



LTE Band 5									
bandwidth	Polarization	Frequency (MHz)	Rt (dBm)	Rs (dBm)	Ps (dBm)	Gs (dBd)	ERP (dBm)	Limit (dBm)	Conclusion
1.4 MHz (QPSK)	H	824.7	-27.63	-47.61	0.00	1.06	26.04	38.45	Pass
	H	836.5	-27.88	-47.75	0.00	1.24	26.98	38.45	Pass
	H	848.3	-28.74	-48.23	0.00	1.38	28.29	38.45	Pass
	V	824.7	-42.56	-47.29	0.00	1.06	23.39	38.45	Pass
	V	836.5	-42.26	-47.15	0.00	1.24	23.29	38.45	Pass
	V	848.3	-42.88	-47.48	0.00	1.38	23.94	38.45	Pass
1.4 MHz (16QAM)	H	824.7	-27.96	-47.61	0.00	1.06	25.70	38.45	Pass
	H	836.5	-28.19	-47.75	0.00	1.24	26.66	38.45	Pass
	H	848.3	-29.06	-48.23	0.00	1.38	27.95	38.45	Pass
	V	824.7	-42.86	-47.29	0.00	1.06	23.07	38.45	Pass
	V	836.5	-42.57	-47.15	0.00	1.24	22.98	38.45	Pass
	V	848.3	-43.20	-47.48	0.00	1.38	23.60	38.45	Pass
3 MHz (QPSK)	H	825.5	-27.89	-47.59	0.00	1.06	25.72	38.45	Pass
	H	836.5	-28.18	-47.75	0.00	1.24	27.17	38.45	Pass
	H	847.5	-28.63	-48.18	0.00	1.38	27.95	38.45	Pass
	V	825.5	-42.57	-47.26	0.00	1.06	23.23	38.45	Pass
	V	836.5	-42.60	-47.15	0.00	1.24	23.59	38.45	Pass
	V	847.5	-43.73	-47.44	0.00	1.38	23.97	38.45	Pass
3 MHz (16QAM)	H	825.5	-27.92	-47.59	0.00	1.06	25.40	38.45	Pass
	H	836.5	-28.49	-47.75	0.00	1.24	26.85	38.45	Pass
	H	847.5	-28.94	-48.18	0.00	1.38	27.65	38.45	Pass
	V	825.5	-42.91	-47.26	0.00	1.06	22.90	38.45	Pass
	V	836.5	-42.91	-47.15	0.00	1.24	23.26	38.45	Pass
	V	847.5	-44.03	-47.44	0.00	1.38	23.65	38.45	Pass
5 MHz (QPSK)	H	826.5	-27.81	-47.60	0.00	1.13	25.49	38.45	Pass
	H	836.5	-28.20	-47.75	0.00	1.24	26.73	38.45	Pass
	H	846.5	-28.85	-48.12	0.00	1.38	27.53	38.45	Pass
	V	826.5	-42.46	-47.24	0.00	1.13	23.20	38.45	Pass
	V	836.5	-42.64	-47.15	0.00	1.24	23.10	38.45	Pass
	V	846.5	-43.02	-47.40	0.00	1.38	22.93	38.45	Pass
5 MHz (16QAM)	H	826.5	-28.11	-47.60	0.00	1.13	25.17	38.45	Pass
	H	836.5	-28.54	-47.75	0.00	1.24	26.40	38.45	Pass
	H	846.5	-29.18	-48.12	0.00	1.38	27.20	38.45	Pass
	V	826.5	-42.77	-47.24	0.00	1.13	22.88	38.45	Pass
	V	836.5	-42.94	-47.15	0.00	1.24	22.77	38.45	Pass
	V	846.5	-43.36	-47.40	0.00	1.38	22.60	38.45	Pass



LTE Band 5									
bandwidth	Polarization	Frequency (MHz)	Rt (dBm)	Rs (dBm)	Ps (dBm)	Gs (dBd)	ERP (dBm)	Limit (dBm)	Conclusion
10 MHz (QPSK)	H	829	-27.65	-47.61	0.00	1.13	24.43	38.45	Pass
	H	836.5	-27.96	-47.75	0.00	1.24	26.06	38.45	Pass
	H	844	-28.46	-48.01	0.00	1.33	26.22	38.45	Pass
	V	829	-42.44	-47.19	0.00	1.13	21.91	38.45	Pass
	V	836.5	-42.49	-47.15	0.00	1.24	22.84	38.45	Pass
	V	844	-42.36	-47.29	0.00	1.33	22.03	38.45	Pass
10 MHz (16QAM)	H	829	-27.96	-47.61	0.00	1.13	24.10	38.45	Pass
	H	836.5	-28.24	-47.75	0.00	1.24	25.75	38.45	Pass
	H	844	-28.78	-48.01	0.00	1.33	25.90	38.45	Pass
	V	829	-42.77	-47.19	0.00	1.13	21.60	38.45	Pass
	V	836.5	-42.79	-47.15	0.00	1.24	22.51	38.45	Pass
	V	844	-42.61	-47.29	0.00	1.33	21.70	38.45	Pass

LTE Band 26									
bandwidth	Polarization	Frequency (MHz)	Rt (dBm)	Rs (dBm)	Ps (dBm)	Gs (dBd)	ERP (dBm)	Limit (dBm)	Conclusion
1.4 MHz (QPSK)	H	824.7	-27.76	-47.61	0.00	1.06	26.69	38.45	Pass
	H	836.5	-27.84	-47.75	0.00	1.24	27.83	38.45	Pass
	H	848.3	-28.32	-48.23	0.00	1.38	28.11	38.45	Pass
	V	824.7	-38.14	-47.29	0.00	1.06	23.52	38.45	Pass
	V	836.5	-38.81	-47.75	0.00	1.24	24.37	38.45	Pass
	V	848.3	-38.25	-47.48	0.00	1.38	24.74	38.45	Pass
1.4 MHz (16QAM)	H	824.7	-28.25	-47.61	0.00	1.06	26.37	38.45	Pass
	H	836.5	-28.46	-47.75	0.00	1.24	27.50	38.45	Pass
	H	848.3	-29.00	-48.23	0.00	1.38	27.80	38.45	Pass
	V	824.7	-38.59	-47.29	0.00	1.06	23.20	38.45	Pass
	V	836.5	-39.38	-47.75	0.00	1.24	24.06	38.45	Pass
	V	848.3	-39.21	-47.48	0.00	1.38	24.43	38.45	Pass
3 MHz (QPSK)	H	825.5	-27.65	-47.59	0.00	1.06	26.68	38.45	Pass
	H	836.5	-27.73	-47.75	0.00	1.24	27.76	38.45	Pass
	H	847.5	-27.98	-48.18	0.00	1.38	28.60	38.45	Pass
	V	825.5	-38.00	-47.26	0.00	1.06	23.90	38.45	Pass
	V	836.5	-38.50	-47.75	0.00	1.24	24.38	38.45	Pass
	V	847.5	-37.96	-47.44	0.00	1.38	24.50	38.45	Pass
3 MHz (16QAM)	H	825.5	-28.20	-47.59	0.00	1.06	26.37	38.45	Pass
	H	836.5	-28.48	-47.75	0.00	1.24	27.45	38.45	Pass
	H	847.5	-28.93	-48.18	0.00	1.38	28.27	38.45	Pass
	V	825.5	-38.52	-47.26	0.00	1.06	23.60	38.45	Pass



LTE Band 26									
bandwidth	Polarization	Frequency (MHz)	Rt (dBm)	Rs (dBm)	Ps (dBm)	Gs (dBd)	ERP (dBm)	Limit (dBm)	Conclusion
	V	836.5	-39.07	-47.75	0.00	1.24	24.06	38.45	Pass
	V	847.5	-38.62	-47.44	0.00	1.38	24.15	38.45	Pass
5 MHz (QPSK)	H	826.5	-27.97	-47.60	0.00	1.13	26.17	38.45	Pass
	H	836.5	-28.06	-47.75	0.00	1.24	27.43	38.45	Pass
	H	846.5	-28.20	-48.12	0.00	1.38	28.13	38.45	Pass
	V	826.5	-38.39	-47.24	0.00	1.13	23.75	38.45	Pass
	V	836.5	-38.82	-47.75	0.00	1.24	24.22	38.45	Pass
	V	846.5	-38.17	-47.40	0.00	1.38	23.09	38.45	Pass
	V	846.5	-38.17	-47.40	0.00	1.38	23.09	38.45	Pass
5 MHz (16QAM)	H	826.5	-28.70	-47.60	0.00	1.13	25.86	38.45	Pass
	H	836.5	-28.83	-47.75	0.00	1.24	27.10	38.45	Pass
	H	846.5	-28.79	-48.12	0.00	1.38	27.82	38.45	Pass
	V	826.5	-39.02	-47.24	0.00	1.13	23.45	38.45	Pass
	V	836.5	-39.40	-47.75	0.00	1.24	23.90	38.45	Pass
	V	846.5	-38.81	-47.40	0.00	1.38	22.78	38.45	Pass
10 MHz (QPSK)	H	829	-27.51	-47.61	0.00	1.13	25.12	38.45	Pass
	H	836.5	-27.99	-47.75	0.00	1.24	25.83	38.45	Pass
	H	844	-27.87	-48.01	0.00	1.33	26.96	38.45	Pass
	V	829	-37.89	-47.19	0.00	1.13	22.16	38.45	Pass
	V	836.5	-38.90	-47.75	0.00	1.24	23.36	38.45	Pass
	V	844	-37.83	-47.29	0.00	1.33	23.63	38.45	Pass
10 MHz (16QAM)	H	829	-28.30	-47.61	0.00	1.13	24.80	38.45	Pass
	H	836.5	-28.14	-47.75	0.00	1.24	25.47	38.45	Pass
	H	844	-28.39	-48.01	0.00	1.33	26.65	38.45	Pass
	V	829	-38.38	-47.19	0.00	1.13	21.85	38.45	Pass
	V	836.5	-39.48	-47.75	0.00	1.24	23.05	38.45	Pass
	V	844	-38.38	-47.29	0.00	1.33	23.30	38.45	Pass
15 MHz (QPSK)	H	831.5	-27.66	-47.64	0.00	1.18	24.68	38.45	Pass
	H	836.5	-28.06	-47.75	0.00	1.24	25.59	38.45	Pass
	H	841.5	-27.85	-47.93	0.00	1.28	26.06	38.45	Pass
	V	831.5	-37.97	-47.15	0.00	1.18	21.88	38.45	Pass
	V	836.5	-38.86	-47.75	0.00	1.24	22.49	38.45	Pass
	V	841.5	-37.93	-47.23	0.00	1.28	22.51	38.45	Pass
15 MHz (16QAM)	H	831.5	-28.29	-47.64	0.00	1.18	24.35	38.45	Pass
	H	836.5	-28.56	-47.75	0.00	1.24	25.17	38.45	Pass
	H	841.5	-28.37	-47.93	0.00	1.28	25.75	38.45	Pass
	V	831.5	-38.49	-47.15	0.00	1.18	21.56	38.45	Pass
	V	836.5	-39.34	-47.75	0.00	1.24	22.15	38.45	Pass
	V	841.5	-38.55	-47.23	0.00	1.28	22.18	38.45	Pass

5.3. Occupied Bandwidth

Ambient condition

Temperature	Relative humidity	Pressure
23°C ~25°C	45%~50%	101.5kPa

Method of Measurement

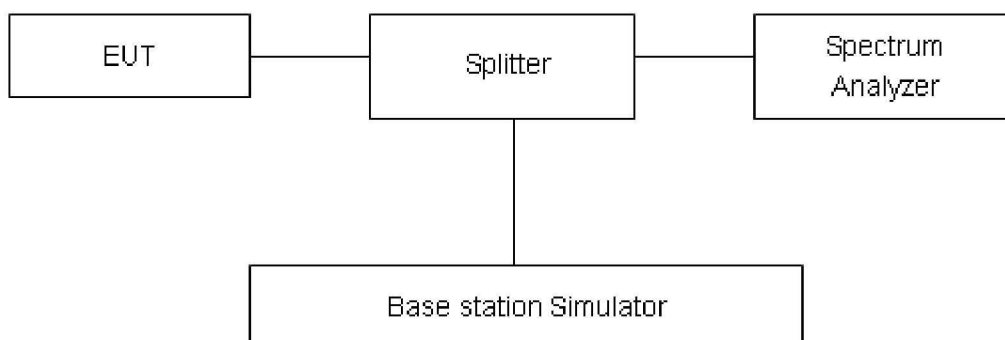
The EUT was connected to Spectrum Analyzer and Base Station Simulator via power Splitter. The occupied bandwidth is measured using spectrum analyzer.

RBW is set to 3kHz, VBW is set to 10kHz for GSM 850,

RBW is set to 51 kHz, VBW is set to 160 kHz for LTE Band 5/26,

99% power and -26dBc occupied bandwidths are recorded. Spectrum analyzer plots are included on the following pages.

Test Setup



Limits

No specific occupied bandwidth requirements in part 2.1049.

Measurement Uncertainty

The assessed measurement uncertainty to ensure 95% confidence level for the normal distribution is with the coverage factor $k = 2$, $U = 624\text{Hz}$.

**Test Result**

Mode	Channel	Frequency (MHz)	99% Power Bandwidth (MHz)	-26dBc Bandwidth(MHz)
GPRS 850 (GMSK)	128	824.2	0.24584	0.3134
	190	836.6	0.24471	0.3148
	251	848.8	0.24419	0.3039
EGPRS 850 (8-PSK)	128	824.2	0.24858	0.2973
	190	836.6	0.24438	0.3111
	251	848.8	0.24744	0.3130



LTE Band 5						
RB	Modulation	Bandwidth (MHz)	Channel	Frequency (MHz)	99% Power Bandwidth(MHz)	-26dBc Bandwidth(MHz)
100%	QPSK	1.4	20407	824.7	1.1075	1.316
			20525	836.5	1.1074	1.329
			20643	848.3	1.1082	1.348
		3	20415	825.5	1.1606	1.845
			20525	836.5	1.1561	1.848
			20635	847.5	1.1630	1.859
		5	20425	826.5	1.1552	1.879
			20525	836.5	1.1536	1.866
			20625	846.5	1.1629	1.986
		10	20450	829	1.2027	1.767
			20525	836.5	1.1952	1.920
			20600	844	1.1780	1.735
	16QAM	1.4	20407	824.7	0.94471	1.214
			20525	836.5	0.94726	1.198
			20643	848.3	0.94381	1.173
		3	20415	825.5	0.97884	1.373
			20525	836.5	0.98345	1.345
			20635	847.5	0.98361	1.339
		5	20425	826.5	1.0052	1.451
			20525	836.5	1.0072	1.453
			20625	846.5	1.0025	1.447
		10	20450	829	1.0349	1.513
			20525	836.5	1.0457	1.661
			20600	844	1.0258	1.504



LTE Band 26						
RB	Modulation	Bandwidth (MHz)	Channel	Frequency (MHz)	99% Power Bandwidth(MHz)	-26dBc Bandwidth(MHz)
100%	QPSK	1.4	26797	824.7	1.1080	1.320
			26915	836.5	1.1092	1.331
			27033	848.3	1.1071	1.322
		3	26805	825.5	1.1343	1.535
			26915	836.5	1.1398	1.623
			27025	847.5	1.1666	1.86
		5	26815	826.5	1.1524	1.466
			26915	836.5	1.1531	1.488
			27015	846.5	1.1296	1.472
		10	26840	829	1.211	2.049
			26915	836.5	1.1901	2.035
			26990	844	1.1955	2.044
		15	26865	831.5	1.1982	1.841
			26915	836.5	1.1913	1.961
			26965	841.5	1.2049	1.972
	16QAM	1.4	26797	824.7	0.94796	1.212
			26915	836.5	0.94121	1.205
			27033	848.3	0.94791	1.214
		3	26805	825.5	0.98579	1.334
			26915	836.5	0.98773	1.345
			27025	847.5	0.99320	1.410
		5	26815	826.5	0.99601	1.549
			26915	836.5	1.0185	1.578
			27015	846.5	1.0013	1.578
		10	26840	829	1.0527	1.660
			26915	836.5	1.0557	1.671
			26990	844	1.0551	1.662
		15	26865	831.5	1.060	1.642
			26915	836.5	1.0588	1.632
			26965	841.5	1.0577	1.649

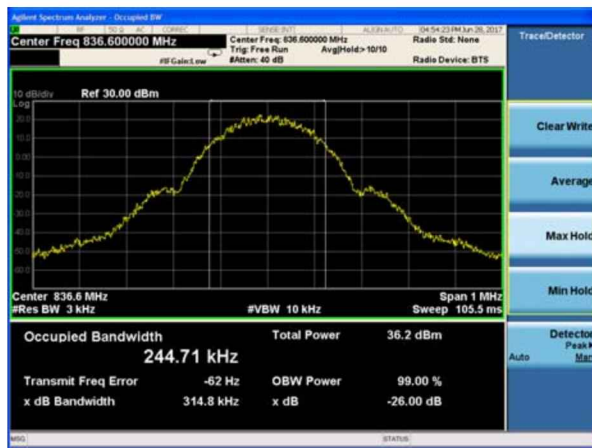
GSM 850 GPRS CH-Low



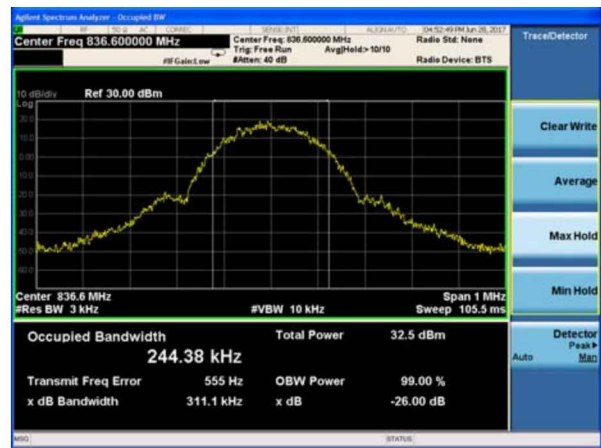
GSM 850 EGPRS CH-Low



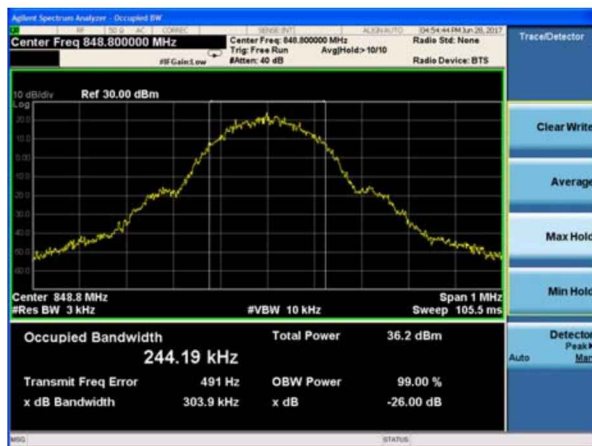
GSM 850 GPRS CH-Middle



GSM 850 EGPRS CH-Middle



GSM 850 GPRS CH-High

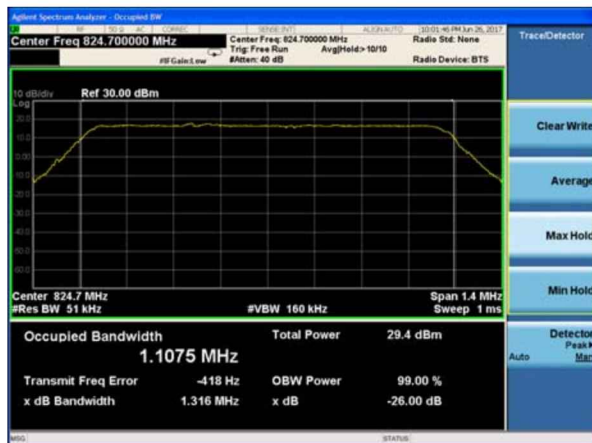


GSM 850 EGPRS CH-High





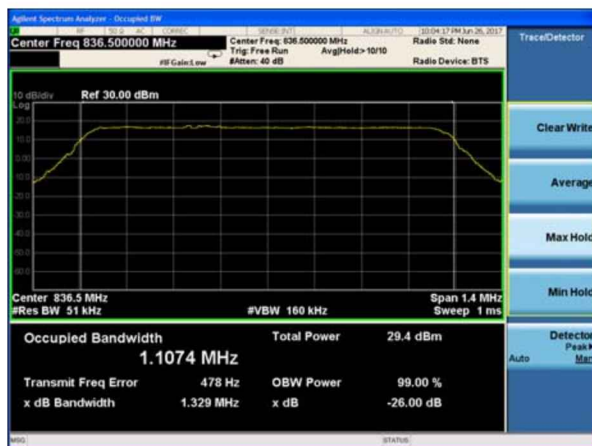
LTE Band 5 QPSK 1.4MHz CH-Low



LTE Band 5 QPSK 3MHz CH-Low



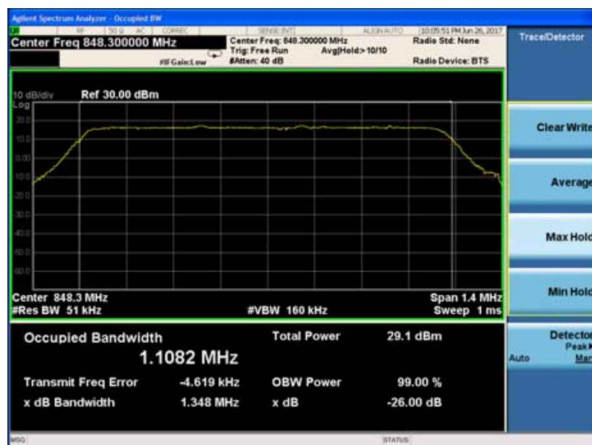
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LTE Band 5 QPSK 3MHz CH-Middle



LTE Band 5 QPSK 1.4MHz CH-High



LTE Band 5 QPSK 3MHz CH-High



LTE Band 5 QPSK 5MHz CH-Low



LTE Band 5 QPSK 10MHz CH-Low



LTE Band 5 QPSK 5MHz CH-Middle



LTE Band 5 QPSK 10MHz CH-Middle



LTE Band 5 QPSK 5MHz CH-High



LTE Band 5 QPSK 10MHz CH-High





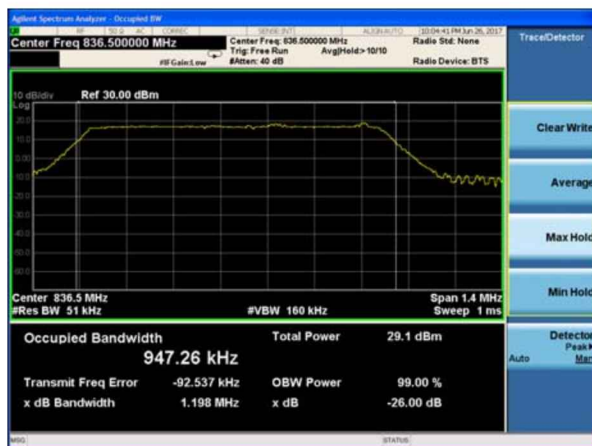
LTE Band 5 16QAM 1.4MHz CH-Low



LTE Band 5 16QAM 3MHz CH-Low



LTE Band 5 16QAM 1.4MHz CH-Middle



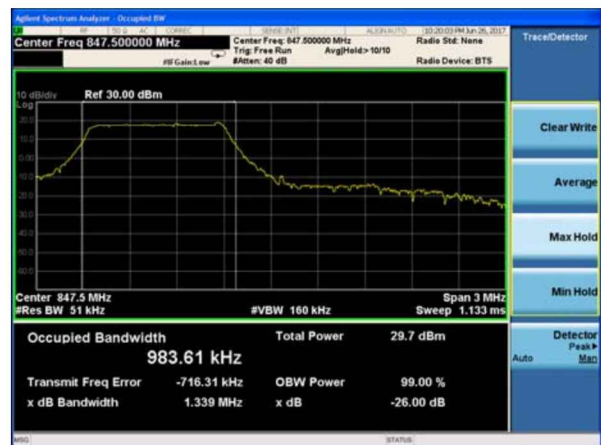
LTE Band 5 16QAM 3MHz CH-Middle



LTE Band 5 16QAM 1.4MHz CH-High

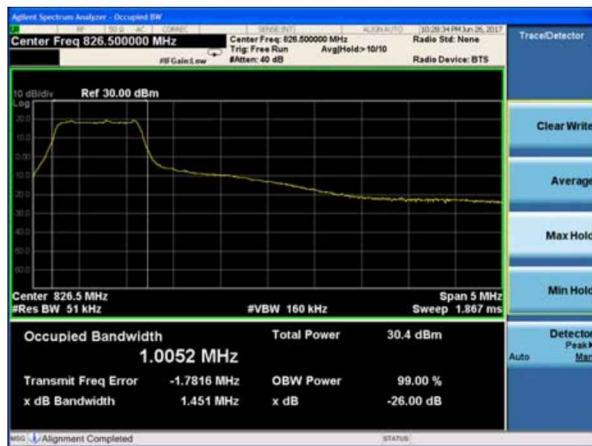


LTE Band 5 16QAM 3MHz CH-High





LTE Band 5 16QAM 5MHz CH-Low



LTE Band 5 16QAM 10MHz CH-Low



LTE Band 5 16QAM 5MHz CH-Middle



LTE Band 5 16QAM 10MHz CH-Middle



LTE Band 5 16QAM 5MHz CH-High

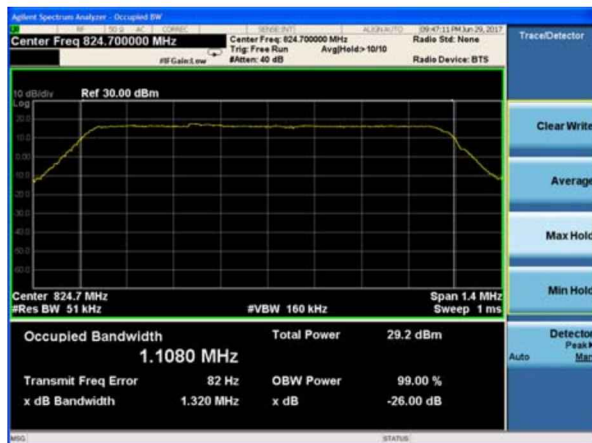


LTE Band 5 16QAM 10MHz CH-High





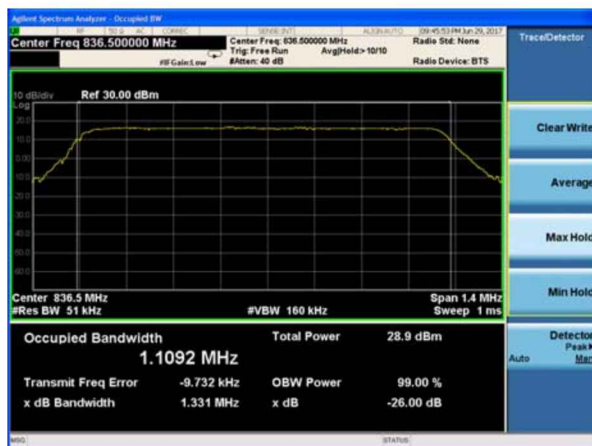
LTE Band 26 QPSK 1.4MHz CH-Low



LTE Band 26 QPSK 3MHz CH-Low



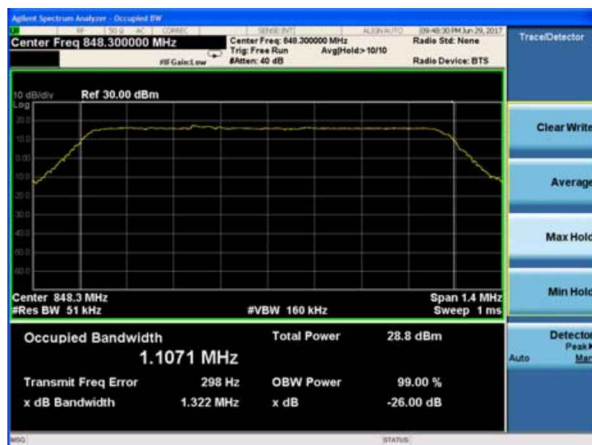
LTE Band 26 QPSK 1.4MHz CH-Middle



LTE Band 26 QPSK 3MHz CH-Middle



LTE Band 26 QPSK 1.4MHz CH-High



LTE Band 26 QPSK 3MHz CH-High





LTE Band 26 QPSK 5MHz CH-Low



LTE Band 26 QPSK 10MHz CH-Low



LTE Band 26 QPSK 5MHz CH-Middle



LTE Band 26 QPSK 10MHz CH-Middle



LTE Band 26 QPSK 5MHz CH-High



LTE Band 26 QPSK 10MHz CH-High

