



Test Band: 26b _ 5MHz Bandwidth												
Modulation	RB Allocation		Conducted Power (dBm)			Antenna gain		ERP(dBm)			Limit (dBm)	Verdict
	Size	Offset	LCH	MCH	HCH	(dBd)	(dBi)	LCH	MCH	HCH		
QPSK	1	0	23.55	23.4	24.14	-1.74	0.41	21.81	21.66	22.4	38.45	PASS
		13	23.42	23.59	24.08	-1.74	0.41	21.68	21.85	22.34	38.45	PASS
		24	23.28	23.63	23.47	-1.74	0.41	21.54	21.89	21.73	38.45	PASS
	12	0	22.5	22.47	23.14	-1.74	0.41	20.76	20.73	21.4	38.45	PASS
		6	22.43	22.58	23.11	-1.74	0.41	20.69	20.84	21.37	38.45	PASS
		13	22.39	22.6	22.99	-1.74	0.41	20.65	20.86	21.25	38.45	PASS
	25	0	22.5	22.56	23.03	-1.74	0.41	20.76	20.82	21.29	38.45	PASS
			22.76	22.68	22.97	-1.74	0.41	21.02	20.94	21.23	38.45	PASS
	16QAM	1	13	22.61	22.91	23	-1.74	0.41	20.87	21.17	21.26	38.45
24			22.51	23.01	22.53	-1.74	0.41	20.77	21.27	20.79	38.45	PASS
12		0	21.56	21.58	22.09	-1.74	0.41	19.82	19.84	20.35	38.45	PASS
		6	21.51	21.68	22.13	-1.74	0.41	19.77	19.94	20.39	38.45	PASS
		13	21.46	21.72	22.04	-1.74	0.41	19.72	19.98	20.3	38.45	PASS
25		0	21.61	21.64	22.09	-1.74	0.41	19.87	19.9	20.35	38.45	PASS
Note:												
1) dBd = dBi - 2.15												
2) EIRP = Conducted output power + Antenna gain (dBi)												
3) ERP = Conducted output power + Antenna gain (dBd)												



Test Band: 26b _ 10MHz Bandwidth												
Modulation	RB Allocation		Conducted Power (dBm)			Antenna gain		ERP(dBm)			Limit (dBm)	Verdict
	Size	Offset	LCH	MCH	HCH	(dBd)	(dBi)	LCH	MCH	HCH		
QPSK	1	0	23.57	23.32	23.87	-1.74	0.41	21.83	21.58	22.13	38.45	PASS
		25	23.34	23.51	24.15	-1.74	0.41	21.6	21.77	22.41	38.45	PASS
		49	23.29	23.9	23.02	-1.74	0.41	21.55	22.16	21.28	38.45	PASS
	25	0	22.55	22.44	23.08	-1.74	0.41	20.81	20.7	21.34	38.45	PASS
		13	22.39	22.62	23.12	-1.74	0.41	20.65	20.88	21.38	38.45	PASS
		25	22.33	22.71	23.09	-1.74	0.41	20.59	20.97	21.35	38.45	PASS
	50	0	22.44	22.61	23.07	-1.74	0.41	20.7	20.87	21.33	38.45	PASS
			22.63	22.58	23.53	-1.74	0.41	20.89	20.84	21.79	38.45	PASS
		25	22.4	22.76	23.56	-1.74	0.41	20.66	21.02	21.82	38.45	PASS
16QAM	1	49	22.35	23.13	22.65	-1.74	0.41	20.61	21.39	20.91	38.45	PASS
	25	0	21.68	21.51	22.17	-1.74	0.41	19.94	19.77	20.43	38.45	PASS
		13	21.56	21.7	22.15	-1.74	0.41	19.82	19.96	20.41	38.45	PASS
		25	21.45	21.88	22.13	-1.74	0.41	19.71	20.14	20.39	38.45	PASS
	50	0	21.52	21.68	22.1	-1.74	0.41	19.78	19.94	20.36	38.45	PASS
Note:												
1) dBd = dBi - 2.15												
2) EIRP = Conducted output power + Antenna gain (dBi)												
3) ERP = Conducted output power + Antenna gain (dBd)												



Test Band: 26b _ 15MHz Bandwidth												
Modulation	RB Allocation		Conducted Power (dBm)			Antenna gain		ERP(dBm)			Limit (dBm)	Verdict
	Size	Offset	LCH	MCH	HCH	(dBd)	(dBi)	LCH	MCH	HCH		
QPSK	1	0	23.65	23.46	23.6	-2.5	-0.35	21.15	20.96	21.1	38.45	PASS
		38	23.42	23.69	24.11	-2.5	-0.35	20.92	21.19	21.61	38.45	PASS
		74	23.7	24.14	23.32	-2.5	-0.35	21.2	21.64	20.82	38.45	PASS
	36	0	22.53	22.53	22.81	-2.5	-0.35	20.03	20.03	20.31	38.45	PASS
		18	22.5	22.7	23.05	-2.5	-0.35	20	20.2	20.55	38.45	PASS
		39	22.62	22.96	23.19	-2.5	-0.35	20.12	20.46	20.69	38.45	PASS
	75	0	22.58	22.71	22.99	-2.5	-0.35	20.08	20.21	20.49	38.45	PASS
	23.18		22.76	23.26	-2.5	-0.35	20.68	20.26	20.76	38.45	PASS	
	16QAM	1	38	22.85	22.92	23.75	-2.5	-0.35	20.35	20.42	21.25	38.45
74			23.21	23.39	23.06	-2.5	-0.35	20.71	20.89	20.56	38.45	PASS
0			21.65	21.65	21.98	-2.5	-0.35	19.15	19.15	19.48	38.45	PASS
36		18	21.57	21.82	22.14	-2.5	-0.35	19.07	19.32	19.64	38.45	PASS
		39	21.65	22.03	22.27	-2.5	-0.35	19.15	19.53	19.77	38.45	PASS
		75	0	21.68	21.81	22.1	-2.5	-0.35	19.18	19.31	19.6	38.45

Note:
1) dBd = dBi - 2.15
2) EIRP = Conducted output power + Antenna gain (dBi)



FCC LTE 4G Band 41

Test Band: 41 _ 5MHz Bandwidth																
Modulation	RB Allocation		Conducted Power (dBm)					Antenna gain		EIRP(dBm)					Limit (dBm)	Verdict
	Size	Offset	LCH	MCH1	MCH2	MCH3	HCH	(dBd)	(dBi)	LCH	MCH1	MCH2	MCH3	HCH		
QPSK	1	0	22.38	22.16	22.18	22.16	22.2	/	0.38	22.76	22.54	22.56	22.54	22.58	33.01	PASS
		13	22.64	22.86	22.9	22.90	21.93	/	0.38	23.02	23.24	23.28	23.28	22.31	33.01	PASS
		24	22.66	22.78	22.79	22.78	21.83	/	0.38	23.04	23.16	23.17	23.16	22.21	33.01	PASS
	12	0	21.11	21.74	21.74	21.73	20.79	/	0.38	21.49	22.12	22.12	22.11	21.17	33.01	PASS
		6	21.49	21.58	21.6	21.56	21.24	/	0.38	21.87	21.96	21.98	21.94	21.62	33.01	PASS
		13	21.48	21.71	21.72	21.69	21.29	/	0.38	21.86	22.09	22.1	22.07	21.67	33.01	PASS
	25	0	21.08	21.90	21.92	21.91	20.75	/	0.38	21.46	22.28	22.3	22.29	21.13	33.01	PASS
			21.27	21.56	21.57	21.55	21.43	/	0.38	21.65	21.94	21.95	21.93	21.81	33.01	PASS
		13	21.74	21.97	21.98	21.95	21.35	/	0.38	22.12	22.35	22.36	22.33	21.73	33.01	PASS
16QAM	1	24	21.49	22.08	22.1	22.09	21.22	/	0.38	21.87	22.46	22.48	22.47	21.6	33.01	PASS
	12	0	20.5	20.51	20.53	20.53	20.38	/	0.38	20.88	20.89	20.91	20.91	20.76	33.01	PASS
		6	20.26	20.98	21	21.00	20.4	/	0.38	20.64	21.36	21.38	21.38	20.78	33.01	PASS
		13	20.27	21.08	21.09	21.09	20.39	/	0.38	20.65	21.46	21.47	21.47	20.77	33.01	PASS
	25	0	20.16	20.71	20.72	20.69	19.91	/	0.38	20.54	21.09	21.1	21.07	20.29	33.01	PASS

Note:

1) dBd = dBi - 2.15

2) EIRP = Conducted output power + Antenna gain (dBi)



Test Band: 41 _ 10MHz Bandwidth																
Modulation	RB Allocation		Conducted Power (dBm)					Antenna gain		EIRP(dBm)					Limit (dBm)	Verdict
	Size	Offset	LCH	MCH1	MCH2	MCH3	HCH	(dBd)	(dBi)	LCH	MCH1	MCH2	MCH3	HCH		
QPSK	1	0	22.36	22.38	22.42	22.39	21.94	/	0.38	22.74	22.76	22.8	22.77	22.32	33.01	PASS
		25	22.68	22.58	22.59	22.58	21.68	/	0.38	23.06	22.96	22.97	22.96	22.06	33.01	PASS
		49	22.99	22.92	22.93	22.89	21.73	/	0.38	23.37	23.30	23.31	23.27	22.11	33.01	PASS
	25	0	21.11	21.30	21.32	21.29	20.67	/	0.38	21.49	21.68	21.7	21.67	21.05	33.01	PASS
		13	21.64	21.61	21.61	21.60	20.72	/	0.38	22.02	21.99	21.99	21.98	21.1	33.01	PASS
		25	21.82	22.09	22.11	22.07	21.3	/	0.38	22.2	22.47	22.49	22.45	21.68	33.01	PASS
	50	0	21.63	21.55	21.56	21.56	20.78	/	0.38	22.01	21.93	21.94	21.94	21.16	33.01	PASS
			21.18	21.17	21.2	21.17	20.9	/	0.38	21.56	21.55	21.58	21.55	21.28	33.01	PASS
		25	21.51	21.60	21.61	21.58	21.35	/	0.38	21.89	21.98	21.99	21.96	21.73	33.01	PASS
16QAM	1	49	22.12	22.16	22.19	22.18	21.01	/	0.38	22.5	22.54	22.57	22.56	21.39	33.01	PASS
	25	0	20.24	20.47	20.47	20.44	19.88	/	0.38	20.62	20.85	20.85	20.82	20.26	33.01	PASS
		13	20.42	20.77	20.77	20.76	19.92	/	0.38	20.8	21.15	21.15	21.14	20.3	33.01	PASS
		25	20.62	21.22	21.22	21.20	20.38	/	0.38	21	21.60	21.6	21.58	20.76	33.01	PASS
	50	0	20.42	20.96	20.98	20.94	20.32	/	0.38	20.8	21.34	21.36	21.32	20.7	33.01	PASS
		25														
		0														
		25														

Note:

1) dBd = dBi - 2.15

2) EIRP = Conducted output power + Antenna gain (dBi)



Test Band: 41 _ 15MHz Bandwidth																
Modulation	RB Allocation		Conducted Power (dBm)					Antenna gain		EIRP(dBm)					Limit (dBm)	Verdict
	Size	Offset	LCH	MCH1	MCH2	MCH3	HCH	(dBd)	(dBi)	LCH	MCH1	MCH2	MCH3	HCH		
QPSK	1	0	22.01	22.28	22.31	22.29	21.61	/	0.38	22.39	22.66	22.69	22.67	21.99	33.01	PASS
		38	22.95	22.62	22.62	22.62	21.5	/	0.38	23.33	23.00	23	23.00	21.88	33.01	PASS
		74	22.68	23.20	23.23	23.22	21.67	/	0.38	23.06	23.58	23.61	23.60	22.05	33.01	PASS
	36	0	21.53	21.12	21.14	21.11	20.79	/	0.38	21.91	21.50	21.52	21.49	21.17	33.01	PASS
		18	21.55	21.51	21.54	21.54	21.11	/	0.38	21.93	21.89	21.92	21.92	21.49	33.01	PASS
		39	21.85	22.13	22.13	22.11	20.68	/	0.38	22.23	22.51	22.51	22.49	21.06	33.01	PASS
	75	0	21.73	21.54	21.55	21.53	21.04	/	0.38	22.11	21.92	21.93	21.91	21.42	33.01	PASS
	21.24		21.17	21.17	21.13	20.54	/	0.38	21.62	21.55	21.55	21.51	20.92	33.01	PASS	
	16QAM	1	38	22.1	21.77	21.79	21.77	20.79	/	0.38	22.48	22.15	22.17	22.15	21.17	33.01
74			22.19	22.15	22.18	22.18	21.42	/	0.38	22.57	22.53	22.56	22.56	21.8	33.01	PASS
0			20.3	20.27	20.27	20.24	19.57	/	0.38	20.68	20.65	20.65	20.62	19.95	33.01	PASS
36		18	20.66	20.96	20.96	20.96	19.82	/	0.38	21.04	21.34	21.34	21.34	20.2	33.01	PASS
		39	20.7	20.94	20.96	20.92	19.88	/	0.38	21.08	21.32	21.34	21.30	20.26	33.01	PASS
		75	0	20.58	20.60	20.62	20.61	19.74	/	0.38	20.96	20.98	21	20.99	20.12	33.01

Note:
1) dBd = dBi - 2.15
2) EIRP = Conducted output power + Antenna gain (dBi)



Test Band: 41 _ 20MHz Bandwidth																
Modulation	RB Allocation		Conducted Power (dBm)					Antenna gain		EIRP(dBm)					Limit (dBm)	Verdict
	Size	Offset	LCH	MCH1	MCH2	MCH3	HCH	(dBd)	(dBi)	LCH	MCH1	MCH2	MCH3	HCH		
QPSK	1	0	22.44	22.08	22.12	22.08	22.08	/	0.38	22.82	22.46	22.5	22.46	22.46	33.01	PASS
		50	22.81	22.56	22.57	22.57	22.18	/	0.38	23.19	22.94	22.95	22.95	22.56	33.01	PASS
		99	22.75	22.83	22.85	22.83	22.36	/	0.38	23.13	23.21	23.23	23.21	22.74	33.01	PASS
	50	0	21.42	21.10	21.13	21.10	20.62	/	0.38	21.8	21.48	21.51	21.48	21	33.01	PASS
		25	21.88	21.93	21.93	21.90	20.85	/	0.38	22.26	22.31	22.31	22.28	21.23	33.01	PASS
		50	21.8	22.13	22.17	22.14	21.23	/	0.38	22.18	22.51	22.55	22.52	21.61	33.01	PASS
	100	0	21.7	21.85	21.85	21.85	21.32	/	0.38	22.08	22.23	22.23	22.23	21.7	33.01	PASS
			21.46	20.86	20.89	20.88	20.67	/	0.38	21.84	21.24	21.27	21.26	21.05	33.01	PASS
		50	21.53	21.91	21.93	21.91	20.61	/	0.38	21.91	22.29	22.31	22.29	20.99	33.01	PASS
16QAM	1	99	21.74	22.07	22.11	22.08	21.03	/	0.38	22.12	22.45	22.49	22.46	21.41	33.01	PASS
	50	0	20.75	20.53	20.54	20.51	19.46	/	0.38	21.13	20.91	20.92	20.89	19.84	33.01	PASS
		25	20.9	20.97	21.01	21.01	19.64	/	0.38	21.28	21.35	21.39	21.39	20.02	33.01	PASS
		50	20.71	21.24	21.27	21.24	19.92	/	0.38	21.09	21.62	21.65	21.62	20.3	33.01	PASS
	100	0	20.81	20.93	20.95	20.94	20.1	/	0.38	21.19	21.31	21.33	21.32	20.48	33.01	PASS
Note:																
1) dBd = dBi - 2.15																
2) EIRP = Conducted output power + Antenna gain (dBi)																



FCC_LTE_4G_Band_66

Test Band: 66 1.4MHz Bandwidth													
Modulation	RB Allocation		Conducted Power (dBm)			Antenna gain		EIRP(dBm)			Limit (dBm)	Verdict	
	Size	Offset	LCH	MCH	HCH	(dBd)	(dBi)	LCH	MCH	HCH			
QPSK	1	0	20.16	21.1	21.18	/	-0.37	19.79	20.73	20.81	30.00	PASS	
		2	20.31	21.21	21.3	/	-0.37	19.94	20.84	20.93	30.00	PASS	
		5	20.29	21.17	21.31	/	-0.37	19.92	20.8	20.94	30.00	PASS	
	3	0	20.12	21.15	21.21	/	-0.37	19.75	20.78	20.84	30.00	PASS	
		2	20.28	21.25	21.34	/	-0.37	19.91	20.88	20.97	30.00	PASS	
		3	20.19	21.15	21.24	/	-0.37	19.82	20.78	20.87	30.00	PASS	
	6	0	19.23	20.16	20.34	/	-0.37	18.86	19.79	19.97	30.00	PASS	
	19.24		20.29	20.24	/	-0.37	18.87	19.92	19.87	30.00	PASS		
	16QAM	1	2	19.36	20.42	20.38	/	-0.37	18.99	20.05	20.01	30.00	PASS
5			19.34	20.36	20.41	/	-0.37	18.97	19.99	20.04	30.00	PASS	
3			0	19.29	20.17	20.42	/	-0.37	18.92	19.8	20.05	30.00	PASS
			2	19.45	20.29	20.57	/	-0.37	19.08	19.92	20.2	30.00	PASS
		3	19.37	20.21	20.52	/	-0.37	19	19.84	20.15	30.00	PASS	
6		0	18.21	19.23	19.38	/	-0.37	17.84	18.86	19.01	30.00	PASS	

Note:
1) dBd = dBi - 2.15
2) EIRP = Conducted output power + Antenna gain (dBi)



Test Band: 66 3MHz Bandwidth												
Modulation	RB Allocation		Conducted Power (dBm)			Antenna gain		EIRP(dBm)			Limit (dBm)	Verdict
	Size	Offset	LCH	MCH	HCH	(dBd)	(dBi)	LCH	MCH	HCH		
QPSK	1	0	20.13	21.07	20.95	/	-0.37	19.76	20.7	20.58	30.00	PASS
		7	20.48	21.34	21.34	/	-0.37	20.11	20.97	20.97	30.00	PASS
		14	20.45	21.17	21.31	/	-0.37	20.08	20.8	20.94	30.00	PASS
	8	0	19.23	20.17	20.12	/	-0.37	18.86	19.8	19.75	30.00	PASS
		4	19.41	20.26	20.3	/	-0.37	19.04	19.89	19.93	30.00	PASS
		7	19.38	20.24	20.27	/	-0.37	19.01	19.87	19.9	30.00	PASS
	15	0	19.32	20.22	20.17	/	-0.37	18.95	19.85	19.8	30.00	PASS
	19.23		20.24	20.49	/	-0.37	18.86	19.87	20.12	30.00	PASS	
	16QAM	1	7	19.53	20.55	20.89	/	-0.37	19.16	20.18	20.52	30.00
14			19.48	20.34	20.86	/	-0.37	19.11	19.97	20.49	30.00	PASS
0			18.35	19.21	19.29	/	-0.37	17.98	18.84	18.92	30.00	PASS
8		4	18.5	19.3	19.48	/	-0.37	18.13	18.93	19.11	30.00	PASS
		7	18.53	19.24	19.46	/	-0.37	18.16	18.87	19.09	30.00	PASS
		15	0	18.42	19.21	19.29	/	-0.37	18.05	18.84	18.92	30.00

Note:
1) dBd = dBi - 2.15
2) EIRP = Conducted output power + Antenna gain (dBi)



Test Band: 66 5MHz Bandwidth												
Modulation	RB Allocation		Conducted Power (dBm)			Antenna gain		EIRP(dBm)			Limit (dBm)	Verdict
	Size	Offset	LCH	MCH	HCH	(dBd)	(dBi)	LCH	MCH	HCH		
QPSK	1	0	20.08	20.96	20.57	/	-0.37	19.71	20.59	20.2	30.00	PASS
		13	20.62	21.35	21.21	/	-0.37	20.25	20.98	20.84	30.00	PASS
		24	20.67	21.2	21.25	/	-0.37	20.3	20.83	20.88	30.00	PASS
	12	0	19.27	20.09	19.79	/	-0.37	18.9	19.72	19.42	30.00	PASS
		6	19.5	20.24	20.06	/	-0.37	19.13	19.87	19.69	30.00	PASS
		13	19.58	20.17	20.15	/	-0.37	19.21	19.8	19.78	30.00	PASS
	25	0	19.43	20.17	19.95	/	-0.37	19.06	19.8	19.58	30.00	PASS
	19.23		20.26	19.47	/	-0.37	18.86	19.89	19.1	30.00	PASS	
	16QAM	1	13	19.8	20.67	20.13	/	-0.37	19.43	20.3	19.76	30.00
24			19.81	20.46	20.18	/	-0.37	19.44	20.09	19.81	30.00	PASS
0			18.32	19.22	18.82	/	-0.37	17.95	18.85	18.45	30.00	PASS
12		6	18.54	19.34	19.09	/	-0.37	18.17	18.97	18.72	30.00	PASS
		13	18.6	19.29	19.2	/	-0.37	18.23	18.92	18.83	30.00	PASS
		25	0	18.52	19.23	19.05	/	-0.37	18.15	18.86	18.68	30.00

Note:
1) dBd = dBi - 2.15
2) EIRP = Conducted output power + Antenna gain (dBi)



Test Band: 66 10MHz Bandwidth													
Modulation	RB Allocation		Conducted Power (dBm)			Antenna gain		EIRP(dBm)			Limit (dBm)	Verdict	
	Size	Offset	LCH	MCH	HCH	(dBd)	(dBi)	LCH	MCH	HCH			
QPSK	1	0	20.27	20.97	20.07	/	-0.37	19.9	20.6	19.7	30.00	PASS	
		25	20.9	21.25	20.69	/	-0.37	20.53	20.88	20.32	30.00	PASS	
		49	21.34	21.31	21.35	/	-0.37	20.97	20.94	20.98	30.00	PASS	
	25	0	19.48	20.06	19.24	/	-0.37	19.11	19.69	18.87	30.00	PASS	
		13	19.79	20.23	19.59	/	-0.37	19.42	19.86	19.22	30.00	PASS	
		25	20.06	20.29	19.97	/	-0.37	19.69	19.92	19.6	30.00	PASS	
	50	0	19.78	20.18	19.6	/	-0.37	19.41	19.81	19.23	30.00	PASS	
	19.3		20.18	19.49	/	-0.37	18.93	19.81	19.12	30.00	PASS		
	25		19.95	20.44	20.23	/	-0.37	19.58	20.07	19.86	30.00	PASS	
16QAM	1	49	20.43	20.55	20.88	/	-0.37	20.06	20.18	20.51	30.00	PASS	
		25	0	18.61	19.11	18.26	/	-0.37	18.24	18.74	17.89	30.00	PASS
			13	18.98	19.28	18.69	/	-0.37	18.61	18.91	18.32	30.00	PASS
	25		19.25	19.35	19.06	/	-0.37	18.88	18.98	18.69	30.00	PASS	
	50	0	18.88	19.25	18.61	/	-0.37	18.51	18.88	18.24	30.00	PASS	
	Note:												
1) dBd = dBi - 2.15													
2) EIRP = Conducted output power + Antenna gain (dBi)													



Test Band: 66 15MHz Bandwidth												
Modulation	RB Allocation		Conducted Power (dBm)			Antenna gain		EIRP(dBm)			Limit (dBm)	Verdict
	Size	Offset	LCH	MCH	HCH	(dBd)	(dBi)	LCH	MCH	HCH		
QPSK	1	0	20.31	20.92	19.96	/	-0.37	19.94	20.55	19.59	30.00	PASS
		38	21.31	21.32	20.37	/	-0.37	20.94	20.95	20	30.00	PASS
		74	21.41	21.3	21.33	/	-0.37	21.04	20.93	20.96	30.00	PASS
	36	0	19.57	19.92	18.84	/	-0.37	19.2	19.55	18.47	30.00	PASS
		18	20.13	20.21	19.21	/	-0.37	19.76	19.84	18.84	30.00	PASS
		39	20.31	20.25	19.67	/	-0.37	19.94	19.88	19.3	30.00	PASS
	75	0	20.01	20.07	19.19	/	-0.37	19.64	19.7	18.82	30.00	PASS
	19.72		20.11	19.38	/	-0.37	19.35	19.74	19.01	30.00	PASS	
	16QAM	1	38	20.73	20.54	19.84	/	-0.37	20.36	20.17	19.47	30.00
74			20.88	20.53	20.85	/	-0.37	20.51	20.16	20.48	30.00	PASS
0			18.69	18.99	17.91	/	-0.37	18.32	18.62	17.54	30.00	PASS
36		18	19.16	19.3	18.3	/	-0.37	18.79	18.93	17.93	30.00	PASS
		39	19.33	19.34	18.75	/	-0.37	18.96	18.97	18.38	30.00	PASS
		75	0	19.06	19.18	18.28	/	-0.37	18.69	18.81	17.91	30.00

Note:
1) dBd = dBi - 2.15
2) EIRP = Conducted output power + Antenna gain (dBi)



Test Band: 66 20MHz Bandwidth												
Modulation	RB Allocation		Conducted Power (dBm)			Antenna gain		EIRP(dBm)			Limit (dBm)	Verdict
	Size	Offset	LCH	MCH	HCH	(dBd)	(dBi)	LCH	MCH	HCH		
QPSK	1	0	20.25	20.89	20.39	/	-0.37	19.88	20.52	20.02	30.00	PASS
		50	21.43	21.33	20.05	/	-0.37	21.06	20.96	19.68	30.00	PASS
		99	21.22	21.25	21.26	/	-0.37	20.85	20.88	20.89	30.00	PASS
	50	0	19.84	19.97	18.9	/	-0.37	19.47	19.6	18.53	30.00	PASS
		25	20.28	20.16	18.88	/	-0.37	19.91	19.79	18.51	30.00	PASS
		50	20.34	20.28	19.44	/	-0.37	19.97	19.91	19.07	30.00	PASS
	100	0	20.11	20.11	19.09	/	-0.37	19.74	19.74	18.72	30.00	PASS
	19.85		20.17	19.7	/	-0.37	19.48	19.8	19.33	30.00	PASS	
	16QAM	1	50	21.06	20.59	19.29	/	-0.37	20.69	20.22	18.92	30.00
99			20.82	20.49	20.57	/	-0.37	20.45	20.12	20.2	30.00	PASS
0			18.87	19.03	17.94	/	-0.37	18.5	18.66	17.57	30.00	PASS
50		25	19.28	19.22	17.9	/	-0.37	18.91	18.85	17.53	30.00	PASS
		50	19.37	19.33	18.46	/	-0.37	19	18.96	18.09	30.00	PASS
		100	0	19.17	19.18	18.17	/	-0.37	18.8	18.81	17.8	30.00
Note: 1) dBd = dBi - 2.15 2) EIRP = Conducted output power + Antenna gain (dBi)												



FCC_LTE_4G_Band_71

Test Band: 71 5MHz Bandwidth												
Modulation	RB Allocation		Conducted Power (dBm)			Antenna gain		ERP(dBm)			Limit (dBm)	Verdict
	Size	Offset	LCH	MCH	HCH	(dBd)	(dBi)	LCH	MCH	HCH		
QPSK	1	0	24.48	23.18	24.38	-2.5	-0.35	21.98	20.68	21.88	34.77	PASS
		13	24.36	23.31	24.44	-2.5	-0.35	21.86	20.81	21.94	34.77	PASS
		24	24.13	23.4	24.18	-2.5	-0.35	21.63	20.9	21.68	34.77	PASS
	12	0	23.41	22.17	23.31	-2.5	-0.35	20.91	19.67	20.81	34.77	PASS
		6	23.43	22.24	23.31	-2.5	-0.35	20.93	19.74	20.81	34.77	PASS
		13	23.24	22.33	23.31	-2.5	-0.35	20.74	19.83	20.81	34.77	PASS
	25	0	23.37	22.25	23.27	-2.5	-0.35	20.87	19.75	20.77	34.77	PASS
		13	23.56	22.41	23.23	-2.5	-0.35	21.06	19.91	20.73	34.77	PASS
		24	23.47	22.59	23.33	-2.5	-0.35	20.97	20.09	20.83	34.77	PASS
16QAM	1	0	22.45	21.27	22.34	-2.5	-0.35	19.95	18.77	19.84	34.77	PASS
		6	22.46	21.34	22.32	-2.5	-0.35	19.96	18.84	19.82	34.77	PASS
		13	22.26	21.41	22.33	-2.5	-0.35	19.76	18.91	19.83	34.77	PASS
	12	0	22.42	21.3	22.34	-2.5	-0.35	19.92	18.8	19.84	34.77	PASS
		6	22.46	21.34	22.32	-2.5	-0.35	19.96	18.84	19.82	34.77	PASS
		13	22.26	21.41	22.33	-2.5	-0.35	19.76	18.91	19.83	34.77	PASS
	25	0	22.42	21.3	22.34	-2.5	-0.35	19.92	18.8	19.84	34.77	PASS

Note:

- 1) dBd = dBi - 2.15
- 2) EIRP = Conducted output power + Antenna gain (dBi)
- 3) ERP = Conducted output power + Antenna gain (dBd)



Test Band: 71 10MHz Bandwidth												
Modulation	RB Allocation		Conducted Power (dBm)			Antenna gain		ERP(dBm)			Limit (dBm)	Verdict
	Size	Offset	LCH	MCH	HCH	(dBd)	(dBi)	LCH	MCH	HCH		
QPSK	1	0	24.47	23.10	24.16	-2.50	-0.35	21.97	20.60	21.66	34.77	PASS
		25	24.11	23.19	24.38	-2.50	-0.35	21.61	20.69	21.88	34.77	PASS
		49	23.50	23.70	24.23	-2.50	-0.35	21.00	21.20	21.73	34.77	PASS
	25	0	23.36	22.18	23.22	-2.50	-0.35	20.86	19.68	20.72	34.77	PASS
		13	23.12	22.27	23.36	-2.50	-0.35	20.62	19.77	20.86	34.77	PASS
		25	22.84	22.42	23.27	-2.50	-0.35	20.34	19.92	20.77	34.77	PASS
	50	0	23.06	22.29	23.29	-2.50	-0.35	20.56	19.79	20.79	34.77	PASS
	23.50		22.28	23.67	-2.50	-0.35	21.00	19.78	21.17	34.77	PASS	
	16QAM	1	25	23.14	22.40	23.89	-2.50	-0.35	20.64	19.90	21.39	34.77
49			22.51	22.94	23.70	-2.50	-0.35	20.01	20.44	21.20	34.77	PASS
25			0	22.50	21.19	22.32	-2.50	-0.35	20.00	18.69	19.82	34.77
		13	22.19	21.34	22.45	-2.50	-0.35	19.69	18.84	19.95	34.77	PASS
		25	21.93	21.47	22.38	-2.50	-0.35	19.43	18.97	19.88	34.77	PASS
50		0	22.08	21.33	22.35	-2.50	-0.35	19.58	18.83	19.85	34.77	PASS
Note:												
1) dBd = dBi - 2.15												
2) EIRP = Conducted output power + Antenna gain (dBi)												
3) ERP = Conducted output power + Antenna gain (dBd)												



Test Band: 71 15MHz Bandwidth												
Modulation	RB Allocation		Conducted Power (dBm)			Antenna gain		ERP(dBm)			Limit (dBm)	Verdict
	Size	Offset	LCH	MCH	HCH	(dBd)	(dBi)	LCH	MCH	HCH		
QPSK	1	0	24.44	23.32	23.70	-2.50	-0.35	21.94	20.82	21.20	34.77	PASS
		38	23.67	23.21	24.33	-2.50	-0.35	21.17	20.71	21.83	34.77	PASS
		74	23.05	23.92	24.22	-2.50	-0.35	20.55	21.42	21.72	34.77	PASS
	36	0	23.20	22.20	22.95	-2.50	-0.35	20.70	19.70	20.45	34.77	PASS
		18	22.82	22.28	23.19	-2.50	-0.35	20.32	19.78	20.69	34.77	PASS
		39	22.27	22.52	23.28	-2.50	-0.35	19.77	20.02	20.78	34.77	PASS
	75	0	22.74	22.33	23.09	-2.50	-0.35	20.24	19.83	20.59	34.77	PASS
	23.78		22.53	23.23	-2.50	-0.35	21.28	20.03	20.73	34.77	PASS	
	16QAM	1	38	23.03	22.39	23.89	-2.50	-0.35	20.53	19.89	21.39	34.77
74			22.38	23.18	23.70	-2.50	-0.35	19.88	20.68	21.20	34.77	PASS
36			0	22.25	21.31	22.08	-2.50	-0.35	19.75	18.81	19.58	34.77
		18	21.92	21.33	22.31	-2.50	-0.35	19.42	18.83	19.81	34.77	PASS
		39	21.38	21.64	22.39	-2.50	-0.35	18.88	19.14	19.89	34.77	PASS
75		0	21.85	21.45	22.18	-2.50	-0.35	19.35	18.95	19.68	34.77	PASS

Note:
1) dBd = dBi - 2.15
2) EIRP = Conducted output power + Antenna gain (dBi)
3) ERP = Conducted output power + Antenna gain (dBd)



Test Band: 71 20MHz Bandwidth												
Modulation	RB Allocation		Conducted Power (dBm)			Antenna gain		ERP(dBm)			Limit (dBm)	Verdict
	Size	Offset	LCH	MCH	HCH	(dBd)	(dBi)	LCH	MCH	HCH		
QPSK	1	0	24.39	23.55	23.19	-2.50	-0.35	21.89	21.05	20.69	34.77	PASS
		50	23.33	23.22	24.06	-2.50	-0.35	20.83	20.72	21.56	34.77	PASS
		99	23.27	24.21	24.24	-2.50	-0.35	20.77	21.71	21.74	34.77	PASS
	50	0	22.95	22.28	22.52	-2.50	-0.35	20.45	19.78	20.02	34.77	PASS
		25	22.47	22.31	23.06	-2.50	-0.35	19.97	19.81	20.56	34.77	PASS
		50	22.18	22.67	23.26	-2.50	-0.35	19.68	20.17	20.76	34.77	PASS
	100	0	22.57	22.46	22.96	-2.50	-0.35	20.07	19.96	20.46	34.77	PASS
	23.92		22.78	22.46	-2.50	-0.35	21.42	20.28	19.96	34.77	PASS	
	16QAM	1	50	22.88	22.42	23.34	-2.50	-0.35	20.38	19.92	20.84	34.77
99			22.84	23.46	23.47	-2.50	-0.35	20.34	20.96	20.97	34.77	PASS
50			0	22.00	21.32	21.59	-2.50	-0.35	19.50	18.82	19.09	34.77
		25	21.50	21.33	22.11	-2.50	-0.35	19.00	18.83	19.61	34.77	PASS
		50	21.30	21.67	22.31	-2.50	-0.35	18.80	19.17	19.81	34.77	PASS
100		0	21.63	21.52	22.01	-2.50	-0.35	19.13	19.02	19.51	34.77	PASS
Note:												
1) dBd = dBi - 2.15												
2) EIRP = Conducted output power + Antenna gain (dBi)												
3) ERP = Conducted output power + Antenna gain (dBd)												



9.2 SAR Test Exclusions Applied

Per FCC KDB 447498D01, the 1-g SAR and 10-g SAR test exclusion thresholds for 100 MHz to 6 GHz at test separation distances ≤ 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 and ≤ 7.5 for 10-g extremity 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

When the minimum test separation distance is < 5 mm, a distance of 5 mm is applied to determine SAR test exclusion.

$$\frac{\text{Max Power of Channel (mW)}}{\text{Test Separation Dist (mm)}} * \sqrt{\text{Frequency (GHz)}} \leq 3.0$$

Based on the maximum conducted power of **Bluetooth** (rounded to the nearest mW) and the antenna to user separation distance,

Bluetooth SAR was not required; $[(9.29/5) * \sqrt{2.441}] = 2.91 < 3.0$.

11. EUT and Test Setup Photo

11.1 EUT Photo

Front side



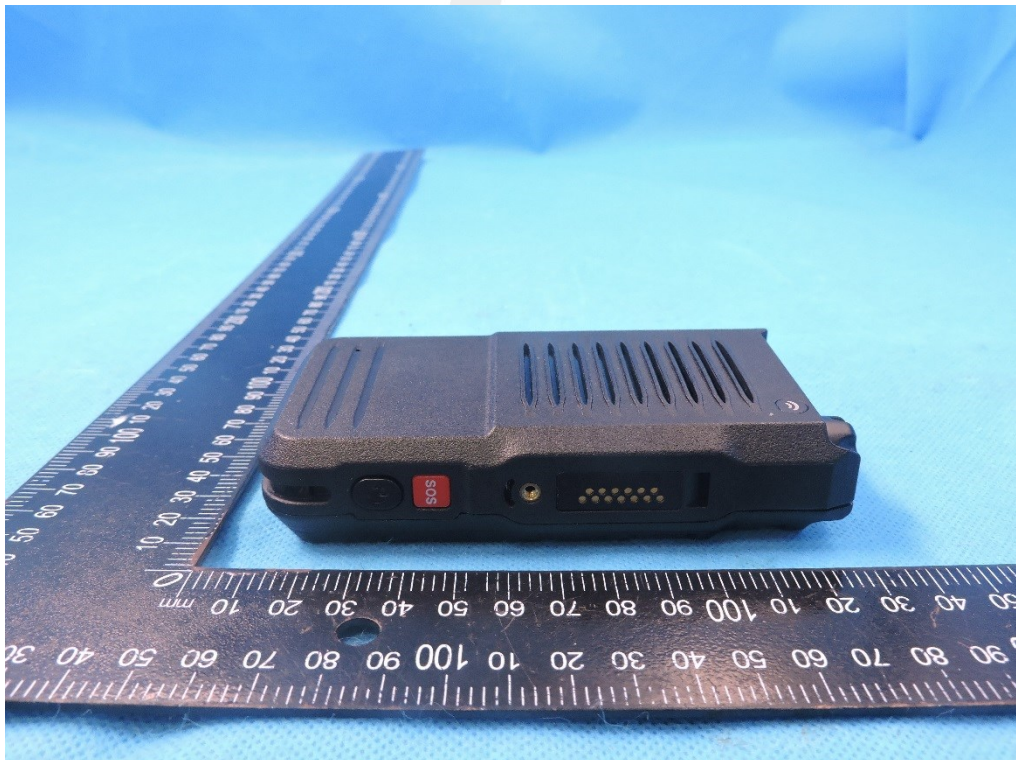
Back side



Left Edge



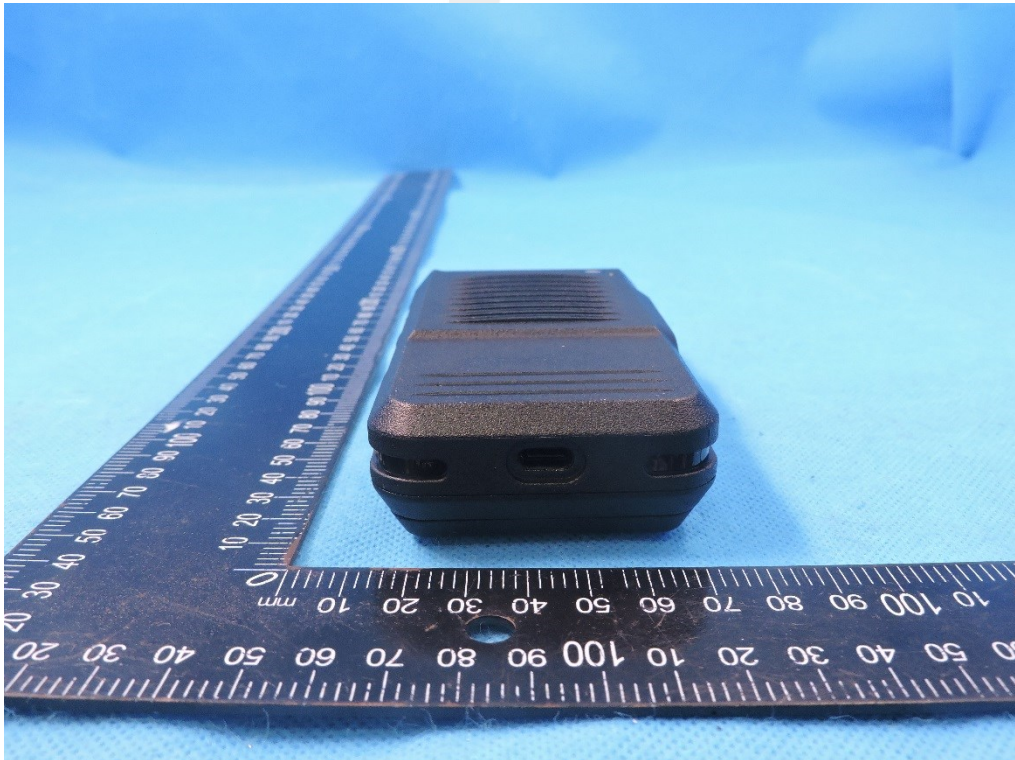
Right Edge



Top Edge

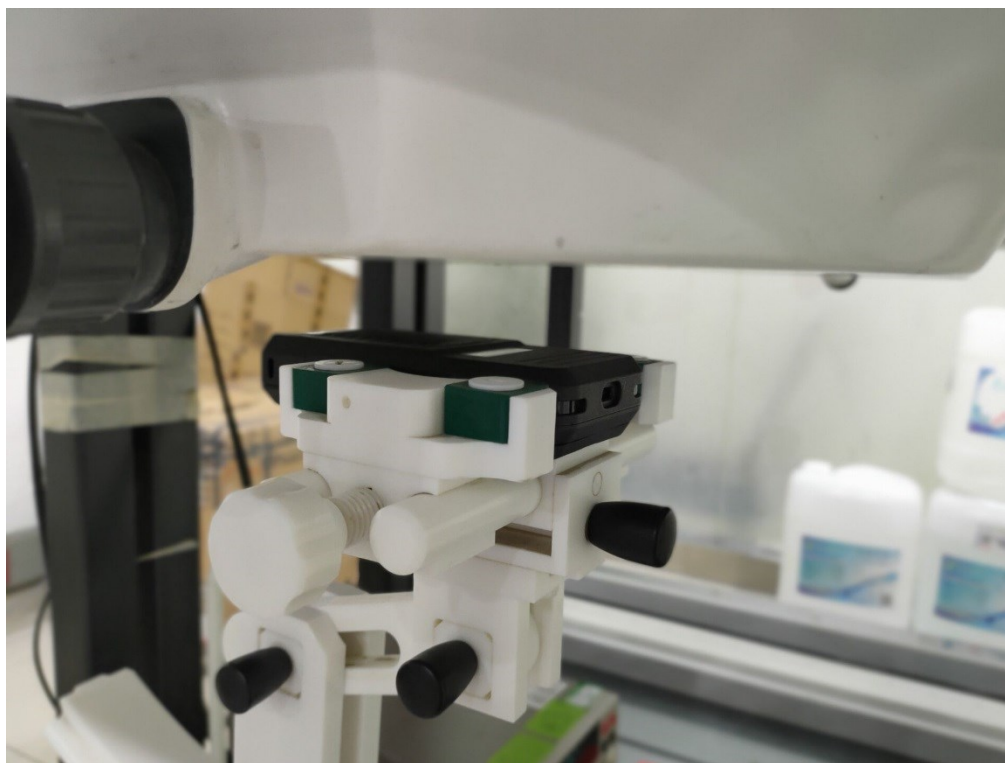


Bottom Edge

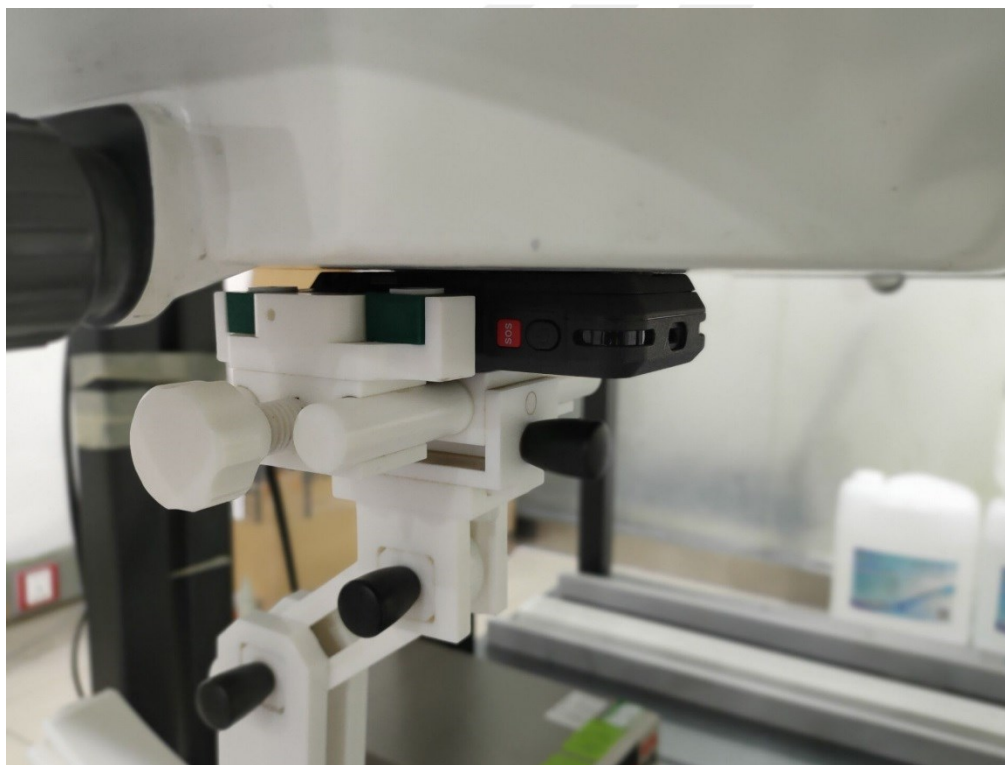


11.2 Setup Photo

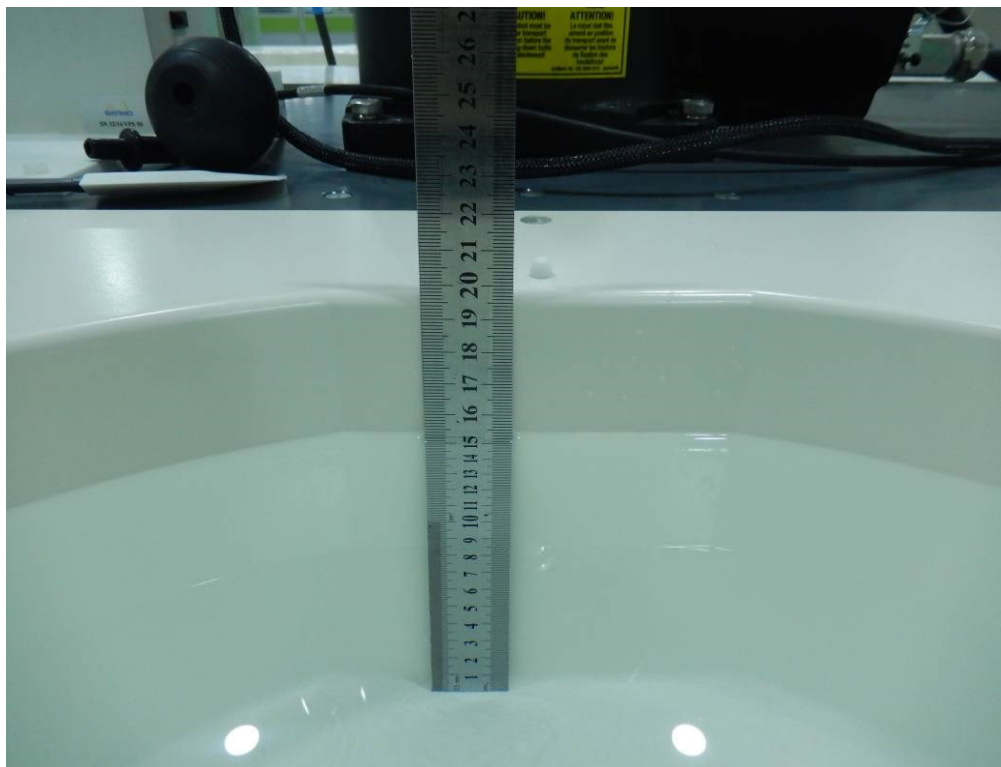
Front of face(25mm)



Body Back(0mm)



Liquid depth (15 cm)





12. SAR Result Summary

12.1 Front of face SAR

Band	Model	Test Position	Frequency (MHz)	SAR (1g) (W/kg)	Power Drift(%)	Max.Turn-up Power(dBm)	Meas.Output Power(dBm)	Scaled SAR (W/Kg)	Meas.No.
WCDMA Band II	RMC	Front Side	1852.4	0.082	-0.55	24.50	24.07	0.091	1
WCDMA Band V	RMC	Front Side	846.6	0.113	1.97	24.50	24.14	0.123	3
WCDMA Band IV	RMC	Front Side	1752.4	0.134	-0.85	24.50	24.35	0.139	5
2.4GHz WLAN	802.11b	Front Side	2437	0.005	0.98	16.50	16.47	0.005	7
5.2GHz WLAN	802.11a	Front Side	5240	0.057	1.29	10.50	10.13	0.062	9
5.3GHz WLAN	802.11a	Front Side	5260	0.062	3.73	8.50	8.34	0.064	11
5.6GHz WLAN	802.11a	Front Side	5580	0.067	0.64	10.00	9.88	0.069	13
5.8GHz WLAN	802.11a	Front Side	5745	0.074	-0.90	8.50	8.09	0.081	15



Band	BW (MHz)	Mod.	RB Size	RB offset	Test Position	Frequency (MHz)	Result 1g (W/Kg)	Power Drift(%)	Max. Turn-up Power(dBm)	Meas. Output Power(dBm)	Scaled SAR (W/Kg)	Meas.No.
LTE Band 2	20M	QPSK	1	0	Front side	1860	0.183	3.47	22.00	21.70	0.196	17
			50	50	Front side	1860	0.175	-0.55	20.50	20.35	0.181	/
LTE Band 4	20M	QPSK	1	0	Front side	1732.5	0.146	2.62	21.50	21.28	0.154	19
			50	50	Front side	1720	0.135	1.28	20.50	20.31	0.141	/
LTE Band 5	10M	QPSK	1	25	Front side	844	0.119	-1.32	24.50	24.35	0.123	21
			25	13	Front side	844	0.11	0.02	23.50	23.37	0.113	/
LTE Band 7	20M	QPSK	1	50	Front side	2535	0.021	-3.98	23.00	22.82	0.022	0.145
			50	50	Front side	2535	0.018	-0.82	22.50	21.80	0.021	/
LTE Band 12	10M	QPSK	1	0	Front side	704	0.047	1.36	21.50	21.06	0.052	25
			25	0	Front side	704	0.042	-3.77	20.00	19.89	0.043	/
LTE Band 13	10M	QPSK	1	25	Front side	782	0.139	-1.53	22.00	21.81	0.145	27
			25	13	Front side	782	0.135	1.46	21.00	20.83	0.140	/
LTE Band 14	10M	QPSK	1	25	Front side	793	0.121	-3.17	24.00	23.58	0.133	29
			25	0	Front side	793	0.117	0.52	23.50	23.06	0.129	/
LTE Band 17	10M	QPSK	1	49	Front side	711	0.124	-0.17	24.00	23.81	0.130	31
			25	25	Front side	711	0.116	1.41	23.00	22.50	0.130	/
LTE Band 25	20M	QPSK	1	0	Front side	1882.5	0.137	-2.83	22.00	21.87	0.141	33
			50	25	Front side	1860	0.134	-0.79	20.50	20.26	0.142	/
LTE Band 26	15M	QPSK	1	74	Front side	831.5	0.046	-2.11	24.50	24.14	0.050	35
			36	39	Front side	841.5	0.042	-3.47	23.50	23.19	0.045	/
LTE Band 41	20M	QPSK	1	99	Front side	2506	0.185	2.19	23.00	22.75	0.196	/
					Front side	2593	0.191	1.76	23.00	22.85	0.198	37
					Front side	2680	0.158	-1.15	23.00	22.36	0.183	/
			50	50	Front side	2593	0.184	0.71	22.50	22.17	0.199	/
LTE Band 66	20M	QPSK	1	50	Front side	1720	0.119	-0.56	21.50	21.43	0.121	39
			50	50	Front side	1720	0.115	3.44	20.50	20.34	0.119	/
LTE Band 71	20M	QPSK	1	0	Front side	673	0.145	2.18	24.50	24.39	0.149	41
			50	50	Front side	688	0.139	2.46	23.50	23.26	0.147	/



Note:

1. Per KDB 447498 D01, the reported SAR is the measured SAR value adjusted for maximum tune-up tolerance.
 - a. Tune-up scaling Factor = tune-up limit power (mW) / EUT RF power (mW), where tune-up limit is the maximum rated power among all production units.
 - b. For WWAN: Scaled SAR(W/kg)= Measured SAR(W/kg)*Tune-up Scaling Factor
2. Per KDB 248227- When the highest reported SAR for DSSS is adjusted by the ratio of OFDM to DSSS specified maximum output power and the adjusted SAR is ≤ 1.2 W/kg. (The highest reported SAR for DSSS is adjusted by the ratio of OFDM to DSSS specified maximum output power was **0.009** W/Kg for Front of face)
3. Per KDB865664 D01, Repeated measurement is not required when the original highest measured SAR is <0.80 W/kg



**12.2 Body SAR**

Band	Model	Test Position	Frequency (MHz)	SAR (10g) (W/kg)	Power Drift(%)	Max.Turn-up Power(dBm)	Meas.Output Power(dBm)	Scaled SAR (W/Kg)	Meas.No.
WCDMA Band II	RMC	Back Side	1852.4	0.880	1.82	24.50	24.07	0.972	2
		Back Side	1880	0.719	-1.2	24.5	23.22	0.965	/
		Back Side	1907.6	0.795	3.42	24.5	23.78	0.938	/
WCDMA Band V	RMC	Back Side	826.4	0.698	-1.56	24.5	23.22	0.937	/
		Back Side	836.6	0.795	0.93	24.5	23.91	0.911	/
		Back Side	846.6	0.856	0.56	24.50	24.14	0.930	4
WCDMA Band IV	RMC	Back Side	1752.4	0.314	1.21	24.50	24.35	0.325	6
2.4GHz WLAN	802.11b	Back Side	2437	0.065	-1.34	16.50	16.47	0.065	8
5.2GHz WLAN	802.11a	Back Side	5240	0.324	3.96	10.50	10.13	0.353	10
5.3GHz WLAN	802.11a	Back Side	5260	0.378	3.26	8.50	8.34	0.392	12
5.6GHz WLAN	802.11a	Back Side	5580	0.391	-2.97	10.00	9.88	0.402	14
5.8GHz WLAN	802.11a	Back Side	5745	0.262	0.96	8.50	8.09	0.288	16



Band	BW (MHz)	Mod.	RB Size	RB offset	Test Position	Frequency (MHz)	Result 10g (W/Kg)	Power Drift(%)	Max. Turn-up Power(dBm)	Meas. Output Power(dBm)	Scaled SAR (W/Kg)	Meas.No.
LTE Band 2	20M	QPSK	1	0	Back Side	1860	1.084	1.26	22.00	21.70	1.162	18
					Back Side	1880	0.582	3.68	22.00	19.08	1.140	/
					Back Side	1900	0.924	-3.94	22.00	21.03	1.155	/
			50	50	Back Side	1860	1.004	-0.20	20.50	20.35	1.039	/
					Back Side	1880	0.659	0.51	20.5	18.63	1.014	/
					Back Side	1900	0.875	0.94	20.5	19.9	1.005	/
			100	0	Back Side	1860	0.985	2.11	20.50	20.29	1.034	/
					Back Side	1880	0.812	-0.57	20.5	19.49	1.025	/
					Back Side	1900	0.800	0.19	20.5	19.39	1.033	/
LTE Band 4	20M	QPSK	1	0	Back Side	1720	0.798	-0.20	21.50	20.15	1.089	/
					Back Side	1732.5	1.06	3.47	21.50	21.28	1.115	20
					Back Side	1745	0.758	-2.88	21.50	20.75	0.901	/
			50	50	Back Side	1720	0.987	3.65	20.50	20.31	1.031	/
					Back Side	1732.5	0.815	2.19	20.5	19.82	0.953	/
					Back Side	1745	0.906	-1.37	20.5	20.16	0.980	/
			100	0	Back Side	1720	0.958	-1.61	20.50	20.08	1.055	/
					Back Side	1732.5	0.931	1.75	20.5	20.03	1.037	/
					Back Side	1745	0.922	0.99	20.5	20	1.035	/
LTE Band 5	10M	QPSK	1	25	Back Side	844	0.637	3.45	24.50	24.35	0.659	22
			25	13	Back Side	844	0.621	3.30	23.50	23.37	0.640	/
LTE Band 7	20M	QPSK	1	50	Back Side	2510	0.651	0.31	23	22.05	0.810	/
					Back Side	2535	0.785	-3.45	23	22.82	0.818	24
					Back Side	2560	0.605	1.58	23	21.85	0.788	/
			50	50	Back Side	2535	0.758	3.51	22	21.8	0.794	/
			100	0	Back Side	2535	0.705	0.86	22	21.58	0.777	/
LTE Band 12	10M	QPSK	1	0	Back Side	704	0.522	2.38	21.50	21.06	0.578	26
			25	0	Back Side	704	0.51	-3.94	20.00	19.89	0.523	/
LTE Band 13	10M	QPSK	1	25	Back Side	782	0.543	1.17	22.00	21.81	0.567	28
			25	13	Back Side	782	0.526	1.31	21.00	20.83	0.547	/
LTE Band 14	10M	QPSK	1	25	Back Side	793	0.759	2.26	24.00	23.58	0.836	30



			25	0	Back Side	793	0.748	-2.61	23.50	23.06	0.828	/
			50	0	Back Side	793	0.722	1.66	23	22.77	0.761	/
LTE Band 17	10M	QPSK	1	49	Back Side	711	0.456	-0.99	24.00	23.81	0.476	32
			25	25	Back Side	711	0.452	3.12	23.00	22.50	0.507	/
LTE Band 25	20M	QPSK	1	0	Back Side	1860	0.825	-0.19	21.90	21.67	0.870	/
					Back Side	1882.5	0.909	2.63	21.90	21.87	0.915	34
					Back Side	1905	0.556	-1.98	21.90	19.90	0.881	/
			50	25	Back Side	1860	0.845	-1.87	20.50	20.26	0.893	/
					Back Side	1882.5	0.801	0.45	20.5	20.04	0.890	/
					Back Side	1905	0.711	1.38	20.5	19.54	0.887	/
			100	0	Back Side	1860	0.824	-0.08	20.50	20.22	0.879	/
					Back Side	1882.5	0.652	0.92	20.5	19.23	0.873	/
					Back Side	1905	0.725	1.37	20.5	19.78	0.856	/
LTE Band 26	15M	QPSK	1	74	Back Side	831.5	0.637	1.90	24.50	24.14	0.692	36
			36	39	Back Side	841.5	0.624	3.09	23.50	23.19	0.670	/
LTE Band 41	20M	QPSK	1	99	Back Side	2593	0.431	-2.88	23.00	22.85	0.446	38
			50	50	Back Side	2593	0.412	-0.87	22.50	22.17	0.445	/
LTE Band 66	20M	QPSK	1	50	Back Side	1720	1.082	-0.10	21.50	21.43	1.100	40
					Back Side	1755	0.987	-0.14	21.50	21.33	1.026	/
					Back Side	1770	0.785	3.51	21.50	20.05	1.096	/
			50	50	Back Side	1720	1.020	-3.14	20.50	20.34	1.058	/
					Back Side	1755	0.957	1.69	20.5	20.28	1.007	/
					Back Side	1770	0.801	0.98	20.5	19.44	1.022	/
			100	0	Back Side	1720	0.984	2.16	20.50	20.11	1.076	/
					Back Side	1755	0.921	1.33	20.5	20.11	1.008	/
					Back Side	1770	0.771	1.95	20.5	19.09	1.067	/
LTE Band 71	20M	QPSK	1	0	Back Side	673	0.353	-3.54	24.50	24.39	0.362	42
			50	50	Back Side	688	0.35	-2.30	23.50	23.26	0.370	/

Note:

- The test separation of all above table is 0mm.
- Per KDB 447498 D01, the reported SAR is the measured SAR value adjusted for maximum tune-up tolerance.
 - Tune-up scaling Factor = tune-up limit power (mW) / EUT RF power (mW), where tune-up limit is the maximum rated power among all production units.
 - For WWAN: Scaled SAR(W/kg)= Measured SAR(W/kg)*Tune-up Scaling Factor
- Per KDB865664 D01, Repeated measurement is not required when the original highest measured SAR is <0.8 W/kg



Repeated SAR

Band	Mode	Test Position	Fre.(MHz)	Result 1g (W/Kg)	Power Drift(%)	Max.Turn-up Power(dBm)	Meas.Output Power(dBm)	Scaled SAR(W/Kg)	Meas. No.
WCDMA Band II	RMC	Back Side	1852.4	0.863	-2.53	24.5	24.07	0.953	-
		Back Side	1880	0.71	-3.59	24.5	23.22	0.953	-
		Back Side	1907.6	0.781	-1.34	24.5	23.78	0.922	-
WCDMA Band V	RMC	Back Side	826.4	0.688	-2.02	24.5	23.22	0.924	-
		Back Side	836.6	0.773	2.52	24.5	23.91	0.885	-
		Back Side	846.6	0.819	-1.41	24.5	24.14	0.890	-

Band	BW (MHz)	Mod.	RB Size	RB offset	Test Position	Frequency (MHz)	Result 1g (W/Kg)	Power Drift(%)	Max.Turn-up Power(dBm)	Meas.Output Power(dBm)	Scaled SAR(W/Kg)	Meas. No.
LTE Band 2	20M	QPSK	1	0	Back Side	1860	1.056	-0.95	22	21.7	1.132	-
					Back Side	1880	0.569	-2.19	22	19.08	1.115	-
					Back Side	1900	0.889	0.40	22	21.03	1.111	-
			50	50	Back Side	1860	1.003	-0.89	20.5	20.35	1.038	-
					Back Side	1880	0.645	0.45	20.5	18.63	0.992	-
					Back Side	1900	0.844	1.53	20.5	19.9	0.969	-
			100	0	Back Side	1860	0.984	3.36	20.5	20.29	1.033	-
					Back Side	1880	0.806	1.66	20.5	19.49	1.017	-
					Back Side	1900	0.798	-3.09	20.5	19.39	1.030	-
LTE Band 4	20M	QPSK	1	0	Back Side	1720	0.784	-2.08	21.5	20.15	1.070	-
					Back Side	1732.5	1.034	-2.08	21.5	21.28	1.088	-
					Back Side	1745	0.727	-2.57	21.5	20.75	0.864	-
			50	50	Back Side	1720	0.973	3.04	20.5	20.31	1.017	-
					Back Side	1732.5	0.802	3.14	20.5	19.82	0.938	-
					Back Side	1745	0.904	-1.72	20.5	20.16	0.978	-
			100	0	Back Side	1720	0.939	-0.39	20.5	20.08	1.034	-
					Back Side	1732.5	0.901	2.20	20.5	20.03	1.004	-
					Back Side	1745	0.921	-2.77	20.5	20	1.033	-
LTE Band 7	20M	QPSK	1	50	Back Side	2510	0.631	-1.29	23	22.05	0.785	-
					Back Side	2535	0.754	-3.71	23	22.82	0.786	-
LTE Band 14	10M	QPSK	1	25	Back Side	793	0.756	-3.26	24	23.58	0.833	-
			25	0	Back Side	793	0.745	-2.63	23.5	23.06	0.824	-
LTE Band 25	20M	QPSK	1	0	Back Side	1860	0.786	-3.10	21.9	21.67	0.829	-
					Back Side	1882.5	0.876	-1.77	21.9	21.87	0.882	-
					Back Side	1905	0.539	-0.78	21.9	19.9	0.854	-
			50	25	Back Side	1860	0.803	-1.23	20.5	20.26	0.849	-
					Back Side	1882.5	0.775	0.53	20.5	20.04	0.862	-
					Back Side	1905	0.683	0.14	20.5	19.54	0.852	-
			100	0	Back Side	1860	0.815	3.11	20.5	20.22	0.869	-
					Back Side	1882.5	0.622	-0.61	20.5	19.23	0.833	-
					Back Side	1905	0.721	-1.07	20.5	19.78	0.851	-



LTE Band 66	20M	QPSK	1	50	Back Side	1720	1.072	-0.28	21.5	21.43	1.089	-
					Back Side	1755	0.951	0.65	21.5	21.33	0.989	-
					Back Side	1770	0.771	0.60	21.5	20.05	1.077	-
			50	50	Back Side	1720	1.013	1.72	20.5	20.34	1.051	-
					Back Side	1755	0.933	-0.62	20.5	20.28	0.981	-
					Back Side	1770	0.799	-0.78	20.5	19.44	1.020	-
			100	0	Back Side	1720	0.939	2.91	20.5	20.11	1.027	-
					Back Side	1755	0.920	-1.33	20.5	20.11	1.006	-
					Back Side	1770	0.770	0.10	20.5	19.09	1.065	-





12.2 repeated SAR measurement

Band	Mode	Test Position	Ch.	Original Measured SAR 1g(W/kg)	1 st Repeated SAR 1g	Ratio	Original Measured SAR 1g(W/kg)	2nd Repeated SAR 1g	Ratio
WCDMA Band II	RMC	Back Side	1852.4	0.880	0.863	1.020	-	-	-
		Back Side	1880	0.719	0.71	1.013	-	-	-
		Back Side	1907.6	0.795	0.781	1.018	-	-	-
WCDMA Band V	RMC	Back Side	826.4	0.698	0.688	1.015	-	-	-
		Back Side	836.6	0.795	0.773	1.028	-	-	-
		Back Side	846.6	0.856	0.819	1.045	-	-	-

Band	BW (MHz)	Mod.	RB Size	RB offset	Test Position	Frequency (MHz)	Original Measured SAR 1g(W/kg)	1 st Repeated SAR 1g	Ratio	Original Measured SAR 1g(W/kg)	2nd Repeated SAR 1g	Ratio
LTE Band 2	20M	QPSK	1	0	Back Side	1860	1.084	1.056	1.027	-	-	-
					Back Side	1880	0.582	0.569	1.023	-	-	-
					Back Side	1900	0.924	0.889	1.039	-	-	-
			50	50	Back Side	1860	1.004	1.003	1.001	-	-	-
					Back Side	1880	0.659	0.645	1.022	-	-	-
					Back Side	1900	0.875	0.844	1.037	-	-	-
			100	0	Back Side	1860	0.985	0.984	1.001	-	-	-
					Back Side	1880	0.812	0.806	1.007	-	-	-
					Back Side	1900	0.8	0.798	1.003	-	-	-
LTE Band 4	20M	QPSK	1	0	Back Side	1720	0.798	0.784	1.018	-	-	-
					Back Side	1732.5	1.06	1.034	1.025	-	-	-
					Back Side	1745	0.758	0.727	1.043	-	-	-
			50	50	Back Side	1720	0.987	0.973	1.014	-	-	-
					Back Side	1732.5	0.815	0.802	1.016	-	-	-
					Back Side	1745	0.906	0.904	1.002	-	-	-
			100	0	Back Side	1720	0.958	0.939	1.020	-	-	-
					Back Side	1732.5	0.931	0.901	1.033	-	-	-
					Back Side	1745	0.922	0.921	1.001	-	-	-
LTE Band 7	20M	QPSK	1	50	Back Side	2510	0.651	0.631	1.032	-	-	-
					Back Side	2535	0.785	0.754	1.041	-	-	-
LTE Band 14	10M	QPSK	1	25	Back Side	793	0.759	0.756	1.004	-	-	-
			25	0	Back Side	793	0.748	0.745	1.004	-	-	-
LTE Band 25	20M	QPSK	1	0	Back Side	1860	0.786	0.631	1.246	-	-	-
					Back Side	1882.5	0.876	0.754	1.162	-	-	-
					Back Side	1905	0.539	0.756	0.713	-	-	-
			50	25	Back Side	1860	0.803	0.745	1.078	-	-	-
					Back Side	1882.5	0.775	0.645	1.202	-	-	-
					Back Side	1905	0.683	0.844	0.809	-	-	-
			100	0	Back Side	1860	0.815	0.984	0.828	-	-	-
					Back Side	1882.5	0.622	0.806	0.772	-	-	-
					Back Side	1905	0.721	0.798	0.904	-	-	-



LTE Band 66	20M	QPSK	1	50	Back Side	1720	1.072	0.784	1.367	-	-	-
					Back Side	1755	0.951	1.034	0.920	-	-	-
					Back Side	1770	0.771	0.727	1.061	-	-	-
			50	50	Back Side	1720	1.013	0.973	1.041	-	-	-
					Back Side	1755	0.933	0.802	1.163	-	-	-
					Back Side	1770	0.799	0.904	0.884	-	-	-
			100	0	Back Side	1720	0.939	0.939	1.000	-	-	-
					Back Side	1755	0.92	0.901	1.021	-	-	-
					Back Side	1770	0.77	0.921	0.836	-	-	-

Note:

1. Per KDB 865664 D01, for each frequency band, repeated SAR measurement is required only when the measured SAR is $\geq 0.8\text{W/Kg}$.
2. Per KDB 865664 D01, if the ratio of largest to smallest SAR for the original and first repeated measurement is ≤ 1.2 and the measured SAR $< 1.45\text{W/Kg}$, only one repeated measurement is required.
3. Perform a second repeated measurement only if the ratio of largest to smallest SAR for the original and first repeated measurements is > 1.20 or when the original or repeated measurement is $\geq 1.45\text{W/Kg}$.
4. The ratio is the difference in percentage between original and repeated measured SAR.

**Simultaneous Multi-band Transmission Evaluation:**

Application Simultaneous Transmission information:

Position	Simultaneous State
Front of face	1.GSM+ 2.4G/5G WLAN
	2.GSM+Bluetooth
	3.WCDMA+ 2.4G/5G WLAN
	4.WCDMA+Bluetooth
	5.LTE+ 2.4G/5G WLAN
	6.LTE+Bluetooth
Body	1.GSM+ 2.4G/5G WLAN
	2.GSM+Bluetooth
	3.WCDMA+ 2.4G/5G WLAN
	4.WCDMA+Bluetooth
	5.LTE+ 2.4G/5G WLAN
	6.LTE+Bluetooth

NOTE:

1. Bluetooth and WLAN can't simultaneous transmission at the same time.
2. For simultaneous transmission at head and body exposure position, 2 transmitters simultaneous transmission was the worst state.
3. Based upon KDB 447498 D01, BT SAR is excluded as below table.
4. If the test separation distance is <5mm, 5mm is used for excluded SAR calculation.
5. For minimum test separation distance $\leq 50\text{mm}$, Bluetooth standalone SAR is excluded according to $[(\text{max. power of channel, including tune-up tolerance, mW}) / (\text{min. test separation distance, mm})] \cdot [\sqrt{f} (\text{GHz}) / x] \leq 3.0$ for 1-g SAR and ≤ 7.5 for 10-g extremity SAR
6. The reported SAR summation is calculated based on the same configuration and test position.
7. KDB 447498 / 4.3.2 (2) 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:
 - a) $(\text{max. power of channel, including tune-up tolerance, mW}) / (\text{min. test separation distance, mm}) \cdot [\sqrt{f} (\text{GHz}) / x] \text{ W/kg}$ for test separation distances $\leq 50 \text{ mm}$;
Where $x = 7.5$ for 1-g SAR, and $x = 18.75$ for 10-g SAR.
 - b) 0.4W/Kg for 1-g SAR and 1.0W/Kg for 10-g SAR, when the separation distance is $>50\text{mm}$.

Estimated SAR		Maximum Power		Antenna to user(mm)	Frequency(GHz)	Stand Alone SAR(1g) [W/kg]
		dBm	mW			
BT	Front of face	9.7	9.333	≤ 5	2.441	0.389
	Body			≤ 5	2.441	0.389



Simultaneous Mode	Position	Mode	Max. 1-g SAR	1-g Sum SAR
			(W/kg)	(W/kg)
WCDMA + 2.4G WLAN	Front of face	WCDMA	0.139	0.144
		2.4G WLAN	0.005	
	Body	WCDMA	0.972	1.037
		2.4G WLAN	0.065	
WCDMA + BT	Front of face	WCDMA	0.139	0.528
		BT	0.389	
	Body	WCDMA	0.972	1.361
		BT	0.389	
WCDMA + 5.2G WLAN	Front of face	WCDMA	0.139	0.201
		5.2G WLAN	0.062	
	Body	WCDMA	0.972	1.325
		5.2G WLAN	0.353	
WCDMA + 5.3G WLAN	Front of face	WCDMA	0.139	0.203
		5.3G WLAN	0.064	
	Body	WCDMA	0.972	1.364
		5.3G WLAN	0.392	
WCDMA + 5.6G WLAN	Front of face	WCDMA	0.139	0.208
		5.6G WLAN	0.069	
	Body	WCDMA	0.972	1.374
		5.6G WLAN	0.402	
WCDMA + 5.8G WLAN	Front of face	WCDMA	0.139	0.22
		5.8G WLAN	0.081	
	Body	WCDMA	0.972	1.26
		5.8G WLAN	0.288	
LTE + 2.4G WLAN	Front of face	LTE	0.198	0.203
		2.4G WLAN	0.005	
	Body	LTE	1.162	1.227
		2.4G WLAN	0.065	
LTE +BT	Front of face	LTE	0.198	0.587
		BT	0.389	
	Body	LTE	1.162	1.551
		BT	0.389	