

<b>Hotspot Power</b>							
LTE-FDD Band 2				Actual output Power (dBm)			Tune up
Band-width	RB allocation	RB offset	Modulation	High	Middle	Low	
1.4 MHz				1909.3MHz	1880MHz	1850.7MHz	
	1RB	High	QPSK	20.00	20.04	20.14	22
			16QAM	20.36	20.31	20.40	22
		Middle	QPSK	20.03	20.03	20.13	22
			16QAM	20.35	20.33	20.37	22
		Low	QPSK	20.04	20.05	20.15	22
			16QAM	20.28	20.40	20.39	22
	3RB	High	QPSK	20.14	20.17	20.28	22
			16QAM	20.22	20.25	20.34	22
		Middle	QPSK	20.09	20.13	20.24	22
			16QAM	20.29	20.28	20.37	22
		Low	QPSK	20.10	20.12	20.24	22
			16QAM	20.27	20.33	20.36	22
	6RB	/	QPSK	20.10	20.12	20.25	22
16QAM			20.17	20.19	20.28	22	
3 MHz				1908.5MHz	1880MHz	1851.5MHz	/
	1RB	High	QPSK	20.20	20.19	20.24	22
			16QAM	20.43	20.53	20.56	22
		Middle	QPSK	20.18	20.18	20.26	22
			16QAM	20.40	20.49	20.50	22
		Low	QPSK	20.19	20.22	20.30	22
			16QAM	20.44	20.52	20.51	22
	8RB	High	QPSK	20.18	20.17	20.27	22
			16QAM	20.24	20.25	20.32	22
		Middle	QPSK	20.18	20.17	20.26	22
			16QAM	20.20	20.27	20.32	22
		Low	QPSK	20.18	20.17	20.28	22
			16QAM	20.24	20.26	20.30	22
	15RB	/	QPSK	20.17	20.17	20.29	22
16QAM			20.22	20.22	20.31	22	

LTE-FDD Band 2				Actual output Power (dBm)			Tune up
Band-width	RB allocation	RB offset	Modulation	High	Middle	Low	
5 MHz				1907.5MHz	1880MHz	1852.5MHz	
	1RB	High	QPSK	20.11	20.14	20.17	22
			16QAM	20.42	20.41	20.40	22
		Middle	QPSK	20.15	20.21	20.26	22
			16QAM	20.38	20.44	20.61	22
		Low	QPSK	20.09	20.17	20.28	22
			16QAM	20.41	20.45	20.43	22
	12RB	High	QPSK	20.06	20.09	20.23	22
			16QAM	20.10	20.14	20.24	22
		Middle	QPSK	20.10	20.14	20.24	22
			16QAM	20.14	20.18	20.24	22
		Low	QPSK	20.07	20.11	20.16	22
			16QAM	20.11	20.14	20.16	22
	25RB	/	QPSK	20.08	20.11	20.20	22
16QAM			20.09	20.14	20.21	22	
10 MHz				1905MHz	1880MHz	1855MHz	/
	1RB	High	QPSK	20.14	20.15	20.19	22
			16QAM	20.35	20.37	20.43	22
		Middle	QPSK	20.11	20.16	20.21	22
			16QAM	20.35	20.46	20.40	22
		Low	QPSK	20.11	20.21	20.32	22
			16QAM	20.46	20.46	20.52	22
	25RB	High	QPSK	20.05	20.11	20.29	22
			16QAM	20.06	20.14	20.30	22
		Middle	QPSK	20.07	20.13	20.19	22
			16QAM	20.11	20.16	20.19	22
		Low	QPSK	20.11	20.12	20.11	22
			16QAM	20.13	20.16	20.14	22
	50RB	/	QPSK	20.09	20.12	20.22	22
16QAM			20.11	20.15	20.22	22	

LTE-FDD Band 2				Actual output Power (dBm)			Tune up
Band-width	RB allocation	RB offset	Modulation	High	Middle	Low	
15 MHz				1902.5MHz	1880MHz	1857.5MHz	
	1RB	High	QPSK	20.17	20.18	20.24	<b>22</b>
			16QAM	20.49	20.44	20.44	<b>22</b>
		Middle	QPSK	20.10	20.19	20.24	<b>22</b>
			16QAM	20.34	20.44	20.44	<b>22</b>
		Low	QPSK	20.21	20.30	20.43	<b>22</b>
			16QAM	20.57	20.60	20.63	<b>22</b>
	25RB	High	QPSK	20.05	20.13	20.27	<b>22</b>
			16QAM	20.07	20.13	20.26	<b>22</b>
		Middle	QPSK	20.10	20.16	20.21	<b>22</b>
			16QAM	20.10	20.16	20.21	<b>22</b>
		Low	QPSK	20.14	20.21	20.18	<b>22</b>
			16QAM	20.14	20.21	20.17	<b>22</b>
	50RB	/	QPSK	20.09	20.16	20.24	<b>22</b>
16QAM			20.11	20.17	20.24	<b>22</b>	
20 MHz				1900MHz	1880MHz	1860MHz	/
	1RB	High	QPSK	20.20	20.18	20.27	<b>22</b>
			16QAM	20.44	20.54	20.50	<b>22</b>
		Middle	QPSK	20.07	20.14	20.21	<b>22</b>
			16QAM	20.34	20.51	20.45	<b>22</b>
		Low	QPSK	<b>20.28</b>	<b>20.37</b>	<b>20.51</b>	<b>22</b>
			16QAM	20.62	20.59	20.68	<b>22</b>
	50RB	High	QPSK	20.04	20.16	<b>20.31</b>	<b>22</b>
			16QAM	20.09	20.17	20.28	<b>22</b>
		Middle	QPSK	20.08	20.16	20.21	<b>22</b>
			16QAM	20.10	20.15	20.21	<b>22</b>
		Low	QPSK	<b>20.10</b>	<b>20.26</b>	20.09	<b>22</b>
			16QAM	20.13	20.26	20.07	<b>22</b>
	100RB	/	QPSK	20.09	<b>20.22</b>	20.22	<b>22</b>
16QAM			20.11	20.23	20.21	<b>22</b>	

<b>Full Power</b>							
LTE-FDD Band 4				Actual output Power (dBm)			<b>Tune up</b>
Band-width	RB allocation	RB offset	Modulation	High	Middle	Low	
1.4 MHz				1754.3MHz	1732.5MHz	1710.7MHz	
	1RB	High	QPSK	22.24	22.25	22.17	<b>23.3</b>
			16QAM	21.58	21.56	21.46	<b>22.3</b>
		Middle	QPSK	22.19	22.23	22.12	<b>23.3</b>
			16QAM	21.50	21.48	21.41	<b>22.3</b>
		Low	QPSK	22.23	22.25	22.16	<b>23.3</b>
			16QAM	21.61	21.63	21.49	<b>22.3</b>
	3RB	High	QPSK	22.40	22.41	22.31	<b>23.3</b>
			16QAM	21.45	21.52	21.39	<b>22.3</b>
		Middle	QPSK	22.35	22.37	22.27	<b>23.3</b>
			16QAM	21.51	21.56	21.42	<b>22.3</b>
		Low	QPSK	22.37	22.37	22.28	<b>23.3</b>
			16QAM	21.48	21.50	21.42	<b>22.3</b>
	6RB	/	QPSK	21.37	21.36	21.27	<b>22.3</b>
			16QAM	20.47	20.46	20.36	<b>21.3</b>
	3 MHz				1753.5MHz	1732.5MHz	1711.5MHz
1RB		High	QPSK	22.37	22.43	22.32	<b>23.3</b>
			16QAM	21.68	21.61	21.46	<b>22.3</b>
		Middle	QPSK	22.38	22.44	22.32	<b>23.3</b>
			16QAM	21.61	21.65	21.56	<b>22.3</b>
		Low	QPSK	22.44	22.45	22.37	<b>23.3</b>
			16QAM	21.62	21.64	21.63	<b>22.3</b>
8RB		High	QPSK	21.39	21.42	21.31	<b>22.3</b>
			16QAM	20.47	20.46	20.43	<b>21.3</b>
		Middle	QPSK	21.40	21.43	21.32	<b>22.3</b>
			16QAM	20.48	20.48	20.42	<b>21.3</b>
		Low	QPSK	21.43	21.45	21.34	<b>22.3</b>
			16QAM	20.49	20.51	20.42	<b>21.3</b>
15RB		/	QPSK	21.42	21.43	21.33	<b>22.3</b>
			16QAM	20.48	20.49	20.38	<b>21.3</b>

LTE-FDD Band 4				Actual output Power (dBm)			Tune up
Band-width	RB allocation	RB offset	Modulation	High	Middle	Low	
5 MHz				1752.5MHz	1732.5MHz	1712.5MHz	
	1RB	High	QPSK	22.33	22.34	22.27	<b>23.3</b>
			16QAM	21.56	21.57	21.47	<b>22.3</b>
		Middle	QPSK	22.39	22.44	22.35	<b>23.3</b>
			16QAM	21.62	21.72	21.56	<b>22.3</b>
		Low	QPSK	22.36	22.42	22.34	<b>23.3</b>
			16QAM	21.59	21.62	21.52	<b>22.3</b>
	12RB	High	QPSK	21.31	21.38	21.28	<b>22.3</b>
			16QAM	20.37	20.43	20.31	<b>21.3</b>
		Middle	QPSK	21.37	21.39	21.28	<b>22.3</b>
			16QAM	20.42	20.43	20.31	<b>21.3</b>
		Low	QPSK	21.35	21.34	21.22	<b>22.3</b>
			16QAM	20.41	20.39	20.26	<b>21.3</b>
	25RB	/	QPSK	21.34	21.36	21.25	<b>22.3</b>
16QAM			20.39	20.40	20.28	<b>21.3</b>	
10 MHz				1750MHz	1732.5MHz	1715MHz	/
	1RB	High	QPSK	22.38	22.40	22.31	<b>23.3</b>
			16QAM	21.67	21.67	21.55	<b>22.3</b>
		Middle	QPSK	22.38	22.40	22.30	<b>23.3</b>
			16QAM	21.66	21.64	21.63	<b>22.3</b>
		Low	QPSK	22.44	22.44	22.39	<b>23.3</b>
			16QAM	21.74	21.67	21.68	<b>22.3</b>
	25RB	High	QPSK	21.32	21.40	21.29	<b>22.3</b>
			16QAM	20.38	20.45	20.32	<b>21.3</b>
		Middle	QPSK	21.39	21.39	21.28	<b>22.3</b>
			16QAM	20.43	20.43	20.33	<b>21.3</b>
		Low	QPSK	21.37	21.36	21.23	<b>22.3</b>
			16QAM	20.40	20.42	20.27	<b>21.3</b>
	50RB	/	QPSK	21.36	21.40	21.26	<b>22.3</b>
16QAM			20.38	20.42	20.28	<b>21.3</b>	

LTE-FDD Band 4				Actual output Power (dBm)			Tune up
Band-width	RB allocation	RB offset	Modulation	High	Middle	Low	
15 MHz				1747.5MHz	1732.5MHz	1717.5MHz	
	1RB	High	QPSK	22.38	22.45	22.41	<b>23.3</b>
			16QAM	21.68	21.64	21.69	<b>22.3</b>
		Middle	QPSK	22.38	22.41	22.30	<b>23.3</b>
			16QAM	21.65	21.60	21.60	<b>22.3</b>
		Low	QPSK	22.50	22.50	22.42	<b>23.3</b>
			16QAM	21.75	21.73	21.77	<b>22.3</b>
	25RB	High	QPSK	21.36	21.43	21.35	<b>22.3</b>
			16QAM	20.40	20.45	20.37	<b>21.3</b>
		Middle	QPSK	21.39	21.40	21.30	<b>22.3</b>
			16QAM	20.42	20.43	20.32	<b>21.3</b>
		Low	QPSK	21.36	21.43	21.30	<b>22.3</b>
			16QAM	20.39	20.45	20.30	<b>21.3</b>
	50RB	/	QPSK	21.35	21.43	21.33	<b>22.3</b>
16QAM			20.38	20.47	20.34	<b>21.3</b>	
20 MHz				1745MHz	1732.5MHz	1720MHz	/
	1RB	High	QPSK	22.45	22.48	22.50	<b>23.3</b>
			16QAM	21.60	21.71	21.72	<b>22.3</b>
		Middle	QPSK	22.35	22.40	22.30	<b>23.3</b>
			16QAM	21.54	21.70	21.50	<b>22.3</b>
		Low	QPSK	22.59	<b>22.55</b>	22.52	<b>23.3</b>
			16QAM	21.81	21.76	21.74	<b>22.3</b>
	50RB	High	QPSK	21.42	<b>21.55</b>	21.42	<b>22.3</b>
			16QAM	20.45	20.56	20.44	<b>21.3</b>
		Middle	QPSK	21.40	21.42	21.35	<b>22.3</b>
			16QAM	20.42	20.45	20.38	<b>21.3</b>
		Low	QPSK	21.33	21.45	21.31	<b>22.3</b>
			16QAM	20.35	20.48	20.33	<b>21.3</b>
	100RB	/	QPSK	21.39	21.50	21.37	<b>22.3</b>
16QAM			20.43	20.54	20.39	<b>21.3</b>	

<b>Hotspot Power</b>							
LTE-FDD Band 4				Actual output Power (dBm)			<b>Tune up</b>
Band-width	RB allocation	RB offset	Modulation	High	Middle	Low	
1.4 MHz				1754.3MHz	1732.5MHz	1710.7MHz	
	1RB	High	QPSK	21.29	21.31	21.21	<b>23</b>
			16QAM	21.68	21.59	21.43	<b>23</b>
		Middle	QPSK	21.23	21.25	21.19	<b>23</b>
			16QAM	21.47	21.53	21.43	<b>23</b>
		Low	QPSK	21.28	21.28	21.20	<b>23</b>
			16QAM	21.64	21.65	21.43	<b>23</b>
	3RB	High	QPSK	21.43	21.43	21.34	<b>23</b>
			16QAM	21.49	21.53	21.44	<b>23</b>
		Middle	QPSK	21.39	21.37	21.30	<b>23</b>
			16QAM	21.56	21.59	21.44	<b>23</b>
		Low	QPSK	21.40	21.38	21.29	<b>23</b>
			16QAM	21.52	21.52	21.42	<b>23</b>
	6RB	/	QPSK	21.40	21.39	21.29	<b>23</b>
			16QAM	20.50	20.50	20.40	<b>22</b>
	3 MHz				1753.5MHz	1732.5MHz	1711.5MHz
1RB		High	QPSK	21.44	21.47	21.31	<b>23</b>
			16QAM	21.72	21.78	21.56	<b>23</b>
		Middle	QPSK	21.43	21.47	21.32	<b>23</b>
			16QAM	21.65	21.75	21.56	<b>23</b>
		Low	QPSK	21.45	21.48	21.33	<b>23</b>
			16QAM	21.73	21.76	21.68	<b>23</b>
8RB		High	QPSK	21.44	21.45	21.33	<b>23</b>
			16QAM	20.53	20.55	20.43	<b>22</b>
		Middle	QPSK	21.46	21.46	21.34	<b>23</b>
			16QAM	20.53	20.55	20.46	<b>22</b>
		Low	QPSK	21.47	21.48	21.34	<b>23</b>
			16QAM	20.56	20.57	20.44	<b>22</b>
15RB		/	QPSK	21.45	21.45	21.32	<b>23</b>
			16QAM	20.54	20.52	20.43	<b>22</b>

LTE-FDD Band 4				Actual output Power (dBm)			Tune up
Band-width	RB allocation	RB offset	Modulation	High	Middle	Low	
5 MHz				1752.5MHz	1732.5MHz	1712.5MHz	
	1RB	High	QPSK	21.35	21.37	21.28	<b>23</b>
			16QAM	21.62	21.69	21.54	<b>23</b>
		Middle	QPSK	21.44	21.46	21.35	<b>23</b>
			16QAM	21.73	21.64	21.62	<b>23</b>
		Low	QPSK	21.43	21.43	21.38	<b>23</b>
			16QAM	21.64	21.72	21.58	<b>23</b>
	12RB	High	QPSK	21.35	21.41	21.29	<b>23</b>
			16QAM	20.42	20.45	20.35	<b>22</b>
		Middle	QPSK	21.41	21.42	21.30	<b>23</b>
			16QAM	20.47	20.47	20.36	<b>22</b>
		Low	QPSK	21.39	21.38	21.22	<b>23</b>
			16QAM	20.44	20.42	20.27	<b>22</b>
	25RB	/	QPSK	21.37	21.39	21.27	<b>23</b>
16QAM			20.42	20.42	20.31	<b>22</b>	
10 MHz				1750MHz	1732.5MHz	1715MHz	/
	1RB	High	QPSK	21.41	21.44	21.33	<b>23</b>
			16QAM	21.58	21.67	21.58	<b>23</b>
		Middle	QPSK	21.43	21.42	21.32	<b>23</b>
			16QAM	21.68	21.65	21.57	<b>23</b>
		Low	QPSK	21.47	21.47	21.39	<b>23</b>
			16QAM	21.66	21.71	21.57	<b>23</b>
	25RB	High	QPSK	21.34	21.41	21.30	<b>23</b>
			16QAM	20.39	20.47	20.36	<b>22</b>
		Middle	QPSK	21.41	21.42	21.28	<b>23</b>
			16QAM	20.47	20.47	20.34	<b>22</b>
		Low	QPSK	21.38	21.38	21.24	<b>23</b>
			16QAM	20.43	20.45	20.28	<b>22</b>
	50RB	/	QPSK	21.37	21.41	21.29	<b>23</b>
16QAM			20.39	20.46	20.31	<b>22</b>	



LTE-FDD Band 4				Actual output Power (dBm)			Tune up
Band-width	RB allocation	RB offset	Modulation	High	Middle	Low	
15 MHz				1747.5MHz	1732.5MHz	1717.5MHz	
	1RB	High	QPSK	21.45	21.51	21.45	<b>23</b>
			16QAM	21.71	21.77	21.69	<b>23</b>
		Middle	QPSK	21.44	21.46	21.35	<b>23</b>
			16QAM	21.68	21.63	21.55	<b>23</b>
		Low	QPSK	21.54	21.56	21.50	<b>23</b>
			16QAM	21.84	21.76	21.70	<b>23</b>
	25RB	High	QPSK	21.39	21.46	21.38	<b>23</b>
			16QAM	20.43	20.49	20.38	<b>22</b>
		Middle	QPSK	21.44	21.43	21.33	<b>23</b>
			16QAM	20.46	20.46	20.35	<b>22</b>
		Low	QPSK	21.39	21.47	21.32	<b>23</b>
			16QAM	20.42	20.48	20.33	<b>22</b>
	50RB	/	QPSK	21.39	21.47	21.35	<b>23</b>
16QAM			20.43	20.50	20.38	<b>22</b>	
20 MHz				1745MHz	1732.5MHz	1720MHz	/
	1RB	High	QPSK	21.52	21.50	21.58	<b>23</b>
			16QAM	21.79	21.76	21.78	<b>23</b>
		Middle	QPSK	21.43	21.44	21.38	<b>23</b>
			16QAM	21.67	21.62	21.57	<b>23</b>
		Low	QPSK	<b>21.67</b>	<b>21.59</b>	<b>21.57</b>	<b>23</b>
			16QAM	21.86	21.78	21.80	<b>23</b>
	50RB	High	QPSK	<b>21.48</b>	<b>21.58</b>	<b>21.46</b>	<b>23</b>
			16QAM	20.49	20.58	20.48	<b>22</b>
		Middle	QPSK	21.45	21.46	21.37	<b>23</b>
			16QAM	20.48	20.47	20.39	<b>22</b>
		Low	QPSK	21.37	21.49	21.34	<b>23</b>
			16QAM	20.38	20.51	20.37	<b>22</b>
	100RB	/	QPSK	21.43	21.54	21.40	<b>23</b>
16QAM			20.46	20.55	20.43	<b>22</b>	

<b>Full Power</b>							
LTE-FDD Band 5				Actual output Power (dBm)			<b>Tune up</b>
Band-width	RB allocation	RB offset	Modulation	High	Middle	Low	
1.4 MHz				848.3MHz	836.5MHz	824.7MHz	
	1RB	High	QPSK	22.22	22.30	22.32	<b>23.3</b>
			16QAM	21.52	21.67	21.58	<b>22.3</b>
		Middle	QPSK	22.16	22.24	22.24	<b>23.3</b>
			16QAM	21.48	21.59	21.60	<b>22.3</b>
		Low	QPSK	22.20	22.26	22.28	<b>23.3</b>
			16QAM	21.61	21.69	21.71	<b>22.3</b>
	3RB	High	QPSK	22.33	22.40	22.42	<b>23.3</b>
			16QAM	21.44	21.57	21.57	<b>22.3</b>
		Middle	QPSK	22.29	22.37	22.39	<b>23.3</b>
			16QAM	21.52	21.60	21.59	<b>22.3</b>
		Low	QPSK	22.29	22.36	22.38	<b>23.3</b>
			16QAM	21.50	21.58	21.59	<b>22.3</b>
	6RB	/	QPSK	21.32	21.40	21.42	<b>22.3</b>
			16QAM	20.38	20.47	20.47	<b>21.3</b>
	3 MHz				847.5MHz	836.5MHz	825.5MHz
1RB		High	QPSK	22.37	22.46	22.48	<b>23.3</b>
			16QAM	21.58	21.72	21.76	<b>22.3</b>
		Middle	QPSK	22.37	22.44	22.46	<b>23.3</b>
			16QAM	21.59	21.81	21.77	<b>22.3</b>
		Low	QPSK	22.39	22.47	22.48	<b>23.3</b>
			16QAM	21.67	21.69	21.74	<b>22.3</b>
8RB		High	QPSK	21.38	21.46	21.49	<b>22.3</b>
			16QAM	20.37	20.51	20.50	<b>21.3</b>
		Middle	QPSK	21.39	21.47	21.50	<b>22.3</b>
			16QAM	20.43	20.50	20.51	<b>21.3</b>
		Low	QPSK	21.43	21.49	21.51	<b>22.3</b>
			16QAM	20.44	20.54	20.51	<b>21.3</b>
15RB		/	QPSK	21.39	21.47	21.48	<b>22.3</b>
			16QAM	20.41	20.50	20.50	<b>21.3</b>

LTE-FDD Band 5				Actual output Power (dBm)			Tune up
Band-width	RB allocation	RB offset	Modulation	High	Middle	Low	
5 MHz				846.5MHz	836.5MHz	826.5MHz	
	1RB	High	QPSK	22.30	22.38	22.44	<b>23.3</b>
			16QAM	21.49	21.64	21.77	<b>22.3</b>
		Middle	QPSK	22.41	22.46	22.49	<b>23.3</b>
			16QAM	21.74	21.72	21.77	<b>22.3</b>
		Low	QPSK	22.36	22.41	22.40	<b>23.3</b>
			16QAM	21.66	21.66	21.69	<b>22.3</b>
	12RB	High	QPSK	21.32	21.40	21.41	<b>22.3</b>
			16QAM	20.33	20.43	20.42	<b>21.3</b>
		Middle	QPSK	21.39	21.43	21.45	<b>22.3</b>
			16QAM	20.39	20.45	20.46	<b>21.3</b>
		Low	QPSK	21.36	21.42	21.40	<b>22.3</b>
			16QAM	20.36	20.42	20.41	<b>21.3</b>
	25RB	/	QPSK	21.33	21.40	21.39	<b>22.3</b>
16QAM			20.33	20.41	20.38	<b>21.3</b>	
10 MHz				844MHz	836.5MHz	829MHz	/
	1RB	High	QPSK	22.34	22.42	22.48	<b>23.3</b>
			16QAM	21.69	21.67	21.75	<b>22.3</b>
		Middle	QPSK	22.34	22.41	22.45	<b>23.3</b>
			16QAM	21.71	21.72	21.77	<b>22.3</b>
		Low	QPSK	22.44	<b>22.46</b>	22.44	<b>23.3</b>
			16QAM	21.70	21.76	21.73	<b>22.3</b>
	25RB	High	QPSK	21.30	21.40	21.35	<b>22.3</b>
			16QAM	20.31	20.42	20.35	<b>21.3</b>
		Middle	QPSK	21.38	21.43	21.48	<b>22.3</b>
			16QAM	20.38	20.44	20.47	<b>21.3</b>
		Low	QPSK	21.42	<b>21.51</b>	21.52	<b>22.3</b>
			16QAM	20.42	20.51	20.52	<b>21.3</b>
	50RB	/	QPSK	21.37	21.47	21.45	<b>22.3</b>
16QAM			20.34	20.46	20.43	<b>21.3</b>	

<b>Full Power</b>								
LTE-FDD Band 7				Actual output Power (dBm)			Tune up	
Band-width	RB allocation	RB offset	Modulation	High	Middle	Low		
5 MHz	1RB	High	QPSK	2567.4MHz	2535MHz	2502.5MHz	<b>23.3</b>	
			16QAM	21.74	21.56	21.34	<b>22.3</b>	
		Middle	QPSK	22.53	22.26	22.18	<b>23.3</b>	
			16QAM	21.69	21.55	21.41	<b>22.3</b>	
		Low	QPSK	22.47	22.16	22.11	<b>23.3</b>	
			16QAM	21.69	21.46	21.37	<b>22.3</b>	
	12RB	High	QPSK	21.54	21.29	21.18	<b>22.3</b>	
			16QAM	20.60	20.31	20.18	<b>21.3</b>	
		Middle	QPSK	21.53	21.27	21.19	<b>22.3</b>	
			16QAM	20.61	20.29	20.19	<b>21.3</b>	
		Low	QPSK	21.47	21.21	21.14	<b>22.3</b>	
			16QAM	20.55	20.20	20.13	<b>21.3</b>	
	25RB	/	QPSK	21.51	21.25	21.17	<b>22.3</b>	
			16QAM	20.57	20.26	20.15	<b>21.3</b>	
	10 MHz	1RB	High	QPSK	2565MHz	2535MHz	2505MHz	/
				16QAM	22.58	22.30	22.14	<b>23.3</b>
Middle			QPSK	22.47	22.20	22.10	<b>23.3</b>	
			16QAM	21.70	21.49	21.37	<b>22.3</b>	
Low			QPSK	22.41	22.13	22.12	<b>23.3</b>	
			16QAM	21.64	21.44	21.40	<b>22.3</b>	
25RB		High	QPSK	21.52	21.33	21.19	<b>22.3</b>	
			16QAM	20.57	20.32	20.19	<b>21.3</b>	
		Middle	QPSK	21.50	21.28	21.16	<b>22.3</b>	
			16QAM	20.56	20.28	20.16	<b>21.3</b>	
		Low	QPSK	21.50	21.24	21.15	<b>22.3</b>	
			16QAM	20.55	20.25	20.13	<b>21.3</b>	
50RB		/	QPSK	21.53	21.29	21.19	<b>22.3</b>	
			16QAM	20.57	20.29	20.16	<b>21.3</b>	

LTE-FDD Band 7				Actual output Power (dBm)			Tune up
Band-width	RB allocation	RB offset	Modulation	High	Middle	Low	
15 MHz				2562.5MHz	2535MHz	2507.5MHz	
	1RB	High	QPSK	22.60	22.34	22.15	<b>23.3</b>
			16QAM	21.83	21.61	21.34	<b>22.3</b>
		Middle	QPSK	22.44	22.21	22.11	<b>23.3</b>
			16QAM	21.71	21.48	21.33	<b>22.3</b>
		Low	QPSK	22.38	22.19	22.18	<b>23.3</b>
			16QAM	21.65	21.40	21.39	<b>22.3</b>
	25RB	High	QPSK	21.52	21.35	21.21	<b>22.3</b>
			16QAM	20.56	20.33	20.19	<b>21.3</b>
		Middle	QPSK	21.47	21.28	21.16	<b>22.3</b>
			16QAM	20.53	20.28	20.13	<b>21.3</b>
		Low	QPSK	21.50	21.27	21.15	<b>22.3</b>
			16QAM	20.54	20.27	20.13	<b>21.3</b>
	50RB	/	QPSK	21.49	21.30	21.19	<b>22.3</b>
16QAM			20.56	20.31	20.20	<b>21.3</b>	
20 MHz				2560MHz	2535MHz	2510MHz	/
	1RB	High	QPSK	22.65	<b>22.42</b>	22.21	<b>23.3</b>
			16QAM	21.92	21.66	21.48	<b>22.3</b>
		Middle	QPSK	22.39	22.20	22.04	<b>23.3</b>
			16QAM	21.66	21.57	21.27	<b>22.3</b>
		Low	QPSK	22.35	22.19	22.18	<b>23.3</b>
			16QAM	21.62	21.48	21.36	<b>22.3</b>
	50RB	High	QPSK	21.49	<b>21.41</b>	21.22	<b>22.3</b>
			16QAM	20.53	20.42	20.20	<b>21.3</b>
		Middle	QPSK	21.47	21.30	21.16	<b>22.3</b>
			16QAM	20.50	20.29	20.13	<b>21.3</b>
		Low	QPSK	21.54	21.34	21.14	<b>22.3</b>
			16QAM	20.57	20.34	20.09	<b>21.3</b>
	100RB	/	QPSK	21.52	21.36	21.17	<b>22.3</b>
16QAM			20.56	20.36	20.15	<b>21.3</b>	

<b>Full Power</b>							
LTE-FDD Band 12				Actual output Power (dBm)			<b>Tune up</b>
Band-width	RB allocation	RB offset	Modulation	High	Middle	Low	
1.4 MHz				715.3MHz	707.5MHz	699.7MHz	/
	1RB	High	QPSK	22.19	22.18	22.20	<b>23.3</b>
			16QAM	21.54	21.55	21.49	<b>22.3</b>
		Middle	QPSK	22.14	22.13	22.15	<b>23.3</b>
			16QAM	21.42	21.39	21.42	<b>22.3</b>
		Low	QPSK	22.15	22.17	22.13	<b>23.3</b>
			16QAM	21.45	21.51	21.40	<b>22.3</b>
	3RB	High	QPSK	22.31	22.31	22.34	<b>23.3</b>
			16QAM	21.41	21.47	21.41	<b>22.3</b>
		Middle	QPSK	22.26	22.26	22.29	<b>23.3</b>
			16QAM	21.44	21.45	21.45	<b>22.3</b>
		Low	QPSK	22.27	22.26	22.28	<b>23.3</b>
			16QAM	21.43	21.43	21.40	<b>22.3</b>
	6RB	/	QPSK	21.33	21.31	21.36	<b>22.3</b>
16QAM			20.38	20.38	20.39	<b>21.3</b>	
3 MHz				714.5MHz	707.5MHz	700.5MHz	/
	1RB	High	QPSK	22.36	22.35	22.36	<b>23.3</b>
			16QAM	21.58	21.60	21.65	<b>22.3</b>
		Middle	QPSK	22.32	22.34	22.35	<b>23.3</b>
			16QAM	21.57	21.60	21.62	<b>22.3</b>
		Low	QPSK	22.31	22.35	22.33	<b>23.3</b>
			16QAM	21.54	21.62	21.58	<b>22.3</b>
	8RB	High	QPSK	21.39	21.40	21.42	<b>22.3</b>
			16QAM	20.39	20.43	20.44	<b>21.3</b>
		Middle	QPSK	21.38	21.39	21.42	<b>22.3</b>
			16QAM	20.39	20.40	20.42	<b>21.3</b>
		Low	QPSK	21.40	21.39	21.43	<b>22.3</b>
			16QAM	20.44	20.44	20.44	<b>21.3</b>
	15RB	/	QPSK	21.39	21.40	21.43	<b>22.3</b>
16QAM			20.40	20.39	20.43	<b>21.3</b>	

LTE-FDD Band 12				Actual output Power (dBm)			Tune up
Band-width	RB allocation	RB offset	Modulation	High	Middle	Low	
5 MHz				713.5MHz	707.5MHz	701.5MHz	
	1RB	High	QPSK	22.32	22.33	22.35	<b>23.3</b>
			16QAM	21.54	21.56	21.60	<b>22.3</b>
		Middle	QPSK	22.34	22.33	22.35	<b>23.3</b>
			16QAM	21.56	21.65	21.66	<b>22.3</b>
		Low	QPSK	22.22	22.27	22.25	<b>23.3</b>
			16QAM	21.46	21.49	21.49	<b>22.3</b>
	12RB	High	QPSK	21.30	21.40	21.35	<b>22.3</b>
			16QAM	20.29	20.38	20.34	<b>21.3</b>
		Middle	QPSK	21.35	21.36	21.39	<b>22.3</b>
			16QAM	20.35	20.36	20.36	<b>21.3</b>
		Low	QPSK	21.36	21.29	21.34	<b>22.3</b>
			16QAM	20.34	20.30	20.31	<b>21.3</b>
	25RB	/	QPSK	21.33	21.34	21.35	<b>22.3</b>
16QAM			20.29	20.31	20.32	<b>21.3</b>	
10 MHz				711MHz	707.5MHz	704MHz	/
	1RB	High	QPSK	22.40	<b>22.36</b>	22.37	<b>23.3</b>
			16QAM	21.58	21.57	21.66	<b>22.3</b>
		Middle	QPSK	22.28	22.33	22.33	<b>23.3</b>
			16QAM	21.53	21.61	21.63	<b>22.3</b>
		Low	QPSK	22.29	22.30	22.28	<b>23.3</b>
			16QAM	21.57	21.52	21.46	<b>22.3</b>
	25RB	High	QPSK	21.24	<b>21.39</b>	21.45	<b>22.3</b>
			16QAM	20.21	20.38	20.43	<b>21.3</b>
		Middle	QPSK	21.37	21.36	21.39	<b>22.3</b>
			16QAM	20.33	20.36	20.37	<b>21.3</b>
		Low	QPSK	21.29	21.34	21.43	<b>22.3</b>
			16QAM	20.26	20.32	20.40	<b>21.3</b>
	50RB	/	QPSK	21.28	21.37	21.44	<b>22.3</b>
16QAM			20.25	20.34	20.40	<b>21.3</b>	

Full Power							
LTE-FDD Band 17				Actual output Power (dBm)			Tune up
Band-width	RB allocation	RB offset	Modulation	High	Middle	Low	
5 MHz	1RB	High	QPSK	22.34	22.32	22.40	23.3
			16QAM	21.58	21.54	21.65	22.3
		Middle	QPSK	22.37	22.39	22.41	23.3
			16QAM	21.68	21.66	21.70	22.3
		Low	QPSK	22.30	22.33	22.35	23.3
			16QAM	21.54	21.65	21.64	22.3
	12RB	High	QPSK	21.31	21.36	21.47	22.3
			16QAM	20.31	20.37	20.46	21.3
		Middle	QPSK	21.39	21.41	21.41	22.3
			16QAM	20.38	20.40	20.41	21.3
		Low	QPSK	21.39	21.34	21.37	22.3
			16QAM	20.38	20.34	20.38	21.3
	25RB	/	QPSK	21.36	21.35	21.40	22.3
			16QAM	20.35	20.35	20.40	21.3
10 MHz	1RB	High	QPSK	22.40	22.38	22.40	23.3
			16QAM	21.70	21.64	21.65	22.3
		Middle	QPSK	22.35	22.36	22.37	23.3
			16QAM	21.62	21.64	21.68	22.3
		Low	QPSK	22.34	22.35	22.34	23.3
			16QAM	21.64	21.69	21.61	22.3
	25RB	High	QPSK	21.26	21.28	21.33	22.3
			16QAM	20.27	20.27	20.32	21.3
		Middle	QPSK	21.40	21.40	21.40	22.3
			16QAM	20.38	20.39	20.39	21.3
		Low	QPSK	21.33	21.31	21.30	22.3
			16QAM	20.32	20.31	20.31	21.3
	50RB	/	QPSK	21.31	21.30	21.34	22.3
			16QAM	20.27	20.28	20.31	21.3



<b>Full Power</b>								
LTE-FDD Band 38				Actual output Power (dBm)			Tune up	
Band-width	RB allocation	RB offset	Modulation	High	Middle	Low		
5 MHz	1RB	High	QPSK	2617.5MHz	2595MHz	2572.5MHz	<b>23.3</b>	
			16QAM	21.04	21.16	21.35	<b>22.3</b>	
		Middle	QPSK	22.10	22.30	22.46	<b>23.3</b>	
			16QAM	21.07	21.22	21.41	<b>22.3</b>	
		Low	QPSK	22.07	22.30	22.46	<b>23.3</b>	
			16QAM	21.02	21.22	21.42	<b>22.3</b>	
	12RB	High	QPSK	21.08	21.23	21.39	<b>22.3</b>	
			16QAM	20.17	20.32	20.48	<b>21.3</b>	
		Middle	QPSK	21.09	21.26	21.44	<b>22.3</b>	
			16QAM	20.17	20.32	20.51	<b>21.3</b>	
		Low	QPSK	21.02	21.20	21.41	<b>22.3</b>	
			16QAM	20.10	20.28	20.49	<b>21.3</b>	
	25RB	/	QPSK	21.04	21.21	21.39	<b>22.3</b>	
			16QAM	20.07	20.24	20.42	<b>21.3</b>	
	10 MHz	1RB	High	QPSK	2615MHz	2595MHz	2575MHz	/
				16QAM	22.09	22.21	22.39	<b>23.3</b>
Middle			QPSK	21.07	21.18	21.38	<b>22.3</b>	
			16QAM	22.07	22.26	22.36	<b>23.3</b>	
Low			QPSK	21.03	21.19	21.34	<b>22.3</b>	
			16QAM	22.06	22.29	22.44	<b>23.3</b>	
25RB		High	QPSK	21.01	21.22	21.41	<b>22.3</b>	
			16QAM	21.07	21.25	21.38	<b>22.3</b>	
		Middle	QPSK	20.13	20.27	20.41	<b>21.3</b>	
			16QAM	21.05	21.26	21.39	<b>22.3</b>	
		Low	QPSK	20.09	20.29	20.42	<b>21.3</b>	
			16QAM	21.00	21.24	21.44	<b>22.3</b>	
50RB		/	QPSK	20.05	20.26	20.46	<b>21.3</b>	
			16QAM	21.05	21.22	21.38	<b>22.3</b>	
50RB		/	QPSK	21.05	21.22	21.38	<b>22.3</b>	
			16QAM	20.03	20.21	20.38	<b>21.3</b>	

LTE-FDD Band 38				Actual output Power (dBm)			Tune up
Band-width	RB allocation	RB offset	Modulation	High	Middle	Low	
15 MHz				2612.5MHz	2595MHz	2577.5MHz	
	1RB	High	QPSK	22.12	22.23	22.39	<b>23.3</b>
			16QAM	21.08	21.16	21.33	<b>22.3</b>
		Middle	QPSK	22.05	22.26	22.37	<b>23.3</b>
			16QAM	21.00	21.18	21.34	<b>22.3</b>
		Low	QPSK	22.11	22.36	22.51	<b>23.3</b>
			16QAM	21.07	21.29	21.47	<b>22.3</b>
	25RB	High	QPSK	21.07	21.24	21.37	<b>22.3</b>
			16QAM	20.07	20.24	20.36	<b>21.3</b>
		Middle	QPSK	21.06	21.25	21.40	<b>22.3</b>
			16QAM	20.06	20.24	20.37	<b>21.3</b>
		Low	QPSK	21.03	21.27	21.43	<b>22.3</b>
			16QAM	20.01	20.26	20.42	<b>21.3</b>
	50RB	/	QPSK	21.05	21.27	21.39	<b>22.3</b>
16QAM			20.02	20.23	20.37	<b>21.3</b>	
20 MHz				2610MHz	2595MHz	2580MHz	/
	1RB	High	QPSK	22.13	22.23	22.39	<b>23.3</b>
			16QAM	21.11	21.19	21.32	<b>22.3</b>
		Middle	QPSK	22.02	22.22	22.34	<b>23.3</b>
			16QAM	20.98	21.15	21.29	<b>22.3</b>
		Low	QPSK	22.18	<b>22.39</b>	22.56	<b>23.3</b>
			16QAM	21.12	21.32	21.48	<b>22.3</b>
	50RB	High	QPSK	21.13	<b>21.31</b>	21.35	<b>22.3</b>
			16QAM	20.13	20.29	20.33	<b>21.3</b>
		Middle	QPSK	21.06	21.23	21.36	<b>22.3</b>
			16QAM	20.05	20.22	20.34	<b>21.3</b>
		Low	QPSK	21.03	21.30	21.48	<b>22.3</b>
			16QAM	20.02	20.28	20.46	<b>21.3</b>
	100RB	/	QPSK	21.09	21.30	21.43	<b>22.3</b>
16QAM			20.08	20.32	20.43	<b>21.3</b>	

## 11.4 Wi-Fi and BT Measurement result

**Table 11.5: The conducted Power measurement results for BT**

BT	Tune up	Averaged Power (dBm)		
Mode		Ch.0 (2402 MHz)	Ch39 (2441 MHz)	Ch78 (2480 MHz)
GFSK	<b>5</b>	3.39	4.57	3.30
EDR2M-4_DQPSK	<b>3.5</b>	2.20	3.23	1.86
EDR3M-8DPSK	<b>3.5</b>	2.28	3.35	1.95
BLE	Tune up	Ch0 (2402MHz)	Ch19 (2440MHz)	Ch39 (2480MHz)
	<b>0.5</b>	-2.04	-1.05	-2.10

**Table 11.6: The conducted Power measurement results for 2.4G WIFI**

WiFi 2.4GHz	Tune up	Averaged Power (dBm)		
Mode		Ch.1(2412 MHz)	Ch.6(2437Mhz)	Ch.11(2462MHz)
802.11b	<b>16</b>	15.02	<b>15.55</b>	15.33
802.11g	<b>15.5</b>	14.75	15.03	14.67
802.11n(20MHz)	<b>16</b>	14.93	14.96	14.69

**Table 11.7: The conducted Power for 5G WIFI**

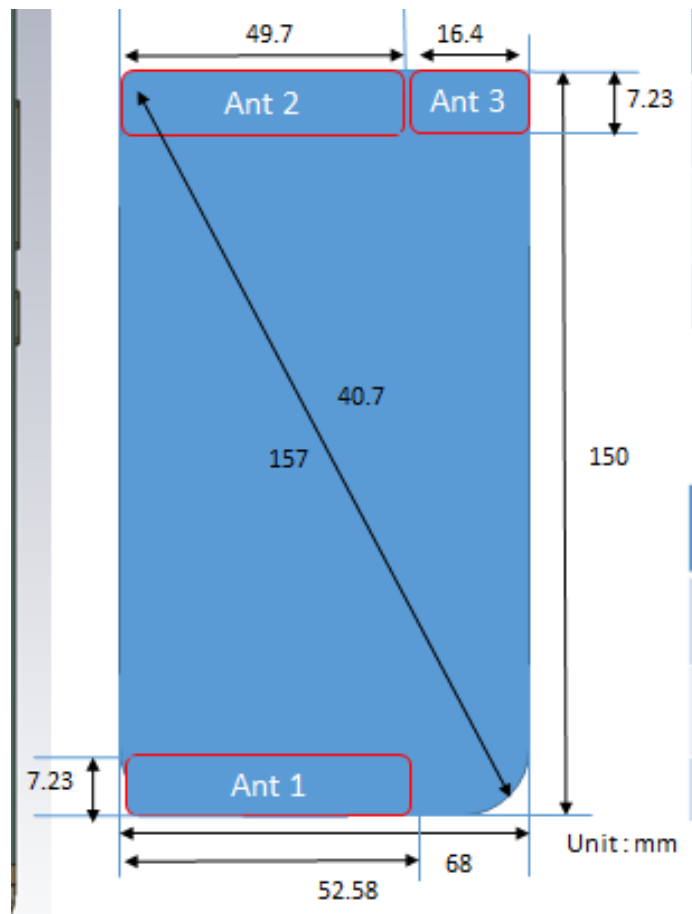
Averaged Power (dBm)					
Mode		802.11a	802.11n-20MHz	Mode	802.11n-40MHz
<b>Tune up</b>		<b>14</b>	<b>14</b>	<b>/</b>	<b>14</b>
Channel (MHz)		6Mbps	MCS0	Channel	MCS0
U-NII-1	36(5180MHz)	13.41	13.66	38(5190MHz)	13.63
	40(5200MHz)	13.45	13.58	46(5230MHz)	13.72
	44(5220MHz)	13.49	13.61	/	
	48(5240MHz)	13.53	13.41		
U-NII-2A	52(5260MHz)	<b>13.50</b>	13.47	54(5270MHz)	13.45
	56(5280MHz)	13.38	13.30	62(5310MHz)	13.44
	60(5300MHz)	13.37	13.34	/	
	64(5320MHz)	13.45	13.16		
U-NII-2C	100(5500MHz)	<b>13.49</b>	13.13	102(5510MHz)	13.42
	104(5520MHz)	13.37	12.94	110(5550MHz)	13.45
	108(5540MHz)	13.31	12.58	118(5590MHz)	12.92
	112(5560MHz)	13.15	12.35	126(5630MHz)	12.56
	116(5580MHz)	13.39	12.91	134(5670MHz)	12.67
	120(5600MHz)	13.25	12.60	/	
	124(5620MHz)	13.18	12.67		
	128(5640MHz)	12.98	12.47		
	132(5660MHz)	13.25	12.60		
	136(5680MHz)	13.30	12.73		
	140(5700MHz)	13.35	12.48		
U-NII-3	149(5745MHz)	<b>13.41</b>	12.62	151(5755 MHz)	12.40
	153(5765MHz)	13.38	12.53	159(5795 MHz)	12.40
	157(5785MHz)	13.31	12.45	/	
	161(5805MHz)	13.23	12.43		
	165(5825MHz)	13.28	12.48		

## 12 Simultaneous TX SAR Considerations

### 12.1 Introduction

The following procedures adopted from “FCC SAR Considerations for Cell Phones with Multiple Transmitters” are applicable to handsets with built-in unlicensed transmitters such as 802.11 a/b/g and Bluetooth devices which may simultaneously transmit with the licensed transmitter. For this device, the BT and Wi-Fi can transmit simultaneous with other transmitters.

### 12.2 Transmit Antenna Separation Distances



Picture 12.1 Antenna Locations (Front View)

Antenn	Mode	Bands
Ant 1	Primary LB/MB/HB	All Cellular
Ant 2	Diversity LB/MB/HB	W(1,2,4,5,8), LTE(1,2,3,4,5,7,8,12,17,28,38,40)
Ant 3	BT/WIFI/GPS	BT/WIFI2.4G & 5G/GPS

### 12.3 SAR Measurement Positions

According to the KDB941225 D06 Hot Spot SAR, the edges with less than 2.5 cm distance to the antennas need to be tested for SAR.

SAR measurement positions						
Mode	Front	Rear	Left edge	Right edge	Top edge	Bottom edge
Main antenna	Yes	Yes	Yes	Yes	No	Yes
WLAN	Yes	Yes	No	Yes	Yes	No

### 12.4 Standalone SAR Test Exclusion Considerations

Standalone 1-g head or body SAR evaluation by measurement or numerical simulation is not required when the corresponding SAR Exclusion Threshold condition, listed below, is satisfied.

The 1-g SAR test exclusion threshold for 100 MHz to 6 GHz at test separation distances  $\leq 50$  mm are determined by:

$[(\text{max. power of channel, including tune-up tolerance, mW}) / (\text{min. test separation distance, mm})] \cdot [\sqrt{f(\text{GHz})}] \leq 3.0$  for 1-g SAR, where

- $f(\text{GHz})$  is the RF channel transmit frequency in GHz
- Power and distance are rounded to the nearest mW and mm before calculation
- The result is rounded to one decimal place for comparison

**Table 12.1: Standalone SAR test exclusion considerations**

Band/Mode	f(GHz)	Position	SAR test exclusion threshold (mW)	RF output power		SAR test exclusion
				dBm	mW	
Bluetooth	2.441	Head	9.60	5	3.16	Yes
		Body	19.20	5	3.16	Yes
2.4GHz WLAN	2.45	Head	9.58	16	39.81	No
		Body	19.17	16	39.81	No
5GHz WLAN	5.2	Head	6.58	14	25.12	No
	5.2	Body	13.16	14	25.12	No
	5.3	Head	6.52	14	25.12	No
	5.3	Body	13.03	14	25.12	No
	5.6	Head	6.34	14	25.12	No
	5.6	Body	12.68	14	25.12	No
	5.8	Head	6.23	14	25.12	No
	5.8	Body	12.46	14	25.12	No

### 13 Evaluation of Simultaneous

**Table 13.1: The sum of reported SAR values for main antenna and Wi-Fi**

/	Position	Main antenna	Wi-Fi	Sum
Highest reported SAR value for Head	Left Touch	0.26	1.10	1.36
Highest reported SAR value for Hotspot	Bottom	1.36	/	1.36
Highest reported SAR value for Body-worn	Rear	1.08	0.08	1.16

**Table 13.2: The sum of reported SAR values for main antenna and Bluetooth**

/	Position	Main antenna	BT*	Sum
Highest reported SAR value for Head	Right Touch	0.35	0.13	0.48
Highest reported SAR value for Hotspot	Bottom	1.36	/	1.36
Highest reported SAR value for Body-worn	Rear	1.08	0.04	1.12

BT\* - Estimated SAR for Bluetooth (see the table 13.3)

**Table 13.3: Estimated SAR for Bluetooth**

Position	f (GHz)	Distance (mm)	Upper limit of power *		Estimated <sub>1g</sub> (W/kg)
			dBm	mW	
Head	2.441	5	5	5.01	0.13
Body	2.441	10	5	5.01	0.07
Body	2.441	15	5	5.01	0.04

\* - Maximum possible output power declared by manufacturer

When standalone SAR test exclusion applies to an antenna that transmits simultaneously with other antennas, the standalone SAR must be estimated according to following to determine simultaneous transmission SAR test exclusion:

$(\text{max. power of channel, including tune-up tolerance, mW}) / (\text{min. test separation distance, mm}) \cdot [\sqrt{f(\text{GHz})}/x] \text{ W/kg}$  for test separation distances  $\leq 50 \text{ mm}$ ;

Where  $x = 7.5$  for 1-g SAR.

When the minimum test separation distance is  $< 5 \text{ mm}$ , a distance of  $5 \text{ mm}$  is applied to determine SAR test exclusion

#### Conclusion:

According to the above tables, the sum of reported SAR values is  $< 1.6 \text{ W/kg}$ . So the simultaneous transmission SAR with volume scans is not required.

## 14 SAR Test Result

It is determined by user manual for the distance between the EUT and the phantom bottom.

The distance is 10mm and just applied to the condition of body worn accessory.

It is performed for all SAR measurements with area scan based 1-g SAR estimation (Fast SAR). A zoom scan measurement is added when the estimated 1-g SAR is the highest measured SAR in each exposure configuration, wireless mode and frequency band combination or >1.2W/kg.

The calculated SAR is obtained by the following formula:

$$\text{Reported SAR} = \text{Measured SAR} \times 10^{(P_{\text{Target}} - P_{\text{Measured}})/10}$$

Where  $P_{\text{Target}}$  is the power of manufacturing upper limit;

$P_{\text{Measured}}$  is the measured power in chapter 11.

**Table 14.1: Duty Cycle**

Mode	Duty Cycle
Speech for GSM850/1900	1:8.3
GPRS for GSM850	1:2
GPRS for GSM1900	1:8.3
GPRS for GSM1900 (Hotspot)	1:4
WCDMA850/1700/1900	1:1
FDD_LTE Band 2/4/5/7/12/17	1:1
TDD_LTE Band 38	1:1.58



### 14.1 SAR results

**Table 14.2: SAR Values (GSM 850 - Head)**

Frequency		Test Mode	Test Position	Figure No.	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift(dB)
MHz	Ch.								
Ambient Temperature: 22.5°C      Liquid Temperature: 22.0°C									
836.6	190	Speech	Left Touch	/	32.39	33.5	0.083	<b>0.11</b>	0.04
836.6	190	Speech	Left Tilt	/	32.39	33.5	0.060	<b>0.08</b>	0.08
836.6	190	Speech	Right Touch	<b>Fig.1</b>	32.39	33.5	<b>0.092</b>	<b>0.12</b>	-0.01
836.6	190	Speech	Right Tilt	/	32.39	33.5	0.055	<b>0.07</b>	0.05
<b>32G</b>									
836.6	190	Speech	Right Touch	/	32.39	33.5	0.085	<b>0.11</b>	0.06

**Table 14.3: SAR Values (GSM 850 -Body)**

Frequency		Test Mode	Test Position	Figure No.	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift(dB)
MHz	Ch.								
Ambient Temperature: 22.5°C      Liquid Temperature: 22.0°C									
<b>Hotspot Test Data (10mm)</b>									
836.6	190	GPRS	Front	/	27.04	27.5	0.170	<b>0.19</b>	0.09
836.6	190	GPRS	Rear	/	27.04	27.5	0.103	<b>0.11</b>	0.04
836.6	190	GPRS	Left	/	27.04	27.5	0.064	<b>0.07</b>	-0.08
836.6	190	GPRS	Right	/	27.04	27.5	0.115	<b>0.13</b>	-0.04
836.6	190	GPRS	Bottom	/	27.04	27.5	0.066	<b>0.07</b>	0.06
836.6	190	EGPRS	Front	/	27.04	27.5	0.149	<b>0.17</b>	0.14
<b>Hotspot Test Data (10mm) + 32G</b>									
836.6	190	GPRS	Front	<b>Fig.2</b>	27.04	27.5	<b>0.204</b>	<b>0.23</b>	0.07
<b>Body Worn Test Data (15mm)</b>									
836.6	190	GPRS	Front	/	27.04	27.5	0.127	<b>0.14</b>	0.02
836.6	190	GPRS	Rear	/	27.04	27.5	0.091	<b>0.10</b>	0.08

**Table 14.4: SAR Values (GSM 1900 - Head)**

Frequency		Test Mode	Test Position	Figure No.	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift(dB)
MHz	Ch.								
Ambient Temperature: 22.7°C      Liquid Temperature: 22.2°C									
1880	661	Speech	Left Touch	<b>Fig.3</b>	30.06	31.5	<b>0.124</b>	<b>0.17</b>	0.06
1880	661	Speech	Left Tilt	/	30.06	31.5	0.057	<b>0.08</b>	0.06
1880	661	Speech	Right Touch	/	30.06	31.5	0.068	<b>0.09</b>	0.04
1880	661	Speech	Right Tilt	/	30.06	31.5	0.056	<b>0.08</b>	0.02
<b>32G</b>									
1880	661	Speech	Left Touch	/	30.06	31.5	0.121	<b>0.17</b>	0.01

**Table 14.5: SAR Values (GSM 1900 - Body)**

Frequency		Test Mode	Test Position	Figure No.	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift(dB)
MHz	Ch.								
Ambient Temperature: 22.4°C      Liquid Temperature: 22.0°C									
<b>Hotspot Test Data (10mm)</b>									
1880	661	GPRS	Front	/	23.69	24	0.787	<b>0.85</b>	0.13
1880	661	GPRS	Rear	/	23.69	24	0.181	<b>0.19</b>	0.05
1880	661	GPRS	Left	/	23.69	24	0.095	<b>0.10</b>	0.03
1880	661	GPRS	Right	/	23.69	24	0.105	<b>0.11</b>	0.04
1880	661	GPRS	Bottom	/	23.69	24	0.991	<b>1.06</b>	0.11
1909.8	810	GPRS	Front	/	23.84	24	0.664	<b>0.69</b>	0.16
1850.2	512	GPRS	Front	/	23.52	24	0.993	<b>1.11</b>	0.08
1909.8	810	GPRS	Bottom	/	23.84	24	0.829	<b>0.86</b>	0.02
1850.2	512	GPRS	Bottom	<b>Fig.4</b>	23.52	24	<b>1.200</b>	<b>1.34</b>	0.09
1850.2	512	EGPRS	Bottom	/	23.52	24	1.160	<b>1.30</b>	0.07
<b>Hotspot Test Data (10mm) + 32G</b>									
1850.2	512	GPRS	Bottom	/	23.52	24	1.180	<b>1.32</b>	0.01
<b>Body Worn Test Data (15mm)</b>									
1880	661	GPRS	Front	/	30.19	31.5	0.650	<b>0.88</b>	0.05
1880	661	GPRS	Rear	/	30.19	31.5	0.163	<b>0.22</b>	0.11
1909.8	810	GPRS	Front	/	30.05	31.5	0.510	<b>0.71</b>	0.01
1850.2	512	GPRS	Front	/	30.32	31.5	0.821	<b>1.08</b>	0.05

**Table 14.6: SAR Values (WCDMA 850 - Head)**

Frequency		Test Mode	Test Position	Figure No.	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift(dB)
MHz	Ch.								
Ambient Temperature: 22.5°C      Liquid Temperature: 22.0°C									
836.4	4182	RMC	Left Touch	/	24.1	24.5	0.211	<b>0.23</b>	0.03
836.4	4182	RMC	Left Tilt	/	24.1	24.5	0.122	<b>0.13</b>	0.05
836.4	4182	RMC	Right Touch	<b>Fig.5</b>	24.1	24.5	<b>0.220</b>	<b>0.24</b>	0.09
836.4	4182	RMC	Right Tilt	/	24.1	24.5	0.136	<b>0.15</b>	0.07

**Table 14.7: SAR Values (WCDMA 850 -Body)**

Frequency		Test Mode	Test Position	Figure No.	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift(dB)
MHz	Ch.								
Ambient Temperature: 22.8°C      Liquid Temperature: 22.2°C									
<b>Hotspot Test Data (10mm)</b>									
836.4	4182	RMC	Front	<b>Fig.6</b>	24.1	24.5	<b>0.512</b>	<b>0.56</b>	-0.03
836.4	4182	RMC	Rear	/	24.1	24.5	0.303	<b>0.33</b>	0.00
836.4	4182	RMC	Left	/	24.1	24.5	0.154	<b>0.17</b>	-0.12
836.4	4182	RMC	Right	/	24.1	24.5	0.203	<b>0.22</b>	-0.01
836.4	4182	RMC	Bottom	/	24.1	24.5	0.175	<b>0.19</b>	0.01
<b>Body Worn Test Data (15mm)</b>									
836.4	4182	RMC	Front	/	24.1	24.5	0.352	<b>0.39</b>	0.00
836.4	4182	RMC	Rear	/	24.1	24.5	0.255	<b>0.28</b>	-0.01

**Table 14.8: SAR Values (WCDMA1900 - Head)**

Frequency		Test Mode	Test Position	Figure No.	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift(dB)
MHz	Ch.								
Ambient Temperature: 22.7°C      Liquid Temperature: 22.2°C									
1880	9400	RMC	Left Touch	<b>Fig.7</b>	23.5	24.5	<b>0.097</b>	<b>0.12</b>	0.02
1880	9400	RMC	Left Tilt	/	23.5	24.5	0.045	<b>0.06</b>	0.03
1880	9400	RMC	Right Touch	/	23.5	24.5	0.053	<b>0.07</b>	-0.07
1880	9400	RMC	Right Tilt	/	23.5	24.5	0.053	<b>0.07</b>	0.04

**Table 14.9: SAR Values (WCDMA1900 - Body)**

Frequency		Test Mode	Test Position	Figure No.	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift(dB)
MHz	Ch.								
Ambient Temperature: 22.4°C      Liquid Temperature: 22.0°C									
<b>Hotspot Test Data (10mm)</b>									
1880	9400	RMC	Front	/	19.6	21	0.397	<b>0.55</b>	0.01
1880	9400	RMC	Rear	/	19.6	21	0.090	<b>0.12</b>	0.04
1880	9400	RMC	Left	/	19.6	21	0.033	<b>0.05</b>	0.03
1880	9400	RMC	Right	/	19.6	21	0.054	<b>0.07</b>	0.01
1880	9400	RMC	Bottom	/	19.6	21	0.424	<b>0.59</b>	0.06
<b>Body Worn Test Data (15mm)</b>									
1880	9400	RMC	Front	<b>Fig.8</b>	23.5	24.5	<b>0.616</b>	<b>0.78</b>	0.03
1880	9400	RMC	Rear	/	23.5	24.5	0.135	<b>0.17</b>	0.02

**Table 14.10: SAR Values (WCDMA 1700 - Head)**

Frequency		Test Mode	Test Position	Figure No.	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift(dB)
MHz	Ch.								
Ambient Temperature: 22.9°C      Liquid Temperature: 22.4°C									
1732.6	1413	RMC	Left Touch	<b>Fig.9</b>	23.6	24.5	<b>0.128</b>	<b>0.16</b>	-0.01
1732.6	1413	RMC	Left Tilt	/	23.6	24.5	0.045	<b>0.06</b>	-0.03
1732.6	1413	RMC	Right Touch	/	23.6	24.5	0.085	<b>0.10</b>	0.02
1732.6	1413	RMC	Right Tilt	/	23.6	24.5	0.072	<b>0.09</b>	-0.03

**Table 14.11: SAR Values (WCDMA 1700 - Body)**

Frequency		Test Mode	Test Position	Figure No.	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift(dB)
MHz	Ch.								
Ambient Temperature: 22.6°C      Liquid Temperature: 22.1°C									
<b>Hotspot Test Data (10mm)</b>									
1732.6	1413	RMC	Front	/	21.6	23	0.633	<b>0.87</b>	0.17
1732.6	1413	RMC	Rear	/	21.6	23	0.132	<b>0.18</b>	0.01
1732.6	1413	RMC	Left	/	21.6	23	0.069	<b>0.10</b>	0.04
1732.6	1413	RMC	Right	/	21.6	23	0.034	<b>0.05</b>	0.02
1732.6	1413	RMC	Bottom	/	21.6	23	0.667	<b>0.92</b>	0.01
1752.6	1513	RMC	Bottom	<b>Fig.10</b>	21.7	23	<b>0.837</b>	<b>1.13</b>	0.03
1712.4	1312	RMC	Bottom	/	21.4	23	0.632	<b>0.91</b>	0.03
1752.6	1513	RMC	Bottom	/	21.7	23	0.752	<b>1.01</b>	0.11
1712.4	1312	RMC	Bottom	/	21.4	23	0.573	<b>0.83</b>	0.06
<b>Body Worn Test Data (15mm)</b>									
/	1413	RMC	Front	/	23.6	24.5	0.632	<b>0.78</b>	0.09
1732.6	1413	RMC	Rear	/	23.6	24.5	0.127	<b>0.16</b>	0.09

**Table 14.12: SAR Values (LTE Band 2 - Head)**

Frequency		Test Mode	Test Position	Figure No.	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift(dB)
MHz	Ch.								
		Ambient Temperature: 22.7°C			Liquid Temperature: 22.2°C				
1880	18900	1RB_Low	Left Touch	<b>Fig.11</b>	22.38	23.3	<b>0.146</b>	<b>0.18</b>	0.04
1880	18900	50RB_Low	Left Touch	/	21.31	22.3	0.088	<b>0.11</b>	0.06
1880	18900	1RB_Low	Left Tilt	/	22.38	23.3	0.036	<b>0.04</b>	0.02
1880	18900	50RB_Low	Left Tilt	/	21.31	22.3	0.026	<b>0.03</b>	0.03
1880	18900	1RB_Low	Right Touch	/	22.38	23.3	0.061	<b>0.08</b>	0.04
1880	18900	50RB_Low	Right Touch	/	21.31	22.3	0.041	<b>0.05</b>	0.03
1880	18900	1RB_Low	Right Tilt	/	22.38	23.3	0.059	<b>0.07</b>	0.02
1880	18900	50RB_Low	Right Tilt	/	21.31	22.3	0.040	<b>0.05</b>	0.02

**Table 14.13: SAR Values (LTE Band 2 - Body)**

Frequency		Test Mode	Test Position	Figure No.	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift(dB)
MHz	Ch.								
		Ambient Temperature: 22.4°C			Liquid Temperature: 22.0°C				
<b>Hotspot Test Data (10mm)</b>									
1880	18900	1RB_Low	Front	/	20.37	22	0.741	<b>1.08</b>	-0.08
1880	18900	50RB_Low	Front	/	20.26	22	0.626	<b>0.93</b>	-0.01
1880	18900	1RB_Low	Rear	/	20.37	22	0.151	<b>0.22</b>	0.02
1880	18900	50RB_Low	Rear	/	20.26	22	0.140	<b>0.21</b>	0.06
1880	18900	1RB_Low	Left	/	20.37	22	0.072	<b>0.10</b>	0.08
1880	18900	50RB_Low	Left	/	20.26	22	0.053	<b>0.08</b>	-0.09
1880	18900	1RB_Low	Right	/	20.37	22	0.050	<b>0.07</b>	0.00
1880	18900	50RB_Low	Right	/	20.26	22	0.043	<b>0.06</b>	0.09
1880	18900	1RB_Low	Bottom	/	20.37	22	0.784	<b>1.14</b>	-0.06
1880	18900	50RB_Low	Bottom	/	20.26	22	0.741	<b>1.11</b>	0.03
1900	19100	1RB_Low	Front	/	20.28	22	0.715	<b>1.06</b>	-0.06
1860	18700	1RB_Low	Front	/	20.51	22	0.552	<b>0.78</b>	-0.07
1880	18900	100RB	Front	/	20.22	22	0.648	<b>0.98</b>	0.07
1900	19100	1RB_Low	Bottom	<b>Fig.12</b>	20.28	22	<b>0.885</b>	<b>1.32</b>	-0.05
1860	18700	1RB_Low	Bottom	/	20.51	22	0.626	<b>0.88</b>	-0.02
1900	19100	50RB_Low	Bottom	/	20.10	22	0.832	<b>1.29</b>	-0.05
1860	18700	50RB_High	Bottom	/	20.31	22	0.626	<b>0.92</b>	-0.02
1880	18900	100RB	Bottom	/	20.22	22	0.790	<b>1.19</b>	-0.09
<b>Body Worn Test Data (15mm)</b>									
1880	18900	1RB_Low	Front	/	22.38	23.3	0.641	<b>0.79</b>	0.03
1880	18900	50RB_Low	Front	/	21.31	22.3	0.456	<b>0.57</b>	-0.02
1880	18900	1RB_Low	Rear	/	22.38	23.3	0.155	<b>0.19</b>	0.08
1880	18900	50RB_Low	Rear	/	21.31	22.3	0.122	<b>0.15</b>	0.04

**Table 14.14: SAR Values (LTE Band 4 - Head)**

Frequency		Test Mode	Test Position	Figure No.	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift(dB)
MHz	Ch.								
Ambient Temperature: 22.9°C		Liquid Temperature: 22.4°C							
1732.5	20175	1RB_Low	Left Touch	<b>Fig.13</b>	22.55	23.3	<b>0.128</b>	<b>0.15</b>	0.05
1732.5	20175	50RB_High	Left Touch	/	21.55	22.3	0.087	<b>0.10</b>	-0.06
1732.5	20175	1RB_Low	Left Tilt	/	22.55	23.3	0.038	<b>0.05</b>	-0.03
1732.5	20175	50RB_High	Left Tilt	/	21.55	22.3	0.027	<b>0.03</b>	-0.03
1732.5	20175	1RB_Low	Right Touch	/	22.55	23.3	0.065	<b>0.08</b>	0.08
1732.5	20175	50RB_High	Right Touch	/	21.55	22.3	0.043	<b>0.05</b>	0.06
1732.5	20175	1RB_Low	Right Tilt	/	22.55	23.3	0.055	<b>0.07</b>	-0.07
1732.5	20175	50RB_High	Right Tilt	/	21.55	22.3	0.038	<b>0.05</b>	-0.08

**Table 14.15: SAR Values (LTE Band 4 - Body)**

Frequency		Test Mode	Test Position	Figure No.	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift(dB)
MHz	Ch.								
Ambient Temperature: 22.6°C		Liquid Temperature: 22.1°C							
<b>Hotspot Test Data (10mm)</b>									
1732.5	20175	1RB_Low	Front	/	21.59	23	0.849	<b>1.17</b>	0.08
1732.5	20175	50RB_High	Front	/	21.58	23	0.682	<b>0.95</b>	0.01
1732.5	20175	1RB_Low	Rear	/	21.59	23	0.186	<b>0.26</b>	0.06
1732.5	20175	50RB_High	Rear	/	21.58	23	0.172	<b>0.24</b>	-0.03
1732.5	20175	1RB_Low	Left	/	21.59	23	0.117	<b>0.16</b>	0.07
1732.5	20175	50RB_High	Left	/	21.58	23	0.087	<b>0.12</b>	-0.08
1732.5	20175	1RB_Low	Right	/	21.59	23	0.024	<b>0.03</b>	-0.09
1732.5	20175	50RB_High	Right	/	21.58	23	0.023	<b>0.03</b>	0.05
1732.5	20175	1RB_Low	Bottom	/	21.59	23	0.953	<b>1.32</b>	0.03
1732.5	20175	50RB_High	Bottom	/	21.58	23	0.825	<b>1.14</b>	0.06
1745	20300	1RB_Low	Front	/	21.67	23	0.869	<b>1.18</b>	-0.02
1720	20050	1RB_Low	Front	/	21.57	23	0.846	<b>1.18</b>	0.20
1732.5	20175	100RB	Front	/	21.54	23	0.707	<b>0.99</b>	0.01
1745	20300	1RB_Low	Bottom	<b>Fig.14</b>	21.67	23	<b>1.000</b>	<b>1.36</b>	0.01
1720	20050	1RB_Low	Bottom	/	21.57	23	0.865	<b>1.20</b>	-0.03
1745	20300	50RB_High	Bottom	/	21.48	23	0.960	<b>1.36</b>	0.06
1720	20050	50RB_High	Bottom	/	21.46	23	0.917	<b>1.31</b>	-0.08
1732.5	20175	100RB	Bottom	/	21.54	23	0.959	<b>1.34</b>	-0.02
<b>Body Worn Test Data (15mm)</b>									
1732.5	20175	1RB_Low	Front	/	22.55	23.3	0.600	<b>0.71</b>	0.09
1732.5	20175	50RB_High	Front	/	21.55	22.3	0.488	<b>0.58</b>	0.01
1732.5	20175	1RB_Low	Rear	/	22.55	23.3	0.157	<b>0.19</b>	0.01
1732.5	20175	50RB_High	Rear	/	21.55	22.3	0.128	<b>0.15</b>	0.07

**Table 14.16: SAR Values (LTE Band 5 - Head)**

Frequency		Test Mode	Test Position	Figure No.	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift(dB)
MHz	Ch.								
Ambient Temperature: 22.5°C					Liquid Temperature: 22.0°C				
836.5	20525	1RB_Low	Left Touch	/	22.46	23.3	0.211	<b>0.26</b>	-0.10
836.5	20525	25RB_Low	Left Touch	/	21.51	22.3	0.193	<b>0.23</b>	0.06
836.5	20525	1RB_Low	Left Tilt	/	22.46	23.3	0.201	<b>0.24</b>	0.00
836.5	20525	25RB_Low	Left Tilt	/	21.51	22.3	0.184	<b>0.22</b>	0.01
836.5	20525	1RB_Low	Right Touch	<b>Fig.15</b>	22.46	23.3	<b>0.290</b>	<b>0.35</b>	0.06
836.5	20525	25RB_Low	Right Touch	/	21.51	22.3	0.231	<b>0.28</b>	0.09
836.5	20525	1RB_Low	Right Tilt	/	22.46	23.3	0.118	<b>0.14</b>	0.09
836.5	20525	25RB_Low	Right Tilt	/	21.51	22.3	0.095	<b>0.11</b>	0.16

**Table 14.17: SAR Values (LTE Band 5 - Body)**

Frequency		Test Mode	Test Position	Figure No.	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift(dB)
MHz	Ch.								
Ambient Temperature: 22.8°C					Liquid Temperature: 22.2°C				
<b>Hotspot Test Data (10mm)</b>									
836.5	20525	1RB_Low	Front	<b>Fig.16</b>	22.46	23.3	<b>0.452</b>	<b>0.55</b>	0.04
836.5	20525	25RB_Low	Front	/	21.51	22.3	0.345	<b>0.41</b>	0.05
836.5	20525	1RB_Low	Rear	/	22.46	23.3	0.312	<b>0.38</b>	0.01
836.5	20525	25RB_Low	Rear	/	21.51	22.3	0.240	<b>0.29</b>	0.04
836.5	20525	1RB_Low	Left	/	22.46	23.3	0.170	<b>0.21</b>	0.01
836.5	20525	25RB_Low	Left	/	21.51	22.3	0.123	<b>0.15</b>	-0.03
836.5	20525	1RB_Low	Right	/	22.46	23.3	0.324	<b>0.39</b>	-0.07
836.5	20525	25RB_Low	Right	/	21.51	22.3	0.247	<b>0.30</b>	-0.01
836.5	20525	1RB_Low	Bottom	/	22.46	23.3	0.174	<b>0.21</b>	0.05
836.5	20525	25RB_High	Bottom	/	21.51	22.3	0.141	<b>0.17</b>	-0.07
<b>Body Worn Test Data (15mm)</b>									
836.5	20525	1RB_Low	Front	/	22.46	23.3	0.322	<b>0.39</b>	0.01
836.5	20525	25RB_Low	Front	/	21.51	22.3	0.247	<b>0.30</b>	0.05
836.5	20525	1RB_Low	Rear	/	22.46	23.3	0.269	<b>0.33</b>	-0.01
836.5	20525	25RB_Low	Rear	/	21.51	22.3	0.204	<b>0.24</b>	0.02



**Table 14.18: SAR Values (LTE Band 7 - Head)**

Frequency		Test Mode	Test Position	Figure No.	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift(dB)
MHz	Ch.								
Ambient Temperature: 22.2°C      Liquid Temperature: 21.7°C									
2535	21100	1RB_High	Left Touch	<b>Fig.17</b>	22.42	23.3	<b>0.201</b>	<b>0.25</b>	0.08
2535	21100	50RB_High	Left Touch	/	21.41	22.3	0.179	<b>0.22</b>	0.07
2535	21100	1RB_High	Left Tilt	/	22.42	23.3	0.073	<b>0.09</b>	0.08
2535	21100	50RB_High	Left Tilt	/	21.41	22.3	0.044	<b>0.05</b>	0.08
2535	21100	1RB_High	Right Touch	/	22.42	23.3	0.152	<b>0.19</b>	0.06
2535	21100	50RB_High	Right Touch	/	21.41	22.3	0.102	<b>0.13</b>	0.09
2535	21100	1RB_High	Right Tilt	/	22.42	23.3	0.063	<b>0.08</b>	0.05
2535	21100	50RB_High	Right Tilt	/	21.41	22.3	0.050	<b>0.06</b>	0.09

**Table 14.19: SAR Values (LTE Band 7 - Body)**

Frequency		Test Mode	Test Position	Figure No. / Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift(dB)
MHz	Ch.								
Ambient Temperature: 22.2°C      Liquid Temperature: 21.7°C									
<b>Hotspot Test Data (10mm)</b>									
2535	21100	1RB_Mid	Front	/	22.42	23.3	0.327	<b>0.40</b>	0.07
2535	21100	50RB_High	Front	/	21.41	22.3	0.294	<b>0.36</b>	-0.05
2535	21100	1RB_Mid	Rear	/	22.42	23.3	0.270	<b>0.33</b>	0.05
2535	21100	50RB_High	Rear	/	21.41	22.3	0.236	<b>0.29</b>	0.08
2535	21100	1RB_Mid	Left	/	22.42	23.3	0.131	<b>0.16</b>	0.07
2535	21100	50RB_High	Left	/	21.41	22.3	0.113	<b>0.14</b>	0.03
2535	21100	1RB_Mid	Right	/	22.42	23.3	0.140	<b>0.17</b>	0.01
2535	21100	50RB_High	Right	/	21.41	22.3	0.118	<b>0.14</b>	-0.01
2535	21100	1RB_Mid	Bottom	<b>Fig.18</b>	22.42	23.3	<b>0.409</b>	<b>0.50</b>	-0.03
2535	21100	50RB_High	Bottom	/	21.41	22.3	0.394	<b>0.48</b>	-0.06
<b>Body Worn Test Data (15mm)</b>									
2535	21100	1RB_Mid	Front	/	22.42	23.3	0.184	<b>0.23</b>	-0.07
2535	21100	50RB_High	Front	/	21.41	22.3	0.137	<b>0.17</b>	-0.02
2535	21100	1RB_Mid	Rear	/	22.42	23.3	0.158	<b>0.19</b>	0.08
2535	21100	50RB_High	Rear	/	21.41	22.3	0.118	<b>0.14</b>	0.01

**Table 14.20: SAR Values (LTE Band 12 - Head)**

Ambient Temperature: 22.5°C					Liquid Temperature: 22.0°C				
Frequency		Test Mode	Test Position	Figure No.	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift(dB)
MHz	Ch.								
707.5	23095	1RB_High	Left Touch	<b>Fig.19</b>	22.36	23.3	<b>0.085</b>	<b>0.11</b>	0.06
707.5	23095	25RB_High	Left Touch	/	21.39	22.3	0.069	<b>0.09</b>	0.01
707.5	23095	1RB_High	Left Tilt	/	22.36	23.3	0.045	<b>0.06</b>	0.02
707.5	23095	25RB_High	Left Tilt	/	21.39	22.3	0.038	<b>0.05</b>	0.02
707.5	23095	1RB_High	Right Touch	/	22.36	23.3	0.072	<b>0.09</b>	0.07
707.5	23095	25RB_High	Right Touch	/	21.39	22.3	0.060	<b>0.07</b>	0.09
707.5	23095	1RB_High	Right Tilt	/	22.36	23.3	0.034	<b>0.04</b>	-0.05
707.5	23095	25RB_High	Right Tilt	/	21.39	22.3	0.028	<b>0.03</b>	0.08

**Table 14.21: SAR Values (LTE Band 12 - Body)**

Ambient Temperature: 22.8°C					Liquid Temperature: 22.2°C				
Frequency		Test Mode	Test Position	Figure No.	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift(dB)
MHz	Ch.								
<b>Hotspot Test Data (10mm)</b>									
707.5	23095	1RB_High	Front	<b>Fig.20</b>	22.36	23.3	<b>0.187</b>	<b>0.23</b>	0.05
707.5	23095	25RB_High	Front	/	21.39	22.3	0.157	<b>0.19</b>	0.08
707.5	23095	1RB_High	Rear	/	22.36	23.3	0.111	<b>0.14</b>	0.09
707.5	23095	25RB_High	Rear	/	21.39	22.3	0.089	<b>0.11</b>	0.03
707.5	23095	1RB_High	Left	/	22.36	23.3	0.143	<b>0.18</b>	0.08
707.5	23095	25RB_High	Left	/	21.39	22.3	0.120	<b>0.15</b>	-0.07
707.5	23095	1RB_High	Right	/	22.36	23.3	0.116	<b>0.14</b>	-0.07
707.5	23095	25RB_High	Right	/	21.39	22.3	0.095	<b>0.12</b>	0.02
707.5	23095	1RB_High	Bottom	/	22.36	23.3	0.035	<b>0.04</b>	0.04
707.5	23095	25RB_High	Bottom	/	21.39	22.3	0.031	<b>0.04</b>	0.01
<b>Body Worn Test Data (15mm)</b>									
707.5	23095	1RB_High	Front	/	22.36	23.3	0.149	<b>0.19</b>	0.05
707.5	23095	25RB_High	Front	/	21.39	22.3	0.122	<b>0.15</b>	-0.03
707.5	23095	1RB_High	Rear	/	22.36	23.3	0.107	<b>0.13</b>	0.06
707.5	23095	25RB_High	Rear	/	21.39	22.3	0.084	<b>0.10</b>	0.09

**Table 14.22: SAR Values (LTE Band 17 - Head)**

Frequency		Test Mode	Test Position	Figure No.	Ambient Temperature: 22.5°C		Liquid Temperature: 22.0°C		Power Drift(dB)
MHz	Ch.				Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	
710	23790	1RB_High	Left Touch	<b>Fig.21</b>	22.38	23.3	<b>0.084</b>	<b>0.10</b>	0.06
710	23790	25RB_Mid	Left Touch	/	21.40	22.3	0.067	<b>0.08</b>	0.03
710	23790	1RB_High	Left Tilt	/	22.38	23.3	0.045	<b>0.06</b>	0.06
710	23790	25RB_Mid	Left Tilt	/	21.40	22.3	0.036	<b>0.04</b>	0.03
710	23790	1RB_High	Right Touch	/	22.38	23.3	0.072	<b>0.09</b>	0.01
710	23790	25RB_Mid	Right Touch	/	21.40	22.3	0.057	<b>0.07</b>	0.06
710	23790	1RB_High	Right Tilt	/	22.38	23.3	0.034	<b>0.04</b>	0.07
710	23790	25RB_Mid	Right Tilt	/	21.40	22.3	0.028	<b>0.03</b>	0.08

**Table 14.23: SAR Values (LTE Band 17 - Body)**

Frequency		Test Mode	Test Position	Figure No.	Ambient Temperature: 22.8°C		Liquid Temperature: 22.2°C		Power Drift(dB)
MHz	Ch.				Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	
<b>Hotspot Test Data (10mm)</b>									
710	23790	1RB_High	Front	<b>Fig.22</b>	22.38	23.3	<b>0.192</b>	<b>0.24</b>	0.05
710	23790	25RB_Mid	Front	/	21.40	22.3	0.148	<b>0.18</b>	0.05
710	23790	1RB_High	Rear	/	22.38	23.3	0.111	<b>0.14</b>	0.03
710	23790	25RB_Mid	Rear	/	21.40	22.3	0.087	<b>0.11</b>	-0.08
710	23790	1RB_High	Left	/	22.38	23.3	0.158	<b>0.20</b>	-0.03
710	23790	25RB_Mid	Left	/	21.40	22.3	0.124	<b>0.15</b>	0.05
710	23790	1RB_High	Right	/	22.38	23.3	0.125	<b>0.15</b>	0.01
710	23790	25RB_Mid	Right	/	21.40	22.3	0.096	<b>0.12</b>	0.04
710	23790	1RB_High	Bottom	/	22.38	23.3	0.037	<b>0.05</b>	0.10
710	23790	25RB_Mid	Bottom	/	21.40	22.3	0.030	<b>0.04</b>	0.12
<b>Body Worn Test Data (15mm)</b>									
710	23790	1RB_High	Front	/	22.38	23.3	0.152	<b>0.19</b>	0.03
710	23790	25RB_Mid	Front	/	21.40	22.3	0.120	<b>0.15</b>	0.04
710	23790	1RB_High	Rear	/	22.38	23.3	0.104	<b>0.13</b>	0.08
710	23790	25RB_Mid	Rear	/	21.40	22.3	0.083	<b>0.10</b>	0.03

**Table 14.24: SAR Values (LTE Band 38 - Head)**

Frequency		Test Mode	Test Position	Figure No.	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift(dB)
MHz	Ch.								
Ambient Temperature: 22.2°C      Liquid Temperature: 21.7°C									
2595	38000	1RB_Low	Left Touch	<b>Fig.23</b>	22.39	23.3	<b>0.112</b>	<b>0.14</b>	0.04
2595	38000	50RB_High	Left Touch	/	21.31	22.3	0.097	<b>0.12</b>	0.05
2595	38000	1RB_Low	Left Tilt	/	22.39	23.3	0.027	<b>0.03</b>	0.13
2595	38000	50RB_High	Left Tilt	/	21.31	22.3	0.023	<b>0.03</b>	0.09
2595	38000	1RB_Low	Right Touch	/	22.39	23.3	0.076	<b>0.09</b>	0.02
2595	38000	50RB_High	Right Touch	/	21.31	22.3	0.057	<b>0.07</b>	0.05
2595	38000	1RB_Low	Right Tilt	/	22.39	23.3	0.028	<b>0.03</b>	0.07
2595	38000	50RB_High	Right Tilt	/	21.31	22.3	0.018	<b>0.02</b>	0.06

**Table 14.25: SAR Values (LTE Band 38 - Body)**

Frequency		Test Mode	Test Position	Figure No. / Note	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift(dB)
MHz	Ch.								
Ambient Temperature: 22.2°C      Liquid Temperature: 21.7°C									
<b>Hotspot Test Data (10mm)</b>									
2595	38000	1RB_Low	Front	/	22.39	23.3	0.213	<b>0.26</b>	0.07
2595	38000	50RB_High	Front	/	21.31	22.3	0.156	<b>0.20</b>	-0.08
2595	38000	1RB_Low	Rear	/	22.39	23.3	0.146	<b>0.18</b>	0.02
2595	38000	50RB_High	Rear	/	21.31	22.3	0.113	<b>0.14</b>	0.03
2595	38000	1RB_Low	Left	/	22.39	23.3	0.069	<b>0.09</b>	0.07
2595	38000	50RB_High	Left	/	21.31	22.3	0.051	<b>0.06</b>	0.04
2595	38000	1RB_Low	Right	/	22.39	23.3	0.097	<b>0.12</b>	0.03
2595	38000	50RB_High	Right	/	21.31	22.3	0.072	<b>0.09</b>	0.01
2595	38000	1RB_Low	Bottom	<b>Fig.24</b>	22.39	23.3	<b>0.259</b>	<b>0.32</b>	-0.06
2595	38000	50RB_High	Bottom	/	21.31	22.3	0.238	<b>0.30</b>	-0.04
<b>Body Worn Test Data (15mm)</b>									
2595	38000	1RB_Low	Front	/	22.39	23.3	0.069	<b>0.09</b>	0.07
2595	38000	50RB_High	Front	/	21.31	22.3	0.051	<b>0.06</b>	0.04
2595	38000	1RB_Low	Rear	/	22.39	23.3	0.097	<b>0.12</b>	0.03
2595	38000	50RB_High	Rear	/	21.31	22.3	0.072	<b>0.09</b>	0.01

### 14.2 WLAN Evaluation for 2.4G

According to the KDB248227 D01, SAR is measured for 2.4GHz 802.11b DSSS using the initial test position procedure.

#### Head Evaluation

**Table 14.26: SAR Values (WLAN 2.4G - Head)–802.11b 1Mbps**

Frequency		Test Mode	Test Position	Figure No.	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift(dB)
MHz	Ch.								
		Ambient Temperature: 22.6°C			Liquid Temperature: 22.0°C				
2437	6	802.11 b	Left Touch	/	15.55	16	0.734	<b>0.81</b>	0.01
2437	6	802.11 b	Left Tilt	/	15.55	16	0.611	<b>0.68</b>	0.11
2437	6	802.11 b	Right Touch	/	15.55	16	0.348	<b>0.39</b>	-0.15
2437	6	802.11 b	Right Tilt	/	15.55	16	0.404	<b>0.45</b>	0.03
2462	11	802.11 b	Left Touch	<b>Fig.25</b>	15.33	16	0.701	<b>0.82</b>	0.08

Note1:For all positions/configurations tested using the initial test position and subsequent test positions, when the reported SAR is > 0.8 W/kg, SAR is measured for these test positions/configurations on the subsequent next highest measured output power channel until the reported SAR is ≤ 1.2 W/kg or all required channels are tested.

According to the KDB248227 D01, The reported SAR must be scaled to 100% transmission duty factor to determine compliance at the maximum tune-up tolerance limit. A maximum transmission duty factor of 100% is achievable for WLAN in this project and the scaled reported SAR is presented as below.

**Table 14.27: SAR Values (WLAN - Head) – 802.11b 1Mbps (Scaled Reported SAR)**

Frequency		Test Position	Actual duty factor	maximum duty factor	Reported SAR (1g)(W/kg)	Scaled reported SAR (1g)(W/kg)
MHz	Ch.					
2462	11	Left Touch	100%	100%	0.82	<b>0.82</b>

SAR is not required for OFDM because the 802.11b adjusted SAR ≤ 1.2 W/kg.

**Body Evaluation**

**Table 14.28: SAR Values (WLAN 2.4G - Body)– 802.11b 1Mbps**

Frequency		Test Mode	Test Position	Figure No.	Conducted Power (dBm)	Max. tune-up Power (dBm)	Measured SAR(1g) (W/kg)	Reported SAR(1g) (W/kg)	Power Drift(dB)
MHz	Ch.								
Ambient Temperature: 22.6°C      Liquid Temperature: 22.0°C									
<b>Hotspot Test Data (10mm)</b>									
2437	6	802.11 b	Front	/	15.55	16	0.108	<b>0.12</b>	0.04
2437	6	802.11 b	Rear	/	15.55	16	0.070	<b>0.08</b>	0.06
2437	6	802.11 b	Right	/	15.55	16	0.075	<b>0.08</b>	0.08
2437	6	802.11 b	Top	<b>Fig.26</b>	15.55	16	<b>0.162</b>	<b>0.18</b>	0.01
<b>Body Worn Test Data (15mm)</b>									
2437	6	802.11 b	Front	/	15.55	16	0.071	<b>0.08</b>	0.01
2437	6	802.11 b	Rear	/	15.55	16	0.043	<b>0.05</b>	0.03

Note1:For all positions/configurations tested using the initial test position and subsequent test positions, when the reported SAR is > 0.8 W/kg, SAR is measured for these test positions/configurations on the subsequent next highest measured output power channel until the reported SAR is ≤ 1.2 W/kg or all required channels are tested.

According to the KDB248227 D01, The reported SAR must be scaled to 100% transmission duty factor to determine compliance at the maximum tune-up tolerance limit. A maximum transmission duty factor of 100% is achievable for WLAN in this project and the scaled reported SAR is presented as below.

**Table 14.29: SAR Values (WLAN - Body) – 802.11b 1Mbps (Scaled Reported SAR)**

Frequency		Test Position	Actual duty factor	maximum duty factor	Reported SAR (1g)(W/kg)	Scaled reported SAR (1g)(W/kg)
MHz	Ch.					
Ambient Temperature: 22.6°C      Liquid Temperature: 22.0°C						
2437	6	Rear	100%	100%	0.18	<b>0.18</b>

SAR is not required for OFDM because the 802.11b adjusted SAR ≤ 1.2 W/kg.