

G. LTE Down-Link Carrier Aggregation (DLCA)

G.1. Supported DLCA Combinations

This device supports LTE downlink carrier aggregation (CA). The table below shows the supported frequency bands of the device for DL Inter-band and DL Intra-band combinations.

Index	2CC	Restriction	Completely Covered by Measurement Superset	Index	3CC	Restriction	Completely Covered by Measurement Superset	Index	4CC	Restriction	Completely Covered by Measurement Superset	Index	5CC	Restriction	Completely Covered by Measurement Superset
2CC # 1	CA_2A-2A		3CC #1	3CC # 1	CA_2A-2A-4A		4CC #1	4CC # 1	CA_2A-2A-4A-4A		No	5CC # 1	CA_2A-2A-5A-30A-66A		No
2CC # 2	CA_2A-4A		3CC #11	3CC # 2	CA_2A-2A-5A		4CC #4	4CC # 2	CA_2A-2A-4A-5A		No	5CC # 2	CA_2A-2A-5A-66A-66A		No
2CC # 3	CA_2A-5A		3CC #18	3CC # 3	CA_2A-2A-7A		4CC #6	4CC # 3	CA_2A-2A-4A-12A		No	5CC # 3	CA_2A-2A-5A-66B		No
2CC # 4	CA_2A-7A		3CC #23	3CC # 4	CA_2A-2A-12A		4CC #9	4CC # 4	CA_2A-2A-5A-30A		5CC #1	5CC # 4	CA_2A-2A-5A-66C		No
2CC # 5	CA_2A-12A		3CC #29	3CC # 5	CA_2A-2A-13A		4CC #12	4CC # 5	CA_2A-2A-5A-66A		5CC #2	5CC # 5	CA_2A-2A-7A-12A-66A		No
2CC # 6	CA_2A-13A		3CC #33	3CC # 6	CA_2A-2A-14A		4CC #13	4CC # 6	CA_2A-2A-7A-12A		5CC #5	5CC # 6	CA_2A-2A-7A-66A-66A		No
2CC # 7	CA_2A-14A		3CC #34	3CC # 7	CA_2A-2A-29A	B29 SCC only	4CC #15	4CC # 7	CA_2A-2A-7A-66A		5CC #6	5CC # 7	CA_2A-2A-7A-66A-71A		No
2CC # 8	CA_2A-17A		No	3CC # 8	CA_2A-2A-30A		4CC #17	4CC # 8	CA_2A-2A-7A-71A		5CC #7	5CC # 8	CA_2A-2A-12A-30A-66A		No
2CC # 9	CA_2A-29A	B29 SCC only	3CC #36	3CC # 9	CA_2A-2A-66A		4CC #18	4CC # 9	CA_2A-2A-12A-30A		5CC #8	5CC # 9	CA_2A-2A-12A-66A-66A		No
2CC # 10	CA_2A-30A		3CC #38	3CC # 10	CA_2A-2A-71A		4CC #19	4CC # 10	CA_2A-2A-12A-66A		5CC #9	5CC # 10	CA_2A-2A-13A-66A-66A		No
2CC # 11	CA_2A-48A		3CC #39	3CC # 11	CA_2A-4A-4A		4CC #22	4CC # 11	CA_2A-2A-12B		No	5CC # 11	CA_2A-2A-7A-30A-66A		No
2CC # 12	CA_2A-66A		3CC #42	3CC # 12	CA_2A-4A-5A		4CC #22	4CC # 12	CA_2A-2A-13A-66A		5CC #10	5CC # 12	CA_2A-2A-14A-66A-66A		No
2CC # 13	CA_2A-71A		3CC #43	3CC # 13	CA_2A-4A-7A		4CC #24	4CC # 13	CA_2A-2A-14A-30A		5CC #11	5CC # 13	CA_2A-2A-29A-30A-66A	B29 SCC only	No
2CC # 14	CA_2C		3CC #46	3CC # 14	CA_2A-4A-12A		4CC #25	4CC # 14	CA_2A-2A-14A-66A		5CC #12	5CC # 14	CA_2A-2A-29A-66A-66A	B29 SCC only	No
2CC # 15	CA_4A-4A		3CC #51	3CC # 15	CA_2A-4A-13A		No	4CC # 15	CA_2A-2A-29A-30A	B29 SCC only	5CC #13	5CC # 15	CA_2A-5A-7A-7A-66A		No
2CC # 16	CA_4A-5A		3CC #51	3CC # 16	CA_2A-4A-29A	B29 SCC only	No	4CC # 16	CA_2A-2A-29A-66A	B29 SCC only	5CC #14	5CC # 16	CA_2A-5A-30A-66A-66A		No
2CC # 17	CA_4A-7A		3CC #58	3CC # 17	CA_2A-4A-71A		No	4CC # 17	CA_2A-2A-30A-66A		5CC #13	5CC # 17	CA_2A-5A-48A-66A-66A		No
2CC # 18	CA_4A-12A		3CC #53	3CC # 18	CA_2A-5A-7A		4CC #28	4CC # 18	CA_2A-2A-66A-66A		5CC #2	5CC # 18	CA_2A-7A-7A-13A-66A		No
2CC # 19	CA_4A-13A		3CC #54	3CC # 19	CA_2A-5A-30A		4CC #31	4CC # 19	CA_2A-2A-66A-71A		5CC #7	5CC # 19	CA_2A-7A-7A-66A-66A		No
2CC # 20	CA_4A-17A		No	3CC # 20	CA_2A-5A-48A		4CC #32	4CC # 20	CA_2A-2A-66B		5CC #3	5CC # 20	CA_2A-7C-66A-66A		No
2CC # 21	CA_4A-29A	B29 SCC only	3CC #55	3CC # 21	CA_2A-5A-66A		4CC #34	4CC # 21	CA_2A-2A-66C		5CC #4	5CC # 21	CA_2A-12A-30A-66A-66A		No
2CC # 22	CA_4A-71A		3CC #56	3CC # 22	CA_2A-5B		4CC #37	4CC # 22	CA_2A-4A-4A-5A		No	5CC # 22	CA_2A-14A-30A-66A-66A		No
2CC # 23	CA_5A-7A		3CC #62	3CC # 23	CA_2A-7A-7A		4CC #38	4CC # 23	CA_2A-4A-4A-12A		No	5CC # 23	CA_2A-48C-66A-66A		No
2CC # 24	CA_5A-25A		No	3CC # 24	CA_2A-7A-12A		4CC #40	4CC # 24	CA_2A-4A-7A-7A		No	5CC # 24	CA_2A-48D-66A		No
2CC # 25	CA_5A-30A		3CC #30	3CC # 25	CA_2A-7A-13A		4CC #41	4CC # 25	CA_2A-4A-7A-12A		No	5CC # 25	CA_2A-48E		No
2CC # 26	CA_5A-38A		No	3CC # 26	CA_2A-7A-66A		4CC #42	4CC # 26	CA_2A-4A-7C		No	5CC # 26	CA_5A-7C-66A-66A		No
2CC # 27	CA_5A-41A		No	3CC # 27	CA_2A-7A-71A		4CC #43	4CC # 27	CA_2A-4A-12B		No	5CC # 27	CA_5A-48C-66A-66A		No
2CC # 28	CA_5A-48A		3CC #66	3CC # 28	CA_2A-7C		4CC #44	4CC # 28	CA_2A-5A-7A-7A		5CC #15	5CC # 28	CA_13A-48D-66A		No
2CC # 29	CA_5A-66A		3CC #68	3CC # 29	CA_2A-12A-30A		4CC #46	4CC # 29	CA_2A-5A-7A-66A		5CC #15	5CC # 29	CA_13A-48E		No
2CC # 30	CA_5B		3CC #71	3CC # 30	CA_2A-12A-66A		4CC #47	4CC # 30	CA_2A-5A-7C		No	5CC # 30	CA_25A-25A-41D		No
2CC # 31	CA_7A-7A		3CC #73	3CC # 31	CA_2A-12B		4CC #11	4CC # 31	CA_2A-5A-30A-66A		5CC #16	5CC # 31	CA_41C-41D		No
2CC # 32	CA_7A-12A		3CC #77	3CC # 32	CA_2A-13A-48A		No	4CC # 32	CA_2A-5A-48A-66A		5CC #17	5CC # 32	CA_48E-66A		No
2CC # 33	CA_7A-13A		3CC #78	3CC # 33	CA_2A-13A-66A		4CC #12	4CC # 33	CA_2A-5A-48C		No				
2CC # 34	CA_7A-25A		3CC #79	3CC # 34	CA_2A-14A-30A		4CC #13	4CC # 34	CA_2A-5A-66A-66A		5CC #17				
2CC # 35	CA_7A-26A		3CC #75	3CC # 35	CA_2A-14A-66A		4CC #14	4CC # 35	CA_2A-5A-66B		5CC #3				
2CC # 36	CA_7A-29A	B29 SCC only	No	3CC # 36	CA_2A-29A-30A	B29 SCC only	4CC #15	4CC # 36	CA_2A-5A-66C		5CC #4				
2CC # 37	CA_7A-66A		3CC #80	3CC # 37	CA_2A-29A-66A	B29 SCC only	4CC #16	4CC # 37	CA_2A-5B-66A		No				
2CC # 38	CA_7A-71A		3CC #81	3CC # 38	CA_2A-30A-66A		4CC #17	4CC # 38	CA_2A-7A-7A-13A		5CC #18				
2CC # 39	CA_7B		No	3CC # 39	CA_2A-48A-48A		No	4CC # 39	CA_2A-7A-7A-66A		5CC #19				
2CC # 40	CA_7C		3CC #82	3CC # 40	CA_2A-48A-66A		4CC #58	4CC # 40	CA_2A-7A-12A-66A		5CC #5				
2CC # 41	CA_12A-25A		No	3CC # 41	CA_2A-48C		4CC #59	4CC # 41	CA_2A-7A-13A-66A		5CC #18				
2CC # 42	CA_12A-30A		3CC #84	3CC # 42	CA_2A-66A-66A		4CC #61	4CC # 42	CA_2A-7A-66A-66A		5CC #19				
2CC # 43	CA_12A-48A		No	3CC # 43	CA_2A-66A-71A		4CC #62	4CC # 43	CA_2A-7A-66A-71A		5CC #7				
2CC # 44	CA_12A-66A		3CC #86	3CC # 44	CA_2A-66B		4CC #63	4CC # 44	CA_2A-7C-13A		No				
2CC # 45	CA_12B		3CC #81	3CC # 45	CA_2A-66C		4CC #64	4CC # 45	CA_2A-7C-66A		5CC #20				
2CC # 46	CA_13A-48A		3CC #88	3CC # 46	CA_2C-5A		No	4CC # 46	CA_2A-12A-30A-66A		5CC #21				
2CC # 47	CA_13A-66A		3CC #90	3CC # 47	CA_2C-12A		No	4CC # 47	CA_2A-12A-66A-66A		5CC #21				
2CC # 48	CA_14A-30A		3CC #93	3CC # 48	CA_2C-29A	B29 SCC only	No	4CC # 48	CA_2A-12A-66C		No				
2CC # 49	CA_14A-66A		3CC #94	3CC # 49	CA_2C-30A		No	4CC # 49	CA_2A-13A-48C		No				
2CC # 50	CA_25A-25A		3CC #95	3CC # 50	CA_2C-66A		4CC #66	4CC # 50	CA_2A-13A-66A-66A		5CC #10				
2CC # 51	CA_25A-26A		3CC #95	3CC # 51	CA_4A-4A-5A		4CC #22	4CC # 51	CA_2A-13A-66B		No				
2CC # 52	CA_25A-41A		3CC #96	3CC # 52	CA_4A-4A-7A		No	4CC # 52	CA_2A-13A-66C		No				
2CC # 53	CA_25A-66A		3CC #79	3CC # 53	CA_4A-4A-12A		4CC #23	4CC # 53	CA_2A-14A-30A-66A		5CC #11				
2CC # 54	CA_26A-41A		No	3CC # 54	CA_4A-4A-13A		No	4CC # 54	CA_2A-14A-66A-66A		5CC #12				
2CC # 55	CA_29A-30A	B29 SCC only	3CC #99	3CC # 55	CA_4A-4A-29A	B29 SCC only	No	4CC # 55	CA_2A-29A-30A-66A	B29 SCC only	5CC #13				
2CC # 56	CA_29A-66A	B29 SCC only	3CC #100	3CC # 56	CA_4A-4A-71A		No	4CC # 56	CA_2A-29A-66A-66A	B29 SCC only	5CC #14				
2CC # 57	CA_30A-66A		3CC #101	3CC # 57	CA_4A-5B		No	4CC # 57	CA_2A-30A-66A-66A		5CC #16				
2CC # 58	CA_38C		No	3CC # 58	CA_4A-7A-7A		4CC #24	4CC # 58	CA_2A-48A-66A-66A		5CC #17				
2CC # 59	CA_41A-41A		No	3CC # 59	CA_4A-7A-12A		4CC #25	4CC # 59	CA_2A-48C-66A		5CC #23				

Index	2CC	Restriction	Completely Covered by Measurement Superset	Index	3CC	Restriction	Completely Covered by Measurement Superset	Index	4CC	Restriction	Completely Covered by Measurement Superset
2CC # 60	CA_41C		3CC #102	3CC # 60	CA_4A-7C		4CC #26	4CC # 60	CA_2A-48D		No
2CC # 61	CA_48A-48A		3CC #104	3CC # 61	CA_4A-12B		4CC #27	4CC # 61	CA_2A-66A-66A-66A		No
2CC # 62	CA_48A-66A		3CC #106	3CC # 62	CA_5A-7A-7A		4CC #68	4CC # 62	CA_2A-66A-66A-71A		No
2CC # 63	CA_48A-71A		No	3CC # 63	CA_5A-7A-66A		4CC #69	4CC # 63	CA_2A-66A-66B		No
2CC # 64	CA_48B		No	3CC # 64	CA_5A-7C		4CC #70	4CC # 64	CA_2A-66A-66C		No
2CC # 65	CA_48C		3CC #107	3CC # 65	CA_5A-30A-66A		4CC #71	4CC # 65	CA_2A-66C-71A		No
2CC # 66	CA_66A-66A		3CC #109	3CC # 66	CA_5A-48A-66A		4CC #72	4CC # 66	CA_2C-66A-66A		No
2CC # 67	CA_66A-71A		3CC #110	3CC # 67	CA_5A-48C		4CC #73	4CC # 67	CA_4A-4A-12B		No
2CC # 68	CA_66B		3CC #112	3CC # 68	CA_5A-66A-66A		4CC #69	4CC # 68	CA_5A-7A-7A-66A		No
2CC # 69	CA_66C		3CC #113	3CC # 69	CA_5A-66B		4CC #75	4CC # 69	CA_5A-7A-66A-66A		No
				3CC # 70	CA_5A-66C		4CC #76	4CC # 70	CA_5A-7C-66A		5CC #26
				3CC # 71	CA_5B-30A		No	4CC # 71	CA_5A-30A-66A-66A		No
				3CC # 72	CA_5B-66A		4CC #37	4CC # 72	CA_5A-48A-66A-66A		No
				3CC # 73	CA_7A-7A-13A		4CC #77	4CC # 73	CA_5A-48C-66A		5CC #27
				3CC # 74	CA_7A-7A-25A		4CC #78	4CC # 74	CA_5A-48D		No
				3CC # 75	CA_7A-7A-26A		No	4CC # 75	CA_5A-66A-66B		No
				3CC # 76	CA_7A-7A-66A		4CC #79	4CC # 76	CA_5A-66A-66C		No
				3CC # 77	CA_7A-12A-66A		4CC #40	4CC # 77	CA_7A-7A-13A-66A		5CC #18
				3CC # 78	CA_7A-13A-66A		4CC #77	4CC # 78	CA_7A-7A-25A-66A		No
				3CC # 79	CA_7A-25A-66A		4CC #78	4CC # 79	CA_7A-7A-66A-66A		5CC #19
				3CC # 80	CA_7A-66A-66A		4CC #79	4CC # 80	CA_7C-66A-66A		5CC #20
				3CC # 81	CA_7A-66A-71A		4CC #43	4CC # 81	CA_12A-30A-66A-66A		5CC #21
				3CC # 82	CA_7C-13A		4CC #44	4CC # 82	CA_13A-48C-66A		No
				3CC # 83	CA_7C-66A		4CC #80	4CC # 83	CA_13A-48D		5CC #28
				3CC # 84	CA_12A-30A-66A		4CC #81	4CC # 84	CA_13A-66A-66B		No
				3CC # 85	CA_12A-48C		No	4CC # 85	CA_13A-66A-66C		No
				3CC # 86	CA_12A-66A-66A		4CC #81	4CC # 86	CA_14A-30A-66A-66A		5CC #22
				3CC # 87	CA_12A-66C		4CC #48	4CC # 87	CA_25A-25A-41C		No
				3CC # 88	CA_13A-48A-66A		No	4CC # 88	CA_25A-41D		5CC #30
				3CC # 89	CA_13A-48C		4CC #82	4CC # 89	CA_29A-30A-66A-66A	B29 SCC only	No
				3CC # 90	CA_13A-66A-66A		4CC #50	4CC # 90	CA_30A-66A-66A-66A		No
				3CC # 91	CA_13A-66B		4CC #84	4CC # 91	CA_41A-41D		No
				3CC # 92	CA_13A-66C		4CC #85	4CC # 92	CA_41C-41C		No
				3CC # 93	CA_14A-30A-66A		4CC #86	4CC # 93	CA_41E		No
				3CC # 94	CA_14A-66A-66A		4CC #86	4CC # 94	CA_48A-48C-66A		No
				3CC # 95	CA_25A-25A-26A		No	4CC # 95	CA_48C-66A-66A		5CC #27
				3CC # 96	CA_25A-25A-41A		No	4CC # 96	CA_48D-66A		5CC #28
				3CC # 97	CA_25A-41C		4CC #87	4CC # 97	CA_48E		5CC #29
				3CC # 98	CA_26A-41C		No				
				3CC # 99	CA_29A-30A-66A	B29 SCC only	4CC #89				
				3CC # 100	CA_29A-66A-66A	B29 SCC only	4CC #89				
				3CC # 101	CA_30A-66A-66A		4CC #90				
				3CC # 102	CA_41A-41C		No				
				3CC # 103	CA_41D		4CC #91				
				3CC # 104	CA_48A-48A-66A		No				
				3CC # 105	CA_48A-48C		4CC #94				
				3CC # 106	CA_48A-66A-66A		No				
				3CC # 107	CA_48C-66A		4CC #95				
				3CC # 108	CA_48D		4CC #96				
				3CC # 109	CA_66A-66A-66A		4CC #90				
				3CC # 110	CA_66A-66A-71A		4CC #62				
				3CC # 111	CA_66A-66B		4CC #63				
				3CC # 112	CA_66A-66C		4CC #64				
				3CC # 113	CA_66C-71A		4CC #65				

G.2. DLCA Measured Results

2CC DLCA Measured Results

E-UTRA CA configuration	CC1 (UL)					CC2 (DL)			Aggregated BW	CA Inactive (dBm)	CA Active (dBm)	Delta	2CC #
	Mode	BW (MHz)	Channel	Freq (MHz)	RB,Offset	BW (MHz)	Channel	Freq (MHz)					
CA_2A-17A	QPSK	20	18900	1880	1,49	10	5790	740	30	22.95	22.90	-0.05	8
CA_4A-17A	QPSK	20	20050	1720	1,49	10	5790	740	30	24.09	24.09	0.00	20
CA_5A-25A	QPSK	10	20525	836.5	1,24	20	8365	1962.5	30	24.76	24.75	-0.01	24
CA_5A-38A	QPSK	10	20525	836.5	1,24	20	38000	2595	30	24.74	24.74	0.00	26
CA_5A-41A	QPSK	10	20525	836.5	1,24	20	40620	2593	30	24.75	24.77	0.02	27
CA_7A-29A	QPSK	20	21100	2535	1,49	10	9715	722.5	30	21.35	21.37	0.02	36
CA_7B	QPSK	15	21076	2532.6	1,0	5	3169	2661.9	20	21.23	21.26	0.03	39
CA_12A-25A	QPSK	10	23110	709	1,49	20	8365	1962.5	30	24.68	24.71	0.03	41
CA_12A-48A	QPSK	5	23110	709	1,24	20	55934	3619.4	25	24.10	24.09	-0.01	43
CA_26A-41A	QPSK	10	26865	831.5	1,37	20	40842	2615.2	30	24.93	24.92	-0.01	54
CA_38C	QPSK	20	37901	2585.1	1,49	20	38099	2604.9	40	22.32	22.33	0.01	58
CA_41A-41A	QPSK	20	39750	2506	1,0	20	41292	2660.2	40	22.23	22.22	-0.01	59
CA_48A-71A	QPSK	20	55990	3625	1,49	20	68786	637	40	23.40	23.37	-0.03	63
CA_48B	QPSK	10	55990	3625	1,24	10	56690	3695	20	23.54	23.55	0.01	64

3CC DLCA Measured Results

E-UTRA CA configuration	CC1 (UL)					CC2 (DL)			CC3 (DL)			Aggregated BW	CA Inactive (dBm)	CA Active (dBm)	Delta	3CC #
	Mode	BW (MHz)	Channel	Freq (MHz)	RB,Offset	BW (MHz)	Channel	Freq (MHz)	BW (MHz)	Channel	Freq (MHz)					
CA_2A-4A-13A	QPSK	20	18900	1880	1,49	20	2175	2132.5	10	5230	751	50	22.90	22.96	0.06	15
CA_2A-4A-29A	QPSK	20	18900	1880	1,49	20	2175	2132.5	10	9715	722.5	50	22.96	22.93	-0.03	16
CA_2A-4A-71A	QPSK	20	18900	1880	1,49	20	2175	2132.5	20	68761	634.5	60	22.98	22.94	-0.04	17
CA_2A-13A-48A	QPSK	20	18900	1880	1,49	10	5230	751	20	55990	3625	50	22.99	22.97	-0.02	32
CA_2A-48A-48A	QPSK	20	18900	1880	1,49	20	55934	3619.4	20	55340	3560	60	22.98	22.98	0.00	39
CA_2C-5A	QPSK	20	18801	1870.1	1,49	20	999	1969.9	10	2525	881.5	50	23.01	23.02	0.01	46
CA_2C-12A	QPSK	20	18801	1870.1	1,49	20	999	1969.9	10	5095	737.5	50	23.02	23.01	-0.01	47
CA_2C-29A	QPSK	20	18801	1870.1	1,49	20	999	1969.9	10	9715	722.5	50	23.02	23.00	-0.02	48
CA_2C-30A	QPSK	20	18801	1870.1	1,49	20	999	1969.9	10	9820	2355	50	23.04	23.02	-0.02	49
CA_4A-4A-7A	QPSK	20	20050	1720	1,49	20	2300	2145	20	2850	2630	60	24.11	24.12	0.01	52
CA_4A-4A-13A	QPSK	20	20050	1720	1,49	20	2300	2145	10	5230	751	50	24.12	24.11	-0.01	54
CA_4A-4A-29A	QPSK	20	20050	1720	1,49	20	2300	2145	10	9715	722.5	50	24.16	24.21	0.05	55
CA_4A-4A-71A	QPSK	20	20050	1720	1,49	20	2300	2145	20	68761	634.5	60	24.11	24.18	0.07	56
CA_4A-5B	QPSK	20	20050	1720	1,49	10	2476	876.6	10	2575	886.5	40	24.11	24.16	0.05	57
CA_5B-30A	QPSK	10	20476	831.6	1,24	10	2575	886.5	10	9820	2355	30	24.76	24.76	0.00	71
CA_7A-7A-26A	QPSK	20	20850	2510	1,49	20	3350	2680	15	8865	876.5	55	21.90	21.89	-0.01	75
CA_12A-48C	QPSK	10	23095	707.5	1,24	20	55934	3619.4	20	55736	3599.6	50	24.81	24.79	-0.02	85
CA_13A-48A-66A	QPSK	10	23230	782	1,24	20	55990	3625	20	66786	2145	50	24.62	24.62	0.00	88
CA_25A-25A-26A	QPSK	20	26140	1860	1,49	20	8615	1987.5	5	8865	876.5	45	22.91	22.93	0.02	95
CA_25A-25A-41A	QPSK	20	26140	1860	1,49	20	8590	1985	20	40340	2565	60	23.14	23.12	-0.02	96
CA_26A-41C	QPSK	10	26865	831.5	1,37	20	40842	2615.2	20	41040	2645	50	24.81	24.85	0.04	98
CA_41A-41C	QPSK	20	39750	2506	1,0	20	41292	2660.2	20	41490	2680	60	22.27	22.31	0.04	102
CA_48A-48A-66A	QPSK	20	55340	3560	1,49	20	56640	3690	20	66786	2145	60	23.24	23.22	-0.02	104
CA_48A-66A-66A	QPSK	20	55340	3560	1,49	20	50665	5537.5	20	66786	2145	60	23.25	23.26	0.01	106

4CC DLCA Measured Results

E-UTRA CA configuration	CC1 (UL)					CC2 (DL)			CC3 (DL)			CC4 (DL)			Aggregated BW	CA Inactive (dBm)	CA Active (dBm)	Delta
	Mode	BW (MHz)	Channel	Freq (MHz)	RB,Offset	BW (MHz)	Channel	Freq (MHz)	BW (MHz)	Channel	Freq (MHz)	BW (MHz)	Channel	Freq (MHz)				
CA_2A-2A-4A-4A	QPSK	20	18700	1860	1,49	20	1100	1980	20	2050	2120	20	2300	2145	80	23.09	23.08	-0.01
CA_2A-2A-4A-5A	QPSK	20	18900	1880	1,49	20	1100	1980	20	2175	2132.5	10	2525	881.5	70	22.97	22.99	0.02
CA_2A-2A-4A-12A	QPSK	20	18900	1880	1,49	20	1100	1980	20	2175	2132.5	10	5095	737.5	70	22.98	22.98	0.00
CA_2A-2A-12B	QPSK	20	18700	1860	1,49	20	1100	1980	5	5048	732.8	10	5120	740	55	23.02	23.02	0.00
CA_2A-4A-4A-5A	QPSK	20	18900	1880	1,49	20	2050	2120	20	2300	2145	10	2525	881.5	70	23.06	23.00	-0.06
CA_2A-4A-4A-12A	QPSK	20	18900	1880	1,49	20	2050	2120	20	2300	2145	10	5095	737.5	70	23.05	22.99	-0.06
CA_2A-4A-7A-7A	QPSK	20	18900	1880	1,49	20	2175	2132.5	20	2850	2630	20	3350	2680	80	22.99	23.00	0.01
CA_2A-4A-7A-12A	QPSK	20	18900	1880	1,49	20	2175	2132.5	20	2850	2630	10	5095	737.5	70	23.04	23.00	-0.04
CA_2A-4A-7C	QPSK	20	18900	1880	1,49	20	2175	2132.5	20	2950	2640	20	3148	2659.8	80	23.04	23.01	-0.03
CA_2A-4A-12B	QPSK	20	18900	1880	1,49	20	2175	2132.5	5	5048	732.8	10	5120	740	55	22.96	22.98	0.02
CA_2A-5A-7C	QPSK	20	18900	1880	1,49	10	2525	881.5	20	2950	2640	20	3148	2659.8	70	23.00	22.98	-0.02
CA_2A-5A-48C	QPSK	20	18900	1880	1,49	10	2525	881.5	20	55934	3619.4	20	55736	3599.6	70	22.98	22.93	-0.05
CA_2A-5B-66A	QPSK	20	18900	1880	1,49	10	2476	876.6	10	2575	886.5	20	66536	2120	60	22.97	22.99	0.02
CA_2A-7C-13A	QPSK	20	18900	1880	1,49	20	2950	2640	20	3148	2659.8	10	5230	751	70	23.01	22.99	-0.02
CA_2A-12A-66C	QPSK	20	18900	1880	1,49	10	5095	737.5	20	66787	2145.1	20	66985	2164.9	70	23.04	23.01	-0.03
CA_2A-13A-48C	QPSK	20	18900	1880	1,49	10	5230	751	20	55934	3619.4	20	55736	3599.6	70	22.97	23.00	0.03
CA_2A-13A-66B	QPSK	20	18900	1880	1,49	10	5230	751	10	66837	2150.1	10	66936	2160	50	22.98	22.97	-0.01
CA_2A-13A-66C	QPSK	20	18900	1880	1,49	10	5230	751	20	66787	2145.1	20	66985	2164.9	70	22.96	22.97	0.01
CA_2A-48D	QPSK	20	18900	1880	1,49	20	55934	3619.4	20	55736	3599.6	20	55538	3579.8	80	22.97	22.96	-0.01
CA_2A-66A-66A-66A	QPSK	20	18900	1880	1,49	20	66536	2120	20	66886	2155	20	67236	2190	80	23.04	23.00	-0.04
CA_2A-66A-66A-71A	QPSK	20	18900	1880	1,49	20	66536	2120	20	67236	2190	20	68761	634.5	80	22.99	22.96	-0.03
CA_2A-66A-66B	QPSK	20	18900	1880	1,49	20	66536	2120	10	67187	2185.1	10	67286	2195	60	22.98	22.98	0.00
CA_2A-66A-66C	QPSK	20	18900	1880	1,49	20	66536	2120	20	67038	2170.2	20	67236	2190	80	23.00	22.98	-0.02
CA_2A-66C-71A	QPSK	20	18900	1880	1,49	20	67038	2170.2	20	67236	2190	20	68761	634.5	80	22.98	23.00	0.02
CA_2C-66A-66A	QPSK	20	18801	1870.1	1,0	20	999	1969.9	20	66536	2120	20	67236	2190	80	23.03	23.03	0.00
CA_4A-4A-12B	QPSK	20	20050	1720	1,49	20	2300	2145	5	5048	732.8	10	5120	740	55	24.27	24.25	-0.02
CA_5A-7A-7A-66A	QPSK	10	20525	836.5	1,24	20	2850	2630	20	3350	2680	20	66536	2120	70	24.76	24.80	0.04
CA_5A-7A-66A-66A	QPSK	10	20525	836.5	1,24	20	2850	2630	20	66536	2120	20	67236	2190	70	24.85	24.82	-0.03
CA_5A-30A-66A-66A	QPSK	10	20525	836.5	1,24	10	9820	2355	20	66536	2120	20	67236	2190	60	24.80	24.82	0.02
CA_5A-48A-66A-66A	QPSK	10	20525	836.5	1,24	20	55934	3619.4	20	66536	2120	20	67236	2190	70	24.80	24.78	-0.02
CA_5A-48D	QPSK	10	20525	836.5	1,24	20	55934	3619.4	20	55736	3599.6	20	55538	3579.8	70	24.81	24.79	-0.02
CA_5A-66A-66B	QPSK	10	20525	836.5	1,24	20	66536	2120	10	67187	2185.1	10	67286	2195	50	24.83	24.82	-0.01
CA_5A-66A-66C	QPSK	10	20525	836.5	1,24	20	66536	2120	20	67038	2170.2	20	67236	2190	70	24.81	24.80	-0.01
CA_7A-7A-25A-66A	QPSK	20	20850	2510	1,49	20	3350	2680	20	8365	1962.5	20	66786	2145	80	21.13	21.12	-0.01
CA_13A-48C-66A	QPSK	10	23230	782	1,24	20	55934	3619.4	20	55736	3599.6	20	66536	2120	70	24.65	24.67	0.02
CA_13A-66A-66B	QPSK	10	23230	782	1,24	20	66536	2120	10	67187	2185.1	10	67286	2195	50	24.66	24.65	-0.01
CA_13A-66A-66C	QPSK	10	23230	782	1,24	20	66536	2120	20	67038	2170.2	20	67236	2190	70	24.62	24.69	0.07
CA_25A-25A-41C	QPSK	5	26665	1912.5	1,24	5	8321	1958.1	20	40842	2615.2	20	41040	2635	50	23.16	23.14	-0.02
CA_30A-66A-66A-66A	QPSK	10	27710	2310	1,24	20	66886	2155	20	66536	2120	20	67236	2190	70	21.14	21.13	-0.01
CA_41A-41D	QPSK	20	39750	2506	1,49	20	41094	2640.4	20	41292	2660.2	20	41490	2680	80	22.36	22.35	-0.01
CA_41C-41C	QPSK	20	39750	2506	1,49	20	39948	2525.8	20	41292	2660.2	20	41490	2680	80	22.39	22.41	0.02
CA_41E	QPSK	20	40224	2553.4	1,49	20	40422	2573.2	20	40620	2593	20	40818	2612.8	80	22.41	22.40	-0.01
CA_48A-48C-66A	QPSK	20	55934	3619.4	1,49	20	55538	3579.8	20	55340	3560	10	66536	2120	70	23.16	23.18	0.02

5CC DLCA Measured Results

E-UTRA CA configuration	CC1 (UL)					CC2 (DL)			CC3 (DL)			CC4 (DL)			CC5 (DL)			Aggregated BW	CA Inactive (dBm)	CA Active (dBm)	Delta
	Mode	BW (MHz)	Channel	Freq (MHz)	RB, Offset	BW (MHz)	Channel	Freq (MHz)	BW (MHz)	Channel	Freq (MHz)	BW (MHz)	Channel	Freq (MHz)	BW (MHz)	Channel	Freq (MHz)				
CA_2A-2A-5A-30A-66A	QPSK	20	18900	1880	1,49	20	1100	1980	10	2525	881.5	10	9820	2355	20	66786	2145	80	22.97	23.04	0.07
CA_2A-2A-5A-66A-66A	QPSK	20	18900	1880	1,49	20	1100	1980	10	2525	881.5	20	66536	2120	20	67236	2190	90	22.97	23.01	0.04
CA_2A-2A-5A-66B	QPSK	20	18900	1880	1,49	20	1100	1980	10	2525	881.5	10	66837	2150.1	10	66936	2160	70	22.97	23.12	0.15
CA_2A-2A-5A-66C	QPSK	20	18900	1880	1,49	20	1100	1980	10	2525	881.5	20	66787	2145.1	20	66985	2164.9	90	22.97	23.01	0.04
CA_2A-2A-7A-12A-66A	QPSK	20	18900	1880	1,49	20	1100	1980	20	2850	2630	10	5095	737.5	20	66786	2145	90	22.97	23.19	0.22
CA_2A-2A-7A-66A-66A	QPSK	20	18900	1880	1,49	20	1100	1980	20	2850	2630	20	66536	2120	20	67236	2190	100	22.97	23.06	0.09
CA_2A-2A-7A-66A-71A	QPSK	20	18900	1880	1,49	20	1100	1980	20	2850	2630	20	66536	2120	20	68786	637	100	22.97	23.03	0.06
CA_2A-2A-12A-30A-66A	QPSK	20	18700	1860	1,49	20	1100	1980	10	5095	737.5	10	9820	2355	20	66786	2145	80	23.09	23.26	0.17
CA_2A-2A-12A-66A-66A	QPSK	20	18900	1880	1,49	20	1100	1980	10	5095	737.5	20	66536	2120	20	67036	2170	90	22.97	23.10	0.13
CA_2A-2A-13A-66A-66A	QPSK	20	18900	1880	1,49	20	1100	1980	10	5230	751	20	66536	2120	20	67036	2170	90	22.97	23.18	0.21
CA_2A-2A-14A-30A-66A	QPSK	20	18700	1860	1,49	20	1100	1980	10	5330	763	10	9820	2355	20	66786	2145	80	23.09	23.15	0.06
CA_2A-2A-14A-66A-66A	QPSK	20	18900	1880	1,49	20	1100	1980	10	5330	763	20	66536	2120	20	67236	2190	90	22.97	23.07	0.10
CA_2A-2A-29A-30A-66A	QPSK	20	18900	1880	1,49	20	1100	1980	10	9715	722.5	10	9820	2355	20	66786	2145	80	22.97	23.06	0.09
CA_2A-2A-29A-66A-66A	QPSK	20	18900	1880	1,49	20	1100	1980	10	9715	722.5	20	66536	2120	20	67236	2190	90	22.97	23.21	0.24
CA_2A-5A-7A-7A-66A	QPSK	20	18900	1880	1,49	10	2525	881.5	20	3200	2665	20	2850	2630	20	66786	2145	90	22.97	23.11	0.14
CA_2A-5A-30A-66A-66A	QPSK	20	18900	1880	1,49	10	2525	881.5	10	9820	2355	20	66536	2120	20	67236	2190	80	22.97	23.15	0.18
CA_2A-5A-48A-66A-66A	QPSK	20	18900	1880	1,49	10	2525	881.5	20	55934	3619.4	20	66536	2120	20	67236	2190	90	22.97	23.00	0.03
CA_2A-7A-7A-13A-66A	QPSK	20	18900	1880	1,49	20	3200	2665	20	2850	2630	10	5230	751	20	66536	2120	90	22.97	23.10	0.13
CA_2A-7A-7A-66A-66A	QPSK	20	18900	1880	1,49	20	3200	2665	20	2850	2630	20	66536	2120	20	67236	2190	100	22.97	23.10	0.13
CA_2A-7C-66A-66A	QPSK	20	18900	1880	1,49	20	2950	2640	20	3148	2659.8	20	66536	2120	20	67236	2190	100	22.97	23.07	0.10
CA_2A-12A-30A-66A-66A	QPSK	20	18900	1880	1,49	10	5095	737.5	10	9820	2355	20	66536	2120	20	67236	2190	80	22.97	23.16	0.19
CA_2A-14A-30A-66A-66A	QPSK	20	18900	1880	1,49	10	5330	763	10	9820	2355	20	66536	2120	20	67236	2190	80	22.97	23.20	0.23
CA_2A-48C-66A-66A	QPSK	20	18900	1880	1,49	20	55934	3619.4	20	55736	3599.6	20	66536	2120	20	67236	2190	100	22.97	22.98	0.01
CA_2A-48D-66A	QPSK	20	18900	1880	1,49	20	55934	3619.4	20	55736	3599.6	20	55538	3579.8	20	66536	2120	100	22.97	22.98	0.01
CA_2A-48E	QPSK	20	18900	1880	1,49	20	55934	3619.4	20	55736	3599.6	20	55538	3579.8	20	55340	3560	100	22.97	23.04	0.07
CA_5A-7C-66A-66A	QPSK	10	20525	836.5	1,24	20	2950	2640	20	3148	2659.8	20	66536	2120	20	67236	2190	90	24.81	24.83	0.02
CA_5A-48C-66A-66A	QPSK	10	20525	836.5	1,24	20	55934	3619.4	20	55736	3599.6	20	66536	2120	20	67236	2190	90	24.81	24.96	0.15
CA_13A-48D-66A	QPSK	10	23230	782	1,24	20	55934	3619.4	20	55736	3599.6	20	55538	3579.8	20	66536	2120	90	24.65	24.87	0.22
CA_13A-48E	QPSK	10	23230	782	1,24	20	55934	3619.4	20	55736	3599.6	20	55538	3579.8	20	55340	3560	90	24.65	24.83	0.18
CA_25A-25A-41D	QPSK	20	26140	1860	1,49	20	8590	1985	20	39750	2506	20	39948	2525.8	20	40146	2545.6	100	23.14	23.21	0.07
CA_41C-41D	QPSK	20	40521	2583.1	1,0	20	40719	2602.9	20	39750	2506	20	39948	2525.8	20	40146	2545.6	100	22.39	22.47	0.08
CA_48E-66A	QPSK	20	20	55934	3619.4	20	55736	3599.6	20	55538	3579.8	20	55340	3560	20	66536	2120	100	22.41	22.53	0.12