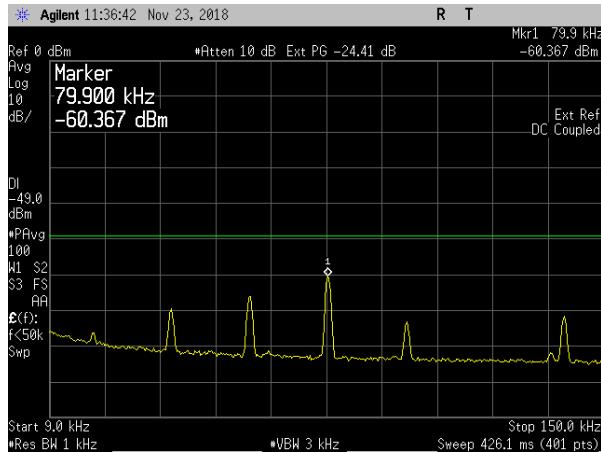
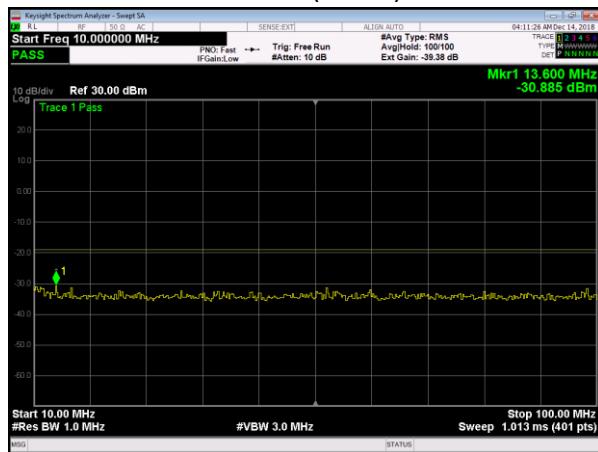


LTE15 Middle Channel (1962.5MHz) NB IoT at lower Guard Band:

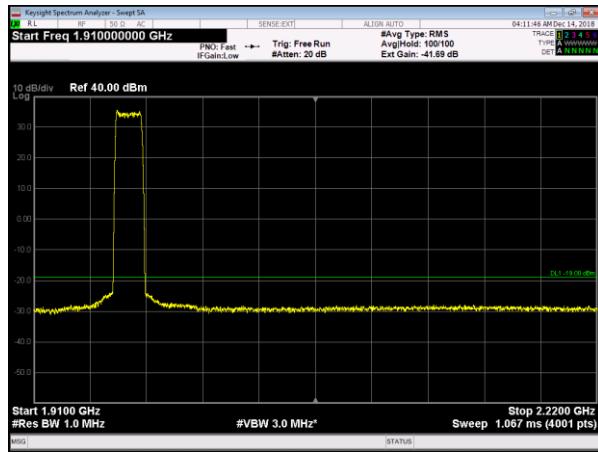
LTE15 Middle+NB IoT GB (Lower) 9-150KHz



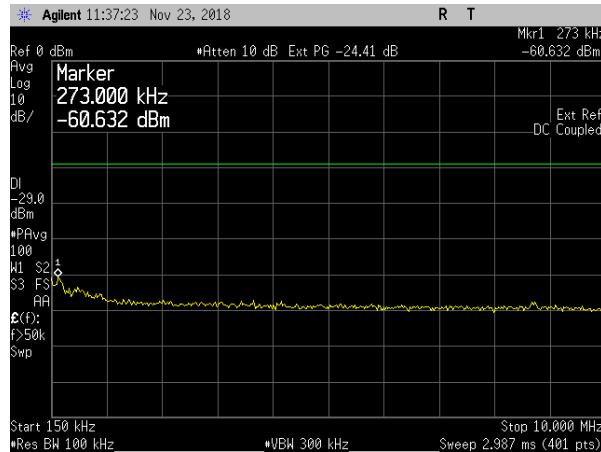
LTE15 Middle+NB IoT GB (Lower) 10MHz-100MHz



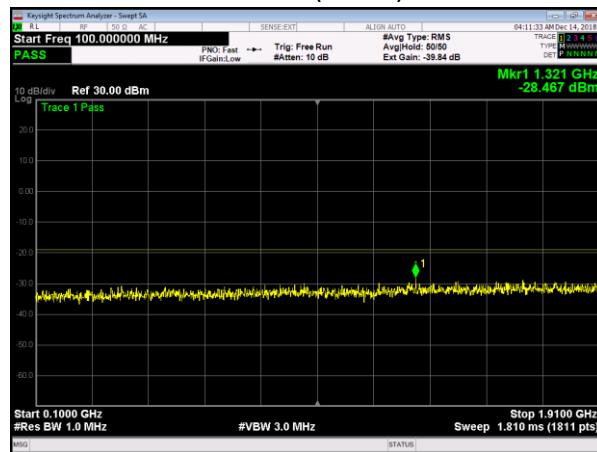
LTE15 Middle+NB IoT GB (Lower) 1910MHz-2220MHz



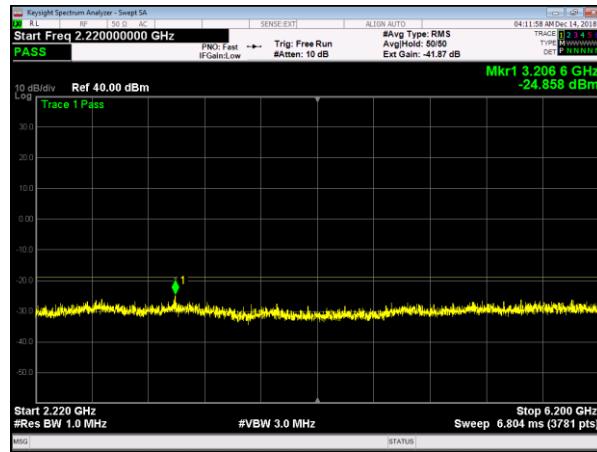
LTE15 Middle+NB IoT GB (Lower) 150 KHz-10MHz



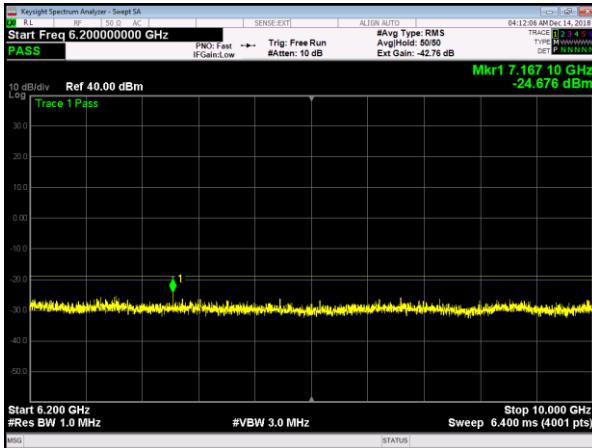
LTE15 Middle+NB IoT GB (Lower) 100MHz-1910MHz



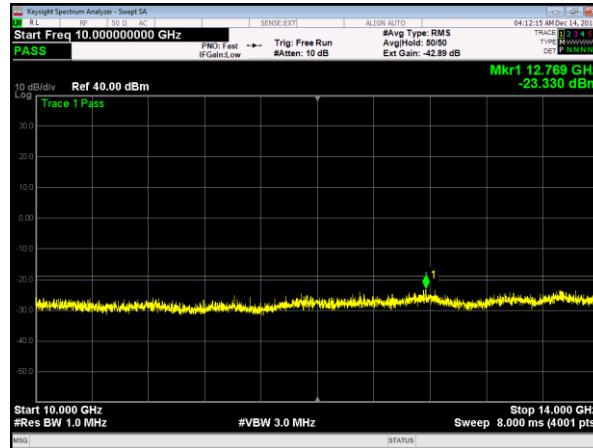
LTE15 Middle+NB IoT GB (Lower) 2220MHz-6.2GHz



LTE15 Middle+NB IoT GB (Lower) 6.2GHz-10GHz



LTE15 Middle+NB IoT GB (Lower) 10GHz-14GHz



LTE15 Middle+NB IoT GB (Lower) 14GHz-18GHz

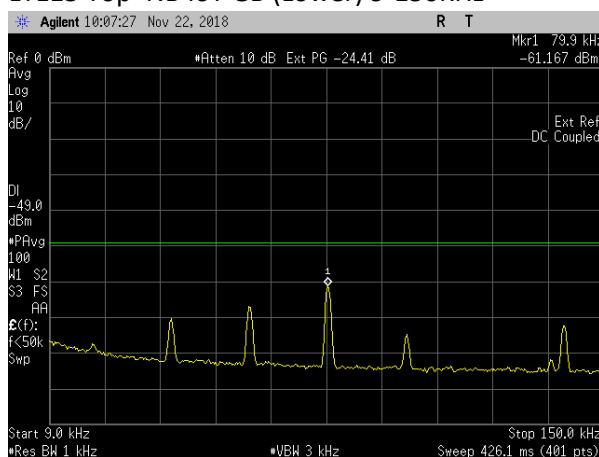


LTE15 Middle+NB IoT GB (Lower) 18GHz-22GHz

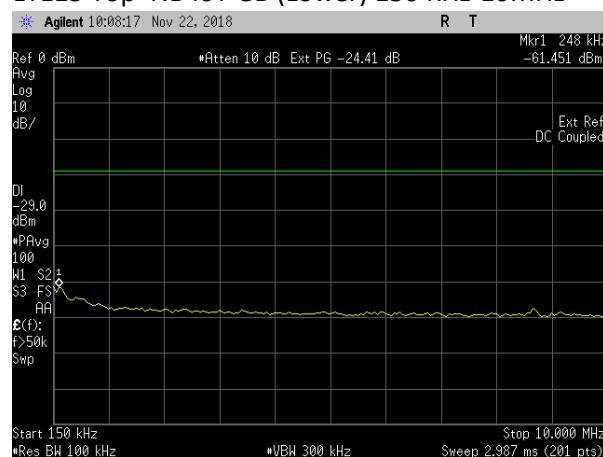


LTE15 Top Channel (1987.5MHz) NB IoT at lower Guard Band:

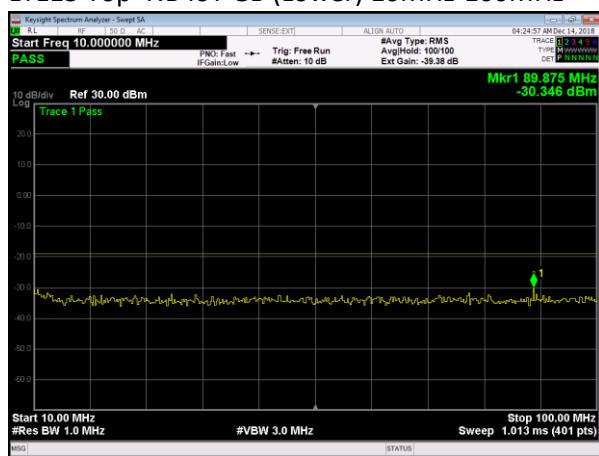
LTE15 Top+NB IoT GB (Lower) 9-150KHz



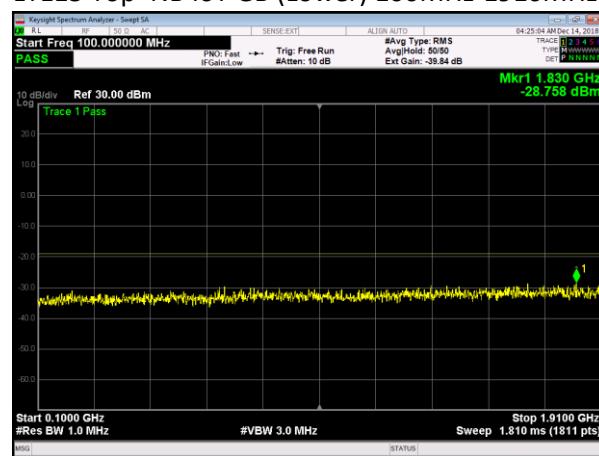
LTE15 Top+NB IoT GB (Lower) 150 KHz-10MHz



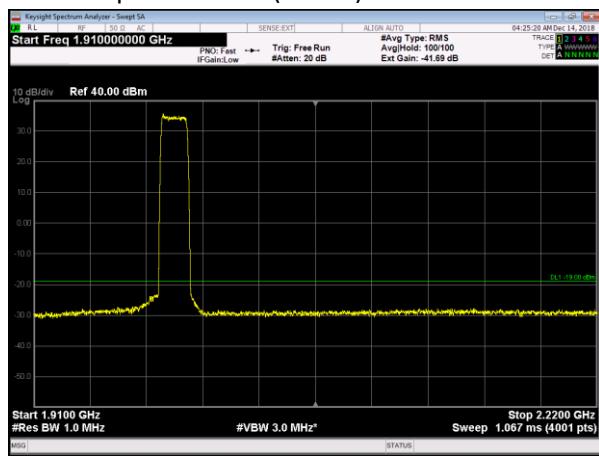
LTE15 Top+NB IoT GB (Lower) 10MHz-100MHz



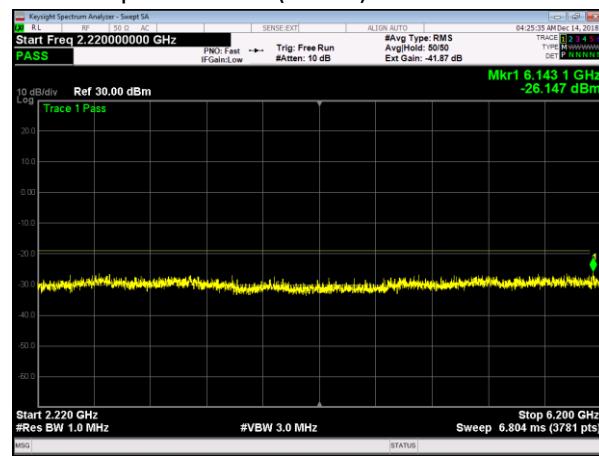
LTE15 Top+NB IoT GB (Lower) 100MHz-1910MHz



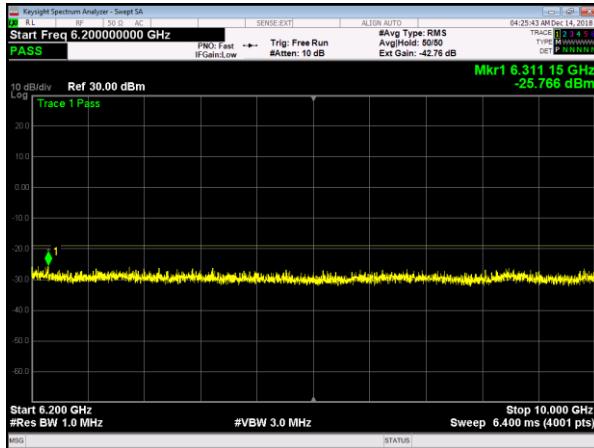
LTE15 Top+NB IoT GB (Lower) 1910MHz-2220MHz



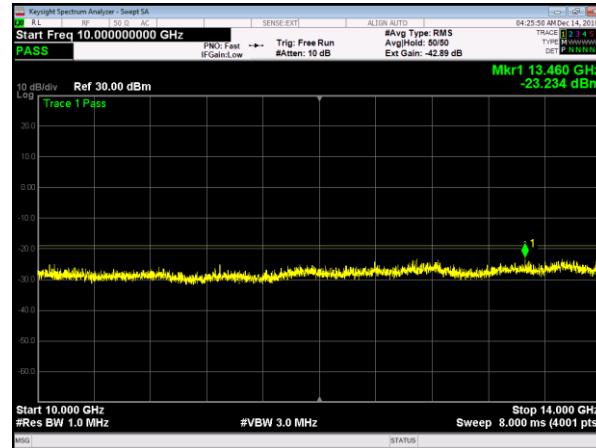
LTE15 Top+NB IoT GB (Lower) 2220MHz-6.2GHz



LTE15 Top+NB IoT GB (Lower) 6.2GHz-10GHz



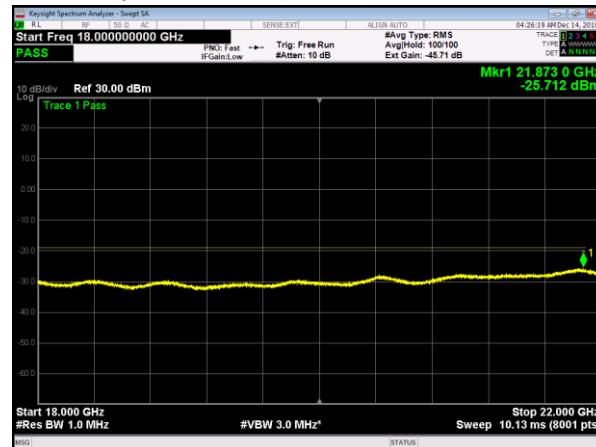
LTE15 Top+NB IoT GB (Lower) 10GHz-14GHz

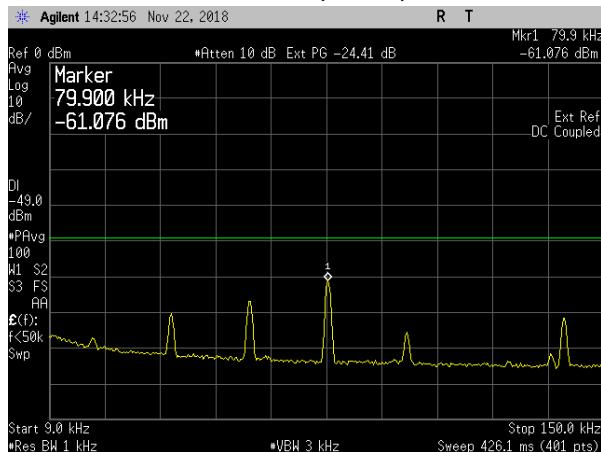
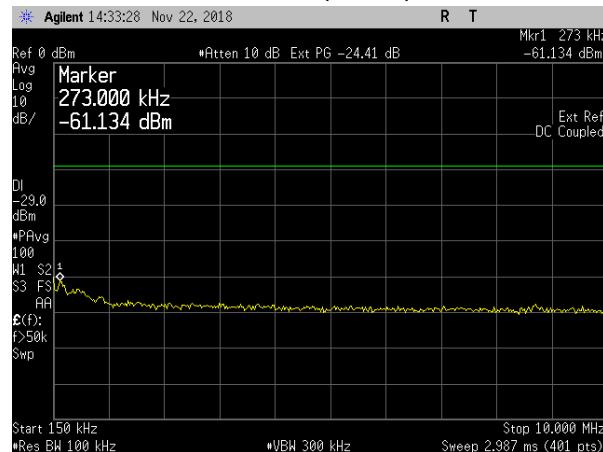
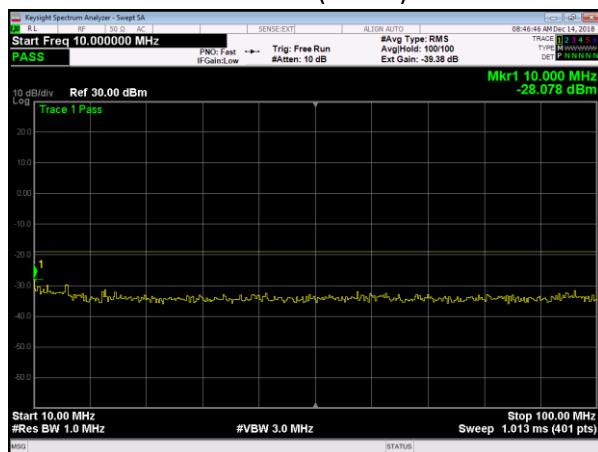
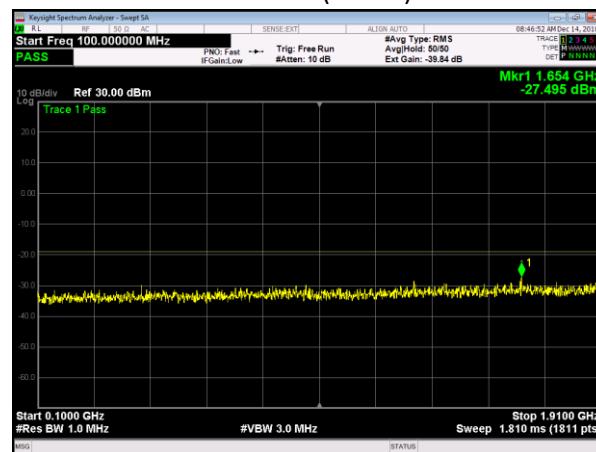
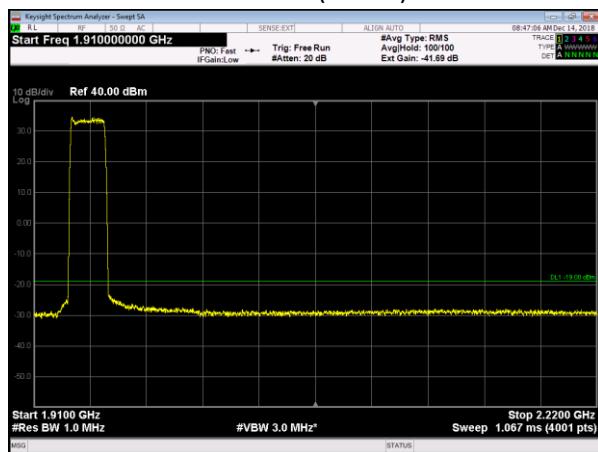
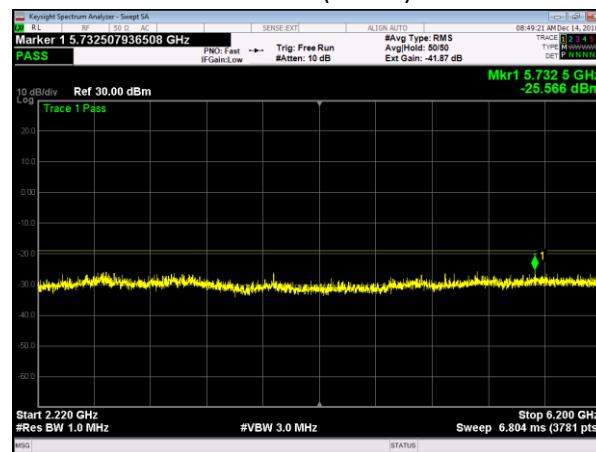


LTE15 Top+NB IoT GB (Lower) 14GHz-18GHz

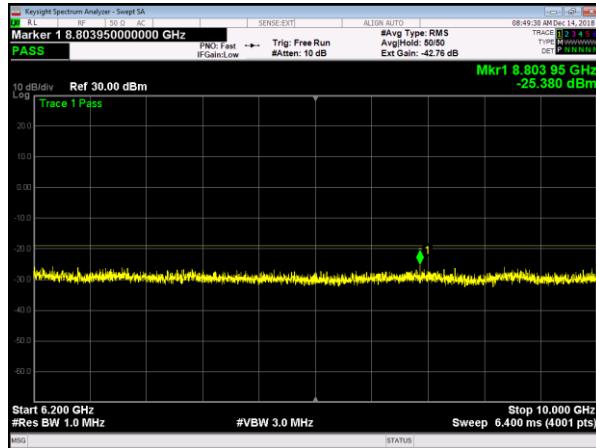


LTE15 Top+NB IoT GB (Lower) 18GHz-22GHz

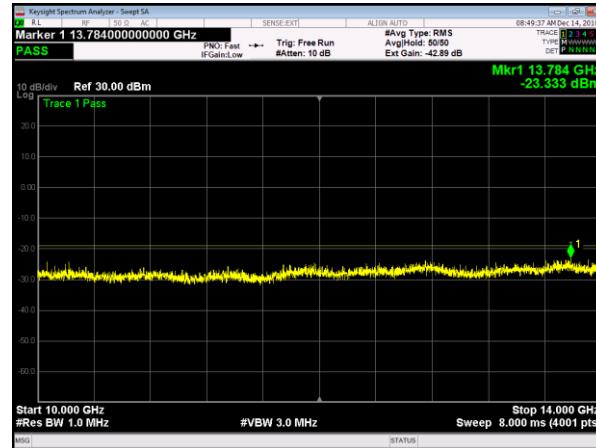


LTE20 Bottom Channel (1940MHz) NB IoT at lower Guard Band:
LTE20 Bottom+NB IoT GB (Lower) 9-150KHz

LTE20 Bottom+NB IoT GB (Lower) 150 KHz-10MHz

LTE20 Bottom+NB IoT GB (Lower) 10MHz-100MHz

LTE20 Bottom+NB IoT GB (Lower) 100MHz-1910MHz

LTE20 Bottom+NB IoT GB (Lower) 1910MHz-2220MHz

LTE20 Bottom+NB IoT GB (Lower) 2220MHz-6.2GHz


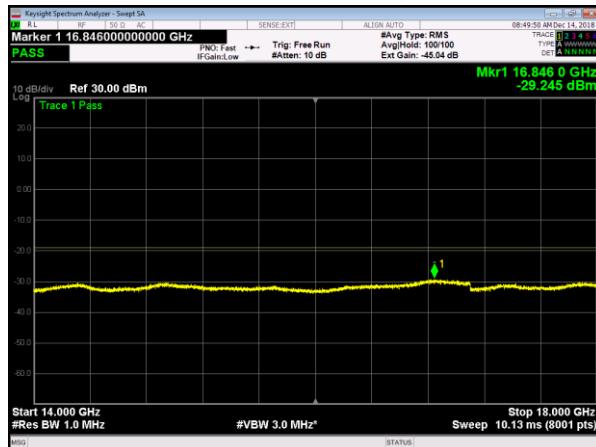
LTE20 Bottom+NB IoT GB (Lower) 6.2GHz-10GHz



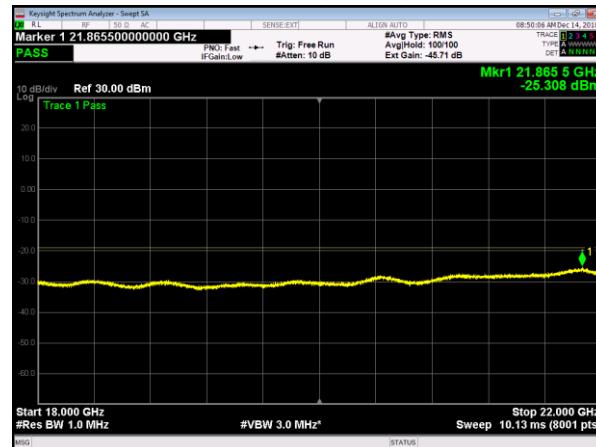
LTE20 Bottom+NB IoT GB (Lower) 10GHz-14GHz



LTE20 Bottom+NB IoT GB (Lower) 14GHz-18GHz

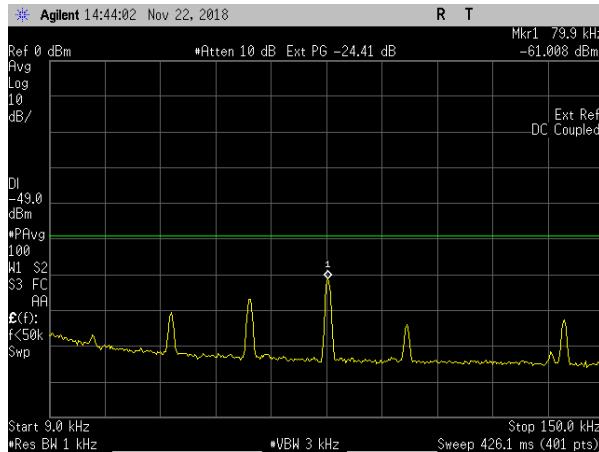


LTE20 Bottom+NB IoT GB (Lower) 18GHz-22GHz

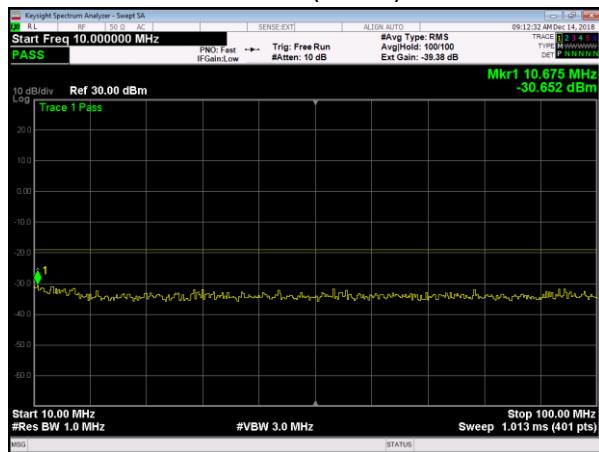


LTE20 Middle Channel (1962.5MHz) NB IoT at lower Guard Band:

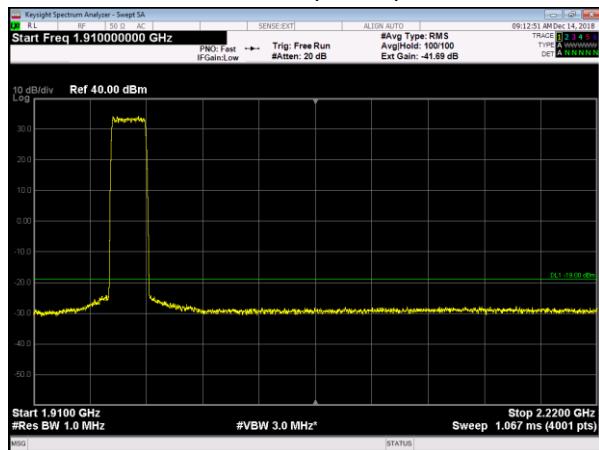
LTE20 Middle+NB IoT GB (Lower) 9-150KHz



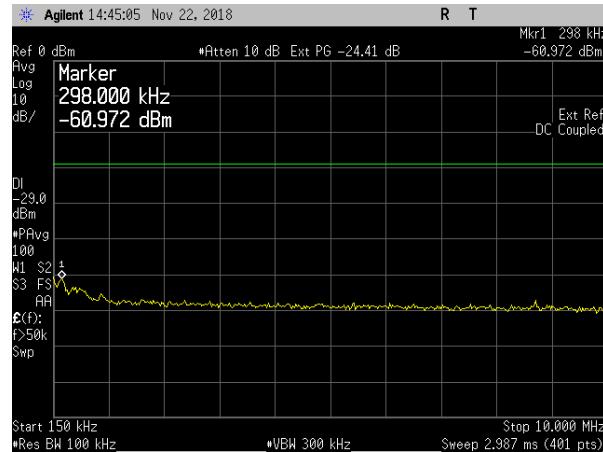
LTE20 Middle+NB IoT GB (Lower) 10MHz-100MHz



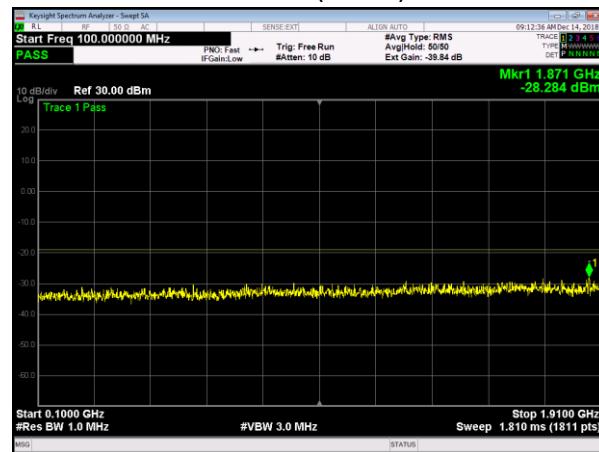
LTE20 Middle+NB IoT GB (Lower) 1910MHz-2220MHz



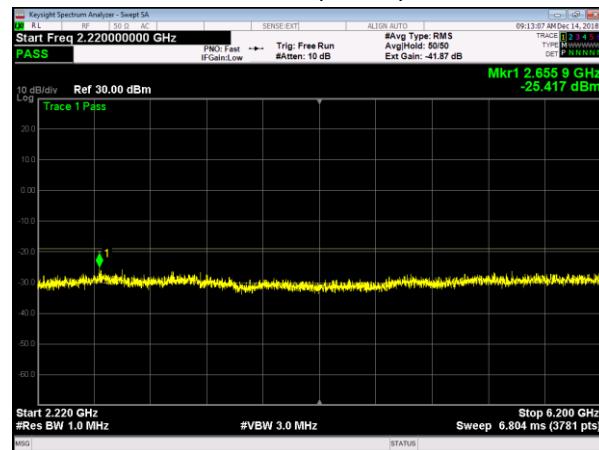
LTE20 Middle+NB IoT GB (Lower) 150 KHz-10MHz



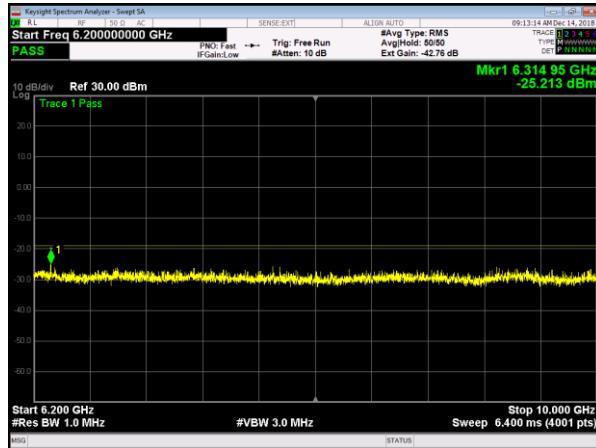
LTE20 Middle+NB IoT GB (Lower) 100MHz-1910MHz



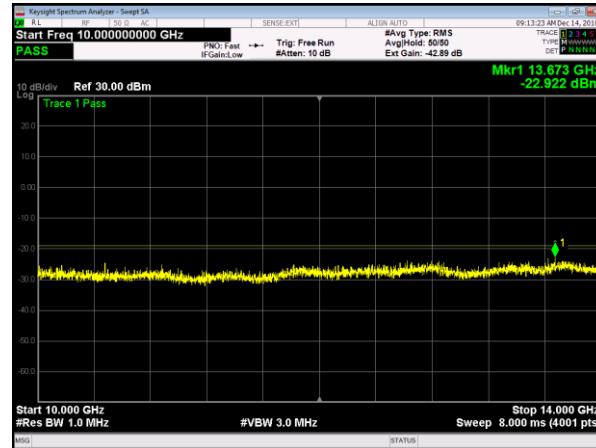
LTE20 Middle+NB IoT GB (Lower) 2220MHz-6.2GHz



LTE20 Middle+NB IoT GB (Lower) 6.2GHz-10GHz



LTE20 Middle+NB IoT GB (Lower) 10GHz-14GHz

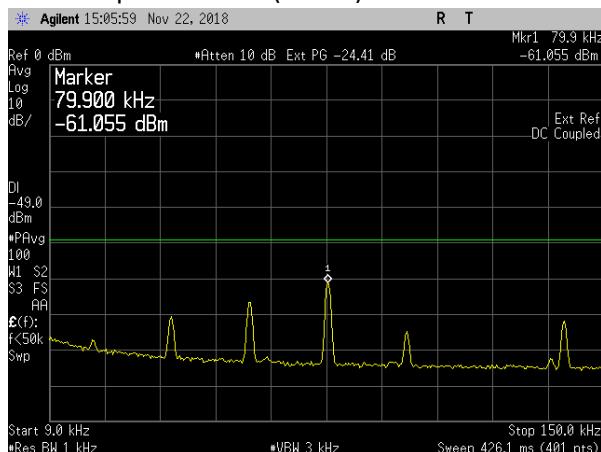


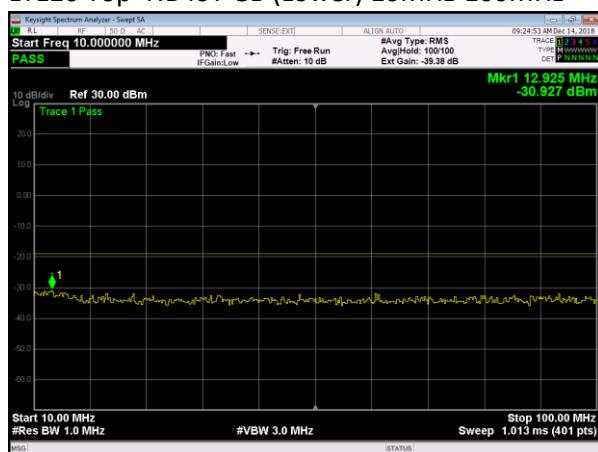
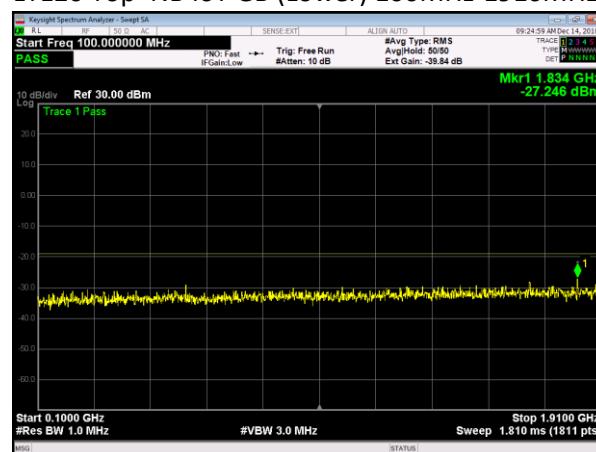
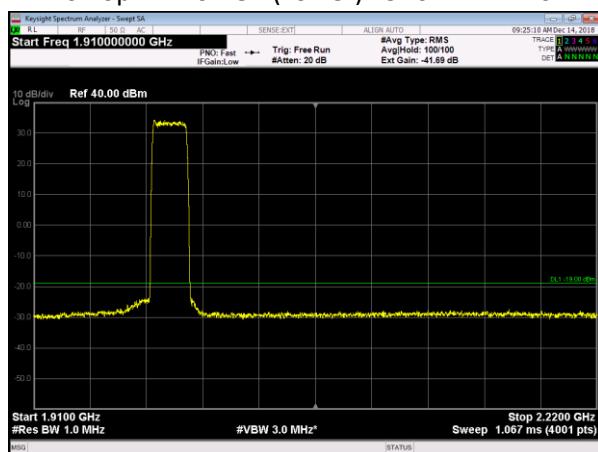
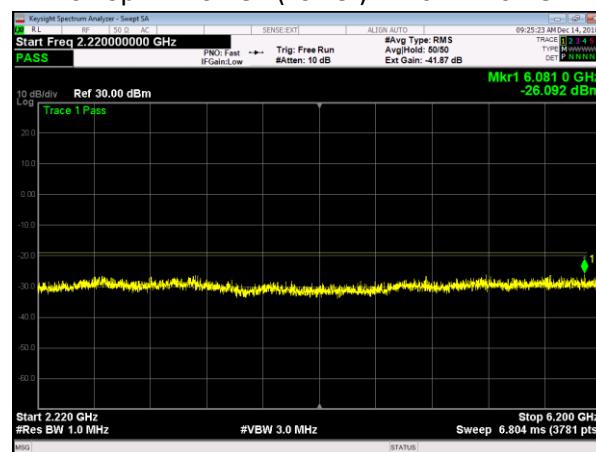
LTE20 Middle+NB IoT GB (Lower) 14GHz-18GHz



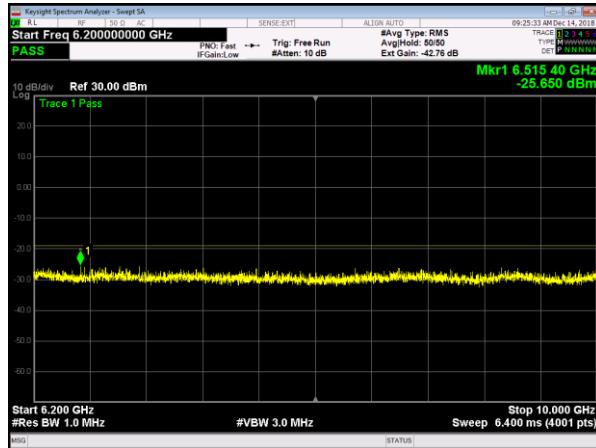
LTE20 Middle+NB IoT GB (Lower) 18GHz-22GHz



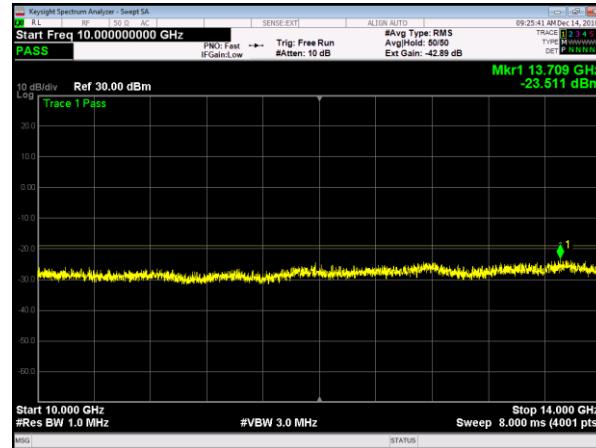
LTE20 Top Channel (1985MHz) NB IoT at lower Guard Band:
LTE20 Top+NB IoT GB (Lower) 9-150KHz

LTE20 Top+NB IoT GB (Lower) 150 KHz-10MHz

LTE20 Top+NB IoT GB (Lower) 10MHz-100MHz

LTE20 Top+NB IoT GB (Lower) 100MHz-1910MHz

LTE20 Top+NB IoT GB (Lower) 1910MHz-2220MHz

LTE20 Top+NB IoT GB (Lower) 2220MHz-6.2GHz


LTE20 Top+NB IoT GB (Lower) 6.2GHz-10GHz



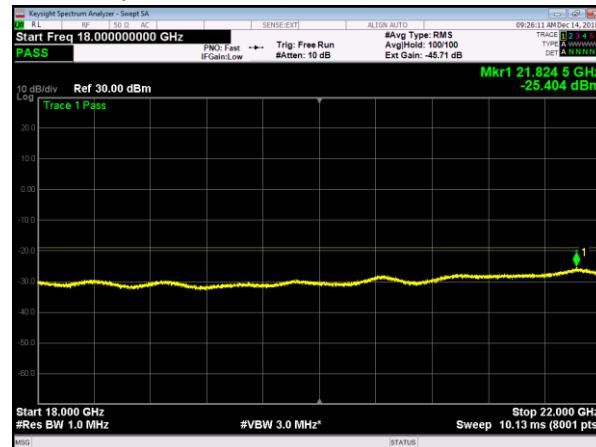
LTE20 Top+NB IoT GB (Lower) 10GHz-14GHz

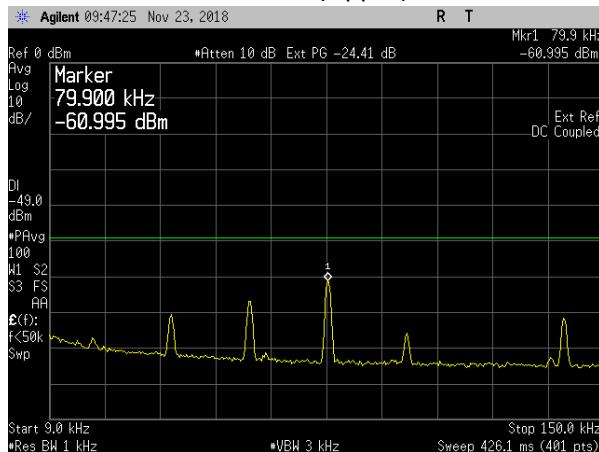
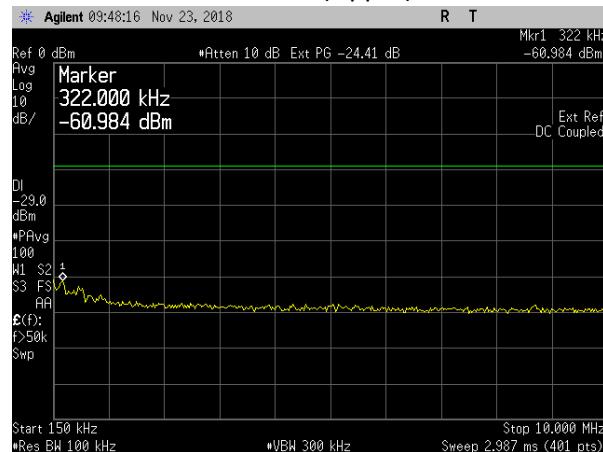
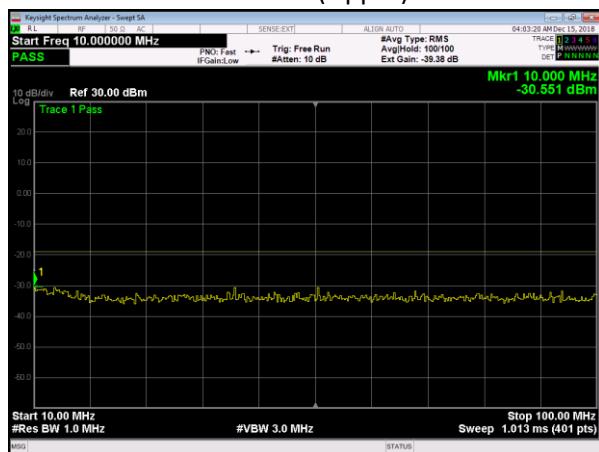
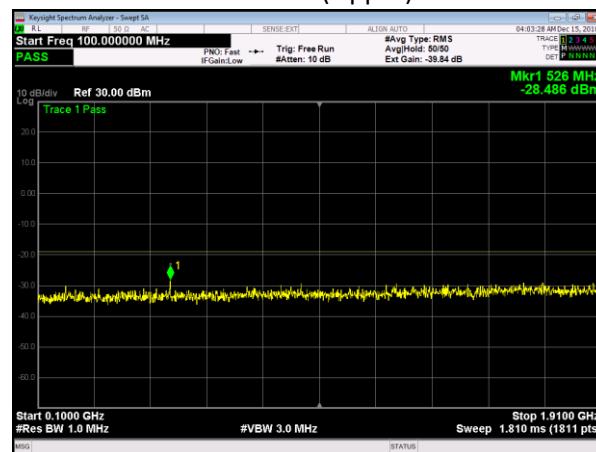
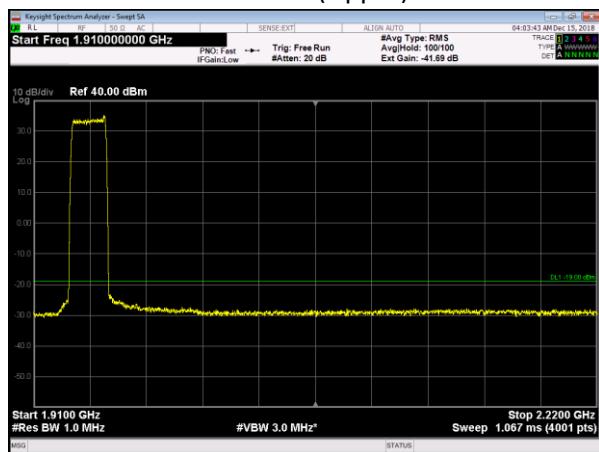
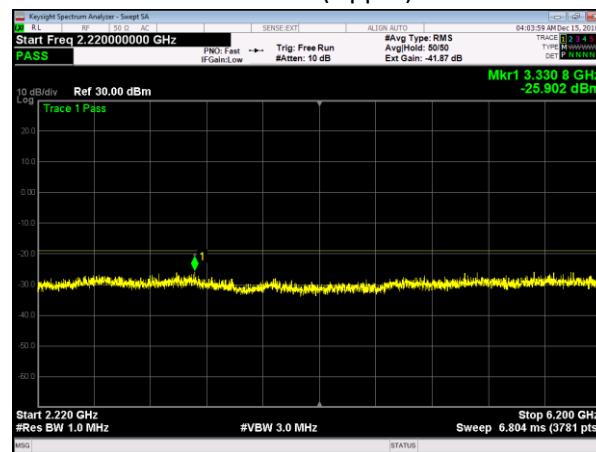


LTE20 Top+NB IoT GB (Lower) 14GHz-18GHz

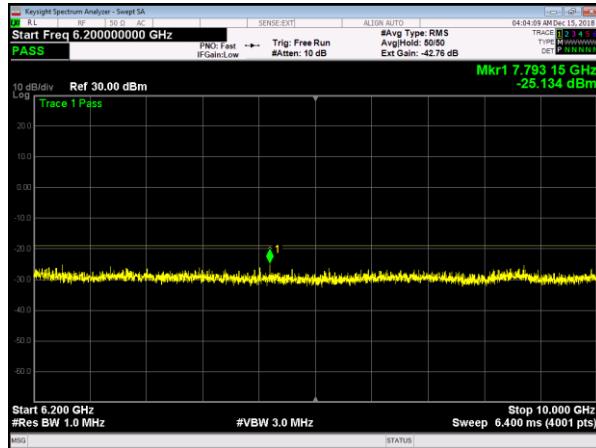


LTE20 Top+NB IoT GB (Lower) 18GHz-22GHz

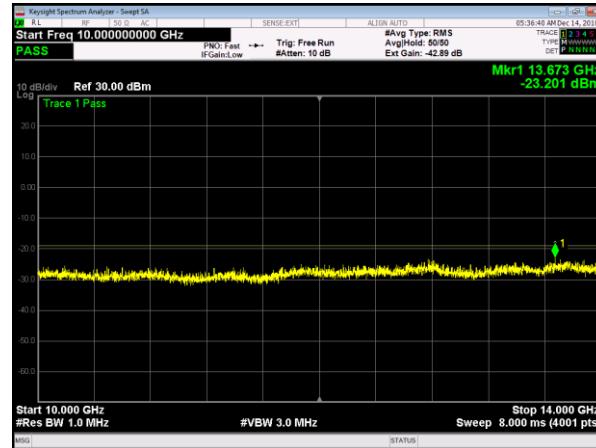


LTE15 Bottom Channel (1937.5) NB IoT at Upper Guard Band:
LTE15 Bottom+NB IoT GB (Upper) 9-150KHz

LTE15 Bottom+NB IoT GB (Upper) 150KHz-10MHz

LTE15 Bottom+NB IoT GB (Upper) 10MHz-100MHz

LTE15 Bottom+NB IoT GB (Upper) 100MHz-1910MHz

LTE15 Bottom+NB IoT GB (Upper) 1910MHz-2220MHz

LTE15 Bottom+NB IoT GB (Upper) 2220MHz-6.2GHz


LTE15 Bottom+NB IoT GB (Upper) 6.2GHz-10GHz



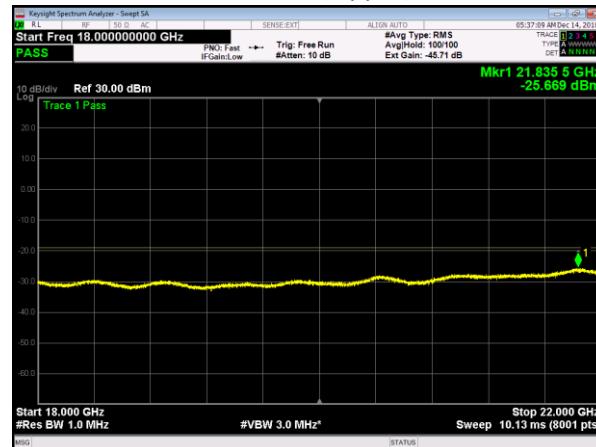
LTE15 Bottom+NB IoT GB (Upper) 10GHz-14GHz

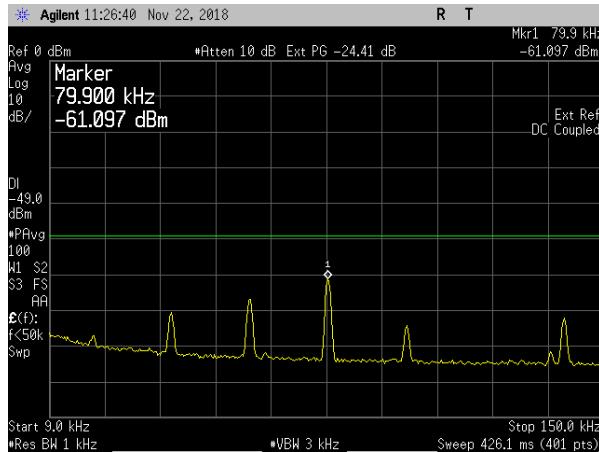
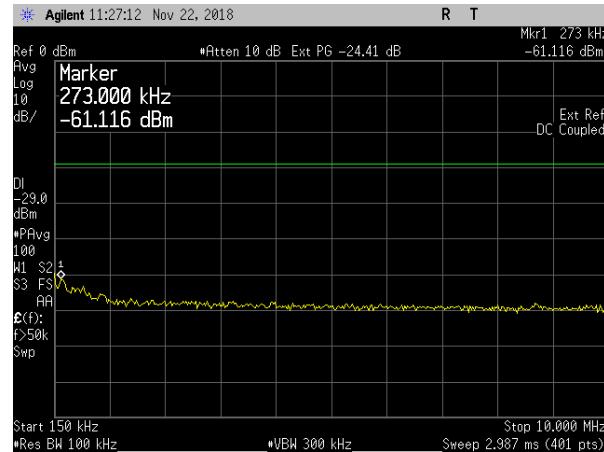
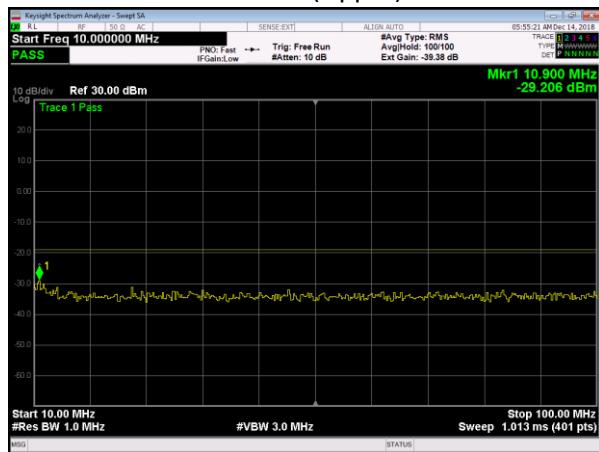
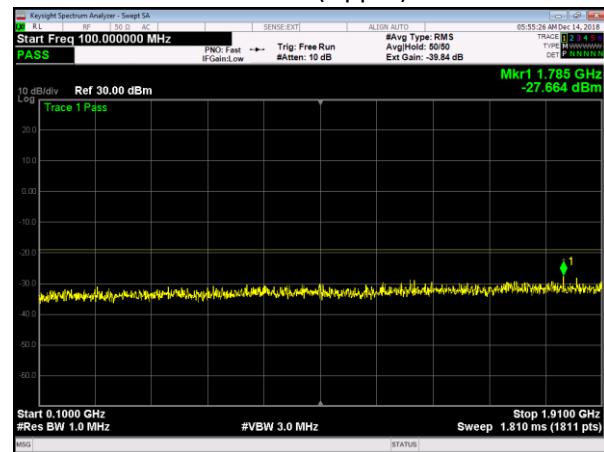
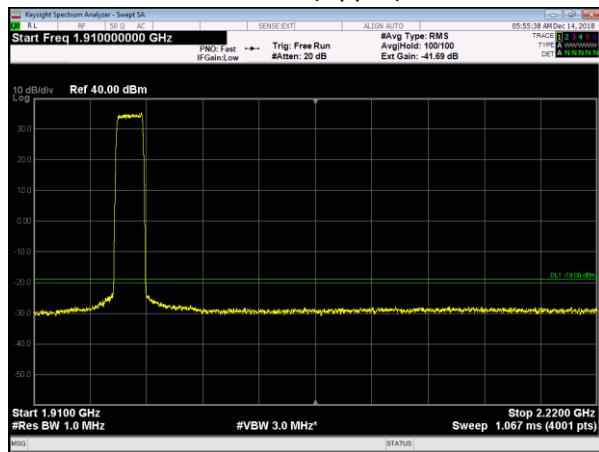
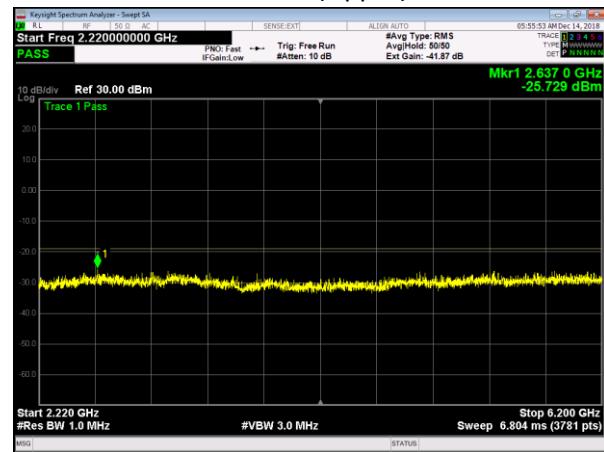


LTE15 Bottom+NB IoT GB (Upper) 14GHz-18GHz

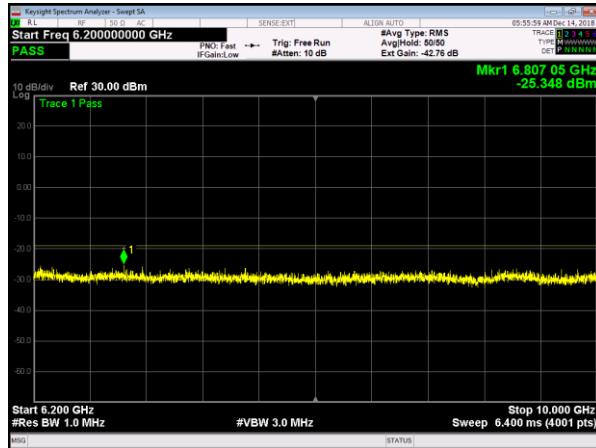


LTE15 Bottom+NB IoT GB (Upper) 18GHz-22GHz

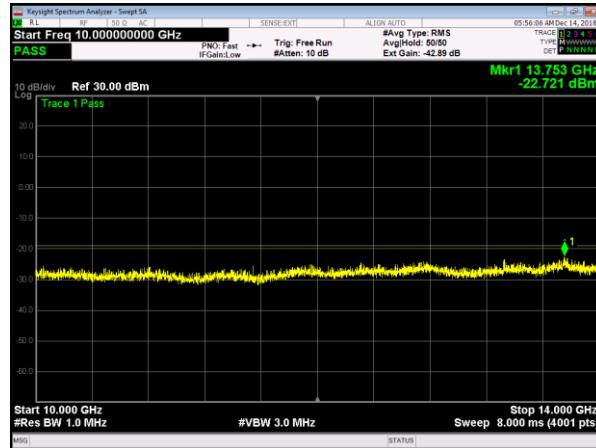


LTE15 Middle Channel (1962.5MHz) NB IoT at Upper Guard Band:
LTE15 Middle+NB IoT GB (Upper) 9-150KHz

LTE15 Middle+NB IoT GB (Upper) 150 KHz-10MHz

LTE15 Middle+NB IoT GB (Upper) 10MHz-100MHz

LTE15 Middle+NB IoT GB (Upper) 100MHz-1910MHz

LTE15 Middle+NB IoT GB (Upper) 1910MHz-2220MHz

LTE15 Middle+NB IoT GB (Upper) 2220MHz-6.2GHz


LTE15 Middle+NB IoT GB (Upper) 6.2GHz-10GHz



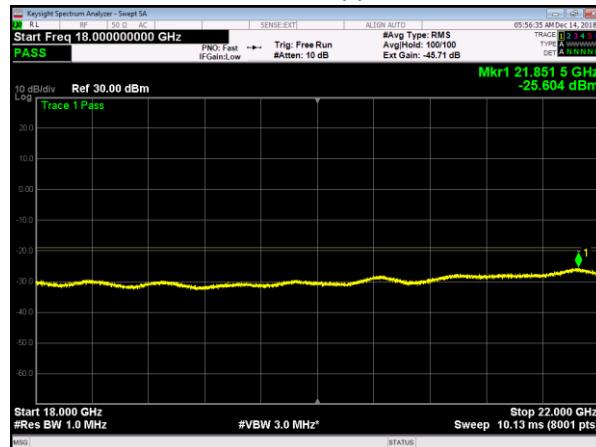
LTE15 Middle+NB IoT GB (Upper) 10GHz-14GHz

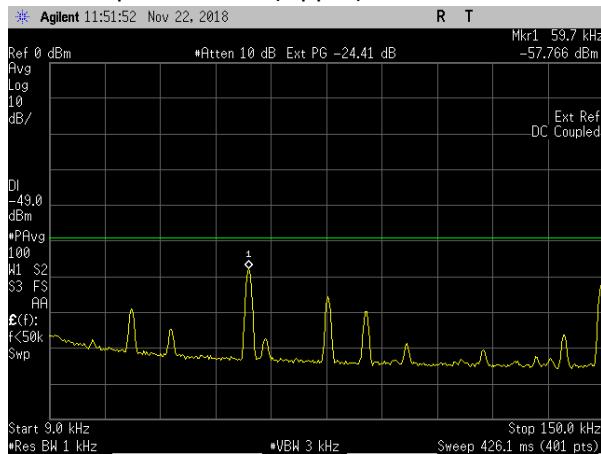
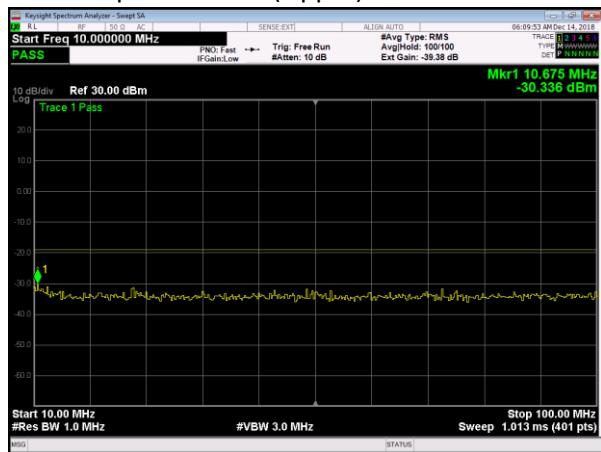
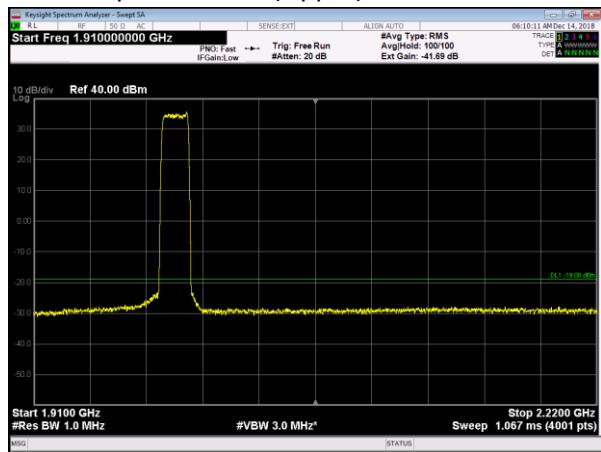
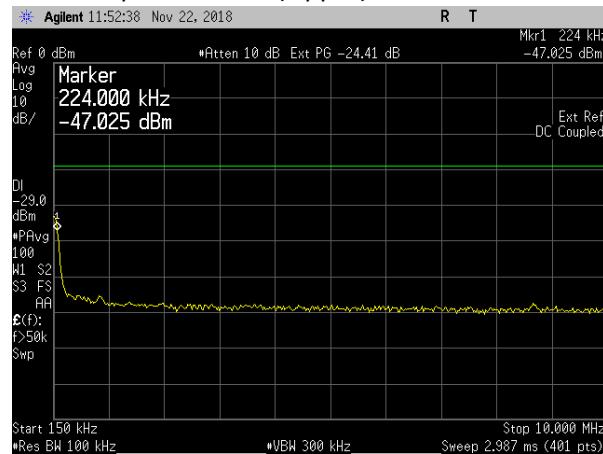
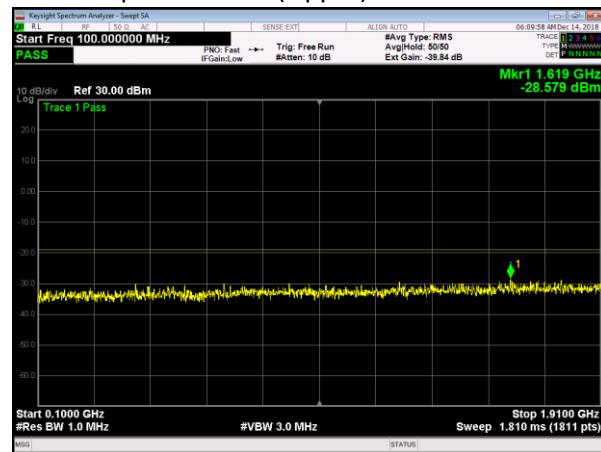
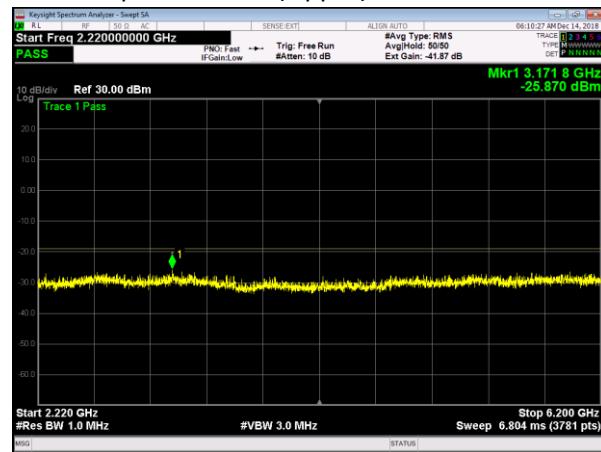


LTE20 Middle+NB IoT GB (Upper) 14GHz-18GHz

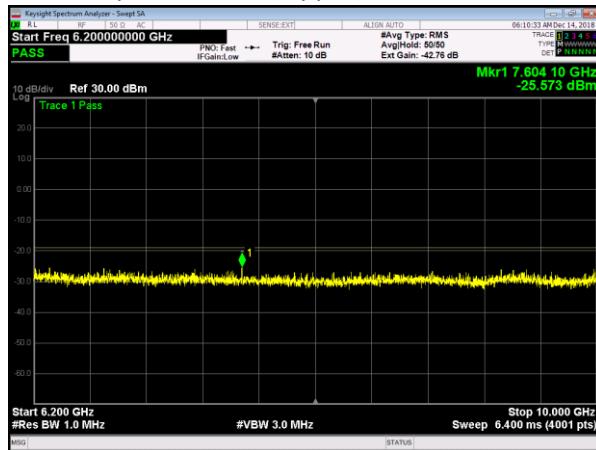


LTE20 Middle+NB IoT GB (Upper) 18GHz-22GHz

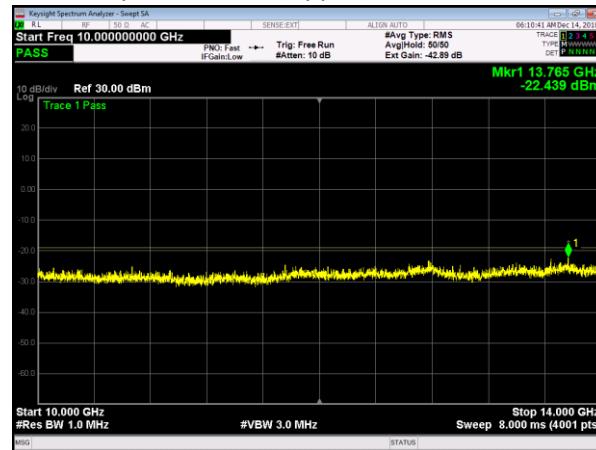


LTE15 Top Channel (1987.5MHz) NB IoT at Upper Guard Band:
LTE15 Top+NB IoT GB (Upper) 9-150KHz

LTE15 Top+NB IoT GB (Upper) 10MHz-100MHz

LTE15 Top+NB IoT GB (Upper) 1910MHz-2220MHz

LTE15 Top+NB IoT GB (Upper) 150 KHz-10MHz

LTE15 Top+NB IoT GB (Upper) 100MHz-1910MHz

LTE15 Top+NB IoT GB (Upper) 2220MHz-6.2GHz


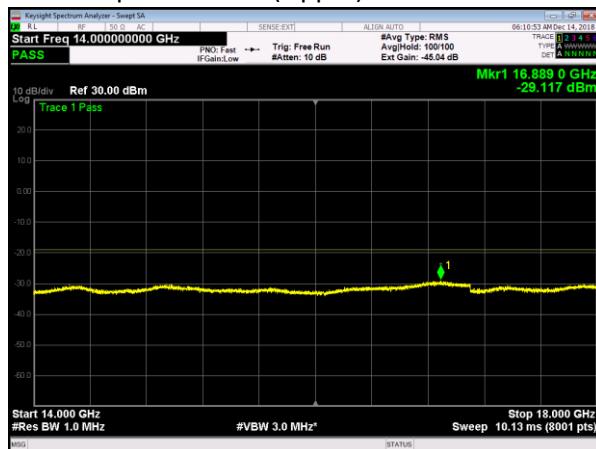
LTE15 Top+NB IoT GB (Upper) 6.2GHz-10GHz



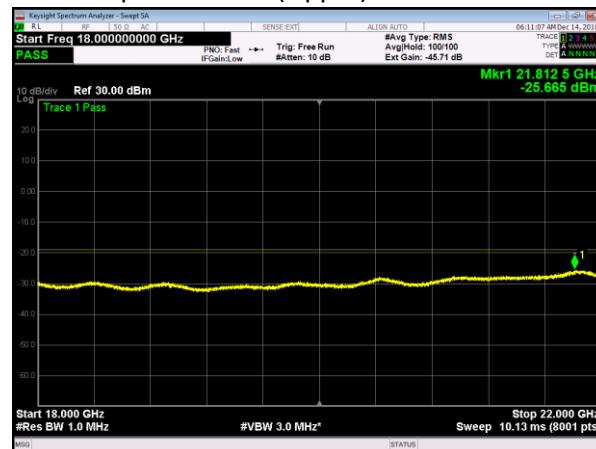
LTE15 Top+NB IoT GB (Upper) 10GHz-14GHz

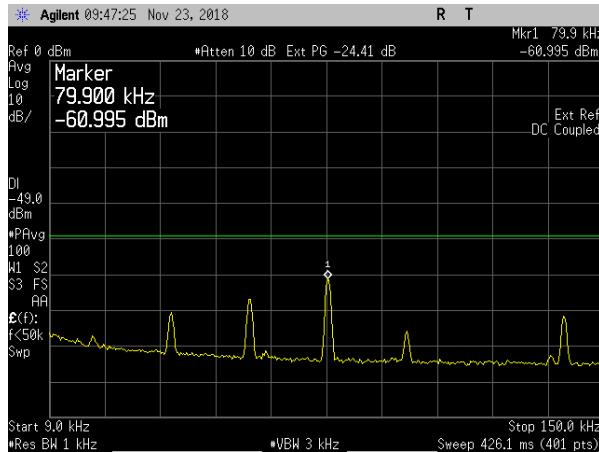
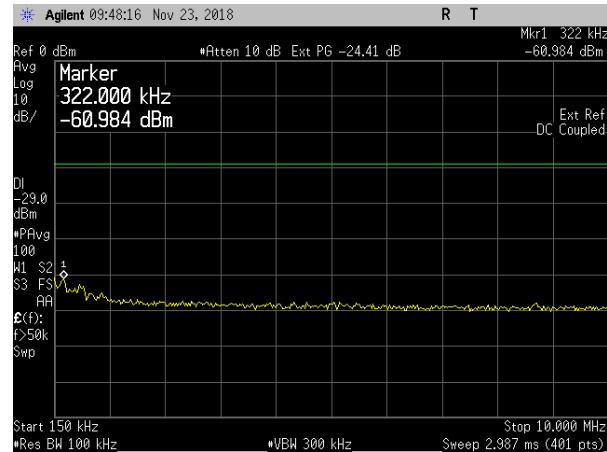
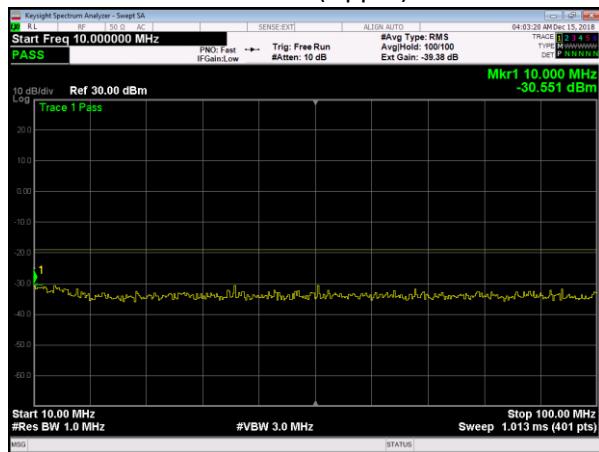
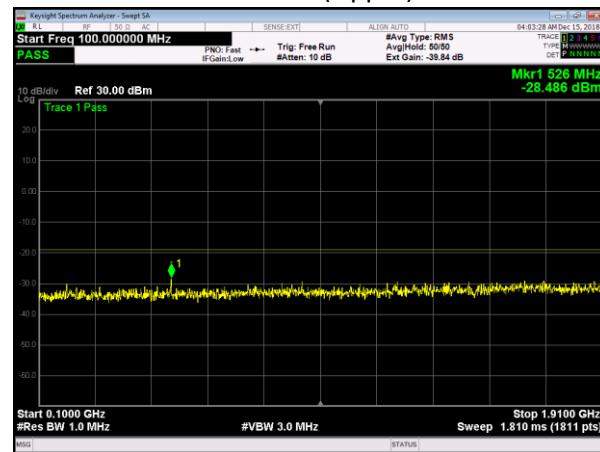
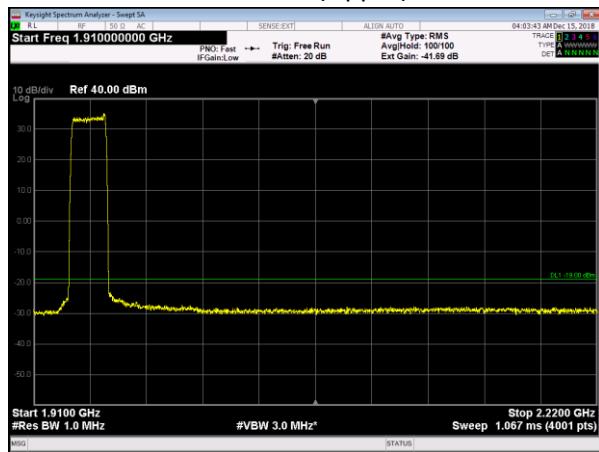
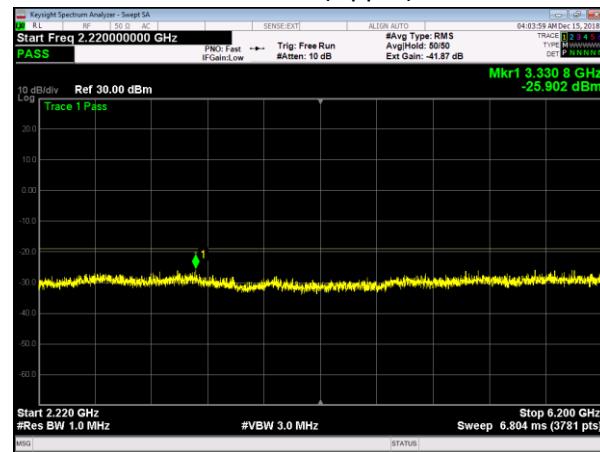


LTE15 Top+NB IoT GB (Upper) 14GHz-18GHz

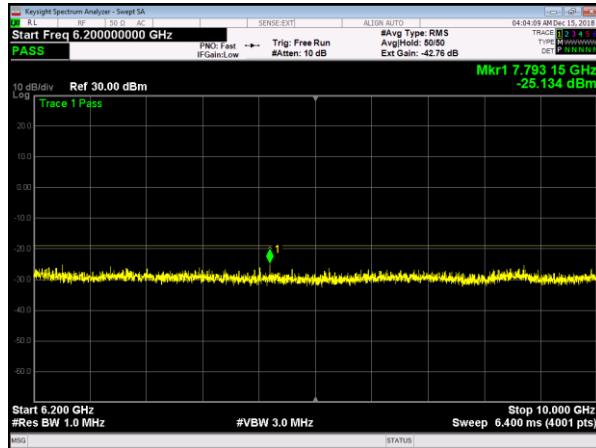


LTE15 Top+NB IoT GB (Upper) 18GHz-22GHz



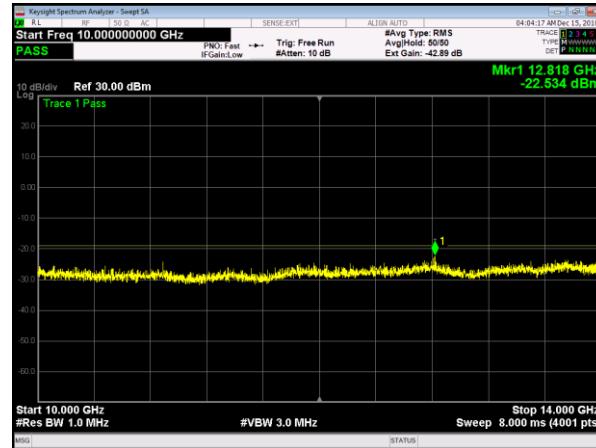
LTE20 Bottom Channel (1940MHz) NB IoT at Upper Guard Band:
LTE20 Bottom+NB IoT GB (Upper) 9-150KHz

LTE20 Bottom+NB IoT GB (Upper) 150KHz-10MHz

LTE20 Bottom+NB IoT GB (Upper) 10MHz-100MHz

LTE20 Bottom+NB IoT GB (Upper) 100MHz-1910MHz

LTE20 Bottom+NB IoT GB (Upper) 1910MHz-2220MHz

LTE20 Bottom+NB IoT GB (Upper) 2220MHz-6.2GHz


LTE20 Bottom+NB IoT GB (Upper) 6.2GHz-10GHz



LTE20 Bottom+NB IoT GB (Upper) 10GHz-14GHz

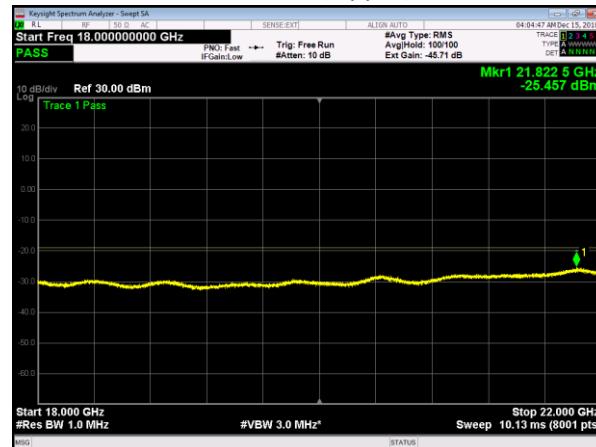
LTE20 Bottom+NB IoT GB (Upper) 10GHz-14GHz



LTE20 Bottom+NB IoT GB (Upper) 14GHz-18GHz

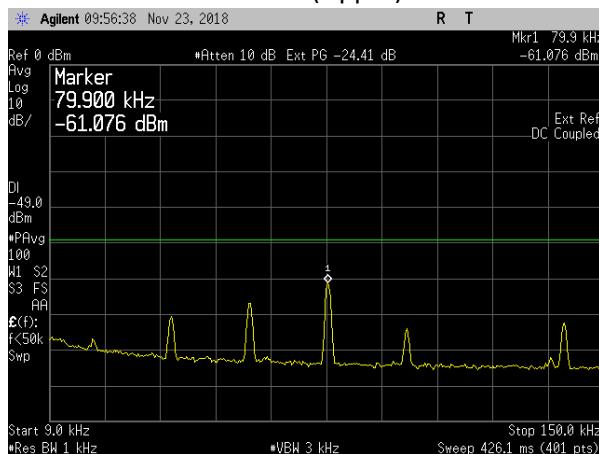


LTE20 Bottom+NB IoT GB (Upper) 18GHz-22GHz

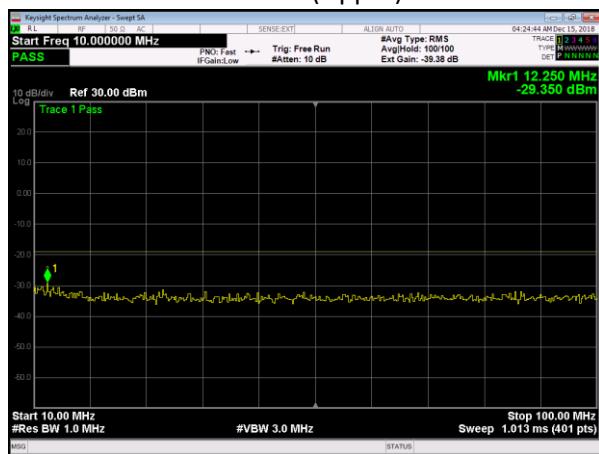


LTE20 Middle Channel (1962.5MHz) NB IoT at Upper Guard Band:

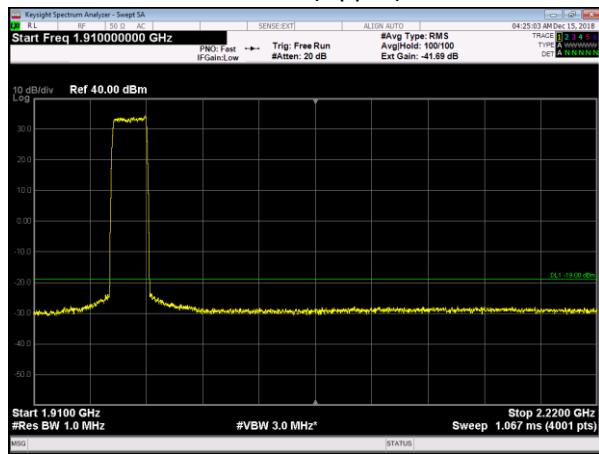
LTE20 Middle+NB IoT GB (Upper) 9-150KHz



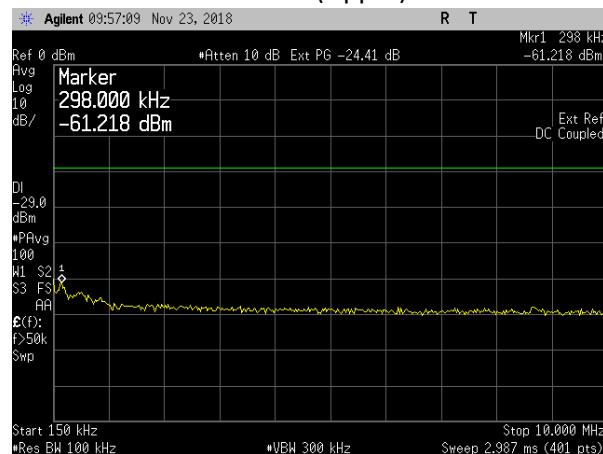
LTE20 Middle+NB IoT GB (Upper) 10MHz-100MHz



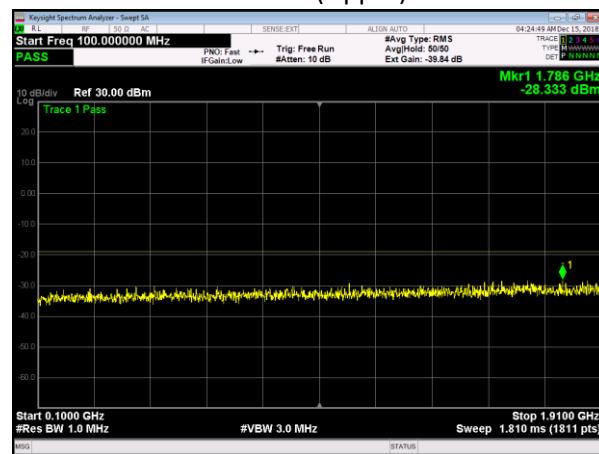
LTE20 Middle+NB IoT GB (Upper) 1910MHz-2220MHz



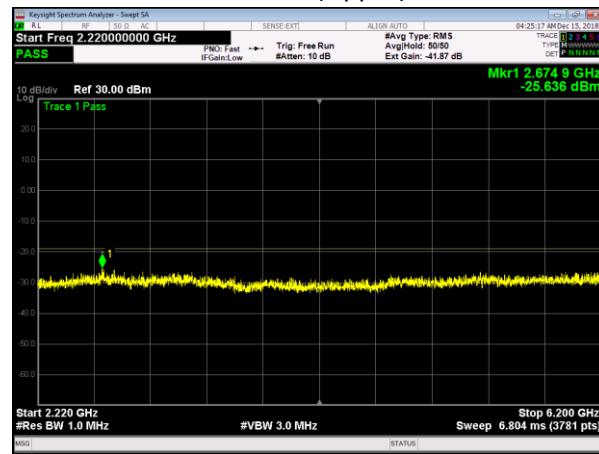
LTE20 Middle+NB IoT GB (Upper) 150 KHz-10MHz



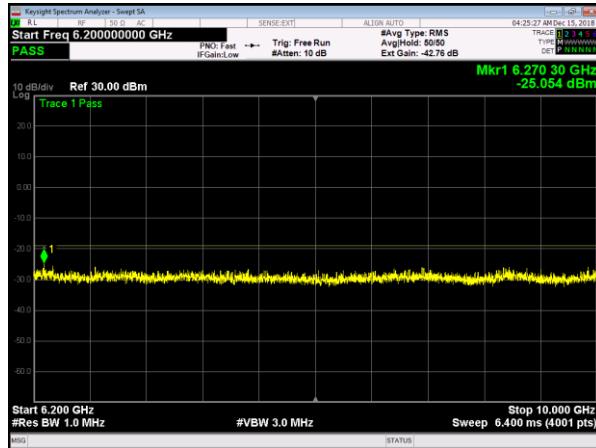
LTE20 Middle+NB IoT GB (Upper) 100MHz-1910MHz



LTE20 Middle+NB IoT GB (Upper) 2220MHz-6.2GHz



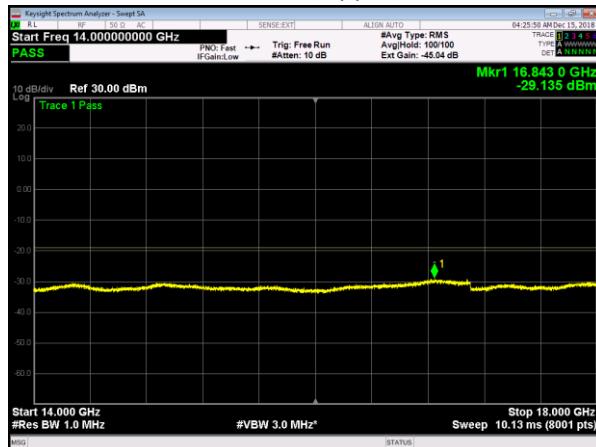
LTE20 Middle+NB IoT GB (Upper) 6.2GHz-10GHz



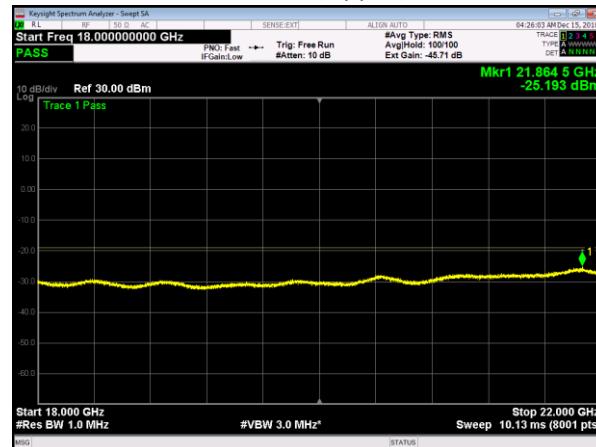
LTE20 Middle+NB IoT GB (Upper) 10GHz-14GHz

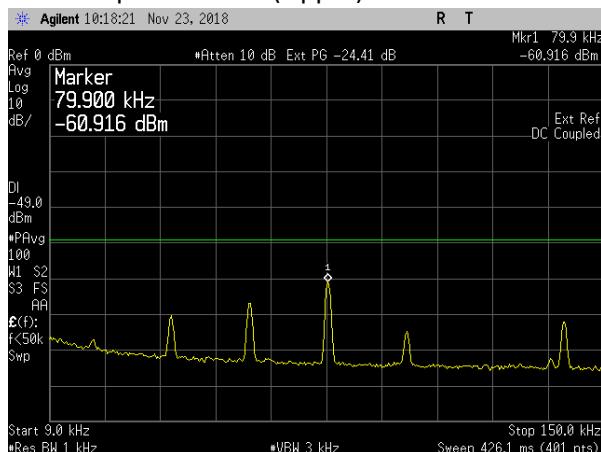
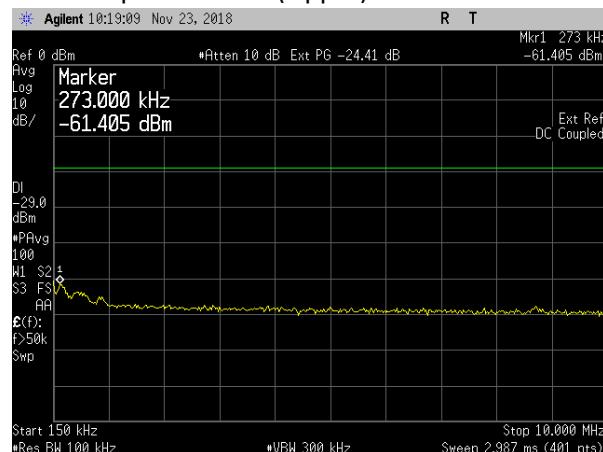
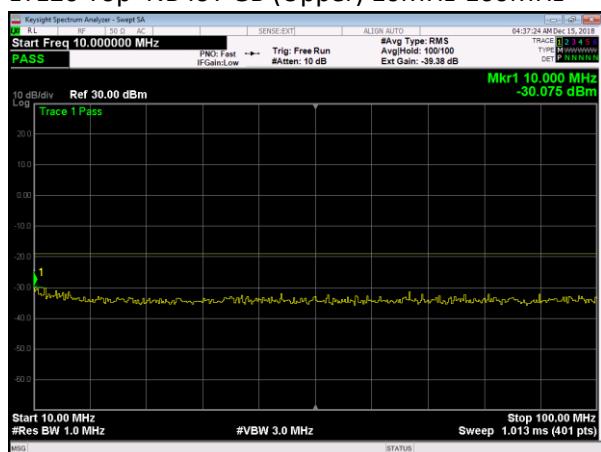
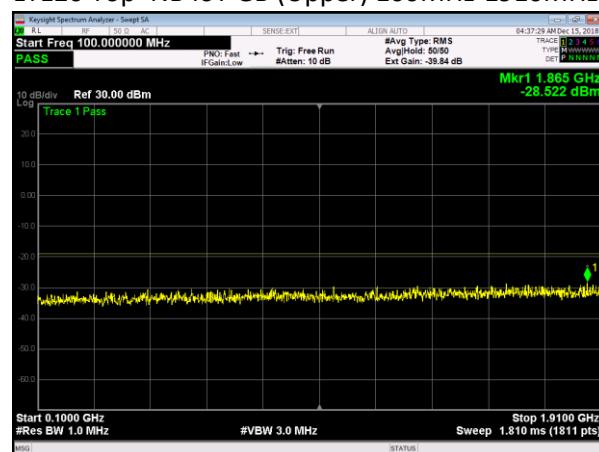
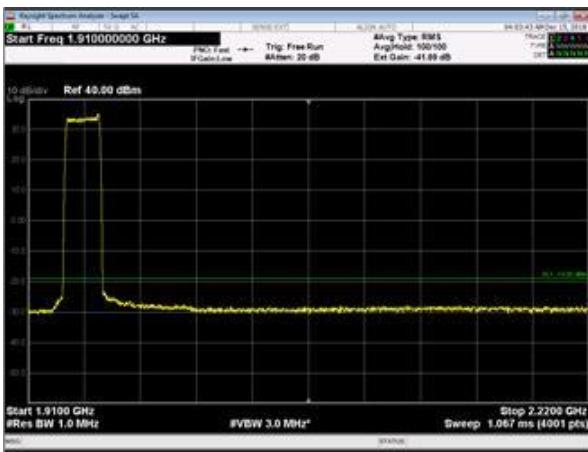


LTE20 Middle+NB IoT GB (Upper) 14GHz-18GHz

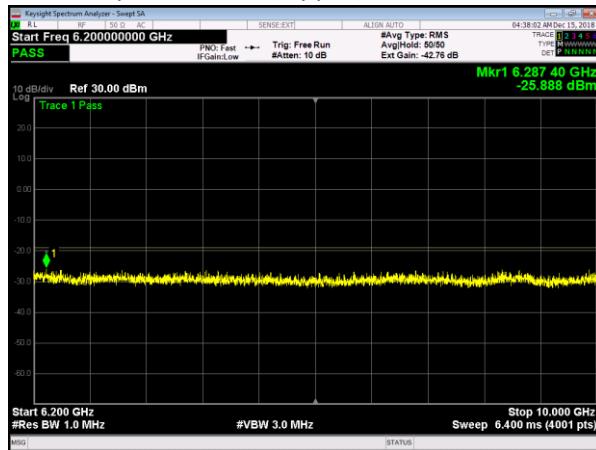


LTE20 Middle+NB IoT GB (Upper) 18GHz-22GHz

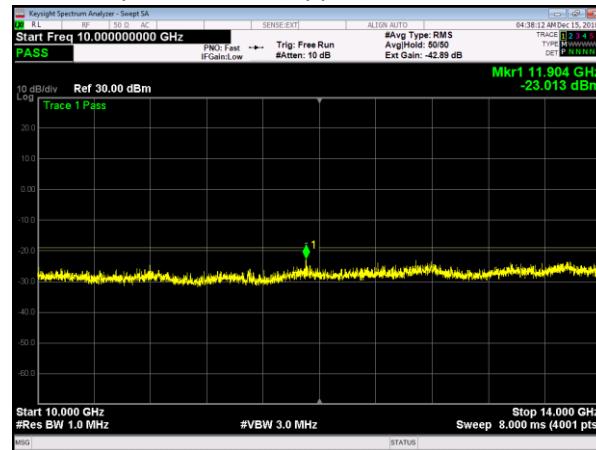


LTE20 Top Channel (1985MHz) NB IoT at Upper Guard Band:
LTE20 Top+NB IoT GB (Upper) 9-150KHz

LTE20 Top+NB IoT GB (Upper) 150 KHz-10MHz

LTE20 Top+NB IoT GB (Upper) 10MHz-100MHz

LTE20 Top+NB IoT GB (Upper) 100MHz-1910MHz

LTE20 Top+NB IoT GB (Upper) 1910MHz-2220MHz

LTE20 Top+NB IoT GB (Upper) 2220MHz-6.2GHz

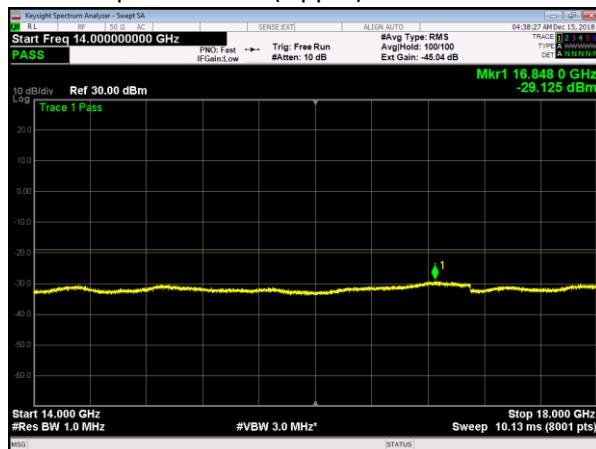

LTE20 Top+NB IoT GB (Upper) 6.2GHz-10GHz



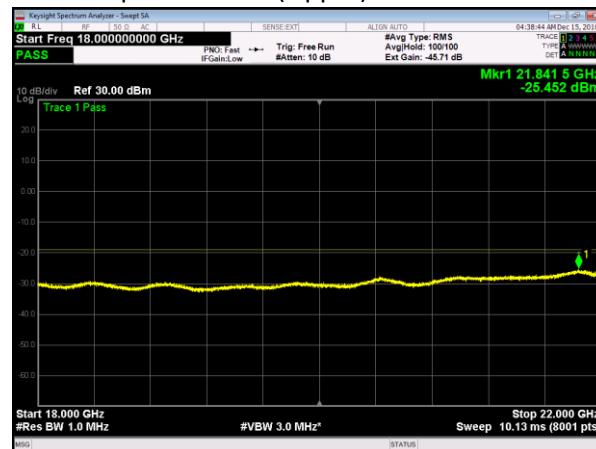
LTE20 Top+NB IoT GB (Upper) 10GHz-14GHz



LTE20 Top+NB IoT GB (Upper) 14GHz-18GHz



LTE20 Top+NB IoT GB (Upper) 18GHz-22GHz



13 TEST DATA FOR AHFIB Band 66 (2110-2200)

13.1 RF Output Power

The total measurement RF path loss of the test setup (attenuator and test cables) was 41.82 dB and is accounted for by the spectrum analyzer external gain offset.

RF Output Power Band 66 NB IoT Lower Guard Band Carrier				
AHFIB Ant port 2	LTE Bandwidth	LTE - Aggregate w/NB IoT GB		
		Peak (dBm)	Average (dBm)	PAPR (dB)
Bottom Channel	LTE15	53.80	45.73	8.07
Middle Channel	LTE15	53.76	45.64	8.12
Top Channel	LTE15	53.77	45.68	8.09
Bottom Channel	LTE20	53.75	45.68	8.07
Middle Channel	LTE20	53.74	45.64	8.10
Top Channel	LTE20	53.82	45.76	8.06

RF Output Power Band 66 NB IoT Upper Guard Band Carrier				
AHFIB Ant port 2	LTE Bandwidth	LTE - Aggregate w/NB IoT GB		
		Peak (dBm)	Average (dBm)	PAPR (dB)
Bottom Channel	LTE15	53.65	45.71	7.94
Middle Channel	LTE15	53.58	45.68	7.90
Top Channel	LTE15	53.62	45.70	7.92
Bottom Channel	LTE20	53.80	45.80	8.00
Middle Channel	LTE20	53.70	45.75	7.95
Top Channel	LTE20	5.078	45.71	8.07