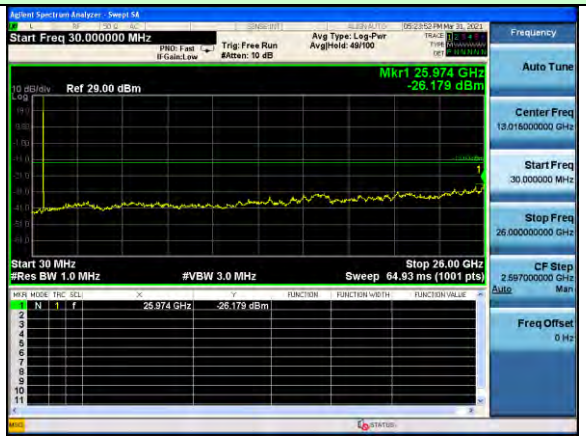
Test Mode: LTE Band 12 / 10MHz /1RB	Test Mode: LTE Band 12 / 10MHz /100RB

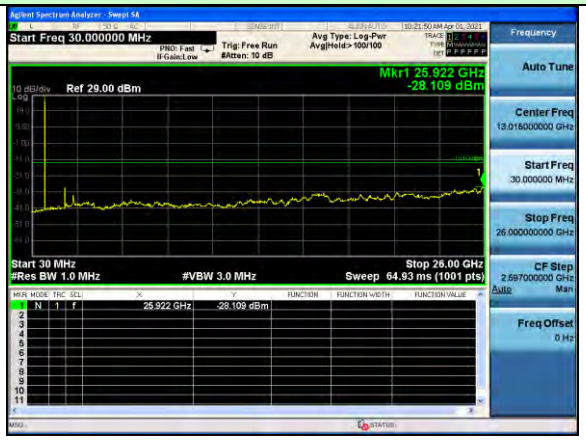


Lowest channel

Middle channel

Highest channel

Test Mode: LTE Band 13 / 5MHz /1RB	Test Mode: LTE Band 13 / 5MHz /100RB

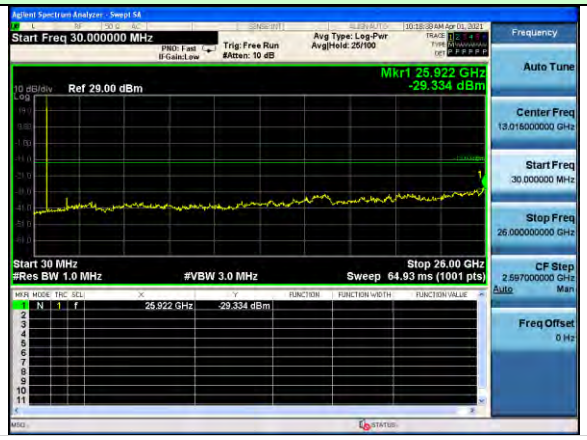


Lowest channel

Middle channel

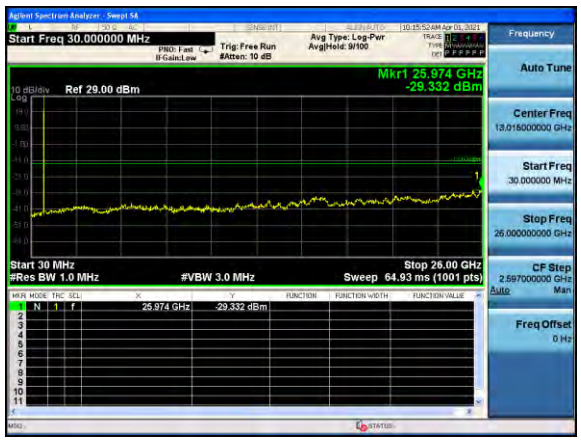
Highest channel

Test Mode: LTE Band 13 / 10MHz /1RB	Test Mode: LTE Band 13 / 10MHz /100RB



Lowest channel

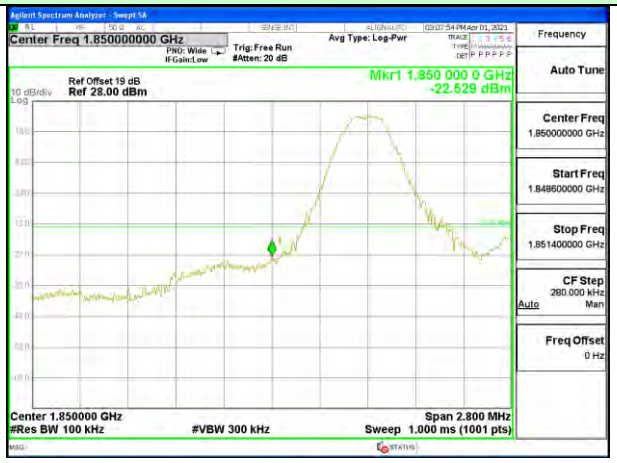
Middle channel



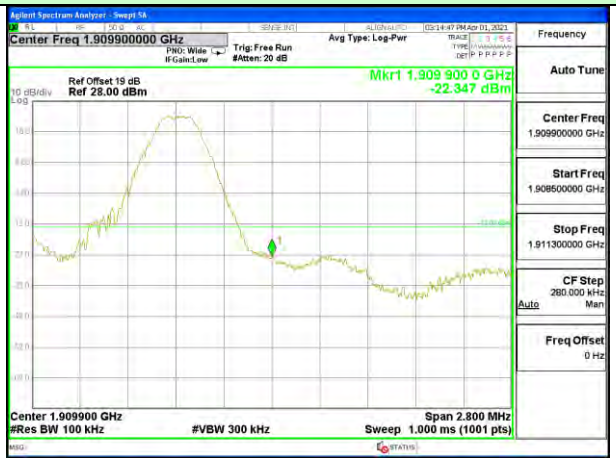
Highest channel

Band Edge

Test Mode: LTE Band 2 / 1.4MHz / 1RB / QPSK

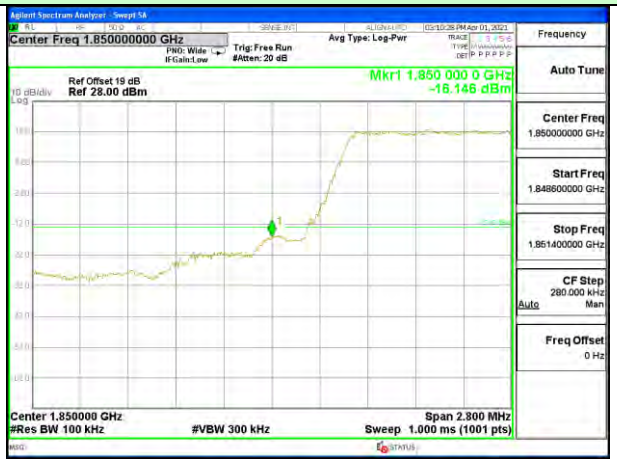


Lowest channel

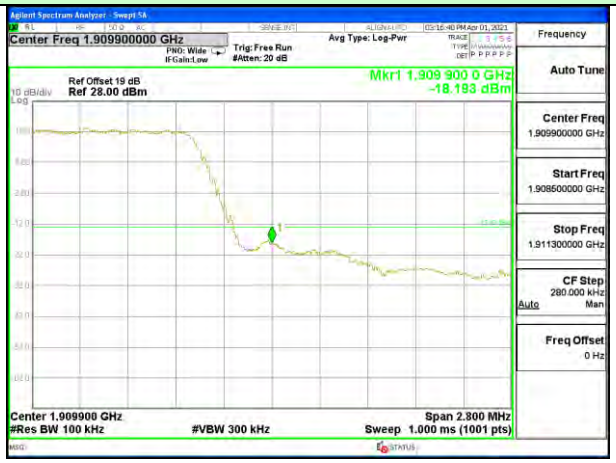


Highest channel

Test Mode: LTE Band 2 / 1.4MHz / 6RB / QPSK

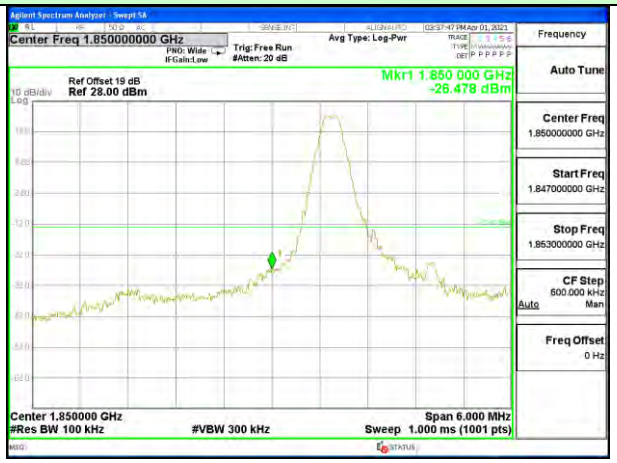


Lowest channel

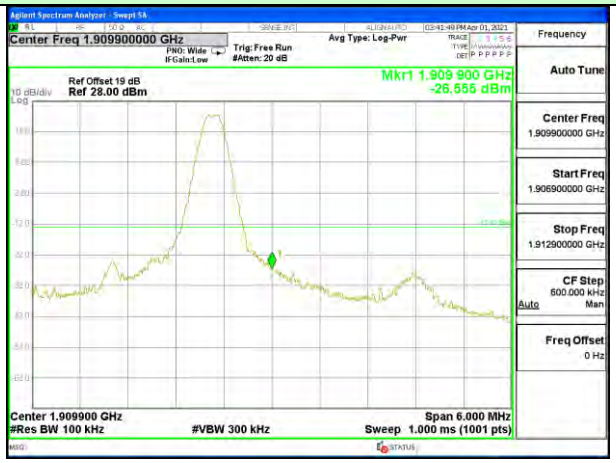


Highest channel

Test Mode: LTE Band 2 / 3MHz / 1RB / QPSK

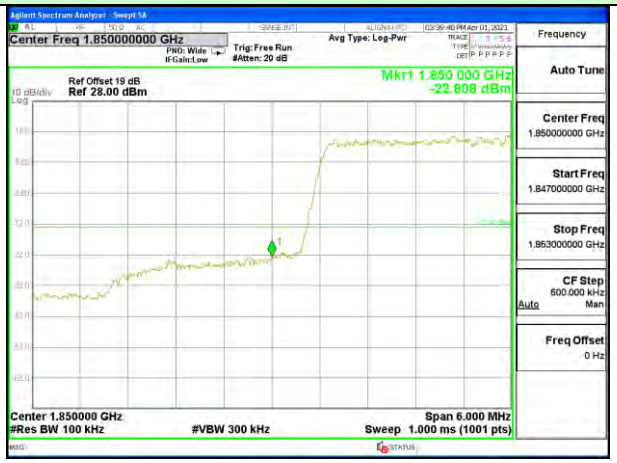


Lowest channel

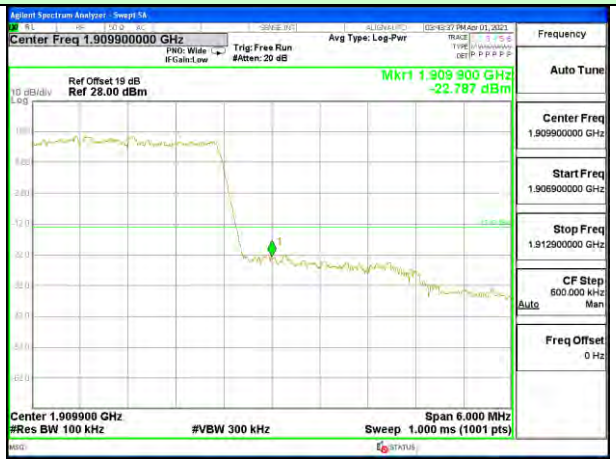


Highest channel

Test Mode: LTE Band 2 / 3MHz / 15RB / QPSK

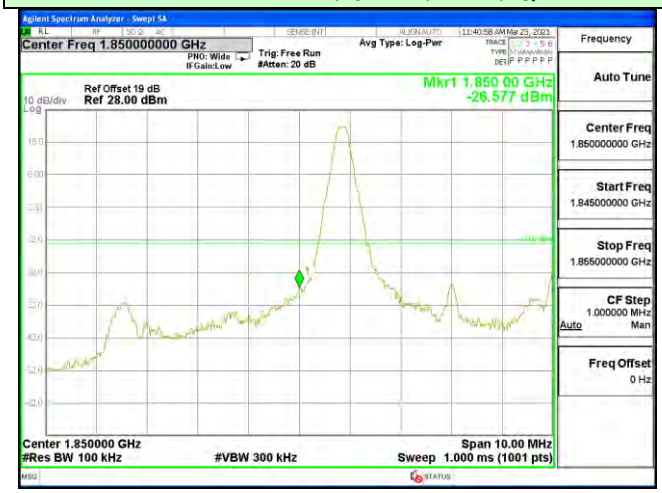


Lowest channel

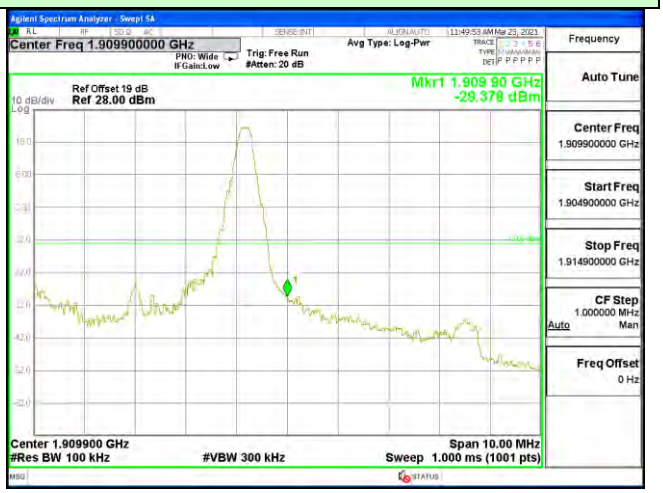


Highest channel

Test Mode: LTE Band 2 / 5MHz / 1RB / QPSK

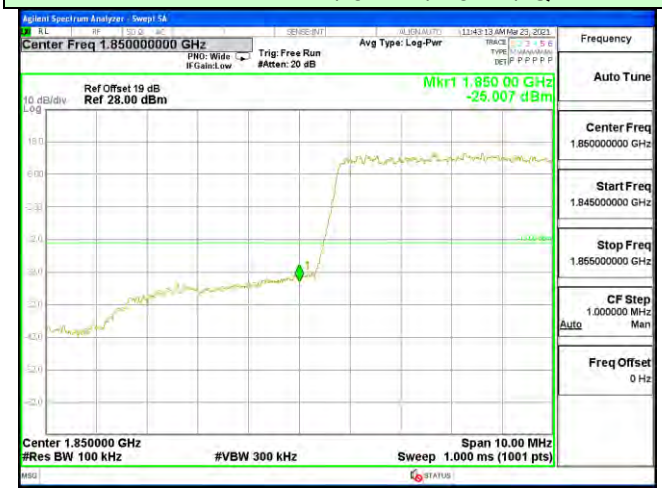


Lowest channel

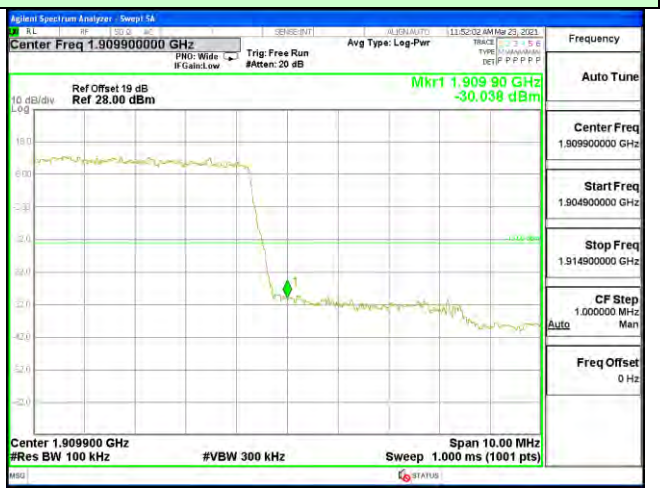


Highest channel

Test Mode: LTE Band 2 / 5MHz / 25RB / QPSK

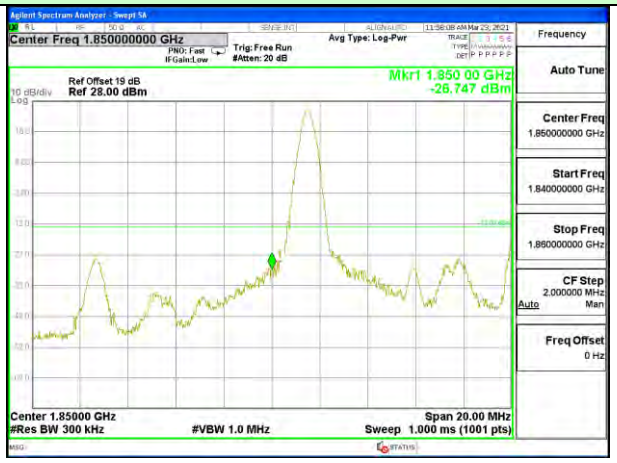


Lowest channel

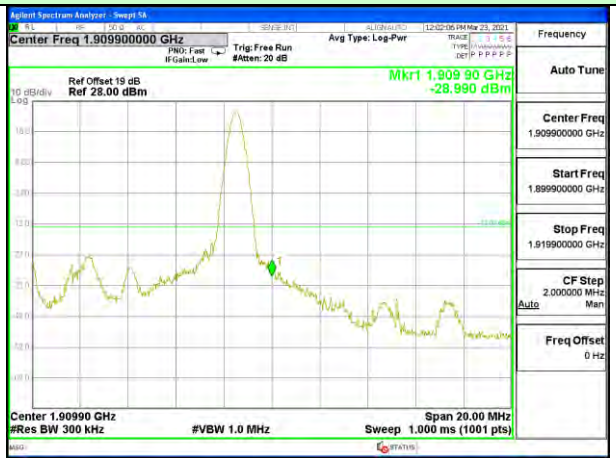


Highest channel

Test Mode: LTE Band 2 / 10MHz / 1RB / QPSK

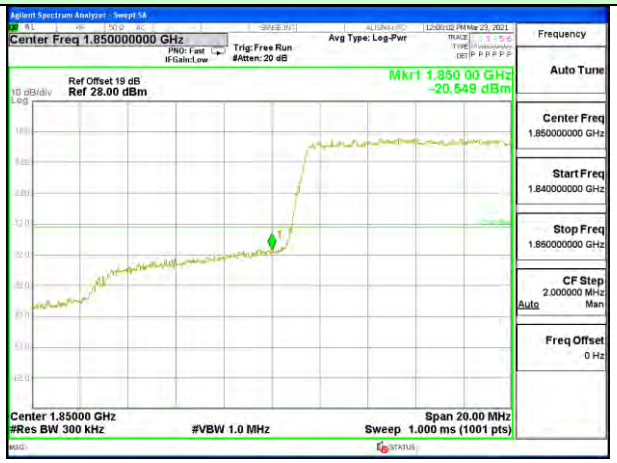


Lowest channel

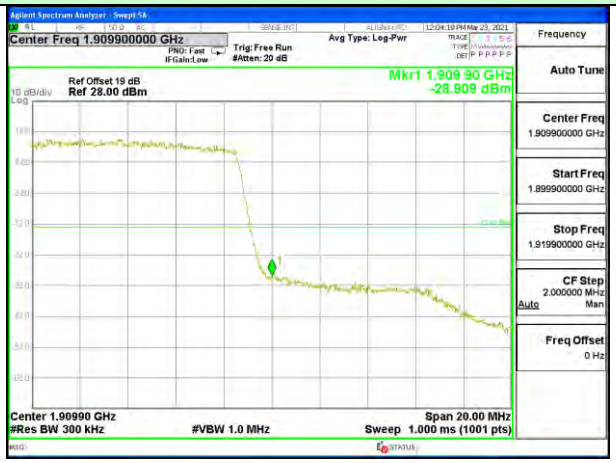


Highest channel

Test Mode: LTE Band 2 / 10MHz / 50RB / QPSK

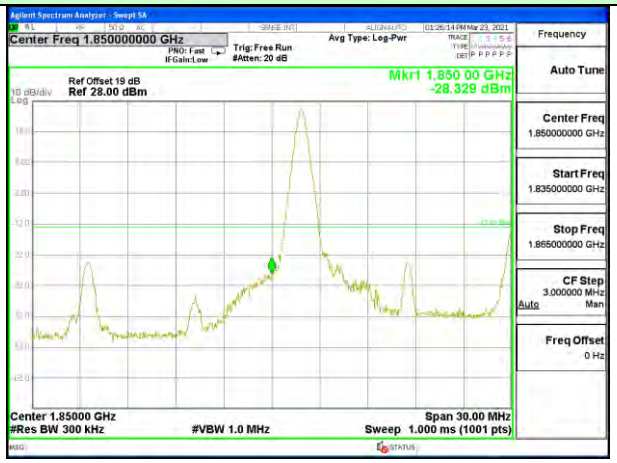


Lowest channel

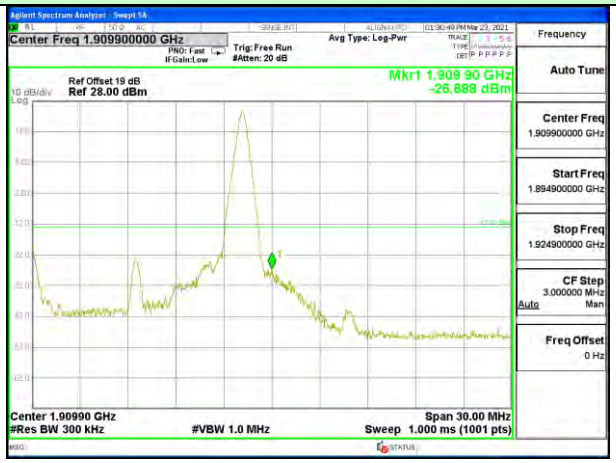


Highest channel

Test Mode: LTE Band 2 / 15MHz / 1RB / QPSK

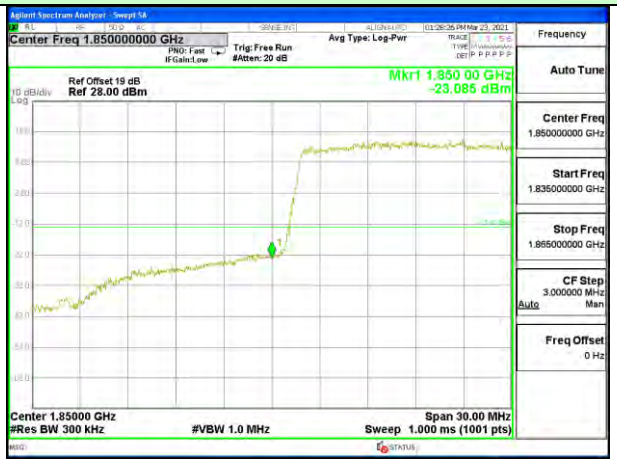


Lowest channel

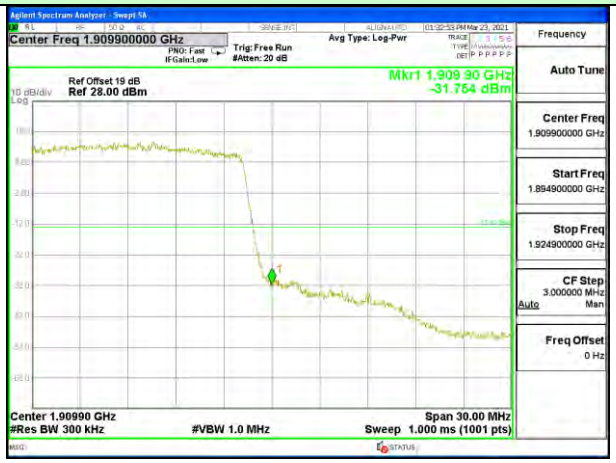


Highest channel

Test Mode: LTE Band 2 / 15MHz / 75RB / QPSK

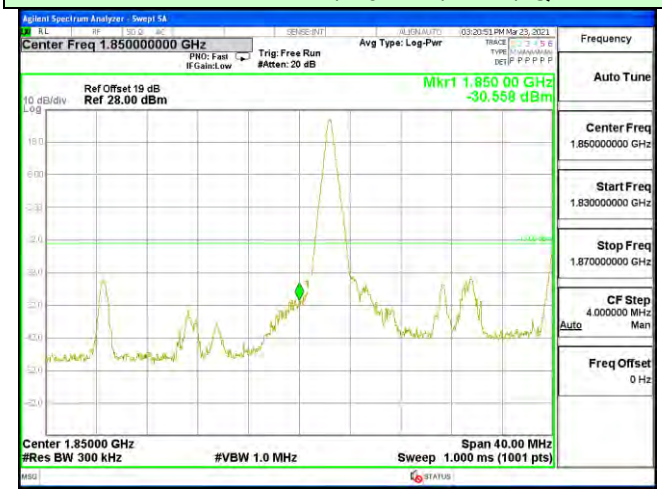


Lowest channel

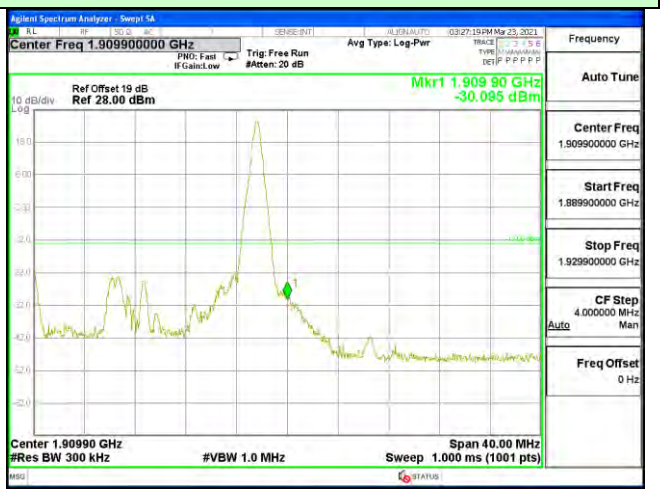


Highest channel

Test Mode: LTE Band 2 / 20MHz / 1RB / QPSK

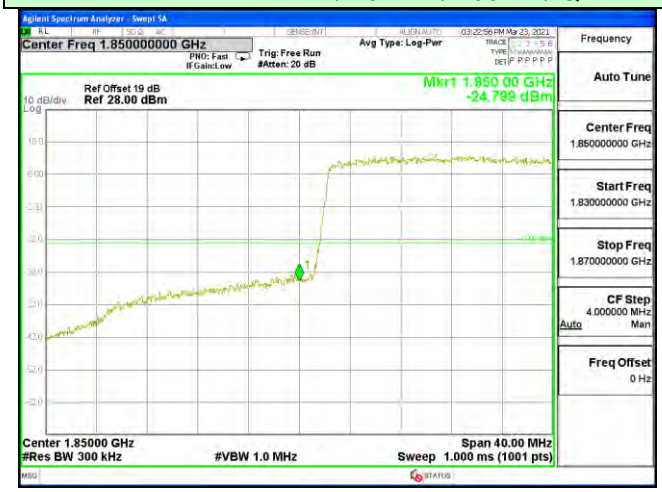


Lowest channel

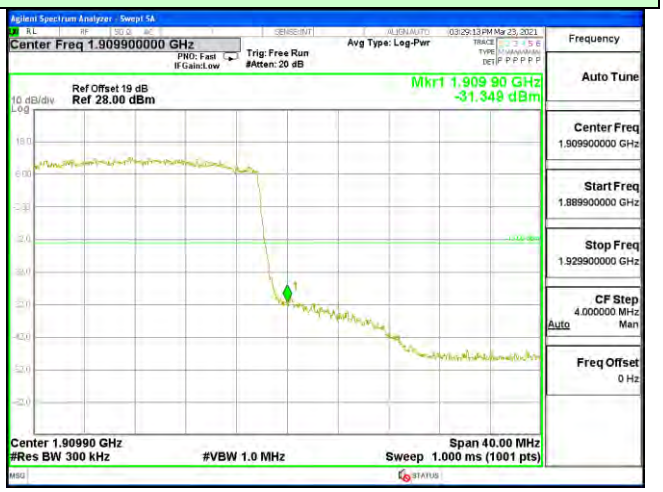


Highest channel

Test Mode: LTE Band 2 / 20MHz / 100RB / QPSK

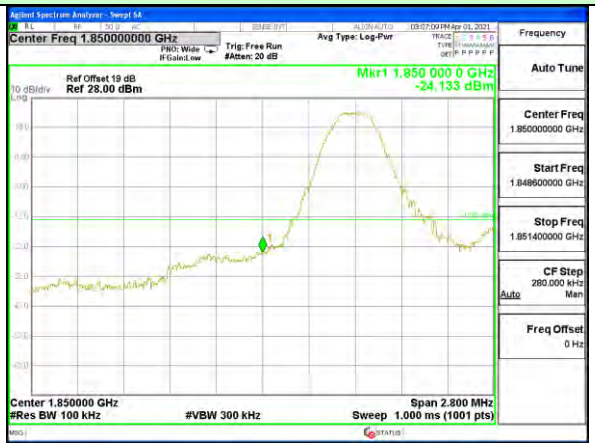


Lowest channel

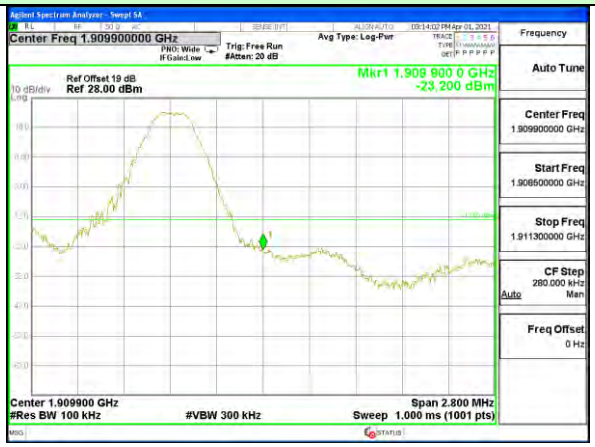


Highest channel

Test Mode: LTE Band 2 / 1.4MHz / 1RB / 16-QAM

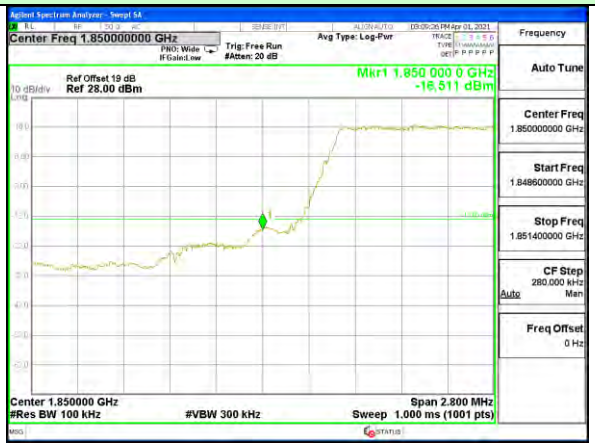


Lowest channel

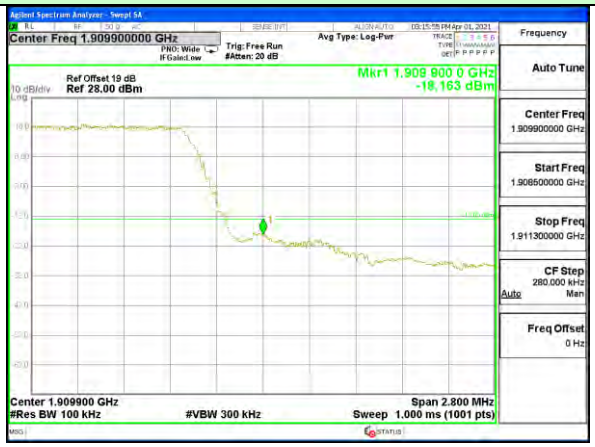


Highest channel

Test Mode: LTE Band 2 / 1.4MHz / 6RB / 16-QAM

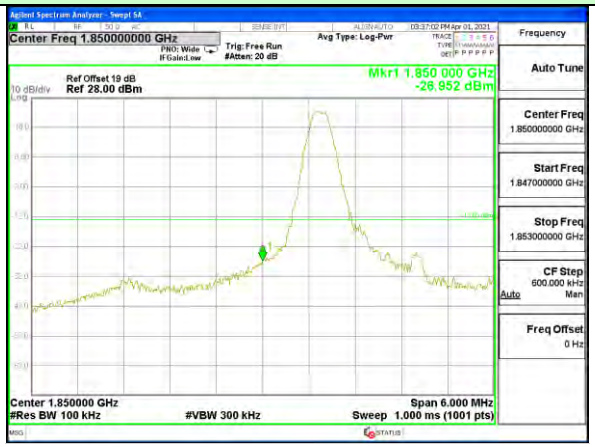


Lowest channel



Highest channel

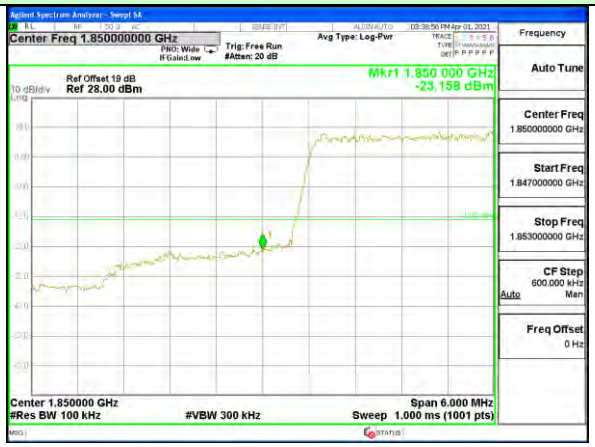
Test Mode: LTE Band 2 / 3MHz / 1RB / 16-QAM



Lowest channel

Highest channel

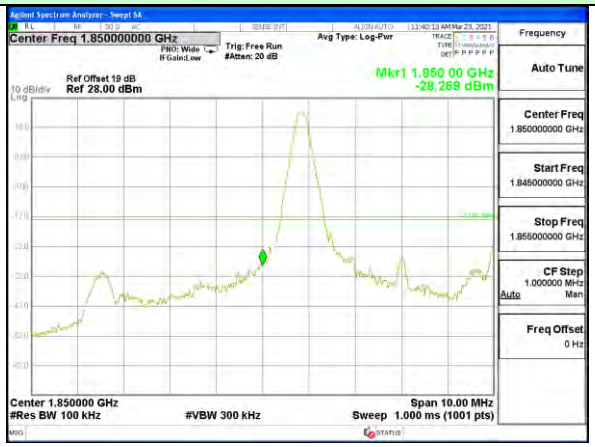
Test Mode: LTE Band 2 / 3MHz / 15RB / 16-QAM



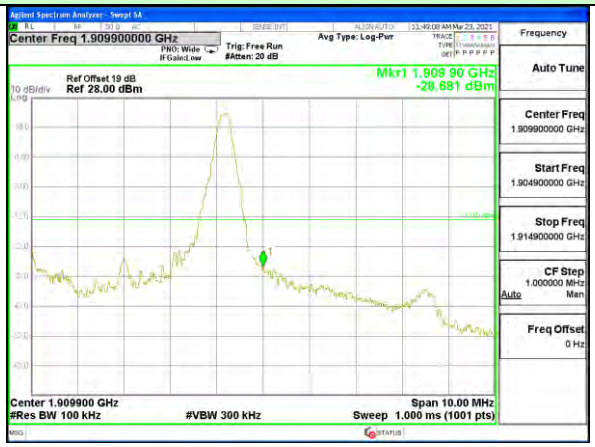
Lowest channel

Highest channel

Test Mode: LTE Band 2 / 5MHz / 1RB / 16-QAM

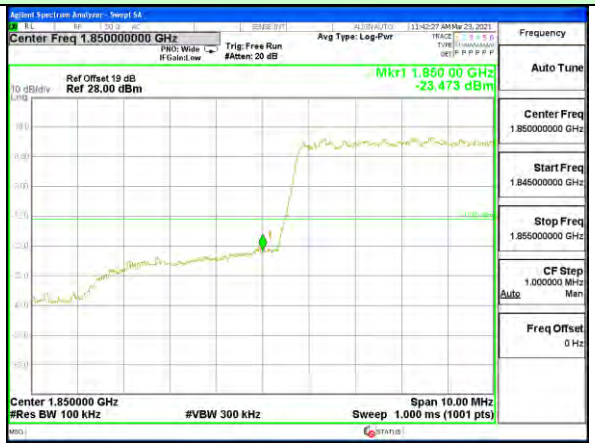


Lowest channel

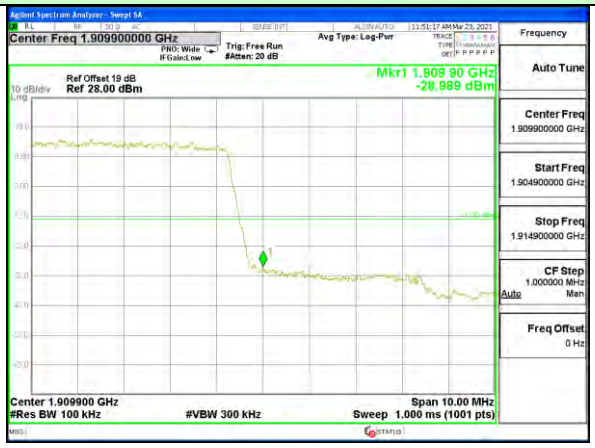


Highest channel

Test Mode: LTE Band 2 / 5MHz / 25RB / 16-QAM



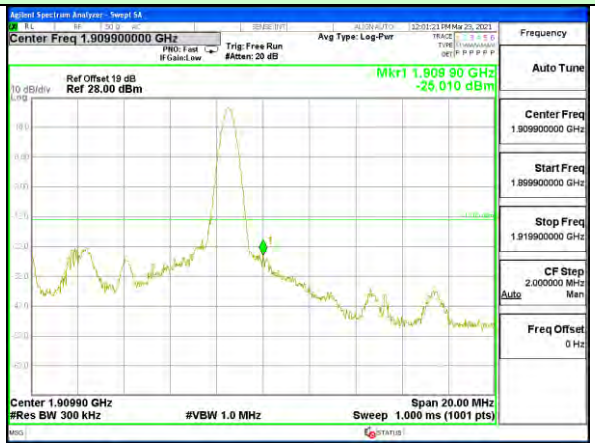
Lowest channel



Highest channel

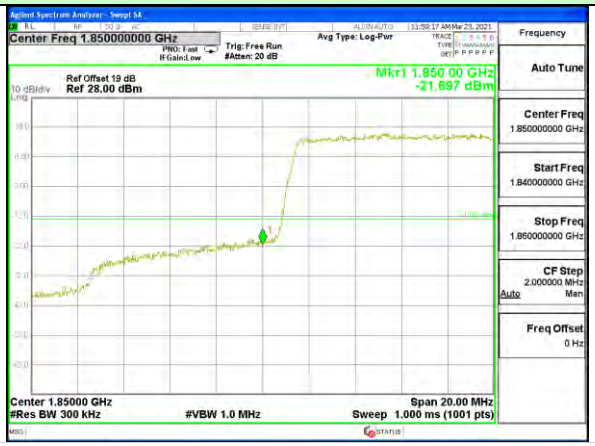
Test Mode: LTE Band 2 / 10MHz / 1RB / 16-QAM

Lowest channel

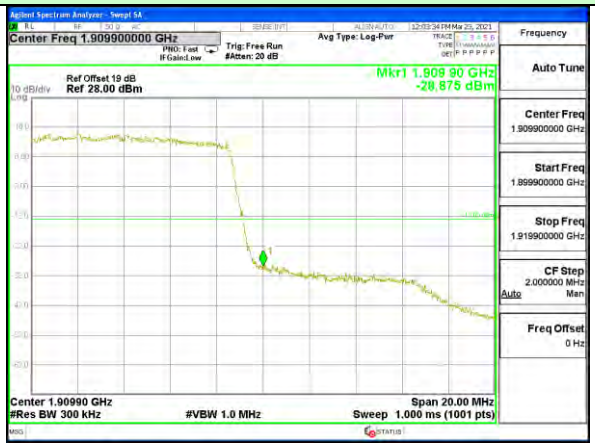


Highest channel

Test Mode: LTE Band 2 / 10MHz / 50RB / 16-QAM

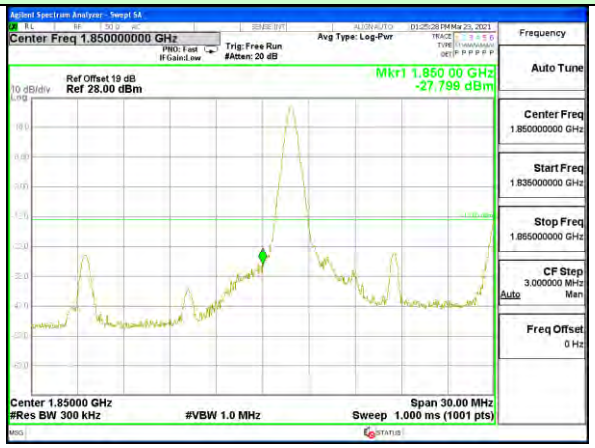


Lowest channel



Highest channel

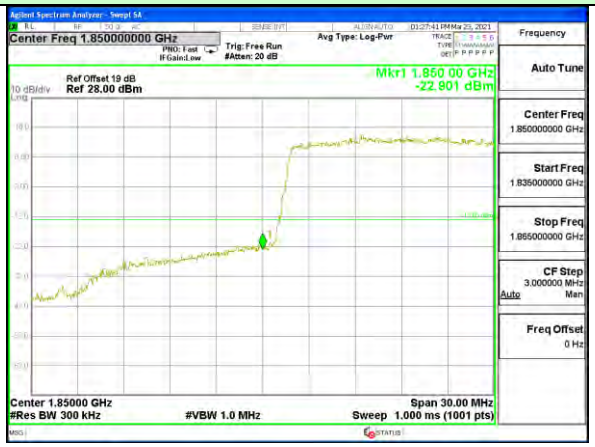
Test Mode: LTE Band 2 / 15MHz / 1RB / 16-QAM



Lowest channel

Highest channel

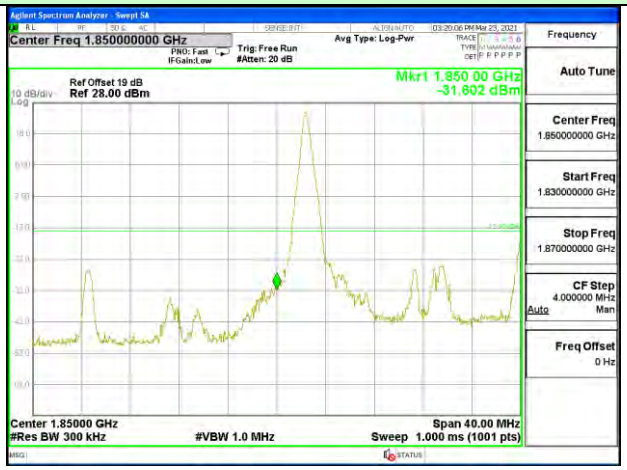
Test Mode: LTE Band 2 / 15MHz / 75RB / 16-QAM



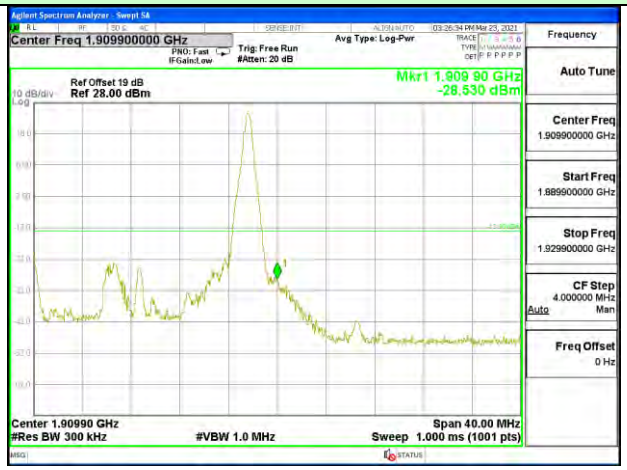
Lowest channel

Highest channel

Test Mode: LTE Band 2 / 20MHz / 1RB / 16-QAM

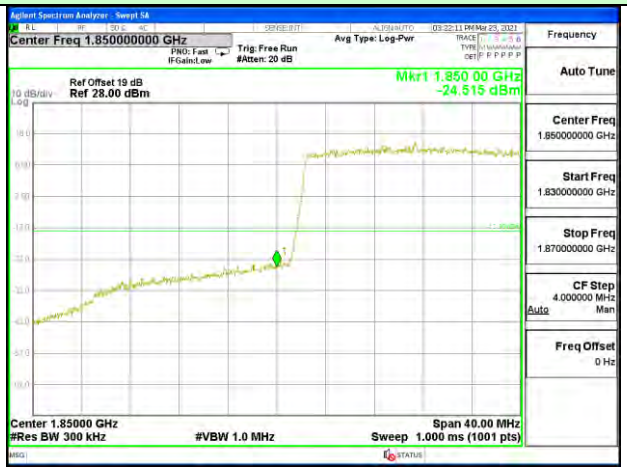


Lowest channel

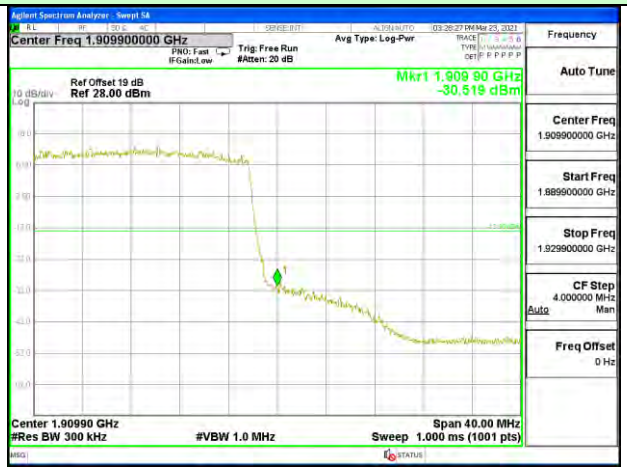


Highest channel

Test Mode: LTE Band 2 / 20MHz / 100RB / 16-QAM

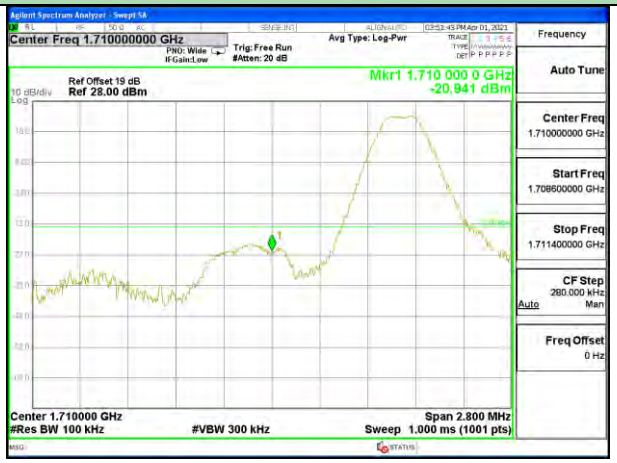


Lowest channel

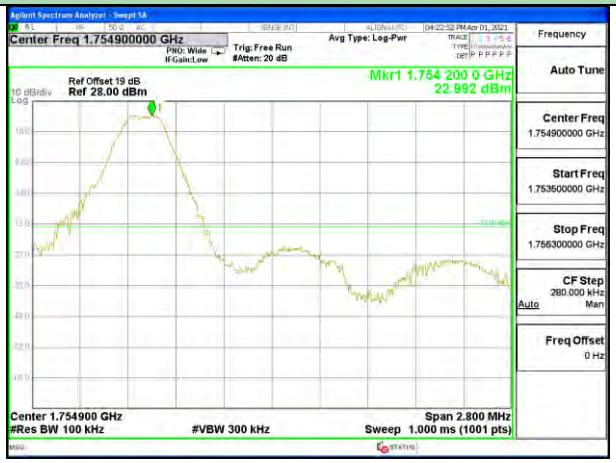


Highest channel

Test Mode: LTE Band 4 / 1.4MHz / 1RB / QPSK



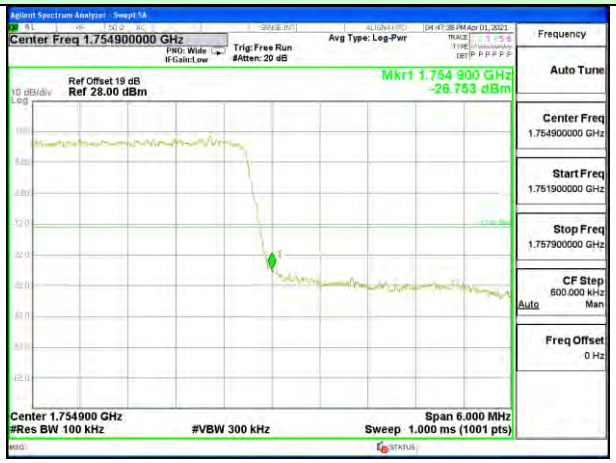
Lowest channel



Highest channel

Test Mode: LTE Band 4 / 1.4MHz / 6RB / QPSK

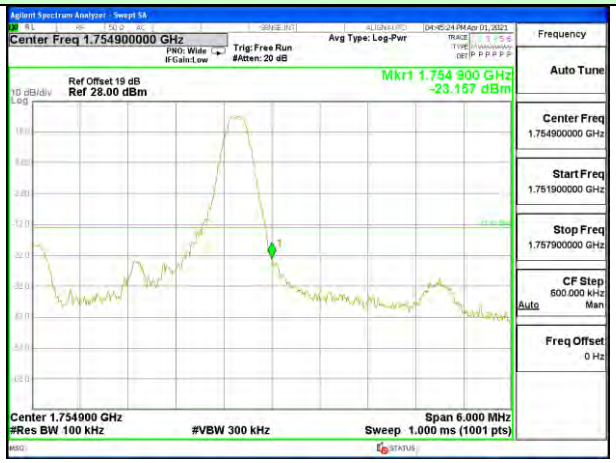
Lowest channel



Highest channel

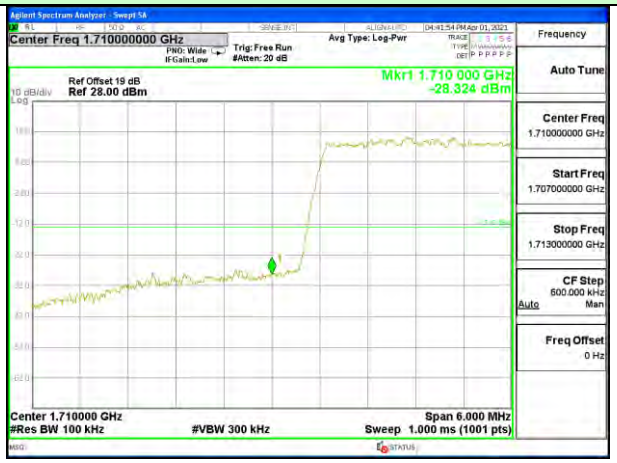
Test Mode: LTE Band 4 / 3MHz / 1RB / QPSK

Lowest channel

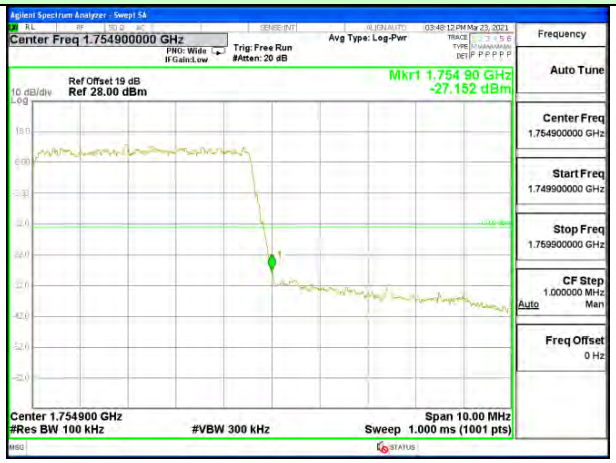


Highest channel

Test Mode: LTE Band 4 / 3MHz / 15RB / QPSK

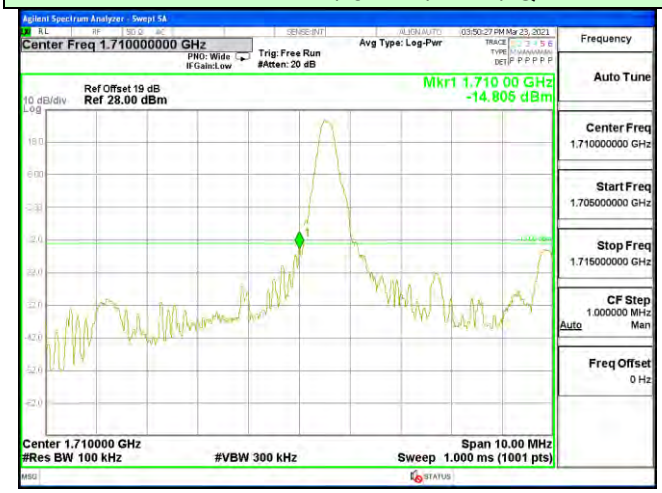


Lowest channel

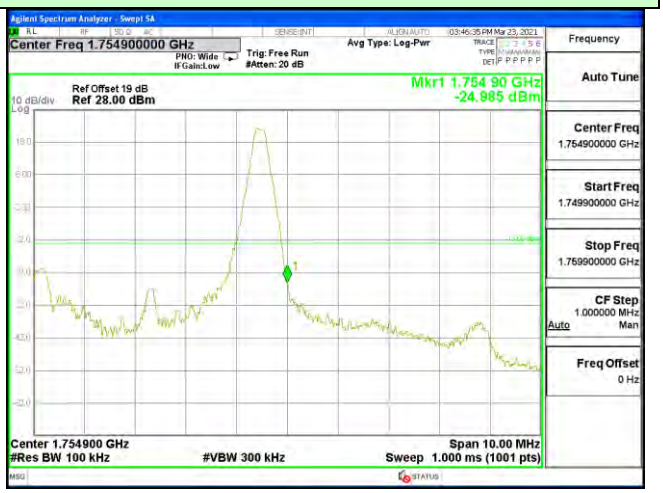


Highest channel

Test Mode: LTE Band 4 / 5MHz / 1RB / QPSK

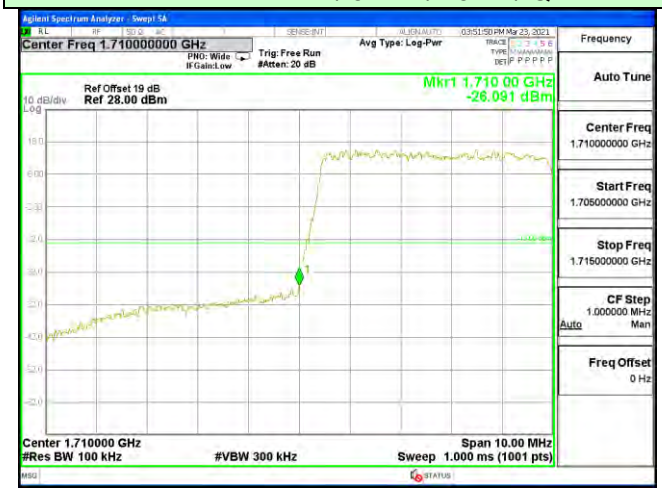


Lowest channel

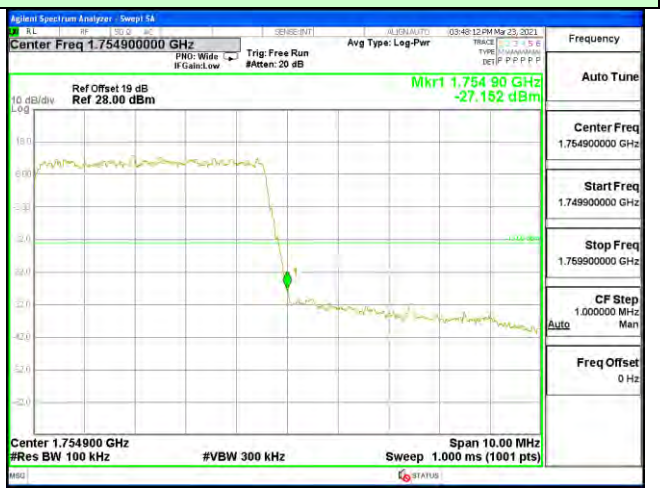


Highest channel

Test Mode: LTE Band 4 / 5MHz / 25RB / QPSK

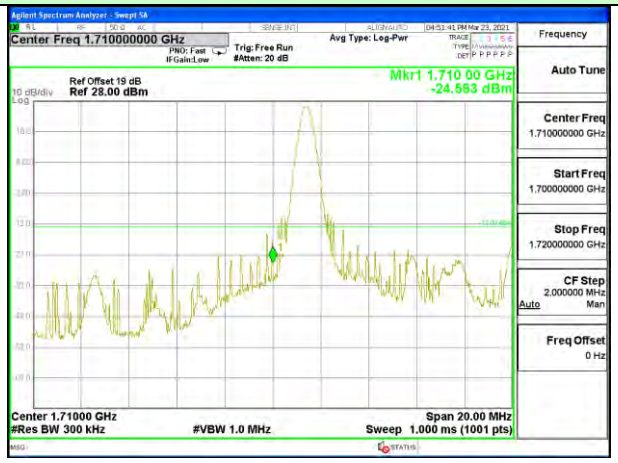


Lowest channel

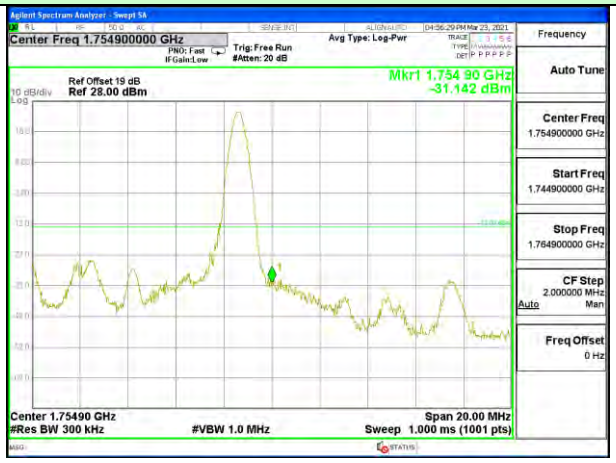


Highest channel

Test Mode: LTE Band 4 / 10MHz / 1RB / QPSK

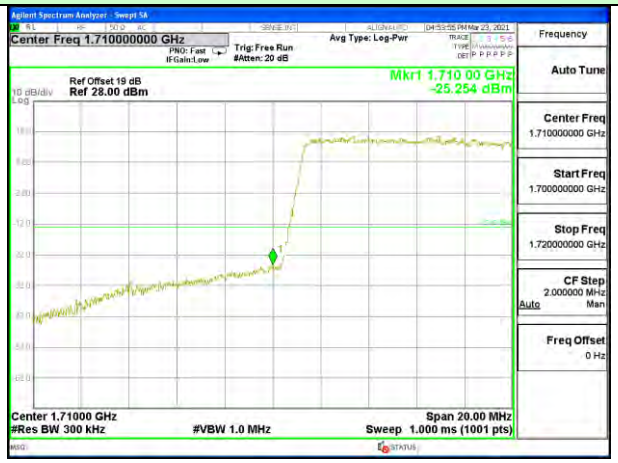


Lowest channel

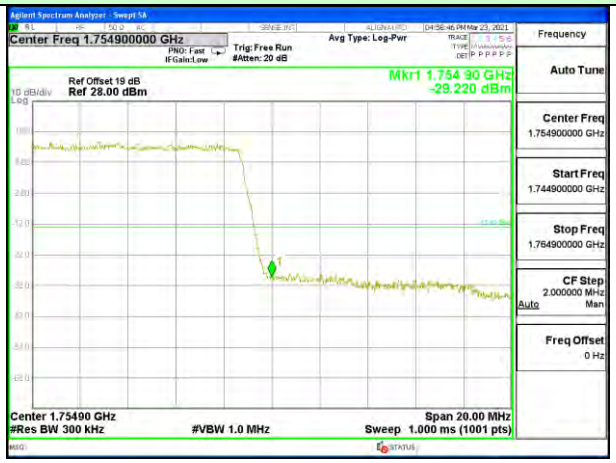


Highest channel

Test Mode: LTE Band 4 / 10MHz / 50RB / QPSK

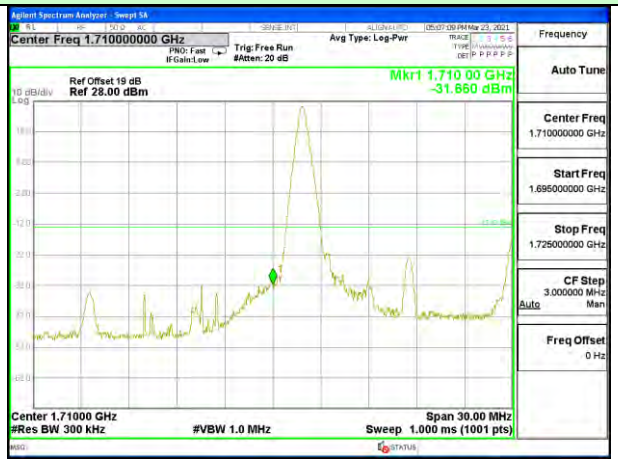


Lowest channel

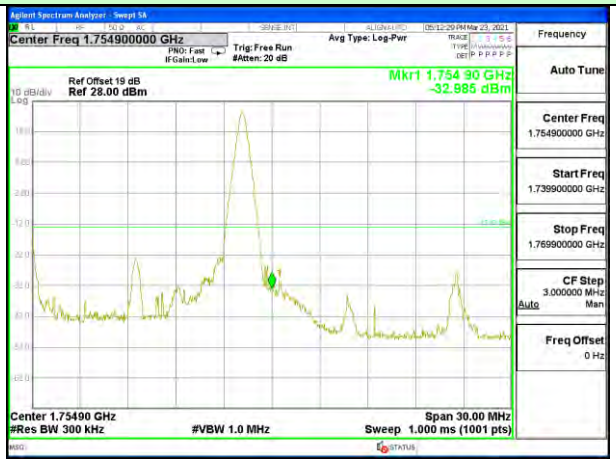


Highest channel

Test Mode: LTE Band 4 / 15MHz / 1RB / QPSK

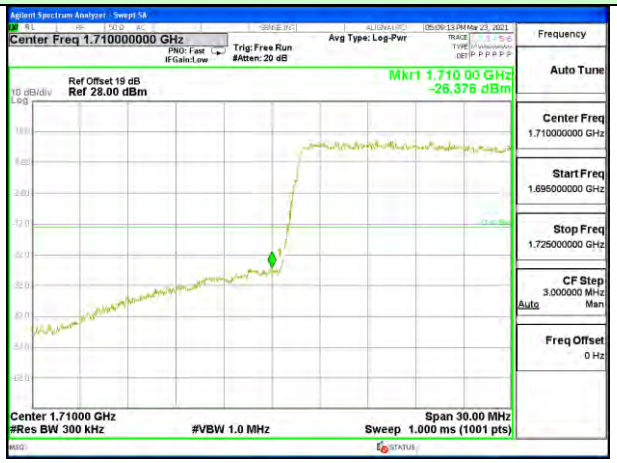


Lowest channel

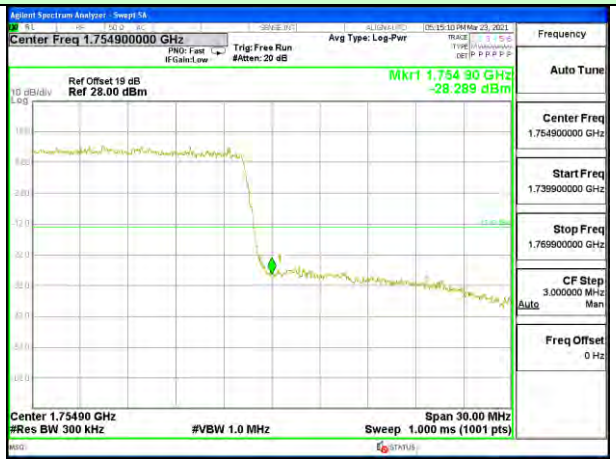


Highest channel

Test Mode: LTE Band 4 / 15MHz / 75RB / QPSK

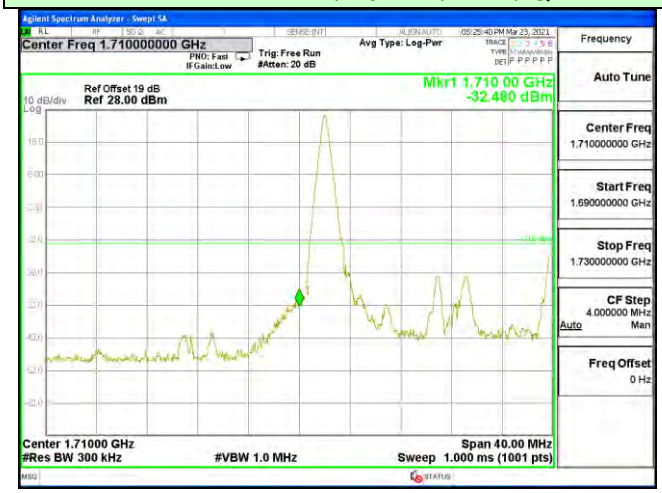


Lowest channel

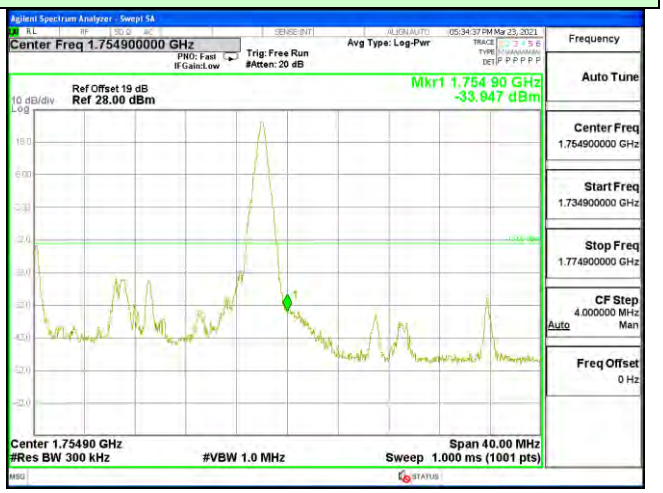


Highest channel

Test Mode: LTE Band 4 / 20MHz / 1RB / QPSK

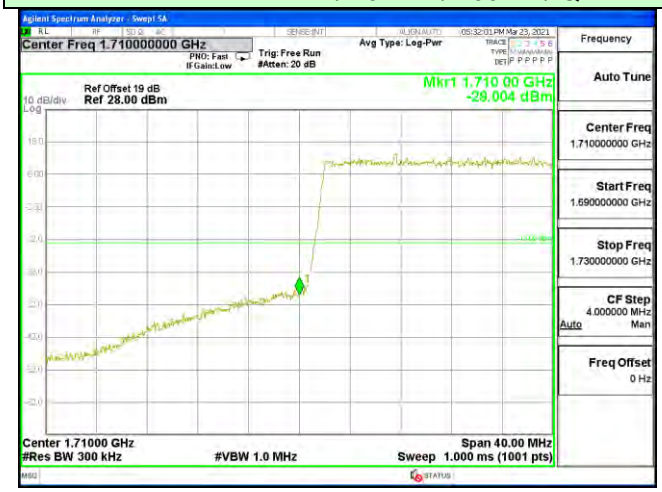


Lowest channel

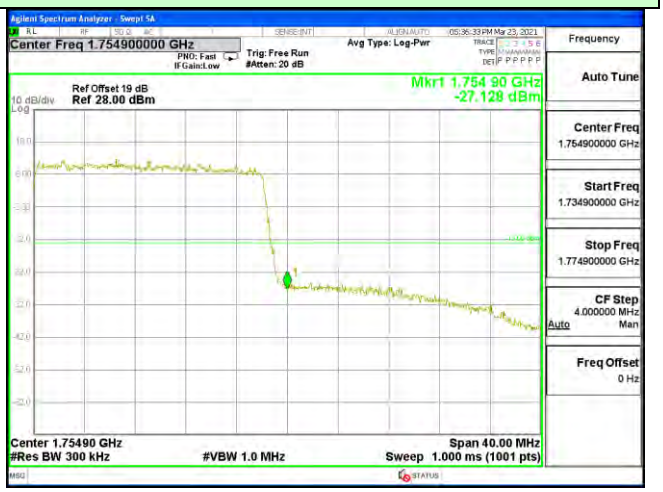


Highest channel

Test Mode: LTE Band 4 / 20MHz / 100RB / QPSK

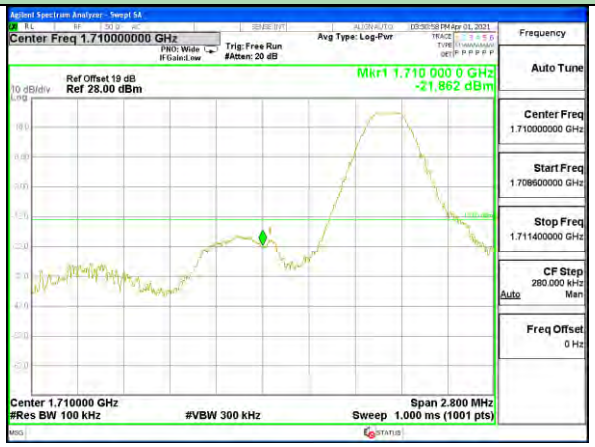


Lowest channel

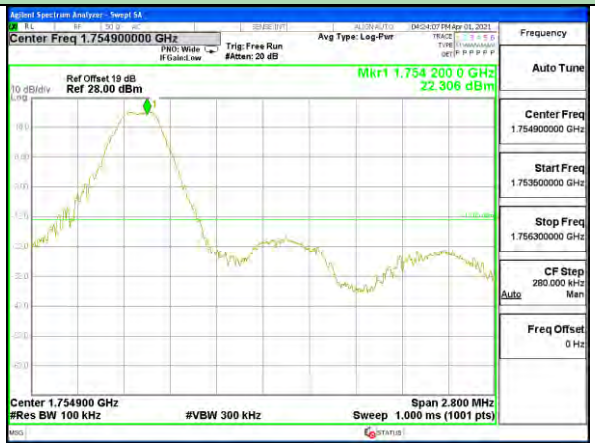


Highest channel

Test Mode: LTE Band 4 / 1.4MHz / 1RB / 16-QAM

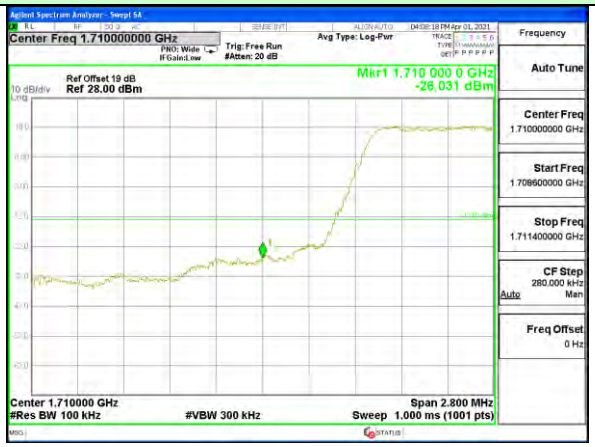


Lowest channel

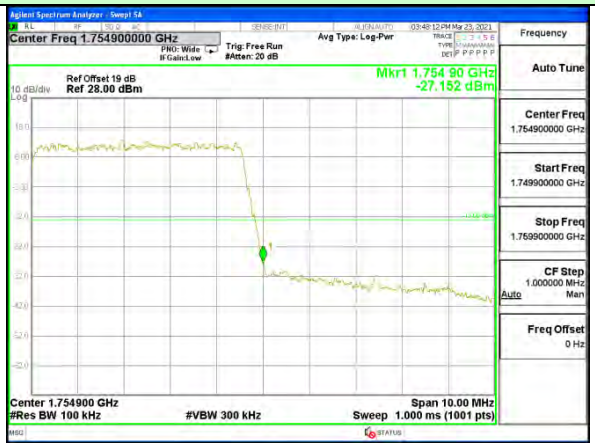


Highest channel

Test Mode: LTE Band 4 / 1.4MHz / 6RB / 16-QAM



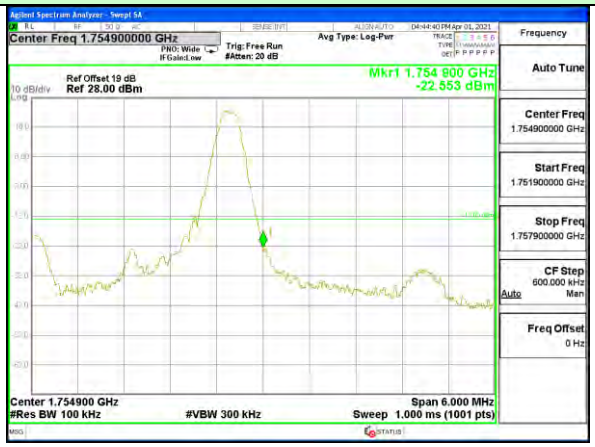
Lowest channel



Highest channel

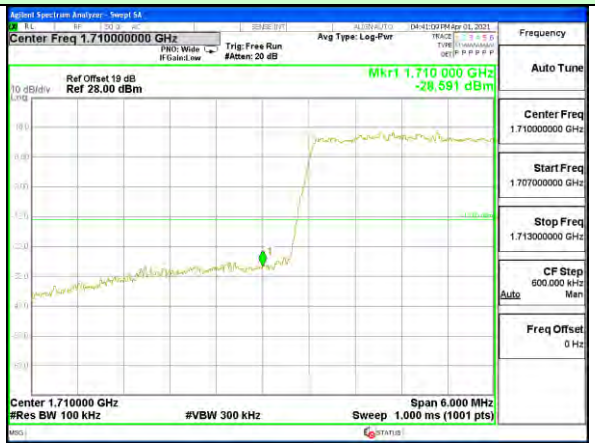
Test Mode: LTE Band 4 / 3MHz / 1RB / 16-QAM

Lowest channel

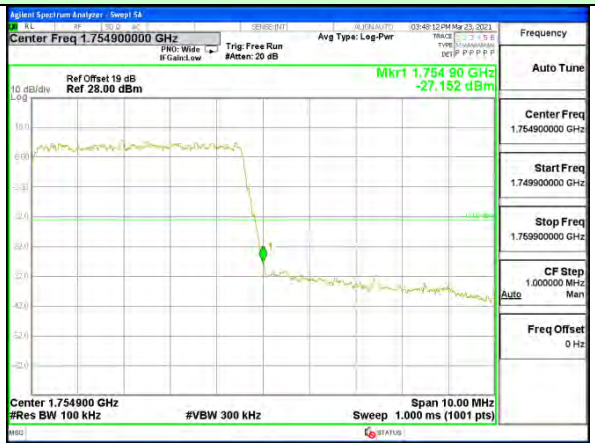


Highest channel

Test Mode: LTE Band 4 / 3MHz / 15RB / 16-QAM

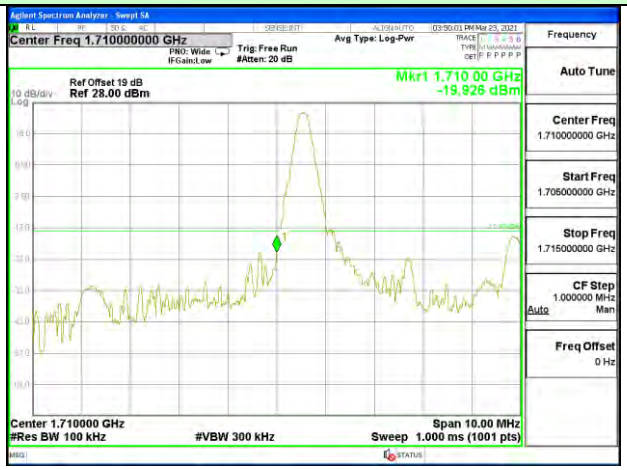


Lowest channel

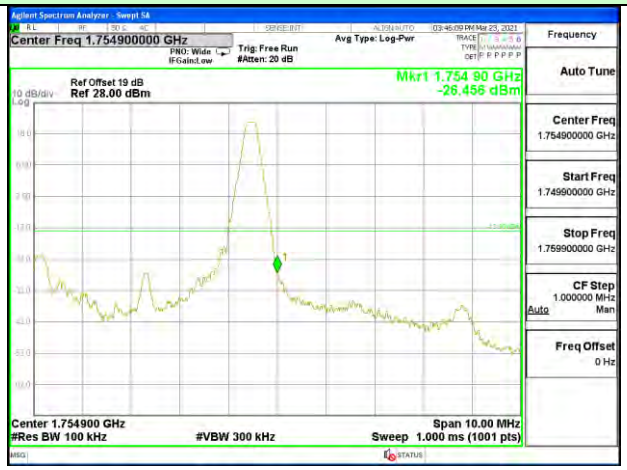


Highest channel

Test Mode: LTE Band 4 / 5MHz / 1RB / 16-QAM

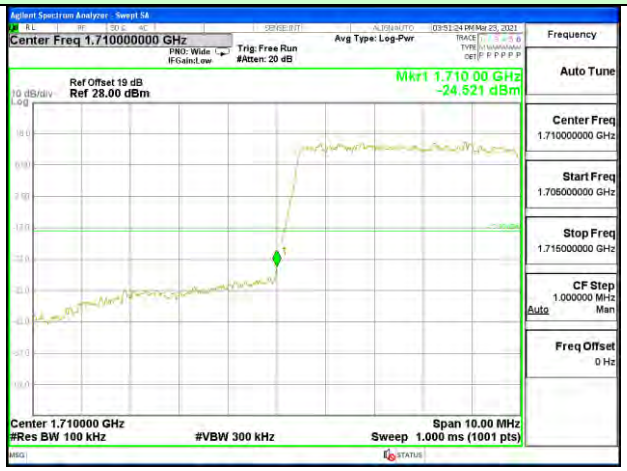


Lowest channel



Highest channel

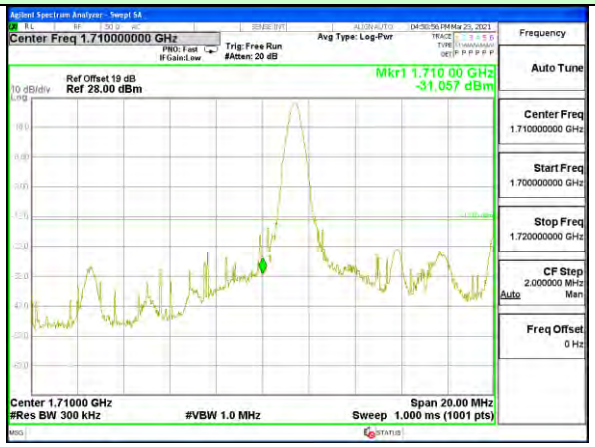
Test Mode: LTE Band 4 / 5MHz / 25RB / 16-QAM



Lowest channel

Highest channel

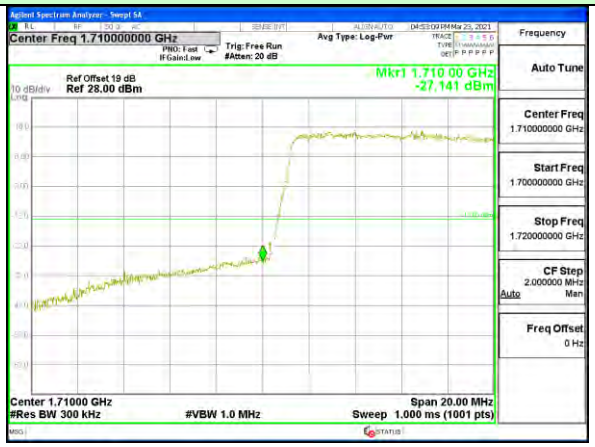
Test Mode: LTE Band 4 / 10MHz / 1RB / 16-QAM



Lowest channel

Highest channel

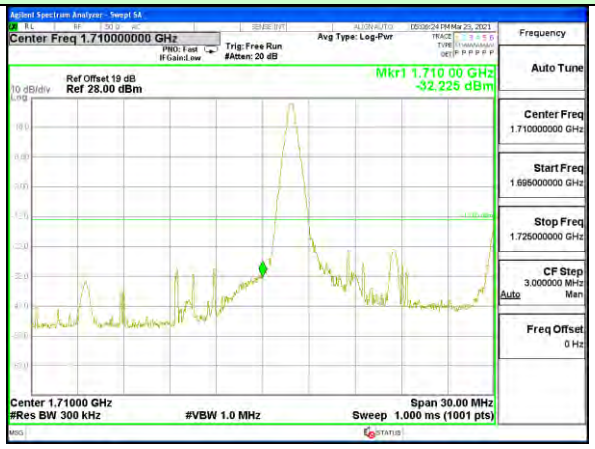
Test Mode: LTE Band 4 / 10MHz / 50RB / 16-QAM



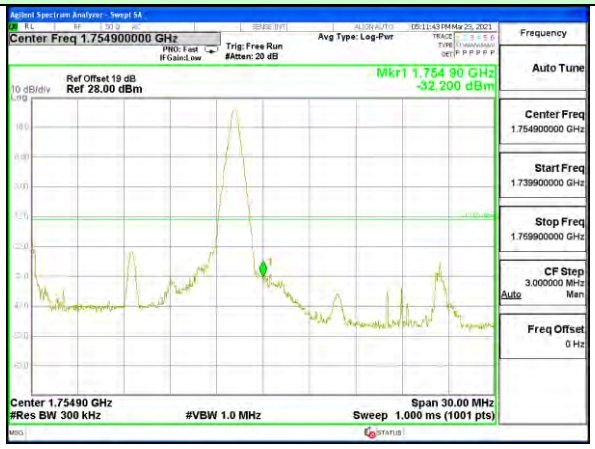
Lowest channel

Highest channel

Test Mode: LTE Band 4 / 15MHz / 1RB / 16-QAM

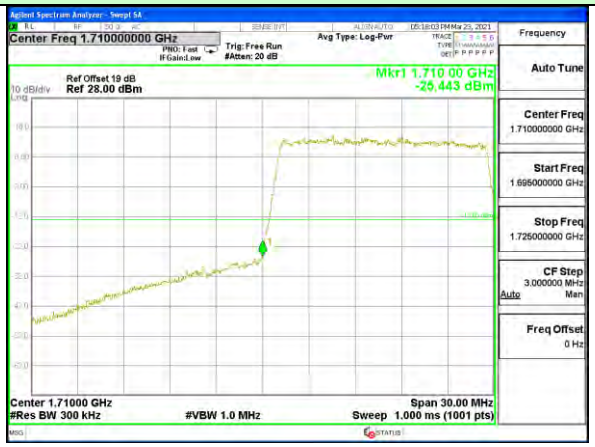


Lowest channel



Highest channel

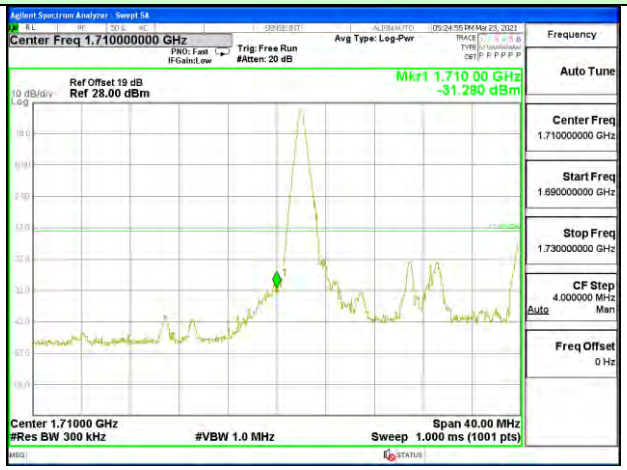
Test Mode: LTE Band 4 / 15MHz / 75RB / 16-QAM



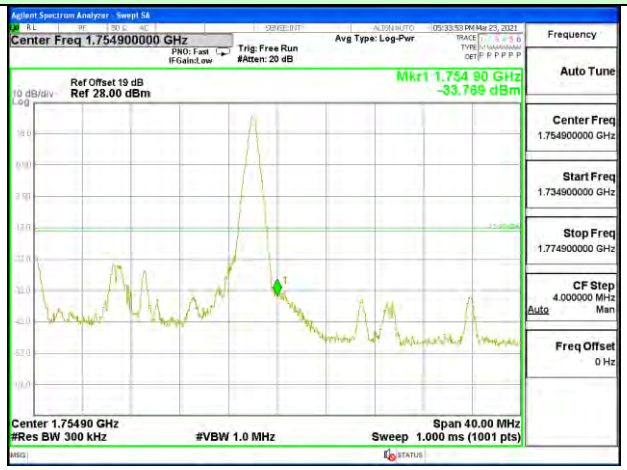
Lowest channel

Highest channel

Test Mode: LTE Band 4 / 20MHz / 1RB / 16-QAM

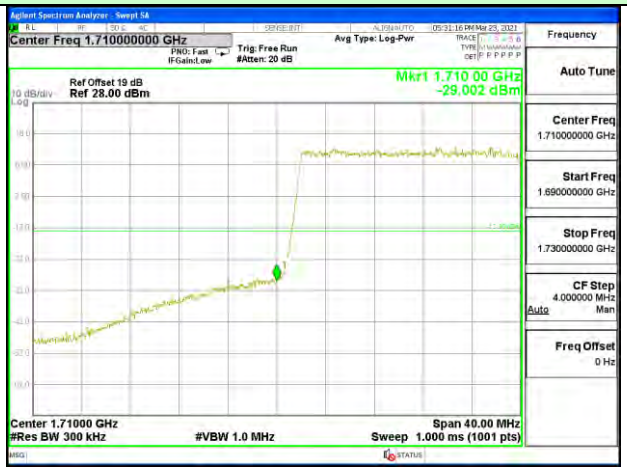


Lowest channel

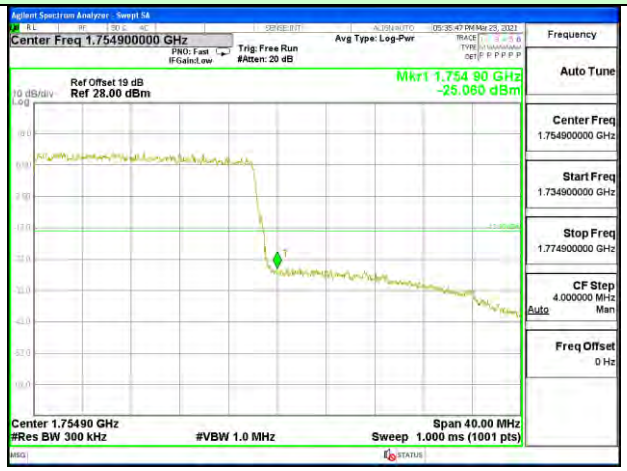


Highest channel

Test Mode: LTE Band 4 / 20MHz / 100RB / 16-QAM

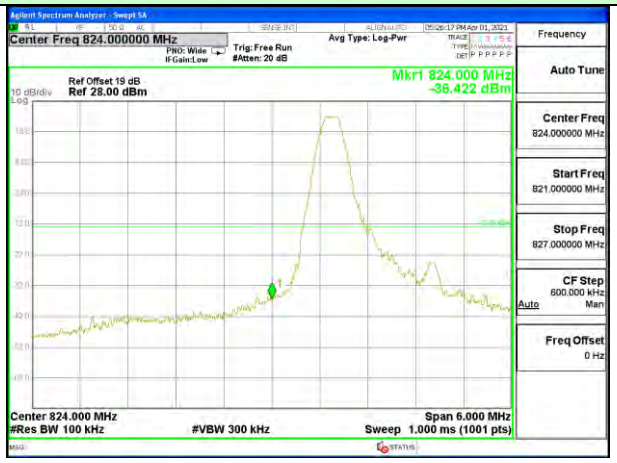


Lowest channel

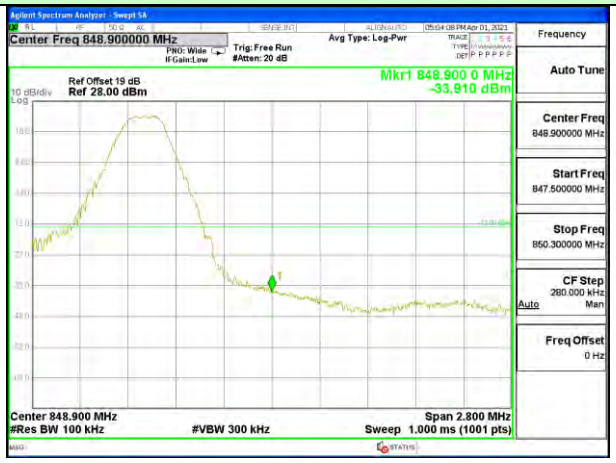


Highest channel

Test Mode: LTE Band 5 / 1.4MHz / 1RB / QPSK

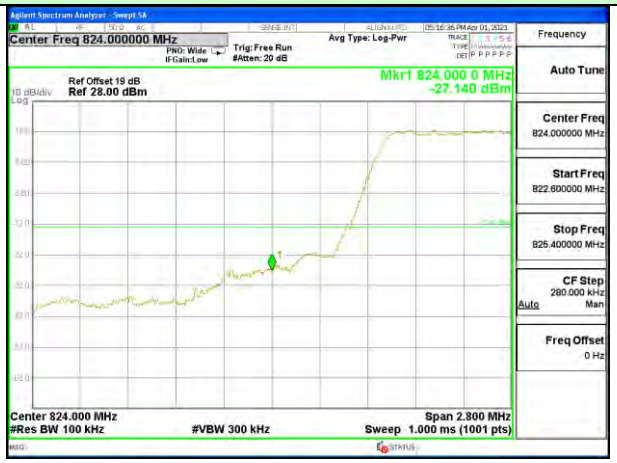


Lowest channel

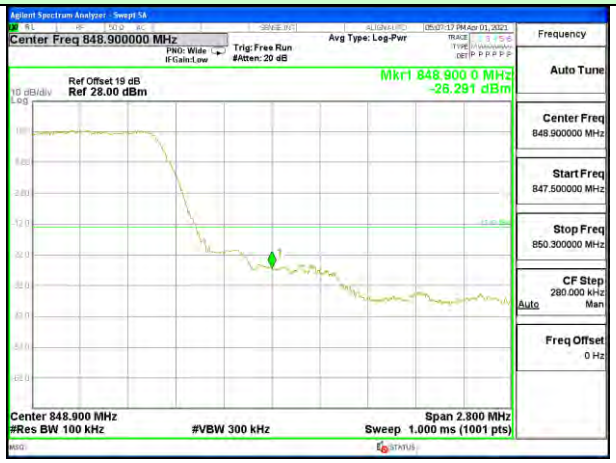


Highest channel

Test Mode: LTE Band 5 / 1.4MHz / 6RB / QPSK

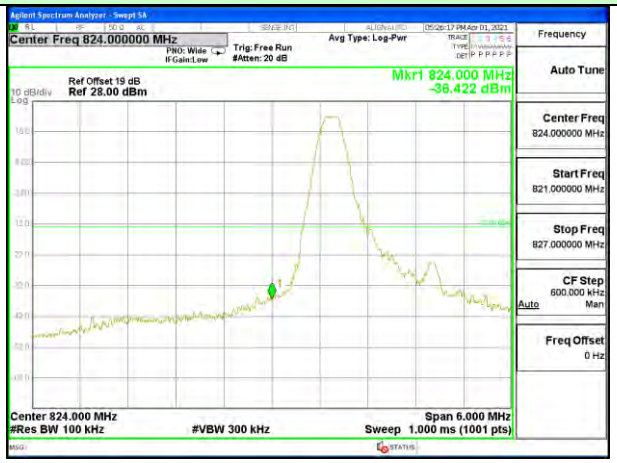


Lowest channel

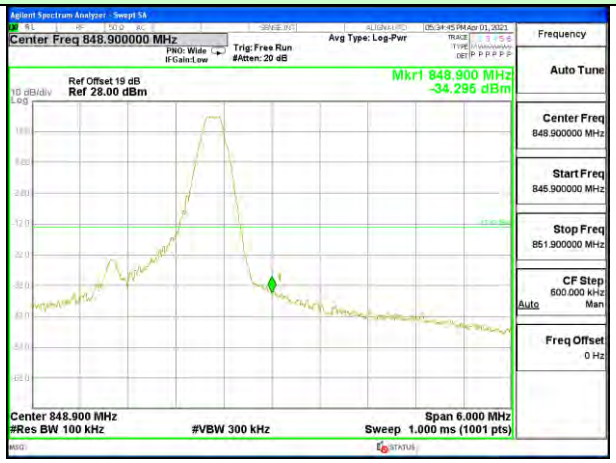


Highest channel

Test Mode: LTE Band 5 / 3MHz / 1RB / QPSK

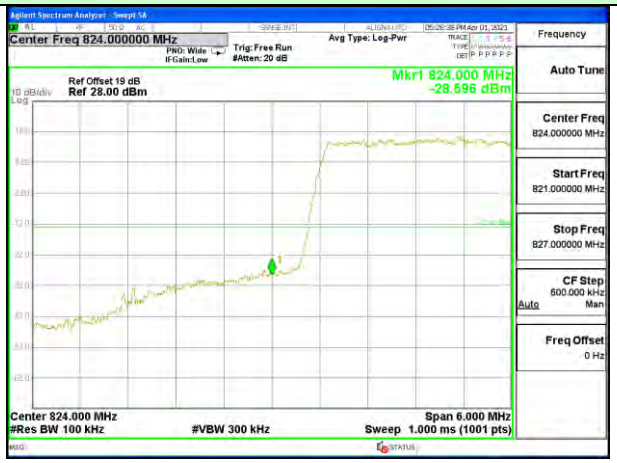


Lowest channel

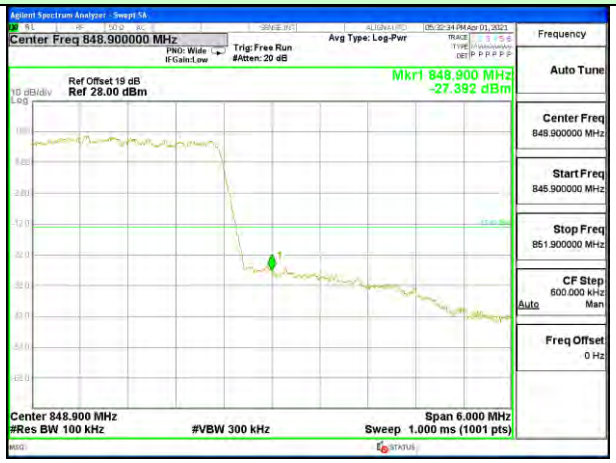


Highest channel

Test Mode: LTE Band 5 / 3MHz / 15RB / QPSK



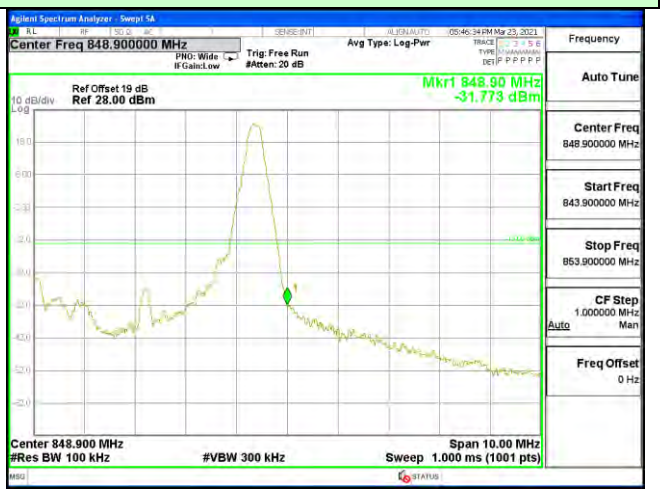
Lowest channel



Highest channel

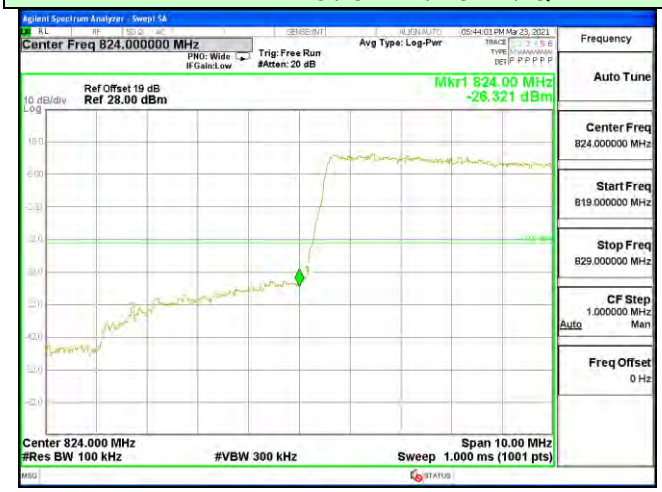
Test Mode: LTE Band 5 / 5MHz / 1RB / QPSK

Lowest channel



Highest channel

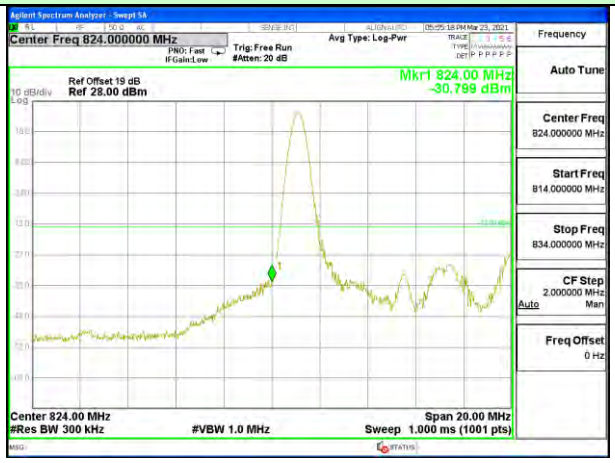
Test Mode: LTE Band 5 / 5MHz / 25RB / QPSK



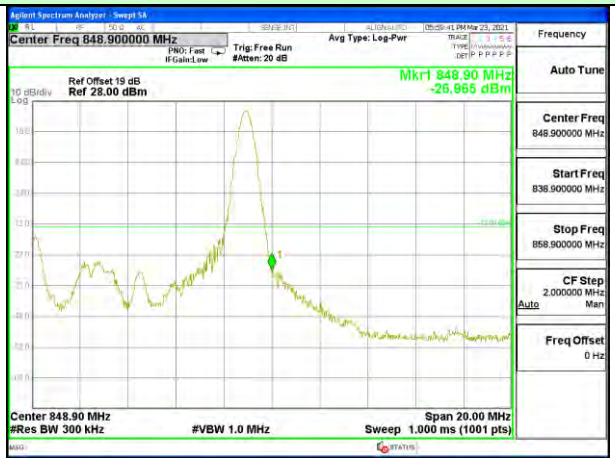
Lowest channel

Highest channel

Test Mode: LTE Band 5 / 10MHz / 1RB / QPSK

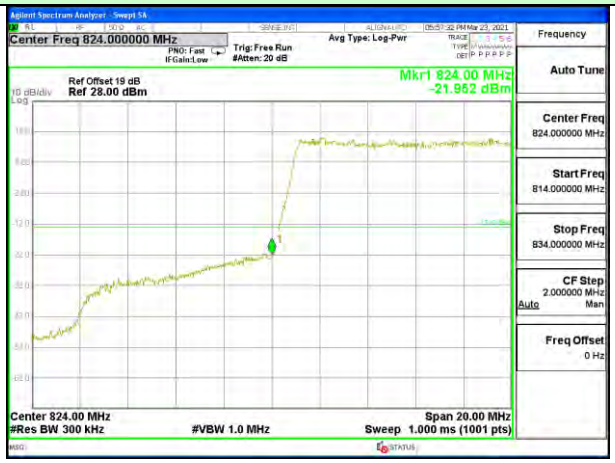


Lowest channel

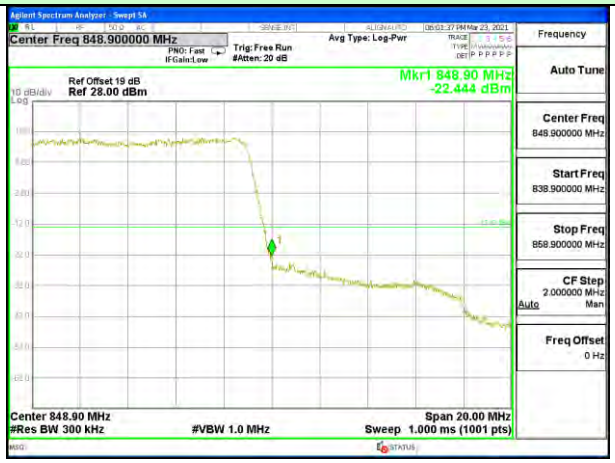


Highest channel

Test Mode: LTE Band 5 / 10MHz / 50RB / QPSK

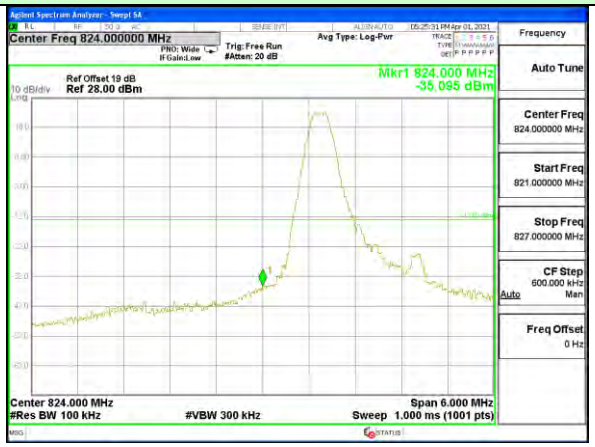


Lowest channel

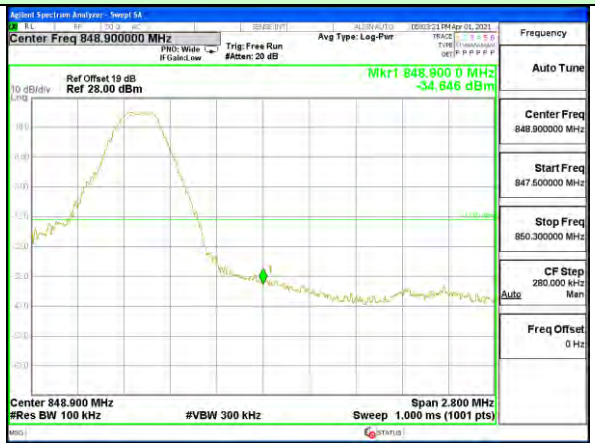


Highest channel

Test Mode: LTE Band 5 / 1.4MHz / 1RB / 16-QAM

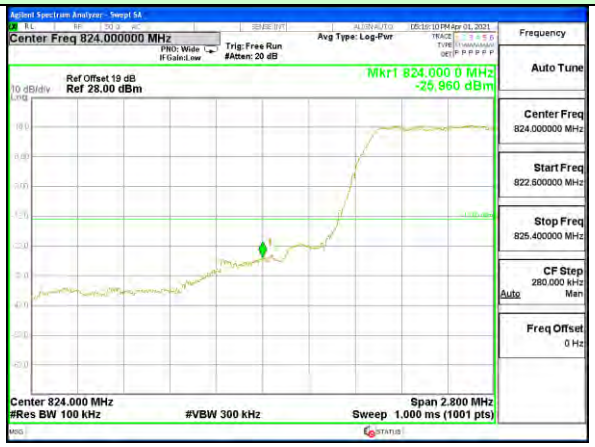


Lowest channel

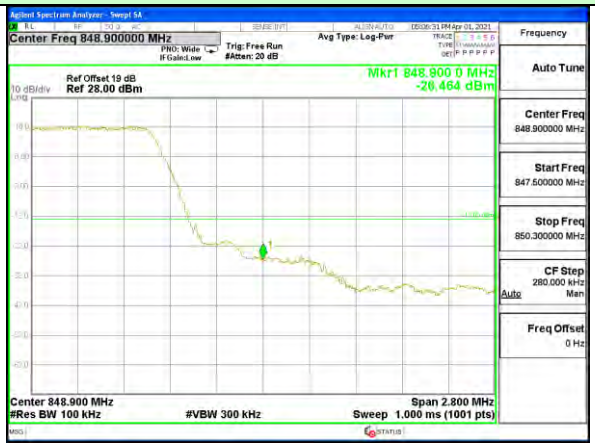


Highest channel

Test Mode: LTE Band 5 / 1.4MHz / 6RB / 16-QAM

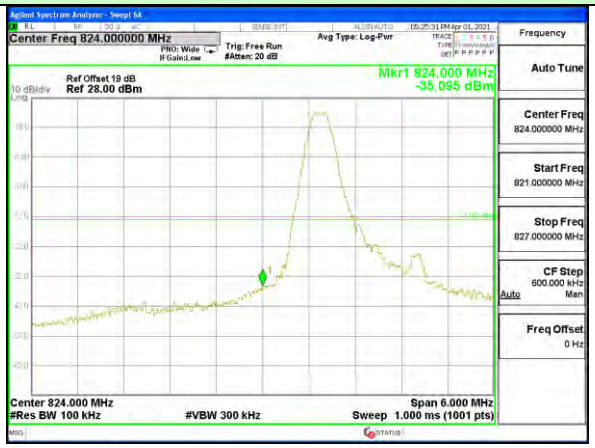


Lowest channel

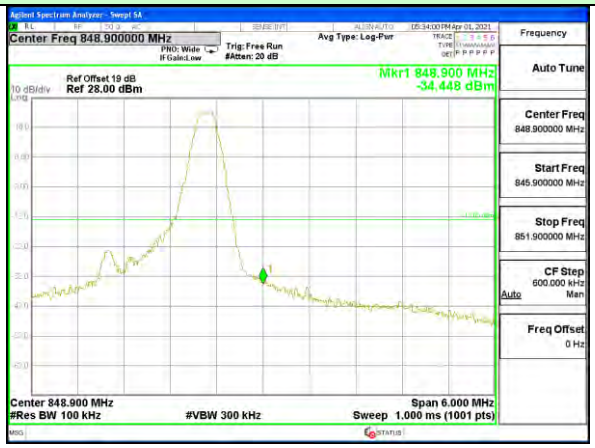


Highest channel

Test Mode: LTE Band 5 / 3MHz / 1RB / 16-QAM

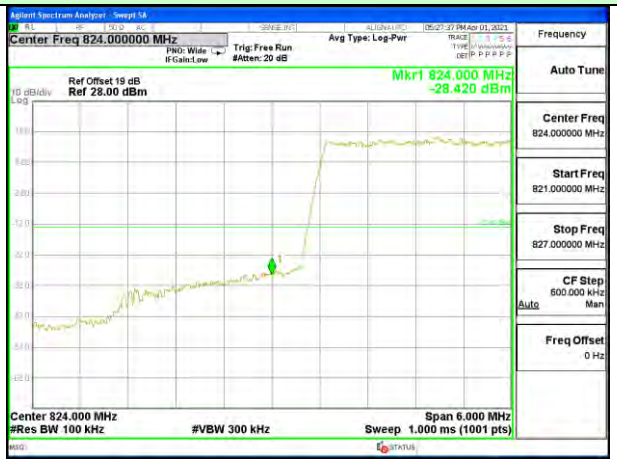


Lowest channel

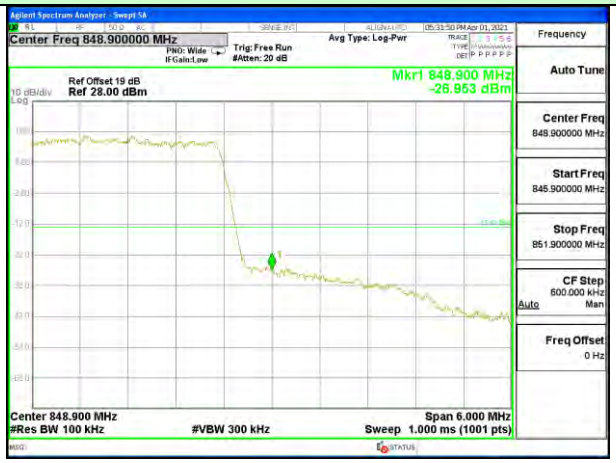


Highest channel

Test Mode: LTE Band 5 / 3MHz / 15RB / 16-QAM



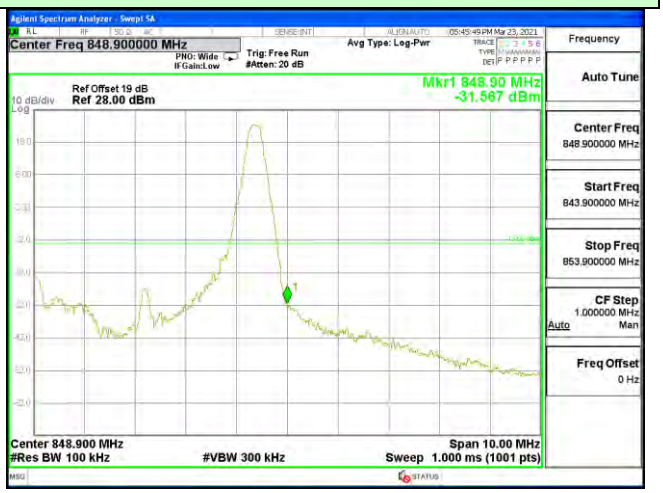
Lowest channel



Highest channel

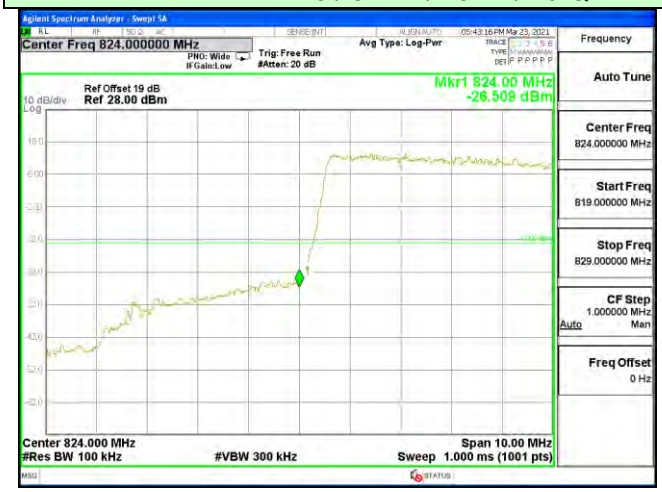
Test Mode: LTE Band 5 / 5MHz / 1RB / 16-QAM

Lowest channel

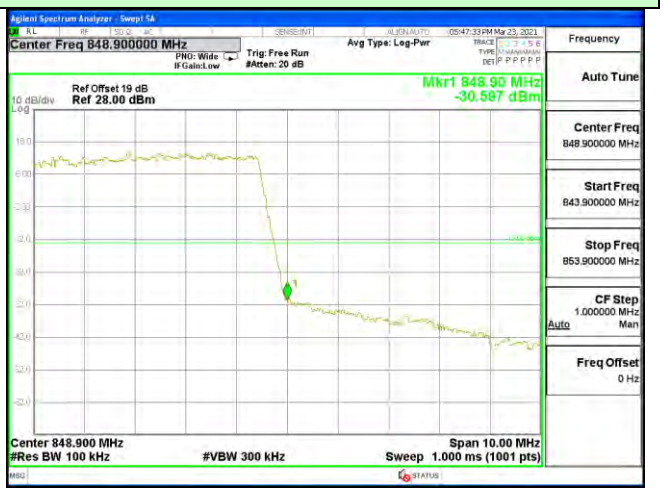


Highest channel

Test Mode: LTE Band 5 / 5MHz / 25RB / 16-QAM

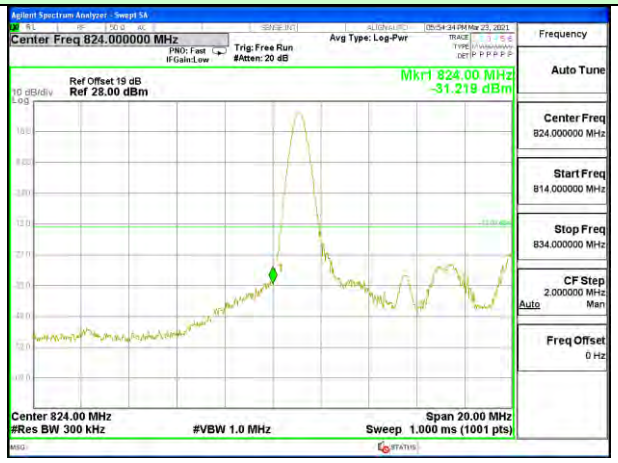


Lowest channel

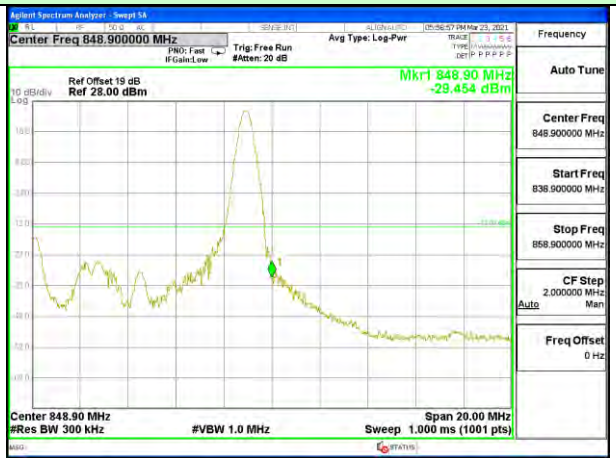


Highest channel

Test Mode: LTE Band 5 / 10MHz / 1RB / 16-QAM

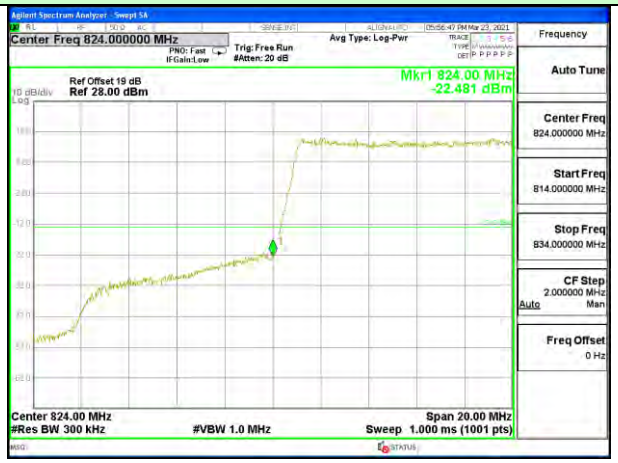


Lowest channel

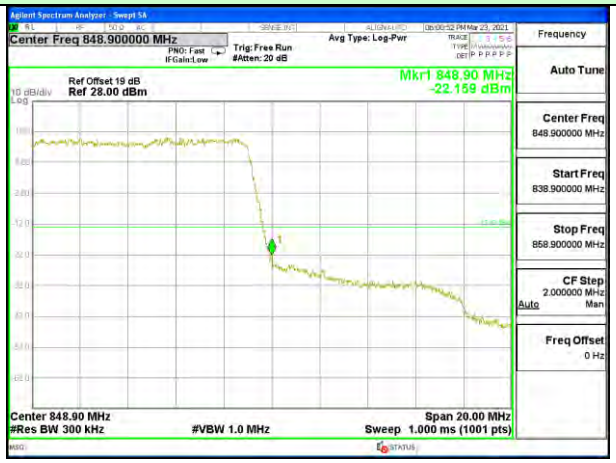


Highest channel

Test Mode: LTE Band 5 / 10MHz / 50RB / 16-QAM

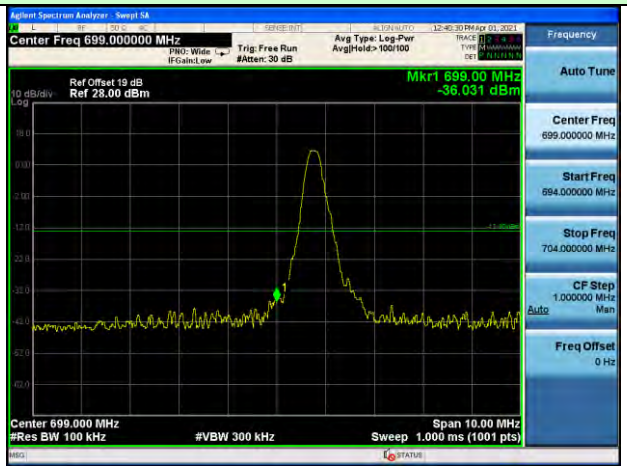


Lowest channel

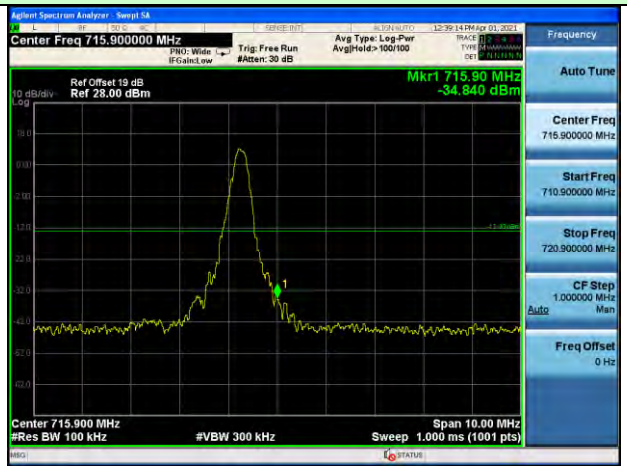


Highest channel

Test Mode: LTE Band 12 / 1.4MHz / 1RB / QPSK



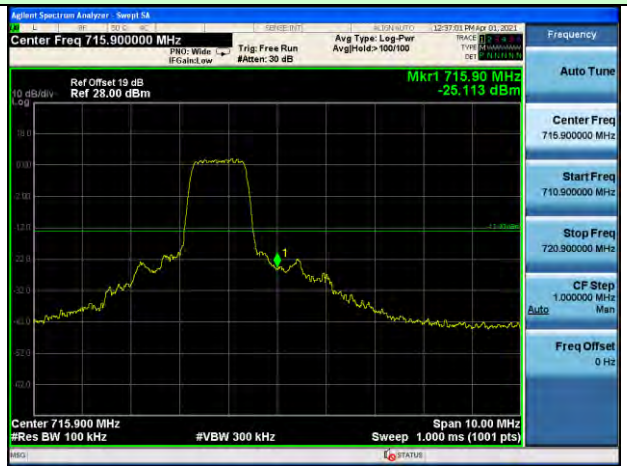
Lowest channel



Highest channel

Test Mode: LTE Band 12 / 1.4MHz / Full RB / QPSK

Lowest channel



Highest channel

Test Mode: LTE Band 12 / 3MHz / 1RB / QPSK

Lowest channel

Highest channel

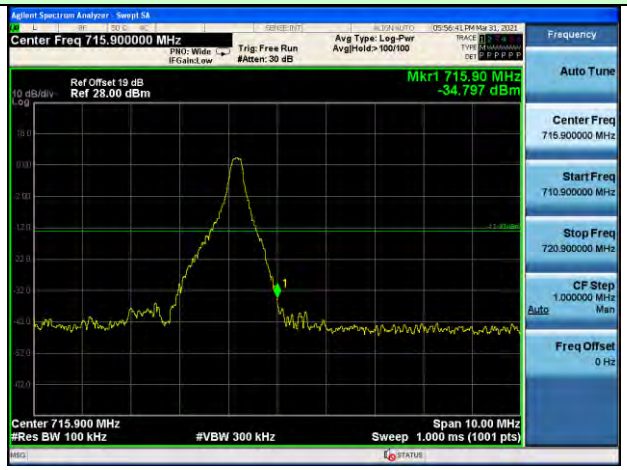
Test Mode: LTE Band 12 / 3MHz / Full RB / QPSK

Lowest channel

Highest channel

Test Mode: LTE Band 12 / 5MHz / 1RB / QPSK

Lowest channel



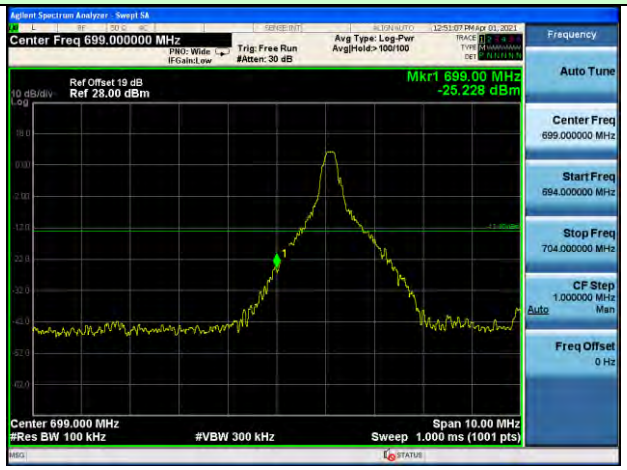
Highest channel

Test Mode: LTE Band 12 / 5MHz / Full RB / QPSK

Lowest channel

Highest channel

Test Mode: LTE Band 12 / 10MHz / 1RB / QPSK



Lowest channel

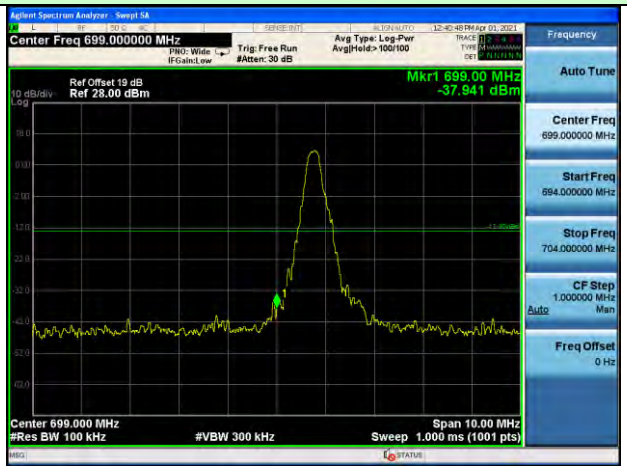
Highest channel

Test Mode: LTE Band 12 / 10MHz / Full RB / QPSK

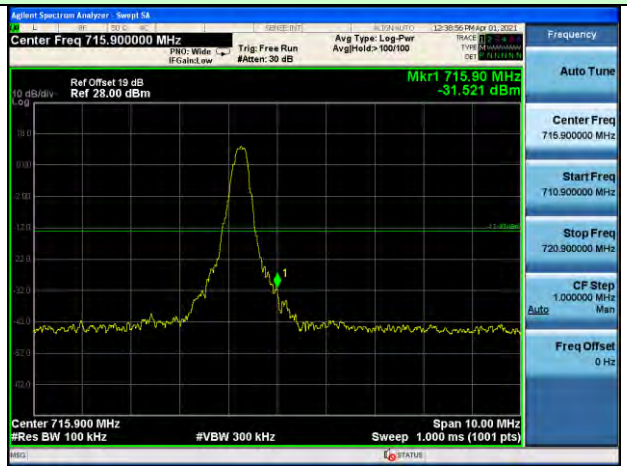
Lowest channel

Highest channel

Test Mode: LTE Band 12 / 1.4MHz / 1RB / 16-QAM



Lowest channel



Highest channel

Test Mode: LTE Band 12 / 1.4MHz / Full RB /16-QAM

Lowest channel

Highest channel

Test Mode: LTE Band 12 / 3MHz / 1 RB / 16-QAM

Lowest channel

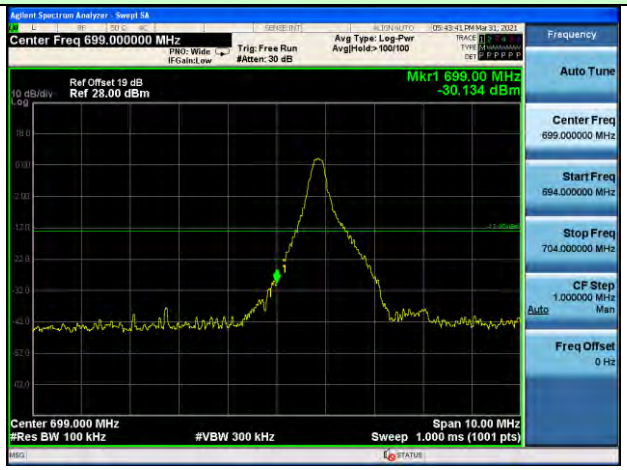
Highest channel

Test Mode: LTE Band 12 / 3MHz / Full RB /16-QAM

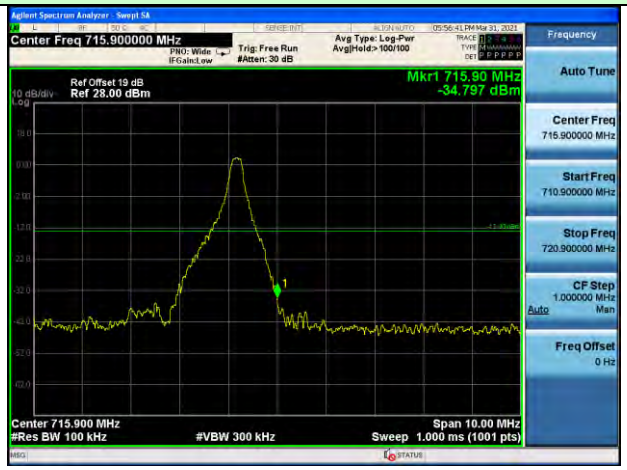
Lowest channel

Highest channel

Test Mode: LTE Band 12 / 5MHz / 1RB / 16-QAM



Lowest channel



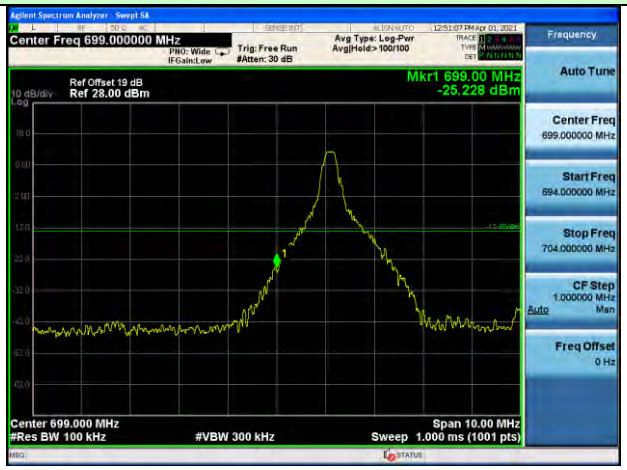
Highest channel

Test Mode: LTE Band 12 / 5MHz / Full RB /16-QAM

Lowest channel

Highest channel

Test Mode: LTE Band 12 / 10MHz / 1RB / 16-QAM



Lowest channel

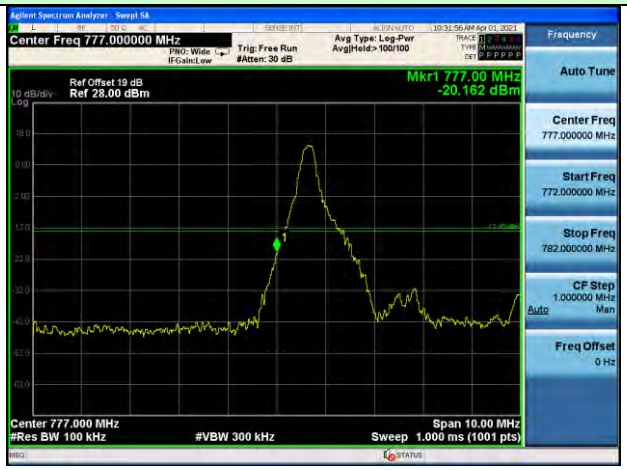
Highest channel

Test Mode: LTE Band 12 / 10MHz / Full RB /16-QAM

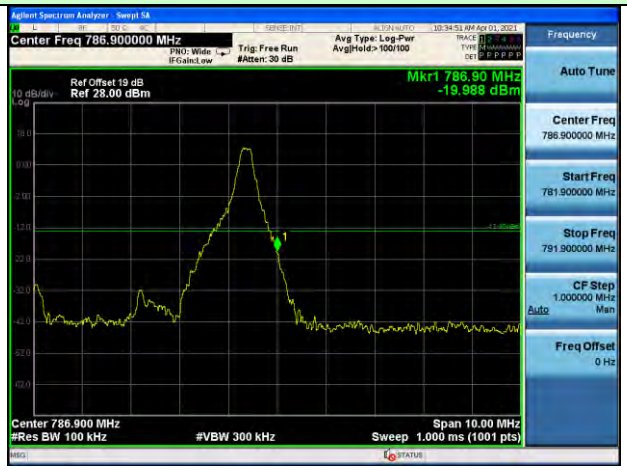
Lowest channel

Highest channel

Test Mode: LTE Band 13 / 5MHz / 1RB / QPSK



Lowest channel



Highest channel

Test Mode: LTE Band 13 / 5MHz / 25RB / QPSK

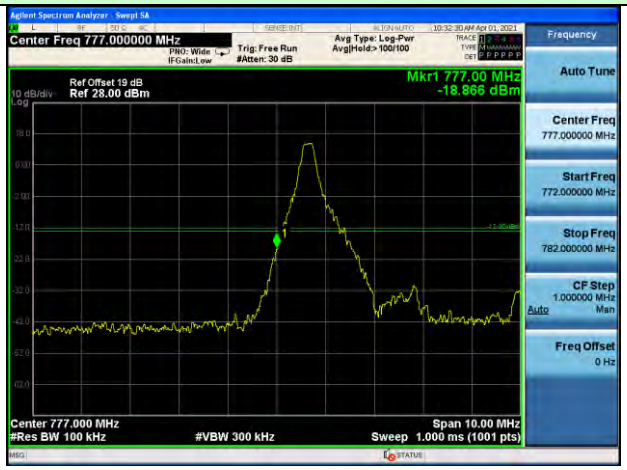
Lowest channel

Highest channel

Test Mode: LTE Band 13 / 10MHz / 50RB / QPSK

Lowest channel

Test Mode: LTE Band 13 / 5MHz / 1RB / 16-QAM



Lowest channel

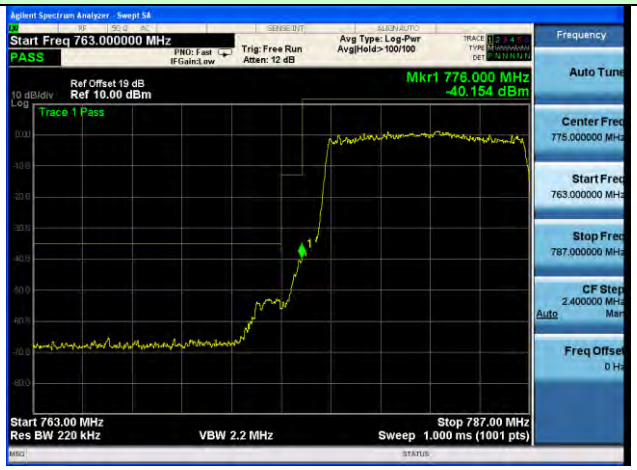
Highest channel

Test Mode: LTE Band 13 / 5MHz / 25RB / 16-QAM

Lowest channel

Highest channel

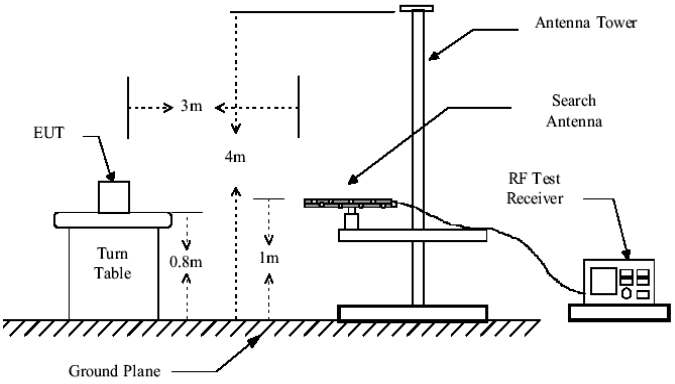
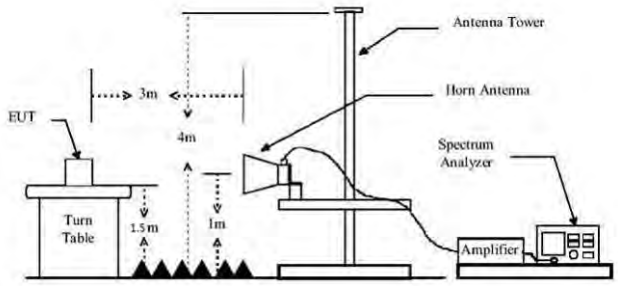
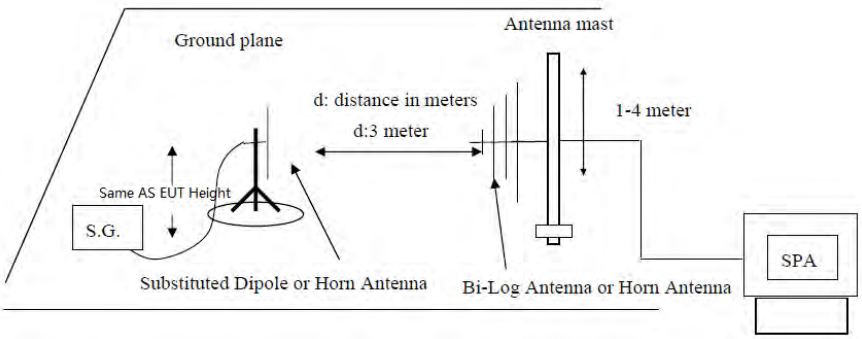
Test Mode: LTE Band 13 / 10MHz / 50RB / 16-QAM



Lowest channel

Note: All bandwidth and modulation are tested, only the worst result is reported.

4.8 ERP, EIRP Measurement

Test Requirement:	FCC part22.913(a), FCC part24.232(b) and FCC part 27.50
Test Method:	ANSI C63.26:2015
Limit:	LTE Band 2: 2W (EIRP) LTE Band 4: 1W (EIRP) LTE Band 5(Upper Band): [7W (ERP) for FCC] LTE Band 12: 3W (EIRP) LTE Band 13: 3W (EIRP)
Test setup:	Below 1GHz  Above 1GHz  Substituted method: 

Test Procedure:	1. The EUT was placed on an non-conductive turntable using a non-conductive support. The radiated emission at the fundamental frequency was measured at 3 m with a test antenna and EMI spectrum analyzer. 2. During the measurement, the EUT was communication with the station. The highest emission was recorded with the rotation of the turntable and the lowering of the test antenna from 4m to 1m. The reading was recorded and the field strength (E in dBuV/m) was calculated. 3. ERP were measured using a substitution method. The EUT was replaced by dipole antenna connected, the S.G. output was recorded and ERP was calculated asfollows: ERP = S.G. output (dBm) + Antenna Gain (dBd) – Cable Loss (dB) 4. EIRP were measured using a substitution method. The EUT was replaced by or horn antenna connected, the S.G. output was recorded and EIRP was calculated as follows: EIRP = S.G. output (dBm) + Antenna Gain (dBi) – Cable Loss (dB)
Test Instruments:	Refer to section 3 for details
Test mode:	Refer to section 4.1 for details
Test results:	Pass

Measurement Data

LTE BAND 2 QPSK-5MHz	Frequency (MHz)	PMea (dBm)	Pcl(dB)+PAg(dB)		Ga Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Polarity	Margin (dB)
	1852.5	-13.70	-29.3	-	9.8	25.40	33	H	-7.60
	1880	-14.58	-29.4	-	9.8	24.62	33	H	-8.38
	1907.5	-13.73	-29.3	-	9.8	25.37	33	H	-7.63
LTE BAND 2 QPSK-10MHz	Frequency (MHz)	PMea (dBm)	Pcl(dB)+PAg(dB)		Ga Antenna Gain(dBi)	EIRP (dBm)	Limit (dBm)	Polarity	Margin (dB)
	1855	-14.15	-29.3	-	9.8	24.95	33	H	-8.05
	1880	-14.57	-29.4	-	9.8	24.63	33	H	-8.37
	1905	-14.19	-29.3	-	9.8	24.91	33	H	-8.09
LTE BAND 2 QPSK-15MHz	Frequency (MHz)	PMea (dBm)	Pcl(dB)+PAg(dB)		Ga Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Polarity	Margin (dB)
	1857.5	-14.11	-29.3	-	9.8	24.99	33	H	-8.01
	1880	-14.26	-29.4	-	9.8	24.94	33	H	-8.06
	1902.5	-14.27	-29.3	-	9.8	24.83	33	H	-8.17
LTE BAND 2 QPSK-20MHz	Frequency (MHz)	PMea (dBm)	Pcl(dB)+PAg(dB)		Ga Antenna Gain(dBi)	EIRP (dBm)	Limit (dBm)	Polarity	Margin (dB)
	1860	-14.95	-29.3	-	9.8	24.15	33	H	-8.85
	1880	-14.73	-29.4	-	9.8	24.47	33	H	-8.53
	1900	-14.55	-29.3	-	9.8	24.55	33	H	-8.45
LTE BAND 2 16QAM-5MHz	Frequency (MHz)	PMea (dBm)	Pcl(dB)+PAg(dB)		Ga Antenna Gain(dBi)	EIRP (dBm)	Limit (dBm)	Polarity	Margin (dB)
	1852.5	-15.02	-29.3	-	9.8	24.08	33	H	-8.92
	1880	-14.63	-29.4	-	9.8	24.57	33	H	-8.43
	1907.5	-14.75	-29.3	-	9.8	24.35	33	H	-8.65
LTE BAND 2 16QAM-10MHz	Frequency (MHz)	PMea (dBm)	Pcl(dB)+PAg(dB)		Ga Antenna Gain(dBi)	EIRP (dBm)	Limit (dBm)	Polarity	Margin (dB)
	1855	-14.33	-29.3	-	9.8	24.77	33	H	-8.23
	1880	-14.82	-29.4	-	9.8	24.38	33	H	-8.62
	1905	-14.52	-29.3	-	9.8	24.58	33	H	-8.42
LTE BAND 2 16QAM-15MHz	Frequency (MHz)	PMea (dBm)	Pcl(dB)+PAg(dB)		Ga Antenna Gain(dBi)	EIRP (dBm)	Limit (dBm)	Polarity	Margin (dB)
	1857.5	-15.04	-29.3	-	9.8	24.06	33	H	-8.94
	1880	-14.24	-29.4	-	9.8	24.96	33	H	-8.04
	1902.5	-14.35	-29.3	-	9.8	24.75	33	H	-8.25
LTE BAND 2 16QAM-20MHz	Frequency (MHz)	PMea (dBm)	Pcl(dB)+PAg(dB)		Ga Antenna Gain(dBi)	EIRP (dBm)	Limit (dBm)	Polarity	Margin (dB)
	1860	-14.15	-29.3	-	9.8	24.95	33	H	-8.05
	1880	-14.43	-29.4	-	9.8	24.77	33	H	-8.23
	1900	-14.75	-29.3	-	9.8	24.35	33	H	-8.65

LTE BAND 4 QPSK-5MHz	Frequency (MHz)	PMea (dBm)	Pcl(dB)+PAg(dB)	Ga Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Polarity	Margin (dB)
	1712.5	-13.14	-29.6 -	8.1	24.56	30	H	-5.44
	1732.5	-13.67	-29.6 -	8.1	24.03	30	H	-5.97
	1752.5	-13.43	-29.5 -	8.1	24.17	30	H	-5.83
LTE BAND 4 QPSK-10MHz	Frequency (MHz)	PMea (dBm)	Pcl(dB)+PAg(dB)	Ga Antenna Gain(dBi)	EIRP (dBm)	Limit (dBm)	Polarity	Margin (dB)
	1715	-12.93	-29.6 -	8.1	24.77	30	H	-5.23
	1732.5	-12.82	-29.6 -	8.1	24.88	30	H	-5.12
	1750	-12.94	-29.5 -	8.1	24.66	30	H	-5.34
LTE BAND 4 QPSK-15MHz	Frequency (MHz)	PMea (dBm)	Pcl(dB)+PAg(dB)	Ga Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Polarity	Margin (dB)
	1717.5	-13.43	-29.6 -	8.1	24.27	30	H	-5.73
	1732.5	-13.14	-29.6 -	8.1	24.56	30	H	-5.44
	1747.5	-12.91	-29.5 -	8.1	24.69	30	H	-5.31
LTE BAND 4 QPSK-20MHz	Frequency (MHz)	PMea (dBm)	Pcl(dB)+PAg(dB)	Ga Antenna Gain(dBi)	EIRP (dBm)	Limit (dBm)	Polarity	Margin (dB)
	1720	-13.40	-29.6 -	8.1	24.30	30	H	-5.70
	1732.5	-13.54	-29.6 -	8.1	24.16	30	H	-5.84
	1745	-13.22	-29.5 -	8.1	24.38	30	H	-5.62
LTE BAND 4 16QAM-5MHz	Frequency (MHz)	PMea (dBm)	Pcl(dB)+PAg(dB)	Ga Antenna Gain(dBi)	EIRP (dBm)	Limit (dBm)	Polarity	Margin (dB)
	1712.5	-13.48	-29.6 -	8.1	24.22	30	H	-5.78
	1732.5	-13.66	-29.6 -	8.1	24.04	30	H	-5.96
	1752.5	-12.67	-29.5 -	8.1	24.93	30	H	-5.07
LTE BAND 4 16QAM-10MHz	Frequency (MHz)	PMea (dBm)	Pcl(dB)+PAg(dB)	Ga Antenna Gain(dBi)	EIRP (dBm)	Limit (dBm)	Polarity	Margin (dB)
	1715	-13.64	-29.6 -	8.1	24.06	30	H	-5.94
	1732.5	-13.05	-29.6 -	8.1	24.65	30	H	-5.35
	1750	-13.00	-29.5 -	8.1	24.60	30	H	-5.40
LTE BAND 4 16QAM-15MHz	Frequency (MHz)	PMea (dBm)	Pcl(dB)+PAg(dB)	Ga Antenna Gain(dBi)	EIRP (dBm)	Limit (dBm)	Polarity	Margin (dB)
	1717.5	-13.24	-29.6 -	8.1	24.46	30	H	-5.54
	1732.5	-13.54	-29.6 -	8.1	24.16	30	H	-5.84
	1747.5	-13.19	-29.5 -	8.1	24.41	30	H	-5.59
LTE BAND 4 16QAM-20MHz	Frequency (MHz)	PMea (dBm)	Pcl(dB)+PAg(dB)	Ga Antenna Gain(dBi)	EIRP (dBm)	Limit (dBm)	Polarity	Margin (dB)
	1720	-13.44	-29.6 -	8.1	24.26	30	H	-5.74
	1732.5	-12.85	-29.6 -	8.1	24.85	30	H	-5.15
	1745	-13.42	-29.5 -	8.1	24.18	30	H	-5.82

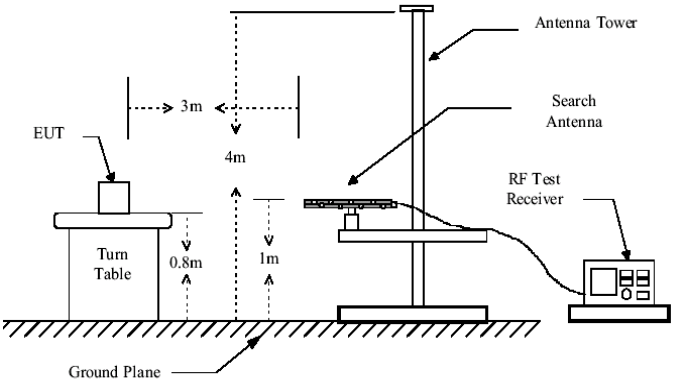
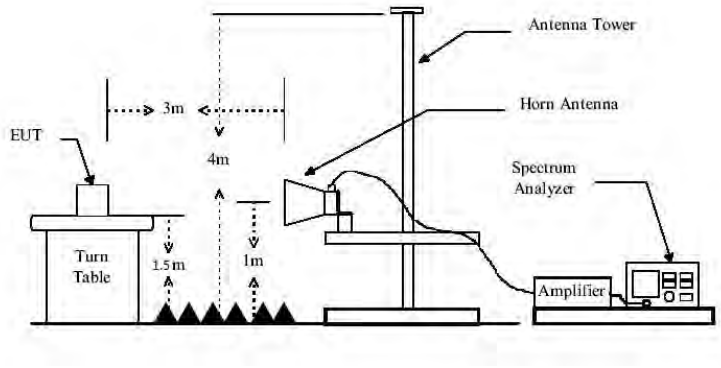
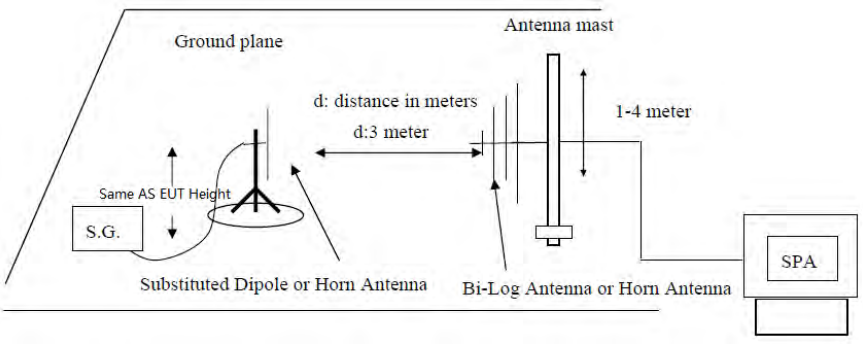
LTE BAND 5 QPSK-5MHz	Frequency (MHz)	PMea (dBm)	Pcl(dB)+PAg(dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP (dBm)	Limit (dBm)	Polarity	Margin (dB)
	826.5	-8.97	-33.6 -	-0.84	2.15	21.64	38.45	H	-16.81
	836.5	-9.39	-33.5 -	-0.74	2.15	21.22	38.45	H	-17.23
	846.5	-8.84	-33.5 -	-0.73	2.15	21.78	38.45	H	-16.67
LTE BAND 5 QPSK-10MHz	Frequency (MHz)	PMea (dBm)	Pcl(dB)+PAg(dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP (dBm)	Limit (dBm)	Polarity	Margin (dB)
	829	-8.86	-33.6 -	-0.84	2.15	21.75	38.45	H	-16.70
	836.5	-9.18	-33.5 -	-0.74	2.15	21.43	38.45	H	-17.02
	844	-9.47	-33.5 -	-0.78	2.15	21.10	38.45	H	-17.35
LTE BAND 5 16QAM-5MHz	Frequency (MHz)	PMea (dBm)	Pcl(dB)+PAg(dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP (dBm)	Limit (dBm)	Polarity	Margin (dB)
	826.5	-9.30	-33.6 -	-0.84	2.15	21.31	38.45	H	-17.14
	836.5	-8.94	-33.5 -	-0.74	2.15	21.67	38.45	H	-16.78
	846.5	-8.71	-33.5 -	-0.73	2.15	21.91	38.45	H	-16.54
LTE BAND 5 16QAM-10MHz	Frequency (MHz)	PMea (dBm)	Pcl(dB)+PAg(dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP (dBm)	Limit (dBm)	Polarity	Margin (dB)
	829	-9.41	-33.6 -	-0.84	2.15	21.20	38.45	H	-17.25
	836.5	-9.06	-33.5 -	-0.74	2.15	21.55	38.45	H	-16.90
	844	-9.51	-33.5 -	-0.78	2.15	21.06	38.45	H	-17.39

LTE BAND 12 QPSK-1.4MHz	Frequency (MHz)	PMea (dBm)	Pcl(dB)+PAg(dB)	Ga Antenna Gain (dBi)	Correction (dB)	ERP (dBm)	Limit (dBm)	Polarity	Margin (dB)
	699.7	-6.06	-33.6 -	-0.84	2.15	24.55	38.45	H	-13.90
	707.5	-5.86	-33.5 -	-0.74	2.15	24.75	38.45	H	-13.70
	715.3	-6.57	-33.5 -	-0.73	2.15	24.05	38.45	H	-14.40
LTE BAND 12 QPSK-3MHz	Frequency (MHz)	PMea (dBm)	Pcl(dB)+PAg(dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP (dBm)	Limit (dBm)	Polarity	Margin (dB)
	700.5	-5.87	-33.6 -	-0.84	2.15	24.74	38.45	H	-13.71
	707.5	-6.19	-33.5 -	-0.74	2.15	24.42	38.45	H	-14.03
	714.5	-5.94	-33.5 -	-0.78	2.15	24.63	38.45	H	-13.82
LTE BAND 12 QPSK-5MHz	Frequency (MHz)	PMea (dBm)	Pcl(dB)+PAg(dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP (dBm)	Limit (dBm)	Polarity	Margin (dB)
	701.5	-6.30	-33.6 -	-0.84	2.15	24.31	38.45	H	-14.14
	707.5	-5.89	-33.5 -	-0.74	2.15	24.72	38.45	H	-13.73
	713.5	-6.54	-33.5 -	-0.73	2.15	24.08	38.45	H	-14.37
LTE BAND 12 QPSK-10MHz	Frequency (MHz)	PMea (dBm)	Pcl(dB)+PAg(dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP (dBm)	Limit (dBm)	Polarity	Margin (dB)
	704	-5.68	-33.6 -	-0.84	2.15	24.93	38.45	H	-13.52
	707.5	-6.18	-33.5 -	-0.74	2.15	24.43	38.45	H	-14.02
	711	-5.98	-33.5 -	-0.78	2.15	24.59	38.45	H	-13.86
LTE BAND 12 16QAM-1.4MHz	Frequency (MHz)	PMea (dBm)	Pcl(dB)+PAg(dB)	Ga Antenna Gain (dBi)	Correction (dB)	ERP (dBm)	Limit (dBm)	Polarity	Margin (dB)
	699.7	-5.86	-33.6 -	-0.84	2.15	24.75	38.45	H	-13.70
	707.5	-6.39	-33.5 -	-0.74	2.15	24.22	38.45	H	-14.23
	715.3	-5.85	-33.5 -	-0.73	2.15	24.77	38.45	H	-13.68
LTE BAND 12 16QAM-3MHz	Frequency (MHz)	PMea (dBm)	Pcl(dB)+PAg(dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP (dBm)	Limit (dBm)	Polarity	Margin (dB)
	700.5	-5.63	-33.6 -	-0.84	2.15	24.98	38.45	H	-13.47
	707.5	-5.76	-33.5 -	-0.74	2.15	24.85	38.45	H	-13.60
	714.5	-5.73	-33.5 -	-0.78	2.15	24.84	38.45	H	-13.61
LTE BAND 12 16QAM-5MHz	Frequency (MHz)	PMea (dBm)	Pcl(dB)+PAg(dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP (dBm)	Limit (dBm)	Polarity	Margin (dB)
	701.5	-6.45	-33.6 -	-0.84	2.15	24.16	38.45	H	-14.29
	707.5	-5.65	-33.5 -	-0.74	2.15	24.96	38.45	H	-13.49
	713.5	-6.25	-33.5 -	-0.73	2.15	24.37	38.45	H	-14.08
LTE BAND 12 16QAM-10MHz	Frequency (MHz)	PMea (dBm)	Pcl(dB)+PAg(dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP (dBm)	Limit (dBm)	Polarity	Margin (dB)

	704	-5.75	-33.6	-	-0.84	2.15	24.86	38.45	H	-13.59
	707.5	-5.99	-33.5	-	-0.74	2.15	24.62	38.45	H	-13.83
	711	-6.10	-33.5	-	-0.78	2.15	24.47	38.45	H	-13.98

LTE BAND 13 QPSK-5MHz	Frequency (MHz)	PMea (dBm)	Pcl(dB)+PAg(dB)		Ga Antenna Gain (dBi)	Correction (dB)	ERP (dBm)	Limit (dBm)	Polarity	Margin (dB)
	779.5	-6.10	-33.6	-	-0.84	2.15	24.51	38.45	H	-13.94
	782	-5.86	-33.5	-	-0.74	2.15	24.75	38.45	H	-13.70
	784.5	-5.66	-33.5	-	-0.73	2.15	24.96	38.45	H	-13.49
LTE BAND 13 QPSK-10MHz	Frequency (MHz)	PMea (dBm)	Pcl(dB)+PAg(dB)		Ga Antenna Gain(dBi)	Correction (dB)	ERP (dBm)	Limit (dBm)	Polarity	Margin (dB)
	782	-5.83	-33.5	-	-0.74	2.15	24.78	38.45	H	-13.67
LTE BAND 13 16QAM-5MHz	Frequency (MHz)	PMea (dBm)	Pcl(dB)+PAg(dB)		Ga Antenna Gain(dBi)	Correction (dB)	ERP (dBm)	Limit (dBm)	Polarity	Margin (dB)
	779.5	-6.35	-33.6	-	-0.84	2.15	24.26	38.45	H	-14.19
	782	-5.93	-33.5	-	-0.74	2.15	24.68	38.45	H	-13.77
	784.5	-5.66	-33.5	-	-0.73	2.15	24.96	38.45	H	-13.49
LTE BAND 13 16QAM-10MHz	Frequency (MHz)	PMea (dBm)	Pcl(dB)+PAg(dB)		Ga Antenna Gain(dBi)	Correction (dB)	ERP (dBm)	Limit (dBm)	Polarity	Margin (dB)
	782	-5.60	-33.5	-	-0.78	2.15	24.97	38.45	H	-13.48

4.9 Field strength of spurious radiation measurement

Test Requirement:	FCC part22.913(a), FCC part24.238(a) and FCC part27.53
Test Method:	ANSI C63.26:2015
Limit:	Band 2/4/5/12:-13dBm Band 13: Limit out of the band 1559-1610MHz(-13dBm) Limit in the band 1559-1610MHz(-40dBm)
Test setup:	Below 1GHz  Above 1GHz  Substituted method: 

Test Procedure:	1. The EUT was placed on an non-conductive turntable using a non-conductive support. The radiated emission at the fundamental frequency was measured at 3 m with a test antenna and EMI spectrum analyzer. 2. During the tests, the antenna height and the EUT azimuth were varied in order to identify the maximum level of emissions from the EUT. This maximization process was repeated with the EUT positioned in each of its three orthogonal orientations. 3. The frequency range up to tenth harmonic was investigated for each of three fundamental frequency (low, middle and high channels). Once spurious emission was identified, the power of the emission was determined using the substitution method. 4. The spurious emissions attenuation was calculated as the difference between radiated power at the fundamental frequency and the spurious emissions frequency. ERP / EIRP = S.G. output (dBm) + Antenna Gain(dB/dBi) – Cable Loss (dB)
Test Instruments:	Refer to section 3 for details
Test mode:	Refer to section 4.1 for details
Test results:	Pass

Measurement Data

QPSK Mode:

Test mode:	LTE Band 2(1.4MHz)		Test channel:	Lowest
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
3701.40	Vertical	-36.36	-13.00	Pass
5552.10	V	-39.31		
7402.80	V	-38.06		
9253.50	V	-43.65		
11104.20	V	---		
3701.40	Horizontal	-39.05	-13.00	Pass
5552.10	H	-43.27		
7402.80	H	-44.46		
9253.50	H	-45.46		
11104.20	H	---		
Test mode:	**LTE Band 2(1.4MHz)**		**Test channel:**	**Middle**
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
3760.00	Vertical	-36.20	-13.00	Pass
5640.00	V	-37.47		
7520.00	V	-38.90		
9400.00	V	-41.69		
11280.00	V	---		
3760.00	Horizontal	-38.11	-13.00	Pass
5640.00	H	-43.53		
7520.00	H	-43.45		
9400.00	H	-48.94		
11280.00	H	---		
Test mode:	**LTE Band 2(1.4MHz)**		**Test channel:**	**Highest**
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
3818.60	Vertical	-36.92	-13.00	Pass
5727.90	V	-37.59		
7637.20	V	-38.16		
9546.50	V	-43.67		
11455.80	V	---		
3818.60	Horizontal	-40.62	-13.00	Pass
5727.90	H	-40.86		
7637.20	H	-43.03		
9546.50	H	-45.81		
11455.80	H	-36.92		

Remark：

1. The emission behaviour belongs to narrowband spurious emission, all modes investigated and only worst case is reported.
2. Remark”---“ means that the emission level is too low (20dB lower than the limit) to be measured
3. The emission levels of below 1 GHz are very lower (20dB lower than the limit) than the limit and not show in test report.

Test mode:	LTE Band 4(1.4MHz)		Test channel:	Lowest
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
3421.40	Vertical	-33.22	-13.00	Pass
5132.10	V	-38.41		
6842.80	V	-36.25		
8553.50	V	-39.56		
10264.20	V	---		
3421.40	Horizontal	-39.87	-13.00	Pass
5132.10	H	-43.48		
6842.80	H	-43.31		
8553.50	H	-48.31		
10264.20	H	---		
Test mode:	**LTE Band 4(1.4MHz)**		**Test channel:**	**Middle**
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
3465.00	Vertical	-32.50	-13.00	Pass
5197.50	V	-35.41		
6930.00	V	-37.26		
8662.50	V	-38.73		
10395.00	V	---		
3465.00	Horizontal	-36.13	-13.00	Pass
5197.50	H	-39.76		
6930.00	H	-40.11		
8662.50	H	-44.06		
10395.00	H	---		
Test mode:	**LTE Band 4(1.4MHz)**		**Test channel:**	**Highest**
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
3508.60	Vertical	-30.96	-13.00	Pass
5262.90	V	-34.54		
7017.20	V	-38.24		
8771.50	V	-39.51		
10525.80	V	---		
3508.60	Horizontal	-39.59	-13.00	Pass
5262.90	H	-41.62		
7017.20	H	-42.66		
8771.50	H	-44.99		
10525.80	H	---		

Remark：

1. The emission behaviour belongs to narrowband spurious emission, all modes investigated and only worst case is reported.
2. Remark”---“ means that the emission level is too low (20dB lower than the limit) to be measured
3. The emission levels of below 1 GHz are very lower (20dB lower than the limit) than the limit and not show in test report.

Test mode:	LTE Band 5(1.4MHz)		Test channel:	Lowest
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
1649.40	Vertical	-33.97	-13.00	Pass
2474.10	V	-36.68		
3298.80	V	-39.75		
4123.50	V	-40.26		
4948.20	V	---		
1649.40	Horizontal	-39.62	-13.00	Pass
2474.10	H	-45.61		
3298.80	H	-44.93		
4123.50	H	-51.35		
4948.20	H	---		
Test mode:	**LTE Band 5(1.4MHz)**		**Test channel:**	**Middle**
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
1673.00	Vertical	-36.25	-13.00	Pass
2509.50	V	-38.73		
3346.00	V	-38.65		
4182.50	V	-39.93		
5019.00	V	---		
1673.00	Horizontal	-40.78	-13.00	Pass
2509.50	H	-43.27		
3346.00	H	-45.33		
4182.50	H	-45.72		
5019.00	H	---		
Test mode:	**LTE Band 5(1.4MHz)**		**Test channel:**	**Highest**
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
1696.60	Vertical	-35.29	-13.00	Pass
2544.90	V	-37.65		
3393.20	V	-39.27		
4241.50	V	-38.96		
5089.80	V	---		
1696.60	Horizontal	-39.02	-13.00	Pass
2544.90	H	-40.46		
3393.20	H	-46.35		
4241.50	H	-46.18		
5089.80	H	---		

Remark：

4. The emission behaviour belongs to narrowband spurious emission, all modes investigated and only worst case is reported.
5. Remark”---“ means that the emission level is too low (20dB lower than the limit) to be measured
4. The emission levels of below 1 GHz are very lower (20dB lower than the limit) than the limit and not show in test report.

Test mode:	LTE Band 12(1.4MHz)		Test channel:	Lowest
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
5005.00	Vertical	-34.69	-13.00	Pass
7507.50	V	-38.50		
10010.00	V	-40.65		
12512.50	V	-42.85		
15015.00	V	---		
5005.00	Horizontal	-38.87	-13.00	Pass
7507.50	H	-44.77		
10010.00	H	-49.52		
12512.50	H	-51.50		
15015.00	H	---		
Test mode:	**LTE Band 12(1.4MHz)**		**Test channel:**	**Middle**
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
5070.00	Vertical	-33.92	-13.00	Pass
7605.00	V	-37.25		
10140.00	V	-40.86		
12675.00	V	-40.44		
15210.00	V	---		
5070.00	Horizontal	-39.81	-13.00	Pass
7605.00	H	-43.41		
10140.00	H	-44.88		
12675.00	H	-47.12		
15210.00	H	---		
Test mode:	**LTE Band 12(1.4MHz)**		**Test channel:**	**Highest**
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
5135.00	Vertical	-33.32	-13.00	Pass
7702.50	V	-37.09		
10270.00	V	-40.86		
12837.50	V	-40.65		
15405.00	V	---		
5135.00	Horizontal	-39.33	-13.00	Pass
7702.50	H	-43.03		
10270.00	H	-44.60		
12837.50	H	-47.87		
15405.00	H	---		

Remark：

1 The emission behaviour belongs to narrowband spurious emission, all modes investigated and only worst case is reported.
2 Remark"---" means that the emission level is too low (20dB lower than the limit) to be measured
3 The emission levels of below 1 GHz are very lower (20dB lower than the limit) than the limit and not show in test report.

Test mode:	LTE Band 13(5MHz)		Test channel:	Lowest
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
5005.00	Vertical	-35.09	-13.00	Pass
7507.50	V	-39.08		
10010.00	V	-40.43		
12512.50	V	-43.15		
15015.00	V	---		
5005.00	Horizontal	-38.44	-13.00	Pass
7507.50	H	-44.99		
10010.00	H	-49.56		
12512.50	H	-52.30		
15015.00	H	---		
Test mode:	**LTE Band 13(5MHz)**		**Test channel:**	**Middle**
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
5070.00	Vertical	-33.39	-13.00	Pass
7605.00	V	-37.15		
10140.00	V	-40.16		
12675.00	V	-42.62		
15210.00	V	---		
5070.00	Horizontal	-40.24	-13.00	Pass
7605.00	H	-44.17		
10140.00	H	-47.47		
12675.00	H	-51.31		
15210.00	H	---		
Test mode:	**LTE Band 13(5MHz)**		**Test channel:**	**Highest**
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
5135.00	Vertical	-34.23	-13.00	Pass
7702.50	V	-36.89		
10270.00	V	-40.62		
12837.50	V	-42.73		
15405.00	V	---		
5135.00	Horizontal	-40.05	-13.00	Pass
7702.50	H	-43.27		
10270.00	H	-47.42		
12837.50	H	-50.99		
15405.00	H	---		

Remark：

4 The emission behaviour belongs to narrowband spurious emission, all modes investigated and only worst case is reported.
5 Remark”---“ means that the emission level is too low (20dB lower than the limit) to be measured
6 The emission levels of below 1 GHz are very lower (20dB lower than the limit) than the limit and not show in test report.

16 QAM Mode:

Test mode:	LTE Band 2 (1.4MHz)		Test channel:	Lowest
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
3701.40	Vertical	-34.47	-13.00	Pass
5552.10	V	-35.10		
7402.80	V	-40.70		
9253.50	V	-40.24		
11104.20	V	---		
3701.40	Horizontal	-38.42	-13.00	Pass
5552.10	H	-43.30		
7402.80	H	-43.96		
9253.50	H	-46.66		
11104.20	H	---		
Test mode:	**LTE Band 2 (1.4MHz)**		**Test channel:**	**Middle**
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
3760.00	Vertical	-34.90	-13.00	Pass
5640.00	V	-37.15		
7520.00	V	-39.66		
9400.00	V	-41.28		
11280.00	V	---		
3760.00	Horizontal	-38.27	-13.00	Pass
5640.00	H	-41.78		
7520.00	H	-43.51		
9400.00	H	-45.63		
11280.00	H	---		
Test mode:	**LTE Band 2 (1.4MHz)**		**Test channel:**	**Highest**
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
3818.60	Vertical	-35.79	-13.00	Pass
5727.90	V	-38.78		
7637.20	V	-41.03		
9546.50	V	-41.77		
11455.80	V	---		
3818.60	Horizontal	-41.89	-13.00	Pass
5727.90	H	-43.75		
7637.20	H	-44.82		
9546.50	H	-48.67		
11455.80	H	---		

Remark：

1 The emission behaviour belongs to narrowband spurious emission, all modes investigated and only worst case is reported.
2 Remark”---“ means that the emission level is too low (20dB lower than the limit) to be measured
3 The emission levels of below 1 GHz are very lower (20dB lower than the limit) than the limit and not show in test report.