

Band/BW	Modulation	RB Size	RB Offset	Low CH (39725)	Mid CH (40620)	High CH (41515)
				Frequency (2503.5)MHz	Frequency (2593)MHz	Frequency (2682.5)MHz
41/ 15	QPSK	1	0	24.34	24.33	24.12
		1	37	24.46	24.46	24.31
		1	74	24.26	24.12	23.21
		36	0	23.33	23.36	23.27
		36	19	23.34	23.33	23.30
		36	39	23.33	23.29	23.17
		75	0	23.50	23.37	23.37
	16QAM	1	0	23.29	23.36	23.24
		1	37	23.37	23.27	23.41
		1	74	23.19	23.37	23.12
		36	0	22.42	22.43	22.24
		36	19	22.38	22.27	22.49
		36	39	22.35	22.30	22.50
		75	0	22.54	22.63	22.66
	64QAM	1	0	22.36	22.21	22.41
		1	37	22.37	22.25	22.39
		1	74	22.31	22.28	22.19
		36	0	21.34	21.46	21.29
		36	19	21.32	21.32	21.42
		36	39	21.30	21.34	21.38
		75	0	21.30	21.37	21.19

Band/BW	Modulation	RB Size	RB Offset	Low CH (39750)	Mid CH (40620)	High CH (41490)
				Frequency (2506)MHz	Frequency (2593)MHz	Frequency (2680)MHz
41/ 20	QPSK	1	0	24.39	24.37	24.23
		1	50	24.57	24.47	24.42
		1	99	24.32	24.18	23.32
		50	0	23.41	23.34	23.29
		50	25	23.42	23.41	23.31
		50	50	23.38	23.31	23.28
		100	0	23.54	23.48	23.46
	16QAM	1	0	23.30	23.37	23.32
		1	50	23.46	23.31	23.45
		1	99	23.25	23.38	23.23
		50	0	22.43	22.45	22.36
		50	25	22.47	22.37	22.52
		50	50	22.42	22.36	22.54
		100	0	22.58	22.64	22.73
	64QAM	1	0	22.39	22.26	22.50
		1	50	22.39	22.28	22.41
		1	99	22.39	22.30	22.29
		50	0	21.39	21.49	21.32
		50	25	21.39	21.42	21.42
		50	50	21.39	21.36	21.50
		100	0	21.39	21.47	21.28

LTE Band 66

Band/BW	Modulation	RB Size	RB Offset	Low CH 131979	Mid CH 132322	High CH 132665
				Frequency 1710.7MHz	Frequency 1745MHz	Frequency 1779.3MHz
66/ 1.4	QPSK	1	0	24.12	24.16	24.15
		1	2	23.88	24.12	24.01
		1	5	24.02	23.89	24.06
		3	0	24.10	24.17	24.11
		3	1	24.13	24.25	24.17
		3	3	23.94	24.07	23.86
		6	0	22.88	23.10	22.84
	16QAM	1	0	22.97	23.26	22.88
		1	2	23.13	23.23	22.95
		1	5	23.16	23.07	23.18
		3	0	23.10	23.17	23.26
		3	1	23.14	23.23	23.08
		3	3	22.94	23.13	23.00
		6	0	22.08	22.19	22.00
	64QAM	1	0	22.14	22.09	21.96
		1	2	22.03	22.16	22.07
		1	5	21.95	22.14	22.02
		3	0	22.16	22.16	22.18
		3	1	22.10	22.08	22.02
		3	3	21.93	22.17	22.09
		6	0	21.07	21.13	21.15

Band/BW	Modulation	RB Size	RB Offset	Low CH 131987	Mid CH 132322	High CH 132657
				Frequency 1711.5MHz	Frequency 1745MHz	Frequency 1778.5MHz
66/ 3	QPSK	1	0	24.08	24.07	24.16
		1	7	23.92	24.08	23.99
		1	14	24.02	23.94	24.06
		8	0	23.06	23.18	23.05
		8	3	23.12	23.17	23.10
		8	7	23.02	23.10	22.89
		15	0	22.92	23.07	22.84
	16QAM	1	0	22.92	23.23	22.92
		1	7	23.10	23.29	22.97
		1	14	23.15	22.98	23.14
		8	0	22.16	22.11	22.19
		8	3	22.22	22.15	22.09
		8	7	21.91	22.14	22.03
		15	0	22.07	22.16	22.05
	64QAM	1	0	22.07	22.09	21.96
		1	7	21.95	22.08	22.15
		1	14	21.96	22.16	22.06
		8	0	21.12	21.11	21.20
		8	3	21.12	21.15	21.07
		8	7	20.92	21.13	21.08
		15	0	20.98	21.13	21.06



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Band/BW	Modulation	RB Size	RB Offset	Low CH 131997	Mid CH 132322	High CH 132647
				Frequency 1712.5MHz	Frequency 1745MHz	Frequency 1777.5MHz
66/ 5	QPSK	1	0	24.09	24.07	24.06
		1	12	23.96	24.08	23.99
		1	24	23.99	23.94	24.08
		12	0	23.13	23.19	23.07
		12	6	23.12	23.18	23.11
		12	13	22.95	23.05	22.80
		25	0	22.97	23.12	22.84
	16QAM	1	0	22.90	23.23	22.85
		1	12	23.12	23.21	22.93
		1	24	23.17	23.07	23.19
		12	0	22.21	22.15	22.17
		12	6	22.24	22.18	22.07
		12	13	21.95	22.11	22.01
		25	0	22.13	22.14	21.99
	64QAM	1	0	22.14	22.14	21.92
		1	12	22.00	22.06	22.13
		1	24	22.04	22.09	21.97
		12	0	21.17	21.08	21.22
		12	6	21.12	21.12	21.06
		12	13	20.94	21.06	21.02
		25	0	21.08	21.07	21.06



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Band/BW	Modulation	RB Size	RB Offset	Low CH 132022	Mid CH 132322	High CH 132622
				Frequency 1715MHz	Frequency 1745MHz	Frequency 1775MHz
66/ 10	QPSK	1	0	24.05	24.16	24.14
		1	24	23.99	24.11	24.03
		1	49	24.08	23.97	24.08
		25	0	23.06	23.09	23.04
		25	12	23.19	23.18	23.18
		25	25	22.96	23.08	22.84
		50	0	22.96	23.14	22.83
	16QAM	1	0	22.93	23.26	22.91
		1	24	23.12	23.30	22.93
		1	49	23.14	23.01	23.24
		25	0	22.15	22.11	22.19
		25	12	22.17	22.25	22.05
		25	25	21.87	22.13	22.04
		50	0	22.06	22.11	22.03
	64QAM	1	0	22.09	22.07	22.02
		1	24	22.01	22.13	22.13
		1	49	22.04	22.16	21.94
		25	0	21.16	21.14	21.14
		25	12	21.11	21.09	21.08
		25	25	20.96	21.14	21.09
		50	0	20.98	21.17	21.11



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Band/BW	Modulation	RB Size	RB Offset	Low CH 132047	Mid CH 132322	High CH 132597
				Frequency 1717.5 MHz	Frequency 1745MHz	Frequency 1772.5 MHz
66/ 15	QPSK	1	0	24.04	24.06	24.07
		1	37	23.89	24.01	24.04
		1	74	23.98	23.93	24.06
		36	0	23.07	23.08	23.06
		36	19	23.10	23.19	23.14
		36	39	22.96	23.01	22.86
		75	0	22.87	23.08	22.79
	16QAM	1	0	22.86	23.28	22.84
		1	37	23.12	23.31	23.00
		1	74	23.15	23.06	23.20
		36	0	22.13	22.17	22.16
		36	19	22.23	22.21	22.13
		36	39	21.96	22.07	21.97
		75	0	22.04	22.20	21.96
	64QAM	1	0	22.13	22.09	21.97
		1	37	22.04	22.13	22.06
		1	74	22.02	22.16	22.03
		36	0	21.14	21.16	21.19
		36	19	21.14	21.08	21.07
		36	39	20.98	21.17	21.04
		75	0	20.98	21.14	21.11

Band/BW	Modulation	RB Size	RB Offset	Low CH 132072	Mid CH 132322	High CH 132572
				Frequency 1720MHz	Frequency 1745MHz	Frequency 1770MHz
66/ 20	QPSK	1	0	24.12	24.18	24.17
		1	50	24.00	24.13	24.07
		1	99	24.09	23.99	24.12
		50	0	23.16	23.19	23.14
		50	25	23.20	23.26	23.18
		50	50	23.03	23.13	22.92
		100	0	22.98	23.19	22.86
	16QAM	1	0	22.98	23.29	22.94
		1	50	23.16	23.32	23.02
		1	99	23.25	23.08	23.25
		50	0	22.21	22.21	22.27
		50	25	22.25	22.26	22.14
		50	50	21.98	22.17	22.05
		100	0	22.14	22.21	22.05
	64QAM	1	0	22.14	22.18	22.03
		1	50	22.06	22.18	22.17
		1	99	22.06	22.18	22.06
		50	0	21.17	21.18	21.25
		50	25	21.15	21.18	21.12
		50	50	21.04	21.18	21.11
		100	0	21.09	21.18	21.15



**BUREAU
VERITAS**

Test Report No.: W7L-P23080006RF07

EIRP

Ant 0(UP):

LTE BAND 4

CHANNEL BANDWIDTH: 1.4MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
19957	1710.7	24.31	-4.5	19.81	95.72	1
20175	1732.5	24.36	-4.5	19.86	96.83	1
20393	1754.3	24.28	-4.5	19.78	95.06	1

CHANNEL BANDWIDTH: 1.4MHz 16QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
19957	1710.7	23.36	-4.5	18.86	76.91	1
20175	1732.5	23.41	-4.5	18.91	77.8	1
20393	1754.3	23.4	-4.5	18.9	77.62	1

CHANNEL BANDWIDTH: 1.4MHz 64QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
19957	1710.7	22.18	-4.5	17.68	58.61	1
20175	1732.5	22.23	-4.5	17.73	59.29	1
20393	1754.3	22.07	-4.5	17.57	57.15	1

CHANNEL BANDWIDTH: 3MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
19965	1711.5	24.26	-4.5	19.76	94.62	1
20175	1732.5	24.33	-4.5	19.83	96.16	1
20385	1753.5	24.19	-4.5	19.69	93.11	1

CHANNEL BANDWIDTH: 3MHz 16QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
19965	1711.5	23.27	-4.5	18.77	75.34	1
20175	1732.5	23.27	-4.5	18.77	75.34	1
20385	1753.5	23.17	-4.5	18.67	73.62	1

CHANNEL BANDWIDTH: 3MHz 64QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
19965	1711.5	22.18	-4.5	17.68	58.61	1
20175	1732.5	21.91	-4.5	17.41	55.08	1
20385	1753.5	22.02	-4.5	17.52	56.49	1

CHANNEL BANDWIDTH: 5MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
19975	1712.5	24.3	-4.5	19.8	95.5	1
20175	1732.5	24.34	-4.5	19.84	96.38	1
20375	1752.5	24.3	-4.5	19.8	95.5	1

CHANNEL BANDWIDTH: 5MHz 16QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
19975	1712.5	23.25	-4.5	18.75	74.99	1
20175	1732.5	23.46	-4.5	18.96	78.7	1
20375	1752.5	23.45	-4.5	18.95	78.52	1

CHANNEL BANDWIDTH: 5MHz 64QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
19975	1712.5	22.13	-4.5	17.63	57.94	1
20175	1732.5	22.01	-4.5	17.51	56.36	1
20375	1752.5	22.09	-4.5	17.59	57.41	1

CHANNEL BANDWIDTH: 10MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
20000	1715	24.26	-4.5	19.76	94.62	1
20175	1732.5	24.35	-4.5	19.85	96.61	1
20350	1750	24.24	-4.5	19.74	94.19	1

CHANNEL BANDWIDTH: 10MHz 16QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
20000	1715	23.25	-4.5	18.75	74.99	1
20175	1732.5	23.47	-4.5	18.97	78.89	1
20350	1750	23.45	-4.5	18.95	78.52	1

CHANNEL BANDWIDTH: 10MHz 64QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
20000	1715	22.21	-4.5	17.71	59.02	1
20175	1732.5	21.98	-4.5	17.48	55.98	1
20350	1750	22.03	-4.5	17.53	56.62	1

CHANNEL BANDWIDTH: 15MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
20025	1717.5	24.27	-4.5	19.77	94.84	1
20175	1732.5	24.29	-4.5	19.79	95.28	1
20325	1747.5	24.25	-4.5	19.75	94.41	1

CHANNEL BANDWIDTH: 15MHz 16QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
20025	1717.5	23.26	-4.5	18.76	75.16	1
20175	1732.5	23.46	-4.5	18.96	78.7	1
20325	1747.5	23.37	-4.5	18.87	77.09	1

CHANNEL BANDWIDTH: 15MHz 64QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
20025	1717.5	22.17	-4.5	17.67	58.48	1
20175	1732.5	22.01	-4.5	17.51	56.36	1
20325	1747.5	22.05	-4.5	17.55	56.89	1

CHANNEL BANDWIDTH: 20MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
20050	1720	24.37	-4.5	19.87	97.05	1
20175	1732.5	24.39	-4.5	19.89	97.5	1
20300	1745	24.3	-4.5	19.8	95.5	1

CHANNEL BANDWIDTH: 20MHz 16QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
20050	1720	23.34	-4.5	18.84	76.56	1
20175	1732.5	23.48	-4.5	18.98	79.07	1
20300	1745	23.48	-4.5	18.98	79.07	1

CHANNEL BANDWIDTH: 20MHz 64QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
20050	1720	22.24	-4.5	17.74	59.43	1
20175	1732.5	22.03	-4.5	17.53	56.62	1
20300	1745	22.1	-4.5	17.6	57.54	1

LTE BAND 38

CHANNEL BANDWIDTH: 5MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
37775	2572.5	24.33	-1.8	22.53	179.06	2
38000	2595.0	24.32	-1.8	22.52	178.65	2
38225	2617.5	24.27	-1.8	22.47	176.6	2

CHANNEL BANDWIDTH: 5MHz 16QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
37775	2572.5	23.5	-1.8	21.7	147.91	2
38000	2595.0	23.34	-1.8	21.54	142.56	2
38225	2617.5	23.45	-1.8	21.65	146.22	2

CHANNEL BANDWIDTH: 5MHz 64QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
37775	2572.5	22.26	-1.8	20.46	111.17	2
38000	2595	22.19	-1.8	20.39	109.4	2
38225	2617.5	22.21	-1.8	20.41	109.9	2



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VERITAS**

Test Report No.: W7L-P23080006RF07

CHANNEL BANDWIDTH: 10MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
37800	2575.0	24.37	-1.8	22.57	180.72	2
38000	2595.0	24.31	-1.8	22.51	178.24	2
38200	2615.0	24.25	-1.8	22.45	175.79	2

CHANNEL BANDWIDTH: 10MHz 16QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
37800	2575.0	23.43	-1.8	21.63	145.55	2
38000	2595.0	23.32	-1.8	21.52	141.91	2
38200	2615.0	23.37	-1.8	21.57	143.55	2

CHANNEL BANDWIDTH: 10MHz 64QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
37800	2575	22.28	-1.8	20.48	111.69	2
38000	2595	22.23	-1.8	20.43	110.41	2
38200	2615	22.23	-1.8	20.43	110.41	2



**BUREAU
VERITAS**

Test Report No.: W7L-P23080006RF07

CHANNEL BANDWIDTH: 15MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
37825	2577.5	24.38	-1.8	22.58	181.13	2
38000	2595.0	24.32	-1.8	22.52	178.65	2
38175	2612.5	24.29	-1.8	22.49	177.42	2

CHANNEL BANDWIDTH: 15MHz 16QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
37825	2577.5	23.42	-1.8	21.62	145.21	2
38000	2595.0	23.35	-1.8	21.55	142.89	2
38175	2612.5	23.45	-1.8	21.65	146.22	2

CHANNEL BANDWIDTH: 15MHz 64QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
37825	2577.5	22.28	-1.8	20.48	111.69	2
38000	2595	22.26	-1.8	20.46	111.17	2
38175	2612.5	22.17	-1.8	20.37	108.89	2



BUREAU
VERITAS

Test Report No.: W7L-P23080006RF07

CHANNEL BANDWIDTH: 20MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
37850	2580.0	24.4	-1.8	22.6	181.97	2
38000	2595.0	24.34	-1.8	22.54	179.47	2
38150	2610.0	24.35	-1.8	22.55	179.89	2

CHANNEL BANDWIDTH: 20MHz 16QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
37850	2580.0	23.53	-1.8	21.73	148.94	2
38000	2595.0	23.36	-1.8	21.56	143.22	2
38150	2610.0	23.46	-1.8	21.66	146.55	2

CHANNEL BANDWIDTH: 20MHz 64QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
37850	2580	22.34	-1.8	20.54	113.24	2
38000	2595	22.3	-1.8	20.5	112.2	2
38150	2610	22.24	-1.8	20.44	110.66	2



**BUREAU
VERITAS**

Test Report No.: W7L-P23080006RF07

LTE BAND 41

CHANNEL BANDWIDTH: 5MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
39675	2498.5	24.31	-1.1	23.21	209.41	2
40620	2593.0	24.19	-1.1	23.09	203.7	2
41565	2687.5	24.17	-1.1	23.07	202.77	2

CHANNEL BANDWIDTH: 5MHz 16QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
39675	2498.5	23.19	-1.1	22.09	161.81	2
40620	2593.0	23.14	-1.1	22.04	159.96	2
41565	2687.5	23.05	-1.1	21.95	156.68	2

CHANNEL BANDWIDTH: 5MHz 64QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
39675	2498.5	22.06	-1.1	20.96	124.74	2
40620	2593.0	22	-1.1	20.9	123.03	2
41565	2687.5	21.97	-1.1	20.87	122.18	2



**BUREAU
VERITAS**

Test Report No.: W7L-P23080006RF07

CHANNEL BANDWIDTH: 10MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
39700	2501.0	24.3	-1.1	23.2	208.93	2
40620	2593.0	24.19	-1.1	23.09	203.7	2
41540	2685.0	24.15	-1.1	23.05	201.84	2

CHANNEL BANDWIDTH: 10MHz 16QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
39700	2501.0	23.21	-1.1	22.11	162.55	2
40620	2593.0	23.12	-1.1	22.02	159.22	2
41540	2685.0	23.16	-1.1	22.06	160.69	2

CHANNEL BANDWIDTH: 10MHz 64QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
39700	2501.0	22.08	-1.1	20.98	125.31	2
40620	2593.0	22.01	-1.1	20.91	123.31	2
41540	2685.0	21.98	-1.1	20.88	122.46	2



Test Report No.: W7L-P23080006RF07

CHANNEL BANDWIDTH: 15MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
39725	2503.5	24.25	-1.1	23.15	206.54	2
40620	2593.0	24.12	-1.1	23.02	200.45	2
41515	2682.5	24.12	-1.1	23.02	200.45	2

CHANNEL BANDWIDTH: 15MHz 16QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
39725	2503.5	23.24	-1.1	22.14	163.68	2
40620	2593.0	23.09	-1.1	21.99	158.12	2
41515	2682.5	23.12	-1.1	22.02	159.22	2

CHANNEL BANDWIDTH: 15MHz 64QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
39725	2503.5	22.02	-1.1	20.92	123.59	2
40620	2593.0	21.95	-1.1	20.85	121.62	2
41515	2682.5	21.97	-1.1	20.87	122.18	2



**BUREAU
VERITAS**

Test Report No.: W7L-P23080006RF07

CHANNEL BANDWIDTH: 20MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
39750	2506.0	24.34	-1.1	23.24	210.86	2
40620	2593.0	24.2	-1.1	23.1	204.17	2
41490	2680.0	24.24	-1.1	23.14	206.06	2

CHANNEL BANDWIDTH: 20MHz 16QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
39750	2506.0	23.25	-1.1	22.15	164.06	2
40620	2593.0	23.16	-1.1	22.06	160.69	2
41490	2680.0	23.16	-1.1	22.06	160.69	2

CHANNEL BANDWIDTH: 20 MHz 64QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
39750	2506.0	22.08	-1.1	20.98	125.31	2
40620	2593.0	22.06	-1.1	20.96	124.74	2
41490	2680.0	22.07	-1.1	20.97	125.03	2

LTE BAND 66

CHANNEL BANDWIDTH: 1.4MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
131979	1710.7	24.17	-4.5	19.67	92.68	1
132322	1745	24.16	-4.5	19.66	92.47	1
132665	1779.3	24.17	-4.5	19.67	92.68	1

CHANNEL BANDWIDTH: 1.4MHz 16QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
131979	1710.7	23.2	-4.5	18.7	74.13	1
132322	1745	23.31	-4.5	18.81	76.03	1
132665	1779.3	23.35	-4.5	18.85	76.74	1

CHANNEL BANDWIDTH: 1.4MHz 64QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
131979	1710.7	22.26	-4.5	17.76	59.7	1
132322	1745	22.11	-4.5	17.61	57.68	1
132665	1779.3	22.36	-4.5	17.86	61.09	1

CHANNEL BANDWIDTH: 3MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
131987	1711.5	24.18	-4.5	19.68	92.9	1
132322	1745	24.2	-4.5	19.7	93.33	1
132657	1778.5	24.12	-4.5	19.62	91.62	1

CHANNEL BANDWIDTH: 3MHz 16QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
131987	1711.5	23.06	-4.5	18.56	71.78	1
132322	1745	23.36	-4.5	18.86	76.91	1
132657	1778.5	23.09	-4.5	18.59	72.28	1

CHANNEL BANDWIDTH: 3MHz 64QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
131987	1711.5	22.15	-4.5	17.65	58.21	1
132322	1745	22.01	-4.5	17.51	56.36	1
132657	1778.5	22.04	-4.5	17.54	56.75	1

CHANNEL BANDWIDTH: 5MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
131997	1712.5	24.13	-4.5	19.63	91.83	1
132322	1745	24.2	-4.5	19.7	93.33	1
132647	1777.5	24.15	-4.5	19.65	92.26	1

CHANNEL BANDWIDTH: 5MHz 16QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
131997	1712.5	23.1	-4.5	18.6	72.44	1
132322	1745	23.29	-4.5	18.79	75.68	1
132647	1777.5	23.05	-4.5	18.55	71.61	1

CHANNEL BANDWIDTH: 5MHz 64QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
131997	1712.5	22.11	-4.5	17.61	57.68	1
132322	1745	22.02	-4.5	17.52	56.49	1
132647	1777.5	22.07	-4.5	17.57	57.15	1

CHANNEL BANDWIDTH: 10MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
132022	1715	24.16	-4.5	19.66	92.47	1
132322	1745	24.18	-4.5	19.68	92.9	1
132622	1775	24.14	-4.5	19.64	92.04	1

CHANNEL BANDWIDTH: 10MHz 16QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
132022	1715	23.1	-4.5	18.6	72.44	1
132322	1745	23.24	-4.5	18.74	74.82	1
132622	1775	23.14	-4.5	18.64	73.11	1

CHANNEL BANDWIDTH: 10MHz 64QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
132022	1715	22.11	-4.5	17.61	57.68	1
132322	1745	22.04	-4.5	17.54	56.75	1
132622	1775	22.07	-4.5	17.57	57.15	1

CHANNEL BANDWIDTH: 15MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
132047	1717.5	24.14	-4.5	19.64	92.04	1
132322	1745	24.2	-4.5	19.7	93.33	1
132597	1772.5	24.19	-4.5	19.69	93.11	1

CHANNEL BANDWIDTH: 15MHz 16QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
132047	1717.5	23.1	-4.5	18.6	72.44	1
132322	1745	23.25	-4.5	18.75	74.99	1
132597	1772.5	23.14	-4.5	18.64	73.11	1

CHANNEL BANDWIDTH: 15MHz 64QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
132047	1717.5	22.16	-4.5	17.66	58.34	1
132322	1745	22.02	-4.5	17.52	56.49	1
132597	1772.5	22.1	-4.5	17.6	57.54	1

CHANNEL BANDWIDTH: 20MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
132072	1720	24.2	-4.5	19.7	93.33	1
132322	1745	24.21	-4.5	19.71	93.54	1
132572	1770	24.19	-4.5	19.69	93.11	1

CHANNEL BANDWIDTH: 20MHz 16QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
132072	1720	23.12	-4.5	18.62	72.78	1
132322	1745	23.36	-4.5	18.86	76.91	1
132572	1770	23.15	-4.5	18.65	73.28	1

CHANNEL BANDWIDTH: 20MHz 64QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
132072	1720	22.17	-4.5	17.67	58.48	1
132322	1745	22.09	-4.5	17.59	57.41	1
132572	1770	22.12	-4.5	17.62	57.81	1

REMARKS: EIRP Output Power (dBm) = EIRP (dBm) -2.15(dB).



**BUREAU
VERITAS**

Test Report No.: W7L-P23080006RF07

Ant 1(DOWN):

LTE BAND 4

CHANNEL BANDWIDTH: 1.4MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
19957	1710.7	24.11	-3.5	20.61	115.08	1
20175	1732.5	24.22	-3.5	20.72	118.03	1
20393	1754.3	24.33	-3.5	20.83	121.06	1

CHANNEL BANDWIDTH: 1.4MHz 16QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
19957	1710.7	23.01	-3.5	19.51	89.33	1
20175	1732.5	23.3	-3.5	19.8	95.5	1
20393	1754.3	23.32	-3.5	19.82	95.94	1

CHANNEL BANDWIDTH: 1.4MHz 64QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
19957	1710.7	22.2	-3.5	18.7	74.13	1
20175	1732.5	22.27	-3.5	18.77	75.34	1
20393	1754.3	22.27	-3.5	18.77	75.34	1

CHANNEL BANDWIDTH: 3MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
19965	1711.5	24.1	-3.5	20.6	114.82	1
20175	1732.5	24.19	-3.5	20.69	117.22	1
20385	1753.5	24.27	-3.5	20.77	119.4	1

CHANNEL BANDWIDTH: 3MHz 16QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
19965	1711.5	23.09	-3.5	19.59	90.99	1
20175	1732.5	23.02	-3.5	19.52	89.54	1
20385	1753.5	23.02	-3.5	19.52	89.54	1

CHANNEL BANDWIDTH: 3MHz 64QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
19965	1711.5	22.21	-3.5	18.71	74.3	1
20175	1732.5	22.27	-3.5	18.77	75.34	1
20385	1753.5	22.25	-3.5	18.75	74.99	1

CHANNEL BANDWIDTH: 5MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
19975	1712.5	24.17	-3.5	20.67	116.68	1
20175	1732.5	24.18	-3.5	20.68	116.95	1
20375	1752.5	24.3	-3.5	20.8	120.23	1

CHANNEL BANDWIDTH: 5MHz 16QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
19975	1712.5	22.99	-3.5	19.49	88.92	1
20175	1732.5	23.13	-3.5	19.63	91.83	1
20375	1752.5	23.26	-3.5	19.76	94.62	1

CHANNEL BANDWIDTH: 5MHz 64QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
19975	1712.5	22.15	-3.5	18.65	73.28	1
20175	1732.5	22.18	-3.5	18.68	73.79	1
20375	1752.5	22.21	-3.5	18.71	74.3	1

CHANNEL BANDWIDTH: 10MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
20000	1715	24.2	-3.5	20.7	117.49	1
20175	1732.5	24.24	-3.5	20.74	118.58	1
20350	1750	24.3	-3.5	20.8	120.23	1

CHANNEL BANDWIDTH: 10MHz 16QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
20000	1715	23.04	-3.5	19.54	89.95	1
20175	1732.5	23.15	-3.5	19.65	92.26	1
20350	1750	23.3	-3.5	19.8	95.5	1

CHANNEL BANDWIDTH: 10MHz 64QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
20000	1715	22.24	-3.5	18.74	74.82	1
20175	1732.5	22.26	-3.5	18.76	75.16	1
20350	1750	22.25	-3.5	18.75	74.99	1

CHANNEL BANDWIDTH: 15MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
20025	1717.5	24.16	-3.5	20.66	116.41	1
20175	1732.5	24.17	-3.5	20.67	116.68	1
20325	1747.5	24.3	-3.5	20.8	120.23	1

CHANNEL BANDWIDTH: 15MHz 16QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
20025	1717.5	23.05	-3.5	19.55	90.16	1
20175	1732.5	23.16	-3.5	19.66	92.47	1
20325	1747.5	23.33	-3.5	19.83	96.16	1

CHANNEL BANDWIDTH: 15MHz 64QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
20025	1717.5	22.22	-3.5	18.72	74.47	1
20175	1732.5	22.25	-3.5	18.75	74.99	1
20325	1747.5	22.26	-3.5	18.76	75.16	1

CHANNEL BANDWIDTH: 20MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
20050	1720	24.21	-3.5	20.71	117.76	1
20175	1732.5	24.25	-3.5	20.75	118.85	1
20300	1745	24.34	-3.5	20.84	121.34	1

CHANNEL BANDWIDTH: 20MHz 16QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
20050	1720	23.1	-3.5	19.6	91.2	1
20175	1732.5	23.22	-3.5	19.72	93.76	1
20300	1745	23.38	-3.5	19.88	97.27	1

CHANNEL BANDWIDTH: 20MHz 64QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
20050	1720	22.25	-3.5	18.75	74.99	1
20175	1732.5	22.29	-3.5	18.79	75.68	1
20300	1745	22.3	-3.5	18.8	75.86	1

LTE BAND 38

CHANNEL BANDWIDTH: 5MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
37775	2572.5	24.53	2	26.53	449.78	2
38000	2595.0	24.43	2	26.43	439.54	2
38225	2617.5	24.42	2	26.42	438.53	2

CHANNEL BANDWIDTH: 5MHz 16QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
37775	2572.5	23.55	2	25.55	358.92	2
38000	2595.0	23.53	2	25.53	357.27	2
38225	2617.5	23.44	2	25.44	349.95	2

CHANNEL BANDWIDTH: 5MHz 64QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
37775	2572.5	22.59	2	24.59	287.74	2
38000	2595	22.55	2	24.55	285.1	2
38225	2617.5	22.61	2	24.61	289.07	2



**BUREAU
VERITAS**

Test Report No.: W7L-P23080006RF07

CHANNEL BANDWIDTH: 10MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
37800	2575.0	24.55	2	26.55	451.86	2
38000	2595.0	24.5	2	26.5	446.68	2
38200	2615.0	24.47	2	26.47	443.61	2

CHANNEL BANDWIDTH: 10MHz 16QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
37800	2575.0	23.53	2	25.53	357.27	2
38000	2595.0	23.56	2	25.56	359.75	2
38200	2615.0	23.43	2	25.43	349.14	2

CHANNEL BANDWIDTH: 10MHz 64QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
37800	2575	22.67	2	24.67	293.09	2
38000	2595	22.55	2	24.55	285.1	2
38200	2615	22.6	2	24.6	288.4	2



**BUREAU
VERITAS**

Test Report No.: W7L-P23080006RF07

CHANNEL BANDWIDTH: 15MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
37825	2577.5	24.54	2	26.54	450.82	2
38000	2595.0	24.53	2	26.53	449.78	2
38175	2612.5	24.39	2	26.39	435.51	2

CHANNEL BANDWIDTH: 15MHz 16QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
37825	2577.5	23.54	2	25.54	358.1	2
38000	2595.0	23.53	2	25.53	357.27	2
38175	2612.5	23.35	2	25.35	342.77	2

CHANNEL BANDWIDTH: 15MHz 64QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
37825	2577.5	22.68	2	24.68	293.76	2
38000	2595	22.56	2	24.56	285.76	2
38175	2612.5	22.54	2	24.54	284.45	2



**BUREAU
VERITAS**

Test Report No.: W7L-P23080006RF07

CHANNEL BANDWIDTH: 20MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
37850	2580.0	24.65	2	26.65	462.38	2
38000	2595.0	24.54	2	26.54	450.82	2
38150	2610.0	24.47	2	26.47	443.61	2

CHANNEL BANDWIDTH: 20MHz 16QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
37850	2580.0	23.61	2	25.61	363.92	2
38000	2595.0	23.56	2	25.56	359.75	2
38150	2610.0	23.45	2	25.45	350.75	2

CHANNEL BANDWIDTH: 20MHz 64QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
37850	2580	22.69	2	24.69	294.44	2
38000	2595	22.59	2	24.59	287.74	2
38150	2610	22.61	2	24.61	289.07	2



**BUREAU
VERITAS**

Test Report No.: W7L-P23080006RF07

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CHANNEL BANDWIDTH: 5MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
39675	2498.5	24.5	2.2	26.7	467.74	2
40620	2593.0	24.44	2.2	26.64	461.32	2
41565	2687.5	24.31	2.2	26.51	447.71	2

CHANNEL BANDWIDTH: 5MHz 16QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
39675	2498.5	23.46	2.2	25.66	368.13	2
40620	2593.0	23.28	2.2	25.48	353.18	2
41565	2687.5	23.4	2.2	25.6	363.08	2

CHANNEL BANDWIDTH: 5MHz 64QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
39675	2498.5	22.37	2.2	24.57	286.42	2
40620	2593.0	22.28	2.2	24.48	280.54	2
41565	2687.5	22.44	2.2	24.64	291.07	2



**BUREAU
VERITAS**

Test Report No.: W7L-P23080006RF07

CHANNEL BANDWIDTH: 10MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
39700	2501.0	24.55	2.2	26.75	473.15	2
40620	2593.0	24.38	2.2	26.58	454.99	2
41540	2685.0	24.39	2.2	26.59	456.04	2

CHANNEL BANDWIDTH: 10MHz 16QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
39700	2501.0	23.36	2.2	25.56	359.75	2
40620	2593.0	23.35	2.2	25.55	358.92	2
41540	2685.0	23.39	2.2	25.59	362.24	2

CHANNEL BANDWIDTH: 10MHz 64QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
39700	2501.0	22.34	2.2	24.54	284.45	2
40620	2593.0	22.25	2.2	24.45	278.61	2
41540	2685.0	22.45	2.2	24.65	291.74	2



**BUREAU
VERITAS**

Test Report No.: W7L-P23080006RF07

CHANNEL BANDWIDTH: 15MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
39725	2503.5	24.46	2.2	26.66	463.45	2
40620	2593.0	24.46	2.2	26.66	463.45	2
41515	2682.5	24.31	2.2	26.51	447.71	2

CHANNEL BANDWIDTH: 15MHz 16QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
39725	2503.5	23.37	2.2	25.57	360.58	2
40620	2593.0	23.37	2.2	25.57	360.58	2
41515	2682.5	23.41	2.2	25.61	363.92	2

CHANNEL BANDWIDTH: 15MHz 64QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
39725	2503.5	22.37	2.2	24.57	286.42	2
40620	2593.0	22.28	2.2	24.48	280.54	2
41515	2682.5	22.41	2.2	24.61	289.07	2



**BUREAU
VERITAS**

Test Report No.: W7L-P23080006RF07

CHANNEL BANDWIDTH: 20MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
39750	2506.0	24.57	2.2	26.77	475.34	2
40620	2593.0	24.47	2.2	26.67	464.52	2
41490	2680.0	24.42	2.2	26.62	459.2	2

CHANNEL BANDWIDTH: 20MHz 16QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
39750	2506.0	23.46	2.2	25.66	368.13	2
40620	2593.0	23.38	2.2	25.58	361.41	2
41490	2680.0	23.45	2.2	25.65	367.28	2

CHANNEL BANDWIDTH: 20 MHz 64QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
39750	2506.0	22.39	2.2	24.59	287.74	2
40620	2593.0	22.3	2.2	24.5	281.84	2
41490	2680.0	22.5	2.2	24.7	295.12	2

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CHANNEL BANDWIDTH: 1.4MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
131979	1710.7	24.13	-3.5	20.63	115.61	1
132322	1745	24.25	-3.5	20.75	118.85	1
132665	1779.3	24.17	-3.5	20.67	116.68	1

CHANNEL BANDWIDTH: 1.4MHz 16QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
131979	1710.7	23.16	-3.5	19.66	92.47	1
132322	1745	23.26	-3.5	19.76	94.62	1
132665	1779.3	23.26	-3.5	19.76	94.62	1

CHANNEL BANDWIDTH: 1.4MHz 64QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
131979	1710.7	22.16	-3.5	18.66	73.45	1
132322	1745	22.17	-3.5	18.67	73.62	1
132665	1779.3	22.18	-3.5	18.68	73.79	1

CHANNEL BANDWIDTH: 3MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
131987	1711.5	24.08	-3.5	20.58	114.29	1
132322	1745	24.08	-3.5	20.58	114.29	1
132657	1778.5	24.16	-3.5	20.66	116.41	1

CHANNEL BANDWIDTH: 3MHz 16QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
131987	1711.5	23.15	-3.5	19.65	92.26	1
132322	1745	23.29	-3.5	19.79	95.28	1
132657	1778.5	23.14	-3.5	19.64	92.04	1

CHANNEL BANDWIDTH: 3MHz 64QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
131987	1711.5	22.07	-3.5	18.57	71.94	1
132322	1745	22.16	-3.5	18.66	73.45	1
132657	1778.5	22.15	-3.5	18.65	73.28	1

CHANNEL BANDWIDTH: 5MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
131997	1712.5	24.09	-3.5	20.59	114.55	1
132322	1745	24.08	-3.5	20.58	114.29	1
132647	1777.5	24.08	-3.5	20.58	114.29	1

CHANNEL BANDWIDTH: 5MHz 16QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
131997	1712.5	23.17	-3.5	19.67	92.68	1
132322	1745	23.23	-3.5	19.73	93.97	1
132647	1777.5	23.19	-3.5	19.69	93.11	1

CHANNEL BANDWIDTH: 5MHz 64QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
131997	1712.5	22.14	-3.5	18.64	73.11	1
132322	1745	22.14	-3.5	18.64	73.11	1
132647	1777.5	22.13	-3.5	18.63	72.95	1

CHANNEL BANDWIDTH: 10MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
132022	1715	24.08	-3.5	20.58	114.29	1
132322	1745	24.16	-3.5	20.66	116.41	1
132622	1775	24.14	-3.5	20.64	115.88	1

CHANNEL BANDWIDTH: 10MHz 16QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
132022	1715	23.14	-3.5	19.64	92.04	1
132322	1745	23.3	-3.5	19.8	95.5	1
132622	1775	23.24	-3.5	19.74	94.19	1

CHANNEL BANDWIDTH: 10MHz 64QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
132022	1715	22.09	-3.5	18.59	72.28	1
132322	1745	22.16	-3.5	18.66	73.45	1
132622	1775	22.13	-3.5	18.63	72.95	1



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CHANNEL BANDWIDTH: 15MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
132047	1717.5	24.04	-3.5	20.54	113.24	1
132322	1745	24.06	-3.5	20.56	113.76	1
132597	1772.5	24.07	-3.5	20.57	114.02	1

CHANNEL BANDWIDTH: 15MHz 16QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
132047	1717.5	23.15	-3.5	19.65	92.26	1
132322	1745	23.31	-3.5	19.81	95.72	1
132597	1772.5	23.2	-3.5	19.7	93.33	1

CHANNEL BANDWIDTH: 15MHz 64QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
132047	1717.5	22.13	-3.5	18.63	72.95	1
132322	1745	22.16	-3.5	18.66	73.45	1
132597	1772.5	22.06	-3.5	18.56	71.78	1



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CHANNEL BANDWIDTH: 20MHz QPSK

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
132072	1720	24.12	-3.5	20.62	115.35	1
132322	1745	24.18	-3.5	20.68	116.95	1
132572	1770	24.17	-3.5	20.67	116.68	1

CHANNEL BANDWIDTH: 20MHz 16QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
132072	1720	23.25	-3.5	19.75	94.41	1
132322	1745	23.32	-3.5	19.82	95.94	1
132572	1770	23.25	-3.5	19.75	94.41	1

CHANNEL BANDWIDTH: 20MHz 64QAM

Channel	Frequency (MHz)	Conducted Power (dBm)	G _T -L _c (dB)	EIRP (dBm)	EIRP (mW)	Limit (W)
132072	1720	22.14	-3.5	18.64	73.11	1
132322	1745	22.18	-3.5	18.68	73.79	1
132572	1770	22.17	-3.5	18.67	73.62	1

REMARKS: EIRP Output Power (dBm) = EIRP (dBm) -2.15(dB).

3.2 FREQUENCY STABILITY MEASUREMENT

3.2.1 LIMITS OF FREQUENCY STABILITY MEASUREMENT

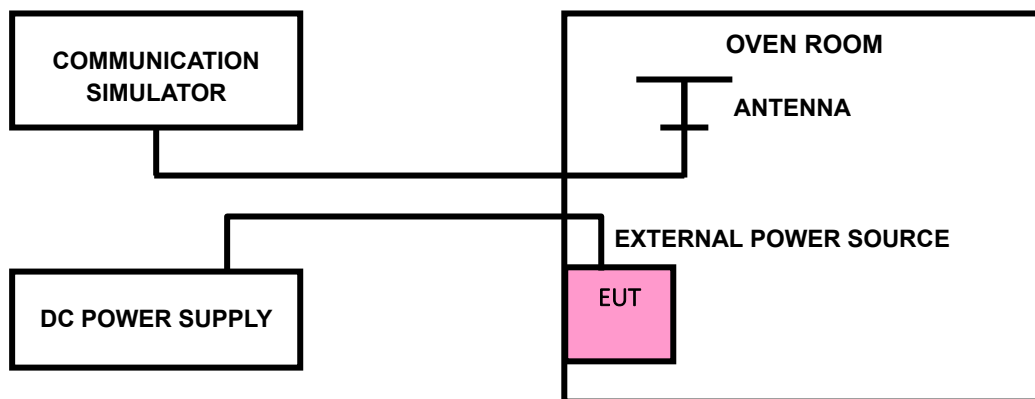
The frequency stability shall be sufficient to ensure that the fundamental emissions stay within the authorized bands of operation.

3.2.2 TEST PROCEDURE

- The device is placed in the oven room. The oven room could control the temperatures and humidity. Power warms up is at least 15 min and power applied should perform before recording frequency error.
- EUT is connected the external power supply to control the DC input power. The test voltage range is from minimum to maximum working voltage. Each step shall be recording the frequency error rate.
- The temperature range step is 10 degrees in this test items. All temperature levels shall be holding $\pm 0.5^{\circ}\text{C}$ during the measurement testing. Each temperature step shall be at least 0.5 hours, consider the EUT could be test under the stability condition.

NOTE: The frequency error was recorded frequency error from the communication simulator.

3.2.3 TEST SETUP





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3.2.4 TEST RESULTS

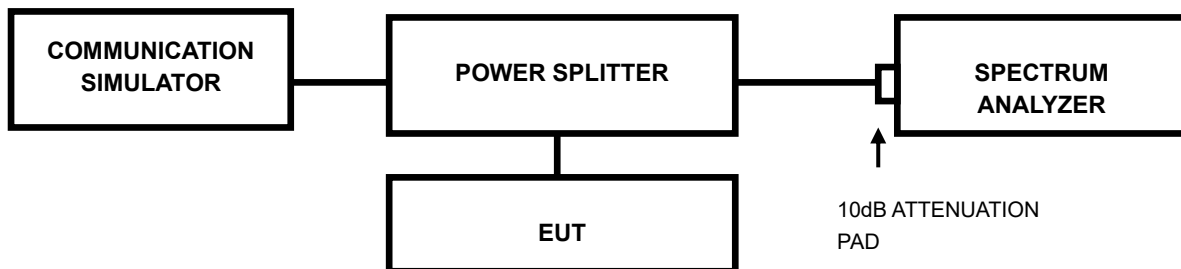
Please Refer to Appendix Of this test report.

3.3 OCCUPIED BANDWIDTH MEASUREMENT

3.3.1 LIMITS OF OCCUPIED BANDWIDTH MEASUREMENT

The width of a frequency band is such that, below the lower and above the upper frequency limits, the mean powers emitted are each equal to a specified percentage. 0.5 % of the total mean power of a given emission.

3.3.2 TEST SETUP



3.3.3 TEST PROCEDURES

- The conducted occupied bandwidth used the power splitter via EUT RF power connector between simulation base station and spectrum analyzer.
- Use OBW measurement function of Spectrum analyzer to measure 99 % occupied bandwidth.



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3.3.4 TEST RESULTS

Please Refer to Appendix Of this test report.



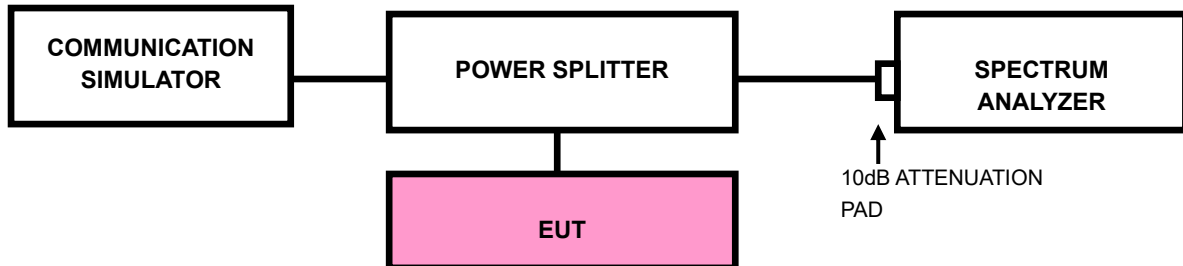
3.4 BAND EDGE MEASUREMENT

3.4.1 LIMITS OF BAND EDGE MEASUREMENT

According to FCC Part 27.53(h) specified that For operations in the 1710-1755 MHz band, the power of any emission outside a licensee's frequency band(s) of operation shall be attenuated below the transmitter power (P) within the licensed band(s) of operation, measured in watts, by at least $43 + 10 \log (P)$ dB. However, in the 1-megahertz bands immediately outside and adjacent to the licensee's frequency block, a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed.

According to FCC Part 27.53(m)(4) specified that For mobile digital stations, the attenuation factor shall be not less than $40 + 10 \log (P)$ dB on all frequencies between the channel edge and 5 megahertz from the channel edge, $43 + 10 \log (P)$ dB on all frequencies between 5 megahertz and X megahertz from the channel edge, and $55 + 10 \log (P)$ dB on all frequencies more than X megahertz from the channel edge, where X is the greater of 6 megahertz or the actual emission bandwidth as defined in paragraph (m)(6) of this section. In addition, the attenuation factor shall not be less that $43 + 10 \log (P)$ dB on all frequencies between 2490.5 MHz and 2496 MHz and $55 + 10 \log (P)$ dB at or below 2490.5 MHz. Mobile Satellite Service licensees operating on frequencies below 2495 MHz may also submit a documented interference complaint against BRS licensees operating on channel BRS Channel 1 on the same terms and conditions as adjacent channel BRS or EBS licensees. For mobile digital stations, in the 1-megahertz bands immediately outside and adjacent to the frequency block a resolution bandwidth of at least two percent may be employed.

3.4.2 TEST SETUP





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3.4.3 TEST PROCEDURES

- a) Connect the transmitter to the spectrum analyzer via coaxial cable while ensuring proper impedance matching.
- b) Tune the analyzer to the nominal center frequency of the emission bandwidth (EBW).
- c) Set the resolution bandwidth (RBW) $\geq 1\%$ EBW in the 1MHz band immediately outside and adjacent to the band edge.
- d) Beyond the 1MHz band from the band edge, RBW=1MHz was used.
- e) Set the video bandwidth (VBW) to $\geq 3 \times$ RBW.
- f) Select the average power (RMS) display detector.
- g) Set the number of measurement points to ≥ 1001 .
- h) Use auto-coupled sweep time.
- i) Perform the measurement over an interval of time when the transmission is continuous and at its maximum power level.
- j) The RF fundamental frequency should be excluded against the limit line in the operating frequency band and use RBW is 10KHz or 30/100KHz.
- k) Record the max trace plot into the test report.



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3.4.4 TEST RESULTS

Please Refer to Appendix Of this test report.

3.5 CONDUCTED SPURIOUS EMISSIONS

3.5.1 LIMITS OF CONDUCTED SPURIOUS EMISSIONS MEASUREMENT

The 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. The emission limit is equal to -13dBm .

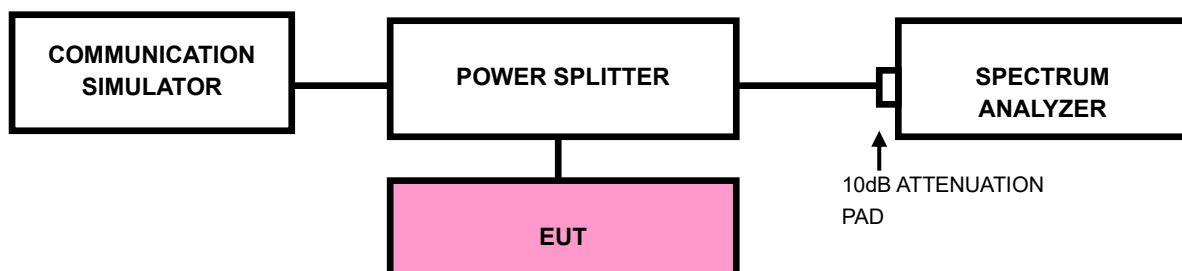
For: Band41

The power of any emission outside a licensee's frequency block shall be attenuated below the transmitter power (P) by at least $55 + 10 \log_{10}(P)$ dB. The limit of emission is equal to -25dBm .

3.5.2 TEST PROCEDURE

- a. The EUT makes a phone call to the communication simulator. All measurements were done at low, middle, and high operational frequency range.
- b. Measuring frequency range is from 9kHz up to a frequency including its 10th harmonic. 10dB attenuation pad is connected with spectrum. RBW=1MHz and VBW=3MHz are used for conducted emission measurement.

3.5.3 TEST SETUP





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3.5.4 TEST RESULTS

NOTE : The 9K~30MHz amplitude of spurious emissions attenuated more than 20 dB below the permissible value is not required in the report.

Please Refer to Appendix Of this test report.



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3.6 RADIATED EMISSION MEASUREMENT

3.6.1 LIMITS OF RADIATED EMISSION MEASUREMENT

The 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. The emission limit is equal to -13dBm .

For: Band41

The power of any emission outside a licensee's frequency block shall be attenuated below the transmitter power (P) by at least $55 + 10 \log_{10}(P)$ dB. The limit of emission is equal to -25dBm .

3.6.2 TEST PROCEDURES

- a. The substitute 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. $\text{EIRP} = \text{Output power level of S.G} - \text{TX cable loss} + \text{Antenna gain of substitution horn}$.
- d. E.R.P power can be calculated form E.I.R.P power by subtracting the gain of dipole, $\text{E.R.P power} = \text{E.I.P.R power} - 2.15\text{dBi}$.

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

3.6.3 DEVIATION FROM TEST STANDARD

No deviation