

LTE Downlink Carrier Aggregation configurations

1. DL Inter Band(2CC)

E-UTRA CA configuration	Bandwidth Combination Set	E-UTRA Band	Bandwidth						Max Aggregated BW
			1.4 MHz	3 MHz	5 MHz	10 MHz	15 MHz	20 MHz	
2A-4A	(0)	Band 2	Yes	Yes	Yes	Yes	Yes	Yes	40
		Band 4			Yes	Yes	Yes	Yes	
	(1)	Band 2			Yes	Yes			20
		Band 4			Yes	Yes			
(2)	Band 2			Yes	Yes	Yes	Yes	40	
	Band 4			Yes	Yes	Yes	Yes		
2A-5A	(0)	Band 2			Yes	Yes	Yes	Yes	30
		Band 5			Yes	Yes			
(1)	Band 2			Yes	Yes			20	
	Band 5			Yes	Yes				
2A-7A	(0)	Band 2			Yes	Yes	Yes	Yes	40
		Band 7			Yes	Yes	Yes	Yes	
(0)	Band 2	Yes	Yes	Yes	Yes	Yes	Yes	30	
	Band 12			Yes	Yes	Yes	Yes		
2A-12A	(1)	Band 2			Yes	Yes			20
		Band 12			Yes	Yes			
(2)	Band 2			Yes	Yes	Yes	Yes	30	
	Band 12			Yes	Yes	Yes	Yes		
2A-13A	(0)	Band 2			Yes	Yes	Yes	Yes	30
		Band 13			Yes	Yes			
(1)	Band 2			Yes	Yes			20	
	Band 13			Yes	Yes				
(2)	Band 2			Yes	Yes	Yes	Yes	30	
	Band 13			Yes	Yes				
2A-14A	(0)	Band 2			Yes	Yes	Yes	Yes	30
		Band 14			Yes	Yes			
2A-29A	(0)	Band 2			Yes	Yes	Yes	Yes	30
		Band 13			Yes	Yes			
(1)	Band 2			Yes	Yes			20	
	Band 13			Yes	Yes				
(2)	Band 2			Yes	Yes	Yes	Yes	30	
	Band 2			Yes	Yes				
2A-30A	(0)	Band 2			Yes	Yes	Yes	Yes	30
2A-66A	(0)	Band 2	Yes	Yes	Yes	Yes	Yes	Yes	40
		Band 66			Yes	Yes	Yes	Yes	
(1)	Band 2			Yes	Yes			20	
	Band 66			Yes	Yes				
(2)	Band 2			Yes	Yes	Yes	Yes	40	
	Band 66			Yes	Yes	Yes	Yes		
2A-71A	(0)	Band 2			Yes	Yes	Yes	Yes	40
		Band 71			Yes	Yes	Yes	Yes	
(1)	Band 2			Yes	Yes			20	
	Band 71			Yes	Yes				
4A-5A	(0)	Band 4			Yes	Yes			20
		Band 5			Yes	Yes			
(1)	Band 4			Yes	Yes	Yes	Yes	30	
	Band 5			Yes	Yes				
4A-7A	(0)	Band 4			Yes	Yes	Yes	Yes	30
		Band 7			Yes	Yes	Yes	Yes	
(1)	Band 4			Yes	Yes	Yes	Yes	40	
	Band 7			Yes	Yes	Yes	Yes		

2. DL Inter Band(3CC)

E-UTRA CA configuration	Bandwidth Combination Set	E-UTRA Band	Bandwidth						Max Aggregated BW
			1.4 MHz	3 MHz	5 MHz	10 MHz	15 MHz	20 MHz	
2A-2A-4A	(0)	Band 2	2A-2A BCS 0						60
		Band 4			Yes	Yes	Yes	Yes	
2A-2A-5A	(0)	Band 2	2A-2A BCS 0						50
		Band 5			Yes	Yes			
2A-2A-7A	(0)	Band 2	2A-2A BCS 0						60
		Band 7			Yes	Yes	Yes	Yes	
2A-2A-12A	(0)	Band 2	2A-2A BCS 0						60
		Band 12			Yes	Yes			
2A-2A-13A	(0)	Band 2	2A-2A BCS 0						50
		Band 13			Yes	Yes			
(1)	Band 2	2A-2A BCS 0						50	
	Band 13			Yes	Yes				
2A-2A-14A	(0)	Band 2	2A-2A BCS 0						50
		Band 14			Yes	Yes			
2A-2A-29A	(0)	Band 2	2A-2A BCS 0						50
		Band 29			Yes	Yes			
2A-2A-30A	(0)	Band 2	2A-2A BCS 0						50
		Band 30			Yes	Yes			
2A-2A-66A	(0)	Band 2	2A-2A BCS 0						60
		Band 66			Yes	Yes	Yes	Yes	
2C-66A	(0)	Band 2	2C BCS 0						60
		Band 66			Yes	Yes	Yes	Yes	
2A-2A-71A	(0)	Band 2	2A-2A BCS 0						60
		Band 71			Yes	Yes	Yes	Yes	
2A-4A-4A	(0)	Band 2	2A-4A BCS 0						60
		Band 4			Yes	Yes	Yes	Yes	
2A-4A-5A	(0)	Band 2	2A-4A BCS 0						50
		Band 4			Yes	Yes	Yes	Yes	
2A-4A-7A	(0)	Band 2	2A-4A BCS 0						60
		Band 4			Yes	Yes	Yes	Yes	
2A-4A-12A	(0)	Band 2	2A-4A BCS 0						50
		Band 4			Yes	Yes	Yes	Yes	
2A-4A-13A	(0)	Band 2	2A-4A BCS 0						50
		Band 4			Yes	Yes	Yes	Yes	
2A-4A-29A	(0)	Band 2	2A-4A BCS 0						50
		Band 29			Yes	Yes	Yes	Yes	
2A-4A-30A	(0)	Band 2	2A-4A BCS 0						50
		Band 4			Yes	Yes	Yes	Yes	
2A-4A-71A	(0)	Band 2	2A-4A BCS 0						60
		Band 71			Yes	Yes	Yes	Yes	
2A-5B	(0)	Band 2	5B BCS 0						40
		Band 5			Yes	Yes	Yes	Yes	
2A-5A-7A	(0)	Band 2	2A-5A BCS 0						50
		Band 5			Yes	Yes	Yes	Yes	
2A-5A-7A	(0)	Band 2	2A-5A BCS 0						50
		Band 7			Yes	Yes	Yes	Yes	

3. DL Inter Band(4CC)

E-UTRA CA configuration	Bandwidth Combination Set	E-UTRA Band	Bandwidth						Max Aggregated BW
			1.4 MHz	3 MHz	5 MHz	10 MHz	15 MHz	20 MHz	
2A-2A-4A-4A	(0)	Band 2	2A-2A BCS 0						80
		Band 4			Yes	Yes	Yes	Yes	
2A-2A-4A-5A	(0)	Band 2	2A-2A BCS 0						70
		Band 4			Yes	Yes	Yes	Yes	
2A-2A-4A-7A	(0)	Band 2	2A-2A BCS 0						70
		Band 4			Yes	Yes	Yes	Yes	
2A-2A-4A-71A	(0)	Band 2	2A-2A BCS 0						80
		Band 4			Yes	Yes	Yes	Yes	
2A-2A-5B	(0)	Band 2	2A-2A BCS 0						60
		Band 5			Yes	Yes			
2A-2A-5A-7A	(0)	Band 2	2A-2A BCS 0						70
		Band 5			Yes	Yes	Yes	Yes	
2A-2A-5A-30A	(0)	Band 2	2A-2A BCS 0						60
		Band 5			Yes	Yes			
2A-2A-5A-66A	(0)	Band 2	2A-2A BCS 0						70
		Band 5			Yes	Yes	Yes	Yes	
2A-2A-7A-7A	(0)	Band 2	2A-2A BCS 0						80
		Band 7			Yes	Yes	Yes	Yes	
2A-2A-7C	(0)	Band 2	2A-2A BCS 0						80
		Band 7			Yes	Yes	Yes	Yes	
2A-2A-7A-12A	(0)	Band 2	2A-2A BCS 0						70
		Band 7			Yes	Yes	Yes	Yes	
2A-2A-7A-13A	(0)	Band 2	2A-2A BCS 0						70
		Band 7			Yes	Yes	Yes	Yes	
2A-2A-7A-66A	(0)	Band 2	2A-2A BCS 0						80
		Band 7			Yes	Yes	Yes	Yes	
2A-2A-12B	(0)	Band 2	2A-2A BCS 0						55
		Band 12			Yes	Yes	Yes	Yes	
2A-2A-12A-30A	(0)	Band 2	2A-2A BCS 0						60
		Band 12			Yes	Yes	Yes	Yes	
2A-2A-12A-66A	(0)	Band 2	2A-2A BCS 0						70
		Band 12			Yes	Yes	Yes	Yes	
2A-2A-13A-66A	(0)	Band 2	2A-2A BCS 0						70
		Band 13			Yes	Yes	Yes	Yes	
2A-2A-14A-30A	(0)	Band 2	2A-2A BCS 0						60
		Band 14			Yes	Yes	Yes	Yes	
2A-2A-14A-66A	(0)	Band 2	2A-2A BCS 0						70
		Band 14			Yes	Yes	Yes	Yes	

LTE Downlink Carrier Aggregation configurations (Continued)

1. DL Inter Band(2CC)

E-UTRA CA configuration	Bandwidth Combination Set	E-UTRA Band	Bandwidth					Max Aggregated BW
			1.4 MHz	3 MHz	5 MHz	10 MHz	15 MHz	
4A-12A	(0)	Band 4	Yes	Yes	Yes	Yes		20
		Band 12			Yes	Yes		
	(1)	Band 4	Yes	Yes	Yes	Yes	Yes	Yes
		Band 12			Yes	Yes		
	(2)	Band 4			Yes	Yes	Yes	Yes
		Band 12		Yes	Yes	Yes		
	(3)	Band 4			Yes	Yes		
		Band 12			Yes	Yes		
	(4)	Band 4			Yes	Yes	Yes	Yes
		Band 12			Yes	Yes		
(5)	Band 4			Yes	Yes	Yes		
	Band 12			Yes	Yes			
4A-13A	(0)	Band 4			Yes	Yes	Yes	Yes
	Band 13				Yes			
(1)	Band 4			Yes	Yes			
	Band 13				Yes			
4A-29A	(0)	Band 4			Yes	Yes		
	Band 29		Yes	Yes	Yes			
(1)	Band 4			Yes	Yes			
	Band 29			Yes	Yes			
(2)	Band 4			Yes	Yes	Yes	Yes	
	Band 29			Yes	Yes			
4A-30A	(0)	Band 4			Yes	Yes	Yes	Yes
4A-71A	(0)	Band 4			Yes	Yes	Yes	Yes
5A-7A	(0)	Band 5	Yes	Yes	Yes	Yes		
	Band 7				Yes	Yes	Yes	
(1)	Band 5			Yes	Yes			
	Band 7				Yes	Yes	Yes	
5A-25A	(0)	Band 5		Yes	Yes			
5A-30A	(0)	Band 5		Yes	Yes			
	Band 30			Yes	Yes			
5A-41A	(0)	Band 5		Yes	Yes			
5A-66A	(0)	Band 41			Yes	Yes		
	Band 66			Yes	Yes	Yes	Yes	
7A-12A	(0)	Band 7		Yes	Yes	Yes	Yes	
7A-29A	(0)	Band 7		Yes	Yes	Yes	Yes	
	Band 29			Yes	Yes			
7A-66A	(0)	Band 7		Yes	Yes	Yes	Yes	
12A-25A	(0)	Band 66		Yes	Yes	Yes	Yes	
	Band 25			Yes	Yes	Yes	Yes	
12A-30A	(0)	Band 12		Yes	Yes	Yes	Yes	
12A-66A	(0)	Band 12		Yes	Yes	Yes	Yes	
		Band 66	Yes	Yes	Yes	Yes		
	(1)	Band 12		Yes	Yes	Yes	Yes	
		Band 66	Yes	Yes	Yes	Yes	Yes	Yes
	(2)	Band 12		Yes	Yes	Yes	Yes	
		Band 66		Yes	Yes	Yes	Yes	Yes
	(3)	Band 12		Yes	Yes	Yes	Yes	
		Band 66		Yes	Yes	Yes	Yes	Yes
	(4)	Band 12		Yes	Yes	Yes	Yes	
		Band 66		Yes	Yes	Yes	Yes	Yes
(5)	Band 12		Yes	Yes	Yes	Yes		
	Band 66		Yes	Yes	Yes	Yes	Yes	

2. DL Inter Band(3CC)

E-UTRA CA configuration	Bandwidth Combination Set	E-UTRA Band	Bandwidth					Max Aggregated BW	
			1.4 MHz	3 MHz	5 MHz	10 MHz	15 MHz		20 MHz
2A-5A-30A	(0)	Band 2			Yes	Yes	Yes	Yes	
		Band 5			Yes	Yes			
		Band 30			Yes	Yes			
2A-7A-7A	(0)	Band 2			Yes	Yes	Yes	Yes	
		Band 7			7A-7A BCS 1				
2A-7C	(0)	Band 2			Yes	Yes	Yes	Yes	
		Band 7			7C BCS 1				
2A-7A-12A	(0)	Band 2			Yes	Yes	Yes	Yes	
		Band 7			Yes	Yes	Yes	Yes	
		Band 12			Yes	Yes			
2A-7A-13A	(0)	Band 2			Yes	Yes	Yes	Yes	
		Band 7			Yes	Yes	Yes	Yes	
		Band 13			Yes	Yes			
2A-7A-29A	(0)	Band 2			Yes	Yes	Yes	Yes	
		Band 7			Yes	Yes	Yes	Yes	
		Band 29			Yes	Yes			
2A-7A-66A	(0)	Band 2			Yes	Yes	Yes	Yes	
		Band 7			Yes	Yes	Yes	Yes	
		Band 66			Yes	Yes	Yes	Yes	
2A-12B	(0)	Band 2			Yes	Yes	Yes	Yes	
		Band 12			12B BCS 0				
2A-12A-30A	(0)	Band 2			Yes	Yes	Yes	Yes	
		Band 12			Yes	Yes			
		Band 30			Yes	Yes			
2A-12A-66A	(0)	Band 2			Yes	Yes	Yes	Yes	
		Band 12			Yes	Yes	Yes	Yes	
		Band 66			Yes	Yes	Yes	Yes	
2A-13A-66A	(0)	Band 2			Yes	Yes	Yes	Yes	
		Band 13			Yes	Yes			
		Band 66			Yes	Yes	Yes	Yes	
2A-14A-30A	(0)	Band 2			Yes	Yes	Yes	Yes	
		Band 13			Yes	Yes			
		Band 66			Yes	Yes	Yes	Yes	
2A-14A-66A	(0)	Band 2			Yes	Yes	Yes	Yes	
		Band 14			Yes	Yes			
		Band 66			Yes	Yes	Yes	Yes	
2A-29A-30A	(0)	Band 2			Yes	Yes	Yes	Yes	
		Band 29			Yes	Yes			
		Band 30			Yes	Yes			
2A-29A-66A	(0)	Band 2			Yes	Yes	Yes	Yes	
		Band 29			Yes	Yes			
		Band 66			Yes	Yes	Yes	Yes	
2A-30A-66A	(0)	Band 2			Yes	Yes	Yes	Yes	
		Band 30			Yes	Yes			
		Band 66			Yes	Yes	Yes	Yes	
2A-66A-66A	(0)	Band 2			66A-66A BCS 0				
		Band 66			Yes	Yes	Yes	Yes	
2A-66B	(0)	Band 2			66B BCS 0				
		Band 66			Yes	Yes	Yes	Yes	
2A-66C	(0)	Band 2			66C BCS 0				
		Band 66			Yes	Yes	Yes	Yes	
2A-66A-71A	(0)	Band 2			Yes	Yes	Yes	Yes	
		Band 66			Yes	Yes	Yes	Yes	
		Band 71			Yes	Yes	Yes	Yes	
4A-4A-5A	(0)	Band 4			4A-4A BCS 0				
		Band 5			Yes	Yes			
4A-4A-7A	(0)	Band 4			4A-4A BCS 1				
		Band 5			Yes	Yes			
		Band 7			Yes	Yes			
(1)	Band 4			4A-4A BCS 0					
	Band 5			Yes	Yes				

3. DL Inter Band(4CC)

E-UTRA CA configuration	Bandwidth Combination Set	E-UTRA Band	Bandwidth					Max Aggregated BW
			1.4 MHz	3 MHz	5 MHz	10 MHz	15 MHz	
2A-2A-29A-30	(0)	Band 2			2A-2A BCS 0			
		Band 29			Yes	Yes		
		Band 30			Yes	Yes		
2A-2A-29A-66A	(0)	Band 2			2A-2A BCS 0			
		Band 29			Yes	Yes		
		Band 66			Yes	Yes	Yes	Yes
2A-2A-30A-66A	(0)	Band 2			2A-2A BCS 0			
		Band 30			Yes	Yes		
		Band 66			Yes	Yes	Yes	Yes
2A-2A-66A-66A	(0)	Band 2			2A-2A BCS 0			
		Band 66			66A-66A BCS 0			
		Band 66			Yes	Yes	Yes	Yes
2A-2A-66B	(0)	Band 2			2A-2A BCS 0			
		Band 66			66B BCS 0			
		Band 66			Yes	Yes	Yes	Yes
2A-2A-66C	(0)	Band 2			2A-2A BCS 0			
		Band 66			66C BCS 0			
		Band 66			Yes	Yes	Yes	Yes
2C-66A-66A	(0)	Band 2			2C BCS 0			
		Band 66			66A-66A BCS 0			
		Band 66			Yes	Yes	Yes	Yes
2A-2A-66A-71A	(0)	Band 2			2A-2A BCS 0			
		Band 66			Yes	Yes	Yes	Yes
		Band 71			Yes	Yes	Yes	Yes
2A-4A-4A-5A	(0)	Band 2			Yes	Yes	Yes	Yes
		Band 4			4A-4A BCS 0			
		Band 5			Yes	Yes		
2A-4A-4A-12A	(0)	Band 2			Yes	Yes	Yes	Yes
		Band 4			4A-4A BCS 0			
		Band 12			Yes	Yes		
2A-4A-5B	(0)	Band 2			Yes	Yes	Yes	Yes
		Band 4			Yes	Yes	Yes	Yes
		Band 5			5B BCS 0			
2A-4A-5A-30A	(0)	Band 2			Yes	Yes	Yes	Yes
		Band 4			Yes	Yes	Yes	Yes
		Band 5			Yes	Yes		
2A-4A-7A-7A	(0)	Band 2			Yes	Yes	Yes	Yes
		Band 4			Yes	Yes	Yes	Yes
		Band 7			7A-7A BCS 1			
2A-4A-7C	(0)	Band 2			Yes	Yes	Yes	Yes
		Band 4			Yes	Yes	Yes	Yes
		Band 7			7C BCS 1			
2A-4A-7A-12A	(0)	Band 2			Yes	Yes	Yes	Yes
		Band 4			Yes	Yes	Yes	Yes
		Band 7			Yes	Yes	Yes	Yes
2A-4A-12B	(0)	Band 2			Yes	Yes	Yes	Yes
		Band 4			Yes	Yes	Yes	Yes
		Band 12			12B BCS 0			
2A-4A-12A-30A	(0)	Band 2			Yes	Yes	Yes	Yes
		Band 4			Yes	Yes	Yes	Yes
		Band 12			Yes	Yes	Yes	Yes
2A-4A-29A-30A	(0)	Band 2			Yes	Yes	Yes	Yes
		Band 4			Yes	Yes	Yes	Yes
		Band 29			Yes	Yes	Yes	Yes
2A-5B-30A	(0)	Band 2			Yes	Yes	Yes	Yes
		Band 5			5B BCS 0			
		Band 30			Yes	Yes		
2A-5B-66A	(0)	Band 2			Yes	Yes	Yes	Yes
		Band 5			5B BCS 0			
		Band 66			Yes	Yes	Yes	Yes

LTE Downlink Carrier Aggregation configurations (Continued)

1. DL Inter Band(2CC)

E-UTRA CA configuration	Bandwidth Combination Set	E-UTRA Band	Bandwidth						Max Aggregated BW
			1.4 MHz	3 MHz	5 MHz	10 MHz	15 MHz	20 MHz	
13A-66A	(0)	Band 13			Yes	Yes			30
		Band 66			Yes	Yes	Yes	Yes	
14A-30A	(0)	Band 14			Yes	Yes			20
		Band 30			Yes	Yes			
14A-66A	(0)	Band 14			Yes	Yes			30
		Band 66			Yes	Yes	Yes	Yes	
25A-26A	(0)	Band 25		Yes	Yes	Yes	Yes	Yes	35
		Band 26	Yes	Yes	Yes	Yes	Yes	Yes	
	(1)	Band 25		Yes	Yes	Yes			20
		Band 26	Yes	Yes	Yes				
(2)	Band 25		Yes	Yes				20	
	Band 26		Yes	Yes					
25A-41A	(0)	Band 25		Yes	Yes	Yes	Yes	40	
25A-66A	(0)	Band 25		Yes	Yes	Yes	Yes	40	
		Band 66		Yes	Yes	Yes	Yes		
26A-41A	(0)	Band 26		Yes	Yes	Yes		35	
29A-30A	(0)	Band 29		Yes	Yes			20	
		Band 30		Yes	Yes				
29A-66A	(0)	Band 29		Yes	Yes			30	
		Band 66		Yes	Yes	Yes	Yes		
30A-66A	(0)	Band 30		Yes	Yes			30	
		Band 66		Yes	Yes	Yes	Yes		
66A-71A	(0)	Band 66		Yes	Yes	Yes	Yes	40	
		Band 71		Yes	Yes	Yes	Yes		

2. DL Inter Band(3CC)

E-UTRA CA configuration	Bandwidth Combination Set	E-UTRA Band	Bandwidth						Max Aggregated BW
			1.4 MHz	3 MHz	5 MHz	10 MHz	15 MHz	20 MHz	
4A-4A-12A	(0)	Band 4	4A-4A BCS 0						50
		Band 12			Yes	Yes			
4A-4A-13A	(0)	Band 4	4A-4A BCS 0						50
		Band 12				Yes			
4A-4A-29A	(0)	Band 4	4A-4A BCS 0						50
		Band 12			Yes	Yes			
4A-4A-71A	(0)	Band 4	4A-4A BCS 0						50
		Band 71			Yes	Yes	Yes	Yes	
4A-5B	(0)	Band 4	5B BCS 0						40
		Band 5			Yes	Yes	Yes	Yes	
4A-7A-7A	(0)	Band 4	7A-7A BCS 1						60
		Band 7			Yes	Yes	Yes	Yes	
4A-7C	(0)	Band 4	7C BCS 1						60
		Band 7			Yes	Yes	Yes	Yes	
4A-7A-12A	(0)	Band 4	12B BCS 0						40
		Band 7			Yes	Yes	Yes	Yes	
4A-12B	(0)	Band 4	12B BCS 0						35
		Band 12			Yes	Yes	Yes	Yes	
4A-12A-30A	(0)	Band 4	12B BCS 0						40
		Band 12			Yes	Yes	Yes	Yes	
4A-29A-30A	(0)	Band 30	12B BCS 0						40
		Band 4			Yes	Yes	Yes	Yes	
5B-30A	(0)	Band 29	5B BCS 0						30
		Band 30			Yes	Yes			
5A-5A-66A	(0)	Band 5	5A-5A BCS 0						40
		Band 66			Yes	Yes	Yes	Yes	
5B-66A	(0)	Band 5	5B BCS 0						40
		Band 66			Yes	Yes	Yes	Yes	
5A-7A-7A	(0)	Band 5	7A-7A BCS 3						50
		Band 7			Yes	Yes			
5A-7C	(0)	Band 5	7C BCS 1						50
		Band 7			Yes	Yes			
5A-7A-66A	(0)	Band 5	7C BCS 1						50
		Band 66			Yes	Yes	Yes	Yes	
5A-30A-66A	(0)	Band 5	66A-66A BCS 0						40
		Band 30			Yes	Yes			
5A-66A-66A	(0)	Band 5	66A-66A BCS 0						50
		Band 66			Yes	Yes	Yes	Yes	
5A-66B	(0)	Band 5	66B BCS 0						30
		Band 66			Yes	Yes			
5A-66C	(0)	Band 5	66C BCS 0						50
		Band 66			Yes	Yes			
7A-7A-13A	(0)	Band 7	7A-7A BCS 1						50
		Band 13			Yes	Yes			
7C-13A	(0)	Band 7	7C BCS 1						50
		Band 13			Yes	Yes			
7C-25A	(0)	Band 7	7C BCS 1						60
		Band 25	Yes	Yes	Yes	Yes	Yes	Yes	
7A-7A-29A	(0)	Band 7	7A-7A BCS 1						50
		Band 29			Yes	Yes			
7C-29A	(0)	Band 7	7C BCS 2						50
		Band 29			Yes	Yes			
7A-7A-66A	(0)	Band 7	7A-7A BCS 1						60
		Band 66			Yes	Yes	Yes	Yes	

3. DL Inter Band(4CC)

E-UTRA CA configuration	Bandwidth Combination Set	E-UTRA Band	Bandwidth						Max Aggregated BW
			1.4 MHz	3 MHz	5 MHz	10 MHz	15 MHz	20 MHz	
2A-5A-7A-7A	(0)	Band 2	7A-7A BCS 1						70
		Band 5			Yes	Yes	Yes	Yes	
2A-5A-7A-7A	(0)	Band 7	7A-7A BCS 1						70
		Band 2			Yes	Yes	Yes	Yes	
2A-5A-7A-66A	(0)	Band 5	7A-7A BCS 1						70
		Band 7			Yes	Yes	Yes	Yes	
2A-5A-30A-66A	(0)	Band 2	7A-7A BCS 1						60
		Band 5			Yes	Yes	Yes	Yes	
2A-5A-30A-66A	(0)	Band 30	7A-7A BCS 1						60
		Band 66			Yes	Yes	Yes	Yes	
2A-5A-66A-66A	(0)	Band 2	66A-66A BCS 0						70
		Band 5			Yes	Yes	Yes	Yes	
2A-5A-66B	(0)	Band 2	66B BCS 0						50
		Band 5			Yes	Yes	Yes	Yes	
2A-5A-66C	(0)	Band 2	66C BCS 0						70
		Band 5			Yes	Yes	Yes	Yes	
2A-7A-7A-13A	(0)	Band 2	7A-7A BCS 1						70
		Band 7			Yes	Yes	Yes	Yes	
2A-7C-13A	(0)	Band 2	7C BCS 1						70
		Band 13			Yes	Yes	Yes	Yes	
2A-7A-7A-29A	(0)	Band 2	7A-7A BCS 1						70
		Band 7			Yes	Yes	Yes	Yes	
2A-7C-29A	(0)	Band 2	7C BCS 1						70
		Band 7			Yes	Yes	Yes	Yes	
2A-7A-7A-66A	(0)	Band 2	7C BCS 1						80
		Band 7			Yes	Yes	Yes	Yes	
2A-7C-66A	(0)	Band 2	7C BCS 1						80
		Band 66			Yes	Yes	Yes	Yes	
2A-7A-12B	(0)	Band 2	12B BCS 0						55
		Band 7			Yes	Yes	Yes	Yes	
2A-7A-12A-66A	(0)	Band 2	12B BCS 0						70
		Band 7			Yes	Yes	Yes	Yes	
2A-7A-13A-66A	(0)	Band 12	7A-7A BCS 1						70
		Band 66			Yes	Yes	Yes	Yes	
2A-7A-29A-66A	(0)	Band 2	7A-7A BCS 1						70
		Band 7			Yes	Yes	Yes	Yes	
2A-7A-66A-66A	(0)	Band 2	66A-66A BCS 0						80
		Band 66			Yes	Yes	Yes	Yes	

LTE Downlink Carrier Aggregation configurations (Continued)

2. DL Inter Band(3CC)								
E-UTRA CA configuration	Bandwidth Combination Set	E-UTRA Band	Bandwidth					Max Aggregated BW
			1.4 MHz	3 MHz	5 MHz	10 MHz	15 MHz	
7C-66A	(0)	Band 7	7C BCS 1					60
		Band 66	Yes	Yes	Yes	Yes	Yes	
7A-12B	(0)	Band 7	Yes	Yes	Yes	Yes	Yes	35
		Band 12	12B BCS 0					
7A-12A-66A	(0)	Band 7	Yes	Yes	Yes	Yes	50	
		Band 12	Yes	Yes	Yes	Yes		
7A-29A-66A	(0)	Band 7	Yes	Yes	Yes	Yes	50	
		Band 29	Yes	Yes	Yes	Yes		
7A-66A-66A	(0)	Band 7	Yes	Yes	Yes	Yes	60	
		Band 66	66A-66A BCS 0					
12B-66A	(0)	Band 12	12B BCS 0					35
		Band 66	Yes	Yes	Yes	Yes		
12A-30A-66A	(0)	Band 12	Yes	Yes	Yes	Yes	40	
		Band 30	Yes	Yes	Yes	Yes		
12A-66A-66A	(0)	Band 12	Yes	Yes	Yes	Yes	50	
		Band 66	66A-66A BCS 0					
12A-66C	(0)	Band 12	Yes	Yes	Yes	Yes	50	
		Band 66	66C BCS 0					
13A-66A-66A	(0)	Band 13	Yes	Yes	Yes	Yes	50	
		Band 66	66A-66A BCS 0					
13A-66B	(0)	Band 13	Yes	Yes	Yes	Yes	30	
		Band 66	66B BCS 0					
13A-66C	(0)	Band 13	Yes	Yes	Yes	Yes	50	
		Band 66	66C BCS 0					
14A-30A-66A	(0)	Band 14	Yes	Yes	Yes	Yes	40	
		Band 30	Yes	Yes	Yes	Yes		
14A-66A-66A	(0)	Band 13	Yes	Yes	Yes	Yes	50	
		Band 66	66A-66A BCS 0					
25A-25A-26A	(0)	Band 25	25A-25A BCS 1					45
		Band 26	Yes	Yes	Yes	Yes		
25A-25A-66A	(0)	Band 25	25A-25A BCS 1					60
		Band 66	Yes	Yes	Yes	Yes		
25A-25A-41A	(0)	Band 25	25A-25A BCS 1					60
		Band 41	Yes	Yes	Yes	Yes		
25A-26A-41A	(0)	Band 25	Yes	Yes	Yes	Yes	55	
		Band 41	Yes	Yes	Yes	Yes		

3. DL Inter Band(4CC)								
E-UTRA CA configuration	Bandwidth Combination Set	E-UTRA Band	Bandwidth					Max Aggregated BW
			1.4 MHz	3 MHz	5 MHz	10 MHz	15 MHz	
2A-12B-66A	(0)	Band 2	Yes	Yes	Yes	Yes	55	
		Band 12	12B BCS 0					
2A-12A-30A-66A	(0)	Band 2	Yes	Yes	Yes	Yes	60	
		Band 12	Yes	Yes	Yes	Yes		
2A-12A-66A-66A	(0)	Band 2	Yes	Yes	Yes	Yes	70	
		Band 12	Yes	Yes	Yes	Yes		
2A-12A-66C	(0)	Band 2	66A-66A BCS 0					70
		Band 66	Yes	Yes	Yes	Yes		
2A-13A-66A-66A	(0)	Band 2	66C BCS 0					70
		Band 66	Yes	Yes	Yes	Yes		
2A-13A-66B	(0)	Band 2	Yes	Yes	Yes	Yes	50	
		Band 13	Yes	Yes	Yes	Yes		
2A-13A-66C	(0)	Band 2	Yes	Yes	Yes	Yes	70	
		Band 13	Yes	Yes	Yes	Yes		
2A-14A-30A-66A	(0)	Band 2	Yes	Yes	Yes	Yes	60	
		Band 14	Yes	Yes	Yes	Yes		
2A-14A-66A-66A	(0)	Band 2	Yes	Yes	Yes	Yes	70	
		Band 14	Yes	Yes	Yes	Yes		
2A-29A-30A-66A	(0)	Band 2	Yes	Yes	Yes	Yes	60	
		Band 29	Yes	Yes	Yes	Yes		
2A-29A-66A-66A	(0)	Band 2	Yes	Yes	Yes	Yes	70	
		Band 29	Yes	Yes	Yes	Yes		
2A-30A-66A-66A	(0)	Band 2	Yes	Yes	Yes	Yes	70	
		Band 30	Yes	Yes	Yes	Yes		
2A-66A-66A-66A	(0)	Band 2	66A-66A BCS 0					80
		Band 66	Yes	Yes	Yes	Yes		

3. DL Inter Band(4CC)								
E-UTRA CA configuration	Bandwidth Combination Set	E-UTRA Band	Bandwidth					Max Aggregated BW
			1.4 MHz	3 MHz	5 MHz	10 MHz	15 MHz	
5A-7C-66A	(0)	Band 5	Yes	Yes	Yes	Yes	70	
		Band 7	7C BCS 1					
5A-7A-66A-66A	(0)	Band 5	Yes	Yes	Yes	Yes	70	
		Band 7	Yes	Yes	Yes	Yes		
5A-30A-66A-66A	(0)	Band 5	66A-66A BCS 0					60
		Band 30	Yes	Yes	Yes	Yes		
7A-7A-13A-66A	(0)	Band 7	66A-66A BCS 0					70
		Band 13	7A-7A BCS 1					
7C-13A-66A	(0)	Band 7	7C BCS 1					70
		Band 13	Yes	Yes	Yes	Yes		
7A-7A-25A-25A	(0)	Band 7	7A-7A BCS 1					80
		Band 25	25A-25A BCS 1					
7C-25A-25A	(0)	Band 7	7C BCS 1					80
		Band 25	25A-25A BCS 1					
7A-7A-25A-66A	(0)	Band 7	7A-7A BCS 1					80
		Band 25	Yes	Yes	Yes	Yes		
7C-25A-66A	(0)	Band 7	7C BCS 1					80
		Band 25	Yes	Yes	Yes	Yes		
7A-7A-29A-66A	(0)	Band 7	7A-7A BCS 1					70
		Band 29	Yes	Yes	Yes	Yes		
7C-29A-66A	(0)	Band 7	7C BCS 2					70
		Band 29	Yes	Yes	Yes	Yes		
7A-7A-66A-66A	(0)	Band 7	7A-7A BCS 1					80
		Band 66	66A-66A BCS 0					
7C-66A-66A	(0)	Band 7	7C BCS 1					80
		Band 66	66A-66A BCS 0					
7A-12A-66A-66A	(0)	Band 7	Yes	Yes	Yes	Yes	70	
		Band 12	Yes	Yes	Yes	Yes		
7A-12B-66A	(0)	Band 7	66A-66A BCS 0					55
		Band 12	12B BCS 0					

**LTE Downlink Carrier Aggregation Combinations**

**2. DL Inter Band(3CC)**

E-UTRA CA configuration	Bandwidth Combination Set	E-UTRA Band	Bandwidth						Max Aggregated BW
			1.4 MHz	3 MHz	5 MHz	10 MHz	15 MHz	20 MHz	
25A-41C	(0)	Band 25			Yes	Yes	Yes	Yes	60
		Band 41	41C BCS 1						
26A-41C	(0)	Band 26	Yes	Yes	Yes	Yes		55	
		Band 41	41C BCS 1						
29A-30A-66A	(0)	Band 29			Yes	Yes		40	
		Band 30			Yes	Yes			
29A-66A-66A	(0)	Band 29	Yes	Yes	Yes	Yes	Yes	50	
		Band 66	66A-66A BCS 0						
30A-66A-66A	(0)	Band 30			Yes	Yes		50	
		Band 66	66A-66A BCS 0						
66A-66A-71A	(0)	Band 66	66A-66A BCS 0						60
		Band 71	Yes		Yes	Yes	Yes	Yes	
66C-71A	(0)	Band 66	66C BCS 0						60
		Band 71	Yes		Yes	Yes	Yes	Yes	

**3. DL Inter Band(4CC)**

E-UTRA CA configuration	Bandwidth Combination Set	E-UTRA Band	Bandwidth						Max Aggregated BW
			1.4 MHz	3 MHz	5 MHz	10 MHz	15 MHz	20 MHz	
2A-66A-66B	(0)	Band 2			Yes	Yes	Yes	Yes	60
		Band 66	66A-66B BCS 0						
2A-66C-71A	(0)	Band 2	Yes	Yes	Yes	Yes	Yes	80	
		Band 66	66C BCS 0						
4A-4A-5B	(0)	Band 4			Yes	Yes	Yes	60	
		Band 5	4A-4A BCS 0						
4A-4A-12B	(0)	Band 4			Yes	Yes	Yes	55	
		Band 12	4A-4A BCS 0						
5B-30A-66A	(0)	Band 5			Yes	Yes		50	
		Band 66	5B BCS 0						
5A-5A-66A-66A	(0)	Band 5			Yes	Yes	Yes	60	
		Band 66	66A-66A BCS 0						
5A-5A-66B	(0)	Band 5			Yes	Yes		40	
		Band 66	5A-5A BCS 0						
5A-5A-66C	(0)	Band 5			Yes	Yes	Yes	60	
		Band 66	66B BCS 0						
5B-66A-66A	(0)	Band 5			Yes	Yes		60	
		Band 66	5B BCS 0						
5B-66B	(0)	Band 5			Yes	Yes		40	
		Band 66	66A-66A BCS 0						
5B-66C	(0)	Band 5			Yes	Yes		60	
		Band 66	5B BCS 0						
5A-7A-7A-66A	(0)	Band 5			Yes	Yes		70	
		Band 7	7A-7A BCS 1						
5A-7A-7A-66A	(0)	Band 66			Yes	Yes	Yes	70	
		Band 7	66C BCS 0						

**3. DL Inter Band(4CC)**

E-UTRA CA configuration	Bandwidth Combination Set	E-UTRA Band	Bandwidth						Max Aggregated BW
			1.4 MHz	3 MHz	5 MHz	10 MHz	15 MHz	20 MHz	
7A-25A-25A-66A	(0)	Band 7			Yes	Yes	Yes	Yes	80
		Band 25	25A-25A BCS 1						
12B-66A-66A	(0)	Band 66	Yes	Yes	Yes	Yes	Yes	Yes	55
		Band 12	12B BCS 0						
12A-30A-66A-66A	(0)	Band 66	66A-66A BCS 0						60
		Band 12			Yes	Yes			
13A-66A-66B	(0)	Band 13			Yes	Yes		50	
		Band 66	66A-66B BCS 0						
13A-66A-66C	(0)	Band 13			Yes	Yes		70	
		Band 66	66A-66C BCS 0						
13A-66D	(0)	Band 13			Yes	Yes		70	
		Band 66	66D BCS 0						
14A-30A-66A-66A	(0)	Band 14			Yes	Yes		60	
		Band 30			Yes	Yes			
25A-25A-41C	(0)	Band 66	66A-66A BCS 0						80
		Band 25	25A-25A BCS 1						
25A-26A-41C	(0)	Band 41	41C BCS 0						75
		Band 25	Yes	Yes	Yes	Yes	Yes	Yes	
25A-41D	(0)	Band 26	Yes	Yes	Yes	Yes	Yes	80	
		Band 41	41C BCS 0						
29A-30A-66A-66A	(0)	Band 25			Yes	Yes	Yes	60	
		Band 41	41C BCS 0						
29A-30A-66A-66A	(0)	Band 29			Yes	Yes		60	
		Band 30			Yes	Yes			
29A-30A-66A-66A	(0)	Band 66	66A-66A BCS 0						60
		Band 30			Yes	Yes			

LTE Uplink / Downlink Carrier Aggregation Intra-band configurations

4 DL Intra Band(non-contiguous)

E-UTRA CA configuration	Bandwidth Combination Set	E-UTRA Band	Allowed Channel BW Per Carrier (MHz)				Max Aggregated BW
			1st Carrier	2nd Carrier	3rd Carrier	4th Carrier	
2A-2A	(0)	Band 2	5, 10, 15, 20	5, 10, 15, 20			40
4A-4A	(0)	Band 4	5, 10, 15, 20	5, 10, 15, 20			40
	(1)	Band 4	5, 10	5, 10			20
5A-5A	(0)	Band 5	5, 10	5, 10			20
	(1)	Band 5	3	5			8
7A-7A	(0)	Band 7	5	15			40
			10	10, 15			40
			15	15, 20			40
			20	20			40
	(1)	Band 7	5, 10, 15, 20	5, 10, 15, 20			40
	(2)	Band 7	5, 10, 15, 20	5, 10			40
25A-25A	(0)	Band 25	5, 10	5, 10			20
	(1)	Band 25	5, 10, 15, 20	5, 10, 15, 20			40
41A-41A	(0)	Band 41	10, 15, 20	10, 15, 20			40
	(1)	Band 41	5, 10, 15, 20	5, 10, 15, 20			40
66A-66A	(0)	Band 66	5, 10, 15, 20	5, 10, 15, 20			40
41A-41C	(0)	Band 41	5, 10, 15, 20	41C BCS 1			60
			41C BCS 1	5, 10, 15, 20			60
41D	(0)	Band 41	10	20	15		60
			10	15, 20	20		
			15	20	10, 15		
			15	10, 15, 20	20		
			20	15, 20	10		
			20	10, 15, 20	15, 20		
66A-66A-66A	(0)	Band 66	5, 10, 15, 20	5, 10, 15, 20	5, 10, 15, 20		60
66A-66B	(0)	Band 66	5, 10, 15, 20	66B BCS 0			40
			66B BCS 0	5, 10, 15, 20			40
66C-66B	(0)	Band 66	5, 10, 15, 20	66C BCS 0			60
			66C BCS 0	5, 10, 15, 20			60
41A-41D	(0)	Band 41	5, 10, 15, 20	41D BCS 0			80
			41D BCS 0	5, 10, 15, 20			80
41C-41C	(0)	Band 41	41C BCS 0	41C BCS 0			80

5. DL Intra Band(contiguous)

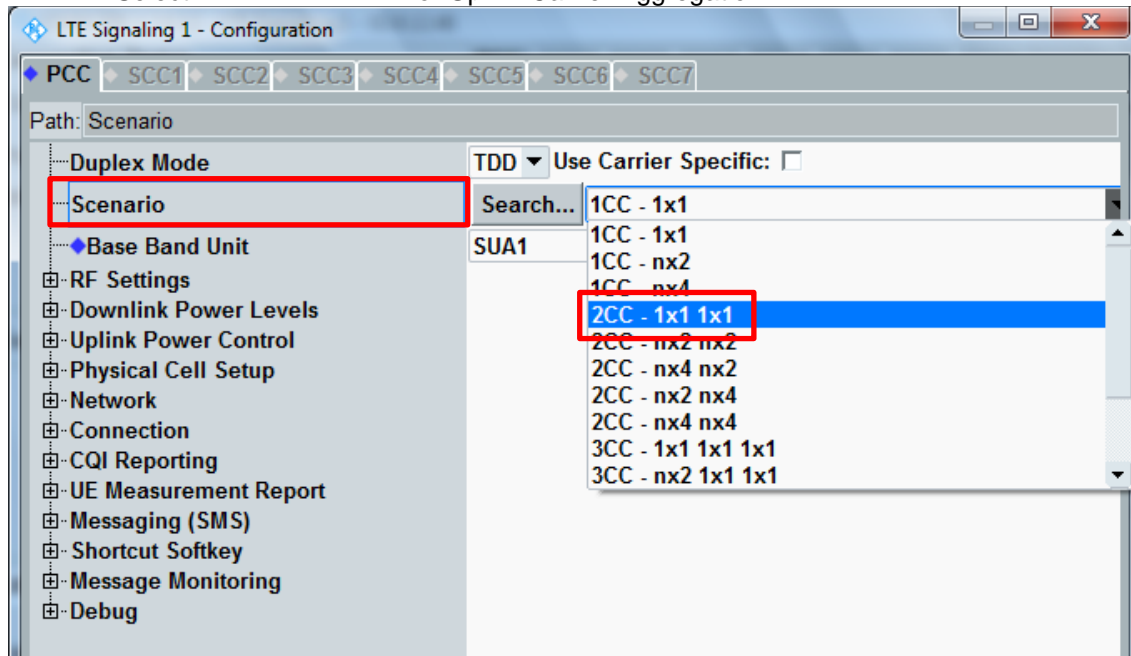
E-UTRA CA configuration	Bandwidth Combination Set	E-UTRA Band	Allowed Channel BW Per Carrier (MHz)					Max Aggregated BW
			1st Carrier	2nd Carrier	3rd Carrier	4th Carrier	5th Carrier	
2C	(0)	Band 2	5	20				40
			10	15, 20				
			15	10, 15, 20				
			20	5, 10, 15, 20				
5B	(0)	Band 5	5, 10	10				20
	(1)	Band 5	10	5				8
7C	(0)	Band 7	15	15				40
			20	20				
	(1)	Band 7	10	20				40
			15	15, 20				
			20	10, 15, 20				
			15	10, 15				
(2)	Band 7	20	15, 20				40	
		20	15, 20					
12B	(0)	Band 12	5	5, 10				15
41C	(0)	Band 41	10	20				40
			15	15, 20				
			20	10, 15, 20				
	(1)	Band 41	5, 10	20				40
			15	15, 20				
			20	5, 10, 15, 20				
			10	15, 20				
	(2)	Band 41	15	10, 15, 20				40
			20	10, 15, 20				
			20	10, 15, 20				
(3)	Band 41	10	20				40	
		20	20					
66B	(0)	Band 66	5	5, 10, 15				20
			10	5, 10				
66C	(0)	Band 66	20	5, 10, 15, 20				40
			5	20				
			10	15, 20				
			15	10, 15, 20				
			15	10, 15, 20				
66D	(0)	Band 66	20	5, 10, 15, 20				60
			5	20	20			
			20	5	20			
			20	20	5			
			10	20	15			
			15	20	10			
			10, 15, 20	15, 20	20			
			15, 20	10	20			
			15	15, 20	15			
			20	15, 20	10, 15			
			20	10	15			
41E	(0)	Band 41	15, 20	15, 20	15, 20	20		80

**Note:**

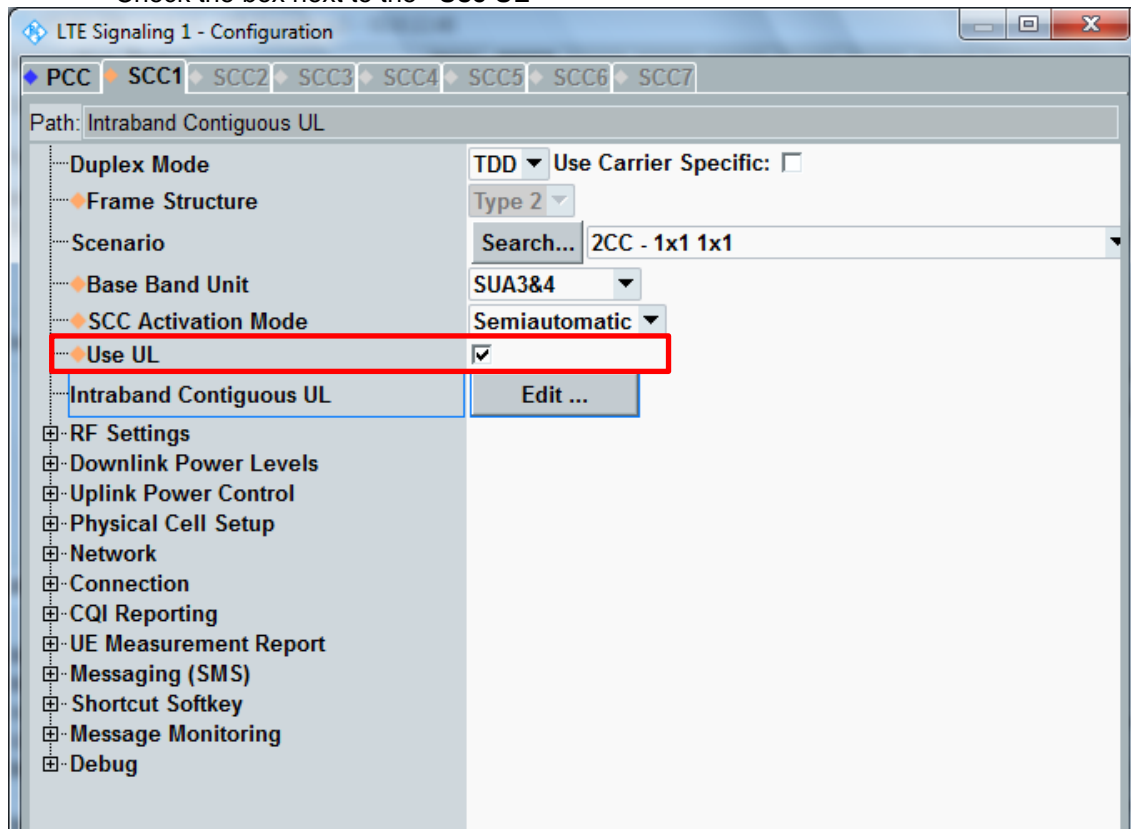
LTE CA\_5B, 41C, 66B, 66C are supported in both Uplink and Downlink, other CA configurations are supported only Downlink

**LTE Uplink Carrier Aggregation – Output Power measurement procedures**

- Change the Scenario in the Configuration of LTE Signaling  
Select **“2CC – 1x1 1x1”** for Uplink Carrier Aggregation



- Check the box next to the **“Use UL”**



- Back to the LTE Signal screen, and then select the PCC tab, Set operating band, BW, channel and RB configurations for PCC

CMW 500 V 3.8.12 - LTE Signaling 1 - X3.8.12.48

Connection Status: PCC (selected), SCC1, SCC2, SCC3, SCC4, SCC5, SCC6, SCC7

Cell:

Packet Switched: ON

RRC State: Idle

SCC1 State: OFF

Event Log: 06:13:39 State 'Cell On', 2CC 1x1 1x1; 06:13:21 Signaling Unit Startup; 06:13:21 Data end to end enabled; 06:13:20 Starting Data Application Unit

Operating Band: Band 41

Downlink: Channel 40620 Ch, Frequency 2593.0 MHz, Cell Bandwidth 20.0 MHz, RS EPRE -85.0 dBm/15kHz

Uplink: Channel 40620 Ch, Frequency 2593.0 MHz, Cell Bandwidth 20.0 MHz, RS EPRE -85.0 dBm/15kHz

Full Cell BW Pow. -54.2 dBm

PUSCH Open Loop Nom.Power 23 dBm

PUSCH Closed Loop Target Power 24.0 dBm

Sched. User def. Channels

# RB: 100

Start RB: 0

Mod / TBSI: QPSK 5

Code Rate / TBS: 0.328 8760 0.583 144

Throughput: 3.478 Mbit/s (DL), 0.057 Mbit/s (UL)

64/256-QAM

Downlink Multicenter  Uplink Multicenter

LTE Signaling: ON

- Select the SCC1 tab, Set operating band, BW, channel, and RB configurations for SCC1

CMW 500 V 3.8.12 - LTE Signaling 1 - X3.8.12.48

Connection Status: PCC, SCC1 (selected), SCC2, SCC3, SCC4, SCC5, SCC6, SCC7

Cell:

Packet Switched: ON

RRC State: Idle

SCC1 State: OFF

Event Log: 06:13:39 State 'Cell On', 2CC 1x1 1x1; 06:13:21 Signaling Unit Startup; 06:13:21 Data end to end enabled; 06:13:20 Starting Data Application Unit

Operating Band: Band 41

Downlink: Channel 40818 Ch, Frequency 2612.8 MHz, Cell Bandwidth 20.0 MHz, RS EPRE -85.0 dBm/15kHz

Uplink: Channel 40818 Ch, Frequency 2612.8 MHz, Cell Bandwidth 20.0 MHz, RS EPRE -85.0 dBm/15kHz

Full Cell BW Pow. -54.2 dBm

PUSCH Open Loop Nom.Power 23 dBm

PUSCH Closed Loop Target Power 24.0 dBm

PCC <-> SCC1: Swap

PCC -> SCC1: Copy

Sched. User def. Channels

# RB: 100

Start RB: 0

Mod / TBSI: QPSK 5

Code Rate / TBS: 0.328 8760 0.583 144

Throughput: 3.478 Mbit/s (DL), 0.057 Mbit/s (UL)

64/256-QAM

Downlink Multicenter  Uplink Multicenter

LTE Signaling: ON

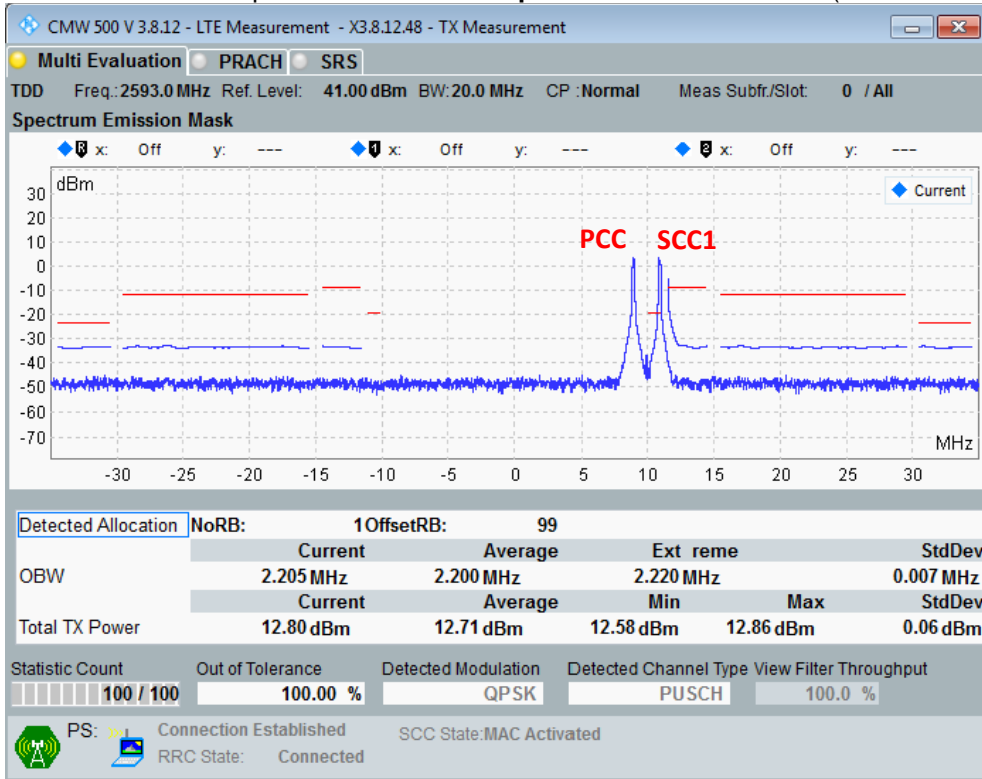


- Click the **“Connect”** button at the bottom of the screen, if necessary, turn the Airplane mode on/off in the DUT

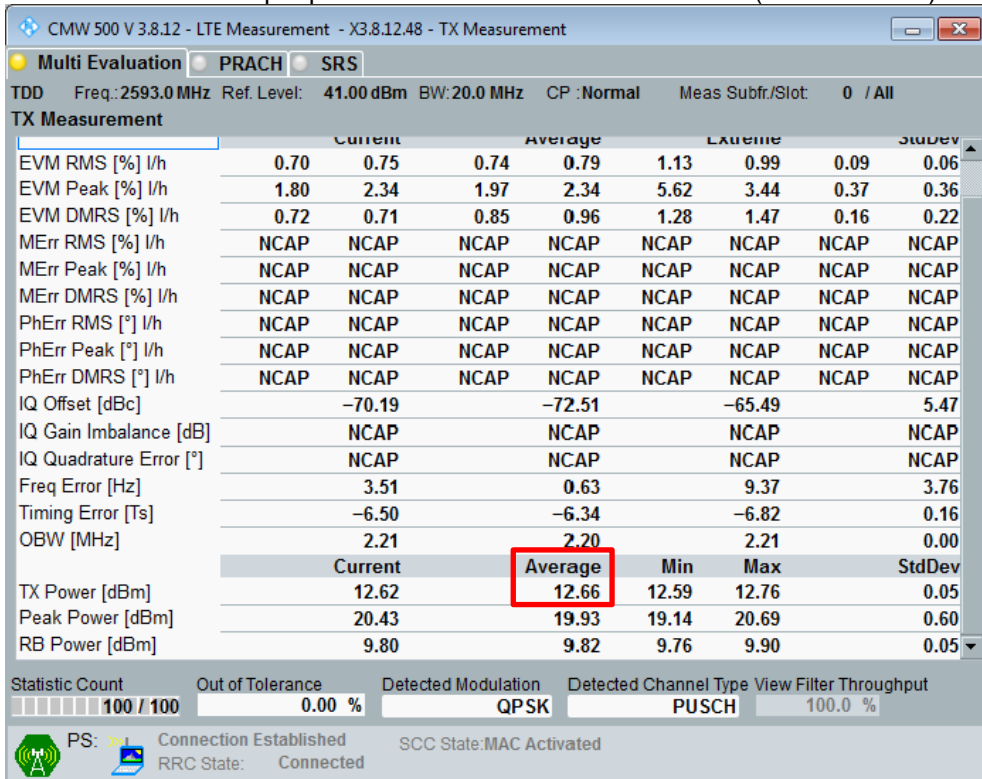
The screenshot displays the CMW 500 V 3.8.12 - LTE Signaling 1 - X3.8.12.48 interface. The main window is titled "LTE" and shows the following sections:

- Connection Status:** Shows "Connection Established", "RRC State: Connected", and "SCC1 State: MAC Activated".
- Event Log:** Lists events such as "State 'Connection Established'", "EPS Dedicated Bearer Established", "SCC1: MAC Activated", "SCC1: RRC Added", "SCC1: On", and "SCC1: Off".
- UE Info:** Displays details like IMEI (355346630026654), IMSI (001010123456063), Voice Domain (IMS PS Voice preferred CS), UE's Usage S... (Data centric), Default Bearer (IPv4 address 192.168.48.129), and Dedicated Be... (5005 - 5008 / 5005 - 5008).
- Configuration:** Shows "Operating Band: Band 41", "Channel: 40818 Ch", "Frequency: 2612.8 MHz", "Cell Bandwidth: 20.0 MHz", "RS EPRE: -85.0 dBm/15kHz", "Full Cell BW Pow.: -54.2 dBm", "PUSCH Open Loop Nom.Power: 23 dBm", and "PUSCH Closed Loop Target Power: 24.0 dBm".
- Buttons:** Includes "Swap", "Copy", "Send SMS", "Inter/Intra-RAT ...", and "Config ...".
- Bottom Bar:** Contains "Detach", "Disconnect" (highlighted with a red box), "SCC1 Off", and "Send SMS".

- Check the spectrum of UL CA in **Spectrum Emission Mask** (LTE Tx Meas.)

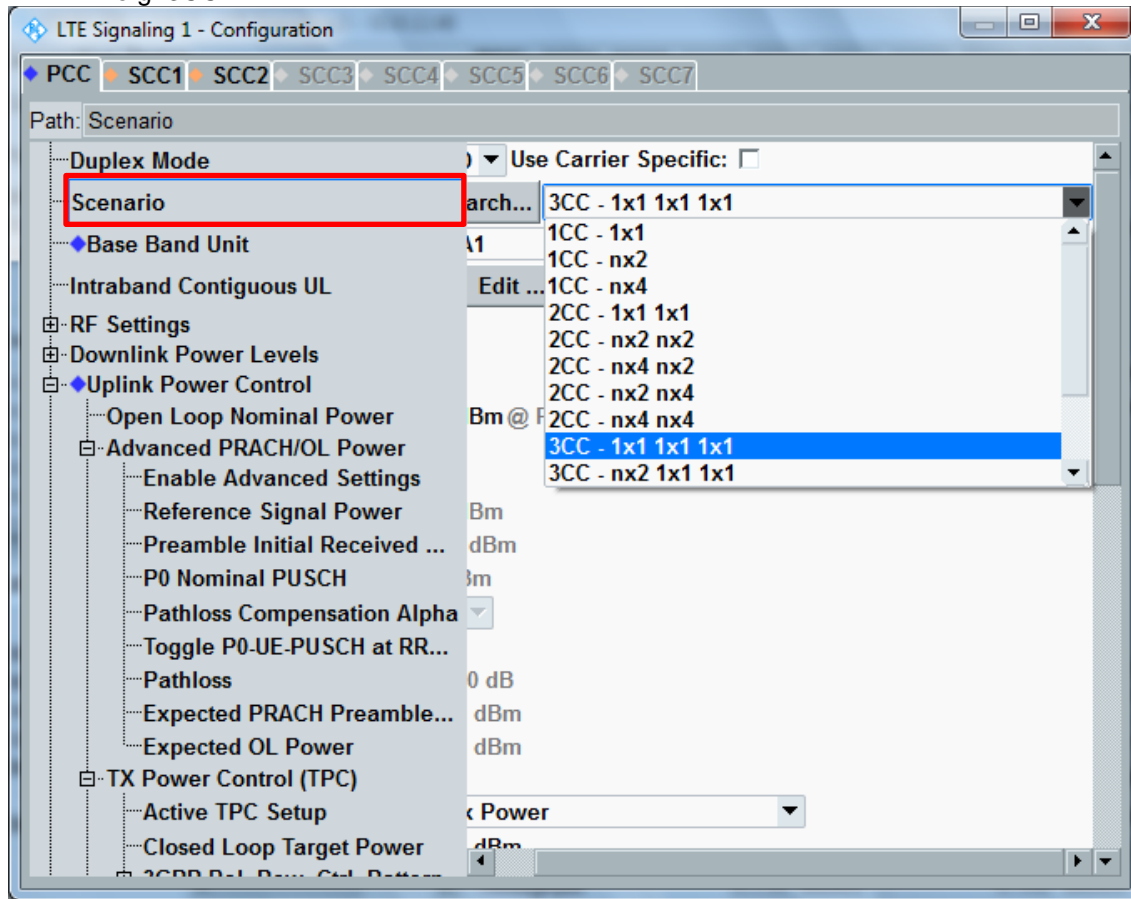


- Read the output power of UL CA in **TX Measurement** (LTE Tx Meas.)

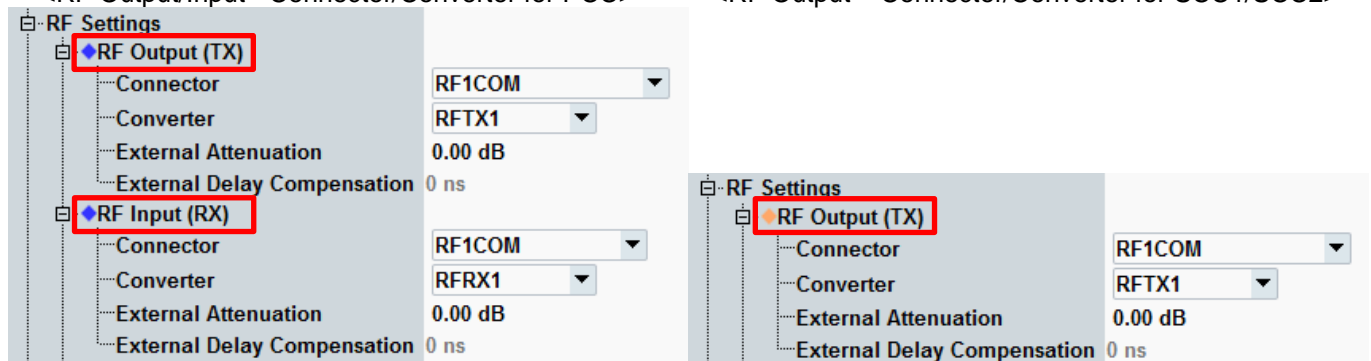


**LTE Downlink Carrier Aggregation - Output Power measurement procedures**

- Change the Scenario in the Configuration of LTE Signaling  
e.g. 3CC – 1x1 1x1 1x1



- Set the RF Output/Input Connector and Converter for PCC/SCC1/SCC2 in each tab.  
<RF Output/Input - Connector/Converter for PCC>      <RF Output – Connector/Converter for SCC1/SCC2>



- Back to the LTE Signal screen, and then select the PCC tab, Set operating band, BW, channel and RB configurations for PCC

**CMW 500 V 3.8.12 - LTE Signaling 1 - X3.8.12.48**

Connection Status: PCC (selected), SCC1, SCC2, SCC3, SCC4, SCC5, SCC6, SCC7

Cell: Connection Established

RRC State: Connected  
 SCC1 State: OFF  
 SCC2 State: OFF

Event Log:

- 06:36:17 SCC2: Off
- 06:36:17 SCC2: On
- 06:36:17 SCC2: RRC Added
- 06:36:16 SCC1: Off
- 06:36:16 SCC1: On
- 06:36:16 SCC1: RRC Added
- 06:36:12 SCC2: MAC Activated

UE Info:

IMEI: 355346630026654  
 IMSI: 001010123456063  
 Voice Domain Pr...: IMS PS Voice preferred CS Voi  
 UE's Usage Setti...: Data centric  
 Default Bearer: IPv4 address IPv6 prefix  
 ...5 (cmw500.r...): 192.168.48.129  
 Dedicated Bearer: TFT Port Range DL / UL  
 ...6 (->5, Default): 5005 - 5008 / 5005 - 5008

Operating Band	Band 66	FDD
Channel	67036 Ch	132572 Ch
Frequency	2170.0 MHz	1770.0 MHz
Cell Bandwidth	20.0 MHz	20.0 MHz
RS EPRE	-85.0 dBm/15kHz	
Full Cell BW Pow.	-54.2 dBm	
PUSCH Open Loop Nom.Power	23 dBm	
PUSCH Closed Loop Target Power	24.0 dBm	
Sched.	User def. Channels	
# RB	100	1
Start RB	0	0
Mod / TBSI	QPSK 5	QPSK 10
Code Rate / TBS	0.330 8760	0.583 144
Throughput	8.734 Mbit/s	0.144 Mbit/s

Downlink Multicluster  Uplink Multicluster

64/256-QAM

LTE Signaling: **ON**

Buttons: Detach, Disconnect, SCC1 activate MAC, Multiple SCC Actions, Send SMS, Inter/Intra-RAT ..., Config ...

- Select the SCC1/SCC2 tab, set operating band, BW, channel and RB configurations for SCC1/SCC2

CMW 500 V 3.8.12 - LTE Signaling 1 - X3.8.12.48

**Connection Status**

Cell: Connection Established

RRC State: Connected  
 SCC1 State: OFF  
 SCC2 State: OFF

**Event Log**

- 06:36:17 SCC2: Off
- 06:36:17 SCC2: On
- 06:36:17 SCC2: RRC Added
- 06:36:16 SCC1: Off
- 06:36:16 SCC1: On
- 06:36:16 SCC1: RRC Added
- 06:36:12 SCC2: MAC Activated

**UE Info**

IMEI: 355346630026654  
 IMSI: 001010123456063  
 Voice Domain: IMS PS Voice preferred CS  
 UE's Usage S...: Data centric  
 Default Bearer: IPv4 address IPv6 prefix  
 5 (cmw50...): 192.168.48.129  
 Dedicated Be...: TFT Port Range DL / UL  
 6 (->5, Def...): 5005 - 5008 / 5005 - 5008

**Configuration:**

- Operating Band: Co-location active with PCC
- Channel: 66536 Ch
- Frequency: 2120.0 MHz
- Cell Bandwidth: 20.0 MHz
- RS EPRE: -85.0 dBm/15kHz
- Full Cell BW Pow.: -54.2 dBm
- PCC <-> SCC1: Swap
- PCC -> SCC1: Copy
- Sched.: User def. Channels
- # RB: 100
- Start RB: 0
- Mod / TBSI: QPSK 5
- Code Rate / TBS: 0.330 8760
- Throughput: 8.734 Mbit/s
- Multicenter:

**Buttons:** Detach, Disconnect, SCC1 activate MAC, Multiple SCC Actions, Send SMS, Inter/Intra-RAT ..., Config ...

CMW 500 V 3.8.12 - LTE Signaling 1 - X3.8.12.48

**Connection Status**

Cell: Connection Established

RRC State: Connected  
 SCC1 State: OFF  
 SCC2 State: OFF

**Event Log**

- 06:36:17 SCC2: Off
- 06:36:17 SCC2: On
- 06:36:17 SCC2: RRC Added
- 06:36:16 SCC1: Off
- 06:36:16 SCC1: On
- 06:36:16 SCC1: RRC Added
- 06:36:12 SCC2: MAC Activated

**UE Info**

IMEI: 355346630026654  
 IMSI: 001010123456063  
 Voice Domain: IMS PS Voice preferred CS  
 UE's Usage S...: Data centric  
 Default Bearer: IPv4 address IPv6 prefix  
 5 (cmw50...): 192.168.48.129  
 Dedicated Be...: TFT Port Range DL / UL  
 6 (->5, Def...): 5005 - 5008 / 5005 - 5008

**Configuration:**

- Operating Band: Band 71
- Channel: 68761 Ch
- Frequency: 634.5 MHz
- Cell Bandwidth: 20.0 MHz
- RS EPRE: -85.0 dBm/15kHz
- Full Cell BW Pow.: -54.2 dBm
- PCC <-> SCC2: Swap
- PCC -> SCC2: Copy
- Sched.: User def. Channels
- # RB: 100
- Start RB: 0
- Mod / TBSI: QPSK 5
- Code Rate / TBS: 0.330 8760
- Throughput: 8.734 Mbit/s
- Multicenter:

**Buttons:** Detach, Disconnect, SCC2 activate MAC, Multiple SCC Actions, Send SMS, Inter/Intra-RAT ..., Config ...

- Connect and Activate MAC for all SCCs

Multiple SCC Actions

SCC	State	Action
SCC1	OFF	activate MAC
SCC2	OFF	activate MAC

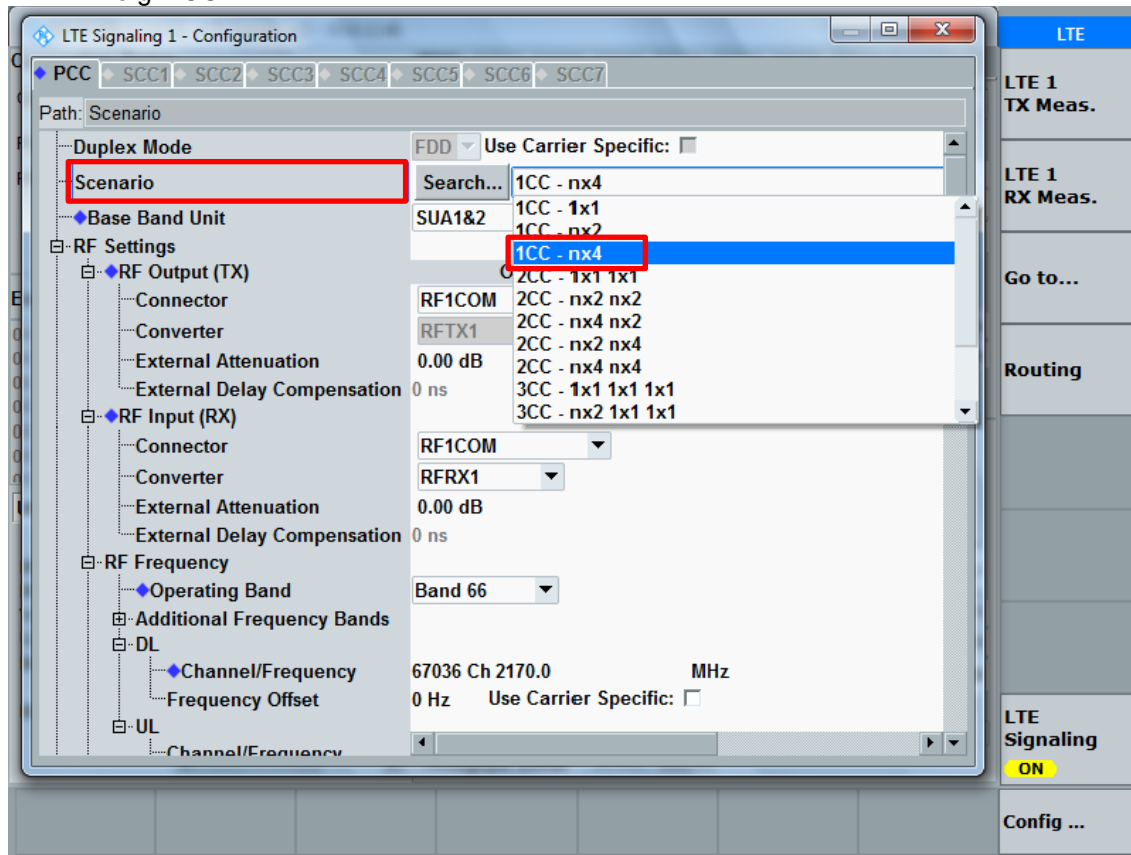
- Read the output power of DL CA in TX Measurement (LTE Tx Meas.)

TX Measurement

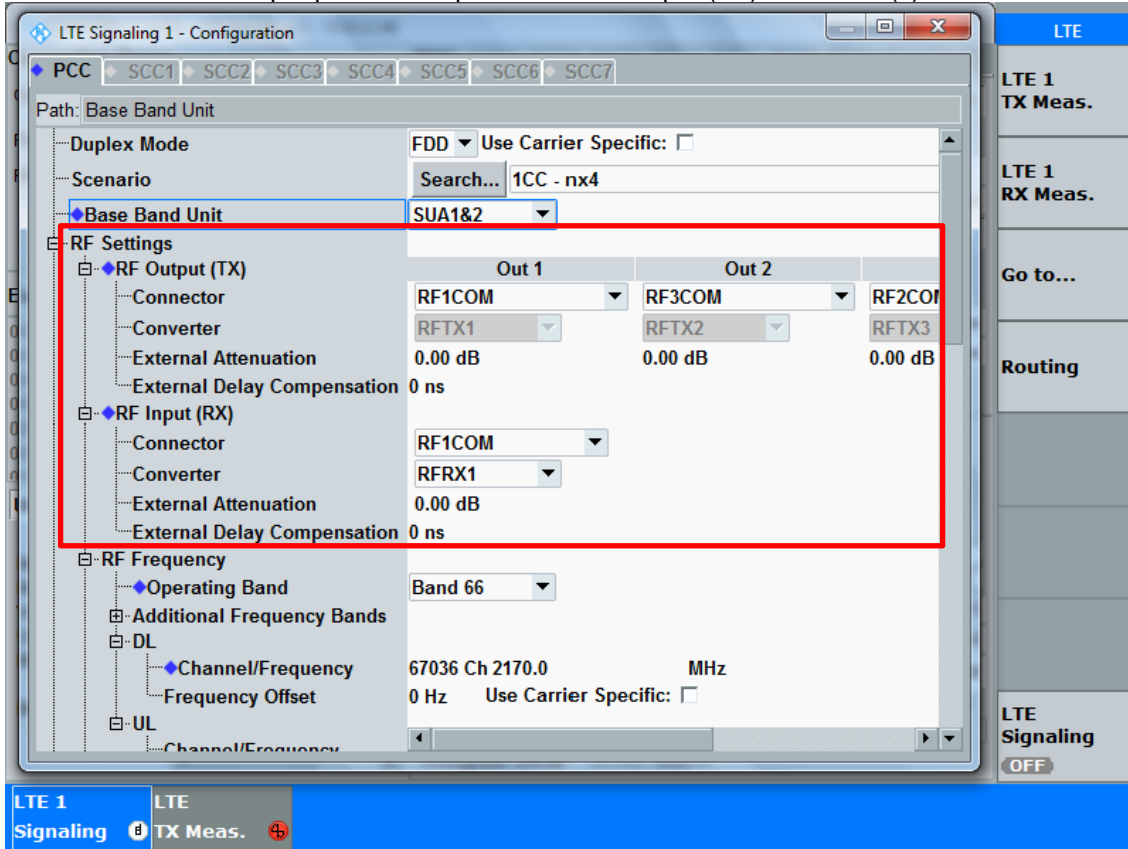
	Current	Average	Extreme	StdDev
EVM RMS [%] I/h	0.64	0.71	0.68	0.71
EVM Peak [%] I/h	1.51	2.64	1.96	2.23
EVM DMRS [%] I/h	0.61	0.65	0.61	0.60
MErr RMS [%] I/h	NCAP	NCAP	NCAP	NCAP
MErr Peak [%] I/h	NCAP	NCAP	NCAP	NCAP
MErr DMRS [%] I/h	NCAP	NCAP	NCAP	NCAP
PhErr RMS [°] I/h	NCAP	NCAP	NCAP	NCAP
PhErr Peak [°] I/h	NCAP	NCAP	NCAP	NCAP
PhErr DMRS [°] I/h	NCAP	NCAP	NCAP	NCAP
IQ Offset [dBc]	-52.22	-52.32	-49.92	0.85
IQ Gain Imbalance [dB]	NCAP	NCAP	NCAP	NCAP
IQ Quadrature Error [°]	NCAP	NCAP	NCAP	NCAP
Freq Error [Hz]	0.51	0.09	-5.38	1.33
Timing Error [Ts]	-6.30	-5.63	-8.52	2.54
OBW [MHz]	0.27	0.27	0.32	0.02
	Current	Average	Min	Max
TX Power [dBm]	13.51	13.48	13.30	13.59
Peak Power [dBm]	18.40	18.60	17.80	19.50
RB Power [dBm]	13.48	13.46	13.37	13.50

**LTE Downlink 4x4 MIMO - Output Power measurement procedures**

- Change the Scenario in the Configuration of LTE Signaling  
e.g. 1CC – nx4



- Set the RF Output/Input Connector and Converter for PCC.  
DL MIMO output ports correspond with RF Output (TX) Connector(s).



- Back to the LTE Signal screen, set operating band, BW, channel and RB configurations for PCC



- Check the Throughput of DL 4x4 MIMO in LTE Rx Measurement.

CMW 500 V 3.8.12 - LTE Signaling 1 - X3.8.12.48 - RX Measurement

Extended BLER RLC Throughput

Overall PCC SCC1 SCC2 SCC3 SCC4

Throughput (Mbit/s) vs Subframes

	Over All		Stream 1		Stream 2	
	Relative	Absolute	Relative	Absolute	Relative	Absolute
ACK	99.99%	19598	99.99%	9799	99.99%	9799
NACK	0.01%	2	0.01%	1	0.01%	1
DTX	0.00%	0	0.00%	0	0.00%	0
BLER	0.01%		0.01%		0.01%	
<b>Throughput</b>	<b>Relative</b>	<b>Mbit/s</b>	<b>Relative</b>	<b>Mbit/s</b>	<b>Relative</b>	<b>Mbit/s</b>
Average	99.99%	17.47	99.99%	8.73	99.99%	8.73
Minimum		17.38				
Maximum		17.47				

Subframes: 9800 Scheduled: 9800 Median CQI PCC: Stream 1 ---

PS: Connection Established RRC State: Connected

- Read the output power of DL CA in TX Measurement (LTE Tx Meas.)

CMW 500 V 3.8.12 - LTE Measurement - X3.8.12.48 - TX Measurement

Multi Evaluation PRACH SRS

FDD Freq.: 1770.0 MHz Ref. Level: 41.00 dBm BW: 20.0 MHz CP: Normal Meas Subfr/Slot: 0 / All

TX Measurement

	Current	Average	Extreme	StdDev
EVM RMS [%] I/h	0.64	0.71	0.83	0.04
EVM Peak [%] I/h	1.51	2.23	3.27	0.38
EVM DMRS [%] I/h	0.61	0.60	1.02	0.10
MErr RMS [%] I/h	NCAP	NCAP	NCAP	NCAP
MErr Peak [%] I/h	NCAP	NCAP	NCAP	NCAP
MErr DMRS [%] I/h	NCAP	NCAP	NCAP	NCAP
PhErr RMS [°] I/h	NCAP	NCAP	NCAP	NCAP
PhErr Peak [°] I/h	NCAP	NCAP	NCAP	NCAP
PhErr DMRS [°] I/h	NCAP	NCAP	NCAP	NCAP
IQ Offset [dBc]	-52.22	-52.32	-49.92	0.85
IQ Gain Imbalance [dB]	NCAP	NCAP	NCAP	NCAP
IQ Quadrature Error [°]	NCAP	NCAP	NCAP	NCAP
Freq Error [Hz]	0.51	0.09	-5.38	1.33
Timing Error [Ts]	-6.30	-5.63	-8.52	2.54
OBW [MHz]	0.27	0.27	0.32	0.02
	Current	Average	Min	Max
TX Power [dBm]	13.51	13.48	13.30	13.59
Peak Power [dBm]	18.40	18.60	17.80	19.50
RB Power [dBm]	13.48	13.46	13.37	13.50

Statistic Count: 100 / 100 Out of Tolerance: 0.00 % Detected Modulation: QPSK Detected Channel Type: PUSCH View Filter Throughput: 100.0 %

PS: Connection Established RRC State: Connected

**LTE Uplink Carrier Aggregation Combinations**

**Maximum Output Power (Tune-up Limit) for LTE UL Carrier Aggregation**

UL CA shall be tested based on the worst-case SAR configuration determined from non-CA SAR testing result. The channel BW, channel number, RB Allocation, etc. would be selected to allow contiguous CA of PCC and SCC. Uplink output power for UL CA is the total power measured across the PCC and SCC.

UL CA power measurements were performed with QPSK modulation based on the worst-case standalone SAR. The tune-up limits are provided in table below. The UL CA mode power measurements represent the total power across both carriers. Measurements were made for all supported PCC bandwidths using the channel/RB combination resulting in the highest standalone output power at the least MPR (0 dB). SCCs were set to use configurations similar to the PCC to establish conservative or worst case equivalent SAR test conditions (highest maximum power with MPR of 0 dB).

The standalone power measurement is the power for the PCC in the non-CA mode (i.e. single carrier power). In all cases the UL CA power is less than or equal to the standalone power, which is in accordance with the tune-up limits in table below.

According to November 2017 TCB workshop, Uplink CA SAR Test Guidance as follows;

- a) When the maximum output for UL CA is ≤ standalone LTE mode (without CA)
  - PCC is configured according to the highest standalone SAR configuration tested
  - SCC and subsequent CCs are configured according to procedures used for power measurement and parameters (BW, RB etc.) similar to that used for the PCC.
- b) When the Reported SAR for UL CA configuration, described above, is > 1.2 W/kg, UL CA SAR is also required for all required test channels (PCC based).
- c) UL CA SAR is also required for standalone SAR configurations > 1.2 W/kg when they are scaled to the UL CA power level.

SAR measurement is not required for the 16QAM and 64QAM. When the highest maximum output power for 16QAM and 64QAM is ≤ 0.25 dB higher than the QPSK or when the reported SAR for the QPSK configuration is ≤ 1.45 W/kg.

E-UTRA CA configuration (BCS)	Pwr back-off	Antenna	Bands		UL													MPR	Standalone		PCC + SCC				
			PCC	SCC	PCC					SCC					LTE Rel.8	Aggregated BW	MPR		Tune-Up Limit	CA power (total PCC+SCC)	Delta	3GPP Rel.			
			1st	2nd	Modulation	RB	Offset	BW	Freq	ch	Modulation	RB	Offset	BW	Freq	ch									
CA_5B(0)(1)	On	Main 1	5B	5B	QPSK	1	0	10	836.5	20525	QPSK	1	24	5	829.3	20453	0	24.17	20	0	25.0	24.10	-0.07	16	
CA_41C(0)(1)(2)(3)	On	Main 1	41C	41C	QPSK	1	0	20	2593.0	40620	QPSK	1	99	20	2573.2	40422	0	14.25	40	0	15.0	14.12	-0.13	16	
CA_66B(0)	OFF	Main 1	66B	66B	QPSK	1	0	15	1745.0	132322	QPSK	1	24	5	1735.7	132229	0	23.04	20	0	24.5	22.99	-0.05	16	
CA_66C(0)	OFF	Main 1	66C	66C	QPSK	1	0	20	1745.0	132322	QPSK	1	99	20	1725.2	132124	0	23.31	40	0	24.5	23.30	-0.01	16	

**Note:**

Standalone output power values are referenced from Sec.9.3 in the SAR Part.1 Test Report.

**LTE Downlink Carrier Aggregation Combinations**

The DL CA power measurement conditions for various CC's combinations were determined according LTE DL CA SAR Test Exclusion guidance in TCB workshop note (April 2018). Only yellow highlighted cells need power measurement. The following power measurements were performed with a single carrier uplink; CA for this particular project only supports one (1) uplink and up to four (4) downlinks.

**LTE Release 10 Carrier Aggregation**

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#1	2A-2A		4CC#1	3CC#1	2A-2A-4A		4CC#1	4CC#1	2A-2A-4A-4A		
2CC#2	2C		4CC#26	3CC#2	2A-2A-5A		4CC#2	4CC#2	2A-2A-4A-5A		
2CC#3	2A-4A		4CC#1	3CC#3	2A-2A-7A		4CC#6	4CC#3	2A-2A-4A-12A		
2CC#4	2A-5A		4CC#2	3CC#4	2A-2A-12A		4CC#3	4CC#4	2A-2A-4A-71A		
2CC#5	2A-7A		4CC#6	3CC#5	2A-2A-13A		4CC#12	4CC#5	2A-2A-5B		
2CC#6	2A-12A		4CC#3	3CC#6	2A-2A-14A		4CC#18	4CC#6	2A-2A-5A-7A		
2CC#7	2A-13A		4CC#12	3CC#7	2A-2A-29A	B29 SCC only	4CC#20	4CC#7	2A-2A-5A-30A		
2CC#8	2A-14A		4CC#18	3CC#8	2A-2A-30A		4CC#7	4CC#8	2A-2A-5A-66A		
2CC#9	2A-29A	B29 SCC only	4CC#20	3CC#9	2A-2A-66A		4CC#8	4CC#9	2A-2A-7A-7A		
2CC#10	2A-30A		4CC#7	3CC#10	2C-66A		4CC#26	4CC#10	2A-2A-7C		
2CC#11	2A-66A		4CC#8	3CC#11	2A-2A-71A		4CC#4	4CC#11	2A-2A-7A-12A		
2CC#12	2A-71A		4CC#4	3CC#12	2A-4A-4A		4CC#1	4CC#12	2A-2A-7A-13A		
2CC#13	4A-4A		4CC#1	3CC#13	2A-4A-5A		4CC#2	4CC#13	2A-2A-7A-66A		
2CC#14	4A-5A		4CC#2	3CC#14	2A-4A-7A		4CC#32	4CC#14	2A-2A-12B		
2CC#15	4A-7A		4CC#32	3CC#15	2A-4A-12A		4CC#3	4CC#15	2A-2A-12A-30A		
2CC#16	4A-12A		4CC#3	3CC#16	2A-4A-13A			4CC#16	2A-2A-12A-66A		
2CC#17	4A-13A		3CC#16	3CC#17	2A-4A-29A	B29 SCC only	4CC#37	4CC#17	2A-2A-13A-66A		
2CC#18	4A-29A	B29 SCC only	4CC#37	3CC#18	2A-4A-30A		4CC#18	4CC#18	2A-2A-14A-30A		
2CC#19	4A-30A		4CC#18	3CC#19	2A-4A-71A		4CC#4	4CC#19	2A-2A-14A-66A		
2CC#20	4A-71A		4CC#4	3CC#20	2A-5B		4CC#5	4CC#20	2A-2A-29A-30A	B29 SCC only	
2CC#21	5A-5A		4CC#77	3CC#21	2A-5A-7A		4CC#6	4CC#21	2A-2A-29A-66A	B29 SCC only	
2CC#22	5B		4CC#5	3CC#22	2A-5A-30A		4CC#7	4CC#22	2A-2A-30A-66A		
2CC#23	5A-7A		4CC#6	3CC#23	2A-5A-66A		4CC#8	4CC#23	2A-2A-66A-66A		
2CC#24	5A-25A			3CC#24	2A-7A-7A		4CC#9	4CC#24	2A-2A-66B		
2CC#25	5A-30A		4CC#7	3CC#25	2A-7C		4CC#10	4CC#25	2A-2A-66C		
2CC#26	5A-41A	B41 SCC only		3CC#26	2A-7A-12A		4CC#11	4CC#26	2C-66A-66A		
2CC#27	5A-66A		4CC#8	3CC#27	2A-7A-13A		4CC#12	4CC#27	2A-2A-66A-71A		
2CC#28	7A-7A		4CC#9	3CC#28	2A-7A-29A	B29 SCC only	4CC#49	4CC#28	2A-4A-4A-5A		
2CC#29	7C		4CC#10	3CC#29	2A-7A-66A		4CC#13	4CC#29	2A-4A-4A-12A		
2CC#30	7A-12A		4CC#11	3CC#30	2A-12B		4CC#14	4CC#30	2A-4A-5B		

**Note:**

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

LTE Release 10 Carrier Aggregation (Continued)

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#31	7A-13A		4CC#12	3CC#31	2A-12A-30A		4CC#15	4CC#31	2A-4A-5A-30A		
2CC#32	7A-29A	B29 SCC only	4CC#49	3CC#32	2A-12A-66A		4CC#16	4CC#32	2A-4A-7A-7A		
2CC#33	7A-66A		4CC#13	3CC#33	2A-13A-66A		4CC#17	4CC#33	2A-4A-7C		
2CC#34	12B		4CC#14	3CC#34	2A-14A-30A		4CC#18	4CC#34	2A-4A-7A-12A		
2CC#35	12A-25A		4CC#15	3CC#35	2A-14A-66A		4CC#19	4CC#35	2A-4A-12B		
2CC#36	12A-30A		4CC#15	3CC#36	2A-29A-30A	B29 SCC only	4CC#20	4CC#36	2A-4A-12A-30A		
2CC#37	12A-66A		4CC#16	3CC#37	2A-29A-66A	B29 SCC only	4CC#21	4CC#37	2A-4A-29A-30A	B29 SCC only	
2CC#38	13A-66A		4CC#17	3CC#38	2A-30A-66A		4CC#22	4CC#38	2A-5B-30A		
2CC#39	14A-30A		4CC#18	3CC#39	2A-66A-66A		4CC#23	4CC#39	2A-5B-66A		
2CC#40	14A-66A		4CC#19	3CC#40	2A-66B		4CC#24	4CC#40	2A-5A-7A-7A		
2CC#41	25A-25A		4CC#89	3CC#41	2A-66C		4CC#25	4CC#41	2A-5A-7C		
2CC#42	25A-26A		4CC#107	3CC#42	2A-66A-71A		4CC#27	4CC#42	2A-5A-7A-66A		
2CC#43	25A-41A	B41 SCC only	3CC#89	3CC#43	4A-4A-5A		4CC#28	4CC#43	2A-5A-30A-66A		
2CC#44	25A-66A		4CC#91	3CC#44	4A-4A-7A			4CC#44	2A-5A-66A-66A		
2CC#45	26A-41A	B41 SCC only	3CC#90	3CC#45	4A-4A-12A		4CC#29	4CC#45	2A-5A-66B		
2CC#46	29A-30A	B29 SCC only	4CC#20	3CC#46	4A-4A-13A			4CC#46	2A-5A-66C		
2CC#47	29A-66A	B29 SCC only	4CC#21	3CC#47	4A-4A-29A	B29 SCC only		4CC#47	2A-7A-7A-13A		
2CC#48	30A-66A		4CC#22	3CC#48	4A-4A-71A			4CC#48	2A-7C-13A		
2CC#49	41A-41A			3CC#49	4A-5B		4CC#30	4CC#49	2A-7A-7A-29A	B29 SCC only	
2CC#50	41C		4CC#111	3CC#50	4A-5A-30A		4CC#31	4CC#50	2A-7C-29A	B29 SCC only	
2CC#51	66A-66A		4CC#23	3CC#51	4A-7A-7A		4CC#32	4CC#51	2A-7A-7A-66A		
2CC#52	66B		4CC#24	3CC#52	4A-7C		4CC#33	4CC#52	2A-7C-66A		
2CC#53	66C		4CC#25	3CC#53	4A-7A-12A		4CC#34	4CC#53	2A-7A-12B		
2CC#54	66A-71A		4CC#27	3CC#54	4A-12B		4CC#35	4CC#54	2A-7A-12A-66A		
				3CC#55	4A-12A-30A		4CC#36	4CC#55	2A-7A-13A-66A		
				3CC#56	4A-29A-30A	B29 SCC only	4CC#37	4CC#56	2A-7A-29A-66A	B29 SCC only	
				3CC#57	5B-30A		4CC#38	4CC#57	2A-7A-66A-66A		
				3CC#58	5A-5A-66A		4CC#77	4CC#58	2A-12B-66A		
				3CC#59	5B-66A		4CC#39	4CC#59	2A-12A-30A-66A		
				3CC#60	5A-7A-7A		4CC#40	4CC#60	2A-12A-66A-66A		
				3CC#61	5A-7C		4CC#41	4CC#61	2A-12A-66C		
				3CC#62	5A-7A-66A		4CC#42	4CC#62	2A-13A-66A-66A		
				3CC#63	5A-30A-66A		4CC#43	4CC#63	2A-13A-66B		
				3CC#64	5A-66A-66A		4CC#44	4CC#64	2A-13A-66C		
				3CC#65	5A-66B		4CC#45	4CC#65	2A-14A-30A-66A		

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

**LTE Release 10 Carrier Aggregation (Continued)**

Index	3CC	Restriction	Completely Covered by Measurement Superset
3CC#66	5A-66C		4CC#46
3CC#67	7A-7A-13A		4CC#47
3CC#68	7C-13A		4CC#48
3CC#69	7C-25A		4CC#90
3CC#70	7A-7A-29A		4CC#49
3CC#71	7C-29A	B29 SCC only	4CC#50
3CC#72	7A-7A-66A		4CC#51
3CC#73	7C-66A		4CC#52
3CC#74	7A-12B		4CC#53
3CC#75	7A-12A-66A		4CC#54
3CC#76	7A-29A-66A	B29 SCC only	4CC#56
3CC#77	7A-66A-66A		4CC#57
3CC#78	12B-66A		4CC#58
3CC#79	12A-30A-66A		4CC#59
3CC#80	12A-66A-66A		4CC#60
3CC#81	12A-66C		4CC#61
3CC#82	13A-66A-66A		4CC#62
3CC#83	13A-66B		4CC#63
3CC#84	13A-66C		4CC#64
3CC#85	14A-30A-66A		4CC#65
3CC#86	14A-66A-66A		4CC#66
3CC#87	25A-25A-26A		
3CC#88	25A-25A-66A		4CC#99
3CC#89	25A-25A-41A	B41 SCC only	
3CC#90	25A-26A-41A	B41 SCC only	
3CC#91	25A-41C	B41 SCC only	4CC#106
3CC#92	26A-41C	B41 SCC only	4CC#107
3CC#93	29A-30A-66A	B29 SCC only	4CC#67
3CC#94	29A-66A-66A	B29 SCC only	4CC#68
3CC#95	30A-66A-66A		4CC#69
3CC#96	41A-41C		
3CC#97	41D		4CC#110
3CC#98	66A-66A-66A		4CC#70
3CC#99	66A-66B		4CC#71
3CC#100	66A-66C		4CC#103
3CC#101	66D		4CC#104
3CC#102	66A-66A-71A		4CC#72
3CC#103	66C-71A		4CC#73

Index	4CC	Restriction	Completely Covered by Measurement Superset
4CC#66	2A-14A-66A-66A		
4CC#67	2A-29A-30A-66A	B29 SCC only	
4CC#68	2A-29A-66A-66A	B29 SCC only	
4CC#69	2A-30A-66A-66A		
4CC#70	2A-66A-66A-66A		
4CC#71	2A-66A-66B		
4CC#72	2A-66A-66A-71A		
4CC#73	2A-66C-71A		
4CC#74	4A-4A-5B		
4CC#75	4A-4A-12B		
4CC#76	5B-30A-66A		
4CC#77	5A-5A-66A-66A		
4CC#78	5A-5A-66B		
4CC#79	5A-5A-66C		
4CC#80	5B-66A-66A		
4CC#81	5B-66B		
4CC#82	5B-66C		
4CC#83	5A-7A-7A-66A		
4CC#84	5A-7C-66A		
4CC#85	5A-7A-66A-66A		
4CC#86	5A-30A-66A-66A		
4CC#87	7A-7A-13A-66A		
4CC#88	7C-13A-66A		
4CC#89	7A-7A-25A-25A		
4CC#90	7C-25A-25A		
4CC#91	7A-7A-25A-66A		
4CC#92	7C-25A-66A		
4CC#93	7A-7A-29A-66A	B29 SCC only	
4CC#94	7C-29A-66A	B29 SCC only	
4CC#95	7A-7A-66A-66A	B46 SCC only	
4CC#96	7C-66A-66A		
4CC#97	7A-12A-66A-66A		
4CC#98	7A-12B-66A		
4CC#99	7A-25A-25A-66A		
4CC#100	12B-66A-66A		
4CC#101	12A-30A-66A-66A		
4CC#102	13A-66A-66B		
4CC#103	13A-66A-66C		

Index	4CC	Restriction	Completely Covered by Measurement Superset
4CC#104	13A-66D		
4CC#105	14A-30A-66A-66A		
4CC#106	25A-25A-41C	B41 SCC only	
4CC#107	25A-26A-41C	B41 SCC only	
4CC#108	25A-41D	B41 SCC only	
4CC#109	29A-30A-66A-66A	B29 SCC only	
4CC#110	41A-41D		
4CC#111	41C-41C		
4CC#112	41E		

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

**LTE Release 10 Carrier Aggregation with 4x4 MIMO**

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#1	[2A]-2A		4CC#2	3CC#1	2A-2A-[4A]		4CC#1	4CC#1	2A-2A-[4A]-4A		
2CC#2	[2A]-[2A]		4CC#5	3CC#2	2A-[2A]-4A		4CC#2	4CC#2	[2A]-2A-4A-4A		
2CC#3	[2C]		4CC#105	3CC#3	[2A]-2A-4A		4CC#2	4CC#3	2A-2A-[4A]-[4A]		
2CC#4	2A-[4A]		4CC#1	3CC#4	2A-[2A]-[4A]		4CC#4	4CC#4	[2A]-2A-[4A]-4A		
2CC#5	[2A]-4A		4CC#2	3CC#5	[2A]-2A-[4A]		4CC#4	4CC#5	[2A]-[2A]-4A-4A		
2CC#6	[2A]-[4A]		4CC#4	3CC#6	[2A]-[2A]-4A		4CC#5	4CC#6	2A-2A-[4A]-5A		
2CC#7	[2A]-5A		4CC#7	3CC#7	[2A]-[2A]-[4A]			4CC#7	[2A]-2A-4A-5A		
2CC#8	[2A]-7A		4CC#20	3CC#8	[2A]-2A-5A		4CC#7	4CC#8	[2A]-2A-[4A]-5A		
2CC#9	[2A]-12A		4CC#11	3CC#9	[2A]-[2A]-5A		4CC#9	4CC#9	[2A]-[2A]-4A-5A		
2CC#10	[2A]-13A		4CC#39	3CC#10	2A-[2A]-7A		4CC#20	4CC#10	2A-2A-[4A]-12A		
2CC#11	[2A]-14A		4CC#63	3CC#11	[2A]-2A-7A		4CC#20	4CC#11	[2A]-2A-4A-12A		
2CC#12	[2A]-29A	B29 SCC only	4CC#71	3CC#12	[2A]-[2A]-7A		4CC#21	4CC#12	[2A]-2A-[4A]-12A		
2CC#13	[2A]-30A		4CC#23	3CC#13	[2A]-2A-12A		4CC#11	4CC#13	[2A]-[2A]-4A-12A		
2CC#14	2A-[30A]		4CC#22	3CC#14	[2A]-[2A]-12A		4CC#13	4CC#14	2A-2A-[4A]-71A		
2CC#15	[2A]-[30A]		4CC#24	3CC#15	[2A]-2A-13A		4CC#39	4CC#15	[2A]-2A-4A-71A		
2CC#16	2A-[66A]		4CC#26	3CC#16	[2A]-[2A]-13A		4CC#41	4CC#16	[2A]-2A-[4A]-71A		
2CC#17	[2A]-66A		4CC#27	3CC#17	[2A]-2A-14A		4CC#63	4CC#17	[2A]-[2A]-4A-71A		
2CC#18	[2A]-[66A]		4CC#28	3CC#18	[2A]-[2A]-14A		4CC#65	4CC#18	[2A]-2A-5B		
2CC#19	[2A]-71A		4CC#15	3CC#19	[2A]-2A-29A	B29 SCC only	4CC#71	4CC#19	[2A]-[2A]-5B		
2CC#20	[4A]-4A		4CC#1	3CC#20	[2A]-[2A]-29A	B29 SCC only	4CC#73	4CC#20	[2A]-2A-5A-7A		
2CC#21	[4A]-[4A]		4CC#3	3CC#21	2A-2A-[30A]		4CC#22	4CC#21	[2A]-[2A]-5A-7A		
2CC#22	[4A]-5A		4CC#6	3CC#22	[2A]-2A-30A		4CC#23	4CC#22	2A-2A-5A-[30A]		
2CC#23	[4A]-7A		4CC#130	3CC#23	[2A]-2A-[30A]		4CC#24	4CC#23	[2A]-2A-5A-30A		
2CC#24	[4A]-12A		4CC#10	3CC#24	2A-[2A]-[30A]		4CC#52	4CC#24	[2A]-2A-5A-[30A]		
2CC#25	[4A]-13A		3CC#54	3CC#25	[2A]-[2A]-30A		4CC#25	4CC#25	[2A]-[2A]-5A-30A		
2CC#26	[4A]-29A	B29 SCC only	4CC#149	3CC#26	[2A]-[2A]-[30A]			4CC#26	2A-2A-5A-[66A]		
2CC#27	[4A]-30A		4CC#125	3CC#27	2A-2A-[66A]		4CC#26	4CC#27	[2A]-2A-5A-66A		
2CC#28	4A-[30A]		4CC#124	3CC#28	[2A]-2A-66A		4CC#27	4CC#28	[2A]-2A-5A-[66A]		
2CC#29	[4A]-[30A]		4CC#127	3CC#29	[2A]-2A-[66A]		4CC#28	4CC#29	[2A]-[2A]-5A-66A		
2CC#30	[4A]-71A		4CC#14	3CC#30	[2A]-[2A]-66A		4CC#29	4CC#30	2A-[2A]-7A-7A		
2CC#31	5A-[25A]			3CC#31	[2A]-[2A]-[66A]			4CC#31	[2A]-2A-7A-7A		
2CC#32	5A-[30A]		4CC#22	3CC#32	2C-[66A]		4CC#104	4CC#32	[2A]-[2A]-7A-7A		
2CC#33	5A-[41A]	B41 SCC only		3CC#33	[2C]-66A		4CC#105	4CC#33	2A-[2A]-7C		
2CC#34	5A-[66A]		4CC#26	3CC#34	[2C]-[66A]			4CC#34	[2A]-2A-7C		
2CC#35	7A-[66A]		4CC#42	3CC#35	2A-[2A]-71A		4CC#15	4CC#35	[2A]-[2A]-7C		
2CC#36	12A-[25A]			3CC#36	[2A]-2A-71A		4CC#15	4CC#36	2A-[2A]-7A-12A		
2CC#37	12A-[30A]		4CC#50	3CC#37	[2A]-[2A]-71A		4CC#17	4CC#37	[2A]-2A-7A-12A		
2CC#38	12A-[66A]		4CC#54	3CC#38	2A-4A-[4A]		4CC#1	4CC#38	[2A]-[2A]-7A-12A		
2CC#39	13A-[66A]		4CC#58	3CC#39	2A-[4A]-4A		4CC#1	4CC#39	2A-[2A]-7A-13A		
2CC#40	14A-[30A]		4CC#62	3CC#40	[2A]-4A-4A		4CC#2	4CC#40	[2A]-2A-7A-13A		

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

LTE Release 10 Carrier Aggregation with 4x4 MIMO (Continued)

Index	2CC	Restriction	Completely Covered by Measurement Superset
2CC#41	14A-[66A]		4CC#66
2CC#42	25A-[25A]		4CC#289
2CC#43	[25A]-[25A]		4CC#290
2CC#44	[25A]-26A		4CC#332
2CC#45	25A-[41A]	B41 SCC only	3CC#202
2CC#46	[25A]-41A	B41 SCC only	3CC#203
2CC#47	[25A]-[41A]	B41 SCC only	3CC#205
2CC#48	25A-[66A]		4CC#293
2CC#49	[25A]-66A		4CC#294
2CC#50	[25A]-[66A]		4CC#295
2CC#51	26A-[41A]	B41 SCC only	3CC#209
2CC#52	29A-[30A]	B29 SCC only	4CC#70
2CC#53	29A-[66A]	B29 SCC only	4CC#74
2CC#54	30A-[66A]		4CC#78
2CC#55	[30A]-66A		4CC#79
2CC#56	[30A]-[66A]		4CC#82
2CC#57	41A-[41A]		
2CC#58	[41A]-[41A]		
2CC#59	[41C]		4CC#339
2CC#60	66A-[66A]		4CC#88
2CC#61	[66A]-[66A]		4CC#92
2CC#62	[66B]		4CC#222
2CC#63	[66C]		4CC#101
2CC#64	[66A]-71A		4CC#107

Index	3CC	Restriction	Completely Covered by Measurement Superset
3CC#41	2A-[4A]-[4A]		4CC#3
3CC#42	[2A]-4A-[4A]		4CC#4
3CC#43	[2A]-[4A]-4A		4CC#116
3CC#44	[2A]-[4A]-[4A]		
3CC#45	2A-[4A]-5A		4CC#6
3CC#46	[2A]-4A-5A		4CC#7
3CC#47	[2A]-[4A]-5A		4CC#8
3CC#48	2A-[4A]-7A		4CC#130
3CC#49	[2A]-4A-7A		4CC#131
3CC#50	[2A]-[4A]-7A		4CC#132
3CC#51	2A-[4A]-12A		4CC#10
3CC#52	[2A]-4A-12A		4CC#11
3CC#53	[2A]-[4A]-12A		4CC#12
3CC#54	2A-[4A]-13A		
3CC#55	[2A]-[4A]-13A		
3CC#56	[2A]-[4A]-13A		
3CC#57	2A-[4A]-29A	B29 SCC only	4CC#149
3CC#58	[2A]-4A-29A	B29 SCC only	4CC#150
3CC#59	2A-4A-[30A]		4CC#124
3CC#60	2A-[4A]-30A		4CC#125
3CC#61	[2A]-4A-30A		4CC#126
3CC#62	2A-[4A]-[30A]		4CC#127
3CC#63	[2A]-4A-[30A]		4CC#128
3CC#64	[2A]-[4A]-30A		4CC#129
3CC#65	[2A]-[4A]-[30A]		
3CC#66	2A-[4A]-71A		4CC#14
3CC#67	[2A]-4A-71A		4CC#15
3CC#68	[2A]-[4A]-71A		4CC#16
3CC#69	[2A]-5B		4CC#18
3CC#70	[2A]-5A-7A		4CC#20
3CC#71	2A-5A-[30A]		4CC#22
3CC#72	[2A]-5A-30A		4CC#23
3CC#73	[2A]-5A-[30A]		4CC#24
3CC#74	2A-5A-[66A]		4CC#26
3CC#75	[2A]-5A-66A		4CC#27
3CC#76	[2A]-5A-[66A]		4CC#28
3CC#77	[2A]-7A-7A		4CC#30
3CC#78	[2A]-7C		4CC#33
3CC#79	[2A]-7A-12A		4CC#36
3CC#80	[2A]-7A-13A		4CC#39

Index	4CC	Restriction	Completely Covered by Measurement Superset
4CC#41	[2A]-[2A]-7A-13A		
4CC#42	2A-2A-7A-[66A]		
4CC#43	2A-[2A]-7A-66A		
4CC#44	[2A]-2A-7A-66A		
4CC#45	2A-[2A]-7A-[66A]		
4CC#46	[2A]-2A-7A-[66A]		
4CC#47	[2A]-[2A]-7A-66A		
4CC#48	[2A]-2A-12B		
4CC#49	[2A]-[2A]-12B		
4CC#50	2A-2A-12A-[30A]		
4CC#51	[2A]-2A-12A-30A		
4CC#52	[2A]-2A-12A-[30A]		
4CC#53	[2A]-[2A]-12A-30A		
4CC#54	2A-2A-12A-[66A]		
4CC#55	[2A]-2A-12A-66A		
4CC#56	[2A]-2A-12A-[66A]		
4CC#57	[2A]-[2A]-12A-66A		
4CC#58	2A-2A-13A-[66A]		
4CC#59	[2A]-2A-13A-66A		
4CC#60	[2A]-2A-13A-[66A]		
4CC#61	[2A]-[2A]-13A-66A		
4CC#62	2A-2A-14A-[30A]		
4CC#63	[2A]-2A-14A-30A		
4CC#64	[2A]-2A-14A-[30A]		
4CC#65	[2A]-[2A]-14A-30A		
4CC#66	2A-2A-14A-[66A]		
4CC#67	[2A]-2A-14A-66A		
4CC#68	[2A]-2A-14A-[66A]		
4CC#69	[2A]-[2A]-14A-66A		
4CC#70	2A-2A-29A-[30A]	B29 SCC only	
4CC#71	[2A]-2A-29A-30A	B29 SCC only	
4CC#72	[2A]-2A-29A-[30A]	B29 SCC only	
4CC#73	[2A]-[2A]-29A-30A	B29 SCC only	
4CC#74	2A-2A-29A-[66A]	B29 SCC only	
4CC#75	[2A]-2A-29A-66A	B29 SCC only	
4CC#76	[2A]-2A-29A-[66A]	B29 SCC only	
4CC#77	[2A]-[2A]-29A-66A	B29 SCC only	
4CC#78	2A-2A-30A-[66A]		
4CC#79	2A-2A-[30A]-66A		
4CC#80	2A-[2A]-30A-66A		

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

**LTE Release 10 Carrier Aggregation with 4x4 MIMO (Continued)**

Index	3CC	Restriction	Completely Covered by Measurement Superset	Index	4CC	Restriction	Completely Covered by Measurement Superset
3CC#81	[2A]-7A-29A	B29 SCC only	4CC#181	4CC#81	[2A]-2A-30A-66A		
3CC#82	2A-7A-[66A]		4CC#42	4CC#82	2A-2A-[30A]-[66A]		
3CC#83	[2A]-7A-66A		4CC#43	4CC#83	2A-[2A]-30A-[66A]		
3CC#84	[2A]-7A-[66A]		4CC#45	4CC#84	[2A]-2A-30A-[66A]		
3CC#85	[2A]-12B		4CC#48	4CC#85	2A-[2A]-[30A]-66A		
3CC#86	2A-12A-[30A]		4CC#50	4CC#86	[2A]-2A-[30A]-66A		
3CC#87	[2A]-12A-30A		4CC#51	4CC#87	[2A]-[2A]-30A-66A		
3CC#88	[2A]-12A-[30A]		4CC#52	4CC#88	2A-2A-66A-[66A]		
3CC#89	2A-12A-[66A]		4CC#54	4CC#89	2A-2A-[66A]-66A		
3CC#90	[2A]-12A-66A		4CC#55	4CC#90	2A-[2A]-66A-66A		
3CC#91	[2A]-12A-[66A]		4CC#56	4CC#91	[2A]-2A-66A-66A		
3CC#92	2A-13A-[66A]		4CC#58	4CC#92	2A-2A-[66A]-[66A]		
3CC#93	[2A]-13A-66A		4CC#59	4CC#93	2A-[2A]-66A-[66A]		
3CC#94	[2A]-13A-[66A]		4CC#60	4CC#94	[2A]-2A-66A-[66A]		
3CC#95	2A-14A-[30A]		4CC#62	4CC#95	2A-[2A]-[66A]-66A		
3CC#96	[2A]-14A-30A		4CC#63	4CC#96	[2A]-2A-[66A]-66A		
3CC#97	[2A]-14A-[30A]		4CC#64	4CC#97	[2A]-[2A]-66A-66A		
3CC#98	2A-14A-[66A]		4CC#66	4CC#98	2A-2A-[66B]		
3CC#99	[2A]-14A-66A		4CC#67	4CC#99	[2A]-2A-66B		
3CC#100	[2A]-14A-[66A]		4CC#68	4CC#100	[2A]-[2A]-66B		
3CC#101	2A-29A-[30A]	B29 SCC only	4CC#70	4CC#101	2A-2A-[66C]		
3CC#102	[2A]-29A-30A	B29 SCC only	4CC#71	4CC#102	[2A]-2A-66C		
3CC#103	[2A]-29A-[30A]	B29 SCC only	4CC#72	4CC#103	[2A]-[2A]-66C		
3CC#104	2A-29A-[66A]	B29 SCC only	4CC#74	4CC#104	2C-[66A]-66A		
3CC#105	[2A]-29A-66A	B29 SCC only	4CC#75	4CC#105	[2C]-66A-66A		
3CC#106	[2A]-29A-[66A]	B29 SCC only	4CC#76	4CC#106	2C-[66A]-[66A]		
3CC#107	[2A]-30A-66A		4CC#80	4CC#107	2A-2A-[66A]-71A		
3CC#108	2A-[30A]-66A		4CC#79	4CC#108	2A-[2A]-66A-71A		
3CC#109	2A-30A-[66A]		4CC#78	4CC#109	[2A]-2A-66A-71A		
3CC#110	[2A]-[30A]-66A		4CC#85	4CC#110	2A-[2A]-[66A]-71A		
3CC#111	[2A]-30A-[66A]		4CC#84	4CC#111	[2A]-2A-[66A]-71A		
3CC#112	2A-[30A]-[66A]		4CC#82	4CC#112	[2A]-[2A]-66A-71A		
3CC#113	[2A]-[30A]-[66A]			4CC#113	2A-[4A]-4A-5A		
3CC#114	2A-[66A]-66A		4CC#88	4CC#114	[2A]-4A-4A-5A		
3CC#115	[2A]-66A-66A		4CC#90	4CC#115	2A-[4A]-[4A]-5A		
3CC#116	2A-[66A]-[66A]		4CC#92	4CC#116	[2A]-[4A]-4A-5A		
3CC#117	[2A]-[66A]-66A		4CC#93	4CC#117	2A-[4A]-4A-12A		
3CC#118	[2A]-[66A]-[66A]			4CC#118	[2A]-4A-4A-12A		
3CC#119	2A-[66B]		4CC#98	4CC#119	2A-[4A]-[4A]-12A		
3CC#120	[2A]-66B		4CC#99	4CC#120	[2A]-[4A]-4A-12A		

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



**LTE Release 10 Carrier Aggregation with 4x4 MIMO (Continued)**

Index	3CC	Restriction	Completely Covered by Measurement Superset	Index	4CC	Restriction	Completely Covered by Measurement Superset
3CC#121	[2A]-[66B]			4CC#121	2A-[4A]-5B		
3CC#122	2A-[66C]		4CC#101	4CC#122	[2A]-4A-5B		
3CC#123	[2A]-66C		4CC#102	4CC#123	[2A]-[4A]-5B		
3CC#124	[2A]-[66C]			4CC#124	2A-4A-5A-[30A]		
3CC#125	2A-[66A]-71A		4CC#107	4CC#125	2A-[4A]-5A-30A		
3CC#126	[2A]-66A-71A		4CC#108	4CC#126	[2A]-4A-5A-30A		
3CC#127	[2A]-[66A]-71A		4CC#110	4CC#127	2A-[4A]-5A-[30A]		
3CC#128	[4A]-4A-5A		4CC#113	4CC#128	[2A]-4A-5A-[30A]		
3CC#129	[4A]-[4A]-5A		4CC#115	4CC#129	[2A]-[4A]-5A-30A		
3CC#130	4A-[4A]-7A			4CC#130	2A-[4A]-7A-7A		
3CC#131	[4A]-4A-7A			4CC#131	[2A]-4A-7A-7A		
3CC#132	[4A]-[4A]-7A			4CC#132	[2A]-[4A]-7A-7A		
3CC#133	[4A]-4A-12A		4CC#117	4CC#133	2A-[4A]-7C		
3CC#134	[4A]-[4A]-12A		4CC#119	4CC#134	[2A]-4A-7C		
3CC#135	[4A]-4A-13A			4CC#135	[2A]-[4A]-7C		
3CC#136	[4A]-[4A]-13A			4CC#136	2A-[4A]-7A-12A		
3CC#137	[4A]-4A-29A	B29 SCC only		4CC#137	[2A]-4A-7A-12A		
3CC#138	4A-[4A]-71A			4CC#138	[2A]-[4A]-7A-12A		
3CC#139	[4A]-4A-71A			4CC#139	2A-[4A]-12B		
3CC#140	[4A]-[4A]-71A			4CC#140	[2A]-4A-12B		
3CC#141	[4A]-5B		4CC#121	4CC#141	[2A]-[4A]-12B		
3CC#142	[4A]-5A-30A		4CC#125	4CC#142	2A-4A-12A-[30A]		
3CC#143	4A-5A-[30A]		4CC#124	4CC#143	2A-[4A]-12A-30A		
3CC#144	[4A]-5A-[30A]		4CC#127	4CC#144	[2A]-4A-12A-30A		
3CC#145	[4A]-7A-7A		4CC#130	4CC#145	2A-[4A]-12A-[30A]		
3CC#146	[4A]-7C		4CC#133	4CC#146	[2A]-4A-12A-[30A]		
3CC#147	[4A]-7A-12A		4CC#136	4CC#147	[2A]-[4A]-12A-30A		
3CC#148	[4A]-12B		4CC#139	4CC#148	2A-4A-29A-[30A]	B29 SCC only	
3CC#149	[4A]-12A-30A		4CC#143	4CC#149	2A-[4A]-29A-30A	B29 SCC only	
3CC#150	4A-12A-[30A]		4CC#142	4CC#150	[2A]-4A-29A-30A	B29 SCC only	
3CC#151	[4A]-12A-[30A]		4CC#145	4CC#151	2A-[4A]-29A-[30A]	B29 SCC only	
3CC#152	[4A]-29A-30A	B29 SCC only	4CC#149	4CC#152	[2A]-4A-29A-[30A]	B29 SCC only	
3CC#153	4A-29A-[30A]	B29 SCC only	4CC#148	4CC#153	[2A]-[4A]-29A-30A	B29 SCC only	
3CC#154	[4A]-29A-[30A]	B29 SCC only	4CC#151	4CC#154	2A-5B-[30A]		
3CC#155	5B-[30A]		4CC#154	4CC#155	[2A]-5B-30A		
3CC#156	5A-5A-[66A]		4CC#271	4CC#156	[2A]-5B-[30A]		
3CC#157	5B-[66A]		4CC#157	4CC#157	2A-5B-[66A]		
3CC#158	5A-7A-[66A]		4CC#162	4CC#158	[2A]-5B-66A		
3CC#159	5A-30A-[66A]		4CC#165	4CC#159	[2A]-5B-[66A]		
3CC#160	5A-[30A]-66A		4CC#166	4CC#160	[2A]-5A-7A-7A		

**Note:**

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

**LTE Release 10 Carrier Aggregation with 4x4 MIMO (Continued)**

Index	3CC	Restriction	Completely Covered by Measurement Superset	Index	4CC	Restriction	Completely Covered by Measurement Superset
3CC#161	5A-[30A]-[66A]		4CC#168	4CC#161	[2A]-5A-7C		
3CC#162	5A-66A-[66A]		4CC#171	4CC#162	2A-5A-7A-[66A]		
3CC#163	5A-[66A]-66A		4CC#171	4CC#163	[2A]-5A-7A-66A		
3CC#164	5A-[66A]-[66A]		4CC#173	4CC#164	[2A]-5A-7A-[66A]		
3CC#165	5A-[66B]		4CC#175	4CC#165	2A-5A-30A-[66A]		
3CC#166	5A-[66C]		4CC#177	4CC#166	2A-5A-[30A]-66A		
3CC#167	7C-[25A]		4CC#291	4CC#167	[2A]-5A-30A-66A		
3CC#168	7A-7A-[66A]		4CC#183	4CC#168	2A-5A-[30A]-[66A]		
3CC#169	7C-[66A]		4CC#186	4CC#169	[2A]-5A-30A-[66A]		
3CC#170	7A-12A-[66A]		4CC#190	4CC#170	[2A]-5A-[30A]-66A		
3CC#171	7A-29A-[66A]	B29 SCC only	4CC#196	4CC#171	2A-5A-[66A]-66A		
3CC#172	7A-[66A]-66A		4CC#199	4CC#172	[2A]-5A-66A-66A		
3CC#173	7A-[66A]-[66A]		4CC#201	4CC#173	2A-5A-[66A]-[66A]		
3CC#174	12B-[66A]		4CC#203	4CC#174	[2A]-5A-[66A]-66A		
3CC#175	12A-30A-[66A]		4CC#206	4CC#175	2A-5A-[66B]		
3CC#176	12A-[30A]-66A		4CC#207	4CC#176	[2A]-5A-66B		
3CC#177	12A-[30A]-[66A]		4CC#209	4CC#177	2A-5A-[66C]		
3CC#178	12A-66A-[66A]		4CC#212	4CC#178	[2A]-5A-66C		
3CC#179	12A-[66A]-66A		4CC#212	4CC#179	[2A]-7A-7A-13A		
3CC#180	12A-[66A]-[66A]		4CC#214	4CC#180	[2A]-7C-13A		
3CC#181	12A-[66C]		4CC#216	4CC#181	[2A]-7A-7A-29A	B29 SCC only	
3CC#182	13A-66A-[66A]		4CC#218	4CC#182	[2A]-7C-29A	B29 SCC only	
3CC#183	13A-[66A]-66A		4CC#218	4CC#183	2A-7A-7A-[66A]		
3CC#184	13A-[66A]-[66A]		4CC#220	4CC#184	[2A]-7A-7A-66A		
3CC#185	13A-[66B]		4CC#222	4CC#185	[2A]-7A-7A-[66A]		
3CC#186	13A-[66C]		4CC#224	4CC#186	2A-7C-[66A]		
3CC#187	14A-30A-[66A]		4CC#226	4CC#187	[2A]-7C-66A		
3CC#188	14A-[30A]-66A		4CC#227	4CC#188	[2A]-7C-[66A]		
3CC#189	14A-[30A]-[66A]		4CC#229	4CC#189	[2A]-7A-12B		
3CC#190	14A-[66A]-66A		4CC#232	4CC#190	2A-7A-12A-[66A]		
3CC#191	14A-[66A]-[66A]		4CC#234	4CC#191	[2A]-7A-12A-66A		
3CC#192	25A-[25A]-26A			4CC#192	[2A]-7A-12A-[66A]		
3CC#193	[25A]-25A-26A			4CC#193	2A-7A-13A-[66A]		
3CC#194	[25A]-[25A]-26A			4CC#194	[2A]-7A-13A-66A		
3CC#195	25A-25A-[66A]		4CC#309	4CC#195	[2A]-7A-13A-[66A]		
3CC#196	25A-[25A]-66A		4CC#310	4CC#196	2A-7A-29A-[66A]	B29 SCC only	
3CC#197	[25A]-25A-66A		4CC#310	4CC#197	[2A]-7A-29A-66A	B29 SCC only	
3CC#198	25A-[25A]-[66A]		4CC#311	4CC#198	[2A]-7A-29A-[66A]	B29 SCC only	
3CC#199	[25A]-25A-[66A]		4CC#311	4CC#199	2A-7A-[66A]-66A		
3CC#200	[25A]-[25A]-66A			4CC#200	[2A]-7A-66A-66A		

**Note:**

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

**LTE Release 10 Carrier Aggregation with 4x4 MIMO (Continued)**

Index	3CC	Restriction	Completely Covered by Measurement Superset	Index	4CC	Restriction	Completely Covered by Measurement Superset
3CC#201	[25A]-[25A]-[66A]			4CC#201	2A-7A-[66A]-[66A]		
3CC#202	25A-25A-[41A]	B41 SCC only		4CC#202	[2A]-7A-[66A]-66A		
3CC#203	25A-[25A]-41A	B41 SCC only		4CC#203	2A-12B-[66A]		
3CC#204	[25A]-25A-41A	B41 SCC only		4CC#204	[2A]-12B-66A		
3CC#205	25A-[25A]-[41A]	B41 SCC only		4CC#205	[2A]-12B-[66A]		
3CC#206	[25A]-25A-[41A]	B41 SCC only		4CC#206	2A-12A-30A-[66A]		
3CC#207	[25A]-[25A]-41A	B41 SCC only		4CC#207	2A-12A-[30A]-66A		
3CC#208	[25A]-[25A]-[41A]	B41 SCC only		4CC#208	[2A]-12A-30A-66A		
3CC#209	25A-26A-[41A]	B41 SCC only		4CC#209	2A-12A-[30A]-[66A]		
3CC#210	[25A]-26A-41A	B41 SCC only		4CC#210	[2A]-12A-[30A]-66A		
3CC#211	[25A]-26A-[41A]	B41 SCC only		4CC#211	[2A]-12A-30A-[66A]		
3CC#212	25A-[41C]	B41 SCC only	4CC#327	4CC#212	2A-12A-[66A]-66A		
3CC#213	[25A]-41C	B41 SCC only	4CC#328	4CC#213	[2A]-12A-66A-66A		
3CC#214	[25A]-[41C]	B41 SCC only		4CC#214	2A-12A-[66A]-[66A]		
3CC#215	26A-[41C]	B41 SCC only	4CC#331	4CC#215	[2A]-12A-[66A]-66A		
3CC#216	29A-30A-[66A]	B29 SCC only	4CC#236	4CC#216	2A-12A-[66C]		
3CC#217	29A-[30A]-66A	B29 SCC only	4CC#237	4CC#217	[2A]-12A-66C		
3CC#218	29A-[30A]-[66A]	B29 SCC only	4CC#239	4CC#218	2A-13A-[66A]-66A		
3CC#219	29A-[66A]-66A	B29 SCC only	4CC#242	4CC#219	[2A]-13A-66A-66A		
3CC#220	29A-[66A]-[66A]	B29 SCC only	4CC#244	4CC#220	2A-13A-[66A]-[66A]		
3CC#221	[30A]-66A-66A		4CC#247	4CC#221	[2A]-13A-[66A]-66A		
3CC#222	30A-[66A]-66A		4CC#246	4CC#222	2A-13A-[66B]		
3CC#223	[30A]-[66A]-66A		4CC#250	4CC#223	[2A]-13A-66B		
3CC#224	30A-[66A]-[66A]		4CC#249	4CC#224	2A-13A-[66C]		
3CC#225	[30A]-[66A]-[66A]			4CC#225	[2A]-13A-66C		
3CC#226	41A-[41C]			4CC#226	2A-14A-30A-[66A]		
3CC#227	[41A]-41C			4CC#227	2A-14A-[30A]-66A		
3CC#228	[41A]-[41C]			4CC#228	[2A]-14A-30A-66A		
3CC#229	[41D]			4CC#229	2A-14A-[30A]-[66A]		
3CC#230	66A-[66B]		4CC#254	4CC#230	[2A]-14A-30A-[66A]		
3CC#231	[66A]-66B		4CC#253	4CC#231	[2A]-14A-[30A]-66A		
3CC#232	[66A]-[66B]			4CC#232	2A-14A-[66A]-66A		
3CC#233	66A-[66C]		4CC#322	4CC#233	[2A]-14A-66A-66A		
3CC#234	[66A]-66C		4CC#321	4CC#234	2A-14A-[66A]-[66A]		
3CC#235	[66A]-[66C]			4CC#235	[2A]-14A-[66A]-66A		
3CC#236	[66D]			4CC#236	2A-29A-30A-[66A]	B29 SCC only	
3CC#237	[66A]-66A-71A		4CC#256	4CC#237	2A-29A-[30A]-66A	B29 SCC only	
3CC#238	[66A]-[66A]-71A		4CC#259	4CC#238	[2A]-29A-30A-66A	B29 SCC only	
3CC#239	[66C]-71A		4CC#262	4CC#239	2A-29A-[30A]-[66A]	B29 SCC only	
				4CC#240	[2A]-29A-30A-[66A]	B29 SCC only	

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

Single Carrier Downlink 4x4 MIMO output power results

Index	4CC	Restriction	Completely Covered by Measurement Superset
4CC#241	[2A]-29A-[30A]-66A	B29 SCC only	
4CC#242	2A-29A-[66A]-66A	B29 SCC only	
4CC#243	[2A]-29A-66A-66A	B29 SCC only	
4CC#244	2A-29A-[66A]-[66A]	B29 SCC only	
4CC#245	[2A]-29A-[66A]-66A	B29 SCC only	
4CC#246	2A-30A-[66A]-66A		
4CC#247	2A-[30A]-66A-66A		
4CC#248	[2A]-30A-66A-66A		
4CC#249	2A-30A-[66A]-[66A]		
4CC#250	2A-[30A]-66A-[66A]		
4CC#251	[2A]-30A-[66A]-66A		
4CC#252	[2A]-66A-66B		
4CC#253	2A-[66A]-66B		
4CC#254	2A-66A-[66B]		
4CC#255	[2A]-[66A]-66B		
4CC#256	2A-66A-[66A]-71A		
4CC#257	2A-[66A]-66A-71A		
4CC#258	[2A]-66A-66A-71A		
4CC#259	2A-[66A]-[66A]-71A		
4CC#260	[2A]-66A-[66A]-71A		
4CC#261	[2A]-[66A]-66A-71A		
4CC#262	2A-[66C]-71A		
4CC#263	[2A]-66C-71A		
4CC#264	[4A]-4A-5B		
4CC#265	[4A]-[4A]-5B		
4CC#266	[4A]-4A-12B		
4CC#267	[4A]-[4A]-12B		
4CC#268	5B-30A-[66A]		
4CC#269	5B-[30A]-66A		
4CC#270	5B-[30A]-[66A]		
4CC#271	5A-5A-[66A]-66A		
4CC#272	5A-5A-[66A]-[66A]		
4CC#273	5A-5A-[66B]		
4CC#274	5A-5A-[66C]		
4CC#275	5B-[66A]-66A		
4CC#276	5B-[66A]-[66A]		
4CC#277	5B-[66B]		
4CC#278	5B-[66C]		
4CC#279	5A-7A-7A-[66A]		
4CC#280	5A-7C-[66A]		

Index	4CC	Restriction	Completely Covered by Measurement Superset
4CC#280	5A-7C-[66A]		
4CC#281	5A-7A-66A-[66A]		
4CC#282	5A-7A-[66A]-[66A]		
4CC#283	5A-[30A]-66A-66A		
4CC#284	5A-30A-[66A]-66A		
4CC#285	5A-[30A]-66A-[66A]		
4CC#286	5A-30A-[66A]-[66A]		
4CC#287	7A-7A-13A-[66A]		
4CC#288	7C-13A-[66A]		
4CC#289	7A-7A-25A-[25A]		
4CC#290	7A-7A-[25A]-[25A]		
4CC#291	7C-25A-[25A]		
4CC#292	7C-[25A]-[25A]		
4CC#293	7A-7A-25A-[66A]		
4CC#294	7A-7A-[25A]-66A		
4CC#295	7A-7A-[25A]-[66A]		
4CC#296	7C-25A-[66A]		
4CC#297	7C-[25A]-66A		
4CC#298	7C-[25A]-[66A]		
4CC#299	7A-7A-29A-[66A]	B29 SCC only	
4CC#300	7C-29A-[66A]	B29 SCC only	
4CC#301	7A-7A-66A-[66A]	B46 SCC only	
4CC#302	7A-7A-[66A]-66A	B46 SCC only	
4CC#303	7A-7A-[66A]-[66A]	B46 SCC only	
4CC#304	7C-[66A]-66A		
4CC#305	7C-[66A]-[66A]		
4CC#306	7A-12A-66A-[66A]		
4CC#307	7A-12A-[66A]-[66A]		
4CC#308	7A-12B-[66A]		
4CC#309	7A-25A-25A-[66A]		
4CC#310	7A-[25A]-25A-66A		
4CC#311	7A-[25A]-25A-[66A]		
4CC#312	12B-66A-[66A]		
4CC#313	12B-[66A]-66A		
4CC#314	12B-[66A]-[66A]		
4CC#315	12A-[30A]-66A-66A		
4CC#316	12A-30A-[66A]-66A		
4CC#317	12A-30A-[66A]-[66A]		
4CC#318	12A-[30A]-66A-[66A]		
4CC#319	13A-[66A]-66B		

Index	4CC	Restriction	Completely Covered by Measurement Superset
4CC#321	13A-[66A]-66C		
4CC#322	13A-66A-[66C]		
4CC#323	14A-[30A]-66A-66A		
4CC#324	14A-30A-[66A]-66A		
4CC#325	14A-[30A]-[66A]-66A		
4CC#326	14A-30A-[66A]-[66A]		
4CC#327	25A-25A-[41C]	B41 SCC only	
4CC#328	25A-[25A]-41C	B41 SCC only	
4CC#329	[25A]-25A-41C	B41 SCC only	
4CC#330	[25A]-[25A]-41C	B41 SCC only	
4CC#331	25A-26A-[41C]	B41 SCC only	
4CC#332	[25A]-26A-41C	B41 SCC only	
4CC#333	[25A]-41D	B41 SCC only	
4CC#334	29A-[30A]-66A-66A	B29 SCC only	
4CC#335	29A-30A-[66A]-66A	B29 SCC only	
4CC#336	29A-[30A]-66A-[66A]	B29 SCC only	
4CC#337	29A-30A-[66A]-[66A]	B29 SCC only	
4CC#338	[41A]-41D		
4CC#339	41C-[41C]		
4CC#340	[41C]-41C		

**Note:** According to LTE Test Conditions in TCB workshop (May, 2017), SAR is excluded for LTE downlink 4x4 MIMO operation when uplink output with DL MIMO does not exceed highest uplink output power configuration without DL MIMO by more than 1/4 dB. And for DL MIMO with carrier aggregation, the same SAR test exclusion procedure is considered.

## Single Carrier Downlink 4x4 MIMO output power results

LTE Bands	Modulation	BW (MHz)	Channel	Freq. (MHz)	RB/Offset	LTE Rel 8 Tx. Power [dBm]	DL 4x4 MIMO Tx. Power [dBm]	Delta
2	QPSK	20	18900	1880	1/0	23.7	23.7	-0.02
4	QPSK	20	20175	1732.5	1/99	23.4	23.3	-0.09
25	QPSK	20	26140	1860	1/99	24.1	24.0	-0.04
30	QPSK	20	27710	2310	1/25	22.6	22.5	-0.08
41	QPSK	20	40620	2593	1/0	24.7	24.6	-0.11
66	QPSK	20	132322	1745	1/0	23.3	23.3	-0.06

**Note:**

According to LTE Test Conditions in TCB workshop (May, 2017), SAR is excluded for LTE downlink 4x4 MIMO operation when uplink output with DL MIMO does not exceed highest uplink output power configuration without DL MIMO by more than 1/4 dB. And for DL MIMO with carrier aggregation, the same SAR test exclusion procedure is considered.

DL CA output power results

E-UTRA CA configuration (BCS)	Bands				UL								DL											LTE Rel 8 Tx. Power [dBm]	LTE Rel 10 Tx. Power [dBm]	Delta
	PCC	SCC1	SCC2	SCC3	Mode	PCC				PCC		SCC1		SCC2		SCC3										
						BW (MHz)	Channel	Freq. (MHz)	RB location	RB Offset	BW (MHz)	Channel	Freq. (MHz)	BW (MHz)	Channel	Freq. (MHz)	BW (MHz)	Channel	Freq. (MHz)							
5A-25A	5A	25A			QPSK	10	20525	836.5	1	0	10	2525	881.5	20	8365	1962.5							24.17	24.06	-0.11	
	25A	5A			QPSK	20	26140	1880	1	99	20	8140	1940	10	2525	881.5								24.05	23.95	-0.1
5A-41A	5A	41A			QPSK	10	20525	836.5	1	0	10	2525	881.5	20	40620	2593							24.17	24.04	-0.13	
41A-41A	41A	41A			QPSK	20	40620	2593	1	0	20	40620	2593	20	41055	2636.5							24.72	24.69	-0.03	
2A-4A-13A	2A	4A	13A		QPSK	20	18900	1880	1	0	20	900	1960	20	2175	2132.5	10	5230	751				23.68	23.57	-0.11	
	4A	2A	13A		QPSK	20	20175	1732.5	1	99	20	2175	2132.5	20	900	1960	10	5230	751				23.4	23.4	0	
	13A	2A	4A		QPSK	10	23230	782	1	0	10	5230	751	20	900	1960	20	2248	2139.8				23.52	23.43	-0.09	
4A-4A-7A	4A	4A	7A		QPSK	20	20050	1720	1	0	20	2050	2120	20	2248	2139.8	10	9715	722.5				23.21	23.21	0	
	7A	4A	4A		QPSK	20	21350	2560	1	0	20	3350	2680	20	2050	2120	20	2248	2139.8				24.71	24.61	-0.1	
4A-4A-13A	4A	4A	13A		QPSK	20	20050	1720	1	0	20	2050	2120	20	2248	2139.8	10	9715	722.5				23.21	23.13	-0.08	
	13A	4A	4A		QPSK	10	23230	782	1	0	10	5230	751	20	2050	2120	20	2248	2139.8				23.52	23.49	-0.03	
4A-4A-29A	4A	4A	29A		QPSK	20	20050	1720	1	0	20	2050	2120	20	2248	2139.8	10	9715	722.5				23.21	23.08	-0.13	
	4A	4A	71A		QPSK	20	20050	1720	1	0	20	2050	2120	20	2248	2139.8	20	68761	634.5				23.21	23.21	0	
4A-4A-71A	4A	4A	4A		QPSK	20	133297	680.5	1	0	20	68761	634.5	20	2050	2120	20	2248	2139.8				24.15	24.05	-0.1	
	71A	4A	4A		QPSK	20	26140	1880	1	99	20	8140	1940	20	8590	1985	15	8865	876.5				24.05	23.9	-0.15	
25A-25A-26A	25A	25A	26A		QPSK	15	26865	831.5	1	0	15	8865	876.5	20	8365	1962.5	20	8590	1985				24.17	24.13	-0.04	
	26A	25A	25A		QPSK	20	26140	1880	1	99	20	8140	1940	20	8590	1985	20	40620	2593				24.05	24.01	-0.04	
25A-25A-41A	25A	26A	41A		QPSK	20	26140	1880	1	99	20	8140	1940	15	8865	876.5	20	40620	2593				24.05	24.04	-0.01	
	26A	25A	41A		QPSK	15	26865	831.5	1	0	15	8865	876.5	20	8365	1962.5	20	40620	2593				24.17	24.08	-0.09	
25A-26A-41A	41A	41C	41C		QPSK	20	40620	2593	1	0	20	40620	2593	20	41055	2636.5	20	41253	2656.3				24.72	24.57	-0.15	
	41C	41C	41A		QPSK	20	40620	2593	1	0	20	40620	2593	20	40818	2612.8	20	41055	2636.5				24.72	24.59	-0.13	
2A-2A-4A-4A	2A	2A	4A	4A	QPSK	20	18900	1880	1	0	20	900	1960	20	1100	1980	20	2050	2120	20	2248	2139.8	23.68	23.62	-0.06	
	4A	4A	2A	2A	QPSK	20	20050	1720	1	0	20	2050	2120	20	2248	2139.8	20	900	1960	20	1100	1980	23.21	23.09	-0.12	
	2A	2A	4A	5A	QPSK	20	18900	1880	1	0	20	900	1960	20	1100	1980	20	2175	2132.5	10	2525	881.5	23.68	23.59	-0.09	
2A-2A-4A-5A	4A	2A	2A	5A	QPSK	20	20175	1732.5	1	99	20	2175	2132.5	20	900	1960	20	1100	1980	10	2525	881.5	23.4	23.39	-0.01	
	5A	2A	2A	4A	QPSK	10	20525	836.5	1	0	10	2525	881.5	20	900	1960	20	1100	1980	20	2175	2132.5	24.17	24.06	-0.11	
	2A	2A	4A	12A	QPSK	20	18900	1880	1	0	20	900	1960	20	1100	1980	20	2175	2132.5	10	5095	737.5	23.68	23.61	-0.07	
2A-2A-4A-12A	4A	2A	2A	12A	QPSK	20	20175	1732.5	1	99	20	2175	2132.5	20	900	1960	20	1100	1980	10	5095	737.5	23.4	23.35	-0.05	
	12A	2A	2A	4A	QPSK	10	23095	707.5	1	0	10	5095	737.5	20	900	1960	20	1100	1980	20	2175	2132.5	23.56	23.45	-0.11	
	2A	2A	4A	71A	QPSK	20	18900	1880	1	0	20	900	1960	20	1100	1980	20	2175	2132.5	20	68761	634.5	23.68	23.65	-0.03	
2A-2A-4A-71A	4A	2A	2A	71A	QPSK	20	20175	1732.5	1	99	20	2175	2132.5	20	900	1960	20	1100	1980	20	68761	634.5	23.4	23.38	-0.02	
	71A	2A	2A	4A	QPSK	20	133297	680.5	1	0	20	68761	634.5	20	900	1960	20	1100	1980	20	2175	2132.5	24.15	24.11	-0.04	
	2A	2A	5B	5B	QPSK	20	18900	1880	1	0	20	900	1960	10	2450	874	10	2549	883.9				23.68	23.62	-0.06	
2A-2A-5B	5B	5B	2A	2A	QPSK	10	20450	829	1	0	10	2450	874	10	2549	883.9	20	900	1960	20	1100	1980	24.11	24.02	-0.09	
	2A	2A	5A	7A	QPSK	20	18900	1880	1	0	20	900	1960	20	1100	1980	10	2525	881.5	20	3100	2655	23.68	23.58	-0.1	
	5A	2A	2A	7A	QPSK	10	20525	836.5	1	0	10	2525	881.5	20	900	1960	20	1100	1980	20	3100	2655	24.17	24.09	-0.08	
2A-2A-5A-7A	7A	2A	2A	5A	QPSK	20	21350	2560	1	0	20	3350	2680	20	900	1960	20	1100	1980	10	2525	881.5	24.71	24.68	-0.03	
	2A	2A	5A	30A	QPSK	20	18900	1880	1	0	20	900	1960	20	1100	1980	10	2525	881.5	10	9820	2355	23.68	23.6	-0.08	
	5A	2A	2A	30A	QPSK	10	20525	836.5	1	0	10	2525	881.5	20	900	1960	20	1100	1980	10	9820	2355	24.17	24.02	-0.15	
2A-2A-5A-30A	30A	2A	2A	5A	QPSK	10	27710	2310	1	25	10	9820	2355	20	900	1960	20	1100	1980	10	2525	881.5	22.62	22.5	-0.12	
	2A	2A	5A	66A	QPSK	20	18900	1880	1	0	20	900	1960	20	1100	1980	10	2525	881.5	20	66786	2145	23.68	23.68	0	
	5A	2A	2A	66A	QPSK	10	20525	836.5	1	0	10	2525	881.5	20	900	1960	20	1100	1980	20	66786	2145	24.17	24.12	-0.05	
2A-2A-7A-7A	66A	2A	2A	5A	QPSK	20	132322	1745	1	0	20	66786	2145	20	900	1960	20	1100	1980	10	2525	881.5	23.31	23.23	-0.08	
	2A	2A	7A	7A	QPSK	20	18900	1880	1	0	20	900	1960	20	1100	1980	20	3100	2655	20	3350	2680	23.68	23.58	-0.1	
	7A	7A	2A	2A	QPSK	20	21350	2560	1	0	20	3350	2680	20	2850	2630	20	900	1960	20	1100	1980	24.71	24.62	-0.09	
2A-2A-7C	2A	2A	7C	7C	QPSK	20	18900	1880	1	0	20	900	1960	20	1100	1980	20	3100	2655	20	3298	2674.8	23.68	23.53	-0.15	
	7C	7C	2A	2A	QPSK	20	21350	2560	1	0	20	3350	2680	20	3152	2660.2	20	900	1960	20	1100	1980	24.71	24.57	-0.14	
	2A	2A	7A	12A	QPSK	20	18900	1880	1	0	20	900	1960	20	1100	1980	20	3100	2655	10	5095	737.5	23.68	23.55	-0.13	
2A-2A-7A-12A	7A	2A	2A	12A	QPSK	20	21350	2560	1	0	20	3350	2680	20	900	1960	20	1100	1980	10	5095	737.5	24.71	24.71	0	
	12A	2A	2A	7A	QPSK	10	23095	707.5	1	0	10	5095	737.5	20	900	1960	20	1100	1980	20	3100	2655	23.56	23.55	-0.	



DL CA output power results (Continued)

E-UTRA CA configuration (BCS)	Bands				UL								DL									LTE Rel 8 Tx. Power [dBm]	LTE Rel 10 Tx. Power [dBm]	Delta	
	PCC	SCC1	SCC2	SCC3	PCC								SCC1			SCC2			SCC3						
	1st	2nd	3rd	4th	Mode	BW (MHz)	Channel	Freq. (MHz)	RB location	RB Offset	BW (MHz)	Channel	Freq. (MHz)	BW (MHz)	Channel	Freq. (MHz)	BW (MHz)	Channel	Freq. (MHz)	BW (MHz)	Channel				Freq. (MHz)
2A-4A-12B	2A	4A	12B	12B	QPSK	20	18900	1880	1	0	20	900	1960	20	2175	2132.5	5	5035	731.5	10	739	5110	23.68	23.62	-0.06
	4A	2A	12B	12B	QPSK	20	20175	1732.5	1	99	20	2175	2132.5	20	900	1960	5	5035	731.5	10	739	5110	23.4	23.3	-0.1
	12B	12B	2A	4A	QPSK	5	23035	701.5	1	0	5	5035	731.5	10	739	5110	20	900	1960	20	2175	2132.5	23.89	23.89	0
2A-4A-12A-30A	2A	4A	12A	30A	QPSK	20	18900	1880	1	0	20	900	1960	20	2175	2132.5	10	5095	737.5	10	9820	2355	23.68	23.62	-0.06
	4A	2A	12A	30A	QPSK	20	20175	1732.5	1	99	20	2175	2132.5	20	900	1960	10	5095	737.5	10	9820	2355	23.4	23.28	-0.12
	12A	2A	4A	30A	QPSK	10	23095	707.5	1	0	10	5095	737.5	20	900	1960	20	2175	2132.5	10	9820	2355	23.56	23.45	-0.11
	30A	2A	4A	12A	QPSK	10	27710	2310	1	25	10	9820	2355	20	900	1960	20	2175	2132.5	10	5095	737.5	22.62	22.58	-0.04
	2A	4A	29A	30A	QPSK	20	18900	1880	1	0	20	900	1960	20	2175	2132.5	10	9715	722.5	10	9820	2355	23.68	23.55	-0.13
2A-4A-29A-30A	4A	2A	29A	30A	QPSK	20	20175	1732.5	1	99	20	2175	2132.5	20	900	1960	10	9715	722.5	10	9820	2355	23.4	23.4	0
	30A	2A	4A	29A	QPSK	10	27710	2310	1	25	10	9820	2355	20	900	1960	20	2175	2132.5	10	9715	722.5	22.62	22.49	-0.13
	2A	5B	5B	30A	QPSK	20	18900	1880	1	0	20	900	1960	10	2450	874	10	2549	883.9	10	9820	2355	23.68	23.55	-0.13
2A-5B-30A	5B	5B	2A	30A	QPSK	10	20450	829	1	0	10	2450	874	10	2549	883.9	20	900	1960	10	9820	2355	24.11	24.01	-0.1
	30A	2A	5B	5B	QPSK	10	27710	2310	1	25	10	9820	2355	20	900	1960	10	2450	874	10	2549	883.9	22.62	22.57	-0.05
	2A	5B	5B	66A	QPSK	20	18900	1880	1	0	20	900	1960	10	2450	874	10	2549	883.9	20	66786	2145	23.68	23.54	-0.14
2A-5B-66A	5B	5B	2A	66A	QPSK	10	20450	829	1	0	10	2450	874	10	2549	883.9	20	900	1960	20	66786	2145	24.11	24.1	-0.01
	66A	2A	5B	5B	QPSK	20	132322	1745	1	0	20	66786	2145	20	900	1960	10	2450	874	10	2549	883.9	23.31	23.22	-0.09
	2A	5A	7A	7A	QPSK	20	18900	1880	1	0	20	900	1960	10	2525	881.5	20	3100	2655	20	3350	2680	23.68	23.57	-0.11
2A-5A-7A-7A	5A	2A	7A	7A	QPSK	10	20525	836.5	1	0	10	2525	881.5	20	900	1960	20	3100	2655	20	3350	2680	24.17	24.12	-0.05
	7A	7A	2A	5A	QPSK	20	21350	2560	1	0	20	3350	2680	20	2850	2630	20	900	1960	10	2525	881.5	24.71	24.66	-0.05
	2A	5A	7C	7C	QPSK	20	18900	1880	1	0	20	900	1960	10	2525	881.5	20	3100	2655	20	3298	2674.8	23.68	23.64	-0.04
2A-5A-7C	5A	2A	7C	7C	QPSK	10	20525	836.5	1	0	10	2525	881.5	20	900	1960	20	3100	2655	20	3298	2674.8	24.17	24.13	-0.04
	7C	7C	2A	5A	QPSK	20	21350	2560	1	0	20	3350	2680	20	3152	2680.2	20	900	1960	10	2525	881.5	24.71	24.66	-0.05
	2A	5A	7A	66A	QPSK	20	18900	1880	1	0	20	900	1960	10	2525	881.5	20	3100	2655	20	66786	2145	23.68	23.6	-0.08
2A-5A-7A-66A	5A	2A	7A	66A	QPSK	10	20525	836.5	1	0	10	2525	881.5	20	900	1960	20	3100	2655	20	66786	2145	24.17	24.13	-0.04
	7A	2A	5A	66A	QPSK	20	21350	2560	1	0	20	3350	2680	20	900	1960	10	2525	881.5	20	66786	2145	24.71	24.6	-0.11
	66A	2A	5A	7A	QPSK	20	132322	1745	1	0	20	66786	2145	20	900	1960	10	2525	881.5	20	3100	2655	23.31	23.28	-0.03
2A-5A-30A-66A	2A	5A	30A	66A	QPSK	20	18900	1880	1	0	20	900	1960	10	2525	881.5	10	9820	2355	20	66786	2145	23.68	23.61	-0.07
	5A	2A	30A	66A	QPSK	10	20525	836.5	1	0	10	2525	881.5	20	900	1960	10	9820	2355	20	66786	2145	24.17	24.06	-0.11
	30A	2A	5A	66A	QPSK	10	27710	2310	1	25	10	9820	2355	20	900	1960	10	2525	881.5	20	66786	2145	22.62	22.56	-0.06
2A-5A-66A-66A	66A	2A	5A	30A	QPSK	20	132322	1745	1	0	20	66786	2145	20	900	1960	10	2525	881.5	10	9820	2355	23.31	23.31	0
	2A	5A	66A	66A	QPSK	20	18900	1880	1	0	20	900	1960	10	2525	881.5	20	66786	2145	20	67036	2170	23.68	23.6	-0.08
	5A	2A	66A	66A	QPSK	10	20525	836.5	1	0	10	2525	881.5	20	900	1960	20	66786	2145	20	67036	2170	24.17	24.13	-0.04
2A-5A-66B	66A	66A	2A	5A	QPSK	20	132322	1745	1	0	20	66786	2145	20	900	1960	10	2525	881.5	10	2525	881.5	23.31	23.2	-0.11
	2A	5A	66B	66B	QPSK	20	18900	1880	1	0	20	900	1960	10	2525	881.5	10	66786	2145	10	66885	2154.9	23.68	23.53	-0.15
	5A	2A	66B	66B	QPSK	10	20525	836.5	1	0	10	2525	881.5	20	900	1960	10	66786	2145	10	66885	2154.9	24.17	24.09	-0.08
2A-5A-66C	66B	66B	2A	5A	QPSK	10	132322	1745	1	0	10	66786	2145	10	66885	2154.9	20	900	1960	10	2525	881.5	23.04	23.02	-0.02
	2A	5A	66C	66C	QPSK	20	18900	1880	1	0	20	900	1960	10	2525	881.5	20	66786	2145	20	66984	2164.8	23.68	23.61	-0.07
	5A	2A	66C	66C	QPSK	10	20525	836.5	1	0	10	2525	881.5	20	900	1960	20	66786	2145	20	66984	2164.8	24.17	24.04	-0.13
2A-7A-7A-13A	66C	66C	2A	5A	QPSK	20	132322	1745	1	0	20	66786	2145	20	66984	2164.8	20	900	1960	10	2525	881.5	23.31	23.17	-0.14
	2A	7A	7A	13A	QPSK	20	18900	1880	1	0	20	900	1960	20	3100	2655	20	3350	2680	10	5230	751	23.68	23.64	-0.04
	7A	7A	2A	13A	QPSK	20	21350	2560	1	0	20	3350	2680	20	2850	2630	20	900	1960	10	5230	751	24.71	24.71	0
2A-7C-13A	13A	2A	7A	7A	QPSK	10	23230	782	1	0	10	5230	751	20	900	1960	20	3100	2655	20	3350	2680	23.52	23.45	-0.07
	2A	7C	7C	13A	QPSK	20	18900	1880	1	0	20	900	1960	20	3100	2655	20	3298	2674.8	10	5230	751	23.68	23.58	-0.1
	7C	7C	2A	13A	QPSK	20	21350	2560	1	0	20	3350	2680	20	3152	2680.2	20	900	1960	10	5230	751	24.71	24.61	-0.1
2A-7A-7A-29A	13A	2A	7C	7C	QPSK	10	23230	782	1	0	10	5230	751	20	900	1960	20	3100	2655	20	3298	2674.8	23.52	23.5	-0.02
	2A	7A	7A	29A	QPSK	20	18900	1880	1	0	20	900	1960	20	3100	2655	20	3350	2680	10	9715	722.5	23.68	23.56	-0.12
	7A	7A	2A	29A	QPSK	20	21350	2560	1	0	20	3350	2680	20	2850	2630	20	900	1960	10	9715	722.5	24.71	24.56	-0.15
2A-7C-29A	2A	7C	7C	29A	QPSK	20	18900	1880	1	0	20	900	1960	20	3100	2655	20	3298	2674.8	10	9715	722.5	23.68	23.54	-0.14
	7C	7C	2A	29A	QPSK	20	21350	2560	1	0	20	3350	2680	20	3152	2680.2	20	900	1960	10	9715	722.5	24.71	24.68	-0.03
	2A	7A	7A	66A	QPSK	20	18900	1880	1	0	20	900	1960	20	3100	2655	20	3350	2680	20	66786	2145	23.68	23.68	0
2A-7A-7A-66A	7A	7A	2A	66A	QPSK	20	21350	2560	1	0	20	3350	2680	20	2850	2630	20	900	1960	20	66786	2145	24.71	24.71	0
	66A	2A	7A	7A	QPSK	20	132322	1745	1	0	20	66786	2145	20	900	1960	20	3100	2655	20	3350	2680	23.31	23.16	-0.15
	2A	7C	7C	66A	QPSK	20	18900	1880	1	0	20	900	1960	20	3100	2655	20	3298	2674.8	20	66786	2145	23.68	23.61	-0.07
2A-7C-66A	7C	7C	2A	66A	QPSK	20	21350	2560	1	0	20	3350	2680	2											



**DL CA output power results (Continued)**

E-UTRA CA configuration (BCS)	Bands				UL								DL										LTE Rel 8 Tx. Power [dBm]	LTE Rel 10 Tx. Power [dBm]	Delta
	PCC	SCC1	SCC2	SCC3	PCC								SCC1		SCC2		SCC3								
	1st	2nd	3rd	4th	Mode	BW (MHz)	Channel	Freq. (MHz)	RB location	RB Offset	BW (MHz)	Channel	Freq. (MHz)	BW (MHz)	Channel	Freq. (MHz)	BW (MHz)	Channel	Freq. (MHz)	BW (MHz)	Channel	Freq. (MHz)			
2A-7A-12A-66A	2A	7A	12A	66A	QPSK	20	18900	1880	1	0	20	900	1960	20	3100	2655	10	5095	737.5	20	66786	2145	23.68	23.64	-0.04
	7A	2A	12A	66A	QPSK	20	21350	2560	1	0	20	3350	2680	20	900	1960	10	5095	737.5	20	66786	2145	24.71	24.56	-0.15
	12A	2A	7A	66A	QPSK	10	23095	707.5	1	0	10	5095	737.5	20	900	1960	20	3100	2655	20	66786	2145	23.56	23.55	-0.01
	66A	2A	7A	12A	QPSK	20	132322	1745	1	0	20	66786	2145	20	900	1960	20	3100	2655	10	5095	737.5	23.31	23.17	-0.14
2A-7A-13A-66A	2A	7A	13A	66A	QPSK	20	18900	1880	1	0	20	900	1960	20	3100	2655	10	5230	751	20	66786	2145	23.68	23.67	-0.01
	7A	2A	13A	66A	QPSK	20	21350	2560	1	0	20	3350	2680	20	900	1960	10	5230	751	20	66786	2145	24.71	24.59	-0.12
	13A	2A	7A	66A	QPSK	10	23230	782	1	0	10	5230	751	20	900	1960	20	3100	2655	20	66786	2145	23.52	23.43	-0.09
	66A	2A	7A	13A	QPSK	20	132322	1745	1	0	20	66786	2145	20	900	1960	20	3100	2655	10	5230	751	23.31	23.25	-0.06
2A-7A-29A-66A	2A	7A	29A	66A	QPSK	20	18900	1880	1	0	20	900	1960	20	3100	2655	10	9715	722.5	20	66786	2145	23.68	23.66	-0.02
	7A	2A	29A	66A	QPSK	20	21350	2560	1	0	20	3350	2680	20	900	1960	10	9715	722.5	20	66786	2145	24.71	24.63	-0.08
	66A	2A	7A	29A	QPSK	20	132322	1745	1	0	20	66786	2145	20	900	1960	20	3100	2655	10	9715	722.5	23.31	23.2	-0.11
2A-7A-66A-66A	2A	7A	66A	66A	QPSK	20	18900	1880	1	0	20	900	1960	20	3100	2655	20	66786	2145	20	67036	2170	23.68	23.53	-0.15
	7A	2A	66A	66A	QPSK	20	21350	2560	1	0	20	3350	2680	20	900	1960	20	66786	2145	20	67036	2170	24.71	24.71	0
	66A	66A	2A	7A	QPSK	20	132322	1745	1	0	20	66786	2145	20	67036	2170	20	900	1960	20	3100	2655	23.31	23.28	-0.03
2A-12B-66A	2A	12B	12B	66A	QPSK	20	18900	1880	1	0	20	900	1960	5	5035	731.5	10	739	5110	20	66786	2145	23.68	23.54	-0.14
	12B	12B	2A	66A	QPSK	5	23035	701.5	1	0	5	5035	731.5	10	739	5110	20	900	1960	20	66786	2145	23.89	23.89	0
	66A	2A	12B	12B	QPSK	20	132322	1745	1	0	20	66786	2145	20	900	1960	5	5035	731.5	10	739	5110	23.31	23.3	-0.01
2A-12A-30A-66A	2A	12A	30A	66A	QPSK	20	18900	1880	1	0	20	900	1960	10	5095	737.5	10	9820	2355	20	66786	2145	23.68	23.53	-0.15
	12A	2A	30A	66A	QPSK	10	23095	707.5	1	0	10	5095	737.5	20	900	1960	10	9820	2355	20	66786	2145	23.56	23.47	-0.09
	30A	2A	12A	66A	QPSK	10	27710	2310	1	25	10	9820	2355	20	900	1960	10	5095	737.5	20	66786	2145	22.62	22.55	-0.07
	66A	2A	12A	30A	QPSK	20	132322	1745	1	0	20	66786	2145	20	900	1960	10	5095	737.5	10	9820	2355	23.31	23.26	-0.05
2A-12A-66A-66A	2A	12A	66A	66A	QPSK	20	18900	1880	1	0	20	900	1960	10	5095	737.5	20	66786	2145	20	67036	2170	23.68	23.65	-0.03
	12A	2A	66A	66A	QPSK	10	23095	707.5	1	0	10	5095	737.5	20	900	1960	20	66786	2145	20	67036	2170	23.56	23.49	-0.07
	66A	66A	2A	12A	QPSK	20	132322	1745	1	0	20	66786	2145	20	67036	2170	20	900	1960	10	5095	737.5	23.31	23.31	0
2A-12A-66C	2A	12A	66C	66C	QPSK	20	18900	1880	1	0	20	900	1960	10	5095	737.5	20	66786	2145	20	66984	2164.8	23.68	23.56	-0.12
	12A	2A	66C	66C	QPSK	10	23095	707.5	1	0	10	5095	737.5	20	900	1960	20	66786	2145	20	66984	2164.8	23.56	23.46	-0.1
	66C	66C	2A	12A	QPSK	20	132322	1745	1	0	20	66786	2145	20	66984	2164.8	20	900	1960	10	5095	737.5	23.31	23.21	-0.1
2A-13A-66A-66A	2A	13A	66A	66A	QPSK	20	18900	1880	1	0	20	900	1960	10	5230	751	20	66786	2145	20	67036	2170	23.68	23.64	-0.04
	13A	2A	66A	66A	QPSK	10	23230	782	1	0	10	5230	751	20	900	1960	20	66786	2145	20	67036	2170	23.52	23.39	-0.13
	66A	66A	2A	13A	QPSK	20	132322	1745	1	0	20	66786	2145	20	67036	2170	20	900	1960	10	5230	751	23.31	23.22	-0.09
2A-13A-66B	2A	13A	66B	66B	QPSK	20	18900	1880	1	0	20	900	1960	10	5230	751	20	66786	2145	10	66885	2154.9	23.68	23.68	0
	13A	2A	66B	66B	QPSK	10	23230	782	1	0	10	5230	751	20	900	1960	10	66786	2145	10	66885	2154.9	23.52	23.38	-0.14
	66B	66B	2A	13A	QPSK	10	132322	1745	1	0	10	66786	2145	10	66885	2154.9	20	900	1960	10	5230	751	23.04	22.93	-0.11
2A-13A-66C	2A	13A	66C	66C	QPSK	20	18900	1880	1	0	20	900	1960	10	5230	751	20	66786	2145	20	66984	2164.8	23.68	23.57	-0.11
	13A	2A	66C	66C	QPSK	10	23230	782	1	0	10	5230	751	20	900	1960	20	66786	2145	20	66984	2164.8	23.52	23.52	0
	66C	66C	2A	13A	QPSK	20	132322	1745	1	0	20	66786	2145	20	66984	2164.8	20	900	1960	10	5230	751	23.31	23.19	-0.12
2A-14A-30A-66A	2A	14A	30A	66A	QPSK	20	18900	1880	1	0	20	900	1960	10	5330	763	10	9820	2355	20	66786	2145	23.68	23.59	-0.09
	14A	2A	30A	66A	QPSK	10	23330	793	1	0	10	5330	763	20	900	1960	10	9820	2355	20	66786	2145	24.15	24.09	-0.06
	30A	2A	14A	66A	QPSK	10	27710	2310	1	25	10	9820	2355	20	900	1960	10	5330	763	20	66786	2145	22.62	22.53	-0.09
	66A	2A	14A	30A	QPSK	20	132322	1745	1	0	20	66786	2145	20	900	1960	10	5330	763	10	9820	2355	23.31	23.17	-0.14
2A-14A-66A-66A	2A	14A	66A	66A	QPSK	20	18900	1880	1	0	20	900	1960	10	5330	763	20	66786	2145	20	67036	2170	23.68	23.54	-0.14
	14A	2A	66A	66A	QPSK	10	23330	793	1	0	10	5330	763	20	900	1960	20	66786	2145	20	67036	2170	24.15	24.12	-0.03
	66A	66A	2A	14A	QPSK	20	132322	1745	1	0	20	66786	2145	20	67036	2170	20	900	1960	10	5330	763	23.31	23.22	-0.09
2A-29A-30A-66A	2A	29A	30A	66A	QPSK	20	18900	1880	1	0	20	900	1960	10	9715	722.5	10	9820	2355	20	66786	2145	23.68	23.55	-0.13
	30A	2A	29A	66A	QPSK	10	27710	2310	1	25	10	9820	2355	20	900	1960	10	9715	722.5	20	66786	2145	22.62	22.6	-0.02
	66A	2A	29A	30A	QPSK	20	132322	1745	1	0	20	66786	2145	20	900	1960	10	9715	722.5	10	9820	2355	23.31	23.28	-0.03
2A-29A-66A-66A	2A	29A	66A	66A	QPSK	20	18900	1880	1	0	20	900	1960	10	9715	722.5	20	66786	2145	20	67036	2170	23.68	23.58	-0.1
	66A	66A	2A	29A	QPSK	20	132322	1745	1	0	20	66786	2145	20	67036	2170	20	900	1960	10	9715	722.5	23.31	23.27	-0.04
	2A	30A	66A	66A	QPSK	20	18900	1880	1	0	20	900	1960	10	9820	2355	20	66786	2145	20	67036	2170	23.68	23.56	-0.12
2A-30A-66A-66A	2A	30A	66A	66A	QPSK	10	27710	2310	1	25	10	9820	2355	20	900	1960	20	66786	2145	20	67036	2170	22.62	22.61	-0.01
	66A	66A	2A	30A	QPSK	20	132322	1745	1	0	20	66786	2145	20	67036	2170	20	900	1960	10	9820	2355	23.31	23.23	-0.08
	2A	66A	66A	66A	QPSK	20	18900	1880	1	0	20	900	1960	20	66786	2145	20	67036	2170	20	66536	2120	23.68	23.62	-0.06
2A-66A-66A-66A	66A	66A	66A	2A	QPSK	20	132322	1745	1	0	20	66786	2145	20	67036	2170	20	66536	2120	20	900	1960	23.31	23.18	-0.13
	66A																								

DL CA output power results (Continued)

E-UTRA CA configuration (BCS)	Bands				UL								DL											LTE Rel 8 Tx. Power [dBm]	LTE Rel 10 Tx. Power [dBm]	Delta
	PCC	SCC1	SCC2	SCC3	Mode	BW (MHz)	Channel	Freq. (MHz)	RB location	RB Offset	PCC		SCC1			SCC2			SCC3							
	1st	2nd	3rd	4th							BW (MHz)	Channel	Freq. (MHz)	BW (MHz)	Channel	Freq. (MHz)	BW (MHz)	Channel	Freq. (MHz)	BW (MHz)	Channel	Freq. (MHz)	BW (MHz)			
2A-66A-66A-71A	2A	66A	66A	71A	QPSK	20	18900	1880	1	0	20	900	1960	20	66786	2145	20	67036	2170	20	68761	634.5	23.68	23.53	-0.15	
	66A	66A	2A	71A	QPSK	20	132322	1745	1	0	20	66786	2145	20	67036	2170	20	900	1960	20	68761	634.5	23.31	23.31	0	
	71A	2A	66A	66A	QPSK	20	133297	680.5	1	0	20	68761	634.5	20	900	1960	20	66786	2145	20	67036	2170	24.15	24.12	-0.03	
2A-66C-71A	2A	66C	66C	71A	QPSK	20	18900	1880	1	0	20	900	1960	20	66786	2145	20	66984	2164.8	20	68761	634.5	23.68	23.65	-0.03	
	66C	66C	2A	71A	QPSK	20	132322	1745	1	0	20	66786	2145	20	66984	2164.8	20	900	1960	20	68761	634.5	23.31	23.23	-0.08	
	71A	2A	66C	66C	QPSK	20	133297	680.5	1	0	20	68761	634.5	20	900	1960	20	66786	2145	20	66984	2164.8	24.15	24.04	-0.11	
4A-4A-5B	4A	4A	5B	5B	QPSK	20	20050	1720	1	0	20	2050	2120	20	2248	2139.8	10	2450	874	10	2549	883.9	23.21	23.14	-0.07	
	5B	5B	4A	4A	QPSK	10	20450	829	1	0	10	2450	874	10	2549	883.9	20	2050	2120	20	2248	2139.8	24.11	24.09	-0.02	
	4A	4A	12B	12B	QPSK	20	20050	1720	1	0	20	2050	2120	20	2248	2139.8	5	5035	731.5	10	739	5110	23.21	23.11	-0.1	
4A-4A-12B	12B	12B	4A	4A	QPSK	5	23035	701.5	1	0	5	5035	731.5	10	739	5110	20	2050	2120	20	2248	2139.8	23.89	23.87	-0.02	
	5B	5B	30A	66A	QPSK	10	20450	829	1	0	10	2450	874	10	2549	883.9	10	9820	2355	20	66786	2145	24.11	24.05	-0.06	
	30A	5B	5B	66A	QPSK	10	27710	2310	1	25	10	9820	2355	10	2450	874	10	2549	883.9	20	66786	2145	22.62	22.52	-0.1	
5B-30A-66A	66A	5B	5B	30A	QPSK	20	132322	1745	1	0	20	66786	2145	10	2450	874	10	2549	883.9	10	9820	2355	23.31	23.2	-0.11	
	5A	5A	66A	66A	QPSK	10	20450	829	1	0	10	2450	874	10	2600	889	20	66786	2145	20	67036	2170	24.11	24.04	-0.07	
	66A	66A	5A	5A	QPSK	20	132322	1745	1	0	20	66786	2145	20	67036	2170	10	2450	874	10	2600	889	23.31	23.19	-0.12	
5A-5A-66B	5A	5A	66B	66B	QPSK	10	20450	829	1	0	10	2450	874	10	2600	889	10	66786	2145	10	66885	2154.9	24.11	24	-0.11	
	66B	66B	5A	5A	QPSK	10	132322	1745	1	0	10	66786	2145	10	66885	2154.9	10	2450	874	10	2600	889	23.04	23.01	-0.03	
	5A	5A	66C	66C	QPSK	10	20450	829	1	0	10	2450	874	10	2600	889	20	66786	2145	20	66984	2164.8	24.11	24.06	-0.05	
5A-5A-66C	66C	66C	5A	5A	QPSK	20	132322	1745	1	0	20	66786	2145	20	66984	2164.8	10	2450	874	10	2600	889	23.31	23.31	0	
	5B	5B	66A	66A	QPSK	10	20450	829	1	0	10	2450	874	10	2549	883.9	20	66786	2145	20	67036	2170	24.11	24	-0.11	
	66A	66A	5B	5B	QPSK	20	132322	1745	1	0	20	66786	2145	20	67036	2170	10	2450	874	10	2549	883.9	23.31	23.29	-0.02	
5B-66B	5B	5B	66B	66B	QPSK	10	20450	829	1	0	10	2450	874	10	2549	883.9	10	66786	2145	10	66885	2154.9	24.11	23.96	-0.15	
	66B	66B	5B	5B	QPSK	10	132322	1745	1	0	10	66786	2145	10	66885	2154.9	10	2450	874	10	2549	883.9	23.04	22.95	-0.09	
	5B	5B	66C	66C	QPSK	10	20450	829	1	0	10	2450	874	10	2549	883.9	20	66786	2145	20	66984	2164.8	24.11	24.07	-0.04	
5B-66C	66C	66C	5B	5B	QPSK	20	132322	1745	1	0	20	66786	2145	20	66984	2164.8	10	2450	874	10	2549	883.9	23.31	23.29	-0.02	
	5A	7A	7A	66A	QPSK	10	20525	836.5	1	0	10	2525	881.5	20	3100	2655	20	3350	2680	20	66786	2145	24.17	24.17	0	
	7A	7A	5A	66A	QPSK	20	21350	2560	1	0	20	3350	2680	20	2850	2630	10	2525	881.5	20	66786	2145	24.71	24.64	-0.07	
5A-7A-66A	66A	5A	7A	7A	QPSK	20	132322	1745	1	0	20	66786	2145	10	2525	881.5	20	3100	2655	20	3350	2680	23.31	23.16	-0.15	
	5A	7C	7C	66A	QPSK	10	20525	836.5	1	0	10	2525	881.5	20	3100	2655	20	3298	2674.8	20	66786	2145	24.17	24.12	-0.05	
	7C	7C	5A	66A	QPSK	20	21350	2560	1	0	20	3350	2680	20	3152	2660.2	10	2525	881.5	20	66786	2145	24.71	24.7	-0.01	
5A-7A-66A-66A	66A	5A	7C	7C	QPSK	20	132322	1745	1	0	20	66786	2145	10	2525	881.5	20	3100	2655	20	3298	2674.8	23.31	23.23	-0.08	
	5A	7A	66A	66A	QPSK	10	20525	836.5	1	0	10	2525	881.5	20	3100	2655	20	66786	2145	20	67036	2170	24.17	24.16	-0.01	
	7A	5A	66A	66A	QPSK	20	21350	2560	1	0	20	3350	2680	10	2525	881.5	20	66786	2145	20	67036	2170	24.71	24.6	-0.11	
5A-30A-66A-66A	66A	66A	5A	7A	QPSK	20	132322	1745	1	0	20	66786	2145	20	67036	2170	10	2525	881.5	20	3100	2655	23.31	23.28	-0.03	
	5A	30A	66A	66A	QPSK	10	20525	836.5	1	0	10	2525	881.5	10	9820	2355	20	66786	2145	20	67036	2170	24.17	24.14	-0.03	
	30A	5A	66A	66A	QPSK	10	27710	2310	1	25	10	9820	2355	10	2525	881.5	20	66786	2145	20	67036	2170	22.62	22.52	-0.1	
7A-7A-13A-66A	66A	66A	5A	30A	QPSK	20	132322	1745	1	0	20	66786	2145	20	67036	2170	10	2525	881.5	10	9820	2355	23.31	23.16	-0.15	
	7A	7A	13A	66A	QPSK	20	21350	2560	1	0	20	3350	2680	20	2850	2630	10	5230	751	20	66786	2145	24.71	24.67	-0.04	
	13A	7A	7A	66A	QPSK	10	23230	782	1	0	10	5230	751	20	3100	2655	20	3350	2680	20	66786	2145	23.52	23.5	-0.02	
7C-13A-66A	66A	7A	7A	13A	QPSK	20	132322	1745	1	0	20	66786	2145	20	3100	2655	20	3350	2680	10	5230	751	24.71	24.59	-0.12	
	13A	7C	7C	66A	QPSK	10	23230	782	1	0	10	5230	751	20	3100	2655	20	3298	2674.8	20	66786	2145	23.52	23.43	-0.09	
	66A	7C	7C	13A	QPSK	20	132322	1745	1	0	20	66786	2145	20	3100	2655	20	3298	2674.8	10	5230	751	23.31	23.18	-0.13	
7A-7A-25A-25A	7A	7A	25A	25A	QPSK	20	21350	2560	1	0	20	3350	2680	20	2850	2630	20	8365	1962.5	20	8590	1985	24.71	24.63	-0.08	
	25A	25A	7A	7A	QPSK	20	26140	1860	1	99	20	8140	1940	20	8590	1985	20	3100	2655	20	3350	2680	24.05	23.97	-0.08	
	7C	7C	25A	25A	QPSK	20	21350	2560	1	0	20	3350	2680	20	3152	2660.2	20	8365	1962.5	20	8590	1985	24.71	24.56	-0.15	
7A-7A-25A-66A	25A	25A	7C	7C	QPSK	20	26140	1860	1	99	20	8140	1940	20	8590	1985	20	3100	2655	20	3298	2674.8	24.05	23.96	-0.09	
	7A	7A	25A	66A	QPSK	20	21350	2560	1	0	20	3350	2680	20	2850	2630	20	8365	1962.5	20	8590	1985	24.71	24.71	0	
	25A	7A	7A	66A	QPSK	20	26140	1860	1	99	20	8140	1940	20	3100	2655	20	3350	2680	20	66786	2145	24.05	23.99	-0.06	
7C-25A-66A	66A	7A	7A	25A	QPSK	20	132322	1745	1	0	20	66786	2145	20	3100	2655	20	3350	2680	20	8365	1962.5	23.31	23.18	-0.13	
	7C	7C	25A	66A	QPSK	20	21350	2560	1	0	20	3350	2680	20	3152	2660.2	20	8365	1962.5	20	8590	1985	24.71	24.58	-0.13	
	25A	7C	7C	25A	QPSK	20	26140	1860	1	99	20	8140	1940	20	3100	2655	20	3298	2674.8	20	66786	2145	24.05	23.97	-0.08	
7A-7A-29A-66A	66A	7C	7C	25A	QPSK	20	132322	1745	1	0	20	66786	2145	20	3298	2674.8	20	8365	1962.5	20	8590	1985	23.31	23.25	-0.06	
	7A	7A	29A	66A	QPSK	20	21350	2560	1	0	20	3350	2680	20	2850	2630	10	9715	722.5	20	6					

**DL CA output power results (Continued)**

E-UTRA CA configuration (BCS)	Bands				UL						DL									LTE Rel 8 Tx. Power [dBm]	LTE Rel 10 Tx. Power [dBm]	Delta			
	PCC	SCC1	SCC2	SCC3	Mode	BW (MHz)	Channel	Freq. (MHz)	RB location	RB Offset	PCC			SCC1			SCC2						SCC3		
	1st	2nd	3rd	4th							BW (MHz)	Channel	Freq. (MHz)	BW (MHz)	Channel	Freq. (MHz)	BW (MHz)	Channel	Freq. (MHz)				BW (MHz)	Channel	Freq. (MHz)
7A-7A-66A-66A	7A	7A	66A	66A	QPSK	20	21350	2560	1	0	20	3350	2680	20	2850	2630	20	66786	2145	20	67036	2170	24.71	24.58	-0.13
	66A	66A	7A	7A	QPSK	20	132322	1745	1	0	20	66786	2145	20	67036	2170	20	3100	2655	20	3350	2680	23.31	23.2	-0.11
7C-66A-66A	7C	7C	66A	66A	QPSK	20	21350	2560	1	0	20	3350	2680	20	3152	2660.2	20	66786	2145	20	67036	2170	24.71	24.59	-0.12
	66A	66A	7C	7C	QPSK	20	132322	1745	1	0	20	66786	2145	20	67036	2170	20	3100	2655	20	3298	2674.8	23.31	23.31	0
7A-12A-66A-66A	7A	12A	66A	66A	QPSK	20	21350	2560	1	0	20	3350	2680	10	5095	737.5	20	66786	2145	20	67036	2170	24.71	24.71	0
	12A	7A	66A	66A	QPSK	10	23095	707.5	1	0	10	5095	737.5	20	3100	2655	20	66786	2145	20	67036	2170	23.56	23.49	-0.07
	66A	66A	7A	12A	QPSK	20	132322	1745	1	0	20	66786	2145	20	67036	2170	20	3100	2655	10	5095	737.5	23.31	23.31	0
	7A	12B	12B	66A	QPSK	20	21350	2560	1	0	20	3350	2680	5	5035	731.5	10	739	5110	20	66786	2145	24.71	24.63	-0.08
7A-12B-66A	12B	12B	7A	66A	QPSK	5	23035	701.5	1	0	5	5035	731.5	10	739	5110	20	3100	2655	20	66786	2145	23.89	23.76	-0.13
	66A	7A	12B	12B	QPSK	20	132322	1745	1	0	20	66786	2145	20	3100	2655	5	5035	731.5	10	739	5110	23.31	23.16	-0.15
	7A	25A	25A	66A	QPSK	20	21350	2560	1	0	20	3350	2680	20	8365	1962.5	20	8590	1985	20	66786	2145	24.71	24.68	-0.03
	25A	25A	7A	66A	QPSK	20	26140	1860	1	99	20	8140	1940	20	8590	1985	20	3100	2655	20	66786	2145	24.05	23.9	-0.15
12B-66A-66A	66A	7A	25A	25A	QPSK	20	132322	1745	1	0	20	66786	2145	20	3100	2655	20	8365	1962.5	20	8590	1985	23.31	23.18	-0.13
	12B	12B	66A	66A	QPSK	5	23035	701.5	1	0	5	5035	731.5	10	739	5110	20	66786	2145	20	67036	2170	23.89	23.89	0
12A-30A-66A-66A	66A	66A	12B	12B	QPSK	20	132322	1745	1	0	20	66786	2145	20	67036	2170	5	5035	731.5	10	739	5110	23.31	23.28	-0.03
	12A	30A	66A	66A	QPSK	10	23095	707.5	1	0	10	5095	737.5	10	9820	2355	20	66786	2145	20	67036	2170	23.56	23.44	-0.12
	30A	12A	66A	66A	QPSK	10	27710	2310	1	25	10	9820	2355	10	5095	737.5	20	66786	2145	20	67036	2170	22.62	22.56	-0.06
	66A	66A	12A	30A	QPSK	20	132322	1745	1	0	20	66786	2145	20	67036	2170	10	5095	737.5	10	9820	2355	23.31	23.22	-0.09
13A-66A-66B	13A	66A	66B	66B	QPSK	10	23230	782	1	0	10	5230	751	20	66786	2145	10	67086	2175	10	66987	2165.1	23.52	23.5	-0.02
	66A	66B	66B	13A	QPSK	20	132322	1745	1	0	20	66786	2145	10	67086	2175	10	66987	2165.1	10	5230	751	23.31	23.25	-0.06
	66B	66B	66A	13A	QPSK	10	132322	1745	1	0	10	66786	2145	10	66885	2154.9	20	66536	2120	10	5230	751	23.04	23.98	-0.06
	13A	66A	66C	66C	QPSK	10	23230	782	1	0	10	5230	751	20	66536	2120	20	67036	2170	20	66885	2154.9	23.52	23.43	-0.09
13A-66A-66C	66A	66C	66C	13A	QPSK	20	132072	1720	1	0	20	66536	2120	20	67036	2170	20	66885	2154.9	10	5230	751	22.59	22.47	-0.12
	66C	66C	66A	13A	QPSK	20	132322	1745	1	0	20	66786	2145	20	66984	2164.8	20	66536	2120	10	5230	751	23.31	23.23	-0.08
	13A	66D	66D	66D	QPSK	10	23230	782	1	0	10	5230	751	20	66786	2145	20	66984	2164.8	20	66588	2125.2	23.52	23.38	-0.14
13A-66D	66D	66D	66D	13A	QPSK	20	132322	1745	1	0	20	66786	2145	20	66984	2164.8	20	66588	2125.2	10	5230	751	23.31	23.29	-0.02
	14A	30A	66A	66A	QPSK	10	23330	793	1	0	10	5330	763	10	9820	2355	20	66786	2145	20	67036	2170	24.15	24.08	-0.07
	30A	14A	66A	66A	QPSK	10	27710	2310	1	25	10	9820	2355	10	5330	763	20	66786	2145	20	67036	2170	22.62	22.53	-0.09
25A-25A-41C	66A	66A	14A	30A	QPSK	20	132322	1745	1	0	20	66786	2145	20	67036	2170	10	5330	763	10	9820	2355	23.31	23.26	-0.05
	25A	25A	41C	41C	QPSK	20	26140	1860	1	99	20	8140	1940	20	8590	1985	20	40620	2593	20	40818	2612.8	24.05	23.92	-0.13
25A-26A-41C	25A	26A	41C	41C	QPSK	20	26140	1860	1	99	20	8140	1940	15	8865	876.5	20	40620	2593	20	40818	2612.8	24.05	23.98	-0.07
	26A	25A	41C	41C	QPSK	15	26865	831.5	1	0	15	8865	876.5	20	8365	1962.5	20	40620	2593	20	40818	2612.8	24.17	24.02	-0.15
25A-41D	25A	41D	41D	41D	QPSK	20	26140	1860	1	99	20	8140	1940	20	40620	2593	20	40818	2612.8	20	41016	2632.6	24.05	24.05	0
	30A	29A	66A	66A	QPSK	10	27710	2310	1	25	10	9820	2355	10	9715	722.5	20	66786	2145	20	67036	2170	22.62	22.58	-0.04
29A-30A-66A-66A	66A	66A	29A	30A	QPSK	20	132322	1745	1	0	20	66786	2145	20	67036	2170	10	9715	722.5	10	9820	2355	23.31	23.17	-0.14
	41A	41D	41D	41D	QPSK	20	40620	2593	1	0	20	40620	2593	20	41055	2636.5	20	41253	2656.3	20	41451	2676.1	24.72	24.57	-0.15
	41D	41D	41D	41A	QPSK	20	40620	2593	1	0	20	40620	2593	20	40818	2612.8	20	41016	2632.6	20	41055	2636.5	24.72	24.61	-0.11
41C-41C	41C	41C	41C	41C	QPSK	20	40620	2593	1	0	20	40620	2593	20	40818	2612.8	20	41055	2636.5	20	41253	2656.3	24.72	24.6	-0.12
	41E	41E	41E	41E	QPSK	20	40620	2593	1	0	20	40620	2593	20	40818	2612.8	20	41016	2632.6	20	41214	2652.4	24.72	24.68	-0.04

**Note:**

1. Per KDB 941225 D05A LTE Rel. 10 KDB Inquiry Sheet: SAR is excluded for Carrier Aggregation when measured power does not exceed LTE Release 8 by more than a 1/4 dB.
2. When the same frequency band is used for both contiguous and non-contiguous in DL CA Intra band, power was measured using the configuration with the largest aggregated bandwidth and maximum output power among the contiguous and non-contiguous in DL CA Intra band configurations.

DL CA with 4x4 MIMO output power results

E-UTRA CA configuration (BCS)	Bands				UL										DL									LTE Rel 8 Tx. Power [dBm]	LTE Rel 10 Tx. Power [dBm]	Delta		
	PCC	SCC1	SCC2	SCC3	PCC					SCC1					SCC2			SCC3										
	1st	2nd	3rd	4th	Mode	BW (MHz)	Channel	Freq. (MHz)	RB Location	RB Offset	BW (MHz)	Channel	Freq. (MHz)	BW (MHz)	Channel	Freq. (MHz)	BW (MHz)	Channel	Freq. (MHz)	BW (MHz)	Channel	Freq. (MHz)						
25A-[25A]-26A	25A	[25A]	26A		QPSK	20	26140	1860	1	99	20	8140	1940	20	8590	1985	15	8865	876.5				24.05	24.02	-0.03			
	[25A]	25A	26A		QPSK	20	26140	1860	1	99	20	8140	1940	20	8590	1985	15	8865	876.5				24.05	24.04	-0.01			
	26A	25A	[25A]		QPSK	15	26865	831.5	1	0	15	8865	876.5	20	8365	1962.5	20	8590	1985				24.17	24.17	0			
	[25A]	[25A]	26A		QPSK	20	26140	1860	1	99	20	8140	1940	20	8590	1985	15	8865	876.5				24.05	24.05	0			
[25A]-[25A]-26A	26A	[25A]	[25A]		QPSK	15	26865	831.5	1	0	15	8865	876.5	20	8365	1962.5	20	8590	1985				24.17	24.08	-0.09			
	[25A]	[25A]	[25A]		QPSK	15	26865	831.5	1	0	15	8865	876.5	20	8365	1962.5	20	8590	1985				24.05	24.05	0			
25A-26A-[41A]	25A	26A	[41A]		QPSK	20	26140	1860	1	99	20	8140	1940	15	8865	876.5	20	40620	2593				24.05	23.98	-0.07			
	26A	25A	[41A]		QPSK	15	26865	831.5	1	0	15	8865	876.5	20	8365	1962.5	20	40620	2593				24.17	24.05	-0.12			
[25A]-26A-41A	[25A]	26A	41A		QPSK	20	26140	1860	1	99	20	8140	1940	15	8865	876.5	20	40620	2593				24.05	23.9	-0.15			
	26A	[25A]	41A		QPSK	15	26865	831.5	1	0	15	8865	876.5	20	8365	1962.5	20	40620	2593				24.17	24.11	-0.06			
[25A]-26A-[41A]	[25A]	26A	[41A]		QPSK	20	26140	1860	1	99	20	8140	1940	15	8865	876.5	20	40620	2593				24.05	24.04	-0.01			
	26A	[25A]	[41A]		QPSK	15	26865	831.5	1	0	15	8865	876.5	20	8365	1962.5	20	40620	2593				24.17	24.04	-0.13			
2A-2A-14A-[30A]	2A	2A	14A	[30A]	QPSK	20	18900	1880	1	0	20	900	1960	20	1100	1980	10	5330	763	10	9820	2355	23.68	23.57	-0.11			
	14A	2A	2A	[30A]	QPSK	10	23330	793	1	0	10	5330	763	20	900	1960	20	1100	1980	10	9820	2355	24.15	24.1	-0.05			
	[30A]	2A	2A	14A	QPSK	10	27710	2310	1	25	10	9820	2355	20	900	1960	20	1100	1980	10	5330	763	22.62	22.47	-0.15			
	[2A]	2A	14A	30A	QPSK	20	18900	1880	1	0	20	900	1960	20	1100	1980	10	5330	763	10	9820	2355	23.68	23.55	-0.13			
[2A]-2A-14A-30A	2A	[2A]	14A	30A	QPSK	20	18900	1880	1	0	20	900	1960	20	1100	1980	10	5330	763	10	9820	2355	23.68	23.58	-0.1			
	14A	[2A]	2A	30A	QPSK	10	23330	793	1	0	10	5330	763	20	900	1960	20	1100	1980	10	9820	2355	24.15	24.11	-0.04			
	30A	[2A]	2A	14A	QPSK	10	27710	2310	1	25	10	9820	2355	20	900	1960	20	1100	1980	10	5330	763	22.62	22.61	-0.01			
	[2A]	2A	14A	[30A]	QPSK	20	18900	1880	1	0	20	900	1960	20	1100	1980	10	5330	763	10	9820	2355	23.68	23.58	-0.1			
[2A]-2A-14A-[30A]	2A	[2A]	14A	[30A]	QPSK	20	18900	1880	1	0	20	900	1960	20	1100	1980	10	5330	763	10	9820	2355	23.68	23.6	-0.08			
	14A	[2A]	2A	[30A]	QPSK	10	23330	793	1	0	10	5330	763	20	900	1960	20	1100	1980	10	9820	2355	24.15	24.05	-0.1			
	[30A]	[2A]	2A	14A	QPSK	10	27710	2310	1	25	10	9820	2355	20	900	1960	20	1100	1980	10	5330	763	22.62	22.47	-0.15			
	[2A]	[2A]	14A	30A	QPSK	20	18900	1880	1	0	20	900	1960	20	1100	1980	10	5330	763	10	9820	2355	23.68	23.67	-0.01			
[2A]-[2A]-14A-30A	14A	[2A]	[2A]	30A	QPSK	10	23330	793	1	0	10	5330	763	20	900	1960	20	1100	1980	10	9820	2355	24.15	24.06	-0.09			
	30A	[2A]	[2A]	14A	QPSK	10	27710	2310	1	25	10	9820	2355	20	900	1960	20	1100	1980	10	5330	763	22.62	22.51	-0.11			
	2A	2A	14A	[66A]	QPSK	20	18900	1880	1	0	20	900	1960	20	1100	1980	10	5330	763	20	66786	2145	23.68	23.62	-0.06			
	14A	2A	2A	[66A]	QPSK	10	23330	793	1	0	10	5330	763	20	900	1960	20	1100	1980	10	5330	763	20	66786	2145	24.15	24.04	-0.11
2A-2A-14A-[66A]	[66A]	2A	2A	14A	QPSK	20	132322	1745	1	0	20	66786	2145	20	900	1960	20	1100	1980	10	5330	763	23.31	23.29	-0.02			
	[2A]	2A	14A	66A	QPSK	20	18900	1880	1	0	20	900	1960	20	1100	1980	10	5330	763	20	66786	2145	23.68	23.68	0			
	2A	[2A]	14A	66A	QPSK	20	18900	1880	1	0	20	900	1960	20	1100	1980	10	5330	763	20	66786	2145	23.68	23.53	-0.15			
	14A	[2A]	2A	66A	QPSK	10	23330	793	1	0	10	5330	763	20	900	1960	20	1100	1980	10	5330	763	20	66786	2145	24.15	24.11	-0.04
[2A]-2A-14A-66A	66A	[2A]	2A	14A	QPSK	20	132322	1745	1	0	20	66786	2145	20	900	1960	20	1100	1980	10	5330	763	23.31	23.28	-0.03			
	[2A]	2A	14A	[66A]	QPSK	20	18900	1880	1	0	20	900	1960	20	1100	1980	10	5330	763	20	66786	2145	23.68	23.58	-0.1			
	2A	[2A]	14A	[66A]	QPSK	20	18900	1880	1	0	20	900	1960	20	1100	1980	10	5330	763	20	66786	2145	23.68	23.64	-0.04			
	14A	[2A]	2A	[66A]	QPSK	10	23330	793	1	0	10	5330	763	20	900	1960	20	1100	1980	10	5330	763	20	66786	2145	24.15	24.05	-0.1
[2A]-2A-14A-[66A]	[66A]	[2A]	2A	14A	QPSK	20	132322	1745	1	0	20	66786	2145	20	900	1960	20	1100	1980	10	5330	763	23.31	23.18	-0.13			
	[2A]	[2A]	14A	66A	QPSK	20	18900	1880	1	0	20	900	1960	20	1100	1980	10	5330	763	20	66786	2145	23.68	23.67	-0.01			
	14A	[2A]	2A	[66A]	QPSK	10	23330	793	1	0	10	5330	763	20	900	1960	20	1100	1980	10	5330	763	20	66786	2145	24.15	24.06	-0.09
	[66A]	[2A]	2A	14A	QPSK	20	132322	1745	1	0	20	66786	2145	20	900	1960	20	1100	1980	10	5330	763	23.31	23.18	-0.13			
[2A]-[2A]-14A-66A	[2A]	[2A]	14A	66A	QPSK	20	18900	1880	1	0	20	900	1960	20	1100	1980	10	5330	763	20	66786	2145	23.68	23.57	-0.11			
	14A	[2A]	[2A]	66A	QPSK	10	23330	793	1	0	10	5330	763	20	900	1960	20	1100	1980	10	5330	763	20	66786	2145	24.15	24.14	-0.01
	66A	[2A]	[2A]	14A	QPSK	20	132322	1745	1	0	20	66786	2145	20	900	1960	20	1100	1980	10	5330	763	23.31	23.27	-0.04			
	2A	14A	30A	[66A]	QPSK	20	18900	1880	1	0	20	900	1960	10	5330	763	10	9820	2355	20	66786	2145	23.68	23.65	-0.03			
2A-14A-30A-[66A]	14A	2A	30A	[66A]	QPSK	10	23330	793	1	0	10	5330	763	20	900	1960	10	9820	2355	20	66786	2145	24.15	24.07	-0.08			
	30A	2A	14A	[66A]	QPSK	10	27710	2310	1	25	10	9820	2355	20	900	1960	10	5330	763	20	66786	2145	22.62	22.57	-0.05			
	[66A]	2A	14A	30A	QPSK	20	132322	1745	1	0	20	66786	2145	20	900	1960	10	5330	763	10	9820	2355	23.31	23.3	-0.01			
	2A	14A	[30A]	66A	QPSK	20	18900	1880	1	0	20	900	1960	10	5330	763	10	9820	2355	20	66786	2145	23.68	23.64	-0.04			
2A-14A-[30A]-66A	14A	2A	[30A]	66A	QPSK	10	23330	793	1	0	10	5330	763	20	900	1960	10	9820	23									

DL CA with 4x4 MIMO output power results (Continued)

E-UTRA CA configuration (BCS)	Bands				UL								DL												LTE Rel 8 Tx. Power [dBm]	LTE Rel 10 Tx. Power [dBm]	Delta
	PCC	SCC1	SCC2	SCC3	Mode	BW (MHz)	Channel	Freq. (MHz)	RB Location	RB Offset	PCC		SCC1		SCC2		SCC3										
	1st	2nd	3rd	4th							BW (MHz)	Channel	Freq. (MHz)	BW (MHz)	Channel	Freq. (MHz)	BW (MHz)	Channel	Freq. (MHz)	BW (MHz)	Channel	Freq. (MHz)	BW (MHz)	Channel			
[2A]-14A-[30A]-66A	[2A]	14A	[30A]	66A	QPSK	20	18900	1880	1	0	20	900	1960	10	5330	763	10	9820	2355	20	66786	2145	23.68	23.54	-0.14		
	14A	[2A]	[30A]	66A	QPSK	10	23330	793	1	0	10	5330	763	20	900	1960	10	9820	2355	20	66786	2145	24.15	24.06	-0.09		
	[30A]	[2A]	14A	66A	QPSK	10	27710	2310	1	25	10	9820	2355	20	900	1960	10	5330	763	20	66786	2145	22.62	22.59	-0.03		
	66A	[2A]	14A	[30A]	QPSK	20	132322	1745	1	0	20	66786	2145	20	900	1960	10	5330	763	10	9820	2355	23.31	23.18	-0.13		
2A-14A-[66A]-66A	2A	14A	[66A]	66A	QPSK	20	18900	1880	1	0	20	900	1960	10	5330	763	20	66786	2145	20	67036	2170	23.68	23.64	-0.04		
	14A	2A	[66A]	66A	QPSK	10	23330	793	1	0	10	5330	763	20	900	1960	20	66786	2145	20	67036	2170	24.15	24.03	-0.12		
	[66A]	66A	2A	14A	QPSK	20	132322	1745	1	0	20	66786	2145	20	67036	2170	20	900	1960	10	5330	763	23.31	23.31	0		
	66A	[66A]	2A	14A	QPSK	20	132322	1745	1	0	20	66786	2145	20	67036	2170	20	900	1960	10	5330	763	23.31	23.19	-0.12		
[2A]-14A-66A-66A	[2A]	14A	66A	66A	QPSK	20	18900	1880	1	0	20	900	1960	10	5330	763	20	66786	2145	20	67036	2170	23.68	23.58	-0.1		
	14A	[2A]	66A	66A	QPSK	10	23330	793	1	0	10	5330	763	20	900	1960	20	66786	2145	20	67036	2170	24.15	24.08	-0.07		
	66A	66A	[2A]	14A	QPSK	20	132322	1745	1	0	20	66786	2145	20	67036	2170	20	900	1960	10	5330	763	23.31	23.27	-0.04		
	2A	14A	[66A]	[66A]	QPSK	20	18900	1880	1	0	20	900	1960	10	5330	763	20	66786	2145	20	67036	2170	23.68	23.67	-0.01		
2A-14A-[66A]-[66A]	14A	2A	[66A]	[66A]	QPSK	10	23330	793	1	0	10	5330	763	20	900	1960	20	66786	2145	20	67036	2170	24.15	24.1	-0.05		
	[66A]	[66A]	2A	14A	QPSK	20	132322	1745	1	0	20	66786	2145	20	67036	2170	20	900	1960	10	5330	763	23.31	23.21	-0.1		
	[2A]	14A	[66A]	66A	QPSK	20	18900	1880	1	0	20	900	1960	10	5330	763	20	66786	2145	20	67036	2170	23.68	23.58	-0.1		
	14A	[2A]	[66A]	66A	QPSK	10	23330	793	1	0	10	5330	763	20	900	1960	20	66786	2145	20	67036	2170	24.15	24.01	-0.14		
[2A]-14A-[66A]-66A	[66A]	66A	[2A]	14A	QPSK	20	132322	1745	1	0	20	66786	2145	20	67036	2170	20	900	1960	10	5330	763	23.31	23.28	-0.03		
	66A	[66A]	[2A]	14A	QPSK	20	132322	1745	1	0	20	66786	2145	20	67036	2170	20	900	1960	10	5330	763	23.31	23.18	-0.13		
	14A	[30A]	66A	66A	QPSK	10	23330	793	1	0	10	5330	763	10	9820	2355	20	66786	2145	20	67036	2170	24.15	24.13	-0.02		
	[30A]	14A	66A	66A	QPSK	10	27710	2310	1	25	10	9820	2355	10	5330	763	20	66786	2145	20	67036	2170	22.62	22.62	0		
14A-[30A]-66A-66A	66A	66A	14A	[30A]	QPSK	20	132322	1745	1	0	20	66786	2145	20	67036	2170	10	5330	763	10	9820	2355	23.31	23.3	-0.01		
	14A	30A	[66A]	66A	QPSK	10	23330	793	1	0	10	5330	763	10	9820	2355	20	66786	2145	20	67036	2170	24.15	24.06	-0.09		
	30A	14A	[66A]	66A	QPSK	10	27710	2310	1	25	10	9820	2355	10	5330	763	20	66786	2145	20	67036	2170	22.62	22.55	-0.07		
	[66A]	66A	14A	30A	QPSK	20	132322	1745	1	0	20	66786	2145	20	67036	2170	10	5330	763	10	9820	2355	23.31	23.29	-0.02		
14A-[30A]-[66A]-66A	66A	[66A]	14A	30A	QPSK	20	132322	1745	1	0	20	66786	2145	20	67036	2170	10	5330	763	10	9820	2355	23.31	23.24	-0.07		
	14A	[30A]	[66A]	66A	QPSK	10	23330	793	1	0	10	5330	763	10	9820	2355	20	66786	2145	20	67036	2170	24.15	24.1	-0.05		
	[30A]	14A	[66A]	66A	QPSK	10	27710	2310	1	25	10	9820	2355	10	5330	763	20	66786	2145	20	67036	2170	22.62	22.5	-0.12		
	[66A]	66A	14A	[30A]	QPSK	20	132322	1745	1	0	20	66786	2145	20	67036	2170	10	5330	763	10	9820	2355	23.31	23.28	-0.03		
14A-30A-[66A]-[66A]	66A	[66A]	14A	[30A]	QPSK	20	132322	1745	1	0	20	66786	2145	20	67036	2170	10	5330	763	10	9820	2355	23.31	23.16	-0.15		
	14A	30A	[66A]	[66A]	QPSK	10	23330	793	1	0	10	5330	763	10	9820	2355	20	66786	2145	20	67036	2170	24.15	24.07	-0.08		
	30A	14A	[66A]	[66A]	QPSK	10	27710	2310	1	25	10	9820	2355	10	5330	763	20	66786	2145	20	67036	2170	22.62	22.53	-0.09		
	[66A]	[66A]	14A	30A	QPSK	20	132322	1745	1	0	20	66786	2145	20	67036	2170	10	5330	763	10	9820	2355	23.31	23.2	-0.11		
25A-26A-[41C]	25A	26A	[41C]	[41C]	QPSK	20	26140	1860	1	99	20	8140	1940	15	8965	876.5	20	40620	2593	20	40818	2612.8	24.05	23.97	-0.08		
	26A	25A	[41C]	[41C]	QPSK	15	28865	831.5	1	0	15	8865	876.5	20	8365	876.5	20	40620	2593	20	40818	2612.8	24.17	24.16	-0.01		
	[25A]	26A	41C	41C	QPSK	20	26140	1860	1	99	20	8140	1940	15	8965	876.5	20	40620	2593	20	40818	2612.8	24.05	24.05	0		
	26A	[25A]	41C	41C	QPSK	15	28865	831.5	1	0	15	8865	876.5	20	8365	876.5	20	40620	2593	20	40818	2612.8	24.17	24.1	-0.07		
[41A]-41A	[41A]	41A			QPSK	20	40620	2593	1	0	20	40620	2593	20	41055	2636.5							24.72	24.72	0		
	41A	[41A]			QPSK	20	40620	2593	1	0	20	40620	2593	20	41055	2636.5							24.72	24.58	-0.14		
5A-[25A]	5A	[25A]			QPSK	10	20525	836.5	1	0	10	2525	881.5	20	8365	876.5	20	40620	2593				24.17	24.04	-0.13		
	[25A]	5A			QPSK	20	26140	1860	1	99	20	8140	1940	10	2525	881.5	20	40620	2593				24.05	24.02	-0.03		
5A-[41A]	5A	[41A]			QPSK	10	20525	836.5	1	0	10	2525	881.5	20	40620	2593							24.17	24.17	0		
	12A	[25A]			QPSK	10	23095	707.5	1	0	10	5095	737.5	20	8365	876.5	20	40620	2593				23.56	23.44	-0.12		
[41A]-[41A]	[25A]	12A			QPSK	20	26140	1860	1	99	20	8140	1940	10	5095	737.5							24.05	24.04	-0.01		
	[41A]	[41A]			QPSK	20	40620	2593	1	0	20	40620	2593	20	41055	2636.5							24.72	24.61	-0.11		
[2A]-[2A]-[4A]	[2A]	[2A]			QPSK	20	18900	1880	1	0	20	900	1960	20	1100	1980							23.68	23.55	-0.13		
	[4A]	[2A]	[2A]		QPSK	20	20175	1732.5	1	99	20	2175	2132.5	20	900	1960	20	1100	1980				23.4	23.34	-0.06		
[2A]-[2A]-[30A]	[2A]	[2A]	[30A]		QPSK	20	18900	1880	1	0	20	900	1960	20	1100	1980	10	9820	2355				23.68	23.66	-0.02		
	[30A]	[2A]	[2A]		QPSK	10	27710	2310	1	25	10	9820	2355	20	900	1960	20	1100	1980				22.62	22.56	-0.06		
[2A]-[2A]-[66A]	[2A]	[2A]	[66A]		QPSK	20	18900	1880	1	0	20	900	1960	20	1100	1980	20	66786	2145				23.68	23.64	-0.04		
	[66A]	[2A]	[2A]		QPSK	20	132322	1745	1	0	20	66786	2145	20	900	1960	20	1100	1980				23.31	23.18	-0.13		
[2C]-[66A]	[2C]	[2C]	[66A]		QPSK	20	18900	1880	1	0	20	900	1960	20	1098	1979.8	20	66786	2145				23.68	23.53	-0.15		
	[66A]	[2C]	[2C]		QPSK	20	132322	1745	1	0	20	66786	2145	20	900	1960	20	1098	1979.8				23.31	23.16	-0.15		
[2A]-[4A]-[4A]	[2A]	[4A]	[4A]		QPSK	20	18900	1880	1	0	20	900	1960	20	2050	2120	20	2248	2139.8				23.68	23.57	-0.11		
	[4A]	[4A]	[2A]		QPSK	20	20050	1720	1	0	20	2050	2120	20	2300	2145	20	900	1960				23.21	23.15	-0.06		
2A-[4A]-13A	2A	[4A]	13A		QPSK	20	18900	1880	1	0	20	900	1960	20	2175	2											

DL CA with 4x4 MIMO output power results (Continued)

E-UTRA CA configuration (BCS)	Bands				UL							DL									LTE Rel 8 Tx. Power [dBm]	LTE Rel 10 Tx. Power [dBm]	Delta		
	PCC	SCC1	SCC2	SCC3	Mode	BW (MHz)	Channel	Freq. (MHz)	RB Location	RB Offset	PCC			SCC1			SCC2			SCC3					
	1st	2nd	3rd	4th							BW (MHz)	Channel	Freq. (MHz)	BW (MHz)	Channel	Freq. (MHz)	BW (MHz)	Channel	Freq. (MHz)	BW (MHz)				Channel	Freq. (MHz)
[2A]-[4A]-13A	[2A]	[4A]	[13A]		QPSK	20	18900	1880	1	0	20	900	1960	20	2175	2132.5	10	5230	751				23.68	23.56	-0.12
	[4A]	[2A]	[13A]		QPSK	20	20175	1732.5	1	99	20	2175	2132.5	20	900	1960	10	5230	751				23.4	23.34	-0.06
[2A]-[4A]-[30A]	[2A]	[4A]	[30A]		QPSK	10	23230	782	1	0	10	5230	751	20	900	1960	20	2175	2132.5				23.52	23.48	-0.04
	[2A]	[4A]	[30A]		QPSK	20	18900	1880	1	0	20	900	1960	20	2175	2132.5	10	9820	2355				23.68	23.66	-0.02
	[4A]	[2A]	[30A]		QPSK	20	20175	1732.5	1	99	20	2175	2132.5	20	900	1960	10	9820	2355				23.4	23.36	-0.04
	[30A]	[2A]	[4A]		QPSK	10	27710	2310	1	25	10	9820	2355	20	900	1960	20	2175	2132.5				22.62	22.62	0
[2A]-[30A]-[66A]	[2A]	[30A]	[66A]		QPSK	20	18900	1880	1	0	20	900	1960	10	9820	2355	20	66786	2145				23.68	23.68	0
	[30A]	[2A]	[66A]		QPSK	10	27710	2310	1	25	10	9820	2355	20	900	1960	20	66786	2145				22.62	22.59	-0.03
	[66A]	[2A]	[30A]		QPSK	20	132322	1745	1	0	20	66786	2145	20	900	1960	10	9820	2355				23.31	23.19	-0.12
	[2A]	[66A]	[66A]		QPSK	20	18900	1880	1	0	20	900	1960	20	66786	2145	20	67036	2170				23.68	23.64	-0.04
[2A]-[66B]	[66A]	[66A]	[2A]		QPSK	20	132322	1745	1	0	20	66786	2145	20	67036	2170	20	900	1960				23.31	23.22	-0.09
	[2A]	[66B]	[66B]		QPSK	20	18900	1880	1	0	20	900	1960	10	66786	2145	10	66885	2154.9				23.68	23.64	-0.04
[2A]-[66C]	[66B]	[66B]	[2A]		QPSK	10	132322	1745	1	0	10	66786	2145	10	66885	2154.9	20	900	1960				23.39	23.38	-0.01
	[2A]	[66C]	[66C]		QPSK	20	18900	1880	1	0	20	900	1960	20	66786	2145	20	66984	2164.8				23.68	23.66	-0.02
4A-[4A]-7A	[66C]	[66C]	[2A]		QPSK	20	132322	1745	1	0	20	66786	2145	20	66984	2164.8	20	900	1960				23.31	23.2	-0.11
	4A	[4A]	7A		QPSK	20	20050	1720	1	0	20	2050	2120	20	2300	2145	20	3100	2655				23.21	23.06	-0.15
	[4A]	4A	7A		QPSK	20	20050	1720	1	0	20	2050	2120	20	2300	2145	20	3100	2655				23.21	23.06	-0.15
	7A	4A	[4A]		QPSK	20	21350	2560	1	0	20	3350	2680	20	2050	2120	20	2248	2139.8				24.71	24.7	-0.01
[4A]-[4A]-7A	[4A]	[4A]	7A		QPSK	20	20050	1720	1	0	20	2050	2120	20	2300	2145	20	3100	2655				23.21	23.07	-0.14
	7A	[4A]	[4A]		QPSK	20	21350	2560	1	0	20	3350	2680	20	2050	2120	20	2248	2139.8				24.71	24.62	-0.09
[4A]-4A-13A	[4A]	4A	13A		QPSK	20	20050	1720	1	0	20	2050	2120	20	2300	2145	10	5230	751				23.21	23.14	-0.07
	4A	[4A]	13A		QPSK	20	20050	1720	1	0	20	2050	2120	20	2300	2145	10	5230	751				23.21	23.11	-0.1
	[4A]	[4A]	4A		QPSK	10	23230	782	1	0	10	5230	751	20	2050	2120	20	2248	2139.8				23.52	23.4	-0.12
	[4A]	[4A]	13A		QPSK	20	20050	1720	1	0	20	2050	2120	20	2300	2145	10	5230	751				23.21	23.2	-0.01
[4A]-[4A]-13A	[4A]	[4A]	[4A]		QPSK	10	23230	782	1	0	10	5230	751	20	2050	2120	20	2248	2139.8				23.52	23.46	-0.06
	13A	[4A]	[4A]		QPSK	20	20050	1720	1	0	20	2050	2120	20	2300	2145	10	9715	722.5				23.21	23.07	-0.14
[4A]-4A-29A	[4A]	4A	29A		QPSK	20	20050	1720	1	0	20	2050	2120	20	2300	2145	10	9715	722.5				23.21	23.11	-0.1
	4A	[4A]	29A		QPSK	20	20050	1720	1	0	20	2050	2120	20	2300	2145	10	9715	722.5				23.21	23.11	-0.1
4A-[4A]-71A	4A	[4A]	71A		QPSK	20	20050	1720	1	0	20	2050	2120	20	2300	2145	20	68761	634.5				23.21	23.21	0
	[4A]	4A	71A		QPSK	20	20050	1720	1	0	20	2050	2120	20	2300	2145	20	68761	634.5				23.21	23.07	-0.14
	71A	4A	[4A]		QPSK	20	133297	680.5	1	0	20	68761	634.5	20	2050	2120	20	2248	2139.8				24.15	24.03	-0.12
	[4A]	[4A]	[4A]		QPSK	20	20050	1720	1	0	20	2050	2120	20	2300	2145	20	68761	634.5				23.21	23.18	-0.03
[25A]-[25A]-66A	71A	[4A]	[4A]		QPSK	20	133297	680.5	1	0	20	68761	634.5	20	2050	2120	20	2248	2139.8				24.15	24.11	-0.04
	[25A]	[25A]	66A		QPSK	20	26140	1860	1	99	20	8140	1940	20	8590	1985	20	66786	2145				24.05	23.92	-0.13
[25A]-[25A]-[66A]	[66A]	[25A]	[25A]		QPSK	20	132322	1745	1	0	20	66786	2145	20	8365	1962.5	20	8590	1985				23.31	23.29	-0.02
	[25A]	[25A]	[66A]		QPSK	20	26140	1860	1	99	20	8140	1940	20	8590	1985	20	66786	2145				24.05	23.96	-0.09
	[66A]	[25A]	[25A]		QPSK	20	132322	1745	1	0	20	66786	2145	20	8365	1962.5	20	8590	1985				23.31	23.16	-0.15
	[25A]	[25A]	[41A]		QPSK	20	26140	1860	1	99	20	8140	1940	20	8590	1985	20	40620	2593				24.05	23.91	-0.14
25A-[25A]-41A	25A	[25A]	41A		QPSK	20	26140	1860	1	99	20	8140	1940	20	8590	1985	20	40620	2593				24.05	23.95	-0.1
	[25A]	25A	41A		QPSK	20	26140	1860	1	99	20	8140	1940	20	8590	1985	20	40620	2593				24.05	23.94	-0.11
25A-[25A]-[41A]	25A	[25A]	[41A]		QPSK	20	26140	1860	1	99	20	8140	1940	20	8590	1985	20	40620	2593				24.05	24.01	-0.04
	[25A]	25A	[41A]		QPSK	20	26140	1860	1	99	20	8140	1940	20	8590	1985	20	40620	2593				24.05	24.01	-0.04
[25A]-[25A]-41A	[25A]	[25A]	41A		QPSK	20	26140	1860	1	99	20	8140	1940	20	8590	1985	20	40620	2593				24.05	23.97	-0.08
[25A]-[25A]-[41A]	[25A]	[25A]	[41A]		QPSK	20	26140	1860	1	99	20	8140	1940	20	8590	1985	20	40620	2593				24.05	24.04	-0.01
[25A]-[41C]	[25A]	[41C]	[41C]		QPSK	20	26140	1860	1	99	20	8140	1940	20	40620	2593	20	40818	2612.8				24.05	24.03	-0.02
[30A]-[66A]-[66A]	[30A]	[66A]	[66A]		QPSK	10	27710	2310	1	25	10	9820	2355	20	66786	2145	20	67036	2170				22.62	22.49	-0.13
	[66A]	[66A]	[30A]		QPSK	20	132322	1745	1	0	20	66786	2145	20	67036	2170	10	9820	2355				23.31	23.21	-0.1
41A-[41C]	41A	[41C]	[41C]		QPSK	20	40620	2593	1	0	20	40620	2593	20	41055	2636.5	20	41253	2656.3				24.72	24.71	-0.01
	[41C]	[41C]	41A		QPSK	20	40620	2593	1	0	20	40620	2593	20	40818	2612.8	20	41055	2636.5				24.72	24.57	-0.15
[41A]-41C	[41A]	41C	41C		QPSK	20	40620	2593	1	0	20	40620	2593	20	41055	2636.5	20	41253	2656.3				24.72	24.71	-0.01
	41C	41C	[41A]		QPSK	20	40620	2593	1	0	20	40620	2593	20	40818	2612.8	20	41055	2636.5				24.72	24.66	-0.06
[41A]-[41C]	[41A]	[41C]	[41C]		QPSK	20	40620	2593	1	0	20	40620	2593	20	41055	2636.5	20	41253	2656.3				24.72	24.6	-0.12
	[41C]	41C	[41A]		QPSK	20	40620	2593	1	0	20	40620	2593	20	40818	2612.8	20	41055	2636.5				24.72	24.62	-0.1
[41D]	[41D]	[41D]	[41D]		QPSK	20	40620	2593	1	0	20	40620	2593	20	40818	2612.8	20	41016	2632.6				24.72	24.71	-0.01
[66A]-[66B]	[66A]	[66B]	[66B]		QPSK	20	132322	1745	1	0	20	66786	2145	10	67086	2175	10	66987	2165.1				23.31	23.22	-0.09
	[66B]	[66B]	[66A]		QPSK	10	132322	1745	1	0	10	66786	2145	10	66885	2154.9	20	66536	2120				23.39	23.34	-0.05
[66A]-[66C]	[66A]	[66C]	[66C]		Q																				

**DL CA with 4x4 MIMO output power results (Continued)**

E-UTRA CA configuration (BCS)	Bands				UL								DL											LTE Rel 8 Tx. Power [dBm]	LTE Rel 10 Tx. Power [dBm]	Delta
	PCC	SCC1	SCC2	SCC3	PCC				PCC				SCC1			SCC2			SCC3							
	1st	2nd	3rd	4th	Mode	BW (MHz)	Channel	Freq. (MHz)	RB Location	RB Offset	BW (MHz)	Channel	Freq. (MHz)	BW (MHz)	Channel	Freq. (MHz)	BW (MHz)	Channel	Freq. (MHz)	BW (MHz)	Channel	Freq. (MHz)	BW (MHz)			
2A-2A-[4A]-4A	2A	2A	[4A]	4A	QPSK	20	18900	1880	1	0	20	900	1960	20	1100	1980	20	2050	2120	20	2248	2139.8	23.68	23.56	-0.12	
	[4A]	[4A]	2A	2A	QPSK	20	20050	1720	1	0	20	2050	2120	20	2300	2145	20	1100	1980	20	2175	2132.5	23.4	23.25	-0.15	
	4A	[4A]	2A	2A	QPSK	20	20050	1720	1	0	20	2050	2120	20	2300	2145	20	1100	1980	20	2175	2132.5	23.4	23.38	-0.02	
[2A]-2A-4A-4A	[2A]	2A	4A	4A	QPSK	20	18900	1880	1	0	20	900	1960	20	1100	1980	20	2050	2120	20	2248	2139.8	23.68	23.62	-0.06	
	2A	[2A]	4A	4A	QPSK	20	18900	1880	1	0	20	900	1960	20	1100	1980	20	2050	2120	20	2248	2139.8	23.68	23.55	-0.13	
	4A	4A	[2A]	2A	QPSK	20	20050	1720	1	0	20	2050	2120	20	2300	2145	20	900	1960	20	1100	1980	20	2175	2132.5	-0.13
2A-2A-[4A]-[4A]	2A	2A	[4A]	[4A]	QPSK	20	18900	1880	1	0	20	900	1960	20	1100	1980	20	2050	2120	20	2248	2139.8	23.68	23.58	-0.1	
	[4A]	[4A]	2A	2A	QPSK	20	20050	1720	1	0	20	2050	2120	20	2300	2145	20	900	1960	20	1100	1980	20	2175	2132.5	-0.13
	[2A]	2A	[4A]	4A	QPSK	20	18900	1880	1	0	20	900	1960	20	1100	1980	20	2050	2120	20	2248	2139.8	23.68	23.67	-0.01	
[2A]-2A-[4A]-4A	[2A]	[2A]	[4A]	4A	QPSK	20	18900	1880	1	0	20	900	1960	20	1100	1980	20	2050	2120	20	2248	2139.8	23.68	23.54	-0.14	
	[4A]	[4A]	[2A]	2A	QPSK	20	20050	1720	1	0	20	2050	2120	20	2300	2145	20	1100	1980	20	2175	2132.5	23.4	23.35	-0.05	
	4A	[4A]	[2A]	2A	QPSK	20	20050	1720	1	0	20	2050	2120	20	2300	2145	20	1100	1980	20	2175	2132.5	23.4	23.31	-0.09	
[2A]-[2A]-4A-4A	[2A]	[2A]	4A	4A	QPSK	20	18900	1880	1	0	20	900	1960	20	1100	1980	20	2050	2120	20	2248	2139.8	23.68	23.64	-0.04	
	4A	4A	[2A]	[2A]	QPSK	20	20050	1720	1	0	20	2050	2120	20	2300	2145	20	900	1960	20	1100	1980	20	2175	2132.5	-0.06
	2A	2A	[4A]	5A	QPSK	20	18900	1880	1	0	20	900	1960	20	1100	1980	20	2175	2132.5	10	2525	881.5	23.68	23.65	-0.03	
2A-2A-[4A]-5A	[4A]	2A	2A	5A	QPSK	20	20175	1732.5	1	99	20	2175	2132.5	20	900	1960	20	1100	1980	10	2525	881.5	23.4	23.4	0	
	5A	2A	2A	[4A]	QPSK	10	20525	836.5	1	0	10	2525	881.5	20	900	1960	20	1100	1980	20	2175	2132.5	24.17	24.08	-0.09	
	[2A]	2A	4A	5A	QPSK	20	18900	1880	1	0	20	900	1960	20	1100	1980	20	2175	2132.5	10	2525	881.5	23.68	23.64	-0.04	
[2A]-2A-4A-5A	2A	[2A]	4A	5A	QPSK	20	18900	1880	1	0	20	900	1960	20	1100	1980	20	2175	2132.5	10	2525	881.5	23.68	23.59	-0.09	
	4A	[2A]	2A	5A	QPSK	20	20175	1732.5	1	99	20	2175	2132.5	20	900	1960	20	1100	1980	10	2525	881.5	23.4	23.39	-0.01	
	5A	[2A]	2A	4A	QPSK	10	20525	836.5	1	0	10	2525	881.5	20	900	1960	20	1100	1980	20	2175	2132.5	24.17	24.05	-0.12	
[2A]-2A-[4A]-5A	[2A]	2A	[4A]	5A	QPSK	20	18900	1880	1	0	20	900	1960	20	1100	1980	20	2175	2132.5	10	2525	881.5	23.68	23.55	-0.13	
	2A	[2A]	[4A]	5A	QPSK	20	18900	1880	1	0	20	900	1960	20	1100	1980	20	2175	2132.5	10	2525	881.5	23.68	23.62	-0.06	
	[4A]	[2A]	2A	5A	QPSK	20	20175	1732.5	1	99	20	2175	2132.5	20	900	1960	20	1100	1980	10	2525	881.5	23.4	23.27	-0.13	
[2A]-[2A]-4A-5A	5A	[2A]	2A	[4A]	QPSK	10	20525	836.5	1	0	10	2525	881.5	20	900	1960	20	1100	1980	20	2175	2132.5	24.17	24.14	-0.03	
	[2A]	[2A]	4A	5A	QPSK	20	18900	1880	1	0	20	900	1960	20	1100	1980	20	2175	2132.5	10	2525	881.5	23.68	23.64	-0.04	
	4A	[2A]	[2A]	5A	QPSK	20	20175	1732.5	1	99	20	2175	2132.5	20	900	1960	20	1100	1980	10	2525	881.5	23.4	23.31	-0.09	
2A-2A-[4A]-12A	5A	[2A]	[2A]	4A	QPSK	10	20525	836.5	1	0	10	2525	881.5	20	900	1960	20	1100	1980	20	2175	2132.5	24.17	24.1	-0.07	
	2A	2A	[4A]	12A	QPSK	20	18900	1880	1	0	20	900	1960	20	1100	1980	20	2175	2132.5	10	5095	737.5	23.68	23.57	-0.11	
	[4A]	2A	2A	12A	QPSK	20	20175	1732.5	1	99	20	2175	2132.5	20	900	1960	20	1100	1980	10	5095	737.5	23.4	23.3	-0.07	
[2A]-2A-4A-12A	12A	2A	2A	[4A]	QPSK	10	23095	707.5	1	0	10	5095	737.5	20	900	1960	20	1100	1980	20	2175	2132.5	23.56	23.5	-0.06	
	[2A]	2A	4A	12A	QPSK	20	18900	1880	1	0	20	900	1960	20	1100	1980	20	2175	2132.5	10	5095	737.5	23.68	23.59	-0.09	
	2A	[2A]	4A	12A	QPSK	20	18900	1880	1	0	20	900	1960	20	1100	1980	20	2175	2132.5	10	5095	737.5	23.68	23.59	-0.09	
[2A]-2A-4A-12A	4A	[2A]	2A	12A	QPSK	20	20175	1732.5	1	99	20	2175	2132.5	20	900	1960	20	1100	1980	10	5095	737.5	23.4	23.26	-0.14	
	12A	[2A]	2A	4A	QPSK	10	23095	707.5	1	0	10	5095	737.5	20	900	1960	20	1100	1980	20	2175	2132.5	23.56	23.54	-0.02	
	[2A]	2A	[4A]	12A	QPSK	20	18900	1880	1	0	20	900	1960	20	1100	1980	20	2175	2132.5	10	5095	737.5	23.68	23.6	-0.08	
[2A]-2A-[4A]-12A	2A	[2A]	[4A]	12A	QPSK	20	18900	1880	1	0	20	900	1960	20	1100	1980	20	2175	2132.5	10	5095	737.5	23.68	23.59	-0.09	
	[4A]	[2A]	2A	12A	QPSK	20	20175	1732.5	1	99	20	2175	2132.5	20	900	1960	20	1100	1980	10	5095	737.5	23.4	23.38	-0.02	
	12A	[2A]	2A	[4A]	QPSK	10	23095	707.5	1	0	10	5095	737.5	20	900	1960	20	1100	1980	20	2175	2132.5	23.56	23.52	-0.04	
[2A]-[2A]-4A-12A	[2A]	[2A]	4A	12A	QPSK	20	18900	1880	1	0	20	900	1960	20	1100	1980	20	2175	2132.5	10	5095	737.5	23.68	23.56	-0.12	
	4A	[2A]	[2A]	12A	QPSK	20	20175	1732.5	1	99	20	2175	2132.5	20	900	1960	20	1100	1980	10	5095	737.5	23.4	23.3	-0.1	
	12A	[2A]	[2A]	4A	QPSK	10	23095	707.5	1	0	10	5095	737.5	20	900	1960	20	1100	1980	20	2175	2132.5	23.56	23.51	-0.05	
2A-2A-[4A]-71A	2A	2A	[4A]	71A	QPSK	20	18900	1880	1	0	20	900	1960	20	1100	1980	20	2175	2132.5	20	68761	634.5	23.68	23.55	-0.13	
	[4A]	2A	2A	71A	QPSK	20	20175	1732.5	1	99	20	2175	2132.5	20	900	1960	20	1100	1980	20	68761	634.5	23.4	23.36	-0.04	
	71A	2A	2A	[4A]	QPSK	20	133297	680.5	1	0	20	68761	634.5	20	900	1960	20	1100	1980	20	2175	2132.5	24.15	24.14	-0.01	
[2A]-2A-4A-71A	[2A]	2A	4A	71A	QPSK	20	18900	1880	1	0	20	900	1960	20	1100	1980	20	2175	2132.5	20	68761	634.5	23.68	23.68	0	
	2A	[2A]	4A	71A	QPSK	20	18900	1880	1	0	20	900	1960	20	1100	1980	20	2175	2132.5	20	68761	634.5	23.68	23.54	-0.14	
	4A	[2A]	2A	71A	QPSK	20	20175	1732.5	1	99	20	2175	2132.5	20	900	1960	20	1100	1980	20	68761	634.5	23.4	23.26	-0.14	
[2A]-2A-[4A]-71A	71A	[2A]	2A	4A	QPSK	20	133297	680.5	1	0	20	68761	634.5	20	900	1960	20	1100	1980	20	2175	2132.5	24.15	24.13	-0.02	
	[2A]	2A	[4A]	71A	QPSK	20	18900	1880	1	0	20	900	1960	20	1100	1980	20	2175	2132.5	20	68761	634.5	23.68	23.54	-0.14	
	4A	[2A]	2A	71A	QPSK	20	20175	1732.5	1	99	20	2175	2132.5	20	900	1960	20	1100	1980	20	68761	634.5	23.4	23.26	-0.14	
[2A]-[2A]-4A-71A	[2A]	[2A]	4A	71A	QPSK	20	18900	1880	1	0	20	900	1960	20	1100	1980	20	2175	2132.5	20	68761	634.5	23.68	23.64	-0.04	
	4A	[2A]	[2A]	71A	QPSK	20	20175	1732.5	1	99	20	2175	2132.5	20	900	1960	20	1100	1980	20	68761	634.5	23.4			





DL CA with 4x4 MIMO output power results (Continued)

E-UTRA CA configuration (BCS)	Bands				UL							DL											LTE Rel 8 Tx. Power [dBm]	LTE Rel 10 Tx. Power [dBm]	Delta
	PCC	SCC1	SCC2	SCC3	Mode	BW (MHz)	Channel	Freq. (MHz)	RB Location	RB Offset	PCC		SCC1			SCC2			SCC3						
	1st	2nd	3rd	4th							BW (MHz)	Channel	Freq. (MHz)	BW (MHz)	Channel	Freq. (MHz)	BW (MHz)	Channel	Freq. (MHz)	BW (MHz)	Channel	Freq. (MHz)			
[2A]-[2A]-7A-13A	[2A]	[2A]	7A	13A	QPSK	20	18900	1880	1	0	20	900	1960	20	1100	1980	20	3100	2655	10	5230	751	23.68	23.57	-0.11
	7A	[2A]	[2A]	13A	QPSK	20	21350	2560	1	0	20	3350	2680	20	900	1960	20	1100	1980	10	5230	751	24.71	24.57	-0.14
	13A	[2A]	[2A]	7A	QPSK	10	23230	782	1	0	10	5230	751	20	900	1960	20	1100	1980	20	3100	2655	23.52	23.42	-0.1
2A-2A-7A-[66A]	2A	2A	7A	[66A]	QPSK	20	18900	1880	1	0	20	900	1960	20	1100	1980	20	3100	2655	20	66786	2145	23.68	23.62	-0.06
	7A	2A	2A	[66A]	QPSK	20	21350	2560	1	0	20	3350	2680	20	900	1960	20	1100	1980	20	66786	2145	24.71	24.58	-0.13
	[66A]	2A	2A	7A	QPSK	20	132322	1745	1	0	20	66786	2145	20	900	1960	20	1100	1980	20	3100	2655	23.31	23.22	-0.09
2A-[2A]-7A-66A	2A	[2A]	7A	66A	QPSK	20	18900	1880	1	0	20	900	1960	20	1100	1980	20	3100	2655	20	66786	2145	23.68	23.56	-0.12
	[2A]	2A	7A	66A	QPSK	20	18900	1880	1	0	20	900	1960	20	1100	1980	20	3100	2655	20	66786	2145	23.68	23.68	0
	7A	2A	[2A]	66A	QPSK	20	21350	2560	1	0	20	3350	2680	20	900	1960	20	1100	1980	20	66786	2145	24.71	24.66	-0.05
2A-[2A]-7A-[66A]	66A	2A	[2A]	7A	QPSK	20	132322	1745	1	0	20	66786	2145	20	900	1960	20	1100	1980	20	3100	2655	23.31	23.16	-0.15
	2A	[2A]	7A	[66A]	QPSK	20	18900	1880	1	0	20	900	1960	20	1100	1980	20	3100	2655	20	66786	2145	23.68	23.65	-0.03
	[2A]	2A	7A	[66A]	QPSK	20	18900	1880	1	0	20	900	1960	20	1100	1980	20	3100	2655	20	66786	2145	23.68	23.63	-0.05
[2A]-[2A]-7A-[66A]	7A	2A	[2A]	[66A]	QPSK	20	21350	2560	1	0	20	3350	2680	20	900	1960	20	1100	1980	20	66786	2145	24.71	24.65	-0.06
	[66A]	2A	[2A]	7A	QPSK	20	132322	1745	1	0	20	66786	2145	20	900	1960	20	1100	1980	20	3100	2655	23.31	23.23	-0.08
	[2A]	2A	[2A]	7A	QPSK	20	18900	1880	1	0	20	900	1960	20	1100	1980	20	3100	2655	20	66786	2145	23.68	23.58	-0.1
[2A]-[2A]-7A-66A	7A	[2A]	[2A]	66A	QPSK	20	21350	2560	1	0	20	3350	2680	20	900	1960	20	1100	1980	20	66786	2145	24.71	24.65	-0.06
	66A	[2A]	[2A]	7A	QPSK	20	132322	1745	1	0	20	66786	2145	20	900	1960	20	1100	1980	20	3100	2655	23.31	23.27	-0.04
	[2A]	2A	12B	12B	QPSK	20	18900	1880	1	0	20	900	1960	20	1100	1980	5	5035	731.5	10	5110	739	23.68	23.61	-0.07
[2A]-2A-12B	2A	[2A]	12B	12B	QPSK	20	18900	1880	1	0	20	900	1960	20	1100	1980	5	5035	731.5	10	5110	739	23.68	23.58	-0.1
	12B	12B	[2A]	2A	QPSK	5	23035	701.5	1	0	5	5035	731.5	10	5110	739	20	900	1960	20	1100	1980	23.89	23.87	-0.02
	[2A]	[2A]	12B	12B	QPSK	20	18900	1880	1	0	20	900	1960	20	1100	1980	5	5035	731.5	10	5110	739	23.68	23.65	-0.03
[2A]-[2A]-12B	12B	12B	[2A]	[2A]	QPSK	5	23035	701.5	1	0	5	5035	731.5	10	5110	739	20	900	1960	20	1100	1980	23.89	23.79	-0.1
	2A	2A	12A	[30A]	QPSK	20	18900	1880	1	0	20	900	1960	20	1100	1980	10	5095	737.5	10	9820	2355	23.68	23.57	-0.11
	12A	2A	2A	[30A]	QPSK	10	23095	707.5	1	0	10	5095	737.5	20	900	1960	20	1100	1980	10	9820	2355	23.56	23.44	-0.12
2A-2A-12A-[30A]	[30A]	2A	2A	12A	QPSK	10	27710	2310	1	25	10	9820	2355	20	900	1960	20	1100	1980	10	5095	737.5	22.62	22.59	-0.03
	[2A]	2A	12A	30A	QPSK	20	18900	1880	1	0	20	900	1960	20	1100	1980	10	5095	737.5	10	9820	2355	23.68	23.68	0
	2A	[2A]	12A	30A	QPSK	20	18900	1880	1	0	20	900	1960	20	1100	1980	10	5095	737.5	10	9820	2355	23.68	23.64	-0.04
[2A]-2A-12A-30A	12A	[2A]	2A	30A	QPSK	10	23095	707.5	1	0	10	5095	737.5	20	900	1960	20	1100	1980	10	9820	2355	23.56	23.45	-0.11
	30A	[2A]	2A	12A	QPSK	10	27710	2310	1	25	10	9820	2355	20	900	1960	20	1100	1980	10	5095	737.5	22.62	22.47	-0.15
	[2A]	2A	12A	[30A]	QPSK	20	18900	1880	1	0	20	900	1960	20	1100	1980	10	5095	737.5	10	9820	2355	23.68	23.63	-0.05
[2A]-2A-12A-[30A]	2A	[2A]	12A	[30A]	QPSK	20	18900	1880	1	0	20	900	1960	20	1100	1980	10	5095	737.5	10	9820	2355	23.68	23.64	-0.04
	12A	[2A]	2A	[30A]	QPSK	10	23095	707.5	1	0	10	5095	737.5	20	900	1960	20	1100	1980	10	9820	2355	23.56	23.42	-0.14
	[30A]	[2A]	2A	12A	QPSK	10	27710	2310	1	25	10	9820	2355	20	900	1960	20	1100	1980	10	5095	737.5	22.62	22.61	-0.01
[2A]-[2A]-12A-30A	[2A]	[2A]	12A	30A	QPSK	20	18900	1880	1	0	20	900	1960	20	1100	1980	10	5095	737.5	10	9820	2355	23.68	23.67	-0.01
	12A	[2A]	[2A]	30A	QPSK	10	23095	707.5	1	0	10	5095	737.5	20	900	1960	20	1100	1980	10	9820	2355	23.56	23.43	-0.13
	30A	[2A]	[2A]	12A	QPSK	10	27710	2310	1	25	10	9820	2355	20	900	1960	20	1100	1980	10	5095	737.5	22.62	22.54	-0.08
2A-2A-12A-[66A]	2A	2A	12A	[66A]	QPSK	20	18900	1880	1	0	20	900	1960	20	1100	1980	10	5095	737.5	20	66786	2145	23.68	23.63	-0.05
	12A	2A	2A	[66A]	QPSK	10	23095	707.5	1	0	10	5095	737.5	20	900	1960	20	1100	1980	20	66786	2145	23.56	23.51	-0.05
	[66A]	2A	2A	12A	QPSK	20	132322	1745	1	0	20	66786	2145	20	900	1960	20	1100	1980	10	5095	737.5	23.31	23.17	-0.14
[2A]-2A-12A-66A	[2A]	2A	12A	66A	QPSK	20	18900	1880	1	0	20	900	1960	20	1100	1980	10	5095	737.5	20	66786	2145	23.68	23.55	-0.13
	2A	[2A]	12A	66A	QPSK	20	18900	1880	1	0	20	900	1960	20	1100	1980	10	5095	737.5	20	66786	2145	23.68	23.66	-0.02
	12A	[2A]	2A	66A	QPSK	10	23095	707.5	1	0	10	5095	737.5	20	900	1960	20	1100	1980	20	66786	2145	23.56	23.47	-0.09
[2A]-2A-12A-[66A]	66A	[2A]	2A	12A	QPSK	20	132322	1745	1	0	20	66786	2145	20	900	1960	20	1100	1980	10	5095	737.5	23.31	23.27	-0.04
	[2A]	2A	12A	[66A]	QPSK	20	18900	1880	1	0	20	900	1960	20	1100	1980	10	5095	737.5	20	66786	2145	23.68	23.62	-0.06
	12A	[2A]	12A	[66A]	QPSK	20	18900	1880	1	0	20	900	1960	20	1100	1980	10	5095	737.5	20	66786	2145	23.68	23.55	-0.13
[2A]-2A-12A-[66A]	12A	[2A]	2A	[66A]	QPSK	10	23095	707.5	1	0	10	5095	737.5	20	900	1960	20	1100	1980	20	66786	2145	23.68	23.45	-0.11
	[66A]	[2A]	2A	12A	QPSK	20	132322	1745	1	0	20	66786	2145	20	900	1960	20	1100	1980	10	5095	737.5	23.31	23.19	-0.12
	[2A]	[2A]	12A	66A	QPSK	20	18900	1880	1	0	20	900	1960	20	1100	1980	10	5095	737.5	20	66786	2145	23.68	23.66	-0.02
[2A]-[2A]-12A-66A	12A	[2A]	[2A]	66A	QPSK	10	23095	707.5	1	0	10	5095	737.5	20	900	1960	20	1100	1980	20	66786	2145	23.56	23.44	-0.12
	66A	[2A]	[2A]	12A	QPSK	20	132322	1745	1	0	20	66786	2145	20	900	1960	20	1100	1980	10	5095	737.5	23.31	23.21	-0.1
	2A	2A	13A	[66A]	QPSK	20	18900	1880	1	0	20	900	1960	20	1100	1980	10	5230	751	20	66786	2145	23.68	23.6	-0.08
2A-2A-13A-[66A]	13A	2A	2A	[66A]	QPSK	10	23230	782	1	0	10	5230	751	20	900	1960	20	1100	1980	20	66786	2145	23.52	23.5	-0.02
	[66A]	2A	2A	13A	QPSK	20	132322	1745	1	0	20	66786	2145	20	900	1960	20	1100	1980	10	5230	751	23.31	23.19	-0.12
	[2A]	2A	13A	66A	QPSK	20	18900	1880	1	0	20														

DL CA with 4x4 MIMO output power results (Continued)

E-UTRA CA configuration (BCS)	Bands				UL							DL											LTE Rel 8 Tx. Power [dBm]	LTE Rel 10 Tx. Power [dBm]	Delta
	PCC	SCC1	SCC2	SCC3	Mode	BW (MHz)	Channel	Freq. (MHz)	RB Location	RB Offset	PCC		SCC1		SCC2		SCC3								
	1st	2nd	3rd	4th							BW (MHz)	Channel	Freq. (MHz)	BW (MHz)	Channel	Freq. (MHz)	BW (MHz)	Channel	Freq. (MHz)	BW (MHz)	Channel	Freq. (MHz)			
[2A]-2A-13A-[66A]	[2A]	2A	13A	[66A]	QPSK	20	18900	1880	1	0	20	900	1960	20	1100	1980	10	5230	751	20	66786	2145	23.68	23.62	-0.06
	2A	[2A]	13A	[66A]	QPSK	20	18900	1880	1	0	20	900	1960	20	1100	1980	10	5230	751	20	66786	2145	23.68	23.56	-0.12
	13A	[2A]	2A	[66A]	QPSK	10	23230	782	1	0	10	5230	751	20	900	1960	20	1100	1980	20	66786	2145	23.52	23.46	-0.06
	[66A]	[2A]	2A	13A	QPSK	20	132322	1745	1	0	20	66786	2145	20	900	1960	20	1100	1980	10	5230	751	23.31	23.24	-0.07
[2A]-[2A]-13A-66A	[2A]	[2A]	13A	66A	QPSK	20	18900	1880	1	0	20	900	1960	20	1100	1980	10	5230	751	20	66786	2145	23.68	23.59	-0.09
	13A	[2A]	[2A]	66A	QPSK	10	23230	782	1	0	10	5230	751	20	900	1960	20	1100	1980	20	66786	2145	23.52	23.44	-0.08
	66A	[2A]	[2A]	13A	QPSK	20	132322	1745	1	0	20	66786	2145	20	900	1960	20	1100	1980	10	5230	751	23.31	23.18	-0.13
	[2A]	2A	29A	[30A]	QPSK	20	18900	1880	1	0	20	900	1960	20	1100	1980	10	9715	722.5	10	9820	2355	23.68	23.54	-0.14
2A-2A-29A-[30A]	[30A]	2A	2A	29A	QPSK	10	27710	2310	1	25	10	9820	2355	20	900	1960	20	1100	1980	10	9715	722.5	22.62	22.55	-0.07
	[2A]	2A	29A	30A	QPSK	20	18900	1880	1	0	20	900	1960	20	1100	1980	10	9715	722.5	10	9820	2355	23.68	23.53	-0.15
	2A	[2A]	29A	30A	QPSK	20	18900	1880	1	0	20	900	1960	20	1100	1980	10	9715	722.5	10	9820	2355	23.68	23.59	-0.09
	30A	[2A]	2A	29A	QPSK	10	27710	2310	1	25	10	9820	2355	20	900	1960	20	1100	1980	10	9715	722.5	22.62	22.49	-0.13
[2A]-2A-29A-30A	[2A]	2A	29A	[30A]	QPSK	20	18900	1880	1	0	20	900	1960	20	1100	1980	10	9715	722.5	10	9820	2355	23.68	23.59	-0.09
	2A	[2A]	29A	[30A]	QPSK	20	18900	1880	1	0	20	900	1960	20	1100	1980	10	9715	722.5	10	9820	2355	23.68	23.54	-0.14
	[30A]	[2A]	2A	29A	QPSK	10	27710	2310	1	25	10	9820	2355	20	900	1960	20	1100	1980	10	9715	722.5	22.62	22.57	-0.05
	[2A]	[2A]	29A	30A	QPSK	20	18900	1880	1	0	20	900	1960	20	1100	1980	10	9715	722.5	10	9820	2355	23.68	23.58	-0.1
2A-2A-29A-[66A]	30A	[2A]	[2A]	29A	QPSK	10	27710	2310	1	25	10	9820	2355	20	900	1960	20	1100	1980	10	9715	722.5	22.62	22.5	-0.12
	2A	2A	29A	[66A]	QPSK	20	18900	1880	1	0	20	900	1960	20	1100	1980	10	9715	722.5	20	66786	2145	23.68	23.54	-0.14
	[66A]	2A	2A	29A	QPSK	20	132322	1745	1	0	20	66786	2145	20	900	1960	20	1100	1980	10	9715	722.5	23.31	23.3	-0.01
	[2A]	2A	29A	66A	QPSK	20	18900	1880	1	0	20	900	1960	20	1100	1980	10	9715	722.5	20	66786	2145	23.68	23.61	-0.07
[2A]-2A-29A-66A	2A	[2A]	29A	66A	QPSK	20	18900	1880	1	0	20	900	1960	20	1100	1980	10	9715	722.5	20	66786	2145	23.68	23.59	-0.09
	[66A]	[2A]	2A	29A	QPSK	20	132322	1745	1	0	20	66786	2145	20	900	1960	20	1100	1980	10	9715	722.5	23.31	23.28	-0.03
	[2A]	2A	29A	[66A]	QPSK	20	18900	1880	1	0	20	900	1960	20	1100	1980	10	9715	722.5	20	66786	2145	23.68	23.63	-0.05
	2A	[2A]	29A	[66A]	QPSK	20	18900	1880	1	0	20	900	1960	20	1100	1980	10	9715	722.5	20	66786	2145	23.68	23.67	-0.01
[2A]-[2A]-29A-66A	[66A]	[2A]	2A	29A	QPSK	20	132322	1745	1	0	20	66786	2145	20	900	1960	20	1100	1980	10	9715	722.5	23.31	23.16	-0.15
	[2A]	[2A]	29A	66A	QPSK	20	18900	1880	1	0	20	900	1960	20	1100	1980	10	9715	722.5	20	66786	2145	23.68	23.61	-0.07
	66A	[2A]	[2A]	29A	QPSK	20	132322	1745	1	0	20	66786	2145	20	900	1960	20	1100	1980	10	9715	722.5	23.31	23.25	-0.06
	2A	2A	30A	[66A]	QPSK	20	18900	1880	1	0	20	900	1960	20	1100	1980	10	9820	2355	20	66786	2145	23.68	23.6	-0.08
2A-2A-30A-[66A]	30A	2A	2A	[66A]	QPSK	10	27710	2310	1	25	10	9820	2355	20	900	1960	20	1100	1980	20	66786	2145	22.62	22.49	-0.13
	[66A]	2A	2A	30A	QPSK	20	132322	1745	1	0	20	66786	2145	20	900	1960	20	1100	1980	10	9820	2355	23.31	23.2	-0.11
	2A	2A	[30A]	66A	QPSK	20	18900	1880	1	0	20	900	1960	20	1100	1980	10	9820	2355	20	66786	2145	23.68	23.57	-0.11
	[30A]	2A	2A	66A	QPSK	10	27710	2310	1	25	10	9820	2355	20	900	1960	20	1100	1980	20	66786	2145	22.62	22.61	-0.01
2A-[2A]-30A-66A	66A	2A	2A	[30A]	QPSK	20	132322	1745	1	0	20	66786	2145	20	900	1960	20	1100	1980	10	9820	2355	23.31	23.2	-0.11
	2A	[2A]	30A	66A	QPSK	20	18900	1880	1	0	20	900	1960	20	1100	1980	10	9820	2355	20	66786	2145	23.68	23.59	-0.09
	[2A]	2A	30A	66A	QPSK	20	18900	1880	1	0	20	900	1960	20	1100	1980	10	9820	2355	20	66786	2145	23.68	23.57	-0.11
	30A	2A	[2A]	66A	QPSK	10	27710	2310	1	25	10	9820	2355	20	900	1960	20	1100	1980	20	66786	2145	22.62	22.52	-0.1
2A-2A-[30A]-[66A]	66A	2A	[2A]	30A	QPSK	20	132322	1745	1	0	20	66786	2145	20	900	1960	20	1100	1980	10	9820	2355	23.31	23.22	-0.09
	2A	2A	[30A]	[66A]	QPSK	20	18900	1880	1	0	20	900	1960	20	1100	1980	10	9820	2355	20	66786	2145	23.68	23.61	-0.07
	[30A]	2A	2A	[66A]	QPSK	10	27710	2310	1	25	10	9820	2355	20	900	1960	20	1100	1980	20	66786	2145	22.62	22.55	-0.07
	[66A]	2A	2A	[30A]	QPSK	20	132322	1745	1	0	20	66786	2145	20	900	1960	20	1100	1980	10	9820	2355	23.31	23.31	0
2A-[2A]-30A-[66A]	2A	[2A]	30A	[66A]	QPSK	20	18900	1880	1	0	20	900	1960	20	1100	1980	10	9820	2355	20	66786	2145	23.68	23.65	-0.03
	[2A]	2A	30A	[66A]	QPSK	20	18900	1880	1	0	20	900	1960	20	1100	1980	10	9820	2355	20	66786	2145	23.68	23.59	-0.09
	30A	2A	[2A]	[66A]	QPSK	10	27710	2310	1	25	10	9820	2355	20	900	1960	20	1100	1980	20	66786	2145	22.62	22.5	-0.12
	[66A]	2A	[2A]	30A	QPSK	20	132322	1745	1	0	20	66786	2145	20	900	1960	20	1100	1980	10	9820	2355	23.31	23.22	-0.09
2A-[2A]-[30A]-66A	[2A]	[2A]	[30A]	66A	QPSK	20	18900	1880	1	0	20	900	1960	20	1100	1980	10	9820	2355	20	66786	2145	23.68	23.57	-0.11
	2A	2A	[30A]	66A	QPSK	20	18900	1880	1	0	20	900	1960	20	1100	1980	10	9820	2355	20	66786	2145	23.68	23.66	-0.02
	[30A]	2A	[2A]	66A	QPSK	10	27710	2310	1	25	10	9820	2355	20	900	1960	20	1100	1980	20	66786	2145	22.62	22.5	-0.12
	66A	2A	[2A]	[30A]	QPSK	20	132322	1745	1	0	20	66786	2145	20	900	1960	20	1100	1980	10	9820	2355	23.31	23.19	-0.12
[2A]-[2A]-30A-66A	[2A]	[2A]	30A	66A	QPSK	20	18900	1880	1	0	20	900	1960	20	1100	1980	10	9820	2355	20	66786	2145	23.68	23.56	-0.12
	30A	[2A]	[2A]	66A	QPSK	10	27710	2310	1	25	10	9820	2355	20	900	1960	20	1100	1980	20	66786	2145	22.62	22.6	-0.02
	[66A]	[2A]	[2A]	30A	QPSK	20	132322	1745	1	0	20	66786	2145	20	900	1960	20	1100	1980	10	9820	2355	23.31	23.24	-0.07
	2A	2A	66A	[66A]	QPSK	20	18900	1880	1	0	20	900	1960	20	1100	1980	20	66786	2145	20	67036	2170	23.68	23.64	-0.04
2A-2A-66A-[66A]	66A	[66A]	2A	2A	QPSK	20	132322	1745	1	0	20	66786	2145	20	67036	2170	20	1100	1980	20	66786	2145	23.31	23.27	-0.04
	[66A]	66A	2A	2A	QPSK	20	132322	1745	1	0	20	66786	2145	20	67036	2170	20	1100							

DL CA with 4x4 MIMO output power results (Continued)

E-UTRA CA configuration (BCS)	Bands				UL								DL												LTE Rel 8 Tx. Power [dBm]	LTE Rel 10 Tx. Power [dBm]	Delta	
	PCC	SCC1	SCC2	SCC3	PCC								SCC1				SCC2				SCC3							
	1st	2nd	3rd	4th	Mode	BW (MHz)	Channel	Freq. (MHz)	RB Location	RB Offset	BW (MHz)	Channel	Freq. (MHz)	BW (MHz)	Channel	Freq. (MHz)	BW (MHz)	Channel	Freq. (MHz)	BW (MHz)	Channel	Freq. (MHz)	BW (MHz)	Channel				Freq. (MHz)
2A-2A-[66A]-[66A]	2A	2A	[66A]	[66A]	QPSK	20	18900	1880	1	0	20	900	1960	20	1100	1980	20	66786	2145	20	67036	2170	20	67036	2170	23.68	23.67	-0.01
	[66A]	[66A]	2A	2A	QPSK	20	132322	1745	1	0	20	66786	2145	20	67036	2170	20	900	1960	20	1100	1980	20	1100	1980	23.31	23.17	-0.14
2A-[2A]-66A-[66A]	2A	[2A]	66A	[66A]	QPSK	20	18900	1880	1	0	20	900	1960	20	1100	1980	20	66786	2145	20	67036	2170	20	67036	2170	23.68	23.55	-0.13
	[2A]	2A	[66A]	[66A]	QPSK	20	18900	1880	1	0	20	900	1960	20	1100	1980	20	66786	2145	20	67036	2170	20	67036	2170	23.68	23.64	-0.04
	66A	[66A]	2A	[2A]	QPSK	20	132322	1745	1	0	20	66786	2145	20	67036	2170	20	1100	1980	20	1100	1980	20	66786	2145	23.31	23.26	-0.05
	[66A]	66A	2A	[2A]	QPSK	20	132322	1745	1	0	20	66786	2145	20	67036	2170	20	1100	1980	20	1100	1980	20	66786	2145	23.31	23.29	-0.02
[2A]-[2A]-66A-66A	[2A]	[2A]	66A	66A	QPSK	20	18900	1880	1	0	20	900	1960	20	1100	1980	20	66786	2145	20	67036	2170	20	67036	2170	23.68	23.59	-0.09
	66A	66A	[2A]	[2A]	QPSK	20	132322	1745	1	0	20	66786	2145	20	67036	2170	20	900	1960	20	1100	1980	20	1100	1980	23.31	23.22	-0.09
2A-2A-[66B]	2A	2A	[66B]	[66B]	QPSK	20	18900	1880	1	0	20	900	1960	20	1100	1980	10	66786	2145	10	66885	2154.9	20	66885	2154.9	23.68	23.63	-0.05
	[66B]	[66B]	2A	2A	QPSK	10	132322	1745	1	0	10	66786	2145	10	66885	2154.9	20	900	1960	20	1100	1980	20	1100	1980	23.39	23.36	-0.03
[2A]-[2A]-66B	[2A]	2A	66B	66B	QPSK	20	18900	1880	1	0	20	900	1960	20	1100	1980	10	66786	2145	10	66885	2154.9	20	66885	2154.9	23.68	23.55	-0.13
	2A	[2A]	66B	66B	QPSK	20	18900	1880	1	0	20	900	1960	20	1100	1980	10	66786	2145	10	66885	2154.9	20	66885	2154.9	23.68	23.68	0
[2A]-[2A]-66B	66B	66B	[2A]	2A	QPSK	10	132322	1745	1	0	10	66786	2145	10	66885	2154.9	20	900	1960	20	1100	1980	20	1100	1980	23.39	23.31	-0.08
	[2A]	[2A]	66B	66B	QPSK	20	18900	1880	1	0	20	900	1960	20	1100	1980	10	66786	2145	10	66885	2154.9	20	66885	2154.9	23.68	23.64	-0.04
2A-2A-[66C]	2A	2A	[66C]	[66C]	QPSK	20	18900	1880	1	0	20	900	1960	20	1100	1980	20	66786	2145	20	66984	2164.8	20	66984	2164.8	23.68	23.64	-0.04
	[66C]	[66C]	2A	2A	QPSK	20	132322	1745	1	0	20	66786	2145	20	66984	2164.8	20	900	1960	20	1100	1980	20	1100	1980	23.31	23.19	-0.12
[2A]-2A-66C	[2A]	2A	66C	66C	QPSK	20	18900	1880	1	0	20	900	1960	20	1100	1980	20	66786	2145	20	66984	2164.8	20	66984	2164.8	23.68	23.68	0
	2A	[2A]	66C	66C	QPSK	20	18900	1880	1	0	20	900	1960	20	1100	1980	20	66786	2145	20	66984	2164.8	20	66984	2164.8	23.68	23.55	-0.13
	66C	66C	[2A]	2A	QPSK	20	132322	1745	1	0	20	66786	2145	20	66984	2164.8	20	900	1960	20	1100	1980	20	1100	1980	23.31	23.27	-0.04
	[2A]	[2A]	66C	66C	QPSK	20	18900	1880	1	0	20	900	1960	20	1100	1980	20	66786	2145	20	66984	2164.8	20	66984	2164.8	23.68	23.59	-0.09
[2A]-[2A]-66C	66C	66C	[2A]	[2A]	QPSK	20	132322	1745	1	0	20	66786	2145	20	66984	2164.8	20	900	1960	20	1100	1980	20	1100	1980	23.31	23.28	-0.03
	2C	2C	[66A]	66A	QPSK	20	18900	1880	1	0	20	900	1960	20	1098	1979.8	20	66786	2145	20	67036	2170	20	67036	2170	23.68	23.65	-0.03
2C-[66A]-66A	[66A]	66A	2C	2C	QPSK	20	132322	1745	1	0	20	66786	2145	20	67036	2170	20	1098	1979.8	20	66786	2145	20	66786	2145	23.31	23.26	-0.05
	66A	[66A]	2C	2C	QPSK	20	132322	1745	1	0	20	66786	2145	20	67036	2170	20	1098	1979.8	20	66786	2145	20	66786	2145	23.31	23.27	-0.04
[2C]-66A-66A	[2C]	[2C]	66A	66A	QPSK	20	18900	1880	1	0	20	900	1960	20	1098	1979.8	20	66786	2145	20	67036	2170	20	67036	2170	23.68	23.62	-0.06
	66A	66A	[2C]	[2C]	QPSK	20	132322	1745	1	0	20	66786	2145	20	67036	2170	20	900	1960	20	1098	1979.8	20	1098	1979.8	23.31	23.27	-0.04
2C-[66A]-[66A]	2C	2C	[66A]	[66A]	QPSK	20	18900	1880	1	0	20	900	1960	20	1098	1979.8	20	66786	2145	20	67036	2170	20	67036	2170	23.68	23.6	-0.08
	[66A]	[66A]	2C	2C	QPSK	20	132322	1745	1	0	20	66786	2145	20	67036	2170	20	900	1960	20	1098	1979.8	20	1098	1979.8	23.31	23.24	-0.07
2A-2A-[66A]-71A	2A	2A	[66A]	71A	QPSK	20	18900	1880	1	0	20	900	1960	20	1100	1980	20	66786	2145	20	68761	634.5	20	68761	634.5	23.68	23.68	0
	[66A]	2A	2A	71A	QPSK	20	132322	1745	1	0	20	66786	2145	20	900	1960	20	1100	1980	20	68761	634.5	20	68761	634.5	23.31	23.18	-0.13
	71A	2A	2A	[66A]	QPSK	20	133297	680.5	1	0	20	68761	634.5	20	900	1960	20	1100	1980	20	66786	2145	20	66786	2145	24.15	24.03	-0.12
	2A	[2A]	66A	71A	QPSK	20	18900	1880	1	0	20	900	1960	20	1100	1980	20	66786	2145	20	68761	634.5	20	68761	634.5	23.68	23.58	-0.1
2A-[2A]-66A-71A	[2A]	2A	66A	71A	QPSK	20	18900	1880	1	0	20	900	1960	20	1100	1980	20	66786	2145	20	68761	634.5	20	68761	634.5	23.68	23.56	-0.12
	66A	2A	[2A]	71A	QPSK	20	132322	1745	1	0	20	66786	2145	20	900	1960	20	1100	1980	20	68761	634.5	20	68761	634.5	23.31	23.29	-0.02
	71A	2A	[2A]	66A	QPSK	20	133297	680.5	1	0	20	68761	634.5	20	900	1960	20	1100	1980	20	66786	2145	20	66786	2145	24.15	24.12	-0.03
	2A	[2A]	[66A]	71A	QPSK	20	18900	1880	1	0	20	900	1960	20	1100	1980	20	66786	2145	20	68761	634.5	20	68761	634.5	23.68	23.6	-0.08
2A-[2A]-[66A]-71A	[2A]	2A	[66A]	71A	QPSK	20	18900	1880	1	0	20	900	1960	20	1100	1980	20	66786	2145	20	68761	634.5	20	68761	634.5	23.68	23.66	-0.02
	[66A]	2A	[2A]	71A	QPSK	20	132322	1745	1	0	20	66786	2145	20	900	1960	20	1100	1980	20	68761	634.5	20	68761	634.5	23.31	23.23	-0.08
	71A	2A	[2A]	[66A]	QPSK	20	133297	680.5	1	0	20	68761	634.5	20	900	1960	20	1100	1980	20	66786	2145	20	66786	2145	24.15	24.04	-0.11
	[2A]	[2A]	66A	71A	QPSK	20	18900	1880	1	0	20	900	1960	20	1100	1980	20	66786	2145	20	68761	634.5	20	68761	634.5	23.68	23.54	-0.14
[2A]-[2A]-66A-71A	66A	[2A]	[2A]	71A	QPSK	20	132322	1745	1	0	20	66786	2145	20	900	1960	20	1100	1980	20	68761	634.5	20	68761	634.5	23.31	23.21	-0.1
	71A	[2A]	[2A]	66A	QPSK	20	133297	680.5	1	0	20	68761	634.5	20	900	1960	20	1100	1980	20	66786	2145	20	66786	2145	24.15	24.11	-0.04
	2A	[4A]	4A	5A	QPSK	20	18900	1880	1	0	20	900	1960	20	2050	2120	20	2248	2139.8	10	2525	881.5	20	2525	881.5	23.68	23.65	-0.03
	[4A]	4A	2A	5A	QPSK	20	20050	1720	1	0	20	2050	2120	20	2300	2145	20	2175	2132.5	10	2525	881.5	20	2525	881.5	23.4	23.27	-0.13
2A-[4A]-4A-5A	4A	[4A]	2A	5A	QPSK	20	20050	1720	1	0	20	2050	2120	20	2300	2145	20	2175	2132.5	10	2525	881.5	20	2525	881.5	23.4	23.32	-0.08
	5A	2A	[4A]	4A	QPSK	10	20525	836.5	1	0	10	2525	881.5	20	900	1960	20	2050	2120	20	2248	2139.8	20	2248	2139.8	24.17	24.1	-0.07
	[2A]	4A	4A	5A	QPSK	20	18900	1880	1	0	20	900	1960	20	2050	2120	20	2248	2139.8	10	2525	881.5	20	2525	881.5	23.68	23.6	

DL CA with 4x4 MIMO output power results (Continued)

E-UTRA CA configuration (BCS)	Bands				UL								DL											LTE Rel 8 Tx. Power [dBm]	LTE Rel 10 Tx. Power [dBm]	Delta
	PCC	SCC1	SCC2	SCC3	Mode	BW (MHz)	Channel	Freq. (MHz)	RB Location	RB Offset	PCC		SCC1		SCC2		SCC3									
	1st	2nd	3rd	4th							BW (MHz)	Channel	Freq. (MHz)	BW (MHz)	Channel	Freq. (MHz)	BW (MHz)	Channel	Freq. (MHz)	BW (MHz)	Channel	Freq. (MHz)	BW (MHz)			
2A-[4A]-4A-12A	2A	[4A]	4A	12A	QPSK	20	18900	1880	1	0	20	900	1960	20	2050	2120	20	2248	2139.8	10	5095	737.5	23.68	23.53	-0.15	
	[4A]	4A	2A	12A	QPSK	20	20050	1720	1	0	20	2050	2120	20	2300	2145	20	2175	2132.5	10	5095	737.5	23.4	23.36	-0.04	
	4A	[4A]	2A	12A	QPSK	20	20050	1720	1	0	20	2050	2120	20	2300	2145	20	2175	2132.5	10	5095	737.5	23.4	23.39	-0.01	
	12A	2A	[4A]	4A	QPSK	10	23095	707.5	1	0	10	5095	737.5	20	900	1960	20	2050	2120	20	2248	2139.8	23.56	23.43	-0.13	
[2A]-4A-4A-12A	[2A]	4A	4A	12A	QPSK	20	18900	1880	1	0	20	900	1960	20	2050	2120	20	2248	2139.8	10	5095	737.5	23.68	23.61	-0.07	
	4A	4A	[2A]	12A	QPSK	20	20050	1720	1	0	20	2050	2120	20	2300	2145	20	900	1960	10	5095	737.5	23.21	23.11	-0.1	
	12A	[2A]	4A	4A	QPSK	10	23095	707.5	1	0	10	5095	737.5	20	900	1960	20	2050	2120	20	2248	2139.8	23.56	23.41	-0.15	
	2A	[4A]	[4A]	12A	QPSK	20	18900	1880	1	0	20	900	1960	20	2050	2120	20	2248	2139.8	10	5095	737.5	23.68	23.53	-0.15	
2A-[4A]-[4A]-12A	[4A]	[4A]	2A	12A	QPSK	20	20050	1720	1	0	20	2050	2120	20	2300	2145	20	900	1960	10	5095	737.5	23.21	23.2	-0.01	
	12A	2A	[4A]	[4A]	QPSK	10	23095	707.5	1	0	10	5095	737.5	20	900	1960	20	2050	2120	20	2248	2139.8	23.56	23.43	-0.13	
	[2A]	[4A]	4A	12A	QPSK	20	18900	1880	1	0	20	900	1960	20	2050	2120	20	2248	2139.8	10	5095	737.5	23.68	23.55	-0.13	
	[4A]	4A	[2A]	12A	QPSK	20	20050	1720	1	0	20	2050	2120	20	2300	2145	20	2175	2132.5	10	5095	737.5	23.4	23.3	-0.1	
[2A]-[4A]-4A-12A	4A	[4A]	[2A]	12A	QPSK	20	20050	1720	1	0	20	2050	2120	20	2300	2145	20	2175	2132.5	10	5095	737.5	23.4	23.34	-0.06	
	12A	[2A]	4A	4A	QPSK	10	23095	707.5	1	0	10	5095	737.5	20	900	1960	20	2050	2120	20	2248	2139.8	23.56	23.54	-0.02	
	4A	[4A]	[2A]	12A	QPSK	20	20050	1720	1	0	20	2050	2120	20	2300	2145	20	2175	2132.5	10	5095	737.5	23.4	23.37	-0.03	
	2A	[4A]	[4A]	4A	QPSK	10	23095	707.5	1	0	10	5095	737.5	20	900	1960	20	2050	2120	20	2248	2139.8	23.56	23.53	-0.03	
2A-[4A]-5B	2A	[4A]	5B	5B	QPSK	20	18900	1880	1	0	20	900	1960	20	2175	2132.5	10	2450	874	10	2549	883.9	23.68	23.53	-0.15	
	[4A]	2A	5B	5B	QPSK	20	20175	1732.5	1	99	20	2175	2132.5	20	900	1960	10	2450	874	10	2549	883.9	23.4	23.39	-0.01	
	5B	5B	2A	[4A]	QPSK	10	20450	829	1	0	10	2450	874	10	2549	883.9	20	900	1960	20	2175	2132.5	24.11	24.01	-0.1	
	[2A]	4A	5B	5B	QPSK	20	18900	1880	1	0	20	900	1960	20	2175	2132.5	10	2450	874	10	2549	883.9	23.68	23.64	-0.04	
[2A]-4A-5B	4A	[2A]	5B	5B	QPSK	20	20175	1732.5	1	99	20	2175	2132.5	20	900	1960	10	2450	874	10	2549	883.9	23.4	23.37	-0.03	
	5B	5B	[2A]	4A	QPSK	10	20450	829	1	0	10	2450	874	10	2549	883.9	20	900	1960	20	2175	2132.5	24.11	24.11	0	
	[2A]	[4A]	5B	5B	QPSK	20	18900	1880	1	0	20	900	1960	20	2175	2132.5	10	2450	874	10	2549	883.9	23.68	23.67	-0.01	
	[4A]	[2A]	5B	5B	QPSK	20	20175	1732.5	1	99	20	2175	2132.5	20	900	1960	10	2450	874	10	2549	883.9	23.4	23.26	-0.14	
2A-4A-5A-[30A]	5B	5B	[2A]	[4A]	QPSK	10	20450	829	1	0	10	2450	874	10	2549	883.9	20	900	1960	20	2175	2132.5	24.11	24.07	-0.04	
	2A	4A	5A	[30A]	QPSK	20	18900	1880	1	0	20	900	1960	20	2175	2132.5	10	2525	881.5	10	9820	2355	23.68	23.54	-0.14	
	4A	2A	5A	[30A]	QPSK	20	20175	1732.5	1	99	20	2175	2132.5	20	900	1960	10	2525	881.5	10	9820	2355	23.4	23.34	-0.06	
	5A	2A	4A	[30A]	QPSK	10	20525	836.5	1	0	10	2525	881.5	20	900	1960	20	2175	2132.5	10	9820	2355	24.17	24.09	-0.08	
2A-[4A]-5A-30A	[30A]	2A	4A	5A	QPSK	10	27710	2310	1	25	10	9820	2355	20	900	1960	20	2175	2132.5	10	2525	881.5	22.62	22.59	-0.03	
	2A	[4A]	5A	30A	QPSK	20	18900	1880	1	0	20	900	1960	20	2175	2132.5	10	2525	881.5	10	9820	2355	23.68	23.54	-0.14	
	[4A]	2A	5A	30A	QPSK	20	20175	1732.5	1	99	20	2175	2132.5	20	900	1960	10	2525	881.5	10	9820	2355	23.4	23.37	-0.03	
	5A	2A	[4A]	30A	QPSK	10	20525	836.5	1	0	10	2525	881.5	20	900	1960	20	2175	2132.5	10	9820	2355	24.17	24.04	-0.13	
[2A]-4A-5A-30A	30A	2A	[4A]	5A	QPSK	10	27710	2310	1	25	10	9820	2355	20	900	1960	20	2175	2132.5	10	2525	881.5	22.62	22.61	-0.01	
	[2A]	4A	5A	30A	QPSK	20	18900	1880	1	0	20	900	1960	20	2175	2132.5	10	2525	881.5	10	9820	2355	23.68	23.56	-0.12	
	4A	[2A]	5A	30A	QPSK	20	20175	1732.5	1	99	20	2175	2132.5	20	900	1960	10	2525	881.5	10	9820	2355	23.4	23.26	-0.14	
	5A	[2A]	4A	30A	QPSK	10	20525	836.5	1	0	10	2525	881.5	20	900	1960	20	2175	2132.5	10	9820	2355	24.17	24.17	0	
2A-[4A]-5A-[30A]	30A	[2A]	4A	5A	QPSK	10	27710	2310	1	25	10	9820	2355	20	900	1960	20	2175	2132.5	10	2525	881.5	22.62	22.56	-0.06	
	2A	[4A]	5A	[30A]	QPSK	20	18900	1880	1	0	20	900	1960	20	2175	2132.5	10	2525	881.5	10	9820	2355	23.68	23.64	-0.04	
	[4A]	2A	5A	[30A]	QPSK	20	20175	1732.5	1	99	20	2175	2132.5	20	900	1960	10	2525	881.5	10	9820	2355	23.4	23.29	-0.11	
	5A	2A	[4A]	[30A]	QPSK	10	20525	836.5	1	0	10	2525	881.5	20	900	1960	20	2175	2132.5	10	9820	2355	24.17	24.09	-0.08	
[2A]-4A-5A-[30A]	[30A]	2A	[4A]	5A	QPSK	10	27710	2310	1	25	10	9820	2355	20	900	1960	20	2175	2132.5	10	2525	881.5	22.62	22.48	-0.14	
	[2A]	4A	5A	[30A]	QPSK	20	18900	1880	1	0	20	900	1960	20	2175	2132.5	10	2525	881.5	10	9820	2355	23.68	23.57	-0.11	
	4A	[2A]	5A	[30A]	QPSK	20	20175	1732.5	1	99	20	2175	2132.5	20	900	1960	10	2525	881.5	10	9820	2355	23.4	23.31	-0.09	
	5A	[2A]	4A	[30A]	QPSK	10	20525	836.5	1	0	10	2525	881.5	20	900	1960	20	2175	2132.5	10	9820	2355	24.17	24.08	-0.09	
[2A]-[4A]-5A-30A	[30A]	[2A]	4A	5A	QPSK	10	27710	2310	1	25	10	9820	2355	20	900	1960	20	2175	2132.5	10	2525	881.5	22.62	22.5	-0.12	
	[2A]	[4A]	5A	30A	QPSK	20	18900	1880	1	0	20	900	1960	20	2175	2132.5	10	2525	881.5	10	9820	2355	23.68	23.66	-0.02	
	[4A]	[2A]	5A	30A	QPSK	20	20175	1732.5	1	99	20	2175	2132.5	20	900	1960	10	2525	881.5	10	9820	2355	23.4	23.38	-0.02	
	5A	[2A]	[4A]	30A	QPSK	10	20525	836.5	1	0	10	2525	881.5	20	900	1960	20	2175	2132.5	10	9820	2355	24.17	24.06	-0.11	
2A-[4A]-7A-7A	30A	[2A]	[4A]	5A	QPSK	10	27710	2310	1	25	10	9820	2355	20	900	1960	20	2175	2132.5	10	2525	881.5	22.62	22.62	0	
	2A	[4A]	7A	7A	QPSK	20	18900	1880	1	0	20	900	1960	20	2175	2132.5	20	3100	2655	20	3350	2680	23.68	23.65	-0.03	
	[4A]	2A	7A	7A	QPSK	20	20175	1732.5	1	99	20	2175	2132.5	20	900	1960	20	3100	2655	20	3350	2680	23.4	23.3	-0.1	
	7A	7A	2A	[4A]	QPSK	20	21350	2560	1	0	20	3350	2680	20	2850	2630	20	900	1960	20	2175	2132.5	24.71	24.58	-0.13	
[2A]-4A-7A-7A	[2A]	4A	7A	7A	QPSK	20	18900	1880	1	0	20	900	1960	20	2175	2132.5	20	3100	2655	20	3350	2680	23.68	23.59	-0.09	
	4A	[2A]	7A	7A	QPSK	20	20175	1732.5	1	99	20	2175</														

**DL CA with 4x4 MIMO output power results (Continued)**

E-UTRA CA configuration (BCS)	Bands				UL							DL											LTE Rel 8 Tx. Power [dBm]	LTE Rel 10 Tx. Power [dBm]	Delta
	PCC	SCC1	SCC2	SCC3	Mode	BW (MHz)	Channel	Freq. (MHz)	RB Location	RB Offset	PCC		SCC1			SCC2			SCC3						
	1st	2nd	3rd	4th							BW (MHz)	Channel	BW (MHz)	Channel	Freq. (MHz)	BW (MHz)	Channel	Freq. (MHz)	BW (MHz)	Channel	Freq. (MHz)	BW (MHz)			
[2A]-4A-7C	[2A]	4A	7C	7C	QPSK	20	18900	1880	1	0	20	900	1960	20	2175	2132.5	20	3100	2655	20	3298	2674.8	23.68	23.55	-0.13
	4A	[2A]	7C	7C	QPSK	20	20175	1732.5	1	99	20	2175	2132.5	20	900	1960	20	3100	2655	20	3298	2674.8	23.4	23.39	-0.01
	7C	7C	[2A]	4A	QPSK	20	21350	2560	1	0	20	3350	2680	20	3152	2660.2	20	900	1960	20	2175	2132.5	24.71	24.56	-0.15
[2A]-[4A]-7C	[2A]	[4A]	7C	7C	QPSK	20	18900	1880	1	0	20	900	1960	20	2175	2132.5	20	3100	2655	20	3298	2674.8	23.68	23.53	-0.15
	[4A]	[2A]	7C	7C	QPSK	20	20175	1732.5	1	99	20	2175	2132.5	20	900	1960	20	3100	2655	20	3298	2674.8	23.4	23.4	0
	7C	7C	[2A]	[4A]	QPSK	20	21350	2560	1	0	20	3350	2680	20	3152	2660.2	20	900	1960	20	2175	2132.5	24.71	24.7	-0.01
2A-[4A]-7A-12A	2A	[4A]	7A	12A	QPSK	20	18900	1880	1	0	20	900	1960	20	2175	2132.5	20	3100	2655	10	5095	737.5	23.68	23.67	-0.01
	[4A]	2A	7A	12A	QPSK	20	20175	1732.5	1	99	20	2175	2132.5	20	900	1960	20	3100	2655	10	5095	737.5	23.4	23.27	-0.13
	7A	2A	[4A]	12A	QPSK	20	21350	2560	1	0	20	3350	2680	20	2175	2132.5	10	5095	737.5	20	2175	2132.5	24.71	24.6	-0.11
[2A]-4A-7A-12A	12A	2A	[4A]	7A	QPSK	10	23095	707.5	1	0	10	5095	737.5	20	900	1960	20	2175	2132.5	20	3100	2655	23.56	23.5	-0.06
	[2A]	4A	7A	12A	QPSK	20	18900	1880	1	0	20	900	1960	20	2175	2132.5	20	3100	2655	10	5095	737.5	23.68	23.57	-0.11
	4A	[2A]	7A	12A	QPSK	20	20175	1732.5	1	99	20	2175	2132.5	20	900	1960	20	3100	2655	10	5095	737.5	23.4	23.37	-0.03
[2A]-[4A]-7A-12A	7A	[2A]	4A	12A	QPSK	20	21350	2560	1	0	20	3350	2680	20	900	1960	20	2175	2132.5	10	5095	737.5	24.71	24.58	-0.13
	12A	[2A]	4A	7A	QPSK	10	23095	707.5	1	0	10	5095	737.5	20	900	1960	20	2175	2132.5	20	3100	2655	23.56	23.56	0
	[2A]	[4A]	7A	12A	QPSK	20	18900	1880	1	0	20	900	1960	20	2175	2132.5	20	3100	2655	10	5095	737.5	23.68	23.63	-0.05
[2A]-[4A]-7A-12A	[4A]	[2A]	7A	12A	QPSK	20	20175	1732.5	1	99	20	2175	2132.5	20	900	1960	20	3100	2655	10	5095	737.5	23.4	23.26	-0.14
	7A	[2A]	[4A]	12A	QPSK	20	21350	2560	1	0	20	3350	2680	20	900	1960	20	2175	2132.5	10	5095	737.5	24.71	24.66	-0.05
	12A	[2A]	[4A]	7A	QPSK	10	23095	707.5	1	0	10	5095	737.5	20	900	1960	20	2175	2132.5	20	3100	2655	23.56	23.45	-0.11
2A-[4A]-12B	2A	[4A]	12B	12B	QPSK	20	18900	1880	1	0	20	900	1960	20	2175	2132.5	5	5035	731.5	10	5110	739	23.68	23.63	-0.05
	[4A]	2A	12B	12B	QPSK	20	20175	1732.5	1	99	20	2175	2132.5	20	900	1960	5	5035	731.5	10	5110	739	23.4	23.27	-0.13
	12B	12B	2A	[4A]	QPSK	5	23035	701.5	1	0	5	5035	731.5	10	5110	739	20	900	1960	20	2175	2132.5	23.89	23.74	-0.15
[2A]-4A-12B	[2A]	4A	12B	12B	QPSK	20	18900	1880	1	0	20	900	1960	20	2175	2132.5	5	5035	731.5	10	5110	739	23.68	23.55	-0.13
	4A	[2A]	12B	12B	QPSK	20	20175	1732.5	1	99	20	2175	2132.5	20	900	1960	5	5035	731.5	10	5110	739	23.4	23.34	-0.06
	12B	12B	[2A]	4A	QPSK	5	23035	701.5	1	0	5	5035	731.5	10	5110	739	20	900	1960	20	2175	2132.5	23.89	23.81	-0.08
[2A]-[4A]-12B	[2A]	[4A]	12B	12B	QPSK	20	18900	1880	1	0	20	900	1960	20	2175	2132.5	5	5035	731.5	10	5110	739	23.68	23.62	-0.06
	[4A]	[2A]	12B	12B	QPSK	20	20175	1732.5	1	99	20	2175	2132.5	20	900	1960	5	5035	731.5	10	5110	739	23.4	23.32	-0.08
	12B	12B	[2A]	[4A]	QPSK	5	23035	701.5	1	0	5	5035	731.5	10	5110	739	20	900	1960	20	2175	2132.5	23.89	23.76	-0.13
2A-4A-12A-[30A]	2A	4A	12A	[30A]	QPSK	20	18900	1880	1	0	20	900	1960	20	2175	2132.5	10	5095	737.5	10	9820	2355	23.68	23.53	-0.15
	4A	2A	12A	[30A]	QPSK	20	20175	1732.5	1	99	20	2175	2132.5	20	900	1960	10	5095	737.5	10	9820	2355	23.4	23.31	-0.09
	12A	2A	4A	[30A]	QPSK	10	23095	707.5	1	0	10	5095	737.5	20	900	1960	20	2175	2132.5	10	9820	2355	23.56	23.44	-0.12
2A-[4A]-12A-[30A]	[30A]	2A	4A	12A	QPSK	10	27710	2310	1	25	10	9820	2355	20	900	1960	20	2175	2132.5	10	5095	737.5	22.62	22.57	-0.05
	2A	[4A]	12A	30A	QPSK	20	18900	1880	1	0	20	900	1960	20	2175	2132.5	10	5095	737.5	10	9820	2355	23.68	23.59	-0.09
	[4A]	2A	12A	30A	QPSK	20	20175	1732.5	1	99	20	2175	2132.5	20	900	1960	10	5095	737.5	10	9820	2355	23.4	23.28	-0.12
[2A]-4A-12A-[30A]	12A	2A	[4A]	30A	QPSK	10	23095	707.5	1	0	10	5095	737.5	20	900	1960	20	2175	2132.5	10	9820	2355	23.56	23.42	-0.14
	30A	2A	[4A]	12A	QPSK	10	27710	2310	1	25	10	9820	2355	20	900	1960	20	2175	2132.5	10	5095	737.5	22.62	22.6	-0.02
	[2A]	4A	12A	30A	QPSK	20	18900	1880	1	0	20	900	1960	20	2175	2132.5	10	5095	737.5	10	9820	2355	23.68	23.56	-0.12
[2A]-4A-12A-[30A]	4A	[2A]	12A	30A	QPSK	20	20175	1732.5	1	99	20	2175	2132.5	20	900	1960	10	5095	737.5	10	9820	2355	23.4	23.31	-0.09
	12A	[2A]	4A	[30A]	QPSK	10	23095	707.5	1	0	10	5095	737.5	20	900	1960	20	2175	2132.5	10	9820	2355	23.56	23.49	-0.07
	[30A]	[2A]	4A	12A	QPSK	10	27710	2310	1	25	10	9820	2355	20	900	1960	20	2175	2132.5	10	5095	737.5	22.62	22.57	-0.05
[2A]-[4A]-12A-[30A]	[2A]	[4A]	12A	30A	QPSK	20	18900	1880	1	0	20	900	1960	20	2175	2132.5	10	5095	737.5	10	9820	2355	23.68	23.6	-0.08
	[4A]	[2A]	12A	30A	QPSK	20	20175	1732.5	1	99	20	2175	2132.5	20	900	1960	10	5095	737.5	10	9820	2355	23.4	23.39	-0.01
	12A	[2A]	[4A]	30A	QPSK	10	23095	707.5	1	0	10	5095	737.5	20	900	1960	20	2175	2132.5	10	9820	2355	23.56	23.54	-0.02
2A-4A-29A-[30A]	30A	[2A]	[4A]	12A	QPSK	10	27710	2310	1	25	10	9820	2355	20	900	1960	20	2175	2132.5	10	5095	737.5	22.62	22.62	0
	2A	4A	29A	[30A]	QPSK	20	18900	1880	1	0	20	900	1960	20	2175	2132.5	10	9715	722.5	10	9820	2355	23.68	23.66	-0.02
	4A	2A	29A	[30A]	QPSK	20	20175	1732.5	1	99	20	2175	2132.5	20	900	1960	10	9715	722.5	10	9820	2355	23.4	23.38	-0.02
2A-[4A]-29A-[30A]	[30A]	[2A]	4A	29A	QPSK	10	27710	2310	1	25	10	9820	2355	20	900	1960	20	2175	2132.5	10	9715	722.5	22.62	22.55	-0.07
	2A	[4A]	29A	30A	QPSK	20	18900	1880	1	0	20	900	1960	20	2175	2132.5	10	9715	722.5	10	9820	2355	23.68	23.68	0
	[4A]	2A	29A	30A	QPSK	20	20175	1732.5	1	99	20	2175	2132.5	20	900	1960	10	9715	722.5	10	9				

**DL CA with 4x4 MIMO output power results (Continued)**

E-UTRA CA configuration (BCS)	Bands				UL						DL										LTE Rel 8 Tx. Power [dBm]	LTE Rel 10 Tx. Power [dBm]	Delta		
	PCC	SCC1	SCC2	SCC3	Mode	BW (MHz)	Channel	Freq. (MHz)	RB Location	RB Offset	PCC		SCC1		SCC2		SCC3								
	1st	2nd	3rd	4th							BW (MHz)	Channel	Freq. (MHz)	BW (MHz)	Channel	Freq. (MHz)	BW (MHz)	Channel	Freq. (MHz)	BW (MHz)				Channel	Freq. (MHz)
2A-[4A]-29A-[30A]	2A	[4A]	29A	[30A]	QPSK	20	18900	1880	1	0	20	900	1960	20	2175	2132.5	10	9715	722.5	10	9820	2355	23.68	23.6	-0.08
	[4A]	2A	29A	[30A]	QPSK	20	20175	1732.5	1	99	20	2175	2132.5	20	900	1960	10	9715	722.5	10	9820	2355	23.4	23.31	-0.09
	[30A]	2A	[4A]	29A	QPSK	10	27710	2310	1	25	10	9820	2355	20	900	1960	20	2175	2132.5	10	9715	722.5	22.62	22.51	-0.11
[2A]-4A-29A-[30A]	[2A]	4A	29A	[30A]	QPSK	20	18900	1880	1	0	20	900	1960	20	2175	2132.5	10	9715	722.5	10	9820	2355	23.68	23.53	-0.15
	4A	[2A]	29A	[30A]	QPSK	20	20175	1732.5	1	99	20	2175	2132.5	20	900	1960	10	9715	722.5	10	9820	2355	23.4	23.35	-0.05
	[30A]	[2A]	4A	29A	QPSK	10	27710	2310	1	25	10	9820	2355	20	900	1960	20	2175	2132.5	10	9715	722.5	22.62	22.51	-0.11
[2A]-[4A]-29A-30A	[2A]	[4A]	29A	30A	QPSK	20	18900	1880	1	0	20	900	1960	20	2175	2132.5	10	9715	722.5	10	9820	2355	23.68	23.59	-0.09
	[4A]	[2A]	29A	30A	QPSK	20	20175	1732.5	1	99	20	2175	2132.5	20	900	1960	10	9715	722.5	10	9820	2355	23.4	23.29	-0.11
	30A	[2A]	[4A]	29A	QPSK	10	27710	2310	1	25	10	9820	2355	20	900	1960	20	2175	2132.5	10	9715	722.5	22.62	22.55	-0.07
2A-5B-[30A]	2A	5B	5B	[30A]	QPSK	20	18900	1880	1	0	20	900	1960	10	2450	874	10	2549	883.9	10	9820	2355	23.68	23.68	0
	5B	5B	2A	[30A]	QPSK	10	20450	829	1	0	10	2450	874	10	2549	883.9	20	900	1960	10	9820	2355	24.11	23.97	-0.14
	[30A]	2A	5B	5B	QPSK	10	27710	2310	1	25	10	9820	2355	20	900	1960	10	2549	883.9	10	9820	2355	22.62	22.56	-0.06
[2A]-5B-30A	[2A]	5B	5B	30A	QPSK	20	18900	1880	1	0	20	900	1960	10	2450	874	10	2549	883.9	10	9820	2355	23.68	23.56	-0.12
	5B	5B	[2A]	30A	QPSK	10	20450	829	1	0	10	2450	874	10	2549	883.9	20	900	1960	10	9820	2355	24.11	24.01	-0.1
	30A	[2A]	5B	5B	QPSK	10	27710	2310	1	25	10	9820	2355	20	900	1960	10	2549	883.9	10	9820	2355	22.62	22.61	-0.01
[2A]-5B-[30A]	[2A]	5B	5B	[30A]	QPSK	20	18900	1880	1	0	20	900	1960	10	2450	874	10	2549	883.9	10	9820	2355	23.68	23.6	-0.08
	5B	5B	[2A]	[30A]	QPSK	10	20450	829	1	0	10	2450	874	10	2549	883.9	20	900	1960	10	9820	2355	24.11	24.05	-0.06
	[30A]	[2A]	5B	5B	QPSK	10	27710	2310	1	25	10	9820	2355	20	900	1960	10	2549	883.9	10	9820	2355	22.62	22.54	-0.08
2A-5B-[66A]	2A	5B	5B	[66A]	QPSK	20	18900	1880	1	0	20	900	1960	10	2450	874	10	2549	883.9	20	66786	2145	23.68	23.59	-0.09
	5B	5B	2A	[66A]	QPSK	10	20450	829	1	0	10	2450	874	10	2549	883.9	20	900	1960	20	66786	2145	24.11	24.02	-0.09
	[66A]	2A	5B	5B	QPSK	20	132322	1745	1	0	20	66786	2145	20	900	1960	10	2450	874	10	2549	883.9	23.31	23.29	-0.02
[2A]-5B-66A	[2A]	5B	5B	[66A]	QPSK	20	18900	1880	1	0	20	900	1960	10	2450	874	10	2549	883.9	20	66786	2145	23.68	23.6	-0.08
	5B	5B	[2A]	[66A]	QPSK	10	20450	829	1	0	10	2450	874	10	2549	883.9	20	900	1960	20	66786	2145	24.11	24.02	-0.09
	[66A]	[2A]	5B	5B	QPSK	20	132322	1745	1	0	20	66786	2145	20	900	1960	10	2450	874	10	2549	883.9	23.31	23.23	-0.08
[2A]-5B-[66A]	[2A]	5B	5B	[66A]	QPSK	20	18900	1880	1	0	20	900	1960	10	2450	874	10	2549	883.9	20	66786	2145	23.68	23.56	-0.12
	5B	5B	[2A]	[66A]	QPSK	10	20450	829	1	0	10	2450	874	10	2549	883.9	20	900	1960	20	66786	2145	24.11	24.04	-0.07
	[66A]	[2A]	5B	5B	QPSK	20	132322	1745	1	0	20	66786	2145	20	900	1960	10	2450	874	10	2549	883.9	23.31	23.27	-0.04
[2A]-5A-7A-7A	[2A]	5A	7A	7A	QPSK	20	18900	1880	1	0	20	900	1960	10	2525	881.5	20	3100	2655	20	3350	2680	23.68	23.58	-0.1
	5A	[2A]	7A	7A	QPSK	10	20525	836.5	1	0	10	2525	881.5	20	900	1960	20	3100	2655	20	3350	2680	24.17	24.05	-0.12
	7A	7A	[2A]	5A	QPSK	20	21350	2560	1	0	20	3350	2680	20	2850	2630	20	900	1960	10	2525	881.5	24.71	24.71	0
[2A]-5A-7C	[2A]	5A	7C	7C	QPSK	20	18900	1880	1	0	20	900	1960	10	2525	881.5	20	3100	2655	20	3298	2674.8	23.68	23.54	-0.14
	5A	[2A]	7C	7C	QPSK	10	20525	836.5	1	0	10	2525	881.5	20	900	1960	20	3100	2655	20	3298	2674.8	24.17	24.14	-0.03
	7C	7C	[2A]	5A	QPSK	20	21350	2560	1	0	20	3350	2680	20	3152	2660.2	20	900	1960	10	2525	881.5	24.71	24.65	-0.06
2A-5A-7A-[66A]	2A	5A	7A	[66A]	QPSK	20	18900	1880	1	0	20	900	1960	10	2525	881.5	20	3100	2655	20	66786	2145	23.68	23.65	-0.03
	5A	2A	7A	[66A]	QPSK	10	20525	836.5	1	0	10	2525	881.5	20	900	1960	20	3100	2655	20	66786	2145	24.17	24.02	-0.15
	7A	2A	5A	[66A]	QPSK	20	21350	2560	1	0	20	3350	2680	20	900	1960	10	2525	881.5	20	66786	2145	24.71	24.7	-0.01
[2A]-5A-7A-[66A]	[66A]	2A	5A	7A	QPSK	20	132322	1745	1	0	20	66786	2145	20	900	1960	10	2525	881.5	20	3100	2655	23.31	23.27	-0.04
	[2A]	5A	7A	[66A]	QPSK	20	18900	1880	1	0	20	900	1960	10	2525	881.5	20	3100	2655	20	66786	2145	23.68	23.58	-0.1
	5A	[2A]	7A	[66A]	QPSK	10	20525	836.5	1	0	10	2525	881.5	20	900	1960	20	3100	2655	20	66786	2145	24.17	24.09	-0.08
[2A]-5A-7A-66A	7A	[2A]	5A	[66A]	QPSK	20	21350	2560	1	0	20	3350	2680	20	900	1960	10	2525	881.5	20	66786	2145	24.71	24.6	-0.11
	[66A]	[2A]	5A	7A	QPSK	20	132322	1745	1	0	20	66786	2145	20	900	1960	10	2525	881.5	20	3100	2655	23.31	23.16	-0.15
	[2A]	5A	7A	[66A]	QPSK	20	18900	1880	1	0	20	900	1960	10	2525	881.5	20	3100	2655	20	66786	2145	23.68	23.54	-0.14
2A-5A-30A-[66A]	5A	[2A]	5A	[66A]	QPSK	20	21350	2560	1	0	20	3350	2680	20	900	1960	10	2525	881.5	20	66786	2145	24.71	24.64	-0.07
	[66A]	[2A]	5A	7A	QPSK	20	132322	1745	1	0	20	66786	2145	20	900	1960	10	2525	881.5	20	3100	2655	23.31	23.31	0
	2A	5A	30A	[66A]	QPSK	20	18900	1880	1	0	20	900	1960	10	9820	2355	20	66786	2145	23.68	23.54	-0.14			
2A-5A-[30A]-66A	5A	2A	30A	[66A]	QPSK	10	20525	836.5	1	0	10	2525	881.5	20	900	1960	10	9820	2355	20	66786	2145	24.17	24.13	-0.04
	[30A]	2A	5A	[66A]	QPSK	10	27710	2310	1	25	10	9820	2355	20	900	1960	10	2525	881.5	20	66786	2145	22.62	22.58	-0.04
	[66A]	2A	5A	30A	QPSK	20	132322	1745	1	0	20	66786	2145	20	900	1960	10	9820	2355	20	66786	2145	23.31	23.31	0
[2A]-5A-30A-66A	2A	5A	[30A]	66A	QPSK	20	18900	1880	1	0	20	900	1960	10	2525	881.5	10	9820	2355	20	66786	2145	23.68	23.64	-0.04
	5A	2A	[30A]	66A	QPSK	10	20525	836.5	1	0	10	2525	881.5	20	900	1960	10	9820	2355	20	66786	2145	24.17	24.12	-0.05
	[30A]	2A	5A	66A	QPSK	10	27710	2310	1	25	10	9820	2355	20	900	1960	10	2525	881.5	10	9820	2355	22.62	22.58	-0.04
[2A]-5A-30A-66A	[66A]	2A	5A	[30A]	QPSK	20	132322	1745	1	0	20	66786	2145	20	900	1960	10	9820	2355	20	66786	2145	23.31	23.16	-0.15
	[2A]	5A	30A	66A	QPSK	20	18900	1880	1	0	20	900	1960	10	2525	881.5	10	9820	2355	20	66786	2145	23.68	23.64	-0.04
	5A	[2A]	30A	66A	QPSK	10	20525	836.5	1																

DL CA with 4x4 MIMO output power results (Continued)

E-UTRA CA configuration (BCS)	Bands				UL								DL										LTE Rel 8 Tx. Power [dBm]	LTE Rel 10 Tx. Power [dBm]	Delta
	PCC	SCC1	SCC2	SCC3	Mode	BW (MHz)	Channel	Freq. (MHz)	RB Location	RB Offset	PCC		SCC1		SCC2		SCC3								
	1st	2nd	3rd	4th							BW (MHz)	Channel	Freq. (MHz)	BW (MHz)	Channel	Freq. (MHz)	BW (MHz)	Channel	Freq. (MHz)	BW (MHz)	Channel	Freq. (MHz)			
2A-5A-[30A]-[66A]	2A	5A	[30A]	[66A]	QPSK	20	18900	1880	1	0	20	900	1960	10	2525	881.5	10	9820	2355	20	66786	2145	23.68	23.55	-0.13
	5A	2A	[30A]	[66A]	QPSK	10	20525	836.5	1	0	10	2525	881.5	20	900	1960	10	9820	2355	20	66786	2145	24.17	24.07	-0.1
	[30A]	2A	5A	[66A]	QPSK	10	27710	2310	1	25	10	9820	2355	20	900	1960	10	2525	881.5	20	66786	2145	22.62	22.59	-0.03
	[66A]	2A	5A	[30A]	QPSK	20	132322	1745	1	0	20	66786	2145	20	900	1960	10	2525	881.5	10	9820	2355	23.31	23.31	0
[2A]-5A-30A-[66A]	[2A]	5A	30A	[66A]	QPSK	20	18900	1880	1	0	20	900	1960	10	2525	881.5	10	9820	2355	20	66786	2145	23.68	23.61	-0.07
	5A	[2A]	30A	[66A]	QPSK	10	20525	836.5	1	0	10	2525	881.5	20	900	1960	10	9820	2355	20	66786	2145	24.17	24.06	-0.11
	30A	[2A]	5A	[66A]	QPSK	10	27710	2310	1	25	10	9820	2355	20	900	1960	10	2525	881.5	20	66786	2145	22.62	22.61	-0.01
	[66A]	[2A]	5A	30A	QPSK	20	132322	1745	1	0	20	66786	2145	20	900	1960	10	2525	881.5	10	9820	2355	23.31	23.28	-0.03
[2A]-5A-[30A]-66A	[2A]	5A	[30A]	66A	QPSK	20	18900	1880	1	0	20	900	1960	10	2525	881.5	10	9820	2355	20	66786	2145	23.68	23.59	-0.09
	5A	[2A]	[30A]	66A	QPSK	10	20525	836.5	1	0	10	2525	881.5	20	900	1960	10	9820	2355	20	66786	2145	24.17	24.05	-0.12
	[30A]	[2A]	5A	66A	QPSK	10	27710	2310	1	25	10	9820	2355	20	900	1960	10	2525	881.5	20	66786	2145	22.62	22.61	-0.01
	66A	[2A]	5A	[30A]	QPSK	20	132322	1745	1	0	20	66786	2145	20	900	1960	10	2525	881.5	10	9820	2355	23.31	23.24	-0.07
2A-5A-[66A]-66A	2A	5A	[66A]	66A	QPSK	20	18900	1880	1	0	20	900	1960	10	2525	881.5	20	66786	2145	20	67036	2170	23.68	23.54	-0.14
	5A	2A	[66A]	66A	QPSK	10	20525	836.5	1	0	10	2525	881.5	20	900	1960	20	66786	2145	20	67036	2170	24.17	24.02	-0.15
	[66A]	66A	2A	5A	QPSK	20	132322	1745	1	0	20	66786	2145	20	67036	2170	10	2525	881.5	20	66786	2145	23.31	23.17	-0.14
	66A	[66A]	2A	5A	QPSK	20	132322	1745	1	0	20	66786	2145	20	67036	2170	10	2525	881.5	20	66786	2145	23.31	23.25	-0.06
[2A]-5A-66A-66A	[2A]	5A	66A	66A	QPSK	20	18900	1880	1	0	20	900	1960	10	2525	881.5	20	66786	2145	20	67036	2170	23.68	23.64	-0.04
	5A	[2A]	66A	66A	QPSK	10	20525	836.5	1	0	10	2525	881.5	20	900	1960	20	66786	2145	20	67036	2170	24.17	24.11	-0.06
	66A	66A	[2A]	5A	QPSK	20	132322	1745	1	0	20	66786	2145	20	67036	2170	10	2525	881.5	20	66786	2145	23.31	23.28	-0.03
	2A	5A	[66A]	[66A]	QPSK	20	18900	1880	1	0	20	900	1960	10	2525	881.5	20	66786	2145	20	67036	2170	23.68	23.58	-0.1
2A-5A-[66A]-[66A]	5A	2A	[66A]	[66A]	QPSK	10	20525	836.5	1	0	10	2525	881.5	20	900	1960	20	66786	2145	20	67036	2170	24.17	24.17	0
	[66A]	[66A]	2A	5A	QPSK	20	132322	1745	1	0	20	66786	2145	20	67036	2170	10	2525	881.5	20	66786	2145	23.31	23.18	-0.13
	[2A]	5A	[66A]	66A	QPSK	20	18900	1880	1	0	20	900	1960	10	2525	881.5	20	66786	2145	20	67036	2170	23.68	23.59	-0.09
	5A	[2A]	[66A]	66A	QPSK	10	20525	836.5	1	0	10	2525	881.5	20	900	1960	20	66786	2145	20	67036	2170	24.17	24.03	-0.14
[2A]-5A-[66A]-66A	[66A]	66A	[2A]	5A	QPSK	20	132322	1745	1	0	20	66786	2145	20	67036	2170	10	2525	881.5	20	66786	2145	23.31	23.29	-0.02
	66A	[66A]	[2A]	5A	QPSK	20	132322	1745	1	0	20	66786	2145	20	67036	2170	10	2525	881.5	20	66786	2145	23.31	23.31	0
	2A	5A	[66B]	[66B]	QPSK	20	18900	1880	1	0	20	900	1960	10	2525	881.5	10	66885	2154.9	10	66885	2154.9	23.68	23.67	-0.01
	5A	2A	[66B]	[66B]	QPSK	10	20525	836.5	1	0	10	2525	881.5	20	900	1960	10	66786	2145	10	66885	2154.9	24.17	24.09	-0.08
[2A]-5A-66B	[66B]	[66B]	2A	5A	QPSK	10	132322	1745	1	0	10	66786	2145	10	66885	2154.9	20	900	1960	10	2525	881.5	23.39	23.38	-0.01
	[2A]	5A	66B	66B	QPSK	20	18900	1880	1	0	20	900	1960	10	2525	881.5	10	66786	2145	10	66885	2154.9	23.68	23.58	-0.1
	5A	[2A]	66B	66B	QPSK	10	20525	836.5	1	0	10	2525	881.5	20	900	1960	10	66786	2145	10	66885	2154.9	24.17	24.11	-0.06
	66B	66B	[2A]	5A	QPSK	10	132322	1745	1	0	10	66786	2145	10	66885	2154.9	20	900	1960	10	2525	881.5	23.39	23.27	-0.12
2A-5A-[66C]	2A	5A	[66C]	[66C]	QPSK	20	18900	1880	1	0	20	900	1960	10	2525	881.5	20	66786	2145	20	66984	2164.8	23.68	23.62	-0.06
	5A	2A	[66C]	[66C]	QPSK	10	20525	836.5	1	0	10	2525	881.5	20	900	1960	20	66786	2145	20	66984	2164.8	24.17	24.15	-0.02
	[66C]	[66C]	2A	5A	QPSK	20	132322	1745	1	0	20	66786	2145	20	66984	2164.8	20	900	1960	10	2525	881.5	23.31	23.18	-0.13
	[2A]	5A	66C	66C	QPSK	20	18900	1880	1	0	20	900	1960	10	2525	881.5	20	66786	2145	20	66984	2164.8	23.68	23.54	-0.14
[2A]-5A-66C	5A	[2A]	66C	66C	QPSK	10	20525	836.5	1	0	10	2525	881.5	20	900	1960	20	66786	2145	20	66984	2164.8	24.17	24.04	-0.13
	66C	66C	[2A]	5A	QPSK	20	132322	1745	1	0	20	66786	2145	20	66984	2164.8	20	900	1960	10	2525	881.5	23.31	23.2	-0.11
	[2A]	7A	7A	13A	QPSK	20	18900	1880	1	0	20	900	1960	20	3100	2655	20	3350	2680	10	5230	751	23.68	23.58	-0.1
	7A	7A	[2A]	13A	QPSK	20	21350	2560	1	0	20	3350	2680	20	2850	2630	20	900	1960	10	5230	751	24.71	24.59	-0.12
[2A]-7A-7A-13A	13A	[2A]	7A	7A	QPSK	10	23230	782	1	0	10	5230	751	20	900	1960	20	3100	2655	20	3350	2680	23.52	23.43	-0.09
	[2A]	7C	7C	13A	QPSK	20	18900	1880	1	0	20	900	1960	20	3100	2655	20	3298	2674.8	10	5230	751	23.68	23.65	-0.03
	7C	7C	[2A]	13A	QPSK	20	21350	2560	1	0	20	3350	2680	20	3152	2660.2	20	900	1960	10	5230	751	24.71	24.59	-0.12
	13A	[2A]	7C	7C	QPSK	10	23230	782	1	0	10	5230	751	20	900	1960	20	3100	2655	20	3298	2674.8	23.52	23.43	-0.09
[2A]-7A-7A-29A	[2A]	7A	7A	29A	QPSK	20	18900	1880	1	0	20	900	1960	20	3100	2655	20	3350	2680	10	9715	722.5	23.68	23.61	-0.07
	7A	7A	[2A]	29A	QPSK	20	21350	2560	1	0	20	3350	2680	20	2850	2630	20	900	1960	10	9715	722.5	24.71	24.61	-0.1
	[2A]	7C	7C	29A	QPSK	20	18900	1880	1	0	20	900	1960	20	3100	2655	20	3298	2674.8	10	9715	722.5	23.68	23.68	0
	7C	7C	[2A]	29A	QPSK	20	21350	2560	1	0	20	3350	2680	20	3152	2660.2	20	900	1960	10	9715	722.5	24.71	24.62	-0.09
2A-7A-7A-[66A]	2A	7A</																							

**DL CA with 4x4 MIMO output power results (Continued)**

E-UTRA CA configuration (BCS)	Bands				UL							DL										LTE Rel 8 Tx. Power [dBm]	LTE Rel 10 Tx. Power [dBm]	Delta	
	PCC	SCC1	SCC2	SCC3	Mode	BW (MHz)	Channel	Freq. (MHz)	RB Location	RB Offset	PCC		SCC1		SCC2		SCC3								
	1st	2nd	3rd	4th							BW (MHz)	Channel	Freq. (MHz)	BW (MHz)	Channel	Freq. (MHz)	BW (MHz)	Channel	Freq. (MHz)	BW (MHz)	Channel				Freq. (MHz)
[2A]-7A-7A-[66A]	[2A]	7A	7A	[66A]	QPSK	20	18900	1880	1	0	20	900	1960	20	3100	2655	20	3350	2680	20	66786	2145	23.68	23.65	-0.03
	7A	7A	[2A]	[66A]	QPSK	20	21350	2560	1	0	20	3350	2680	20	2850	2630	20	900	1960	20	66786	2145	24.71	24.56	-0.15
2A-7C-[66A]	[66A]	[2A]	7A	7A	QPSK	20	132322	1745	1	0	20	66786	2145	20	900	1960	20	3100	2655	20	3350	2680	23.31	23.18	-0.13
	2A	7C	7C	[66A]	QPSK	20	18900	1880	1	0	20	900	1960	20	3100	2655	20	3298	2674.8	20	66786	2145	23.68	23.64	-0.04
	7C	7C	2A	[66A]	QPSK	20	21350	2560	1	0	20	3350	2680	20	3152	2660.2	20	900	1960	20	66786	2145	24.71	24.6	-0.11
	[66A]	2A	7C	7C	QPSK	20	132322	1745	1	0	20	66786	2145	20	900	1960	20	3100	2655	20	3298	2674.8	23.31	23.26	-0.05
[2A]-7C-66A	[2A]	7C	7C	66A	QPSK	20	18900	1880	1	0	20	900	1960	20	3100	2655	20	3298	2674.8	20	66786	2145	23.68	23.67	-0.01
	7C	7C	[2A]	66A	QPSK	20	21350	2560	1	0	20	3350	2680	20	3152	2660.2	20	900	1960	20	66786	2145	24.71	24.6	-0.11
	66A	[2A]	7C	7C	QPSK	20	132322	1745	1	0	20	66786	2145	20	900	1960	20	3100	2655	20	3298	2674.8	23.31	23.17	-0.14
	[2A]	7C	7C	[66A]	QPSK	20	18900	1880	1	0	20	900	1960	20	3100	2655	20	3298	2674.8	20	66786	2145	23.68	23.54	-0.14
[2A]-7C-[66A]	7C	7C	[2A]	[66A]	QPSK	20	21350	2560	1	0	20	3350	2680	20	3152	2660.2	20	900	1960	20	66786	2145	24.71	24.59	-0.12
	[66A]	[2A]	7C	7C	QPSK	20	132322	1745	1	0	20	66786	2145	20	900	1960	20	3100	2655	20	3298	2674.8	23.31	23.29	-0.02
	[2A]	7A	12B	12B	QPSK	20	18900	1880	1	0	20	900	1960	20	3100	2655	5	5035	731.5	10	5110	739	23.68	23.64	-0.04
[2A]-7A-12B	7A	[2A]	12B	12B	QPSK	20	21350	2560	1	0	20	3350	2680	20	900	1960	5	5035	731.5	10	5110	739	24.71	24.59	-0.12
	12B	12B	[2A]	7A	QPSK	5	23035	701.5	1	0	5	5035	731.5	10	5110	739	20	900	1960	20	3100	2655	23.89	23.77	-0.12
	2A	7A	12A	[66A]	QPSK	20	18900	1880	1	0	20	900	1960	20	3100	2655	10	5095	737.5	20	66786	2145	23.68	23.67	-0.01
2A-7A-12A-[66A]	7A	2A	12A	[66A]	QPSK	20	21350	2560	1	0	20	3350	2680	20	900	1960	10	5095	737.5	20	66786	2145	24.71	24.61	-0.1
	12A	2A	7A	[66A]	QPSK	10	23095	707.5	1	0	10	5095	737.5	20	900	1960	20	3100	2655	20	66786	2145	23.56	23.45	-0.11
	[66A]	2A	7A	12A	QPSK	20	132322	1745	1	0	20	66786	2145	20	900	1960	20	3100	2655	10	5095	737.5	23.31	23.18	-0.13
	[2A]	7A	12A	66A	QPSK	20	18900	1880	1	0	20	900	1960	20	3100	2655	10	5095	737.5	20	66786	2145	23.68	23.68	0
[2A]-7A-12A-66A	7A	[2A]	12A	66A	QPSK	20	21350	2560	1	0	20	3350	2680	20	900	1960	10	5095	737.5	20	66786	2145	24.71	24.69	-0.02
	12A	[2A]	7A	66A	QPSK	10	23095	707.5	1	0	10	5095	737.5	20	900	1960	20	3100	2655	20	66786	2145	23.56	23.47	-0.09
	66A	[2A]	7A	12A	QPSK	20	132322	1745	1	0	20	66786	2145	20	900	1960	20	3100	2655	10	5095	737.5	23.31	23.16	-0.15
	[2A]	7A	12A	[66A]	QPSK	20	18900	1880	1	0	20	900	1960	20	3100	2655	10	5095	737.5	20	66786	2145	23.68	23.68	0
[2A]-7A-12A-[66A]	7A	[2A]	12A	[66A]	QPSK	20	21350	2560	1	0	20	3350	2680	20	900	1960	10	5095	737.5	20	66786	2145	24.71	24.59	-0.12
	12A	[2A]	7A	[66A]	QPSK	10	23095	707.5	1	0	10	5095	737.5	20	900	1960	20	3100	2655	20	66786	2145	23.56	23.42	-0.14
	[66A]	[2A]	7A	12A	QPSK	20	132322	1745	1	0	20	66786	2145	20	900	1960	20	3100	2655	10	5095	737.5	23.31	23.3	-0.01
	2A	7A	13A	[66A]	QPSK	20	18900	1880	1	0	20	900	1960	20	3100	2655	10	5230	751	20	66786	2145	23.68	23.67	-0.01
2A-7A-13A-[66A]	7A	2A	13A	[66A]	QPSK	20	21350	2560	1	0	20	3350	2680	20	900	1960	10	5230	751	20	66786	2145	24.71	24.69	-0.02
	13A	2A	7A	[66A]	QPSK	10	23230	782	1	0	10	5230	751	20	900	1960	20	3100	2655	20	66786	2145	23.52	23.37	-0.15
	[66A]	2A	7A	13A	QPSK	20	132322	1745	1	0	20	66786	2145	20	900	1960	20	3100	2655	10	5230	751	23.31	23.3	-0.01
	[2A]	7A	13A	66A	QPSK	20	18900	1880	1	0	20	900	1960	20	3100	2655	10	5230	751	20	66786	2145	23.68	23.63	-0.05
[2A]-7A-13A-66A	7A	[2A]	13A	66A	QPSK	20	21350	2560	1	0	20	3350	2680	20	900	1960	10	5230	751	20	66786	2145	24.71	24.57	-0.14
	13A	[2A]	7A	66A	QPSK	10	23230	782	1	0	10	5230	751	20	900	1960	20	3100	2655	20	66786	2145	23.52	23.51	-0.01
	66A	[2A]	7A	13A	QPSK	20	132322	1745	1	0	20	66786	2145	20	900	1960	20	3100	2655	10	5230	751	23.31	23.29	-0.02
	[2A]	7A	13A	[66A]	QPSK	20	18900	1880	1	0	20	900	1960	20	3100	2655	10	5230	751	20	66786	2145	23.68	23.59	-0.09
[2A]-7A-13A-[66A]	7A	[2A]	13A	[66A]	QPSK	20	21350	2560	1	0	20	3350	2680	20	900	1960	10	5230	751	20	66786	2145	24.71	24.62	-0.09
	13A	[2A]	7A	[66A]	QPSK	10	23230	782	1	0	10	5230	751	20	900	1960	20	3100	2655	20	66786	2145	23.52	23.48	-0.04
	[66A]	[2A]	7A	13A	QPSK	20	132322	1745	1	0	20	66786	2145	20	900	1960	20	3100	2655	10	5230	751	23.31	23.27	-0.04
	2A	7A	29A	[66A]	QPSK	20	18900	1880	1	0	20	900	1960	20	3100	2655	10	9715	722.5	20	66786	2145	23.68	23.53	-0.15
2A-7A-29A-[66A]	7A	2A	29A	[66A]	QPSK	20	21350	2560	1	0	20	3350	2680	20	900	1960	10	9715	722.5	20	66786	2145	24.71	24.62	-0.09
	[66A]	2A	7A	29A	QPSK	20	132322	1745	1	0	20	66786	2145	20	900	1960	20	3100	2655	10	9715	722.5	23.31	23.29	-0.02
	[2A]	7A	29A	66A	QPSK	20	18900	1880	1	0	20	900	1960	20	3100	2655	10	9715	722.5	20	66786	2145	23.68	23.65	-0.03
	7A	[2A]	29A	66A	QPSK	20	21350	2560	1	0	20	3350	2680	20	900	1960	10	9715	722.5	20	66786	2145	24.71	24.71	0
[2A]-7A-29A-66A	66A	[2A]	7A	29A	QPSK	20	132322	1745	1	0	20	66786	2145	20	900	1960	20	3100	2655	10	9715	722.5	23.31	23.3	-0.01
	[2A]	7A	29A	[66A]	QPSK	20	18900	1880	1	0	20	900	1960	20	3100	2655	10	9715	722.5	20	66786	2145	23.68	23.53	-0.15
	7A	[2A]	29A	[66A]	QPSK	20	21350	2560	1	0	20	3350	2680	20	900	1960	10	9715	722.5	20	66786	2145	24.71	24.59	-0.12
	[66A]	[2A]	7A	29A	QPSK	20	132322	1745	1	0	20	66786	2145	20	900	1960	20	3100	2655	10	9715	722.5	23.31	23.25	-0.06
2A-7A-[66A]-66A	2A	7A	[66A]	66A	QPSK	20	18900	1880	1																



DL CA with 4x4 MIMO output power results (Continued)

E-UTRA CA configuration (BCS)	Bands				UL									DL									LTE Rel 8 Tx. Power [dBm]	LTE Rel 10 Tx. Power [dBm]	Delta
	PCC	SCC1	SCC2	SCC3	Mode	BW (MHz)	Channel	Freq. (MHz)	RB Location	RB Offset	BW (MHz)	Channel	Freq. (MHz)	BW (MHz)	Channel	Freq. (MHz)	BW (MHz)	Channel	Freq. (MHz)	BW (MHz)	Channel	Freq. (MHz)			
	1st	2nd	3rd	4th																					
[2A]-7A-[66A]-66A	[2A]	7A	[66A]	66A	QPSK	20	18900	1880	1	0	20	900	1960	20	3100	2655	20	66786	2145	20	67036	2170	23.68	23.63	-0.05
	7A	[2A]	[66A]	66A	QPSK	20	21350	2560	1	0	20	3350	2680	20	900	1960	20	66786	2145	20	67036	2170	24.71	24.64	-0.07
	[66A]	66A	[2A]	7A	QPSK	20	132322	1745	1	0	20	66786	2145	20	67036	2170	20	3100	2655	20	66786	2145	23.31	23.25	-0.06
2A-12B-[66A]	66A	[66A]	[2A]	7A	QPSK	20	132322	1745	1	0	20	66786	2145	20	67036	2170	20	3100	2655	20	66786	2145	23.31	23.23	-0.08
	2A	12B	12B	[66A]	QPSK	20	18900	1880	1	0	20	900	1960	5	5035	737.5	10	5110	739	20	66786	2145	23.68	23.55	-0.13
	12B	12B	2A	[66A]	QPSK	5	23035	701.5	1	0	5	5035	731.5	10	5110	739	20	900	1960	20	66786	2145	23.89	23.84	-0.05
[2A]-12B-[66A]	[66A]	2A	12B	12B	QPSK	20	132322	1745	1	0	20	66786	2145	20	900	1960	5	5035	731.5	10	5110	739	23.31	23.16	-0.15
	[2A]	12B	12B	66A	QPSK	20	18900	1880	1	0	20	900	1960	5	5035	731.5	10	5110	739	20	66786	2145	23.68	23.6	-0.08
	12B	12B	[2A]	66A	QPSK	5	23035	701.5	1	0	5	5035	731.5	10	5110	739	20	900	1960	20	66786	2145	23.89	23.76	-0.13
[2A]-12B-[66A]	66A	[2A]	12B	12B	QPSK	20	132322	1745	1	0	20	66786	2145	20	900	1960	5	5035	731.5	10	5110	739	23.31	23.22	-0.09
	[2A]	12B	12B	[66A]	QPSK	20	18900	1880	1	0	20	900	1960	5	5035	731.5	10	5110	739	20	66786	2145	23.68	23.65	-0.03
	12B	12B	[2A]	[66A]	QPSK	5	23035	701.5	1	0	5	5035	731.5	10	5110	739	20	900	1960	20	66786	2145	23.89	23.89	0
2A-12A-[30A]-[66A]	[66A]	[2A]	12B	12B	QPSK	20	132322	1745	1	0	20	66786	2145	20	900	1960	5	5035	731.5	10	5110	739	23.31	23.18	-0.13
	2A	12A	30A	[66A]	QPSK	20	18900	1880	1	0	20	900	1960	10	5095	737.5	10	9820	2355	20	66786	2145	23.68	23.57	-0.11
	12A	2A	30A	[66A]	QPSK	10	23095	707.5	1	0	10	5095	737.5	20	900	1960	10	9820	2355	20	66786	2145	23.56	23.51	-0.05
2A-12A-[30A]-[66A]	30A	2A	12A	[66A]	QPSK	10	27710	2310	1	25	10	9820	2355	20	900	1960	10	5095	737.5	20	66786	2145	22.62	22.53	-0.09
	[66A]	2A	12A	30A	QPSK	20	132322	1745	1	0	20	66786	2145	20	900	1960	10	5095	737.5	10	9820	2355	23.31	23.28	-0.03
	2A	12A	[30A]	66A	QPSK	20	18900	1880	1	0	20	900	1960	10	5095	737.5	10	9820	2355	20	66786	2145	23.68	23.57	-0.11
2A-12A-[30A]-[66A]	12A	2A	[30A]	66A	QPSK	10	23095	707.5	1	0	10	5095	737.5	20	900	1960	10	9820	2355	20	66786	2145	23.56	23.5	-0.06
	[30A]	2A	12A	66A	QPSK	10	27710	2310	1	25	10	9820	2355	20	900	1960	10	5095	737.5	20	66786	2145	22.62	22.62	0
	66A	2A	12A	[30A]	QPSK	20	132322	1745	1	0	20	66786	2145	20	900	1960	10	5095	737.5	10	9820	2355	23.31	23.21	-0.1
[2A]-12A-[30A]-[66A]	[2A]	12A	30A	66A	QPSK	20	18900	1880	1	0	20	900	1960	10	5095	737.5	10	9820	2355	20	66786	2145	23.68	23.6	-0.08
	12A	[2A]	30A	66A	QPSK	10	23095	707.5	1	0	10	5095	737.5	20	900	1960	10	9820	2355	20	66786	2145	23.56	23.41	-0.15
	30A	[2A]	12A	66A	QPSK	10	27710	2310	1	25	10	9820	2355	20	900	1960	10	5095	737.5	20	66786	2145	22.62	22.62	0
2A-12A-[30A]-[66A]	66A	[2A]	12A	30A	QPSK	20	132322	1745	1	0	20	66786	2145	20	900	1960	10	5095	737.5	10	9820	2355	23.31	23.22	-0.09
	2A	12A	[30A]	[66A]	QPSK	20	18900	1880	1	0	20	900	1960	10	5095	737.5	10	9820	2355	20	66786	2145	23.68	23.62	-0.06
	12A	2A	[30A]	[66A]	QPSK	10	23095	707.5	1	0	10	5095	737.5	20	900	1960	10	9820	2355	20	66786	2145	23.56	23.45	-0.11
[2A]-12A-[30A]-[66A]	[30A]	2A	12A	[66A]	QPSK	10	27710	2310	1	25	10	9820	2355	20	900	1960	10	5095	737.5	20	66786	2145	22.62	22.55	-0.07
	[66A]	2A	12A	[30A]	QPSK	20	132322	1745	1	0	20	66786	2145	20	900	1960	10	5095	737.5	10	9820	2355	23.31	23.29	-0.02
	[2A]	12A	[30A]	66A	QPSK	20	18900	1880	1	0	20	900	1960	10	5095	737.5	10	9820	2355	20	66786	2145	23.68	23.59	-0.09
[2A]-12A-[30A]-[66A]	12A	[2A]	[30A]	66A	QPSK	10	23095	707.5	1	0	10	5095	737.5	20	900	1960	10	9820	2355	20	66786	2145	23.56	23.5	-0.06
	[30A]	[2A]	12A	66A	QPSK	10	27710	2310	1	25	10	9820	2355	20	900	1960	10	5095	737.5	20	66786	2145	22.62	22.51	-0.11
	66A	[2A]	12A	[30A]	QPSK	20	132322	1745	1	0	20	66786	2145	20	900	1960	10	5095	737.5	10	9820	2355	23.31	23.16	-0.15
[2A]-12A-[30A]-[66A]	[2A]	12A	30A	[66A]	QPSK	20	18900	1880	1	0	20	900	1960	10	5095	737.5	10	9820	2355	20	66786	2145	23.68	23.61	-0.07
	12A	[2A]	30A	[66A]	QPSK	10	23095	707.5	1	0	10	5095	737.5	20	900	1960	10	9820	2355	20	66786	2145	23.56	23.5	-0.06
	30A	[2A]	12A	[66A]	QPSK	10	27710	2310	1	25	10	9820	2355	20	900	1960	10	5095	737.5	20	66786	2145	22.62	22.58	-0.04
2A-12A-[66A]-66A	[66A]	[2A]	12A	30A	QPSK	20	132322	1745	1	0	20	66786	2145	20	900	1960	10	5095	737.5	10	9820	2355	23.31	23.25	-0.06
	2A	12A	[66A]	66A	QPSK	20	18900	1880	1	0	20	900	1960	10	5095	737.5	20	66786	2145	20	67036	2170	23.68	23.65	-0.03
	12A	2A	[66A]	66A	QPSK	10	23095	707.5	1	0	10	5095	737.5	20	900	1960	20	66786	2145	20	67036	2170	23.56	23.43	-0.13
[2A]-12A-[66A]-66A	[66A]	66A	2A	12A	QPSK	20	132322	1745	1	0	20	66786	2145	20	67036	2170	10	5095	737.5	20	66786	2145	23.31	23.19	-0.12
	66A	[66A]	2A	12A	QPSK	20	132322	1745	1	0	20	66786	2145	20	67036	2170	10	5095	737.5	20	66786	2145	23.31	23.19	-0.12
	[2A]	12A	66A	66A	QPSK	20	18900	1880	1	0	20	900	1960	10	5095	737.5	20	66786	2145	20	67036	2170	23.68	23.57	-0.11
[2A]-12A-[66A]-66A	12A	[2A]	66A	66A	QPSK	10	23095	707.5	1	0	10	5095	737.5	20	900	1960	20	66786	2145	20	67036	2170	23.56	23.46	-0.1
	66A	66A	[2A]	12A	QPSK	20	132322	1745	1	0	20	66786	2145	20	67036	2170	20	900	1960	10	5095	737.5	23.31	23.2	-0.11
	2A	12A	[66A]	[66A]	QPSK	20	18900	1880	1	0	20	900	1960	10	5095	737.5	20	66786	2145	20	67036	2170	23.68	23.61	-0.07
2A-12A-[66A]-[66A]	12A	2A	[66A]	[66A]	QPSK	10	23095	707.5	1	0	10	5095	737.5	20	900	1960	20	66786	2145	20	67036	2170	23.56	23.41	-0.15
	[66A]	[66A]	2A	12A	QPSK	20	132322	1745	1	0	20	66786	2145	20	67036	2170	20	900	1960	10	5095	737.5	23.31	23.21	-0.1
	[2A]	12A	[66A]	66A	QPSK	20	18900	1880	1	0	20	900	1960	10	5095	737.5	20								

DL CA with 4x4 MIMO output power results (Continued)

E-UTRA CA configuration (BCS)	Bands				UL								DL												LTE Rel 8 Tx. Power [dBm]	LTE Rel 10 Tx. Power [dBm]	Delta
	PCC	SCC1	SCC2	SCC3	Mode	BW (MHz)	Channel	Freq. (MHz)	RB Location	RB Offset	PCC		SCC1		SCC2		SCC3										
	1st	2nd	3rd	4th							BW (MHz)	Channel	Freq. (MHz)	BW (MHz)	Channel	Freq. (MHz)	BW (MHz)	Channel	Freq. (MHz)	BW (MHz)	Channel	Freq. (MHz)	BW (MHz)	Channel			
2A-13A-[66A]-66A	2A	13A	[66A]	66A	QPSK	20	18900	1880	1	0	20	900	1960	10	5230	751	20	66786	2145	20	67036	2170	23.68	23.63	-0.05		
	13A	2A	[66A]	66A	QPSK	10	23230	782	1	0	10	5230	751	20	900	1960	20	66786	2145	20	67036	2170	23.52	23.42	-0.1		
	[66A]	66A	2A	13A	QPSK	20	132322	1745	1	0	20	66786	2145	20	67036	2170	10	5230	751	20	66786	2145	23.31	23.3	-0.01		
[2A]-13A-66A-66A	66A	[66A]	2A	13A	QPSK	20	132322	1745	1	0	20	66786	2145	20	67036	2170	10	5230	751	20	66786	2145	23.31	23.27	-0.04		
	[2A]	13A	66A	66A	QPSK	20	18900	1880	1	0	20	900	1960	10	5230	751	20	66786	2145	20	67036	2170	23.68	23.68	0		
	13A	[2A]	66A	66A	QPSK	10	23230	782	1	0	10	5230	751	20	900	1960	20	66786	2145	20	67036	2170	23.52	23.49	-0.03		
2A-13A-[66A]-[66A]	66A	66A	[2A]	13A	QPSK	20	132322	1745	1	0	20	66786	2145	20	67036	2170	10	5230	751	20	66786	2145	23.31	23.28	-0.03		
	2A	13A	[66A]	[66A]	QPSK	20	18900	1880	1	0	20	900	1960	10	5230	751	20	66786	2145	20	67036	2170	23.68	23.57	-0.11		
	13A	2A	[66A]	[66A]	QPSK	10	23230	782	1	0	10	5230	751	20	900	1960	20	66786	2145	20	67036	2170	23.52	23.45	-0.07		
[2A]-13A-[66A]-66A	[66A]	[66A]	2A	13A	QPSK	20	132322	1745	1	0	20	66786	2145	20	67036	2170	20	900	1960	10	5230	751	23.31	23.21	-0.1		
	[2A]	13A	[66A]	66A	QPSK	20	18900	1880	1	0	20	900	1960	10	5230	751	20	66786	2145	20	67036	2170	23.68	23.58	-0.1		
	13A	[2A]	[66A]	66A	QPSK	10	23230	782	1	0	10	5230	751	20	900	1960	20	66786	2145	20	67036	2170	23.52	23.41	-0.11		
2A-13A-[66B]	[66A]	66A	[2A]	13A	QPSK	20	132322	1745	1	0	20	66786	2145	20	67036	2170	10	5230	751	20	66786	2145	23.31	23.3	-0.01		
	66A	[66A]	[2A]	13A	QPSK	20	132322	1745	1	0	20	66786	2145	20	67036	2170	10	5230	751	20	66786	2145	23.31	23.1	0		
	2A	13A	[66B]	[66B]	QPSK	20	18900	1880	1	0	20	900	1960	10	5230	751	10	66786	2145	10	66885	2154.9	23.68	23.56	-0.12		
[2A]-13A-66B	13A	2A	[66B]	[66B]	QPSK	10	23230	782	1	0	10	5230	751	20	900	1960	10	66786	2145	10	66885	2154.9	23.52	23.42	-0.1		
	[66B]	[66B]	2A	13A	QPSK	10	132322	1745	1	0	10	66786	2145	10	66885	2154.9	20	900	1960	10	5230	751	23.39	23.29	-0.1		
	[2A]	13A	66B	66B	QPSK	20	18900	1880	1	0	20	900	1960	10	5230	751	10	66786	2145	10	66885	2154.9	23.68	23.64	-0.04		
2A-13A-[66C]	13A	[2A]	66B	66B	QPSK	10	23230	782	1	0	10	5230	751	20	900	1960	10	66786	2145	10	66885	2154.9	23.52	23.4	-0.12		
	66B	66B	[2A]	13A	QPSK	10	132322	1745	1	0	10	66786	2145	10	66885	2154.9	20	900	1960	10	5230	751	23.39	23.31	-0.08		
	2A	13A	[66C]	[66C]	QPSK	20	18900	1880	1	0	20	900	1960	10	5230	751	20	66786	2145	20	66984	2164.8	23.68	23.63	-0.05		
[2A]-13A-66C	13A	2A	[66C]	[66C]	QPSK	10	23230	782	1	0	10	5230	751	20	900	1960	20	66786	2145	20	66984	2164.8	23.52	23.43	-0.09		
	[66C]	[66C]	2A	13A	QPSK	20	132322	1745	1	0	20	66786	2145	20	66984	2164.8	20	900	1960	10	5230	751	23.31	23.17	-0.14		
	[2A]	13A	66C	66C	QPSK	20	18900	1880	1	0	20	900	1960	10	5230	751	20	66786	2145	20	66984	2164.8	23.68	23.66	-0.02		
2A-29A-30A-[66A]	13A	[2A]	66C	66C	QPSK	10	23230	782	1	0	10	5230	751	20	900	1960	20	66786	2145	20	66984	2164.8	23.52	23.49	-0.03		
	66C	66C	[2A]	13A	QPSK	20	132322	1745	1	0	20	66786	2145	20	66984	2164.8	20	900	1960	10	5230	751	23.31	23.27	-0.04		
	2A	29A	30A	[66A]	QPSK	20	18900	1880	1	0	20	900	1960	10	9715	722.5	10	9820	2355	20	66786	2145	23.68	23.53	-0.15		
2A-29A-[30A]-66A	30A	2A	29A	[66A]	QPSK	10	27710	2310	1	25	10	9820	2355	20	900	1960	10	9715	722.5	10	9820	2355	22.62	22.49	-0.13		
	[66A]	2A	29A	30A	QPSK	20	132322	1745	1	0	20	66786	2145	20	900	1960	10	9715	722.5	10	9820	2355	23.31	23.3	-0.01		
	2A	29A	[30A]	66A	QPSK	20	18900	1880	1	0	20	900	1960	10	9715	722.5	10	9820	2355	20	66786	2145	23.68	23.66	-0.02		
[2A]-29A-30A-66A	[30A]	2A	29A	66A	QPSK	10	27710	2310	1	25	10	9820	2355	20	900	1960	10	9715	722.5	10	9820	2355	22.62	22.51	-0.11		
	66A	2A	29A	[30A]	QPSK	20	132322	1745	1	0	20	66786	2145	20	900	1960	10	9715	722.5	10	9820	2355	23.31	23.31	0		
	[2A]	29A	30A	66A	QPSK	20	18900	1880	1	0	20	900	1960	10	9715	722.5	10	9820	2355	20	66786	2145	23.68	23.53	-0.15		
2A-29A-[30A]-[66A]	30A	[2A]	29A	66A	QPSK	10	27710	2310	1	25	10	9820	2355	20	900	1960	10	9715	722.5	10	9820	2355	22.62	22.51	-0.11		
	66A	[2A]	29A	30A	QPSK	20	132322	1745	1	0	20	66786	2145	20	900	1960	10	9715	722.5	10	9820	2355	23.31	23.23	-0.08		
	2A	29A	[30A]	[66A]	QPSK	20	18900	1880	1	0	20	900	1960	10	9715	722.5	10	9820	2355	20	66786	2145	23.68	23.63	-0.05		
[2A]-29A-30A-[66A]	[30A]	2A	29A	[66A]	QPSK	10	27710	2310	1	25	10	9820	2355	20	900	1960	10	9715	722.5	10	9820	2355	22.62	22.58	-0.04		
	[66A]	2A	29A	[30A]	QPSK	20	132322	1745	1	0	20	66786	2145	20	900	1960	10	9715	722.5	10	9820	2355	23.31	23.23	-0.08		
	[2A]	29A	30A	66A	QPSK	10	27710	2310	1	25	10	9820	2355	20	900	1960	10	9715	722.5	10	9820	2355	23.31	23.26	-0.05		
[2A]-29A-[30A]-66A	[66A]	[2A]	29A	30A	QPSK	20	132322	1745	1	0	20	66786	2145	20	900	1960	10	9715	722.5	10	9820	2355	23.31	23.26	-0.05		
	[2A]	29A	[30A]	66A	QPSK	20	18900	1880	1	0	20	900	1960	10	9715	722.5	10	9820	2355	20	66786	2145	23.68	23.6	-0.08		
	[30A]	[2A]	29A	66A	QPSK	10	27710	2310	1	25	10	9820	2355	20	900	1960	10	9715	722.5	10	9820	2355	22.62	22.48	-0.14		
2A-29A-[66A]-66A	66A	[2A]	29A	[30A]	QPSK	20	132322	1745	1	0	20	66786	2145	20	900	1960	10	9715	722.5	10	9820	2355	23.31	23.27	-0.04		
	2A	29A	[66A]	66A	QPSK	20	18900	1880	1	0	20	900	1960	10	9715	722.5	20	66786	2145	20	67036	2170	23.68	23.66	-0.02		
	[66A]	66A	2A	29A	QPSK	20	132322	1745	1	0	20	66786	2145	20	67036	2170	10	9715	722.5	20	66786	2145	23.31	23.17	-0.14		
[2A]-29A-66A-66A	66A	[66A]	2A	29A	QPSK	20	132322	1745	1	0	20	66786	2145	20	67036	2170	10	9715	722.5	20	66786	2145	23.31	23.16	-0.15		
	[2A]	29A	66A	66A	QPSK	20	18900	1880	1	0	20	900	1960	10	9715	722.5	20	66786	2145	20	67036	2170	23.68	23.56	-0.12		
	66A	66A	[2A]	29A	QPSK	20	132322	1745	1	0	20	66786	2145	20	67036	2170	20	900	1								

DL CA with 4x4 MIMO output power results (Continued)

E-UTRA CA configuration (BCS)	Bands				UL							DL											LTE Rel 8 Tx. Power [dBm]	LTE Rel 10 Tx. Power [dBm]	Delta
	PCC	SCC1	SCC2	SCC3	Mode	BW (MHz)	Channel	Freq. (MHz)	RB Location	RB Offset	PCC		SCC1			SCC2			SCC3						
	1st	2nd	3rd	4th							BW (MHz)	Channel	Freq. (MHz)	BW (MHz)	Channel	Freq. (MHz)	BW (MHz)	Channel	Freq. (MHz)	BW (MHz)	Channel	Freq. (MHz)			
2A-[30A]-66A-66A	2A	[30A]	66A	66A	QPSK	20	18900	1880	1	0	20	900	1960	10	9820	2355	20	66786	2145	20	67036	2170	23.68	23.64	-0.04
	[30A]	2A	66A	66A	QPSK	10	27710	2310	1	25	10	9820	2355	20	900	1960	20	66786	2145	20	67036	2170	22.62	22.59	-0.03
[2A]-30A-66A-66A	66A	66A	2A	[30A]	QPSK	20	132322	1745	1	0	20	66786	2145	20	67036	2170	20	900	1960	10	9820	2355	23.31	23.2	-0.11
	[2A]	30A	66A	66A	QPSK	20	18900	1880	1	0	20	900	1960	10	9820	2355	20	66786	2145	20	67036	2170	23.68	23.64	-0.04
2A-30A-[66A]-[66A]	30A	[2A]	66A	66A	QPSK	10	27710	2310	1	25	10	9820	2355	20	900	1960	20	66786	2145	20	67036	2170	22.62	22.56	-0.06
	66A	66A	[2A]	30A	QPSK	20	132322	1745	1	0	20	66786	2145	20	67036	2170	20	900	1960	10	9820	2355	23.31	23.18	-0.13
2A-30A-[66A]-[66A]	2A	30A	[66A]	[66A]	QPSK	20	18900	1880	1	0	20	900	1960	10	9820	2355	20	66786	2145	20	67036	2170	23.68	23.66	-0.02
	30A	2A	[66A]	[66A]	QPSK	10	27710	2310	1	25	10	9820	2355	20	900	1960	20	66786	2145	20	67036	2170	22.62	22.52	-0.1
2A-[30A]-66A-[66A]	[66A]	[66A]	2A	30A	QPSK	20	132322	1745	1	0	20	66786	2145	20	67036	2170	20	900	1960	10	9820	2355	23.31	23.31	0
	2A	[30A]	66A	[66A]	QPSK	20	18900	1880	1	0	20	900	1960	10	9820	2355	20	66786	2145	20	67036	2170	23.68	23.55	-0.13
2A-[30A]-66A-[66A]	[30A]	2A	66A	[66A]	QPSK	10	27710	2310	1	25	10	9820	2355	20	900	1960	20	66786	2145	20	67036	2170	22.62	22.52	-0.1
	66A	[66A]	2A	[30A]	QPSK	20	132322	1745	1	0	20	66786	2145	20	67036	2170	10	9820	2355	20	66786	2145	23.31	23.28	-0.03
[2A]-30A-[66A]-66A	[66A]	66A	2A	[30A]	QPSK	20	132322	1745	1	0	20	66786	2145	20	67036	2170	10	9820	2355	20	66786	2145	23.31	23.18	-0.13
	[2A]	30A	[66A]	66A	QPSK	20	18900	1880	1	0	20	900	1960	10	9820	2355	20	66786	2145	20	67036	2170	23.68	23.53	-0.15
[2A]-30A-[66A]-66A	30A	[2A]	[66A]	66A	QPSK	10	27710	2310	1	25	10	9820	2355	20	900	1960	20	66786	2145	20	67036	2170	22.62	22.53	-0.09
	[66A]	66A	[2A]	30A	QPSK	20	132322	1745	1	0	20	66786	2145	20	67036	2170	10	9820	2355	20	66786	2145	23.31	23.22	-0.09
[2A]-66A-66B	66A	[66A]	[2A]	30A	QPSK	20	132322	1745	1	0	20	66786	2145	20	67036	2170	10	9820	2355	20	66786	2145	23.31	23.29	-0.02
	[2A]	66A	66B	66B	QPSK	20	18900	1880	1	0	20	900	1960	20	66786	2145	10	67086	2175	10	6987	2165.1	23.68	23.65	-0.03
[2A]-66A-66B	66A	66B	66B	[2A]	QPSK	20	132322	1745	1	0	20	66786	2145	10	67086	2175	10	66786	2145	10	66885	2154.9	23.31	23.18	-0.13
	66B	66B	66A	[2A]	QPSK	10	132322	1745	1	0	10	66786	2145	10	66885	2154.9	20	66536	2120	20	900	1960	23.39	23.32	-0.07
2A-[66A]-66B	2A	[66A]	66B	66B	QPSK	20	18900	1880	1	0	20	900	1960	20	66786	2145	10	67086	2175	10	6987	2165.1	23.68	23.68	0
	[66A]	66B	66B	2A	QPSK	20	132322	1745	1	0	20	66786	2145	10	66786	2145	10	66885	2154.9	20	66536	2120	23.39	23.35	-0.04
2A-66A-[66B]	2A	66A	[66B]	[66B]	QPSK	20	18900	1880	1	0	20	900	1960	20	66786	2145	10	66786	2145	10	66885	2154.9	23.68	23.61	-0.07
	66A	[66B]	[66B]	2A	QPSK	20	132322	1745	1	0	20	66786	2145	10	67086	2175	10	66786	2145	10	66885	2154.9	23.31	23.21	-0.1
[2A]-[66A]-66B	[66B]	[66B]	66A	2A	QPSK	10	132322	1745	1	0	10	66786	2145	10	66885	2154.9	20	66536	2120	20	900	1960	23.39	23.26	-0.13
	[2A]	[66A]	66B	66B	QPSK	20	18900	1880	1	0	20	900	1960	20	66786	2145	10	67086	2175	10	6987	2165.1	23.68	23.53	-0.15
[2A]-[66A]-66B	[66A]	66B	66B	[2A]	QPSK	20	132322	1745	1	0	20	66786	2145	10	67086	2175	10	66786	2145	10	66885	2154.9	23.31	23.26	-0.05
	66B	66B	[66A]	[2A]	QPSK	10	132322	1745	1	0	10	66786	2145	10	66885	2154.9	20	66536	2120	20	900	1960	23.39	23.32	-0.07
2A-66A-[66A]-71A	2A	66A	[66A]	71A	QPSK	20	18900	1880	1	0	20	900	1960	20	66786	2145	20	67036	2170	20	68761	634.5	23.68	23.58	-0.1
	[66A]	[66A]	2A	71A	QPSK	20	132322	1745	1	0	20	66786	2145	20	67036	2170	20	66786	2145	20	68761	634.5	23.31	23.29	-0.02
[2A]-66A-66A-71A	[66A]	66A	2A	71A	QPSK	20	132322	1745	1	0	20	66786	2145	20	67036	2170	20	66786	2145	20	68761	634.5	23.31	23.25	-0.06
	71A	2A	66A	[66A]	QPSK	20	132322	1745	1	0	20	66786	2145	20	67036	2170	20	66786	2145	20	68761	634.5	23.31	23.25	-0.06
2A-[66A]-[66A]-71A	[2A]	66A	66A	71A	QPSK	20	18900	1880	1	0	20	900	1960	20	66786	2145	20	67036	2170	20	68761	634.5	23.68	23.67	-0.01
	66A	[66A]	[2A]	71A	QPSK	20	132322	1745	1	0	20	66786	2145	20	67036	2170	20	900	1960	20	68761	634.5	23.31	23.25	-0.06
[2A]-66A-[66A]-71A	71A	[2A]	66A	66A	QPSK	20	132322	1745	1	0	20	66786	2145	20	67036	2170	20	66786	2145	20	68761	634.5	23.68	23.67	-0.01
	2A	[66A]	[66A]	71A	QPSK	20	18900	1880	1	0	20	900	1960	20	66786	2145	20	67036	2170	20	68761	634.5	23.68	23.61	-0.07
[2A]-66A-[66A]-71A	[66A]	[66A]	2A	71A	QPSK	20	132322	1745	1	0	20	66786	2145	20	67036	2170	20	900	1960	20	68761	634.5	23.31	23.28	-0.03
	71A	2A	[66A]	[66A]	QPSK	20	132322	1745	1	0	20	66786	2145	20	67036	2170	20	66786	2145	20	68761	634.5	23.31	23.28	-0.03
[2A]-66A-[66A]-71A	[2A]	66A	[66A]	71A	QPSK	20	18900	1880	1	0	20	900	1960	20	66786	2145	20	66786	2145	20	68761	634.5	23.68	23.53	-0.15
	66A	[66A]	[2A]	71A	QPSK	20	132322	1745	1	0	20	66786	2145	20	67036	2170	20	66786	2145	20	68761	634.5	23.31	23.26	-0.05
[2A]-66A-[66A]-71A	[66A]	66A	[2A]	71A	QPSK	20	132322	1745	1	0	20	66786	2145	20	67036	2170	20	66786	2145	20	68761	634.5	23.31	23.25	-0.06
	71A	[2A]	66A	[66A]	QPSK	20	132322	1745	1	0	20	66786	2145	20	67036	2170	20	66786	2145	20	68761	634.5	23.31	23.25	-0.06
2A-[66C]-71A	2A	[66C]	[66C]	71A	QPSK	20	18900	1880	1	0	20	900	1960	20	66786	2145	20	66984	2164.8	20	68761	634.5	23.68	23.57	-0.11
	[66C]	[66C]	2A	71A	QPSK	20	132322	1745	1	0	20	66786	2145	20	66984	2164.8	20	900	1960	20	68761	634.5	23.31	23.3	-0.01
[2A]-66C-71A	71A	2A	[66C]	[66C]	QPSK	20	132322	1745	1	0	20	66786	2145	20	66984	2164.8	20	66786	2145	20	68761	634.5	23.31	23.3	-0.01
	[2A]	66C	66C	71A	QPSK	20	18900	1880	1	0	20	900	1960	20	66786	2145	20	66984	2164.8	20	68761	634.5	23.68	23.62	-0.06
[2A]-66C-71A	66C	66C	[2A]	71A	QPSK	20	132322	1745	1	0	20	6678													

DL CA with 4x4 MIMO output power results (Continued)

E-UTRA CA configuration (BCS)	Bands				UL								DL											LTE Rel 8 Tx. Power [dBm]	LTE Rel 10 Tx. Power [dBm]	Delta
	PCC	SCC1	SCC2	SCC3	Mode	BW (MHz)	Channel	Freq. (MHz)	RB Location	RB Offset	PCC		SCC1		SCC2		SCC3									
	1st	2nd	3rd	4th							BW (MHz)	Channel	BW (MHz)	Channel	BW (MHz)	Channel	BW (MHz)	Channel	BW (MHz)	Channel	BW (MHz)	Channel	Freq. (MHz)			
5B-30A-[66A]	5B	5B	30A	[66A]	QPSK	10	20450	829	1	0	10	2450	874	10	2549	883.9	10	9820	2355	20	66786	2145	24.11	24.07	-0.04	
	30A	5B	5B	[66A]	QPSK	10	27710	2310	1	25	10	9820	2355	10	2450	874	10	2549	883.9	20	66786	2145	22.62	22.61	-0.01	
	[66A]	5B	5B	30A	QPSK	20	132322	1745	1	0	20	66786	2145	10	2450	874	10	2549	883.9	10	9820	2355	23.31	23.16	-0.15	
5B-[30A]-66A	5B	5B	[30A]	[66A]	QPSK	10	20450	829	1	0	10	2450	874	10	2549	883.9	10	9820	2355	20	66786	2145	24.11	24.07	-0.04	
	[30A]	5B	5B	[66A]	QPSK	10	27710	2310	1	25	10	9820	2355	10	2450	874	10	2549	883.9	20	66786	2145	22.62	22.57	-0.05	
	66A	5B	5B	[30A]	QPSK	20	132322	1745	1	0	20	66786	2145	10	2450	874	10	2549	883.9	10	9820	2355	23.31	23.31	0	
5B-[30A]-[66A]	5B	5B	[30A]	[66A]	QPSK	10	20450	829	1	0	10	2450	874	10	2549	883.9	10	9820	2355	20	66786	2145	24.11	24.01	-0.1	
	[30A]	5B	5B	[66A]	QPSK	10	27710	2310	1	25	10	9820	2355	10	2450	874	10	2549	883.9	20	66786	2145	22.62	22.59	-0.03	
	[66A]	5B	5B	[30A]	QPSK	20	132322	1745	1	0	20	66786	2145	10	2450	874	10	2549	883.9	10	9820	2355	23.31	23.24	-0.07	
5A-5A-[66A]-66A	5A	5A	[66A]	[66A]	QPSK	10	20450	829	1	0	10	2450	874	10	2600	889	20	66786	2145	20	67036	2170	24.11	24.07	-0.04	
	[66A]	66A	5A	5A	QPSK	20	132322	1745	1	0	20	66786	2145	20	67036	2170	10	2600	889	20	66786	2145	23.31	23.3	-0.01	
	66A	[66A]	5A	5A	QPSK	20	132322	1745	1	0	20	66786	2145	20	67036	2170	10	2600	889	20	66786	2145	23.31	23.27	-0.04	
5A-5A-[66A]-[66A]	5A	5A	[66A]	[66A]	QPSK	10	20450	829	1	0	10	2450	874	10	2600	889	20	66786	2145	20	67036	2170	24.11	23.96	-0.15	
	[66A]	[66A]	5A	5A	QPSK	20	132322	1745	1	0	20	66786	2145	20	67036	2170	10	2450	874	10	2600	889	23.31	23.16	-0.15	
	66A	[66A]	[66B]	[66B]	QPSK	10	20450	829	1	0	10	2450	874	10	2600	889	10	66786	2145	10	66885	2154.9	24.11	24.08	-0.03	
5A-5A-[66B]	5A	5A	[66B]	[66B]	QPSK	10	20450	829	1	0	10	2450	874	10	2600	889	20	66786	2145	20	66984	2164.8	24.11	24.09	-0.02	
	[66B]	[66B]	5A	5A	QPSK	10	132322	1745	1	0	10	66786	2145	10	66885	2154.9	10	2450	874	10	2600	889	23.39	23.39	0	
	66B	[66B]	[66C]	[66C]	QPSK	10	20450	829	1	0	10	2450	874	10	2600	889	20	66786	2145	20	66984	2164.8	24.11	24.09	-0.02	
5A-5A-[66C]	5A	5A	[66C]	[66C]	QPSK	10	20450	829	1	0	10	2450	874	10	2600	889	20	66786	2145	20	66984	2164.8	24.11	24.09	-0.02	
	[66C]	[66C]	5A	5A	QPSK	20	132322	1745	1	0	20	66786	2145	10	66984	2164.8	10	2450	874	10	2600	889	23.31	23.19	-0.12	
	66C	[66C]	[66A]	[66A]	QPSK	10	20450	829	1	0	10	2450	874	10	2549	883.9	20	66786	2145	20	67036	2170	24.11	24.11	0	
5B-[66A]-66A	[66A]	66A	5B	5B	QPSK	20	132322	1745	1	0	20	66786	2145	20	67036	2170	10	2549	883.9	20	66786	2145	23.31	23.17	-0.14	
	66A	[66A]	5B	5B	QPSK	20	132322	1745	1	0	20	66786	2145	20	67036	2170	10	2549	883.9	20	66786	2145	23.31	23.31	0	
	66A	[66A]	[66A]	[66A]	QPSK	10	20450	829	1	0	10	2450	874	10	2549	883.9	20	66786	2145	20	67036	2170	24.11	24.01	-0.1	
5B-[66A]-[66A]	[66A]	[66A]	5B	5B	QPSK	20	132322	1745	1	0	20	66786	2145	20	67036	2170	10	2450	874	10	2549	883.9	23.31	23.31	0	
	5B	5B	[66B]	[66B]	QPSK	10	20450	829	1	0	10	2450	874	10	2549	883.9	10	66786	2145	10	66885	2154.9	24.11	24.02	-0.09	
	[66B]	[66B]	5B	5B	QPSK	10	132322	1745	1	0	10	66786	2145	10	66885	2154.9	10	2450	874	10	2549	883.9	23.39	23.3	-0.09	
5B-[66C]	5B	5B	[66C]	[66C]	QPSK	10	20450	829	1	0	10	2450	874	10	2549	883.9	20	66786	2145	20	66984	2164.8	24.11	24.03	-0.08	
	[66C]	[66C]	5B	5B	QPSK	20	132322	1745	1	0	20	66786	2145	20	66984	2164.8	10	2450	874	10	2549	883.9	23.31	23.28	-0.03	
	66C	[66C]	[66A]	[66A]	QPSK	10	20525	836.5	1	0	10	2525	881.5	20	3100	2655	20	3350	2680	20	66786	2145	24.17	24.16	-0.01	
5A-7A-7A-[66A]	5A	7A	7A	[66A]	QPSK	10	20525	836.5	1	0	10	2525	881.5	20	3100	2655	20	3350	2680	20	66786	2145	24.17	24.16	-0.01	
	7A	7A	5A	[66A]	QPSK	20	21350	2560	1	0	20	3350	2680	20	2850	2630	10	2525	881.5	20	66786	2145	24.71	24.59	-0.12	
	[66A]	5A	7A	7A	QPSK	20	132322	1745	1	0	20	66786	2145	10	2525	881.5	20	3100	2655	20	3350	2680	23.31	23.16	-0.15	
5A-7A-7C-[66A]	5A	7C	7C	[66A]	QPSK	10	20525	836.5	1	0	10	2525	881.5	20	3100	2655	20	3298	2674.8	20	66786	2145	24.17	24.07	-0.1	
	7C	7C	5A	[66A]	QPSK	20	21350	2560	1	0	20	3350	2680	20	3152	2660.2	10	2525	881.5	20	66786	2145	24.71	24.62	-0.09	
	[66A]	5A	7C	7C	QPSK	20	132322	1745	1	0	20	66786	2145	10	2525	881.5	20	3100	2655	20	3298	2674.8	23.31	23.21	-0.1	
5A-7A-66A-[66A]	5A	7A	66A	[66A]	QPSK	10	20525	836.5	1	0	10	2525	881.5	20	3100	2655	20	66786	2145	20	67036	2170	24.17	24.1	-0.07	
	7A	5A	66A	[66A]	QPSK	20	21350	2560	1	0	20	3350	2680	10	2525	881.5	20	66786	2145	20	67036	2170	24.71	24.64	-0.07	
	[66A]	[66A]	5A	7A	QPSK	20	132322	1745	1	0	20	66786	2145	20	67036	2170	20	3100	2655	20	66786	2145	23.31	23.2	-0.11	
5A-7A-[66A]-[66A]	[66A]	66A	5A	7A	QPSK	20	132322	1745	1	0	20	66786	2145	20	67036	2170	20	3100	2655	20	66786	2145	23.31	23.23	-0.08	
	5A	7A	[66A]	[66A]	QPSK	10	20525	836.5	1	0	10	2525	881.5	20	3100	2655	20	66786	2145	20	67036	2170	24.17	24.15	-0.02	
	7A	5A	[66A]	[66A]	QPSK	20	21350	2560	1	0	20	3350	2680	10	2525	881.5	20	66786	2145	20	67036	2170	24.71	24.61	-0.1	
5A-[30A]-66A-66A	[66A]	[66A]	5A	7A	QPSK	20	132322	1745	1	0	20	66786	2145	20	67036	2170	10	2525	881.5	20	66786	2145	23.31	23.16	-0.15	
	5A	[30A]	66A	66A	QPSK	10	20525	836.5	1	0	10	2525	881.5	10	9820	2355	20	66786	2145	20	67036	2170	24.17	24.15	-0.02	
	[30A]	5A	66A	66A	QPSK	10	27710	2310	1	25	10	9820	2355	10	2525	881.5	20	66786	2145	20	67036	2170	22.62	22.59	-0.03	
5A-30A-[66A]-66A	66A	66A	5A	[30A]	QPSK	20	132322	1745	1	0	20	66786	2145	20	67036	2170	10	2525	881.5	10	9820	2355	23.31	23.17	-0.14	
	5A	30A	[66A]	[66A]	QPSK	10	20525	836.5	1	0	10	2525	881.5	10	9820	2355	20	66786	2145	20	67036	2170	24.17	24.12	-0.05	
	[30A]	5A	[66A]	[66A]	QPSK	10	27710	2310	1	25	10	9820	2355	10	2525	881.5	20	66786	2145	20	67036	2170	22.62	22.56	-0.06	
5A-[30A]-66A-[66A]	[66A]	66A	5A	30A	QPSK	20	132322	1745	1	0	20	66786	2145	20	67036	2170	10	9820	2355	20	66786	2145	23.31	23.22	-0.09	
	66A	[66A]	5A	30A	QPSK	20	132322	1745	1	0	20	66786	2145	20	67036	2170	10	9820	2355	20	66786	2145	23.31	23.27	-0.04	
	5A	[30A]	66A	[66A]	QPSK	10	20525	836.5	1	0	10	2525	881.5	10	9820	2355	20	66786	2145	20	67036	2170	24.17	24.1	-0.07	
5A-[30A]-66A-[66A]	[30A]	5A	66A	[66A]	QPSK	10	27710	2310	1	25	10	9820	2355	10	2525	881.5	20	66786	2145	20	67036	2170	22.62	22.54	-0.08	
	66A	[66A]	5A	[30A]	QPSK	20	132322	1745	1	0	20	66786	2145	20	67036	2170	10	9820	2355	20	66786	2145				

**DL CA with 4x4 MIMO output power results (Continued)**

E-UTRA CA configuration (BCS)	Bands				UL								DL												LTE Rel 8 Tx. Power [dBm]	LTE Rel 10 Tx. Power [dBm]	Delta
	PCC	SCC1	SCC2	SCC3	Mode	BW (MHz)	Channel	Freq. (MHz)	RB Location	RB Offset	PCC		SCC1		SCC2		SCC3										
	1st	2nd	3rd	4th							BW (MHz)	Channel	Freq. (MHz)	BW (MHz)	Channel	Freq. (MHz)	BW (MHz)	Channel	Freq. (MHz)	BW (MHz)	Channel	Freq. (MHz)	BW (MHz)	Channel			
7A-7A-25A-[25A]	7A	7A	25A	[25A]	QPSK	20	21350	2560	1	0	20	3350	2680	20	2850	2630	20	8365	1962.5	20	8590	1985	24.71	24.58	-0.13		
	25A	7A	7A	[25A]	QPSK	20	26140	1860	1	99	20	8140	1940	20	3100	2655	20	3350	2680	20	8365	1962.5	24.05	24.04	-0.01		
7A-7A-[25A]-[25A]	[25A]	25A	7A	7A	QPSK	20	26140	1860	1	99	20	8140	1940	20	8590	1985	20	3350	2680	20	8365	1962.5	24.05	23.97	-0.08		
	7A	7A	[25A]	[25A]	QPSK	20	21350	2560	1	0	20	3350	2680	20	2850	2630	20	8365	1962.5	20	8590	1985	24.71	24.57	-0.14		
7C-25A-[25A]	[25A]	[25A]	7A	7A	QPSK	20	26140	1860	1	99	20	8140	1940	20	8590	1985	20	3100	2655	20	3350	2680	24.05	24.05	0		
	7C	7C	25A	[25A]	QPSK	20	21350	2560	1	0	20	3350	2680	20	3152	2660.2	20	8365	1962.5	20	8590	1985	24.71	24.58	-0.13		
7C-[25A]-[25A]	25A	7C	7C	[25A]	QPSK	20	26140	1860	1	99	20	8140	1940	20	3100	2655	20	3298	2674.8	20	8365	1962.5	24.05	24.02	-0.03		
	[25A]	25A	7C	7C	QPSK	20	26140	1860	1	99	20	8140	1940	20	8590	1985	20	3298	2674.8	20	8365	1962.5	24.05	24	-0.05		
7A-7A-25A-[66A]	7C	7C	[25A]	[25A]	QPSK	20	21350	2560	1	0	20	3350	2680	20	3152	2660.2	20	8365	1962.5	20	8590	1985	24.71	24.67	-0.04		
	[25A]	[25A]	7C	7C	QPSK	20	26140	1860	1	99	20	8140	1940	20	8590	1985	20	3100	2655	20	3298	2674.8	24.05	23.98	-0.07		
7A-7A-[25A]-[66A]	7A	7A	25A	[66A]	QPSK	20	21350	2560	1	0	20	3350	2680	20	2850	2630	20	8365	1962.5	20	86786	2145	24.71	24.68	-0.03		
	25A	7A	7A	[66A]	QPSK	20	26140	1860	1	99	20	8140	1940	20	3100	2655	20	3350	2680	20	86786	2145	24.05	24.05	0		
7A-7A-[25A]-66A	[66A]	7A	7A	25A	QPSK	20	132322	1745	1	0	20	66786	2145	20	3100	2655	20	3350	2680	20	8365	1962.5	23.31	23.17	-0.14		
	7A	7A	[25A]	66A	QPSK	20	21350	2560	1	0	20	3350	2680	20	2850	2630	20	8365	1962.5	20	66786	2145	24.71	24.71	0		
7A-7A-[25A]-[66A]	[66A]	7A	7A	66A	QPSK	20	21350	2560	1	0	20	3350	2680	20	3100	2655	20	3350	2680	20	66786	2145	24.05	23.96	-0.09		
	25A	7A	7A	[66A]	QPSK	20	26140	1860	1	99	20	8140	1940	20	3100	2655	20	3350	2680	20	66786	2145	24.05	23.92	-0.13		
7C-25A-[66A]	[66A]	7A	7A	[25A]	QPSK	20	132322	1745	1	0	20	66786	2145	20	3100	2655	20	3350	2680	20	8365	1962.5	23.31	23.17	-0.14		
	7C	7C	25A	[66A]	QPSK	20	21350	2560	1	0	20	3350	2680	20	3152	2660.2	20	8365	1962.5	20	66786	2145	24.71	24.7	-0.01		
7C-[25A]-[66A]	25A	7C	7C	[66A]	QPSK	20	26140	1860	1	99	20	8140	1940	20	3100	2655	20	3298	2674.8	20	66786	2145	24.05	24.01	-0.04		
	[66A]	7C	7C	25A	QPSK	20	132322	1745	1	0	20	66786	2145	20	3100	2655	20	3298	2674.8	20	8365	1962.5	23.31	23.19	-0.12		
7C-[25A]-66A	7C	7C	[25A]	66A	QPSK	20	21350	2560	1	0	20	3350	2680	20	3152	2660.2	20	8365	1962.5	20	66786	2145	24.71	24.63	-0.08		
	[25A]	7C	7C	66A	QPSK	20	26140	1860	1	99	20	8140	1940	20	3100	2655	20	3298	2674.8	20	66786	2145	24.05	23.95	-0.1		
7C-[25A]-[66A]	66A	7C	7C	[25A]	QPSK	20	132322	1745	1	0	20	66786	2145	20	3100	2655	20	3298	2674.8	20	8365	1962.5	23.31	23.27	-0.04		
	7C	7C	[25A]	[66A]	QPSK	20	21350	2560	1	0	20	3350	2680	20	3152	2660.2	20	8365	1962.5	20	66786	2145	24.71	24.69	-0.02		
7A-7A-29A-[66A]	[66A]	7C	7C	[66A]	QPSK	20	26140	1860	1	99	20	8140	1940	20	3100	2655	20	3298	2674.8	20	66786	2145	24.05	23.9	-0.15		
	7A	7A	29A	[66A]	QPSK	20	132322	1745	1	0	20	66786	2145	20	3100	2655	20	3298	2674.8	20	8365	1962.5	23.31	23.25	-0.06		
7C-29A-[66A]	[66A]	7A	29A	[66A]	QPSK	20	21350	2560	1	0	20	3350	2680	20	2850	2630	10	9715	722.5	10	9715	722.5	23.31	23.23	-0.08		
	7C	7C	29A	[66A]	QPSK	20	132322	1745	1	0	20	66786	2145	20	3100	2655	20	3298	2674.8	10	9715	722.5	23.31	23.22	-0.09		
7A-7A-66A-[66A]	[66A]	7A	66A	[66A]	QPSK	20	21350	2560	1	0	20	3350	2680	20	2850	2630	20	66786	2145	20	67036	2170	24.71	24.62	-0.09		
	66A	7A	7A	29A	QPSK	20	132322	1745	1	0	20	66786	2145	20	3100	2655	20	3350	2680	10	9715	722.5	23.31	23.23	-0.08		
7A-7A-[66A]-[66A]	7C	7C	29A	[66A]	QPSK	20	21350	2560	1	0	20	3350	2680	20	3152	2660.2	10	9715	722.5	10	9715	722.5	24.71	24.68	-0.03		
	[66A]	7C	7C	[25A]	QPSK	20	132322	1745	1	0	20	66786	2145	20	3100	2655	20	3298	2674.8	10	9715	722.5	23.31	23.22	-0.09		
7A-7A-[66A]-[66A]	7A	7A	66A	[66A]	QPSK	20	21350	2560	1	0	20	3350	2680	20	2850	2630	20	66786	2145	20	67036	2170	24.71	24.61	-0.1		
	[66A]	[66A]	7A	7A	QPSK	20	132322	1745	1	0	20	66786	2145	20	67036	2170	20	3350	2680	20	66786	2145	23.31	23.17	-0.14		
7C-[66A]-66A	[66A]	66A	7A	7A	QPSK	20	132322	1745	1	0	20	66786	2145	20	67036	2170	20	3350	2680	20	66786	2145	23.31	23.3	-0.01		
	7C	7C	[66A]	66A	QPSK	20	21350	2560	1	0	20	3350	2680	20	3152	2660.2	20	66786	2145	20	67036	2170	24.71	24.7	-0.01		
7C-[66A]-[66A]	[66A]	66A	7C	7C	QPSK	20	132322	1745	1	0	20	66786	2145	20	67036	2170	20	3298	2674.8	20	66786	2145	23.31	23.29	-0.02		
	66A	[66A]	7C	7C	QPSK	20	132322	1745	1	0	20	66786	2145	20	67036	2170	20	3298	2674.8	20	66786	2145	23.31	23.18	-0.13		
7A-12A-66A-[66A]	7C	7C	[66A]	[66A]	QPSK	20	21350	2560	1	0	20	3350	2680	20	3152	2660.2	20	66786	2145	20	67036	2170	24.71	24.61	-0.1		
	[66A]	[66A]	7C	7C	QPSK	20	132322	1745	1	0	20	66786	2145	20	67036	2170	20	3100	2655	20	3298	2674.8	23.31	23.22	-0.09		
7A-12A-[66A]-[66A]	7A	12A	66A	[66A]	QPSK	20	21350	2560	1	0	20	3350	2680	10	5095	737.5	20	66786	2145	20	67036	2170	24.71	24.59	-0.12		
	[66A]	66A	7A	7A	QPSK	10	23095	707.5	1	0	10	5095	737.5	20	3100	2655	20	66786	2145	20	67036	2170	23.56	23.51	-0.05		
7A-12B-[66A]	66A	[66A]	7A	12A	QPSK	20	132322	1745	1	0	20	66786	2145	20	67036	2170	10	5095	737.5	20	66786	2145	23.31	23.23	-0.08		
	[66A]	66A	7A	12A	QPSK	20	132322	1745	1	0	20	66786	2145	20	67036	2170	10	5095	737.5	20	66786	2145	23.31	23.31	0		
7A-25A-25A-[66A]	7A	12B	12B	[66A]	QPSK	20	21350	2560	1	0	20	3350	2680	5	5035	731.5	10	5110	739	20	66786	2145	24.71	24.71	0		
	12B	12B	7A	[66A]	QPSK	5	23035	701.5	1	0	5	5035	731.5	10	5110	739	20	3100	2655	20	66786	2145	23.89	23.81	-0.08		
7A-25A-[25A]-[66A]	[66A]	7A	12B	12B	QPSK	20	132322	1745	1	0	20	66786	2145	20	3100	2655	5	5035	731.5	10	5110	739	23.31	23.26	-0.05		
	7A	25A	25A	[66A]	QPSK	20	21350	2560	1	0	20	3350	2680	20	8365	1962.5	20	8590	1985	20	66786	2145	24.71	24.58	-0.13		
7A-[25A]-25A-66A	25A	25A	7A	[66A]	QPSK	20	26140	1860	1	99	20	8140	1940	20	8590	1985	20	3100	2655	20	66786	2145	24.05	23.92	-0.13		
	[66A]	7A	25A	25A	QPSK	20	132322	1745	1	0	20	66786	2145	20	3100	2655	20	8365	1962.5	20	8590	1985	23.31	23.18	-0.13		
7A-[25A]-25A-66A	7A	[25A]	25A	66A	QPSK	20	21350	2560	1	0	20	3350	2680	20	8365	1962.5	20	8590	1985	20	66786	2145	24.71	24.57	-0.14		
	[25A]	25A	7A	66A	QPSK	20	26140	1860	1	99	20	8140	1940	20	8590												

DL CA with 4x4 MIMO output power results (Continued)

E-UTRA CA configuration (BCS)	Bands				UL								DL												LTE Rel 8 Tx. Power [dBm]	LTE Rel 10 Tx. Power [dBm]	Delta
	PCC	SCC1	SCC2	SCC3	Mode	BW (MHz)	Channel	Freq. (MHz)	RB Location	RB Offset	PCC		SCC1		SCC2		SCC3										
	1st	2nd	3rd	4th							BW (MHz)	Channel	Freq. (MHz)	BW (MHz)	Channel	Freq. (MHz)	BW (MHz)	Channel	Freq. (MHz)	BW (MHz)	Channel	Freq. (MHz)	BW (MHz)	Channel			
7A-[25A]-25A-[66A]	7A	[25A]	25A	[66A]	QPSK	20	21350	2560	1	0	20	3350	2680	20	8365	1962.5	20	8590	1985	20	66786	2145	24.71	24.6	-0.11		
	[25A]	25A	7A	[66A]	QPSK	20	26140	1860	1	99	20	8140	1940	20	8590	1985	20	8365	1962.5	20	66786	2145	24.05	24.04	-0.01		
	25A	7A	[25A]	[66A]	QPSK	20	26140	1860	1	99	20	8140	1940	20	3100	2655	20	8365	1962.5	20	66786	2145	24.05	23.94	-0.11		
	[66A]	7A	[25A]	25A	QPSK	20	132322	1745	1	0	20	66786	2145	20	3100	2655	20	8365	1962.5	20	8590	1985	23.31	23.23	-0.08		
12B-[66A]-[66A]	12B	12B	66A	[66A]	QPSK	5	23035	701.5	1	0	5	5035	731.5	10	5110	739	20	66786	2145	20	67036	2170	23.89	23.83	-0.06		
	[66A]	[66A]	12B	12B	QPSK	20	132322	1745	1	0	20	66786	2145	20	67036	2170	10	5110	739	20	66786	2145	23.31	23.3	-0.01		
	[66A]	66A	12B	12B	QPSK	20	132322	1745	1	0	20	66786	2145	20	67036	2170	10	5110	739	20	66786	2145	23.31	23.16	-0.15		
	12B	12B	[66A]	[66A]	QPSK	5	23035	701.5	1	0	5	5035	731.5	10	5110	739	20	66786	2145	20	67036	2170	23.89	23.87	-0.02		
12A-[30A]-66A-66A	[66A]	[66A]	12B	12B	QPSK	20	132322	1745	1	0	20	66786	2145	20	67036	2170	10	5110	739	20	66786	2145	23.31	23.27	-0.04		
	12A	[30A]	66A	66A	QPSK	10	23095	707.5	1	0	10	5095	737.5	10	9820	2355	20	66786	2145	20	67036	2170	23.56	23.55	-0.01		
	[30A]	12A	66A	66A	QPSK	10	27710	2310	1	25	10	9820	2355	10	5095	737.5	20	66786	2145	20	67036	2170	22.62	22.6	-0.02		
	66A	66A	12A	[30A]	QPSK	20	132322	1745	1	0	20	66786	2145	20	67036	2170	10	5095	737.5	10	9820	2355	23.31	23.22	-0.09		
12A-30A-[66A]-66A	12A	30A	[66A]	66A	QPSK	10	23095	707.5	1	0	10	5095	737.5	10	9820	2355	20	66786	2145	20	67036	2170	23.56	23.5	-0.06		
	30A	12A	[66A]	66A	QPSK	10	27710	2310	1	25	10	9820	2355	10	5095	737.5	20	66786	2145	20	67036	2170	22.62	22.48	-0.14		
	[66A]	66A	12A	30A	QPSK	20	132322	1745	1	0	20	66786	2145	20	67036	2170	10	9820	2355	20	66786	2145	23.31	23.31	0		
	66A	[66A]	12A	30A	QPSK	20	132322	1745	1	0	20	66786	2145	20	67036	2170	10	9820	2355	20	66786	2145	23.31	23.25	-0.06		
12A-30A-[66A]-[66A]	12A	30A	[66A]	[66A]	QPSK	10	23095	707.5	1	0	10	5095	737.5	10	9820	2355	20	66786	2145	20	67036	2170	23.56	23.51	-0.05		
	30A	12A	[66A]	[66A]	QPSK	10	27710	2310	1	25	10	9820	2355	10	5095	737.5	20	66786	2145	20	67036	2170	22.62	22.59	-0.03		
	[66A]	[66A]	12A	30A	QPSK	20	132322	1745	1	0	20	66786	2145	20	67036	2170	10	5095	737.5	10	9820	2355	23.31	23.28	-0.03		
	12A	[30A]	66A	[66A]	QPSK	10	23095	707.5	1	0	10	5095	737.5	10	9820	2355	20	66786	2145	20	67036	2170	23.56	23.52	-0.04		
12A-[30A]-66A-[66A]	[30A]	12A	66A	[66A]	QPSK	10	27710	2310	1	25	10	9820	2355	10	5095	737.5	20	66786	2145	20	67036	2170	22.62	22.55	-0.07		
	66A	[66A]	12A	[30A]	QPSK	20	132322	1745	1	0	20	66786	2145	20	67036	2170	10	9820	2355	20	66786	2145	23.31	23.17	-0.14		
	[66A]	66A	12A	[30A]	QPSK	20	132322	1745	1	0	20	66786	2145	20	67036	2170	10	9820	2355	20	66786	2145	23.31	23.21	-0.1		
	13A	[66A]	66B	66B	QPSK	10	23230	782	1	0	10	5230	751	20	66786	2145	10	67086	2175	10	66987	2165.1	23.52	23.42	-0.1		
13A-[66A]-66B	[66A]	66B	66B	13A	QPSK	20	132322	1745	1	0	20	66786	2145	10	67086	2175	10	66786	2145	10	66885	2154.9	23.31	23.28	-0.03		
	66B	66B	[66A]	13A	QPSK	10	132322	1745	1	0	10	66786	2145	10	66885	2154.9	20	66536	2120	10	5230	751	23.39	23.32	-0.07		
	13A	66A	[66B]	[66B]	QPSK	10	23230	782	1	0	10	5230	751	20	66786	2145	10	67086	2175	10	66987	2165.1	23.52	23.42	-0.1		
	66A	[66B]	[66B]	13A	QPSK	20	132322	1745	1	0	20	66786	2145	10	67086	2175	10	66786	2145	10	66885	2154.9	23.31	23.19	-0.12		
13A-66A-[66B]	[66B]	[66B]	66A	13A	QPSK	10	132322	1745	1	0	10	66786	2145	10	66885	2154.9	20	66536	2120	10	5230	751	23.39	23.33	-0.06		
	13A	[66A]	66C	66C	QPSK	10	23230	782	1	0	10	5230	751	20	66536	2120	20	67036	2170	20	66885	2154.9	23.52	23.43	-0.09		
	[66A]	66C	66C	13A	QPSK	20	132072	1720	1	0	20	66536	2120	20	67036	2170	20	66984	2164.8	20	66984	2164.8	23.31	23.3	-0.01		
	66C	66C	[66A]	13A	QPSK	20	132322	1745	1	0	20	66786	2145	20	66984	2164.8	20	66536	2120	10	5230	751	23.31	23.27	-0.04		
13A-66A-[66C]	13A	66A	[66C]	[66C]	QPSK	10	23230	782	1	0	10	5230	751	20	66536	2120	20	67036	2170	20	66885	2154.9	23.52	23.47	-0.05		
	66A	[66C]	[66C]	13A	QPSK	20	132072	1720	1	0	20	66536	2120	20	67036	2170	20	66786	2145	20	66984	2164.8	23.31	23.3	-0.01		
	[66C]	[66C]	66A	13A	QPSK	20	132322	1745	1	0	20	66786	2145	20	66984	2164.8	20	66536	2120	10	5230	751	23.31	23.17	-0.14		
	25A-25A-[41C]	25A	25A	[41C]	[41C]	QPSK	20	26140	1860	1	99	20	8140	1940	20	8590	1985	20	40620	2593	20	40818	2612.8	24.05	24.05	0	
25A-[25A]-41C	25A	[25A]	41C	41C	QPSK	20	26140	1860	1	99	20	8140	1940	20	8590	1985	20	40620	2593	20	40818	2612.8	24.05	24.04	-0.01		
	[25A]	25A	41C	41C	QPSK	20	26140	1860	1	99	20	8140	1940	20	8590	1985	20	40620	2593	20	40818	2612.8	24.05	24.04	-0.01		
	[25A]	[25A]	41C	41C	QPSK	20	26140	1860	1	99	20	8140	1940	20	8590	1985	20	40620	2593	20	40818	2612.8	24.05	24.04	-0.01		
	[25A]	41D	41D	41D	QPSK	20	26140	1860	1	99	20	8140	1940	20	40620	2593	20	40818	2612.8	20	41016	2632.6	24.05	24.02	-0.03		
29A-[30A]-66A-66A	[30A]	29A	66A	66A	QPSK	10	27710	2310	1	25	10	9820	2355	10	9715	722.5	20	66786	2145	20	67036	2170	22.62	22.5	-0.12		
	66A	66A	29A	[30A]	QPSK	20	132322	1745	1	0	20	66786	2145	20	67036	2170	10	9715	722.5	10	9820	2355	23.31	23.17	-0.14		
	30A	29A	[66A]	66A	QPSK	10	27710	2310	1	25	10	9820	2355	10	9715	722.5	20	66786	2145	20	67036	2170	22.62	22.55	-0.07		
	[66A]	66A	29A	30A	QPSK	20	132322	1745	1	0	20	66786	2145	20	67036	2170	10	9820	2355	20	66786	2145	23.31	23.17	-0.14		
29A-30A-[66A]-66A	66A	[66A]	29A	30A	QPSK	20	132322	1745	1	0	20	66786	2145	20	67036	2170	10	9820	2355	20	66786	2145	23.31	23.28	-0.03		
	[30A]	29A	66A	[66A]	QPSK	10	27710	2310	1	25	10	9820	2355	10	9715	722.5	20	66786	2145	20	67036	2170	22.62	22.6	-0.02		
	[66A]	[66A]	29A	[30A]	QPSK	20	132322	1745	1	0	20	66786	2145	20	67036	2170	10	9820	2355	20	66786	2145	23.31	23.25	-0.06		
	[66A]	66A	29A	[30A]	QPSK	20	1323																				