

**Table 9.1: Configuration of special subframe (lengths of DwPTS/GP/UpPTS)**

Special subframe configuration	Normal cyclic prefix in downlink			Extended cyclic prefix in downlink		
	DwPTS	UpPTS		DwPTS	UpPTS	
		Normal cyclic prefix in uplink	Extended cyclic prefix in uplink		Normal cyclic prefix in uplink	Extended cyclic prefix in uplink
0	$6592 \cdot T_s$	$2192 \cdot T_s$	$2560 \cdot T_s$	$7680 \cdot T_s$	$2192 \cdot T_s$	$2560 \cdot T_s$
1	$19760 \cdot T_s$			$20480 \cdot T_s$		
2	$21952 \cdot T_s$			$23040 \cdot T_s$		
3	$24144 \cdot T_s$			$25600 \cdot T_s$		
4	$26336 \cdot T_s$			$7680 \cdot T_s$		
5	$6592 \cdot T_s$	$4384 \cdot T_s$	$5120 \cdot T_s$	$20480 \cdot T_s$	$4384 \cdot T_s$	$5120 \cdot T_s$
6	$19760 \cdot T_s$			$23040 \cdot T_s$		
7	$21952 \cdot T_s$			$12800 \cdot T_s$		
8	$24144 \cdot T_s$			-		
9	$13168 \cdot T_s$			-		

**Table 9.2: Uplink-downlink configurations**

Uplink-downlink configuration	Downlink-to-Uplink Switch-point periodicity	Subframe number										
		0	1	2	3	4	5	6	7	8	9	
0	5 ms	D	S	U	U	U	D	S	U	U	U	
1	5 ms	D	S	U	U	D	D	S	U	U	D	
2	5 ms	D	S	U	D	D	D	S	U	D	D	
3	10 ms	D	S	U	U	U	D	D	D	D	D	
4	10 ms	D	S	U	U	D	D	D	D	D	D	
5	10 ms	D	S	U	D	D	D	D	D	D	D	
6	5 ms	D	S	U	U	U	D	S	U	U	D	

Duty factor is calculated by:

$$\begin{aligned}
 \text{Duty factor} &= \text{uplink frame} \cdot 6 + \text{UpPTS} \cdot 2 / \text{one frame length} \\
 &= (30720 \cdot T_s \cdot 6 + 5120 \cdot T_s \cdot 2) / 307200 \cdot T_s \\
 &= 0.633
 \end{aligned}$$

According to the KDB 447498 D01, SAR should be evaluated at more than 3 frequencies for devices supporting transmit bands wider than 100MHz. Oct.2014 FCC-TCB conference notes (Dec. 2014 rev.) specifies the 5 test channels to use for 3GPP band 41 SAR evaluation.

## 9.5 Bluetooth & Wi-Fi Measurement Procedures for SAR

Normal network operating configurations are not suitable for measuring the SAR of 802.11 transmitters in general. Unpredictable fluctuations in network traffic and antenna diversity conditions can introduce undesirable variations in SAR results. The SAR for these devices should be measured using chipset based test mode software to ensure that the results are consistent and reliable.

Chipset based test mode software is hardware dependent and generally varies among manufacturers. The device operating parameters established in a test mode for SAR measurements must be identical to those programmed in production units, including output power levels, amplifier gain settings and other RF performance tuning parameters. The test frequencies should correspond to actual channel frequencies defined for domestic use. SAR for devices with switched diversity should be measured with only one antenna transmitting at a time during each SAR measurement, according to a fixed modulation and data rate. The same data pattern should be used for all measurements.

## 9.6 Power Drift

To control the output power stability during the SAR test, DASY4 system calculates the power drift by measuring the E-field at the same location at the beginning and at the end of the measurement for each test position. These drift values can be found in section 14 labeled as: (Power Drift [dB]). This ensures that the power drift during one measurement is within 5%.

## 10 Area Scan Based 1-g SAR

### 10.1 Requirement of KDB

According to the KDB447498 D01 v05, when the implementation is based the specific polynomial fit algorithm as presented at the 29th Bioelectromagnetics Society meeting (2007) and the estimated 1-gSAR is  $\leq 1.2$  W/kg, a zoom scan measurement is not required provided it is also not needed for any other purpose; for example, if the peak SAR location required for simultaneous transmission SAR test exclusion can be determined accurately by the SAR system or manually to discriminate between distinctive peaks and scattered noisy SAR distributions from area scans.

There must not be any warning or alert messages due to various measurement concerns identified by the SAR system; for example, noise in measurements, peaks too close to scan boundary, peaks are too sharp, spatial resolution and uncertainty issues etc. The SAR system verification must also demonstrate that the area scan estimated 1-g SAR is within 3% of the zoom scan 1-g SAR (See Annex B). When all the SAR results for each exposure condition in a frequency band and wireless mode are based on estimated 1-g SAR, the 1-g SAR for the highest SAR configuration must be determined by a zoom scan.

### 10.2 Fast SAR Algorithms

The approach is based on the area scan measurement applying a frequency dependent attenuation parameter. This attenuation parameter was empirically determined by analyzing a large number of phones. The MOTOROLA FAST SAR was developed and validated by the MOTOROLA Research Group in Ft. Lauderdale.

In the initial study, an approximation algorithm based on Linear fit was developed. The accuracy of the algorithm has been demonstrated across a broad frequency range (136-2450 MHz) and for both 1- and 10-g averaged SAR using a sample of 264 SAR measurements from 55 wireless handsets. For the sample size studied, the root-mean-squared errors of the algorithm are 1.2% and 5.8% for 1- and 10-g averaged SAR, respectively. The paper describing the algorithm in detail is expected to be published in August 2004 within the Special Issue of Transactions on MTT.

In the second step, the same research group optimized the fitting algorithm to an Polynomial fit whereby the frequency validity was extended to cover the range 30-6000MHz. Details of this study can be found in the BEMS 2007 Proceedings.

Both algorithms are implemented in DASY software.

## 11 Conducted Output Power

This device uses a proximity sensor for SAR compliance. The proximity sensor is activated when the device is used in close proximity to the user's body. The proximity sensors trigger power reduction for all bands except BT. There is no power reduction mechanism for BT modes for SAR purposes.

### 11.1 GSM Measurement result

During the process of testing, the EUT was controlled via Agilent Digital Radio Communication tester (E5515C) to ensure the maximum power transmission and proper modulation. This result contains conducted output power for the EUT. In all cases, the measured peak output power should be greater and within 5% than EMI measurement.

#### Normal Power – Proximity sensor not active

**Table 11.1-1: The conducted power measurement results for GSM, GPRS and EGPRS**

GSM 850 Speech (GMSK)	Measured Power (dBm)			Tune up	calculation	Averaged Power (dBm)		
	251	190	128			251	190	128
1 Txslot	32.70	32.67	32.57	<b>33.5</b>	/	/	/	/
GSM 850 GPRS (GMSK)	Measured Power (dBm)				calculation	Averaged Power (dBm)		
	251	190	128			251	190	128
1 Txslot	32.71	32.69	32.57	<b>33.5</b>	-9.03	23.68	23.66	23.54
2 Txslots	31.50	31.46	31.36	<b>32</b>	-6.02	25.48	25.44	25.34
3Txslots	29.35	29.30	29.16	<b>30</b>	-4.26	25.09	25.04	24.90
<b>4 Txslots</b>	<b>28.62</b>	<b>28.58</b>	<b>28.47</b>	<b>29</b>	<b>-3.01</b>	<b>25.61</b>	<b>25.57</b>	<b>25.46</b>
GSM 850 EGPRS (GMSK)	Measured Power (dBm)				calculation	Averaged Power (dBm)		
	251	190	128			251	190	128
1 Txslot	32.70	32.68	32.58	<b>33.5</b>	-9.03	23.67	23.65	23.55
2 Txslots	31.49	31.45	31.36	<b>32</b>	-6.02	25.47	25.43	25.34
3Txslots	29.34	29.28	29.15	<b>30</b>	-4.26	25.08	25.02	24.89
<b>4 Txslots</b>	<b>28.60</b>	<b>28.57</b>	<b>28.45</b>	<b>29</b>	<b>-3.01</b>	<b>25.59</b>	<b>25.56</b>	<b>25.44</b>
GSM 850 EGPRS (8PSK)	Measured Power (dBm)				calculation	Averaged Power (dBm)		
	251	190	128			251	190	128
1 Txslot	27.02	26.94	26.95	<b>27.5</b>	-9.03	17.99	17.91	17.92
2 Txslots	26.06	26.02	25.99	<b>26.5</b>	-6.02	20.04	20.00	19.97
3Txslots	24.00	23.94	23.99	<b>24.5</b>	-4.26	19.74	19.68	19.73
4 Txslots	23.04	22.96	23.05	<b>23.5</b>	-3.01	20.03	19.95	20.04
PCS1900 Speech (GMSK)	Measured Power (dBm)			Tune up	calculation	Averaged Power (dBm)		
	810	661	512			810	661	512
1 Txslot	29.93	29.93	29.93	<b>30.5</b>	/	/	/	/
PCS1900 GPRS (GMSK)	Measured Power (dBm)				calculation	Averaged Power (dBm)		
	810	661	512			810	661	512
1 Txslot	29.90	29.89	29.90	<b>30.5</b>	-9.03	20.87	20.86	20.87

2 Txslots	28.64	28.58	28.50	<b>29</b>	<b>-6.02</b>	22.62	22.56	22.48
3Txslots	26.51	26.36	26.30	<b>27</b>	<b>-4.26</b>	22.25	22.10	22.04
<b>4 Txslots</b>	25.69	25.58	25.51	<b>26</b>	<b>-3.01</b>	<b>22.68</b>	<b>22.57</b>	<b>22.50</b>
PCS1900 EGPRS (GMSK)	Measured Power (dBm)				calculation	Averaged Power (dBm)		
	810	661	512			810	661	512
1 Txslot	29.94	29.92	29.94	<b>30.5</b>	<b>-9.03</b>	20.91	20.89	20.91
2 Txslots	28.68	28.59	28.52	<b>29</b>	<b>-6.02</b>	22.66	22.57	22.50
3Txslots	26.54	26.41	26.34	<b>27</b>	<b>-4.26</b>	22.28	22.15	22.08
<b>4 Txslots</b>	25.73	25.61	25.52	<b>26</b>	<b>-3.01</b>	<b>22.72</b>	<b>22.60</b>	<b>22.51</b>
PCS1900 EGPRS (8PSK)	Measured Power (dBm)				calculation	Averaged Power (dBm)		
	810	661	512			810	661	512
1 Txslot	25.31	25.37	25.50	<b>26</b>	<b>-9.03</b>	16.28	16.34	16.47
2 Txslots	24.43	24.48	24.57	<b>25</b>	<b>-6.02</b>	18.41	18.46	18.55
3Txslots	22.44	22.53	22.64	<b>23</b>	<b>-4.26</b>	18.18	18.27	18.38
4 Txslots	21.31	21.38	21.54	<b>22</b>	<b>-3.01</b>	18.30	18.37	18.53

NOTES:

1) Division Factors

To average the power, the division factor is as follows:

1TX-slot = 1 transmit time slot out of 8 time slots=> conducted power divided by (8/1) => -9.03dB

2TX-slots = 2 transmit time slots out of 8 time slots=> conducted power divided by (8/2) => -6.02dB

3TX-slots = 3 transmit time slots out of 8 time slots=> conducted power divided by (8/3) => -4.26dB

4TX-slots = 4 transmit time slots out of 8 time slots=> conducted power divided by (8/4) => -3.01dB

**According to the conducted power as above, the body measurements are performed with 4Txslots for GPRS and EGPRS.**

**Low Power – Proximity sensor active**

**Table 11.1-2: The conducted power measurement results for GSM, GPRS and EGPRS**

GSM 850 Speech (GMSK)	Measured Power (dBm)			Tune up	calculation	Averaged Power (dBm)		
	251	190	128			251	190	128
1 Txslot	29.46	29.40	29.27	<b>30</b>	/	/	/	/
GSM 850 GPRS (GMSK)	Measured Power (dBm)				calculation	Averaged Power (dBm)		
	251	190	128			251	190	128
1 Txslot	29.46	29.41	29.28	<b>30</b>	<b>-9.03</b>	20.43	20.38	20.25
2 Txslots	26.66	26.60	26.46	<b>27</b>	<b>-6.02</b>	20.64	20.58	20.44
3Txslots	24.93	24.87	24.71	<b>25.5</b>	<b>-4.26</b>	20.67	20.61	20.45
<b>4 Txslots</b>	23.89	23.79	23.55	<b>24</b>	<b>-3.01</b>	<b>20.88</b>	<b>20.78</b>	<b>20.54</b>
GSM 850 EGPRS (GMSK)	Measured Power (dBm)				calculation	Averaged Power (dBm)		
	251	190	128			251	190	128
1 Txslot	29.47	29.42	29.30	<b>30</b>	<b>-9.03</b>	20.44	20.39	20.27
2 Txslots	26.67	26.61	26.47	<b>27</b>	<b>-6.02</b>	20.65	20.59	20.45
3Txslots	24.94	24.88	24.72	<b>25.5</b>	<b>-4.26</b>	20.68	20.62	20.46
<b>4 Txslots</b>	23.89	23.74	23.56	<b>24</b>	<b>-3.01</b>	<b>20.88</b>	<b>20.73</b>	<b>20.55</b>

GSM 850 EGPRS (8PSK)	Measured Power (dBm)				calculation	Averaged Power (dBm)		
	251	190	128			251	190	128
1 Txslot	24.95	24.87	24.86	<b>25</b>	<b>-9.03</b>	15.92	15.84	15.83
2 Txslots	21.51	21.47	21.45	<b>22</b>	<b>-6.02</b>	15.49	15.45	15.43
3Txslots	19.44	19.36	19.41	<b>20</b>	<b>-4.26</b>	15.18	15.10	15.15
4 Txslots	18.03	18.01	17.94	<b>18.5</b>	<b>-3.01</b>	15.02	15.00	14.93
PCS1900 Speech (GMSK)	Measured Power (dBm)			Tune up	calculation	Averaged Power (dBm)		
	810	661	512			810	661	512
1 Txslot	21.43	21.30	21.24	<b>22</b>	/	/	/	/
PCS1900 GPRS (GMSK)	Measured Power (dBm)				calculation	Averaged Power (dBm)		
	810	661	512			810	661	512
1 Txslot	21.68	21.56	21.48	<b>22</b>	<b>-9.03</b>	12.65	12.53	12.45
2 Txslots	18.72	18.66	18.58	<b>19</b>	<b>-6.02</b>	12.70	12.64	12.56
<b>3Txslots</b>	16.98	16.91	16.84	<b>17</b>	<b>-4.26</b>	<b>12.72</b>	<b>12.65</b>	<b>12.58</b>
4 Txslots	15.71	15.55	15.35	<b>16</b>	<b>-3.01</b>	12.70	12.54	12.34
PCS1900 EGPRS (GMSK)	Measured Power (dBm)				calculation	Averaged Power (dBm)		
	810	661	512			810	661	512
1 Txslot	21.59	21.47	21.41	<b>22</b>	<b>-9.03</b>	12.56	12.44	12.38
2 Txslots	18.67	18.54	18.48	<b>19</b>	<b>-6.02</b>	12.65	12.52	12.46
<b>3Txslots</b>	16.93	16.79	16.75	<b>17</b>	<b>-4.26</b>	<b>12.67</b>	<b>12.53</b>	<b>12.49</b>
4 Txslots	15.62	15.43	15.27	<b>16</b>	<b>-3.01</b>	12.61	12.42	12.26
PCS1900 EGPRS (8PSK)	Measured Power (dBm)				calculation	Averaged Power (dBm)		
	810	661	512			810	661	512
1 Txslot	17.83	17.89	17.98	<b>18.5</b>	<b>-9.03</b>	8.80	8.86	8.95
2 Txslots	14.77	14.86	15.02	<b>15.5</b>	<b>-6.02</b>	8.75	8.84	9.00
3Txslots	12.84	12.87	13.04	<b>13.5</b>	<b>-4.26</b>	8.58	8.61	8.78
4 Txslots	11.23	11.33	11.49	<b>12</b>	<b>-3.01</b>	8.22	8.32	8.48

NOTES:

1) Division Factors

To average the power, the division factor is as follows:

1TX-slot = 1 transmit time slot out of 8 time slots=> conducted power divided by (8/1) => -9.03dB

2TX-slots = 2 transmit time slots out of 8 time slots=> conducted power divided by (8/2) => -6.02dB

3TX-slots = 3 transmit time slots out of 8 time slots=> conducted power divided by (8/3) => -4.26dB

4TX-slots = 4 transmit time slots out of 8 time slots=> conducted power divided by (8/4) => -3.01dB

**According to the conducted power as above, the body measurements are performed with 4Txslots for GSM850 and 3Txslots for PCS1900.**

## 11.2 WCDMA Measurement result

Normal Power – Proximity sensor not active

Table 11.2-1: The conducted Power for WCDMA

Item	band	FDDV result			
	ARFCN	4132 (826.4MHz)	4182 (836.4MHz)	4233 (846.6MHz)	Tune up
WCDMA	\	23.41	23.55	23.34	24
HSUPA	1	19.02	19.04	18.98	19.5
	2	18.98	19.01	18.97	19.5
	3	19.99	20.03	19.97	20.5
	4	18.44	18.49	18.44	19
	5	21.01	21.02	20.96	21.5
HSPA+	1	20.77	20.88	20.92	21
DC-HSDPA	1	21.62	21.69	21.75	22
	2	21.61	21.65	21.76	22
	3	21.61	21.74	21.74	22
	4	21.60	21.72	21.76	22
Item	band	FDDII result			
	ARFCN	9262 (1852.4MHz)	9400 (1880MHz)	9538 (1907.6MHz)	
WCDMA	\	22.64	22.47	22.23	23
HSUPA	1	19.91	19.72	20.07	20.5
	2	19.76	19.59	19.44	20
	3	20.78	20.67	20.38	21
	4	19.32	19.16	18.99	19.5
	5	21.73	21.73	21.54	22
HSPA+	1	20.43	20.28	20.13	21
DC-HSDPA	1	20.91	20.78	20.62	21
	2	20.90	20.77	20.58	21
	3	20.88	20.78	20.59	21
	4	20.89	20.75	20.58	21

Low Power – Proximity sensor active

Table 11.2-2: The conducted Power for WCDMA

Item	band	FDDV result			
	ARFCN	4132 (826.4MHz)	4182 (836.4MHz)	4233 (846.6MHz)	Tune up
WCDMA	\	20.57	20.47	20.46	<b>21</b>
HSUPA	1	15.95	16.06	16.54	<b>17</b>
	2	15.96	15.98	15.93	<b>16</b>
	3	16.94	16.96	16.94	<b>17</b>
	4	15.39	15.44	15.49	<b>16</b>
	5	17.96	17.98	18.12	<b>18.5</b>
HSPA+	1	18.78	18.86	18.92	<b>19</b>
DC-HSDPA	1	19.62	19.72	19.73	<b>20</b>
	2	19.61	19.71	19.75	<b>20</b>
	3	19.61	19.74	19.73	<b>20</b>
	4	19.60	19.73	19.76	<b>20</b>
Item	band	FDDII result			
	ARFCN	9262 (1852.4MHz)	9400 (1880MHz)	9538 (1907.6MHz)	
WCDMA	\	14.42	14.33	14.26	<b>14.5</b>
HSUPA	1	12.86	12.74	12.97	<b>13</b>
	2	12.81	12.66	12.38	<b>13</b>
	3	13.85	13.70	13.44	<b>14</b>
	4	12.31	12.17	11.91	<b>12.5</b>
	5	14.80	14.64	14.36	<b>15</b>
HSPA+	1	13.52	13.41	13.22	<b>14</b>
DC-HSDPA	1	14.04	13.88	13.74	<b>14.5</b>
	2	14.00	13.92	13.68	<b>14.5</b>
	3	13.99	13.91	13.69	<b>14.5</b>
	4	13.99	13.91	13.69	<b>14.5</b>



### 11.3 LTE Measurement result

Normal Power – Proximity sensor not active

**Table 11.3-1: The conducted Power for LTE**

Band 2								
Bandwidth (MHz)	RB allocation	Frequency (MHz)	Max. Target Power (dBm)	QPSK		16QAM		
	RB offset (Start RB)			Actual output power (dBm)	MPR	Actual output power (dBm)	MPR	
1.4 MHz	1RB High (5)	1909.3	24	22.61	0	21.31	1	
		1880	24	22.58	0	21.55	1	
		1850.7	24	22.66	0	21.58	1	
	1RB Middle (3)	1909.3	24	22.53	0	21.29	1	
		1880	24	22.61	0	21.55	1	
		1850.7	24	22.68	0	21.60	1	
	1RB Low (0)	1909.3	24	22.49	0	21.46	1	
		1880	24	22.58	0	21.61	1	
		1850.7	24	22.68	0	21.59	1	
	3RB High (3)	1909.3	24	22.62	0	21.56	1	
		1880	24	22.65	0	21.65	1	
		1850.7	24	22.65	0	21.62	1	
	3RB Middle (1)	1909.3	24	22.53	0	21.48	1	
		1880	24	22.55	0	21.56	1	
		1850.7	24	22.60	0	21.56	1	
	3RB Low (0)	1909.3	24	22.58	0	21.54	1	
		1880	24	22.67	0	21.66	1	
		1850.7	24	22.67	0	21.63	1	
	6RB (0)	1909.3	24	21.50	1	20.61	2	
		1880	24	21.49	1	20.67	2	
		1850.7	24	21.57	1	20.66	2	
	3 MHz	1RB High (14)	1908.5	24	22.54	0	21.89	1
			1880	24	22.52	0	22.01	1
			1851.5	24	22.54	0	21.94	1
		1RB Middle (7)	1908.5	24	22.57	0	21.97	1
			1880	24	22.57	0	22.08	1
			1851.5	24	22.61	0	22.03	1
1RB Low (0)		1908.5	24	22.53	0	21.97	1	
		1880	24	22.55	0	22.04	1	
		1851.5	24	22.59	0	22.00	1	
8RB High (7)		1908.5	24	21.59	1	20.68	2	
		1880	24	21.58	1	20.70	2	
		1851.5	24	21.62	1	20.64	2	
8RB Middle (4)		1908.5	24	21.60	1	20.68	2	
		1880	24	21.59	1	20.73	2	
		1851.5	24	21.61	1	20.66	2	

	8RB Low (0)	1908.5	24	21.57	1	20.68	2	
		1880	24	21.59	1	20.73	2	
		1851.5	24	21.64	1	20.65	2	
	15RB (0)	1908.5	24	21.54	1	20.58	2	
		1880	24	21.56	1	20.63	2	
		1851.5	24	21.59	1	20.56	2	
5 MHz	1RB High (24)	1907.5	24	22.56	0	21.37	1	
		1880	24	22.55	0	21.42	1	
		1852.5	24	22.58	0	21.40	1	
	1RB Middle (12)	1907.5	24	22.61	0	21.44	1	
		1880	24	22.62	0	21.47	1	
		1852.5	24	22.66	0	21.48	1	
	1RB Low (0)	1907.5	24	22.60	0	21.44	1	
		1880	24	22.65	0	21.49	1	
		1852.5	24	22.67	0	21.48	1	
	12RB High (13)	1907.5	24	21.58	1	20.68	2	
		1880	24	21.60	1	20.72	2	
		1852.5	24	21.60	1	20.68	2	
	12RB Middle (6)	1907.5	24	21.58	1	20.67	2	
		1880	24	21.60	1	20.72	2	
		1852.5	24	21.64	1	20.70	2	
	12RB Low (0)	1907.5	24	21.58	1	20.70	2	
		1880	24	21.63	1	20.74	2	
		1852.5	24	21.65	1	20.72	2	
	25RB (0)	1907.5	24	21.54	1	20.59	2	
		1880	24	21.57	1	20.64	2	
		1852.5	24	21.56	1	20.53	2	
	10 MHz	1RB High (49)	1905	24	22.63	0	21.98	1
			1880	24	22.58	0	22.06	1
			1855	24	22.58	0	22.00	1
1RB Middle (24)		1905	24	22.60	0	22.04	1	
		1880	24	22.60	0	22.10	1	
		1855	24	22.65	0	22.05	1	
1RB Low (0)		1905	24	22.58	0	22.06	1	
		1880	24	22.66	0	22.09	1	
		1855	24	22.66	0	22.08	1	
25RB High (25)		1905	24	21.51	1	20.57	2	
		1880	24	21.57	1	20.63	2	
		1855	24	21.53	1	20.61	2	
25RB Middle (12)		1905	24	21.53	1	20.60	2	
		1880	24	21.56	1	20.65	2	
		1855	24	21.57	1	20.62	2	
25RB Low (0)		1905	24	21.50	1	20.57	2	
		1880	24	21.58	1	20.67	2	
		1855	24	21.57	1	20.62	2	
50RB (0)		1905	24	21.56	1	20.58	2	
		1880	24	21.59	1	20.64	2	
		1855	24	21.56	1	20.58	2	

15 MHz	1RB High (74)	1902.5	24	22.60	0	21.96	1
		1880	24	22.61	0	22.05	1
		1857.5	24	22.63	0	22.01	1
	1RB Middle (37)	1902.5	24	22.58	0	22.05	1
		1880	24	22.61	0	22.11	1
		1857.5	24	22.66	0	22.06	1
	1RB Low (0)	1902.5	24	22.62	0	22.05	1
		1880	24	22.70	0	22.09	1
		1857.5	24	22.73	0	22.11	1
	36RB High (38)	1902.5	24	21.63	1	20.60	2
		1880	24	21.65	1	20.65	2
		1857.5	24	21.69	1	20.63	2
	36RB Middle (19)	1902.5	24	21.60	1	20.59	2
		1880	24	21.66	1	20.64	2
		1857.5	24	21.74	1	20.69	2
	36RB Low (0)	1902.5	24	21.63	1	20.60	2
		1880	24	21.71	1	20.68	2
		1857.5	24	21.75	1	20.70	2
75RB (0)	1902.5	24	21.66	1	20.63	2	
	1880	24	21.70	1	20.68	2	
	1857.5	24	21.75	1	20.71	2	
20 MHz	1RB High (99)	1900	24	22.66	0	21.76	1
		1880	24	22.69	0	21.86	1
		1860	24	22.69	0	21.84	1
	1RB Middle (50)	1900	24	22.61	0	21.81	1
		1880	24	22.67	0	21.91	1
		1860	24	22.69	0	21.86	1
	1RB Low (0)	1900	24	22.68	0	21.85	1
		1880	24	22.74	0	21.89	1
		1860	24	22.78	0	21.91	1
	50RB High (50)	1900	24	21.51	1	20.57	2
		1880	24	21.60	1	20.65	2
		1860	24	21.58	1	20.63	2
	50RB Middle (25)	1900	24	21.49	1	20.58	2
		1880	24	21.60	1	20.68	2
		1860	24	21.59	1	20.63	2
	50RB Low (0)	1900	24	21.56	1	20.63	2
		1880	24	21.64	1	20.71	2
		1860	24	21.63	1	20.69	2
100RB (0)	1900	24	21.52	1	20.59	2	
	1880	24	21.60	1	20.67	2	
	1860	24	21.59	1	20.66	2	

Band 7								
Bandwidth (MHz)	RB allocation	Frequency (MHz)	Max. Target Power (dBm)	QPSK		16QAM		
	RB offset (Start RB)			Actual output power (dBm)	MPR	Actual output power (dBm)	MPR	
5 MHz	1RB High (24)	2567.5	23.5	22.83	0	21.73	1	
		2535	23.5	22.84	0	21.92	1	
		2502.5	23.5	22.98	0	21.82	1	
	1RB Middle (12)	2567.5	23.5	23.03	0	21.86	1	
		2535	23.5	22.91	0	21.99	1	
		2502.5	23.5	23.11	0	21.94	1	
	1RB Low (0)	2567.5	23.5	23.19	0	21.97	1	
		2535	23.5	22.93	0	22.00	1	
		2502.5	23.5	23.16	0	21.96	1	
	12RB High (13)	2567.5	23.5	22.01	1	21.08	2	
		2535	23.5	21.99	1	21.06	2	
		2502.5	23.5	22.08	1	21.12	2	
	12RB Middle (6)	2567.5	23.5	22.07	1	21.14	2	
		2535	23.5	22.01	1	21.08	2	
		2502.5	23.5	22.10	1	21.16	2	
	12RB Low (0)	2567.5	23.5	22.11	1	21.18	2	
		2535	23.5	21.99	1	21.07	2	
		2502.5	23.5	22.12	1	21.17	2	
	25RB (0)	2567.5	23.5	22.00	1	20.97	2	
		2535	23.5	21.92	1	20.91	2	
		2502.5	23.5	22.05	1	21.00	2	
	10 MHz	1RB High (49)	2565	23.5	22.88	0	22.38	1
			2535	23.5	22.80	0	21.86	1
			2505	23.5	22.77	0	22.32	1
1RB Middle (24)		2565	23.5	23.18	0	22.41	1	
		2535	23.5	22.92	0	21.99	1	
		2505	23.5	23.03	0	22.43	1	
1RB Low (0)		2565	23.5	23.26	0	22.47	1	
		2535	23.5	22.90	0	21.94	1	
		2505	23.5	22.92	0	22.40	1	
25RB High (25)		2565	23.5	22.01	1	21.12	2	
		2535	23.5	21.89	1	21.01	2	
		2505	23.5	21.91	1	21.01	2	
25RB Middle (12)		2565	23.5	22.12	1	21.24	2	
		2535	23.5	21.93	1	21.04	2	
		2505	23.5	21.96	1	21.07	2	
25RB Low (0)		2565	23.5	22.18	1	21.30	2	
		2535	23.5	21.92	1	21.04	2	
		2505	23.5	22.04	1	21.13	2	
50RB (0)		2565	23.5	22.09	1	21.15	2	
		2535	23.5	21.92	1	20.98	2	
		2505	23.5	21.97	1	21.01	2	

15 MHz	1RB High (74)	2562.5	23.5	22.54	0	22.09	1
		2535	23.5	22.76	0	22.19	1
		2507.5	23.5	23.05	0	22.49	1
	1RB Middle (37)	2562.5	23.5	22.85	0	22.40	1
		2535	23.5	22.93	0	22.31	1
		2507.5	23.5	23.19	0	22.42	1
	1RB Low (0)	2562.5	23.5	22.73	0	22.34	1
		2535	23.5	22.92	0	22.31	1
		2507.5	23.5	23.37	0	22.49	1
	36RB High (38)	2562.5	23.5	21.85	1	20.80	2
		2535	23.5	21.96	1	20.94	2
		2507.5	23.5	22.16	1	21.11	2
	36RB Middle (19)	2562.5	23.5	21.95	1	20.90	2
		2535	23.5	22.00	1	20.98	2
		2507.5	23.5	22.27	1	21.21	2
	36RB Low (0)	2562.5	23.5	21.91	1	20.86	2
		2535	23.5	21.98	1	20.95	2
		2507.5	23.5	22.37	1	21.30	2
	75RB (0)	2562.5	23.5	21.90	1	20.87	2
		2535	23.5	22.02	1	20.99	2
		2507.5	23.5	22.27	1	21.24	2
20 MHz	1RB High (99)	2560	23.5	22.59	0	22.15	1
		2535	23.5	22.69	0	22.31	1
		2510	23.5	23.22	0	22.47	1
	1RB Middle (50)	2560	23.5	22.83	0	22.42	1
		2535	23.5	22.93	0	22.42	1
		2510	23.5	23.12	0	22.49	1
	1RB Low (0)	2560	23.5	23.26	0	22.28	1
		2535	23.5	23.27	0	22.36	1
		2510	23.5	23.43	0	22.48	1
	50RB High (50)	2560	23.5	21.80	1	20.81	2
		2535	23.5	21.84	1	20.85	2
		2510	23.5	22.00	1	21.01	2
	50RB Middle (25)	2560	23.5	21.84	1	20.85	2
		2535	23.5	21.92	1	20.93	2
		2510	23.5	22.06	1	21.04	2
	50RB Low (0)	2560	23.5	21.86	1	20.82	2
		2535	23.5	21.95	1	20.91	2
		2510	23.5	22.21	1	21.18	2
	100RB (0)	2560	23.5	21.78	1	20.84	2
		2535	23.5	21.91	1	20.94	2
		2510	23.5	22.10	1	21.12	2

Band 38							
Bandwidth (MHz)	RB allocation	Frequency (MHz)	Max. Target Power (dBm)	QPSK		16QAM	
	RB offset (Start RB)			Actual output power (dBm)	MPR	Actual output power (dBm)	MPR
5 MHz	1RB High (24)	2617.5	24	23.22	0	22.15	1
		2595	24	23.25	0	22.16	1
		2572.5	24	23.26	0	22.17	1
	1RB Middle (12)	2617.5	24	23.30	0	22.22	1
		2595	24	23.36	0	22.26	1
		2572.5	24	23.32	0	22.26	1
	1RB Low (0)	2617.5	24	23.29	0	22.21	1
		2595	24	23.29	0	22.22	1
		2572.5	24	23.33	0	22.27	1
	12RB High (13)	2617.5	24	22.25	1	21.34	2
		2595	24	22.29	1	21.40	2
		2572.5	24	22.24	1	21.36	2
	12RB Middle (6)	2617.5	24	22.22	1	21.36	2
		2595	24	22.29	1	21.37	2
		2572.5	24	22.27	1	21.38	2
	12RB Low (0)	2617.5	24	22.24	1	21.34	2
		2595	24	22.27	1	21.37	2
		2572.5	24	22.27	1	21.41	2
	25RB (0)	2617.5	24	22.19	1	21.21	2
		2595	24	22.21	1	21.22	2
		2572.5	24	22.23	1	21.25	2
10 MHz	1RB High (49)	2615	24	23.26	0	22.36	1
		2595	24	23.33	0	22.37	1
		2575	24	23.27	0	22.40	1
	1RB Middle (24)	2615	24	23.29	0	22.42	1
		2595	24	23.37	0	22.40	1
		2575	24	23.29	0	22.44	1
	1RB Low (0)	2615	24	23.28	0	22.38	1
		2595	24	23.39	0	22.42	1
		2575	24	23.28	0	22.42	1
	25RB High (25)	2615	24	22.18	1	21.19	2
		2595	24	22.19	1	21.22	2
		2575	24	22.20	1	21.22	2
	25RB Middle (12)	2615	24	22.20	1	21.22	2
		2595	24	22.21	1	21.23	2
		2575	24	22.23	1	21.20	2
	25RB Low (0)	2615	24	22.18	1	21.14	2
		2595	24	22.21	1	21.22	2
		2575	24	22.21	1	21.23	2
	50RB (0)	2615	24	22.18	1	21.21	2
		2595	24	22.19	1	21.22	2
		2575	24	22.19	1	21.22	2

15 MHz	1RB High (74)	2612.5	24	23.24	0	22.38	1
		2595	24	23.31	0	22.45	1
		2577.5	24	23.31	0	22.44	1
	1RB Middle (37)	2612.5	24	23.27	0	22.42	1
		2595	24	23.35	0	22.46	1
		2577.5	24	23.30	0	22.45	1
	1RB Low (0)	2612.5	24	23.31	0	22.42	1
		2595	24	23.41	0	22.54	1
		2577.5	24	23.30	0	22.48	1
	36RB High (38)	2612.5	24	22.24	1	21.21	2
		2595	24	22.24	1	21.27	2
		2577.5	24	22.26	1	21.30	2
	36RB Middle (19)	2612.5	24	22.22	1	21.32	2
		2595	24	22.23	1	21.25	2
		2577.5	24	22.27	1	21.27	2
	36RB Low (0)	2612.5	24	22.24	1	21.34	2
		2595	24	22.24	1	21.29	2
		2577.5	24	22.24	1	21.27	2
75RB (0)	2612.5	24	22.25	1	21.30	2	
	2595	24	22.28	1	21.23	2	
	2577.5	24	22.28	1	21.25	2	
20 MHz	1RB High (99)	2610	24	23.33	0	22.32	1
		2595	24	23.50	0	22.59	1
		2580	24	23.39	0	22.40	1
	1RB Middle (50)	2610	24	23.31	0	22.32	1
		2595	24	23.43	0	22.57	1
		2580	24	23.39	0	22.37	1
	1RB Low (0)	2610	24	23.27	0	22.34	1
		2595	24	23.48	0	22.60	1
		2580	24	23.38	0	22.35	1
	50RB High (50)	2610	24	22.16	1	21.20	2
		2595	24	22.19	1	21.23	2
		2580	24	22.22	1	21.26	2
	50RB Middle (25)	2610	24	22.16	1	21.29	2
		2595	24	22.21	1	21.22	2
		2580	24	22.19	1	21.23	2
	50RB Low (0)	2610	24	22.19	1	21.22	2
		2595	24	22.23	1	21.27	2
		2580	24	22.24	1	21.28	2
100RB (0)	2610	24	22.20	1	21.14	2	
	2595	24	22.20	1	21.19	2	
	2580	24	22.21	1	21.24	2	

Low Power – Proximity sensor active

Table 11.3-2: The conducted Power for LTE

Band 2								
Bandwidth (MHz)	RB allocation	Frequency (MHz)	Max. Target Power (dBm)	QPSK		16QAM		
	RB offset (Start RB)			Actual output power (dBm)	MPR	Actual output power (dBm)	MPR	
1.4 MHz	1RB High (5)	1909.3	14.5	13.33	0	13.43	1	
		1880	14.5	13.37	0	13.45	1	
		1850.7	14.5	13.41	0	13.47	1	
	1RB Middle (3)	1909.3	14.5	13.41	0	13.37	1	
		1880	14.5	13.50	0	13.46	1	
		1850.7	14.5	13.45	0	13.50	1	
	1RB Low (0)	1909.3	14.5	13.31	0	13.36	1	
		1880	14.5	13.48	0	13.28	1	
		1850.7	14.5	13.45	0	13.50	1	
	3RB High (3)	1909.3	14.5	13.51	0	13.68	1	
		1880	14.5	13.57	0	13.68	1	
		1850.7	14.5	13.62	0	13.70	1	
	3RB Middle (1)	1909.3	14.5	13.42	0	13.63	1	
		1880	14.5	13.47	0	13.58	1	
		1850.7	14.5	13.52	0	13.61	1	
	3RB Low (0)	1909.3	14.5	13.48	0	13.68	1	
		1880	14.5	13.56	0	13.68	1	
		1850.7	14.5	13.61	0	13.69	1	
	6RB (0)	1909.3	14.5	13.26	1	13.48	2	
		1880	14.5	13.33	1	13.54	2	
		1850.7	14.5	13.44	1	13.60	2	
	3 MHz	1RB High (14)	1908.5	14.5	13.47	0	13.89	1
			1880	14.5	13.57	0	14.05	1
			1851.5	14.5	13.59	0	14.01	1
1RB Middle (7)		1908.5	14.5	13.50	0	13.96	1	
		1880	14.5	13.61	0	14.02	1	
		1851.5	14.5	13.64	0	14.09	1	
1RB Low (0)		1908.5	14.5	13.47	0	13.84	1	
		1880	14.5	13.61	0	13.99	1	
		1851.5	14.5	13.62	0	13.96	1	
8RB High (7)		1908.5	14.5	13.40	1	13.46	2	
		1880	14.5	13.49	1	13.65	2	
		1851.5	14.5	13.55	1	13.60	2	
8RB Middle (4)		1908.5	14.5	13.40	1	13.48	2	
		1880	14.5	13.51	1	13.66	2	
		1851.5	14.5	13.55	1	13.62	2	
8RB Low (0)		1908.5	14.5	13.40	1	13.47	2	
		1880	14.5	13.51	1	13.67	2	
		1851.5	14.5	13.54	1	13.61	2	



	15RB (0)	1908.5	14.5	13.39	1	13.37	2	
		1880	14.5	13.50	1	13.58	2	
		1851.5	14.5	13.54	1	13.52	2	
5 MHz	1RB High (24)	1907.5	14.5	13.37	0	13.29	1	
		1880	14.5	13.46	0	13.40	1	
		1852.5	14.5	13.49	0	13.41	1	
	1RB Middle (12)	1907.5	14.5	13.42	0	13.34	1	
		1880	14.5	13.54	0	13.46	1	
		1852.5	14.5	13.55	0	13.46	1	
	1RB Low (0)	1907.5	14.5	13.40	0	13.32	1	
		1880	14.5	13.57	0	13.49	1	
		1852.5	14.5	13.58	0	13.48	1	
	12RB High (13)	1907.5	14.5	13.46	1	13.54	2	
		1880	14.5	13.56	1	13.70	2	
		1852.5	14.5	13.60	1	13.68	2	
	12RB Middle (6)	1907.5	14.5	13.45	1	13.54	2	
		1880	14.5	13.56	1	13.70	2	
		1852.5	14.5	13.63	1	13.70	2	
	12RB Low (0)	1907.5	14.5	13.44	1	13.53	2	
		1880	14.5	13.58	1	13.71	2	
		1852.5	14.5	13.63	1	13.70	2	
	25RB (0)	1907.5	14.5	13.39	1	13.37	2	
		1880	14.5	13.51	1	13.58	2	
		1852.5	14.5	13.56	1	13.53	2	
	10 MHz	1RB High (49)	1905	14.5	13.72	0	14.15	1
			1880	14.5	13.41	0	13.89	1
			1855	14.5	13.43	0	13.85	1
1RB Middle (24)		1905	14.5	13.74	0	14.22	1	
		1880	14.5	13.57	0	13.96	1	
		1855	14.5	13.59	0	13.92	1	
1RB Low (0)		1905	14.5	13.78	0	14.23	1	
		1880	14.5	13.50	0	13.95	1	
		1855	14.5	13.50	0	13.94	1	
25RB High (25)		1905	14.5	13.79	1	13.85	2	
		1880	14.5	13.50	1	13.57	2	
		1855	14.5	13.53	1	13.64	2	
25RB Middle (12)		1905	14.5	13.83	1	13.89	2	
		1880	14.5	13.52	1	13.59	2	
		1855	14.5	13.54	1	13.65	2	
25RB Low (0)		1905	14.5	13.81	1	13.88	2	
		1880	14.5	13.55	1	13.62	2	
		1855	14.5	13.57	1	13.68	2	
50RB (0)		1905	14.5	13.82	1	13.83	2	
		1880	14.5	13.53	1	13.54	2	
		1855	14.5	13.55	1	13.59	2	
15 MHz		1RB High (74)	1902.5	14.5	13.57	0	14.00	1
			1880	14.5	13.64	0	13.91	1
			1857.5	14.5	13.65	0	14.09	1

	1RB Middle (37)	1902.5	14.5	13.58	0	14.05	1	
		1880	14.5	13.54	0	14.00	1	
		1857.5	14.5	13.60	0	14.03	1	
	1RB Low (0)	1902.5	14.5	13.53	0	14.01	1	
		1880	14.5	13.56	0	14.01	1	
		1857.5	14.5	13.56	0	14.00	1	
	36RB High (38)	1902.5	14.5	13.45	1	13.47	2	
		1880	14.5	13.52	1	13.54	2	
		1857.5	14.5	13.60	1	13.61	2	
	36RB Middle (19)	1902.5	14.5	13.43	1	13.45	2	
		1880	14.5	13.55	1	13.57	2	
		1857.5	14.5	13.64	1	13.64	2	
	36RB Low (0)	1902.5	14.5	13.47	1	13.49	2	
		1880	14.5	13.57	1	13.57	2	
		1857.5	14.5	13.62	1	13.62	2	
	75RB (0)	1902.5	14.5	13.50	1	13.51	2	
		1880	14.5	13.58	1	13.59	2	
		1857.5	14.5	13.65	1	13.65	2	
	20 MHz	1RB High (99)	1900	14.5	13.44	0	13.76	1
			1880	14.5	13.46	0	13.89	1
			1860	14.5	13.56	0	13.88	1
		1RB Middle (50)	1900	14.5	13.44	0	13.78	1
			1880	14.5	13.52	0	13.96	1
			1860	14.5	13.58	0	13.89	1
		1RB Low (0)	1900	14.5	13.54	0	13.86	1
			1880	14.5	13.56	0	13.97	1
			1860	14.5	13.65	0	13.97	1
50RB High (50)		1900	14.5	13.44	1	13.50	2	
		1880	14.5	13.53	1	13.54	2	
		1860	14.5	13.59	1	13.57	2	
50RB Middle (25)		1900	14.5	13.43	1	13.47	2	
		1880	14.5	13.51	1	13.53	2	
		1860	14.5	13.60	1	13.58	2	
50RB Low (0)		1900	14.5	13.47	1	13.52	2	
		1880	14.5	13.59	1	13.58	2	
		1860	14.5	13.62	1	13.60	2	
100RB (0)		1900	14.5	13.46	1	13.50	2	
		1880	14.5	13.53	1	13.54	2	
		1860	14.5	13.56	1	13.57	2	

Band 7								
Bandwidth (MHz)	RB allocation	Frequency (MHz)	Max. Target Power (dBm)	QPSK		16QAM		
	RB offset (Start RB)			Actual output power (dBm)	MPR	Actual output power (dBm)	MPR	
5 MHz	1RB High (24)	2567.5	16	14.99	0	14.91	1	
		2535	16	14.98	0	14.90	1	
		2502.5	16	15.07	0	14.98	1	
	1RB Middle (12)	2567.5	16	15.17	0	15.07	1	
		2535	16	15.08	0	14.98	1	
		2502.5	16	15.19	0	15.09	1	
	1RB Low (0)	2567.5	16	15.28	0	15.18	1	
		2535	16	15.05	0	14.97	1	
		2502.5	16	15.25	0	15.14	1	
	12RB High (13)	2567.5	16	15.14	1	15.19	2	
		2535	16	15.06	1	15.11	2	
		2502.5	16	15.13	1	15.20	2	
	12RB Middle (6)	2567.5	16	15.17	1	15.22	2	
		2535	16	15.06	1	15.13	2	
		2502.5	16	15.14	1	15.19	2	
	12RB Low (0)	2567.5	16	15.24	1	15.29	2	
		2535	16	15.06	1	15.12	2	
		2502.5	16	15.18	1	15.23	2	
	25RB (0)	2567.5	16	15.12	1	15.07	2	
		2535	16	15.03	1	14.98	2	
		2502.5	16	15.13	1	15.08	2	
	10 MHz	1RB High (49)	2565	16	15.00	0	15.41	1
			2535	16	14.94	0	14.97	1
			2505	16	14.81	0	15.24	1
1RB Middle (24)		2565	16	15.25	0	15.66	1	
		2535	16	15.06	0	15.10	1	
		2505	16	15.00	0	15.44	1	
1RB Low (0)		2565	16	15.32	0	15.75	1	
		2535	16	15.01	0	15.03	1	
		2505	16	15.13	0	15.55	1	
25RB High (25)		2565	16	15.13	1	15.22	2	
		2535	16	15.02	1	15.12	2	
		2505	16	15.00	1	15.09	2	
25RB Middle (12)		2565	16	15.26	1	15.35	2	
		2535	16	15.05	1	15.14	2	
		2505	16	15.06	1	15.15	2	
25RB Low (0)		2565	16	15.32	1	15.41	2	
		2535	16	15.05	1	15.14	2	
		2505	16	15.12	1	15.22	2	
50RB (0)		2565	16	15.23	1	15.27	2	
		2535	16	15.05	1	15.07	2	
		2505	16	15.06	1	15.10	2	

15 MHz	1RB High (74)	2562.5	16	14.69	0	15.11	1
		2535	16	14.94	0	15.17	1
		2507.5	16	14.98	0	15.32	1
	1RB Middle (37)	2562.5	16	15.00	0	15.43	1
		2535	16	15.04	0	15.38	1
		2507.5	16	15.15	0	15.46	1
	1RB Low (0)	2562.5	16	14.94	0	15.39	1
		2535	16	15.04	0	15.27	1
		2507.5	16	15.42	0	15.62	1
	36RB High (38)	2562.5	16	14.91	1	14.88	2
		2535	16	15.04	1	15.01	2
		2507.5	16	15.18	1	15.19	2
	36RB Middle (19)	2562.5	16	15.05	1	15.01	2
		2535	16	15.08	1	15.06	2
		2507.5	16	15.31	1	15.30	2
	36RB Low (0)	2562.5	16	14.99	1	14.97	2
		2535	16	15.04	1	15.01	2
		2507.5	16	15.37	1	15.36	2
75RB (0)	2562.5	16	14.96	1	14.94	2	
	2535	16	15.05	1	15.04	2	
	2507.5	16	15.30	1	15.28	2	
20 MHz	1RB High (99)	2560	16	14.99	0	15.09	1
		2535	16	15.06	0	15.35	1
		2510	16	15.25	0	15.45	1
	1RB Middle (50)	2560	16	15.13	0	15.34	1
		2535	16	15.25	0	15.44	1
		2510	16	15.13	0	15.33	1
	1RB Low (0)	2560	16	14.89	0	15.20	1
		2535	16	14.92	0	15.32	1
		2510	16	15.42	0	15.52	1
	50RB High (50)	2560	16	14.90	1	14.87	2
		2535	16	14.95	1	14.93	2
		2510	16	15.07	1	15.06	2
	50RB Middle (25)	2560	16	14.95	1	14.93	2
		2535	16	15.05	1	15.02	2
		2510	16	15.12	1	15.10	2
	50RB Low (0)	2560	16	14.97	1	14.92	2
		2535	16	15.09	1	14.98	2
		2510	16	15.29	1	15.27	2
100RB (0)	2560	16	14.90	1	14.90	2	
	2535	16	14.99	1	14.98	2	
	2510	16	15.16	1	15.15	2	

Band 38								
Bandwidth (MHz)	RB allocation	Frequency (MHz)	Max. Target Power (dBm)	QPSK		16QAM		
	RB offset (Start RB)			Actual output power (dBm)	MPR	Actual output power (dBm)	MPR	
5 MHz	1RB High (24)	2617.5	21.5	20.54	0	20.50	1	
		2595	21.5	20.90	0	21.10	1	
		2572.5	21.5	20.98	0	20.94	1	
	1RB Middle (12)	2617.5	21.5	20.64	0	20.60	1	
		2595	21.5	20.94	0	21.15	1	
		2572.5	21.5	21.04	0	21.01	1	
	1RB Low (0)	2617.5	21.5	20.71	0	20.67	1	
		2595	21.5	20.95	0	21.17	1	
		2572.5	21.5	20.99	0	20.95	1	
	12RB High (13)	2617.5	21.5	20.63	1	20.70	2	
		2595	21.5	20.90	1	20.97	2	
		2572.5	21.5	20.99	1	21.06	2	
	12RB Middle (6)	2617.5	21.5	20.66	1	20.72	2	
		2595	21.5	20.94	1	21.01	2	
		2572.5	21.5	21.01	1	21.08	2	
	12RB Low (0)	2617.5	21.5	20.67	1	20.73	2	
		2595	21.5	20.98	1	21.02	2	
		2572.5	21.5	21.02	1	21.06	2	
	25RB (0)	2617.5	21.5	20.57	1	20.55	2	
		2595	21.5	20.85	1	20.83	2	
		2572.5	21.5	20.95	1	20.92	2	
	10 MHz	1RB High (49)	2615	21.5	20.55	0	20.70	1
			2595	21.5	20.90	0	20.96	1
			2575	21.5	20.98	0	21.14	1
1RB Middle (24)		2615	21.5	20.71	0	20.85	1	
		2595	21.5	20.99	0	21.04	1	
		2575	21.5	21.02	0	21.15	1	
1RB Low (0)		2615	21.5	20.73	0	20.92	1	
		2595	21.5	21.03	0	21.07	1	
		2575	21.5	20.96	0	21.09	1	
25RB High (25)		2615	21.5	20.59	1	20.57	2	
		2595	21.5	20.83	1	20.81	2	
		2575	21.5	20.96	1	20.94	2	
25RB Middle (12)		2615	21.5	20.63	1	20.62	2	
		2595	21.5	20.85	1	20.85	2	
		2575	21.5	20.96	1	20.94	2	
25RB Low (0)		2615	21.5	20.69	1	20.67	2	
		2595	21.5	20.91	1	20.89	2	
		2575	21.5	20.93	1	20.91	2	
50RB (0)		2615	21.5	20.62	1	20.62	2	
		2595	21.5	20.87	1	20.87	2	
		2575	21.5	20.94	1	20.94	2	

15 MHz	1RB High (74)	2612.5	21.5	20.58	0	20.75	1
		2595	21.5	20.97	0	21.05	1
		2577.5	21.5	20.97	0	21.13	1
	1RB Middle (37)	2612.5	21.5	20.73	0	20.87	1
		2595	21.5	20.97	0	21.12	1
		2577.5	21.5	21.03	0	21.17	1
	1RB Low (0)	2612.5	21.5	20.83	0	21.02	1
		2595	21.5	21.05	0	21.21	1
		2577.5	21.5	20.99	0	21.13	1
	36RB High (38)	2612.5	21.5	20.68	1	20.66	2
		2595	21.5	20.85	1	20.88	2
		2577.5	21.5	21.00	1	20.92	2
	36RB Middle (19)	2612.5	21.5	20.73	1	20.73	2
		2595	21.5	20.88	1	20.91	2
		2577.5	21.5	21.02	1	21.00	2
	36RB Low (0)	2612.5	21.5	20.80	1	20.78	2
		2595	21.5	20.98	1	20.96	2
		2577.5	21.5	21.03	1	21.00	2
	75RB (0)	2612.5	21.5	20.81	1	20.71	2
		2595	21.5	20.94	1	20.90	2
		2577.5	21.5	21.04	1	21.00	2
20 MHz	1RB High (99)	2610	21.5	20.62	0	20.65	1
		2595	21.5	20.95	0	21.14	1
		2580	21.5	21.00	0	21.03	1
	1RB Middle (50)	2610	21.5	20.79	0	20.82	1
		2595	21.5	21.05	0	21.21	1
		2580	21.5	21.07	0	21.08	1
	1RB Low (0)	2610	21.5	20.88	0	20.92	1
		2595	21.5	21.11	0	21.27	1
		2580	21.5	21.02	0	21.03	1
	50RB High (50)	2610	21.5	20.62	1	20.64	2
		2595	21.5	20.81	1	20.83	2
		2580	21.5	20.96	1	20.94	2
	50RB Middle (25)	2610	21.5	20.69	1	20.71	2
		2595	21.5	20.82	1	20.84	2
		2580	21.5	21.01	1	20.98	2
	50RB Low (0)	2610	21.5	20.84	1	20.85	2
		2595	21.5	20.93	1	20.96	2
		2580	21.5	20.95	1	20.96	2
	100RB (0)	2610	21.5	20.75	1	20.71	2
		2595	21.5	20.87	1	20.82	2
		2580	21.5	20.93	1	20.91	2



### 11.4 Wi-Fi and BT Measurement result

The output power of BT antenna is as following:

Mode	Conducted Power (dBm)			Tune up
	Channel 0 (2402MHz)	Channel 39 (2441MHz)	Channel 78(2480MHz)	
GFSK	4.64	5.97	5.33	6
EDR2M-4_DQPSK	3.67	5.20	4.22	5.5
EDR3M-8DPSK	3.76	5.29	4.32	5.5

The average conducted power for Wi-Fi is as following:

#### Normal Power – Proximity sensor not active

802.11b (dBm)

Channel\data rate	1Mbps	2Mbps	5.5Mbps	11Mbps
1	16.38	/	/	/
6	16.72	16.67	16.62	16.71
11	16.61	/	/	/
<b>Tune up</b>	<b>17</b>	<b>17</b>	<b>17</b>	<b>17</b>

802.11g (dBm)

Channel\data rate	6Mbps	9Mbps	12Mbps	18Mbps	24Mbps	36Mbps	48Mbps	54Mbps
1	15.05	/	15.10	/	/	/	/	/
6	15.68	15.65	15.69	15.60	15.24	15.07	15.19	15.12
11	15.25	/	15.37	/	/	/	/	/
<b>Tune up</b>	<b>16</b>	<b>16</b>	<b>16</b>	<b>16</b>	<b>16</b>	<b>16</b>	<b>16</b>	<b>16</b>

802.11n (dBm) - HT20 (2.4G)

Channel\data rate	MCS0	MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7
1	14.57	15.49	/	/	/	/	/	/
6	14.99	15.06	14.99	14.69	14.55	14.65	14.37	14.32
11	14.83	14.70	/	/	/	/	/	/
<b>Tune up</b>	<b>15.5</b>	<b>15.5</b>	<b>15.5</b>	<b>15.5</b>	<b>15.5</b>	<b>15.5</b>	<b>15.5</b>	<b>15.5</b>

802.11n (dBm) – HT40 (2.4G)

Channel\data rate	MCS0	MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7
3	11.53	/	/	/	/	/	/	/
6	11.74	11.56	11.42	11.27	11.05	10.82	10.21	10.13
9	11.59	/	/	/	/	/	/	/
<b>Tune up</b>	<b>12</b>	<b>12</b>	<b>12</b>	<b>12</b>	<b>12</b>	<b>12</b>	<b>12</b>	<b>12</b>



**Low Power – Proximity sensor active**

802.11b (dBm)

Channel\data rate	1Mbps	2Mbps	5.5Mbps	11Mbps
1	11.39	11.46	/	/
6	11.68	11.90	11.85	11.59
11	11.64	11.62	/	/
<b>Tune up</b>	<b>12</b>	<b>12</b>	<b>12</b>	<b>12</b>

802.11g (dBm)

Channel\data rate	6Mbps	9Mbps	12Mbps	18Mbps	24Mbps	36Mbps	48Mbps	54Mbps
1	9.51	/	/	/	/	/	/	/
6	9.91	9.82	9.56	9.48	9.55	9.40	9.04	8.98
11	9.59	/	/	/	/	/	/	/
<b>Tune up</b>	<b>10.5</b>	<b>10.5</b>	<b>10.5</b>	<b>10.5</b>	<b>10.5</b>	<b>10.5</b>	<b>10.5</b>	<b>10.5</b>

802.11n (dBm) - HT20 (2.4G)

Channel\data rate	MCS0	MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7
1	8.81	/	/	/	/	/	/	/
6	9.24	9.14	9.06	8.96	8.82	8.47	8.41	8.36
11	9.07	/	/	/	/	/	/	/
<b>Tune up</b>	<b>9.5</b>	<b>9.5</b>	<b>9.5</b>	<b>9.5</b>	<b>9.5</b>	<b>9.5</b>	<b>9.5</b>	<b>9.5</b>

802.11n (dBm) – HT40 (2.4G)

Channel\data rate	MCS0	MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7
3	5.46	/	/	/	/	/	/	/
6	5.90	5.77	5.40	5.25	5.02	4.75	4.33	4.26
9	5,73	/	/	/	/	/	/	/
<b>Tune up</b>	<b>6</b>	<b>6</b>	<b>6</b>	<b>6</b>	<b>6</b>	<b>6</b>	<b>6</b>	<b>6</b>