

# FCC SAR Test Report

## < WWAN-Ant 1 Reruced Power for Head >

Band	GSM1900			
	Channel	512	661	810
Frequency (MHz)	1850.2	1880.0	1909.8	
<b>Maximum Burst-Averaged Output Power</b>				
GSM (GMSK, 1Tx-slot)	24.38	24.40	24.62	
GPRS (GMSK, 1Tx-slot)	24.36	24.37	24.60	
GPRS (GMSK, 2Tx-slot)	22.34	22.38	22.65	
GPRS (GMSK, 3Tx-slot)	20.39	20.47	20.86	
GPRS (GMSK, 4Tx-slot)	18.92	18.95	19.43	
EDGE (8PSK, 1Tx-slot)	24.40	24.33	24.56	
EDGE (8PSK, 2Tx-slot)	22.62	22.57	22.97	
EDGE (8PSK, 3Tx-slot)	20.52	20.40	20.73	
EDGE (8PSK, 4Tx-slot)	19.36	19.30	19.58	
<b>Maximum Frame-Averaged Output Power</b>				
GSM (GMSK, 1Tx-slot)	15.38	15.40	15.62	
GPRS (GMSK, 1Tx-slot)	15.36	15.37	15.60	
GPRS (GMSK, 2Tx-slot)	16.34	16.38	16.65	
GPRS (GMSK, 3Tx-slot)	16.13	16.21	16.60	
GPRS (GMSK, 4Tx-slot)	15.92	15.95	16.43	
EDGE (8PSK, 1Tx-slot)	15.40	15.33	15.56	
EDGE (8PSK, 2Tx-slot)	16.62	16.57	16.97	
EDGE (8PSK, 3Tx-slot)	16.26	16.14	16.47	
EDGE (8PSK, 4Tx-slot)	16.36	16.30	16.58	

Band	WCDMA Band II			WCDMA Band IV			WCDMA Band V			3GPP MPR (dB)
	Channel	9262	9400	9538	1312	1413	1513	4132	4182	
Frequency (MHz)	1852.4	1880.0	1907.6	1712.4	1732.6	1752.6	826.4	836.4	846.6	
RMC 12.2K	15.51	15.73	15.79	15.61	15.56	15.40	23.25	23.17	23.20	-
HSDPA Subtest-1	15.18	15.17	15.33	15.11	14.95	15.02	23.06	22.93	22.98	0
HSDPA Subtest-2	15.04	15.22	15.22	14.96	15.01	14.94	23.06	22.88	22.89	0
HSDPA Subtest-3	14.65	14.63	14.77	14.65	14.63	15.60	22.53	22.51	22.53	0.5
HSDPA Subtest-4	14.64	14.58	13.80	14.60	14.52	14.53	22.61	22.60	22.54	0.5
DC-HSDPA Subtest-1	15.06	15.07	15.26	15.05	14.96	15.02	22.84	22.70	22.76	0
DC-HSDPA Subtest-2	15.13	15.17	15.12	15.09	15.04	14.85	22.95	22.78	22.77	0
DC-HSDPA Subtest-3	14.59	14.59	14.66	14.61	14.52	14.48	22.56	22.57	22.54	0.5
DC-HSDPA Subtest-4	14.64	14.60	14.67	14.68	14.56	14.53	22.60	22.54	22.51	0.5
HSUPA Subtest-1	14.83	15.02	14.91	14.75	14.80	14.62	21.07	21.04	21.06	0
HSUPA Subtest-2	15.17	15.09	15.26	15.19	15.09	15.26	21.43	21.57	21.51	2
HSUPA Subtest-3	14.48	14.63	14.59	14.45	14.51	14.40	22.15	22.01	22.19	1
HSUPA Subtest-4	15.15	15.12	15.27	15.20	15.06	15.22	21.04	20.98	20.99	2
HSUPA Subtest-5	14.87	14.90	14.88	14.85	14.76	14.70	22.18	22.16	22.08	0



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LTE Band 2															
BW	MCS Index	RB Size	RB Offset	Low	Mid	High	3GPP MPR (dB)	BW	MCS Index	RB Size	RB Offset	Low	Mid	High	3GPP MPR (dB)
		Channel		18700	18900	19100				Channel		18675	18900	19125	
		Frequency(MHz)		1860	1880	1900				Frequency(MHz)		1857.5	1880	1902.5	
20M	QPSK	1	0	15.60	15.71	15.64	0	15M	QPSK	1	0	15.59	15.67	15.56	0
		1	50	15.68	15.83	15.77	0			1	37	15.64	15.80	15.71	0
		1	99	15.48	15.63	15.57	0			1	74	15.46	15.62	15.53	0
		50	0	15.34	15.49	15.50	1			36	0	15.28	15.44	15.49	1
		50	25	15.43	15.56	15.50	1			36	19	15.42	15.54	15.45	1
		50	50	15.32	15.47	15.49	1			36	39	15.24	15.40	15.47	1
	100	0	15.35	15.46	15.44	1	75		0	15.34	15.42	15.41	1		
	16QAM	1	0	15.48	15.64	15.56	1		1	0	15.45	15.63	15.50	1	
		1	50	15.55	15.68	15.68	1		1	37	15.51	15.63	15.66	1	
		1	99	15.32	15.50	15.46	1		1	74	15.26	15.48	15.43	1	
		50	0	15.40	15.48	15.52	2		36	0	15.38	15.40	15.51	2	
		50	25	15.38	15.56	15.52	2		36	19	15.30	15.52	15.47	2	
		50	50	15.39	15.50	15.51	2		36	39	15.36	15.44	15.49	2	
	100	0	15.36	15.46	15.40	2	75		0	15.35	15.41	15.32	2		
	64QAM	1	0	15.27	15.44	15.40	2		1	0	15.21	15.41	15.36	2	
		1	50	15.43	15.52	15.51	2		1	37	15.15	15.45	15.46	2	
		1	99	15.21	15.33	15.36	2		1	74	15.15	15.25	15.34	2	
		50	0	15.37	15.50	15.41	3		36	0	15.36	15.48	15.33	3	
50		25	15.36	15.49	15.48	3	36	19	15.29	15.41	15.42	3			
50		50	15.35	15.50	15.44	3	36	39	15.33	15.49	15.40	3			
100	0	15.33	15.41	15.45	3	75	0	15.31	15.33	15.44	3				
10M	QPSK	Channel		18650	18900	19150	3GPP MPR (dB)	5M	QPSK	Channel		18625	18900	19175	3GPP MPR (dB)
		Frequency(MHz)		1855	1880	1905				Frequency(MHz)		1852.5	1880	1907.5	
		1	0	15.52	15.67	15.59				0	1	0	15.55	15.64	
		1	24	15.66	15.75	15.76	0			1	12	15.66	15.75	15.75	0
		1	49	15.40	15.59	15.52	0			1	24	15.43	15.55	15.56	0
		25	0	15.31	15.43	15.48	1			12	0	15.30	15.44	15.45	1
	25	12	15.41	15.49	15.45	1	12		6	15.35	15.55	15.45	1		
	25	25	15.26	15.39	15.47	1	12		13	15.28	15.42	15.48	1		
	50	0	15.34	15.44	15.36	1	25		0	15.29	15.44	15.39	1		
	16QAM	1	0	15.41	15.56	15.50	1		1	0	15.41	15.59	15.54	1	
		1	24	15.52	15.62	15.66	1		1	12	15.47	15.66	15.63	1	
		1	49	15.30	15.43	15.41	1		1	24	15.30	15.42	15.44	1	
		25	0	15.34	15.40	15.50	2		12	0	15.32	15.42	15.44	2	
		25	12	15.36	15.48	15.51	2		12	6	15.32	15.54	15.46	2	
		25	25	15.31	15.46	15.46	2		12	13	15.32	15.45	15.49	2	
	64QAM	50	0	15.34	15.38	15.39	2		25	0	15.30	15.39	15.35	2	
		1	0	15.19	15.40	15.35	2		1	0	15.20	15.39	15.38	2	
		1	24	15.40	15.46	15.49	2		1	12	15.35	15.50	15.45	2	
1		49	15.19	15.26	15.31	2	1	24	15.13	15.32	15.34	2			
25		0	15.31	15.42	15.39	3	12	0	15.33	15.45	15.33	3			
25		12	15.35	15.47	15.40	3	12	6	15.28	15.48	15.46	3			
25	25	15.30	15.42	15.38	3	12	13	15.31	15.45	15.36	3				
50	0	15.32	15.35	15.43	3	25	0	15.27	15.39	15.42	3				
3M	QPSK	Channel		18615	18900	19185	3GPP MPR (dB)	1.4M	QPSK	Channel		18607	18900	19193	3GPP MPR (dB)
		Frequency(MHz)		1851.5	1880	1908.5				Frequency(MHz)		1850.7	1880	1909.3	
		1	0	15.54	15.69	15.58				0	1	0	15.52	15.67	
		1	7	15.61	15.78	15.75	0			1	2	15.65	15.77	15.75	0
		1	14	15.42	15.56	15.52	0			1	5	15.46	15.56	15.52	0
		8	0	15.27	15.44	15.48	1			3	0	15.28	15.41	15.48	1
	8	3	15.35	15.54	15.44	1	3		1	15.42	15.54	15.42	1		
	8	7	15.24	15.46	15.47	1	3		3	15.27	15.39	15.43	1		
	15	0	15.31	15.41	15.36	1	6		0	15.34	15.40	15.42	1		
	16QAM	1	0	15.40	15.63	15.54	1		1	0	15.43	15.57	15.51	1	
		1	7	15.50	15.63	15.64	1		1	2	15.53	15.60	15.66	1	
		1	14	15.30	15.42	15.45	1		1	5	15.27	15.42	15.45	1	
		8	0	15.32	15.44	15.47	2		3	0	15.36	15.43	15.47	2	
		8	3	15.35	15.50	15.50	2		3	1	15.30	15.55	15.47	2	
		8	7	15.37	15.43	15.46	2		3	3	15.35	15.45	15.50	2	
	64QAM	15	0	15.30	15.38	15.38	2		6	0	15.30	15.44	15.35	2	
		1	0	15.26	15.42	15.32	2		1	0	15.20	15.39	15.38	2	
		1	7	15.38	15.44	15.45	2		1	2	15.35	15.50	15.46	2	
1		14	15.20	15.27	15.34	2	1	5	15.19	15.25	15.34	2			
8		0	15.32	15.48	15.34	3	3	0	15.29	15.44	15.33	3			
8		3	15.34	15.41	15.47	3	3	1	15.30	15.47	15.42	3			
8	7	15.27	15.46	15.39	3	3	3	15.30	15.42	15.43	3				
15	0	15.31	15.33	15.44	3	6	0	15.29	15.36	15.40	3				



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LTE Band 4															
BW	MCS Index	RB Size	RB Offset	Low	Mid	High	3GPP MPR (dB)	BW	MCS Index	RB Size	RB Offset	Low	Mid	High	3GPP MPR (dB)
		Channel		20050	20175	20300				Channel		20025	20175	20325	
		Frequency(MHz)		1720	1732.5	1745				Frequency(MHz)		1717.5	1732.5	1747.5	
20M	QPSK	1	0	15.72	15.63	15.50	0	15M	QPSK	1	0	15.71	15.59	15.42	0
		1	50	15.80	15.75	15.63	0			1	37	15.76	15.72	15.57	0
		1	99	15.58	15.53	15.41	0			1	74	15.56	15.52	15.37	0
		50	0	15.42	15.37	15.32	1			36	0	15.36	15.32	15.31	1
		50	25	15.54	15.47	15.35	1			36	19	15.53	15.45	15.30	1
		50	50	15.40	15.35	15.31	1			36	39	15.32	15.28	15.29	1
	16QAM	100	0	15.44	15.35	15.27	1		75	0	15.43	15.31	15.24	1	
		1	0	15.58	15.54	15.40	1		1	0	15.55	15.53	15.34	1	
		1	50	15.74	15.67	15.61	1		1	37	15.70	15.62	15.59	1	
		1	99	15.46	15.44	15.34	1		1	74	15.40	15.42	15.31	1	
		50	0	15.48	15.36	15.34	2		36	0	15.46	15.28	15.33	2	
		50	25	15.49	15.47	15.37	2		36	19	15.41	15.43	15.32	2	
	64QAM	50	50	15.47	15.38	15.33	2		36	39	15.44	15.32	15.31	2	
		100	0	15.46	15.36	15.24	2		75	0	15.45	15.31	15.16	2	
		1	0	15.35	15.32	15.22	2		1	0	15.29	15.29	15.18	2	
		1	50	15.55	15.44	15.37	2		1	37	15.53	15.37	15.32	2	
		1	99	15.26	15.18	15.15	2		1	74	15.20	15.10	15.13	2	
		50	0	15.46	15.39	15.24	3		36	0	15.45	15.37	15.16	3	
	10M	QPSK	50	25	15.47	15.40	15.33		3	36	19	15.40	15.32	15.27	3
			50	50	15.45	15.40	15.28		3	36	39	15.43	15.39	15.24	3
			100	0	15.44	15.32	15.30		3	75	0	15.42	15.24	15.29	3
			1	0	15.64	15.59	15.45		0	1	0	15.67	15.56	15.45	0
			1	24	15.78	15.67	15.62		0	1	12	15.78	15.67	15.61	0
			1	49	15.50	15.49	15.36		0	1	24	15.53	15.45	15.40	0
16QAM		25	0	15.39	15.31	15.30	1	12	0	15.38	15.32	15.27	1		
		25	12	15.52	15.40	15.30	1	12	6	15.46	15.46	15.30	1		
		25	25	15.34	15.27	15.29	1	12	13	15.36	15.30	15.30	1		
		50	0	15.43	15.33	15.19	1	25	0	15.38	15.33	15.22	1		
		1	0	15.51	15.46	15.34	1	1	0	15.51	15.49	15.38	1		
		1	24	15.71	15.61	15.59	1	1	12	15.66	15.65	15.56	1		
64QAM		1	49	15.44	15.37	15.29	1	1	24	15.44	15.36	15.32	1		
		25	0	15.42	15.28	15.32	2	12	0	15.40	15.30	15.26	2		
		25	12	15.47	15.39	15.36	2	12	6	15.43	15.45	15.31	2		
		25	25	15.39	15.34	15.28	2	12	13	15.40	15.33	15.31	2		
		50	0	15.44	15.28	15.23	2	25	0	15.40	15.29	15.19	2		
		1	0	15.27	15.28	15.17	2	1	0	15.28	15.27	15.20	2		
3M		QPSK	1	24	15.52	15.38	15.35	2	1	12	15.47	15.42	15.31	2	
			1	49	15.24	15.11	15.10	2	1	24	15.18	15.17	15.13	2	
			25	0	15.40	15.31	15.22	3	12	0	15.42	15.34	15.16	3	
			25	12	15.46	15.38	15.25	3	12	6	15.39	15.39	15.31	3	
			25	25	15.40	15.32	15.22	3	12	13	15.41	15.35	15.20	3	
			50	0	15.43	15.26	15.28	3	25	0	15.38	15.30	15.27	3	
	16QAM	19965	20175	20385	3GPP MPR (dB)	1.4M	QPSK	Channel		19957	20175	20393	3GPP MPR (dB)		
		Frequency(MHz)		1711.5	1732.5			1753.5	Frequency(MHz)		1710.7	1732.5	1754.3		
		1	0	15.66	15.61			15.44	0	1	0	15.64	15.59	15.45	0
		1	7	15.73	15.70			15.61	0	1	2	15.77	15.69	15.61	0
		1	14	15.52	15.46			15.36	0	1	5	15.56	15.46	15.36	0
		8	0	15.35	15.32			15.30	1	3	0	15.36	15.29	15.30	1
64QAM	8	3	15.46	15.45	15.29		1	3	1	15.53	15.45	15.27	1		
	8	7	15.32	15.34	15.29		1	3	3	15.35	15.27	15.25	1		
	15	0	15.40	15.30	15.19		1	6	0	15.43	15.29	15.25	1		
	1	0	15.50	15.53	15.38		1	1	0	15.53	15.47	15.35	1		
	1	7	15.69	15.62	15.57		1	1	2	15.72	15.59	15.59	1		
	1	14	15.44	15.36	15.33		1	1	5	15.41	15.36	15.33	1		
3M	16QAM	8	0	15.40	15.32	15.29	2	3	0	15.44	15.31	15.29	2		
		8	3	15.46	15.41	15.35	2	3	1	15.41	15.46	15.32	2		
		8	7	15.45	15.31	15.28	2	3	3	15.43	15.33	15.32	2		
		15	0	15.40	15.28	15.22	2	6	0	15.40	15.34	15.19	2		
		1	0	15.34	15.30	15.14	2	1	0	15.28	15.27	15.20	2		
		1	7	15.50	15.36	15.31	2	1	2	15.47	15.42	15.32	2		
	64QAM	1	14	15.25	15.12	15.13	2	1	5	15.24	15.10	15.13	2		
		8	0	15.41	15.37	15.17	3	3	0	15.38	15.33	15.16	3		
		8	3	15.45	15.32	15.32	3	3	1	15.41	15.38	15.27	3		
		8	7	15.37	15.36	15.23	3	3	3	15.40	15.32	15.27	3		
		15	0	15.42	15.24	15.29	3	6	0	15.40	15.27	15.25	3		



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LTE Band 5															
BW	MCS Index	RB Size	RB Offset	Low	Mid	High	3GPP MPR (dB)	BW	MCS Index	RB Size	RB Offset	Low	Mid	High	3GPP MPR (dB)
		Channel		20450	20525	20600				Channel		20425	20525	20625	
		Frequency(MHz)		829	836.5	844				Frequency(MHz)		826.5	836.5	846.5	
10M	QPSK	1	0	23.27	23.33	23.30	0	5M	QPSK	1	0	23.22	23.26	23.25	0
		1	24	23.33	23.37	23.35	0			1	12	23.31	23.29	23.33	0
		1	49	23.26	23.31	23.33	0			1	24	23.21	23.23	23.32	0
		25	0	22.96	23.03	22.98	1			12	0	22.92	22.98	22.93	1
		25	12	23.06	23.21	23.12	1			12	6	22.98	23.20	23.07	1
		25	25	23.09	23.16	23.15	1			12	13	23.05	23.11	23.14	1
	16QAM	50	0	22.99	23.11	23.03	1		25	0	22.93	23.09	22.98	1	
		1	0	23.04	23.14	23.12	1		1	0	22.97	23.09	23.10	1	
		1	24	23.05	23.19	23.11	1		1	12	22.97	23.17	23.06	1	
		1	49	23.03	23.05	23.06	1		1	24	23.01	22.97	23.04	1	
		25	0	21.89	21.99	21.92	2		12	0	21.81	21.93	21.84	2	
		25	12	22.05	22.17	22.08	2		12	6	21.99	22.15	22.02	2	
	64QAM	25	25	21.99	22.09	22.07	2		12	13	21.92	22.04	22.05	2	
		50	0	21.98	22.05	22.02	2		25	0	21.92	21.98	21.97	2	
		1	0	22.19	22.29	22.27	2		1	0	22.12	22.24	22.25	2	
		1	24	22.20	22.34	22.25	2		1	12	22.12	22.32	22.19	2	
		1	49	22.15	22.30	22.24	2		1	24	22.07	22.29	22.22	2	
		25	0	20.93	21.00	20.92	3		12	0	20.89	20.95	20.84	3	
	3M Bandwidth Section	QPSK	25	12	21.03	21.18	21.12		3	12	6	20.95	21.17	21.10	3
			25	25	21.02	21.09	21.01		3	12	13	20.98	21.04	20.93	3
			50	0	21.02	21.14	21.08		3	25	0	20.96	21.12	21.05	3
			1	0	23.21	23.31	23.24		0	1	0	23.19	23.29	23.25	0
			1	7	23.26	23.32	23.33		0	1	2	23.30	23.31	23.33	0
			1	14	23.20	23.24	23.28		0	1	5	23.24	23.24	23.28	0
16QAM	QPSK	8	0	22.89	22.98	22.96	1	3	0	22.90	22.95	22.96	1		
		8	3	22.98	23.19	23.06	1	3	1	23.05	23.19	23.04	1		
		8	7	23.01	23.15	23.13	1	3	3	23.04	23.08	23.09	1		
		15	0	22.95	23.06	22.95	1	6	0	22.98	23.05	23.01	1		
		1	0	22.96	23.13	23.10	1	1	0	22.99	23.07	23.07	1		
		1	7	23.00	23.14	23.07	1	1	2	23.03	23.11	23.09	1		
	16QAM	16QAM	1	14	23.01	22.97	23.05	1	1	5	22.98	22.97	23.05	1	
			8	0	21.81	21.95	21.87	2	3	0	21.85	21.94	21.87	2	
			8	3	22.02	22.11	22.06	2	3	1	21.97	22.16	22.03	2	
			8	7	21.97	22.02	22.02	2	3	3	21.95	22.04	22.06	2	
			15	0	21.92	21.97	22.00	2	6	0	21.92	22.03	21.97	2	
			1	0	22.18	22.27	22.19	2	1	0	22.12	22.24	22.25	2	
		64QAM	64QAM	1	7	22.15	22.26	22.19	2	1	2	22.12	22.32	22.20	2
				1	14	22.14	22.24	22.22	2	1	5	22.13	22.22	22.22	2
				8	0	20.88	20.98	20.85	3	3	0	20.85	20.94	20.84	3
8	3			21.01	21.10	21.11	3	3	1	20.97	21.16	21.06	3		
8	7			20.94	21.05	20.96	3	3	3	20.97	21.01	21.00	3		
15	0			21.00	21.06	21.07	3	6	0	20.98	21.09	21.03	3		



# FCC SAR Test Report

LTE Band 7																	
BW	MCS Index	RB Size	RB Offset	Low	Mid	High	3GPP MPR (dB)	BW	MCS Index	RB Size	RB Offset	Low	Mid	High	3GPP MPR (dB)		
		Channel		20850	21100	21350				Channel		20825	21100	21375			
		Frequency(MHz)		2510	2535	2560				Frequency(MHz)		2507.5	2535	2562.5			
20M	QPSK	1	0	17.79	17.73	17.76	0	15M	QPSK	1	0	17.78	17.69	17.68	0		
		1	50	18.05	18.03	18.07	0			1	37	18.01	18.00	18.01	0		
		1	99	17.97	17.95	17.99	0			1	74	17.95	17.94	17.95	0		
		50	0	17.62	17.60	17.71	1			36	0	17.56	17.55	17.70	1		
		50	25	17.79	17.75	17.79	1			36	19	17.78	17.73	17.74	1		
		50	50	17.66	17.64	17.76	1			36	39	17.58	17.57	17.74	1		
		100	0	17.66	17.60	17.68	1			75	0	17.65	17.56	17.65	1		
	16QAM	1	0	17.68	17.67	17.69	1		1	0	17.65	17.66	17.63	1			
		1	50	17.91	17.87	17.97	1		1	37	17.87	17.82	17.95	1			
		1	99	17.77	17.78	17.84	1		1	74	17.71	17.76	17.81	1			
		50	0	17.66	17.57	17.71	2		36	0	17.64	17.49	17.70	2			
		50	25	17.72	17.73	17.79	2		36	19	17.64	17.69	17.74	2			
		50	50	17.70	17.64	17.75	2		36	39	17.67	17.58	17.73	2			
		100	0	17.67	17.60	17.64	2		75	0	17.66	17.55	17.56	2			
	64QAM	1	0	17.49	17.49	17.55	2		1	0	17.43	17.46	17.51	2			
		1	50	17.79	17.71	17.80	2		1	37	17.77	17.64	17.75	2			
		1	99	17.62	17.57	17.70	2		1	74	17.56	17.49	17.68	2			
		50	0	17.64	17.60	17.61	3		36	0	17.63	17.58	17.53	3			
		50	25	17.71	17.67	17.76	3		36	19	17.64	17.59	17.70	3			
		50	50	17.70	17.68	17.72	3		36	39	17.68	17.67	17.68	3			
		100	0	17.65	17.56	17.70	3		75	0	17.63	17.48	17.69	3			
	BW	MCS Index	Channel		20800	21100	21400		3GPP MPR (dB)	BW	MCS Index	Channel		20775	21100	21425	3GPP MPR (dB)
			Frequency(MHz)		2505	2535	2565					Frequency(MHz)		2502.5	2535	2567.5	
	10M	QPSK	1	0	17.71	17.69	17.71		0	5M	QPSK	1	0	17.74	17.66	17.71	0
1			24	18.03	17.95	18.06	0	1	12			18.03	17.95	18.05	0		
1			49	17.89	17.91	17.94	0	1	24			17.92	17.87	17.98	0		
25			0	17.59	17.54	17.69	1	12	0			17.58	17.55	17.66	1		
25			12	17.77	17.68	17.74	1	12	6			17.71	17.74	17.74	1		
25			25	17.60	17.56	17.74	1	12	13			17.62	17.59	17.75	1		
50			0	17.65	17.58	17.60	1	25	0			17.60	17.58	17.63	1		
16QAM		1	0	17.61	17.59	17.63	1	1	0		17.61	17.62	17.67	1			
		1	24	17.88	17.81	17.95	1	1	12		17.83	17.85	17.92	1			
		1	49	17.75	17.71	17.79	1	1	24		17.75	17.70	17.82	1			
		25	0	17.60	17.49	17.69	2	12	0		17.58	17.51	17.63	2			
		25	12	17.70	17.65	17.78	2	12	6		17.66	17.71	17.73	2			
		25	25	17.62	17.60	17.70	2	12	13		17.63	17.59	17.73	2			
		50	0	17.65	17.52	17.63	2	25	0		17.61	17.53	17.59	2			
64QAM		1	0	17.41	17.45	17.50	2	1	0		17.42	17.44	17.53	2			
		1	24	17.76	17.65	17.78	2	1	12		17.71	17.69	17.74	2			
		1	49	17.60	17.50	17.65	2	1	24		17.54	17.56	17.68	2			
		25	0	17.58	17.52	17.59	3	12	0		17.60	17.55	17.53	3			
		25	12	17.70	17.65	17.68	3	12	6		17.63	17.66	17.74	3			
		25	25	17.65	17.60	17.66	3	12	13		17.66	17.63	17.64	3			
		50	0	17.64	17.50	17.68	3	25	0		17.59	17.54	17.67	3			



# FCC SAR Test Report

LTE Band 38																
BW	MCS Index	RB Size	RB Offset	Low	Mid	High	3GPP MPR (dB)	BW	MCS Index	RB Size	RB Offset	Low	Mid	High	3GPP MPR (dB)	
		Channel		37850	38000	38150				Channel		37825	38000	38175		
		Frequency(MHz)		2580	2595	2610				Frequency(MHz)		2577.5	2595	2612.5		
20M	QPSK	1	0	20.62	20.54	20.45	0	15M	QPSK	1	0	20.61	20.50	20.37	0	
		1	50	20.78	20.74	20.66	0			1	37	20.74	20.71	20.60	0	
		1	99	20.67	20.63	20.55	0			1	74	20.65	20.62	20.51	0	
		50	0	20.64	20.60	20.59	1			36	0	20.58	20.55	20.58	1	
		50	25	20.72	20.66	20.58	1			36	19	20.71	20.64	20.53	1	
		50	50	20.64	20.60	20.60	1			36	39	20.56	20.53	20.58	1	
	16QAM	100	0	20.73	20.65	20.61	1		75	0	20.72	20.61	20.58	1		
		1	0	20.49	20.46	20.36	1		1	0	20.46	20.45	20.30	1		
		1	50	20.68	20.62	20.60	1		1	37	20.64	20.57	20.58	1		
		1	99	20.54	20.53	20.47	1		1	74	20.48	20.51	20.44	1		
		50	0	20.69	20.58	20.60	2		36	0	20.67	20.50	20.59	2		
		50	25	20.61	20.60	20.54	2		36	19	20.53	20.56	20.49	2		
	64QAM	50	50	20.70	20.62	20.61	2		36	39	20.67	20.56	20.59	2		
		100	0	20.70	20.61	20.53	2		75	0	20.69	20.56	20.45	2		
		1	0	20.32	20.30	20.24	2		1	0	20.26	20.27	20.20	2		
		1	50	20.55	20.45	20.42	2		1	37	20.53	20.38	20.37	2		
		1	99	20.36	20.29	20.30	2		1	74	20.30	20.21	20.28	2		
		50	0	20.64	20.58	20.47	3		36	0	20.63	20.56	20.39	3		
	10M	QPSK	50	25	20.65	20.59	20.56		3	36	19	20.58	20.51	20.50	3	
			50	50	20.65	20.61	20.53		3	36	39	20.63	20.60	20.49	3	
			100	0	20.66	20.55	20.57		3	75	0	20.64	20.47	20.56	3	
			16QAM	Channel	37800	38000	38200		3GPP MPR (dB)	5M	QPSK	Channel	37775	38000	38225	3GPP MPR (dB)
				Frequency(MHz)	2575	2595	2615					Frequency(MHz)	2572.5	2595	2617.5	
				1	0	20.54	20.50					20.40	0	1	0	
1		24		20.76	20.66	20.65	0	1	12			20.76	20.66	20.64	0	
1		49		20.59	20.59	20.50	0	1	24			20.62	20.55	20.54	0	
25		0		20.61	20.54	20.57	1	12	0			20.60	20.55	20.54	1	
25		12	20.70	20.59	20.53	1	12	6	20.64		20.65	20.53	1			
25		25	20.58	20.52	20.58	1	12	13	20.60		20.55	20.59	1			
50		0	20.72	20.63	20.53	1	25	0	20.67		20.63	20.56	1			
16QAM		1	0	20.42	20.38	20.30	1	1	0		20.42	20.41	20.34	1		
		1	24	20.65	20.56	20.58	1	1	12		20.60	20.60	20.55	1		
		1	49	20.52	20.46	20.42	1	1	24		20.52	20.45	20.45	1		
		25	0	20.63	20.50	20.58	2	12	0		20.61	20.52	20.52	2		
		25	12	20.59	20.52	20.53	2	12	6		20.55	20.58	20.48	2		
		25	25	20.62	20.58	20.56	2	12	13		20.63	20.57	20.59	2		
64QAM		50	0	20.68	20.53	20.52	2	25	0		20.64	20.54	20.48	2		
		1	0	20.24	20.26	20.19	2	1	0		20.25	20.25	20.22	2		
		1	24	20.52	20.39	20.40	2	1	12		20.47	20.43	20.36	2		
		1	49	20.34	20.22	20.25	2	1	24		20.28	20.28	20.28	2		
		25	0	20.58	20.50	20.45	3	12	0		20.60	20.53	20.39	3		
		25	12	20.64	20.57	20.48	3	12	6		20.57	20.58	20.54	3		
25	25	20.60	20.53	20.47	3	12	13	20.61	20.56		20.45	3				
50	0	20.65	20.49	20.55	3	25	0	20.60	20.53		20.54	3				



# FCC SAR Test Report

LTE Band 41															
BW	MCS Index	RB Size	RB Offset	Low	Mid	High	3GPP MPR (dB)	BW	MCS Index	RB Size	RB Offset	Low	Mid	High	3GPP MPR (dB)
		Channel		40140	40640	41140				Channel		40115	40640	41165	
		Frequency(MHz)		2545	2595	2645				Frequency(MHz)		2542.5	2595	2647.5	
20M	QPSK	1	0	20.65	20.50	20.35	0	15M	QPSK	1	0	20.64	20.42	20.29	0
		1	50	20.82	20.71	20.58	0			1	37	20.78	20.65	20.56	0
		1	99	20.69	20.59	20.40	0			1	74	20.67	20.55	20.34	0
		50	0	20.67	20.64	20.47	1			36	0	20.61	20.63	20.46	1
		50	25	20.77	20.70	20.51	1			36	19	20.76	20.65	20.44	1
		50	50	20.69	20.67	20.50	1			36	39	20.61	20.65	20.48	1
	16QAM	100	0	20.73	20.63	20.44	1		75	0	20.72	20.60	20.39	1	
		1	0	20.58	20.47	20.34	1		1	0	20.55	20.41	20.32	1	
		1	50	20.73	20.67	20.45	1		1	37	20.69	20.65	20.38	1	
		1	99	20.56	20.51	20.33	1		1	74	20.50	20.48	20.29	1	
		50	0	20.65	20.58	20.41	2		36	0	20.63	20.57	20.40	2	
		50	25	20.69	20.64	20.47	2		36	19	20.61	20.59	20.42	2	
	64QAM	50	50	20.68	20.61	20.44	2		36	39	20.65	20.59	20.42	2	
		100	0	20.70	20.55	20.40	2		75	0	20.69	20.47	20.34	2	
		1	0	20.37	20.31	20.17	2		1	0	20.31	20.27	20.16	2	
		1	50	20.60	20.49	20.29	2		1	37	20.58	20.44	20.21	2	
		1	99	20.39	20.35	20.19	2		1	74	20.33	20.33	20.18	2	
		50	0	20.72	20.57	20.45	3		36	0	20.71	20.49	20.42	3	
	10M	QPSK	50	25	20.77	20.70	20.55		3	36	19	20.70	20.64	20.51	3
			50	50	20.75	20.65	20.50		3	36	39	20.73	20.61	20.48	3
			100	0	20.73	20.66	20.47		3	75	0	20.71	20.65	20.44	3
			1	0	20.57	20.45	20.27		0	1	0	20.60	20.45	20.29	0
			1	24	20.80	20.70	20.56		0	1	12	20.80	20.69	20.51	0
			1	49	20.61	20.54	20.32		0	1	24	20.64	20.58	20.34	0
16QAM		25	0	20.64	20.62	20.44	1	12	0	20.63	20.59	20.40	1		
		25	12	20.75	20.65	20.49	1	12	6	20.69	20.65	20.43	1		
		25	25	20.63	20.65	20.45	1	12	13	20.65	20.66	20.44	1		
		50	0	20.72	20.55	20.42	1	25	0	20.67	20.58	20.42	1		
		1	0	20.51	20.41	20.29	1	1	0	20.51	20.45	20.29	1		
		1	24	20.70	20.65	20.43	1	1	12	20.65	20.62	20.44	1		
64QAM	1	49	20.54	20.46	20.25	1	1	24	20.54	20.49	20.28	1			
	25	0	20.59	20.56	20.35	2	12	0	20.57	20.50	20.39	2			
	25	12	20.67	20.63	20.41	2	12	6	20.63	20.58	20.42	2			
	25	25	20.60	20.56	20.37	2	12	13	20.61	20.59	20.42	2			
	50	0	20.68	20.54	20.32	2	25	0	20.64	20.50	20.39	2			
	1	0	20.29	20.26	20.15	2	1	0	20.30	20.29	20.12	2			
16QAM	1	24	20.57	20.47	20.21	2	1	12	20.52	20.43	20.24	2			
	1	49	20.37	20.30	20.13	2	1	24	20.31	20.33	20.18	2			
	25	0	20.66	20.55	20.38	3	12	0	20.68	20.49	20.43	3			
	25	12	20.76	20.62	20.52	3	12	6	20.69	20.68	20.50	3			
	25	25	20.70	20.59	20.48	3	12	13	20.71	20.57	20.46	3			
	50	0	20.72	20.64	20.41	3	25	0	20.67	20.63	20.39	3			

CA_7C							
Combination 20MHz+20MHz (100RB+100RB)							
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)
			RB Size	RB offset	RB Size	RB offset	
20850	21048	QPSK	50	25	0	0	17.95
		16QAM	50	25	0	0	17.62
		64QAM	50	25	0	0	17.63
21001	21199	QPSK	50	25	0	0	17.94
		16QAM	50	25	0	0	17.63
		64QAM	50	25	0	0	17.61
21152	21350	QPSK	50	25	0	0	17.92
		16QAM	50	25	0	0	17.40
		64QAM	50	25	0	0	17.37

CA_38C							
Combination 20MHz+20MHz (100RB+100RB)							
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)
			RB Size	RB offset	RB Size	RB offset	
37850	38048	QPSK	1	50	0	0	20.65
		16QAM	1	50	0	0	20.51
		64QAM	1	50	0	0	20.47
37901	38099	QPSK	1	50	0	0	20.58
		16QAM	1	50	0	0	20.39
		64QAM	1	50	0	0	20.27
37952	38150	QPSK	1	50	0	0	20.62
		16QAM	1	50	0	0	20.44
		64QAM	1	50	0	0	20.39



# FCC SAR Test Report

## < WWAN-Ant 1 Reruced Power for Body >

Band	GSM1900		
Channel	512	661	810
Frequency (MHz)	1850.2	1880.0	1909.8
<b>Maximum Burst-Averaged Output Power</b>			
GSM (GMSK, 1Tx-slot)	25.57	25.55	25.73
GPRS (GMSK, 1Tx-slot)	25.55	25.53	25.74
GPRS (GMSK, 2Tx-slot)	21.99	22.04	22.36
GPRS (GMSK, 3Tx-slot)	20.46	20.54	20.96
GPRS (GMSK, 4Tx-slot)	18.90	18.96	19.49
EDGE (8PSK, 1Tx-slot)	25.43	25.33	25.56
EDGE (8PSK, 2Tx-slot)	22.32	22.25	22.50
EDGE (8PSK, 3Tx-slot)	20.60	20.50	20.84
EDGE (8PSK, 4Tx-slot)	19.40	19.34	19.73
<b>Maximum Frame-Averaged Output Power</b>			
GSM (GMSK, 1Tx-slot)	16.57	16.55	16.73
GPRS (GMSK, 1Tx-slot)	16.55	16.53	16.74
GPRS (GMSK, 2Tx-slot)	15.99	16.04	16.36
GPRS (GMSK, 3Tx-slot)	16.20	16.28	16.70
GPRS (GMSK, 4Tx-slot)	15.90	15.96	16.49
EDGE (8PSK, 1Tx-slot)	16.43	16.33	16.56
EDGE (8PSK, 2Tx-slot)	16.32	16.25	16.50
EDGE (8PSK, 3Tx-slot)	16.34	16.24	16.58
EDGE (8PSK, 4Tx-slot)	16.40	16.34	16.73

Band	WCDMA Band II			WCDMA Band IV			3GPP MPR (dB)
Channel	9262	9400	9538	1312	1413	1513	
Frequency (MHz)	1852.4	1880.0	1907.6	1712.4	1732.6	1752.6	
RMC 12.2K	17.13	17.26	17.34	18.17	18.02	17.94	-
HSDPA Subtest-1	16.99	17.00	17.02	17.61	17.57	17.67	0
HSDPA Subtest-2	16.87	17.03	16.96	17.53	17.58	17.61	0
HSDPA Subtest-3	16.57	16.56	16.55	17.21	17.22	17.20	0.5
HSDPA Subtest-4	16.54	16.54	16.46	17.20	17.19	17.17	0.5
DC-HSDPA Subtest-1	16.90	16.99	17.01	17.52	17.54	17.66	0
DC-HSDPA Subtest-2	16.92	17.04	16.90	17.60	17.56	17.58	0
DC-HSDPA Subtest-3	16.51	16.45	16.51	17.18	17.19	17.18	0.5
DC-HSDPA Subtest-4	16.52	16.46	16.50	17.21	17.14	17.21	0.5
HSUPA Subtest-1	16.50	16.58	16.46	17.23	17.23	17.14	0
HSUPA Subtest-2	16.84	16.82	16.86	17.48	17.45	17.51	2
HSUPA Subtest-3	16.47	16.53	16.44	17.20	17.18	17.16	1
HSUPA Subtest-4	16.53	16.59	16.65	17.15	17.27	17.29	2
HSUPA Subtest-5	16.97	16.98	16.96	17.59	17.57	17.54	0



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LTE Band 2															
BW	MCS Index	RB Size	RB Offset	Low	Mid	High	3GPP MPR (dB)	BW	MCS Index	RB Size	RB Offset	Low	Mid	High	3GPP MPR (dB)
		Channel		18700	18900	19100				Channel		18675	18900	19125	
		Frequency(MHz)		1860	1880	1900				Frequency(MHz)		1857.5	1880	1902.5	
20M	QPSK	1	0	17.14	17.26	17.15	0	15M	QPSK	1	0	17.13	17.22	17.07	0
		1	50	17.19	17.35	17.25	0			1	37	17.15	17.32	17.19	0
		1	99	17.06	17.22	17.12	0			1	74	17.04	17.21	17.08	0
		50	0	16.85	17.01	16.98	1			36	0	16.79	16.96	16.97	1
		50	25	16.97	17.11	17.01	1			36	19	16.96	17.09	16.96	1
		50	50	16.87	17.03	17.01	1			36	39	16.79	16.96	16.99	1
		100	0	16.88	17.00	16.94	1			75	0	16.87	16.96	16.91	1
	16QAM	1	0	17.03	17.20	17.08	1		16QAM	1	0	17.00	17.19	17.02	1
		1	50	17.13	17.27	17.23	1			1	37	17.09	17.22	17.21	1
		1	99	16.94	17.13	17.05	1			1	74	16.88	17.11	17.02	1
		50	0	16.92	17.01	17.01	2			36	0	16.90	16.93	17.00	2
		50	25	16.89	17.08	17.00	2			36	19	16.81	17.04	16.95	2
		50	50	16.93	17.05	17.02	2			36	39	16.90	16.99	17.00	2
		100	0	16.90	17.01	16.91	2			75	0	16.89	16.96	16.83	2
	64QAM	1	0	16.79	16.97	16.89	2		64QAM	1	0	16.73	16.94	16.85	2
		1	50	16.92	17.02	16.97	2			1	37	16.90	16.95	16.92	2
		1	99	16.72	16.85	16.84	2			1	74	16.66	16.77	16.82	2
		50	0	16.88	17.02	16.89	3			36	0	16.87	17.00	16.81	3
		50	25	16.87	17.01	16.96	3			36	19	16.80	16.93	16.90	3
		50	50	16.84	17.00	16.90	3			36	39	16.82	16.99	16.86	3
		100	0	16.87	16.96	16.96	3			75	0	16.85	16.88	16.95	3
BW	MCS Index	Channel			3GPP MPR (dB)	BW	MCS Index	Channel			3GPP MPR (dB)				
		18650	18900	19150				18625	18900	19175					
		Frequency(MHz)		1855	1880	1905			Frequency(MHz)		1852.5	1880	1907.5		
10M	QPSK	1	0	17.06	17.22	17.10	0	5M	QPSK	1	0	17.09	17.19	17.10	0
		1	24	17.17	17.27	17.24	0			1	12	17.17	17.27	17.23	0
		1	49	16.98	17.18	17.07	0			1	24	17.01	17.14	17.11	0
		25	0	16.82	16.95	16.96	1			12	0	16.81	16.96	16.93	1
		25	12	16.95	17.04	16.96	1			12	6	16.89	17.10	16.96	1
		25	25	16.81	16.95	16.99	1			12	13	16.83	16.98	17.00	1
		50	0	16.87	16.98	16.86	1			25	0	16.82	16.98	16.89	1
	16QAM	1	0	16.96	17.12	17.02	1		16QAM	1	0	16.96	17.15	17.06	1
		1	24	17.10	17.21	17.21	1			1	12	17.05	17.25	17.18	1
		1	49	16.92	17.06	17.00	1			1	24	16.92	17.05	17.03	1
		25	0	16.86	16.93	16.99	2			12	0	16.84	16.95	16.93	2
		25	12	16.87	17.00	16.99	2			12	6	16.83	17.06	16.94	2
		25	25	16.85	17.01	16.97	2			12	13	16.86	17.00	17.00	2
		50	0	16.88	16.93	16.90	2			25	0	16.84	16.94	16.86	2
	64QAM	1	0	16.71	16.93	16.84	2		64QAM	1	0	16.72	16.92	16.87	2
		1	24	16.89	16.96	16.95	2			1	12	16.84	17.00	16.91	2
		1	49	16.70	16.78	16.79	2			1	24	16.64	16.84	16.82	2
		25	0	16.82	16.94	16.87	3			12	0	16.84	16.97	16.81	3
		25	12	16.86	16.99	16.88	3			12	6	16.79	17.00	16.94	3
		25	25	16.79	16.92	16.84	3			12	13	16.80	16.95	16.82	3
		50	0	16.86	16.90	16.94	3			25	0	16.81	16.94	16.93	3
BW	MCS Index	Channel			3GPP MPR (dB)	BW	MCS Index	Channel			3GPP MPR (dB)				
		18615	18900	19185				18607	18900	19193					
		Frequency(MHz)		1851.5	1880	1908.5			Frequency(MHz)		1850.7	1880	1909.3		
3M	QPSK	1	0	17.08	17.24	17.09	0	1.4M	QPSK	1	0	17.06	17.22	17.10	0
		1	7	17.12	17.30	17.23	0			1	2	17.16	17.29	17.23	0
		1	14	17.00	17.15	17.07	0			1	5	17.04	17.15	17.07	0
		8	0	16.78	16.96	16.96	1			3	0	16.79	16.93	16.96	1
		8	3	16.89	17.09	16.95	1			3	1	16.96	17.09	16.93	1
		8	7	16.79	17.02	16.99	1			3	3	16.82	16.95	16.95	1
		15	0	16.84	16.95	16.86	1			6	0	16.87	16.94	16.92	1
	16QAM	1	0	16.95	17.19	17.06	1		16QAM	1	0	16.98	17.13	17.03	1
		1	7	17.08	17.22	17.19	1			1	2	17.11	17.19	17.21	1
		1	14	16.92	17.05	17.04	1			1	5	16.89	17.05	17.04	1
		8	0	16.84	16.97	16.96	2			3	0	16.88	16.96	16.96	2
		8	3	16.86	17.02	16.98	2			3	1	16.81	17.07	16.95	2
		8	7	16.91	16.98	16.97	2			3	3	16.89	17.00	17.01	2
		15	0	16.84	16.93	16.89	2			6	0	16.84	16.99	16.86	2
	64QAM	1	0	16.78	16.95	16.81	2		64QAM	1	0	16.72	16.92	16.87	2
		1	7	16.87	16.94	16.91	2			1	2	16.84	17.00	16.92	2
		1	14	16.71	16.79	16.82	2			1	5	16.70	16.77	16.82	2
		8	0	16.83	17.00	16.82	3			3	0	16.80	16.96	16.81	3
		8	3	16.85	16.93	16.95	3			3	1	16.81	16.99	16.90	3
		8	7	16.76	16.96	16.85	3			3	3	16.79	16.92	16.89	3
		15	0	16.85	16.88	16.95	3			6	0	16.83	16.91	16.91	3



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LTE Band 4																		
BW	MCS Index	RB Size	RB Offset	Low	Mid	High	3GPP MPR (dB)	BW	MCS Index	RB Size	RB Offset	Low	Mid	High	3GPP MPR (dB)			
		Channel		20050	20175	20300				Channel		20025	20175	20325				
		Frequency(MHz)		1720	1732.5	1745				Frequency(MHz)		1717.5	1732.5	1747.5				
20M	QPSK	1	0	18.22	18.11	17.99	0	15M	QPSK	1	0	18.21	18.07	17.91	0			
		1	50	18.33	18.26	18.15	0			1	37	18.29	18.23	18.09	0			
		1	99	18.09	18.02	17.91	0			1	74	18.07	18.01	17.87	0			
		50	0	17.91	17.84	17.80	1			36	0	17.85	17.79	17.79	1			
		50	25	18.04	17.95	17.84	1			36	19	18.03	17.93	17.79	1			
		50	50	18.03	17.96	17.93	1			36	39	17.95	17.89	17.91	1			
	16QAM	100	0	17.93	17.82	17.75	1		75	0	17.92	17.78	17.72	1				
		1	0	18.11	18.05	17.92	1		1	0	18.08	18.04	17.86	1				
		1	50	18.28	18.19	18.14	1		1	37	18.24	18.14	18.12	1				
		1	99	17.96	17.92	17.83	1		1	74	17.90	17.90	17.80	1				
		50	0	17.98	17.84	17.83	2		36	0	17.96	17.76	17.82	2				
		50	25	17.97	17.93	17.84	2		36	19	17.89	17.89	17.79	2				
	64QAM	50	50	17.95	17.84	17.80	2		36	39	17.92	17.78	17.78	2				
		100	0	17.98	17.86	17.75	2		75	0	17.97	17.81	17.67	2				
		1	0	17.85	17.80	17.71	2		1	0	17.79	17.77	17.67	2				
		1	50	18.00	17.87	17.81	2		1	37	17.98	17.80	17.76	2				
		1	99	17.73	17.63	17.61	2		1	74	17.67	17.55	17.59	2				
		50	0	17.95	17.86	17.72	3		36	0	17.94	17.84	17.64	3				
	10M	QPSK	50	25	17.93	17.84	17.78		3	36	19	17.86	17.76	17.72	3			
			50	50	17.92	17.85	17.74		3	36	39	17.90	17.84	17.70	3			
			100	0	17.94	17.80	17.79		3	75	0	17.92	17.72	17.78	3			
	10M		QPSK	Channel		20000	20175		20350	3GPP MPR (dB)	5M	QPSK	Channel		19975	20175	20375	3GPP MPR (dB)
				Frequency(MHz)		1715	1732.5		1750				Frequency(MHz)		1712.5	1732.5	1752.5	
				1	0	18.14	18.07		17.94				0	1	0	18.17	18.04	
1		24		18.31	18.18	18.14	0	1	12	18.31			18.18	18.13	0			
1		49		18.01	17.98	17.86	0	1	24	18.04			17.94	17.90	0			
25		0		17.88	17.78	17.78	1	12	0	17.87			17.79	17.75	1			
16QAM		25	12	18.02	17.88	17.79	1	12	6	17.96		17.94	17.79	1				
		25	25	17.97	17.88	17.91	1	12	13	17.99		17.91	17.92	1				
		50	0	17.92	17.80	17.67	1	25	0	17.87		17.80	17.70	1				
		1	0	18.04	17.97	17.86	1	1	0	18.04		18.00	17.90	1				
		1	24	18.25	18.13	18.12	1	1	12	18.20		18.17	18.09	1				
		1	49	17.94	17.85	17.78	1	1	24	17.94		17.84	17.81	1				
64QAM		25	0	17.92	17.76	17.81	2	12	0	17.90		17.78	17.75	2				
		25	12	17.95	17.85	17.83	2	12	6	17.91		17.91	17.78	2				
		25	25	17.87	17.80	17.75	2	12	13	17.88		17.79	17.78	2				
		50	0	17.96	17.78	17.74	2	25	0	17.92		17.79	17.70	2				
		1	0	17.77	17.76	17.66	2	1	0	17.78		17.75	17.69	2				
		1	24	17.97	17.81	17.79	2	1	12	17.92		17.85	17.75	2				
3M	QPSK	1	49	17.71	17.56	17.56	2	1	24	17.65	17.62	17.59	2					
		25	0	17.89	17.78	17.70	3	12	0	17.91	17.81	17.64	3					
		25	12	17.92	17.82	17.70	3	12	6	17.85	17.83	17.76	3					
		25	25	17.87	17.77	17.68	3	12	13	17.88	17.80	17.66	3					
		50	0	17.93	17.74	17.77	3	25	0	17.88	17.78	17.76	3					
		15	0	17.89	17.77	17.67	1	6	0	17.92	17.76	17.73	1					
3M	16QAM	1	0	18.03	18.04	17.90	1	1	0	18.06	17.98	17.87	1					
		1	7	18.23	18.14	18.10	1	1	2	18.26	18.11	18.12	1					
		1	14	17.94	17.84	17.82	1	1	5	17.91	17.84	17.82	1					
		8	0	17.90	17.80	17.78	2	3	0	17.94	17.79	17.78	2					
		8	3	17.94	17.87	17.82	2	3	1	17.89	17.92	17.79	2					
		8	7	17.93	17.77	17.75	2	3	3	17.91	17.79	17.79	2					
	64QAM	15	0	17.92	17.78	17.73	2	6	0	17.92	17.84	17.70	2					
		1	0	17.84	17.78	17.63	2	1	0	17.78	17.75	17.69	2					
		1	7	17.95	17.79	17.75	2	1	2	17.92	17.85	17.76	2					
		1	14	17.72	17.57	17.59	2	1	5	17.71	17.55	17.59	2					
		8	0	17.90	17.84	17.65	3	3	0	17.87	17.80	17.64	3					
		8	3	17.91	17.76	17.77	3	3	1	17.87	17.82	17.72	3					
		8	7	17.84	17.81	17.69	3	3	3	17.87	17.77	17.73	3					
		15	0	17.92	17.72	17.78	3	6	0	17.90	17.75	17.74	3					



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LTE Band 7																	
BW	MCS Index	RB Size	RB Offset	Low	Mid	High	3GPP MPR (dB)	BW	MCS Index	RB Size	RB Offset	Low	Mid	High	3GPP MPR (dB)		
		Channel		20850	21100	21350				Channel		20825	21100	21375			
		Frequency(MHz)		2510	2535	2560				Frequency(MHz)		2507.5	2535	2562.5			
20M	QPSK	1	0	17.79	17.73	17.76	0	15M	QPSK	1	0	17.78	17.69	17.68	0		
		1	50	18.05	18.03	18.07	0			1	37	18.01	18.00	18.01	0		
		1	99	17.97	17.95	17.99	0			1	74	17.95	17.94	17.95	0		
		50	0	17.62	17.60	17.71	1			36	0	17.56	17.55	17.70	1		
		50	25	17.79	17.75	17.79	1			36	19	17.78	17.73	17.74	1		
		50	50	17.66	17.64	17.76	1			36	39	17.58	17.57	17.74	1		
		100	0	17.66	17.60	17.68	1			75	0	17.65	17.56	17.65	1		
	16QAM	1	0	17.68	17.67	17.69	1		1	0	17.65	17.66	17.63	1			
		1	50	17.91	17.87	17.97	1		1	37	17.87	17.82	17.95	1			
		1	99	17.77	17.78	17.84	1		1	74	17.71	17.76	17.81	1			
		50	0	17.66	17.57	17.71	2		36	0	17.64	17.49	17.70	2			
		50	25	17.72	17.73	17.79	2		36	19	17.64	17.69	17.74	2			
		50	50	17.70	17.64	17.75	2		36	39	17.67	17.58	17.73	2			
		100	0	17.67	17.60	17.64	2		75	0	17.66	17.55	17.56	2			
	64QAM	1	0	17.49	17.49	17.55	2		1	0	17.43	17.46	17.51	2			
		1	50	17.79	17.71	17.80	2		1	37	17.77	17.64	17.75	2			
		1	99	17.62	17.57	17.70	2		1	74	17.56	17.49	17.68	2			
		50	0	17.64	17.60	17.61	3		36	0	17.63	17.58	17.53	3			
		50	25	17.71	17.67	17.76	3		36	19	17.64	17.59	17.70	3			
		50	50	17.70	17.68	17.72	3		36	39	17.68	17.67	17.68	3			
		100	0	17.65	17.56	17.70	3		75	0	17.63	17.48	17.69	3			
	BW	MCS Index	Channel		20800	21100	21400		3GPP MPR (dB)	BW	MCS Index	Channel		20775	21100	21425	3GPP MPR (dB)
			Frequency(MHz)		2505	2535	2565					Frequency(MHz)		2502.5	2535	2567.5	
	10M	QPSK	1	0	17.71	17.69	17.71		0	5M	QPSK	1	0	17.74	17.66	17.71	0
1			24	18.03	17.95	18.06	0	1	12			18.03	17.95	18.05	0		
1			49	17.89	17.91	17.94	0	1	24			17.92	17.87	17.98	0		
25			0	17.59	17.54	17.69	1	12	0			17.58	17.55	17.66	1		
25			12	17.77	17.68	17.74	1	12	6			17.71	17.74	17.74	1		
25			25	17.60	17.56	17.74	1	12	13			17.62	17.59	17.75	1		
50			0	17.65	17.58	17.60	1	25	0			17.60	17.58	17.63	1		
16QAM		1	0	17.61	17.59	17.63	1	1	0		17.61	17.62	17.67	1			
		1	24	17.88	17.81	17.95	1	1	12		17.83	17.85	17.92	1			
		1	49	17.75	17.71	17.79	1	1	24		17.75	17.70	17.82	1			
		25	0	17.60	17.49	17.69	2	12	0		17.58	17.51	17.63	2			
		25	12	17.70	17.65	17.78	2	12	6		17.66	17.71	17.73	2			
		25	25	17.62	17.60	17.70	2	12	13		17.63	17.59	17.73	2			
		50	0	17.65	17.52	17.63	2	25	0		17.61	17.53	17.59	2			
64QAM		1	0	17.41	17.45	17.50	2	1	0		17.42	17.44	17.53	2			
		1	24	17.76	17.65	17.78	2	1	12		17.71	17.69	17.74	2			
		1	49	17.60	17.50	17.65	2	1	24		17.54	17.56	17.68	2			
		25	0	17.58	17.52	17.59	3	12	0		17.60	17.55	17.53	3			
		25	12	17.70	17.65	17.68	3	12	6		17.63	17.66	17.74	3			
		25	25	17.65	17.60	17.66	3	12	13		17.66	17.63	17.64	3			
		50	0	17.64	17.50	17.68	3	25	0		17.59	17.54	17.67	3			



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LTE Band 38															
BW	MCS Index	RB Size	RB Offset	Low	Mid	High	3GPP MPR (dB)	BW	MCS Index	RB Size	RB Offset	Low	Mid	High	3GPP MPR (dB)
		Channel		37850	38000	38150				Channel		37825	38000	38175	
		Frequency(MHz)		2580	2595	2610				Frequency(MHz)		2577.5	2595	2612.5	
20M	QPSK	1	0	19.62	19.47	19.40	0	15M	QPSK	1	0	19.61	19.43	19.32	0
		1	50	19.79	19.68	19.62	0			1	37	19.75	19.65	19.56	0
		1	99	19.68	19.57	19.51	0			1	74	19.66	19.56	19.47	0
		50	0	19.66	19.55	19.56	1			36	0	19.60	19.50	19.55	1
		50	25	19.76	19.63	19.57	1			36	19	19.75	19.61	19.52	1
		50	50	19.66	19.55	19.57	1			36	39	19.58	19.48	19.55	1
	16QAM	100	0	19.72	19.57	19.55	1		75	0	19.71	19.53	19.52	1	
		1	0	19.51	19.41	19.33	1		1	0	19.48	19.40	19.27	1	
		1	50	19.73	19.60	19.60	1		1	37	19.69	19.55	19.58	1	
		1	99	19.57	19.49	19.45	1		1	74	19.51	19.47	19.42	1	
		50	0	19.69	19.51	19.55	2		36	0	19.67	19.43	19.54	2	
		50	25	19.72	19.64	19.60	2		36	19	19.64	19.60	19.55	2	
	64QAM	50	50	19.71	19.56	19.57	2		36	39	19.68	19.50	19.55	2	
		100	0	19.73	19.57	19.51	2		75	0	19.72	19.52	19.43	2	
		1	0	19.43	19.34	19.30	2		1	0	19.37	19.31	19.26	2	
		1	50	19.58	19.41	19.40	2		1	37	19.56	19.34	19.35	2	
		1	99	19.36	19.22	19.25	2		1	74	19.30	19.14	19.23	2	
		50	0	19.65	19.52	19.43	3		36	0	19.64	19.50	19.35	3	
	10M	QPSK	50	25	19.68	19.55	19.54		3	36	19	19.61	19.47	19.48	3
			50	50	19.66	19.55	19.49		3	36	39	19.64	19.54	19.45	3
			100	0	19.68	19.50	19.54		3	75	0	19.66	19.42	19.53	3
			1	0	19.54	19.43	19.35		0	1	0	19.57	19.40	19.35	0
			1	24	19.77	19.60	19.61		0	1	12	19.77	19.60	19.60	0
			1	49	19.60	19.53	19.46		0	1	24	19.63	19.49	19.50	0
16QAM		25	0	19.63	19.49	19.54	1	12	0	19.62	19.50	19.51	1		
		25	12	19.74	19.56	19.52	1	12	6	19.68	19.62	19.52	1		
		25	25	19.60	19.47	19.55	1	12	13	19.62	19.50	19.56	1		
		50	0	19.71	19.55	19.47	1	25	0	19.66	19.55	19.50	1		
		1	0	19.44	19.33	19.27	1	1	0	19.44	19.36	19.31	1		
		1	24	19.70	19.54	19.58	1	1	12	19.65	19.58	19.55	1		
64QAM		1	49	19.55	19.42	19.40	1	1	24	19.55	19.41	19.43	1		
		25	0	19.63	19.43	19.53	2	12	0	19.61	19.45	19.47	2		
		25	12	19.70	19.56	19.59	2	12	6	19.66	19.62	19.54	2		
		25	25	19.63	19.52	19.52	2	12	13	19.64	19.51	19.55	2		
		50	0	19.71	19.49	19.50	2	25	0	19.67	19.50	19.46	2		
		1	0	19.35	19.30	19.25	2	1	0	19.36	19.29	19.28	2		
16QAM		1	24	19.55	19.35	19.38	2	1	12	19.50	19.39	19.34	2		
		1	49	19.34	19.15	19.20	2	1	24	19.28	19.21	19.23	2		
		25	0	19.59	19.44	19.41	3	12	0	19.61	19.47	19.35	3		
		25	12	19.67	19.53	19.46	3	12	6	19.60	19.54	19.52	3		
		25	25	19.61	19.47	19.43	3	12	13	19.62	19.50	19.41	3		
		50	0	19.67	19.44	19.52	3	25	0	19.62	19.48	19.51	3		



FCC SAR Test Report

LTE Band 41																		
BW	MCS Index	RB Size	RB Offset	Low	Mid	High	3GPP MPR (dB)	BW	MCS Index	RB Size	RB Offset	Low	Mid	High	3GPP MPR (dB)			
		Channel		40140	40640	41140				Channel		40115	40640	41165				
		Frequency(MHz)		2545	2595	2645				Frequency(MHz)		2542.5	2595	2647.5				
20M	QPSK	1	0	20.18	19.98	19.88	0	15M	QPSK	1	0	20.17	19.90	19.82	0			
		1	50	20.33	20.18	20.10	0			1	37	20.29	20.12	20.08	0			
		1	99	20.18	20.03	19.89	0			1	74	20.16	19.99	19.83	0			
		50	0	20.16	20.08	19.96	1			36	0	20.10	20.07	19.95	1			
		50	25	20.33	20.16	20.02	1			36	19	20.32	20.11	19.95	1			
		50	50	20.20	20.13	20.01	1			36	39	20.12	20.11	19.99	1			
	16QAM	100	0	20.25	20.10	19.96	1		75	0	20.24	20.07	19.91	1				
		1	0	20.11	19.95	19.87	1		1	0	20.08	19.89	19.85	1				
		1	50	20.25	20.14	19.97	1		1	37	20.21	20.12	19.90	1				
		1	99	20.06	19.96	19.83	1		1	74	20.00	19.93	19.79	1				
		50	0	20.15	20.03	19.91	2		36	0	20.13	20.02	19.90	2				
		50	25	20.21	20.11	19.99	2		36	19	20.13	20.06	19.94	2				
	64QAM	50	50	20.19	20.07	19.95	2		36	39	20.16	20.05	19.93	2				
		100	0	20.22	20.02	19.92	2		75	0	20.21	19.94	19.86	2				
		1	0	19.91	19.80	19.71	2		1	0	19.85	19.76	19.70	2				
		1	50	20.11	19.95	19.80	2		1	37	20.09	19.90	19.72	2				
		1	99	19.88	19.79	19.68	2		1	74	19.82	19.77	19.67	2				
		50	0	20.22	20.02	19.95	3		36	0	20.21	19.94	19.92	3				
	10M	QPSK	50	25	20.27	20.15	20.05		3	36	19	20.20	20.09	20.01	3			
			50	50	20.24	20.09	19.99		3	36	39	20.22	20.05	19.97	3			
			100	0	20.26	20.14	20.00		3	75	0	20.24	20.13	19.97	3			
			16QAM	1	0	20.10	19.93		19.80	0	5M	QPSK	1	0	20.13	19.93	19.82	0
				1	24	20.31	20.17		20.08	0			1	12	20.31	20.16	20.03	0
				1	49	20.10	19.98		19.81	0			1	24	20.13	20.02	19.83	0
25		0		20.13	20.06	19.93	1	12	0	20.12			20.03	19.89	1			
25		12		20.31	20.11	20.00	1	12	6	20.25			20.11	19.94	1			
25		25		20.14	20.11	19.96	1	12	13	20.16			20.12	19.95	1			
16QAM		50	0	20.24	20.02	19.94	1	25	0	20.19		20.05	19.94	1				
		1	0	20.04	19.89	19.82	1	1	0	20.04		19.93	19.82	1				
		1	24	20.22	20.12	19.95	1	1	12	20.17		20.09	19.96	1				
		1	49	20.04	19.91	19.75	1	1	24	20.04		19.94	19.78	1				
		25	0	20.09	20.01	19.85	2	12	0	20.07		19.95	19.89	2				
		25	12	20.19	20.10	19.93	2	12	6	20.15		20.05	19.94	2				
64QAM		25	25	20.11	20.02	19.88	2	12	13	20.12		20.05	19.93	2				
		50	0	20.20	20.01	19.84	2	25	0	20.16		19.97	19.91	2				
		1	0	19.83	19.75	19.69	2	1	0	19.84		19.78	19.66	2				
		1	24	20.08	19.93	19.72	2	1	12	20.03		19.89	19.75	2				
		1	49	19.86	19.74	19.62	2	1	24	19.80		19.77	19.67	2				
		25	0	20.16	20.00	19.88	3	12	0	20.18		19.94	19.93	3				
64QAM		25	12	20.26	20.07	20.02	3	12	6	20.19		20.13	20.00	3				
		25	25	20.19	20.03	19.97	3	12	13	20.20		20.01	19.95	3				
		50	0	20.25	20.12	19.94	3	25	0	20.20		20.11	19.92	3				

# FCC SAR Test Report

CA_7C							
Combination 20MHz+20MHz (100RB+100RB)							
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)
			RB Size	RB offset	RB Size	RB offset	
20850	21048	QPSK	1	0	0	0	17.98
		16QAM	1	0	0	0	17.67
		64QAM	1	0	0	0	17.65
21001	21199	QPSK	1	0	0	0	17.90
		16QAM	1	0	0	0	17.60
		64QAM	1	0	0	0	17.58
21152	21350	QPSK	1	0	0	0	17.95
		16QAM	1	0	0	0	17.42
		64QAM	1	0	0	0	17.37

CA_38C							
Combination 20MHz+20MHz (100RB+100RB)							
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)
			RB Size	RB offset	RB Size	RB offset	
37850	38048	QPSK	1	0	0	0	19.54
		16QAM	1	0	0	0	19.31
		64QAM	1	0	0	0	19.24
37901	38099	QPSK	1	0	0	0	19.36
		16QAM	1	0	0	0	19.17
		64QAM	1	0	0	0	19.09
37952	38150	QPSK	1	0	0	0	19.28
		16QAM	1	0	0	0	19.19
		64QAM	1	0	0	0	19.13

WLAN / BT

	Mode	Channel	Frequency (MHz)	Full power (dBm)	Reduced power (dBm)
2.4GHz WLAN	802.11b 1Mbps	1	2412	17.82	17.09
		6	2437	17.84	17.26
		11	2462	18.01	17.36
	802.11g 6Mbps	1	2412	15.17	15.17
		6	2437	15.15	15.15
		11	2462	15.21	15.21
	802.11n-HT20 MCS0	1	2412	13.89	13.89
		6	2437	13.78	13.78
		11	2462	13.84	13.84

	Mode	Channel	Frequency(MHz)	Full power (dBm)
Bluetooth	BR / EDR	0	2402	8.36
		39	2441	9.28
		78	2480	8.99
	BLE 1Mbps	0	2402	-5.08
		19	2440	-3.02
		39	2480	-3.68
	BLE 2Mbps	0	2402	-6.75
		19	2440	-4.69
		39	2480	-5.34



# FCC SAR Test Report

5.2GHz WLAN	Mode	Channel	Frequency (MHz)	Full power (dBm)	Reduced power (dBm)
	802.11a 6Mbps	36	5180	14.02	11.00
		40	5200	14.07	11.07
		44	5220	14.05	11.25
		48	5240	14.16	11.03
	802.11n-HT20 MCS0	36	5180	13.90	11.18
		40	5200	14.02	11.05
		44	5220	14.00	11.06
		48	5240	14.11	11.09
	802.11n-HT40 MCS0	38	5190	14.30	11.09
		46	5230	14.38	11.06
	802.11ac-VHT20 MCS0	36	5180	14.32	11.00
		40	5200	13.98	11.04
44		5220	14.01	11.22	
48		5240	14.05	11.23	
802.11ac-VHT40 MCS0	38	5190	14.29	11.07	
	46	5230	14.43	11.22	
802.11ac-VHT80 MCS0	42	5210	13.52	11.14	

5.3GHz WLAN	Mode	Channel	Frequency (MHz)	Full power (dBm)	Reduced power (dBm)
	802.11a 6Mbps	52	5260	14.04	11.30
		56	5280	14.00	11.28
		60	5300	14.12	11.23
		64	5320	14.15	11.25
	802.11n-HT20 MCS0	52	5260	14.15	11.22
		56	5280	14.08	11.18
		60	5300	14.12	11.22
		64	5320	14.51	11.31
	802.11n-HT40 MCS0	54	5270	14.43	11.13
		62	5310	14.00	11.14
	802.11ac-VHT20 MCS0	52	5260	14.16	11.17
		56	5280	14.09	11.26
60		5300	14.09	11.22	
64		5320	14.01	11.14	
802.11ac-VHT40 MCS0	54	5270	14.05	11.30	
	62	5310	14.08	11.27	
802.11ac-VHT80 MCS0	58	5290	13.66	11.01	

# FCC SAR Test Report

5.6GHz WLAN	Mode	Channel	Frequency (MHz)	Full power (dBm)	Reduced power (dBm)
	802.11a 6Mbps	100	5500	14.09	11.04
		116	5580	13.75	10.98
		124	5620	13.90	10.96
		132	5660	14.01	11.00
		140	5700	13.80	11.09
	802.11n-HT20 MCS0	100	5500	13.91	11.08
		116	5580	13.56	11.06
		124	5620	13.78	10.95
		132	5660	13.88	10.92
140		5700	13.71	10.95	
802.11n-HT40 MCS0	102	5510	14.25	11.04	
	110	5550	13.91	11.08	
	126	5630	14.24	11.02	
	134	5670	13.95	10.75	
802.11ac-VHT20 MCS0	100	5500	13.92	11.02	
	116	5580	13.62	11.00	
	124	5620	13.80	11.00	
	132	5660	13.87	10.78	
	140	5700	13.71	11.07	
802.11ac-VHT40 MCS0	102	5510	14.26	11.09	
	110	5550	13.91	11.00	
	126	5630	14.20	10.83	
	134	5670	13.93	10.91	
802.11ac-VHT80 MCS0	106	5530	14.03	10.86	
	122	5610	13.84	10.75	

5.8GHz WLAN	Mode	Channel	Frequency (MHz)	Full power (dBm)	Reduced power (dBm)
	802.11a 6Mbps	149	5745	14.41	11.16
		157	5785	14.17	11.16
		165	5825	14.75	11.18
	802.11n-HT20 MCS0	149	5745	14.36	10.98
		157	5785	14.43	11.15
		165	5825	14.64	11.11
	802.11n-HT40 MCS0	151	5755	14.30	10.82
		159	5795	13.99	10.85
	802.11ac-VHT20 MCS0	149	5745	13.82	10.86
157		5785	13.98	10.87	
165		5825	14.54	10.83	
802.11ac-VHT40 MCS0	151	5755	14.26	10.82	
	159	5795	14.40	10.72	
802.11ac-VHT80 MCS0	155	5775	14.11	10.95	