

APPENDIX I: LTE DOWNLINK ONLY CARRIER AGGREGATION TEST REDUCTION METHODOLOGY

SAR test exclusion for LTE downlink Carrier Aggregation is determined by power measurements according to the number of component carriers (CCs) supported by the product implementation. Per April 2018 TCBC Workshop Notes, the following test reduction methodology was applied to determine the combinations required for conducted power measurements.

LTE DLCA Test Reduction Methodology:

- The supported combinations were arranged by the number of component carriers in columns.
- Any limitations on the PCC or SCC for each combination were identified alongside the combination (e.g. CA_2A-2A-4A-12A, but B12 can only be configured as a SCC).
- Power measurements were performed for "supersets" (LTE CA combinations with multiple components carriers) and any "subsets" (LTE CA combinations with fewer component carriers) that were not completely covered by the supersets.
- Only subsets that have the exact same components as a superset were excluded for measurement.
- When there were certain restrictions on component carriers that existed in the superset that were not applied for the subset, the subset configuration was additionally evaluated.
- Both inter-band and intra-band downlink carrier aggregation scenarios were considered.
- Downlink CA combinations for SISO and 4x4 Downlink MIMO operations were measured independently, per May 2017 TCBC Workshop notes.

Table I-1 – Example of Exclusion Table for SISO Configurations

Index	CC	Supported Channel Bandwidth (MHz)	Restriction	Completely Covered by Measurement Superset
CC#1	CA [2A]	5, 10, 15, 20		Yes
CC#2	CA [2A]	5, 10, 15, 20		Yes
CC#3	CA [2A]	5, 10, 15, 20		Yes
CC#4	CA [2A]	5, 10, 15, 20		Yes
CC#5	CA [2A]	5, 10, 15, 20		Yes
CC#6	CA [2A]	5, 10, 15, 20		Yes
CC#7	CA [2A]	5, 10, 15, 20		Yes
CC#8	CA [2A]	5, 10, 15, 20		Yes
CC#9	CA [2A]	5, 10, 15, 20		Yes
CC#10	CA [2A]	5, 10, 15, 20		Yes
CC#11	CA [2A]	5, 10, 15, 20		Yes
CC#12	CA [2A]	5, 10, 15, 20		Yes
CC#13	CA [2A]	5, 10, 15, 20		Yes
CC#14	CA [2A]	5, 10, 15, 20		Yes
CC#15	CA [2A]	5, 10, 15, 20		Yes
CC#16	CA [2A]	5, 10, 15, 20		Yes
CC#17	CA [2A]	5, 10, 15, 20		Yes
CC#18	CA [2A]	5, 10, 15, 20		Yes
CC#19	CA [2A]	5, 10, 15, 20		Yes
CC#20	CA [2A]	5, 10, 15, 20		Yes
CC#21	CA [2A]	5, 10, 15, 20		Yes
CC#22	CA [2A]	5, 10, 15, 20		Yes
CC#23	CA [2A]	5, 10, 15, 20		Yes
CC#24	CA [2A]	5, 10, 15, 20		Yes
CC#25	CA [2A]	5, 10, 15, 20		Yes
CC#26	CA [2A]	5, 10, 15, 20		Yes
CC#27	CA [2A]	5, 10, 15, 20		Yes
CC#28	CA [2A]	5, 10, 15, 20		Yes
CC#29	CA [2A]	5, 10, 15, 20		Yes
CC#30	CA [2A]	5, 10, 15, 20		Yes
CC#31	CA [2A]	5, 10, 15, 20		Yes
CC#32	CA [2A]	5, 10, 15, 20		Yes
CC#33	CA [2A]	5, 10, 15, 20		Yes
CC#34	CA [2A]	5, 10, 15, 20		Yes
CC#35	CA [2A]	5, 10, 15, 20		Yes
CC#36	CA [2A]	5, 10, 15, 20		Yes
CC#37	CA [2A]	5, 10, 15, 20		Yes
CC#38	CA [2A]	5, 10, 15, 20		Yes
CC#39	CA [2A]	5, 10, 15, 20		Yes
CC#40	CA [2A]	5, 10, 15, 20		Yes
CC#41	CA [2A]	5, 10, 15, 20		Yes
CC#42	CA [2A]	5, 10, 15, 20		Yes
CC#43	CA [2A]	5, 10, 15, 20		Yes
CC#44	CA [2A]	5, 10, 15, 20		Yes
CC#45	CA [2A]	5, 10, 15, 20		Yes
CC#46	CA [2A]	5, 10, 15, 20		Yes
CC#47	CA [2A]	5, 10, 15, 20		Yes
CC#48	CA [2A]	5, 10, 15, 20		Yes
CC#49	CA [2A]	5, 10, 15, 20		Yes
CC#50	CA [2A]	5, 10, 15, 20		Yes
CC#51	CA [2A]	5, 10, 15, 20		Yes
CC#52	CA [2A]	5, 10, 15, 20		Yes
CC#53	CA [2A]	5, 10, 15, 20		Yes
CC#54	CA [2A]	5, 10, 15, 20		Yes
CC#55	CA [2A]	5, 10, 15, 20		Yes
CC#56	CA [2A]	5, 10, 15, 20		Yes
CC#57	CA [2A]	5, 10, 15, 20		Yes
CC#58	CA [2A]	5, 10, 15, 20		Yes
CC#59	CA [2A]	5, 10, 15, 20		Yes
CC#60	CA [2A]	5, 10, 15, 20		Yes
CC#61	CA [2A]	5, 10, 15, 20		Yes
CC#62	CA [2A]	5, 10, 15, 20		Yes
CC#63	CA [2A]	5, 10, 15, 20		Yes
CC#64	CA [2A]	5, 10, 15, 20		Yes
CC#65	CA [2A]	5, 10, 15, 20		Yes
CC#66	CA [2A]	5, 10, 15, 20		Yes
CC#67	CA [2A]	5, 10, 15, 20		Yes
CC#68	CA [2A]	5, 10, 15, 20		Yes
CC#69	CA [2A]	5, 10, 15, 20		Yes
CC#70	CA [2A]	5, 10, 15, 20		Yes
CC#71	CA [2A]	5, 10, 15, 20		Yes
CC#72	CA [2A]	5, 10, 15, 20		Yes
CC#73	CA [2A]	5, 10, 15, 20		Yes
CC#74	CA [2A]	5, 10, 15, 20		Yes
CC#75	CA [2A]	5, 10, 15, 20		Yes
CC#76	CA [2A]	5, 10, 15, 20		Yes
CC#77	CA [2A]	5, 10, 15, 20		Yes
CC#78	CA [2A]	5, 10, 15, 20		Yes
CC#79	CA [2A]	5, 10, 15, 20		Yes
CC#80	CA [2A]	5, 10, 15, 20		Yes
CC#81	CA [2A]	5, 10, 15, 20		Yes
CC#82	CA [2A]	5, 10, 15, 20		Yes
CC#83	CA [2A]	5, 10, 15, 20		Yes
CC#84	CA [2A]	5, 10, 15, 20		Yes
CC#85	CA [2A]	5, 10, 15, 20		Yes
CC#86	CA [2A]	5, 10, 15, 20		Yes
CC#87	CA [2A]	5, 10, 15, 20		Yes
CC#88	CA [2A]	5, 10, 15, 20		Yes
CC#89	CA [2A]	5, 10, 15, 20		Yes
CC#90	CA [2A]	5, 10, 15, 20		Yes
CC#91	CA [2A]	5, 10, 15, 20		Yes
CC#92	CA [2A]	5, 10, 15, 20		Yes
CC#93	CA [2A]	5, 10, 15, 20		Yes
CC#94	CA [2A]	5, 10, 15, 20		Yes
CC#95	CA [2A]	5, 10, 15, 20		Yes
CC#96	CA [2A]	5, 10, 15, 20		Yes
CC#97	CA [2A]	5, 10, 15, 20		Yes
CC#98	CA [2A]	5, 10, 15, 20		Yes
CC#99	CA [2A]	5, 10, 15, 20		Yes
CC#100	CA [2A]	5, 10, 15, 20		Yes

Table I-2 – Example of Exclusion Table for 4x4 Downlink MIMO Configurations

Index	CC	Supported Channel Bandwidth (MHz)	Restriction	Completely Covered by Measurement Superset
CC#1	CA [2A]	5, 10, 15, 20		Yes
CC#2	CA [2A]	5, 10, 15, 20		Yes
CC#3	CA [2A]	5, 10, 15, 20		Yes
CC#4	CA [2A]	5, 10, 15, 20		Yes
CC#5	CA [2A]	5, 10, 15, 20		Yes
CC#6	CA [2A]	5, 10, 15, 20		Yes
CC#7	CA [2A]	5, 10, 15, 20		Yes
CC#8	CA [2A]	5, 10, 15, 20		Yes
CC#9	CA [2A]	5, 10, 15, 20		Yes
CC#10	CA [2A]	5, 10, 15, 20		Yes
CC#11	CA [2A]	5, 10, 15, 20		Yes
CC#12	CA [2A]	5, 10, 15, 20		Yes
CC#13	CA [2A]	5, 10, 15, 20		Yes
CC#14	CA [2A]	5, 10, 15, 20		Yes
CC#15	CA [2A]	5, 10, 15, 20		Yes
CC#16	CA [2A]	5, 10, 15, 20		Yes
CC#17	CA [2A]	5, 10, 15, 20		Yes
CC#18	CA [2A]	5, 10, 15, 20		Yes
CC#19	CA [2A]	5, 10, 15, 20		Yes
CC#20	CA [2A]	5, 10, 15, 20		Yes
CC#21	CA [2A]	5, 10, 15, 20		Yes
CC#22	CA [2A]	5, 10, 15, 20		Yes
CC#23	CA [2A]	5, 10, 15, 20		Yes
CC#24	CA [2A]	5, 10, 15, 20		Yes
CC#25	CA [2A]	5, 10, 15, 20		Yes
CC#26	CA [2A]	5, 10, 15, 20		Yes
CC#27	CA [2A]	5, 10, 15, 20		Yes
CC#28	CA [2A]	5, 10, 15, 20		Yes
CC#29	CA [2A]	5, 10, 15, 20		Yes
CC#30	CA [2A]	5, 10, 15, 20		Yes
CC#31	CA [2A]	5, 10, 15, 20		Yes
CC#32	CA [2A]	5, 10, 15, 20		Yes
CC#33	CA [2A]	5, 10, 15, 20		Yes
CC#34	CA [2A]	5, 10, 15, 20		Yes
CC#35	CA [2A]	5, 10, 15, 20		Yes
CC#36	CA [2A]	5, 10, 15, 20		Yes
CC#37	CA [2A]	5, 10, 15, 20		Yes
CC#38	CA [2A]	5, 10, 15, 20		Yes
CC#39	CA [2A]	5, 10, 15, 20		Yes
CC#40	CA [2A]	5, 10, 15, 20		Yes
CC#41	CA [2A]	5, 10, 15, 20		Yes
CC#42	CA [2A]	5, 10, 15, 20		Yes
CC#43	CA [2A]	5, 10, 15, 20		Yes
CC#44	CA [2A]	5, 10, 15, 20		Yes
CC#45	CA [2A]	5, 10, 15, 20		Yes
CC#46	CA [2A]	5, 10, 15, 20		Yes
CC#47	CA [2A]	5, 10, 15, 20		Yes
CC#48	CA [2A]	5, 10, 15, 20		Yes
CC#49	CA [2A]	5, 10, 15, 20		Yes
CC#50	CA [2A]	5, 10, 15, 20		Yes
CC#51	CA [2A]	5, 10, 15, 20		Yes
CC#52	CA [2A]	5, 10, 15, 20		Yes
CC#53	CA [2A]	5, 10, 15, 20		Yes
CC#54	CA [2A]	5, 10, 15, 20		Yes
CC#55	CA [2A]	5, 10, 15, 20		Yes
CC#56	CA [2A]	5, 10, 15, 20		Yes
CC#57	CA [2A]	5, 10, 15, 20		Yes
CC#58	CA [2A]	5, 10, 15, 20		Yes
CC#59	CA [2A]	5, 10, 15, 20		Yes
CC#60	CA [2A]	5, 10, 15, 20		Yes
CC#61	CA [2A]	5, 10, 15, 20		Yes
CC#62	CA [2A]	5, 10, 15, 20		Yes
CC#63	CA [2A]	5, 10, 15, 20		Yes
CC#64	CA [2A]	5, 10, 15, 20		Yes
CC#65	CA [2A]	5, 10, 15, 20		Yes
CC#66	CA [2A]	5, 10, 15, 20		Yes
CC#67	CA [2A]	5, 10, 15, 20		Yes
CC#68	CA [2A]	5, 10, 15, 20		Yes
CC#69	CA [2A]	5, 10, 15, 20		Yes
CC#70	CA [2A]	5, 10, 15, 20		Yes
CC#71	CA [2A]	5, 10, 15, 20		Yes
CC#72	CA [2A]	5, 10, 15, 20		Yes
CC#73	CA [2A]	5, 10, 15, 20		Yes
CC#74	CA [2A]	5, 10, 15, 20		Yes
CC#75	CA [2A]	5, 10, 15, 20		Yes
CC#76	CA [2A]	5, 10, 15, 20		Yes
CC#77	CA [2A]	5, 10, 15, 20		Yes
CC#78	CA [2A]	5, 10, 15, 20		Yes
CC#79	CA [2A]	5, 10, 15, 20		Yes
CC#80	CA [2A]	5, 10, 15, 20		Yes
CC#81	CA [2A]	5, 10, 15, 20		Yes
CC#82	CA [2A]	5, 10, 15, 20		Yes
CC#83	CA [2A]	5, 10, 15, 20		Yes
CC#84	CA [2A]	5, 10, 15, 20		Yes
CC#85	CA [2A]	5, 10, 15, 20		Yes
CC#86	CA [2A]	5, 10, 15, 20		Yes
CC#87	CA [2A]	5, 10, 15, 20		Yes
CC#88	CA [2A]	5, 10, 15, 20		Yes
CC#89	CA [2A]	5, 10, 15, 20		Yes
CC#90	CA [2A]	5, 10, 15, 20		Yes
CC#91	CA [2A]	5, 10, 15, 20		Yes
CC#92	CA [2A]	5, 10, 15, 20		Yes
CC#93	CA [2A]	5, 10, 15, 20		Yes
CC#94	CA [2A]	5, 10, 15, 20		Yes
CC#95	CA [2A]	5, 10, 15, 20		Yes
CC#96	CA [2A]	5, 10, 15, 20		Yes
CC#97	CA [2A]	5, 10, 15, 20		Yes
CC#98	CA [2A]	5, 10, 15, 20		Yes
CC#99	CA [2A]	5, 10, 15, 20		Yes
CC#100	CA [2A]	5, 10, 15, 20		Yes

Note: [CC] indicates component carrier with 4x4 DL MIMO antenna configuration

I.1 LTE Downlink Only Carrier Aggregation Test Selection and Setup

SAR test exclusion for LTE downlink Carrier Aggregation is determined by power measurements according to the number component carrier carriers (CCs) supported by the product implementation. For those configurations required by April 2018 TCBC Workshop Notes, the following test reduction methodology was applied to determine the combinations required for conducted power measurements with LTE Carrier Aggregation (CA) (downlink

FCC ID: A3LSMA356U	SAR EVALUATION REPORT	Approved by: Technical Manager
DUT Type: Portable Handset		APPENDIX I: Page 1 of 12

only) active are made in accordance to KDB Publication 941225 D05Av01r02. The RRC connection is only handled by one cell, the primary component carrier (PCC) for downlink and uplink communications. After making a data connection to the PCC, the UE device adds secondary component carrier(s) (SCC) on the downlink only. All uplink communications and acknowledgements remain identical to specifications when downlink carrier aggregation is inactive on the PCC. Additional conducted output powers are measured with the downlink carrier aggregation active for the configuration with highest measured maximum conducted power with downlink carrier aggregation inactive measured among the channel bandwidth, modulation, and RB combinations in each frequency band.

Per FCC KDB Publication 941225 D05Av01r02, no SAR measurements are required for carrier aggregation configurations when the maximum average output power with downlink only carrier aggregation active is not more than 0.25 dB higher than the average output power with downlink only carrier aggregation inactive. All bands required for SAR testing per FCC KDB procedures were considered. Based on the measured maximum powers below, no additional SAR tests were required for DLCA SAR configurations.

General PCC and SCC configuration selection procedure

- PCC uplink channel, channel bandwidth, modulation and RB configurations were selected based on section C)3)b)ii) of KDB 941225 D05 V01r02. All LTE bandwidth conducted powers needed for PCC uplink configuration selection can be found in the RF Conducted Powers Section and LTE/NR Lower Bandwidth RF Conducted Power Appendix. The downlink PCC channel was paired with the selected PCC uplink channel according to normal configurations without carrier aggregation.
- To maximize aggregated bandwidth, highest channel bandwidth available for that CA combination was selected for SCC. For inter-band CA, the SCC downlink channels were selected near the middle of their transmission bands. For contiguous intra-band CA, the downlink channel spacing between the component carriers was set to multiple of 300 kHz less than the nominal channel spacing defined in section 5.4.1A of 3GPP TS 36.521. For non-contiguous intra-band CA, the downlink channel spacing between the component carriers was set to be larger than the nominal channel spacing and provided maximum separation between the component carriers.
- All selected PCC and SCC(s) remained fully within the uplink/downlink transmission band of the respective component carrier.

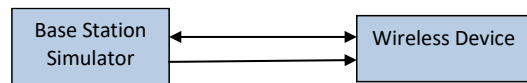


Figure I-1
DL CA Power Measurement Setup

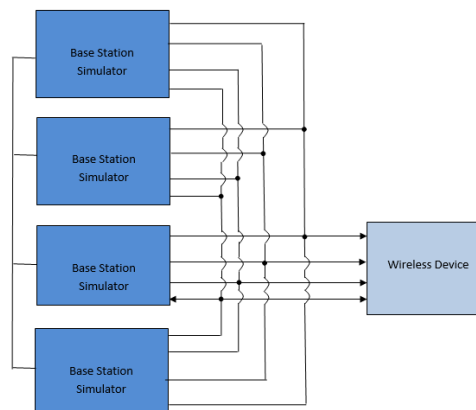


Figure I-2
DL CA with DL 4x4 MIMO Power Measurement Setup

FCC ID: A3LSMA356U	SAR EVALUATION REPORT	Approved by: Technical Manager
DUT Type: Portable Handset		APPENDIX I: Page 2 of 12

I.2 Downlink Carrier Aggregation RF Conducted Powers

I.2.1 LTE Band 71 as PCC

Table I-3
Maximum Output Powers

Combination	PCC Band	PCC BW [MHz]	PCC (UL) Ch.	PCC				PCC (DL) Channel	PCC (DL) Freq. [MHz]	SCC 1			SCC 2			SCC 3			Power				
				Mod.	PCC UL RB	PCC UL RB Offset	SCC Band			SCC BW [MHz]	SCC (DL) Channel	SCC (DL) Freq. [MHz]	SCC Band	SCC BW [MHz]	SCC (DL) Channel	SCC (DL) Freq. [MHz]	SCC Band	SCC BW [MHz]	SCC (DL) Channel	SCC (DL) Freq. [MHz]	LTE Tx Power with DL CA Enabled (dBm)	LTE Single Carrier Tx Power (dBm)	
CA 4A-4A-71A	LTE B71	10	133422	693	QPSK	1	25	68886	647	LTE B4	20	2175	2132.5	LTE B4	10	2350	2150	-	-	-	-	24.69	24.66
CA 4B-71A	LTE B71	10	133422	693	QPSK	1	25	68886	647	LTE B48	20	55980	3625	LTE B48	20	56188	3644.8	-	-	-	-	24.66	24.66
CA 2A-2A-4A-71A	LTE B71	10	133422	693	QPSK	1	25	68886	647	LTE B2	20	900	1960	LTE B2	20	700	1940	LTE B4	20	2175	2132.5	24.73	24.66
CA 2A-2A-66A-71A	LTE B71	10	133422	693	QPSK	1	25	68886	647	LTE B2	20	900	1960	LTE B2	20	700	1940	LTE B66	20	66786	2145	24.75	24.66
CA 2A-66A-66A-71A	LTE B71	10	133422	693	QPSK	1	25	68886	647	LTE B2	20	900	1960	LTE B66	20	66786	2145	LTE B66	20	67236	2190	24.65	24.66
CA 2A-66C-71A	LTE B71	10	133422	693	QPSK	1	25	68886	647	LTE B2	20	900	1960	LTE B66	20	66786	2145	LTE B66	20	66984	2164.8	24.67	24.66

I.2.2 LTE Band 12 as PCC

Table I-4
Maximum Output Powers

Combination	PCC Band	PCC BW [MHz]	PCC				PCC UL RB	PCC UL RB Offset	PCC (DL) Channel	PCC (DL) Freq. [MHz]	SCC Band	SCC 1		SCC 2		SCC 3		LTE Tx Power with DL CA Enabled (dBm)	LTE Single Carrier Tx Power (dBm)				
			PCC (UL) Ch.	PCC (UL) Freq. [MHz]	Mod.	PCC UL RB						SCC BW [MHz]	SCC (DL) Channel	SCC (DL) Freq. [MHz]	SCC Band	SCC BW [MHz]	SCC (DL) Channel			SCC (DL) Freq. [MHz]	SCC Band	SCC BW [MHz]	SCC (DL) Channel
CA 2A-12A (1)	LTE B12	5	23035	701.5	QPSK	1	12	5035	731.5	LTE B2	20	900	1960	-	-	-	-	-	-	24.57	24.70		
CA 4A-12A (1)	LTE B12	5	23035	701.5	QPSK	1	12	5035	731.5	LTE B4	20	2175	2132.5	-	-	-	-	-	-	24.71	24.70		
CA 4A-12A (2)	LTE B12	5	23035	701.5	QPSK	1	12	5035	731.5	LTE B4	20	2175	2132.5	-	-	-	-	-	-	24.71	24.70		
CA 12A-25A	LTE B12	5	23035	701.5	QPSK	1	12	5035	731.5	LTE B25	20	8305	1962.5	-	-	-	-	-	-	24.62	24.70		
CA 12A-48A	LTE B12	5	23035	701.5	QPSK	1	12	5035	731.5	LTE B48	20	55980	3625	-	-	-	-	-	-	24.57	24.70		
CA 12A-66A (1)	LTE B12	5	23035	701.5	QPSK	1	12	5035	731.5	LTE B66	20	66786	2145	-	-	-	-	-	-	24.60	24.70		
CA 12A-66A (2)	LTE B12	5	23035	701.5	QPSK	1	12	5035	731.5	LTE B66	20	66786	2145	-	-	-	-	-	-	24.60	24.70		
CA 12A-48C	LTE B12	5	23035	701.5	QPSK	1	12	5035	731.5	LTE B48	20	55980	3625	LTE B48	20	56188	3644.8	-	-	24.51	24.70		
CA 2A-2A-4A-12A	LTE B12	5	23035	701.5	QPSK	1	12	5035	731.5	LTE B2	20	900	1960	LTE B2	20	700	1940	LTE B4	20	2175	2132.5	24.82	24.70
CA 2A-2A-12A-30A	LTE B12	5	23035	701.5	QPSK	1	12	5035	731.5	LTE B2	20	900	1960	LTE B2	20	700	1940	LTE B30	10	9820	2395	24.76	24.70
CA 2A-2A-12A-66A	LTE B12	5	23035	701.5	QPSK	1	12	5035	731.5	LTE B2	20	900	1960	LTE B2	20	700	1940	LTE B66	20	66786	2145	24.79	24.70
CA 2A-2A-12B	LTE B12	5	23035	701.5	QPSK	1	12	5035	731.5	LTE B12	10	5107	738.7	LTE B2	20	900	1960	LTE B2	20	700	1940	24.75	24.70
CA 2A-4A-4A-12A	LTE B12	5	23035	701.5	QPSK	1	12	5035	731.5	LTE B2	20	900	1960	LTE B4	20	2175	2132.5	LTE B4	10	2350	2150	24.78	24.70
CA 2A-4A-12B	LTE B12	5	23035	701.5	QPSK	1	12	5035	731.5	LTE B12	10	5107	738.7	LTE B2	20	900	1960	LTE B4	20	2175	2132.5	24.62	24.70
CA 2A-4A-12A-30A	LTE B12	5	23035	701.5	QPSK	1	12	5035	731.5	LTE B2	20	900	1960	LTE B4	20	2175	2132.5	LTE B30	10	9820	2395	24.72	24.70
CA 2A-12A-30A-66A	LTE B12	5	23035	701.5	QPSK	1	12	5035	731.5	LTE B2	20	900	1960	LTE B30	10	9820	2395	LTE B66	20	66786	2145	24.57	24.70
CA 2A-12A-66A-66A	LTE B12	5	23035	701.5	QPSK	1	12	5035	731.5	LTE B2	20	900	1960	LTE B66	20	66786	2145	LTE B66	20	67236	2190	24.60	24.70
CA 2A-12A-66C	LTE B12	5	23035	701.5	QPSK	1	12	5035	731.5	LTE B2	20	900	1960	LTE B66	20	66786	2145	LTE B66	20	66984	2164.8	24.54	24.70
CA 2A-12B-66A	LTE B12	5	23035	701.5	QPSK	1	12	5035	731.5	LTE B12	10	5107	738.7	LTE B2	20	900	1960	LTE B66	20	66786	2145	24.66	24.70
CA 4A-4A-12B	LTE B12	5	23035	701.5	QPSK	1	12	5035	731.5	LTE B12	10	5107	738.7	LTE B4	20	2175	2132.5	LTE B4	10	2350	2150	24.58	24.70
CA 12A-30A-66A-66A	LTE B12	5	23035	701.5	QPSK	1	12	5035	731.5	LTE B30	10	9820	2395	LTE B66	20	66786	2145	LTE B66	20	67236	2190	24.51	24.70
CA 12A-48D	LTE B12	5	23035	701.5	QPSK	1	12	5035	731.5	LTE B48	20	55980	3625	LTE B4	20	56188	3644.8	LTE B48	20	56386	3664.6	24.53	24.70
CA 12B-66A-66A	LTE B12	5	23035	701.5	QPSK	1	12	5035	731.5	LTE B12	10	5107	738.7	LTE B66	20	66786	2145	LTE B66	20	67236	2190	24.55	24.70

I.2.3 LTE Band 13 as PCC

Table I-5
Maximum Output Powers

Combination	PCC Band	PCC BW [MHz]	PCC (UL) Ch.	PCC				PCC (DL) Channel	PCC (DL) Freq. [MHz]	SCC Band	SCC 1			SCC 2			SCC 3			Power			
				Mod.	PCC UL RB	PCC UL RB Offset	SCC BW [MHz]				SCC (DL) Channel	SCC (DL) Freq. [MHz]	SCC Band	SCC BW [MHz]	SCC (DL) Channel	SCC (DL) Freq. [MHz]	SCC Band	SCC BW [MHz]	SCC (DL) Channel	SCC (DL) Freq. [MHz]	LTE Tx Power with DL CA (dBm)	LTE Single Carrier Tx Power (dBm)	
CA 2A-4A-13A	LTE B13	10	23230	782	QPSK	1	0	5230	751	LTE B2	20	900	1960	LTE B4	20	2175	2132.5	-	-	-	23.99	24.06	
CA 4A-4A-13A	LTE B13	10	23230	782	QPSK	1	0	5230	751	LTE B4	20	2175	2132.5	LTE B4	10	2350	2150	-	-	-	24.00	24.06	
CA 2A-2A-13A-66A	LTE B13	10	23230	782	QPSK	1	0	5230	751	LTE B2	20	900	1960	LTE B2	20	700	1940	LTE B66	20	66786	2145	24.06	24.06
CA 2A-13A-48A-66A	LTE B13	10	23230	782	QPSK	1	0	5230	751	LTE B2	20	900	1960	LTE B48	20	55980	3625	LTE B66	20	66786	2145	24.11	24.06
CA 2A-13A-48C	LTE B13	10	23230	782	QPSK	1	0	5230	751	LTE B2	20	900	1960	LTE B48	20	55980	3625	LTE B48	20	56188	3644.8	23.98	24.06
CA 2A-13A-66A-66A	LTE B13	10	23230	782	QPSK	1	0	5230	751	LTE B2	20	900	1960	LTE B66	20	66786	2145	LTE B66	20	66984	2164.8	23.93	24.06
CA 2A-13A-66B	LTE B13	10	23230	782	QPSK	1	0	5230	751	LTE B2	20	900	1960	LTE B66	15	66786	2145	LTE B66	5	66879	2154.3	23.94	24.06
CA 2A-13A-66C	LTE B13	10	23230	782	QPSK	1	0	5230	751	LTE B2	20	900	1960	LTE B66	20	66786	2145	LTE B66	20	66984	2164.8	23.93	24.06
CA 13A-48A-66B	LTE B13	10	23230	782	QPSK	1	0	5230	751	LTE B48	20	55980	3625	LTE B66	15	66786	2145	LTE B66	5	66879	2154.3	23.88	24.06
CA 13A-48A-66C	LTE B13	10	23230	782	QPSK	1	0	5230	751	LTE B48	20	55980	3625	LTE B66	20	66786	2145	LTE B66	20	66984	2164.8	23.92	24.06
CA 13A-48C-66A	LTE B13	10	23230	782	QPSK	1	0	5230	751	LTE B48	20	55980	3625	LTE B48	20	56188	3644.8	LTE B66	20	66786	2145	23.94	24.06
CA 13A-48D	LTE B13	10	23230	782	QPSK	1	0	5230	751	LTE B48	20	55980	3625	LTE B48	20	56188	3644.8	LTE B48	20	56386	3664.6	23.97	24.06
CA 13A-66A-66B	LTE B13	10	23230	782	QPSK	1	0	5230	751	LTE B66	20	66786	2145	LTE B66	5	67166	2183.2	LTE B66	15	67261	2192.5	23.95	24.06
CA 13A-66A-66C	LTE B13	10	23230	782	QPSK	1	0	5230	751	LTE B66	20	66786	2145	LTE B66	20	67038	2170.2	LTE B66	20	67236	2190	23.93	24.06
CA 13A-66D	LTE B13	10	23230	782	QPSK	1	0	5230	751	LTE B66	20	66786	2145	LTE B66	20	66984	2164.8	LTE B66	20	66986	2165.2	23.95	24.06

I.2.4 LTE Band 14 as PCC

Table I-6
Maximum Output Powers

Combination	PCC Band	PCC BW [MHz]	PCC (UL) Ch.	PCC			PCC UL RB Offset	PCC (DL) Channel	PCC (DL) Freq. [MHz]	SCC 1			SCC 2			SCC 3			Power				
				Mod.	PCC UL RB	PCC UL RB Offset				SCC Band	SCC BW [MHz]	SCC (DL) Channel	SCC (DL) Freq. [MHz]	SCC Band	SCC BW [MHz]	SCC (DL) Channel	SCC (DL) Freq. [MHz]	SCC Band	SCC BW [MHz]	SCC (DL) Channel	SCC (DL) Freq. [MHz]	LTE Tx Power with DL CA Enabled (dBm)	LTE Single Carrier Tx Power (dBm)
CA 2A-2A-14A-30A	LTE B14	10	23330	793	QPSK	1	0	5330	763	LTE B2	20	900	1960	LTE B2	20	700	1940	LTE B30	10	9820	2305	24.26	24.21
CA 2A-14A-66A	LTE B14	10	23330	793	QPSK	1	0	5330	763	LTE B2	20	900	1960	LTE B2	20	700	1940	LTE B66	20	66786	2145	24.30	24.21
CA 2A-14A-30A-66A	LTE B14	10	23330	793	QPSK	1	0	5330	763	LTE B2	20	900	1960	LTE B30	10	9820	2305	LTE B66	20	66786	2145	24.21	24.21
CA 2A-14A-66A-66A	LTE B14	10	23330	793	QPSK	1	0	5330	763	LTE B2	20	900	1960	LTE B66	20	66786	2145	LTE B66	20	66786	2145	24.30	24.21
CA 14A-30A-66A-66A	LTE B14	10	23330	793	QPSK	1	0	5330	763	LTE B30	10	9820	2305	LTE B66	20	66786	2145	LTE B66	20	66726	2140	24.15	24.21

I.2.5 LTE Band 5 as PCC

Table I-7
Maximum Output Powers

Combination	PCC Band	PCC BW [MHz]	PCC (UL) Ch.	PCC				PCC (DL) Channel	PCC (DL) Freq. [MHz]	SCC Band	SCC BW [MHz]	SCC (DL) Channel	SCC (DL) Freq. [MHz]	SCC 2				SCC 3				LTE Tx Power with DL CA Enabled (dBm)	LTE Single Carrier Tx Power (dBm)		
				Mod.	PCC UL RB	PCC UL RB Offset	SCC Band							SCC BW [MHz]	SCC (DL) Channel	SCC (DL) Freq. [MHz]	SCC Band	SCC BW [MHz]	SCC (DL) Channel	SCC (DL) Freq. [MHz]					
CA 5A-5A (1)	LTE B5	3	20425	836.5	QPSK	1	14	2525	881.5	LTE B5	5	2425	871.5	-	-	-	-	-	-	-	-	-	-	24.61	24.63
CA 5A-25A	LTE B5	5	20425	836.5	QPSK	1	12	2425	871.5	LTE B25	20	8365	1962.5	-	-	-	-	-	-	-	-	-	-	24.66	24.62
CA 5A-41A	LTE B5	5	20425	836.5	QPSK	1	12	2425	871.5	LTE B41	20	40620	2593	-	-	-	-	-	-	-	-	-	-	24.64	24.62
CA 2A-2A-4A-5A	LTE B5	5	20425	836.5	QPSK	1	12	2425	871.5	LTE B2	20	900	1960	LTE B2	20	700	1940	LTE B4	20	2375	2132.5	2145	24.58	24.62	
CA 2A-2A-5A-30A	LTE B5	5	20425	836.5	QPSK	1	12	2425	871.5	LTE B2	20	900	1960	LTE B2	20	700	1940	LTE B30	10	9620	2395	2145	24.58	24.62	
CA 2A-2A-5A-66A	LTE B5	5	20425	836.5	QPSK	1	12	2425	871.5	LTE B2	20	900	1960	LTE B2	20	700	1940	LTE B66	20	66786	2145	2145	24.65	24.62	
CA 2A-4A-4A-5A	LTE B5	5	20425	836.5	QPSK	1	12	2425	871.5	LTE B2	20	900	1960	LTE B4	20	2175	2132.5	LTE B4	10	2390	2190	2146.1	24.61	24.62	
CA 2A-4A-5A-30A	LTE B5	5	20425	836.5	QPSK	1	12	2425	871.5	LTE B2	20	900	1960	LTE B4	20	2175	2132.5	LTE B30	10	9620	2395	2146.1	24.58	24.62	
CA 2A-5A-30A-66A	LTE B5	5	20425	836.5	QPSK	1	12	2425	871.5	LTE B2	20	900	1960	LTE B30	10	9620	2395	LTE B30	10	9620	2395	2146.1	24.55	24.62	
CA 2A-5A-48A-66A	LTE B5	5	20425	836.5	QPSK	1	12	2425	871.5	LTE B2	20	900	1960	LTE B48	20	55960	3625	LTE B66	20	66786	2145	2145	24.56	24.62	
CA 2A-5A-48C	LTE B5	5	20425	836.5	QPSK	1	12	2425	871.5	LTE B2	20	900	1960	LTE B48	20	55960	3625	LTE B48	20	56188	3644.8	2145	24.54	24.62	
CA 2A-5A-66A-66A	LTE B5	5	20425	836.5	QPSK	1	12	2425	871.5	LTE B2	20	900	1960	LTE B66	20	66786	2145	LTE B66	20	67236	2190	2145	24.65	24.62	
CA 2A-5A-66B	LTE B5	5	20425	836.5	QPSK	1	12	2425	871.5	LTE B2	20	900	1960	LTE B66	15	66786	2145	LTE B66	5	66984	2164.8	2145	24.57	24.62	
CA 2A-5A-66C	LTE B5	5	20425	836.5	QPSK	1	12	2425	871.5	LTE B2	20	900	1960	LTE B66	20	66786	2145	LTE B66	20	66984	2164.8	2145	24.55	24.62	
CA 5A-5A-66A-66A	LTE B5	5	20425	836.5	QPSK	1	12	2425	871.5	LTE B5	5	2625	881.5	LTE B66	20	66786	2145	LTE B66	20	67236	2190	2145	24.57	24.62	
CA 5A-5A-66B	LTE B5	5	20425	836.5	QPSK	1	12	2425	871.5	LTE B5	5	2625	881.5	LTE B66	15	66786	2145	LTE B66	5	66984	2164.8	2145	24.57	24.62	
CA 5A-5A-66C	LTE B5	5	20425	836.5	QPSK	1	12	2425	871.5	LTE B5	5	2625	881.5	LTE B66	20	66786	2145	LTE B66	20	66984	2164.8	2145	24.55	24.62	
CA 5A-30A-66A-66A	LTE B5	5	20425	836.5	QPSK	1	12	2425	871.5	LTE B30	10	9620	2395	LTE B66	20	66786	2145	LTE B66	20	67236	2190	2145	24.53	24.62	
CA 5A-48A-66A-66A	LTE B5	5	20425	836.5	QPSK	1	12	2425	871.5	LTE B48	20	55960	3625	LTE B66	20	66786	2145	LTE B66	20	67236	2190	2145	24.52	24.62	
CA 5A-48C-66A	LTE B5	5	20425	836.5	QPSK	1	12	2425	871.5	LTE B48	20	55960	3625	LTE B48	20	56188	3644.8	LTE B66	20	66786	2145	2145	24.55	24.62	
CA 5A-48D	LTE B5	5	20425	836.5	QPSK	1	12	2425	871.5	LTE B48	20	55960	3625	LTE B48	20	56188	3644.8	LTE B48	20	56386	3664.6	2145	24.51	24.62	

I.2.6 LTE Band 26 as PCC

Table I-8
Maximum Output Powers

Combination	PCC Band	PCC BW [MHz]	PCC (UL) Ch.	PCC				PCC (DL) Channel	PCC (DL) Freq. [MHz]	SCC Band	SCC 1			SCC 2			SCC 3			LTE Tx Power with DL CA Enabled (dBm)	LTE Single Carrier Tx Power (dBm)		
				Mod.	PCC UL RB	PCC UL RB Offset	SCC Band				SCC BW [MHz]	SCC (DL) Channel	SCC (DL) Freq. [MHz]	SCC Band	SCC BW [MHz]	SCC (DL) Channel	SCC (DL) Freq. [MHz]	SCC Band	SCC BW [MHz]			SCC (DL) Channel	SCC (DL) Freq. [MHz]
CA 25A-25A-26A	LTE B26	5	26865	831.5	QPSK	1	24	8865	876.5	LTE B25	20	8365	1962.5	LTE B25	20	8590	1995	-	-	-	24.61	24.57	
CA 25A-26A-41A	LTE B26	5	26865	831.5	QPSK	1	24	8865	876.5	LTE B25	20	8365	1962.5	LTE B41	20	40620	2593	-	-	-	24.62	24.57	
CA 26A-41C	LTE B26	5	26865	831.5	QPSK	1	24	8865	876.5	LTE B41	20	40620	2593	LTE B41	20	40422	2573.2	-	-	-	24.60	24.57	
CA 25A-26A-41C	LTE B26	5	26865	831.5	QPSK	1	24	8865	876.5	LTE B25	20	8365	1962.5	LTE B41	20	40620	2593	LTE B41	20	40422	2573.2	24.59	24.57

I.2.7 LTE Band 66 as PCC

Table I-9
Maximum Output Powers

PCC										SCC 1				SCC 2				SCC 3				Power			
Combination	PCC Band	PCC BW [MHz]	PCC (UL) Ch.	PCC (UL) Freq. [MHz]	Mod.	PCC UL RB	PCC UL RB Offset	PCC (DL) Channel	PCC (DL) Freq. [MHz]	SCC Band	SCC BW [MHz]	SCC (DL) Channel	SCC (DL) Freq. [MHz]	SCC Band	SCC BW [MHz]	SCC (DL) Channel	SCC (DL) Freq. [MHz]	SCC Band	SCC BW [MHz]	SCC (DL) Channel	SCC (DL) Freq. [MHz]	LTE Tx Power with DL CA Enabled (dBm)	LTE Single Carrier Tx Power (dBm)		
CA 12A-66A (1)	LTE B66	5	131997	1712.5	QPSK	1	24	66463	2112.5	LTE B12	10	5095	737.5	-	-	-	-	-	-	-	-	-	24.45	23.51	
CA 12A-66A (2)	LTE B66	5	131997	1712.5	QPSK	1	24	66463	2112.5	LTE B12	10	5095	737.5	-	-	-	-	-	-	-	-	-	24.45	23.51	
CA 25A-66A	LTE B66	5	131997	1712.5	QPSK	1	24	66463	2112.5	LTE B25	20	8365	1962.5	-	-	-	-	-	-	-	-	-	23.52	23.51	
CA 25A-25A-66A	LTE B66	5	131997	1712.5	QPSK	1	24	66463	2112.5	LTE B25	20	8365	1962.5	LTE B25	20	8590	1995	-	-	-	-	-	24.41	23.51	
CA 2A-2A-5A-66A	LTE B66	5	131997	1712.5	QPSK	1	24	66463	2112.5	LTE B2	20	900	1960	LTE B2	20	700	1940	LTE B5	10	2525	881.5	2145	23.51		
CA 2A-2A-13A-66A	LTE B66	5	131997	1712.5	QPSK	1	24	66463	2112.5	LTE B2	20	900	1960	LTE B2	20	700	1940	LTE B13	10	5230	751	2145	23.57	23.51	
CA 2A-2A-14A-66A	LTE B66	5	131997	1712.5	QPSK	1	24	66463	2112.5	LTE B2	20	900	1960	LTE B2	20	700	1940	LTE B14	10	5330	763	2145	23.60	23.51	
CA 2A-2A-20A-66A	LTE B66	5	131997	1712.5	QPSK	1	24	66463	2112.5	LTE B2	20	900	1960	LTE B2	20	700	1940	LTE B20	10	9715	722.5	2145	23.53	23.51	
CA 2A-2A-30A-66A	LTE B66	5	131997	1712.5	QPSK	1	24	66463	2112.5	LTE B2	20	900	1960	LTE B2	20	700	1940	LTE B30	10	9620	2395	2145	23.57	23.51	
CA 2A-2A-66A-66A	LTE B66	5	131997	1712.5	QPSK	1	24	66463	2112.5	LTE B66	20	67236	2190	LTE B2	20	900	1960	LTE B2	20	700	1940	2145	2145	23.33	23.51
CA 2A-2A-66A-71A	LTE B66	5	131997	1712.5	QPSK	1	24	66463	2112.5	LTE B2	20	900	1960	LTE B2	20	700	1940	LTE B71	20	66761	634.5	2145	2145	23.52	23.51
CA 2A-2A-66B	LTE B66	5	131997	1712.5	QPSK	1	24	66463	2112.5	LTE B66	15	66554	2121.8	LTE B2	20	900	1960	LTE B2	20	700	1940	2145	2145	23.38	23.51
CA 2A-2A-66C	LTE B66	5	131997	1712.5	QPSK	1	24	66463	2112.5	LTE B66	20	66578	2124.2	LTE B2	20	900	1960	LTE B2	20	700	1940	2145	2145	23.37	23.51
CA 2A-5A-30A-66A	LTE B66	5	131997	1712.5	QPSK	1	24	66463	2112.5	LTE B2	20	900	1960	LTE B5	10	2525	881.5	LTE B30	10	9620	2395	2145	2145	23.30	23.51
CA 2A-5A-48A-66A	LTE B66	5	131997	1712.5	QPSK	1	24	66463	2112.5	LTE B2	20	900	1960	LTE B5	10	2525	881.5	LTE B48	20	55960	3625	2145	2145	23.36	23.51
CA 2A-5A-66A-66A	LTE B66	5	131997	1712.5	QPSK	1	24	66463	2112.5	LTE B66	20	67236	2190	LTE B2	20	900	1960	LTE B5	10	2525	881.5	2145	2145	23.42	23.51
CA 2A-5A-66B	LTE B66	5	131997	1712.5	QPSK	1	24	66463	2112.5	LTE B66	15	66554	2121.8	LTE B2	20	900	1960	LTE B5	10	2525	881.5	2145	2145	23.45	23.51
CA 2A-5A-66C	LTE B66	5	131997	1712.5	QPSK	1	24	66463	2112.5	LTE B66	20	66578	2124.2	LTE B2	20	900	1960	LTE B5	10	2525	881.5	2145	2145	23.47	23.51
CA 2A-12A-30A-66A	LTE B66	5	131997	1712.5	QPSK	1	24	66463	2112.5	LTE B2	20	900	1960	LTE B12	20	5095	737.5	LTE B30	10	9620	2395	2145	2145	23.41	23.51
CA 2A-12A-66A-66A	LTE B66	5	131997	1712.5	QPSK	1	24	66463	2112.5	LTE B66	20	67236	2190	LTE B2	20	900	1960	LTE B12	20	5095	737.5	2145	2145	23.34	23.51
CA 2A-12A-66B	LTE B66	5	131997	1712.5	QPSK	1	24	66463	2112.5	LTE B66	20	66578	2124.2	LTE B2	20	900	1960	LTE B12	20	5095	737.5	2145	2145	23.36	23.51
CA 2A-12A-66C	LTE B66	5	131997	1712.5	QPSK	1	24	66463	2112.5	LTE B2	20	900	1960	LTE B12	5	5095	737.5	LTE B12	5	5047	732.7	2145	2145	23.32	23.51
CA 2A-13A-48A-66A	LTE B66	5	131997	1712.5	QPSK	1	24	66463	2112.5	LTE B2	20	900	1960	LTE B13	10	5230	751	LTE B48	20	55960	3625	2145	2145	23.42	23.51
CA 2A-13A-66A-66A	LTE B66	5	131997	1712.5	QPSK	1	24	66463	2112.5	LTE B66	20	67236	2190	LTE B12	20	900	1960	LTE B13	10	5230	751	2145	2145	23.59	23.51
CA 2A-13A-66B	LTE B66	5	131997	1712.5	QPSK	1	24	66463	2112.5	LTE B66	15	66554	2121.8	LTE B13	10	5230	751	LTE B48	20	55960	3625	2145	2145	23.46	23.51
CA 2A-13A-66C	LTE B66	5	131997	1712.5	QPSK	1	24	66463	2112.5	LTE B66	20	66578	2124.2	LTE B2	20	900	1960	LTE B13	10	5230	751	2145	2145	23.52	23.51
CA 2A-14A-30A-66A	LTE B66	5	131997	1712.5	QPSK	1	24	66463	2112.5	LTE B2	20	900	1960	LTE B14	10	5330	763	LTE B30	10	9620	2395	2145	2145	23.50	23.51
CA 2A-14A-66A-66A	LTE B66	5	131997	1712.5	QPSK	1	24	66463	2112.5	LTE B66	20	67236	2190	LTE B2	20	900	1960	LTE B14	10	5330	763	2145	2145	23.44	23.51
CA 2A-20A-30A-66A	LTE B66	5	131997	1712.5	QPSK	1	24	66463	2112.5	LTE B2	20	900	1960	LTE B20	10	9715	722.5	LTE B30	10	9620	2395	2145	2145	23.48	23.51
CA 2A-20A-66A-66A	LTE B66	5	131997	1712.5	QPSK	1	24	66463	2112.5	LTE B66	20	67236	2190	LTE B2	20	900	1960	LTE B20	10	9715	722.5	2145	2145	23.44	23.51
CA 2A-30A-66A-66A	LTE B66	5	131997	1712.5	QPSK	1	24	66463	2112.5	LTE B66	20	67236	2190	LTE B2	20	900	1960	LTE B20	10	9715	722.5	2145	2145	23.46	23.51
CA 2A-30A-66B	LTE B66	5	131997	1712.5	QPSK	1	24	66463	2112.5	LTE B66	15	66554	2121.8	LTE B20	10	9715	722.5	LTE B30	10	9620	2395	2145	2145	23.49	23.51
CA 2A-30A-66A-66A	LTE B66	5	131997	1712.5	QPSK	1	24	66463	2112.5	LTE B66	20	67236	2190	LTE B2	20	900	1960	LTE B30	10	9620	2395	2145	2145	23.56	23.51
CA 2A-48A-48A-66A	LTE B66	5	131997	1712.5	QPSK	1	24	66463	2112.5	LTE B2	20	900	1960	LTE B48	20	55960	3625	LTE B48	20	55340	3580	2145	2145	23.42	23.51
CA 2A-48A-66A-66A	LTE B66	5	131997	1712.5	QPSK	1	24	66463	2112.5	LTE B66	20	67236	2190	LTE B2	20	900	1960	LTE B48	20	55960	3625	2145	2145	23.47	23.51
CA 2A-48C-66B	LTE B66	5	131997	1712.5	QPSK	1	24	66463	2112.5	LTE B2	20	900	1960	LTE B48	20	55960	3625	LTE B48	20	56188	3644.8	2145	2145	23.48	23.51
CA 2A-66A-66B	LTE B66	5	131997	1712.5	QPSK	1	24	66463	2112.5	LTE B66	15	67218	2188.2	LTE B66	5	67311	2197.5	LTE B2	20	900	1960	2145	2145	23.40	23.51
CA 2A-66A-66A-66A	LTE B66	5	131997	1712.5	QPSK	1	24	66463	2112.5	LTE B66	20	66786	2145	LTE B66	20	67236	2190	LTE B2	20	900	1960	2145	2145	23.58	23.51
CA 2A-66A-66A-71A	LTE B66	5	131997	1712.5	QPSK	1	24	66463	2112.5	LTE B66	20	67236	2190	LTE B2	20	900	1960	LTE B71	20	66761	634.5	2145	2145	23.51	23.51
CA 2C-66A-66A	LTE B66	5	131997	1712.5	QPSK	1	24	66463	2112.5	LTE B66	20	67236	2190	LTE B2	20	900	1960	LTE B2	20	702	1940.2	2145	2145	23.45	23.51
CA 2A-66C-71A	LTE B66	5	131997	1712.5	QPSK	1	24	66463	2112.5	LTE B66	20	66578	2124.2	LTE B2	20	900	1960	LTE B71	20	66761	634.5	2145	2145	23.40	23.51
CA 5A-5A-66A-66A	LTE B66	5	131997	1712.5	QPSK	1	24	66463	2112.5	LTE B66	20	67236	2190	LTE B5	10	2525	881.5	LTE B5	5	2425	874.5	2145	2145	23.36	23.51
CA 5A-5A-66B	LTE B66	5	131997	1712.5	QPSK	1	24	66463	2112.5	LTE B66	15	66578	2124.2	LTE B5	10	2525	881.5	LTE B48	20	55960	3625	2145	2145	23.37	23.51
CA 5A-5A-66C	LTE B66	5	131997	1712.5	QPSK	1	24	66463	2112.5	LTE B66	20	66578	2124.2	LTE B5	10	2525	881.5	LTE B5	5	2425	874.5	2145	2145	23.37	23.51
CA 5A-30A-66A-66A	LTE B66	5	131997	1712.5	QPSK	1	24	66463	2112.5	LTE B66	20	67236	2190	LTE B5	10	2525	881.5	LTE B30	10	9620	2395	2145	2145	23.44	23.51
CA 5A-48A-66A-66A	LTE B66	5	131997	1712.5	QPSK	1	24	66463	2112.5	LTE B66	20	67236	2190	LTE B5	10	2525	881.5	LTE B48	20	55960	3625	2145	2145	23.47	23.51
CA 5A-48A-66B	LTE B66	5	131997	1712.5	QPSK	1	24	66463	2112.5	LTE B66	15	66578	2124.2	LTE B5	10	2525	881.5	LTE B48	20	56188	3644.8	2145	2145	23.48	23.51
CA 5A-48C-66A	LTE B66	5	131997	1712.5	QPSK	1	24	66463	2112.5	LTE B5	10	2525	881.5	LTE B48	20	55960	3625	LTE B48	20	55998	3644.8	2145	2145	23.29	23.51
CA 12A-30A-66A-66A	LTE B66	5	131997	1712.5	QPSK	1	24	66463	2112.5	LTE B66	20	67236	2190	LTE B12	10	5095	737.5	LTE B30	10	9620	2395	2145	2145	23.35	23.51
CA 13A-66A-66A	LTE B66	5	131997	1712.5	QPSK	1	24	66463	2112.5	LTE B66	20	67236	2190	LTE B12	5	5095	737.5	LTE B12	5	5047	732.7	2145	2145	23.34	23.51
CA 13A-66B	LTE B66	5	131997	1712.5	QPSK	1	24	66463	2112.5	LTE B66	15	66554	2121.8	LTE B13	10	5230	751	LTE B48							

I.2.8 LTE Band 25 as PCC

Table I-10
Maximum Output Powers

Combination	PCC Band	PCC BW [MHz]	PCC (UL) Ch. Freq. [MHz]	PCC				SCC 1				SCC 2				SCC 3				Power			
				Mod.	PCC UL RB	PCC UL RB Offset	PCC (DL) Channel	PCC (DL) Freq. [MHz]	SCC Band	SCC BW [MHz]	SCC (DL) Channel	SCC (DL) Freq. [MHz]	SCC Band	SCC BW [MHz]	SCC (DL) Channel	SCC (DL) Freq. [MHz]	SCC Band	SCC BW [MHz]	SCC (DL) Channel	SCC (DL) Freq. [MHz]	LTE Tx Power with DL CA Enabled (dBm)	LTE Single Carrier Tx Power (dBm)	
CA 5A-25A	LTE B25	5	26065	18S2.5	QPSK	1	24	8065	1932.5	LTE B5	10	2525	881.5	-	-	-	-	-	-	-	23.34	23.37	
CA 12A-25A	LTE B25	5	26065	18S2.5	QPSK	1	24	8065	1932.5	LTE B12	10	5095	737.5	-	-	-	-	-	-	-	23.36	23.37	
CA 25A-66A	LTE B25	3	26055	18S1.5	QPSK	1	14	8065	1931.5	LTE B66	20	66786	2145	-	-	-	-	-	-	-	23.34	23.39	
CA 25A-25A-26A	LTE B25	5	26065	18S2.5	QPSK	1	24	8065	1932.5	LTE B25	20	8590	1985	LTE B26	5	8895	876.5	-	-	-	-	23.12	23.37
CA 25A-25A-66A	LTE B25	5	26065	18S2.5	QPSK	1	24	8065	1932.5	LTE B25	20	8590	1985	LTE B66	20	66786	2145	-	-	-	-	23.29	23.37
CA 25A-25A-41A	LTE B25	5	26065	18S2.5	QPSK	1	24	8065	1932.5	LTE B25	20	8590	1985	LTE B41	20	40620	2593	-	-	-	-	23.39	23.37
CA 25A-25A-41A	LTE B25	3	26055	18S1.5	QPSK	1	14	8065	1931.5	LTE B26	15	8895	876.5	LTE B41	20	40620	2593	-	-	-	-	23.39	23.37
CA 25A-41C	LTE B25	5	26065	18S2.5	QPSK	1	24	8065	1932.5	LTE B41	20	40620	2593	LTE B41	20	40620	2573.2	-	-	-	-	23.16	23.37
CA 25A-25A-41C	LTE B25	5	26065	18S2.5	QPSK	1	24	8065	1932.5	LTE B25	20	8590	1985	LTE B41	20	40620	2593	LTE B41	20	40620	2573.2	23.39	23.37
CA 25A-25A-41C	LTE B25	3	26055	18S1.5	QPSK	1	14	8065	1931.5	LTE B26	15	8895	876.5	LTE B41	20	40620	2593	LTE B41	20	40620	2573.2	23.33	23.39
CA 25A-41D	LTE B25	5	26065	18S2.5	QPSK	1	24	8065	1932.5	LTE B41	20	40620	2573.2	LTE B41	20	40620	2593	LTE B41	20	40618	2612.8	23.28	23.37

I.2.9 LTE Band 30 as PCC

Table I-11
Maximum Output Powers

Combination	PCC Band	PCC BW [MHz]	PCC (UL) Ch.	PCC				SCC 1				SCC 2				SCC 3				Power		
				Mod.	PCC UL#	PCC UL RB Offset	PCC (DL) Channel	PCC (DL) Freq. [MHz]	SCC Band	SCC BW [MHz]	SCC (DL) Channel	SCC (DL) Freq. [MHz]	SCC Band	SCC BW [MHz]	SCC (DL) Channel	SCC (DL) Freq. [MHz]	SCC Band	SCC BW [MHz]	SCC (DL) Channel	SCC (DL) Freq. [MHz]	LTE Tx Power with DL CA Enabled (dBm)	LTE Single Carrier Tx Power (dBm)
CA 2A-2A-5A-30A	LTE B30	10	27710	QPSK	1	0	9620	2355	LTE B2	20	900	1960	LTE B2	20	700	1940	LTE B5	10	2525	881.5	21.98	22.02
CA 2A-2A-12A-30A	LTE B30	10	27710	QPSK	1	0	9620	2355	LTE B2	20	900	1960	LTE B2	20	700	1940	LTE B12	10	5095	737.5	22.00	22.02
CA 2A-2A-14A-30A	LTE B30	10	27710	QPSK	1	0	9620	2355	LTE B2	20	900	1960	LTE B2	20	700	1940	LTE B14	10	5330	763	21.93	22.02
CA 2A-2A-29A-30A	LTE B30	10	27710	QPSK	1	0	9620	2355	LTE B2	20	900	1960	LTE B2	20	700	1940	LTE B29	10	9715	722.5	21.97	22.02
CA 2A-2A-30A-66A	LTE B30	10	27710	QPSK	1	0	9620	2355	LTE B2	20	900	1960	LTE B2	20	700	1940	LTE B66	20	66786	2145	22.10	22.02
CA 2A-4A-5A-30A	LTE B30	10	27710	QPSK	1	0	9620	2355	LTE B2	20	900	1960	LTE B4	20	2175	2132.5	LTE B5	10	2525	881.5	21.95	22.02
CA 2A-4A-12A-30A	LTE B30	10	27710	QPSK	1	0	9620	2355	LTE B2	20	900	1960	LTE B4	20	2175	2132.5	LTE B12	10	5095	737.5	22.02	22.02
CA 2A-4A-29A-30A	LTE B30	10	27710	QPSK	1	0	9620	2355	LTE B2	20	900	1960	LTE B4	20	2175	2132.5	LTE B29	10	9715	722.5	21.90	22.02
CA 2A-5A-30A-66A	LTE B30	10	27710	QPSK	1	0	9620	2355	LTE B2	20	900	1960	LTE B5	10	2525	881.5	LTE B66	20	66786	2145	21.91	22.02
CA 2A-12A-30A-66A	LTE B30	10	27710	QPSK	1	0	9620	2355	LTE B2	20	900	1960	LTE B12	10	5095	737.5	LTE B66	20	66786	2145	21.91	22.02
CA 2A-14A-30A-66A	LTE B30	10	27710	QPSK	1	0	9620	2355	LTE B2	20	900	1960	LTE B14	10	5330	763	LTE B66	20	66786	2145	21.95	22.02
CA 2A-29A-30A-66A	LTE B30	10	27710	QPSK	1	0	9620	2355	LTE B2	20	900	1960	LTE B29	10	9715	722.5	LTE B66	20	66786	2145	21.97	22.02
CA 2A-30A-66A-66A	LTE B30	10	27710	QPSK	1	0	9620	2355	LTE B2	20	900	1960	LTE B66	20	66786	2145	LTE B66	20	67236	2190	21.93	22.02
CA 5A-30A-66A-66A	LTE B30	10	27710	QPSK	1	0	9620	2355	LTE B5	10	2525	881.5	LTE B66	20	66786	2145	LTE B66	20	67236	2190	21.90	22.02
CA 12A-30A-66A-66A	LTE B30	10	27710	QPSK	1	0	9620	2355	LTE B12	10	5095	737.5	LTE B66	20	66786	2145	LTE B66	20	67236	2190	21.96	22.02
CA 14A-30A-66A-66A	LTE B30	10	27710	QPSK	1	0	9620	2355	LTE B14	10	5330	763	LTE B66	20	66786	2145	LTE B66	20	67236	2190	21.95	22.02
CA 29A-30A-66A-66A	LTE B30	10	27710	QPSK	1	0	9620	2355	LTE B29	10	9715	722.5	LTE B66	20	66786	2145	LTE B66	20	67236	2190	21.91	22.02

I.2.10 LTE Band 41 PC2 as PCC

Table I-12
Maximum Output Powers

Combination	PCC Band	PCC BW [MHz]	PCC (UL) Ch. Freq. [MHz]	PCC			SCC 1				SCC 2				SCC 3				Power				
				Mod.	PCC UL RB	PCC UL RB Offset	PCC (DL) Channel	PCC (DL) Freq. [MHz]	SCC Band	SCC BW [MHz]	SCC (DL) Channel	SCC (DL) Freq. [MHz]	SCC Band	SCC BW [MHz]	SCC (DL) Channel	SCC (DL) Freq. [MHz]	SCC Band	SCC BW [MHz]	SCC (DL) Channel	SCC (DL) Freq. [MHz]	LTE Tx Power with DL CA Enabled (dBm)	LTE Single Carrier Tx Power (dBm)	
CA 41A-41A (1)	LTE B41	20	41055	2636.5	QPSK	1	0	41055	2636.5	LTE B41	20	39750	2506	-	-	-	-	-	-	-	26.12	26.21	
CA 41A-41C	LTE B41	20	41055	2636.5	QPSK	1	0	41055	2636.5	LTE B41	20	39948	2525.8	LTE B41	20	39750	2506	-	-	-	26.15	26.21	
CA 41C-41A	LTE B41	20	41055	2636.5	QPSK	1	0	41055	2636.5	LTE B41	20	40857	2616.7	LTE B41	20	39750	2506	-	-	-	26.13	26.21	
CA 41A-41D	LTE B41	20	41055	2636.5	QPSK	1	0	41055	2636.5	LTE B41	20	40146	2545.6	LTE B41	20	39948	2525.8	LTE B41	20	39750	2506	26.17	26.21
CA 41D-41A	LTE B41	20	41055	2636.5	QPSK	1	0	41055	2636.5	LTE B41	20	40857	2616.7	LTE B41	20	40659	2596.9	LTE B41	20	39750	2506	26.25	26.21
CA 41C-41C	LTE B41	20	41055	2636.5	QPSK	1	0	41055	2636.5	LTE B41	20	40857	2616.7	LTE B41	20	39948	2525.8	LTE B41	20	39750	2506	26.22	26.21
CA 41E	LTE B41	20	41055	2636.5	QPSK	1	0	41055	2636.5	LTE B41	20	40857	2616.7	LTE B41	20	40659	2596.9	LTE B41	20	40661	2597.1	26.16	26.21

I.3 DL CA with DL 4x4 MIMO RF Conduction Powers

This device supports downlink 4x4 MIMO operations for some LTE bands. Uplink transmission is limited to a single output stream. When carrier aggregation was applicable, the general test selection and setup procedures described in Section I.1 were applied.

Per May 2017 TCB Workshop Notes, SAR for 4x4 DL MIMO was not needed since the maximum average output power in 4x4 DL MIMO mode was not more than 0.25 dB higher than the maximum output power with 4x4 DL MIMO inactive. Additionally, SAR for 4x4 MIMO Downlink Carrier Aggregation was not needed since the maximum average output power in 4x4 MIMO Downlink Carrier Aggregation mode was not more than 0.25 dB higher than the maximum output power with 4x4 MIMO Downlink and downlink carrier aggregation inactive.

FCC ID: A3LSMA356U	SAR EVALUATION REPORT	Approved by: Technical Manager
DUT Type: Portable Handset		APPENDIX I: Page 5 of 12

I.3.3 LTE Band 13 as PCC

Table I-15
Maximum Output Powers

Combination	PCC Band	PCC BW [MHz]	PCC UL Freq [MHz]	PCC (UL) Freq [MHz]	Mod.	PCC				DL Ant. Config.	SCC 1				DL Ant. Config.	SCC 2				DL Ant. Config.	SCC 3				DL Ant. Config.	Power	
						PCC UL RB	PCC UL RB Offset	PCC (DL) Ch.	PCC (DL) Freq [MHz]		SCC Band	SCC BW [MHz]	SCC (DL) Ch.	SCC (DL) Freq [MHz]		SCC Band	SCC BW [MHz]	SCC (DL) Ch.	SCC (DL) Freq [MHz]		SCC Band	SCC BW [MHz]	SCC (DL) Ch.	SCC (DL) Freq [MHz]		LTE Tx Power with DL CA Enabled (dBm)	LTE Single Carrier Tx Power (dBm)
CA 2A-4A-13A	LTE B13	10	23230	782	QPSK	1	0	5230	751	2x2	LTE B2	20	900	1960	2x2	LTE B4	20	2175	2132.5	4x4	-	-	-	-	-	24.16	24.06
CA 2A-4A-13A	LTE B13	10	23230	782	QPSK	1	0	5230	751	2x2	LTE B2	20	900	1960	4x4	LTE B4	20	2175	2132.5	2x2	-	-	-	-	-	23.15	24.06
CA 2A-4A-13A	LTE B13	10	23230	782	QPSK	1	0	5230	751	2x2	LTE B2	20	900	1960	4x4	LTE B4	20	2175	2132.5	4x4	-	-	-	-	-	24.11	24.06
CA 4A-4A-13A	LTE B13	10	23230	782	QPSK	1	0	5230	751	2x2	LTE B4	20	2175	2132.5	4x4	LTE B4	20	2175	2132.5	2x2	-	-	-	-	-	24.09	24.06
CA 4A-4A-13A	LTE B13	10	23230	782	QPSK	1	0	5230	751	2x2	LTE B4	20	2175	2132.5	4x4	LTE B4	20	2175	2132.5	4x4	-	-	-	-	-	24.11	24.06
CA 2A-2A-13A-66A	LTE B13	10	23230	782	QPSK	1	0	5230	751	2x2	LTE B2	20	900	1960	2x2	LTE B2	20	900	1960	2x2	LTE B66	20	66786	2145	4x4	23.10	24.06
CA 2A-2A-13A-66A	LTE B13	10	23230	782	QPSK	1	0	5230	751	2x2	LTE B2	20	900	1960	4x4	LTE B2	20	900	1960	2x2	LTE B66	20	66786	2145	2x2	23.10	24.06
CA 2A-2A-13A-66A	LTE B13	10	23230	782	QPSK	1	0	5230	751	2x2	LTE B2	20	900	1960	4x4	LTE B2	20	900	1960	2x2	LTE B66	20	66786	2145	4x4	23.14	24.06
CA 2A-2A-13A-66A	LTE B13	10	23230	782	QPSK	1	0	5230	751	2x2	LTE B2	20	900	1960	4x4	LTE B2	20	900	1960	4x4	LTE B66	20	66786	2145	2x2	23.17	24.06
CA 2A-13A-48A-66A	LTE B13	10	23230	782	QPSK	1	0	5230	751	2x2	LTE B2	20	900	1960	2x2	LTE B48	20	55990	3625	2x2	LTE B66	20	66786	2145	4x4	24.13	24.06
CA 2A-13A-48A-66A	LTE B13	10	23230	782	QPSK	1	0	5230	751	2x2	LTE B2	20	900	1960	2x2	LTE B48	20	55990	3625	4x4	LTE B66	20	66786	2145	2x2	24.18	24.06
CA 2A-13A-48A-66A	LTE B13	10	23230	782	QPSK	1	0	5230	751	2x2	LTE B2	20	900	1960	2x2	LTE B48	20	55990	3625	4x4	LTE B66	20	66786	2145	4x4	24.15	24.06
CA 2A-13A-48A-66A	LTE B13	10	23230	782	QPSK	1	0	5230	751	2x2	LTE B2	20	900	1960	4x4	LTE B48	20	55990	3625	2x2	LTE B66	20	66786	2145	2x2	24.19	24.06
CA 2A-13A-48A-66A	LTE B13	10	23230	782	QPSK	1	0	5230	751	2x2	LTE B2	20	900	1960	4x4	LTE B48	20	55990	3625	2x2	LTE B66	20	66786	2145	4x4	24.16	24.06
CA 2A-13A-48A-66A	LTE B13	10	23230	782	QPSK	1	0	5230	751	2x2	LTE B2	20	900	1960	4x4	LTE B48	20	55990	3625	4x4	LTE B66	20	66786	2145	2x2	24.16	24.06
CA 2A-13A-48A-66A	LTE B13	10	23230	782	QPSK	1	0	5230	751	2x2	LTE B2	20	900	1960	2x2	LTE B48	20	55990	3625	4x4	LTE B48	20	56188	3644.8	4x4	24.10	24.06
CA 2A-13A-48A-66A	LTE B13	10	23230	782	QPSK	1	0	5230	751	2x2	LTE B2	20	900	1960	2x2	LTE B48	20	55990	3625	2x2	LTE B48	20	56188	3644.8	2x2	24.13	24.06
CA 2A-13A-66A-66A	LTE B13	10	23230	782	QPSK	1	0	5230	751	2x2	LTE B2	20	900	1960	2x2	LTE B66	20	66786	2145	4x4	LTE B66	20	67236	2190	2x2	24.12	24.06
CA 2A-13A-66A-66A	LTE B13	10	23230	782	QPSK	1	0	5230	751	2x2	LTE B2	20	900	1960	2x2	LTE B66	20	66786	2145	4x4	LTE B66	20	67236	2190	2x2	24.10	24.06
CA 2A-13A-66A-66A	LTE B13	10	23230	782	QPSK	1	0	5230	751	2x2	LTE B2	20	900	1960	4x4	LTE B66	20	66786	2145	2x2	LTE B66	20	67236	2190	2x2	24.10	24.06
CA 2A-13A-66A-66A	LTE B13	10	23230	782	QPSK	1	0	5230	751	2x2	LTE B2	20	900	1960	4x4	LTE B66	15	66786	2145	4x4	LTE B66	5	66879	2154.3	4x4	23.16	24.06
CA 2A-13A-66A	LTE B13	10	23230	782	QPSK	1	0	5230	751	2x2	LTE B2	20	900	1960	4x4	LTE B66	15	66786	2145	2x2	LTE B66	5	66879	2154.3	2x2	23.15	24.06
CA 2A-13A-66A	LTE B13	10	23230	782	QPSK	1	0	5230	751	2x2	LTE B2	20	900	1960	2x2	LTE B66	20	66786	2145	4x4	LTE B66	20	66884	2164.8	4x4	24.12	24.06
CA 2A-13A-66A	LTE B13	10	23230	782	QPSK	1	0	5230	751	2x2	LTE B2	20	900	1960	4x4	LTE B66	20	66786	2145	2x2	LTE B66	20	66884	2164.8	2x2	24.10	24.06
CA 13A-48A-66A	LTE B13	10	23230	782	QPSK	1	0	5230	751	2x2	LTE B48	20	55990	3625	2x2	LTE B66	15	66786	2145	4x4	LTE B66	5	66879	2154.3	4x4	24.09	24.06
CA 13A-48A-66A	LTE B13	10	23230	782	QPSK	1	0	5230	751	2x2	LTE B48	20	55990	3625	4x4	LTE B66	15	66786	2145	2x2	LTE B66	5	66879	2154.3	2x2	24.09	24.06
CA 13A-48A-66A	LTE B13	10	23230	782	QPSK	1	0	5230	751	2x2	LTE B48	20	55990	3625	4x4	LTE B66	20	66786	2145	4x4	LTE B66	20	66884	2164.8	4x4	24.11	24.06
CA 13A-48A-66A	LTE B13	10	23230	782	QPSK	1	0	5230	751	2x2	LTE B48	20	55990	3625	4x4	LTE B66	20	66786	2145	2x2	LTE B66	20	66884	2164.8	2x2	24.09	24.06
CA 13A-48C-66A	LTE B13	10	23230	782	QPSK	1	0	5230	751	2x2	LTE B48	20	55990	3625	2x2	LTE B66	20	66786	2145	4x4	LTE B66	20	66884	2164.8	4x4	24.11	24.06
CA 13A-48C-66A	LTE B13	10	23230	782	QPSK	1	0	5230	751	2x2	LTE B48	20	55990	3625	4x4	LTE B48	20	56188	3644.8	4x4	LTE B66	20	66786	2145	2x2	24.10	24.06
CA 13A-66A-66A	LTE B13	10	23230	782	QPSK	1	0	5230	751	2x2	LTE B66	20	66786	2145	4x4	LTE B66	5	67168	2193.2	2x2	LTE B66	15	67261	2192.5	2x2	24.11	24.06
CA 13A-66A-66A	LTE B13	10	23230	782	QPSK	1	0	5230	751	2x2	LTE B66	20	66786	2145	4x4	LTE B66	5	67168	2193.2	4x4	LTE B66	15	67261	2192.5	4x4	24.09	24.06
CA 13A-66A-66A	LTE B13	10	23230	782	QPSK	1	0	5230	751	2x2	LTE B66	20	66786	2145	4x4	LTE B66	20	67038	2170.2	2x2	LTE B66	20	67236	2190	2x2	24.10	24.06
CA 13A-66A-66A	LTE B13	10	23230	782	QPSK	1	0	5230	751	2x2	LTE B66	20	66786	2145	2x2	LTE B66	20	67038	2170.2	4x4	LTE B66	20	67236	2190	4x4	24.07	24.06

I.3.4 LTE Band 14 as PCC

Table I-16
Maximum Output Powers

Combination	PCC Band	PCC						SCC 1						SCC 2						SCC 3						Power	
		PCC BW [MHz]	PCC (UL) Ch.	PCC (UL) Freq. [MHz]	Mod.	PCC UL RB	PCC UL RB Offset	PCC (DL) Ch.	PCC (DL) Freq. [MHz]	DL Ant. Config.	SCC Band	SCC BW [MHz]	SCC (DL) Ch.	SCC (DL) Freq. [MHz]	DL Ant. Config.	SCC Band	SCC BW [MHz]	SCC (DL) Ch.	SCC (DL) Freq. [MHz]	DL Ant. Config.	SCC Band	SCC BW [MHz]	SCC (DL) Ch.	SCC (DL) Freq. [MHz]	DL Ant. Config.	LTE Tx Power with DL CA Enabled (dBm)	LTE Single Carrier Tx Power (dBm)
CA 2A-2A-14A-30A	LTE B14	10	23330	793	QPSK	1	0	5330	763	2x2	LTE B2	20	900	1960	4x4	LTE B2	20	700	1940	2x2	LTE B30	10	9820	2355	2x2	24.28	24.21
CA 2A-2A-14A-30A	LTE B14	10	23330	793	QPSK	1	0	5330	763	2x2	LTE B2	20	900	1960	4x4	LTE B2	20	700	1940	4x4	LTE B30	10	9820	2355	2x2	24.30	24.21
CA 2A-2A-14A-66A	LTE B14	10	23330	793	QPSK	1	0	5330	763	2x2	LTE B2	20	900	1960	2x2	LTE B2	20	700	1940	2x2	LTE B66	20	66786	2145	4x4	24.21	24.21
CA 2A-2A-14A-66A	LTE B14	10	23330	793	QPSK	1	0	5330	763	2x2	LTE B2	20	900	1960	4x4	LTE B2	20	700	1940	2x2	LTE B66	20	66786	2145	2x2	24.20	24.21
CA 2A-2A-14A-66A	LTE B14	10	23330	793	QPSK	1	0	5330	763	2x2	LTE B2	20	900	1960	4x4	LTE B2	20	700	1940	2x2	LTE B66	20	66786	2145	4x4	24.09	24.21
CA 2A-2A-14A-66A	LTE B14	10	23330	793	QPSK	1	0	5330	763	2x2	LTE B2	20	900	1960	4x4	LTE B2	20	700	1940	4x4	LTE B66	20	66786	2145	2x2	24.29	24.21
CA 2A-14A-30A-66A	LTE B14	10	23330	793	QPSK	1	0	5330	763	2x2	LTE B2	20	900	1960	2x2	LTE B30	10	9820	2355	2x2	LTE B66	20	66786	2145	4x4	24.16	24.21
CA 2A-14A-30A-66A	LTE B14	10	23330	793	QPSK	1	0	5330	763	2x2	LTE B2	20	900	1960	4x4	LTE B30	10	9820	2355	2x2	LTE B66	20	66786	2145	2x2	24.19	24.21
CA 2A-14A-30A-66A	LTE B14	10	23330	793	QPSK	1	0	5330	763	2x2	LTE B2	20	900	1960	4x4	LTE B30	10	9820	2355	2x2	LTE B66	20	66786	2145	4x4	24.29	24.21
CA 2A-14A-66A-66A	LTE B14	10	23330	793	QPSK	1	0	5330	763	2x2	LTE B2	20	900	1960	2x2	LTE B66	20	66786	2145	4x4	LTE B66	20	67236	2190	2x2	24.14	24.21
CA 2A-14A-66A-66A	LTE B14	10	23330	793	QPSK	1	0	5330	763	2x2	LTE B2	20	900	1960	2x2	LTE B66	20	66786	2145	4x4	LTE B66	20	67236	2190	4x4	24.18	24.21
CA 2A-14A-66A-66A	LTE B14	10	23330	793	QPSK	1	0	5330	763	2x2	LTE B2	20	900	1960	4x4	LTE B66	20	66786	2145	2x2	LTE B66	20	67236	2190	2x2	24.19	24.21
CA 2A-14A-66A-66A	LTE B14	10	23330	793	QPSK	1	0	5330	763	2x2	LTE B2	20	900	1960	2x2	LTE B66	20	66786	2145	2x2	LTE B66	20	67236	2190	2x2	24.21	24.21
CA 14A-30A-66A-66A	LTE B14	10	23330	793	QPSK	1	0	5330	763	2x2	LTE B30	10	9820	2355	2x2	LTE B66	20	66786	2145	4x4	LTE B66	20	67236	2190	4x4	24.23	24.21
CA 14A-30A-66A-66A	LTE B14	10	23330	793	QPSK	1	0	5330	763	2x2	LTE B30	10	9820	2355	2x2	LTE B66	20	66786	2145	4x4	LTE B66	20	67236	2190	2x2	24.27	24.21

I.3.8 LTE Band 66 as PCC

Table I-20
Maximum Output Powers

Combination	PCC Band	PCC BW [MHz]	PCC (UL) Ch.	PCC (UL) Freq. [MHz]	Mod.	PCC UL RB	PCC UL RB Offset	PCC (DL) Ch.	PCC (DL) Freq. [MHz]	DL Ant. Config.	SCC 1				SCC 2				SCC 3				Power					
											SCC Band	SCC BW [MHz]	SCC (DL) Ch.	SCC (DL) Freq. [MHz]	DL Ant. Config.	SCC Band	SCC BW [MHz]	SCC (DL) Ch.	SCC (DL) Freq. [MHz]	DL Ant. Config.	SCC Band	SCC BW [MHz]	SCC (DL) Ch.	SCC (DL) Freq. [MHz]	DL Ant. Config.	LTE Tx Power with FusedB (dBm)	LTE Single Carrier Tx Power (dBm)	
CA 12A-(66A) (1)	LTE B66	5	131997	1212.5	QPSK	1	24	66461	2112.5	4x4	LTE B12	10	5095	737.5	2x2	-	-	-	-	-	-	-	-	-	23.37	23.51		
CA 12A-(66A) (2)	LTE B66	5	131997	1212.5	QPSK	1	24	66461	2112.5	4x4	LTE B12	10	5095	737.5	2x2	-	-	-	-	-	-	-	-	-	-	23.35	23.51	
CA 25A-(66A)	LTE B66	5	131997	1212.5	QPSK	1	24	66461	2112.5	4x4	LTE B25	20	8365	1962.5	2x2	-	-	-	-	-	-	-	-	-	-	23.35	23.51	
CA 25A-(66A)	LTE B66	5	131997	1212.5	QPSK	1	24	66461	2112.5	2x2	LTE B25	20	8365	1962.5	4x4	-	-	-	-	-	-	-	-	-	-	23.36	23.51	
CA 25A-(66A)	LTE B66	5	131997	1212.5	QPSK	1	24	66461	2112.5	4x4	LTE B25	20	8365	1962.5	4x4	-	-	-	-	-	-	-	-	-	-	23.37	23.51	
CA 12A-(2A)-(66A)	LTE B66	5	131997	1212.5	QPSK	1	24	66461	2112.5	4x4	LTE B2	20	900	1960	4x4	LTE B2	20	700	1940	4x4	-	-	-	-	-	-	23.34	23.51
CA 12A-(48A)-(66A)	LTE B66	5	131997	1212.5	QPSK	1	24	66461	2112.5	4x4	LTE B2	20	900	1960	4x4	LTE B48	20	5990	3625	4x4	-	-	-	-	-	-	23.34	23.51
CA 12A-(66A)-(66A)	LTE B66	5	131997	1212.5	QPSK	1	24	66461	2112.5	4x4	LTE B66	20	67236	2112.5	4x4	LTE B66	20	67236	2112.5	4x4	-	-	-	-	-	-	23.32	23.51
CA 12C-(66A)	LTE B66	5	131997	1212.5	QPSK	1	24	66461	2112.5	4x4	LTE B2	20	900	1960	4x4	LTE B2	20	702	1940.2	4x4	-	-	-	-	-	-	23.35	23.51
CA 25A-2A-(66A)	LTE B66	5	131997	1212.5	QPSK	1	24	66461	2112.5	4x4	LTE B25	20	8365	1962.5	2x2	LTE B25	20	8590	1985	2x2	-	-	-	-	-	-	23.36	23.51
CA 12A-(2A)-(66A)	LTE B66	5	131997	1212.5	QPSK	1	24	66461	2112.5	2x2	LTE B25	20	8365	1962.5	4x4	LTE B25	20	8590	1985	4x4	-	-	-	-	-	-	23.40	23.51
CA 48A-(48A)-(66A)	LTE B66	5	131997	1212.5	QPSK	1	24	66461	2112.5	4x4	LTE B66	20	67236	2112.5	4x4	LTE B48	10	5990	3625	4x4	-	-	-	-	-	-	23.32	23.51
CA 48A-(66B)	LTE B66	5	131997	1212.5	QPSK	1	24	66461	2112.5	4x4	LTE B66	15	66554	2121.8	4x4	LTE B48	10	5990	3625	4x4	-	-	-	-	-	-	23.35	23.51
CA 48C-(66A)	LTE B66	5	131997	1212.5	QPSK	1	24	66461	2112.5	4x4	LTE B48	20	55990	3625	4x4	LTE B48	20	56344	2100.8	4x4	-	-	-	-	-	-	23.35	23.51
CA 66A-(66B)	LTE B66	5	131997	1212.5	QPSK	1	24	66461	2112.5	4x4	LTE B66	5	67168	2183.2	4x4	LTE B66	15	67261	2192.5	4x4	-	-	-	-	-	-	23.34	23.51
CA 66B-(66A)	LTE B66	5	131997	1212.5	QPSK	1	24	66461	2112.5	4x4	LTE B66	15	66554	2121.8	4x4	LTE B66	20	67236	2190	4x4	-	-	-	-	-	-	23.37	23.51
CA 66A-(66C)	LTE B66	5	131997	1212.5	QPSK	1	24	66461	2112.5	4x4	LTE B66	20	67038	2170.2	4x4	LTE B66	20	67236	2190	4x4	-	-	-	-	-	-	23.36	23.51
CA 66C-(66A)	LTE B66	5	131997	1212.5	QPSK	1	24	66461	2112.5	4x4	LTE B66	20	66578	2124.2	4x4	LTE B66	20	67236	2190	4x4	-	-	-	-	-	-	23.35	23.51
CA 66C	LTE B66	5	131997	1212.5	QPSK	1	24	66461	2112.5	4x4	LTE B66	20	66578	2124.2	4x4	LTE B66	20	66578	2124.2	4x4	-	-	-	-	-	-	23.35	23.51
CA 2A-2A-5A-(66A)	LTE B66	5	131997	1212.5	QPSK	1	24	66461	2112.5	4x4	LTE B2	20	900	1960	2x2	LTE B2	20	700	1940	2x2	LTE B5	10	2525	881.5	2x2	23.35	23.51	
CA 12A-2A-5A-(66A)	LTE B66	5	131997	1212.5	QPSK	1	24	66461	2112.5	2x2	LTE B2	20	900	1960	4x4	LTE B2	20	700	1940	2x2	LTE B5	10	2525	881.5	2x2	23.37	23.51	
CA 12A-2A-6A-(66A)	LTE B66	5	131997	1212.5	QPSK	1	24	66461	2112.5	4x4	LTE B2	20	900	1960	4x4	LTE B2	20	700	1940	2x2	LTE B5	10	2525	881.5	2x2	23.33	23.51	
CA 2A-2A-12A-(66A)	LTE B66	5	131997	1212.5	QPSK	1	24	66461	2112.5	2x2	LTE B2	20	900	1960	2x2	LTE B2	20	700	1940	2x2	LTE B12	10	5095	737.5	2x2	23.36	23.51	
CA 2A-2A-12A-(66A)	LTE B66	5	131997	1212.5	QPSK	1	24	66461	2112.5	2x2	LTE B2	20	900	1960	4x4	LTE B2	20	700	1940	2x2	LTE B12	10	5095	737.5	2x2	23.38	23.51	
CA 2A-2A-12A-(66A)	LTE B66	5	131997	1212.5	QPSK	1	24	66461	2112.5	4x4	LTE B2	20	900	1960	4x4	LTE B2	20	700	1940	2x2	LTE B12	10	5095	737.5	2x2	23.34	23.51	
CA 2A-2A-13A-(66A)	LTE B66	5	131997	1212.5	QPSK	1	24	66461	2112.5	2x2	LTE B2	20	900	1960	2x2	LTE B2	20	700	1940	2x2	LTE B13	10	5230	751	2x2	23.37	23.51	
CA 2A-2A-13A-(66A)	LTE B66	5	131997	1212.5	QPSK	1	24	66461	2112.5	4x4	LTE B2	20	900	1960	4x4	LTE B2	20	700	1940	2x2	LTE B13	10	5230	751	2x2	23.47	23.51	
CA 2A-2A-13A-(66A)	LTE B66	5	131997	1212.5	QPSK	1	24	66461	2112.5	4x4	LTE B2	20	900	1960	4x4	LTE B2	20	700	1940	2x2	LTE B13	10	5230	751	2x2	23.36	23.51	
CA 12A-2A-13A-(66A)	LTE B66	5	131997	1212.5	QPSK	1	24	66461	2112.5	2x2	LTE B2	20	900	1960	4x4	LTE B2	20	700	1940	2x2	LTE B13	10	5230	751	2x2	23.32	23.51	
CA 2A-2A-14A-(66A)	LTE B66	5	131997	1212.5	QPSK	1	24	66461	2112.5	2x2	LTE B2	20	900	1960	2x2	LTE B2	20	700	1940	2x2	LTE B14	10	5330	763	2x2	23.37	23.51	
CA 2A-2A-14A-(66A)	LTE B66	5	131997	1212.5	QPSK	1	24	66461	2112.5	4x4	LTE B2	20	900	1960	4x4	LTE B2	20	700	1940	2x2	LTE B14	10	5330	763	2x2	23.33	23.51	
CA 2A-2A-14A-(66A)	LTE B66	5	131997	1212.5	QPSK	1	24	66461	2112.5	2x2	LTE B2	20	900	1960	4x4	LTE B2	20	700	1940	2x2	LTE B14	10	5330	763	2x2	23.35	23.51	
CA 2A-2A-29A-(66A)	LTE B66	5	131997	1212.5	QPSK	1	24	66461	2112.5	4x4	LTE B2	20	900	1960	2x2	LTE B2	20	700	1940	2x2	LTE B29	10	9715	722.5	2x2	23.49	23.51	
CA 12A-2A-29A-(66A)	LTE B66	5	131997	1212.5	QPSK	1	24	66461	2112.5	2x2	LTE B2	20	900	1960	4x4	LTE B2	20	700	1940	2x2	LTE B29	10	9715	722.5	2x2	23.40	23.51	
CA 2A-2A-29A-(66A)	LTE B66	5	131997	1212.5	QPSK	1	24	66461	2112.5	4x4	LTE B2	20	900	1960	4x4	LTE B2	20	700	1940	2x2	LTE B29	10	9715	722.5	2x2	23.40	23.51	
CA 2A-2A-30A-(66A)	LTE B66	5	131997	1212.5	QPSK	1	24	66461	2112.5	4x4	LTE B2	20	900	1960	2x2	LTE B2	20	700	1940	2x2	LTE B30	10	9820	2355	2x2	23.41	23.51	
CA 12A-2A-30A-(66A)	LTE B66	5	131997	1212.5	QPSK	1	24	66461	2112.5	2x2	LTE B2	20	900	1960	4x4	LTE B2	20	700	1940	2x2	LTE B30	10	9820	2355	2x2	23.45	23.51	
CA 2A-2A-30A-(66A)	LTE B66	5	131997	1212.5	QPSK	1	24	66461	2112.5	4x4	LTE B2	20	900	1960	4x4	LTE B2	20	700	1940	2x2	LTE B30	10	9820	2355	2x2	23.45	23.51	
CA 2A-2A-66A-(66A)	LTE B66	5	131997	1212.5	QPSK	1	24	66461	2112.5	2x2	LTE B66	20	67236	2112.5	4x4	LTE B2	20	900	1960	2x2	LTE B2	20	700	1940	2x2	23.48	23.51	
CA 2A-2A-(66A)-(66A)	LTE B66	5	131997	1212.5	QPSK	1	24	66461	2112.5	4x4	LTE B66	20	67236	2112.5	2x2	LTE B2	20	900	1960	2x2	LTE B2	20	700	1940	2x2	23.42	23.51	
CA 2A-2A-(66A)-(66A)	LTE B66	5	131997	1212.5	QPSK	1	24	66461	2112.5	4x4	LTE B66	20	67236	2112.5	4x4	LTE B2	20	900	1960	2x2	LTE B2	20	700	1940	2x2	23.47	23.51	
CA 12A-2A-(66A)-(66A)	LTE B66	5	131997	1212.5	QPSK	1	24	66461	2112.5	2x2	LTE B66	20	67236	2112.5	4x4	LTE B2	20	900	1960	4x4	LTE B2	20	700	1940	2x2	23.48	23.51	
CA 12A-2A-66A-(66A)	LTE B66	5	131997	1212.5	QPSK	1	24	66461	2112.5	2x2	LTE B66	20	67236	2112.5	2x2	LTE B2	20	900	1960	4x4	LTE B2	20	700	1940	2x2	23.46	23.51	
CA 12A-2A-(66A)-(66A)	LTE B66	5	131997	1212.5	QPSK	1	24																					

PCC										SCC 1				SCC 2				SCC 3				Power					
Combination	PCC Band	PCC BW [MHz]	PCC (UL) Ch.	PCC (UL) Freq. [MHz]	Mod.	PCC UL RB	PCC UL RB Offset	PCC (DL) Ch.	PCC Freq. [MHz]	DL Ant. Config.	SCC Band	SCC BW [MHz]	SCC (DL) Ch.	SCC (DL) Freq. [MHz]	DL Ant. Config.	SCC Band	SCC BW [MHz]	SCC (DL) Ch.	SCC (DL) Freq. [MHz]	DL Ant. Config.	SCC Band	SCC BW [MHz]	SCC (DL) Ch.	SCC (DL) Freq. [MHz]	DL Ant. Config.	LTE Tx Power With CA	LTE Single Carrier Tx Power (dBm)
CA [2A]-12A-30A-66A	LTE B66	5	131997	712.5	QPSK	1	24	66461	2112.5	4x4	LTE B2	20	900	1960	4x4	LTE B12	10	5095	737.5	2x2	LTE B30	10	9820	2355	2x2	23.35	23.51
CA 2A-12A-66A-66A	LTE B66	5	131997	712.5	QPSK	1	24	66461	2112.5	2x2	LTE B66	20	67236	2190	4x4	LTE B2	20	900	1960	2x2	LTE B12	10	9820	2355	2x2	23.34	23.51
CA 2A-12A-66A-66A	LTE B66	5	131997	712.5	QPSK	1	24	66461	2112.5	4x4	LTE B66	20	67236	2190	2x2	LTE B2	20	900	1960	2x2	LTE B12	10	9820	2355	2x2	23.32	23.51
CA [2A]-12A-66A-66A	LTE B66	5	131997	712.5	QPSK	1	24	66461	2112.5	4x4	LTE B66	20	67236	2190	4x4	LTE B2	20	900	1960	2x2	LTE B12	10	9820	2355	2x2	23.36	23.51
CA [2A]-12A-66A-66A	LTE B66	5	131997	712.5	QPSK	1	24	66461	2112.5	2x2	LTE B66	20	67236	2190	2x2	LTE B2	20	900	1960	4x4	LTE B12	10	9820	2355	2x2	23.37	23.51
CA [2A]-12A-66C	LTE B66	5	131997	712.5	QPSK	1	24	66461	2112.5	2x2	LTE B66	20	66578	2124.2	4x4	LTE B2	20	900	1960	2x2	LTE B12	10	9820	2355	2x2	23.34	23.51
CA 2A-12B-66A	LTE B66	5	131997	712.5	QPSK	1	24	66461	2112.5	4x4	LTE B2	20	900	1960	4x4	LTE B12	5	5095	737.5	2x2	LTE B12	5	5047	732.7	2x2	23.35	23.51
CA 2A-13A-48A-66A	LTE B66	5	131997	712.5	QPSK	1	24	66461	2112.5	4x4	LTE B2	20	900	1960	2x2	LTE B13	10	5230	751	2x2	LTE B48	20	55990	3625	2x2	23.43	23.51
CA 2A-13A-48A-66A	LTE B66	5	131997	712.5	QPSK	1	24	66461	2112.5	2x2	LTE B2	20	900	1960	2x2	LTE B13	10	5230	751	2x2	LTE B48	20	55990	3625	4x4	23.41	23.51
CA [2A]-13A-48A-66A	LTE B66	5	131997	712.5	QPSK	1	24	66461	2112.5	2x2	LTE B66	20	67236	2190	2x2	LTE B13	10	5230	751	2x2	LTE B48	20	55990	3625	2x2	23.39	23.51
CA [2A]-13A-48A-66A	LTE B66	5	131997	712.5	QPSK	1	24	66461	2112.5	4x4	LTE B2	20	900	1960	4x4	LTE B13	10	5230	751	2x2	LTE B48	20	55990	3625	4x4	23.35	23.51
CA 2A-13A-66A-66A	LTE B66	5	131997	712.5	QPSK	1	24	66461	2112.5	2x2	LTE B66	20	67236	2190	2x2	LTE B2	20	900	1960	2x2	LTE B13	10	5230	751	2x2	23.35	23.51
CA 2A-13A-66A-66A	LTE B66	5	131997	712.5	QPSK	1	24	66461	2112.5	4x4	LTE B66	20	67236	2190	2x2	LTE B2	20	900	1960	2x2	LTE B13	10	5230	751	2x2	23.34	23.51
CA [2A]-13A-66A-66A	LTE B66	5	131997	712.5	QPSK	1	24	66461	2112.5	2x2	LTE B66	20	67236	2190	2x2	LTE B2	20	900	1960	4x4	LTE B13	10	5230	751	2x2	23.36	23.51
CA [2A]-13A-66B	LTE B66	5	131997	712.5	QPSK	1	24	66461	2112.5	4x4	LTE B66	15	66554	2121.8	2x2	LTE B2	20	900	1960	4x4	LTE B13	10	5230	751	2x2	23.35	23.51
CA [2A]-13A-66B	LTE B66	5	131997	712.5	QPSK	1	24	66461	2112.5	2x2	LTE B66	15	66554	2121.8	4x4	LTE B2	20	900	1960	4x4	LTE B13	10	5230	751	2x2	23.35	23.51
CA 2A-14A-30A-66A	LTE B66	5	131997	712.5	QPSK	1	24	66461	2112.5	4x4	LTE B2	20	900	1960	2x2	LTE B14	10	5330	763	2x2	LTE B30	10	9820	2355	2x2	23.34	23.51
CA [2A]-14A-30A-66A	LTE B66	5	131997	712.5	QPSK	1	24	66461	2112.5	2x2	LTE B2	20	900	1960	4x4	LTE B14	10	5330	763	2x2	LTE B30	10	9820	2355	2x2	23.38	23.51
CA [2A]-14A-30A-66A	LTE B66	5	131997	712.5	QPSK	1	24	66461	2112.5	4x4	LTE B2	20	900	1960	4x4	LTE B14	10	5330	763	2x2	LTE B30	10	9820	2355	2x2	23.35	23.51
CA 2A-14A-66A-66A	LTE B66	5	131997	712.5	QPSK	1	24	66461	2112.5	2x2	LTE B66	20	67236	2190	4x4	LTE B2	20	900	1960	2x2	LTE B14	10	5330	763	2x2	23.41	23.51
CA 2A-14A-66A-66A	LTE B66	5	131997	712.5	QPSK	1	24	66461	2112.5	4x4	LTE B66	20	67236	2190	2x2	LTE B2	20	900	1960	2x2	LTE B14	10	5330	763	2x2	23.34	23.51
CA [2A]-14A-66A-66A	LTE B66	5	131997	712.5	QPSK	1	24	66461	2112.5	4x4	LTE B66	20	67236	2190	4x4	LTE B2	20	900	1960	2x2	LTE B14	10	5330	763	2x2	23.35	23.51
CA [2A]-14A-66B	LTE B66	5	131997	712.5	QPSK	1	24	66461	2112.5	2x2	LTE B66	20	67236	2190	2x2	LTE B2	20	900	1960	4x4	LTE B14	10	5330	763	2x2	23.47	23.51
CA [2A]-14A-66B-66A	LTE B66	5	131997	712.5	QPSK	1	24	66461	2112.5	2x2	LTE B66	20	67236	2190	4x4	LTE B2	20	900	1960	4x4	LTE B14	10	5330	763	2x2	23.44	23.51
CA [2A]-14A-66B-66A	LTE B66	5	131997	712.5	QPSK	1	24	66461	2112.5	4x4	LTE B66	20	67236	2190	2x2	LTE B2	20	900	1960	4x4	LTE B14	10	5330	763	2x2	23.38	23.51
CA [2A]-25A-20A-66A	LTE B66	5	131997	712.5	QPSK	1	24	66461	2112.5	4x4	LTE B2	20	900	1960	2x2	LTE B29	10	9715	722.5	2x2	LTE B30	10	9820	2355	2x2	23.37	23.51
CA 2A-25A-66A-66A	LTE B66	5	131997	712.5	QPSK	1	24	66461	2112.5	4x4	LTE B66	20	67236	2190	2x2	LTE B2	20	900	1960	2x2	LTE B29	10	9715	722.5	2x2	23.36	23.51
CA 2A-25A-66A-66A	LTE B66	5	131997	712.5	QPSK	1	24	66461	2112.5	4x4	LTE B66	20	67236	2190	4x4	LTE B2	20	900	1960	2x2	LTE B29	10	9715	722.5	2x2	23.44	23.51
CA [2A]-25A-66A-66A	LTE B66	5	131997	712.5	QPSK	1	24	66461	2112.5	2x2	LTE B66	20	67236	2190	2x2	LTE B2	20	900	1960	4x4	LTE B29	10	9715	722.5	2x2	23.37	23.51
CA [2A]-25A-66A-66A	LTE B66	5	131997	712.5	QPSK	1	24	66461	2112.5	4x4	LTE B66	20	67236	2190	2x2	LTE B2	20	900	1960	4x4	LTE B29	10	9715	722.5	2x2	23.39	23.51
CA 2A-30A-66A-66A	LTE B66	5	131997	712.5	QPSK	1	24	66461	2112.5	4x4	LTE B66	20	67236	2190	2x2	LTE B2	20	900	1960	2x2	LTE B30	10	9820	2355	2x2	23.32	23.51
CA 2A-30A-66A-66A	LTE B66	5	131997	712.5	QPSK	1	24	66461	2112.5	4x4	LTE B66	20	67236	2190	2x2	LTE B2	20	900	1960	2x2	LTE B30	10	9820	2355	2x2	23.42	23.51
CA [2A]-30A-66A-66A	LTE B66	5	131997	712.5	QPSK	1	24	66461	2112.5	2x2	LTE B66	20	67236	2190	4x4	LTE B2	20	900	1960	4x4	LTE B30	10	9820	2355	2x2	23.43	23.51
CA [2A]-30A-66A-66A	LTE B66	5	131997	712.5	QPSK	1	24	66461	2112.5	4x4	LTE B66	20	67236	2190	2x2	LTE B2	20	900	1960	4x4	LTE B30	10	9820	2355	2x2	23.34	23.51
CA 2A-48A-48A-66A	LTE B66	5	131997	712.5	QPSK	1	24	66461	2112.5	4x4	LTE B2	20	900	1960	2x2	LTE B48	20	55990	3625	2x2	LTE B48	20	55340	3560	2x2	23.49	23.51
CA 2A-48A-48A-66A	LTE B66	5	131997	712.5	QPSK	1	24	66461	2112.5	2x2	LTE B2	20	900	1960	2x2	LTE B48	20	55990	3625	2x2	LTE B48	20	55340	3560	2x2	23.37	23.51
CA [2A]-48A-48A-66A	LTE B66	5	131997	712.5	QPSK	1	24	66461	2112.5	2x2	LTE B66	20	67236	2190	2x2	LTE B48	20	55990	3625	2x2	LTE B48	20	55340	3560	2x2	23.42	23.51
CA [2A]-48A-48A-66A	LTE B66	5	131997	712.5	QPSK	1	24	66461	2112.5	4x4	LTE B2	20	900	1960	2x2	LTE B48	20	55990	3625	2x2	LTE B48	20	55340	3560	4x4	23.35	23.51
CA 2A-48A-66A-66A	LTE B66	5	131997	712.5	QPSK	1	24	66461	2112.5	2x2	LTE B66	20	67236	2190	2x2	LTE B2	20	900	1960	2x2	LTE B48	20	55990	3625	2x2	23.43	23.51
CA																											

I.3.9 LTE Band 25 as PCC

Table I-21
Maximum Output Powers

Combination	PCC Band	PCC BW [MHz]	PCC (UL) Ch.	PCC (UL) Freq. [MHz]	Mod.	PCC				DL Ant. Config.	SCC 1				DL Ant. Config.	SCC 2				DL Ant. Config.	SCC 3				DL Ant. Config.	Power	
						PCC UL RB	PCC UL RB Offset	PCC (DL) Ch.	PCC (DL) Freq. [MHz]		SCC Band	SCC BW [MHz]	SCC (DL) Ch.	SCC (DL) Freq. [MHz]		SCC Band	SCC BW [MHz]	SCC (DL) Ch.	SCC (DL) Freq. [MHz]		SCC Band	SCC BW [MHz]	SCC (DL) Ch.	SCC (DL) Freq. [MHz]		LTE Tx Power with DL CA Enabled (dBm)	LTE Single Carrier Tx Power (dBm)
CA 5A-25A	LTE B25	5	26065	1852.5	QPSK	1	24	8065	1932.5	4A4	LTE B5	10	2525	881.5	2x2	-	-	-	-	-	-	-	-	-	-	23.36	23.37
CA 12A-25A	LTE B25	5	26065	1852.5	QPSK	1	24	8065	1932.5	4A4	LTE B12	10	5095	737.5	2x2	-	-	-	-	-	-	-	-	-	-	23.35	23.37
CA 25A-66A	LTE B25	3	26055	1851.5	QPSK	1	14	8055	1931.5	2x2	LTE B66	20	66786	2145	4x4	-	-	-	-	-	-	-	-	-	-	23.48	23.39
CA 25A-66A	LTE B25	3	26055	1851.5	QPSK	1	14	8055	1931.5	4x4	LTE B66	20	66786	2145	2x2	-	-	-	-	-	-	-	-	-	-	23.47	23.39
CA 25A-66A	LTE B25	3	26055	1851.5	QPSK	1	14	8055	1931.5	4x4	LTE B66	20	66786	2145	4x4	-	-	-	-	-	-	-	-	-	-	23.45	23.39
CA 25A-25A-26A	LTE B25	5	26065	1852.5	QPSK	1	24	8065	1932.5	2x2	LTE B25	20	8590	1985	2x2	LTE B26	5	8865	876.5	4x4	-	-	-	-	-	23.42	23.37
CA 25A-25A-26A	LTE B25	5	26065	1852.5	QPSK	1	24	8065	1932.5	4x4	LTE B25	20	8590	1985	4x4	LTE B26	5	8865	876.5	2x2	-	-	-	-	-	23.38	23.37
CA 25A-25A-66A	LTE B25	5	26065	1852.5	QPSK	1	24	8065	1932.5	2x2	LTE B25	20	8590	1985	2x2	LTE B66	20	66786	2145	4x4	-	-	-	-	-	23.38	23.37
CA 25A-25A-66A	LTE B25	5	26065	1852.5	QPSK	1	24	8065	1932.5	4x4	LTE B25	20	8590	1985	4x4	LTE B66	20	66786	2145	2x2	-	-	-	-	-	23.37	23.37
CA 25A-25A-66A	LTE B25	5	26065	1852.5	QPSK	1	24	8065	1932.5	2x2	LTE B25	20	8590	1985	4x4	LTE B66	20	66786	2145	4x4	-	-	-	-	-	23.39	23.37
CA 25A-25A-66A	LTE B25	5	26065	1851.5	QPSK	1	14	8055	1931.5	4x4	LTE B25	20	8590	1985	4x4	LTE B66	20	66786	2145	4x4	-	-	-	-	-	23.46	23.38
CA 25A-25A-66A	LTE B25	5	26065	1852.5	QPSK	1	24	8065	1932.5	4x4	LTE B25	20	8590	1985	4x4	LTE B66	20	66786	2145	4x4	-	-	-	-	-	23.33	23.37
CA 25A-25A-41A	LTE B25	5	26065	1852.5	QPSK	1	24	8065	1932.5	2x2	LTE B25	20	8590	1985	2x2	LTE B41	20	40620	2593	4x4	-	-	-	-	-	23.35	23.37
CA 25A-25A-41A	LTE B25	5	26065	1852.5	QPSK	1	24	8065	1932.5	4x4	LTE B25	20	8590	1985	4x4	LTE B41	20	40620	2593	2x2	-	-	-	-	-	23.36	23.37
CA 25A-25A-41A	LTE B25	5	26065	1852.5	QPSK	1	24	8065	1932.5	4x4	LTE B25	20	8590	1985	4x4	LTE B41	20	40620	2593	2x2	-	-	-	-	-	23.36	23.37
CA 25A-25A-41A	LTE B25	5	26065	1852.5	QPSK	1	24	8065	1932.5	4x4	LTE B25	20	8590	1985	4x4	LTE B41	20	40620	2593	2x2	-	-	-	-	-	23.36	23.37
CA 25A-25A-41A	LTE B25	5	26065	1852.5	QPSK	1	24	8065	1932.5	4x4	LTE B25	20	8590	1985	4x4	LTE B41	20	40620	2593	4x4	-	-	-	-	-	23.40	23.37
CA 25A-25A-41A	LTE B25	3	26055	1851.5	QPSK	1	14	8055	1931.5	2x2	LTE B26	15	8865	876.5	2x2	LTE B41	20	40620	2593	4x4	-	-	-	-	-	23.45	23.39
CA 25A-25A-41A	LTE B25	3	26055	1851.5	QPSK	1	14	8055	1931.5	4x4	LTE B26	15	8865	876.5	2x2	LTE B41	20	40620	2593	2x2	-	-	-	-	-	23.42	23.39
CA 25A-25A-41A	LTE B25	3	26055	1851.5	QPSK	1	14	8055	1931.5	4x4	LTE B26	15	8865	876.5	2x2	LTE B41	20	40620	2593	4x4	-	-	-	-	-	23.46	23.38
CA 25A-41C	LTE B25	5	26065	1852.5	QPSK	1	24	8065	1932.5	2x2	LTE B41	20	40620	2593	4x4	LTE B41	20	40422	2573.2	4x4	-	-	-	-	-	23.38	23.37
CA 25A-41C	LTE B25	5	26065	1852.5	QPSK	1	24	8065	1932.5	4x4	LTE B41	20	40620	2593	2x2	LTE B41	20	40422	2573.2	2x2	-	-	-	-	-	23.35	23.37
CA 25A-41C	LTE B25	5	26065	1852.5	QPSK	1	24	8065	1932.5	4x4	LTE B41	20	40620	2593	4x4	LTE B41	20	40422	2573.2	4x4	-	-	-	-	-	23.38	23.37
CA 25A-25A-41C	LTE B25	5	26065	1852.5	QPSK	1	24	8065	1932.5	2x2	LTE B25	20	8590	1985	2x2	LTE B41	20	40620	2593	4x4	LTE B41	20	40422	2573.2	4x4	23.42	23.37
CA 25A-25A-41C	LTE B25	5	26065	1852.5	QPSK	1	24	8065	1932.5	4x4	LTE B25	20	8590	1985	4x4	LTE B41	20	40620	2593	2x2	LTE B41	20	40422	2573.2	2x2	23.37	23.37
CA 25A-25A-41C	LTE B25	5	26065	1852.5	QPSK	1	24	8065	1932.5	4x4	LTE B25	20	8590	1985	4x4	LTE B41	20	40620	2593	2x2	LTE B41	20	40422	2573.2	2x2	23.35	23.37
CA 25A-25A-41C	LTE B25	3	26055	1851.5	QPSK	1	14	8055	1931.5	2x2	LTE B26	15	8865	876.5	2x2	LTE B41	20	40620	2593	4x4	LTE B41	20	40422	2573.2	4x4	23.47	23.39
CA 25A-25A-41C	LTE B25	3	26055	1851.5	QPSK	1	14	8055	1931.5	4x4	LTE B26	15	8865	876.5	2x2	LTE B41	20	40620	2593	2x2	LTE B41	20	40422	2573.2	2x2	23.38	23.37
CA 25A-41D	LTE B25	5	26065	1852.5	QPSK	1	24	8065	1932.5	4x4	LTE B41	20	40422	2573.2	2x2	LTE B41	20	40620	2593	2x2	LTE B41	20	40818	2632.8	2x2	23.38	23.37

I.3.10 LTE Band 30 as PCC

Table I-22
Maximum Output Powers

Combination	PCC Band	PCC BW [MHz]	PCC (UL) Ch.	PCC (UL) Freq. [MHz]	Mod.	PCC				DL Ant. Config.	SCC 1				DL Ant. Config.	SCC 2				DL Ant. Config.	SCC 3				DL Ant. Config.	Power	
						PCC UL RB	PCC UL RB Offset	PCC (DL) Ch.	PCC (DL) Freq. [MHz]		SCC Band	SCC BW [MHz]	SCC (DL) Ch.	SCC (DL) Freq. [MHz]		SCC Band	SCC BW [MHz]	SCC (DL) Ch.	SCC (DL) Freq. [MHz]		SCC Band	SCC BW [MHz]	SCC (DL) Ch.	SCC (DL) Freq. [MHz]		LTE Tx Power with DL CA Enabled (dBm)	LTE Single Carrier Tx Power (dBm)
CA [2A]-2A-5A-30A	LTE B30	10	27710	2310	QPSK	1	0	9820	2355	2x2	LTE B2	20	900	1960	4x4	LTE B2	20	700	1940	2x2	LTE B5	10	2525	881.5	2x2	22.04	22.02
CA [2A]-[2A]-5A-30A	LTE B30	10	27710	2310	QPSK	1	0	9820	2355	2x2	LTE B2	20	900	1960	4x4	LTE B2	20	700	1940	4x4	LTE B5	10	2525	881.5	2x2	22.02	22.02
CA [2A]-2A-12A-30A	LTE B30	10	27710	2310	QPSK	1	0	9820	2355	2x2	LTE B2	20	900	1960	4x4	LTE B2	20	700	1940	2x2	LTE B12	10	5095	737.5	2x2	22.07	22.02
CA [2A]-[2A]-12A-30A	LTE B30	10	27710	2310	QPSK	1	0	9820	2355	2x2	LTE B2	20	900	1960	4x4	LTE B2	20	700	1940	4x4	LTE B12	10	5095	737.5	2x2	22.05	22.02
CA [2A]-[2A]-14A-30A	LTE B30	10	27710	2310	QPSK	1	0	9820	2355	2x2	LTE B2	20	900	1960	4x4	LTE B2	20	700	1940	2x2	LTE B14	10	5310	763	2x2	22.07	22.02
CA [2A]-[2A]-14A-30A	LTE B30	10	27710	2310	QPSK	1	0	9820	2355	2x2	LTE B2	20	900	1960	4x4	LTE B2	20	700	1940	4x4	LTE B14	10	5310	763	2x2	22.08	22.02
CA [2A]-2A-29A-30A	LTE B30	10	27710	2310	QPSK	1	0	9820	2355	2x2	LTE B2	20	900	1960	4x4	LTE B2	20	700	1940	2x2	LTE B29	10	9715	722.5	2x2	22.05	22.02
CA [2A]-[2A]-29A-30A	LTE B30	10	27710	2310	QPSK	1	0	9820	2355	2x2	LTE B2	20	900	1960	4x4	LTE B2	20	700	1940	4x4	LTE B29	10	9715	722.5	2x2	22.06	22.02
CA [2A]-2A-30A-66A	LTE B30	10	27710	2310	QPSK	1	0	9820	2355	2x2	LTE B2	20	900	1960	2x2	LTE B2	20	700	1940	2x2	LTE B66	20	66786	2145	2x2	22.09	22.02
CA [2A]-[2A]-30A-66A	LTE B30	10	27710	2310	QPSK	1	0	9820	2355	2x2	LTE B2	20	900	1960	4x4	LTE B2	20	700	1940	2x2	LTE B66	20	66786	2145	4x4	22.06	22.02
CA [2A]-2A-30A-66A	LTE B30	10	27710	2310	QPSK	1	0	9820	2355	2x2	LTE B2	20	900	1960	4x4	LTE B2	20	700	1940	4x4	LTE B66	20	66786	2145	4x4	22.03	22.02
CA [2A]-2A-30A-66A	LTE B30	10	27710	2310	QPSK	1	0	9820	2355	2x2	LTE B2	20	900	1960	4x4	LTE B2	20	700	1940	2x2	LTE B66	20	66786	2145	2x2	22.01	22.02
CA [2A]-4A-5A-30A	LTE B30	10	27710	2310	QPSK	1	0	9820	2355	2x2	LTE B2	20	900	1960	2x2	LTE B4	20	2175	2132.5	4x4	LTE B5	10	2525	881.5	2x2	22.07	22.02
CA [2A]-[4A]-12A-30A	LTE B30	10	27710	2310	QPSK	1	0	9820	2355	2x2	LTE B2	20	900	1960	2x2	LTE B4	20	2175	2132.5	4x4	LTE B12	10	5095	737.5	2x2	22.08	22.02
CA [2A]-[4A]-12A-30A	LTE B30	10	27710	2310	QPSK	1	0	9820	2355	2x2	LTE B2	20	900	1960	4x4	LTE B4	20	2175	2132.5	2x2	LTE B12	10	5095	737.5	2x2	22.05	22.02
CA [2A]-[4A]-12A-30A	LTE B30	10	27710	2310	QPSK	1	0	9820	2355	2x2	LTE B2	20	900	1960	4x4	LTE B4	20	2175	2132.5	4x4	LTE B12	10	5095	737.5	2x2	22.07	22.02
CA 2A-4A-29A-30A	LTE B30	10	27710	2310	QPSK	1	0	9820	2355	2x2	LTE B2	20	900	1960	2x2	LTE B4	20	2175	2132.5	4x4	LTE B29	10	9715	722.5	2x2	22.01	22.02
CA [2A]-4A-29A-30A	LTE B30	10	27710	2310	QPSK	1	0	9820	2355	2x2	LTE B2	20	900	1960	4x4	LTE B4	20	2175	2132.5	2x2	LTE B29	10	9715	722.5	2x2	22.08	22.02
CA [2A]-[4A]-29A-30A	LTE B30	10	27710	2310	QPSK	1	0	9820	2355	2x2	LTE B2	20	900	1960	4x4	LTE B4	20	2175	2132.5	4x4	LTE B29	10	9715	722.5	2x2	22.06	22.02
CA [2A]-4A-30A-66A	LTE B30	10	27710	2310	QPSK	1	0	9820	2355	2x2	LTE B2	20	900	1960	2x2	LTE B5	10	2525	881.5	2x2	LTE B66	20	66786	2145	2x2	22.03	22.02
CA [2A]-[5A]-30A-66A	LTE B30	10	27710	2310	QPSK	1	0	9820	2355	2x2	LTE B2	20	900	1960	4x4	LTE B5	10	2525	881.5	2x2	LTE B66	20	66786	2145	4x4	22.01	22.02
CA 2A-12A-30A-66A	LTE B30	10	27710	2310	QPSK	1	0	9820	2355	2x2	LTE B2	20	900	1960	2x2	LTE B12	10	5095	737.5	2x2	LTE B66	20	66786	2145	4x4	22.08	22.02
CA [2A]-[12A]-30A-66A	LTE B30	10	27710	2310	QPSK	1	0	9820	2355	2x2	LTE B2	20	900	1960	4x4	LTE B12	10	5095	737.5	2x2	LTE B66	20	66786	2145	4x4	22.05	22.02
CA [2A]-12A-30A-66A	LTE B30	10	27710	2310	QPSK	1	0	9820	2355	2x2	LTE B2	20	900	1960	4x4	LTE B12	10	5095	737.5	2x2	LTE B66	20	66786	2145	4x4	22.04	22.02
CA 2A-14A-30A-66A	LTE B30	10	27710	2310	QPSK	1	0	9820	2355	2x2	LTE B2	20	900	1960	2x2	LTE B14	10	5310	763	2x2	LTE B66	20	66786	2145	4x4	22.03	22.02
CA [2A]-14A-30A-66A	LTE B30	10	27710	2310	QPSK	1	0	9820	2355	2x2	LTE B2	20	900	1960	4x4	LTE B14	10	5310	763	2x2	LTE B66	20	66786	2145	4x4	22.06	22.02
CA [2A]-[14A]-30A-66A	LTE B30	10	27710	2310	QPSK	1	0	9820	2355	2x2	LTE B2	20	900	1960	4x4	LTE B14	10	5310	763	2x2	LTE B66	20	66786	2145	4x4	22.08	22.02
CA 2A-29A-30A-66A	LTE B30	10	27710	2310	QPSK	1	0	9820	2355	2x2	LTE B2	20	900	1960	2x2	LTE B29	10	9715	722.5	2x2	LTE B66	20	66786	2145	4x4	22.05	22.02
CA [2A]-29A-30A-66A	LTE B30	10	27710	2310	QPSK	1	0	9820	2355	2x2	LTE B2	20	900	1960	4x4	LTE B29	10	9715	722.5	2x2	LTE B66	20	66786	2145	2x2	22.01	22.02
CA [2A]-29A-30A-66A	LTE B30	10	27710	2310	QPSK	1	0	9820	2355	2x2	LTE B2	20	900	1960	4x4	LTE B29	10	9715	722.5	2x2	LTE B66	20	66786	2145	4x4	22.05	22.02
CA [2A]-[30A]-66A-66A	LTE B30	10	27710	2310	QPSK	1	0	9820	2355	2x2	LTE B2	20	900	1960	2x2	LTE B66	20	66786	2145	4x4	LTE B66	20	66786	2145	4x4	22.09	22.02
CA 2A-30A-66A-66A	LTE B30	10	27710	2310	QPSK	1	0	9820	2355	2x2	LTE B2	20	900	1960	4x4	LTE B66	20	66786	2145	4x4	LTE B66	20	66786	2145	4x4	22.04	22.02
CA [5A]-30A-66A-66A	LTE B30	10	27710	2310	QPSK	1	0	9820	2355	2x2	LTE B5	10	2525	881.5	2x2	LTE B66	20	66786	2145	4x4	LTE B66	20	66786	2145	4x4	22.05	22.02
CA 5A-30A-66A-66A	LTE B30	10	27710	2310	QPSK	1	0	9820	2355	2x2	LTE B5	10	2525	881.5	2x2	LTE B66	20	66786	2145	4x4	LTE B66	20	66786	2145	4x4	22.07	22.02
CA 12A-30A-66A-66A	LTE B30	10	27710	2310	QPSK	1	0	9820	2355	2x2	LTE B12	10	5095	737.5	2x2	LTE B66	20	66786	2145	4x4	LTE B66	20	66786	2145	4x4	22.02	22.02
CA 12A-30A-66A-66A	LTE B30	10	27710	2310	QPSK	1	0	9820	2355	2x2	LTE B12	10	5095	737.5	2x2	LTE B66	20	66786	2145	4x4	LTE B66	20	66786	2145	4x4	22.07	22.02
CA 14A-30A-66A-66A	LTE B30	10	27710	2310	QPSK	1	0	9820	2355	2x2	LTE B14	10	5310	763	2x2	LTE B66	20	66786	2145	4x4	LTE B66	20	66786	2145	4x4	22.04	22.02
CA 14A-30A-66A-66A	LTE B30	10	27710	2310	QPSK	1	0	9820	2355	2x2	LTE B14	10	5310	763	2x2	LTE B66	20	66786	2145	4x4	LTE B66	20	66786	2145	4x4	22.07	22.02
CA 29A-30A-66A-66A	LTE B30	10	27710	2310	QPSK	1	0	9820	2355	2x2	LTE B29	10	9715	722.5	2x2	LTE B66	20	66786	2145	4x4	LTE B66	20	66786	2145	4x4	22.02	22.02
CA 29A-30A-66A-66A	LTE B30	10	27710	2310	QPSK	1	0	9820	2355	2x2	LTE B29	10	9715	722.5	2x2	LTE B66	20	66786	2145	4x4	LTE B66	20	66786	2145	4x4	22.01	22.02
CA 30A-30A-66A-66A	LTE B30	10	27710	2310	QPSK	1	0	9820	2355	4x4	LTE B29	10	9715	722.5	2x2	LTE B66	20	66786	2145	4x4	LTE B66	20	66786	2145	4x4	22.01	22.02

I.3.11 LTE Band 41 PC2 as PCC

Table I-23
Maximum Output Powers

Combination	PCC Band	PCC BW [MHz]	PCC (UL) Ch.	PCC (UL) Freq. [MHz]	Mod.	PCC UL RB	PCC UL RB Offset	PCC (DL) Ch.	PCC (DL) Freq. [MHz]	DL Ant. Config.	SCC Band	SCC BW [MHz]	SCC (UL) Ch.	SCC (UL) Freq. [MHz]	DL Ant. Config.	SCC Band	SCC BW [MHz]	SCC (DL) Ch.	SCC (DL) Freq. [MHz]	DL Ant. Config.	SCC Band	SCC BW [MHz]	SCC (DL) Ch.	SCC (DL) Freq. [MHz]	DL Ant. Config.	SCC Band	SCC BW [MHz]	SCC (DL) Ch.	SCC (DL) Freq. [MHz]	DL Ant. Config.	Power	
																															LTE Tx Power with DL CA Enabled	LTE Single Carrier Tx Power (dBm)
A_41A-41A (1)	LTE B41	20	41055	2636.5	QPSK	1	0	41055	2636.5	4x4	LTE B41	20	39750	2506	2x2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	26.23	26.21
A_41A-41A (1)	LTE B41	20	41055	2636.5	QPSK	1	0	41055	2636.5	2x2	LTE B41	20	39750	2506	4x4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	26.24	26.21
A_41A-41A (1)	LTE B41	20	41055	2636.5	QPSK	1	0	41055	2636.5	4x4	LTE B41	20	39750	2506	4x4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	26.22	26.21
CA_41A-41C	LTE B41	20	41055	2636.5	QPSK	1	0	41055	2636.5	2x2	LTE B41	20	39948	2525.8	4x4	LTE B41	20	39750	2506	4x4	-	-	-	-	-	-	-	-	-	-	26.17	26.21
CA_41C-41A	LTE B41	20	41055	2636.5	QPSK	1	0	41055	2636.5	4x4	LTE B41	20	40857	2616.7	4x4	LTE B41	20	39750	2506	2x2	-	-	-	-	-	-	-	-	-	-	26.23	26.21
CA_41A-41C	LTE B41	20	41055	2636.5	QPSK	1	0	41055	2636.5	4x4	LTE B41	20	39948	2525.8	2x2	LTE B41	20	39750	2506	2x2	-	-	-	-	-	-	-	-	-	-	26.21	26.21
CA_41C-41A	LTE B41	20	41055	2636.5	QPSK	1	0	41055	2636.5	2x2	LTE B41	20	40857	2616.7	2x2	LTE B41	20	39750	2506	4x4	-	-	-	-	-	-	-	-	-	-	26.22	26.21
A_41A-41C	LTE B41	20	41055	2636.5	QPSK	1	0	41055	2636.5	4x4	LTE B41	20	39948	2525.8	4x4	LTE B41	20	39750	2506	4x4	-	-	-	-	-	-	-	-	-	-	26.19	26.21
A_41C-41A	LTE B41	20	41055	2636.5	QPSK	1	0	41055	2636.5	4x4	LTE B41	20	40857	2616.7	4x4	LTE B41	20	39750	2506	4x4	-	-	-	-	-	-	-	-	-	-	26.24	26.21
CA_41D	LTE B41	20	41055	2636.5	QPSK	1	0	41055	2636.5	4x4	LTE B41	20	40857	2616.7	4x4	LTE B41	20	40659	2596.9	4x4	-	-	-	-	-	-	-	-	-	-	26.26	26.21
CA_41A-41D	LTE B41	20	41055	2636.5	QPSK	1	0	41055	2636.5	4x4	LTE B41	20	40146	2545.6	2x2	LTE B41	20	39948	2525.8	2x2	LTE B41	20	39750	2506	2x2	LTE B41	20	39750	2506	2x2	26.36	26.21
CA_41D-41A	LTE B41	20	41055	2636.5	QPSK	1	0	41055	2636.5	2x2	LTE B41	20	40857	2616.7	2x2	LTE B41	20	40659	2596.9	2x2	LTE B41	20	39750	2506	4x4	LTE B41	20	39750	2506	4x4	26.28	26.21
CA_41C-41C	LTE B41	20	41055	2636.5	QPSK	1	0	41055	2636.5	4x4	LTE B41	20	39948	2525.8	2x2	LTE B41	20	39948	2525.8	2x2	LTE B41	20	39750	2506	2x2	LTE B41	20	39750	2506	2x2	26.22	26.21
CA_41C-41C	LTE B41	20	41055	2636.5	QPSK	1	0	41055	2636.5	2x2	LTE B41	20	40857	2616.7	2x2	LTE B41	20	39948	2525.8	4x4	LTE B41	20	39948	2525.8	4x4	LTE B41	20	39750	2506	4x4	26.26	26.21

I.4 Additional Downlink Carrier Aggregation with Uplink Carrier Aggregation Enabled

This device supports uplink carrier aggregation (ULCA) with additional Carrier Aggregation configurations active in the downlink. Power measurements were performed with ULCA active and additional CA configurations active in the downlink for the configuration per Fall 2017 TCB Workshop Notes.

Per FCC Guidance, additional SAR measurements for these configurations were not required since their maximum output power was not more than 0.25 dB higher than the maximum output power for with only CA_41C ULCA active.

I.4.1 Additional DL Carrier Aggregation RF Conducted Powers with Uplink Carrier Aggregation Enabled

Table I-24
Maximum Output Powers

Combination	PCC Band	PCC BW [MHz]	PCC (UL) Ch.	PCC (UL) Freq. [MHz]	Mod.	PCC UL RB	PCC UL RB Offset	PCC (DL) Channel	PCC (DL) Freq. [MHz]	SCC Band	SCC BW [MHz]	SCC (UL) Ch.	SCC (UL) Freq. [MHz]	Mod.	SCC UL RB	SCC UL RB Offset	SCC (DL) Channel	SCC (DL) Freq. [MHz]	SCC Band	SCC BW [MHz]	SCC (DL) Channel	SCC (DL) Freq. [MHz]	Power	
																							ULCA Tx Power with add'l CA config. active (dBm)	ULCA Tx Power (dBm)
CA_41D	LTE B41	20	41055	2636.5	QPSK	1	0	41055	2636.5	LTE B41	20	40857	2616.7	QPSK	1	99	40857	2616.7	LTE B41	20	41253	2656.3	26.26	26.27

I.4.2 Additional 4x4 MIMO DL Carrier Aggregation RF Conducted Powers with Uplink Carrier Aggregation Enabled

Note: 4x4 DL MIMO is only operating in the downlink. Uplink transmission is limited to a single output stream for each component carrier of ULCA.

Table I-25
Maximum Output Powers

Combination	PCC Band	PCC BW [MHz]	PCC (UL) Ch.	PCC (UL) Freq. [MHz]	Mod.	PCC UL RB	PCC UL RB Offset	PCC (DL) Ch.	PCC (DL) Freq. [MHz]	DL Ant. Config.	SCC Band	SCC BW [MHz]	SCC (UL) Ch.	SCC (UL) Freq. [MHz]	Mod.	SCC UL RB	SCC UL RB Offset	SCC (DL) Ch.	SCC (DL) Freq. [MHz]	DL Ant. Config.	SCC Band	SCC BW [MHz]	SCC (DL) Ch.	SCC (DL) Freq. [MHz]	DL Ant. Config.	Power	
																										ULCA Tx Power with add'l CA config. active (dBm)	ULCA Tx Power (dBm)
CA_41D	LTE B41	20	41055	2636.5	QPSK	1	0	41055	2636.5	4x4	LTE B41	20	40857	2616.7	QPSK	1	99	40857	2616.7	4x4	LTE B41	20	41253	2656.3	4x4	26.33	26.27

FCC ID: A3LSMA356U	SAR EVALUATION REPORT	Approved by: Technical Manager
DUT Type: Portable Handset		APPENDIX I: Page 12 of 12