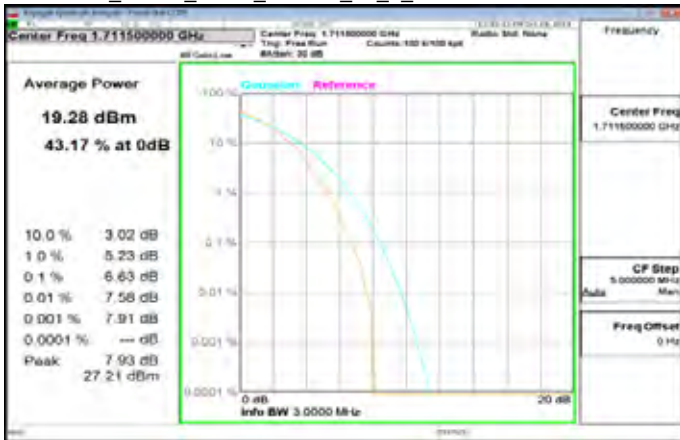


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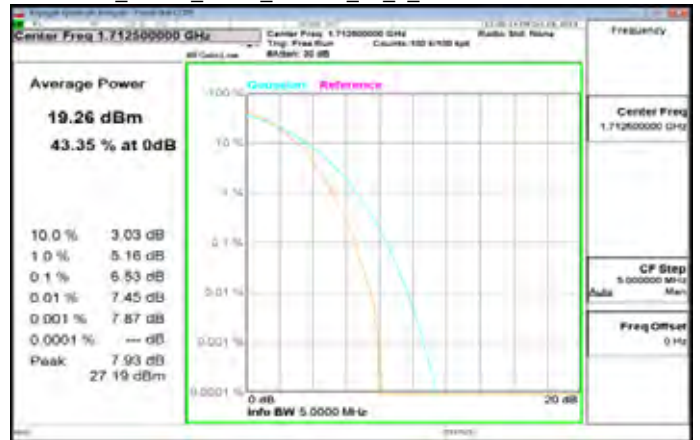
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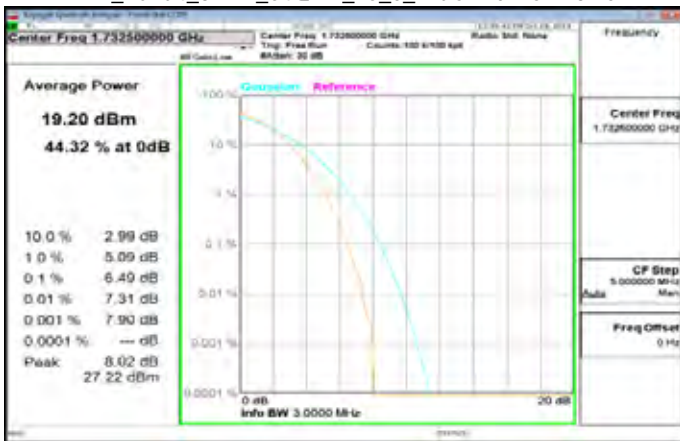
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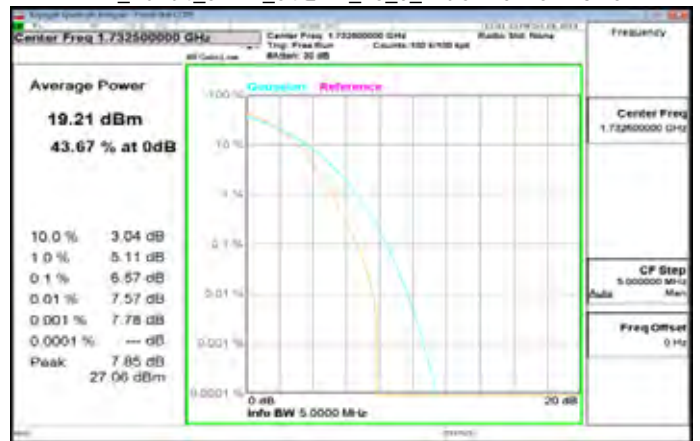
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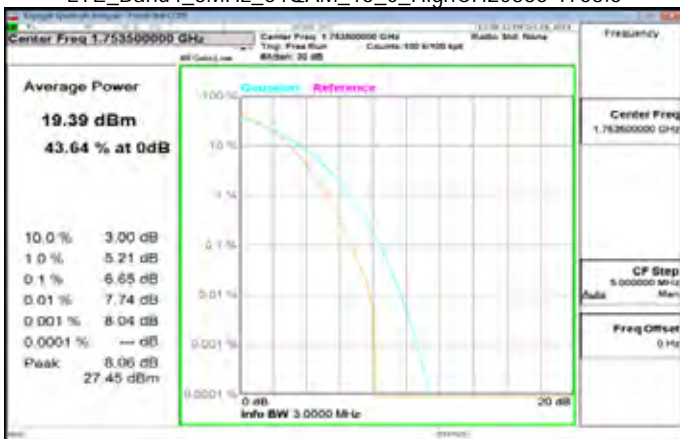
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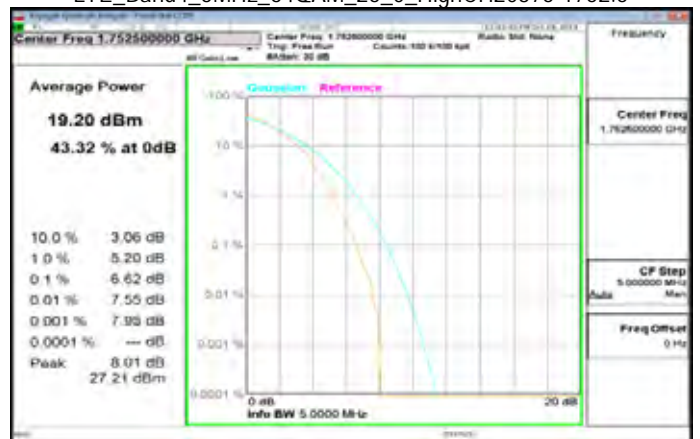
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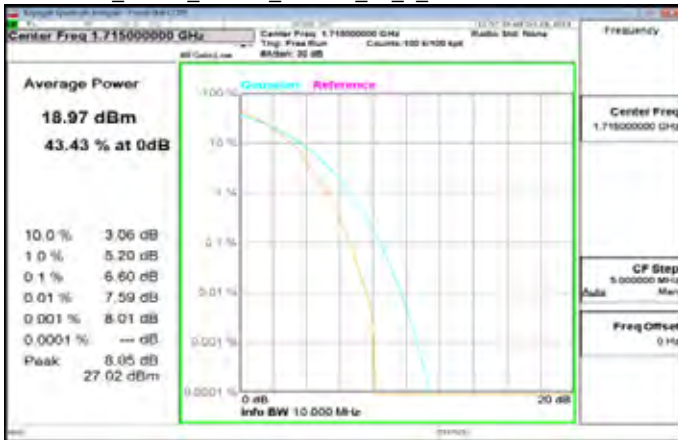
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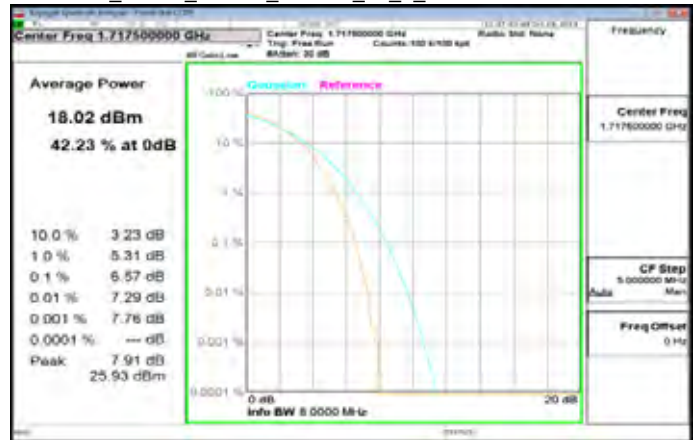
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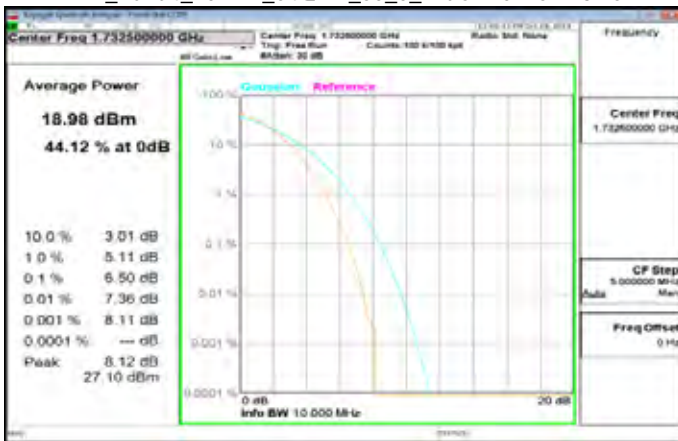
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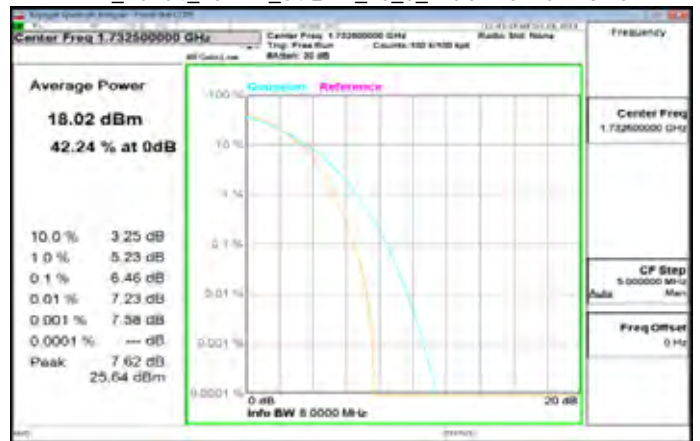
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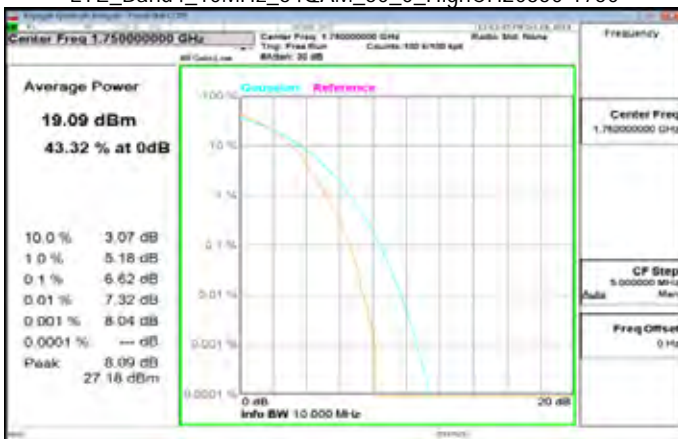
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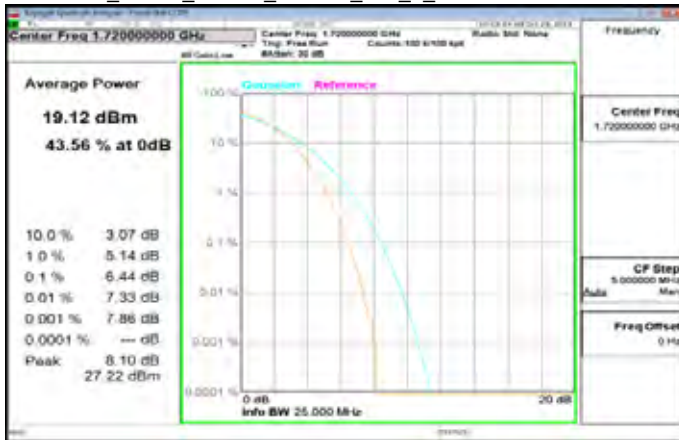


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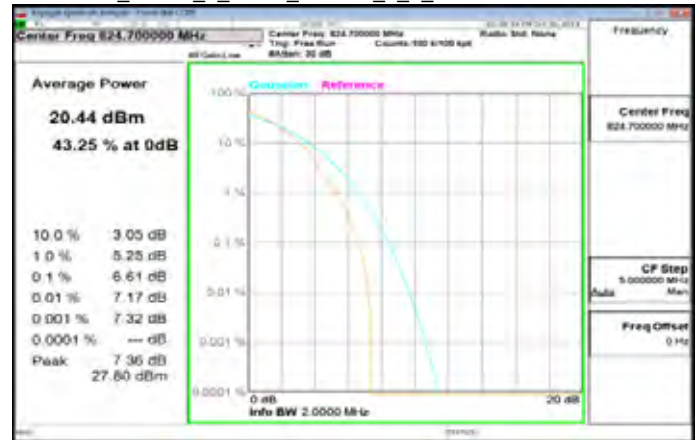
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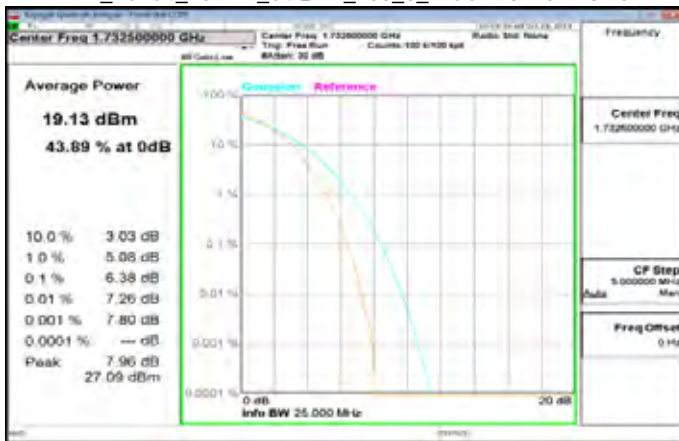
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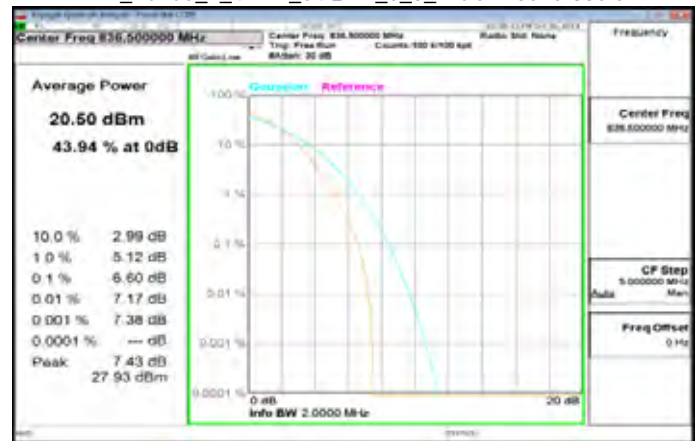
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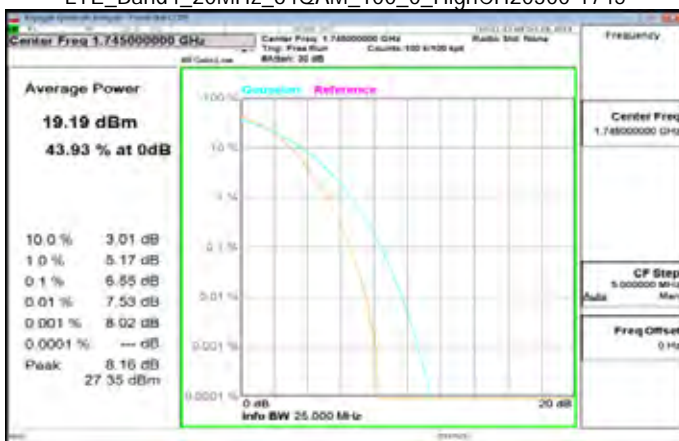
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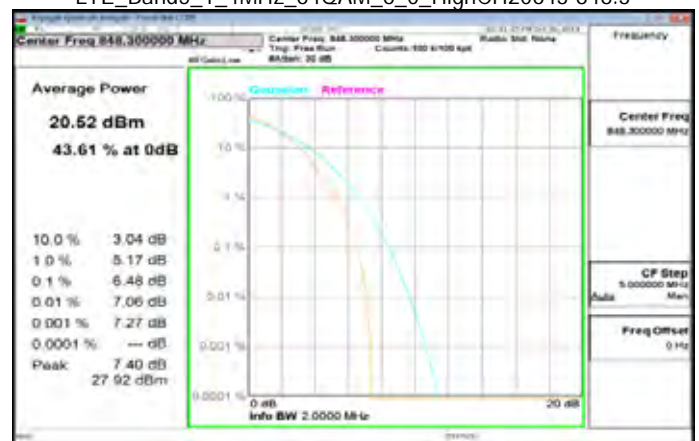
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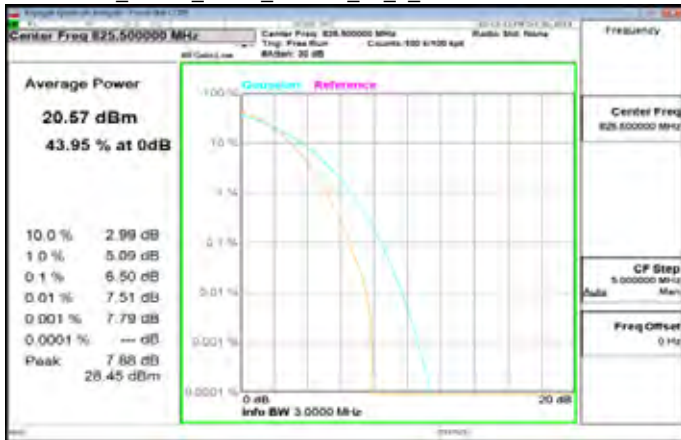
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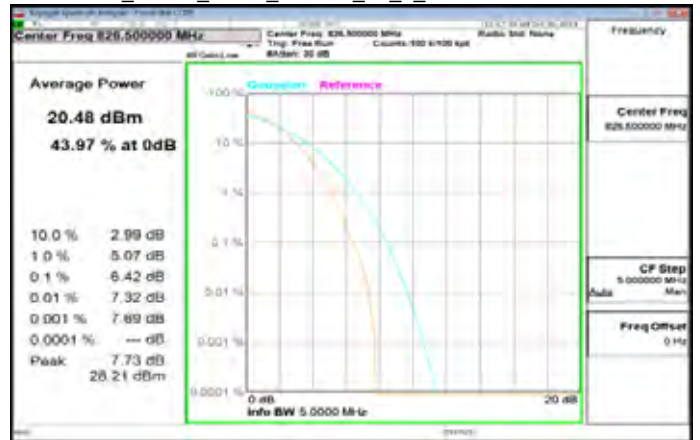
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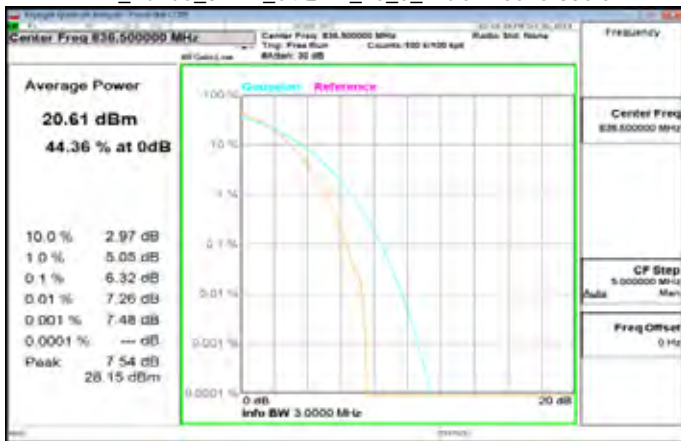
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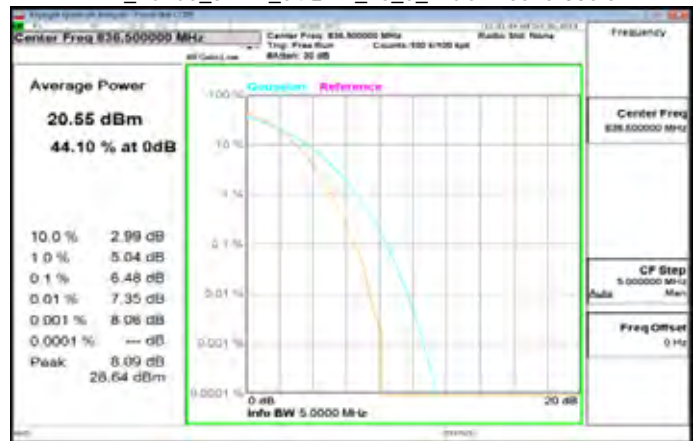
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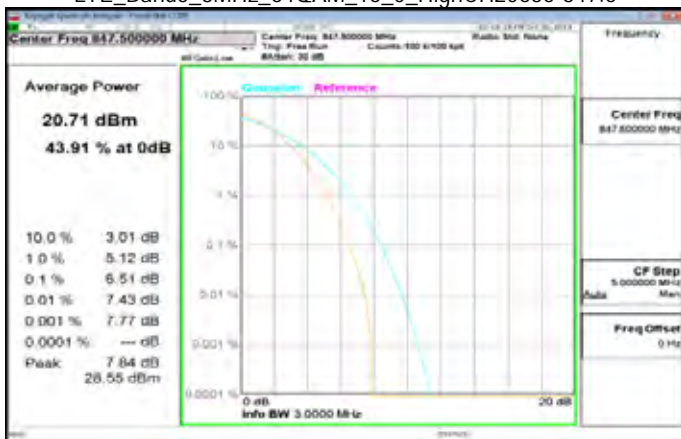
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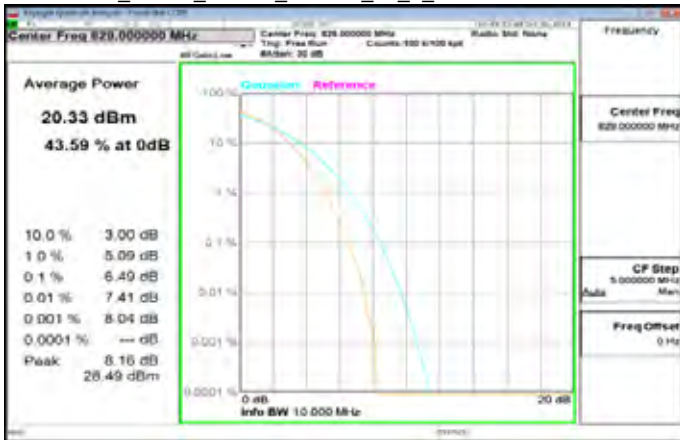


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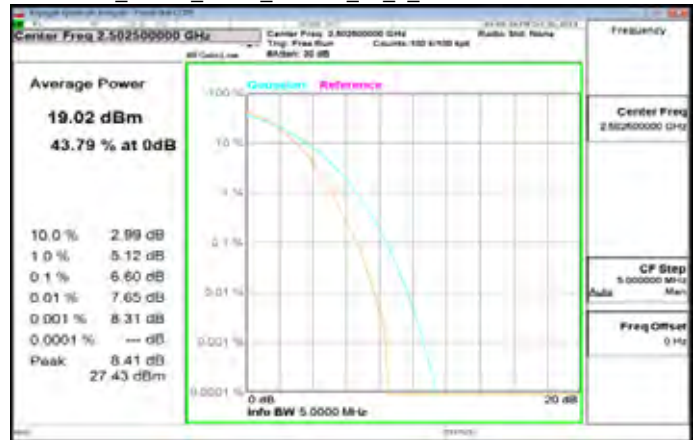
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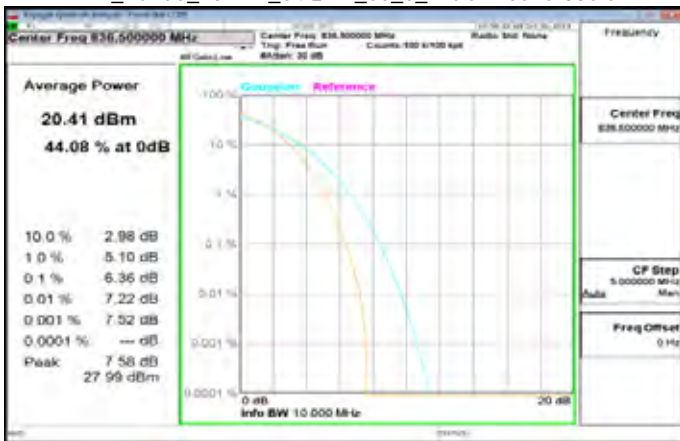
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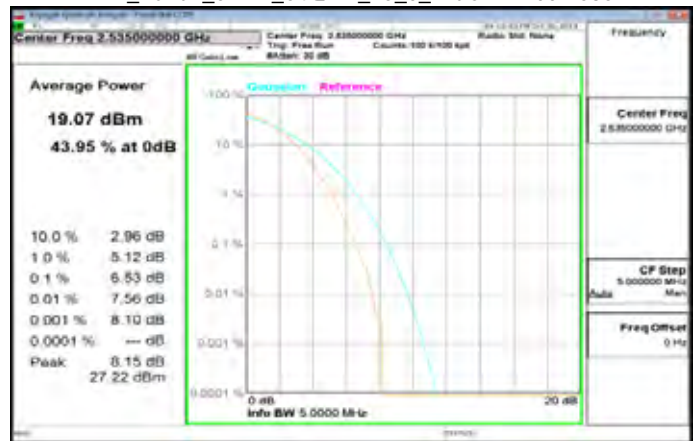
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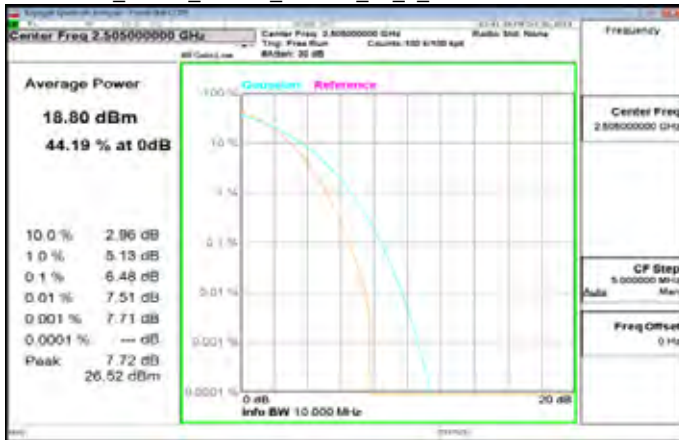
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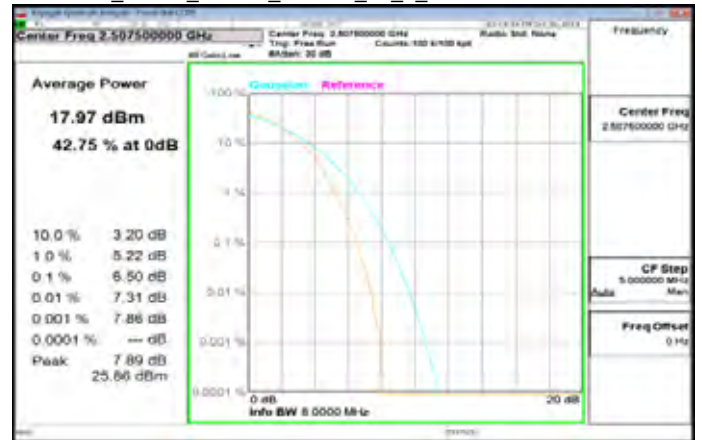
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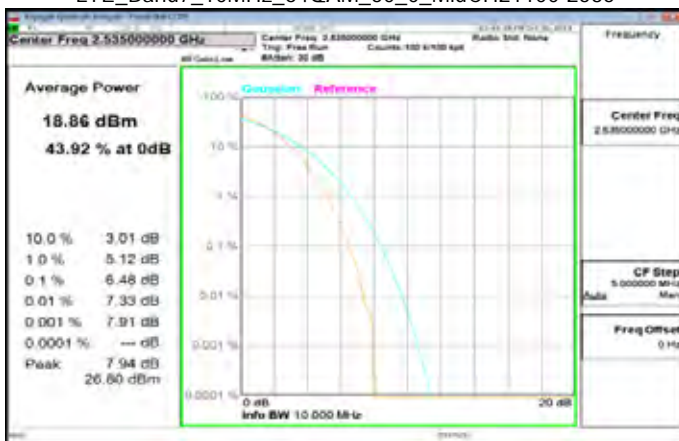
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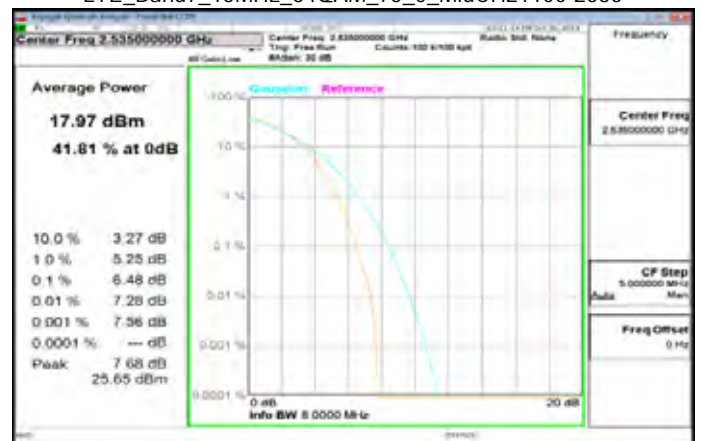
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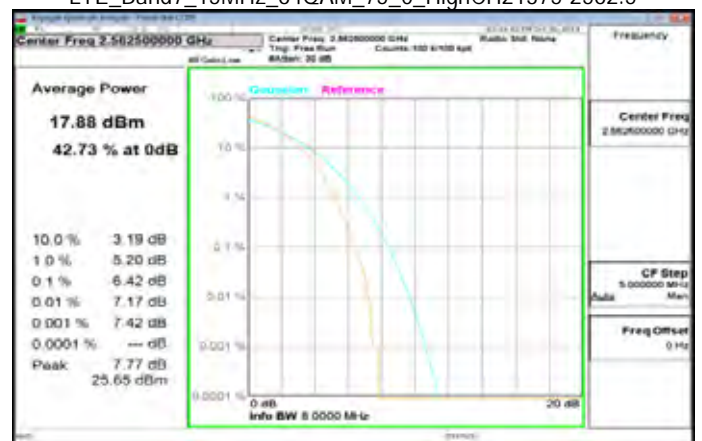
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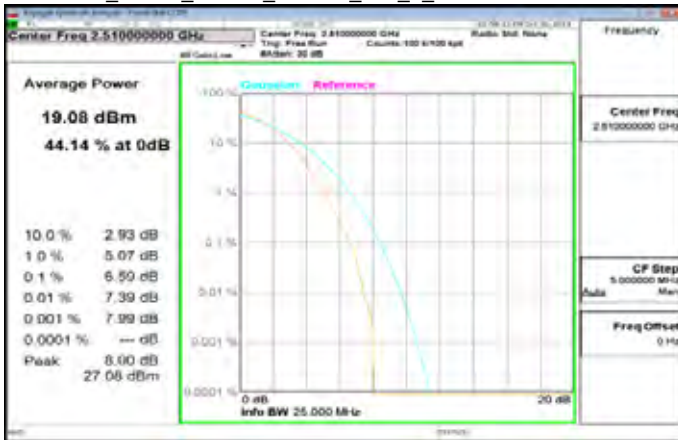


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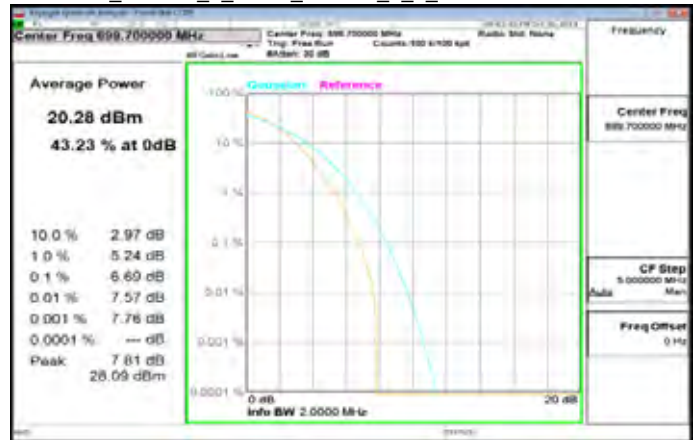
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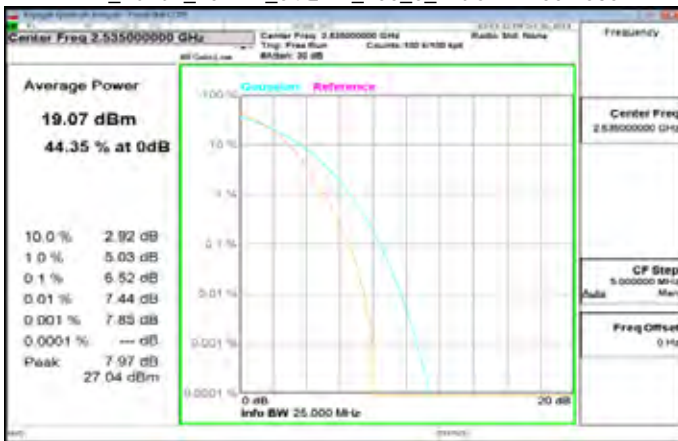
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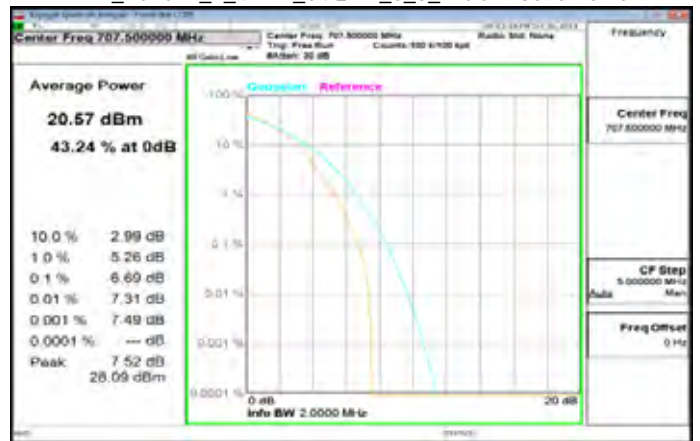
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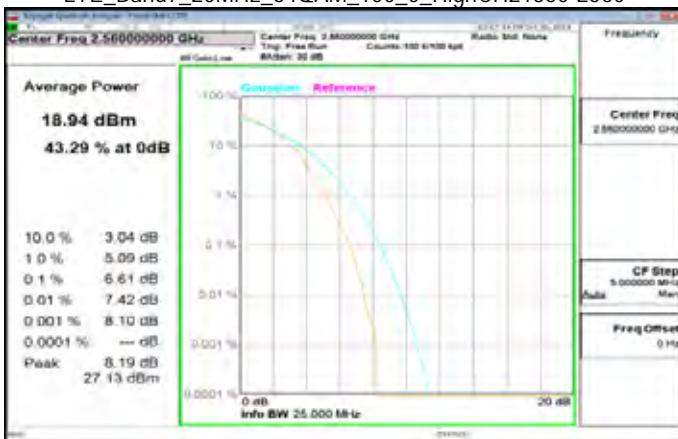
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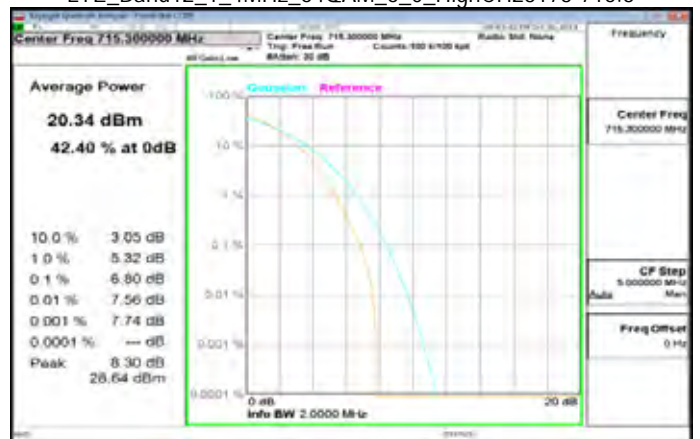
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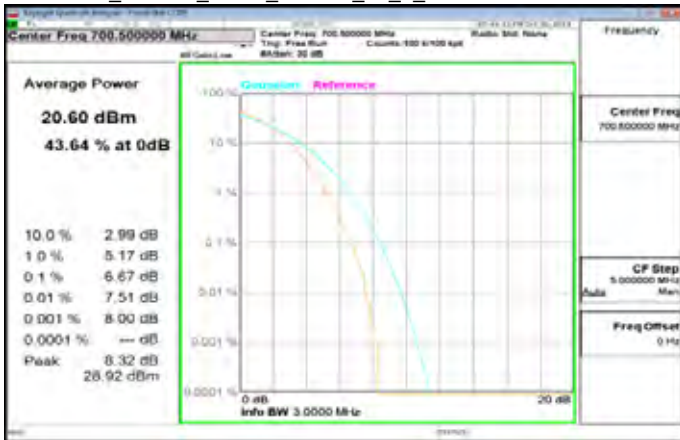
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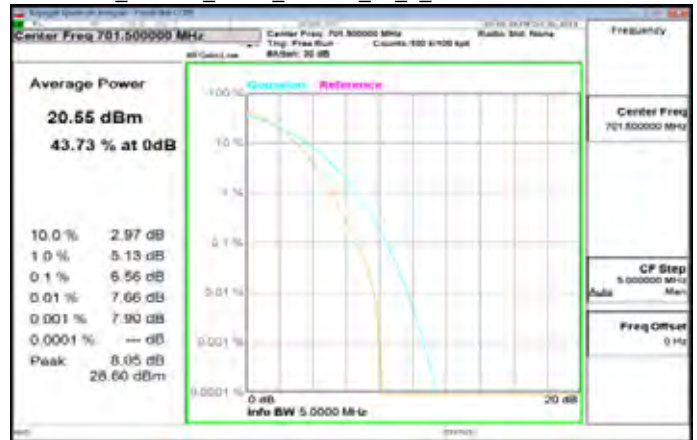
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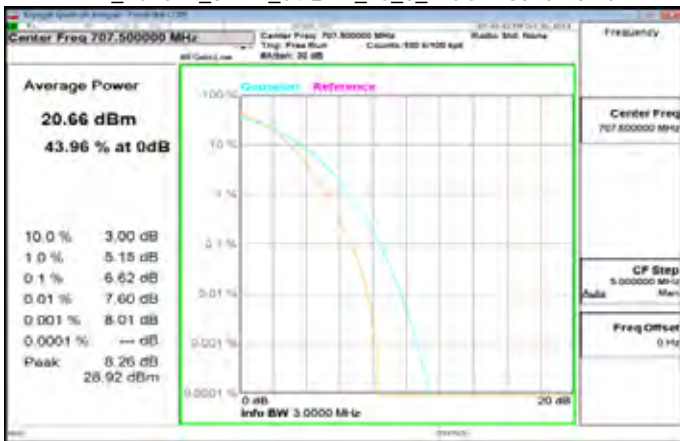
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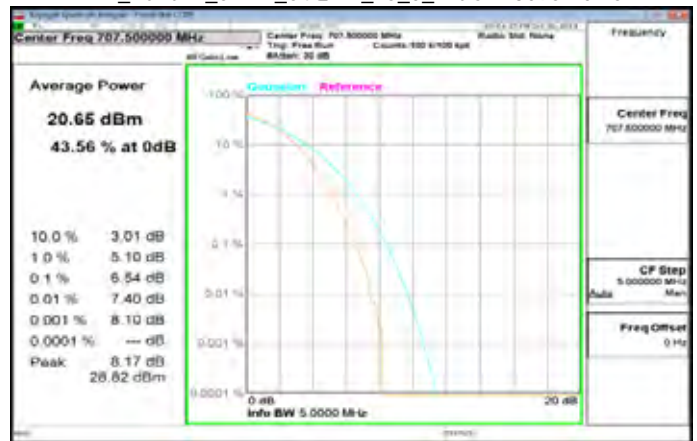
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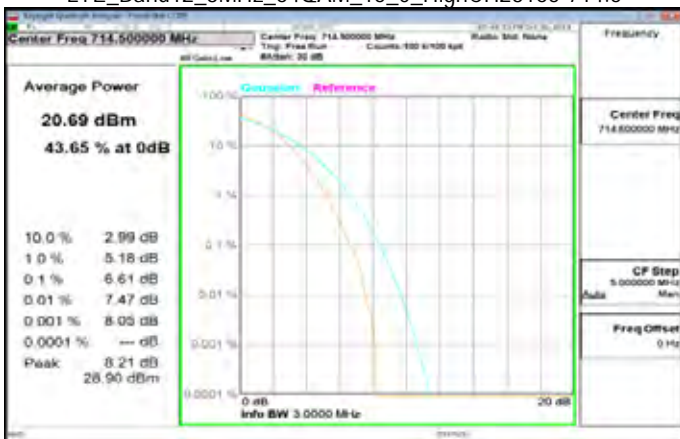
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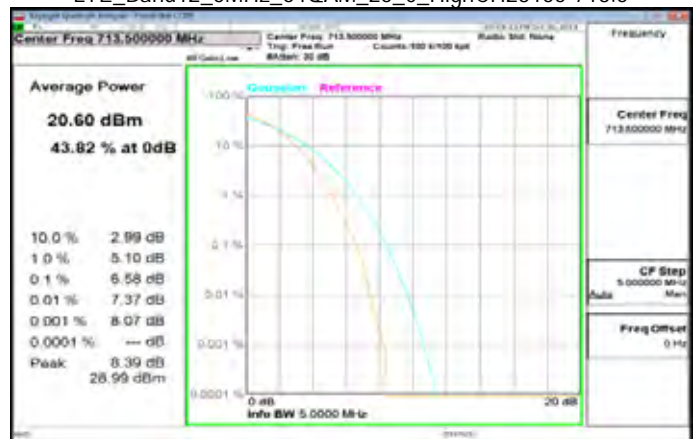
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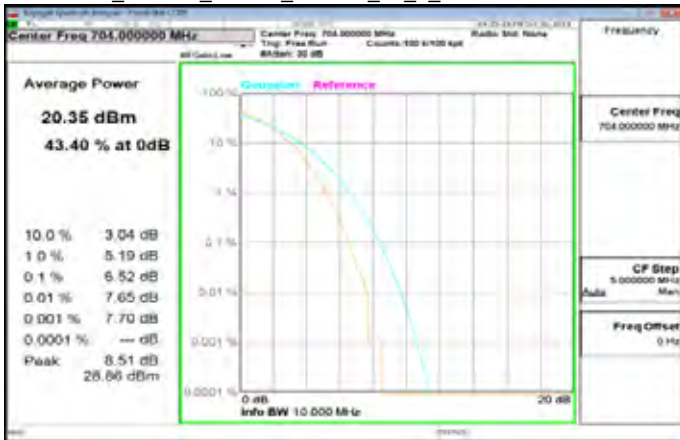


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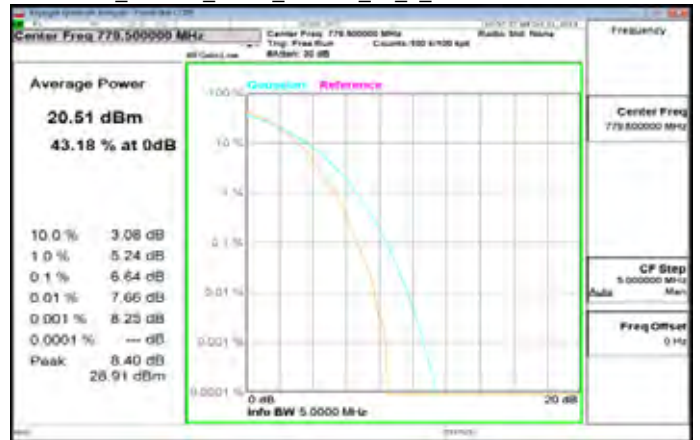
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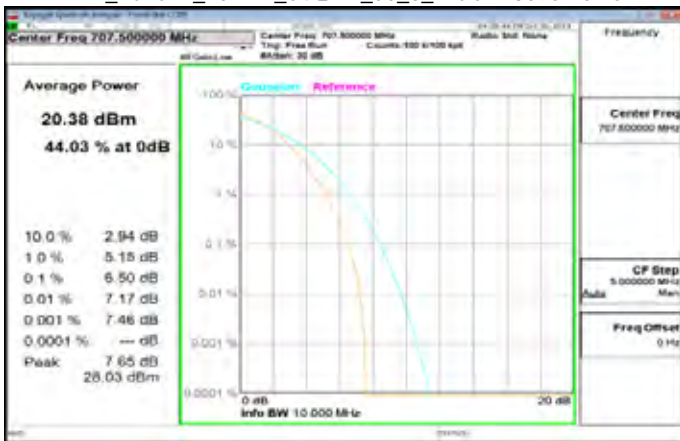
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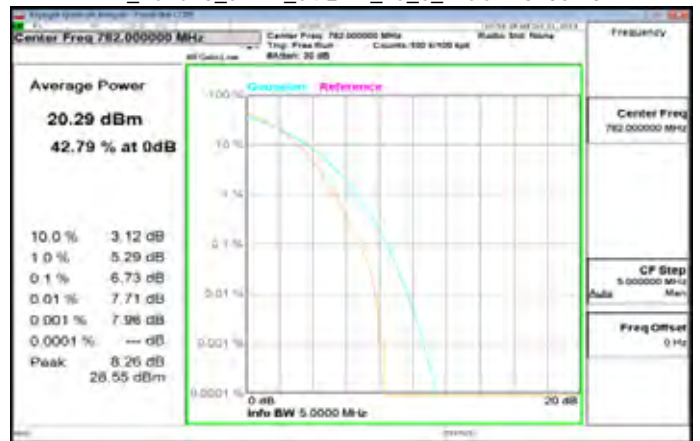
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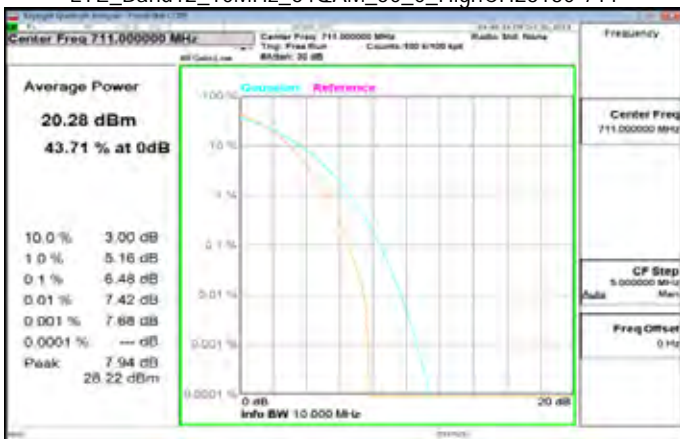
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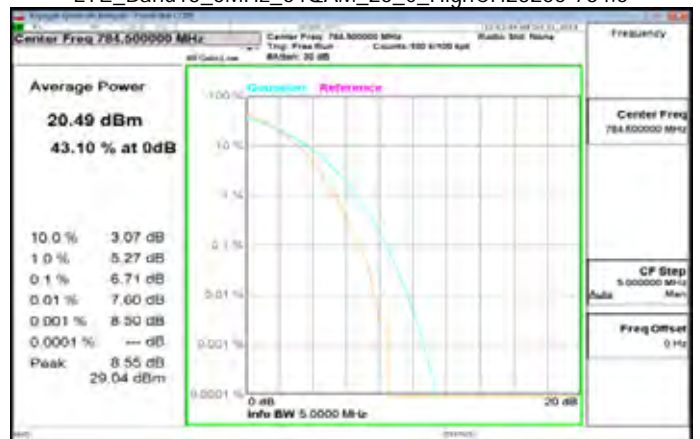
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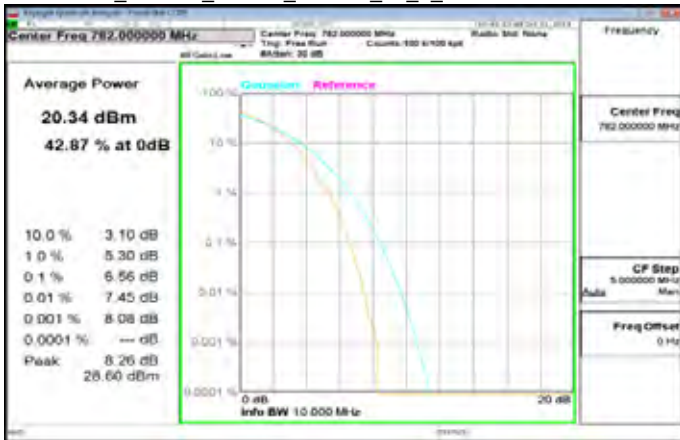
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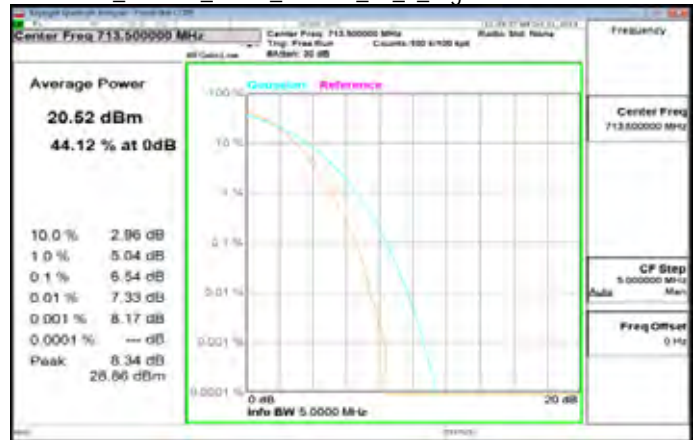
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LTE\_Band13\_10MHz\_64QAM\_50\_0\_MidCH23230-782



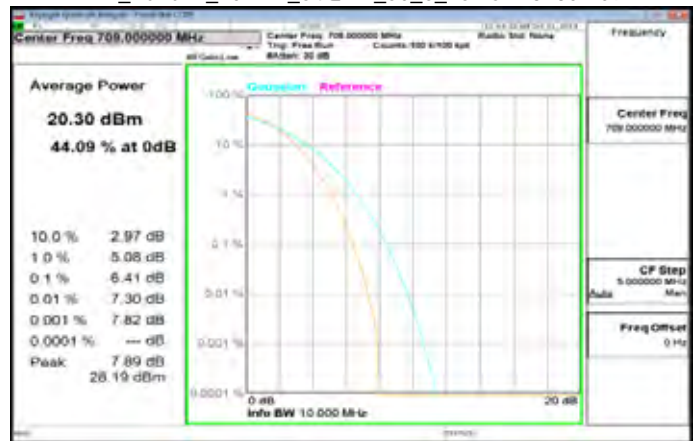
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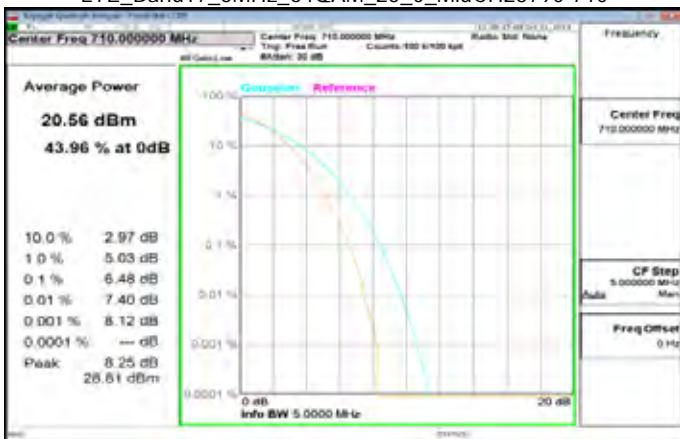
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LTE\_Band17\_10MHz\_64QAM\_50\_0\_LowCH23780-709



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LTE\_Band17\_10MHz\_64QAM\_50\_0\_MidCH23790-710

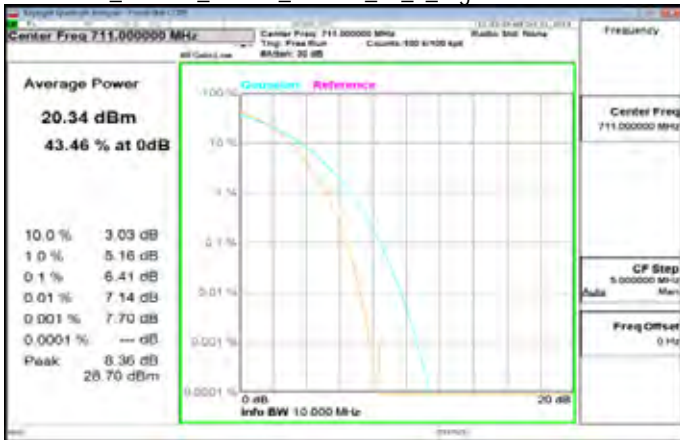


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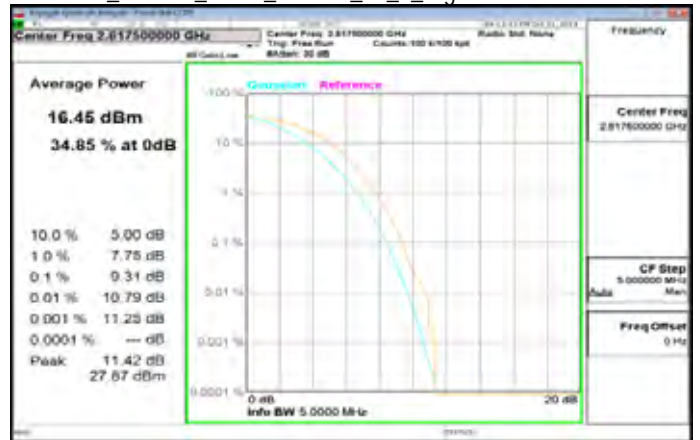
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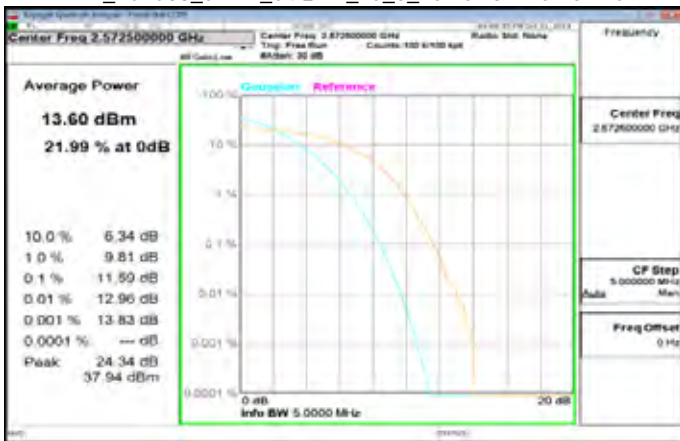
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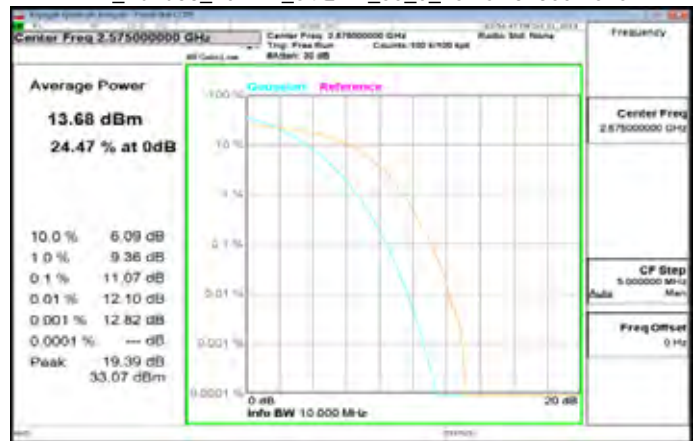
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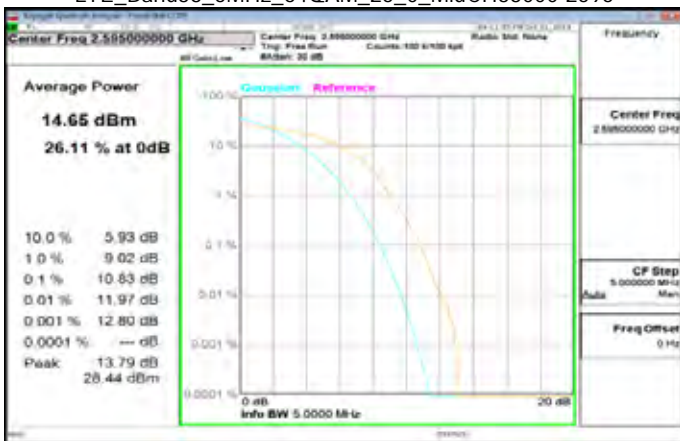
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LTE\_Band38\_10MHz\_64QAM\_50\_0\_LowCH37800-2575



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LTE\_Band38\_10MHz\_64QAM\_50\_0\_MidCH38000-2595



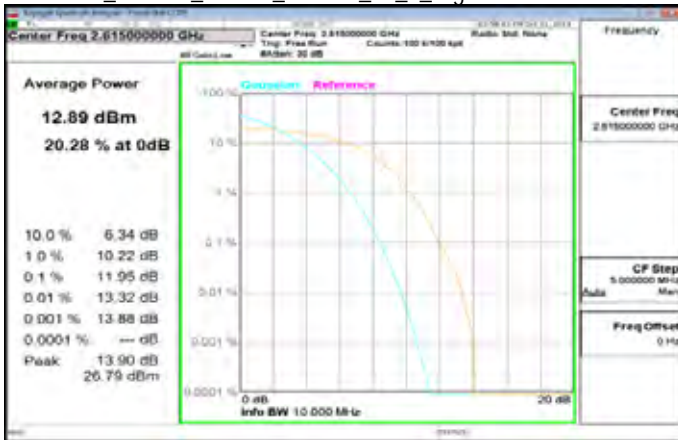
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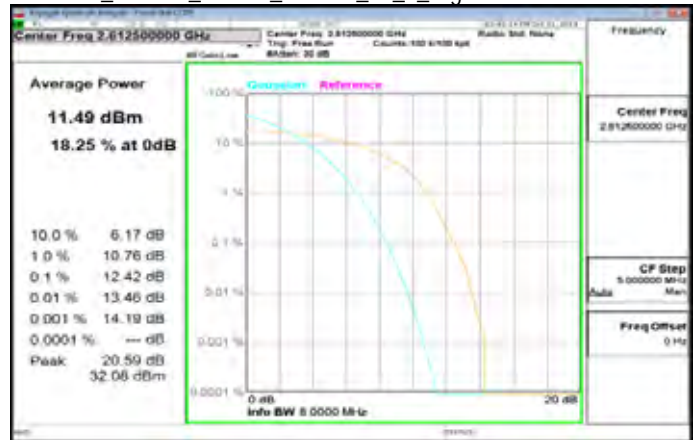
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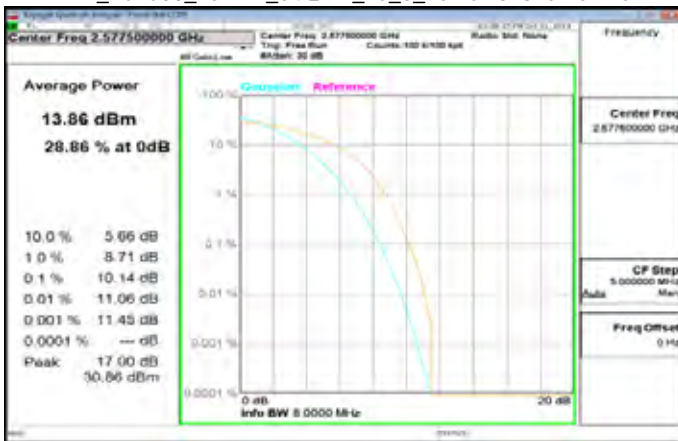
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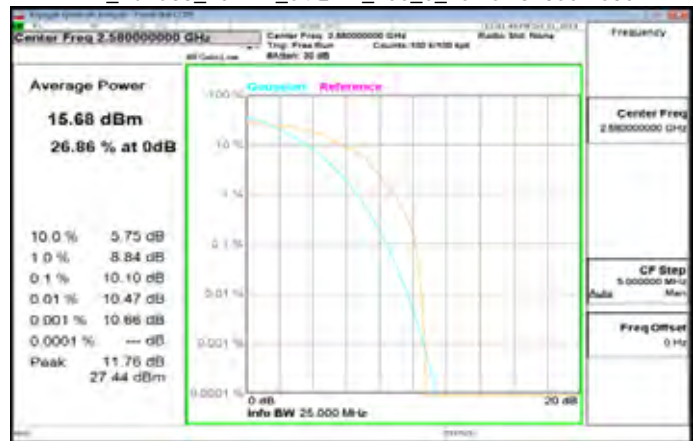
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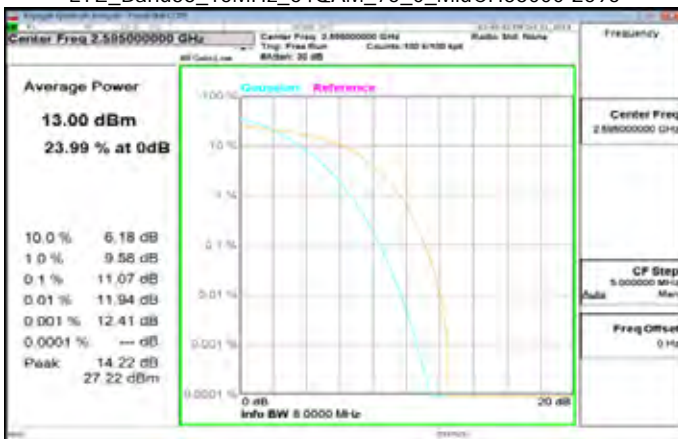
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LTE\_Band38\_20MHz\_64QAM\_100\_0\_LowCH37850-2580



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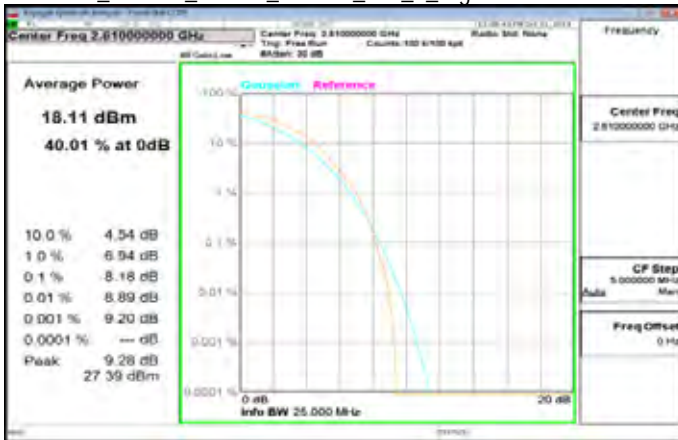


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LTE\_Band38\_20MHz\_64QAM\_100\_0\_HighCH38150-2610



~ End of Report ~

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