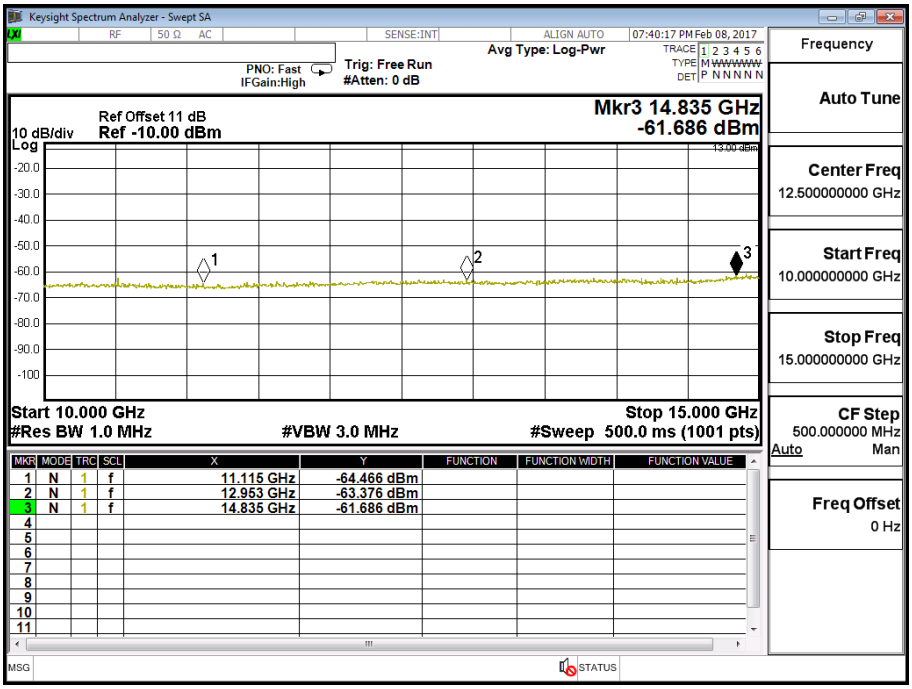
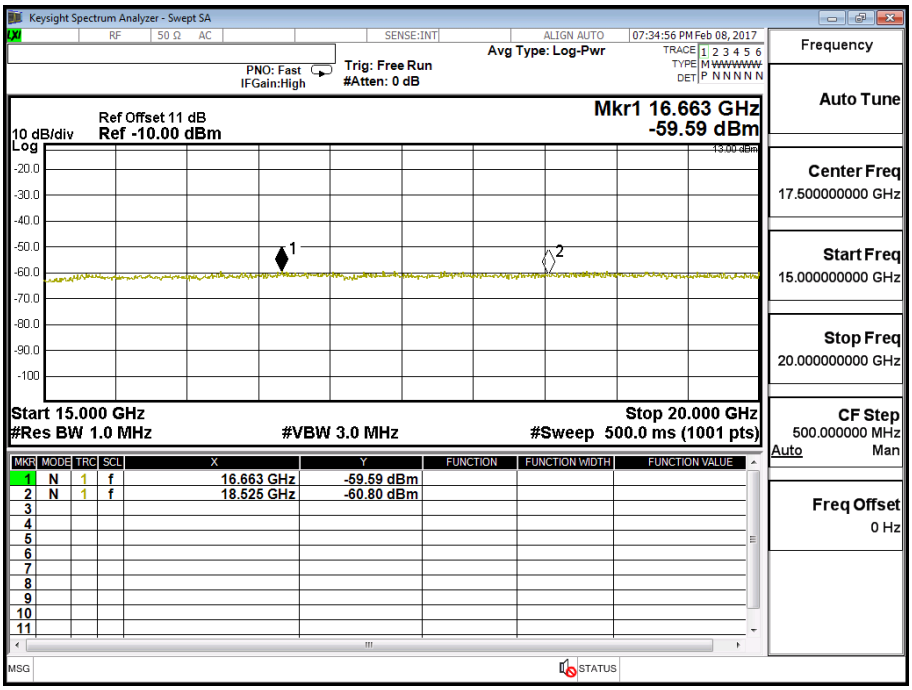
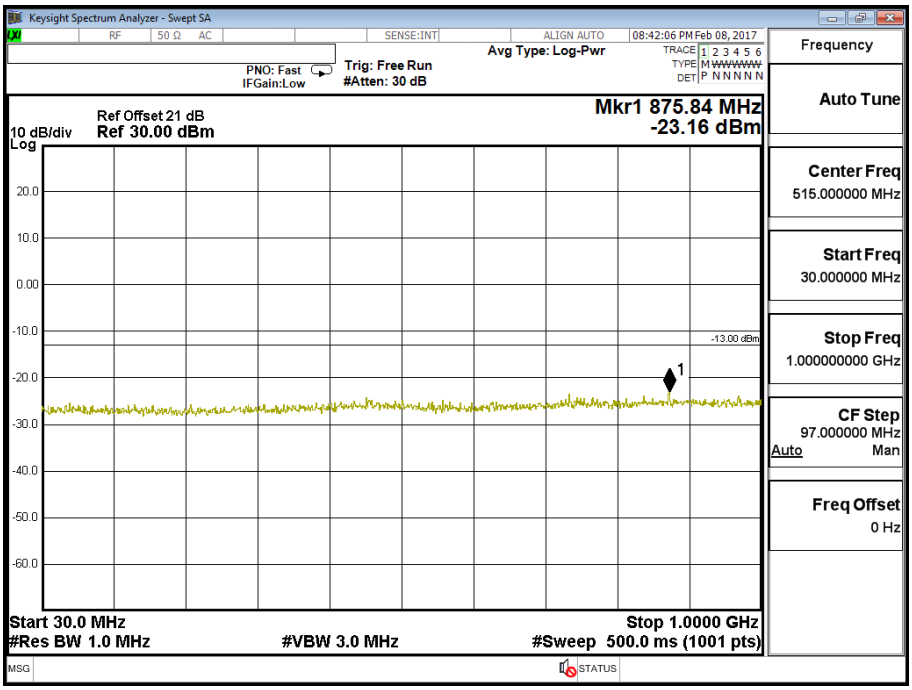

Keysight Spectrum Analyzer - Swept SA
RF 50 Ω AC
SENSE:INT
ALIGN AUTO
07:40:17 PM Feb 08, 2017
Avg Type: Log-Pwr
PNO: Fast
IFGain:High
Trig: Free Run
#Atten: 0 dB
Ref Offset 11 dB
10 dB/div Ref -10.00 dBm
Mkr3 14.835 GHz
-61.686 dBm
Start 10.000 GHz
#Res BW 1.0 MHz
#VBW 3.0 MHz
Stop 15.000 GHz
#Sweep 500.0 ms (1001 pts)
Frequency
Auto Tune
Center Freq
12.500000000 GHz
Start Freq
10.000000000 GHz
Stop Freq
15.000000000 GHz
CF Step
500.000000 MHz
Auto Man
Freq Offset
0 Hz
1 N 1 f 11.115 GHz -64.466 dBm
2 N 1 f 12.953 GHz -63.376 dBm
3 N 1 f 14.835 GHz -61.686 dBm

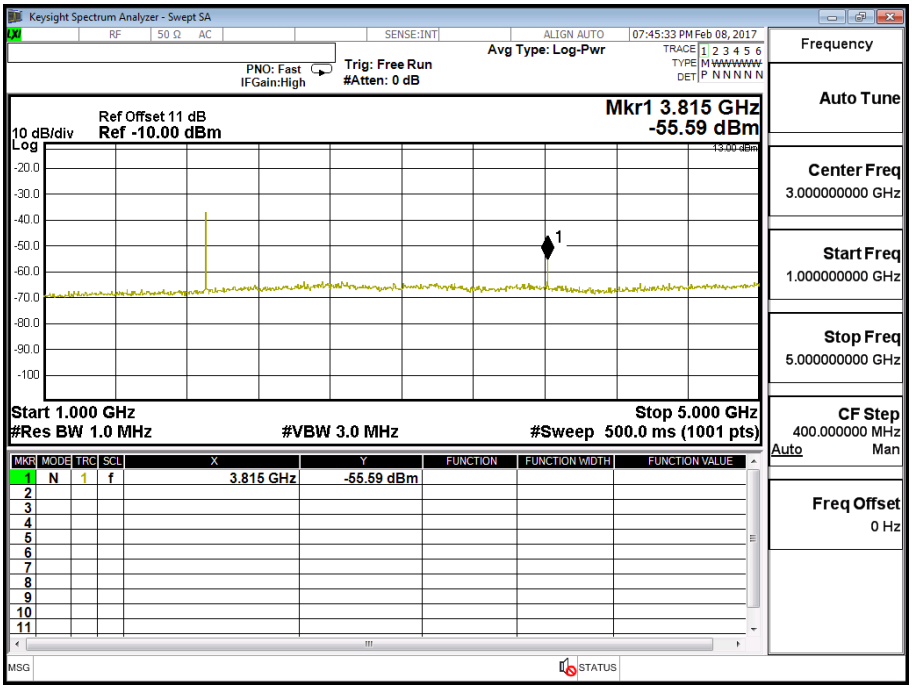

Keysight Spectrum Analyzer - Swept SA
RF 50 Ω AC
SENSE:INT
ALIGN AUTO
07:34:56 PM Feb 08, 2017
Avg Type: Log-Pwr
PNO: Fast
IFGain:High
Trig: Free Run
#Atten: 0 dB
Ref Offset 11 dB
10 dB/div Ref -10.00 dBm
Mkr1 16.663 GHz
-59.59 dBm
Start 15.000 GHz
#Res BW 1.0 MHz
#VBW 3.0 MHz
Stop 20.000 GHz
#Sweep 500.0 ms (1001 pts)
Frequency
Auto Tune
Center Freq
17.500000000 GHz
Start Freq
15.000000000 GHz
Stop Freq
20.000000000 GHz
CF Step
500.000000 MHz
Auto Man
Freq Offset
0 Hz
1 N 1 f 16.663 GHz -59.59 dBm
2 N 1 f 18.525 GHz -60.80 dBm

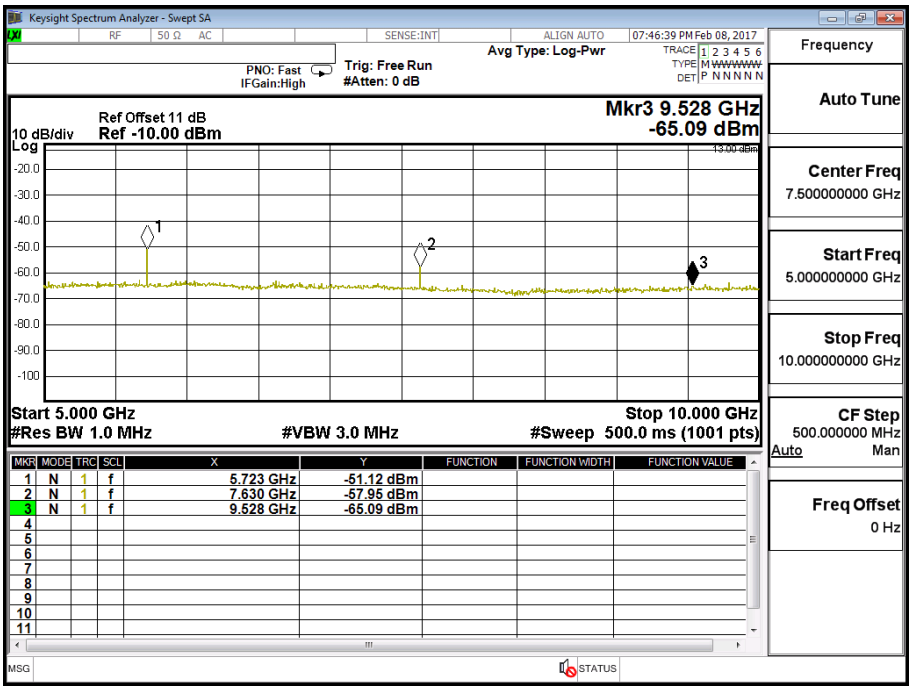
Product	LE910C1-NA		
Test Mode	Spurious Emission (Conducted)		
Date of Test	2017/02/08	Test Site	CTR
Test Condition	LTE-Band 2 (5M)	Test Range	30MHz~20GHz

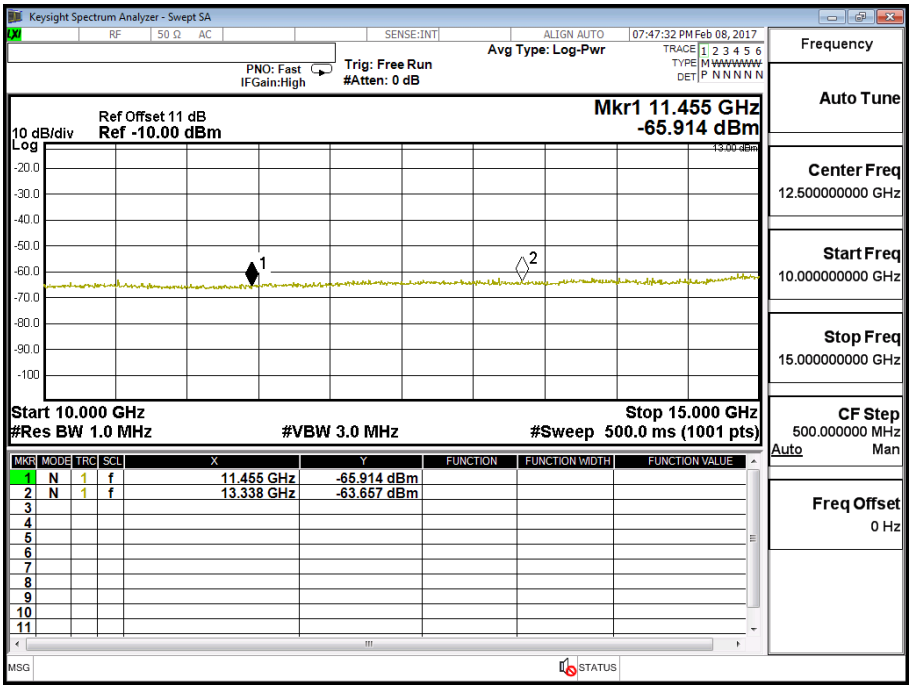
LTE- Band 2 (5M) 16QAM(1,12) CH19175 (1907.5MHz)

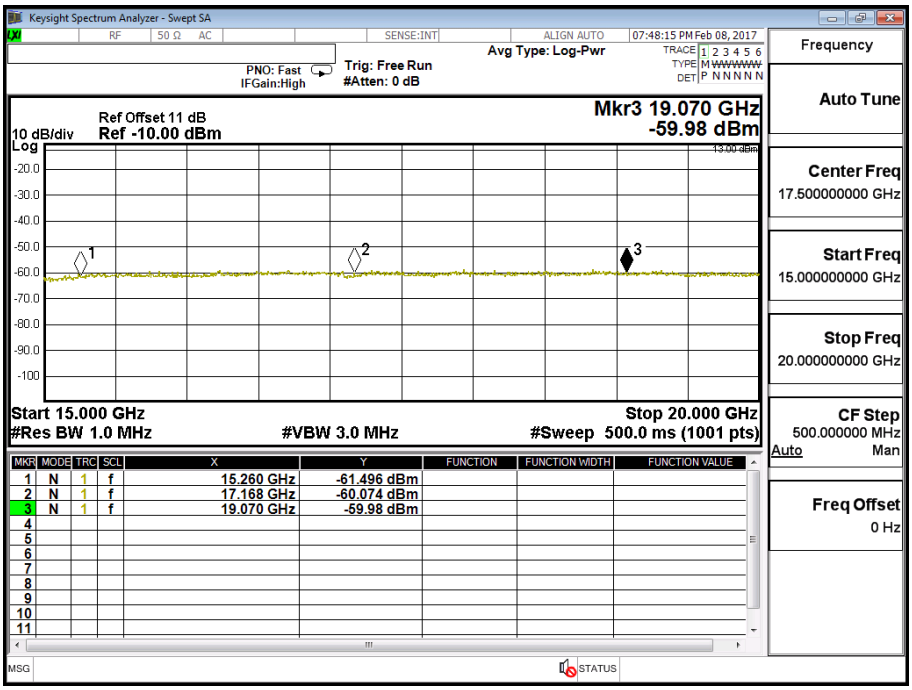
Frequency (MHz)	Reading Level (dBm)	Path Loss (dB)	Emission Level (dBm)	Limit (dBm)
3815	-55.590	1.1	-54.490	-13
5723	-51.120	1.23	-49.890	-13
7630	-57.950	1.59	-56.360	-13
9528	-65.090	1.89	-63.200	-13
11455	-65.914	2.07	-63.844	-13
13338	-63.657	2.26	-61.397	-13
15260	-61.496	2.64	-58.856	-13
17168	-60.074	3.5	-56.574	-13
19070	-59.980	3.7	-56.280	-13




Keysight Spectrum Analyzer - Swept SA
RF 50 Ω AC
SENSE:INT
ALIGN AUTO
07:45:33 PM Feb 08, 2017
Avg Type: Log-Pwr
PNO: Fast
IFGain:High
Trig: Free Run
#Atten: 0 dB
Ref Offset 11 dB
10 dB/div Ref -10.00 dBm
Mkr1 3.815 GHz
-55.59 dBm
Start 1.000 GHz
#Res BW 1.0 MHz
#VBW 3.0 MHz
Stop 5.000 GHz
#Sweep 500.0 ms (1001 pts)
Frequency
Auto Tune
Center Freq
3.000000000 GHz
Start Freq
1.000000000 GHz
Stop Freq
5.000000000 GHz
CF Step
400.000000 MHz
Auto Man
Freq Offset
0 Hz
1 N 1 f 3.815 GHz -55.59 dBm


Keysight Spectrum Analyzer - Swept SA
RF 50 Ω AC
SENSE:INT
ALIGN AUTO
07:46:39 PM Feb 08, 2017
Avg Type: Log-Pwr
PNO: Fast
IFGain:High
Trig: Free Run
#Atten: 0 dB
Ref Offset 11 dB
10 dB/div Ref -10.00 dBm
Mkr3 9.528 GHz
-65.09 dBm
Start 5.000 GHz
#Res BW 1.0 MHz
#VBW 3.0 MHz
Stop 10.000 GHz
#Sweep 500.0 ms (1001 pts)
Frequency
Auto Tune
Center Freq
7.500000000 GHz
Start Freq
5.000000000 GHz
Stop Freq
10.000000000 GHz
CF Step
500.000000 MHz
Auto Man
Freq Offset
0 Hz
1 N 1 f 5.723 GHz -51.12 dBm
2 N 1 f 7.630 GHz -57.95 dBm
3 N 1 f 9.528 GHz -65.09 dBm

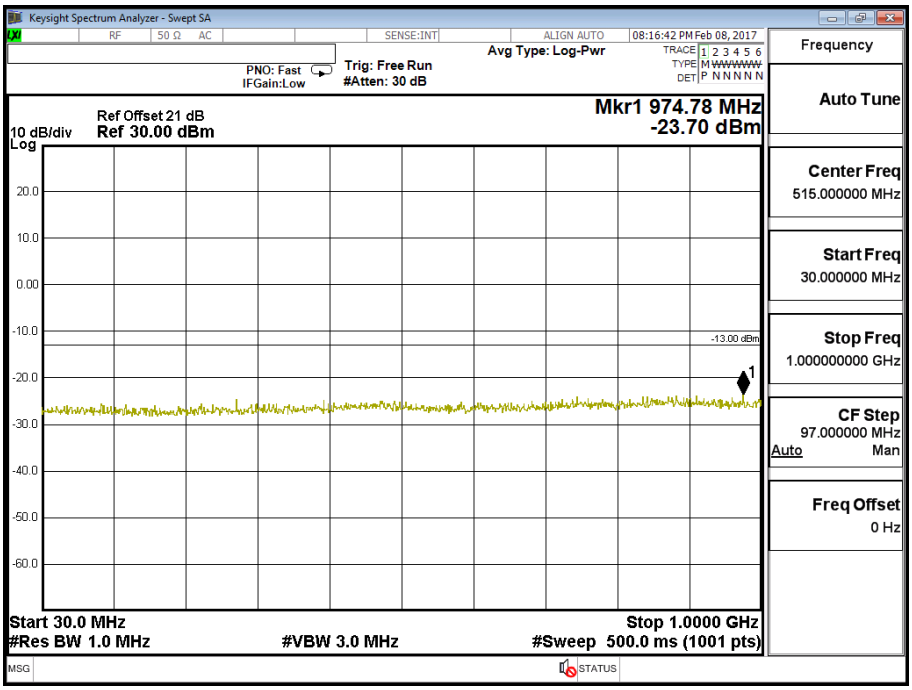

Keysight Spectrum Analyzer - Swept SA
RF 50 Ω AC
SENSE:INT
ALIGN AUTO
07:47:32 PM Feb 08, 2017
Avg Type: Log-Pwr
PNO: Fast
IFGain:High
Trig: Free Run
#Atten: 0 dB
Ref Offset 11 dB
10 dB/div Ref -10.00 dBm
Mkr1 11.455 GHz
-65.914 dBm
Start 10.000 GHz
#Res BW 1.0 MHz
#VBW 3.0 MHz
Stop 15.000 GHz
#Sweep 500.0 ms (1001 pts)
1 N 1 f 11.455 GHz -65.914 dBm
2 N 1 f 13.338 GHz -63.657 dBm
Frequency
Auto Tune
Center Freq
12.500000000 GHz
Start Freq
10.000000000 GHz
Stop Freq
15.000000000 GHz
CF Step
500.000000 MHz
Auto Man
Freq Offset
0 Hz

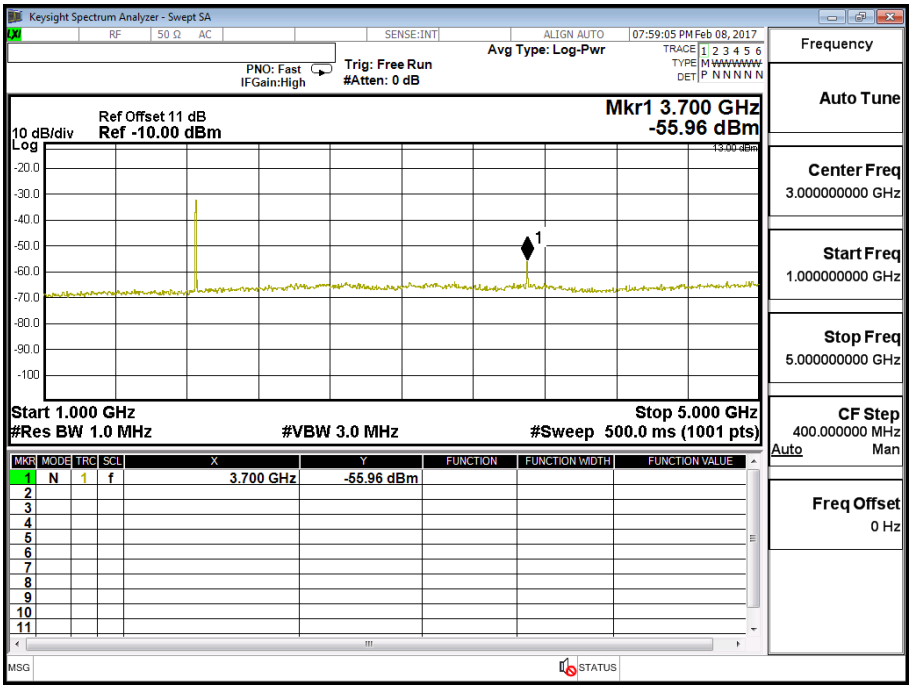

Keysight Spectrum Analyzer - Swept SA
RF 50 Ω AC
SENSE:INT
ALIGN AUTO
07:48:15 PM Feb 08, 2017
Avg Type: Log-Pwr
PNO: Fast
IFGain:High
Trig: Free Run
#Atten: 0 dB
Ref Offset 11 dB
10 dB/div Ref -10.00 dBm
Mkr3 19.070 GHz
-59.98 dBm
Start 15.000 GHz
#Res BW 1.0 MHz
#VBW 3.0 MHz
Stop 20.000 GHz
#Sweep 500.0 ms (1001 pts)
1 N 1 f 15.260 GHz -61.496 dBm
2 N 1 f 17.168 GHz -60.074 dBm
3 N 1 f 19.070 GHz -59.98 dBm
Frequency
Auto Tune
Center Freq
17.500000000 GHz
Start Freq
15.000000000 GHz
Stop Freq
20.000000000 GHz
CF Step
500.000000 MHz
Auto Man
Freq Offset
0 Hz

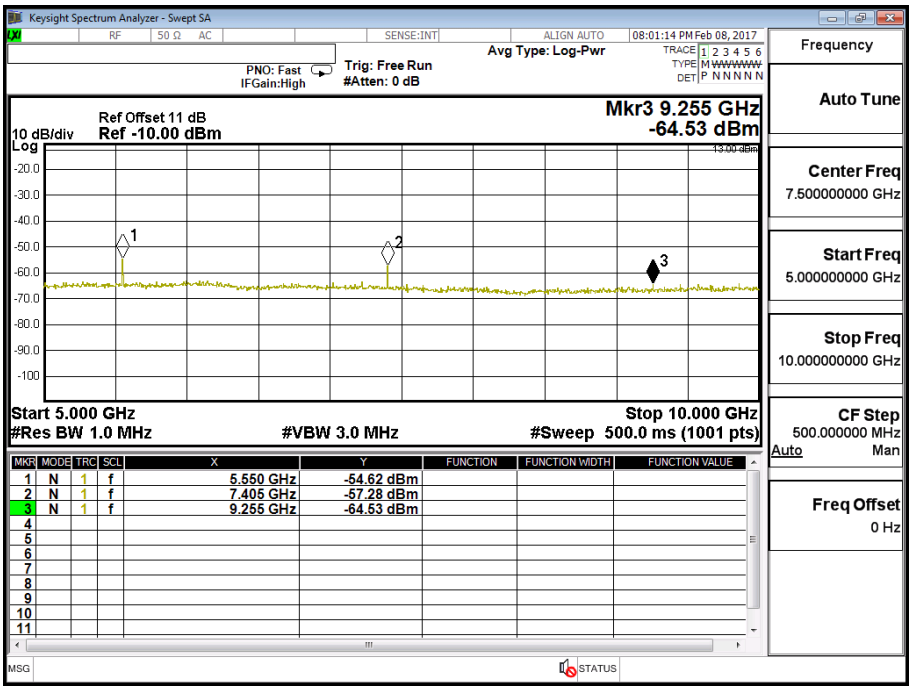
Product	LE910C1-NA		
Test Mode	Spurious Emission (Conducted)		
Date of Test	2017/02/08	Test Site	CTR
Test Condition	LTE-Band 2 (10M)	Test Range	30MHz~20GHz

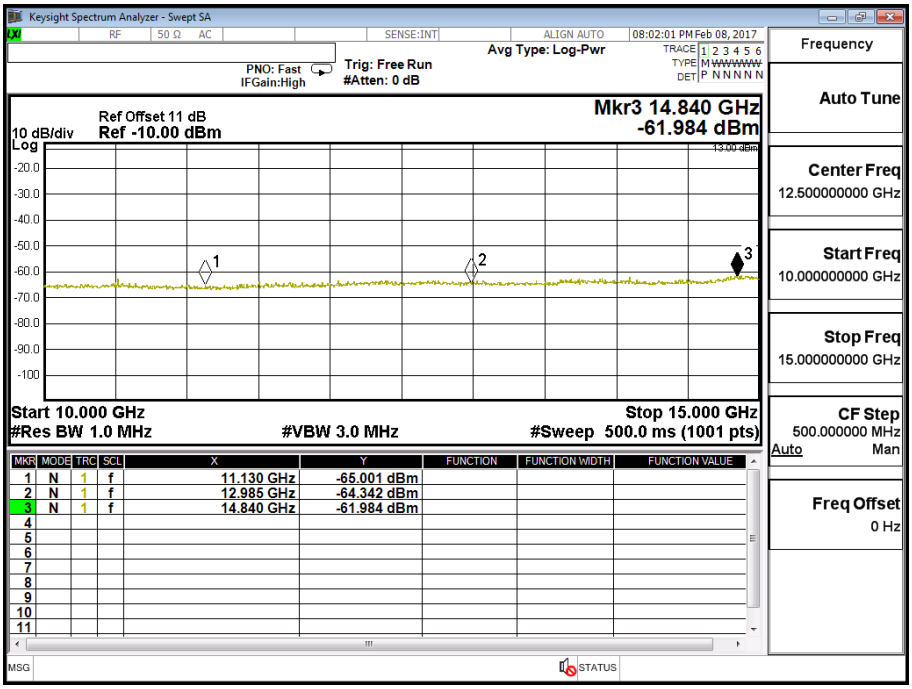
LTE- Band 2 (10M) QPSK(1,24) CH18650 (1855MHz)

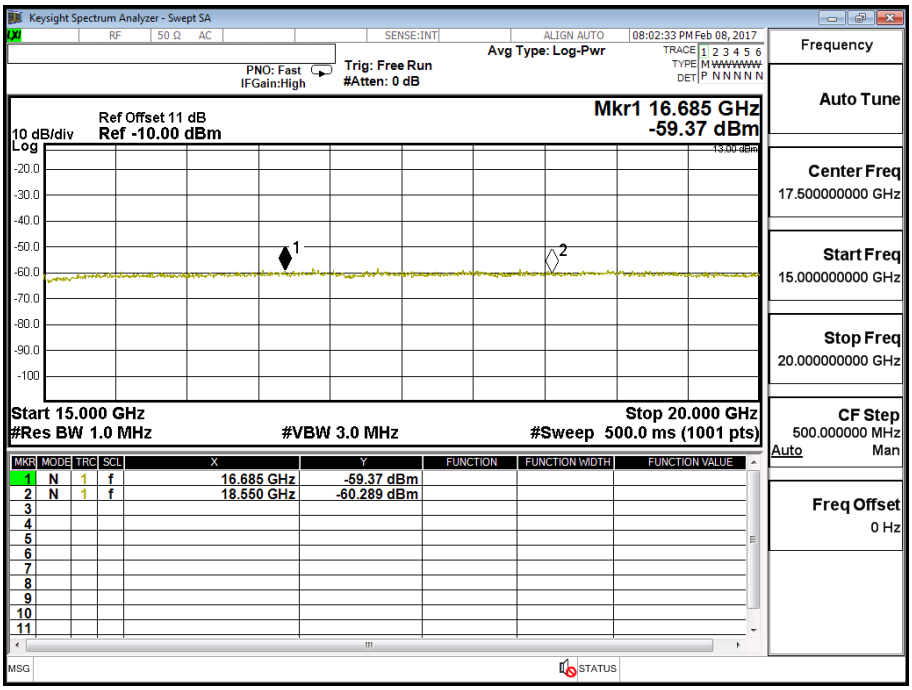
Frequency (MHz)	Reading Level (dBm)	Path Loss (dB)	Emission Level (dBm)	Limit (dBm)
3700	-55.960	1.1	-54.860	-13
5550	-54.620	1.23	-53.390	-13
7405	-57.280	1.59	-55.690	-13
9255	-64.530	1.89	-62.640	-13
11130	-65.001	2.07	-62.931	-13
12985	-64.342	2.26	-62.082	-13
14840	-61.984	2.64	-59.344	-13
16685	-59.370	3.5	-55.870	-13
18550	-60.289	3.7	-56.589	-13




Keysight Spectrum Analyzer - Swept SA
RF 50 Ω AC
SENSE:INT
ALIGN AUTO
07:59:05 PM Feb 08, 2017
Avg Type: Log-Pwr
PNO: Fast
IFGain:High
Trig: Free Run
#Atten: 0 dB
Ref Offset 11 dB
10 dB/div Ref -10.00 dBm
Mkr1 3.700 GHz
-55.96 dBm
Start 1.000 GHz
#Res BW 1.0 MHz
#VBW 3.0 MHz
Stop 5.000 GHz
#Sweep 500.0 ms (1001 pts)
Frequency
Auto Tune
Center Freq
3.000000000 GHz
Start Freq
1.000000000 GHz
Stop Freq
5.000000000 GHz
CF Step
400.000000 MHz
Auto Man
Freq Offset
0 Hz
1 N 1 f 3.700 GHz -55.96 dBm


Keysight Spectrum Analyzer - Swept SA
RF 50 Ω AC
SENSE:INT
ALIGN AUTO
08:01:14 PM Feb 08, 2017
Avg Type: Log-Pwr
PNO: Fast
IFGain:High
Trig: Free Run
#Atten: 0 dB
Ref Offset 11 dB
10 dB/div Ref -10.00 dBm
Mkr3 9.255 GHz
-64.53 dBm
Start 5.000 GHz
#Res BW 1.0 MHz
#VBW 3.0 MHz
Stop 10.000 GHz
#Sweep 500.0 ms (1001 pts)
Frequency
Auto Tune
Center Freq
7.500000000 GHz
Start Freq
5.000000000 GHz
Stop Freq
10.000000000 GHz
CF Step
500.000000 MHz
Auto Man
Freq Offset
0 Hz
1 N 1 f 5.550 GHz -54.62 dBm
2 N 1 f 7.405 GHz -57.28 dBm
3 N 1 f 9.255 GHz -64.53 dBm

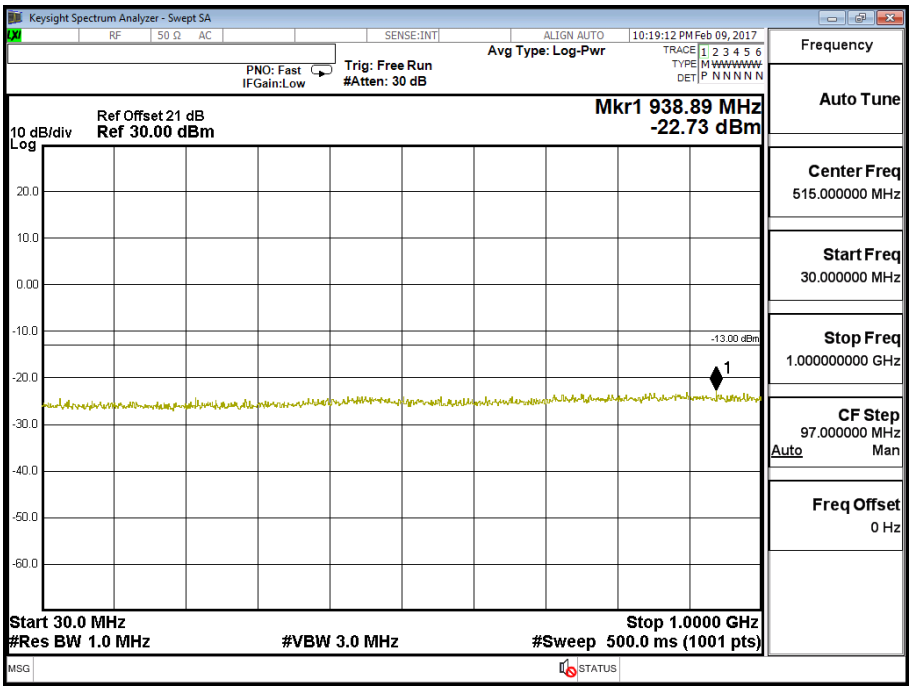

Keysight Spectrum Analyzer - Swept SA
RF 50 Ω AC
SENSE:INT
ALIGN AUTO
08:02:01 PM Feb 08, 2017
Avg Type: Log-Pwr
PNO: Fast
IFGain:High
Trig: Free Run
#Atten: 0 dB
Ref Offset 11 dB
10 dB/div Ref -10.00 dBm
Mkr3 14.840 GHz
-61.984 dBm
Start 10.000 GHz
#Res BW 1.0 MHz
#VBW 3.0 MHz
Stop 15.000 GHz
#Sweep 500.0 ms (1001 pts)
MKR MODE TRC SCL X Y FUNCTION FUNCTION WIDTH FUNCTION VALUE
1 N 1 f 11.130 GHz -65.001 dBm
2 N 1 f 12.985 GHz -64.342 dBm
3 N 1 f 14.840 GHz -61.984 dBm
Frequency
Auto Tune
Center Freq
12.500000000 GHz
Start Freq
10.000000000 GHz
Stop Freq
15.000000000 GHz
CF Step
500.000000 MHz
Auto Man
Freq Offset
0 Hz
MSG
STATUS

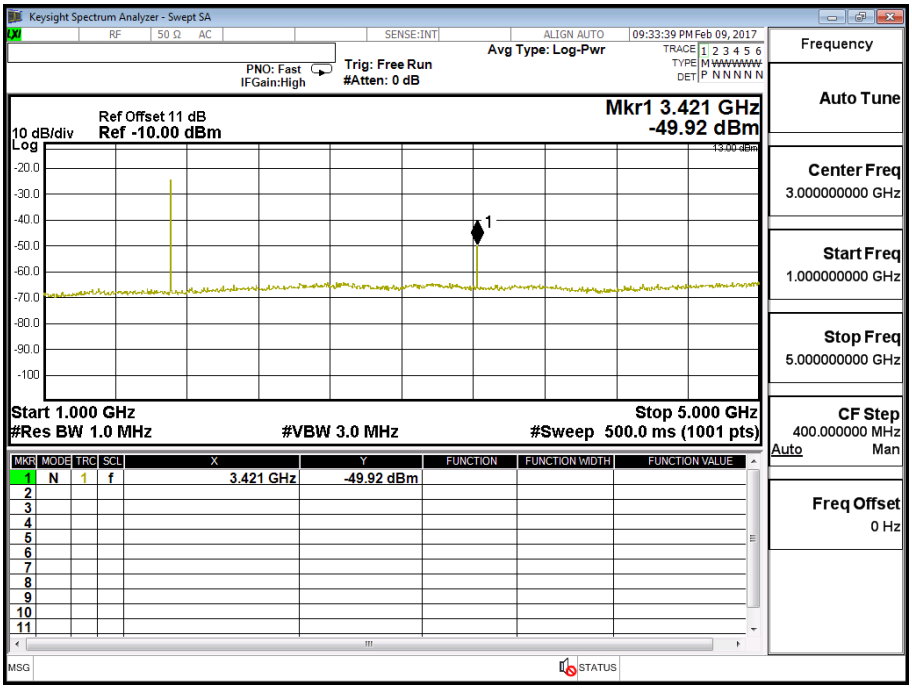

Keysight Spectrum Analyzer - Swept SA
RF 50 Ω AC
SENSE:INT
ALIGN AUTO
08:02:33 PM Feb 08, 2017
Avg Type: Log-Pwr
PNO: Fast
IFGain:High
Trig: Free Run
#Atten: 0 dB
Ref Offset 11 dB
10 dB/div Ref -10.00 dBm
Mkr1 16.685 GHz
-59.37 dBm
Start 15.000 GHz
#Res BW 1.0 MHz
#VBW 3.0 MHz
Stop 20.000 GHz
#Sweep 500.0 ms (1001 pts)
MKR MODE TRC SCL X Y FUNCTION FUNCTION WIDTH FUNCTION VALUE
1 N 1 f 16.685 GHz -59.37 dBm
2 N 1 f 18.550 GHz -60.289 dBm
Frequency
Auto Tune
Center Freq
17.500000000 GHz
Start Freq
15.000000000 GHz
Stop Freq
20.000000000 GHz
CF Step
500.000000 MHz
Auto Man
Freq Offset
0 Hz
MSG
STATUS

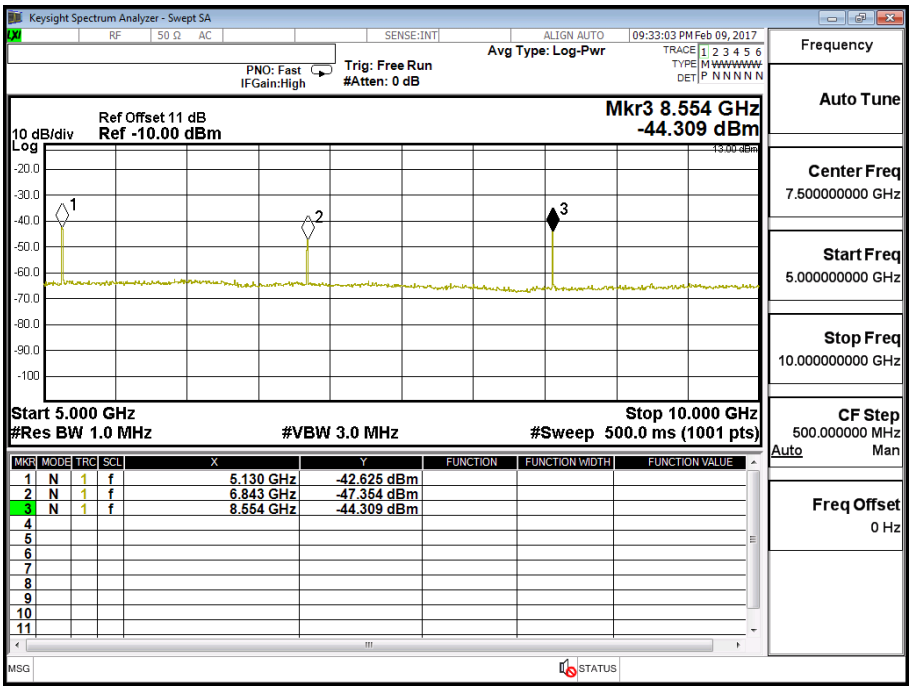
Product	LE910C1-NA		
Test Mode	Spurious Emission (Conducted)		
Date of Test	2017/02/08	Test Site	CTR
Test Condition	LTE-Band 4 (1.4M)	Test Range	30MHz~20GHz

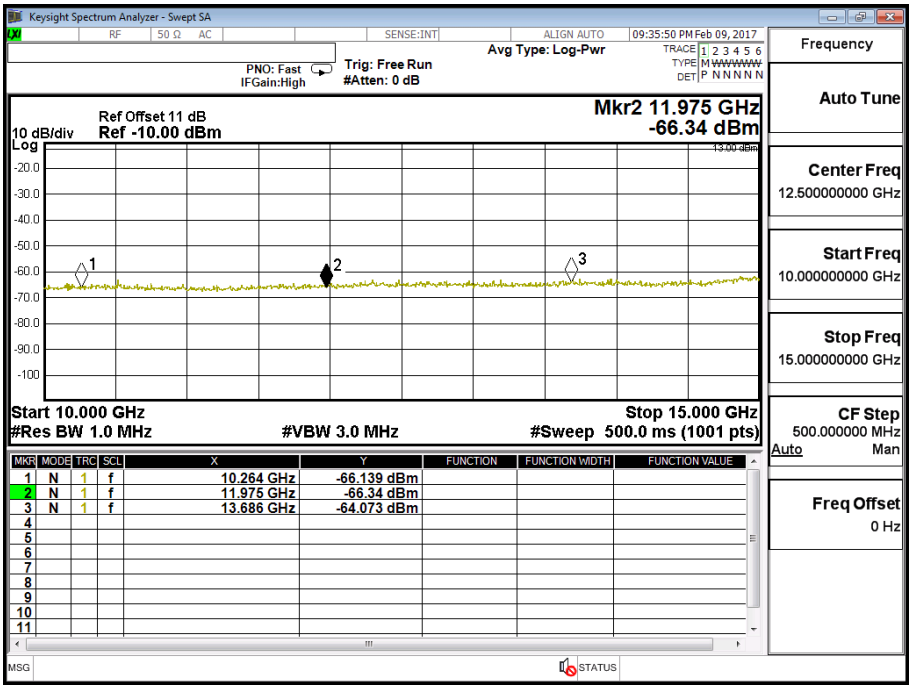
LTE-Band 4 (1.4M) QPSK(3,2) CH19957 (1710.7MHz)

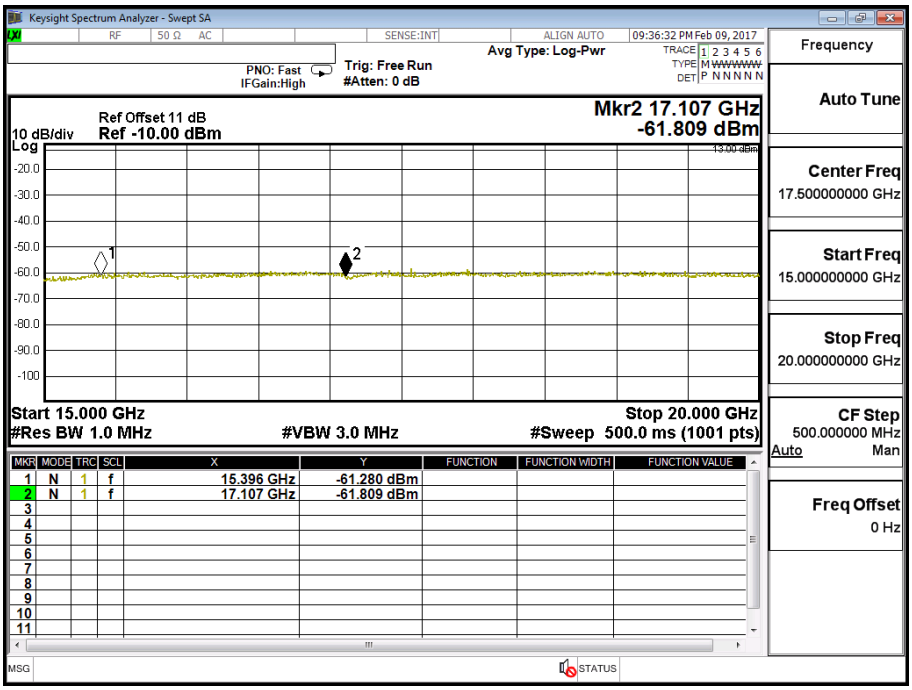
Frequency (MHz)	Reading Level (dBm)	Path Loss (dB)	Emission Level (dBm)	Limit (dBm)
3421	-49.920	1.1	-48.820	-13
5130	-42.625	1.23	-41.394	-13
6843	-47.354	1.59	-45.764	-13
8554	-44.309	1.89	-42.419	-13
10264	-66.139	2.07	-64.069	-13
11975	-66.340	2.26	-64.080	-13
13686	-64.073	2.64	-61.433	-13
15396	-61.280	3.5	-57.780	-13
17107	-61.809	3.7	-58.109	-13




Keysight Spectrum Analyzer - Swept SA
RF 50 Ω AC
SENSE:INT
ALIGN AUTO
09:33:39 PM Feb 09, 2017
Avg Type: Log-Pwr
PNO: Fast
IFGain:High
Trig: Free Run
#Atten: 0 dB
Ref Offset 11 dB
10 dB/div Ref -10.00 dBm
Mkr1 3.421 GHz
-49.92 dBm
Start 1.000 GHz
#Res BW 1.0 MHz
#VBW 3.0 MHz
Stop 5.000 GHz
#Sweep 500.0 ms (1001 pts)
Frequency
Auto Tune
Center Freq
3.000000000 GHz
Start Freq
1.000000000 GHz
Stop Freq
5.000000000 GHz
CF Step
400.000000 MHz
Auto Man
Freq Offset
0 Hz
1 N 1 f 3.421 GHz -49.92 dBm


Keysight Spectrum Analyzer - Swept SA
RF 50 Ω AC
SENSE:INT
ALIGN AUTO
09:33:03 PM Feb 09, 2017
Avg Type: Log-Pwr
PNO: Fast
IFGain:High
Trig: Free Run
#Atten: 0 dB
Ref Offset 11 dB
10 dB/div Ref -10.00 dBm
Mkr3 8.554 GHz
-44.309 dBm
Start 5.000 GHz
#Res BW 1.0 MHz
#VBW 3.0 MHz
Stop 10.000 GHz
#Sweep 500.0 ms (1001 pts)
Frequency
Auto Tune
Center Freq
7.500000000 GHz
Start Freq
5.000000000 GHz
Stop Freq
10.000000000 GHz
CF Step
500.000000 MHz
Auto Man
Freq Offset
0 Hz
1 N 1 f 5.130 GHz -42.625 dBm
2 N 1 f 6.843 GHz -47.354 dBm
3 N 1 f 8.554 GHz -44.309 dBm

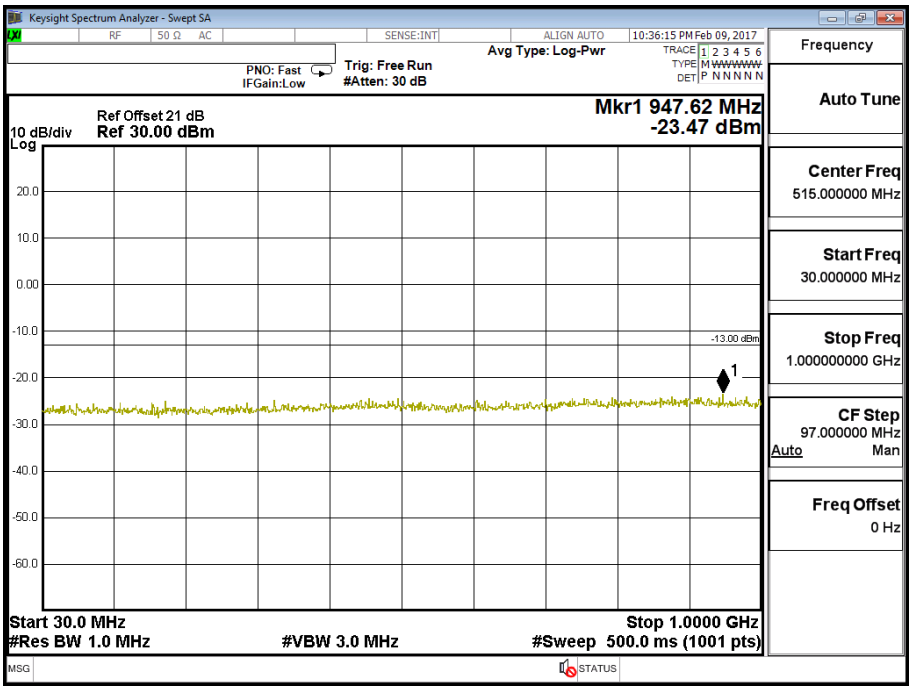

Keysight Spectrum Analyzer - Swept SA
RF 50 Ω AC
SENSE:INT
ALIGN AUTO
09:35:50 PM Feb 09, 2017
Avg Type: Log-Pwr
PNO: Fast
IFGain:High
Trig: Free Run
#Atten: 0 dB
Ref Offset 11 dB
10 dB/div Ref -10.00 dBm
Mkr2 11.975 GHz
-66.34 dBm
Start 10.000 GHz
#Res BW 1.0 MHz
#VBW 3.0 MHz
Stop 15.000 GHz
#Sweep 500.0 ms (1001 pts)
1 N 1 f 10.264 GHz -66.139 dBm
2 N 1 f 11.975 GHz -66.34 dBm
3 N 1 f 13.686 GHz -64.073 dBm
Frequency
Auto Tune
Center Freq
12.500000000 GHz
Start Freq
10.000000000 GHz
Stop Freq
15.000000000 GHz
CF Step
500.000000 MHz
Auto Man
Freq Offset
0 Hz

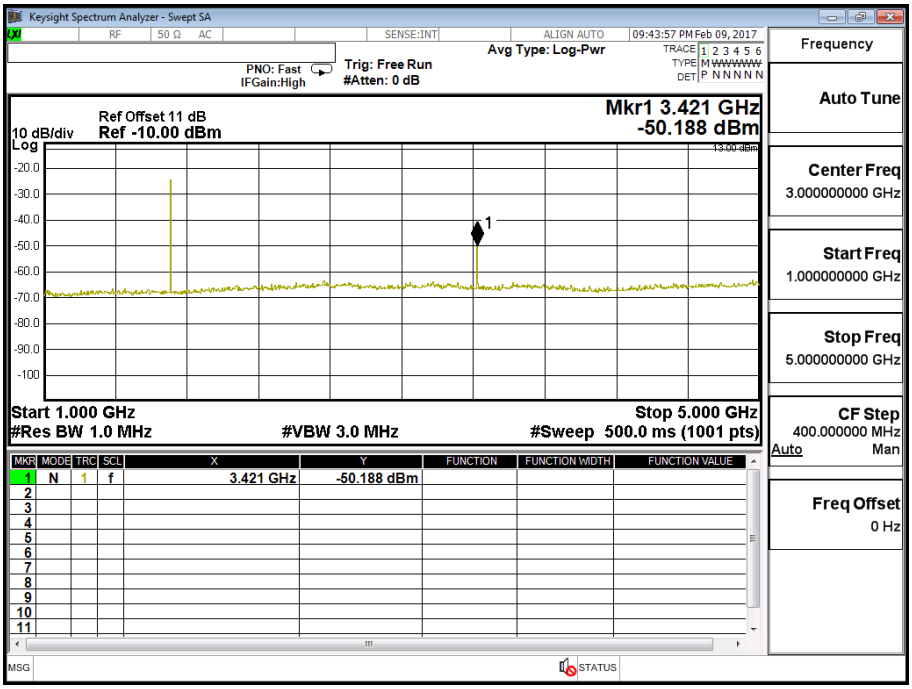

Keysight Spectrum Analyzer - Swept SA
RF 50 Ω AC
SENSE:INT
ALIGN AUTO
09:36:32 PM Feb 09, 2017
Avg Type: Log-Pwr
PNO: Fast
IFGain:High
Trig: Free Run
#Atten: 0 dB
Ref Offset 11 dB
10 dB/div Ref -10.00 dBm
Mkr2 17.107 GHz
-61.809 dBm
Start 15.000 GHz
#Res BW 1.0 MHz
#VBW 3.0 MHz
Stop 20.000 GHz
#Sweep 500.0 ms (1001 pts)
1 N 1 f 15.396 GHz -61.280 dBm
2 N 1 f 17.107 GHz -61.809 dBm
Frequency
Auto Tune
Center Freq
17.500000000 GHz
Start Freq
15.000000000 GHz
Stop Freq
20.000000000 GHz
CF Step
500.000000 MHz
Auto Man
Freq Offset
0 Hz

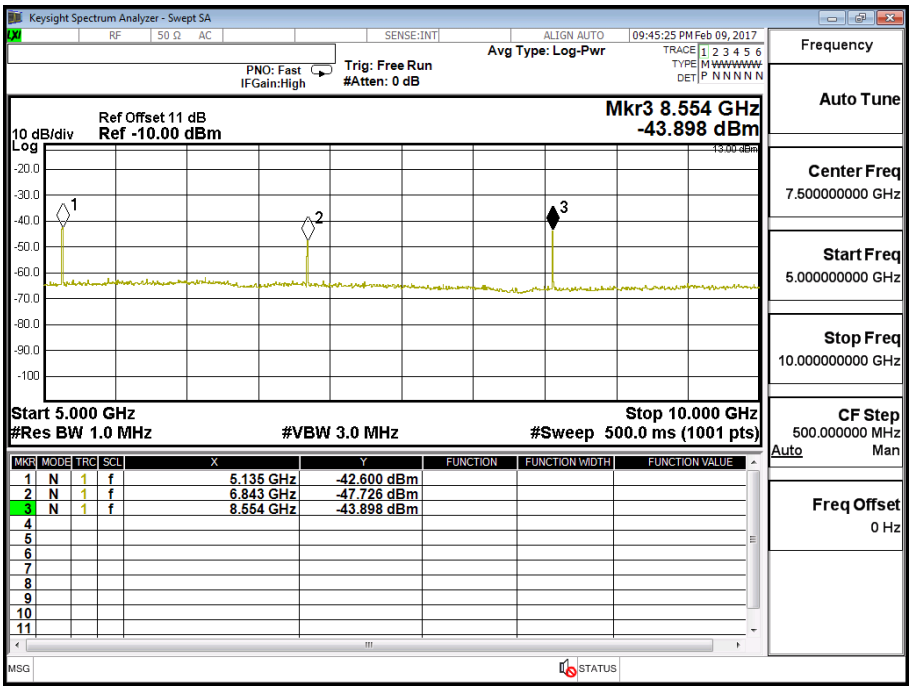
Product	LE910C1-NA		
Test Mode	Spurious Emission (Conducted)		
Date of Test	2017/02/08	Test Site	CTR
Test Condition	LTE-Band 4 (1.4M)	Test Range	30MHz~20GHz

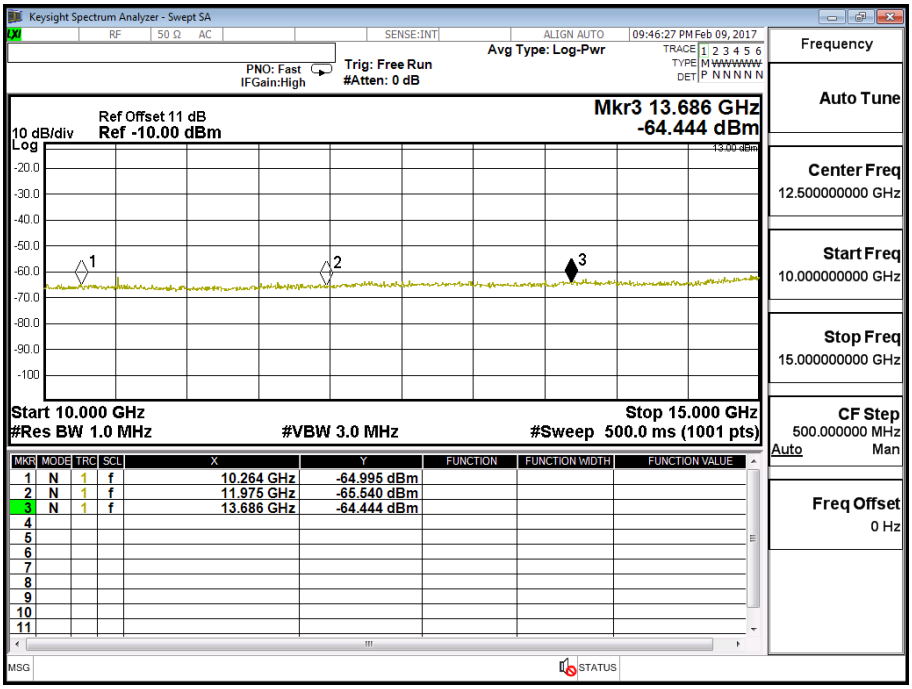
LTE-Band 4 (1.4M) 16QAM(3,3) CH19957 (1710.7MHz)

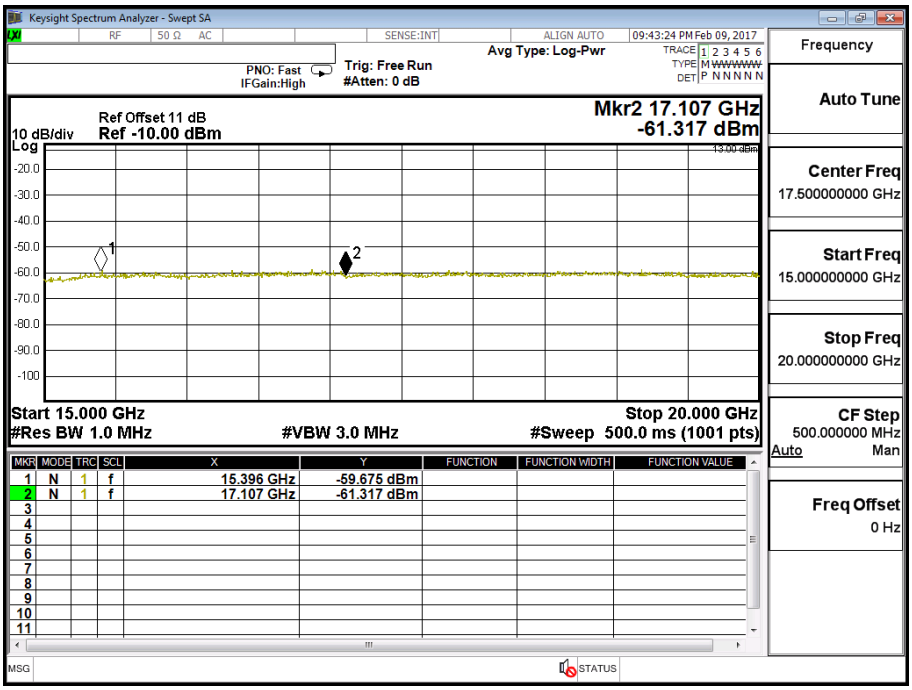
Frequency (MHz)	Reading Level (dBm)	Path Loss (dB)	Emission Level (dBm)	Limit (dBm)
3421	-50.188	1.1	-49.088	-13
5135	-42.600	1.23	-41.370	-13
6843	-47.726	1.59	-46.136	-13
8554	-43.898	1.89	-42.008	-13
10264	-64.995	2.07	-62.925	-13
11975	-65.540	2.26	-63.280	-13
13686	-64.444	2.64	-61.804	-13
15396	-59.675	3.5	-56.175	-13
17107	-61.317	3.7	-57.617	-13




Keysight Spectrum Analyzer - Swept SA
RF 50 Ω AC
SENSE:INT
ALIGN AUTO
09:43:57 PM Feb 09, 2017
Avg Type: Log-Pwr
PNO: Fast
IFGain:High
Trig: Free Run
#Atten: 0 dB
Ref Offset 11 dB
10 dB/div Ref -10.00 dBm
Mkr1 3.421 GHz
-50.188 dBm
Start 1.000 GHz
#Res BW 1.0 MHz
#VBW 3.0 MHz
Stop 5.000 GHz
#Sweep 500.0 ms (1001 pts)
1 N 1 f 3.421 GHz -50.188 dBm
Frequency
Auto Tune
Center Freq
3.000000000 GHz
Start Freq
1.000000000 GHz
Stop Freq
5.000000000 GHz
CF Step
400.000000 MHz
Auto Man
Freq Offset
0 Hz


Keysight Spectrum Analyzer - Swept SA
RF 50 Ω AC
SENSE:INT
ALIGN AUTO
09:45:25 PM Feb 09, 2017
Avg Type: Log-Pwr
PNO: Fast
IFGain:High
Trig: Free Run
#Atten: 0 dB
Ref Offset 11 dB
10 dB/div Ref -10.00 dBm
Mkr3 8.554 GHz
-43.898 dBm
Start 5.000 GHz
#Res BW 1.0 MHz
#VBW 3.0 MHz
Stop 10.000 GHz
#Sweep 500.0 ms (1001 pts)
1 N 1 f 5.135 GHz -42.600 dBm
2 N 1 f 6.843 GHz -47.726 dBm
3 N 1 f 8.554 GHz -43.898 dBm
Frequency
Auto Tune
Center Freq
7.500000000 GHz
Start Freq
5.000000000 GHz
Stop Freq
10.000000000 GHz
CF Step
500.000000 MHz
Auto Man
Freq Offset
0 Hz

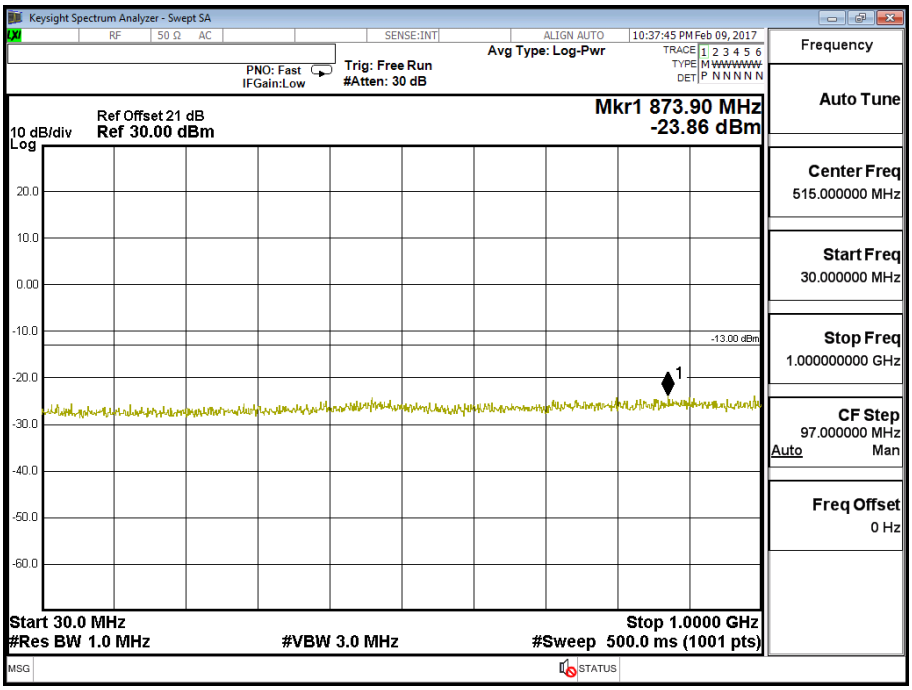

Keysight Spectrum Analyzer - Swept SA
RF 50 Ω AC
SENSE:INT
ALIGN AUTO
09:46:27 PM Feb 09, 2017
Avg Type: Log-Pwr
PNO: Fast
IFGain:High
Trig: Free Run
#Atten: 0 dB
Ref Offset 11 dB
10 dB/div Ref -10.00 dBm
Mkr3 13.686 GHz
-64.444 dBm
Start 10.000 GHz
#Res BW 1.0 MHz
#VBW 3.0 MHz
Stop 15.000 GHz
#Sweep 500.0 ms (1001 pts)
1 N 1 f 10.264 GHz -64.995 dBm
2 N 1 f 11.975 GHz -65.640 dBm
3 N 1 f 13.686 GHz -64.444 dBm
Frequency
Auto Tune
Center Freq
12.500000000 GHz
Start Freq
10.000000000 GHz
Stop Freq
15.000000000 GHz
CF Step
500.000000 MHz
Auto Man
Freq Offset
0 Hz

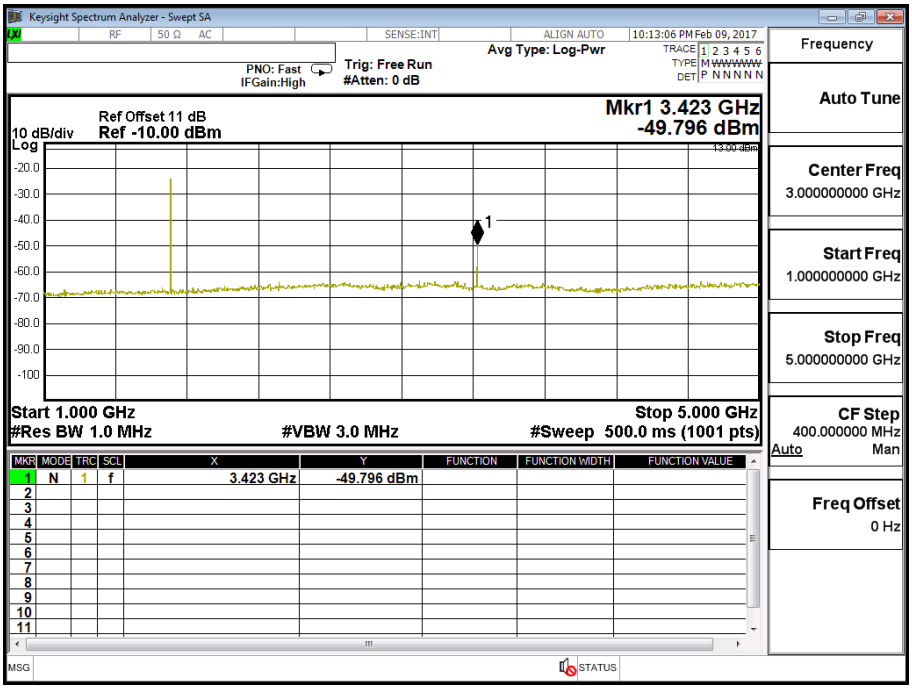

Keysight Spectrum Analyzer - Swept SA
RF 50 Ω AC
SENSE:INT
ALIGN AUTO
09:43:24 PM Feb 09, 2017
Avg Type: Log-Pwr
PNO: Fast
IFGain:High
Trig: Free Run
#Atten: 0 dB
Ref Offset 11 dB
10 dB/div Ref -10.00 dBm
Mkr2 17.107 GHz
-61.317 dBm
Start 15.000 GHz
#Res BW 1.0 MHz
#VBW 3.0 MHz
Stop 20.000 GHz
#Sweep 500.0 ms (1001 pts)
1 N 1 f 15.396 GHz -59.675 dBm
2 N 1 f 17.107 GHz -61.317 dBm
Frequency
Auto Tune
Center Freq
17.500000000 GHz
Start Freq
15.000000000 GHz
Stop Freq
20.000000000 GHz
CF Step
500.000000 MHz
Auto Man
Freq Offset
0 Hz

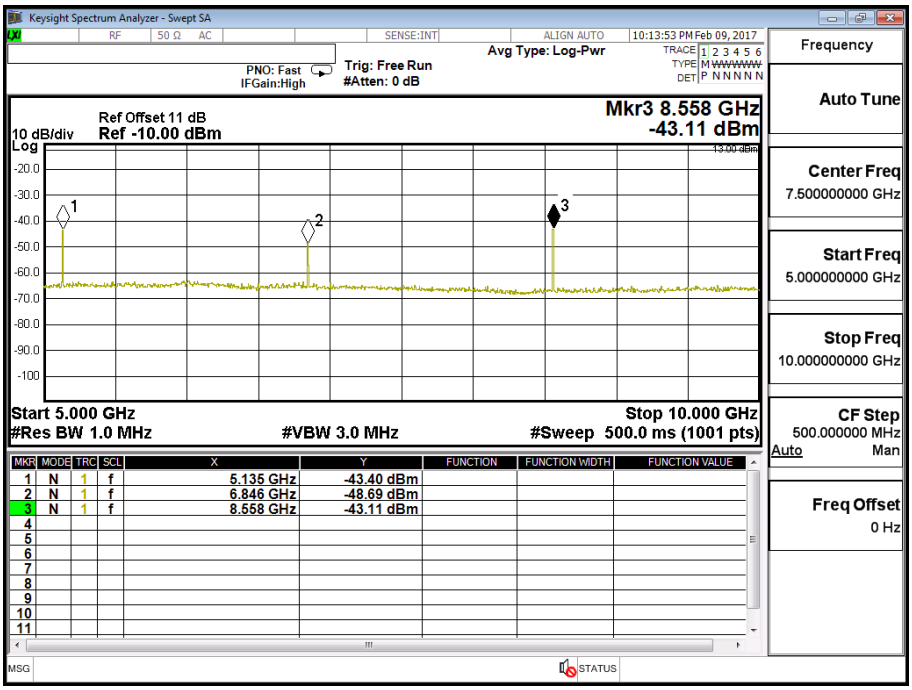
Product	LE910C1-NA		
Test Mode	Spurious Emission (Conducted)		
Date of Test	2017/02/08	Test Site	CTR
Test Condition	LTE-Band 4 (3M)	Test Range	30MHz~20GHz

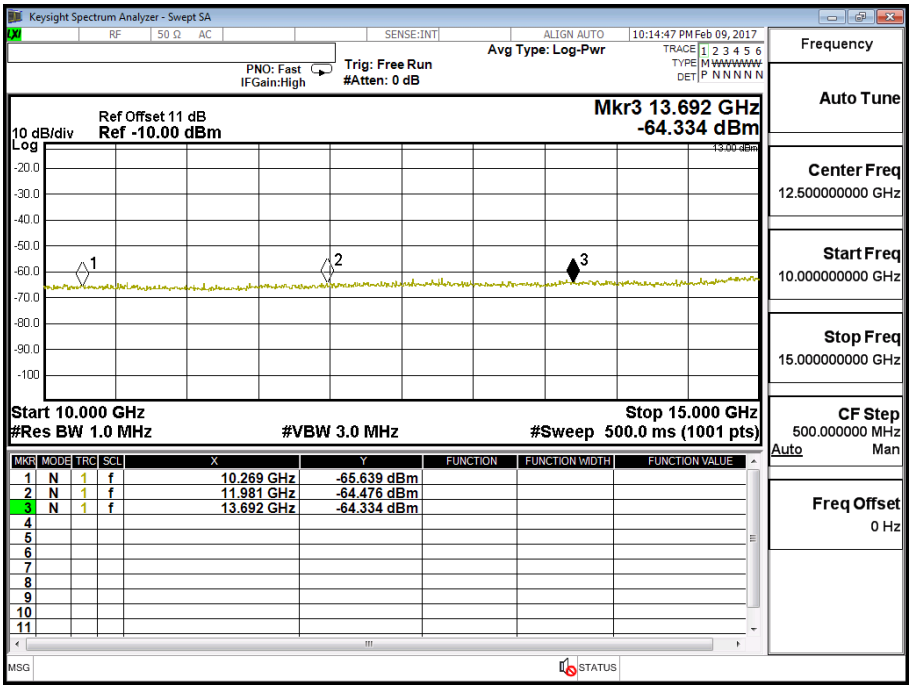
LTE-Band 4 (3M) QPSK(1,7) CH19965 (1711.5MHz)

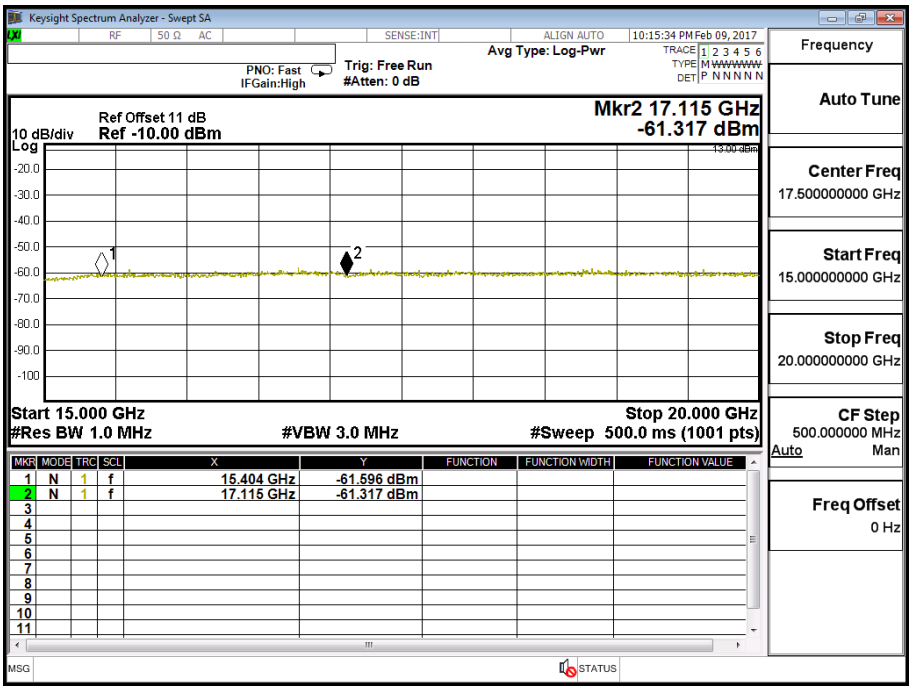
Frequency (MHz)	Reading Level (dBm)	Path Loss (dB)	Emission Level (dBm)	Limit (dBm)
3423	-49.796	1.1	-48.696	-13
5135	-43.400	1.23	-42.170	-13
6846	-48.690	1.59	-47.100	-13
8558	-43.110	1.89	-41.220	-13
10269	-65.639	2.07	-63.569	-13
11981	-64.476	2.26	-62.216	-13
13692	-64.334	2.64	-61.694	-13
15404	-61.596	3.5	-58.096	-13
17115	-61.317	3.7	-57.617	-13




Keysight Spectrum Analyzer - Swept SA
RF 50 Ω AC
SENSE:INT
ALIGN AUTO
10:13:06 PM Feb 09, 2017
Avg Type: Log-Pwr
PNO: Fast
IFGain:High
Trig: Free Run
#Atten: 0 dB
Ref Offset 11 dB
10 dB/div Ref -10.00 dBm
Mkr1 3.423 GHz
-49.796 dBm
Start 1.000 GHz
#Res BW 1.0 MHz
#VBW 3.0 MHz
Stop 5.000 GHz
#Sweep 500.0 ms (1001 pts)
Frequency
Auto Tune
Center Freq
3.000000000 GHz
Start Freq
1.000000000 GHz
Stop Freq
5.000000000 GHz
CF Step
400.000000 MHz
Auto Man
Freq Offset
0 Hz
1 N 1 f 3.423 GHz -49.796 dBm


Keysight Spectrum Analyzer - Swept SA
RF 50 Ω AC
SENSE:INT
ALIGN AUTO
10:13:53 PM Feb 09, 2017
Avg Type: Log-Pwr
PNO: Fast
IFGain:High
Trig: Free Run
#Atten: 0 dB
Ref Offset 11 dB
10 dB/div Ref -10.00 dBm
Mkr3 8.558 GHz
-43.11 dBm
Start 5.000 GHz
#Res BW 1.0 MHz
#VBW 3.0 MHz
Stop 10.000 GHz
#Sweep 500.0 ms (1001 pts)
Frequency
Auto Tune
Center Freq
7.500000000 GHz
Start Freq
5.000000000 GHz
Stop Freq
10.000000000 GHz
CF Step
500.000000 MHz
Auto Man
Freq Offset
0 Hz
1 N 1 f 5.135 GHz -43.40 dBm
2 N 1 f 6.846 GHz -48.69 dBm
3 N 1 f 8.558 GHz -43.11 dBm

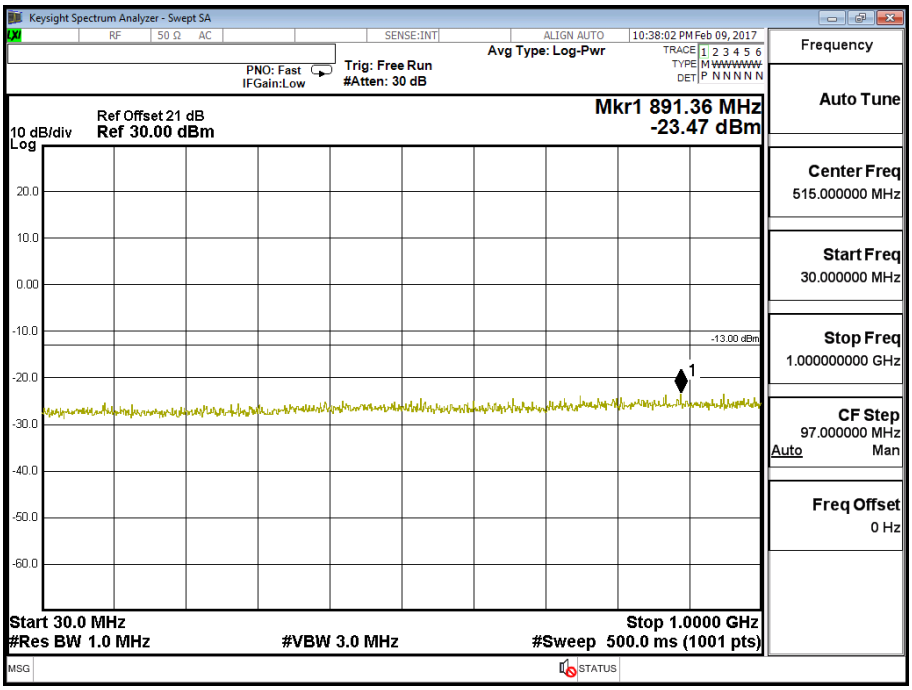

Keysight Spectrum Analyzer - Swept SA
RF 50 Ω AC
SENSE:INT
ALIGN AUTO
10:14:47 PM Feb 09, 2017
Avg Type: Log-Pwr
PNO: Fast
IFGain:High
Trig: Free Run
#Atten: 0 dB
Ref Offset 11 dB
10 dB/div Ref -10.00 dBm
Mkr3 13.692 GHz
-64.334 dBm
Start 10.000 GHz
#Res BW 1.0 MHz
#VBW 3.0 MHz
Stop 15.000 GHz
#Sweep 500.0 ms (1001 pts)
MKR MODE TRC SCL X Y FUNCTION FUNCTION WIDTH FUNCTION VALUE
1 N 1 f 10.269 GHz -65.639 dBm
2 N 1 f 11.981 GHz -64.476 dBm
3 N 1 f 13.692 GHz -64.334 dBm
Frequency
Auto Tune
Center Freq
12.500000000 GHz
Start Freq
10.000000000 GHz
Stop Freq
15.000000000 GHz
CF Step
500.000000 MHz
Auto Man
Freq Offset
0 Hz
MSG
STATUS

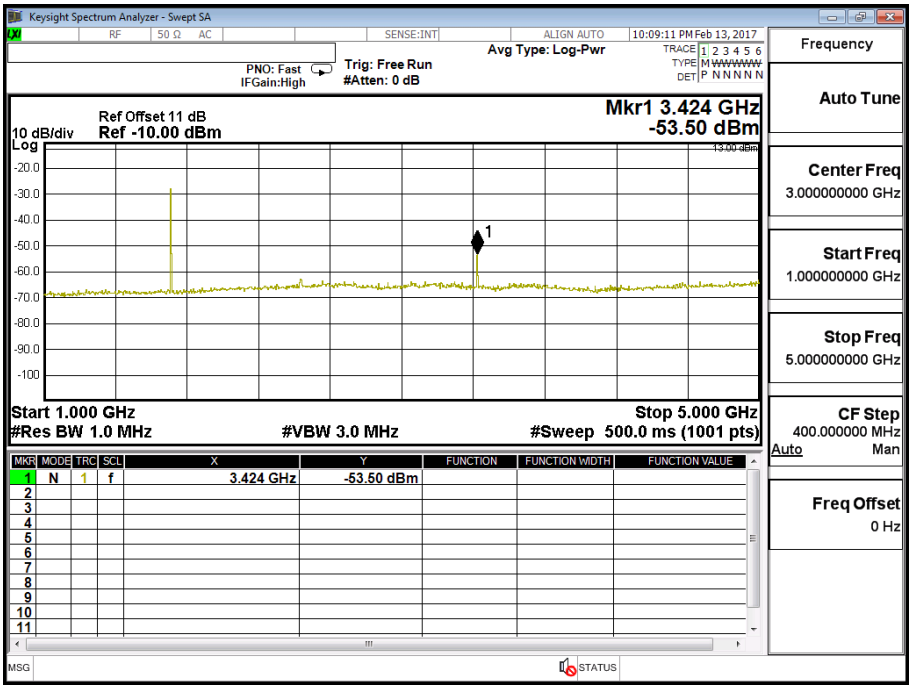

Keysight Spectrum Analyzer - Swept SA
RF 50 Ω AC
SENSE:INT
ALIGN AUTO
10:15:34 PM Feb 09, 2017
Avg Type: Log-Pwr
PNO: Fast
IFGain:High
Trig: Free Run
#Atten: 0 dB
Ref Offset 11 dB
10 dB/div Ref -10.00 dBm
Mkr2 17.115 GHz
-61.317 dBm
Start 15.000 GHz
#Res BW 1.0 MHz
#VBW 3.0 MHz
Stop 20.000 GHz
#Sweep 500.0 ms (1001 pts)
MKR MODE TRC SCL X Y FUNCTION FUNCTION WIDTH FUNCTION VALUE
1 N 1 f 15.404 GHz -61.596 dBm
2 N 1 f 17.115 GHz -61.317 dBm
Frequency
Auto Tune
Center Freq
17.500000000 GHz
Start Freq
15.000000000 GHz
Stop Freq
20.000000000 GHz
CF Step
500.000000 MHz
Auto Man
Freq Offset
0 Hz
MSG
STATUS

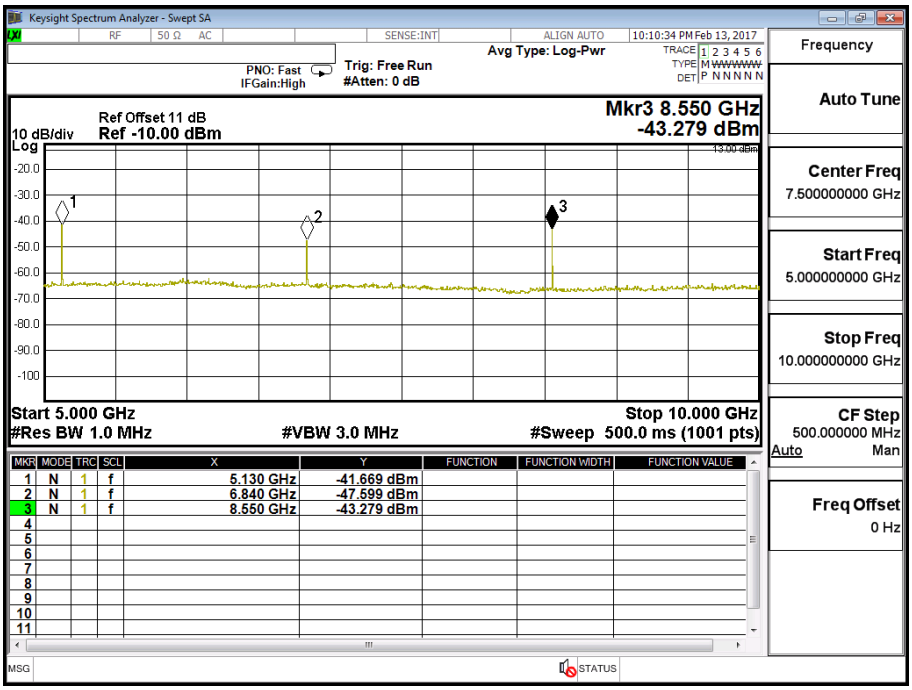
Product	LE910C1-NA		
Test Mode	Spurious Emission (Conducted)		
Date of Test	2017/02/08	Test Site	CTR
Test Condition	LTE-Band 4 (3M)	Test Range	30MHz~20GHz

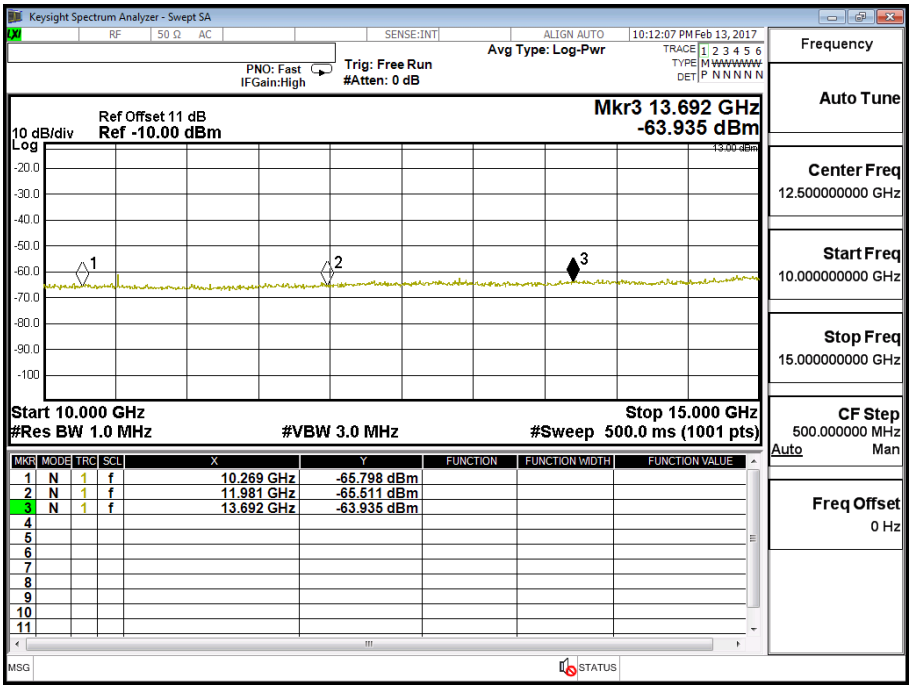
LTE-Band 4 (3M) 16QAM(1,0) CH19965 (1711.5MHz)

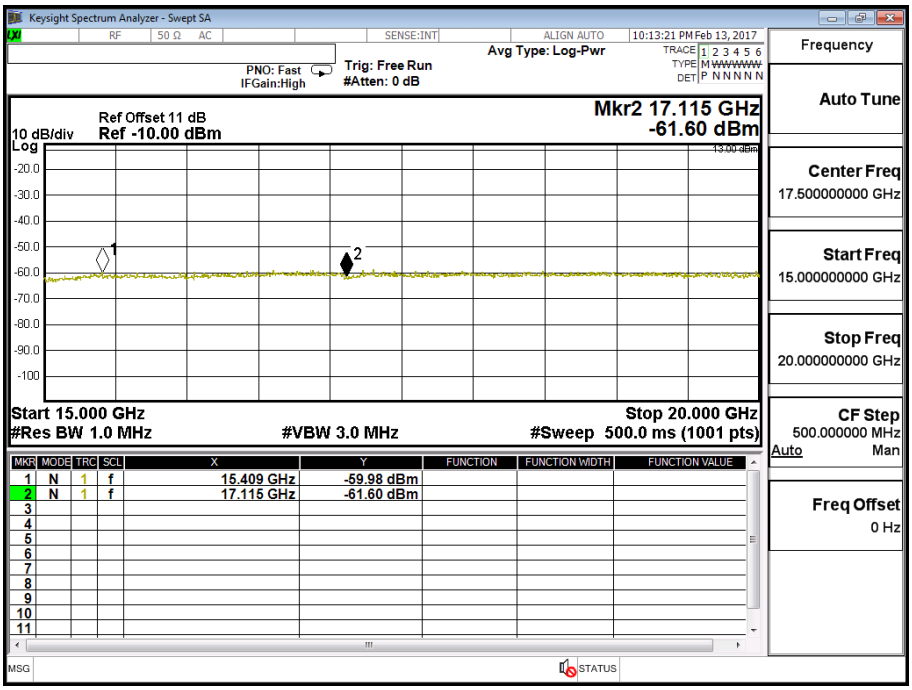
Frequency (MHz)	Reading Level (dBm)	Path Loss (dB)	Emission Level (dBm)	Limit (dBm)
3424	-53.500	1.1	-52.400	-13
5130	-41.669	1.23	-40.439	-13
6840	-47.599	1.59	-46.009	-13
8550	-43.279	1.89	-41.389	-13
10269	-65.798	2.07	-63.728	-13
11981	-65.511	2.26	-63.251	-13
13692	-63.935	2.64	-61.295	-13
15409	-59.980	3.5	-56.480	-13
17115	-61.600	3.7	-57.900	-13




Keysight Spectrum Analyzer - Swept SA
RF 50 Ω AC
SENSE:INT
ALIGN AUTO
10:09:11 PM Feb 13, 2017
Avg Type: Log-Pwr
PNO: Fast
IFGain:High
Trig: Free Run
#Atten: 0 dB
Ref Offset 11 dB
10 dB/div Ref -10.00 dBm
Mkr1 3.424 GHz
-53.50 dBm
Start 1.000 GHz
#Res BW 1.0 MHz
#VBW 3.0 MHz
Stop 5.000 GHz
#Sweep 500.0 ms (1001 pts)
Frequency
Auto Tune
Center Freq
3.000000000 GHz
Start Freq
1.000000000 GHz
Stop Freq
5.000000000 GHz
CF Step
400.000000 MHz
Auto Man
Freq Offset
0 Hz
1 N 1 f 3.424 GHz -53.50 dBm


Keysight Spectrum Analyzer - Swept SA
RF 50 Ω AC
SENSE:INT
ALIGN AUTO
10:10:34 PM Feb 13, 2017
Avg Type: Log-Pwr
PNO: Fast
IFGain:High
Trig: Free Run
#Atten: 0 dB
Ref Offset 11 dB
10 dB/div Ref -10.00 dBm
Mkr3 8.550 GHz
-43.279 dBm
Start 5.000 GHz
#Res BW 1.0 MHz
#VBW 3.0 MHz
Stop 10.000 GHz
#Sweep 500.0 ms (1001 pts)
Frequency
Auto Tune
Center Freq
7.500000000 GHz
Start Freq
5.000000000 GHz
Stop Freq
10.000000000 GHz
CF Step
500.000000 MHz
Auto Man
Freq Offset
0 Hz
1 N 1 f 5.130 GHz -41.669 dBm
2 N 1 f 6.840 GHz -47.599 dBm
3 N 1 f 8.550 GHz -43.279 dBm

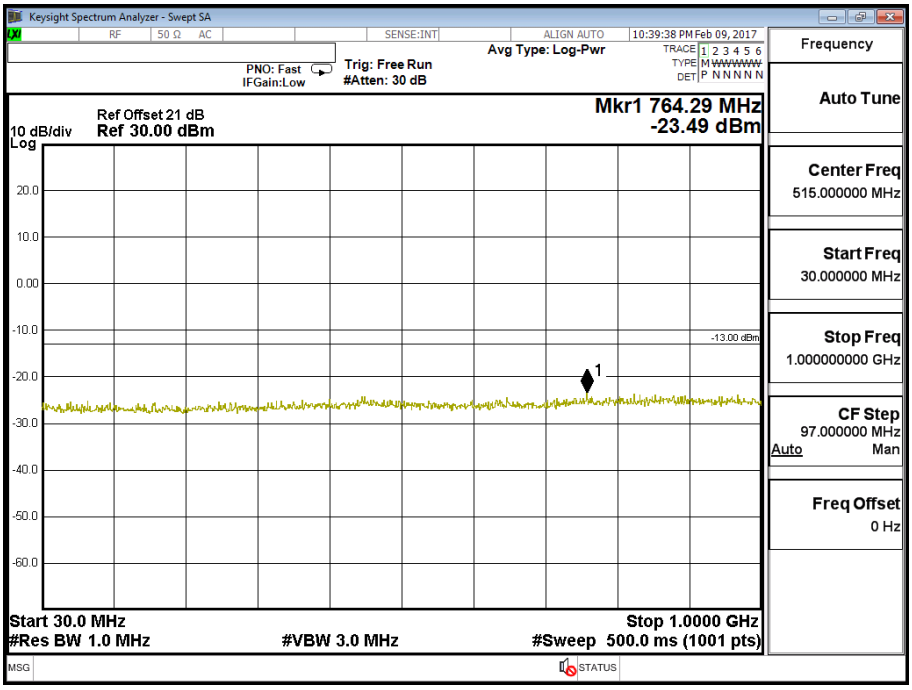

Keysight Spectrum Analyzer - Swept SA
RF 50 Ω AC
SENSE:INT
ALIGN AUTO
10:12:07 PM Feb 13, 2017
Avg Type: Log-Pwr
PNO: Fast
IFGain:High
Trig: Free Run
#Atten: 0 dB
Ref Offset 11 dB
10 dB/div Ref -10.00 dBm
Mkr3 13.692 GHz
-63.935 dBm
Start 10.000 GHz
#Res BW 1.0 MHz
#VBW 3.0 MHz
Stop 15.000 GHz
#Sweep 500.0 ms (1001 pts)
1 N 1 f 10.269 GHz -65.798 dBm
2 N 1 f 11.981 GHz -65.511 dBm
3 N 1 f 13.692 GHz -63.935 dBm
Frequency
Auto Tune
Center Freq 12.500000000 GHz
Start Freq 10.000000000 GHz
Stop Freq 15.000000000 GHz
CF Step 500.000000 MHz
Auto Man
Freq Offset 0 Hz

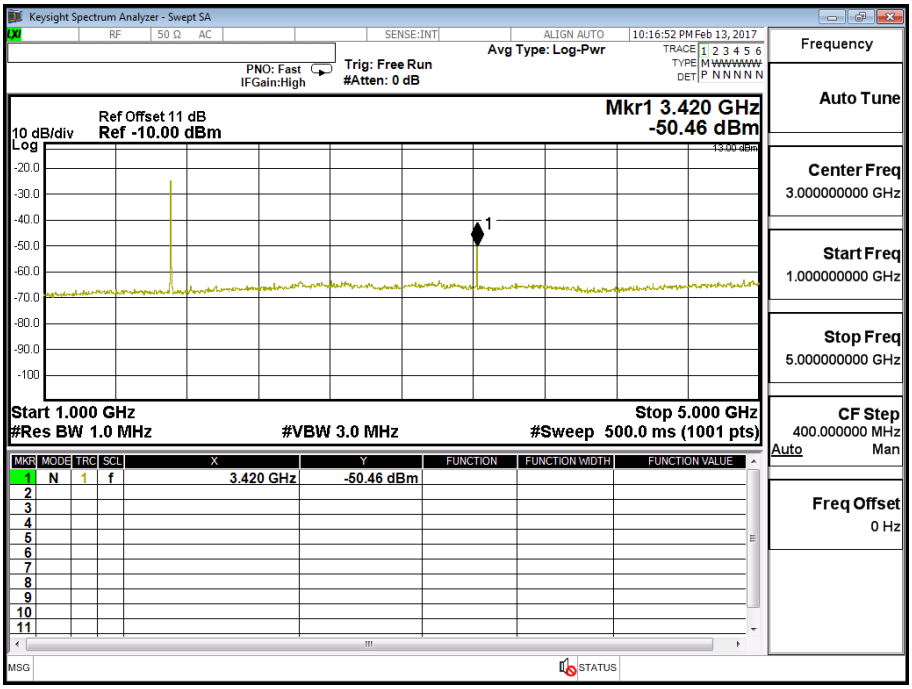

Keysight Spectrum Analyzer - Swept SA
RF 50 Ω AC
SENSE:INT
ALIGN AUTO
10:13:21 PM Feb 13, 2017
Avg Type: Log-Pwr
PNO: Fast
IFGain:High
Trig: Free Run
#Atten: 0 dB
Ref Offset 11 dB
10 dB/div Ref -10.00 dBm
Mkr2 17.115 GHz
-61.60 dBm
Start 15.000 GHz
#Res BW 1.0 MHz
#VBW 3.0 MHz
Stop 20.000 GHz
#Sweep 500.0 ms (1001 pts)
1 N 1 f 15.409 GHz -59.98 dBm
2 N 1 f 17.115 GHz -61.60 dBm
Frequency
Auto Tune
Center Freq 17.500000000 GHz
Start Freq 15.000000000 GHz
Stop Freq 20.000000000 GHz
CF Step 500.000000 MHz
Auto Man
Freq Offset 0 Hz

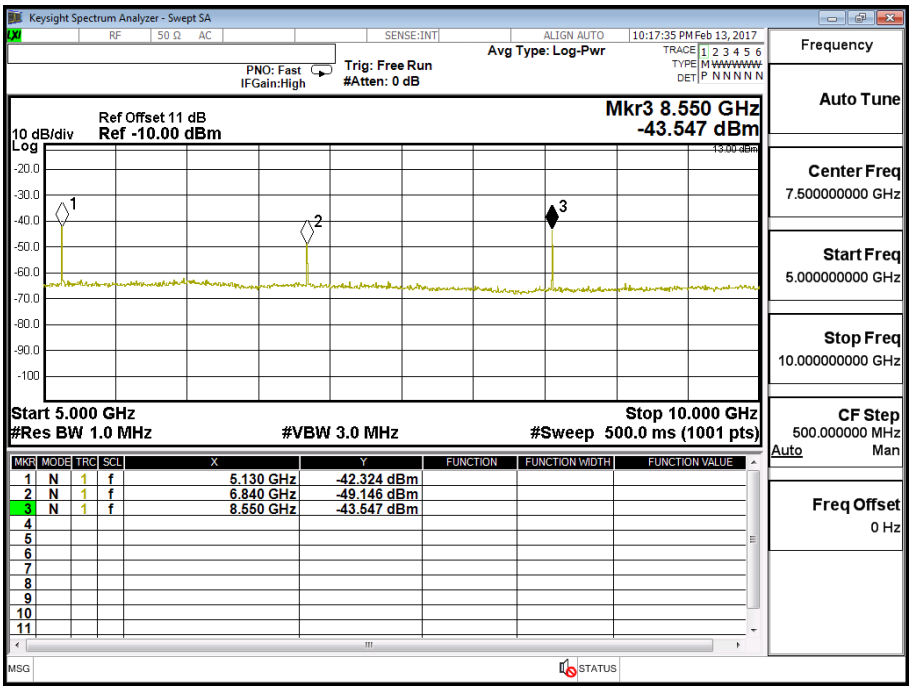
Product	LE910C1-NA		
Test Mode	Spurious Emission (Conducted)		
Date of Test	2017/02/08	Test Site	CTR
Test Condition	LTE-Band 4 (5M)	Test Range	30MHz~20GHz

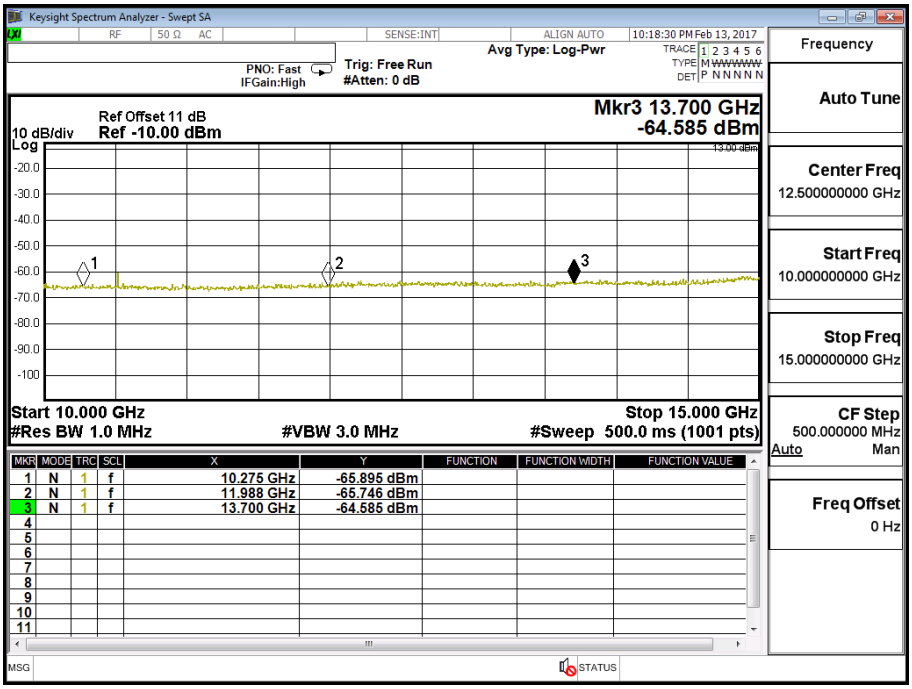
LTE-Band 4 (5M) QPSK(1,0) CH19975 (1712.5MHz)

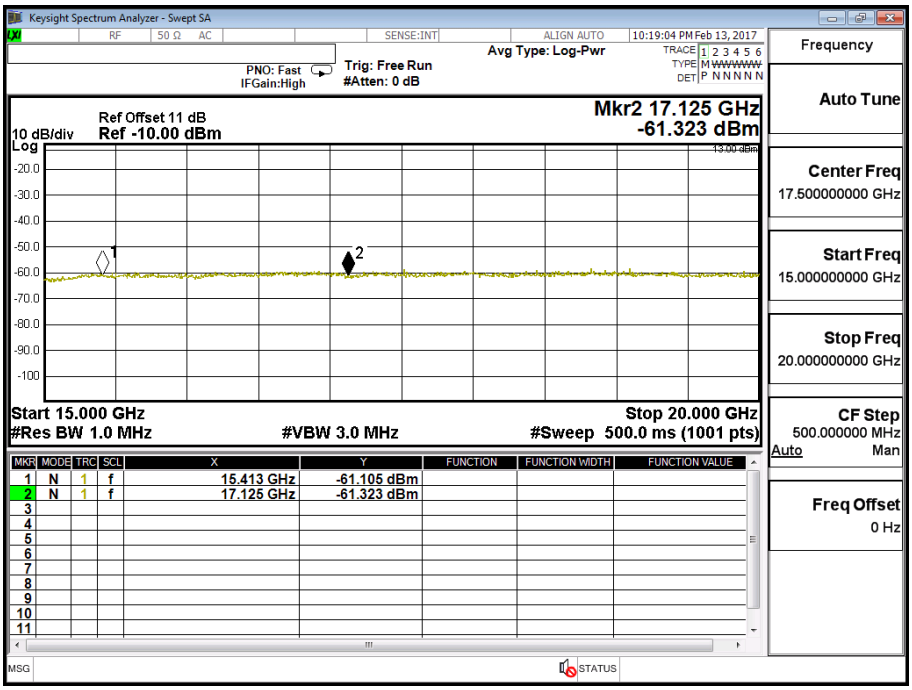
Frequency (MHz)	Reading Level (dBm)	Path Loss (dB)	Emission Level (dBm)	Limit (dBm)
3420	-50.460	1.1	-49.360	-13
5130	-42.324	1.23	-41.094	-13
6840	-49.146	1.59	-47.556	-13
8550	-43.547	1.89	-41.657	-13
10275	-65.895	2.07	-63.825	-13
11988	-65.746	2.26	-63.486	-13
13700	-64.585	2.64	-61.945	-13
15413	-61.105	3.5	-57.605	-13
17125	-61.323	3.7	-57.623	-13




Keysight Spectrum Analyzer - Swept SA
RF 50 Ω AC
SENSE:INT
ALIGN AUTO
10:16:52 PM Feb 13, 2017
Avg Type: Log-Pwr
PNO: Fast
IFGain:High
Trig: Free Run
#Atten: 0 dB
Ref Offset 11 dB
10 dB/div Ref -10.00 dBm
Mkr1 3.420 GHz
-50.46 dBm
Start 1.000 GHz
#Res BW 1.0 MHz
#VBW 3.0 MHz
Stop 5.000 GHz
#Sweep 500.0 ms (1001 pts)
Frequency
Auto Tune
Center Freq
3.000000000 GHz
Start Freq
1.000000000 GHz
Stop Freq
5.000000000 GHz
CF Step
400.000000 MHz
Auto Man
Freq Offset
0 Hz
1 N 1 f 3.420 GHz -50.46 dBm


Keysight Spectrum Analyzer - Swept SA
RF 50 Ω AC
SENSE:INT
ALIGN AUTO
10:17:35 PM Feb 13, 2017
Avg Type: Log-Pwr
PNO: Fast
IFGain:High
Trig: Free Run
#Atten: 0 dB
Ref Offset 11 dB
10 dB/div Ref -10.00 dBm
Mkr3 8.550 GHz
-43.547 dBm
Start 5.000 GHz
#Res BW 1.0 MHz
#VBW 3.0 MHz
Stop 10.000 GHz
#Sweep 500.0 ms (1001 pts)
Frequency
Auto Tune
Center Freq
7.500000000 GHz
Start Freq
5.000000000 GHz
Stop Freq
10.000000000 GHz
CF Step
500.000000 MHz
Auto Man
Freq Offset
0 Hz
1 N 1 f 5.130 GHz -42.324 dBm
2 N 1 f 6.840 GHz -49.146 dBm
3 N 1 f 8.550 GHz -43.547 dBm

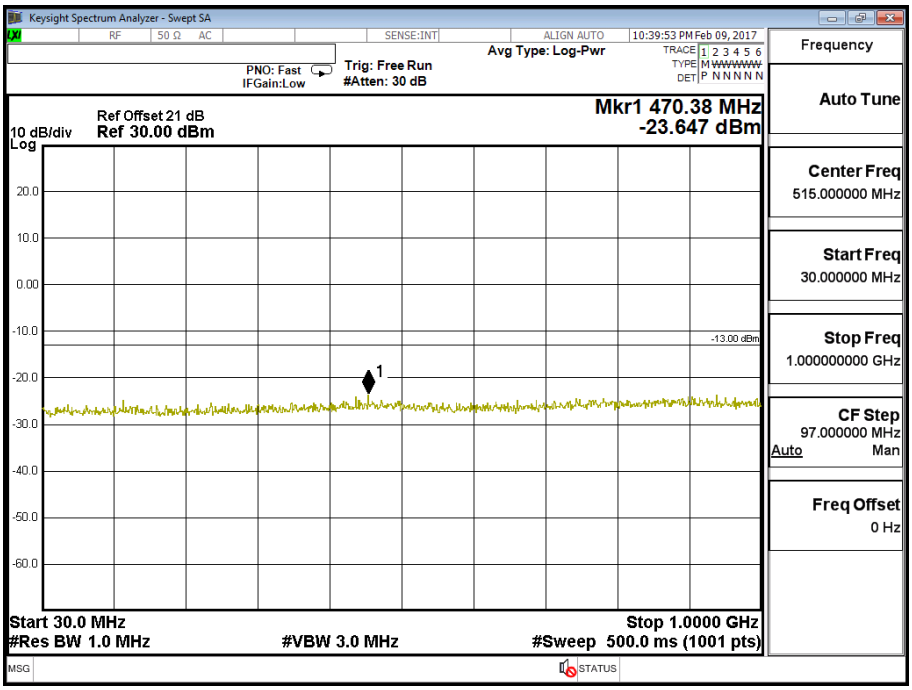

Keysight Spectrum Analyzer - Swept SA
RF 50 Ω AC
SENSE:INT
ALIGN AUTO
10:18:30 PM Feb 13, 2017
Avg Type: Log-Pwr
PNO: Fast
IFGain:High
Trig: Free Run
#Atten: 0 dB
Ref Offset 11 dB
10 dB/div Ref -10.00 dBm
Mkr3 13.700 GHz
-64.585 dBm
Start 10.000 GHz
#Res BW 1.0 MHz
#VBW 3.0 MHz
Stop 15.000 GHz
#Sweep 500.0 ms (1001 pts)
1 N 1 f 10.275 GHz -65.895 dBm
2 N 1 f 11.988 GHz -65.746 dBm
3 N 1 f 13.700 GHz -64.585 dBm
Frequency
Auto Tune
Center Freq
12.500000000 GHz
Start Freq
10.000000000 GHz
Stop Freq
15.000000000 GHz
CF Step
500.000000 MHz
Auto Man
Freq Offset
0 Hz

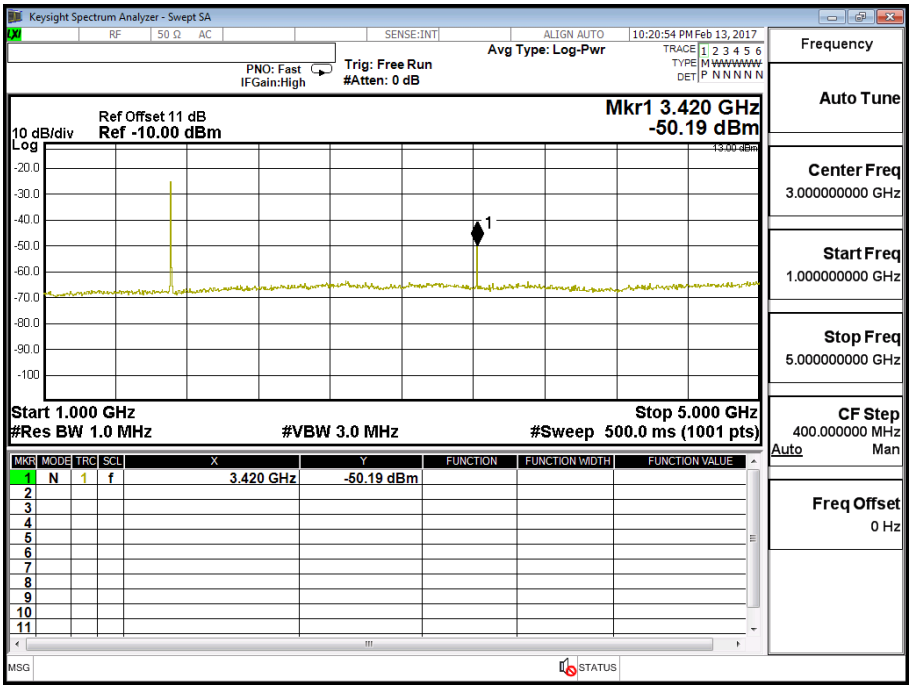

Keysight Spectrum Analyzer - Swept SA
RF 50 Ω AC
SENSE:INT
ALIGN AUTO
10:19:04 PM Feb 13, 2017
Avg Type: Log-Pwr
PNO: Fast
IFGain:High
Trig: Free Run
#Atten: 0 dB
Ref Offset 11 dB
10 dB/div Ref -10.00 dBm
Mkr2 17.125 GHz
-61.323 dBm
Start 15.000 GHz
#Res BW 1.0 MHz
#VBW 3.0 MHz
Stop 20.000 GHz
#Sweep 500.0 ms (1001 pts)
1 N 1 f 15.413 GHz -61.105 dBm
2 N 1 f 17.125 GHz -61.323 dBm
Frequency
Auto Tune
Center Freq
17.500000000 GHz
Start Freq
15.000000000 GHz
Stop Freq
20.000000000 GHz
CF Step
500.000000 MHz
Auto Man
Freq Offset
0 Hz

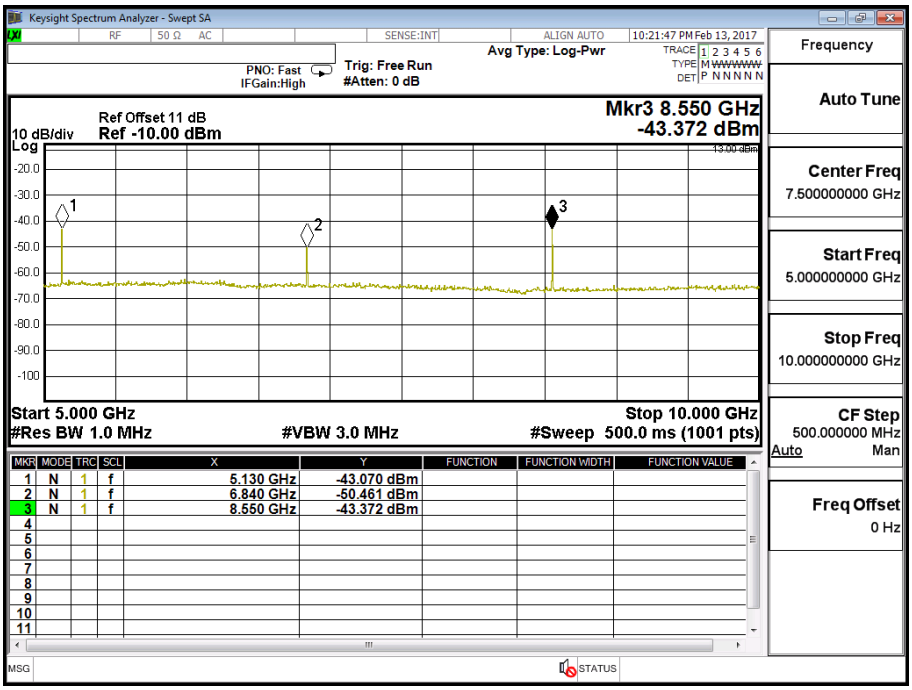
Product	LE910C1-NA		
Test Mode	Spurious Emission (Conducted)		
Date of Test	2017/02/08	Test Site	CTR
Test Condition	LTE-Band 4 (5M)	Test Range	30MHz~20GHz

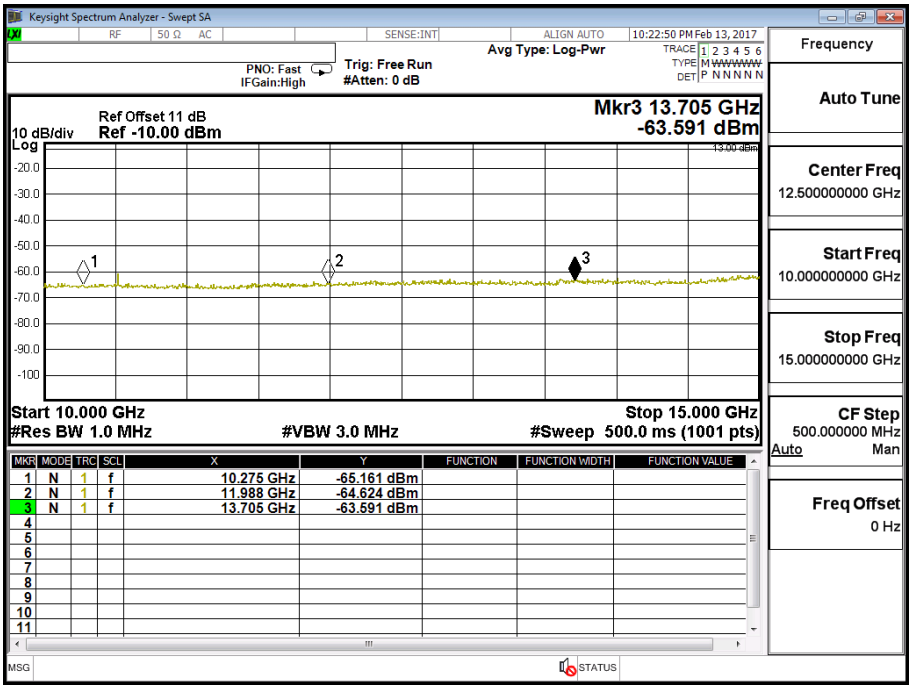
LTE- Band 4 (5M) 16QAM(1,0) CH19975 (1712.5MHz)

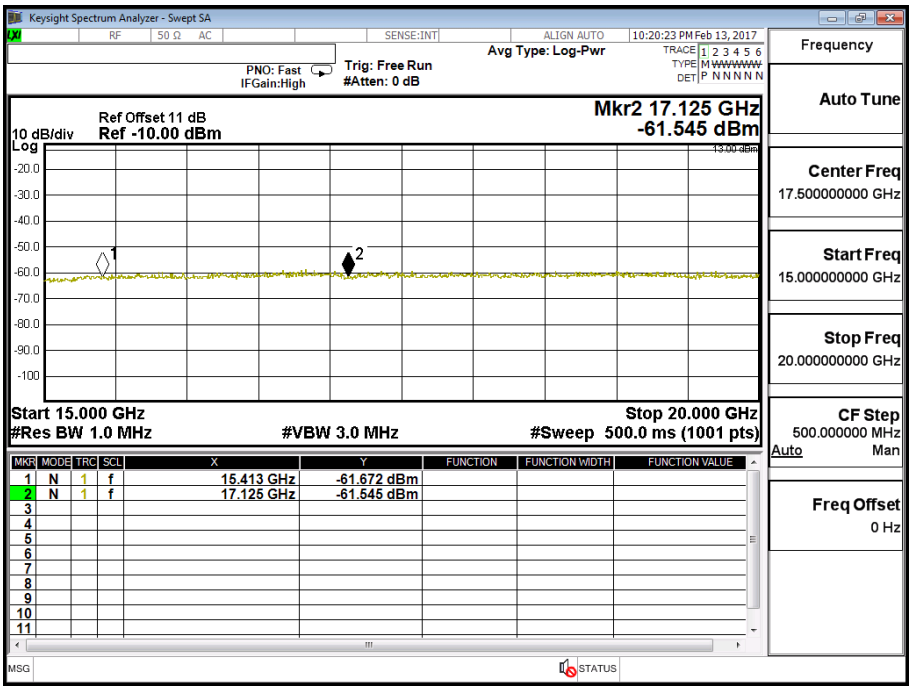
Frequency (MHz)	Reading Level (dBm)	Path Loss (dB)	Emission Level (dBm)	Limit (dBm)
3420	-50.190	1.1	-49.090	-13
5130	-43.070	1.23	-41.840	-13
6840	-50.461	1.59	-48.871	-13
8550	-43.372	1.89	-41.482	-13
10275	-65.161	2.07	-63.091	-13
11988	-64.624	2.26	-62.364	-13
13705	-63.591	2.64	-60.951	-13
15413	-61.672	3.5	-58.172	-13
17125	-61.545	3.7	-57.845	-13




Keysight Spectrum Analyzer - Swept SA
RF 50 Ω AC
SENSE:INT
ALIGN AUTO
10:20:54 PM Feb 13, 2017
Avg Type: Log-Pwr
PNO: Fast
IFGain:High
Trig: Free Run
#Atten: 0 dB
Ref Offset 11 dB
10 dB/div Ref -10.00 dBm
Mkr1 3.420 GHz
-50.19 dBm
Start 1.000 GHz
#Res BW 1.0 MHz
#VBW 3.0 MHz
Stop 5.000 GHz
#Sweep 500.0 ms (1001 pts)
Frequency
Auto Tune
Center Freq
3.000000000 GHz
Start Freq
1.000000000 GHz
Stop Freq
5.000000000 GHz
CF Step
400.000000 MHz
Auto Man
Freq Offset
0 Hz
1 N 1 f 3.420 GHz -50.19 dBm


Keysight Spectrum Analyzer - Swept SA
RF 50 Ω AC
SENSE:INT
ALIGN AUTO
10:21:47 PM Feb 13, 2017
Avg Type: Log-Pwr
PNO: Fast
IFGain:High
Trig: Free Run
#Atten: 0 dB
Ref Offset 11 dB
10 dB/div Ref -10.00 dBm
Mkr3 8.550 GHz
-43.372 dBm
Start 5.000 GHz
#Res BW 1.0 MHz
#VBW 3.0 MHz
Stop 10.000 GHz
#Sweep 500.0 ms (1001 pts)
Frequency
Auto Tune
Center Freq
7.500000000 GHz
Start Freq
5.000000000 GHz
Stop Freq
10.000000000 GHz
CF Step
500.000000 MHz
Auto Man
Freq Offset
0 Hz
1 N 1 f 5.130 GHz -43.070 dBm
2 N 1 f 6.840 GHz -50.461 dBm
3 N 1 f 8.550 GHz -43.372 dBm

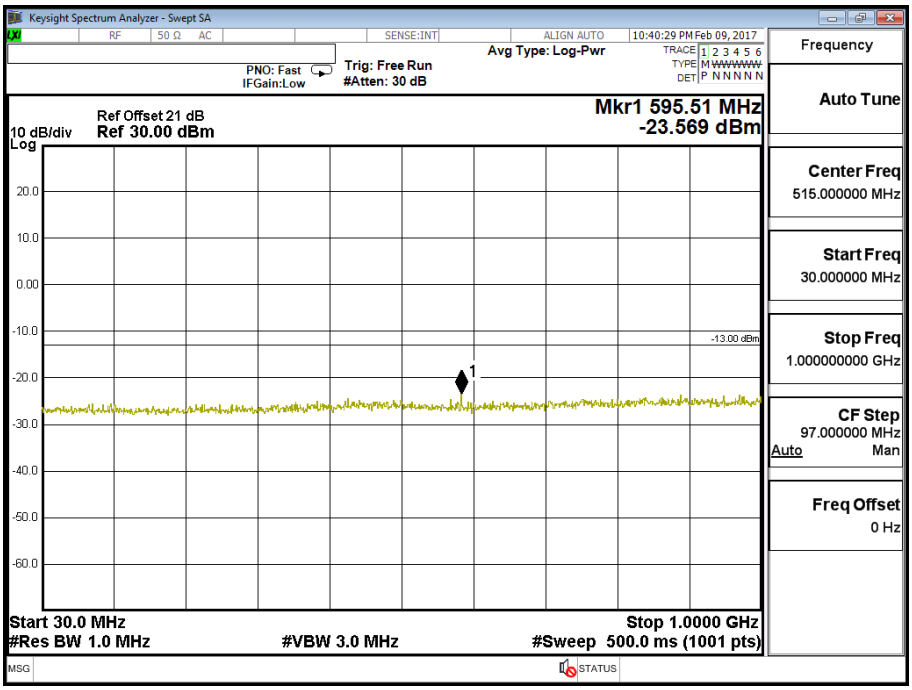

Keysight Spectrum Analyzer - Swept SA
RF 50 Ω AC
SENSE:INT
ALIGN AUTO
10:22:50 PM Feb 13, 2017
Avg Type: Log-Pwr
TRACE 1 2 3 4 5 6
TYPE M WWWWWW
DET P N N N N N
PNO: Fast
IFGain:High
Trig: Free Run
#Atten: 0 dB
Ref Offset 11 dB
10 dB/div Ref -10.00 dBm
Log
Mkr3 13.705 GHz
-63.591 dBm
Start 10.000 GHz
#Res BW 1.0 MHz
#VBW 3.0 MHz
Stop 15.000 GHz
#Sweep 500.0 ms (1001 pts)
MKR MODE TRC SCL X Y FUNCTION FUNCTION WIDTH FUNCTION VALUE
1 N 1 f 10.275 GHz -65.161 dBm
2 N 1 f 11.988 GHz -64.624 dBm
3 N 1 f 13.705 GHz -63.591 dBm
Frequency
Auto Tune
Center Freq
12.500000000 GHz
Start Freq
10.000000000 GHz
Stop Freq
15.000000000 GHz
CF Step
500.000000 MHz
Auto Man
Freq Offset
0 Hz
MSG
STATUS

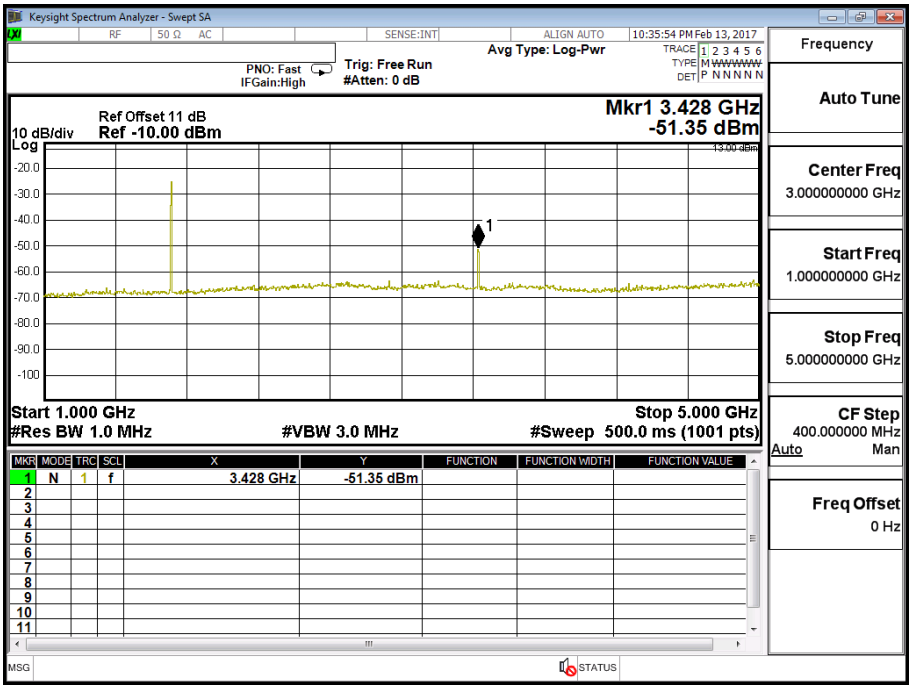

Keysight Spectrum Analyzer - Swept SA
RF 50 Ω AC
SENSE:INT
ALIGN AUTO
10:20:23 PM Feb 13, 2017
Avg Type: Log-Pwr
TRACE 1 2 3 4 5 6
TYPE M WWWWWW
DET P N N N N N
PNO: Fast
IFGain:High
Trig: Free Run
#Atten: 0 dB
Ref Offset 11 dB
10 dB/div Ref -10.00 dBm
Log
Mkr2 17.125 GHz
-61.545 dBm
Start 15.000 GHz
#Res BW 1.0 MHz
#VBW 3.0 MHz
Stop 20.000 GHz
#Sweep 500.0 ms (1001 pts)
MKR MODE TRC SCL X Y FUNCTION FUNCTION WIDTH FUNCTION VALUE
1 N 1 f 15.413 GHz -61.672 dBm
2 N 1 f 17.125 GHz -61.545 dBm
Frequency
Auto Tune
Center Freq
17.500000000 GHz
Start Freq
15.000000000 GHz
Stop Freq
20.000000000 GHz
CF Step
500.000000 MHz
Auto Man
Freq Offset
0 Hz
MSG
STATUS

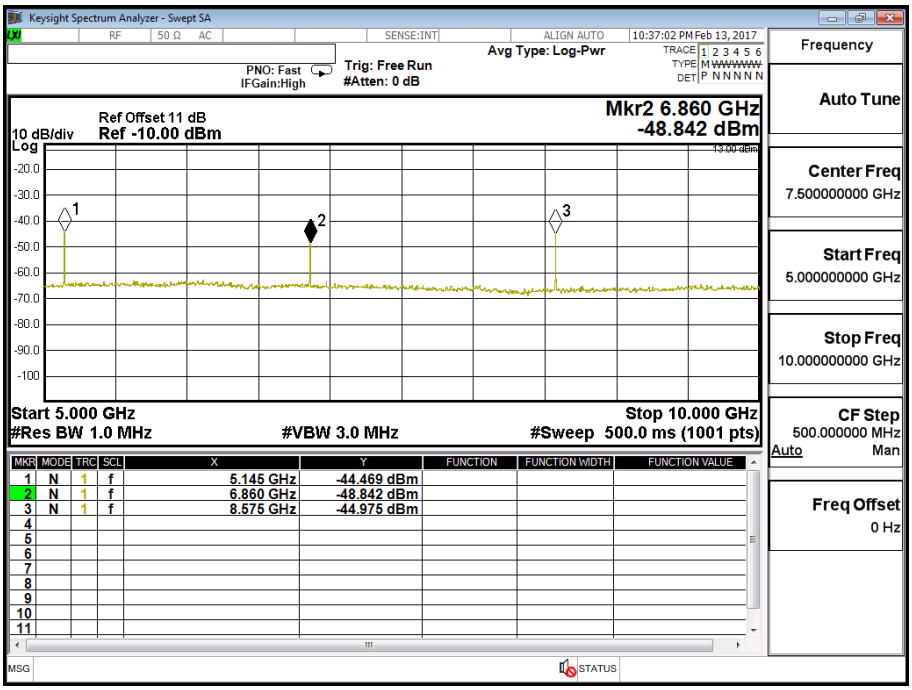
Product	LE910C1-NA		
Test Mode	Spurious Emission (Conducted)		
Date of Test	2017/02/08	Test Site	CTR
Test Condition	LTE-Band 4 (10M)	Test Range	30MHz~20GHz

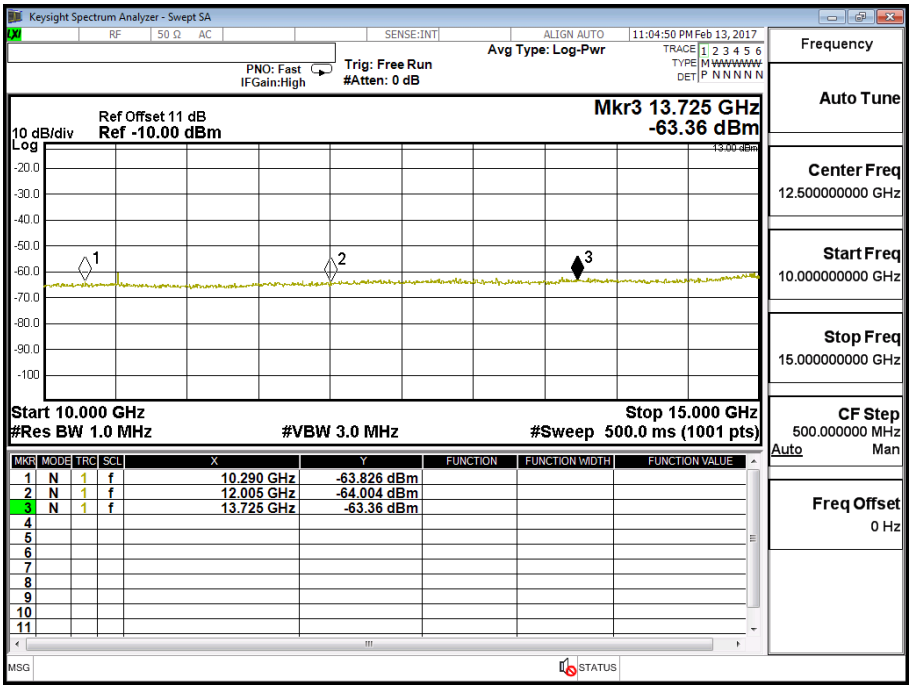
LTE- Band 4 (10M) QPSK(1,24) CH20000 (1715MHz)

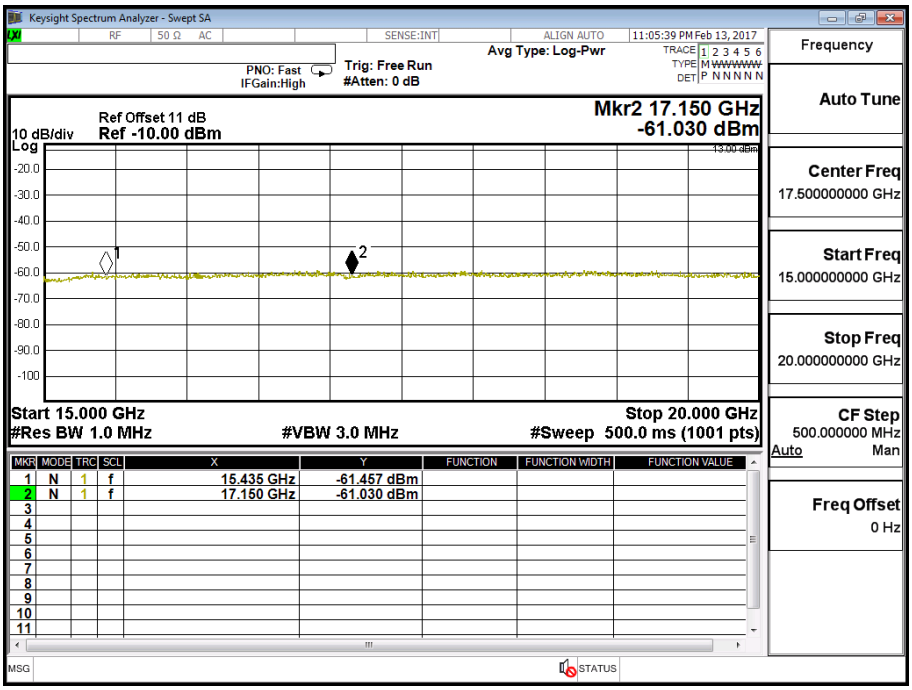
Frequency (MHz)	Reading Level (dBm)	Path Loss (dB)	Emission Level (dBm)	Limit (dBm)
3428	-51.350	1.1	-50.250	-13
5145	-44.469	1.23	-43.239	-13
6860	-48.842	1.59	-47.252	-13
8575	-44.975	1.89	-43.085	-13
10290	-63.826	2.07	-61.756	-13
12005	-64.004	2.26	-61.744	-13
13725	-63.360	2.64	-60.720	-13
15435	-61.457	3.5	-57.957	-13
17150	-61.030	3.7	-57.330	-13




Keysight Spectrum Analyzer - Swept SA
RF 50 Ω AC
SENSE:INT
ALIGN AUTO
10:35:54 PM Feb 13, 2017
Avg Type: Log-Pwr
PNO: Fast
IFGain:High
Trig: Free Run
#Atten: 0 dB
Ref Offset 11 dB
10 dB/div Ref -10.00 dBm
Mkr1 3.428 GHz
-51.35 dBm
Start 1.000 GHz
#Res BW 1.0 MHz
#VBW 3.0 MHz
Stop 5.000 GHz
#Sweep 500.0 ms (1001 pts)
Frequency
Auto Tune
Center Freq
3.000000000 GHz
Start Freq
1.000000000 GHz
Stop Freq
5.000000000 GHz
CF Step
400.000000 MHz
Auto Man
Freq Offset
0 Hz
1 N 1 f 3.428 GHz -51.35 dBm


Keysight Spectrum Analyzer - Swept SA
RF 50 Ω AC
SENSE:INT
ALIGN AUTO
10:37:02 PM Feb 13, 2017
Avg Type: Log-Pwr
PNO: Fast
IFGain:High
Trig: Free Run
#Atten: 0 dB
Ref Offset 11 dB
10 dB/div Ref -10.00 dBm
Mkr2 6.860 GHz
-48.842 dBm
Start 5.000 GHz
#Res BW 1.0 MHz
#VBW 3.0 MHz
Stop 10.000 GHz
#Sweep 500.0 ms (1001 pts)
Frequency
Auto Tune
Center Freq
7.500000000 GHz
Start Freq
5.000000000 GHz
Stop Freq
10.000000000 GHz
CF Step
500.000000 MHz
Auto Man
Freq Offset
0 Hz
1 N 1 f 5.145 GHz -44.469 dBm
2 N 1 f 6.860 GHz -48.842 dBm
3 N 1 f 8.575 GHz -44.975 dBm

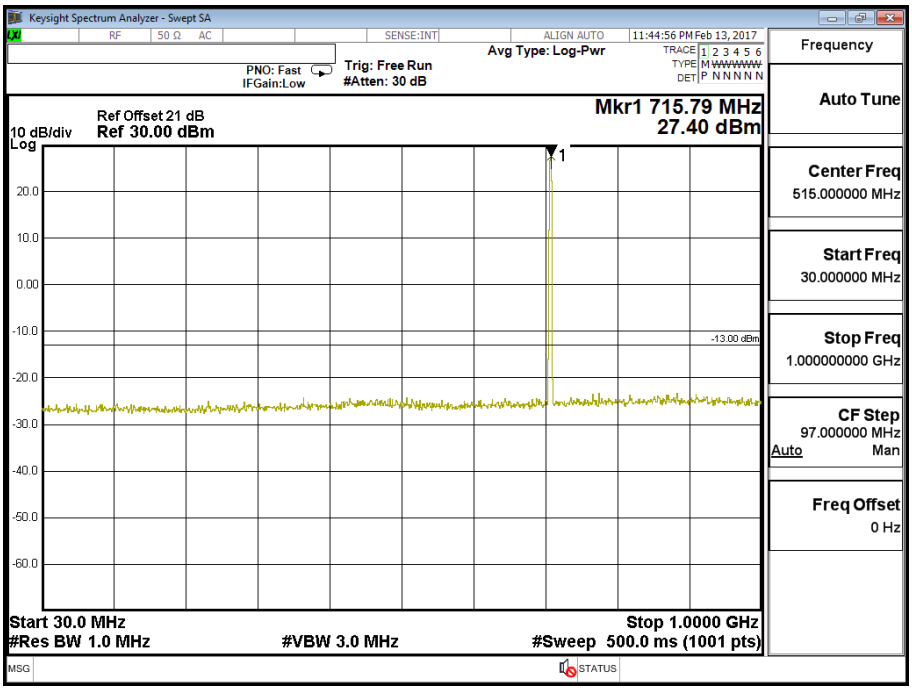

Keysight Spectrum Analyzer - Swept SA
RF 50 Ω AC
SENSE:INT
ALIGN AUTO
11:04:50 PM Feb 13, 2017
Avg Type: Log-Pwr
TRACE 1 2 3 4 5 6
TYPE M WWWWWW
DET P N N N N N
PNO: Fast
IFGain:High
Trig: Free Run
#Atten: 0 dB
Ref Offset 11 dB
10 dB/div Ref -10.00 dBm
Log
Mkr3 13.725 GHz
-63.36 dBm
Start 10.000 GHz
#Res BW 1.0 MHz
#VBW 3.0 MHz
Stop 15.000 GHz
#Sweep 500.0 ms (1001 pts)
MKR MODE TRC SCL X Y FUNCTION FUNCTION WIDTH FUNCTION VALUE
1 N 1 f 10.290 GHz -63.826 dBm
2 N 1 f 12.005 GHz -64.004 dBm
3 N 1 f 13.725 GHz -63.36 dBm
Frequency
Auto Tune
Center Freq
12.500000000 GHz
Start Freq
10.000000000 GHz
Stop Freq
15.000000000 GHz
CF Step
500.000000 MHz
Auto Man
Freq Offset
0 Hz
MSG
STATUS

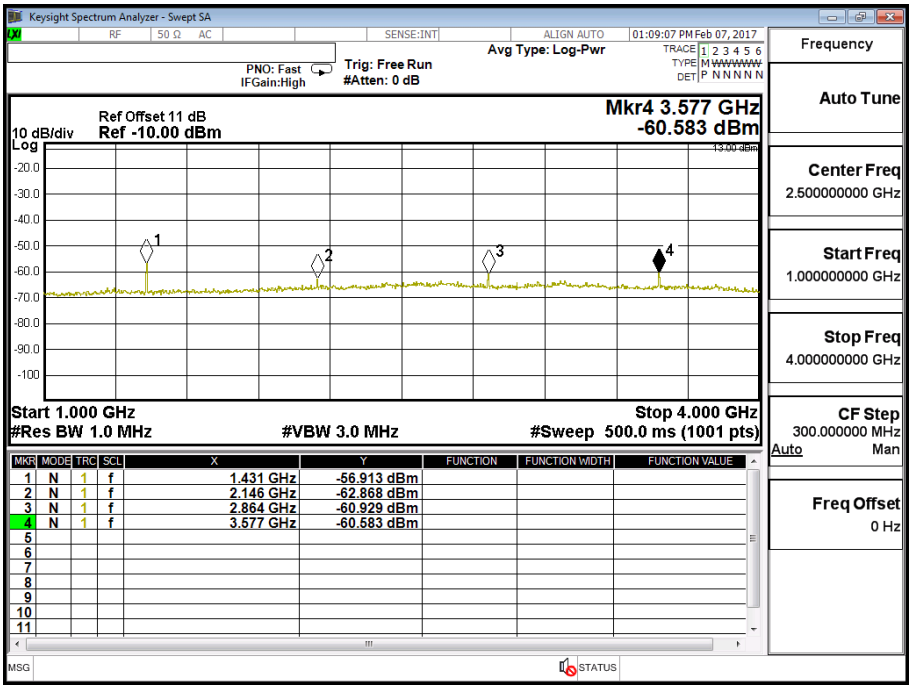

Keysight Spectrum Analyzer - Swept SA
RF 50 Ω AC
SENSE:INT
ALIGN AUTO
11:05:39 PM Feb 13, 2017
Avg Type: Log-Pwr
TRACE 1 2 3 4 5 6
TYPE M WWWWWW
DET P N N N N N
PNO: Fast
IFGain:High
Trig: Free Run
#Atten: 0 dB
Ref Offset 11 dB
10 dB/div Ref -10.00 dBm
Log
Mkr2 17.150 GHz
-61.030 dBm
Start 15.000 GHz
#Res BW 1.0 MHz
#VBW 3.0 MHz
Stop 20.000 GHz
#Sweep 500.0 ms (1001 pts)
MKR MODE TRC SCL X Y FUNCTION FUNCTION WIDTH FUNCTION VALUE
1 N 1 f 15.435 GHz -61.457 dBm
2 N 1 f 17.150 GHz -61.030 dBm
Frequency
Auto Tune
Center Freq
17.500000000 GHz
Start Freq
15.000000000 GHz
Stop Freq
20.000000000 GHz
CF Step
500.000000 MHz
Auto Man
Freq Offset
0 Hz
MSG
STATUS

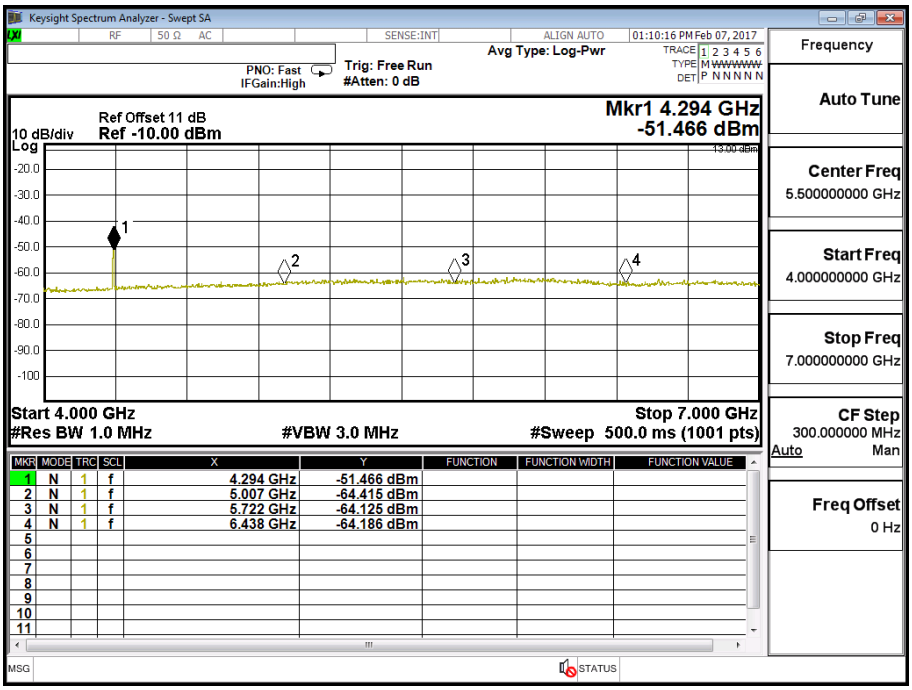
Product	LE910C1-NA		
Test Mode	Spurious Emission (Conducted)		
Date of Test	2017/02/08	Test Site	CTR
Test Condition	LTE-Band 12 (1.4M)	Test Range	30MHz~10GHz

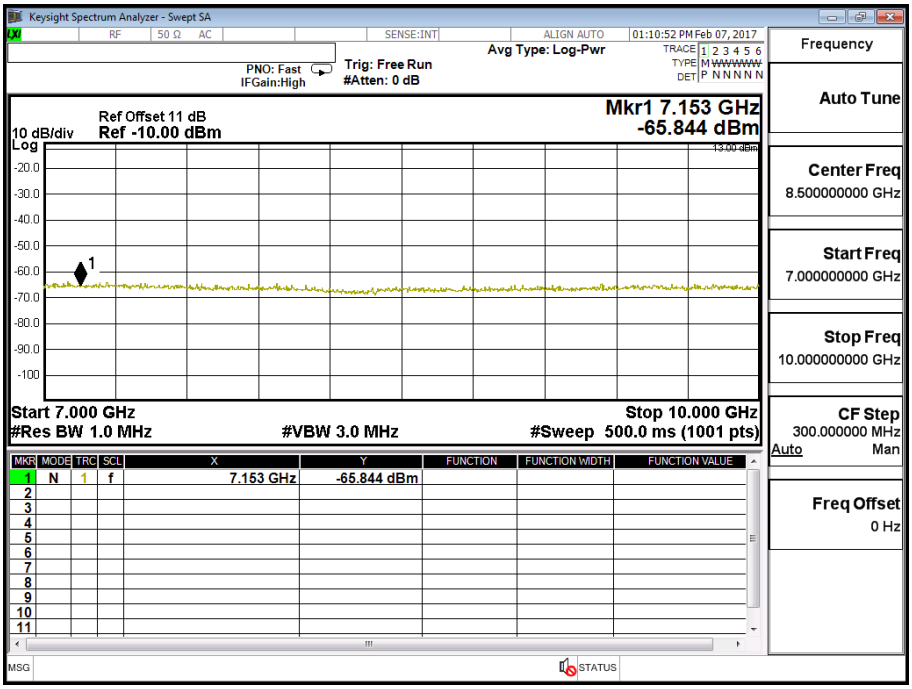
LTE-Band 12 (1.4M) QPSK(3,3) CH23173 (715.3MHz)

Frequency (MHz)	Reading Level (dBm)	Path Loss (dB)	Emission Level (dBm)	Limit (dBm)
1431	-56.913	0.58	-56.333	-13
2146	-62.868	0.7	-62.168	-13
2864	-60.929	1.01	-59.919	-13
3577	-60.583	1.18	-59.403	-13
4294	-51.466	1.23	-50.236	-13
5007	-64.415	1.45	-62.965	-13
5722	-64.125	1.56	-62.565	-13
6438	-64.186	1.59	-62.596	-13
7153	-65.844	1.82	-64.024	-13




Keysight Spectrum Analyzer - Swept SA
RF 50 Ω AC
SENSE:INT
ALIGN AUTO
01:09:07 PM Feb 07, 2017
Avg Type: Log-Pwr
PNO: Fast
IFGain:High
Trig: Free Run
#Atten: 0 dB
Ref Offset 11 dB
10 dB/div Ref -10.00 dBm
Mkr4 3.577 GHz
-60.583 dBm
Start 1.000 GHz
#Res BW 1.0 MHz
#VBW 3.0 MHz
Stop 4.000 GHz
#Sweep 500.0 ms (1001 pts)
MKR MODE TRC SCL X Y FUNCTION FUNCTION WIDTH FUNCTION VALUE
1 N 1 f 1.431 GHz -56.913 dBm
2 N 1 f 2.146 GHz -62.868 dBm
3 N 1 f 2.864 GHz -60.929 dBm
4 N 1 f 3.577 GHz -60.583 dBm
Frequency
Auto Tune
Center Freq
2.500000000 GHz
Start Freq
1.000000000 GHz
Stop Freq
4.000000000 GHz
CF Step
300.000000 MHz
Auto Man
Freq Offset
0 Hz
MSG
STATUS

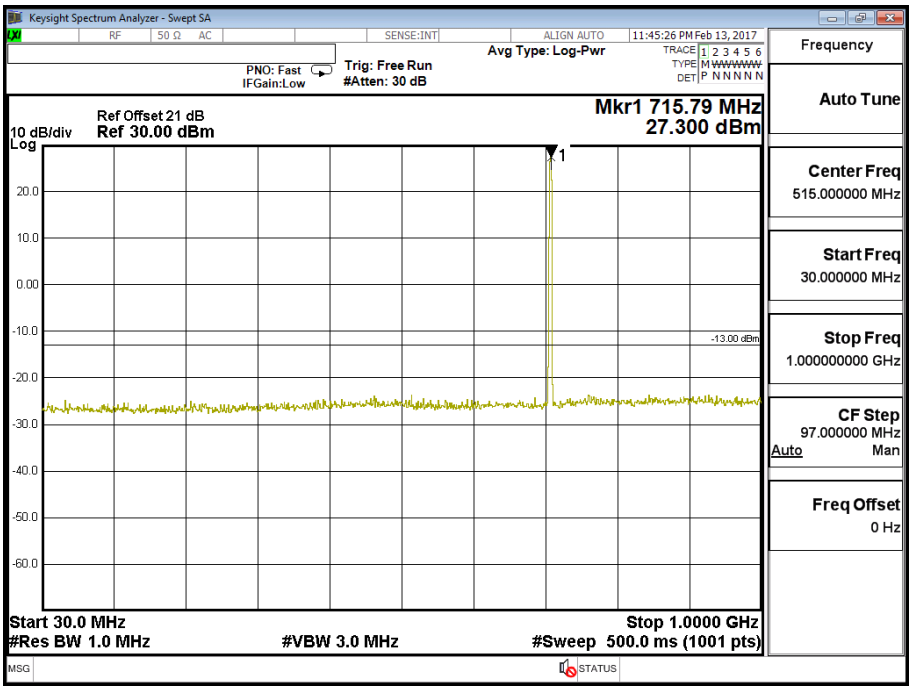

Keysight Spectrum Analyzer - Swept SA
RF 50 Ω AC
SENSE:INT
ALIGN AUTO
01:10:16 PM Feb 07, 2017
Avg Type: Log-Pwr
PNO: Fast
IFGain:High
Trig: Free Run
#Atten: 0 dB
Ref Offset 11 dB
10 dB/div Ref -10.00 dBm
Mkr1 4.294 GHz
-51.466 dBm
Start 4.000 GHz
#Res BW 1.0 MHz
#VBW 3.0 MHz
Stop 7.000 GHz
#Sweep 500.0 ms (1001 pts)
MKR MODE TRC SCL X Y FUNCTION FUNCTION WIDTH FUNCTION VALUE
1 N 1 f 4.294 GHz -51.466 dBm
2 N 1 f 5.007 GHz -64.415 dBm
3 N 1 f 5.722 GHz -64.125 dBm
4 N 1 f 6.438 GHz -64.186 dBm
Frequency
Auto Tune
Center Freq
5.500000000 GHz
Start Freq
4.000000000 GHz
Stop Freq
7.000000000 GHz
CF Step
300.000000 MHz
Auto Man
Freq Offset
0 Hz
MSG
STATUS

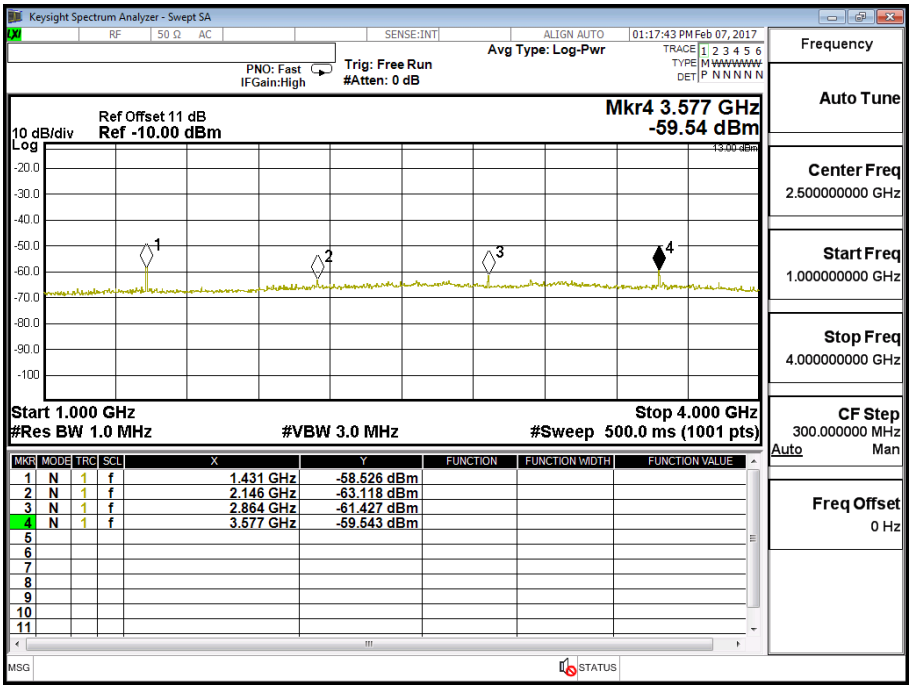

Keysight Spectrum Analyzer - Swept SA
RF
50 Ω AC
SENSE:INT
ALIGN AUTO
01:10:52 PM Feb 07, 2017
Avg Type: Log-Pwr
TRACE 1 2 3 4 5 6
TYPE M WWWWWW
DET P N N N N N
PNO: Fast
IFGain:High
Trig: Free Run
#Atten: 0 dB
Ref Offset 11 dB
10 dB/div
Ref -10.00 dBm
Log
Mkr1 7.153 GHz
-65.844 dBm
13.00 dBm
-20.0
-30.0
-40.0
-50.0
-60.0
-70.0
-80.0
-90.0
-100
Start 7.000 GHz
#Res BW 1.0 MHz
#VBW 3.0 MHz
Stop 10.000 GHz
#Sweep 500.0 ms (1001 pts)
MKR MODE TRC SCL X Y FUNCTION FUNCTION WIDTH FUNCTION VALUE
1 N 1 f 7.153 GHz -65.844 dBm
Frequency
Auto Tune
Center Freq
8.500000000 GHz
Start Freq
7.000000000 GHz
Stop Freq
10.000000000 GHz
CF Step
300.000000 MHz
Auto Man
Freq Offset
0 Hz
MSG
STATUS

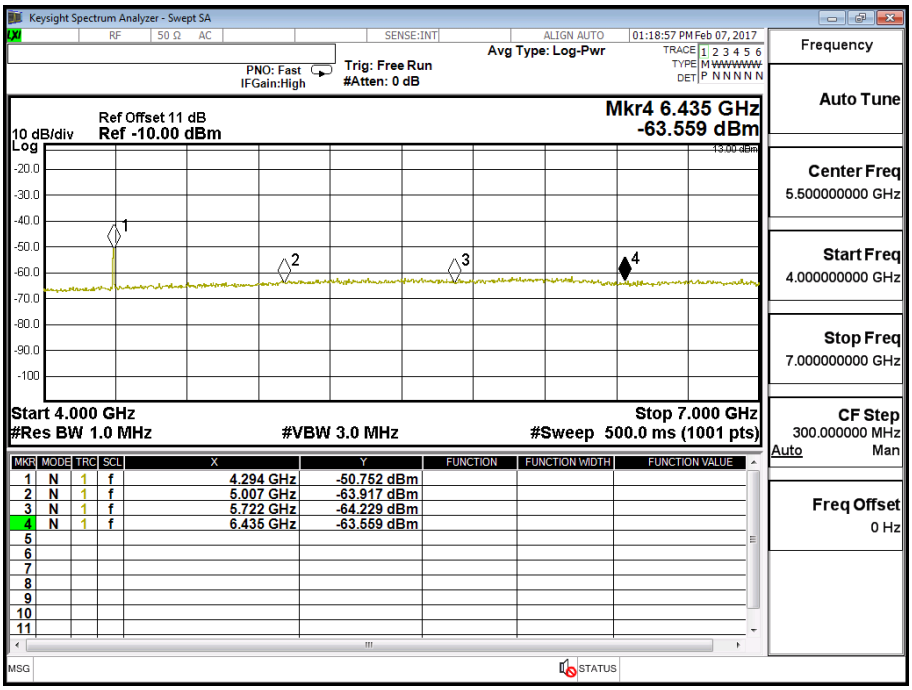
Product	LE910C1-NA		
Test Mode	Spurious Emission (Conducted)		
Date of Test	2017/02/08	Test Site	CTR
Test Condition	LTE-Band 12 (1.4M)	Test Range	30MHz~10GHz

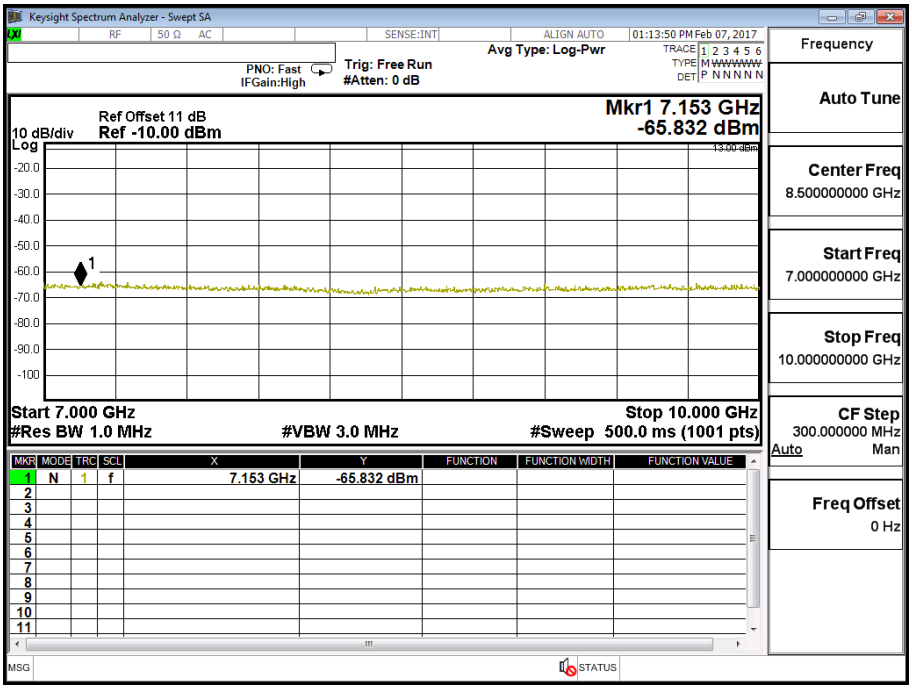
LTE-Band 12 (1.4M) 16QAM(3,3) CH23173 (715.3MHz)

Frequency (MHz)	Reading Level (dBm)	Path Loss (dB)	Emission Level (dBm)	Limit (dBm)
1431	-58.526	0.58	-57.946	-13
2146	-63.118	0.7	-62.418	-13
2864	-61.427	1.01	-60.417	-13
3577	-59.543	1.18	-58.363	-13
4294	-50.752	1.23	-49.522	-13
5007	-63.917	1.45	-62.467	-13
5722	-64.229	1.56	-62.669	-13
6435	-63.559	1.59	-61.969	-13
7153	-65.832	1.82	-64.012	-13




Keysight Spectrum Analyzer - Swept SA
RF 50 Ω AC
SENSE:INT
ALIGN AUTO
01:17:43 PM Feb 07, 2017
Avg Type: Log-Pwr
PNO: Fast
IFGain:High
Trig: Free Run
#Atten: 0 dB
Ref Offset 11 dB
10 dB/div Ref -10.00 dBm
Mkr4 3.577 GHz
-59.54 dBm
Start 1.000 GHz
#Res BW 1.0 MHz
#VBW 3.0 MHz
Stop 4.000 GHz
#Sweep 500.0 ms (1001 pts)
Frequency
Auto Tune
Center Freq
2.500000000 GHz
Start Freq
1.000000000 GHz
Stop Freq
4.000000000 GHz
CF Step
300.000000 MHz
Auto Man
Freq Offset
0 Hz
1 N 1 f 1.431 GHz -58.526 dBm
2 N 1 f 2.146 GHz -63.118 dBm
3 N 1 f 2.864 GHz -61.427 dBm
4 N 1 f 3.577 GHz -59.543 dBm

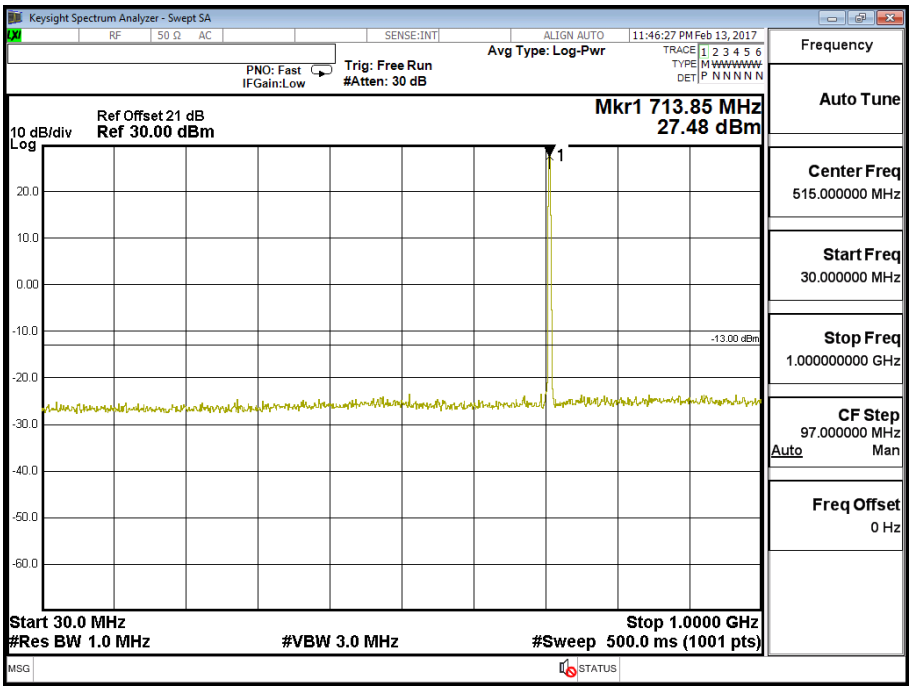

Keysight Spectrum Analyzer - Swept SA
RF 50 Ω AC
SENSE:INT
ALIGN AUTO
01:18:57 PM Feb 07, 2017
Avg Type: Log-Pwr
PNO: Fast
IFGain:High
Trig: Free Run
#Atten: 0 dB
Ref Offset 11 dB
10 dB/div Ref -10.00 dBm
Mkr4 6.435 GHz
-63.559 dBm
Start 4.000 GHz
#Res BW 1.0 MHz
#VBW 3.0 MHz
Stop 7.000 GHz
#Sweep 500.0 ms (1001 pts)
Frequency
Auto Tune
Center Freq
5.500000000 GHz
Start Freq
4.000000000 GHz
Stop Freq
7.000000000 GHz
CF Step
300.000000 MHz
Auto Man
Freq Offset
0 Hz
1 N 1 f 4.294 GHz -50.752 dBm
2 N 1 f 5.007 GHz -63.917 dBm
3 N 1 f 5.722 GHz -64.229 dBm
4 N 1 f 6.435 GHz -63.559 dBm

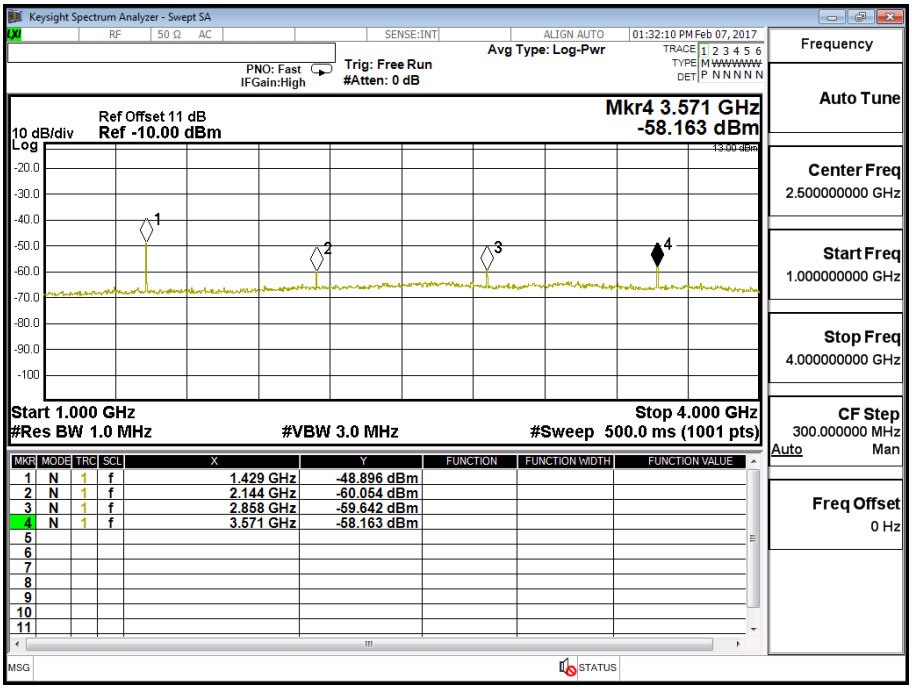

Keysight Spectrum Analyzer - Swept SA
RF
50 Ω AC
SENSE:INT
ALIGN AUTO
01:13:50 PM Feb 07, 2017
Avg Type: Log-Pwr
TRACE 1 2 3 4 5 6
TYPE M WWWWWW
DET P N N N N N
PNO: Fast
IFGain:High
Trig: Free Run
#Atten: 0 dB
Ref Offset 11 dB
10 dB/div
Ref -10.00 dBm
Log
Mkr1 7.153 GHz
-65.832 dBm
13.00 dBm
-20.0
-30.0
-40.0
-50.0
-60.0
-70.0
-80.0
-90.0
-100
Start 7.000 GHz
#Res BW 1.0 MHz
#VBW 3.0 MHz
Stop 10.000 GHz
#Sweep 500.0 ms (1001 pts)
MKR MODE TRC SCL X Y FUNCTION FUNCTION WIDTH FUNCTION VALUE
1 N 1 f 7.153 GHz -65.832 dBm
Frequency
Auto Tune
Center Freq
8.500000000 GHz
Start Freq
7.000000000 GHz
Stop Freq
10.000000000 GHz
CF Step
300.000000 MHz
Auto Man
Freq Offset
0 Hz
MSG
STATUS

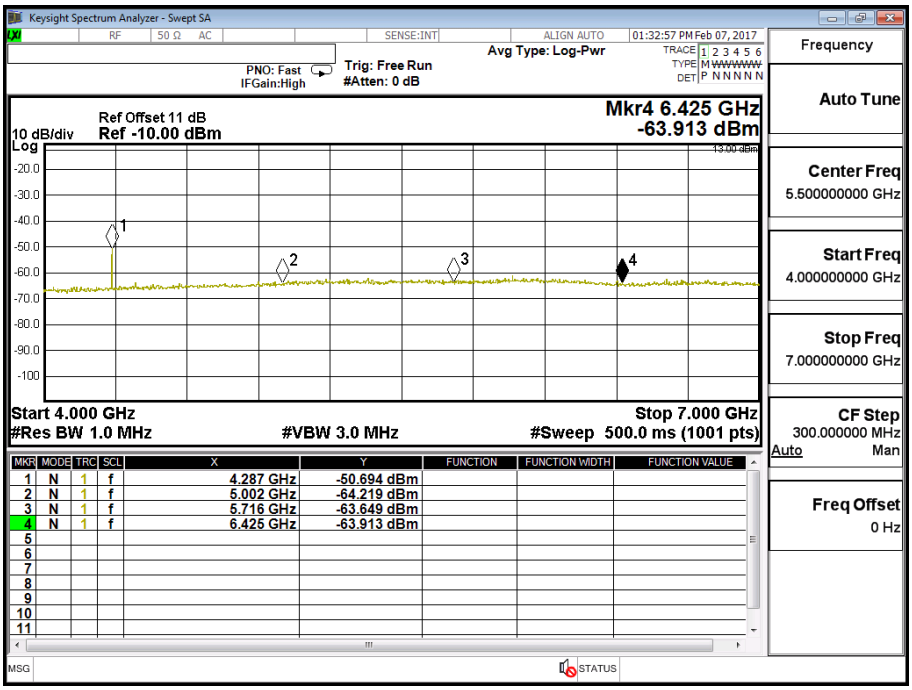
Product	LE910C1-NA		
Test Mode	Spurious Emission (Conducted)		
Date of Test	2017/02/08	Test Site	CTR
Test Condition	LTE-Band 12 (3M)	Test Range	30MHz~10GHz

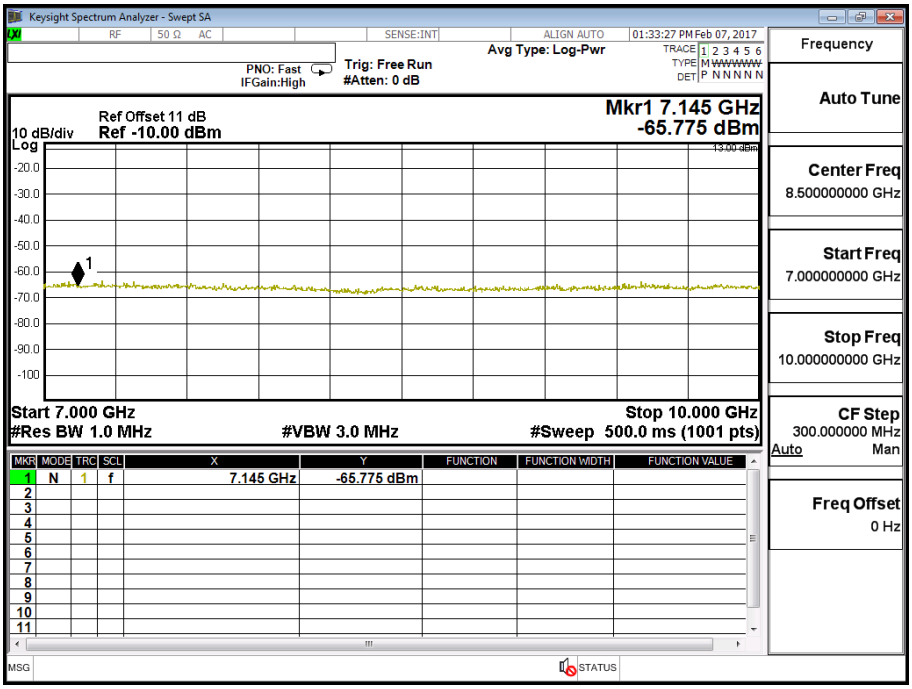
LTE-Band 12 (3M) QPSK(1,7) CH23165 (714.5MHz)

Frequency (MHz)	Reading Level (dBm)	Path Loss (dB)	Emission Level (dBm)	Limit (dBm)
1429	-48.896	0.58	-48.316	-13
2144	-60.054	0.7	-59.354	-13
2858	-59.642	1.01	-58.632	-13
3571	-58.163	1.18	-56.983	-13
4287	-50.694	1.23	-49.464	-13
5002	-64.219	1.45	-62.769	-13
5716	-63.649	1.56	-62.089	-13
6425	-63.913	1.59	-62.323	-13
7145	-65.775	1.82	-63.955	-13




Keysight Spectrum Analyzer - Swept SA
RF 50 Ω AC
SENSE:INT
ALIGN AUTO
01:32:10 PM Feb 07, 2017
Avg Type: Log-Pwr
PNO: Fast
IFGain:High
Trig: Free Run
#Atten: 0 dB
Ref Offset 11 dB
10 dB/div Ref -10.00 dBm
Mkr4 3.571 GHz
-58.163 dBm
Start 1.000 GHz
#Res BW 1.0 MHz
#VBW 3.0 MHz
Stop 4.000 GHz
#Sweep 500.0 ms (1001 pts)
Frequency
Auto Tune
Center Freq
2.500000000 GHz
Start Freq
1.000000000 GHz
Stop Freq
4.000000000 GHz
CF Step
300.000000 MHz
Auto Man
Freq Offset
0 Hz
1 N 1 f 1.429 GHz -48.896 dBm
2 N 1 f 2.144 GHz -60.054 dBm
3 N 1 f 2.858 GHz -59.642 dBm
4 N 1 f 3.571 GHz -58.163 dBm

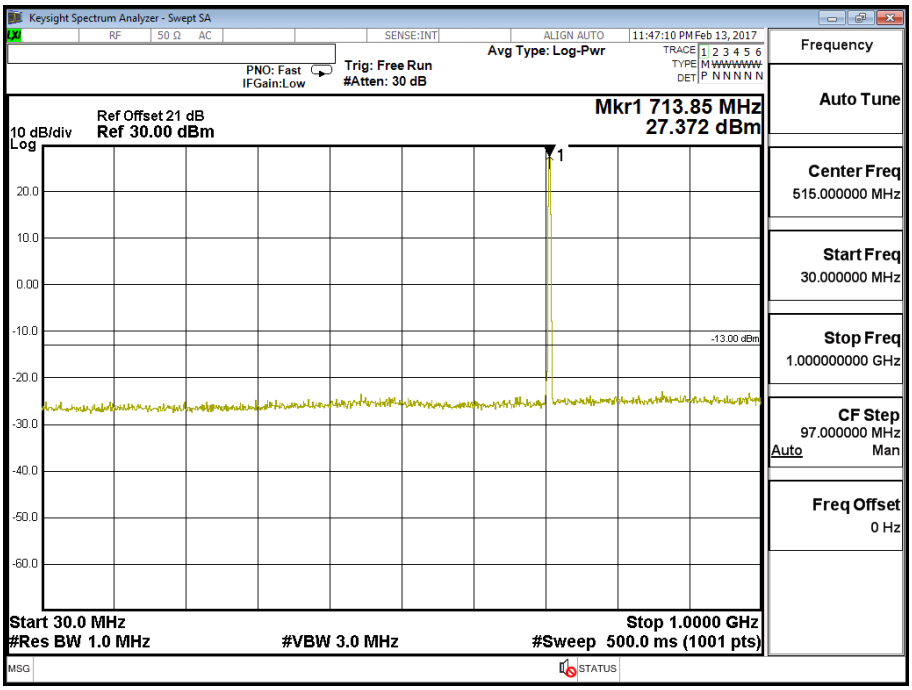

Keysight Spectrum Analyzer - Swept SA
RF 50 Ω AC
SENSE:INT
ALIGN AUTO
01:32:57 PM Feb 07, 2017
Avg Type: Log-Pwr
PNO: Fast
IFGain:High
Trig: Free Run
#Atten: 0 dB
Ref Offset 11 dB
10 dB/div Ref -10.00 dBm
Mkr4 6.425 GHz
-63.913 dBm
Start 4.000 GHz
#Res BW 1.0 MHz
#VBW 3.0 MHz
Stop 7.000 GHz
#Sweep 500.0 ms (1001 pts)
Frequency
Auto Tune
Center Freq
5.500000000 GHz
Start Freq
4.000000000 GHz
Stop Freq
7.000000000 GHz
CF Step
300.000000 MHz
Auto Man
Freq Offset
0 Hz
1 N 1 f 4.287 GHz -50.694 dBm
2 N 1 f 5.002 GHz -64.219 dBm
3 N 1 f 5.716 GHz -63.649 dBm
4 N 1 f 6.425 GHz -63.913 dBm

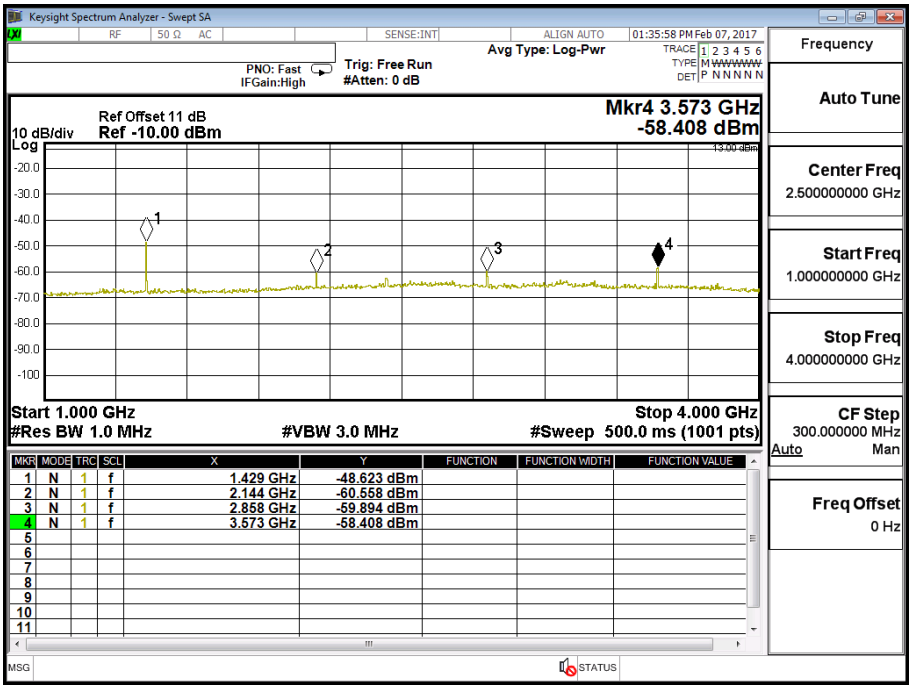

Keysight Spectrum Analyzer - Swept SA
RF
50 Ω AC
SENSE:INT
ALIGN AUTO
01:33:27 PM Feb 07, 2017
Avg Type: Log-Pwr
TRACE 1 2 3 4 5 6
TYPE M WWWWWW
DET P N N N N N
PNO: Fast
IFGain:High
Trig: Free Run
#Atten: 0 dB
Ref Offset 11 dB
10 dB/div
Ref -10.00 dBm
Mkr1 7.145 GHz
-65.775 dBm
Log
13.00 dBm
-20.0
-30.0
-40.0
-50.0
-60.0
-70.0
-80.0
-90.0
-100
Start 7.000 GHz
#Res BW 1.0 MHz
#VBW 3.0 MHz
Stop 10.000 GHz
#Sweep 500.0 ms (1001 pts)
MKR MODE TRC SCL X Y FUNCTION FUNCTION WIDTH FUNCTION VALUE
1 N 1 f 7.145 GHz -65.775 dBm
Frequency
Auto Tune
Center Freq
8.500000000 GHz
Start Freq
7.000000000 GHz
Stop Freq
10.000000000 GHz
CF Step
300.000000 MHz
Auto Man
Freq Offset
0 Hz
MSG
STATUS

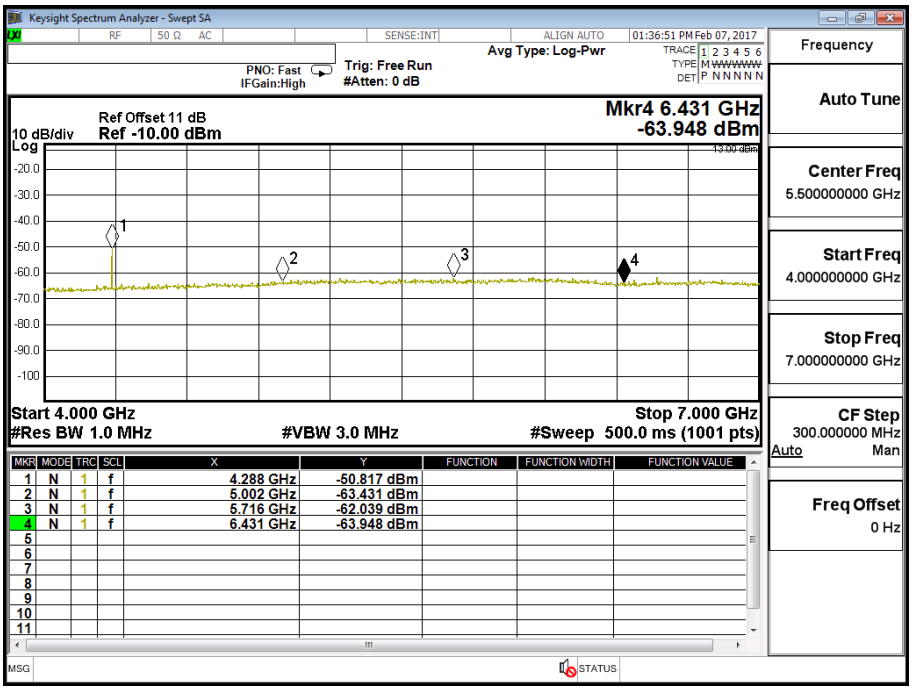
Product	LE910C1-NA		
Test Mode	Spurious Emission (Conducted)		
Date of Test	2017/02/08	Test Site	CTR
Test Condition	LTE-Band 12 (3M)	Test Range	30MHz~10GHz

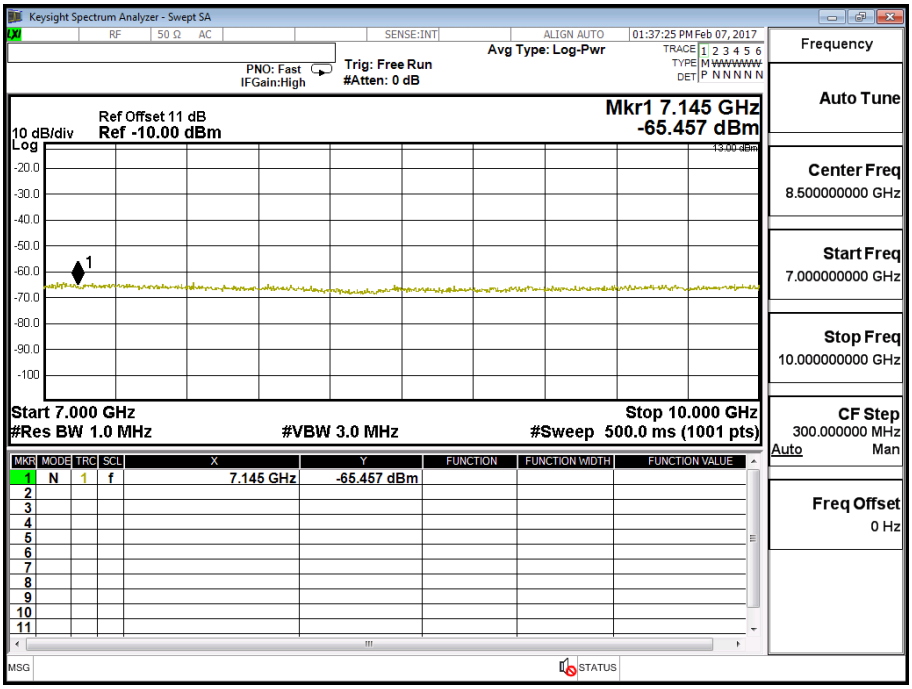
LTE-Band 12 (3M) 16QAM(1,7) CH23165 (714.5MHz)

Frequency (MHz)	Reading Level (dBm)	Path Loss (dB)	Emission Level (dBm)	Limit (dBm)
1429	-48.623	0.58	-48.043	-13
2144	-60.558	0.7	-59.858	-13
2858	-59.894	1.01	-58.884	-13
3573	-58.408	1.18	-57.228	-13
4288	-50.817	1.23	-49.587	-13
5002	-63.431	1.45	-61.981	-13
5716	-62.039	1.56	-60.479	-13
6431	-63.948	1.59	-62.358	-13
7145	-65.457	1.82	-63.637	-13




Keysight Spectrum Analyzer - Swept SA
RF 50 Ω AC
SENSE:INT
ALIGN AUTO
01:35:58 PM Feb 07, 2017
Avg Type: Log-Pwr
PNO: Fast
IFGain:High
Trig: Free Run
#Atten: 0 dB
Ref Offset 11 dB
10 dB/div Ref -10.00 dBm
Mkr4 3.573 GHz
-58.408 dBm
Start 1.000 GHz
#Res BW 1.0 MHz
#VBW 3.0 MHz
Stop 4.000 GHz
#Sweep 500.0 ms (1001 pts)
Frequency
Auto Tune
Center Freq
2.500000000 GHz
Start Freq
1.000000000 GHz
Stop Freq
4.000000000 GHz
CF Step
300.000000 MHz
Auto Man
Freq Offset
0 Hz
1 N 1 f 1.429 GHz -48.623 dBm
2 N 1 f 2.144 GHz -60.558 dBm
3 N 1 f 2.858 GHz -59.894 dBm
4 N 1 f 3.573 GHz -58.408 dBm

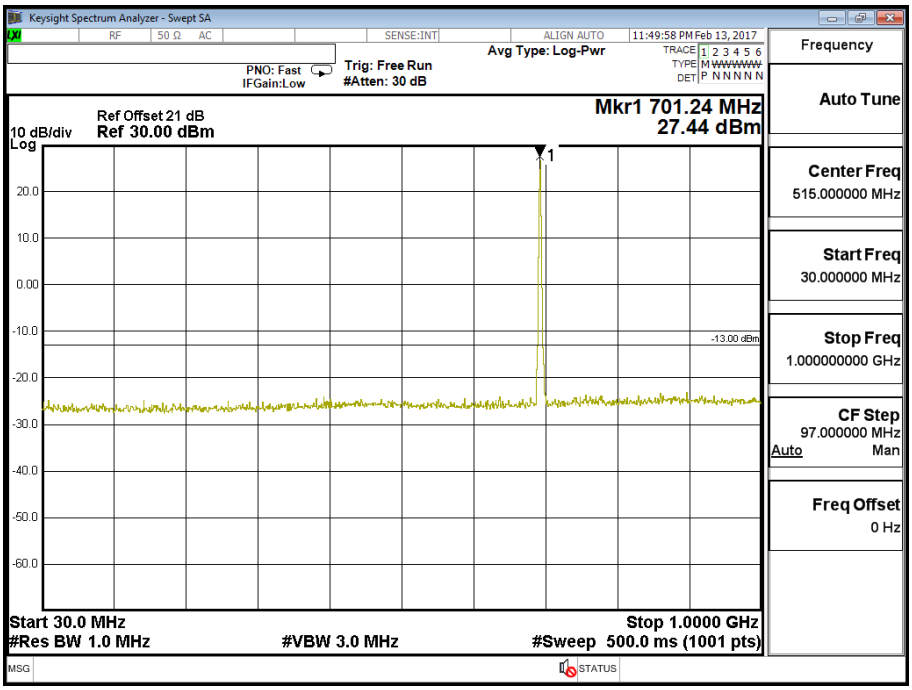

Keysight Spectrum Analyzer - Swept SA
RF 50 Ω AC
SENSE:INT
ALIGN AUTO
01:36:51 PM Feb 07, 2017
Avg Type: Log-Pwr
PNO: Fast
IFGain:High
Trig: Free Run
#Atten: 0 dB
Ref Offset 11 dB
10 dB/div Ref -10.00 dBm
Mkr4 6.431 GHz
-63.948 dBm
Start 4.000 GHz
#Res BW 1.0 MHz
#VBW 3.0 MHz
Stop 7.000 GHz
#Sweep 500.0 ms (1001 pts)
Frequency
Auto Tune
Center Freq
5.500000000 GHz
Start Freq
4.000000000 GHz
Stop Freq
7.000000000 GHz
CF Step
300.000000 MHz
Auto Man
Freq Offset
0 Hz
1 N 1 f 4.288 GHz -50.817 dBm
2 N 1 f 5.002 GHz -63.431 dBm
3 N 1 f 5.716 GHz -62.039 dBm
4 N 1 f 6.431 GHz -63.948 dBm

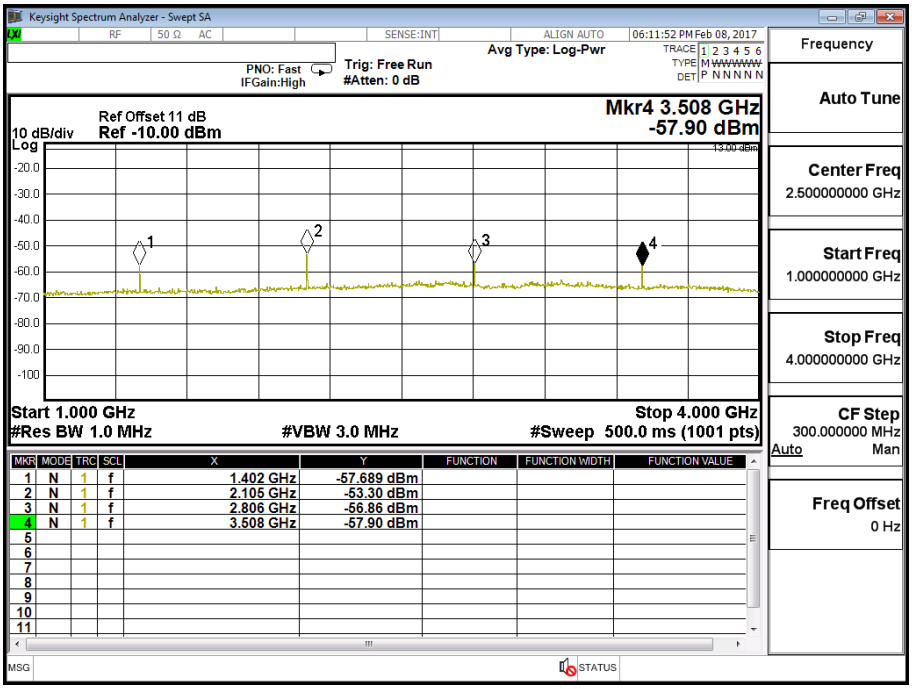

Keysight Spectrum Analyzer - Swept SA
RF
50 Ω AC
SENSE:INT
ALIGN AUTO
01:37:25 PM Feb 07, 2017
Avg Type: Log-Pwr
TRACE 1 2 3 4 5 6
TYPE M WWWWWW
DET P N N N N N
PNO: Fast
IFGain:High
Trig: Free Run
#Atten: 0 dB
Ref Offset 11 dB
10 dB/div
Ref -10.00 dBm
Mkr1 7.145 GHz
-65.457 dBm
Log
-20.0
-30.0
-40.0
-50.0
-60.0
-70.0
-80.0
-90.0
-100
Start 7.000 GHz
#Res BW 1.0 MHz
#VBW 3.0 MHz
Stop 10.000 GHz
#Sweep 500.0 ms (1001 pts)
MKR MODE TRC SCL X Y FUNCTION FUNCTION WIDTH FUNCTION VALUE
1 N 1 f 7.145 GHz -65.457 dBm
Frequency
Auto Tune
Center Freq
8.500000000 GHz
Start Freq
7.000000000 GHz
Stop Freq
10.000000000 GHz
CF Step
300.000000 MHz
Auto Man
Freq Offset
0 Hz
MSG
STATUS

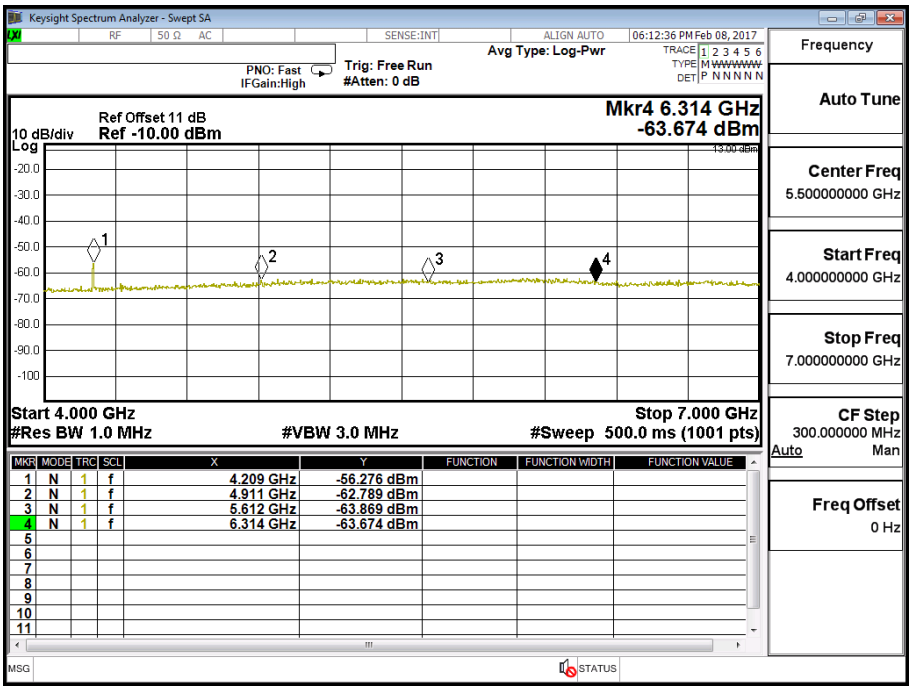
Product	LE910C1-NA		
Test Mode	Spurious Emission (Conducted)		
Date of Test	2017/02/08	Test Site	CTR
Test Condition	LTE-Band 12 (5M)	Test Range	30MHz~10GHz

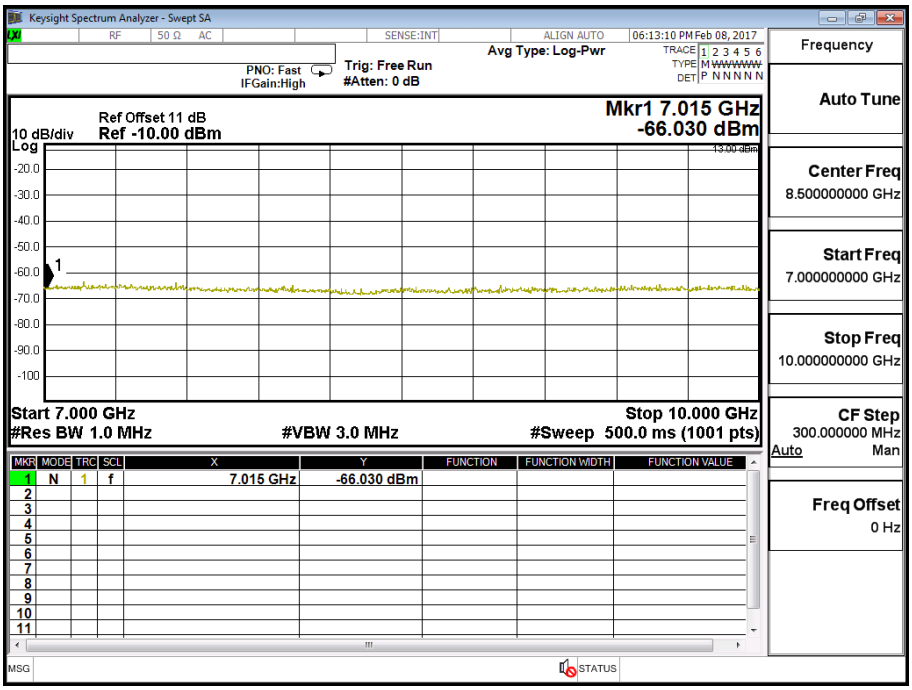
LTE-Band 12 (5M) QPSK(1,12) CH23035 (701.5MHz)

Frequency (MHz)	Reading Level (dBm)	Path Loss (dB)	Emission Level (dBm)	Limit (dBm)
1402	-57.689	0.58	-57.109	-13
2105	-53.300	0.7	-52.600	-13
2806	-56.860	1.01	-55.850	-13
3508	-57.900	1.18	-56.720	-13
4209	-56.276	1.23	-55.046	-13
4911	-62.789	1.45	-61.339	-13
5612	-63.869	1.56	-62.309	-13
6314	-63.674	1.59	-62.084	-13
7015	-66.030	1.82	-64.210	-13




Keysight Spectrum Analyzer - Swept SA
RF 50 Ω AC
SENSE:INT
ALIGN AUTO
06:11:52 PM Feb 08, 2017
Avg Type: Log-Pwr
PNO: Fast
IFGain:High
Trig: Free Run
#Atten: 0 dB
Ref Offset 11 dB
10 dB/div Ref -10.00 dBm
Mkr4 3.508 GHz
-57.90 dBm
Start 1.000 GHz
#Res BW 1.0 MHz
#VBW 3.0 MHz
Stop 4.000 GHz
#Sweep 500.0 ms (1001 pts)
Frequency
Auto Tune
Center Freq
2.500000000 GHz
Start Freq
1.000000000 GHz
Stop Freq
4.000000000 GHz
CF Step
300.000000 MHz
Auto Man
Freq Offset
0 Hz
1 N 1 f 1.402 GHz -57.689 dBm
2 N 1 f 2.105 GHz -53.30 dBm
3 N 1 f 2.806 GHz -56.86 dBm
4 N 1 f 3.508 GHz -57.90 dBm

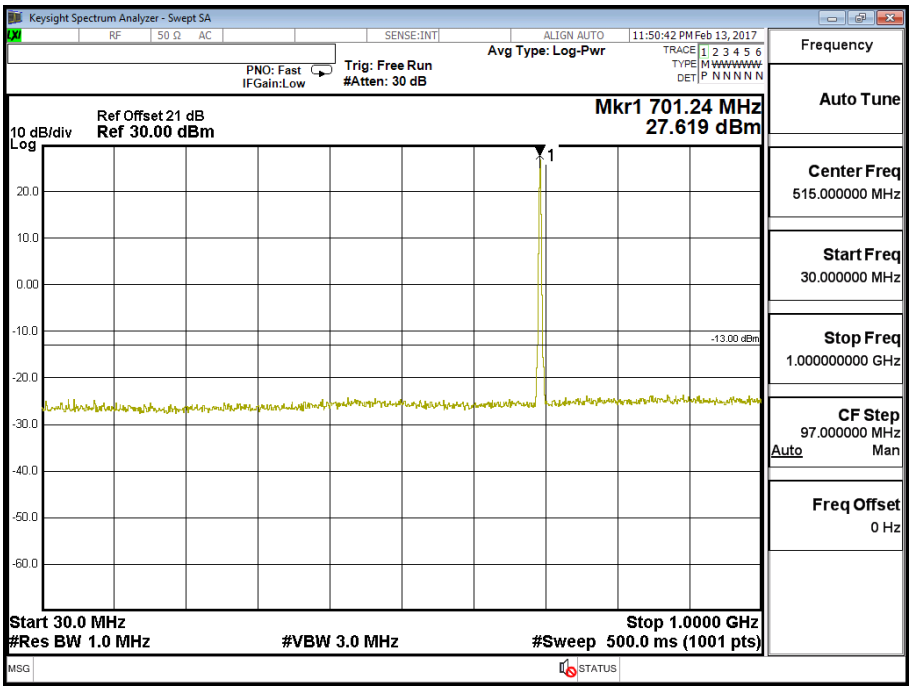

Keysight Spectrum Analyzer - Swept SA
RF 50 Ω AC
SENSE:INT
ALIGN AUTO
06:12:36 PM Feb 08, 2017
Avg Type: Log-Pwr
PNO: Fast
IFGain:High
Trig: Free Run
#Atten: 0 dB
Ref Offset 11 dB
10 dB/div Ref -10.00 dBm
Mkr4 6.314 GHz
-63.674 dBm
Start 4.000 GHz
#Res BW 1.0 MHz
#VBW 3.0 MHz
Stop 7.000 GHz
#Sweep 500.0 ms (1001 pts)
Frequency
Auto Tune
Center Freq
5.500000000 GHz
Start Freq
4.000000000 GHz
Stop Freq
7.000000000 GHz
CF Step
300.000000 MHz
Auto Man
Freq Offset
0 Hz
1 N 1 f 4.209 GHz -56.276 dBm
2 N 1 f 4.911 GHz -62.789 dBm
3 N 1 f 5.612 GHz -63.869 dBm
4 N 1 f 6.314 GHz -63.674 dBm

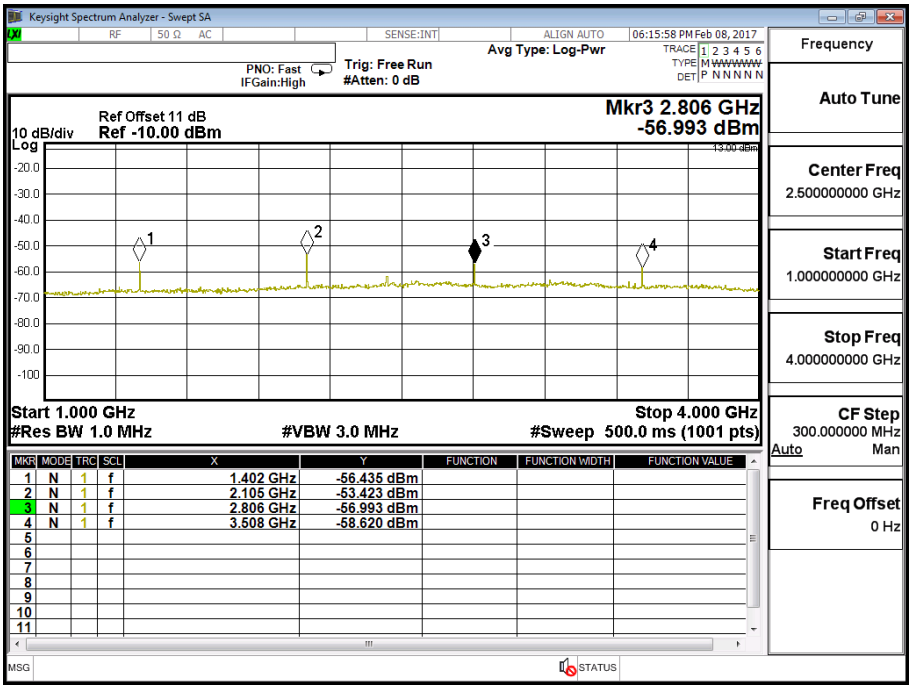

Keysight Spectrum Analyzer - Swept SA
RF
50 Ω AC
SENSE:INT
ALIGN AUTO
06:13:10 PM Feb 08, 2017
Avg Type: Log-Pwr
TRACE 1 2 3 4 5 6
TYPE M WWWWWW
DET P N N N N N
PNO: Fast
IFGain:High
Trig: Free Run
#Atten: 0 dB
Ref Offset 11 dB
10 dB/div
Ref -10.00 dBm
Mkr1 7.015 GHz
-66.030 dBm
Log
13.00 dBm
-20.0
-30.0
-40.0
-50.0
-60.0
-70.0
-80.0
-90.0
-100
Start 7.000 GHz
#Res BW 1.0 MHz
#VBW 3.0 MHz
Stop 10.000 GHz
#Sweep 500.0 ms (1001 pts)
MKR MODE TRC SCL X Y FUNCTION FUNCTION WIDTH FUNCTION VALUE
1 N 1 f 7.015 GHz -66.030 dBm
Frequency
Auto Tune
Center Freq
8.500000000 GHz
Start Freq
7.000000000 GHz
Stop Freq
10.000000000 GHz
CF Step
300.000000 MHz
Auto Man
Freq Offset
0 Hz
MSG
STATUS

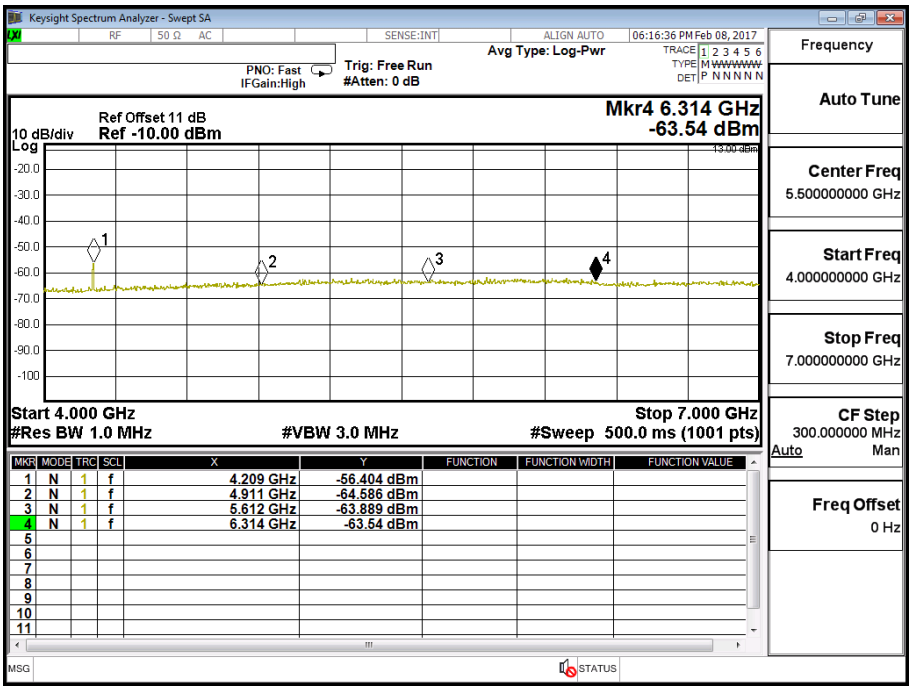
Product	LE910C1-NA		
Test Mode	Spurious Emission (Conducted)		
Date of Test	2017/02/08	Test Site	CTR
Test Condition	LTE-Band 12 (5M)	Test Range	30MHz~10GHz

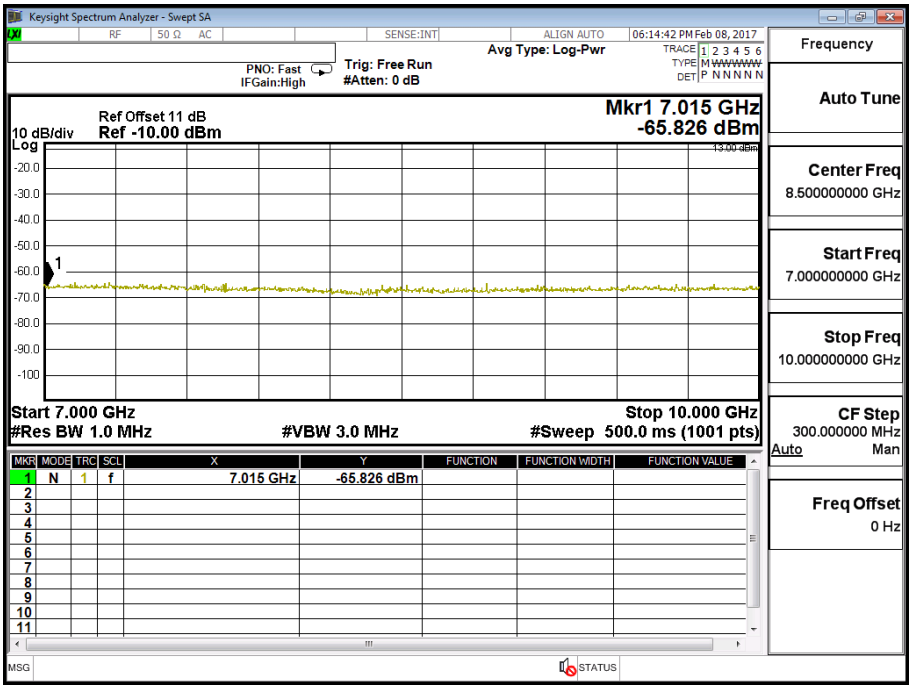
LTE-Band 12 (5M) 16QAM(1,12) CH23035 (701.5MHz)

Frequency (MHz)	Reading Level (dBm)	Path Loss (dB)	Emission Level (dBm)	Limit (dBm)
1402	-56.435	0.58	-55.855	-13
2105	-53.423	0.7	-52.723	-13
2806	-56.993	1.01	-55.983	-13
3508	-58.620	1.18	-57.440	-13
4209	-56.404	1.23	-55.174	-13
4911	-64.586	1.45	-63.136	-13
5612	-63.889	1.56	-62.329	-13
6314	-63.540	1.59	-61.950	-13
7015	-65.826	1.82	-64.006	-13




Keysight Spectrum Analyzer - Swept SA
RF 50 Ω AC
SENSE:INT
ALIGN AUTO
06:15:58 PM Feb 08, 2017
Avg Type: Log-Pwr
PNO: Fast
IFGain:High
Trig: Free Run
#Atten: 0 dB
Ref Offset 11 dB
10 dB/div Ref -10.00 dBm
Mkr3 2.806 GHz
-56.993 dBm
Start 1.000 GHz
#Res BW 1.0 MHz
#VBW 3.0 MHz
Stop 4.000 GHz
#Sweep 500.0 ms (1001 pts)
Frequency
Auto Tune
Center Freq
2.500000000 GHz
Start Freq
1.000000000 GHz
Stop Freq
4.000000000 GHz
CF Step
300.000000 MHz
Auto Man
Freq Offset
0 Hz
1 N 1 f 1.402 GHz -56.435 dBm
2 N 1 f 2.105 GHz -63.423 dBm
3 N 1 f 2.806 GHz -56.993 dBm
4 N 1 f 3.508 GHz -58.620 dBm

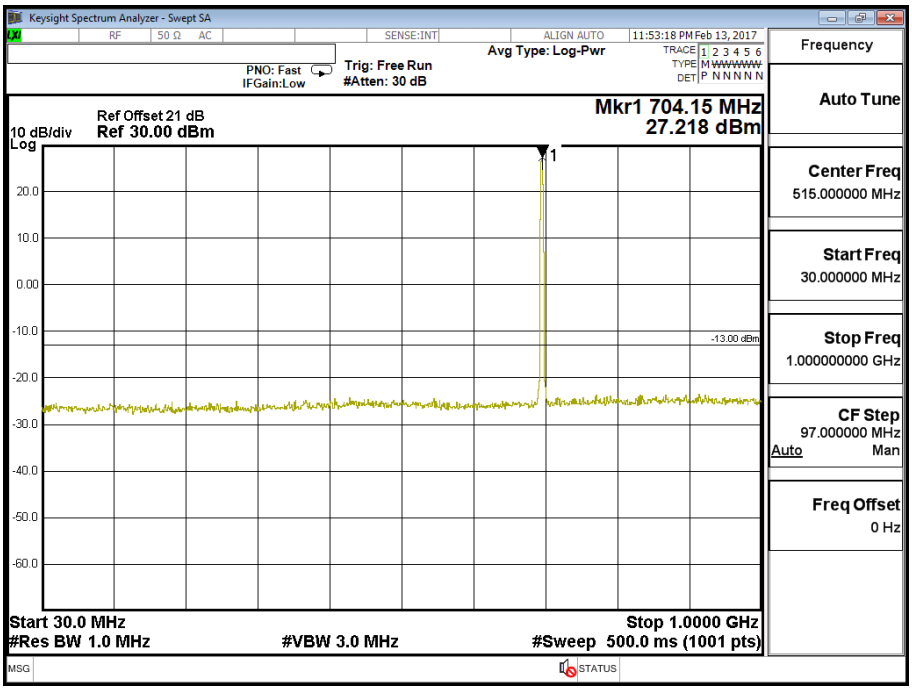

Keysight Spectrum Analyzer - Swept SA
RF 50 Ω AC
SENSE:INT
ALIGN AUTO
06:16:36 PM Feb 08, 2017
Avg Type: Log-Pwr
PNO: Fast
IFGain:High
Trig: Free Run
#Atten: 0 dB
Ref Offset 11 dB
10 dB/div Ref -10.00 dBm
Mkr4 6.314 GHz
-63.54 dBm
Start 4.000 GHz
#Res BW 1.0 MHz
#VBW 3.0 MHz
Stop 7.000 GHz
#Sweep 500.0 ms (1001 pts)
Frequency
Auto Tune
Center Freq
5.500000000 GHz
Start Freq
4.000000000 GHz
Stop Freq
7.000000000 GHz
CF Step
300.000000 MHz
Auto Man
Freq Offset
0 Hz
1 N 1 f 4.209 GHz -56.404 dBm
2 N 1 f 4.911 GHz -64.586 dBm
3 N 1 f 5.612 GHz -63.889 dBm
4 N 1 f 6.314 GHz -63.54 dBm

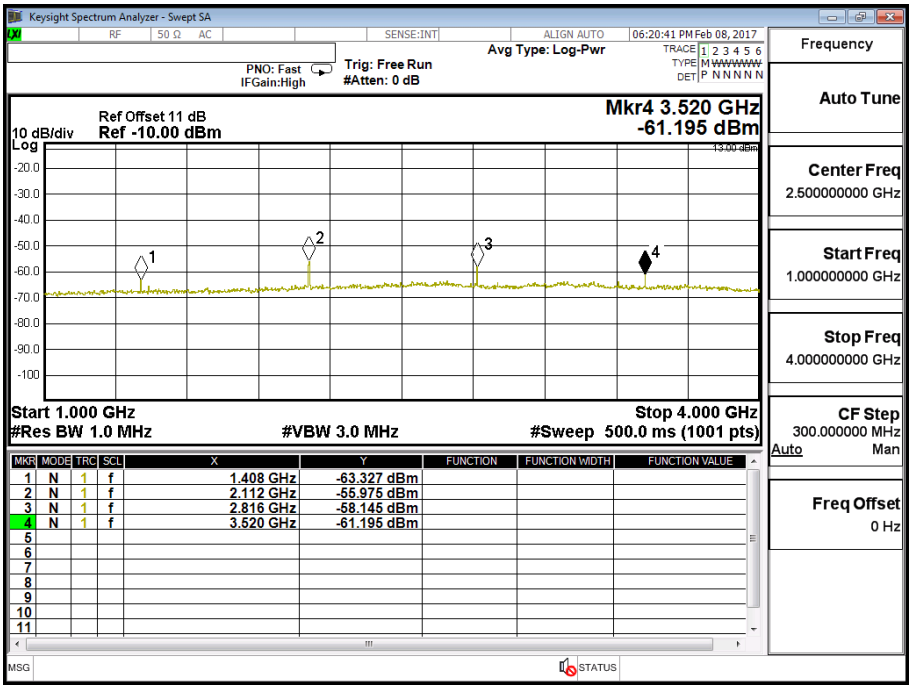

Keysight Spectrum Analyzer - Swept SA
RF
50 Ω AC
SENSE:INT
ALIGN AUTO
06:14:42 PM Feb 08, 2017
Avg Type: Log-Pwr
TRACE 1 2 3 4 5 6
TYPE M WWWWWW
DET P N N N N N
PNO: Fast
IFGain:High
Trig: Free Run
#Atten: 0 dB
Ref Offset 11 dB
10 dB/div
Ref -10.00 dBm
Mkr1 7.015 GHz
-65.826 dBm
Log
13.00 dBm
-20.0
-30.0
-40.0
-50.0
-60.0
-70.0
-80.0
-90.0
-100
Start 7.000 GHz
#Res BW 1.0 MHz
#VBW 3.0 MHz
Stop 10.000 GHz
#Sweep 500.0 ms (1001 pts)
MKR MODE TRC SCL X Y FUNCTION FUNCTION WIDTH FUNCTION VALUE
1 N 1 f 7.015 GHz -65.826 dBm
Frequency
Auto Tune
Center Freq
8.500000000 GHz
Start Freq
7.000000000 GHz
Stop Freq
10.000000000 GHz
CF Step
300.000000 MHz
Auto Man
Freq Offset
0 Hz
MSG
STATUS

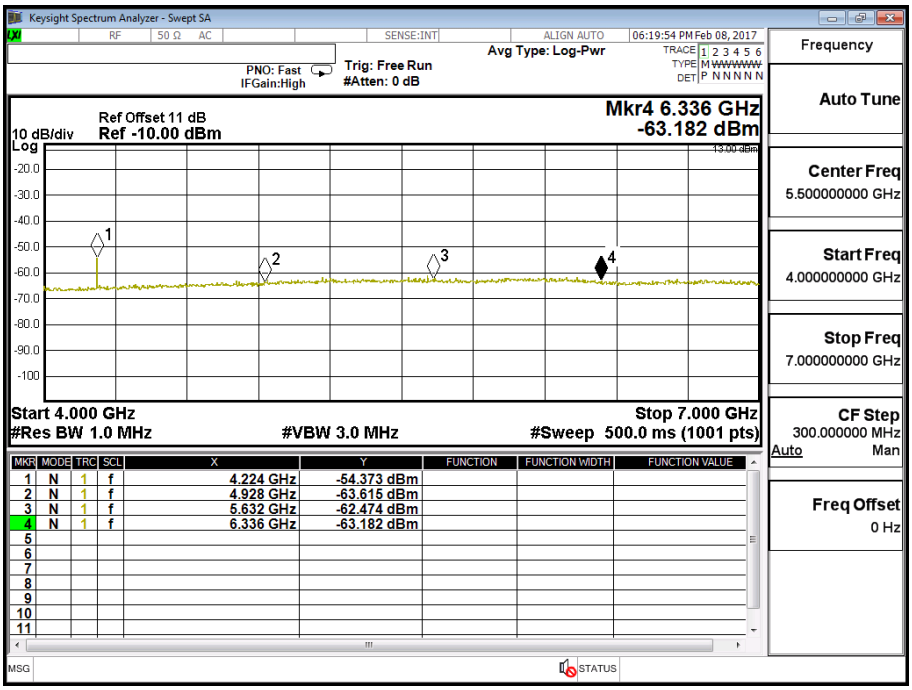
Product	LE910C1-NA		
Test Mode	Spurious Emission (Conducted)		
Date of Test	2017/02/08	Test Site	CTR
Test Condition	LTE-Band 12 (10M)	Test Range	30MHz~10GHz

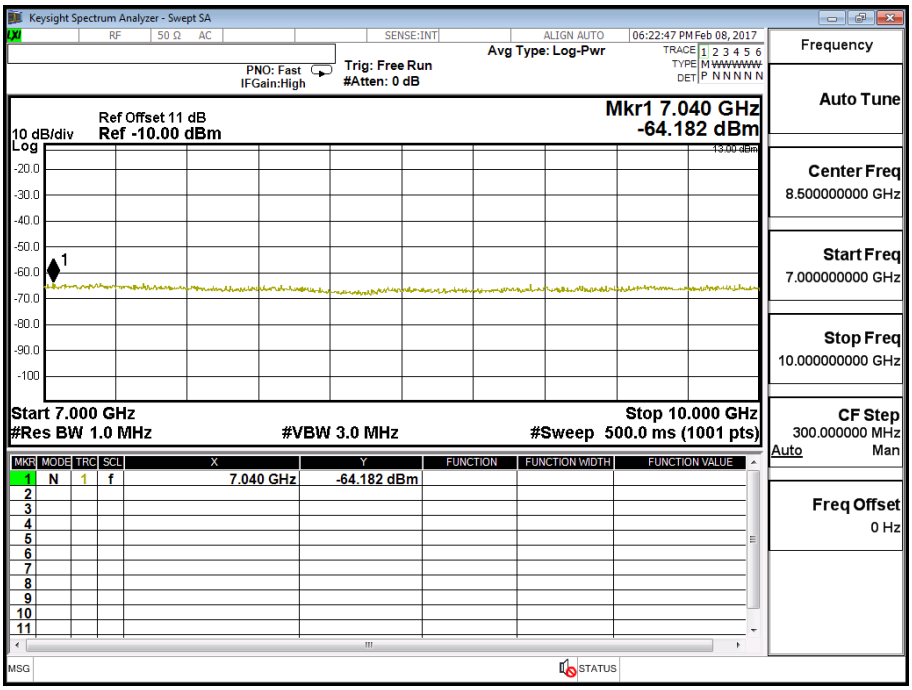
LTE-Band 12 (10M) QPSK(1,24) CH23060 (704MHz)

Frequency (MHz)	Reading Level (dBm)	Path Loss (dB)	Emission Level (dBm)	Limit (dBm)
1408	-63.327	0.58	-62.747	-13
2112	-55.975	0.7	-55.275	-13
2816	-58.145	1.01	-57.135	-13
3520	-61.195	1.18	-60.015	-13
4224	-54.373	1.23	-53.143	-13
4928	-63.615	1.45	-62.165	-13
5632	-62.474	1.56	-60.914	-13
6336	-63.182	1.59	-61.592	-13
7040	-64.182	1.82	-62.362	-13




Keysight Spectrum Analyzer - Swept SA
RF 50 Ω AC
SENSE:INT
ALIGN AUTO
06:20:41 PM Feb 08, 2017
Avg Type: Log-Pwr
PNO: Fast
IFGain:High
Trig: Free Run
#Atten: 0 dB
Ref Offset 11 dB
10 dB/div Ref -10.00 dBm
Mkr4 3.520 GHz
-61.195 dBm
Start 1.000 GHz
#Res BW 1.0 MHz
#VBW 3.0 MHz
Stop 4.000 GHz
#Sweep 500.0 ms (1001 pts)
1 N 1 f 1.408 GHz -63.327 dBm
2 N 1 f 2.112 GHz -65.975 dBm
3 N 1 f 2.816 GHz -68.145 dBm
4 N 1 f 3.520 GHz -61.195 dBm
Frequency
Auto Tune
Center Freq 2.500000000 GHz
Start Freq 1.000000000 GHz
Stop Freq 4.000000000 GHz
CF Step 300.000000 MHz
Auto Man
Freq Offset 0 Hz


Keysight Spectrum Analyzer - Swept SA
RF 50 Ω AC
SENSE:INT
ALIGN AUTO
06:19:54 PM Feb 08, 2017
Avg Type: Log-Pwr
PNO: Fast
IFGain:High
Trig: Free Run
#Atten: 0 dB
Ref Offset 11 dB
10 dB/div Ref -10.00 dBm
Mkr4 6.336 GHz
-63.182 dBm
Start 4.000 GHz
#Res BW 1.0 MHz
#VBW 3.0 MHz
Stop 7.000 GHz
#Sweep 500.0 ms (1001 pts)
1 N 1 f 4.224 GHz -54.373 dBm
2 N 1 f 4.928 GHz -63.615 dBm
3 N 1 f 5.632 GHz -62.474 dBm
4 N 1 f 6.336 GHz -63.182 dBm
Frequency
Auto Tune
Center Freq 5.500000000 GHz
Start Freq 4.000000000 GHz
Stop Freq 7.000000000 GHz
CF Step 300.000000 MHz
Auto Man
Freq Offset 0 Hz


Keysight Spectrum Analyzer - Swept SA
RF
50 Ω AC
SENSE:INT
ALIGN AUTO
06:22:47 PM Feb 08, 2017
Avg Type: Log-Pwr
TRACE 1 2 3 4 5 6
TYPE M WWWWWW
DET P N N N N N
PNO: Fast
IFGain:High
Trig: Free Run
#Atten: 0 dB
Ref Offset 11 dB
10 dB/div
Ref -10.00 dBm
Mkr1 7.040 GHz
-64.182 dBm
Log
-20.0
-30.0
-40.0
-50.0
-60.0
-70.0
-80.0
-90.0
-100
Start 7.000 GHz
#Res BW 1.0 MHz
#VBW 3.0 MHz
Stop 10.000 GHz
#Sweep 500.0 ms (1001 pts)
MKR MODE TRC SCL X Y FUNCTION FUNCTION WIDTH FUNCTION VALUE
1 N 1 f 7.040 GHz -64.182 dBm
Frequency
Auto Tune
Center Freq
8.500000000 GHz
Start Freq
7.000000000 GHz
Stop Freq
10.000000000 GHz
CF Step
300.000000 MHz
Auto Man
Freq Offset
0 Hz
MSG
STATUS

Product	LE910C1-NA		
Test Mode	Spurious Emission (Radiated)		
Date of Test	2017/02/08	Test Site	Site3
Test Condition	Band 2 (1.4M) QPSK(3,2)	Test Range	9kHz ~20GHz

Frequency	Reading Level	Signal Generator Level	Cable Loss	Antenna Gain	EIRP Value	Limit
(GHz)	(dBm)	(dBm)	(dB)	(dBi)	(dBm)	(dBm)

Horizontal Emissions Band 2 (1.4M) QPSK(3,2) CH18607(1850.7MHz)

3701	-62.070	-62.682	2.530	12.600	-52.612	-13
5552	-63.844	-60.460	3.050	13.100	-50.410	-13
7403	-64.905	-50.223	3.650	11.500	-42.373	-13
9254	-63.444	-48.612	3.850	12.000	-40.462	-13
11104	-64.073	-46.524	4.580	12.000	-39.104	-13

Vertical Emissions Band 2 (1.4M) QPSK(3,2) CH18607(1850.7MHz)

3701	-61.342	-59.707	2.530	12.600	-49.637	-13
5552	-60.229	-56.244	3.050	13.100	-46.194	-13
7403	-64.328	-49.248	3.650	11.500	-41.398	-13
9254	-63.623	-48.202	3.850	12.000	-40.052	-13
11104	-63.971	-46.309	4.580	12.000	-38.889	-13

Note:

1. Receiver setting (Peak Detector) : RBW:1MHz; VBW:3MHz
2. EIRP Value = Signal Generator Level + Antenna Gain - Cable Loss
3. Spurious emissions past 12 GHz are not shown, due to the magnitude of spurious emissions attenuated more than 20 dB below the limit.

Product	LE910C1-NA		
Test Mode	Spurious Emission (Radiated)		
Date of Test	2017/02/08	Test Site	Site3
Test Condition	Band 2 (3M) QPSK(1,7)	Test Range	9kHz ~20GHz

Frequency	Reading Level	Signal Generator Level	Cable Loss	Antenna Gain	EIRP Value	Limit
(GHz)	(dBm)	(dBm)	(dB)	(dBi)	(dBm)	(dBm)

Horizontal Emissions Band 2 (3M) QPSK(1,7) CH18615 (1851.5MHz)

3703	-61.905	-62.517	2.530	12.600	-52.447	-13
5555	-63.798	-60.414	3.050	13.100	-50.364	-13
7406	-63.592	-48.938	3.650	11.500	-41.088	-13
9258	-62.590	-47.717	3.850	12.000	-39.567	-13
11109	-64.793	-47.302	4.580	12.000	-39.882	-13

Vertical Emissions Band 2 (3M) QPSK(1,7) CH18615 (1851.5MHz)

3703	-61.075	-59.440	2.530	12.600	-49.370	-13
5555	-58.569	-54.584	3.050	13.100	-44.534	-13
7406	-64.187	-49.100	3.650	11.500	-41.250	-13
9258	-63.180	-47.706	3.850	12.000	-39.556	-13
11109	-64.867	-47.205	4.580	12.000	-39.785	-13

Note:

1. Receiver setting (Peak Detector) : RBW:1MHz; VBW:3MHz
2. EIRP Value = Signal Generator Level + Antenna Gain - Cable Loss
3. Spurious emissions past 12 GHz are not shown, due to the magnitude of spurious emissions attenuated more than 20 dB below the limit.

Product	LE910C1-NA		
Test Mode	Spurious Emission (Radiated)		
Date of Test	2017/02/08	Test Site	Site3
Test Condition	Band 2 (5M) QPSK(1,12)	Test Range	9kHz ~20GHz

Frequency	Reading Level	Signal Generator Level	Cable Loss	Antenna Gain	EIRP Value	Limit
(GHz)	(dBm)	(dBm)	(dB)	(dBi)	(dBm)	(dBm)

Horizontal Emissions Band 2 (5M) QPSK(1,12) CH18625 (1852.5MHz)

3705	-61.336	-61.948	2.530	12.600	-51.878	-13
5558	-63.718	-60.414	3.050	13.100	-50.364	-13
7410	-64.132	-49.478	3.650	11.500	-41.628	-13
9263	-63.537	-48.663	3.850	12.000	-40.513	-13
11115	-64.317	-46.827	4.580	12.000	-39.407	-13

Vertical Emissions Band 2 (5M) QPSK(1,12) CH18625 (1852.5MHz)

3705	-60.117	-58.482	2.530	12.600	-48.412	-13
5558	-59.039	-55.054	3.050	13.100	-45.004	-13
7410	-64.384	-49.297	3.650	11.500	-41.447	-13
9263	-62.548	-47.074	3.850	12.000	-38.924	-13
11115	-64.868	-47.206	4.580	12.000	-39.786	-13

Note:

1. Receiver setting (Peak Detector) : RBW:3MHz; VBW:3MHz
2. EIRP Value = Signal Generator Level + Antenna Gain - Cable Loss
3. Spurious emissions past 12 GHz are not shown, due to the magnitude of spurious emissions attenuated more than 20 dB below the limit.

Product	LE910C1-NA		
Test Mode	Spurious Emission (Radiated)		
Date of Test	2017/02/08	Test Site	Site3
Test Condition	Band 2 (10M) QPSK(1,24)	Test Range	9KHz ~20GHz

Frequency	Reading Level	Signal Generator Level	Cable Loss	Antenna Gain	EIRP Value	Limit
(GHz)	(dBm)	(dBm)	(dB)	(dBi)	(dBm)	(dBm)

Horizontal Emissions Band 2 (10M) QPSK(1,24) CH18650 (1855MHz)

3710	-61.552	-62.126	2.530	12.600	-52.056	-13
5565	-64.205	-60.901	3.050	13.100	-50.851	-13
7420	-64.921	-50.294	3.650	11.500	-42.444	-13
9275	-63.576	-48.661	3.850	12.000	-40.511	-13
11130	-64.836	-47.463	4.580	12.000	-40.043	-13

Vertical Emissions Band 2 (10M) QPSK(1,24) CH18650 (1855MHz)

3710	-59.884	-58.200	2.530	12.600	-48.130	-13
5565	-59.422	-55.495	3.050	13.100	-45.445	-13
7420	-64.824	-49.740	3.650	11.500	-41.890	-13
9275	-63.774	-48.246	3.850	12.000	-40.096	-13
11130	-65.111	-47.647	4.580	12.000	-40.227	-13

Note:

1. Receiver setting (Peak Detector) : RBW:1MHz; VBW:3MHz
2. ERP Value = Signal Generator Level + Antenna Gain - Cable Loss
3. Spurious emissions past 12 GHz are not shown, due to the magnitude of spurious emissions attenuated more than 20 dB below the limit.

Product	LE910C1-NA		
Test Mode	Spurious Emission (Radiated)		
Date of Test	2017/02/08	Test Site	Site3
Test Condition	Band 4 (1.4M) QPSK(3,2)	Test Range	9kHz ~20GHz

Frequency	Reading Level	Signal Generator Level	Cable Loss	Antenna Gain	EIRP Value	Limit
(GHz)	(dBm)	(dBm)	(dB)	(dBi)	(dBm)	(dBm)

Horizontal Emissions Band 4 (1.4M) QPSK(3,2) CH19957 (1710.7MHz)

3421	-51.857	-53.124	2.530	12.600	-43.054	-13
5132	-61.005	-56.768	3.050	13.100	-46.718	-13
6843	-61.837	-50.948	3.650	11.500	-43.098	-13
8554	-62.978	-47.719	3.850	12.000	-39.569	-13
10264	-63.104	-46.795	4.580	12.000	-39.375	-13
11975	-65.165	-48.711	4.800	13.300	-40.211	-13

Vertical Emissions Band 4 (1.4M) QPSK(3,2) CH19957 (1710.7MHz)

3424	-52.818	-53.087	2.530	12.600	-43.017	-13
5130	-53.099	-48.544	3.050	13.100	-38.494	-13
6840	-56.493	-44.997	3.650	11.500	-37.147	-13
8554	-62.307	-46.675	3.850	12.000	-38.525	-13
10264	-63.914	-47.768	4.580	12.000	-40.348	-13
11975	-65.213	-48.543	4.800	13.300	-40.043	-13

Note:

1. Receiver setting (Peak Detector) : RBW:1MHz; VBW:3MHz
2. EIRP Value = Signal Generator Level + Antenna Gain - Cable Loss
3. Spurious emissions past 12 GHz are not shown, due to the magnitude of spurious emissions attenuated more than 20 dB below the limit.

Product	LE910C1-NA		
Test Mode	Spurious Emission (Radiated)		
Date of Test	2017/02/08	Test Site	Site3
Test Condition	Band 4 (3M) QPSK(1,7)	Test Range	9kHz ~20GHz

Frequency	Reading Level	Signal Generator Level	Cable Loss	Antenna Gain	EIRP Value	Limit
(GHz)	(dBm)	(dBm)	(dB)	(dBi)	(dBm)	(dBm)

Horizontal Emissions Band 4 (3M) QPSK(1,7) CH19965 (1711.5MHz)

3424	-51.689	-52.955	2.530	12.600	-42.885	-13
5135	-60.328	-56.090	3.050	13.100	-46.040	-13
6846	-61.544	-50.599	3.650	11.500	-42.749	-13
8558	-62.108	-46.849	3.850	12.000	-38.699	-13
10269	-63.602	-47.284	4.580	12.000	-39.864	-13
11981	-65.293	-48.912	4.800	13.300	-40.412	-13

Vertical Emissions Band 4 (3M) QPSK(1,7) CH19965 (1711.5MHz)

3424	-52.240	-52.509	2.530	12.600	-42.439	-13
5120	-52.703	-48.117	3.050	13.100	-38.067	-13
6850	-56.932	-45.377	3.650	11.500	-37.527	-13
8558	-63.562	-47.930	3.850	12.000	-39.780	-13
10269	-63.467	-47.326	4.580	12.000	-39.906	-13
11981	-65.370	-48.780	4.800	13.300	-40.280	-13

Note:

1. Receiver setting (Peak Detector) : RBW:1MHz; VBW:3MHz
2. EIRP Value = Signal Generator Level + Antenna Gain - Cable Loss
3. Spurious emissions past 12 GHz are not shown, due to the magnitude of spurious emissions attenuated more than 20 dB below the limit.

Product	LE910C1-NA		
Test Mode	Spurious Emission (Radiated)		
Date of Test	2017/02/08	Test Site	Site3
Test Condition	Band 4 (5M) QPSK(1,0)	Test Range	9kHz ~20GHz

Frequency	Reading Level	Signal Generator Level	Cable Loss	Antenna Gain	EIRP Value	Limit
(GHz)	(dBm)	(dBm)	(dB)	(dBi)	(dBm)	(dBm)

Horizontal Emissions Band 4 (5M) QPSK(1,0) CH19975 (1712.5MHz)

3424	-52.745	-54.012	2.530	12.600	-43.942	-13
5130	-58.986	-54.749	3.050	13.100	-44.699	-13
6850	-62.739	-51.850	3.650	11.500	-44.000	-13
8563	-62.548	-47.307	3.850	12.000	-39.157	-13
10275	-62.678	-46.359	4.580	12.000	-38.939	-13
11988	-64.408	-47.998	4.800	13.300	-39.498	-13

Vertical Emissions Band 4 (5M) QPSK(1,0) CH19975 (1712.5MHz)

3424	-51.549	-51.818	2.530	12.600	-41.748	-13
5130	-51.471	-46.917	3.050	13.100	-36.867	-13
6840	-55.990	-44.494	3.650	11.500	-36.644	-13
8563	-62.070	-46.465	3.850	12.000	-38.315	-13
10275	-62.153	-46.011	4.580	12.000	-38.591	-13
11988	-65.216	-48.706	4.800	13.300	-40.206	-13

Note:

1. Receiver setting (Peak Detector) : RBW:1MHz; VBW:3MHz
2. EIRP Value = Signal Generator Level + Antenna Gain - Cable Loss
3. Spurious emissions past 12 GHz are not shown, due to the magnitude of spurious emissions attenuated more than 20 dB below the limit.

Product	LE910C1-NA		
Test Mode	Spurious Emission (Radiated)		
Date of Test	2017/02/08	Test Site	Site3
Test Condition	Band 4 (10M) QPSK(1,24)	Test Range	9KHz ~20GHz

Frequency	Reading Level	Signal Generator Level	Cable Loss	Antenna Gain	EIRP Value	Limit
(GHz)	(dBm)	(dBm)	(dB)	(dBi)	(dBm)	(dBm)

Horizontal Emissions Band 4 (10M) QPSK(1,24) CH20000 (1715MHz)

3430	-62.824	-63.996	2.530	12.600	-53.926	-13
5145	-62.612	-58.375	3.050	13.100	-48.325	-13
6860	-63.590	-52.589	3.650	11.500	-44.739	-13
8575	-62.775	-47.481	3.850	12.000	-39.331	-13
10290	-62.002	-45.675	4.580	12.000	-38.255	-13

Vertical Emissions Band 4 (10M) QPSK(1,24) CH20000 (1715MHz)

3430	-62.142	-62.337	2.530	12.600	-52.267	-13
5145	-62.959	-58.501	3.050	13.100	-48.451	-13
6860	-63.991	-52.376	3.650	11.500	-44.526	-13
8575	-62.208	-46.630	3.850	12.000	-38.480	-13
10290	-63.649	-47.515	4.580	12.000	-40.095	-13

Note:

1. Receiver setting (Peak Detector) : RBW:1MHz; VBW:3MHz
2. EIRP Value = Signal Generator Level + Antenna Gain - Cable Loss
3. Spurious emissions past 12 GHz are not shown, due to the magnitude of spurious emissions attenuated more than 20 dB below the limit.

Product	LE910C1-NA		
Test Mode	Spurious Emission (Radiated)		
Date of Test	2017/02/08	Test Site	Site3
Test Condition	Band 12 (1.4M) QPSK(3,3)	Test Range	9KHz ~10GHz

Frequency	Reading Level	Signal Generator Level	Cable Loss	Antenna Gain	EIRP Value	Limit
(GHz)	(dBm)	(dBm)	(dB)	(dBi)	(dBm)	(dBm)

Horizontal Emissions Band 12 (1.4M) QPSK(3,3) CH23173 (715.3MHz)

1431	-60.169	-64.695	1.630	9.800	-56.525	-13
2146	-64.655	-64.887	2.100	10.600	-56.387	-13
2861	-63.700	-65.623	2.350	12.300	-55.673	-13
3577	-62.175	-62.648	2.700	12.600	-52.748	-13
4292	-61.535	-59.218	2.830	12.700	-49.348	-13
5007	-64.558	-60.178	3.200	13.000	-50.378	-13
5722	-63.392	-60.138	3.200	12.100	-51.238	-13

Vertical Emissions Band 12 (1.4M) QPSK(3,3) CH23173 (715.3MHz)

1431	-56.431	-59.875	1.630	9.800	-51.705	-13
2146	-63.050	-63.632	2.100	10.600	-55.132	-13
2861	-62.684	-63.388	2.350	12.300	-53.438	-13
3577	-62.325	-60.963	2.700	12.600	-51.063	-13
4292	-61.584	-58.059	2.830	12.700	-48.189	-13
5007	-63.946	-58.863	3.200	13.000	-49.063	-13
5722	-63.762	-60.401	3.200	12.100	-51.501	-13

Note:

1. Receiver setting (Peak Detector) : RBW:1MHz; VBW:3MHz
2. EIRP Value = Signal Generator Level + Antenna Gain - Cable Loss
3. Spurious emissions past 6 GHz are not shown, due to the magnitude of spurious emissions attenuated more than 20 dB below the limit.

Product	LE910C1-NA		
Test Mode	Spurious Emission (Radiated)		
Date of Test	2017/02/08	Test Site	Site3
Test Condition	Band 12 (3M) QPSK(1,7)	Test Range	9KHz ~10GHz

Frequency	Reading Level	Signal Generator Level	Cable Loss	Antenna Gain	EIRP Value	Limit
(GHz)	(dBm)	(dBm)	(dB)	(dBi)	(dBm)	(dBm)

Horizontal Emissions Band 12 (3M) QPSK(1,7) CH23165 (714.5MHz)

1429	-55.804	-60.307	1.630	9.800	-52.137	-13
2144	-62.580	-62.812	2.100	10.600	-54.312	-13
2858	-61.392	-63.315	2.350	12.300	-53.365	-13
3573	-61.842	-62.314	2.700	12.600	-52.414	-13
4287	-62.768	-60.465	2.830	12.700	-50.595	-13
5002	-63.295	-58.939	3.200	13.000	-49.139	-13
5716	-63.354	-60.062	3.200	12.100	-51.162	-13

Vertical Emissions Band 12 (3M) QPSK(1,7) CH23165 (714.5MHz)

1429	-47.353	-50.785	1.630	9.800	-42.615	-13
2144	-57.908	-58.490	2.100	10.600	-49.990	-13
2858	-59.758	-60.462	2.350	12.300	-50.512	-13
3573	-60.512	-59.150	2.700	12.600	-49.250	-13
4287	-59.072	-55.698	2.830	12.700	-45.828	-13
5002	-63.024	-57.942	3.200	13.000	-48.142	-13
5716	-63.863	-60.467	3.200	12.100	-51.567	-13

Note:

1. Receiver setting (Peak Detector) : RBW:1MHz; VBW:3MHz
2. EIRP Value = Signal Generator Level + Antenna Gain - Cable Loss
3. Spurious emissions past 6 GHz are not shown, due to the magnitude of spurious emissions attenuated more than 20 dB below the limit.

Product	LE910C1-NA		
Test Mode	Spurious Emission (Radiated)		
Date of Test	2017/02/08	Test Site	Site3
Test Condition	Band 12 (5M) QPSK(1,12)	Test Range	9KHz ~10GHz

Frequency	Reading Level	Signal Generator Level	Cable Loss	Antenna Gain	EIRP Value	Limit
(GHz)	(dBm)	(dBm)	(dB)	(dBi)	(dBm)	(dBm)

Horizontal Emissions Band 12 (5M) QPSK(1,12) CH23035 (701.5MHz)

1403	-62.981	-67.393	1.630	9.800	-59.223	-13
2105	-63.604	-64.282	2.100	10.600	-55.782	-13
2806	-62.924	-64.691	2.350	12.300	-54.741	-13
3508	-61.911	-62.331	2.700	12.600	-52.431	-13
4209	-62.618	-61.399	2.830	12.700	-51.529	-13
4911	-64.390	-60.323	3.200	13.000	-50.523	-13
5612	-64.135	-60.104	3.200	12.100	-51.204	-13

Vertical Emissions Band 12 (5M) QPSK(1,12) CH23035 (701.5MHz)

1403	-56.390	-59.813	1.630	9.800	-51.643	-13
2105	-59.925	-60.698	2.100	10.600	-52.198	-13
2806	-60.705	-61.172	2.350	12.300	-51.222	-13
3508	-61.614	-60.931	2.700	12.600	-51.031	-13
4209	-62.881	-60.402	2.830	12.700	-50.532	-13
4911	-64.129	-59.662	3.200	13.000	-49.862	-13
5612	-64.451	-59.800	3.200	12.100	-50.900	-13

Note:

1. Receiver setting (Peak Detector) : RBW:1MHz; VBW:3MHz
2. EIRP Value = Signal Generator Level + Antenna Gain - Cable Loss
3. Spurious emissions past 6 GHz are not shown, due to the magnitude of spurious emissions attenuated more than 20 dB below the limit.

Product	LE910C1-NA		
Test Mode	Spurious Emission (Radiated)		
Date of Test	2017/02/08	Test Site	Site3
Test Condition	Band 12 (10M) QPSK(1,24)	Test Range	9KHz ~10GHz

Frequency	Reading Level	Signal Generator Level	Cable Loss	Antenna Gain	EIRP Value	Limit
(GHz)	(dBm)	(dBm)	(dB)	(dBi)	(dBm)	(dBm)

Horizontal Emissions Band 12 (10M) QPSK(1,24) CH23060 (704MHz)

1408	-62.808	-67.243	1.630	9.800	-59.073	-13
2112	-63.490	-64.104	2.100	10.600	-55.604	-13
2816	-61.704	-63.505	2.350	12.300	-53.555	-13
3520	-62.043	-62.472	2.700	12.600	-52.572	-13
4224	-62.610	-61.205	2.830	12.700	-51.335	-13
4928	-63.694	-59.573	3.200	13.000	-49.773	-13
5632	-62.283	-58.298	3.200	12.100	-49.398	-13

Vertical Emissions Band 12 (10M) QPSK(1,24) CH23060 (704MHz)

1408	-58.284	-61.680	1.630	9.800	-53.510	-13
2112	-57.805	-58.542	2.100	10.600	-50.042	-13
2816	-61.784	-62.304	2.350	12.300	-52.354	-13
3520	-62.039	-61.233	2.700	12.600	-51.333	-13
4224	-61.694	-59.077	2.830	12.700	-49.207	-13
4928	-62.967	-58.368	3.200	13.000	-48.568	-13
5632	-63.784	-59.376	3.200	12.100	-50.476	-13

Note:

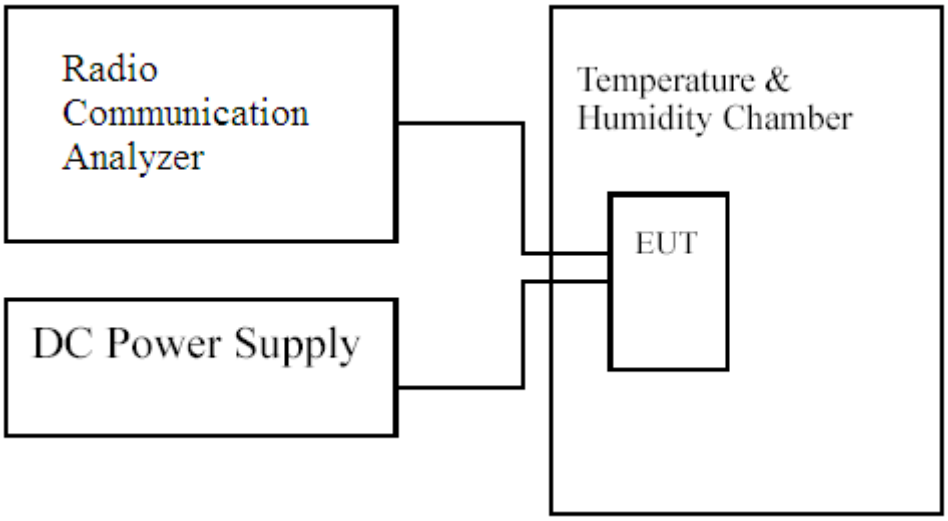
1. Receiver setting (Peak Detector) : RBW:1MHz; VBW:3MHz
2. EIRP Value = Signal Generator Level + Antenna Gain - Cable Loss
3. Spurious emissions past 6 GHz are not shown, due to the magnitude of spurious emissions attenuated more than 20 dB below the limit.

7. Frequency Stability Under Temperature & Voltage Variations

7.1. Test Specification

According to FCC Part 2.1055, 24.235, 27.54
RSS GEN, RSS 130, RSS 133, RSS 139

7.2. Test Setup



7.3. Limits

Limit	**<±2.5ppm**

7.4. Test Procedure

The frequency stability of transmitter is measured by:

(a) Temperature: The temperature is varied from -30˚C to 50˚C in 10˚C increment using a standard temperature & Humidity chamber.

(b) Primary Supply Voltage: The primary supply voltage is varied 85% to 115% of the nominal value for non hand-carried equipment. For hand-carried, battery-powered equipment, primary supply voltage is reduced to the battery operating endpoint which shall be specified by the manufacturer.

The EUT was connected via the base station simulator. Universal Radio Communication Tester, (MT8820C), was used to measure The Frequency Error. The maximum result of measurements was recorded.

7.5. Test Result of Frequency Stability Under Temperature Variations

Product	LE910C1-NA		
Test Mode	Frequency Stability Under Temperature Variations & Voltage Variations		
Date of Test	2017/02/21	Test Site	CTR
Test Condition	Band 2 (1.4M) CH18900(1880MHz) –QPSK	Test Range	-20℃~+50℃

Frequency Stability Under Temperature Variations

Temperature Interval(℃)	Test Frequency (GHz)	Deviation (kHz)	Limit (kHz)
-30	1.88	-0.0118	±4.70
-20	1.88	-0.0084	±4.70
-10	1.88	-0.0109	±4.70
0	1.88	-0.0103	±4.70
10	1.88	-0.0078	±4.70
20	1.88	-0.0090	±4.70
30	1.88	-0.0089	±4.70
40	1.88	-0.0076	±4.70
50	1.88	-0.0095	±4.70

Voltage Variations

AC Voltage (V)	Test Frequency (GHz)	Deviation (kHz)	Limit (kHz)
138	1.88	-0.0088	±4.70
120	1.88	-0.0090	±4.70
102	1.88	-0.0078	±4.70

Product	LE910C1-NA		
Test Mode	Frequency Stability Under Temperature Variations & Voltage Variations		
Date of Test	2017/02/21	Test Site	CTR
Test Condition	Band 2 (1.4M) CH18900(1880MHz) –16QAM	Test Range	-20℃~+50℃

Frequency Stability Under Temperature Variations

Temperature Interval(℃)	Test Frequency (GHz)	Deviation (kHz)	Limit (kHz)
-30	1.88	-0.0098	±4.70
-20	1.88	-0.0052	±4.70
-10	1.88	-0.0069	±4.70
0	1.88	-0.0055	±4.70
10	1.88	-0.0083	±4.70
20	1.88	-0.0097	±4.70
30	1.88	-0.0101	±4.70
40	1.88	-0.0092	±4.70
50	1.88	-0.0079	±4.70

Voltage Variations

AC Voltage (V)	Test Frequency (GHz)	Deviation (kHz)	Limit (kHz)
138	1.88	-0.0097	±4.70
120	1.88	-0.0097	±4.70
102	1.88	-0.0096	±4.70

Product	LE910C1-NA		
Test Mode	Frequency Stability Under Temperature Variations & Voltage Variations		
Date of Test	2017/02/21	Test Site	CTR
Test Condition	Band 2 (3M) CH18900(1880MHz) –QPSK	Test Range	-30℃~+50℃

Frequency Stability Under Temperature Variations

Temperature Interval(℃)	Test Frequency (GHz)	Deviation (kHz)	Limit (kHz)
-30	1.88	-0.0095	±4.70
-20	1.88	-0.0069	±4.70
-10	1.88	-0.0096	±4.70
0	1.88	-0.0128	±4.70
10	1.88	-0.0072	±4.70
20	1.88	-0.0101	±4.70
30	1.88	-0.0093	±4.70
40	1.88	-0.0095	±4.70
50	1.88	-0.0091	±4.70

Voltage Variations

AC Voltage (V)	Test Frequency (GHz)	Deviation (kHz)	Limit (kHz)
138	1.88	0.0094	±4.70
120	1.88	-0.0101	±4.70
102	1.88	-0.0097	±4.70

Product	LE910C1-NA		
Test Mode	Frequency Stability Under Temperature Variations & Voltage Variations		
Date of Test	2017/02/21	Test Site	CTR
Test Condition	Band 2 (3M) CH18900(1880MHz) –16QAM	Test Range	-30℃~+50℃

Frequency Stability Under Temperature Variations

Temperature Interval(℃)	Test Frequency (GHz)	Deviation (kHz)	Limit (kHz)
-30	1.88	-0.0079	±4.70
-20	1.88	-0.0085	±4.70
-10	1.88	-0.0078	±4.70
0	1.88	-0.0113	±4.70
10	1.88	-0.0089	±4.70
20	1.88	-0.0077	±4.70
30	1.88	-0.0058	±4.70
40	1.88	-0.0083	±4.70
50	1.88	-0.0079	±4.70

Voltage Variations

AC Voltage (V)	Test Frequency (GHz)	Deviation (kHz)	Limit (kHz)
138	1.88	-0.0095	±4.70
120	1.88	-0.0077	±4.70
102	1.88	0.0051	±4.70

Product	LE910C1-NA		
Test Mode	Frequency Stability Under Temperature Variations & Voltage Variations		
Date of Test	2017/02/21	Test Site	CTR
Test Condition	Band 2 (5M) CH18900(1880MHz) –QPSK	Test Range	-20℃~+50℃

Frequency Stability Under Temperature Variations

Temperature Interval(℃)	Test Frequency (GHz)	Deviation (kHz)	Limit (kHz)
-30	1.88	-0.0107	±4.70
-20	1.88	-0.0106	±4.70
-10	1.88	-0.0078	±4.70
0	1.88	-0.0091	±4.70
10	1.88	-0.0072	±4.70
20	1.88	-0.0090	±4.70
30	1.88	-0.0097	±4.70
40	1.88	-0.0089	±4.70
50	1.88	-0.0075	±4.70

Voltage Variations

AC Voltage (V)	Test Frequency (GHz)	Deviation (kHz)	Limit (kHz)
138	1.88	-0.0077	±4.70
120	1.88	-0.0090	±4.70
102	1.88	-0.0085	±4.70

Product	LE910C1-NA		
Test Mode	Frequency Stability Under Temperature Variations & Voltage Variations		
Date of Test	2017/02/21	Test Site	CTR
Test Condition	Band 2 (5M) CH18900(1880MHz) –16QAM	Test Range	-20℃~+50℃

Frequency Stability Under Temperature Variations

Temperature Interval(℃)	Test Frequency (GHz)	Deviation (kHz)	Limit (kHz)
-30	1.88	-0.0088	±4.70
-20	1.88	-0.0105	±4.70
-10	1.88	-0.0081	±4.70
0	1.88	-0.0079	±4.70
10	1.88	-0.0086	±4.70
20	1.88	-0.0075	±4.70
30	1.88	-0.0095	±4.70
40	1.88	-0.0081	±4.70
50	1.88	-0.0086	±4.70

Voltage Variations

AC Voltage (V)	Test Frequency (GHz)	Deviation (kHz)	Limit (kHz)
138	1.88	-0.0070	±4.70
120	1.88	-0.0075	±4.70
102	1.88	-0.0083	±4.70

Product	LE910C1-NA		
Test Mode	Frequency Stability Under Temperature Variations & Voltage Variations		
Date of Test	2017/02/21	Test Site	CTR
Test Condition	Band 2 (10M) CH18900(1880MHz) –QPSK	Test Range	-30℃~+50℃

Frequency Stability Under Temperature Variations

Temperature Interval(℃)	Test Frequency (GHz)	Deviation (kHz)	Limit (kHz)
-30	1.88	-0.0100	±4.70
-20	1.88	-0.0074	±4.70
-10	1.88	-0.0069	±4.70
0	1.88	-0.0071	±4.70
10	1.88	-0.0063	±4.70
20	1.88	-0.0079	±4.70
30	1.88	-0.0068	±4.70
40	1.88	-0.0072	±4.70
50	1.88	-0.0098	±4.70

Voltage Variations

AC Voltage (V)	Test Frequency (GHz)	Deviation (kHz)	Limit (kHz)
138	1.88	-0.0071	±4.70
120	1.88	-0.0079	±4.70
102	1.88	-0.0097	±4.70

Product	LE910C1-NA		
Test Mode	Frequency Stability Under Temperature Variations & Voltage Variations		
Date of Test	2017/02/21	Test Site	CTR
Test Condition	Band 4 (1.4M) CH20175(1732.5MHz) –QPSK	Test Range	-20℃~+50℃

Frequency Stability Under Temperature Variations

Temperature Interval(℃)	Test Frequency (GHz)	Deviation (kHz)	Limit (kHz)
-30	1.73	0.0047	±4.33
-20	1.73	0.0062	±4.33
-10	1.73	0.0100	±4.33
0	1.73	0.0091	±4.33
10	1.73	0.0076	±4.33
20	1.73	0.0078	±4.33
30	1.73	-0.0060	±4.33
40	1.73	0.0043	±4.33
50	1.73	0.0052	±4.33

Voltage Variations

AC Voltage (V)	Test Frequency (GHz)	Deviation (kHz)	Limit (kHz)
138	1.73	-0.0072	±4.33
120	1.73	0.0078	±4.33
102	1.73	0.0089	±4.33

Product	LE910C1-NA		
Test Mode	Frequency Stability Under Temperature Variations & Voltage Variations		
Date of Test	2017/02/21	Test Site	CTR
Test Condition	Band 4 (1.4M) CH20175(1732.5MHz) –16QAM	Test Range	-20℃~+50℃

Frequency Stability Under Temperature Variations

Temperature Interval(℃)	Test Frequency (GHz)	Deviation (kHz)	Limit (kHz)
-30	1.73	-0.0052	±4.33
-20	1.73	0.0076	±4.33
-10	1.73	0.0064	±4.33
0	1.73	0.0090	±4.33
10	1.73	0.0053	±4.33
20	1.73	0.0058	±4.33
30	1.73	0.0046	±4.33
40	1.73	-0.0055	±4.33
50	1.73	-0.0050	±4.33

Voltage Variations

AC Voltage (V)	Test Frequency (GHz)	Deviation (kHz)	Limit (kHz)
138	1.73	0.0058	±4.33
120	1.73	0.0058	±4.33
102	1.73	0.0063	±4.33

Product	LE910C1-NA		
Test Mode	Frequency Stability Under Temperature Variations & Voltage Variations		
Date of Test	2017/02/21	Test Site	CTR
Test Condition	Band 4 (3M) CH20175(1732.5MHz) –QPSK	Test Range	-30℃~+50℃

Frequency Stability Under Temperature Variations

Temperature Interval(℃)	Test Frequency (GHz)	Deviation (kHz)	Limit (kHz)
-30	1.73	0.0085	±4.33
-20	1.73	0.0144	±4.33
-10	1.73	0.0088	±4.33
0	1.73	0.0089	±4.33
10	1.73	0.0102	±4.33
20	1.73	0.0076	±4.33
30	1.73	0.0058	±4.33
40	1.73	0.0065	±4.33
50	1.73	0.0060	±4.33

Voltage Variations

AC Voltage (V)	Test Frequency (GHz)	Deviation (kHz)	Limit (kHz)
138	1.73	0.0061	±4.33
120	1.73	0.0076	±4.33
102	1.73	0.0070	±4.33

Product	LE910C1-NA		
Test Mode	Frequency Stability Under Temperature Variations & Voltage Variations		
Date of Test	2017/02/21	Test Site	CTR
Test Condition	Band 4 (3M) CH20175(1732.5MHz) –16QAM	Test Range	-30℃~+50℃

Frequency Stability Under Temperature Variations

Temperature Interval(℃)	Test Frequency (GHz)	Deviation (kHz)	Limit (kHz)
-30	1.73	0.0068	±4.33
-20	1.73	0.0096	±4.33
-10	1.73	-0.0074	±4.33
0	1.73	0.0085	±4.33
10	1.73	0.0096	±4.33
20	1.73	0.0092	±4.33
30	1.73	-0.0082	±4.33
40	1.73	0.0071	±4.33
50	1.73	-0.0067	±4.33

Voltage Variations

AC Voltage (V)	Test Frequency (GHz)	Deviation (kHz)	Limit (kHz)
138	1.73	0.0095	±4.33
120	1.73	0.0092	±4.33
102	1.73	0.0087	±4.33

Product	LE910C1-NA		
Test Mode	Frequency Stability Under Temperature Variations & Voltage Variations		
Date of Test	2017/02/21	Test Site	CTR
Test Condition	Band 4 (5M) CH20175(1732.5MHz) –QPSK	Test Range	-20℃~+50℃

Frequency Stability Under Temperature Variations

Temperature Interval(℃)	Test Frequency (GHz)	Deviation (kHz)	Limit (kHz)
-30	1.73	0.0072	±4.33
-20	1.73	0.0056	±4.33
-10	1.73	0.0064	±4.33
0	1.73	0.0072	±4.33
10	1.73	0.0074	±4.33
20	1.73	0.0077	±4.33
30	1.73	0.0064	±4.33
40	1.73	0.0052	±4.33
50	1.73	0.0061	±4.33

Voltage Variations

AC Voltage (V)	Test Frequency (GHz)	Deviation (kHz)	Limit (kHz)
138	1.73	0.0086	±4.33
120	1.73	0.0077	±4.33
102	1.73	-0.0051	±4.33

Product	LE910C1-NA		
Test Mode	Frequency Stability Under Temperature Variations & Voltage Variations		
Date of Test	2017/02/21	Test Site	CTR
Test Condition	Band 4 (5M) CH20175(1732.5MHz) –16QAM	Test Range	-20℃~+50℃

Frequency Stability Under Temperature Variations

Temperature Interval(℃)	Test Frequency (GHz)	Deviation (kHz)	Limit (kHz)
-30	1.73	-0.0078	±4.33
-20	1.73	-0.0064	±4.33
-10	1.73	0.0094	±4.33
0	1.73	0.0074	±4.33
10	1.73	0.0065	±4.33
20	1.73	0.0061	±4.33
30	1.73	0.0049	±4.33
40	1.73	0.0070	±4.33
50	1.73	-0.0062	±4.33

Voltage Variations

AC Voltage (V)	Test Frequency (GHz)	Deviation (kHz)	Limit (kHz)
138	1.73	0.0052	±4.33
120	1.73	0.0061	±4.33
102	1.73	0.0065	±4.33

Product	LE910C1-NA		
Test Mode	Frequency Stability Under Temperature Variations & Voltage Variations		
Date of Test	2017/02/21	Test Site	CTR
Test Condition	Band 4 (10M) CH20175(1732.5MHz)-QPSK	Test Range	-30℃~+50℃

Frequency Stability Under Temperature Variations

Temperature Interval(℃)	Test Frequency (GHz)	Deviation (kHz)	Limit (kHz)
-30	1.73	0.0065	±4.33
-20	1.73	0.0079	±4.33
-10	1.73	0.0072	±4.33
0	1.73	0.0050	±4.33
10	1.73	0.0080	±4.33
20	1.73	0.0070	±4.33
30	1.73	-0.0064	±4.33
40	1.73	-0.0075	±4.33
50	1.73	0.0090	±4.33

Voltage Variations

AC Voltage (V)	Test Frequency (GHz)	Deviation (kHz)	Limit (kHz)
138	1.73	0.0074	±4.33
120	1.73	0.0070	±4.33
102	1.73	0.0082	±4.33

Product	LE910C1-NA		
Test Mode	Frequency Stability Under Temperature Variations & Voltage Variations		
Date of Test	2017/02/21	Test Site	CTR
Test Condition	Band 12 (1.4M) CH23095(707.5MHz)-QPSK	Test Range	-30℃~+50℃

Frequency Stability Under Temperature Variations

Temperature Interval(℃)	Test Frequency (GHz)	Deviation (kHz)	Limit (kHz)
-30	0.708	-0.0050	±1.77
-20	0.708	0.0030	±1.77
-10	0.708	0.0045	±1.77
0	0.708	0.0049	±1.77
10	0.708	0.0044	±1.77
20	0.708	0.0061	±1.77
30	0.708	0.0047	±1.77
40	0.708	-0.0038	±1.77
50	0.708	0.0042	±1.77

Voltage Variations

AC Voltage (V)	Test Frequency (GHz)	Deviation (kHz)	Limit (kHz)
138	0.708	0.0047	±1.77
120	0.708	0.0061	±1.77
102	0.708	-0.0031	±1.77

Product	LE910C1-NA		
Test Mode	Frequency Stability Under Temperature Variations & Voltage Variations		
Date of Test	2017/02/21	Test Site	CTR
Test Condition	Band 12 (1.4M) CH23095(707.5MHz)-16QAM	Test Range	-30℃~+50℃

Frequency Stability Under Temperature Variations

Temperature Interval(℃)	Test Frequency (GHz)	Deviation (kHz)	Limit (kHz)
-30	0.708	-0.0052	±1.77
-20	0.708	0.0042	±1.77
-10	0.708	0.0066	±1.77
0	0.708	-0.0035	±1.77
10	0.708	0.0037	±1.77
20	0.708	0.0045	±1.77
30	0.708	-0.0045	±1.77
40	0.708	0.0046	±1.77
50	0.708	-0.0054	±1.77

Voltage Variations

AC Voltage (V)	Test Frequency (GHz)	Deviation (kHz)	Limit (kHz)
138	0.708	0.0033	±1.77
120	0.708	0.0045	±1.77
102	0.708	0.0042	±1.77

Product	LE910C1-NA		
Test Mode	Frequency Stability Under Temperature Variations & Voltage Variations		
Date of Test	2017/02/21	Test Site	CTR
Test Condition	Band 12 (3M) CH23095(707.5MHz)-QPSK	Test Range	-30℃~+50℃

Frequency Stability Under Temperature Variations

Temperature Interval(℃)	Test Frequency (GHz)	Deviation (kHz)	Limit (kHz)
-30	0.708	0.0048	±1.77
-20	0.708	0.0035	±1.77
-10	0.708	0.0059	±1.77
0	0.708	0.0070	±1.77
10	0.708	-0.0061	±1.77
20	0.708	0.0075	±1.77
30	0.708	-0.0061	±1.77
40	0.708	-0.0050	±1.77
50	0.708	-0.0042	±1.77

Voltage Variations

AC Voltage (V)	Test Frequency (GHz)	Deviation (kHz)	Limit (kHz)
138	0.708	0.0052	±1.77
120	0.708	0.0075	±1.77
102	0.708	0.0047	±1.77

Product	LE910C1-NA		
Test Mode	Frequency Stability Under Temperature Variations & Voltage Variations		
Date of Test	2017/02/21	Test Site	CTR
Test Condition	Band 12 (3M) CH23095(707.5MHz)-16QAM	Test Range	-30℃~+50℃

Frequency Stability Under Temperature Variations

Temperature Interval(℃)	Test Frequency (GHz)	Deviation (kHz)	Limit (kHz)
-30	0.708	-0.0044	±1.77
-20	0.708	-0.0041	±1.77
-10	0.708	0.0052	±1.77
0	0.708	0.0036	±1.77
10	0.708	-0.0044	±1.77
20	0.708	0.0053	±1.77
30	0.708	0.0049	±1.77
40	0.708	-0.0054	±1.77
50	0.708	-0.0037	±1.77

Voltage Variations

AC Voltage (V)	Test Frequency (GHz)	Deviation (kHz)	Limit (kHz)
138	0.708	0.0069	±1.77
120	0.708	0.0053	±1.77
102	0.708	-0.0042	±1.77

Product	LE910C1-NA		
Test Mode	Frequency Stability Under Temperature Variations & Voltage Variations		
Date of Test	2017/02/21	Test Site	CTR
Test Condition	Band 12 (5M) CH23095(707.5MHz)-QPSK	Test Range	-30℃~+50℃

Frequency Stability Under Temperature Variations

Temperature Interval(℃)	Test Frequency (GHz)	Deviation (kHz)	Limit (kHz)
-30	0.708	-0.0032	±1.77
-20	0.708	-0.0026	±1.77
-10	0.708	0.0034	±1.77
0	0.708	0.0047	±1.77
10	0.708	-0.0035	±1.77
20	0.708	0.0032	±1.77
30	0.708	-0.0048	±1.77
40	0.708	-0.0031	±1.77
50	0.708	0.0038	±1.77

Voltage Variations

AC Voltage (V)	Test Frequency (GHz)	Deviation (kHz)	Limit (kHz)
138	0.708	0.0030	±1.77
120	0.708	0.0032	±1.77
102	0.708	0.0048	±1.77

Product	LE910C1-NA		
Test Mode	Frequency Stability Under Temperature Variations & Voltage Variations		
Date of Test	2017/02/21	Test Site	CTR
Test Condition	Band 12 (5M) CH23095(707.5MHz)-16QAM	Test Range	-30℃~+50℃

Frequency Stability Under Temperature Variations

Temperature Interval(℃)	Test Frequency (GHz)	Deviation (kHz)	Limit (kHz)
-30	0.708	-0.0041	±1.77
-20	0.708	-0.0031	±1.77
-10	0.708	0.0033	±1.77
0	0.708	0.0049	±1.77
10	0.708	-0.0031	±1.77
20	0.708	0.0041	±1.77
30	0.708	-0.0039	±1.77
40	0.708	-0.0045	±1.77
50	0.708	-0.0037	±1.77

Voltage Variations

AC Voltage (V)	Test Frequency (GHz)	Deviation (kHz)	Limit (kHz)
138	0.708	-0.0044	±1.77
120	0.708	0.0041	±1.77
102	0.708	-0.0032	±1.77

Product	LE910C1-NA		
Test Mode	Frequency Stability Under Temperature Variations & Voltage Variations		
Date of Test	2017/02/21	Test Site	CTR
Test Condition	Band 12 (10M) CH23095(707.5MHz)-QPSK	Test Range	-30℃~+50℃

Frequency Stability Under Temperature Variations

Temperature Interval(℃)	Test Frequency (GHz)	Deviation (kHz)	Limit (kHz)
-30	0.708	0.0038	±1.77
-20	0.708	-0.0042	±1.77
-10	0.708	-0.0041	±1.77
0	0.708	-0.0035	±1.77
10	0.708	0.0036	±1.77
20	0.708	0.0045	±1.77
30	0.708	0.0031	±1.77
40	0.708	-0.0028	±1.77
50	0.708	-0.0042	±1.77

Voltage Variations

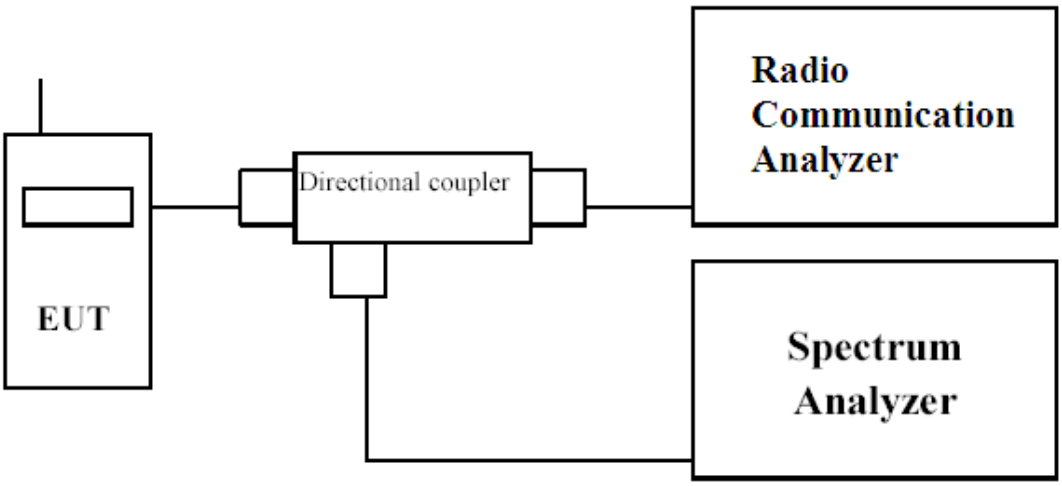
AC Voltage (V)	Test Frequency (GHz)	Deviation (kHz)	Limit (kHz)
138	0.708	0.0038	±1.77
120	0.708	0.0045	±1.77
102	0.708	-0.0032	±1.77

8. Peak to Average Ratio

8.1 Test Specification

According to Part 24.232, 27.50(a), RSS 130, RSS 133, RSS 139

8.2 Test Setup



8.3 Limits

The peak-to-average power ratio (PAPR) of the transmitter output power must not exceed 13 dB. The PAPR measurements should be made using either an instrument with complementary cumulative distribution function (CCDF) capabilities to determine that PAPR will not exceed 13 dB for more than 0.1 percent of the time or other Commission approved procedure.

8.4 Test Procedure

a) Refer to instrument's analyzer instruction manual for details on how to use the power statistics/CCDF function;

b) Set resolution/measurement bandwidth ≥ signal's occupied bandwidth;

c) Set the number of counts to a value that stabilizes the measured CCDF curve;

d) Set the measurement interval as follows:

1) for continuous transmissions, set to 1 ms,

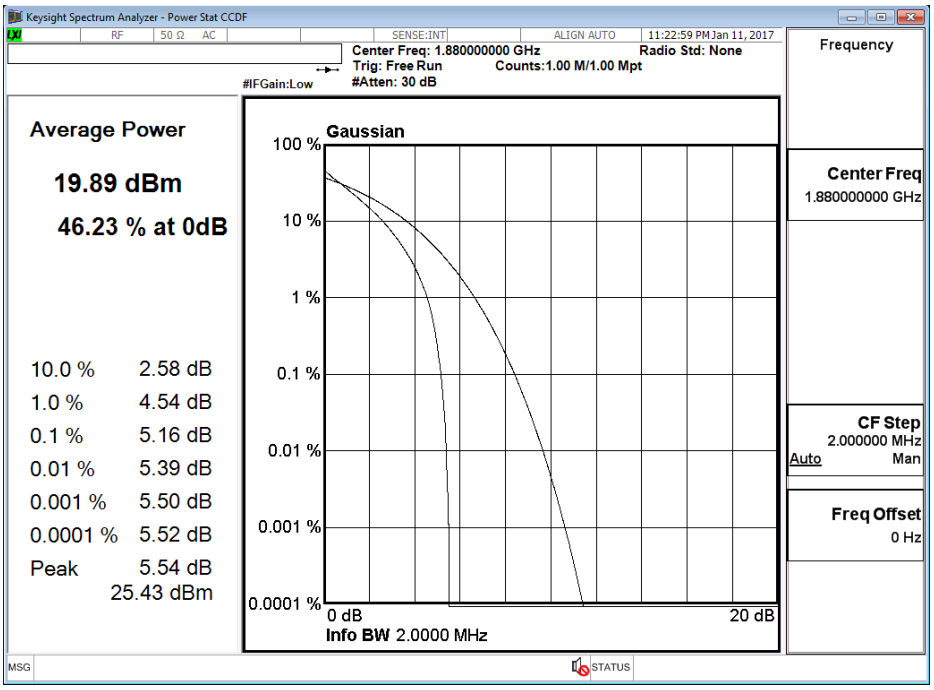
2) for burst transmissions, employ an external trigger that is synchronized with the EUT burst timing sequence, or use the internal burst trigger with a trigger level that allows the burst to stabilize and set the measurement interval to a time that is less than or equal to the burst duration.

e) Record the maximum PAPR level associated with a probability of 0.1%.

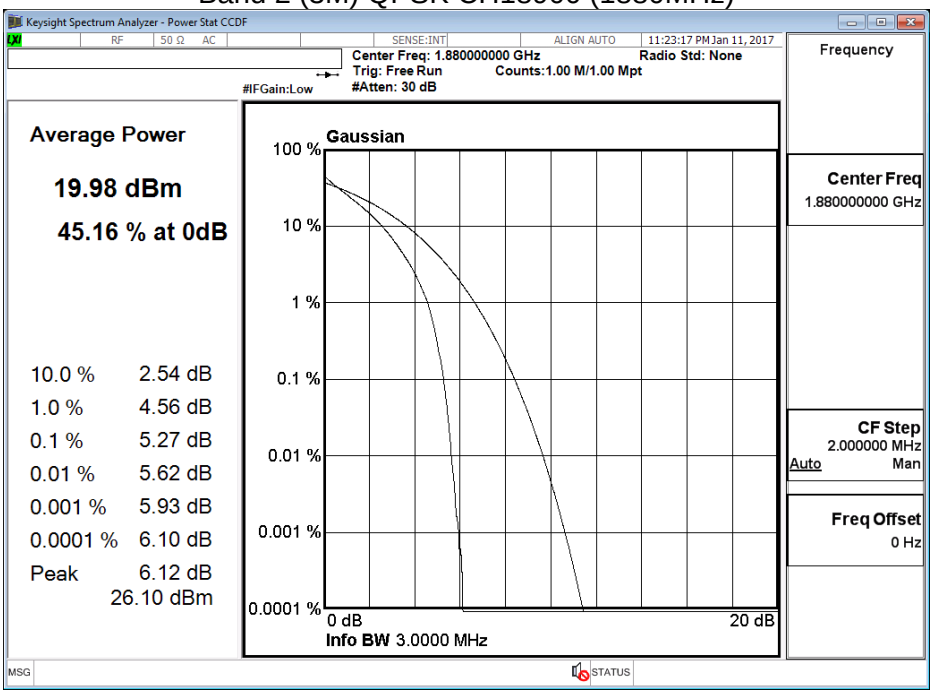
8.5 Test Result of Spurious Emission

Product	LE910C1-NA		
Test Mode	Peak to Average Ratio		
Date of Test	2016/12/15	Test Site	CTR
Test Condition	LTE-Band 2		

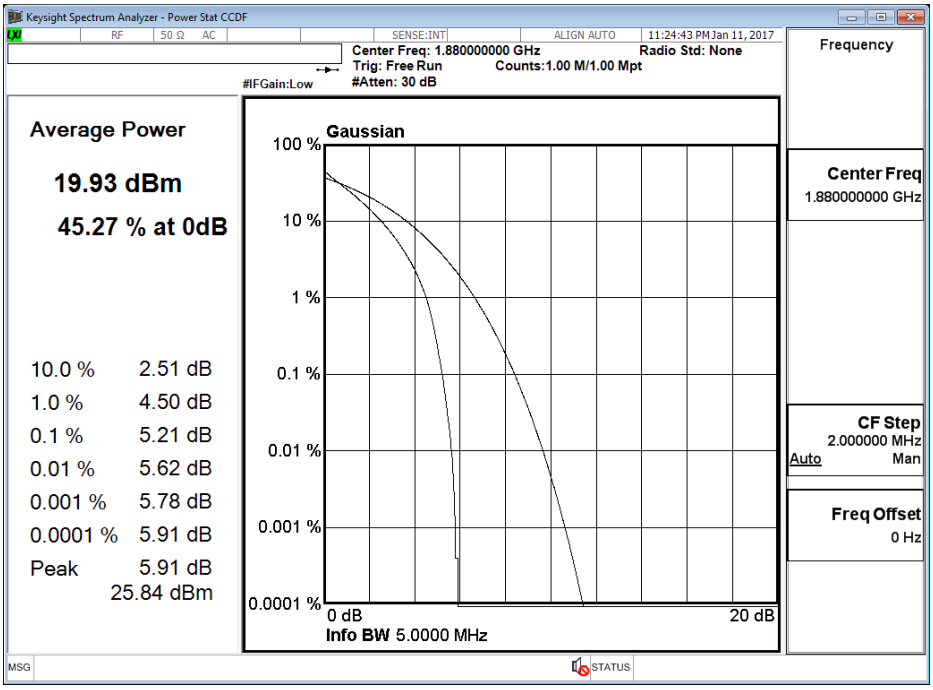
Band 2 (1.4M) QPSK CH18900 (1880MHz)



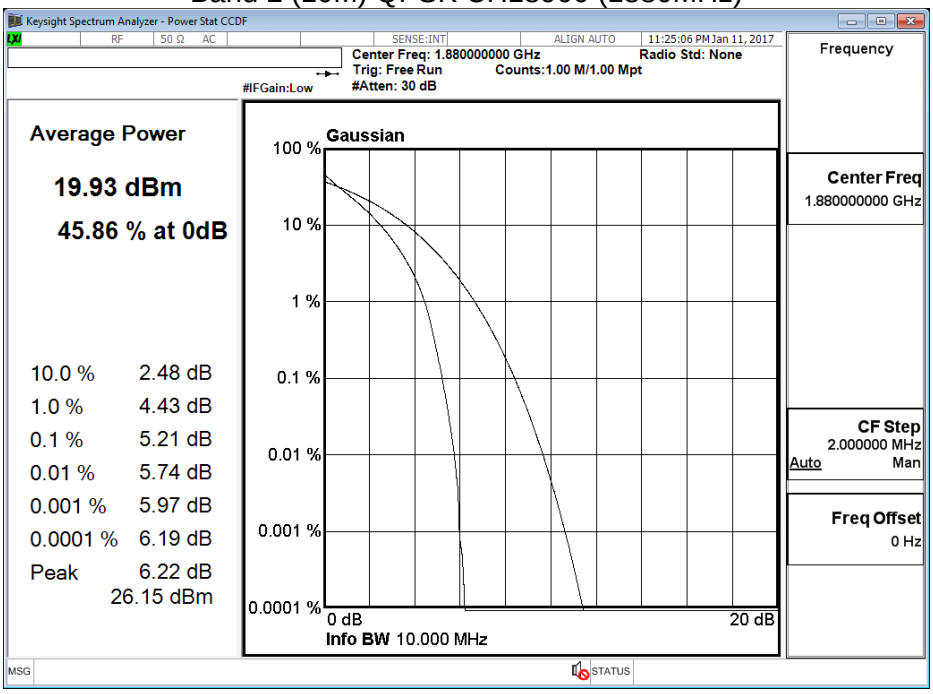
Band 2 (3M) QPSK CH18900 (1880MHz)



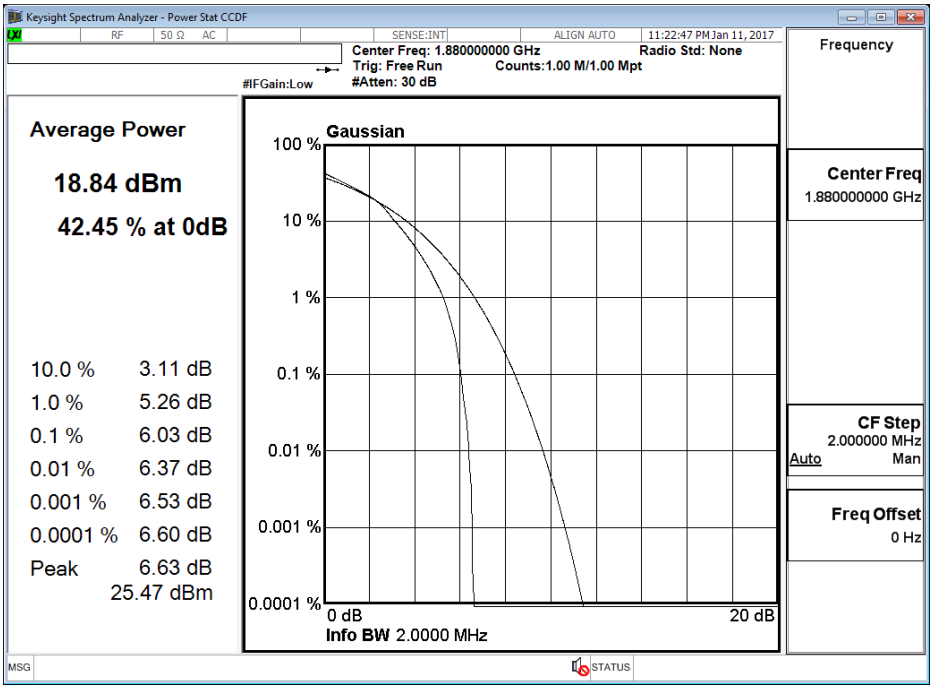
Band 2 (5M) QPSK CH18900 (1880MHz)



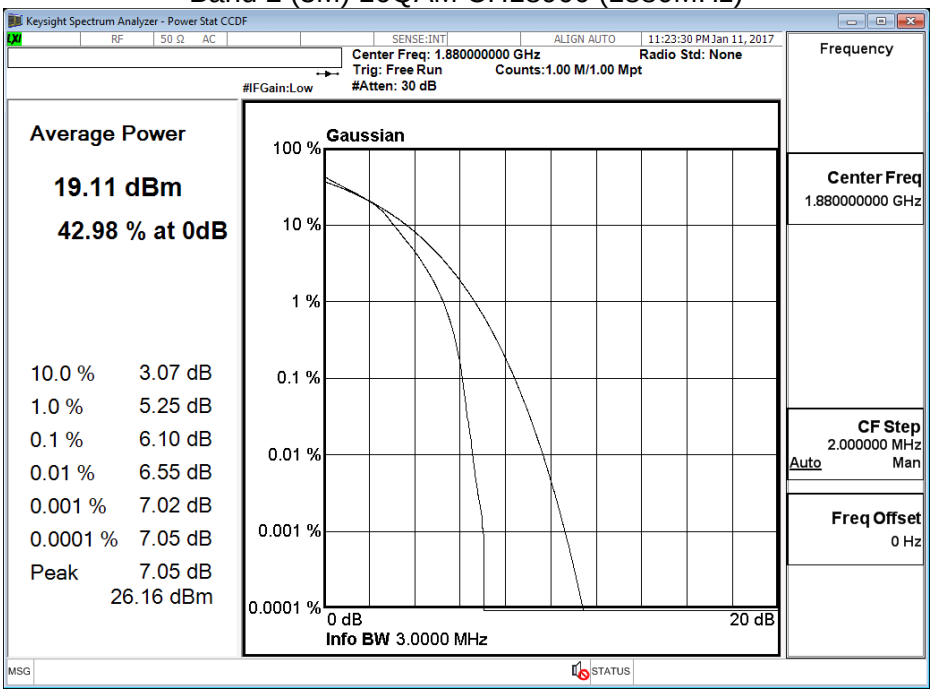
Band 2 (10M) QPSK CH18900 (1880MHz)



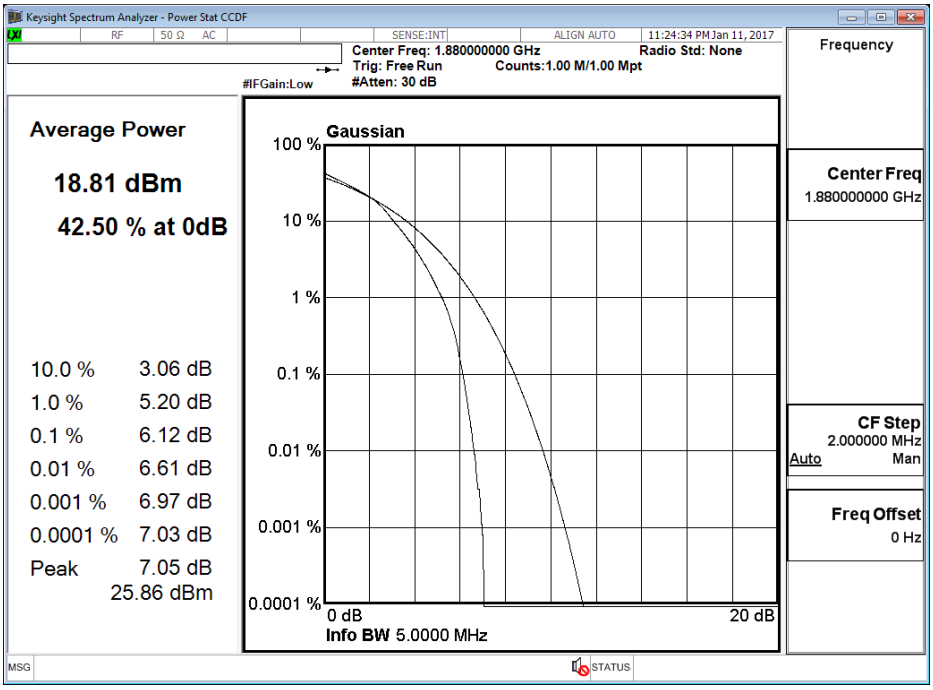
Band 2 (1.4M) 16QAM CH18900 (1880MHz)



Band 2 (3M) 16QAM CH18900 (1880MHz)

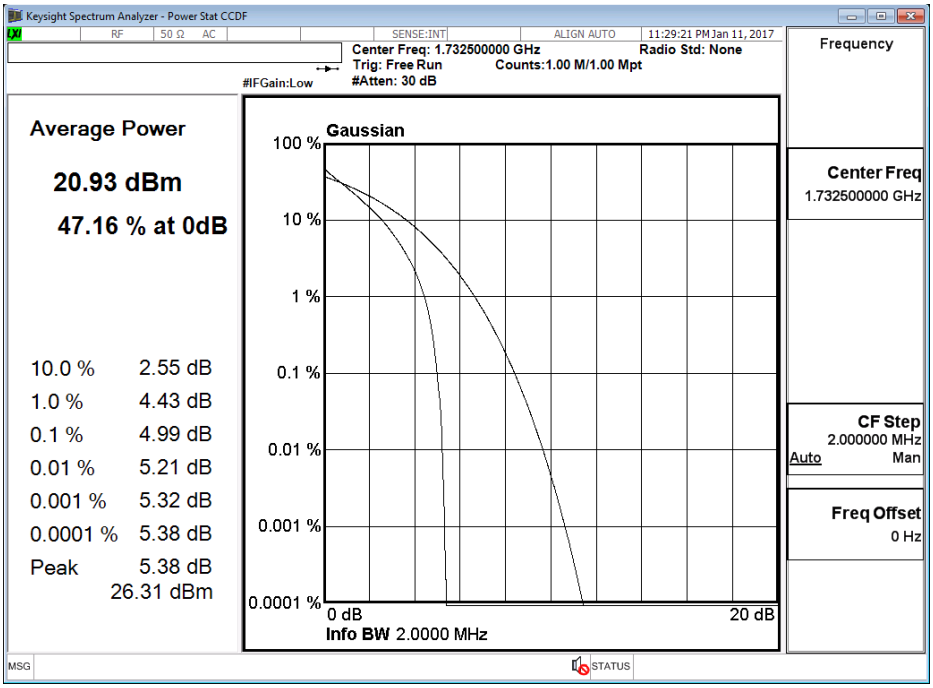


Band 2 (5M) 16QAM CH18900 (1880MHz)

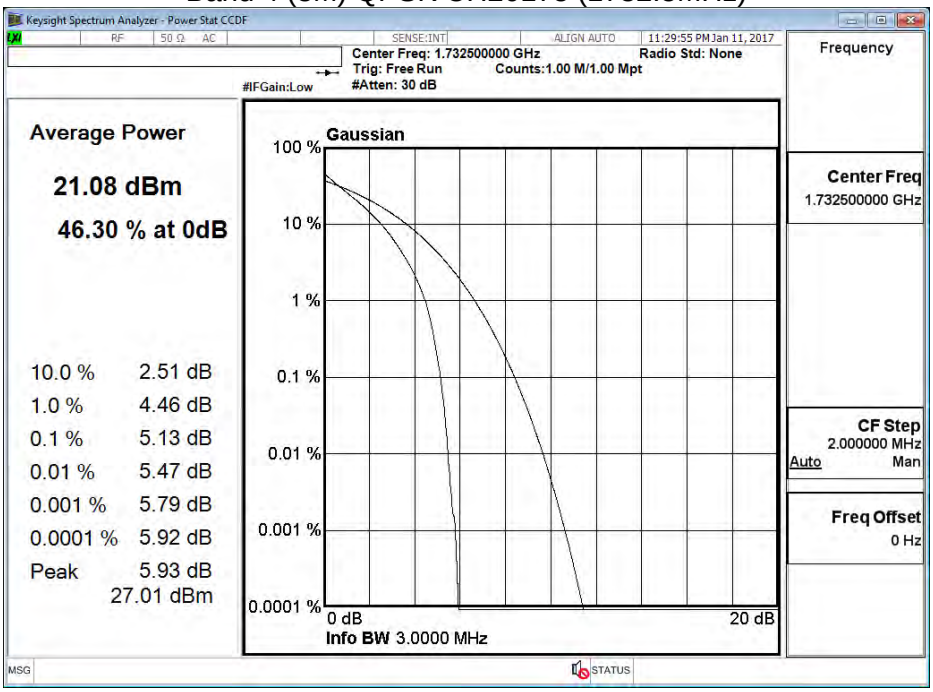


Product	LE910C1-NA		
Test Mode	Peak to Average Ratio		
Date of Test	2016/12/15	Test Site	CTR
Test Condition	LTE-Band 4		

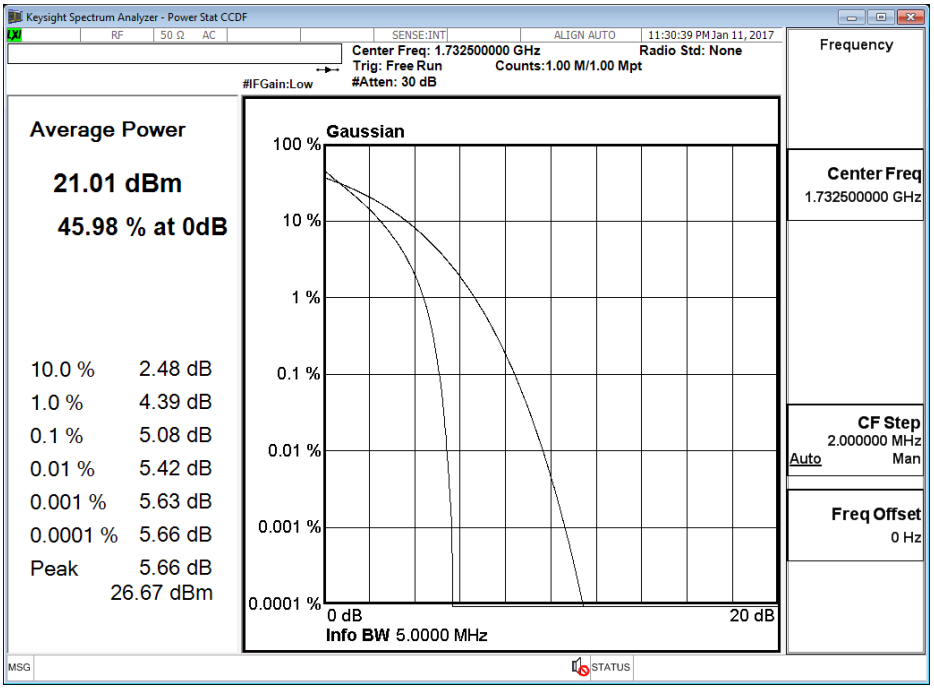
Band 4 (1.4M) QPSK CH20175 (1732.5MHz)



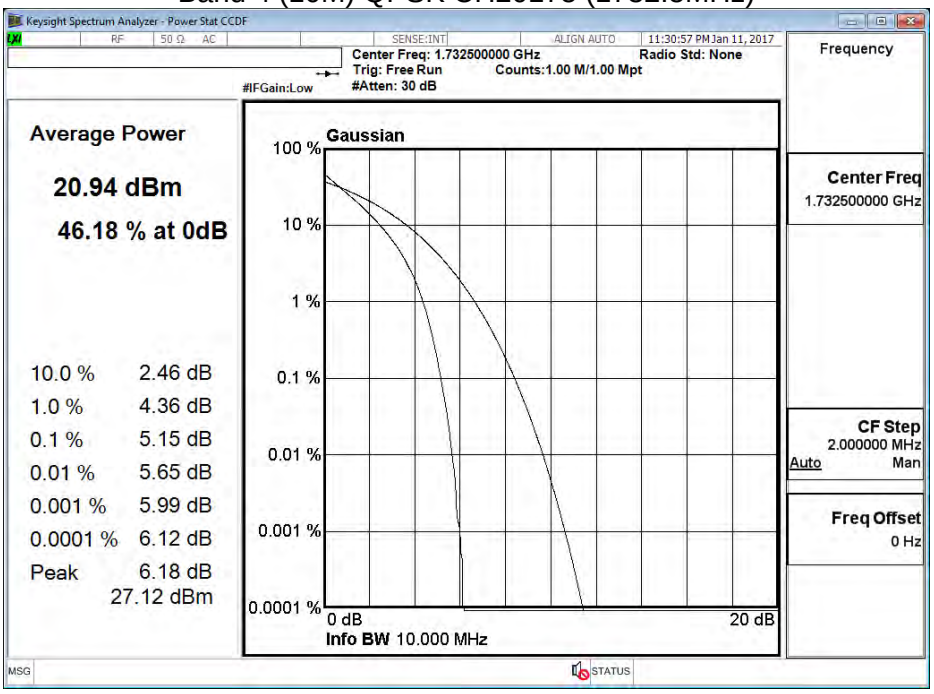
Band 4 (3M) QPSK CH20175 (1732.5MHz)



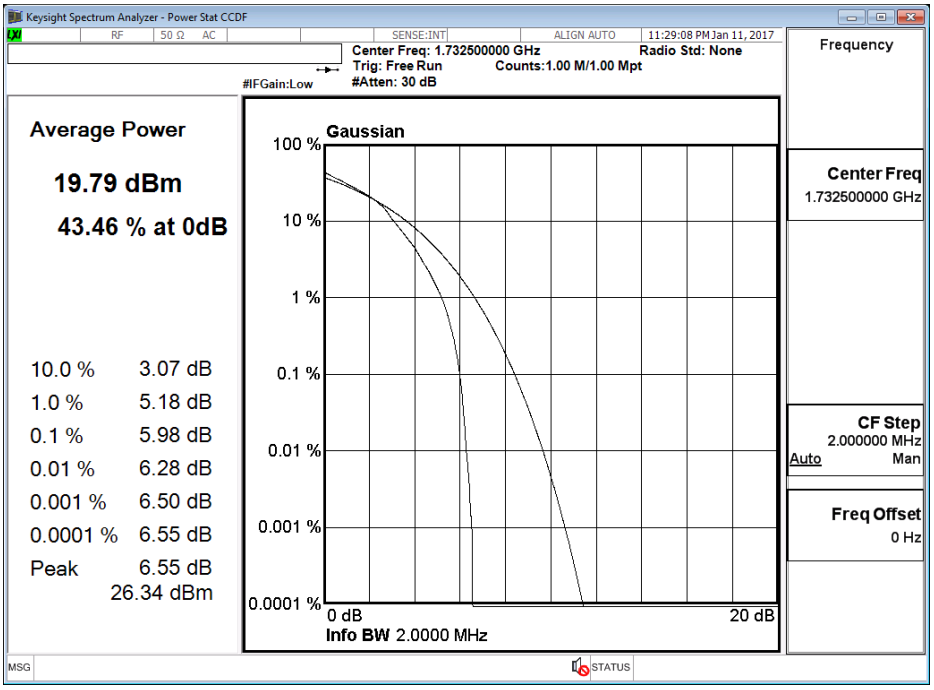
Band 4 (5M) QPSK CH20175 (1732.5MHz)



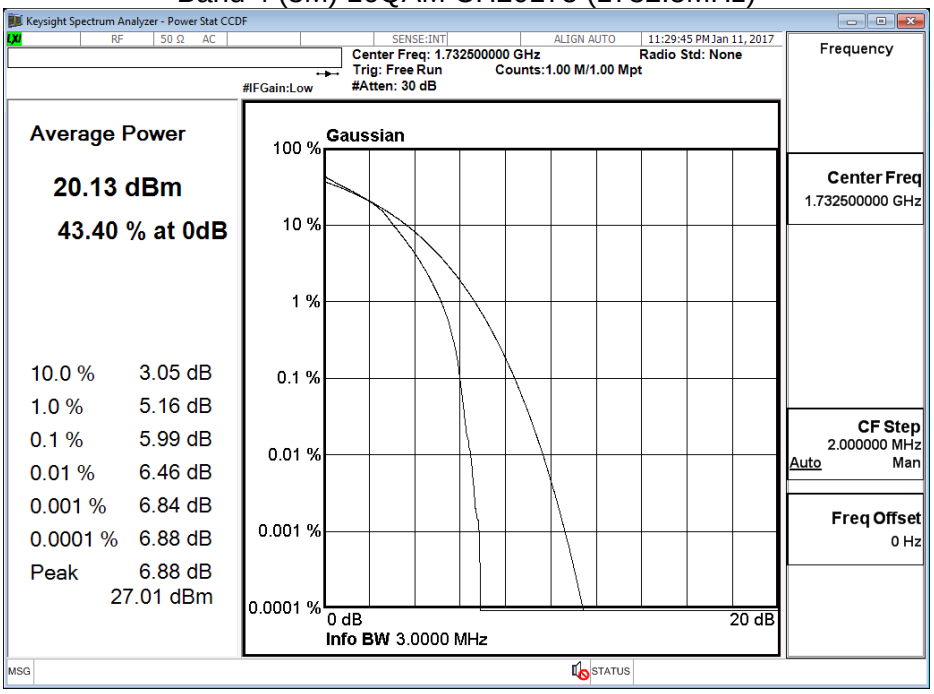
Band 4 (10M) QPSK CH20175 (1732.5MHz)



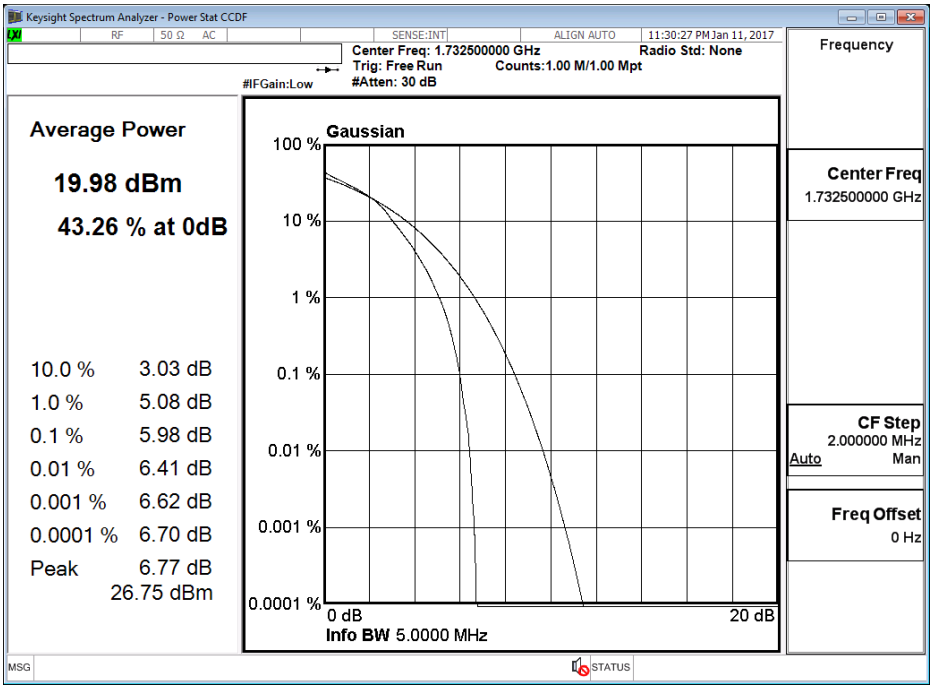
Band 4 (1.4M) 16QAM CH20175 (1732.5MHz)



Band 4 (3M) 16QAM CH20175 (1732.5MHz)

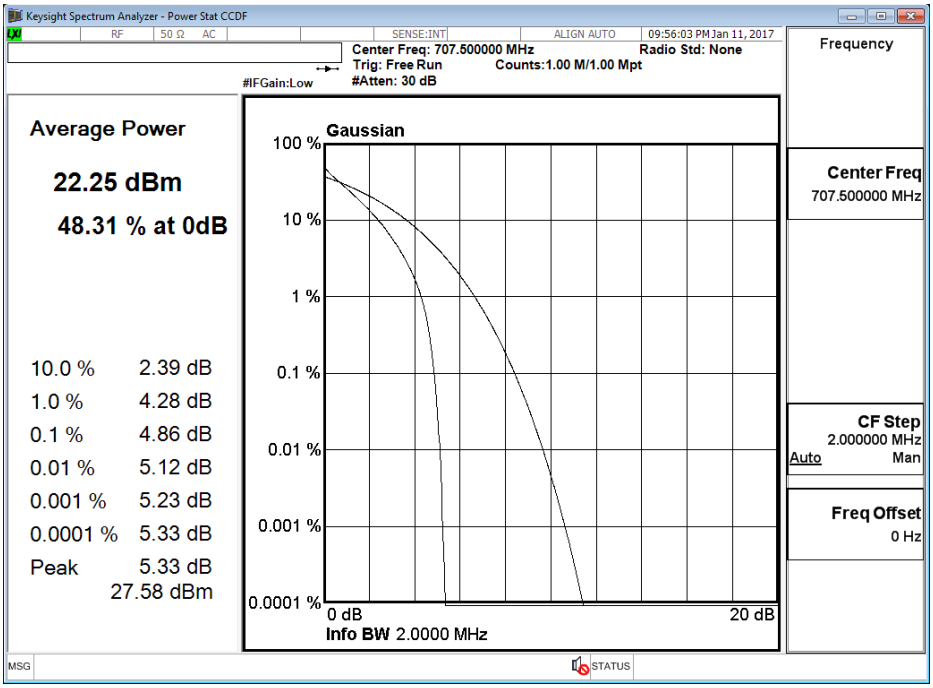


Band 4 (5M) 16QAM CH20175 (1732.5MHz)

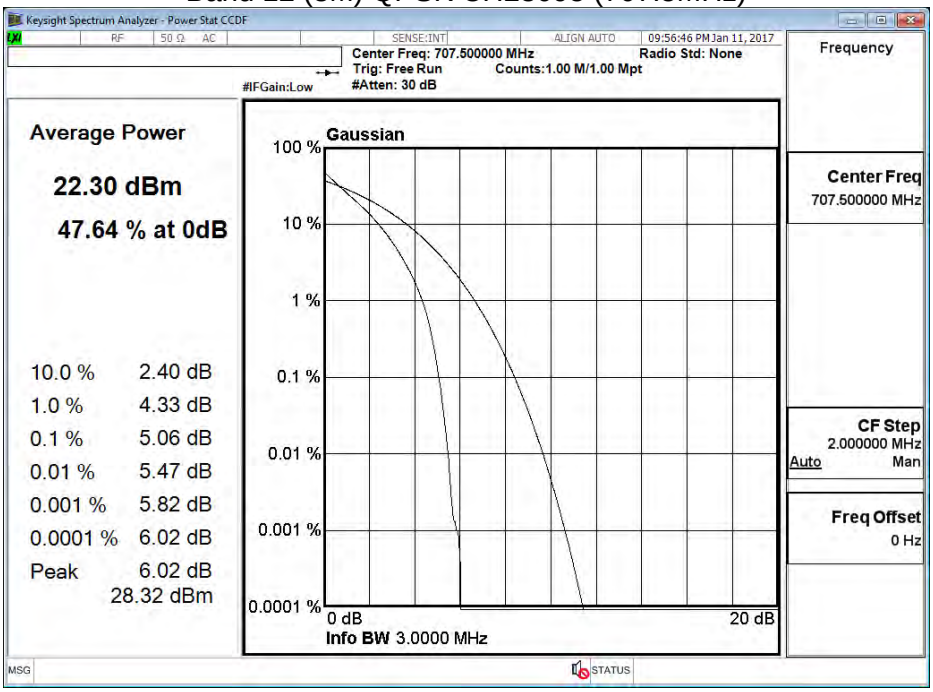


Product	LE910C1-NA		
Test Mode	Peak to Average Ratio		
Date of Test	2016/12/15	Test Site	CTR
Test Condition	LTE-Band 12		

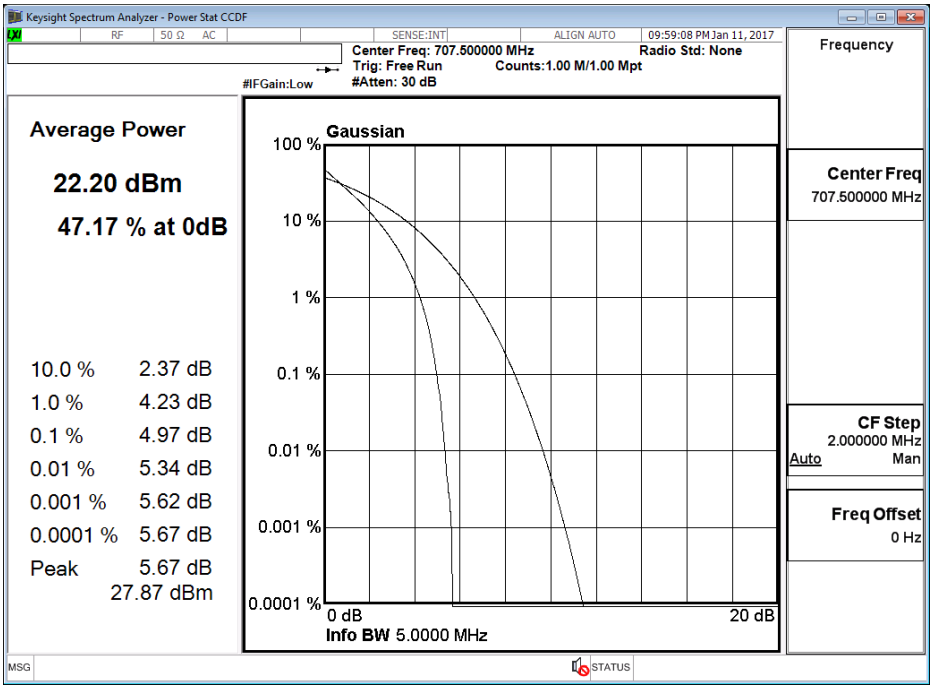
Band 12 (1.4M) QPSK CH23095 (707.5MHz)



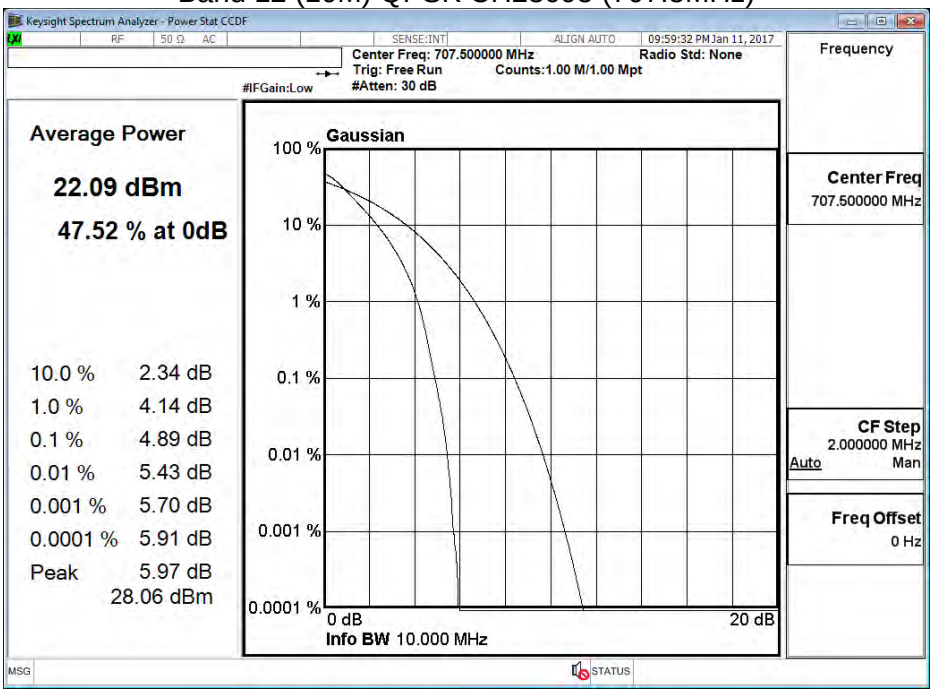
Band 12 (3M) QPSK CH23095 (707.5MHz)



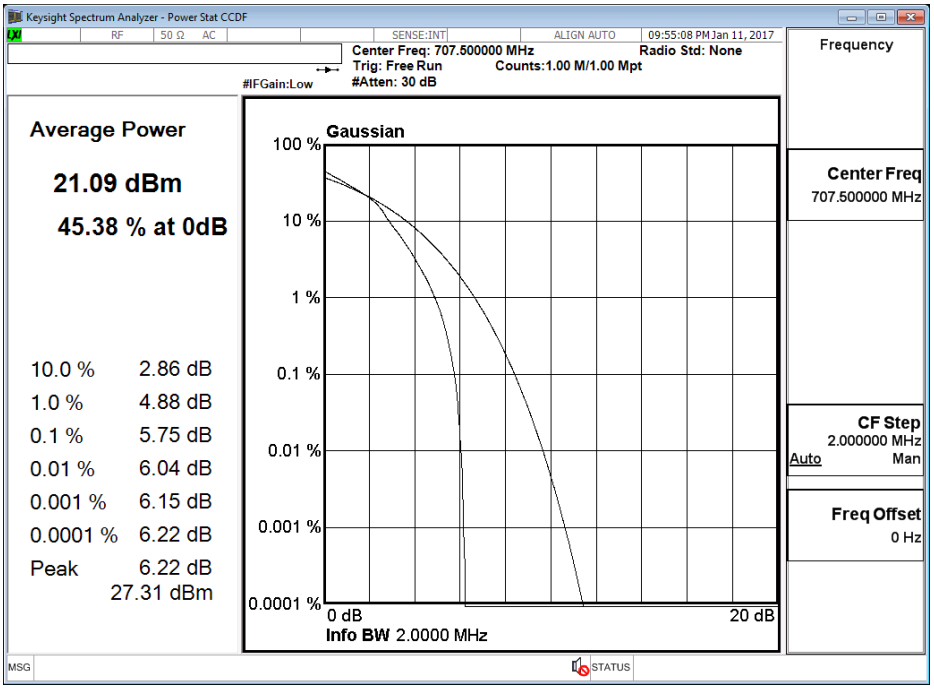
Band 12 (5M) QPSK CH23095 (707.5MHz)



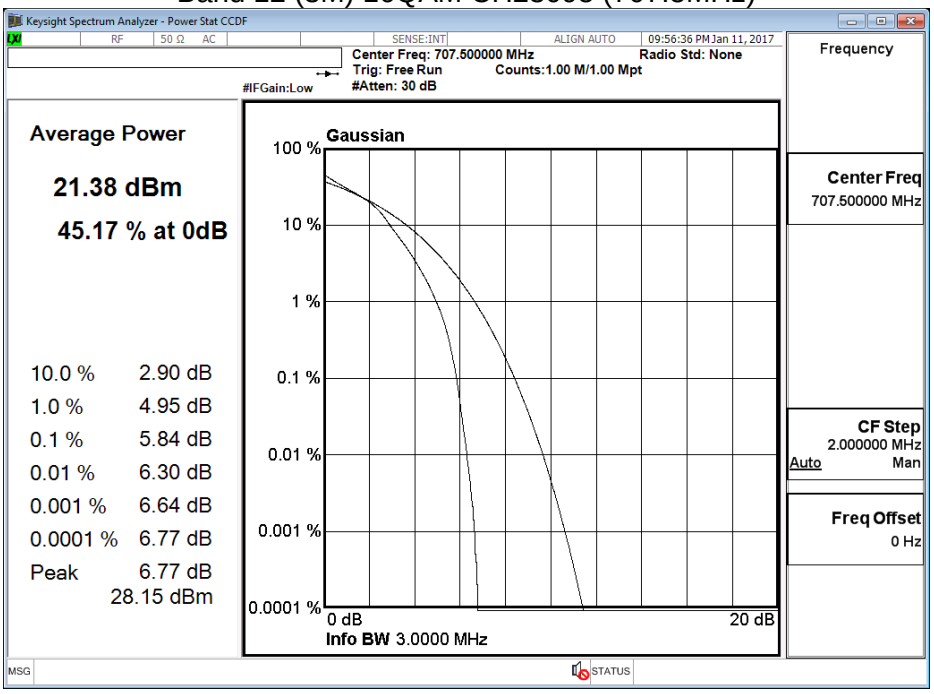
Band 12 (10M) QPSK CH23095 (707.5MHz)



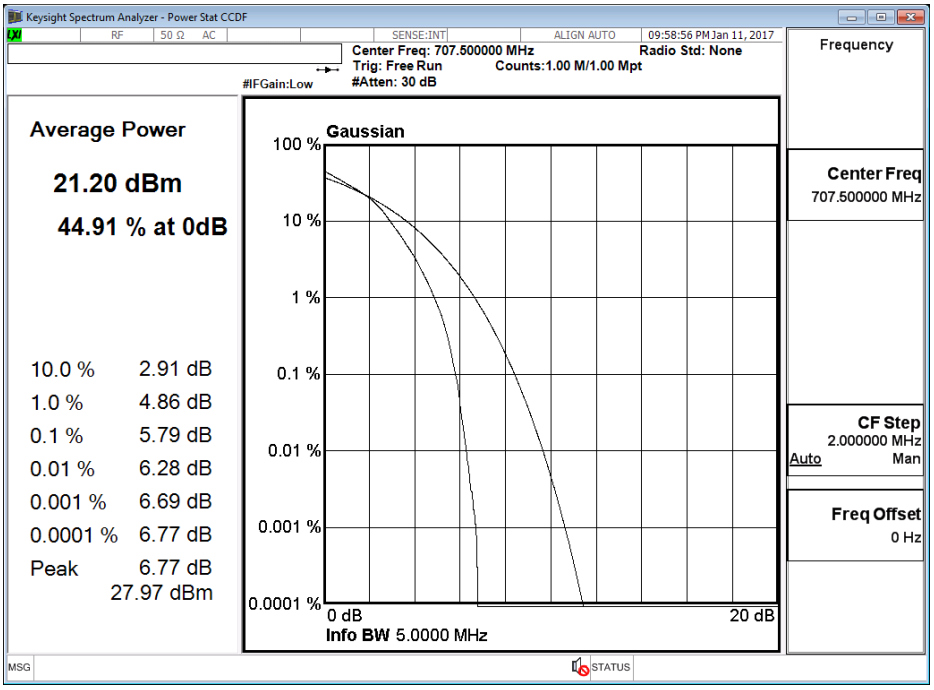
Band 12 (1.4M) 16QAM CH23095 (707.5MHz)



Band 12 (3M) 16QAM CH23095 (707.5MHz)



Band 12 (5M) 16QAM CH23095 (707.5MHz)



Attachment 1: EUT Test Photographs

Attachment 2: EUT Detailed Photographs