



## Appendix B. SAR Tissue Specification

The brain mixtures consist of a viscous gel using hydrox-ethyl cellulose(HEC) gelling agent and saline solution. Preservation with a bactericide is added and visual inspection is made to make sure air bubbles are not trapped during the mixing process. The mixture is calibrated to obtain proper dielectric constant (permittivity) and conductivity of the desired tissue.

Frequency (MHz)	750 ~ 835		1 750		1 900		2 450		5 200 ~ 5 800	
Tissue Type	Head	Body	Head	Body	Head	Body	Head	Body	Head	Body
Ingredient	% by weight									
Water	40.29	51.97	53.00	68.00	55.00	70.50	72.00	73.00	65.52	80.00
Salt (NaCl)	1.38	0.93	0.40	0.20	0.35	0.30	0.10	0.10	0	0
Sugar	57.90	47.00	0	0	0	0	0	0	0	0
HEC	0.24	0	0	0	0	0	0	0	0	0
Bactericide	0.19	0.10	0	0	0	0	0	0	0	0
Triton X-100	0	0	0	0	0	0	20.00	0	17.24	0
DGBE	0	0	46.60	31.80	44.65	29.20	0	26.90	0	0
Diethylene glycol hexyl ether	0	0	0	0	0	0	7.90	0	17.24	0
Polysorbate (Tween) 80	0	0	0	0	0	0	0	0	0	20.00
<b>Tissue parameter target by C. Gabriel and G. Harts grove.</b>										
Salt: 99 % Pure Sodium Chloride					Sucrose: 98 % Pure Sucrose					
Water: De-ionized, 16 M resistivity					HEC: Hydroxyethyl Cellulose					
DGBE: 99 % Di(ethylene glycol) butyl ether, [2-(2-butoxyethoxy) ethanol]										
Triton X-100(ultra-pure): Polyethylene glycol mono[4-(1,1,3,3-tetramethylbutyl)phenyl] ether										

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## Appendix C. Dynamic Antenna Tuner Testing

### C.1 Dynamic Antenna Tuning

Per April 2019 TCB Workshop Notes, SAR is measured according to required procedures with dynamic tuner active allowing device to automatically tune. Auto-tune state determined by device during normal SAR measurement verified and listed alongside the reported SAR results.

Additional single point SAR measurements to verify other tuner configurations result in equivalent or lower SAR value.

The additional tuner hardware has no influence on the antenna characteristics, other impedance matching.

- i) Total number tuner states divided evenly among each supported band / air interface and exposure condition combination
- ii) Tuner state is established remotely so that the device is not moved for the entire series of single point SAR measurements for the tuner states in each combination
- iii) Single point measurements performed at the peak SAR location of the highest measured SAR configuration for each combination. SAR probe remains stationary throughout the entire series of single point measurements for each combination
- iiii) If any single point SAR measurement result is  $> 1.2 \text{ W/kg}$  for a band/exposure condition combination set, all supported tuner states are evaluated with single point SAR measurements for the combination.

To evaluate all the tuner states, the 144 tuner states were divided among the aggregate band, mode and exposure combinations. Single point time-sweep measurements were performed at the peak SAR location determined by the zoom scan of the configuration with the highest reported SAR for each combination.

The tuner state was able to be established remotely so that the device was not moved for the entire series of single point SAR for the tuner states in each combination. The SAR probe remained stationary at the same position throughout the entire series of single point measurements for each combination. When the single point SAR or 1g SAR was  $> 1.2 \text{ W/kg}$  for a particular band/mode/exposure condition, point SAR measurements were made for all 144 states.

The operational description contains more information about the design and implementation of the dynamic antenna tuning.

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Report No.:  
KR22-SPF0015-B  
Page (306) of (337)



## C.2 Dynamic Antenna Tuner Test Result

### C.2.1 Body SAR data

Band	WCDMA II	WCDMA IV	WCDMA V	LTE B.2	LTE B.5	LTE B.12	LTE B.66
Mode	RMC	RMC	RMC	QPSK 20M 1RB 0Offset	QPSK 10M 1RB 0Offset	QPSK 10M 25RB 0Offset	QPSK 20M 1RB 99Offset
Test Position	Rear	Rear	Top	Rear	Rear	Top	Rear
Distance (mm)	14	0	0	14	14	0	14
Frequency (MHz)	1 907.6	1 752.6	836.6	1880.0	836.5	707.5	1720.0
Channel	9538	1513	4183	18900	20525	23095	132072
Measured 1g SAR (W/kg)	0.790	0.851	0.646	0.757	0.406	0.650	0.633
Average Value of Time Sweep (W/kg)							
-	Auto-Tune (State 122) =1.376	Auto-Tune (State 45) =2.186	Auto-Tune (State 23) =1.758	Auto-Tune (State 119) =1.595	Auto-Tune (State 18) =0.639	Auto-Tune (State 93) =1.911	Auto-Tune (State 45) =1.210
State 0	1.312	1.555	0.841	1.234	-	1.522	0.561
State 1	1.283	1.412	1.048	1.150	-	1.648	0.497
State 2	1.260	1.348	1.096	1.103	-	1.622	0.467
State 3	1.186	1.216	1.195	0.999	-	1.499	0.412
State 4	1.177	1.189	1.257	0.982	-	1.385	0.402
State 5	0.891	0.972	1.288	0.797	-	1.009	0.322
State 6	0.657	0.622	0.814	0.483	-	0.428	0.207
State 7	0.369	0.381	0.373	0.273	0.156	0.200	0.129
State 8	0.222	0.252	0.192	0.170	-	0.111	0.088
State 9	1.348	1.906	0.266	1.437	-	0.878	0.793
State 10	1.325	1.784	0.304	1.346	-	0.956	0.732
State 11	1.302	1.725	0.306	1.302	-	0.930	0.704
State 12	1.248	1.602	0.299	1.196	-	0.841	0.655
State 13	1.234	1.576	0.286	1.177	-	0.754	0.641
State 14	1.081	1.351	0.226	0.970	-	0.516	0.557
State 15	0.725	0.942	0.100	0.628	0.186	0.201	0.405
State 16	0.420	0.619	0.046	0.371	-	0.091	0.285
State 17	0.260	0.425	0.028	0.236	-	0.051	0.211
State 18	1.106	1.006	1.102	0.861	0.658	1.651	0.305
State 19	1.095	0.902	1.312	0.813	-	1.762	0.269
State 20	1.060	0.845	1.367	0.770	-	1.727	0.250
State 21	0.981	0.740	1.485	0.683	-	1.602	0.216
State 22	0.985	0.725	1.569	0.681	-	1.484	0.210
State 23	0.816	0.560	1.757	0.529	-	1.096	0.162
State 24	0.499	0.328	1.685	0.302	-	0.477	0.095
State 25	0.263	0.185	1.019	0.158	-	0.225	0.055
State 26	0.149	0.114	0.560	0.092	-	0.126	0.034
State 27	1.230	1.398	0.328	1.099	-	0.942	0.488
State 28	1.213	1.267	0.383	1.033	-	1.028	0.432
State 29	1.177	1.203	0.387	0.980	-	1.007	0.406
State 30	1.110	1.082	0.382	0.883	-	0.914	0.362
State 31	1.106	1.051	0.371	0.877	-	0.823	0.353
State 32	0.847	0.856	0.301	0.702	0.397	0.576	0.282
State 33	0.602	0.542	0.137	0.427	-	0.224	0.177
State 34	0.333	0.325	0.062	0.235	-	0.101	0.111
State 35	0.198	0.214	0.034	0.143	-	0.057	0.074
State 36	1.168	1.997	0.146	1.368	-	0.554	0.990

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Report No.:  
KR22-SPF0015-B  
Page (307) of (337)



Band	WCDMA II	WCDMA IV	WCDMA V	LTE B.2	LTE B.5	LTE B.12	LTE B.66
State 37	1.253	1.963	0.232	1.394	-	1.265	0.907
State 38	1.286	1.923	0.264	1.400	-	1.376	0.871
State 39	1.286	1.835	0.361	1.353	-	1.224	0.782
State 40	1.340	1.815	0.463	1.344	-	0.917	0.764
State 41	1.328	1.593	0.960	1.180	-	0.368	0.614
State 42	0.963	1.092	0.502	0.728	0.082	0.079	0.374
State 43	0.503	0.659	0.101	0.382	-	0.029	0.218
State 44	0.277	0.420	0.038	0.220	-	0.015	0.138
State 45	1.165	2.190	0.071	1.538	-	0.343	1.200
State 46	1.246	2.167	0.169	1.549	-	1.232	1.114
State 47	1.288	2.148	0.222	1.563	-	1.438	1.082
State 48	1.339	2.090	0.430	1.521	-	1.014	0.999
State 49	1.346	2.066	0.668	1.496	-	0.589	0.984
State 50	1.356	1.907	0.352	1.353	-	0.173	0.848
State 51	1.189	1.462	0.031	0.885	0.056	0.031	0.610
State 52	0.553	0.975	0.008	0.487	-	0.010	0.419
State 53	0.310	0.656	0.003	0.293	-	0.005	0.298
State 54	1.044	1.314	0.183	0.947	-	0.609	0.484
State 55	1.154	1.344	0.244	1.026	-	1.230	0.486
State 56	1.180	1.317	0.264	1.023	-	1.299	0.471
State 57	1.200	1.245	0.317	0.999	-	1.136	0.428
State 58	1.224	1.243	0.360	1.006	-	0.888	0.425
State 59	1.164	1.059	0.529	0.858	0.198	0.388	0.341
State 60	0.784	0.662	0.893	0.504	-	0.089	0.195
State 61	0.386	0.365	0.356	0.244	-	0.034	0.104
State 62	0.207	0.221	0.137	0.136	-	0.018	0.062
State 63	1.125	1.803	0.080	1.216	-	0.366	0.839
State 64	1.214	1.792	0.178	1.268	-	1.217	0.788
State 65	1.246	1.756	0.228	1.271	-	1.412	0.752
State 66	1.278	1.664	0.414	1.222	-	1.053	0.681
State 67	1.299	1.654	0.644	1.236	-	0.642	0.666
State 68	1.262	1.445	0.531	1.073	0.285	0.196	0.541
State 69	0.901	0.974	0.047	0.653	-	0.036	0.328
State 70	0.465	0.582	0.012	0.335	-	0.012	0.192
State 71	0.256	0.370	0.005	0.192	-	0.006	0.121
State 72	1.268	1.695	0.379	1.284	-	1.010	0.664
State 73	1.276	1.585	0.537	1.236	-	1.651	0.595
State 74	1.272	1.521	0.588	1.194	-	1.778	0.567
State 75	1.236	1.395	0.724	1.104	0.637	1.859	0.508
State 76	1.238	1.368	0.843	1.088	-	1.756	0.495
State 77	1.104	1.148	1.236	0.902	-	1.089	0.403
State 78	1.104	0.763	1.113	0.563	-	0.289	0.259
State 79	0.423	0.476	0.346	0.316	-	0.110	0.164
State 80	0.251	0.316	1.117	0.194	-	0.056	0.111
State 81	1.300	2.040	0.147	1.483	0.303	0.585	0.936
State 82	1.311	1.945	0.246	1.425	-	1.124	0.871
State 83	1.279	1.887	0.277	1.385	-	1.242	0.841
State 84	1.286	1.782	0.354	1.307	-	1.311	0.786
State 85	1.277	1.759	0.412	1.287	-	1.169	0.763
State 86	1.170	1.546	0.416	1.092	-	0.594	0.670
State 87	0.820	1.121	0.112	0.716	0.185	0.129	0.491
State 88	0.477	0.752	0.034	0.424	-	0.046	0.349
State 89	0.290	0.522	0.158	0.268	-	0.023	0.257
State 90	1.089	1.091	0.509	0.889	-	1.110	0.348

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Report No.:  
KR22-SPF0015-B  
Page (308) of (337)



Band	WCDMA II	WCDMA IV	WCDMA V	LTE B.2	LTE B.5	LTE B.12	LTE B.66
State 91	1.121	1.021	0.639	0.882	-	1.730	0.318
State 92	1.101	0.968	0.680	0.850	-	1.833	0.299
State 93	1.049	0.869	0.779	0.775	0.619	1.894	0.265
State 94	1.056	0.856	0.860	0.779	-	1.782	0.260
State 95	0.914	0.683	1.120	0.623	-	1.142	0.204
State 96	0.586	0.418	1.645	0.364	-	0.326	0.123
State 97	0.312	0.242	0.985	0.191	-	0.127	0.071
State 98	0.176	0.152	0.453	0.111	-	0.066	0.046
State 99	1.200	0.152	0.172	1.146	0.338	0.631	0.576
State 100	1.223	1.423	0.280	1.116	-	1.188	0.519
State 101	1.207	1.369	0.316	1.076	-	1.311	0.494
State 102	1.164	1.253	0.406	0.984	-	1.381	0.443
State 103	1.172	1.230	0.477	0.983	-	1.252	0.435
State 104	1.036	1.022	0.529	0.811	-	0.657	0.352
State 105	0.696	0.671	0.157	0.500	0.211	0.146	0.226
State 106	0.387	0.415	0.048	0.277	-	0.053	0.141
State 107	0.228	0.273	0.022	0.166	-	0.027	0.095
State 108	1.121	2.055	0.096	1.390	-	0.425	1.098
State 109	1.229	2.046	0.156	1.441	-	1.019	1.005
State 110	1.276	2.020	0.181	1.450	-	1.061	0.954
State 111	1.345	1.937	0.258	1.432	0.243	0.819	0.848
State 112	1.363	1.914	0.342	1.435	-	0.564	0.824
State 113	1.382	1.674	0.792	1.256	-	0.215	0.643
State 114	0.984	1.105	0.270	0.743	-	0.046	0.368
State 115	0.482	0.640	0.054	0.364	-	0.017	0.204
State 116	0.256	0.399	0.021	0.207	-	0.009	0.126
State 117	1.108	2.136	0.052	1.545	-	0.267	1.185
State 118	1.207	2.143	0.141	1.592	0.252	1.143	1.091
State 119	1.263	2.133	0.297	1.603	-	1.214	1.057
State 120	1.341	2.094	0.477	1.568	-	0.628	0.973
State 121	1.354	2.085	0.766	1.573	-	0.331	0.956
State 122	1.405	2.125	0.178	1.410	-	0.095	0.811
State 123	1.052	1.450	0.015	0.895	-	0.017	0.566
State 124	0.529	0.935	0.004	0.466	0.010	0.006	0.374
State 125	0.285	0.616	0.002	0.273	-	0.003	0.262
State 126	1.019	1.395	0.116	0.968	-	0.457	0.545
State 127	1.156	1.474	0.155	1.091	-	0.945	0.570
State 128	1.194	1.461	0.170	1.104	-	0.964	0.551
State 129	1.240	1.398	0.206	1.090	0.215	0.758	0.506
State 130	1.268	1.395	0.236	1.093	-	0.548	0.500
State 131	1.235	1.180	0.358	0.945	-	0.228	0.388
State 132	0.808	0.701	0.578	0.520	-	0.053	0.202
State 133	0.378	0.367	0.203	0.240	-	0.021	0.100
State 134	0.198	0.217	0.078	0.131	-	0.011	0.059
State 135	1.081	1.862	0.057	1.240	0.215	0.283	0.934
State 136	1.202	1.885	0.142	1.327	-	1.112	0.874
State 137	1.246	1.862	0.192	1.335	-	1.194	0.836
State 138	1.309	1.785	0.414	1.308	-	0.677	0.750
State 139	1.327	1.771	0.714	1.314	-	0.369	0.725
State 140	1.319	1.540	0.291	1.149	-	0.109	0.569
State 141	0.919	0.998	0.024	0.670	0.035	0.020	0.324
State 142	0.447	0.572	0.006	0.327	-	0.007	0.179
State 143	0.239	0.353	0.006	0.185	-	0.003	0.111

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## Appendix D. Downlink LTE CA RF Conducted Power

### C.1 LTE Downlink Carrier Aggregation

The tables below show the supported frequency bands of the device for DL Inter-band and DL Intra-band combinations.

Power measurements were performed on the channel with the highest maximum output power from Tune-up Procedure.

In applying the power measurement procedures of KDB 941225 D05A for DL CA to qualify for UL SAR test exclusion, power measurement is required only for the subset in each row with the largest combination of frequency bands and CCs

Index	2CC	Restriction	Completely Covered by Measurement Superset	Reverse
2CC #1	CA_2A-2A	N/A	No	N/A
2CC #2	CA_2C	N/A	No	N/A
2CC #3	CA_2A-4A	N/A	3CC #1	Yes
2CC #4	CA_2A-5A	N/A	3CC #1	Yes
2CC #5	CA_2A-12A	N/A	3CC #2	Yes
2CC #6	CA_2A-66A	N/A	3CC #3	Yes
2CC #7	CA_4A-4A	N/A	3CC #4	N/A
2CC #8	CA_4A-5A	N/A	3CC #1	Yes
2CC #9	CA_4A-12A	B12 SCC Only	3CC #2	No
2CC #10	CA_5A-41A	B41 SCC Only	No	N/A
2CC #11	CA_5A-66A	N/A	3CC #5	Yes
2CC #12	CA_41A-41A	N/A	No	N/A
2CC #13	CA_41C	N/A	3CC #6	N/A
2CC #14	CA_66A-12A	B12 SCC Only	3CC #8	No
2CC #15	CA_66A-66A	N/A	3CC #8	N/A
2CC #16	CA_66B	N/A	No	N/A
2CC #17	CA_66C	N/A	No	N/A

Index	3CC	Restriction	Completely Covered by Measurement Superset	Reverse
3CC #1	CA_2A-4A-5A	N/A	No	Yes
3CC #2	CA_2A-4A-12A	B12 SCC Only	No	Yes
3CC #3	CA_2A-12A-66A	B12 SCC Only	No	Yes
3CC #4	CA_4A-4A-12A	B12 SCC Only	No	No
3CC #5	CA_5A-66A-66A	N/A	No	Yes
3CC #6	CA_41A-41C	N/A	No	Yes
3CC #7	CA_41D	N/A	No	N/A
3CC #8	CA_66A-66A-12A	B12 SCC Only	No	No

Note: Only yellow highlight cells need power measurement according to LTE DL CA SAR test Exclusion in TCB workshop (April 2018).

In applying the power measurement procedures of KDB 941225 D05A for DL CA to qualify for UL SAR test exclusion, power measurement is required only for the CA configuration with the largest aggregated DL CA BW in each frequency band, independently for contiguous and non-contiguous CA; however, if the same frequency band is used for both contiguous and non-contiguous CA, power measurement was performed using the configuration with the largest aggregated BW and maximum output power among contiguous and non-contiguous CA.



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Report No.:  
KR22-SPF0015-B  
Page (310) of (337)



## C.2 Downlink Carrier Aggregation RF Conducted Powers

### C.2.1 LTE Band 2 as PCC

Combination	PCC								SCC 1				SCC 2				Power		
	Band	BW [MHz]	(UL) Ch.	(UL) Freq. [MHz]	Mod.	(UL) RB Size	(UL) RB Offset	(DL) Ch.	(DL) Freq. [MHz]	Band	BW [MHz]	(DL) Ch.	(DL) Freq. [MHz]	Band	BW [MHz]	(DL) Ch.	(DL) Freq. [MHz]	LTE Tx. Power with DL CA Enabled (dBm)	LTE Single Carrier Tx Power (dBm)
CA_2A-2A	LTE B2	20	18700	1860.0	QPSK	1	0	700	1940.0	LTE B2	20	1100	1980.0	N/A				23.23	23.44
CA_2C	LTE B2	20	18700	1860.0	QPSK	1	0	700	1940.0	LTE B2	20	898	1959.8	N/A				23.28	23.44
CA_2A-4A-5A	LTE B2	20	18700	1860.0	QPSK	1	0	700	1940.0	LTE B4	20	2175	2132.5	LTE B5	10	2525	881.5	23.31	23.44
CA_2A-4A-12A	LTE B2	20	18700	1860.0	QPSK	1	0	700	1940.0	LTE B4	20	2175	2132.5	LTE B12	10	5095	737.5	23.23	23.44
CA_2A-12A-66A	LTE B2	20	18700	1860.0	QPSK	1	0	700	1940.0	LTE B12	10	5095	737.5	LTE B66	20	66786	2415.0	23.26	23.44

### C.2.2 LTE Band 4 as PCC

Combination	PCC								SCC 1				SCC 2				Power		
	Band	BW [MHz]	(UL) Ch.	(UL) Freq. [MHz]	Mod.	(UL) RB Size	(UL) RB Offset	(DL) Ch.	(DL) Freq. [MHz]	Band	BW [MHz]	(DL) Ch.	(DL) Freq. [MHz]	Band	BW [MHz]	(DL) Ch.	(DL) Freq. [MHz]	LTE Tx. Power with DL CA Enabled (dBm)	LTE Single Carrier Tx Power (dBm)
CA_2A-4A-5A	LTE B4	20	20175	1732.5	QPSK	1	99	2175	2132.5	LTE B2	20	900	1960.0	LTE B5	10	2525	881.5	22.40	23.53
CA_2A-4A-12A	LTE B4	20	20175	1732.5	QPSK	1	99	2175	2132.5	LTE B2	20	900	1960.0	LTE B12	10	5095	737.5	22.45	23.53
CA_4A-4A-12A	LTE B4	20	20050	1720.0	QPSK	1	99	2050	2120.0	LTE B4	20	2300	2145.0	LTE B12	10	5095	737.5	22.41	23.52

### C.2.3 LTE Band 5 as PCC

Combination	PCC								SCC 1				SCC 2				Power		
	Band	BW [MHz]	(UL) Ch.	(UL) Freq. [MHz]	Mod.	(UL) RB Size	(UL) RB Offset	(DL) Ch.	(DL) Freq. [MHz]	Band	BW [MHz]	(DL) Ch.	(DL) Freq. [MHz]	Band	BW [MHz]	(DL) Ch.	(DL) Freq. [MHz]	LTE Tx. Power with DL CA Enabled (dBm)	LTE Single Carrier Tx Power (dBm)
CA_5A-41A	LTE B5	10	20525	836.5	QPSK	1	0	2525	881.5	LTE B41	20	40620	2593.0	N/A				23.45	23.52
CA_2A-4A-5A	LTE B5	10	20525	836.5	QPSK	1	0	2525	881.5	LTE B2	20	900	1960.0	LTE B4	20	2175	2132.5	23.48	23.52
CA_5A-66A-66A	LTE B5	10	20525	836.5	QPSK	1	0	2525	881.5	LTE B66	20	66786	2145.0	LTE B66	20	67036	2170.0	23.41	23.52

### C.2.4 LTE Band 12 as PCC

Combination	PCC								SCC 1				SCC 2				Power		
	Band	BW [MHz]	(UL) Ch.	(UL) Freq. [MHz]	Mod.	(UL) RB Size	(UL) RB Offset	(DL) Ch.	(DL) Freq. [MHz]	Band	BW [MHz]	(DL) Ch.	(DL) Freq. [MHz]	Band	BW [MHz]	(DL) Ch.	(DL) Freq. [MHz]	LTE Tx. Power with DL CA Enabled (dBm)	LTE Single Carrier Tx Power (dBm)
CA_2A-12A	LTE B12	10	23095	707.5	QPSK	1	25	5095	737.5	LTE B2	20	900	1960.0	N/A				23.85	23.98

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Report No.:  
KR22-SPF0015-B  
Page (311) of (337)



## C.2.5 LTE Band 41 as PCC

Combination	PCC									SCC 1				SCC 2				Power	
	Band	BW [MHz]	(UL) Ch.	(UL) Freq. [MHz]	Mod.	(UL) RB Size	(UL) RB Offset	(DL) Ch.	(DL) Freq. [MHz]	Band	BW [MHz]	(DL) Ch.	(DL) Freq. [MHz]	Band	BW [MHz]	(DL) Ch.	(DL) Freq. [MHz]	LTE Tx. Power with DL CA Enabled (dBm)	LTE Single Carrier Tx Power (dBm)
CA-41A-41A	LTE B41	20	40185	2549.5	QPSK	1	99	40185	2549.5	LTE B41	20	41490	2680.0	N/A				22.44	22.56
CA-41A-41C	LTE B41	20	40185	2549.5	QPSK	1	99	40185	2549.5	LTE B41	20	41490	2680.0	LTE B41	20	41292	2660.2	22.51	22.56
CA-41C-41A	LTE B41	20	40185	2549.5	QPSK	1	99	40185	2549.5	LTE B41	20	39987	2529.7	LTE B41	20	41490	2680.0	22.43	22.56
CA-41D	LTE B41	20	40185	2549.5	QPSK	1	99	40185	2549.5	LTE B41	20	39987	2529.7	LTE B41	20	39789	2509.9	22.45	22.56

## C.2.6 LTE Band 66 as PCC

Combination	PCC									SCC 1				SCC 2				Power	
	Band	BW [MHz]	(UL) Ch.	(UL) Freq. [MHz]	Mod.	(UL) RB Size	(UL) RB Offset	(DL) Ch.	(DL) Freq. [MHz]	Band	BW [MHz]	(DL) Ch.	(DL) Freq. [MHz]	Band	BW [MHz]	(DL) Ch.	(DL) Freq. [MHz]	LTE Tx. Power with DL CA Enabled (dBm)	LTE Single Carrier Tx Power (dBm)
CA_66B	LTE B66	15	132322	1745.0	QPSK	1	74	66786	2145.0	LTE B66	5	66693	2135.7	N/A				23.55	23.61
CA_66C	LTE B66	20	132072	1720.0	QPSK	1	99	66536	2120.0	LTE B66	20	66734	2139.8	N/A				23.58	23.65
CA_2A-12A-66A	LTE B66	20	132072	1720.0	QPSK	1	99	66536	2120.0	LTE B2	20	900	1960.0	LTE B12	10	5095	737.5	23.60	23.65
CA_5A-66A-66A	LTE B66	20	132072	1720.0	QPSK	1	99	66536	2120.0	LTE B66	20	67036	2170.0	LTE B5	10	2525	881.5	23.61	23.65
CA_12A-66A-66A	LTE B66	20	132072	1720.0	QPSK	1	99	66536	2120.0	LTE B66	20	67036	2170.0	LTE B12	10	5095	737.5	23.53	23.65



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Report No.:  
KR22-SPF0015-B  
Page (312) of (337)



## Appendix E. Power Reduction Verification

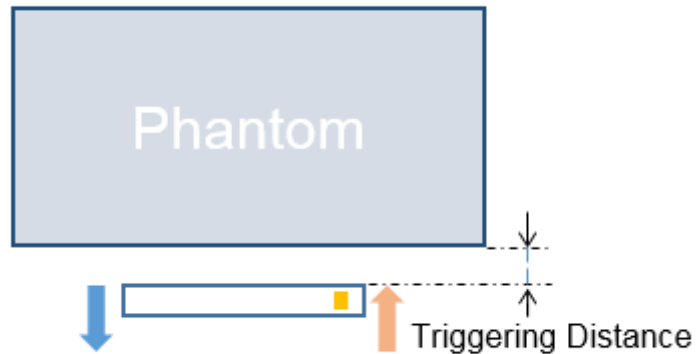
### Proximity Sensor Triggering Distance (KDB 616217 §6.2)



Rear, Right Edge, Right Corner, Left Edge, Left Corner and Top of the DUT was placed directly below the flat phantom. The DUT was moved toward the phantom in accordance with the steps outlined in KDB 616217 §6.2 to determine the trigger distance for enabling power reduction. The DUT was moved away from the phantom to determine the trigger distance for resuming full power.

The DUT featured a visual indicator on its display that showed the status of the proximity sensor (Triggered or not triggered). This was used to determine the status of the sensor during the proximity sensor assessment as monitoring the output power directly was not practical without affecting the measurement.

It was confirmed separately that the output power was altered according to the proximity sensor status indication. This was achieved by observing the proximity sensor status at the same time as monitoring the conducted power contains both the full and reduced conducted power measurements.



**LEGEND**

-  Direction of DUT travel for determination of power reduction triggering point
-  Direction of DUT travel for determination of full power resumption triggering point

**Resulting test positions for SAR measurements**

Tissue simulating liquid	Band	Trigger distance – Rear		
		Moving toward phantom	Moving from phantom	Worst case distance for SAR
750 Head	LTE Band 12	15mm	15mm	14mm
	LTE Band 17			
850 Head	GSM 850	15mm	15mm	14mm
	WCDMA V			
	LTE Band 5			
1750 Head	WCDMA IV	15mm	15mm	14mm
	LTE Band 4			
	LTE Band 66			
1900 Head	GSM1900	15mm	15mm	14mm
	WCDMA II			
	LTE Band 2			
2600 Head	LTE Band 41	15mm	15mm	14mm
2450 Head	WLAN Ant.1	13mm	13mm	12mm
5000 Head		13mm	13mm	12mm
2450 Head	WLAN Ant.2	10mm	10mm	9mm
5000 Head		10mm	10mm	9mm

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Report No.:  
KR22-SPF0015-B  
Page (314) of (337)

**Proximity Sensor Triggering Distance Measurement Results – Rear Side**

DUT Moving Toward (Trigger) and Away (Release) from the Phantom

Distance to DUT Output Power (dBm)										
Distance (mm)	20	19	18	17	16	15	14	13	12	11
GSM850 Voice & GPRS 1Tx	33.08	33.13	33.06	33.16	33.10	23.12	23.16	23.02	23.15	23.11
GSM850 GPRS2Tx	31.98	32.00	31.93	31.96	31.94	20.65	20.59	20.64	20.67	20.63
GSM850 GPRS3Tx	29.67	29.63	29.62	29.76	29.66	19.15	19.20	19.11	19.16	19.23
GSM850 GPRS4Tx	28.50	28.47	28.55	28.57	28.40	18.09	18.07	18.05	18.08	18.07
GSM1900 Voice & GPRS 1Tx	30.01	30.11	29.93	30.02	30.02	21.91	21.87	22.00	21.82	21.98
GSM1900 GPRS2Tx	28.99	29.01	28.95	28.97	28.97	19.05	18.95	19.15	19.10	19.08
GSM1900 GPRS3Tx	25.12	25.19	25.21	25.14	25.18	16.80	16.89	16.75	16.81	16.78
GSM1900 GPRS4Tx	24.83	24.76	24.92	24.76	24.83	14.66	14.59	14.62	14.73	14.75
WCDMA II	23.58	23.60	23.59	23.66	23.61	13.50	13.49	13.41	13.49	13.42
WCDMA IV	23.59	23.49	23.51	23.67	23.55	14.49	14.56	14.39	14.57	14.51
WCDMA V	23.71	23.77	23.65	23.63	23.73	15.44	15.38	15.34	15.39	15.40
LTE Band 2	23.37	23.37	23.28	23.29	23.42	13.10	13.20	13.14	13.03	13.13
LTE Band 4	23.63	23.59	23.57	23.56	23.61	13.55	13.49	13.61	13.53	13.50
LTE Band 5	23.66	23.59	23.59	23.67	23.63	15.43	15.41	15.42	15.39	15.46
LTE Band 12	24.05	23.95	24.06	23.97	23.97	17.35	17.35	17.42	17.45	17.41
LTE Band 17	23.85	23.82	23.88	23.90	23.79	17.30	17.28	17.24	17.35	17.34
LTE Band 41	22.47	22.46	22.43	22.56	22.53	14.76	14.76	14.86	14.76	14.76
LTE Band 66	23.56	23.62	23.57	23.54	23.47	13.82	13.85	13.74	13.73	13.79

### Proximity Sensor Triggering Distance Measurement Results – Rear Side (Ant.1)

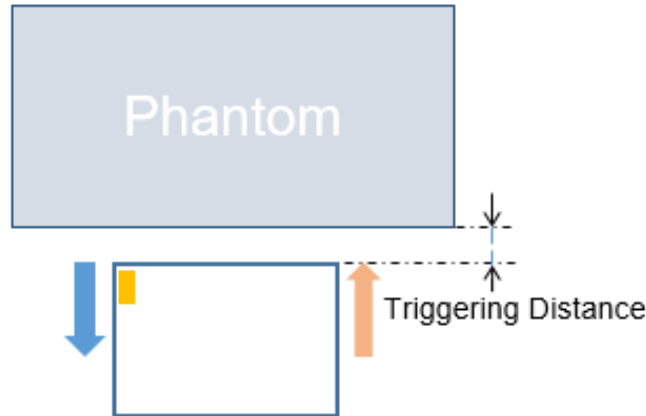
DUT Moving Toward (Trigger) and Away (Release) from the Phantom

Distance to DUT Output Power (dBm)										
Distance (mm)	18	17	16	15	14	13	12	11	10	9
2.4 GHz 802.11b	15.76	15.76	15.80	15.81	15.71	11.38	11.44	11.36	11.31	11.36
2.4 GHz 802.11g	17.40	17.52	17.49	17.39	17.49	11.55	11.51	11.62	11.54	11.46
2.4 GHz 802.11n	17.43	17.41	17.41	17.32	17.39	11.21	11.15	11.19	11.20	11.25
5 GHz 802.11a	15.89	15.82	15.75	15.77	15.75	10.32	10.32	10.33	10.39	10.28
5 GHz 802.11n 20MHz	15.64	15.74	15.75	15.67	15.65	10.15	10.22	10.17	10.13	10.06
5 GHz 802.11n 40MHz	13.93	13.97	13.95	13.89	13.97	10.28	10.20	10.35	10.35	10.20
5 GHz 802.11ac 20MHz	15.72	15.66	15.63	15.65	15.63	10.51	10.44	10.58	10.45	10.52
5 GHz 802.11ac 40MHz	13.82	13.84	13.78	13.82	13.82	10.25	10.20	10.17	10.24	10.29
5 GHz 802.11ac 80MHz	12.46	12.53	12.53	12.40	12.42	10.61	10.56	10.65	10.69	10.51



### Proximity Sensor Triggering Distance Measurement Results – Rear Side (Ant.2)

DUT Moving Toward (Trigger) and Away (Release) from the Phantom

Distance to DUT Output Power (dBm)										
Distance (mm)	15	14	13	12	11	10	9	8	7	6
2.4 GHz 802.11b	14.70	14.77	14.74	14.68	14.63	11.87	11.88	11.81	11.91	11.84
2.4 GHz 802.11g	17.47	17.55	17.53	17.54	17.49	11.80	11.72	11.79	11.71	11.76
2.4 GHz 802.11n	17.41	17.33	17.41	17.35	17.40	11.54	11.56	11.66	11.63	11.66
5 GHz 802.11a	15.32	15.29	15.36	15.39	15.31	10.52	10.42	10.49	10.46	10.46
5 GHz 802.11n 20MHz	15.15	15.25	15.20	15.10	15.23	10.24	10.27	10.17	10.21	10.18
5 GHz 802.11n 40MHz	13.97	13.91	13.98	14.00	13.96	10.26	10.24	10.17	10.29	10.34
5 GHz 802.11ac 20MHz	15.22	15.26	15.28	15.24	15.24	10.32	10.26	10.40	10.27	10.34
5 GHz 802.11ac 40MHz	13.94	13.90	13.93	13.93	13.86	10.68	10.59	10.61	10.61	10.68
5 GHz 802.11ac 80MHz	12.93	12.88	12.78	12.92	12.91	10.59	10.65	10.62	10.54	10.68



**LEGEND**

-  Direction of DUT travel for determination of power reduction triggering point
-  Direction of DUT travel for determination of full power resumption triggering point

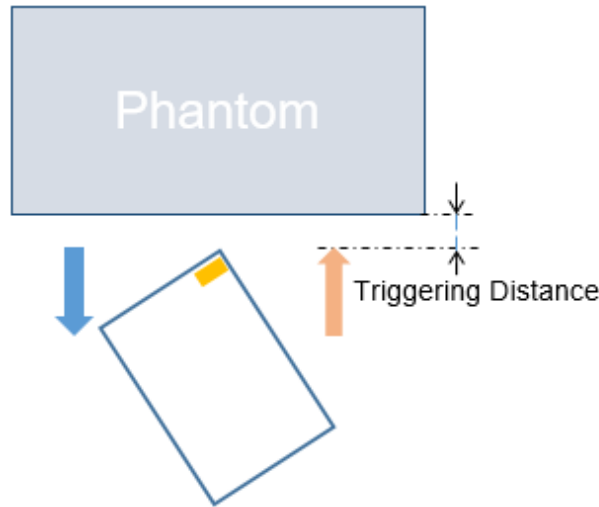
**Resulting test positions for SAR measurements**

Tissue simulating liquid	Band	Trigger distance – Right Edge		
		Moving toward phantom	Moving from phantom	Worst case distance for SAR
2450 Head	WLAN Ant.1	8mm	8mm	7mm
5000 Head		8mm	8mm	7mm



**Proximity Sensor Triggering Distance Measurement Results – Right Edge**

DUT Moving Toward (Trigger) and Away (Release) from the Phantom

Distance to DUT Output Power (dBm)										
Distance (mm)	13	12	11	10	9	8	7	6	5	4
2.4 GHz 802.11b	15.69	15.81	15.72	15.74	15.84	11.37	11.28	11.34	11.47	11.34
2.4 GHz 802.11g	17.42	17.54	17.52	17.47	17.48	11.63	11.50	11.59	11.50	11.63
2.4 GHz 802.11n	17.33	17.31	17.35	17.41	17.30	11.25	11.23	11.23	11.27	11.24
5 GHz 802.11a	15.85	15.80	15.86	15.85	15.79	10.23	10.37	10.41	10.24	10.28
5 GHz 802.11n 20MHz	15.64	15.64	15.67	15.75	15.68	10.18	10.19	10.07	10.17	10.13
5 GHz 802.11n 40MHz	13.99	13.89	13.95	14.02	13.99	10.29	10.24	10.21	10.35	10.37
5 GHz 802.11ac 20MHz	15.62	15.61	15.70	15.66	15.76	10.50	10.47	10.49	10.43	10.60
5 GHz 802.11ac 40MHz	13.71	13.78	13.74	13.83	13.72	10.33	10.26	10.25	10.18	10.17
5 GHz 802.11ac 80MHz	12.59	12.61	12.64	12.50	12.52	10.63	10.55	10.60	10.60	10.63



**LEGEND**

-  Direction of DUT travel for determination of power reduction triggering point
-  Direction of DUT travel for determination of full power resumption triggering point

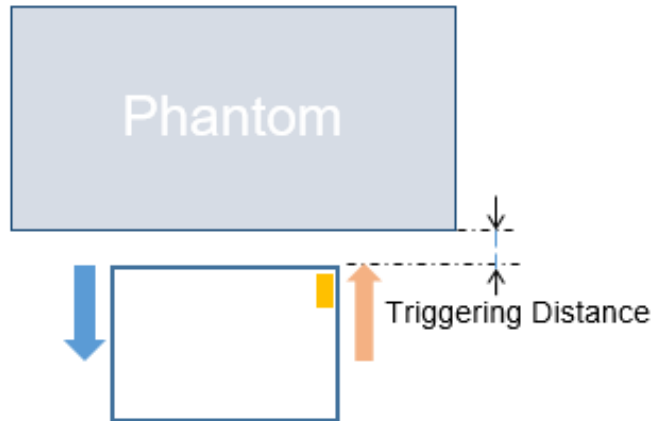
**Resulting test positions for SAR measurements**

Tissue simulating liquid	Band	Trigger distance – Right Corner		
		Moving toward phantom	Moving from phantom	Worst case distance for SAR
2450 Head	WLAN Ant.1	9mm	9mm	8mm
5000 Head		9mm	9mm	8mm



**Proximity Sensor Triggering Distance Measurement Results – Right Corner**

DUT Moving Toward (Trigger) and Away (Release) from the Phantom

Distance to DUT Output Power (dBm)										
Distance (mm)	14	13	12	11	10	9	8	7	6	5
2.4 GHz 802.11b	15.77	15.80	15.73	15.78	15.81	11.32	11.40	11.36	11.37	11.33
2.4 GHz 802.11g	17.54	17.49	17.42	17.48	17.44	11.46	11.58	11.46	11.57	11.47
2.4 GHz 802.11n	17.37	17.29	17.40	17.36	17.31	11.25	11.26	11.21	11.23	11.26
5 GHz 802.11a	15.77	15.82	15.83	15.82	15.86	10.22	10.28	10.42	10.27	10.40
5 GHz 802.11n 20MHz	15.77	15.74	15.65	15.77	15.63	10.21	10.11	10.21	10.09	10.22
5 GHz 802.11n 40MHz	13.90	13.93	14.00	13.91	13.96	10.32	10.19	10.30	10.18	10.36
5 GHz 802.11ac 20MHz	15.71	15.62	15.70	15.69	15.65	10.47	10.55	10.44	10.42	10.49
5 GHz 802.11ac 40MHz	13.83	13.83	13.78	13.73	13.70	10.32	10.33	10.19	10.23	10.16
5 GHz 802.11ac 80MHz	12.56	12.51	12.50	12.59	12.63	10.53	10.71	10.59	10.66	10.56



**LEGEND**

-  Direction of DUT travel for determination of power reduction triggering point
-  Direction of DUT travel for determination of full power resumption triggering point

**Resulting test positions for SAR measurements**

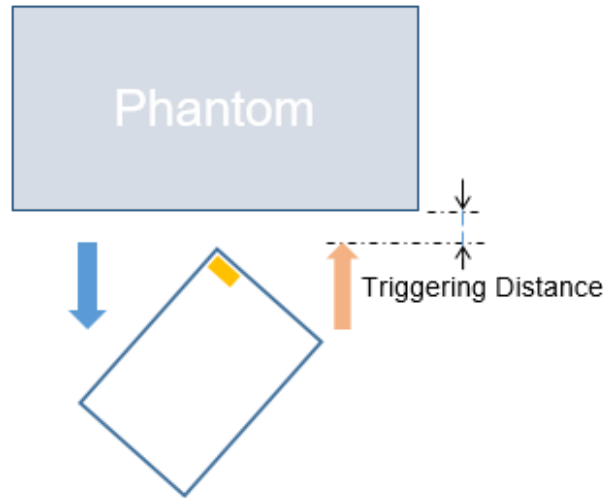
Tissue simulating liquid	Band	Trigger distance – Left Edge		
		Moving toward phantom	Moving from phantom	Worst case distance for SAR
2450 Head	WLAN Ant.2	7mm	7mm	6mm
5000 Head		7mm	7mm	6mm

**Proximity Sensor Triggering Distance Measurement Results – Left Edge**



DUT Moving Toward (Trigger) and Away (Release) from the Phantom

Distance (mm)	Distance to DUT Output Power (dBm)									
	12	11	10	9	8	7	6	5	4	3
2.4 GHz 802.11b	14.64	14.68	14.69	14.64	14.74	11.82	11.90	11.89	11.86	11.78
2.4 GHz 802.11g	17.50	17.53	17.52	17.45	17.51	11.67	11.79	11.73	11.66	11.77
2.4 GHz 802.11n	17.28	17.35	17.39	17.37	17.32	11.64	11.55	11.51	11.64	11.59
5 GHz 802.11a	15.36	15.27	15.31	15.39	15.39	10.52	10.49	10.49	10.48	10.48
5 GHz 802.11n 20MHz	15.08	15.06	15.12	15.12	15.17	10.34	10.15	10.22	10.19	10.22
5 GHz 802.11n 40MHz	13.94	13.91	13.93	13.92	13.88	10.32	10.23	10.29	10.35	10.33
5 GHz 802.11ac 20MHz	15.23	15.16	15.17	15.20	15.18	10.28	10.37	10.25	10.41	10.38
5 GHz 802.11ac 40MHz	13.86	13.90	13.93	13.92	13.85	10.67	10.78	10.67	10.69	10.74
5 GHz 802.11ac 80MHz	12.78	12.93	12.90	12.80	12.92	10.65	10.53	10.58	10.53	10.69





**LEGEND**

-  Direction of DUT travel for determination of power reduction triggering point
-  Direction of DUT travel for determination of full power resumption triggering point

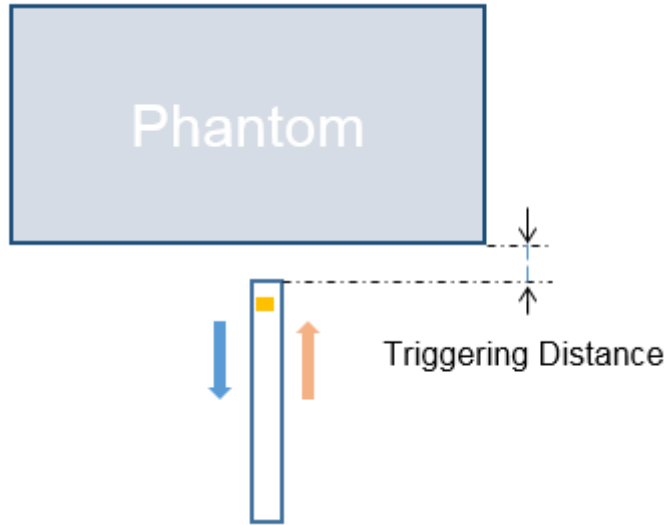
**Resulting test positions for SAR measurements**

Tissue simulating liquid	Band	Trigger distance – Left Corner		
		Moving toward phantom	Moving from phantom	Worst case distance for SAR
2450 Head	WLAN Ant.2	8mm	8mm	7mm
5000 Head		8mm	8mm	7mm



**Proximity Sensor Triggering Distance Measurement Results – Left Corner**

DUT Moving Toward (Trigger) and Away (Release) from the Phantom

Distance to DUT Output Power (dBm)										
Distance (mm)	13	12	11	10	9	8	7	6	5	4
2.4 GHz 802.11b	14.75	14.68	14.78	14.65	14.78	11.91	11.84	11.83	11.89	11.93
2.4 GHz 802.11g	17.52	17.55	17.47	17.47	17.58	11.66	11.65	11.72	11.77	11.78
2.4 GHz 802.11n	17.37	17.26	17.40	17.33	17.40	11.57	11.54	11.58	11.59	11.63
5 GHz 802.11a	15.40	15.26	15.40	15.39	15.23	10.47	10.57	10.52	10.59	10.48
5 GHz 802.11n 20MHz	15.22	15.23	15.13	15.07	15.07	10.26	10.28	10.19	10.25	10.27
5 GHz 802.11n 40MHz	13.98	13.99	13.91	13.96	13.88	10.25	10.21	10.26	10.24	10.20
5 GHz 802.11ac 20MHz	15.19	15.25	15.13	15.15	15.16	10.36	10.42	10.22	10.26	10.28
5 GHz 802.11ac 40MHz	13.79	13.80	13.80	13.79	13.83	10.78	10.73	10.63	10.76	10.63
5 GHz 802.11ac 80MHz	12.86	12.88	12.88	12.89	12.89	10.54	10.50	10.57	10.68	10.58



**LEGEND**

-  Direction of DUT travel for determination of power reduction triggering point
-  Direction of DUT travel for determination of full power resumption triggering point

**Resulting test positions for SAR measurements**

Tissue simulating liquid	Band	Trigger distance – Top		
		Moving toward phantom	Moving from phantom	Worst case distance for SAR
750 Head	LTE Band 12	23mm	23mm	22mm
	LTE Band 17			
850 Head	GSM 850	23mm	23mm	22mm
	WCDMA V			
	LTE Band 5			
1750 Head	WCDMA IV	23mm	23mm	22mm
	LTE Band 4			
	LTE Band 66			
1900 Head	GSM1900	23mm	23mm	22mm
	WCDMA II			
	LTE Band 2			
2600 Head	LTE Band 41	23mm	23mm	22mm
2450 Head	WLAN Ant.1	18mm	18mm	17mm
5000 Head		18mm	18mm	17mm
2450 Head	WLAN Ant.2	17mm	17mm	16mm
5000 Head		17mm	17mm	16mm

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Report No.:  
KR22-SPF0015-B  
Page (321) of (337)



## Proximity Sensor Triggering Distance Measurement Results – Top Side

DUT Moving Toward (Trigger) and Away (Release) from the Phantom

Distance to DUT Output Power (dBm)										
Distance (mm)	28	27	26	25	24	23	22	21	20	19
GSM850 Voice &GPRS 1Tx	33.04	33.00	33.02	33.14	33.18	23.21	23.03	23.22	23.09	23.11
GSM850 GPRS2Tx	32.04	31.88	31.96	31.96	31.96	20.73	20.59	20.62	20.74	20.75
GSM850 GPRS3Tx	29.60	29.72	29.63	29.76	29.74	19.19	19.24	19.19	19.07	19.21
GSM850 GPRS4Tx	28.45	28.45	28.44	28.56	28.57	18.04	18.02	18.09	18.09	18.01
GSM1900 Voice &GPRS 1Tx	30.03	30.05	29.96	30.09	29.95	21.84	22.00	21.93	21.85	21.88
GSM1900 GPRS2Tx	29.03	28.97	29.07	29.00	28.89	19.06	19.03	18.96	19.03	19.06
GSM1900 GPRS3Tx	25.20	25.04	25.17	25.15	25.19	16.78	16.87	16.76	16.85	16.90
GSM1900 GPRS4Tx	24.76	24.89	24.80	24.87	24.85	14.73	14.66	14.58	14.76	14.57
WCDMA II	23.53	23.40	23.38	23.46	23.45	13.41	13.49	13.44	13.60	13.46
WCDMA IV	23.43	23.46	23.57	23.61	23.60	14.52	14.57	14.42	14.54	14.40
WCDMA V	23.78	23.77	23.66	23.80	23.77	15.41	15.39	15.33	15.41	15.37
LTE Band 2	23.35	23.46	23.29	23.33	23.47	13.00	13.09	13.08	13.10	13.11
LTE Band 4	23.58	23.73	23.55	23.70	23.67	13.52	13.57	13.47	13.65	13.61
LTE Band 5	23.63	23.65	23.70	23.59	23.60	15.36	15.36	15.35	15.46	15.44
LTE Band 12	24.05	23.99	23.99	23.97	24.01	17.37	17.35	17.43	17.35	17.35
LTE Band 17	23.95	23.87	23.89	23.87	23.84	17.38	17.35	17.33	17.24	17.34
LTE Band 41	22.52	22.45	22.56	22.42	22.45	14.78	14.73	14.66	14.84	14.72
LTE Band 66	23.53	23.55	23.50	23.60	23.52	13.90	13.79	13.86	13.79	13.79

### Proximity Sensor Triggering Distance Measurement Results – Top Side (Ant.1)

DUT Moving Toward (Trigger) and Away (Release) from the Phantom

Distance to DUT Output Power (dBm)										
Distance (mm)	23	22	21	20	19	18	17	16	15	14
2.4 GHz 802.11b	15.83	15.78	15.75	15.76	15.72	11.38	11.28	11.46	11.33	11.44
2.4 GHz 802.11g	17.42	17.47	17.53	17.50	17.46	11.53	11.58	11.56	11.49	11.54
2.4 GHz 802.11n	17.41	17.29	17.40	17.29	17.36	11.24	11.14	11.30	11.23	11.11
5 GHz 802.11a	15.82	15.82	15.78	15.90	15.78	10.28	10.28	10.34	10.31	10.34
5 GHz 802.11n 20MHz	15.65	15.74	15.71	15.64	15.75	10.24	10.06	10.11	10.05	10.10
5 GHz 802.11n 40MHz	14.02	13.94	14.01	13.88	13.97	10.32	10.22	10.27	10.29	10.24
5 GHz 802.11ac 20MHz	15.76	15.65	15.62	15.71	15.64	10.42	10.54	10.52	10.52	10.46
5 GHz 802.11ac 40MHz	13.80	13.76	13.73	13.76	13.84	10.15	10.31	10.26	10.18	10.35
5 GHz 802.11ac 80MHz	12.51	12.52	12.56	12.64	12.61	10.55	10.65	10.52	10.56	10.60

### Proximity Sensor Triggering Distance Measurement Results – Top Side (Ant.2)

DUT Moving Toward (Trigger) and Away (Release) from the Phantom

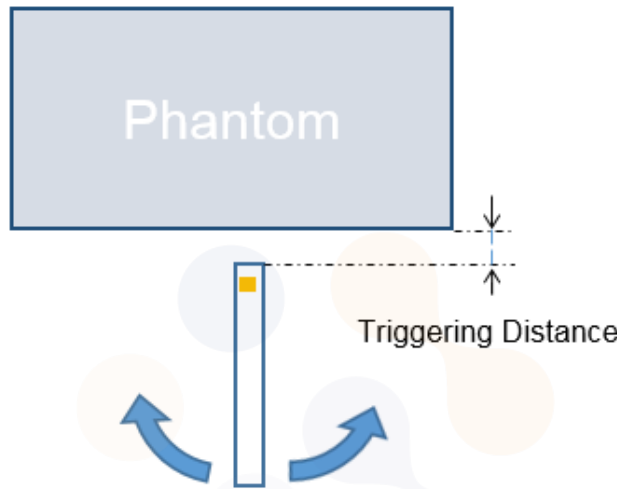
Distance to DUT Output Power (dBm)										
Distance (mm)	22	21	20	19	18	17	16	15	14	13
2.4 GHz 802.11b	14.64	14.71	14.77	14.74	14.66	11.91	11.80	11.79	11.78	11.92
2.4 GHz 802.11g	17.58	17.52	17.55	17.56	17.53	11.70	11.67	11.69	11.72	11.73
2.4 GHz 802.11n	17.33	17.40	17.33	17.38	17.29	11.55	11.58	11.66	11.62	11.59
5 GHz 802.11a	15.26	15.29	15.41	15.39	15.35	10.59	10.57	10.51	10.60	10.42
5 GHz 802.11n 20MHz	15.10	15.08	15.10	15.18	15.08	10.28	10.26	10.19	10.16	10.20
5 GHz 802.11n 40MHz	13.99	13.94	13.99	13.92	13.88	10.20	10.27	10.20	10.35	10.31
5 GHz 802.11ac 20MHz	15.21	15.14	15.14	15.16	15.17	10.23	10.33	10.40	10.29	10.42
5 GHz 802.11ac 40MHz	13.83	13.87	13.93	13.88	13.88	10.70	10.69	10.74	10.60	10.62
5 GHz 802.11ac 80MHz	12.81	12.90	12.86	12.83	12.87	10.56	10.63	10.66	10.50	10.56

**Proximity Sensor Tilt Angle Assessment (KDB 616217 §6.4)**

The DUT was positioned directly below the flat phantom at the minimum measured trigger distance with Bottom parallel to the base of the flat phantom for each band.

The EUT was rotated about Bottom for angles up to +/- 45°. If the output power increased during the rotation the DUT was moved 1mm toward the phantom and the rotation repeated.

This procedure was repeated until the power remained reduced for all angles up to +/- 45°.



Proximity sensor tilt angle assessment KDB 616217 §6.4

Summary of Tilt Angle Influence to Proximity Sensor Triggering (Top)

Band [MHz]	Minimum trigger distance measured according to KDB 616217 §6.2	Minimum distance at which power reduction was maintained over +/-45°	Power reduction status										
			-45°	-40°	-30°	-20°	-10°	0°	10°	20°	30°	40°	45°
750	23 mm	23 mm	On	On	On	On	On	On	On	On	On	On	On
850	23 mm	23 mm	On	On	On	On	On	On	On	On	On	On	On
1750	23 mm	23 mm	On	On	On	On	On	On	On	On	On	On	On
1900	23 mm	23 mm	On	On	On	On	On	On	On	On	On	On	On
2600	23 mm	23 mm	On	On	On	On	On	On	On	On	On	On	On
2450 (Ant.1)	18 mm	18 mm	On	On	On	On	On	On	On	On	On	On	On
2450 (Ant.2)	17 mm	17 mm	On	On	On	On	On	On	On	On	On	On	On
5000 (Ant.1)	18 mm	18 mm	On	On	On	On	On	On	On	On	On	On	On
5000 (Ant.2)	17 mm	17 mm	On	On	On	On	On	On	On	On	On	On	On

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Report No.:  
KR22-SPF0015-B  
Page (324) of (337)



### Summary of Tilt Angle Influence to Proximity Sensor Triggering (Left)

Band [MHz]	Minimum trigger distance measured according to KDB 616217 §6.2	Minimum distance at which power reduction was maintained over +/-45°	Power reduction status										
			-45°	-40°	-30°	-20°	-10°	0°	10°	20°	30°	40°	45°
2450 (Ant.2)	7 mm	7 mm	On	On	On	On	On	On	On	On	On	On	On
5000 (Ant.2)	7 mm	7 mm	On	On	On	On	On	On	On	On	On	On	On

### Summary of Tilt Angle Influence to Proximity Sensor Triggering (Right)

Band [MHz]	Minimum trigger distance measured according to KDB 616217 §6.2	Minimum distance at which power reduction was maintained over +/-45°	Power reduction status										
			-45°	-40°	-30°	-20°	-10°	0°	10°	20°	30°	40°	45°
2450 (Ant.1)	8 mm	8 mm	On	On	On	On	On	On	On	On	On	On	On
5000 (Ant.1)	8 mm	8 mm	On	On	On	On	On	On	On	On	On	On	On