SAR TEST REPORT

Applicant	TCL Communication Ltd.
FCC ID	2ACCJB229
Product	Tablet PC
Brand	TCL
Model	9185W
Report No.	EFTA25010145-IE-01-S1
Issue Date	March 12, 2025

Eurofins TA Technology (Shanghai) Co., Ltd. tested the above equipment in accordance with the requirements in **IEEE 1528-2013, ANSI C95.1: 1992, IEEE C95.1: 1991.** The test results show that the equipment tested is capable of demonstrating compliance with the requirements as documented in this report.

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1 Test Laboratory

1.1 Notes of the Test Report

This report shall not be reproduced in full or partial, without the written approval of **Eurofins TA Technology (Shanghai) Co., Ltd.** The results documented in this report apply only to the tested sample, under the conditions and modes of operation as described herein. Measurement Uncertainties were not taken into account and are published for informational purposes only. This report is written to support regulatory compliance of the applicable standards stated above.

1.2 Test Facility

FCC (Designation number: CN1179, Test Firm Registration Number: 446626)

Eurofins TA Technology (Shanghai) Co., Ltd. has been listed on the US Federal Communications Commission list of test facilities recognized to perform measurements.

A2LA (Certificate Number: 3857.01)

Eurofins TA Technology (Shanghai) Co., Ltd. has been listed by American Association for Laboratory Accreditation to perform measurement.

1.3 Testing Location

Company:	Eurofins TA Technology (Shanghai) Co., Ltd.
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1.4 Laboratory Environment

Temperature	Min. = 18°C, Max. = 25°C
Relative humidity	Min. = 20%, Max. = 80%
Ground system resistance	< 0.5 Ω
Ambient noise is checked and found very low and in compliance with requirement of standards. Reflection of surrounding objects is minimized and in compliance with requirement of standards.	

2 Statement of Compliance

The maximum results of Specific Absorption Rate (SAR) found during testing for the EUT are as follows:

Table 1: Highest Reported SAR

Mode	Highest Reported SAR (W/kg)
	1g Body SAR (Separation 0mm)
GSM 850	1.23
GSM 1900	1.17
WCDMA Band II	1.28
WCDMA Band IV	0.98
WCDMA Band V	1.04
LTE Band 2/25	1.28
LTE Band 5	0.97
LTE Band 7	1.29
LTE Band 12	1.19
LTE Band 26	1.08
LTE Band 41/38	1.17
LTE Band 4/66	1.11
LTE Band 71	0.80
NR Band n25	1.15
NR Band n41	0.89
NR Band n66	1.27
NR Band n71	0.59
Wi-Fi (2.4GHz)	1.25
Wi-Fi (5GHz)	1.19
Bluetooth	0.39
Date of Testing: February 13, 2025 ~ March 5, 2025 Date of Sample Received: January 24, 2025	
Note: 1. The device is in compliance with SAR for Uncontrolled Environment /General Population exposure limits (1.6 W/kg) specified in ANSI C95.1: 1992/IEEE C95.1: 1991, and had been tested in accordance with the measurement methods and procedures specified in IEEE 1528-2013. 2. All indications of Pass/Fail in this report are opinions expressed by Eurofins TA	

Technology (Shanghai) Co., Ltd. based on interpretations and/or observations of test results. Measurement Uncertainties were not taken into account and are published for informational purposes only.

Note:

1) According to TCB workshop October, 2014 RF Exposure Procedures Update (Overlapping LTE Bands):

SAR for LTE Band 2 (Frequency range: 1850 ~ 1910 MHz) is covered by LTE Band 25 (Frequency range 1850 ~ 1915 MHz); SAR for LTE Band 4 (Frequency range 1710-1755 MHz) is covered by LTE Band 66 (Frequency range: 1710-1780 MHz); SAR for LTE Band 38 (Frequency range: 2570 ~ 2620 MHz) is covered by LTE Band 41 (Frequency range 2496 ~ 2690 MHz) due to similar frequency range, same maximum tune up limit and same channel bandwidth.

Table 2: Highest Simultaneous Transmission SAR

Exposure Configuration	Position	1g Body SAR (Separation 0mm)
Highest Simultaneous Transmission SAR (W/kg)	Back Side (NR n71 + Wi-Fi 2.4GHz + Bluetooth)	1.56
Note: The detail for simultaneous transmission consideration is described in chapter 10.2.		

3 Description of Equipment Under Test

Client Information

Applicant	TCL Communication Ltd.
Applicant address	5/F, Building 22E, 22 Science Park East Avenue, Hong Kong Science Park, shatin, NT, Hong Kong
Manufacturer	TCL Communication Ltd.
Manufacturer address	5/F, Building 22E, 22 Science Park East Avenue, Hong Kong Science Park, shatin, NT, Hong Kong

General Technologies

EUT Stage	Identical Prototype
Model	9185W
IMEI	016645000021364
Hardware Version	05
Software Version	4J3M
Antenna Type	Internal Antenna
Power Class	GSM 850: 4 GSM 1900: 1 WCDMA Band II/IV/V: 3 LTE 2/4/5/7/12/25/26/38/41/66/71: 3 NR n25/n66/n71: 3 LTE 41: 2 NR n41: 2
Power Level	GSM 850: level 5 GSM 1900: level 0 WCDMA Band II/IV/V: all up bits LTE 2/4/5/7/12/25/26/38/41/66/71: max power NR n25/n41/n66/n71: max power
EUT Accessory	
Battery	Manufacturer: Veken Model: TLp058C7
Data Cable	Manufacturer: PUAN Model: CDA0000296C8
Note: The EUT is sent from the applicant to Eurofins TA and the information of the EUT is declared by the applicant.	

Wireless Technology and Frequency Range

Wireless Technology		Modulation	Operating mode	Tx (MHz)	Rx (MHz)
GSM	850	GPRS(GMSK) EGPRS(GMSK,8PSK)	☐Multi-slot Class:8-1UP ☐Multi-slot Class:10-2UP ☒Multi-slot Class:12-4UP ☐Multi-slot Class:33-4UP	824 ~ 849	869 ~ 894
	1900			1850 ~ 1910	1930 ~ 1990
	Does this device support DTM (Dual Transfer Mode)? ☐Yes ☒No				
WCDMA	Band II	QPSK, 16QAM	DL Category: 24 UL Category: 7	1850 ~ 1910	1930 ~ 1990
	Band IV			1710 ~ 1755	2110 ~ 2155
	Band V			824 ~ 849	869 ~ 894
LTE	FDD 2	QPSK, 16QAM, 64QAM, 256QAM	Rel.15 /Category 6	1850 ~ 1910	1930 ~ 1990
	FDD 4			1710 ~ 1755	2110 ~ 2155
	FDD 5			824 ~ 849	869 ~ 894
	FDD 7			2500 ~ 2570	2620 ~ 2690
	FDD 12			699 ~ 716	729 ~ 746
	FDD 25			1850 ~ 1915	1930 ~ 1995
	FDD 26			814 ~ 849	859 ~ 894
	TDD 38			2570 ~ 2620	2570 ~ 2620
	TDD 41			2496 ~ 2690	2496 ~ 2690
	FDD 66			1710 ~ 1780	2110 ~ 2180
	FDD 71			663 ~ 698	617 ~ 652
	Does this device support Carrier Aggregation (CA) ☒Yes downlink only ☐No				
	Does this device support SV-LTE (1xRTT-LTE)? ☐Yes ☒No				
NR	n25	CP-OFDM: QPSK, 16QAM, 64QAM, 256QAM; DFT-s OFDM: PI/2 BPSK, QPSK, 16QAM, 64QAM, 256QAM	Rel. 16	1850 ~ 1915	1930 ~ 1995
	n41			2496 ~ 2690	2496 ~ 2690
	n66			1710 ~ 1780	2110 ~ 2180
	n71			663 ~ 698	617 ~ 652
Bluetooth	2.4GHz	Version 5.2 BR/EDR + LE		2402 ~2480	2402 ~2480
Wi-Fi	2.4GHz	DSSS, OFDM	802.11b/g/n HT20	2412 ~ 2462	2412 ~ 2462
		OFDM	802.11n HT40	2422 ~ 2452	2422 ~ 2452
	5GHz	OFDM	802.11a/n HT20/ HT40/ ac VHT20/ VHT40/ VHT80	5150 ~ 5250 5250 ~ 5350 5470 ~ 5725 5725 ~ 5850	5150 ~ 5250 5250 ~ 5350 5470 ~ 5725 5725 ~ 5850
	Does this device support MIMO ☐Yes ☒No				

4 Test Specification, Methods and Procedures

The tests documented in this report were performed in accordance with FCC 47 CFR § 2.1093, IEEE 1528- 2013, ANSI C95.1: 1992, IEEE C95.1: 1991, the following FCC Published RF exposure KDB procedures:

KDB 248227 D01 802.11Wi-Fi SAR v02r02
KDB 447498 D01 General RF Exposure Guidance v06
KDB 690783 D01 SAR Listings on Grants v01r03
KDB 865664 D01 SAR measurement 100 MHz to 6 GHz v01r04
KDB 865664 D02 RF Exposure Reporting v01r02
KDB 941225 D01 3G SAR Procedures v03r01
KDB 941225 D05 SAR for LTE Devices v02r05
KDB 941225 D05A LTE Rel.10 KDB Inquiry Sheet v01r02
KDB 616217 D04 SAR for laptop and tablets v01r02

5 Operational Conditions during Test

5.1 Test Positions

According to KDB 616217 D04, SAR evaluation is required for back surface and edges of the devices. The back surface and edges of the tablet are tested with the tablet touching the phantom. Exposures from antennas through the front surface of the display section of a tablet are generally limited to the user's hands. Exposures to hands for typical consumer transmitters used in tablets are not expected to exceed the extremity SAR limit; therefore, SAR evaluation for the front surface of tablet display screens are generally not necessary. When voice mode is supported on a tablet and it is limited to speaker mode or headset operations only, additional SAR testing for this type of voice use is not required.

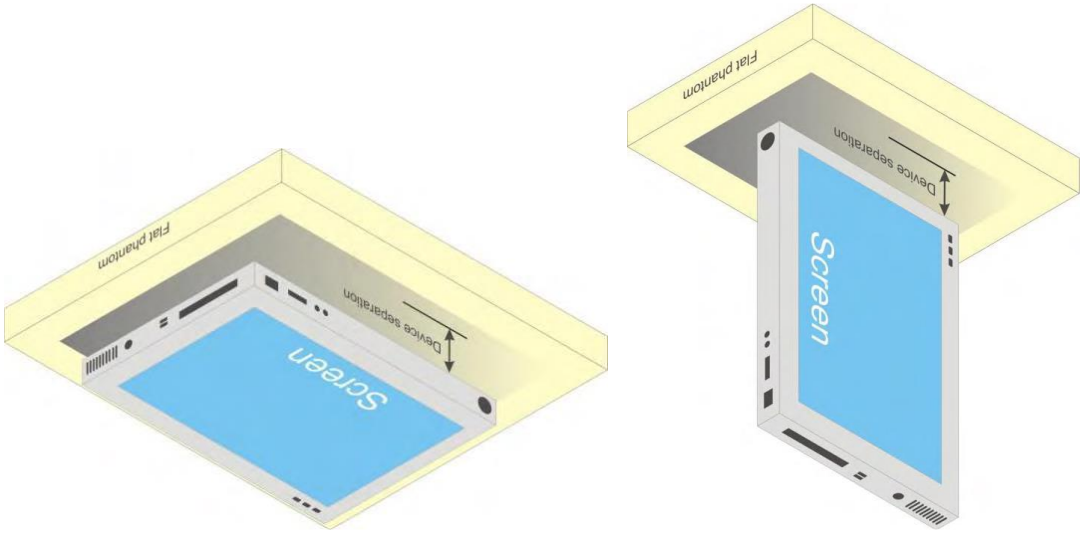


Fig-4.1 Illustration for Tablet Setup

According to KDB 447498 D01, the SAR test exclusion condition is based on source-based time-averaged maximum conducted output power, adjusted for tune-up tolerance, and the minimum test separation distance required for the exposure conditions. The SAR exclusion threshold is determined by the following formula.

(1) The SAR exclusion threshold for distances ≤50mm is defined by the following equation:

$$\frac{\text{(max. power of channel, including tune-up tolerance, mW)}}{\text{(min. test separation distance, mm)}} * \sqrt{\text{Frequency (GHz)}} \leq 3.0$$

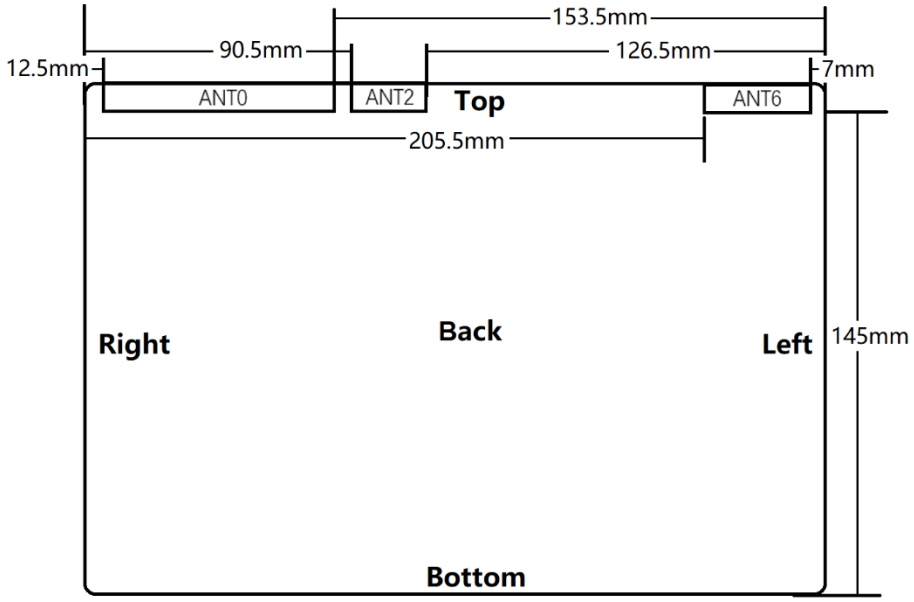
(2) The SAR exclusion threshold for distances ＞50mm is defined by the following equation, as illustrated in KDB 447498 D01 Appendix B:

a) at 100 MHz to 1500 MHz

[Power allowed at numeric Threshold at 50 mm in step 1) + (test separation distance - 50 mm) · (f (MHz)/150)] mW

b) at > 1500 MHz and ≤ 6 GHz

[Power allowed at numeric Threshold at 50 mm in step 1) + (test separation distance - 50 mm) ·10] mW



ANT0: GSM 850/1900
WCDMA 2/4/5
LTE 2/4/5/12/25/26/66/71
NR n25/n66/n71
ANT2: LTE 7/38/41/NR n41
ANT6: Wi-Fi 2.4G/5G/Bluetooth

Band	Ant	Frequency (MHz)	Max. Tune-up Power (dBm)	Back Side			Left Edge			Right Edge			Top Edge			Bottom Edge		
				Ant. To Surgace (mm)	Evaluation	Conclusion	Ant. To Surgace (mm)	Evaluation	Conclusion	Ant. To Surgace (mm)	Evaluation	Conclusion	Ant. To Surgace (mm)	Evaluation	Conclusion	Ant. To Surgace (mm)	Evaluation	Conclusion
GSM 850	ANT0	824	33.00	0	362.24	Yes	153.5	604.78	Yes	12.5	144.90	Yes	0	362.24	Yes	145	558.09	Yes
GSM 1900	ANT0	1850	30.00	0	272.03	Yes	153.5	1062.20	No	12.5	108.81	Yes	0	272.03	Yes	145	977.20	Yes
WCDMA II	ANT0	1850	24.00	0	68.33	Yes	153.5	1041.83	No	12.5	27.33	Yes	0	68.33	Yes	145	956.83	No
WCDMA IV	ANT0	1710	24.00	0	65.69	Yes	153.5	1041.57	No	12.5	26.28	Yes	0	65.69	Yes	145	956.57	No
WCDMA V	ANT0	824	24.00	0	45.60	Yes	153.5	573.12	No	12.5	18.24	Yes	0	45.60	Yes	145	526.43	No
LTE 2	ANT0	1850	24.00	0	68.33	Yes	153.5	1041.83	No	12.5	27.33	Yes	0	68.33	Yes	145	956.83	No
LTE 4	ANT0	1710	24.00	0	65.69	Yes	153.5	1041.57	No	12.5	26.28	Yes	0	65.69	Yes	145	956.57	No
LTE 5	ANT0	824	24.00	0	45.60	Yes	153.5	573.12	No	12.5	18.24	Yes	0	45.60	Yes	145	526.43	No
LTE 7	ANT2	2500	24.00	0	79.43	Yes	126.5	772.94	No	90.5	412.94	No	0	79.43	Yes	145	957.94	No
LTE 12	ANT0	699	24.00	0	42.00	Yes	153.5	486.51	No	12.5	16.80	Yes	0	42.00	Yes	145	446.90	No
LTE 25	ANT0	1850	24.00	0	68.33	Yes	153.5	1041.83	No	12.5	27.33	Yes	0	68.33	Yes	145	956.83	No
LTE 26	ANT0	814	24.00	0	45.33	Yes	153.5	566.19	No	12.5	18.13	Yes	0	45.33	Yes	145	520.07	No
LTE 38	ANT2	2570	24.00	0	80.54	Yes	126.5	773.05	No	90.5	413.05	No	0	80.54	Yes	145	958.05	No
LTE 41 PC3	ANT2	2496	24.00	0	79.37	Yes	126.5	772.94	No	90.5	412.94	No	0	79.37	Yes	145	957.94	No
LTE 41 PC2	ANT2	2496	26.50	0	141.14	Yes	126.5	779.11	No	90.5	419.11	Yes	0	141.14	Yes	145	964.11	No
LTE 66	ANT0	1710	24.00	0	65.69	Yes	153.5	1041.57	No	12.5	26.28	Yes	0	65.69	Yes	145	956.57	No
LTE 71	ANT0	663	24.00	0	40.91	Yes	153.5	461.56	No	12.5	16.36	Yes	0	40.91	Yes	145	423.99	No
NR n25	ANT0	1850	24.00	0	68.33	Yes	153.5	1041.83	No	12.5	27.33	Yes	0	68.33	Yes	145	956.83	No
NR n41 PC2	ANT2	2496	26.50	0	141.14	Yes	126.5	779.11	No	90.5	419.11	Yes	0	141.14	Yes	145	964.11	No
NR n66	ANT0	1710	24.00	0	65.69	Yes	153.5	1041.57	No	12.5	26.28	Yes	0	65.69	Yes	145	956.57	No
NR n71	ANT0	663	24.00	0	40.91	Yes	153.5	461.56	No	12.5	16.36	Yes	0	40.91	Yes	145	423.99	No
Wi-Fi 2.4GHz	ANT6	2412	19.50	0	27.68	Yes	7	19.77	Yes	205.5	1557.77	No	0	27.68	Yes	145	952.77	No
Wi-Fi 5GHz	ANT6	5150	19.00	0	36.05	Yes	7	25.75	Yes	205.5	1558.61	No	0	36.05	Yes	145	953.61	No
Bluetooth	ANT6	2402	8.50	0	2.19	No	7	1.57	No	205.5	1555.22	No	0	2.19	No	145	950.22	No

5.2 Measurement Variability

Per FCC KDB Publication 865664 D01, SAR measurement variability was assessed for each frequency band, which was determined by the SAR probe calibration point and tissue-equivalent medium used for the device measurements. When both head and body tissue-equivalent media were required for SAR measurements in a frequency band, the variability measurement procedures were applied to the tissue medium with the highest measured SAR, using the highest measured SAR configuration for that tissue-equivalent medium. These additional measurements were repeated after the completion of all measurements requiring the same head or body tissue-equivalent medium in a frequency band. The test device was returned to ambient conditions (normal room temperature) with the battery fully charged before it was re-mounted on the device holder for the repeated measurement(s) to minimize any unexpected variations in the repeated results.

SAR Measurement Variability was assessed using the following procedures for each frequency band:
1) When the original highest measured SAR is ≥ 0.80 W/kg, the measurement was repeated once.
2) A second repeated measurement was preformed only if the ratio of largest to smallest SAR for the original and first repeated measurements was > 1.20 or when the original or repeated measurement was ≥ 1.45 W/kg (~ 10% from the 1-g SAR limit).
3) A third repeated measurement was performed only if the original, first or second repeated measurement was ≥ 1.5 W/kg and the ratio of largest to smallest SAR for the original, first and second repeated measurements is > 1.20.
4) Repeated measurements are not required when the original highest measured SAR is < 0.80 W/kg

The same procedures should be adapted for measurements according to extremity and occupational exposure limits by applying a factor of 2.5 for extremity exposure and a factor of 5 for occupational exposure to the corresponding SAR thresholds.

5.3 Test Configuration

5.2.1 GSM Test Configuration

According to specification 3GPP TS 51.010, the maximum power of the GSM can do the power reduction for the multi-slot. The allowed power reduction in the multi-slot configuration is as following:

Output power of reductions:

Table 3: The allowed power reduction in the multi-slot configuration

Number of timeslots in uplink assignment	Permissible nominal reduction of maximum output power (dB)
1	0
2	0 to 3,0
3	1,8 to 4,8
4	3,0 to 6,0

SAR test reduction for GPRS and EDGE modes is determined by the source-based time-averaged output power specified for production units, including tune-up tolerance. The data mode with highest specified time-averaged output power should be tested for SAR compliance in the applicable exposure conditions. For modes with the same specified maximum output power and tolerance, the higher number time-slot configuration should be tested. GSM voice and GPRS data use GMSK, which is a constant amplitude modulation with minimal peak to average power difference within the time-slot burst. For EDGE, GMSK is used for MCS 1 – MCS 4 and 8-PSK is used for MCS 5 – MCS 9; where 8-PSK has an inherently higher peak-to-average power ratio. The GMSK and 8-PSK EDGE configurations are considered separately for SAR compliance. The GMSK EDGE configurations are grouped with GPRS and considered with respect to time-averaged maximum output power to determine compliance. The 3G SAR test reduction procedure is applied to 8-PSK EDGE with GMSK GPRS/EDGE as the primary mode.

5.2.2 WCDMA Test Configuration

5.2.2.1 3G SAR Test Reduction Procedure

The default test configuration is to measure SAR with an established radio link between the EUT and a communication test set using a 12.2 kbps RMC (reference measurement channel) configured in Test Loop Mode 1. SAR is selectively confirmed for other physical channel configurations modes according to output power, exposure conditions and device operating capabilities. Maximum output power is verified by applying the applicable versions of 3GPP TS 34.121.

5.2.2.2 Body-worn Accessory SAR

SAR for body-worn accessory configurations is measured using a 12.2 kbps RMC with TPC bits configured to all “1’s”. The 3G SAR test reduction procedure is applied to other spreading codes and multiple DPDCHn configurations supported by the EUT with 12.2 kbps RMC as the primary mode. Otherwise, SAR is measured using an applicable RMC configuration with the corresponding spreading code or DPDCHn, for the highest reported body-worn accessory exposure SAR

configuration in 12.2 kbps RMC. When more than 2 DPDCHn are supported by the EUT, it may be necessary to configure additional DPDCHn using FTM (Factory Test Mode) or other chipset based test approaches with parameters similar to those used in 384 kbps and 768 kbps RMC

5.2.2.3 Release 5 HSDPA Test Configuration

The 3G SAR test reduction procedure is applied to HSDPA body-worn accessory configurations with 12.2 kbps RMC as the primary mode. Otherwise, SAR is measured for HSDPA using the HSDPA body SAR procedures in the "Release 5 HSDPA Data Devices" section of this document, for the highest SAR body-worn accessory exposure configuration in 12.2 kbps RMC. EUT with both HSDPA and HSUPA are tested according to Release 6 HSPA test procedures.

HSDPA should be configured according to the UE category of a test device. The number of HSDSCH/HS-PDSCHs, HARQ processes, minimum inter-TTI interval, transport block sizes and RV coding sequence are defined by the H-set. To maintain a consistent test configuration and stable transmission conditions, QPSK is used in the H-set for SAR testing. HS-DPCCH should be configured with a CQI feedback cycle of 4 ms with a CQI repetition factor of 2 to maintain a constant rate of active CQI slots. DPCCH and DPDCH gain factors (βc, βd), and HS-DPCCH power offset parameters (ΔACK, ΔNACK, ΔCQI) should be set according to values indicated in the Table below. The CQI value is determined by the UE category, transport block size, number of HS-PDSCHs and modulation used in the H-set.

Table 4: Subtests for WCDMA Release 5 HSDPA

Sub-set	β_c	β_d	β_d (SF)	β_c/β_d	β_{hs} (note 1, note 2)	CM(dB) (note 3)	MPR(dB)
1	2/15	15/15	64	2/15	4/15	0.0	0.0
2	12/15 (note 4)	15/15 (note 4)	64	12/15 (note 4)	24/15	1.0	0.0
3	15/15	8/15	64	15/8	30/15	1.5	0.5
4	15/15	4/15	64	15/4	30/15	1.5	0.5

Note 1: Δ_{ACK}, Δ_{NACK} and Δ_{CQI}= 8$\Leftrightarrow$$A_{hs}$ = β_{hs}/β_c=30/15$\Leftrightarrow$$\beta_{hs}$=30/15*$\beta_c$

Note 2: CM=1 for β_c/β_d =12/15, β_{hs}/β_c=24/15.

Note 3: For subtest 2 the β_c/β_d ratio of 12/15 for the TFC during the measurement period (TF1, TF0) is achieved by setting the signaled gain factors for the reference TFC (TFC1, TF1) to β_c=11/15 and β_d=15/15.

5.2.2.4 Release 6 HSUPA Test Configuration

The 3G SAR test reduction procedure is applied to HSPA (HSUPA/HSDPA with RMC) body-worn accessory configurations with 12.2 kbps RMC as the primary mode. Otherwise, SAR is measured for HSPA using the HSPA body SAR procedures in the "Release 6 HSPA Data Devices" section of this document, for the highest body-worn accessory exposure SAR configuration in 12.2 kbps RMC. When VOIP is applicable for next to the ear head exposure in HSPA, the 3G SAR test reduction procedure is applied to HSPA with 12.2 kbps RMC as the primary mode; otherwise, the same HSPA

configuration used for body-worn accessory measurements is tested for next to the ear head exposure.

Due to inner loop power control requirements in HSPA, a communication test set is required for output power and SAR tests. The 12.2 kbps RMC, FRC H-set 1 and E-DCH configurations for HSPA are configured according to the β values indicated in Table 2 and other applicable procedures described in the 'WCDMA EUT' and 'Release 5 HSDPA Data Devices' sections of this document

Table 5: Sub-Test 5 Setup for Release 6 HSUPA

Sub-set	β_c	β_d	β_d (SF)	β_c/β_d	β_{hs}(1)	β_{ec}	β_{ed}	β_{ed} (SF)	β_{ed} (codes)	CM (2) (dB)	MPR (dB)	AG(4) Index	E-TFCI
1	11/15(3)	15/15(3)	64	11/15(3)	22/15	209/225	1039/225	4	1	1.0	0.0	20	75
2	6/15	15/15	64	6/15	12/15	12/15	94/75	4	1	3.0	2.0	12	67
3	15/15	9/15	64	15/9	30/15	30/15	β_{ed1}:47/15 β_{ed2}:47/15	4	2	2.0	1.0	15	92
4	2/15	15/15	64	2/15	4/15	2/15	56/75	4	1	3.0	2.0	17	71
5	15/15(4)	15/15(4)	64	15/15(4)	30/15	24/15	134/15	4	1	1.0	0.0	21	81

Note 1: Δ_{ACK}, ΔNACK and Δ_{CQI} = 8 ⇔ $A_{hs} = \beta_{hs}/\beta_c$ = 30/15 ⇔β_{hs}= 30/15 *β_c.
Note 2: CM = 1 for β_c/β_d =12/15, β_{hs}/β_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.
Note 3: For subtest 1 the β_c/β_d ratio of 11/15 for the TFC during the measurement period (TF1, TF0) is achieved by setting the signaled gain factors for the reference TFC (TF1, TF1) to β_c = 10/15 and β_d = 15/15.
Note 4: For subtest 5 the β_c/β_d ratio of 15/15 for the TFC during the measurement period (TF1, TF0) is achieved by setting the signaled gain factors for the reference TFC (TF1, TF1) to β_c = 14/15 and β_d = 15/15.
Note 5: Testing UE using E-DPDCH Physical Layer category 1 Sub-test 3 is not required according to TS 25.306 Figure 5.1g.
Note 6: β_{ed} cannot be set directly; it is set by Absolute Grant Value.

Table 6: HSUPA UE Category

UE E-DCH Category	Maximum E-DCH Codes Transmitted	Number of HARQ Processes	E-DCHTTI (ms)	Minimum Spreading Factor	Maximum E-DCH Transport Block Bits	Max Rate (Mbps)
1	1	4	10	4	7110	0.7296
2	2	8	2	4	2798	1.4592
	2	4	10	4	14484	
3	2	4	10	4	14484	1.4592
4	2	8	2	2	5772	2.9185
	2	4	10	2	20000	2.00
5	2	4	10	2	20000	2.00
6 (No DPDCH)	4	8	2	2 SF2 & 2 SF4	11484	5.76
	4	4	10		20000	2.00
7 (No DPDCH)	4	8	2	2 SF2 & 2 SF4	22996	?

	4	4	10		20000	?
NOTE: When 4 codes are transmitted in parallel, two codes shall be transmitted with SF2 and two with SF4. UE Categories 1 to 6 supports QPSK only. UE Category 7 supports QPSK and 16QAM. (TS25.306-7.3.0)						

5.2.2.5 HSPA, HSPA+ and DC-HSDPA Test Configuration

SAR test exclusion may apply to 3GPP Rel. 6 HSPA and Rel. 8 DC-HSDPA. When SAR measurement is required for HSPA or DC-HSDPA, a KDB inquiry is required to confirm that the wireless mode configurations in the test setup have remained stable throughout the SAR measurements. Without prior KDB confirmation to determine the SAR results are acceptable, a PAG is required for equipment approval.

SAR test exclusion for HSPA, HSPA+ and DC-HSDPA is determined according to the following:

1) The HSPA procedures are applied to configure 3GPP Rel. 6 HSPA devices in the required sub-test mode(s) to determine SAR test exclusion.

2) SAR is required for Rel. 7 HSPA+ when SAR is required for Rel. 6 HSPA; otherwise, the 3G SAR test reduction procedure is applied to (uplink) HSPA+ with 12.2 kbps RMC as the primary mode. Power is measured for HSPA+ that supports uplink 16 QAM according to configurations in Table C.11.1.4 of 3GPP TS 34.121-1 to determine SAR test reduction.

3) SAR is required for Rel. 8 DC-HSDPA when SAR is required for Rel. 5 HSDPA; otherwise, the 3G SAR test reduction procedure is applied to DC-HSDPA with 12.2 kbps RMC as the primary mode. Power is measured for DC-HSDPA according to the H-Set 12, FRC configuration in Table C.8.1.12 of 3GPP TS 34.121-1 to determine SAR test reduction. A primary and a secondary serving HS-DSCH Cell are required to perform the power measurement and for the results to be acceptable.

4) Regardless of whether a PBA is required, the following information must be verified and included in the SAR report for devices supporting HSPA, HSPA+ or DC-HSDPA:

a) The output power measurement results and applicable release version(s) of 3GPP TS 34.121. Power measurement difficulties due to test equipment setup or availability must be resolved between the grantee and its test lab.

b) The power measurement results are in agreement with the individual device implementation and specifications. When Enhanced MPR (E-MPR) applies, the normal MPR targets may be modified according to the Cubic Metric (CM) measured by the device, which must be taken into consideration.

c) The UE category, operating parameters, such as the β and Δ values used to configure the device for testing, power setback procedures described in 3GPP TS 34.121 for the power measurements, and HSPA/HSPA+ channel conditions (active and stable) for the entire duration of the measurement according to the required E-TFCI and AG index values.

5) When SAR measurement is required, the test configurations, procedures and power measurement results must be clearly described to confirm that the required test parameters are used, including E-TFCI and AG index stability and output power conditions.

Table 7: HS-DSCH UE Category

<table>
<tr><th>HS-DSCH category</th><th>Maximum number of HS-DSCH codes received</th><th>Minimum inter-TTI interval</th><th>Maximum number of bits of an HS-DSCH transport block received within an HS-DSCH TTI NOTE 1</th><th>Total number of soft channel bits</th><th>Supported modulations without MIMO operation or dual cell operation</th><th>Supported modulations with MIMO operation and without dual cell operation</th><th>Supported modulations with dual cell operation</th></tr>
<tr><td>Category 1</td><td>5</td><td>3</td><td>7298</td><td>19200</td><td rowspan="10">QPSK, 16QAM</td><td rowspan="13">Not applicable (MIMO not supported)</td><td rowspan="20">Not applicable (dual cell operation not supported)</td></tr>
<tr><td>Category 2</td><td>5</td><td>3</td><td>7298</td><td>28800</td></tr>
<tr><td>Category 3</td><td>5</td><td>2</td><td>7298</td><td>28800</td></tr>
<tr><td>Category 4</td><td>5</td><td>2</td><td>7298</td><td>38400</td></tr>
<tr><td>Category 5</td><td>5</td><td>1</td><td>7298</td><td>57600</td></tr>
<tr><td>Category 6</td><td>5</td><td>1</td><td>7298</td><td>67200</td></tr>
<tr><td>Category 7</td><td>10</td><td>1</td><td>14411</td><td>115200</td></tr>
<tr><td>Category 8</td><td>10</td><td>1</td><td>14411</td><td>134400</td></tr>
<tr><td>Category 9</td><td>15</td><td>1</td><td>20251</td><td>172800</td></tr>
<tr><td>Category 10</td><td>15</td><td>1</td><td>27952</td><td>172800</td></tr>
<tr><td>Category 11</td><td>5</td><td>2</td><td>3630</td><td>14400</td><td rowspan="2">QPSK</td></tr>
<tr><td>Category 12</td><td>5</td><td>1</td><td>3630</td><td>28800</td></tr>
<tr><td>Category 13</td><td>15</td><td>1</td><td>35280</td><td>259200</td><td rowspan="2">QPSK, 16QAM, 64QAM</td></tr>
<tr><td>Category 14</td><td>15</td><td>1</td><td>42192</td><td>259200</td></tr>
<tr><td>Category 15</td><td>15</td><td>1</td><td>23370</td><td>345600</td><td colspan="2">QPSK, 16QAM</td></tr>
<tr><td>Category 16</td><td>15</td><td>1</td><td>27952</td><td>345600</td></tr>
<tr><td rowspan="2">Category 17 NOTE 2</td><td rowspan="2">15</td><td rowspan="2">1</td><td>35280</td><td>259200</td><td>QPSK, 16QAM, 64QAM</td><td>–</td></tr>
<tr><td>23370</td><td>345600</td><td>–</td><td>QPSK, 16QAM</td></tr>
<tr><td rowspan="2">Category 18 NOTE 3</td><td rowspan="2">15</td><td rowspan="2">1</td><td>42192</td><td>259200</td><td>QPSK, 16QAM, 64QAM</td><td>–</td></tr>
<tr><td>27952</td><td>345600</td><td>–</td><td>QPSK, 16QAM</td></tr>
<tr><td>Category 19</td><td>15</td><td>1</td><td>35280</td><td>518400</td><td colspan="2" rowspan="2">QPSK, 16QAM, 64QAM</td></tr>
<tr><td>Category 20</td><td>15</td><td>1</td><td>42192</td><td>518400</td></tr>
<tr><td>Category 21</td><td>15</td><td>1</td><td>23370</td><td>345600</td><td rowspan="4">-</td><td rowspan="4">-</td><td>QPSK, 16QAM</td></tr>
<tr><td>Category 22</td><td>15</td><td>1</td><td>27952</td><td>345600</td></tr>
<tr><td>Category 23</td><td>15</td><td>1</td><td>35280</td><td>518400</td><td rowspan="2">QPSK, 16QAM, 64QAM</td></tr>
<tr><td>Category 24</td><td>15</td><td>1</td><td>42192</td><td>518400</td></tr>
</table>

5.2.3 LTE Test Configuration

LTE modes were tested according to FCC KDB 941225 D05 publication. Please see notes after the tabulated SAR data for required test configurations. Establishing connections with base station simulators ensure a consistent means for testing SAR and are recommended for evaluating SAR. The R&S CMW500 was used for LTE output power measurements and SAR testing. Max power control was used so the UE transmits with maximum output power during SAR testing. SAR must be measured with the maximum TTI (transmit time interval) supported by the device in each LTE configuration.

A) Spectrum Plots for RB Configurations

A properly configured base station simulator was used for SAR tests and power measurements. Therefore, spectrum plots for RB configurations were not required to be included in this report.

B) MPR

MPR is permanently implemented for this device by the manufacturer. The specific manufacturer target MPR is indicated alongside the SAR results. MPR is enabled for this device, according to 3GPP TS36.101 Section 6.2.3 – 6.2.5 under Table 6.2.3-1.

C) A-MPR

A-MPR (Additional MPR) has been disabled for all SAR tests by setting NS=01 on the base station simulator.

D) Largest Channel Bandwidth Standalone SAR Test Requirements

1) QPSK with 1 RB allocation

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. When the reported SAR is ≤ 0.8 W/kg, testing of the remaining RB offset configurations and required test channels is not required for 1 RB allocation; otherwise, SAR is required for the remaining required test channels and only for the RB offset configuration with the highest output power for that channel. When the reported SAR of a required test channel is > 1.45 W/kg, SAR is required for all three RB offset configurations for that required test channel.

2) QPSK with 50% RB allocation

The procedures required for 1 RB allocation in 1) are applied to measure the SAR for QPSK with 50% RB allocation.

3) QPSK with 100% RB allocation

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 in 1) and 2) 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.

4) Higher order modulations

For each modulation besides QPSK; e.g., 16-QAM, 64-QAM, apply the QPSK procedures in above sections to determine the QAM configurations that may need SAR measurement. For each configuration identified as required for testing, SAR is required only when the highest maximum output power for the configuration in the higher order modulation is > ½ dB higher than the same configuration in QPSK or when the reported SAR for the QPSK configuration is > 1.45 W/kg.

E) Other Channel Bandwidth Standalone SAR Test Requirements

For the other channel bandwidths used by the device in a frequency band, apply all the procedures required for the largest channel bandwidth in section A) to determine the channels and RB configurations that need SAR testing and only measure SAR when the highest maximum output power of a configuration requiring testing in the smaller channel bandwidth is > ½ dB higher than the equivalent channel configurations in the largest channel bandwidth configuration or the reported SAR of a configuration for the largest channel bandwidth is > 1.45 W/kg.

5.2.4 Additional Requirements for TDD LTE Specification

For Time-Division Duplex (TDD) systems, SAR must be tested using a fixed periodic duty factor according to the highest transmission duty factor implemented for the device and supported by the defined 3GPP LTE TDD configurations.

TDD LTE Band supports 3GPP TS 36.211 section 4.2 for Type 2 Frame Structure and Table: Uplink-downlink configurations for uplink-downlink configurations and Table: Configuration of special subframe (lengths of DwPTS/GP/UpPTS) for Special subframe configurations.

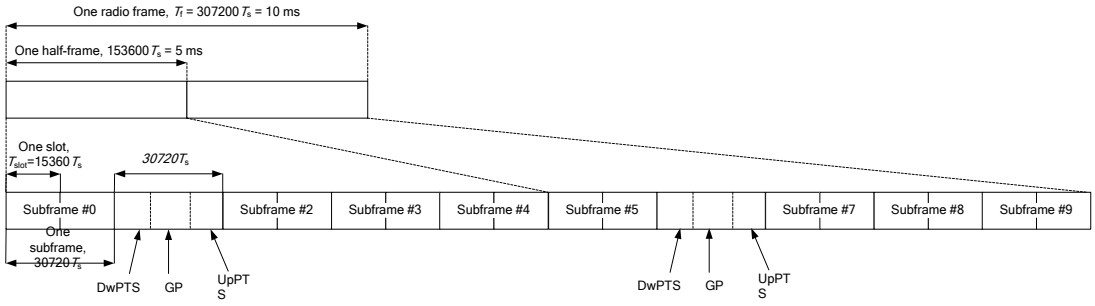


Figure 1: Frame structure type 2

Table 8: 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	$26336 \cdot T_s$			$7680 \cdot T_s$	$4384 \cdot T_s$	$5120 \cdot T_s$
5	$6592 \cdot T_s$	$4384 \cdot T_s$	$5120 \cdot T_s$	$20480 \cdot T_s$		
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: 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

According to Figure 1, one radio frame is configured by 10 subframes, which consist of Uplink-subframe, Downlink-subframe and Special subframe. For TDD-LTE, the Duty Cycle should be calculated on Uplink-subframes and Special subframes, due to Special subframe containing both Uplink transmissions. So for one radio frame, Duty Cycle can be calculated with formula as below. The count of Uplink subframes are according to Table: Uplink-downlink configurations:

Duty cycle = (30720Ts*Ups + Uplink Component*Specials)/(307200Ts)

About the uplink component of Special subframes, we can figure out by Table: Configuration of special subframe (lengths of DwPTS/GP/UpPTS):

Uplink Component = UpPTS

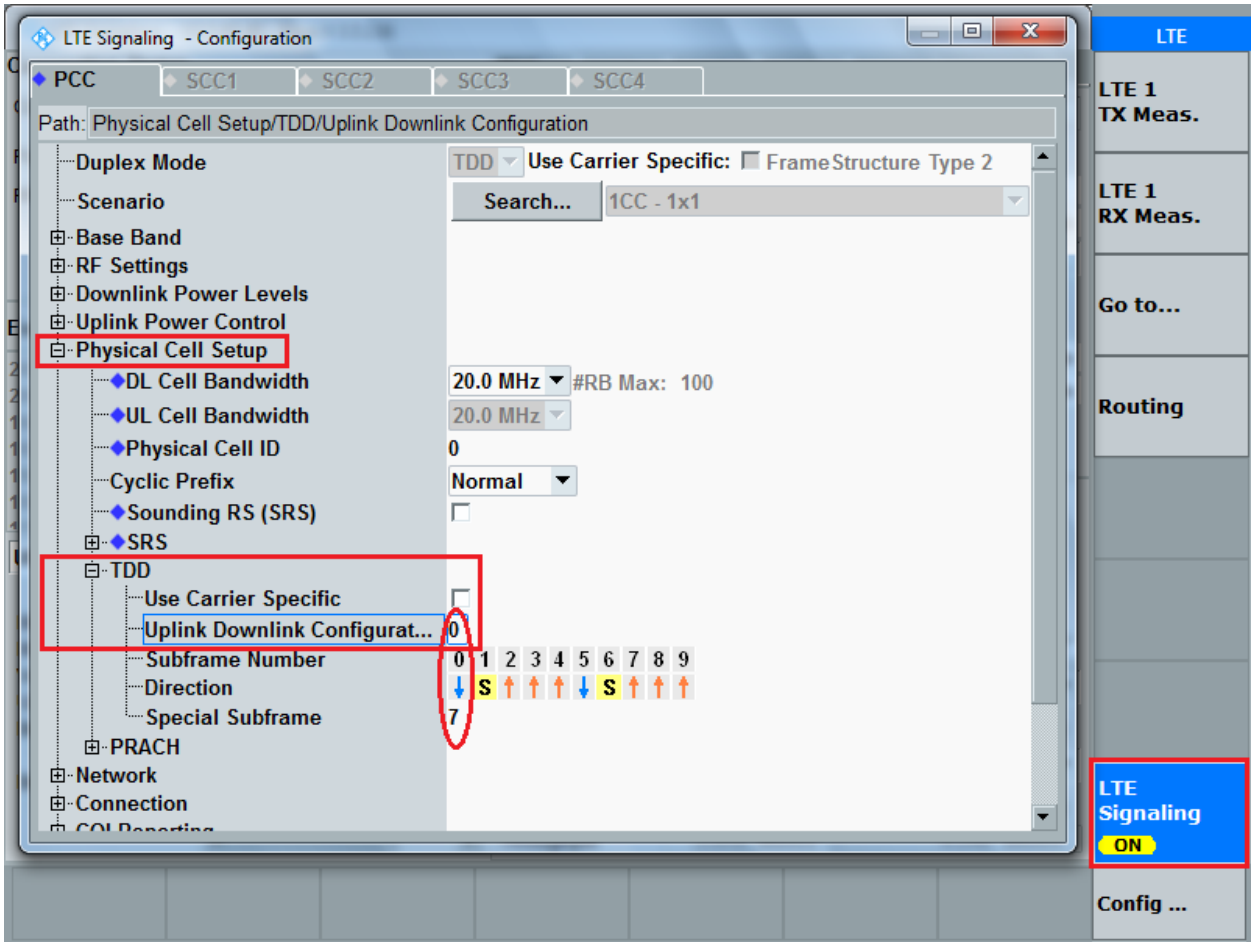
In conclusion, for the TDD LTE Band, Duty Cycle can be calculated with formula as below. All these sets are ok when we test, or we can set as below.

Duty cycle = [(30720Ts*Ups) + UpPTS *Specials]/(307200Ts)

And we can get different Duty cycles under different configurations:

Uplink-downlink configuration	Subframe number			Configuration of special subframe							
				Normal cyclic prefix in downlink				Extended cyclic prefix in downlink			
				Normal cyclic prefix in uplink		Extended cyclic prefix in uplink		Normal cyclic prefix in uplink		Extended cyclic prefix in uplink	
	D	S	U	configuration 0~4	configuration 5~9	configuration 0~4	configuration 5~9	configuration 0~3	configuration 4~7	configuration 0~3	configuration 4~7
0	2	2	6	61.43%	62.85%	61.67%	63.33%	61.43%	62.85%	61.67%	63.33%
1	4	2	4	41.43%	42.85%	41.67%	43.33%	41.43%	42.85%	41.67%	43.33%
2	6	2	2	21.43%	22.85%	21.67%	23.33%	21.43%	22.85%	21.67%	23.33%
3	6	1	3	30.71%	31.43%	30.83%	31.67%	30.71%	31.43%	30.83%	31.67%
4	7	1	2	20.71%	21.43%	20.83%	21.67%	20.71%	21.43%	20.83%	21.67%
5	8	1	1	10.71%	11.43%	10.83%	11.67%	10.71%	11.43%	10.83%	11.67%
6	3	2	5	51.43%	52.85%	51.67%	53.33%	51.43%	52.85%	51.67%	53.33%

SAR test Plan: For TDD LTE, SAR should be tested with the highest transmission duty factor (63.33%) using Uplink-downlink configuration 0 and Special subframe configuration 7 for Frame structure type



5.2.5 5G NR Test Configuration

For 5G NR SAR testing, due to test setup limitations, SAR testing for NR was performed using factory test mode software to establish the connection and perform SAR with 100% transmission.

The DFT-s-OFDM and CP-OFDM waveforms were investigated, and DFT-s-OFDM was found to be the worst case.
The worst-case scenario for all measurements is based on an engineering evaluation and QPSK was observed as the worst one and set for all conducted and radiated. Output power measurements were measured on QPSK, 16QAM, 64QAM, 256QAM, and BPSK, modulations.

5.2.6 Wi-Fi Test Configuration

SAR test reduction for 802.11 Wi-Fi transmission mode configurations are considered separately for DSSS and OFDM. An initial test position is determined to reduce the number of tests required for certain exposure configurations with multiple test positions. An initial test configuration is determined for each frequency band and aggregated band according to maximum output power, channel bandwidth, wireless mode configurations and other operating parameters to streamline the measurement requirements. For 2.4 GHz DSSS, either the initial test position or DSSS procedure is applied to reduce the number of SAR tests; These are mutually exclusive. For OFDM, an initial test position is only applicable to next to the ear, UMPC mini-tablet and hotspot mode configurations, which is tested using the initial test configuration to facilitate test reduction. For other exposure conditions with a fixed test position, SAR test reduction is determined using only the initial test configuration.

The multiple test positions require SAR measurements in head, hotspot mode or UMPC mini-tablet configurations may be reduced according to the highest reported SAR determined using the *initial test position(s)* by applying the DSSS or OFDM SAR measurement procedures in the required wireless mode test configuration(s). The *initial test position(s)* is measured using the highest measured maximum output power channel in the required wireless mode test configuration(s). When the *reported* SAR for the *initial test position* is:

- ≤ 0.4 W/kg, further SAR measurement is not required for the other test positions in that exposure configuration and wireless mode combination within the frequency band or aggregated band. DSSS and OFDM configurations are considered separately according to the required SAR procedures.
- 0.4 W/kg, SAR is repeated using the same wireless mode test configuration tested in the *initial test position* to measure the subsequent next closet/smallest test separation distance and maximum coupling test position, on the highest maximum output power channel, until the *reported* SAR is ≤ 0.8 W/kg or all required test positions are tested.
    - ✧ For subsequent test positions with equivalent test separation distance or when exposure is dominated by coupling conditions, the position for maximum coupling condition should be tested.
    - ✧ When it is unclear, all equivalent conditions must be tested.
- For all positions/configurations tested using the *initial test position* and subsequent test positions, when the *reported* SAR is > 0.8 W/kg, measure the SAR for these positions/configurations on the subsequent next highest measured output power channel(s) until the *reported* SAR is ≤ 1.2 W/kg or all required test channels are considered.
    - ✧ The additional power measurements required for this step should be limited to those necessary for identifying subsequent highest output power channels to apply the test reduction.

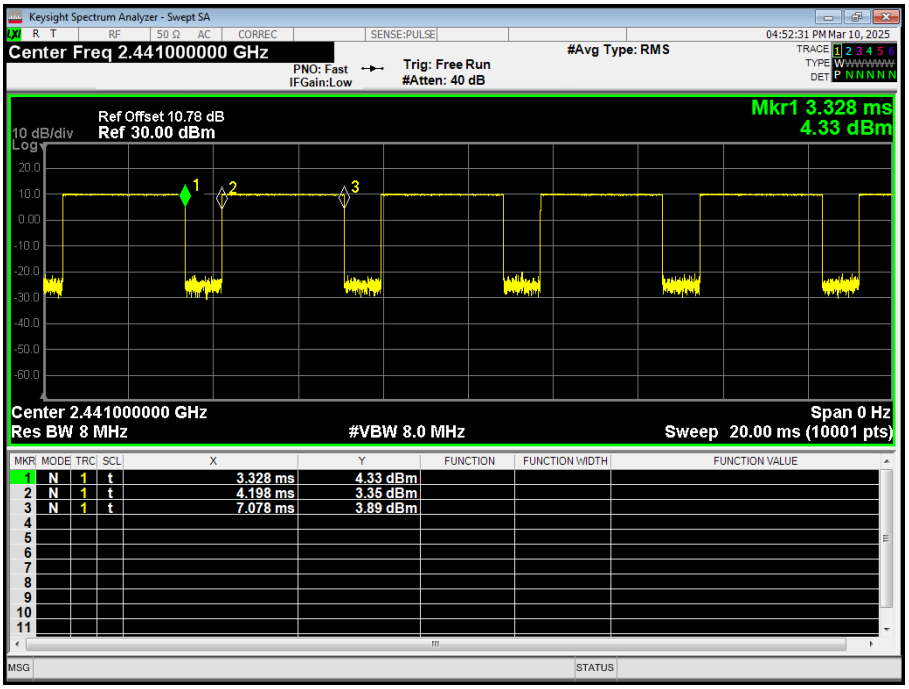
To determine the initial test position, Area Scans were performed to determine the position with the Maximum Value of SAR (measured). The position that produced the highest Maximum Value of SAR is considered the worst case position; thus used as the initial test position.

A Wi-Fi device must be configured to transmit continuously at the required data rate, channel bandwidth and signal modulation, using the highest transmission duty factor supported by the test mode tools for SAR measurement.

5.2.7 Bluetooth Test Configuration

For Bluetooth SAR testing, Bluetooth engineering testing software installed on the EUT can provide continuous transmitting RF signal with maximum output power. And the CBT control the EUT operating with hoping off and data rate set for DH5.

The SAR measurement takes full account of the Bluetooth duty cycle and is reflected in the report, and the duty factor of the device is as follow:



Note: Duty factor= Ton (ms)/ T(on+off) (ms)=2.880/3.750*100%=76.8%

5.2.8 Downlink LTE CA specification

The device supports LTE advanced Rel. 15, Carrier Aggregation (CA) is supported for Intra band and Inter-band, more details information is provided in tables below:

1) DL CA Intra band contiguous

E-UTRA CA configuration / Bandwidth combination set								
E-UTRA CA configuration	Uplink CA configurations	Component carriers in order of increasing carrier frequency					Maximum aggregated bandwidth [MHz]	Bandwidth combination set
		Channel bandwidths for carrier [MHz]	Channel bandwidths for carrier [MHz]	Channel bandwidths for carrier [MHz]	Channel bandwidths for carrier [MHz]	Channel bandwidths for carrier [MHz]		
CA_2C	-	5	20				40	0
		10	15, 20					
		15	10, 15, 20					
		20	5, 10, 15, 20					
CA_41C	-	10	20				40	0
		15	15, 20					
		20	10, 15, 20					

		5, 10	20				40	1
		15	15, 20					
		20	5, 10, 15, 20					
		10	15, 20				40	2
		15	10, 15, 20					
		20	10, 15, 20					
		10	20				40	3
		20	20					
CA_66B	-	5	5, 10, 15				20	0
		10	5, 10					
		15	5					
CA_66C	-	5	20				40	0
		10	15, 20					
		15	10, 15, 20					
		20	5, 10, 15, 20					

NOTE 1: The CA configuration refers to an operating band and a CA bandwidth class specified in Table 5.6A-1 (the indexing letter). Absence of a CA bandwidth class for an operating band implies support of all classes.
NOTE 2: For the supported CC bandwidth combinations, the CC downlink and uplink bandwidths are equal.
NOTE 3: Restricted to E-UTRA operation when inter-band carrier aggregation is configured. The downlink operating band is paired with the uplink operating band (external) of the carrier aggregation configuration that is supporting the configured Pcell.

CA configuration	SCS (PCC/SCC) (kHz)	Aggregated channel bandwidth (PCC+SCC)	UL PCC allocation (L_{CRB})	SCC ΔR_{IBC} (dB)	Duplex mode
CA_n71B[1]	15/15	30MHz + 5MHz	20 (RB_{START} = 0)	3.8	FDD

NOTE 1: Applicable only to BCS 4 and 5 and for UEs supporting the optional symmetrical UL/DL channel bandwidths.

2) DL CA Intra band non-contiguous

E-UTRA CA configuration / Bandwidth combination set								
E-UTRACA configuration	Uplink CA configurations	Component carriers in order of increasing carrier frequency					Maximum aggregated bandwidth [MHz]	Bandwidth combination set
		Channel bandwidths for carrier [MHz]	Channel bandwidths for carrier [MHz]	Channel bandwidths for carrier [MHz]	Channel bandwidths for carrier [MHz]	Channel bandwidths for carrier [MHz]		
CA_2A-2A	-	5, 10, 15, 20	5, 10, 15, 20				40	0
CA_4A-4A	-	5, 10, 15, 20	5, 10, 15, 20				40	0
CA_25A-25A	-	5, 10	5, 10				20	0
		5, 10, 15, 20	5, 10, 15, 20				40	1
CA_41A-41A	-	10, 15, 20	10, 15, 20				40	0
		5, 10, 15, 20	5, 10, 15, 20				40	1

CA_66A-66A	-	5, 10, 15, 20	5, 10, 15, 20				40	0

NOTE 1: Uplink CA configurations are the configurations supported by the present release of specifications.

NOTE 2: Restricted to E-UTRA operation when inter-band carrier aggregation is configured. The downlink operating band is paired with the uplink operating band (external) of the carrier aggregation configuration that is supporting the configured Pcell.

3) DL CA Inter-band

E-UTRA CA configuration / Bandwidth combination set										
E-UTRA CA Configuration	**Uplink CA configurations**	**E-UTRA Bands**	**1.4 MHz**	**3 MHz**	**5 MHz**	**10 MHz**	**15 MHz**	**20 MHz**	**Maximum aggregated bandwidth [MHz]**	**Bandwidth combination set**
CA_2A-4A	-	2	Yes	Yes	Yes	Yes	Yes	Yes	40	0
		4			Yes	Yes	Yes	Yes		
		2			Yes	Yes			20	1
		4			Yes	Yes				
		2			Yes	Yes	Yes	Yes	40	2
		4			Yes	Yes	Yes	Yes		
CA_2A-5A	-	2			Yes	Yes	Yes	Yes	30	0
		5			Yes	Yes				
		2			Yes	Yes			20	1
		5			Yes	Yes				
CA_2A-12A	-	2			Yes	Yes	Yes	Yes	30	0
		12			Yes	Yes				
		2			Yes	Yes	Yes	Yes	30	1
		12		Yes	Yes	Yes				
		2			Yes	Yes			20	2
		12			Yes	Yes				
CA_2A-66A	-	2	Yes	Yes	Yes	Yes	Yes	Yes	40	0
		66			Yes	Yes	Yes	Yes		
		2			Yes	Yes			20	1
		66			Yes	Yes				
		2			Yes	Yes	Yes	Yes	40	2
		66			Yes	Yes	Yes	Yes		
CA_2A-71A	-	2			Yes	Yes	Yes	Yes	40	0
		71			Yes	Yes	Yes	Yes		
		2			Yes	Yes			20	1
		71			Yes	Yes				
CA_4A-5A	-	4			Yes	Yes			20	0
		5			Yes	Yes				
		4			Yes	Yes	Yes	Yes	30	1
		5			Yes	Yes				
CA_4A-12A	-	4	Yes	Yes	Yes	Yes			20	0

		12			Yes	Yes				
		4	Yes	Yes	Yes	Yes	Yes	Yes	30	1
		12			Yes	Yes				
		4			Yes	Yes	Yes	Yes	30	2
		12		Yes	Yes	Yes				
		4			Yes	Yes			20	3
		12			Yes	Yes				
		4			Yes	Yes	Yes	Yes	30	4
		12			Yes	Yes				
		4			Yes	Yes	Yes		20	5
		12			Yes					
CA_4A-71A	-	4			Yes	Yes	Yes	Yes	40	0
		71			Yes	Yes	Yes	Yes		
CA_5A-66A	-	5			Yes	Yes			30	0
		66			Yes	Yes	Yes	Yes		
CA_12A-66A	-	12			Yes	Yes			20	0
		66	Yes	Yes	Yes	Yes				
		12			Yes	Yes			30	1
		66	Yes	Yes	Yes	Yes	Yes	Yes		
		12		Yes	Yes	Yes			30	2
		66			Yes	Yes	Yes	Yes		
		12			Yes	Yes			20	3
		66			Yes	Yes				
		12			Yes	Yes			30	4
		66			Yes	Yes	Yes	Yes		
		12			Yes				20	5
		66			Yes	Yes	Yes			
CA_66A-71A	-	66			Yes	Yes	Yes	Yes	40	0
		71			Yes	Yes	Yes	Yes		

NOTE 1: The CA Configuration refers to a combination of an operating band and a CA bandwidth class specified in Table 5.6A-1 (the indexing letter). Absence of a CA bandwidth class for an operating band implies support of all classes.

NOTE 2: For each band combination, all combinations of indicated bandwidths belong to the set.

NOTE 3: For the supported CC bandwidth combinations, the CC downlink and uplink bandwidths are equal.

NOTE 4: Uplink CA configurations are the configurations supported by the present release of specifications.

NOTE 5: For TDD inter-band Carrier Aggregtion only non-simultaneous Rx/Tx uplink CA configurations can be supported by UE supporting corresponding DL CA configuration without simultaneous Rx/Tx.

NOTE 6: Void

NOTE 7: Power imbalance between downlink carriers on Band 20 and Band 28 is assumed to be within [6dB].

NOTE 8: For the corresponding CA configuration, UE may not support Pcell transmissions in this E-UTRA band

For downlink carrier aggregation, SAR is not required for downlink carrier aggregation in active uplink maximum output power not more than 1/4dB higher than the maximum output power measured when downlink carrier aggregation inactive.

5.2.9 Proximity Sensor Power Reduction Description

Due to the operating configurations and exposure conditions required by the device, the proximity sensor is used to indicate when the device is held close to a user's body exposure condition. It utilizes the proximity sensor to reduce the output power in specific wireless and operating modes of Antenna Main and Antenna WIFI to ensure SAR compliance. It is also set an output power leveled to the lowest one to make sure that in any case of SAR sensor hardware failure, the SAR requirements can still be satisfied.

The following tables summarize the key power reduction information for proximity sensor. The test procedures be applied to determine proximity sensor triggering distances, and sensor coverage for normal and tilt positions. To ensure all production units are compliant, it is generally necessary to reduce the triggering distance determined from the triggering tests by 1 mm, or more if it is necessary, and use the smallest distance for movements to and from the phantom, minus 1 mm, as the sensor triggering distance for determining the SAR measurement distance.

Antenna Main				
Band	Test position	Sensor Trigger Distance range (DUT to Phantom)	Power reduction amount(dB)	Power level
GSM 850	Back side	0mm≤distance≤25mm	2	Sensor on
		25mm<distance	0	Sensor off
	Front side	/	0	Sensor off
	Left edge	/	0	Sensor off
	Right edge	/	0	Sensor off
	Top edge	0mm≤distance≤25mm	2	Sensor on
		25mm<distance	0	Sensor off
	Bottom Edge	/	0	Sensor off
GSM 1900	Back side	0mm≤distance≤25mm	5	Sensor on
		25mm<distance	0	Sensor off
	Front side	/	0	Sensor off
	Left edge	/	0	Sensor off
	Right edge	/	0	Sensor off
	Top edge	0mm≤distance≤25mm	5	Sensor on
		25mm<distance	0	Sensor off
	Bottom Edge	/	0	Sensor off
WCDMA Band II	Back side	0mm≤distance≤25mm	10	Sensor on
		25mm<distance	0	Sensor off
	Front side	/	0	Sensor off
	Left edge	/	0	Sensor off
	Right edge	/	0	Sensor off
	Top edge	0mm≤distance≤25mm	10	Sensor on
		25mm<distance	0	Sensor off
	Bottom Edge	/	0	Sensor off

WCDMA Band IV	Back side	0mm≤distance≤25mm	10	Sensor on
		25mm<distance	0	Sensor off
	Front side	/	0	Sensor off
	Left edge	/	0	Sensor off
	Right edge	/	0	Sensor off
	Top edge	0mm≤distance≤25mm	10	Sensor on
		25mm<distance	0	Sensor off
	Bottom Edge	/	0	Sensor off
WCDMA Band V	Back side	0mm≤distance≤25mm	2	Sensor on
		25mm<distance	0	Sensor off
	Front side	/	0	Sensor off
	Left edge	/	0	Sensor off
	Right edge	/	0	Sensor off
	Top edge	0mm≤distance≤25mm	2	Sensor on
		25mm<distance	0	Sensor off
	Bottom Edge	/	0	Sensor off
LTE 2	Back side	0mm≤distance≤25mm	10	Sensor on
		25mm<distance	0	Sensor off
	Front side	/	0	Sensor off
	Left edge	/	0	Sensor off
	Right edge	/	0	Sensor off
	Top edge	0mm≤distance≤25mm	10	Sensor on
		25mm<distance	0	Sensor off
	Bottom Edge	/	0	Sensor off
LTE 4	Back side	0mm≤distance≤25mm	10	Sensor on
		25mm<distance	0	Sensor off
	Front side	/	0	Sensor off
	Left edge	/	0	Sensor off
	Right edge	/	0	Sensor off
	Top edge	0mm≤distance≤25mm	10	Sensor on
		25mm<distance	0	Sensor off
	Bottom Edge	/	0	Sensor off
LTE 5	Back side	0mm≤distance≤25mm	2	Sensor on
		25mm<distance	0	Sensor off
	Front side	/	0	Sensor off
	Left edge	/	0	Sensor off
	Right edge	/	0	Sensor off
	Top edge	0mm≤distance≤25mm	2	Sensor on
		25mm<distance	0	Sensor off
	Bottom Edge	/	0	Sensor off
LTE 7	Back side	0mm≤distance≤12mm	10	Sensor on
		12mm<distance	0	Sensor off
	Front side	/	0	Sensor off

	Left edge	/	0	Sensor off
	Right edge	/	0	Sensor off
	Top edge	0mm≤distance≤12mm	10	Sensor on
		12mm<distance	0	Sensor off
	Bottom Edge	/	0	Sensor off
LTE 12	Back side	0mm≤distance≤25mm	2	Sensor on
		25mm<distance	0	Sensor off
	Front side	/	0	Sensor off
	Left edge	/	0	Sensor off
	Right edge	/	0	Sensor off
	Top edge	0mm≤distance≤25mm	2	Sensor on
		25mm<distance	0	Sensor off
	Bottom Edge	/	0	Sensor off
LTE 25	Back side	0mm≤distance≤25mm	10	Sensor on
		25mm<distance	0	Sensor off
	Front side	/	0	Sensor off
	Left edge	/	0	Sensor off
	Right edge	/	0	Sensor off
	Top edge	0mm≤distance≤25mm	10	Sensor on
		25mm<distance	0	Sensor off
	Bottom Edge	/	0	Sensor off
LTE 26	Back side	0mm≤distance≤25mm	5	Sensor on
		25mm<distance	0	Sensor off
	Front side	/	0	Sensor off
	Left edge	/	0	Sensor off
	Right edge	/	0	Sensor off
	Top edge	0mm≤distance≤25mm	5	Sensor on
		25mm<distance	0	Sensor off
	Bottom Edge	/	0	Sensor off
LTE 38	Back side	0mm≤distance≤12mm	9	Sensor on
		12mm<distance	0	Sensor off
	Front side	/	0	Sensor off
	Left edge	/	0	Sensor off
	Right edge	/	0	Sensor off
	Top edge	0mm≤distance≤12mm	9	Sensor on
		12mm<distance	0	Sensor off
	Bottom Edge	/	0	Sensor off
LTE 41 PC2	Back side	0mm≤distance≤12mm	6.5	Sensor on
		12mm<distance	0	Sensor off
	Front side	/	0	Sensor off
	Left edge	/	0	Sensor off
	Right edge	/	0	Sensor off
	Top edge	0mm≤distance≤12mm	6.5	Sensor on

		12mm<distance	0	Sensor off
	Bottom Edge	/	0	Sensor off
LTE 41 PC3	Back side	0mm≤distance≤12mm	8	Sensor on
		12mm<distance	0	Sensor off
	Front side	/	0	Sensor off
	Left edge	/	0	Sensor off
	Right edge	/	0	Sensor off
	Top edge	0mm≤distance≤12mm	8	Sensor on
		12mm<distance	0	Sensor off
	Bottom Edge	/	0	Sensor off
LTE 66	Back side	0mm≤distance≤25mm	10	Sensor on
		25mm<distance	0	Sensor off
	Front side	/	0	Sensor off
	Left edge	/	0	Sensor off
	Right edge	/	0	Sensor off
	Top edge	0mm≤distance≤25mm	10	Sensor on
		25mm<distance	0	Sensor off
	Bottom Edge	/	0	Sensor off
LTE 71	Back side	0mm≤distance≤25mm	3.5	Sensor on
		25mm<distance	0	Sensor off
	Front side	/	0	Sensor off
	Left edge	/	0	Sensor off
	Right edge	/	0	Sensor off
	Top edge	0mm≤distance≤25mm	3.5	Sensor on
		25mm<distance	0	Sensor off
	Bottom Edge	/	0	Sensor off
n 25	Back side	0mm≤distance≤25mm	10	Sensor on
		25mm<distance	0	Sensor off
	Front side	/	0	Sensor off
	Left edge	/	0	Sensor off
	Right edge	/	0	Sensor off
	Top edge	0mm≤distance≤25mm	10	Sensor on
		25mm<distance	0	Sensor off
	Bottom Edge	/	0	Sensor off
n 41 PC2	Back side	0mm≤distance≤12mm	8	Sensor on
		12mm<distance	0	Sensor off
	Front side	/	0	Sensor off
	Left edge	/	0	Sensor off
	Right edge	/	0	Sensor off
	Top edge	0mm≤distance≤12mm	8	Sensor on
		12mm<distance	0	Sensor off
	Bottom Edge	/	0	Sensor off
n 66	Back side	0mm≤distance≤25mm	8	Sensor on

		25mm<distance	0	Sensor off
	Front side	/	0	Sensor off
	Left edge	/	0	Sensor off
	Right edge	/	0	Sensor off
	Top edge	0mm≤distance≤25mm	8	Sensor on
		25mm<distance	0	Sensor off
	Bottom Edge	/	0	Sensor off
Antenna WIFI				
Band	Test position	Sensor Trigger Distance range (DUT to Phantom)	Power reduction amount(dB)	Power level
WIFI 2.4G	Back side	0mm≤distance≤15mm	6	Sensor on
		15mm<distance	0	Sensor off
	Front side	/	0	Sensor off
	Left edge	/	0	Sensor off
	Right edge	/	0	Sensor off
	Top edge	0mm≤distance≤14mm	6	Sensor on
		14mm<distance	0	Sensor off
	Bottom Edge	/	0	Sensor off
WIFI 5G	Back side	0mm≤distance≤15mm	6	Sensor on
		15mm<distance	0	Sensor off
	Front side	/	0	Sensor off
	Left edge	/	0	Sensor off
	Right edge	/	0	Sensor off
	Top edge	0mm≤distance≤14mm	6	Sensor on
		14mm<distance	0	Sensor off
	Bottom Edge	/	0	Sensor off

Note:

To ensure all production units are compliant, the smallest separation distance determined by the sensor triggering and sensor coverage for normal and tit positions for all usage conditions and applicable sides, minus 1 mm, must be used as the test separation distance for additional SAR testing of each higher power stage.

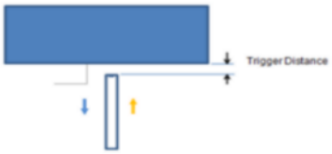
For the other sides or other frequency bands of the device, SAR is still tested at the sensor off.

Procedures for determining proximity sensor triggering distances

The device was tested by the test lab to determine the proximity sensor triggering distances for the back side, top side and bottom edge of the device. To ensure all production units are compliant, the smallest separation distance determined by the sensor triggering minus 1 mm, must be used as the test separation distance for SAR testing.

The Proximity sensor triggering distance measurement method are as below:

Picture：Proximity sensor triggering distances assessmect(Back side)



Picture：Proximity sensor triggering distances assessmect(Top edge)

Table: Summary of Trigger Distances ：

Band	Trigger distance-Back Side		Trigger distance-Top Edge	
	Moving toward Phantom	Moving away from Phantom	Moving toward Phantom	Moving away from Phantom
GSM 850	25	25	25	25
GSM 1900	25	25	25	25
WCDMA B2	25	25	25	25
WCDMA B4	25	25	25	25
WCDMA B5	25	25	25	25
LTE B2	25	25	25	25
LTE B4	25	25	25	25
LTE B5	25	25	25	25
LTE B7	12	12	12	12
LTE B12	25	25	25	25
LTE B25	25	25	25	25
LTE B26	25	25	25	25
LTE B38	12	12	12	12
LTE B41	12	12	12	12
LTE B66	25	25	25	25
LTE B71	25	25	25	25
n 25	25	25	25	25
n 41	12	12	12	12
n 66	25	25	25	25
WIFI 2.4G	15	15	14	14
WIFI 5G	15	15	14	14

Conclusion: It can be ensured that the proximity sensor can be valid triggered for the body exposure condition (GSM 850/1900, WCDMA Band2/4/5, LTE Band 2/4/5/7/12/25/26/ 38/41/66/ 71, NR Band 25/41/66 with Antenna Main and WIFI 2.4G/5G with Antenna WIFI)

The detailed conducted power measurement data to determine the triggering distances is as below:

Table: Power Reduction Status (Moving toward phantom)

Position	Ant	Band	Power Reduction Status(dBm)																														
			45	44	43	42	41	40	39	38	37	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22	21	18	15	12	10	4	1
Back Side	Main Antenna	GSM 850	32.08	32.08	32.08	32.08	32.08	32.08	32.08	32.08	32.08	32.08	32.08	32.08	32.08	32.08	32.08	32.08	32.08	32.08	32.08	32.08	30.14	30.14	30.14	30.14	30.14	30.14	30.14	30.14	30.14	30.14	30.14
Back Side	Main Antenna	GSM 1900	28.87	28.87	28.87	28.87	28.87	28.87	28.87	28.87	28.87	28.87	28.87	28.87	28.87	28.87	28.87	28.87	28.87	28.87	28.87	28.87	23.92	23.92	23.92	23.92	23.92	23.92	23.92	23.92	23.92	23.92	23.92
Back Side	Main Antenna	WCDMA B2	23.23	23.23	23.23	23.23	23.23	23.23	23.23	23.23	23.23	23.23	23.23	23.23	23.23	23.23	23.23	23.23	23.23	23.23	23.23	23.23	13.35	13.35	13.35	13.35	13.35	13.35	13.35	13.35	13.35	13.35	13.35
Back Side	Main Antenna	WCDMA B4	23.25	23.25	23.25	23.25	23.25	23.25	23.25	23.25	23.25	23.25	23.25	23.25	23.25	23.25	23.25	23.25	23.25	23.25	23.25	23.25	12.68	12.68	12.68	12.68	12.68	12.68	12.68	12.68	12.68	12.68	12.68
Back Side	Main Antenna	WCDMA B5	22.90	22.90	22.90	22.90	22.90	22.90	22.90	22.90	22.90	22.90	22.90	22.90	22.90	22.90	22.90	22.90	22.90	22.90	22.90	22.90	20.92	20.92	20.92	20.92	20.92	20.92	20.92	20.92	20.92	20.92	20.92
Back Side	Main Antenna	LTE B2	23.70	23.70	23.70	23.70	23.70	23.70	23.70	23.70	23.70	23.70	23.70	23.70	23.70	23.70	23.70	23.70	23.70	23.70	23.70	23.70	12.72	12.72	12.72	12.72	12.72	12.72	12.72	12.72	12.72	12.72	12.72
Back Side	Main Antenna	LTE B4	23.29	23.29	23.29	23.29	23.29	23.29	23.29	23.29	23.29	23.29	23.29	23.29	23.29	23.29	23.29	23.29	23.29	23.29	23.29	23.29	12.58	12.58	12.58	12.58	12.58	12.58	12.58	12.58	12.58	12.58	12.58
Back Side	Main Antenna	LTE B5	22.91	22.91	22.91	22.91	22.91	22.91	22.91	22.91	22.91	22.91	22.91	22.91	22.91	22.91	22.91	22.91	22.91	22.91	22.91	22.91	20.91	20.91	20.91	20.91	20.91	20.91	20.91	20.91	20.91	20.91	20.91
Back Side	Main Antenna	LTE B12	22.98	22.98	22.98	22.98	22.98	22.98	22.98	22.98	22.98	22.98	22.98	22.98	22.98	22.98	22.98	22.98	22.98	22.98	22.98	22.98	21.39	21.39	21.39	21.39	21.39	21.39	21.39	21.39	21.39	21.39	21.39
Back Side	Main Antenna	LTE B25	23.69	23.69	23.69	23.69	23.69	23.69	23.69	23.69	23.69	23.69	23.69	23.69	23.69	23.69	23.69	23.69	23.69	23.69	23.69	23.69	13.19	13.19	13.19	13.19	13.19	13.19	13.19	13.19	13.19	13.19	13.19
Back Side	Main Antenna	LTE B26	22.79	22.79	22.79	22.79	22.79	22.79	22.79	22.79	22.79	22.79	22.79	22.79	22.79	22.79	22.79	22.79	22.79	22.79	22.79	22.79	17.74	17.74	17.74	17.74	17.74	17.74	17.74	17.74	17.74	17.74	17.74
Back Side	Main Antenna	LTE B66	23.20	23.20	23.20	23.20	23.20	23.20	23.20	23.20	23.20	23.20	23.20	23.20	23.20	23.20	23.20	23.20	23.20	23.20	23.20	23.20	12.66	12.66	12.66	12.66	12.66	12.66	12.66	12.66	12.66	12.66	12.66
Back Side	Main Antenna	LTE B71	22.80	22.80	22.80	22.80	22.80	22.80	22.80	22.80	22.80	22.80	22.80	22.80	22.80	22.80	22.80	22.80	22.80	22.80	22.80	22.80	19.16	19.16	19.16	19.16	19.16	19.16	19.16	19.16	19.16	19.16	19.16
Back Side	Main Antenna	n 25	22.47	22.47	22.47	22.47	22.47	22.47	22.47	22.47	22.47	22.47	22.47	22.47	22.47	22.47	22.47	22.47	22.47	22.47	22.47	22.47	13.21	13.21	13.21	13.21	13.21	13.21	13.21	13.21	13.21	13.21	13.21
Back Side	Main Antenna	n 66	23.14	23.14	23.14	23.14	23.14	23.14	23.14	23.14	23.14	23.14	23.14	23.14	23.14	23.14	23.14	23.14	23.14	23.14	23.14	23.14	15.23	15.23	15.23	15.23	15.23	15.23	15.23	15.23	15.23	15.23	15.23

Position	Ant	Band	Power Reduction Status(dBm)																														
			32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	3	2	1
Back Side	Main Antenna	LTE B7	23.06	23.06	23.06	23.06	23.06	23.06	23.06	23.06	23.06	23.06	23.06	23.06	23.06	23.06	23.06	23.06	23.06	23.06	23.06	23.06	12.54	12.54	12.54	12.54	12.54	12.54	12.54	12.54	12.54	12.54	12.54
Back Side	Main Antenna	LTE B38	22.97	22.97	22.97	22.97	22.97	22.97	22.97	22.97	22.97	22.97	22.97	22.97	22.97	22.97	22.97	22.97	22.97	22.97	22.97	22.97	16.94	16.94	16.94	16.94	16.94	16.94	16.94	16.94	16.94	16.94	16.94
Back Side	Main Antenna	LTE B41 PC3	22.35	22.35	22.35	22.35	22.35	22.35	22.35	22.35	22.35	22.35	22.35	22.35	22.35	22.35	22.35	22.35	22.35	22.35	22.35	22.35	16.21	16.21	16.21	16.21	16.21	16.21	16.21	16.21	16.21	16.21	16.21
Back Side	Main Antenna	LTE B41 PC2	25.32	25.32	25.32	25.32	25.32	25.32	25.32	25.32	25.32	25.32	25.32	25.32	25.32	25.32	25.32	25.32	25.32	25.32	25.32	25.32	17.26	17.26	17.26	17.26	17.26	17.26	17.26	17.26	17.26	17.26	17.26
Back Side	Main Antenna	LTE B41 PC2	22.47	22.47	22.47	22.47	22.47	22.47	22.47	22.47	22.47	22.47	22.47	22.47	22.47	22.47	22.47	22.47	22.47	22.47	22.47	22.47	19.22	19.22	19.22	19.22	19.22	19.22	19.22	19.22	19.22	19.22	19.22
Back Side	Main Antenna	n 41 PC2	25.58	25.58	25.58	25.58	25.58	25.58	25.58	25.58	25.58	25.58	25.58	25.58	25.58	25.58	25.58	25.58	25.58	25.58	25.58	25.58	17.13	17.13	17.13	17.13	17.13	17.13	17.13	17.13	17.13	17.13	17.13

Position	Ant	Band	Power Reduction Status(dBm)																														
			35	34	33	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12	11	10	8	6	5	3	1
Back Side	WIFI Antenna	WIFI 2.4G	18.81	18.81	18.81	18.81	18.81	18.81	18.81	18.81	18.81	18.81	18.81	18.81	18.81	18.81	18.81	18.81	18.81	18.81	18.81	18.81	12.95	12.95	12.95	12.95	12.95	12.95	12.95	12.95	12.95	12.95	12.95
Back Side	WIFI Antenna	WIFI 5G	17.85	17.85	17.85	17.85	17.85	17.85	17.85	17.85	17.85	17.85	17.85	17.85	17.85	17.85	17.85	17.85	17.85	17.85	17.85	17.85	11.87	11.87	11.87	11.87	11.87	11.87	11.87	11.87	11.87	11.87	11.87

Position	Ant	Band	Power Reduction Status(dBm)																														
			45	44	43	42	41	40	39	38	37	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22	21	18	15	12	10	4	1
Top Edge	Main Antenna	GSM 850	32.08	32.08	32.08	32.08	32.08	32.08	32.08	32.08	32.08	32.08	32.08	32.08	32.08	32.08	32.08	32.08	32.08	32.08	32.08	32.08	30.14	30.14	30.14	30.14	30.14	30.14	30.14	30.14	30.14	30.14	30.14
Top Edge	Main Antenna	GSM 1900	28.87	28.87	28.87	28.87	28.87	28.87	28.87	28.87	28.87	28.87	28.87	28.87	28.87	28.87	28.87	28.87	28.87	28.87	28.87	28.87	23.92	23.92	23.92	23.92	23.92	23.92	23.92	23.92	23.92	23.92	23.92
Top Edge	Main Antenna	WCDMA B2	23.23	23.23	23.23	23.23	23.23	23.23	23.23	23.23	23.23	23.23	23.23	23.23	23.23	23.23	23.23	23.23	23.23	23.23	23.23	23.23	13.35	13.35	13.35	13.35	13.35	13.35	13.35	13.35	13.35	13.35	13.35
Top Edge	Main Antenna	WCDMA B4	23.25	23.25	23.25	23.25	23.25	23.25	23.25	23.25	23.25	23.25	23.25	23.25	23.25	23.25	23.25	23.25	23.25	23.25	23.25	23.25	12.68	12.68	12.68	12.68	12.68	12.68	12.68	12.68	12.68	12.68	12.68
Top Edge	Main Antenna	WCDMA B5	22.90	22.90	22.90	22.90	22.90	22.90	22.90	22.90	22.90	22.90	22.90	22.90	22.90	22.90	22.90	22.90	22.90	22.90	22.90	22.90	20.92	20.92	20.92	20.92	20.92	20.92	20.92	20.92	20.92	20.92	20.92
Top Edge	Main Antenna	LTE B2	23.70	23.70	23.70	23.70	23.70	23.70	23.70	23.70	23.70	23.70	23.70	23.70	23.70	23.70	23.70	23.70	23.70	23.70	23.70	23.70	12.72	12.72	12.72	12.72	12.72	12.72	12.72	12.72	12.72	12.72	12.72
Top Edge	Main Antenna	LTE B4	23.29	23.29	23.29	23.29	23.29	23.29	23.29	23.29	23.29	23.29	23.29	23.29	23.29	23.29	23.29	23.29	23.29	23.29	23.29	23.29	12.58	12.58	12.58	12.58	12.58	12.58	12.58	12.58	12.58	12.58	12.58
Top Edge	Main Antenna	LTE B5	22.91	22.91	22.91	22.91	22.91	22.91	22.91	22.91	22.91	22.91	22.91	22.91	22.91	22.91	22.91	22.91	22.91	22.91	22.91	22.91	20.91	20.91	20.91	20.91	20.91	20.91	20.91	20.91	20.91	20.91	20.91
Top Edge	Main Antenna	LTE B12	22.98	22.98	22.98	22.98	22.98	22.98	22.98	22.98	22.98	22.98	22.98	22.98	22.98	22.98	22.98	22.98	22.98	22.98	22.98	22.98	21.39	21.39	21.39	21.39	21.39	21.39	21.39	21.39	21.39	21.39	21.39
Top Edge	Main Antenna	LTE B25	23.69	23.69	23.69	23.69	23.69	23.69	23.69	23.69	23.69	23.69	23.69	23.69	23.69	23.69	23.69	23.69	23.69	23.69	23.69	23.69	13.19	13.19	13.19	13.19	13.19	13.19	13.19	13.19	13.19	13.19	13.19
Top Edge	Main Antenna	LTE B26	22.79	22.79	22.79	22.79	22.79	22.79	22.79	22.79	22.79	22.79	22.79	22.79	22.79	22.79	22.79	22.79	22.79	22.79	22.79	22.79	17.74	17.74	17.74	17.74	17.74	17.74	17.74	17.74	17.74	17.74	17.74
Top Edge	Main Antenna	LTE B66	23.20	23.20	23.20	23.20	23.20	23.20	23.20	23.20	23.20	23.20	23.20	23.20	23.20	23.20	23.20	23.20	23.20	23.20	23.20	23.20	12.66	12.66	12.66	12.66	12.66	12.66	12.66	12.66	12.66	12.66	12.66
Top Edge	Main Antenna	LTE B71	22.80	22.80	22.80	22.80	22.80	22.80	22.80	22.80	22.80	22.80	22.80	22.80	22.80	22.80	22.80	22.80	22.80	22.80	22.80	22.80	19.16	19.16	19.16	19.16	19.16	19.16	19.16	19.16	19.16	19.16	19.16
Top Edge	Main Antenna	n 25	22.47	22.47	22.47	22.47	22.47	22.47	22.47	22.47	22.47	22.47	22.47	22.47	22.47	22.47	22.47	22.47	22.47	22.47	22.47	22.47	13.21	13.21	13.21	13.21	13.21	13.21	13.21	13.21	13.21	13.21	13.21
Top Edge	Main Antenna	n 66	23.14	23.14	23.14	23.14	23.14	23.14	23.14	23.14	23.14	23.14	23.14	23.14	23.14	23.14	23.14	23.14	23.14	23.14	23.14	23.14	15.23	15.23	15.23	15.23	15.23	15.23	15.23	15.23	15.23	15.23	15.23

Position	Ant	Band	Power Reduction Status(dBm)																														
			32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	3	2	1
Top Edge	Main Antenna	LTE B7	23.06	23.06	23.06	23.06	23.06	23.06	23.06	23.06	23.06	23.06	23.06	23.06	23.06	23.06	23.06	23.06	23.06	23.06	23.06	23.06	12.54	12.54	12.54	12.54	12.54	12.54	12.54	12.54	12.54	12.54	12.54
Top Edge	Main Antenna	LTE B38	22.97	22.97	22.97	22.97	22.97	22.97	22.97	22.97	22.97	22.97	22.97	22.97	22.97	22.97	22.97	22.97	22.97	22.97	22.97	22.97	16.94	16.94	16.94	16.94	16.94	16.94	16.94	16.94	16.94	16.94	16.94
Top Edge	Main Antenna	LTE B41 PC3	22.35	22.35	22.35	22.35	22.35	22.35	22.35	22.35	22.35	22.35	22.35	22.35	22.35	22.35	22.35	22.35	22.35	22.35	22.35	22.35	16.21	16.21	16.21	16.21	16.21	16.21	16.21	16.21	16.21	16.21	16.21
Top Edge	Main Antenna	LTE B41 PC2	25.32	25.32	25.32	25.32	25.32	25.32	25.32	25.32	25.32	25.32	25.32	25.32	25.32	25.32	25.32	25.32	25.32	25.32	25.32	25.32	17.26	17.26	17.26	17.26	17.26	17.26	17.26	17.26	17.26	17.26	17.26
Top Edge	Main Antenna	LTE B41 PC2	22.47	22.47	22.47	22.47	22.47	22.47	22.47	22.47	22.47	22.47	22.47	22.47	22.47	22.47	22.47	22.47	22.47	22.47	22.47	22.47	19.22	19.22	19.22	19.22	19.22	19.22	19.22	19.22	19.22	19.22	19.22
Top Edge	Main Antenna	n 41 PC2	25.58	25.58	25.58	25.58	25.58	25.58	25.58	25.58	25.58	25.58	25.58	25.58	25.58	25.58	25.58	25.58	25.58	25.58	25.58	25.58	17.13	17.13	17.13	17.13	17.13	17.13	17.13	17.13	17.13	17.13	17.13

Position	Ant	Band	Power Reduction Status(dBm)																														
			35	34	33	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12	11	10	8	6	5	3	1
Top Edge	WIFI Antenna	WIFI 2.4G	18.81	18.81	18.81	18.81	18.81	18.81	18.81	18.81	18.81	18.81	18.81	18.81	18.81	18.81	18.81	18.81	18.81	18.81	18.81	18.81	18.81	12.95	12.95	12.95	12.95	12.95	12.95	12.95	12.95	12.95	12.95
Top Edge	WIFI Antenna	WIFI 5G	17.85	17.85	17.85	17.85	17.85	17.85	17.85	17.85	17.85	17.85	17.85	17.85	17.85	17.85	17.85	17.85	17.85	17.85	17.85	17.85	17.85	11.87	11.87	11.87	11.87	11.87	11.87	11.87	11.87	11.87	11.87

Table: Power Reduction Status (Moving away from phantom)

Position	Ant	Band	Power Reduction Status(dBm)																														
			1	4	10	12	15	18	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45
Back Side	Main Antenna	GSM 850	30.14	30.14	30.14	30.14	30.14	30.14	30.14	30.14	30.14	30.14	30.14	32.08	32.08	32.08	32.08	32.08	32.08	32.08	32.08	32.08	32.08	32.08	32.08	32.08	32.08	32.08	32.08	32.08	32.08	32.08	32.08	32.08
Back Side	Main Antenna	GSM 1900	23.92	23.92	23.92	23.92	23.92	23.92	23.92	23.92	23.92	23.92	23.92	28.87	28.87	28.87	28.87	28.87	28.87	28.87	28.87	28.87	28.87	28.87	28.87	28.87	28.87	28.87	28.87	28.87	28.87	28.87	28.87	28.87
Back Side	Main Antenna	WCDMA B2	13.35	13.35	13.35	13.35	13.35	13.35	13.35	13.35	13.35	13.35	13.35	23.23	23.23	23.23	23.23	23.23	23.23	23.23	23.23	23.23	23.23	23.23	23.23	23.23	23.23	23.23	23.23	23.23	23.23	23.23	23.23	23.23
Back Side	Main Antenna	WCDMA B4	12.68	12.68	12.68	12.68	12.68	12.68	12.68	12.68	12.68	12.68	12.68	23.25	23.25	23.25	23.25	23.25	23.25	23.25	23.25	23.25	23.25	23.25	23.25	23.25	23.25	23.25	23.25	23.25	23.25	23.25	23.25	23.25
Back Side	Main Antenna	WCDMA B5	20.92	20.92	20.92	20.92	20.92	20.92	20.92	20.92	20.92	20.92	20.92	22.90	22.90	22.90	22.90	22.90	22.90	22.90	22.90	22.90	22.90	22.90	22.90	22.90	22.90	22.90	22.90	22.90	22.90	22.90	22.90	22.90
Back Side	Main Antenna	LTE B2	12.72	12.72	12.72	12.72	12.72	12.72	12.72	12.72	12.72	12.72	12.72	23.70	23.70	23.70	23.70	23.70	23.70	23.70	23.70	23.70	23.70	23.70	23.70	23.70	23.70	23.70	23.70	23.70	23.70	23.70	23.70	23.70
Back Side	Main Antenna	LTE B4	12.58	12.58	12.58	12.58	12.58	12.58	12.58	12.58	12.58	12.58	12.58	23.29	23.29	23.29	23.29	23.29	23.29	23.29	23.29	23.29	23.29	23.29	23.29	23.29	23.29	23.29	23.29	23.29	23.29	23.29	23.29	23.29
Back Side	Main Antenna	LTE B5	20.91	20.91	20.91	20.91	20.91	20.91	20.91	20.91	20.91	20.91	20.91	22.91	22.91	22.91	22.91	22.91	22.91	22.91	22.91	22.91	22.91	22.91	22.91	22.91	22.91	22.91	22.91	22.91	22.91	22.91	22.91	22.91
Back Side	Main Antenna	LTE B12	21.39	21.39	21.39	21.39	21.39	21.39	21.39	21.39	21.39	21.39	21.39	22.98	22.98	22.98	22.98	22.98	22.98	22.98	22.98	22.98	22.98	22.98	22.98	22.98	22.98	22.98	22.98	22.98	22.98	22.98	22.98	22.98
Back Side	Main Antenna	LTE B25	13.19	13.19	13.19	13.19	13.19	13.19	13.19	13.19	13.19	13.19	13.19	23.69	23.69	23.69	23.69	23.69	23.69	23.69	23.69	23.69	23.69	23.69	23.69	23.69	23.69	23.69	23.69	23.69	23.69	23.69	23.69	23.69
Back Side	Main Antenna	LTE B26	17.74	17.74	17.74	17.74	17.74	17.74	17.74	17.74	17.74	17.74	17.74	22.79	22.79	22.79	22.79	22.79	22.79	22.79	22.79	22.79	22.79	22.79	22.79	22.79	22.79	22.79	22.79	22.79	22.79	22.79	22.79	22.79
Back Side	Main Antenna	LTE B66	12.66	12.66	12.66	12.66	12.66	12.66	12.66	12.66	12.66	12.66	12.66	23.20	23.20	23.20	23.20	23.20	23.20	23.20	23.20	23.20	23.20	23.20	23.20	23.20	23.20	23.20	23.20	23.20	23.20	23.20	23.20	23.20
Back Side	Main Antenna	LTE B71	19.16	19.16	19.16	19.16	19.16	19.16	19.16	19.16	19.16	19.16	19.16	22.80	22.80	22.80	22.80	22.80	22.80	22.80	22.80	22.80	22.80	22.80	22.80	22.80	22.80	22.80	22.80	22.80	22.80	22.80	22.80	22.80
Back Side	Main Antenna	n 25	13.21	13.21	13.21	13.21	13.21	13.21	13.21	13.21	13.21	13.21	13.21	22.47	22.47	22.47	22.47	22.47	22.47	22.47	22.47	22.47	22.47	22.47	22.47	22.47	22.47	22.47	22.47	22.47	22.47	22.47	22.47	22.47
Back Side	Main Antenna	n 66	15.23	15.23	15.23	15.23	15.23	15.23	15.23	15.23	15.23	15.23	15.23	23.14	23.14	23.14	23.14	23.14	23.14	23.14	23.14	23.14	23.14	23.14	23.14	23.14	23.14	23.14	23.14	23.14	23.14	23.14	23.14	23.14

Position	Ant	Band	Power Reduction Status(dBm)																														
			1	2	3	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
Back Side	Main Antenna	LTE B7	12.54	12.54	12.54	12.54	12.54	12.54	12.54	12.54	12.54	12.54	12.54	23.06	23.06	23.06	23.06	23.06	23.06	23.06	23.06	23.06	23.06	23.06	23.06	23.06	23.06	23.06	23.06	23.06	23.06	23.06	23.06	23.06
Back Side	Main Antenna	LTE B38	16.94	16.94	16.94	16.94	16.94	16.94	16.94	16.94	16.94	16.94	16.94	22.97	22.97	22.97	22.97	22.97	22.97	22.97	22.97	22.97	22.97	22.97	22.97	22.97	22.97	22.97	22.97	22.97	22.97	22.97	22.97	22.97
Back Side	Main Antenna	LTE B41 PC3	16.21	16.21	16.21	16.21	16.21	16.21	16.21	16.21	16.21	16.21	16.21	22.35	22.35	22.35	22.35	22.35	22.35	22.35	22.35	22.35	22.35	22.35	22.35	22.35	22.35	22.35	22.35	22.35	22.35	22.35	22.35	22.35
Back Side	Main Antenna	LTE B41 PC2	17.26	17.26	17.26	17.26	17.26	17.26	17.26	17.26	17.26	17.26	17.26	25.32	25.32	25.32	25.32	25.32	25.32	25.32	25.32	25.32	25.32	25.32	25.32	25.32	25.32	25.32	25.32	25.32	25.32	25.32	25.32	25.32
Back Side	Main Antenna	LTE B41 PC2	19.22	19.22	19.22	19.22	19.22	19.22	19.22	19.22	19.22	19.22	19.22	22.47	22.47	22.47	22.47	22.47	22.47	22.47	22.47	22.47	22.47	22.47	22.47	22.47	22.47	22.47	22.47	22.47	22.47	22.47	22.47	22.47
Back Side	Main Antenna	n 41 PC2	17.13	17.13	17.13	17.13	17.13	17.13	17.13	17.13	17.13	17.13	17.13	25.58	25.58	25.58	25.58	25.58	25.58	25.58	25.58	25.58	25.58	25.58	25.58	25.58	25.58	25.58	25.58	25.58	25.58	25.58	25.58	25.58

Position	Ant	Band	Power Reduction Status(dBm)																														
			1	3	5	6	8	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35
Back Side	WIFI Antenna	WIFI 2.4G	12.95	12.95	12.95	12.95	12.95	12.95	12.95	12.95	12.95	12.95	12.95	18.81	18.81	18.81	18.81	18.81	18.81	18.81	18.81	18.81	18.81	18.81	18.81	18.81	18.81	18.81	18.81	18.81	18.81	18.81	18.81	18.81
Back Side	WIFI Antenna	WIFI 5G	11.87	11.87	11.87	11.87	11.87	11.87	11.87	11.87	11.87	11.87	11.87	17.85	17.85	17.85	17.85	17.85	17.85	17.85	17.85	17.85	17.85	17.85	17.85	17.85	17.85	17.85	17.85	17.85	17.85	17.85	17.85	17.85

Position	Ant	Band	Power Reduction Status(dBm)																																		
			1	4	10	12	15	18	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45					
Top Edge	Main Antenna	GSM 850	30.14	30.14	30.14	30.14	30.14	30.14	30.14	30.14	30.14	30.14	30.14	32.08	32.08	32.08	32.08	32.08	32.08	32.08	32.08	32.08	32.08	32.08	32.08	32.08	32.08	32.08	32.08	32.08	32.08	32.08	32.08					
Top Edge	Main Antenna	GSM 1900	23.92	23.92	23.92	23.92	23.92	23.92	23.92	23.92	23.92	23.92	23.92	28.87	28.87	28.87	28.87	28.87	28.87	28.87	28.87	28.87	28.87	28.87	28.87	28.87	28.87	28.87	28.87	28.87	28.87	28.87	28.87					
Top Edge	Main Antenna	WCDMA B2	13.35	13.35	13.35	13.35	13.35	13.35	13.35	13.35	13.35	13.35	13.35	23.23	23.23	23.23	23.23	23.23	23.23	23.23	23.23	23.23	23.23	23.23	23.23	23.23	23.23	23.23	23.23	23.23	23.23	23.23	23.23					
Top Edge	Main Antenna	WCDMA B4	12.68	12.68	12.68	12.68	12.68	12.68	12.68	12.68	12.68	12.68	12.68	23.25	23.25	23.25	23.25	23.25	23.25	23.25	23.25	23.25	23.25	23.25	23.25	23.25	23.25	23.25	23.25	23.25	23.25	23.25	23.25					
Top Edge	Main Antenna	WCDMA B5	20.92	20.92	20.92	20.92	20.92	20.92	20.92	20.92	20.92	20.92	20.92	22.90	22.90	22.90	22.90	22.90	22.90	22.90	22.90	22.90	22.90	22.90	22.90	22.90	22.90	22.90	22.90	22.90	22.90	22.90	22.90					
Top Edge	Main Antenna	LTE B2	12.72	12.72	12.72	12.72	12.72	12.72	12.72	12.72	12.72	12.72	12.72	23.70	23.70	23.70	23.70	23.70	23.70	23.70	23.70	23.70	23.70	23.70	23.70	23.70	23.70	23.70	23.70	23.70	23.70	23.70	23.70					
Top Edge	Main Antenna	LTE B4	12.58	12.58	12.58	12.58	12.58	12.58	12.58	12.58	12.58	12.58	12.58	23.29	23.29	23.29	23.29	23.29	23.29	23.29	23.29	23.29	23.29	23.29	23.29	23.29	23.29	23.29	23.29	23.29	23.29	23.29	23.29					
Top Edge	Main Antenna	LTE B5	20.91	20.91	20.91	20.91	20.91	20.91	20.91	20.91	20.91	20.91	20.91	22.91	22.91	22.91	22.91	22.91	22.91	22.91	22.91	22.91	22.91	22.91	22.91	22.91	22.91	22.91	22.91	22.91	22.91	22.91	22.91					
Top Edge	Main Antenna	LTE B12	21.39	21.39	21.39	21.39	21.39	21.39	21.39	21.39	21.39	21.39	21.39	22.98	22.98	22.98	22.98	22.98	22.98	22.98	22.98	22.98	22.98	22.98	22.98	22.98	22.98	22.98	22.98	22.98	22.98	22.98	22.98					
Top Edge	Main Antenna	LTE B25	13.19	13.19	13.19	13.19	13.19	13.19	13.19	13.19	13.19	13.19	13.19	23.69	23.69	23.69	23.69	23.69	23.69	23.69	23.69	23.69	23.69	23.69	23.69	23.69	23.69	23.69	23.69	23.69	23.69	23.69	23.69					
Top Edge	Main Antenna	LTE B26	17.74	17.74	17.74	17.74	17.74	17.74	17.74	17.74	17.74	17.74	17.74	22.79	22.79	22.79	22.79	22.79	22.79	22.79	22.79	22.79	22.79	22.79	22.79	22.79	22.79	22.79	22.79	22.79	22.79	22.79	22.79					
Top Edge	Main Antenna	LTE B66	12.66	12.66	12.66	12.66	12.66	12.66	12.66	12.66	12.66	12.66	12.66	23.20	23.20	23.20	23.20	23.20	23.20	23.20	23.20	23.20	23.20	23.20	23.20	23.20	23.20	23.20	23.20	23.20	23.20	23.20	23.20					
Top Edge	Main Antenna	LTE B71	19.16	19.16	19.16	19.16	19.16	19.16	19.16	19.16	19.16	19.16	19.16	22.80	22.80	22.80	22.80	22.80	22.80	22.80	22.80	22.80	22.80	22.80	22.80	22.80	22.80	22.80	22.80	22.80	22.80	22.80	22.80					
Top Edge	Main Antenna	n 25	13.21	13.21	13.21	13.21	13.21	13.21	13.21	13.21	13.21	13.21	13.21	22.47	22.47	22.47	22.47	22.47	22.47	22.47	22.47	22.47	22.47	22.47	22.47	22.47	22.47	22.47	22.47	22.47	22.47	22.47	22.47					
Top Edge	Main Antenna	n 66	15.23	15.23	15.23	15.23	15.23	15.23	15.23	15.23	15.23	15.23	15.23	23.14	23.14	23.14	23.14	23.14	23.14	23.14	23.14	23.14	23.14	23.14	23.14	23.14	23.14	23.14	23.14	23.14	23.14	23.14	23.14					

Position	Ant	Band	Power Reduction Status(dBm)																																		
			1	2	3	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32					
Top Edge	Main Antenna	LTE B7	12.54	12.54	12.54	12.54	12.54	12.54	12.54	12.54	12.54	12.54	12.54	23.06	23.06	23.06	23.06	23.06	23.06	23.06	23.06	23.06	23.06	23.06	23.06	23.06	23.06	23.06	23.06	23.06	23.06	23.06	23.06					
Top Edge	Main Antenna	LTE B38	16.94	16.94	16.94	16.94	16.94	16.94	16.94	16.94	16.94	16.94	16.94	22.97	22.97	22.97	22.97	22.97	22.97	22.97	22.97	22.97	22.97	22.97	22.97	22.97	22.97	22.97	22.97	22.97	22.97	22.97	22.97					
Top Edge	Main Antenna	LTE B41 PC3	16.21	16.21	16.21	16.21	16.21	16.21	16.21	16.21	16.21	16.21	16.21	22.35	22.35	22.35	22.35	22.35	22.35	22.35	22.35	22.35	22.35	22.35	22.35	22.35	22.35	22.35	22.35	22.35	22.35	22.35	22.35					
Top Edge	Main Antenna	LTE B41 PC2	17.26	17.26	17.26	17.26	17.26	17.26	17.26	17.26	17.26	17.26	17.26	25.32	25.32	25.32	25.32	25.32	25.32	25.32	25.32	25.32	25.32	25.32	25.32	25.32	25.32	25.32	25.32	25.32	25.32	25.32	25.32					
Top Edge	Main Antenna	LTE B41 PC2	19.22	19.22	19.22	19.22	19.22	19.22	19.22	19.22	19.22	19.22	19.22	22.47	22.47	22.47	22.47	22.47	22.47	22.47	22.47	22.47	22.47	22.47	22.47	22.47	22.47	22.47	22.47	22.47	22.47	22.47	22.47					
Top Edge	Main Antenna	n 41 PC2	17.13	17.13	17.13	17.13	17.13	17.13	17.13	17.13	17.13	17.13	17.13	25.58	25.58	25.58	25.58	25.58	25.58	25.58	25.58	25.58	25.58	25.58	25.58	25.58	25.58	25.58	25.58	25.58	25.58	25.58	25.58					

Position	Ant	Band	Power Reduction Status(dBm)																																		
			1	2	3	5	6	8	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34					
Top Edge	WIFI Antenna	WIFI 2.4G	12.95	12.95	12.95	12.95	12.95	12.95	12.95	12.95	12.95	12.95	12.95	18.81	18.81	18.81	18.81	18.81	18.81	18.81	18.81	18.81	18.81	18.81	18.81	18.81	18.81	18.81	18.81	18.81	18.81	18.81	18.81					
Top Edge	WIFI Antenna	WIFI 5G	11.87	11.87	11.87	11.87	11.87	11.87	11.87	11.87	11.87	11.87	11.87	17.85	17.85	17.85	17.85	17.85	17.85	17.85	17.85	17.85	17.85	17.85	17.85	17.85	17.85	17.85	17.85	17.85	17.85	17.85	17.85					

Procedures for determining device tilt angle influences to proximity sensor triggering

The DUT was positioned directly below the flat phantom at the minimum measured trigger distance with Top Edge parallel to the base of the flat phantom for each band.

The EUT was rotated about and Top Edge for angles up to +/- 45°. If the output power increased during the rotation the DUT was moved 1mm toward the phantom and the rotation repeated. This procedure was repeated until the power remained reduced for all angles up to +/- 45°.

The proximity sensor triggering tilt angle measurement method are as below:

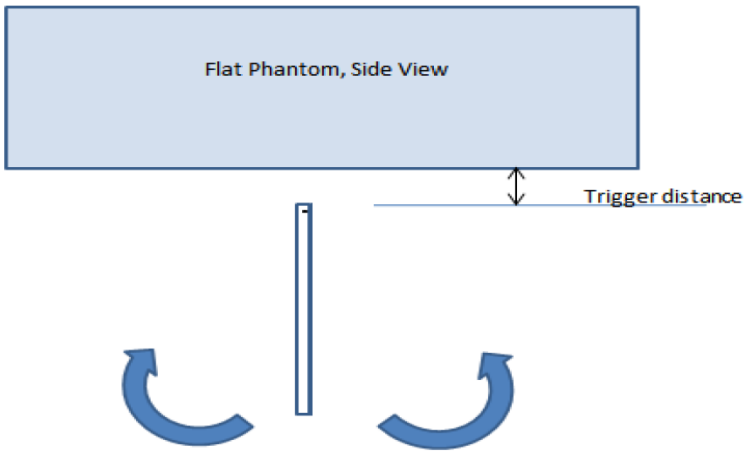


Table: Summary of Tablet Tilt Angle Influence to Proximity Sensor Triggering(Top edge)

Band(MHz)	Position	Minimum trigger distance at which power reduction was maintained over ±45°	Power Reduction Status										
			-45°	-35°	-25°	-15°	-5°	0°	5°	15°	25°	35°	45°
GSM 850	Top edge	25mm	on	on	on	on	on	on	on	on	on	on	on
GSM 1900	Top edge	25mm	on	on	on	on	on	on	on	on	on	on	on
WCDMA B2	Top edge	25mm	on	on	on	on	on	on	on	on	on	on	on
WCDMA B4	Top edge	25mm	on	on	on	on	on	on	on	on	on	on	on
WCDMA B5	Top edge	25mm	on	on	on	on	on	on	on	on	on	on	on
LTE B2	Top edge	25mm	on	on	on	on	on	on	on	on	on	on	on
LTE B4	Top edge	25mm	on	on	on	on	on	on	on	on	on	on	on
LTE B5	Top edge	25mm	on	on	on	on	on	on	on	on	on	on	on
LTE B7	Top edge	12mm	on	on	on	on	on	on	on	on	on	on	on
LTE B12	Top edge	25mm	on	on	on	on	on	on	on	on	on	on	on
LTE B25	Top edge	25mm	on	on	on	on	on	on	on	on	on	on	on
LTE B26	Top edge	25mm	on	on	on	on	on	on	on	on	on	on	on
LTE B38	Top edge	12mm	on	on	on	on	on	on	on	on	on	on	on
LTE B41	Top edge	12mm	on	on	on	on	on	on	on	on	on	on	on
LTE B66	Top edge	25mm	on	on	on	on	on	on	on	on	on	on	on
LTE B71	Top edge	25mm	on	on	on	on	on	on	on	on	on	on	on

n 25	Top edge	25mm	on	on	on	on	on	on	on	on	on	on	on
n 41	Top edge	12mm	on	on	on	on	on	on	on	on	on	on	on
n 66	Top edge	25mm	on	on	on	on	on	on	on	on	on	on	on
WIFI 2.4G	Top edge	14mm	on	on	on	on	on	on	on	on	on	on	on
WIFI 5G	Top edge	14mm	on	on	on	on	on	on	on	on	on	on	on

Conclusion: It can be ensured that the proximity sensor can be valid triggered for the DUT tilt coverage exposure condition.

5.2.10 SAR Detection Mechanism Specification

This device support the receiver and sensor detection mechanism, the main purpose is to minimize triggering associated with power reduction scenarios and provide enhanced user experience.
More details information followings:

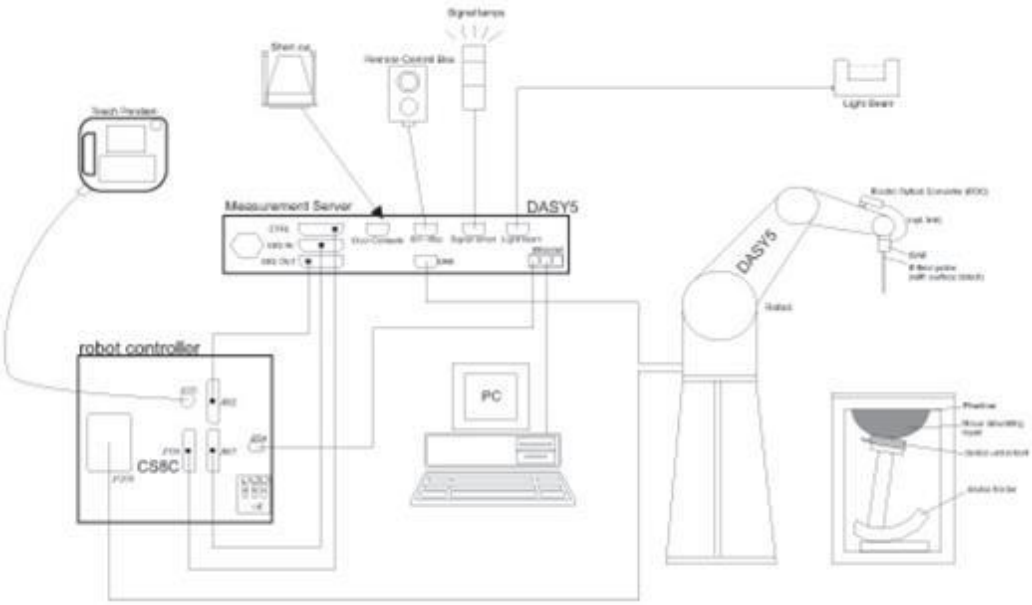
Main Antenna			Power Reduction Level Amount (dB)																					
Power Reduction Scenario		Sensor	GSM850	GSM1900	WCDMA B2	WCDMA B4	WCDMA B5	LTE B2	LTE B4	LTE B5	LTE B7	LTE B12	LTE B25	LTE B26	LTE B38	LTE B41 PC3	LTE B41 PC2	LTE B66	LTE B71	n25	n41 PC2	n66	n71
Full power		Full power	33.00	30.00	24.00	24.00	24.00	24.00	24.00	24.00	24.00	24.00	24.00	24.00	24.00	24.00	26.50	24.00	24.00	24.00	26.50	24.00	24.00
Standalone		Sensor on	2.00	5.00	10.00	10.00	2.00	10.00	10.00	2.00	10.00	2.00	10.00	5.00	6.50	6.50	8.00	10.00	3.50	8.00	8.00	10.00	0.00
		Sensor off	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Simultaneous	Wi-Fi on	Sensor on	2.00	5.00	10.00	10.00	2.00	10.00	10.00	2.00	12.00	2.00	10.00	5.00	9.00	8.00	10.00	10.00	3.50	8.00	8.00	10.00	0.00
		Sensor off	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Wi-Fi Antenna			Power Reduction Level Amount (dB)									
Power Reduction Scenario		Sensor	WiFi 2.4G 11b	WiFi 2.4G 11g	WiFi 2.4G 11n HT20	WiFi 2.4G 11n HT40	WiFi 5G 11a	WiFi 5G 11n HT20	WiFi 5G 11n HT40	WiFi 5G 802.11ac-VHT20	WiFi 5G 802.11ac-VHT40	WiFi 5G 802.11ac-VHT80
Full power		Full power	19.50	19.00	18.00	16.00	19.00	19.00	17.00	17.00	16.00	15.00
Standalone		Sensor on	6.00	6.00	5.00	3.00	6.00	6.50	4.50	4.50	3.50	2.50
		Sensor off	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Simultaneous	WWAN on	Sensor on	6.00	6.00	5.00	3.00	6.00	6.50	4.50	4.50	3.50	2.50
		Sensor off	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

6 SAR Measurements System Configuration

6.1 SAR Measurement Set-up

The DASY system for performing compliance tests consists of the following items:



- A standard high precision 6-axis robot with controller, teach pendant and software. An arm extension for accommodating the data acquisition electronics (DAE).
- An isotropic Field probe optimized and calibrated for the targeted measurement.
- A data acquisition electronics (DAE) which performs the signal amplification, signal multiplexing, AD-conversion, offset measurements, mechanical surface detection, collision detection, etc. The unit is battery powered with standard or rechargeable batteries. The signal is optically transmitted to the EOC.
- The Electro-optical converter (EOC) performs the conversion from optical to electrical signals for the digital communication to the DAE. To use optical surface detection, a special version of the EOC is required. The EOC signal is transmitted to the measurement server.
- The function of the measurement server is to perform the time critical tasks such as signal filtering, control of the robot operation and fast movement interrupts.
- The Light Beam used is for probe alignment. This improves the (absolute) accuracy of the probe positioning.
- A computer running WinXP or Win7 and the DASY software.
- Remote control and teach pendant as well as additional circuitry for robot safety such as warning lamps, etc.
- The phantom, the device holder and other accessories according to the targeted measurement.

6.2 DASY5 E-field Probe System

The SAR measurements were conducted with the dosimetric probe EX3DV4 (manufactured by SPEAG), designed in the classical triangular configuration and optimized for dosimetric evaluation.

EX3DV4 Probe Specification

Construction	Symmetrical design with triangular core Built-in shielding against static charges PEEK enclosure material (resistant to organic solvents, e.g., DGBE)
Calibration	ISO/IEC 17025 calibration service available
Frequency	10 MHz to > 6 GHz Linearity: ± 0.2 dB (30 MHz to 6 GHz)
Directivity	± 0.3 dB in HSL (rotation around probe axis) ± 0.5 dB in tissue material (rotation normal to probe axis)
Dynamic Range	10 µW/g to > 100 mW/g Linearity: ± 0.2dB (noise: typically < 1 µW/g)
Dimensions	Overall length: 330 mm (Tip: 20 mm) Tip diameter: 2.5 mm (Body: 12 mm) Typical distance from probe tip to dipole centers: 1 mm
Application	High precision dosimetric measurements in any exposure Scenario (e.g., very strong gradient fields). Only probe which enables compliance testing for frequencies up to 6 GHz with precision of better 30%.

E-field Probe Calibration

Each probe is calibrated according to a dosimetric assessment procedure with accuracy better than ± 10%. The spherical isotropy was evaluated and found to be better than ± 0.25dB. The sensitivity parameters (NormX, NormY, NormZ), the diode compression parameter (DCP) and the conversion factor (ConvF) of the probe are tested.

The free space E-field from amplified probe outputs is determined in a test chamber. This is performed in a TEM cell for frequencies bellow 1 GHz, and in a wave guide above 1 GHz for free space. For the free space calibration, the probe is placed in the volumetric center of the cavity and at the proper orientation with the field. The probe is then rotated 360 degrees.

E-field temperature correlation calibration is performed in a flat phantom filled with the appropriate simulated brain tissue. The measured free space E-field in the medium correlates to temperature rise in a dielectric medium. For temperature correlation calibration a RF transparent thermistor-based temperature probe is used in conjunction with the E-field probe.

$$SAR=C\Delta T/\Delta t$$

Where: Δt = Exposure time (30 seconds),

C = Heat capacity of tissue (brain or muscle),

ΔT = Temperature increase due to RF exposure.

Or

$$SAR=|E|^2\sigma/\rho$$

Where: σ = Simulated tissue conductivity,

ρ = Tissue density (kg/m^3).

6.3 SAR Measurement Procedure

Power Reference Measurement

The Power Reference Measurement and Power Drift Measurements are for monitoring the power drift of the device under test in the batch process. The minimum distance of probe sensors to surface determines the closest measurement point to phantom surface. This distance cannot be smaller than the distance of sensor calibration points to probe tip as defined in the probe properties.

Area Scan

The area scan is used as a fast scan in two dimensions to find the area of high field values, before doing a fine measurement around the hot spot. The sophisticated interpolation routines implemented in DASY software can find the maximum found in the scanned area, within a range of the global maximum. The range (in dB) is specified in the standards for compliance testing. For example, a 2 dB range is required in IEEE standard 1528 and IEC 62209 standards, whereby 3 dB is a requirement when compliance is assessed in accordance with the ARIB standard (Japan), if only one zoom scan follows the area scan, then only the absolute maximum will be taken as reference. For cases where multiple maximums are detected, the number of zoom scans has to be increased accordingly.
Area scan parameters extracted from FCC KDB 865664 D01 SAR measurement 100 MHz to 6 GHz.

<table>
<tr><td></td><td>≤3 GHz</td><td>> 3 GHz</td></tr>
<tr><td>Maximum distance from closest measurement point (geometric center of probe sensors) to phantom surface</td><td>5 ± 1 mm</td><td>½·δ·ln(2) ± 0.5 mm</td></tr>
<tr><td>Maximum probe angle from probe axis to phantom surface normal at the measurement location</td><td>30° ± 1°</td><td>20° ± 1°</td></tr>
<tr><td rowspan="2">Maximum area scan spatial resolution: ΔxArea, ΔyArea</td><td>≤ 2 GHz: ≤ 15 mm
2 – 3 GHz: ≤ 12 mm</td><td>3 – 4 GHz: ≤ 12 mm
4 – 6 GHz: ≤ 10 mm</td></tr>
<tr><td colspan="2">When the x or y dimension of the test device, in the measurement plane orientation, is smaller than the above, the measurement resolution must be ≤ the corresponding x or y dimension of the test device with at least one measurement point on the test device.</td></tr>
</table>

Zoom Scan

Zoom scans are used assess the peak spatial SAR values within a cubic averaging volume containing 1 gram and 10 gram of simulated tissue. The zoom scan measures points (refer to table below) within a cube shoes base faces are centered on the maxima found in a preceding area scan job within the same procedure. When the measurement is done, the zoom scan evaluates the averaged SAR for 1 gram and 10 gram and displays these values next to the job's label.

Zoom scan parameters extracted from FCC KDB 865664 D01 SAR measurement 100 MHz to 6 GHz.

			≤3GHz	> 3 GHz
Maximum zoom scan spatial resolution: $\triangle x_{zoom} \triangle y_{zoom}$			≤2GHz: ≤8mm 2 – 3GHz: ≤5mm*	3 – 4GHz: ≤5mm* 4 – 6GHz: ≤4mm*
Maximum zoom scan spatial resolution, normal to phantom surface	Uniform grid: $\triangle z_{zoom}(n)$		≤5mm	3 – 4GHz: ≤4mm 4 – 5GHz: ≤3mm 5 – 6GHz: ≤2mm
	Graded grid	$\triangle z_{zoom}(1)$: between 1st two points closest to phantom surface	≤4mm	3 – 4GHz: ≤3mm 4 – 5GHz: ≤2.5mm 5 – 6GHz: ≤2mm
		$\triangle z_{zoom}(n>1)$: between subsequent points	≤1.5•$\triangle z_{zoom}(n-1)$	
Minimum zoom scan volume	X, y, z		≥30mm	3 – 4GHz: ≥28mm 4 – 5GHz: ≥25mm 5 – 6GHz: ≥22mm
Note: δ is the penetration depth of a plane-wave at normal incidence to the tissue medium; see draft standard IEEE P1528-2011 for details. * When zoom scan is required and the *reported* SAR from the *area scan based 1-g SAR estimation* procedures of KDB 447498 is ≤ 1.4W/kg, ≤8mm, ≤7mm and ≤5mm zoom scan resolution may be applied, respectively, for 2GHz to 3GHz, 3GHz to 4GHz and 4GHz to 6GHz.				

Volume Scan Procedures

The volume scan is used for assess overlapping SAR distributions for antennas transmitting in different frequency bands. It is equivalent to an oversized zoom scan used in standalone measurements. The measurement volume will be used to enclose all the simultaneous transmitting antennas. For antennas transmitting simultaneously in different frequency bands, the volume scan is measured separately in each frequency band. In order to sum correctly to compute the 1g aggregate SAR, the EUT remain in the same test position for all measurements and all volume scan use the same spatial resolution and grid spacing. When all volume scan were completed, the software, SEMCAD postprocessor can combine and subsequently superpose these measurement data to calculating the multiband SAR.

Power Drift Monitoring

All SAR testing is under the EUT install full charged battery and transmit maximum output power. In DASY measurement software, the power reference measurement and power drift measurement procedures are used for monitoring the power drift of EUT during SAR test. Both these procedures measure the field at a specified reference position before and after the SAR testing. The software will calculate the field difference in dB. If the power drifts more than 5%, the SAR will be retested.

7 Main Test Equipment

Name of Equipment	Manufacturer	Type/Model	Serial Number	Software Version	Last Cal.	Cal. Due Date
Network Analyzer	Agilent	E5071B	MY42404014	/	2024-05-07	2025-05-06
Dielectric Probe Kit	SPEAG	DAK-3.5	1332	/	2024-07-15	2025-07-14
Power Meter	Agilent	E4417A	GB41291714	/	2024-05-07	2025-05-06
Power Sensor	Agilent	N8481H	MY50350004	/	2024-05-07	2025-05-06
Power Sensor	Agilent	E9327A	US40441622	/	2024-05-07	2025-05-06
Signal Generator	KEYSIGHT	N5182B-X07	MY51350303	/	2024-12-02	2025-12-01
Dual Directional Coupler	UCL	UCL-DDC056G-S	20010600118	/	/	/
Amplifier	R&S	SCU18F	101022	/	2024-05-08	2025-05-07
Wireless Communication Tester	Anritsu	MT8820C	6201342015	/	2024-12-03	2025-12-02
Wireless Communication Tester	Agilent	E5515C	MY48360988	/	2024-12-03	2025-12-02
Wireless communication tester	Starpoint	SP9500	20440	/	2024-05-07	2025-05-06
Wireless Communication Tester	Anritsu	MT8000A	6261844783	/	2024-05-07	2025-05-06
Wireless Communication Tester	R&S	CMW 500	146734	/	2024-05-07	2025-05-06
E-field Probe	SPEAG	EX3DV4	7689	/	2024-06-04	2025-06-03
DAE	SPEAG	DAE4	1317	/	2024-09-10	2025-09-09
Validation Kit 750MHz	SPEAG	D750V3	1045	/	2023-09-12	2026-09-11
Validation Kit 835MHz	SPEAG	D835V2	4d020	/	2023-09-15	2026-09-14
Validation Kit 1750MHz	SPEAG	D1750V2	1033	/	2023-03-23	2026-03-22
Validation Kit 1900MHz	SPEAG	D1900V2	5d060	/	2023-09-12	2026-09-11
Validation Kit 2450MHz	SPEAG	D2450V2	786	/	2023-09-12	2026-09-11
Validation Kit 2600MHz	SPEAG	D2600V2	1025	/	2024-05-08	2027-05-07
Validation Kit 5GHz	SPEAG	D5GHzV2	1203	/	2022-12-09	2025-12-08
Software for Tissue	SPEAG	DAK 3.0.4.1	/	3.0.4.1	/	/
Temperature Probe	Auden	DTM3000	3905	/	2024-12-03	2025-12-02
Twin ELI Phantom	SPEAG	ELI v4.0	1179	/	/	/
Hygrothermograph	Anymetr	HTC - 1	TA2024A031	/	2024-05-06	2025-05-05
Test System	SPEAG	TX90 XLspeag	F08/5AH5A1/A/01	52.10.4.1527	/	/

8 Tissue Dielectric Parameter Measurements & System Check

8.1 Tissue Verification

The temperature of the tissue-equivalent medium used during measurement must also be within 18°C to 25°C and within ± 2°C of the temperature when the tissue parameters are characterized. The dielectric parameters must be measured before the tissue-equivalent medium is used in a series of SAR measurements. The parameters should be re-measured after each 24 hours of use; or earlier if the dielectric parameters can become out of tolerance.

Target values

Frequency (MHz)	ε_r	σ(s/m)
750	42.0	0.90
835	41.5	0.90
1750	40.1	1.37
1900	40.0	1.40
2450	39.2	1.80
2600	39.0	1.96
5250	35.9	4.71
5600	35.5	5.07
5750	35.4	5.22

Measurements results

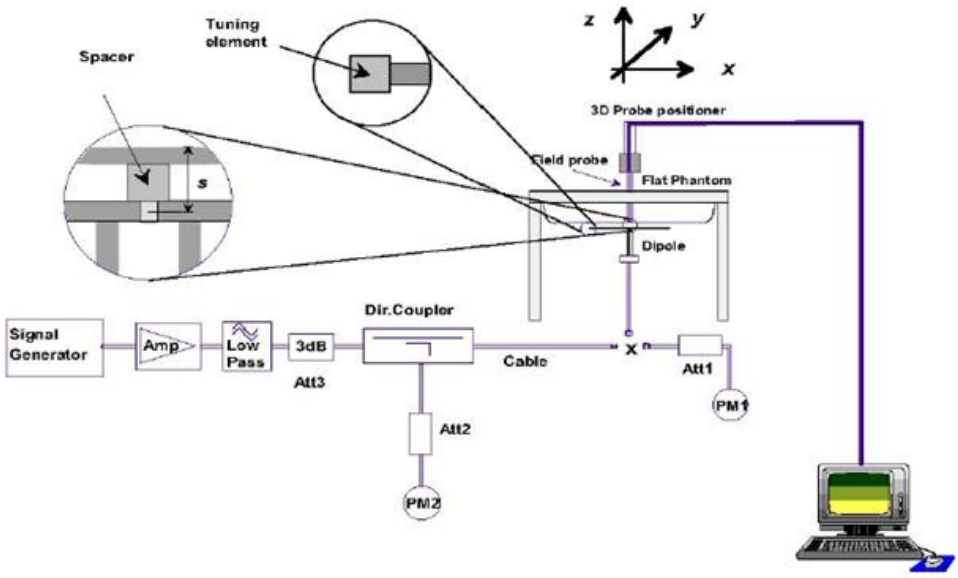
Frequency (MHz)	Test Date	Temp ℃	Measured Dielectric Parameters		Target Dielectric Parameters		Limit (Within ±5%)	
			ε_r	σ(s/m)	ε_r	σ(s/m)	Dev ε_r(%)	Dev σ(%)
750	2/27/2025	21.5	42.3	0.88	42.0	0.90	0.71	-2.22
	2/26/2025	21.5	42.0	0.87	42.0	0.90	0.00	-3.33
835	2/13/2025	21.5	41.4	0.88	41.5	0.90	-0.24	-2.22
	2/24/2025	21.5	41.3	0.87	41.5	0.90	-0.48	-3.33
	2/28/2025	21.5	41.4	0.92	41.5	0.90	-0.24	2.22
1750	2/14/2025	21.5	40.2	1.34	40.1	1.37	0.25	-2.19
	2/18/2025	21.5	40.1	1.34	40.1	1.37	0.00	-2.19
	2/21/2025	21.5	40.2	1.36	40.1	1.37	0.25	-0.73
1900	2/15/2025	21.5	40.1	1.41	40.0	1.40	0.25	0.71
	2/22/2025	21.5	40.2	1.43	40.0	1.40	0.50	2.14
	2/28/2025	21.5	40.0	1.40	40.0	1.40	0.00	0.00
2450	2/17/2025	21.5	38.6	1.81	39.2	1.80	-1.53	0.56
2600	2/18/2025	21.5	38.2	2.01	39.0	1.96	-2.05	2.55
	2/19/2025	21.5	38.4	1.94	39.0	1.96	-1.54	-1.02

	2/20/2025	21.5	38.3	1.99	39.0	1.96	-1.79	1.53
	3/5/2025	21.5	38.5	1.95	39.0	1.96	-1.28	-0.51
5250	2/19/2025	21.5	35.5	4.80	35.9	4.71	-1.11	1.91
5600	2/17/2025	21.5	34.2	5.21	35.5	5.07	-3.66	2.76
5750	2/19/2025	21.5	34.9	5.21	35.4	5.22	-1.41	-0.19
Note: The depth of tissue-equivalent liquid in a phantom must be ≥ 15.0 cm.								

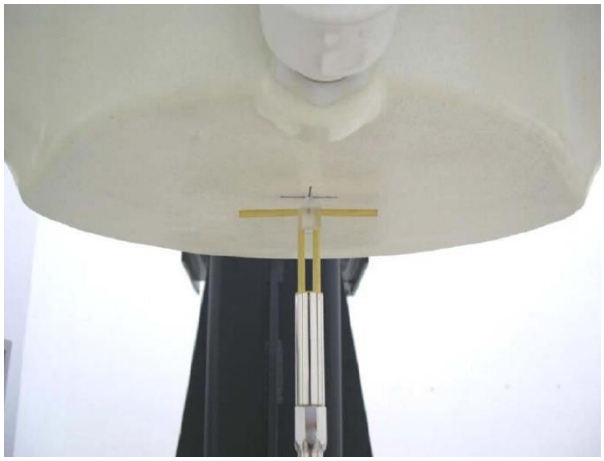
8.2 System Check

The manufacturer calibrates the probes annually. Dielectric parameters of the tissue simulates were measured using the dielectric probe kit and the network analyzer. A system check measurement for every day was made following the determination of the dielectric parameters of the Tissue simulates, using the dipole validation kit. The dipole antenna was placed under the flat section of the twin SAM phantom.

System check is performed regularly on all frequency bands where tests are performed with the DASY system.



Picture 1 System Check setup



Picture 2 Setup Photo

Justification for Extended SAR Dipole Calibrations

Usage of SAR dipoles calibrated less than 3 years ago but more than 1 year ago were confirmed in maintaining return loss (＞20 dB, within 20% of prior calibration) and impedance (within 5 ohm from prior calibration) requirements per extended calibrations in KDB 865664 D01:

Dipole		Date of Measurement	Return Loss (dB)	Δ %	Impedance (Ω)			
					Real	ΔΩ	Imaginary	ΔΩ
Dipole D750V3 SN: 1045	Head Liquid	2023-09-12	30.4	/	51.9	/	-2.47	/
		2024-09-11	30.12	-0.9	52.3	0.4	-2.46	0.01
Dipole D835V2 SN: 4d020	Head Liquid	2023-09-15	28.3	/	50.6	/	-3.80	/
		2024-09-14	28.9	2.0	51.4	0.8	-3.66	0.14
Dipole D1750V2 SN: 1033	Head Liquid	2023-03-23	36.2	/	51.2	/	-0.98	/
		2024-03-22	35.4	-2.2	51.6	0.4	-1.28	-0.3
Dipole D1900V2 SN: 5d060	Head Liquid	2023-09-12	24.0	/	50.5	/	6.32	/
		2024-09-11	24.1	0.6	50.9	0.4	6.83	0.51
Dipole D2450V2 SN: 786	Head Liquid	2023-09-12	28.2	/	52.2	/	3.34	/
		2024-09-11	28.6	1.4	52.8	0.6	3.43	0.09
Dipole D5GHzV2 (5250 MHz) SN: 1203	Head Liquid	2022-12-09	29.0	/	48.5	/	-3.20	/
		2023-12-08	28.4	-2.1	48.4	-0.1	-3.4	-0.2
		2024-12-07	28.6	0.6	49.3	0.9	-3.37	0.03
Dipole D5GHzV2 (5600 MHz) SN: 1203	Head Liquid	2022-12-09	30.4	/	51.7	/	2.60	/
		2023-12-08	30.5	0.3	51.5	-0.2	2.4	-0.2
		2024-12-07	30.8	1.1	51.9	0.4	2.85	0.45
Dipole D5GHzV2 (5750 MHz) SN: 1203	Head Liquid	2022-12-09	25.3	/	53.6	/	4.30	/
		2023-12-08	25.7	1.6	53.1	-0.5	4.7	0.4
		2024-12-07	26.1	3.1	54.5	0.9	4.62	0.32

System Check Results

Frequency (MHz)	Test Date	Temp ℃	250mW Measured SAR_{1g} (W/kg)	1W Normalized SAR_{1g} (W/kg)	1W Target SAR_{1g} (W/kg)	Δ % (Limit ±10%)	Plot No.
750	2/27/2025	21.5	2.13	8.52	8.47	0.59	1
	2/26/2025	21.5	2.10	8.40	8.47	-0.83	2
835	2/13/2025	21.5	2.44	9.76	9.75	0.10	3
	2/24/2025	21.5	2.46	9.84	9.75	0.92	4
	2/28/2025	21.5	2.43	9.72	9.75	-0.31	5
1750	2/14/2025	21.5	8.95	35.80	36.80	-2.72	6
	2/18/2025	21.5	9.11	36.44	36.80	-0.98	7
	2/21/2025	21.5	8.96	35.84	36.80	-2.61	8
1900	2/15/2025	21.5	9.88	39.52	40.40	-2.18	9
	2/22/2025	21.5	9.85	39.40	40.40	-2.48	10
	2/28/2025	21.5	9.55	38.20	40.40	-5.45	11
2450	2/17/2025	21.5	13.70	54.80	52.60	4.18	12
2600	2/18/2025	21.5	13.90	55.60	56.10	-0.89	13
	2/19/2025	21.5	13.88	55.52	56.10	-1.03	14
	2/20/2025	21.5	13.94	55.76	56.10	-0.61	15
	3/5/2025	21.5	13.90	55.60	56.10	-0.89	16
Frequency (MHz)	**Test Date**	**Temp ℃**	**100mW Measured SAR_{1g} (W/kg)**	**1W Normalized SAR_{1g} (W/kg)**	**1W Target SAR_{1g} (W/kg)**	**Δ % (Limit ±10%)**	**Plot No.**
5250	2/19/2025	21.5	7.87	78.70	77.70	1.29	17
5600	2/17/2025	21.5	7.67	76.70	80.30	-4.48	18
5750	2/19/2025	21.5	7.66	76.60	76.80	-0.26	19
Note: Target Values used derive from the calibration certificate data storage and evaluation.							

9 Normal and Maximum Output Power

KDB 447498 D01 at the maximum rated output power and within the tune-up tolerance range specified for the product, but not more than 2 dB lower than the maximum tune-up tolerance limit.

9.1 GSM Mode

GSM 850 Pmax&Sensor off --Main Ant0		Burst-Averaged Output Power(dBm)				Division Factors	Frame-Averaged Output Power(dBm)			
		Tune-up	Channel/Frequency(MHz)				Tune-up	Channel/Frequency(MHz)		
		MAX	128 /824.2	190 /836.6	251 /848.8		MAX	128 /824.2	190 /836.6	251 /848.8
GPRS/ EGPRS (GMSK)	1 Tx Slot	33.00	31.91	31.98	32.28	9.03	23.97	22.88	22.95	23.25
	2 Tx Slots	32.00	31.28	31.32	31.60	6.02	25.98	25.26	25.30	25.58
	3 Tx Slots	30.50	29.60	29.64	30.05	4.26	26.24	25.34	25.38	25.79
	4 Tx Slots	29.50	28.42	28.44	28.86	3.01	**26.49**	25.41	25.43	25.85
EGPRS (8PSK)	1 Tx Slot	26.00	24.70	24.96	25.15	9.03	16.97	15.67	15.93	16.12
	2 Tx Slots	25.00	24.05	24.00	24.37	6.02	18.98	18.03	17.98	18.35
	3 Tx Slots	23.00	22.10	22.12	21.74	4.26	18.74	17.84	17.86	17.48
	4 Tx Slots	22.00	20.76	20.68	20.75	3.01	18.99	17.75	17.67	17.74
GSM 850 Sensor on--Main Ant0		Burst-Averaged Output Power(dBm)				Division Factors	Frame-Averaged Output Power(dBm)			
		Tune-up	Channel/Frequency(MHz)				Tune-up	Channel/Frequency(MHz)		
		MAX	128 /824.2	190 /836.6	251 /848.8		MAX	128 /824.2	190 /836.6	251 /848.8
GPRS/ EGPRS (GMSK)	1 Tx Slot	31.00	30.00	30.19	30.52	9.03	21.97	20.97	21.16	21.49
	2 Tx Slots	28.50	27.56	27.63	28.03	6.02	22.48	21.54	21.61	22.01
	3 Tx Slots	26.50	25.74	25.72	26.12	4.26	22.24	21.48	21.46	21.86
	4 Tx Slots	25.50	24.52	24.42	24.78	3.01	**22.49**	21.51	21.41	21.77
EGPRS (8PSK)	1 Tx Slot	23.50	22.22	22.61	22.54	9.03	14.47	13.19	13.58	13.51
	2 Tx Slots	21.00	19.74	19.83	20.21	6.02	14.98	13.72	13.81	14.19
	3 Tx Slots	18.50	17.64	17.80	17.74	4.26	14.24	13.38	13.54	13.48
	4 Tx Slots	17.50	16.09	15.92	16.65	3.01	14.49	13.08	12.91	13.64
GSM 1900 Pmax&Sensor off--Main Ant0		Burst-Averaged Output Power(dBm)				Division Factors	Frame-Averaged Output Power(dBm)			
		Tune-up	Channel/Frequency(MHz)				Tune-up	Channel/Frequency(MHz)		
		MAX	512 /1850.2	661 /1880	810 /1909.8		MAX	512 /1850.2	661 /1880	810 /1909.8
GPRS/ EGPRS (GMSK)	1 Tx Slot	30.00	28.46	28.85	28.93	9.03	20.97	19.43	19.82	19.90
	2 Tx Slots	29.00	27.81	28.21	28.29	6.02	22.98	21.79	22.19	22.27
	3 Tx Slots	27.50	26.10	26.52	26.64	4.26	23.24	21.84	22.26	22.38
	4 Tx Slots	26.50	25.01	25.31	25.41	3.01	**23.49**	22.00	22.30	22.40
EGPRS	1 Tx Slot	26.00	24.54	25.01	25.02	9.03	16.97	15.51	15.98	15.99

(8PSK)	2 Tx Slots	25.00	23.56	23.87	23.71	6.02	18.98	17.54	17.85	17.69
	3 Tx Slots	23.00	21.49	21.85	21.31	4.26	18.74	17.23	17.59	17.05
	4 Tx Slots	22.00	20.91	20.93	20.89	3.01	18.99	17.90	17.92	17.88
GSM 1900 Sensor on--Main Ant0		Burst-Averaged Output Power(dBm)				Division Factors	Frame-Averaged Output Power(dBm)			
		Tune-up	Channel/Frequency(MHz)				Tune-up	Channel/Frequency(MHz)		
		MAX	512 /1850.2	661 /1880	810 /1909.8		MAX	512 /1850.2	661 /1880	810 /1909.8
GPRS/ EGPRS (GMSK)	1 Tx Slot	25.00	23.58	24.00	24.10	9.03	15.97	14.55	14.97	15.07
	2 Tx Slots	22.00	20.99	21.53	21.73	6.02	15.98	14.97	15.51	15.71
	3 Tx Slots	20.00	18.83	19.50	19.73	4.26	15.74	14.57	15.24	15.47
	4 Tx Slots	19.00	17.26	17.94	18.24	3.01	**15.99**	14.25	14.93	15.23
EGPRS (8PSK)	1 Tx Slot	20.50	19.04	19.17	19.54	9.03	11.47	10.01	10.14	10.51
	2 Tx Slots	17.50	16.28	16.74	16.77	6.02	11.48	10.26	10.72	10.75
	3 Tx Slots	15.50	14.12	14.13	14.82	4.26	11.24	9.86	9.87	10.56
	4 Tx Slots	14.00	13.01	13.04	12.94	3.01	10.99	10.00	10.03	9.93

Notes: The worst-case configuration and mode for SAR testing is determined to be as follows: Standalone: GSM 850 GMSK (GPRS) mode with 4 time slots for Max power, GSM 1900 GMSK (GPRS) mode with 4 time slots for Max power, based on the output power measurements above.

9.2 WCDMA Mode

The following tests were completed according to the test requirements outlined in the 3GPP TS34.121 specification.

WCDMA Pmax&Sensor off--Main Ant0		Band II(dBm)				Band IV(dBm)				Band V(dBm)			
Tx Channel		9262	9400	9538	Tune-up Limit	1312	1413	1513	Tune-up Limit	4132	4183	4233	Tune-up Limit
Frequency(MHz)		1852.4	1880	1907.6		1712.4	1732.6	1752.6		826.4	836.6	846.6	
RMC	12.2kbps	23.70	23.23	23.35	24.00	23.31	23.25	23.27	24.00	22.97	22.90	22.94	24.00
HSDPA	Sub 1	22.49	21.48	21.57	23.00	22.49	22.10	22.10	23.00	21.87	21.72	21.64	23.00
	Sub 2	22.43	21.34	21.61	23.00	22.39	21.95	21.71	23.00	21.77	21.62	21.49	23.00
	Sub 3	21.83	20.80	21.08	22.00	21.84	21.87	21.55	22.00	21.16	20.90	20.82	22.00
	Sub 4	21.75	20.80	21.09	22.00	21.80	21.83	21.48	22.00	21.31	21.01	20.85	22.00
HSUPA	Sub 1	20.53	19.97	20.06	21.50	20.98	20.60	20.59	21.50	20.41	20.25	20.17	21.50
	Sub 2	20.55	19.51	19.59	21.00	20.53	20.12	20.11	21.00	19.91	19.76	19.67	21.00
	Sub 3	20.54	19.51	19.60	21.00	20.53	20.12	20.14	21.00	19.92	19.76	19.69	21.00
	Sub 4	20.06	19.02	19.10	21.00	20.05	19.64	19.62	21.00	19.45	19.28	19.22	21.00
	Sub 5	21.53	20.49	20.57	22.00	21.48	21.11	21.09	22.00	20.89	20.74	20.65	22.00
DC-HSDPA	Sub 1	22.55	21.36	21.55	23.00	22.53	21.98	22.12	23.00	21.79	21.74	21.70	23.00
	Sub 2	22.57	21.34	21.59	23.00	22.61	21.85	21.81	23.00	21.83	21.64	21.39	23.00
	Sub 3	21.83	20.72	21.14	22.00	21.66	21.93	21.77	22.00	21.28	20.80	20.74	22.00
	Sub 4	21.67	20.84	21.27	22.00	21.62	21.77	21.42	22.00	21.25	21.11	20.85	22.00
HSPA+	16QAM	20.84	20.37	20.79	21.00	20.53	20.47	20.55	21.00	20.17	20.26	20.24	21.00
WCDMA Sensor on--Main Ant0		Band II(dBm)				Band IV(dBm)				Band V(dBm)			
Tx Channel		9262	9400	9538	Tune-up Limit	1312	1413	1513	Tune-up Limit	4132	4183	4233	Tune-up Limit
Frequency(MHz)		1852.4	1880	1907.6		1712.4	1732.6	1752.6		826.4	836.6	846.6	
RMC	12.2kbps	13.46	13.35	13.42	14.00	13.05	12.68	12.68	14.00	21.05	20.92	20.82	22.00
HSDPA	Sub 1	12.48	11.45	11.56	13.00	12.08	11.68	11.69	13.00	19.73	19.82	19.46	21.00
	Sub 2	12.14	11.14	11.44	13.00	11.81	11.34	11.36	13.00	19.61	19.42	19.51	21.00
	Sub 3	11.53	10.59	10.79	12.00	11.30	11.33	11.21	12.00	19.08	18.74	18.72	20.00
	Sub 4	11.55	10.64	10.95	12.00	11.22	11.17	11.13	12.00	19.23	18.93	18.89	20.00
HSUPA	Sub 1	10.99	9.96	10.02	11.50	10.55	10.17	10.12	11.50	18.35	18.07	18.01	19.50
	Sub 2	10.51	9.47	9.55	11.00	10.07	9.66	9.66	11.00	17.73	17.58	17.71	19.00
	Sub 3	10.82	9.50	9.54	11.00	10.05	10.66	9.68	11.00	17.92	17.82	17.57	19.00
	Sub 4	10.01	9.02	9.04	11.00	9.60	9.38	9.19	11.00	17.27	17.30	17.24	19.00
	Sub 5	11.46	10.44	10.50	12.00	11.04	10.64	10.62	12.00	18.99	18.56	18.75	20.00

DC-HSDPA	Sub 1	12.44	11.47	11.74	13.00	12.22	11.80	11.73	13.00	19.73	19.82	19.68	21.00
	Sub 2	12.06	11.26	11.60	13.00	11.91	11.42	11.28	13.00	19.87	19.62	19.23	21.00
	Sub 3	11.61	10.71	10.67	12.00	11.44	11.21	11.25	12.00	19.28	18.80	18.56	20.00
	Sub 4	11.59	10.62	11.07	12.00	11.18	11.35	11.31	12.00	19.07	19.13	18.75	20.00
HSPA+	16QAM	10.71	10.70	10.61	11.00	10.44	9.85	9.83	11.00	18.21	18.36	18.04	19.00
Note: Per KDB 941225 D01, SAR for each exposure is measured using a 12.2 kbps RMC with TPC bits configured to all “1’s”.													

9.3 LTE Mode

UE Power Class: 3 (23 +/- 2dBm). The allowed Maximum Power Reduction (MPR) for the maximum output power due to higher order modulation and transmit bandwidth configuration (resource blocks) is specified in Table 6.2.3-1 of the 3GPP TS36.101.

Table 6.2.3-1: Maximum Power Reduction (MPR) for Power Class 1, 2 and 3

Modulation	Channel bandwidth / Transmission bandwidth (N_{RB})						MPR (dB)
	1.4 MHz	3.0 MHz	5 MHz	10 MHz	15 MHz	20 MHz	
QPSK	> 5	> 4	> 8	> 12	> 16	> 18	≤ 1
16 QAM	≤ 5	≤ 4	≤ 8	≤ 12	≤ 16	≤ 18	≤ 1
16 QAM	> 5	> 4	> 8	> 12	> 16	> 18	≤ 2
64 QAM	≤ 5	≤ 4	≤ 8	≤ 12	≤ 16	≤ 18	≤ 2
64 QAM	> 5	> 4	> 8	> 12	> 16	> 18	≤ 3
256 QAM	≥ 1						≤ 5

LTE B2							
Pmax&Sensor off--Main Ant0				Maximum Output Power (dBm)			Tune-up
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			
				18607/1850.7	18900/1880	19193/1909.3	
1.4MHz	QPSK	1	0	23.53	23.43	23.17	24.00
		1	2	23.54	23.40	23.16	24.00
		1	5	23.57	23.42	23.18	24.00
		3	0	23.59	23.39	23.15	24.00
		3	2	23.60	23.39	23.15	24.00
		3	3	23.63	23.38	23.17	24.00
		6	0	22.59	22.41	22.19	23.00
	16QAM	1	0	22.77	22.72	22.44	23.00
		1	2	22.78	22.72	22.44	23.00
		1	5	22.82	22.77	22.46	23.00
		3	0	22.51	22.36	22.20	23.00
		3	2	22.51	22.38	22.19	23.00
		3	3	22.50	22.37	22.19	23.00
		6	0	21.63	21.47	21.27	22.00
	64QAM	1	0	21.59	21.56	21.31	22.00
		1	2	21.59	21.55	21.30	22.00
		1	5	21.64	21.59	21.35	22.00
		3	0	21.70	21.52	21.29	22.00
		3	2	21.66	21.52	21.31	22.00
		3	3	21.69	21.52	21.31	22.00
		6	0	20.51	20.37	20.18	21.00
	256QAM	1	0	20.78	20.64	20.92	21.00
		1	2	20.86	20.66	20.73	21.00
		1	5	20.57	20.34	20.60	21.00

		3	0	20.43	20.06	20.34	21.00
		3	2	20.74	20.28	20.13	21.00
		3	3	20.74	20.59	20.25	21.00
		6	0	19.43	19.50	19.57	20.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				18615/1851.5	18900/1880	19185/1908.5	
3MHz	QPSK	1	0	23.53	23.43	23.23	24.00
		1	7	23.55	23.40	23.20	24.00
		1	14	23.60	23.33	23.19	24.00
		8	0	22.56	22.40	22.22	23.00
		8	4	22.60	22.39	22.22	23.00
		8	7	22.66	22.36	22.19	23.00
		15	0	22.59	22.36	22.20	23.00
	16QAM	1	0	22.81	22.72	22.48	23.00
		1	7	22.80	22.65	22.43	23.00
		1	14	22.85	22.58	22.41	23.00
		8	0	21.62	21.48	21.28	22.00
		8	4	21.64	21.47	21.28	22.00
		8	7	21.71	21.43	21.28	22.00
		15	0	21.59	21.39	21.21	22.00
	64QAM	1	0	21.68	21.65	21.34	22.00
		1	7	21.72	21.65	21.31	22.00
		1	14	21.76	21.56	21.32	22.00
		8	0	20.62	20.46	20.27	21.00
		8	4	20.64	20.44	20.26	21.00
		8	7	20.70	20.44	20.27	21.00
		15	0	20.60	20.32	20.14	21.00
	256QAM	1	0	20.52	20.70	20.76	21.00
		1	7	20.66	20.60	20.49	21.00
		1	14	20.41	20.32	20.46	21.00
		8	0	19.55	19.34	19.62	20.00
		8	4	19.62	19.22	19.33	20.00
		8	7	19.76	19.45	19.21	20.00
		15	0	19.31	19.58	19.63	20.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				18625/1852.5	18900/1880	19175/1907.5	
5MHz	QPSK	1	0	23.60	23.47	23.33	24.00
		1	13	23.63	23.43	23.23	24.00
		1	24	23.69	23.40	23.23	24.00
		12	0	22.60	22.43	22.32	23.00
		12	6	22.66	22.40	22.27	23.00
		12	13	22.66	22.39	22.24	23.00
		25	0	22.65	22.44	22.31	23.00

	16QAM	1	0	22.83	22.73	22.59	23.00
		1	13	22.83	22.70	22.50	23.00
		1	24	22.86	22.59	22.47	23.00
		12	0	21.56	21.45	21.31	22.00
		12	6	21.65	21.41	21.26	22.00
		12	13	21.67	21.42	21.24	22.00
		25	0	21.66	21.41	21.28	22.00
	64QAM	1	0	21.76	21.62	21.48	22.00
		1	13	21.79	21.58	21.37	22.00
		1	24	21.83	21.54	21.37	22.00
		12	0	20.60	20.47	20.35	21.00
		12	6	20.68	20.41	20.29	21.00
		12	13	20.69	20.43	20.23	21.00
		25	0	20.62	20.39	20.27	21.00
	256QAM	1	0	20.72	20.42	20.56	21.00
		1	13	20.92	20.60	20.53	21.00
		1	24	20.33	20.16	20.12	21.00
		12	0	19.41	19.18	19.40	20.00
		12	6	19.78	19.30	18.93	20.00
		12	13	19.50	19.27	19.37	20.00
		25	0	19.27	19.76	19.55	20.00

Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				18650/1855	18900/1880	19150/1905	
10MHz	QPSK	1	0	23.65	23.53	23.44	24.00
		1	25	23.68	23.43	23.31	24.00
		1	49	23.66	23.36	23.25	24.00
		25	0	22.67	22.46	22.39	23.00
		25	13	22.70	22.44	22.37	23.00
		25	25	22.69	22.43	22.36	23.00
		50	0	22.71	22.44	22.38	23.00
	16QAM	1	0	22.86	22.79	22.67	23.00
		1	25	22.83	22.71	22.58	23.00
		1	49	22.86	22.64	22.56	23.00
		25	0	21.64	21.44	21.39	22.00
		25	13	21.68	21.39	21.36	22.00
		25	25	21.68	21.42	21.34	22.00
		50	0	21.68	21.40	21.38	22.00
	64QAM	1	0	21.82	21.65	21.55	22.00
		1	25	21.82	21.58	21.43	22.00
		1	49	21.85	21.51	21.37	22.00
		25	0	20.61	20.39	20.37	21.00
		25	13	20.67	20.37	20.30	21.00
		25	25	20.66	20.39	20.30	21.00

		50	0	20.66	20.39	20.36	21.00
	256QAM	1	0	20.60	20.60	20.82	21.00
		1	25	20.72	20.82	20.45	21.00
		1	49	20.43	20.48	20.54	21.00
		25	0	19.73	19.42	19.60	20.00
		25	13	19.92	19.30	19.25	20.00
		25	25	19.70	19.63	19.51	20.00
		50	0	19.59	19.56	19.61	20.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				18675/1857.5	18900/1880	19125/1902.5	
15MHz	QPSK	1	0	23.70	23.54	23.31	24.00
		1	38	23.71	23.47	23.36	24.00
		1	74	23.58	23.31	23.22	24.00
		36	0	22.69	22.46	22.39	23.00
		36	18	22.69	22.43	22.36	23.00
		36	39	22.63	22.40	22.32	23.00
		75	0	22.68	22.42	22.37	23.00
	16QAM	1	0	22.90	22.76	22.59	23.00
		1	38	22.86	22.72	22.61	23.00
		1	74	22.75	22.57	22.51	23.00
		36	0	21.70	21.46	21.38	22.00
		36	18	21.71	21.42	21.36	22.00
		36	39	21.65	21.39	21.32	22.00
		75	0	21.70	21.42	21.39	22.00
	64QAM	1	0	21.85	21.73	21.47	22.00
		1	38	21.90	21.65	21.48	22.00
		1	74	21.77	21.53	21.34	22.00
		36	0	20.70	20.44	20.41	21.00
		36	18	20.74	20.39	20.38	21.00
		36	39	20.65	20.41	20.32	21.00
		75	0	20.67	20.42	20.36	21.00
	256QAM	1	0	20.72	20.54	20.92	21.00
		1	38	20.84	20.72	20.53	21.00
		1	74	20.49	20.36	20.38	21.00
		36	0	19.55	19.34	19.56	20.00
		36	18	19.98	19.18	19.31	20.00
		36	39	19.56	19.53	19.41	20.00
		75	0	19.67	19.72	19.71	20.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				18700/1860	18900/1880	19100/1900	
20MHz	QPSK	1	0	**23.70**	**23.58**	**23.38**	24.00
		1	50	23.68	23.49	**23.38**	24.00
		1	99	23.56	23.34	23.26	24.00

		50	0	**22.79**	**22.51**	**22.50**	23.00
		50	25	22.73	22.46	22.42	23.00
		50	50	22.60	22.40	22.43	23.00
		100	0	**22.67**	22.47	22.46	23.00
	16QAM	1	0	22.88	22.79	22.61	23.00
		1	50	22.81	22.77	22.54	23.00
		1	99	22.73	22.55	22.46	23.00
		50	0	21.77	21.47	21.50	22.00
		50	25	21.72	21.43	21.41	22.00
		50	50	21.61	21.39	21.42	22.00
		100	0	21.67	21.43	21.43	22.00
	64QAM	1	0	21.68	21.70	21.62	22.00
		1	50	21.68	21.66	21.59	22.00
		1	99	21.53	21.48	21.48	22.00
		50	0	20.75	20.48	20.48	21.00
		50	25	20.72	20.42	20.41	21.00
		50	50	20.60	20.39	20.39	21.00
		100	0	20.63	20.44	20.43	21.00
	256QAM	1	0	20.76	20.78	20.66	21.00
		1	50	20.90	20.70	20.49	21.00
		1	99	20.47	20.54	20.52	21.00
		50	0	19.79	19.40	19.44	20.00
		50	25	19.74	19.22	19.33	20.00
		50	50	19.74	19.39	19.27	20.00
		100	0	19.51	19.62	19.45	20.00

LTE B2							
Sensor on--Main Ant0				Maximum Output Power (dBm)			Tune-up
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			
				18607/1850.7	18900/1880	19193/1909.3	
1.4MHz	QPSK	1	0	12.83	12.56	12.28	14.00
		1	2	12.71	12.61	12.36	14.00
		1	5	12.75	12.57	12.40	14.00
		3	0	12.76	12.56	12.40	14.00
		3	2	12.75	12.55	12.35	14.00
		3	3	12.75	12.52	12.37	14.00
		6	0	12.77	12.55	12.43	14.00
	16QAM	1	0	13.04	12.91	12.72	14.00
		1	2	13.06	12.90	12.66	14.00
		1	5	13.05	12.84	12.73	14.00
		3	0	12.79	12.63	12.38	14.00
		3	2	12.78	12.64	12.34	14.00
		3	3	12.79	12.56	12.35	14.00

		6	0	12.83	12.62	12.47	14.00
	64QAM	1	0	12.97	12.81	12.51	14.00
		1	2	13.00	12.76	12.47	14.00
		1	5	12.98	12.74	12.50	14.00
		3	0	12.84	12.69	12.55	14.00
		3	2	12.85	12.70	12.52	14.00
		3	3	12.83	12.65	12.52	14.00
		6	0	12.71	12.54	12.38	14.00
	256QAM	1	0	12.74	13.05	12.83	14.00
		1	2	12.59	12.88	12.82	14.00
		1	5	12.73	12.50	12.40	14.00
		3	0	12.86	12.78	12.91	14.00
		3	2	13.05	12.60	12.73	14.00
		3	3	12.73	12.52	12.76	14.00
		6	0	12.77	12.72	12.54	14.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				18615/1851.5	18900/1880	19185/1908.5	
3MHz	QPSK	1	0	12.77	12.74	12.56	14.00
		1	7	12.71	12.58	12.34	14.00
		1	14	12.67	12.51	12.34	14.00
		8	0	12.68	12.58	12.39	14.00
		8	4	12.71	12.56	12.39	14.00
		8	7	12.74	12.56	12.42	14.00
		15	0	12.74	12.56	12.42	14.00
	16QAM	1	0	13.02	12.88	12.67	14.00
		1	7	13.02	12.87	12.64	14.00
		1	14	12.99	12.81	12.68	14.00
		8	0	12.77	12.64	12.46	14.00
		8	4	12.79	12.63	12.49	14.00
		8	7	12.84	12.65	12.50	14.00
		15	0	12.76	12.56	12.43	14.00
	64QAM	1	0	12.82	12.74	12.51	14.00
		1	7	12.83	12.69	12.45	14.00
		1	14	12.85	12.67	12.51	14.00
		8	0	12.79	12.64	12.50	14.00
		8	4	12.82	12.64	12.48	14.00
		8	7	12.88	12.65	12.52	14.00
		15	0	12.76	12.57	12.45	14.00
	256QAM	1	0	12.76	12.87	12.93	14.00
		1	7	12.95	12.84	12.78	14.00
		1	14	12.77	12.72	12.66	14.00
		8	0	13.08	12.78	12.85	14.00
		8	4	12.97	12.78	12.91	14.00

		8	7	12.85	12.38	12.70	14.00
		15	0	12.95	12.76	12.82	14.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				18625/1852.5	18900/1880	19175/1907.5	
5MHz	QPSK	1	0	12.75	12.62	12.44	14.00
		1	13	12.75	12.61	12.41	14.00
		1	24	12.74	12.52	12.42	14.00
		12	0	12.74	12.63	12.50	14.00
		12	6	12.80	12.59	12.48	14.00
		12	13	12.82	12.61	12.47	14.00
		25	0	12.81	12.63	12.48	14.00
	16QAM	1	0	12.95	12.87	12.77	14.00
		1	13	12.97	12.86	12.70	14.00
		1	24	12.96	12.83	12.71	14.00
		12	0	12.78	12.65	12.53	14.00
		12	6	12.80	12.61	12.52	14.00
		12	13	12.83	12.61	12.48	14.00
		25	0	12.80	12.61	12.48	14.00
	64QAM	1	0	12.95	12.84	12.69	14.00
		1	13	12.88	12.82	12.59	14.00
		1	24	12.91	12.75	12.62	14.00
		12	0	12.80	12.69	12.55	14.00
		12	6	12.83	12.63	12.53	14.00
		12	13	12.87	12.66	12.52	14.00
		25	0	12.77	12.58	12.49	14.00
	256QAM	1	0	12.68	12.95	12.77	14.00
		1	13	12.79	12.68	12.82	14.00
		1	24	12.91	12.78	12.76	14.00
		12	0	13.24	12.74	12.89	14.00
		12	6	12.69	12.66	12.65	14.00
		12	13	12.93	12.52	12.42	14.00
		25	0	12.83	12.88	12.64	14.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				18650/1855	18900/1880	19150/1905	
10MHz	QPSK	1	0	12.61	12.84	12.60	14.00
		1	25	12.68	12.62	12.46	14.00
		1	49	12.78	12.50	12.48	14.00
		25	0	12.76	12.62	12.59	14.00
		25	13	12.85	12.60	12.54	14.00
		25	25	12.82	12.62	12.51	14.00
		50	0	12.81	12.63	12.55	14.00
	16QAM	1	0	13.10	12.96	12.85	14.00
		1	25	13.02	12.92	12.75	14.00

		1	49	13.14	12.79	12.78	14.00
		25	0	12.76	12.60	12.59	14.00
		25	13	12.84	12.61	12.56	14.00
		25	25	12.82	12.59	12.51	14.00
		50	0	12.80	12.61	12.56	14.00
	64QAM	1	0	12.88	12.79	12.67	14.00
		1	25	12.85	12.73	12.61	14.00
		1	49	12.99	12.65	12.60	14.00
		25	0	12.75	12.60	12.57	14.00
		25	13	12.82	12.60	12.54	14.00
		25	25	12.82	12.61	12.51	14.00
		50	0	12.80	12.59	12.54	14.00
	256QAM	1	0	12.84	12.87	12.71	14.00
		1	25	12.97	12.74	12.86	14.00
		1	49	12.75	12.62	12.58	14.00
		25	0	12.94	12.62	12.97	14.00
		25	13	12.77	12.56	12.97	14.00
		25	25	12.85	12.54	12.52	14.00
		50	0	13.13	12.80	12.86	14.00

Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				18675/1857.5	18900/1880	19125/1902.5	
15MHz	QPSK	1	0	12.81	12.76	12.56	14.00
		1	38	12.77	12.58	12.41	14.00
		1	74	12.68	12.46	12.40	14.00
		36	0	12.88	12.61	12.61	14.00
		36	18	12.81	12.60	12.51	14.00
		36	39	12.77	12.55	12.51	14.00
		75	0	12.80	12.61	12.59	14.00
	16QAM	1	0	13.06	12.92	12.79	14.00
		1	38	13.04	12.90	12.73	14.00
		1	74	12.93	12.73	12.70	14.00
		36	0	12.80	12.57	12.63	14.00
		36	18	12.81	12.59	12.52	14.00
		36	39	12.77	12.54	12.50	14.00
		75	0	12.82	12.60	12.61	14.00
	64QAM	1	0	12.98	12.88	12.73	14.00
		1	38	12.99	12.85	12.66	14.00
		1	74	12.86	12.69	12.63	14.00
		36	0	12.78	12.64	12.66	14.00
		36	18	12.86	12.62	12.56	14.00
		36	39	12.81	12.58	12.54	14.00
		75	0	12.82	12.61	12.59	14.00
	256QAM	1	0	12.84	12.97	12.77	14.00

		1	38	12.81	12.82	12.72	14.00
		1	74	12.79	12.68	12.54	14.00
		36	0	13.06	12.64	12.79	14.00
		36	18	12.85	12.68	12.79	14.00
		36	39	12.91	12.48	12.60	14.00
		75	0	12.97	12.74	12.82	14.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				18700/1860	18900/1880	19100/1900	
20MHz	QPSK	1	0	12.72	12.62	**12.64**	14.00
		1	50	**12.79**	**12.68**	12.42	14.00
		1	99	12.66	12.50	12.46	14.00
		50	0	**13.22**	**12.93**	**12.71**	14.00
		50	25	12.85	12.63	12.62	14.00
		50	50	12.71	12.62	12.55	14.00
		100	0	**12.97**	12.92	12.66	14.00
	16QAM	1	0	13.07	12.94	12.74	14.00
		1	50	13.03	12.89	12.80	14.00
		1	99	12.86	12.76	12.76	14.00
		50	0	12.85	12.61	12.72	14.00
		50	25	12.89	12.62	12.65	14.00
		50	50	12.74	12.61	12.55	14.00
		100	0	12.80	12.62	12.63	14.00
	64QAM	1	0	12.88	12.77	12.69	14.00
		1	50	12.85	12.70	12.70	14.00
		1	99	12.77	12.58	12.64	14.00
		50	0	12.84	12.62	12.69	14.00
		50	25	12.91	12.64	12.63	14.00
		50	50	12.75	12.62	12.54	14.00
		100	0	12.77	12.60	12.64	14.00
	256QAM	1	0	12.96	12.75	12.73	14.00
		1	50	12.97	12.84	12.74	14.00
		1	99	12.89	12.70	12.62	14.00
		50	0	12.80	12.68	12.81	14.00
		50	25	13.03	12.82	12.73	14.00
		50	50	12.75	12.64	12.66	14.00
		100	0	12.77	12.72	12.66	14.00

LTE B4							
Pmax&Sensor off--Main Ant0				Maximum Output Power (dBm)			Tune-up
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			
				19957/1710.7	20175/1732.5	20393/1754.3	
1.4MHz	QPSK	1	0	23.14	23.20	22.96	24.00
		1	2	23.12	23.20	22.91	24.00
		1	5	23.10	23.16	22.96	24.00
		3	0	23.11	23.16	23.01	24.00
		3	2	23.12	23.14	23.01	24.00
		3	3	23.12	23.16	23.01	24.00
		6	0	22.12	22.17	22.05	23.00
	16QAM	1	0	22.36	22.46	22.16	23.00
		1	2	22.36	22.46	22.20	23.00
		1	5	22.39	22.44	22.20	23.00
		3	0	22.13	22.14	22.02	23.00
		3	2	22.14	22.09	22.02	23.00
		3	3	22.12	22.11	22.04	23.00
		6	0	21.19	21.21	21.11	22.00
	64QAM	1	0	21.31	21.37	21.21	22.00
		1	2	21.25	21.33	21.13	22.00
		1	5	21.30	21.34	21.18	22.00
		3	0	21.18	21.29	21.15	22.00
		3	2	21.20	21.30	21.14	22.00
		3	3	21.16	21.28	21.15	22.00
		6	0	20.10	20.11	20.02	21.00
	256QAM	1	0	20.39	20.15	20.17	21.00
		1	2	20.31	20.42	20.09	21.00
		1	5	20.35	20.07	20.26	21.00
		3	0	19.99	19.91	20.27	21.00
		3	2	20.39	20.14	20.13	21.00
		3	3	20.01	20.09	19.94	21.00
		6	0	19.17	19.19	19.19	20.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				19965/1711.5	20175/1732.5	20385/1753.5	
3MHz	QPSK	1	0	23.15	23.17	23.01	24.00
		1	7	23.17	23.15	22.96	24.00
		1	14	23.19	23.08	22.94	24.00
		8	0	22.16	22.18	22.04	23.00
		8	4	22.19	22.12	22.03	23.00
		8	7	22.19	22.12	22.01	23.00
		15	0	22.17	22.15	22.02	23.00
	16QAM	1	0	22.33	22.53	22.18	23.00

		1	7	22.35	22.51	22.16	23.00
		1	14	22.42	22.41	22.14	23.00
		8	0	21.23	21.24	21.11	22.00
		8	4	21.23	21.17	21.08	22.00
		8	7	21.22	21.18	21.07	22.00
		15	0	21.18	21.12	21.08	22.00
	64QAM	1	0	21.23	21.31	21.16	22.00
		1	7	21.27	21.31	21.18	22.00
		1	14	21.32	21.24	21.16	22.00
		8	0	20.21	20.25	20.07	21.00
		8	4	20.21	20.16	20.05	21.00
		8	7	20.23	20.19	20.05	21.00
		15	0	20.16	20.14	19.97	21.00
	256QAM	1	0	20.53	20.33	20.45	21.00
		1	7	20.39	20.22	20.31	21.00
		1	14	20.31	20.07	20.14	21.00
		8	0	19.07	19.27	19.17	20.00
		8	4	19.33	19.08	19.17	20.00
		8	7	19.43	19.29	19.18	20.00
		15	0	19.37	19.41	19.31	20.00

Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				19975/1712.5	20175/1732.5	20375/1752.5	
5MHz	QPSK	1	0	23.16	23.24	23.06	24.00
		1	13	23.23	23.19	23.01	24.00
		1	24	23.24	23.10	23.01	24.00
		12	0	22.22	22.22	22.08	23.00
		12	6	22.19	22.17	22.09	23.00
		12	13	22.23	22.17	22.07	23.00
		25	0	22.23	22.21	22.10	23.00
	16QAM	1	0	22.40	22.55	22.27	23.00
		1	13	22.47	22.49	22.16	23.00
		1	24	22.48	22.40	22.22	23.00
		12	0	21.24	21.23	21.08	22.00
		12	6	21.21	21.16	21.06	22.00
		12	13	21.23	21.17	21.07	22.00
		25	0	21.23	21.19	21.08	22.00
	64QAM	1	0	21.33	21.44	21.20	22.00
		1	13	21.34	21.40	21.13	22.00
		1	24	21.36	21.30	21.14	22.00
		12	0	20.26	20.25	20.12	21.00
		12	6	20.23	20.19	20.10	21.00
		12	13	20.26	20.21	20.10	21.00
		25	0	20.21	20.17	20.05	21.00

	256QAM	1	0	20.41	20.25	20.29	21.00
		1	13	20.19	20.08	20.13	21.00
		1	24	20.27	20.13	20.20	21.00
		12	0	19.27	19.27	19.31	20.00
		12	6	19.45	19.26	19.05	20.00
		12	13	19.15	19.35	18.90	20.00
		25	0	19.09	19.33	19.27	20.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				20000/1715	20175/1732.5	20350/1750	
10MHz	QPSK	1	0	23.24	23.29	23.13	24.00
		1	25	23.26	23.19	23.05	24.00
		1	49	23.28	23.14	23.06	24.00
		25	0	22.24	22.24	22.12	23.00
		25	13	22.25	22.18	22.08	23.00
		25	25	22.25	22.19	22.08	23.00
		50	0	22.25	22.21	22.10	23.00
	16QAM	1	0	22.38	22.59	22.31	23.00
		1	25	22.43	22.48	22.19	23.00
		1	49	22.51	22.39	22.26	23.00
		25	0	21.23	21.22	21.14	22.00
		25	13	21.24	21.18	21.09	22.00
		25	25	21.23	21.18	21.07	22.00
		50	0	21.26	21.19	21.08	22.00
	64QAM	1	0	21.35	21.52	21.29	22.00
		1	25	21.40	21.41	21.16	22.00
		1	49	21.45	21.35	21.23	22.00
		25	0	20.23	20.19	20.07	21.00
		25	13	20.23	20.14	20.07	21.00
		25	25	20.21	20.16	20.09	21.00
		50	0	20.23	20.17	20.07	21.00
	256QAM	1	0	20.31	20.29	20.23	21.00
		1	25	20.33	20.06	20.01	21.00
		1	49	20.25	20.39	20.28	21.00
		25	0	18.99	19.15	19.39	20.00
		25	13	19.55	19.20	19.23	20.00
		25	25	19.43	19.39	19.18	20.00
		50	0	19.47	19.33	19.37	20.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				20025/1717.5	20175/1732.5	20325/1747.5	
15MHz	QPSK	1	0	23.21	23.28	23.16	24.00
		1	38	23.26	23.24	23.00	24.00
		1	74	23.25	23.15	23.01	24.00
		36	0	22.27	22.22	22.12	23.00

		36	18	22.23	22.18	22.09	23.00
		36	39	22.21	22.15	22.07	23.00
		75	0	22.26	22.22	22.11	23.00
	16QAM	1	0	22.49	22.56	22.35	23.00
		1	38	22.55	22.46	22.24	23.00
		1	74	22.53	22.43	22.23	23.00
		36	0	21.29	21.24	21.13	22.00
		36	18	21.24	21.17	21.10	22.00
		36	39	21.21	21.16	21.07	22.00
		75	0	21.26	21.23	21.11	22.00
	64QAM	1	0	21.36	21.52	21.41	22.00
		1	38	21.38	21.43	21.28	22.00
		1	74	21.32	21.37	21.21	22.00
		36	0	20.30	20.23	20.13	21.00
		36	18	20.27	20.17	20.10	21.00
		36	39	20.23	20.19	20.07	21.00
		75	0	20.25	20.20	20.11	21.00
	256QAM	1	0	20.27	20.15	20.45	21.00
		1	38	20.23	20.18	20.27	21.00
		1	74	20.41	20.23	20.16	21.00
		36	0	19.35	19.25	19.35	20.00
		36	18	19.31	19.20	19.19	20.00
		36	39	19.41	19.19	19.22	20.00
		75	0	19.17	19.43	19.23	20.00

Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				20050/1720	20175/1732.5	20300/1745	
20MHz	QPSK	1	0	**23.25**	**23.29**	**23.21**	24.00
		1	50	23.23	23.22	23.12	24.00
		1	99	23.20	23.08	23.03	24.00
		50	0	**22.32**	**22.28**	**22.21**	23.00
		50	25	22.30	22.23	22.15	23.00
		50	50	22.25	22.21	22.14	23.00
		100	0	**22.29**	22.23	22.12	23.00
	16QAM	1	0	22.54	22.62	22.48	23.00
		1	50	22.57	22.51	22.33	23.00
		1	99	22.54	22.31	22.19	23.00
		50	0	21.32	21.27	21.18	22.00
		50	25	21.27	21.20	21.13	22.00
		50	50	21.23	21.20	21.11	22.00
		100	0	21.28	21.22	21.10	22.00
	64QAM	1	0	21.34	21.32	21.34	22.00
		1	50	21.36	21.27	21.20	22.00
		1	99	21.34	21.14	21.13	22.00

		50	0	20.30	20.28	20.18	21.00
		50	25	20.26	20.21	20.14	21.00
		50	50	20.22	20.22	20.11	21.00
		100	0	20.26	20.20	20.12	21.00
	256QAM	1	0	20.37	20.23	20.29	21.00
		1	50	20.27	20.24	20.15	21.00
		1	99	20.23	20.17	20.12	21.00
		50	0	19.17	19.17	19.27	20.00
		50	25	19.39	19.16	19.21	20.00
		50	50	19.31	19.29	19.08	20.00
		100	0	19.25	19.25	19.19	20.00

LTE B4							
Sensor on--Main Ant0				Maximum Output Power (dBm)			Tune-up
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			
				19957/1710.7	20175/1732.5	20393/1754.3	
1.4MHz	QPSK	1	0	12.46	12.31	12.16	14.00
		1	2	12.42	12.40	12.27	14.00
		1	5	12.46	12.44	12.24	14.00
		3	0	12.43	12.41	12.28	14.00
		3	2	12.39	12.40	12.30	14.00
		3	3	12.42	12.39	12.29	14.00
		6	0	12.45	12.45	12.32	14.00
	16QAM	1	0	12.73	12.75	12.52	14.00
		1	2	12.68	12.74	12.50	14.00
		1	5	12.73	12.75	12.51	14.00
		3	0	12.41	12.41	12.37	14.00
		3	2	12.41	12.42	12.37	14.00
		3	3	12.41	12.39	12.34	14.00
		6	0	12.53	12.52	12.40	14.00
	64QAM	1	0	12.60	12.63	12.49	14.00
		1	2	12.58	12.61	12.47	14.00
		1	5	12.62	12.62	12.50	14.00
		3	0	12.57	12.53	12.42	14.00
		3	2	12.56	12.51	12.44	14.00
		3	3	12.58	12.52	12.44	14.00
		6	0	12.42	12.45	12.33	14.00
	256QAM	1	0	12.48	12.49	13.03	14.00
		1	2	12.79	12.74	12.62	14.00
		1	5	12.78	12.75	12.69	14.00
		3	0	12.44	12.70	12.28	14.00
		3	2	12.61	13.02	12.20	14.00
		3	3	12.83	12.57	12.40	14.00

		6	0	12.40	12.53	12.48	14.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				19965/1711.5	20175/1732.5	20385/1753.5	
3MHz	QPSK	1	0	12.30	12.28	12.13	14.00
		1	7	12.45	12.44	12.28	14.00
		1	14	12.46	12.41	12.27	14.00
		8	0	12.49	12.43	12.35	14.00
		8	4	12.47	12.42	12.33	14.00
		8	7	12.47	12.43	12.33	14.00
		15	0	12.47	12.44	12.33	14.00
	16QAM	1	0	12.68	12.79	12.55	14.00
		1	7	12.69	12.74	12.56	14.00
		1	14	12.69	12.74	12.56	14.00
		8	0	12.55	12.48	12.43	14.00
		8	4	12.54	12.46	12.40	14.00
		8	7	12.53	12.48	12.42	14.00
		15	0	12.51	12.46	12.40	14.00
	64QAM	1	0	12.60	12.63	12.49	14.00
		1	7	12.61	12.63	12.50	14.00
		1	14	12.61	12.65	12.49	14.00
		8	0	12.55	12.54	12.44	14.00
		8	4	12.54	12.50	12.41	14.00
		8	7	12.53	12.52	12.38	14.00
		15	0	12.47	12.45	12.35	14.00
	256QAM	1	0	12.44	12.57	12.73	14.00
		1	7	12.85	12.68	12.60	14.00
		1	14	13.04	12.53	12.83	14.00
		8	0	12.60	12.54	12.40	14.00
		8	4	12.71	12.96	12.42	14.00
		8	7	12.79	12.51	12.54	14.00
		15	0	12.54	12.43	12.52	14.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				19975/1712.5	20175/1732.5	20375/1752.5	
5MHz	QPSK	1	0	12.53	12.35	12.31	14.00
		1	13	12.52	12.44	12.27	14.00
		1	24	12.50	12.46	12.31	14.00
		12	0	12.51	12.49	12.39	14.00
		12	6	12.51	12.47	12.36	14.00
		12	13	12.51	12.49	12.36	14.00
		25	0	12.54	12.51	12.38	14.00
	16QAM	1	0	12.81	12.86	12.59	14.00
		1	13	12.81	12.78	12.53	14.00
		1	24	12.83	12.84	12.55	14.00

		12	0	12.57	12.51	12.37	14.00
		12	6	12.56	12.48	12.40	14.00
		12	13	12.52	12.48	12.40	14.00
		25	0	12.54	12.51	12.41	14.00
	64QAM	1	0	12.73	12.63	12.55	14.00
		1	13	12.67	12.59	12.49	14.00
		1	24	12.70	12.61	12.51	14.00
		12	0	12.59	12.52	12.47	14.00
		12	6	12.57	12.51	12.43	14.00
		12	13	12.54	12.53	12.42	14.00
		25	0	12.52	12.48	12.38	14.00
	256QAM	1	0	12.54	12.65	12.83	14.00
		1	13	12.85	12.54	12.60	14.00
		1	24	12.94	12.55	12.65	14.00
		12	0	12.48	12.62	12.40	14.00
		12	6	12.65	12.82	12.32	14.00
		12	13	12.71	12.37	12.48	14.00
		25	0	12.46	12.43	12.50	14.00

Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				20000/1715	20175/1732.5	20350/1750	
10MHz	QPSK	1	0	12.13	12.57	12.44	14.00
		1	25	12.51	12.48	12.31	14.00
		1	49	12.56	12.48	12.30	14.00
		25	0	12.58	12.50	12.49	14.00
		25	13	12.52	12.48	12.44	14.00
		25	25	12.52	12.51	12.41	14.00
		50	0	12.52	12.50	12.42	14.00
	16QAM	1	0	12.85	12.85	12.73	14.00
		1	25	12.80	12.74	12.55	14.00
		1	49	12.83	12.77	12.57	14.00
		25	0	12.57	12.49	12.48	14.00
		25	13	12.52	12.50	12.42	14.00
		25	25	12.50	12.50	12.39	14.00
		50	0	12.57	12.50	12.43	14.00
	64QAM	1	0	12.61	12.69	12.69	14.00
		1	25	12.56	12.60	12.54	14.00
		1	49	12.59	12.62	12.54	14.00
		25	0	12.55	12.47	12.47	14.00
		25	13	12.48	12.48	12.41	14.00
		25	25	12.48	12.48	12.38	14.00
		50	0	12.53	12.50	12.44	14.00
	256QAM	1	0	12.84	12.81	12.89	14.00
		1	25	12.73	12.90	12.78	14.00

		1	49	12.82	12.67	12.65	14.00
		25	0	12.74	12.50	12.42	14.00
		25	13	12.55	12.64	12.50	14.00
		25	25	12.45	12.63	12.44	14.00
		50	0	12.62	12.65	12.56	14.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				20025/1717.5	20175/1732.5	20325/1747.5	
15MHz	QPSK	1	0	12.60	12.57	12.44	14.00
		1	38	12.51	12.48	12.38	14.00
		1	74	12.48	12.45	12.27	14.00
		36	0	12.55	12.51	12.47	14.00
		36	18	12.49	12.47	12.45	14.00
		36	39	12.48	12.48	12.38	14.00
		75	0	12.55	12.50	12.44	14.00
	16QAM	1	0	12.81	12.89	12.81	14.00
		1	38	12.76	12.82	12.75	14.00
		1	74	12.78	12.76	12.60	14.00
		36	0	12.54	12.51	12.48	14.00
		36	18	12.48	12.47	12.46	14.00
		36	39	12.47	12.47	12.43	14.00
		75	0	12.56	12.52	12.44	14.00
	64QAM	1	0	12.79	12.75	12.62	14.00
		1	38	12.74	12.66	12.53	14.00
		1	74	12.73	12.63	12.42	14.00
		36	0	12.57	12.54	12.50	14.00
		36	18	12.52	12.52	12.47	14.00
		36	39	12.51	12.52	12.41	14.00
		75	0	12.54	12.52	12.45	14.00
	256QAM	1	0	12.92	12.81	12.61	14.00
		1	38	12.65	12.76	12.70	14.00
		1	74	12.76	12.49	12.61	14.00
		36	0	12.70	12.72	12.40	14.00
		36	18	12.65	12.46	12.72	14.00
		36	39	12.57	12.67	12.66	14.00
		75	0	12.70	12.53	12.52	14.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				20050/1720	20175/1732.5	20300/1745	
20MHz	QPSK	1	0	12.43	**12.58**	12.37	14.00
		1	50	**12.55**	12.52	**12.38**	14.00
		1	99	12.53	12.48	12.24	14.00
		50	0	**12.64**	**12.56**	12.51	14.00
		50	25	12.56	12.53	**12.52**	14.00
		50	50	12.53	12.55	12.44	14.00

		100	0	**12.60**	12.55	12.49	14.00
	16QAM	1	0	12.84	12.89	12.77	14.00
		1	50	12.84	12.72	12.63	14.00
		1	99	12.82	12.73	12.51	14.00
		50	0	12.64	12.55	12.50	14.00
		50	25	12.56	12.53	12.51	14.00
		50	50	12.52	12.53	12.46	14.00
		100	0	12.56	12.53	12.47	14.00
	64QAM	1	0	12.72	12.79	12.79	14.00
		1	50	12.77	12.74	12.66	14.00
		1	99	12.66	12.63	12.53	14.00
		50	0	12.66	12.54	12.50	14.00
		50	25	12.59	12.52	12.50	14.00
		50	50	12.51	12.53	12.46	14.00
		100	0	12.56	12.53	12.50	14.00
	256QAM	1	0	12.90	12.93	12.71	14.00
		1	50	12.85	12.64	12.62	14.00
		1	99	12.78	12.69	12.57	14.00
		50	0	12.68	12.50	12.48	14.00
		50	25	12.49	12.44	12.46	14.00
		50	50	12.57	12.43	12.34	14.00
		100	0	12.70	12.57	12.48	14.00

LTE B5							
Pmax&Sensor off--Main Ant0				Maximum Output Power (dBm)			Tune-up
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			
				20407/824.7	20525/836.5	20643/848.3	
1.4MHz	QPSK	1	0	22.85	22.72	22.61	24.00
		1	2	22.81	22.67	22.57	24.00
		1	5	22.82	22.71	22.57	24.00
		3	0	22.82	22.69	22.61	24.00
		3	2	22.78	22.69	22.60	24.00
		3	3	22.80	22.67	22.60	24.00
		6	0	21.82	21.71	21.61	23.00
	16QAM	1	0	22.11	21.95	21.86	23.00
		1	2	22.11	21.98	21.88	23.00
		1	5	22.06	21.93	21.88	23.00
		3	0	21.82	21.71	21.60	23.00
		3	2	21.80	21.65	21.56	23.00
		3	3	21.78	21.71	21.57	23.00
		6	0	20.96	20.81	20.73	22.00
	64QAM	1	0	21.12	20.96	20.81	22.00
		1	2	21.06	20.93	20.80	22.00

		1	5	21.12	20.95	20.80	22.00
		3	0	20.95	20.86	20.78	22.00
		3	2	20.95	20.85	20.79	22.00
		3	3	20.95	20.85	20.78	22.00
		6	0	19.84	19.73	19.61	21.00
	256QAM	1	0	20.02	20.17	20.17	21.00
		1	2	19.77	19.89	19.58	21.00
		1	5	20.38	19.96	19.95	21.00
		3	0	19.85	19.63	19.76	21.00
		3	2	19.66	19.70	19.35	21.00
		3	3	19.69	19.83	19.52	21.00
		6	0	18.83	18.72	18.71	20.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				20415/825.5	20525/836.5	20635/847.5	
3MHz	QPSK	1	0	22.85	22.73	22.59	24.00
		1	7	22.69	22.67	22.55	24.00
		1	14	22.74	22.70	22.58	24.00
		8	0	21.82	21.70	21.63	23.00
		8	4	21.75	21.68	21.60	23.00
		8	7	21.77	21.69	21.61	23.00
		15	0	21.81	21.69	21.66	23.00
	16QAM	1	0	22.15	21.93	21.93	23.00
		1	7	21.99	21.88	21.84	23.00
		1	14	22.03	21.91	21.90	23.00
		8	0	20.94	20.84	20.80	22.00
		8	4	20.93	20.83	20.74	22.00
		8	7	20.92	20.82	20.73	22.00
		15	0	20.86	20.76	20.68	22.00
	64QAM	1	0	21.02	20.94	20.86	22.00
		1	7	20.99	20.87	20.81	22.00
		1	14	21.02	20.87	20.83	22.00
		8	0	19.94	19.82	19.77	21.00
		8	4	19.89	19.80	19.71	21.00
		8	7	19.88	19.80	19.70	21.00
		15	0	19.84	19.77	19.66	21.00
	256QAM	1	0	19.88	20.33	19.91	21.00
		1	7	19.97	19.87	19.78	21.00
		1	14	20.24	20.32	19.79	21.00
		8	0	18.95	18.61	18.86	20.00
		8	4	18.92	18.70	18.55	20.00
		8	7	18.73	18.75	18.74	20.00
		15	0	18.75	18.60	18.75	20.00

Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				20425/826.5	20525/836.5	20625/846.5	
5MHz	QPSK	1	0	22.92	22.81	22.67	24.00
		1	13	22.78	22.72	22.63	24.00
		1	24	22.83	22.74	22.66	24.00
		12	0	21.88	21.76	21.69	23.00
		12	6	21.82	21.74	21.63	23.00
		12	13	21.81	21.73	21.64	23.00
		25	0	21.87	21.77	21.67	23.00
	16QAM	1	0	22.21	22.07	21.97	23.00
		1	13	22.05	22.01	21.89	23.00
		1	24	22.11	22.04	21.90	23.00
		12	0	20.95	20.85	20.82	22.00
		12	6	20.93	20.84	20.77	22.00
		12	13	20.92	20.81	20.72	22.00
		25	0	20.90	20.85	20.76	22.00
	64QAM	1	0	21.09	20.95	20.92	22.00
		1	13	21.01	20.93	20.88	22.00
		1	24	20.99	20.90	20.82	22.00
		12	0	19.96	19.87	19.82	21.00
		12	6	19.94	19.84	19.79	21.00
		12	13	19.92	19.82	19.73	21.00
		25	0	19.89	19.80	19.73	21.00
	256QAM	1	0	20.16	20.23	20.09	21.00
		1	13	19.77	19.89	19.86	21.00
		1	24	20.24	20.04	19.65	21.00
		12	0	19.01	18.73	18.68	20.00
		12	6	18.98	18.90	18.61	20.00
		12	13	18.73	18.67	18.68	20.00
		25	0	18.65	18.66	18.45	20.00

Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				20450/829	20525/836.5	20600/844	
10MHz	QPSK	1	0	**22.91**	**22.87**	**22.78**	24.00
		1	25	22.77	22.75	22.65	24.00
		1	49	22.86	22.80	22.72	24.00
		25	0	21.85	**21.78**	**21.74**	23.00
		25	13	21.82	21.74	21.66	23.00
		25	25	**21.89**	21.74	21.68	23.00
		50	0	**21.88**	21.77	21.70	23.00
	16QAM	1	0	22.15	22.13	22.02	23.00
		1	25	22.02	22.01	21.95	23.00
		1	49	22.10	22.02	21.95	23.00
		25	0	20.88	20.80	20.82	22.00

		25	13	20.84	20.79	20.75	22.00
		25	25	20.88	20.77	20.73	22.00
		50	0	20.91	20.80	20.79	22.00
	64QAM	1	0	21.10	21.13	21.03	22.00
		1	25	20.95	20.99	20.90	22.00
		1	49	21.10	21.02	20.89	22.00
		25	0	19.89	19.79	19.80	21.00
		25	13	19.80	19.76	19.73	21.00
		25	25	19.87	19.75	19.72	21.00
		50	0	19.89	19.76	19.75	21.00
	256QAM	1	0	20.06	20.11	20.05	21.00
		1	25	19.87	19.85	19.74	21.00
		1	49	20.18	20.12	19.75	21.00
		25	0	18.99	18.71	18.70	20.00
		25	13	18.88	18.84	18.57	20.00
		25	25	18.69	18.79	18.72	20.00
		50	0	18.69	18.66	18.57	20.00

LTE B5							
Sensor on--Main Ant0				Maximum Output Power (dBm)			Tune-up
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			
				20407/824.7	20525/836.5	20643/848.3	
1.4MHz	QPSK	1	0	20.71	20.83	20.82	22.00
		1	2	20.63	21.13	20.71	22.00
		1	5	20.82	20.72	20.80	22.00
		3	0	20.59	20.56	20.60	22.00
		3	2	20.54	21.04	20.74	22.00
		3	3	21.05	20.56	20.84	22.00
		6	0	20.48	20.81	20.58	22.00
	16QAM	1	0	21.31	21.13	20.98	22.00
		1	2	20.76	20.91	21.01	22.00
		1	5	20.78	21.04	20.91	22.00
		3	0	20.94	20.88	20.68	22.00
		3	2	20.66	20.51	20.65	22.00
		3	3	20.88	20.85	20.91	22.00
		6	0	20.47	20.20	20.53	22.00
	64QAM	1	0	20.84	20.61	20.87	22.00
		1	2	20.81	20.79	20.72	22.00
		1	5	20.82	20.76	20.67	22.00
		3	0	20.65	20.21	20.30	22.00
		3	2	20.44	20.36	20.37	22.00
		3	3	20.33	20.37	20.30	22.00
		6	0	19.73	19.46	19.55	21.00

	256QAM	1	0	19.70	19.83	19.99	21.00
		1	2	19.81	19.49	19.54	21.00
		1	5	19.96	19.96	19.61	21.00
		3	0	19.83	19.45	19.38	21.00
		3	2	19.56	19.22	19.09	21.00
		3	3	19.61	19.63	19.30	21.00
		6	0	19.01	18.88	18.47	20.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				20415/825.5	20525/836.5	20635/847.5	
3MHz	QPSK	1	0	20.85	20.67	21.00	22.00
		1	7	20.97	20.85	20.73	22.00
		1	14	20.94	20.68	20.96	22.00
		8	0	20.71	20.52	20.74	22.00
		8	4	20.58	20.84	20.52	22.00
		8	7	20.75	20.68	20.60	22.00
		15	0	20.66	20.55	20.50	22.00
	16QAM	1	0	21.09	21.21	20.88	22.00
		1	7	20.88	20.97	21.15	22.00
		1	14	20.74	20.92	21.15	22.00
		8	0	20.78	20.86	20.98	22.00
		8	4	20.58	20.61	20.47	22.00
		8	7	21.04	20.73	20.93	22.00
		15	0	20.83	20.46	20.43	22.00
	64QAM	1	0	20.62	20.91	20.65	22.00
		1	7	21.11	20.63	20.96	22.00
		1	14	21.18	20.56	20.89	22.00
		8	0	19.91	19.35	19.54	21.00
		8	4	19.54	19.42	19.43	21.00
		8	7	19.43	19.55	19.58	21.00
		15	0	19.73	19.28	19.53	21.00
	256QAM	1	0	19.62	19.99	19.99	21.00
		1	7	19.63	19.59	19.38	21.00
		1	14	20.10	19.76	19.35	21.00
		8	0	19.07	18.31	18.40	20.00
		8	4	18.72	18.42	18.15	20.00
		8	7	18.53	18.95	18.34	20.00
		15	0	18.83	18.84	18.29	20.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				20425/826.5	20525/836.5	20625/846.5	
5MHz	QPSK	1	0	21.05	20.95	20.84	22.00
		1	13	20.89	20.95	20.71	22.00
		1	24	21.02	20.66	20.78	22.00
		12	0	20.73	20.82	20.52	22.00

		12	6	20.72	20.88	20.66	22.00
		12	13	21.09	20.50	20.66	22.00
		25	0	20.56	20.55	20.48	22.00
	16QAM	1	0	21.21	21.15	21.12	22.00
		1	13	21.12	21.03	20.93	22.00
		1	24	20.84	21.02	20.97	22.00
		12	0	20.78	21.08	21.06	22.00
		12	6	20.88	20.77	20.71	22.00
		12	13	21.00	20.81	20.85	22.00
		25	0	20.93	20.36	20.57	22.00
	64QAM	1	0	20.90	20.65	20.79	22.00
		1	13	20.77	20.83	21.02	22.00
		1	24	20.94	20.56	20.57	22.00
		12	0	19.67	19.43	19.76	21.00
		12	6	19.56	19.46	19.51	21.00
		12	13	19.57	19.43	19.44	21.00
		25	0	19.57	19.50	19.51	21.00
	256QAM	1	0	19.88	20.01	19.97	21.00
		1	13	19.77	19.49	19.50	21.00
		1	24	20.08	19.88	19.41	21.00
		12	0	19.01	18.37	18.46	20.00
		12	6	18.72	18.62	18.09	20.00
		12	13	18.57	18.81	18.60	20.00
		25	0	18.85	18.64	18.41	20.00

Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				20450/829	20525/836.5	20600/844	
10MHz	QPSK	1	0	**20.91**	**20.85**	**20.82**	22.00
		1	25	20.85	**20.85**	20.71	22.00
		1	49	20.88	20.68	20.76	22.00
		25	0	20.71	**20.66**	**20.68**	22.00
		25	13	20.68	20.58	20.61	22.00
		25	25	**20.91**	20.52	20.66	22.00
		50	0	**20.66**	20.63	20.48	22.00
	16QAM	1	0	21.09	21.01	21.02	22.00
		1	25	20.94	20.87	20.95	22.00
		1	49	20.86	20.96	21.01	22.00
		25	0	20.86	20.92	20.90	22.00
		25	13	20.74	20.75	20.65	22.00
		25	25	20.90	20.67	20.79	22.00
		50	0	20.75	20.48	20.57	22.00
	64QAM	1	0	20.80	20.77	20.75	22.00
		1	25	20.89	20.71	20.86	22.00
		1	49	20.98	20.66	20.67	22.00

		25	0	19.69	19.53	19.58	21.00
		25	13	19.60	19.48	19.51	21.00
		25	25	19.47	19.39	19.40	21.00
		50	0	19.65	19.42	19.49	21.00
	256QAM	1	0	19.76	19.89	19.89	21.00
		1	25	19.77	19.49	19.54	21.00
		1	49	20.10	19.94	19.51	21.00
		25	0	18.87	18.45	18.30	20.00
		25	13	18.84	18.46	18.17	20.00
		25	25	18.57	18.77	18.46	20.00
		50	0	18.81	18.72	18.47	20.00

LTE B7							
Pmax&Sensor off--Main Ant2				Maximum Output Power (dBm)			Tune-up
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			
				20775/2502.5	21100/2535	21425/2567.5	
5MHz	QPSK	1	0	22.67	22.73	22.85	24.00
		1	13	22.73	22.74	22.82	24.00
		1	24	22.82	22.73	22.85	24.00
		12	0	21.76	21.77	21.88	23.00
		12	6	21.75	21.71	21.85	23.00
		12	13	21.80	21.74	21.84	23.00
		25	0	21.55	21.78	21.91	23.00
	16QAM	1	0	22.58	22.00	22.17	23.00
		1	13	21.89	22.01	22.12	23.00
		1	24	21.97	21.99	22.15	23.00
		12	0	20.64	20.78	20.88	22.00
		12	6	20.63	20.72	20.85	22.00
		12	13	20.70	20.74	20.88	22.00
		25	0	20.66	20.76	20.89	22.00
	64QAM	1	0	20.74	20.91	21.00	22.00
		1	13	20.77	20.90	20.98	22.00
		1	24	20.87	20.90	21.00	22.00
		12	0	19.66	19.80	19.91	21.00
		12	6	19.67	19.73	19.86	21.00
		12	13	19.72	19.73	19.88	21.00
		25	0	19.64	19.73	19.84	21.00
	256QAM	1	0	19.59	20.12	19.65	21.00
		1	13	19.99	19.87	20.30	21.00
		1	24	20.45	19.74	20.41	21.00
		12	0	18.94	18.86	18.78	20.00
		12	6	18.73	18.64	18.98	20.00
		12	13	19.00	19.14	18.97	20.00

		25	0	18.81	18.56	18.81	20.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				20800/2505	21100/2535	21400/2565	
10MHz	QPSK	1	0	22.61	22.79	22.79	24.00
		1	25	22.67	22.73	22.85	24.00
		1	49	22.87	22.77	22.92	24.00
		25	0	21.65	21.78	21.86	23.00
		25	13	21.72	21.75	21.84	23.00
		25	25	21.78	21.79	21.89	23.00
		50	0	21.71	21.78	21.86	23.00
	16QAM	1	0	21.88	22.06	22.07	23.00
		1	25	21.94	22.02	22.15	23.00
		1	49	22.15	22.06	22.18	23.00
		25	0	20.65	20.78	20.86	22.00
		25	13	20.70	20.73	20.84	22.00
		25	25	20.77	20.77	20.89	22.00
		50	0	20.70	20.76	20.89	22.00
	64QAM	1	0	20.77	20.94	21.00	22.00
		1	25	20.82	20.89	21.06	22.00
		1	49	21.01	20.92	21.10	22.00
		25	0	19.62	19.73	19.80	21.00
		25	13	19.68	19.70	19.79	21.00
		25	25	19.75	19.73	19.86	21.00
		50	0	19.70	19.73	19.84	21.00
	256QAM	1	0	19.67	20.40	20.01	21.00
		1	25	20.23	20.11	20.32	21.00
		1	49	20.27	19.98	20.43	21.00
		25	0	18.94	19.04	18.92	20.00
		25	13	18.97	18.82	18.98	20.00
		25	25	19.06	19.02	19.15	20.00
		50	0	18.89	18.98	18.73	20.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				20825/2507.5	21100/2535	21375/2562.5	
15MHz	QPSK	1	0	22.65	22.81	22.73	24.00
		1	38	22.85	22.83	22.90	24.00
		1	74	22.99	22.82	22.98	24.00
		36	0	21.74	21.79	21.78	23.00
		36	18	21.81	21.79	21.86	23.00
		36	39	21.90	21.80	21.93	23.00
		75	0	21.84	21.84	21.88	23.00
	16QAM	1	0	21.92	22.10	22.01	23.00
		1	38	22.10	22.09	22.18	23.00
		1	74	22.28	22.07	22.28	23.00

		36	0	20.75	20.80	20.80	22.00
		36	18	20.81	20.79	20.87	22.00
		36	39	20.90	20.82	20.94	22.00
		75	0	20.84	20.85	20.91	22.00
	64QAM	1	0	20.83	20.99	20.91	22.00
		1	38	21.00	21.00	21.07	22.00
		1	74	21.17	20.95	21.14	22.00
		36	0	19.75	19.80	19.80	21.00
		36	18	19.80	19.79	19.87	21.00
		36	39	19.91	19.82	19.95	21.00
		75	0	19.82	19.82	19.87	21.00
	256QAM	1	0	19.63	20.26	20.05	21.00
		1	38	20.09	19.97	20.44	21.00
		1	74	20.23	20.06	20.53	21.00
		36	0	18.92	19.12	18.78	20.00
		36	18	18.89	18.96	18.84	20.00
		36	39	19.10	19.04	18.91	20.00
		75	0	18.89	18.76	18.89	20.00

Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				20850/2510	21100/2535	21350/2560	
20MHz	QPSK	1	0	22.66	**22.88**	22.64	24.00
		1	50	22.89	22.84	22.87	24.00
		1	99	**23.06**	22.82	**23.02**	24.00
		50	0	21.84	21.89	21.82	23.00
		50	25	21.92	21.88	21.90	23.00
		50	50	**22.00**	**21.90**	**21.99**	23.00
		100	0	21.91	21.89	**21.92**	23.00
	16QAM	1	0	21.94	22.18	21.95	23.00
		1	50	22.19	22.13	22.17	23.00
		1	99	22.36	22.12	22.33	23.00
		50	0	20.82	20.88	20.81	22.00
		50	25	20.91	20.86	20.90	22.00
		50	50	21.00	20.90	20.99	22.00
		100	0	20.90	20.89	20.90	22.00
	64QAM	1	0	20.79	21.06	20.81	22.00
		1	50	21.03	21.03	21.04	22.00
		1	99	21.21	21.00	21.19	22.00
		50	0	19.80	19.86	19.80	21.00
		50	25	19.87	19.84	19.88	21.00
		50	50	19.98	19.86	19.97	21.00
		100	0	19.89	19.86	19.87	21.00
	256QAM	1	0	19.85	20.28	19.85	21.00
		1	50	20.13	20.13	20.34	21.00

		1	99	20.31	20.14	20.45	21.00
		50	0	19.04	19.12	18.90	20.00
		50	25	18.77	18.96	18.82	20.00
		50	50	19.14	18.96	19.07	20.00
		100	0	18.91	18.82	18.93	20.00

LTE B7							
Sensor on--Main Ant2				Maximum Output Power (dBm)			Tune-up
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			
				20775/2502.5	21100/2535	21425/2567.5	
5MHz	QPSK	1	0	12.10	12.48	12.51	14.00
		1	13	12.12	12.19	12.26	14.00
		1	24	12.17	12.14	12.31	14.00
		12	0	12.16	12.21	12.31	14.00
		12	6	12.18	12.19	12.32	14.00
		12	13	12.19	12.19	12.32	14.00
		25	0	12.20	12.23	12.33	14.00
	16QAM	1	0	12.36	12.42	12.58	14.00
		1	13	12.38	12.40	12.58	14.00
		1	24	12.49	12.42	12.61	14.00
		12	0	12.15	12.24	12.35	14.00
		12	6	12.18	12.20	12.34	14.00
		12	13	12.20	12.20	12.34	14.00
		25	0	12.19	12.23	12.33	14.00
	64QAM	1	0	12.31	12.36	12.45	14.00
		1	13	12.35	12.33	12.43	14.00
		1	24	12.39	12.35	12.50	14.00
		12	0	12.17	12.26	12.35	14.00
		12	6	12.21	12.23	12.36	14.00
		12	13	12.22	12.23	12.36	14.00
		25	0	12.16	12.20	12.31	14.00
	256QAM	1	0	12.31	12.57	12.12	14.00
		1	13	12.67	12.49	12.61	14.00
		1	24	12.73	12.47	12.77	14.00
		12	0	12.38	12.29	12.29	14.00
		12	6	12.40	12.48	12.49	14.00
		12	13	12.63	12.28	12.51	14.00
		25	0	12.29	12.41	12.33	14.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				20800/2505	21100/2535	21400/2565	
10MHz	QPSK	1	0	12.25	12.69	12.66	14.00
		1	25	12.11	12.17	12.21	14.00
		1	49	12.38	12.17	12.36	14.00

		25	0	12.13	12.22	12.25	14.00
		25	13	12.17	12.16	12.24	14.00
		25	25	12.28	12.15	12.31	14.00
		50	0	12.20	12.19	12.27	14.00
	16QAM	1	0	12.41	12.47	12.45	14.00
		1	25	12.39	12.40	12.44	14.00
		1	49	12.62	12.38	12.64	14.00
		25	0	12.13	12.21	12.25	14.00
		25	13	12.17	12.16	12.24	14.00
		25	25	12.26	12.19	12.30	14.00
		50	0	12.20	12.20	12.28	14.00
	64QAM	1	0	12.32	12.44	12.43	14.00
		1	25	12.26	12.33	12.44	14.00
		1	49	12.52	12.37	12.59	14.00
		25	0	12.12	12.22	12.23	14.00
		25	13	12.19	12.15	12.23	14.00
		25	25	12.24	12.17	12.27	14.00
		50	0	12.20	12.17	12.24	14.00
	256QAM	1	0	12.31	12.61	12.02	14.00
		1	25	12.39	12.35	12.33	14.00
		1	49	12.47	12.43	12.63	14.00
		25	0	12.54	12.11	12.31	14.00
		25	13	12.66	12.30	12.27	14.00
		25	25	12.75	12.24	12.19	14.00
		50	0	12.39	12.57	12.13	14.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				20825/2507.5	21100/2535	21375/2562.5	
15MHz	QPSK	1	0	12.08	12.50	12.54	14.00
		1	38	12.24	12.21	12.25	14.00
		1	74	12.44	12.15	12.39	14.00
		36	0	12.14	12.24	12.18	14.00
		36	18	12.26	12.15	12.25	14.00
		36	39	12.37	12.16	12.31	14.00
		75	0	12.28	12.22	12.28	14.00
	16QAM	1	0	12.34	12.51	12.38	14.00
		1	38	12.51	12.41	12.51	14.00
		1	74	12.70	12.41	12.62	14.00
		36	0	12.14	12.25	12.19	14.00
		36	18	12.24	12.18	12.28	14.00
		36	39	12.36	12.17	12.34	14.00
		75	0	12.28	12.23	12.30	14.00
	64QAM	1	0	12.27	12.34	12.23	14.00
		1	38	12.41	12.29	12.36	14.00

		1	74	12.61	12.27	12.55	14.00
		36	0	12.16	12.27	12.21	14.00
		36	18	12.26	12.17	12.27	14.00
		36	39	12.42	12.19	12.34	14.00
		75	0	12.29	12.23	12.29	14.00
	256QAM	1	0	12.33	12.59	12.08	14.00
		1	38	12.43	12.37	12.57	14.00
		1	74	12.53	12.47	12.71	14.00
		36	0	12.36	12.15	12.47	14.00
		36	18	12.36	12.28	12.51	14.00
		36	39	12.53	12.16	12.41	14.00
		75	0	12.37	12.39	12.35	14.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				20850/2510	21100/2535	21350/2560	
20MHz	QPSK	1	0	12.26	**12.53**	12.22	14.00
		1	50	12.37	12.23	12.22	14.00
		1	99	**12.54**	12.20	**12.42**	14.00
		50	0	12.27	**12.35**	12.20	14.00
		50	25	12.38	12.27	12.29	14.00
		50	50	**12.48**	12.26	**12.38**	14.00
		100	0	**12.35**	12.29	12.30	14.00
	16QAM	1	0	12.42	12.50	12.33	14.00
		1	50	12.55	12.41	12.51	14.00
		1	99	12.78	12.40	12.74	14.00
		50	0	12.23	12.28	12.21	14.00
		50	25	12.37	12.26	12.31	14.00
		50	50	12.46	12.25	12.37	14.00
		100	0	12.32	12.24	12.24	14.00
	64QAM	1	0	12.31	12.49	12.18	14.00
		1	50	12.57	12.49	12.39	14.00
		1	99	12.73	12.47	12.61	14.00
		50	0	12.24	12.29	12.17	14.00
		50	25	12.36	12.24	12.29	14.00
		50	50	12.45	12.24	12.33	14.00
		100	0	12.33	12.27	12.25	14.00
	256QAM	1	0	12.27	12.65	12.12	14.00
		1	50	12.55	12.43	12.47	14.00
		1	99	12.61	12.43	12.77	14.00
		50	0	12.40	12.23	12.29	14.00
		50	25	12.46	12.34	12.41	14.00
		50	50	12.63	12.20	12.35	14.00
		100	0	12.25	12.41	12.17	14.00

LTE B7							
WWAN+WALN Sensor on--Main Ant2				Maximum Output Power (dBm)			Tune-up
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			
				20775/2502.5	21100/2535	21425/2567.5	
5MHz	QPSK	1	0	10.40	10.67	10.38	12.00
		1	13	10.73	10.51	10.36	12.00
		1	24	10.70	10.44	10.80	12.00
		12	0	10.51	10.67	10.58	12.00
		12	6	10.74	10.49	10.43	12.00
		12	13	10.86	10.42	10.60	12.00
		25	0	10.63	10.61	10.62	12.00
	16QAM	1	0	10.64	10.66	10.57	12.00
		1	13	10.69	10.57	10.77	12.00
		1	24	11.08	10.56	11.12	12.00
		12	0	10.41	10.56	10.37	12.00
		12	6	10.57	10.44	10.49	12.00
		12	13	10.74	10.39	10.53	12.00
		25	0	10.56	10.46	10.58	12.00
	64QAM	1	0	10.57	10.83	10.32	12.00
		1	13	10.87	10.85	10.71	12.00
		1	24	10.91	10.75	10.91	12.00
		12	0	10.54	10.59	10.35	12.00
		12	6	10.74	10.58	10.59	12.00
		12	13	10.65	10.52	10.63	12.00
		25	0	10.51	10.65	10.41	12.00
	256QAM	1	0	10.55	11.01	10.36	12.00
		1	13	10.89	10.65	10.73	12.00
		1	24	10.81	10.81	11.03	12.00
		12	0	10.78	10.55	10.45	12.00
		12	6	10.66	10.66	10.55	12.00
		12	13	10.75	10.38	10.49	12.00
		25	0	10.55	10.65	10.53	12.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				20800/2505	21100/2535	21400/2565	
10MHz	QPSK	1	0	10.62	10.67	10.64	12.00
		1	25	10.73	10.27	10.56	12.00
		1	49	10.74	10.44	10.68	12.00
		25	0	10.59	10.77	10.60	12.00
		25	13	10.62	10.35	10.55	12.00
		25	25	10.84	10.34	10.48	12.00
		50	0	10.51	10.53	10.42	12.00
	16QAM	1	0	10.84	10.56	10.61	12.00
		1	25	10.81	10.75	10.59	12.00

		1	49	11.00	10.68	10.92	12.00
		25	0	10.27	10.56	10.45	12.00
		25	13	10.67	10.62	10.57	12.00
		25	25	10.70	10.69	10.43	12.00
		50	0	10.46	10.34	10.54	12.00
	64QAM	1	0	10.51	10.77	10.56	12.00
		1	25	10.73	10.89	10.57	12.00
		1	49	10.99	10.53	10.69	12.00
		25	0	10.32	10.33	10.37	12.00
		25	13	10.70	10.48	10.55	12.00
		25	25	10.63	10.62	10.67	12.00
		50	0	10.69	10.65	10.37	12.00
	256QAM	1	0	10.49	10.83	10.42	12.00
		1	25	10.65	10.77	10.79	12.00
		1	49	10.65	10.71	11.15	12.00
		25	0	10.70	10.43	10.39	12.00
		25	13	10.86	10.54	10.49	12.00
		25	25	10.77	10.34	10.59	12.00
		50	0	10.67	10.71	10.53	12.00

Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				20825/2507.5	21100/2535	21375/2562.5	
15MHz	QPSK	1	0	10.42	10.85	10.42	12.00
		1	38	10.69	10.45	10.42	12.00
		1	74	10.84	10.30	10.66	12.00
		36	0	10.61	10.47	10.30	12.00
		36	18	10.60	10.47	10.65	12.00
		36	39	10.86	10.48	10.70	12.00
		75	0	10.51	10.47	10.46	12.00
	16QAM	1	0	10.54	10.74	10.71	12.00
		1	38	10.79	10.77	10.67	12.00
		1	74	10.92	10.74	11.04	12.00
		36	0	10.41	10.52	10.41	12.00
		36	18	10.51	10.46	10.57	12.00
		36	39	10.82	10.63	10.61	12.00
		75	0	10.54	10.38	10.60	12.00
	64QAM	1	0	10.49	10.81	10.30	12.00
		1	38	10.89	10.89	10.49	12.00
		1	74	11.03	10.67	10.97	12.00
		36	0	10.60	10.49	10.37	12.00
		36	18	10.52	10.58	10.67	12.00
		36	39	10.63	10.38	10.45	12.00
		75	0	10.69	10.51	10.37	12.00
	256QAM	1	0	10.39	10.93	10.24	12.00

		1	38	10.85	10.53	10.69	12.00
		1	74	10.81	10.77	10.87	12.00
		36	0	10.56	10.63	10.63	12.00
		36	18	10.70	10.52	10.53	12.00
		36	39	10.91	10.56	10.45	12.00
		75	0	10.63	10.53	10.29	12.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				20850/2510	21100/2535	21350/2560	
20MHz	QPSK	1	0	10.20	**10.71**	10.44	12.00
		1	50	10.81	10.27	10.48	12.00
		1	99	**10.84**	10.16	**10.80**	12.00
		50	0	10.41	10.51	10.20	12.00
		50	25	10.60	**10.59**	**10.53**	12.00
		50	50	**10.66**	10.56	10.38	12.00
		100	0	10.53	10.47	**10.58**	12.00
	16QAM	1	0	10.60	10.44	10.31	12.00
		1	50	10.75	10.71	10.97	12.00
		1	99	10.98	10.68	10.78	12.00
		50	0	10.27	10.48	10.57	12.00
		50	25	10.71	10.62	10.59	12.00
		50	50	10.64	10.71	10.89	12.00
		100	0	10.58	10.62	10.34	12.00
	64QAM	1	0	10.55	10.69	10.44	12.00
		1	50	10.67	10.73	10.75	12.00
		1	99	10.95	10.73	10.61	12.00
		50	0	10.74	10.45	10.31	12.00
		50	25	10.34	10.56	10.43	12.00
		50	50	10.49	10.20	10.43	12.00
		100	0	10.61	10.73	10.19	12.00
	256QAM	1	0	10.65	10.89	10.48	12.00
		1	50	10.81	10.61	10.57	12.00
		1	99	10.83	10.79	11.13	12.00
		50	0	10.52	10.43	10.43	12.00
		50	25	10.56	10.72	10.61	12.00
		50	50	10.73	10.36	10.65	12.00
		100	0	10.61	10.73	10.49	12.00

LTE B12							
Pmax&Sensor off--Main Ant0				Maximum Output Power (dBm)			Tune-up
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			
				23017/699.7	23095/707.5	23173/715.3	
1.4MHz	QPSK	1	0	22.81	22.79	22.70	24.00
		1	2	22.78	22.79	22.72	24.00
		1	5	22.77	22.79	22.71	24.00
		3	0	22.78	22.76	22.69	24.00
		3	2	22.73	22.72	22.65	24.00
		3	3	22.78	22.76	22.69	24.00
		6	0	21.83	21.74	21.67	23.00
	16QAM	1	0	22.08	22.09	21.99	23.00
		1	2	22.10	22.07	21.99	23.00
		1	5	22.17	22.06	22.00	23.00
		3	0	21.77	21.77	21.64	23.00
		3	2	21.78	21.76	21.64	23.00
		3	3	21.79	21.77	21.63	23.00
		6	0	20.88	20.83	20.72	22.00
	64QAM	1	0	21.00	21.02	20.82	22.00
		1	2	21.00	20.99	20.78	22.00
		1	5	21.10	20.95	20.81	22.00
		3	0	20.89	20.86	20.78	22.00
		3	2	20.89	20.85	20.80	22.00
		3	3	20.90	20.85	20.80	22.00
		6	0	19.78	19.71	19.64	21.00
	256QAM	1	0	20.14	19.74	19.84	21.00
		1	2	20.06	19.82	19.77	21.00
		1	5	19.95	19.98	20.09	21.00
		3	0	19.74	19.40	19.39	21.00
		3	2	19.80	19.46	19.37	21.00
		3	3	19.52	19.42	19.47	21.00
		6	0	18.52	18.82	18.83	20.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				23025/700.5	23095/707.5	23165/714.5	
3MHz	QPSK	1	0	22.77	22.79	22.71	24.00
		1	7	22.73	22.74	22.68	24.00
		1	14	22.80	22.78	22.70	24.00
		8	0	21.81	21.79	21.71	23.00
		8	4	21.81	21.76	21.69	23.00
		8	7	21.80	21.76	21.66	23.00
		15	0	21.82	21.74	21.69	23.00
	16QAM	1	0	22.09	21.99	21.93	23.00

		1	7	22.11	22.01	21.95	23.00
		1	14	22.10	22.00	21.93	23.00
		8	0	20.88	20.81	20.74	22.00
		8	4	20.89	20.80	20.71	22.00
		8	7	20.87	20.78	20.70	22.00
		15	0	20.85	20.76	20.70	22.00
	64QAM	1	0	20.93	20.87	20.83	22.00
		1	7	20.96	20.88	20.86	22.00
		1	14	20.96	20.88	20.87	22.00
		8	0	19.89	19.80	19.73	21.00
		8	4	19.88	19.76	19.70	21.00
		8	7	19.89	19.73	19.67	21.00
		15	0	19.79	19.71	19.64	21.00
	256QAM	1	0	19.92	19.92	19.80	21.00
		1	7	19.86	19.92	19.95	21.00
		1	14	20.07	19.84	20.01	21.00
		8	0	18.72	18.62	18.77	20.00
		8	4	18.80	18.66	18.61	20.00
		8	7	18.84	18.74	18.69	20.00
		15	0	18.72	18.70	18.71	20.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				23035/701.5	23095/707.5	23155/713.5	
5MHz	QPSK	1	0	22.85	22.82	22.78	24.00
		1	13	22.79	22.83	22.74	24.00
		1	24	22.92	22.85	22.80	24.00
		12	0	21.83	21.82	21.72	23.00
		12	6	21.84	21.80	21.72	23.00
		12	13	21.87	21.80	21.74	23.00
		25	0	21.86	21.82	21.75	23.00
	16QAM	1	0	22.08	22.06	22.05	23.00
		1	13	22.06	22.09	22.05	23.00
		1	24	22.14	22.10	22.07	23.00
		12	0	20.81	20.82	20.73	22.00
		12	6	20.85	20.78	20.75	22.00
		12	13	20.89	20.79	20.71	22.00
		25	0	20.85	20.81	20.74	22.00
	64QAM	1	0	20.96	20.87	20.90	22.00
		1	13	20.92	20.89	20.90	22.00
		1	24	21.00	20.90	20.90	22.00
		12	0	19.85	19.82	19.75	21.00
		12	6	19.86	19.84	19.77	21.00
		12	13	19.91	19.82	19.75	21.00
		25	0	19.82	19.79	19.70	21.00

	256QAM	1	0	20.10	19.82	19.98	21.00
		1	13	19.94	19.66	19.77	21.00
		1	24	20.03	20.08	20.03	21.00
		12	0	18.54	18.86	18.85	20.00
		12	6	18.90	18.60	18.63	20.00
		12	13	18.66	18.64	18.61	20.00
		25	0	18.88	18.64	18.63	20.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				23060/704	23095/707.5	23130/711	
10MHz	QPSK	1	0	22.88	22.87	22.87	24.00
		1	25	22.91	22.87	22.81	24.00
		1	49	**22.98**	**22.95**	**22.91**	24.00
		25	0	21.77	21.82	**21.77**	23.00
		25	13	**21.84**	21.79	21.76	23.00
		25	25	21.83	**21.85**	**21.77**	23.00
		50	0	**21.83**	**21.83**	21.78	23.00
	16QAM	1	0	22.15	22.13	22.13	23.00
		1	25	22.10	22.07	22.08	23.00
		1	49	22.25	22.19	22.16	23.00
		25	0	20.77	20.80	20.76	22.00
		25	13	20.80	20.78	20.72	22.00
		25	25	20.80	20.82	20.77	22.00
		50	0	20.80	20.82	20.76	22.00
	64QAM	1	0	21.04	20.96	20.98	22.00
		1	25	20.94	20.92	20.91	22.00
		1	49	21.07	21.04	21.03	22.00
		25	0	19.78	19.80	19.73	21.00
		25	13	19.82	19.76	19.73	21.00
		25	25	19.80	19.80	19.73	21.00
		50	0	19.78	19.80	19.75	21.00
	256QAM	1	0	19.94	19.82	19.96	21.00
		1	25	19.76	19.90	19.87	21.00
		1	49	19.91	20.06	20.11	21.00
		25	0	18.76	18.58	18.53	20.00
		25	13	18.64	18.58	18.75	20.00
		25	25	18.76	18.76	18.59	20.00
		50	0	18.82	18.78	18.59	20.00

LTE B12							
Sensor on--Main Ant0				Maximum Output Power (dBm)			Tune-up
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			
				23017/699.7	23095/707.5	23173/715.3	
1.4MHz	QPSK	1	0	21.25	21.22	21.14	22.00
		1	2	21.27	21.24	21.14	22.00
		1	5	21.35	21.23	21.16	22.00
		3	0	21.26	21.19	21.14	22.00
		3	2	21.29	21.17	21.16	22.00
		3	3	21.29	21.19	21.12	22.00
		6	0	21.31	21.20	21.14	22.00
	16QAM	1	0	21.50	21.56	21.46	22.00
		1	2	21.52	21.50	21.47	22.00
		1	5	21.57	21.61	21.47	22.00
		3	0	21.24	21.21	21.12	22.00
		3	2	21.28	21.18	21.12	22.00
		3	3	21.33	21.14	21.13	22.00
		6	0	21.37	21.28	21.21	22.00
	64QAM	1	0	21.50	21.43	21.34	22.00
		1	2	21.44	21.42	21.34	22.00
		1	5	21.48	21.42	21.31	22.00
		3	0	21.38	21.29	21.25	22.00
		3	2	21.36	21.29	21.25	22.00
		3	3	21.38	21.29	21.25	22.00
		6	0	20.31	20.22	20.08	21.00
	256QAM	1	0	20.32	20.20	20.14	21.00
		1	2	20.41	20.17	20.24	21.00
		1	5	20.68	20.31	20.47	21.00
		3	0	20.27	20.05	20.08	21.00
		3	2	19.99	20.05	19.96	21.00
		3	3	20.29	20.08	19.93	21.00
		6	0	19.01	19.19	19.12	20.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				23025/700.5	23095/707.5	23165/714.5	
3MHz	QPSK	1	0	21.22	21.21	21.14	22.00
		1	7	21.25	21.21	21.14	22.00
		1	14	21.24	21.20	21.15	22.00
		8	0	21.26	21.24	21.15	22.00
		8	4	21.26	21.22	21.13	22.00
		8	7	21.27	21.22	21.12	22.00
		15	0	21.30	21.22	21.15	22.00
	16QAM	1	0	21.54	21.52	21.50	22.00

		1	7	21.53	21.52	21.51	22.00
		1	14	21.53	21.56	21.46	22.00
		8	0	21.35	21.31	21.21	22.00
		8	4	21.35	21.26	21.19	22.00
		8	7	21.34	21.24	21.15	22.00
		15	0	21.30	21.24	21.14	22.00
	64QAM	1	0	21.42	21.34	21.24	22.00
		1	7	21.38	21.39	21.26	22.00
		1	14	21.49	21.41	21.27	22.00
		8	0	20.32	20.28	20.21	21.00
		8	4	20.36	20.24	20.17	21.00
		8	7	20.37	20.23	20.15	21.00
		15	0	20.28	20.21	20.15	21.00
	256QAM	1	0	20.30	20.26	20.08	21.00
		1	7	20.29	20.09	20.16	21.00
		1	14	20.64	20.17	20.49	21.00
		8	0	19.27	19.13	19.30	20.00
		8	4	19.15	19.01	18.98	20.00
		8	7	19.25	19.24	18.97	20.00
		15	0	19.11	19.31	19.16	20.00

Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				23035/701.5	23095/707.5	23155/713.5	
5MHz	QPSK	1	0	21.30	21.26	21.24	22.00
		1	13	21.27	21.24	21.20	22.00
		1	24	21.35	21.28	21.23	22.00
		12	0	21.28	21.28	21.20	22.00
		12	6	21.31	21.25	21.20	22.00
		12	13	21.33	21.24	21.18	22.00
		25	0	21.33	21.29	21.19	22.00
	16QAM	1	0	21.60	21.54	21.45	22.00
		1	13	21.64	21.57	21.49	22.00
		1	24	21.62	21.45	21.48	22.00
		12	0	21.31	21.30	21.19	22.00
		12	6	21.34	21.26	21.23	22.00
		12	13	21.36	21.28	21.21	22.00
		25	0	21.33	21.30	21.20	22.00
	64QAM	1	0	21.43	21.41	21.27	22.00
		1	13	21.39	21.34	21.33	22.00
		1	24	21.47	21.38	21.34	22.00
		12	0	20.31	20.33	20.23	21.00
		12	6	20.35	20.29	20.24	21.00
		12	13	20.40	20.31	20.23	21.00
		25	0	20.31	20.27	20.19	21.00

	256QAM	1	0	20.54	20.24	20.38	21.00
		1	13	20.45	20.13	20.36	21.00
		1	24	20.60	20.27	20.37	21.00
		12	0	19.25	19.11	19.04	20.00
		12	6	19.03	19.15	19.20	20.00
		12	13	19.13	19.00	18.97	20.00
		25	0	19.17	19.17	19.08	20.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				23060/704	23095/707.5	23130/711	
10MHz	QPSK	1	0	21.34	**21.36**	21.28	22.00
		1	25	21.30	21.27	21.21	22.00
		1	49	**21.39**	**21.36**	**21.30**	22.00
		25	0	21.24	21.30	21.24	22.00
		25	13	**21.30**	21.27	21.24	22.00
		25	25	21.29	**21.31**	**21.28**	22.00
		50	0	**21.33**	21.31	21.25	22.00
	16QAM	1	0	21.58	21.60	21.63	22.00
		1	25	21.50	21.55	21.47	22.00
		1	49	21.71	21.64	21.59	22.00
		25	0	21.23	21.27	21.24	22.00
		25	13	21.29	21.25	21.22	22.00
		25	25	21.27	21.29	21.24	22.00
		50	0	21.29	21.29	21.27	22.00
	64QAM	1	0	21.54	21.54	21.50	22.00
		1	25	21.45	21.49	21.36	22.00
		1	49	21.62	21.57	21.49	22.00
		25	0	20.23	20.27	20.24	21.00
		25	13	20.27	20.23	20.22	21.00
		25	25	20.27	20.26	20.23	21.00
		50	0	20.27	20.27	20.24	21.00
	256QAM	1	0	20.38	20.30	20.22	21.00
		1	25	20.27	20.23	20.24	21.00
		1	49	20.52	20.29	20.41	21.00
		25	0	19.25	19.15	19.14	20.00
		25	13	18.99	19.03	19.10	20.00
		25	25	19.23	19.12	18.97	20.00
		50	0	19.09	19.29	19.06	20.00

LTE B25							
Pmax&Sensor off--Main Ant0				Maximum Output Power (dBm)			Tune-up
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			
				26047/1850.7	26365/1882.5	26683/1914.3	
1.4MHz	QPSK	1	0	23.53	23.30	23.08	24.00
		1	2	23.51	23.27	23.05	24.00
		1	5	23.53	23.27	23.05	24.00
		3	0	23.49	23.23	23.05	24.00
		3	2	23.49	23.23	23.06	24.00
		3	3	23.50	23.22	23.06	24.00
		6	0	22.52	22.26	22.12	23.00
	16QAM	1	0	22.74	22.59	22.34	23.00
		1	2	22.76	22.60	22.31	23.00
		1	5	22.75	22.58	22.32	23.00
		3	0	22.57	22.28	22.12	23.00
		3	2	22.53	22.26	22.12	23.00
		3	3	22.56	22.25	22.09	23.00
		6	0	21.54	21.32	21.18	22.00
	64QAM	1	0	21.70	21.50	21.22	22.00
		1	2	21.66	21.37	21.21	22.00
		1	5	21.65	21.41	21.23	22.00
		3	0	21.60	21.39	21.19	22.00
		3	2	21.62	21.37	21.20	22.00
		3	3	21.64	21.35	21.16	22.00
		6	0	20.49	20.23	20.05	21.00
	256QAM	1	0	20.68	20.38	20.13	21.00
		1	2	20.55	20.22	20.23	21.00
		1	5	20.28	20.43	20.15	21.00
		3	0	20.06	20.00	20.06	21.00
		3	2	20.42	20.02	20.12	21.00
		3	3	20.47	19.74	20.14	21.00
		6	0	19.16	19.30	19.01	20.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				26055/1851.5	26365/1882.5	26675/1913.5	
3MHz	QPSK	1	0	23.50	23.28	23.17	24.00
		1	7	23.55	23.27	23.07	24.00
		1	14	23.49	23.27	23.09	24.00
		8	0	22.54	22.26	22.16	23.00
		8	4	22.54	22.24	22.12	23.00
		8	7	22.59	22.26	22.09	23.00
		15	0	22.56	22.28	22.11	23.00
	16QAM	1	0	22.80	22.57	22.34	23.00

		1	7	22.77	22.58	22.28	23.00
		1	14	22.77	22.56	22.27	23.00
		8	0	21.58	21.33	21.24	22.00
		8	4	21.61	21.31	21.18	22.00
		8	7	21.62	21.32	21.14	22.00
		15	0	21.57	21.27	21.13	22.00
	64QAM	1	0	21.66	21.47	21.28	22.00
		1	7	21.65	21.45	21.24	22.00
		1	14	21.68	21.45	21.22	22.00
		8	0	20.62	20.34	20.23	21.00
		8	4	20.59	20.32	20.14	21.00
		8	7	20.64	20.34	20.12	21.00
		15	0	20.56	20.22	20.09	21.00
	256QAM	1	0	20.50	20.26	20.23	21.00
		1	7	20.47	20.20	20.25	21.00
		1	14	20.18	20.21	20.01	21.00
		8	0	19.24	18.98	19.12	20.00
		8	4	19.42	19.04	19.26	20.00
		8	7	19.31	18.80	19.20	20.00
		15	0	19.26	19.26	19.05	20.00

Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				26065/1852.5	26365/1882.5	26665/1912.5	
5MHz	QPSK	1	0	23.56	23.35	23.24	24.00
		1	13	23.53	23.31	23.15	24.00
		1	24	23.51	23.35	23.12	24.00
		12	0	22.60	22.33	22.27	23.00
		12	6	22.61	22.34	22.20	23.00
		12	13	22.62	22.33	22.14	23.00
		25	0	22.63	22.35	22.23	23.00
	16QAM	1	0	22.80	22.62	22.49	23.00
		1	13	22.80	22.60	22.41	23.00
		1	24	22.73	22.58	22.34	23.00
		12	0	21.61	21.33	21.29	22.00
		12	6	21.59	21.33	21.22	22.00
		12	13	21.62	21.32	21.16	22.00
		25	0	21.61	21.33	21.21	22.00
	64QAM	1	0	21.75	21.53	21.41	22.00
		1	13	21.71	21.49	21.31	22.00
		1	24	21.73	21.49	21.25	22.00
		12	0	20.61	20.34	20.32	21.00
		12	6	20.62	20.34	20.25	21.00
		12	13	20.63	20.34	20.19	21.00
		25	0	20.55	20.30	20.22	21.00

	256QAM	1	0	20.42	20.48	20.15	21.00
		1	13	20.53	20.38	20.33	21.00
		1	24	20.28	20.05	20.23	21.00
		12	0	18.92	19.06	19.24	20.00
		12	6	19.04	19.40	19.12	20.00
		12	13	19.33	18.82	19.18	20.00
		25	0	19.06	19.42	19.21	20.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				26090/1855	26365/1882.5	26640/1910	
10MHz	QPSK	1	0	23.60	23.43	23.42	24.00
		1	25	23.50	23.35	23.26	24.00
		1	49	23.54	23.34	23.19	24.00
		25	0	22.61	22.36	22.35	23.00
		25	13	22.63	22.34	22.30	23.00
		25	25	22.61	22.34	22.20	23.00
		50	0	22.60	22.36	22.32	23.00
	16QAM	1	0	22.85	22.66	22.63	23.00
		1	25	22.75	22.60	22.47	23.00
		1	49	22.73	22.57	22.35	23.00
		25	0	21.61	21.34	21.35	22.00
		25	13	21.62	21.34	21.32	22.00
		25	25	21.61	21.33	21.21	22.00
		50	0	21.60	21.33	21.29	22.00
	64QAM	1	0	21.75	21.58	21.53	22.00
		1	25	21.65	21.49	21.44	22.00
		1	49	21.65	21.51	21.28	22.00
		25	0	20.58	20.32	20.32	21.00
		25	13	20.58	20.30	20.29	21.00
		25	25	20.57	20.30	20.21	21.00
		50	0	20.56	20.30	20.29	21.00
	256QAM	1	0	20.50	20.38	20.45	21.00
		1	25	20.51	20.10	20.33	21.00
		1	49	20.18	20.31	20.05	21.00
		25	0	19.34	18.98	19.12	20.00
		25	13	19.44	19.28	19.20	20.00
		25	25	19.51	19.00	19.32	20.00
		50	0	19.20	19.14	18.97	20.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				26115/1857.5	26365/1882.5	26615/1907.5	
15MHz	QPSK	1	0	23.63	23.40	23.38	24.00
		1	38	23.55	23.36	23.35	24.00
		1	74	23.52	23.29	23.22	24.00
		36	0	22.62	22.36	22.37	23.00

		36	18	22.59	22.35	22.34	23.00
		36	39	22.56	22.29	22.26	23.00
		75	0	22.63	22.34	22.35	23.00
	16QAM	1	0	22.86	22.72	22.68	23.00
		1	38	22.74	22.64	22.65	23.00
		1	74	22.73	22.59	22.49	23.00
		36	0	21.62	21.33	21.39	22.00
		36	18	21.60	21.33	21.37	22.00
		36	39	21.57	21.30	21.25	22.00
		75	0	21.62	21.34	21.34	22.00
	64QAM	1	0	21.85	21.53	21.46	22.00
		1	38	21.72	21.46	21.43	22.00
		1	74	21.75	21.38	21.29	22.00
		36	0	20.63	20.35	20.37	21.00
		36	18	20.62	20.34	20.36	21.00
		36	39	20.59	20.32	20.27	21.00
		75	0	20.60	20.32	20.32	21.00
	256QAM	1	0	20.66	20.46	20.17	21.00
		1	38	20.65	20.22	20.53	21.00
		1	74	20.32	20.03	20.09	21.00
		36	0	19.28	19.22	19.00	20.00
		36	18	19.26	19.22	19.32	20.00
		36	39	19.53	19.14	19.08	20.00
		75	0	19.38	19.00	19.13	20.00

Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				26140/1860	26365/1882.5	26590/1905	
20MHz	QPSK	1	0	**23.69**	**23.43**	**23.39**	24.00
		1	50	23.58	23.36	23.37	24.00
		1	99	23.48	23.33	23.20	24.00
		50	0	**22.68**	22.38	**22.45**	23.00
		50	25	22.67	**22.40**	22.40	23.00
		50	50	22.58	22.34	22.35	23.00
		100	0	**22.61**	22.34	22.39	23.00
	16QAM	1	0	22.96	22.69	22.65	23.00
		1	50	22.84	22.62	22.66	23.00
		1	99	22.63	22.52	22.47	23.00
		50	0	21.69	21.37	21.45	22.00
		50	25	21.66	21.38	21.40	22.00
		50	50	21.59	21.37	21.33	22.00
		100	0	21.61	21.31	21.38	22.00
	64QAM	1	0	21.84	21.64	21.57	22.00
		1	50	21.77	21.56	21.53	22.00
		1	99	21.62	21.47	21.33	22.00

		50	0	20.66	20.34	20.42	21.00
		50	25	20.62	20.36	20.38	21.00
		50	50	20.55	20.32	20.34	21.00
		100	0	20.60	20.32	20.37	21.00
	256QAM	1	0	20.50	20.22	20.37	21.00
		1	50	20.69	20.10	20.47	21.00
		1	99	20.32	20.31	20.05	21.00
		50	0	19.20	19.04	19.18	20.00
		50	25	19.42	19.36	19.16	20.00
		50	50	19.53	19.14	19.04	20.00
		100	0	19.30	19.32	19.17	20.00

LTE B25							
Sensor on--Main Ant0				Maximum Output Power (dBm)			Tune-up
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			
				26047/1850.7	26365/1882.5	26683/1914.3	
1.4MHz	QPSK	1	0	12.80	13.17	12.93	14.00
		1	2	12.63	12.49	12.25	14.00
		1	5	12.64	12.50	12.28	14.00
		3	0	12.64	12.46	12.28	14.00
		3	2	12.63	12.46	12.26	14.00
		3	3	12.67	12.45	12.24	14.00
		6	0	12.71	12.48	12.31	14.00
	16QAM	1	0	12.97	12.83	12.51	14.00
		1	2	12.94	12.83	12.52	14.00
		1	5	12.99	12.86	12.49	14.00
		3	0	12.69	12.57	12.35	14.00
		3	2	12.72	12.58	12.33	14.00
		3	3	12.76	12.57	12.30	14.00
		6	0	12.79	12.58	12.38	14.00
	64QAM	1	0	12.85	12.82	12.51	14.00
		1	2	12.81	12.75	12.47	14.00
		1	5	12.95	12.80	12.45	14.00
		3	0	12.79	12.62	12.41	14.00
		3	2	12.79	12.62	12.38	14.00
		3	3	12.82	12.61	12.39	14.00
		6	0	12.69	12.49	12.26	14.00
	256QAM	1	0	13.19	13.51	12.94	14.00
		1	2	13.35	13.31	13.33	14.00
		1	5	13.61	13.23	13.75	14.00
		3	0	13.30	13.01	13.15	14.00
		3	2	13.26	13.28	13.31	14.00
		3	3	13.39	13.08	13.15	14.00

		6	0	13.13	13.27	12.97	14.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				26055/1851.5	26365/1882.5	26675/1913.5	
3MHz	QPSK	1	0	12.76	13.06	13.17	14.00
		1	7	12.67	12.51	12.28	14.00
		1	14	12.69	12.52	12.28	14.00
		8	0	12.66	12.51	12.36	14.00
		8	4	12.68	12.49	12.30	14.00
		8	7	12.71	12.52	12.31	14.00
		15	0	12.73	12.53	12.31	14.00
	16QAM	1	0	12.92	12.77	12.54	14.00
		1	7	12.99	12.77	12.50	14.00
		1	14	12.96	12.75	12.50	14.00
		8	0	12.77	12.57	12.41	14.00
		8	4	12.78	12.60	12.37	14.00
		8	7	12.80	12.59	12.36	14.00
		15	0	12.77	12.53	12.33	14.00
	64QAM	1	0	12.82	12.69	12.45	14.00
		1	7	12.89	12.70	12.42	14.00
		1	14	12.87	12.73	12.43	14.00
		8	0	12.75	12.60	12.44	14.00
		8	4	12.77	12.63	12.37	14.00
		8	7	12.80	12.62	12.36	14.00
		15	0	12.69	12.51	12.30	14.00
	256QAM	1	0	13.19	13.53	13.06	14.00
		1	7	13.43	13.09	13.27	14.00
		1	14	13.73	13.19	13.29	14.00
		8	0	13.12	13.15	13.01	14.00
		8	4	13.14	13.26	13.47	14.00
		8	7	13.63	13.34	13.29	14.00
		15	0	13.21	13.27	13.19	14.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				26065/1852.5	26365/1882.5	26665/1912.5	
5MHz	QPSK	1	0	12.91	13.19	13.27	14.00
		1	13	12.67	12.51	12.36	14.00
		1	24	12.73	12.57	12.38	14.00
		12	0	12.75	12.55	12.45	14.00
		12	6	12.80	12.54	12.40	14.00
		12	13	12.83	12.56	12.34	14.00
		25	0	12.80	12.58	12.40	14.00
	16QAM	1	0	12.92	12.89	12.66	14.00
		1	13	12.95	12.85	12.60	14.00
		1	24	12.99	12.85	12.52	14.00

		12	0	12.73	12.59	12.45	14.00
		12	6	12.83	12.57	12.42	14.00
		12	13	12.85	12.60	12.38	14.00
		25	0	12.78	12.58	12.42	14.00
	64QAM	1	0	12.87	12.70	12.64	14.00
		1	13	12.85	12.73	12.50	14.00
		1	24	12.94	12.76	12.49	14.00
		12	0	12.78	12.61	12.49	14.00
		12	6	12.83	12.60	12.45	14.00
		12	13	12.86	12.61	12.40	14.00
		25	0	12.78	12.56	12.39	14.00
	256QAM	1	0	13.09	13.57	12.98	14.00
		1	13	13.41	13.47	13.51	14.00
		1	24	13.63	13.31	13.75	14.00
		12	0	13.36	13.17	13.31	14.00
		12	6	13.40	13.30	13.39	14.00
		12	13	13.63	13.04	13.37	14.00
		25	0	13.13	13.43	13.15	14.00

Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				26090/1855	26365/1882.5	26640/1910	
10MHz	QPSK	1	0	12.83	13.27	13.48	14.00
		1	25	12.71	12.53	12.43	14.00
		1	49	12.77	12.60	12.39	14.00
		25	0	12.72	12.55	12.55	14.00
		25	13	12.83	12.58	12.51	14.00
		25	25	12.81	12.61	12.47	14.00
		50	0	12.79	12.59	12.52	14.00
	16QAM	1	0	13.03	12.91	12.93	14.00
		1	25	13.02	12.84	12.79	14.00
		1	49	13.09	12.91	12.64	14.00
		25	0	12.69	12.53	12.55	14.00
		25	13	12.82	12.56	12.50	14.00
		25	25	12.80	12.60	12.47	14.00
		50	0	12.78	12.56	12.49	14.00
	64QAM	1	0	12.85	12.79	12.82	14.00
		1	25	12.93	12.71	12.69	14.00
		1	49	12.97	12.78	12.58	14.00
		25	0	12.70	12.55	12.49	14.00
		25	13	12.81	12.57	12.49	14.00
		25	25	12.79	12.59	12.46	14.00
		50	0	12.77	12.57	12.49	14.00
	256QAM	1	0	13.01	12.92	12.99	14.00
		1	25	12.97	12.65	12.94	14.00

		1	49	13.00	12.90	12.77	14.00
		25	0	12.97	12.41	12.72	14.00
		25	13	12.86	12.51	12.41	14.00
		25	25	12.95	12.75	12.89	14.00
		50	0	12.87	12.53	12.63	14.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				26115/1857.5	26365/1882.5	26615/1907.5	
15MHz	QPSK	1	0	12.78	13.39	12.95	14.00
		1	38	12.67	12.52	12.52	14.00
		1	74	12.61	12.48	12.40	14.00
		36	0	12.82	12.56	12.53	14.00
		36	18	12.79	12.55	12.56	14.00
		36	39	12.72	12.55	12.48	14.00
		75	0	12.75	12.59	12.58	14.00
	16QAM	1	0	12.99	12.92	12.82	14.00
		1	38	12.98	12.89	12.83	14.00
		1	74	12.86	12.87	12.79	14.00
		36	0	12.74	12.54	12.56	14.00
		36	18	12.78	12.57	12.56	14.00
		36	39	12.73	12.58	12.52	14.00
		75	0	12.76	12.57	12.58	14.00
	64QAM	1	0	12.84	12.70	12.67	14.00
		1	38	12.97	12.69	12.56	14.00
		1	74	12.75	12.62	12.52	14.00
		36	0	12.82	12.59	12.53	14.00
		36	18	12.83	12.60	12.58	14.00
		36	39	12.76	12.60	12.52	14.00
		75	0	12.79	12.60	12.59	14.00
	256QAM	1	0	13.01	12.88	12.87	14.00
		1	38	13.11	12.75	12.94	14.00
		1	74	12.92	12.88	12.83	14.00
		36	0	12.85	12.59	12.86	14.00
		36	18	13.04	12.61	12.47	14.00
		36	39	12.99	12.75	12.69	14.00
		75	0	12.65	12.59	12.47	14.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				26140/1860	26365/1882.5	26590/1905	
20MHz	QPSK	1	0	**13.19**	**13.01**	**13.03**	14.00
		1	50	12.77	12.63	12.53	14.00
		1	99	12.69	12.55	12.51	14.00
		50	0	**13.00**	12.58	**12.72**	14.00
		50	25	12.81	**12.63**	12.65	14.00
		50	50	12.71	**12.63**	12.67	14.00

		100	0	**12.90**	12.66	12.70	14.00
	16QAM	1	0	13.07	12.90	12.75	14.00
		1	50	12.96	12.89	12.78	14.00
		1	99	12.92	12.79	12.60	14.00
		50	0	12.84	12.54	12.69	14.00
		50	25	12.86	12.59	12.66	14.00
		50	50	12.76	12.62	12.64	14.00
		100	0	12.77	12.57	12.69	14.00
	64QAM	1	0	12.97	12.80	12.83	14.00
		1	50	12.91	12.83	12.84	14.00
		1	99	12.78	12.80	12.69	14.00
		50	0	12.87	12.53	12.76	14.00
		50	25	12.86	12.59	12.65	14.00
		50	50	12.75	12.61	12.63	14.00
		100	0	12.77	12.57	12.67	14.00
	256QAM	1	0	12.93	12.88	12.89	14.00
		1	50	12.97	12.77	12.94	14.00
		1	99	12.96	12.86	12.75	14.00
		50	0	12.89	12.51	12.88	14.00
		50	25	13.02	12.69	12.57	14.00
		50	50	12.81	12.65	12.67	14.00
		100	0	12.73	12.65	12.57	14.00

LTE B26							
Pmax&Sensor off--Main Ant0				Maximum Output Power (dBm)			Tune-up
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			
				26697/814.7	26865/831.5	27033/848.3	
1.4MHz	QPSK	1	0	22.36	22.59	22.56	24.00
		1	2	22.70	22.55	22.51	24.00
		1	5	22.71	22.55	22.51	24.00
		3	0	22.73	22.54	22.54	24.00
		3	2	22.69	22.49	22.51	24.00
		3	3	22.71	22.51	22.52	24.00
		6	0	21.75	21.60	21.56	23.00
	16QAM	1	0	22.10	21.86	21.82	23.00
		1	2	21.98	21.82	21.79	23.00
		1	5	22.04	21.85	21.82	23.00
		3	0	21.73	21.55	21.52	23.00
		3	2	21.70	21.53	21.49	23.00
		3	3	21.73	21.53	21.50	23.00
		6	0	20.94	20.71	20.70	22.00
	64QAM	1	0	21.08	20.86	20.74	22.00
		1	2	21.01	20.75	20.72	22.00

		1	5	21.02	20.84	20.73	22.00
		3	0	20.97	20.79	20.76	22.00
		3	2	20.97	20.78	20.74	22.00
		3	3	20.99	20.77	20.73	22.00
		6	0	19.82	19.60	19.60	21.00
	256QAM	1	0	19.61	19.57	19.45	21.00
		1	2	19.66	19.77	19.90	21.00
		1	5	19.89	19.35	19.51	21.00
		3	0	19.23	19.09	19.40	21.00
		3	2	19.45	19.34	19.38	21.00
		3	3	19.13	19.16	19.16	21.00
		6	0	18.47	18.06	18.26	20.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				26705/815.5	26865/831.5	27025/847.5	
3MHz	QPSK	1	0	22.81	22.59	22.54	24.00
		1	7	22.66	22.52	22.50	24.00
		1	14	22.69	22.56	22.54	24.00
		8	0	21.76	21.55	21.57	23.00
		8	4	21.69	21.54	21.53	23.00
		8	7	21.69	21.55	21.56	23.00
		15	0	21.73	21.59	21.56	23.00
	16QAM	1	0	22.06	21.84	21.84	23.00
		1	7	21.95	21.78	21.73	23.00
		1	14	21.94	21.78	21.74	23.00
		8	0	20.90	20.73	20.72	22.00
		8	4	20.92	20.70	20.70	22.00
		8	7	20.92	20.71	20.69	22.00
		15	0	20.86	20.64	20.63	22.00
	64QAM	1	0	21.10	20.82	20.84	22.00
		1	7	21.08	20.80	20.80	22.00
		1	14	21.03	20.78	20.81	22.00
		8	0	19.89	19.72	19.90	21.00
		8	4	19.89	19.68	19.70	21.00
		8	7	19.92	19.73	19.82	21.00
		15	0	19.80	19.64	19.75	21.00
	256QAM	1	0	19.67	19.59	19.45	21.00
		1	7	19.62	19.81	19.72	21.00
		1	14	19.69	19.31	19.57	21.00
		8	0	18.49	18.33	18.46	20.00
		8	4	18.55	18.36	18.48	20.00
		8	7	18.27	18.22	18.48	20.00
		15	0	18.63	18.22	18.36	20.00

Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				26715/816.5	26865/831.5	27015/846.5	
5MHz	QPSK	1	0	22.81	22.65	22.61	24.00
		1	13	22.68	22.61	22.55	24.00
		1	24	22.75	22.62	22.56	24.00
		12	0	21.75	21.60	21.63	23.00
		12	6	21.74	21.60	21.61	23.00
		12	13	21.75	21.61	21.57	23.00
		25	0	21.80	21.61	21.64	23.00
	16QAM	1	0	22.15	21.87	21.89	23.00
		1	13	21.98	21.82	21.83	23.00
		1	24	22.04	21.83	21.86	23.00
		12	0	20.87	20.72	20.74	22.00
		12	6	20.86	20.70	20.69	22.00
		12	13	20.87	20.68	20.68	22.00
		25	0	20.87	20.68	20.69	22.00
	64QAM	1	0	21.03	20.87	20.83	22.00
		1	13	21.01	20.81	20.80	22.00
		1	24	21.00	20.81	20.79	22.00
		12	0	19.88	19.70	19.77	21.00
		12	6	19.87	19.71	19.72	21.00
		12	13	19.88	19.69	19.71	21.00
		25	0	19.84	19.68	19.67	21.00
	256QAM	1	0	19.73	19.51	19.43	21.00
		1	13	19.48	19.55	19.80	21.00
		1	24	19.71	19.59	19.77	21.00
		12	0	18.43	18.37	18.18	20.00
		12	6	18.31	18.20	18.48	20.00
		12	13	18.45	18.30	18.32	20.00
		25	0	18.69	18.44	18.28	20.00

Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				26740/819	26865/831.5	26990/844	
10MHz	QPSK	1	0	22.83	22.73	22.63	24.00
		1	25	22.77	22.62	22.60	24.00
		1	49	22.83	22.63	22.63	24.00
		25	0	21.76	21.63	21.67	23.00
		25	13	21.78	21.61	21.65	23.00
		25	25	21.76	21.64	21.62	23.00
		50	0	21.76	21.65	21.66	23.00
	16QAM	1	0	22.10	22.00	21.95	23.00
		1	25	22.05	21.87	21.91	23.00
		1	49	22.12	21.93	21.98	23.00
		25	0	20.82	20.66	20.71	22.00

		25	13	20.80	20.66	20.68	22.00
		25	25	20.78	20.66	20.65	22.00
		50	0	20.79	20.67	20.71	22.00
	64QAM	1	0	21.09	20.95	20.83	22.00
		1	25	20.97	20.79	20.81	22.00
		1	49	20.95	20.87	20.85	22.00
		25	0	19.82	19.67	19.70	21.00
		25	13	19.77	19.64	19.68	21.00
		25	25	19.75	19.66	19.67	21.00
		50	0	19.76	19.64	19.71	21.00
	256QAM	1	0	19.89	19.37	19.49	21.00
		1	25	19.44	19.53	19.56	21.00
		1	49	19.67	19.37	19.75	21.00
		25	0	18.41	18.33	18.42	20.00
		25	13	18.47	18.20	18.56	20.00
		25	25	18.27	18.28	18.54	20.00
		50	0	18.59	18.14	18.46	20.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				26765/821.5	26865/831.5	26965/841.5	
15MHz	QPSK	1	0	22.77	**22.73**	22.59	24.00
		1	38	**22.79**	22.65	**22.63**	24.00
		1	74	22.74	22.63	22.62	24.00
		36	0	**21.74**	**21.64**	21.55	23.00
		36	18	21.70	21.58	21.58	23.00
		36	39	21.71	21.59	**21.61**	23.00
		75	0	**21.76**	21.62	21.64	23.00
	16QAM	1	0	22.10	22.04	21.88	23.00
		1	38	22.06	21.97	21.91	23.00
		1	74	22.06	21.94	21.91	23.00
		36	0	20.80	20.69	20.63	22.00
		36	18	20.76	20.67	20.64	22.00
		36	39	20.73	20.66	20.65	22.00
		75	0	20.76	20.68	20.69	22.00
	64QAM	1	0	21.03	20.87	20.81	22.00
		1	38	20.88	20.87	20.82	22.00
		1	74	20.89	20.83	20.83	22.00
		36	0	19.79	19.69	19.64	21.00
		36	18	19.75	19.64	19.64	21.00
		36	39	19.73	19.66	19.64	21.00
		75	0	19.73	19.64	19.66	21.00
	256QAM	1	0	19.71	19.47	19.37	21.00
		1	38	19.54	19.65	19.66	21.00
		1	74	19.69	19.41	19.63	21.00

		36	0	18.39	18.27	18.32	20.00
		36	18	18.43	18.26	18.40	20.00
		36	39	18.31	18.32	18.48	20.00
		75	0	18.57	18.22	18.32	20.00

LTE B26							
Sensor on--Main Ant0				Maximum Output Power (dBm)			Tune-up
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			
				26697/814.7	26865/831.5	27033/848.3	
1.4MHz	QPSK	1	0	17.87	17.67	17.62	19.00
		1	2	17.86	17.65	17.59	19.00
		1	5	17.86	17.66	17.59	19.00
		3	0	17.86	17.61	17.59	19.00
		3	2	17.84	17.61	17.59	19.00
		3	3	17.84	17.61	17.59	19.00
		6	0	17.84	17.66	17.61	19.00
	16QAM	1	0	18.18	17.98	17.93	19.00
		1	2	18.20	17.98	17.95	19.00
		1	5	18.18	17.98	17.98	19.00
		3	0	17.84	17.59	17.65	19.00
		3	2	17.82	17.61	17.59	19.00
		3	3	17.83	17.59	17.62	19.00
		6	0	17.91	17.68	17.72	19.00
	64QAM	1	0	18.00	17.84	17.84	19.00
		1	2	17.97	17.80	17.82	19.00
		1	5	17.98	17.80	17.84	19.00
		3	0	17.96	17.80	17.75	19.00
		3	2	17.95	17.80	17.77	19.00
		3	3	18.00	17.80	17.75	19.00
		6	0	17.86	17.61	17.65	19.00
	256QAM	1	0	18.05	17.84	18.01	19.00
		1	2	18.02	17.77	18.04	19.00
		1	5	18.05	17.85	17.80	19.00
		3	0	17.79	17.42	17.59	19.00
		3	2	17.60	18.05	18.00	19.00
		3	3	17.83	17.84	18.00	19.00
		6	0	18.03	17.62	17.84	19.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				26705/815.5	26865/831.5	27025/847.5	
3MHz	QPSK	1	0	17.88	17.67	17.63	19.00
		1	7	17.86	17.67	17.62	19.00
		1	14	17.84	17.62	17.59	19.00
		8	0	17.84	17.64	17.67	19.00

		8	4	17.84	17.65	17.64	19.00
		8	7	17.87	17.65	17.64	19.00
		15	0	17.88	17.66	17.65	19.00
	16QAM	1	0	18.13	17.92	17.92	19.00
		1	7	18.09	17.88	17.90	19.00
		1	14	18.09	17.87	17.90	19.00
		8	0	17.93	17.73	17.74	19.00
		8	4	17.91	17.70	17.71	19.00
		8	7	17.93	17.74	17.71	19.00
		15	0	17.91	17.68	17.67	19.00
	64QAM	1	0	18.05	17.81	17.84	19.00
		1	7	18.07	17.82	17.83	19.00
		1	14	18.06	17.77	17.80	19.00
		8	0	17.93	17.74	17.75	19.00
		8	4	17.93	17.72	17.70	19.00
		8	7	17.93	17.73	17.72	19.00
		15	0	17.82	17.67	17.66	19.00
	256QAM	1	0	18.03	17.78	17.63	19.00
		1	7	17.80	17.97	17.66	19.00
		1	14	18.13	18.03	17.74	19.00
		8	0	17.81	17.70	17.59	19.00
		8	4	17.74	17.67	17.68	19.00
		8	7	17.67	17.66	17.54	19.00
		15	0	17.71	17.50	17.68	19.00

Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				26715/816.5	26865/831.5	27015/846.5	
5MHz	QPSK	1	0	17.92	17.73	17.68	19.00
		1	13	17.87	17.70	17.66	19.00
		1	24	17.88	17.68	17.66	19.00
		12	0	17.88	17.71	17.73	19.00
		12	6	17.87	17.70	17.71	19.00
		12	13	17.89	17.71	17.68	19.00
		25	0	17.90	17.73	17.73	19.00
	16QAM	1	0	18.21	17.96	17.96	19.00
		1	13	18.11	17.96	17.93	19.00
		1	24	18.11	17.97	17.99	19.00
		12	0	17.90	17.73	17.75	19.00
		12	6	17.89	17.72	17.72	19.00
		12	13	17.90	17.71	17.72	19.00
		25	0	17.89	17.68	17.73	19.00
	64QAM	1	0	18.12	17.90	17.89	19.00
		1	13	18.04	17.87	17.86	19.00
		1	24	18.12	17.83	17.84	19.00

		12	0	17.93	17.74	17.79	19.00
		12	6	17.92	17.75	17.74	19.00
		12	13	17.93	17.75	17.73	19.00
		25	0	17.89	17.70	17.74	19.00
	256QAM	1	0	18.19	17.90	17.75	19.00
		1	13	17.90	17.95	17.92	19.00
		1	24	18.15	17.89	17.96	19.00
		12	0	17.97	17.80	17.59	19.00
		12	6	17.84	17.83	17.82	19.00
		12	13	17.89	17.86	17.72	19.00
		25	0	17.77	17.60	17.70	19.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				26740/819	26865/831.5	26990/844	
10MHz	QPSK	1	0	17.96	17.82	17.74	19.00
		1	25	17.83	17.67	17.68	19.00
		1	49	17.84	17.79	17.77	19.00
		25	0	17.86	17.72	17.77	19.00
		25	13	17.84	17.71	17.75	19.00
		25	25	17.82	17.73	17.71	19.00
		50	0	17.83	17.73	17.75	19.00
	16QAM	1	0	18.24	18.13	18.06	19.00
		1	25	18.12	17.99	18.00	19.00
		1	49	18.12	18.08	18.12	19.00
		25	0	17.83	17.71	17.74	19.00
		25	13	17.80	17.68	17.72	19.00
		25	25	17.81	17.72	17.72	19.00
		50	0	17.82	17.72	17.75	19.00
	64QAM	1	0	18.14	17.96	17.87	19.00
		1	25	17.98	17.80	17.86	19.00
		1	49	18.02	17.89	17.92	19.00
		25	0	17.86	17.70	17.75	19.00
		25	13	17.80	17.67	17.73	19.00
		25	25	17.80	17.72	17.71	19.00
		50	0	17.81	17.70	17.73	19.00
	256QAM	1	0	17.97	17.86	17.93	19.00
		1	25	18.04	17.97	17.70	19.00
		1	49	18.25	17.91	17.82	19.00
		25	0	17.85	17.90	17.87	19.00
		25	13	17.82	17.53	17.70	19.00
		25	25	17.73	17.62	17.80	19.00
		50	0	17.73	17.86	17.66	19.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				26765/821.5	26865/831.5	26965/841.5	

15MHz	QPSK	1	0	**17.87**	**17.70**	17.59	19.00
		1	38	17.74	17.68	17.65	19.00
		1	74	17.84	17.68	**17.68**	19.00
		36	0	**17.83**	**17.71**	17.65	19.00
		36	18	17.75	17.68	17.66	19.00
		36	39	17.75	17.70	**17.68**	19.00
		75	0	**17.79**	17.68	17.67	19.00
	16QAM	1	0	18.17	18.02	17.95	19.00
		1	38	18.08	18.02	18.00	19.00
		1	74	18.12	18.00	18.02	19.00
		36	0	17.83	17.70	17.65	19.00
		36	18	17.75	17.68	17.66	19.00
		36	39	17.77	17.70	17.68	19.00
		75	0	17.80	17.68	17.71	19.00
	64QAM	1	0	18.11	17.92	17.79	19.00
		1	38	17.96	17.91	17.84	19.00
		1	74	18.05	17.93	17.88	19.00
		36	0	17.83	17.70	17.67	19.00
		36	18	17.80	17.71	17.68	19.00
		36	39	17.77	17.72	17.70	19.00
		75	0	17.77	17.68	17.70	19.00
	256QAM	1	0	17.99	17.86	17.91	19.00
		1	38	17.94	17.79	17.84	19.00
		1	74	18.21	18.03	17.96	19.00
		36	0	17.99	17.60	17.67	19.00
		36	18	17.72	17.73	17.64	19.00
		36	39	17.65	17.64	17.78	19.00
		75	0	17.81	17.66	17.64	19.00

LTE B38							
Pmax&Sensor off--Main Ant2				Maximum Output Power (dBm)			Tune-up
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			
				37775/2572.5	38000/2595	38225/2617.5	
5MHz	QPSK	1	0	22.95	22.58	22.51	24.00
		1	13	22.93	22.56	22.54	24.00
		1	24	22.96	22.54	22.65	24.00
		12	0	21.97	21.57	21.55	23.00
		12	6	21.96	21.52	21.56	23.00
		12	13	21.97	21.53	21.59	23.00
		25	0	21.99	21.56	21.59	23.00
	16QAM	1	0	21.94	21.62	21.55	23.00
		1	13	21.95	21.61	21.59	23.00
		1	24	21.98	21.61	21.71	23.00

		12	0	20.93	20.57	20.52	22.00
		12	6	20.93	20.53	20.51	22.00
		12	13	20.95	20.55	20.56	22.00
		25	0	21.00	20.60	20.60	22.00
	64QAM	1	0	20.76	20.39	20.30	22.00
		1	13	20.73	20.35	20.30	22.00
		1	24	20.75	20.34	20.42	22.00
		12	0	20.11	19.68	19.64	21.00
		12	6	20.05	19.64	19.64	21.00
		12	13	20.03	19.66	19.64	21.00
		25	0	20.10	19.70	19.67	21.00
	256QAM	1	0	20.31	19.99	19.45	21.00
		1	13	20.31	19.65	19.68	21.00
		1	24	20.06	19.59	19.68	21.00
		12	0	18.86	18.61	18.66	20.00
		12	6	18.85	18.43	18.63	20.00
		12	13	18.95	18.47	18.64	20.00
		25	0	18.78	18.79	18.58	20.00

Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				37800/2575	38000/2595	38200/2615	
10MHz	QPSK	1	0	22.93	22.62	22.54	24.00
		1	25	22.88	22.59	22.51	24.00
		1	49	22.92	22.57	22.69	24.00
		25	0	21.99	21.60	21.53	23.00
		25	13	21.93	21.56	21.53	23.00
		25	25	21.95	21.58	21.58	23.00
		50	0	21.96	21.56	21.55	23.00
	16QAM	1	0	22.01	21.70	21.62	23.00
		1	25	21.99	21.66	21.58	23.00
		1	49	21.99	21.66	21.73	23.00
		25	0	20.99	20.60	20.52	22.00
		25	13	20.93	20.55	20.51	22.00
		25	25	20.94	20.58	20.58	22.00
		50	0	20.97	20.57	20.54	22.00
	64QAM	1	0	20.72	20.41	20.30	22.00
		1	25	20.71	20.36	20.25	22.00
		1	49	20.73	20.35	20.45	22.00
		25	0	20.07	19.69	19.61	21.00
		25	13	20.04	19.66	19.61	21.00
		25	25	20.05	19.69	19.64	21.00
		50	0	20.03	19.67	19.59	21.00
	256QAM	1	0	20.01	19.73	19.37	21.00
		1	25	20.05	19.57	19.70	21.00

		1	49	19.90	19.87	19.70	21.00
		25	0	18.96	18.53	18.40	20.00
		25	13	18.55	18.49	18.63	20.00
		25	25	19.13	18.39	18.48	20.00
		50	0	18.66	18.59	18.68	20.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				37825/2577.5	38000/2595	38175/2612.5	
15MHz	QPSK	1	0	22.95	22.69	22.53	24.00
		1	38	22.94	22.63	22.54	24.00
		1	74	22.89	22.59	22.68	24.00
		36	0	21.98	21.61	21.51	23.00
		36	18	21.94	21.54	21.51	23.00
		36	39	21.92	21.55	21.55	23.00
		75	0	21.98	21.63	21.55	23.00
	16QAM	1	0	22.04	21.80	21.58	23.00
		1	38	22.02	21.71	21.61	23.00
		1	74	21.98	21.69	21.77	23.00
		36	0	20.93	20.59	20.48	22.00
		36	18	20.88	20.51	20.48	22.00
		36	39	20.89	20.52	20.53	22.00
		75	0	21.02	20.66	20.58	22.00
	64QAM	1	0	20.80	20.50	20.30	22.00
		1	38	20.76	20.42	20.32	22.00
		1	74	20.72	20.38	20.48	22.00
		36	0	20.03	19.69	19.57	21.00
		36	18	20.00	19.63	19.57	21.00
		36	39	19.97	19.60	19.63	21.00
		75	0	20.05	19.69	19.62	21.00
	256QAM	1	0	20.23	19.93	19.57	21.00
		1	38	20.07	19.55	19.64	21.00
		1	74	19.94	19.53	19.76	21.00
		36	0	18.72	18.63	18.64	20.00
		36	18	18.83	18.63	18.45	20.00
		36	39	18.95	18.59	18.40	20.00
		75	0	18.76	18.65	18.56	20.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				37850/2580	38000/2595	38150/2610	
20MHz	QPSK	1	0	**22.97**	**22.77**	22.52	24.00
		1	50	22.89	22.64	22.55	24.00
		1	99	22.77	22.63	**22.64**	24.00
		50	0	**22.04**	**21.71**	21.54	23.00
		50	25	21.97	21.63	21.58	23.00
		50	50	21.88	21.61	**21.61**	23.00

		100	0	**21.95**	21.66	21.56	23.00
	16QAM	1	0	22.06	21.85	21.59	23.00
		1	50	21.96	21.74	21.62	23.00
		1	99	21.87	21.73	21.74	23.00
		50	0	21.03	20.71	20.57	22.00
		50	25	20.96	20.63	20.58	22.00
		50	50	20.89	20.62	20.62	22.00
		100	0	20.96	20.66	20.59	22.00
	64QAM	1	0	20.79	20.56	20.30	22.00
		1	50	20.73	20.41	20.39	22.00
		1	99	20.54	20.41	20.42	22.00
		50	0	20.09	19.77	19.59	21.00
		50	25	20.05	19.73	19.62	21.00
		50	50	19.94	19.69	19.64	21.00
		100	0	19.98	19.73	19.60	21.00
	256QAM	1	0	20.19	19.89	19.53	21.00
		1	50	20.19	19.65	19.70	21.00
		1	99	20.02	19.65	19.70	21.00
		50	0	18.80	18.49	18.50	20.00
		50	25	18.73	18.45	18.55	20.00
		50	50	19.01	18.41	18.48	20.00
		100	0	18.84	18.65	18.64	20.00

LTE B38							
Sensor on--Main Ant2				Maximum Output Power (dBm)			Tune-up
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			
				37775/2572.5	38000/2595	38225/2617.5	
5MHz	QPSK	1	0	16.98	16.65	16.64	17.50
		1	13	16.93	16.57	16.56	17.50
		1	24	16.93	16.61	16.59	17.50
		12	0	17.02	16.62	16.58	17.50
		12	6	16.95	16.59	16.60	17.50
		12	13	16.94	16.60	16.60	17.50
		25	0	16.99	16.61	16.61	17.50
	16QAM	1	0	16.99	16.64	16.60	17.50
		1	13	16.93	16.63	16.60	17.50
		1	24	16.99	16.68	16.64	17.50
		12	0	16.98	16.61	16.57	17.50
		12	6	16.93	16.57	16.57	17.50
		12	13	16.92	16.58	16.57	17.50
		25	0	17.00	16.64	16.63	17.50
	64QAM	1	0	16.76	16.38	16.35	17.50
		1	13	16.69	16.35	16.34	17.50

		1	24	16.73	16.39	16.39	17.50
		12	0	17.00	16.65	16.61	17.50
		12	6	16.97	16.61	16.60	17.50
		12	13	16.98	16.61	16.59	17.50
		25	0	17.00	16.63	16.64	17.50
	256QAM	1	0	16.57	16.45	16.21	17.50
		1	13	16.86	16.58	16.08	17.50
		1	24	16.44	16.40	16.43	17.50
		12	0	16.97	16.55	16.59	17.50
		12	6	16.90	16.67	16.60	17.50
		12	13	17.04	16.73	16.76	17.50
		25	0	16.78	16.68	16.47	17.50
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				37800/2575	38000/2595	38200/2615	
10MHz	QPSK	1	0	16.97	16.71	16.63	17.50
		1	25	16.86	16.53	16.48	17.50
		1	49	16.94	16.58	16.59	17.50
		25	0	16.96	16.61	16.56	17.50
		25	13	16.92	16.56	16.56	17.50
		25	25	16.95	16.56	16.58	17.50
		50	0	16.94	16.60	16.56	17.50
	16QAM	1	0	17.00	16.71	16.61	17.50
		1	25	16.94	16.59	16.54	17.50
		1	49	17.00	16.68	16.65	17.50
		25	0	16.97	16.60	16.56	17.50
		25	13	16.92	16.56	16.55	17.50
		25	25	16.95	16.59	16.59	17.50
		50	0	16.94	16.61	16.57	17.50
	64QAM	1	0	16.75	16.44	16.35	17.50
		1	25	16.65	16.34	16.31	17.50
		1	49	16.73	16.36	16.38	17.50
		25	0	16.97	16.62	16.57	17.50
		25	13	16.93	16.59	16.57	17.50
		25	25	16.97	16.60	16.60	17.50
		50	0	16.94	16.60	16.56	17.50
	256QAM	1	0	16.73	16.63	16.21	17.50
		1	25	16.62	16.32	16.32	17.50
		1	49	16.64	16.56	16.31	17.50
		25	0	17.01	16.63	16.59	17.50
		25	13	17.02	16.71	16.62	17.50
		25	25	16.76	16.69	16.66	17.50
		50	0	17.00	16.80	16.73	17.50
Bandwidth	Modulation	RB	Offset	Channel/Frequency(MHz)			Tune-up

		Allocation		37825/2577.5	38000/2595	38175/2612.5	
15MHz	QPSK	1	0	16.93	16.79	16.59	17.50
		1	38	16.95	16.61	16.55	17.50
		1	74	16.82	16.58	16.60	17.50
		36	0	16.92	16.63	16.54	17.50
		36	18	16.91	16.59	16.54	17.50
		36	39	16.86	16.57	16.59	17.50
		75	0	16.93	16.64	16.57	17.50
	16QAM	1	0	16.99	16.79	16.56	17.50
		1	38	17.04	16.67	16.60	17.50
		1	74	16.93	16.64	16.67	17.50
		36	0	16.91	16.61	16.47	17.50
		36	18	16.88	16.55	16.51	17.50
		36	39	16.84	16.54	16.53	17.50
		75	0	16.97	16.66	16.58	17.50
	64QAM	1	0	16.73	16.52	16.31	17.50
		1	38	16.73	16.38	16.33	17.50
		1	74	16.64	16.34	16.39	17.50
		36	0	16.94	16.61	16.52	17.50
		36	18	16.91	16.56	16.52	17.50
		36	39	16.88	16.56	16.55	17.50
		75	0	16.95	16.64	16.56	17.50
	256QAM	1	0	16.59	16.71	16.27	17.50
		1	38	16.76	16.44	16.48	17.50
		1	74	16.78	16.44	16.31	17.50
		36	0	17.17	16.73	16.61	17.50
		36	18	16.84	16.73	16.44	17.50
		36	39	16.96	16.65	16.54	17.50
		75	0	16.74	16.66	16.61	17.50
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				37850/2580	38000/2595	38150/2610	
20MHz	QPSK	1	0	**16.94**	**16.83**	16.57	17.50
		1	50	16.89	16.60	16.52	17.50
		1	99	16.79	16.60	**16.61**	17.50
		50	0	**17.01**	**16.72**	16.56	17.50
		50	25	16.95	16.68	16.60	17.50
		50	50	16.85	16.62	**16.62**	17.50
		100	0	**16.93**	16.67	16.57	17.50
	16QAM	1	0	17.04	16.82	16.59	17.50
		1	50	16.94	16.69	16.58	17.50
		1	99	16.84	16.67	16.70	17.50
		50	0	16.98	16.71	16.57	17.50
		50	25	16.95	16.65	16.59	17.50

		50	50	16.84	16.62	16.62	17.50
		100	0	16.92	16.66	16.58	17.50
	64QAM	1	0	16.75	16.55	16.29	17.50
		1	50	16.70	16.40	16.30	17.50
		1	99	16.58	16.40	16.41	17.50
		50	0	16.99	16.69	16.55	17.50
		50	25	16.94	16.65	16.58	17.50
		50	50	16.84	16.61	16.60	17.50
		100	0	16.90	16.64	16.57	17.50
	256QAM	1	0	16.77	16.43	16.41	17.50
		1	50	16.84	16.32	16.30	17.50
		1	99	16.70	16.48	16.53	17.50
		50	0	16.87	16.73	16.65	17.50
		50	25	17.06	16.69	16.76	17.50
		50	50	16.82	16.73	16.60	17.50
		100	0	16.98	16.68	16.65	17.50

LTE B38							
WWAN+WLAN Sensor on--Main Ant2				Maximum Output Power (dBm)			Tune-up
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			
				37775/2572.5	38000/2595	38225/2617.5	
5MHz	QPSK	1	0	14.54	14.31	13.97	15.00
		1	13	14.39	14.08	14.02	15.00
		1	24	14.31	13.88	14.21	15.00
		12	0	14.45	14.22	13.90	15.00
		12	6	14.31	13.84	13.80	15.00
		12	13	14.43	13.98	14.14	15.00
		25	0	14.43	14.07	13.95	15.00
	16QAM	1	0	14.20	14.06	13.95	15.00
		1	13	14.34	14.09	14.18	15.00
		1	24	14.38	14.27	14.08	15.00
		12	0	14.28	13.87	13.93	15.00
		12	6	14.35	14.19	14.17	15.00
		12	13	14.22	14.02	14.10	15.00
		25	0	14.50	14.16	13.82	15.00
	64QAM	1	0	14.35	14.03	13.73	15.00
		1	13	13.90	13.80	13.54	15.00
		1	24	13.90	13.80	13.81	15.00
		12	0	14.37	14.31	14.09	15.00
		12	6	14.40	14.23	13.96	15.00
		12	13	14.28	14.07	13.98	15.00
		25	0	14.30	14.14	14.15	15.00
	256QAM	1	0	14.25	13.71	13.85	15.00

		1	13	14.24	13.76	13.74	15.00
		1	24	14.00	14.04	13.91	15.00
		12	0	14.17	13.97	13.95	15.00
		12	6	14.56	14.09	14.04	15.00
		12	13	14.36	14.17	13.96	15.00
		25	0	14.32	14.04	14.03	15.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				37800/2575	38000/2595	38200/2615	
10MHz	QPSK	1	0	14.48	14.37	14.07	15.00
		1	25	14.29	14.14	13.88	15.00
		1	49	14.13	14.02	14.19	15.00
		25	0	14.39	13.90	13.84	15.00
		25	13	14.39	13.86	13.70	15.00
		25	25	14.51	14.18	14.20	15.00
		50	0	14.47	13.99	14.01	15.00
	16QAM	1	0	14.44	14.12	14.03	15.00
		1	25	14.30	14.09	14.08	15.00
		1	49	14.40	13.99	14.04	15.00
		25	0	14.42	13.89	14.07	15.00
		25	13	14.33	14.11	13.97	15.00
		25	25	14.04	14.24	13.90	15.00
		50	0	14.32	14.16	13.78	15.00
	64QAM	1	0	14.17	13.83	13.81	15.00
		1	25	14.04	13.88	13.52	15.00
		1	49	13.94	13.80	13.77	15.00
		25	0	14.45	14.09	13.93	15.00
		25	13	14.32	14.29	13.76	15.00
		25	25	14.46	14.11	13.90	15.00
		50	0	14.42	14.34	14.13	15.00
	256QAM	1	0	14.47	13.93	13.97	15.00
		1	25	14.16	13.64	13.58	15.00
		1	49	14.00	14.08	14.01	15.00
		25	0	14.09	13.97	13.75	15.00
		25	13	14.44	14.29	13.94	15.00
		25	25	14.20	14.09	13.96	15.00
		50	0	14.38	13.80	13.93	15.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				37825/2577.5	38000/2595	38175/2612.5	
15MHz	QPSK	1	0	14.46	14.09	14.07	15.00
		1	38	14.41	14.24	13.80	15.00
		1	74	14.17	13.92	14.25	15.00
		36	0	14.43	14.18	13.92	15.00
		36	18	14.43	13.94	13.80	15.00

		36	39	14.31	14.22	14.06	15.00
		75	0	14.49	14.09	13.95	15.00
	16QAM	1	0	14.26	13.92	13.91	15.00
		1	38	14.44	14.11	14.02	15.00
		1	74	14.40	14.31	14.16	15.00
		36	0	14.20	14.07	14.15	15.00
		36	18	14.29	14.15	13.93	15.00
		36	39	14.18	14.00	14.14	15.00
		75	0	14.54	14.10	14.06	15.00
	64QAM	1	0	14.33	13.91	13.73	15.00
		1	38	14.14	13.74	13.64	15.00
		1	74	13.92	13.90	14.07	15.00
		36	0	14.45	14.09	14.03	15.00
		36	18	14.24	14.29	13.96	15.00
		36	39	14.34	14.17	13.82	15.00
		75	0	14.30	14.14	14.21	15.00
	256QAM	1	0	14.43	13.95	13.77	15.00
		1	38	14.10	13.70	13.76	15.00
		1	74	13.90	14.12	13.89	15.00
		36	0	14.07	14.11	14.07	15.00
		36	18	14.66	14.17	14.24	15.00
		36	39	14.40	14.15	13.94	15.00
		75	0	14.14	13.88	14.23	15.00

Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				37850/2580	38000/2595	38150/2610	
20MHz	QPSK	1	0	**14.40**	**14.17**	13.97	15.00
		1	50	14.27	14.06	13.90	15.00
		1	99	14.23	13.96	**14.13**	15.00
		50	0	14.33	**14.06**	13.86	15.00
		50	25	14.31	13.94	13.88	15.00
		50	50	**14.35**	14.04	**14.14**	15.00
		100	0	**14.31**	14.01	13.85	15.00
	16QAM	1	0	14.28	14.04	13.95	15.00
		1	50	14.40	14.01	14.06	15.00
		1	99	14.32	14.13	14.12	15.00
		50	0	14.24	13.95	13.97	15.00
		50	25	14.37	14.11	14.01	15.00
		50	50	14.08	14.08	14.02	15.00
		100	0	14.38	14.08	13.90	15.00
	64QAM	1	0	14.21	13.91	13.75	15.00
		1	50	14.00	13.76	13.64	15.00
		1	99	13.94	13.78	13.91	15.00
		50	0	14.37	14.17	14.01	15.00

		50	25	14.36	14.15	13.84	15.00
		50	50	14.32	14.11	13.94	15.00
		100	0	14.32	14.14	14.07	15.00
	256QAM	1	0	14.25	13.77	13.85	15.00
		1	50	14.22	13.76	13.62	15.00
		1	99	13.98	14.00	13.93	15.00
		50	0	14.13	13.99	13.89	15.00
		50	25	14.58	14.17	14.06	15.00
		50	50	14.26	14.25	13.82	15.00
		100	0	14.26	13.94	14.09	15.00

LTE B41 PC3									
Pmax&Sensor off--Main Ant2				Maximum Output Power (dBm)					Tune-up
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)					
				39675/ 2498.5	40148/ 2545.8	40620/ 2593	41093/ 2640.3	41565/ 2687.5	
5MHz	QPSK	1	0	22.51	22.80	22.71	22.25	22.27	24.00
		1	13	22.53	22.80	22.67	22.22	22.20	24.00
		1	24	22.60	22.81	22.65	22.26	22.22	24.00
		12	0	21.55	21.88	21.73	21.31	21.28	23.00
		12	6	21.57	21.86	21.70	21.25	21.23	23.00
		12	13	21.61	21.88	21.67	21.30	21.22	23.00
		25	0	21.62	21.90	21.70	21.33	21.28	23.00
	16QAM	1	0	21.56	21.86	21.78	21.34	21.34	23.00
		1	13	21.61	21.85	21.73	21.31	21.27	23.00
		1	24	21.70	21.88	21.73	21.36	21.31	23.00
		12	0	20.53	20.84	20.71	20.29	20.28	22.00
		12	6	20.56	20.82	20.67	20.23	20.23	22.00
		12	13	20.63	20.83	20.64	20.26	20.22	22.00
		25	0	20.62	20.88	20.71	20.30	20.30	22.00
	64QAM	1	0	20.28	20.60	20.50	20.05	20.09	22.00
		1	13	20.30	20.59	20.45	20.05	20.03	22.00
		1	24	20.42	20.64	20.43	20.05	20.05	22.00
		12	0	19.64	19.94	19.76	19.39	19.32	21.00
		12	6	19.69	19.94	19.72	19.32	19.28	21.00
		12	13	19.70	19.95	19.69	19.37	19.28	21.00
		25	0	19.68	19.95	19.78	19.38	19.30	21.00
	256QAM	1	0	19.60	19.59	19.58	19.03	19.18	21.00
		1	13	19.43	19.81	19.37	19.36	19.05	21.00
		1	24	19.77	19.90	19.34	19.05	19.03	21.00
		12	0	18.54	18.81	18.62	18.51	18.21	20.00
		12	6	18.69	19.04	18.86	18.30	18.12	20.00
		12	13	18.99	18.97	18.61	18.54	18.05	20.00

		25	0	18.82	18.85	18.58	18.10	18.36	20.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/ Frequency(MHz)					Tune-up
				39700/ 2501	40160/ 2547	40620/ 2593	41080/ 2639	41540/ 2685	
10MHz	QPSK	1	0	22.53	22.82	22.78	22.37	22.33	24.00
		1	25	22.56	22.81	22.66	22.26	22.27	24.00
		1	49	22.78	22.88	22.67	22.30	22.28	24.00
		25	0	21.61	21.88	21.75	21.34	21.31	23.00
		25	13	21.60	21.84	21.67	21.28	21.25	23.00
		25	25	21.73	21.87	21.67	21.34	21.22	23.00
		50	0	21.65	21.88	21.72	21.32	21.29	23.00
	16QAM	1	0	21.59	21.89	21.84	21.43	21.38	23.00
		1	25	21.67	21.88	21.74	21.34	21.30	23.00
		1	49	21.87	21.95	21.74	21.37	21.32	23.00
		25	0	20.61	20.87	20.75	20.34	20.32	22.00
		25	13	20.64	20.83	20.67	20.27	20.27	22.00
		25	25	20.75	20.88	20.67	20.30	20.23	22.00
		50	0	20.67	20.88	20.73	20.32	20.29	22.00
	64QAM	1	0	20.30	20.64	20.56	20.13	20.12	22.00
		1	25	20.37	20.60	20.45	20.04	20.03	22.00
		1	49	20.58	20.68	20.44	20.07	20.05	22.00
		25	0	19.64	19.89	19.77	19.38	19.34	21.00
		25	13	19.69	19.91	19.71	19.35	19.29	21.00
		25	25	19.76	19.89	19.70	19.38	19.27	21.00
		50	0	19.66	19.89	19.73	19.36	19.26	21.00
	256QAM	1	0	19.52	19.63	19.40	19.22	19.16	21.00
		1	25	19.39	19.91	19.49	19.12	19.23	21.00
		1	49	19.69	19.92	19.28	19.03	19.11	21.00
		25	0	18.48	18.85	18.74	18.35	18.13	20.00
		25	13	18.75	18.92	18.90	18.34	18.24	20.00
		25	25	19.05	18.87	18.41	18.18	18.21	20.00
		50	0	18.86	18.95	18.46	18.18	18.24	20.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/ Frequency(MHz)					Tune-up
				39725/ 2503.5	40173/ 2548.3	40620/ 2593	41068/ 2637.8	41515/ 2682.5	
15MHz	QPSK	1	0	22.60	22.85	22.84	22.38	22.38	24.00
		1	38	22.75	22.87	22.72	22.29	22.30	24.00
		1	74	22.94	23.00	22.66	22.32	22.25	24.00
		36	0	21.66	21.88	21.76	21.35	21.33	23.00
		36	18	21.73	21.89	21.66	21.28	21.24	23.00
		36	39	21.87	21.92	21.64	21.32	21.26	23.00
		75	0	21.78	21.93	21.71	21.37	21.31	23.00
	16QAM	1	0	21.65	21.91	21.90	21.47	21.43	23.00

		1	38	21.81	21.91	21.79	21.37	21.37	23.00
		1	74	22.02	22.07	21.76	21.41	21.38	23.00
		36	0	20.62	20.85	20.74	20.32	20.30	22.00
		36	18	20.69	20.83	20.63	20.25	20.22	22.00
		36	39	20.82	20.91	20.62	20.28	20.23	22.00
		75	0	20.79	20.96	20.74	20.39	20.36	22.00
	64QAM	1	0	20.39	20.64	20.63	20.17	20.16	22.00
		1	38	20.53	20.66	20.51	20.09	20.09	22.00
		1	74	20.74	20.79	20.46	20.12	20.07	22.00
		36	0	19.64	19.91	19.77	19.37	19.32	21.00
		36	18	19.73	19.89	19.70	19.34	19.28	21.00
		36	39	19.82	19.93	19.66	19.34	19.23	21.00
		75	0	19.75	19.97	19.75	19.41	19.32	21.00
	256QAM	1	0	19.56	19.63	19.60	19.22	19.28	21.00
		1	38	19.61	19.89	19.41	19.10	19.17	21.00
		1	74	19.79	19.92	19.54	19.01	19.21	21.00
		36	0	18.68	18.85	18.62	18.41	18.25	20.00
		36	18	18.61	18.92	18.72	18.48	18.10	20.00
		36	39	18.93	19.05	18.53	18.24	18.19	20.00
		75	0	18.76	18.89	18.62	18.36	18.40	20.00

Bandwidth	Modulation	RB Allocation	Offset	Channel/ Frequency(MHz)					Tune-up
				39750/ 2506	40185/ 2549.5	40620/ 2593	41055/ 2636.5	41490/ 2680	
20MHz	QPSK	1	0	22.61	22.87	**22.87**	**22.43**	**22.35**	24.00
		1	50	22.86	22.85	22.75	22.35	**22.35**	24.00
		1	99	**23.01**	**23.05**	22.67	22.32	22.33	24.00
		50	0	21.79	21.95	**21.85**	**21.44**	**21.47**	23.00
		50	25	21.88	21.97	21.81	21.40	21.35	23.00
		50	50	**22.00**	**22.00**	21.71	21.41	21.34	23.00
		100	0	21.87	**21.97**	21.79	21.42	**21.38**	23.00
	16QAM	1	0	21.70	21.95	21.95	21.51	21.43	23.00
		1	50	21.89	21.96	21.81	21.46	21.47	23.00
		1	99	22.07	22.13	21.76	21.40	21.42	23.00
		50	0	20.76	20.96	20.84	20.44	20.44	22.00
		50	25	20.88	20.97	20.77	20.39	20.34	22.00
		50	50	20.99	21.02	20.71	20.41	20.32	22.00
		100	0	20.86	20.98	20.76	20.41	20.37	22.00
	64QAM	1	0	20.41	20.68	20.65	20.20	20.14	22.00
		1	50	20.60	20.70	20.54	20.12	20.12	22.00
		1	99	20.80	20.85	20.45	20.10	20.12	22.00
		50	0	19.73	19.96	19.85	19.46	19.42	21.00
		50	25	19.84	19.97	19.79	19.41	19.39	21.00
		50	50	19.96	20.00	19.70	19.41	19.32	21.00

		100	0	19.85	19.98	19.79	19.43	19.37	21.00
	256QAM	1	0	19.46	19.49	19.48	19.10	19.16	21.00
		1	50	19.43	19.77	19.35	19.22	19.19	21.00
		1	99	19.67	19.74	19.40	19.13	19.07	21.00
		50	0	18.54	18.91	18.62	18.51	18.21	20.00
		50	25	18.69	19.04	18.70	18.30	18.20	20.00
		50	50	18.93	18.95	18.59	18.28	18.09	20.00
		100	0	18.74	18.75	18.60	18.28	18.26	20.00

LTE B41 PC3									
Sensor on--Main Ant2				Maximum Output Power (dBm)					Tune-up
Bandwidth	Modulation	RB Allocation	Offset	Channel/ Frequency(MHz)					
				39675/ 2498.5	40148/ 2545.8	40620/ 2593	41093/ 2640.3	41565/ 2687.5	
5MHz	QPSK	1	0	16.29	16.58	16.53	16.19	16.07	17.50
		1	13	16.32	16.51	16.41	16.06	15.97	17.50
		1	24	16.40	16.51	16.38	16.12	15.94	17.50
		12	0	16.36	16.56	16.48	16.16	16.02	17.50
		12	6	16.39	16.57	16.45	16.11	15.97	17.50
		12	13	16.42	16.60	16.41	16.16	15.97	17.50
		25	0	16.39	16.60	16.46	16.15	16.01	17.50
	16QAM	1	0	16.34	16.58	16.53	16.19	16.05	17.50
		1	13	16.36	16.60	16.49	16.14	16.02	17.50
		1	24	16.42	16.62	16.46	16.21	16.01	17.50
		12	0	16.32	16.56	16.47	16.17	16.01	17.50
		12	6	16.36	16.55	16.44	16.12	15.97	17.50
		12	13	16.36	16.57	16.41	16.14	15.97	17.50
		25	0	16.40	16.65	16.49	16.18	16.01	17.50
	64QAM	1	0	16.09	16.32	16.27	15.94	15.80	17.50
		1	13	16.08	16.31	16.23	15.92	15.76	17.50
		1	24	16.16	16.33	16.19	15.95	15.75	17.50
		12	0	16.34	16.60	16.51	16.20	16.02	17.50
		12	6	16.37	16.60	16.44	16.16	15.98	17.50
		12	13	16.38	16.60	16.43	16.18	16.03	17.50
		25	0	16.38	16.63	16.51	16.18	16.06	17.50
	256QAM	1	0	16.07	16.11	16.28	16.36	16.47	17.50
		1	13	16.10	15.93	16.29	16.35	16.27	17.50
		1	24	15.86	15.97	16.61	16.64	16.37	17.50
		12	0	16.31	16.10	16.58	16.66	16.67	17.50
		12	6	16.23	16.10	16.69	16.77	16.43	17.50
		12	13	16.27	16.01	16.71	16.60	16.35	17.50
		25	0	16.21	16.23	16.62	16.59	16.48	17.50
Bandwidth	Modulation	RB	Offset	Channel/ Frequency(MHz)					Tune-

		Allocation		39700/ 2501	40160/ 2547	40620/ 2593	41080/ 2639	41540/ 2685	up
10MHz	QPSK	1	0	16.28	16.63	16.50	16.26	16.18	17.50
		1	25	16.28	16.44	16.38	16.06	15.98	17.50
		1	49	16.48	16.54	16.39	16.11	15.97	17.50
		25	0	16.32	16.59	16.49	16.18	16.09	17.50
		25	13	16.36	16.58	16.42	16.16	16.01	17.50
		25	25	16.40	16.57	16.43	16.15	16.00	17.50
		50	0	16.36	16.59	16.48	16.17	16.02	17.50
	16QAM	1	0	16.35	16.63	16.59	16.26	16.20	17.50
		1	25	16.37	16.54	16.46	16.16	16.06	17.50
		1	49	16.53	16.60	16.49	16.19	16.03	17.50
		25	0	16.33	16.59	16.52	16.20	16.09	17.50
		25	13	16.37	16.57	16.42	16.15	16.02	17.50
		25	25	16.43	16.59	16.43	16.15	16.01	17.50
		50	0	16.39	16.60	16.50	16.18	16.03	17.50
	64QAM	1	0	16.10	16.40	16.34	16.00	15.93	17.50
		1	25	16.10	16.23	16.22	15.87	15.80	17.50
		1	49	16.27	16.33	16.22	15.94	15.75	17.50
		25	0	16.34	16.59	16.51	16.20	16.10	17.50
		25	13	16.39	16.59	16.45	16.16	16.03	17.50
		25	25	16.45	16.59	16.45	16.18	16.04	17.50
		50	0	16.36	16.58	16.47	16.16	16.02	17.50
	256QAM	1	0	15.91	16.07	16.22	16.24	16.29	17.50
		1	25	15.92	15.93	16.13	16.27	16.23	17.50
		1	49	15.98	15.69	16.35	16.58	16.05	17.50
		25	0	16.21	16.22	16.38	16.66	16.47	17.50
		25	13	16.31	15.98	16.41	16.49	16.41	17.50
		25	25	16.09	15.99	16.69	16.58	16.39	17.50
		50	0	16.27	16.19	16.60	16.57	16.58	17.50
Bandwidth	Modulation	RB Allocation	Offset	Channel/ Frequency(MHz)					Tune-up
				39725/ 2503.5	40173/ 2548.3	40620/ 2593	41068/ 2637.8	41515/ 2682.5	
15MHz	QPSK	1	0	16.29	16.56	16.55	16.19	16.17	17.50
		1	38	16.41	16.53	16.44	16.15	16.06	17.50
		1	74	16.60	16.62	16.42	16.14	15.98	17.50
		36	0	16.37	16.59	16.54	16.21	16.12	17.50
		36	18	16.46	16.58	16.45	16.15	16.07	17.50
		36	39	16.54	16.60	16.42	16.16	16.01	17.50
		75	0	16.47	16.63	16.48	16.21	16.09	17.50
	16QAM	1	0	16.37	16.62	16.65	16.29	16.23	17.50
		1	38	16.47	16.61	16.53	16.21	16.12	17.50
		1	74	16.67	16.70	16.48	16.22	16.06	17.50

		36	0	16.33	16.54	16.50	16.18	16.10	17.50
		36	18	16.45	16.54	16.40	16.13	16.03	17.50
		36	39	16.49	16.56	16.37	16.12	15.95	17.50
		75	0	16.49	16.65	16.50	16.25	16.12	17.50
	64QAM	1	0	16.10	16.41	16.39	16.01	15.99	17.50
		1	38	16.21	16.38	16.25	15.92	15.87	17.50
		1	74	16.37	16.49	16.20	15.95	15.80	17.50
		36	0	16.36	16.60	16.52	16.19	16.14	17.50
		36	18	16.45	16.57	16.43	16.13	16.07	17.50
		36	39	16.52	16.61	16.39	16.14	16.01	17.50
		75	0	16.47	16.64	16.49	16.23	16.11	17.50
	256QAM	1	0	16.00	16.50	16.45	16.25	15.89	17.50
		1	38	16.15	16.53	16.47	15.84	16.07	17.50
		1	74	16.41	16.54	16.39	16.08	15.79	17.50
		36	0	16.52	16.52	16.75	16.13	16.38	17.50
		36	18	16.41	16.51	16.69	16.19	16.38	17.50
		36	39	16.49	16.66	16.33	16.33	16.07	17.50
		75	0	16.64	16.63	16.60	16.31	16.15	17.50
Bandwidth	Modulation	RB Allocation	Offset	Channel/ Frequency(MHz)					Tune-up
				39750/ 2506	40185/ 2549.5	40620/ 2593	41055/ 2636.5	41490/ 2680	
20MHz	QPSK	1	0	16.35	16.65	**16.64**	**16.34**	**16.21**	17.50
		1	50	16.48	16.53	16.47	16.17	16.07	17.50
		1	99	**16.66**	**16.70**	16.39	16.13	15.98	17.50
		50	0	16.47	16.66	**16.59**	**16.27**	**16.21**	17.50
		50	25	16.54	16.64	16.54	16.22	16.15	17.50
		50	50	**16.64**	**16.67**	16.47	16.21	16.08	17.50
		100	0	16.54	**16.68**	16.52	16.24	**16.12**	17.50
	16QAM	1	0	16.43	16.66	16.71	16.35	16.22	17.50
		1	50	16.54	16.65	16.53	16.22	16.15	17.50
		1	99	16.74	16.81	16.49	16.21	16.09	17.50
		50	0	16.46	16.68	16.61	16.27	16.20	17.50
		50	25	16.56	16.68	16.54	16.24	16.14	17.50
		50	50	16.66	16.71	16.45	16.23	16.08	17.50
		100	0	16.54	16.69	16.54	16.25	16.12	17.50
	64QAM	1	0	16.14	16.38	16.43	16.07	15.97	17.50
		1	50	16.27	16.35	16.25	15.96	15.89	17.50
		1	99	16.45	16.52	16.21	15.92	15.81	17.50
		50	0	16.44	16.64	16.59	16.27	16.18	17.50
		50	25	16.55	16.65	16.51	16.23	16.16	17.50
		50	50	16.65	16.68	16.45	16.19	16.07	17.50
		100	0	16.54	16.67	16.50	16.21	16.13	17.50
	256QAM	1	0	16.25	15.97	16.08	16.28	16.55	17.50

		1	50	15.92	15.95	16.39	16.23	16.25	17.50
		1	99	15.86	15.77	16.37	16.70	16.35	17.50
		50	0	16.35	16.12	16.50	16.72	16.61	17.50
		50	25	16.23	16.32	16.57	16.67	16.41	17.50
		50	50	16.11	16.07	16.79	16.56	16.49	17.50
		100	0	16.15	16.27	16.54	16.65	16.64	17.50

LTE B41 PC3									
WWAN+WLAN Sensor on--Main Ant2				Maximum Output Power (dBm)					Tune-up
Bandwidth	Modulation	RB Allocation	Offset	Channel/ Frequency(MHz)					
				39675/ 2498.5	40148/ 2545.8	40620/ 2593	41093/ 2640.3	41565/ 2687.5	
5MHz	QPSK	1	0	14.73	15.03	15.28	15.04	14.53	16.00
		1	13	14.92	15.17	14.69	14.51	14.37	16.00
		1	24	14.94	15.26	15.01	14.63	14.36	16.00
		12	0	14.93	15.06	14.93	14.67	14.59	16.00
		12	6	14.82	15.04	14.82	14.72	14.73	16.00
		12	13	15.06	14.99	14.97	14.63	14.50	16.00
		25	0	15.10	15.18	14.90	14.54	14.54	16.00
	16QAM	1	0	15.07	15.30	14.93	14.91	14.74	16.00
		1	13	15.20	15.21	15.15	14.50	14.73	16.00
		1	24	15.14	15.07	14.81	14.55	14.31	16.00
		12	0	14.82	15.32	15.23	14.67	14.70	16.00
		12	6	15.22	15.02	14.94	14.84	14.76	16.00
		12	13	15.18	15.29	14.69	14.95	14.42	16.00
		25	0	14.98	15.05	14.68	14.93	14.44	16.00
	64QAM	1	0	14.80	14.66	14.71	14.25	14.25	16.00
		1	13	14.53	14.87	14.71	14.28	14.35	16.00
		1	24	15.11	14.90	14.71	14.10	14.22	16.00
		12	0	14.78	15.18	15.19	14.63	14.48	16.00
		12	6	15.03	15.15	15.01	14.65	14.52	16.00
		12	13	14.95	15.10	14.63	14.43	14.41	16.00
		25	0	14.74	15.13	14.86	14.69	14.73	16.00
	256QAM	1	0	14.66	14.19	14.23	14.50	15.15	16.00
		1	13	14.57	14.28	14.47	14.67	14.53	16.00
		1	24	15.05	14.06	14.40	15.24	14.91	16.00
		12	0	14.66	14.67	14.46	15.20	15.05	16.00
		12	6	15.03	14.65	14.52	15.35	14.69	16.00
		12	13	14.85	14.39	14.21	14.96	14.95	16.00
		25	0	14.96	14.45	14.81	15.19	15.20	16.00

Bandwidth	Modulation	RB Allocation	Offset	Channel/ Frequency(MHz)					Tune-up
				39700/ 2501	40160/ 2547	40620/ 2593	41080/ 2639	41540/ 2685	
10MHz	QPSK	1	0	14.51	14.93	15.04	14.74	14.65	16.00
		1	25	14.72	14.87	14.75	14.47	14.43	16.00
		1	49	15.00	15.06	14.79	14.69	14.42	16.00
		25	0	15.07	15.26	15.05	14.95	14.65	16.00
		25	13	14.66	15.04	14.76	14.88	14.59	16.00
		25	25	14.88	15.03	15.17	14.53	14.56	16.00
		50	0	14.84	14.92	14.82	14.68	14.30	16.00
	16QAM	1	0	14.87	15.38	14.99	14.95	14.72	16.00
		1	25	14.90	15.27	15.25	14.52	14.65	16.00
		1	49	15.08	15.25	15.13	14.63	14.45	16.00
		25	0	14.70	15.26	15.01	14.89	14.42	16.00
		25	13	15.12	14.98	15.02	14.68	14.54	16.00
		25	25	15.20	15.07	14.83	14.93	14.56	16.00
		50	0	14.96	14.87	14.60	15.05	14.48	16.00
	64QAM	1	0	14.74	14.76	14.65	14.47	14.33	16.00
		1	25	14.47	14.83	14.65	14.38	14.21	16.00
		1	49	14.99	14.90	14.67	14.08	14.44	16.00
		25	0	14.86	15.08	15.27	14.67	14.44	16.00
		25	13	14.91	15.27	14.99	14.53	14.62	16.00
		25	25	14.89	15.02	14.71	14.61	14.17	16.00
		50	0	14.92	15.21	15.14	14.39	14.81	16.00
	256QAM	1	0	14.43	14.37	14.58	14.44	15.11	16.00
		1	25	14.16	14.65	14.93	14.83	14.69	16.00
		1	49	14.52	14.23	14.75	15.44	14.77	16.00
		25	0	14.85	14.48	14.80	15.18	15.15	16.00
		25	13	14.87	14.46	14.71	15.41	14.83	16.00
		25	25	14.39	14.51	15.19	14.62	14.87	16.00
		50	0	14.43	14.59	15.02	15.27	15.14	16.00

Bandwidth	Modulation	RB Allocation	Offset	Channel/ Frequency(MHz)					Tune-up
				39725/ 2503.5	40173/ 2548.3	40620/ 2593	41068/ 2637.8	41515/ 2682.5	
15MHz	QPSK	1	0	14.63	15.19	15.30	14.96	14.63	16.00
		1	38	14.94	14.93	14.89	14.37	14.37	16.00
		1	74	15.06	15.08	14.75	14.57	14.34	16.00
		36	0	14.85	15.06	15.07	14.89	14.63	16.00
		36	18	14.82	15.04	14.86	14.72	14.73	16.00
		36	39	15.06	14.97	15.11	14.63	14.42	16.00
		75	0	14.88	14.94	15.00	14.56	14.62	16.00
	16QAM	1	0	15.05	15.34	15.09	14.91	14.60	16.00
		1	38	14.96	15.15	15.09	14.64	14.75	16.00

		1	74	15.14	15.21	14.79	14.69	14.27	16.00
		36	0	14.98	15.10	14.97	14.75	14.76	16.00
		36	18	15.14	15.12	15.04	14.86	14.70	16.00
		36	39	15.02	15.17	14.87	14.93	14.36	16.00
		75	0	14.78	15.03	14.72	14.77	14.44	16.00
	64QAM	1	0	14.56	14.84	14.85	14.21	14.41	16.00
		1	38	14.39	14.95	14.55	14.16	14.29	16.00
		1	74	15.09	15.02	14.61	14.14	14.42	16.00
		36	0	14.86	15.22	15.17	14.65	14.54	16.00
		36	18	14.91	15.03	15.01	14.57	14.40	16.00
		36	39	15.05	15.36	14.87	14.31	14.17	16.00
		75	0	14.80	15.09	15.12	14.51	14.75	16.00
	256QAM	1	0	14.49	14.41	14.50	14.44	14.91	16.00
		1	38	14.12	14.41	14.71	14.89	14.37	16.00
		1	74	14.36	14.37	14.91	15.22	14.91	16.00
		36	0	14.77	14.56	14.82	15.36	15.27	16.00
		36	18	14.83	14.74	14.77	15.33	14.79	16.00
		36	39	14.47	14.29	15.41	14.72	15.13	16.00
		75	0	14.37	14.89	14.84	15.33	15.36	16.00

Bandwidth	Modulation	RB Allocation	Offset	Channel/ Frequency(MHz)					Tune-up
				39750/ 2506	40185/ 2549.5	40620/ 2593	41055/ 2636.5	41490/ 2680	
20MHz	QPSK	1	0	14.69	15.03	**15.14**	**14.92**	**14.51**	16.00
		1	50	14.84	15.05	14.73	14.35	14.45	16.00
		1	99	**15.04**	**15.19**	14.85	14.55	14.44	16.00
		50	0	14.85	15.10	14.97	**14.73**	14.45	16.00
		50	25	14.82	14.98	14.88	14.68	**14.73**	16.00
		50	50	**14.98**	**15.11**	**15.01**	14.59	14.52	16.00
		100	0	14.96	**15.02**	14.96	14.52	**14.44**	16.00
	16QAM	1	0	14.93	15.18	14.97	14.89	14.72	16.00
		1	50	15.08	15.11	15.05	14.54	14.61	16.00
		1	99	15.12	15.07	14.91	14.63	14.37	16.00
		50	0	14.88	15.22	15.07	14.73	14.58	16.00
		50	25	15.08	15.02	15.00	14.78	14.64	16.00
		50	50	15.08	15.13	14.75	14.81	14.34	16.00
		100	0	14.84	14.95	14.78	14.83	14.44	16.00
	64QAM	1	0	14.66	14.66	14.77	14.25	14.27	16.00
		1	50	14.51	14.89	14.67	14.24	14.31	16.00
		1	99	14.95	14.98	14.57	14.16	14.26	16.00
		50	0	14.68	15.12	15.09	14.55	14.56	16.00
		50	25	15.01	15.11	14.95	14.65	14.50	16.00
		50	50	14.89	15.18	14.69	14.43	14.27	16.00
		100	0	14.82	15.11	14.96	14.53	14.71	16.00

	256QAM	1	0	14.61	14.35	14.48	14.52	14.99	16.00
		1	50	14.16	14.45	14.83	14.77	14.49	16.00
		1	99	14.34	14.27	14.77	15.22	14.83	16.00
		50	0	14.79	14.52	14.92	15.22	15.11	16.00
		50	25	14.77	14.60	14.81	15.19	14.75	16.00
		50	50	14.41	14.31	15.25	14.80	14.99	16.00
		100	0	14.39	14.75	14.82	15.19	15.18	16.00

LTE B41 PC2									
Pmax&Sensor off--Main Ant2				Maximum Output Power (dBm)					Tune-up
Bandwidth	Modulation	RB Allocation	Offset	Channel/ Frequency(MHz)					
				39675/ 2498.5	40148/ 2545.8	40620/ 2593	41093/ 2640.3	41565/ 2687.5	
5MHz	QPSK	1	0	25.51	25.75	25.67	25.29	25.25	26.50
		1	13	25.58	25.75	25.63	25.25	25.21	26.50
		1	24	25.64	25.76	25.62	25.30	25.23	26.50
		12	0	24.56	24.85	24.71	24.33	24.30	25.50
		12	6	24.59	24.84	24.67	24.28	24.25	25.50
		12	13	24.64	24.85	24.65	24.30	24.24	25.50
		25	0	24.62	24.87	24.70	24.33	24.29	25.50
	16QAM	1	0	24.64	24.91	24.82	24.45	24.41	25.50
		1	13	24.02	24.93	24.80	24.43	24.36	25.50
		1	24	24.65	24.93	24.79	24.47	24.38	25.50
		12	0	23.61	23.90	23.77	23.37	23.35	24.50
		12	6	23.64	23.89	23.73	23.33	23.31	24.50
		12	13	23.67	23.91	23.71	23.35	23.29	24.50
		25	0	23.65	23.93	23.75	23.37	23.31	24.50
	64QAM	1	0	23.54	23.82	23.74	23.32	23.34	24.50
		1	13	23.59	23.81	23.69	23.30	23.26	24.50
		1	24	23.67	23.82	23.70	23.34	23.29	24.50
		12	0	22.59	22.90	22.76	22.36	22.35	23.50
		12	6	22.63	22.90	22.73	22.32	22.30	23.50
		12	13	22.66	22.91	22.70	22.35	22.29	23.50
		25	0	22.65	22.90	22.74	22.36	22.31	23.50
	256QAM	1	0	22.67	22.85	22.75	22.51	22.37	23.50
		1	13	22.60	22.90	22.48	22.36	22.29	23.50
		1	24	22.85	22.83	22.73	22.35	22.56	23.50
		12	0	21.65	21.80	21.81	22.43	22.34	22.50
		12	6	21.88	22.08	21.73	21.54	21.32	22.50
		12	13	22.18	21.77	21.61	21.33	21.24	22.50
		25	0	21.95	22.05	21.62	21.32	21.25	22.50

Bandwidth	Modulation	RB Allocation	Offset	Channel/ Frequency(MHz)					Tune-up
				39700/ 2501	40160/ 2547	40620/ 2593	41080/ 2639	41540/ 2685	
10MHz	QPSK	1	0	25.51	25.76	25.71	25.33	25.29	26.50
		1	25	25.55	25.73	25.61	25.27	25.22	26.50
		1	49	25.76	25.81	25.62	25.30	25.25	26.50
		25	0	24.58	24.83	24.73	24.32	24.31	25.50
		25	13	24.62	24.83	24.66	24.30	24.26	25.50
		25	25	24.72	24.86	24.66	24.31	24.24	25.50
		50	0	24.63	24.86	24.72	24.33	24.28	25.50
	16QAM	1	0	24.70	24.94	24.90	24.52	24.47	25.50
		1	25	24.75	24.92	24.80	24.46	24.41	25.50
		1	49	24.97	25.00	24.81	24.47	24.42	25.50
		25	0	23.62	23.88	23.76	23.35	23.34	24.50
		25	13	23.65	23.86	23.69	23.31	23.30	24.50
		25	25	23.75	23.91	23.69	23.35	23.26	24.50
		50	0	23.67	23.90	23.75	23.34	23.32	24.50
	64QAM	1	0	23.56	23.82	23.76	23.41	23.35	24.50
		1	25	23.63	23.78	23.67	23.34	23.30	24.50
		1	49	23.81	23.87	23.67	23.33	23.29	24.50
		25	0	22.63	22.88	22.78	22.36	22.35	23.50
		25	13	22.67	22.87	22.70	22.33	22.31	23.50
		25	25	22.77	22.92	22.70	22.37	22.26	23.50
		50	0	22.64	22.87	22.71	22.32	22.28	23.50
	256QAM	1	0	22.57	22.87	22.93	22.57	22.41	23.50
		1	25	22.58	22.86	22.62	22.54	21.99	23.50
		1	49	22.69	23.03	22.65	22.35	22.66	23.50
		25	0	21.77	21.86	21.67	22.21	22.50	22.50
		25	13	21.80	21.94	21.81	21.38	21.48	22.50
		25	25	22.24	21.93	21.51	21.17	21.20	22.50
		50	0	21.81	22.19	21.74	21.60	21.41	22.50

Bandwidth	Modulation	RB Allocation	Offset	Channel/ Frequency(MHz)					Tune-up
				39725/ 2503.5	40173/ 2548.3	40620/ 2593	41068/ 2637.8	41515/ 2682.5	
15MHz	QPSK	1	0	25.57	25.79	25.77	25.38	25.34	26.50
		1	38	25.74	25.78	25.68	25.34	25.26	26.50
		1	74	25.90	25.91	25.63	25.32	25.25	26.50
		36	0	24.65	24.87	24.77	24.34	24.33	25.50
		36	18	24.74	24.90	24.68	24.31	24.28	25.50
		36	39	24.86	24.93	24.65	24.34	24.26	25.50
		75	0	24.78	24.94	24.72	24.38	24.33	25.50
	16QAM	1	0	24.75	24.98	24.94	24.56	24.53	25.50
		1	38	24.89	24.98	24.85	24.50	24.43	25.50

		1	74	25.08	25.10	24.81	24.50	24.43	25.50
		36	0	23.64	23.88	23.76	23.33	23.31	24.50
		36	18	23.74	23.89	23.67	23.27	23.27	24.50
		36	39	23.83	23.94	23.63	23.31	23.25	24.50
		75	0	23.81	23.96	23.75	23.40	23.36	24.50
	64QAM	1	0	23.62	23.85	23.83	23.44	23.41	24.50
		1	38	23.77	23.85	23.74	23.33	23.33	24.50
		1	74	23.96	23.98	23.69	23.37	23.31	24.50
		36	0	22.65	22.90	22.77	22.34	22.33	23.50
		36	18	22.73	22.89	22.68	22.28	22.26	23.50
		36	39	22.85	22.94	22.64	22.31	22.25	23.50
		75	0	22.78	22.95	22.72	22.38	22.34	23.50
	256QAM	1	0	22.83	23.03	22.73	22.39	22.35	23.50
		1	38	22.82	22.94	22.44	22.32	22.25	23.50
		1	74	22.93	22.89	22.97	22.35	22.42	23.50
		36	0	21.59	21.78	21.83	22.37	22.34	22.50
		36	18	21.82	21.84	21.81	21.44	21.34	22.50
		36	39	22.06	21.91	21.67	21.23	21.36	22.50
		75	0	22.05	22.07	21.80	21.56	21.29	22.50

Bandwidth	Modulation	RB Allocation	Offset	Channel/ Frequency(MHz)					Tune-up
				39750/ 2506	40185/ 2549.5	40620/ 2593	41055/ 2636.5	41490/ 2680	
20MHz	QPSK	1	0	25.59	25.82	**25.81**	**25.42**	**25.32**	26.50
		1	50	25.79	25.78	25.67	25.34	25.29	26.50
		1	99	**25.96**	**25.97**	25.62	25.31	25.28	26.50
		50	0	24.76	24.93	**24.82**	**24.44**	**24.41**	25.50
		50	25	24.85	24.95	24.77	24.40	24.34	25.50
		50	50	**24.98**	**24.98**	24.70	24.40	24.33	25.50
		100	0	24.85	**24.95**	24.77	24.43	**24.35**	25.50
	16QAM	1	0	24.77	25.03	24.99	24.60	24.50	25.50
		1	50	24.98	24.97	24.85	24.49	24.48	25.50
		1	99	25.16	25.16	24.81	24.50	24.46	25.50
		50	0	23.76	23.97	23.86	23.45	23.45	24.50
		50	25	23.87	23.99	23.79	23.41	23.37	24.50
		50	50	24.00	24.03	23.74	23.40	23.34	24.50
		100	0	23.86	23.97	23.79	23.44	23.36	24.50
	64QAM	1	0	23.64	23.88	23.88	23.47	23.38	24.50
		1	50	23.83	23.87	23.73	23.38	23.37	24.50
		1	99	24.02	24.04	23.68	23.36	23.35	24.50
		50	0	22.74	22.95	22.82	22.43	22.41	23.50
		50	25	22.85	22.97	22.78	22.38	22.35	23.50
		50	50	22.97	23.00	22.70	22.39	22.32	23.50
		100	0	22.86	22.96	22.77	22.40	22.34	23.50

	256QAM	1	0	22.75	22.91	22.73	22.35	22.27	23.50
		1	50	22.70	22.76	22.52	22.32	22.15	23.50
		1	99	22.85	22.93	22.81	22.41	22.50	23.50
		50	0	21.63	21.74	21.67	22.33	22.36	22.50
		50	25	21.92	21.96	21.67	21.38	21.36	22.50
		50	50	22.10	21.83	21.51	21.29	21.30	22.50
		100	0	21.99	22.01	21.62	21.42	21.35	22.50

LTE B41 PC2									
Sensor on--Main Ant2				Maximum Output Power (dBm)					Tune-up
Bandwidth	Modulation	RB Allocation	Offset	Channel/ Frequency(MHz)					
				39675/ 2498.5	40148/ 2545.8	40620/ 2593	41093/ 2640.3	41565/ 2687.5	
5MHz	QPSK	1	0	17.30	17.66	17.57	17.25	17.13	18.50
		1	13	17.35	17.60	17.50	17.17	17.03	18.50
		1	24	17.39	17.62	17.47	17.18	17.02	18.50
		12	0	17.37	17.60	17.51	17.18	17.05	18.50
		12	6	17.39	17.60	17.45	17.14	16.98	18.50
		12	13	17.43	17.61	17.44	17.17	16.98	18.50
		25	0	17.39	17.62	17.48	17.17	17.02	18.50
	16QAM	1	0	17.48	17.71	17.66	17.32	17.26	18.50
		1	13	17.54	17.73	17.64	17.32	17.20	18.50
		1	24	17.57	17.73	17.63	17.34	17.16	18.50
		12	0	17.41	17.64	17.57	17.23	17.09	18.50
		12	6	17.42	17.62	17.50	17.19	17.04	18.50
		12	13	17.44	17.64	17.48	17.21	17.05	18.50
		25	0	17.41	17.64	17.52	17.20	17.05	18.50
	64QAM	1	0	17.38	17.64	17.59	17.22	17.10	18.50
		1	13	17.39	17.63	17.53	17.19	17.07	18.50
		1	24	17.47	17.64	17.51	17.21	17.05	18.50
		12	0	17.39	17.64	17.55	17.21	17.09	18.50
		12	6	17.39	17.64	17.51	17.19	17.04	18.50
		12	13	17.43	17.64	17.48	17.22	17.05	18.50
		25	0	17.42	17.66	17.53	17.22	17.05	18.50
	256QAM	1	0	17.30	17.14	17.81	17.44	17.14	18.50
		1	13	17.20	17.22	17.64	17.30	17.22	18.50
		1	24	17.38	17.03	17.40	17.22	17.23	18.50
		12	0	17.13	17.12	17.58	17.35	17.32	18.50
		12	6	17.39	17.12	17.55	17.21	17.10	18.50
		12	13	17.22	17.01	17.59	17.36	17.05	18.50
		25	0	17.15	17.08	17.69	17.11	17.10	18.50

Bandwidth	Modulation	RB Allocation	Offset	Channel/ Frequency(MHz)					Tune-up
				39700/ 2501	40160/ 2547	40620/ 2593	41080/ 2639	41540/ 2685	
10MHz	QPSK	1	0	17.30	17.60	17.57	17.30	17.22	18.50
		1	25	17.35	17.50	17.42	17.11	17.00	18.50
		1	49	17.53	17.59	17.46	17.18	17.03	18.50
		25	0	17.32	17.55	17.48	17.18	17.05	18.50
		25	13	17.36	17.57	17.43	17.14	17.00	18.50
		25	25	17.44	17.57	17.42	17.14	16.98	18.50
		50	0	17.38	17.59	17.48	17.16	17.00	18.50
	16QAM	1	0	17.51	17.76	17.73	17.39	17.32	18.50
		1	25	17.53	17.68	17.61	17.28	17.21	18.50
		1	49	17.70	17.73	17.63	17.34	17.18	18.50
		25	0	17.36	17.60	17.52	17.20	17.10	18.50
		25	13	17.41	17.60	17.45	17.14	17.03	18.50
		25	25	17.45	17.59	17.46	17.17	17.00	18.50
		50	0	17.39	17.62	17.52	17.19	17.04	18.50
	64QAM	1	0	17.36	17.64	17.61	17.26	17.21	18.50
		1	25	17.39	17.55	17.47	17.17	17.04	18.50
		1	49	17.55	17.63	17.48	17.18	17.03	18.50
		25	0	17.38	17.63	17.55	17.22	17.12	18.50
		25	13	17.43	17.62	17.48	17.18	17.05	18.50
		25	25	17.47	17.62	17.48	17.21	17.03	18.50
		50	0	17.37	17.59	17.48	17.16	17.01	18.50
	256QAM	1	0	17.32	17.14	17.61	17.40	17.10	18.50
		1	25	17.28	16.96	17.32	17.32	17.20	18.50
		1	49	17.28	16.91	17.38	17.02	16.91	18.50
		25	0	17.19	17.00	17.52	17.19	17.14	18.50
		25	13	17.29	16.98	17.33	17.13	17.08	18.50
		25	25	17.24	17.05	17.51	17.20	17.03	18.50
		50	0	17.11	17.00	17.61	17.03	17.20	18.50

Bandwidth	Modulation	RB Allocation	Offset	Channel/ Frequency(MHz)					Tune-up
				39725/ 2503.5	40173/ 2548.3	40620/ 2593	41068/ 2637.8	41515/ 2682.5	
15MHz	QPSK	1	0	17.32	17.68	17.62	17.30	17.21	18.50
		1	38	17.47	17.59	17.50	17.19	17.09	18.50
		1	74	17.64	17.69	17.45	17.20	17.01	18.50
		36	0	17.37	17.57	17.52	17.19	17.11	18.50
		36	18	17.47	17.55	17.44	17.14	17.07	18.50
		36	39	17.52	17.60	17.39	17.14	16.98	18.50
		75	0	17.47	17.63	17.47	17.22	17.09	18.50
	16QAM	1	0	17.50	17.77	17.78	17.43	17.39	18.50
		1	38	17.63	17.73	17.66	17.35	17.26	18.50

		1	74	17.80	17.85	17.62	17.36	17.19	18.50
		36	0	17.34	17.55	17.50	17.18	17.10	18.50
		36	18	17.45	17.55	17.42	17.12	17.05	18.50
		36	39	17.51	17.57	17.39	17.11	16.98	18.50
		75	0	17.48	17.64	17.50	17.23	17.12	18.50
	64QAM	1	0	17.38	17.64	17.64	17.28	17.26	18.50
		1	38	17.51	17.62	17.55	17.21	17.13	18.50
		1	74	17.68	17.73	17.48	17.23	17.05	18.50
		36	0	17.36	17.59	17.53	17.18	17.13	18.50
		36	18	17.47	17.57	17.44	17.14	17.09	18.50
		36	39	17.53	17.59	17.39	17.13	17.00	18.50
		75	0	17.47	17.62	17.47	17.22	17.12	18.50
	256QAM	1	0	17.59	17.48	17.18	17.54	17.12	18.50
		1	38	17.72	17.06	17.30	17.36	16.96	18.50
		1	74	17.64	17.16	17.19	17.10	17.07	18.50
		36	0	17.44	17.13	17.38	17.33	17.36	18.50
		36	18	17.63	17.15	17.36	17.07	17.20	18.50
		36	39	17.65	17.02	17.01	17.36	16.93	18.50
		75	0	17.57	17.21	17.18	17.37	17.26	18.50

Bandwidth	Modulation	RB Allocation	Offset	Channel/ Frequency(MHz)					Tune-up
				39750/ 2506	40185/ 2549.5	40620/ 2593	41055/ 2636.5	41490/ 2680	
20MHz	QPSK	1	0	17.47	17.68	**17.75**	**17.38**	**17.26**	18.50
		1	50	17.52	17.59	17.48	17.22	17.11	18.50
		1	99	**17.70**	**17.76**	17.45	17.19	17.04	18.50
		50	0	17.44	17.64	**17.59**	**17.27**	**17.20**	18.50
		50	25	17.54	17.63	17.54	17.22	17.14	18.50
		50	50	**17.64**	**17.67**	17.45	17.21	17.05	18.50
		100	0	17.54	**17.68**	17.52	17.23	**17.11**	18.50
	16QAM	1	0	17.57	17.78	17.85	17.48	17.36	18.50
		1	50	17.68	17.77	17.67	17.37	17.32	18.50
		1	99	17.87	17.92	17.64	17.36	17.23	18.50
		50	0	17.45	17.67	17.62	17.26	17.20	18.50
		50	25	17.55	17.64	17.55	17.23	17.16	18.50
		50	50	17.67	17.70	17.47	17.23	17.09	18.50
		100	0	17.54	17.68	17.53	17.23	17.12	18.50
	64QAM	1	0	17.44	17.68	17.73	17.34	17.22	18.50
		1	50	17.55	17.63	17.52	17.22	17.14	18.50
		1	99	17.73	17.80	17.48	17.22	17.07	18.50
		50	0	17.42	17.66	17.60	17.23	17.20	18.50
		50	25	17.55	17.64	17.53	17.23	17.14	18.50
		50	50	17.64	17.67	17.47	17.20	17.05	18.50
		100	0	17.53	17.67	17.53	17.21	17.12	18.50

	256QAM	1	0	17.28	17.34	17.67	17.42	17.34	18.50
		1	50	17.26	17.04	17.40	17.22	17.22	18.50
		1	99	17.28	17.01	17.64	17.10	17.07	18.50
		50	0	17.11	17.20	17.54	17.39	17.12	18.50
		50	25	17.31	17.20	17.61	17.31	17.32	18.50
		50	50	17.30	17.23	17.55	17.12	17.15	18.50
		100	0	17.33	17.30	17.57	17.21	17.04	18.50

LTE B41 PC2									
WWAN+WLAN Sensor on--Main Ant2				Maximum Output Power (dBm)					Tune-up
Bandwidth	Modulation	RB Allocation	Offset	Channel/ Frequency(MHz)					
				39675/ 2498.5	40148/ 2545.8	40620/ 2593	41093/ 2640.3	41565/ 2687.5	
5MHz	QPSK	1	0	**15.48**	15.63	15.64	15.41	15.51	16.50
		1	13	15.51	15.54	15.15	15.09	15.14	16.50
		1	24	15.35	15.67	15.48	14.82	15.13	16.50
		12	0	15.37	15.35	15.58	15.00	15.05	16.50
		12	6	15.23	15.62	15.51	15.41	15.21	16.50
		12	13	15.69	15.52	14.88	14.84	14.84	16.50
		25	0	15.63	15.41	15.45	15.36	15.08	16.50
	16QAM	1	0	15.74	15.81	15.96	15.41	15.27	16.50
		1	13	15.67	15.86	15.84	15.36	15.21	16.50
		1	24	15.76	15.83	15.69	15.21	15.24	16.50
		12	0	15.28	15.40	15.53	15.11	15.23	16.50
		12	6	15.26	15.39	15.46	15.08	15.11	16.50
		12	13	15.80	15.47	15.22	14.98	14.86	16.50
		25	0	15.01	15.55	15.12	15.04	15.09	16.50
	64QAM	1	0	15.17	15.25	15.62	15.37	15.27	16.50
		1	13	15.50	15.70	15.63	14.85	15.37	16.50
		1	24	15.48	15.81	15.69	15.21	14.68	16.50
		12	0	15.31	15.21	15.97	15.38	15.01	16.50
		12	6	15.88	15.61	15.20	15.52	15.01	16.50
		12	13	15.03	15.50	15.32	14.99	14.94	16.50
		25	0	15.52	15.50	15.36	15.14	14.79	16.50
	256QAM	1	0	15.21	15.51	15.44	15.15	15.15	16.50
		1	13	15.39	14.97	15.19	15.27	14.79	16.50
		1	24	15.21	14.68	15.29	15.17	14.78	16.50
		12	0	14.68	15.27	15.47	15.04	15.07	16.50
		12	6	15.52	15.21	15.78	15.02	15.35	16.50
		12	13	15.11	14.80	15.54	15.17	15.06	16.50
		25	0	14.76	15.23	15.40	15.16	14.75	16.50

Bandwidth	Modulation	RB Allocation	Offset	Channel/ Frequency(MHz)					Tune-up
				39700/ 2501	40160/ 2547	40620/ 2593	41080/ 2639	41540/ 2685	
10MHz	QPSK	1	0	15.58	15.59	15.54	15.31	15.07	16.50
		1	25	15.55	15.42	15.35	15.17	15.06	16.50
		1	49	15.39	15.81	15.44	15.24	14.91	16.50
		25	0	15.37	15.49	15.44	15.24	15.11	16.50
		25	13	15.57	15.56	15.19	15.17	15.07	16.50
		25	25	15.61	15.52	15.08	15.02	15.08	16.50
		50	0	15.29	15.79	15.59	15.26	15.02	16.50
	16QAM	1	0	15.80	15.87	15.78	15.29	15.35	16.50
		1	25	15.59	16.00	15.70	15.56	15.31	16.50
		1	49	15.50	15.75	15.75	15.29	15.18	16.50
		25	0	15.02	15.38	15.57	15.13	15.35	16.50
		25	13	15.26	15.69	15.50	15.20	15.09	16.50
		25	25	15.62	15.59	15.44	15.00	14.84	16.50
		50	0	15.45	15.87	15.44	15.24	14.93	16.50
	64QAM	1	0	15.47	15.59	15.92	15.35	15.05	16.50
		1	25	15.56	15.58	15.57	15.07	15.09	16.50
		1	49	15.78	15.77	15.31	15.21	14.92	16.50
		25	0	15.65	15.59	15.49	15.24	15.31	16.50
		25	13	15.80	15.55	15.46	15.32	15.21	16.50
		25	25	15.33	15.26	15.32	14.97	14.90	16.50
		50	0	15.50	15.64	15.50	15.24	15.13	16.50
	256QAM	1	0	15.53	15.51	15.86	15.31	15.57	16.50
		1	25	14.99	14.97	15.13	15.15	15.15	16.50
		1	49	15.05	14.84	15.25	15.03	14.90	16.50
		25	0	15.18	15.31	15.47	15.14	15.11	16.50
		25	13	15.54	14.89	15.82	15.08	15.21	16.50
		25	25	15.01	15.20	15.62	15.11	15.08	16.50
		50	0	15.18	15.15	15.64	15.18	14.81	16.50

Bandwidth	Modulation	RB Allocation	Offset	Channel/ Frequency(MHz)					Tune-up
				39725/ 2503.5	40173/ 2548.3	40620/ 2593	41068/ 2637.8	41515/ 2682.5	
15MHz	QPSK	1	0	15.34	15.61	15.64	15.25	15.35	16.50
		1	38	15.47	15.58	15.13	15.07	15.10	16.50
		1	74	15.37	15.75	15.44	15.10	14.95	16.50
		36	0	15.31	15.39	15.76	15.44	15.27	16.50
		36	18	15.41	15.50	15.41	15.25	14.85	16.50
		36	39	15.61	15.64	15.24	15.18	15.18	16.50
		75	0	15.33	15.59	15.49	15.36	14.96	16.50
	16QAM	1	0	15.76	15.97	15.88	15.55	15.11	16.50
		1	38	15.49	16.00	15.70	15.34	15.51	16.50

		1	74	15.62	15.87	15.67	15.15	15.18	16.50
		36	0	15.24	15.42	15.69	15.33	15.23	16.50
		36	18	15.32	15.43	15.58	15.00	14.91	16.50
		36	39	15.44	15.53	15.44	15.02	14.96	16.50
		75	0	15.23	15.77	15.36	15.22	14.87	16.50
	64QAM	1	0	15.43	15.43	15.78	15.15	15.17	16.50
		1	38	15.58	15.44	15.63	14.89	15.05	16.50
		1	74	15.86	15.79	15.47	15.45	14.72	16.50
		36	0	15.49	15.49	15.81	15.24	15.35	16.50
		36	18	15.62	15.47	15.40	15.32	15.07	16.50
		36	39	15.49	15.36	15.40	15.05	15.12	16.50
		75	0	15.66	15.72	15.68	15.18	15.01	16.50
	256QAM	1	0	15.39	15.41	15.74	15.49	15.51	16.50
		1	38	15.25	14.89	15.35	15.17	15.07	16.50
		1	74	15.33	14.88	15.39	14.95	15.06	16.50
		36	0	15.00	15.43	15.55	15.28	15.01	16.50
		36	18	15.28	15.11	15.60	15.00	15.37	16.50
		36	39	15.09	15.20	15.64	15.15	15.10	16.50
		75	0	15.02	15.15	15.36	15.18	14.93	16.50

Bandwidth	Modulation	RB Allocation	Offset	Channel/ Frequency(MHz)					Tune-up
				39750/ 2506	40185/ 2549.5	40620/ 2593	41055/ 2636.5	41490/ 2680	
20MHz	QPSK	1	0	15.40	15.47	**15.60**	**15.37**	**15.17**	16.50
		1	50	**15.55**	15.52	15.23	15.05	15.08	16.50
		1	99	15.45	**15.77**	15.40	15.08	14.89	16.50
		50	0	15.35	15.39	**15.60**	15.24	**15.21**	16.50
		50	25	15.47	15.38	15.31	**15.25**	14.97	16.50
		50	50	**15.65**	**15.69**	15.22	15.10	14.98	16.50
		100	0	15.41	**15.57**	15.49	15.28	**15.12**	16.50
	16QAM	1	0	15.64	15.87	15.92	15.35	15.29	16.50
		1	50	15.57	15.88	15.78	15.40	15.35	16.50
		1	99	15.58	15.79	15.73	15.17	15.16	16.50
		50	0	15.18	15.42	15.63	15.13	15.25	16.50
		50	25	15.26	15.53	15.62	15.10	15.07	16.50
		50	50	15.52	15.53	15.38	15.04	14.92	16.50
		100	0	15.25	15.65	15.24	15.26	14.97	16.50
	64QAM	1	0	15.35	15.49	15.72	15.19	15.11	16.50
		1	50	15.66	15.54	15.59	15.01	15.13	16.50
		1	99	15.82	15.73	15.45	15.27	14.86	16.50
		50	0	15.47	15.37	15.65	15.14	15.15	16.50
		50	25	15.66	15.51	15.24	15.24	15.07	16.50
		50	50	15.39	15.40	15.38	15.03	15.00	16.50
		100	0	15.62	15.60	15.54	15.20	15.05	16.50

	256QAM	1	0	15.33	15.35	15.68	15.33	15.41	16.50
		1	50	15.15	14.95	15.31	15.03	15.11	16.50
		1	99	15.23	14.90	15.41	14.87	14.96	16.50
		50	0	14.98	15.27	15.51	15.16	15.05	16.50
		50	25	15.36	15.05	15.60	15.12	15.27	16.50
		50	50	15.17	15.10	15.58	15.07	15.14	16.50
		100	0	15.12	15.21	15.42	15.18	14.97	16.50

LTE B66							
Pmax&Sensor off--Main Ant0				Maximum Output Power (dBm)			Tune-up
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			
				131979/1710.7	132322/1745	132665/1779.3	
1.4MHz	QPSK	1	0	23.06	22.80	23.04	24.00
		1	2	23.03	22.77	23.02	24.00
		1	5	23.04	22.78	23.05	24.00
		3	0	23.02	22.75	23.01	24.00
		3	2	23.02	22.74	23.00	24.00
		3	3	23.03	22.76	23.03	24.00
		6	0	22.07	21.78	22.06	23.00
	16QAM	1	0	22.25	22.17	22.29	23.00
		1	2	22.28	22.06	22.26	23.00
		1	5	22.26	22.09	22.30	23.00
		3	0	22.09	21.76	22.06	23.00
		3	2	22.05	21.80	22.09	23.00
		3	3	22.07	21.81	22.05	23.00
		6	0	21.13	20.85	21.12	22.00
	64QAM	1	0	21.23	21.01	21.24	22.00
		1	2	21.17	20.91	21.21	22.00
		1	5	21.17	20.96	21.23	22.00
		3	0	21.18	20.90	21.16	22.00
		3	2	21.14	20.89	21.18	22.00
		3	3	21.14	20.84	21.19	22.00
		6	0	20.04	19.75	20.05	21.00
	256QAM	1	0	20.11	20.15	20.01	21.00
		1	2	19.70	19.75	20.20	21.00
		1	5	19.86	19.91	19.92	21.00
		3	0	19.89	19.53	19.39	21.00
		3	2	19.60	19.59	19.72	21.00
		3	3	19.65	19.44	19.82	21.00
		6	0	18.94	18.62	18.72	20.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				131987/1711.5	132322/1745	132657/1778.5	
3MHz	QPSK	1	0	23.00	22.77	23.08	24.00

		1	7	22.98	22.83	23.07	24.00
		1	14	22.97	22.77	23.01	24.00
		8	0	22.12	21.81	22.06	23.00
		8	4	22.08	21.81	22.04	23.00
		8	7	22.06	21.83	22.04	23.00
		15	0	22.08	21.83	22.06	23.00
	16QAM	1	0	22.32	22.01	22.22	23.00
		1	7	22.27	21.97	22.22	23.00
		1	14	22.26	22.02	22.23	23.00
		8	0	21.15	20.87	21.15	22.00
		8	4	21.15	20.89	21.12	22.00
		8	7	21.10	20.90	21.08	22.00
		15	0	21.11	20.86	21.07	22.00
	64QAM	1	0	21.16	20.97	21.22	22.00
		1	7	21.12	20.95	21.22	22.00
		1	14	21.11	20.98	21.20	22.00
		8	0	20.14	19.89	20.14	21.00
		8	4	20.12	19.88	20.10	21.00
		8	7	20.10	19.89	20.13	21.00
		15	0	20.05	19.82	20.01	21.00
	256QAM	1	0	20.39	19.91	19.83	21.00
		1	7	19.70	19.93	19.90	21.00
		1	14	19.86	19.73	19.48	21.00
		8	0	18.71	18.61	18.89	20.00
		8	4	18.50	18.65	18.62	20.00
		8	7	18.87	18.52	18.80	20.00
		15	0	18.48	18.64	18.88	20.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				131997/1712.5	132322/1745	132647/1777.5	
5MHz	QPSK	1	0	23.07	22.90	23.05	24.00
		1	13	23.08	22.77	23.04	24.00
		1	24	23.01	22.81	23.07	24.00
		12	0	22.13	21.89	22.11	23.00
		12	6	22.08	21.91	22.08	23.00
		12	13	22.08	21.91	22.09	23.00
		25	0	22.11	21.91	22.12	23.00
	16QAM	1	0	22.34	22.06	22.32	23.00
		1	13	22.28	22.05	22.33	23.00
		1	24	22.31	22.12	22.32	23.00
		12	0	21.15	20.88	21.16	22.00
		12	6	21.12	20.87	21.09	22.00
		12	13	21.10	20.89	21.09	22.00
		25	0	21.10	20.89	21.10	22.00

	64QAM	1	0	21.28	21.06	21.23	22.00
		1	13	21.22	21.01	21.19	22.00
		1	24	21.22	21.04	21.21	22.00
		12	0	20.14	19.89	20.14	21.00
		12	6	20.11	19.93	20.11	21.00
		12	13	20.11	19.92	20.10	21.00
		25	0	20.09	19.89	20.10	21.00
	256QAM	1	0	20.25	20.01	19.79	21.00
		1	13	19.66	19.69	20.04	21.00
		1	24	19.82	19.67	19.90	21.00
		12	0	19.11	18.61	18.77	20.00
		12	6	18.90	18.77	18.80	20.00
		12	13	18.77	18.80	18.86	20.00
		25	0	18.86	18.60	19.02	20.00

Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				132022/1715	132322/1745	132622/1775	
10MHz	QPSK	1	0	23.10	22.91	23.08	24.00
		1	25	23.04	22.82	23.06	24.00
		1	49	23.07	22.90	23.13	24.00
		25	0	22.13	21.87	22.10	23.00
		25	13	22.09	21.90	22.10	23.00
		25	25	22.06	21.92	22.10	23.00
		50	0	22.08	21.90	22.09	23.00
	16QAM	1	0	22.36	22.19	22.27	23.00
		1	25	22.29	22.08	22.27	23.00
		1	49	22.34	22.14	22.30	23.00
		25	0	21.13	20.88	21.12	22.00
		25	13	21.06	20.92	21.11	22.00
		25	25	21.06	20.92	21.10	22.00
		50	0	21.07	20.91	21.10	22.00
	64QAM	1	0	21.30	21.05	21.21	22.00
		1	25	21.19	20.96	21.20	22.00
		1	49	21.24	21.03	21.27	22.00
		25	0	20.11	19.87	20.10	21.00
		25	13	20.04	19.89	20.10	21.00
		25	25	20.04	19.91	20.09	21.00
		50	0	20.05	19.88	20.10	21.00
	256QAM	1	0	20.29	20.15	19.99	21.00
		1	25	19.94	19.65	19.96	21.00
		1	49	19.80	19.89	19.94	21.00
		25	0	18.83	18.73	18.65	20.00
		25	13	18.66	18.57	18.82	20.00
		25	25	18.53	18.68	18.88	20.00

		50	0	18.76	18.56	19.06	20.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				132047/1717.5	132322/1745	132597/1772.5	
15MHz	QPSK	1	0	23.12	22.94	23.07	24.00
		1	38	23.03	22.89	23.02	24.00
		1	74	22.97	22.91	23.04	24.00
		36	0	22.13	21.89	22.08	23.00
		36	18	22.07	21.89	22.08	23.00
		36	39	22.00	21.95	22.07	23.00
		75	0	22.10	21.91	22.11	23.00
	16QAM	1	0	22.37	22.24	22.38	23.00
		1	38	22.30	22.09	22.37	23.00
		1	74	22.28	22.11	22.35	23.00
		36	0	21.13	20.89	21.09	22.00
		36	18	21.07	20.90	21.07	22.00
		36	39	21.00	20.94	21.09	22.00
		75	0	21.11	20.93	21.12	22.00
	64QAM	1	0	21.33	21.12	21.22	22.00
		1	38	21.23	21.02	21.18	22.00
		1	74	21.14	21.01	21.23	22.00
		36	0	20.14	19.91	20.10	21.00
		36	18	20.09	19.92	20.09	21.00
		36	39	20.03	19.98	20.11	21.00
		75	0	20.09	19.92	20.11	21.00
	256QAM	1	0	20.25	20.03	19.79	21.00
		1	38	19.92	19.79	19.94	21.00
		1	74	19.78	19.79	19.92	21.00
		36	0	18.97	18.41	18.77	20.00
		36	18	18.94	18.79	18.64	20.00
		36	39	18.77	18.78	18.84	20.00
		75	0	18.76	18.64	18.96	20.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				132072/1720	132322/1745	132572/1770	
20MHz	QPSK	1	0	**23.20**	**23.18**	23.04	24.00
		1	50	23.09	22.87	22.99	24.00
		1	99	22.96	22.85	**23.06**	24.00
		50	0	**22.15**	21.96	**22.13**	23.00
		50	25	22.11	21.96	22.10	23.00
		50	50	22.01	**21.99**	22.08	23.00
		100	0	**22.09**	21.94	22.08	23.00
	16QAM	1	0	22.51	22.30	22.31	23.00
		1	50	22.44	22.16	22.30	23.00
		1	99	22.31	22.12	22.40	23.00

		50	0	21.14	20.93	21.14	22.00
		50	25	21.11	20.95	21.11	22.00
		50	50	21.00	20.99	21.08	22.00
		100	0	21.05	20.92	21.07	22.00
	64QAM	1	0	21.28	21.18	21.20	22.00
		1	50	21.17	21.08	21.15	22.00
		1	99	21.11	21.08	21.19	22.00
		50	0	20.12	19.92	20.10	21.00
		50	25	20.07	19.94	20.09	21.00
		50	50	19.98	19.97	20.05	21.00
		100	0	20.05	19.93	20.07	21.00
	256QAM	1	0	20.09	19.97	19.85	21.00
		1	50	19.76	19.75	20.00	21.00
		1	99	19.68	19.77	19.76	21.00
		50	0	18.95	18.53	18.65	20.00
		50	25	18.78	18.67	18.66	20.00
		50	50	18.63	18.74	18.84	20.00
		100	0	18.84	18.62	18.86	20.00

LTE B66							
Sensor on--Main Ant0				Maximum Output Power (dBm)			Tune-up
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			
				131979/1710.7	132322/1745	132665/1779.3	
1.4MHz	QPSK	1	0	12.65	13.05	12.77	14.00
		1	2	12.64	12.43	12.61	14.00
		1	5	12.65	12.50	12.65	14.00
		3	0	12.70	12.47	12.68	14.00
		3	2	12.69	12.48	12.66	14.00
		3	3	12.70	12.46	12.67	14.00
		6	0	12.73	12.51	12.72	14.00
	16QAM	1	0	12.96	12.77	12.97	14.00
		1	2	12.99	12.72	13.01	14.00
		1	5	12.99	12.75	12.95	14.00
		3	0	12.72	12.54	12.69	14.00
		3	2	12.76	12.53	12.69	14.00
		3	3	12.74	12.53	12.67	14.00
		6	0	12.82	12.57	12.76	14.00
	64QAM	1	0	12.93	12.71	12.85	14.00
		1	2	12.85	12.69	12.79	14.00
		1	5	12.93	12.70	12.83	14.00
		3	0	12.82	12.68	12.84	14.00
		3	2	12.80	12.60	12.80	14.00
		3	3	12.79	12.61	12.86	14.00

		6	0	12.70	12.49	12.67	14.00
	256QAM	1	0	13.29	12.77	12.97	14.00
		1	2	12.91	12.65	13.03	14.00
		1	5	12.78	12.84	12.74	14.00
		3	0	12.98	12.52	12.77	14.00
		3	2	12.67	12.55	12.87	14.00
		3	3	12.89	12.82	12.63	14.00
		6	0	12.90	12.58	12.64	14.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				131987/1711.5	132322/1745	132657/1778.5	
3MHz	QPSK	1	0	12.60	12.52	13.25	14.00
		1	7	12.62	12.41	12.66	14.00
		1	14	12.63	12.43	12.62	14.00
		8	0	12.73	12.49	12.68	14.00
		8	4	12.72	12.47	12.68	14.00
		8	7	12.69	12.51	12.66	14.00
		15	0	12.75	12.53	12.68	14.00
	16QAM	1	0	13.00	12.83	12.86	14.00
		1	7	13.01	12.78	12.93	14.00
		1	14	12.98	12.73	12.91	14.00
		8	0	12.81	12.56	12.73	14.00
		8	4	12.78	12.54	12.72	14.00
		8	7	12.74	12.60	12.72	14.00
		15	0	12.74	12.54	12.69	14.00
	64QAM	1	0	12.88	12.63	12.72	14.00
		1	7	12.80	12.67	12.78	14.00
		1	14	12.85	12.66	12.75	14.00
		8	0	12.81	12.61	12.76	14.00
		8	4	12.80	12.58	12.74	14.00
		8	7	12.76	12.60	12.78	14.00
		15	0	12.74	12.52	12.66	14.00
	256QAM	1	0	13.15	12.79	13.05	14.00
		1	7	13.01	12.77	12.99	14.00
		1	14	12.78	12.94	12.74	14.00
		8	0	13.06	12.46	12.65	14.00
		8	4	12.49	12.43	12.93	14.00
		8	7	12.73	12.70	12.61	14.00
		15	0	12.80	12.56	12.62	14.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				131997/1712.5	132322/1745	132647/1777.5	
5MHz	QPSK	1	0	12.69	12.60	12.89	14.00
		1	13	12.67	12.45	12.61	14.00
		1	24	12.65	12.53	12.67	14.00

		12	0	12.79	12.55	12.71	14.00
		12	6	12.74	12.57	12.72	14.00
		12	13	12.72	12.57	12.71	14.00
		25	0	12.78	12.60	12.71	14.00
	16QAM	1	0	13.01	12.83	12.88	14.00
		1	13	12.94	12.76	12.86	14.00
		1	24	12.93	12.79	12.93	14.00
		12	0	12.83	12.60	12.73	14.00
		12	6	12.78	12.61	12.73	14.00
		12	13	12.76	12.59	12.73	14.00
		25	0	12.78	12.59	12.71	14.00
	64QAM	1	0	12.98	12.79	12.85	14.00
		1	13	12.85	12.74	12.77	14.00
		1	24	12.90	12.70	12.88	14.00
		12	0	12.86	12.62	12.73	14.00
		12	6	12.80	12.62	12.76	14.00
		12	13	12.79	12.64	12.75	14.00
		25	0	12.76	12.60	12.69	14.00
	256QAM	1	0	13.01	12.81	13.05	14.00
		1	13	12.79	12.89	13.03	14.00
		1	24	12.76	12.74	12.98	14.00
		12	0	12.80	12.62	12.71	14.00
		12	6	12.79	12.69	12.83	14.00
		12	13	12.61	12.56	12.75	14.00
		25	0	12.74	12.54	12.62	14.00

Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				132022/1715	132322/1745	132622/1775	
10MHz	QPSK	1	0	12.60	12.56	12.31	14.00
		1	25	12.55	12.42	12.51	14.00
		1	49	12.56	12.41	12.62	14.00
		25	0	12.70	12.46	12.57	14.00
		25	13	12.63	12.50	12.61	14.00
		25	25	12.58	12.49	12.60	14.00
		50	0	12.65	12.48	12.58	14.00
	16QAM	1	0	12.93	12.80	12.78	14.00
		1	25	12.84	12.67	12.78	14.00
		1	49	12.79	12.71	12.86	14.00
		25	0	12.70	12.48	12.56	14.00
		25	13	12.63	12.50	12.57	14.00
		25	25	12.57	12.49	12.57	14.00
		50	0	12.67	12.49	12.56	14.00
	64QAM	1	0	12.88	12.62	12.71	14.00
		1	25	12.75	12.58	12.65	14.00

		1	49	12.70	12.62	12.80	14.00
		25	0	12.69	12.43	12.57	14.00
		25	13	12.60	12.46	12.58	14.00
		25	25	12.55	12.46	12.60	14.00
		50	0	12.64	12.50	12.56	14.00
	256QAM	1	0	12.65	12.87	12.87	14.00
		1	25	12.45	12.53	12.77	14.00
		1	49	12.66	12.44	12.74	14.00
		25	0	12.76	12.54	12.65	14.00
		25	13	12.47	12.55	12.67	14.00
		25	25	12.57	12.46	12.55	14.00
		50	0	12.66	12.56	12.52	14.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				132047/1717.5	132322/1745	132597/1772.5	
15MHz	QPSK	1	0	12.40	12.38	12.66	14.00
		1	38	12.52	12.38	12.54	14.00
		1	74	12.49	12.38	12.61	14.00
		36	0	12.69	12.47	12.59	14.00
		36	18	12.58	12.47	12.53	14.00
		36	39	12.53	12.46	12.57	14.00
		75	0	12.62	12.49	12.59	14.00
	16QAM	1	0	12.93	12.84	12.84	14.00
		1	38	12.77	12.67	12.82	14.00
		1	74	12.81	12.71	12.88	14.00
		36	0	12.68	12.48	12.60	14.00
		36	18	12.58	12.47	12.55	14.00
		36	39	12.53	12.46	12.59	14.00
		75	0	12.63	12.50	12.61	14.00
	64QAM	1	0	12.90	12.70	12.68	14.00
		1	38	12.78	12.57	12.71	14.00
		1	74	12.74	12.54	12.74	14.00
		36	0	12.70	12.51	12.61	14.00
		36	18	12.60	12.55	12.58	14.00
		36	39	12.54	12.49	12.60	14.00
		75	0	12.62	12.51	12.56	14.00
	256QAM	1	0	12.65	12.67	12.89	14.00
		1	38	12.87	12.83	12.75	14.00
		1	74	12.74	12.84	12.68	14.00
		36	0	12.88	12.32	12.59	14.00
		36	18	12.83	12.61	12.67	14.00
		36	39	12.43	12.54	12.43	14.00
		75	0	12.66	12.66	12.74	14.00

Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				132072/1720	132322/1745	132572/1770	
20MHz	QPSK	1	0	**12.66**	**12.63**	12.62	14.00
		1	50	12.58	12.44	12.53	14.00
		1	99	12.51	12.43	**12.63**	14.00
		50	0	**12.90**	12.51	**12.65**	14.00
		50	25	12.62	**12.54**	12.64	14.00
		50	50	12.57	12.50	12.60	14.00
		100	0	**12.67**	12.52	12.62	14.00
	16QAM	1	0	12.98	12.89	12.79	14.00
		1	50	12.80	12.75	12.78	14.00
		1	99	12.77	12.76	12.90	14.00
		50	0	12.75	12.48	12.64	14.00
		50	25	12.62	12.52	12.61	14.00
		50	50	12.56	12.50	12.61	14.00
		100	0	12.66	12.48	12.62	14.00
	64QAM	1	0	12.83	12.79	12.81	14.00
		1	50	12.65	12.63	12.79	14.00
		1	99	12.64	12.64	12.82	14.00
		50	0	12.74	12.50	12.63	14.00
		50	25	12.61	12.53	12.59	14.00
		50	50	12.57	12.48	12.59	14.00
		100	0	12.66	12.52	12.62	14.00
	256QAM	1	0	12.89	12.97	12.71	14.00
		1	50	12.81	12.71	12.79	14.00
		1	99	12.66	12.52	12.90	14.00
		50	0	12.72	12.44	12.79	14.00
		50	25	12.75	12.67	12.73	14.00
		50	50	12.49	12.40	12.63	14.00
		100	0	12.58	12.40	12.70	14.00

LTE B71							
Pmax&Sensor off--Main Ant0				Maximum Output Power (dBm)			Tune-up
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			
				133147/665.5	133297/680.5	133447/695.5	
5MHz	QPSK	1	0	22.55	22.72	22.62	24.00
		1	13	22.52	22.54	22.62	24.00
		1	24	22.65	22.59	22.81	24.00
		12	0	21.51	21.54	21.51	23.00
		12	6	21.48	21.44	21.56	23.00
		12	13	21.48	21.65	21.66	23.00
		25	0	21.76	21.66	21.60	23.00
	16QAM	1	0	21.98	22.06	22.08	23.00

		1	13	21.68	22.05	22.05	23.00
		1	24	21.59	21.85	21.95	23.00
		12	0	20.50	20.71	20.54	22.00
		12	6	20.39	20.53	20.49	22.00
		12	13	20.53	20.45	20.47	22.00
		25	0	20.53	20.47	20.58	22.00
	64QAM	1	0	20.70	20.88	20.84	22.00
		1	13	20.86	20.74	20.78	22.00
		1	24	20.59	20.71	20.91	22.00
		12	0	19.62	19.72	19.74	21.00
		12	6	19.75	19.45	19.53	21.00
		12	13	19.82	19.78	19.88	21.00
		25	0	19.88	19.90	19.94	21.00
	256QAM	1	0	19.32	19.54	19.46	21.00
		1	13	19.64	19.54	19.54	21.00
		1	24	19.39	19.43	19.45	21.00
		12	0	18.48	18.64	18.60	20.00
		12	6	18.41	18.07	18.15	20.00
		12	13	18.22	18.26	18.42	20.00
		25	0	18.62	18.50	18.54	20.00

Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				133172/668	133297/680.5	133422/693	
10MHz	QPSK	1	0	22.65	22.80	22.92	24.00
		1	25	22.70	22.62	22.62	24.00
		1	49	22.67	22.73	22.75	24.00
		25	0	21.49	21.54	21.71	23.00
		25	13	21.44	21.70	21.78	23.00
		25	25	21.64	21.73	21.78	23.00
		50	0	21.72	21.60	21.46	23.00
	16QAM	1	0	22.16	21.86	22.24	23.00
		1	25	21.66	21.97	22.39	23.00
		1	49	21.91	22.21	22.29	23.00
		25	0	20.60	20.63	20.64	22.00
		25	13	20.75	20.47	20.57	22.00
		25	25	20.61	20.79	20.47	22.00
		50	0	20.53	20.75	20.70	22.00
	64QAM	1	0	20.74	20.72	20.90	22.00
		1	25	21.22	20.76	20.94	22.00
		1	49	20.75	20.63	20.83	22.00
		25	0	19.56	19.84	19.94	21.00
		25	13	19.89	19.75	19.59	21.00
		25	25	19.82	19.70	19.82	21.00
		50	0	20.08	19.74	20.12	21.00

	256QAM	1	0	19.36	19.32	19.72	21.00
		1	25	19.76	19.62	19.66	21.00
		1	49	19.27	19.43	19.37	21.00
		25	0	18.60	18.68	18.48	20.00
		25	13	18.57	18.05	18.21	20.00
		25	25	18.40	18.42	18.40	20.00
		50	0	18.54	18.20	18.34	20.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				133197/670.5	133297/680.5	133397/690.5	
15MHz	QPSK	1	0	22.81	22.72	22.68	24.00
		1	38	22.62	22.90	22.74	24.00
		1	74	22.53	22.77	22.69	24.00
		36	0	21.69	21.70	21.73	23.00
		36	18	21.76	21.66	21.64	23.00
		36	39	21.62	21.45	21.74	23.00
		75	0	21.54	21.62	21.78	23.00
	16QAM	1	0	22.00	22.16	22.18	23.00
		1	38	21.68	21.95	22.33	23.00
		1	74	21.67	21.95	22.05	23.00
		36	0	20.68	20.53	20.56	22.00
		36	18	20.65	20.79	20.81	22.00
		36	39	20.87	20.63	20.69	22.00
		75	0	20.53	20.67	20.78	22.00
	64QAM	1	0	20.82	20.98	20.78	22.00
		1	38	21.18	21.12	21.04	22.00
		1	74	20.85	20.91	20.85	22.00
		36	0	19.74	19.84	19.88	21.00
		36	18	20.01	19.81	19.73	21.00
		36	39	19.86	19.74	19.70	21.00
		75	0	20.12	19.94	19.90	21.00
	256QAM	1	0	19.26	19.52	19.62	21.00
		1	38	19.92	19.36	19.54	21.00
		1	74	19.29	19.49	19.63	21.00
		36	0	18.52	18.64	18.42	20.00
		36	18	18.41	18.13	18.17	20.00
		36	39	18.48	18.12	18.24	20.00
		75	0	18.52	18.36	18.62	20.00
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				133222/673	133322/683	133372/688	
20MHz	QPSK	1	0	22.63	**22.78**	22.72	24.00
		1	50	**22.64**	22.74	**22.80**	24.00
		1	99	22.57	22.69	22.73	24.00
		50	0	21.61	**21.60**	**21.65**	23.00

		50	25	21.60	21.52	21.62	23.00
		50	50	**21.68**	21.57	21.64	23.00
		100	0	**21.66**	21.58	21.64	23.00
	16QAM	1	0	22.10	21.98	22.22	23.00
		1	50	21.72	22.01	22.21	23.00
		1	99	21.71	21.99	22.11	23.00
		50	0	20.64	20.65	20.64	22.00
		50	25	20.55	20.63	20.69	22.00
		50	50	20.71	20.61	20.59	22.00
		100	0	20.63	20.63	20.62	22.00
	64QAM	1	0	20.76	20.86	20.78	22.00
		1	50	21.04	20.94	20.88	22.00
		1	99	20.79	20.79	20.85	22.00
		50	0	19.72	19.82	19.72	21.00
		50	25	19.87	19.65	19.69	21.00
		50	50	19.86	19.76	19.82	21.00
		100	0	20.08	19.88	19.96	21.00
	256QAM	1	0	19.34	19.40	19.50	21.00
		1	50	19.74	19.46	19.58	21.00
		1	99	19.41	19.35	19.49	21.00
		50	0	18.40	18.56	18.44	20.00
		50	25	18.51	18.09	18.21	20.00
		50	50	18.32	18.20	18.36	20.00
		100	0	18.52	18.36	18.48	20.00

LTE B71							
Sensor on--Main Ant0				Maximum Output Power (dBm)			Tune-up
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			
				133147/665.5	133297/680.5	133447/695.5	
5MHz	QPSK	1	0	18.92	19.02	19.03	20.50
		1	13	19.05	18.99	19.16	20.50
		1	24	19.33	18.85	19.09	20.50
		12	0	18.91	19.18	18.94	20.50
		12	6	18.89	18.97	18.92	20.50
		12	13	19.21	19.11	19.12	20.50
		25	0	19.30	19.33	18.99	20.50
	16QAM	1	0	19.36	19.26	18.90	20.50
		1	13	19.29	19.39	19.24	20.50
		1	24	19.08	19.33	19.25	20.50
		12	0	19.18	19.28	18.98	20.50
		12	6	19.23	19.08	19.04	20.50
		12	13	19.04	19.14	19.18	20.50
		25	0	19.07	19.16	19.18	20.50

	64QAM	1	0	19.13	19.07	18.88	20.50
		1	13	19.12	19.04	19.17	20.50
		1	24	19.18	19.08	19.08	20.50
		12	0	18.92	18.87	19.13	20.50
		12	6	18.90	18.82	19.13	20.50
		12	13	19.26	19.18	19.25	20.50
		25	0	19.11	19.10	19.10	20.50
	256QAM	1	0	19.33	19.67	18.99	20.50
		1	13	19.32	19.44	19.37	20.50
		1	24	19.31	19.56	19.52	20.50
		12	0	18.95	18.81	18.97	20.50
		12	6	19.16	18.95	18.93	20.50
		12	13	19.07	18.99	19.23	20.50
		25	0	19.08	19.09	18.97	20.50

Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				133172/668	133297/680.5	133422/693	
10MHz	QPSK	1	0	19.24	19.24	19.17	20.50
		1	25	19.07	19.13	19.16	20.50
		1	49	19.15	19.15	19.23	20.50
		25	0	19.03	19.24	19.12	20.50
		25	13	19.07	18.93	19.20	20.50
		25	25	19.05	19.11	19.16	20.50
		50	0	19.08	19.09	19.19	20.50
	16QAM	1	0	19.54	19.74	19.10	20.50
		1	25	19.57	19.53	19.66	20.50
		1	49	19.40	19.39	19.35	20.50
		25	0	19.12	19.10	19.28	20.50
		25	13	19.09	19.08	19.12	20.50
		25	25	19.20	19.12	19.12	20.50
		50	0	19.19	19.02	19.20	20.50
	64QAM	1	0	18.95	19.21	19.10	20.50
		1	25	18.98	19.34	19.15	20.50
		1	49	19.32	19.30	19.34	20.50
		25	0	19.16	19.11	19.09	20.50
		25	13	19.20	19.00	19.37	20.50
		25	25	19.14	19.34	19.13	20.50
		50	0	19.17	19.12	19.04	20.50
	256QAM	1	0	19.57	19.59	19.19	20.50
		1	25	19.52	19.40	19.31	20.50
		1	49	19.59	19.56	19.58	20.50
		25	0	18.93	19.19	19.29	20.50
		25	13	18.98	19.03	19.13	20.50
		25	25	19.37	19.01	19.09	20.50

		50	0	19.10	19.41	18.85	20.50
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				133197/670.5	133297/680.5	133397/690.5	
15MHz	QPSK	1	0	19.10	19.08	19.27	20.50
		1	38	19.17	19.21	19.32	20.50
		1	74	19.47	19.17	19.31	20.50
		36	0	19.25	19.06	19.34	20.50
		36	18	19.23	19.19	19.14	20.50
		36	39	19.33	19.11	19.36	20.50
		75	0	19.14	19.15	19.21	20.50
	16QAM	1	0	19.58	19.80	19.14	20.50
		1	38	19.55	19.73	19.72	20.50
		1	74	19.68	19.55	19.59	20.50
		36	0	19.02	19.10	19.18	20.50
		36	18	19.27	19.08	19.08	20.50
		36	39	19.32	19.26	19.04	20.50
		75	0	19.23	19.18	19.20	20.50
	64QAM	1	0	19.25	19.13	19.06	20.50
		1	38	19.20	19.28	19.25	20.50
		1	74	19.40	19.28	19.20	20.50
		36	0	19.00	19.23	19.43	20.50
		36	18	19.04	18.90	19.15	20.50
		36	39	19.10	19.12	19.27	20.50
		75	0	19.05	19.18	19.02	20.50
	256QAM	1	0	19.27	19.87	19.27	20.50
		1	38	19.58	19.60	19.23	20.50
		1	74	19.41	19.58	19.42	20.50
		36	0	19.01	19.13	19.01	20.50
		36	18	19.18	18.93	19.29	20.50
		36	39	19.31	19.09	19.05	20.50
		75	0	19.16	19.43	19.15	20.50
Bandwidth	Modulation	RB Allocation	Offset	Channel/Frequency(MHz)			Tune-up
				133222/673	133322/683	133372/688	
20MHz	QPSK	1	0	19.20	19.14	**19.23**	20.50
		1	50	19.25	**19.19**	19.16	20.50
		1	99	**19.56**	19.13	19.19	20.50
		50	0	19.11	19.14	19.20	20.50
		50	25	19.13	19.05	19.18	20.50
		50	50	**19.21**	**19.17**	**19.42**	20.50
		100	0	19.12	19.15	**19.25**	20.50
	16QAM	1	0	19.58	19.70	19.22	20.50
		1	50	19.55	19.73	19.56	20.50
		1	99	19.52	19.55	19.45	20.50

		50	0	19.12	19.20	19.24	20.50
		50	25	19.15	19.12	19.16	20.50
		50	50	19.18	19.22	19.14	20.50
		100	0	19.13	19.22	19.12	20.50
	64QAM	1	0	19.07	19.17	19.04	20.50
		1	50	19.04	19.20	19.13	20.50
		1	99	19.26	19.20	19.24	20.50
		50	0	18.96	19.07	19.27	20.50
		50	25	19.02	18.88	19.19	20.50
		50	50	19.16	19.24	19.27	20.50
		100	0	19.05	19.12	19.06	20.50
	256QAM	1	0	19.37	19.75	19.11	20.50
		1	50	19.46	19.58	19.35	20.50
		1	99	19.37	19.62	19.44	20.50
		50	0	18.99	18.99	19.11	20.50
		50	25	19.10	18.99	19.13	20.50
		50	50	19.21	19.15	19.13	20.50
		100	0	19.02	19.25	18.97	20.50

DL Intra Band Contiguous Measured Results												
CA configuration	CC1 UL					CC2 DL			Aggregated BW	MPR	CA Inactive (dBm)	CA Active (dBm)
	Mode	BW (MHz)	Channel	Fre (MHz)	RB, Offset	BW(MHz)	Channel	Fre (MHz)				
CA_2C	QPSK	20	18801	1870.1	1,50	20	999	1969.9	40	0	23.58	23.58
CA_66B	QPSK	15	132273	1740.1	1,38	5	66835	2149.9	20	0	23.01	23.03
CA_66C	QPSK	20	132223	1735.1	1,50	20	66885	2154.9	40	0	23.03	23.03
CA_41C	QPSK	20	40521	2583.1	1,50	20	40719	2602.9	40	0	22.89	22.90
CA_n71B	DFT-s-OFDM BPSK	15	136100	680.5	1,1	5	128860	644.3	20	0	22.52	22.52
DL Intra Band Non-Contiguous Measured Results												
CA configuration	CC1 UL					CC2 DL			Aggregated BW	MPR	CA Inactive (dBm)	CA Active (dBm)
	Mode	BW (MHz)	Channel	Fre (MHz)	RB, Offset	BW (MHz)	Channel	Fre (MHz)				
CA_2A-2A	QPSK	20	18700	1860	1,50	20	1100	1980	40	0	23.56	23.58
CA_4A-4A	QPSK	20	20050	1720	1,50	20	2300	2145	40	0	23.16	23.16
CA_25A-25A	QPSK	20	26140	1860	1,50	20	8590	1985	40	0	23.52	23.52
CA_66A-66A	QPSK	20	132072	1720	1,50	20	67035	2169.9	40	0	23.01	23.03
CA_41A-41A	QPSK	20	39750	2506	1,50	20	41490	2680	40	0	22.90	22.90

DL Inter Band(2 Bands)Measured Results												
CA configuration	CC1 UL					CC2 DL			Aggregated BW	MPR	CA Inactive (dBm)	CA Active (dBm)
	Mode	BW (MHz)	Channel	Fre (MHz)	RB, Offset	BW (MHz)	Channel	Fre (MHz)				
CA_2A-4A	QPSK	20	18900	1880	1,0	20	2175	2132.5	40	0	23.52	23.58
CA_2A-5A	QPSK	20	18900	1880	1,0	10	2600	889	30	0	23.58	23.58
CA_2A-12A	QPSK	20	18900	1880	1,0	10	5095	737.5	30	0	23.54	23.58
CA_2A-66A	QPSK	20	18900	1880	1,0	20	66786	2145	40	0	23.56	23.58
CA_2A-71A	QPSK	20	18900	1880	1,0	20	68786	637	40	0	23.58	23.58
CA_4A-5A	QPSK	20	20175	1732.5	1,0	10	2525	881.5	30	0	23.10	23.16
CA_4A-12A	QPSK	20	20175	1732.5	1,0	10	5095	737.5	30	0	23.16	23.16
CA_4A-71A	QPSK	20	20175	1732.5	1,0	20	68786	637	40	0	23.16	23.16
CA_5A-66A	QPSK	10	20525	836.5	1,0	20	66786	2145	30	0	22.89	22.90
CA_12A-66A	QPSK	10	23095	707.5	1,0	20	66786	2145	30	0	22.86	22.86
CA_66A-71A	QPSK	20	132322	1745	1,0	20	68786	637	40	0	23.03	23.03
CA_n25A-n66A	DFT-s-OFDM BPSK	20	376500	1882.5	1,1	20	429000	2145	40	0	22.25	22.25
CA_n25A-n41A	DFT-s-OFDM BPSK	20	376500	1882.5	1,1	20	518600	2593	40	0	22.25	22.25
CA_n25A-n71A	DFT-s-OFDM BPSK	20	376500	1882.5	1,1	20	127400	637	40	0	22.22	22.25
CA_n66A-n71A	DFT-s-OFDM BPSK	20	349000	1745	1,1	20	127400	637	40	0	22.75	22.77
CA_n66A-n41A	DFT-s-OFDM BPSK	20	349000	1745	1,1	20	518600	2593	40	0	22.77	22.77

9.4 NR Mode

The following tests were conducted according to the test requirements outlined in section 6.2 of the 3GPP TS 138.521-1 specification.
UE Power Class: 3 (23 +/- 2dBm). The allowed Maximum Power Reduction (MPR) for the maximum output power due to higher order modulation and transmit bandwidth configuration (resource blocks) is specified in Table 6.2.3-1 of the 3GPP TS138.521-1.

Table 6.2.2.3-1: Maximum Power Reduction (MPR) for Power 3

Modulation	MPR (dB)		
	Edge RB allocations	Outer RB allocations	Inner RB allocations
DFT-s-OFDM PI/2 BPSK	≤ 3.5[1]	≤ 1.2[1]	≤ 0.2[1]
	≤ 0.5[2]		0[2]
DFT-s-OFDM QPSK	≤ 1		0
DFT-s-OFDM 16 QAM	≤ 2		≤ 1
DFT-s-OFDM 64 QAM	≤ 2.5		
DFT-s-OFDM 256 QAM	≤ 4.5		
CP-OFDM QPSK	≤ 3		≤ 1.5
CP-OFDM 16 QAM	≤ 3		≤ 2
CP-OFDM 64 QAM	≤ 3.5		
CP-OFDM 256 QAM	≤ 6.5		

NOTE 1: Applicable for UE operating in TDD mode with PI/2 BPSK modulation and UE indicates support for UE capability *powerBoosting-pi2BPSK* and if the IE *powerBoostPi2BPSK* is set to 1 and 40 % or less slots in radio frame are used for UL transmission for bands n40, n41, n77, n78 and n79. The reference power of 0dB MPR is 26dBm.
NOTE 2: Applicable for UE operating in FDD mode, or in TDD mode in bands other than n40, n41, n77, n78 and n79 and if the IE *powerBoostPi2BPSK* is set to 0 and if more than 40% of slots in radio frame are used for UL transmission for bands n40, n41, n77, n78 and n79.

The allowed A-MPR values specified below in Table 6.2.3.3.1-1 of 3GPP TS138.521-1 are in addition to the allowed MPR requirements. All the measurements below were performed with A-MPR disabled, by using Network Signaling Value of “NS_ 01”

Table 6.2.3.3.1-1: Additional maximum power reduction (A-MPR)

Network Signalling label	Requirements (subclause)	NR Band	Channel bandwidth (MHz)	Resources Blocks (N_{RB})	A-MPR (dB)
NS_01		Table 5.2-1	5, 10, 15, 20, 25, 30, 40, 50, 60, 80, 90, 100	Table 5.3.2-1	N/A

n25							
Pmax&Sensor off-Main Ant0				Maximum Output Power (dBm)			Tune-up
Bandwidth	Modulation	RB allocation	offset	Channel/Frequency(MHz)			
				370500/1852.5	376500/1882.5	382500/1912.5	
5MHz	DFT-s-OFDM BPSK	1	1	22.57	22.49	22.09	24.00
		1	23	22.40	22.26	22.14	24.00
		12	6	22.39	22.10	22.65	24.00

		25	0	21.30	21.59	21.15	23.00
	DFT-s-OFDM QPSK	1	1	22.05	22.39	22.23	24.00
		1	23	22.12	22.18	22.38	24.00
		12	6	22.23	22.34	22.07	24.00
		25	0	21.26	21.21	21.47	23.00
	DFT-s-OFDM 16QAM	1	1	21.39	21.31	21.45	22.50
		12	6	21.34	21.32	21.46	22.50
	DFT-s-OFDM 64QAM	1	1	19.85	19.81	19.99	21.50
		12	6	20.03	20.11	19.87	21.50
	DFT-s-OFDM 256QAM	1	1	17.65	17.65	18.07	19.50
		12	6	17.91	17.81	17.89	19.50
	CP-OFDM QPSK	1	1	22.53	22.43	22.39	23.00
	CP-OFDM 16QAM	1	1	21.08	21.16	21.26	22.00
	CP-OFDM 64QAM	1	1	19.99	19.85	19.41	20.50
	CP-OFDM 256QAM	1	1	16.79	16.67	16.45	17.50
Bandwidth	Modulation	RB allocation	offset	Channel/Frequency(MHz)			Tune-up
				371000/1855	376500/1882.5	382000/1910	
10MHz	DFT-s-OFDM BPSK	1	1	22.39	22.43	22.09	24.00
		1	50	22.52	22.12	22.20	24.00
		25	12	22.29	22.10	22.47	24.00
		50	0	21.32	21.61	21.13	23.00
	DFT-s-OFDM QPSK	1	1	22.05	22.39	22.19	24.00
		1	50	22.16	22.08	22.30	24.00
		25	12	22.05	22.28	22.07	24.00
		50	0	21.10	21.23	21.31	23.00
	DFT-s-OFDM 16QAM	1	1	21.27	21.27	21.43	22.50
		25	12	21.32	21.28	21.30	22.50
	DFT-s-OFDM 64QAM	1	1	19.69	19.63	19.91	21.50
		25	12	20.03	20.01	19.97	21.50
	DFT-s-OFDM 256QAM	1	1	17.75	17.91	17.99	19.50
		25	12	18.11	17.83	17.69	19.50
	CP-OFDM QPSK	1	1	22.49	22.17	22.55	23.00
	CP-OFDM 16QAM	1	1	21.12	21.26	21.18	22.00
	CP-OFDM 64QAM	1	1	19.87	19.79	19.47	20.50
	CP-OFDM 256QAM	1	1	16.67	16.49	16.35	17.50
Bandwidth	Modulation	RB	offset	Channel/Frequency(MHz)			Tune-up

		allocation		371500/1857.5	376500/1882.5	38150/1907.5	
15MHz	DFT-s-OFDM BPSK	1	1	22.29	22.41	22.23	24.00
		1	77	22.22	22.36	22.14	24.00
		36	18	22.29	22.20	22.05	24.00
		75	0	21.26	21.37	21.09	23.00
	DFT-s-OFDM QPSK	1	1	22.05	22.63	22.35	24.00
		1	77	22.06	22.14	22.14	24.00
		36	18	22.35	22.18	22.37	24.00
		75	0	21.20	21.19	21.27	23.00
	DFT-s-OFDM 16QAM	1	1	21.61	21.43	21.63	22.50
		36	18	21.22	21.26	21.38	22.50
	DFT-s-OFDM 64QAM	1	1	19.73	19.67	19.91	21.50
		36	18	20.09	19.93	20.05	21.50
	DFT-s-OFDM 256QAM	1	1	17.63	17.59	18.13	19.50
		36	18	17.67	17.67	17.85	19.50
	CP-OFDM QPSK	1	1	22.43	22.25	22.39	23.00
	CP-OFDM 16QAM	1	1	21.00	21.16	21.18	22.00
	CP-OFDM 64QAM	1	1	19.77	19.63	19.55	20.50
	CP-OFDM 256QAM	1	1	16.67	16.47	16.61	17.50
Bandwidth	Modulation	RB allocation	offset	Channel/Frequency(MHz)			Tune-up
				372000/1860	376500/1882.5	381000/1905	
20MHz	DFT-s-OFDM BPSK	1	1	22.33	22.57	22.31	24.00
		1	104	22.18	22.12	22.14	24.00
		50	25	22.21	22.40	22.03	24.00
		100	0	21.08	21.15	21.01	23.00
	DFT-s-OFDM QPSK	1	1	22.23	22.41	22.29	24.00
		1	104	22.00	22.02	22.10	24.00
		50	25	22.25	22.12	22.21	24.00
		100	0	21.32	21.15	21.09	23.00
	DFT-s-OFDM 16QAM	1	1	21.41	21.31	21.61	22.50
		50	25	21.26	21.08	21.14	22.50
	DFT-s-OFDM 64QAM	1	1	19.73	19.77	19.99	21.50
		50	25	20.15	20.03	19.73	21.50
	DFT-s-OFDM 256QAM	1	1	17.91	17.95	17.81	19.50
		50	25	17.83	17.77	17.91	19.50
	CP-OFDM QPSK	1	1	22.47	22.45	22.33	23.00
	CP-OFDM 16QAM	1	1	20.96	21.20	21.10	22.00
	CP-OFDM	1	1	20.01	19.81	19.69	20.50

	64QAM						
	CP-OFDM 256QAM	1	1	16.79	16.69	16.53	17.50
Bandwidth	Modulation	RB allocation	offset	Channel/Frequency(MHz)			Tune-up
				372500 /1862.5	376500/1882.5	380500/1902.5	
25MHz	DFT-s-OFDM BPSK	1	1	22.33	22.37	22.27	24.00
		1	131	22.22	22.10	22.14	24.00
		64	32	22.35	22.40	22.27	24.00
		128	0	21.24	21.57	21.19	23.00
	DFT-s-OFDM QPSK	1	1	22.01	22.41	22.07	24.00
		1	131	22.08	22.38	22.16	24.00
		64	32	22.11	22.10	22.27	24.00
		128	0	21.14	21.19	21.27	23.00
	DFT-s-OFDM 16QAM	1	1	21.67	21.35	21.79	22.50
		64	32	21.40	21.40	21.50	22.50
	DFT-s-OFDM 64QAM	1	1	19.69	19.77	19.79	21.50
		64	32	20.21	19.99	19.87	21.50
	DFT-s-OFDM 256QAM	1	1	17.69	17.67	18.17	19.50
		64	32	17.89	17.95	17.75	19.50
	CP-OFDM QPSK	1	1	22.69	22.63	22.33	23.00
	CP-OFDM 16QAM	1	1	21.24	21.30	21.04	22.00
	CP-OFDM 64QAM	1	1	19.85	19.83	19.75	20.50
	CP-OFDM 256QAM	1	1	16.77	16.49	16.49	17.50
Bandwidth	Modulation	RB allocation	offset	Channel/Frequency(MHz)			Tune-up
				373000/1865	376500/1882.5	380000/1900	
30MHz	DFT-s-OFDM BPSK	1	1	22.31	22.49	22.33	24.00
		1	158	22.32	22.34	22.10	24.00
		80	40	22.23	22.22	22.21	24.00
		160	0	21.20	21.31	21.05	23.00
	DFT-s-OFDM QPSK	1	1	22.23	22.49	22.39	24.00
		1	158	22.26	22.22	22.02	24.00
		80	40	22.23	22.20	22.35	24.00
		160	0	21.40	21.39	21.23	23.00
	DFT-s-OFDM 16QAM	1	1	21.63	21.39	21.65	22.50
		80	40	21.26	21.20	21.22	22.50
	DFT-s-OFDM 64QAM	1	1	19.61	19.85	20.07	21.50
		80	40	20.03	19.83	19.85	21.50
	DFT-s-OFDM 256QAM	1	1	17.73	17.91	17.85	19.50
		80	40	17.95	17.89	17.71	19.50