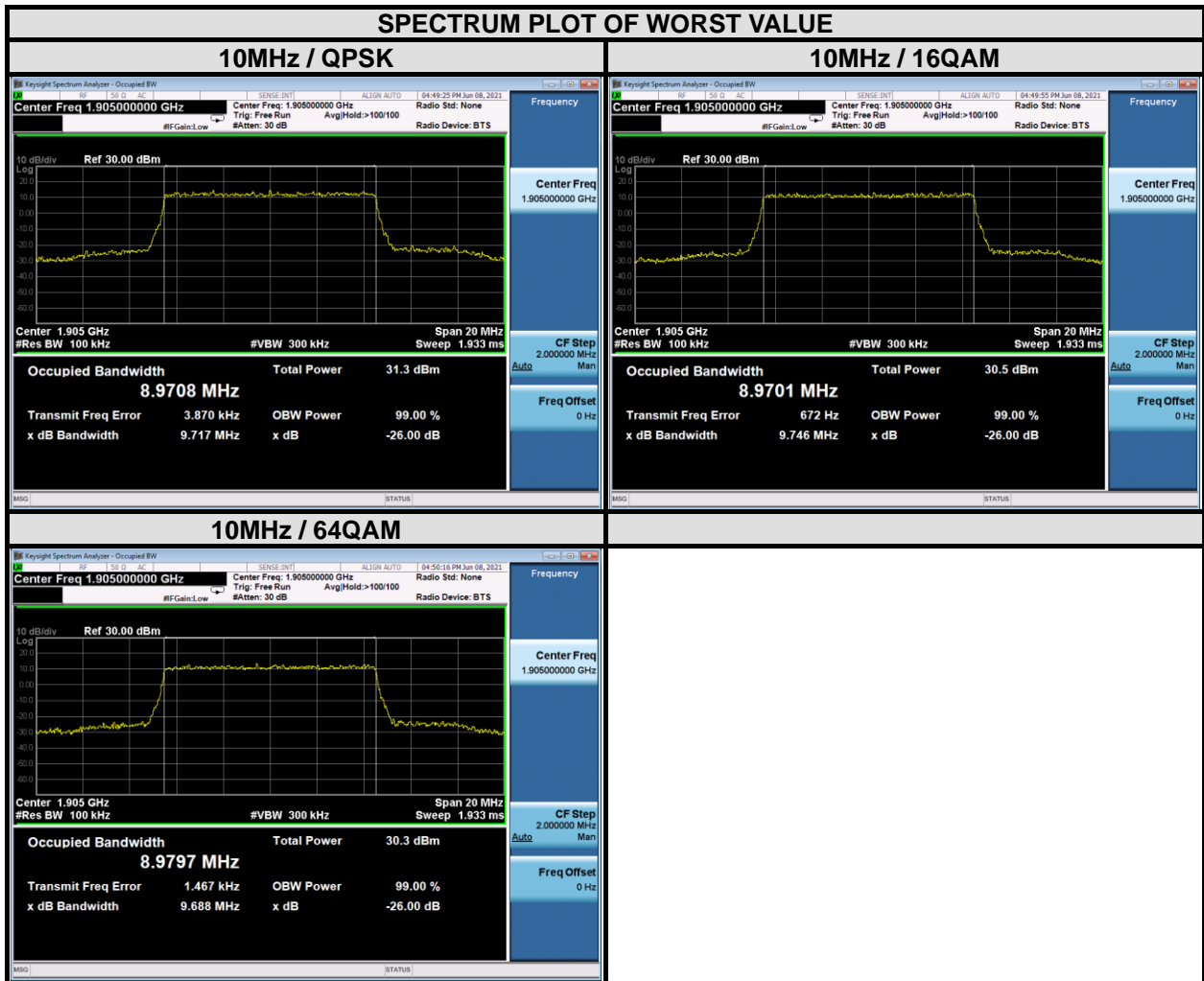




**BUREAU
VERITAS**

Test Report No.: W7L-P21080006RF16

CHANNEL BANDWIDTH: 10MHz							
CHANNEL	Frequency (MHz)	99% OCCUPIED Bandwidth (MHz)			26 dB bandwidth (MHz)		
		QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
18650	1855	8.94	8.95	8.95	9.70	9.65	9.69
18900	1880	8.96	8.94	8.95	9.80	9.68	9.66
19150	1905	8.97	8.97	8.98	9.72	9.75	9.69

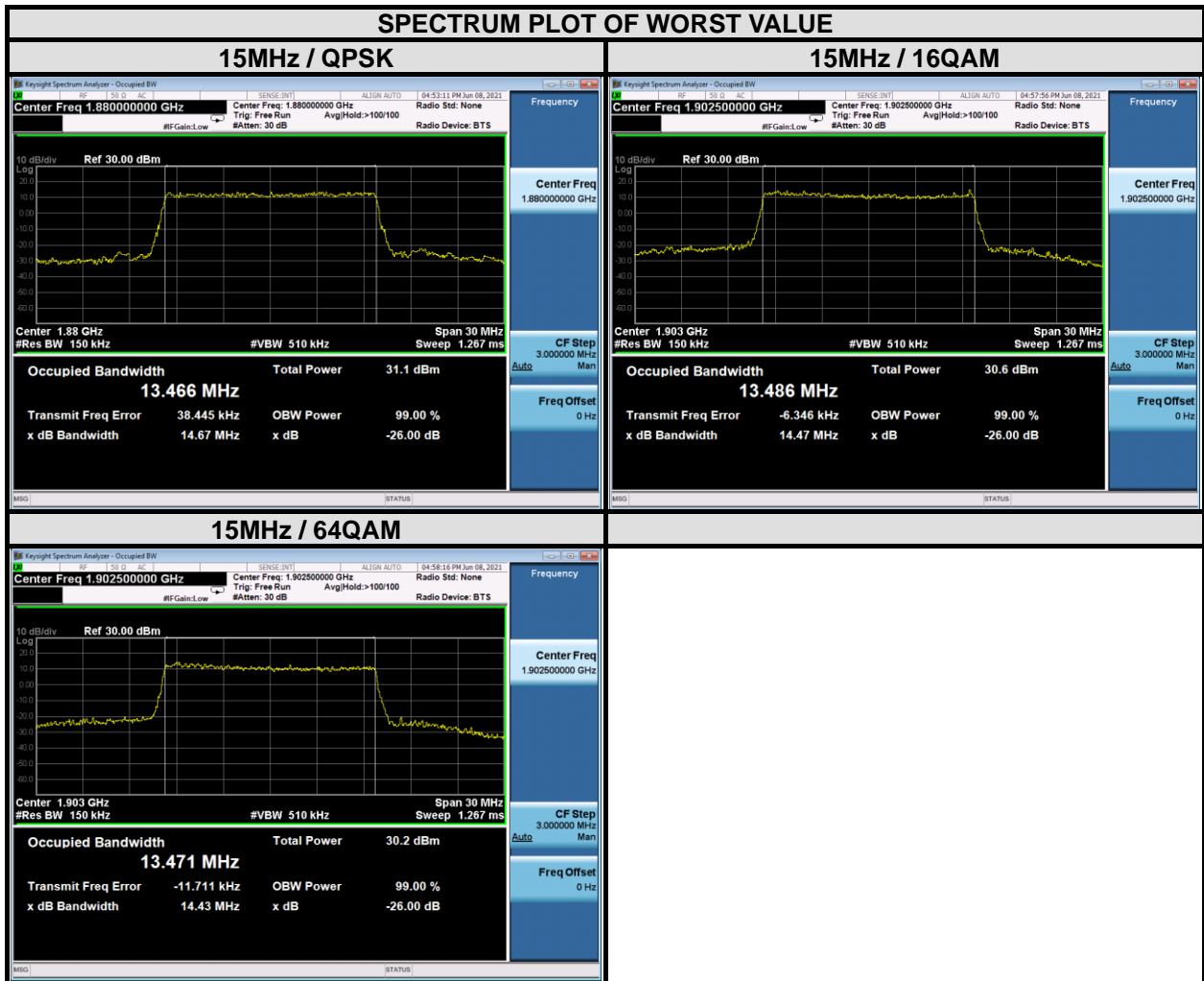




**BUREAU
VERITAS**

Test Report No.: W7L-P21080006RF16

CHANNEL BANDWIDTH: 15MHz							
CHANNEL	Frequency (MHz)	99% OCCUPIED Bandwidth (MHz)			26 dB bandwidth (MHz)		
		QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
18675	1857.5	13.38	13.40	13.39	14.35	14.29	14.47
18900	1880	13.47	13.46	13.44	14.67	14.38	14.53
19125	1902.5	13.44	13.49	13.47	14.39	14.47	14.43

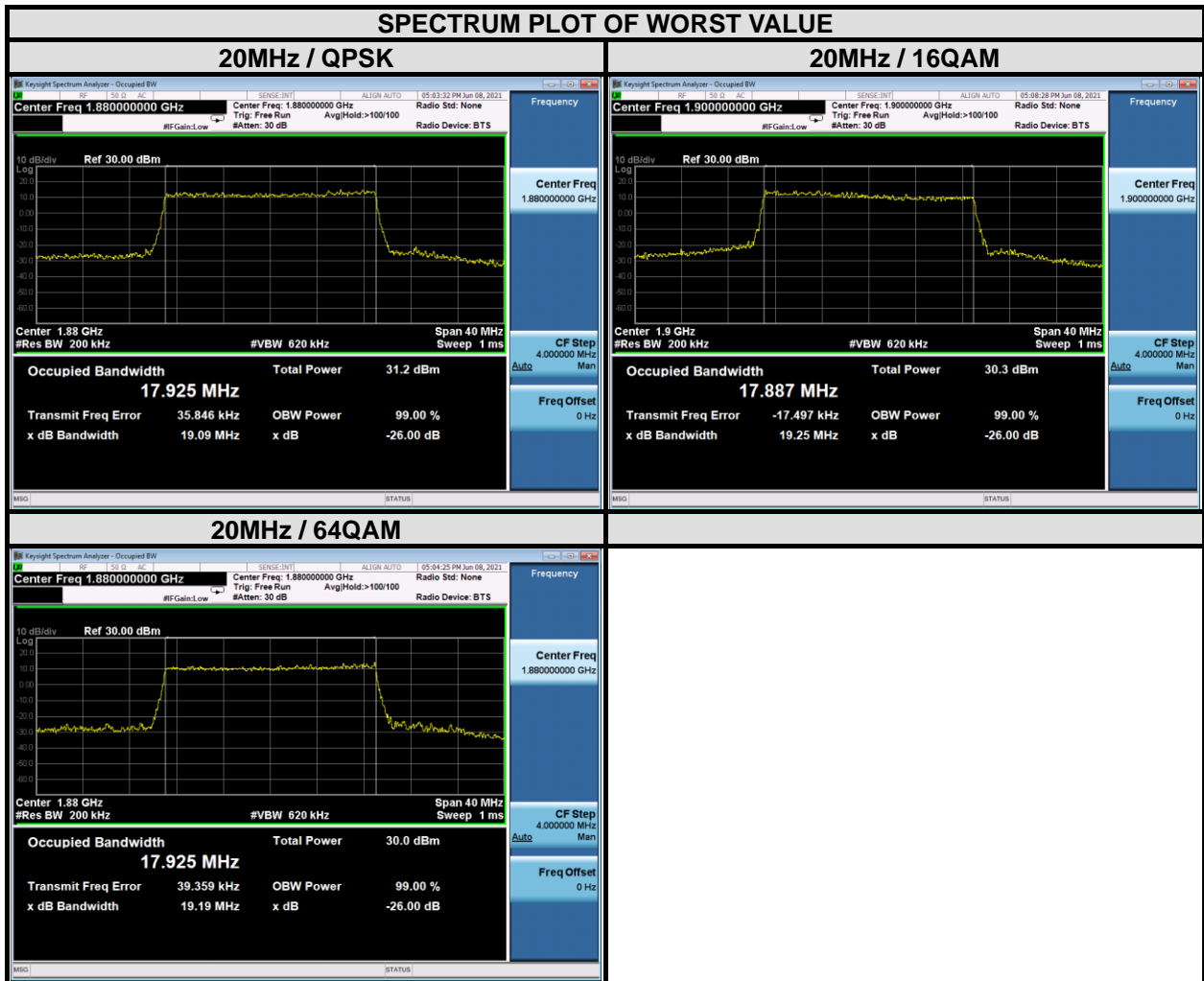




**BUREAU
VERITAS**

Test Report No.: W7L-P21080006RF16

CHANNEL BANDWIDTH: 20MHz							
CHANNEL	Frequency (MHz)	99% OCCUPIED Bandwidth (MHz)			26 dB bandwidth (MHz)		
		QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
18700	1860	17.83	17.84	17.86	18.94	19.01	19.13
18900	1880	17.93	17.97	17.93	19.09	19.22	19.19
19100	1900	17.90	19.25	17.92	19.13	17.89	19.16



LTE BAND 25

CHANNEL BANDWIDTH: 1.4MHz							
CHANNEL	Frequency (MHz)	99% OCCUPIED Bandwidth (MHz)			26 dB bandwidth (MHz)		
		QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
26047	1850.7	1.08	1.09	1.08	1.47	1.50	1.50
26365	1882.5	1.09	1.08	1.09	1.55	1.49	1.52
26683	1914.3	1.09	1.08	1.08	1.49	1.43	1.45





CHANNEL BANDWIDTH: 3MHz							
CHANNEL	Frequency (MHz)	99% OCCUPIED Bandwidth (MHz)			26 dB bandwidth (MHz)		
		QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
26055	1851.5	2.69	2.69	2.93	2.98	2.97	2.97
26365	1882.5	2.70	2.69	2.69	2.98	2.98	2.95
26675	1913.5	2.69	2.69	2.69	3.05	2.94	2.96





CHANNEL BANDWIDTH: 5MHz							
CHANNEL	Frequency (MHz)	99% OCCUPIED Bandwidth (MHz)			26 dB bandwidth (MHz)		
		QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
26065	1852.5	4.46	4.46	4.49	4.82	4.80	4.83
26365	1882.5	4.46	4.46	4.47	4.84	4.80	4.81
26665	1912.5	4.46	4.46	4.46	4.88	4.83	4.80





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CHANNEL BANDWIDTH: 10MHz							
CHANNEL	Frequency (MHz)	99% OCCUPIED Bandwidth (MHz)			26 dB bandwidth (MHz)		
		QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
26090	1855	8.91	8.92	8.90	9.31	9.33	9.34
26365	1882.5	8.92	8.92	8.92	9.32	9.33	9.36
26640	1910	8.89	8.89	8.89	9.34	9.37	9.31

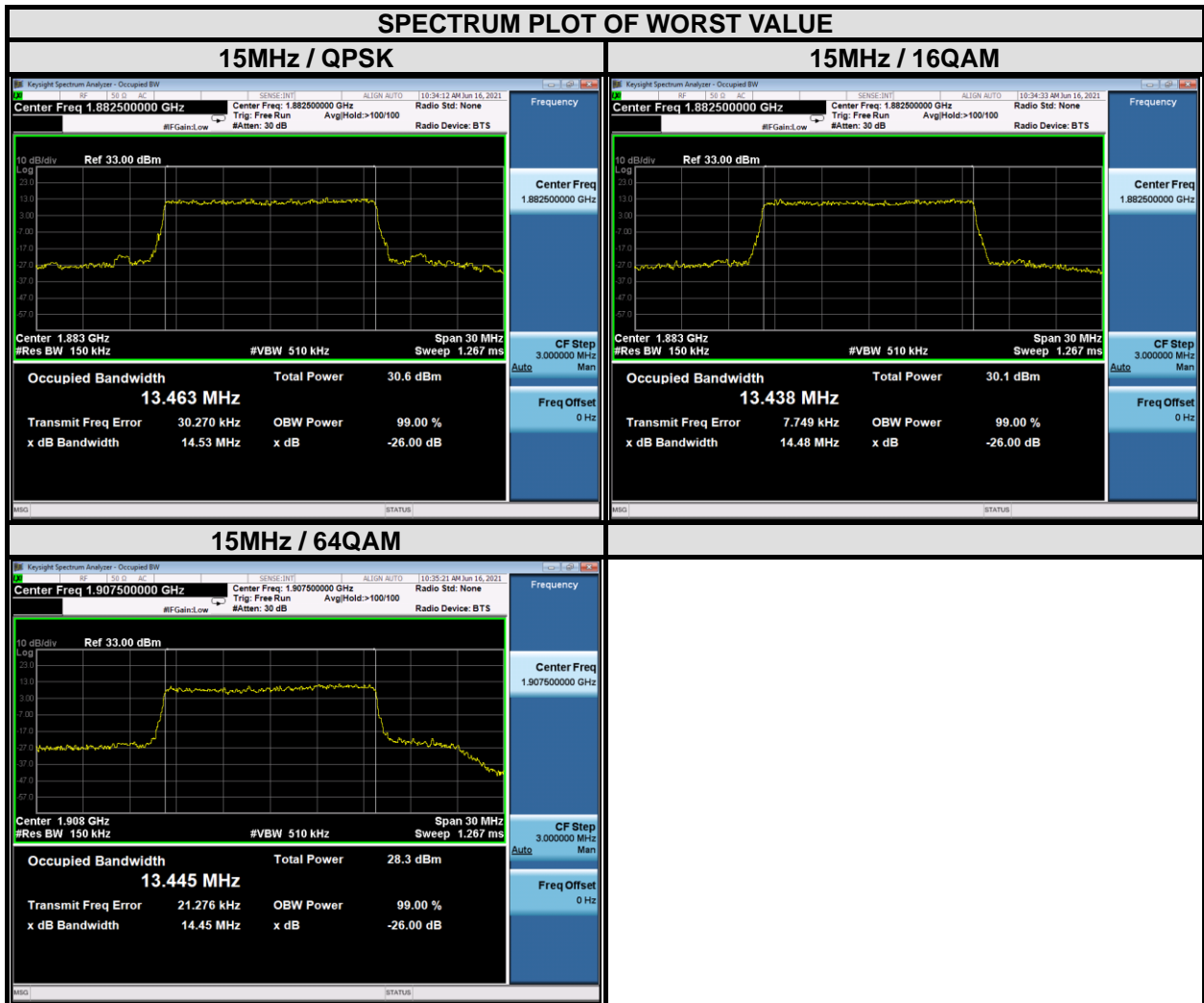




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VERITAS**

Test Report No.: W7L-P21080006RF16

CHANNEL BANDWIDTH: 15MHz							
CHANNEL	Frequency (MHz)	99% OCCUPIED Bandwidth (MHz)			26 dB bandwidth (MHz)		
		QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
26115	1857.5	13.39	13.37	13.38	14.04	14.01	14.08
26365	1882.5	13.46	13.44	13.44	14.53	14.48	14.52
26615	1907.5	13.42	13.41	13.45	14.39	14.45	14.45





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Test Report No.: W7L-P21080006RF16

CHANNEL BANDWIDTH: 20MHz							
CHANNEL	Frequency (MHz)	99% OCCUPIED Bandwidth (MHz)			26 dB bandwidth (MHz)		
		QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
26140	1860	17.86	17.87	17.91	18.99	19.06	19.25
26365	1882.5	17.92	17.98	17.96	19.13	19.22	19.28
26590	1905	17.95	17.96	17.97	19.18	19.17	19.09



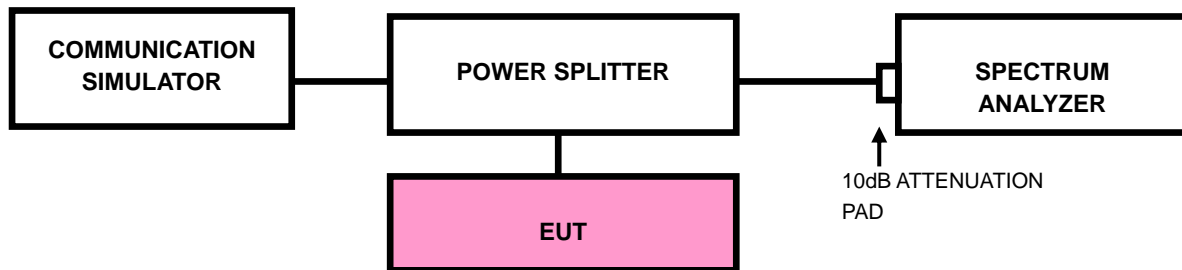


3.4 BAND EDGE MEASUREMENTC

3.4.1 LIMITS OF BAND EDGE MEASUREMENT

Power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least $43 + 10 \log(P)$ dB. In the 1 MHz bands immediately outside and adjacent to the frequency block a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed.

3.4.2 TEST SETUP



3.4.3 TEST PROCEDURES

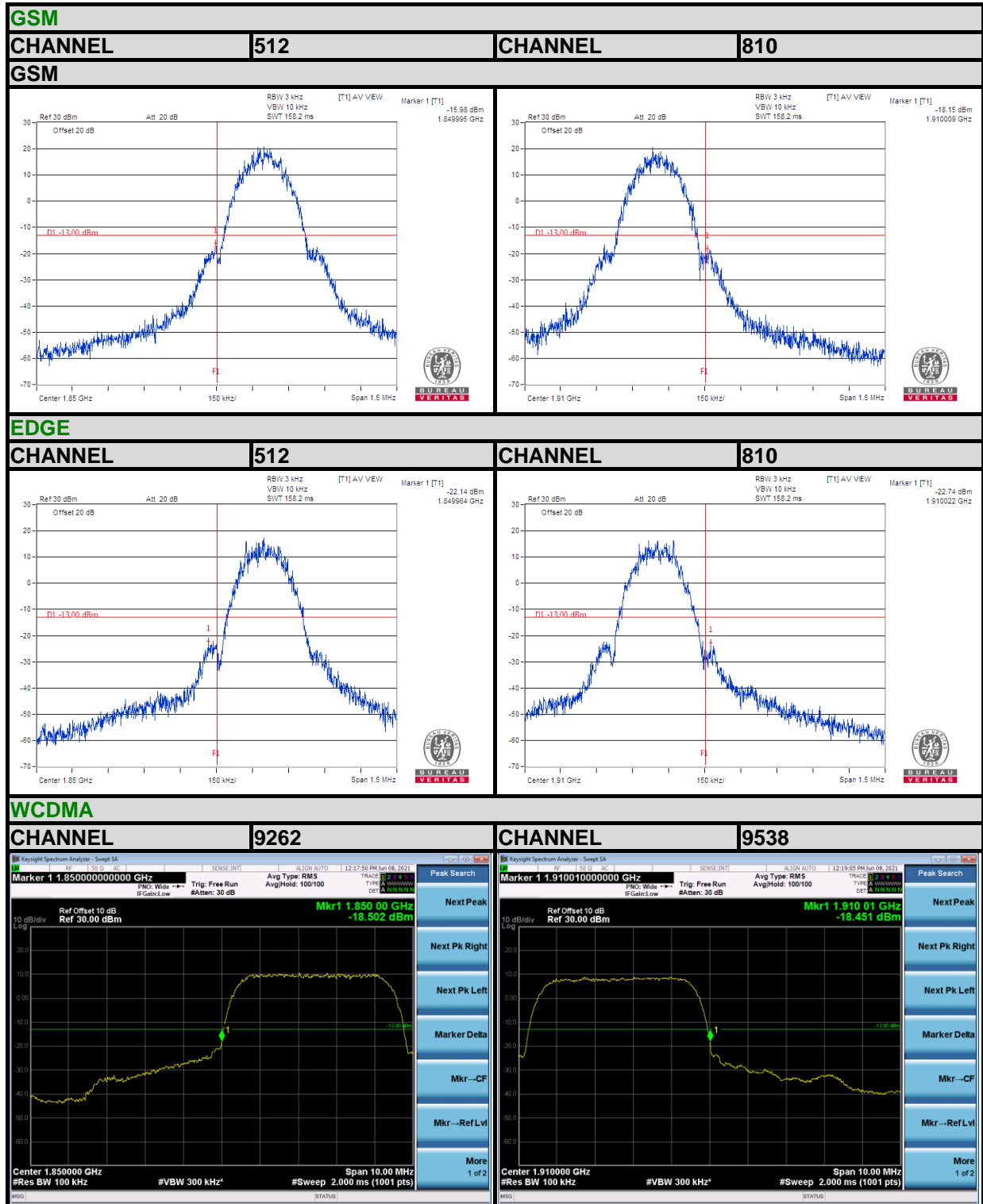
- a. All measurements were done at low and high operational frequency range.
- b. The center frequency of spectrum is the band edge frequency and span is 1.5 MHz. RBW of the spectrum is 10kHz and VBW of the spectrum is 30kHz (GSM/GPRS/EDGE).
- c. The center frequency of spectrum is the band edge frequency and span is 10MHz. RBW of the spectrum is 100kHz and VBW of the spectrum is 300kHz (WCDMA).
- d. The center frequency of spectrum is the band edge frequency and span is 1~5 MHz. RBW of the spectrum is 20kHz and VBW of the spectrum is 100 kHz. (LTE bandwidth 1.4MHz)
- e. The center frequency of spectrum is the band edge frequency and span is 1~5 MHz. RBW of the spectrum is 30kHz and VBW of the spectrum is 100kHz. (LTE bandwidth 3MHz)
- f. The center frequency of spectrum is the band edge frequency and span is 1~5 MHz. RBW of the spectrum is 50kHz and VBW of the spectrum is 200kHz. (LTE bandwidth 5MHz)
- g. The center frequency of spectrum is the band edge frequency and span is 1~5 MHz. RBW of the spectrum is 100kHz and VBW of the spectrum is 300kHz. (LTE bandwidth 10MHz)
- h. The center frequency of spectrum is the band edge frequency and span is 1~5 MHz. RBW of the spectrum is 200kHz and VBW of the spectrum is 1MHz. (LTE bandwidth 15MHz)
- i. The center frequency of spectrum is the band edge frequency and span is 1~5 MHz. RBW of the spectrum is 200kHz and VBW of the spectrum is 1MHz. (LTE bandwidth 20MHz)
- j. Record the max trace plot into the test report.



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3.4.4. TEST RESULTS





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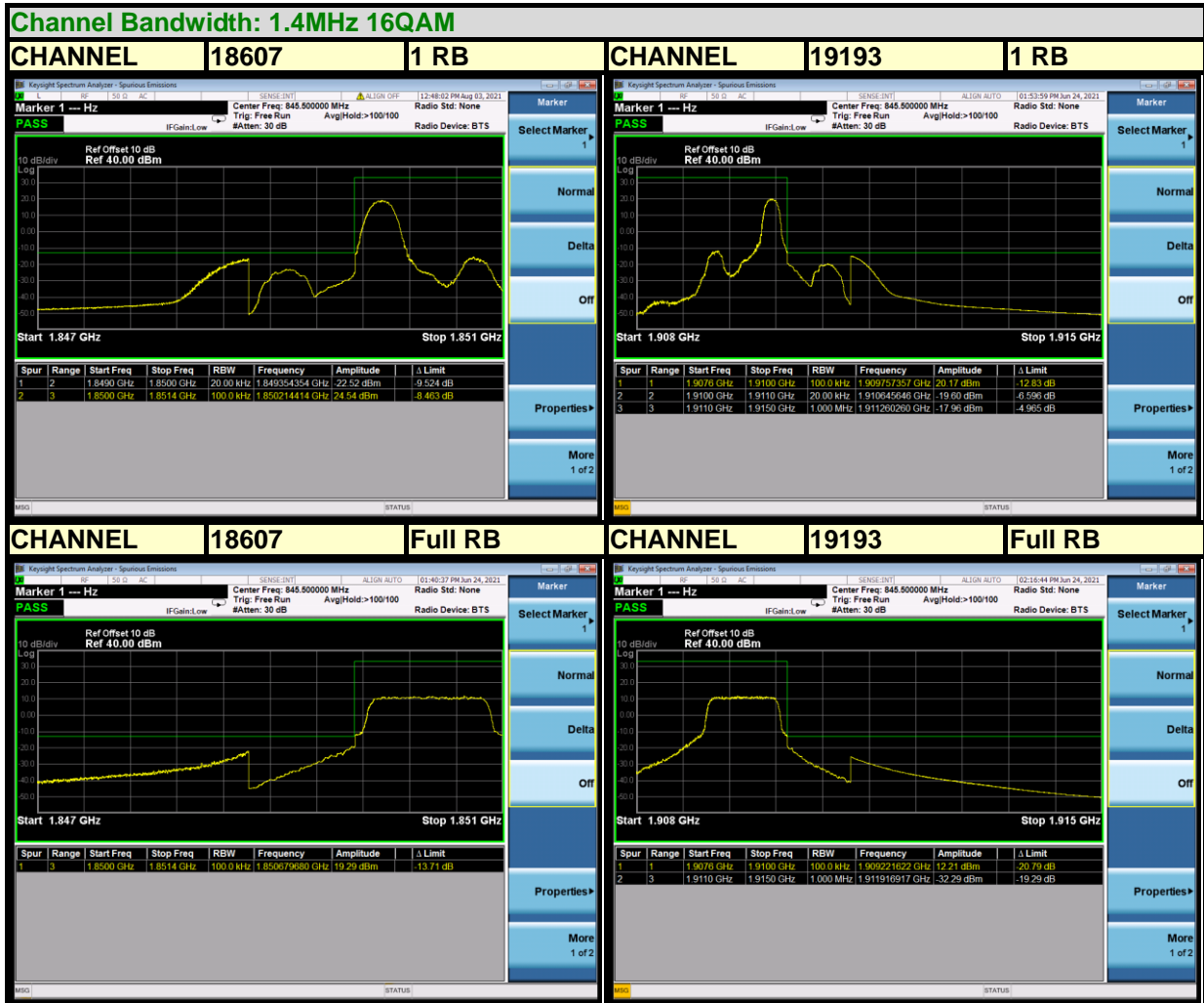
LTE BAND 2





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LTE BAND 2





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