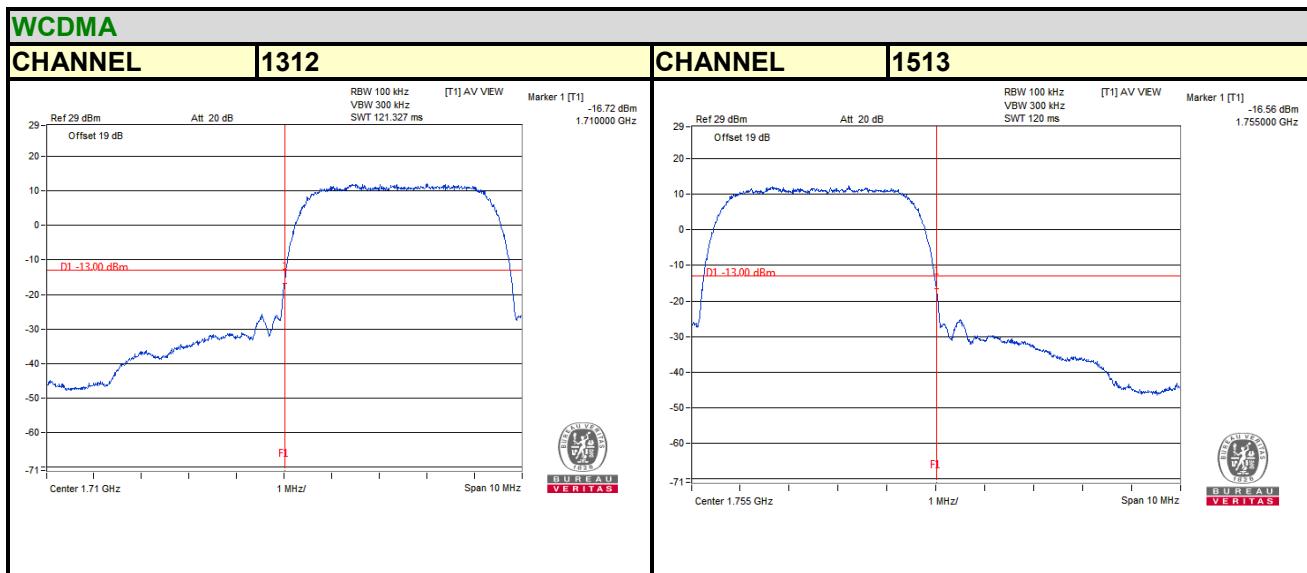




Test Report No.: RF190712W002-5

3.5.4 TEST RESULTS

WCDMA BAND 4

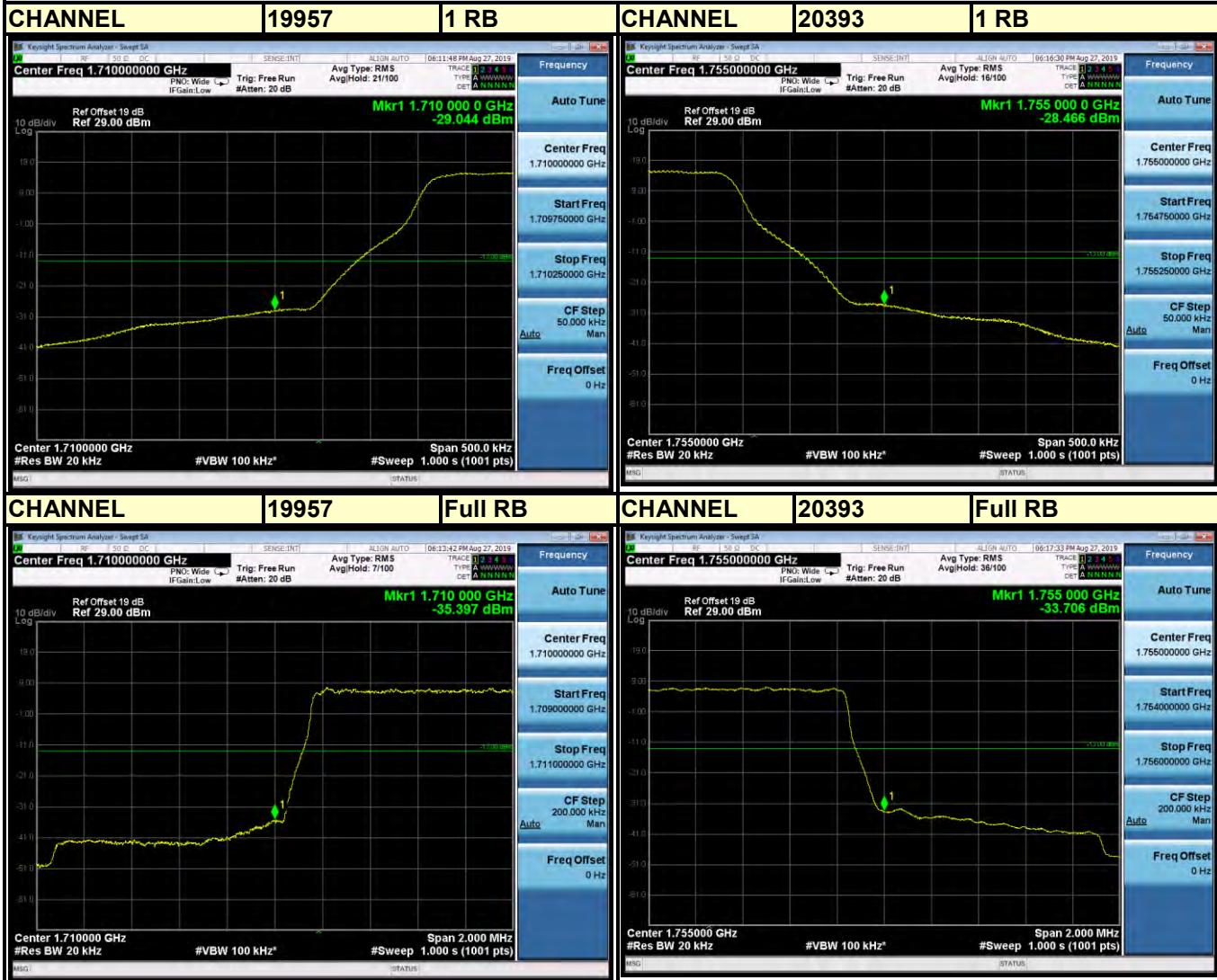




Test Report No.: RF190712W002-5

LTE BAND 4

Channel Bandwidth: 1.4MHz QPSK

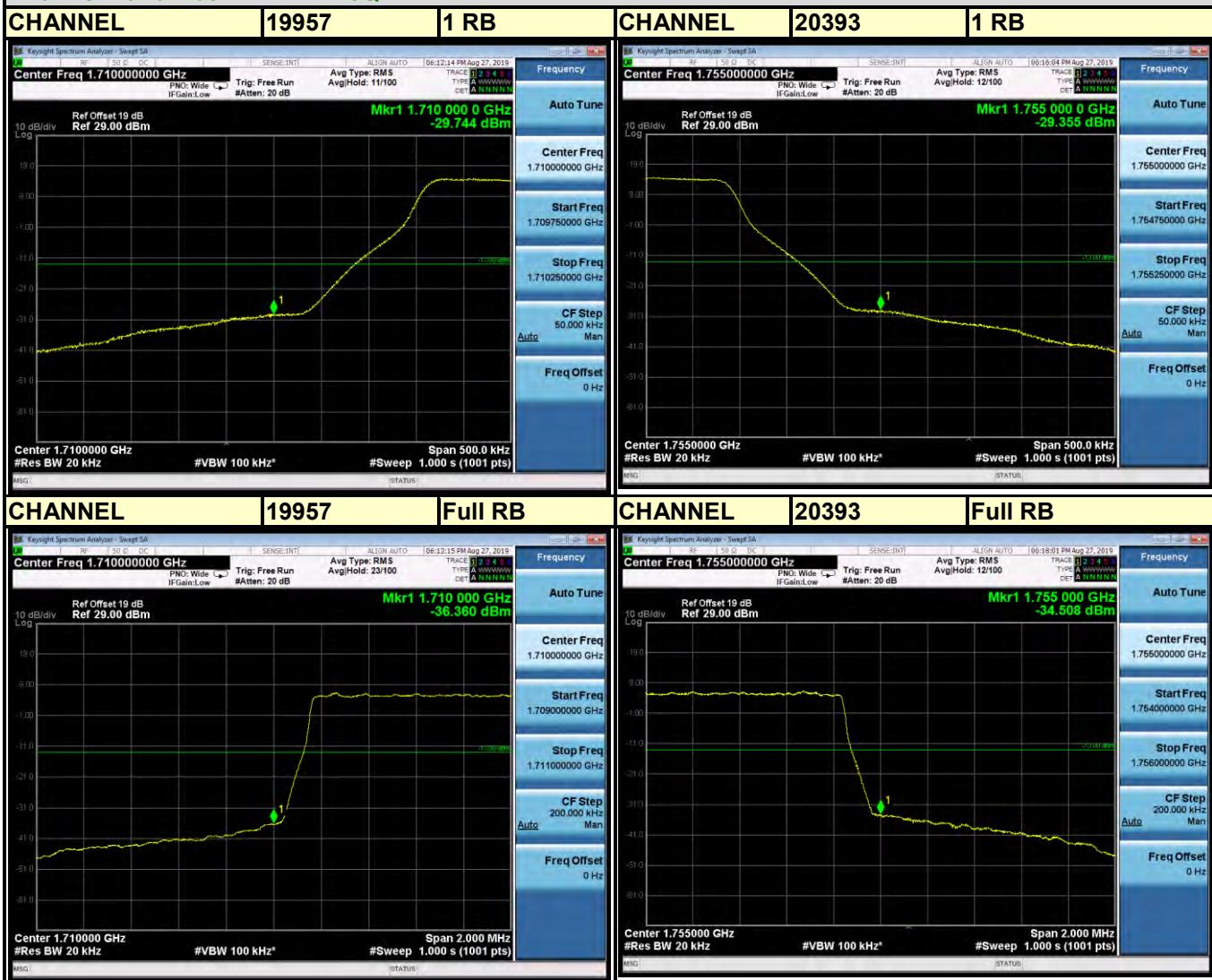




Test Report No.: RF190712W002-5

BUREAU
VERITAS

Channel Bandwidth: 1.4MHz 16QAM

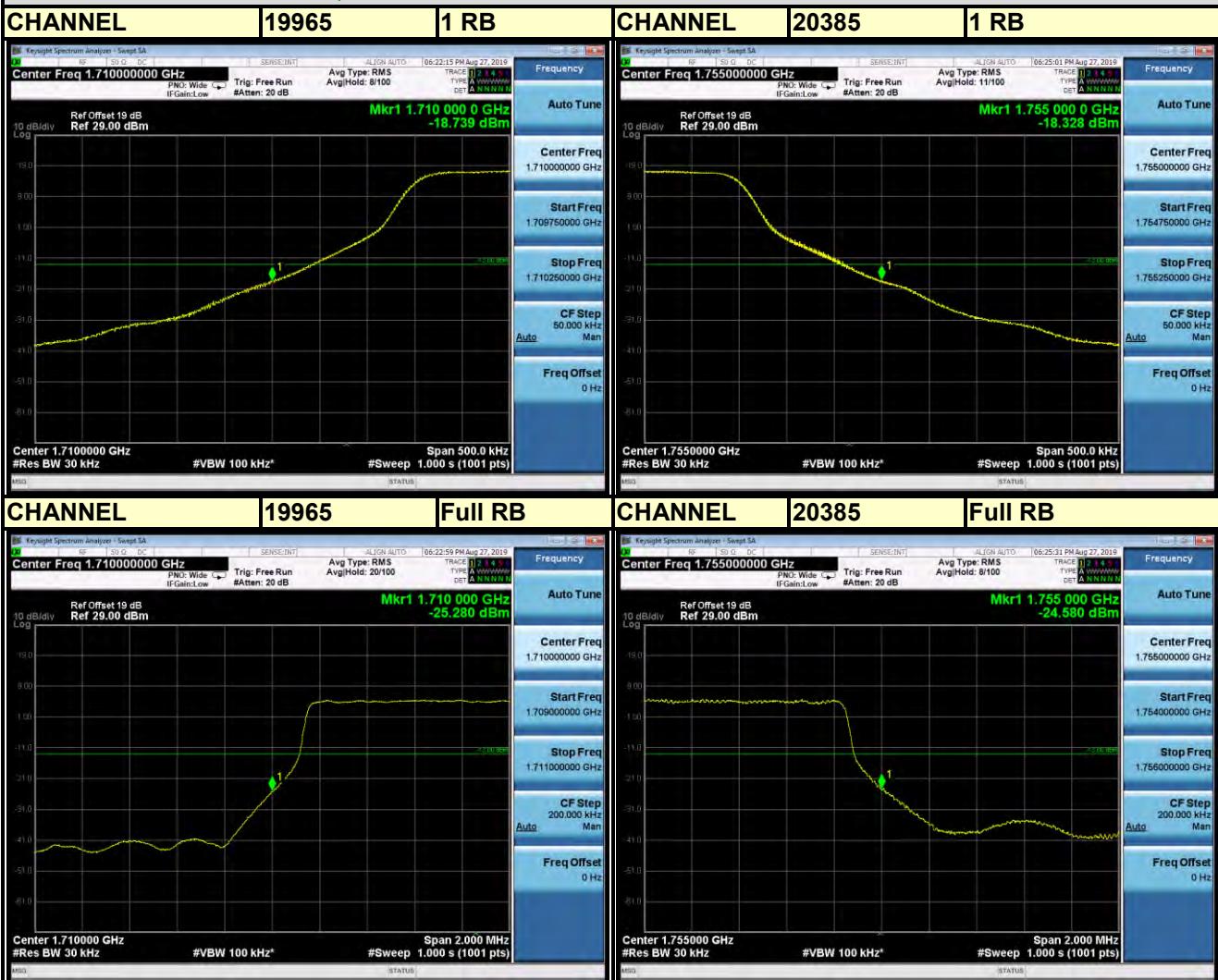




Test Report No.: RF190712W002-5

LTE BAND 4

Channel Bandwidth: 3MHz QPSK





Test Report No.: RF190712W002-5

BUREAU
VERITAS

Channel Bandwidth: 3MHz 16QAM

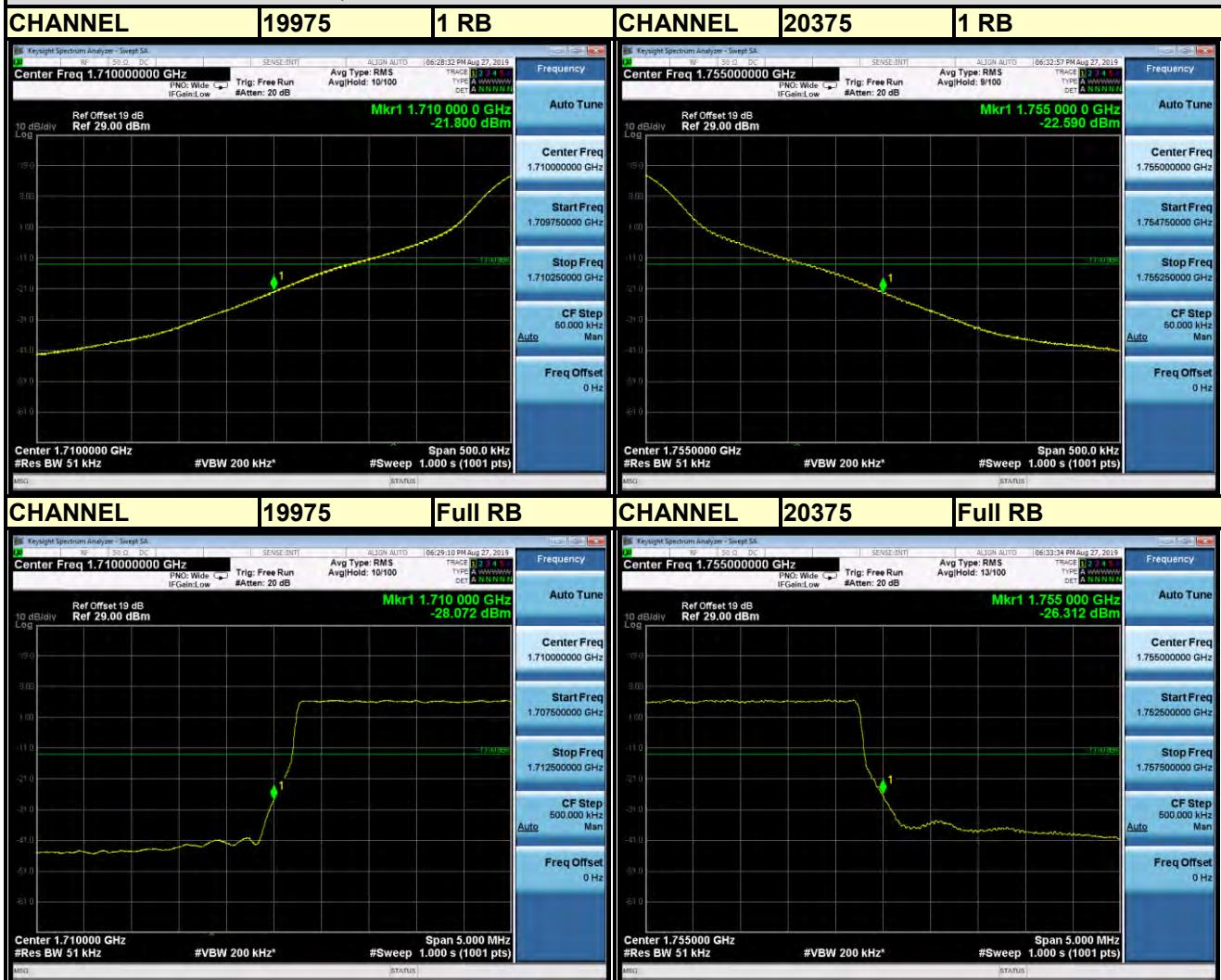




Test Report No.: RF190712W002-5

LTE BAND 4

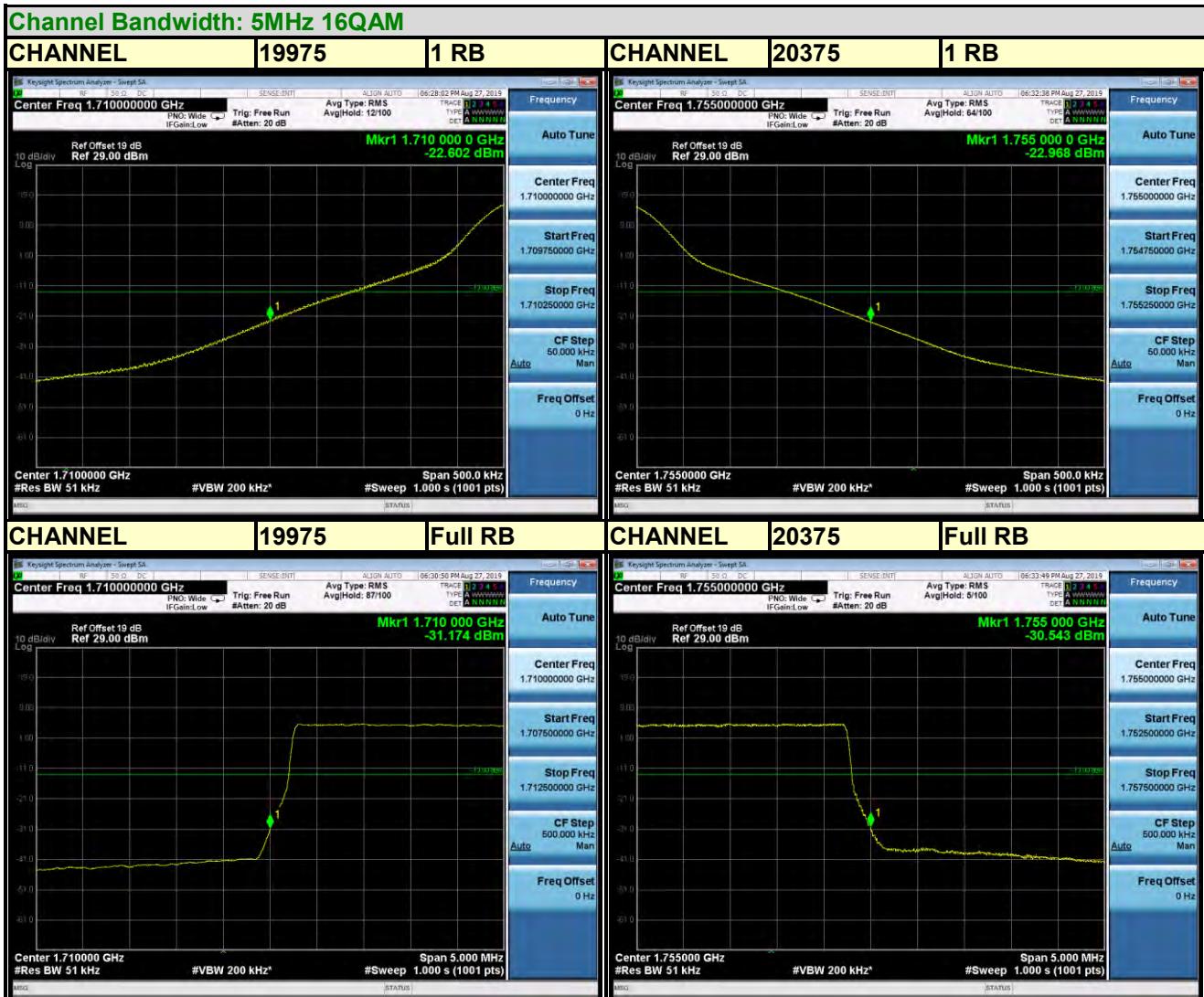
Channel Bandwidth: 5MHz QPSK





Test Report No.: RF190712W002-5

BUREAU
VERITAS

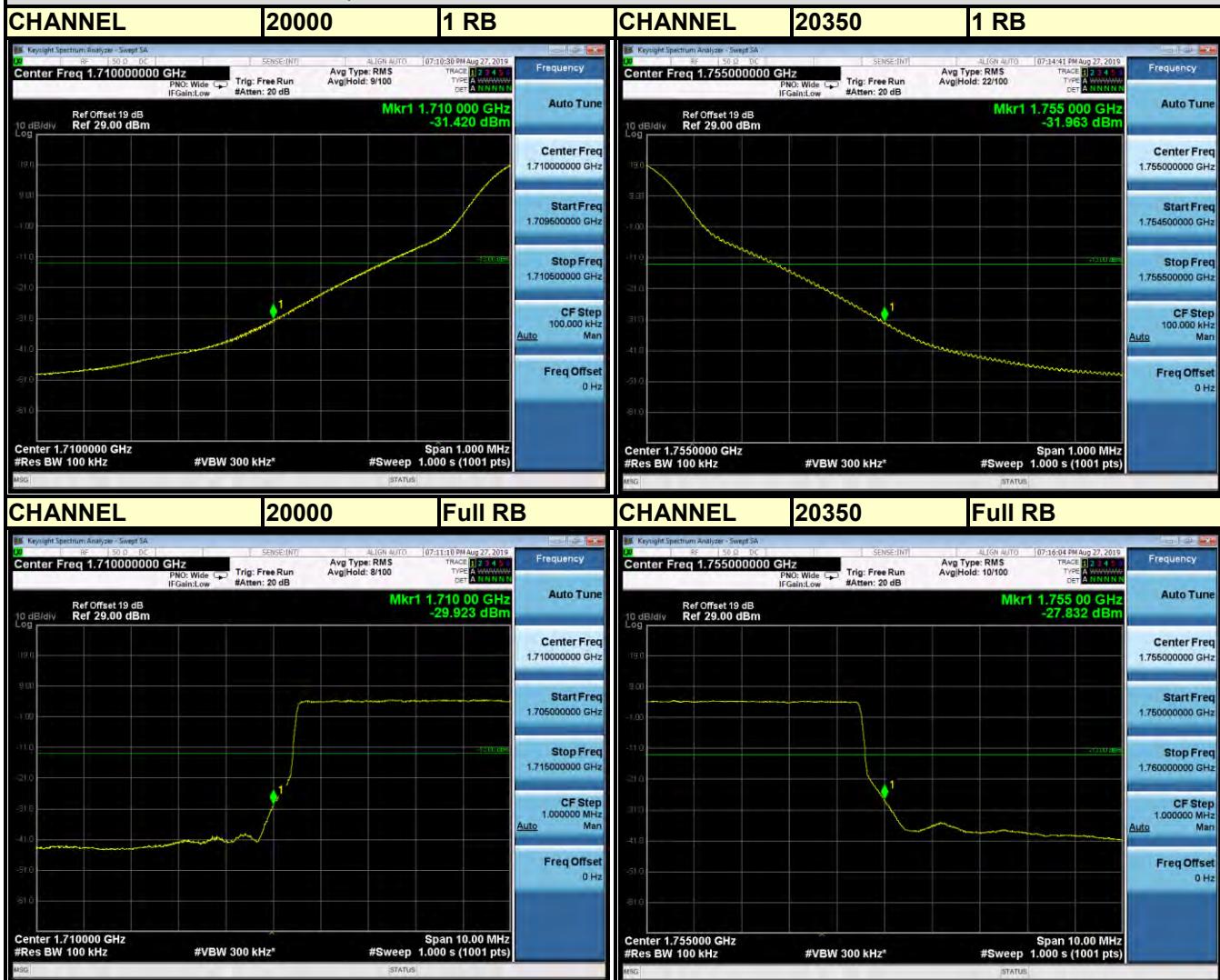




Test Report No.: RF190712W002-5

LTE BAND 4

Channel Bandwidth: 10MHz QPSK



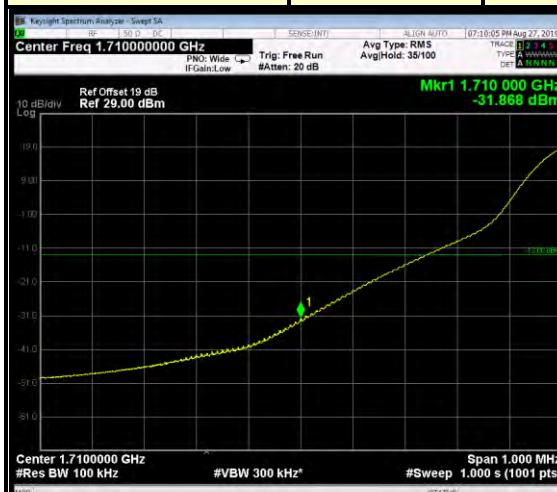


Test Report No.: RF190712W002-5

BUREAU
VERITAS

Channel Bandwidth: 10MHz 16QAM

CHANNEL 20000 1 RB



CHANNEL 20350 1 RB



CHANNEL 20000 Full RB



CHANNEL 20350 Full RB

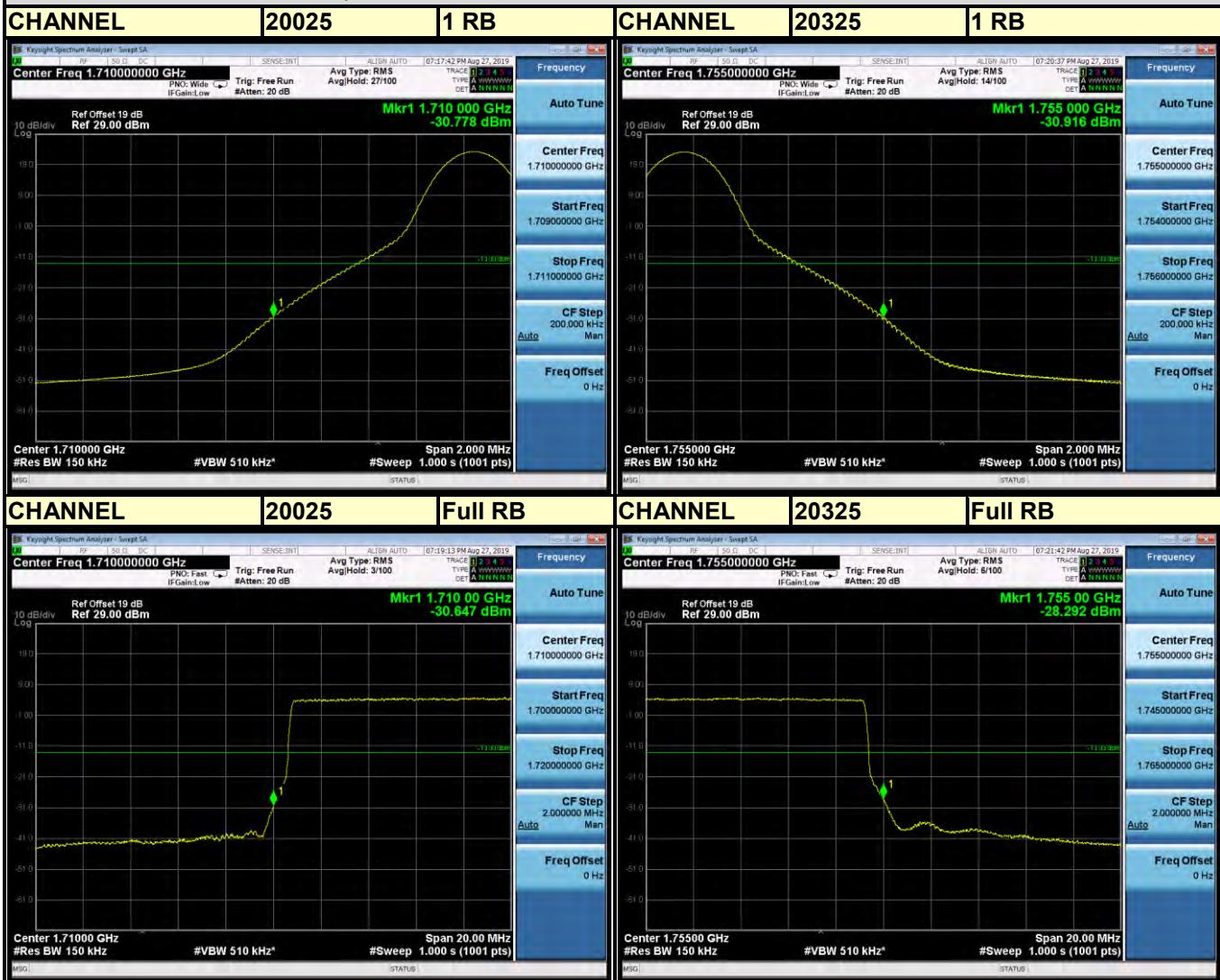




Test Report No.: RF190712W002-5

LTE BAND 4

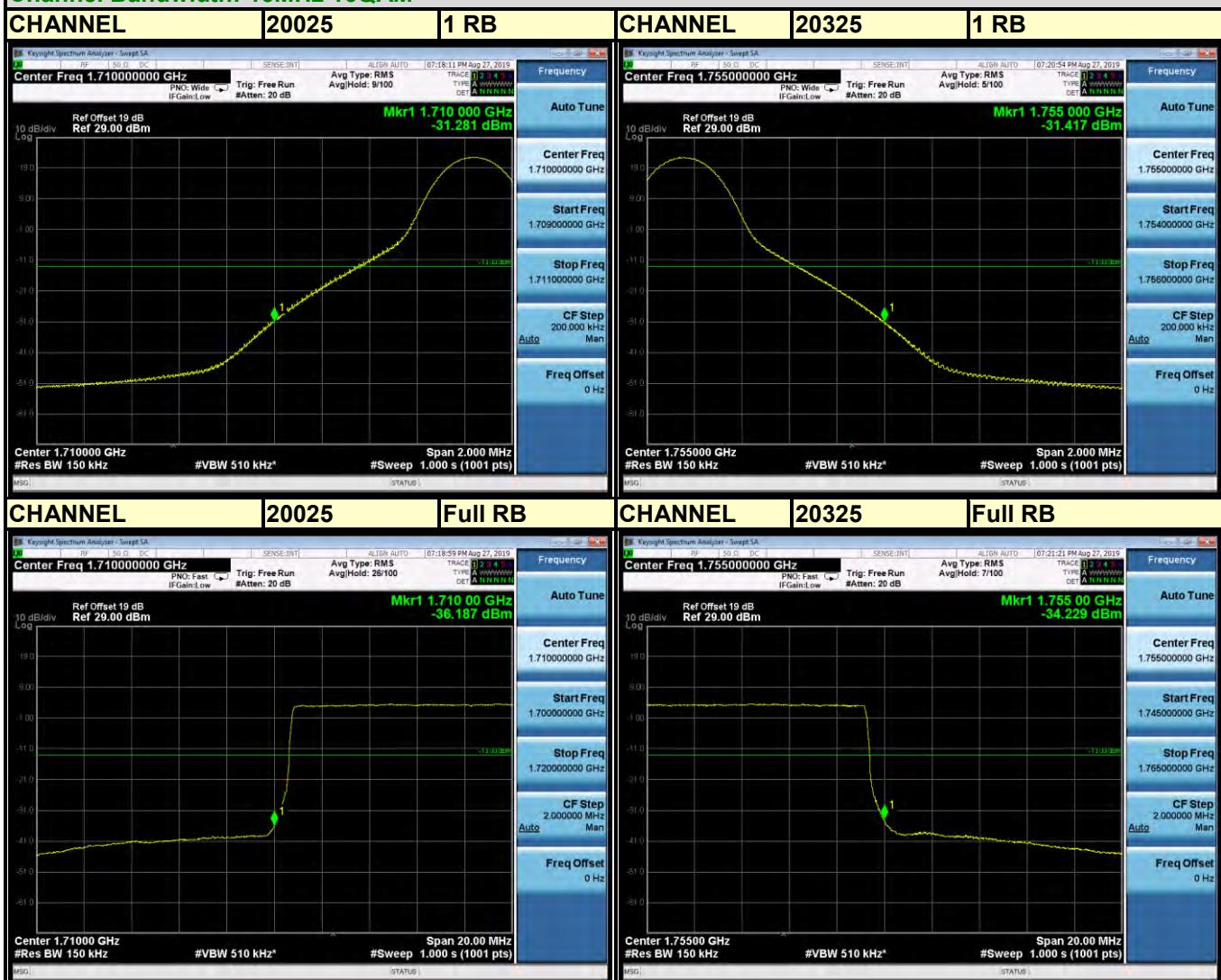
Channel Bandwidth: 15MHz QPSK





Test Report No.: RF190712W002-5

Channel Bandwidth: 15MHz 16QAM

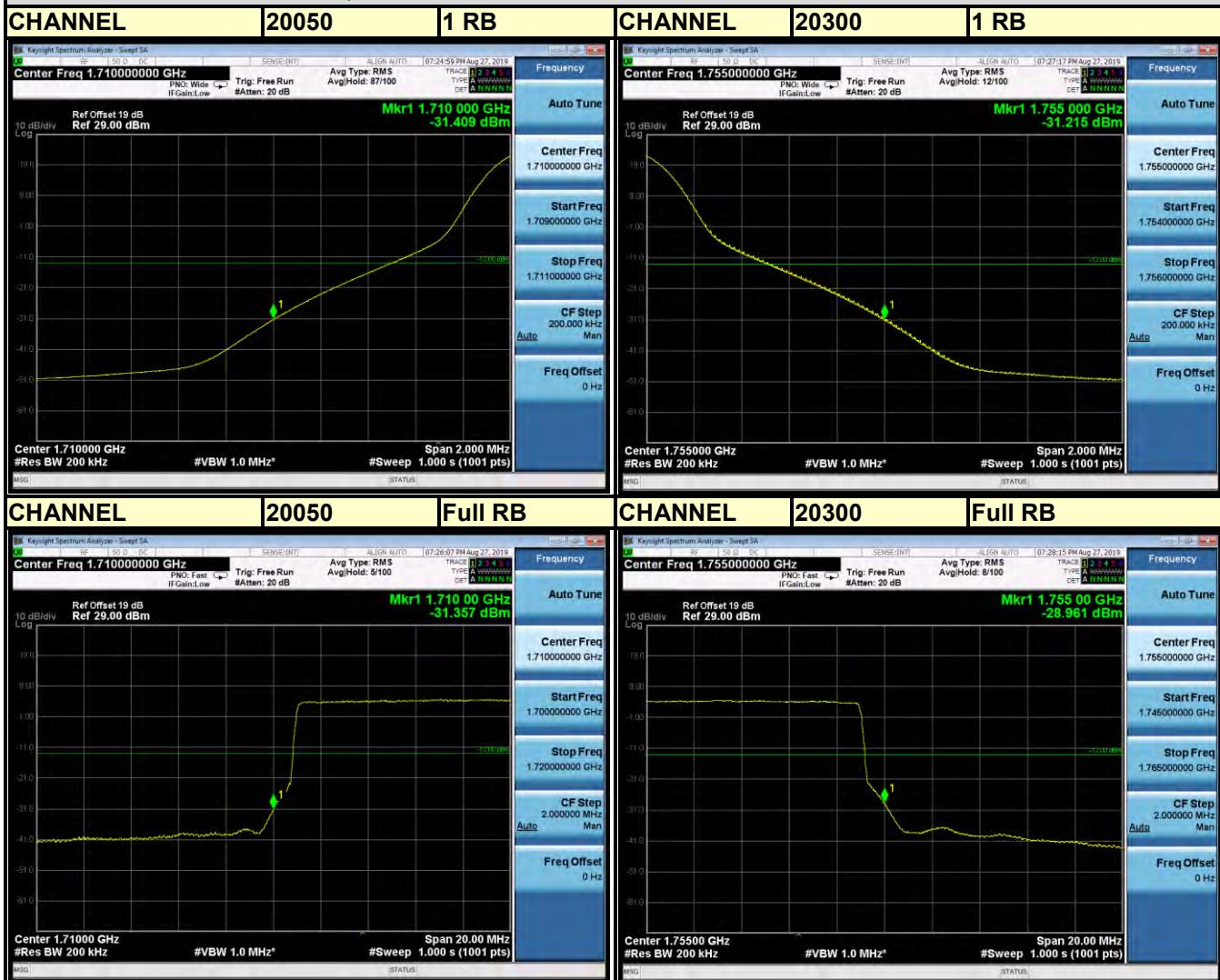




Test Report No.: RF190712W002-5

LTE BAND 4

Channel Bandwidth: 20MHz QPSK





Test Report No.: RF190712W002-5

BUREAU
VERITAS

Channel Bandwidth: 20MHz 16QAM

CHANNEL 20050 1 RB



CHANNEL 20300 1 RB



CHANNEL 20050 Full RB



CHANNEL 20300 Full RB





Test Report No.: RF190712W002-5

BUREAU
VERITAS

LTE BAND 66

Channel Bandwidth: 1.4MHz QPSK

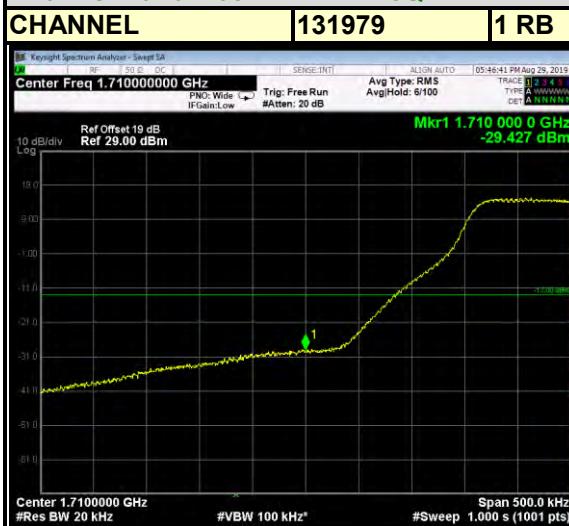




Test Report No.: RF190712W002-5

BUREAU
VERITAS

Channel Bandwidth: 1.4MHz 16QAM

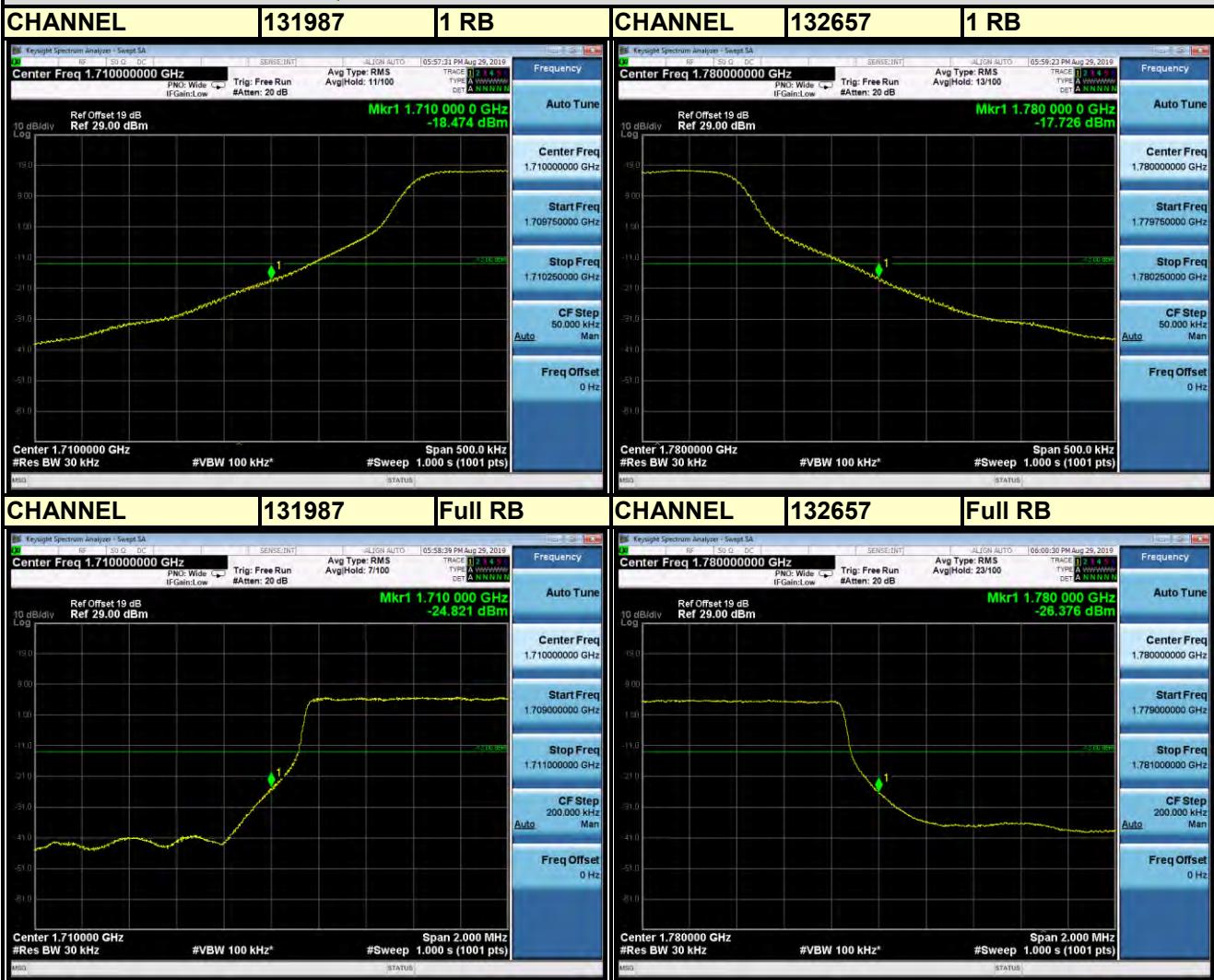




Test Report No.: RF190712W002-5

LTE BAND 66

Channel Bandwidth: 3MHz QPSK





Test Report No.: RF190712W002-5

BUREAU
VERITAS

Channel Bandwidth: 3MHz 16QAM

CHANNEL 131987 1 RB



CHANNEL 132657 1 RB



CHANNEL 131987 Full RB



CHANNEL 132657 Full RB



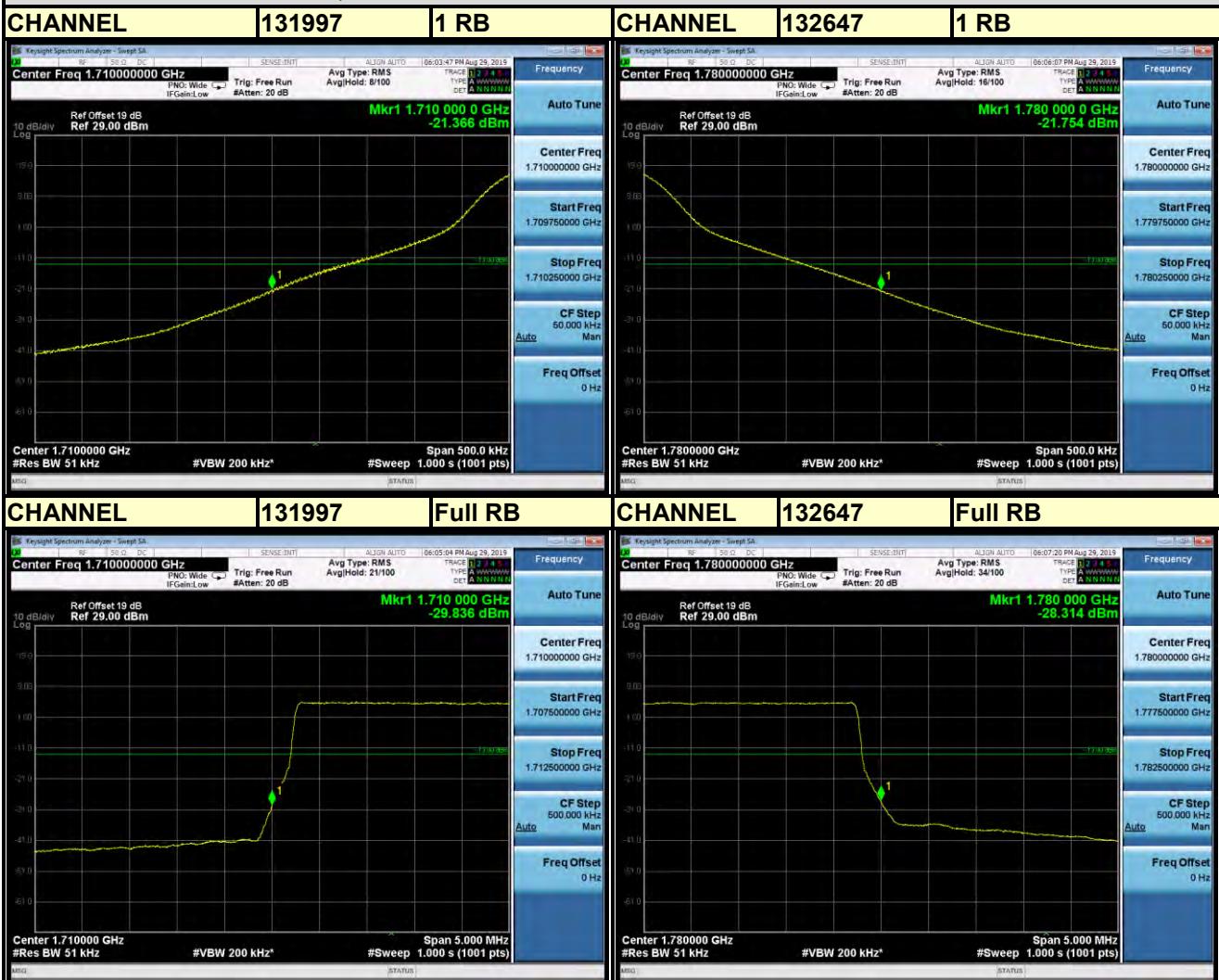


Test Report No.: RF190712W002-5

BUREAU
VERITAS

LTE BAND 66

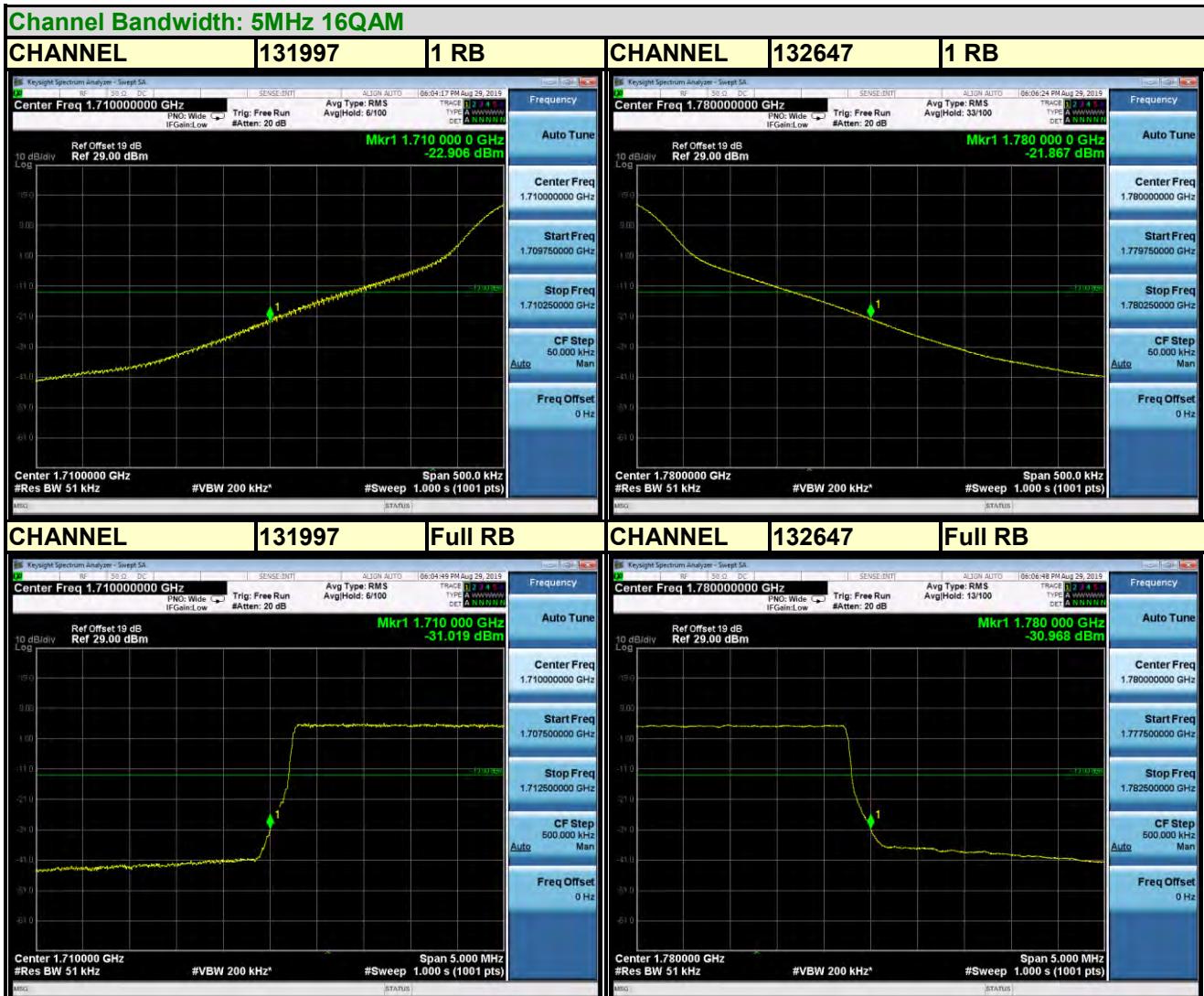
Channel Bandwidth: 5MHz QPSK





Test Report No.: RF190712W002-5

BUREAU
VERITAS

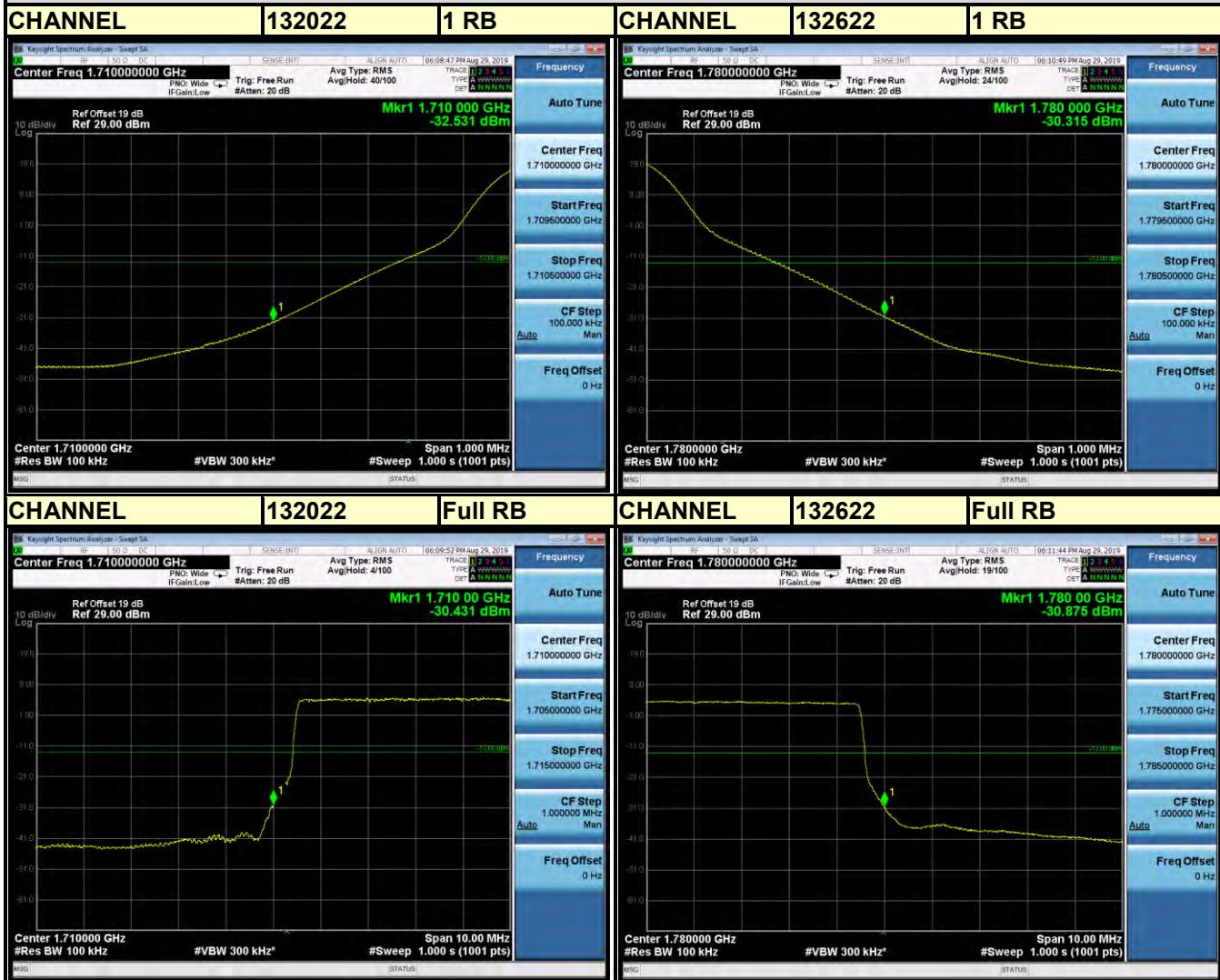




Test Report No.: RF190712W002-5

LTE BAND 66

Channel Bandwidth: 10MHz QPSK





Test Report No.: RF190712W002-5

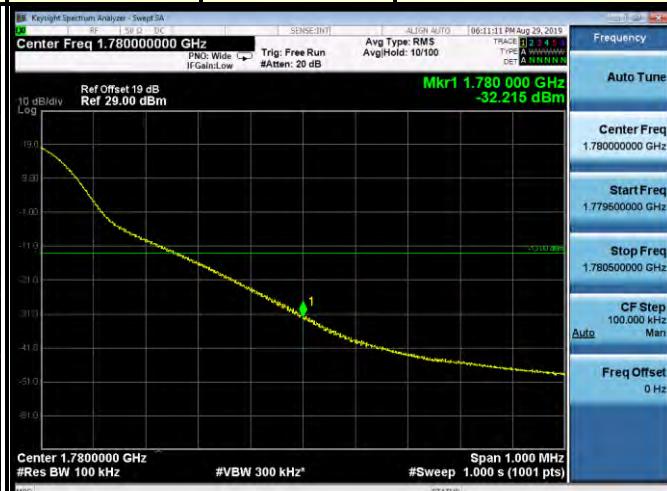
BUREAU
VERITAS

Channel Bandwidth: 10MHz 16QAM

CHANNEL 132022 1 RB



CHANNEL 132622 1 RB



CHANNEL 132022 Full RB



CHANNEL 132622 Full RB

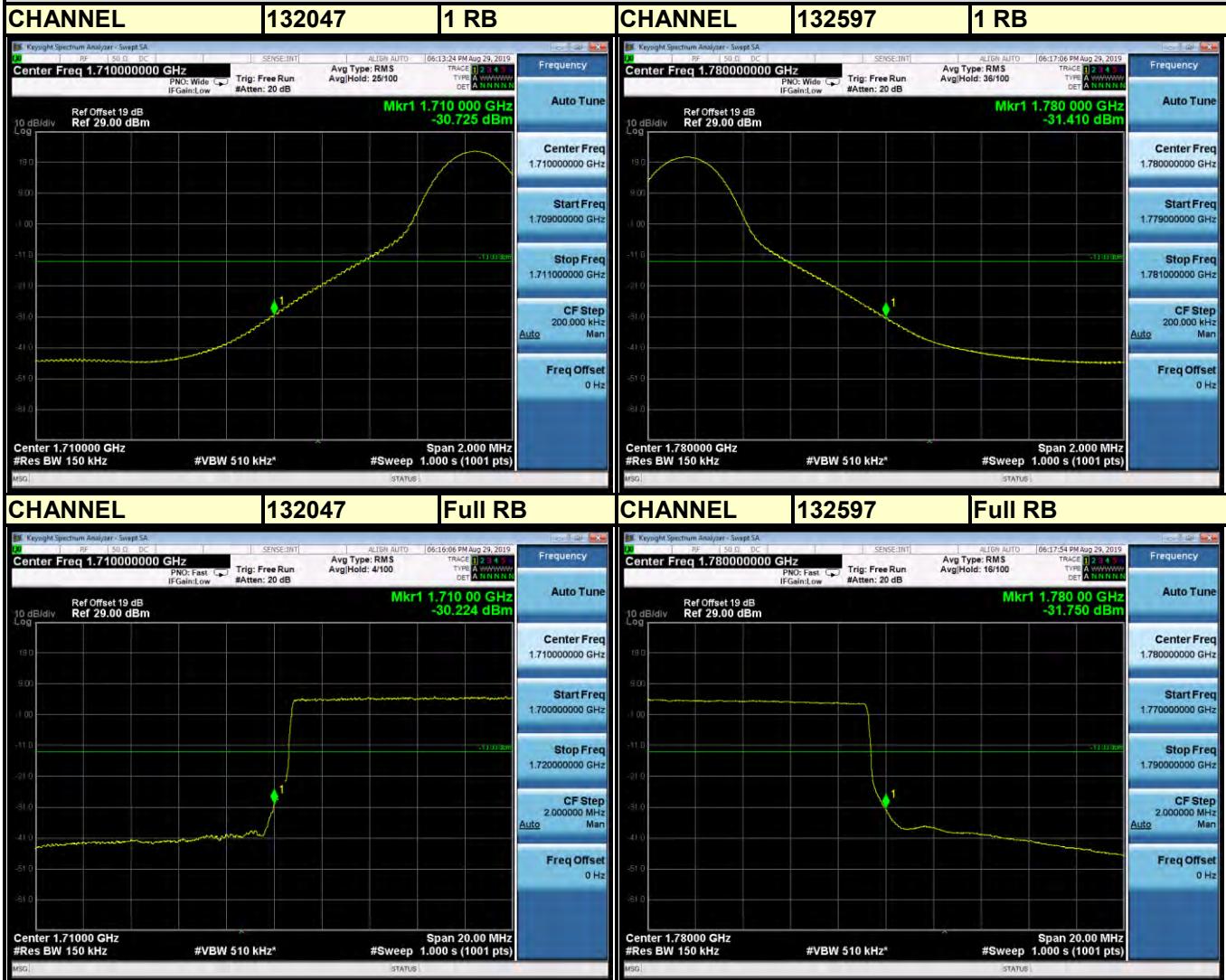




Test Report No.: RF190712W002-5

LTE BAND 66

Channel Bandwidth: 15MHz QPSK

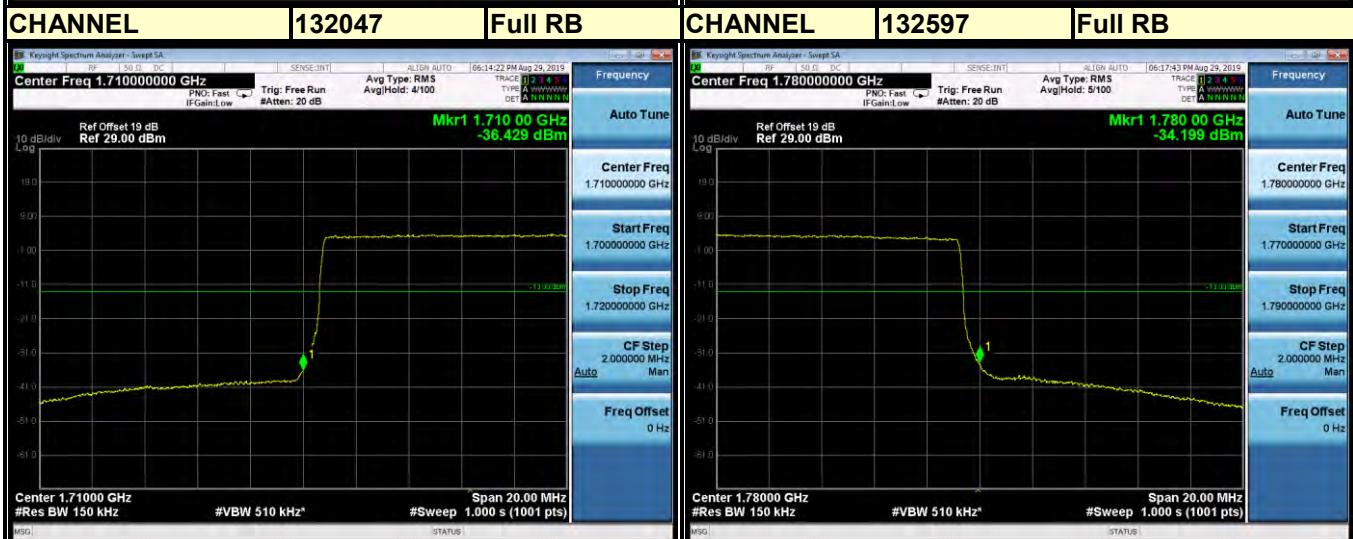
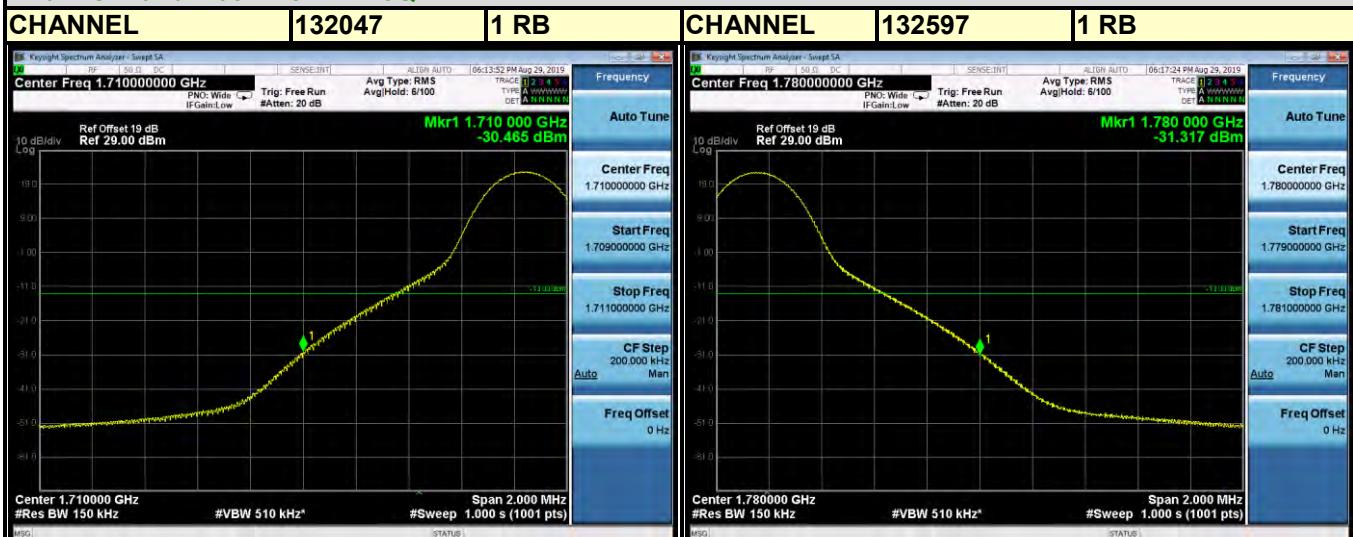




Test Report No.: RF190712W002-5

BUREAU
VERITAS

Channel Bandwidth: 15MHz 16QAM

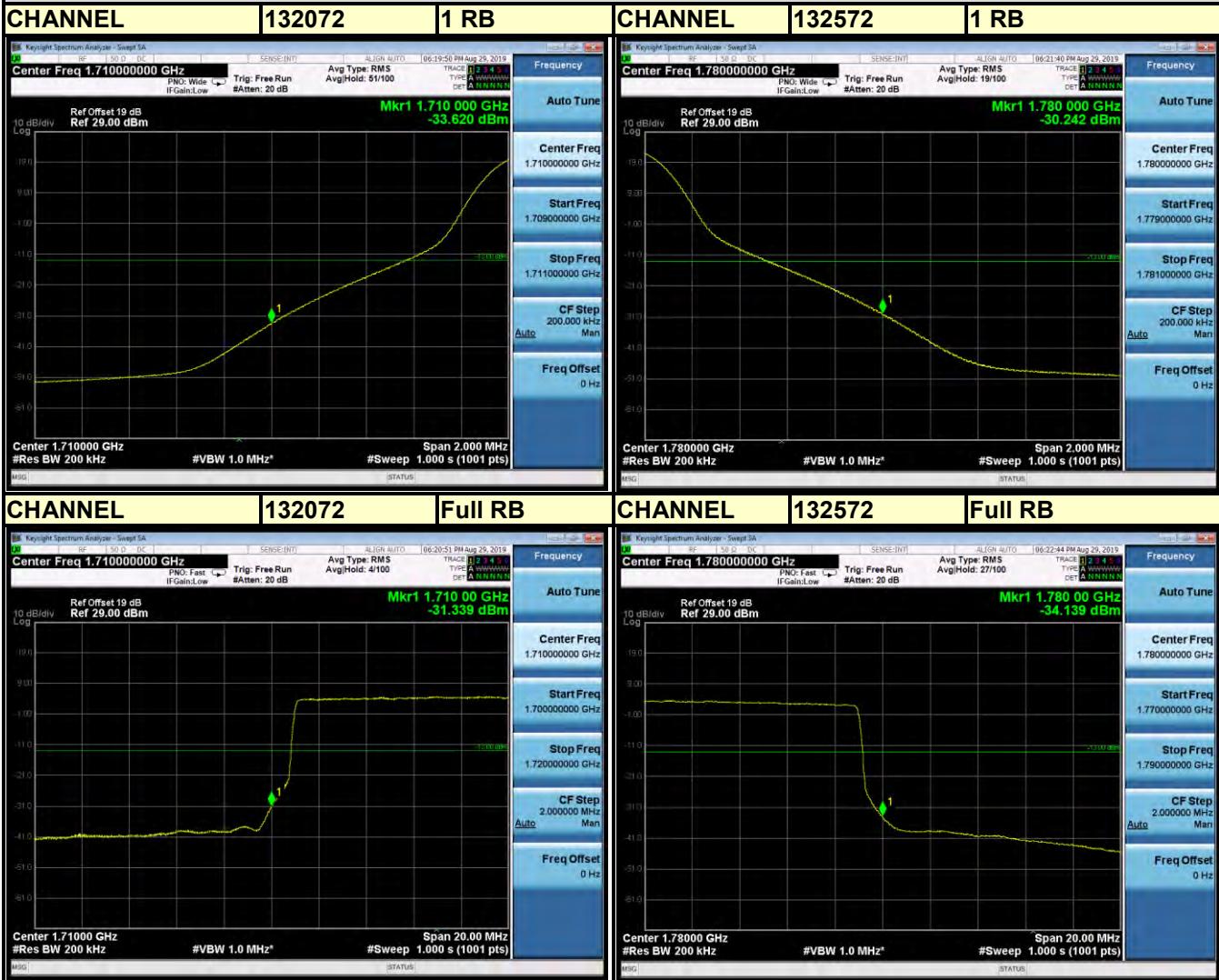




Test Report No.: RF190712W002-5

LTE BAND 66

Channel Bandwidth: 20MHz QPSK



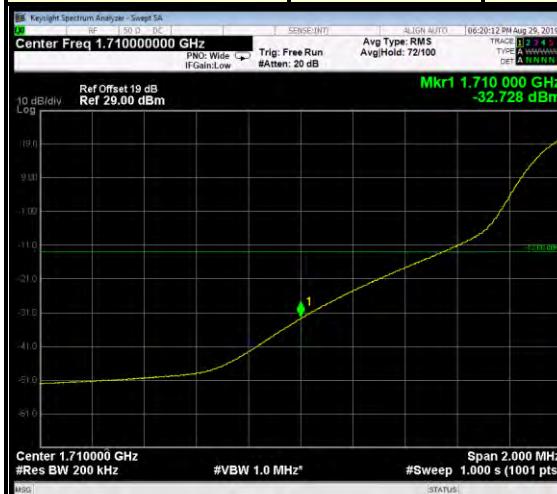


Test Report No.: RF190712W002-5

BUREAU
VERITAS

Channel Bandwidth: 20MHz 16QAM

CHANNEL 132072 1 RB



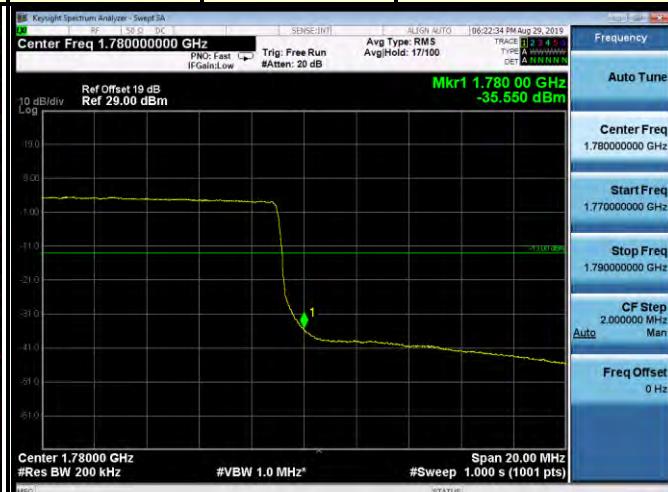
CHANNEL 132572 1 RB



CHANNEL 132072 Full RB



CHANNEL 132572 Full RB





Test Report No.: RF190712W002-5

3.6 CONDUCTED SPURIOUS EMISSIONS

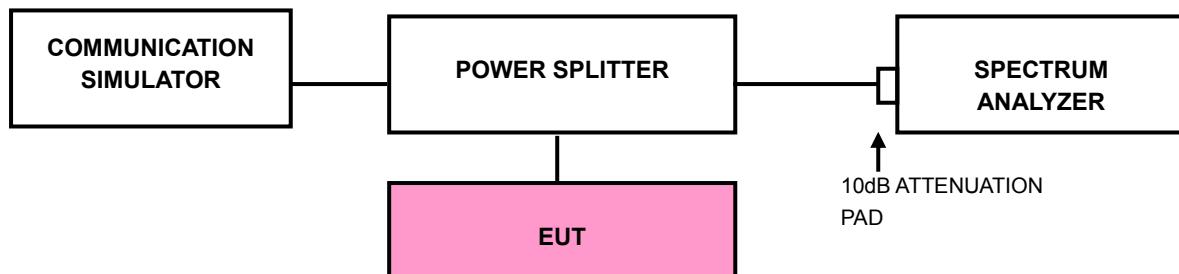
3.6.1 LIMITS OF CONDUCTED SPURIOUS EMISSIONS MEASUREMENT

The power of any emission outside a licensee's frequency block shall be attenuated below the transmitter power (P) by at least $43 + 10 \log_{10}(P)$ dB. The limit of emission equal to -13dBm

3.6.2 TEST PROCEDURE

- a. The EUT makes a phone call to the communication simulator. All measurements were done at middle operational frequency range.
- b. Measuring frequency range is from 30 MHz to 19.1GHz for WCDMA Band 4 & LTE Band 4. 10dB attenuation pad is connected with spectrum. RBW=1MHz and VBW=3MHz are used for conducted emission measurement.

3.6.3 TEST SETUP

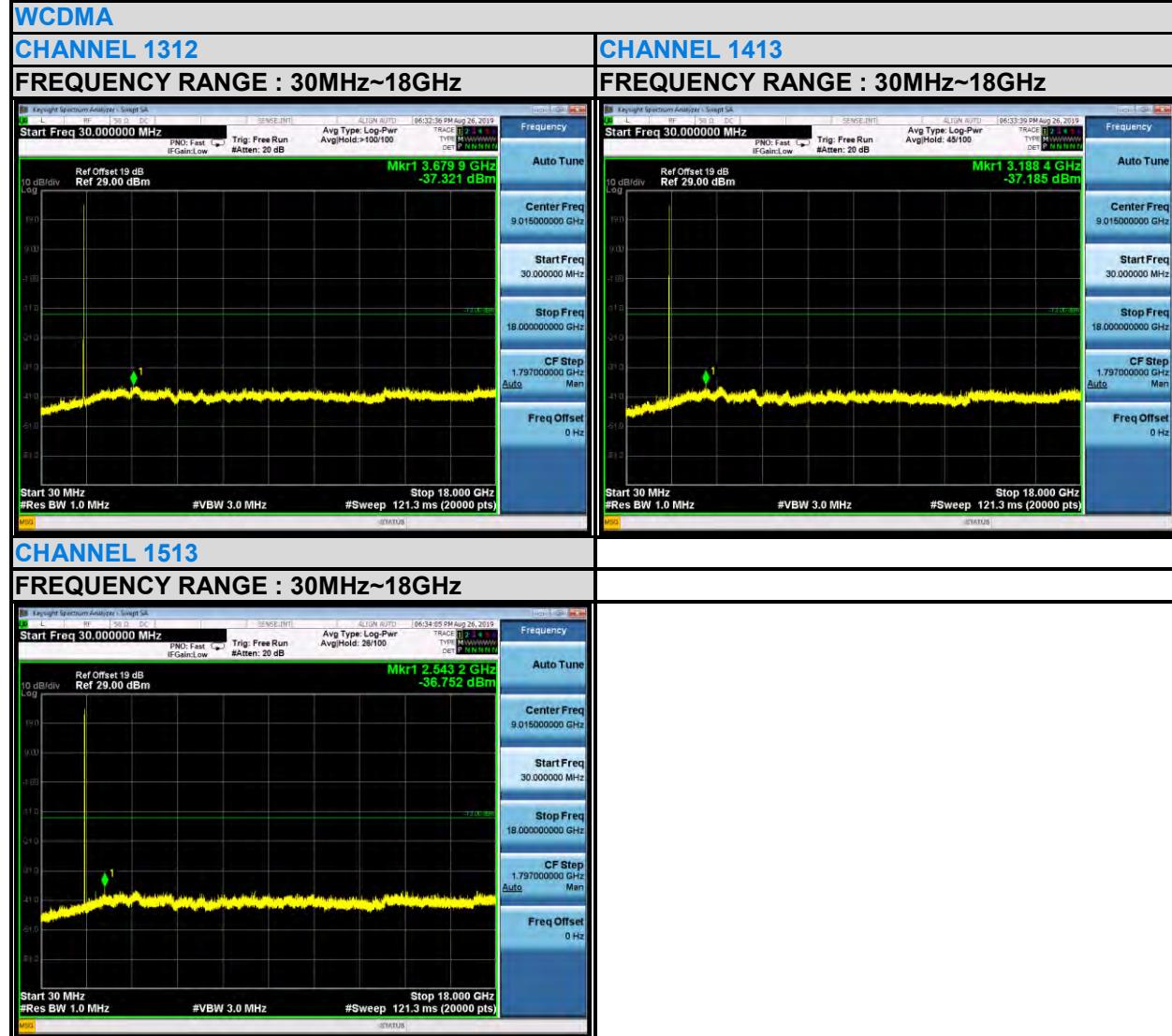




Test Report No.: RF190712W002-5

BUREAU
VERITAS

3.6.4 TEST RESULTS





Test Report No.: RF190712W002-5

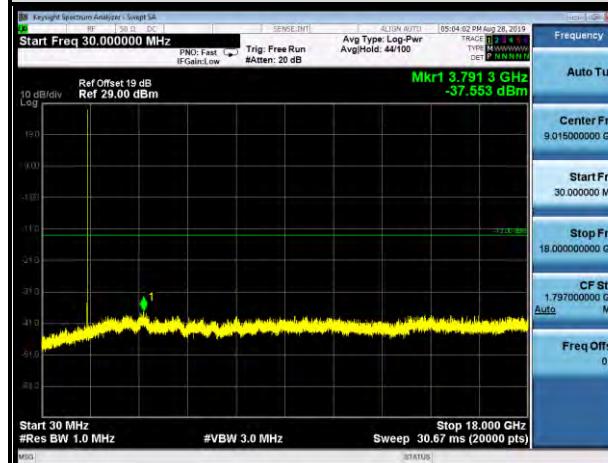
BUREAU
VERITAS

LTE BAND 4

1.4MHz / QPSK

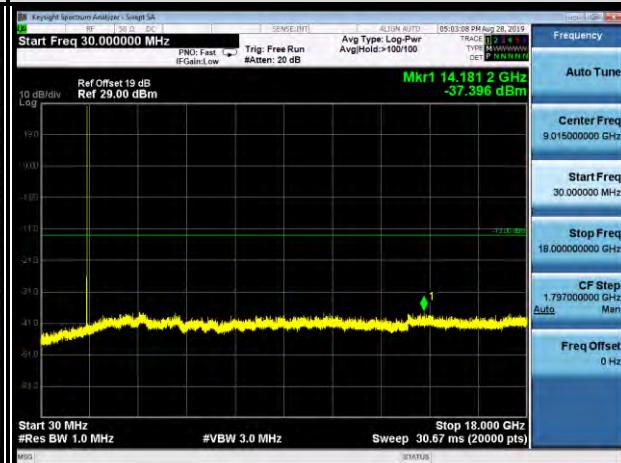
CHANNEL 19957

FREQUENCY RANGE : 30MHz~18GHz



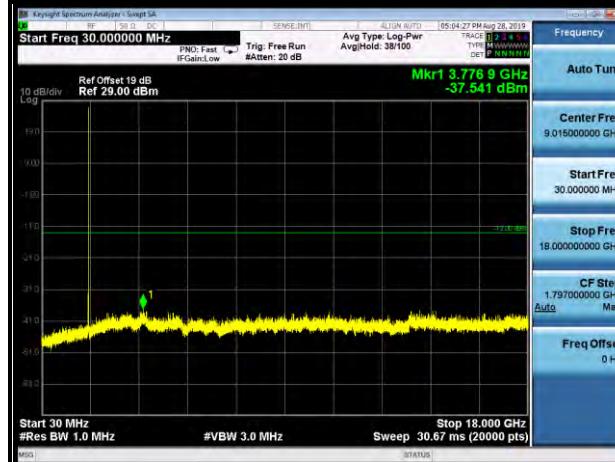
CHANNEL 20175

FREQUENCY RANGE : 30MHz~18GHz



CHANNEL 20393

FREQUENCY RANGE : 30MHz~18GHz





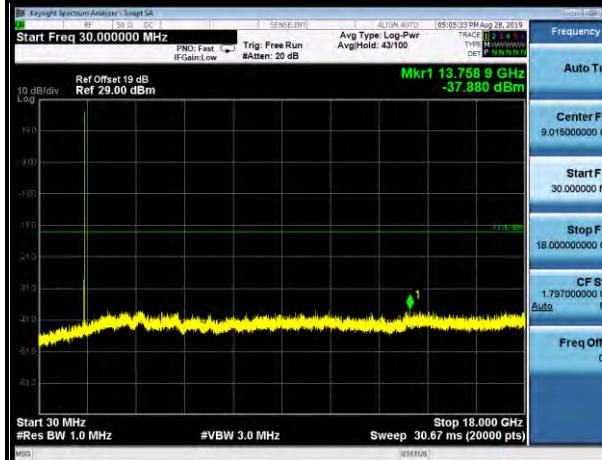
Test Report No.: RF190712W002-5

BUREAU
VERITAS

3MHz / QPSK

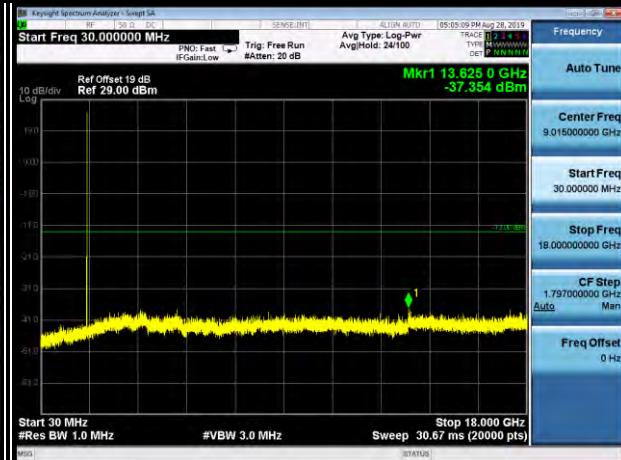
CHANNEL 19965

FREQUENCY RANGE : 30MHz~18GHz



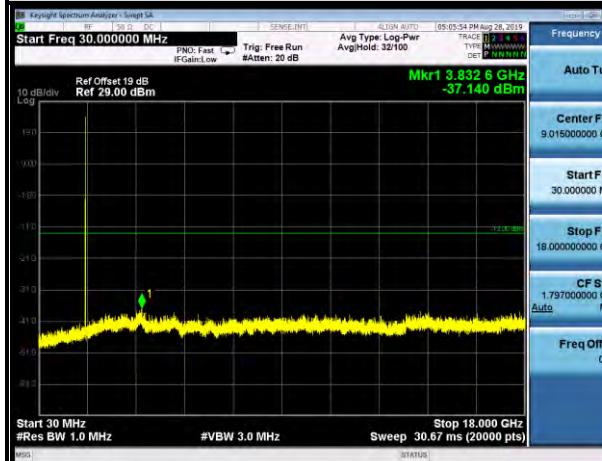
CHANNEL 20175

FREQUENCY RANGE : 30MHz~18GHz



CHANNEL 20385

FREQUENCY RANGE : 30MHz~18GHz





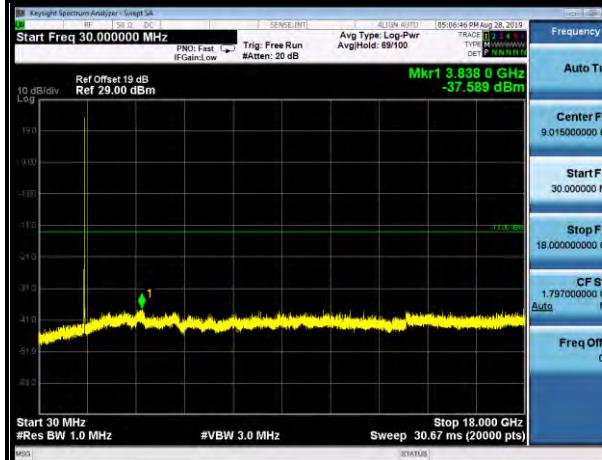
Test Report No.: RF190712W002-5

BUREAU
VERITAS

5MHz / QPSK

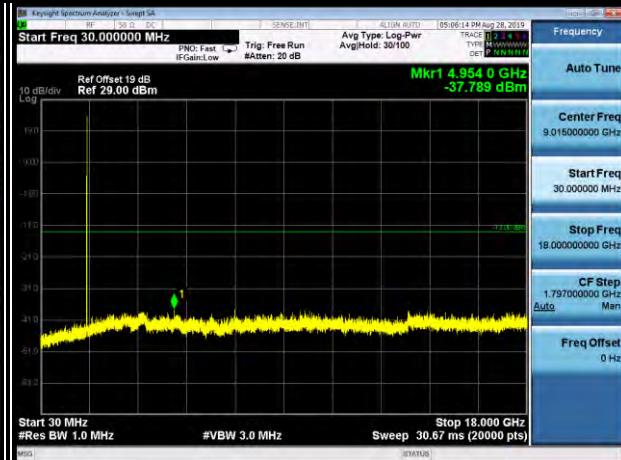
CHANNEL 19975

FREQUENCY RANGE : 30MHz~18GHz



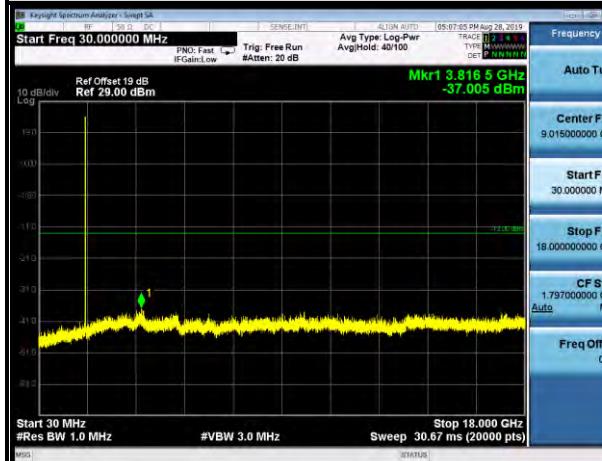
CHANNEL 20175

FREQUENCY RANGE : 30MHz~18GHz



CHANNEL 20375

FREQUENCY RANGE : 30MHz~18GHz





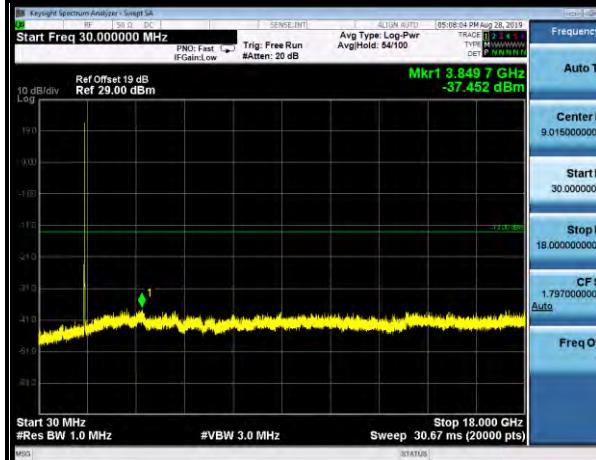
Test Report No.: RF190712W002-5

BUREAU
VERITAS

10MHz / QPSK

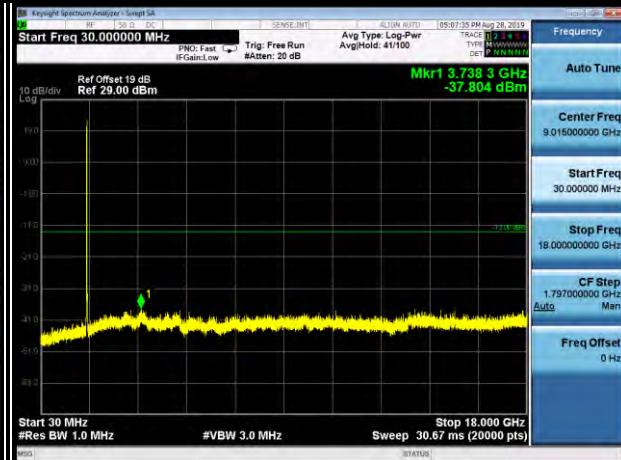
CHANNEL 20000

FREQUENCY RANGE : 30MHz~18GHz



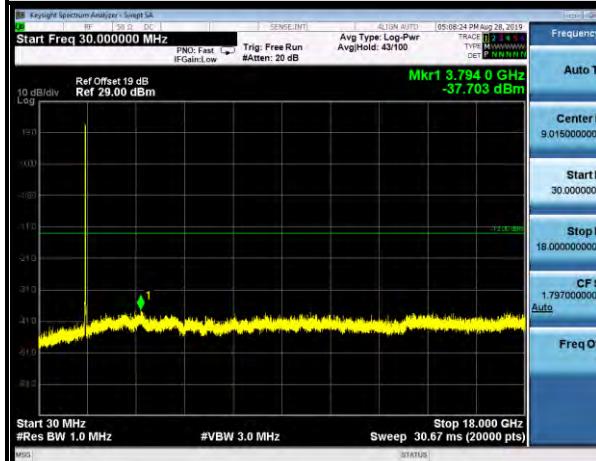
CHANNEL 20175

FREQUENCY RANGE : 30MHz~18GHz



CHANNEL 20350

FREQUENCY RANGE : 30MHz~18GHz





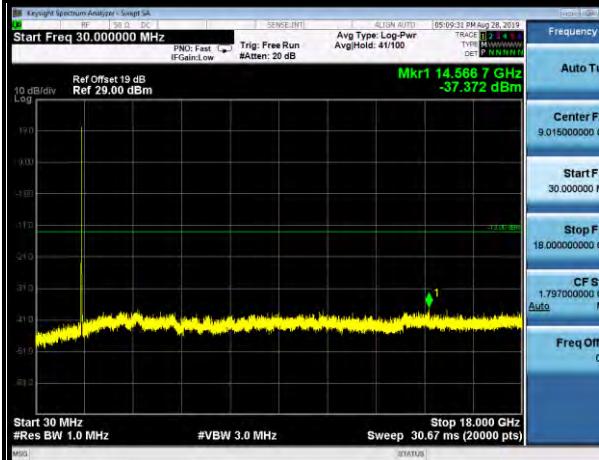
Test Report No.: RF190712W002-5

BUREAU
VERITAS

15MHz / QPSK

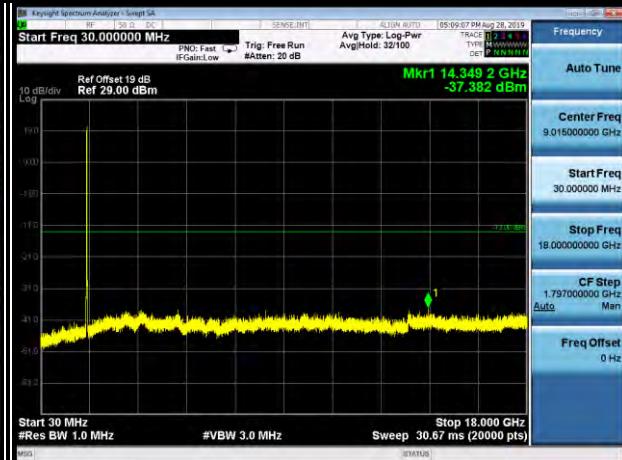
CHANNEL 20025

FREQUENCY RANGE : 30MHz~18GHz



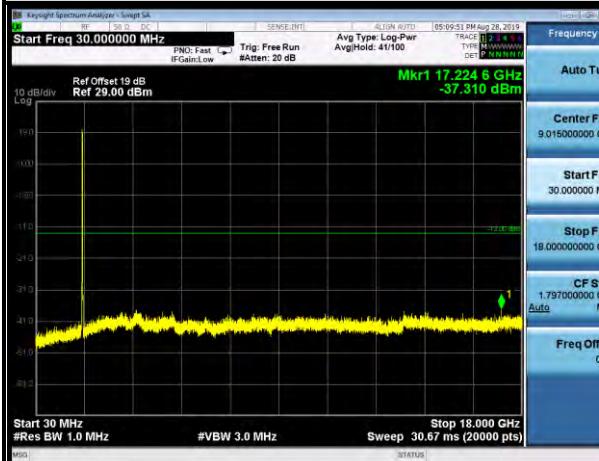
CHANNEL 20175

FREQUENCY RANGE : 30MHz~18GHz



CHANNEL 20325

FREQUENCY RANGE : 30MHz~18GHz





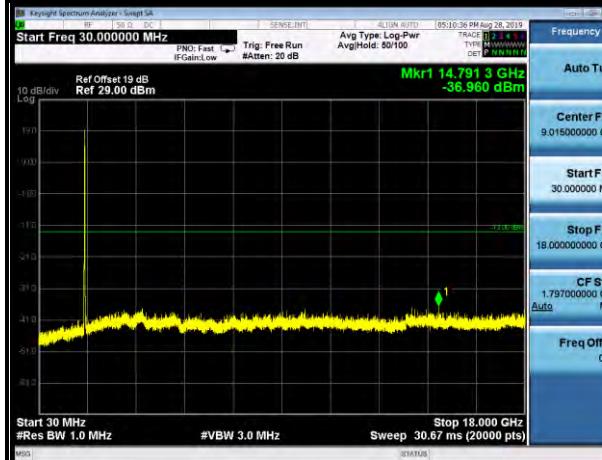
Test Report No.: RF190712W002-5

BUREAU
VERITAS

20MHz / QPSK

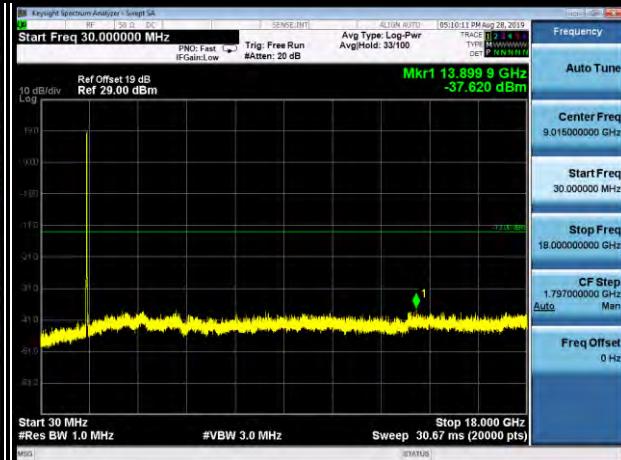
CHANNEL 20050

FREQUENCY RANGE : 30MHz~18GHz



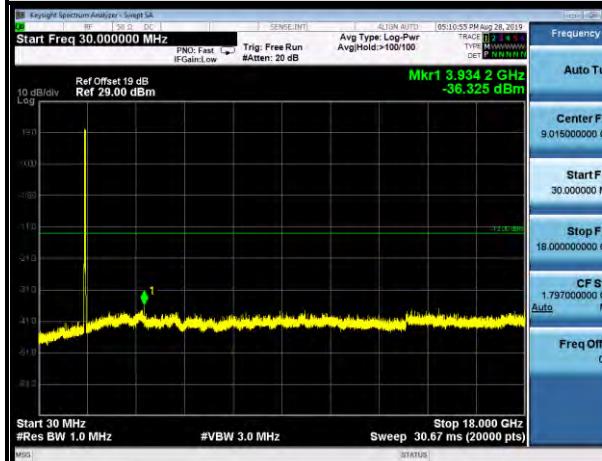
CHANNEL 20175

FREQUENCY RANGE : 30MHz~18GHz



CHANNEL 20300

FREQUENCY RANGE : 30MHz~18GHz





Test Report No.: RF190712W002-5

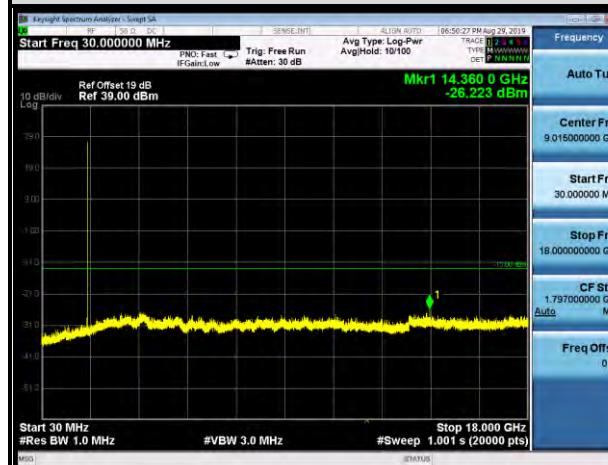
BUREAU
VERITAS

LTE BAND 66

1.4MHz / QPSK

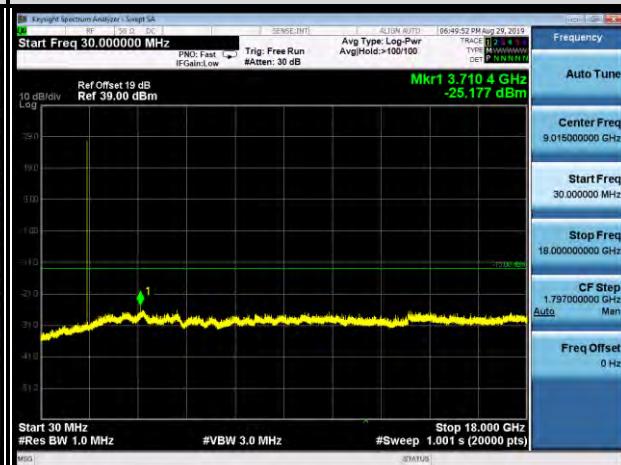
CHANNEL 131979

FREQUENCY RANGE : 30MHz~18GHz



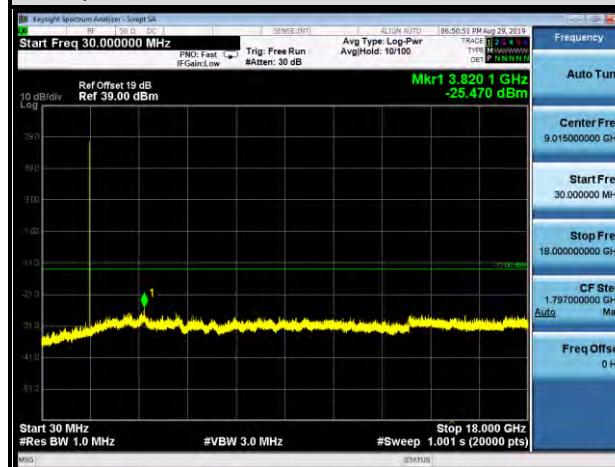
CHANNEL 132322

FREQUENCY RANGE : 30MHz~18GHz



CHANNEL 132665

FREQUENCY RANGE : 30MHz~18GHz





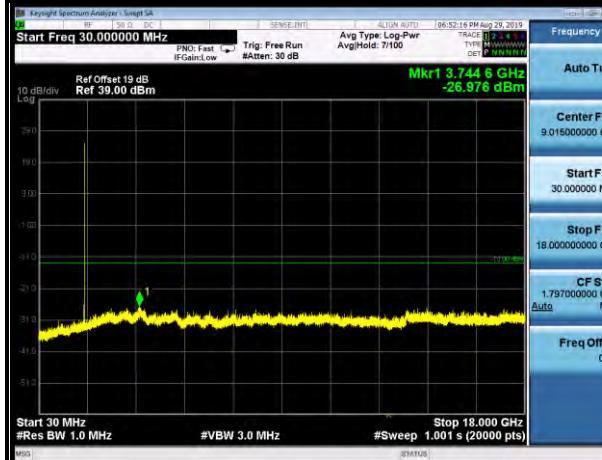
Test Report No.: RF190712W002-5

BUREAU
VERITAS

3MHz / QPSK

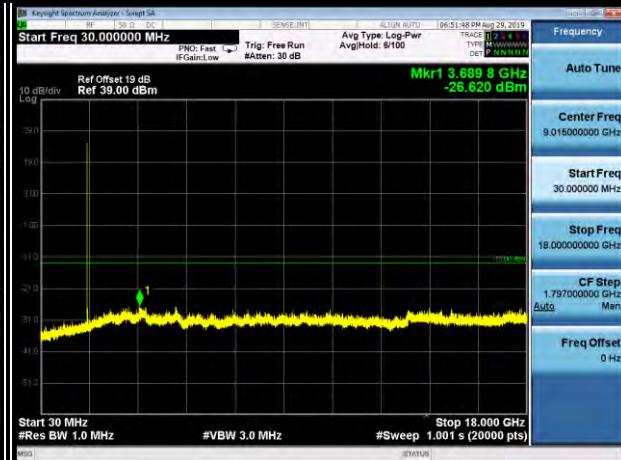
CHANNEL 131987

FREQUENCY RANGE : 30MHz~18GHz



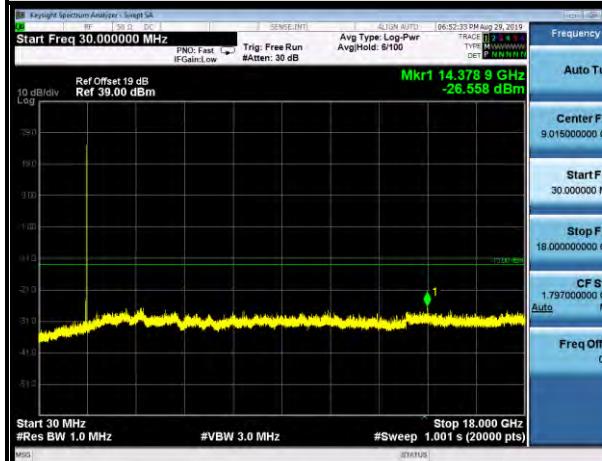
CHANNEL 132322

FREQUENCY RANGE : 30MHz~18GHz



CHANNEL 132657

FREQUENCY RANGE : 30MHz~18GHz





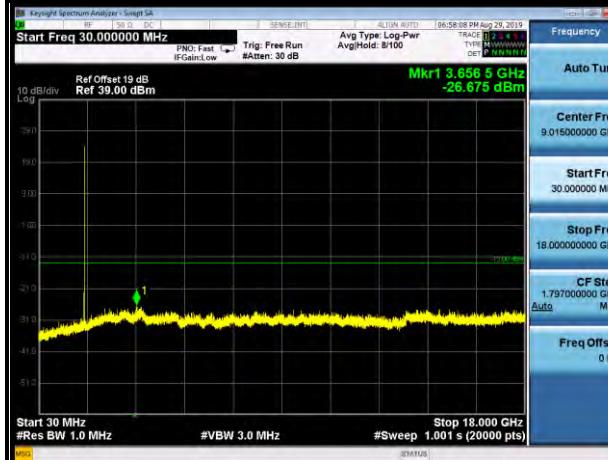
Test Report No.: RF190712W002-5

BUREAU
VERITAS

5MHz / QPSK

CHANNEL 131997

FREQUENCY RANGE : 30MHz~18GHz



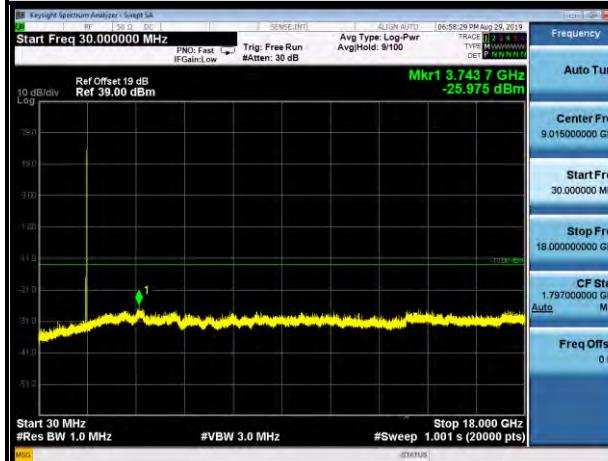
CHANNEL 132322

FREQUENCY RANGE : 30MHz~18GHz



CHANNEL 132647

FREQUENCY RANGE : 30MHz~18GHz





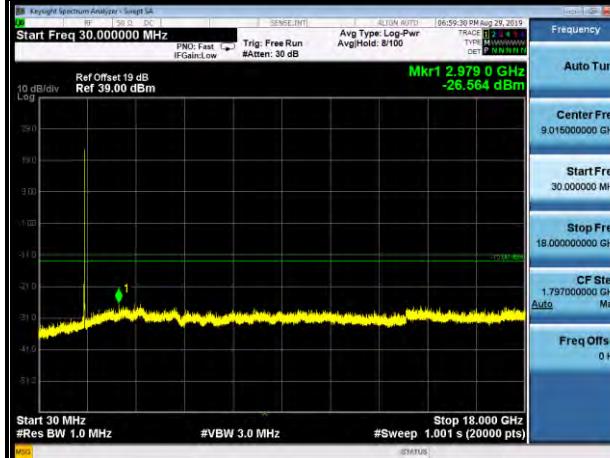
Test Report No.: RF190712W002-5

BUREAU
VERITAS

10MHz / QPSK

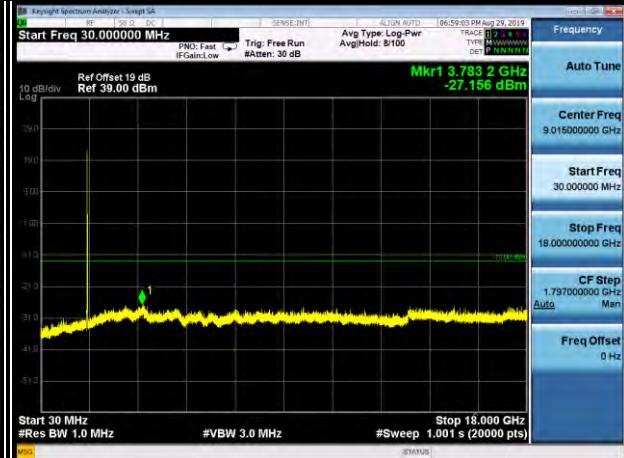
CHANNEL 132022

FREQUENCY RANGE : 30MHz~18GHz



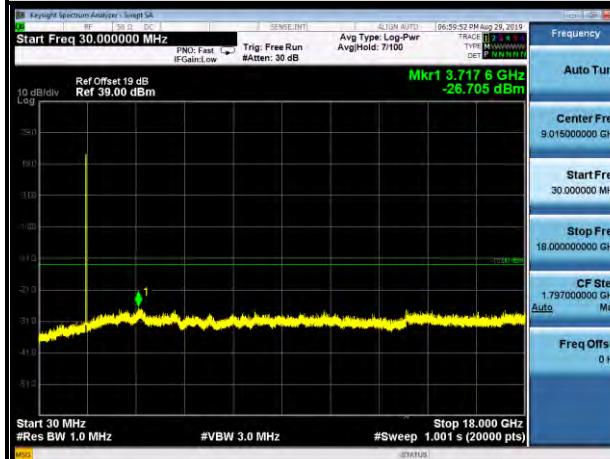
CHANNEL 132322

FREQUENCY RANGE : 30MHz~18GHz



CHANNEL 132622

FREQUENCY RANGE : 30MHz~18GHz





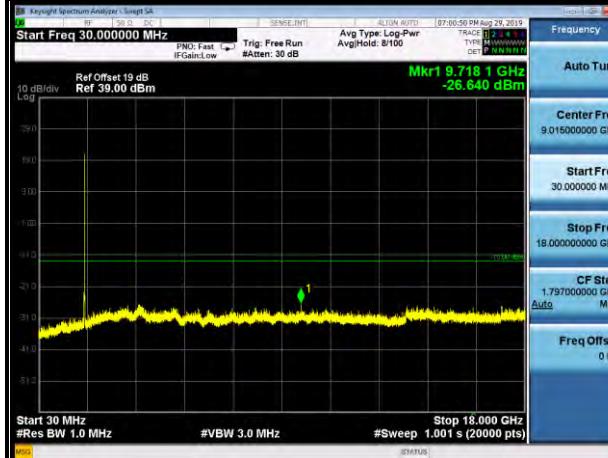
Test Report No.: RF190712W002-5

BUREAU
VERITAS

15MHz / QPSK

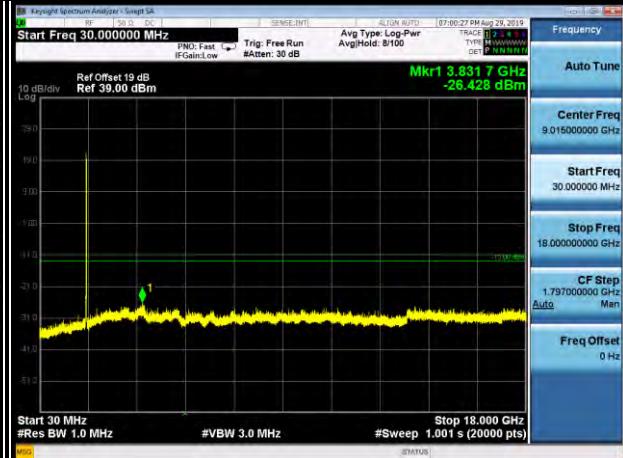
CHANNEL 132047

FREQUENCY RANGE : 30MHz~18GHz



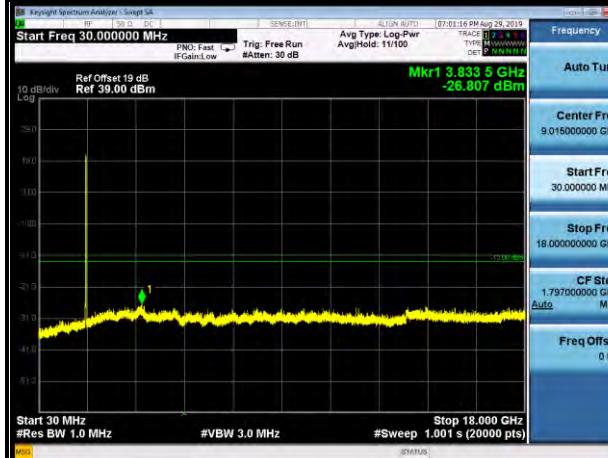
CHANNEL 132322

FREQUENCY RANGE : 30MHz~18GHz



CHANNEL 132597

FREQUENCY RANGE : 30MHz~18GHz





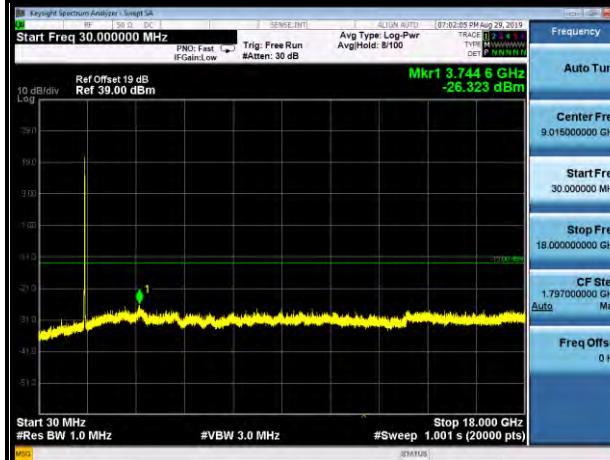
Test Report No.: RF190712W002-5

BUREAU
VERITAS

20MHz / QPSK

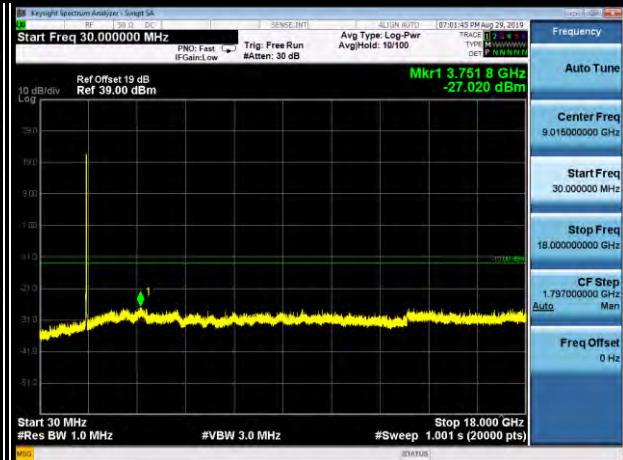
CHANNEL 132072

FREQUENCY RANGE : 30MHz~18GHz



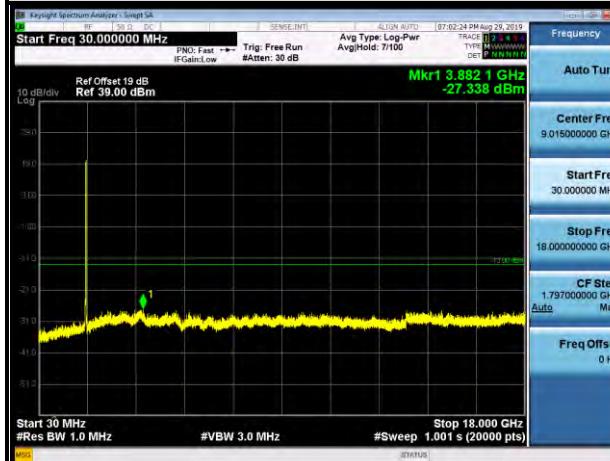
CHANNEL 132322

FREQUENCY RANGE : 30MHz~18GHz



CHANNEL 132572

FREQUENCY RANGE : 30MHz~18GHz





3.7 RADIATED EMISSION MEASUREMENT

3.7.1 LIMITS OF RADIATED EMISSION MEASUREMENT

The power of any emission outside a licensee's frequency block shall be attenuated below the transmitter power (P) by at least $43 + 10 \log_{10}(P)$ dB. The limit of emission equal to -13dBm

3.7.2 TEST PROCEDURES

- a. Substitution method is used for E.I.R.P measurement. In the semi-anechoic chamber, EUT placed on the 0.8m height of Turn Table, rotated the table around 360 degrees to search the maximum radiation power and receiver antenna shall be rotated vertical and horizontal polarization and moved height from 1m to 4m to find the maximum polar radiated power. The "Read Value" is the spectrum reading the maximum power value.
- b. The substitution horn antenna is substituted for EUT at the same position and signals generator export the CW signal to the substitution antenna via a TX cable. Rotated the Turn Table and moved receiving antenna to find the maximum radiation power. Adjust output power level of S.G to get a Value of spectrum reading equal to "Read Value" of step a. Record the power level of S.G
- c. EIRP = Output power level of S.G - TX cable loss + Antenna gain of substitution horn.
- d. E.R.P power can be calculated form E.I.R.P power by subtracting the gain of dipole, E.R.P power = E.I.P.R power - 2.15dBi.

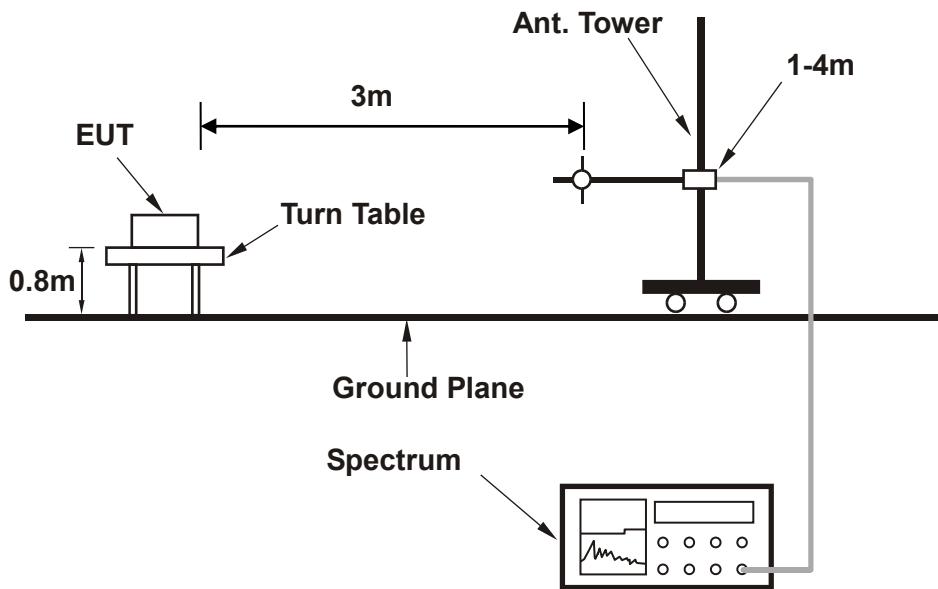
NOTE: The resolution bandwidth of spectrum analyzer is 1 MHz and the video bandwidth is 3 MHz.

3.7.3 DEVIATION FROM TEST STANDARD

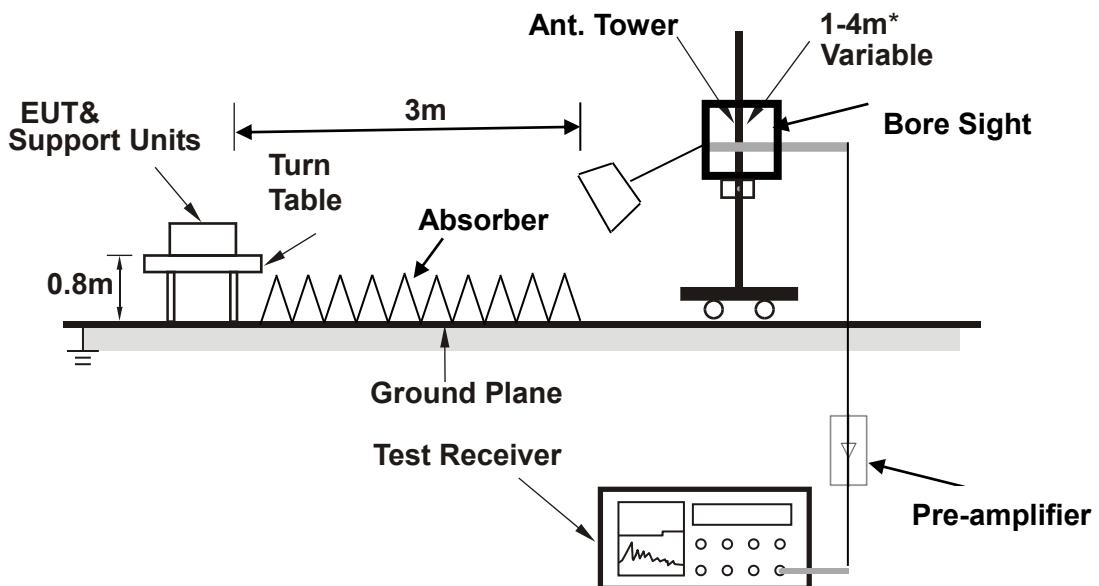
No deviation

3.7.4 TEST SETUP

< Frequency Range 30MHz~1GHz >



<Frequency Range above 1GHz>



Note: Above 1G is a directional antenna

depends on the EUT height and the antenna 3dB beamwidth both, refer to section 7.3 of CISPR 16-2-3.

For the actual test configuration, please refer to the attached file (Test Setup Photo).



Test Report No.: RF190712W002-5

BUREAU
VERITAS

3.7.5 TEST RESULTS

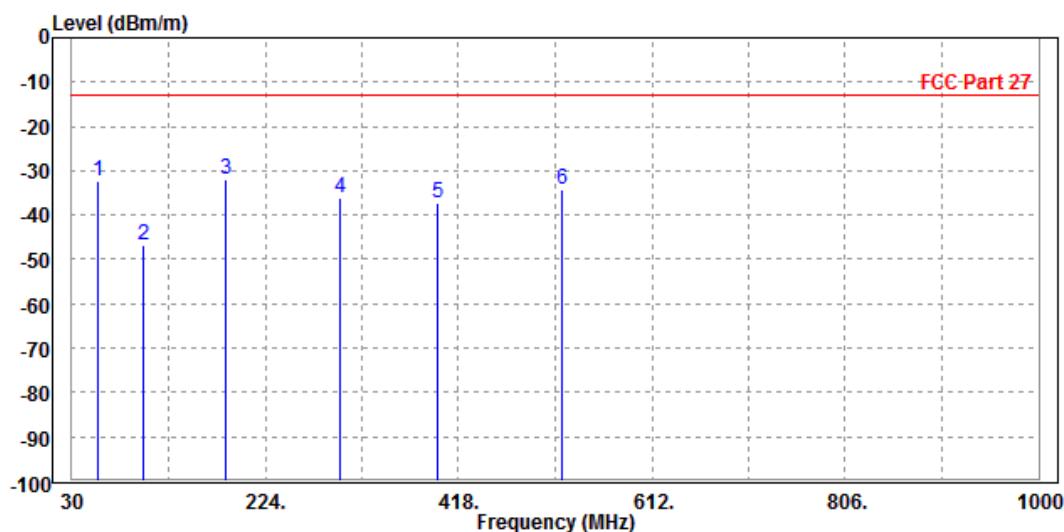
BELOW 1GHz WORST-CASE DATA

30 MHz – 1GHz data:

LTE BAND 4

MODE	TX channel 20175	FREQUENCY RANGE	Below 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	DC 5V from adapter
TESTED BY	Star Le		
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M			

Freq	Level	Read	Limit	Over	Remark	Pol/Phase
		Line	dBm/m	dB		
MHz	dBm/m	dBm	dBm/m	dB	dB/m	
1	56.320	-32.18	-39.15	-13.00	-19.18	6.97 Peak Horizontal
2	101.230	-46.85	-56.48	-13.00	-33.85	9.63 Peak Horizontal
3 PP	184.750	-31.89	-42.31	-13.00	-18.89	10.42 Peak Horizontal
4	298.610	-36.25	-50.32	-13.00	-23.25	14.07 Peak Horizontal
5	396.620	-37.08	-54.18	-13.00	-24.08	17.10 Peak Horizontal
6	521.340	-34.28	-53.12	-13.00	-21.28	18.84 Peak Horizontal



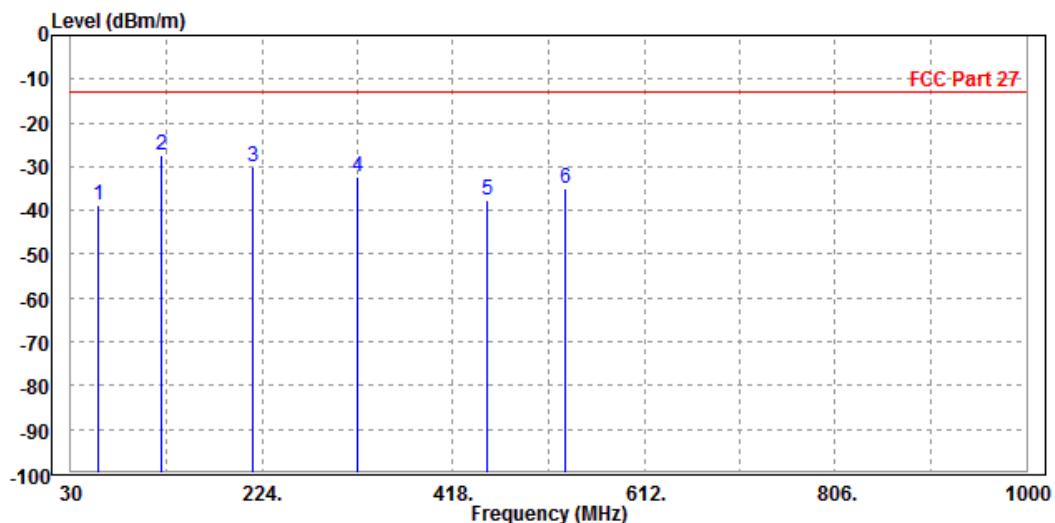


Test Report No.: RF190712W002-5

BUREAU
VERITAS

MODE	TX channel 20175	FREQUENCY RANGE	Below 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	DC 5V from adapter
TESTED BY	Star Le		
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M			

Freq	Level	Read	Limit	Over	Remark	Pol/Phase
		Level	Line	Limit Factor		
MHz	dBm/m	dBm	dBm/m	dB	dB/m	
1	58.490	-38.78	-45.67	-13.00	-25.78	6.89 Peak Vertical
2 PP	121.200	-27.42	-36.12	-13.00	-14.42	8.70 Peak Vertical
3	215.310	-29.99	-41.52	-13.00	-16.99	11.53 Peak Vertical
4	321.450	-32.37	-47.23	-13.00	-19.37	14.86 Peak Vertical
5	452.370	-37.53	-55.56	-13.00	-24.53	18.03 Peak Vertical
6	532.160	-35.13	-54.28	-13.00	-22.13	19.15 Peak Vertical





Test Report No.: RF190712W002-5

BUREAU
VERITAS

ABOVE 1GHz

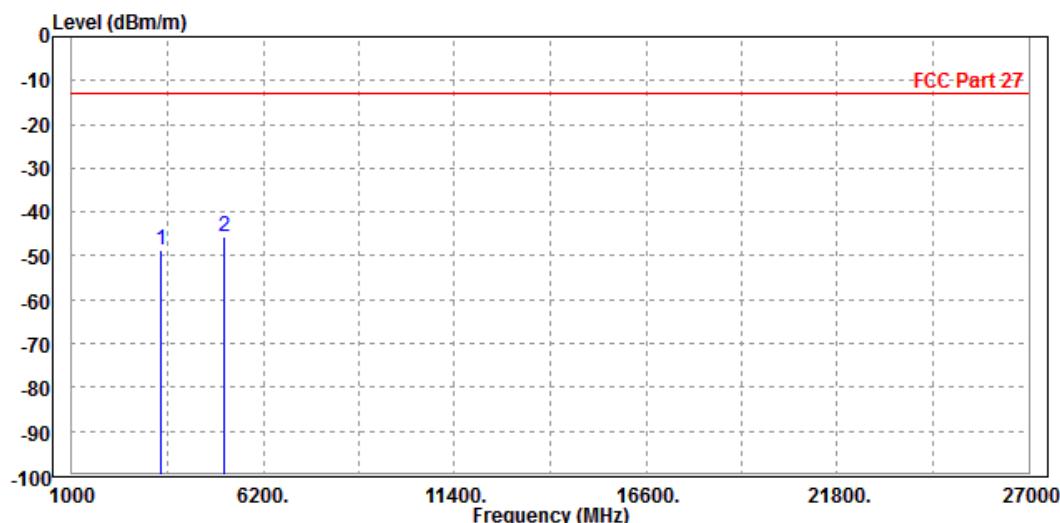
Note: For higher frequency, the emission is too low to be detected.

WCDMA Band IV:

CH 1312

MODE	TX channel 1312	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	DC 5V from adapter
TESTED BY	Star Le		
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M			

Freq MHz	Level dBm/m	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
		dBm	dBm/m	dB			
1 3418.000	-48.84	-50.69	-13.00	-35.84	1.85	Peak	Horizontal
2 PP 5137.000	-45.78	-54.32	-13.00	-32.78	8.54	Peak	Horizontal



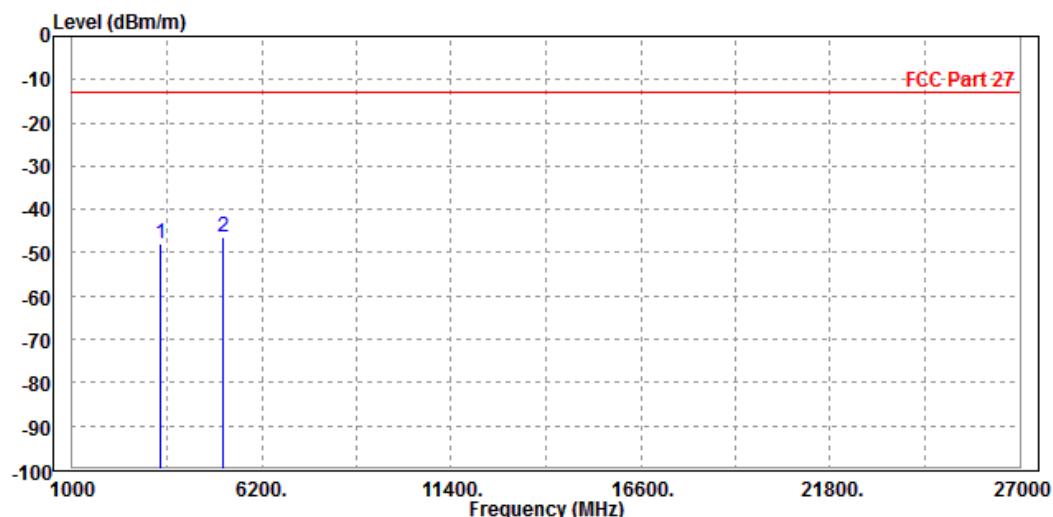


Test Report No.: RF190712W002-5

BUREAU
VERITAS

MODE	TX channel 1312	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	DC 5V from adapter
TESTED BY	Star Le		
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M			

Freq	Level	Read	Limit	Over	Factor	Remark	Pol/Phase
		Level	Line	Limit			
MHz	dBm/m	dBm	dBm/m	dB	dB/m		
1	3418.000	-47.87	-50.34	-13.00	-34.87	2.47 Peak	Vertical
2	PP 5137.000	-46.27	-54.26	-13.00	-33.27	7.99 Peak	Vertical





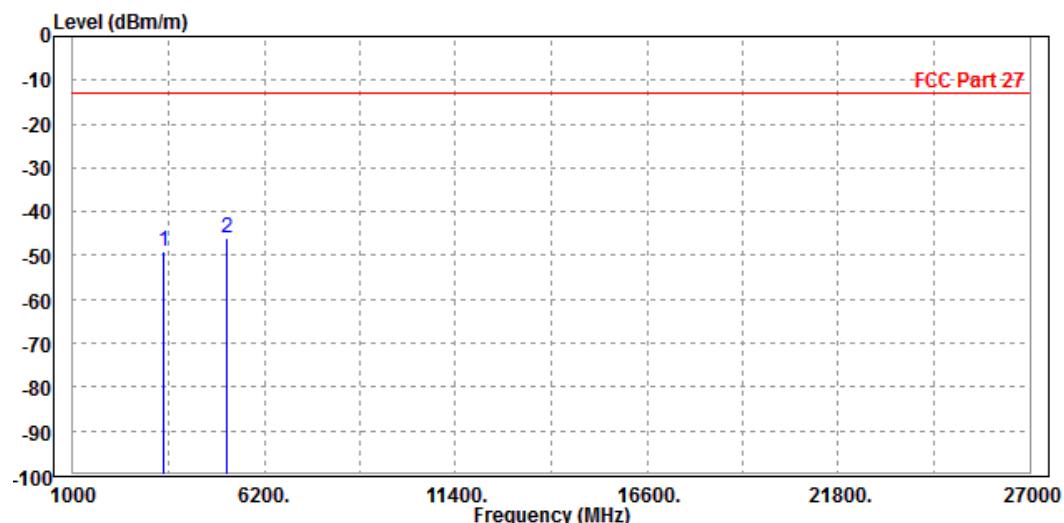
Test Report No.: RF190712W002-5

BUREAU
VERITAS

CH 1413

MODE	TX channel 1413	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	DC 5V from adapter
TESTED BY	Star Le		
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M			

Freq MHz	Level dBm/m	Read	Limit	Over	Factor	Remark	Pol/Phase
		Level dBm	Line dBm/m	dB			
1 3470.000	-49.21	-51.26	-13.00	-36.21	2.05	Peak	Horizontal
2 PP 5197.000	-45.98	-54.59	-13.00	-32.98	8.61	Peak	Horizontal



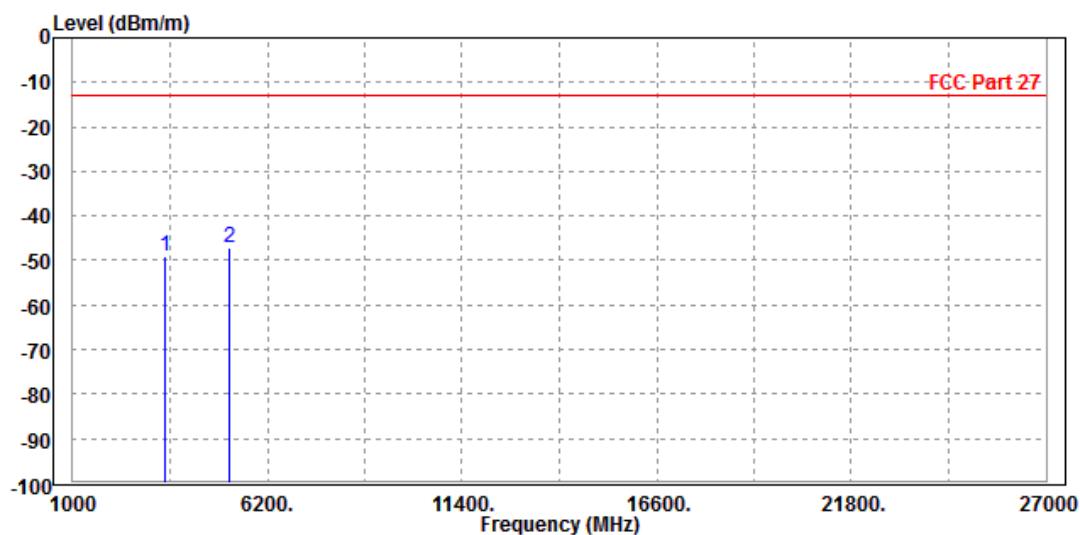


Test Report No.: RF190712W002-5

BUREAU
VERITAS

MODE	TX channel 1413	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	DC 5V from adapter
TESTED BY	Star Le		
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M			

Freq	Level	Read	Limit	Over	Factor	Remark	Pol/Phase
		Level	Line	Limit			
MHz	dBm/m	dBm	dBm/m	dB	dB/m		
1	3470.000	-48.95	-51.48	-13.00	-35.95	2.53 Peak	Vertical
2	PP 5197.000	-47.28	-55.26	-13.00	-34.28	7.98 Peak	Vertical



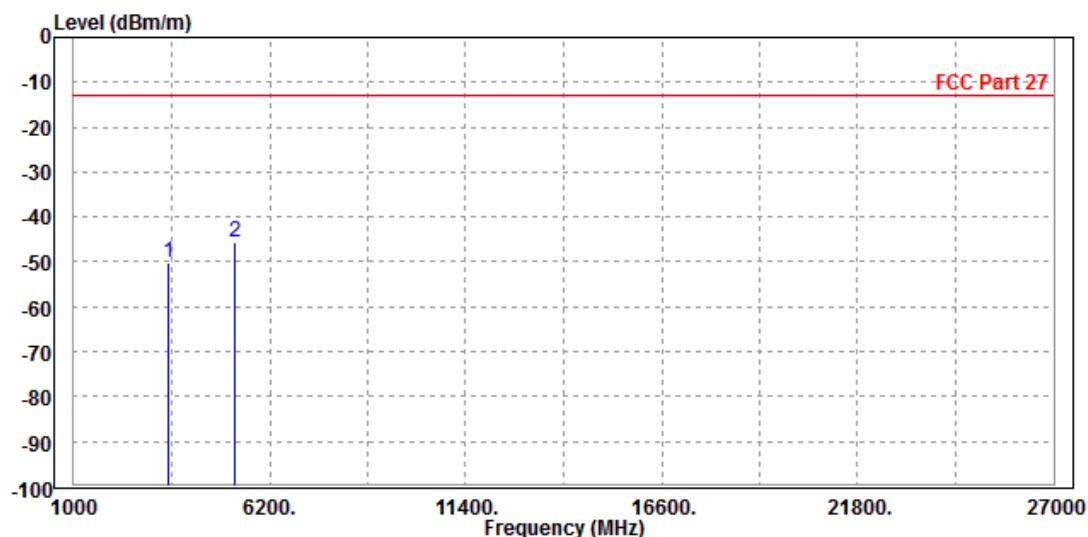


Test Report No.: RF190712W002-5

CH 1513

MODE	TX channel 1513	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	DC 5V from adapter
TESTED BY	Star Le		
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M			

Freq MHz	Level dBm/m	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
		dBm	dBm/m	dB			
1 3505.000	-50.12	-52.31	-13.00	-37.12	2.19	Peak	Horizontal
2 PP 5257.000	-45.55	-54.23	-13.00	-32.55	8.68	Peak	Horizontal



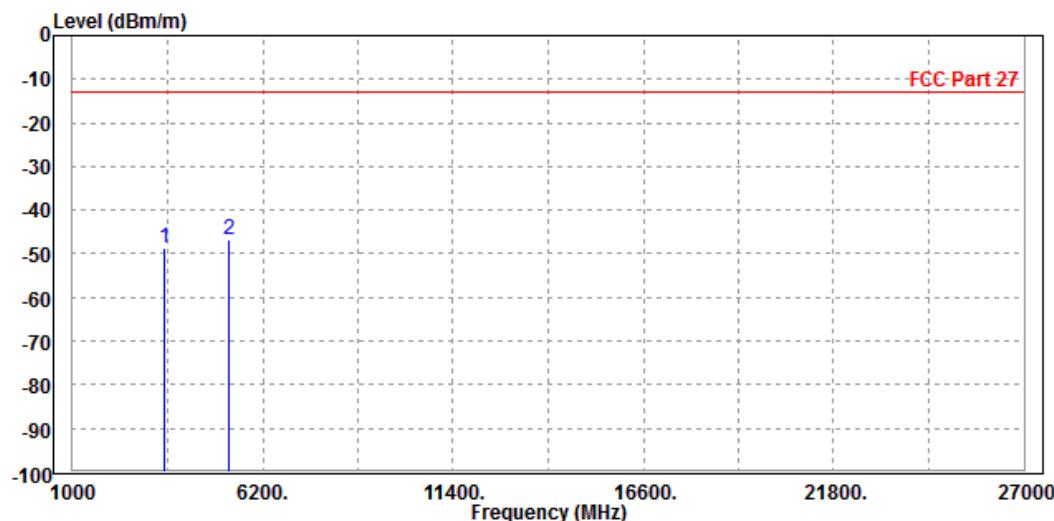


Test Report No.: RF190712W002-5

BUREAU
VERITAS

MODE	TX channel 1513	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	DC 5V from adapter
TESTED BY	Star Le		
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M			

Freq	Level	Read	Limit	Over	Remark	Pol/Phase
		Level	Line	Limit Factor		
MHz	dBm/m	dBm	dBm/m	dB	dB/m	
1	3505.000	-48.72	-51.32	-13.00	-35.72	2.60 Peak Vertical
2 PP	5257.000	-46.69	-54.67	-13.00	-33.69	7.98 Peak Vertical





Test Report No.: RF190712W002-5

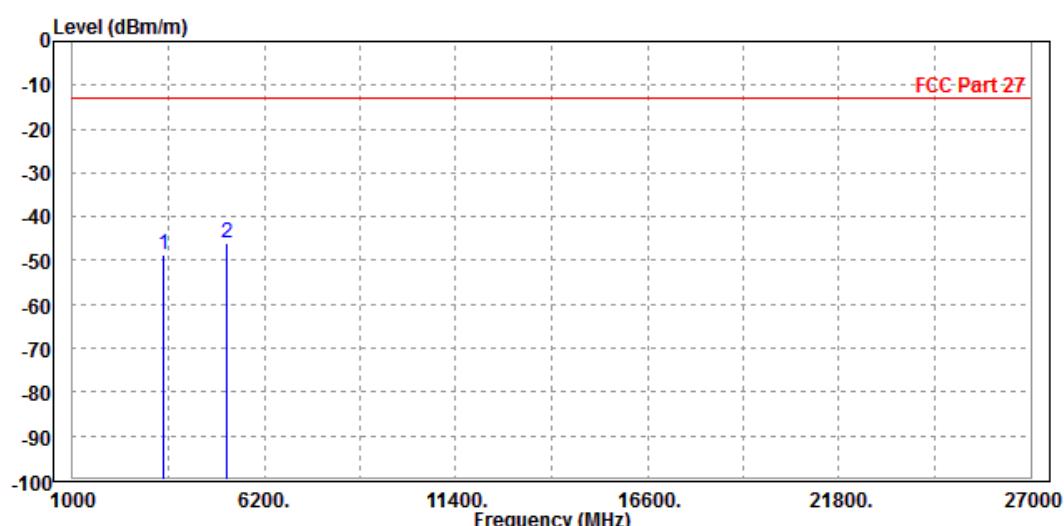
BUREAU
VERITAS

LTE BAND 4

CHANNEL BANDWIDTH: 1.4MHz / QPSK

MODE	TX channel 20175	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	DC 5V from adapter
TESTED BY	Star Le		
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M			

Freq	Level	Read	Limit	Over	Remark	Pol/Phase
		Level	Line	Limit Factor		
MHz	dBm/m	dBm	dBm/m	dB	dB/m	
1	3470.000	-48.79	-50.84	-13.00	-35.79	2.05 Peak Horizontal
2 PP	5197.000	-46.06	-54.67	-13.00	-33.06	8.61 Peak Horizontal



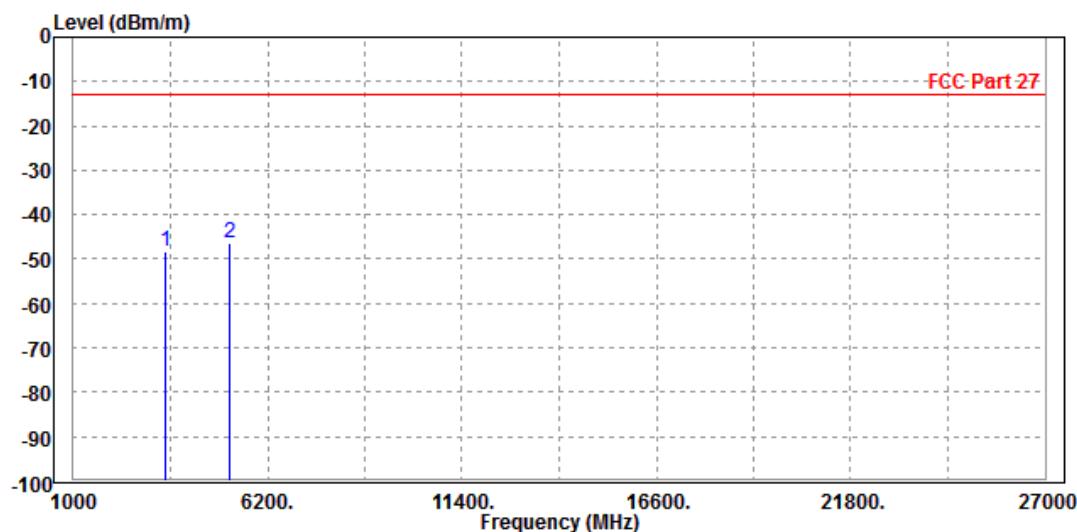


Test Report No.: RF190712W002-5

BUREAU
VERITAS

MODE	TX channel 20175	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	DC 5V from adapter
TESTED BY	Star Le		
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M			

Freq	Level	Read	Limit	Over	Factor	Remark	Pol/Phase
		Level	Line	Limit			
MHz	dBm/m	dBm	dBm/m	dB	dB/m		
1	3470.000	-48.11	-50.64	-13.00	-35.11	2.53 Peak	Vertical
2	PP 5197.000	-46.34	-54.32	-13.00	-33.34	7.98 Peak	Vertical





Test Report No.: RF190712W002-5

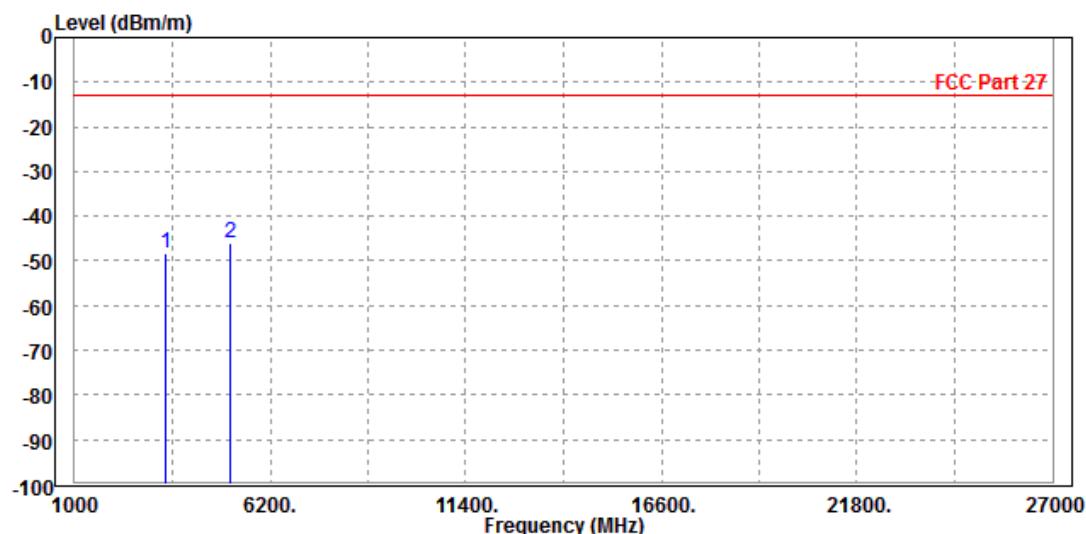
BUREAU
VERITAS

CHANNEL BANDWIDTH: 3MHz / QPSK

CH 19965

MODE	TX channel 19965	FREQUENCY RANGE		Above 1000MHz		
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER		DC 5V from adapter		
TESTED BY	Star Le					
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M						

Freq	Level	Read	Limit	Over	Factor	Remark	Pol/Phase
		Level	Line	Limit			
MHz	dBm/m	dBm	dBm/m	dB	dB/m		
1	3418.000	-48.47	-50.32	-13.00	-35.47	1.85 Peak	Horizontal
2	PP 5132.000	-46.16	-54.69	-13.00	-33.16	8.53 Peak	Horizontal



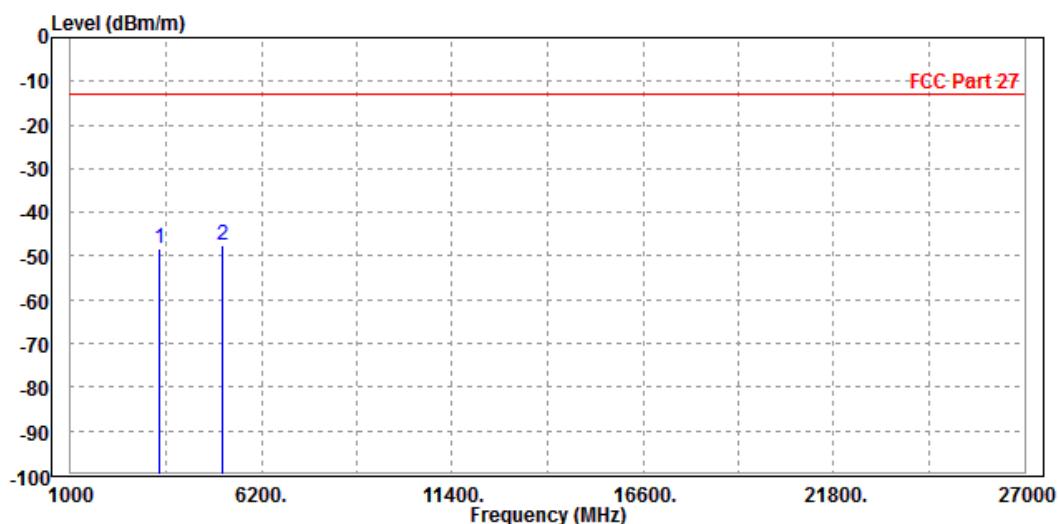


Test Report No.: RF190712W002-5

BUREAU
VERITAS

MODE	TX channel 19965	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	DC 5V from adapter
TESTED BY	Star Le		
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M			

Freq	Level	Read	Limit	Over	Remark	Pol/Phase
		Level	Line	Limit Factor		
MHz	dBm/m	dBm	dBm/m	dB	dB/m	
1	3418.000	-48.15	-50.62	-13.00	-35.15	2.47 Peak Vertical
2	PP 5132.000	-47.37	-55.36	-13.00	-34.37	7.99 Peak Vertical





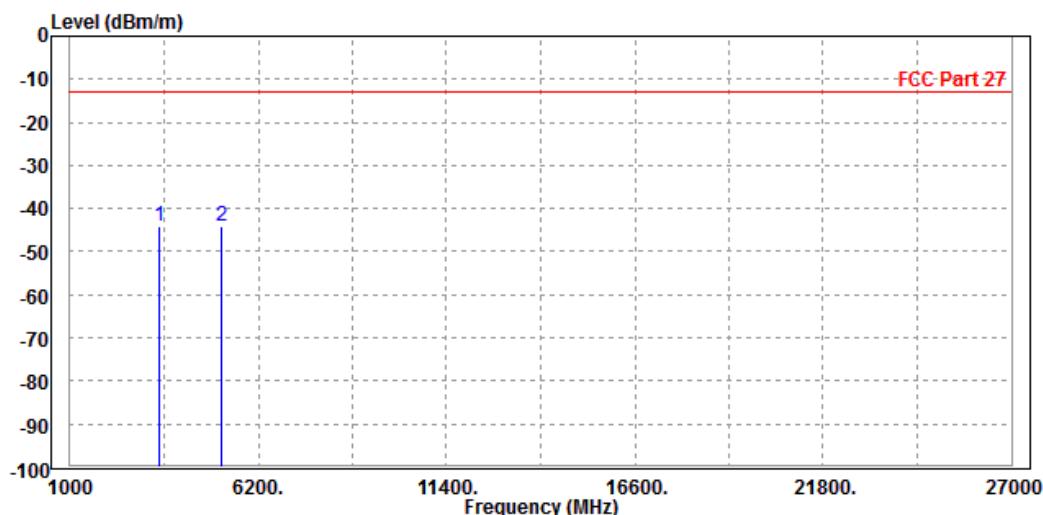
Test Report No.: RF190712W002-5

BUREAU
VERITAS

CH 20175

MODE	TX channel 20175	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	DC 5V from adapter
TESTED BY	Star Le		
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M			

Freq	Level	Read	Limit	Over	Factor	Remark	Pol/Phase
		Line	dBm/m	dB			
MHz	dBm/m	dBm	dBm/m	dB	dB/m		
1	3470.000	-44.23	-46.28	-13.00	-31.23	2.05 Peak	Horizontal
2	PP 5197.000	-44.02	-52.63	-13.00	-31.02	8.61 Peak	Horizontal



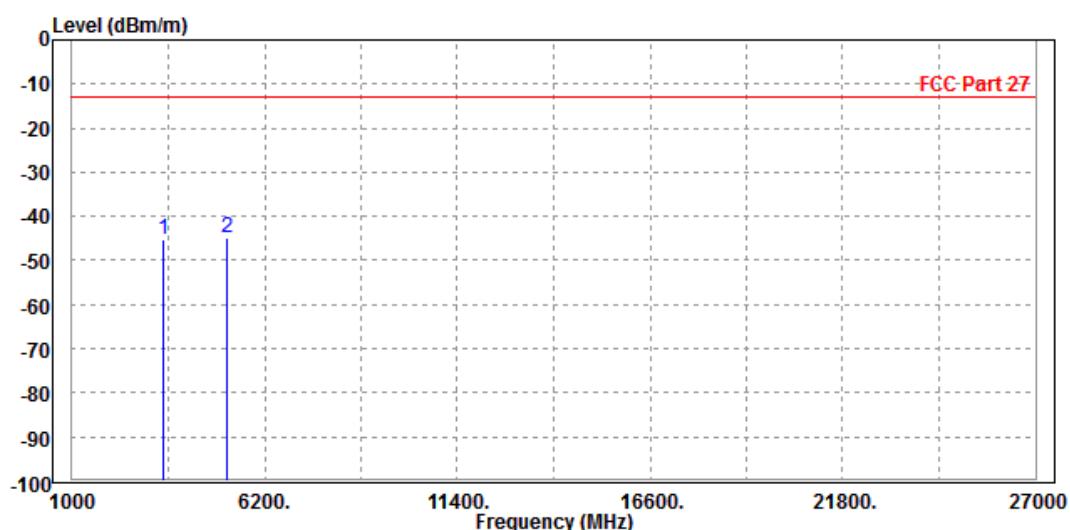


Test Report No.: RF190712W002-5

BUREAU
VERITAS

MODE	TX channel 20175	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	DC 5V from adapter
TESTED BY	Star Le		
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M			

	Freq	Read Level	Limit Level	Over Line	Over Factor	Over Remark	Pol/Phase
	MHz	dBm/m	dBm	dBm/m	dB	dB/m	
1	3470.000	-45.33	-47.86	-13.00	-32.33	2.53	Peak Vertical
2	PP 5197.000	-44.69	-52.67	-13.00	-31.69	7.98	Peak Vertical





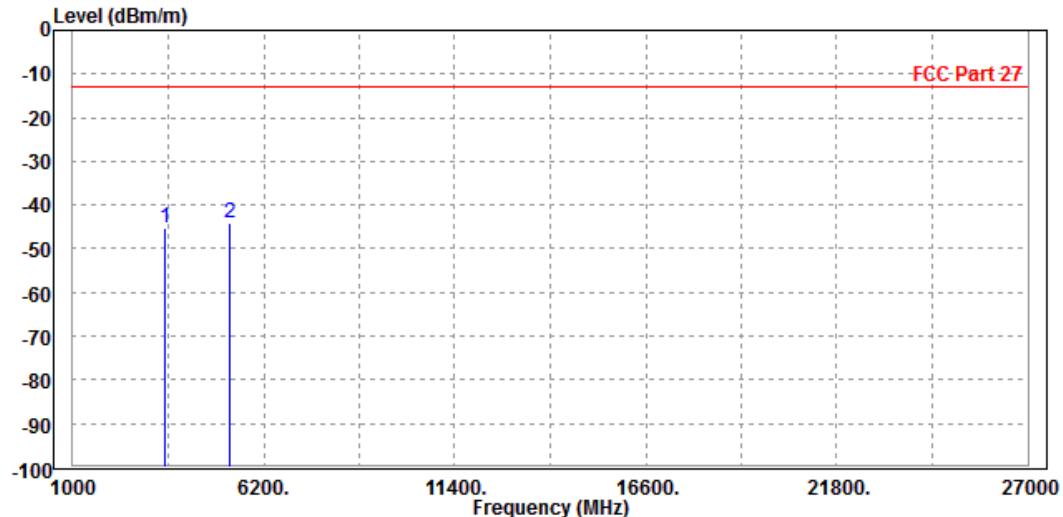
Test Report No.: RF190712W002-5

BUREAU
VERITAS

CH 20385

MODE	TX channel 20385	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	DC 5V from adapter
TESTED BY	Star Le		
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M			

Freq	Level	Read	Limit	Over	Factor	Remark	Pol/Phase
		Line	Line	Limit Factor			
MHz	dBm/m	dBm	dBm/m	dB	dB/m		
1	3502.000	-45.18	-47.35	-13.00	-32.18	2.17 Peak	Horizontal
2	PP 5266.000	-44.22	-52.91	-13.00	-31.22	8.69 Peak	Horizontal



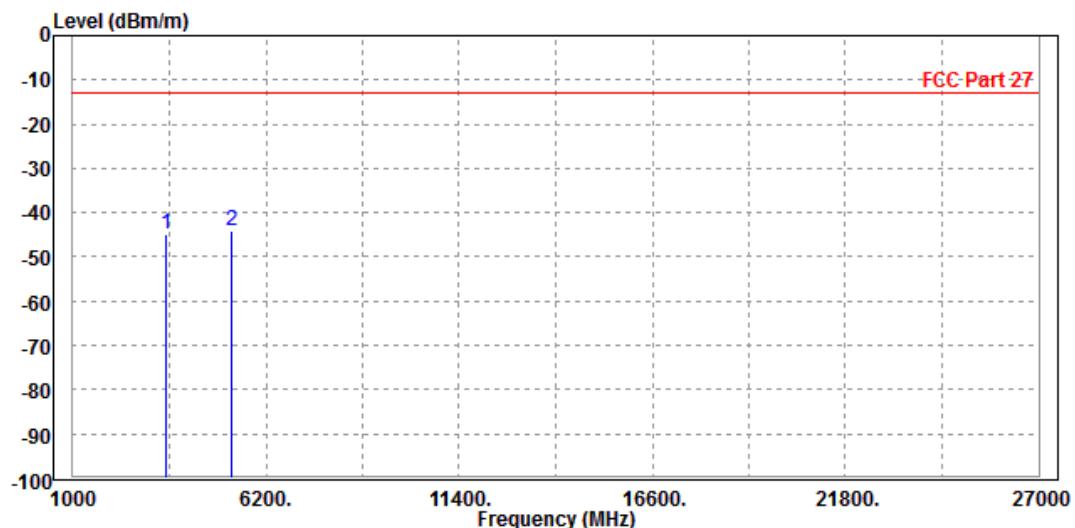


Test Report No.: RF190712W002-5

BUREAU
VERITAS

MODE	TX channel 20385	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	DC 5V from adapter
TESTED BY	Star Le		
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M			

Freq	Level	Read	Limit	Over	Remark	Pol/Phase
		Level	Line	Limit Factor		
MHz	dBm/m	dBm	dBm/m	dB	dB/m	
1	3502.000	-45.05	-47.63	-13.00	-32.05	2.58 Peak Vertical
2 PP	5266.000	-44.23	-52.21	-13.00	-31.23	7.98 Peak Vertical





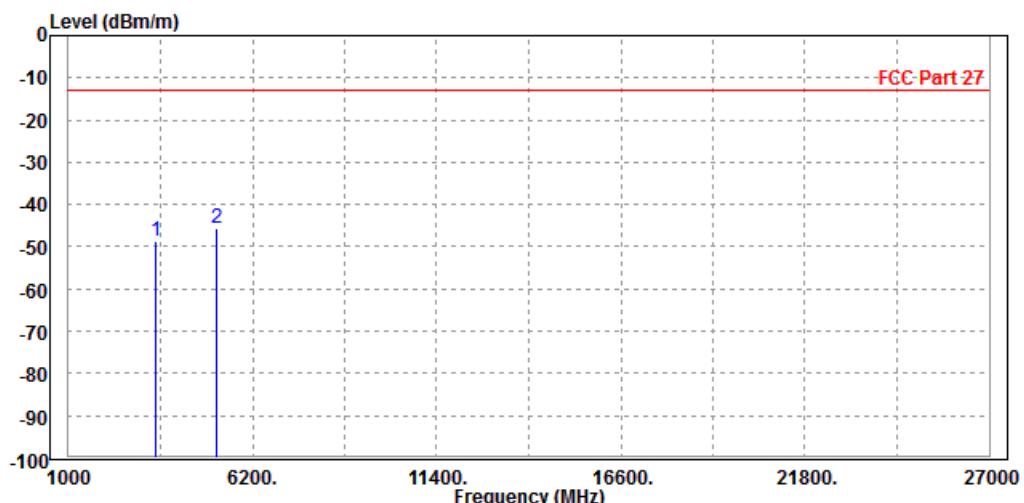
Test Report No.: RF190712W002-5

BUREAU
VERITAS

CHANNEL BANDWIDTH: 5MHz / QPSK

MODE	TX channel 20175	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	DC 5V from adapter
TESTED BY	Star Le		
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M			

Freq	Level	Read	Limit	Over	Factor	Remark	Pol/Phase
		Level	Line	Limit			
MHz	dBm/m	dBm	dBm/m	dB	dB/m		
1	3470.000	-48.59	-50.64	-13.00	-35.59	2.05 Peak	Horizontal
2	PP 5197.000	-45.68	-54.29	-13.00	-32.68	8.61 Peak	Horizontal



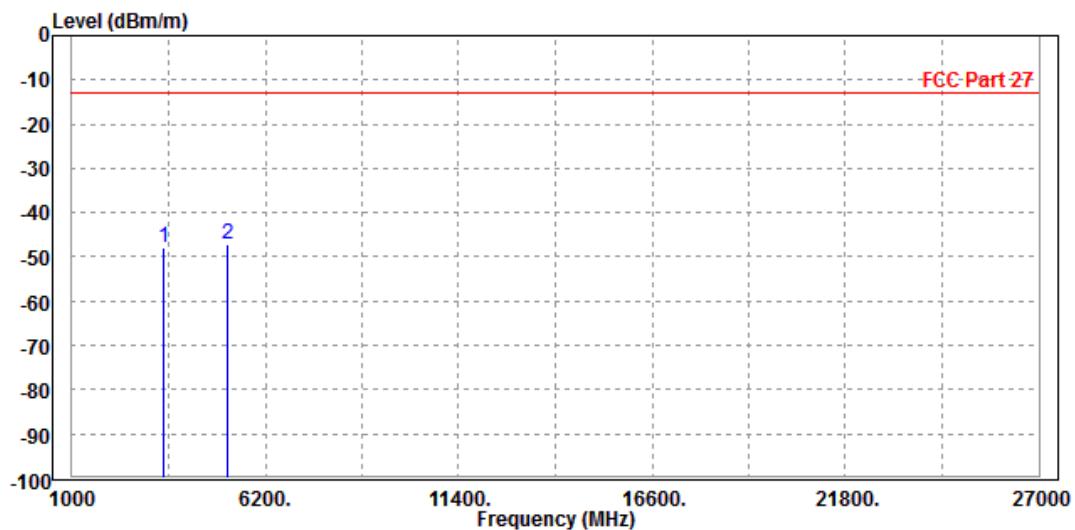


Test Report No.: RF190712W002-5

BUREAU
VERITAS

MODE	TX channel 20175	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	DC 5V from adapter
TESTED BY	Star Le		
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M			

Freq	Level	Read	Limit	Over	Factor	Remark	Pol/Phase
		Level	Line	Limit			
MHz	dBm/m	dBm	dBm/m	dB	dB/m		
1	3470.000	-47.81	-50.34	-13.00	-34.81	2.53 Peak	Vertical
2	PP 5197.000	-47.23	-55.21	-13.00	-34.23	7.98 Peak	Vertical





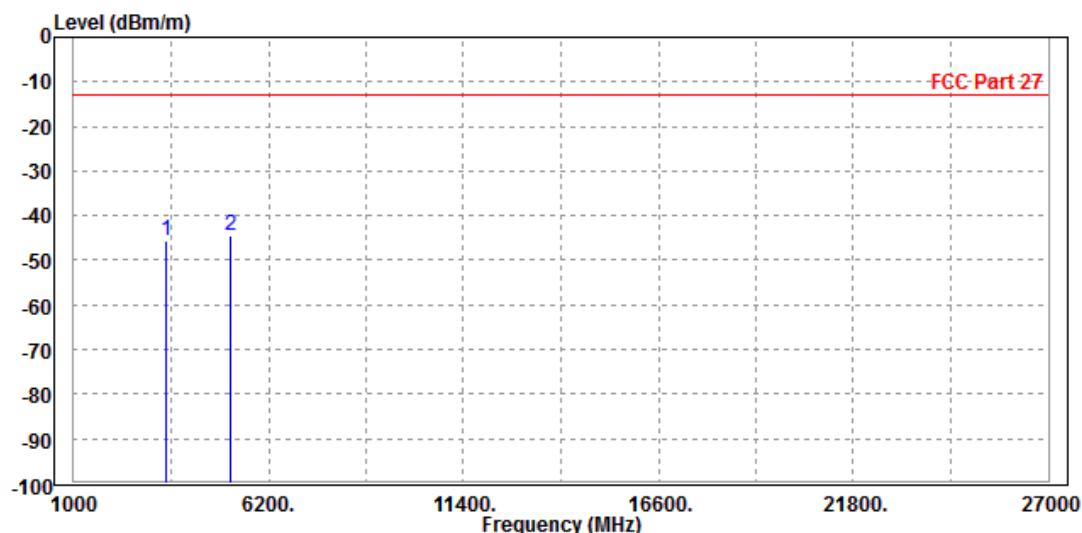
Test Report No.: RF190712W002-5

BUREAU
VERITAS

CHANNEL BANDWIDTH: 10MHz / QPSK

MODE	TX channel 20175	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	DC 5V from adapter
TESTED BY	Star Le		
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M			

Freq	Level	Read	Limit	Over	Remark	Pol/Phase
		Level	Line	Limit Factor		
MHz	dBm/m	dBm	dBm/m	dB	dB/m	
1	3470.000	-45.80	-47.85	-13.00	-32.80	2.05 Peak
2 PP	5197.000	-44.60	-53.21	-13.00	-31.60	8.61 Peak



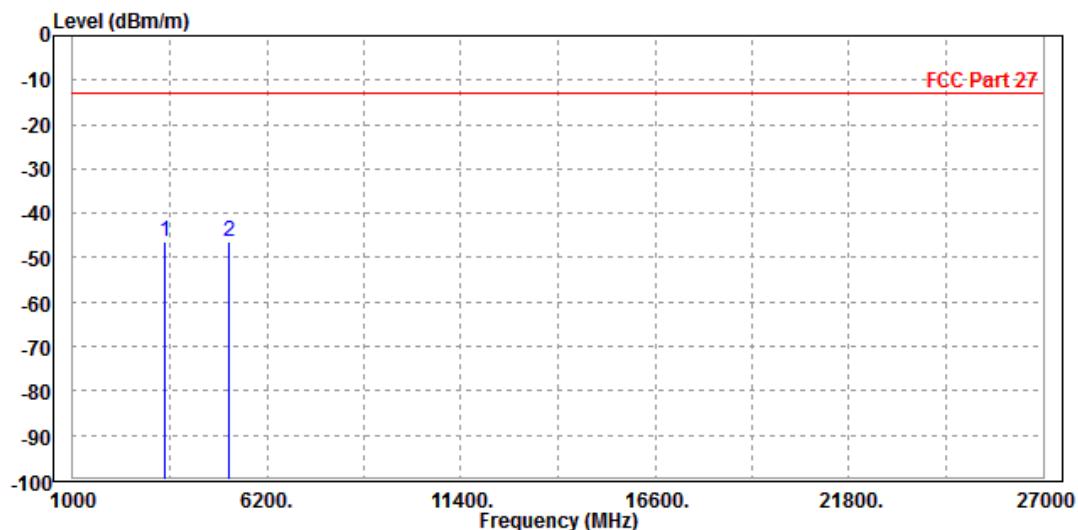


Test Report No.: RF190712W002-5

BUREAU
VERITAS

MODE	TX channel 20175	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	DC 5V from adapter
TESTED BY	Star Le		
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M			

Freq	Level	Read	Limit	Over	Factor	Remark	Pol/Phase
		Level	Line	Limit			
1	PP	3470.000	-46.21	-48.74	-13.00	-33.21	2.53 Peak
2		5197.000	-46.38	-54.36	-13.00	-33.38	7.98 Peak





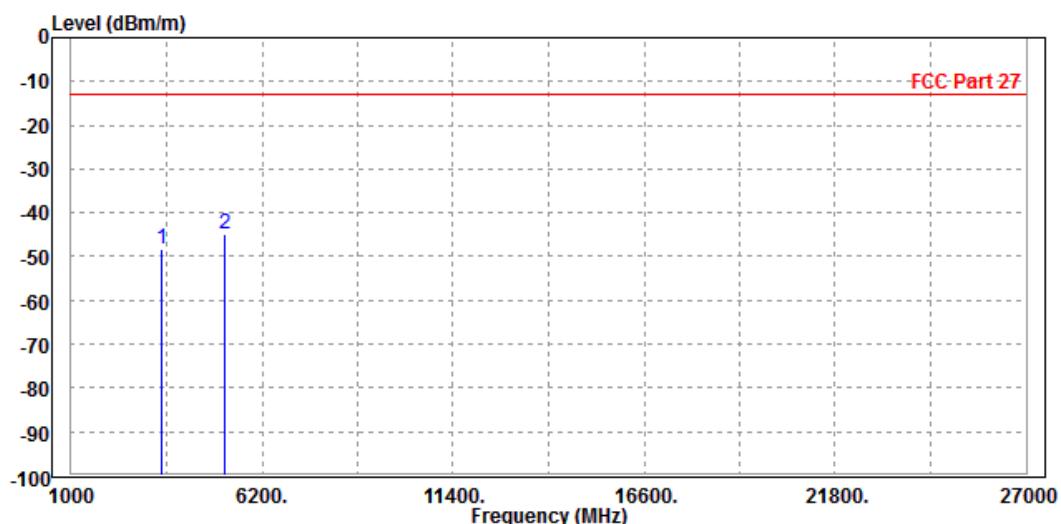
Test Report No.: RF190712W002-5

BUREAU
VERITAS

CHANNEL BANDWIDTH: 15MHz / QPSK

MODE	TX channel 20175	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	DC 5V from adapter
TESTED BY	Star Le		
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M			

Freq	Level	Read	Limit	Over	Factor	Remark	Pol/Phase
		Level	Line	Limit			
MHz	dBm/m	dBm	dBm/m	dB	dB/m		
1	3470.000	-48.26	-50.31	-13.00	-35.26	2.05 Peak	Horizontal
2 PP	5197.000	-45.04	-53.65	-13.00	-32.04	8.61 Peak	Horizontal



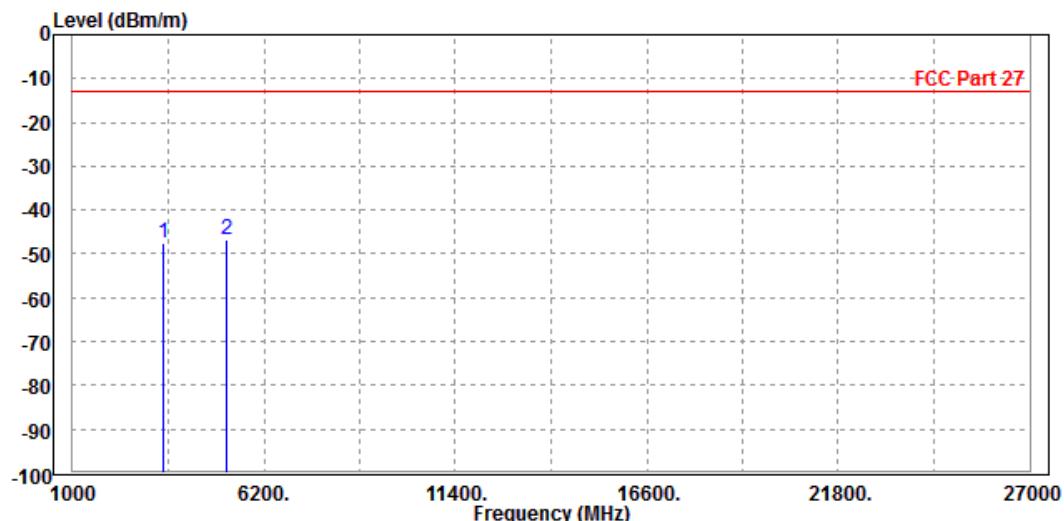


Test Report No.: RF190712W002-5

BUREAU
VERITAS

MODE	TX channel 20175	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	DC 5V from adapter
TESTED BY	Star Le		
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M			

Freq	Level	Read	Limit	Over	Factor	Remark	Pol/Phase
		Level	Line	Limit			
MHz	dBm/m	dBm	dBm/m	dB	dB		
1	3470.000	-47.72	-50.25	-13.00	-34.72	2.53 Peak	Vertical
2 PP	5197.000	-46.63	-54.61	-13.00	-33.63	7.98 Peak	Vertical





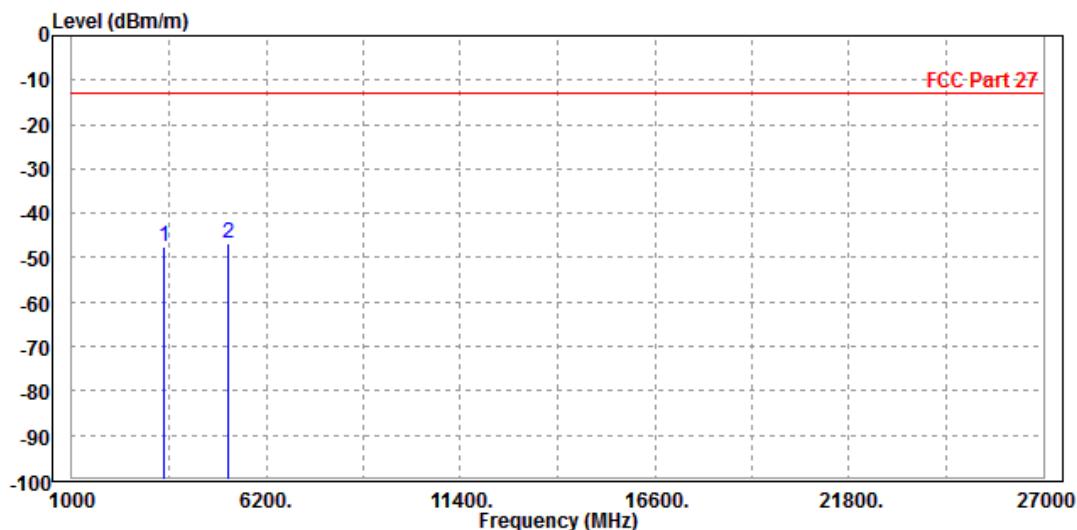
Test Report No.: RF190712W002-5

BUREAU
VERITAS

CHANNEL BANDWIDTH: 20MHz / QPSK

MODE	TX channel 20175	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	DC 5V from adapter
TESTED BY	Star Le		
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M			

Freq	Level	Read	Limit	Over	Factor	Remark	Pol/Phase
		Level	Line	Limit			
MHz	dBm/m	dBm	dBm/m	dB	dB/m		
1	3470.000	-47.59	-49.64	-13.00	-34.59	2.05 Peak	Horizontal
2 PP	5197.000	-46.60	-55.21	-13.00	-33.60	8.61 Peak	Horizontal



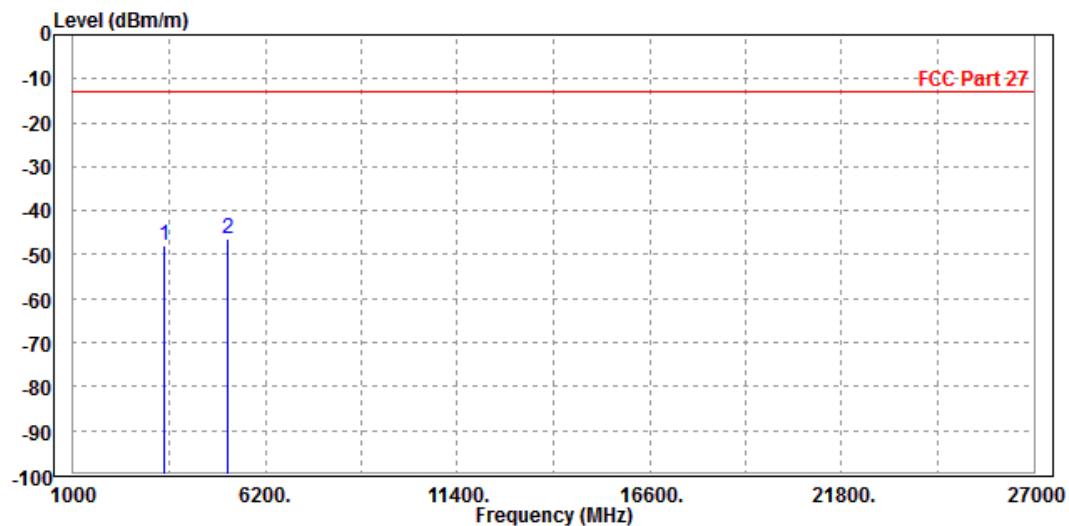


Test Report No.: RF190712W002-5

BUREAU
VERITAS

MODE	TX channel 20175	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	DC 5V from adapter
TESTED BY	Star Le		
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M			

Freq MHz	Level dBm/m	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
		dBm	dBm/m	dB			
1 3470.000	-47.76	-50.29	-13.00	-34.76	2.53	Peak	Vertical
2 PP 5197.000	-46.39	-54.37	-13.00	-33.39	7.98	Peak	Vertical





Test Report No.: RF190712W002-5

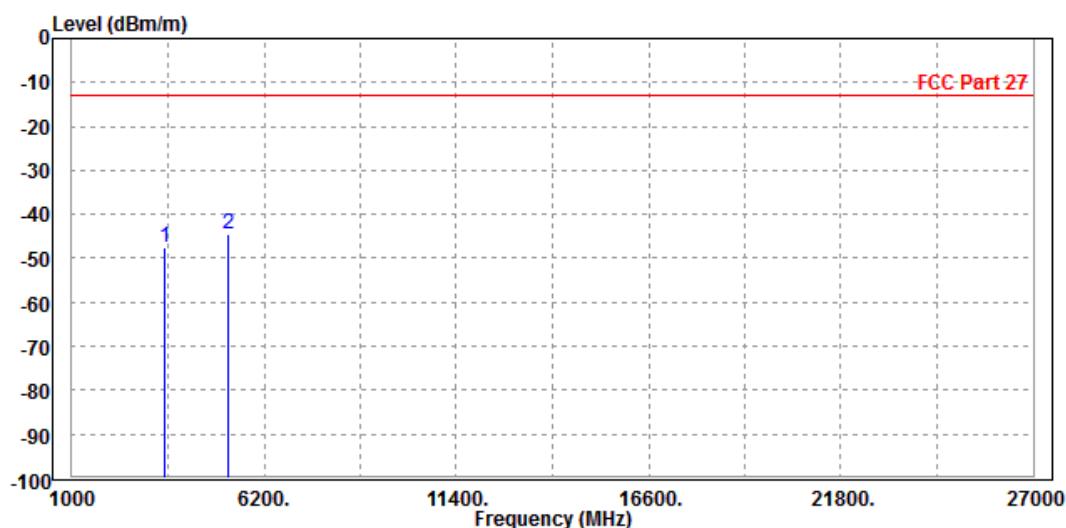
BUREAU
VERITAS

LTE BAND 66

CHANNEL BANDWIDTH: 1.4MHz / QPSK

MODE	TX channel 132322	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	DC 5V from adapter
TESTED BY	Star Le		
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M			

	Freq	Read Level	Limit Level	Over Line	Limit Factor	Remark	Pol/Phase
	MHz	dBm/m	dBm	dBm/m	dB	dB/m	
1	3490.000	-47.55	-49.67	-13.00	-34.55	2.12 Peak	Horizontal
2	PP 5238.000	-44.67	-53.32	-13.00	-31.67	8.65 Peak	Horizontal



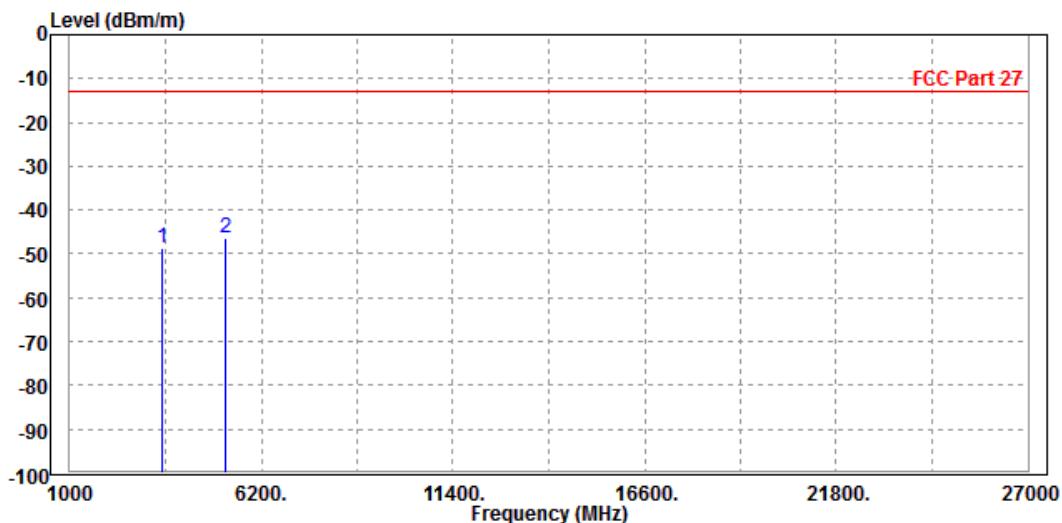


Test Report No.: RF190712W002-5

BUREAU
VERITAS

MODE	TX channel 132322	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	DC 5V from adapter
TESTED BY	Star Le		
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M			

Freq	Level	Read	Limit	Over	Factor	Remark	Pol/Phase
		Level	Line	Limit			
MHz	dBm/m	dBm	dBm/m	dB	dB/m		
1	3496.000	-48.67	-51.23	-13.00	-35.67	2.56 Peak	Vertical
2 PP	5235.000	-46.33	-54.31	-13.00	-33.33	7.98 Peak	Vertical





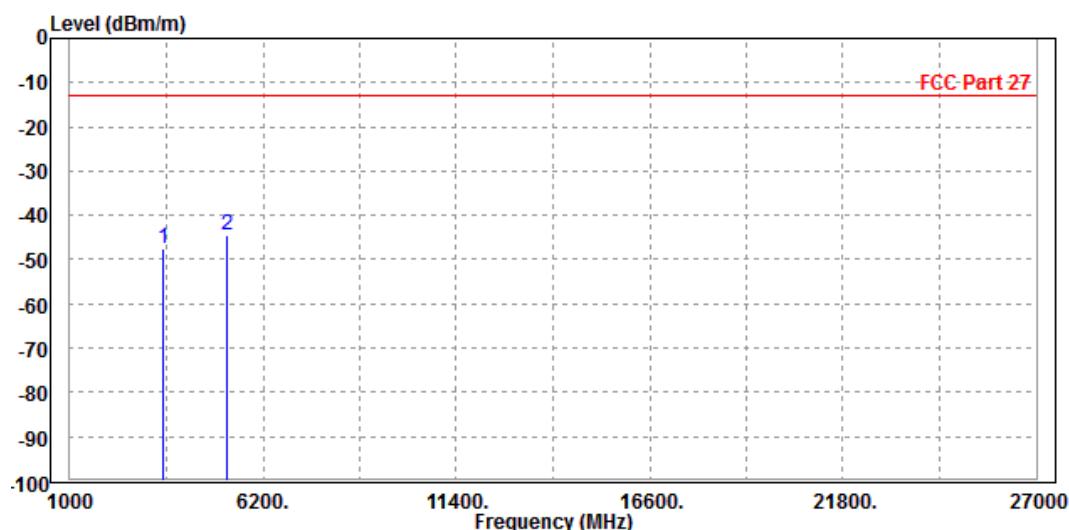
Test Report No.: RF190712W002-5

BUREAU
VERITAS

CHANNEL BANDWIDTH: 3MHz / QPSK

MODE	TX channel 132322	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	DC 5V from adapter
TESTED BY	Star Le		
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M			

	Freq	Read Level	Limit Level	Over Line	Limit Factor	Over Factor	Remark	Pol/Phase
	MHz	dBm/m	dBm	dBm/m	dB	dB/m		
1	3496.000	-47.51	-49.66	-13.00	-34.51	2.15	Peak	Horizontal
2	PP 5235.000	-45.47	-54.12	-13.00	-32.47	8.65	Peak	Horizontal



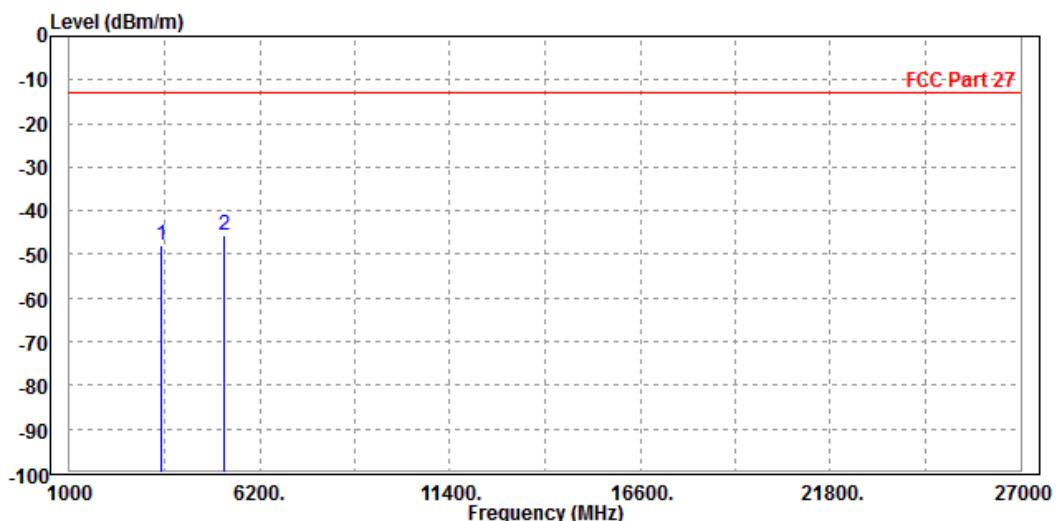


Test Report No.: RF190712W002-5

BUREAU
VERITAS

MODE	TX channel 132322	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	DC 5V from adapter
TESTED BY	Star Le		
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M			

Freq	Level	Read	Limit	Over	Factor	Remark	Pol/Phase
		Level	Line	Limit			
MHz	dBm/m	dBm	dBm/m	dB	dB/m		
1	3490.000	-47.78	-50.34	-13.00	-34.78	2.56 Peak	Vertical
2 PP	5238.000	-45.47	-53.45	-13.00	-32.47	7.98 Peak	Vertical





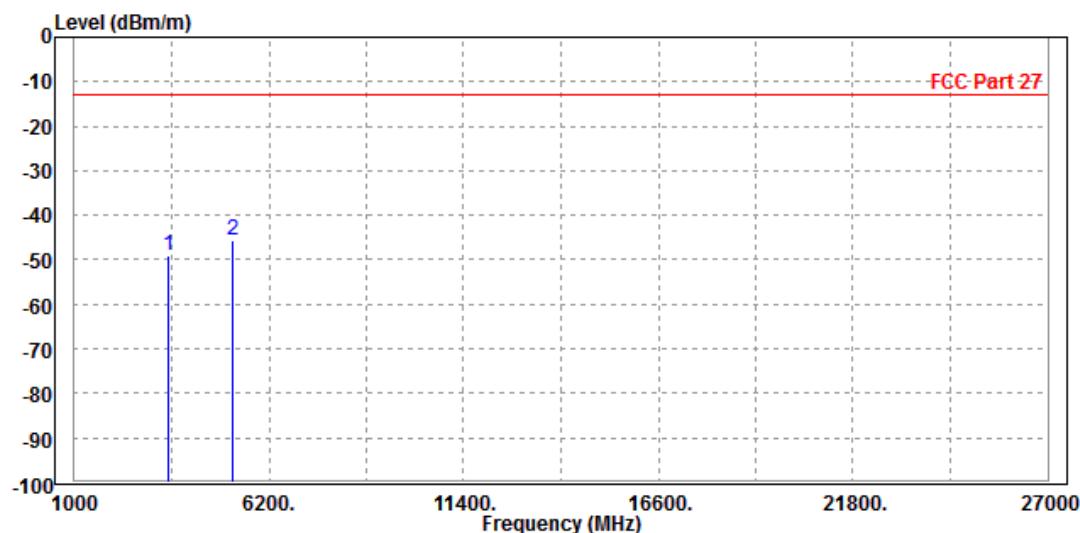
Test Report No.: RF190712W002-5

BUREAU
VERITAS

CHANNEL BANDWIDTH: 5MHz / QPSK

MODE	TX channel 132322	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	DC 5V from adapter
TESTED BY	Star Le		
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M			

	Freq	Read Level	Limit Level	Over Line	Over Limit	Factor	Remark	Pol/Phase
	MHz	dBm/m	dBm	dBm/m	dB	dB/m		
1	3490.000	-49.11	-51.23	-13.00	-36.11	2.12	Peak	Horizontal
2 PP	5238.000	-45.53	-54.18	-13.00	-32.53	8.65	Peak	Horizontal



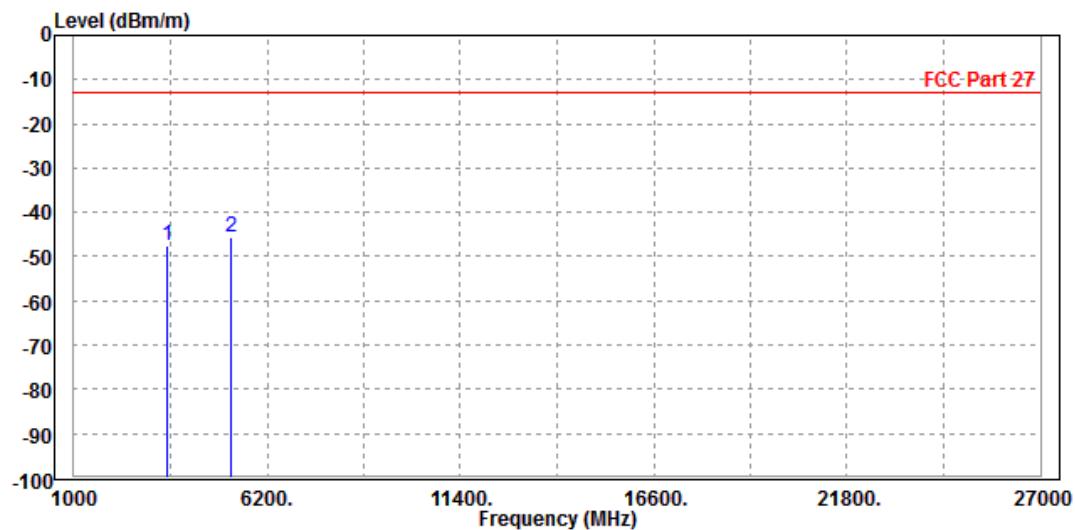


Test Report No.: RF190712W002-5

BUREAU
VERITAS

MODE	TX channel 132322	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	DC 5V from adapter
TESTED BY	Star Le		
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M			

Freq	Level	Read	Limit	Over	Factor	Remark	Pol/Phase
		Level	Line	Limit			
MHz	dBm/m	dBm	dBm/m	dB	dB/m		
1	3496.000	-47.72	-50.28	-13.00	-34.72	2.56 Peak	Vertical
2 PP	5235.000	-45.66	-53.64	-13.00	-32.66	7.98 Peak	Vertical





Test Report No.: RF190712W002-5

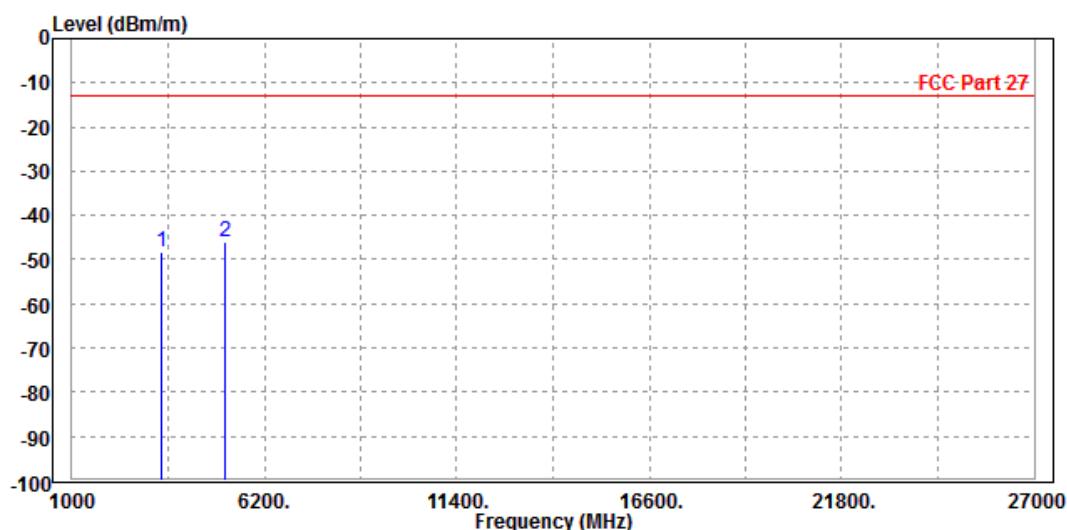
BUREAU
VERITAS

CHANNEL BANDWIDTH: 10MHz / QPSK

CH 132022

MODE	TX channel 132022	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	DC 5V from adapter
TESTED BY	Star Le		
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M			

Freq	Level	Read	Limit	Over	Factor	Remark	Pol/Phase
		Line	Line	Limit Factor			
MHz	dBm/m	dBm	dBm/m	dB	dB/m		
1	3418.000	-48.44	-50.29	-13.00	-35.44	1.85 Peak	Horizontal
2 PP	5145.000	-45.91	-54.45	-13.00	-32.91	8.54 Peak	Horizontal



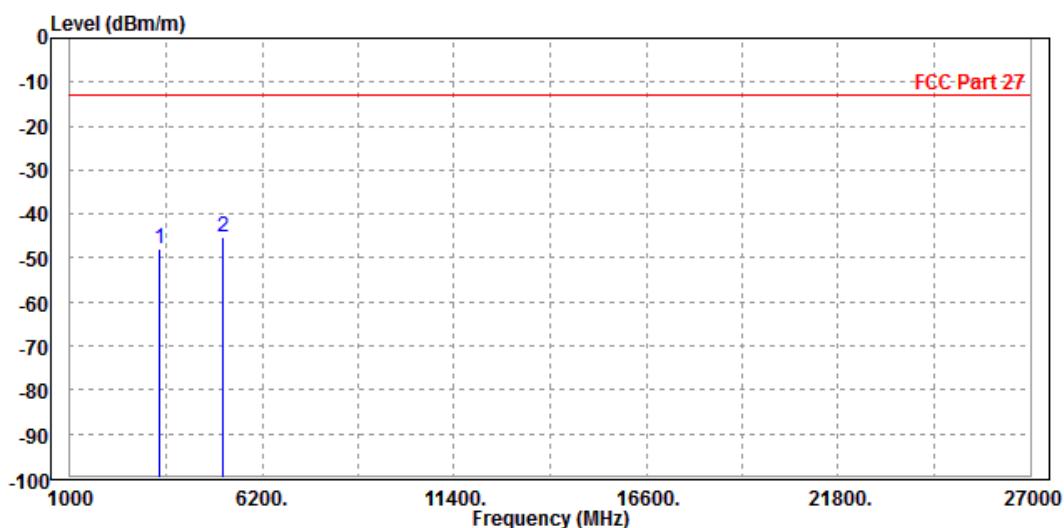


Test Report No.: RF190712W002-5

BUREAU
VERITAS

MODE	TX channel 132022	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	DC 5V from adapter
TESTED BY	Star Le		
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M			

	Freq	Read Level	Limit Level	Over Line	Over Limit	Factor	Remark	Pol/Phase
	MHz	dBm/m	dBm	dBm/m	dB	dB/m		
1	3430.000	-47.86	-50.34	-13.00	-34.86	2.48	Peak	Vertical
2	PP 5134.000	-45.17	-53.16	-13.00	-32.17	7.99	Peak	Vertical





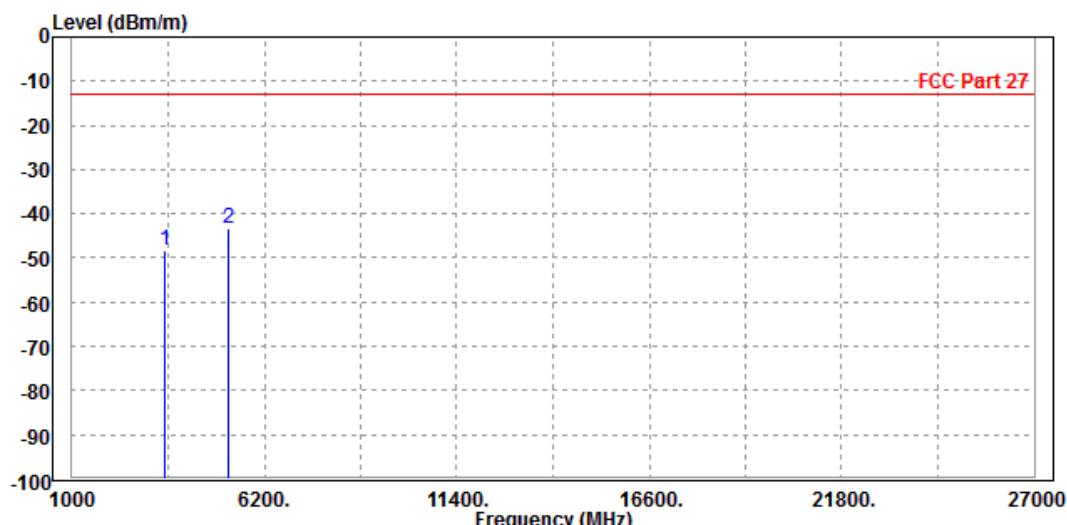
Test Report No.: RF190712W002-5

BUREAU
VERITAS

CH 132322

MODE	TX channel 132322	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	DC 5V from adapter
TESTED BY	Star Le		
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M			

	Freq	Read Level	Limit Level	Over Line	Over Limit	Factor	Remark	Pol/Phase
	MHz	dBm/m	dBm	dBm/m	dB	dB/m		
1	3490.000	-48.27	-50.39	-13.00	-35.27	2.12	Peak	Horizontal
2	PP 5238.000	-43.49	-52.14	-13.00	-30.49	8.65	Peak	Horizontal



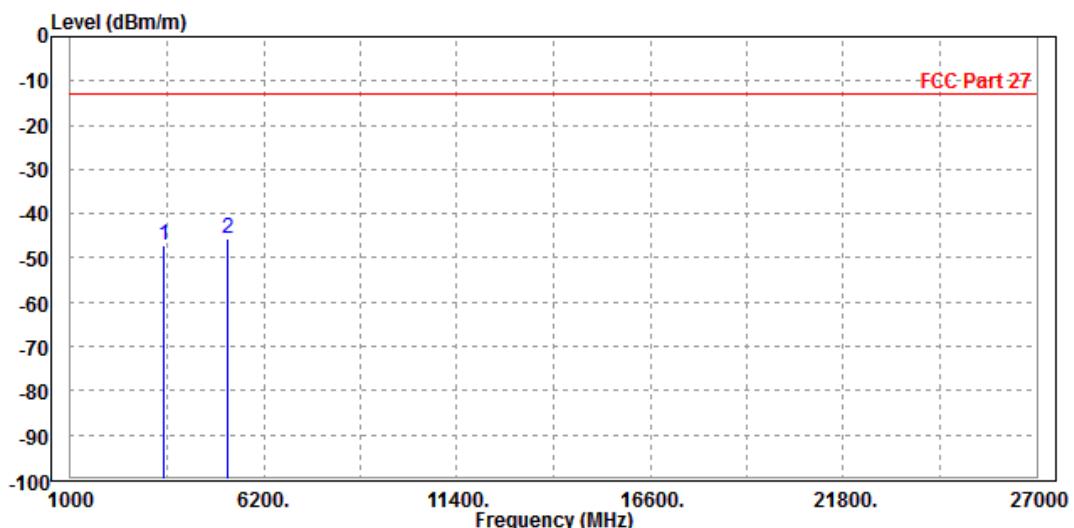


Test Report No.: RF190712W002-5

BUREAU
VERITAS

MODE	TX channel 132322	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	DC 5V from adapter
TESTED BY	Star Le		
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M			

Freq	Level	Read	Limit	Over	Remark	Pol/Phase
		Level	Line	Limit Factor		
MHz	dBm/m	dBm	dBm/m	dB	dB/m	
1	3496.000	-47.12	-49.68	-13.00	-34.12	2.56 Peak Vertical
2 PP	5235.000	-45.64	-53.62	-13.00	-32.64	7.98 Peak Vertical





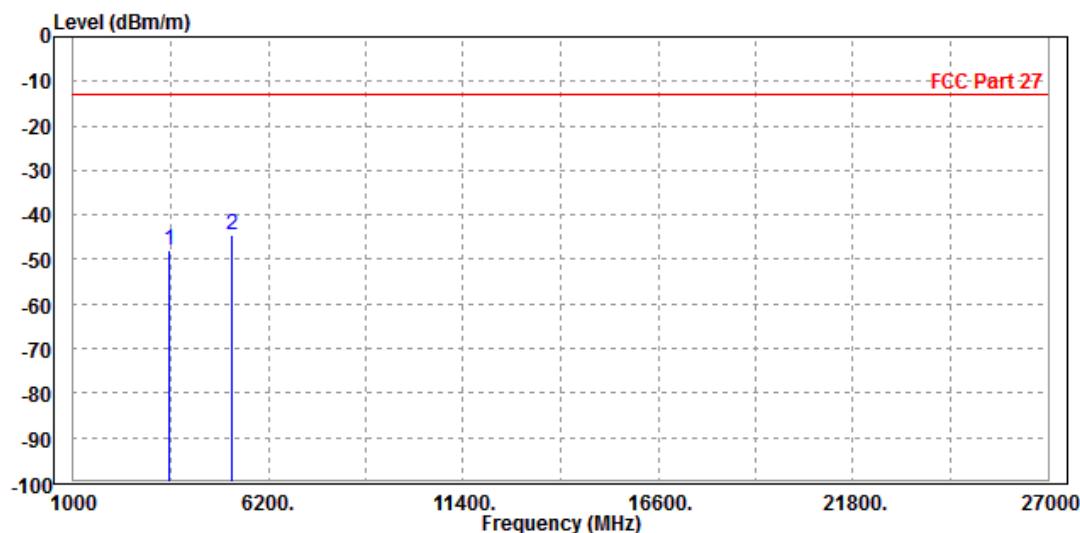
Test Report No.: RF190712W002-5

BUREAU
VERITAS

CH 132622

MODE	TX channel 132622	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	DC 5V from adapter
TESTED BY	Star Le		
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M			

Freq	Level	Read	Limit	Over	Factor	Remark	Pol/Phase
		Line	Line	dB			
MHz	dBm/m	dBm	dBm/m	dB	dB/m		
1	3550.000	-47.87	-50.27	-13.00	-34.87	2.40 Peak	Horizontal
2	PP 5238.000	-44.50	-53.15	-13.00	-31.50	8.65 Peak	Horizontal



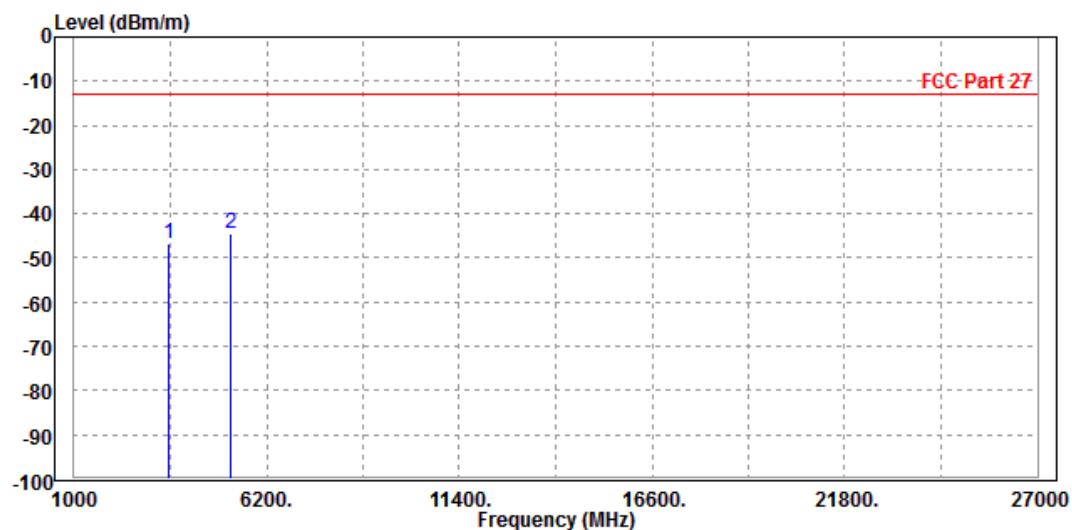


Test Report No.: RF190712W002-5

BUREAU
VERITAS

MODE	TX channel 132622	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	DC 5V from adapter
TESTED BY	Star Le		
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M			

	Freq	Read Level	Limit Level	Over Line	Over Limit	Factor	Remark	Pol/Phase
	MHz	dBm/m	dBm	dBm/m	dB	dB/m		
1	3548.000	-46.81	-49.62	-13.00	-33.81	2.81	Peak	Vertical
2	PP 5235.000	-44.38	-52.36	-13.00	-31.38	7.98	Peak	Vertical





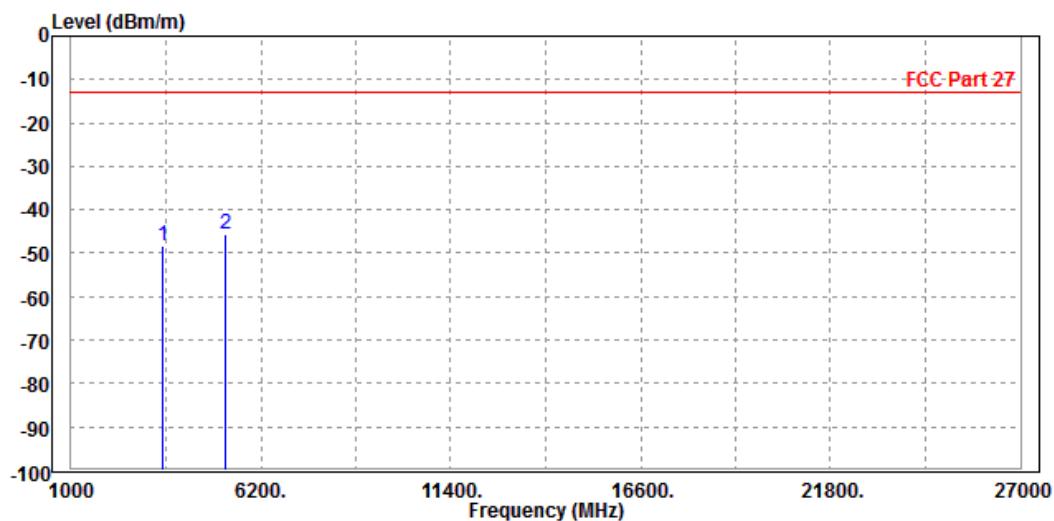
Test Report No.: RF190712W002-5

BUREAU
VERITAS

CHANNEL BANDWIDTH: 15MHz / QPSK

MODE	TX channel 132322	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	DC 5V from adapter
TESTED BY	Star Le		
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M			

Freq MHz	Level dBm/m	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
		dBm	dBM/m	dB			
1 3496.000	-48.11	-50.26	-13.00	-35.11	2.15	Peak	Horizontal
2 PP 5235.000	-45.56	-54.21	-13.00	-32.56	8.65	Peak	Horizontal



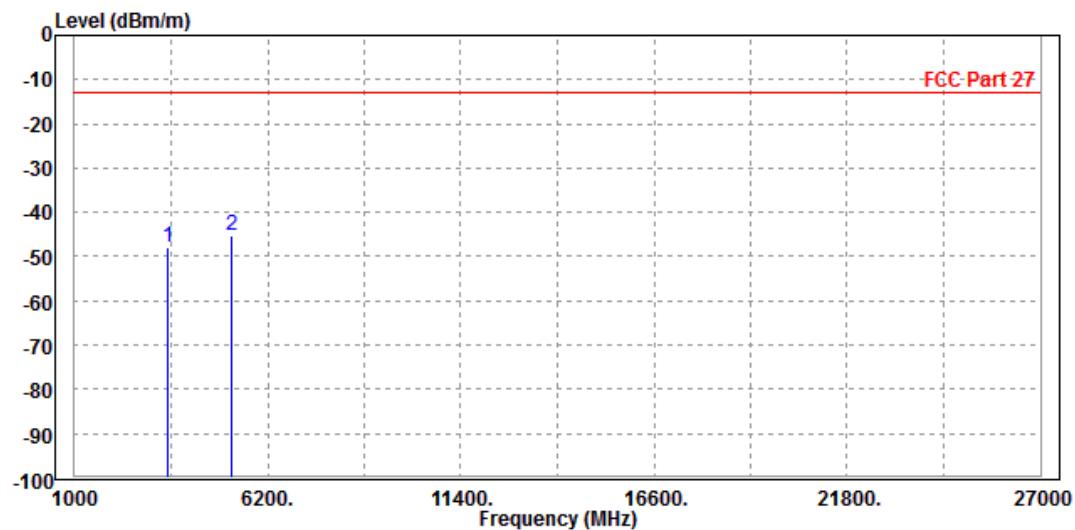


Test Report No.: RF190712W002-5

BUREAU
VERITAS

MODE	TX channel 132322	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	DC 5V from adapter
TESTED BY	Star Le		
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M			

Freq	Level	Read	Limit	Over	Remark	Pol/Phase
		Level	Line	Limit Factor		
MHz	dBm/m	dBm	dBm/m	dB	dB/m	
1	3490.000	-47.85	-50.41	-13.00	-34.85	2.56 Peak Vertical
2 PP	5238.000	-45.30	-53.28	-13.00	-32.30	7.98 Peak Vertical





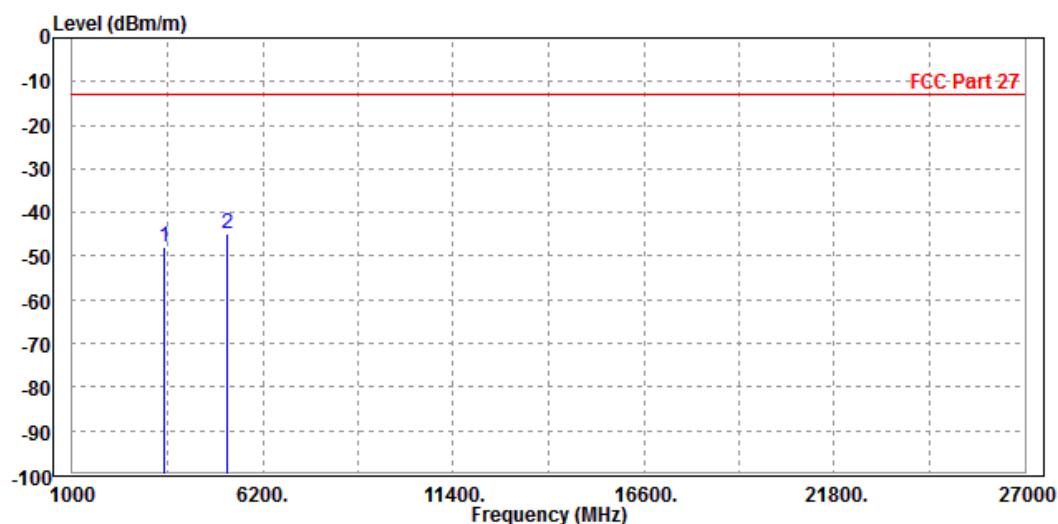
Test Report No.: RF190712W002-5

BUREAU
VERITAS

CHANNEL BANDWIDTH: 20MHz / QPSK

MODE	TX channel 132322	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	DC 5V from adapter
TESTED BY	Star Le		
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M			

Freq	Level	Read	Limit	Over	Factor	Remark	Pol/Phase
		Line	dBm/m	dBm			
MHz	dBm/m	dBm	dBm/m	dB	dB/m		
1	3490.000	-48.00	-50.12	-13.00	-35.00	2.12 Peak	Horizontal
2	PP 5238.000	-44.99	-53.64	-13.00	-31.99	8.65 Peak	Horizontal



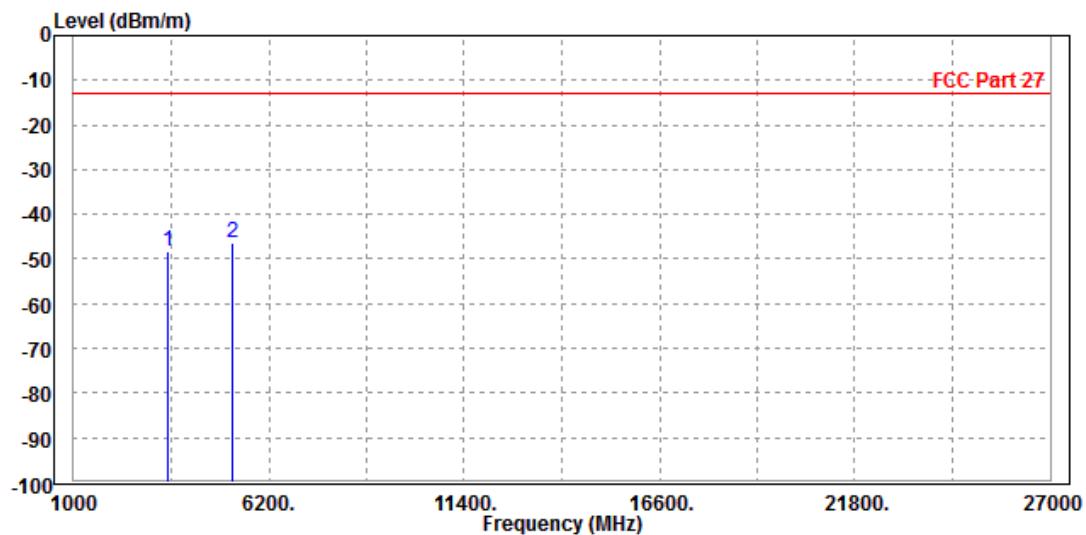


Test Report No.: RF190712W002-5

BUREAU
VERITAS

MODE	TX channel 132322	FREQUENCY RANGE	Above 1000MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70%RH	INPUT POWER	DC 5V from adapter
TESTED BY	Star Le		
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M			

Freq	Level	Read	Limit	Over	Remark	Pol/Phase
		Level	Line	Limit Factor		
MHz	dBm/m	dBm	dBm/m	dB	dB/m	
1	3496.000	-48.11	-50.67	-13.00	-35.11	2.56 Peak Vertical
2 PP	5235.000	-46.24	-54.22	-13.00	-33.24	7.98 Peak Vertical





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4 INFORMATION ON THE TESTING LABORATORIES

We, BV 7LAYERS COMMUNICATIONS TECHNOLOGY (SHENZHEN) CO. LTD., were founded in 2015 to provide our best service in EMC, Radio, Telecom and Safety consultation. Our laboratories are accredited and approved according to ISO/IEC 17025.

If you have any comments, please feel free to contact us at the following:

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Fax: +86-755-88696577

Email: customerservice.dg@cn.bureauveritas.com

Web Site: www.adt.com.tw

The address and road map of all our labs can be found in our web site also.



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5 APPENDIX A – MODIFICATIONS RECORDERS FOR ENGINEERING CHANGES TO THE EUT BY THE LAB

No modifications were made to the EUT by the lab during the test.

---END---