



TEST REPORT

APPLICANT	:	Hot Pepper, Inc.
PRODUCT NAME	:	4G Smart Phone
MODEL NAME	:	H5
BRAND NAME	:	Hot Pepper
FCC ID	:	2APD4-P26A
STANDARD(S)	:	47 CFR Part 22 Subpart H 47 CFR Part 24 Subpart E 47 CFR Part 27 Subpart L
TEST DATE	:	2018-04-10 to 2018-05-03
ISSUE DATE	:	2018-05-19

Tested by:

Ya'nan TU

Tu Ya'nan (Test Engineer)

Approved by:

Andy Yeh (Technical Director)

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Change History						
Issue	Date	Reason for change				
1.0	2018-05-19	First edition				



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1. Technical Information

Note: Provide by applicant.

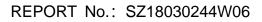
1.1. Applicant and Manufacturer Information

Applicant:	Hot Pepper, Inc.	
Applicant Address:	5151 California Ave., Suite 100, Irvine 92617, USA	
Manufacturer:	Hot Pepper, Inc.	
Manufacturer Address:	5151 California Ave., Suite 100, Irvine 92617, USA	

1.2. Equipment Under Test (EUT) Description

Product Name:	4G Smart Phone				
Serial No:	(N/A, marked #1 by test site)				
Hardware Version:	T169-LK-V1.2				
Software Version:	HOTPEPPER_SW01_20180320				
Modulation Type:	GSM,GPRS Mode with GMSK Modulation				
	GSM 850MHz:				
	Tx: 824.20 - 848.80MHz (at intervals of 200kHz);				
	Rx: 869.20 - 893.80MHz (at intervals of 200kHz)				
	GSM 1900MHz:				
	Tx: 1850.20 - 1909.80MHz (at intervals of 200kHz);				
	Rx: 1930.20 - 1989.80MHz (at intervals of 200kHz)				
	WCDMA 850MHz				
Operating Frequency Range:	Tx: 826.4 - 846.6MHz (at intervals of 200kHz);				
	Rx: 871.4 - 891.6MHz (at intervals of 200kHz)				
	WCDMA 1700MHz				
	Tx: 1712.4 – 1752.6MHz (at intervals of 200kHz);				
	Rx: 2112.4 - 2152.6MHz (at intervals of 200kHz)				
	WCDMA 1900MHz				
	Tx: 1852.4 - 1907.6MHz (at intervals of 200kHz);				
	Rx: 1932.4 - 1987.6MHz (at intervals of 200kHz)				
Multi-slot Class:	GPRS: Multislot Class12; EGPRS: Multislot Class12				
	GSM 850:247KGXW,GSM 1900:249KGXW				
Emission Designators:	EGPRS850:254KG7W, EGPRS1900:252KG7W,				
	WCDMA 850:4M17F9W , WCDMA1700:4M17F9W				







	WCDMA1900:4M17F9W						
Antenna Type:	PIFA Antenna						
Antenna Gain:	1.51 dBi	1.51 dBi					
	Normal(NV):	3.8V					
Operating voltage:	Lowest(LV):	3.5V					
	Highest(HV):	4.4V					

- *Note 1:* The transmitter (Tx) frequency arrangement of the Cellular 850MHz band used by the EUT can be represented with the formula F(n)=824.2+0.2*(n-128), 128<=n<=251; the lowest, middle, highest channel numbers (ARFCHs) used and tested in this report are separately 128 (824.2MHz), 190 (836.6MHz) and 251 (848.8MHz).
- *Note 2:* The transmitter (Tx) frequency arrangement of the PCS 1900MHz band used by the EUT can be represented with the formula F(n)=1850.2+0.2*(n-512), 512<=n<=810; the lowest, middle and highest channel numbers (ARFCHs) used and tested in this report are separately 512 (1850.2MHz), 661 (1880.0MHz) and 810 (1909.8MHz).
- *Note 3:* The transmitter (Tx) frequency arrangement of the WCDMA 850MHz band used by the EUT can be represented with the formula F(n)=826.4+0.2*(n-4132), 4132<=n<=4233; the lowest, middle and highest channel numbers (ARFCHs) used and tested in this report are separately 4132 (826.4MHz), 4175(835MHz) and 4233 (846.6MHz).
- *Note 4:* The transmitter (Tx) frequency arrangement of the WCDMA 1900MHz band used by the EUT can be represented with the formula F(n)=1852.4+0.2*(n-9262), 9262<=n<=9538; the lowest, middle and highest channel numbers (ARFCHs) used and tested in this report are separately 9262 (1852.4MHz), 9400 (1880MHz) and 9538 (1907.6MHz).
- *Note 5:* For a more detailed description, please refer to Specification or User's Manual supplied by the applicant and/or manufacturer.





1.3. Test Standards and Results

The objective of the report is to perform testing according to 47 CFR Part 2, Part 22, Part 24 and Part 27 for the EUT FCC ID Certification:

No	Identity	Document Title					
1	47 CEP Port 2 (10 1 12 Edition)	Frequency Allocations and Radio Treaty Matters;					
1	47 CFR Part 2 (10-1-12 Edition)	General Rules and Regulations					
2	47 CFR Part 22 (10-1-12 Edition)	Public Mobile Services					
3	47 CFR Part 24 (10-1-12 Edition)	Personal Communications Services					
4	47 CFR Part 27 (10-1-12 Edition)	Miscellaneous Wireless Communications Services					

Test detailed items/section required by FCC rules and results are as below:

No.	Section	Description Test Date		Test Engineer	Result		
1	2.1046	Conducted RF Output Power	Apr 12, 2018	Tu Ya'nan	PASS		
2	24.232(d)	Peak - Average	Apr 12, 2018	Tu Ya'nan	PASS		
2	27.50(d)	Radio	May 03, 2018	ru ra nan	1700		
3	2.1049	99% Occupied	Apr 12, 2018	Tu Ya'nan	PASS		
3	2.1049	Bandwidth	May 02, 2018	TU TA HAH	PASS		
4	2.1055,22.355,	Frequency Stability	Apr 12, 2018	Tu Ya'nan	PASS		
4	24.235,27.54	Frequency Stability	May 02, 2018	TU TA HAH	FA33		
5	2.1051, 22.917(a),	Conducted Out of	Apr 12, 2018	Tu Ya'nan	PASS		
5	24.238(a), 27.53(h)	Band Emissions	May 02, 2018	TU TATIAN	PASS		
6	2.1051, 22.917(a),	Band Edge	Apr 12, 2018	Tu Ya'nan	PASS		
0	24.238(a), 27.53(h)	Ballu Euge	May 02, 2018	TU TA HAH			
7	22.913(a), 24.232(a)	Transmitter Radiated	Apr 14&15,	Wu Junke	DAGG		
1	22.913(a), 24.232(a)	Power (EIPR/ERP)	2018		PASS		
8	2.1051, 22.917(a),	Radiated Out of	Apr 10&17,	Wu Junke	PASS		
^o 24.238(a), 27.53(h) Band Emissions		2018	vvu Julike PAS				
Note: The tests were performed according to the method of measurements prescribed in							
KDB971168 D01 v03 (Oct 27, 2017) and ANSI/TIA-603-E-2016.							





1.4. Environmental Conditions

During the measurement, the environmental conditions were within the listed ranges:

Temperature (°C):	15 - 35
Relative Humidity (%):	30 -60
Atmospheric Pressure (kPa):	86-106



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2. 47 CFR Part 2, Part 22H & 24E Requirements

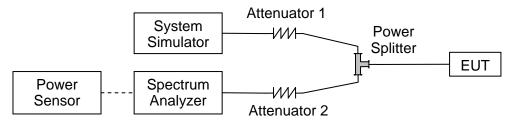
2.1. Conducted RF Output Power

2.1.1. Requirement

According to FCC section 2.1046(a), for transmitters other than single sideband, independent sideband and controlled carrier radiotelephone, power output shall be measured at the RF output terminals when the transmitter is adjusted in accordance with the tune-up procedure to give the values of current and voltage on the circuit elements specified in FCC section 2.1033(c)(8).

2.1.2. Test Description

Test Setup:



The EUT is coupled to the Spectrum Analyzer (SA) and the System Simulator (SS) with Attenuators through the Power Splitter; the RF load attached to the EUT antenna terminal is 500hm; the path loss as the factor is calibrated to correct the reading. The EUT is commanded by the SS to operate at the maximum output power i.e. Power Control Level (PCL) = 5 and Power Class = 4. A call is established between the EUT and the SS.





2.1.3. Test Results

The lowest, middle and highest channels are selected to perform testing to verify the conducted RF output power of the EUT.

Band Channel		Frequency	Measured Output Power	Limit	Verdict		
Danu	Channel	(MHz)	dBm	dBm	VEILUCL		
GSM	128 824.2 32.11		32.11		PASS		
850MHz	190	836.6	32.00	35	PASS		
ODUMITZ	251	848.8	31.98		PASS		
GSM	512	1850.2	27.20		PASS		
1900MHz	661	1880.0	26.93	32	PASS		
	810	1909.8	26.85		PASS		
	128	824.2	31.86		PASS		
GPRS 850MHz	190	836.6	31.86	35	PASS		
	251	848.8	31.80		PASS		
GPRS 661	1850.2	27.45		PASS			
	661	1880.0 27.50		32	PASS		
	810	1909.8	27.31		PASS		
	128	824.2	29.64		PASS		
	190	836.6	29.50	35	PASS		
850MHz	251	848.8	29.32		PASS		
	512	1850.2	26.98		PASS		
	661	1880.0 26.51		32	PASS		
1900MHz	810	1909.8	1909.8 25.80				
Note 1: For the GPRS and EGPRS model, all the slots were tested and just the worst data was recorded in this report.							





WCDMA Test Verdict:

	band	W	CDMA 8	50	WCDMA 1700			WCDMA 1900		
ltem	ARFCN	4132	4175	4233	1312	1412	1513	9262	9400	9538
	subtest	dBm			dBm			dBm		
5.2(WCDMA)	non	23.15	23.21	23.15	23.17	23.19	23.24	22.71	22.68	22.61
	1	22.19	22.19	22.25	22.39	22.32	22.42	21.99	21.92	21.89
HSDPA	2	22.21	22.25	22.23	22.37	22.35	22.38	21.95	21.93	21.9
ISDFA	3	21.70	21.71	21.76	21.93	21.92	21.94	21.48	21.45	21.41
	4	21.69	21.71	21.74	21.84	21.82	21.88	21.43	21.43	21.39
	1	20.22	20.24	20.21	20.49	20.4	20.41	19.83	19.88	19.83
	2	20.27	20.26	20.23	20.46	20.35	20.49	19.89	19.86	19.84
HSUPA	3	21.28	21.35	21.29	21.43	21.35	21.42	20.92	20.86	20.85
	4	19.79	19.85	19.81	20.05	19.89	19.99	19.46	19.41	19.43
	5	21.20	21.26	21.23	21.45	21.33	21.38	20.83	20.82	20.81
HSPA+	1	21.26	21.28	21.31	21.32	21.17	21.22	20.87	20.85	20.84



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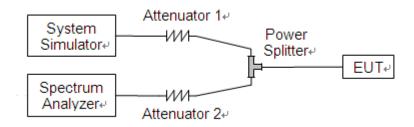
2.2. Peak to Average Radio

2.2.1. Requirement

According to FCC 24.232(d) the peak-to-average ratio (PAR) of the transmission may not exceed 13 dB.

2.2.2. Test Description

Test Setup:



The EUT is coupled to the Spectrum Analyzer (SA) and the System Simulator (SS) with Attenuators through the Power Splitter; the RF load attached to the EUT antenna terminal is 500hm; the path loss as the factor is calibrated to correct the reading. The EUT is commanded by the SS to operate at the maximum output power i.e. Power Control Level (PCL) = 5 and Power Class = 4. A call is established between the EUT and the SS.

2.2.3. Test procedure

1 .For GSM/EGPRS operating mode:

- a. Set RBW=1MHz, VBW=3MHz, peak detector in spectrum analyzer.
- b. Set EUT in maximum output power, and triggered the bust signal.
- c. Measured respectively the peak level and mean level, and the deviation was recorded as Peak to Average radio.
- 2. For UMTS operating mode:
- a. Set the CCDF (Complementary Cumulative Distribution Function) option in spectrum analyzer.
- b. The highest RF powers were measured and recorded the maximum PAPR level associated with a probability of 0.1%.





2.2.4. Test Result

The lowest, middle and highest channels are selected to perform testing to verify the conducted RF output peak power of the Module.

A. Test Verdict:

Band	Channel	Frequency	Peak to A	Average radio	Limit	Verdict
Danu	Channel	(MHz)	dB	Refer to Plot	dB	verdici
GSM	512	1850.2	0.02			PASS
1900MHz	661	1880.0	0.05	Plot A1 to A3	13	PASS
190010112	810	1909.8	0.01			PASS
EGPRS	512	1850.2	0.04			PASS
1900MHz	661	1880.0	0.04	Plot B1 to B3	13	PASS
190010112	810	1909.8	0.01			PASS
WCDMA	9262	1852.4	3.45			PASS
1900MHz	9400	1880.0	2.90	Plot C1 to C3	13	PASS
190010112	9538	1907.6	3.00			PASS
WCDMA	1312	1712.4	2.82			PASS
1700MHz	1412	1732.4	2.73	Plot D1 to D3	13	PASS
	1513	1752.6	2.56			PASS





B. Test Plots:

n Analyzer - Swept SA Peak Search TRACE TYPE DET Marker 1 1.07347 ms Avg Type: Log-Pwr Avg|Hold:>100/100 PNO: Fast Trig: Free Run IFGain:Low Atten: 34 dB Next Peak Mkr1 1.073 ms 32.691 dBm Ref Offset 17.5 dB Ref 40.00 dBm 0 dl ¹ Next Pk Right Next Pk Left Marker Delta Mkr→CF Mkr→RefLvl More 1 of 2 Center 1.850200000 GHz Res BW 1.0 MHz Span 0 Hz Sweep 6.467 ms (1001 pts) #VBW 3.0 MHz 53 AM May 03, 2018 Peak Search Marker 1 3.35620 ms Avg Type: RMS Avg|Hold:>100/100 PNO: Fast IFGain:Low Atten: 34 dB TYPE DET Next Peak Mkr1 3.356 ms 32.712 dBm Ref Offset 17.5 dB Ref 40.00 dBm 0 dB/di 01 Next Pk Right Next Pk Left Marker Delta Mkr→CF Mkr→RefLvi More Center 1.850200000 GHz Res BW 1.0 MHz 1 of 2 Span 0 Hz Sweep 6.467 ms (1001 pts) #VBW 3.0 MHz*

(Plot A1, GSM 1900 MHz, Channel = 512)





narker 1	RF 50 Ω AC		SENSE:PULSE SOU		08:27:05 AM May 03, 2018	Peak Search
	1.94647 ms	PNO: Fast 🖵 IFGain:Low	Trig: Free Run Atten: 34 dB	Avg Type: Log-Pwr Avg Hold:>100/100	TRACE 123456 TYPE M	
) dB/div	Ref Offset 17.5 dB Ref 40.00 dBm				Mkr1 1.946 ms 32.506 dBm	NextPe
^{og}		≬ 1				
30.0						Next Pk Rig
0.0						
0.0						Next Pk L
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0.0						Mkr→
D.0						Mkr. D. S
						Mkr→Refl
0.0						Ма
enter 1.8 es BW 1.	80000000 GHz	40 (D)M	3.0 MHz	0	Span 0 Hz 6.467 ms (1001 pts)	1 c
G DVV I.		#4044	3.0 WIHZ	Sweep		
	um Analyzer - Swept SA					
	RF 50 Ω AC 2.36680 ms		SENSE:PULSE SOU		08:25:01 AM May 03, 2018	Peak Search
		PNO: East	Trig: Free Run	Avg Type: RMS Avg Hold:>100/100	TYPE MUMMMM	i out oouron
		PNO: Fast 🖵 IFGain:Low	Trig: Free Run Atten: 34 dB		TRACE 1 2 3 4 5 6 TYPE M WWWWW DET A N N N N N Mkr1 2.367 ms	
dB/div	Ref Offset 17.5 dB Ref 40.00 dBm	PNO: Fast IFGain:Low	7 Trig: Free Run Atten: 34 dB		Mkr1 2.367 ms 32.556 dBm	
^{pg}		PNO: Fast	Trig: Free Run Atten: 34 dB			Next Pe
		PN0: Fast IFGain:Low	Trig: Free Run Atten: 34 dB			Next Pe
		PN0: Fast IFGain:Low	, Trig: Free Run Atten: 34 dB			Next Pe Next Pk Rig
		PN0: Fast IFGain:Low	Trig: Free Run Atten: 34 dB			Next Pe Next Pk Rig
		PNO: Fast IFGain:Low	Trig: Free Run Atten: 34 dB			Next Pe Next Pk Rig Next Pk L
0 dB/div 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		PN0: Fast IFGain:Low	Trig: Free Run Atten: 34 dB			Next Pe Next Pk Rig Next Pk L Marker De
0.0		PN0: Fast IFGain:Low	Trig: Free Run Atten: 34 dB			Next Pe Next Pk Rig Next Pk L
>9 0.0 0.0 0.0 0.0 0.0		PNO: Fast IFGain:Low	Trig: Free Run Atten: 34 dB			Next Pe Next Pk Rig Next Pk L Marker De
0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0		PN0: Fast IFGain:Low	Trig: Free Run Atten: 34 dB			Next Pe Next Pk Rig Next Pk L Marker De Mkr→t
0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0		PNO: Fast IFGain:Low	Trig: Free Run Atten: 34 dB			Next Pe Next Pk Rig Next Pk L Marker De
0.0		PNO: Fast IFGain:Low	Trig: Free Run Atten: 34 dB			Next Pe Next Pk Rig Next Pk L Marker De Mkr→t

(Plot A2, GSM 1900 MHz, Channel = 661)

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u I	rum Analyzer - Swept SA RF 50 Ω AC		SENSE:PULSE SO	DURCE OFF ALIGN AUTO	08:25:55 AM May 03, 2018	Peak Search
larker 1	3.40793 ms	PNO: Fast 😱 IFGain:Low	Trig: Free Run Atten: 34 dB	Avg Type: Log-Pwr Avg Hold:>100/100	TRACE 123456 TYPE MWWWW DET P N N N N N	r cak ocaren
0 dB/div	Ref Offset 17.5 dB Ref 40.00 dBm				Mkr1 3.408 ms 32.324 dBm	NextPea
	Kei 40.00 dBiii		<u> </u> 1			
80.0			·····			Next Pk Rig
20.0						
0.0						Next Pk L
1.00						Marker De
0.0						
0.0						Mkr→
0.0						
0.0						Mkr. D.C.
						Mkr→Refl
0.0						Ma
enter 1.	909800000 GHz				Span 0 Hz	1 0
					e pour o ric	
es BW 1		#VBW	3.0 MHz		6.467 ms (1001 pts)	
es BW 1	1.0 MHz	#VBW	3.0 MHz	Sweep (6.467 ms (1001 pts)	
es BW 1 G gilent Spect	1.0 MHz rum Analyzer - Swept SA RF 50 Ω AC		3.0 MHz	STATU	6.467 ms (1001 pts) Is 08:25:31 AM May 03, 2018	Peak Search
es BW 1 IG jilent Spect	1.0 MHz rum Analyzer - Swept SA		SENSE:PULSE SC	STATU	6.467 ms (1001 pts) Is 08:25:31 AM May 03, 2018 TRACE 1 2 3 4 5 6 TYPE M	
es BW 1 g g g g g lent Spectro arker 1 arker 1 0 dB/div	1.0 MHz rum Analyzer - Swept SA RF 50 Ω AC	PNO: Fast 😱	SENSE:PULSE SC	STATU	6.467 ms (1001 pts) Is 08:25:31 AM May 03, 2018	
es BW 1 g g g g g lent Spectro arker 1 arker 1 0 dB/div	1.0 MHz rum Analyzer - Swept SA RF 50 2 AC 1.87533 ms Ref Offset 17.5 dB	PNO: Fast 😱	SENSE:PULSE SC	STATU	6.467 ms (1001 pts) Is 08:25:31 AM May 03, 2018 TRACE 12 3 4 5 6 TYPE MYMAN DET A NNNNN Mkr1 1,875 ms	NextPe
es BW 1 g jilent Spectro arker 1 odB/div	1.0 MHz rum Analyzer - Swept SA RF 50 2 AC 1.87533 ms Ref Offset 17.5 dB	PNO: Fast 😱	SENSE:PULSE SC	STATU	6.467 ms (1001 pts) Is 08:25:31 AM May 03, 2018 TRACE 12 3 4 5 6 TYPE MYMAN DET A NNNNN Mkr1 1,875 ms	NextPe
es BW 1 is jilent Spect arker 1 0 dB/div 0 g	1.0 MHz rum Analyzer - Swept SA RF 50 2 AC 1.87533 ms Ref Offset 17.5 dB	PNO: Fast 😱	SENSE:PULSE SC	STATU	6.467 ms (1001 pts) Is 08:25:31 AM May 03, 2018 TRACE 12 3 4 5 6 TYPE MYMAN DET A NNNNN Mkr1 1,875 ms	NextPe
es BW 1 G g g arker 1 o dB/div og 0.0	1.0 MHz rum Analyzer - Swept SA RF 50 2 AC 1.87533 ms Ref Offset 17.5 dB	PNO: Fast 😱	SENSE:PULSE SC	STATU	6.467 ms (1001 pts) Is 08:25:31 AM May 03, 2018 TRACE 12 3 4 5 6 TYPE MYMAN DET A NNNNN Mkr1 1,875 ms	Next Pe Next Pk Rig
es BW 1 a jent Spectro arker 1 o dB/div o dB/div o dB/div	1.0 MHz rum Analyzer - Swept SA RF 50 2 AC 1.87533 ms Ref Offset 17.5 dB	PNO: Fast 😱	SENSE:PULSE SC	STATU	6.467 ms (1001 pts) Is 08:25:31 AM May 03, 2018 TRACE 12 3 4 5 6 TYPE MYMAN DET A NNNNN Mkr1 1,875 ms	Next Pe Next Pk Rig
es BW 1 ig iglent Spect iglent	1.0 MHz rum Analyzer - Swept SA RF 50 2 AC 1.87533 ms Ref Offset 17.5 dB	PNO: Fast 😱	SENSE:PULSE SC	STATU	6.467 ms (1001 pts) Is 08:25:31 AM May 03, 2018 TRACE 12 3 4 5 6 TYPE MYMAN DET A NNNNN Mkr1 1,875 ms	Next Pe Next Pk Rig Next Pk Lu
es BW 1 ig iglent Spect iglent	1.0 MHz rum Analyzer - Swept SA RF 50 2 AC 1.87533 ms Ref Offset 17.5 dB	PNO: Fast 😱	SENSE:PULSE SC	STATU	6.467 ms (1001 pts) Is 08:25:31 AM May 03, 2018 TRACE 12 3 4 5 6 TYPE MYMAN DET A NNNNN Mkr1 1,875 ms	Next Pe Next Pk Rig Next Pk Lu
es BW 1 G G G G G G G G G G G G G G G G G G G	1.0 MHz rum Analyzer - Swept SA RF 50 2 AC 1.87533 ms Ref Offset 17.5 dB	PNO: Fast 😱	SENSE:PULSE SC	STATU	6.467 ms (1001 pts) Is 08:25:31 AM May 03, 2018 TRACE 12 3 4 5 6 TYPE MYMAN DET A NNNNN Mkr1 1,875 ms	Next Pe Next Pk Rig Next Pk Li Marker De
es BW 1 a a b d B/div g g a b d B/div g g a b a b a b a b a b a b a b a b a b	1.0 MHz rum Analyzer - Swept SA RF 50 2 AC 1.87533 ms Ref Offset 17.5 dB	PNO: Fast 😱	SENSE:PULSE SC	STATU	6.467 ms (1001 pts) Is 08:25:31 AM May 03, 2018 TRACE 12 3 4 5 6 TYPE MYMAN DET A NNNNN Mkr1 1,875 ms	Next Pe Next Pk Rig Next Pk Li Marker De
es BW 1 is is illent Spect ille	1.0 MHz rum Analyzer - Swept SA RF 50 2 AC 1.87533 ms Ref Offset 17.5 dB	PNO: Fast 😱	SENSE:PULSE SC	STATU	6.467 ms (1001 pts) Is 08:25:31 AM May 03, 2018 TRACE 12 3 4 5 6 TYPE MYMAN DET A NNNNN Mkr1 1,875 ms	Next Pe Next Pk Rig Next Pk Li Marker De Mkr→i
es BW 1 ig ilent Spect Spect ilent Spect ilent Spect ilent Spect ilent Spect ilent Spect	1.0 MHz rum Analyzer - Swept SA RF 50 2 AC 1.87533 ms Ref Offset 17.5 dB	PNO: Fast 😱	SENSE:PULSE SC	STATU	6.467 ms (1001 pts) Is 08:25:31 AM May 03, 2018 TRACE 12 3 4 5 6 TYPE MYMAN DET A NNNNN Mkr1 1,875 ms	Next Pe Next Pk Rig Next Pk Li Marker De Mkr→i
es BW 1 g g g g g g g g g g g g g	1.0 MHz rum Analyzer - Swept SA RF 50 2 AC 1.87533 ms Ref Offset 17.5 dB	PNO: Fast 😱	SENSE:PULSE SC	STATU	6.467 ms (1001 pts) Is 08:25:31 AM May 03, 2018 TRACE 12 3 4 5 6 TYPE MYMAN DET A NNNNN Mkr1 1,875 ms	Next Pe Next Pk Rig Next Pk Lu Marker De Mkr→Ref L
es BW 1 Garage Set	1.0 MHz Tum Analyzer - Swept SA RF 50 9 AC 1.87533 ms Ref 0ffset 17.5 dB Ref 40.00 dBm	PNO: Fast IFGain:Low	SENSE:PULSE SC	STATU OURCE OFF ALIGNAUTO Avg Type: RMS Avg Hold>100/100	6.467 ms (1001 pts) Is 08:25:31 AM May 03, 2018 TRACE 12 3 4 5 6 TYPE MYMAN DET A NNNNN Mkr1 1,875 ms	Peak Search Next Pea Next Pk Rig Next Pk Lo Marker De Mkr→Ref L Mo 1 o

(Plot A3, GSM 1900MHz, Channel = 810)

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	RF 50 Ω AC		SENSE:PULSE SOUR		10:27:29 AM May 03, 2018	Peak Search
larker 1	l 117.000 µs	PNO: Fast 🖵 IFGain:Low	Trig: Free Run Atten: 34 dB	Avg Type: Log-Pwr Avg Hold:>100/100	TRACE 123456 TYPE M WWWWWW DET P N N N N N	
0 dB/div og	Ref Offset 16.5 dB Ref 40.00 dBm				Mkr1 117.0 µs 30.927 dBm	NextPea
30.0 	<u> </u>					Next Pk Rig
20.0						Next Pk Le
).00						Marker De
0.0						Mkr→0
0.0						
0.0						Mkr→RefL
						M o 1 o
	.850200000 GHz 1.0 MHz	#VBW	3.0 MHz	Sweep	Span 0 Hz 1.000 ms (1001 pts)	10
		#VBW	3.0 MHz	Sweep	1.000 ms (1001 pts)	
es BW ' G gilent Spect	1.0 MHz trum Analyzer - Swept SA			STATU	1.000 ms (1001 pts) s	
es BW ' G jilent Spect	1.0 MHz	PNO: Fast 😱	SENSE:PULSE SOUR	STATU	1.000 ms (1001 pts) s	Peak Search
es BW / g ilent Spect arker 1	1.0 MHz trum Analyzer - Swept SA RF 50 Ω AC		SENSE:PULSE SOUR	STATU	1.000 ms (1001 pts)	Peak Search
es BW / g jlent Spect arker 1) dB/div	1.0 MHz rum Analyzer - Swept SA RF 50 Ω AC 1 665.000 μs Ref Offset 16.5 dB	PNO: Fast 😱	SENSE:PULSE SOUR	STATU	1.000 ms (1001 pts) Is 10:27:57 AM May 03, 2018 TRACE 12:34 56 TRACE 12:34 56 TRACE 12:34 56	Peak Search Next Pe
es BW ² ig iglent Spect larker 1 og 0 dB/div 0 g 0 0 0 0 0 0 0 0 0 0 0 0 0 0	1.0 MHz rum Analyzer - Swept SA RF 50 Ω AC 1 665.000 μs Ref Offset 16.5 dB	PNO: Fast 😱	SENSE:PULSE SOUR	CEE OFF ALIGNAUTO Avg Type: RMS Avg Hold>100/100	1.000 ms (1001 pts) Is 10:27:57 AM May 03, 2018 TRACE 12:34 56 TRACE 12:34 56 TRACE 12:34 56	Peak Search Next Pe Next Pk Rig
es BW ⁴ g g g g g g g g g g g g g g g g g g g	1.0 MHz rum Analyzer - Swept SA RF 50 Ω AC 1 665.000 μs Ref Offset 16.5 dB	PNO: Fast 😱	SENSE:PULSE SOUR	CEE OFF ALIGNAUTO Avg Type: RMS Avg Hold>100/100	1.000 ms (1001 pts) Is 10:27:57 AM May 03, 2018 TRACE 12:34 56 TRACE 12:34 56 TRACE 12:34 56	Peak Search Next Pea Next Pk Rig Next Pk Lu
es BW ⁷ g glent Spect arker 1 0 dB/div 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	1.0 MHz rum Analyzer - Swept SA RF 50 Ω AC 1 665.000 μs Ref Offset 16.5 dB	PNO: Fast 😱	SENSE:PULSE SOUR	CEE OFF ALIGNAUTO Avg Type: RMS Avg Hold>100/100	1.000 ms (1001 pts) Is 10:27:57 AM May 03, 2018 TRACE 12:34 56 TRACE 12:34 56 TRACE 12:34 56	Peak Search Next Per Next Pk Rig Next Pk Lu Marker De
es BW ² ^{IG} ^{IG} ^{IG} ^{IG} ^{IG} ^{IG} ^{IG} ^{IG}	1.0 MHz rum Analyzer - Swept SA RF 50 Ω AC 1 665.000 μs Ref Offset 16.5 dB	PNO: Fast 😱	SENSE:PULSE SOUR	CEE OFF ALIGNAUTO Avg Type: RMS Avg Hold>100/100	1.000 ms (1001 pts) Is 10:27:57 AM May 03, 2018 TRACE 12:34 56 TRACE 12:34 56 TRACE 12:34 56	Peak Search Next Pea Next Pk Rig Next Pk Lo Marker De
es BW ' ^{ig} gilent Spect	1.0 MHz rum Analyzer - Swept SA RF 50 Ω AC 1 665.000 μs Ref Offset 16.5 dB	PNO: Fast 😱	SENSE:PULSE SOUR	CEE OFF ALIGNAUTO Avg Type: RMS Avg Hold>100/100	1.000 ms (1001 pts) Is 10:27:57 AM May 03, 2018 TRACE 12:34 56 TRACE 12:34 56 TRACE 12:34 56	Peak Search Next Pea Next Pk Rig Next Pk Lu Marker De Mkr→C
es BW ² id ident Spect ident Spect ident Spect o dB/div o d o dB/div o d o d o d o d o d o d o d o d	1.0 MHz rum Analyzer - Swept SA RF 50 Ω AC 1 665.000 μs Ref Offset 16.5 dB	PNO: Fast	SENSE:PULSE SOUR	STATU	1.000 ms (1001 pts) Is 10:27:57 AM May 03, 2018 TRACE 12:34 56 TRACE 12:34 56 TRACE 12:34 56	

(Plot B1, EGPRS 1900 MHz, Channel = 512)

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gilent Spectru 4 Marker 1	RF 50Ω AC 202.000 μs		SENSE:PULSE SO	Avg Type: Log-Pwr	10:27:03 AM May 03, 2018 TRACE 1 2 3 4 5 6	Peak Search
	202.000 µ3	PNO: Fast 🕞 IFGain:Low	Trig: Free Run Atten: 34 dB	Avg Hold:>100/100	TRACE 123456 TYPE M	NextDe
0 dB/div	Ref Offset 16.5 dB Ref 40.00 dBm				Mkr1 202.0 µs 30.085 dBm	NextPea
og 30.0	1					Next Pk Rig
20.0						
10.0						Next Pk Lo
.00						
0.0						Marker De
0.0						
0.0						Mkr→0
0.0						Mkr→RefL
0.0						wikt → Kei L
						Mo
	80000000 GHz 0 MHz	#VBW	/ 3.0 MHz	Sweep 1	Span 0 Hz .000 ms (1001 pts)	1 o
es BW 1.	0 MHz	#VBW	/ 3.0 MHz	Sweep 1 statu	1.000 ms (1001 pts)	1 0
es BW 1. G gilent Spectru	0 MHz m Analyzer - Swept SA RF 50 Ω AC		/ 3.0 MHz	STATU:	1.000 ms (1001 pts)	1 o Peak Search
es BW 1. G jilent Spectru	0 MHz Im Analyzer - Swept SA		SENSE:PULSE SO	STATU	1.000 ms (1001 pts) s 10:28:21 AM May 03, 2018 TRACE 12:34 56 TYPE MUNICIPAL DET ALMININ	Peak Search
es BW 1. g gilent Spectru arker 1 s	0 MHz m Analyzer - Swept SA RF 50 Ω AC	PNO: Fast 🖕	SENSE:PULSE SO	STATU: URCE OFF ALIGNAUTO Avg Type: RMS	1.000 ms (1001 pts)	Peak Search
es BW 1. Ig ilent Spectru larker 1 : 0 dB/div	0 MHz m Analyzer - Swept SA RF 50 Ω AC 517.000 μs Ref Offset 16.5 dB	PNO: Fast 🖕	SENSE:PULSE SO	STATU: URCE OFF ALIGNAUTO Avg Type: RMS	1.000 ms (1001 pts) s 10:28:21 AM May 03, 2018 TRACE 12:34 56 TYPE MUNICIPAL DET ALMININ	Peak Search Next Pe
es BW 1. G ilent Spectru arker 1 O dB/div	0 MHz m Analyzer - Swept SA RF 50 Ω AC 517.000 μs Ref Offset 16.5 dB	PNO: Fast 🖕	SENSE:PULSE SO Trig: Free Run Atten: 34 dB	STATU: URCE OFF ALIGNAUTO Avg Type: RMS	1.000 ms (1001 pts) s 10:28:21 AM May 03, 2018 TRACE 12:34 56 TYPE MUNICIPAL DET ALMININ	Peak Search Next Pe
es BW 1.	0 MHz m Analyzer - Swept SA RF 50 Ω AC 517.000 μs Ref Offset 16.5 dB	PNO: Fast 🖕	SENSE:PULSE SO Trig: Free Run Atten: 34 dB	STATU: URCE OFF ALIGNAUTO Avg Type: RMS	1.000 ms (1001 pts) s 10:28:21 AM May 03, 2018 TRACE 12:34 56 TYPE MUNICIPAL DET ALMININ	Peak Search Next Pe Next Pk Rig
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es BW 1. ig iglent Spectru arker 1 1 0 dB/div 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 MHz m Analyzer - Swept SA RF 50 Ω AC 517.000 μs Ref Offset 16.5 dB	PNO: Fast 🖕	SENSE:PULSE SO Trig: Free Run Atten: 34 dB	STATU: URCE OFF ALIGNAUTO Avg Type: RMS	1.000 ms (1001 pts) s 10:28:21 AM May 03, 2018 TRACE 12:34 56 TYPE MUNICIPAL DET ALMININ	Peak Search Next Pea Next Pk Rig Next Pk Lu
es BW 1. ig iglent Spectru arker 1 : 0 dB/div 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 MHz m Analyzer - Swept SA RF 50 Ω AC 517.000 μs Ref Offset 16.5 dB	PNO: Fast 🖕	SENSE:PULSE SO Trig: Free Run Atten: 34 dB	STATU: URCE OFF ALIGNAUTO Avg Type: RMS	1.000 ms (1001 pts) s 10:28:21 AM May 03, 2018 TRACE 12:34 56 TYPE MUNICIPAL DET ALMININ	Peak Search Next Per Next Pk Rig Next Pk Lu Marker De
es BW 1. iglient Spectru larker 1 : 0 dB/div 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 MHz m Analyzer - Swept SA RF 50 Ω AC 517.000 μs Ref Offset 16.5 dB	PNO: Fast 🖕	SENSE:PULSE SO Trig: Free Run Atten: 34 dB	STATU: URCE OFF ALIGNAUTO Avg Type: RMS	1.000 ms (1001 pts) s 10:28:21 AM May 03, 2018 TRACE 12:34 56 TYPE MUNICIPAL DET ALMININ	
es BW 1. iii gilent Spectru larker 1 i 0 dB/div 0	0 MHz m Analyzer - Swept SA RF 50 Ω AC 517.000 μs Ref Offset 16.5 dB	PNO: Fast 🖕	SENSE:PULSE SO Trig: Free Run Atten: 34 dB	STATU: URCE OFF ALIGNAUTO Avg Type: RMS	1.000 ms (1001 pts) s 10:28:21 AM May 03, 2018 TRACE 12:34 56 TYPE MUNICIPAL DET ALMININ	Peak Search Next Pea Next Pk Rig Next Pk Lo Marker De
es BW 1. ig glent Spectru larker 1 : 0 dB/div 0	0 MHz m Analyzer - Swept SA RF 50 Ω AC 517.000 μs Ref Offset 16.5 dB	PNO: Fast 🖕	SENSE:PULSE SO Trig: Free Run Atten: 34 dB	STATU: URCE OFF ALIGNAUTO Avg Type: RMS	1.000 ms (1001 pts) s 10:28:21 AM May 03, 2018 TRACE 12:34 56 TYPE MUNICIPAL DET ALMININ	Peak Search Next Pea Next Pk Rig Next Pk Lo Marker De
es BW 1. ig ilent Spectru arker 1 : 0 dB/div 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 MHz m Analyzer - Swept SA RF 50 Ω AC 517.000 μs Ref Offset 16.5 dB	PNO: Fast 🖕	SENSE:PULSE SO Trig: Free Run Atten: 34 dB	STATU: URCE OFF ALIGNAUTO Avg Type: RMS	1.000 ms (1001 pts) s 10:28:21 AM May 03, 2018 TRACE 12:34 56 TYPE MUNICIPAL DET ALMININ	Peak Search Next Per Next Pk Rig Next Pk Lu Marker De

(Plot B2, EGPRS 1900 MHz, Channel = 661)

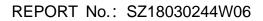




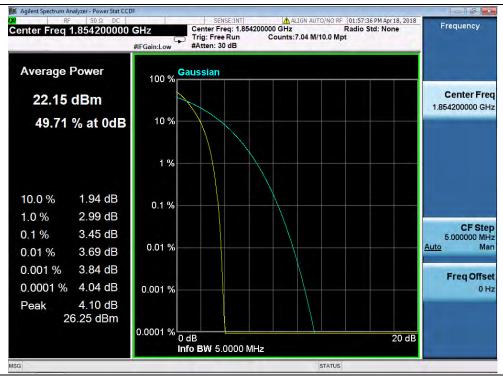
a	RF 50 Ω AC		SENSE:PULSE SOU	ALIGNAUTO Avg Type: Log-Pwr	10:26:39 AM May 03, 2018	Peak Search
larker	703.000 μs	PNO: Fast 🖵 IFGain:Low	Trig: Free Run Atten: 34 dB	Avg Hold:>100/100	TRACE 123456 TYPE MWWWWW DET PNNNNN	
0 dB/div og	Ref Offset 16.5 dB Ref 40.00 dBm				Mkr1 703.0 μs 29.585 dBm	NextPea
30.0				1		Next Pk Rig
20.0						_
0.0						Next Pk L
).00						Marker De
0.0						
0.0						Mkr→0
0.0						Mkr→RefL
i0.0						
						М о 1 о
	909800000 GHz			•••••	Span 0 Hz	
es BW '		#VBW	3.0 MHz	Sweep 1	.000 ms (1001 pts)	
SG BW '	1.0 MHz rum Analyzer - Swept SA		/ 3.0 MHz		.000 ms (1001 pts)	
es BW ' G gilent Spect	1.0 MHz		SENSE:PULSE SOU	STATUS	.000 ms (1001 pts)	Peak Search
es BW [/] ^{ig} lent Spect larker 1	1.0 MHz rum Analyzer - Swept SA RF 50 Ω AC 1 105.000 μs Ref Offset 16.5 dB		SENSE:PULSE SOU	STATUS RCE OFF ALIGNAUTO Avg Type: RMS	.000 ms (1001 pts)	Peak Search
es BW / gilent Spect larker 1	1.0 MHz rum Analyzer - Swept SA RF 50 Ω AC I 105.000 μs	PNO: Fast 😱	SENSE:PULSE SOU	STATUS RCE OFF ALIGNAUTO Avg Type: RMS	.000 ms (1001 pts)	Peak Search Next Pea
es BW [/] ^{ig} ^{ig} iglent Spect arker 1 od B/div og	1.0 MHz rum Analyzer - Swept SA RF 50Ω AC 1 105.000 μs Ref Offset 16.5 dB Ref 40.00 dBm	PNO: Fast 😱	SENSE:PULSE SOU	STATUS RCE OFF ALIGNAUTO Avg Type: RMS	.000 ms (1001 pts)	Peak Search Next Pe
es BW ² ig iglent Spect larker 1 o dB/div o g 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	1.0 MHz rum Analyzer - Swept SA RF 50Ω AC 1 105.000 μs Ref Offset 16.5 dB Ref 40.00 dBm	PNO: Fast 😱	SENSE:PULSE SOU	STATUS RCE OFF ALIGNAUTO Avg Type: RMS	.000 ms (1001 pts)	Peak Search Next Pe Next Pk Rig
es BW ² ig ilent Spect arker 1 o dB/div o g 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	1.0 MHz rum Analyzer - Swept SA RF 50Ω AC 1 105.000 μs Ref Offset 16.5 dB Ref 40.00 dBm	PNO: Fast 😱	SENSE:PULSE SOU	STATUS RCE OFF ALIGNAUTO Avg Type: RMS	.000 ms (1001 pts)	Peak Search Next Pea Next Pk Rig Next Pk Lu
es BW ' G gilent Spect	1.0 MHz rum Analyzer - Swept SA RF 50Ω AC 1 105.000 μs Ref Offset 16.5 dB Ref 40.00 dBm	PNO: Fast 😱	SENSE:PULSE SOU	STATUS RCE OFF ALIGNAUTO Avg Type: RMS	.000 ms (1001 pts)	
es BW ² ^{IG} ^{IG} ^{IG} ^{IG} ^{IG} ^{IG} ^{IG} ^{IG}	1.0 MHz rum Analyzer - Swept SA RF 50Ω AC 1 105.000 μs Ref Offset 16.5 dB Ref 40.00 dBm	PNO: Fast 😱	SENSE:PULSE SOU	STATUS RCE OFF ALIGNAUTO Avg Type: RMS	.000 ms (1001 pts)	Peak Search Next Pea Next Pk Rig Next Pk Lu
es BW ⁷	1.0 MHz rum Analyzer - Swept SA RF 50Ω AC 1 105.000 μs Ref Offset 16.5 dB Ref 40.00 dBm	PNO: Fast 😱	SENSE:PULSE SOU	STATUS RCE OFF ALIGNAUTO Avg Type: RMS	.000 ms (1001 pts)	Peak Search Next Per Next Pk Rig Next Pk Lu Marker De
es BW ⁴ ^{3G} ^{3G} ^{3G} ^{3G} ^{3G} ^{3G} ^{3G} ^{3G}	1.0 MHz rum Analyzer - Swept SA RF 50Ω AC 1 105.000 μs Ref Offset 16.5 dB Ref 40.00 dBm	PNO: Fast 😱	SENSE:PULSE SOU	STATUS RCE OFF ALIGNAUTO Avg Type: RMS	.000 ms (1001 pts)	Peak Search Next Per Next Pk Rig Next Pk Lu Marker De
es BW ⁴ sa glent Spect larker 1	1.0 MHz rum Analyzer - Swept SA RE 50 Q AC 1 105.000 µs Ref Offset 16.5 dB Ref 40.00 dBm 1 1 1 1 1 1 1 1 1 1 1 1 1	PNO: Fast 😱	SENSE:PULSE SOU	STATUS RCE OFF ALIGNAUTO Avg Type: RMS	.000 ms (1001 pts)	Peak Search Next Pea Next Pk Rig Next Pk Lu Marker De Mkr-A
es BW ⁴	1.0 MHz rum Analyzer - Swept SA RF 50Ω AC 1 105.000 μs Ref Offset 16.5 dB Ref 40.00 dBm	PNO: Fast	SENSE:PULSE SOU	RCE OFF ALIGNAUTO Avg Type: RMS Avg Hold>100/100	.000 ms (1001 pts)	Peak Search Next Pe Next Pk Rig Next Pk Li Marker De Mkr→Ref L

(Plot B3, EGPRS 1900MHz, Channel = 810)









(Plot C1, WCDMA 1900MHz, Channel = 9262)



(Plot C2, WCDMA 1900MHz, Channel = 9400)

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(Plot C3, WCDMA 1900MHz, Channel = 9538)

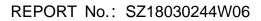


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M

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(Plot D1, WCDMA 1700MHz, Channel = 1312)



(Plot D2, WCDMA 1700MHz, Channel = 1412)

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(Plot D3, WCDMA 1700MHz, Channel = 1513)



M

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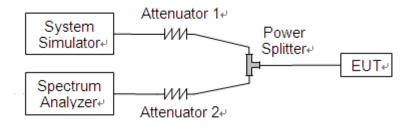
2.3. 99% Occupied Bandwidth

2.3.1. Requirement

According to FCC section 2.1049 and FCC § 22.917 & 24.238, the occupied bandwidth is the frequency bandwidth such that, below its lower and above its upper frequency limits, the mean powers radiated are each equal to 0.5 percent of the total mean power radiated by a given emission. Occupied bandwidth is also known as the 99% emission bandwidth.

2.3.2. Test Description

Test Setup:



The EUT is coupled to the Spectrum Analyzer (SA) and the System Simulator (SS) with Attenuators through the Power Splitter; the RF load attached to the EUT antenna terminal is 500hm; the path loss as the factor is calibrated to correct the reading. The EUT is commanded by the SS to operate at the maximum output power i.e. Power Control Level (PCL) = 5 and Power Class = 4. A call is established between the EUT and the SS.





2.3.3. Test Result

The lowest, middle and highest channels are selected to perform testing to record the 99% occupied bandwidth.

GSM Test Verdict:

Band	Channel	Frequency	26dB bandwidth	99% Occupied	Refer to
Danu	Channel	(MHz)	(kHz)	Bandwidth (kHz)	Plot
GSM	128	824.2	317.1	246.12	Plot
850MHz	190	836.6	316.6	244.50	A1 to A3
ODUNITZ	251	848.8	314.8	245.88	AT IU AS
GSM	512	1850.2	321.6	246.00	Plot
1900MHz	661	1880.0	322.8	248.66	B1 to B3
	810	1909.8	312.4	247.38	
	128	824.2	320.3	246.74	Dist
GPRS 850MHz	190	836.6	312.8	243.44	Plot C1 to C3
	251	848.8	316.3	243.54	011003
GPRS	512	1850.2	322.7	246.83	Plot
1900MHz	661	1880.0	321.4	248.72	D1 to D3
190010172	810	1909.8	319.6	249.48	011003
EGPRS	128	824.2	327.0	250.29	Plot
850MHz	190	836.6	326.4	246.55	E1 to E3
ODUNITZ	251	848.8	329.8	253.95	ET 10 E3
EGPRS	512	1850.2	323.6	252.42	Diot
1900MHz	661	1880.0	313.5	243.55	Plot F1 to F3
TBOOMINZ	810	1909.8	320.8	247.80	111073

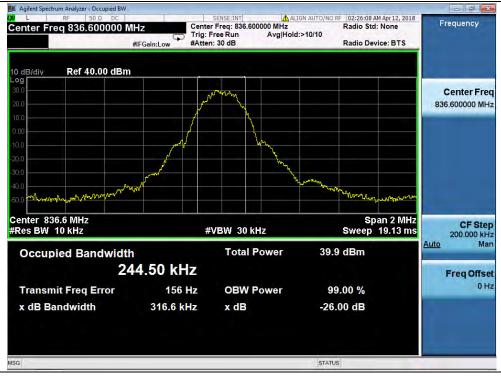




Test Plots:

Agilent Spectrum Analyzer - Occupied BW SENSE:INT ALIGN AUTO/NO RF Center Freq: 824.200000 MHz Trig: Free Run Avg|Hold:>10/10 #Atten: 30 dB 02:25:40 AM Apr 12, 2018 Radio Std: None Frequency Center Freq 824.200000 MHz Radio Device: BTS #IFGain:Low Ref 40.00 dBm 0 dB/div og Center Freq 824.200000 MHz Center 824.2 MHz #Res BW 10 kHz Span 2 MHz Sweep 19.13 ms CF Step 200.000 kHz #VBW 30 kHz Auto Mar **Total Power** 39.7 dBm **Occupied Bandwidth** 246.12 kHz **Freq Offset** 0 Hz **Transmit Freq Error** -654 Hz **OBW Power** 99.00 % x dB Bandwidth -26.00 dB 317.1 kHz x dB STATUS

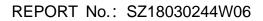
(Plot A1, GSM 850MHz, Channel = 128)



(Plot A2, GSM 850MHz, Channel = 190)



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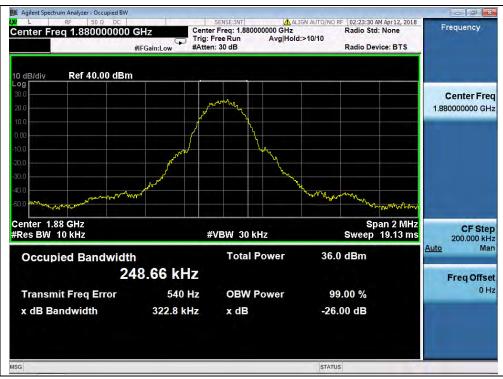


(Plot B1, GSM1900MHz, Channel = 512)

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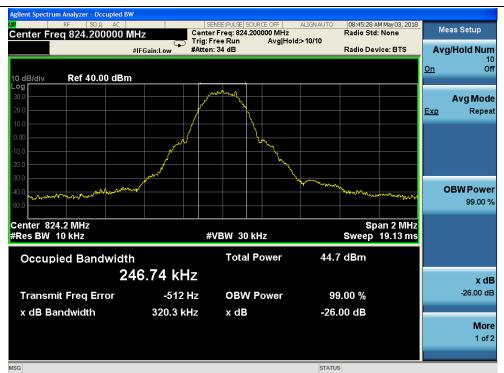
(Plot B3, GSM 1900MHz, Channel = 810)

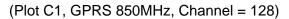
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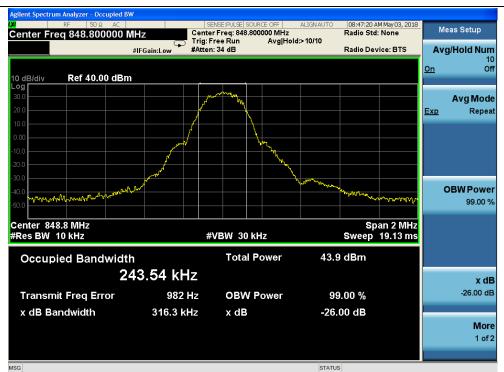
(Plot C2, GPRS 850MHz, Channel = 190)

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(Plot D1, GPRS1900MHz, Channel = 512)

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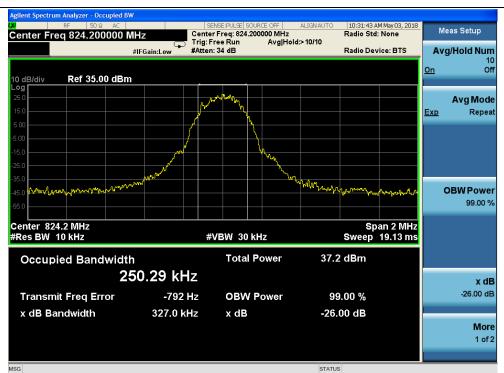


(Plot D3, GPRS 1900MHz, Channel = 810)

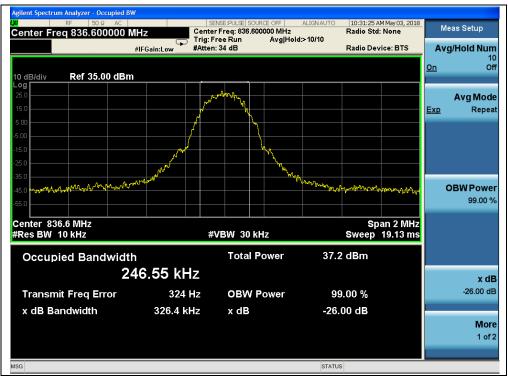
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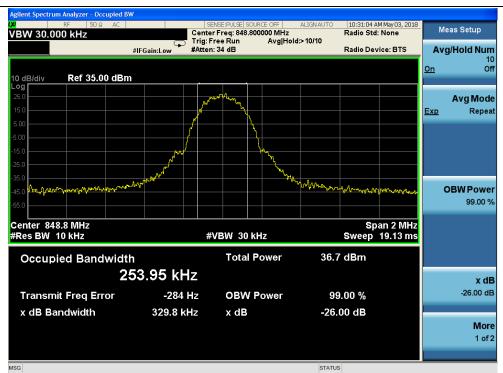


(Plot E2, EGPRS 850MHz, Channel = 190)

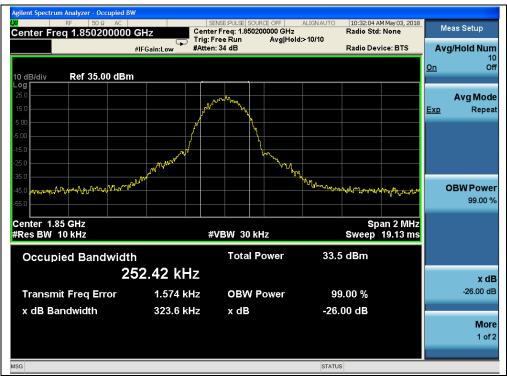
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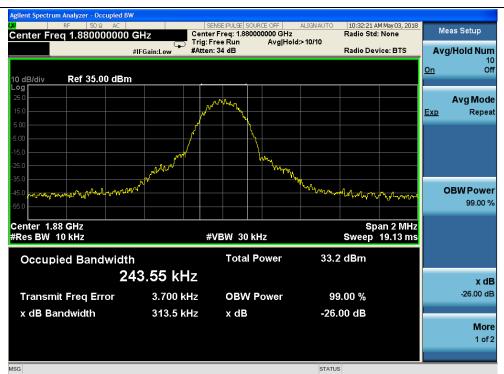


(Plot F1, EGPRS1900MHz, Channel = 512)

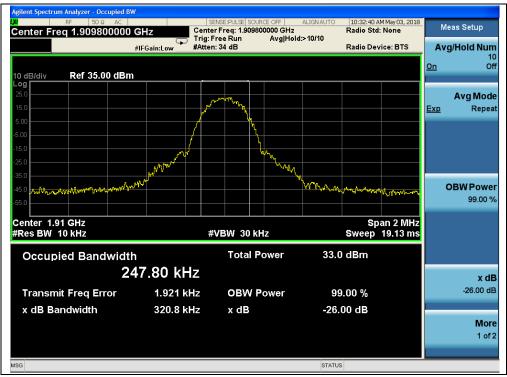
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(Plot F3, EGPRS 1900MHz, Channel = 810)



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WCDMA Test Verdict:

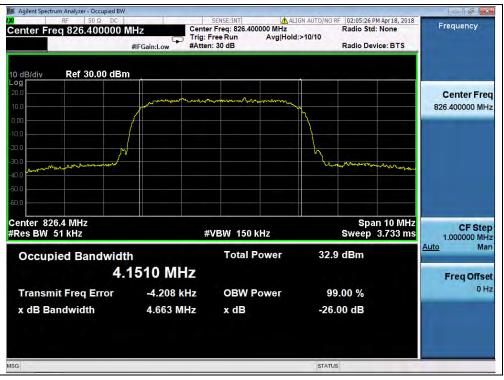
Band	Channel	Frequency	26dB bandwidth	99% Occupied	Refer to
Бапо	Channel	(MHz)	(MHz)	Bandwidth (MHz)	Plot
	4132	826.4	4.663	4.1510	Dist
WCDMA	4175	835.0	4.667	4.1657	Plot
850MHz	4233	846.6	4.674	4.1686	G1 to G3
	1312	1712.4	4.666	4.1549	Dist
WCDMA 1700MHz	1412	1732.4	4.675	4.1567	Plot H1 to H3
	1513	1752.6	4.673	4.1457	
	9262	1852.4	4.690	4.1659	Dist
	9400	1880.0	4.658	4.1709	Plot I1 to I3
1900MHz	9538	1907.6	4.660	4.1545	11 10 13
	4132	826.4	4.650	4.1524	Dist
	4175	835.0	4.646	4.1633	Plot J1 to J3
850MHz	4233	846.6	4.665	4.1605	J 1 10 J 3
HSDPA	1312	1712.4	4.660	4.1668	Plot
1700MHz	1412	1732.4	4.675	4.1480	K1 to K3
	1513	1752.6	4.662	4.1569	
HSDPA	9262	1852.4	4.661	4.1497	Plot
1900MHz	9400	1880.0	4.685	4.1568	L1 to L3
	9538	1907.6	4.654	4.1581	
HSUPA	4132	826.4	4.640	4.1465	Plot
850MHz	4175	835.0	4.645	4.1471	M1 to M3
ODUNITZ	4233	846.6	4.664	4.1586	
HSUPA	1312	1712.4	4.654	4.1532	Plot
1700MHz	1412	1732.4	4.660	4.1563	N1 to N3
	1513	1752.6	4.663	4.1599	
HSUPA	9262	1852.4	4.672	4.1635	Plot
1900MHz	9400	1880.0	4.650	4.1606	O1 to O3
	9538	1907.6	4.656	4.1516	011003





Dand	Channel	Frequency	26dB bandwidth	99% Occupied	Refer to
Band	Channel	(MHz)	(MHz)	Bandwidth (MHz)	Plot
HSPA+	4132	826.4	4.651	4.1672	Plot
850MHz	4175	835.0	4.652	4.1486	PIOL P1 to P3
83010112	4233	846.6	4.651	4.1554	
HSPA+	1312	1712.4	4.651	4.1562	Plot
1700MHz	1412	1732.4	4.661	4.1633	Q1 to Q3
	1513	1752.6	4.664	4.1535	
HSPA+	9262	1852.4	4.669	4.1686	Plot
1900MHz	9400	1880.0	4.661	4.1623	R1 to R3
TBOUININZ	9538	1907.6	4.656	4.1567	

Test Plots:



(Plot G1, WCDMA 850MHz, Channel = 4132)







(Plot G2, WCDMA 850 MHz, Channel = 4175)



(Plot G3, WCDMA 850MHz, Channel = 4233)







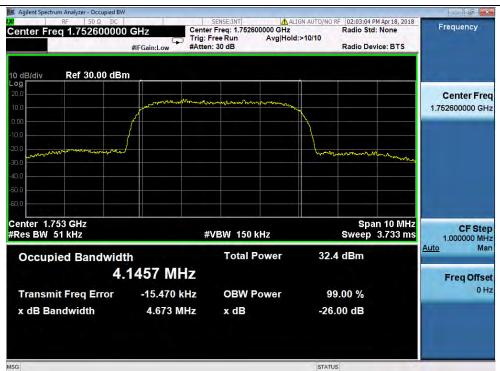
(Plot H1, WCDMA 1700MHz, Channel = 1312)



(Plot H2, WCDMA 1700 MHz, Channel = 1412)







(Plot H3, WCDMA1700MHz, Channel = 1513)

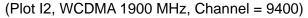


(Plot I1, WCDMA 1900MHz, Channel = 9262)











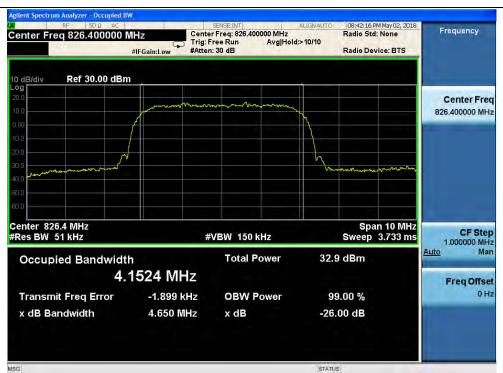
(Plot I3, WCDMA1900MHz, Channel = 9538)



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(Plot J1, HSDPA 850MHz, Channel = 4132)



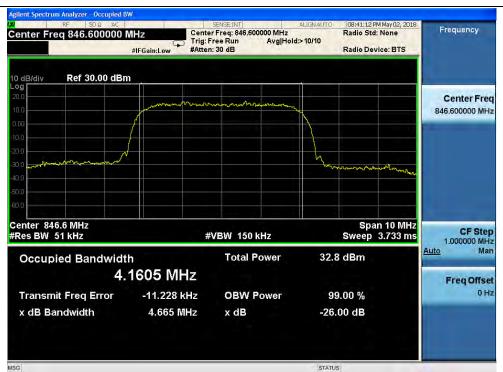
(Plot J2, HSDPA 850 MHz, Channel = 4175)

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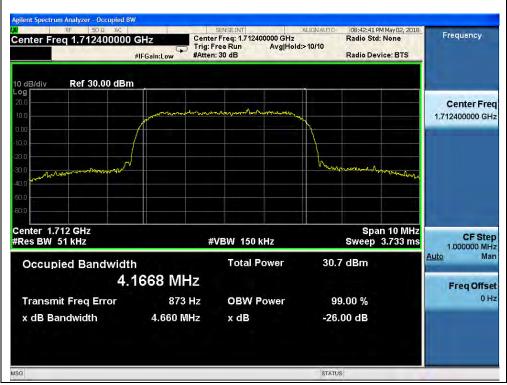
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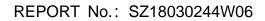
(Plot J3, HSDPA 850MHz, Channel = 4233)



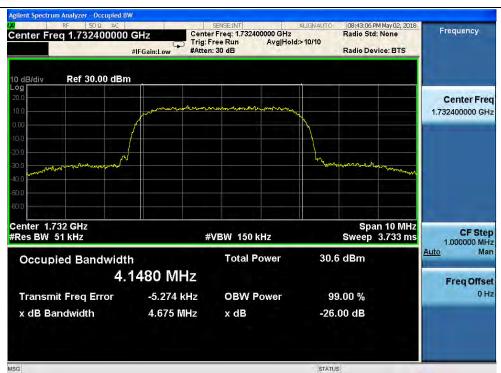
(Plot K1, HSDPA 1700MHz, Channel = 1312)



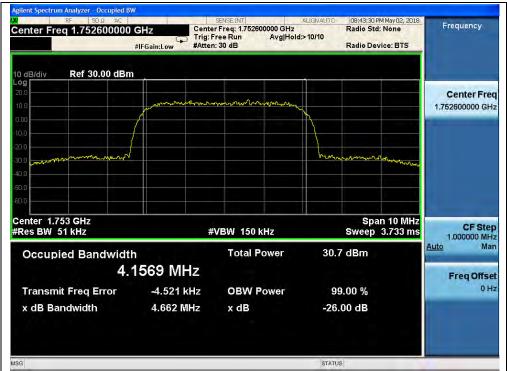
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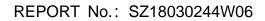


(Plot K2, HSDPA 1700 MHz, Channel = 1412)

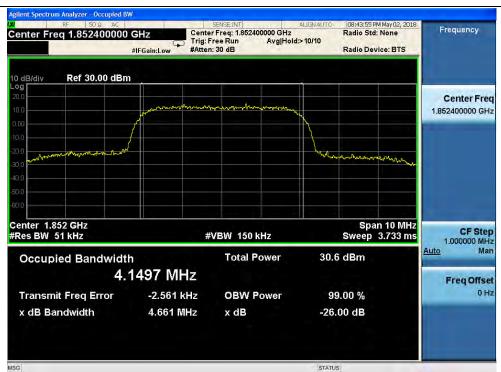


(Plot K3, HSDPA 1700MHz, Channel = 1513)

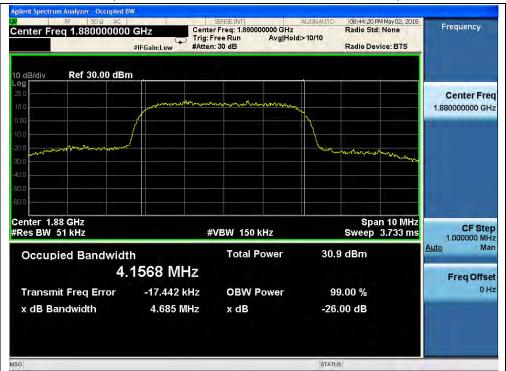








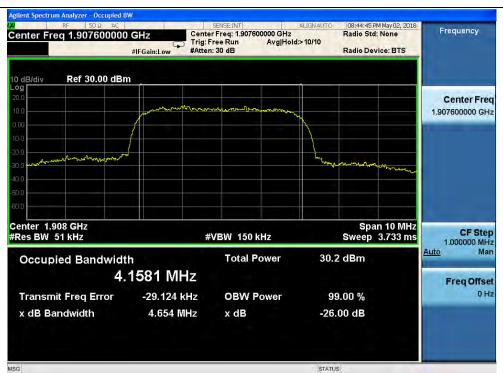
(Plot L1, HSDPA 1900MHz, Channel = 9262)



(Plot L2, HSDPA 1900 MHz, Channel = 9400)





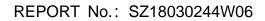


(Plot L3, HSDPA 1900MHz, Channel = 9538)

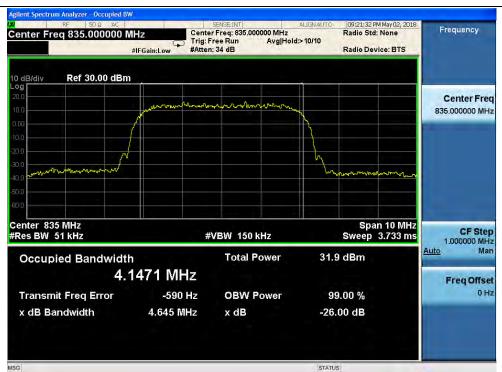


(Plot M1, HSUPA 850MHz, Channel = 4132)







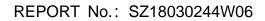


(Plot M2, HSUPA 850 MHz, Channel = 4175)



(Plot M3, HSUPA 850MHz, Channel = 4233)

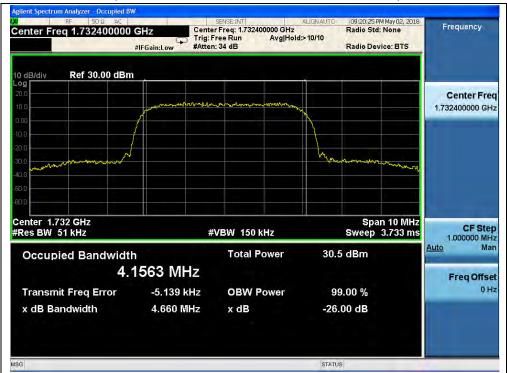






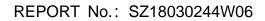


(Plot N1, HSUPA 1700MHz, Channel =1312)

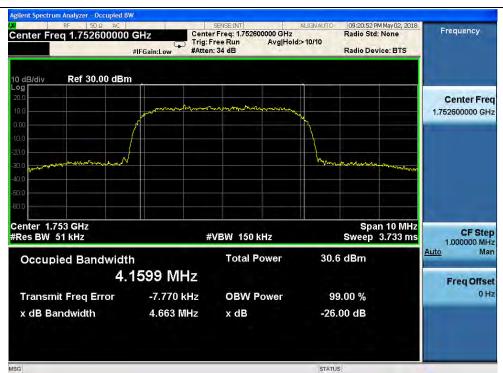


(Plot N2, HSUPA 1700 MHz, Channel = 1412)

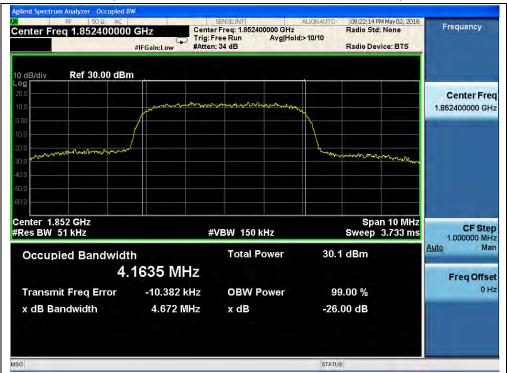








(Plot N3, HSUPA 1700MHz, Channel = 1513)



(Plot O1, HSUPA 1900MHz, Channel = 9262)





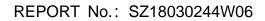


(Plot O2, HSUPA 1900 MHz, Channel = 9400)



(Plot O3, HSUPA 1900MHz, Channel = 9538)

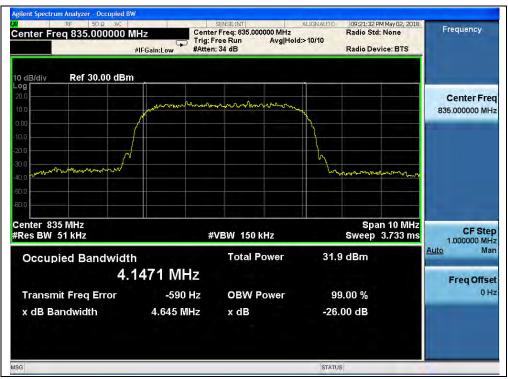












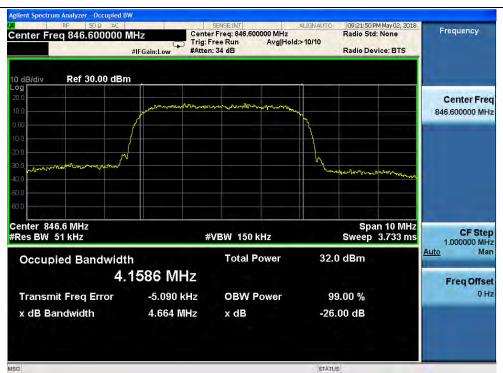
(Plot P2, HSPA+850 MHz, Channel = 4175)



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(Plot P3, HSPA+ 850MHz, Channel = 4233)



(Plot Q1, HSPA+ 1700MHz, Channel =1312)

