

APPENDIX I: LTE DLCA 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 component 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.

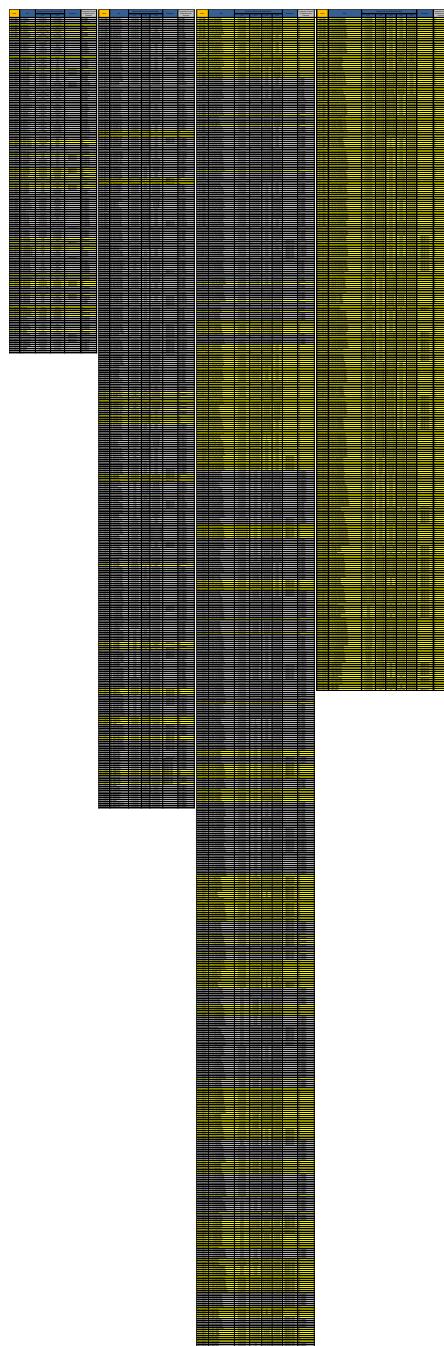
| | | |
|--|-----------------------|-----------------------------------|
| FCC ID A3LSMX828U | SAR EVALUATION REPORT | Approved by: Technical Manager |
| DUT Type: Portable Computing Device | | APPENDIX I Page 1 of 14 |



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

| | | |
|--|-----------------------|-----------------------------------|
| FCC ID A3LSMX828U | SAR EVALUATION REPORT | Approved by: Technical Manager |
| DUT Type: Portable Computing Device | | APPENDIX I Page 2 of 14 |

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



| | | |
|--|-----------------------|-----------------------------------|
| FCC ID A3LSMX828U | SAR EVALUATION REPORT | Approved by: Technical Manager |
| DUT Type: Portable Computing Device | | APPENDIX I Page 3 of 14 |

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

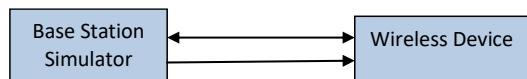
I.1 LTE Downlink Only Carrier Aggregation Test Selection and Setup

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

| | | |
|--|-----------------------|-----------------------------------|
| FCC ID A3LSMX828U | SAR EVALUATION REPORT | Approved by: Technical Manager |
| DUT Type: Portable Computing Device | | APPENDIX I Page 4 of 14 |

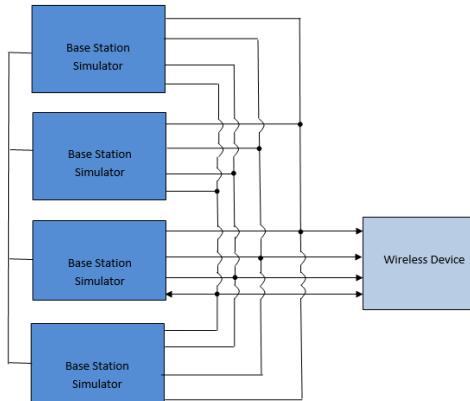


Figure I-2

I.2 Downlink Carrier Aggregation RF Conducted Powers

I.2.1 LTE Band 71 as PCC

Table I-3
Maximum Output Powers

| Combination | PCC | | | | | | | | | | SCC 1 | | | | SCC 2 | | | | SCC 3 | | | | SCC 4 | | | | Power |
|--------------|----------|--------------|--------------|----------------------|------|-----------|------------------|------------------|----------------------|----------|--------------|------------------|----------------------|----------|--------------|------------------|----------------------|----------|--------------|------------------|----------------------|----------|--------------|------------------|----------------------|-------|-------|
| | PCC Band | PCC BW [MHz] | PCC [UL] Ch. | PCC [UL] Freq. [MHz] | Mod. | PCC UL/FB | 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] | SCC Band | SCC BW [MHz] | SCC [DL] Channel | SCC [DL] Freq. [MHz] | | |
| CA_4A-4B-71A | LTE_B71 | 20 | 133297 | 680.5 | QPSK | 1 | 0 | 68761 | 634.5 | LTE_B4 | 20 | 2175 | - | LTE_B4 | 10 | 22520 | 21450 | - | - | - | - | - | - | 23.67 | 23.57 | | |
| CA_4A-4B-71A | LTE_B71 | 20 | 133297 | 680.5 | QPSK | 1 | 0 | 68761 | 634.5 | LTE_B4 | 20 | 50500 | 36205 | LTE_B4 | 20 | 66440 | 36300 | - | - | - | - | - | - | - | 24.49 | 23.57 | |
| CA_4B-71A | LTE_B71 | 20 | 133297 | 680.5 | QPSK | 1 | 0 | 68761 | 634.5 | LTE_B4 | 20 | 50500 | 36205 | LTE_B4 | 20 | 56188 | 36544.5 | - | - | - | - | - | - | - | 23.92 | 23.57 | |
| CA_2A-4A-71A | LTE_B71 | 20 | 133297 | 680.5 | QPSK | 1 | 0 | 68761 | 634.5 | LTE_B2 | 20 | 900 | 1960 | LTE_B2 | 20 | 700 | 1940 | LTE_B4 | 20 | 2175 | 2132.5 | - | - | - | - | 23.67 | 23.57 |
| CA_2A-4A-71A | LTE_B71 | 20 | 133297 | 680.5 | QPSK | 1 | 0 | 68761 | 634.5 | LTE_B2 | 20 | 900 | 1960 | LTE_B2 | 20 | 66786 | 21450 | LTE_B6 | 20 | 66984 | 2164.5 | - | - | - | - | 23.64 | 23.57 |
| CA_2A-4B-71A | LTE_B71 | 20 | 133297 | 680.5 | QPSK | 1 | 0 | 68761 | 634.5 | LTE_B2 | 20 | 900 | 1960 | LTE_B2 | 20 | 700 | 1940 | LTE_B7 | 20 | 3120 | 2655.5 | LTE_B6 | 20 | 66786 | 2145 | 23.33 | 23.57 |

I.2.1 LTE Band 12 as PCC

Table I-4
Maximum Output Powers

| | | |
|--|-----------------------|-----------------------------------|
| FCC ID A3LSMX828U | SAR EVALUATION REPORT | Approved by: Technical Manager |
| DUT Type: Portable Computing Device | | APPENDIX I Page 5 of 14 |

I.2.2 LTE Band 13 as PCC

Table I-5
Maximum Output Powers

| Combination | PCC | | | | | | | | SCC 1 | | | | SCC 2 | | | | SCC 3 | | | | SCC 4 | | | | Power | | | | |
|----------------------|----------|--------------|--------------|----------------------|------|------------|------------------|------------------|----------------------|----------|--------------|------------------|----------------------|----------|--------------|------------------|----------------------|----------|--------------|------------------|----------------------|---------------------------------------|-----------------------------------|-------|--------|-------|-------|-------|-------|
| | 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_2A-4A-13A | LTE B13 | 10 | 23230 | 782 | QPSK | 1 | 25 | 6230 | 751 | LTE B2 | 20 | 900 | 1960 | LTE B48 | 20 | 2175 | 2132.5 | - | - | - | - | - | - | - | 21.28 | 23.89 | | | |
| CA_2A-4A-13A | LTE B13 | 10 | 23230 | 782 | QPSK | 1 | 25 | 6230 | 751 | LTE B2 | 20 | 900 | 1960 | LTE B48 | 20 | 55990 | 3625 | - | - | - | - | - | - | - | 21.28 | 23.89 | | | |
| CA_4B-4B-13A | LTE B13 | 10 | 23230 | 782 | QPSK | 1 | 25 | 6230 | 751 | LTE B2 | 20 | 7075 | 2132.5 | LTE B48 | 20 | 2390 | 2132.5 | - | - | - | - | - | - | - | 21.28 | 23.89 | | | |
| CA_13A-4B8 | LTE B13 | 10 | 23230 | 782 | QPSK | 1 | 25 | 6230 | 751 | LTE B48 | 10 | 55990 | 3625 | LTE B48 | 10 | 56089 | 3634.9 | - | - | - | - | - | - | - | 23.91 | 23.89 | | | |
| CA_13A-4B8-6B8 | LTE B13 | 10 | 23230 | 782 | QPSK | 1 | 25 | 6230 | 751 | LTE B48 | 10 | 55990 | 3625 | LTE B96 | 20 | 66786 | 2145 | - | - | - | - | - | - | - | 22.99 | 23.89 | | | |
| CA_2A-13A-4B8 | LTE B13 | 10 | 23230 | 782 | QPSK | 1 | 25 | 6230 | 751 | LTE B2 | 20 | 900 | 1960 | LTE B48 | 20 | 55990 | 3625 | LTE B48 | 20 | 56188 | 3644.8 | - | - | - | - | - | - | 21.21 | 23.89 |
| CA_2A-13A-4B8-6B8 | LTE B13 | 10 | 23230 | 782 | QPSK | 1 | 25 | 6230 | 751 | LTE B2 | 20 | 900 | 1960 | LTE B48 | 20 | 56188 | 3644.8 | LTE B96 | 20 | 66786 | 2145 | - | - | - | - | - | - | 21.21 | 23.89 |
| CA_2A-13A-6B8 | LTE B13 | 10 | 23230 | 782 | QPSK | 1 | 25 | 6230 | 751 | LTE B2 | 20 | 900 | 1960 | LTE B96 | 15 | 66786 | 2145 | LTE B96 | 5 | 66879 | 2154.3 | - | - | - | - | - | - | 23.58 | 23.89 |
| CA_2A-13A-6B8-6B8 | LTE B13 | 10 | 23230 | 782 | QPSK | 1 | 25 | 6230 | 751 | LTE B2 | 20 | 900 | 1960 | LTE B96 | 20 | 66786 | 2145 | LTE B96 | 5 | 66879 | 2154.3 | - | - | - | - | - | - | 23.58 | 23.89 |
| CA_13A-6B8-6B8 | LTE B13 | 10 | 23230 | 782 | QPSK | 1 | 25 | 6230 | 751 | LTE B48 | 20 | 55990 | 3625 | LTE B96 | 15 | 66786 | 2145 | LTE B96 | 5 | 66879 | 2154.3 | - | - | - | - | - | - | 23.58 | 23.89 |
| CA_13A-6B8-6B8 | LTE B13 | 10 | 23230 | 782 | QPSK | 1 | 25 | 6230 | 751 | LTE B96 | 20 | 66786 | 2145 | LTE B96 | 5 | 67168 | 2183.2 | LTE B96 | 15 | 67281 | 2192.5 | - | - | - | - | - | - | 23.62 | 23.89 |
| CA_13A-6B8-6B8 | LTE B13 | 10 | 23230 | 782 | QPSK | 1 | 25 | 6230 | 751 | LTE B96 | 20 | 66786 | 2145 | LTE B96 | 20 | 67038 | 2170.2 | LTE B96 | 20 | 67236 | 2190 | - | - | - | - | - | - | 23.62 | 23.89 |
| CA_13A-6B8-6B8 | LTE B13 | 10 | 23230 | 782 | QPSK | 1 | 25 | 6230 | 751 | LTE B96 | 20 | 66786 | 2145 | LTE B96 | 20 | 66894 | 2164.8 | LTE B96 | 20 | 66898 | 2152.5 | - | - | - | - | - | - | 23.65 | 23.89 |
| CA_2A-13A-7A-13A | LTE B13 | 10 | 23230 | 782 | QPSK | 1 | 25 | 6230 | 751 | LTE B2 | 20 | 900 | 1960 | LTE B96 | 20 | 55990 | 3625 | LTE B96 | 20 | 56188 | 3630.2 | - | - | - | - | - | - | 23.65 | 23.89 |
| CA_2A-2A-7C-13A | LTE B13 | 10 | 23230 | 782 | QPSK | 1 | 25 | 5230 | 751 | LTE B2 | 20 | 700 | 1940 | LTE B7 | 20 | 3100 | 2653 | LTE B7 | 20 | 2902 | 2635.2 | - | - | - | - | - | - | 23.49 | 23.89 |
| CA_2A-2A-13A-6B8-6B8 | LTE B13 | 10 | 23230 | 782 | QPSK | 1 | 25 | 5230 | 751 | LTE B2 | 20 | 900 | 1960 | LTE B7 | 20 | 3100 | 2653 | LTE B7 | 20 | 67786 | 2145 | LTE B66 | 20 | 67236 | 2190 | - | 23.66 | 23.89 | |
| CA_2A-7A-13A-6B8 | LTE B13 | 10 | 23230 | 782 | QPSK | 1 | 25 | 5230 | 751 | LTE B2 | 20 | 900 | 1960 | LTE B7 | 20 | 3100 | 2653 | LTE B7 | 20 | 2850 | 2630 | LTE B66 | 20 | 65786 | 2145 | - | 23.46 | 23.89 | |
| CA_2A-13A-4B8 | LTE B13 | 10 | 23230 | 782 | QPSK | 1 | 25 | 5230 | 751 | LTE B2 | 20 | 900 | 1960 | LTE B7 | 20 | 3100 | 2653 | LTE B7 | 20 | 2850 | 2630 | LTE B66 | 20 | 65786 | 2145 | - | 23.46 | 23.89 | |
| CA_2A-13A-4B8-6B8 | LTE B13 | 10 | 23230 | 782 | QPSK | 1 | 25 | 5230 | 751 | LTE B2 | 20 | 900 | 1960 | LTE B7 | 20 | 3100 | 2653 | LTE B7 | 20 | 56188 | 3644.8 | LTE B48 | 20 | 56386 | 3634.6 | - | 23.33 | 23.89 | |
| CA_13A-4B8 | LTE B13 | 10 | 23230 | 782 | QPSK | 1 | 25 | 5230 | 751 | LTE B2 | 20 | 900 | 1960 | LTE B7 | 20 | 3100 | 2653 | LTE B7 | 20 | 56188 | 3644.8 | LTE B48 | 20 | 56386 | 3634.6 | - | 23.33 | 23.89 | |
| CA_13A-4B8-6B8 | LTE B13 | 10 | 23230 | 782 | QPSK | 1 | 25 | 5230 | 751 | LTE B2 | 20 | 900 | 1960 | LTE B7 | 20 | 3100 | 2653 | LTE B7 | 20 | 56188 | 3644.8 | LTE B48 | 20 | 56386 | 3634.6 | - | 23.33 | 23.89 | |
| CA_13A-4B8-6B8 | LTE B13 | 10 | 23230 | 782 | QPSK | 1 | 25 | 5230 | 751 | LTE B48 | 20 | 55990 | 3625 | LTE B48 | 20 | 56188 | 3644.8 | LTE B48 | 20 | 56386 | 3644.6 | LTE B48 | 20 | 56386 | 3634.4 | - | 24.01 | 23.89 | |
| CA_13A-4B8-6B8 | LTE B13 | 10 | 23230 | 782 | QPSK | 1 | 25 | 5230 | 751 | LTE B48 | 20 | 55990 | 3625 | LTE B48 | 20 | 56188 | 3644.8 | LTE B48 | 20 | 56386 | 3644.6 | LTE B48 | 20 | 56786 | 2145 | 24.00 | 23.89 | | |

I.2.3 LTE Band 14 as PCC

Table I-6
Maximum Output Powers

| Combination | PCC | | | | | | | | SCC 1 | | | | SCC 2 | | | | SCC 3 | | | | SCC 4 | | | | Power | | |
|-----------------------|----------|--------------|--------------|----------------------|------|------------|------------------|------------------|----------------------|----------|--------------|------------------|----------------------|----------|--------------|------------------|----------------------|----------|--------------|------------------|----------------------|---------------------------------------|-----------------------------------|-------|-------|-------|-------|
| | 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_2A-2A-14A-30A-6B8 | LTE B14 | 10 | 23330 | 793 | QPSK | 1 | 0 | 5330 | 763 | LTE B2 | 20 | 900 | 1960 | LTE B2 | 20 | 700 | 1940 | LTE B30 | 10 | 9820 | 2355 | LTE B66 | 20 | 66786 | 2145 | 23.72 | 23.90 |
| CA_2A-2A-14A-6B8-6B8 | 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 | LTE B66 | 20 | 67236 | 2190 | 23.75 | 23.90 |
| CA_2A-14A-30A-6B8-6B8 | LTE B14 | 10 | 23330 | 793 | QPSK | 1 | 0 | 5330 | 763 | LTE B2 | 20 | 900 | 1960 | LTE B30 | 10 | 9820 | 2355 | LTE B66 | 20 | 66786 | 2145 | LTE B66 | 20 | 67236 | 2190 | 23.87 | 23.90 |

I.2.4 LTE Band 26 as PCC

Table I-7
Maximum Output Powers

| Combination | PCC | | | | | | | | SCC 1 | | | | SCC 2 | | | | SCC 3 | | | | SCC 4 | | | | Power |
|-------------|----------|--------------|--------------|----------------------|------|------------|------------------|------------------|----------------------|----------|--------------|------------------|----------------------|----------|--------------|------------------|----------------------|----------|--------------|------------------|----------------------|---------------------------------------|-----------------------------------|-------|-------|
| | 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_25A-26A | LTE B26 | 15 | 26865 | 831.5 | QPSK | 1 | 74 | 8865 | 876.5 | LTE B25 | 20 | 8365 | 1962.5 | LTE B41 | 20 | 40620 | 2593 | 24.20 | 24.25 | 24.20 | 24.25 | 24.20 | 24.25 | 24.20 | 24.25 |
| CA_26A-41A | LTE B26 | 15 | 26865 | 831.5 | QPSK | 1 | 74 | 8865 | 876.5 | LTE B41 | 20 | 40620 | 2593 | LTE B41 | 20 | 40620 | 2593 | 24.23 | 24.25 | 24.23 | 24.25 | 24.23 | 24.25 | 24.23 | 24.25 |

| | | |
|--|-----------------------|-----------------------------------|
| FCC ID A3LSMX828U | SAR EVALUATION REPORT | Approved by: Technical Manager |
| DUT Type: Portable Computing Device | | APPENDIX I Page 6 of 14 |



I.2.5 LTE Band 66 as PCC

Table I-8
Maximum Output Powers

I.2.6 I TIE Band 25 as PCC

Table I-9
Maximum Output Powers

| | | Maximum Output Powers | | | | | | | | | | | | | | | | | | | | | | | | | |
|-------------------|----------|-----------------------|--------------|----------------------|------|-----------|-----------|------------------|----------------------|----------|--------------|------------------|----------------------|----------|--------------|------------------|----------------------|----------|--------------|------------------|----------------------|---------------------------------|-----------------------------------|-------|------|-------|-------|
| Combination | PCC Band | PCC | | | | SCC 1 | | | | SCC 2 | | | | SCC 3 | | | | SCC 4 | | | | Power | | | | | |
| | | PCC BW [MHz] | PCC [UL] Ch. | PCC [UL] Freq. [MHz] | Mod. | PCC UL/FB | PCC UL/RB | 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 Enabled (dBm) | LTE Single Carrier Tx Power (dBm) | | | | |
| CA_5A-25A | LTE B25 | 20 | 26140 | 1850 | QPSK | 1 | 99 | 8140 | 1940 | LTE B5 | 10 | 2525 | 881.5 | - | - | - | - | - | - | - | - | 23.89 | 23.89 | | | | |
| CA_12A-25A | LTE B25 | 20 | 26140 | 1850 | QPSK | 1 | 99 | 8140 | 1940 | LTE B5 | 10 | 5095 | 737.5 | - | - | - | - | - | - | - | - | 23.87 | 23.89 | | | | |
| CA_12A-25A | LTE B25 | 20 | 26140 | 1850 | QPSK | 1 | 99 | 8140 | 1940 | LTE B5 | 10 | 5095 | 737.5 | - | - | - | - | - | - | - | - | 23.89 | 23.89 | | | | |
| CA_25A-41A | LTE B25 | 20 | 26140 | 1850 | QPSK | 1 | 99 | 8140 | 1940 | LTE B41 | 20 | 4020 | 2933 | - | - | - | - | - | - | - | - | 23.84 | 23.89 | | | | |
| CA_25A-41C | LTE B25 | 20 | 26140 | 1850 | QPSK | 1 | 99 | 8140 | 1940 | LTE B41 | 20 | 4020 | 2933 | LTE B41 | 20 | 40422 | 2573.2 | - | - | - | - | 23.83 | 23.89 | | | | |
| CA_7A-25A-25A-66A | LTE B25 | 20 | 26140 | 1850 | QPSK | 1 | 99 | 8140 | 1940 | LTE B7 | 20 | 3100 | 2655 | LTE B7 | 20 | 2850 | 2630 | LTE B66 | 20 | 65536 | 2120 | - | 23.86 | 23.89 | | | |
| CA_7A-25A-25A-66A | LTE B25 | 20 | 26140 | 1850 | QPSK | 1 | 99 | 8140 | 1940 | LTE B7 | 20 | 3100 | 2655 | LTE B7 | 20 | 2850 | 2630 | LTE B66 | 20 | 65536 | 2120 | - | 23.86 | 23.89 | | | |
| CA_25A-41D | LTE B25 | 20 | 26140 | 1850 | QPSK | 1 | 99 | 8140 | 1940 | LTE B41 | 20 | 40422 | 2573.2 | LTE B41 | 20 | 40602 | 2933 | LTE B41 | 20 | 40918 | 2012.8 | - | 23.88 | 23.89 | | | |
| CA_7A-25A-25A-66A | LTE B25 | 20 | 26140 | 1850 | QPSK | 1 | 99 | 8140 | 1940 | LTE B5 | 20 | 5590 | 1885 | LTE B7 | 20 | 3100 | 2655 | LTE B7 | 20 | 2850 | 2630 | LTE B66 | 20 | 65786 | 2145 | 23.88 | 23.89 |
| CA_7C-25A-25A-66A | LTE B25 | 20 | 26140 | 1850 | QPSK | 1 | 99 | 8140 | 1940 | LTE B5 | 20 | 5590 | 1885 | LTE B7 | 20 | 3100 | 2655 | LTE B7 | 20 | 2902 | 2635.2 | LTE B66 | 20 | 66786 | 2145 | 23.91 | 23.89 |

| | | |
|--|-----------------------|-----------------------------------|
| FCC ID A3LSMX828U | SAR EVALUATION REPORT | Approved by: Technical Manager |
| DUT Type: Portable Computing Device | | APPENDIX I Page 7 of 14 |



I.2.1 LTE Band 7 as PCC

Table I-10
Maximum Output Powers

I.2.2 LTE Band 30 as PCC

Table I-11
Maximum Output Powers

I.2.3 LTE Band 41 as PCC

Table I-12
Maximum Output Powers

| Combination | PCC | | | | | | SCC 1 | | | | | | SCC 2 | | | | | | Power | |
|----------------|----------|--------------|--------------------------|---------------|------------|------------------|------------------|----------------------|----------|--------------|------------------|----------------------|----------|--------------|------------------|----------------------|---------------------------------------|-----------------------------------|-------|--|
| | PCC Band | PCC BW [MHz] | PCC (UL) Ch. Freq. [MHz] | PCC (UL) 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] | LTE Tx.Power with DL CA Enabled [dBm] | LTE Single Carrier Tx Power [dBm] | | |
| CA_41A-41A (1) | LTE B41 | 15 | 40185 | 2549.5 | QPSK | 1 | 0 | 40185 | 2549.5 | LTE B41 | 20 | 41490 | 2680 | - | - | - | - | 23.99 | 24.02 | |
| CA_41A-41C | LTE B41 | 15 | 40185 | 2549.5 | QPSK | 1 | 0 | 40185 | 2549.5 | LTE B41 | 20 | 41292 | 2669.2 | LTE B41 | 20 | 41490 | 2680 | 23.99 | 24.02 | |
| CA_41C-41A | LTE B41 | 15 | 40185 | 2549.5 | QPSK | 1 | 0 | 40185 | 2549.5 | LTE B41 | 20 | 40256 | 2566.6 | LTE B41 | 20 | 41490 | 2680 | 23.99 | 24.02 | |
| CA_41D | LTE B41 | 15 | 40185 | 2549.5 | QPSK | 1 | 0 | 40185 | 2549.5 | LTE B41 | 20 | 40356 | 2566.6 | LTE B41 | 20 | 40554 | 2586.4 | 23.51 | 24.02 | |

I.2.1 LTE Band 48 as PCC

Table I-13
Maximum Output Powers

| | | |
|--|-----------------------|-----------------------------------|
| FCC ID A3LSMX828U | SAR EVALUATION REPORT | Approved by: Technical Manager |
| DUT Type: Portable Computing Device | | APPENDIX I Page 8 of 14 |

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.

I.3.1 LTE 4x4 MIMO DL Standalone Powers

Table I-14
Maximum Output Powers

| LTE Band | Bandwidth [MHz] | Channel | Frequency [MHz] | Modulation | RB Size | RB Offset | 4x4 DL MIMO Tx. Power [dBm] | Single Antenna Tx. Power [dBm] | Target Power [dBm] |
|----------|-----------------|---------|-----------------|------------|---------|-----------|-----------------------------|--------------------------------|--------------------|
| 66 | 5 | 131997 | 1712.5 | QPSK | 1 | 12 | 23.95 | 23.93 | 24.0 |
| 25 | 20 | 26140 | 1860 | QPSK | 1 | 99 | 23.92 | 23.89 | 24.0 |
| 7 | 20 | 21100 | 2535 | QPSK | 1 | 0 | 23.94 | 23.96 | 24.0 |
| 30 | 10 | 27710 | 2310 | QPSK | 1 | 25 | 22.78 | 22.80 | 23.0 |
| 41 | 5 | 40185 | 2549.5 | QPSK | 1 | 0 | 23.87 | 23.92 | 24.0 |
| 48 | 5 | 56232 | 3649.2 | QPSK | 1 | 0 | 23.20 | 23.24 | 23.0 |

I.3.2 LTE Band 71 as PCC

Table I-15
Maximum Output Powers

| Combination | PCC | | | | | | | | | | SCC 1 | | | | | | | | | | SCC 2 | | | | | | | | | | SCC 3 | | | | | | | | | | Power | |
|-----------------------------|----------|--------------|-------------------------|--------------|------|-----------|------------------|------------------|---------------------|------------------|----------|--------------|-------------------------|--------------|------------------|----------|--------------|-------------------------|--------------|------------------|----------|--------------|-------------------------|--------------|------------------|----------|--------------|-------------------------|--------------|------------------|----------|--------------|-------------------------|--------------|------------------|---------------------------------|-----------------------------------|-------|-------|-------|-------|-------|
| | PCC Band | PCC BW [MHz] | PCC PCC (UL) Freq [MHz] | PCC (UL) Ch. | Mod. | PCC UL Rb | PCC UL RB Offset | PCC PCC (DL) Ch. | PCC (DL) Freq [MHz] | Dl. Ant. Config. | SCC Band | SCC BW [MHz] | SCC SCC (DL) Freq [MHz] | SCC (DL) Ch. | Dl. Ant. Config. | SCC Band | SCC BW [MHz] | SCC SCC (DL) Freq [MHz] | SCC (DL) Ch. | Dl. Ant. Config. | SCC Band | SCC BW [MHz] | SCC SCC (DL) Freq [MHz] | SCC (DL) Ch. | Dl. Ant. Config. | SCC Band | SCC BW [MHz] | SCC SCC (DL) Freq [MHz] | SCC (DL) Ch. | Dl. Ant. Config. | SCC Band | SCC BW [MHz] | SCC SCC (DL) Freq [MHz] | SCC (DL) Ch. | Dl. Ant. Config. | LTE Tx Power with DL CA Enabled | LTE Single Carrier Tx Power (dBm) | | | | | |
| CA (41)(40)(71A) LTE B71 | 20 | 133297 | 680.5 | QPSK | 2 | 0 | 68701 | 634.5 | 2x2 | LTE B4 | 20 | 2175 | 2133.5 | 4x4 | LTE B4 | 20 | 2150 | 4x4 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 23.55 | 23.57 | | | | |
| CA (48)(48)(71A) LTE B71 | 20 | 133297 | 680.5 | QPSK | 2 | 0 | 68701 | 634.5 | 2x2 | LTE B40 | 20 | 55998 | 55293 | 4x4 | LTE B40 | 20 | 55240 | 4x4 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 23.40 | 23.57 | | | | |
| CA (48C)71A LTE B71 | 20 | 133297 | 680.5 | QPSK | 2 | 0 | 68701 | 634.5 | 2x2 | LTE B40 | 20 | 55990 | 3625 | 4x4 | LTE B40 | 20 | 56128 | 3644.8 | 4x4 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 23.40 | 23.57 | | | |
| CA (2-2A)(4)(71A) LTE B71 | 20 | 133297 | 680.5 | QPSK | 2 | 0 | 68701 | 634.5 | 2x2 | LTE B2 | 20 | 900 | 1960 | 2x2 | LTE B2 | 20 | 700 | 1940 | 2x2 | LTE B4 | 20 | 2175 | 2132.5 | 4x4 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 23.42 | 23.57 |
| CA (2)(2A)(4)(71A) LTE B71 | 20 | 133297 | 680.5 | QPSK | 2 | 0 | 68701 | 634.5 | 2x2 | LTE B2 | 20 | 900 | 1960 | 4x4 | LTE B2 | 20 | 700 | 1940 | 4x4 | LTE B4 | 20 | 2175 | 2132.5 | 2x2 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 23.34 | 23.57 | |
| CA (2A)(2A)(4)(71A) LTE B71 | 20 | 133297 | 680.5 | QPSK | 2 | 0 | 68701 | 634.5 | 2x2 | LTE B2 | 20 | 900 | 1960 | 4x4 | LTE B2 | 20 | 700 | 1940 | 4x4 | LTE B4 | 20 | 2175 | 2132.5 | 4x4 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 23.34 | 23.57 | |
| CA (2A)(2A)(4)(71A) LTE B71 | 20 | 133297 | 680.5 | QPSK | 2 | 0 | 68701 | 634.5 | 2x2 | LTE B2 | 20 | 900 | 1960 | 2x2 | LTE B2 | 20 | 700 | 1940 | 2x2 | LTE B4 | 20 | 2175 | 2132.5 | 4x4 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 23.34 | 23.57 | |
| CA (2A)(2A)(4)(71A) LTE B71 | 20 | 133297 | 680.5 | QPSK | 2 | 0 | 68701 | 634.5 | 2x2 | LTE B2 | 20 | 900 | 1960 | 4x4 | LTE B2 | 20 | 700 | 1940 | 4x4 | LTE B4 | 20 | 2175 | 2132.5 | 2x2 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 23.34 | 23.57 | |
| CA (2A)(2A)(4)(71A) LTE B71 | 20 | 133297 | 680.5 | QPSK | 2 | 0 | 68701 | 634.5 | 2x2 | LTE B2 | 20 | 900 | 1960 | 4x4 | LTE B2 | 20 | 700 | 1940 | 4x4 | LTE B4 | 20 | 2175 | 2132.5 | 4x4 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 23.34 | 23.57 | |
| CA (2A)(2A)(4)(71A) LTE B71 | 20 | 133297 | 680.5 | QPSK | 2 | 0 | 68701 | 634.5 | 2x2 | LTE B2 | 20 | 900 | 1960 | 2x2 | LTE B2 | 20 | 700 | 1940 | 2x2 | LTE B4 | 20 | 2175 | 2132.5 | 4x4 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 23.34 | 23.57 | |
| CA (2A)(2A)(4)(71A) LTE B71 | 20 | 133297 | 680.5 | QPSK | 2 | 0 | 68701 | 634.5 | 2x2 | LTE B2 | 20 | 900 | 1960 | 4x4 | LTE B2 | 20 | 700 | 1940 | 4x4 | LTE B4 | 20 | 2175 | 2132.5 | 2x2 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 23.34 | 23.57 | |
| CA (2A)(2A)(4)(71A) LTE B71 | 20 | 133297 | 680.5 | QPSK | 2 | 0 | 68701 | 634.5 | 2x2 | LTE B2 | 20 | 900 | 1960 | 4x4 | LTE B2 | 20 | 700 | 1940 | 4x4 | LTE B4 | 20 | 2175 | 2132.5 | 4x4 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 23.34 | 23.57 | |
| CA (2A)(2A)(4)(71A) LTE B71 | 20 | 133297 | 680.5 | QPSK | 2 | 0 | 68701 | 634.5 | 2x2 | LTE B2 | 20 | 900 | 1960 | 2x2 | LTE B2 | 20 | 700 | 1940 | 2x2 | LTE B4 | 20 | 2175 | 2132.5 | 4x4 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 23.34 | 23.57 | |
| CA (2A)(2A)(4)(71A) LTE B71 | 20 | 133297 | 680.5 | QPSK | 2 | 0 | 68701 | 634.5 | 2x2 | LTE B2 | 20 | 900 | 1960 | 4x4 | LTE B2 | 20 | 700 | 1940 | 4x4 | LTE B4 | 20 | 2175 | 2132.5 | 2x2 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 23.34 | 23.57 | |
| CA (2A)(2A)(4)(71A) LTE B71 | 20 | 133297 | 680.5 | QPSK | 2 | 0 | 68701 | 634.5 | 2x2 | LTE B2 | 20 | 900 | 1960 | 4x4 | LTE B2 | 20 | 700 | 1940 | 4x4 | LTE B4 | 20 | 2175 | 2132.5 | 4x4 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 23.34 | 23.57 | |
| CA (2A)(2A)(4)(71A) LTE B71 | 20 | 133297 | 680.5 | QPSK | 2 | 0 | 68701 | 634.5 | 2x2 | LTE B2 | 20 | 900 | 1960 | 2x2 | LTE B2 | 20 | 700 | 1940 | 2x2 | LTE B4 | 20 | 2175 | 2132.5 | 4x4 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 23.34 | 23.57 | |
| CA (2A)(2A)(4)(71A) LTE B71 | 20 | 133297 | 680.5 | QPSK | 2 | 0 | 68701 | 634.5 | 2x2 | LTE B2 | 20 | 900 | 1960 | 4x4 | LTE B2 | 20 | 700 | 1940 | 4x4 | LTE B4 | 20 | 2175 | 2132.5 | 2x2 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 23.34 | 23.57 | |
| CA (2A)(2A)(4)(71A) LTE B71 | 20 | 133297 | 680.5 | QPSK | 2 | 0 | 68701 | 634.5 | 2x2 | LTE B2 | 20 | 900 | 1960 | 4x4 | LTE B2 | 20 | 700 | 1940 | 4x4 | LTE B4 | 20 | 2175 | 2132.5 | 4x4 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 23.34 | 23.57 | |
| CA (2A)(2A)(4)(71A) LTE B71 | 20 | 133297 | 680.5 | QPSK | 2 | 0 | 68701 | 634.5 | 2x2 | LTE B2 | 20 | 900 | 1960 | 2x2 | LTE B2 | 20 | 700 | 1940 | 2x2 | LTE B4 | 20 | 2175 | 2132.5 | 4x4 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 23.34 | 23.57 | |
| CA (2A)(2A)(4)(71A) LTE B71 | 20 | 133297 | 680.5 | QPSK | 2 | 0 | 68701 | 634.5 | 2x2 | LTE B2 | 20 | 900 | 1960 | 4x4 | LTE B2 | 20 | 700 | 1940 | 4x4 | LTE B4 | 20 | 2175 | 2132.5 | 2x2 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 23.34 | 23.57 | |
| CA (2A)(2A)(4)(71A) LTE B71 | 20 | 133297 | 680.5 | QPSK | 2 | 0 | 68701 | 634.5 | 2x2 | LTE B2 | 20 | 900 | 1960 | 4x4 | LTE B2 | 20 | 700 | 1940 | 4x4 | LTE B4 | 20 | 2175 | 2132.5 | 4x4 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 23.34 | 23.57 | |
| CA (2A)(2A)(4)(71A) LTE B71 | 20 | 133297 | 680.5 | QPSK | 2 | 0 | 68701 | 634.5 | 2x2 | LTE B2 | 20 | 900 | 1960 | 2x2 | LTE B2 | 20 | 700 | 1940 | 2x2 | LTE B4 | 20 | 2175 | 2132.5 | 4x4 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 23.34 | 23.57 | |
| CA (2A)(2A)(4)(71A) LTE B71 | 20 | 133297 | 680.5 | QPSK | 2 | 0 | 68701 | 634.5 | 2x2 | LTE B2 | 20 | 900 | 1960 | 4x4 | LTE B2 | 20 | 700 | 1940 | 4x4 | LTE B4 | 20 | 2175 | 2132.5 | 2x2 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 23.34 | 23.57 | |
| CA (2A)(2A)(4)(71A) LTE B71 | 20 | 133297 | 680.5 | QPSK | 2 | 0 | 68701 | 634.5 | 2x2 | LTE B2 | 20 | 900 | 1960 | 4x4 | LTE B2 | 20 | 700 | 1940 | 4x4 | LTE B4 | 20 | 2175 | 2132.5 | 4x4 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 23.34 | 23.57 | |
| CA (2A)(2A)(4)(71A) LTE B71 | 20 | 133297 | 680.5 | QPSK | 2 | 0 | 68701 | 634.5 | 2x2 | LTE B2 | 20 | 900 | 1960 | 2x2 | LTE B2 | 20 | 700 | 1940 | 2x2 | LTE B4 | 20 | 2175 | 2132.5 | 4x4 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 23.34 | 23.57 | |
| CA (2A)(2A)(4)(71A) LTE B71 | 20 | 133297 | 680.5 | QPSK | 2 | 0 | 68701 | 634.5 | 2x2 | LTE B2 | 20 | 900 | 1960 | 4x4 | LTE B2 | 20 | 700 | 1940 | 4x4 | LTE B4 | 20 | 2175 | 2132.5 | 2x2 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 23.34 | 23.57 | |
| CA (2A)(2A)(4)(71A) LTE B71 | 20 | 133297 | 680.5 | QPSK | 2 | 0 | 68701 | 634.5 | 2x2 | LTE B2 | 20 | 900 | 1960 | 4x4 | LTE B2 | | | | | | | | | | | | | | | | | | | | | | | | | | | |



I.3.3 LTE Band 12 as PCC

Table I-16
Maximum Output Powers

| | | |
|--|-----------------------|-----------------------------------|
| FCC ID A3LSMX828U | SAR EVALUATION REPORT | Approved by: Technical Manager |
| DUT Type: Portable Computing Device | | APPENDIX I Page 10 of 14 |



I.3.4 LTE Band 13 as PCC

Table I-17
Maximum Output Powers

1.3.5 LTE Band 14 as PCC

Table I-18
Maximum Output Powers

I.3.6 LTE Band 26 as PCC

Table I-19
Maximum Output Powers

| Combination | PCC | | | | | | | | SCC 1 | | | | Power | | | | |
|-------------|----------|--------------|--------------|----------------------|------|------------|------------------|--------------|----------------------|-----------------|----------|--------------|--------------|----------------------|-----------------|---------------------------------------|-----------------------------------|
| | 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 (DL) Ch. | SCC (DL) Freq. [MHz] | Dl Ant. Config. | LTE Tx.Power with DL CA Enabled (dBm) | LTE Single Carrier Tx Power (dBm) |
| CA_25A-26A | LTE B26 | 15 | 26865 | 831.5 | QPSK | 1 | 74 | 8865 | 876.5 | 2x2 | LTE B25 | 20 | 8365 | 1962.5 | 4x4 | 24.14 | 24.25 |
| CA_26A-41A | LTE B26 | 15 | 26865 | 831.5 | QPSK | 1 | 74 | 8865 | 876.5 | 2x2 | LTE B41 | 20 | 40620 | 2593 | 4x4 | 24.23 | 24.25 |

| FCC ID A3LSMX828U | SAR EVALUATION REPORT | Approved by: Technical Manager |
|---|-----------------------|-----------------------------------|
| DUT Type: Portable Computing Device | | APPENDIX I Page 11 of 14 |

I.3.7 LTE Band 66 as PCC

Table I-20
Maximum Output Powers

| | | |
|--|-----------------------|-----------------------------------|
| FCC ID A3LSMX828U | SAR EVALUATION REPORT | Approved by: Technical Manager |
| DUT Type: Portable Computing Device | | APPENDIX I Page 12 of 14 |



I.3.8 LTE Band 25 as PCC

Table I-21
Maximum Output Powers

I.3.9 LTE Band 30 as PCC

Table I-22
Maximum Output Powers

| | | |
|--|-----------------------|-----------------------------------|
| FCC ID A3LSMX828U | SAR EVALUATION REPORT | Approved by: Technical Manager |
| DUT Type: Portable Computing Device | | APPENDIX I Page 13 of 14 |

I.3.10 LTE Band 41 as PCC

Table I-23
Maximum Output Powers

| Combination | PCC | | | | | | | | | | SCC 1 | | | | | Power | | | |
|------------------|----------|--------------|--------------|----------------------|------|------------|------------------|--------------|----------------------|-----------------|----------|--------------|--------------|----------------------|-----------------|---------------------------------------|-----------------------------------|--|--|
| | 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 (DL) Ch. | SCC (DL) Freq. [MHz] | DL Ant. Config. | LTE Tx.Power with DL CA Enabled (dBm) | LTE Single Carrier Tx Power (dBm) | | |
| CA_41A]-41A (1) | LTE B41 | 15 | 40185 | 2549.5 | QPSK | 1 | 0 | 40185 | 2549.5 | 2x2 | LTE B41 | 20 | 41490 | 2680 | 4x4 | 24.00 | 24.02 | | |
| CA_41A]-41A | LTE B41 | 15 | 40185 | 2549.5 | QPSK | 1 | 0 | 40185 | 2549.5 | 2x2 | LTE B41 | 20 | 41490 | 2680 | 4x4 | 24.03 | 24.02 | | |
| CA_41A]-41A | LTE B41 | 15 | 40185 | 2549.5 | QPSK | 1 | 0 | 40185 | 2549.5 | 4x4 | LTE B41 | 20 | 41490 | 2680 | 2x2 | 24.00 | 24.02 | | |
| CA_41A]-41A] (1) | LTE B41 | 15 | 40185 | 2549.5 | QPSK | 1 | 0 | 40185 | 2549.5 | 4x4 | LTE B41 | 20 | 41490 | 2680 | 4x4 | 23.97 | 24.02 | | |
| CA_41A]-41C] | LTE B41 | 15 | 40185 | 2549.5 | QPSK | 1 | 0 | 40185 | 2549.5 | 2x2 | LTE B41 | 20 | 41292 | 2660.2 | 4x4 | 23.72 | 24.02 | | |
| CA_41C]-41A | LTE B41 | 15 | 40185 | 2549.5 | QPSK | 1 | 0 | 40185 | 2549.5 | 4x4 | LTE B41 | 20 | 40356 | 2566.6 | 4x4 | 24.00 | 24.02 | | |
| CA_41A]-41C | LTE B41 | 15 | 40185 | 2549.5 | QPSK | 1 | 0 | 40185 | 2549.5 | 4x4 | LTE B41 | 20 | 41292 | 2660.2 | 2x2 | 23.96 | 24.02 | | |
| CA_41C]-41A | LTE B41 | 15 | 40185 | 2549.5 | QPSK | 1 | 0 | 40185 | 2549.5 | 2x2 | LTE B41 | 20 | 40356 | 2566.6 | 2x2 | 23.73 | 24.02 | | |
| CA_41A]-41C] | LTE B41 | 15 | 40185 | 2549.5 | QPSK | 1 | 0 | 40185 | 2549.5 | 4x4 | LTE B41 | 20 | 41292 | 2660.2 | 4x4 | 23.98 | 24.02 | | |
| CA_41C]-41A] | LTE B41 | 15 | 40185 | 2549.5 | QPSK | 1 | 0 | 40185 | 2549.5 | 4x4 | LTE B41 | 20 | 40356 | 2566.6 | 4x4 | 23.96 | 24.02 | | |
| CA_41D] | LTE B41 | 15 | 40185 | 2549.5 | QPSK | 1 | 0 | 40185 | 2549.5 | 4x4 | LTE B41 | 20 | 40356 | 2566.6 | 4x4 | 24.01 | 24.02 | | |

I.3.11 LTE Band 48 as PCC

Table I-24
Maximum Output Powers

| Combination | PCC | | | | | | | | | | SCC 1 | | | | | SCC 2 | | | | | SCC 3 | | | | | SCC 4 | | | | Power | |
|--------------|----------|--------------|--------------|----------------------|-------|------------|------------------|--------------|----------------------|-----------------|----------|--------------|--------------|----------------------|-----------------|----------|--------------|--------------|----------------------|-----------------|----------|--------------|--------------|----------------------|-----------------|---------------------------------------|-----------------------------------|-------|-------|-------|-------|
| | 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 (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_48B] | LTE B48 | 10 | 55757 | 3601.7 | CQPSK | 1 | 0 | 55757 | 3601.7 | 4x4 | LTE B48 | 10 | 55856 | 3611.6 | 4x4 | - | - | - | - | - | - | - | - | - | - | - | - | 23.15 | 23.23 | | |
| CA_48A]-48D] | LTE B48 | 5 | 56232 | 3649.2 | CQPSK | 1 | 0 | 56232 | 3649.2 | 2x2 | LTE B48 | 20 | 55340 | 3560 | 4x4 | LTE B48 | 20 | 55358 | 3579.8 | 4x4 | LTE B48 | 20 | 55736 | 3599.6 | 4x4 | - | - | - | - | 23.32 | 23.24 |
| CA_48A]-48B] | LTE B48 | 5 | 56232 | 3649.2 | CQPSK | 1 | 0 | 56232 | 3649.2 | 4x4 | LTE B48 | 20 | 56115 | 3637.5 | 4x4 | LTE B48 | 20 | 55958 | 3637.7 | 4x4 | LTE B48 | 20 | 56640 | 3690 | 2x2 | - | - | - | - | 23.15 | 23.24 |
| CA_48A]-48C] | LTE B48 | 5 | 56232 | 3649.2 | CQPSK | 1 | 0 | 56232 | 3649.2 | 4x4 | LTE B48 | 20 | 56115 | 3637.5 | 2x2 | LTE B48 | 20 | 55958 | 3637.7 | 2x2 | LTE B48 | 20 | 56640 | 3690 | 4x4 | - | - | - | - | 23.15 | 23.24 |
| CA_48D]-48A) | LTE B48 | 5 | 56232 | 3649.2 | CQPSK | 1 | 0 | 56232 | 3649.2 | 2x2 | LTE B48 | 20 | 56115 | 3637.5 | 2x2 | LTE B48 | 20 | 55957 | 3637.7 | 2x2 | LTE B48 | 20 | 56640 | 3690 | 4x4 | - | - | - | - | 23.08 | 23.24 |
| CA_48A]-48D) | LTE B48 | 5 | 56232 | 3649.2 | CQPSK | 1 | 0 | 56232 | 3649.2 | 4x4 | LTE B48 | 20 | 56115 | 3637.5 | 4x4 | LTE B48 | 20 | 55358 | 3637.8 | 4x4 | LTE B48 | 20 | 55736 | 3599.6 | 4x4 | - | - | - | - | 23.22 | 23.24 |
| CA_48D]-48A) | LTE B48 | 5 | 56232 | 3649.2 | CQPSK | 1 | 0 | 56232 | 3649.2 | 4x4 | LTE B48 | 20 | 56115 | 3637.5 | 4x4 | LTE B48 | 20 | 55957 | 3637.7 | 4x4 | LTE B48 | 20 | 56640 | 3690 | 4x4 | - | - | - | - | 23.22 | 23.24 |
| CA_48C]-48A) | LTE B48 | 5 | 56232 | 3649.2 | CQPSK | 1 | 0 | 56232 | 3649.2 | 4x4 | LTE B48 | 20 | 56115 | 3637.5 | 4x4 | LTE B48 | 20 | 55957 | 3637.7 | 4x4 | LTE B48 | 20 | 56640 | 3690 | 4x4 | - | - | - | - | 23.22 | 23.24 |
| CA_48E]-48B) | LTE B48 | 5 | 56232 | 3649.2 | CQPSK | 1 | 0 | 56232 | 3649.2 | 4x4 | LTE B48 | 20 | 56115 | 3637.5 | 4x4 | LTE B48 | 20 | 55957 | 3637.7 | 4x4 | LTE B48 | 20 | 56640 | 3690 | 4x4 | - | - | - | - | 23.22 | 23.24 |
| CA_48B]-48E) | LTE B48 | 5 | 56232 | 3649.2 | CQPSK | 1 | 0 | 56232 | 3649.2 | 4x4 | LTE B48 | 20 | 56115 | 3637.5 | 4x4 | LTE B48 | 20 | 55958 | 3599.6 | 2x2 | LTE B48 | 20 | 55934 | 3619.4 | 2x2 | - | - | - | - | 23.15 | 23.24 |
| CA_48E]-48A) | LTE B48 | 5 | 56232 | 3649.2 | CQPSK | 1 | 0 | 56232 | 3649.2 | 2x2 | LTE B48 | 20 | 56115 | 3637.5 | 2x2 | LTE B48 | 20 | 56638 | 3598.8 | 2x2 | LTE B48 | 20 | 56640 | 3690 | 4x4 | - | - | - | - | 23.17 | 23.24 |
| CA_48C]-48D) | LTE B48 | 5 | 56232 | 3649.2 | CQPSK | 1 | 0 | 56232 | 3649.2 | 2x2 | LTE B48 | 20 | 56115 | 3637.5 | 2x2 | LTE B48 | 20 | 55358 | 3597.8 | 4x4 | LTE B48 | 20 | 55736 | 3599.6 | 4x4 | - | - | - | - | 23.15 | 23.24 |
| CA_48D]-48C) | LTE B48 | 5 | 56232 | 3649.2 | CQPSK | 1 | 0 | 56232 | 3649.2 | 2x2 | LTE B48 | 20 | 56115 | 3637.5 | 2x2 | LTE B48 | 20 | 55957 | 3637.7 | 2x2 | LTE B48 | 20 | 56640 | 3690 | 2x2 | - | - | - | - | 23.15 | 23.24 |
| CA_48C]-48D) | LTE B48 | 5 | 56232 | 3649.2 | CQPSK | 1 | 0 | 56232 | 3649.2 | 2x2 | LTE B48 | 20 | 56115 | 3637.5 | 2x2 | LTE B48 | 20 | 55957 | 3637.7 | 2x2 | LTE B48 | 20 | 56736 | 3599.6 | 2x2 | - | - | - | - | 23.16 | 23.24 |
| CA_48D]-48C) | LTE B48 | 5 | 56232 | 3649.2 | CQPSK | 1 | 0 | 56232 | 3649.2 | 2x2 | LTE B48 | 20 | 56115 | 3637.5 | 2x2 | LTE B48 | 20 | 55957 | 3637.7 | 2x2 | LTE B48 | 20 | 56640 | 3670.2 | 4x4 | - | - | - | - | 23.17 | 23.24 |

| | | |
|--|-----------------------|-----------------------------------|
| FCC ID A3LSMX828U | SAR EVALUATION REPORT | Approved by: Technical Manager |
| DUT Type: Portable Computing Device | | APPENDIX I Page 14 of 14 |