

F.2 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.

This device supports LAA with downlink carrier aggregation only. It uses carrier aggregation in the downlink to combine LTE in the unlicensed spectrum (i.e. LTE Band 46) with LTE in the licensed band (served as PCC). All uplink communications and acknowledgements on the PCC remain identical to specifications when downlink carrier aggregation is inactive.

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)iii) of KDB 941225 D05 V01r02. All LTE bandwidth conducted powers needed for PCC uplink configuration selection can be found in Section 9.4 and appendix H. 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.

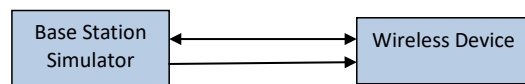


Figure F-1
DL CA Power Measurement Setup

FCC ID: PY7-95324M	 PCTEST Proud to be part of element	SAR EVALUATION REPORT	SONY	Reviewed by: Quality Manager
Test Dates: 08/30/21 - 10/03/21	DUT Type: Portable Handset			APPENDIX F: Page 2 of 11

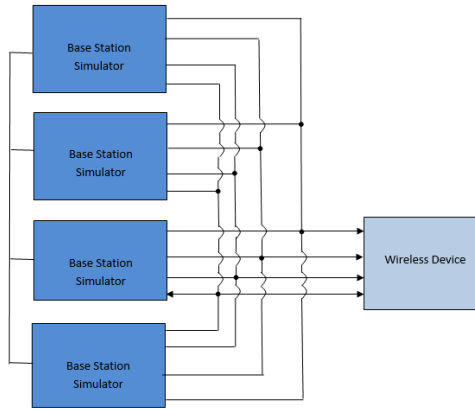


Figure F-2
DL CA with DL 4x4 MIMO Power Measurement Setup

F.3 Downlink Carrier Aggregation RF Conducted Powers

F.3.1 LTE Band 71 as PCC

Table F-3
Maximum Output Powers

Combination	PCC										SCC 1						SCC 2				SCC 3				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 4A-4A-71A	LTE B71	5	133147	695.5	QPSK	1	0	69611	619.5	LTE B4	20	2175	2132.5	LTE B4	10	2350	2150	-	-	-	-	-	23.66	23.61					
CA 2A-2A-4A-71A	LTE B71	5	133147	695.5	QPSK	1	0	69611	619.5	LTE B2	20	900	1980	LTE B2	20	700	1940	LTE B4	20	2175	2132.5	2150.5	2145	66786	2145	67236	2180	23.69	23.61
CA 2A-2A-66A-71A	LTE B71	5	133147	695.5	QPSK	1	0	69611	619.5	LTE B2	20	900	1980	LTE B2	20	700	1940	LTE B66	20	66786	2145	66786	2145	66786	2145	67236	2180	23.67	23.61
CA 2A-66A-66A-71A	LTE B71	5	133147	695.5	QPSK	1	0	69611	619.5	LTE B2	20	900	1980	LTE B66	20	66786	2145	LTE B66	20	66786	2145	LTE B66	20	66786	2145	67236	2180	23.67	23.61
CA 2A-66C-71A	LTE B71	5	133147	695.5	QPSK	1	0	69611	619.5	LTE B2	20	900	1980	LTE B66	20	66786	2145	LTE B66	20	66786	2145	LTE B66	20	66786	2145	67236	2180	23.67	23.61

F.3.2 LTE Band 12 as PCC

Table F-4
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]	SCC Band	SCC BW [MHz]	SCC (DL) Channel	SCC (DL) Freq. [MHz]	LTE Tx Power with CA Enabled (dBm)	LTE Single Carrier Tx Power (dBm)	
CA 12A-66A (1)	LTE B12	5	23095	707.5	QPSK	1	0	6965	737.5	LTE B66	20	66786	2145	-	-	-	-	-	-	-	-	-	-	-	-	-	23.68	23.63
CA 12A-66A (2)	LTE B12	5	23095	707.5	QPSK	1	0	6965	737.5	LTE B66	20	66786	2145	-	-	-	-	-	-	-	-	-	-	-	-	-	23.73	23.63
CA 2A-12A (1)	LTE B12	5	23095	707.5	QPSK	1	0	6965	737.5	LTE B2	20	900	1990	-	-	-	-	-	-	-	-	-	-	-	-	-	23.73	23.63
CA 4A-12A (1)	LTE B12	5	23095	707.5	QPSK	1	0	6965	737.5	LTE B4	20	2175	2132.5	-	-	-	-	-	-	-	-	-	-	-	-	-	23.61	23.56
CA 4A-12A (2)	LTE B12	5	23095	707.5	QPSK	1	0	6965	737.5	LTE B4	20	2175	2132.5	-	-	-	-	-	-	-	-	-	-	-	-	-	23.68	23.63
CA 12A-66C	LTE B12	5	23095	707.5	QPSK	1	0	6965	737.5	LTE B66	20	66786	2145	LTE B66	20	66984	2164.8	-	-	-	-	-	-	-	-	-	23.62	23.56
CA 2A-4A-12A	LTE B12	5	23095	707.5	QPSK	1	0	6965	737.5	LTE B2	20	900	1990	LTE B4	20	2175	2132.5	-	-	-	-	-	-	-	-	-	23.67	23.56
CA 4A-4A-12A	LTE B12	5	23095	707.5	QPSK	1	0	6965	737.5	LTE B4	20	2175	2132.5	LTE B4	20	2200	2150	-	-	-	-	-	-	-	-	-	23.69	23.56
CA 2A-2A-12A-66A-66A	LTE B12	5	23095	707.5	QPSK	1	0	6965	737.5	LTE B2	20	900	1990	LTE B2	20	700	1940	LTE B66	20	66786	2145	LTE B66	20	67236	2180	23.65	23.68	

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Test Dates: 08/30/21 - 10/03/21	DUT Type: Portable Handset			APPENDIX F: Page 3 of 11

F.3.3

LTE Band 13 as PCC

Table F-5
Maximum Output Powers

Combination	PCC Band	PCC BW [MHz]	PCC [UL] Ch.	PCC				Mod.	PCC UL RB	PCC UL RB Offset	PCC [DL] Channel	SCC 1				SCC 2				SCC 3				SCC 4				Power		
				PCC [UL] Freq. [MHz]	PCC [UL] Freq. [MHz]	PCC [UL] Freq. [MHz]	PCC [UL] 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]	LTE Tx Power with DL CA	LTE Single Carrier Tx Power [dBm]	
CA 13A-46A-66A	LTE B13	5	23230	782	QPSK	1	0	6230	751		6230	LTE B46	20	60665	5537.5	LTE B66	20	68786	2145	-	-	-	-	-	-	-	-	-	23.37	23.34
CA 2A-13A-46A	LTE B13	5	23230	782	QPSK	1	0	6230	751		6230	LTE B2	20	600	1960	LTE B46	20	60665	5537.5	-	-	-	-	-	-	-	-	-	23.34	23.34
CA 2A-4A-13A	LTE B13	10	23230	782	QPSK	1	48	6230	751		6230	LTE B2	20	600	1960	LTE B4	20	2175	2132.5	-	-	-	-	-	-	-	-	-	23.26	23.47
CA 4A-4A-13A	LTE B13	10	23230	782	QPSK	1	48	6230	751		6230	LTE B4	20	2175	2132.5	LTE B4	10	2350	2150	-	-	-	-	-	-	-	-	-	23.16	23.47
CA 13A-46C-66A	LTE B13	5	23230	782	QPSK	1	0	6230	751		6230	LTE B46	20	60665	5537.5	LTE B46	20	60665	5537.5	-	-	-	-	-	-	-	-	-	23.32	23.34
CA 13A-46A-66B	LTE B13	5	23230	782	QPSK	1	0	6230	751		6230	LTE B46	20	60665	5537.5	LTE B46	20	68786	2145	-	-	-	-	-	-	-	-	-	23.32	23.34
CA 13A-46A-66C	LTE B13	5	23230	782	QPSK	1	0	6230	751		6230	LTE B46	20	60665	5537.5	LTE B46	20	68786	2145	-	-	-	-	-	-	-	-	-	23.36	23.34
CA 2A-13A-46C	LTE B13	5	23230	782	QPSK	1	0	6230	751		6230	LTE B2	20	600	1960	LTE B46	20	60665	5537.5	-	-	-	-	-	-	-	-	-	23.33	23.34
CA 2A-13A-46A-66A	LTE B13	5	23230	782	QPSK	1	0	6230	751		6230	LTE B2	20	600	1960	LTE B46	20	68786	2145	-	-	-	-	-	-	-	-	-	23.29	23.34
CA 2A-13A-46C	LTE B13	5	23230	782	QPSK	1	0	6230	751		6230	LTE B2	20	600	1960	LTE B46	20	68786	2145	-	-	-	-	-	-	-	-	-	23.32	23.34
CA 2A-13A-46A-66A	LTE B13	5	23230	782	QPSK	1	0	6230	751		6230	LTE B2	20	600	1960	LTE B46	20	68786	2145	-	-	-	-	-	-	-	-	-	23.32	23.34
CA 13A-46C-66B	LTE B13	5	23230	782	QPSK	1	0	6230	751		6230	LTE B46	20	60665	5537.5	LTE B46	20	68786	2145	-	-	-	-	-	-	-	-	-	23.32	23.34
CA 13A-46C	LTE B13	5	23230	782	QPSK	1	0	6230	751		6230	LTE B46	20	60665	5537.5	LTE B46	20	68786	2145	-	-	-	-	-	-	-	-	-	23.32	23.34
CA 13A-46A-48C-66A	LTE B13	5	23230	782	QPSK	1	0	6230	751		6230	LTE B48	20	55990	3625	LTE B48	20	55340	3579.8	-	-	-	-	-	-	-	-	-	23.29	23.34
CA 13A-46A-48D	LTE B13	5	23230	782	QPSK	1	0	6230	751		6230	LTE B48	20	55990	3625	LTE B48	20	55340	3579.8	-	-	-	-	-	-	-	-	-	23.29	23.34
CA 13A-48C-48C	LTE B13	5	23230	782	QPSK	1	0	6230	751		6230	LTE B48	20	55990	3625	LTE B48	20	56188	3644.8	-	-	-	-	-	-	-	-	-	23.33	23.34
CA 13A-48D-48C	LTE B13	5	23230	782	QPSK	1	0	6230	751		6230	LTE B48	20	55990	3625	LTE B48	20	56188	3644.8	-	-	-	-	-	-	-	-	-	23.30	23.34
CA 2A-13A-48D	LTE B13	5	23230	782	QPSK	1	0	6230	751		6230	LTE B2	20	600	1960	LTE B48	20	55990	3625	-	-	-	-	-	-	-	-	-	23.32	23.34
CA 2A-13A-48A-48A-66A	LTE B13	5	23230	782	QPSK	1	0	6230	751		6230	LTE B2	20	600	1960	LTE B48	20	55990	3625	-	-	-	-	-	-	-	-	-	23.35	23.34
CA 2A-13A-48A-48C	LTE B13	5	23230	782	QPSK	1	0	6230	751		6230	LTE B2	20	600	1960	LTE B48	20	55990	3625	-	-	-	-	-	-	-	-	-	23.32	23.34
CA 2A-13A-48C-66A	LTE B13	5	23230	782	QPSK	1	0	6230	751		6230	LTE B2	20	600	1960	LTE B48	20	55990	3625	-	-	-	-	-	-	-	-	-	23.32	23.34
CA 2A-13A-48D	LTE B13	5	23230	782	QPSK	1	0	6230	751		6230	LTE B2	20	600	1960	LTE B48	20	55990	3625	-	-	-	-	-	-	-	-	-	23.29	23.34

F.3.4

LTE Band 5 as PCC

Table F-6
Maximum Output Powers

Combination	PCC Band	PCC BW [MHz]	PCC [UL] Ch.	PCC				Mod.	PCC UL RB	PCC UL RB Offset	PCC [DL] Channel	SCC 1				SCC 2				SCC 3				SCC 4				Power				
				PCC [UL] Freq. [MHz]	PCC [UL] Freq. [MHz]	PCC [UL] Freq. [MHz]	PCC [UL] 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]	LTE Tx Power with DL CA Enabled (dBm)	LTE Single Carrier Tx Power (dBm)			
CA 5A-46A (1)	LTE B5	3	20415	825.5	QPSK	1	0	2415	870.5		870.5	LTE B46	20	50665	5537.5	-	-	-	-	-	-	-	-	-	-	-	-	-	24.00	23.94		
CA 5A-5A (1)	LTE B5	3	20415	825.5	QPSK	1	0	2415	870.5		870.5	LTE B5	5	2625	891.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	24.04	23.94	
CA 5B (1)	LTE B5	3	20415	825.5	QPSK	1	0	2415	870.5		870.5	LTE B5	5	2454	874.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	24.00	23.98	
CA 2A-5A-46A	LTE B5	5	20625	846.5	QPSK	1	0	2625	891.5		891.5	LTE B2	20	600	1960	LTE B46	20	50665	5537.5	-	-	-	-	-	-	-	-	-	-	23.89	23.85	
CA 5A-46A-66A	LTE B5	5	20625	846.5	QPSK	1	0	2625	891.5		891.5	LTE B46	20	50665	5537.5	LTE B66	20	68786	2145	-	-	-	-	-	-	-	-	-	-	23.79	23.88	
CA 5A-46C (1)	LTE B5	5	20625	846.5	QPSK	1	0	2625	891.5		891.5	LTE B46	20	50665	5537.5	LTE B46	20	60665	5537.5	-	-	-	-	-	-	-	-	-	-	23.79	23.88	
CA 2A-2A-4A-5A	LTE B5	5	20625	846.5	QPSK	1	0	2625	891.5		891.5	LTE B2	20	600	1960	LTE B2	20	700	1940	LTE B4	20	2175	2132.5	-	-	-	-	-	-	-	23.99	23.85
CA 2A-4A-4A-5A	LTE B5	5	20625	846.5	QPSK	1	0	2625	891.5		891.5	LTE B2	20	600	1960	LTE B2	20	2175	2132.5	LTE B4	10	2350	2150	-	-	-	-	-	-	-	23.91	23.88
CA 2A-4A-4B	LTE B5	5	20625	846.5	QPSK	1	0	2625	891.5		891.5	LTE B2	20	2353	884.3	LTE B2	20	600	1960	LTE B4	20	2175	2132.5	-	-	-	-	-	-	-	23.73	23.88
CA 2A-5A-46C	LTE B5	5	20625	846.5	QPSK	1	0	2625	891.5		891.5	LTE B2	20	600	1960	LTE B46	20	50665	5537.5	-	-	-	-	-	-	-	-	-	-	23.82	23.88	
CA 4A-5A-66B	LTE B5	5	20625	846.5	QPSK	1	0	2625	891.5		891.5	LTE B2	20	600	1960	LTE B46	20	50665	5537.5	LTE B46	20	68786	2145	-	-	-	-	-	-	-	23.85	23.88
CA 4A-5A-66C	LTE B5	5	20625	846.5	QPSK	1	0	2625	891.5		891.5	LTE B2	20	600	1960	LTE B46	20	68786	2145	-	-	-	-	-	-	-	-	-	-	23.85	23.88	
CA 5A-46C (1)	LTE B5	5	20625	846.5	QPSK	1	0	2625	891.5		891.5	LTE B46	20	50665	5537.5	LTE B46	20	68786	2145	-	-	-	-	-	-	-	-	-	-	23.77	23.88	
CA 5A-46C	LTE B5	5	20625	846.5	QPSK	1	0	2625	891.5		891.5	LTE B46	20	50665	5537.5	LTE B46	20	68786	2145	-	-	-	-	-	-	-	-	-	-	23.77	23.88	
CA 5A-5A-66B	LTE B5	5	20625	846.5	QPSK	1	0	2625	891.5		891.5	LTE B2	20	600	1960	LTE B46	20	50665	5537.5	LTE B46	20	68786	2145	-	-	-	-	-	-	-	23.82	23.88
CA 5A-5A-66A-66A	LTE B5	5	20625	846.5	QPSK	1	0	2625	891.5		891.5	LTE B5	5	2425	871.5	LTE B5	5	2425	871.5	LTE B46	20	68786	2145	-	-	-	-	-	-	-	23.82	23.88
CA 5A-5A-66C	LTE B5	5	20625	846.5	QPSK	1	0	2625	891.5		891.5	LTE B5	5	2425	871.5	LTE B5	5	2425	871.5	LTE B46	20	68786	2145	-	-	-	-	-	-	-	23.81	23.88
CA 5B-46C	LTE B5	5	20625	846.5	QPSK	1	0	2625	891.5		891.5	LTE B5	10	2263	884.3	LTE B46	20	50665	5537.5	LTE B46	20	60665	5537.5	-	-	-	-	-	-	-	23.85	23.88
CA 2A-5A-66A-66A	LTE B5	5	20625	846.5	QPSK	1	0	2625	891.5		891.5	LTE B2	20	600	1960	LTE B2	20	700	1940	LTE B66	20	68786	2145	-	-	-	-	-	-	-	24.01	23.85
CA 2A-2A-5A-66B	LTE B5	5	20625	846.5	QPSK	1	0	2625	891.5		891.5	LTE B2	20	600	1960	LTE B2	20	700	1940	LTE B66	15	68786	2145	-	-	-	-	-	-	-	24.03	23.88
CA 2A-2A-5A-66C	LTE B5	5	20625	846.5	QPSK	1	0	2625	891.5		891.5	LTE B2	20	600	1960	LTE B2	20	700	1940	LTE B66	15	68786	2145	-	-	-	-	-	-	-	24.03	23.88
CA 2A-5A-46D	LTE B5	5	20625	846.5	QPSK	1	0	2625	891.5		891.5	LTE B2	20	600	1960	LTE B46	20	50665	5537.5	LTE B46	20											

Table F-7 Maximum Output Powers

Table F-8
Maximum Output Powers

Table F-9 Maximum Output Powers

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F.4 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 F.2 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.

F.4.1 LTE 4x4 MIMO DL Standalone Powers

Table F-10
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]
5	3	20415	825.5	QPSK	1	0	23.72	23.94	24.0
66	15	132322	1745	QPSK	1	74	23.72	23.69	24.0
41	20	41490	2680	QPSK	1	0	23.88	23.90	24.0
48	20	55340	3560	QPSK	1	0	23.80	23.65	24.0

F.4.1 LTE Band 71 as PCC

Table F-11
Maximum Output Powers

																				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 [DL] Freq. [MHz]	DL Ant. Config.	SCC 1				SCC 2				SCC 3				LTE Tx Power with DL CA Enabled [dBm]	LTE Single Carrier Tx Power (dBm)			
											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.
CA [A]4A-71A	LTE B71	5	133147	665.5	QPSK	1	0	68611	619.5	2x2	LTE B4	20	2175	2132.5	4x4	LTE B4	10	2350	2150	2x2	-	-	-	-	-	23.61	23.61
CA [A]4A-71A	LTE B71	5	133147	665.5	QPSK	1	0	68611	619.5	2x2	LTE B4	20	2175	2132.5	4x4	LTE B4	10	2350	2150	4x4	-	-	-	-	-	23.65	23.61
CA [2A]2A-4A-71A	LTE B71	5	133147	665.5	QPSK	1	0	68611	619.5	2x2	LTE B2	20	900	1960	4x4	LTE B2	20	700	1940	2x2	LTE B4	20	2175	2132.5	2x2	23.61	23.61
CA [2A]2A-4A-71A	LTE B71	5	133147	665.5	QPSK	1	0	68611	619.5	2x2	LTE B2	20	900	1960	4x4	LTE B2	20	700	1940	4x4	LTE B4	20	2175	2132.5	2x2	23.56	23.61
CA 2A-2A-4A-71A	LTE B71	5	133147	665.5	QPSK	1	0	68611	619.5	2x2	LTE B2	20	900	1960	2x2	LTE B2	20	700	1940	2x2	LTE B4	20	2175	2132.5	4x4	23.51	23.61
CA [2A]2A-6A-71A	LTE B71	5	133147	665.5	QPSK	1	0	68611	619.5	2x2	LTE B2	20	900	1960	4x4	LTE B2	20	700	1940	2x2	LTE B4	20	2175	2132.5	4x4	23.52	23.61
CA [2A]2A-6A-71A	LTE B71	5	133147	665.5	QPSK	1	0	68611	619.5	2x2	LTE B2	20	900	1960	4x4	LTE B2	20	700	1940	4x4	LTE B4	20	2175	2132.5	4x4	23.45	23.61
CA [2A]2A-6A-71A	LTE B71	5	133147	665.5	QPSK	1	0	68611	619.5	2x2	LTE B2	20	900	1960	4x4	LTE B2	20	700	1940	2x2	LTE B66	20	66786	2145	2x2	23.47	23.61
CA [2A]2A-6A-71A	LTE B71	5	133147	665.5	QPSK	1	0	68611	619.5	2x2	LTE B2	20	900	1960	4x4	LTE B2	20	700	1940	4x4	LTE B66	20	66786	2145	2x2	23.48	23.61
CA 2A-2A-6A-71A	LTE B71	5	133147	665.5	QPSK	1	0	68611	619.5	2x2	LTE B2	20	900	1960	2x2	LTE B2	20	700	1940	2x2	LTE B66	20	66786	2145	4x4	23.46	23.61
CA [2A]2A-6A-71A	LTE B71	5	133147	665.5	QPSK	1	0	68611	619.5	2x2	LTE B2	20	900	1960	4x4	LTE B2	20	700	1940	2x2	LTE B66	20	66786	2145	4x4	23.43	23.61
CA [2A]2A-6A-71A	LTE B71	5	133147	665.5	QPSK	1	0	68611	619.5	2x2	LTE B2	20	900	1960	4x4	LTE B2	20	700	1940	4x4	LTE B66	20	66786	2145	4x4	23.45	23.61
CA [2A]6A-6A-71A	LTE B71	5	133147	665.5	QPSK	1	0	68611	619.5	2x2	LTE B2	20	900	1960	4x4	LTE B66	20	66786	2145	2x2	LTE B66	20	67236	2190	2x2	23.47	23.61
CA 2A-6A-6A-71A	LTE B71	5	133147	665.5	QPSK	1	0	68611	619.5	2x2	LTE B2	20	900	1960	2x2	LTE B66	20	66786	2145	4x4	LTE B66	20	67236	2190	2x2	23.44	23.61
CA 2A-6A-6A-71A	LTE B71	5	133147	665.5	QPSK	1	0	68611	619.5	2x2	LTE B2	20	900	1960	2x2	LTE B66	20	66786	2145	4x4	LTE B66	20	67236	2190	4x4	23.46	23.61
CA [2A]6A-6A-71A	LTE B71	5	133147	665.5	QPSK	1	0	68611	619.5	2x2	LTE B2	20	900	1960	4x4	LTE B66	20	66786	2145	4x4	LTE B66	20	67236	2190	2x2	23.45	23.61
CA [2A]6A-6A-71A	LTE B71	5	133147	665.5	QPSK	1	0	68611	619.5	2x2	LTE B2	20	900	1960	4x4	LTE B66	20	66786	2145	4x4	LTE B66	20	67236	2190	4x4	23.48	23.61
CA [2A]6A-71A	LTE B71	5	133147	665.5	QPSK	1	0	68611	619.5	2x2	LTE B2	20	900	1960	4x4	LTE B66	20	66786	2145	2x2	LTE B66	20	66984	2164.8	2x2	23.66	23.61
CA 2A-6A-71A	LTE B71	5	133147	665.5	QPSK	1	0	68611	619.5	2x2	LTE B2	20	900	1960	2x2	LTE B66	20	66786	2145	4x4	LTE B66	20	66984	2164.8	4x4	23.57	23.61
CA [2A]6A-71A	LTE B71	5	133147	665.5	QPSK	1	0	68611	619.5	2x2	LTE B2	20	900	1960	4x4	LTE B66	20	66786	2145	4x4	LTE B66	20	66984	2164.8	4x4	23.59	23.61

FCC ID: PY7-95324M	 PCTEST Proud to be part of element	SAR EVALUATION REPORT		Reviewed by: Quality Manager
Test Dates: 08/30/21 - 10/03/21	DUT Type: Portable Handset	APPENDIX F: Page 6 of 11		

F.4.2 LTE Band 12 as PCC

Table F-12
Maximum Output Powers

Combination		PCC										SCC 1				SCC 2				SCC 3				SCC 4				Power			
		PCC Band	PCC BW [MHz]	PCC [DL] Ch.	PCC [UL] Freq. [MHz]	Mod.	PCC UL RB	PCC UL RB Offset	PCC [DL] Freq. [MHz]	DL Ant. Config.	SCC Band	SCC BW [MHz]	SCC [DL] Ch.	SCC [UL] Freq. [MHz]	DL Ant. Config.	SCC Band	SCC BW [MHz]	SCC [DL] Ch.	SCC [UL] Freq. [MHz]	DL Ant. Config.	SCC Band	SCC BW [MHz]	SCC [DL] Ch.	SCC [UL] Freq. [MHz]	DL Ant. Config.	SCC Band	SCC BW [MHz]	SCC [DL] Ch.	LTE to 5G Power with DC CA	LTE Single Carrier Power	
CA 12A-166A (1)	LTE B12	5	23095	7075	QPSK	1	0	5095	7375	2x2	LTE B05	20	66785	2145	4x4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	21.63	25.56
CA 12A-166A (2)	LTE B12	5	23095	7075	QPSK	1	0	5095	7375	2x2	LTE B05	20	66785	2145	4x4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	26.70	26.83
CA 12A-12A (1)	LTE B12	5	23095	7075	QPSK	1	0	5095	7375	2x2	LTE B12	20	66785	2145	4x4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	21.63	25.56
CA 12A-12A (2)	LTE B12	5	23095	7075	QPSK	1	0	5095	7375	2x2	LTE B12	20	66785	2145	4x4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	26.70	26.83
CA 14A-12A (1)	LTE B12	5	23095	7075	QPSK	1	0	5095	7375	2x2	LTE B14	20	21215	21325	4x4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	21.63	26.83
CA 14A-12A (2)	LTE B12	5	23095	7075	QPSK	1	0	5095	7375	2x2	LTE B12	20	66785	2145	4x4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	26.70	26.83
CA 16A-12A (1)	LTE B12	5	23095	7075	QPSK	1	0	5095	7375	2x2	LTE B12	20	66785	2145	4x4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	21.63	26.83
CA 16A-12A (2)	LTE B12	5	23095	7075	QPSK	1	0	5095	7375	2x2	LTE B14	20	21215	21325	4x4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	26.70	26.83
CA 18A-12A (1)	LTE B12	5	23095	7075	QPSK	1	0	5095	7375	2x2	LTE B18	20	71215	71325	4x4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	21.63	26.83
CA 18A-12A (2)	LTE B12	5	23095	7075	QPSK	1	0	5095	7375	2x2	LTE B12	20	66785	2145	4x4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	26.70	26.83
CA 12A-12A-12A-66A-66A	LTE B12	5	23095	7075	QPSK	1	0	5095	7375	2x2	LTE B12	20	66785	2145	4x4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	21.63	25.56
CA 2A-12A-12A-66A-66A	LTE B12	5	23095	7075	QPSK	1	0	5095	7375	2x2	LTE B12	20	66785	2145	4x4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	21.63	25.56
CA 2A-2A-12A-66A-66A	LTE B12	5	23095	7075	QPSK	1	0	5095	7375	2x2	LTE B12	20	66785	2145	4x4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	21.63	25.56
CA 2A-2A-2A-66A-66A	LTE B12	5	23095	7075	QPSK	1	0	5095	7375	2x2	LTE B12	20	66785	2145	4x4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	21.63	25.56
CA 2A-2A-12A-66A-66A	LTE B12	5	23095	7075	QPSK	1	0	5095	7375	2x2	LTE B12	20	66785	2145	4x4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	21.63	25.56
CA 2A-12A-12A-66A-66A	LTE B12	5	23095	7075	QPSK	1	0	5095	7375	2x2	LTE B12	20	66785	2145	4x4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	21.63	25.56
CA 2A-12A-12A-66A-66A	LTE B12	5	23095	7075	QPSK	1	0	5095	7375	2x2	LTE B12	20	66785	2145	4x4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	21.63	25.56

F.4.3 LTE Band 13 as PCC

Table F-13
Maximum Output Powers

[illegible]

FCC ID: PY7-95324M



SAR EVALUATION REPORT



Reviewed by:

Quality Mana

Test Dates:

08/30/21 - 10/03/21

DUT Type:

Portable Handset

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LTE Band 66 as PCC

Table F-15
Maximum Output Powers

[illegible]

FOUO ID: BVE 050044



SAR EVALUATION REPORT



Reviewed by:
Quality Manager

Test Dates:

DUT Type:
Portable Handset

APPENDIX F:
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Maximum Output Powers Continued

Combination	PCB Prod	PCB BW		PCB (R) Freq		PCB (R) Mod		PCB (R) RB		PCB (R) FC (Off Ch)		Di Ant. Config	S11		S22		S33		S44		S55		S66		S77		S88		S99		S100		S101		S102		S103		S104		S105		S106		S107		S108		S109		S110		S111		S112		S113		S114		S115		S116		S117		S118		S119		S120		S121		S122		S123		S124		S125		S126		S127		S128		S129		S130		S131		S132		S133		S134		S135		S136		S137		S138		S139		S140		S141		S142		S143		S144		S145		S146		S147		S148		S149		S150		S151		S152		S153		S154		S155		S156		S157		S158		S159		S160		S161		S162		S163		S164		S165		S166		S167		S168		S169		S170		S171		S172		S173		S174		S175		S176		S177		S178		S179		S180		S181		S182		S183		S184		S185		S186		S187		S188		S189		S190		S191		S192		S193		S194		S195		S196		S197		S198		S199		S200		S201		S202		S203		S204		S205		S206		S207		S208		S209		S210		S211		S212		S213		S214		S215		S216		S217		S218		S219		S220		S221		S222		S223		S224		S225		S226		S227		S228		S229		S230		S231		S232		S233		S234		S235		S236		S237		S238		S239		S240		S241		S242		S243		S244		S245		S246		S247		S248		S249		S250		S251		S252		S253		S254		S255		S256		S257		S258		S259		S260		S261		S262		S263		S264		S265		S266		S267		S268		S269		S270		S271		S272		S273		S274		S275		S276		S277		S278		S279		S280		S281		S282		S283		S284		S285		S286		S287		S288		S289		S290		S291		S292		S293		S294		S295		S296		S297		S298		S299		S300		S301		S302		S303		S304		S305		S306		S307		S308		S309		S310		S311		S312		S313		S314		S315		S316		S317		S318		S319		S320		S321		S322		S323		S324		S325		S326		S327		S328		S329		S330		S331		S332		S333		S334		S335		S336		S337		S338		S339		S340		S341		S342		S343		S344		S345		S346		S347		S348		S349		S350		S351		S352		S353		S354		S355		S356		S357		S358		S359		S360		S361		S362		S363		S364		S365		S366		S367		S368		S369		S370		S371		S372		S373		S374		S375		S376		S377		S378		S379		S380		S381		S382		S383		S384		S385		S386		S387		S388		S389		S390		S391		S392		S393		S394		S395		S396		S397		S398		S399		S400		S401		S402		S403		S404		S405		S406		S407		S408		S409		S410		S411		S412		S413		S414		S415		S416		S417		S418		S419		S420		S421		S422		S423	
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F.4.6

LTE Band 41 as PCC

Table F-17
Maximum Output Powers

Combination	PCC										SCC 1					SCC 2					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.	LTE Tx Power with DL CA Enabled [dBm]	LTE Single Carrier Tx Power [dBm]
CA [41C] (1)	LTE B41	20	41490	2680	QPSK	1	0	41490	2680	4x4	LTE B41	20	41292	2660.2	4x4	-	-	-	-	-	23.94	23.90
CA [41D]	LTE B41	20	41490	2680	QPSK	1	0	41490	2680	4x4	LTE B41	20	41292	2660.2	4x4	LTE B41	20	41094	2640.4	4x4	24.02	23.90

F.4.1

LTE Band 48 as PCC

Table F-18
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.	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 48A-48A	LTE B48	20	55340	3560	QPSK	1	0	55340	3560	2x2	LTE B48	20	56640	3690	4x4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	23.62	23.60
CA 48B-48A	LTE B48	20	55340	3560	QPSK	1	0	55340	3560	4x4	LTE B48	20	56640	3690	2x2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	23.74	23.60
CA 48B-48B	LTE B48	20	55340	3560	QPSK	1	0	55340	3560	4x4	LTE B48	20	56640	3690	4x4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	23.70	23.60
CA 48A-48C	LTE B48	20	55340	3560	QPSK	1	0	55340	3560	4x4	LTE B48	20	56640	3690	2x2	LTE B48	20	56442	3670.2	2x2	-	-	-	-	-	-	-	-	-	-	23.68	23.60
CA 48C-48A	LTE B48	20	55340	3560	QPSK	1	0	55340	3560	2x2	LTE B48	20	55538	3579.8	2x2	LTE B48	20	56442	3670.2	4x4	-	-	-	-	-	-	-	-	-	-	23.68	23.60
CA 48A-48C1	LTE B48	20	55340	3560	QPSK	1	0	55340	3560	4x4	LTE B48	20	56640	3690	4x4	LTE B48	20	56442	3670.2	4x4	-	-	-	-	-	-	-	-	-	-	23.65	23.60
CA 48C1-48A	LTE B48	20	55340	3560	QPSK	1	0	55340	3560	4x4	LTE B48	20	55538	3579.8	4x4	LTE B48	20	56442	3670.2	4x4	-	-	-	-	-	-	-	-	-	-	23.70	23.60
CA 48A-48D	LTE B48	20	55340	3560	QPSK	1	0	55340	3560	4x4	LTE B48	20	56640	3690	2x2	LTE B48	20	56442	3670.2	2x2	-	-	-	-	-	-	-	-	-	-	23.77	23.60
CA 48B-48A	LTE B48	20	55340	3560	QPSK	1	0	55340	3560	2x2	LTE B48	20	55538	3579.8	2x2	LTE B48	20	56442	3670.2	2x2	-	-	-	-	-	-	-	-	-	-	23.74	23.60
CA 48A-48C1	LTE B48	20	55340	3560	QPSK	1	0	55340	3560	2x2	LTE B48	20	56640	3690	4x4	LTE B48	20	56442	3670.2	4x4	-	-	-	-	-	-	-	-	-	-	23.72	23.60
CA 48C1-48A	LTE B48	20	55340	3560	QPSK	1	0	55340	3560	4x4	LTE B48	20	55538	3579.8	4x4	LTE B48	20	56442	3670.2	4x4	-	-	-	-	-	-	-	-	-	-	23.74	23.60
CA 48A-48C2	LTE B48	20	55340	3560	QPSK	1	0	55340	3560	4x4	LTE B48	20	56640	3690	4x4	LTE B48	20	56442	3670.2	4x4	-	-	-	-	-	-	-	-	-	-	23.71	23.60
CA 48C2-48A	LTE B48	20	55340	3560	QPSK	1	0	55340	3560	2x2	LTE B48	20	55538	3579.8	2x2	LTE B48	20	56442	3670.2	4x4	-	-	-	-	-	-	-	-	-	-	23.70	23.60
CA 48C2-48C	LTE B48	20	55340	3560	QPSK	1	0	55340	3560	4x4	LTE B48	20	55538	3579.8	4x4	LTE B48	20	56442	3670.2	2x2	-	-	-	-	-	-	-	-	-	-	23.69	23.60
CA 48C1-48C1	LTE B48	20	55340	3560	QPSK	1	0	55340	3560	4x4	LTE B48	20	55538	3579.8	4x4	LTE B48	20	56442	3670.2	4x4	-	-	-	-	-	-	-	-	-	-	23.66	23.60
CA 48C1	LTE B48	20	55340	3560	QPSK	1	0	55340	3560	4x4	LTE B48	20	55538	3579.8	4x4	LTE B48	20	56442	3670.2	4x4	-	-	-	-	-	-	-	-	-	-	23.68	23.60
CA 48C1-48D	LTE B48	20	55340	3560	QPSK	1	0	55340	3560	4x4	LTE B48	20	55538	3579.8	4x4	LTE B48	20	56442	3670.2	2x2	-	-	-	-	-	-	-	-	-	-	23.76	23.60
CA 48C1-48C1	LTE B48	20	55340	3560	QPSK	1	0	55340	3560	2x2	LTE B48	20	55538	3579.8	2x2	LTE B48	20	56442	3670.2	4x4	-	-	-	-	-	-	-	-	-	-	23.64	23.60
CA 48C1-48C2	LTE B48	20	55340	3560	QPSK	1	0	55340	3560	2x2	LTE B48	20	55538	3579.8	2x2	LTE B48	20	56442	3670.2	4x4	-	-	-	-	-	-	-	-	-	-	23.56	23.60
CA 48C1-48C3	LTE B48	20	55340	3560	QPSK	1	0	55340	3560	4x4	LTE B48	20	55538	3579.8	4x4	LTE B48	20	56442	3670.2	4x4	-	-	-	-	-	-	-	-	-	-	23.79	23.60
CA 48C1-48C4	LTE B48	20	55340	3560	QPSK	1	0	55340	3560	4x4	LTE B48	20	55538	3579.8	4x4	LTE B48	20	56442	3670.2	4x4	-	-	-	-	-	-	-	-	-	-	23.70	23.60

FCC ID: PY7-95324M	 PCTEST Proud to be part of element	SAR EVALUATION REPORT		Reviewed by: Quality Manager
Test Dates: 08/30/21 - 10/03/21	DUT Type: Portable Handset			APPENDIX F: Page 11 of 11