



Exposure Position	Wireless Interface	NFC	5.2G WLAN	5.8G WLAN
	Calculated Frequency(GHz)	0.01356	5.24	5.785
	Maximum Turn-up power (dBm)	-45.00	12	12
	Maximum rated power(mW)	0	15.85	15.85
Back Side	Separation distance (cm)	1	1	1
	exclusion threshold(mW)	301.38	6.25	5.86
	Testing required?	NO	YES	YES
Front Side	Separation distance (cm)	1	1	1
	exclusion threshold(mW)	301.38	6.25	5.86
	Testing required?	NO	YES	YES
Left Side	Separation distance (cm)	3	1	1
	exclusion threshold(mW)	705.12	6.25	5.86
	Testing required?	NO	YES	YES
Right Side	Separation distance (cm)	3	7	7
	exclusion threshold(mW)	705.12	349.30	341.51
	Testing required?	NO	NO	NO
Top Side	Separation distance (cm)	6.5	1.5	1.5
	exclusion threshold(mW)	1282.52	14.46	13.68
	Testing required?	NO	YES	YES
Bottom Side	Separation distance (cm)	8.5	16	16
	exclusion threshold(mW)	1578.36	1929.24	1920.01
	Testing required?	NO	NO	NO

**Note:**

1. maximum power is the source-based time-average power and represents the maximum RF output power among production units.
2. Per KDB 447498 D04, for larger devices, the test separation distance of adjacent edge configuration is determined by the closest separation between the antenna and the user.
3. Per KDB 447498 D04, if the maximum time-averaged power available does not exceed 1 mW. This stand-alone SAR exemption test.
4. Per KDB 447498 D04, the available maximum time-averaged power or effective radiated power (ERP), whichever is greater, is less than or equal to the threshold P_{th} (mW) described in the following formula. This method shall only be used at separation distances (cm) from 0.5 centimeters to 40 centimeters and at frequencies from 0.3 GHz to 6 GHz (inclusive). P_{th} is given by:

$$P_{th} \text{ (mW)} = \begin{cases} ERP_{20 \text{ cm}} (d/20 \text{ cm})^x & d \leq 20 \text{ cm} \\ ERP_{20 \text{ cm}} & 20 \text{ cm} < d \leq 40 \text{ cm} \end{cases}$$

Where

$$x = -\log_{10} \left(\frac{60}{ERP_{20 \text{ cm}} \sqrt{f}} \right) \text{ and } f \text{ is in GHz;}$$

and

$$ERP_{20 \text{ cm}} \text{ (mW)} = \begin{cases} 2040f & 0.3 \text{ GHz} \leq f < 1.5 \text{ GHz} \\ 3060 & 1.5 \text{ GHz} \leq f \leq 6 \text{ GHz} \end{cases}$$

d = the separation distance (cm);



5. Per KDB 447498 D04, An alternative to the SAR-based exemption is using below table and the minimum separation distance (R in meters) from the body of a nearby person for the frequency (f in MHz) at which the source operates, the ERP (watts) is no more than the calculated value prescribed for that frequency. For the exemption in below table to apply, R must be at least $\lambda/2\pi$, where λ is the free-space operating wavelength in meters. If the ERP of a single RF source is not easily obtained, then the available maximum time-averaged power may be used in lieu of ERP if the physical dimensions of the radiating structure(s) do not exceed the electrical length of $\lambda/4$ or if the antenna gain is less than that of a half-wave dipole (1.64 linear value).

RF Source frequency (MHz)	Threshold ERP(watts)
0.3-1.34	$1,920 R^2$.
1.34-30	$3,450 R^2/f^2$.
30-300	$3.83 R^2$.
300-1,500	$0.0128 R^2f$.
1,500-100,000	$19.2R^2$.

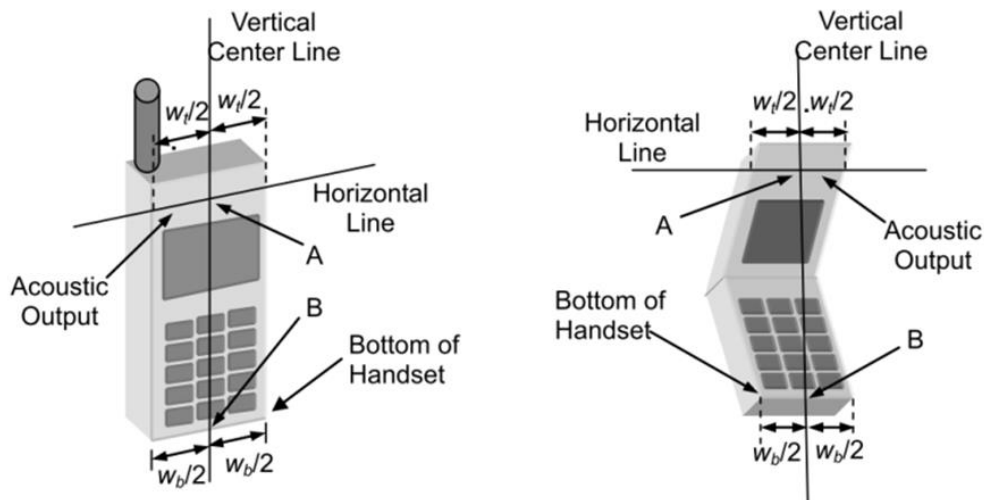
6. Per KDB 248227 D01, choose the highest output power channel to test SAR and determine further SAR exclusion 8.for each frequency band ,testing at higher data rates and higher order modulations is not required when the maximum average output power for each of each of these configurations is less than 1/4db higher than those measured at the lower data rate than 11b mode ,thus the SAR can be excluded.
7. Per KDB 616217 D04, SAR evaluation for the front surface of tablet display screens are generally not necessary.
8. Per KDB 248227, as maximum rated power for U-NII-2A>U-NII-1, U-NII-2A was chosen for SAR evaluation. Based on the measurements obtained, SAR measurements on U-NII-1 are not required as highest reported SAR from U-NII-2A band is $\leq 1.2W/Kg$.

8. EUT Test Position

This EUT was tested in Right Cheek, Right Titled, Left Cheek, Left Titled, Front Face and Rear Face.

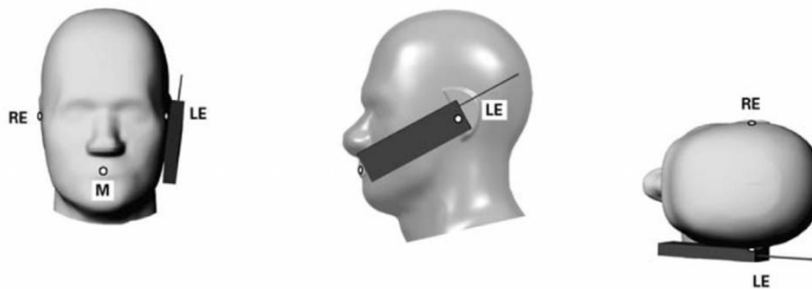
8.1 Define Two Imaginary Lines on the Handset

- (1) The vertical centerline passes through two points on the front side of the handset the midpoint of the width w_t of the handset at the level of the acoustic output, and the midpoint of the width w_b of the handset.
- (2) The horizontal line is perpendicular to the vertical centerline and passes through the center of the acoustic output. The horizontal line is also tangential to the face of the handset at point A.
- (3) The two lines intersect at point A. Note that for many handsets, point A coincides with the center of the acoustic output; however, the acoustic output may be located elsewhere on the horizontal line. Also note that the vertical centerline is not necessarily to the front face of the handset, especially for clamshell handsets, handsets with flip covers, and other irregularly shaped handsets.



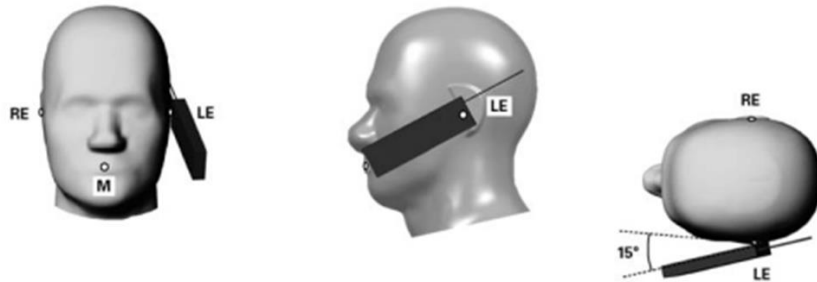
Cheek Position

- 1) To position the device with the vertical center line of the body of the device and the horizontal line crossing the center piece in a plane parallel to the sagittal plane of the phantom. While maintaining the device in this plane, align the vertical center line with the reference plane containing the ear and mouth reference point (M: Mouth, RE: Right Ear, and LE: Left Ear) and align the center of the ear piece with the line RE-LE.
- 2) To move the device towards the phantom with the ear piece aligned with the line LE-RE until the phone touched the ear. While maintaining the device in the reference plane and maintaining the phone contact with ear, move the bottom of the phone until any point on the front side is in contact with the cheek of the phantom or until contact with the ear is lost



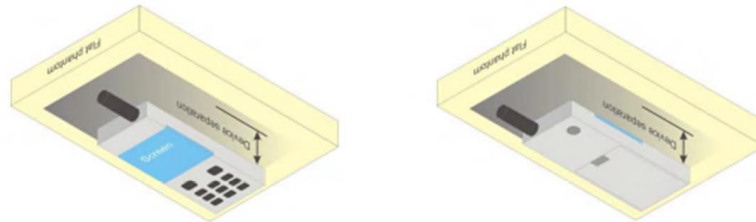
Title Position

- (1) To position the device in the “cheek” position described above.
- (2) While maintaining the device in the reference plane described above and pivoting against the ear, moves it outward away from the mouth by an angle of 15 degrees or until with the ear is lost.



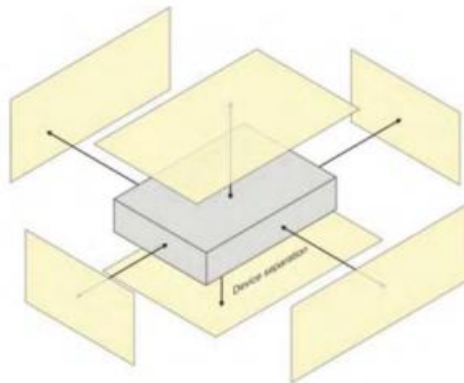
Body-worn Position Conditions:

Body-worn accessory exposure is typically related to voice mode operations when handsets are carried in body-worn accessories. The body-worn accessory procedures in KDB Publication 447498 D01 should be used to test for body-worn accessory SAR compliance, without a headset connected to it. When the same wireless transmission configuration is used for testing body-worn accessory and hotspot mode SAR, respectively, in voice and data mode, SAR results for the most conservative *test separation distance* configuration may be used to support both SAR conditions. When the *reported SAR* for a body-worn accessory, measured without a headset connected to the handset, is $> 1.2 \text{ W/kg}$, the highest *reported SAR* configuration for that wireless mode and frequency band should be repeated for the body-worn accessory with a headset attached to the handset.



8.2 Hotspot mode exposure position condition

For handsets that support hotspot mode operations, with wireless router capabilities and various web browsing function, the relevant hand and body exposure condition are tested according to the hotspot SAR procedures in KDB 941225. A test separation distance of 10 mm is required between the phantom and all surface and edges with a transmitting antenna located within 25 mm from that surface or edge. When form factor of a handset is smaller than $9\text{cm} \times 5\text{cm}$, a test separation distance of 5mm (instead of 10mm) is required for testing hotspot mode. When the separate distance required for body-worn accessory testing is larger than or equal to that tested for hotspot mode, in the same wireless mode and for the same surface of the phone, the hotspot mode SAR data may be used to support body-worn accessory SAR compliance for that particular configuration (surface).





9. Uncertainty

9.1 Measurement Uncertainty

The following measurement uncertainty levels have been estimated for tests performed on the EUT as specified in IEEE 1528: 2013. This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of $k=2$.

SATIMO Uncertainty- SN 08/21 EPG0352									
Measurement uncertainty for DUT averaged over 1 gram / 10 gram.									
Uncertainty Component	Sec.	Tol (+/- %)	Prob. Dist.	Div.	Ci (1g)	Ci (10g)	1g Ui (+/- %)	10g Ui (+/- %)	vi
Measurement System									
Probe calibration	E.2.1	5.72	N	1.00	1.00	1.00	5.72	5.72	∞
Axial Isotropy	E.2.2	0.18	R	1.73	0.71	0.71	0.07	0.07	∞
Hemispherical Isotropy	E.2.2	1.04	R	1.73	0.71	0.71	0.42	0.42	∞
Boundary effect	E.2.3	0.80	R	1.73	1.00	1.00	0.46	0.46	∞
Linearity	E.2.4	1.25	R	1.73	1.00	1.00	0.72	0.72	∞
System detection limits	E.2.4	1.20	R	1.73	1.00	1.00	0.69	0.69	∞
Modulation response	E.2.5	3.42	R	1.73	1.00	1.00	1.97	1.97	∞
Readout Electronics	E.2.6	0.26	N	1.00	1.00	1.00	0.26	0.26	∞
Response Time	E.2.7	0.17	R	1.73	1.00	1.00	0.10	0.10	∞
Integration Time	E.2.8	1.43	R	1.73	1.00	1.00	0.83	0.83	∞
RF ambient conditions-Noise	E.6.1	3.51	R	1.73	1.00	1.00	2.03	2.03	∞
RF ambient conditions-reflections	E.6.1	3.15	R	1.73	1.00	1.00	1.82	1.82	∞
Probe positioner mechanical tolerance	E.6.2	1.20	R	1.73	1.00	1.00	0.69	0.69	∞
Probe positioning with respect to phantom shell	E.6.3	1.40	R	1.73	1.00	1.00	0.81	0.81	∞
Extrapolation, interpolation, and integrations algorithms for max. SAR evaluation	E.5	2.10	R	1.73	1.00	1.00	1.21	1.21	∞
Test sample Related									
Test sample positioning	E.4.2	3.10	N	1.00	1.00	1.00	3.10	3.10	∞
Device holder uncertainty	E.4.1	3.80	N	1.00	1.00	1.00	3.80	3.80	∞
Output power variation—SAR drift measurement	E.2.9	4.50	R	1.73	1.00	1.00	2.60	2.60	∞
SAR scaling	E.6.5	1.80	R	1.73	1.00	1.00	1.04	1.04	∞
Phantom and tissue parameters									
Phantom shell uncertainty—shape, thickness, and permittivity	E.3.1	3.70	R	1.73	1.00	1.00	2.14	2.14	∞
Uncertainty in SAR correction for deviations in permittivity and conductivity	E.3.2	1.90	N	1.00	1.00	0.84	1.90	1.60	∞
Liquid conductivity measurement	E.3.3	2.40	R	1.73	0.78	0.71	1.08	0.98	M
Liquid permittivity measurement	E.3.3	4.10	N	1.00	0.78	0.71	3.20	2.91	M
Liquid conductivity—temperature uncertainty	E.3.4	2.70	R	1.73	0.23	0.26	0.36	0.41	∞
Liquid permittivity—temperature uncertainty	E.3.4	4.80	N	1.00	0.23	0.26	1.10	1.25	∞
Combined Standard Uncertainty			RSS				10.08	9.59	
Expanded Uncertainty (95% Confidence interval)			K=2				19.58	19.18	



SATIMO Uncertainty- SN 08/21 EPG0352									
System Validation uncertainty for DUT averaged over 1 gram / 10 gram.									
Uncertainty Component	Sec.	Tol (+ - %)	Prob. Dist.	Div.	Ci (1g)	Ci (10g)	1g Ui (+ %)	10g Ui (+-%)	vi
Measurement System									
Probe calibration	E.2.1	5.72	N	1.00	1.00	1.00	5.72	5.72	∞
Axial Isotropy	E.2.2	0.18	R	1.73	1.00	1.00	0.10	0.10	∞
Hemispherical Isotropy	E.2.2	1.04	R	1.73	0.00	0.00	0.00	0.00	∞
Boundary effect	E.2.3	0.80	R	1.73	1.00	1.00	0.46	0.46	∞
Linearity	E.2.4	1.25	R	1.73	1.00	1.00	0.72	0.72	∞
System detection limits	E.2.4	1.20	R	1.73	1.00	1.00	0.69	0.69	∞
Modulation response	E.2.5	3.42	R	1.73	0.00	0.00	0.00	0.00	∞
Readout Electronics	E.2.6	0.26	N	1.00	1.00	1.00	0.26	0.26	∞
Response Time	E.2.7	0.17	R	1.73	0.00	0.00	0.00	0.00	∞
Integration Time	E.2.8	1.43	R	1.73	0.00	0.00	0.00	0.00	∞
RF ambient conditions- Noise	E.6.1	3.51	R	1.73	1.00	1.00	2.03	2.03	∞
RF ambient conditions- reflections	E.6.1	3.15	R	1.73	1.00	1.00	1.82	1.82	∞
Probe positioner mechanical tolerance	E.6.2	1.20	R	1.73	1.00	1.00	0.69	0.69	∞
Probe positioning with respect to phantom shell	E.6.3	1.40	R	1.73	1.00	1.00	0.81	0.81	∞
Extrapolation, interpolation, and integrations algorithms for max. SAR evaluation	E.5	2.10	R	1.73	1.00	1.00	1.21	1.21	∞
System validation source									
Deviation of experimental dipole from numerical dipole	E.6.4	4.80	N	1.00	1.00	1.00	4.80	4.80	∞
Input power and SAR drift measurement	8,6.6.4	5.10	R	1.73	1.00	1.00	2.94	2.94	∞
Dipole axis to liquid distance	8,E.6.6	2.40	R	1.73	1.00	1.00	1.39	1.39	∞
Phantom and set-up									
Phantom shell uncertainty— shape, thickness, and permittivity	E.3.1	3.70	R	1.73	1.00	1.00	2.14	2.14	∞
Uncertainty in SAR correction for deviations in permittivity and conductivity	E.3.2	1.90	N	1.00	1.00	0.84	1.90	1.60	∞
Liquid conductivity (temperature uncertainty)	E.3.3	2.40	R	1.73	0.78	0.71	1.08	0.98	∞
Liquid conductivity (measured)	E.3.3	4.10	N	1.00	0.78	0.71	3.20	2.91	M
Liquid permittivity (temperature uncertainty)	E.3.4	2.70	R	1.73	0.23	0.26	0.36	0.41	∞
Liquid permittivity (measured)	E.3.4	4.80	N	1.00	0.23	0.26	1.10	1.25	M
Combined Standard Uncertainty			RSS				9.72	9.52	
Expanded Uncertainty (95% Confidence interval)			K=2				19.44	19.03	



SATIMO Uncertainty- SN 08/21 EPGO352									
。 System Check uncertainty for DUT averaged over 1 gram / 10 gram.									
Uncertainty Component	Sec.	Tol (+-%)	Prob. Dist.	Div.	Ci (1g)	Ci (10g)	1g Ui (+-%)	10g Ui (+-%)	vi
Measurement System									
Probe calibration drift	E.2.1.3	5.72	N	1.00	1.00	1.00	5.72	5.72	∞
Axial Isotropy	E.2.2	0.18	R	1.73	0.00	0.00	0.00	0.00	∞
Hemispherical Isotropy	E.2.2	1.04	R	1.73	0.00	0.00	0.00	0.00	∞
Boundary effect	E.2.3	0.8	R	1.73	0.00	0.00	0.00	0.00	∞
Linearity	E.2.4	1.25	R	1.73	0.00	0.00	0.00	0.00	∞
System detection limits	E.2.4	1.20	R	1.73	0.00	0.00	0.00	0.00	∞
Modulation response	E.2.5	3.42	R	1.73	0.00	0.00	0.00	0.00	∞
Readout Electronics	E.2.6	0.26	N	1.00	0.00	0.00	0.00	0.00	∞
Response Time	E.2.7	0.17	R	1.73	0.00	0.00	0.00	0.00	∞
Integration Time	E.2.8	1.43	R	1.73	0.00	0.00	0.00	0.00	∞
RF ambient conditions- Noise	E.6.1	3.51	R	1.73	0.00	0.00	0.00	0.00	∞
RF ambient conditions- reflections	E.6.1	3.15	R	1.73	0.00	0.00	0.00	0.00	∞
Probe positioner mechanical tolerance	E.6.2	1.2	R	1.73	1.00	1.00	0.69	0.69	∞
Probe positioning with respect to phantom shell	E.6.3	1.4	R	1.73	1.00	1.00	0.81	0.81	∞
Extrapolation, interpolation, and integrations algorithms for max. SAR evaluation	E.5	3.9	R	1.73	0.00	0.00	0.00	0.00	∞
System check source (dipole)									
Deviation of experimental dipoles	E.6.4	4.8	N	1.00	1.00	1.00	4.80	4.80	∞
Input power and SAR drift measurement	8,6.6.4	5.1	R	1.73	1.00	1.00	2.94	2.94	∞
Dipole axis to liquid distance	8,E.6.6	2.4	R	1.73	1.00	1.00	1.39	1.39	∞
Phantom and tissue parameters									
Phantom shell uncertainty— shape, thickness, and permittivity	E.3.1	3.7	R	1.73	1.00	1.00	2.14	2.14	∞
Uncertainty in SAR correction for deviations in permittivity and conductivity	E.3.2	1.9	N	1.00	1.00	0.84	1.90	1.60	∞
Liquid conductivity measurement	E.3.3	2.4	R	1.73	0.78	0.71	1.08	0.98	∞
Liquid permittivity measurement	E.3.3	4.1	N	1.00	0.78	0.71	3.20	2.91	M
Liquid conductivity— temperature uncertainty	E.3.4	2.7	R	1.73	0.23	0.26	0.36	0.41	∞
Liquid permittivity— temperature uncertainty	E.3.4	4.8	N	1.00	0.23	0.26	1.10	1.25	M
Combined Standard Uncertainty			RSS				5.56	5.20	
Expanded Uncertainty (95% Confidence interval)			K=2				11.12	10.41	



10. Conducted Power Measurement

10.1 Test Result

Burst Average Power (dBm)						
Band	GSM 850			PCS 1900		
Channel	128	190	251	512	661	810
Frequency (MHz)	824.2	836.6	848.8	1850.2	1880.0	1909.8
GSM(GMSK, 1-Slot)	30.95	32.53	32.25	30.51	32.09	31.81
GPRS (GMSK, 1-Slot)	31.98	31.87	31.86	32.27	32.16	32.15
GPRS (GMSK, 2-Slot)	29.86	29.42	29.51	29.35	28.91	29.00
GPRS (GMSK, 3-Slot)	28.04	27.38	27.80	27.82	27.16	27.58
GPRS (GMSK, 4-Slot)	24.96	25.26	25.03	25.09	25.39	25.16
EGPRS(8PSK, 1-Slot)	25.57	25.34	25.61	25.59	25.36	25.63
EGPRS(8PSK, 2-Slot)	24.24	24.35	23.87	24.30	24.41	23.93
EGPRS(8PSK, 3-Slot)	22.13	22.27	22.51	22.34	22.48	22.72
EGPRS(8PSK, 4-Slot)	19.75	20.08	19.76	19.89	20.22	19.90
Remark: GPRS, CS4 coding scheme. EGPRS, MCS5 coding scheme. Multi-Slot Class 8, Support Max 4 downlink, 1 uplink, 5 working link Multi-Slot Class 10, Support Max 4 downlink, 2 uplink, 5 working link Multi-Slot Class 12, Support Max 4 downlink, 4 uplink, 5 working link						

Frame- Average Power(dBm)						
Band	GSM 850			PCS 1900		
Channel	128	190	251	512	661	810
Frequency (MHz)	824.2	836.6	848.8	1850.2	1880.0	1909.8
GSM(GMSK, 1-Slot)	21.92	23.50	23.22	21.48	23.06	22.78
GPRS (GMSK, 1-Slot)	22.95	22.84	22.83	23.24	23.13	23.12
GPRS (GMSK, 2-Slot)	23.84	23.40	23.49	23.33	22.89	22.98
GPRS (GMSK, 3-Slot)	23.78	23.12	23.54	23.56	22.90	23.32
GPRS (GMSK, 4-Slot)	21.95	22.25	22.02	22.08	22.38	22.15
EGPRS(8PSK, 1-Slot)	16.54	16.31	16.58	16.56	16.33	16.60
EGPRS(8PSK, 2-Slot)	18.22	18.33	17.85	18.28	18.39	17.91
EGPRS(8PSK, 3-Slot)	17.87	18.01	18.25	18.08	18.22	18.46
EGPRS(8PSK, 4-Slot)	16.74	17.07	16.75	16.88	17.21	16.89
Remark : 1. SAR testing was performed on the maximum frame-averaged power mode. 2. The frame-averaged power is linearly proportion to the slot number configured and it is linearly scaled the maximum Burst - averaged power based on time slots. The calculated method is shown as below: Frame-averaged power = Burst averaged power (1 TX Slot) – 9.03 dB Frame-averaged power = Burst averaged power (2 TX Slots) – 6.02 dB Frame-averaged power = Burst averaged power (3 TX Slots) - 4.26 dB Frame-averaged power = Burst averaged power (4 TX Slots) – 3.01 dB						

**WCDMA**

Band	WCDMA Band 2			WCDMA Band 5			WCDMA Band 4		
Channel	9262	9400	9538	4132	4183	4233	1312	1413	1513
Frequency (MHz)	1852.4	1880	1907.6	826.4	836.6	846.6	1712.6	1740	1752.4
RMC 12.2Kbps	21.58	21.86	21.50	21.43	21.71	21.35	21.55	21.83	21.47
HSDPA Subtest-1	22.85	22.85	22.05	22.38	22.38	21.58	22.11	22.11	21.31
HSDPA Subtest-2	22.11	21.77	21.86	22.36	22.02	22.11	22.47	22.13	22.22
HSDPA Subtest-3	22.06	21.41	20.95	22.20	21.55	21.09	22.40	21.75	21.29
HSDPA Subtest-4	22.01	22.49	21.61	22.04	22.52	21.64	21.68	22.16	21.28
HSUPA Subtest-1	20.39	19.90	18.92	20.99	20.50	19.52	20.16	19.67	18.69
HSUPA Subtest-2	20.35	19.70	20.14	20.33	19.68	20.12	20.69	20.04	20.48
HSUPA Subtest-3	20.70	20.45	19.80	21.04	20.79	20.14	20.16	19.91	19.26
HSUPA Subtest-4	20.98	20.65	20.38	20.52	20.19	19.92	21.22	20.89	20.62
HSUPA Subtest-5	21.83	21.69	21.28	21.83	21.69	21.28	21.83	21.69	21.28

According to 3GPP 25.101 sub-clause 6.2.2, the maximum output power is allowed to be reduced by following the table.

Table 6.1A: UE maximum output power with HS-DPCCH and E-DCH

UE Transmit Channel Configuration	CM(db)	MPR(db)
For all combinations of ,DPDCH,DPCCH HS-DPDCH,E-DPDCH and E-DPCCH	$0 \leq CM \leq 3.5$	$MAX(CM-1,0)$
Note: CM=1 for $\beta_c/\beta_d=12/15$, $\beta_{hs}/\beta_c=24/15$. For all other combinations of DPDCH, DPCCH, HS-DPCCH, E-DPDCH and E-DPCCH the MPR is based on the relative CM difference.		

The device supports MPR to solve linearity issues (ACLR or SEM) due to the higher peak-to average ratios (PAR) of the HSUPA signal. This prevents saturating the full range of the TX DAC inside of device and provides a reduced power output to the RF transceiver chip according to the Cubic Metric (a function of the combinations of DPDCH, DPCCH, HS-DPCCH, E-DPDCH and E-DPCCH).

When E-DPDCH channels are present the beta gains on those channels are reduced firsts to try to get the power under the allowed limit. If the beta gains are lowered as far as possible, then a hard limiting is applied at the maximum allowed level.

The SW currently recalculates the cubic metric every time the beta gains on the E-DPDCH are reduced. The cubic metric will likely get lower each time this is done .However, there is no reported reduction of maximum output power in the HSUPA mode since the device also provides a compensation for the power back-off by increasing the gain of TX_AGC in the transceiver (PA) device.

The end effect is that the DUT output power is identical to the case where there is no MPR in the device.

**2.4G WLAN**

2.4GWIFI				
Mode	Channel Number	Frequency (MHz)	Average Power (dBm)	Output Power (mW)
802.11b	1	2412	7.19	5.24
	7	2437	6.57	4.54
	11	2462	6.03	4.01
802.11g	1	2412	7.19	5.24
	7	2437	6.43	4.40
	11	2462	6.00	3.98
802.11 n-HT20	1	2412	7.19	5.24
	7	2437	6.37	4.34
	11	2462	5.92	3.91
802.11 n-HT40	3	2422	7.66	5.83
	6	2437	7.71	5.90
	9	2452	7.23	5.28

Bluetooth

BT				
Mode	Channel Number	Frequency (MHz)	Average Power (dBm)	Output Power (mW)
GFSK(1Mbps)	0	2402	8.83	7.64
	39	2441	10.24	10.57
	78	2480	11.66	14.66
$\pi/4$ -QPSK(2Mbps)	0	2402	8.86	7.69
	39	2441	9.96	9.91
	78	2480	10.83	12.11
8DPSK(3Mbps)	0	2402	8.66	7.35
	39	2441	9.79	9.53
	78	2480	10.41	10.99

BLE

BLE				
Mode	Channel Number	Frequency (MHz)	Average Power (dBm)	Output Power (mW)
GFSK(1Mbps)	0	2402	-7.52	0.18
	19	2440	-6.04	0.25
	39	2480	-6.55	0.22
GFSK(2Mbps)	0	2402	-7.49	0.18
	19	2440	-6.07	0.25
	39	2480	-6.87	0.21



NFC

NFC		
Mode	Output Power (dBm)	Output Power (mW)
ASK	-49.4	0.00

5.2G WLAN				
Mode	Channel Number	Frequency (MHz)	Average Power (dBm)	Output Power (mW)
802.11a	36	5180	9.00	7.94
	40	5200	8.06	6.40
	48	5240	8.14	6.52
802.11 n-HT20	36	5180	9.35	8.61
	40	5200	8.48	7.05
	48	5240	11.67	14.69
802.11 n-HT40	38	5190	8.64	7.31
	46	5230	8.14	6.52
802.11ac-VHT20	36	5180	8.86	7.69
	40	5200	8.37	6.87
	48	5240	8.54	7.14
802.11ac-VHT40	38	5190	9.10	8.13
	46	5230	8.65	7.33
802.11ac-VHT80	42	5210	8.41	6.93

5.8G WLAN				
Mode	Channel Number	Frequency (MHz)	Average Power (dBm)	Output Power (mW)
802.11a	149	5745	7.00	5.01
	157	5785	8.27	6.71
	165	5825	6.80	4.79
802.11 n-HT20	149	5745	10.38	10.91
	157	5785	11.55	14.29
	165	5825	9.84	9.64
802.11 n-HT40	151	5755	6.70	4.68
	159	5795	8.87	7.71
802.11ac-VHT20	149	5745	7.24	5.30
	157	5785	8.40	6.92
	165	5825	6.80	4.79
802.11ac-VHT40	151	5755	7.17	5.21
	159	5795	8.29	6.75
802.11ac-VHT80	155	5775	7.50	5.62



LTE Conducted Power

General Note:

1. Anritsu CMW500 base station simulator was used to setup the connection with EUT; the frequency band, channel bandwidth, RB allocation configuration, modulation type are set in the base station simulator to configure EUT transmitting at maximum power and at different configurations which are requested to be reported to FCC, for conducted power measurement and SAR testing.
2. Per KDB 941225 D05, when a properly configured base station simulator is used for the SAR and power measurements, spectrum plots for each RB allocation and offset configuration is not required.
3. Per KDB 941225 D05, start with the largest channel bandwidth and measure SAR for QPSK with 1 RB allocation, using the RB offset and required test channel combination with the highest maximum output power for RB offsets at the upper edge, middle and lower edge of each required test channel.
4. Per KDB 941225 D05, 50% RB allocation for QPSK SAR testing follows 1RB QPSK allocation procedure.
5. Per KDB 941225 D05, For QPSK with 100% RB allocation, SAR is not required when the highest maximum output power for 100 % RB allocation is less than the highest maximum output power in 50% and 1 RB allocations and the highest reported SAR for 1 RB and 50% RB allocation are ≤ 0.8 W/kg. Otherwise, SAR is measured for the highest output power channel; and if the reported SAR is > 1.45 W/kg, the remaining required test channels must also be tested.
6. Per KDB 941225 D05, 16QAM output power for each RB allocation configuration is $>$ not $\frac{1}{2}$ dB higher than the same configuration in QPSK and the reported SAR for the QPSK configuration is ≤ 1.45 W/kg; Per KDB 941225 D05, 16QAM SAR testing is not required.
7. Per KDB 941225 D05, Smaller bandwidth output power for each RB allocation configuration is $>$ not $\frac{1}{2}$ dB higher than the same configuration in the largest supported bandwidth, and the reported SAR for the largest supported bandwidth is ≤ 1.45 W/kg; Per KDB 941225 D05, smaller bandwidth SAR testing is not required.



LTE Band 2

LTE Band 2 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
1.4	1	0	QPSK	21.48	22.16	21.73
1.4	1	2		22.24	22.69	22.88
1.4	1	5		22.35	22.48	22.61
1.4	3	0		22.39	22.69	23.13
1.4	3	1		22.3	22.45	22.55
1.4	3	2		22.03	22.83	22.98
1.4	6	0		21.43	21.99	22.3
1.4	1	0	16-QAM	22.44	22.87	22.78
1.4	1	2		22.17	22.8	22.87
1.4	1	5		21.66	22.16	22.55
1.4	3	0		20.13	20.98	21.05
1.4	3	1		21.52	21.36	21.07
1.4	3	2		21.4	21.18	20.87
1.4	6	0		20.76	20.09	20.58
3	1	0	QPSK	22.97	23.17	22.73
3	1	7		22.21	22.17	22.8
3	1	14		22.27	22.87	22.78
3	8	0		22.07	21.79	22.07
3	8	4		21.4	21.23	21.31
3	8	7		21.66	21.25	22.33
3	15	0		21.51	21.8	21.09
3	1	0	16-QAM	20.96	20.63	20.97
3	1	7		21.22	21.21	21.8
3	1	14		21.21	20.89	21.16
3	8	0		20.59	20.95	21.11
3	8	4		20.88	21.08	21.06
3	8	7		20.01	20.43	20
3	15	0		19.7	20.3	20.99



LTE BAND 2

LTE Band 2 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
5	1	0	QPSK	21.54	22.22	21.85
5	1	12		22.36	22.62	22.68
5	1	24		22.07	22.31	22.57
5	12	0		22.03	22.28	22.53
5	12	6		21.67	21.54	22.09
5	12	11		21.47	21.09	22.03
5	25	0		21.42	21.59	21.27
5	1	0		21.51	21.56	21.11
5	1	12	16-QAM	21.4	20.33	20.78
5	1	24		21.89	20.38	20.87
5	12	0		21.26	20.68	20.63
5	12	6		20.39	19.67	20
5	12	11		20.65	20.79	20.94
5	25	0		21.1	20.65	20.82
10	1	0	QPSK	21.61	22.09	22.44
10	1	24		22.29	22.29	21.4
10	1	49		22.36	21.72	22.09
10	25	0		21.17	21.37	21.96
10	25	12		20.74	21.47	21.27
10	25	24		21.4	21.97	21.5
10	50	0		21.54	21.05	21.99
10	1	0		20.73	20.67	20.65
10	1	24	16-QAM	21.84	21.6	21.59
10	1	49		20.93	21.31	22.04
10	25	0		20.15	20.33	20.2
10	25	12		19.81	20.59	20.52
10	25	24		20.68	19.7	20.16
10	50	0		20.48	20.65	20.98



LTE BAND 2

LTE Band 2 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
15	1	0	QPSK	23.19	23.15	22.74
15	1	37		23.09	22.57	23.05
15	1	74		21.66	22.52	22.82
15	36	0		20.98	20.61	20.96
15	36	18		20.95	21.39	21.37
15	36	39		22.05	22.2	21.98
15	75	0		21.8	21.34	22.2
15	1	0	16-QAM	21.59	21.49	22.01
15	1	38		21.19	20.61	21.18
15	1	75		21.16	20.97	22.02
15	36	0		21.9	21.6	21.48
15	36	18		20.93	20.9	21.17
15	36	39		21.25	20.27	21.22
15	75	0		20.35	20.36	20.69
20	1	0	QPSK	22.56	22.7	22.69
20	1	49		21.71	22.31	21.81
20	1	99		22.2	21.87	22.24
20	50	0		21.18	21.89	21.33
20	50	24		21.4	21.56	21.02
20	50	49		21.71	22.21	21.99
20	100	0		21.2	21.1	20.72
20	1	0	16-QAM	22	22.08	21.95
20	1	49		22.29	22.22	21.45
20	1	99		22.49	21.72	21.53
20	50	0		20.09	20.4	20.18
20	50	24		20.9	20.43	20.41
20	50	49		21.15	21	21.22
20	100	0		20.14	20.22	19.69



LTE BAND 4

LTE Band 4 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
1.4	1	0	QPSK	23.62	23.62	22.63
1.4	1	2		23.26	23.14	23.3
1.4	1	5		23.35	23.4	22.23
1.4	3	0		22.79	22.99	21.92
1.4	3	1		23.16	22.54	22.44
1.4	3	2		23.23	22.81	22.84
1.4	6	0		22.5	22.34	21.51
1.4	1	0	16-QAM	22.87	22.84	23.02
1.4	1	2		23.5	22.96	23.04
1.4	1	5		23.15	22.74	22.59
1.4	3	0		21.81	21.34	20.94
1.4	3	1		21.92	22.22	21.43
1.4	3	2		22.46	22.14	20.95
1.4	6	0		20.69	20.27	19.73
3	1	0	QPSK	22.61	22.34	22.53
3	1	7		22.7	22.85	22.26
3	1	14		23.22	22.91	22.99
3	8	0		22.6	21.98	22.34
3	8	4		22.42	22.79	22.52
3	8	7		22.65	21.85	21.86
3	15	0		22.71	21.86	21.95
3	1	0	16-QAM	21.2	21.92	21.62
3	1	7		21.83	22.89	21.92
3	1	14		21.94	22.02	21.49
3	8	0		21.05	20.12	20.55
3	8	4		21.42	20.52	21.32
3	8	7		20.89	20.42	20.32
3	15	0		21.07	21.57	21.15



LTE BAND 4

LTE Band 4 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
5	1	0	QPSK	23.26	22.25	23.06
5	1	12		23.31	22.54	23.11
5	1	24		22.82	22.32	21.86
5	12	0		22.49	22.78	22.39
5	12	6		22.47	22.52	21.97
5	12	11		21.98	21.82	21.54
5	25	0		22.89	22.78	21.67
5	1	0		22.17	22.01	21.89
5	1	12	16-QAM	21.74	21.32	20.72
5	1	24		21.71	21	20.58
5	12	0		20.99	20.22	20.19
5	12	6		20.63	20.52	20.73
5	12	11		21.65	21.11	20.61
5	25	0		21.7	20.99	21.16
10	1	0	QPSK	23.9	23.12	23.31
10	1	24		22.97	23.4	23.18
10	1	49		23.33	22.91	23.07
10	25	0		21.85	21.61	21.48
10	25	12		22.47	22.4	22.44
10	25	24		21.64	21.68	21.76
10	50	0		21.82	21.57	21.17
10	1	0		22.39	23.27	22.26
10	1	24	16-QAM	21.99	22.79	21.9
10	1	49		22.01	22.54	21.33
10	25	0		21.4	21.47	20.59
10	25	12		21	21.64	20.74
10	25	24		21.69	21.25	20.8
10	50	0		21.29	20.77	21.26



LTE BAND 4

LTE Band 4 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
15	1	0	QPSK	22.64	22.77	22.87
15	1	37		22.69	22.6	23.24
15	1	74		22.2	22.83	22.33
15	36	0		21.92	22.02	21.42
15	36	18		21.26	21.83	21.32
15	36	39		22.61	22.52	22.1
15	75	0		22.15	21.67	21.59
15	1	0	16-QAM	21.11	21.75	21.19
15	1	38		22.2	22.14	22.27
15	1	75		21.41	21.43	21.2
15	36	0		22.03	21.34	20.69
15	36	18		22.52	21.71	21.52
15	36	39		21.64	23.18	21.79
15	75	0		21.66	21.15	21.53
20	1	0	QPSK	23.65	22.66	23.18
20	1	49		23.63	22.98	23.22
20	1	99		23.33	23	22.75
20	50	0		21.47	21.82	21.92
20	50	24		22.19	21.38	21.29
20	50	49		21.85	22.48	21.47
20	100	0		22.05	21.52	21.81
20	1	0	16-QAM	23.13	21.11	21.18
20	1	49		21.88	21.41	20.79
20	1	99		22.77	21.77	20.4
20	50	0		21.21	20.98	21.58
20	50	24		21.3	20.86	20.57
20	50	49		21.34	21.53	20.61
20	100	0		20.56	20.97	20.3



LTE BAND 5

LTE Band 5 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
1.4	1	0	QPSK	24.24	23.91	24.02
1.4	1	2		23.8	23.59	23.23
1.4	1	5		24.12	23.9	24.53
1.4	3	0		23.62	23.97	23.43
1.4	3	1		24.52	24.12	23.86
1.4	3	2		23.11	23.43	24
1.4	6	0		23	23.34	23.08
1.4	1	0	16-QAM	23.14	23.83	23.18
1.4	1	2		23.33	24.06	23.21
1.4	1	5		22.9	24.38	22.97
1.4	3	0		22.35	22.57	22.81
1.4	3	1		22.33	22.59	22.36
1.4	3	2		23.06	23.14	22.69
1.4	6	0		22.28	21.81	21.8
3	1	0	QPSK	24.04	24.43	24.35
3	1	7		24.55	23.85	23.92
3	1	14		23.5	23.99	24.22
3	8	0		23.43	23.5	22.9
3	8	4		22.32	22.58	22.69
3	8	7		23.76	23.07	22.82
3	15	0		22.88	22.96	23.18
3	1	0	16-QAM	22.2	22.26	22.15
3	1	7		22.84	23.32	22.57
3	1	14		22.28	23.1	21.71
3	8	0		21.96	22.21	21.99
3	8	4		21.81	22.05	22.47
3	8	7		22.72	22.5	23.1
3	15	0		22.81	22.28	22.73



LTE BAND 5

LTE Band 5 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
5	1	0	QPSK	24.1	24.49	24.41
5	1	12		24.37	23.67	23.74
5	1	24		23.89	24.38	24.61
5	12	0		23.36	23.43	22.83
5	12	6		22.81	23.07	23.18
5	12	11		23.4	22.71	22.46
5	25	0		22.66	22.74	22.96
5	1	0		22.48	22.54	22.43
5	1	12	16-QAM	23.06	23.54	22.79
5	1	24		22.1	22.92	21.53
5	12	0		22.3	22.55	22.33
5	12	6		22.51	22.75	23.17
5	12	11		22.34	22.12	22.72
5	25	0		22.97	22.44	22.89
10	1	0	QPSK	24.06	24.47	24.01
10	1	24		23.7	24.43	23.81
10	1	49		24.14	24.14	24.24
10	25	0		22.94	23.64	23.33
10	25	12		23.08	22.63	23.06
10	25	24		23.47	22.74	23.22
10	50	0		22.64	23.62	23.17
10	1	0		21.93	22.63	22.54
10	1	24	16-QAM	22.42	22.63	22.93
10	1	49		23.01	23.62	23.39
10	25	0		22.17	22.34	21.72
10	25	12		23.08	22.64	22.93
10	25	24		22.18	22.22	21.99
10	50	0		22.59	22.1	22.66



LTE BAND 7

LTE Band 7 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
5	1	0	QPSK	22.31	21.71	22.53
5	1	12		22.14	21.63	22.35
5	1	24		22.85	22.57	23.48
5	12	0		22.19	21.96	22.87
5	12	6		21.91	21.55	22.5
5	12	11		21.21	22.09	22.26
5	25	0		21.36	20.63	21.37
5	1	0	16-QAM	21.13	21.49	20.9
5	1	12		20.61	20.58	20.65
5	1	24		21.34	21.38	21.37
5	12	0		20.17	20.96	21.13
5	12	6		20.92	21.07	20.99
5	12	11		20.76	20.92	21.4
5	25	0		20.55	21	21.41
10	1	0	QPSK	22.39	22.14	23.1
10	1	24		23.06	22.58	23.33
10	1	49		22.6	22.27	22.58
10	25	0		20.88	20.77	21.29
10	25	12		21.57	22.09	22.36
10	25	24		21.69	21.52	21.76
10	50	0		21.12	21.69	21.74
10	1	0	16-QAM	21.03	22.51	22.11
10	1	24		21.11	21.45	22.11
10	1	49		21.28	20.99	22.44
10	25	0		19.77	20.1	20.09
10	25	12		21.16	21.04	21.81
10	25	24		19.94	20.59	20.22
10	50	0		20.66	20.77	21.1



LTE Band 7 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
15	1	0	QPSK	22.17	23.03	22.66
15	1	37		22.56	22.91	23.73
15	1	74		22.49	21.96	22.73
15	36	0		21.42	21.26	21.71
15	36	18		21.55	21.42	22.11
15	36	39		21.35	20.52	21.73
15	75	0		21.79	21.89	22.28
15	1	0	16-QAM	21.75	22.09	22.1
15	1	38		21.28	21.31	21.7
15	1	75		21.31	20.6	21.93
15	36	0		22.02	21.03	22.41
15	36	18		21.79	21.36	22.8
15	36	39		21.26	21.41	21.63
15	75	0		20.12	20.79	20.44
20	1	0	QPSK	22.94	23.05	22.73
20	1	49		22.96	22.79	22.43
20	1	99		22.76	22.49	22.61
20	50	0		21.45	21.98	22.08
20	50	24		22.28	22.26	22.81
20	50	49		22.26	21.54	22.15
20	100	0		21.79	21.62	21.69
20	1	0	16-QAM	22.54	22.05	21.79
20	1	49		22.74	20.94	21.24
20	1	99		22.97	22.06	21.69
20	50	0		21.38	21.5	21.4
20	50	24		20.89	21.43	22.04
20	50	49		20.55	20.57	21.03
20	100	0		20.71	20.3	21.67



LTE BAND 19

LTE Band 19 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
5	1	0	QPSK	23.2	23.08	23.42
5	1	2		23.93	23.7	23.37
5	1	5		23.26	23.12	23.04
5	3	0		21.92	21.72	22.55
5	3	1		22.19	21.92	22.38
5	3	2		22.35	21.77	22.1
5	6	0		22.21	21.84	22.07
5	1	0	16-QAM	21.96	21.41	21.69
5	1	2		22.74	22.35	22.69
5	1	5		21.71	21.73	21.85
5	3	0		20.93	20.48	21.79
5	3	1		21.38	20.55	21.07
5	3	2		20.7	20.2	21.28
5	6	0		21.25	21.2	21.49
10	1	0	QPSK	23.24	22.88	23.44
10	1	7		23.41	23.57	24.25
10	1	14		22.76	22.7	23.29
10	8	0		22.28	21.97	22.02
10	8	4		22.69	22.6	22.37
10	8	7		21.41	21.41	22
10	15	0		22.63	22.26	22.87
10	1	0	16-QAM	22.47	21.59	21.6
10	1	7		22.33	21.74	22.08
10	1	14		22.28	22.48	21.7
10	8	0		21.68	21.16	21.15
10	8	4		20.77	20.93	20.52
10	8	7		20.69	21.09	20.73
10	15	0		21.7	21.44	21.35



LTE Band 19 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
15	1	0	QPSK	24.14	23.78	24.34
15	1	12		23.61	23.77	24.45
15	1	24		22.98	22.92	23.51
15	12	0		22.95	22.64	22.69
15	12	6		23.33	23.24	23.01
15	12	11		21.44	21.44	22.03
15	25	0		23.49	23.12	23.73
15	1	0	16-QAM	22.79	21.91	21.92
15	1	12		23.32	22.73	23.07
15	1	24		22.99	23.19	22.41
15	12	0		22.6	22.08	22.07
15	12	6		21.1	21.26	20.85
15	12	11		21.31	21.71	21.35
15	25	0		22.13	21.87	21.78



LTE BAND 25

LTE Band 25 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
1.4	1	0	QPSK	22.17	22.42	23.42
1.4	1	2		24.16	23.42	24.15
1.4	1	5		23	23.71	23.45
1.4	3	0		22.66	23.3	22.46
1.4	3	1		22.46	22.84	22.21
1.4	3	2		21.92	21.78	23.03
1.4	6	0		23.04	22.44	22.76
1.4	1	0	16-QAM	21.74	22.51	22.66
1.4	1	2		23.22	21.8	22.51
1.4	1	5		21.49	21.91	21.33
1.4	3	0		21.81	21.39	22.59
1.4	3	1		21.62	20.27	21.35
1.4	3	2		21.5	21.94	21.29
1.4	6	0		22.17	21.37	21.44
3	1	0	QPSK	22.24	22.43	23.47
3	1	7		24.23	23.77	23.56
3	1	14		23.22	23.12	23.73
3	8	0		23.41	23.35	22.85
3	8	4		22.54	22.1	22.35
3	8	7		22.34	21.85	22.49
3	15	0		22.94	22.57	22.48
3	1	0	16-QAM	21.45	22.25	22.46
3	1	7		23.47	21.75	22.15
3	1	14		21.6	21.26	21.29
3	8	0		22.11	21.27	21.82
3	8	4		21.65	20.8	21.4
3	8	7		20.93	22.22	21.35
3	15	0		22.3	21.34	21.76



LTE Band 25 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
5	1	0	QPSK	22.37	22.2	23.08
5	1	12		24.52	22.84	24.15
5	1	24		23.61	23.8	23.32
5	12	0		22.86	22.47	22.33
5	12	6		21.86	22.58	22.64
5	12	11		22.66	21.63	22.55
5	25	0		23.32	22.39	22.55
5	1	0	16-QAM	21.68	22.2	21.85
5	1	12		23.44	22.03	21.67
5	1	24		21.77	21.9	21.05
5	12	0		22.17	21.77	22.5
5	12	6		21.32	20.88	20.84
5	12	11		21.2	22.07	21.1
5	25	0		22.51	21.13	21.66
10	1	0	QPSK	22.11	22.59	23.23
10	1	24		24.35	23.56	23.6
10	1	49		23.12	23.37	23.8
10	25	0		22.67	23.08	22.67
10	25	12		22.42	22.85	23.03
10	25	24		22.58	21.23	23.22
10	50	0		23.43	22.62	22.22
10	1	0	16-QAM	22	21.97	21.92
10	1	24		23.47	21.7	22.15
10	1	49		21.36	21.63	21.44
10	25	0		21.66	21.15	21.75
10	25	12		20.79	20.81	20.75
10	25	24		21.24	21.64	20.79
10	50	0		22.19	21.23	21.29



LTE Band 25 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
15	1	0	QPSK	22.2	21.99	23.06
15	1	37		24.53	23.09	23.9
15	1	74		23.25	23.54	23.85
15	36	0		23.45	23.07	22.48
15	36	18		21.98	22.67	22.84
15	36	39		22.21	21.86	23.27
15	75	0		22.96	23.08	22.54
15	1	0	16-QAM	22.05	22.57	22.02
15	1	38		22.6	22.08	22.26
15	1	75		21.27	21.82	20.86
15	36	0		21.45	21.83	22.13
15	36	18		20.92	20.69	21
15	36	39		21.51	21.99	21.22
15	75	0		22.01	21.45	21.1
20	1	0	QPSK	21.56	22.67	22.61
20	1	49		24.36	23.64	23.91
20	1	99		23.35	23.3	23.7
20	50	0		23.16	22.91	22.79
20	50	24		22.45	22.18	22.64
20	50	49		21.94	21.88	23.15
20	100	0		23.09	23.02	22.99
20	1	0	16-QAM	21.58	22.36	22.27
20	1	49		23.28	21.47	22.15
20	1	99		21.2	21.8	20.74
20	50	0		22.07	21.53	22.06
20	50	24		21.03	20.89	21.26
20	50	49		21.06	22.44	21.06
20	100	0		22.58	21.46	21.81



LTE Band 26-1 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
1.4	1	0	QPSK	21.38	21.95	22.52
1.4	1	2		23.83	22.79	23.38
1.4	1	5		22.87	22.88	23.04
1.4	3	0		22.51	22.36	22.24
1.4	3	1		21.55	21.87	22.2
1.4	3	2		21.79	21.03	22.29
1.4	6	0		22.62	22.25	22.06
1.4	1	0	16-QAM	21.06	21.92	21.74
1.4	1	2		22.56	21.37	21.6
1.4	1	5		21.05	21.24	20.59
1.4	3	0		21.22	21.11	21.68
1.4	3	1		20.71	20.26	20.69
1.4	3	2		20.67	21.57	20.62
1.4	6	0		21.61	20.7	20.95
3	1	0	QPSK	21.66	22.23	22.8
3	1	7		23.09	22.05	22.64
3	1	14		22.74	22.75	22.91
3	8	0		22.17	22.02	21.9
3	8	4		21.69	22.01	22.34
3	8	7		22.04	21.28	22.54
3	15	0		21.98	21.61	21.42
3	1	0	16-QAM	20.26	21.12	20.94
3	1	7		22.53	21.34	21.57
3	1	14		21.84	22.03	21.38
3	8	0		20.92	20.81	21.38
3	8	4		20.92	20.47	20.9
3	8	7		20.47	21.37	20.42
3	15	0		21.09	20.18	20.43



LTE Band 26 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
5	1	0	QPSK	22.07	22.64	23.21
5	1	12		23.15	22.11	22.7
5	1	24		22.45	22.46	22.62
5	12	0		22.36	22.21	22.09
5	12	6		21.5	21.82	22.15
5	12	11		22.08	21.32	22.58
5	25	0		22.25	21.88	21.69
5	1	0	16-QAM	21.08	21.94	21.76
5	1	12		22.55	21.36	21.59
5	1	24		21.25	21.44	20.79
5	12	0		21.32	21.21	21.78
5	12	6		21.11	20.66	21.09
5	12	11		20.5	21.4	20.45
5	25	0		21.29	20.38	20.63
10	1	0	QPSK	21.32	21.89	22.46
10	1	24		23.53	22.49	23.08
10	1	49		23.33	23.34	23.5
10	25	0		22.24	22.09	21.97
10	25	12		21.26	21.58	21.91
10	25	24		21.68	20.92	22.18
10	50	0		22.72	22.35	22.16
10	1	0	16-QAM	21	21.86	21.68
10	1	24		22.89	21.7	21.93
10	1	49		21.21	21.4	20.75
10	25	0		21.28	21.17	21.74
10	25	12		20.59	20.14	20.57
10	25	24		21.29	22.19	21.24
10	50	0		21.8	20.89	21.14



LTE BAND 26-2

LTE Band 26-2 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
1.4	1	0	QPSK	21.23	21.8	22.37
1.4	1	2		23.82	22.78	23.37
1.4	1	5		22.89	22.9	23.06
1.4	3	0		21.79	21.64	21.52
1.4	3	1		21.96	22.28	22.61
1.4	3	2		21.97	21.21	22.47
1.4	6	0		22.85	22.48	22.29
1.4	1	0	16-QAM	20.48	21.34	21.16
1.4	1	2		22.61	21.42	21.65
1.4	1	5		21.97	22.16	21.51
1.4	3	0		20.9	20.79	21.36
1.4	3	1		20.98	20.53	20.96
1.4	3	2		21.4	22.3	21.35
1.4	6	0		21.57	20.66	20.91
3	1	0	QPSK	22.03	22.6	23.17
3	1	7		23.28	22.24	22.83
3	1	14		22.5	22.51	22.67
3	8	0		22.44	22.29	22.17
3	8	4		21.44	21.76	22.09
3	8	7		21.5	20.74	22
3	15	0		22.36	21.99	21.8
3	1	0	16-QAM	20.3	21.16	20.98
3	1	7		22.79	21.6	21.83
3	1	14		21.22	21.41	20.76
3	8	0		20.56	20.45	21.02
3	8	4		21.4	20.95	21.38
3	8	7		21.04	21.94	20.99
3	15	0		20.98	20.07	20.32



LTE Band 26 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
5	1	0	QPSK	21.82	22.39	22.96
5	1	12		23.32	22.28	22.87
5	1	24		23.26	23.27	23.43
5	12	0		21.93	21.78	21.66
5	12	6		21.89	22.21	22.54
5	12	11		21.97	21.21	22.47
5	25	0		22.08	21.71	21.52
5	1	0	16-QAM	21.09	21.95	21.77
5	1	12		23.16	21.97	22.2
5	1	24		21.93	22.12	21.47
5	12	0		20.63	20.52	21.09
5	12	6		20.78	20.33	20.76
5	12	11		21.35	22.25	21.3
5	25	0		21	20.09	20.34
10	1	0	QPSK	22.15	22.72	23.29
10	1	24		23.82	22.78	23.37
10	1	49		23.04	23.05	23.21
10	25	0		22.18	22.03	21.91
10	25	12		21.24	21.56	21.89
10	25	24		21.71	20.95	22.21
10	50	0		22.15	21.78	21.59
10	1	0	16-QAM	20.41	21.27	21.09
10	1	24		22.36	21.17	21.4
10	1	49		21.37	21.56	20.91
10	25	0		20.62	20.51	21.08
10	25	12		21	20.55	20.98
10	25	24		20.69	21.59	20.64
10	50	0		21.68	20.77	21.02



LTE Band 26 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
15	1	0	QPSK	21.82	22.39	22.96
15	1	38		23.69	22.65	23.24
15	1	74		22.98	22.99	23.15
15	38	0		21.89	21.74	21.62
15	38	18		21.12	21.44	21.77
15	38	37		21.37	20.61	21.87
15	75	0		22.73	22.36	22.17
15	1	0	16-QAM	20.34	21.2	21.02
15	1	38		22.46	21.27	21.5
15	1	74		21.85	22.04	21.39
15	12	0		20.6	20.49	21.06
15	12	18		21.21	20.76	21.19
15	12	37		20.99	21.89	20.94
15	25	0		21.31	20.4	20.65



LTE BAND 38

LTE Band 38 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
5	1	0	QPSK	22.43	22.31	22.65
5	1	12		23.82	23.59	23.26
5	1	24		23.14	23	22.92
5	12	0		21.99	21.79	22.62
5	12	6		22.18	21.91	22.37
5	12	11		22.04	21.46	21.79
5	25	0		22.46	22.09	22.32
5	1	0	16-QAM	21.79	21.24	21.52
5	1	12		21.81	21.42	21.76
5	1	24		21.31	21.33	21.45
5	12	0		20.49	20.04	21.35
5	12	6		21.24	20.41	20.93
5	12	11		20.43	19.93	21.01
5	25	0		20.82	20.77	21.06
10	1	0	QPSK	23.16	22.8	23.36
10	1	24		22.84	23	23.68
10	1	49		23.34	23.28	23.87
10	25	0		22.84	22.53	22.58
10	25	12		22.79	22.7	22.47
10	25	24		21.48	21.48	22.07
10	50	0		23.04	22.67	23.28
10	1	0	16-QAM	22.6	21.72	21.73
10	1	24		22.17	21.58	21.92
10	1	49		22.18	22.38	21.6
10	25	0		22.21	21.69	21.68
10	25	12		21.13	21.29	20.88
10	25	24		20.86	21.26	20.9
10	50	0		21.23	20.97	20.88



LTE Band 38 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
15	1	0	QPSK	23.44	23.3	24.08
15	1	37		22.58	22.64	22.82
15	1	74		23.31	23.48	23.09
15	36	0		22.65	22.02	23.01
15	36	18		22.83	22.59	22.39
15	36	39		22.02	21.19	21.55
15	75	0		21.55	21.02	21.4
15	1	0	16-QAM	22.83	22.19	22.36
15	1	38		22.64	22.68	22.39
15	1	75		22.57	22.44	22.52
15	36	0		22.55	21.84	22.71
15	36	18		22.91	21.79	22.71
15	36	39		21.72	21.81	22.19
15	75	0		21.29	20.61	20.92
20	1	0	QPSK	21.21	21.78	22.35
20	1	49		23.47	22.43	23.02
20	1	99		22.59	22.6	22.76
20	50	0		22.4	22.25	22.13
20	50	24		21.38	21.7	22.03
20	50	49		21.96	21.2	22.46
20	100	0		22.85	22.48	22.29
20	1	0	16-QAM	21.03	21.89	21.71
20	1	49		22.71	21.52	21.75
20	1	99		22	22.19	21.54
20	50	0		21	20.89	21.46
20	50	24		21.05	20.6	21.03
20	50	49		21.05	21.95	21
20	100	0		21.83	20.92	21.17



LTE BAND 41

LTE Band 41 Maximum Average Power [dBm] 2555-2655M						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
5	1	0	QPSK	23.09	21.88	21.42
5	1	12		23.08	22.3	21.39
5	1	24		22.43	21.46	21.15
5	12	0		21.43	20.65	20.42
5	12	6		22.83	21.28	20.55
5	12	11		21.92	20.88	19.89
5	25	0		21.84	20.35	20.6
5	1	0	16-QAM	22.84	21.62	20.95
5	1	12		22.25	21.96	21.03
5	1	24		21.09	20.32	20.01
5	12	0		20.92	19.11	20.02
5	12	6		21.03	20.06	19.69
5	12	11		21.09	19.8	20.09
5	25	0		20.85	19.83	18.74
10	1	0	QPSK	23.6	22.36	21.31
10	1	24		23.55	22.42	22.37
10	1	49		22.42	21.5	21.78
10	25	0		21.9	20.95	20.79
10	25	12		21.88	21.26	20.53
10	25	24		21.5	21.54	20.99
10	50	0		21.23	21.28	20.57
10	1	0	16-QAM	21.73	20.69	20.19
10	1	24		22.17	21.07	21.01
10	1	49		21.72	20.65	21.07
10	25	0		21.19	19.66	19.34
10	25	12		21.22	19.69	19.1
10	25	24		21.11	19.77	19.67
10	50	0		21.6	19.73	19.69



LTE Band 41 Maximum Average Power [dBm] 2555-2655M						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
15	1	0	QPSK	23.69	22.06	21.68
15	1	37		23.25	22.65	21.32
15	1	74		22.27	22.01	21.44
15	36	0		21.89	21.38	20.78
15	36	18		21.44	20.25	19.99
15	36	39		21.49	20.71	19.93
15	75	0		21.23	20.71	20.78
15	1	0	16-QAM	23.03	21.4	20.79
15	1	38		21.12	20.66	20.3
15	1	75		20.82	20.88	20.71
15	36	0		21.99	20.81	20.99
15	36	18		22.06	20.75	20.88
15	36	39		21.36	21.74	20.48
15	75	0		20.86	20.19	19.05
20	1	0	QPSK	23.81	22.96	22.68
20	1	49		22.4	22.01	21.66
20	1	99		22	21.46	21.99
20	50	0		21.4	20.79	19.94
20	50	24		21.65	20.6	20.37
20	50	49		21.34	21.05	20.29
20	100	0		21.32	20.76	20.37
20	1	0	16-QAM	22.24	20.48	20.31
20	1	49		21.22	20.61	20.09
20	1	99		21.06	20.62	19.72
20	50	0		21.04	19.51	19
20	50	24		20.87	20.22	19.71
20	50	49		21.03	20.13	20.15
20	100	0		20.55	20.42	19.58



LTE BAND 66

LTE Band 66 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
1.4	1	0	QPSK	23.68	23.97	23.24
1.4	1	2		23.42	23.58	24.03
1.4	1	5		23.61	23.39	23.66
1.4	3	0		24.18	23.39	24.34
1.4	3	1		22.92	22.88	23.14
1.4	3	2		22.74	23.14	23.35
1.4	6	0		22.53	22.27	22.28
1.4	1	0	16-QAM	22.89	22.72	22.82
1.4	1	2		22.49	22.17	22.56
1.4	1	5		22.99	21.84	22.4
1.4	3	0		22.64	21.52	22.36
1.4	3	1		22.17	22.11	22.33
1.4	3	2		22.64	21.42	21.95
1.4	6	0		22.03	21.06	21.98
3	1	0	QPSK	23.69	23.29	24.37
3	1	7		23.72	23.41	23.33
3	1	14		22.87	23.38	23.08
3	8	0		22.79	22.32	22.57
3	8	4		23.38	22.4	22.73
3	8	7		22.98	22.34	22.93
3	15	0		21.79	21.75	21.71
3	1	0	16-QAM	22.11	21.84	22.1
3	1	7		23.03	22.53	22.07
3	1	14		23.36	23.12	23.3
3	8	0		22.19	22	22.1
3	8	4		21.29	21	21.29
3	8	7		21.45	21.27	20.67
3	15	0		21.7	21.52	22.03



LTE Band 66 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
5	1	0	QPSK	23.67	23.56	23.86
5	1	12		23.59	23.92	23.91
5	1	24		22.95	23.1	23.14
5	12	0		21.74	21.59	21.88
5	12	6		22.52	23.07	23.45
5	12	11		22.38	22.19	22.8
5	25	0		22.03	21.59	21.9
5	1	0	16-QAM	22.41	21.45	22.16
5	1	12		22.75	22.58	22.24
5	1	24		22.12	21.94	22.26
5	12	0		20.6	20.4	20.81
5	12	6		21.1	21.06	21.02
5	12	11		21.87	21.16	21.88
5	25	0		21.46	21.24	21.31
10	1	0	QPSK	23.43	23.59	24.04
10	1	24		23.62	23.55	23.83
10	1	49		23.6	23.22	24.09
10	25	0		22.22	22.65	22.27
10	25	12		22.27	22.13	23.1
10	25	24		22.6	22.34	22.74
10	50	0		22.55	22.16	22.82
10	1	0	16-QAM	21.93	22.33	22.16
10	1	24		21.63	22.28	22.8
10	1	49		23.02	22.18	23.3
10	25	0		21.59	20.97	21.19
10	25	12		21.53	21.05	21.56
10	25	24		21.97	21.61	21.41
10	50	0		21.13	20.96	21.1



LTE Band 66 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
15	1	0	QPSK	22.93	22.78	22.78
15	1	37		22.75	22.92	23.13
15	1	74		23.94	23.36	24.42
15	36	0		21.83	22.53	21.7
15	36	18		22.51	22.73	22.47
15	36	39		21.84	22.48	22.34
15	75	0		22.74	22.6	22.68
15	1	0	16-QAM	21.79	22.63	22.27
15	1	38		22.07	22.26	22.35
15	1	75		22.08	21.52	21.91
15	36	0		21.95	22.05	22.27
15	36	18		22.78	22.45	22.32
15	36	39		21.64	21.8	22.8
15	75	0		20.49	21.1	20.84
20	1	0	QPSK	23.47	23.91	22.76
20	1	49		22.83	22.73	23.36
20	1	99		23.97	23.3	23.17
20	50	0		22.79	22.24	22.87
20	50	24		22.5	21.95	22.1
20	50	49		21.57	21.34	22.11
20	100	0		23.14	22.15	22.74
20	1	0	16-QAM	22.2	23.05	22.86
20	1	49		22.68	22.42	22.89
20	1	99		21.95	22.07	22.57
20	50	0		21.95	21.74	21.87
20	50	24		21.15	21.37	20.81
20	50	49		20.95	21.44	21.47
20	100	0		20.59	20.75	20.28