



# BUREAU VERITAS FCC SAR Test Report



Plot No.	Band	Mode	Test Position	Ch.	RB#	RB Offset	Power Reduction	Antenna	Sample	Duty Cycle %	Max. Tune-up Power (dBm)	Measured Conducted Power (dBm)	Power Drift (dB)	Measured SAR-1g (W/kg)	Duty Cycle Scaling Factor	Tune-up Scaling Factor	Scaled SAR-1g (W/kg)
	LTE 7	QPSK20M	Left Cheek	20850	50	25	Reduce	Ant4	1	-	18.50	17.07	-0.01	0.463	1.000	1.390	0.64
	LTE 7	QPSK20M	Left Tilted	20850	50	25	Reduce	Ant4	1	-	18.50	17.07	0.03	0.515	1.000	1.390	0.72
	LTE 7	QPSK20M	Right Cheek	21100	1	50	Reduce	Ant4	1	-	18.50	17.11	0.11	0.596	1.000	1.377	0.82
	LTE 7	QPSK20M	Right Cheek	21350	1	50	Reduce	Ant4	1	-	18.50	17.07	0.03	0.584	1.000	1.390	0.81
	LTE 7	QPSK20M	Right Tilted	21100	1	50	Reduce	Ant4	1	-	18.50	17.11	0.05	0.786	1.000	1.377	1.08
	LTE 7	QPSK20M	Right Tilted	21350	1	50	Reduce	Ant4	1	-	18.50	17.07	-0.19	0.752	1.000	1.390	1.05
	LTE 7	QPSK20M	Left Cheek	21100	1	50	Reduce	Ant4	1	-	18.50	17.11	-0.15	0.559	1.000	1.377	0.77
	LTE 7	QPSK20M	Left Cheek	21350	1	50	Reduce	Ant4	1	-	18.50	17.07	0.07	0.401	1.000	1.390	0.56
	LTE 7	QPSK20M	Left Tilted	21100	1	50	Reduce	Ant4	1	-	18.50	17.11	-0.01	0.472	1.000	1.377	0.65
	LTE 7	QPSK20M	Left Tilted	21350	1	50	Reduce	Ant4	1	-	18.50	17.07	-0.15	0.551	1.000	1.390	0.77
	LTE 7	QPSK20M	Right Cheek	21100	50	25	Reduce	Ant4	1	-	18.50	17.08	0.08	0.616	1.000	1.387	0.85
	LTE 7	QPSK20M	Right Cheek	21350	50	25	Reduce	Ant4	1	-	18.50	16.99	0.01	0.595	1.000	1.416	0.84
	LTE 7	QPSK20M	Right Tilted	21100	50	25	Reduce	Ant4	1	-	18.50	17.08	0.06	0.780	1.000	1.387	1.08
	LTE 7	QPSK20M	Right Tilted	21350	50	25	Reduce	Ant4	1	-	18.50	16.99	-0.11	0.680	1.000	1.416	0.96
	LTE 7	QPSK20M	Left Cheek	21100	50	25	Reduce	Ant4	1	-	18.50	17.08	-0.03	0.557	1.000	1.387	0.77
	LTE 7	QPSK20M	Left Cheek	21350	50	25	Reduce	Ant4	1	-	18.50	16.99	0.09	0.418	1.000	1.416	0.59
	LTE 7	QPSK20M	Left Tilted	21100	50	25	Reduce	Ant4	1	-	18.50	17.08	-0.03	0.648	1.000	1.387	0.90
	LTE 7	QPSK20M	Left Tilted	21350	50	25	Reduce	Ant4	1	-	18.50	16.99	0.05	0.569	1.000	1.416	0.81
	LTE 7	QPSK20M	Right Cheek	20850	100	0	Reduce	Ant4	1	-	18.50	16.96	0.06	0.622	1.000	1.426	0.89
	LTE 7	QPSK20M	Right Tilted	20850	100	0	Reduce	Ant4	1	-	18.50	16.96	-0.01	0.731	1.000	1.426	1.04
	LTE 7	QPSK20M	Left Cheek	20850	100	0	Reduce	Ant4	1	-	18.50	16.96	-0.04	0.439	1.000	1.426	0.63
	LTE 7	QPSK20M	Left Tilted	20850	100	0	Reduce	Ant4	1	-	18.50	16.96	-0.01	0.599	1.000	1.426	0.85
	LTE 7C	QPSK20M	Right Tilted	PCC:20850 SCC:21048	PCC:1 SCC:0	PCC:50 SCC:0	Reduce	Ant4	1	-	18.50	17.07	-0.10	0.759	1.000	1.390	1.05
	LTE 7	QPSK20M	Right Tilted	20850	50	25	Reduce	Ant4	2	-	18.50	17.07	0.14	0.745	1.000	1.390	1.04
	LTE 38	QPSK20M	Right Cheek	38150	1	50	Full	Ant0	1	62.9	25.50	24.16	0.02	0.116	1.006	1.361	0.16
	LTE 38	QPSK20M	Right Tilted	38150	1	50	Full	Ant0	1	62.9	25.50	24.16	0.00	0.087	1.006	1.361	0.12
	LTE 38	QPSK20M	Left Cheek	38150	1	50	Full	Ant0	1	62.9	25.50	24.16	-0.10	0.230	1.006	1.361	0.32
	LTE 38	QPSK20M	Left Tilted	38150	1	50	Full	Ant0	1	62.9	25.50	24.16	0.04	0.098	1.006	1.361	0.13
	LTE 38	QPSK20M	Right Cheek	38150	50	50	Full	Ant0	1	62.9	24.50	23.00	-0.08	0.088	1.006	1.413	0.13
	LTE 38	QPSK20M	Right Tilted	38150	50	50	Full	Ant0	1	62.9	24.50	23.00	-0.06	0.065	1.006	1.413	0.09
	LTE 38	QPSK20M	Left Cheek	38150	50	50	Full	Ant0	1	62.9	24.50	23.00	0.03	0.178	1.006	1.413	0.25
	LTE 38	QPSK20M	Left Tilted	38150	50	50	Full	Ant0	1	62.9	24.50	23.00	-0.09	0.078	1.006	1.413	0.11
	LTE 38C	QPSK20M	Left Cheek	PCC:37952 SCC:38150	PCC:1 SCC:0	PCC:50 SCC:0	Full	Ant0	1	62.9	25.50	24.07	0.02	0.210	1.006	1.390	0.29
	LTE 38	QPSK20M	Right Cheek	38150	1	50	Reduce	Ant4	1	62.9	21.50	20.09	-0.02	0.486	1.006	1.384	0.68
	LTE 38	QPSK20M	Right Tilted	38150	1	50	Reduce	Ant4	1	62.9	21.50	20.09	0.04	0.633	1.006	1.384	0.88
	LTE 38	QPSK20M	Left Cheek	38150	1	50	Reduce	Ant4	1	62.9	21.50	20.09	-0.08	0.362	1.006	1.384	0.50
	LTE 38	QPSK20M	Left Tilted	38150	1	50	Reduce	Ant4	1	62.9	21.50	20.09	0.13	0.465	1.006	1.384	0.65
	LTE 38	QPSK20M	Right Cheek	38150	50	0	Reduce	Ant4	1	62.9	21.50	19.89	0.06	0.425	1.006	1.449	0.62
	LTE 38	QPSK20M	Right Tilted	38150	50	0	Reduce	Ant4	1	62.9	21.50	19.89	-0.05	0.633	1.006	1.449	0.92
	LTE 38	QPSK20M	Left Cheek	38150	50	0	Reduce	Ant4	1	62.9	21.50	19.89	-0.03	0.350	1.006	1.449	0.51
	LTE 38	QPSK20M	Left Tilted	38150	50	0	Reduce	Ant4	1	62.9	21.50	19.89	0.14	0.455	1.006	1.449	0.66
	LTE 38	QPSK20M	Right Cheek	37850	1	50	Reduce	Ant4	1	62.9	21.50	20.05	-0.02	0.547	1.006	1.396	0.77
	LTE 38	QPSK20M	Right Cheek	38000	1	50	Reduce	Ant4	1	62.9	21.50	20.04	-0.03	0.519	1.006	1.400	0.73
P06	LTE 38	QPSK20M	Right Tilted	37850	1	50	Reduce	Ant4	1	62.9	21.50	20.05	0.07	0.686	1.006	1.396	0.96
	LTE 38	QPSK20M	Right Tilted	38000	1	50	Reduce	Ant4	1	62.9	21.50	20.04	0.06	0.657	1.006	1.400	0.93
	LTE 38	QPSK20M	Right Tilted	37850	50	0	Reduce	Ant4	1	62.9	21.50	19.86	0.09	0.650	1.006	1.459	0.95
	LTE 38	QPSK20M	Right Tilted	38000	50	0	Reduce	Ant4	1	62.9	21.50	19.89	0.09	0.609	1.006	1.449	0.89
	LTE 38	QPSK20M	Right Cheek	38150	100	0	Reduce	Ant4	1	62.9	21.50	19.93	-0.06	0.481	1.006	1.435	0.69
	LTE 38	QPSK20M	Right Tilted	38150	100	0	Reduce	Ant4	1	62.9	21.50	19.93	0.02	0.640	1.006	1.435	0.92
	LTE 38C	QPSK20M	Right Tilted	PCC:37850 SCC:38048	PCC:1 SCC:0	PCC:50 SCC:0	Reduce	Ant4	1	62.9	21.50	20.04	-0.10	0.678	1.006	1.400	0.95
	LTE 38	QPSK20M	Right Tilted	37850	1	50	Reduce	Ant4	2	62.9	21.50	20.05	0.09	0.671	1.006	1.396	0.94
	LTE 41	QPSK20M	Right Cheek	39750	1	50	Full	Ant0	1	62.9	25.50	24.19	0.08	0.120	1.006	1.352	0.16
	LTE 41	QPSK20M	Right Tilted	39750	1	50	Full	Ant0	1	62.9	25.50	24.19	0.08	0.058	1.006	1.352	0.08
	LTE 41	QPSK20M	Left Cheek	39750	1	50	Full	Ant0	1	62.9	25.50	24.19	0.04	0.221	1.006	1.352	0.30
	LTE 41	QPSK20M	Left Tilted	39750	1	50	Full	Ant0	1	62.9	25.50	24.19	0.06	0.116	1.006	1.352	0.16
	LTE 41	QPSK20M	Right Cheek	39750	50	0	Full	Ant0	1	62.9	24.50	23.11	-0.11	0.091	1.006	1.377	0.13
	LTE 41	QPSK20M	Right Tilted	39750	50	0	Full	Ant0	1	62.9	24.50	23.11	-0.02	0.041	1.006	1.377	0.06
	LTE 41	QPSK20M	Left Cheek	39750	50	0	Full	Ant0	1	62.9	24.50	23.11	-0.07	0.163	1.006	1.377	0.23
	LTE 41	QPSK20M	Left Tilted	39750	50	0	Full	Ant0	1	62.9	24.50	23.11	-0.02	0.092	1.006	1.377	0.13
	LTE 41	QPSK20M	Right Cheek	39750	1	50	Reduce	Ant4	1	62.9	20.50	19.25	0.01	0.686	1.006	1.334	0.92
P07	LTE 41	QPSK20M	Right Tilted	39750	1	50	Reduce	Ant4	1	62.9	20.50	19.25	0.03	0.776	1.006	1.334	1.04
	LTE 41	QPSK20M	Left Cheek	39750	1	50	Reduce	Ant4	1	62.9	20.50	19.25	0.01	0.427	1.006	1.334	0.57
	LTE 41	QPSK20M	Left Tilted	39750	1	50	Reduce	Ant4	1	62.9	20.50	19.25	0.03	0.578	1.006	1.334	0.78
	LTE 41	QPSK20M	Right Cheek	39750	50	0	Reduce	Ant4	1	62.9	20.50	19.13	-0.03	0.639	1.006	1.371	0.88
	LTE 41	QPSK20M	Right Tilted	39750	50	0	Reduce	Ant4	1	62.9	20.50	19.13	0.01	0.750	1.006	1.371	1.03
	LTE 41	QPSK20M	Left Cheek	39750	50	0	Reduce	Ant4	1	62.9	20.50	19.13	0.07	0.467	1.006	1.371	0.64
	LTE 41	QPSK20M	Left Tilted	39750	50	0	Reduce	Ant4	1	62.9	20.50	19.13	-0.18	0.619	1.006	1.371	0.85
	LTE 41	QPSK20M	Right Cheek	40185	1	50	Reduce	Ant4	1	62.9	20.50	19.21	0.07	0.509	1.006	1.346	0.69
	LTE 41	QPSK20M	Right Cheek	40620	1	50	Reduce	Ant4	1	62.9	20.50	19.17	-0.15	0.480	1.006	1.358	0.65
	LTE 41	QPSK20M	Right Cheek	41055	1	50	Reduce	Ant4	1	62.9	20.50	19.11	-0.06	0.418	1.006	1.377	0.58
	LTE 41	QPSK20M	Right Cheek	41490	1	50	Reduce	Ant4	1	62.9	20.50	19.22	0.02	0.466	1.006	1.343	0.63
	LTE 41	QPSK20M	Right Tilted	40185	1	50	Reduce	Ant4	1	62.9	20.50	19.21	0.06	0.614	1.006	1.346	0.83
	LTE 41	QPSK20M	Right Tilted	40620	1	50	Reduce	Ant4	1	62.9	20.50	19.17	-0.06	0.588	1.006	1.358	0.80
	LTE 41	QPSK20M	Right Tilted	41055	1	50	Reduce	Ant4	1	62.9	20.50	19.11	0.08	0.553	1.006	1.377	0.76
	LTE 41	QPSK20M	Right Tilted	41490	1	50	Reduce	Ant4	1	62.9	20.50	19.22	0.02	0.503	1.006	1.343	0.68
	LTE 41	QPSK20M	Left Tilted	40185	1	50	Reduce	Ant4	1	62.9	20.50	19.21	0.06	0.430	1.006	1.346	0.58
	LTE 41	QPSK20M	Left Tilted	40620	1	50	Reduce	Ant4	1	62.9	20.50	19.17	-0				



Plot No.	Band	Mode	Test Position	Ch.	RB#	RB Offset	Power Reduction	Antenna	Sample	Duty Cycle %	Max. Tune-up Power (dBm)	Measured Conducted Power (dBm)	Power Drift (dB)	Measured SAR-1g (W/kg)	Duty Cycle Scaling Factor	Tune-up Scaling Factor	Scaled SAR-1g (W/kg)
	LTE 41	QPSK20M	Left Tilted	41055	1	50	Reduce	Ant4	1	62.9	20.50	19.11	-0.04	0.389	1.006	1.377	0.54
	LTE 41	QPSK20M	Left Tilted	41490	1	50	Reduce	Ant4	1	62.9	20.50	19.22	-0.08	0.330	1.006	1.343	0.44
	LTE 41	QPSK20M	Right Cheek	40185	50	0	Reduce	Ant4	1	62.9	20.50	18.99	-0.13	0.475	1.006	1.416	0.67
	LTE 41	QPSK20M	Right Cheek	40620	50	0	Reduce	Ant4	1	62.9	20.50	18.96	-0.14	0.455	1.006	1.426	0.65
	LTE 41	QPSK20M	Right Cheek	41055	50	0	Reduce	Ant4	1	62.9	20.50	18.92	0.02	0.396	1.006	1.439	0.57
	LTE 41	QPSK20M	Right Cheek	41490	50	0	Reduce	Ant4	1	62.9	20.50	18.97	0.17	0.359	1.006	1.422	0.51
	LTE 41	QPSK20M	Left Cheek	40185	50	0	Reduce	Ant4	1	62.9	20.50	18.99	0.06	0.356	1.006	1.416	0.50
	LTE 41	QPSK20M	Left Cheek	40620	50	0	Reduce	Ant4	1	62.9	20.50	18.96	-0.08	0.346	1.006	1.426	0.49
	LTE 41	QPSK20M	Left Cheek	41055	50	0	Reduce	Ant4	1	62.9	20.50	18.92	0.01	0.323	1.006	1.439	0.46
	LTE 41	QPSK20M	Left Cheek	41490	50	0	Reduce	Ant4	1	62.9	20.50	18.97	0.05	0.290	1.006	1.422	0.41
	LTE 41	QPSK20M	Left Tilted	40185	50	0	Reduce	Ant4	1	62.9	20.50	18.99	0.01	0.444	1.006	1.416	0.63
	LTE 41	QPSK20M	Left Tilted	40620	50	0	Reduce	Ant4	1	62.9	20.50	18.96	-0.03	0.408	1.006	1.426	0.58
	LTE 41	QPSK20M	Left Tilted	41055	50	0	Reduce	Ant4	1	62.9	20.50	18.92	0.03	0.387	1.006	1.439	0.56
	LTE 41	QPSK20M	Left Tilted	41490	50	0	Reduce	Ant4	1	62.9	20.50	18.97	0.09	0.328	1.006	1.422	0.47
	LTE 41	QPSK20M	Right Tilted	40185	50	0	Reduce	Ant4	1	62.9	20.50	18.99	0.06	0.609	1.006	1.416	0.86
	LTE 41	QPSK20M	Right Tilted	40620	50	0	Reduce	Ant4	1	62.9	20.50	18.96	-0.02	0.587	1.006	1.426	0.84
	LTE 41	QPSK20M	Right Tilted	41055	50	0	Reduce	Ant4	1	62.9	20.50	18.92	0.01	0.538	1.006	1.439	0.77
	LTE 41	QPSK20M	Right Tilted	41490	50	0	Reduce	Ant4	1	62.9	20.50	18.97	-0.04	0.466	1.006	1.422	0.66
	LTE 41	QPSK20M	Right Cheek	39750	100	0	Reduce	Ant4	1	62.9	20.50	19.06	0.04	0.598	1.006	1.393	0.84
	LTE 41	QPSK20M	Right Tilted	39750	100	0	Reduce	Ant4	1	62.9	20.50	19.06	-0.06	0.714	1.006	1.393	1.00
	LTE 41	QPSK20M	Left Tilted	39750	100	0	Reduce	Ant4	1	62.9	20.50	19.06	0.04	0.405	1.006	1.393	0.56
	LTE 41	QPSK20M	Right Tilted	39750	1	50	Reduce	Ant4	2	62.9	20.50	19.25	0.09	0.702	1.006	1.334	0.94
	WLAN2.4G	802.11b	Right Cheek	1	-	-	Reduce	Ant6	1	100	15.00	13.19	0.14	0.086	1.000	1.517	0.13
	WLAN2.4G	802.11b	Right Tilted	1	-	-	Reduce	Ant6	1	100	15.00	13.19	0.04	0.095	1.000	1.517	0.14
P08	WLAN2.4G	802.11b	Left Cheek	1	-	-	Reduce	Ant6	1	100	15.00	13.19	-0.04	0.278	1.000	1.517	0.42
	WLAN2.4G	802.11b	Left Tilted	1	-	-	Reduce	Ant6	1	100	15.00	13.19	0.01	0.168	1.000	1.517	0.25
	WLAN2.4G	802.11b	Left Cheek	1	-	-	Reduce	Ant6	2	100	15.00	13.19	-0.05	0.222	1.000	1.517	0.34
	WLAN5G	802.11a	Right Cheek	64	-	-	Reduce	Ant6	1	96.53	14.50	12.94	-0.02	0.199	1.036	1.432	0.30
P09	WLAN5G	802.11a	Right Tilted	64	-	-	Reduce	Ant6	1	96.53	14.50	12.94	0.02	0.250	1.036	1.432	0.37
	WLAN5G	802.11a	Left Cheek	64	-	-	Reduce	Ant6	1	96.53	14.50	12.94	0.05	0.109	1.036	1.432	0.16
	WLAN5G	802.11a	Left Tilted	64	-	-	Reduce	Ant6	1	96.53	14.50	12.94	0.04	0.060	1.036	1.432	0.09
	WLAN5G	802.11a	Right Tilted	64	-	-	Reduce	Ant6	2	96.53	14.50	12.94	0.14	0.222	1.036	1.432	0.33
	WLAN5G	802.11a	Right Cheek	140	-	-	Reduce	Ant6	1	96.53	16.50	14.70	0.02	0.230	1.036	1.514	0.36
	WLAN5G	802.11a	Right Tilted	140	-	-	Reduce	Ant6	1	96.53	16.50	14.70	0.06	0.282	1.036	1.514	0.44
P10	WLAN5G	802.11a	Left Cheek	140	-	-	Reduce	Ant6	1	96.53	16.50	14.70	0.03	0.321	1.036	1.514	0.50
	WLAN5G	802.11a	Left Tilted	140	-	-	Reduce	Ant6	1	96.53	16.50	14.70	0.09	0.211	1.036	1.514	0.33
	WLAN5G	802.11a	Left Cheek	140	-	-	Reduce	Ant6	2	96.53	16.50	14.70	0.05	0.297	1.036	1.514	0.47
	WLAN5G	802.11a	Right Cheek	149	-	-	Reduce	Ant6	1	96.53	16.00	14.40	0.11	0.206	1.036	1.445	0.31
P11	WLAN5G	802.11a	Right Tilted	149	-	-	Reduce	Ant6	1	96.53	16.00	14.40	0.02	0.262	1.036	1.445	0.39
	WLAN5G	802.11a	Left Cheek	149	-	-	Reduce	Ant6	1	96.53	16.00	14.40	0.02	0.259	1.036	1.445	0.39
	WLAN5G	802.11a	Left Tilted	149	-	-	Reduce	Ant6	1	96.53	16.00	14.40	0.05	0.166	1.036	1.445	0.25
	WLAN5G	802.11a	Right Tilted	149	-	-	Reduce	Ant6	2	96.53	16.00	14.40	0.04	0.244	1.036	1.445	0.37
	BT	GFSK	Right Cheek	0	-	-	Full	Ant6	1	76.88	11.50	9.51	0.01	0.042	1.301	1.581	0.09
	BT	GFSK	Right Tilted	0	-	-	Full	Ant6	1	76.88	11.50	9.51	0.01	0.029	1.301	1.581	0.06
P12	BT	GFSK	Left Cheek	0	-	-	Full	Ant6	1	76.88	11.50	9.51	-0.12	0.066	1.301	1.581	0.14
	BT	GFSK	Left Tilted	0	-	-	Full	Ant6	1	76.88	11.50	9.51	0.04	0.033	1.301	1.581	0.07
	BT	GFSK	Left Cheek	0	-	-	Full	Ant6	2	76.88	11.50	9.51	0.13	0.052	1.301	1.581	0.11

### 4.6.3 SAR Results for Body-worn Exposure Condition (Separation Distance is 1.0 cm Gap)

Plot No.	Band	Mode	Test Position	Separation Distance (cm)	Ch.	RB#	RB Offset	Power Reduction	Antenna	Sample	Duty Cycle %	Max. Tune-up Power (dBm)	Measured Conducted Power (dBm)	Power Drift (dB)	Measured SAR-1g (W/kg)	Duty Cycle Scaling Factor	Tune-up Scaling Factor	Scaled SAR-1g (W/kg)
	GSM850	GPRS 4Tx Slot	Front Face	1	251	-	-	Full	Ant0	1	-	29.50	28.87	-0.10	0.309	1.000	1.156	0.36
P13	GSM850	GPRS 4Tx Slot	Rear Face	1	251	-	-	Full	Ant0	1	-	29.50	28.87	0.09	0.502	1.000	1.156	0.58
	GSM850	GPRS 4Tx Slot	Rear Face	1	251	-	-	Full	Ant0	2	-	29.50	28.87	0.08	0.485	1.000	1.156	0.56
	GSM850	GPRS 4Tx Slot	Front Face	1	251	-	-	Full	Ant4	1	-	29.50	29.26	-0.09	0.188	1.000	1.057	0.20
	GSM850	GPRS 4Tx Slot	Rear Face	1	251	-	-	Full	Ant4	1	-	29.50	29.26	-0.13	0.391	1.000	1.057	0.41
	GSM1900	GPRS 4Tx Slot	Front Face	1	512	-	-	Full	Ant0	1	-	27.00	25.56	0.01	0.214	1.000	1.393	0.30
	GSM1900	GPRS 4Tx Slot	Rear Face	1	512	-	-	Full	Ant0	1	-	27.00	25.56	0.03	0.312	1.000	1.393	0.43
	GSM1900	GPRS 4Tx Slot	Front Face	1	512	-	-	Full	Ant4	1	-	27.00	25.93	0.04	0.295	1.000	1.279	0.38
P14	GSM1900	GPRS 4Tx Slot	Rear Face	1	512	-	-	Full	Ant4	1	-	27.00	25.93	0.00	0.494	1.000	1.279	0.63
	GSM1900	GPRS 4Tx Slot	Rear Face	1	512	-	-	Full	Ant4	2	-	27.00	25.93	0.04	0.479	1.000	1.279	0.61
	WCDMA V	RMC12.2K	Front Face	1	4233	-	-	Full	Ant0	1	-	25.50	24.14	-0.07	0.229	1.000	1.368	0.31
P15	WCDMA V	RMC12.2K	Rear Face	1	4233	-	-	Full	Ant0	1	-	25.50	24.14	0.02	0.378	1.000	1.368	0.52
	WCDMA V	RMC12.2K	Rear Face	1	4233	-	-	Full	Ant0	2	-	25.50	24.14	0.02	0.363	1.000	1.368	0.50
	WCDMA V	RMC12.2K	Front Face	1	4233	-	-	Full	Ant4	1	-	25.50	24.35	0.01	0.170	1.000	1.303	0.22
	WCDMA V	RMC12.2K	Rear Face	1	4233	-	-	Full	Ant4	1	-	25.50	24.35	0.05	0.350	1.000	1.303	0.46
	LTE 5	QPSK10M	Front Face	1	20600	1	24	Full	Ant0	1	-	25.50	24.23	0.07	0.246	1.000	1.340	0.33
	LTE 5	QPSK10M	Rear Face	1	20600	1	24	Reduce	Ant0	1	-	24.50	23.21	-0.01	0.315	1.000	1.346	0.42
	LTE 5	QPSK10M	Front Face	1	20600	25	12	Full	Ant0	1	-	24.50	23.29	0.08	0.201	1.000	1.321	0.27
	LTE 5	QPSK10M	Rear Face	1	20600	25	12	Reduce	Ant0	1	-	24.50	23.17	0.06	0.324	1.000	1.358	0.44
	LTE 5	QPSK10M	Rear Face	1.5	20600	1	24	Full	Ant0	1	-	25.50	24.23	-0.01	0.230	1.000	1.340	0.31



Plot No.	Band	Mode	Test Position	Separation Distance (cm)	Ch.	RB#	RB Offset	Power Reduction	Antenna	Sample	Duty Cycle %	Max. Tune-up Power (dBm)	Measured Conducted Power (dBm)	Power Drift (dB)	Measured SAR-1g (W/kg)	Duty Cycle Scaling Factor	Tune-up Scaling Factor	Scaled SAR-1g (W/kg)
	LTE 5	QPSK10M	Rear Face	1.5	20600	25	12	Full	Ant0	1	-	24.50	23.29	-0.03	0.189	1.000	1.321	0.25
	LTE 5	QPSK10M	Front Face	1	20525	1	24	Full	Ant4	1	-	25.50	24.30	0.00	0.153	1.000	1.318	0.20
P16	LTE 5	QPSK10M	Rear Face	1	20525	1	24	Full	Ant4	1	-	25.50	24.30	0.08	0.347	1.000	1.318	0.46
	LTE 5	QPSK10M	Front Face	1	20525	25	25	Full	Ant4	1	-	24.50	23.32	-0.14	0.125	1.000	1.312	0.16
	LTE 5	QPSK10M	Rear Face	1	20525	25	25	Full	Ant4	1	-	24.50	23.32	-0.11	0.263	1.000	1.312	0.35
	LTE 5	QPSK10M	Rear Face	1	20525	1	24	Full	Ant4	2	-	25.50	24.30	0.04	0.324	1.000	1.318	0.43
	LTE 7	QPSK20M	Front Face	1	20850	1	50	Full	Ant0	1	-	25.50	24.11	-0.05	0.590	1.000	1.377	0.81
	LTE 7	QPSK20M	Rear Face	1	20850	1	50	Reduce	Ant0	1	-	21.50	20.09	0.02	0.283	1.000	1.384	0.39
	LTE 7	QPSK20M	Front Face	1	20850	50	50	Full	Ant0	1	-	24.50	23.21	0.17	0.406	1.000	1.346	0.55
	LTE 7	QPSK20M	Rear Face	1	20850	50	25	Reduce	Ant0	1	-	21.50	19.97	0.01	0.224	1.000	1.422	0.32
	LTE 7	QPSK20M	Front Face	1	21100	1	50	Full	Ant0	1	-	25.50	24.11	0.01	0.697	1.000	1.377	0.96
	LTE 7	QPSK20M	Front Face	1	21350	1	50	Full	Ant0	1	-	25.50	24.11	0.15	0.722	1.000	1.377	0.99
	LTE 7	QPSK20M	Front Face	1	20850	100	0	Full	Ant0	1	-	24.50	23.10	0.12	0.446	1.000	1.380	0.62
	LTE 7	QPSK20M	Rear Face	1.5	20850	1	50	Full	Ant0	1	-	25.50	24.11	0.01	0.307	1.000	1.377	0.42
	LTE 7	QPSK20M	Rear Face	1.5	20850	50	50	Full	Ant0	1	-	24.50	23.21	-0.09	0.245	1.000	1.346	0.33
	LTE 7C	QPSK20M	Front Face	1	PCC:21152 SCC:21350	PCC:1 SCC:0	PCC:50 SCC:0	Full	Ant0	1	-	25.50	23.87	0.00	0.664	1.000	1.455	0.97
	LTE 7	QPSK20M	Front Face	1	20850	1	50	Full	Ant4	1	-	24.50	23.26	0.02	0.739	1.000	1.330	0.98
	LTE 7	QPSK20M	Rear Face	1	20850	1	50	Reduce	Ant4	1	-	19.50	18.25	-0.08	0.677	1.000	1.334	0.90
	LTE 7	QPSK20M	Front Face	1	20850	50	25	Full	Ant4	1	-	24.50	23.21	0.03	0.716	1.000	1.346	0.96
	LTE 7	QPSK20M	Rear Face	1	20850	50	25	Reduce	Ant4	1	-	19.50	18.11	0.09	0.451	1.000	1.377	0.62
P17	LTE 7	QPSK20M	Front Face	1	21100	1	50	Full	Ant4	1	-	24.50	23.09	0.12	0.757	1.000	1.384	1.05
	LTE 7	QPSK20M	Front Face	1	21350	1	50	Full	Ant4	1	-	24.50	23.19	0.16	0.699	1.000	1.352	0.95
	LTE 7	QPSK20M	Rear Face	1	21100	1	50	Reduce	Ant4	1	-	19.50	18.10	-0.12	0.596	1.000	1.380	0.82
	LTE 7	QPSK20M	Rear Face	1	21350	1	50	Reduce	Ant4	1	-	19.50	18.24	0.00	0.484	1.000	1.337	0.65
	LTE 7	QPSK20M	Front Face	1	21100	50	25	Full	Ant4	1	-	24.50	23.09	0.06	0.673	1.000	1.384	0.93
	LTE 7	QPSK20M	Front Face	1	21350	50	25	Full	Ant4	1	-	24.50	23.17	-0.09	0.627	1.000	1.358	0.85
	LTE 7	QPSK20M	Rear Face	1	21100	50	25	Reduce	Ant4	1	-	19.50	18.13	0.01	0.416	1.000	1.371	0.57
	LTE 7	QPSK20M	Rear Face	1	21350	50	25	Reduce	Ant4	1	-	19.50	18.12	0.09	0.371	1.000	1.374	0.51
	LTE 7	QPSK20M	Front Face	1	20850	100	0	Full	Ant4	1	-	24.50	23.12	0.08	0.751	1.000	1.374	1.03
	LTE 7	QPSK20M	Rear Face	1	20850	100	0	Reduce	Ant4	1	-	19.50	18.11	0.01	0.504	1.000	1.377	0.69
	LTE 7	QPSK20M	Rear Face	1.5	20850	1	50	Full	Ant4	1	-	24.50	23.26	0.15	0.717	1.000	1.330	0.95
	LTE 7	QPSK20M	Rear Face	1.5	20850	50	25	Full	Ant4	1	-	24.50	23.21	0.12	0.736	1.000	1.346	0.99
	LTE 7	QPSK20M	Rear Face	1.5	21100	1	50	Full	Ant4	1	-	24.50	23.09	-0.02	0.734	1.000	1.384	1.02
	LTE 7	QPSK20M	Rear Face	1.5	21350	1	50	Full	Ant4	1	-	24.50	23.19	0.02	0.678	1.000	1.352	0.92
	LTE 7	QPSK20M	Rear Face	1.5	21100	50	25	Full	Ant4	1	-	24.50	23.09	-0.08	0.702	1.000	1.384	0.97
	LTE 7	QPSK20M	Rear Face	1.5	21350	50	25	Full	Ant4	1	-	24.50	23.17	-0.07	0.590	1.000	1.358	0.80
	LTE 7	QPSK20M	Rear Face	1.5	20850	100	0	Full	Ant4	1	-	24.50	23.12	0.05	0.754	1.000	1.374	1.04
	LTE 7C	QPSK20M	Front Face	1	PCC:21001 SCC:2199	PCC:1 SCC:0	PCC:50 SCC:0	Full	Ant4	1	-	24.50	23.05	0.04	0.729	1.000	1.396	1.02
	LTE 7	QPSK20M	Front Face	1	21100	1	50	Full	Ant4	2	-	24.50	23.09	0.08	0.744	1.000	1.384	1.03
	LTE 38	QPSK20M	Front Face	1	38150	1	50	Full	Ant0	1	62.9	25.50	24.16	0.09	0.491	1.006	1.361	0.67
	LTE 38	QPSK20M	Rear Face	1	38150	1	50	Reduce	Ant0	1	62.9	23.50	22.14	0.01	0.376	1.006	1.368	0.52
	LTE 38	QPSK20M	Front Face	1	38150	50	50	Full	Ant0	1	62.9	24.50	23.00	-0.02	0.384	1.006	1.413	0.55
	LTE 38	QPSK20M	Rear Face	1	38150	50	50	Reduce	Ant0	1	62.9	23.50	22.02	-0.01	0.348	1.006	1.406	0.49
	LTE 38	QPSK20M	Rear Face	1.5	38150	1	50	Full	Ant0	1	62.9	25.50	24.16	0.01	0.283	1.006	1.361	0.39
	LTE 38	QPSK20M	Rear Face	1.5	38150	50	50	Full	Ant0	1	62.9	24.50	23.00	0.06	0.211	1.006	1.413	0.30
	LTE 38C	QPSK20M	Front Face	1	PCC:37952 SCC:38150	PCC:1 SCC:0	PCC:50 SCC:0	Full	Ant0	1	62.9	25.50	24.07	-0.05	0.455	1.006	1.390	0.64
	LTE 38	QPSK20M	Front Face	1	38150	1	50	Full	Ant4	1	62.9	25.50	24.09	-0.15	0.494	1.006	1.384	0.69
	LTE 38	QPSK20M	Rear Face	1	38150	1	50	Reduce	Ant4	1	62.9	23.00	21.69	0.05	0.531	1.006	1.352	0.72
	LTE 38	QPSK20M	Front Face	1	38150	50	0	Full	Ant4	1	62.9	24.50	22.94	-0.05	0.396	1.006	1.432	0.57
P18	LTE 38	QPSK20M	Rear Face	1	38150	50	0	Reduce	Ant4	1	62.9	23.00	21.55	0.00	0.568	1.006	1.396	0.80
	LTE 38	QPSK20M	Rear Face	1	37850	50	0	Reduce	Ant4	1	62.9	23.00	21.45	0.08	0.411	1.006	1.429	0.59
	LTE 38	QPSK20M	Rear Face	1	38000	50	0	Reduce	Ant4	1	62.9	23.00	21.40	0.00	0.533	1.006	1.445	0.78
	LTE 38	QPSK20M	Rear Face	1	38150	100	0	Reduce	Ant4	1	62.9	23.00	21.57	-0.05	0.476	1.006	1.390	0.67
	LTE 38	QPSK20M	Rear Face	1.5	38150	1	50	Full	Ant4	1	62.9	25.50	24.09	-0.02	0.398	1.006	1.384	0.55
	LTE 38	QPSK20M	Rear Face	1.5	38150	50	0	Full	Ant4	1	62.9	24.50	22.94	-0.01	0.321	1.006	1.432	0.46
	LTE 38C	QPSK20M	Rear Face	1	PCC:37952 SCC:38150	PCC:1 SCC:0	PCC:50 SCC:0	Reduce	Ant4	1	62.9	23.00	21.53	0.03	0.512	1.006	1.403	0.72
	LTE 38	QPSK20M	Rear Face	1	38150	50	0	Reduce	Ant4	2	62.9	23.00	21.55	-0.03	0.496	1.006	1.396	0.70
	LTE 41	QPSK20M	Front Face	1	39750	1	50	Full	Ant0	1	62.9	25.50	24.19	-0.09	0.437	1.006	1.352	0.59
	LTE 41	QPSK20M	Rear Face	1	39750	1	50	Reduce	Ant0	1	62.9	24.50	23.15	-0.07	0.420	1.006	1.365	0.58
	LTE 41	QPSK20M	Front Face	1	39750	50	0	Full	Ant0	1	62.9	24.50	23.11	0.03	0.343	1.006	1.377	0.48
	LTE 41	QPSK20M	Rear Face	1	39750	50	0	Reduce	Ant0	1	62.9	24.50	23.14	-0.02	0.400	1.006	1.368	0.55
	LTE 41	QPSK20M	Rear Face	1.5	39750	1	50	Full	Ant0	1	62.9	25.50	24.19	0.02	0.264	1.006	1.352	0.36
	LTE 41	QPSK20M	Rear Face	1.5	39750	50	0	Full	Ant0	1	62.9	24.50	23.11	-0.15	0.190	1.006	1.377	0.26
	LTE 41	QPSK20M	Front Face	1	39750	1	50	Full	Ant4	1	62.9	25.50	24.25	0.19	0.609	1.006	1.334	0.82
	LTE 41	QPSK20M	Rear Face	1	39750	1	50	Reduce	Ant4	1	62.9	21.50	20.29	0.09	0.319	1.006	1.321	0.42
	LTE 41	QPSK20M	Front Face	1	39750	50	0	Full	Ant4	1	62.9	24.50	23.20	-0.14	0.476	1.006	1.349	0.65
	LTE 41	QPSK20M	Rear Face	1	39750	50	0	Reduce	Ant4	1	62.9	21.50	20.07	0.15	0.317	1.006	1.390	0.44
	LTE 41	QPSK20M	Front Face	1	40185	1	50	Full	Ant4	1	62.9	25.50	24.05	-0.06	0.534	1.006	1.396	0.75
	LTE 41	QPSK20M	Front Face	1	40620	1	50	Full	Ant4	1	62.9	25.50	24.09	0.00	0.542	1.006	1.384	0.75
	LTE 41	QPSK20M	Front Face	1	41055	1	50	Full	Ant4	1	62.9	25.50	24.10	-0.07	0.462	1.006	1.380	0.64
	LTE 41	QPSK20M	Front Face	1	41490	1	50	Full	Ant4	1	62.9	25.50	24.15	0.05	0.558	1.006	1.365	0.77
	LTE 41	QPSK20M	Front Face	1	40185	50	0	Full	Ant4	1	62.9	24.50	22.97	-0.03	0.506	1.006	1.422	0.72
	LTE 41	QPSK20M	Front Face	1	40620	50	0	Full	Ant4	1	62.9	24.50	23.08	0.16	0.458	1.006	1.387	0.64
	LTE 41	QPSK20M	Front Face	1	41055	50	0	Full	Ant4	1	62.9	24.50	23.08	-0.04	0.371	1.006	1.387	0.52
	LTE 41	QPSK20M	Front Face	1	41490	50	0	Full	Ant4	1	62.9	2						



Plot No.	Band	Mode	Test Position	Separation Distance (cm)	Ch.	RB#	RB Offset	Power Reduction	Antenna	Sample	Duty Cycle %	Max. Tune-up Power (dBm)	Measured Conducted Power (dBm)	Power Drift (dB)	Measured SAR-1g (W/kg)	Duty Cycle Scaling Factor	Tune-up Scaling Factor	Scaled SAR-1g (W/kg)
	LTE 41	QPSK20M	Rear Face	1.5	39750	50	0	Full	Ant4	1	62.9	24.50	23.20	0.01	0.643	1.006	1.349	0.87
	LTE 41	QPSK20M	Rear Face	1.5	40185	1	50	Full	Ant4	1	62.9	25.50	24.05	0.19	0.557	1.006	1.396	0.78
	LTE 41	QPSK20M	Rear Face	1.5	40620	1	50	Full	Ant4	1	62.9	25.50	24.09	0.05	0.478	1.006	1.384	0.67
	LTE 41	QPSK20M	Rear Face	1.5	41055	1	50	Full	Ant4	1	62.9	25.50	24.10	0.03	0.408	1.006	1.380	0.57
	LTE 41	QPSK20M	Rear Face	1.5	41490	1	50	Full	Ant4	1	62.9	25.50	24.15	-0.02	0.343	1.006	1.365	0.47
	LTE 41	QPSK20M	Rear Face	1.5	40185	50	0	Full	Ant4	1	62.9	24.50	22.97	0.08	0.430	1.006	1.422	0.62
	LTE 41	QPSK20M	Rear Face	1.5	40620	50	0	Full	Ant4	1	62.9	24.50	23.08	0.08	0.383	1.006	1.387	0.53
	LTE 41	QPSK20M	Rear Face	1.5	41055	50	0	Full	Ant4	1	62.9	24.50	23.08	0.07	0.322	1.006	1.387	0.45
	LTE 41	QPSK20M	Rear Face	1.5	41490	50	0	Full	Ant4	1	62.9	24.50	23.07	0.15	0.267	1.006	1.390	0.37
	LTE 41	QPSK20M	Rear Face	1.5	39750	100	0	Full	Ant4	1	62.9	24.50	23.09	0.06	0.643	1.006	1.384	0.90
	LTE 41	QPSK20M	Rear Face	1.5	39750	1	50	Full	Ant4	2	62.9	25.50	24.25	-0.11	0.663	1.006	1.334	0.89
P20	WLAN2.4G	802.11b	Front Face	1	1	-	-	Full	Ant6	1	100	21.00	19.21	0.00	0.138	1.000	1.510	0.21
	WLAN2.4G	802.11b	Rear Face	1	1	-	-	Full	Ant6	1	100	21.00	19.21	0.05	0.212	1.000	1.510	0.32
	WLAN2.4G	802.11b	Rear Face	1	1	-	-	Full	Ant6	2	100	21.00	19.21	0.02	0.107	1.000	1.510	0.16
P21	WLAN5G	802.11a	Front Face	1	64	-	-	Reduce	Ant6	1	96.53	17.50	15.88	0.09	0.178	1.036	1.452	0.27
	WLAN5G	802.11a	Rear Face	1	64	-	-	Reduce	Ant6	1	96.53	17.50	15.88	0.03	0.435	1.036	1.452	0.65
	WLAN5G	802.11a	Rear Face	1	64	-	-	Reduce	Ant6	2	96.53	17.50	15.88	0.01	0.418	1.036	1.452	0.63
P22	WLAN5G	802.11a	Front Face	1	140	-	-	Reduce	Ant6	1	96.53	18.50	16.74	0.05	0.174	1.036	1.500	0.27
	WLAN5G	802.11a	Rear Face	1	140	-	-	Reduce	Ant6	1	96.53	18.50	16.74	-0.06	0.384	1.036	1.500	0.60
	WLAN5G	802.11a	Rear Face	1	140	-	-	Reduce	Ant6	2	96.53	18.50	16.74	-0.14	0.359	1.036	1.500	0.56
P23	WLAN5G	802.11a	Front Face	1	149	-	-	Reduce	Ant6	1	96.53	17.50	15.78	-0.11	0.097	1.036	1.486	0.15
	WLAN5G	802.11a	Rear Face	1	149	-	-	Reduce	Ant6	1	96.53	17.50	15.78	-0.07	0.217	1.036	1.486	0.33
	WLAN5G	802.11a	Rear Face	1	149	-	-	Reduce	Ant6	2	96.53	17.50	15.78	0.04	0.198	1.036	1.486	0.30
P24	BT	GFSK	Front Face	1	0	-	-	Full	Ant6	1	76.88	11.50	9.51	0.03	0.016	1.301	1.581	0.03
	BT	GFSK	Rear Face	1	0	-	-	Full	Ant6	1	76.88	11.50	9.51	-0.09	0.018	1.301	1.581	0.04
	BT	GFSK	Rear Face	1	0	-	-	Full	Ant6	2	76.88	11.50	9.51	-0.19	0.015	1.301	1.581	0.03

#### 4.6.4 SAR Results for Hotspot Exposure Condition (Separation Distance is 1.0 cm Gap)

Plot No.	Band	Mode	Test Position	Separation Distance (cm)	Ch.	RB#	RB Offset	Power Reduction	Antenna	Sample	Duty Cycle %	Max. Tune-up Power (dBm)	Measured Conducted Power (dBm)	Power Drift (dB)	Measured SAR-1g (W/kg)	Duty Cycle Scaling Factor	Tune-up Scaling Factor	Scaled SAR-1g (W/kg)
P25	GSM850	GPRS 4Tx Slot	Front Face	1	251	-	-	Full	Ant0	1	-	29.50	28.87	-0.10	0.309	1.000	1.156	0.36
	GSM850	GPRS 4Tx Slot	Rear Face	1	251	-	-	Full	Ant0	1	-	29.50	28.87	0.09	0.502	1.000	1.156	0.58
	GSM850	GPRS 4Tx Slot	Left Side	1	251	-	-	Full	Ant0	1	-	29.50	28.87	-0.09	0.161	1.000	1.156	0.19
	GSM850	GPRS 4Tx Slot	Right Side	1	251	-	-	Full	Ant0	1	-	29.50	28.87	0.01	0.293	1.000	1.156	0.34
	GSM850	GPRS 4Tx Slot	Bottom Side	1	251	-	-	Full	Ant0	1	-	29.50	28.87	0.16	0.446	1.000	1.156	0.52
	GSM850	GPRS 4Tx Slot	Rear Face	1	251	-	-	Full	Ant0	2	-	29.50	28.87	0.08	0.485	1.000	1.156	0.56
	GSM850	GPRS 4Tx Slot	Front Face	1	251	-	-	Full	Ant4	1	-	29.50	29.26	-0.09	0.188	1.000	1.057	0.20
	GSM850	GPRS 4Tx Slot	Rear Face	1	251	-	-	Full	Ant4	1	-	29.50	29.26	-0.13	0.391	1.000	1.057	0.41
	GSM850	GPRS 4Tx Slot	Left Side	1	251	-	-	Full	Ant4	1	-	29.50	29.26	0.07	0.080	1.000	1.057	0.08
	GSM850	GPRS 4Tx Slot	Top Side	1	251	-	-	Full	Ant4	1	-	29.50	29.26	0.04	0.270	1.000	1.057	0.29
	GSM1900	GPRS 4Tx Slot	Front Face	1	512	-	-	Full	Ant0	1	-	27.00	25.56	0.01	0.214	1.000	1.393	0.30
	GSM1900	GPRS 4Tx Slot	Rear Face	1	512	-	-	Full	Ant0	1	-	27.00	25.56	0.03	0.312	1.000	1.393	0.43
	GSM1900	GPRS 4Tx Slot	Left Side	1	512	-	-	Full	Ant0	1	-	27.00	25.56	-0.05	0.064	1.000	1.393	0.09
	GSM1900	GPRS 4Tx Slot	Right Side	1	512	-	-	Full	Ant0	1	-	27.00	25.56	0.08	0.088	1.000	1.393	0.12
	GSM1900	GPRS 4Tx Slot	Bottom Side	1	512	-	-	Full	Ant0	1	-	27.00	25.56	-0.02	0.261	1.000	1.393	0.36
	GSM1900	GPRS 4Tx Slot	Front Face	1	512	-	-	Full	Ant4	1	-	27.00	25.93	0.04	0.295	1.000	1.279	0.38
P26	GSM1900	GPRS 4Tx Slot	Rear Face	1	512	-	-	Full	Ant4	1	-	27.00	25.93	0.00	0.494	1.000	1.279	0.63
	GSM1900	GPRS 4Tx Slot	Left Side	1	512	-	-	Full	Ant4	1	-	27.00	25.93	0.04	0.190	1.000	1.279	0.24
	GSM1900	GPRS 4Tx Slot	Top Side	1	512	-	-	Full	Ant4	1	-	27.00	25.93	0.00	0.406	1.000	1.279	0.52
	GSM1900	GPRS 4Tx Slot	Rear Face	1	512	-	-	Full	Ant4	2	-	27.00	25.93	0.04	0.479	1.000	1.279	0.61
P27	WCDMA V	RMC12.2K	Front Face	1	4233	-	-	Full	Ant0	1	-	25.50	24.14	-0.07	0.229	1.000	1.368	0.31
	WCDMA V	RMC12.2K	Rear Face	1	4233	-	-	Full	Ant0	1	-	25.50	24.14	0.02	0.378	1.000	1.368	0.52
	WCDMA V	RMC12.2K	Left Side	1	4233	-	-	Full	Ant0	1	-	25.50	24.14	0.01	0.123	1.000	1.368	0.17
	WCDMA V	RMC12.2K	Right Side	1	4233	-	-	Full	Ant0	1	-	25.50	24.14	0.04	0.214	1.000	1.368	0.29
	WCDMA V	RMC12.2K	Bottom Side	1	4233	-	-	Full	Ant0	1	-	25.50	24.14	-0.09	0.325	1.000	1.368	0.44
	WCDMA V	RMC12.2K	Rear Face	1	4233	-	-	Full	Ant0	2	-	25.50	24.14	0.02	0.363	1.000	1.368	0.50
	WCDMA V	RMC12.2K	Front Face	1	4233	-	-	Full	Ant4	1	-	25.50	24.35	0.01	0.170	1.000	1.303	0.22
	WCDMA V	RMC12.2K	Rear Face	1	4233	-	-	Full	Ant4	1	-	25.50	24.35	0.05	0.350	1.000	1.303	0.46
	WCDMA V	RMC12.2K	Left Side	1	4233	-	-	Full	Ant4	1	-	25.50	24.35	0.05	0.060	1.000	1.303	0.08
	WCDMA V	RMC12.2K	Top Side	1	4233	-	-	Full	Ant4	1	-	25.50	24.35	0.08	0.229	1.000	1.303	0.30
	LTE 5	QPSK10M	Front Face	1	20600	1	24	Full	Ant0	1	-	25.50	24.23	0.07	0.246	1.000	1.340	0.33
	LTE 5	QPSK10M	Rear Face	1	20600	1	24	Reduce	Ant0	1	-	24.50	23.21	-0.01	0.315	1.000	1.346	0.42
	LTE 5	QPSK10M	Left Side	1	20600	1	24	Full	Ant0	1	-	25.50	24.23	0.01	0.121	1.000	1.340	0.16
	LTE 5	QPSK10M	Right Side	1	20600	1	24	Full	Ant0	1	-	25.50	24.23	0.04	0.174	1.000	1.340	0.23
	LTE 5	QPSK10M	Bottom Side	1	20600	1	24	Reduce	Ant0	1	-	24.50	23.21	0.06	0.253	1.000	1.346	0.34
	LTE 5	QPSK10M	Front Face	1	20600	25	12	Full	Ant0	1	-	24.50	23.29	0.08	0.201	1.000	1.321	0.27
	LTE 5	QPSK10M	Rear Face	1	20600	25	12	Reduce	Ant0	1	-	24.50	23.17	0.06	0.324	1.000	1.358	0.44
	LTE 5	QPSK10M	Left Side	1	20600	25	12	Full	Ant0	1	-	24.50	23.29	-0.09	0.075	1.000	1.321	0.10
	LTE 5	QPSK10M	Right Side	1	20600	25	12	Full	Ant0	1	-	24.50	23.29	-0.08	0.116	1.000	1.321	0.15
	LTE 5	QPSK10M	Bottom Side	1	20600	25	12	Reduce	Ant0	1	-	24.50	23.17	0.06	0.256	1.000	1.358	0.35
	LTE 5	QPSK10M	Rear Face	1.5	20600	1	24	Full	Ant0	1	-	25.50	24.23	-0.01	0.230	1.000	1.340	0.31
	LTE 5	QPSK10M	Bottom Side	1.5	20600	1	24	Full	Ant0	1	-	25.50	24.23	-0.09	0.159	1.000	1.340	0.21



# FCC SAR Test Report



Plot No.	Band	Mode	Test Position	Separation Distance (cm)	Ch.	RB#	RB Offset	Power Reduction	Antenna	Sample	Duty Cycle %	Max. Tune-up Power (dBm)	Measured Conducted Power (dBm)	Power Drift (dB)	Measured SAR-1g (W/kg)	Duty Cycle Scaling Factor	Tune-up Scaling Factor	Scaled SAR-1g (W/kg)
	LTE 5	QPSK10M	Rear Face	1.5	20600	25	12	Full	Ant0	1	-	24.50	23.29	-0.03	0.189	1.000	1.321	0.25
	LTE 5	QPSK10M	Bottom Side	1.5	20600	25	12	Full	Ant0	1	-	24.50	23.29	0.00	0.131	1.000	1.321	0.17
	LTE 5	QPSK10M	Front Face	1	20525	1	24	Full	Ant4	1	-	25.50	24.30	0.00	0.153	1.000	1.318	0.20
P28	LTE 5	QPSK10M	Rear Face	1	20525	1	24	Full	Ant4	1	-	25.50	24.30	0.08	0.347	1.000	1.318	0.46
	LTE 5	QPSK10M	Left Side	1	20525	1	24	Full	Ant4	1	-	25.50	24.30	0.01	0.063	1.000	1.318	0.08
	LTE 5	QPSK10M	Top Side	1	20525	1	24	Full	Ant4	1	-	25.50	24.30	0.07	0.225	1.000	1.318	0.30
	LTE 5	QPSK10M	Front Face	1	20525	25	25	Full	Ant4	1	-	24.50	23.32	-0.14	0.125	1.000	1.312	0.16
	LTE 5	QPSK10M	Rear Face	1	20525	25	25	Full	Ant4	1	-	24.50	23.32	-0.11	0.263	1.000	1.312	0.35
	LTE 5	QPSK10M	Left Side	1	20525	25	25	Full	Ant4	1	-	24.50	23.32	0.04	0.056	1.000	1.312	0.07
	LTE 5	QPSK10M	Top Side	1	20525	25	25	Full	Ant4	1	-	24.50	23.32	0.09	0.159	1.000	1.312	0.21
	LTE 5	QPSK10M	Rear Face	1	20525	1	24	Full	Ant4	2	-	25.50	24.30	0.04	0.324	1.000	1.318	0.43
	LTE 7	QPSK20M	Front Face	1	20850	1	50	Full	Ant0	1	-	25.50	24.11	-0.05	0.590	1.000	1.377	0.81
	LTE 7	QPSK20M	Rear Face	1	20850	1	50	Reduce	Ant0	1	-	21.50	20.09	0.02	0.283	1.000	1.384	0.39
	LTE 7	QPSK20M	Left Side	1	20850	1	50	Full	Ant0	1	-	25.50	24.11	-0.10	0.214	1.000	1.377	0.29
	LTE 7	QPSK20M	Right Side	1	20850	1	50	Full	Ant0	1	-	25.50	24.11	0.09	0.038	1.000	1.377	0.05
	LTE 7	QPSK20M	Bottom Side	1	20850	1	50	Reduce	Ant0	1	-	21.50	20.09	0.01	0.118	1.000	1.384	0.16
	LTE 7	QPSK20M	Front Face	1	20850	50	50	Full	Ant0	1	-	24.50	23.21	0.17	0.406	1.000	1.346	0.55
	LTE 7	QPSK20M	Rear Face	1	20850	50	25	Reduce	Ant0	1	-	21.50	19.97	0.01	0.224	1.000	1.422	0.32
	LTE 7	QPSK20M	Left Side	1	20850	50	50	Full	Ant0	1	-	24.50	23.21	0.03	0.170	1.000	1.346	0.23
	LTE 7	QPSK20M	Right Side	1	20850	50	50	Full	Ant0	1	-	24.50	23.21	0.05	0.052	1.000	1.346	0.07
	LTE 7	QPSK20M	Bottom Side	1	20850	50	25	Reduce	Ant0	1	-	21.50	19.97	0.03	0.184	1.000	1.422	0.26
	LTE 7	QPSK20M	Front Face	1	21100	1	50	Full	Ant0	1	-	25.50	24.11	0.01	0.697	1.000	1.377	0.96
	LTE 7	QPSK20M	Front Face	1	21350	1	50	Full	Ant0	1	-	25.50	24.11	0.15	0.722	1.000	1.377	0.99
	LTE 7	QPSK20M	Front Face	1	20850	100	0	Full	Ant0	1	-	24.50	23.10	0.12	0.446	1.000	1.380	0.62
	LTE 7	QPSK20M	Rear Face	1.5	20850	1	50	Full	Ant0	1	-	25.50	24.11	0.09	0.307	1.000	1.377	0.42
	LTE 7	QPSK20M	Bottom Side	1.5	20850	1	50	Full	Ant0	1	-	25.50	24.11	0.01	0.233	1.000	1.377	0.32
	LTE 7	QPSK20M	Rear Face	1.5	20850	50	50	Full	Ant0	1	-	24.50	23.21	0.02	0.245	1.000	1.346	0.33
	LTE 7	QPSK20M	Bottom Side	1.5	20850	50	50	Full	Ant0	1	-	24.50	23.21	-0.09	0.181	1.000	1.346	0.24
	LTE 7C	QPSK20M	Front Face	1	PCC:21152 SCC:21350	PCC:1 SCC:0	PCC:50 SCC:0	Full	Ant0	1	-	25.50	23.87	0.00	0.664	1.000	1.455	0.97
	LTE 7	QPSK20M	Front Face	1	20850	1	50	Full	Ant4	1	-	24.50	23.26	0.02	0.739	1.000	1.330	0.98
	LTE 7	QPSK20M	Rear Face	1	20850	1	50	Reduce	Ant4	1	-	19.50	18.25	-0.08	0.677	1.000	1.334	0.90
	LTE 7	QPSK20M	Left Side	1	20850	1	50	Full	Ant4	1	-	24.50	23.26	0.14	0.169	1.000	1.330	0.22
	LTE 7	QPSK20M	Top Side	1	20850	1	50	Reduce	Ant4	1	-	19.50	18.25	0.03	0.613	1.000	1.334	0.82
	LTE 7	QPSK20M	Front Face	1	20850	50	25	Full	Ant4	1	-	24.50	23.21	0.03	0.716	1.000	1.346	0.96
	LTE 7	QPSK20M	Rear Face	1	20850	50	25	Reduce	Ant4	1	-	19.50	18.11	0.09	0.451	1.000	1.377	0.62
	LTE 7	QPSK20M	Left Side	1	20850	50	25	Full	Ant4	1	-	24.50	23.21	0.01	0.144	1.000	1.346	0.19
	LTE 7	QPSK20M	Top Side	1	20850	50	25	Reduce	Ant4	1	-	19.50	18.11	-0.10	0.618	1.000	1.377	0.85
P29	LTE 7	QPSK20M	Front Face	1	21100	1	50	Full	Ant4	1	-	24.50	23.09	0.12	0.757	1.000	1.384	1.05
	LTE 7	QPSK20M	Front Face	1	21350	1	50	Full	Ant4	1	-	24.50	23.19	0.16	0.699	1.000	1.352	0.95
	LTE 7	QPSK20M	Rear Face	1	21100	1	50	Reduce	Ant4	1	-	19.50	18.10	-0.12	0.596	1.000	1.380	0.82
	LTE 7	QPSK20M	Rear Face	1	21350	1	50	Reduce	Ant4	1	-	19.50	18.24	0.00	0.484	1.000	1.337	0.65
	LTE 7	QPSK20M	Top Side	1	21100	1	50	Reduce	Ant4	1	-	19.50	18.10	0.01	0.610	1.000	1.380	0.84
	LTE 7	QPSK20M	Top Side	1	21350	1	50	Reduce	Ant4	1	-	19.50	18.24	-0.05	0.556	1.000	1.337	0.74
	LTE 7	QPSK20M	Front Face	1	21100	50	25	Full	Ant4	1	-	24.50	23.09	0.06	0.673	1.000	1.384	0.93
	LTE 7	QPSK20M	Front Face	1	21350	50	25	Full	Ant4	1	-	24.50	23.17	-0.09	0.627	1.000	1.358	0.85
	LTE 7	QPSK20M	Rear Face	1	21100	50	25	Reduce	Ant4	1	-	19.50	18.13	0.01	0.416	1.000	1.371	0.57
	LTE 7	QPSK20M	Rear Face	1	21350	50	25	Reduce	Ant4	1	-	19.50	18.12	0.09	0.371	1.000	1.374	0.51
	LTE 7	QPSK20M	Top Side	1	21100	50	25	Reduce	Ant4	1	-	19.50	18.13	-0.09	0.608	1.000	1.371	0.83
	LTE 7	QPSK20M	Top Side	1	21350	50	25	Reduce	Ant4	1	-	19.50	18.12	0.05	0.543	1.000	1.374	0.75
	LTE 7	QPSK20M	Front Face	1	20850	100	0	Full	Ant4	1	-	24.50	23.12	0.08	0.751	1.000	1.374	1.03
	LTE 7	QPSK20M	Rear Face	1	20850	100	0	Reduce	Ant4	1	-	19.50	18.11	0.01	0.504	1.000	1.377	0.69
	LTE 7	QPSK20M	Top Side	1	20850	100	0	Reduce	Ant4	1	-	19.50	18.11	0.05	0.693	1.000	1.377	0.95
	LTE 7	QPSK20M	Rear Face	1.5	20850	1	50	Full	Ant4	1	-	24.50	23.26	0.15	0.717	1.000	1.330	0.95
	LTE 7	QPSK20M	Top Side	1.8	20850	1	50	Full	Ant4	1	-	24.50	23.26	-0.06	0.739	1.000	1.330	0.98
	LTE 7	QPSK20M	Rear Face	1.5	20850	50	25	Full	Ant4	1	-	24.50	23.21	0.12	0.736	1.000	1.346	0.99
	LTE 7	QPSK20M	Top Side	1.8	20850	50	25	Full	Ant4	1	-	24.50	23.21	0.07	0.736	1.000	1.346	0.99
	LTE 7	QPSK20M	Rear Face	1.5	21100	1	50	Full	Ant4	1	-	24.50	23.09	-0.02	0.734	1.000	1.384	1.02
	LTE 7	QPSK20M	Rear Face	1.5	21350	1	50	Full	Ant4	1	-	24.50	23.19	0.02	0.678	1.000	1.352	0.92
	LTE 7	QPSK20M	Top Side	1.8	21100	1	50	Full	Ant4	1	-	24.50	23.09	0.08	0.692	1.000	1.384	0.96
	LTE 7	QPSK20M	Top Side	1.8	21350	1	50	Full	Ant4	1	-	24.50	23.19	0.03	0.639	1.000	1.352	0.86
	LTE 7	QPSK20M	Rear Face	1.5	21100	50	25	Full	Ant4	1	-	24.50	23.09	-0.08	0.702	1.000	1.384	0.97
	LTE 7	QPSK20M	Rear Face	1.5	21350	50	25	Full	Ant4	1	-	24.50	23.17	-0.07	0.590	1.000	1.358	0.80
	LTE 7	QPSK20M	Top Side	1.8	21100	50	25	Full	Ant4	1	-	24.50	23.09	0.06	0.693	1.000	1.384	0.96
	LTE 7	QPSK20M	Top Side	1.8	21350	50	25	Full	Ant4	1	-	24.50	23.12	-0.04	0.606	1.000	1.374	0.83
	LTE 7	QPSK20M	Rear Face	1.5	20850	100	0	Full	Ant4	1	-	24.50	23.12	0.05	0.754	1.000	1.374	1.04
	LTE 7	QPSK20M	Top Side	1.8	20850	100	0	Full	Ant4	1	-	24.50	23.12	-0.02	0.730	1.000	1.374	1.00
	LTE 7C	QPSK20M	Front Face	1	PCC:21001 SCC:21199	PCC:1 SCC:0	PCC:50 SCC:0	Full	Ant4	1	-	24.50	23.05	0.04	0.729	1.000	1.396	1.02
	LTE 7	QPSK20M	Front Face	1	21100	1	50	Full	Ant4	2	-	24.50	23.09	0.08	0.744	1.000	1.384	1.03
	LTE 38	QPSK20M	Front Face	1	38150	1	50	Full	Ant0	1	62.9	25.50	24.16	0.09	0.491	1.006	1.361	0.67
	LTE 38	QPSK20M	Rear Face	1	38150	1	50	Reduce	Ant0	1	62.9	23.50	22.14	0.01	0.376	1.006	1.368	0.52
	LTE 38	QPSK20M	Left Side	1	38150	1	50	Full	Ant0	1	62.9	25.50	24.16	0.08	0.177	1.006	1.361	0.24
	LTE 38	QPSK20M	Right Side	1	38150	1	50	Full	Ant0	1	62.9	25.50	24.16	0.09	0.098	1.006	1.361	0.13
	LTE 38	QPSK20M	Bottom Side	1	38150	1	50	Reduce	Ant0	1	62.9	23.50	22.14	0.03	0.274	1.006	1.368	0.38
	LTE 38	QPSK20M	Front Face	1	38150	50	50	Full	Ant0	1	62.9	24.50	23.00	-0.02	0.384	1.006	1.413	0.55
	LTE 38	QPSK20M	Rear Face	1	38150	50	50	Reduce	Ant0	1	62.9	23.50	22.02	-0.01	0.348	1.006	1.406	0.49
	LTE 38	QPSK20M	Left Side	1	38150	50	50	Full	Ant0	1	62.9	24.50	23.00	0.08				



# FCC SAR Test Report



Plot No.	Band	Mode	Test Position	Separation Distance (cm)	Ch.	RB#	RB Offset	Power Reduction	Antenna	Sample	Duty Cycle %	Max. Tune-up Power (dBm)	Measured Conducted Power (dBm)	Power Drift (dB)	Measured SAR-1g (W/kg)	Duty Cycle Scaling Factor	Tune-up Scaling Factor	Scaled SAR-1g (W/kg)
	LTE 38	QPSK20M	Rear Face	1.5	38150	1	50	Full	Ant0	1	62.9	25.50	24.16	0.01	0.283	1.006	1.361	0.39
	LTE 38	QPSK20M	Bottom Side	1.5	38150	1	50	Full	Ant0	1	62.9	25.50	24.16	-0.07	0.239	1.006	1.361	0.33
	LTE 38	QPSK20M	Rear Face	1.5	38150	50	50	Full	Ant0	1	62.9	24.50	23.00	0.06	0.211	1.006	1.413	0.30
	LTE 38	QPSK20M	Bottom Side	1.5	38150	50	50	Full	Ant0	1	62.9	24.50	23.00	0.01	0.183	1.006	1.413	0.26
	LTE 38C	QPSK20M	Front Face	1	PCC:37952 SCC:38150	PCC:1 SCC:0	PCC:50 SCC:0	Full	Ant0	1	62.9	25.50	24.07	-0.05	0.455	1.006	1.390	0.64
	LTE 38	QPSK20M	Front Face	1	38150	1	50	Full	Ant4	1	62.9	25.50	24.09	-0.15	0.494	1.006	1.384	0.69
	LTE 38	QPSK20M	Rear Face	1	38150	1	50	Reduce	Ant4	1	62.9	23.00	21.69	0.05	0.531	1.006	1.352	0.72
	LTE 38	QPSK20M	Left Side	1	38150	1	50	Full	Ant4	1	62.9	25.50	24.09	-0.03	0.208	1.006	1.384	0.29
	LTE 38	QPSK20M	Top Side	1	38150	1	50	Reduce	Ant4	1	62.9	23.00	21.69	0.00	0.786	1.006	1.352	1.07
	LTE 38	QPSK20M	Front Face	1	38150	50	0	Full	Ant4	1	62.9	24.50	22.94	-0.05	0.396	1.006	1.432	0.57
	LTE 38	QPSK20M	Rear Face	1	38150	50	0	Reduce	Ant4	1	62.9	23.00	21.55	0.00	0.568	1.006	1.396	0.80
	LTE 38	QPSK20M	Left Side	1	38150	50	0	Full	Ant4	1	62.9	24.50	22.94	0.01	0.151	1.006	1.432	0.22
	LTE 38	QPSK20M	Top Side	1	38150	50	0	Reduce	Ant4	1	62.9	23.00	21.55	-0.08	0.750	1.006	1.396	1.05
	LTE 38	QPSK20M	Top Side	1	37850	1	50	Reduce	Ant4	1	62.9	23.00	21.67	0.01	0.761	1.006	1.358	1.04
	LTE 38	QPSK20M	Top Side	1	38000	1	50	Reduce	Ant4	1	62.9	23.00	21.59	-0.02	0.767	1.006	1.384	1.07
	LTE 38	QPSK20M	Rear Face	1	37850	50	0	Reduce	Ant4	1	62.9	23.00	21.45	0.08	0.411	1.006	1.429	0.59
	LTE 38	QPSK20M	Rear Face	1	38000	50	0	Reduce	Ant4	1	62.9	23.00	21.40	0.00	0.533	1.006	1.445	0.78
P30	LTE 38	QPSK20M	Top Side	1	37850	50	0	Reduce	Ant4	1	62.9	23.00	21.45	0.02	0.754	1.006	1.429	1.08
	LTE 38	QPSK20M	Top Side	1	38000	50	0	Reduce	Ant4	1	62.9	23.00	21.40	0.08	0.742	1.006	1.445	1.08
	LTE 38	QPSK20M	Rear Face	1	38150	100	0	Reduce	Ant4	1	62.9	23.00	21.57	-0.05	0.476	1.006	1.390	0.67
	LTE 38	QPSK20M	Top Side	1	38150	100	0	Reduce	Ant4	1	62.9	23.00	21.57	-0.02	0.761	1.006	1.390	1.06
	LTE 38	QPSK20M	Rear Face	1.5	38150	1	50	Full	Ant4	1	62.9	25.50	24.09	-0.02	0.398	1.006	1.384	0.55
	LTE 38	QPSK20M	Top Side	1.8	38150	1	50	Full	Ant4	1	62.9	25.50	24.09	0.00	0.422	1.006	1.384	0.59
	LTE 38	QPSK20M	Rear Face	1.5	38150	50	0	Full	Ant4	1	62.9	24.50	22.94	-0.01	0.321	1.006	1.432	0.46
	LTE 38	QPSK20M	Top Side	1.8	38150	50	0	Full	Ant4	1	62.9	24.50	22.94	0.11	0.349	1.006	1.432	0.50
	LTE 38C	QPSK20M	Top Side	1	PCC:37850 SCC:38048	PCC:1 SCC:0	PCC:50 SCC:0	Reduce	Ant4	1	62.9	23.00	21.43	0.01	0.736	1.006	1.435	1.06
	LTE 38	QPSK20M	Top Side	1	37850	50	0	Reduce	Ant4	2	62.9	23.00	21.45	0.03	0.607	1.006	1.429	0.87
	LTE 41	QPSK20M	Front Face	1	39750	1	50	Full	Ant0	1	62.9	25.50	24.19	-0.09	0.437	1.006	1.352	0.59
	LTE 41	QPSK20M	Rear Face	1	39750	1	50	Reduce	Ant0	1	62.9	24.50	23.15	-0.07	0.420	1.006	1.365	0.58
	LTE 41	QPSK20M	Left Side	1	39750	1	50	Full	Ant0	1	62.9	25.50	24.19	-0.02	0.178	1.006	1.352	0.24
	LTE 41	QPSK20M	Right Side	1	39750	1	50	Full	Ant0	1	62.9	25.50	24.19	0.00	0.102	1.006	1.352	0.14
	LTE 41	QPSK20M	Bottom Side	1	39750	1	50	Reduce	Ant0	1	62.9	24.50	23.15	0.11	0.364	1.006	1.365	0.50
	LTE 41	QPSK20M	Front Face	1	39750	50	0	Full	Ant0	1	62.9	24.50	23.11	0.03	0.343	1.006	1.377	0.48
	LTE 41	QPSK20M	Rear Face	1	39750	50	0	Reduce	Ant0	1	62.9	24.50	23.14	-0.02	0.400	1.006	1.368	0.55
	LTE 41	QPSK20M	Left Side	1	39750	50	0	Full	Ant0	1	62.9	24.50	23.11	0.03	0.140	1.006	1.377	0.19
	LTE 41	QPSK20M	Right Side	1	39750	50	0	Full	Ant0	1	62.9	24.50	23.11	-0.04	0.078	1.006	1.377	0.11
	LTE 41	QPSK20M	Bottom Side	1	39750	50	0	Reduce	Ant0	1	62.9	24.50	23.14	0.11	0.349	1.006	1.368	0.48
	LTE 41	QPSK20M	Rear Face	1.5	39750	1	50	Full	Ant0	1	62.9	25.50	24.19	0.02	0.264	1.006	1.352	0.36
	LTE 41	QPSK20M	Bottom Side	1.5	39750	1	50	Full	Ant0	1	62.9	25.50	24.19	-0.06	0.209	1.006	1.352	0.28
	LTE 41	QPSK20M	Rear Face	1.5	39750	50	0	Full	Ant0	1	62.9	24.50	23.11	-0.15	0.190	1.006	1.377	0.26
	LTE 41	QPSK20M	Bottom Side	1.5	39750	50	0	Full	Ant0	1	62.9	24.50	23.11	0.01	0.164	1.006	1.377	0.23
	LTE 41	QPSK20M	Front Face	1	39750	1	50	Full	Ant4	1	62.9	25.50	24.25	0.19	0.609	1.006	1.334	0.82
	LTE 41	QPSK20M	Rear Face	1	39750	1	50	Reduce	Ant4	1	62.9	21.50	20.29	0.09	0.319	1.006	1.321	0.42
	LTE 41	QPSK20M	Left Side	1	39750	1	50	Full	Ant4	1	62.9	25.50	24.25	0.16	0.165	1.006	1.334	0.22
	LTE 41	QPSK20M	Top Side	1	39750	1	50	Reduce	Ant4	1	62.9	21.50	20.29	-0.04	0.655	1.006	1.321	0.87
	LTE 41	QPSK20M	Front Face	1	39750	50	0	Full	Ant4	1	62.9	24.50	23.20	-0.14	0.476	1.006	1.349	0.65
	LTE 41	QPSK20M	Rear Face	1	39750	50	0	Reduce	Ant4	1	62.9	21.50	20.07	0.15	0.317	1.006	1.390	0.44
	LTE 41	QPSK20M	Left Side	1	39750	50	0	Full	Ant4	1	62.9	24.50	23.20	0.05	0.133	1.006	1.349	0.18
P31	LTE 41	QPSK20M	Top Side	1	39750	50	0	Reduce	Ant4	1	62.9	21.50	20.07	0.01	0.773	1.006	1.390	1.08
	LTE 41	QPSK20M	Front Face	1	40185	1	50	Full	Ant4	1	62.9	25.50	24.05	-0.06	0.534	1.006	1.396	0.75
	LTE 41	QPSK20M	Front Face	1	40620	1	50	Full	Ant4	1	62.9	25.50	24.09	0.00	0.542	1.006	1.384	0.75
	LTE 41	QPSK20M	Front Face	1	41055	1	50	Full	Ant4	1	62.9	25.50	24.10	-0.07	0.462	1.006	1.380	0.64
	LTE 41	QPSK20M	Front Face	1	41490	1	50	Full	Ant4	1	62.9	25.50	24.15	0.05	0.558	1.006	1.365	0.77
	LTE 41	QPSK20M	Top Side	1	40185	1	50	Reduce	Ant4	1	62.9	21.50	20.18	0.09	0.535	1.006	1.355	0.73
	LTE 41	QPSK20M	Top Side	1	40620	1	50	Reduce	Ant4	1	62.9	21.50	20.07	0.01	0.598	1.006	1.390	0.84
	LTE 41	QPSK20M	Top Side	1	41055	1	50	Reduce	Ant4	1	62.9	21.50	20.14	0.13	0.612	1.006	1.368	0.84
	LTE 41	QPSK20M	Top Side	1	41490	1	50	Reduce	Ant4	1	62.9	21.50	20.14	0.18	0.506	1.006	1.368	0.70
	LTE 41	QPSK20M	Front Face	1	40185	50	0	Full	Ant4	1	62.9	24.50	22.97	-0.03	0.506	1.006	1.422	0.72
	LTE 41	QPSK20M	Front Face	1	40620	50	0	Full	Ant4	1	62.9	24.50	23.08	0.16	0.458	1.006	1.387	0.64
	LTE 41	QPSK20M	Front Face	1	41055	50	0	Full	Ant4	1	62.9	24.50	23.08	-0.04	0.371	1.006	1.387	0.52
	LTE 41	QPSK20M	Front Face	1	41490	50	0	Full	Ant4	1	62.9	24.50	23.07	0.00	0.436	1.006	1.390	0.61
	LTE 41	QPSK20M	Top Side	1	40185	50	0	Reduce	Ant4	1	62.9	21.50	19.98	0.02	0.634	1.006	1.419	0.91
	LTE 41	QPSK20M	Top Side	1	40620	50	0	Reduce	Ant4	1	62.9	21.50	19.92	0.03	0.586	1.006	1.439	0.85
	LTE 41	QPSK20M	Top Side	1	41055	50	0	Reduce	Ant4	1	62.9	21.50	20.02	0.10	0.615	1.006	1.406	0.87
	LTE 41	QPSK20M	Top Side	1	41490	50	0	Reduce	Ant4	1	62.9	21.50	19.96	0.01	0.513	1.006	1.426	0.74
	LTE 41	QPSK20M	Front Face	1	39750	100	0	Full	Ant4	1	62.9	23.50	22.14	0.07	0.607	1.006	1.368	0.84
	LTE 41	QPSK20M	Top Side	1	39750	100	0	Reduce	Ant4	1	62.9	21.50	20.04	0.00	0.315	1.006	1.400	0.44
	LTE 41	QPSK20M	Rear Face	1.5	39750	1	50	Full	Ant4	1	62.9	25.50	24.25	0.01	0.793	1.006	1.334	1.06
	LTE 41	QPSK20M	Top Side	1.8	39750	1	50	Full	Ant4	1	62.9	25.50	24.25	-0.07	0.796	1.006	1.334	1.07
	LTE 41	QPSK20M	Rear Face	1.5	39750	50	0	Full	Ant4	1	62.9	24.50	23.20	0.01	0.643	1.006	1.349	0.87
	LTE 41	QPSK20M	Top Side	1.8	39750	50	0	Full	Ant4	1	62.9	24.50	23.20	0.19	0.648	1.006	1.349	0.88
	LTE 41	QPSK20M	Rear Face	1.5	40185	1	50	Full	Ant4	1	62.9	25.50	24.05	0.19	0.557	1.006	1.396	0.78
	LTE 41	QPSK20M	Rear Face	1.5	40620	1	50	Full	Ant4	1	62.9	25.50	24.09	0.05	0.478	1.006	1.384	0.67
	LTE 41	QPSK20M	Rear Face	1.5	41055	1	50	Full	Ant4	1	62.9	25.50	24.10	0.03	0.408	1.0		



Plot No.	Band	Mode	Test Position	Separation Distance (cm)	Ch.	RB#	RB Offset	Power Reduction	Antenna	Sample	Duty Cycle %	Max. Tune-up Power (dBm)	Measured Conducted Power (dBm)	Power Drift (dB)	Measured SAR-1g (W/kg)	Duty Cycle Scaling Factor	Tune-up Scaling Factor	Scaled SAR-1g (W/kg)
	LTE 41	QPSK20M	Top Side	1.8	41490	1	50	Full	Ant4	1	62.9	25.50	24.15	-0.11	0.378	1.006	1.365	0.52
	LTE 41	QPSK20M	Rear Face	1.5	40185	50	0	Full	Ant4	1	62.9	24.50	22.97	0.08	0.430	1.006	1.422	0.62
	LTE 41	QPSK20M	Rear Face	1.5	40620	50	0	Full	Ant4	1	62.9	24.50	23.08	0.08	0.383	1.006	1.387	0.53
	LTE 41	QPSK20M	Rear Face	1.5	41055	50	0	Full	Ant4	1	62.9	24.50	23.08	0.07	0.322	1.006	1.387	0.45
	LTE 41	QPSK20M	Rear Face	1.5	41490	50	0	Full	Ant4	1	62.9	24.50	23.07	0.15	0.267	1.006	1.390	0.37
	LTE 41	QPSK20M	Top Side	1.8	40185	50	0	Full	Ant4	1	62.9	24.50	22.97	0.04	0.511	1.006	1.422	0.73
	LTE 41	QPSK20M	Top Side	1.8	40620	50	0	Full	Ant4	1	62.9	24.50	23.08	0.03	0.454	1.006	1.387	0.63
	LTE 41	QPSK20M	Top Side	1.8	41055	50	0	Full	Ant4	1	62.9	24.50	23.08	0.06	0.376	1.006	1.387	0.52
	LTE 41	QPSK20M	Top Side	1.8	41490	50	0	Full	Ant4	1	62.9	24.50	23.07	-0.04	0.313	1.006	1.390	0.44
	LTE 41	QPSK20M	Rear Face	1.5	39750	100	0	Full	Ant4	1	62.9	24.50	23.09	0.06	0.643	1.006	1.384	0.90
	LTE 41	QPSK20M	Top Side	1.8	39750	100	0	Full	Ant4	1	62.9	24.50	23.09	0.00	0.646	1.006	1.384	0.90
	LTE 41	QPSK20M	Top Side	1	39750	50	0	Reduce	Ant4	2	62.9	21.50	20.07	0.04	0.680	1.006	1.390	0.95
P32	WLAN2.4G	802.11b	Front Face	1	1	-	-	Full	Ant6	1	100	21.00	19.21	0.00	0.138	1.000	1.510	0.21
	WLAN2.4G	802.11b	Rear Face	1	1	-	-	Full	Ant6	1	100	21.00	19.21	0.05	0.212	1.000	1.510	0.32
	WLAN2.4G	802.11b	Right Side	1	1	-	-	Full	Ant6	1	100	21.00	19.21	-0.09	0.144	1.000	1.510	0.22
	WLAN2.4G	802.11b	Top Side	1	1	-	-	Full	Ant6	1	100	21.00	19.21	-0.03	0.115	1.000	1.510	0.17
	WLAN2.4G	802.11b	Rear Face	1	1	-	-	Full	Ant6	2	100	21.00	19.21	0.02	0.107	1.000	1.510	0.16
	WLAN5G	802.11a	Front Face	1	40	-	-	Reduce	Ant6	1	96.53	17.50	15.90	0.02	0.189	1.036	1.445	0.28
P33	WLAN5G	802.11a	Rear Face	1	40	-	-	Reduce	Ant6	1	96.53	17.50	15.90	0.00	0.429	1.036	1.445	0.64
	WLAN5G	802.11a	Right Side	1	40	-	-	Reduce	Ant6	1	96.53	17.50	15.90	0.06	0.073	1.036	1.445	0.11
	WLAN5G	802.11a	Top Side	1	40	-	-	Reduce	Ant6	1	96.53	17.50	15.90	0.08	0.137	1.036	1.445	0.21
	WLAN5G	802.11a	Rear Face	1	40	-	-	Reduce	Ant6	2	96.53	17.50	15.90	-0.06	0.398	1.036	1.445	0.60
	WLAN5G	802.11a	Front Face	1	149	-	-	Reduce	Ant6	1	96.53	17.50	15.78	-0.11	0.097	1.036	1.486	0.15
	WLAN5G	802.11a	Rear Face	1	149	-	-	Reduce	Ant6	1	96.53	17.50	15.78	-0.07	0.217	1.036	1.486	0.33
	WLAN5G	802.11a	Right Side	1	149	-	-	Reduce	Ant6	1	96.53	17.50	15.78	0.02	0.119	1.036	1.486	0.18
P34	WLAN5G	802.11a	Top Side	1	149	-	-	Reduce	Ant6	1	96.53	17.50	15.78	-0.08	0.274	1.036	1.486	0.42
	WLAN5G	802.11a	Top Side	1	149	-	-	Reduce	Ant6	2	96.53	17.50	15.78	-0.05	0.266	1.036	1.486	0.41
	BT	GFSK	Front Face	1	0	-	-	Full	Ant6	1	76.88	11.50	9.51	0.03	0.016	1.301	1.581	0.03
P35	BT	GFSK	Rear Face	1	0	-	-	Full	Ant6	1	76.88	11.50	9.51	-0.09	0.018	1.301	1.581	0.04
	BT	GFSK	Right Side	1	0	-	-	Full	Ant6	1	76.88	11.50	9.51	0.05	0.011	1.301	1.581	0.02
	BT	GFSK	Top Side	1	0	-	-	Full	Ant6	1	76.88	11.50	9.51	-0.04	0.015	1.301	1.581	0.03
	BT	GFSK	Rear Face	1	0	-	-	Full	Ant6	2	76.88	11.50	9.51	-0.19	0.015	1.301	1.581	0.03

4.6.5 SAR Results for Extremity Exposure Condition (Separation Distance is 0 cm Gap)

Plot No.	Band	Mode	Test Position	Separation Distance (cm)	Ch.	RB#	RB Offset	Power Reduction	Antenna	Sample	Duty Cycle %	Max. Tune-up Power (dBm)	Measured Conducted Power (dBm)	Power Drift (dB)	Measured SAR-10g (W/kg)	Duty Cycle Scaling Factor	Tune-up Scaling Factor	Scaled SAR-10g (W/kg)
	LTE 7	QPSK20M	Rear Face	0	20850	1	50	DSI-4	Ant4	-	-	19.50	18.25	-0.12	0.949	1.000	1.334	1.27
	LTE 7	QPSK20M	Rear Face	0	20850	50	25	DSI-4	Ant4	-	-	19.50	18.11	-0.04	0.907	1.000	1.377	1.25
	LTE 7	QPSK20M	Top Side	0	20850	1	50	DSI-4	Ant4	-	-	19.50	18.25	-0.05	1.420	1.000	1.334	1.89
P36	LTE 7	QPSK20M	Top Side	0	20850	50	25	DSI-4	Ant4	-	-	19.50	18.11	0.07	1.410	1.000	1.377	1.94
	LTE 7C	QPSK20M	Top Side	0	PCC:20850 SCC:21048	PCC:1 SCC:0	PCC:50 SCC:0	DSI-4	Ant4	-	-	19.50	18.08	0.00	1.370	1.000	1.387	1.90
	LTE 7	QPSK20M	Top Side	0	20850	50	25	DSI-4	Ant4	-	-	19.50	18.11	0.00	1.260	1.000	1.377	1.74
	LTE 38	QPSK20M	Top Side	0	38150	1	50	DSI-4	Ant4	-	62.9	23.00	21.69	0.04	1.380	1.006	1.352	1.87
P37	LTE 38	QPSK20M	Top Side	0	38150	50	0	DSI-4	Ant4	-	62.9	23.00	21.55	0.08	1.390	1.006	1.396	1.94
	LTE 38C	QPSK20M	Top Side	0	PCC:37952 SCC:38150	PCC:1 SCC:0	PCC:50 SCC:0	DSI-4	Ant4	-	62.9	23.00	21.53	-0.02	1.320	1.006	1.403	1.85
	LTE 38	QPSK20M	Top Side	0	38150	50	0	DSI-4	Ant4	-	62.9	23.00	21.55	-0.05	1.210	1.006	1.396	1.69
P38	LTE 41	QPSK20M	Top Side	0	39750	1	50	DSI-4	Ant4	-	62.9	21.50	20.29	0.11	1.390	1.006	1.321	1.84
	LTE 41	QPSK20M	Top Side	0	39750	50	0	DSI-4	Ant4	-	62.9	21.50	20.07	0.11	1.310	1.006	1.390	1.82
	LTE 41	QPSK20M	Top Side	0	40185	1	50	DSI-4	Ant4	-	62.9	21.50	20.18	0.05	1.190	1.006	1.355	1.62
	LTE 41	QPSK20M	Top Side	0	40620	1	50	DSI-4	Ant4	-	62.9	21.50	20.07	0.02	0.936	1.006	1.390	1.31
	LTE 41	QPSK20M	Top Side	0	41055	1	50	DSI-4	Ant4	-	62.9	21.50	20.14	0.02	1.010	1.006	1.368	1.39
	LTE 41	QPSK20M	Top Side	0	41490	1	50	DSI-4	Ant4	-	62.9	21.50	20.14	0.01	0.904	1.006	1.368	1.24
	LTE 41	QPSK20M	Top Side	0	40185	50	0	DSI-4	Ant4	-	62.9	21.50	19.98	0.14	1.200	1.006	1.419	1.71
	LTE 41	QPSK20M	Top Side	0	40620	50	0	DSI-4	Ant4	-	62.9	21.50	19.92	0.04	1.090	1.006	1.439	1.58
	LTE 41	QPSK20M	Top Side	0	41055	50	0	DSI-4	Ant4	-	62.9	21.50	20.02	0.06	0.994	1.006	1.406	1.41
	LTE 41	QPSK20M	Top Side	0	41490	50	0	DSI-4	Ant4	-	62.9	21.50	19.96	-0.04	0.919	1.006	1.426	1.32
	LTE 41	QPSK20M	Top Side	0	39750	1	50	DSI-4	Ant4	-	62.9	21.50	20.29	0.15	1.180	1.006	1.321	1.56
	WLAN5G	802.11a	Front Face	0	64	-	-	DSI-4	Ant6	15	96.53	17.50	15.88	0.07	0.433	1.036	1.452	0.65
	WLAN5G	802.11a	Rear Face	0	64	-	-	DSI-4	Ant6	15	96.53	17.50	15.88	0.01	0.481	1.036	1.452	0.72
	WLAN5G	802.11a	Right Side	0	64	-	-	DSI-4	Ant6	15	96.53	17.50	15.88	0.00	0.197	1.036	1.452	0.30
P39	WLAN5G	802.11a	Top Side	0	64	-	-	DSI-4	Ant6	15	96.53	17.50	15.88	-0.06	0.526	1.036	1.452	0.79
	WLAN5G	802.11a	Top Side	0	64	-	-	DSI-4	Ant6	15	96.53	17.50	15.88	-0.10	0.519	1.036	1.452	0.78
	WLAN5G	802.11a	Front Face	0	140	-	-	DSI-4	Ant6	16.5	96.53	18.50	16.74	0.08	0.376	1.036	1.500	0.58
	WLAN5G	802.11a	Rear Face	0	140	-	-	DSI-4	Ant6	16.5	96.53	18.50	16.74	0.01	0.467	1.036	1.500	0.73
	WLAN5G	802.11a	Right Side	0	140	-	-	DSI-4	Ant6	16.5	96.53	18.50	16.74	0.08	0.241	1.036	1.500	0.37
P40	WLAN5G	802.11a	Top Side	0	140	-	-	DSI-4	Ant6	16.5	96.53	18.50	16.74	-0.13	0.707	1.036	1.500	1.10
	WLAN5G	802.11a	Top Side	0	140	-	-	DSI-4	Ant6	16.5	96.53	18.50	16.74	0.03	0.688	1.036	1.500	1.07

#### 4.6.6 SAR Measurement Variability

According to KDB 865664 D01, SAR measurement variability was assessed for each frequency band, which is determined by the SAR probe calibration point and tissue-equivalent medium used for the device measurements. When both head and body tissue-equivalent media are required for SAR measurements in a frequency band, the variability measurement procedures should be applied to the tissue medium with the highest measured SAR, using the highest measured SAR configuration for that tissue-equivalent medium. Alternatively, if the highest measured SAR for both head and body tissue-equivalent media are  $\leq 1.45$  W/kg and the ratio of these highest SAR values, i.e., largest divided by smallest value, is  $\leq 1.10$ , the highest SAR configuration for either head or body tissue-equivalent medium may be used to perform the repeated measurement. These additional measurements are repeated after the completion of all measurements requiring the same head or body tissue-equivalent medium in a frequency band. The test device should be returned to ambient conditions (normal room temperature) with the battery fully charged before it is re-mounted on the device holder for the repeated measurement(s) to minimize any unexpected variations in the repeated results.

SAR repeated measurement procedure:

1. When the highest measured SAR is  $< 0.80$  W/kg, repeated measurement is not required.
2. When the highest measured SAR is  $\geq 0.80$  W/kg, repeat that measurement once.
3. 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  $\geq 1.45$  W/kg, perform a second repeated measurement.
4. If the ratio of largest to smallest SAR for the original, first and second repeated measurements is  $> 1.20$ , and the original, first or second repeated measurement is  $\geq 1.5$  W/kg, perform a third repeated measurement.

Band	Test Position	Ch.	Original Measured SAR-1g (W/kg)	1st Repeated SAR-1g (W/kg)	L/S Ratio	2nd Repeated SAR-1g (W/kg)	L/S Ratio	3rd Repeated SAR-1g (W/kg)	L/S Ratio
GSM850	Left Cheek	189	0.834	0.824	1.012	N/A	N/A	N/A	N/A
GSM1900	Right Cheek	810	0.829	0.821	1.010	N/A	N/A	N/A	N/A





**4.6.7 Simultaneous Multi-band Transmission Evaluation**

**<SAR Summation Analysis>**

Simultaneous transmission SAR test exclusion is determined for each operating configuration and exposure condition according to the reported standalone SAR of each applicable simultaneous transmitting antenna. When the sum of SAR<sub>1g</sub> of all simultaneously transmitting antennas in an operating mode and exposure condition combination is within the SAR limit (SAR<sub>1g</sub> 1.6 W/kg), the simultaneous transmission SAR is not required. When the sum of SAR<sub>1g</sub> is greater than the SAR limit (SAR<sub>1g</sub> 1.6 W/kg), SAR test exclusion is determined by the SPLSR.

**< Head Exposure Condition >**

WWAN Band	Exposure Position	1	2	3	4	1+2+4 Summed 1g SAR (W/kg)	1+3+4 Summed 1g SAR (W/kg)
		WWAN	2.4GHz WLAN	5GHz WLAN	Bluetooth		
		1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)		
GSM850	Right Cheek at 0mm	0.901	0.130	0.361	0.086	1.12	1.35
	Right Tilted at 0mm	0.780	0.144	0.442	0.060	0.98	1.28
	Left Cheek at 0mm	0.946	0.422	0.503	0.135	1.50	1.58
	Left Tilted at 0mm	0.748	0.255	0.331	0.068	1.07	1.15
GSM1900	Right Cheek at 0mm	1.027	0.130	0.361	0.086	1.24	1.47
	Right Tilted at 0mm	0.523	0.144	0.442	0.060	0.73	1.02
	Left Cheek at 0mm	0.331	0.422	0.503	0.135	0.89	0.97
	Left Tilted at 0mm	0.396	0.255	0.331	0.068	0.72	0.79
WCDMA V	Right Cheek at 0mm	0.731	0.130	0.361	0.086	0.95	1.18
	Right Tilted at 0mm	0.696	0.144	0.442	0.060	0.90	1.20
	Left Cheek at 0mm	0.851	0.422	0.503	0.135	1.41	1.49
	Left Tilted at 0mm	0.790	0.255	0.331	0.068	1.11	1.19
LTE Band 5	Right Cheek at 0mm	0.844	0.130	0.361	0.086	1.06	1.29
	Right Tilted at 0mm	0.767	0.144	0.442	0.060	0.97	1.27
	Left Cheek at 0mm	0.872	0.422	0.503	0.135	1.43	1.51
	Left Tilted at 0mm	0.772	0.255	0.331	0.068	1.10	1.17
LTE Band 7	Right Cheek at 0mm	0.933	0.130	0.361	0.086	1.15	1.38
	Right Tilted at 0mm	1.086	0.144	0.442	0.060	1.29	1.59
	Left Cheek at 0mm	0.905	0.422	0.503	0.135	1.46	1.54
	Left Tilted at 0mm	1.029	0.255	0.331	0.068	1.35	1.43
LTE Band 38	Right Cheek at 0mm	0.769	0.130	0.361	0.086	0.99	1.22
	Right Tilted at 0mm	0.964	0.144	0.442	0.060	1.17	1.47
	Left Cheek at 0mm	0.510	0.422	0.503	0.135	1.07	1.15
	Left Tilted at 0mm	0.663	0.255	0.331	0.068	0.99	1.06
LTE Band 41	Right Cheek at 0mm	0.921	0.130	0.361	0.086	1.14	1.37
	Right Tilted at 0mm	1.041	0.144	0.442	0.060	1.25	1.54
	Left Cheek at 0mm	0.644	0.422	0.503	0.135	1.20	1.28
	Left Tilted at 0mm	0.854	0.255	0.331	0.068	1.18	1.25



< Body Worn Exposure Condition >

WWAN Band	Exposure Position	1	2	3	4	1+2+4 Summed 1g SAR (W/kg)	1+3+4 Summed 1g SAR (W/kg)
		WWAN	2.4GHz WLAN	5GHz WLAN	Bluetooth		
		1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)		
GSM850	Front at 10mm -	0.357	0.208	0.268	0.033	0.60	0.66
	Rear at 10mm -	0.580	0.320	0.654	0.036	0.94	1.27
GSM1900	Front at 10mm -	0.377	0.208	0.268	0.033	0.62	0.68
	Rear at 10mm -	0.632	0.320	0.654	0.036	0.99	1.32
WCDMA V	Front at 10mm -	0.313	0.208	0.268	0.033	0.55	0.61
	Rear at 10mm -	0.517	0.320	0.654	0.036	0.87	1.21
LTE Band 5	Front at 10mm -	0.330	0.208	0.268	0.033	0.57	0.63
	Rear at 10mm -	0.457	0.320	0.654	0.036	0.81	1.15
LTE Band 7	Front at 10mm -	1.047	0.208	0.268	0.033	1.29	1.35
	Rear at 10mm -	0.903	0.320	0.654	0.036	1.26	1.59
LTE Band 38	Front at 10mm -	0.673	0.208	0.268	0.033	0.91	0.97
	Rear at 10mm -	0.798	0.320	0.654	0.036	1.15	1.49
LTE Band 41	Front at 10mm -	0.835	0.208	0.268	0.033	1.08	1.14
	Rear at 10mm -	0.580	0.320	0.654	0.036	0.94	1.27

< Hotspot Exposure Condition >

WWAN Band	Exposure Position	1	2	3	4	1+2+4 Summed 1g SAR (W/kg)	1+3+4 Summed 1g SAR (W/kg)
		WWAN	2.4GHz WLAN	5GHz WLAN	Bluetooth		
		1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)		
GSM850	Front at 10mm -	0.357	0.208	0.283	0.033	0.60	0.67
	Rear at 10mm -	0.580	0.320	0.642	0.036	0.94	1.26
	Left side at 10mm -	0.186				0.19	0.19
	Right side at 10mm -	0.339	0.217	0.183	0.023	0.58	0.54
	Top side at 10mm -	0.285	0.174	0.422	0.031	0.49	0.74
	Bottom side at 10mm -	0.516				0.52	0.52
GSM1900	Front at 10mm -	0.377	0.208	0.283	0.033	0.62	0.69
	Rear at 10mm -	0.632	0.320	0.642	0.036	0.99	1.31
	Left side at 10mm -	0.243				0.24	0.24
	Right side at 10mm -	0.123	0.217	0.183	0.023	0.36	0.33
	Top side at 10mm -	0.519	0.174	0.422	0.031	0.72	0.97
	Bottom side at 10mm -	0.364				0.36	0.36
WCDMA V	Front at 10mm -	0.313	0.208	0.283	0.033	0.55	0.63
	Rear at 10mm -	0.517	0.320	0.642	0.036	0.87	1.20
	Left side at 10mm -	0.168				0.17	0.17
	Right side at 10mm -	0.293	0.217	0.183	0.023	0.53	0.50
	Top side at 10mm -	0.298	0.174	0.422	0.031	0.50	0.75
	Bottom side at 10mm -	0.445				0.44	0.44



WWAN Band	Exposure Position	1	2	3	4	1+2+4 Summed 1g SAR (W/kg)	1+3+4 Summed 1g SAR (W/kg)
		WWAN	2.4GHz WLAN	5GHz WLAN	Bluetooth		
		1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)		
LTE Band 5	Front at 10mm -	0.330	0.208	0.283	0.033	0.57	0.65
	Rear at 10mm -	0.457	0.320	0.642	0.036	0.81	1.14
	Left side at 10mm -	0.162				0.16	0.16
	Right side at 10mm -	0.233	0.217	0.183	0.023	0.47	0.44
	Top side at 10mm -	0.297	0.174	0.422	0.031	0.50	0.75
	Bottom side at 10mm -	0.348				0.35	0.35
LTE Band 7	Front at 10mm -	1.047	0.208	0.283	0.033	1.29	1.36
	Rear at 10mm -	0.903	0.320	0.642	0.036	1.26	1.58
	Left side at 10mm -	0.295				0.29	0.29
	Right side at 10mm -	0.070	0.217	0.183	0.023	0.31	0.28
	Top side at 10mm -	0.954	0.174	0.422	0.031	1.16	1.41
	Bottom side at 10mm -	0.262				0.26	0.26
LTE Band 38	Front at 10mm -	0.673	0.208	0.283	0.033	0.91	0.99
	Rear at 10mm -	0.798	0.320	0.642	0.036	1.15	1.48
	Left side at 10mm -	0.290				0.29	0.29
	Right side at 10mm -	0.134	0.217	0.183	0.023	0.37	0.34
	Top side at 10mm -	1.084	0.174	0.422	0.031	1.29	1.54
	Bottom side at 10mm -	0.377				0.38	0.38
LTE Band 41	Front at 10mm -	0.835	0.208	0.283	0.033	1.08	1.15
	Rear at 10mm -	0.580	0.320	0.642	0.036	0.94	1.26
	Left side at 10mm -	0.242				0.24	0.24
	Right side at 10mm -	0.139	0.217	0.183	0.023	0.38	0.34
	Top side at 10mm -	1.081	0.174	0.422	0.031	1.29	1.53
	Bottom side at 10mm -	0.500				0.50	0.50

<Extremity Exposure Condition >

WWAN Band	Exposure Position	1	2	3	4	1+2+4 Summed 10g SAR (W/kg)	1+3+4 Summed 10g SAR (W/kg)
		WWAN	2.4GHz WLAN	5GHz WLAN	Bluetooth		
		10g SAR (W/kg)	10g SAR (W/kg)	10g SAR (W/kg)	10g SAR (W/kg)		
LTE Band 7	Front at 0mm			0.651		0.00	0.65
	Rear at 0mm	1.266		0.726		1.27	1.99
	Right at 0mm			0.374		0.00	0.37
	Top at 0mm	1.942		1.098		1.94	3.04
LTE Band 38	Front at 0mm			0.651		0.00	0.65
	Rear at 0mm			0.726		0.00	0.73
	Right at 0mm			0.374		0.00	0.37
	Top at 0mm	1.941		1.098		1.94	3.04
LTE Band 41	Front at 0mm			0.651		0.00	0.65



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	Rear at 0mm			0.726		0.00	0.73
	Right at 0mm			0.374		0.00	0.37
	Top at 0mm	1.837		1.098		1.84	2.93

**Note:**

1. Summed 1+2+4 covers Summed 1+2 / 1+4 / 2+4, Summed 1+3+4 covers Summed 1+3 / 1+4 / 3+4.
2. The SAR summation of maximum SAR of WWAN and WLAN/BT for each position is under the SAR limitation (**Head & Body: SAR<sub>1g</sub> 1.6 W/kg, Extremity: SAR<sub>10g</sub> 4.0 W/kg**). Therefore, the simultaneous transmission condition is compliance with the SAR criterion.

**Test Engineer :** Rikou Lu, and Dennis Ye



## 5. Calibration of Test Equipment

Equipment	Manufacturer	Model	SN	Cal. Date	Cal. Interval
System Validation Dipole	SPEAG	D835V2	4d139	Sep. 17, 2021	3 Years
System Validation Dipole	SPEAG	D1900V2	5d159	Sep. 16, 2021	3 Years
System Validation Dipole	SPEAG	D2450V2	893	Sep. 18, 2021	3 Years
System Validation Dipole	SPEAG	D2600V2	1110	Sep. 16, 2021	3 Years
System Validation Dipole	SPEAG	D5GHzV2	1133	Sep. 14, 2021	3 Years
Data Acquisition Electronics	SPEAG	DAE4	1389	Nov. 09, 2022	1 Year
Dosimetric E-Field Probe	SPEAG	EX3DV4	3873	Aug. 31, 2022	1 Year
Dielectric Probe Kit	SPEAG	DAK-3.5	1076	Aug. 29, 2022	1 Year
Radio Communication Analyzer	ANRITSU	MT8820C	6201465426	Feb. 14, 2023	1 Year
Wireless Communication Test Set	Agilent	E5515C	MY50260600	May. 12, 2022	1 Year
ENA Series Network Analyzer	Agilent	E5071C	MY46214638	May. 07, 2022	1 Year
Spectrum Analyzer	KEYSIGHT	N9010A	MY54510355	May. 14, 2022	1 Year
MXG Analog Signal Generator	KEYSIGHT	N5183A	MY50143024	Feb. 14, 2023	1 Year
Power Meter	Agilent	N1914A	MY52180044	Feb. 15, 2023	1 Year
Power Sensor	Agilent	E9304A H18	MY52050011	Feb. 15, 2023	1 Year
Power Meter	ANRITSU	ML2495A	1506002	Feb. 14, 2023	1 Year
Power Sensor	ANRITSU	MA2411B	1339352	Feb. 14, 2023	1 Year
Temp. & Humi. Recorder	HUATO	A2000TH	HE20107684	May. 11, 2022	1 Year
Electronic Thermometer	YONGFA	YF-160A	120100323	May. 14, 2022	1 Year
Coupler	Woken	0110A056020-10	COM27RW1A 3	May. 11, 2022	1 Year

**Note:**

- Referring to KDB 865664 D01 v01r04, the dipole calibration interval can be extended to 3 years with justification. The dipole are also not physically damaged, or repaired during the interval. The dipole justification can be found in appendix C.  
The return loss is  $< -20\text{dB}$ , within 20% of prior calibration, the impedance is with 5ohm of prior calibration.



## 6. Measurement Uncertainty

DASY5 Uncertainty Budget								
Error Description	Uncertainty Value (±%)	Probability	Divisor	(Ci) 1g	(Ci) 10g	Standard Uncertainty (1g) (±%)	Standard Uncertainty (10g) (±%)	(Vi) Veff
<b>Measurement System</b>								
Probe Calibration	6.0	N	1	1	1	6.0	6.0	∞
Axial Isotropy	4.7	R	1.732	0.7	0.7	1.9	1.9	∞
Hemispherical Isotropy	9.6	R	1.732	0.7	0.7	3.9	3.9	∞
Boundary Effects	1.0	R	1.732	1	1	0.6	0.6	∞
Linearity	4.7	R	1.732	1	1	2.7	2.7	∞
System Detection Limits	1.0	R	1.732	1	1	0.6	0.6	∞
Modulation Response	3.2	R	1.732	1	1	1.8	1.8	∞
Readout Electronics	0.3	N	1	1	1	0.3	0.3	∞
Response Time	0.0	R	1.732	1	1	0.0	0.0	∞
Integration Time	2.6	R	1.732	1	1	1.5	1.5	∞
RF Ambient Noise	3.0	R	1.732	1	1	1.7	1.7	∞
RF Ambient Reflections	3.0	R	1.732	1	1	1.7	1.7	∞
Probe Positioner	0.4	R	1.732	1	1	0.2	0.2	∞
Probe Positioning	2.9	R	1.732	1	1	1.7	1.7	∞
Max. SAR Eval.	2.0	R	1.732	1	1	1.2	1.2	∞
<b>Test Sample Related</b>								
Device Positioning	3.0	N	1	1	1	3.0	3.0	35
Device Holder	3.6	N	1	1	1	3.6	3.6	12
Power Drift	5.0	R	1.732	1	1	2.9	2.9	∞
Power Scaling	0.0	R	1.732	1	1	0.0	0.0	∞
<b>Phantom and Setup</b>								
Phantom Uncertainty	6.1	R	1.732	1	1	3.5	3.5	∞
SAR correction	0.0	R	1.732	1	0.84	0.0	0.0	∞
Liquid Conductivity Repeatability	0.2	N	1	0.78	0.71	0.1	0.1	5
Liquid Conductivity (target)	5.0	R	1.732	0.78	0.71	2.3	2.0	∞
Liquid Conductivity (mea.)	2.5	R	1.732	0.78	0.71	1.1	1.0	∞
Temp. unc. - Conductivity	3.4	R	1.732	0.78	0.71	1.5	1.4	∞
Liquid Permittivity Repeatability	0.15	N	1	0.23	0.26	0.0	0.0	5
Liquid Permittivity (target)	5.0	R	1.732	0.23	0.26	0.7	0.8	∞
Liquid Permittivity (mea.)	2.5	R	1.732	0.23	0.26	0.3	0.4	∞
Temp. unc. - Permittivity	0.83	R	1.732	0.23	0.26	0.1	0.1	∞
<b>Combined Std. Uncertainty</b>						11.4%	11.4%	1013
<b>Coverage Factor for 95 %</b>						K=2	K=2	
<b>Expanded STD Uncertainty</b>						22.9%	22.7%	

**Uncertainty budget for frequency range 30 MHz to 3 GHz**



DASY5 Uncertainty Budget								
Error Description	Uncertainty Value (±%)	Probability	Divisor	(Ci) 1g	(Ci) 10g	Standard Uncertainty (1g) (±%)	Standard Uncertainty (10g) (±%)	(Vi) Veff
<b>Measurement System</b>								
Probe Calibration	6.55	N	1	1	1	6.5	6.5	∞
Axial Isotropy	4.7	R	1.732	0.7	0.7	1.9	1.9	∞
Hemispherical Isotropy	9.6	R	1.732	0.7	0.7	3.9	3.9	∞
Boundary Effects	2.0	R	1.732	1	1	1.2	1.2	∞
Linearity	4.7	R	1.732	1	1	2.7	2.7	∞
System Detection Limits	1.0	R	1.732	1	1	0.6	0.6	∞
Modulation Response	3.2	R	1.732	1	1	1.8	1.8	∞
Readout Electronics	0.3	N	1	1	1	0.3	0.3	∞
Response Time	0.0	R	1.732	1	1	0.0	0.0	∞
Integration Time	2.6	R	1.732	1	1	1.5	1.5	∞
RF Ambient Noise	3.0	R	1.732	1	1	1.7	1.7	∞
RF Ambient Reflections	3.0	R	1.732	1	1	1.7	1.7	∞
Probe Positioner	0.4	R	1.732	1	1	0.2	0.2	∞
Probe Positioning	6.7	R	1.732	1	1	3.9	3.9	∞
Max. SAR Eval.	4.0	R	1.732	1	1	2.3	2.3	∞
<b>Test Sample Related</b>								
Device Positioning	3.0	N	1	1	1	3.0	3.0	35
Device Holder	3.6	N	1	1	1	3.6	3.6	12
Power Drift	5.0	R	1.732	1	1	2.9	2.9	∞
Power Scaling	0.0	R	1.732	1	1	0.0	0.0	∞
<b>Phantom and Setup</b>								
Phantom Uncertainty	6.6	R	1.732	1	1	3.8	3.8	∞
SAR correction	0.0	R	1.732	1	0.84	0.0	0.0	∞
Liquid Conductivity Repeatability	0.2	N	1	0.78	0.71	0.1	0.1	5
Liquid Conductivity (target)	5.0	R	1.732	0.78	0.71	2.3	2.0	∞
Liquid Conductivity (mea.)	2.5	R	1.732	0.78	0.71	1.1	1.0	∞
Temp. unc. - Conductivity	3.4	R	1.732	0.78	0.71	1.5	1.4	∞
Liquid Permittivity Repeatability	0.15	N	1	0.23	0.26	0.0	0.0	5
Liquid Permittivity (target)	5.0	R	1.732	0.23	0.26	0.7	0.8	∞
Liquid Permittivity (mea.)	2.5	R	1.732	0.23	0.26	0.3	0.4	∞
Temp. unc. - Permittivity	0.83	R	1.732	0.23	0.26	0.1	0.1	∞
<b>Combined Std. Uncertainty</b>						12.5%	12.5%	1458
<b>Coverage Factor for 95 %</b>						K=2	K=2	
<b>Expanded STD Uncertainty</b>						25.0%	24.9%	

**Uncertainty budget for frequency range 3 GHz to 6 GHz**



## **7. Information on the Testing Laboratories**

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

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

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

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## Appendix A. SAR Plots of System Verification

The plots for system verification with largest deviation for each SAR system combination are shown as follows.