

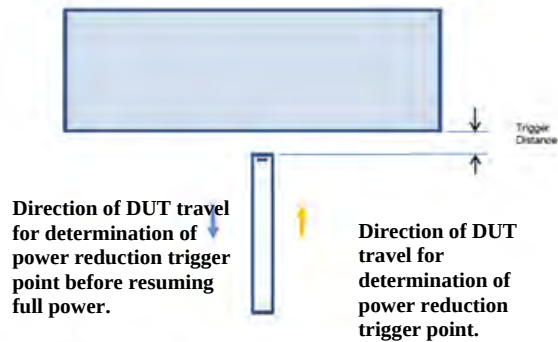
Appendix F: Proximity Sensor Verification

The DUT has a proximity sensors to reduce the output power. The position of the sensors and antenna are as shown in the graphic.

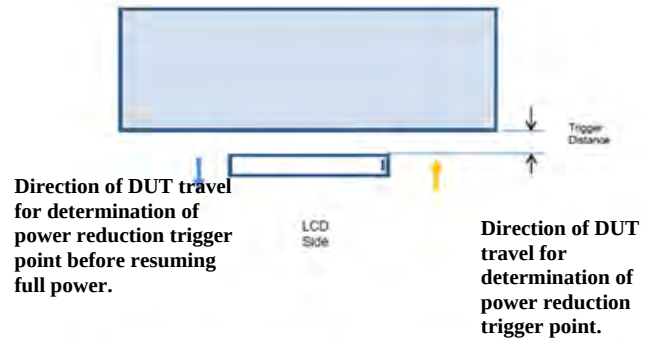
Proximity Sensor Triggering distance (KDB 616217 §6.2)

Edge 1 of the DUT was placed directly below the flat phantom. The DUT was moved toward the phantom in accordance with the steps outlined in KDB 616217 §6.2 to determine the trigger distance for enabling power reduction. The DUT was moved away from the phantom to determine the trigger distance for resuming full power.

The measurement was then repeated for the Rear surface.



**Proximity Sensor Trigger Distance Assessment
KDB 616217 §6.2, Edge 4**



**Proximity Sensor Trigger Distance Assessment
KDB 616217 §6.2, Rear**

Tissue simulating liquid	Trigger distance - Edge 4		Trigger distance - Rear		Trigger distance – Rear tilt(Edge4 side)	
	Moving toward phantom	Moving from phantom	Moving toward phantom	Moving from phantom	Moving toward phantom	Moving from phantom
750/900 1750/1900/2400 muscle	20 mm	20 mm	10 mm	10 mm	10 mm	10 mm

Unit : mm

【Test distance】

Edge 4: 750/900 /1750/1900/2400 muscle 19 mm

Rear: 750/900/1750/1900/2400 muscle 9 mm

Rear tilt (Edge4 side): 750/900/1750/1900/2400 muscle 9 mm

SAR measurements were performed at the most conservative distance.

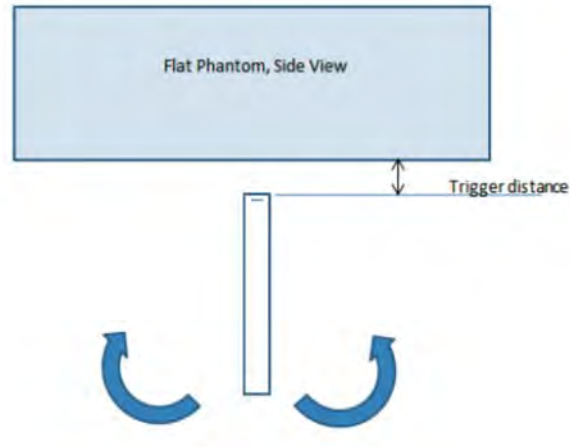
Proximity Sensor Coverage (KDB 616217 §6.3)

As there is no spatial offset between the antenna and the proximity element, except on the display side of the antenna, proximity sensor coverage did not need to be assessed.

Proximity Sensor Tilt Angle (KDB 616217 §6.4)

The DUT was positioned directly below the flat phantom at the minimum measured trigger distance with edge 1 parallel to the base of the flat phantom. The DUT was rotated in both directions about edge 1.

The proximity sensor remained triggered with the DUT positioned at the minimum measured trigger distance from the phantom for all angles up to 45°.



Operation modes for Proximity Sensor

Tablet mode is enabled proximity sensor detection.

Laptop mode is disabled proximity sensor detection.

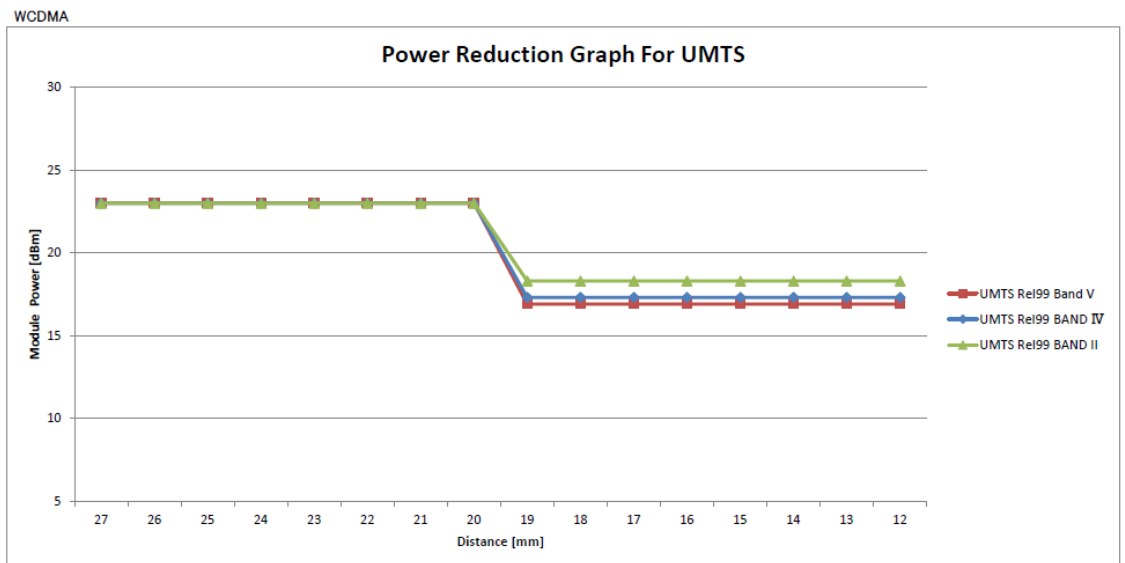
Detail of operation modes for Proximity Sensor

Operation Modes	Proximity sensor detection					
	Edge1	Edge2	Edge3	Edge4	Rear	Rear Tilt (Edge 4 side)
Tablet	No	No	No	Yes	Yes	Yes
Laptop	No	No	No	No	No	No

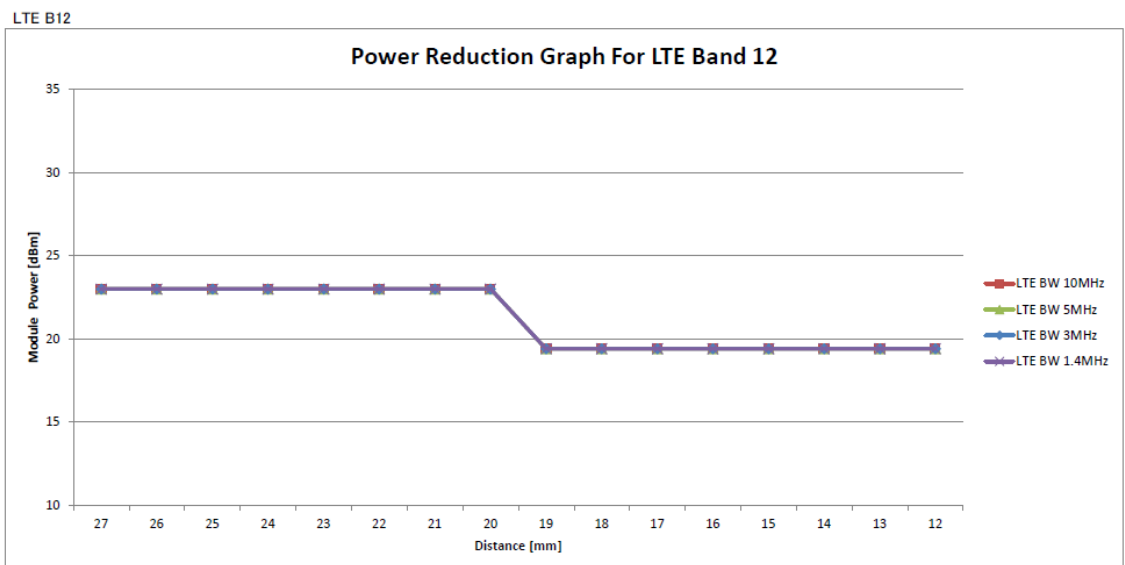
Triggering distances and power levels

DUT moving toward the phantom

[Edge4]

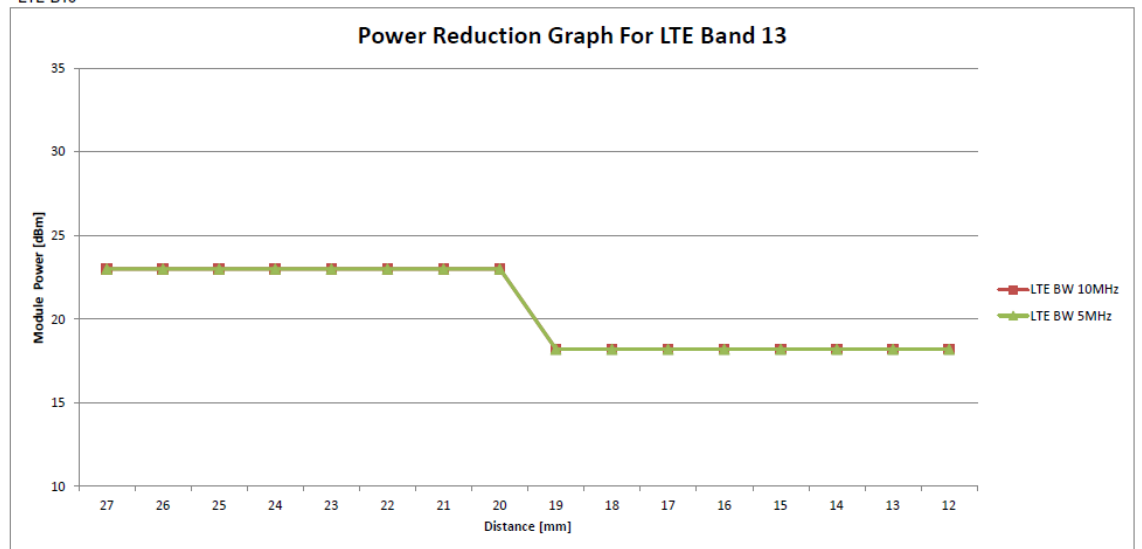


Coverage Step UMTS														
Distance	27	26	25	24	23	22	21	20	19	18	17	16	15	14
DPR	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	ON	ON	ON	ON	ON	ON
UMTS Rel99 Band V	23	23	23	23	23	23	23	23	16.9	16.9	16.9	16.9	16.9	16.9
UMTS Rel99 BAND IV	23	23	23	23	23	23	23	23	17.3	17.3	17.3	17.3	17.3	17.3
UMTS Rel99 BAND II	23	23	23	23	23	23	23	23	18.3	18.3	18.3	18.3	18.3	18.3



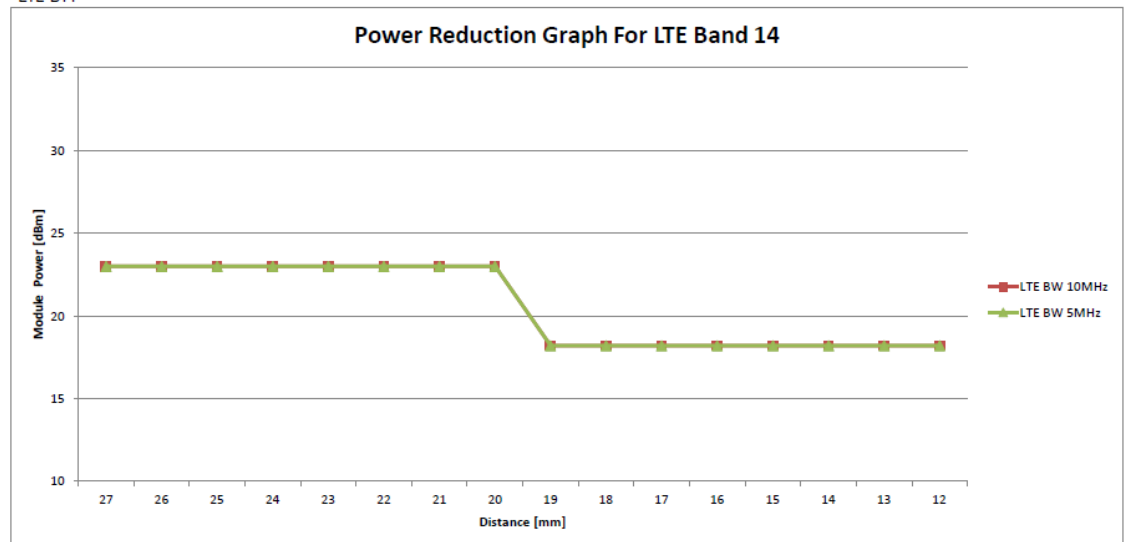
Coverage Step LTE Band 12														
Distance	27	26	25	24	23	22	21	20	19	18	17	16	15	14
DPR	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	ON	ON	ON	ON	ON	ON
LTE BW 10MHz	23	23	23	23	23	23	23	23	19.4	19.4	19.4	19.4	19.4	19.4
LTE BW 5MHz	23	23	23	23	23	23	23	23	19.4	19.4	19.4	19.4	19.4	19.4
LTE BW 3MHz	23	23	23	23	23	23	23	23	19.4	19.4	19.4	19.4	19.4	19.4
LTE BW 1.4MHz	23	23	23	23	23	23	23	23	19.4	19.4	19.4	19.4	19.4	19.4

LTE B13



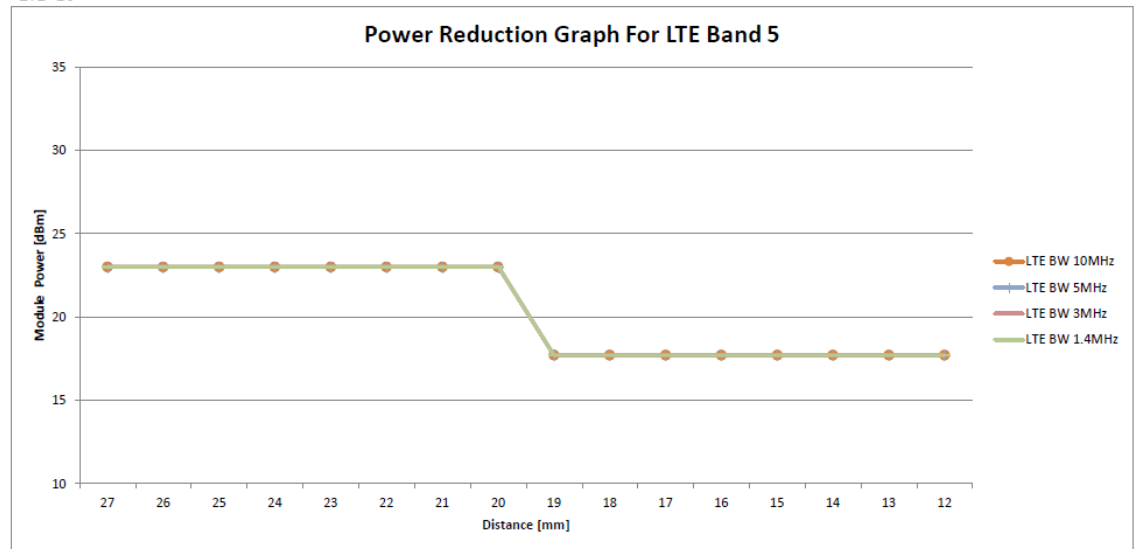
Coverage Step LTE Band 13													
Distance	27	26	25	24	23	22	21	20	19	18	17	16	15
DPR	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	ON	ON	ON	ON	ON
LTE BW 10MHz	23	23	23	23	23	23	23	23	18.2	18.2	18.2	18.2	18.2
LTE BW 5MHz	23	23	23	23	23	23	23	23	18.2	18.2	18.2	18.2	18.2

LTE B14

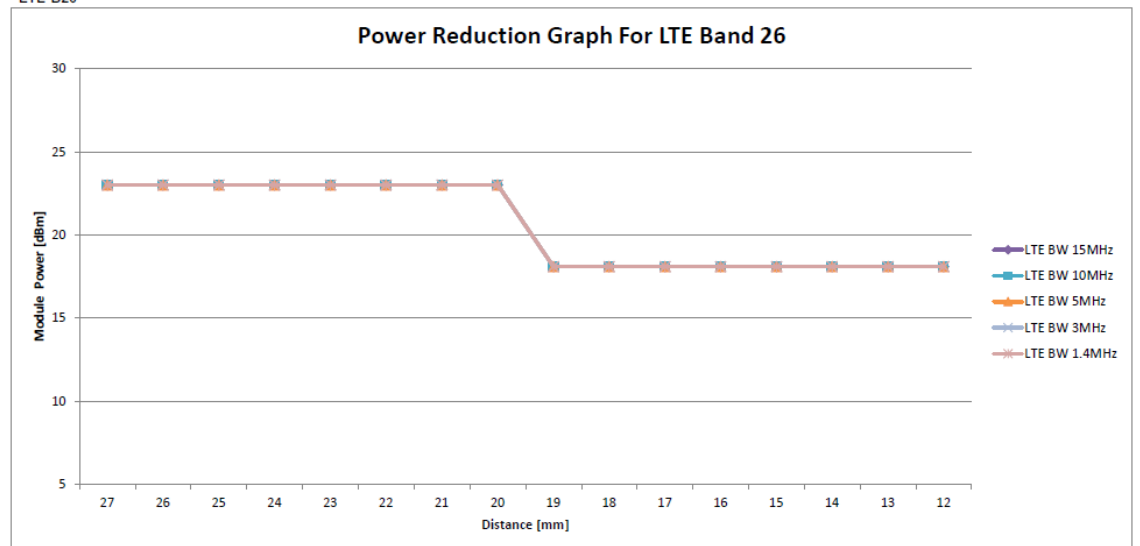


Coverage Step LTE Band 14													
Distance	27	26	25	24	23	22	21	20	19	18	17	16	15
DPR	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	ON	ON	ON	ON	ON
LTE BW 10MHz	23	23	23	23	23	23	23	23	18.2	18.2	18.2	18.2	18.2
LTE BW 5MHz	23	23	23	23	23	23	23	23	18.2	18.2	18.2	18.2	18.2

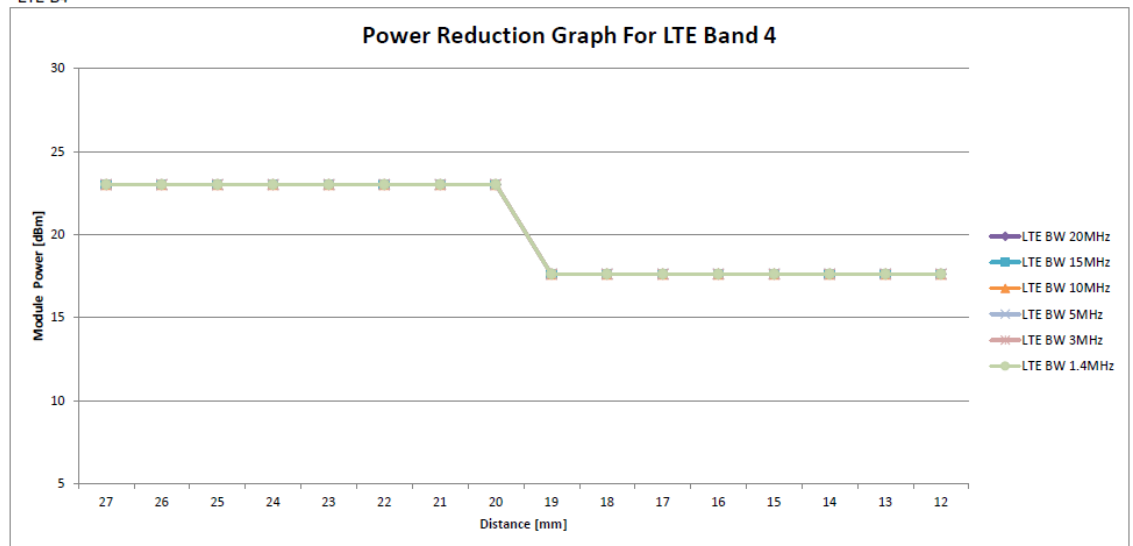
LTE B5

[illegible]

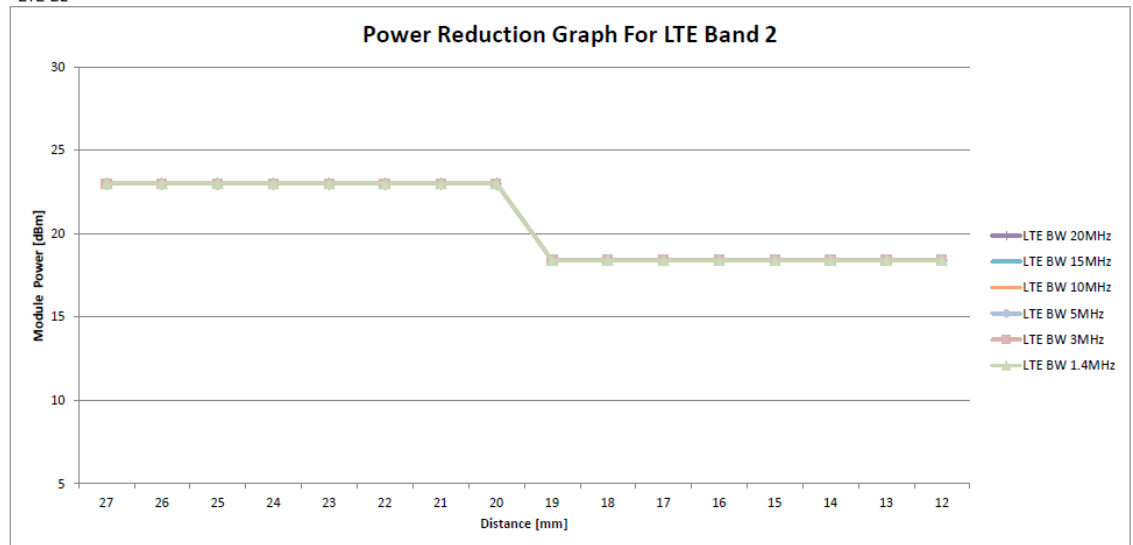
LTE B26

[illegible]

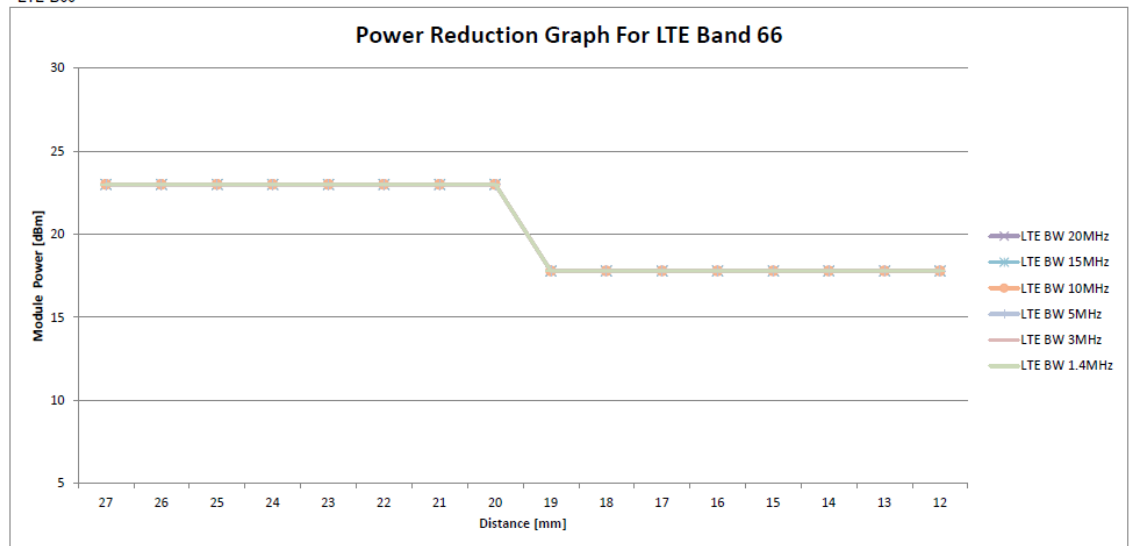
LTE B4

[illegible]

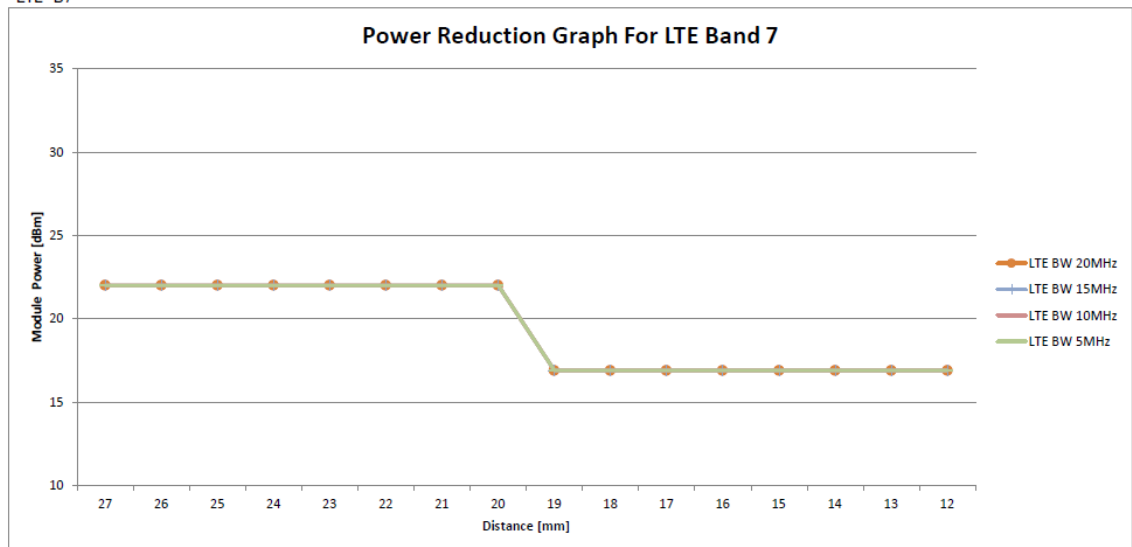
LTE B2

[illegible]

LTE B66

[illegible]

LTE B7

[illegible]

Distance [mm]	LTE BW 20MHz [dBm]	LTE BW 15MHz [dBm]	LTE BW 10MHz [dBm]	LTE BW 5MHz [dBm]
27	22.0	22.0	22.0	22.0
26	22.0	22.0	22.0	22.0
25	22.0	22.0	22.0	22.0
24	22.0	22.0	22.0	22.0
23	22.0	22.0	22.0	22.0
22	22.0	22.0	22.0	22.0
21	22.0	22.0	22.0	22.0
20	22.0	22.0	22.0	22.0
19	18.5	18.5	18.5	18.5
18	18.5	18.5	18.5	18.5
17	18.5	18.5	18.5	18.5
16	18.5	18.5	18.5	18.5
15	18.5	18.5	18.5	18.5
14	18.5	18.5	18.5	18.5
13	18.5	18.5	18.5	18.5
12	18.5	18.5	18.5	18.5

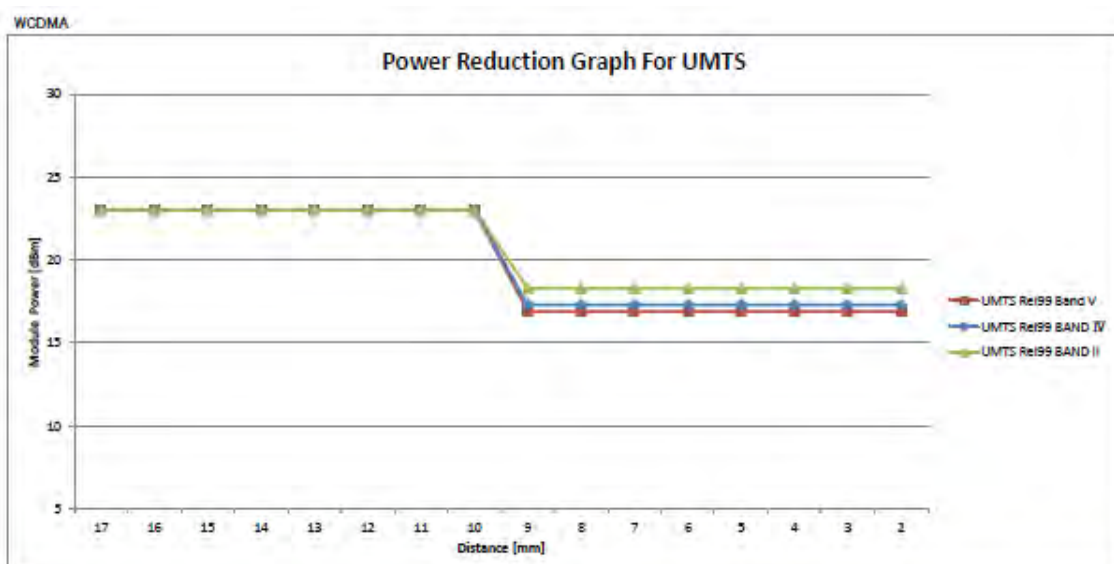
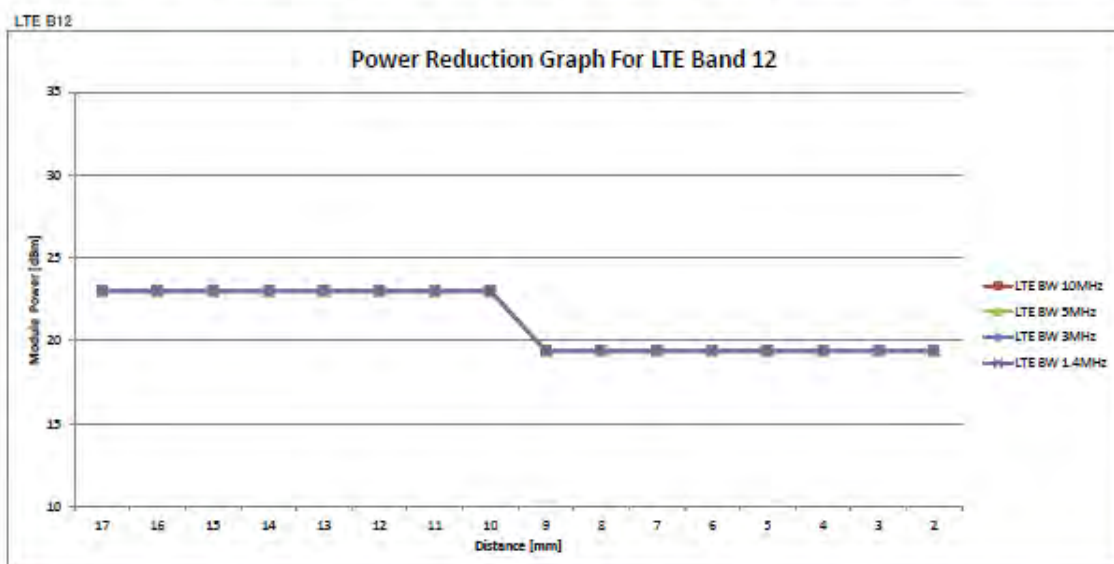
[illegible]

The graph illustrates the power reduction for LTE Band 48 across different bandwidths (20MHz, 15MHz, 10MHz, and 5MHz) as the distance from the antenna decreases. The y-axis represents Module Power in dBm, ranging from 10 to 35. The x-axis represents Distance in mm, ranging from 27 to 12. All bandwidths show a consistent power reduction from approximately 22 dBm at 27mm to 18 dBm at 19mm, after which the power remains constant at 18 dBm for distances 18mm to 12mm.

Distance [mm]	LTE BW 20MHz [dBm]	LTE BW 15MHz [dBm]	LTE BW 10MHz [dBm]	LTE BW 5MHz [dBm]
27	22	22	22	22
26	22	22	22	22
25	22	22	22	22
24	22	22	22	22
23	22	22	22	22
22	22	22	22	22
21	22	22	22	22
20	22	22	22	22
19	18	18	18	18
18	18	18	18	18
17	18	18	18	18
16	18	18	18	18
15	18	18	18	18
14	18	18	18	18
13	18	18	18	18
12	18	18	18	18

[illegible]

[Rear/Rear tilt(Edge4 side)]

[illegible][illegible]

Power Reduction Graph For LTE Band 13

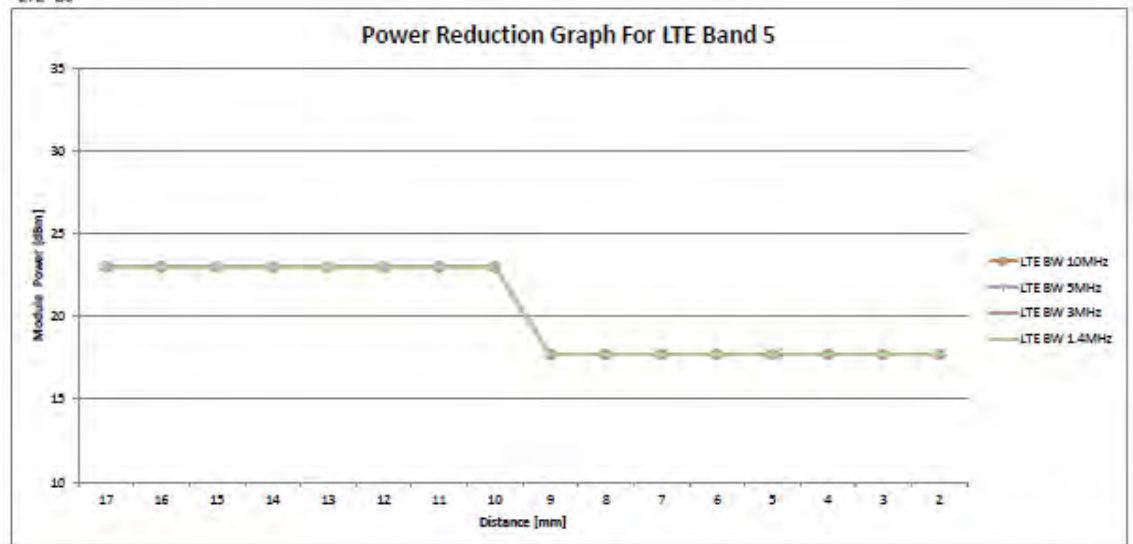
Distance [mm]	LTE BW 10MHz [dBm]	LTE BW 5MHz [dBm]
17	23	23
16	23	23
15	23	23
14	23	23
13	23	23
12	23	23
11	23	23
10	23	23
9	18.5	18.5
8	18.5	18.5
7	18.5	18.5
6	18.5	18.5
5	18.5	18.5
4	18.5	18.5
3	18.5	18.5
2	18.5	18.5

[illegible]

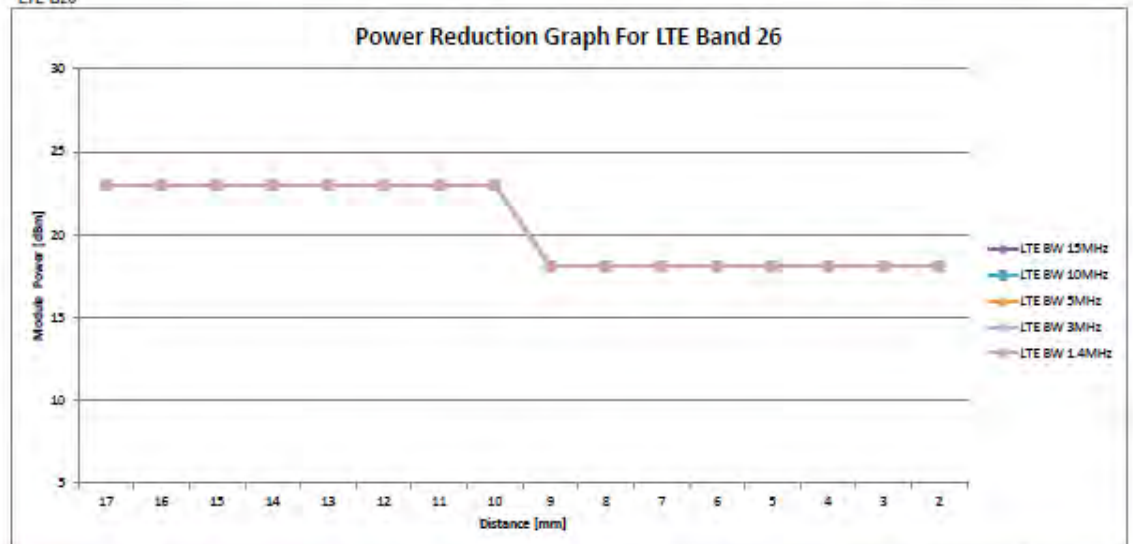
Distance [mm]	LTE BW 10MHz [dBm]	LTE BW 5MHz [dBm]
17	23.2	23.0
16	23.1	23.0
15	23.0	23.0
14	23.0	23.0
13	23.0	23.0
12	23.0	23.0
11	23.0	23.0
10	23.0	23.0
9	18.5	18.2
8	18.5	18.2
7	18.5	18.2
6	18.5	18.2
5	18.5	18.2
4	18.5	18.2
3	18.5	18.2
2	18.5	18.2

[illegible]

LTE B5

[illegible]

LTE B26

[illegible]

Power Reduction Graph For LTE Band 4

Distance [mm]	LTE BW 20MHz	LTE BW 15MHz	LTE BW 10MHz	LTE BW 5MHz	LTE BW 3MHz	LTE BW 1.4MHz
17	23.0	23.0	23.0	23.0	23.0	23.0
16	23.0	23.0	23.0	23.0	23.0	23.0
15	23.0	23.0	23.0	23.0	23.0	23.0
14	23.0	23.0	23.0	23.0	23.0	23.0
13	23.0	23.0	23.0	23.0	23.0	23.0
12	23.0	23.0	23.0	23.0	23.0	23.0
11	23.0	23.0	23.0	23.0	23.0	23.0
10	23.0	23.0	23.0	23.0	23.0	23.0
9	17.5	17.8	17.8	17.8	17.8	17.8
8	17.5	17.8	17.8	17.8	17.8	17.8
7	17.5	17.8	17.8	17.8	17.8	17.8
6	17.5	17.8	17.8	17.8	17.8	17.8
5	17.5	17.8	17.8	17.8	17.8	17.8
4	17.5	17.8	17.8	17.8	17.8	17.8
3	17.5	17.8	17.8	17.8	17.8	17.8
2	17.5	17.8	17.8	17.8	17.8	17.8

Power Reduction Graph For LTE Band 2

Distance [mm]	LTE BW 20MHz	LTE BW 15MHz	LTE BW 10MHz	LTE BW 5MHz	LTE BW 3MHz	LTE BW 1.4MHz
17	23.0	23.0	23.0	23.0	23.0	23.0
16	23.0	23.0	23.0	23.0	23.0	23.0
15	23.0	23.0	23.0	23.0	23.0	23.0
14	23.0	23.0	23.0	23.0	23.0	23.0
13	23.0	23.0	23.0	23.0	23.0	23.0
12	23.0	23.0	23.0	23.0	23.0	23.0
11	23.0	23.0	23.0	23.0	23.0	23.0
10	23.0	23.0	23.0	23.0	23.0	23.0
9	18.5	18.5	18.5	18.5	18.5	18.5
8	18.5	18.5	18.5	18.5	18.5	18.5
7	18.5	18.5	18.5	18.5	18.5	18.5
6	18.5	18.5	18.5	18.5	18.5	18.5
5	18.5	18.5	18.5	18.5	18.5	18.5
4	18.5	18.5	18.5	18.5	18.5	18.5
3	18.5	18.5	18.5	18.5	18.5	18.5
2	18.5	18.5	18.5	18.5	18.5	18.5

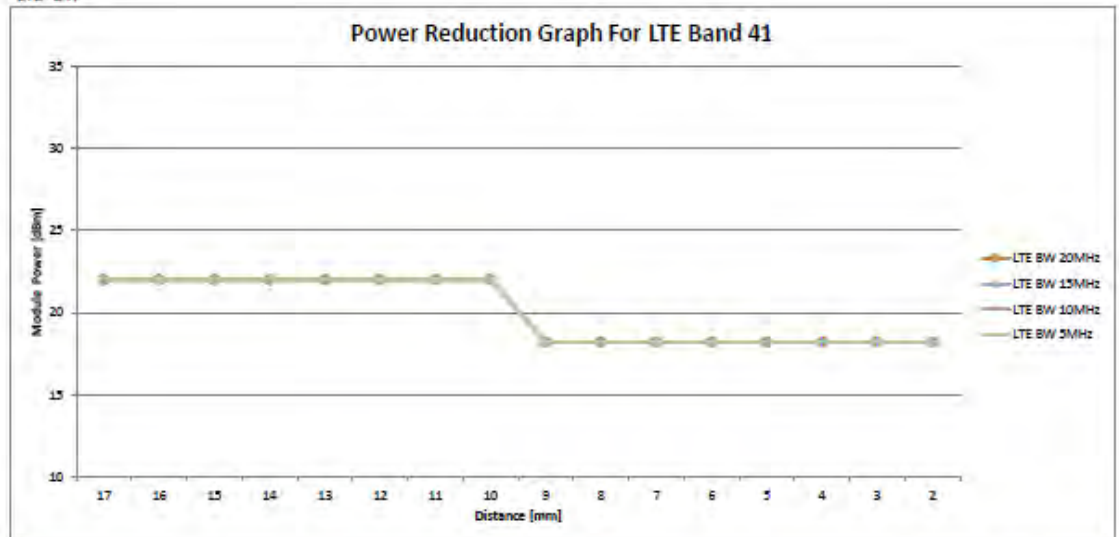
[illegible]

Distance [mm]	LTE BW 20MHz	LTE BW 15MHz	LTE BW 10MHz	LTE BW 5MHz	LTE BW 3MHz	LTE BW 1.4MHz
17	23.0	22.5	22.0	21.5	21.0	20.5
16	23.0	22.5	22.0	21.5	21.0	20.5
15	23.0	22.5	22.0	21.5	21.0	20.5
14	23.0	22.5	22.0	21.5	21.0	20.5
13	23.0	22.5	22.0	21.5	21.0	20.5
12	23.0	22.5	22.0	21.5	21.0	20.5
11	23.0	22.5	22.0	21.5	21.0	20.5
10	23.0	22.5	22.0	21.5	21.0	20.5
9	17.5	17.0	16.5	16.0	15.5	15.0
8	17.5	17.0	16.5	16.0	15.5	15.0
7	17.5	17.0	16.5	16.0	15.5	15.0
6	17.5	17.0	16.5	16.0	15.5	15.0
5	17.5	17.0	16.5	16.0	15.5	15.0
4	17.5	17.0	16.5	16.0	15.5	15.0
3	17.5	17.0	16.5	16.0	15.5	15.0
2	17.5	17.0	16.5	16.0	15.5	15.0

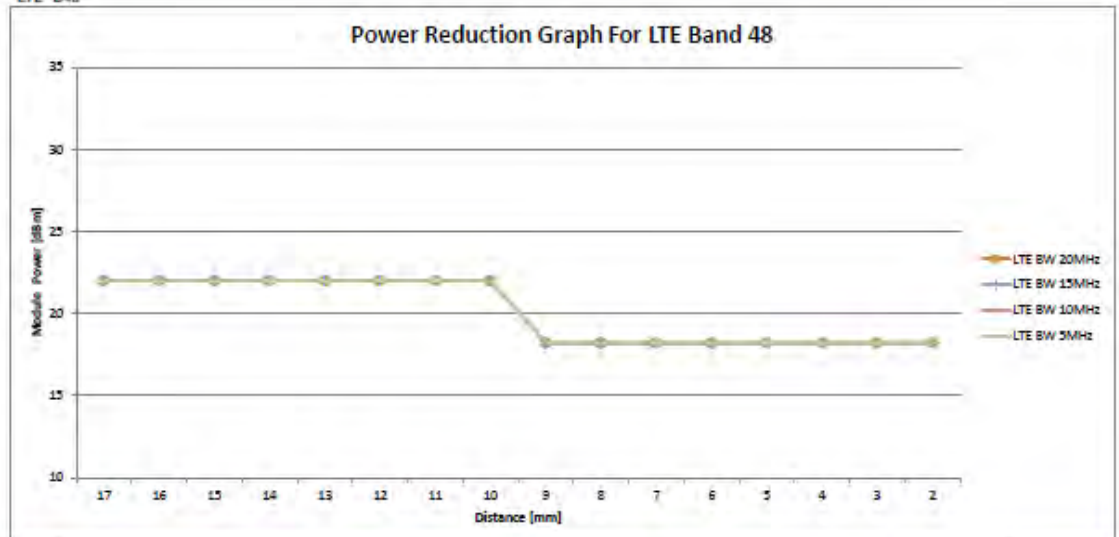
Distance [mm]	LTE BW 20MHz [dBm]	LTE BW 15MHz [dBm]	LTE BW 10MHz [dBm]	LTE BW 5MHz [dBm]
17	22.5	22.5	22.5	22.5
16	22.5	22.5	22.5	22.5
15	22.5	22.5	22.5	22.5
14	22.5	22.5	22.5	22.5
13	22.5	22.5	22.5	22.5
12	22.5	22.5	22.5	22.5
11	22.5	22.5	22.5	22.5
10	22.5	22.5	22.5	22.5
9	16.5	16.5	16.2	16.0
8	16.5	16.5	16.2	16.0
7	16.5	16.5	16.2	16.0
6	16.5	16.5	16.2	16.0
5	16.5	16.5	16.2	16.0
4	16.5	16.5	16.2	16.0
3	16.5	16.5	16.2	16.0
2	16.5	16.5	16.2	16.0

[illegible]

LTE B41

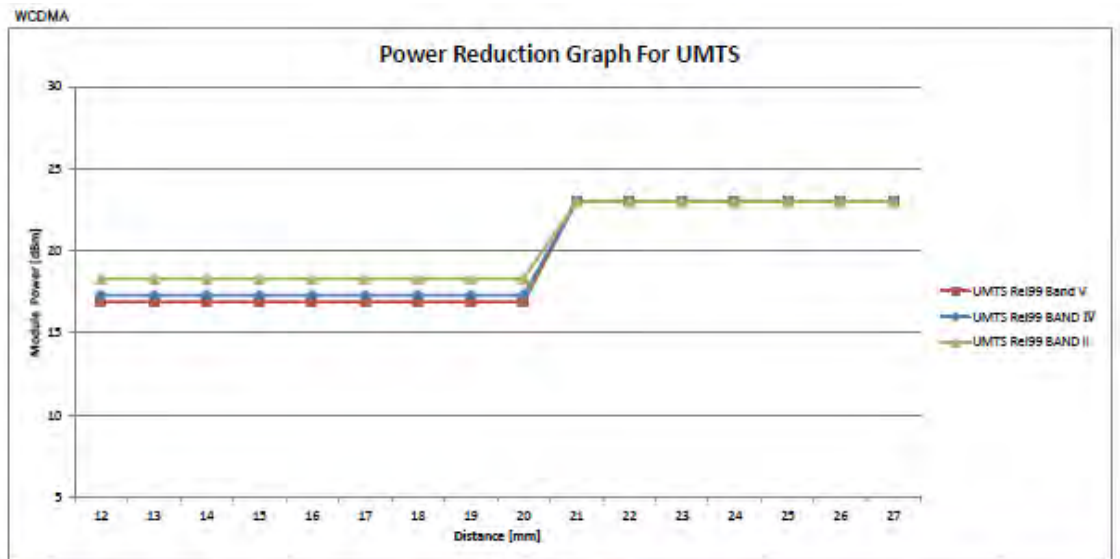
[illegible]

LTE B40

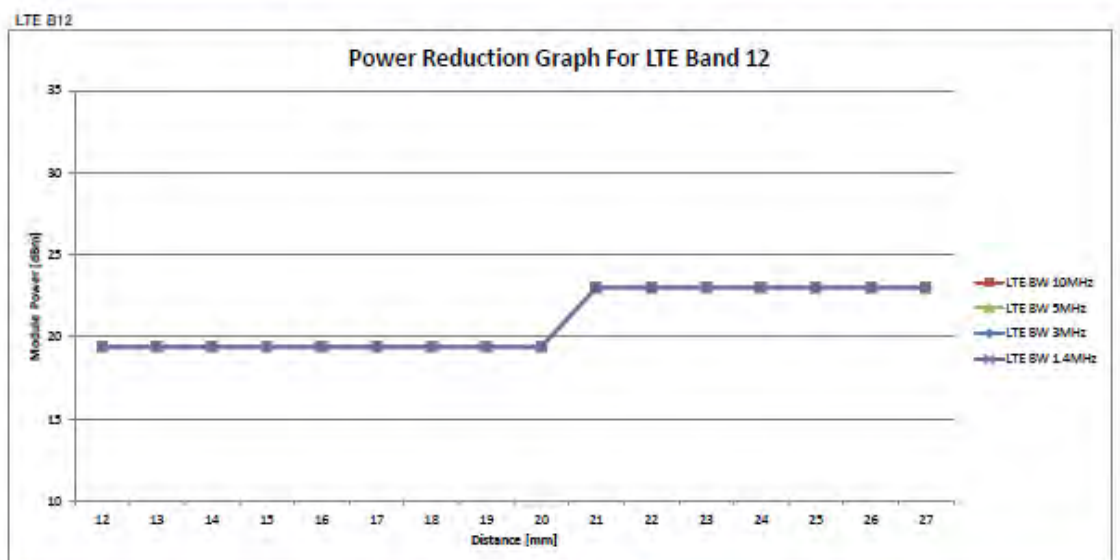
[illegible]

DUT moving from the phantom

[Edge4]



Coverage Step UMTS																	
Distance	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	
DPR	ON	ON	ON	ON	ON	ON	ON	ON	ON	OFF	OFF	OFF	OFF	OFF	OFF	OFF	
UMTS Rel99 Band V	16.9	16.9	16.9	16.9	16.9	16.9	16.9	16.9	16.9	23	23	23	23	23	23	23	
UMTS Rel99 BAND IV	17.3	17.3	17.3	17.3	17.3	17.3	17.3	17.3	17.3	23	23	23	23	23	23	23	
UMTS Rel99 BAND II	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	23	23	23	23	23	23	23	



Coverage Step LTE Band 12																	
Distance	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	
DPR	ON	ON	ON	ON	ON	ON	ON	ON	ON	OFF	OFF	OFF	OFF	OFF	OFF	OFF	
LTE BW 10MHz	19.4	19.4	19.4	19.4	19.4	19.4	19.4	19.4	19.4	23	23	23	23	23	23	23	
LTE BW 5MHz	19.4	19.4	19.4	19.4	19.4	19.4	19.4	19.4	19.4	23	23	23	23	23	23	23	
LTE BW 3MHz	19.4	19.4	19.4	19.4	19.4	19.4	19.4	19.4	19.4	23	23	23	23	23	23	23	
LTE BW 1.4MHz	19.4	19.4	19.4	19.4	19.4	19.4	19.4	19.4	19.4	23	23	23	23	23	23	23	

Power Reduction Graph For LTE Band 13

Distance [mm]	LTE BW 10MHz [dBm]	LTE BW 5MHz [dBm]
12	18.5	18.5
13	18.5	18.5
14	18.5	18.5
15	18.5	18.5
16	18.5	18.5
17	18.5	18.5
18	18.5	18.5
19	18.5	18.5
20	18.5	18.5
21	23.5	23.5
22	23.5	23.5
23	23.5	23.5
24	23.5	23.5
25	23.5	23.5
26	23.5	23.5
27	23.5	23.5

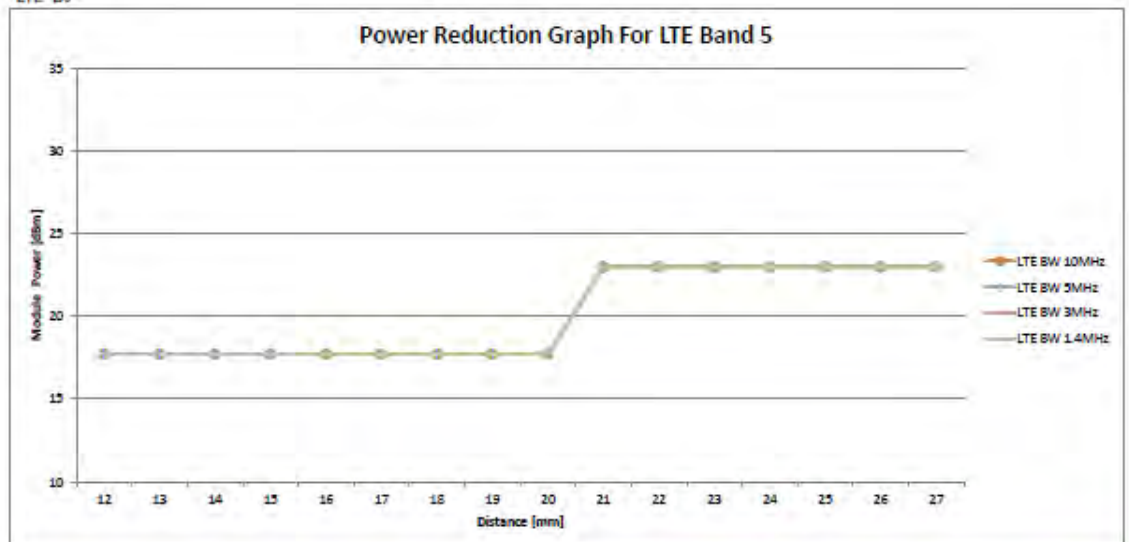
Power Reduction Graph For LTE Band 14

Distance [mm]	LTE BW 10MHz [dBm]	LTE BW 5MHz [dBm]
12	18.5	18.5
13	18.5	18.5
14	18.5	18.5
15	18.5	18.5
16	18.5	18.5
17	18.5	18.5
18	18.5	18.5
19	18.5	18.5
20	18.5	18.5
21	23.5	23.5
22	23.5	23.5
23	23.5	23.5
24	23.5	23.5
25	23.5	23.5
26	23.5	23.5
27	23.5	23.5

Distance [mm]	LTE BW 10MHz [dBm]	LTE BW 5MHz [dBm]
12	18.5	18.5
13	18.5	18.5
14	18.5	18.5
15	18.5	18.5
16	18.5	18.5
17	18.5	18.5
18	18.5	18.5
19	18.5	18.5
20	18.5	18.5
21	23.5	23.5
22	23.5	23.5
23	23.5	23.5
24	23.5	23.5
25	23.5	23.5
26	23.5	23.5
27	23.5	23.5

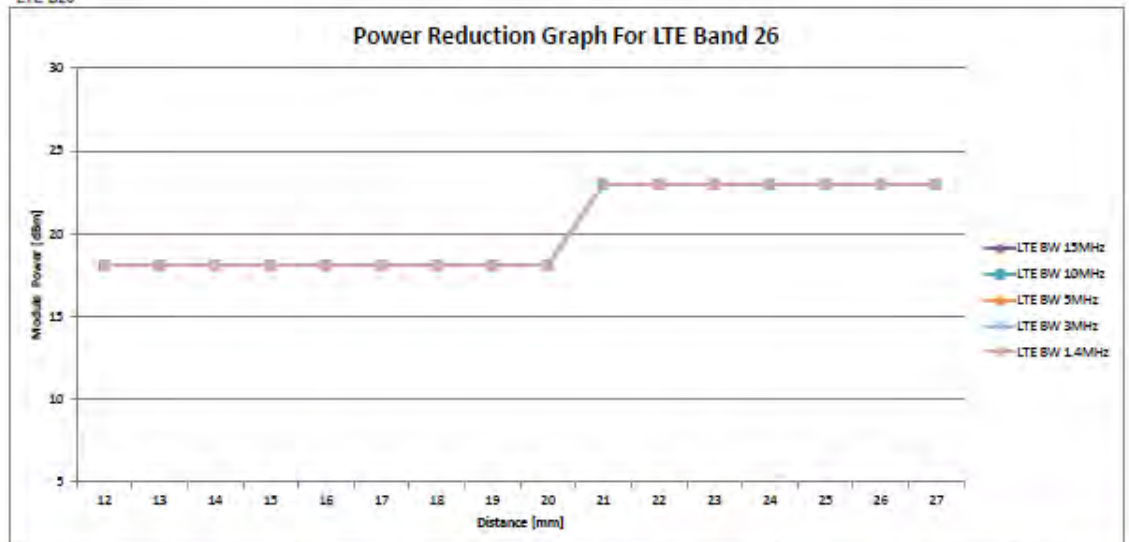
	Coverage Step LTE Band 14															
Distance	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27
DPR	ON	ON	ON	ON	ON	ON	ON	ON	ON	OFF	OFF	OFF	OFF	OFF	OFF	OFF
LTE BW 10MHz	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2	23	23	23	23	23	23
LTE BW 5MHz	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2	23	23	23	23	23	23

LTE B5



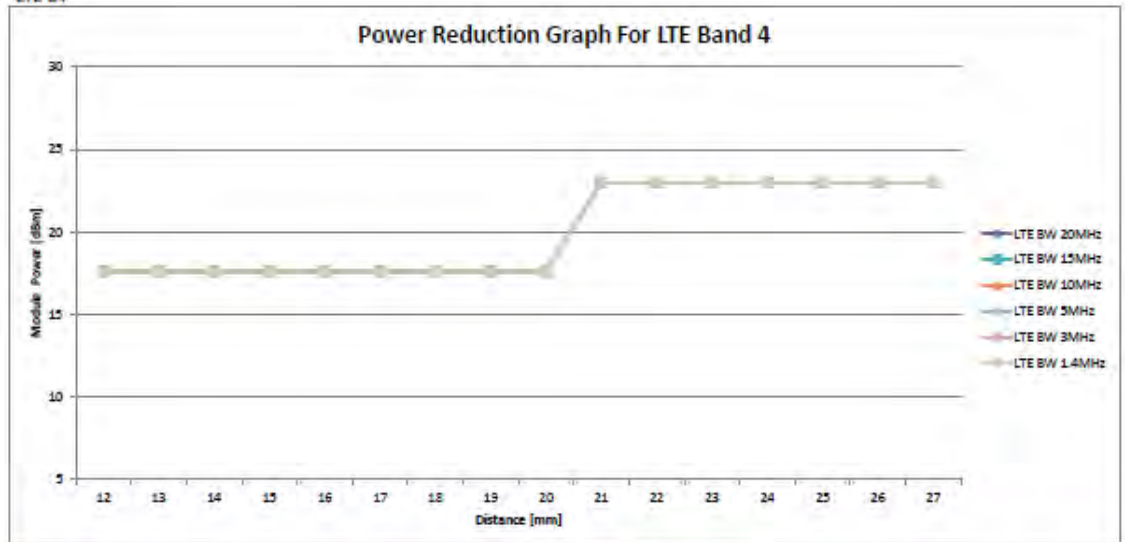
		Coverage Step LTE Band 5															
Distance		12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27
DPR		ON	ON	ON	ON	ON	ON	ON	ON	ON	OFF	OFF	OFF	OFF	OFF	OFF	OFF
LTE BW 10MHz		17.7	17.7	17.7	17.7	17.7	17.7	17.7	17.7	17.7	23	23	23	23	23	23	23
LTE BW 5MHz		17.7	17.7	17.7	17.7	17.7	17.7	17.7	17.7	17.7	23	23	23	23	23	23	23
LTE BW 3MHz		17.7	17.7	17.7	17.7	17.7	17.7	17.7	17.7	17.7	23	23	23	23	23	23	23
LTE BW 1.4MHz		17.7	17.7	17.7	17.7	17.7	17.7	17.7	17.7	17.7	23	23	23	23	23	23	23

LTE B26



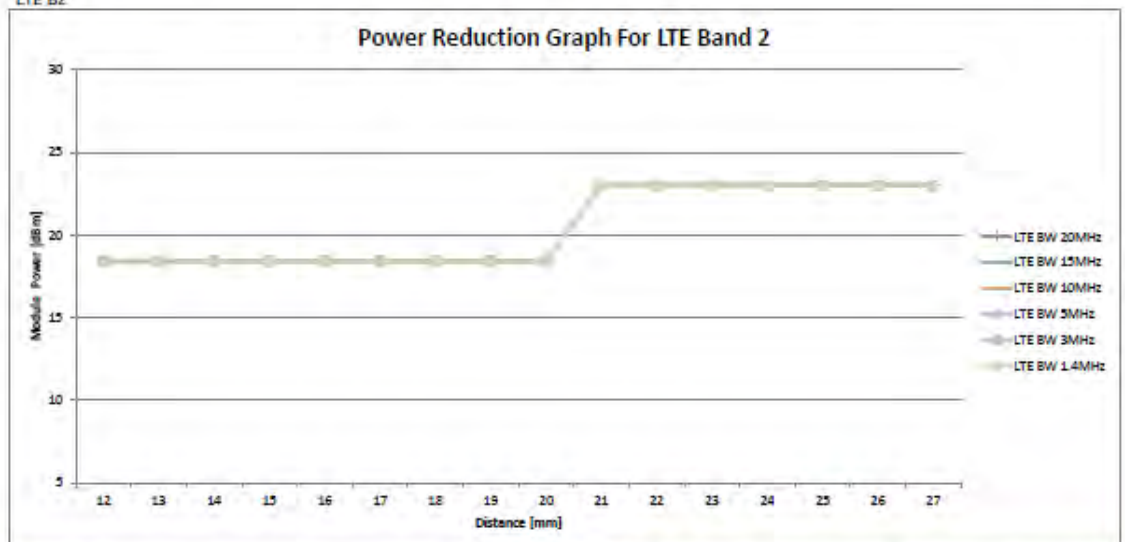
		Coverage Step LTE Band 26															
Distance		12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27
DPR		ON	ON	ON	ON	ON	ON	ON	ON	ON	OFF	OFF	OFF	OFF	OFF	OFF	OFF
LTE BW 15MHz		18.1	18.1	18.1	18.1	18.1	18.1	18.1	18.1	18.1	23	23	23	23	23	23	23
LTE BW 10MHz		18.1	18.1	18.1	18.1	18.1	18.1	18.1	18.1	18.1	23	23	23	23	23	23	23
LTE BW 5MHz		18.1	18.1	18.1	18.1	18.1	18.1	18.1	18.1	18.1	23	23	23	23	23	23	23
LTE BW 3MHz		18.1	18.1	18.1	18.1	18.1	18.1	18.1	18.1	18.1	23	23	23	23	23	23	23
LTE BW 1.4MHz		18.1	18.1	18.1	18.1	18.1	18.1	18.1	18.1	18.1	23	23	23	23	23	23	23

LTE B4



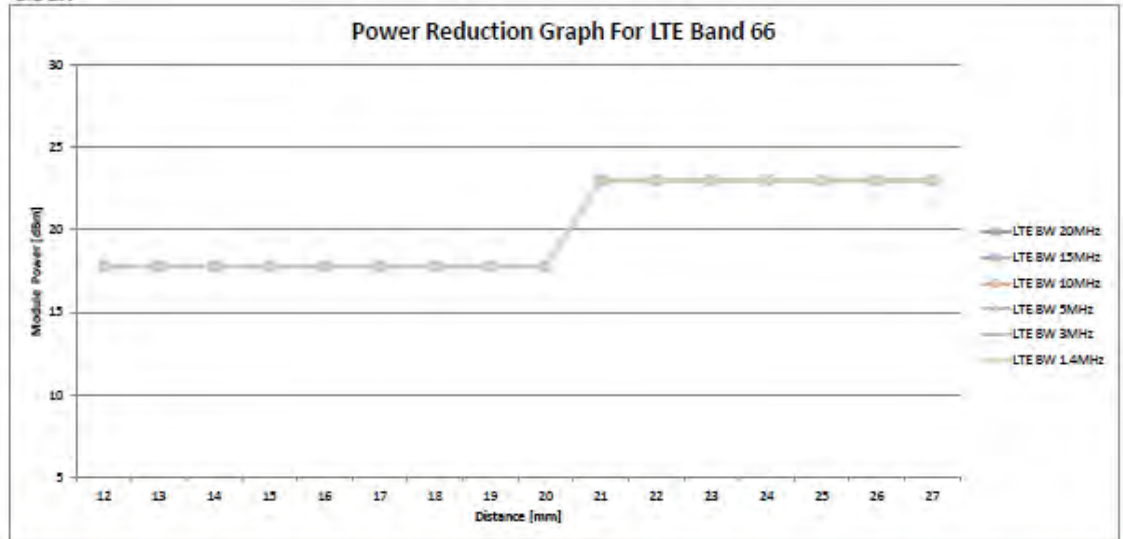
Coverage Step LTE Band 4																
Distance	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27
DPR	ON	ON	ON	ON	ON	ON	ON	ON	ON	OFF	OFF	OFF	OFF	OFF	OFF	OFF
LTE BW 20MHz	17.6	17.6	17.6	17.6	17.6	17.6	17.6	17.6	17.6	23	23	23	23	23	23	23
LTE BW 15MHz	17.6	17.6	17.6	17.6	17.6	17.6	17.6	17.6	17.6	23	23	23	23	23	23	23
LTE BW 10MHz	17.6	17.6	17.6	17.6	17.6	17.6	17.6	17.6	17.6	23	23	23	23	23	23	23
LTE BW 5MHz	17.6	17.6	17.6	17.6	17.6	17.6	17.6	17.6	17.6	23	23	23	23	23	23	23
LTE BW 3MHz	17.6	17.6	17.6	17.6	17.6	17.6	17.6	17.6	17.6	23	23	23	23	23	23	23
LTE BW 1.4MHz	17.6	17.6	17.6	17.6	17.6	17.6	17.6	17.6	17.6	23	23	23	23	23	23	23

LTE B2



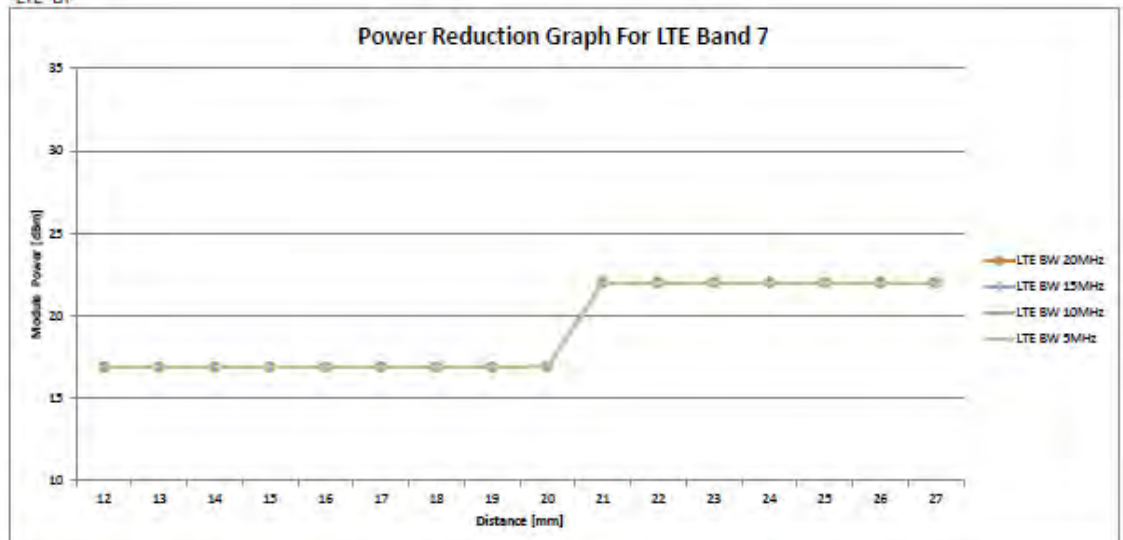
Coverage Step LTE Band 2																
Distance	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27
DPR	ON	ON	ON	ON	ON	ON	ON	ON	ON	OFF	OFF	OFF	OFF	OFF	OFF	OFF
LTE BW 20MHz	18.4	18.4	18.4	18.4	18.4	18.4	18.4	18.4	18.4	23	23	23	23	23	23	23
LTE BW 15MHz	18.4	18.4	18.4	18.4	18.4	18.4	18.4	18.4	18.4	23	23	23	23	23	23	23
LTE BW 10MHz	18.4	18.4	18.4	18.4	18.4	18.4	18.4	18.4	18.4	23	23	23	23	23	23	23
LTE BW 5MHz	18.4	18.4	18.4	18.4	18.4	18.4	18.4	18.4	18.4	23	23	23	23	23	23	23
LTE BW 3MHz	18.4	18.4	18.4	18.4	18.4	18.4	18.4	18.4	18.4	23	23	23	23	23	23	23
LTE BW 1.4MHz	18.4	18.4	18.4	18.4	18.4	18.4	18.4	18.4	18.4	23	23	23	23	23	23	23

LTE B66



Coverage Step LTE Band 25																
Distance	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27
DPR	ON	ON	ON	ON	ON	ON	ON	ON	ON	OFF	OFF	OFF	OFF	OFF	OFF	OFF
LTE BW 20MHz	17.8	17.8	17.8	17.8	17.8	17.8	17.8	17.8	17.8	23	23	23	23	23	23	23
LTE BW 15MHz	17.8	17.8	17.8	17.8	17.8	17.8	17.8	17.8	17.8	23	23	23	23	23	23	23
LTE BW 10MHz	17.8	17.8	17.8	17.8	17.8	17.8	17.8	17.8	17.8	23	23	23	23	23	23	23
LTE BW 5MHz	17.8	17.8	17.8	17.8	17.8	17.8	17.8	17.8	17.8	23	23	23	23	23	23	23
LTE BW 3MHz	17.8	17.8	17.8	17.8	17.8	17.8	17.8	17.8	17.8	23	23	23	23	23	23	23
LTE BW 1.4MHz	17.8	17.8	17.8	17.8	17.8	17.8	17.8	17.8	17.8	23	23	23	23	23	23	23

LTE B7



Coverage Step LTE Band 7																
Distance	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27
DPR	ON	ON	ON	ON	ON	ON	ON	ON	ON	OFF	OFF	OFF	OFF	OFF	OFF	OFF
LTE BW 20MHz	16.9	16.9	16.9	16.9	16.9	16.9	16.9	16.9	16.9	22	22	22	22	22	22	22
LTE BW 15MHz	16.9	16.9	16.9	16.9	16.9	16.9	16.9	16.9	16.9	22	22	22	22	22	22	22
LTE BW 10MHz	16.9	16.9	16.9	16.9	16.9	16.9	16.9	16.9	16.9	22	22	22	22	22	22	22
LTE BW 5MHz	16.9	16.9	16.9	16.9	16.9	16.9	16.9	16.9	16.9	22	22	22	22	22	22	22

Power Reduction Graph For LTE Band 41

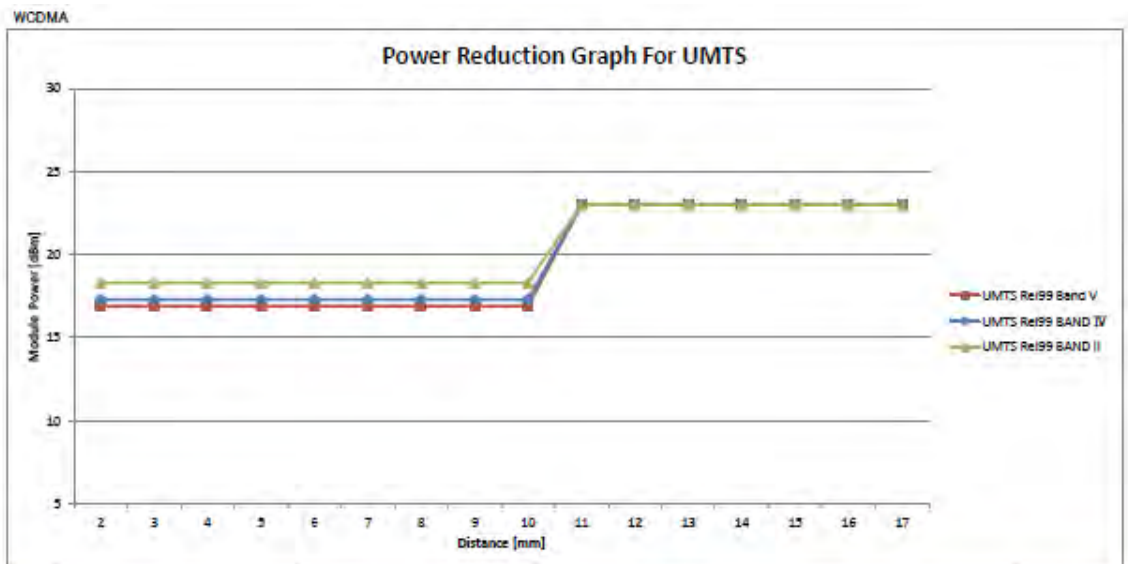
The graph shows the relationship between distance and module power for different LTE bandwidths. All bandwidths exhibit a significant power increase at a distance of 21 mm, likely due to the proximity of the antenna.

Distance (mm)	LTE BW 20MHz (dBm)	LTE BW 15MHz (dBm)	LTE BW 10MHz (dBm)	LTE BW 5MHz (dBm)
12	18.2	18.2	18.2	18.2
13	18.2	18.2	18.2	18.2
14	18.2	18.2	18.2	18.2
15	18.2	18.2	18.2	18.2
16	18.2	18.2	18.2	18.2
17	18.2	18.2	18.2	18.2
18	18.2	18.2	18.2	18.2
19	18.2	18.2	18.2	18.2
20	18.2	18.2	18.2	18.2
21	22.0	22.0	22.0	22.0
22	22.0	22.0	22.0	22.0
23	22.0	22.0	22.0	22.0
24	22.0	22.0	22.0	22.0
25	22.0	22.0	22.0	22.0
26	22.0	22.0	22.0	22.0
27	22.0	22.0	22.0	22.0

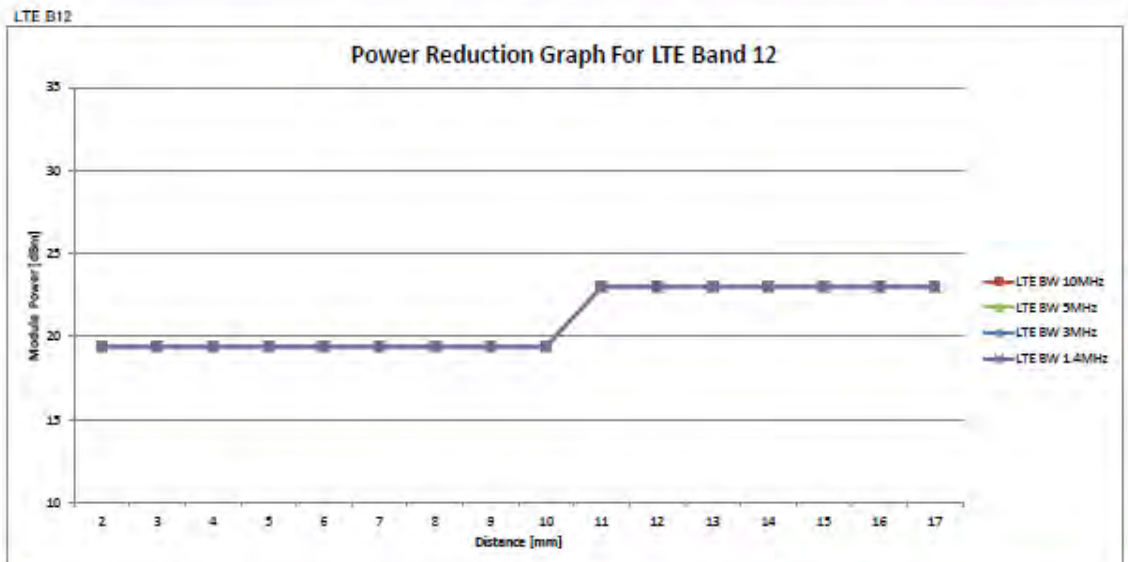
Distance [mm]	LTE BW 20MHz [dBm]	LTE BW 15MHz [dBm]	LTE BW 10MHz [dBm]	LTE BW 5MHz [dBm]
12	18.5	18.5	18.5	18.5
13	18.5	18.5	18.5	18.5
14	18.5	18.5	18.5	18.5
15	18.5	18.5	18.5	18.5
16	18.5	18.5	18.5	18.5
17	18.5	18.5	18.5	18.5
18	18.5	18.5	18.5	18.5
19	18.5	18.5	18.5	18.5
20	18.5	18.5	18.5	18.5
21	22.5	22.5	22.5	22.5
22	22.5	22.5	22.5	22.5
23	22.5	22.5	22.5	22.5
24	22.5	22.5	22.5	22.5
25	22.5	22.5	22.5	22.5
26	22.5	22.5	22.5	22.5
27	22.5	22.5	22.5	22.5

	Coverage Step LTE Band 48															
Distance	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27
DPR	ON	ON	ON	ON	ON	ON	ON	ON	ON	OFF	OFF	OFF	OFF	OFF	OFF	OFF
LTE BW 20MHz	10.8	10.8	10.8	10.8	10.8	10.8	10.8	10.8	10.8	10.8	19	19	19	19	19	19
LTE BW 15MHz	10.8	10.8	10.8	10.8	10.8	10.8	10.8	10.8	10.8	10.8	19	19	19	19	19	19
LTE BW 10MHz	10.8	10.8	10.8	10.8	10.8	10.8	10.8	10.8	10.8	10.8	19	19	19	19	19	19
LTE BW 5MHz	10.8	10.8	10.8	10.8	10.8	10.8	10.8	10.8	10.8	10.8	19	19	19	19	19	19

[Rear/Rear tilt(Edge4 side)]

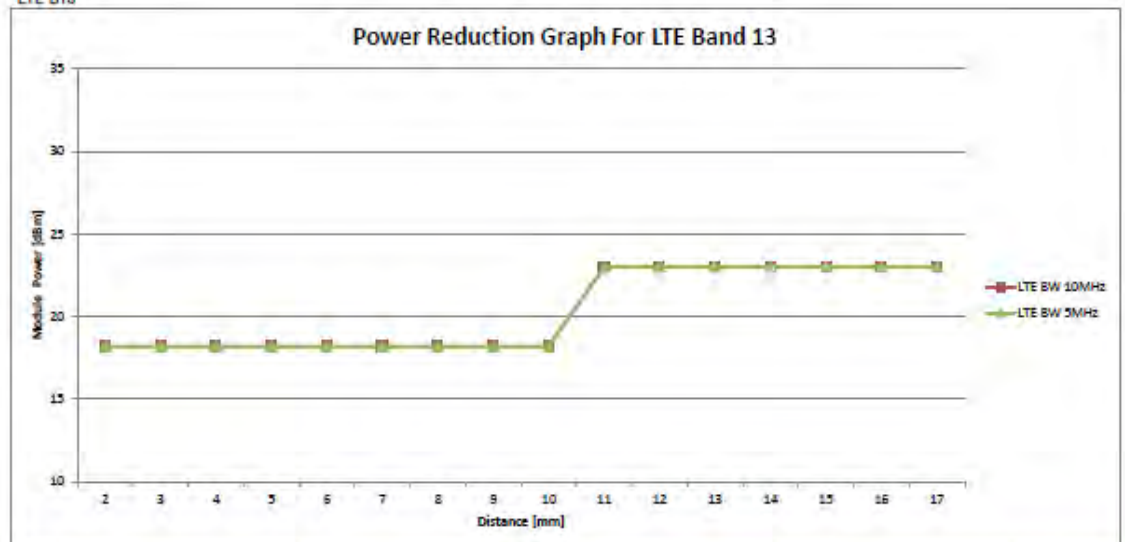


	Coverage Step UMTS																
Distance	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	
DPR	ON	ON	ON	ON	ON	ON	ON	ON	ON	OFF	OFF	OFF	OFF	OFF	OFF	OFF	
UMTS Rel99 Band V	16.9	16.9	16.9	16.9	16.9	16.9	16.9	16.9	16.9	23	23	23	23	23	23	23	
UMTS Rel99 BAND IV	17.3	17.3	17.3	17.3	17.3	17.3	17.3	17.3	17.3	23	23	23	23	23	23	23	
UMTS Rel99 BAND II	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	23	23	23	23	23	23	23	



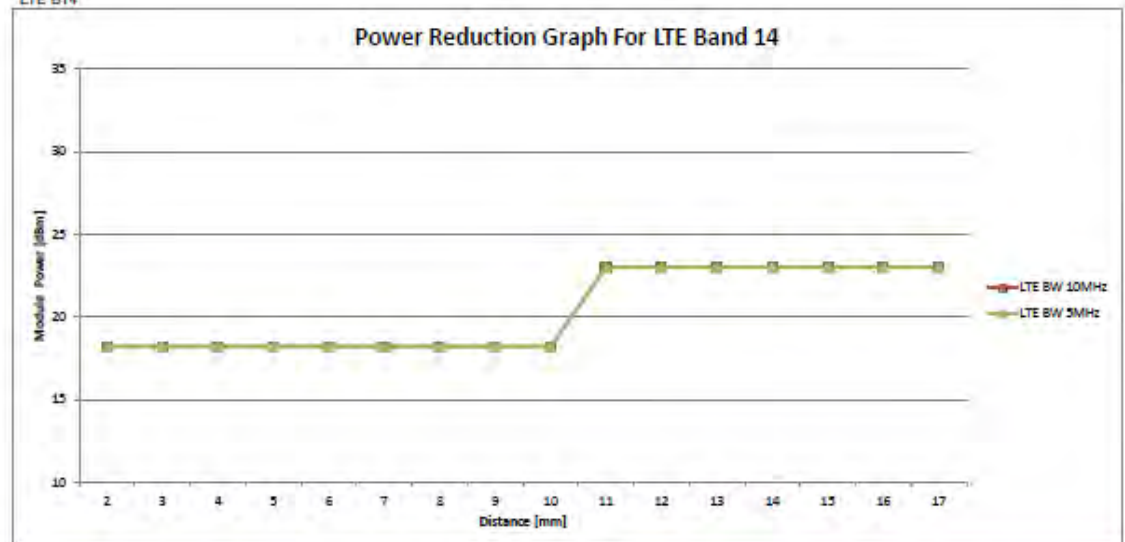
	Coverage Step LTE Band 12																
Distance	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	
DPR	ON	ON	ON	ON	ON	ON	ON	ON	ON	OFF	OFF	OFF	OFF	OFF	OFF	OFF	
LTE BW 10MHz	19.4	19.4	19.4	19.4	19.4	19.4	19.4	19.4	19.4	23	23	23	23	23	23	23	
LTE BW 5MHz	19.4	19.4	19.4	19.4	19.4	19.4	19.4	19.4	19.4	23	23	23	23	23	23	23	
LTE BW 3MHz	19.4	19.4	19.4	19.4	19.4	19.4	19.4	19.4	19.4	23	23	23	23	23	23	23	
LTE BW 1.4MHz	19.4	19.4	19.4	19.4	19.4	19.4	19.4	19.4	19.4	23	23	23	23	23	23	23	

LTE B13



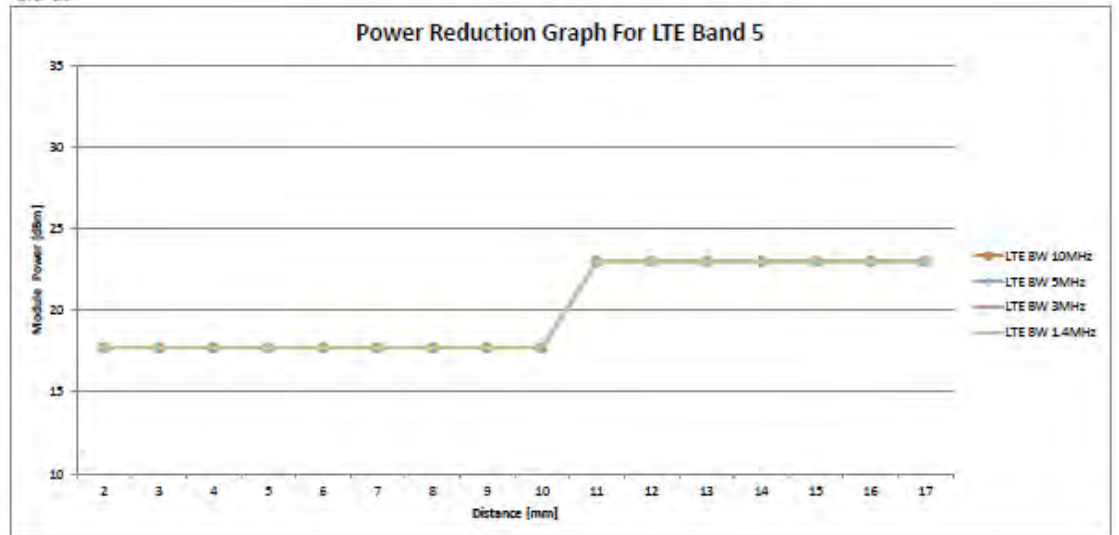
Coverage Step LTE Band 13																	
Distance	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	
DPR	ON	ON	ON	ON	ON	ON	ON	ON	ON	OFF	OFF	OFF	OFF	OFF	OFF	OFF	
LTE BW 10MHz	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2	23	23	23	23	23	23	23	
LTE BW 5MHz	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2	23	23	23	23	23	23	23	

LTE B14



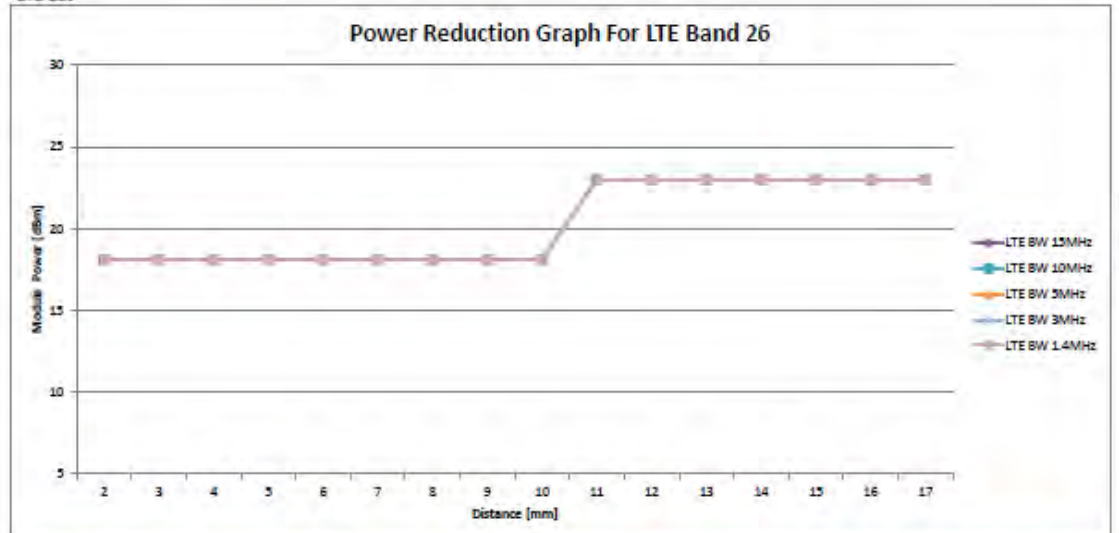
Coverage Step LTE Band 14																	
Distance	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	
DPR	ON	ON	ON	ON	ON	ON	ON	ON	ON	OFF	OFF	OFF	OFF	OFF	OFF	OFF	
LTE BW 10MHz	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2	23	23	23	23	23	23	23	
LTE BW 5MHz	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2	23	23	23	23	23	23	23	

LTE B5



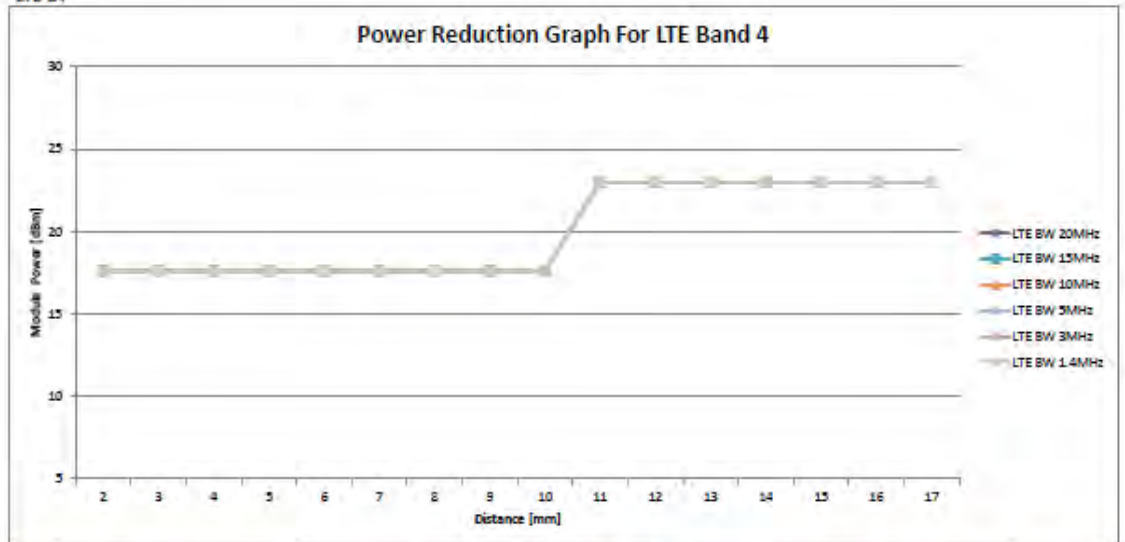
Coverage Step LTE Band 5																	
Distance	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	
DPR	ON	ON	ON	ON	ON	ON	ON	ON	ON	OFF	OFF	OFF	OFF	OFF	OFF	OFF	
LTE BW 10MHz	17.7	17.7	17.7	17.7	17.7	17.7	17.7	17.7	17.7	23	23	23	23	23	23	23	
LTE BW 5MHz	17.7	17.7	17.7	17.7	17.7	17.7	17.7	17.7	17.7	23	23	23	23	23	23	23	
LTE BW 3MHz	17.7	17.7	17.7	17.7	17.7	17.7	17.7	17.7	17.7	23	23	23	23	23	23	23	
LTE BW 1.4MHz	17.7	17.7	17.7	17.7	17.7	17.7	17.7	17.7	17.7	23	23	23	23	23	23	23	

LTE B26



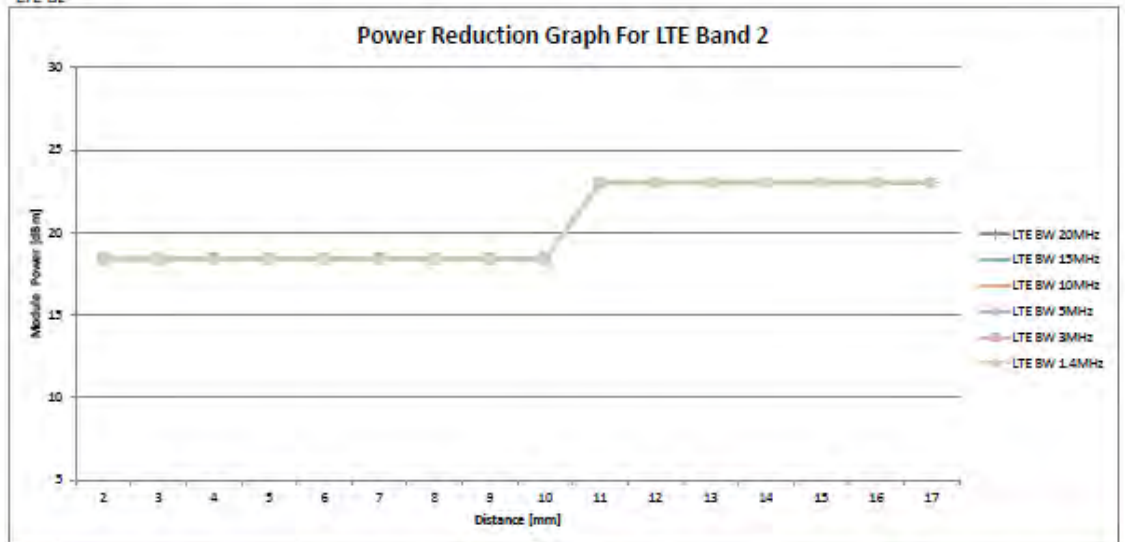
Coverage Step LTE Band 26																	
Distance	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	
DPR	ON	ON	ON	ON	ON	ON	ON	ON	ON	OFF	OFF	OFF	OFF	OFF	OFF	OFF	
LTE BW 15MHz	18.1	18.1	18.1	18.1	18.1	18.1	18.1	18.1	18.1	23	23	23	23	23	23	23	
LTE BW 10MHz	18.1	18.1	18.1	18.1	18.1	18.1	18.1	18.1	18.1	23	23	23	23	23	23	23	
LTE BW 5MHz	18.1	18.1	18.1	18.1	18.1	18.1	18.1	18.1	18.1	23	23	23	23	23	23	23	
LTE BW 3MHz	18.1	18.1	18.1	18.1	18.1	18.1	18.1	18.1	18.1	23	23	23	23	23	23	23	
LTE BW 1.4MHz	18.1	18.1	18.1	18.1	18.1	18.1	18.1	18.1	18.1	23	23	23	23	23	23	23	

LTE B4



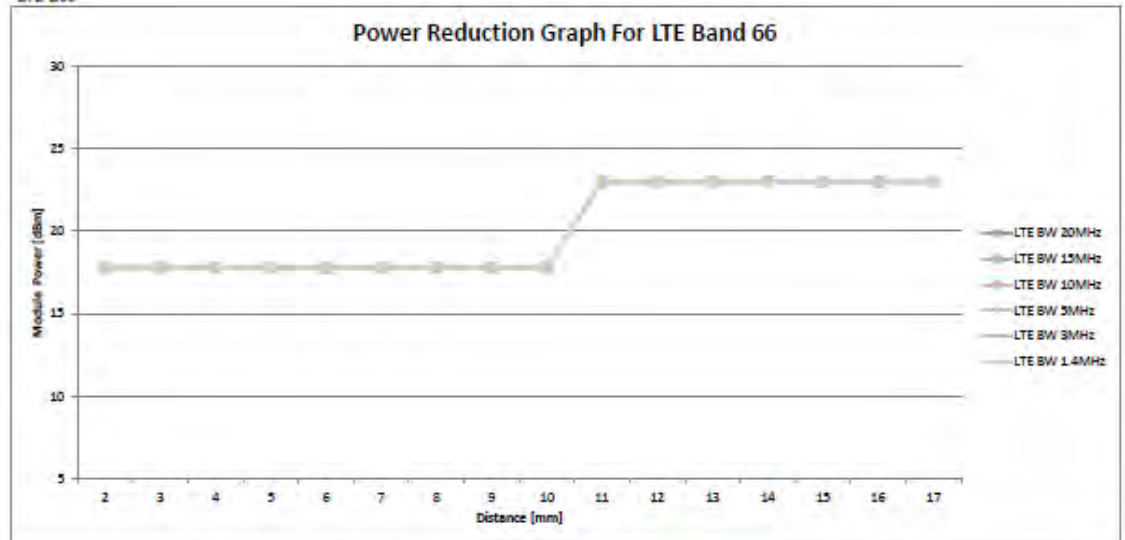
Coverage Step LTE Band 4																	
Distance	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	
DPR	ON	ON	ON	ON	ON	ON	ON	ON	ON	OFF	OFF	OFF	OFF	OFF	OFF	OFF	
LTE BW 20MHz	17.6	17.6	17.6	17.6	17.6	17.6	17.6	17.6	17.6	23	23	23	23	23	23	23	
LTE BW 15MHz	17.6	17.6	17.6	17.6	17.6	17.6	17.6	17.6	17.6	23	23	23	23	23	23	23	
LTE BW 10MHz	17.6	17.6	17.6	17.6	17.6	17.6	17.6	17.6	17.6	23	23	23	23	23	23	23	
LTE BW 5MHz	17.6	17.6	17.6	17.6	17.6	17.6	17.6	17.6	17.6	23	23	23	23	23	23	23	
LTE BW 3MHz	17.6	17.6	17.6	17.6	17.6	17.6	17.6	17.6	17.6	23	23	23	23	23	23	23	
LTE BW 1.4MHz	17.6	17.6	17.6	17.6	17.6	17.6	17.6	17.6	17.6	23	23	23	23	23	23	23	

LTE B2



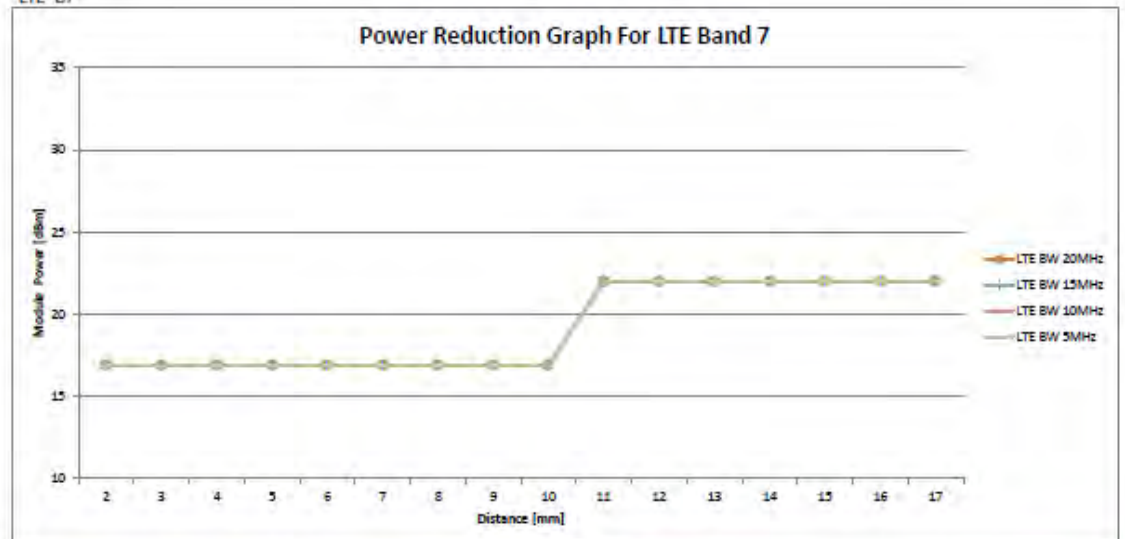
Coverage Step LTE Band 2																	
Distance	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	
DPR	ON	ON	ON	ON	ON	ON	ON	ON	ON	OFF	OFF	OFF	OFF	OFF	OFF	OFF	
LTE BW 20MHz	18.4	18.4	18.4	18.4	18.4	18.4	18.4	18.4	18.4	23	23	23	23	23	23	23	
LTE BW 15MHz	18.4	18.4	18.4	18.4	18.4	18.4	18.4	18.4	18.4	23	23	23	23	23	23	23	
LTE BW 10MHz	18.4	18.4	18.4	18.4	18.4	18.4	18.4	18.4	18.4	23	23	23	23	23	23	23	
LTE BW 5MHz	18.4	18.4	18.4	18.4	18.4	18.4	18.4	18.4	18.4	23	23	23	23	23	23	23	
LTE BW 3MHz	18.4	18.4	18.4	18.4	18.4	18.4	18.4	18.4	18.4	23	23	23	23	23	23	23	
LTE BW 1.4MHz	18.4	18.4	18.4	18.4	18.4	18.4	18.4	18.4	18.4	23	23	23	23	23	23	23	

LTE B66



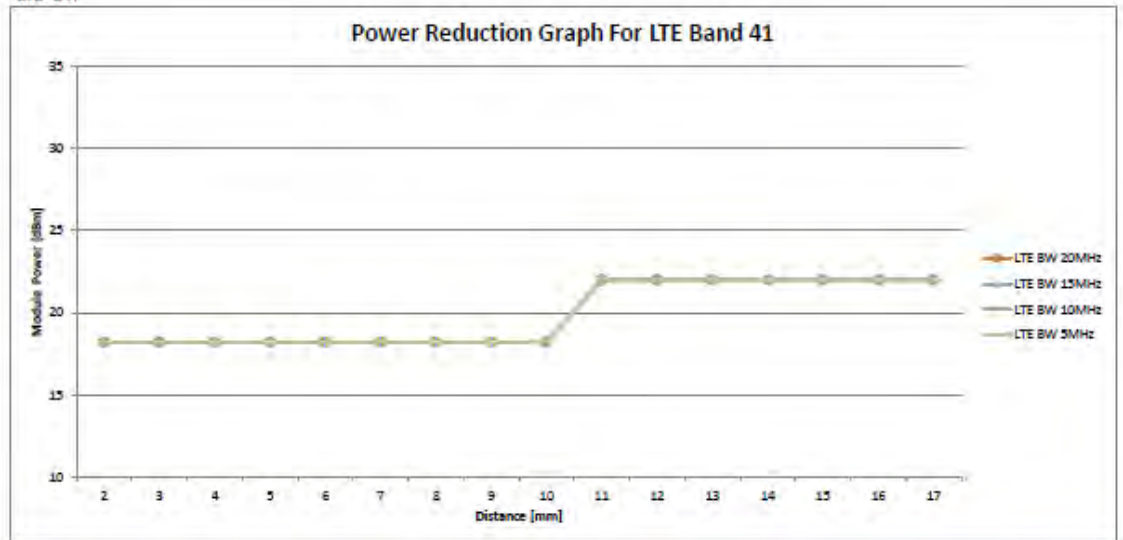
Coverage Step LTE Band 25																	
Distance	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	
DPR	ON	ON	ON	ON	ON	ON	ON	ON	ON	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF
LTE BW 20MHz	17.8	17.8	17.8	17.8	17.8	17.8	17.8	17.8	17.8	23	23	23	23	23	23	23	23
LTE BW 15MHz	17.8	17.8	17.8	17.8	17.8	17.8	17.8	17.8	17.8	23	23	23	23	23	23	23	23
LTE BW 10MHz	17.8	17.8	17.8	17.8	17.8	17.8	17.8	17.8	17.8	23	23	23	23	23	23	23	23
LTE BW 5MHz	17.8	17.8	17.8	17.8	17.8	17.8	17.8	17.8	17.8	23	23	23	23	23	23	23	23
LTE BW 3MHz	17.8	17.8	17.8	17.8	17.8	17.8	17.8	17.8	17.8	23	23	23	23	23	23	23	23
LTE BW 1.4MHz	17.8	17.8	17.8	17.8	17.8	17.8	17.8	17.8	17.8	23	23	23	23	23	23	23	23

LTE B7



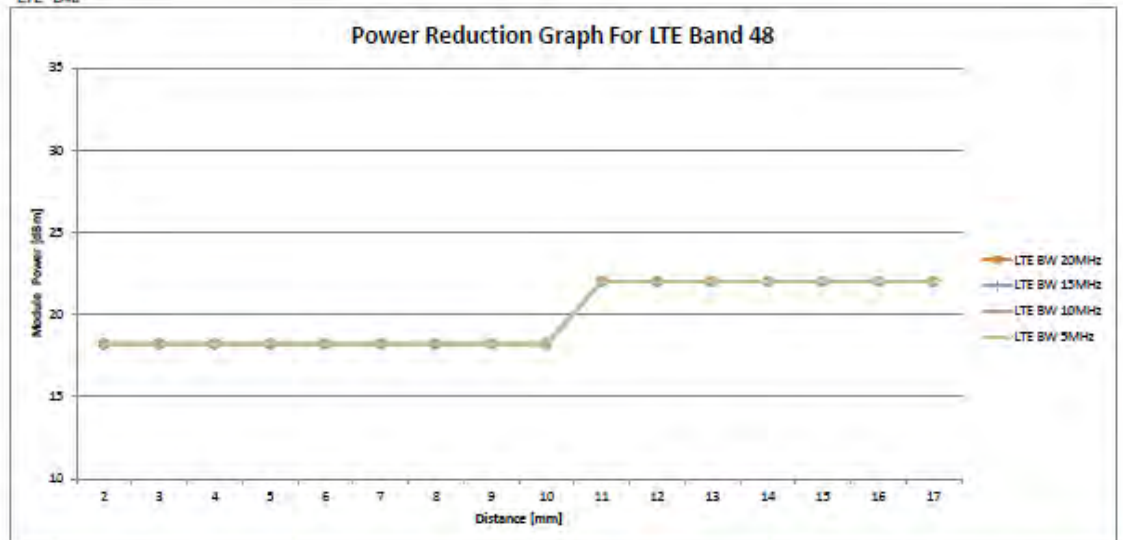
Coverage Step LTE Band 7																	
Distance	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	
DPR	ON	ON	ON	ON	ON	ON	ON	ON	ON	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF
LTE BW 20MHz	16.9	16.9	16.9	16.9	16.9	16.9	16.9	16.9	16.9	22	22	22	22	22	22	22	22
LTE BW 15MHz	16.9	16.9	16.9	16.9	16.9	16.9	16.9	16.9	16.9	22	22	22	22	22	22	22	22
LTE BW 10MHz	16.9	16.9	16.9	16.9	16.9	16.9	16.9	16.9	16.9	22	22	22	22	22	22	22	22
LTE BW 5MHz	16.9	16.9	16.9	16.9	16.9	16.9	16.9	16.9	16.9	22	22	22	22	22	22	22	22

LTE B41



Coverage Step LTE Band 41																	
Distance	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	
DPR	ON	ON	ON	ON	ON	ON	ON	ON	ON	OFF	OFF	OFF	OFF	OFF	OFF	OFF	
LTE BW 20MHz	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2	22	22	22	22	22	22	22	
LTE BW 15MHz	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2	22	22	22	22	22	22	22	
LTE BW 10MHz	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2	22	22	22	22	22	22	22	
LTE BW 5MHz	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2	22	22	22	22	22	22	22	

LTE B48



Coverage Step LTE Band 48																	
Distance	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	
DPR	ON	ON	ON	ON	ON	ON	ON	ON	ON	OFF	OFF	OFF	OFF	OFF	OFF	OFF	
LTE BW 20MHz	10.8	10.8	10.8	10.8	10.8	10.8	10.8	10.8	10.8	19	19	19	19	19	19	19	
LTE BW 15MHz	10.8	10.8	10.8	10.8	10.8	10.8	10.8	10.8	10.8	19	19	19	19	19	19	19	
LTE BW 10MHz	10.8	10.8	10.8	10.8	10.8	10.8	10.8	10.8	10.8	19	19	19	19	19	19	19	
LTE BW 5MHz	10.8	10.8	10.8	10.8	10.8	10.8	10.8	10.8	10.8	19	19	19	19	19	19	19	

End of Appendixes