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Accreditation No.: SCS 0108

Client **PC Test** **Certificate No: ES3-3209_Mar17**

CALIBRATION CERTIFICATE

Object ES3DV3 - SN:3209

Calibration procedure(s) QA CAL-01.v9, QA CAL-23.v5, QA CAL-25.v6
Calibration procedure for dosimetric E-field probes

BN✓
03-27-2017

Calibration date: March 14, 2017

This calibration certificate documents the traceability to national standards, which realize the physical units of measurements (SI).
The measurements and the uncertainties with confidence probability are given on the following pages and are part of the certificate.

All calibrations have been conducted in the closed laboratory facility: environment temperature (22 ± 3)°C and humidity < 70%.

Calibration Equipment used (M&TE critical for calibration)

Primary Standards	ID	Cal Date (Certificate No.)	Scheduled Calibration
Power meter NRP	SN: 104778	06-Apr-16 (No. 217-02288/02289)	Apr-17
Power sensor NRP-Z91	SN: 103244	06-Apr-16 (No. 217-02288)	Apr-17
Power sensor NRP-Z91	SN: 103245	06-Apr-16 (No. 217-02289)	Apr-17
Reference 20 dB Attenuator	SN: S5277 (20x)	05-Apr-16 (No. 217-02293)	Apr-17
Reference Probe ES3DV2	SN: 3013	31-Dec-16 (No. ES3-3013_Dec16)	Dec-17
DAE4	SN: 660	7-Dec-16 (No. DAE4-660_Dec16)	Dec-17
Secondary Standards	ID	Check Date (in house)	Scheduled Check
Power meter E4419B	SN: GB41293874	06-Apr-16 (in house check Jun-16)	In house check: Jun-18
Power sensor E4412A	SN: MY41498087	06-Apr-16 (in house check Jun-16)	In house check: Jun-18
Power sensor E4412A	SN: 000110210	06-Apr-16 (in house check Jun-16)	In house check: Jun-18
RF generator HP 8648C	SN: US3642U01700	04-Aug-99 (in house check Jun-16)	In house check: Jun-18
Network Analyzer HP 8753E	SN: US37390585	18-Oct-01 (in house check Oct-16)	In house check: Oct-17

	Name	Function	Signature
Calibrated by:	**Jeton Kastrati**	**Laboratory Technician**	
Approved by:	**Katja Pokovic**	**Technical Manager**	

Issued: March 16, 2017

Glossary:

TSL	tissue simulating liquid
NORMx,y,z	sensitivity in free space
ConvF	sensitivity in TSL / NORMx,y,z
DCP	diode compression point
CF	crest factor (1/duty_cycle) of the RF signal
A, B, C, D	modulation dependent linearization parameters
Polarization φ	φ rotation around probe axis
Polarization ϑ	ϑ rotation around an axis that is in the plane normal to probe axis (at measurement center), i.e., ϑ = 0 is normal to probe axis
Connector Angle	information used in DASY system to align probe sensor X to the robot coordinate system

Calibration is Performed According to the Following Standards:

a) IEEE Std 1528-2013, "IEEE Recommended Practice for Determining the Peak Spatial-Averaged Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques", June 2013
b) IEC 62209-1, "Procedure to measure the Specific Absorption Rate (SAR) for hand-held devices used in close proximity to the ear (frequency range of 300 MHz to 3 GHz)", February 2005
c) IEC 62209-2, "Procedure to determine the Specific Absorption Rate (SAR) for wireless communication devices used in close proximity to the human body (frequency range of 30 MHz to 6 GHz)", March 2010
d) KDB 865664, "SAR Measurement Requirements for 100 MHz to 6 GHz"

Methods Applied and Interpretation of Parameters:

- *NORMx,y,z:* Assessed for E-field polarization ϑ = 0 (f ≤ 900 MHz in TEM-cell; f > 1800 MHz: R22 waveguide). NORMx,y,z are only intermediate values, i.e., the uncertainties of NORMx,y,z does not affect the E^2-field uncertainty inside TSL (see below *ConvF*).
- *NORM(f)x,y,z = NORMx,y,z * frequency_response* (see Frequency Response Chart). This linearization is implemented in DASY4 software versions later than 4.2. The uncertainty of the frequency response is included in the stated uncertainty of *ConvF*.
- *DCPx,y,z:* DCP are numerical linearization parameters assessed based on the data of power sweep with CW signal (no uncertainty required). DCP does not depend on frequency nor media.
- *PAR:* PAR is the Peak to Average Ratio that is not calibrated but determined based on the signal characteristics
- *Ax,y,z; Bx,y,z; Cx,y,z; Dx,y,z; VRx,y,z: A, B, C, D* are numerical linearization parameters assessed based on the data of power sweep for specific modulation signal. The parameters do not depend on frequency nor media. *VR* is the maximum calibration range expressed in RMS voltage across the diode.
- *ConvF and Boundary Effect Parameters:* Assessed in flat phantom using E-field (or Temperature Transfer Standard for f ≤ 800 MHz) and inside waveguide using analytical field distributions based on power measurements for f > 800 MHz. The same setups are used for assessment of the parameters applied for boundary compensation (alpha, depth) of which typical uncertainty values are given. These parameters are used in DASY4 software to improve probe accuracy close to the boundary. The sensitivity in TSL corresponds to *NORMx,y,z * ConvF* whereby the uncertainty corresponds to that given for *ConvF*. A frequency dependent *ConvF* is used in DASY version 4.4 and higher which allows extending the validity from ± 50 MHz to ± 100 MHz.
- *Spherical isotropy (3D deviation from isotropy)*: in a field of low gradients realized using a flat phantom exposed by a patch antenna.
- *Sensor Offset*: The sensor offset corresponds to the offset of virtual measurement center from the probe tip (on probe axis). No tolerance required.
- *Connector Angle*: The angle is assessed using the information gained by determining the *NORMx* (no uncertainty required).

Probe ES3DV3

SN:3209

Manufactured: October 14, 2008
Calibrated: March 14, 2017

Calibrated for DASY/EASY Systems
(Note: non-compatible with DASY2 system!)

DASY/EASY - Parameters of Probe: ES3DV3 - SN:3209

Basic Calibration Parameters

	Sensor X	Sensor Y	Sensor Z	Unc (k=2)
Norm ($\mu V/(V/m)^2$)[A]	1.31	1.28	1.10	± 10.1 %
DCP (mV)[B]	98.7	100.9	101.0	

Modulation Calibration Parameters

UID	Communication System Name		A dB	B dB√μV	C	D dB	VR mV	Unc[E] (k=2)
0	CW	X	0.0	0.0	1.0	0.00	185.7	±3.5 %
		Y	0.0	0.0	1.0		188.4	
		Z	0.0	0.0	1.0		174.0	

Note: For details on UID parameters see Appendix.

Sensor Model Parameters

	C1 fF	C2 fF	α V^{-1}	T1 $ms.V^{-2}$	T2 $ms.V^{-1}$	T3 ms	T4 V^{-2}	T5 V^{-1}	T6
X	55.02	400.2	36.4	24.81	1.139	5.1	1.332	0.294	1.012
Y	53.76	389.5	36.01	25.47	1.401	5.1	1.486	0.333	1.011
Z	54.22	392	35.92	24.25	1.184	5.1	1.305	0.356	1.012

The reported uncertainty of measurement is stated as the standard uncertainty of measurement multiplied by the coverage factor k=2, which for a normal distribution corresponds to a coverage probability of approximately 95%.

[A] The uncertainties of Norm X,Y,Z do not affect the E^2-field uncertainty inside TSL (see Pages 5 and 6).
[B] Numerical linearization parameter: uncertainty not required.
[E] Uncertainty is determined using the max. deviation from linear response applying rectangular distribution and is expressed for the square of the field value.

DASY/EASY - Parameters of Probe: ES3DV3 - SN:3209

Calibration Parameter Determined in Head Tissue Simulating Media

f (MHz) [C]	Relative Permittivity [F]	Conductivity (S/m) [F]	ConvF X	ConvF Y	ConvF Z	Alpha [G]	Depth [G] (mm)	Unc (k=2)
750	41.9	0.89	6.76	6.76	6.76	0.80	1.17	± 12.0 %
835	41.5	0.90	6.36	6.36	6.36	0.63	1.31	± 12.0 %
1750	40.1	1.37	5.50	5.50	5.50	0.74	1.16	± 12.0 %
1900	40.0	1.40	5.31	5.31	5.31	0.63	1.30	± 12.0 %
2300	39.5	1.67	4.92	4.92	4.92	0.80	1.20	± 12.0 %
2450	39.2	1.80	4.72	4.72	4.72	0.71	1.33	± 12.0 %
2600	39.0	1.96	4.53	4.53	4.53	0.69	1.37	± 12.0 %

[C] Frequency validity above 300 MHz of ± 100 MHz only applies for DASY v4.4 and higher (see Page 2), else it is restricted to ± 50 MHz. The uncertainty is the RSS of the ConvF uncertainty at calibration frequency and the uncertainty for the indicated frequency band. Frequency validity below 300 MHz is ± 10, 25, 40, 50 and 70 MHz for ConvF assessments at 30, 64, 128, 150 and 220 MHz respectively. Above 5 GHz frequency validity can be extended to ± 110 MHz.

[F] At frequencies below 3 GHz, the validity of tissue parameters (ε and σ) can be relaxed to ± 10% if liquid compensation formula is applied to measured SAR values. At frequencies above 3 GHz, the validity of tissue parameters (ε and σ) is restricted to ± 5%. The uncertainty is the RSS of the ConvF uncertainty for indicated target tissue parameters.

[G] Alpha/Depth are determined during calibration. SPEAG warrants that the remaining deviation due to the boundary effect after compensation is always less than ± 1% for frequencies below 3 GHz and below ± 2% for frequencies between 3-6 GHz at any distance larger than half the probe tip diameter from the boundary.

DASY/EASY - Parameters of Probe: ES3DV3 - SN:3209

Calibration Parameter Determined in Body Tissue Simulating Media

f (MHz) [C]	Relative Permittivity [F]	Conductivity (S/m) [F]	ConvF X	ConvF Y	ConvF Z	Alpha [G]	Depth [G] (mm)	Unc (k=2)
750	55.5	0.96	6.44	6.44	6.44	0.80	1.17	± 12.0 %
835	55.2	0.97	6.36	6.36	6.36	0.80	1.20	± 12.0 %
1750	53.4	1.49	5.13	5.13	5.13	0.51	1.53	± 12.0 %
1900	53.3	1.52	4.93	4.93	4.93	0.50	1.59	± 12.0 %
2300	52.9	1.81	4.62	4.62	4.62	0.80	1.24	± 12.0 %
2450	52.7	1.95	4.48	4.48	4.48	0.80	1.24	± 12.0 %
2600	52.5	2.16	4.26	4.26	4.26	0.80	1.20	± 12.0 %

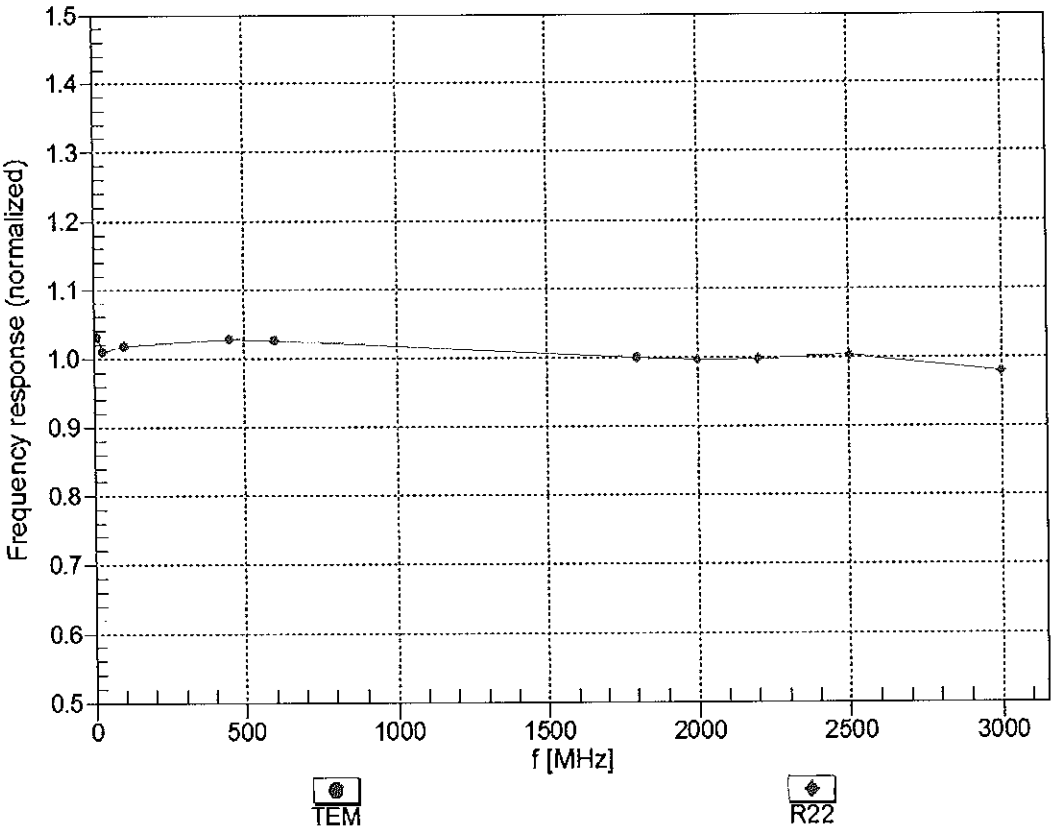
[C] Frequency validity above 300 MHz of ± 100 MHz only applies for DASY v4.4 and higher (see Page 2), else it is restricted to ± 50 MHz. The uncertainty is the RSS of the ConvF uncertainty at calibration frequency and the uncertainty for the indicated frequency band. Frequency validity below 300 MHz is ± 10, 25, 40, 50 and 70 MHz for ConvF assessments at 30, 64, 128, 150 and 220 MHz respectively. Above 5 GHz frequency validity can be extended to ± 110 MHz.

[F] At frequencies below 3 GHz, the validity of tissue parameters (ε and σ) can be relaxed to ± 10% if liquid compensation formula is applied to measured SAR values. At frequencies above 3 GHz, the validity of tissue parameters (ε and σ) is restricted to ± 5%. The uncertainty is the RSS of the ConvF uncertainty for indicated target tissue parameters.

[G] Alpha/Depth are determined during calibration. SPEAG warrants that the remaining deviation due to the boundary effect after compensation is always less than ± 1% for frequencies below 3 GHz and below ± 2% for frequencies between 3-6 GHz at any distance larger than half the probe tip diameter from the boundary.

Frequency Response of E-Field

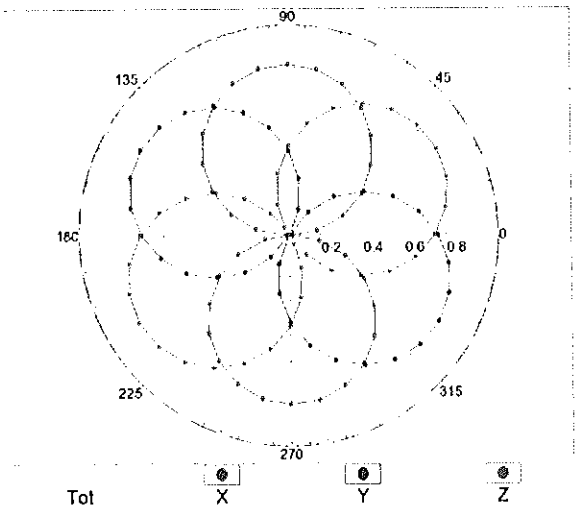
(TEM-Cell:ifi110 EXX, Waveguide: R22)



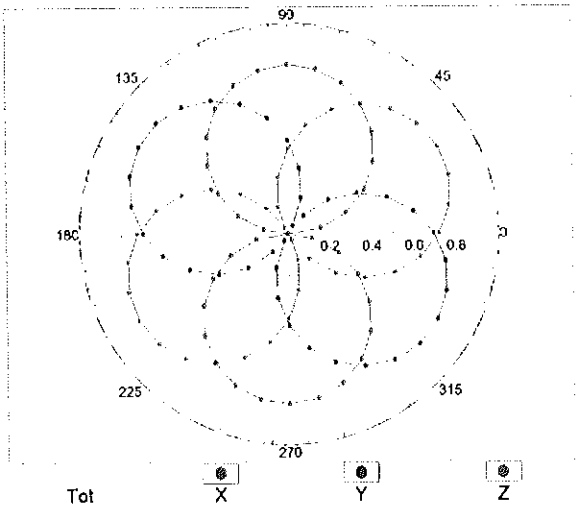
Uncertainty of Frequency Response of E-field: ± 6.3% (k=2)

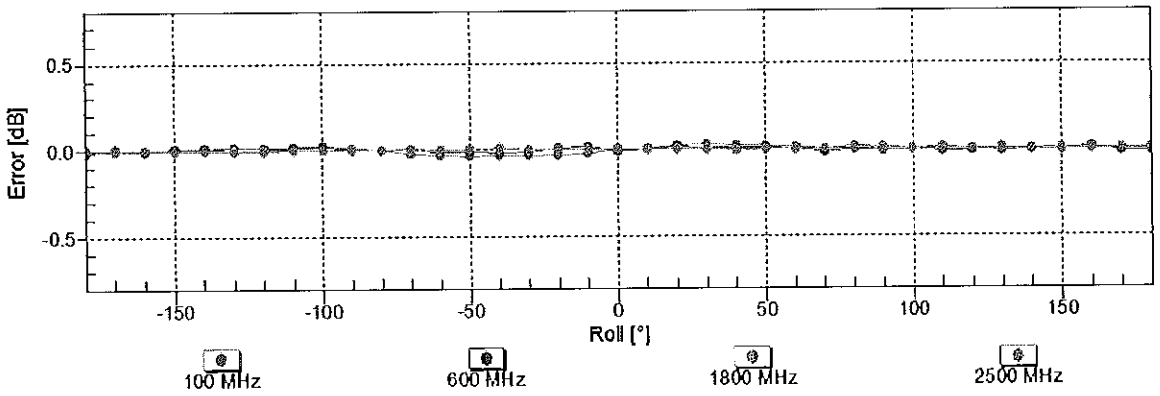
Receiving Pattern (ϕ), ϑ = 0°

f=600 MHz,TEM



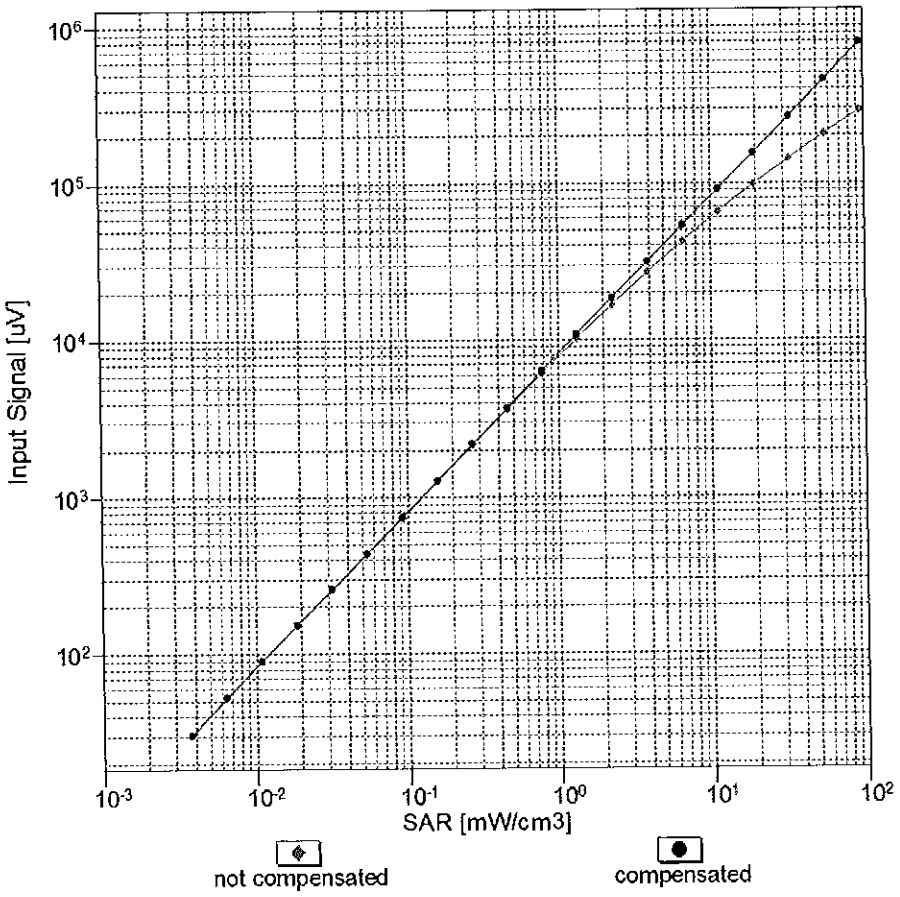
f=1800 MHz,R22

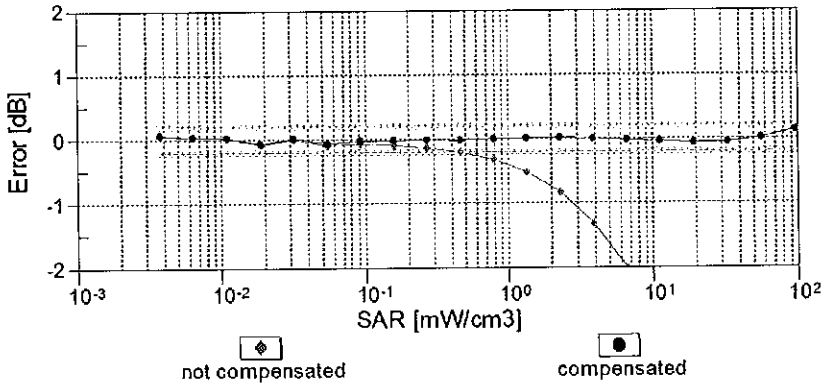




Uncertainty of Axial Isotropy Assessment: ± 0.5% (k=2)

Dynamic Range f(SAR_{head})
(TEM cell , f_{eval}= 1900 MHz)

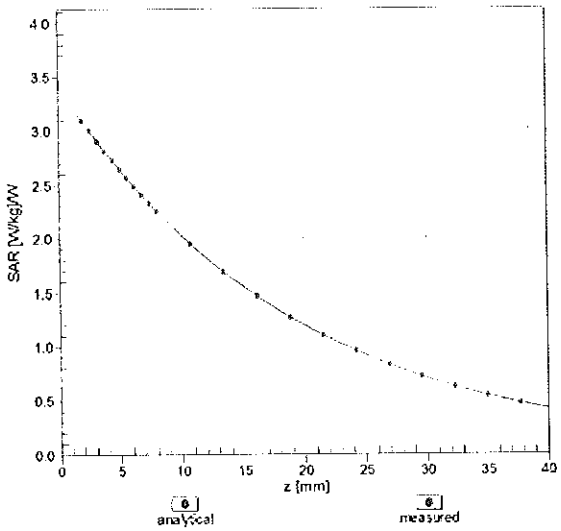




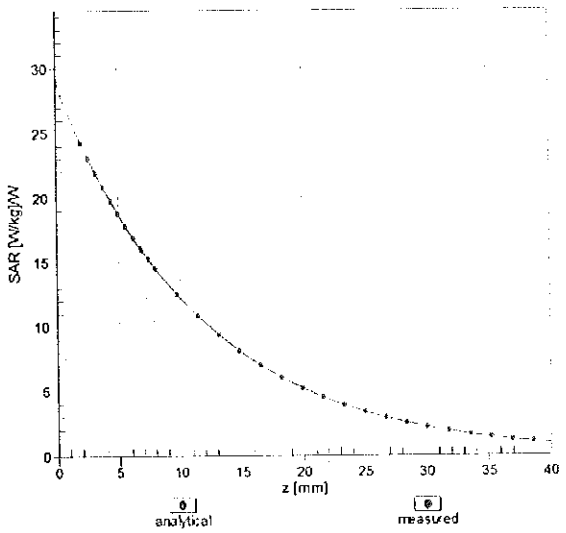
Uncertainty of Linearity Assessment: ± 0.6% (k=2)

Conversion Factor Assessment

f = 835 MHz,WGLS R9 (H_convF)

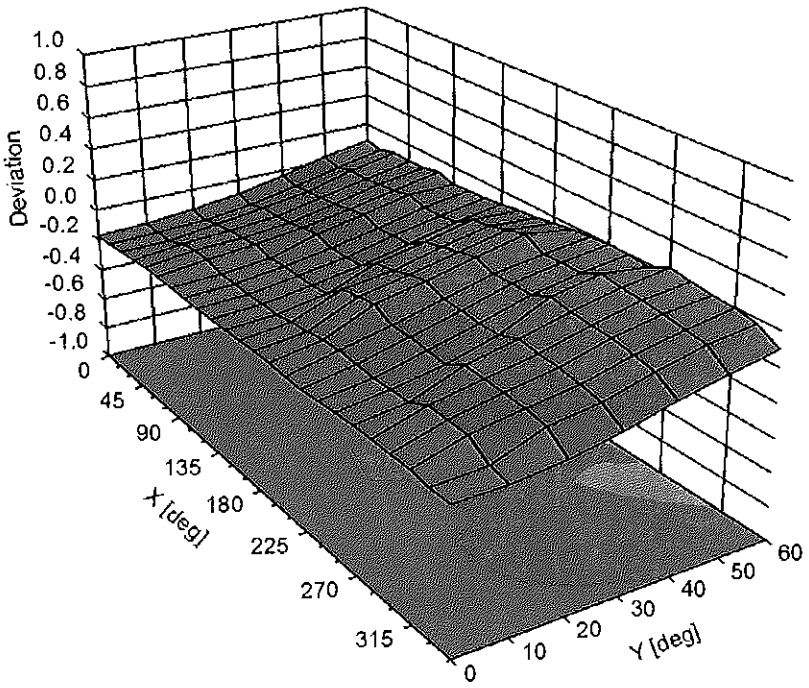


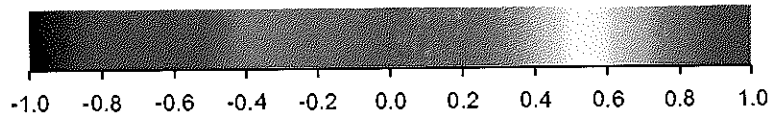
f = 1900 MHz,WGLS R22 (H_convF)



Deviation from Isotropy in Liquid

Error (ϕ, ϑ), f = 900 MHz





Uncertainty of Spherical Isotropy Assessment: ± 2.6% (k=2)

DASY/EASY - Parameters of Probe: ES3DV3 - SN:3209

Other Probe Parameters

Sensor Arrangement	Triangular
Connector Angle (°)	-39.9
Mechanical Surface Detection Mode	enabled
Optical Surface Detection Mode	disabled
Probe Overall Length	337 mm
Probe Body Diameter	10 mm
Tip Length	10 mm
Tip Diameter	4 mm
Probe Tip to Sensor X Calibration Point	2 mm
Probe Tip to Sensor Y Calibration Point	2 mm
Probe Tip to Sensor Z Calibration Point	2 mm
Recommended Measurement Distance from Surface	3 mm

Appendix: Modulation Calibration Parameters

UID	Communication System Name		A dB	B dB√μV	C	D dB	VR mV	Max Unc[E] (k=2)
0	CW	X	0.00	0.00	1.00	0.00	185.7	± 3.5 %
		Y	0.00	0.00	1.00		188.4	
		Z	0.00	0.00	1.00		174.0	
10010-CAA	SAR Validation (Square, 100ms, 10ms)	X	16.56	89.85	21.07	10.00	25.0	± 9.6 %
		Y	14.18	87.91	20.84		25.0	
		Z	16.46	89.94	21.19		25.0	
10011-CAB	UMTS-FDD (WCDMA)	X	1.31	71.34	17.73	0.00	150.0	± 9.6 %
		Y	1.07	67.38	15.30		150.0	
		Z	1.14	68.61	16.10		150.0	
10012-CAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps)	X	1.33	65.77	16.71	0.41	150.0	± 9.6 %
		Y	1.28	64.69	15.69		150.0	
		Z	1.29	65.03	16.02		150.0	
10013-CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps)	X	5.11	67.29	17.66	1.46	150.0	± 9.6 %
		Y	5.08	67.12	17.41		150.0	
		Z	5.08	67.16	17.48		150.0	
10021-DAC	GSM-FDD (TDMA, GMSK)	X	100.00	120.30	31.44	9.39	50.0	± 9.6 %
		Y	100.00	121.02	32.06		50.0	
		Z	100.00	120.74	31.69		50.0	
10023-DAC	GPRS-FDD (TDMA, GMSK, TN 0)	X	100.00	120.21	31.45	9.57	50.0	± 9.6 %
		Y	100.00	120.94	32.08		50.0	
		Z	100.00	120.65	31.69		50.0	
10024-DAC	GPRS-FDD (TDMA, GMSK, TN 0-1)	X	100.00	118.31	29.49	6.56	60.0	± 9.6 %
		Y	100.00	118.38	29.74		60.0	
		Z	100.00	118.51	29.61		60.0	
10025-DAC	EDGE-FDD (TDMA, 8PSK, TN 0)	X	79.79	164.11	61.22	12.57	50.0	± 9.6 %
		Y	21.03	115.56	45.00		50.0	
		Z	21.02	118.33	46.74		50.0	
10026-DAC	EDGE-FDD (TDMA, 8PSK, TN 0-1)	X	56.10	137.19	47.52	9.56	60.0	± 9.6 %
		Y	22.58	110.81	38.90		60.0	
		Z	30.67	120.33	42.31		60.0	
10027-DAC	GPRS-FDD (TDMA, GMSK, TN 0-1-2)	X	100.00	118.60	28.85	4.80	80.0	± 9.6 %
		Y	100.00	117.96	28.73		80.0	
		Z	100.00	118.50	28.81		80.0	
10028-DAC	GPRS-FDD (TDMA, GMSK, TN 0-1-2-3)	X	100.00	120.37	28.91	3.55	100.0	± 9.6 %
		Y	100.00	118.79	28.36		100.0	
		Z	100.00	119.82	28.67		100.0	
10029-DAC	EDGE-FDD (TDMA, 8PSK, TN 0-1-2)	X	18.11	107.13	37.13	7.80	80.0	± 9.6 %
		Y	12.22	95.66	32.56		80.0	
		Z	13.69	99.54	34.27		80.0	
10030-CAA	IEEE 802.15.1 Bluetooth (GFSK, DH1)	X	100.00	117.23	28.52	5.30	70.0	± 9.6 %
		Y	100.00	116.90	28.56		70.0	
		Z	100.00	117.22	28.54		70.0	
10031-CAA	IEEE 802.15.1 Bluetooth (GFSK, DH3)	X	100.00	124.45	29.19	1.88	100.0	± 9.6 %
		Y	100.00	120.00	27.42		100.0	
		Z	100.00	122.22	28.25		100.0	

10032-CAA	IEEE 802.15.1 Bluetooth (GFSK, DH5)	X	100.00	134.81	32.39	1.17	100.0	± 9.6 %
		Y	100.00	125.40	28.63		100.0	
		Z	100.00	129.61	30.26		100.0	
10033-CAA	IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH1)	X	100.00	129.27	35.65	5.30	70.0	± 9.6 %
		Y	49.54	115.99	32.11		70.0	
		Z	90.11	126.99	34.97		70.0	
10034-CAA	IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH3)	X	16.84	102.10	27.13	1.88	100.0	± 9.6 %
		Y	7.82	89.20	22.87		100.0	
		Z	9.48	92.81	24.19		100.0	
10035-CAA	IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH5)	X	6.67	89.65	23.23	1.17	100.0	± 9.6 %
		Y	3.84	80.35	19.62		100.0	
		Z	4.40	82.90	20.73		100.0	
10036-CAA	IEEE 802.15.1 Bluetooth (8-DPSK, DH1)	X	100.00	129.52	35.77	5.30	70.0	± 9.6 %
		Y	85.34	125.22	34.45		70.0	
		Z	100.00	128.99	35.51		70.0	
10037-CAA	IEEE 802.15.1 Bluetooth (8-DPSK, DH3)	X	15.79	101.19	26.84	1.88	100.0	± 9.6 %
		Y	7.32	88.29	22.54		100.0	
		Z	8.88	91.91	23.88		100.0	
10038-CAA	IEEE 802.15.1 Bluetooth (8-DPSK, DH5)	X	6.96	90.64	23.66	1.17	100.0	± 9.6 %
		Y	3.95	81.00	19.95		100.0	
		Z	4.52	83.60	21.07		100.0	
10039-CAB	CDMA2000 (1xRTT, RC1)	X	2.68	77.46	18.66	0.00	150.0	± 9.6 %
		Y	1.87	71.76	15.92		150.0	
		Z	2.09	73.47	16.81		150.0	
10042-CAB	IS-54 / IS-136 FDD (TDMA/FDM, PI/4-DQPSK, Halfrate)	X	100.00	116.28	28.75	7.78	50.0	± 9.6 %
		Y	100.00	116.68	29.16		50.0	
		Z	100.00	116.58	28.91		50.0	
10044-CAA	IS-91/EIA/TIA-553 FDD (FDMA, FM)	X	0.01	103.03	6.46	0.00	150.0	± 9.6 %
		Y	0.01	95.61	0.65		150.0	
		Z	0.02	122.64	11.17		150.0	
10048-CAA	DECT (TDD, TDMA/FDM, GFSK, Full Slot, 24)	X	100.00	122.27	33.78	13.80	25.0	± 9.6 %
		Y	88.36	120.80	33.95		25.0	
		Z	100.00	122.70	34.06		25.0	
10049-CAA	DECT (TDD, TDMA/FDM, GFSK, Double Slot, 12)	X	100.00	120.46	31.88	10.79	40.0	± 9.6 %
		Y	100.00	121.38	32.63		40.0	
		Z	100.00	120.92	32.14		40.0	
10056-CAA	UMTS-TDD (TD-SCDMA, 1.28 Mcps)	X	64.71	119.17	33.88	9.03	50.0	± 9.6 %
		Y	31.81	105.88	30.24		50.0	
		Z	48.79	114.06	32.52		50.0	
10058-DAC	EDGE-FDD (TDMA, 8PSK, TN 0-1-2-3)	X	10.31	93.78	31.68	6.55	100.0	± 9.6 %
		Y	8.35	87.44	28.76		100.0	
		Z	8.74	89.37	29.77		100.0	
10059-CAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps)	X	1.47	67.98	17.85	0.61	110.0	± 9.6 %
		Y	1.41	66.57	16.67		110.0	
		Z	1.42	66.96	17.03		110.0	
10060-CAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps)	X	100.00	138.63	36.70	1.30	110.0	± 9.6 %
		Y	100.00	134.16	34.76		110.0	
		Z	100.00	136.34	35.67		110.0	

10061-CAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps)	X	21.25	113.68	33.06	2.04	110.0	± 9.6 %
		Y	8.67	95.89	27.33		110.0	
		Z	10.38	100.06	28.88		110.0	
10062-CAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps)	X	4.87	67.16	16.99	0.49	100.0	± 9.6 %
		Y	4.83	66.94	16.72		100.0	
		Z	4.84	67.02	16.80		100.0	
10063-CAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps)	X	4.90	67.29	17.12	0.72	100.0	± 9.6 %
		Y	4.86	67.08	16.85		100.0	
		Z	4.87	67.15	16.93		100.0	
10064-CAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps)	X	5.22	67.61	17.38	0.86	100.0	± 9.6 %
		Y	5.17	67.40	17.11		100.0	
		Z	5.19	67.47	17.19		100.0	
10065-CAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps)	X	5.10	67.59	17.53	1.21	100.0	± 9.6 %
		Y	5.06	67.39	17.27		100.0	
		Z	5.07	67.45	17.34		100.0	
10066-CAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps)	X	5.14	67.68	17.74	1.46	100.0	± 9.6 %
		Y	5.10	67.48	17.48		100.0	
		Z	5.11	67.54	17.56		100.0	
10067-CAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps)	X	5.44	67.85	18.21	2.04	100.0	± 9.6 %
		Y	5.41	67.66	17.95		100.0	
		Z	5.41	67.71	18.02		100.0	
10068-CAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps)	X	5.54	68.11	18.56	2.55	100.0	± 9.6 %
		Y	5.51	67.91	18.28		100.0	
		Z	5.51	67.95	18.36		100.0	
10069-CAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps)	X	5.62	68.08	18.75	2.67	100.0	± 9.6 %
		Y	5.59	67.88	18.46		100.0	
		Z	5.59	67.92	18.55		100.0	
10071-CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 9 Mbps)	X	5.23	67.47	18.03	1.99	100.0	± 9.6 %
		Y	5.20	67.30	17.78		100.0	
		Z	5.20	67.34	17.85		100.0	
10072-CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 12 Mbps)	X	5.25	67.96	18.33	2.30	100.0	± 9.6 %
		Y	5.23	67.77	18.07		100.0	
		Z	5.22	67.81	18.14		100.0	
10073-CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 18 Mbps)	X	5.35	68.24	18.74	2.83	100.0	± 9.6 %
		Y	5.33	68.06	18.47		100.0	
		Z	5.32	68.08	18.54		100.0	
10074-CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 24 Mbps)	X	5.35	68.21	18.96	3.30	100.0	± 9.6 %
		Y	5.34	68.06	18.69		100.0	
		Z	5.32	68.06	18.76		100.0	
10075-CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 36 Mbps)	X	5.45	68.57	19.42	3.82	90.0	± 9.6 %
		Y	5.44	68.40	19.14		90.0	
		Z	5.42	68.40	19.20		90.0	
10076-CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 48 Mbps)	X	5.44	68.33	19.53	4.15	90.0	± 9.6 %
		Y	5.45	68.18	19.25		90.0	
		Z	5.42	68.16	19.32		90.0	
10077-CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 54 Mbps)	X	5.47	68.40	19.63	4.30	90.0	± 9.6 %
		Y	5.48	68.26	19.35		90.0	
		Z	5.45	68.24	19.42		90.0	

10081-CAB	CDMA2000 (1xRTT, RC3)	X	1.23	71.08	15.82	0.00	150.0	± 9.6 %
		Y	0.91	66.28	13.04		150.0	
		Z	0.99	67.64	13.91		150.0	
10082-CAB	IS-54 / IS-136 FDD (TDMA/FDM, PI/4-DQPSK, Fullrate)	X	1.44	62.24	7.11	4.77	80.0	± 9.6 %
		Y	1.55	62.44	7.40		80.0	
		Z	1.44	62.17	7.10		80.0	
10090-DAC	GPRS-FDD (TDMA, GMSK, TN 0-4)	X	100.00	118.36	29.54	6.56	60.0	± 9.6 %
		Y	100.00	118.45	29.79		60.0	
		Z	100.00	118.56	29.65		60.0	
10097-CAB	UMTS-FDD (HSDPA)	X	2.01	69.10	16.79	0.00	150.0	± 9.6 %
		Y	1.86	67.49	15.67		150.0	
		Z	1.91	68.05	16.06		150.0	
10098-CAB	UMTS-FDD (HSUPA, Subtest 2)	X	1.98	69.12	16.80	0.00	150.0	± 9.6 %
		Y	1.82	67.46	15.64		150.0	
		Z	1.87	68.03	16.04		150.0	
10099-DAC	EDGE-FDD (TDMA, 8PSK, TN 0-4)	X	56.10	137.12	47.49	9.56	60.0	± 9.6 %
		Y	22.61	110.79	38.89		60.0	
		Z	30.74	120.33	42.30		60.0	
10100-CAC	LTE-FDD (SC-FDMA, 100% RB, 20 MHz, QPSK)	X	3.46	71.82	17.60	0.00	150.0	± 9.6 %
		Y	3.20	70.34	16.69		150.0	
		Z	3.29	70.87	17.01		150.0	
10101-CAC	LTE-FDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM)	X	3.44	68.35	16.55	0.00	150.0	± 9.6 %
		Y	3.33	67.66	16.01		150.0	
		Z	3.37	67.92	16.20		150.0	
10102-CAC	LTE-FDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM)	X	3.53	68.21	16.59	0.00	150.0	± 9.6 %
		Y	3.43	67.60	16.09		150.0	
		Z	3.46	67.83	16.26		150.0	
10103-CAC	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, QPSK)	X	8.71	80.18	22.43	3.98	65.0	± 9.6 %
		Y	8.63	79.54	22.01		65.0	
		Z	8.72	80.06	22.29		65.0	
10104-CAC	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM)	X	8.41	78.26	22.59	3.98	65.0	± 9.6 %
		Y	8.16	77.17	21.90		65.0	
		Z	8.16	77.51	22.15		65.0	
10105-CAC	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM)	X	7.75	76.58	22.19	3.98	65.0	± 9.6 %
		Y	7.29	74.89	21.22		65.0	
		Z	7.40	75.53	21.60		65.0	
10108-CAD	LTE-FDD (SC-FDMA, 100% RB, 10 MHz, QPSK)	X	3.04	71.09	17.48	0.00	150.0	± 9.6 %
		Y	2.81	69.59	16.53		150.0	
		Z	2.89	70.12	16.86		150.0	
10109-CAD	LTE-FDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM)	X	3.10	68.24	16.51	0.00	150.0	± 9.6 %
		Y	2.98	67.47	15.91		150.0	
		Z	3.02	67.76	16.12		150.0	
10110-CAD	LTE-FDD (SC-FDMA, 100% RB, 5 MHz, QPSK)	X	2.51	70.39	17.27	0.00	150.0	± 9.6 %
		Y	2.30	68.71	16.17		150.0	
		Z	2.37	69.29	16.55		150.0	
10111-CAD	LTE-FDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM)	X	2.80	68.98	16.82	0.00	150.0	± 9.6 %
		Y	2.67	68.08	16.14		150.0	
		Z	2.72	68.39	16.37		150.0	

10112-CAD	LTE-FDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM)	X	3.21	68.13	16.51	0.00	150.0	± 9.6 %
		Y	3.11	67.44	15.96		150.0	
		Z	3.14	67.70	16.15		150.0	
10113-CAD	LTE-FDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM)	X	2.94	69.00	16.88	0.00	150.0	± 9.6 %
		Y	2.83	68.20	16.26		150.0	
		Z	2.87	68.48	16.47		150.0	
10114-CAB	IEEE 802.11n (HT Greenfield, 13.5 Mbps, BPSK)	X	5.29	67.60	16.80	0.00	150.0	± 9.6 %
		Y	5.23	67.37	16.54		150.0	
		Z	5.25	67.46	16.62		150.0	
10115-CAB	IEEE 802.11n (HT Greenfield, 81 Mbps, 16-QAM)	X	5.64	67.91	16.97	0.00	150.0	± 9.6 %
		Y	5.58	67.65	16.70		150.0	
		Z	5.60	67.75	16.78		150.0	
10116-CAB	IEEE 802.11n (HT Greenfield, 135 Mbps, 64-QAM)	X	5.42	67.88	16.87	0.00	150.0	± 9.6 %
		Y	5.35	67.63	16.60		150.0	
		Z	5.37	67.72	16.68		150.0	
10117-CAB	IEEE 802.11n (HT Mixed, 13.5 Mbps, BPSK)	X	5.27	67.51	16.78	0.00	150.0	± 9.6 %
		Y	5.21	67.27	16.51		150.0	
		Z	5.23	67.37	16.60		150.0	
10118-CAB	IEEE 802.11n (HT Mixed, 81 Mbps, 16-QAM)	X	5.75	68.18	17.12	0.00	150.0	± 9.6 %
		Y	5.68	67.91	16.83		150.0	
		Z	5.70	68.00	16.92		150.0	
10119-CAB	IEEE 802.11n (HT Mixed, 135 Mbps, 64-QAM)	X	5.39	67.82	16.85	0.00	150.0	± 9.6 %
		Y	5.33	67.57	16.58		150.0	
		Z	5.35	67.66	16.66		150.0	
10140-CAC	LTE-FDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM)	X	3.57	68.23	16.51	0.00	150.0	± 9.6 %
		Y	3.47	67.61	16.01		150.0	
		Z	3.51	67.84	16.19		150.0	
10141-CAC	LTE-FDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM)	X	3.69	68.24	16.63	0.00	150.0	± 9.6 %
		Y	3.59	67.69	16.17		150.0	
		Z	3.63	67.89	16.33		150.0	
10142-CAD	LTE-FDD (SC-FDMA, 100% RB, 3 MHz, QPSK)	X	2.30	70.61	17.13	0.00	150.0	± 9.6 %
		Y	2.07	68.65	15.88		150.0	
		Z	2.15	69.31	16.31		150.0	
10143-CAD	LTE-FDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM)	X	2.70	69.93	16.73	0.00	150.0	± 9.6 %
		Y	2.53	68.73	15.89		150.0	
		Z	2.59	69.14	16.18		150.0	
10144-CAD	LTE-FDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM)	X	2.50	67.93	15.31	0.00	150.0	± 9.6 %
		Y	2.35	66.79	14.47		150.0	
		Z	2.40	67.20	14.77		150.0	
10145-CAD	LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK)	X	1.61	68.59	14.32	0.00	150.0	± 9.6 %
		Y	1.36	65.99	12.68		150.0	
		Z	1.44	66.83	13.25		150.0	
10146-CAD	LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM)	X	4.12	76.15	17.00	0.00	150.0	± 9.6 %
		Y	3.13	71.87	14.86		150.0	
		Z	3.61	74.04	16.00		150.0	
10147-CAD	LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM)	X	5.91	81.17	19.01	0.00	150.0	± 9.6 %
		Y	4.21	75.86	16.64		150.0	
		Z	5.05	78.62	17.93		150.0	

10149-CAC	LTE-FDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM)	X	3.10	68.30	16.55	0.00	150.0	± 9.6 %
		Y	2.99	67.53	15.95		150.0	
		Z	3.03	67.81	16.16		150.0	
10150-CAC	LTE-FDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM)	X	3.22	68.17	16.55	0.00	150.0	± 9.6 %
		Y	3.11	67.49	16.00		150.0	
		Z	3.15	67.74	16.19		150.0	
10151-CAC	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, QPSK)	X	9.92	84.00	24.01	3.98	65.0	± 9.6 %
		Y	9.28	82.23	23.13		65.0	
		Z	9.42	82.88	23.47		65.0	
10152-CAC	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM)	X	8.12	78.81	22.58	3.98	65.0	± 9.6 %
		Y	7.79	77.46	21.77		65.0	
		Z	7.82	77.90	22.06		65.0	
10153-CAC	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM)	X	8.47	79.51	23.20	3.98	65.0	± 9.6 %
		Y	8.19	78.31	22.47		65.0	
		Z	8.19	78.67	22.72		65.0	
10154-CAD	LTE-FDD (SC-FDMA, 50% RB, 10 MHz, QPSK)	X	2.56	70.77	17.50	0.00	150.0	± 9.6 %
		Y	2.35	69.09	16.42		150.0	
		Z	2.42	69.67	16.79		150.0	
10155-CAD	LTE-FDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM)	X	2.80	68.99	16.83	0.00	150.0	± 9.6 %
		Y	2.68	68.09	16.15		150.0	
		Z	2.72	68.40	16.38		150.0	
10156-CAD	LTE-FDD (SC-FDMA, 50% RB, 5 MHz, QPSK)	X	2.18	71.04	17.14	0.00	150.0	± 9.6 %
		Y	1.92	68.76	15.73		150.0	
		Z	2.01	69.52	16.21		150.0	
10157-CAD	LTE-FDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM)	X	2.37	68.82	15.55	0.00	150.0	± 9.6 %
		Y	2.18	67.35	14.55		150.0	
		Z	2.25	67.86	14.90		150.0	
10158-CAD	LTE-FDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM)	X	2.95	69.05	16.92	0.00	150.0	± 9.6 %
		Y	2.83	68.25	16.30		150.0	
		Z	2.87	68.52	16.51		150.0	
10159-CAD	LTE-FDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM)	X	2.48	69.16	15.77	0.00	150.0	± 9.6 %
		Y	2.29	67.76	14.81		150.0	
		Z	2.35	68.25	15.15		150.0	
10160-CAC	LTE-FDD (SC-FDMA, 50% RB, 15 MHz, QPSK)	X	3.02	70.00	17.21	0.00	150.0	± 9.6 %
		Y	2.84	68.79	16.39		150.0	
		Z	2.90	69.20	16.66		150.0	
10161-CAC	LTE-FDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM)	X	3.11	68.10	16.49	0.00	150.0	± 9.6 %
		Y	3.01	67.41	15.93		150.0	
		Z	3.04	67.66	16.12		150.0	
10162-CAC	LTE-FDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM)	X	3.22	68.18	16.56	0.00	150.0	± 9.6 %
		Y	3.11	67.53	16.02		150.0	
		Z	3.15	67.77	16.21		150.0	
10166-CAD	LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK)	X	4.01	71.57	20.55	3.01	150.0	± 9.6 %
		Y	3.96	70.99	19.97		150.0	
		Z	4.00	71.24	20.22		150.0	
10167-CAD	LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM)	X	5.34	76.03	21.61	3.01	150.0	± 9.6 %
		Y	5.24	75.14	20.90		150.0	
		Z	5.29	75.43	21.17		150.0	

10168-CAD	LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM)	X	5.92	78.26	22.84	3.01	150.0	± 9.6 %
		Y	5.88	77.64	22.28		150.0	
		Z	5.88	77.74	22.45		150.0	
10169-CAC	LTE-FDD (SC-FDMA, 1 RB, 20 MHz, QPSK)	X	3.56	72.83	21.25	3.01	150.0	± 9.6 %
		Y	3.54	72.03	20.47		150.0	
		Z	3.57	72.33	20.78		150.0	
10170-CAC	LTE-FDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM)	X	5.89	82.52	24.81	3.01	150.0	± 9.6 %
		Y	5.80	81.18	23.85		150.0	
		Z	5.77	81.27	24.06		150.0	
10171-AAC	LTE-FDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM)	X	4.66	77.30	21.81	3.01	150.0	± 9.6 %
		Y	4.48	75.56	20.63		150.0	
		Z	4.56	76.10	21.06		150.0	
10172-CAC	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK)	X	100.00	142.02	43.67	6.02	65.0	± 9.6 %
		Y	29.14	113.86	35.69		65.0	
		Z	42.14	122.72	38.48		65.0	
10173-CAC	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM)	X	100.00	131.99	38.44	6.02	65.0	± 9.6 %
		Y	100.00	129.98	37.53		65.0	
		Z	100.00	131.24	38.14		65.0	
10174-CAC	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM)	X	100.00	130.14	37.45	6.02	65.0	± 9.6 %
		Y	100.00	127.86	36.41		65.0	
		Z	91.70	127.77	36.74		65.0	
10175-CAD	LTE-FDD (SC-FDMA, 1 RB, 10 MHz, QPSK)	X	3.52	72.50	21.01	3.01	150.0	± 9.6 %
		Y	3.49	71.66	20.21		150.0	
		Z	3.53	71.99	20.53		150.0	
10176-CAD	LTE-FDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM)	X	5.90	82.55	24.82	3.01	150.0	± 9.6 %
		Y	5.81	81.21	23.86		150.0	
		Z	5.78	81.30	24.07		150.0	
10177-CAF	LTE-FDD (SC-FDMA, 1 RB, 5 MHz, QPSK)	X	3.55	72.66	21.10	3.01	150.0	± 9.6 %
		Y	3.52	71.84	20.31		150.0	
		Z	3.56	72.16	20.62		150.0	
10178-CAD	LTE-FDD (SC-FDMA, 1 RB, 5 MHz, 16-QAM)	X	5.82	82.23	24.68	3.01	150.0	± 9.6 %
		Y	5.72	80.87	23.70		150.0	
		Z	5.70	80.99	23.93		150.0	
10179-CAD	LTE-FDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM)	X	5.25	79.82	23.19	3.01	150.0	± 9.6 %
		Y	5.07	78.18	22.08		150.0	
		Z	5.12	78.56	22.43		150.0	
10180-CAD	LTE-FDD (SC-FDMA, 1 RB, 5 MHz, 64-QAM)	X	4.65	77.21	21.76	3.01	150.0	± 9.6 %
		Y	4.46	75.45	20.57		150.0	
		Z	4.54	76.00	21.00		150.0	
10181-CAC	LTE-FDD (SC-FDMA, 1 RB, 15 MHz, QPSK)	X	3.55	72.65	21.10	3.01	150.0	± 9.6 %
		Y	3.51	71.82	20.30		150.0	
		Z	3.55	72.14	20.62		150.0	
10182-CAC	LTE-FDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM)	X	5.81	82.20	24.67	3.01	150.0	± 9.6 %
		Y	5.71	80.84	23.69		150.0	
		Z	5.69	80.96	23.92		150.0	
10183-AAB	LTE-FDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM)	X	4.64	77.18	21.74	3.01	150.0	± 9.6 %
		Y	4.45	75.42	20.56		150.0	
		Z	4.53	75.97	20.99		150.0	

10184-CAD	LTE-FDD (SC-FDMA, 1 RB, 3 MHz, QPSK)	X	3.56	72.69	21.12	3.01	150.0	± 9.6 %
		Y	3.53	71.87	20.33		150.0	
		Z	3.57	72.19	20.64		150.0	
10185-CAD	LTE-FDD (SC-FDMA, 1 RB, 3 MHz, 16-QAM)	X	5.84	82.29	24.71	3.01	150.0	± 9.6 %
		Y	5.74	80.94	23.73		150.0	
		Z	5.72	81.05	23.96		150.0	
10186-AAD	LTE-FDD (SC-FDMA, 1 RB, 3 MHz, 64-QAM)	X	4.67	77.27	21.78	3.01	150.0	± 9.6 %
		Y	4.47	75.51	20.59		150.0	
		Z	4.56	76.06	21.03		150.0	
10187-CAD	LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK)	X	3.57	72.74	21.18	3.01	150.0	± 9.6 %
		Y	3.54	71.92	20.39		150.0	
		Z	3.58	72.24	20.70		150.0	
10188-CAD	LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM)	X	6.08	83.16	25.13	3.01	150.0	± 9.6 %
		Y	6.00	81.87	24.19		150.0	
		Z	5.95	81.90	24.38		150.0	
10189-AAD	LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM)	X	4.80	77.83	22.09	3.01	150.0	± 9.6 %
		Y	4.61	76.08	20.92		150.0	
		Z	4.69	76.60	21.33		150.0	
10193-CAB	IEEE 802.11n (HT Greenfield, 6.5 Mbps, BPSK)	X	4.68	66.98	16.53	0.00	150.0	± 9.6 %
		Y	4.62	66.73	16.24		150.0	
		Z	4.64	66.83	16.34		150.0	
10194-CAB	IEEE 802.11n (HT Greenfield, 39 Mbps, 16-QAM)	X	4.86	67.32	16.65	0.00	150.0	± 9.6 %
		Y	4.81	67.07	16.37		150.0	
		Z	4.83	67.17	16.46		150.0	
10195-CAB	IEEE 802.11n (HT Greenfield, 65 Mbps, 64-QAM)	X	4.91	67.35	16.66	0.00	150.0	± 9.6 %
		Y	4.85	67.10	16.38		150.0	
		Z	4.87	67.20	16.47		150.0	
10196-CAB	IEEE 802.11n (HT Mixed, 6.5 Mbps, BPSK)	X	4.69	67.06	16.56	0.00	150.0	± 9.6 %
		Y	4.63	66.81	16.27		150.0	
		Z	4.65	66.91	16.37		150.0	
10197-CAB	IEEE 802.11n (HT Mixed, 39 Mbps, 16-QAM)	X	4.88	67.35	16.66	0.00	150.0	± 9.6 %
		Y	4.82	67.09	16.38		150.0	
		Z	4.84	67.19	16.47		150.0	
10198-CAB	IEEE 802.11n (HT Mixed, 65 Mbps, 64-QAM)	X	4.91	67.37	16.68	0.00	150.0	± 9.6 %
		Y	4.85	67.12	16.39		150.0	
		Z	4.87	67.22	16.49		150.0	
10219-CAB	IEEE 802.11n (HT Mixed, 7.2 Mbps, BPSK)	X	4.64	67.08	16.52	0.00	150.0	± 9.6 %
		Y	4.58	66.82	16.23		150.0	
		Z	4.60	66.92	16.33		150.0	
10220-CAB	IEEE 802.11n (HT Mixed, 43.3 Mbps, 16-QAM)	X	4.88	67.33	16.66	0.00	150.0	± 9.6 %
		Y	4.82	67.07	16.37		150.0	
		Z	4.84	67.17	16.47		150.0	
10221-CAB	IEEE 802.11n (HT Mixed, 72.2 Mbps, 64-QAM)	X	4.92	67.29	16.66	0.00	150.0	± 9.6 %
		Y	4.86	67.05	16.38		150.0	
		Z	4.88	67.14	16.47		150.0	
10222-CAB	IEEE 802.11n (HT Mixed, 15 Mbps, BPSK)	X	5.24	67.52	16.77	0.00	150.0	± 9.6 %
		Y	5.18	67.28	16.51		150.0	
		Z	5.21	67.38	16.59		150.0	

10223-CAB	IEEE 802.11n (HT Mixed, 90 Mbps, 16-QAM)	X	5.57	67.76	16.92	0.00	150.0	± 9.6 %
		Y	5.51	67.51	16.65		150.0	
		Z	5.53	67.60	16.73		150.0	
10224-CAB	IEEE 802.11n (HT Mixed, 150 Mbps, 64-QAM)	X	5.29	67.62	16.75	0.00	150.0	± 9.6 %
		Y	5.23	67.38	16.48		150.0	
		Z	5.25	67.47	16.57		150.0	
10225-CAB	UMTS-FDD (HSPA+)	X	2.96	66.72	15.94	0.00	150.0	± 9.6 %
		Y	2.88	66.18	15.44		150.0	
		Z	2.91	66.38	15.61		150.0	
10226-CAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM)	X	100.00	132.19	38.58	6.02	65.0	± 9.6 %
		Y	100.00	130.20	37.67		65.0	
		Z	100.00	131.44	38.27		65.0	
10227-CAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM)	X	100.00	129.74	37.30	6.02	65.0	± 9.6 %
		Y	100.00	127.95	36.49		65.0	
		Z	100.00	129.11	37.05		65.0	
10228-CAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK)	X	100.00	141.90	43.60	6.02	65.0	± 9.6 %
		Y	64.28	130.08	40.04		65.0	
		Z	94.90	139.78	42.86		65.0	
10229-CAB	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 16-QAM)	X	100.00	131.97	38.44	6.02	65.0	± 9.6 %
		Y	100.00	129.97	37.54		65.0	
		Z	100.00	131.22	38.14		65.0	
10230-CAB	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 64-QAM)	X	100.00	129.60	37.20	6.02	65.0	± 9.6 %
		Y	100.00	127.79	36.39		65.0	
		Z	100.00	128.96	36.95		65.0	
10231-CAB	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, QPSK)	X	100.00	141.75	43.50	6.02	65.0	± 9.6 %
		Y	57.85	127.76	39.37		65.0	
		Z	84.57	137.19	42.14		65.0	
10232-CAC	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 16-QAM)	X	100.00	131.99	38.45	6.02	65.0	± 9.6 %
		Y	100.00	129.98	37.54		65.0	
		Z	100.00	131.24	38.14		65.0	
10233-CAC	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 64-QAM)	X	100.00	129.61	37.21	6.02	65.0	± 9.6 %
		Y	100.00	127.81	36.39		65.0	
		Z	100.00	128.97	36.95		65.0	
10234-CAC	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK)	X	100.00	141.44	43.31	6.02	65.0	± 9.6 %
		Y	52.53	125.50	38.67		65.0	
		Z	75.93	134.62	41.39		65.0	
10235-CAC	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM)	X	100.00	132.00	38.45	6.02	65.0	± 9.6 %
		Y	100.00	130.00	37.54		65.0	
		Z	100.00	131.25	38.15		65.0	
10236-CAC	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM)	X	100.00	129.56	37.18	6.02	65.0	± 9.6 %
		Y	100.00	127.76	36.37		65.0	
		Z	100.00	128.92	36.93		65.0	
10237-CAC	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK)	X	100.00	141.78	43.50	6.02	65.0	± 9.6 %
		Y	58.86	128.14	39.47		65.0	
		Z	86.67	137.73	42.28		65.0	
10238-CAC	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM)	X	100.00	132.00	38.45	6.02	65.0	± 9.6 %
		Y	100.00	129.99	37.54		65.0	
		Z	100.00	131.25	38.14		65.0	

10239-CAC	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM)	X	100.00	129.64	37.21	6.02	65.0	± 9.6 %
		Y	100.00	127.83	36.40		65.0	
		Z	100.00	129.00	36.96		65.0	
10240-CAC	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, QPSK)	X	100.00	141.80	43.51	6.02	65.0	± 9.6 %
		Y	58.51	128.03	39.44		65.0	
		Z	86.02	137.59	42.24		65.0	
10241-CAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM)	X	13.65	92.13	30.26	6.98	65.0	± 9.6 %
		Y	12.73	89.47	28.84		65.0	
		Z	12.83	90.19	29.33		65.0	
10242-CAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM)	X	11.56	88.33	28.75	6.98	65.0	± 9.6 %
		Y	12.17	88.47	28.39		65.0	
		Z	10.55	85.79	27.57		65.0	
10243-CAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK)	X	8.75	83.84	28.04	6.98	65.0	± 9.6 %
		Y	9.16	83.97	27.64		65.0	
		Z	8.20	81.83	26.97		65.0	
10244-CAB	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM)	X	11.15	85.22	22.92	3.98	65.0	± 9.6 %
		Y	10.49	83.51	22.06		65.0	
		Z	10.74	84.39	22.53		65.0	
10245-CAB	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM)	X	10.71	84.28	22.53	3.98	65.0	± 9.6 %
		Y	10.12	82.65	21.69		65.0	
		Z	10.34	83.48	22.15		65.0	
10246-CAB	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, QPSK)	X	11.99	89.44	24.35	3.98	65.0	± 9.6 %
		Y	10.01	85.73	22.85		65.0	
		Z	10.59	87.16	23.46		65.0	
10247-CAC	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM)	X	7.78	79.88	21.56	3.98	65.0	± 9.6 %
		Y	7.39	78.44	20.77		65.0	
		Z	7.42	78.92	21.06		65.0	
10248-CAC	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM)	X	7.68	79.17	21.27	3.98	65.0	± 9.6 %
		Y	7.29	77.74	20.47		65.0	
		Z	7.33	78.22	20.77		65.0	
10249-CAC	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, QPSK)	X	13.65	92.24	26.09	3.98	65.0	± 9.6 %
		Y	11.34	88.25	24.50		65.0	
		Z	12.01	89.77	25.14		65.0	
10250-CAC	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM)	X	8.65	81.91	23.79	3.98	65.0	± 9.6 %
		Y	8.26	80.45	22.98		65.0	
		Z	8.27	80.90	23.26		65.0	
10251-CAC	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM)	X	8.08	79.43	22.51	3.98	65.0	± 9.6 %
		Y	7.71	78.00	21.68		65.0	
		Z	7.74	78.46	21.99		65.0	
10252-CAC	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, QPSK)	X	11.90	89.42	25.97	3.98	65.0	± 9.6 %
		Y	10.50	86.42	24.67		65.0	
		Z	10.87	87.52	25.18		65.0	
10253-CAC	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM)	X	7.84	78.03	22.28	3.98	65.0	± 9.6 %
		Y	7.57	76.80	21.51		65.0	
		Z	7.57	77.19	21.79		65.0	
10254-CAC	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM)	X	8.21	78.77	22.87	3.98	65.0	± 9.6 %
		Y	7.97	77.64	22.16		65.0	
		Z	7.95	77.97	22.41		65.0	

10255-CAC	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, QPSK)	X	9.44	83.41	24.04	3.98	65.0	± 9.6 %
		Y	8.86	81.64	23.14		65.0	
		Z	8.96	82.26	23.48		65.0	
10256-CAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM)	X	9.33	81.69	20.68	3.98	65.0	± 9.6 %
		Y	8.73	79.97	19.81		65.0	
		Z	9.01	80.96	20.33		65.0	
10257-CAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM)	X	8.80	80.36	20.09	3.98	65.0	± 9.6 %
		Y	8.27	78.77	19.26		65.0	
		Z	8.51	79.68	19.75		65.0	
10258-CAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK)	X	9.10	84.22	21.80	3.98	65.0	± 9.6 %
		Y	7.87	81.28	20.53		65.0	
		Z	8.20	82.41	21.04		65.0	
10259-CAB	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM)	X	8.13	80.62	22.35	3.98	65.0	± 9.6 %
		Y	7.73	79.15	21.54		65.0	
		Z	7.76	79.63	21.84		65.0	
10260-CAB	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM)	X	8.07	80.16	22.18	3.98	65.0	± 9.6 %
		Y	7.70	78.77	21.40		65.0	
		Z	7.73	79.22	21.69		65.0	
10261-CAB	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, QPSK)	X	11.98	89.88	25.68	3.98	65.0	± 9.6 %
		Y	10.32	86.47	24.25		65.0	
		Z	10.77	87.74	24.81		65.0	
10262-CAC	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM)	X	8.64	81.87	23.76	3.98	65.0	± 9.6 %
		Y	8.25	80.40	22.94		65.0	
		Z	8.26	80.85	23.23		65.0	
10263-CAC	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM)	X	8.06	79.41	22.51	3.98	65.0	± 9.6 %
		Y	7.70	77.98	21.68		65.0	
		Z	7.73	78.44	21.98		65.0	
10264-CAC	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, QPSK)	X	11.79	89.22	25.88	3.98	65.0	± 9.6 %
		Y	10.40	86.22	24.58		65.0	
		Z	10.77	87.33	25.09		65.0	
10265-CAC	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM)	X	8.12	78.81	22.58	3.98	65.0	± 9.6 %
		Y	7.79	77.46	21.77		65.0	
		Z	7.81	77.90	22.07		65.0	
10266-CAC	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM)	X	8.47	79.50	23.19	3.98	65.0	± 9.6 %
		Y	8.19	78.30	22.46		65.0	
		Z	8.19	78.66	22.72		65.0	
10267-CAC	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, QPSK)	X	9.89	83.95	23.99	3.98	65.0	± 9.6 %
		Y	9.26	82.18	23.11		65.0	
		Z	9.39	82.83	23.45		65.0	
10268-CAC	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM)	X	8.44	77.80	22.53	3.98	65.0	± 9.6 %
		Y	8.24	76.84	21.89		65.0	
		Z	8.22	77.13	22.11		65.0	
10269-CAC	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM)	X	8.33	77.26	22.37	3.98	65.0	± 9.6 %
		Y	8.15	76.36	21.76		65.0	
		Z	8.12	76.62	21.97		65.0	
10270-CAC	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, QPSK)	X	8.75	79.75	22.52	3.98	65.0	± 9.6 %
		Y	8.49	78.72	21.92		65.0	
		Z	8.50	79.07	22.14		65.0	

10274-CAB	UMTS-FDD (HSUPA, Subtest 5, 3GPP Rel8.10)	X	2.73	67.18	15.92	0.00	150.0	± 9.6 %
		Y	2.64	66.46	15.31		150.0	
		Z	2.68	66.73	15.52		150.0	
10275-CAB	UMTS-FDD (HSUPA, Subtest 5, 3GPP Rel8.4)	X	1.87	70.21	17.08	0.00	150.0	± 9.6 %
		Y	1.66	67.87	15.58		150.0	
		Z	1.73	68.66	16.09		150.0	
10277-CAA	PHS (QPSK)	X	3.84	66.56	11.27	9.03	50.0	± 9.6 %
		Y	4.12	66.98	11.68		50.0	
		Z	3.85	66.55	11.29		50.0	
10278-CAA	PHS (QPSK, BW 884MHz, Rolloff 0.5)	X	11.65	86.02	22.30	9.03	50.0	± 9.6 %
		Y	10.21	83.31	21.39		50.0	
		Z	10.96	84.97	21.93		50.0	
10279-CAA	PHS (QPSK, BW 884MHz, Rolloff 0.38)	X	11.92	86.31	22.44	9.03	50.0	± 9.6 %
		Y	10.38	83.50	21.49		50.0	
		Z	11.18	85.20	22.04		50.0	
10290-AAB	CDMA2000, RC1, SO55, Full Rate	X	2.05	73.37	16.75	0.00	150.0	± 9.6 %
		Y	1.54	68.94	14.39		150.0	
		Z	1.68	70.29	15.17		150.0	
10291-AAB	CDMA2000, RC3, SO55, Full Rate	X	1.19	70.69	15.63	0.00	150.0	± 9.6 %
		Y	0.89	66.06	12.92		150.0	
		Z	0.97	67.37	13.76		150.0	
10292-AAB	CDMA2000, RC3, SO32, Full Rate	X	1.82	77.98	19.13	0.00	150.0	± 9.6 %
		Y	1.09	69.78	15.12		150.0	
		Z	1.26	72.00	16.33		150.0	
10293-AAB	CDMA2000, RC3, SO3, Full Rate	X	3.13	86.75	22.80	0.00	150.0	± 9.6 %
		Y	1.53	74.84	17.78		150.0	
		Z	1.85	77.92	19.23		150.0	
10295-AAB	CDMA2000, RC1, SO3, 1/8th Rate 25 fr.	X	16.24	95.47	28.50	9.03	50.0	± 9.6 %
		Y	13.39	90.69	26.64		50.0	
		Z	14.20	92.62	27.44		50.0	
10297-AAB	LTE-FDD (SC-FDMA, 50% RB, 20 MHz, QPSK)	X	3.05	71.18	17.54	0.00	150.0	± 9.6 %
		Y	2.82	69.68	16.59		150.0	
		Z	2.90	70.21	16.92		150.0	
10298-AAC	LTE-FDD (SC-FDMA, 50% RB, 3 MHz, QPSK)	X	1.96	70.66	16.14	0.00	150.0	± 9.6 %
		Y	1.66	67.94	14.50		150.0	
		Z	1.76	68.83	15.06		150.0	
10299-AAC	LTE-FDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM)	X	4.77	78.24	18.75	0.00	150.0	± 9.6 %
		Y	3.92	74.76	16.99		150.0	
		Z	4.32	76.42	17.88		150.0	
10300-AAC	LTE-FDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM)	X	3.00	70.52	14.82	0.00	150.0	± 9.6 %
		Y	2.63	68.29	13.44		150.0	
		Z	2.81	69.37	14.14		150.0	
10301-AAA	IEEE 802.16e WiMAX (29:18, 5ms, 10MHz, QPSK, PUSC)	X	5.51	68.11	19.09	4.17	80.0	± 9.6 %
		Y	5.33	67.16	18.33		80.0	
		Z	5.40	67.58	18.66		80.0	
10302-AAA	IEEE 802.16e WiMAX (29:18, 5ms, 10MHz, QPSK, PUSC, 3 CTRL symbols)	X	5.91	68.43	19.68	4.96	80.0	± 9.6 %
		Y	5.80	67.70	19.02		80.0	
		Z	5.81	67.92	19.25		80.0	

10303-AAA	IEEE 802.16e WiMAX (31:15, 5ms, 10MHz, 64QAM, PUSC)	X	5.70	68.33	19.67	4.96	80.0	± 9.6 %
		Y	5.59	67.57	18.98		80.0	
		Z	5.60	67.78	19.21		80.0	
10304-AAA	IEEE 802.16e WiMAX (29:18, 5ms, 10MHz, 64QAM, PUSC)	X	5.41	67.77	18.89	4.17	80.0	± 9.6 %
		Y	5.31	67.11	18.28		80.0	
		Z	5.33	67.30	18.48		80.0	
10305-AAA	IEEE 802.16e WiMAX (31:15, 10ms, 10MHz, 64QAM, PUSC, 15 symbols)	X	6.16	75.00	23.87	6.02	50.0	± 9.6 %
		Y	6.03	73.79	22.78		50.0	
		Z	5.90	73.64	22.94		50.0	
10306-AAA	IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, 64QAM, PUSC, 18 symbols)	X	5.76	70.24	21.37	6.02	50.0	± 9.6 %
		Y	5.59	69.03	20.35		50.0	
		Z	5.60	69.33	20.68		50.0	
10307-AAA	IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, QPSK, PUSC, 18 symbols)	X	5.75	70.76	21.47	6.02	50.0	± 9.6 %
		Y	5.78	71.13	21.51		50.0	
		Z	5.57	69.74	20.73		50.0	
10308-AAA	IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, 16QAM, PUSC)	X	5.77	71.12	21.68	6.02	50.0	± 9.6 %
		Y	5.80	71.54	21.74		50.0	
		Z	5.57	70.05	20.90		50.0	
10309-AAA	IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, 16QAM, AMC 2x3, 18 symbols)	X	5.87	70.63	21.59	6.02	50.0	± 9.6 %
		Y	5.68	69.33	20.52		50.0	
		Z	5.69	69.66	20.87		50.0	
10310-AAA	IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, QPSK, AMC 2x3, 18 symbols)	X	5.74	70.42	21.38	6.02	50.0	± 9.6 %
		Y	5.56	69.17	20.34		50.0	
		Z	5.57	69.47	20.67		50.0	
10311-AAB	LTE-FDD (SC-FDMA, 100% RB, 15 MHz, QPSK)	X	3.41	70.28	17.06	0.00	150.0	± 9.6 %
		Y	3.18	68.96	16.24		150.0	
		Z	3.26	69.44	16.53		150.0	
10313-AAA	iDEN 1:3	X	11.93	87.85	22.00	6.99	70.0	± 9.6 %
		Y	8.95	83.03	20.34		70.0	
		Z	9.92	85.08	21.06		70.0	
10314-AAA	iDEN 1:6	X	19.66	101.09	29.03	10.00	30.0	± 9.6 %
		Y	13.64	93.68	26.63		30.0	
		Z	14.94	96.21	27.54		30.0	
10315-AAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 96pc duty cycle)	X	1.20	65.36	16.48	0.17	150.0	± 9.6 %
		Y	1.15	64.26	15.42		150.0	
		Z	1.17	64.62	15.77		150.0	
10316-AAB	IEEE 802.11g WiFi 2.4 GHz (ERP-OFDM, 6 Mbps, 96pc duty cycle)	X	4.76	67.14	16.74	0.17	150.0	± 9.6 %
		Y	4.71	66.90	16.45		150.0	
		Z	4.73	66.99	16.55		150.0	
10317-AAB	IEEE 802.11a WiFi 5 GHz (OFDM, 6 Mbps, 96pc duty cycle)	X	4.76	67.14	16.74	0.17	150.0	± 9.6 %
		Y	4.71	66.90	16.45		150.0	
		Z	4.73	66.99	16.55		150.0	
10400-AAC	IEEE 802.11ac WiFi (20MHz, 64-QAM, 99pc duty cycle)	X	4.87	67.43	16.68	0.00	150.0	± 9.6 %
		Y	4.81	67.14	16.37		150.0	
		Z	4.83	67.26	16.47		150.0	
10401-AAC	IEEE 802.11ac WiFi (40MHz, 64-QAM, 99pc duty cycle)	X	5.57	67.64	16.85	0.00	150.0	± 9.6 %
		Y	5.51	67.40	16.57		150.0	
		Z	5.53	67.48	16.66		150.0	

10402-AAC	IEEE 802.11ac WiFi (80MHz, 64-QAM, 99pc duty cycle)	X	5.83	67.94	16.82	0.00	150.0	± 9.6 %
		Y	5.77	67.71	16.58		150.0	
		Z	5.79	67.80	16.65		150.0	
10403-AAB	CDMA2000 (1xEV-DO, Rev. 0)	X	2.05	73.37	16.75	0.00	115.0	± 9.6 %
		Y	1.54	68.94	14.39		115.0	
		Z	1.68	70.29	15.17		115.0	
10404-AAB	CDMA2000 (1xEV-DO, Rev. A)	X	2.05	73.37	16.75	0.00	115.0	± 9.6 %
		Y	1.54	68.94	14.39		115.0	
		Z	1.68	70.29	15.17		115.0	
10406-AAB	CDMA2000, RC3, SO32, SCH0, Full Rate	X	100.00	124.58	31.94	0.00	100.0	± 9.6 %
		Y	100.00	121.04	30.37		100.0	
		Z	100.00	123.01	31.32		100.0	
10410-AAB	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	100.00	125.25	32.53	3.23	80.0	± 9.6 %
		Y	100.00	122.76	31.43		80.0	
		Z	100.00	124.49	32.22		80.0	
10415-AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 99pc duty cycle)	X	1.07	64.01	15.66	0.00	150.0	± 9.6 %
		Y	1.03	63.00	14.62		150.0	
		Z	1.05	63.37	14.98		150.0	
10416-AAA	IEEE 802.11g WiFi 2.4 GHz (ERP-OFDM, 6 Mbps, 99pc duty cycle)	X	4.68	67.03	16.59	0.00	150.0	± 9.6 %
		Y	4.63	66.78	16.30		150.0	
		Z	4.65	66.88	16.40		150.0	
10417-AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps, 99pc duty cycle)	X	4.68	67.03	16.59	0.00	150.0	± 9.6 %
		Y	4.63	66.78	16.30		150.0	
		Z	4.65	66.88	16.40		150.0	
10418-AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps, 99pc duty cycle, Long preambule)	X	4.67	67.18	16.60	0.00	150.0	± 9.6 %
		Y	4.61	66.92	16.31		150.0	
		Z	4.64	67.02	16.41		150.0	
10419-AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps, 99pc duty cycle, Short preambule)	X	4.69	67.13	16.61	0.00	150.0	± 9.6 %
		Y	4.64	66.87	16.32		150.0	
		Z	4.66	66.98	16.42		150.0	
10422-AAA	IEEE 802.11n (HT Greenfield, 7.2 Mbps, BPSK)	X	4.82	67.13	16.62	0.00	150.0	± 9.6 %
		Y	4.76	66.89	16.34		150.0	
		Z	4.78	66.98	16.43		150.0	
10423-AAA	IEEE 802.11n (HT Greenfield, 43.3 Mbps, 16-QAM)	X	5.00	67.48	16.75	0.00	150.0	± 9.6 %
		Y	4.94	67.23	16.47		150.0	
		Z	4.96	67.33	16.56		150.0	
10424-AAA	IEEE 802.11n (HT Greenfield, 72.2 Mbps, 64-QAM)	X	4.92	67.43	16.72	0.00	150.0	± 9.6 %
		Y	4.86	67.17	16.43		150.0	
		Z	4.88	67.27	16.53		150.0	
10425-AAA	IEEE 802.11n (HT Greenfield, 15 Mbps, BPSK)	X	5.54	67.85	16.94	0.00	150.0	± 9.6 %
		Y	5.48	67.60	16.67		150.0	
		Z	5.50	67.69	16.75		150.0	
10426-AAA	IEEE 802.11n (HT Greenfield, 90 Mbps, 16-QAM)	X	5.55	67.86	16.94	0.00	150.0	± 9.6 %
		Y	5.48	67.61	16.67		150.0	
		Z	5.50	67.70	16.75		150.0	

10427-AAA	IEEE 802.11n (HT Greenfield, 150 Mbps, 64-QAM)	X	5.55	67.81	16.91	0.00	150.0	± 9.6 %
		Y	5.49	67.57	16.65		150.0	
		Z	5.51	67.66	16.73		150.0	
10430-AAA	LTE-FDD (OFDMA, 5 MHz, E-TM 3.1)	X	4.30	70.44	18.21	0.00	150.0	± 9.6 %
		Y	4.27	70.38	18.04		150.0	
		Z	4.27	70.33	18.05		150.0	
10431-AAA	LTE-FDD (OFDMA, 10 MHz, E-TM 3.1)	X	4.40	67.65	16.65	0.00	150.0	± 9.6 %
		Y	4.32	67.31	16.31		150.0	
		Z	4.35	67.44	16.43		150.0	
10432-AAA	LTE-FDD (OFDMA, 15 MHz, E-TM 3.1)	X	4.69	67.49	16.69	0.00	150.0	± 9.6 %
		Y	4.62	67.20	16.38		150.0	
		Z	4.65	67.32	16.48		150.0	
10433-AAA	LTE-FDD (OFDMA, 20 MHz, E-TM 3.1)	X	4.93	67.46	16.74	0.00	150.0	± 9.6 %
		Y	4.87	67.20	16.45		150.0	
		Z	4.89	67.31	16.55		150.0	
10434-AAA	W-CDMA (BS Test Model 1, 64 DPCH)	X	4.38	71.21	18.18	0.00	150.0	± 9.6 %
		Y	4.35	71.12	17.99		150.0	
		Z	4.34	71.07	18.01		150.0	
10435-AAB	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	100.00	125.05	32.43	3.23	80.0	± 9.6 %
		Y	100.00	122.57	31.34		80.0	
		Z	100.00	124.29	32.13		80.0	
10447-AAA	LTE-FDD (OFDMA, 5 MHz, E-TM 3.1, Clipping 44%)	X	3.71	67.79	16.12	0.00	150.0	± 9.6 %
		Y	3.61	67.29	15.67		150.0	
		Z	3.65	67.48	15.83		150.0	
10448-AAA	LTE-FDD (OFDMA, 10 MHz, E-TM 3.1, Clippin 44%)	X	4.22	67.42	16.51	0.00	150.0	± 9.6 %
		Y	4.15	67.08	16.17		150.0	
		Z	4.18	67.21	16.28		150.0	
10449-AAA	LTE-FDD (OFDMA, 15 MHz, E-TM 3.1, Cliping 44%)	X	4.49	67.31	16.58	0.00	150.0	± 9.6 %
		Y	4.42	67.02	16.27		150.0	
		Z	4.45	67.13	16.38		150.0	
10450-AAA	LTE-FDD (OFDMA, 20 MHz, E-TM 3.1, Clipping 44%)	X	4.67	67.22	16.59	0.00	150.0	± 9.6 %
		Y	4.62	66.95	16.30		150.0	
		Z	4.64	67.06	16.40		150.0	
10451-AAA	W-CDMA (BS Test Model 1, 64 DPCH, Clipping 44%)	X	3.63	68.08	15.83	0.00	150.0	± 9.6 %
		Y	3.51	67.49	15.33		150.0	
		Z	3.56	67.71	15.51		150.0	
10456-AAA	IEEE 802.11ac WiFi (160MHz, 64-QAM, 99pc duty cycle)	X	6.40	68.36	17.05	0.00	150.0	± 9.6 %
		Y	6.34	68.15	16.82		150.0	
		Z	6.36	68.22	16.89		150.0	
10457-AAA	UMTS-FDD (DC-HSDPA)	X	3.89	65.64	16.31	0.00	150.0	± 9.6 %
		Y	3.85	65.40	16.01		150.0	
		Z	3.87	65.50	16.11		150.0	
10458-AAA	CDMA2000 (1xEV-DO, Rev. B, 2 carriers)	X	3.46	67.50	15.35	0.00	150.0	± 9.6 %
		Y	3.34	66.87	14.80		150.0	
		Z	3.39	67.11	15.01		150.0	
10459-AAA	CDMA2000 (1xEV-DO, Rev. B, 3 carriers)	X	4.52	65.47	16.05	0.00	150.0	± 9.6 %
		Y	4.52	65.47	15.86		150.0	
		Z	4.43	65.14	15.75		150.0	

10460-AAA	UMTS-FDD (WCDMA, AMR)	X	1.17	72.68	18.90	0.00	150.0	± 9.6 %
		Y	0.92	67.87	15.98		150.0	
		Z	0.99	69.33	16.91		150.0	
10461-AAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	100.00	132.17	35.74	3.29	80.0	± 9.6 %
		Y	100.00	128.42	34.08		80.0	
		Z	100.00	130.59	35.07		80.0	
10462-AAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	100.00	113.31	26.72	3.23	80.0	± 9.6 %
		Y	100.00	110.59	25.58		80.0	
		Z	100.00	112.57	26.48		80.0	
10463-AAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	100.00	109.35	24.86	3.23	80.0	± 9.6 %
		Y	100.00	106.97	23.86		80.0	
		Z	100.00	108.85	24.71		80.0	
10464-AAA	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	100.00	130.18	34.63	3.23	80.0	± 9.6 %
		Y	100.00	126.36	32.95		80.0	
		Z	100.00	128.62	33.98		80.0	
10465-AAA	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	100.00	112.71	26.43	3.23	80.0	± 9.6 %
		Y	100.00	110.00	25.29		80.0	
		Z	100.00	111.98	26.19		80.0	
10466-AAA	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	100.00	108.78	24.59	3.23	80.0	± 9.6 %
		Y	100.00	106.43	23.61		80.0	
		Z	100.00	108.29	24.45		80.0	
10467-AAB	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	100.00	130.44	34.75	3.23	80.0	± 9.6 %
		Y	100.00	126.60	33.07		80.0	
		Z	100.00	128.86	34.09		80.0	
10468-AAB	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	100.00	112.91	26.52	3.23	80.0	± 9.6 %
		Y	100.00	110.19	25.38		80.0	
		Z	100.00	112.17	26.28		80.0	
10469-AAB	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	100.00	108.81	24.59	3.23	80.0	± 9.6 %
		Y	100.00	106.45	23.61		80.0	
		Z	100.00	108.32	24.46		80.0	
10470-AAB	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	100.00	130.49	34.76	3.23	80.0	± 9.6 %
		Y	100.00	126.64	33.07		80.0	
		Z	100.00	128.91	34.11		80.0	
10471-AAB	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	100.00	112.85	26.49	3.23	80.0	± 9.6 %
		Y	100.00	110.13	25.35		80.0	
		Z	100.00	112.12	26.25		80.0	
10472-AAB	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	100.00	108.74	24.56	3.23	80.0	± 9.6 %
		Y	100.00	106.39	23.57		80.0	
		Z	100.00	108.26	24.42		80.0	
10473-AAB	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	100.00	130.46	34.75	3.23	80.0	± 9.6 %
		Y	100.00	126.61	33.06		80.0	
		Z	100.00	128.88	34.09		80.0	
10474-AAB	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	100.00	112.87	26.49	3.23	80.0	± 9.6 %
		Y	100.00	110.14	25.35		80.0	
		Z	100.00	112.13	26.25		80.0	
10475-AAB	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	100.00	108.76	24.57	3.23	80.0	± 9.6 %
		Y	100.00	106.40	23.58		80.0	
		Z	100.00	108.28	24.43		80.0	

10477-AAB	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	100.00	112.67	26.40	3.23	80.0	± 9.6 %
		Y	100.00	109.96	25.26		80.0	
		Z	100.00	111.94	26.16		80.0	
10478-AAB	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	100.00	108.69	24.54	3.23	80.0	± 9.6 %
		Y	100.00	106.34	23.55		80.0	
		Z	100.00	108.21	24.40		80.0	
10479-AAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	40.01	113.99	32.23	3.23	80.0	± 9.6 %
		Y	25.66	104.98	29.34		80.0	
		Z	28.59	107.69	30.37		80.0	
10480-AAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	65.50	112.78	29.57	3.23	80.0	± 9.6 %
		Y	38.67	103.69	26.87		80.0	
		Z	45.46	106.90	27.97		80.0	
10481-AAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	43.66	105.54	27.32	3.23	80.0	± 9.6 %
		Y	27.51	97.77	24.89		80.0	
		Z	32.53	100.89	25.98		80.0	
10482-AAA	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	7.07	83.64	21.75	2.23	80.0	± 9.6 %
		Y	5.28	78.63	19.68		80.0	
		Z	5.64	80.01	20.31		80.0	
10483-AAA	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	12.44	88.49	23.12	2.23	80.0	± 9.6 %
		Y	10.70	85.40	21.78		80.0	
		Z	11.46	86.94	22.49		80.0	
10484-AAA	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	10.60	85.91	22.30	2.23	80.0	± 9.6 %
		Y	9.30	83.19	21.06		80.0	
		Z	9.88	84.56	21.72		80.0	
10485-AAB	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	6.73	83.37	22.54	2.23	80.0	± 9.6 %
		Y	5.38	79.13	20.71		80.0	
		Z	5.62	80.23	21.24		80.0	
10486-AAB	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	4.83	74.76	18.90	2.23	80.0	± 9.6 %
		Y	4.43	72.99	17.93		80.0	
		Z	4.49	73.45	18.22		80.0	
10487-AAB	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	4.73	74.06	18.61	2.23	80.0	± 9.6 %
		Y	4.38	72.45	17.70		80.0	
		Z	4.42	72.86	17.97		80.0	
10488-AAB	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	5.94	79.74	21.83	2.23	80.0	± 9.6 %
		Y	5.18	76.93	20.48		80.0	
		Z	5.31	77.65	20.88		80.0	
10489-AAB	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	4.65	72.93	19.25	2.23	80.0	± 9.6 %
		Y	4.44	71.79	18.53		80.0	
		Z	4.45	72.03	18.73		80.0	
10490-AAB	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	4.70	72.53	19.10	2.23	80.0	± 9.6 %
		Y	4.51	71.49	18.42		80.0	
		Z	4.51	71.71	18.61		80.0	
10491-AAB	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	5.47	76.11	20.55	2.23	80.0	± 9.6 %
		Y	5.05	74.35	19.60		80.0	
		Z	5.11	74.80	19.88		80.0	
10492-AAB	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	4.82	71.43	18.89	2.23	80.0	± 9.6 %
		Y	4.68	70.61	18.31		80.0	
		Z	4.67	70.78	18.47		80.0	

10493-AAB	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	4.87	71.19	18.80	2.23	80.0	± 9.6 %
		Y	4.73	70.41	18.24		80.0	
		Z	4.72	70.57	18.39		80.0	
10494-AAB	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	6.24	78.41	21.24	2.23	80.0	± 9.6 %
		Y	5.62	76.22	20.16		80.0	
		Z	5.73	76.81	20.48		80.0	
10495-AAB	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	4.91	72.01	19.14	2.23	80.0	± 9.6 %
		Y	4.75	71.11	18.53		80.0	
		Z	4.74	71.30	18.69		80.0	
10496-AAB	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	4.93	71.51	18.96	2.23	80.0	± 9.6 %
		Y	4.79	70.71	18.40		80.0	
		Z	4.78	70.87	18.55		80.0	
10497-AAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	5.37	79.10	19.27	2.23	80.0	± 9.6 %
		Y	4.01	74.46	17.26		80.0	
		Z	4.32	75.84	17.92		80.0	
10498-AAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	3.20	69.04	14.31	2.23	80.0	± 9.6 %
		Y	2.73	66.72	13.06		80.0	
		Z	2.85	67.49	13.50		80.0	
10499-AAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	3.04	68.09	13.76	2.23	80.0	± 9.6 %
		Y	2.62	65.95	12.57		80.0	
		Z	2.73	66.66	12.99		80.0	
10500-AAA	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	6.09	81.07	21.99	2.23	80.0	± 9.6 %
		Y	5.13	77.67	20.43		80.0	
		Z	5.29	78.55	20.89		80.0	
10501-AAA	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	4.73	73.89	18.97	2.23	80.0	± 9.6 %
		Y	4.43	72.44	18.13		80.0	
		Z	4.46	72.79	18.37		80.0	
10502-AAA	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	4.76	73.56	18.78	2.23	80.0	± 9.6 %
		Y	4.47	72.19	17.97		80.0	
		Z	4.49	72.52	18.21		80.0	
10503-AAB	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	5.85	79.51	21.73	2.23	80.0	± 9.6 %
		Y	5.11	76.71	20.38		80.0	
		Z	5.24	77.44	20.78		80.0	
10504-AAB	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	4.63	72.85	19.20	2.23	80.0	± 9.6 %
		Y	4.42	71.70	18.48		80.0	
		Z	4.43	71.95	18.68		80.0	
10505-AAB	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	4.68	72.44	19.05	2.23	80.0	± 9.6 %
		Y	4.49	71.39	18.37		80.0	
		Z	4.49	71.62	18.56		80.0	
10506-AAB	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	6.19	78.25	21.17	2.23	80.0	± 9.6 %
		Y	5.58	76.07	20.08		80.0	
		Z	5.68	76.66	20.41		80.0	
10507-AAB	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	4.89	71.95	19.11	2.23	80.0	± 9.6 %
		Y	4.73	71.04	18.50		80.0	
		Z	4.73	71.24	18.66		80.0	

10508-AAB	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	4.92	71.45	18.93	2.23	80.0	± 9.6 %
		Y	4.78	70.64	18.36		80.0	
		Z	4.77	70.80	18.51		80.0	
10509-AAB	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	5.95	75.24	19.99	2.23	80.0	± 9.6 %
		Y	5.60	73.90	19.24		80.0	
		Z	5.65	74.26	19.47		80.0	
10510-AAB	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	5.29	71.15	18.83	2.23	80.0	± 9.6 %
		Y	5.16	70.46	18.33		80.0	
		Z	5.15	70.61	18.47		80.0	
10511-AAB	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	5.30	70.75	18.70	2.23	80.0	± 9.6 %
		Y	5.19	70.12	18.23		80.0	
		Z	5.17	70.25	18.36		80.0	
10512-AAB	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	6.65	77.81	20.82	2.23	80.0	± 9.6 %
		Y	6.08	75.94	19.88		80.0	
		Z	6.18	76.48	20.17		80.0	
10513-AAB	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	5.24	71.68	19.04	2.23	80.0	± 9.6 %
		Y	5.09	70.89	18.50		80.0	
		Z	5.08	71.06	18.65		80.0	
10514-AAB	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	5.18	71.04	18.83	2.23	80.0	± 9.6 %
		Y	5.06	70.34	18.33		80.0	
		Z	5.05	70.49	18.47		80.0	
10515-AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps, 99pc duty cycle)	X	1.04	64.30	15.79	0.00	150.0	± 9.6 %
		Y	1.00	63.17	14.68		150.0	
		Z	1.01	63.58	15.06		150.0	
10516-AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps, 99pc duty cycle)	X	1.17	82.68	23.48	0.00	150.0	± 9.6 %
		Y	0.61	69.65	16.88		150.0	
		Z	0.72	72.79	18.69		150.0	
10517-AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps, 99pc duty cycle)	X	0.94	67.44	17.14	0.00	150.0	± 9.6 %
		Y	0.85	65.01	15.25		150.0	
		Z	0.88	65.81	15.88		150.0	
10518-AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps, 99pc duty cycle)	X	4.68	67.10	16.57	0.00	150.0	± 9.6 %
		Y	4.62	66.85	16.28		150.0	
		Z	4.64	66.95	16.38		150.0	
10519-AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps, 99pc duty cycle)	X	4.88	67.37	16.70	0.00	150.0	± 9.6 %
		Y	4.82	67.11	16.42		150.0	
		Z	4.84	67.21	16.51		150.0	
10520-AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps, 99pc duty cycle)	X	4.73	67.35	16.63	0.00	150.0	± 9.6 %
		Y	4.67	67.07	16.33		150.0	
		Z	4.69	67.18	16.43		150.0	
10521-AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps, 99pc duty cycle)	X	4.66	67.35	16.62	0.00	150.0	± 9.6 %
		Y	4.60	67.06	16.32		150.0	
		Z	4.62	67.17	16.42		150.0	
10522-AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps, 99pc duty cycle)	X	4.72	67.40	16.69	0.00	150.0	± 9.6 %
		Y	4.66	67.13	16.39		150.0	
		Z	4.68	67.24	16.49		150.0	

10523-AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps, 99pc duty cycle)	X	4.59	67.26	16.53	0.00	150.0	± 9.6 %
		Y	4.53	66.98	16.23		150.0	
		Z	4.55	67.09	16.33		150.0	
10524-AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps, 99pc duty cycle)	X	4.66	67.34	16.66	0.00	150.0	± 9.6 %
		Y	4.60	67.06	16.36		150.0	
		Z	4.63	67.17	16.46		150.0	
10525-AAA	IEEE 802.11ac WiFi (20MHz, MCS0, 99pc duty cycle)	X	4.64	66.35	16.23	0.00	150.0	± 9.6 %
		Y	4.58	66.08	15.94		150.0	
		Z	4.60	66.19	16.04		150.0	
10526-AAA	IEEE 802.11ac WiFi (20MHz, MCS1, 99pc duty cycle)	X	4.82	66.75	16.38	0.00	150.0	± 9.6 %
		Y	4.76	66.47	16.09		150.0	
		Z	4.78	66.58	16.19		150.0	
10527-AAA	IEEE 802.11ac WiFi (20MHz, MCS2, 99pc duty cycle)	X	4.74	66.71	16.33	0.00	150.0	± 9.6 %
		Y	4.68	66.42	16.03		150.0	
		Z	4.70	66.54	16.13		150.0	
10528-AAA	IEEE 802.11ac WiFi (20MHz, MCS3, 99pc duty cycle)	X	4.76	66.73	16.36	0.00	150.0	± 9.6 %
		Y	4.69	66.44	16.07		150.0	
		Z	4.72	66.56	16.17		150.0	
10529-AAA	IEEE 802.11ac WiFi (20MHz, MCS4, 99pc duty cycle)	X	4.76	66.73	16.36	0.00	150.0	± 9.6 %
		Y	4.69	66.44	16.07		150.0	
		Z	4.72	66.56	16.17		150.0	
10531-AAA	IEEE 802.11ac WiFi (20MHz, MCS6, 99pc duty cycle)	X	4.76	66.87	16.39	0.00	150.0	± 9.6 %
		Y	4.69	66.56	16.08		150.0	
		Z	4.72	66.68	16.19		150.0	
10532-AAA	IEEE 802.11ac WiFi (20MHz, MCS7, 99pc duty cycle)	X	4.62	66.72	16.33	0.00	150.0	± 9.6 %
		Y	4.55	66.41	16.02		150.0	
		Z	4.57	66.53	16.12		150.0	
10533-AAA	IEEE 802.11ac WiFi (20MHz, MCS8, 99pc duty cycle)	X	4.77	66.77	16.35	0.00	150.0	± 9.6 %
		Y	4.70	66.48	16.05		150.0	
		Z	4.73	66.60	16.15		150.0	
10534-AAA	IEEE 802.11ac WiFi (40MHz, MCS0, 99pc duty cycle)	X	5.29	66.84	16.41	0.00	150.0	± 9.6 %
		Y	5.23	66.60	16.14		150.0	
		Z	5.25	66.69	16.23		150.0	
10535-AAA	IEEE 802.11ac WiFi (40MHz, MCS1, 99pc duty cycle)	X	5.37	67.02	16.49	0.00	150.0	± 9.6 %
		Y	5.30	66.78	16.22		150.0	
		Z	5.32	66.87	16.31		150.0	
10536-AAA	IEEE 802.11ac WiFi (40MHz, MCS2, 99pc duty cycle)	X	5.23	66.97	16.44	0.00	150.0	± 9.6 %
		Y	5.17	66.72	16.17		150.0	
		Z	5.19	66.82	16.26		150.0	
10537-AAA	IEEE 802.11ac WiFi (40MHz, MCS3, 99pc duty cycle)	X	5.29	66.95	16.43	0.00	150.0	± 9.6 %
		Y	5.23	66.69	16.17		150.0	
		Z	5.25	66.79	16.25		150.0	
10538-AAA	IEEE 802.11ac WiFi (40MHz, MCS4, 99pc duty cycle)	X	5.39	66.99	16.50	0.00	150.0	± 9.6 %
		Y	5.33	66.74	16.23		150.0	
		Z	5.35	66.84	16.31		150.0	
10540-AAA	IEEE 802.11ac WiFi (40MHz, MCS6, 99pc duty cycle)	X	5.32	66.99	16.51	0.00	150.0	± 9.6 %
		Y	5.25	66.74	16.24		150.0	
		Z	5.27	66.83	16.33		150.0	

10541-AAA	IEEE 802.11ac WiFi (40MHz, MCS7, 99pc duty cycle)	X	5.28	66.83	16.43	0.00	150.0	± 9.6 %
		Y	5.22	66.59	16.16		150.0	
		Z	5.24	66.69	16.25		150.0	
10542-AAA	IEEE 802.11ac WiFi (40MHz, MCS8, 99pc duty cycle)	X	5.44	66.91	16.48	0.00	150.0	± 9.6 %
		Y	5.38	66.68	16.22		150.0	
		Z	5.40	66.77	16.30		150.0	
10543-AAA	IEEE 802.11ac WiFi (40MHz, MCS9, 99pc duty cycle)	X	5.53	66.97	16.53	0.00	150.0	± 9.6 %
		Y	5.47	66.73	16.27		150.0	
		Z	5.49	66.82	16.35		150.0	
10544-AAA	IEEE 802.11ac WiFi (80MHz, MCS0, 99pc duty cycle)	X	5.59	66.91	16.37	0.00	150.0	± 9.6 %
		Y	5.53	66.70	16.13		150.0	
		Z	5.55	66.79	16.21		150.0	
10545-AAA	IEEE 802.11ac WiFi (80MHz, MCS1, 99pc duty cycle)	X	5.82	67.42	16.57	0.00	150.0	± 9.6 %
		Y	5.75	67.17	16.32		150.0	
		Z	5.77	67.26	16.40		150.0	
10546-AAA	IEEE 802.11ac WiFi (80MHz, MCS2, 99pc duty cycle)	X	5.68	67.19	16.48	0.00	150.0	± 9.6 %
		Y	5.61	66.95	16.22		150.0	
		Z	5.64	67.05	16.30		150.0	
10547-AAA	IEEE 802.11ac WiFi (80MHz, MCS3, 99pc duty cycle)	X	5.77	67.28	16.51	0.00	150.0	± 9.6 %
		Y	5.70	67.03	16.25		150.0	
		Z	5.72	67.12	16.33		150.0	
10548-AAA	IEEE 802.11ac WiFi (80MHz, MCS4, 99pc duty cycle)	X	6.16	68.66	17.18	0.00	150.0	± 9.6 %
		Y	6.05	68.25	16.83		150.0	
		Z	6.07	68.36	16.93		150.0	
10550-AAA	IEEE 802.11ac WiFi (80MHz, MCS6, 99pc duty cycle)	X	5.70	67.18	16.48	0.00	150.0	± 9.6 %
		Y	5.64	66.95	16.23		150.0	
		Z	5.66	67.04	16.31		150.0	
10551-AAA	IEEE 802.11ac WiFi (80MHz, MCS7, 99pc duty cycle)	X	5.70	67.20	16.45	0.00	150.0	± 9.6 %
		Y	5.64	66.98	16.21		150.0	
		Z	5.66	67.07	16.28		150.0	
10552-AAA	IEEE 802.11ac WiFi (80MHz, MCS8, 99pc duty cycle)	X	5.60	66.97	16.34	0.00	150.0	± 9.6 %
		Y	5.55	66.76	16.11		150.0	
		Z	5.57	66.85	16.18		150.0	
10553-AAA	IEEE 802.11ac WiFi (80MHz, MCS9, 99pc duty cycle)	X	5.69	67.02	16.40	0.00	150.0	± 9.6 %
		Y	5.64	66.81	16.16		150.0	
		Z	5.66	66.90	16.24		150.0	
10554-AAA	IEEE 1602.11ac WiFi (160MHz, MCS0, 99pc duty cycle)	X	6.00	67.29	16.47	0.00	150.0	± 9.6 %
		Y	5.95	67.09	16.23		150.0	
		Z	5.96	67.17	16.31		150.0	
10555-AAA	IEEE 1602.11ac WiFi (160MHz, MCS1, 99pc duty cycle)	X	6.15	67.65	16.62	0.00	150.0	± 9.6 %
		Y	6.09	67.42	16.38		150.0	
		Z	6.11	67.51	16.45		150.0	
10556-AAA	IEEE 1602.11ac WiFi (160MHz, MCS2, 99pc duty cycle)	X	6.17	67.68	16.63	0.00	150.0	± 9.6 %
		Y	6.11	67.45	16.39		150.0	
		Z	6.13	67.54	16.46		150.0	
10557-AAA	IEEE 1602.11ac WiFi (160MHz, MCS3, 99pc duty cycle)	X	6.14	67.59	16.60	0.00	150.0	± 9.6 %
		Y	6.07	67.36	16.36		150.0	
		Z	6.09	67.45	16.44		150.0	

10558-AAA	IEEE 1602.11ac WiFi (160MHz, MCS4, 99pc duty cycle)	X	6.20	67.79	16.72	0.00	150.0	± 9.6 %
		Y	6.13	67.55	16.47		150.0	
		Z	6.15	67.64	16.55		150.0	
10560-AAA	IEEE 1602.11ac WiFi (160MHz, MCS6, 99pc duty cycle)	X	6.18	67.59	16.66	0.00	150.0	± 9.6 %
		Y	6.11	67.37	16.42		150.0	
		Z	6.14	67.46	16.49		150.0	
10561-AAA	IEEE 1602.11ac WiFi (160MHz, MCS7, 99pc duty cycle)	X	6.10	67.58	16.69	0.00	150.0	± 9.6 %
		Y	6.04	67.35	16.45		150.0	
		Z	6.06	67.44	16.52		150.0	
10562-AAA	IEEE 1602.11ac WiFi (160MHz, MCS8, 99pc duty cycle)	X	6.27	68.10	16.96	0.00	150.0	± 9.6 %
		Y	6.19	67.81	16.68		150.0	
		Z	6.21	67.92	16.77		150.0	
10563-AAA	IEEE 1602.11ac WiFi (160MHz, MCS9, 99pc duty cycle)	X	6.68	68.88	17.30	0.00	150.0	± 9.6 %
		Y	6.56	68.48	16.97		150.0	
		Z	6.59	68.61	17.07		150.0	
10564-AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 9 Mbps, 99pc duty cycle)	X	5.02	67.23	16.76	0.46	150.0	± 9.6 %
		Y	4.96	66.98	16.48		150.0	
		Z	4.98	67.08	16.57		150.0	
10565-AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 12 Mbps, 99pc duty cycle)	X	5.26	67.67	17.06	0.46	150.0	± 9.6 %
		Y	5.20	67.43	16.79		150.0	
		Z	5.22	67.52	16.88		150.0	
10566-AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 18 Mbps, 99pc duty cycle)	X	5.09	67.55	16.90	0.46	150.0	± 9.6 %
		Y	5.03	67.29	16.62		150.0	
		Z	5.05	67.39	16.71		150.0	
10567-AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 24 Mbps, 99pc duty cycle)	X	5.11	67.86	17.20	0.46	150.0	± 9.6 %
		Y	5.05	67.64	16.94		150.0	
		Z	5.07	67.72	17.02		150.0	
10568-AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 36 Mbps, 99pc duty cycle)	X	5.02	67.38	16.73	0.46	150.0	± 9.6 %
		Y	4.95	67.09	16.41		150.0	
		Z	4.98	67.21	16.52		150.0	
10569-AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 48 Mbps, 99pc duty cycle)	X	5.05	67.90	17.23	0.46	150.0	± 9.6 %
		Y	5.00	67.70	16.99		150.0	
		Z	5.02	67.78	17.06		150.0	
10570-AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 54 Mbps, 99pc duty cycle)	X	5.10	67.80	17.20	0.46	150.0	± 9.6 %
		Y	5.05	67.57	16.93		150.0	
		Z	5.07	67.66	17.02		150.0	
10571-AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 90pc duty cycle)	X	1.35	66.69	17.17	0.46	130.0	± 9.6 %
		Y	1.30	65.45	16.06		130.0	
		Z	1.31	65.81	16.41		130.0	
10572-AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps, 90pc duty cycle)	X	1.38	67.41	17.59	0.46	130.0	± 9.6 %
		Y	1.32	66.05	16.42		130.0	
		Z	1.33	66.44	16.78		130.0	
10573-AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps, 90pc duty cycle)	X	100.00	151.66	41.18	0.46	130.0	± 9.6 %
		Y	3.17	90.18	24.53		130.0	
		Z	5.56	100.47	28.08		130.0	
10574-AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps, 90pc duty cycle)	X	1.74	75.66	21.49	0.46	130.0	± 9.6 %
		Y	1.50	72.10	19.33		130.0	
		Z	1.55	73.02	19.95		130.0	

10575-AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps, 90pc duty cycle)	X	4.81	67.07	16.85	0.46	130.0	± 9.6 %
		Y	4.77	66.83	16.57		130.0	
		Z	4.78	66.92	16.66		130.0	
10576-AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 9 Mbps, 90pc duty cycle)	X	4.84	67.21	16.90	0.46	130.0	± 9.6 %
		Y	4.79	66.98	16.63		130.0	
		Z	4.81	67.07	16.71		130.0	
10577-AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 12 Mbps, 90pc duty cycle)	X	5.05	67.51	17.07	0.46	130.0	± 9.6 %
		Y	5.00	67.28	16.80		130.0	
		Z	5.02	67.37	16.88		130.0	
10578-AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 18 Mbps, 90pc duty cycle)	X	4.95	67.65	17.15	0.46	130.0	± 9.6 %
		Y	4.90	67.43	16.89		130.0	
		Z	4.91	67.51	16.97		130.0	
10579-AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 24 Mbps, 90pc duty cycle)	X	4.73	67.10	16.58	0.46	130.0	± 9.6 %
		Y	4.67	66.80	16.26		130.0	
		Z	4.70	66.92	16.37		130.0	
10580-AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 36 Mbps, 90pc duty cycle)	X	4.79	67.13	16.61	0.46	130.0	± 9.6 %
		Y	4.72	66.82	16.27		130.0	
		Z	4.74	66.95	16.39		130.0	
10581-AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 48 Mbps, 90pc duty cycle)	X	4.85	67.72	17.11	0.46	130.0	± 9.6 %
		Y	4.80	67.49	16.84		130.0	
		Z	4.81	67.57	16.92		130.0	
10582-AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 54 Mbps, 90pc duty cycle)	X	4.69	66.92	16.42	0.46	130.0	± 9.6 %
		Y	4.62	66.58	16.06		130.0	
		Z	4.65	66.72	16.19		130.0	
10583-AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps, 90pc duty cycle)	X	4.81	67.07	16.85	0.46	130.0	± 9.6 %
		Y	4.77	66.83	16.57		130.0	
		Z	4.78	66.92	16.66		130.0	
10584-AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps, 90pc duty cycle)	X	4.84	67.21	16.90	0.46	130.0	± 9.6 %
		Y	4.79	66.98	16.63		130.0	
		Z	4.81	67.07	16.71		130.0	
10585-AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps, 90pc duty cycle)	X	5.05	67.51	17.07	0.46	130.0	± 9.6 %
		Y	5.00	67.28	16.80		130.0	
		Z	5.02	67.37	16.88		130.0	
10586-AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps, 90pc duty cycle)	X	4.95	67.65	17.15	0.46	130.0	± 9.6 %
		Y	4.90	67.43	16.89		130.0	
		Z	4.91	67.51	16.97		130.0	
10587-AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps, 90pc duty cycle)	X	4.73	67.10	16.58	0.46	130.0	± 9.6 %
		Y	4.67	66.80	16.26		130.0	
		Z	4.70	66.92	16.37		130.0	
10588-AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps, 90pc duty cycle)	X	4.79	67.13	16.61	0.46	130.0	± 9.6 %
		Y	4.72	66.82	16.27		130.0	
		Z	4.74	66.95	16.39		130.0	
10589-AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps, 90pc duty cycle)	X	4.85	67.72	17.11	0.46	130.0	± 9.6 %
		Y	4.80	67.49	16.84		130.0	
		Z	4.81	67.57	16.92		130.0	
10590-AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps, 90pc duty cycle)	X	4.69	66.92	16.42	0.46	130.0	± 9.6 %
		Y	4.62	66.58	16.06		130.0	
		Z	4.65	66.72	16.19		130.0	

10591-AAA	IEEE 802.11n (HT Mixed, 20MHz, MCS0, 90pc duty cycle)	X	4.96	67.09	16.93	0.46	130.0	± 9.6 %
		Y	4.92	66.88	16.66		130.0	
		Z	4.93	66.96	16.75		130.0	
10592-AAA	IEEE 802.11n (HT Mixed, 20MHz, MCS1, 90pc duty cycle)	X	5.13	67.44	17.05	0.46	130.0	± 9.6 %
		Y	5.08	67.22	16.79		130.0	
		Z	5.09	67.30	16.87		130.0	
10593-AAA	IEEE 802.11n (HT Mixed, 20MHz, MCS2, 90pc duty cycle)	X	5.05	67.38	16.96	0.46	130.0	± 9.6 %
		Y	5.00	67.15	16.69		130.0	
		Z	5.02	67.24	16.77		130.0	
10594-AAA	IEEE 802.11n (HT Mixed, 20MHz, MCS3, 90pc duty cycle)	X	5.10	67.52	17.09	0.46	130.0	± 9.6 %
		Y	5.05	67.30	16.83		130.0	
		Z	5.07	67.38	16.91		130.0	
10595-AAA	IEEE 802.11n (HT Mixed, 20MHz, MCS4, 90pc duty cycle)	X	5.08	67.50	17.01	0.46	130.0	± 9.6 %
		Y	5.02	67.26	16.73		130.0	
		Z	5.04	67.35	16.82		130.0	
10596-AAA	IEEE 802.11n (HT Mixed, 20MHz, MCS5, 90pc duty cycle)	X	5.02	67.52	17.02	0.46	130.0	± 9.6 %
		Y	4.96	67.27	16.74		130.0	
		Z	4.98	67.36	16.83		130.0	
10597-AAA	IEEE 802.11n (HT Mixed, 20MHz, MCS6, 90pc duty cycle)	X	4.97	67.44	16.92	0.46	130.0	± 9.6 %
		Y	4.91	67.18	16.63		130.0	
		Z	4.93	67.28	16.72		130.0	
10598-AAA	IEEE 802.11n (HT Mixed, 20MHz, MCS7, 90pc duty cycle)	X	4.94	67.63	17.14	0.46	130.0	± 9.6 %
		Y	4.89	67.40	16.88		130.0	
		Z	4.91	67.48	16.96		130.0	
10599-AAA	IEEE 802.11n (HT Mixed, 40MHz, MCS0, 90pc duty cycle)	X	5.64	67.68	17.14	0.46	130.0	± 9.6 %
		Y	5.59	67.47	16.88		130.0	
		Z	5.61	67.54	16.96		130.0	
10600-AAA	IEEE 802.11n (HT Mixed, 40MHz, MCS1, 90pc duty cycle)	X	5.87	68.41	17.49	0.46	130.0	± 9.6 %
		Y	5.79	68.09	17.17		130.0	
		Z	5.81	68.18	17.26		130.0	
10601-AAA	IEEE 802.11n (HT Mixed, 40MHz, MCS2, 90pc duty cycle)	X	5.71	67.98	17.28	0.46	130.0	± 9.6 %
		Y	5.65	67.72	17.00		130.0	
		Z	5.66	67.81	17.08		130.0	
10602-AAA	IEEE 802.11n (HT Mixed, 40MHz, MCS3, 90pc duty cycle)	X	5.79	67.98	17.21	0.46	130.0	± 9.6 %
		Y	5.73	67.73	16.93		130.0	
		Z	5.75	67.82	17.01		130.0	
10603-AAA	IEEE 802.11n (HT Mixed, 40MHz, MCS4, 90pc duty cycle)	X	5.87	68.25	17.46	0.46	130.0	± 9.6 %
		Y	5.81	68.01	17.19		130.0	
		Z	5.83	68.09	17.27		130.0	
10604-AAA	IEEE 802.11n (HT Mixed, 40MHz, MCS5, 90pc duty cycle)	X	5.65	67.64	17.14	0.46	130.0	± 9.6 %
		Y	5.60	67.42	16.89		130.0	
		Z	5.61	67.50	16.96		130.0	
10605-AAA	IEEE 802.11n (HT Mixed, 40MHz, MCS6, 90pc duty cycle)	X	5.80	68.11	17.39	0.46	130.0	± 9.6 %
		Y	5.73	67.85	17.10		130.0	
		Z	5.75	67.93	17.19		130.0	
10606-AAA	IEEE 802.11n (HT Mixed, 40MHz, MCS7, 90pc duty cycle)	X	5.53	67.43	16.92	0.46	130.0	± 9.6 %
		Y	5.48	67.20	16.64		130.0	
		Z	5.50	67.29	16.73		130.0	

10607-AAA	IEEE 802.11ac WiFi (20MHz, MCS0, 90pc duty cycle)	X	4.80	66.40	16.54	0.46	130.0	± 9.6 %
		Y	4.75	66.17	16.27		130.0	
		Z	4.76	66.26	16.35		130.0	
10608-AAA	IEEE 802.11ac WiFi (20MHz, MCS1, 90pc duty cycle)	X	5.00	66.83	16.71	0.46	130.0	± 9.6 %
		Y	4.94	66.59	16.44		130.0	
		Z	4.96	66.68	16.52		130.0	
10609-AAA	IEEE 802.11ac WiFi (20MHz, MCS2, 90pc duty cycle)	X	4.89	66.71	16.57	0.46	130.0	± 9.6 %
		Y	4.83	66.45	16.28		130.0	
		Z	4.85	66.55	16.38		130.0	
10610-AAA	IEEE 802.11ac WiFi (20MHz, MCS3, 90pc duty cycle)	X	4.94	66.85	16.71	0.46	130.0	± 9.6 %
		Y	4.88	66.60	16.44		130.0	
		Z	4.90	66.69	16.53		130.0	
10611-AAA	IEEE 802.11ac WiFi (20MHz, MCS4, 90pc duty cycle)	X	4.86	66.68	16.58	0.46	130.0	± 9.6 %
		Y	4.80	66.42	16.30		130.0	
		Z	4.82	66.52	16.39		130.0	
10612-AAA	IEEE 802.11ac WiFi (20MHz, MCS5, 90pc duty cycle)	X	4.88	66.87	16.65	0.46	130.0	± 9.6 %
		Y	4.82	66.59	16.35		130.0	
		Z	4.84	66.69	16.44		130.0	
10613-AAA	IEEE 802.11ac WiFi (20MHz, MCS6, 90pc duty cycle)	X	4.89	66.78	16.55	0.46	130.0	± 9.6 %
		Y	4.82	66.49	16.24		130.0	
		Z	4.85	66.60	16.34		130.0	
10614-AAA	IEEE 802.11ac WiFi (20MHz, MCS7, 90pc duty cycle)	X	4.81	66.89	16.73	0.46	130.0	± 9.6 %
		Y	4.75	66.64	16.45		130.0	
		Z	4.77	66.73	16.54		130.0	
10615-AAA	IEEE 802.11ac WiFi (20MHz, MCS8, 90pc duty cycle)	X	4.87	66.56	16.40	0.46	130.0	± 9.6 %
		Y	4.81	66.27	16.09		130.0	
		Z	4.83	66.38	16.19		130.0	
10616-AAA	IEEE 802.11ac WiFi (40MHz, MCS0, 90pc duty cycle)	X	5.46	66.92	16.73	0.46	130.0	± 9.6 %
		Y	5.41	66.70	16.48		130.0	
		Z	5.43	66.79	16.56		130.0	
10617-AAA	IEEE 802.11ac WiFi (40MHz, MCS1, 90pc duty cycle)	X	5.54	67.11	16.80	0.46	130.0	± 9.6 %
		Y	5.48	66.88	16.54		130.0	
		Z	5.50	66.96	16.62		130.0	
10618-AAA	IEEE 802.11ac WiFi (40MHz, MCS2, 90pc duty cycle)	X	5.42	67.11	16.81	0.46	130.0	± 9.6 %
		Y	5.36	66.88	16.56		130.0	
		Z	5.38	66.97	16.63		130.0	
10619-AAA	IEEE 802.11ac WiFi (40MHz, MCS3, 90pc duty cycle)	X	5.45	66.98	16.69	0.46	130.0	± 9.6 %
		Y	5.39	66.74	16.43		130.0	
		Z	5.41	66.83	16.51		130.0	
10620-AAA	IEEE 802.11ac WiFi (40MHz, MCS4, 90pc duty cycle)	X	5.55	67.03	16.77	0.46	130.0	± 9.6 %
		Y	5.49	66.78	16.50		130.0	
		Z	5.51	66.88	16.58		130.0	
10621-AAA	IEEE 802.11ac WiFi (40MHz, MCS5, 90pc duty cycle)	X	5.51	67.03	16.86	0.46	130.0	± 9.6 %
		Y	5.46	66.84	16.63		130.0	
		Z	5.48	66.91	16.70		130.0	
10622-AAA	IEEE 802.11ac WiFi (40MHz, MCS6, 90pc duty cycle)	X	5.54	67.25	16.97	0.46	130.0	± 9.6 %
		Y	5.49	67.04	16.73		130.0	
		Z	5.50	67.11	16.80		130.0	

10623-AAA	IEEE 802.11ac WiFi (40MHz, MCS7, 90pc duty cycle)	X	5.41	66.79	16.63	0.46	130.0	± 9.6 %
		Y	5.36	66.56	16.37		130.0	
		Z	5.38	66.65	16.45		130.0	
10624-AAA	IEEE 802.11ac WiFi (40MHz, MCS8, 90pc duty cycle)	X	5.62	67.00	16.79	0.46	130.0	± 9.6 %
		Y	5.56	66.77	16.54		130.0	
		Z	5.58	66.86	16.62		130.0	
10625-AAA	IEEE 802.11ac WiFi (40MHz, MCS9, 90pc duty cycle)	X	6.10	68.33	17.51	0.46	130.0	± 9.6 %
		Y	6.00	67.98	17.19		130.0	
		Z	6.02	68.08	17.28		130.0	
10626-AAA	IEEE 802.11ac WiFi (80MHz, MCS0, 90pc duty cycle)	X	5.74	66.93	16.65	0.46	130.0	± 9.6 %
		Y	5.69	66.74	16.43		130.0	
		Z	5.71	66.82	16.50		130.0	
10627-AAA	IEEE 802.11ac WiFi (80MHz, MCS1, 90pc duty cycle)	X	6.03	67.63	16.96	0.46	130.0	± 9.6 %
		Y	5.97	67.40	16.71		130.0	
		Z	5.98	67.48	16.79		130.0	
10628-AAA	IEEE 802.11ac WiFi (80MHz, MCS2, 90pc duty cycle)	X	5.81	67.14	16.66	0.46	130.0	± 9.6 %
		Y	5.75	66.90	16.41		130.0	
		Z	5.77	67.00	16.49		130.0	
10629-AAA	IEEE 802.11ac WiFi (80MHz, MCS3, 90pc duty cycle)	X	5.89	67.21	16.69	0.46	130.0	± 9.6 %
		Y	5.84	67.00	16.45		130.0	
		Z	5.85	67.08	16.52		130.0	
10630-AAA	IEEE 802.11ac WiFi (80MHz, MCS4, 90pc duty cycle)	X	6.58	69.47	17.83	0.46	130.0	± 9.6 %
		Y	6.44	68.97	17.43		130.0	
		Z	6.47	69.10	17.53		130.0	
10631-AAA	IEEE 802.11ac WiFi (80MHz, MCS5, 90pc duty cycle)	X	6.29	68.65	17.58	0.46	130.0	± 9.6 %
		Y	6.21	68.38	17.32		130.0	
		Z	6.23	68.46	17.39		130.0	
10632-AAA	IEEE 802.11ac WiFi (80MHz, MCS6, 90pc duty cycle)	X	5.97	67.59	17.06	0.46	130.0	± 9.6 %
		Y	5.92	67.40	16.84		130.0	
		Z	5.93	67.46	16.90		130.0	
10633-AAA	IEEE 802.11ac WiFi (80MHz, MCS7, 90pc duty cycle)	X	5.86	67.25	16.74	0.46	130.0	± 9.6 %
		Y	5.80	67.03	16.49		130.0	
		Z	5.82	67.11	16.57		130.0	
10634-AAA	IEEE 802.11ac WiFi (80MHz, MCS8, 90pc duty cycle)	X	5.83	67.23	16.78	0.46	130.0	± 9.6 %
		Y	5.78	67.04	16.55		130.0	
		Z	5.80	67.11	16.62		130.0	
10635-AAA	IEEE 802.11ac WiFi (80MHz, MCS9, 90pc duty cycle)	X	5.74	66.71	16.29	0.46	130.0	± 9.6 %
		Y	5.68	66.44	16.01		130.0	
		Z	5.70	66.56	16.11		130.0	
10636-AAA	IEEE 1602.11ac WiFi (160MHz, MCS0, 90pc duty cycle)	X	6.17	67.34	16.76	0.46	130.0	± 9.6 %
		Y	6.11	67.15	16.53		130.0	
		Z	6.13	67.22	16.60		130.0	
10637-AAA	IEEE 1602.11ac WiFi (160MHz, MCS1, 90pc duty cycle)	X	6.35	67.79	16.97	0.46	130.0	± 9.6 %
		Y	6.29	67.57	16.73		130.0	
		Z	6.30	67.65	16.80		130.0	
10638-AAA	IEEE 1602.11ac WiFi (160MHz, MCS2, 90pc duty cycle)	X	6.35	67.77	16.94	0.46	130.0	± 9.6 %
		Y	6.29	67.54	16.69		130.0	
		Z	6.30	67.62	16.76		130.0	

10639-AAA	IEEE 1602.11ac WiFi (160MHz, MCS3, 90pc duty cycle)	X	6.32	67.69	16.93	0.46	130.0	± 9.6 %
		Y	6.26	67.48	16.70		130.0	
		Z	6.28	67.56	16.77		130.0	
10640-AAA	IEEE 1602.11ac WiFi (160MHz, MCS4, 90pc duty cycle)	X	6.35	67.80	16.94	0.46	130.0	± 9.6 %
		Y	6.28	67.54	16.68		130.0	
		Z	6.30	67.64	16.76		130.0	
10641-AAA	IEEE 1602.11ac WiFi (160MHz, MCS5, 90pc duty cycle)	X	6.36	67.58	16.85	0.46	130.0	± 9.6 %
		Y	6.30	67.37	16.61		130.0	
		Z	6.32	67.45	16.69		130.0	
10642-AAA	IEEE 1602.11ac WiFi (160MHz, MCS6, 90pc duty cycle)	X	6.40	67.80	17.11	0.46	130.0	± 9.6 %
		Y	6.34	67.61	16.89		130.0	
		Z	6.36	67.68	16.96		130.0	
10643-AAA	IEEE 1602.11ac WiFi (160MHz, MCS7, 90pc duty cycle)	X	6.25	67.58	16.92	0.46	130.0	± 9.6 %
		Y	6.19	67.34	16.66		130.0	
		Z	6.21	67.43	16.74		130.0	
10644-AAA	IEEE 1602.11ac WiFi (160MHz, MCS8, 90pc duty cycle)	X	6.47	68.26	17.28	0.46	130.0	± 9.6 %
		Y	6.39	67.96	16.99		130.0	
		Z	6.42	68.06	17.08		130.0	
10645-AAA	IEEE 1602.11ac WiFi (160MHz, MCS9, 90pc duty cycle)	X	7.06	69.52	17.87	0.46	130.0	± 9.6 %
		Y	6.93	69.10	17.52		130.0	
		Z	6.96	69.22	17.62		130.0	
10646-AAC	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK, UL Subframe=2,7)	X	100.00	148.85	48.77	9.30	60.0	± 9.6 %
		Y	80.54	141.06	46.17		60.0	
		Z	100.00	148.08	48.38		60.0	
10647-AAB	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK, UL Subframe=2,7)	X	100.00	150.12	49.32	9.30	60.0	± 9.6 %
		Y	73.97	140.10	46.12		60.0	
		Z	100.00	149.31	48.92		60.0	
10648-AAA	CDMA2000 (1x Advanced)	X	0.92	66.97	13.32	0.00	150.0	± 9.6 %
		Y	0.75	63.96	11.29		150.0	
		Z	0.80	64.80	11.93		150.0	

[E] Uncertainty is determined using the max. deviation from linear response applying rectangular distribution and is expressed for the square of the field value.

Calibration Laboratory of
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Accreditation No.: SCS 0108

Client **PC Test** **Certificate No: ES3-3213_Feb17**

CALIBRATION CERTIFICATE

Object ES3DV3 - SN:3213

Calibration procedure(s) QA CAL-01.v9, QA CAL-23.v5, QA CAL-25.v6
Calibration procedure for dosimetric E-field probes

BMV 03-01-2017

Calibration date: February 10, 2017

This calibration certificate documents the traceability to national standards, which realize the physical units of measurements (SI).
The measurements and the uncertainties with confidence probability are given on the following pages and are part of the certificate.

All calibrations have been conducted in the closed laboratory facility: environment temperature (22 ± 3)°C and humidity < 70%.

Calibration Equipment used (M&TE critical for calibration)

Primary Standards	ID	Cal Date (Certificate No.)	Scheduled Calibration
Power meter NRP	SN: 104778	06-Apr-16 (No. 217-02288/02289)	Apr-17
Power sensor NRP-Z91	SN: 103244	06-Apr-16 (No. 217-02288)	Apr-17
Power sensor NRP-Z91	SN: 103245	06-Apr-16 (No. 217-02289)	Apr-17
Reference 20 dB Attenuator	SN: S5277 (20x)	05-Apr-16 (No. 217-02293)	Apr-17
Reference Probe ES3DV2	SN: 3013	31-Dec-16 (No. ES3-3013_Dec16)	Dec-17
DAE4	SN: 660	7-Dec-16 (No. DAE4-660_Dec16)	Dec-17
Secondary Standards	ID	Check Date (in house)	Scheduled Check
Power meter E4419B	SN: GB41293874	06-Apr-16 (in house check Jun-16)	In house check: Jun-18
Power sensor E4412A	SN: MY41498087	06-Apr-16 (in house check Jun-16)	In house check: Jun-18
Power sensor E4412A	SN: 000110210	06-Apr-16 (in house check Jun-16)	In house check: Jun-18
RF generator HP 8648C	SN: US3642U01700	04-Aug-99 (in house check Jun-16)	In house check: Jun-18
Network Analyzer HP 8753E	SN: US37390585	18-Oct-01 (in house check Oct-16)	In house check: Oct-17

	Name	Function	Signature
Calibrated by:	Claudio Leubler	Laboratory Technician	
Approved by:	Katja Pokovic	Technical Manager	

Issued: February 13, 2017

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Glossary:

TSL	tissue simulating liquid
NORMx,y,z	sensitivity in free space
ConvF	sensitivity in TSL / NORMx,y,z
DCP	diode compression point
CF	crest factor (1/duty_cycle) of the RF signal
A, B, C, D	modulation dependent linearization parameters
Polarization φ	φ rotation around probe axis
Polarization ϑ	ϑ rotation around an axis that is in the plane normal to probe axis (at measurement center), i.e., ϑ = 0 is normal to probe axis
Connector Angle	information used in DASY system to align probe sensor X to the robot coordinate system

Calibration is Performed According to the Following Standards:

a) IEEE Std 1528-2013, "IEEE Recommended Practice for Determining the Peak Spatial-Averaged Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques", June 2013
b) IEC 62209-1, "Procedure to measure the Specific Absorption Rate (SAR) for hand-held devices used in close proximity to the ear (frequency range of 300 MHz to 3 GHz)", February 2005
c) IEC 62209-2, "Procedure to determine the Specific Absorption Rate (SAR) for wireless communication devices used in close proximity to the human body (frequency range of 30 MHz to 6 GHz)", March 2010
d) KDB 865664, "SAR Measurement Requirements for 100 MHz to 6 GHz"

Methods Applied and Interpretation of Parameters:

- *NORMx,y,z:* Assessed for E-field polarization ϑ = 0 (f ≤ 900 MHz in TEM-cell; f > 1800 MHz: R22 waveguide). NORMx,y,z are only intermediate values, i.e., the uncertainties of NORMx,y,z does not affect the E^2-field uncertainty inside TSL (see below *ConvF*).
- *NORM(f)x,y,z = NORMx,y,z * frequency_response* (see Frequency Response Chart). This linearization is implemented in DASY4 software versions later than 4.2. The uncertainty of the frequency response is included in the stated uncertainty of *ConvF*.
- *DCPx,y,z:* DCP are numerical linearization parameters assessed based on the data of power sweep with CW signal (no uncertainty required). DCP does not depend on frequency nor media.
- *PAR:* PAR is the Peak to Average Ratio that is not calibrated but determined based on the signal characteristics
- *Ax,y,z; Bx,y,z; Cx,y,z; Dx,y,z; VRx,y,z: A, B, C, D* are numerical linearization parameters assessed based on the data of power sweep for specific modulation signal. The parameters do not depend on frequency nor media. *VR* is the maximum calibration range expressed in RMS voltage across the diode.
- *ConvF and Boundary Effect Parameters:* Assessed in flat phantom using E-field (or Temperature Transfer Standard for f ≤ 800 MHz) and inside waveguide using analytical field distributions based on power measurements for f > 800 MHz. The same setups are used for assessment of the parameters applied for boundary compensation (alpha, depth) of which typical uncertainty values are given. These parameters are used in DASY4 software to improve probe accuracy close to the boundary. The sensitivity in TSL corresponds to *NORMx,y,z * ConvF* whereby the uncertainty corresponds to that given for *ConvF*. A frequency dependent *ConvF* is used in DASY version 4.4 and higher which allows extending the validity from ± 50 MHz to ± 100 MHz.
- *Spherical isotropy (3D deviation from isotropy)*: in a field of low gradients realized using a flat phantom exposed by a patch antenna.
- *Sensor Offset*: The sensor offset corresponds to the offset of virtual measurement center from the probe tip (on probe axis). No tolerance required.
- *Connector Angle*: The angle is assessed using the information gained by determining the *NORMx* (no uncertainty required).

Probe ES3DV3

SN:3213

Manufactured: October 14, 2008
Calibrated: February 10, 2017

Calibrated for DASY/EASY Systems
(Note: non-compatible with DASY2 system!)

DASY/EASY - Parameters of Probe: ES3DV3 - SN:3213

Basic Calibration Parameters

	Sensor X	Sensor Y	Sensor Z	Unc (k=2)
Norm ($\mu V/(V/m)^2$)[A]	1.44	1.32	1.29	± 10.1 %
DCP (mV)[B]	101.3	102.3	101.6	

Modulation Calibration Parameters

UID	Communication System Name		A dB	B dB√μV	C	D dB	VR mV	Unc[E] (k=2)
0	CW	X	0.0	0.0	1.0	0.00	228.2	±3.5 %
		Y	0.0	0.0	1.0		230.0	
		Z	0.0	0.0	1.0		221.7	

Note: For details on UID parameters see Appendix.

Sensor Model Parameters

	C1 fF	C2 fF	α V^{-1}	T1 $ms.V^{-2}$	T2 $ms.V^{-1}$	T3 ms	T4 V^{-2}	T5 V^{-1}	T6
X	56.23	407.2	35.93	28.85	2.251	5.1	1.129	0.439	1.012
Y	55.47	400.7	35.87	28.65	2.277	5.1	1.321	0.386	1.013
Z	51.67	374.7	36	28.45	2.103	5.1	0.358	0.504	1.009

The reported uncertainty of measurement is stated as the standard uncertainty of measurement multiplied by the coverage factor k=2, which for a normal distribution corresponds to a coverage probability of approximately 95%.

[A] The uncertainties of Norm X,Y,Z do not affect the E^2-field uncertainty inside TSL (see Pages 5 and 6).
[B] Numerical linearization parameter: uncertainty not required.
[E] Uncertainty is determined using the max. deviation from linear response applying rectangular distribution and is expressed for the square of the field value.

DASY/EASY - Parameters of Probe: ES3DV3 - SN:3213

Calibration Parameter Determined in Head Tissue Simulating Media

f (MHz) [C]	Relative Permittivity [F]	Conductivity (S/m) [F]	ConvF X	ConvF Y	ConvF Z	Alpha [G]	Depth [G] (mm)	Unc (k=2)
750	41.9	0.89	6.85	6.85	6.85	0.80	1.18	± 12.0 %
835	41.5	0.90	6.49	6.49	6.49	0.49	1.52	± 12.0 %
1750	40.1	1.37	5.49	5.49	5.49	0.60	1.35	± 12.0 %
1900	40.0	1.40	5.29	5.29	5.29	0.68	1.27	± 12.0 %
2300	39.5	1.67	4.95	4.95	4.95	0.70	1.28	± 12.0 %
2450	39.2	1.80	4.70	4.70	4.70	0.80	1.24	± 12.0 %
2600	39.0	1.96	4.52	4.52	4.52	0.78	1.28	± 12.0 %

[C] Frequency validity above 300 MHz of ± 100 MHz only applies for DASY v4.4 and higher (see Page 2), else it is restricted to ± 50 MHz. The uncertainty is the RSS of the ConvF uncertainty at calibration frequency and the uncertainty for the indicated frequency band. Frequency validity below 300 MHz is ± 10, 25, 40, 50 end 70 MHz for ConvF assessments at 30, 64, 128, 150 and 220 MHz respectively. Above 5 GHz frequency validity can be extended to ± 110 MHz.

[F] At frequencies below 3 GHz, the validity of tissue parameters (ε and σ) can be relaxed to ± 10% if liquid compensation formula is applied to measured SAR values. At frequencies above 3 GHz, the validity of tissue parameters (ε and σ) is restricted to ± 5%. The uncertainty is the RSS of the ConvF uncertainty for indicated target tissue parameters.

[G] Alpha/Depth are determined during calibration. SPEAG warrants that the remaining deviation due to the boundary effect after compensation is always less than ± 1% for frequencies below 3 GHz and below ± 2% for frequencies between 3-6 GHz at any distance larger than half the probe tip diameter from the boundary.

DASY/EASY - Parameters of Probe: ES3DV3 - SN:3213

Calibration Parameter Determined in Body Tissue Simulating Media

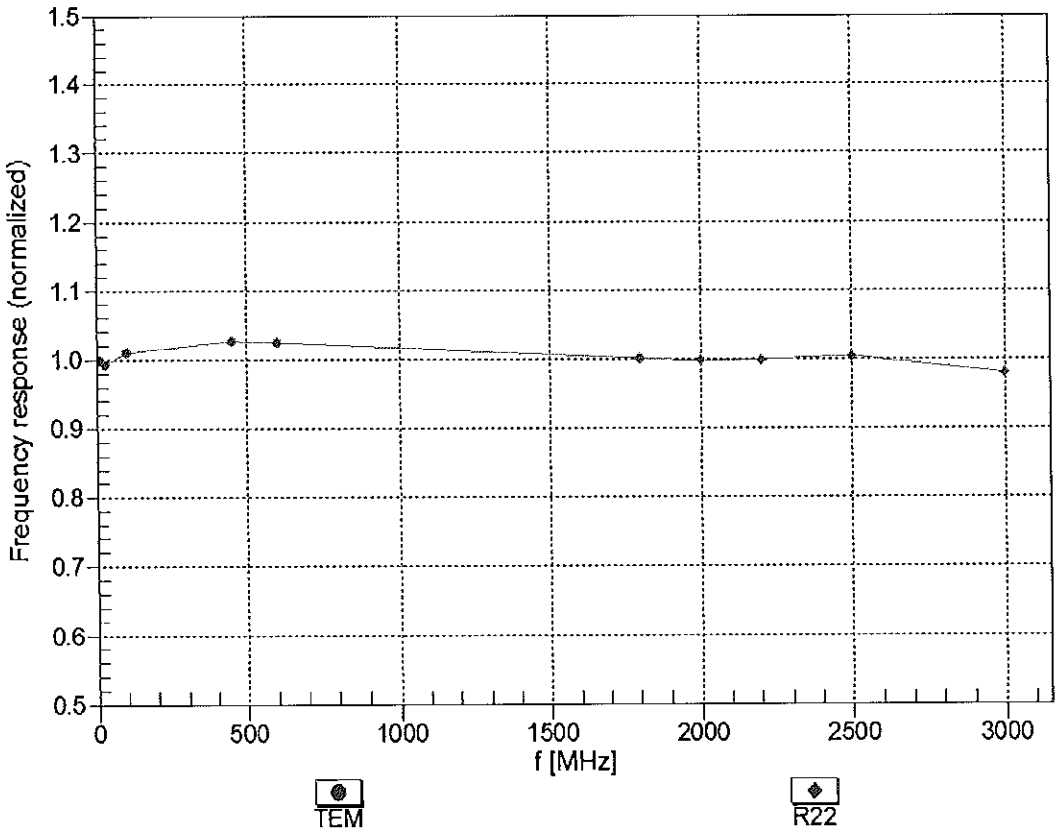
f (MHz) [C]	Relative Permittivity [F]	Conductivity (S/m) [F]	ConvF X	ConvF Y	ConvF Z	Alpha [G]	Depth [G] (mm)	Unc (k=2)
750	55.5	0.96	6.38	6.38	6.38	0.60	1.31	± 12.0 %
835	55.2	0.97	6.28	6.28	6.28	0.80	1.20	± 12.0 %
1750	53.4	1.49	5.09	5.09	5.09	0.66	1.33	± 12.0 %
1900	53.3	1.52	4.94	4.94	4.94	0.40	1.85	± 12.0 %
2300	52.9	1.81	4.69	4.69	4.69	0.80	1.24	± 12.0 %
2450	52.7	1.95	4.53	4.53	4.53	0.72	1.28	± 12.0 %
2600	52.5	2.16	4.32	4.32	4.32	0.80	1.20	± 12.0 %

[C] Frequency validity above 300 MHz of ± 100 MHz only applies for DASY v4.4 and higher (see Page 2), else it is restricted to ± 50 MHz. The uncertainty is the RSS of the ConvF uncertainty at calibration frequency and the uncertainty for the indicated frequency band. Frequency validity below 300 MHz is ± 10, 25, 40, 50 and 70 MHz for ConvF assessments at 30, 64, 128, 150 and 220 MHz respectively. Above 5 GHz frequency validity can be extended to ± 110 MHz.

[F] At frequencies below 3 GHz, the validity of tissue parameters (ε and σ) can be relaxed to ± 10% if liquid compensation formula is applied to measured SAR values. At frequencies above 3 GHz, the validity of tissue parameters (ε and σ) is restricted to ± 5%. The uncertainty is the RSS of the ConvF uncertainty for indicated target tissue parameters.

[G] Alpha/Depth are determined during calibration. SPEAG warrants that the remaining deviation due to the boundary effect after compensation is always less than ± 1% for frequencies below 3 GHz and below ± 2% for frequencies between 3-6 GHz at any distance larger than half the probe tip diameter from the boundary.

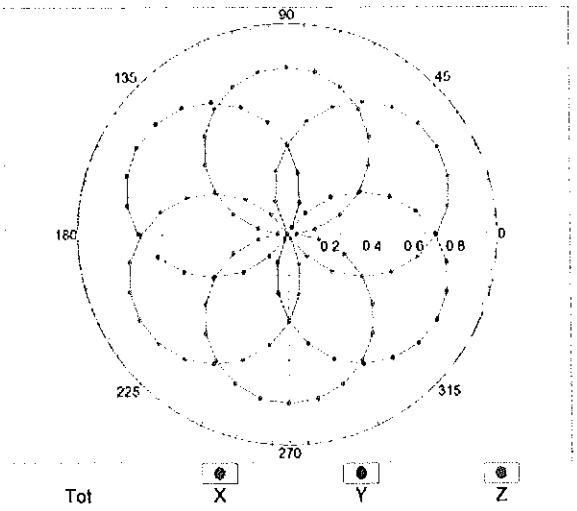
Frequency Response of E-Field
(TEM-Cell:ifi110 EXX, Waveguide: R22)



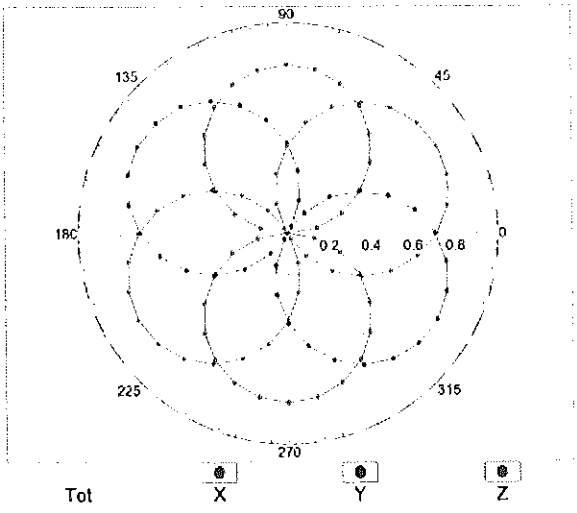
Uncertainty of Frequency Response of E-field: ± 6.3% (k=2)

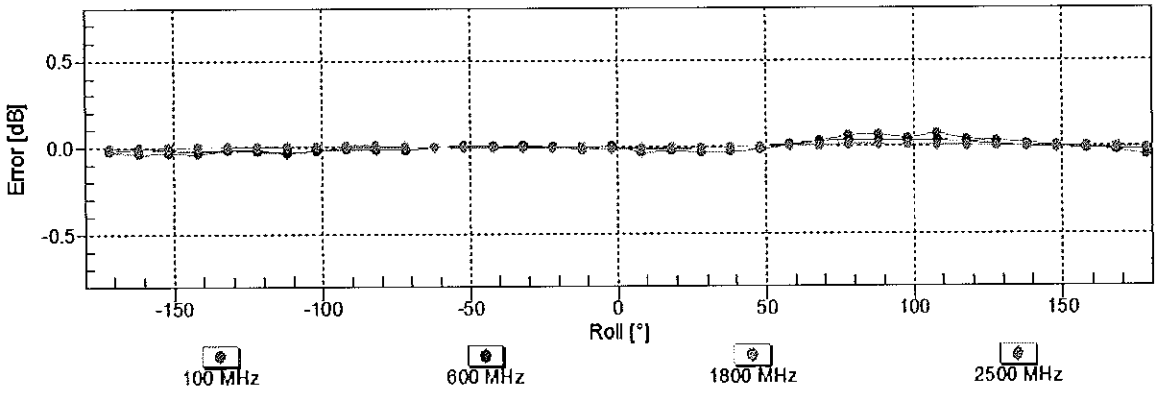
Receiving Pattern (ϕ), ϑ = 0°

f=600 MHz,TEM



f=1800 MHz,R22

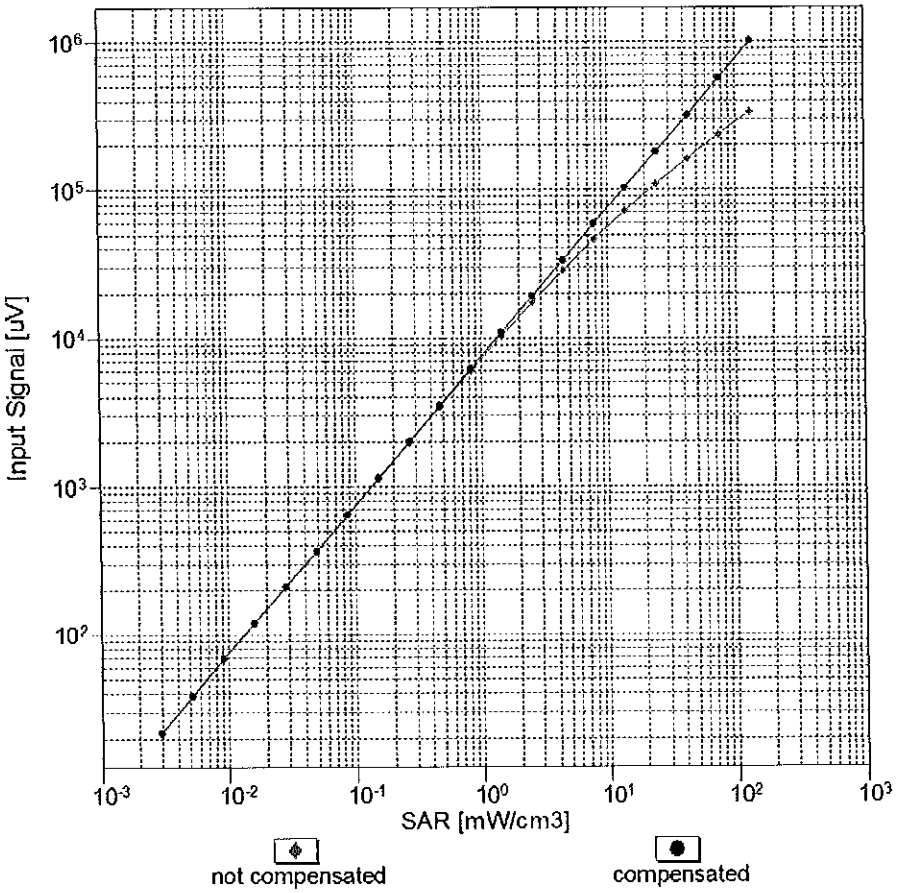


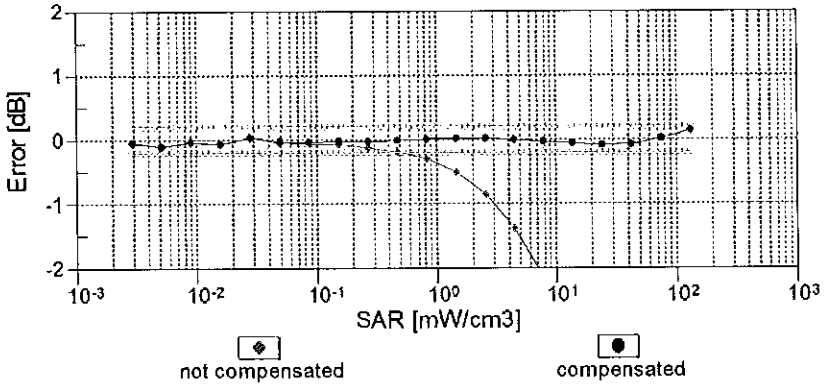


Uncertainty of Axial Isotropy Assessment: ± 0.5% (k=2)

Dynamic Range f(SAR_{head})

(TEM cell , f_{eval}= 1900 MHz)

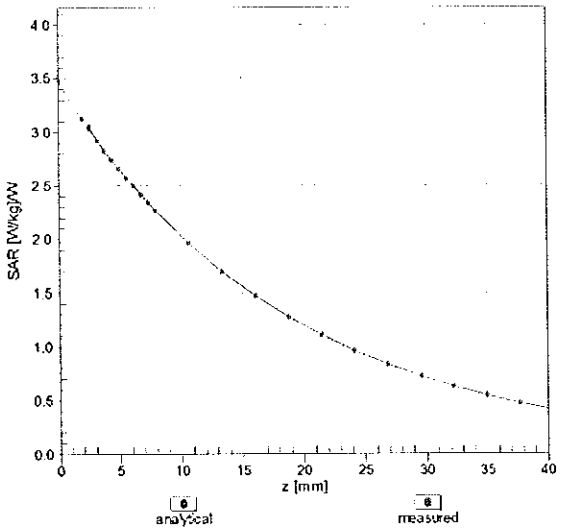




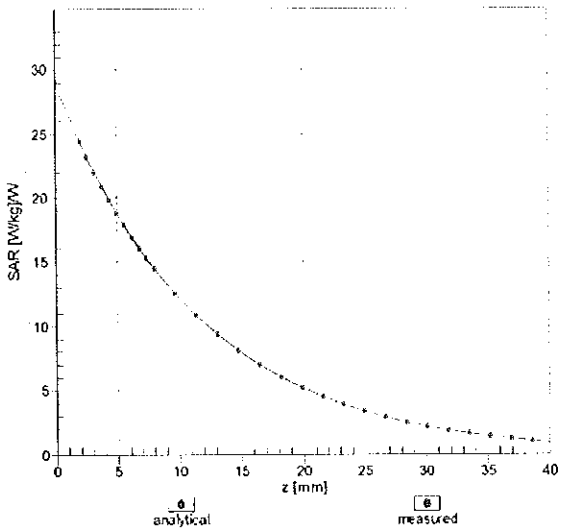
Uncertainty of Linearity Assessment: ± 0.6% (k=2)

Conversion Factor Assessment

f = 835 MHz,WGLS R9 (H_convF)

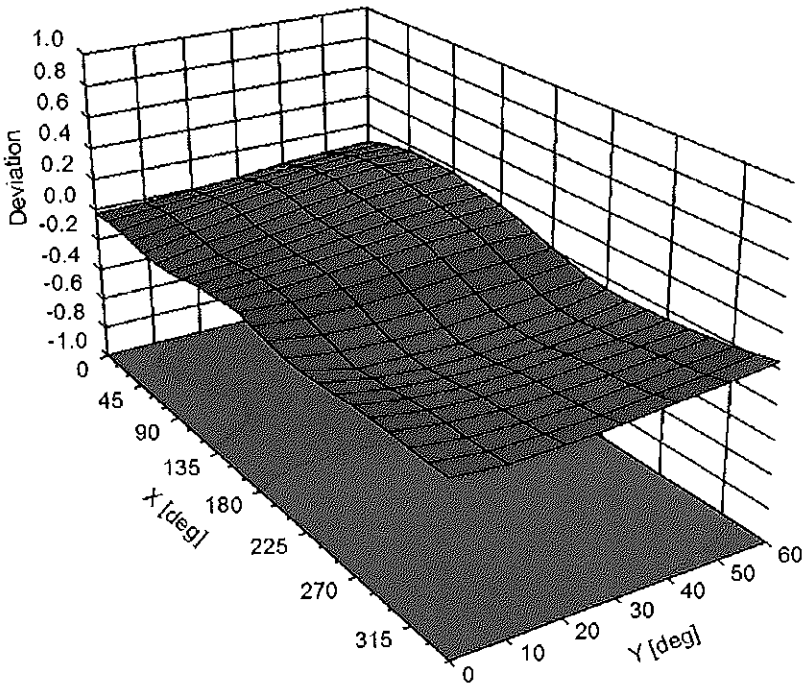


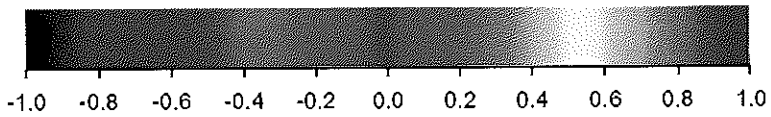
f = 1900 MHz,WGLS R22 (H_convF)



Deviation from Isotropy in Liquid

Error (ϕ, ϑ), f = 900 MHz





Uncertainty of Spherical Isotropy Assessment: ± 2.6% (k=2)

DASY/EASY - Parameters of Probe: ES3DV3 - SN:3213

Other Probe Parameters

Sensor Arrangement	Triangular
Connector Angle (°)	98.2
Mechanical Surface Detection Mode	enabled
Optical Surface Detection Mode	disabled
Probe Overall Length	337 mm
Probe Body Diameter	10 mm
Tip Length	10 mm
Tip Diameter	4 mm
Probe Tip to Sensor X Calibration Point	2 mm
Probe Tip to Sensor Y Calibration Point	2 mm
Probe Tip to Sensor Z Calibration Point	2 mm
Recommended Measurement Distance from Surface	3 mm

Appendix: Modulation Calibration Parameters

UID	Communication System Name		A dB	B dB√μV	C	D dB	VR mV	Max Unc[E] (k=2)
0	CW	X	0.00	0.00	1.00	0.00	228.2	± 3.5 %
		Y	0.00	0.00	1.00		230.0	
		Z	0.00	0.00	1.00		221.7	
10010-CAA	SAR Validation (Square, 100ms, 10ms)	X	11.07	84.26	20.62	10.00	25.0	± 9.6 %
		Y	10.49	83.36	20.27		25.0	
		Z	11.03	84.22	20.43		25.0	
10011-CAB	UMTS-FDD (WCDMA)	X	1.04	66.65	14.82	0.00	150.0	± 9.6 %
		Y	1.16	69.13	16.33		150.0	
		Z	1.01	66.30	14.54		150.0	
10012-CAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps)	X	1.30	64.60	15.49	0.41	150.0	± 9.6 %
		Y	1.33	65.49	16.22		150.0	
		Z	1.28	64.47	15.36		150.0	
10013-CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps)	X	5.14	67.15	17.39	1.46	150.0	± 9.6 %
		Y	5.14	67.35	17.57		150.0	
		Z	5.09	67.17	17.37		150.0	
10021-DAC	GSM-FDD (TDMA, GMSK)	X	62.94	114.81	31.61	9.39	50.0	± 9.6 %
		Y	41.95	107.82	29.66		50.0	
		Z	94.76	121.25	33.03		50.0	
10023-DAC	GPRS-FDD (TDMA, GMSK, TN 0)	X	46.50	109.76	30.33	9.57	50.0	± 9.6 %
		Y	33.70	104.15	28.69		50.0	
		Z	62.69	114.46	31.37		50.0	
10024-DAC	GPRS-FDD (TDMA, GMSK, TN 0-1)	X	100.00	119.19	30.75	6.56	60.0	± 9.6 %
		Y	100.00	118.97	30.64		60.0	
		Z	100.00	118.83	30.48		60.0	
10025-DAC	EDGE-FDD (TDMA, 8PSK, TN 0)	X	18.95	107.68	41.29	12.57	50.0	± 9.6 %
		Y	31.91	124.81	47.58		50.0	
		Z	17.05	104.98	40.36		50.0	
10026-DAC	EDGE-FDD (TDMA, 8PSK, TN 0-1)	X	20.29	105.23	36.57	9.56	60.0	± 9.6 %
		Y	28.92	114.92	39.99		60.0	
		Z	20.11	105.49	36.71		60.0	
10027-DAC	GPRS-FDD (TDMA, GMSK, TN 0-1-2)	X	100.00	118.17	29.38	4.80	80.0	± 9.6 %
		Y	100.00	118.12	29.34		80.0	
		Z	100.00	117.81	29.12		80.0	
10028-DAC	GPRS-FDD (TDMA, GMSK, TN 0-1-2-3)	X	100.00	118.40	28.68	3.55	100.0	± 9.6 %
		Y	100.00	118.60	28.76		100.0	
		Z	100.00	118.00	28.41		100.0	
10029-DAC	EDGE-FDD (TDMA, 8PSK, TN 0-1-2)	X	12.78	94.46	31.72	7.80	80.0	± 9.6 %
		Y	16.27	100.85	34.22		80.0	
		Z	12.37	94.11	31.64		80.0	
10030-CAA	IEEE 802.15.1 Bluetooth (GFSK, DH1)	X	100.00	117.61	29.45	5.30	70.0	± 9.6 %
		Y	100.00	117.52	29.40		70.0	
		Z	100.00	117.17	29.14		70.0	
10031-CAA	IEEE 802.15.1 Bluetooth (GFSK, DH3)	X	100.00	119.11	27.47	1.88	100.0	± 9.6 %
		Y	100.00	120.30	27.96		100.0	
		Z	100.00	118.27	27.02		100.0	

10032-CAA	IEEE 802.15.1 Bluetooth (GFSK, DH5)	X	100.00	123.13	28.10	1.17	100.0	± 9.6 %
		Y	100.00	125.86	29.19		100.0	
		Z	100.00	121.81	27.46		100.0	
10033-CAA	IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH1)	X	19.81	99.27	27.58	5.30	70.0	± 9.6 %
		Y	23.75	102.32	28.48		70.0	
		Z	20.10	99.19	27.31		70.0	
10034-CAA	IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH3)	X	6.18	84.61	21.36	1.88	100.0	± 9.6 %
		Y	8.74	90.01	23.19		100.0	
		Z	6.07	84.02	20.83		100.0	
10035-CAA	IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH5)	X	3.50	78.04	18.75	1.17	100.0	± 9.6 %
		Y	4.77	82.88	20.59		100.0	
		Z	3.40	77.42	18.19		100.0	
10036-CAA	IEEE 802.15.1 Bluetooth (8-DPSK, DH1)	X	25.06	103.36	28.83	5.30	70.0	± 9.6 %
		Y	30.48	106.66	29.76		70.0	
		Z	25.78	103.46	28.61		70.0	
10037-CAA	IEEE 802.15.1 Bluetooth (8-DPSK, DH3)	X	5.91	84.02	21.13	1.88	100.0	± 9.6 %
		Y	8.37	89.43	22.97		100.0	
		Z	5.74	83.28	20.55		100.0	
10038-CAA	IEEE 802.15.1 Bluetooth (8-DPSK, DH5)	X	3.58	78.59	19.05	1.17	100.0	± 9.6 %
		Y	4.93	83.62	20.94		100.0	
		Z	3.47	77.94	18.48		100.0	
10039-CAB	CDMA2000 (1xRTT, RC1)	X	1.75	70.49	15.41	0.00	150.0	± 9.6 %
		Y	2.11	73.63	16.88		150.0	
		Z	1.63	69.80	14.78		150.0	
10042-CAB	IS-54 / IS-136 FDD (TDMA/FDM, PI/4-DQPSK, Halfrate)	X	100.00	117.99	30.44	7.78	50.0	± 9.6 %
		Y	100.00	117.70	30.30		50.0	
		Z	100.00	117.57	30.13		50.0	
10044-CAA	IS-91/EIA/TIA-553 FDD (FDMA, FM)	X	0.01	92.86	0.28	0.00	150.0	± 9.6 %
		Y	0.00	128.30	10.22		150.0	
		Z	0.01	91.94	0.27		150.0	
10048-CAA	DECT (TDD, TDMA/FDM, GFSK, Full Slot, 24)	X	16.43	91.36	26.72	13.80	25.0	± 9.6 %
		Y	14.26	88.55	25.69		25.0	
		Z	18.21	93.36	27.20		25.0	
10049-CAA	DECT (TDD, TDMA/FDM, GFSK, Double Slot, 12)	X	21.81	96.95	27.09	10.79	40.0	± 9.6 %
		Y	18.36	93.74	25.99		40.0	
		Z	24.94	99.20	27.59		40.0	
10056-CAA	UMTS-TDD (TD-SCDMA, 1.28 Mcps)	X	16.12	92.43	26.40	9.03	50.0	± 9.6 %
		Y	16.40	92.69	26.46		50.0	
		Z	16.84	93.23	26.48		50.0	
10058-DAC	EDGE-FDD (TDMA, 8PSK, TN 0-1-2-3)	X	9.13	87.64	28.49	6.55	100.0	± 9.6 %
		Y	10.85	92.11	30.40		100.0	
		Z	8.80	87.14	28.33		100.0	
10059-CAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps)	X	1.45	66.53	16.46	0.61	110.0	± 9.6 %
		Y	1.51	67.75	17.33		110.0	
		Z	1.43	66.36	16.31		110.0	
10060-CAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps)	X	71.32	126.43	32.69	1.30	110.0	± 9.6 %
		Y	100.00	133.00	34.47		110.0	
		Z	56.46	122.77	31.74		110.0	

10061-CAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps)	X	7.70	91.83	25.70	2.04	110.0	± 9.6 %
		Y	12.85	101.15	28.77		110.0	
		Z	7.42	91.30	25.47		110.0	
10062-CAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps)	X	4.86	66.91	16.67	0.49	100.0	± 9.6 %
		Y	4.87	67.10	16.85		100.0	
		Z	4.81	66.91	16.64		100.0	
10063-CAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps)	X	4.90	67.06	16.81	0.72	100.0	± 9.6 %
		Y	4.91	67.26	16.99		100.0	
		Z	4.85	67.06	16.78		100.0	
10064-CAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps)	X	5.22	67.40	17.08	0.86	100.0	± 9.6 %
		Y	5.23	67.59	17.25		100.0	
		Z	5.16	67.38	17.04		100.0	
10065-CAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps)	X	5.12	67.42	17.25	1.21	100.0	± 9.6 %
		Y	5.13	67.61	17.43		100.0	
		Z	5.06	67.40	17.21		100.0	
10066-CAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps)	X	5.18	67.55	17.48	1.46	100.0	± 9.6 %
		Y	5.19	67.76	17.66		100.0	
		Z	5.11	67.52	17.44		100.0	
10067-CAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps)	X	5.50	67.74	17.95	2.04	100.0	± 9.6 %
		Y	5.51	67.96	18.15		100.0	
		Z	5.44	67.76	17.93		100.0	
10068-CAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps)	X	5.63	68.06	18.32	2.55	100.0	± 9.6 %
		Y	5.64	68.30	18.53		100.0	
		Z	5.56	68.03	18.28		100.0	
10069-CAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps)	X	5.71	68.03	18.50	2.67	100.0	± 9.6 %
		Y	5.72	68.29	18.74		100.0	
		Z	5.64	68.03	18.48		100.0	
10071-CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 9 Mbps)	X	5.28	67.38	17.78	1.99	100.0	± 9.6 %
		Y	5.29	67.59	17.97		100.0	
		Z	5.23	67.40	17.76		100.0	
10072-CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 12 Mbps)	X	5.33	67.91	18.09	2.30	100.0	± 9.6 %
		Y	5.34	68.14	18.30		100.0	
		Z	5.28	67.91	18.07		100.0	
10073-CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 18 Mbps)	X	5.46	68.24	18.51	2.83	100.0	± 9.6 %
		Y	5.48	68.51	18.74		100.0	
		Z	5.40	68.25	18.50		100.0	
10074-CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 24 Mbps)	X	5.49	68.30	18.76	3.30	100.0	± 9.6 %
		Y	5.51	68.58	19.00		100.0	
		Z	5.44	68.31	18.74		100.0	
10075-CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 36 Mbps)	X	5.63	68.74	19.25	3.82	90.0	± 9.6 %
		Y	5.66	69.06	19.51		90.0	
		Z	5.57	68.71	19.21		90.0	
10076-CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 48 Mbps)	X	5.64	68.56	19.38	4.15	90.0	± 9.6 %
		Y	5.68	68.89	19.66		90.0	
		Z	5.60	68.57	19.36		90.0	
10077-CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 54 Mbps)	X	5.68	68.64	19.49	4.30	90.0	± 9.6 %
		Y	5.71	68.99	19.77		90.0	
		Z	5.64	68.66	19.47		90.0	

10081-CAB	CDMA2000 (1xRTT, RC3)	X	0.88	65.55	12.70	0.00	150.0	± 9.6 %
		Y	1.01	67.94	14.05		150.0	
		Z	0.82	64.98	12.07		150.0	
10082-CAB	IS-54 / IS-136 FDD (TDMA/FDM, PI/4-DQPSK, Fullrate)	X	2.05	63.91	8.77	4.77	80.0	± 9.6 %
		Y	2.06	64.02	8.81		80.0	
		Z	1.95	63.58	8.48		80.0	
10090-DAC	GPRS-FDD (TDMA, GMSK, TN 0-4)	X	100.00	119.26	30.80	6.56	60.0	± 9.6 %
		Y	100.00	119.04	30.70		60.0	
		Z	100.00	118.90	30.53		60.0	
10097-CAB	UMTS-FDD (HSDPA)	X	1.83	67.01	15.38	0.00	150.0	± 9.6 %
		Y	1.91	68.15	16.11		150.0	
		Z	1.80	66.92	15.21		150.0	
10098-CAB	UMTS-FDD (HSUPA, Subtest 2)	X	1.79	66.97	15.34	0.00	150.0	± 9.6 %
		Y	1.88	68.14	16.10		150.0	
		Z	1.76	66.87	15.18		150.0	
10099-DAC	EDGE-FDD (TDMA, 8PSK, TN 0-4)	X	20.23	105.10	36.53	9.56	60.0	± 9.6 %
		Y	28.70	114.68	39.91		60.0	
		Z	20.06	105.38	36.67		60.0	
10100-CAC	LTE-FDD (SC-FDMA, 100% RB, 20 MHz, QPSK)	X	3.16	69.99	16.45	0.00	150.0	± 9.6 %
		Y	3.31	71.03	17.06		150.0	
		Z	3.09	69.73	16.33		150.0	
10101-CAC	LTE-FDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM)	X	3.32	67.51	15.87	0.00	150.0	± 9.6 %
		Y	3.38	68.00	16.23		150.0	
		Z	3.27	67.36	15.78		150.0	
10102-CAC	LTE-FDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM)	X	3.43	67.46	15.96	0.00	150.0	± 9.6 %
		Y	3.47	67.89	16.28		150.0	
		Z	3.37	67.33	15.88		150.0	
10103-CAC	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, QPSK)	X	8.65	78.54	21.48	3.98	65.0	± 9.6 %
		Y	8.85	79.12	21.77		65.0	
		Z	8.48	78.45	21.46		65.0	
10104-CAC	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM)	X	8.46	76.91	21.67	3.98	65.0	± 9.6 %
		Y	8.66	77.60	22.06		65.0	
		Z	8.34	76.89	21.66		65.0	
10105-CAC	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM)	X	7.58	74.70	20.99	3.98	65.0	± 9.6 %
		Y	7.79	75.45	21.40		65.0	
		Z	7.31	74.25	20.79		65.0	
10108-CAD	LTE-FDD (SC-FDMA, 100% RB, 10 MHz, QPSK)	X	2.79	69.24	16.28	0.00	150.0	± 9.6 %
		Y	2.91	70.28	16.91		150.0	
		Z	2.71	69.00	16.16		150.0	
10109-CAD	LTE-FDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM)	X	2.98	67.28	15.76	0.00	150.0	± 9.6 %
		Y	3.03	67.83	16.15		150.0	
		Z	2.92	67.15	15.65		150.0	
10110-CAD	LTE-FDD (SC-FDMA, 100% RB, 5 MHz, QPSK)	X	2.28	68.31	15.91	0.00	150.0	± 9.6 %
		Y	2.39	69.47	16.63		150.0	
		Z	2.21	68.09	15.75		150.0	
10111-CAD	LTE-FDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM)	X	2.66	67.75	15.94	0.00	150.0	± 9.6 %
		Y	2.72	68.40	16.37		150.0	
		Z	2.60	67.66	15.80		150.0	

10112-CAD	LTE-FDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM)	X	3.11	67.26	15.82	0.00	150.0	± 9.6 %
		Y	3.15	67.75	16.17		150.0	
		Z	3.05	67.15	15.72		150.0	
10113-CAD	LTE-FDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM)	X	2.82	67.88	16.07	0.00	150.0	± 9.6 %
		Y	2.87	68.46	16.46		150.0	
		Z	2.76	67.81	15.94		150.0	
10114-CAB	IEEE 802.11n (HT Greenfield, 13.5 Mbps, BPSK)	X	5.24	67.28	16.46	0.00	150.0	± 9.6 %
		Y	5.25	67.46	16.63		150.0	
		Z	5.20	67.29	16.46		150.0	
10115-CAB	IEEE 802.11n (HT Greenfield, 81 Mbps, 16-QAM)	X	5.61	67.64	16.65	0.00	150.0	± 9.6 %
		Y	5.61	67.79	16.81		150.0	
		Z	5.52	67.52	16.58		150.0	
10116-CAB	IEEE 802.11n (HT Greenfield, 135 Mbps, 64-QAM)	X	5.36	67.55	16.52	0.00	150.0	± 9.6 %
		Y	5.37	67.74	16.69		150.0	
		Z	5.32	67.53	16.51		150.0	
10117-CAB	IEEE 802.11n (HT Mixed, 13.5 Mbps, BPSK)	X	5.22	67.23	16.45	0.00	150.0	± 9.6 %
		Y	5.23	67.39	16.61		150.0	
		Z	5.17	67.16	16.41		150.0	
10118-CAB	IEEE 802.11n (HT Mixed, 81 Mbps, 16-QAM)	X	5.69	67.85	16.77	0.00	150.0	± 9.6 %
		Y	5.70	68.02	16.93		150.0	
		Z	5.63	67.79	16.73		150.0	
10119-CAB	IEEE 802.11n (HT Mixed, 135 Mbps, 64-QAM)	X	5.34	67.49	16.51	0.00	150.0	± 9.6 %
		Y	5.35	67.67	16.67		150.0	
		Z	5.29	67.47	16.49		150.0	
10140-CAC	LTE-FDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM)	X	3.47	67.47	15.89	0.00	150.0	± 9.6 %
		Y	3.51	67.91	16.21		150.0	
		Z	3.41	67.34	15.80		150.0	
10141-CAC	LTE-FDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM)	X	3.59	67.54	16.05	0.00	150.0	± 9.6 %
		Y	3.63	67.94	16.35		150.0	
		Z	3.53	67.43	15.97		150.0	
10142-CAD	LTE-FDD (SC-FDMA, 100% RB, 3 MHz, QPSK)	X	2.05	68.16	15.60	0.00	150.0	± 9.6 %
		Y	2.17	69.48	16.39		150.0	
		Z	1.97	67.92	15.36		150.0	
10143-CAD	LTE-FDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM)	X	2.51	68.28	15.68	0.00	150.0	± 9.6 %
		Y	2.59	69.11	16.17		150.0	
		Z	2.43	68.15	15.43		150.0	
10144-CAD	LTE-FDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM)	X	2.35	66.54	14.37	0.00	150.0	± 9.6 %
		Y	2.42	67.28	14.84		150.0	
		Z	2.27	66.32	14.07		150.0	
10145-CAD	LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK)	X	1.37	65.72	12.66	0.00	150.0	± 9.6 %
		Y	1.46	66.99	13.37		150.0	
		Z	1.25	64.89	11.82		150.0	
10146-CAD	LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM)	X	3.11	71.69	15.06	0.00	150.0	± 9.6 %
		Y	3.87	74.93	16.48		150.0	
		Z	2.20	67.57	12.72		150.0	
10147-CAD	LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM)	X	3.99	75.14	16.65	0.00	150.0	± 9.6 %
		Y	5.26	79.21	18.27		150.0	
		Z	2.59	69.69	13.85		150.0	

10149-CAC	LTE-FDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM)	X	2.99	67.34	15.80	0.00	150.0	± 9.6 %
		Y	3.04	67.88	16.19		150.0	
		Z	2.93	67.20	15.70		150.0	
10150-CAC	LTE-FDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM)	X	3.11	67.30	15.85	0.00	150.0	± 9.6 %
		Y	3.16	67.79	16.21		150.0	
		Z	3.05	67.19	15.76		150.0	
10151-CAC	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, QPSK)	X	9.14	80.78	22.44	3.98	65.0	± 9.6 %
		Y	9.49	81.66	22.85		65.0	
		Z	9.14	81.08	22.55		65.0	
10152-CAC	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM)	X	8.08	77.12	21.52	3.98	65.0	± 9.6 %
		Y	8.33	77.95	21.96		65.0	
		Z	7.95	77.09	21.46		65.0	
10153-CAC	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM)	X	8.46	77.89	22.17	3.98	65.0	± 9.6 %
		Y	8.68	78.63	22.56		65.0	
		Z	8.36	77.94	22.15		65.0	
10154-CAD	LTE-FDD (SC-FDMA, 50% RB, 10 MHz, QPSK)	X	2.33	68.67	16.15	0.00	150.0	± 9.6 %
		Y	2.44	69.83	16.86		150.0	
		Z	2.25	68.43	15.98		150.0	
10155-CAD	LTE-FDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM)	X	2.66	67.76	15.95	0.00	150.0	± 9.6 %
		Y	2.72	68.41	16.38		150.0	
		Z	2.60	67.68	15.82		150.0	
10156-CAD	LTE-FDD (SC-FDMA, 50% RB, 5 MHz, QPSK)	X	1.90	68.21	15.44	0.00	150.0	± 9.6 %
		Y	2.03	69.70	16.30		150.0	
		Z	1.81	67.89	15.12		150.0	
10157-CAD	LTE-FDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM)	X	2.18	67.00	14.41	0.00	150.0	± 9.6 %
		Y	2.26	67.93	14.96		150.0	
		Z	2.09	66.73	14.04		150.0	
10158-CAD	LTE-FDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM)	X	2.82	67.92	16.11	0.00	150.0	± 9.6 %
		Y	2.87	68.51	16.50		150.0	
		Z	2.76	67.86	15.98		150.0	
10159-CAD	LTE-FDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM)	X	2.28	67.39	14.67	0.00	150.0	± 9.6 %
		Y	2.36	68.28	15.19		150.0	
		Z	2.18	67.11	14.29		150.0	
10160-CAC	LTE-FDD (SC-FDMA, 50% RB, 15 MHz, QPSK)	X	2.82	68.45	16.16	0.00	150.0	± 9.6 %
		Y	2.91	69.30	16.70		150.0	
		Z	2.76	68.35	16.07		150.0	
10161-CAC	LTE-FDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM)	X	3.01	67.20	15.78	0.00	150.0	± 9.6 %
		Y	3.05	67.71	16.14		150.0	
		Z	2.95	67.10	15.68		150.0	
10162-CAC	LTE-FDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM)	X	3.11	67.31	15.88	0.00	150.0	± 9.6 %
		Y	3.16	67.80	16.23		150.0	
		Z	3.06	67.24	15.78		150.0	
10166-CAD	LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK)	X	3.96	70.63	19.76	3.01	150.0	± 9.6 %
		Y	4.08	71.58	20.41		150.0	
		Z	3.69	69.63	19.19		150.0	
10167-CAD	LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM)	X	5.16	74.36	20.54	3.01	150.0	± 9.6 %
		Y	5.47	75.92	21.41		150.0	
		Z	4.54	72.52	19.67		150.0	

10168-CAD	LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM)	X	5.71	76.55	21.79	3.01	150.0	± 9.6 %
		Y	6.04	78.08	22.60		150.0	
		Z	4.98	74.53	20.87		150.0	
10169-CAC	LTE-FDD (SC-FDMA, 1 RB, 20 MHz, QPSK)	X	3.56	71.66	20.23	3.01	150.0	± 9.6 %
		Y	3.72	73.10	21.16		150.0	
		Z	3.12	69.36	19.09		150.0	
10170-CAC	LTE-FDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM)	X	5.50	79.49	23.11	3.01	150.0	± 9.6 %
		Y	6.14	82.25	24.43		150.0	
		Z	4.23	74.96	21.26		150.0	
10171-AAC	LTE-FDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM)	X	4.39	74.63	20.21	3.01	150.0	± 9.6 %
		Y	4.87	77.16	21.52		150.0	
		Z	3.55	71.26	18.74		150.0	
10172-CAC	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK)	X	36.90	115.61	35.71	6.02	65.0	± 9.6 %
		Y	89.16	134.58	40.97		65.0	
		Z	21.04	105.02	32.65		65.0	
10173-CAC	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM)	X	54.93	117.26	34.23	6.02	65.0	± 9.6 %
		Y	100.00	128.92	37.35		65.0	
		Z	30.85	107.44	31.57		65.0	
10174-CAC	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM)	X	39.60	109.76	31.68	6.02	65.0	± 9.6 %
		Y	70.95	120.74	34.73		65.0	
		Z	23.48	101.22	29.25		65.0	
10175-CAD	LTE-FDD (SC-FDMA, 1 RB, 10 MHz, QPSK)	X	3.51	71.32	19.98	3.01	150.0	± 9.6 %
		Y	3.68	72.77	20.92		150.0	
		Z	3.08	69.09	18.87		150.0	
10176-CAD	LTE-FDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM)	X	5.51	79.52	23.12	3.01	150.0	± 9.6 %
		Y	6.15	82.28	24.44		150.0	
		Z	4.23	74.98	21.27		150.0	
10177-CAF	LTE-FDD (SC-FDMA, 1 RB, 5 MHz, QPSK)	X	3.54	71.49	20.08	3.01	150.0	± 9.6 %
		Y	3.71	72.93	21.01		150.0	
		Z	3.11	69.22	18.95		150.0	
10178-CAD	LTE-FDD (SC-FDMA, 1 RB, 5 MHz, 16-QAM)	X	5.43	79.21	22.98	3.01	150.0	± 9.6 %
		Y	6.06	81.97	24.30		150.0	
		Z	4.19	74.78	21.16		150.0	
10179-CAD	LTE-FDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM)	X	4.90	76.90	21.51	3.01	150.0	± 9.6 %
		Y	5.47	79.59	22.84		150.0	
		Z	3.86	73.02	19.88		150.0	
10180-CAD	LTE-FDD (SC-FDMA, 1 RB, 5 MHz, 64-QAM)	X	4.38	74.54	20.15	3.01	150.0	± 9.6 %
		Y	4.86	77.07	21.46		150.0	
		Z	3.54	71.20	18.69		150.0	
10181-CAC	LTE-FDD (SC-FDMA, 1 RB, 15 MHz, QPSK)	X	3.54	71.47	20.07	3.01	150.0	± 9.6 %
		Y	3.70	72.91	21.00		150.0	
		Z	3.10	69.21	18.95		150.0	
10182-CAC	LTE-FDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM)	X	5.42	79.19	22.97	3.01	150.0	± 9.6 %
		Y	6.05	81.94	24.29		150.0	
		Z	4.19	74.76	21.15		150.0	
10183-AAB	LTE-FDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM)	X	4.37	74.51	20.14	3.01	150.0	± 9.6 %
		Y	4.85	77.04	21.45		150.0	
		Z	3.53	71.17	18.68		150.0	

10184-CAD	LTE-FDD (SC-FDMA, 1 RB, 3 MHz, QPSK)	X	3.55	71.52	20.09	3.01	150.0	± 9.6 %
		Y	3.72	72.96	21.02		150.0	
		Z	3.11	69.25	18.97		150.0	
10185-CAD	LTE-FDD (SC-FDMA, 1 RB, 3 MHz, 16-QAM)	X	5.45	79.27	23.00	3.01	150.0	± 9.6 %
		Y	6.09	82.03	24.33		150.0	
		Z	4.20	74.82	21.19		150.0	
10186-AAD	LTE-FDD (SC-FDMA, 1 RB, 3 MHz, 64-QAM)	X	4.39	74.59	20.17	3.01	150.0	± 9.6 %
		Y	4.88	77.13	21.49		150.0	
		Z	3.55	71.24	18.71		150.0	
10187-CAD	LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK)	X	3.56	71.57	20.15	3.01	150.0	± 9.6 %
		Y	3.73	73.01	21.08		150.0	
		Z	3.12	69.30	19.03		150.0	
10188-CAD	LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM)	X	5.67	80.08	23.42	3.01	150.0	± 9.6 %
		Y	6.33	82.86	24.73		150.0	
		Z	4.33	75.42	21.53		150.0	
10189-AAD	LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM)	X	4.51	75.09	20.47	3.01	150.0	± 9.6 %
		Y	5.01	77.67	21.79		150.0	
		Z	3.62	71.63	18.97		150.0	
10193-CAB	IEEE 802.11n (HT Greenfield, 6.5 Mbps, BPSK)	X	4.64	66.65	16.17	0.00	150.0	± 9.6 %
		Y	4.65	66.84	16.35		150.0	
		Z	4.59	66.64	16.13		150.0	
10194-CAB	IEEE 802.11n (HT Greenfield, 39 Mbps, 16-QAM)	X	4.82	67.00	16.30	0.00	150.0	± 9.6 %
		Y	4.83	67.19	16.48		150.0	
		Z	4.76	66.96	16.26		150.0	
10195-CAB	IEEE 802.11n (HT Greenfield, 65 Mbps, 64-QAM)	X	4.87	67.02	16.31	0.00	150.0	± 9.6 %
		Y	4.87	67.22	16.49		150.0	
		Z	4.81	67.00	16.28		150.0	
10196-CAB	IEEE 802.11n (HT Mixed, 6.5 Mbps, BPSK)	X	4.65	66.74	16.20	0.00	150.0	± 9.6 %
		Y	4.66	66.93	16.38		150.0	
		Z	4.59	66.71	16.15		150.0	
10197-CAB	IEEE 802.11n (HT Mixed, 39 Mbps, 16-QAM)	X	4.84	67.02	16.31	0.00	150.0	± 9.6 %
		Y	4.85	67.22	16.49		150.0	
		Z	4.78	66.99	16.27		150.0	
10198-CAB	IEEE 802.11n (HT Mixed, 65 Mbps, 64-QAM)	X	4.87	67.04	16.32	0.00	150.0	± 9.6 %
		Y	4.88	67.24	16.50		150.0	
		Z	4.81	67.01	16.29		150.0	
10219-CAB	IEEE 802.11n (HT Mixed, 7.2 Mbps, BPSK)	X	4.60	66.74	16.16	0.00	150.0	± 9.6 %
		Y	4.61	66.94	16.34		150.0	
		Z	4.54	66.71	16.11		150.0	
10220-CAB	IEEE 802.11n (HT Mixed, 43.3 Mbps, 16-QAM)	X	4.84	67.00	16.31	0.00	150.0	± 9.6 %
		Y	4.84	67.20	16.48		150.0	
		Z	4.77	66.96	16.26		150.0	
10221-CAB	IEEE 802.11n (HT Mixed, 72.2 Mbps, 64-QAM)	X	4.88	66.97	16.31	0.00	150.0	± 9.6 %
		Y	4.89	67.16	16.49		150.0	
		Z	4.82	66.95	16.28		150.0	
10222-CAB	IEEE 802.11n (HT Mixed, 15 Mbps, BPSK)	X	5.20	67.24	16.45	0.00	150.0	± 9.6 %
		Y	5.21	67.41	16.61		150.0	
		Z	5.15	67.17	16.40		150.0	

10223-CAB	IEEE 802.11n (HT Mixed, 90 Mbps, 16-QAM)	X	5.54	67.51	16.61	0.00	150.0	± 9.6 %
		Y	5.54	67.65	16.76		150.0	
		Z	5.46	67.41	16.55		150.0	
10224-CAB	IEEE 802.11n (HT Mixed, 150 Mbps, 64-QAM)	X	5.24	67.33	16.42	0.00	150.0	± 9.6 %
		Y	5.25	67.50	16.58		150.0	
		Z	5.19	67.27	16.38		150.0	
10225-CAB	UMTS-FDD (HSPA+)	X	2.89	66.01	15.34	0.00	150.0	± 9.6 %
		Y	2.91	66.41	15.64		150.0	
		Z	2.83	65.96	15.20		150.0	
10226-CAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM)	X	60.00	119.05	34.79	6.02	65.0	± 9.6 %
		Y	100.00	129.10	37.47		65.0	
		Z	33.08	108.86	32.05		65.0	
10227-CAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM)	X	44.36	111.89	32.33	6.02	65.0	± 9.6 %
		Y	77.77	122.52	35.25		65.0	
		Z	27.85	104.26	30.19		65.0	
10228-CAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK)	X	40.71	118.07	36.50	6.02	65.0	± 9.6 %
		Y	92.59	135.95	41.44		65.0	
		Z	26.22	109.78	34.13		65.0	
10229-CAB	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 16-QAM)	X	54.96	117.26	34.24	6.02	65.0	± 9.6 %
		Y	100.00	128.91	37.35		65.0	
		Z	30.93	107.47	31.58		65.0	
10230-CAB	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 64-QAM)	X	41.37	110.53	31.89	6.02	65.0	± 9.6 %
		Y	71.92	120.98	34.79		65.0	
		Z	26.25	103.12	29.80		65.0	
10231-CAB	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, QPSK)	X	37.97	116.54	36.00	6.02	65.0	± 9.6 %
		Y	84.76	133.97	40.88		65.0	
		Z	24.71	108.49	33.69		65.0	
10232-CAC	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 16-QAM)	X	54.99	117.28	34.24	6.02	65.0	± 9.6 %
		Y	100.00	128.92	37.35		65.0	
		Z	30.92	107.48	31.58		65.0	
10233-CAC	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 64-QAM)	X	41.40	110.55	31.90	6.02	65.0	± 9.6 %
		Y	72.14	121.04	34.81		65.0	
		Z	26.24	103.13	29.80		65.0	
10234-CAC	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK)	X	35.49	114.97	35.47	6.02	65.0	± 9.6 %
		Y	77.34	131.82	40.23		65.0	
		Z	23.39	107.20	33.21		65.0	
10235-CAC	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM)	X	55.28	117.39	34.27	6.02	65.0	± 9.6 %
		Y	100.00	128.93	37.36		65.0	
		Z	31.03	107.56	31.61		65.0	
10236-CAC	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM)	X	41.91	110.74	31.95	6.02	65.0	± 9.6 %
		Y	73.33	121.30	34.87		65.0	
		Z	26.52	103.28	29.84		65.0	
10237-CAC	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK)	X	38.41	116.80	36.08	6.02	65.0	± 9.6 %
		Y	86.80	134.49	41.01		65.0	
		Z	24.91	108.68	33.74		65.0	
10238-CAC	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM)	X	55.05	117.31	34.25	6.02	65.0	± 9.6 %
		Y	100.00	128.93	37.35		65.0	
		Z	30.91	107.49	31.58		65.0	

10239-CAC	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM)	X	41.42	110.58	31.91	6.02	65.0	± 9.6 %
		Y	72.33	121.11	34.83		65.0	
		Z	26.22	103.13	29.80		65.0	
10240-CAC	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, QPSK)	X	38.25	116.72	36.05	6.02	65.0	± 9.6 %
		Y	86.28	134.37	40.98		65.0	
		Z	24.82	108.62	33.73		65.0	
10241-CAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM)	X	12.92	88.42	28.30	6.98	65.0	± 9.6 %
		Y	14.47	91.50	29.64		65.0	
		Z	11.71	86.68	27.54		65.0	
10242-CAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM)	X	12.30	87.28	27.78	6.98	65.0	± 9.6 %
		Y	13.91	90.55	29.21		65.0	
		Z	10.78	84.84	26.74		65.0	
10243-CAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK)	X	9.57	83.58	27.27	6.98	65.0	± 9.6 %
		Y	10.70	86.76	28.80		65.0	
		Z	8.63	81.57	26.33		65.0	
10244-CAB	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM)	X	9.97	81.73	21.53	3.98	65.0	± 9.6 %
		Y	10.43	82.64	21.91		65.0	
		Z	8.76	79.58	20.36		65.0	
10245-CAB	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM)	X	9.75	81.12	21.26	3.98	65.0	± 9.6 %
		Y	10.17	81.97	21.61		65.0	
		Z	8.56	78.97	20.07		65.0	
10246-CAB	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, QPSK)	X	9.14	83.08	21.95	3.98	65.0	± 9.6 %
		Y	9.72	84.22	22.38		65.0	
		Z	8.89	82.67	21.56		65.0	
10247-CAC	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM)	X	7.53	77.68	20.47	3.98	65.0	± 9.6 %
		Y	7.73	78.28	20.74		65.0	
		Z	7.33	77.37	20.13		65.0	
10248-CAC	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM)	X	7.50	77.17	20.25	3.98	65.0	± 9.6 %
		Y	7.71	77.80	20.54		65.0	
		Z	7.27	76.81	19.89		65.0	
10249-CAC	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, QPSK)	X	10.17	85.08	23.35	3.98	65.0	± 9.6 %
		Y	10.94	86.52	23.90		65.0	
		Z	10.18	85.27	23.26		65.0	
10250-CAC	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM)	X	8.40	79.60	22.53	3.98	65.0	± 9.6 %
		Y	8.67	80.38	22.90		65.0	
		Z	8.32	79.67	22.46		65.0	
10251-CAC	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM)	X	7.96	77.51	21.40	3.98	65.0	± 9.6 %
		Y	8.23	78.35	21.83		65.0	
		Z	7.84	77.49	21.29		65.0	
10252-CAC	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, QPSK)	X	9.91	84.03	23.67	3.98	65.0	± 9.6 %
		Y	10.54	85.36	24.22		65.0	
		Z	9.99	84.47	23.78		65.0	
10253-CAC	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM)	X	7.87	76.54	21.30	3.98	65.0	± 9.6 %
		Y	8.11	77.33	21.72		65.0	
		Z	7.77	76.53	21.24		65.0	
10254-CAC	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM)	X	8.25	77.30	21.90	3.98	65.0	± 9.6 %
		Y	8.47	78.02	22.29		65.0	
		Z	8.16	77.35	21.86		65.0	

10255-CAC	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, QPSK)	X	8.82	80.37	22.51	3.98	65.0	± 9.6 %
		Y	9.18	81.32	22.95		65.0	
		Z	8.82	80.67	22.60		65.0	
10256-CAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM)	X	8.67	79.06	19.69	3.98	65.0	± 9.6 %
		Y	9.00	79.76	19.98		65.0	
		Z	7.35	76.40	18.22		65.0	
10257-CAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM)	X	8.39	78.18	19.27	3.98	65.0	± 9.6 %
		Y	8.67	78.82	19.53		65.0	
		Z	7.11	75.57	17.80		65.0	
10258-CAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK)	X	7.67	79.80	20.11	3.98	65.0	± 9.6 %
		Y	7.97	80.50	20.36		65.0	
		Z	7.13	78.64	19.35		65.0	
10259-CAB	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM)	X	7.87	78.36	21.19	3.98	65.0	± 9.6 %
		Y	8.11	79.04	21.50		65.0	
		Z	7.72	78.21	20.96		65.0	
10260-CAB	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM)	X	7.88	78.07	21.09	3.98	65.0	± 9.6 %
		Y	8.10	78.72	21.39		65.0	
		Z	7.71	77.89	20.85		65.0	
10261-CAB	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, QPSK)	X	9.63	83.94	23.25	3.98	65.0	± 9.6 %
		Y	10.30	85.33	23.81		65.0	
		Z	9.64	84.17	23.22		65.0	
10262-CAC	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM)	X	8.39	79.56	22.49	3.98	65.0	± 9.6 %
		Y	8.66	80.34	22.86		65.0	
		Z	8.31	79.62	22.42		65.0	
10263-CAC	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM)	X	7.95	77.50	21.40	3.98	65.0	± 9.6 %
		Y	8.22	78.34	21.82		65.0	
		Z	7.83	77.47	21.29		65.0	
10264-CAC	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, QPSK)	X	9.83	83.88	23.59	3.98	65.0	± 9.6 %
		Y	10.46	85.22	24.15		65.0	
		Z	9.91	84.30	23.70		65.0	
10265-CAC	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM)	X	8.08	77.12	21.52	3.98	65.0	± 9.6 %
		Y	8.33	77.96	21.96		65.0	
		Z	7.95	77.09	21.47		65.0	
10266-CAC	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM)	X	8.45	77.88	22.16	3.98	65.0	± 9.6 %
		Y	8.68	78.62	22.55		65.0	
		Z	8.36	77.93	22.14		65.0	
10267-CAC	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, QPSK)	X	9.12	80.75	22.43	3.98	65.0	± 9.6 %
		Y	9.47	81.62	22.84		65.0	
		Z	9.12	81.04	22.54		65.0	
10268-CAC	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM)	X	8.54	76.63	21.68	3.98	65.0	± 9.6 %
		Y	8.73	77.26	22.04		65.0	
		Z	8.44	76.63	21.67		65.0	
10269-CAC	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM)	X	8.47	76.21	21.58	3.98	65.0	± 9.6 %
		Y	8.64	76.83	21.94		65.0	
		Z	8.37	76.22	21.56		65.0	
10270-CAC	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, QPSK)	X	8.62	78.00	21.50	3.98	65.0	± 9.6 %
		Y	8.81	78.56	21.80		65.0	
		Z	8.57	78.16	21.57		65.0	

10274-CAB	UMTS-FDD (HSUPA, Subtest 5, 3GPP Rel8.10)	X	2.63	66.22	15.16	0.00	150.0	± 9.6 %
		Y	2.68	66.76	15.56		150.0	
		Z	2.60	66.20	15.05		150.0	
10275-CAB	UMTS-FDD (HSUPA, Subtest 5, 3GPP Rel8.4)	X	1.63	67.34	15.24	0.00	150.0	± 9.6 %
		Y	1.75	68.91	16.21		150.0	
		Z	1.59	67.10	15.04		150.0	
10277-CAA	PHS (QPSK)	X	5.23	69.17	13.58	9.03	50.0	± 9.6 %
		Y	5.23	69.14	13.54		50.0	
		Z	4.94	68.42	12.95		50.0	
10278-CAA	PHS (QPSK, BW 884MHz, Rolloff 0.5)	X	9.44	80.92	21.03	9.03	50.0	± 9.6 %
		Y	9.27	80.52	20.82		50.0	
		Z	8.80	79.60	20.21		50.0	
10279-CAA	PHS (QPSK, BW 884MHz, Rolloff 0.38)	X	9.60	81.11	21.12	9.03	50.0	± 9.6 %
		Y	9.45	80.75	20.93		50.0	
		Z	8.93	79.76	20.30		50.0	
10290-AAB	CDMA2000, RC1, SO55, Full Rate	X	1.49	68.14	14.07	0.00	150.0	± 9.6 %
		Y	1.71	70.53	15.29		150.0	
		Z	1.38	67.47	13.43		150.0	
10291-AAB	CDMA2000, RC3, SO55, Full Rate	X	0.87	65.35	12.59	0.00	150.0	± 9.6 %
		Y	0.98	67.67	13.90		150.0	
		Z	0.81	64.81	11.96		150.0	
10292-AAB	CDMA2000, RC3, SO32, Full Rate	X	1.01	68.28	14.43	0.00	150.0	± 9.6 %
		Y	1.28	72.37	16.47		150.0	
		Z	0.94	67.61	13.77		150.0	
10293-AAB	CDMA2000, RC3, SO3, Full Rate	X	1.31	72.09	16.62	0.00	150.0	± 9.6 %
		Y	1.86	78.07	19.28		150.0	
		Z	1.24	71.48	16.00		150.0	
10295-AAB	CDMA2000, RC1, SO3, 1/8th Rate 25 fr.	X	11.68	86.43	25.21	9.03	50.0	± 9.6 %
		Y	12.34	87.51	25.61		50.0	
		Z	12.30	87.31	25.27		50.0	
10297-AAB	LTE-FDD (SC-FDMA, 50% RB, 20 MHz, QPSK)	X	2.80	69.32	16.34	0.00	150.0	± 9.6 %
		Y	2.92	70.37	16.97		150.0	
		Z	2.72	69.08	16.22		150.0	
10298-AAC	LTE-FDD (SC-FDMA, 50% RB, 3 MHz, QPSK)	X	1.65	67.43	14.29	0.00	150.0	± 9.6 %
		Y	1.78	69.00	15.16		150.0	
		Z	1.54	66.87	13.72		150.0	
10299-AAC	LTE-FDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM)	X	3.71	73.80	16.79	0.00	150.0	± 9.6 %
		Y	4.50	76.98	18.19		150.0	
		Z	2.80	70.24	14.88		150.0	
10300-AAC	LTE-FDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM)	X	2.66	68.22	13.61	0.00	150.0	± 9.6 %
		Y	2.97	70.07	14.57		150.0	
		Z	2.16	65.95	12.13		150.0	
10301-AAA	IEEE 802.16e WiMAX (29:18, 5ms, 10MHz, QPSK, PUSC)	X	5.56	67.67	18.53	4.17	80.0	± 9.6 %
		Y	5.78	68.72	19.18		80.0	
		Z	5.51	67.68	18.44		80.0	
10302-AAA	IEEE 802.16e WiMAX (29:18, 5ms, 10MHz, QPSK, PUSC, 3 CTRL symbols)	X	6.08	68.43	19.36	4.96	80.0	± 9.6 %
		Y	6.31	69.64	20.14		80.0	
		Z	6.00	68.40	19.26		80.0	

10303-AAA	IEEE 802.16e WiMAX (31:15, 5ms, 10MHz, 64QAM, PUSC)	X	5.91	68.44	19.38	4.96	80.0	± 9.6 %
		Y	6.17	69.77	20.23		80.0	
		Z	5.83	68.37	19.25		80.0	
10304-AAA	IEEE 802.16e WiMAX (29:18, 5ms, 10MHz, 64QAM, PUSC)	X	5.57	67.76	18.57	4.17	80.0	± 9.6 %
		Y	5.77	68.85	19.27		80.0	
		Z	5.49	67.73	18.47		80.0	
10305-AAA	IEEE 802.16e WiMAX (31:15, 10ms, 10MHz, 64QAM, PUSC, 15 symbols)	X	7.72	78.82	24.99	6.02	50.0	± 9.6 %
		Y	9.80	85.05	27.90		50.0	
		Z	7.68	78.78	24.73		50.0	
10306-AAA	IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, 64QAM, PUSC, 18 symbols)	X	6.19	70.81	21.17	6.02	50.0	± 9.6 %
		Y	6.78	73.45	22.69		50.0	
		Z	6.09	70.68	20.96		50.0	
10307-AAA	IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, QPSK, PUSC, 18 symbols)	X	6.23	71.39	21.28	6.02	50.0	± 9.6 %
		Y	6.93	74.34	22.91		50.0	
		Z	6.66	74.17	22.78		50.0	
10308-AAA	IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, 16QAM, PUSC)	X	6.84	74.87	23.29	6.02	50.0	± 9.6 %
		Y	7.04	74.94	23.20		50.0	
		Z	6.77	74.83	23.10		50.0	
10309-AAA	IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, 16QAM, AMC 2x3, 18 symbols)	X	6.29	71.13	21.36	6.02	50.0	± 9.6 %
		Y	6.92	73.87	22.92		50.0	
		Z	6.18	70.98	21.13		50.0	
10310-AAA	IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, QPSK, AMC 2x3, 18 symbols)	X	6.19	71.01	21.18	6.02	50.0	± 9.6 %
		Y	6.82	73.78	22.75		50.0	
		Z	6.55	73.55	22.58		50.0	
10311-AAB	LTE-FDD (SC-FDMA, 100% RB, 15 MHz, QPSK)	X	3.15	68.64	16.01	0.00	150.0	± 9.6 %
		Y	3.28	69.57	16.56		150.0	
		Z	3.07	68.40	15.89		150.0	
10313-AAA	iDEN 1:3	X	7.93	80.00	19.43	6.99	70.0	± 9.6 %
		Y	8.50	81.06	19.83		70.0	
		Z	7.91	80.08	19.40		70.0	
10314-AAA	iDEN 1:6	X	10.36	86.77	24.35	10.00	30.0	± 9.6 %
		Y	11.09	87.90	24.72		30.0	
		Z	10.57	87.37	24.52		30.0	
10315-AAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 96pc duty cycle)	X	1.16	64.08	15.18	0.17	150.0	± 9.6 %
		Y	1.19	64.95	15.92		150.0	
		Z	1.15	63.96	15.05		150.0	
10316-AAB	IEEE 802.11g WiFi 2.4 GHz (ERP-OFDM, 6 Mbps, 96pc duty cycle)	X	4.74	66.85	16.40	0.17	150.0	± 9.6 %
		Y	4.75	67.05	16.58		150.0	
		Z	4.69	66.84	16.36		150.0	
10317-AAB	IEEE 802.11a WiFi 5 GHz (OFDM, 6 Mbps, 96pc duty cycle)	X	4.74	66.85	16.40	0.17	150.0	± 9.6 %
		Y	4.75	67.05	16.58		150.0	
		Z	4.69	66.84	16.36		150.0	
10400-AAC	IEEE 802.11ac WiFi (20MHz, 64-QAM, 99pc duty cycle)	X	4.83	67.07	16.30	0.00	150.0	± 9.6 %
		Y	4.84	67.29	16.50		150.0	
		Z	4.76	67.04	16.26		150.0	
10401-AAC	IEEE 802.11ac WiFi (40MHz, 64-QAM, 99pc duty cycle)	X	5.51	67.29	16.49	0.00	150.0	± 9.6 %
		Y	5.53	67.49	16.67		150.0	
		Z	5.49	67.36	16.51		150.0	

10402-AAC	IEEE 802.11ac WiFi (80MHz, 64-QAM, 99pc duty cycle)	X	5.79	67.69	16.53	0.00	150.0	± 9.6 %
		Y	5.79	67.83	16.67		150.0	
		Z	5.72	67.60	16.48		150.0	
10403-AAB	CDMA2000 (1xEV-DO, Rev. 0)	X	1.49	68.14	14.07	0.00	115.0	± 9.6 %
		Y	1.71	70.53	15.29		115.0	
		Z	1.38	67.47	13.43		115.0	
10404-AAB	CDMA2000 (1xEV-DO, Rev. A)	X	1.49	68.14	14.07	0.00	115.0	± 9.6 %
		Y	1.71	70.53	15.29		115.0	
		Z	1.38	67.47	13.43		115.0	
10406-AAB	CDMA2000, RC3, SO32, SCH0, Full Rate	X	100.00	122.23	31.08	0.00	100.0	± 9.6 %
		Y	100.00	122.94	31.38		100.0	
		Z	21.98	102.39	26.35		100.0	
10410-AAB	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	100.00	121.68	31.26	3.23	80.0	± 9.6 %
		Y	100.00	122.54	31.65		80.0	
		Z	100.00	121.97	31.19		80.0	
10415-AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 99pc duty cycle)	X	1.03	62.73	14.35	0.00	150.0	± 9.6 %
		Y	1.04	63.46	15.05		150.0	
		Z	1.02	62.64	14.23		150.0	
10416-AAA	IEEE 802.11g WiFi 2.4 GHz (ERP-OFDM, 6 Mbps, 99pc duty cycle)	X	4.64	66.69	16.23	0.00	150.0	± 9.6 %
		Y	4.65	66.89	16.41		150.0	
		Z	4.59	66.68	16.20		150.0	
10417-AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps, 99pc duty cycle)	X	4.64	66.69	16.23	0.00	150.0	± 9.6 %
		Y	4.65	66.89	16.41		150.0	
		Z	4.59	66.68	16.20		150.0	
10418-AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps, 99pc duty cycle, Long preambule)	X	4.63	66.83	16.23	0.00	150.0	± 9.6 %
		Y	4.64	67.04	16.42		150.0	
		Z	4.58	66.82	16.21		150.0	
10419-AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps, 99pc duty cycle, Short preambule)	X	4.65	66.79	16.24	0.00	150.0	± 9.6 %
		Y	4.66	66.99	16.43		150.0	
		Z	4.60	66.78	16.21		150.0	
10422-AAA	IEEE 802.11n (HT Greenfield, 7.2 Mbps, BPSK)	X	4.78	66.81	16.27	0.00	150.0	± 9.6 %
		Y	4.78	67.00	16.45		150.0	
		Z	4.72	66.79	16.24		150.0	
10423-AAA	IEEE 802.11n (HT Greenfield, 43.3 Mbps, 16-QAM)	X	4.96	67.16	16.40	0.00	150.0	± 9.6 %
		Y	4.97	67.35	16.58		150.0	
		Z	4.89	67.12	16.36		150.0	
10424-AAA	IEEE 802.11n (HT Greenfield, 72.2 Mbps, 64-QAM)	X	4.88	67.10	16.36	0.00	150.0	± 9.6 %
		Y	4.88	67.30	16.54		150.0	
		Z	4.81	67.07	16.33		150.0	
10425-AAA	IEEE 802.11n (HT Greenfield, 15 Mbps, BPSK)	X	5.49	67.52	16.59	0.00	150.0	± 9.6 %
		Y	5.50	67.70	16.76		150.0	
		Z	5.44	67.51	16.58		150.0	
10426-AAA	IEEE 802.11n (HT Greenfield, 90 Mbps, 16-QAM)	X	5.49	67.54	16.59	0.00	150.0	± 9.6 %
		Y	5.50	67.71	16.76		150.0	
		Z	5.45	67.53	16.59		150.0	

10427-AAA	IEEE 802.11n (HT Greenfield, 150 Mbps, 64-QAM)	X	5.50	67.50	16.57	0.00	150.0	± 9.6 %
		Y	5.51	67.67	16.73		150.0	
		Z	5.45	67.48	16.56		150.0	
10430-AAA	LTE-FDD (OFDMA, 5 MHz, E-TM 3.1)	X	4.25	70.00	17.85	0.00	150.0	± 9.6 %
		Y	4.23	70.09	17.93		150.0	
		Z	4.19	70.14	17.80		150.0	
10431-AAA	LTE-FDD (OFDMA, 10 MHz, E-TM 3.1)	X	4.34	67.20	16.23	0.00	150.0	± 9.6 %
		Y	4.36	67.46	16.45		150.0	
		Z	4.27	67.18	16.16		150.0	
10432-AAA	LTE-FDD (OFDMA, 15 MHz, E-TM 3.1)	X	4.64	67.12	16.31	0.00	150.0	± 9.6 %
		Y	4.65	67.34	16.50		150.0	
		Z	4.57	67.09	16.26		150.0	
10433-AAA	LTE-FDD (OFDMA, 20 MHz, E-TM 3.1)	X	4.89	67.13	16.38	0.00	150.0	± 9.6 %
		Y	4.90	67.33	16.56		150.0	
		Z	4.82	67.10	16.34		150.0	
10434-AAA	W-CDMA (BS Test Model 1, 64 DPCH)	X	4.31	70.67	17.79	0.00	150.0	± 9.6 %
		Y	4.30	70.79	17.87		150.0	
		Z	4.25	70.82	17.71		150.0	
10435-AAB	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	100.00	121.51	31.18	3.23	80.0	± 9.6 %
		Y	100.00	122.37	31.57		80.0	
		Z	100.00	121.79	31.11		80.0	
10447-AAA	LTE-FDD (OFDMA, 5 MHz, E-TM 3.1, Clipping 44%)	X	3.63	67.13	15.60	0.00	150.0	± 9.6 %
		Y	3.66	67.50	15.86		150.0	
		Z	3.54	67.07	15.44		150.0	
10448-AAA	LTE-FDD (OFDMA, 10 MHz, E-TM 3.1, Clippin 44%)	X	4.17	66.96	16.08	0.00	150.0	± 9.6 %
		Y	4.19	67.23	16.30		150.0	
		Z	4.10	66.94	16.02		150.0	
10449-AAA	LTE-FDD (OFDMA, 15 MHz, E-TM 3.1, Cliping 44%)	X	4.44	66.92	16.19	0.00	150.0	± 9.6 %
		Y	4.45	67.15	16.39		150.0	
		Z	4.38	66.90	16.14		150.0	
10450-AAA	LTE-FDD (OFDMA, 20 MHz, E-TM 3.1, Clipping 44%)	X	4.63	66.87	16.23	0.00	150.0	± 9.6 %
		Y	4.64	67.08	16.41		150.0	
		Z	4.58	66.85	16.19		150.0	
10451-AAA	W-CDMA (BS Test Model 1, 64 DPCH, Clipping 44%)	X	3.53	67.33	15.28	0.00	150.0	± 9.6 %
		Y	3.57	67.74	15.55		150.0	
		Z	3.43	67.21	15.05		150.0	
10456-AAA	IEEE 802.11ac WiFi (160MHz, 64-QAM, 99pc duty cycle)	X	6.35	68.11	16.76	0.00	150.0	± 9.6 %
		Y	6.36	68.24	16.90		150.0	
		Z	6.31	68.06	16.74		150.0	
10457-AAA	UMTS-FDD (DC-HSDPA)	X	3.86	65.32	15.94	0.00	150.0	± 9.6 %
		Y	3.86	65.52	16.13		150.0	
		Z	3.83	65.31	15.89		150.0	
10458-AAA	CDMA2000 (1xEV-DO, Rev. B, 2 carriers)	X	3.37	66.71	14.79	0.00	150.0	± 9.6 %
		Y	3.41	67.16	15.08		150.0	
		Z	3.26	66.61	14.51		150.0	
10459-AAA	CDMA2000 (1xEV-DO, Rev. B, 3 carriers)	X	4.52	65.23	15.77	0.00	150.0	± 9.6 %
		Y	4.60	65.75	16.11		150.0	
		Z	4.38	65.07	15.54		150.0	

10460-AAA	UMTS-FDD (WCDMA, AMR)	X	0.89	66.92	15.35	0.00	150.0	± 9.6 %
		Y	1.01	69.93	17.18		150.0	
		Z	0.86	66.57	15.06		150.0	
10461-AAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	100.00	125.62	33.15	3.29	80.0	± 9.6 %
		Y	100.00	127.39	33.94		80.0	
		Z	100.00	125.16	32.74		80.0	
10462-AAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	100.00	110.62	25.96	3.23	80.0	± 9.6 %
		Y	100.00	111.65	26.39		80.0	
		Z	84.76	108.06	25.05		80.0	
10463-AAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	100.00	107.62	24.51	3.23	80.0	± 9.6 %
		Y	100.00	108.53	24.89		80.0	
		Z	14.33	86.37	18.99		80.0	
10464-AAA	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	100.00	123.78	32.14	3.23	80.0	± 9.6 %
		Y	100.00	125.58	32.94		80.0	
		Z	100.00	123.19	31.67		80.0	
10465-AAA	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	100.00	110.13	25.71	3.23	80.0	± 9.6 %
		Y	100.00	111.18	26.15		80.0	
		Z	35.58	97.99	22.58		80.0	
10466-AAA	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	95.39	106.65	24.18	3.23	80.0	± 9.6 %
		Y	100.00	108.07	24.67		80.0	
		Z	9.21	81.47	17.50		80.0	
10467-AAB	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	100.00	123.99	32.23	3.23	80.0	± 9.6 %
		Y	100.00	125.80	33.04		80.0	
		Z	100.00	123.41	31.77		80.0	
10468-AAB	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	100.00	110.29	25.79	3.23	80.0	± 9.6 %
		Y	100.00	111.34	26.23		80.0	
		Z	43.78	100.42	23.20		80.0	
10469-AAB	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	99.99	107.17	24.29	3.23	80.0	± 9.6 %
		Y	100.00	108.09	24.67		80.0	
		Z	9.38	81.68	17.56		80.0	
10470-AAB	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	100.00	124.02	32.24	3.23	80.0	± 9.6 %
		Y	100.00	125.83	33.05		80.0	
		Z	100.00	123.44	31.77		80.0	
10471-AAB	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	100.00	110.24	25.76	3.23	80.0	± 9.6 %
		Y	100.00	111.29	26.20		80.0	
		Z	43.76	100.38	23.18		80.0	
10472-AAB	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	100.00	107.12	24.26	3.23	80.0	± 9.6 %
		Y	100.00	108.04	24.64		80.0	
		Z	9.36	81.64	17.53		80.0	
10473-AAB	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	100.00	123.99	32.23	3.23	80.0	± 9.6 %
		Y	100.00	125.81	33.03		80.0	
		Z	100.00	123.41	31.76		80.0	
10474-AAB	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	100.00	110.25	25.76	3.23	80.0	± 9.6 %
		Y	100.00	111.30	26.20		80.0	
		Z	42.90	100.17	23.13		80.0	
10475-AAB	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	99.25	107.05	24.25	3.23	80.0	± 9.6 %
		Y	100.00	108.06	24.65		80.0	
		Z	9.24	81.52	17.50		80.0	

10477-AAB	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	100.00	110.09	25.68	3.23	80.0	± 9.6 %
		Y	100.00	111.14	26.12		80.0	
		Z	37.23	98.47	22.68		80.0	
10478-AAB	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	95.92	106.64	24.15	3.23	80.0	± 9.6 %
		Y	100.00	108.00	24.62		80.0	
		Z	9.13	81.36	17.44		80.0	
10479-AAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	15.99	96.17	26.79	3.23	80.0	± 9.6 %
		Y	25.94	104.65	29.40		80.0	
		Z	12.83	92.51	25.34		80.0	
10480-AAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	19.48	93.48	24.25	3.23	80.0	± 9.6 %
		Y	30.64	100.38	26.28		80.0	
		Z	12.85	87.46	22.08		80.0	
10481-AAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	16.00	89.85	22.83	3.23	80.0	± 9.6 %
		Y	23.58	95.63	24.59		80.0	
		Z	10.55	84.00	20.64		80.0	
10482-AAA	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	5.04	76.94	19.04	2.23	80.0	± 9.6 %
		Y	6.02	79.79	20.13		80.0	
		Z	4.78	76.30	18.55		80.0	
10483-AAA	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	9.12	82.48	20.94	2.23	80.0	± 9.6 %
		Y	10.77	85.20	21.94		80.0	
		Z	6.99	78.47	19.09		80.0	
10484-AAA	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	8.29	80.89	20.40	2.23	80.0	± 9.6 %
		Y	9.58	83.28	21.31		80.0	
		Z	6.43	77.10	18.60		80.0	
10485-AAB	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	5.28	77.72	20.08	2.23	80.0	± 9.6 %
		Y	6.19	80.50	21.18		80.0	
		Z	5.13	77.51	19.85		80.0	
10486-AAB	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	4.51	72.42	17.68	2.23	80.0	± 9.6 %
		Y	4.81	73.61	18.21		80.0	
		Z	4.36	72.13	17.34		80.0	
10487-AAB	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	4.47	71.97	17.49	2.23	80.0	± 9.6 %
		Y	4.74	73.05	17.98		80.0	
		Z	4.32	71.65	17.14		80.0	
10488-AAB	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	5.28	76.23	20.05	2.23	80.0	± 9.6 %
		Y	5.88	78.28	20.95		80.0	
		Z	5.13	76.06	19.94		80.0	
10489-AAB	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	4.61	71.60	18.35	2.23	80.0	± 9.6 %
		Y	4.82	72.56	18.83		80.0	
		Z	4.51	71.52	18.23		80.0	
10490-AAB	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	4.69	71.33	18.26	2.23	80.0	± 9.6 %
		Y	4.87	72.22	18.72		80.0	
		Z	4.59	71.26	18.14		80.0	
10491-AAB	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	5.21	74.00	19.31	2.23	80.0	± 9.6 %
		Y	5.57	75.36	19.96		80.0	
		Z	5.08	73.85	19.24		80.0	
10492-AAB	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	4.87	70.59	18.20	2.23	80.0	± 9.6 %
		Y	5.02	71.33	18.60		80.0	
		Z	4.77	70.51	18.12		80.0	

10493-AAB	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	4.93	70.41	18.14	2.23	80.0	± 9.6 %
		Y	5.07	71.11	18.53		80.0	
		Z	4.83	70.34	18.06		80.0	
10494-AAB	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	5.74	75.68	19.79	2.23	80.0	± 9.6 %
		Y	6.23	77.26	20.51		80.0	
		Z	5.57	75.46	19.70		80.0	
10495-AAB	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	4.94	71.08	18.40	2.23	80.0	± 9.6 %
		Y	5.11	71.86	18.83		80.0	
		Z	4.84	70.96	18.32		80.0	
10496-AAB	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	4.99	70.71	18.29	2.23	80.0	± 9.6 %
		Y	5.14	71.42	18.69		80.0	
		Z	4.89	70.61	18.21		80.0	
10497-AAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	3.95	73.39	16.94	2.23	80.0	± 9.6 %
		Y	4.59	75.63	17.82		80.0	
		Z	3.56	72.03	16.04		80.0	
10498-AAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	2.99	67.14	13.42	2.23	80.0	± 9.6 %
		Y	3.17	68.04	13.81		80.0	
		Z	2.58	65.48	12.27		80.0	
10499-AAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	2.90	66.50	13.01	2.23	80.0	± 9.6 %
		Y	3.06	67.30	13.36		80.0	
		Z	2.49	64.82	11.82		80.0	
10500-AAA	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	5.14	76.64	19.91	2.23	80.0	± 9.6 %
		Y	5.86	79.02	20.91		80.0	
		Z	5.00	76.51	19.75		80.0	
10501-AAA	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	4.55	72.03	17.90	2.23	80.0	± 9.6 %
		Y	4.80	73.10	18.41		80.0	
		Z	4.43	71.87	17.67		80.0	
10502-AAA	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	4.59	71.80	17.77	2.23	80.0	± 9.6 %
		Y	4.83	72.81	18.25		80.0	
		Z	4.47	71.64	17.53		80.0	
10503-AAB	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	5.22	76.03	19.96	2.23	80.0	± 9.6 %
		Y	5.81	78.08	20.86		80.0	
		Z	5.07	75.86	19.85		80.0	
10504-AAB	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	4.59	71.52	18.30	2.23	80.0	± 9.6 %
		Y	4.80	72.48	18.79		80.0	
		Z	4.49	71.43	18.18		80.0	
10505-AAB	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	4.66	71.24	18.21	2.23	80.0	± 9.6 %
		Y	4.85	72.13	18.67		80.0	
		Z	4.56	71.17	18.09		80.0	
10506-AAB	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	5.69	75.54	19.72	2.23	80.0	± 9.6 %
		Y	6.18	77.12	20.44		80.0	
		Z	5.52	75.31	19.63		80.0	
10507-AAB	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	4.93	71.03	18.37	2.23	80.0	± 9.6 %
		Y	5.09	71.81	18.80		80.0	
		Z	4.82	70.90	18.29		80.0	

10508-AAB	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	4.98	70.65	18.25	2.23	80.0	± 9.6 %
		Y	5.12	71.36	18.65		80.0	
		Z	4.87	70.54	18.17		80.0	
10509-AAB	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	5.75	73.61	18.99	2.23	80.0	± 9.6 %
		Y	6.04	74.62	19.49		80.0	
		Z	5.61	73.42	18.92		80.0	
10510-AAB	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	5.37	70.52	18.25	2.23	80.0	± 9.6 %
		Y	5.50	71.12	18.60		80.0	
		Z	5.26	70.38	18.18		80.0	
10511-AAB	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	5.39	70.20	18.16	2.23	80.0	± 9.6 %
		Y	5.51	70.76	18.50		80.0	
		Z	5.29	70.08	18.10		80.0	
10512-AAB	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	6.17	75.45	19.55	2.23	80.0	± 9.6 %
		Y	6.61	76.77	20.16		80.0	
		Z	5.99	75.18	19.45		80.0	
10513-AAB	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	5.29	70.93	18.40	2.23	80.0	± 9.6 %
		Y	5.44	71.61	18.78		80.0	
		Z	5.18	70.76	18.31		80.0	
10514-AAB	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	5.26	70.42	18.25	2.23	80.0	± 9.6 %
		Y	5.39	71.03	18.61		80.0	
		Z	5.16	70.27	18.17		80.0	
10515-AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps, 99pc duty cycle)	X	0.99	62.88	14.39	0.00	150.0	± 9.6 %
		Y	1.01	63.69	15.14		150.0	
		Z	0.98	62.78	14.25		150.0	
10516-AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps, 99pc duty cycle)	X	0.57	67.90	15.77	0.00	150.0	± 9.6 %
		Y	0.79	74.76	19.51		150.0	
		Z	0.54	67.33	15.34		150.0	
10517-AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps, 99pc duty cycle)	X	0.83	64.48	14.80	0.00	150.0	± 9.6 %
		Y	0.88	66.11	16.05		150.0	
		Z	0.82	64.26	14.59		150.0	
10518-AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps, 99pc duty cycle)	X	4.64	66.76	16.21	0.00	150.0	± 9.6 %
		Y	4.64	66.97	16.39		150.0	
		Z	4.58	66.75	16.17		150.0	
10519-AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps, 99pc duty cycle)	X	4.84	67.04	16.35	0.00	150.0	± 9.6 %
		Y	4.85	67.24	16.53		150.0	
		Z	4.77	67.00	16.30		150.0	
10520-AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps, 99pc duty cycle)	X	4.69	67.00	16.26	0.00	150.0	± 9.6 %
		Y	4.70	67.20	16.45		150.0	
		Z	4.62	66.95	16.22		150.0	
10521-AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps, 99pc duty cycle)	X	4.62	66.99	16.24	0.00	150.0	± 9.6 %
		Y	4.63	67.20	16.43		150.0	
		Z	4.55	66.94	16.20		150.0	
10522-AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps, 99pc duty cycle)	X	4.67	67.03	16.31	0.00	150.0	± 9.6 %
		Y	4.69	67.25	16.50		150.0	
		Z	4.61	67.03	16.28		150.0	

10523-AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps, 99pc duty cycle)	X	4.55	66.89	16.15	0.00	150.0	± 9.6 %
		Y	4.56	67.11	16.34		150.0	
		Z	4.49	66.88	16.12		150.0	
10524-AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps, 99pc duty cycle)	X	4.62	66.97	16.28	0.00	150.0	± 9.6 %
		Y	4.63	67.19	16.48		150.0	
		Z	4.56	66.95	16.25		150.0	
10525-AAA	IEEE 802.11ac WiFi (20MHz, MCS0, 99pc duty cycle)	X	4.59	65.99	15.86	0.00	150.0	± 9.6 %
		Y	4.60	66.20	16.05		150.0	
		Z	4.54	65.98	15.83		150.0	
10526-AAA	IEEE 802.11ac WiFi (20MHz, MCS1, 99pc duty cycle)	X	4.77	66.38	16.01	0.00	150.0	± 9.6 %
		Y	4.79	66.60	16.20		150.0	
		Z	4.71	66.35	15.98		150.0	
10527-AAA	IEEE 802.11ac WiFi (20MHz, MCS2, 99pc duty cycle)	X	4.69	66.34	15.95	0.00	150.0	± 9.6 %
		Y	4.71	66.56	16.15		150.0	
		Z	4.63	66.30	15.91		150.0	
10528-AAA	IEEE 802.11ac WiFi (20MHz, MCS3, 99pc duty cycle)	X	4.71	66.36	15.99	0.00	150.0	± 9.6 %
		Y	4.72	66.58	16.18		150.0	
		Z	4.65	66.32	15.95		150.0	
10529-AAA	IEEE 802.11ac WiFi (20MHz, MCS4, 99pc duty cycle)	X	4.71	66.36	15.99	0.00	150.0	± 9.6 %
		Y	4.72	66.58	16.18		150.0	
		Z	4.65	66.32	15.95		150.0	
10531-AAA	IEEE 802.11ac WiFi (20MHz, MCS6, 99pc duty cycle)	X	4.71	66.48	16.01	0.00	150.0	± 9.6 %
		Y	4.73	66.71	16.20		150.0	
		Z	4.64	66.43	15.96		150.0	
10532-AAA	IEEE 802.11ac WiFi (20MHz, MCS7, 99pc duty cycle)	X	4.56	66.33	15.94	0.00	150.0	± 9.6 %
		Y	4.58	66.56	16.14		150.0	
		Z	4.50	66.27	15.89		150.0	
10533-AAA	IEEE 802.11ac WiFi (20MHz, MCS8, 99pc duty cycle)	X	4.72	66.39	15.97	0.00	150.0	± 9.6 %
		Y	4.73	66.61	16.16		150.0	
		Z	4.65	66.36	15.93		150.0	
10534-AAA	IEEE 802.11ac WiFi (40MHz, MCS0, 99pc duty cycle)	X	5.24	66.54	16.07	0.00	150.0	± 9.6 %
		Y	5.25	66.71	16.24		150.0	
		Z	5.19	66.49	16.04		150.0	
10535-AAA	IEEE 802.11ac WiFi (40MHz, MCS1, 99pc duty cycle)	X	5.31	66.70	16.14	0.00	150.0	± 9.6 %
		Y	5.33	66.88	16.31		150.0	
		Z	5.26	66.68	16.13		150.0	
10536-AAA	IEEE 802.11ac WiFi (40MHz, MCS2, 99pc duty cycle)	X	5.18	66.65	16.10	0.00	150.0	± 9.6 %
		Y	5.19	66.84	16.27		150.0	
		Z	5.12	66.60	16.07		150.0	
10537-AAA	IEEE 802.11ac WiFi (40MHz, MCS3, 99pc duty cycle)	X	5.24	66.63	16.10	0.00	150.0	± 9.6 %
		Y	5.25	66.81	16.26		150.0	
		Z	5.19	66.58	16.06		150.0	
10538-AAA	IEEE 802.11ac WiFi (40MHz, MCS4, 99pc duty cycle)	X	5.35	66.69	16.17	0.00	150.0	± 9.6 %
		Y	5.36	66.87	16.33		150.0	
		Z	5.28	66.62	16.12		150.0	
10540-AAA	IEEE 802.11ac WiFi (40MHz, MCS6, 99pc duty cycle)	X	5.26	66.66	16.17	0.00	150.0	± 9.6 %
		Y	5.27	66.85	16.34		150.0	
		Z	5.21	66.63	16.14		150.0	

10541-AAA	IEEE 802.11ac WiFi (40MHz, MCS7, 99pc duty cycle)	X	5.23	66.53	16.10	0.00	150.0	± 9.6 %
		Y	5.24	66.71	16.26		150.0	
		Z	5.18	66.49	16.06		150.0	
10542-AAA	IEEE 802.11ac WiFi (40MHz, MCS8, 99pc duty cycle)	X	5.39	66.62	16.16	0.00	150.0	± 9.6 %
		Y	5.40	66.79	16.32		150.0	
		Z	5.34	66.57	16.12		150.0	
10543-AAA	IEEE 802.11ac WiFi (40MHz, MCS9, 99pc duty cycle)	X	5.48	66.66	16.19	0.00	150.0	± 9.6 %
		Y	5.49	66.83	16.36		150.0	
		Z	5.42	66.63	16.18		150.0	
10544-AAA	IEEE 802.11ac WiFi (80MHz, MCS0, 99pc duty cycle)	X	5.54	66.65	16.07	0.00	150.0	± 9.6 %
		Y	5.55	66.80	16.22		150.0	
		Z	5.50	66.61	16.04		150.0	
10545-AAA	IEEE 802.11ac WiFi (80MHz, MCS1, 99pc duty cycle)	X	5.76	67.11	16.24	0.00	150.0	± 9.6 %
		Y	5.77	67.28	16.40		150.0	
		Z	5.71	67.07	16.23		150.0	
10546-AAA	IEEE 802.11ac WiFi (80MHz, MCS2, 99pc duty cycle)	X	5.63	66.91	16.16	0.00	150.0	± 9.6 %
		Y	5.64	67.07	16.32		150.0	
		Z	5.57	66.84	16.12		150.0	
10547-AAA	IEEE 802.11ac WiFi (80MHz, MCS3, 99pc duty cycle)	X	5.72	67.00	16.20	0.00	150.0	± 9.6 %
		Y	5.72	67.16	16.35		150.0	
		Z	5.65	66.88	16.14		150.0	
10548-AAA	IEEE 802.11ac WiFi (80MHz, MCS4, 99pc duty cycle)	X	6.07	68.22	16.78	0.00	150.0	± 9.6 %
		Y	6.08	68.42	16.96		150.0	
		Z	5.98	68.06	16.70		150.0	
10550-AAA	IEEE 802.11ac WiFi (80MHz, MCS6, 99pc duty cycle)	X	5.65	66.89	16.16	0.00	150.0	± 9.6 %
		Y	5.66	67.05	16.31		150.0	
		Z	5.60	66.86	16.14		150.0	
10551-AAA	IEEE 802.11ac WiFi (80MHz, MCS7, 99pc duty cycle)	X	5.65	66.93	16.14	0.00	150.0	± 9.6 %
		Y	5.66	67.09	16.29		150.0	
		Z	5.60	66.87	16.11		150.0	
10552-AAA	IEEE 802.11ac WiFi (80MHz, MCS8, 99pc duty cycle)	X	5.56	66.71	16.04	0.00	150.0	± 9.6 %
		Y	5.57	66.86	16.19		150.0	
		Z	5.51	66.66	16.01		150.0	
10553-AAA	IEEE 802.11ac WiFi (80MHz, MCS9, 99pc duty cycle)	X	5.65	66.77	16.10	0.00	150.0	± 9.6 %
		Y	5.66	66.92	16.25		150.0	
		Z	5.60	66.70	16.07		150.0	
10554-AAA	IEEE 1602.11ac WiFi (160MHz, MCS0, 99pc duty cycle)	X	5.95	67.04	16.18	0.00	150.0	± 9.6 %
		Y	5.96	67.19	16.31		150.0	
		Z	5.91	66.99	16.15		150.0	
10555-AAA	IEEE 1602.11ac WiFi (160MHz, MCS1, 99pc duty cycle)	X	6.09	67.37	16.32	0.00	150.0	± 9.6 %
		Y	6.11	67.53	16.46		150.0	
		Z	6.05	67.32	16.29		150.0	
10556-AAA	IEEE 1602.11ac WiFi (160MHz, MCS2, 99pc duty cycle)	X	6.11	67.40	16.33	0.00	150.0	± 9.6 %
		Y	6.12	67.56	16.47		150.0	
		Z	6.07	67.36	16.30		150.0	
10557-AAA	IEEE 1602.11ac WiFi (160MHz, MCS3, 99pc duty cycle)	X	6.08	67.33	16.31	0.00	150.0	± 9.6 %
		Y	6.09	67.48	16.45		150.0	
		Z	6.03	67.26	16.27		150.0	

10558-AAA	IEEE 1602.11ac WiFi (160MHz, MCS4, 99pc duty cycle)	X	6.14	67.52	16.42	0.00	150.0	± 9.6 %
		Y	6.15	67.67	16.56		150.0	
		Z	6.09	67.43	16.37		150.0	
10560-AAA	IEEE 1602.11ac WiFi (160MHz, MCS6, 99pc duty cycle)	X	6.13	67.34	16.37	0.00	150.0	± 9.6 %
		Y	6.14	67.49	16.51		150.0	
		Z	6.07	67.26	16.33		150.0	
10561-AAA	IEEE 1602.11ac WiFi (160MHz, MCS7, 99pc duty cycle)	X	6.05	67.31	16.39	0.00	150.0	± 9.6 %
		Y	6.06	67.47	16.54		150.0	
		Z	6.00	67.24	16.36		150.0	
10562-AAA	IEEE 1602.11ac WiFi (160MHz, MCS8, 99pc duty cycle)	X	6.21	67.80	16.64	0.00	150.0	± 9.6 %
		Y	6.22	67.97	16.79		150.0	
		Z	6.14	67.67	16.57		150.0	
10563-AAA	IEEE 1602.11ac WiFi (160MHz, MCS9, 99pc duty cycle)	X	6.60	68.52	16.95	0.00	150.0	± 9.6 %
		Y	6.61	68.70	17.11		150.0	
		Z	6.44	68.18	16.78		150.0	
10564-AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 9 Mbps, 99pc duty cycle)	X	4.98	66.92	16.42	0.46	150.0	± 9.6 %
		Y	4.99	67.12	16.60		150.0	
		Z	4.93	66.90	16.38		150.0	
10565-AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 12 Mbps, 99pc duty cycle)	X	5.22	67.37	16.73	0.46	150.0	± 9.6 %
		Y	5.23	67.55	16.90		150.0	
		Z	5.16	67.34	16.69		150.0	
10566-AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 18 Mbps, 99pc duty cycle)	X	5.06	67.23	16.56	0.46	150.0	± 9.6 %
		Y	5.06	67.43	16.74		150.0	
		Z	4.99	67.19	16.51		150.0	
10567-AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 24 Mbps, 99pc duty cycle)	X	5.08	67.57	16.87	0.46	150.0	± 9.6 %
		Y	5.08	67.74	17.03		150.0	
		Z	5.01	67.53	16.84		150.0	
10568-AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 36 Mbps, 99pc duty cycle)	X	4.98	67.03	16.35	0.46	150.0	± 9.6 %
		Y	4.99	67.26	16.56		150.0	
		Z	4.91	67.01	16.31		150.0	
10569-AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 48 Mbps, 99pc duty cycle)	X	5.02	67.62	16.91	0.46	150.0	± 9.6 %
		Y	5.03	67.78	17.06		150.0	
		Z	4.97	67.61	16.89		150.0	
10570-AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 54 Mbps, 99pc duty cycle)	X	5.07	67.49	16.86	0.46	150.0	± 9.6 %
		Y	5.07	67.68	17.03		150.0	
		Z	5.00	67.48	16.83		150.0	
10571-AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 90pc duty cycle)	X	1.33	65.38	15.85	0.46	130.0	± 9.6 %
		Y	1.37	66.42	16.66		130.0	
		Z	1.31	65.23	15.71		130.0	
10572-AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps, 90pc duty cycle)	X	1.35	65.94	16.19	0.46	130.0	± 9.6 %
		Y	1.40	67.08	17.03		130.0	
		Z	1.33	65.79	16.04		130.0	
10573-AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps, 90pc duty cycle)	X	2.45	84.59	22.30	0.46	130.0	± 9.6 %
		Y	10.53	109.30	30.18		130.0	
		Z	2.23	83.07	21.66		130.0	
10574-AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps, 90pc duty cycle)	X	1.51	71.42	18.78	0.46	130.0	± 9.6 %
		Y	1.69	74.14	20.31		130.0	
		Z	1.47	71.09	18.56		130.0	

10575-AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps, 90pc duty cycle)	X	4.80	66.79	16.52	0.46	130.0	± 9.6 %
		Y	4.80	66.99	16.70		130.0	
		Z	4.74	66.78	16.48		130.0	
10576-AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 9 Mbps, 90pc duty cycle)	X	4.82	66.93	16.57	0.46	130.0	± 9.6 %
		Y	4.83	67.13	16.75		130.0	
		Z	4.77	66.93	16.54		130.0	
10577-AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 12 Mbps, 90pc duty cycle)	X	5.04	67.25	16.75	0.46	130.0	± 9.6 %
		Y	5.04	67.43	16.92		130.0	
		Z	4.97	67.22	16.71		130.0	
10578-AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 18 Mbps, 90pc duty cycle)	X	4.93	67.39	16.83	0.46	130.0	± 9.6 %
		Y	4.93	67.57	17.00		130.0	
		Z	4.87	67.36	16.79		130.0	
10579-AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 24 Mbps, 90pc duty cycle)	X	4.71	66.78	16.21	0.46	130.0	± 9.6 %
		Y	4.73	67.02	16.43		130.0	
		Z	4.65	66.73	16.16		130.0	
10580-AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 36 Mbps, 90pc duty cycle)	X	4.76	66.79	16.23	0.46	130.0	± 9.6 %
		Y	4.77	67.05	16.45		130.0	
		Z	4.69	66.76	16.18		130.0	
10581-AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 48 Mbps, 90pc duty cycle)	X	4.83	67.44	16.78	0.46	130.0	± 9.6 %
		Y	4.84	67.63	16.95		130.0	
		Z	4.77	67.41	16.74		130.0	
10582-AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 54 Mbps, 90pc duty cycle)	X	4.66	66.56	16.03	0.46	130.0	± 9.6 %
		Y	4.68	66.83	16.26		130.0	
		Z	4.59	66.51	15.97		130.0	
10583-AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps, 90pc duty cycle)	X	4.80	66.79	16.52	0.46	130.0	± 9.6 %
		Y	4.80	66.99	16.70		130.0	
		Z	4.74	66.78	16.48		130.0	
10584-AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps, 90pc duty cycle)	X	4.82	66.93	16.57	0.46	130.0	± 9.6 %
		Y	4.83	67.13	16.75		130.0	
		Z	4.77	66.93	16.54		130.0	
10585-AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps, 90pc duty cycle)	X	5.04	67.25	16.75	0.46	130.0	± 9.6 %
		Y	5.04	67.43	16.92		130.0	
		Z	4.97	67.22	16.71		130.0	
10586-AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps, 90pc duty cycle)	X	4.93	67.39	16.83	0.46	130.0	± 9.6 %
		Y	4.93	67.57	17.00		130.0	
		Z	4.87	67.36	16.79		130.0	
10587-AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps, 90pc duty cycle)	X	4.71	66.78	16.21	0.46	130.0	± 9.6 %
		Y	4.73	67.02	16.43		130.0	
		Z	4.65	66.73	16.16		130.0	
10588-AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps, 90pc duty cycle)	X	4.76	66.79	16.23	0.46	130.0	± 9.6 %
		Y	4.77	67.05	16.45		130.0	
		Z	4.69	66.76	16.18		130.0	
10589-AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps, 90pc duty cycle)	X	4.83	67.44	16.78	0.46	130.0	± 9.6 %
		Y	4.84	67.63	16.95		130.0	
		Z	4.77	67.41	16.74		130.0	
10590-AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps, 90pc duty cycle)	X	4.66	66.56	16.03	0.46	130.0	± 9.6 %
		Y	4.68	66.83	16.26		130.0	
		Z	4.59	66.51	15.97		130.0	

10591-AAA	IEEE 802.11n (HT Mixed, 20MHz, MCS0, 90pc duty cycle)	X	4.94	66.84	16.61	0.46	130.0	± 9.6 %
		Y	4.95	67.02	16.78		130.0	
		Z	4.89	66.83	16.58		130.0	
10592-AAA	IEEE 802.11n (HT Mixed, 20MHz, MCS1, 90pc duty cycle)	X	5.11	67.18	16.74	0.46	130.0	± 9.6 %
		Y	5.11	67.36	16.91		130.0	
		Z	5.05	67.16	16.71		130.0	
10593-AAA	IEEE 802.11n (HT Mixed, 20MHz, MCS2, 90pc duty cycle)	X	5.04	67.12	16.64	0.46	130.0	± 9.6 %
		Y	5.04	67.31	16.81		130.0	
		Z	4.97	67.08	16.60		130.0	
10594-AAA	IEEE 802.11n (HT Mixed, 20MHz, MCS3, 90pc duty cycle)	X	5.09	67.26	16.77	0.46	130.0	± 9.6 %
		Y	5.09	67.44	16.95		130.0	
		Z	5.02	67.24	16.74		130.0	
10595-AAA	IEEE 802.11n (HT Mixed, 20MHz, MCS4, 90pc duty cycle)	X	5.06	67.23	16.68	0.46	130.0	± 9.6 %
		Y	5.07	67.42	16.86		130.0	
		Z	4.99	67.20	16.64		130.0	
10596-AAA	IEEE 802.11n (HT Mixed, 20MHz, MCS5, 90pc duty cycle)	X	5.00	67.23	16.68	0.46	130.0	± 9.6 %
		Y	5.01	67.44	16.87		130.0	
		Z	4.93	67.20	16.65		130.0	
10597-AAA	IEEE 802.11n (HT Mixed, 20MHz, MCS6, 90pc duty cycle)	X	4.95	67.15	16.58	0.46	130.0	± 9.6 %
		Y	4.96	67.36	16.77		130.0	
		Z	4.88	67.11	16.54		130.0	
10598-AAA	IEEE 802.11n (HT Mixed, 20MHz, MCS7, 90pc duty cycle)	X	4.92	67.37	16.82	0.46	130.0	± 9.6 %
		Y	4.93	67.55	16.99		130.0	
		Z	4.86	67.32	16.78		130.0	
10599-AAA	IEEE 802.11n (HT Mixed, 40MHz, MCS0, 90pc duty cycle)	X	5.62	67.44	16.83	0.46	130.0	± 9.6 %
		Y	5.62	67.59	16.99		130.0	
		Z	5.57	67.41	16.81		130.0	
10600-AAA	IEEE 802.11n (HT Mixed, 40MHz, MCS1, 90pc duty cycle)	X	5.83	68.08	17.13	0.46	130.0	± 9.6 %
		Y	5.83	68.26	17.31		130.0	
		Z	5.75	67.98	17.08		130.0	
10601-AAA	IEEE 802.11n (HT Mixed, 40MHz, MCS2, 90pc duty cycle)	X	5.67	67.70	16.95	0.46	130.0	± 9.6 %
		Y	5.68	67.87	17.12		130.0	
		Z	5.61	67.65	16.92		130.0	
10602-AAA	IEEE 802.11n (HT Mixed, 40MHz, MCS3, 90pc duty cycle)	X	5.76	67.70	16.88	0.46	130.0	± 9.6 %
		Y	5.77	67.88	17.05		130.0	
		Z	5.71	67.69	16.87		130.0	
10603-AAA	IEEE 802.11n (HT Mixed, 40MHz, MCS4, 90pc duty cycle)	X	5.83	67.96	17.13	0.46	130.0	± 9.6 %
		Y	5.84	68.14	17.30		130.0	
		Z	5.78	67.93	17.11		130.0	
10604-AAA	IEEE 802.11n (HT Mixed, 40MHz, MCS5, 90pc duty cycle)	X	5.62	67.40	16.84	0.46	130.0	± 9.6 %
		Y	5.63	67.56	17.00		130.0	
		Z	5.57	67.37	16.81		130.0	
10605-AAA	IEEE 802.11n (HT Mixed, 40MHz, MCS6, 90pc duty cycle)	X	5.75	67.79	17.04	0.46	130.0	± 9.6 %
		Y	5.76	67.98	17.22		130.0	
		Z	5.71	67.80	17.04		130.0	
10606-AAA	IEEE 802.11n (HT Mixed, 40MHz, MCS7, 90pc duty cycle)	X	5.50	67.17	16.59	0.46	130.0	± 9.6 %
		Y	5.51	67.36	16.78		130.0	
		Z	5.45	67.15	16.57		130.0	

10607-AAA	IEEE 802.11ac WiFi (20MHz, MCS0, 90pc duty cycle)	X	4.77	66.11	16.20	0.46	130.0	± 9.6 %
		Y	4.78	66.31	16.38		130.0	
		Z	4.72	66.10	16.17		130.0	
10608-AAA	IEEE 802.11ac WiFi (20MHz, MCS1, 90pc duty cycle)	X	4.97	66.53	16.37	0.46	130.0	± 9.6 %
		Y	4.98	66.73	16.55		130.0	
		Z	4.91	66.51	16.34		130.0	
10609-AAA	IEEE 802.11ac WiFi (20MHz, MCS2, 90pc duty cycle)	X	4.86	66.39	16.22	0.46	130.0	± 9.6 %
		Y	4.87	66.61	16.41		130.0	
		Z	4.80	66.37	16.19		130.0	
10610-AAA	IEEE 802.11ac WiFi (20MHz, MCS3, 90pc duty cycle)	X	4.91	66.54	16.37	0.46	130.0	± 9.6 %
		Y	4.92	66.75	16.55		130.0	
		Z	4.85	66.52	16.34		130.0	
10611-AAA	IEEE 802.11ac WiFi (20MHz, MCS4, 90pc duty cycle)	X	4.83	66.37	16.24	0.46	130.0	± 9.6 %
		Y	4.84	66.58	16.42		130.0	
		Z	4.77	66.34	16.20		130.0	
10612-AAA	IEEE 802.11ac WiFi (20MHz, MCS5, 90pc duty cycle)	X	4.85	66.53	16.28	0.46	130.0	± 9.6 %
		Y	4.86	66.77	16.48		130.0	
		Z	4.78	66.50	16.25		130.0	
10613-AAA	IEEE 802.11ac WiFi (20MHz, MCS6, 90pc duty cycle)	X	4.86	66.45	16.19	0.46	130.0	± 9.6 %
		Y	4.87	66.68	16.39		130.0	
		Z	4.79	66.40	16.14		130.0	
10614-AAA	IEEE 802.11ac WiFi (20MHz, MCS7, 90pc duty cycle)	X	4.79	66.59	16.39	0.46	130.0	± 9.6 %
		Y	4.80	66.80	16.57		130.0	
		Z	4.72	66.55	16.34		130.0	
10615-AAA	IEEE 802.11ac WiFi (20MHz, MCS8, 90pc duty cycle)	X	4.84	66.22	16.03	0.46	130.0	± 9.6 %
		Y	4.85	66.46	16.24		130.0	
		Z	4.77	66.19	15.99		130.0	
10616-AAA	IEEE 802.11ac WiFi (40MHz, MCS0, 90pc duty cycle)	X	5.43	66.66	16.42	0.46	130.0	± 9.6 %
		Y	5.44	66.83	16.58		130.0	
		Z	5.38	66.62	16.39		130.0	
10617-AAA	IEEE 802.11ac WiFi (40MHz, MCS1, 90pc duty cycle)	X	5.49	66.80	16.46	0.46	130.0	± 9.6 %
		Y	5.50	66.99	16.63		130.0	
		Z	5.45	66.83	16.47		130.0	
10618-AAA	IEEE 802.11ac WiFi (40MHz, MCS2, 90pc duty cycle)	X	5.38	66.84	16.49	0.46	130.0	± 9.6 %
		Y	5.39	67.01	16.65		130.0	
		Z	5.33	66.80	16.47		130.0	
10619-AAA	IEEE 802.11ac WiFi (40MHz, MCS3, 90pc duty cycle)	X	5.41	66.69	16.36	0.46	130.0	± 9.6 %
		Y	5.42	66.88	16.53		130.0	
		Z	5.36	66.66	16.34		130.0	
10620-AAA	IEEE 802.11ac WiFi (40MHz, MCS4, 90pc duty cycle)	X	5.51	66.76	16.45	0.46	130.0	± 9.6 %
		Y	5.52	66.94	16.61		130.0	
		Z	5.45	66.69	16.40		130.0	
10621-AAA	IEEE 802.11ac WiFi (40MHz, MCS5, 90pc duty cycle)	X	5.49	66.80	16.57	0.46	130.0	± 9.6 %
		Y	5.49	66.95	16.72		130.0	
		Z	5.43	66.76	16.55		130.0	
10622-AAA	IEEE 802.11ac WiFi (40MHz, MCS6, 90pc duty cycle)	X	5.50	66.97	16.65	0.46	130.0	± 9.6 %
		Y	5.51	67.14	16.81		130.0	
		Z	5.46	66.96	16.64		130.0	

10623-AAA	IEEE 802.11ac WiFi (40MHz, MCS7, 90pc duty cycle)	X	5.38	66.52	16.31	0.46	130.0	± 9.6 %
		Y	5.39	66.70	16.48		130.0	
		Z	5.33	66.49	16.29		130.0	
10624-AAA	IEEE 802.11ac WiFi (40MHz, MCS8, 90pc duty cycle)	X	5.58	66.73	16.48	0.46	130.0	± 9.6 %
		Y	5.59	66.90	16.64		130.0	
		Z	5.52	66.69	16.46		130.0	
10625-AAA	IEEE 802.11ac WiFi (40MHz, MCS9, 90pc duty cycle)	X	6.03	67.94	17.14	0.46	130.0	± 9.6 %
		Y	6.04	68.15	17.32		130.0	
		Z	5.94	67.84	17.08		130.0	
10626-AAA	IEEE 802.11ac WiFi (80MHz, MCS0, 90pc duty cycle)	X	5.70	66.70	16.37	0.46	130.0	± 9.6 %
		Y	5.71	66.85	16.51		130.0	
		Z	5.66	66.67	16.35		130.0	
10627-AAA	IEEE 802.11ac WiFi (80MHz, MCS1, 90pc duty cycle)	X	5.98	67.34	16.65	0.46	130.0	± 9.6 %
		Y	5.99	67.51	16.80		130.0	
		Z	5.93	67.32	16.64		130.0	
10628-AAA	IEEE 802.11ac WiFi (80MHz, MCS2, 90pc duty cycle)	X	5.76	66.88	16.35	0.46	130.0	± 9.6 %
		Y	5.78	67.04	16.51		130.0	
		Z	5.72	66.82	16.32		130.0	
10629-AAA	IEEE 802.11ac WiFi (80MHz, MCS3, 90pc duty cycle)	X	5.85	66.94	16.38	0.46	130.0	± 9.6 %
		Y	5.86	67.11	16.54		130.0	
		Z	5.81	66.93	16.37		130.0	
10630-AAA	IEEE 802.11ac WiFi (80MHz, MCS4, 90pc duty cycle)	X	6.47	68.96	17.39	0.46	130.0	± 9.6 %
		Y	6.50	69.20	17.59		130.0	
		Z	6.37	68.78	17.30		130.0	
10631-AAA	IEEE 802.11ac WiFi (80MHz, MCS5, 90pc duty cycle)	X	6.25	68.39	17.28	0.46	130.0	± 9.6 %
		Y	6.25	68.53	17.42		130.0	
		Z	6.15	68.22	17.20		130.0	
10632-AAA	IEEE 802.11ac WiFi (80MHz, MCS6, 90pc duty cycle)	X	5.93	67.33	16.77	0.46	130.0	± 9.6 %
		Y	5.93	67.47	16.90		130.0	
		Z	5.89	67.32	16.77		130.0	
10633-AAA	IEEE 802.11ac WiFi (80MHz, MCS7, 90pc duty cycle)	X	5.83	67.02	16.45	0.46	130.0	± 9.6 %
		Y	5.83	67.17	16.59		130.0	
		Z	5.76	66.93	16.40		130.0	
10634-AAA	IEEE 802.11ac WiFi (80MHz, MCS8, 90pc duty cycle)	X	5.80	67.01	16.50	0.46	130.0	± 9.6 %
		Y	5.81	67.15	16.64		130.0	
		Z	5.75	66.94	16.47		130.0	
10635-AAA	IEEE 802.11ac WiFi (80MHz, MCS9, 90pc duty cycle)	X	5.71	66.44	15.97	0.46	130.0	± 9.6 %
		Y	5.72	66.63	16.15		130.0	
		Z	5.64	66.35	15.92		130.0	
10636-AAA	IEEE 1602.11ac WiFi (160MHz, MCS0, 90pc duty cycle)	X	6.12	67.11	16.48	0.46	130.0	± 9.6 %
		Y	6.13	67.25	16.62		130.0	
		Z	6.09	67.07	16.46		130.0	
10637-AAA	IEEE 1602.11ac WiFi (160MHz, MCS1, 90pc duty cycle)	X	6.30	67.52	16.67	0.46	130.0	± 9.6 %
		Y	6.31	67.68	16.81		130.0	
		Z	6.26	67.49	16.65		130.0	
10638-AAA	IEEE 1602.11ac WiFi (160MHz, MCS2, 90pc duty cycle)	X	6.30	67.50	16.63	0.46	130.0	± 9.6 %
		Y	6.31	67.65	16.78		130.0	
		Z	6.26	67.46	16.61		130.0	

10639-AAA	IEEE 1602.11ac WiFi (160MHz, MCS3, 90pc duty cycle)	X	6.28	67.46	16.65	0.46	130.0	± 9.6 %
		Y	6.28	67.59	16.79		130.0	
		Z	6.23	67.38	16.62		130.0	
10640-AAA	IEEE 1602.11ac WiFi (160MHz, MCS4, 90pc duty cycle)	X	6.30	67.54	16.64	0.46	130.0	± 9.6 %
		Y	6.31	67.70	16.79		130.0	
		Z	6.24	67.43	16.59		130.0	
10641-AAA	IEEE 1602.11ac WiFi (160MHz, MCS5, 90pc duty cycle)	X	6.31	67.32	16.55	0.46	130.0	± 9.6 %
		Y	6.32	67.48	16.70		130.0	
		Z	6.28	67.31	16.54		130.0	
10642-AAA	IEEE 1602.11ac WiFi (160MHz, MCS6, 90pc duty cycle)	X	6.36	67.59	16.84	0.46	130.0	± 9.6 %
		Y	6.36	67.71	16.97		130.0	
		Z	6.31	67.52	16.81		130.0	
10643-AAA	IEEE 1602.11ac WiFi (160MHz, MCS7, 90pc duty cycle)	X	6.20	67.31	16.61	0.46	130.0	± 9.6 %
		Y	6.21	67.47	16.77		130.0	
		Z	6.16	67.26	16.58		130.0	
10644-AAA	IEEE 1602.11ac WiFi (160MHz, MCS8, 90pc duty cycle)	X	6.42	67.97	16.97	0.46	130.0	± 9.6 %
		Y	6.43	68.15	17.13		130.0	
		Z	6.34	67.82	16.88		130.0	
10645-AAA	IEEE 1602.11ac WiFi (160MHz, MCS9, 90pc duty cycle)	X	6.93	69.02	17.44	0.46	130.0	± 9.6 %
		Y	6.97	69.27	17.65		130.0	
		Z	6.82	68.81	17.34		130.0	
10646-AAC	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK, UL Subframe=2,7)	X	47.20	124.94	41.34	9.30	60.0	± 9.6 %
		Y	100.00	143.87	46.72		60.0	
		Z	42.87	123.31	40.85		60.0	
10647-AAB	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK, UL Subframe=2,7)	X	47.80	126.16	41.84	9.30	60.0	± 9.6 %
		Y	100.00	144.94	47.17		60.0	
		Z	42.80	124.20	41.27		60.0	
10648-AAA	CDMA2000 (1x Advanced)	X	0.75	63.57	11.13	0.00	150.0	± 9.6 %
		Y	0.80	64.99	12.02		150.0	
		Z	0.70	63.11	10.54		150.0	

[E] Uncertainty is determined using the max. deviation from linear response applying rectangular distribution and is expressed for the square of the field value.

Calibration Laboratory of
Schmid & Partner
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S Schweizerischer Kalibrierdienst
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The Swiss Accreditation Service is one of the signatories to the EA Multilateral Agreement for the recognition of calibration certificates

Accreditation No.: SCS 0108

Client PC Test

Certificate No: EX3-7308_Aug17

CALIBRATION CERTIFICATE

Object: EX3DV4 - SN:7308

Calibration procedure(s): QA CAL-01.v9, QA CAL-14.v4, QA CAL-23.v5, QA CAL-25.v6
Calibration procedure for dosimetric E-field probes

PM ✓ 8/27/17

Calibration date: August 16, 2017

This calibration certificate documents the traceability to national standards, which realize the physical units of measurements (SI).
The measurements and the uncertainties with confidence probability are given on the following pages and are part of the certificate.

All calibrations have been conducted in the closed laboratory facility: environment temperature (22 ± 3)°C and humidity < 70%.

Calibration Equipment used (M&TE critical for calibration)

Primary Standards	ID	Cal Date (Certificate No.)	Scheduled Calibration
Power meter NRP	SN: 104778	04-Apr-17 (No. 217-02521/02522)	Apr-18
Power sensor NRP-Z91	SN: 103244	04-Apr-17 (No. 217-02521)	Apr-18
Power sensor NRP-Z91	SN: 103245	04-Apr-17 (No. 217-02525)	Apr-18
Reference 20 dB Attenuator	SN: S5277 (20x)	07-Apr-17 (No. 217-02528)	Apr-18
Reference Probe ES3DV2	SN: 3013	31-Dec-16 (No. ES3-3013_Dec16)	Dec-17
DAE4	SN: 660	7-Dec-16 (No. DAE4-660_Dec16)	Dec-17
Secondary Standards	ID	Check Date (in house)	Scheduled Check
Power meter E4419B	SN: GB41293874	06-Apr-16 (in house check Jun-16)	In house check: Jun-18
Power sensor E4412A	SN: MY41498087	06-Apr-16 (in house check Jun-16)	In house check: Jun-18
Power sensor E4412A	SN: 000110210	06-Apr-16 (in house check Jun-16)	In house check: Jun-18
RF generator HP 8648C	SN: US3642U01700	04-Aug-99 (in house check Jun-16)	In house check: Jun-18
Network Analyzer HP 8753E	SN: US37390585	18-Oct-01 (in house check Oct-16)	In house check: Oct-17

	Name	Function	Signature
Calibreted by:	Leif Klysner	Laboratory Technician	
Approved by:	Katja Pokovic	Technical Manager	

Issued: August 16, 2017

Glossary:

TSL	tissue simulating liquid
NORMx,y,z	sensitivity in free space
ConvF	sensitivity in TSL / NORMx,y,z
DCP	diode compression point
CF	crest factor (1/duty_cycle) of the RF signal
A, B, C, D	modulation dependent linearization parameters
Polarization φ	φ rotation around probe axis
Polarization ϑ	ϑ rotation around an axis that is in the plane normal to probe axis (at measurement center), i.e., ϑ = 0 is normal to probe axis
Connector Angle	information used in DASY system to align probe sensor X to the robot coordinate system

Calibration is Performed According to the Following Standards:

a) IEEE Std 1528-2013, "IEEE Recommended Practice for Determining the Peak Spatial-Averaged Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques", June 2013
b) IEC 62209-1, ", "Measurement procedure for the assessment of Specific Absorption Rate (SAR) from hand-held and body-mounted devices used next to the ear (frequency range of 300 MHz to 6 GHz)", July 2016
c) IEC 62209-2, "Procedure to determine the Specific Absorption Rate (SAR) for wireless communication devices used in close proximity to the human body (frequency range of 30 MHz to 6 GHz)", March 2010
d) KDB 865664, "SAR Measurement Requirements for 100 MHz to 6 GHz"

Methods Applied and Interpretation of Parameters:

- *NORMx,y,z:* Assessed for E-field polarization ϑ = 0 (f ≤ 900 MHz in TEM-cell; f > 1800 MHz: R22 waveguide). NORMx,y,z are only intermediate values, i.e., the uncertainties of NORMx,y,z does not affect the E^2-field uncertainty inside TSL (see below *ConvF*).
- *NORM(f)x,y,z = NORMx,y,z * frequency_response* (see Frequency Response Chart). This linearization is implemented in DASY4 software versions later than 4.2. The uncertainty of the frequency response is included in the stated uncertainty of *ConvF*.
- *DCPx,y,z:* DCP are numerical linearization parameters assessed based on the data of power sweep with CW signal (no uncertainty required). DCP does not depend on frequency nor media.
- *PAR:* PAR is the Peak to Average Ratio that is not calibrated but determined based on the signal characteristics
- *Ax,y,z; Bx,y,z; Cx,y,z; Dx,y,z; VRx,y,z: A, B, C, D* are numerical linearization parameters assessed based on the data of power sweep for specific modulation signal. The parameters do not depend on frequency nor media. *VR* is the maximum calibration range expressed in RMS voltage across the diode.
- *ConvF and Boundary Effect Parameters:* Assessed in flat phantom using E-field (or Temperature Transfer Standard for f ≤ 800 MHz) and inside waveguide using analytical field distributions based on power measurements for f > 800 MHz. The same setups are used for assessment of the parameters applied for boundary compensation (alpha, depth) of which typical uncertainty values are given. These parameters are used in DASY4 software to improve probe accuracy close to the boundary. The sensitivity in TSL corresponds to *NORMx,y,z * ConvF* whereby the uncertainty corresponds to that given for *ConvF*. A frequency dependent *ConvF* is used in DASY version 4.4 and higher which allows extending the validity from ± 50 MHz to ± 100 MHz.
- *Spherical isotropy (3D deviation from isotropy)*: in a field of low gradients realized using a flat phantom exposed by a patch antenna.
- *Sensor Offset*: The sensor offset corresponds to the offset of virtual measurement center from the probe tip (on probe axis). No tolerance required.
- *Connector Angle*: The angle is assessed using the information gained by determining the *NORMx* (no uncertainty required).

Probe EX3DV4

SN:7308

Manufactured: March 11, 2014
Calibrated: August 16, 2017

Calibrated for DASY/EASY Systems
(Note: non-compatible with DASY2 system!)

DASY/EASY - Parameters of Probe: EX3DV4 - SN:7308

Basic Calibration Parameters

	Sensor X	Sensor Y	Sensor Z	Unc (k=2)
Norm ($\mu V/(V/m)^2$)[A]	0.49	0.60	0.44	± 10.1 %
DCP (mV)[B]	97.0	91.7	98.5	

Modulation Calibration Parameters

UID	Communication System Name		A dB	B dB√μV	C	D dB	VR mV	Unc[E] (k=2)
0	CW	X	0.0	0.0	1.0	0.00	134.5	±3.3 %
		Y	0.0	0.0	1.0		130.8	
		Z	0.0	0.0	1.0		149.9	

Note: For details on UID parameters see Appendix.

Sensor Model Parameters

	C1 fF	C2 fF	α V^{-1}	T1 $ms.V^{-2}$	T2 $ms.V^{-1}$	T3 ms	T4 V^{-2}	T5 V^{-1}	T6
X	46.65	351.1	36.16	14.68	0.000	5.088	0.834	0.399	1.005
Y	52.88	402.1	36.74	19.55	0.309	5.100	0.477	0.605	1.007
Z	36.70	273.3	35.48	9.322	0.000	5.034	0.373	0.314	1.002

The reported uncertainty of measurement is stated as the standard uncertainty of measurement multiplied by the coverage factor k=2, which for a normal distribution corresponds to a coverage probability of approximately 95%.

[A] The uncertainties of Norm X,Y,Z do not affect the E^2-field uncertainty inside TSL (see Pages 5 and 6).
[B] Numerical linearization parameter: uncertainty not required.
[E] Uncertainty is determined using the max. deviation from linear response applying rectangular distribution and is expressed for the square of the field value.

DASY/EASY - Parameters of Probe: EX3DV4 - SN:7308

Calibration Parameter Determined in Head Tissue Simulating Media

f (MHz) [C]	Relative Permittivity [F]	Conductivity (S/m) [F]	ConvF X	ConvF Y	ConvF Z	Alpha [G]	Depth [G] (mm)	Unc (k=2)
5250	35.9	4.71	5.25	5.25	5.25	0.35	1.80	± 13.1 %
5600	35.5	5.07	4.83	4.83	4.83	0.40	1.80	± 13.1 %
5750	35.4	5.22	5.11	5.11	5.11	0.40	1.80	± 13.1 %

[C] Frequency validity above 300 MHz of ± 100 MHz only applies for DASY v4.4 and higher (see Page 2), else it is restricted to ± 50 MHz. The uncertainty is the RSS of the ConvF uncertainty at calibration frequency and the uncertainty for the indicated frequency band. Frequency validity below 300 MHz is ± 10, 25, 40, 50 and 70 MHz for ConvF assessments at 30, 64, 128, 150 and 220 MHz respectively. Above 5 GHz frequency validity can be extended to ± 110 MHz.

[F] At frequencies below 3 GHz, the validity of tissue parameters (ε and σ) can be relaxed to ± 10% if liquid compensation formula is applied to measured SAR values. At frequencies above 3 GHz, the validity of tissue parameters (ε and σ) is restricted to ± 5%. The uncertainty is the RSS of the ConvF uncertainty for indicated target tissue parameters.

[G] Alpha/Depth are determined during calibration. SPEAG warrants that the remaining deviation due to the boundary effect after compensation is always less than ± 1% for frequencies below 3 GHz and below ± 2% for frequencies between 3-6 GHz at any distance larger than half the probe tip diameter from the boundary.

DASY/EASY - Parameters of Probe: EX3DV4 - SN:7308

Calibration Parameter Determined in Body Tissue Simulating Media

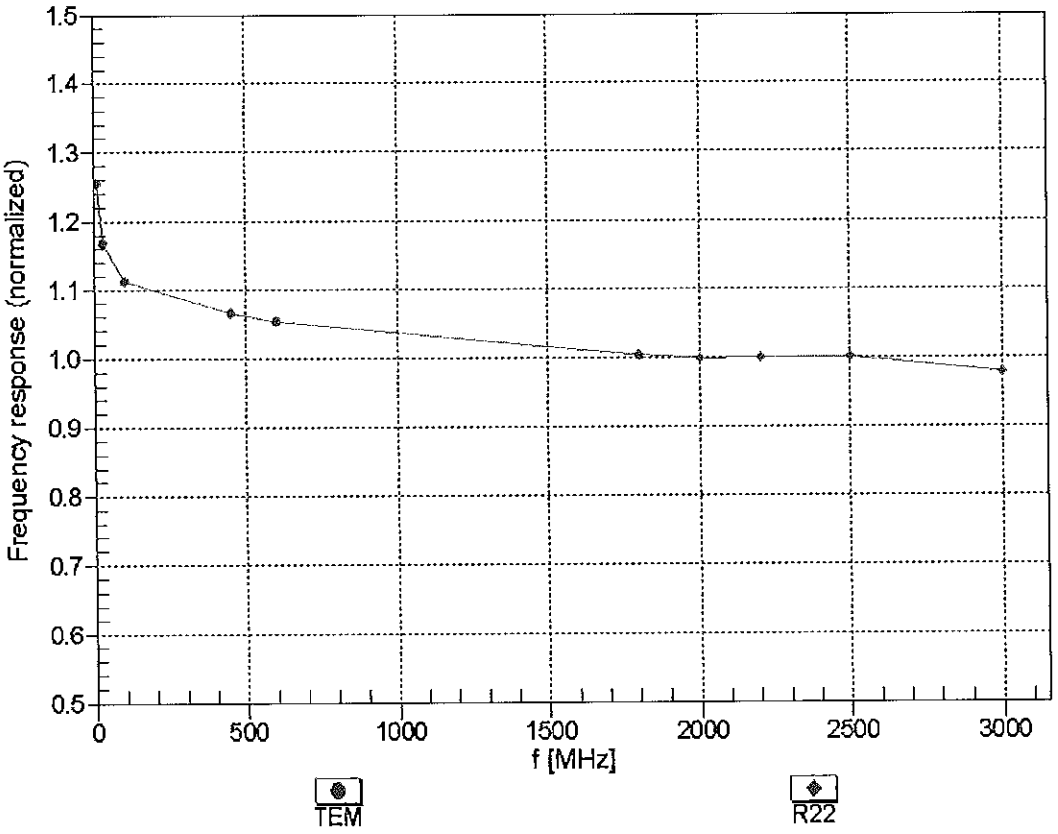
f (MHz) [C]	Relative Permittivity [F]	Conductivity (S/m) [F]	ConvF X	ConvF Y	ConvF Z	Alpha [G]	Depth [G] (mm)	Unc (k=2)
750	55.5	0.96	10.39	10.39	10.39	0.54	0.85	± 12.0 %
835	55.2	0.97	10.21	10.21	10.21	0.47	0.84	± 12.0 %
1750	53.4	1.49	8.24	8.24	8.24	0.41	0.84	± 12.0 %
1900	53.3	1.52	7.96	7.96	7.96	0.37	0.80	± 12.0 %
2300	52.9	1.81	7.77	7.77	7.77	0.39	0.86	± 12.0 %
2450	52.7	1.95	7.66	7.66	7.66	0.35	0.85	± 12.0 %
2600	52.5	2.16	7.46	7.46	7.46	0.31	0.95	± 12.0 %
5250	48.9	5.36	4.84	4.84	4.84	0.35	1.90	± 13.1 %
5600	48.5	5.77	4.23	4.23	4.23	0.40	1.90	± 13.1 %
5750	48.3	5.94	4.50	4.50	4.50	0.40	1.90	± 13.1 %

[C] Frequency validity above 300 MHz of ± 100 MHz only applies for DASY v4.4 and higher (see Page 2), else it is restricted to ± 50 MHz. The uncertainty is the RSS of the ConvF uncertainty at calibration frequency and the uncertainty for the indicated frequency band. Frequency validity below 300 MHz is ± 10, 25, 40, 50 and 70 MHz for ConvF assessments at 30, 64, 128, 150 and 220 MHz respectively. Above 5 GHz frequency validity can be extended to ± 110 MHz.

[F] At frequencies below 3 GHz, the validity of tissue parameters (ε and σ) can be relaxed to ± 10% if liquid compensation formula is applied to measured SAR values. At frequencies above 3 GHz, the validity of tissue parameters (ε and σ) is restricted to ± 5%. The uncertainty is the RSS of the ConvF uncertainty for indicated target tissue parameters.

[G] Alpha/Depth are determined during calibration. SPEAG warrants that the remaining deviation due to the boundary effect after compensation is always less than ± 1% for frequencies below 3 GHz and below ± 2% for frequencies between 3-6 GHz at any distance larger than half the probe tip diameter from the boundary.

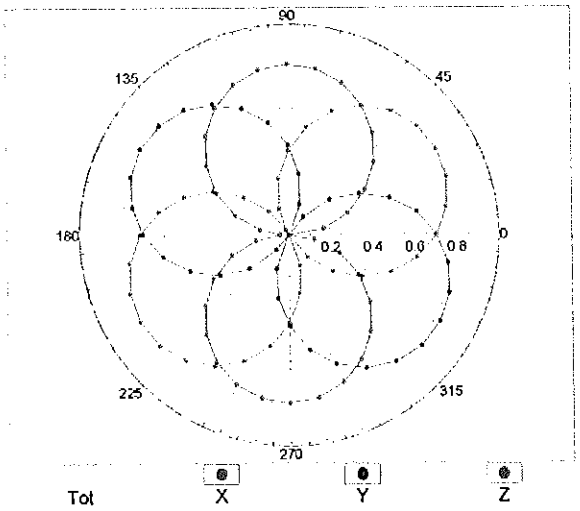
Frequency Response of E-Field
(TEM-Cell:ifi110 EXX, Waveguide: R22)



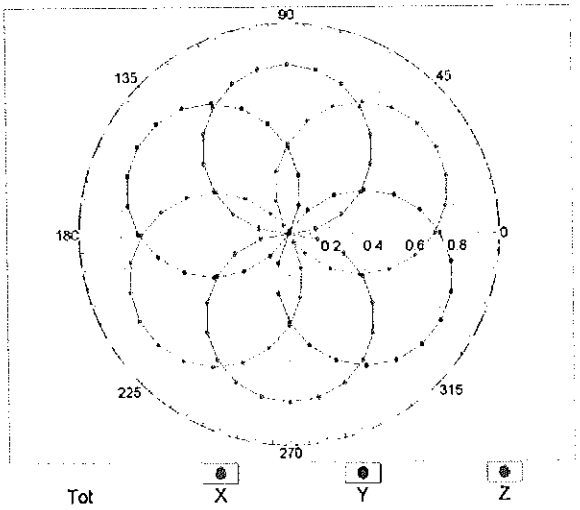
Uncertainty of Frequency Response of E-field: ± 6.3% (k=2)

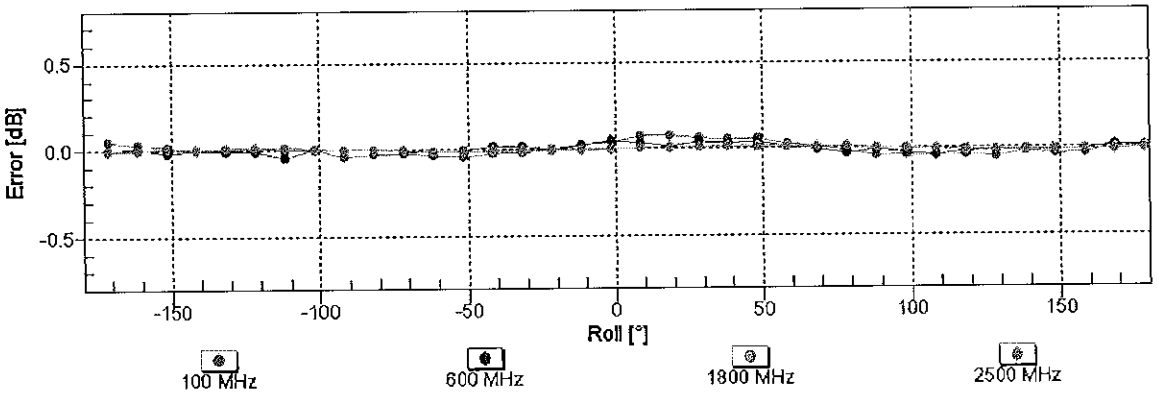
Receiving Pattern (ϕ), ϑ = 0°

f=600 MHz,TEM



f=1800 MHz,R22

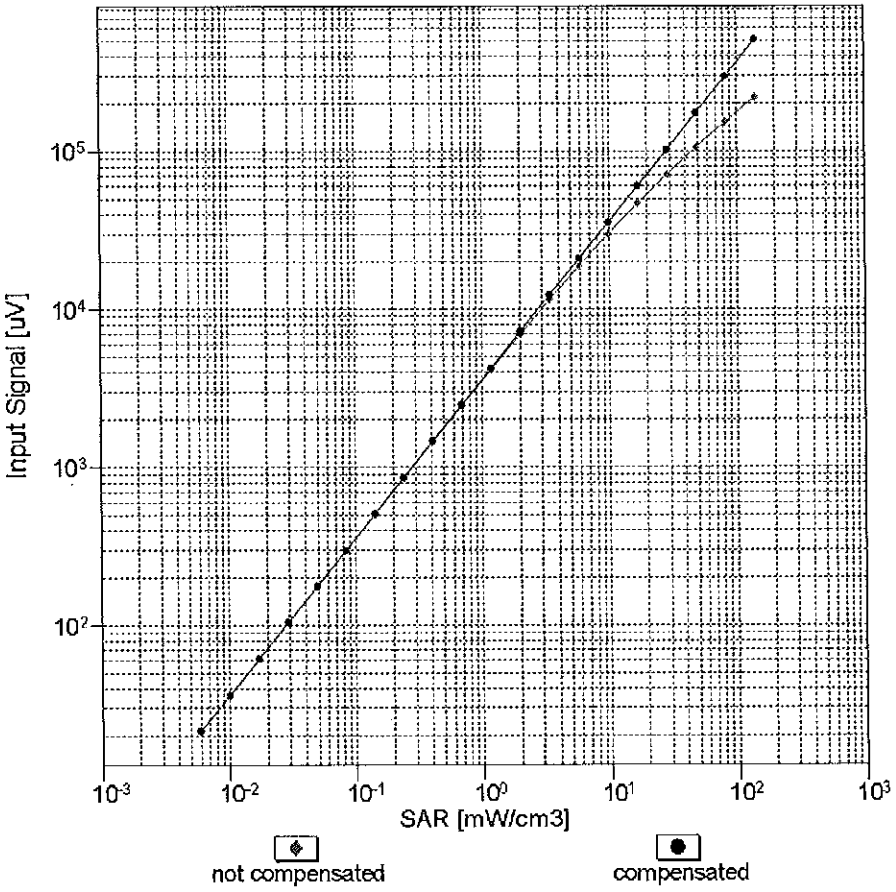


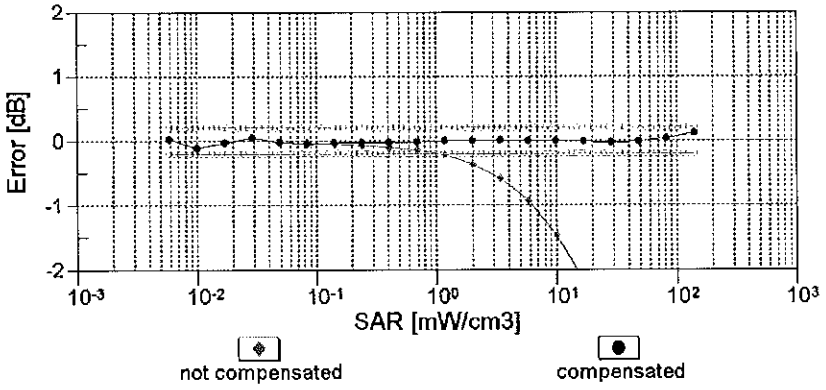


Uncertainty of Axial Isotropy Assessment: ± 0.5% (k=2)

Dynamic Range f(SAR_{head})

(TEM cell , f_{eval}= 1900 MHz)

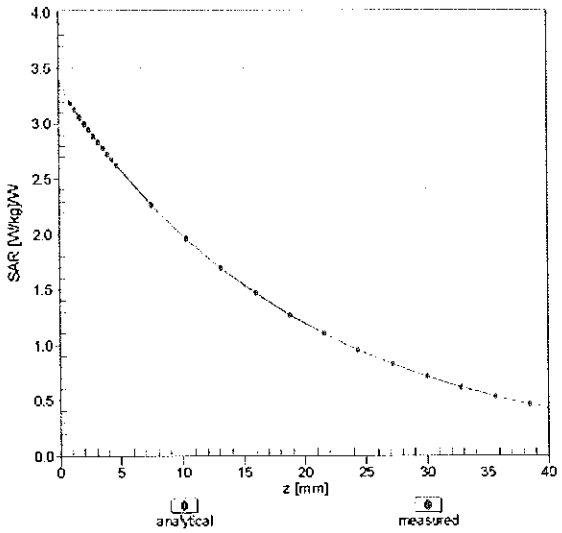




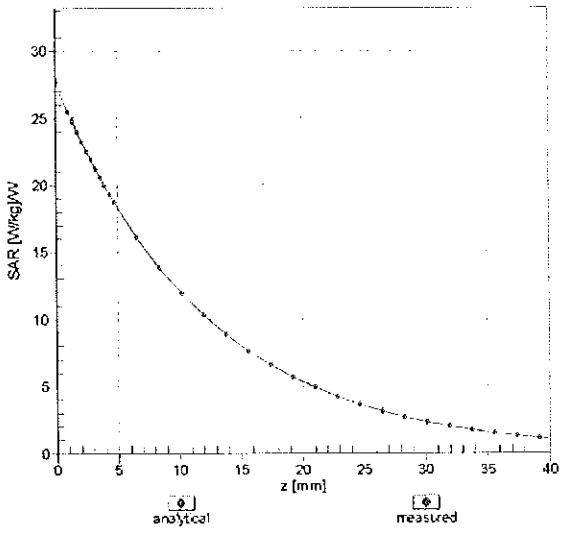
Uncertainty of Linearity Assessment: ± 0.6% (k=2)

Conversion Factor Assessment

f = 835 MHz,WGLS R9 (M_convF)

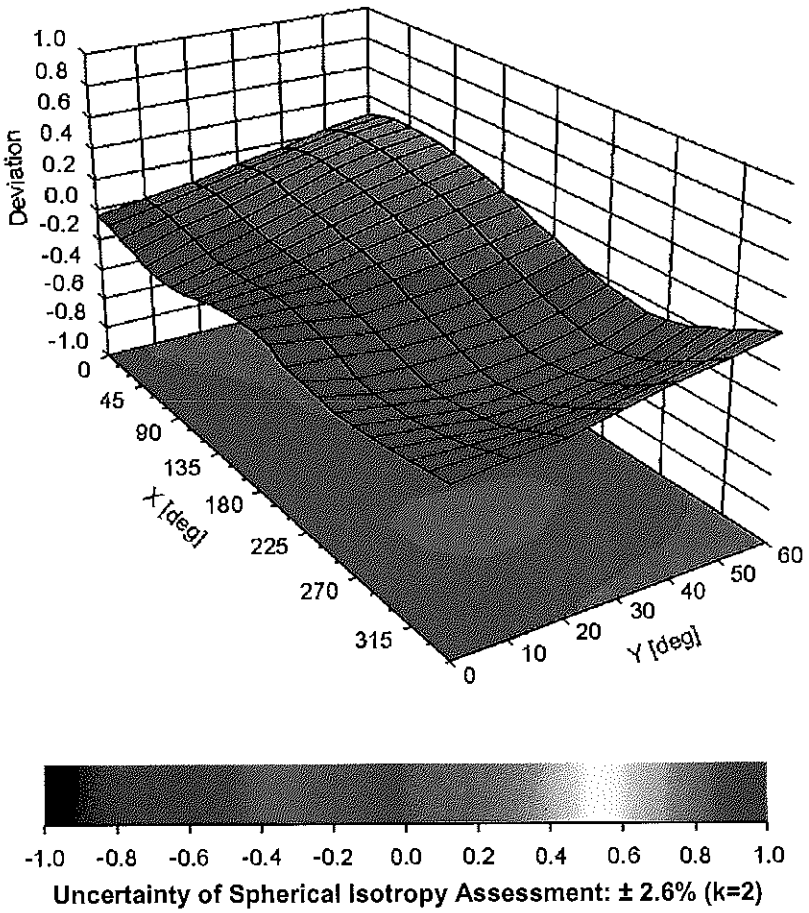


f = 1900 MHz,WGLS R22 (M_convF)



Deviation from Isotropy in Liquid

Error (ϕ, ϑ), f = 900 MHz



Uncertainty of Spherical Isotropy Assessment: ± 2.6% (k=2)

DASY/EASY - Parameters of Probe: EX3DV4 - SN:7308

Other Probe Parameters

Sensor Arrangement	Triangular
Connector Angle (°)	108.4
Mechanical Surface Detection Mode	enabled
Optical Surface Detection Mode	disabled
Probe Overall Length	337 mm
Probe Body Diameter	10 mm
Tip Length	9 mm
Tip Diameter	2.5 mm
Probe Tip to Sensor X Calibration Point	1 mm
Probe Tip to Sensor Y Calibration Point	1 mm
Probe Tip to Sensor Z Calibration Point	1 mm
Recommended Measurement Distance from Surface	1.4 mm

Appendix: Modulation Calibration Parameters

UID	Communication System Name		A dB	B dB√μV	C	D dB	VR mV	Max Unc[E] (k=2)
0	CW	X	0.00	0.00	1.00	0.00	134.5	± 3.3 %
		Y	0.00	0.00	1.00		130.8	
		Z	0.00	0.00	1.00		149.9	
10010-CAA	SAR Validation (Square, 100ms, 10ms)	X	2.82	69.38	11.47	10.00	20.0	± 9.6 %
		Y	8.85	81.60	16.75		20.0	
		Z	1.57	63.55	8.34		20.0	
10011-CAB	UMTS-FDD (WCDMA)	X	1.10	68.34	15.94	0.00	150.0	± 9.6 %
		Y	1.03	66.61	14.91		150.0	
		Z	1.05	68.21	15.74		150.0	
10012-CAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps)	X	1.19	64.20	15.65	0.41	150.0	± 9.6 %
		Y	1.20	63.83	15.29		150.0	
		Z	1.16	63.91	15.33		150.0	
10013-CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps)	X	4.89	66.77	17.26	1.46	150.0	± 9.6 %
		Y	4.97	66.66	17.21		150.0	
		Z	4.71	66.76	17.06		150.0	
10021-DAC	GSM-FDD (TDMA, GMSK)	X	100.00	115.21	27.27	9.39	50.0	± 9.6 %
		Y	100.00	118.99	29.62		50.0	
		Z	100.00	108.16	23.75		50.0	
10023-DAC	GPRS-FDD (TDMA, GMSK, TN 0)	X	100.00	114.49	26.98	9.57	50.0	± 9.6 %
		Y	100.00	118.59	29.46		50.0	
		Z	100.00	107.44	23.48		50.0	
10024-DAC	GPRS-FDD (TDMA, GMSK, TN 0-1)	X	100.00	117.36	27.41	6.56	60.0	± 9.6 %
		Y	100.00	118.20	28.43		60.0	
		Z	100.00	109.72	23.49		60.0	
10025-DAC	EDGE-FDD (TDMA, 8PSK, TN 0)	X	9.43	102.43	43.37	12.57	50.0	± 9.6 %
		Y	5.76	81.81	33.21		50.0	
		Z	6.64	89.92	37.39		50.0	
10026-DAC	EDGE-FDD (TDMA, 8PSK, TN 0-1)	X	12.23	103.58	38.33	9.56	60.0	± 9.6 %
		Y	13.89	103.56	37.54		60.0	
		Z	6.87	89.09	32.73		60.0	
10027-DAC	GPRS-FDD (TDMA, GMSK, TN 0-1-2)	X	100.00	121.12	28.38	4.80	80.0	± 9.6 %
		Y	100.00	119.35	28.26		80.0	
		Z	100.00	113.58	24.47		80.0	
10028-DAC	GPRS-FDD (TDMA, GMSK, TN 0-1-2-3)	X	100.00	126.40	29.97	3.55	100.0	± 9.6 %
		Y	100.00	121.68	28.61		100.0	
		Z	100.00	119.83	26.46		100.0	
10029-DAC	EDGE-FDD (TDMA, 8PSK, TN 0-1-2)	X	6.36	85.88	30.18	7.80	80.0	± 9.6 %
		Y	7.77	88.44	30.64		80.0	
		Z	4.37	77.58	26.51		80.0	
10030-CAA	IEEE 802.15.1 Bluetooth (GFSK, DH1)	X	100.00	116.71	26.74	5.30	70.0	± 9.6 %
		Y	100.00	116.86	27.45		70.0	
		Z	100.00	108.46	22.53		70.0	
10031-CAA	IEEE 802.15.1 Bluetooth (GFSK, DH3)	X	100.00	130.68	30.26	1.88	100.0	± 9.6 %
		Y	100.00	122.76	27.68		100.0	
		Z	100.00	121.33	25.72		100.0	

10032-CAA	IEEE 802.15.1 Bluetooth (GFSK, DH5)	X	100.00	146.47	35.43	1.17	100.0	± 9.6 %
		Y	100.00	130.05	29.64		100.0	
		Z	100.00	142.38	32.95		100.0	
10033-CAA	IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH1)	X	100.00	133.81	36.67	5.30	70.0	± 9.6 %
		Y	100.00	132.56	36.57		70.0	
		Z	18.79	102.95	27.19		70.0	
10034-CAA	IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH3)	X	7.76	92.37	23.91	1.88	100.0	± 9.6 %
		Y	6.00	87.65	22.68		100.0	
		Z	3.22	78.87	18.00		100.0	
10035-CAA	IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH5)	X	3.37	81.04	19.87	1.17	100.0	± 9.6 %
		Y	2.89	77.85	18.94		100.0	
		Z	2.06	74.00	15.93		100.0	
10036-CAA	IEEE 802.15.1 Bluetooth (8-DPSK, DH1)	X	100.00	134.35	36.91	5.30	70.0	± 9.6 %
		Y	100.00	133.01	36.79		70.0	
		Z	38.41	113.99	30.14		70.0	
10037-CAA	IEEE 802.15.1 Bluetooth (8-DPSK, DH3)	X	6.72	90.40	23.29	1.88	100.0	± 9.6 %
		Y	5.52	86.51	22.28		100.0	
		Z	2.77	77.09	17.35		100.0	
10038-CAA	IEEE 802.15.1 Bluetooth (8-DPSK, DH5)	X	3.40	81.53	20.18	1.17	100.0	± 9.6 %
		Y	2.93	78.34	19.24		100.0	
		Z	2.07	74.35	16.21		100.0	
10039-CAB	CDMA2000 (1xRTT, RC1)	X	2.05	73.74	16.48	0.00	150.0	± 9.6 %
		Y	1.78	70.97	15.59		150.0	
		Z	1.68	71.87	14.68		150.0	
10042-CAB	IS-54 / IS-136 FDD (TDMA/FDM, PI/4-DQPSK, Halfrate)	X	100.00	111.92	25.18	7.78	50.0	± 9.6 %
		Y	100.00	114.62	26.97		50.0	
		Z	100.00	105.38	21.87		50.0	
10044-CAA	IS-91/EIA/TIA-553 FDD (FDMA, FM)	X	0.00	97.13	0.41	0.00	150.0	± 9.6 %
		Y	0.00	93.19	1.28		150.0	
		Z	0.01	94.96	0.54		150.0	
10048-CAA	DECT (TDD, TDMA/FDM, GFSK, Full Slot, 24)	X	100.00	111.98	26.96	13.80	25.0	± 9.6 %
		Y	100.00	121.05	31.60		25.0	
		Z	34.07	91.91	20.28		25.0	
10049-CAA	DECT (TDD, TDMA/FDM, GFSK, Double Slot, 12)	X	1284.72	142.21	32.21	10.79	40.0	± 9.6 %
		Y	100.00	117.51	29.18		40.0	
		Z	145.96	109.32	23.74		40.0	
10056-CAA	UMTS-TDD (TD-SCDMA, 1.28 Mcps)	X	100.00	128.20	35.15	9.03	50.0	± 9.6 %
		Y	100.00	128.83	35.96		50.0	
		Z	100.00	122.10	31.77		50.0	
10058-DAC	EDGE-FDD (TDMA, 8PSK, TN 0-1-2-3)	X	4.71	78.88	26.31	6.55	100.0	± 9.6 %
		Y	5.67	81.33	26.92		100.0	
		Z	3.54	73.15	23.60		100.0	
10059-CAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps)	X	1.24	65.47	16.42	0.61	110.0	± 9.6 %
		Y	1.27	65.23	16.10		110.0	
		Z	1.17	64.77	15.84		110.0	
10060-CAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps)	X	100.00	144.38	38.50	1.30	110.0	± 9.6 %
		Y	100.00	138.88	36.40		110.0	
		Z	13.09	112.30	30.84		110.0	

10061-CAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps)	X	4.05	88.33	25.97	2.04	110.0	± 9.6 %
		Y	4.75	88.86	25.68		110.0	
		Z	2.16	77.73	21.68		110.0	
10062-CAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps)	X	4.69	66.76	16.65	0.49	100.0	± 9.6 %
		Y	4.76	66.60	16.58		100.0	
		Z	4.53	66.78	16.51		100.0	
10063-CAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps)	X	4.71	66.86	16.76	0.72	100.0	± 9.6 %
		Y	4.78	66.72	16.70		100.0	
		Z	4.54	66.86	16.60		100.0	
10064-CAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps)	X	4.99	67.12	16.99	0.86	100.0	± 9.6 %
		Y	5.09	67.02	16.95		100.0	
		Z	4.78	67.06	16.80		100.0	
10065-CAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps)	X	4.86	67.02	17.11	1.21	100.0	± 9.6 %
		Y	4.96	66.95	17.08		100.0	
		Z	4.65	66.90	16.87		100.0	
10066-CAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps)	X	4.88	67.05	17.29	1.46	100.0	± 9.6 %
		Y	4.99	66.99	17.27		100.0	
		Z	4.65	66.88	17.02		100.0	
10067-CAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps)	X	5.16	67.22	17.75	2.04	100.0	± 9.6 %
		Y	5.27	67.12	17.71		100.0	
		Z	4.93	67.13	17.49		100.0	
10068-CAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps)	X	5.20	67.26	17.98	2.55	100.0	± 9.6 %
		Y	5.34	67.28	18.00		100.0	
		Z	4.95	67.02	17.64		100.0	
10069-CAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps)	X	5.28	67.26	18.18	2.67	100.0	± 9.6 %
		Y	5.42	67.23	18.17		100.0	
		Z	5.02	67.05	17.83		100.0	
10071-CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 9 Mbps)	X	4.98	66.86	17.58	1.99	100.0	± 9.6 %
		Y	5.07	66.77	17.55		100.0	
		Z	4.79	66.80	17.35		100.0	
10072-CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 12 Mbps)	X	4.95	67.19	17.81	2.30	100.0	± 9.6 %
		Y	5.06	67.16	17.80		100.0	
		Z	4.74	67.03	17.53		100.0	
10073-CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 18 Mbps)	X	5.00	67.34	18.16	2.83	100.0	± 9.6 %
		Y	5.12	67.33	18.16		100.0	
		Z	4.79	67.17	17.85		100.0	
10074-CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 24 Mbps)	X	4.97	67.20	18.31	3.30	100.0	± 9.6 %
		Y	5.10	67.22	18.33		100.0	
		Z	4.78	67.07	17.99		100.0	
10075-CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 36 Mbps)	X	5.00	67.30	18.63	3.82	90.0	± 9.6 %
		Y	5.15	67.40	18.70		90.0	
		Z	4.78	67.05	18.23		90.0	
10076-CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 48 Mbps)	X	5.00	67.05	18.74	4.15	90.0	± 9.6 %
		Y	5.14	67.12	18.78		90.0	
		Z	4.81	66.90	18.39		90.0	
10077-CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 54 Mbps)	X	5.02	67.11	18.84	4.30	90.0	± 9.6 %
		Y	5.16	67.16	18.87		90.0	
		Z	4.84	66.97	18.50		90.0	

10081-CAB	CDMA2000 (1xRTT, RC3)	X	0.91	67.10	13.23	0.00	150.0	± 9.6 %
		Y	0.87	65.55	12.69		150.0	
		Z	0.76	65.80	11.60		150.0	
10082-CAB	IS-54 / IS-136 FDD (TDMA/FDM, PI/4-DQPSK, Fullrate)	X	0.67	60.00	4.34	4.77	80.0	± 9.6 %
		Y	0.83	60.00	4.98		80.0	
		Z	1.32	62.68	4.53		80.0	
10090-DAC	GPRS-FDD (TDMA, GMSK, TN 0-4)	X	100.00	117.37	27.43	6.56	60.0	± 9.6 %
		Y	100.00	118.23	28.46		60.0	
		Z	100.00	109.70	23.50		60.0	
10097-CAB	UMTS-FDD (HSDPA)	X	1.89	68.18	16.03	0.00	150.0	± 9.6 %
		Y	1.82	67.06	15.47		150.0	
		Z	1.87	68.73	15.97		150.0	
10098-CAB	UMTS-FDD (HSUPA, Subtest 2)	X	1.85	68.15	16.01	0.00	150.0	± 9.6 %
		Y	1.78	67.01	15.43		150.0	
		Z	1.83	68.68	15.95		150.0	
10099-DAC	EDGE-FDD (TDMA, 8PSK, TN 0-4)	X	12.41	103.93	38.44	9.56	60.0	± 9.6 %
		Y	14.05	103.81	37.62		60.0	
		Z	6.94	89.30	32.81		60.0	
10100-CAD	LTE-FDD (SC-FDMA, 100% RB, 20 MHz, QPSK)	X	3.20	70.68	16.98	0.00	150.0	± 9.6 %
		Y	3.15	69.96	16.53		150.0	
		Z	3.05	70.44	16.91		150.0	
10101-CAD	LTE-FDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM)	X	3.27	67.67	16.10	0.00	150.0	± 9.6 %
		Y	3.29	67.34	15.87		150.0	
		Z	3.15	67.56	16.02		150.0	
10102-CAD	LTE-FDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM)	X	3.37	67.61	16.17	0.00	150.0	± 9.6 %
		Y	3.39	67.30	15.96		150.0	
		Z	3.26	67.54	16.10		150.0	
10103-CAD	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, QPSK)	X	6.70	77.76	21.71	3.98	65.0	± 9.6 %
		Y	7.25	78.01	21.66		65.0	
		Z	5.31	74.49	20.24		65.0	
10104-CAD	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM)	X	6.39	74.88	21.30	3.98	65.0	± 9.6 %
		Y	7.01	75.63	21.49		65.0	
		Z	5.41	72.53	20.08		65.0	
10105-CAD	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM)	X	5.93	73.22	20.87	3.98	65.0	± 9.6 %
		Y	6.37	73.62	20.93		65.0	
		Z	4.98	70.66	19.52		65.0	
10108-CAE	LTE-FDD (SC-FDMA, 100% RB, 10 MHz, QPSK)	X	2.79	69.92	16.81	0.00	150.0	± 9.6 %
		Y	2.76	69.17	16.35		150.0	
		Z	2.63	69.76	16.75		150.0	
10109-CAE	LTE-FDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM)	X	2.93	67.55	16.01	0.00	150.0	± 9.6 %
		Y	2.94	67.14	15.76		150.0	
		Z	2.80	67.54	15.90		150.0	
10110-CAE	LTE-FDD (SC-FDMA, 100% RB, 5 MHz, QPSK)	X	2.27	69.10	16.46	0.00	150.0	± 9.6 %
		Y	2.25	68.23	15.96		150.0	
		Z	2.13	69.06	16.32		150.0	
10111-CAE	LTE-FDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM)	X	2.65	68.45	16.32	0.00	150.0	± 9.6 %
		Y	2.64	67.76	16.00		150.0	
		Z	2.55	68.78	16.20		150.0	

10112-CAE	LTE-FDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM)	X	3.05	67.53	16.06	0.00	150.0	± 9.6 %
		Y	3.07	67.13	15.82		150.0	
		Z	2.92	67.58	15.97		150.0	
10113-CAE	LTE-FDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM)	X	2.80	68.56	16.43	0.00	150.0	± 9.6 %
		Y	2.80	67.90	16.13		150.0	
		Z	2.69	68.93	16.32		150.0	
10114-CAB	IEEE 802.11n (HT Greenfield, 13.5 Mbps, BPSK)	X	5.15	67.26	16.54	0.00	150.0	± 9.6 %
		Y	5.19	67.08	16.42		150.0	
		Z	4.99	67.20	16.47		150.0	
10115-CAB	IEEE 802.11n (HT Greenfield, 81 Mbps, 16-QAM)	X	5.43	67.37	16.60	0.00	150.0	± 9.6 %
		Y	5.52	67.34	16.56		150.0	
		Z	5.24	67.27	16.51		150.0	
10116-CAB	IEEE 802.11n (HT Greenfield, 135 Mbps, 64-QAM)	X	5.24	67.44	16.56	0.00	150.0	± 9.6 %
		Y	5.30	67.32	16.46		150.0	
		Z	5.08	67.39	16.50		150.0	
10117-CAB	IEEE 802.11n (HT Mixed, 13.5 Mbps, BPSK)	X	5.11	67.11	16.48	0.00	150.0	± 9.6 %
		Y	5.16	66.99	16.39		150.0	
		Z	4.99	67.15	16.47		150.0	
10118-CAB	IEEE 802.11n (HT Mixed, 81 Mbps, 16-QAM)	X	5.51	67.58	16.71	0.00	150.0	± 9.6 %
		Y	5.61	67.54	16.67		150.0	
		Z	5.31	67.44	16.61		150.0	
10119-CAB	IEEE 802.11n (HT Mixed, 135 Mbps, 64-QAM)	X	5.22	67.40	16.54	0.00	150.0	± 9.6 %
		Y	5.27	67.25	16.44		150.0	
		Z	5.07	67.38	16.51		150.0	
10140-CAD	LTE-FDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM)	X	3.41	67.63	16.10	0.00	150.0	± 9.6 %
		Y	3.43	67.31	15.88		150.0	
		Z	3.28	67.57	16.02		150.0	
10141-CAD	LTE-FDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM)	X	3.53	67.71	16.25	0.00	150.0	± 9.6 %
		Y	3.55	67.40	16.05		150.0	
		Z	3.40	67.71	16.20		150.0	
10142-CAD	LTE-FDD (SC-FDMA, 100% RB, 3 MHz, QPSK)	X	2.05	69.21	16.15	0.00	150.0	± 9.6 %
		Y	2.02	68.14	15.65		150.0	
		Z	1.90	69.18	15.79		150.0	
10143-CAD	LTE-FDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM)	X	2.53	69.32	16.06	0.00	150.0	± 9.6 %
		Y	2.50	68.40	15.76		150.0	
		Z	2.39	69.52	15.59		150.0	
10144-CAD	LTE-FDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM)	X	2.28	66.94	14.41	0.00	150.0	± 9.6 %
		Y	2.31	66.41	14.31		150.0	
		Z	2.06	66.49	13.57		150.0	
10145-CAE	LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK)	X	1.26	65.57	12.06	0.00	150.0	± 9.6 %
		Y	1.33	65.51	12.47		150.0	
		Z	0.90	62.72	9.31		150.0	
10146-CAE	LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM)	X	1.87	65.71	11.26	0.00	150.0	± 9.6 %
		Y	2.34	67.84	13.03		150.0	
		Z	1.05	60.97	7.27		150.0	
10147-CAE	LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM)	X	2.17	67.47	12.23	0.00	150.0	± 9.6 %
		Y	2.79	70.16	14.23		150.0	
		Z	1.11	61.38	7.60		150.0	

10149-CAD	LTE-FDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM)	X	2.93	67.61	16.06	0.00	150.0	± 9.6 %
		Y	2.95	67.20	15.81		150.0	
		Z	2.81	67.60	15.95		150.0	
10150-CAD	LTE-FDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM)	X	3.06	67.58	16.10	0.00	150.0	± 9.6 %
		Y	3.08	67.18	15.86		150.0	
		Z	2.93	67.64	16.01		150.0	
10151-CAD	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, QPSK)	X	7.47	81.50	23.31	3.98	65.0	± 9.6 %
		Y	8.13	81.64	23.19		65.0	
		Z	5.82	78.02	21.74		65.0	
10152-CAD	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM)	X	5.96	75.09	21.13	3.98	65.0	± 9.6 %
		Y	6.59	75.82	21.34		65.0	
		Z	4.95	72.53	19.69		65.0	
10153-CAD	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM)	X	6.33	76.00	21.87	3.98	65.0	± 9.6 %
		Y	6.98	76.72	22.08		65.0	
		Z	5.31	73.57	20.52		65.0	
10154-CAE	LTE-FDD (SC-FDMA, 50% RB, 10 MHz, QPSK)	X	2.32	69.50	16.70	0.00	150.0	± 9.6 %
		Y	2.30	68.63	16.21		150.0	
		Z	2.17	69.43	16.55		150.0	
10155-CAE	LTE-FDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM)	X	2.65	68.47	16.34	0.00	150.0	± 9.6 %
		Y	2.64	67.77	16.01		150.0	
		Z	2.55	68.82	16.23		150.0	
10156-CAE	LTE-FDD (SC-FDMA, 50% RB, 5 MHz, QPSK)	X	1.90	69.38	15.98	0.00	150.0	± 9.6 %
		Y	1.87	68.22	15.49		150.0	
		Z	1.73	69.10	15.35		150.0	
10157-CAE	LTE-FDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM)	X	2.13	67.61	14.49	0.00	150.0	± 9.6 %
		Y	2.14	66.94	14.37		150.0	
		Z	1.88	66.88	13.39		150.0	
10158-CAE	LTE-FDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM)	X	2.80	68.62	16.48	0.00	150.0	± 9.6 %
		Y	2.80	67.95	16.18		150.0	
		Z	2.70	69.02	16.37		150.0	
10159-CAE	LTE-FDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM)	X	2.24	68.05	14.76	0.00	150.0	± 9.6 %
		Y	2.25	67.38	14.65		150.0	
		Z	1.97	67.26	13.62		150.0	
10160-CAD	LTE-FDD (SC-FDMA, 50% RB, 15 MHz, QPSK)	X	2.79	68.96	16.56	0.00	150.0	± 9.6 %
		Y	2.78	68.29	16.16		150.0	
		Z	2.67	69.03	16.52		150.0	
10161-CAD	LTE-FDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM)	X	2.95	67.54	16.03	0.00	150.0	± 9.6 %
		Y	2.97	67.10	15.79		150.0	
		Z	2.82	67.63	15.91		150.0	
10162-CAD	LTE-FDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM)	X	3.06	67.69	16.14	0.00	150.0	± 9.6 %
		Y	3.08	67.22	15.89		150.0	
		Z	2.94	67.84	16.05		150.0	
10166-CAE	LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK)	X	3.60	69.71	19.22	3.01	150.0	± 9.6 %
		Y	3.76	69.53	19.10		150.0	
		Z	3.14	68.43	18.52		150.0	
10167-CAE	LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM)	X	4.49	72.92	19.79	3.01	150.0	± 9.6 %
		Y	4.71	72.48	19.58		150.0	
		Z	3.64	70.88	18.81		150.0	

10168-CAE	LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM)	X	4.99	75.19	21.10	3.01	150.0	± 9.6 %
		Y	5.19	74.57	20.82		150.0	
		Z	4.03	73.14	20.19		150.0	
10169-CAD	LTE-FDD (SC-FDMA, 1 RB, 20 MHz, QPSK)	X	3.02	69.31	19.06	3.01	150.0	± 9.6 %
		Y	3.27	69.70	19.15		150.0	
		Z	2.51	66.78	17.76		150.0	
10170-CAD	LTE-FDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM)	X	4.24	75.66	21.52	3.01	150.0	± 9.6 %
		Y	4.60	75.59	21.37		150.0	
		Z	3.08	71.28	19.66		150.0	
10171-AAD	LTE-FDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM)	X	3.48	71.52	18.79	3.01	150.0	± 9.6 %
		Y	3.80	71.54	18.73		150.0	
		Z	2.62	68.04	17.18		150.0	
10172-CAD	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK)	X	9.86	97.03	31.31	6.02	65.0	± 9.6 %
		Y	11.94	97.60	31.03		65.0	
		Z	3.49	77.54	23.86		65.0	
10173-CAD	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM)	X	35.90	116.24	34.55	6.02	65.0	± 9.6 %
		Y	33.36	111.72	33.12		65.0	
		Z	6.56	87.15	25.45		65.0	
10174-CAD	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM)	X	21.48	105.16	30.85	6.02	65.0	± 9.6 %
		Y	20.65	101.59	29.68		65.0	
		Z	4.70	80.63	22.56		65.0	
10175-CAE	LTE-FDD (SC-FDMA, 1 RB, 10 MHz, QPSK)	X	2.98	69.02	18.83	3.01	150.0	± 9.6 %
		Y	3.23	69.39	18.90		150.0	
		Z	2.49	66.55	17.55		150.0	
10176-CAE	LTE-FDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM)	X	4.24	75.68	21.53	3.01	150.0	± 9.6 %
		Y	4.61	75.61	21.38		150.0	
		Z	3.09	71.30	19.67		150.0	
10177-CAG	LTE-FDD (SC-FDMA, 1 RB, 5 MHz, QPSK)	X	3.01	69.16	18.92	3.01	150.0	± 9.6 %
		Y	3.26	69.54	19.00		150.0	
		Z	2.50	66.65	17.62		150.0	
10178-CAE	LTE-FDD (SC-FDMA, 1 RB, 5 MHz, 16-QAM)	X	4.21	75.48	21.42	3.01	150.0	± 9.6 %
		Y	4.56	75.38	21.26		150.0	
		Z	3.07	71.19	19.60		150.0	
10179-CAE	LTE-FDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM)	X	3.83	73.49	20.03	3.01	150.0	± 9.6 %
		Y	4.16	73.42	19.91		150.0	
		Z	2.83	69.59	18.31		150.0	
10180-CAE	LTE-FDD (SC-FDMA, 1 RB, 5 MHz, 64-QAM)	X	3.47	71.46	18.75	3.01	150.0	± 9.6 %
		Y	3.79	71.47	18.68		150.0	
		Z	2.62	68.01	17.15		150.0	
10181-CAD	LTE-FDD (SC-FDMA, 1 RB, 15 MHz, QPSK)	X	3.00	69.14	18.91	3.01	150.0	± 9.6 %
		Y	3.26	69.52	18.99		150.0	
		Z	2.50	66.64	17.62		150.0	
10182-CAD	LTE-FDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM)	X	4.20	75.46	21.41	3.01	150.0	± 9.6 %
		Y	4.55	75.36	21.25		150.0	
		Z	3.07	71.17	19.59		150.0	
10183-AAC	LTE-FDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM)	X	3.46	71.44	18.74	3.01	150.0	± 9.6 %
		Y	3.78	71.45	18.67		150.0	
		Z	2.62	68.00	17.14		150.0	

10184-CAD	LTE-FDD (SC-FDMA, 1 RB, 3 MHz, QPSK)	X	3.01	69.18	18.93	3.01	150.0	± 9.6 %
		Y	3.27	69.56	19.01		150.0	
		Z	2.51	66.67	17.63		150.0	
10185-CAD	LTE-FDD (SC-FDMA, 1 RB, 3 MHz, 16-QAM)	X	4.22	75.53	21.45	3.01	150.0	± 9.6 %
		Y	4.57	75.42	21.28		150.0	
		Z	3.08	71.23	19.63		150.0	
10186-AAD	LTE-FDD (SC-FDMA, 1 RB, 3 MHz, 64-QAM)	X	3.48	71.51	18.77	3.01	150.0	± 9.6 %
		Y	3.80	71.51	18.70		150.0	
		Z	2.63	68.05	17.17		150.0	
10187-CAE	LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK)	X	3.02	69.24	19.00	3.01	150.0	± 9.6 %
		Y	3.28	69.61	19.07		150.0	
		Z	2.52	66.73	17.71		150.0	
10188-CAE	LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM)	X	4.35	76.17	21.80	3.01	150.0	± 9.6 %
		Y	4.72	76.08	21.65		150.0	
		Z	3.15	71.69	19.93		150.0	
10189-AAE	LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM)	X	3.56	71.93	19.04	3.01	150.0	± 9.6 %
		Y	3.88	71.93	18.97		150.0	
		Z	2.67	68.37	17.41		150.0	
10193-CAB	IEEE 802.11n (HT Greenfield, 6.5 Mbps, BPSK)	X	4.54	66.68	16.24	0.00	150.0	± 9.6 %
		Y	4.59	66.47	16.13		150.0	
		Z	4.40	66.85	16.19		150.0	
10194-CAB	IEEE 802.11n (HT Greenfield, 39 Mbps, 16-QAM)	X	4.70	66.99	16.36	0.00	150.0	± 9.6 %
		Y	4.77	66.80	16.26		150.0	
		Z	4.55	67.09	16.33		150.0	
10195-CAB	IEEE 802.11n (HT Greenfield, 65 Mbps, 64-QAM)	X	4.74	67.02	16.38	0.00	150.0	± 9.6 %
		Y	4.81	66.83	16.27		150.0	
		Z	4.58	67.11	16.34		150.0	
10196-CAB	IEEE 802.11n (HT Mixed, 6.5 Mbps, BPSK)	X	4.54	66.74	16.25	0.00	150.0	± 9.6 %
		Y	4.60	66.55	16.16		150.0	
		Z	4.39	66.85	16.19		150.0	
10197-CAB	IEEE 802.11n (HT Mixed, 39 Mbps, 16-QAM)	X	4.72	67.01	16.37	0.00	150.0	± 9.6 %
		Y	4.78	66.83	16.27		150.0	
		Z	4.56	67.10	16.33		150.0	
10198-CAB	IEEE 802.11n (HT Mixed, 65 Mbps, 64-QAM)	X	4.75	67.04	16.39	0.00	150.0	± 9.6 %
		Y	4.81	66.85	16.28		150.0	
		Z	4.58	67.11	16.34		150.0	
10219-CAB	IEEE 802.11n (HT Mixed, 7.2 Mbps, BPSK)	X	4.49	66.76	16.22	0.00	150.0	± 9.6 %
		Y	4.55	66.56	16.12		150.0	
		Z	4.34	66.89	16.16		150.0	
10220-CAB	IEEE 802.11n (HT Mixed, 43.3 Mbps, 16-QAM)	X	4.71	66.98	16.36	0.00	150.0	± 9.6 %
		Y	4.78	66.81	16.26		150.0	
		Z	4.55	67.06	16.32		150.0	
10221-CAB	IEEE 802.11n (HT Mixed, 72.2 Mbps, 64-QAM)	X	4.75	66.96	16.37	0.00	150.0	± 9.6 %
		Y	4.82	66.78	16.27		150.0	
		Z	4.59	67.05	16.33		150.0	
10222-CAB	IEEE 802.11n (HT Mixed, 15 Mbps, BPSK)	X	5.08	67.12	16.48	0.00	150.0	± 9.6 %
		Y	5.14	67.00	16.39		150.0	
		Z	4.96	67.13	16.45		150.0	

10223-CAB	IEEE 802.11n (HT Mixed, 90 Mbps, 16-QAM)	X	5.38	67.33	16.60	0.00	150.0	± 9.6 %
		Y	5.45	67.20	16.51		150.0	
		Z	5.23	67.33	16.56		150.0	
10224-CAB	IEEE 802.11n (HT Mixed, 150 Mbps, 64-QAM)	X	5.13	67.23	16.46	0.00	150.0	± 9.6 %
		Y	5.19	67.11	16.37		150.0	
		Z	4.99	67.25	16.44		150.0	
10225-CAB	UMTS-FDD (HSPA+)	X	2.82	66.29	15.44	0.00	150.0	± 9.6 %
		Y	2.85	65.89	15.31		150.0	
		Z	2.69	66.42	15.13		150.0	
10226-CAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM)	X	40.58	118.73	35.31	6.02	65.0	± 9.6 %
		Y	36.88	113.76	33.77		65.0	
		Z	6.94	88.26	25.92		65.0	
10227-CAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM)	X	36.33	114.29	33.35	6.02	65.0	± 9.6 %
		Y	31.30	108.87	31.78		65.0	
		Z	6.95	87.06	24.80		65.0	
10228-CAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK)	X	13.65	104.05	33.59	6.02	65.0	± 9.6 %
		Y	18.81	107.23	34.08		65.0	
		Z	4.50	82.80	25.97		65.0	
10229-CAB	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 16-QAM)	X	36.18	116.36	34.59	6.02	65.0	± 9.6 %
		Y	33.58	111.82	33.15		65.0	
		Z	6.61	87.25	25.49		65.0	
10230-CAB	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 64-QAM)	X	32.38	112.10	32.69	6.02	65.0	± 9.6 %
		Y	28.70	107.19	31.24		65.0	
		Z	6.54	85.97	24.36		65.0	
10231-CAB	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, QPSK)	X	12.84	102.68	33.09	6.02	65.0	± 9.6 %
		Y	17.62	105.78	33.56		65.0	
		Z	4.35	82.09	25.62		65.0	
10232-CAD	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 16-QAM)	X	36.15	116.36	34.59	6.02	65.0	± 9.6 %
		Y	33.55	111.82	33.15		65.0	
		Z	6.59	87.23	25.48		65.0	
10233-CAD	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 64-QAM)	X	32.28	112.07	32.68	6.02	65.0	± 9.6 %
		Y	28.65	107.18	31.24		65.0	
		Z	6.52	85.93	24.35		65.0	
10234-CAD	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK)	X	12.22	101.47	32.58	6.02	65.0	± 9.6 %
		Y	16.65	104.42	33.04		65.0	
		Z	4.24	81.51	25.28		65.0	
10235-CAD	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM)	X	36.31	116.46	34.62	6.02	65.0	± 9.6 %
		Y	33.66	111.90	33.18		65.0	
		Z	6.60	87.26	25.49		65.0	
10236-CAD	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM)	X	33.06	112.44	32.77	6.02	65.0	± 9.6 %
		Y	29.12	107.43	31.30		65.0	
		Z	6.60	86.11	24.40		65.0	
10237-CAD	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK)	X	12.90	102.82	33.13	6.02	65.0	± 9.6 %
		Y	17.72	105.93	33.61		65.0	
		Z	4.35	82.12	25.64		65.0	
10238-CAD	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM)	X	36.09	116.34	34.59	6.02	65.0	± 9.6 %
		Y	33.52	111.82	33.15		65.0	
		Z	6.58	87.20	25.47		65.0	

10239-CAD	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM)	X	32.17	112.03	32.67	6.02	65.0	± 9.6 %
		Y	28.59	107.16	31.23		65.0	
		Z	6.49	85.89	24.34		65.0	
10240-CAD	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, QPSK)	X	12.85	102.75	33.11	6.02	65.0	± 9.6 %
		Y	17.65	105.86	33.59		65.0	
		Z	4.34	82.09	25.63		65.0	
10241-CAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM)	X	8.52	83.40	26.72	6.98	65.0	± 9.6 %
		Y	9.34	83.46	26.63		65.0	
		Z	6.49	79.39	24.77		65.0	
10242-CAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM)	X	7.72	81.29	25.79	6.98	65.0	± 9.6 %
		Y	8.22	80.66	25.42		65.0	
		Z	5.72	76.85	23.63		65.0	
10243-CAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK)	X	5.95	76.72	24.82	6.98	65.0	± 9.6 %
		Y	6.41	76.67	24.65		65.0	
		Z	4.75	73.34	22.98		65.0	
10244-CAB	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM)	X	6.67	78.45	19.67	3.98	65.0	± 9.6 %
		Y	8.20	80.91	21.14		65.0	
		Z	3.50	69.23	14.35		65.0	
10245-CAB	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM)	X	6.39	77.48	19.23	3.98	65.0	± 9.6 %
		Y	7.92	80.07	20.76		65.0	
		Z	3.42	68.65	14.03		65.0	
10246-CAB	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, QPSK)	X	8.15	85.97	22.95	3.98	65.0	± 9.6 %
		Y	9.24	86.80	23.49		65.0	
		Z	4.03	75.23	17.77		65.0	
10247-CAD	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM)	X	5.50	76.42	20.00	3.98	65.0	± 9.6 %
		Y	6.26	77.49	20.66		65.0	
		Z	3.95	71.61	16.94		65.0	
10248-CAD	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM)	X	5.40	75.54	19.60	3.98	65.0	± 9.6 %
		Y	6.16	76.66	20.28		65.0	
		Z	3.89	70.88	16.59		65.0	
10249-CAD	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, QPSK)	X	9.66	89.43	25.19	3.98	65.0	± 9.6 %
		Y	10.35	89.11	25.13		65.0	
		Z	5.64	80.91	21.33		65.0	
10250-CAD	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM)	X	6.21	78.20	22.44	3.98	65.0	± 9.6 %
		Y	6.93	79.00	22.73		65.0	
		Z	4.95	74.96	20.57		65.0	
10251-CAD	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM)	X	5.85	75.76	21.03	3.98	65.0	± 9.6 %
		Y	6.49	76.44	21.31		65.0	
		Z	4.69	72.73	19.17		65.0	
10252-CAD	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, QPSK)	X	8.41	86.24	25.10	3.98	65.0	± 9.6 %
		Y	9.13	86.11	24.91		65.0	
		Z	5.95	81.04	22.79		65.0	
10253-CAD	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM)	X	5.81	74.45	20.83	3.98	65.0	± 9.6 %
		Y	6.39	75.11	21.05		65.0	
		Z	4.88	72.13	19.42		65.0	
10254-CAD	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM)	X	6.16	75.32	21.51	3.98	65.0	± 9.6 %
		Y	6.77	75.99	21.73		65.0	
		Z	5.19	73.05	20.14		65.0	

10255-CAD	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, QPSK)	X	6.96	80.42	23.12	3.98	65.0	± 9.6 %
		Y	7.59	80.64	23.06		65.0	
		Z	5.51	77.21	21.58		65.0	
10256-CAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM)	X	4.89	73.41	16.49	3.98	65.0	± 9.6 %
		Y	6.68	77.30	18.76		65.0	
		Z	2.46	64.75	10.88		65.0	
10257-CAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM)	X	4.63	72.26	15.89	3.98	65.0	± 9.6 %
		Y	6.35	76.13	18.19		65.0	
		Z	2.42	64.27	10.52		65.0	
10258-CAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK)	X	5.50	79.01	19.45	3.98	65.0	± 9.6 %
		Y	7.01	81.77	20.90		65.0	
		Z	2.56	68.30	13.54		65.0	
10259-CAB	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM)	X	5.80	77.14	20.90	3.98	65.0	± 9.6 %
		Y	6.53	78.01	21.38		65.0	
		Z	4.38	73.08	18.36		65.0	
10260-CAB	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM)	X	5.78	76.67	20.70	3.98	65.0	± 9.6 %
		Y	6.51	77.60	21.22		65.0	
		Z	4.39	72.73	18.19		65.0	
10261-CAB	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, QPSK)	X	8.27	86.47	24.62	3.98	65.0	± 9.6 %
		Y	9.00	86.40	24.57		65.0	
		Z	5.46	80.05	21.57		65.0	
10262-CAD	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM)	X	6.19	78.15	22.39	3.98	65.0	± 9.6 %
		Y	6.92	78.95	22.69		65.0	
		Z	4.94	74.88	20.51		65.0	
10263-CAD	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM)	X	5.84	75.72	21.02	3.98	65.0	± 9.6 %
		Y	6.48	76.42	21.31		65.0	
		Z	4.68	72.71	19.16		65.0	
10264-CAD	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, QPSK)	X	8.30	85.98	24.99	3.98	65.0	± 9.6 %
		Y	9.03	85.88	24.80		65.0	
		Z	5.88	80.81	22.67		65.0	
10265-CAD	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM)	X	5.96	75.09	21.13	3.98	65.0	± 9.6 %
		Y	6.59	75.82	21.35		65.0	
		Z	4.95	72.53	19.70		65.0	
10266-CAD	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM)	X	6.33	75.99	21.86	3.98	65.0	± 9.6 %
		Y	6.97	76.70	22.07		65.0	
		Z	5.31	73.56	20.51		65.0	
10267-CAD	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, QPSK)	X	7.45	81.44	23.28	3.98	65.0	± 9.6 %
		Y	8.11	81.58	23.17		65.0	
		Z	5.81	77.97	21.72		65.0	
10268-CAD	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM)	X	6.50	74.59	21.27	3.98	65.0	± 9.6 %
		Y	7.11	75.29	21.47		65.0	
		Z	5.58	72.49	20.14		65.0	
10269-CAD	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM)	X	6.45	74.07	21.10	3.98	65.0	± 9.6 %
		Y	7.04	74.76	21.30		65.0	
		Z	5.59	72.11	20.01		65.0	
10270-CAD	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, QPSK)	X	6.83	77.38	21.77	3.98	65.0	± 9.6 %
		Y	7.44	77.78	21.79		65.0	
		Z	5.71	75.01	20.64		65.0	

10274-CAB	UMTS-FDD (HSUPA, Subtest 5, 3GPP Rel8.10)	X	2.62	66.75	15.42	0.00	150.0	± 9.6 %
		Y	2.61	66.15	15.17		150.0	
		Z	2.54	67.07	15.23		150.0	
10275-CAB	UMTS-FDD (HSUPA, Subtest 5, 3GPP Rel8.4)	X	1.67	68.55	15.99	0.00	150.0	± 9.6 %
		Y	1.61	67.31	15.31		150.0	
		Z	1.61	68.63	15.84		150.0	
10277-CAA	PHS (QPSK)	X	1.74	60.91	6.37	9.03	50.0	± 9.6 %
		Y	2.31	62.75	8.24		50.0	
		Z	1.34	59.32	4.61		50.0	
10278-CAA	PHS (QPSK, BW 884MHz, Rolloff 0.5)	X	9.23	83.71	19.86	9.03	50.0	± 9.6 %
		Y	16.13	92.59	23.80		50.0	
		Z	2.80	66.68	11.50		50.0	
10279-CAA	PHS (QPSK, BW 884MHz, Rolloff 0.38)	X	9.55	84.14	20.09	9.03	50.0	± 9.6 %
		Y	16.22	92.62	23.87		50.0	
		Z	2.90	67.01	11.74		50.0	
10290-AAB	CDMA2000, RC1, SO55, Full Rate	X	1.55	69.78	14.51	0.00	150.0	± 9.6 %
		Y	1.48	68.23	14.09		150.0	
		Z	1.19	67.52	12.47		150.0	
10291-AAB	CDMA2000, RC3, SO55, Full Rate	X	0.89	66.83	13.08	0.00	150.0	± 9.6 %
		Y	0.85	65.35	12.57		150.0	
		Z	0.74	65.55	11.46		150.0	
10292-AAB	CDMA2000, RC3, SO32, Full Rate	X	1.27	72.61	16.13	0.00	150.0	± 9.6 %
		Y	1.03	68.80	14.67		150.0	
		Z	1.20	72.32	14.93		150.0	
10293-AAB	CDMA2000, RC3, SO3, Full Rate	X	2.34	81.60	20.09	0.00	150.0	± 9.6 %
		Y	1.43	73.64	17.27		150.0	
		Z	3.93	87.90	20.92		150.0	
10295-AAB	CDMA2000, RC1, SO3, 1/8th Rate 25 fr.	X	16.32	98.49	29.02	9.03	50.0	± 9.6 %
		Y	11.98	92.39	27.58		50.0	
		Z	18.77	96.90	26.52		50.0	
10297-AAC	LTE-FDD (SC-FDMA, 50% RB, 20 MHz, QPSK)	X	2.80	70.02	16.88	0.00	150.0	± 9.6 %
		Y	2.77	69.27	16.41		150.0	
		Z	2.65	69.87	16.82		150.0	
10298-AAC	LTE-FDD (SC-FDMA, 50% RB, 3 MHz, QPSK)	X	1.62	68.28	14.44	0.00	150.0	± 9.6 %
		Y	1.62	67.40	14.26		150.0	
		Z	1.32	66.56	12.71		150.0	
10299-AAC	LTE-FDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM)	X	2.59	69.34	14.00	0.00	150.0	± 9.6 %
		Y	2.92	70.30	15.01		150.0	
		Z	1.54	64.05	10.22		150.0	
10300-AAC	LTE-FDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM)	X	1.92	64.86	11.14	0.00	150.0	± 9.6 %
		Y	2.24	65.95	12.27		150.0	
		Z	1.26	61.60	8.20		150.0	
10301-AAA	IEEE 802.16e WiMAX (29:18, 5ms, 10MHz, QPSK, PUSC)	X	4.85	66.06	17.86	4.17	50.0	± 9.6 %
		Y	4.97	65.84	17.76		50.0	
		Z	4.42	65.27	17.23		50.0	
10302-AAA	IEEE 802.16e WiMAX (29:18, 5ms, 10MHz, QPSK, PUSC, 3 CTRL symbols)	X	5.22	66.19	18.31	4.96	50.0	± 9.6 %
		Y	5.38	66.17	18.31		50.0	
		Z	4.86	65.76	17.88		50.0	

10303-AAA	IEEE 802.16e WiMAX (31:15, 5ms, 10MHz, 64QAM, PUSC)	X	4.96	65.79	18.13	4.96	50.0	± 9.6 %
		Y	5.14	65.84	18.17		50.0	
		Z	4.61	65.34	17.65		50.0	
10304-AAA	IEEE 802.16e WiMAX (29:18, 5ms, 10MHz, 64QAM, PUSC)	X	4.78	65.69	17.62	4.17	50.0	± 9.6 %
		Y	4.94	65.66	17.62		50.0	
		Z	4.45	65.35	17.22		50.0	
10305-AAA	IEEE 802.16e WiMAX (31:15, 10ms, 10MHz, 64QAM, PUSC, 15 symbols)	X	4.24	66.91	19.40	6.02	35.0	± 9.6 %
		Y	4.54	67.57	19.86		35.0	
		Z	3.84	65.89	18.29		35.0	
10306-AAA	IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, 64QAM, PUSC, 18 symbols)	X	4.62	66.22	19.11	6.02	35.0	± 9.6 %
		Y	4.86	66.59	19.39		35.0	
		Z	4.26	65.53	18.31		35.0	
10307-AAA	IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, QPSK, PUSC, 18 symbols)	X	4.50	66.31	19.05	6.02	35.0	± 9.6 %
		Y	4.77	66.81	19.39		35.0	
		Z	4.12	65.47	18.17		35.0	
10308-AAA	IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, 16QAM, PUSC)	X	4.47	66.49	19.18	6.02	35.0	± 9.6 %
		Y	4.73	66.98	19.51		35.0	
		Z	4.09	65.63	18.30		35.0	
10309-AAA	IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, 16QAM, AMC 2x3, 18 symbols)	X	4.68	66.45	19.27	6.02	35.0	± 9.6 %
		Y	4.93	66.86	19.56		35.0	
		Z	4.28	65.63	18.41		35.0	
10310-AAA	IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, QPSK, AMC 2x3, 18 symbols)	X	4.56	66.25	19.08	6.02	35.0	± 9.6 %
		Y	4.81	66.65	19.36		35.0	
		Z	4.20	65.54	18.28		35.0	
10311-AAC	LTE-FDD (SC-FDMA, 100% RB, 15 MHz, QPSK)	X	3.16	69.26	16.50	0.00	150.0	± 9.6 %
		Y	3.13	68.60	16.08		150.0	
		Z	3.01	69.09	16.45		150.0	
10313-AAA	iDEN 1:3	X	8.00	86.23	21.34	6.99	70.0	± 9.6 %
		Y	8.53	85.21	20.95		70.0	
		Z	3.31	75.28	17.31		70.0	
10314-AAA	iDEN 1:6	X	12.68	100.31	29.33	10.00	30.0	± 9.6 %
		Y	13.31	98.73	28.67		30.0	
		Z	5.19	85.23	24.17		30.0	
10315-AAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 96pc duty cycle)	X	1.10	64.07	15.53	0.17	150.0	± 9.6 %
		Y	1.10	63.56	15.08		150.0	
		Z	1.08	63.95	15.31		150.0	
10316-AAB	IEEE 802.11g WiFi 2.4 GHz (ERP-OFDM, 6 Mbps, 96pc duty cycle)	X	4.59	66.75	16.41	0.17	150.0	± 9.6 %
		Y	4.66	66.58	16.32		150.0	
		Z	4.43	66.78	16.29		150.0	
10317-AAB	IEEE 802.11a WiFi 5 GHz (OFDM, 6 Mbps, 96pc duty cycle)	X	4.59	66.75	16.41	0.17	150.0	± 9.6 %
		Y	4.66	66.58	16.32		150.0	
		Z	4.43	66.78	16.29		150.0	
10400-AAC	IEEE 802.11ac WiFi (20MHz, 64-QAM, 99pc duty cycle)	X	4.69	67.06	16.37	0.00	150.0	± 9.6 %
		Y	4.77	66.86	16.25		150.0	
		Z	4.51	67.11	16.31		150.0	
10401-AAC	IEEE 802.11ac WiFi (40MHz, 64-QAM, 99pc duty cycle)	X	5.41	67.26	16.54	0.00	150.0	± 9.6 %
		Y	5.45	67.06	16.42		150.0	
		Z	5.18	66.94	16.33		150.0	

10402-AAC	IEEE 802.11ac WiFi (80MHz, 64-QAM, 99pc duty cycle)	X	5.65	67.49	16.51	0.00	150.0	± 9.6 %
		Y	5.72	67.43	16.45		150.0	
		Z	5.51	67.47	16.48		150.0	
10403-AAB	CDMA2000 (1xEV-DO, Rev. 0)	X	1.55	69.78	14.51	0.00	115.0	± 9.6 %
		Y	1.48	68.23	14.09		115.0	
		Z	1.19	67.52	12.47		115.0	
10404-AAB	CDMA2000 (1xEV-DO, Rev. A)	X	1.55	69.78	14.51	0.00	115.0	± 9.6 %
		Y	1.48	68.23	14.09		115.0	
		Z	1.19	67.52	12.47		115.0	
10406-AAB	CDMA2000, RC3, SO32, SCH0, Full Rate	X	100.00	120.41	29.76	0.00	100.0	± 9.6 %
		Y	19.72	99.25	25.38		100.0	
		Z	22.86	100.95	24.14		100.0	
10410-AAC	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	100.00	125.71	31.88	3.23	80.0	± 9.6 %
		Y	100.00	124.16	31.78		80.0	
		Z	8.15	91.76	22.46		80.0	
10415-AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 99pc duty cycle)	X	1.03	63.26	14.92	0.00	150.0	± 9.6 %
		Y	1.02	62.63	14.41		150.0	
		Z	1.03	63.39	14.88		150.0	
10416-AAA	IEEE 802.11g WiFi 2.4 GHz (ERP-OFDM, 6 Mbps, 99pc duty cycle)	X	4.54	66.72	16.31	0.00	150.0	± 9.6 %
		Y	4.59	66.51	16.19		150.0	
		Z	4.40	66.84	16.26		150.0	
10417-AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps, 99pc duty cycle)	X	4.54	66.72	16.31	0.00	150.0	± 9.6 %
		Y	4.59	66.51	16.19		150.0	
		Z	4.40	66.84	16.26		150.0	
10418-AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps, 99pc duty cycle, Long preambule)	X	4.53	66.89	16.33	0.00	150.0	± 9.6 %
		Y	4.58	66.66	16.20		150.0	
		Z	4.40	67.05	16.32		150.0	
10419-AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps, 99pc duty cycle, Short preambule)	X	4.55	66.83	16.33	0.00	150.0	± 9.6 %
		Y	4.60	66.61	16.21		150.0	
		Z	4.41	66.98	16.30		150.0	
10422-AAA	IEEE 802.11n (HT Greenfield, 7.2 Mbps, BPSK)	X	4.66	66.83	16.34	0.00	150.0	± 9.6 %
		Y	4.72	66.62	16.23		150.0	
		Z	4.52	66.95	16.31		150.0	
10423-AAA	IEEE 802.11n (HT Greenfield, 43.3 Mbps, 16-QAM)	X	4.82	67.13	16.45	0.00	150.0	± 9.6 %
		Y	4.90	66.96	16.35		150.0	
		Z	4.65	67.21	16.40		150.0	
10424-AAA	IEEE 802.11n (HT Greenfield, 72.2 Mbps, 64-QAM)	X	4.75	67.09	16.43	0.00	150.0	± 9.6 %
		Y	4.82	66.90	16.32		150.0	
		Z	4.58	67.17	16.38		150.0	
10425-AAA	IEEE 802.11n (HT Greenfield, 15 Mbps, BPSK)	X	5.35	67.37	16.60	0.00	150.0	± 9.6 %
		Y	5.42	67.27	16.52		150.0	
		Z	5.19	67.35	16.55		150.0	
10426-AAA	IEEE 802.11n (HT Greenfield, 90 Mbps, 16-QAM)	X	5.36	67.42	16.62	0.00	150.0	± 9.6 %
		Y	5.42	67.27	16.52		150.0	
		Z	5.21	67.42	16.58		150.0	

10427-AAA	IEEE 802.11n (HT Greenfield, 150 Mbps, 64-QAM)	X	5.37	67.38	16.60	0.00	150.0	± 9.6 %
		Y	5.43	67.25	16.50		150.0	
		Z	5.18	67.23	16.48		150.0	
10430-AAB	LTE-FDD (OFDMA, 5 MHz, E-TM 3.1)	X	4.24	70.83	18.17	0.00	150.0	± 9.6 %
		Y	4.26	70.25	18.02		150.0	
		Z	4.20	71.89	18.27		150.0	
10431-AAB	LTE-FDD (OFDMA, 10 MHz, E-TM 3.1)	X	4.21	67.30	16.30	0.00	150.0	± 9.6 %
		Y	4.28	67.03	16.19		150.0	
		Z	4.03	67.45	16.18		150.0	
10432-AAB	LTE-FDD (OFDMA, 15 MHz, E-TM 3.1)	X	4.51	67.15	16.38	0.00	150.0	± 9.6 %
		Y	4.58	66.93	16.27		150.0	
		Z	4.34	67.27	16.32		150.0	
10433-AAB	LTE-FDD (OFDMA, 20 MHz, E-TM 3.1)	X	4.76	67.12	16.45	0.00	150.0	± 9.6 %
		Y	4.83	66.94	16.34		150.0	
		Z	4.59	67.20	16.40		150.0	
10434-AAA	W-CDMA (BS Test Model 1, 64 DPCH)	X	4.34	71.72	18.14	0.00	150.0	± 9.6 %
		Y	4.35	71.03	17.99		150.0	
		Z	4.31	72.81	18.12		150.0	
10435-AAC	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	100.00	125.48	31.77	3.23	80.0	± 9.6 %
		Y	100.00	123.97	31.69		80.0	
		Z	7.63	90.76	22.11		80.0	
10447-AAB	LTE-FDD (OFDMA, 5 MHz, E-TM 3.1, Clipping 44%)	X	3.51	67.35	15.60	0.00	150.0	± 9.6 %
		Y	3.58	66.99	15.55		150.0	
		Z	3.28	67.36	15.16		150.0	
10448-AAB	LTE-FDD (OFDMA, 10 MHz, E-TM 3.1, Clippin 44%)	X	4.06	67.09	16.17	0.00	150.0	± 9.6 %
		Y	4.12	66.80	16.05		150.0	
		Z	3.89	67.25	16.05		150.0	
10449-AAB	LTE-FDD (OFDMA, 15 MHz, E-TM 3.1, Cliping 44%)	X	4.33	66.98	16.28	0.00	150.0	± 9.6 %
		Y	4.39	66.75	16.16		150.0	
		Z	4.18	67.10	16.22		150.0	
10450-AAB	LTE-FDD (OFDMA, 20 MHz, E-TM 3.1, Clipping 44%)	X	4.53	66.89	16.30	0.00	150.0	± 9.6 %
		Y	4.58	66.69	16.19		150.0	
		Z	4.39	66.98	16.26		150.0	
10451-AAA	W-CDMA (BS Test Model 1, 64 DPCH, Clipping 44%)	X	3.39	67.51	15.20	0.00	150.0	± 9.6 %
		Y	3.48	67.19	15.21		150.0	
		Z	3.10	67.22	14.48		150.0	
10456-AAA	IEEE 802.11ac WiFi (160MHz, 64-QAM, 99pc duty cycle)	X	6.22	67.91	16.74	0.00	150.0	± 9.6 %
		Y	6.28	67.83	16.68		150.0	
		Z	6.11	67.90	16.72		150.0	
10457-AAA	UMTS-FDD (DC-HSDPA)	X	3.80	65.37	16.02	0.00	150.0	± 9.6 %
		Y	3.83	65.15	15.90		150.0	
		Z	3.74	65.57	15.99		150.0	
10458-AAA	CDMA2000 (1xEV-DO, Rev. B, 2 carriers)	X	3.21	66.83	14.57	0.00	150.0	± 9.6 %
		Y	3.31	66.55	14.68		150.0	
		Z	2.82	66.01	13.39		150.0	
10459-AAA	CDMA2000 (1xEV-DO, Rev. B, 3 carriers)	X	4.29	65.14	15.57	0.00	150.0	± 9.6 %
		Y	4.36	64.71	15.51		150.0	
		Z	4.04	65.27	15.07		150.0	

10460-AAA	UMTS-FDD (WCDMA, AMR)	X	0.96	69.26	16.86	0.00	150.0	± 9.6 %
		Y	0.88	67.02	15.53		150.0	
		Z	0.94	69.35	16.76		150.0	
10461-AAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	100.00	131.25	34.47	3.29	80.0	± 9.6 %
		Y	100.00	128.59	33.89		80.0	
		Z	3.16	81.29	20.28		80.0	
10462-AAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	18.15	90.54	19.55	3.23	80.0	± 9.6 %
		Y	100.00	110.06	25.23		80.0	
		Z	0.71	60.00	7.72		80.0	
10463-AAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	2.32	68.92	12.27	3.23	80.0	± 9.6 %
		Y	12.78	85.50	18.46		80.0	
		Z	0.72	60.00	7.06		80.0	
10464-AAA	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	100.00	128.50	33.02	3.23	80.0	± 9.6 %
		Y	100.00	126.31	32.66		80.0	
		Z	2.43	77.27	18.20		80.0	
10465-AAA	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	7.48	81.44	16.98	3.23	80.0	± 9.6 %
		Y	53.06	102.63	23.42		80.0	
		Z	0.71	60.00	7.65		80.0	
10466-AAA	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	1.86	66.75	11.37	3.23	80.0	± 9.6 %
		Y	7.10	79.26	16.56		80.0	
		Z	0.72	60.00	7.01		80.0	
10467-AAC	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	100.00	128.82	33.16	3.23	80.0	± 9.6 %
		Y	100.00	126.57	32.78		80.0	
		Z	2.60	78.29	18.60		80.0	
10468-AAC	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	9.21	83.60	17.62	3.23	80.0	± 9.6 %
		Y	76.07	106.68	24.37		80.0	
		Z	0.70	60.00	7.67		80.0	
10469-AAC	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	1.87	66.82	11.40	3.23	80.0	± 9.6 %
		Y	7.22	79.45	16.62		80.0	
		Z	0.72	60.00	7.01		80.0	
10470-AAC	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	100.00	128.87	33.17	3.23	80.0	± 9.6 %
		Y	100.00	126.61	32.79		80.0	
		Z	2.61	78.33	18.61		80.0	
10471-AAC	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	9.03	83.37	17.54	3.23	80.0	± 9.6 %
		Y	75.72	106.57	24.32		80.0	
		Z	0.70	60.00	7.66		80.0	
10472-AAC	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	1.85	66.72	11.34	3.23	80.0	± 9.6 %
		Y	7.17	79.36	16.58		80.0	
		Z	0.72	60.00	6.99		80.0	
10473-AAC	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	100.00	128.83	33.15	3.23	80.0	± 9.6 %
		Y	100.00	126.57	32.77		80.0	
		Z	2.60	78.28	18.59		80.0	
10474-AAC	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	8.86	83.19	17.49	3.23	80.0	± 9.6 %
		Y	73.20	106.22	24.25		80.0	
		Z	0.70	60.00	7.66		80.0	
10475-AAC	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	1.84	66.67	11.33	3.23	80.0	± 9.6 %
		Y	7.07	79.22	16.54		80.0	
		Z	0.72	60.00	6.99		80.0	

10477-AAC	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	7.55	81.52	16.98	3.23	80.0	± 9.6 %
		Y	56.45	103.26	23.54		80.0	
		Z	0.70	60.00	7.63		80.0	
10478-AAC	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	1.82	66.56	11.27	3.23	80.0	± 9.6 %
		Y	6.95	79.03	16.47		80.0	
		Z	0.72	60.00	6.98		80.0	
10479-AAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	10.99	93.23	25.61	3.23	80.0	± 9.6 %
		Y	9.79	90.18	24.96		80.0	
		Z	4.54	80.48	20.41		80.0	
10480-AAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	12.16	88.23	21.88	3.23	80.0	± 9.6 %
		Y	11.98	87.55	22.28		80.0	
		Z	2.88	70.37	14.48		80.0	
10481-AAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	8.71	82.91	19.80	3.23	80.0	± 9.6 %
		Y	9.82	84.02	20.80		80.0	
		Z	2.18	66.77	12.57		80.0	
10482-AAA	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	4.05	77.33	19.19	2.23	80.0	± 9.6 %
		Y	4.17	76.68	19.19		80.0	
		Z	2.07	68.66	14.58		80.0	
10483-AAA	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	4.93	75.57	17.70	2.23	80.0	± 9.6 %
		Y	6.34	78.50	19.36		80.0	
		Z	1.80	63.38	11.04		80.0	
10484-AAA	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	4.47	74.01	17.11	2.23	80.0	± 9.6 %
		Y	5.79	76.98	18.82		80.0	
		Z	1.76	62.89	10.79		80.0	
10485-AAC	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	4.05	77.49	20.34	2.23	80.0	± 9.6 %
		Y	4.20	76.76	20.09		80.0	
		Z	2.71	72.24	17.50		80.0	
10486-AAC	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	3.54	71.63	17.34	2.23	80.0	± 9.6 %
		Y	3.76	71.58	17.54		80.0	
		Z	2.51	67.51	14.60		80.0	
10487-AAC	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	3.49	71.03	17.07	2.23	80.0	± 9.6 %
		Y	3.74	71.08	17.31		80.0	
		Z	2.49	67.04	14.35		80.0	
10488-AAC	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	3.92	74.84	20.03	2.23	80.0	± 9.6 %
		Y	4.21	74.77	19.87		80.0	
		Z	2.99	71.49	18.31		80.0	
10489-AAC	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	3.58	70.14	18.01	2.23	80.0	± 9.6 %
		Y	3.82	70.22	18.04		80.0	
		Z	3.03	68.36	16.75		80.0	
10490-AAC	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	3.66	69.89	17.90	2.23	80.0	± 9.6 %
		Y	3.90	69.97	17.95		80.0	
		Z	3.10	68.21	16.67		80.0	
10491-AAC	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	4.00	72.50	19.16	2.23	80.0	± 9.6 %
		Y	4.28	72.62	19.08		80.0	
		Z	3.25	70.05	17.90		80.0	
10492-AAC	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	3.86	68.99	17.79	2.23	80.0	± 9.6 %
		Y	4.11	69.18	17.85		80.0	
		Z	3.37	67.61	16.86		80.0	

10493-AAC	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	3.92	68.82	17.72	2.23	80.0	± 9.6 %
		Y	4.17	69.02	17.78		80.0	
		Z	3.43	67.50	16.80		80.0	
10494-AAC	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	4.43	74.41	19.78	2.23	80.0	± 9.6 %
		Y	4.75	74.52	19.68		80.0	
		Z	3.49	71.39	18.37		80.0	
10495-AAC	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	3.90	69.39	18.01	2.23	80.0	± 9.6 %
		Y	4.16	69.65	18.06		80.0	
		Z	3.39	67.86	17.06		80.0	
10496-AAC	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	3.97	69.05	17.88	2.23	80.0	± 9.6 %
		Y	4.22	69.30	17.94		80.0	
		Z	3.47	67.65	16.99		80.0	
10497-AAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	2.87	72.14	16.05	2.23	80.0	± 9.6 %
		Y	3.23	72.92	16.83		80.0	
		Z	1.19	62.14	10.12		80.0	
10498-AAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	1.73	63.11	10.85	2.23	80.0	± 9.6 %
		Y	2.27	65.45	12.56		80.0	
		Z	1.15	60.00	7.68		80.0	
10499-AAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	1.65	62.30	10.28	2.23	80.0	± 9.6 %
		Y	2.18	64.69	12.05		80.0	
		Z	1.17	60.00	7.51		80.0	
10500-AAA	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	3.87	75.87	20.03	2.23	80.0	± 9.6 %
		Y	4.07	75.40	19.81		80.0	
		Z	2.80	71.83	17.80		80.0	
10501-AAA	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	3.57	71.05	17.60	2.23	80.0	± 9.6 %
		Y	3.78	70.97	17.70		80.0	
		Z	2.79	68.23	15.59		80.0	
10502-AAA	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	3.61	70.84	17.44	2.23	80.0	± 9.6 %
		Y	3.84	70.79	17.56		80.0	
		Z	2.82	68.03	15.41		80.0	
10503-AAC	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	3.87	74.62	19.92	2.23	80.0	± 9.6 %
		Y	4.15	74.55	19.77		80.0	
		Z	2.95	71.29	18.21		80.0	
10504-AAC	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	3.57	70.04	17.95	2.23	80.0	± 9.6 %
		Y	3.80	70.13	17.99		80.0	
		Z	3.01	68.26	16.69		80.0	
10505-AAC	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	3.64	69.79	17.85	2.23	80.0	± 9.6 %
		Y	3.88	69.88	17.89		80.0	
		Z	3.09	68.12	16.62		80.0	
10506-AAC	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	4.39	74.26	19.71	2.23	80.0	± 9.6 %
		Y	4.71	74.37	19.61		80.0	
		Z	3.46	71.26	18.30		80.0	
10507-AAC	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	3.89	69.33	17.97	2.23	80.0	± 9.6 %
		Y	4.14	69.59	18.03		80.0	
		Z	3.38	67.80	17.02		80.0	

10508-AAC	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	3.95	68.98	17.84	2.23	80.0	± 9.6 %
		Y	4.21	69.23	17.90		80.0	
		Z	3.46	67.59	16.95		80.0	
10509-AAC	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	4.62	72.40	18.91	2.23	80.0	± 9.6 %
		Y	4.92	72.59	18.86		80.0	
		Z	3.86	70.20	17.85		80.0	
10510-AAC	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	4.34	68.87	17.84	2.23	80.0	± 9.6 %
		Y	4.61	69.18	17.91		80.0	
		Z	3.85	67.53	17.06		80.0	
10511-AAC	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	4.39	68.57	17.74	2.23	80.0	± 9.6 %
		Y	4.65	68.86	17.81		80.0	
		Z	3.92	67.35	17.00		80.0	
10512-AAC	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	4.95	74.43	19.59	2.23	80.0	± 9.6 %
		Y	5.29	74.60	19.52		80.0	
		Z	3.97	71.52	18.28		80.0	
10513-AAC	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	4.24	69.19	17.98	2.23	80.0	± 9.6 %
		Y	4.52	69.55	18.06		80.0	
		Z	3.73	67.67	17.13		80.0	
10514-AAC	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	4.25	68.69	17.82	2.23	80.0	± 9.6 %
		Y	4.51	69.03	17.90		80.0	
		Z	3.78	67.33	17.02		80.0	
10515-AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps, 99pc duty cycle)	X	0.99	63.46	15.00	0.00	150.0	± 9.6 %
		Y	0.98	62.78	14.45		150.0	
		Z	0.99	63.59	14.96		150.0	
10516-AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps, 99pc duty cycle)	X	0.69	72.54	18.63	0.00	150.0	± 9.6 %
		Y	0.56	68.11	16.08		150.0	
		Z	0.67	72.15	18.45		150.0	
10517-AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps, 99pc duty cycle)	X	0.85	65.62	15.80	0.00	150.0	± 9.6 %
		Y	0.82	64.42	14.91		150.0	
		Z	0.84	65.62	15.72		150.0	
10518-AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps, 99pc duty cycle)	X	4.53	66.80	16.29	0.00	150.0	± 9.6 %
		Y	4.59	66.58	16.17		150.0	
		Z	4.39	66.94	16.26		150.0	
10519-AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps, 99pc duty cycle)	X	4.71	67.02	16.40	0.00	150.0	± 9.6 %
		Y	4.78	66.84	16.30		150.0	
		Z	4.54	67.11	16.34		150.0	
10520-AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps, 99pc duty cycle)	X	4.56	66.98	16.32	0.00	150.0	± 9.6 %
		Y	4.63	66.80	16.22		150.0	
		Z	4.40	67.05	16.26		150.0	
10521-AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps, 99pc duty cycle)	X	4.49	66.97	16.31	0.00	150.0	± 9.6 %
		Y	4.56	66.79	16.20		150.0	
		Z	4.33	67.02	16.25		150.0	
10522-AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps, 99pc duty cycle)	X	4.56	67.08	16.40	0.00	150.0	± 9.6 %
		Y	4.62	66.86	16.28		150.0	
		Z	4.38	67.14	16.34		150.0	

10523-AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps, 99pc duty cycle)	X	4.44	66.96	16.26	0.00	150.0	± 9.6 %
		Y	4.50	66.72	16.12		150.0	
		Z	4.31	67.14	16.26		150.0	
10524-AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps, 99pc duty cycle)	X	4.50	67.00	16.37	0.00	150.0	± 9.6 %
		Y	4.57	66.78	16.25		150.0	
		Z	4.33	67.10	16.33		150.0	
10525-AAA	IEEE 802.11ac WiFi (20MHz, MCS0, 99pc duty cycle)	X	4.49	66.06	15.96	0.00	150.0	± 9.6 %
		Y	4.54	65.82	15.83		150.0	
		Z	4.36	66.21	15.95		150.0	
10526-AAA	IEEE 802.11ac WiFi (20MHz, MCS1, 99pc duty cycle)	X	4.65	66.41	16.10	0.00	150.0	± 9.6 %
		Y	4.72	66.20	15.98		150.0	
		Z	4.49	66.49	16.07		150.0	
10527-AAA	IEEE 802.11ac WiFi (20MHz, MCS2, 99pc duty cycle)	X	4.58	66.37	16.05	0.00	150.0	± 9.6 %
		Y	4.64	66.16	15.92		150.0	
		Z	4.42	66.47	16.01		150.0	
10528-AAA	IEEE 802.11ac WiFi (20MHz, MCS3, 99pc duty cycle)	X	4.59	66.39	16.08	0.00	150.0	± 9.6 %
		Y	4.65	66.18	15.96		150.0	
		Z	4.43	66.48	16.04		150.0	
10529-AAA	IEEE 802.11ac WiFi (20MHz, MCS4, 99pc duty cycle)	X	4.59	66.39	16.08	0.00	150.0	± 9.6 %
		Y	4.65	66.18	15.96		150.0	
		Z	4.43	66.48	16.04		150.0	
10531-AAA	IEEE 802.11ac WiFi (20MHz, MCS6, 99pc duty cycle)	X	4.58	66.48	16.09	0.00	150.0	± 9.6 %
		Y	4.65	66.29	15.97		150.0	
		Z	4.40	66.51	16.02		150.0	
10532-AAA	IEEE 802.11ac WiFi (20MHz, MCS7, 99pc duty cycle)	X	4.44	66.34	16.02	0.00	150.0	± 9.6 %
		Y	4.51	66.14	15.90		150.0	
		Z	4.28	66.37	15.96		150.0	
10533-AAA	IEEE 802.11ac WiFi (20MHz, MCS8, 99pc duty cycle)	X	4.60	66.44	16.07	0.00	150.0	± 9.6 %
		Y	4.66	66.22	15.94		150.0	
		Z	4.44	66.56	16.05		150.0	
10534-AAA	IEEE 802.11ac WiFi (40MHz, MCS0, 99pc duty cycle)	X	5.13	66.46	16.12	0.00	150.0	± 9.6 %
		Y	5.19	66.32	16.03		150.0	
		Z	4.99	66.46	16.09		150.0	
10535-AAA	IEEE 802.11ac WiFi (40MHz, MCS1, 99pc duty cycle)	X	5.20	66.64	16.21	0.00	150.0	± 9.6 %
		Y	5.25	66.49	16.10		150.0	
		Z	5.03	66.59	16.15		150.0	
10536-AAA	IEEE 802.11ac WiFi (40MHz, MCS2, 99pc duty cycle)	X	5.07	66.60	16.17	0.00	150.0	± 9.6 %
		Y	5.12	66.44	16.06		150.0	
		Z	4.92	66.60	16.13		150.0	
10537-AAA	IEEE 802.11ac WiFi (40MHz, MCS3, 99pc duty cycle)	X	5.12	66.56	16.15	0.00	150.0	± 9.6 %
		Y	5.18	66.41	16.05		150.0	
		Z	4.98	66.58	16.13		150.0	
10538-AAA	IEEE 802.11ac WiFi (40MHz, MCS4, 99pc duty cycle)	X	5.21	66.56	16.19	0.00	150.0	± 9.6 %
		Y	5.28	66.45	16.11		150.0	
		Z	5.05	66.54	16.15		150.0	
10540-AAA	IEEE 802.11ac WiFi (40MHz, MCS6, 99pc duty cycle)	X	5.14	66.58	16.22	0.00	150.0	± 9.6 %
		Y	5.20	66.45	16.12		150.0	
		Z	4.98	66.51	16.15		150.0	

10541-AAA	IEEE 802.11ac WiFi (40MHz, MCS7, 99pc duty cycle)	X	5.12	66.46	16.14	0.00	150.0	± 9.6 %
		Y	5.18	66.32	16.05		150.0	
		Z	4.96	66.43	16.09		150.0	
10542-AAA	IEEE 802.11ac WiFi (40MHz, MCS8, 99pc duty cycle)	X	5.27	66.53	16.19	0.00	150.0	± 9.6 %
		Y	5.33	66.40	16.10		150.0	
		Z	5.12	66.52	16.15		150.0	
10543-AAA	IEEE 802.11ac WiFi (40MHz, MCS9, 99pc duty cycle)	X	5.34	66.55	16.23	0.00	150.0	± 9.6 %
		Y	5.41	66.44	16.14		150.0	
		Z	5.19	66.58	16.21		150.0	
10544-AAA	IEEE 802.11ac WiFi (80MHz, MCS0, 99pc duty cycle)	X	5.45	66.57	16.12	0.00	150.0	± 9.6 %
		Y	5.49	66.44	16.03		150.0	
		Z	5.33	66.54	16.08		150.0	
10545-AAA	IEEE 802.11ac WiFi (80MHz, MCS1, 99pc duty cycle)	X	5.64	66.98	16.28	0.00	150.0	± 9.6 %
		Y	5.69	66.86	16.18		150.0	
		Z	5.50	66.96	16.25		150.0	
10546-AAA	IEEE 802.11ac WiFi (80MHz, MCS2, 99pc duty cycle)	X	5.50	66.75	16.18	0.00	150.0	± 9.6 %
		Y	5.56	66.68	16.11		150.0	
		Z	5.36	66.66	16.11		150.0	
10547-AAA	IEEE 802.11ac WiFi (80MHz, MCS3, 99pc duty cycle)	X	5.57	66.80	16.19	0.00	150.0	± 9.6 %
		Y	5.64	66.72	16.12		150.0	
		Z	5.44	66.76	16.16		150.0	
10548-AAA	IEEE 802.11ac WiFi (80MHz, MCS4, 99pc duty cycle)	X	5.80	67.67	16.61	0.00	150.0	± 9.6 %
		Y	5.91	67.72	16.59		150.0	
		Z	5.58	67.38	16.44		150.0	
10550-AAA	IEEE 802.11ac WiFi (80MHz, MCS6, 99pc duty cycle)	X	5.54	66.80	16.21	0.00	150.0	± 9.6 %
		Y	5.59	66.67	16.11		150.0	
		Z	5.42	66.83	16.21		150.0	
10551-AAA	IEEE 802.11ac WiFi (80MHz, MCS7, 99pc duty cycle)	X	5.54	66.82	16.18	0.00	150.0	± 9.6 %
		Y	5.59	66.72	16.10		150.0	
		Z	5.36	66.63	16.07		150.0	
10552-AAA	IEEE 802.11ac WiFi (80MHz, MCS8, 99pc duty cycle)	X	5.46	66.64	16.10	0.00	150.0	± 9.6 %
		Y	5.51	66.51	16.00		150.0	
		Z	5.34	66.66	16.08		150.0	
10553-AAA	IEEE 802.11ac WiFi (80MHz, MCS9, 99pc duty cycle)	X	5.54	66.66	16.14	0.00	150.0	± 9.6 %
		Y	5.59	66.56	16.06		150.0	
		Z	5.39	66.61	16.09		150.0	
10554-AAB	IEEE 802.11ac WiFi (160MHz, MCS0, 99pc duty cycle)	X	5.86	66.92	16.20	0.00	150.0	± 9.6 %
		Y	5.89	66.81	16.12		150.0	
		Z	5.75	66.87	16.15		150.0	
10555-AAB	IEEE 802.11ac WiFi (160MHz, MCS1, 99pc duty cycle)	X	5.98	67.22	16.33	0.00	150.0	± 9.6 %
		Y	6.03	67.12	16.25		150.0	
		Z	5.84	67.10	16.25		150.0	
10556-AAB	IEEE 802.11ac WiFi (160MHz, MCS2, 99pc duty cycle)	X	6.00	67.27	16.35	0.00	150.0	± 9.6 %
		Y	6.05	67.16	16.27		150.0	
		Z	5.88	67.20	16.30		150.0	
10557-AAB	IEEE 802.11ac WiFi (160MHz, MCS3, 99pc duty cycle)	X	5.96	67.16	16.31	0.00	150.0	± 9.6 %
		Y	6.02	67.08	16.25		150.0	
		Z	5.84	67.08	16.25		150.0	

10558-AAB	IEEE 802.11ac WiFi (160MHz, MCS4, 99pc duty cycle)	X	6.01	67.32	16.41	0.00	150.0	± 9.6 %
		Y	6.07	67.25	16.34		150.0	
		Z	5.85	67.15	16.31		150.0	
10560-AAB	IEEE 802.11ac WiFi (160MHz, MCS6, 99pc duty cycle)	X	6.01	67.17	16.37	0.00	150.0	± 9.6 %
		Y	6.06	67.10	16.31		150.0	
		Z	5.87	67.07	16.30		150.0	
10561-AAB	IEEE 802.11ac WiFi (160MHz, MCS7, 99pc duty cycle)	X	5.93	67.15	16.40	0.00	150.0	± 9.6 %
		Y	5.98	67.06	16.32		150.0	
		Z	5.80	67.05	16.32		150.0	
10562-AAB	IEEE 802.11ac WiFi (160MHz, MCS8, 99pc duty cycle)	X	6.04	67.49	16.57	0.00	150.0	± 9.6 %
		Y	6.12	67.48	16.53		150.0	
		Z	5.85	67.23	16.41		150.0	
10563-AAB	IEEE 802.11ac WiFi (160MHz, MCS9, 99pc duty cycle)	X	6.18	67.55	16.56	0.00	150.0	± 9.6 %
		Y	6.43	68.00	16.75		150.0	
		Z	5.95	67.17	16.35		150.0	
10564-AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 9 Mbps, 99pc duty cycle)	X	4.86	66.88	16.45	0.46	150.0	± 9.6 %
		Y	4.92	66.69	16.36		150.0	
		Z	4.71	66.96	16.39		150.0	
10565-AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 12 Mbps, 99pc duty cycle)	X	5.08	67.30	16.76	0.46	150.0	± 9.6 %
		Y	5.16	67.15	16.67		150.0	
		Z	4.90	67.36	16.69		150.0	
10566-AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 18 Mbps, 99pc duty cycle)	X	4.91	67.15	16.58	0.46	150.0	± 9.6 %
		Y	4.99	67.00	16.50		150.0	
		Z	4.74	67.18	16.50		150.0	
10567-AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 24 Mbps, 99pc duty cycle)	X	4.94	67.52	16.92	0.46	150.0	± 9.6 %
		Y	5.01	67.38	16.84		150.0	
		Z	4.77	67.57	16.87		150.0	
10568-AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 36 Mbps, 99pc duty cycle)	X	4.83	66.96	16.38	0.46	150.0	± 9.6 %
		Y	4.90	66.77	16.27		150.0	
		Z	4.63	66.92	16.25		150.0	
10569-AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 48 Mbps, 99pc duty cycle)	X	4.90	67.63	17.00	0.46	150.0	± 9.6 %
		Y	4.96	67.44	16.88		150.0	
		Z	4.75	67.78	17.00		150.0	
10570-AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 54 Mbps, 99pc duty cycle)	X	4.93	67.48	16.92	0.46	150.0	± 9.6 %
		Y	5.00	67.29	16.82		150.0	
		Z	4.76	67.58	16.89		150.0	
10571-AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 90pc duty cycle)	X	1.18	64.69	15.93	0.46	130.0	± 9.6 %
		Y	1.20	64.37	15.58		130.0	
		Z	1.13	64.22	15.49		130.0	
10572-AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps, 90pc duty cycle)	X	1.19	65.27	16.29	0.46	130.0	± 9.6 %
		Y	1.21	64.91	15.92		130.0	
		Z	1.14	64.74	15.83		130.0	
10573-AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps, 90pc duty cycle)	X	2.77	92.16	26.12	0.46	130.0	± 9.6 %
		Y	1.86	83.27	22.47		130.0	
		Z	1.57	83.20	23.00		130.0	
10574-AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps, 90pc duty cycle)	X	1.31	71.26	19.39	0.46	130.0	± 9.6 %
		Y	1.31	70.26	18.63		130.0	
		Z	1.20	70.00	18.67		130.0	

10575-AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps, 90pc duty cycle)	X	4.64	66.67	16.51	0.46	130.0	± 9.6 %
		Y	4.71	66.50	16.43		130.0	
		Z	4.47	66.69	16.39		130.0	
10576-AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 9 Mbps, 90pc duty cycle)	X	4.66	66.83	16.58	0.46	130.0	± 9.6 %
		Y	4.73	66.66	16.49		130.0	
		Z	4.50	66.89	16.47		130.0	
10577-AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 12 Mbps, 90pc duty cycle)	X	4.86	67.11	16.74	0.46	130.0	± 9.6 %
		Y	4.94	66.97	16.66		130.0	
		Z	4.67	67.12	16.61		130.0	
10578-AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 18 Mbps, 90pc duty cycle)	X	4.76	67.25	16.83	0.46	130.0	± 9.6 %
		Y	4.84	67.12	16.76		130.0	
		Z	4.57	67.26	16.72		130.0	
10579-AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 24 Mbps, 90pc duty cycle)	X	4.52	66.57	16.17	0.46	130.0	± 9.6 %
		Y	4.61	66.44	16.10		130.0	
		Z	4.33	66.48	15.99		130.0	
10580-AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 36 Mbps, 90pc duty cycle)	X	4.57	66.63	16.21	0.46	130.0	± 9.6 %
		Y	4.66	66.47	16.12		130.0	
		Z	4.36	66.53	16.01		130.0	
10581-AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 48 Mbps, 90pc duty cycle)	X	4.65	67.30	16.78	0.46	130.0	± 9.6 %
		Y	4.73	67.15	16.70		130.0	
		Z	4.48	67.34	16.69		130.0	
10582-AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 54 Mbps, 90pc duty cycle)	X	4.47	66.35	15.97	0.46	130.0	± 9.6 %
		Y	4.56	66.21	15.89		130.0	
		Z	4.26	66.25	15.78		130.0	
10583-AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps, 90pc duty cycle)	X	4.64	66.67	16.51	0.46	130.0	± 9.6 %
		Y	4.71	66.50	16.43		130.0	
		Z	4.47	66.69	16.39		130.0	
10584-AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps, 90pc duty cycle)	X	4.66	66.83	16.58	0.46	130.0	± 9.6 %
		Y	4.73	66.66	16.49		130.0	
		Z	4.50	66.89	16.47		130.0	
10585-AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps, 90pc duty cycle)	X	4.86	67.11	16.74	0.46	130.0	± 9.6 %
		Y	4.94	66.97	16.66		130.0	
		Z	4.67	67.12	16.61		130.0	
10586-AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps, 90pc duty cycle)	X	4.76	67.25	16.83	0.46	130.0	± 9.6 %
		Y	4.84	67.12	16.76		130.0	
		Z	4.57	67.26	16.72		130.0	
10587-AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps, 90pc duty cycle)	X	4.52	66.57	16.17	0.46	130.0	± 9.6 %
		Y	4.61	66.44	16.10		130.0	
		Z	4.33	66.48	15.99		130.0	
10588-AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps, 90pc duty cycle)	X	4.57	66.63	16.21	0.46	130.0	± 9.6 %
		Y	4.66	66.47	16.12		130.0	
		Z	4.36	66.53	16.01		130.0	
10589-AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps, 90pc duty cycle)	X	4.65	67.30	16.78	0.46	130.0	± 9.6 %
		Y	4.73	67.15	16.70		130.0	
		Z	4.48	67.34	16.69		130.0	
10590-AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps, 90pc duty cycle)	X	4.47	66.35	15.97	0.46	130.0	± 9.6 %
		Y	4.56	66.21	15.89		130.0	
		Z	4.26	66.25	15.78		130.0	

10591-AAA	IEEE 802.11n (HT Mixed, 20MHz, MCS0, 90pc duty cycle)	X	4.79	66.72	16.61	0.46	130.0	± 9.6 %
		Y	4.86	66.57	16.53		130.0	
		Z	4.63	66.78	16.50		130.0	
10592-AAA	IEEE 802.11n (HT Mixed, 20MHz, MCS1, 90pc duty cycle)	X	4.94	67.05	16.74	0.46	130.0	± 9.6 %
		Y	5.02	66.91	16.66		130.0	
		Z	4.75	67.07	16.63		130.0	
10593-AAA	IEEE 802.11n (HT Mixed, 20MHz, MCS2, 90pc duty cycle)	X	4.86	66.96	16.62	0.46	130.0	± 9.6 %
		Y	4.94	66.83	16.55		130.0	
		Z	4.67	66.95	16.49		130.0	
10594-AAA	IEEE 802.11n (HT Mixed, 20MHz, MCS3, 90pc duty cycle)	X	4.91	67.12	16.77	0.46	130.0	± 9.6 %
		Y	5.00	66.98	16.70		130.0	
		Z	4.72	67.12	16.65		130.0	
10595-AAA	IEEE 802.11n (HT Mixed, 20MHz, MCS4, 90pc duty cycle)	X	4.88	67.08	16.67	0.46	130.0	± 9.6 %
		Y	4.96	66.94	16.59		130.0	
		Z	4.69	67.10	16.56		130.0	
10596-AAA	IEEE 802.11n (HT Mixed, 20MHz, MCS5, 90pc duty cycle)	X	4.82	67.08	16.68	0.46	130.0	± 9.6 %
		Y	4.90	66.94	16.60		130.0	
		Z	4.62	67.07	16.55		130.0	
10597-AAA	IEEE 802.11n (HT Mixed, 20MHz, MCS6, 90pc duty cycle)	X	4.77	66.98	16.56	0.46	130.0	± 9.6 %
		Y	4.85	66.85	16.49		130.0	
		Z	4.57	66.94	16.41		130.0	
10598-AAA	IEEE 802.11n (HT Mixed, 20MHz, MCS7, 90pc duty cycle)	X	4.75	67.19	16.80	0.46	130.0	± 9.6 %
		Y	4.83	67.08	16.74		130.0	
		Z	4.56	67.16	16.67		130.0	
10599-AAA	IEEE 802.11n (HT Mixed, 40MHz, MCS0, 90pc duty cycle)	X	5.46	67.23	16.81	0.46	130.0	± 9.6 %
		Y	5.53	67.13	16.74		130.0	
		Z	5.31	67.22	16.74		130.0	
10600-AAA	IEEE 802.11n (HT Mixed, 40MHz, MCS1, 90pc duty cycle)	X	5.59	67.67	17.00	0.46	130.0	± 9.6 %
		Y	5.69	67.62	16.95		130.0	
		Z	5.40	67.56	16.88		130.0	
10601-AAA	IEEE 802.11n (HT Mixed, 40MHz, MCS2, 90pc duty cycle)	X	5.48	67.41	16.88	0.46	130.0	± 9.6 %
		Y	5.56	67.33	16.83		130.0	
		Z	5.31	67.36	16.79		130.0	
10602-AAA	IEEE 802.11n (HT Mixed, 40MHz, MCS3, 90pc duty cycle)	X	5.59	67.49	16.85	0.46	130.0	± 9.6 %
		Y	5.65	67.34	16.75		130.0	
		Z	5.41	67.42	16.75		130.0	
10603-AAA	IEEE 802.11n (HT Mixed, 40MHz, MCS4, 90pc duty cycle)	X	5.65	67.74	17.10	0.46	130.0	± 9.6 %
		Y	5.74	67.66	17.04		130.0	
		Z	5.48	67.71	17.02		130.0	
10604-AAA	IEEE 802.11n (HT Mixed, 40MHz, MCS5, 90pc duty cycle)	X	5.49	67.31	16.87	0.46	130.0	± 9.6 %
		Y	5.53	67.10	16.74		130.0	
		Z	5.37	67.37	16.83		130.0	
10605-AAA	IEEE 802.11n (HT Mixed, 40MHz, MCS6, 90pc duty cycle)	X	5.58	67.57	17.01	0.46	130.0	± 9.6 %
		Y	5.65	67.44	16.92		130.0	
		Z	5.40	67.46	16.88		130.0	
10606-AAA	IEEE 802.11n (HT Mixed, 40MHz, MCS7, 90pc duty cycle)	X	5.32	66.88	16.52	0.46	130.0	± 9.6 %
		Y	5.42	66.88	16.50		130.0	
		Z	5.18	66.90	16.45		130.0	

10607-AAA	IEEE 802.11ac WiFi (20MHz, MCS0, 90pc duty cycle)	X	4.63	66.06	16.24	0.46	130.0	± 9.6 %
		Y	4.69	65.87	16.14		130.0	
		Z	4.48	66.14	16.16		130.0	
10608-AAA	IEEE 802.11ac WiFi (20MHz, MCS1, 90pc duty cycle)	X	4.81	66.46	16.41	0.46	130.0	± 9.6 %
		Y	4.89	66.28	16.31		130.0	
		Z	4.62	66.47	16.30		130.0	
10609-AAA	IEEE 802.11ac WiFi (20MHz, MCS2, 90pc duty cycle)	X	4.70	66.31	16.25	0.46	130.0	± 9.6 %
		Y	4.78	66.14	16.15		130.0	
		Z	4.52	66.31	16.13		130.0	
10610-AAA	IEEE 802.11ac WiFi (20MHz, MCS3, 90pc duty cycle)	X	4.75	66.46	16.40	0.46	130.0	± 9.6 %
		Y	4.83	66.29	16.31		130.0	
		Z	4.57	66.47	16.29		130.0	
10611-AAA	IEEE 802.11ac WiFi (20MHz, MCS4, 90pc duty cycle)	X	4.67	66.27	16.25	0.46	130.0	± 9.6 %
		Y	4.74	66.11	16.17		130.0	
		Z	4.48	66.27	16.14		130.0	
10612-AAA	IEEE 802.11ac WiFi (20MHz, MCS5, 90pc duty cycle)	X	4.68	66.43	16.31	0.46	130.0	± 9.6 %
		Y	4.76	66.26	16.21		130.0	
		Z	4.47	66.40	16.18		130.0	
10613-AAA	IEEE 802.11ac WiFi (20MHz, MCS6, 90pc duty cycle)	X	4.68	66.30	16.19	0.46	130.0	± 9.6 %
		Y	4.76	66.16	16.10		130.0	
		Z	4.47	66.22	16.03		130.0	
10614-AAA	IEEE 802.11ac WiFi (20MHz, MCS7, 90pc duty cycle)	X	4.62	66.47	16.40	0.46	130.0	± 9.6 %
		Y	4.70	66.33	16.32		130.0	
		Z	4.44	66.44	16.27		130.0	
10615-AAA	IEEE 802.11ac WiFi (20MHz, MCS8, 90pc duty cycle)	X	4.67	66.12	16.05	0.46	130.0	± 9.6 %
		Y	4.75	65.95	15.95		130.0	
		Z	4.48	66.11	15.92		130.0	
10616-AAA	IEEE 802.11ac WiFi (40MHz, MCS0, 90pc duty cycle)	X	5.28	66.50	16.42	0.46	130.0	± 9.6 %
		Y	5.35	66.40	16.35		130.0	
		Z	5.12	66.44	16.33		130.0	
10617-AAA	IEEE 802.11ac WiFi (40MHz, MCS1, 90pc duty cycle)	X	5.35	66.70	16.50	0.46	130.0	± 9.6 %
		Y	5.42	66.55	16.40		130.0	
		Z	5.16	66.57	16.37		130.0	
10618-AAA	IEEE 802.11ac WiFi (40MHz, MCS2, 90pc duty cycle)	X	5.24	66.70	16.51	0.46	130.0	± 9.6 %
		Y	5.30	66.57	16.42		130.0	
		Z	5.08	66.64	16.42		130.0	
10619-AAA	IEEE 802.11ac WiFi (40MHz, MCS3, 90pc duty cycle)	X	5.25	66.50	16.35	0.46	130.0	± 9.6 %
		Y	5.33	66.41	16.28		130.0	
		Z	5.09	66.45	16.26		130.0	
10620-AAA	IEEE 802.11ac WiFi (40MHz, MCS4, 90pc duty cycle)	X	5.34	66.53	16.41	0.46	130.0	± 9.6 %
		Y	5.42	66.46	16.35		130.0	
		Z	5.16	66.45	16.31		130.0	
10621-AAA	IEEE 802.11ac WiFi (40MHz, MCS5, 90pc duty cycle)	X	5.34	66.65	16.59	0.46	130.0	± 9.6 %
		Y	5.41	66.55	16.51		130.0	
		Z	5.17	66.56	16.48		130.0	
10622-AAA	IEEE 802.11ac WiFi (40MHz, MCS6, 90pc duty cycle)	X	5.35	66.81	16.66	0.46	130.0	± 9.6 %
		Y	5.42	66.71	16.59		130.0	
		Z	5.16	66.65	16.52		130.0	

10623-AAA	IEEE 802.11ac WiFi (40MHz, MCS7, 90pc duty cycle)	X	5.23	66.36	16.32	0.46	130.0	± 9.6 %
		Y	5.30	66.25	16.24		130.0	
		Z	5.05	66.22	16.17		130.0	
10624-AAA	IEEE 802.11ac WiFi (40MHz, MCS8, 90pc duty cycle)	X	5.42	66.55	16.47	0.46	130.0	± 9.6 %
		Y	5.50	66.45	16.40		130.0	
		Z	5.25	66.47	16.36		130.0	
10625-AAA	IEEE 802.11ac WiFi (40MHz, MCS9, 90pc duty cycle)	X	5.75	67.41	16.95	0.46	130.0	± 9.6 %
		Y	5.89	67.51	16.98		130.0	
		Z	5.34	66.63	16.50		130.0	
10626-AAA	IEEE 802.11ac WiFi (80MHz, MCS0, 90pc duty cycle)	X	5.59	66.56	16.38	0.46	130.0	± 9.6 %
		Y	5.64	66.46	16.31		130.0	
		Z	5.45	66.47	16.28		130.0	
10627-AAA	IEEE 802.11ac WiFi (80MHz, MCS1, 90pc duty cycle)	X	5.82	67.13	16.63	0.46	130.0	± 9.6 %
		Y	5.88	67.03	16.55		130.0	
		Z	5.67	67.05	16.54		130.0	
10628-AAA	IEEE 802.11ac WiFi (80MHz, MCS2, 90pc duty cycle)	X	5.61	66.64	16.32	0.46	130.0	± 9.6 %
		Y	5.68	66.59	16.27		130.0	
		Z	5.44	66.46	16.18		130.0	
10629-AAA	IEEE 802.11ac WiFi (80MHz, MCS3, 90pc duty cycle)	X	5.69	66.69	16.34	0.46	130.0	± 9.6 %
		Y	5.78	66.69	16.31		130.0	
		Z	5.54	66.62	16.26		130.0	
10630-AAA	IEEE 802.11ac WiFi (80MHz, MCS4, 90pc duty cycle)	X	6.09	68.10	17.05	0.46	130.0	± 9.6 %
		Y	6.25	68.29	17.11		130.0	
		Z	5.78	67.54	16.72		130.0	
10631-AAA	IEEE 802.11ac WiFi (80MHz, MCS5, 90pc duty cycle)	X	5.99	67.90	17.13	0.46	130.0	± 9.6 %
		Y	6.12	67.99	17.15		130.0	
		Z	5.75	67.56	16.92		130.0	
10632-AAA	IEEE 802.11ac WiFi (80MHz, MCS6, 90pc duty cycle)	X	5.79	67.18	16.78	0.46	130.0	± 9.6 %
		Y	5.85	67.07	16.70		130.0	
		Z	5.67	67.21	16.76		130.0	
10633-AAA	IEEE 802.11ac WiFi (80MHz, MCS7, 90pc duty cycle)	X	5.68	66.80	16.43	0.46	130.0	± 9.6 %
		Y	5.74	66.74	16.37		130.0	
		Z	5.48	66.57	16.27		130.0	
10634-AAA	IEEE 802.11ac WiFi (80MHz, MCS8, 90pc duty cycle)	X	5.66	66.82	16.49	0.46	130.0	± 9.6 %
		Y	5.73	66.76	16.44		130.0	
		Z	5.50	66.72	16.40		130.0	
10635-AAA	IEEE 802.11ac WiFi (80MHz, MCS9, 90pc duty cycle)	X	5.54	66.19	15.93	0.46	130.0	± 9.6 %
		Y	5.62	66.14	15.87		130.0	
		Z	5.36	66.00	15.77		130.0	
10636-AAB	IEEE 802.11ac WiFi (160MHz, MCS0, 90pc duty cycle)	X	6.00	66.92	16.46	0.46	130.0	± 9.6 %
		Y	6.05	66.85	16.41		130.0	
		Z	5.88	66.82	16.36		130.0	
10637-AAB	IEEE 802.11ac WiFi (160MHz, MCS1, 90pc duty cycle)	X	6.16	67.31	16.64	0.46	130.0	± 9.6 %
		Y	6.21	67.23	16.58		130.0	
		Z	6.00	67.12	16.50		130.0	
10638-AAB	IEEE 802.11ac WiFi (160MHz, MCS2, 90pc duty cycle)	X	6.16	67.28	16.60	0.46	130.0	± 9.6 %
		Y	6.21	67.20	16.54		130.0	
		Z	6.02	67.18	16.51		130.0	

10639-AAB	IEEE 802.11ac WiFi (160MHz, MCS3, 90pc duty cycle)	X	6.13	67.21	16.61	0.46	130.0	± 9.6 %
		Y	6.20	67.17	16.57		130.0	
		Z	5.98	67.06	16.49		130.0	
10640-AAB	IEEE 802.11ac WiFi (160MHz, MCS4, 90pc duty cycle)	X	6.13	67.23	16.57	0.46	130.0	± 9.6 %
		Y	6.21	67.21	16.53		130.0	
		Z	5.95	66.98	16.40		130.0	
10641-AAB	IEEE 802.11ac WiFi (160MHz, MCS5, 90pc duty cycle)	X	6.19	67.17	16.55	0.46	130.0	± 9.6 %
		Y	6.24	67.06	16.48		130.0	
		Z	6.04	67.04	16.44		130.0	
10642-AAB	IEEE 802.11ac WiFi (160MHz, MCS6, 90pc duty cycle)	X	6.22	67.37	16.82	0.46	130.0	± 9.6 %
		Y	6.28	67.33	16.77		130.0	
		Z	6.06	67.23	16.70		130.0	
10643-AAB	IEEE 802.11ac WiFi (160MHz, MCS7, 90pc duty cycle)	X	6.06	67.09	16.58	0.46	130.0	± 9.6 %
		Y	6.12	67.02	16.52		130.0	
		Z	5.91	66.93	16.45		130.0	
10644-AAB	IEEE 802.11ac WiFi (160MHz, MCS8, 90pc duty cycle)	X	6.20	67.52	16.82	0.46	130.0	± 9.6 %
		Y	6.31	67.59	16.83		130.0	
		Z	5.97	67.13	16.57		130.0	
10645-AAB	IEEE 802.11ac WiFi (160MHz, MCS9, 90pc duty cycle)	X	6.41	67.77	16.91	0.46	130.0	± 9.6 %
		Y	6.76	68.49	17.23		130.0	
		Z	6.10	67.18	16.56		130.0	
10646-AAD	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK, UL Subframe=2,7)	X	32.54	128.38	44.23	9.30	60.0	± 9.6 %
		Y	33.21	124.21	42.28		60.0	
		Z	8.58	97.27	34.21		60.0	
10647-AAC	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK, UL Subframe=2,7)	X	24.86	122.50	42.74	9.30	60.0	± 9.6 %
		Y	27.83	120.75	41.46		60.0	
		Z	7.33	94.04	33.20		60.0	
10648-AAA	CDMA2000 (1x Advanced)	X	0.71	63.99	11.07	0.00	150.0	± 9.6 %
		Y	0.72	63.38	11.01		150.0	
		Z	0.57	62.72	9.40		150.0	
10652-AAB	LTE-TDD (OFDMA, 5 MHz, E-TM 3.1, Clipping 44%)	X	3.64	67.29	16.91	2.23	80.0	± 9.6 %
		Y	3.79	67.25	16.93		80.0	
		Z	3.31	66.63	16.20		80.0	
10653-AAB	LTE-TDD (OFDMA, 10 MHz, E-TM 3.1, Clipping 44%)	X	4.13	66.44	16.95	2.23	80.0	± 9.6 %
		Y	4.30	66.53	16.99		80.0	
		Z	3.84	65.89	16.44		80.0	
10654-AAB	LTE-TDD (OFDMA, 15 MHz, E-TM 3.1, Clipping 44%)	X	4.11	66.04	16.93	2.23	80.0	± 9.6 %
		Y	4.26	66.17	16.97		80.0	
		Z	3.86	65.50	16.46		80.0	
10655-AAB	LTE-TDD (OFDMA, 20 MHz, E-TM 3.1, Clipping 44%)	X	4.17	66.02	16.96	2.23	80.0	± 9.6 %
		Y	4.32	66.18	17.01		80.0	
		Z	3.93	65.42	16.50		80.0	

[E] Uncertainty is determined using the max. deviation from linear response applying rectangular distribution and is expressed for the square of the field value.

APPENDIX D: SAR TISSUE SPECIFICATIONS

Measurement Procedure for Tissue verification:

1) The network analyzer and probe system was configured and calibrated.
2) The probe was immersed in the tissue. The tissue was placed in a nonmetallic container. Trapped air bubbles beneath the flange were minimized by placing the probe at a slight angle.
3) The complex admittance with respect to the probe aperture was measured
4) The complex relative permittivity ε' can be calculated from the below equation (Pournaropoulos and Misra):

$$Y = \frac{j2\omega\varepsilon_r\varepsilon_0}{\left[\ln(b/a)\right]^2}\int_a^b\int_a^b\int_0^\pi \cos\phi' \frac{\exp\left[-j\omega r(\mu_0\varepsilon_r'\varepsilon_0)^{1/2}\right]}{r} d\phi' d\rho' d\rho$$

where **Y** is the admittance of the probe in contact with the sample, the primed and unprimed coordinates refer to source and observation points, respectively, $r^2 = \rho^2 + \rho'^2 - 2\rho\rho'\cos\phi'$, ω is the angular frequency, and $j = \sqrt{-1}$.

Table D-I
Composition of the Tissue Equivalent Matter

Frequency (MHz)	750	750	835	835	1750	1750	1900	1900	2450-2600	2450-2600	5200-5800	5200-5800
Tissue	Head	Body	Head	Body	Head	Body	Head	Body	Head	Body	Head	Body
Ingredients (% by weight)												
Bactericide	See page 2-3	See page 2	0.1	0.1					See page 4		See page 5	
DGBE					47	31	44.92	29.44		26.7		
HEC			1	1								
NaCl			1.45	0.94	0.4	0.2	0.18	0.39		0.1		
Sucrose			57	44.9								
Polysorbate (Tween) 80												20
Water			40.45	53.06	52.6	68.8	54.9	70.17		73.2		80

2 Composition / Information on ingredients

The Item is composed of the following ingredients:

H_2O	Water, 35 – 58%
Sucrose	Sugar, white, refined, 40 – 60%
NaCl	Sodium Chloride, 0 – 6%
Hydroxyethyl-cellulose	Medium Viscosity (CAS# 9004-62-0), <0.3%
Preventol-D7	Preservative: aqueous preparation, (CAS# 55965-84-9), containing 5-chloro-2-methyl-3(2H)-isothiazolone and 2-methyyl-3(2H)-isothiazolone, 0.1 – 0.7%
	Relevant for safety; Refer to the respective Safety Data Sheet*.

Figure D-1
Composition of 750 MHz Head and Body Tissue Equivalent Matter

Note: 750MHz liquid recipes are proprietary SPEAG. Since the composition is approximate to the actual liquids utilized, the manufacturer tissue-equivalent liquid data sheets are provided below.

Measurement Certificate / Material Test

Item Name	**Body Tissue Simulating Liquid (MSL750V2)**
Product No.	SL AAM 075 AA (Batch: 150518-2)
Manufacturer	SPEAG

Measurement Method
TSL dielectric parameters measured using calibrated DAK probe.

Setup Validation
Validation results were within ± 2.5% towards the target values of Methanol.

Target Parameters
Target parameters as defined in the IEEE 1528 and IEC 62209 compliance standards.

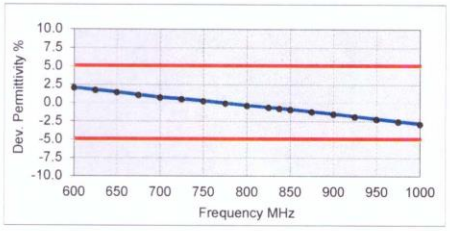
Test Condition

Ambient	Environment temperatur (22 ± 3)°C and humidity < 70%.
TSL Temperature	22°C
Test Date	20-Apr-16
Operator	WM

Additional Information

TSL Density	1.212 g/cm^3
TSL Heat-capacity	3.006 kJ/(kg*K)

	Measured			Target		Diff.to Target [%]	
f [MHz]	e'	e''	sigma	eps	sigma	Δ-eps	Δ-sigma
600	57.2	24.76	0.83	56.1	0.95	2.0	-13.2
625	57.0	24.43	0.85	56.0	0.95	1.7	-11.0
650	56.7	24.11	0.87	55.9	0.96	1.4	-8.8
675	56.4	23.82	0.89	55.8	0.96	1.1	-6.6
700	56.1	23.53	0.92	55.7	0.96	0.7	-4.5
725	55.9	23.32	0.94	55.6	0.96	0.5	-2.2
750	**55.7**	**23.12**	**0.96**	**55.5**	**0.96**	**0.2**	**0.1**
775	55.4	22.93	0.99	55.4	0.97	-0.1	2.4
800	55.1	22.73	1.01	55.3	0.97	-0.4	4.6
825	54.9	22.59	1.04	55.2	0.98	-0.7	6.0
838	54.8	22.52	1.05	55.2	0.98	-0.8	6.7
850	54.6	22.45	1.06	55.2	0.99	-0.9	7.4
875	54.4	22.32	1.09	55.1	1.02	-1.2	6.6
900	54.1	22.19	1.11	55.0	1.05	-1.6	5.8
925	53.9	22.09	1.14	55.0	1.06	-1.9	6.9
950	53.7	21.98	1.16	54.9	1.08	-2.2	8.0
975	53.5	21.91	1.19	54.9	1.09	-2.6	9.3
1000	53.2	21.83	1.21	54.8	1.10	-2.9	10.6



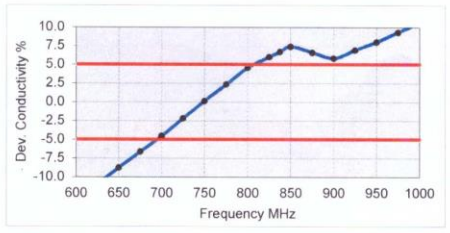


Figure D-2
750MHz Body Tissue Equivalent Matter

Measurement Certificate / Material Test

Item Name	**Head Tissue Simulating Liquid (HSL750V2)**
Product No.	SL AAH 075 AB (Batch: 160322-2)
Manufacturer	SPEAG

Measurement Method

TSL dielectric parameters measured using calibrated DAK probe.

Setup Validation

Validation results were within ± 2.5% towards the target values of Methanol.

Target Parameters

Target parameters as defined in the IEEE 1528 and IEC 62209 compliance standards.

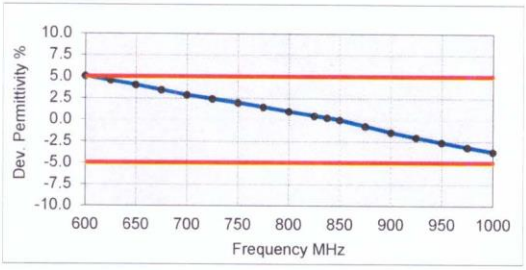
Test Condition

Ambient	Environment temperatur (22 ± 3)°C and humidity < 70%.
TSL Temperature	22ºC
Test Date	23-Mar-16
Operator	WM

Additional Information

TSL Density	1.284 g/cm^3
TSL Heat-capacity	2.701 kJ/(kg*K)

	Measured			Target		Diff.to Target [%]	
f [MHz]	e'	e''	sigma	eps	sigma	Δ-eps	Δ-sigma
600	44.9	22.60	0.75	42.7	0.88	5.1	-14.4
625	44.5	22.37	0.78	42.6	0.88	4.5	-12.0
650	44.2	22.13	0.80	42.5	0.89	4.0	-9.6
675	43.8	21.90	0.82	42.3	0.89	3.4	-7.4
700	43.4	21.67	0.84	42.2	0.89	2.8	-5.1
725	43.1	21.52	0.87	42.1	0.89	2.4	-2.6
750	**42.8**	**21.37**	**0.89**	**41.9**	**0.89**	**2.0**	**-0.2**
775	42.4	21.21	0.91	41.8	0.90	1.5	2.1
800	42.1	21.04	0.94	41.7	0.90	0.9	4.4
825	41.8	20.92	0.96	41.6	0.91	0.5	5.9
838	41.6	20.86	0.97	41.5	0.91	0.2	6.6
850	41.5	20.79	0.98	41.5	0.92	0.0	7.3
875	41.2	20.68	1.01	41.5	0.94	-0.7	6.7
900	40.9	20.56	1.03	41.5	0.97	-1.5	6.1
925	40.6	20.48	1.05	41.5	0.98	-2.0	7.3
950	40.3	20.39	1.08	41.4	0.99	-2.6	8.3
975	40.1	20.29	1.10	41.4	1.00	-3.2	9.5
1000	39.8	20.20	1.12	41.3	1.01	-3.7	10.7



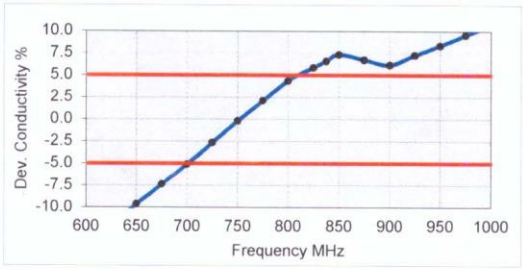


Figure D-3
750MHz Head Tissue Equivalent Matter

3 Composition / Information on ingredients

The Item is composed of the following ingredients:

Water	50 – 73 %	
Non-ionic detergents	25 – 50 %	polyoxyethylenesorbitan monolaurate
NaCl	0 – 2 %	
Preservative	0.05 – 0.1%	Preventol-D7

Safety relevant ingredients:

CAS-No. 55965-84-9	< 0.1 %	aqueous preparation, containing 5-chloro-2-methyl-3(2H)-isothiazolone and 2-methyyl-3(2H)-isothiazolone
CAS-No. 9005-64-5	<50 %	polyoxyethylenesorbitan monolaurate

According to international guidelines, the product is not a dangerous mixture and therefore not required to be marked by symbols.

Figure D-4
Composition of 2.4-2.6 GHz Head Tissue Equivalent Matter

Note: 2.4 GHz head liquid recipes are proprietary SPEAG. Since the composition is approximate to the actual liquids utilized, the manufacturer tissue-equivalent liquid data sheets are provided below.

Measurement Certificate / Material Test

Item Name	**Head Tissue Simulating Liquid (HBBL1900-3800V3)**
Product No.	SL AAH 196 AB (Batch: 160330-1)
Manufacturer	SPEAG

Measurement Method
TSL dielectric parameters measured using calibrated DAK probe.

Setup Validation
Validation results were within ± 2.5% towards the target values of Methanol.

Target Parameters
Target parameters as defined in the IEEE 1528 and IEC 62209 compliance standards.

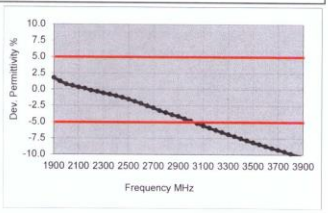
Test Condition

Ambient	Environment temperatur (22 ± 3)°C and humidity < 70%.
TSL Temperature	22°C
Test Date	30-Mar-16
Operator	WM

Additional Information

TSL Density	1.054 g/cm³
TSL Heat-capacity	3.389 kJ/(kg*K)

	Measured			Target		Diff to Target [%]	
f [MHz]	ε'	ε''	sigma	eps	sigma	Δ-eps	Δ-sigma
1900	40.7	12.3	1.3	40.0	1.4	1.7	-6.9
1950	40.5	12.5	1.4	40.0	1.4	1.2	-3.3
2000	40.3	12.6	1.4	40.0	1.4	0.8	0.1
2050	40.1	12.7	1.5	39.9	1.4	0.6	0.5
2100	39.9	12.9	1.5	39.8	1.5	0.3	0.9
2150	39.8	13.0	1.6	39.7	1.5	0.1	1.2
2200	39.6	13.1	1.6	39.6	1.6	-0.2	1.7
2250	39.4	13.2	1.7	39.6	1.6	-0.3	2.0
2300	39.2	13.3	1.7	39.5	1.7	-0.6	2.4
2350	39.1	13.5	1.8	39.4	1.7	-0.8	2.9
2400	38.9	13.6	1.8	39.3	1.8	-1.0	3.4
2450	38.7	13.7	1.9	39.2	1.8	-1.2	4.0
2500	38.5	13.8	1.9	39.1	1.9	-1.5	3.9
2550	38.3	13.9	2.0	39.1	1.9	-1.9	3.5
2600	38.2	14.1	2.0	39.0	2.0	-2.2	3.9
2650	37.9	14.2	2.1	38.9	2.0	-2.6	3.8
2700	37.8	14.3	2.2	38.9	2.1	-2.8	3.9
2750	37.5	14.4	2.2	38.8	2.1	-3.3	3.6
2800	37.4	14.5	2.3	38.8	2.2	-3.6	3.6
2850	37.2	14.6	2.3	38.7	2.2	-3.9	3.7
2900	37.0	14.7	2.4	38.6	2.3	-4.1	3.8
2950	36.8	14.8	2.4	38.6	2.3	-4.5	3.7
3000	36.6	14.9	2.5	38.5	2.4	-4.8	3.6
3050	36.4	15.0	2.5	38.4	2.5	-5.2	3.8
3100	36.2	15.1	2.6	38.4	2.5	-5.6	3.8
3150	36.1	15.2	2.7	38.3	2.6	-5.9	4.0
3200	35.9	15.2	2.7	38.3	2.6	-6.2	3.9
3250	35.7	15.3	2.8	38.2	2.7	-6.6	4.1
3300	35.5	15.3	2.8	38.2	2.7	-6.9	4.0
3350	35.4	15.4	2.9	38.1	2.8	-7.2	4.2
3400	35.2	15.5	2.9	38.0	2.8	-7.5	4.1
3450	35.0	15.5	3.0	38.0	2.9	-7.8	4.2
3500	34.9	15.6	3.0	37.9	2.9	-8.1	4.2
3550	34.7	15.6	3.1	37.9	3.0	-8.4	4.2
3600	34.5	15.7	3.1	37.8	3.0	-8.7	4.4
3650	34.4	15.8	3.2	37.8	3.1	-9.0	4.3
3700	34.2	15.8	3.3	37.7	3.1	-9.3	4.5
3750	34.1	15.9	3.3	37.6	3.2	-9.5	4.4
3800	33.9	15.9	3.4	37.6	3.2	-9.9	4.7
3850	33.7	16.0	3.4	37.5	3.3	-10.1	4.7



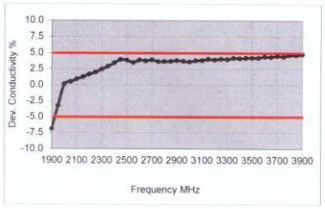


Figure D-5
2.4-2.6 GHz Head Tissue Equivalent Matter

2 Composition / Information on ingredients

The Item is composed of the following ingredients:

Water	50 – 65%
Mineral oil	10 – 30%
Emulsifiers	8 – 25%
Sodium salt	0 – 1.5%

Figure D-6
Composition of 5 GHz Head Tissue Equivalent Matter

Note: 5GHz head liquid recipes are proprietary SPEAG. Since the composition is approximate to the actual liquids utilized, the manufacturer tissue-equivalent liquid data sheets are provided below.

Measurement Certificate / Material Test

Item Name	**Head Tissue Simulating Liquid (HBBL3500-5800V5)**
Product No.	SL AAH 502 AG (Batch: 160331-2)
Manufacturer	SPEAG

Measurement Method
TSL dielectric parameters measured using calibrated DAK probe.

Setup Validation
Validation results were within ± 2.5% towards the target values of Methanol.

Target Parameters
Target parameters as defined in the IEEE 1528 and IEC 62209 compliance standards.

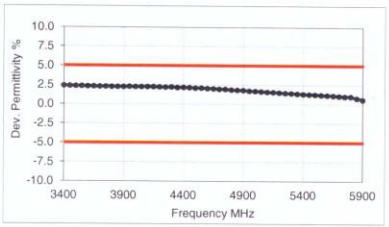
Test Condition

Ambient	Environment temperatur (22 ± 3)°C and humidity < 70%.
TSL Temperature	22°C
Test Date	4-Apr-16
Operator	WM

Additional Information

TSL Density	0.985 g/cm^3
TSL Heat-capacity	3.383 kJ/(kg*K)

	Measured			Target		Diff.to Target [%]	
f [MHz]	e'	e''	sigma	eps	sigma	Δ-eps	Δ-sigma
3400	39.0	15.12	2.86	38.0	2.81	2.5	1.8
3500	**38.8**	**15.09**	**2.94**	**37.9**	**2.91**	**2.3**	**0.9**
3600	38.7	15.08	3.02	37.8	3.02	2.3	0.2
3700	**38.6**	**15.08**	**3.10**	**37.7**	**3.12**	**2.4**	**-0.6**
3800	38.4	15.07	3.19	37.6	3.22	2.2	-0.9
3900	38.3	15.09	3.27	37.5	3.32	2.2	-1.6
4000	38.2	15.10	3.36	37.4	3.43	2.3	-1.9
4100	38.1	15.13	3.45	37.2	3.53	2.3	-2.2
4200	38.0	15.18	3.55	37.1	3.63	2.3	-2.2
4300	37.8	15.22	3.64	37.0	3.73	2.1	-2.5
4400	37.7	15.29	3.74	36.9	3.84	2.2	-2.5
4500	37.6	15.34	3.84	36.8	3.94	2.2	-2.5
4600	37.4	15.41	3.94	36.7	4.04	2.0	-2.5
4700	37.3	15.47	4.05	36.6	4.14	2.0	-2.2
4800	37.1	15.53	4.15	36.4	4.25	1.8	-2.2
4850	37.1	15.57	4.20	36.4	4.30	2.0	-2.2
4900	37.0	15.60	4.25	36.3	4.35	1.8	-2.2
4950	36.9	15.62	4.30	36.3	4.40	1.7	-2.2
5000	36.8	15.66	4.35	36.2	4.45	1.6	-2.2
5050	36.8	15.68	4.40	36.2	4.50	1.8	-2.2
5100	36.7	15.73	4.46	36.1	4.55	1.7	-2.0
5150	36.6	15.75	4.51	36.0	4.60	1.5	-2.0
5200	**36.5**	**15.78**	**4.57**	**36.0**	**4.66**	**1.4**	**-1.8**
5250	36.4	15.80	4.62	35.9	4.71	1.3	-1.8
5300	36.4	15.84	4.67	35.9	4.76	1.5	-1.8
5350	36.3	15.85	4.72	35.8	4.81	1.4	-1.8
5400	36.2	15.88	4.77	35.8	4.86	1.2	-1.9
5450	36.2	15.90	4.82	35.7	4.91	1.4	-1.9
5500	**36.1**	**15.91**	**4.87**	**35.6**	**4.96**	**1.3**	**-1.9**
5550	36.0	15.95	4.93	35.6	5.01	1.2	-1.7
5600	35.9	15.99	4.98	35.5	5.07	1.0	-1.7
5650	35.9	16.02	5.04	35.5	5.12	1.2	-1.5
5700	35.8	16.05	5.09	35.4	5.17	1.1	-1.5
5750	35.7	16.09	5.15	35.4	5.22	1.0	-1.3
5800	**35.7**	**16.10**	**5.20**	**35.3**	**5.27**	**1.1**	**-1.3**
5850	35.6	16.14	5.25	35.3	5.34	0.8	-1.6
5900	35.5	16.15	5.30	35.3	5.40	0.6	-1.9



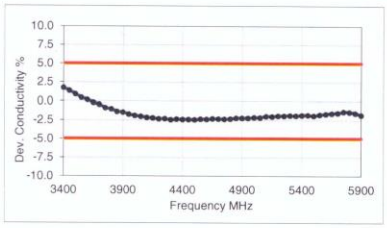


Figure D-7
5GHz Head Tissue Equivalent Matter

APPENDIX E: SAR SYSTEM VALIDATION

Per FCC KDB Publication 865664 D02v01r02, SAR system validation status should be documented to confirm measurement accuracy. The SAR systems (including SAR probes, system components and software versions) used for this device were validated against its performance specifications prior to the SAR measurements. Reference dipoles were used with the required tissue- equivalent media for system validation, according to the procedures outlined in FCC KDB Publication 865664 D01v01r04 and IEEE 1528-2013. Since SAR probe calibrations are frequency dependent, each probe calibration point was validated at a frequency within the valid frequency range of the probe calibration point, using the system that normally operates with the probe for routine SAR measurements and according to the required tissue-equivalent media.

A tabulated summary of the system validation status including the validation date(s), measurement frequencies, SAR probes and tissue dielectric parameters has been included.

Table E-1
SAR System Validation Summary – 1g

SAR SYSTEM #	FREQ. [MHz]	DATE	PROBE SN	PROBE TYPE	PROBE CAL. POINT		COND.	PERM.	CW VALIDATION			MOD. VALIDATION		
							(σ)	(εr)	SENSITIVITY	PROBE LINEARITY	PROBE ISOTROPY	MOD. TYPE	DUTY FACTOR	PAR
D	750	11/17/2017	3318	ES3DV3	750	Head	0.908	42.271	PASS	PASS	PASS	N/A	N/A	N/A
K	835	5/2/2017	7406	EX3DV4	835	Head	0.896	40.478	PASS	PASS	PASS	GMSK	PASS	N/A
H	835	8/31/2017	7410	EX3DV4	835	Head	0.919	43.248	PASS	PASS	PASS	GMSK	PASS	N/A
H	1750	8/30/2017	7410	EX3DV4	1750	Head	1.395	38.864	PASS	PASS	PASS	N/A	N/A	N/A
G	1900	8/31/2017	3332	ES3DV3	1900	Head	1.457	40.398	PASS	PASS	PASS	GMSK	PASS	N/A
K	1900	5/1/2017	7406	EX3DV4	1900	Head	1.458	40.267	PASS	PASS	PASS	GMSK	PASS	N/A
E	2300	4/3/2017	3319	ES3DV3	2300	Head	1.695	39.552	PASS	PASS	PASS	N/A	N/A	N/A
E	2450	4/3/2017	3319	ES3DV3	2450	Head	1.869	38.994	PASS	PASS	PASS	OFDM/TDD	PASS	PASS
E	2600	4/3/2017	3319	ES3DV3	2600	Head	2.038	38.360	PASS	PASS	PASS	TDD	PASS	N/A
H	5250	6/10/2017	3914	EX3DV4	5250	Head	4.580	35.029	PASS	PASS	PASS	OFDM	N/A	PASS
H	5600	6/10/2017	3914	EX3DV4	5600	Head	4.940	34.501	PASS	PASS	PASS	OFDM	N/A	PASS
H	5750	6/10/2017	3914	EX3DV4	5750	Head	5.103	34.300	PASS	PASS	PASS	OFDM	N/A	PASS
D	750	11/6/2017	3318	ES3DV3	750	Body	0.961	54.445	PASS	PASS	PASS	N/A	N/A	N/A
K	835	5/2/2017	7406	EX3DV4	835	Body	0.966	53.380	PASS	PASS	PASS	GMSK	PASS	N/A
G	835	10/11/2017	3332	ES3DV3	835	Body	0.999	52.814	PASS	PASS	PASS	GMSK	PASS	N/A
J	1750	6/5/2017	3209	ES3DV3	1750	Body	1.474	51.981	PASS	PASS	PASS	N/A	N/A	N/A
K	1750	5/1/2017	7406	EX3DV4	1750	Body	1.514	51.685	PASS	PASS	PASS	N/A	N/A	N/A
J	1900	6/15/2017	3209	ES3DV3	1900	Body	1.552	52.203	PASS	PASS	PASS	GMSK	PASS	N/A
I	2300	5/10/2017	3213	ES3DV3	2300	Body	1.792	52.487	PASS	PASS	PASS	N/A	N/A	N/A
I	2450	5/10/2017	3213	ES3DV3	2450	Body	2.003	51.944	PASS	PASS	PASS	OFDM/TDD	PASS	PASS
I	2600	5/10/2017	3213	ES3DV3	2600	Body	2.207	51.200	PASS	PASS	PASS	TDD	PASS	N/A
D	5250	10/24/2017	7308	EX3DV4	5250	Body	5.405	48.529	PASS	PASS	PASS	OFDM	N/A	PASS
D	5600	10/24/2017	7308	EX3DV4	5600	Body	5.910	47.818	PASS	PASS	PASS	OFDM	N/A	PASS
D	5750	10/24/2017	7308	EX3DV4	5750	Body	6.135	47.546	PASS	PASS	PASS	OFDM	N/A	PASS

Table E-2
SAR System Validation Summary – 10g

SAR SYSTEM #	FREQ. [MHz]	DATE	PROBE SN	PROBE TYPE	PROBE CAL. POINT		COND.	PERM.	CW VALIDATION			MOD. VALIDATION		
							(σ)	(εr)	SENSITIVITY	PROBE LINEARITY	PROBE ISOTROPY	MOD. TYPE	DUTY FACTOR	PAR
J	1750	6/5/2017	3209	ES3DV3	1750	Body	1.474	51.981	PASS	PASS	PASS	N/A	N/A	N/A
H	1900	9/5/2017	7410	EX3DV4	1900	Body	1.580	52.546	PASS	PASS	PASS	GMSK	PASS	N/A
G	1900	9/5/2017	3332	ES3DV3	1900	Body	1.580	52.546	PASS	PASS	PASS	GMSK	PASS	N/A
I	2300	5/10/2017	3213	ES3DV3	2300	Body	1.792	52.487	PASS	PASS	PASS	N/A	N/A	N/A
I	2450	5/10/2017	3213	ES3DV3	2450	Body	2.003	51.944	PASS	PASS	PASS	OFDM/TDD	PASS	PASS
I	2600	5/10/2017	3213	ES3DV3	2600	Body	2.207	51.200	PASS	PASS	PASS	TDD	PASS	N/A
D	5250	10/24/2017	7308	EX3DV4	5250	Body	5.405	48.529	PASS	PASS	PASS	OFDM	N/A	PASS
D	5600	10/24/2017	7308	EX3DV4	5600	Body	5.910	47.818	PASS	PASS	PASS	OFDM	N/A	PASS
D	5750	10/24/2017	7308	EX3DV4	5750	Body	6.135	47.546	PASS	PASS	PASS	OFDM	N/A	PASS

NOTE: While the probes have been calibrated for both CW and modulated signals, all measurements were performed using communication systems calibrated for CW signals only. Modulations in the table above represent test configurations for which the measurement system has been validated per FCC KDB Publication 865664 D01v01r04 for scenarios when CW probe calibrations are used with other signal types. SAR systems were validated for modulated signals with a periodic duty cycle, such as GMSK, or with a high peak to average ratio (>5 dB), such as OFDM according to FCC KDB Publication 865664 D01v01r04.

APPENDIX G: POWER REDUCTION VERIFICATION

Per the May 2017 TCBC Workshop Notes, demonstration of proper functioning of the power reduction mechanisms is required to support the corresponding SAR configurations. The verification process was divided into two parts: (1) evaluation of output power levels for individual or multiple triggering mechanisms and (2) evaluation of the triggering distances for proximity-based sensors.

1.1 Power Verification Procedure

The power verification was performed according to the following procedure:

1. A base station simulator was used to establish a conducted RF connection and the output power was monitored. The power measurements were confirmed to be within expected tolerances for all states before and after a power reduction mechanism was triggered.

2. Step 1 was repeated for all relevant modes and frequency bands for the mechanism being investigated.

3. Steps 1 and 2 were repeated for all individual power reduction mechanisms and combinations thereof. For the combination cases, one mechanism was switched to a 'triggered' state at a time; powers were confirmed to be within tolerances after each additional mechanism was activated.

1.2 Distance Verification Procedure

The distance verification procedure was performed according to the following procedure:

1. A base station simulator was used to establish an RF connection and to monitor the power levels. The device being tested was placed below the relevant section of the phantom with the relevant side or edge of the device facing toward the phantom.

2. The device was moved toward and away from the phantom to determine the distance at which the mechanism triggers and the output power is reduced, per KDB Publication 616217 D04v01r02 and FCC Guidance. Each applicable test position was evaluated. The distances were confirmed to be the same or larger (more conservative) than the minimum distances provided by the manufacturer.

3. Steps 1 and 2 were repeated for all relevant frequency bands.

4. Steps 1 through 3 were repeated for all distance-based power reduction mechanisms.

1.3 Main Antenna Verification Summary

Table G-1

Power Measurement Verification for Main Antenna

Mechanism(s)	Mode/Band	Conducted Power (dBm)		
		Un-triggered (Max)	Mechanism #1 (Reduced)	Mechanism #2 (Reduced)
Hotspot On	GSM1900	29.8	26.31	
Hotspot On	UMTS B4	24.83	19.26	
Hotspot On	UMTS B2	24.33	19.11	
Hotspot On	CDMA BC1	23.66	19.89	
Hotspot On	LTE FDD B4	24.56	19.67	
Hotspot On	LTE FDD B66	24.67	19.7	
Hotspot On	LTE FDD B2	24.58	19.51	
Hotspot On	LTE FDD B25	23.91	19.44	
Hotspot On	LTE FDD B30 AntA	23.33	19.34	
Hotspot On	LTE FDD B30 AntB	23.49	19.99	
Hotspot On	LTE FDD B7 AntA	23.44	20.61	
Hotspot On	LTE FDD B7 AntB	23.57	20.53	
Hotspot On	LTE TDD B38	22.48	22.39	
Hotspot On	LTE TDD B41 (PC3)	24.5	22.99	
Hotspot On	LTE TDD B41 (PC2)	27.36	23	
Grip	GSM1900	29.81	27.73	
Grip	UMTS B4	24.83	21.31	
Grip	UMTS B2	24.31	21.1	
Grip	CDMA BC1	23.6	21.47	
Grip	LTE FDD B4	24.52	21.11	
Grip	LTE FDD B66	24.77	21.5	
Grip	LTE FDD B2	24.64	22.07	
Grip	LTE FDD B25	23.9	21.98	
Grip	LTE FDD B30 AntA	23.34	20.88	
Grip	LTE FDD B30 AntB	23.46	21.47	
Grip	LTE FDD B7 AntA	23.45	20.56	
Grip	LTE FDD B7 AntB	23.51	20.55	
Grip	LTE TDD B41 (PC2)	27.43	24.47	
Hotspot On, then Grip	GSM1900	29.79	26.3	26.26
Hotspot On, then Grip	UMTS B4	24.8	19.26	19.26
Hotspot On, then Grip	UMTS B2	24.3	19.08	19.12
Hotspot On, then Grip	CDMA BC1	23.7	19.9	19.91
Hotspot On, then Grip	LTE FDD B4	24.52	19.64	19.63
Hotspot On, then Grip	LTE FDD B66	24.7	19.66	19.76
Hotspot On, then Grip	LTE FDD B2	24.6	19.59	19.58
Hotspot On, then Grip	LTE FDD B25	23.9	19.43	19.43
Hotspot On, then Grip	LTE FDD B30 AntA	23.35	19.36	19.34
Hotspot On, then Grip	LTE FDD B30 AntB	23.48	19.96	19.97
Hotspot On, then Grip	LTE FDD B7 AntA	23.53	20.54	20.51
Hotspot On, then Grip	LTE FDD B7 AntB	23.58	20.54	20.5
Hotspot On, then Grip	LTE TDD B41 (PC2)	27.5	23	22.99
Grip, then Hotspot On	GSM1900	29.78	27.7	26.31
Grip, then Hotspot On	UMTS B4	24.82	21.3	19.28
Grip, then Hotspot On	UMTS B2	24.31	21.09	19.1
Grip, then Hotspot On	CDMA BC1	23.6	21.49	19.88
Grip, then Hotspot On	LTE FDD B4	24.51	21.08	19.62
Grip, then Hotspot On	LTE FDD B66	24.76	21.5	19.71
Grip, then Hotspot On	LTE FDD B2	24.5	21.97	19.49
Grip, then Hotspot On	LTE FDD B25	23.9	21.92	19.4
Grip, then Hotspot On	LTE FDD B30 AntA	23.35	20.89	19.35
Grip, then Hotspot On	LTE FDD B30 AntB	23.46	21.38	19.95
Grip, then Hotspot On	LTE FDD B7 AntA	23.48	20.44	20.43
Grip, then Hotspot On	LTE FDD B7 AntB	23.55	20.51	20.53
Grip, then Hotspot On	LTE TDD B41 (PC2)	27.5	24.5	22.98

Table G-2
Distance Measurement Verification for Main Antenna

Mechanism(s)	Test Condition	Band	Distance Measurements (mm)		Minimum Distance from Manufacturer (mm)
			Moving Toward	Moving Away	
Grip	Phablet – Back Side	Mid	12	15	11
Grip	Phablet – Back Side	High	12	15	11
Grip	Phablet – Front Side	Mid	10	13	8
Grip	Phablet – Front Side	High	10	13	8
Grip	Phablet – Bottom Edge	Mid	14	15	14
Grip	Phablet – Bottom Edge	High	14	15	14

Note: Mid band refers to: CDMA BC1, GSM1900, UMTS B2/4, LTE B2/4/25/66; High band refers to: LTE B7/30/41.

1.4 WIFI Verification Summary

Table G-3

Power Measurement Verification WIFI

Mechanism(s)	Mode/Band	Conducted Power (dBm)	
		Un-triggered (Max)	Mechanism #1 (Reduced)
Held-to-Ear	802.11b	19.30	13.17
Held-to-Ear	802.11g	16.41	12.47
Held-to-Ear	802.11n (2.4GHz)	16.29	12.33
Held-to-Ear	802.11a	16.91	11.82
Held-to-Ear	802.11n (5GHz, 20MHz BW)	17.31	11.69
Held-to-Ear	802.11ac (20MHz BW)	16.43	12.29
Held-to-Ear	802.11n (5GHz, 40MHz BW)	16.39	12.41
Held-to-Ear	802.11ac (40MHz BW)	17.00	12.39

Note: 802.11ac (80 MHz BW) was not evaluated due to equipment limitations.

Table G-4

Distance Measurement Verification for WIFI

Mechanism(s)	Test Condition	Mode/Band	Distance Measurements (mm)		Minimum Distance from Manufacturer (mm)
			Moving Toward	Moving Away	
Held-to-Ear	Head - Right Cheek	2.4 GHz	70	>95	60
Held-to-Ear	Head - Right Cheek	5 GHz	70	>95	60
Held-to-Ear	Head - Left Cheek	2.4 GHz	71	>95	60
Held-to-Ear	Head - Left Cheek	5 GHz	71	>95	60

APPENDIX H: DOWNLINK LTE CA TEST EXCLUSION

SAR test exclusion for LTE downlink Carrier Aggregation is determined by power measurements according to the number of component carriers (CCs) supported by the product implementation. Per FCC Guidance, the following test reduction methodology was applied to determine the combinations required for conducted power measurements.

LTE DLCA Test Reduction Methodology:

- The supported combinations were arranged by the number of component carriers in columns.
- Any limitations on the PCC or SCC for each combination were identified alongside the combination (e.g. CA_2A-2A-4A-12A, but B12 can only be configured as a SCC).
- Power measurements were performed for "supersets" (LTE CA combinations with multiple components carriers) and any "subsets" (LTE CA combinations with fewer component carriers) that were not completely covered by the supersets.
- Only subsets that have the exact same components as a superset were excluded for measurement.
- When there were certain restrictions on component carriers that existed in the superset that were not applied for the subset, the subset configuration was additionally evaluated.
- Both inter-band and intra-band downlink carrier aggregation scenarios were considered.
- Downlink CA combinations for SISO and 4x4 Downlink MIMO operations were measured independently, per May 2017 TCBC Workshop notes.

Table 1 – Example of Exclusion Table for SISO Configurations

Index	2CC	Restriction	Completely Covered by Measurement Superset
2CC #1	CA_2C		3CC #4
2CC #2	CA_2A-5A		4CC #1
2CC #3	CA_2A-12A (1)		3CC #3
2CC #4	CA_2A-13A		3CC #9
2CC #5	CA_2A-17A		No
2CC #6	CA_2A-30A		3CC #14
2CC #7	CA_2A-66A		SCC #1
2CC #8	CA_2A-71A		3CC #10
2CC #9	CA_4A-4A		3CC #6
2CC #10	CA_4A-5A (1)		4CC #1
2CC #11	CA_4A-12A (2)		3CC #8
2CC #12	CA_4A-13A		SCC #9
2CC #13	CA_4A-17A	B17 SCC Only	No
2CC #14	CA_5B		SCC #1
2CC #15	CA_5A-25A		No
2CC #16	CA_7C		No
2CC #17	CA_7A-7A (1)		No
2CC #18	CA_7A-12A		3CC #12
2CC #19	CA_12B		3CC #13
2CC #20	CA_12A-25A		No
2CC #21	CA_12A-30A		3CC #14
2CC #22	CA_41A-41A (1)		No

Index	3CC	Restriction	Completely Covered by Measurement Superset
3CC #1	CA_2A-2A-4A		4CC #1
3CC #2	CA_2A-2A-5A		4CC #1
3CC #3	CA_2A-2A-12A		No
3CC #4	CA_2C-66A		No
3CC #5	CA_2A-2A-71A		No
3CC #6	CA_2A-4A-4A		No
3CC #7	CA_2A-4A-5A		4CC #1
3CC #8	CA_2A-4A-12A		No
3CC #9	CA_2A-4A-13A		No
3CC #10	CA_2A-4A-71A		No
3CC #11	CA_2A-5B		SCC #1
3CC #12	CA_2A-7A-12A		No
3CC #13	CA_2A-12B		No
3CC #14	CA_2A-12A-30A		No
3CC #15	CA_4A-4A-5A		No
3CC #16	CA_5B-30A		SCC #1
3CC #17	CA_5B-66A		SCC #2
3CC #18	CA_5A-30A-66A		4CC #9
3CC #19	CA_12A-66C		No
3CC #20	CA_30A-66A-66A		4CC #9
3CC #21	CA_41D		No
3CC #22	CA_41A-41C		No
3CC #23	CA_66D		No
3CC #24	CA_66A-66C		No

Index	4CC	Restriction	Completely Covered by Measurement Superset
4CC #1	CA_2A-2A-4A-5A		No
4CC #2	CA_2A-2A-4A-12A	B12 SCC Only	No
4CC #3	CA_2A-2A-5A-30A		No
4CC #4	CA_2A-2A-5A-66A		No
4CC #5	CA_2A-5B-30A		SCC #1
4CC #6	CA_2A-5B-66A		SCC #2
4CC #7	CA_5B-30A-66A		SCC #1
4CC #8	CA_5B-66A-66A		SCC #2
4CC #9	CA_5A-30A-66A-66A		No
4CC #10	CA_41E		No

Index	5CC	Restriction	Completely Covered by Measurement Superset
5CC #1	CA_2A-5B-30A-66A		No
5CC #2	CA_2A-5B-66A-66A		No

Table 2 – Example of Exclusion Table for 4x4 Downlink MIMO Configurations

Index	2CC	Restriction	Completely Covered by Measurement Superset
2CC #M1	CA_[2C]		3CC #M8
2CC #M2	CA_[2A]-2A		3CC #M1
2CC #M3	CA_[2A]-[2A]		No
2CC #M4	CA_[2A]-4A (2)		3CC #M1
2CC #M5	CA_[2A]-[4A] (2)		No
2CC #M6	CA_[2A]-5A		4CC #M3
2CC #M7	CA_[2A]-12A (1)		3CC #M3
2CC #M8	CA_[2A]-13A		3CC #M4
2CC #M9	CA_[2A]-17A		No
2CC #M10	CA_[2A]-29A (2)	B29 SCC Only	3CC #M12
2CC #M11	CA_[2A]-30A		3CC #M5
2CC #M12	CA_[2A]-66A		4CC #M1
2CC #M13	CA_2A-[66A]		4CC #M2
2CC #M14	CA_[2A]-[66A]		No
2CC #M15	CA_[2A]-71A		3CC #M11
2CC #M16	CA_5A-[66A]		3CC #M16
2CC #M17	CA_12A-[66A] (1)		3CC #M17
2CC #M18	CA_13A-[66A]		3CC #M19
2CC #M19	CA_30A-[66A]		3CC #M20
2CC #M20	CA_[66B]		4CC #M4
2CC #M21	CA_[66C]		4CC #M6
2CC #M22	CA_[66A]-66A		3CC #M28
2CC #M23	CA_[66A]-[66A]		No

Index	3CC	Restriction	Completely Covered by Measurement Superset
3CC #M1	CA_[2A]-2A-4A		No
3CC #M2	CA_[2A]-2A-5A		No
3CC #M3	CA_[2A]-2A-12A		No
3CC #M4	CA_[2A]-2A-13A		No
3CC #M5	CA_[2A]-2A-30A		No
3CC #M6	CA_[2C]-66A		No
3CC #M7	CA_2C-[66A]		No
3CC #M8	CA_[2C]-[66A]		No
3CC #M9	CA_[2A]-2A-66A		No
3CC #M10	CA_2A-2A-[66A]		No
3CC #M11	CA_[2A]-2A-71A		No
3CC #M12	CA_[2A]-4A-29A	B29 SCC Only	No
3CC #M13	CA_[2A]-4A-71A		No
3CC #M14	CA_[2A]-5B		4CC #M1
3CC #M15	CA_[2A]-5A-66A		No
3CC #M16	CA_2A-5A-[66A]		No
3CC #M17	CA_2A-12A-[66A]		No
3CC #M18	CA_[2A]-13A-66A		No
3CC #M19	CA_2A-13A-[66A]		No
3CC #M20	CA_2A-30A-[66A]		No
3CC #M21	CA_[2A]-66B		4CC #M3
3CC #M22	CA_2A-[66B]		4CC #M4
3CC #M23	CA_[2A]-[66B]		No
3CC #M24	CA_[2A]-66C		4CC #M5
3CC #M25	CA_2A-[66C]		4CC #M6
3CC #M26	CA_[2A]-[66C]		No
3CC #M27	CA_[2A]-66A-66A		No
3CC #M28	CA_2A-[66A]-66A		No
3CC #M29	CA_[2A]-66A-71A		No

Index	4CC	Restriction	Completely Covered by Measurement Superset
4CC #M1	CA_[2A]-5B-66A		No
4CC #M2	CA_2A-5B-[66A]		No
4CC #M3	CA_[2A]-5A-66B		No
4CC #M4	CA_2A-5A-[66B]		No
4CC #M5	CA_[2A]-5A-66C		No
4CC #M6	CA_2A-5A-[66C]		No

Note: [CC] indicates component carrier with 4x4 DL MIMO antenna configuration

APPENDIX I: CONDUCTED POWERS FOR 4X4 DL MIMO

This device supports downlink 4x4 MIMO operations for LTE Bands 2, 4, 25, 7, 30, 41and 66 only. Uplink transmission is limited to a single output stream. Power measurements were performed with downlink 4x4 MIMO active for the configuration with highest measured maximum conducted power with 4x4 downlink MIMO inactive measured among the channel bandwidth, modulation, and RB combinations in each frequency band.

Per May 2017 TCB Workshop Notes, SAR for downlink 4x4 MIMO was not needed since the maximum average output power in 4x4 downlink MIMO mode was not > 0.25 dB higher than the maximum output power with downlink 4x4 MIMO inactive. When carrier aggregation is applicable, power measurements were performed with the downlink carrier aggregation and 4x4 DL MIMO active for the configuration with highest measured maximum conducted power with downlink carrier aggregation inactive measured among the channel bandwidth, modulation, and RB combinations in each frequency band.

Note: Per FCC guidance LTE Band 66 SISO powers were used to select measurement configurations for LTE Band 4, LTE Band 12 SISO powers were used to select measurement configurations for LTE Band 17, and LTE Band 25 SISO powers were used to select measurement configurations for LTE Band 2.

I.1 Single Carrier 4x4 Downlink MIMO

Table I-1
Additional Maximum Output Powers

LTE Band	Bandwidth [MHz]	Channel	Frequency [MHz]	Modulation	RB Size	RB Offset	4x4 DL MIMO Tx. Power [dBm]	Single Antenna Tx. Power [dBm]	Target Power [dBm]
4	20	20300	1745	QPSK	1	0	24.43	24.40	24.5
66	20	132572	1770	QPSK	1	0	24.45	24.40	24.5
2	10	18650	1855	QPSK	1	0	24.8	24.78	24.5
25	10	26090	1855	QPSK	1	0	24.79	24.78	24.5
7	15	21375	2562.5	QPSK	1	0	23.95	23.90	23.5
30	10	27710	2310	QPSK	1	49	23.91	23.83	23.5
41	20	40185	2549.5	QPSK	1	0	24.46	24.41	24.0
41 PC2	20	40620	2593	QPSK	1	0	27.36	27.48	27.0

Table I-2
Additional Hotspot Reduced Output Powers

LTE Band	Bandwidth [MHz]	Channel	Frequency [MHz]	Modulation	RB Size	RB Offset	4x4 DL MIMO Tx. Power [dBm]	Single Antenna Tx. Power [dBm]	Target Power [dBm]
4	20	20300	1745	64QAM	1	0	19.90	20.00	19.5
66	20	132572	1770	64QAM	1	0	19.86	20.00	19.5
2	20	18925	1882.5	64QAM	1	0	19.89	20.00	19.5
25	20	26365	1882.5	64QAM	1	0	19.92	20.00	19.5
7	20	21350	2560	64QAM	1	0	20.99	21.00	20.5
30	10	27710	2310	64QAM	1	0	19.94	19.85	19.5
41	20	40185	2549.5	16QAM	1	0	22.96	23.00	22.5
41 PC2	20	39750	2506	16QAM	1	0	22.98	23.00	22.5

Table I-3
Additional Grip Sensor Reduced Output Powers

LTE Band	Bandwidth [MHz]	Channel	Frequency [MHz]	Modulation	RB Size	RB Offset	4x4 DL MIMO Tx. Power [dBm]	Single Antenna Tx. Power [dBm]	Target Power [dBm]
4	20	20300	1745	16QAM	1	0	21.46	21.50	21.0
66	20	132322	1745	16QAM	1	0	21.49	21.50	21.0
2	20	18700	1860	16QAM	1	99	22.43	22.50	22.0
25	20	26140	1860	16QAM	1	99	22.45	22.50	22.0
7	20	21350	2560	64QAM	1	0	20.99	21.00	20.5
30	10	27710	2310	64QAM	1	0	21.48	21.50	21.0
41 PC2	15	40185	2549.5	16QAM	1	0	24.43	24.50	24.0

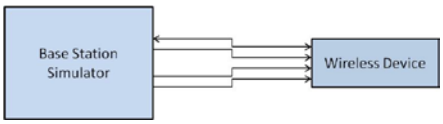


Figure I-1
Power Measurement Setup

I.2 Carrier Aggregation Scenarios with 2 Component Carriers with 4x4 Downlink MIMO

Table I-4
LTE Band 17 Additional Maximum Output Powers – 2 Component Carriers

	PCC										SCC					Power	
Combination	PCC Band	PCC Bandwidth [MHz]	PCC (UL) Channel	PCC (UL) Frequency [MHz]	Modulation	PCC UL# RB	PCC UL RB Offset	PCC (DL) Channel	PCC (DL) Frequency [MHz]	DL Ant. Config.	SCC Band	SCC Bandwidth [MHz]	SCC (DL) Channel	SCC (DL) Frequency [MHz]	DL Ant. Config.	LTE Tx.Power with DL CA Enabled (dBm)	LTE Single Carrier Tx Power (dBm)
CA_2A-17A	LTE B17	10	23790	710	QPSK	1	25	5790	740	2x2 MIMO	LTE B2	10	900	1960	4x4 MIMO	24.29	24.26

Table I-5
LTE Band 26 Additional Maximum Output Powers – 2 Component Carriers

	PCC										SCC					Power	
Combination	PCC Band	PCC Bandwidth [MHz]	PCC (UL) Channel	PCC (UL) Frequency [MHz]	Modulation	PCC UL# RB	PCC UL RB Offset	PCC (DL) Channel	PCC (DL) Frequency [MHz]	DL Ant. Config.	SCC Band	SCC Bandwidth [MHz]	SCC (DL) Channel	SCC (DL) Frequency [MHz]	DL Ant. Config.	LTE Tx.Power with DL CA Enabled (dBm)	LTE Single Carrier Tx Power (dBm)
CA_26A-41A	LTE B26	15	26865	831.5	QPSK	1	36	8865	876.5	2x2 MIMO	LTE B41	20	40620	2593	4x4 MIMO	24.63	24.48

Table I-6
LTE Band 4 Additional Maximum Output Powers – 2 Component Carriers

	PCC										SCC					Power	
Combination	PCC Band	PCC Bandwidth [MHz]	PCC (UL) Channel	PCC (UL) Frequency [MHz]	Modulation	PCC UL# RB	PCC UL RB Offset	PCC (DL) Channel	PCC (DL) Frequency [MHz]	DL Ant. Config.	SCC Band	SCC Bandwidth [MHz]	SCC (DL) Channel	SCC (DL) Frequency [MHz]	DL Ant. Config.	LTE Tx.Power with DL CA Enabled (dBm)	LTE Single Carrier Tx Power (dBm)
CA_2A-4A (2)	LTE B4	20	20300	1745	QPSK	1	0	2300	2145	4x4 MIMO	LTE B2	20	900	1960	4x4 MIMO	24.40	24.40
CA_4A-4A	LTE B4	20	20300	1745	QPSK	1	0	2300	2145	4x4 MIMO	LTE B4	20	2050	2120	4x4 MIMO	24.45	24.40
CA_4A-17A	LTE B4	10	20350	1750	QPSK	1	25	2350	2150	4x4 MIMO	LTE B17	10	5790	740	2x2 MIMO	24.26	24.27

Table I-7
LTE Band 66 Additional Maximum Output Powers – 2 Component Carriers

	PCC										SCC					Power	
Combination	PCC Band	PCC Bandwidth [MHz]	PCC (UL) Channel	PCC (UL) Frequency [MHz]	Modulation	PCC UL# RB	PCC UL RB Offset	PCC (DL) Channel	PCC (DL) Frequency [MHz]	DL Ant. Config.	SCC Band	SCC Bandwidth [MHz]	SCC (DL) Channel	SCC (DL) Frequency [MHz]	DL Ant. Config.	LTE Tx.Power with DL CA Enabled (dBm)	LTE Single Carrier Tx Power (dBm)
CA_2A-66A	LTE B66	20	132572	1770	QPSK	1	0	67036	2170	4x4 MIMO	LTE B2	20	900	1960	4x4 MIMO	24.40	24.40
CA_66A-66A	LTE B66	20	132572	1770	QPSK	1	0	67036	2170	4x4 MIMO	LTE B66	20	66536	2120	4x4 MIMO	24.43	24.40

Table I-8
LTE Band 2 Additional Maximum Output Powers – 2 Component Carriers

	PCC										SCC					Power	
Combination	PCC Band	PCC Bandwidth [MHz]	PCC (UL) Channel	PCC (UL) Frequency [MHz]	Modulation	PCC UL# RB	PCC UL RB Offset	PCC (DL) Channel	PCC (DL) Frequency [MHz]	DL Ant. Config.	SCC Band	SCC Bandwidth [MHz]	SCC (DL) Channel	SCC (DL) Frequency [MHz]	DL Ant. Config.	LTE Tx.Power with DL CA Enabled (dBm)	LTE Single Carrier Tx Power (dBm)
CA_2A-2A	LTE B2	10	18650	1855	QPSK	1	0	650	1935	4x4 MIMO	LTE B2	20	1100	1980	4x4 MIMO	24.77	24.78
CA_2A-4A (2)	LTE B2	10	18650	1855	QPSK	1	0	650	1935	4x4 MIMO	LTE B4	20	2175	2132.5	4x4 MIMO	24.78	24.78
CA_2A-17A	LTE B2	10	18650	1855	QPSK	1	0	650	1935	4x4 MIMO	LTE B17	10	5790	740	2x2 MIMO	24.80	24.78
CA_2A-30A	LTE B2	10	18650	1855	QPSK	1	0	650	1935	4x4 MIMO	LTE B30	10	9820	2355	4x4 MIMO	24.79	24.78
CA_2A-66A	LTE B2	10	18650	1855	QPSK	1	0	650	1935	4x4 MIMO	LTE B66	20	66786	2145	4x4 MIMO	24.76	24.78

Table I-9
LTE Band 25 Additional Maximum Output Powers – 2 Component Carriers

	PCC										SCC					Power	
Combination	PCC Band	PCC Bandwidth [MHz]	PCC (UL) Channel	PCC (UL) Frequency [MHz]	Modulation	PCC UL# RB	PCC UL RB Offset	PCC (DL) Channel	PCC (DL) Frequency [MHz]	DL Ant. Config.	SCC Band	SCC Bandwidth [MHz]	SCC (DL) Channel	SCC (DL) Frequency [MHz]	DL Ant. Config.	LTE Tx.Power with DL CA Enabled (dBm)	LTE Single Carrier Tx Power (dBm)
CA_25A-25A (1)	LTE B25	10	26090	1855	QPSK	1	0	8090	1935	4x4 MIMO	LTE B25	20	8590	1985	4x4 MIMO	24.76	24.78
CA_25A-41A	LTE B25	10	26090	1855	QPSK	1	0	8090	1935	4x4 MIMO	LTE B41	20	40620	2593	2x2 MIMO	24.35	24.78
CA_25A-41A	LTE B25	10	26090	1855	QPSK	1	0	8090	1935	2x2 MIMO	LTE B41	20	40620	2593	4x4 MIMO	24.38	24.78

Table I-10
LTE Band 30 Ant A Additional Maximum Output Powers – 2 Component Carriers

	PCC										SCC					Power	
Combination	PCC Band	PCC Bandwidth [MHz]	PCC (UL) Channel	PCC (UL) Frequency [MHz]	Modulation	PCC UL# RB	PCC UL RB Offset	PCC (DL) Channel	PCC (DL) Frequency [MHz]	DL Ant. Config.	SCC Band	SCC Bandwidth [MHz]	SCC (DL) Channel	SCC (DL) Frequency [MHz]	DL Ant. Config.	LTE Tx.Power with DL CA Enabled (dBm)	LTE Ant. A Tx Power (dBm)
CA_2A-30A	LTE B30 AntA	10	27710	2310	QPSK	1	0	9820	2355	4x4 MIMO	LTE B2	20	900	1960	4x4 MIMO	23.30	23.41

Table I-11
LTE Band 7 Ant B Additional Maximum Output Powers – 2 Component Carriers

	PCC										SCC					Power	
Combination	PCC Band	PCC Bandwidth [MHz]	PCC (UL) Channel	PCC (UL) Frequency [MHz]	Modulation	PCC UL# RB	PCC UL RB Offset	PCC (DL) Channel	PCC (DL) Frequency [MHz]	DL Ant. Config.	SCC Band	SCC Bandwidth [MHz]	SCC (DL) Channel	SCC (DL) Frequency [MHz]	DL Ant. Config.	LTE Tx.Power with DL CA Enabled (dBm)	LTE Single Carrier Tx Power (dBm)
CA_7C (1)	LTE B7	15	21375	2562.5	QPSK	1	0	3375	2682.5	4x4 MIMO	LTE B7	20	3204	2665.4	4x4 MIMO	23.90	23.90
CA_7A-7A (1)	LTE B7	15	21375	2562.5	QPSK	1	0	3375	2682.5	4x4 MIMO	LTE B7	20	2850	2630	2x2 MIMO	23.87	23.90
CA_7A-7A (1)	LTE B7	15	21375	2562.5	QPSK	1	0	3375	2682.5	2x2 MIMO	LTE B7	20	2850	2630	4x4 MIMO	23.92	23.90
CA_7A-7A (1)	LTE B7	15	21375	2562.5	QPSK	1	0	3375	2682.5	4x4 MIMO	LTE B7	20	2850	2630	4x4 MIMO	23.88	23.90

Table I-12
LTE Band 41 PC3 Additional Maximum Output Powers – 2 Component Carriers

	PCC										SCC					Power	
Combination	PCC Band	PCC Bandwidth [MHz]	PCC (UL) Channel	PCC (UL) Frequency [MHz]	Modulation	PCC UL# RB	PCC UL RB Offset	PCC (DL) Channel	PCC (DL) Frequency [MHz]	DL Ant. Config.	SCC Band	SCC Bandwidth [MHz]	SCC (DL) Channel	SCC (DL) Frequency [MHz]	DL Ant. Config.	LTE Tx.Power with DL CA Enabled (dBm)	LTE Single Carrier Tx Power (dBm)
CA_41A-41A (1)	LTE B41	20	40185	2549.5	QPSK	1	0	40185	2549.5	4x4 MIMO	LTE B41	20	41490	2680	2x2 MIMO	24.39	24.41
CA_41A-41A (1)	LTE B41	20	40185	2549.5	QPSK	1	0	40185	2549.5	2x2 MIMO	LTE B41	20	41490	2680	4x4 MIMO	24.41	24.41
CA_41A-41A (1)	LTE B41	20	40185	2549.5	QPSK	1	0	40185	2549.5	4x4 MIMO	LTE B41	20	41490	2680	4x4 MIMO	24.40	24.41

Table I-13
LTE Band 41 PC2 Additional Maximum Output Powers – 2 Component Carriers

	PCC										SCC					Power	
Combination	PCC Band	PCC Bandwidth [MHz]	PCC (UL) Channel	PCC (UL) Frequency [MHz]	Modulation	PCC UL# RB	PCC UL RB Offset	PCC (DL) Channel	PCC (DL) Frequency [MHz]	DL Ant. Config.	SCC Band	SCC Bandwidth [MHz]	SCC (DL) Channel	SCC (DL) Frequency [MHz]	DL Ant. Config.	LTE Tx.Power with DL CA Enabled (dBm)	LTE Single Carrier Tx Power (dBm)
CA_41A-41A (1)	LTE B41 PC2	20	40620	2593	QPSK	1	0	40620	2593	4x4 MIMO	LTE B41 PC2	20	39750	2506	2x2 MIMO	27.36	27.48
CA_41A-41A (1)	LTE B41 PC2	20	40620	2593	QPSK	1	0	40620	2593	2x2 MIMO	LTE B41 PC2	20	39750	2506	4x4 MIMO	27.44	27.48
CA_41A-41A (1)	LTE B41 PC2	20	40620	2593	QPSK	1	0	40620	2593	4x4 MIMO	LTE B41 PC2	20	39750	2506	4x4 MIMO	27.40	27.48

Table I-14
LTE Band 4 Additional Hotspot Reduced Output Powers – 2 Component Carriers

	PCC										SCC					Power	
Combination	PCC Band	PCC Bandwidth [MHz]	PCC (UL) Channel	PCC (UL) Frequency [MHz]	Modulation	PCC UL# RB	PCC UL RB Offset	PCC (DL) Channel	PCC (DL) Frequency [MHz]	DL Ant. Config.	SCC Band	SCC Bandwidth [MHz]	SCC (DL) Channel	SCC (DL) Frequency [MHz]	DL Ant. Config.	LTE Tx.Power with DL CA Enabled (dBm)	LTE Single Carrier Tx Power (dBm)
CA_2A-4A (2)	LTE B4	20	20300	1745	64QAM	1	0	2300	2145	4x4 MIMO	LTE B2	20	900	1960	4x4 MIMO	19.87	20.00
CA_4A-4A	LTE B4	20	20300	1745	64QAM	1	0	2300	2145	4x4 MIMO	LTE B4	20	2050	2120	4x4 MIMO	19.89	20.00
CA_4A-17A	LTE B4	5	20375	1752.5	64QAM	1	0	2375	2152.5	4x4 MIMO	LTE B17	10	5790	740	2x2 MIMO	19.64	19.68

Table I-15
LTE Band 66 Additional Hotspot Reduced Output Powers – 2 Component Carriers

	PCC										SCC					Power	
Combination	PCC Band	PCC Bandwidth [MHz]	PCC (UL) Channel	PCC (UL) Frequency [MHz]	Modulation	PCC UL# RB	PCC UL RB Offset	PCC (DL) Channel	PCC (DL) Frequency [MHz]	DL Ant. Config.	SCC Band	SCC Bandwidth [MHz]	SCC (DL) Channel	SCC (DL) Frequency [MHz]	DL Ant. Config.	LTE Tx.Power with DL CA Enabled (dBm)	LTE Single Carrier Tx Power (dBm)
CA_2A-66A	LTE B66	20	132572	1770	64QAM	1	0	67036	2170	4x4 MIMO	LTE B2	20	900	1960	4x4 MIMO	19.90	20.00
CA_66A-66A	LTE B66	20	132572	1770	64QAM	1	0	67036	2170	4x4 MIMO	LTE B66	20	66536	2120	4x4 MIMO	19.93	20.00

Table I-16
LTE Band 2 Additional Hotspot Reduced Output Powers – 2 Component Carriers

	PCC										SCC					Power	
Combination	PCC Band	PCC Bandwidth [MHz]	PCC (UL) Channel	PCC (UL) Frequency [MHz]	Modulation	PCC UL# RB	PCC UL RB Offset	PCC (DL) Channel	PCC (DL) Frequency [MHz]	DL Ant. Config.	SCC Band	SCC Bandwidth [MHz]	SCC (DL) Channel	SCC (DL) Frequency [MHz]	DL Ant. Config.	LTE Tx.Power with DL CA Enabled (dBm)	LTE Single Carrier Tx Power (dBm)
CA_2A-2A	LTE B2	20	18925	1882.5	64QAM	1	0	925	1962.5	4x4 MIMO	LTE B2	20	700	1940	4x4 MIMO	19.81	20.00
CA_2A-4A (2)	LTE B2	20	18925	1882.5	64QAM	1	0	925	1962.5	4x4 MIMO	LTE B4	20	2175	2132.5	4x4 MIMO	19.91	20.00
CA_2A-17A	LTE B2	5	19175	1907.5	16QAM	1	12	1175	1987.5	4x4 MIMO	LTE B17	10	5790	740	2x2 MIMO	19.98	19.98
CA_2A-30A	LTE B2	20	18925	1882.5	64QAM	1	0	925	1962.5	4x4 MIMO	LTE B30	10	9820	2355	4x4 MIMO	19.63	20.00
CA_2A-66A	LTE B2	20	18925	1882.5	64QAM	1	0	925	1962.5	4x4 MIMO	LTE B66	20	66786	2145	4x4 MIMO	19.81	20.00

Table I-17
LTE Band 25 Additional Hotspot Reduced Output Powers – 2 Component Carriers

	PCC										SCC					Power	
Combination	PCC Band	PCC Bandwidth [MHz]	PCC (UL) Channel	PCC (UL) Frequency [MHz]	Modulation	PCC UL# RB	PCC UL RB Offset	PCC (DL) Channel	PCC (DL) Frequency [MHz]	DL Ant. Config.	SCC Band	SCC Bandwidth [MHz]	SCC (DL) Channel	SCC (DL) Frequency [MHz]	DL Ant. Config.	LTE Tx.Power with DL CA Enabled (dBm)	LTE Single Carrier Tx Power (dBm)
CA_25A-25A (1)	LTE B25	20	26365	1882.5	64QAM	1	0	8365	1962.5	4x4 MIMO	LTE B25	20	8140	1940	4x4 MIMO	19.65	20.00
CA_25A-41A	LTE B25	20	26365	1882.5	64QAM	1	0	8365	1962.5	4x4 MIMO	LTE B41	20	40620	2593	2x2 MIMO	19.61	20.00
CA_25A-41A	LTE B25	20	26365	1882.5	64QAM	1	0	8365	1962.5	2x2 MIMO	LTE B41	20	40620	2593	4x4 MIMO	19.63	20.00

Table I-18
LTE Band 30 Ant A Additional Hotspot Reduced Output Powers – 2 Component Carriers

	PCC										SCC					Power	
Combination	PCC Band	PCC Bandwidth [MHz]	PCC (UL) Channel	PCC (UL) Frequency [MHz]	Modulation	PCC UL# RB	PCC UL RB Offset	PCC (DL) Channel	PCC (DL) Frequency [MHz]	DL Ant. Config.	SCC Band	SCC Bandwidth [MHz]	SCC (DL) Channel	SCC (DL) Frequency [MHz]	DL Ant. Config.	LTE Tx.Power with DL CA Enabled (dBm)	LTE Ant. A Tx Power (dBm)
CA_2A-30A	LTE B30 AntA	10	27710	2310	16QAM	1	0	9820	2355	4x4 MIMO	LTE B2	20	900	1960	4x4 MIMO	19.96	20.00

Table I-19
LTE Band 7 Ant B Additional Hotspot/Grip Sensor Reduced Output Powers – 2 Component Carriers

	PCC										SCC					Power	
Combination	PCC Band	PCC Bandwidth [MHz]	PCC (UL) Channel	PCC (UL) Frequency [MHz]	Modulation	PCC UL# RB	PCC UL RB Offset	PCC (DL) Channel	PCC (DL) Frequency [MHz]	DL Ant. Config.	SCC Band	SCC Bandwidth [MHz]	SCC (DL) Channel	SCC (DL) Frequency [MHz]	DL Ant. Config.	LTE Tx.Power with DL CA Enabled (dBm)	LTE Single Carrier Tx Power (dBm)
CA_7C (1)	LTE B7	20	21350	2560	64QAM	1	0	3350	2680	4x4 MIMO	LTE B7	20	3152	2660.2	4x4 MIMO	20.88	21.00
CA_7A-7A (1)	LTE B7	20	21350	2560	64QAM	1	0	3350	2680	4x4 MIMO	LTE B7	20	2850	2630	2x2 MIMO	20.84	21.00
CA_7A-7A (1)	LTE B7	20	21350	2560	64QAM	1	0	3350	2680	2x2 MIMO	LTE B7	20	2850	2630	4x4 MIMO	20.91	21.00
CA_7A-7A (1)	LTE B7	20	21350	2560	64QAM	1	0	3350	2680	4x4 MIMO	LTE B7	20	2850	2630	4x4 MIMO	20.86	21.00

Table I-20
LTE Band 41 PC3 Additional Hotspot Reduced Output Powers – 2 Component Carriers

	PCC										SCC					Power	
Combination	PCC Band	PCC Bandwidth [MHz]	PCC (UL) Channel	PCC (UL) Frequency [MHz]	Modulation	PCC UL# RB	PCC UL RB Offset	PCC (DL) Channel	PCC (DL) Frequency [MHz]	DL Ant. Config.	SCC Band	SCC Bandwidth [MHz]	SCC (DL) Channel	SCC (DL) Frequency [MHz]	DL Ant. Config.	LTE Tx.Power with DL CA Enabled (dBm)	LTE Single Carrier Tx Power (dBm)
CA_41A-41A (1)	LTE B41	20	40185	2549.5	16QAM	1	0	40185	2549.5	4x4 MIMO	LTE B41	20	41490	2680	2x2 MIMO	22.98	23.00
CA_41A-41A (1)	LTE B41	20	40185	2549.5	16QAM	1	0	40185	2549.5	2x2 MIMO	LTE B41	20	41490	2680	4x4 MIMO	22.97	23.00
CA_41A-41A (1)	LTE B41	20	40185	2549.5	16QAM	1	0	40185	2549.5	4x4 MIMO	LTE B41	20	41490	2680	4x4 MIMO	22.99	23.00

Table I-21
LTE Band 41 PC2 Additional Hotspot Reduced Output Powers – 2 Component Carriers

	PCC										SCC					Power	
Combination	PCC Band	PCC Bandwidth [MHz]	PCC (UL) Channel	PCC (UL) Frequency [MHz]	Modulation	PCC UL# RB	PCC UL RB Offset	PCC (DL) Channel	PCC (DL) Frequency [MHz]	DL Ant. Config.	SCC Band	SCC Bandwidth [MHz]	SCC (DL) Channel	SCC (DL) Frequency [MHz]	DL Ant. Config.	LTE Tx.Power with DL CA Enabled (dBm)	LTE Single Carrier Tx Power (dBm)
CA_41A-41A (1)	LTE B41 PC2	20	39750	2506	16QAM	1	0	39750	2506	4x4 MIMO	LTE B41 PC2	20	41490	2680	2x2 MIMO	22.99	23.00
CA_41A-41A (1)	LTE B41 PC2	20	39750	2506	16QAM	1	0	39750	2506	2x2 MIMO	LTE B41 PC2	20	41490	2680	4x4 MIMO	23.00	23.00
CA_41A-41A (1)	LTE B41 PC2	20	39750	2506	16QAM	1	0	39750	2506	4x4 MIMO	LTE B41 PC2	20	41490	2680	4x4 MIMO	22.98	23.00

Table I-22
LTE Band 4 Additional Grip Sensor Reduced Output Powers – 2 Component Carriers

	PCC										SCC					Power	
Combination	PCC Band	PCC Bandwidth [MHz]	PCC (UL) Channel	PCC (UL) Frequency [MHz]	Modulation	PCC UL# RB	PCC UL RB Offset	PCC (DL) Channel	PCC (DL) Frequency [MHz]	DL Ant. Config.	SCC Band	SCC Bandwidth [MHz]	SCC (DL) Channel	SCC (DL) Frequency [MHz]	DL Ant. Config.	LTE Tx.Power with DL CA Enabled (dBm)	LTE Single Carrier Tx Power (dBm)
CA_2A-4A (2)	LTE B4	20	20300	1745	16QAM	1	0	2300	2145	4x4 MIMO	LTE B2	20	900	1960	4x4 MIMO	21.33	21.50
CA_4A-4A	LTE B4	20	20300	1745	16QAM	1	0	2300	2145	4x4 MIMO	LTE B4	20	2050	2120	4x4 MIMO	21.49	21.50
CA_4A-17A	LTE B4	10	20000	1715	64QAM	1	0	2000	2115	4x4 MIMO	LTE B17	10	5790	740	2x2 MIMO	21.17	21.50

Table I-23
LTE Band 66 Additional Grip Sensor Reduced Output Powers – 2 Component Carriers

	PCC										SCC					Power	
Combination	PCC Band	PCC Bandwidth [MHz]	PCC (UL) Channel	PCC (UL) Frequency [MHz]	Modulation	PCC UL# RB	PCC UL RB Offset	PCC (DL) Channel	PCC (DL) Frequency [MHz]	DL Ant. Config.	SCC Band	SCC Bandwidth [MHz]	SCC (DL) Channel	SCC (DL) Frequency [MHz]	DL Ant. Config.	LTE Tx.Power with DL CA Enabled (dBm)	LTE Single Carrier Tx Power (dBm)
CA_2A-66A	LTE B66	20	132322	1745	16QAM	1	0	66786	2145	4x4 MIMO	LTE B2	20	900	1960	4x4 MIMO	21.46	21.50
CA_66A-66A	LTE B66	20	132322	1745	16QAM	1	0	66786	2145	4x4 MIMO	LTE B66	20	67236	2190	4x4 MIMO	21.41	21.50

Table I-24
LTE Band 2 Additional Grip Sensor Reduced Output Powers – 2 Component Carriers

	PCC										SCC					Power	
Combination	PCC Band	PCC Bandwidth [MHz]	PCC (UL) Channel	PCC (UL) Frequency [MHz]	Modulation	PCC UL# RB	PCC UL RB Offset	PCC (DL) Channel	PCC (DL) Frequency [MHz]	DL Ant. Config.	SCC Band	SCC Bandwidth [MHz]	SCC (DL) Channel	SCC (DL) Frequency [MHz]	DL Ant. Config.	LTE Tx.Power with DL CA Enabled (dBm)	LTE Single Carrier Tx Power (dBm)
CA_2A-2A	LTE B2	20	18700	1860	16QAM	1	99	700	1940	4x4 MIMO	LTE B2	20	1100	1980	4x4 MIMO	22.34	22.50
CA_2A-4A (2)	LTE B2	20	18700	1860	16QAM	1	99	700	1940	4x4 MIMO	LTE B4	20	2175	2132.5	4x4 MIMO	22.45	22.50
CA_2A-17A	LTE B2	10	18650	1855	64QAM	1	0	650	1935	4x4 MIMO	LTE B17	10	5790	740	2x2 MIMO	22.49	22.49
CA_2A-30A	LTE B2	20	18700	1860	16QAM	1	99	700	1940	4x4 MIMO	LTE B30	10	9820	2355	4x4 MIMO	22.38	22.50
CA_2A-66A	LTE B2	20	18700	1860	16QAM	1	99	700	1940	4x4 MIMO	LTE B66	20	66786	2145	4x4 MIMO	22.31	22.50

Table I-25
LTE Band 25 Additional Grip Sensor Reduced Output Powers – 2 Component Carriers

	PCC										SCC					Power	
Combination	PCC Band	PCC Bandwidth [MHz]	PCC (UL) Channel	PCC (UL) Frequency [MHz]	Modulation	PCC UL# RB	PCC UL RB Offset	PCC (DL) Channel	PCC (DL) Frequency [MHz]	DL Ant. Config.	SCC Band	SCC Bandwidth [MHz]	SCC (DL) Channel	SCC (DL) Frequency [MHz]	DL Ant. Config.	LTE Tx.Power with DL CA Enabled (dBm)	LTE Single Carrier Tx Power (dBm)
CA_25A-25A (1)	LTE B25	20	26140	1860	16QAM	1	99	8140	1940	4x4 MIMO	LTE B25	20	8590	1985	4x4 MIMO	22.28	22.50
CA_25A-41A	LTE B25	20	26140	1860	16QAM	1	99	8140	1940	4x4 MIMO	LTE B41	20	40620	2593	2x2 MIMO	22.12	22.50
CA_25A-41A	LTE B25	20	26140	1860	16QAM	1	99	8140	1940	2x2 MIMO	LTE B41	20	40620	2593	4x4 MIMO	22.06	22.50

Table I-26
LTE Band 30 Ant A Additional Grip Sensor Reduced Output Powers – 2 Component Carriers

	PCC										SCC					Power	
Combination	PCC Band	PCC Bandwidth [MHz]	PCC (UL) Channel	PCC (UL) Frequency [MHz]	Modulation	PCC UL# RB	PCC UL RB Offset	PCC (DL) Channel	PCC (DL) Frequency [MHz]	DL Ant. Config.	SCC Band	SCC Bandwidth [MHz]	SCC (DL) Channel	SCC (DL) Frequency [MHz]	DL Ant. Config.	LTE Tx.Power with DL CA Enabled (dBm)	LTE Ant. A Tx Power (dBm)
CA_2A-30A	LTE B30 AntA	10	27710	2310	16QAM	1	0	9820	2355	4x4 MIMO	LTE B2	20	900	1960	4x4 MIMO	21.40	21.50

Table I-27
LTE Band 41 PC2 Additional Grip Sensor Reduced Output Powers – 2 Component Carriers

	PCC										SCC					Power	
Combination	PCC Band	PCC Bandwidth [MHz]	PCC (UL) Channel	PCC (UL) Frequency [MHz]	Modulation	PCC UL# RB	PCC UL RB Offset	PCC (DL) Channel	PCC (DL) Frequency [MHz]	DL Ant. Config.	SCC Band	SCC Bandwidth [MHz]	SCC (DL) Channel	SCC (DL) Frequency [MHz]	DL Ant. Config.	LTE Tx.Power with DL CA Enabled (dBm)	LTE Single Carrier Tx Power (dBm)
CA_41A-41A (1)	LTE B41 PC2	15	40185	2549.5	16QAM	1	0	40185	2549.5	4x4 MIMO	LTE B41 PC2	20	41490	2680	2x2 MIMO	24.44	24.50
CA_41A-41A (1)	LTE B41 PC2	15	40185	2549.5	16QAM	1	0	40185	2549.5	2x2 MIMO	LTE B41 PC2	20	41490	2680	4x4 MIMO	24.39	24.50
CA_41A-41A (1)	LTE B41 PC2	15	40185	2549.5	16QAM	1	0	40185	2549.5	4x4 MIMO	LTE B41 PC2	20	41490	2680	4x4 MIMO	24.42	24.50

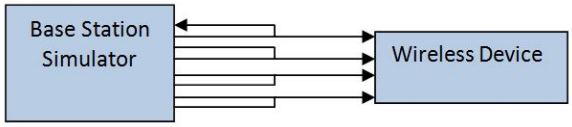


Figure I-2
Power Measurement Setup

I.3 Carrier Aggregation Scenarios with 3 Component Carriers with 4x4 Downlink MIMO

Table I-28
LTE Band 71 Additional Maximum Output Powers – 3 Component Carriers

	PCC										SCC 1					SCC 2					Power	
Combination	PCC Band	PCC Bandwidth [MHz]	PCC (UL) Channel	PCC (UL) Frequency [MHz]	Modulation	PCC UL# RB	PCC UL RB Offset	PCC (DL) Channel	PCC (DL) Frequency [MHz]	DL Ant. Config.	SCC Band	SCC Bandwidth [MHz]	SCC (DL) Channel	SCC (DL) Frequency [MHz]	DL Ant. Config.	SCC Band	SCC Bandwidth [MHz]	SCC (DL) Channel	SCC (DL) Frequency [MHz]	DL Ant. Config.	LTE Tx.Power with DL CA Enabled (dBm)	LTE Single Carrier Tx Power (dBm)
CA_2A-2A-71A	LTE B71	20	133297	680.5	QPSK	1	50	68761	634.5	2x2 MIMO	LTE B2	20	900	1960	4x4 MIMO	LTE B2	20	700	1940	2x2 MIMO	24.54	24.59
CA_2A-4A-71A	LTE B71	20	133297	680.5	QPSK	1	50	68761	634.5	2x2 MIMO	LTE B2	20	900	1960	4x4 MIMO	LTE B4	20	2175	2132.5	2x2 MIMO	24.53	24.59
CA_2A-4A-71A	LTE B71	20	133297	680.5	QPSK	1	50	68761	634.5	2x2 MIMO	LTE B2	20	900	1960	2x2 MIMO	LTE B4	20	2175	2132.5	4x4 MIMO	24.61	24.59
CA_2A-66A-71A	LTE B71	20	133297	680.5	QPSK	1	50	68761	634.5	2x2 MIMO	LTE B2	20	900	1960	4x4 MIMO	LTE B66	20	66786	2145	2x2 MIMO	24.61	24.59
CA_2A-66A-71A	LTE B71	20	133297	680.5	QPSK	1	50	68761	634.5	2x2 MIMO	LTE B2	20	900	1960	2x2 MIMO	LTE B66	20	66786	2145	4x4 MIMO	24.51	24.59
CA_4A-4A-71A	LTE B71	20	133297	680.5	QPSK	1	50	68761	634.5	2x2 MIMO	LTE B4	20	2175	2132.5	4x4 MIMO	LTE B4	10	2350	2150	2x2 MIMO	24.59	24.59
CA_66C-71A	LTE B71	20	133297	680.5	QPSK	1	50	68761	634.5	2x2 MIMO	LTE B66	20	66786	2145	4x4 MIMO	LTE B66	20	66984	2164.8	4x4 MIMO	24.76	24.59
CA_66A-66A-71A	LTE B71	20	133297	680.5	QPSK	1	50	68761	634.5	2x2 MIMO	LTE B66	20	66786	2145	4x4 MIMO	LTE B66	20	67236	2190	2x2 MIMO	24.57	24.59

Table I-29
LTE Band 12 Additional Maximum Output Powers – 3 Component Carriers

	PCC										SCC 1					SCC 2					Power	
Combination	PCC Band	PCC Bandwidth [MHz]	PCC (UL) Channel	PCC (UL) Frequency [MHz]	Modulation	PCC UL# RB	PCC UL RB Offset	PCC (DL) Channel	PCC (DL) Frequency [MHz]	DL Ant. Config.	SCC Band	SCC Bandwidth [MHz]	SCC (DL) Channel	SCC (DL) Frequency [MHz]	DL Ant. Config.	SCC Band	SCC Bandwidth [MHz]	SCC (DL) Channel	SCC (DL) Frequency [MHz]	DL Ant. Config.	LTE Tx.Power with DL CA Enabled (dBm)	LTE Single Carrier Tx Power (dBm)
CA_2A-2A-12A	LTE B12	10	23095	707.5	QPSK	1	25	5095	737.5	2x2 MIMO	LTE B2	20	900	1960	4x4 MIMO	LTE B2	20	700	1940	2x2 MIMO	24.32	24.26
CA_2A-4A-12A	LTE B12	10	23095	707.5	QPSK	1	25	5095	737.5	2x2 MIMO	LTE B2	20	900	1960	4x4 MIMO	LTE B4	20	2175	2132.5	2x2 MIMO	24.30	24.26
CA_2A-4A-12A	LTE B12	10	23095	707.5	QPSK	1	25	5095	737.5	2x2 MIMO	LTE B2	20	900	1960	2x2 MIMO	LTE B4	20	2175	2132.5	4x4 MIMO	24.33	24.26
CA_2A-7A-12A	LTE B12	10	23095	707.5	QPSK	1	25	5095	737.5	2x2 MIMO	LTE B2	20	900	1960	4x4 MIMO	LTE B7	20	3100	2655	2x2 MIMO	24.45	24.26
CA_2A-7A-12A	LTE B12	10	23095	707.5	QPSK	1	25	5095	737.5	2x2 MIMO	LTE B2	20	900	1960	2x2 MIMO	LTE B7	20	3100	2655	4x4 MIMO	24.43	24.26
CA_2A-12A-30A	LTE B12	10	23095	707.5	QPSK	1	25	5095	737.5	2x2 MIMO	LTE B2	20	900	1960	4x4 MIMO	LTE B30	10	9820	2355	2x2 MIMO	24.49	24.26
CA_2A-12A-30A	LTE B12	10	23095	707.5	QPSK	1	25	5095	737.5	2x2 MIMO	LTE B2	20	900	1960	2x2 MIMO	LTE B30	10	9820	2355	4x4 MIMO	24.51	24.26
CA_2A-12A-66A	LTE B12	10	23095	707.5	QPSK	1	25	5095	737.5	2x2 MIMO	LTE B2	20	900	1960	4x4 MIMO	LTE B66	20	66786	2145	2x2 MIMO	24.31	24.26
CA_2A-12A-66A	LTE B12	10	23095	707.5	QPSK	1	25	5095	737.5	2x2 MIMO	LTE B2	20	900	1960	2x2 MIMO	LTE B66	20	66786	2145	4x4 MIMO	24.36	24.26
CA_4A-4A-12A	LTE B12	10	23095	707.5	QPSK	1	25	5095	737.5	2x2 MIMO	LTE B4	20	2175	2132.5	4x4 MIMO	LTE B4	10	2350	2150	2x2 MIMO	24.36	24.26
CA_12A-66C	LTE B12	10	23095	707.5	QPSK	1	25	5095	737.5	2x2 MIMO	LTE B66	20	66786	2145	4x4 MIMO	LTE B66	20	66984	2164.8	4x4 MIMO	24.30	24.26
CA_12A-66A-66A	LTE B12	10	23095	707.5	QPSK	1	25	5095	737.5	2x2 MIMO	LTE B66	20	66786	2145	4x4 MIMO	LTE B66	20	67236	2190	2x2 MIMO	24.28	24.26

Table I-30
LTE Band 13 Additional Maximum Output Powers – 3 Component Carriers

	PCC										SCC 1					SCC 2					Power	
Combination	PCC Band	PCC Bandwidth [MHz]	PCC (UL) Channel	PCC (UL) Frequency [MHz]	Modulation	PCC UL# RB	PCC UL RB Offset	PCC (DL) Channel	PCC (DL) Frequency [MHz]	DL Ant. Config.	SCC Band	SCC Bandwidth [MHz]	SCC (DL) Channel	SCC (DL) Frequency [MHz]	DL Ant. Config.	SCC Band	SCC Bandwidth [MHz]	SCC (DL) Channel	SCC (DL) Frequency [MHz]	DL Ant. Config.	LTE Tx.Power with DL CA Enabled (dBm)	LTE Single Carrier Tx Power (dBm)
CA_2A-2A-13A	LTE B13	10	23230	782	QPSK	1	0	5230	751	2x2 MIMO	LTE B2	20	900	1960	4x4 MIMO	LTE B2	20	700	1940	2x2 MIMO	24.58	24.58
CA_2A-4A-13A	LTE B13	10	23230	782	QPSK	1	0	5230	751	2x2 MIMO	LTE B2	20	900	1960	4x4 MIMO	LTE B4	20	2175	2132.5	2x2 MIMO	24.54	24.58
CA_2A-4A-13A	LTE B13	10	23230	782	QPSK	1	0	5230	751	2x2 MIMO	LTE B2	20	900	1960	2x2 MIMO	LTE B4	20	2175	2132.5	4x4 MIMO	24.57	24.58
CA_2A-13A-66A	LTE B13	10	23230	782	QPSK	1	0	5230	751	2x2 MIMO	LTE B2	20	900	1960	4x4 MIMO	LTE B66	20	66786	2145	2x2 MIMO	24.54	24.58
CA_2A-13A-66A	LTE B13	10	23230	782	QPSK	1	0	5230	751	2x2 MIMO	LTE B2	20	900	1960	2x2 MIMO	LTE B66	20	66786	2145	4x4 MIMO	24.68	24.58
CA_4A-4A-13A	LTE B13	10	23230	782	QPSK	1	0	5230	751	2x2 MIMO	LTE B4	20	2175	2132.5	4x4 MIMO	LTE B4	10	2350	2150	2x2 MIMO	24.71	24.58
CA_13A-66A-66A	LTE B13	10	23230	782	QPSK	1	0	5230	751	2x2 MIMO	LTE B66	20	66786	2145	4x4 MIMO	LTE B66	20	67236	2190	2x2 MIMO	24.67	24.58

Table I-31
LTE Band 5 Additional Maximum Output Powers – 3 Component Carriers

	PCC										SCC 1					SCC 2					Power	
Combination	PCC Band	PCC Bandwidth [MHz]	PCC (UL) Channel	PCC (UL) Frequency [MHz]	Modulation	PCC UL# RB	PCC UL RB Offset	PCC (DL) Channel	PCC (DL) Frequency [MHz]	DL Ant. Config.	SCC Band	SCC Bandwidth [MHz]	SCC (DL) Channel	SCC (DL) Frequency [MHz]	DL Ant. Config.	SCC Band	SCC Bandwidth [MHz]	SCC (DL) Channel	SCC (DL) Frequency [MHz]	DL Ant. Config.	LTE Tx.Power with DL CA Enabled (dBm)	LTE Single Carrier Tx Power (dBm)
CA_2A-2A-5A	LTE B5	10	20525	836.5	QPSK	1	0	2525	881.5	2x2 MIMO	LTE B2	20	900	1960	4x4 MIMO	LTE B2	20	700	1940	2x2 MIMO	24.46	24.45
CA_2A-4A-5A	LTE B5	10	20525	836.5	QPSK	1	0	2525	881.5	2x2 MIMO	LTE B2	20	900	1960	4x4 MIMO	LTE B4	20	2175	2132.5	2x2 MIMO	24.43	24.45
CA_2A-4A-5A	LTE B5	10	20525	836.5	QPSK	1	0	2525	881.5	2x2 MIMO	LTE B2	20	900	1960	2x2 MIMO	LTE B4	20	2175	2132.5	4x4 MIMO	24.43	24.45
CA_2A-5A-30A	LTE B5	10	20525	836.5	QPSK	1	0	2525	881.5	2x2 MIMO	LTE B2	20	900	1960	4x4 MIMO	LTE B30	10	9820	2355	2x2 MIMO	24.44	24.45
CA_2A-5A-30A	LTE B5	10	20525	836.5	QPSK	1	0	2525	881.5	2x2 MIMO	LTE B2	20	900	1960	2x2 MIMO	LTE B30	10	9820	2355	4x4 MIMO	24.46	24.45
CA_2A-5A-66A	LTE B5	10	20525	836.5	QPSK	1	0	2525	881.5	2x2 MIMO	LTE B2	20	900	1960	4x4 MIMO	LTE B66	20	66786	2145	2x2 MIMO	24.41	24.45
CA_2A-5A-66A	LTE B5	10	20525	836.5	QPSK	1	0	2525	881.5	2x2 MIMO	LTE B2	20	900	1960	2x2 MIMO	LTE B66	20	66786	2145	4x4 MIMO	24.42	24.45
CA_4A-4A-5A	LTE B5	10	20525	836.5	QPSK	1	0	2525	881.5	2x2 MIMO	LTE B4	20	2175	2132.5	4x4 MIMO	LTE B4	10	2350	2150	2x2 MIMO	24.48	24.45
CA_4A-5A-30A	LTE B5	10	20525	836.5	QPSK	1	0	2525	881.5	2x2 MIMO	LTE B4	20	2175	2132.5	2x2 MIMO	LTE B30	10	9820	2355	4x4 MIMO	24.43	24.45
CA_5A-30A-66A	LTE B5	10	20525	836.5	QPSK	1	0	2525	881.5	2x2 MIMO	LTE B30	10	9820	2355	4x4 MIMO	LTE B66	20	66786	2145	2x2 MIMO	24.44	24.45
CA_5A-30A-66A	LTE B5	10	20525	836.5	QPSK	1	0	2525	881.5	2x2 MIMO	LTE B30	10	9820	2355	2x2 MIMO	LTE B66	20	66786	2145	4x4 MIMO	24.36	24.45
CA_5A-66A-66A	LTE B5	10	20525	836.5	QPSK	1	0	2525	881.5	2x2 MIMO	LTE B66	20	66786	2145	4x4 MIMO	LTE B66	20	67236	2190	2x2 MIMO	24.41	24.45

Table I-32
LTE Band 26 Additional Maximum Output Powers – 3 Component Carriers

	PCC										SCC 1					SCC 2					Power	
Combination	PCC Band	PCC Bandwidth [MHz]	PCC (UL) Channel	PCC (UL) Frequency [MHz]	Modulation	PCC UL# RB	PCC UL RB Offset	PCC (DL) Channel	PCC (DL) Frequency [MHz]	DL Ant. Config.	SCC Band	SCC Bandwidth [MHz]	SCC (DL) Channel	SCC (DL) Frequency [MHz]	DL Ant. Config.	SCC Band	SCC Bandwidth [MHz]	SCC (DL) Channel	SCC (DL) Frequency [MHz]	DL Ant. Config.	LTE Tx.Power with DL CA Enabled (dBm)	LTE Single Carrier Tx Power (dBm)
CA_25A-25A-26A	LTE B26	3	26865	831.5	QPSK	1	7	8865	876.5	2x2 MIMO	LTE B25	20	8365	1962.5	4x4 MIMO	LTE B25	20	8590	1985	2x2 MIMO	24.32	24.39
CA_26A-41C	LTE B26	15	26865	831.5	QPSK	1	36	8865	876.5	2x2 MIMO	LTE B41	20	40620	2593	4x4 MIMO	LTE B41	20	40422	2573.2	4x4 MIMO	24.46	24.48

Table I-33
LTE Band 4 Additional Maximum Output Powers – 3 Component Carriers

	PCC										SCC 1					SCC 2					Power	
Combination	PCC Band	PCC Bandwidth [MHz]	PCC (UL) Channel	PCC (UL) Frequency [MHz]	Modulation	PCC UL# RB	PCC UL RB Offset	PCC (DL) Channel	PCC (DL) Frequency [MHz]	DL Ant. Config.	SCC Band	SCC Bandwidth [MHz]	SCC (DL) Channel	SCC (DL) Frequency [MHz]	DL Ant. Config.	SCC Band	SCC Bandwidth [MHz]	SCC (DL) Channel	SCC (DL) Frequency [MHz]	DL Ant. Config.	LTE Tx.Power with DL CA Enabled (dBm)	LTE Single Carrier Tx Power (dBm)
CA_2A-2A-4A	LTE B4	20	20300	1745	QPSK	1	0	2300	2145	2x2 MIMO	LTE B2	20	900	1960	4x4 MIMO	LTE B2	20	700	1940	2x2 MIMO	24.41	24.40
CA_2A-2A-4A	LTE B4	20	20300	1745	QPSK	1	0	2300	2145	4x4 MIMO	LTE B2	20	900	1960	2x2 MIMO	LTE B2	20	700	1940	2x2 MIMO	24.34	24.40
CA_2A-4A-4A	LTE B4	20	20300	1745	QPSK	1	0	2300	2145	2x2 MIMO	LTE B4	20	2050	2120	2x2 MIMO	LTE B2	20	900	1960	2x2 MIMO	24.41	24.40
CA_2A-4A-4A	LTE B4	20	20300	1745	QPSK	1	0	2300	2145	4x4 MIMO	LTE B4	20	2050	2120	2x2 MIMO	LTE B2	20	900	1960	2x2 MIMO	24.39	24.40
CA_2A-4A-4A	LTE B4	20	20300	1745	QPSK	1	0	2300	2145	2x2 MIMO	LTE B4	20	2050	2120	4x4 MIMO	LTE B2	20	900	1960	2x2 MIMO	24.41	24.40
CA_2A-4A-5A	LTE B4	20	20300	1745	QPSK	1	0	2300	2145	2x2 MIMO	LTE B2	20	900	1960	4x4 MIMO	LTE B5	10	2525	881.5	2x2 MIMO	24.42	24.40
CA_2A-4A-5A	LTE B4	20	20300	1745	QPSK	1	0	2300	2145	4x4 MIMO	LTE B2	20	900	1960	2x2 MIMO	LTE B5	10	2525	881.5	2x2 MIMO	24.39	24.40
CA_2A-4A-7A	LTE B4	20	20300	1745	QPSK	1	0	2300	2145	2x2 MIMO	LTE B2	20	900	1960	4x4 MIMO	LTE B7	20	3100	2655	2x2 MIMO	24.23	24.40
CA_2A-4A-7A	LTE B4	20	20300	1745	QPSK	1	0	2300	2145	4x4 MIMO	LTE B2	20	900	1960	2x2 MIMO	LTE B7	20	3100	2655	2x2 MIMO	24.22	24.40
CA_2A-4A-7A	LTE B4	20	20300	1745	QPSK	1	0	2300	2145	2x2 MIMO	LTE B2	20	900	1960	2x2 MIMO	LTE B7	20	3100	2655	4x4 MIMO	24.19	24.40
CA_2A-4A-12A	LTE B4	20	20300	1745	QPSK	1	0	2300	2145	2x2 MIMO	LTE B2	20	900	1960	4x4 MIMO	LTE B12	10	5095	737.5	2x2 MIMO	24.40	24.40
CA_2A-4A-12A	LTE B4	20	20300	1745	QPSK	1	0	2300	2145	4x4 MIMO	LTE B2	20	900	1960	2x2 MIMO	LTE B12	10	5095	737.5	2x2 MIMO	24.41	24.40
CA_2A-4A-13A	LTE B4	20	20300	1745	QPSK	1	0	2300	2145	4x4 MIMO	LTE B2	20	900	1960	2x2 MIMO	LTE B13	10	5230	751	2x2 MIMO	24.44	24.40
CA_2A-4A-29A	LTE B4	20	20300	1745	QPSK	1	0	2300	2145	2x2 MIMO	LTE B2	20	900	1960	2x2 MIMO	LTE B29	10	9715	722.5	2x2 MIMO	24.40	24.40
CA_2A-4A-30A	LTE B4	20	20300	1745	QPSK	1	0	2300	2145	2x2 MIMO	LTE B2	20	900	1960	2x2 MIMO	LTE B30	10	9820	2355	4x4 MIMO	24.10	24.40
CA_2A-4A-71A	LTE B4	20	20300	1745	QPSK	1	0	2300	2145	2x2 MIMO	LTE B2	20	900	1960	4x4 MIMO	LTE B71	20	68761	634.5	2x2 MIMO	24.41	24.40
CA_2A-4A-71A	LTE B4	20	20300	1745	QPSK	1	0	2300	2145	4x4 MIMO	LTE B2	20	900	1960	2x2 MIMO	LTE B71	20	68761	634.5	2x2 MIMO	24.41	24.40
CA_4A-4A-5A	LTE B4	20	20300	1745	QPSK	1	0	2300	2145	4x4 MIMO	LTE B4	20	2050	2120	2x2 MIMO	LTE B5	10	2525	881.5	2x2 MIMO	24.43	24.40
CA_4A-4A-5A	LTE B4	20	20300	1745	QPSK	1	0	2300	2145	2x2 MIMO	LTE B4	20	2050	2120	4x4 MIMO	LTE B5	10	2525	881.5	2x2 MIMO	24.43	24.40
CA_4A-4A-12A	LTE B4	20	20300	1745	QPSK	1	0	2300	2145	4x4 MIMO	LTE B4	20	2050	2120	2x2 MIMO	LTE B12	10	5095	737.5	2x2 MIMO	24.45	24.40
CA_4A-4A-12A	LTE B4	20	20300	1745	QPSK	1	0	2300	2145	2x2 MIMO	LTE B4	20	2050	2120	4x4 MIMO	LTE B12	10	5095	737.5	2x2 MIMO	24.38	24.40
CA_4A-4A-13A	LTE B4	20	20300	1745	QPSK	1	0	2300	2145	4x4 MIMO	LTE B4	20	2050	2120	2x2 MIMO	LTE B13	10	5230	751	2x2 MIMO	24.44	24.40
CA_4A-4A-13A	LTE B4	20	20300	1745	QPSK	1	0	2300	2145	2x2 MIMO	LTE B4	20	2050	2120	4x4 MIMO	LTE B13	10	5230	751	2x2 MIMO	24.42	24.40
CA_4A-4A-29A	LTE B4	20	20300	1745	QPSK	1	0	2300	2145	4x4 MIMO	LTE B4	20	2050	2120	2x2 MIMO	LTE B29	10	9715	722.5	2x2 MIMO	24.44	24.40
CA_4A-4A-29A	LTE B4	20	20300	1745	QPSK	1	0	2300	2145	2x2 MIMO	LTE B4	20	2050	2120	4x4 MIMO	LTE B29	10	9715	722.5	2x2 MIMO	24.40	24.40
CA_4A-4A-71A	LTE B4	20	20300	1745	QPSK	1	0	2300	2145	4x4 MIMO	LTE B4	20	2050	2120	2x2 MIMO	LTE B71	20	68761	634.5	2x2 MIMO	24.41	24.40
CA_4A-4A-71A	LTE B4	20	20300	1745	QPSK	1	0	2300	2145	2x2 MIMO	LTE B4	20	2050	2120	4x4 MIMO	LTE B71	20	68761	634.5	2x2 MIMO	24.43	24.40
CA_4A-5A-30A	LTE B4	20	20300	1745	QPSK	1	0	2300	2145	2x2 MIMO	LTE B5	10	2525	881.5	2x2 MIMO	LTE B30	10	9820	2355	4x4 MIMO	24.10	24.40
CA_4A-7A-7A	LTE B4	20	20300	1745	QPSK	1	0	2300	2145	4x4 MIMO	LTE B7	20	3100	2655	2x2 MIMO	LTE B7	20	2850	2630	2x2 MIMO	24.22	24.40
CA_4A-7A-7A	LTE B4	20	20300	1745	QPSK	1	0	2300	2145	2x2 MIMO	LTE B7	20	3100	2655	4x4 MIMO	LTE B7	20	2850	2630	2x2 MIMO	24.13	24.40
CA_4A-7A-12A	LTE B4	20	20300	1745	QPSK	1	0	2300	2145	4x4 MIMO	LTE B7	20	3100	2655	2x2 MIMO	LTE B12	10	5095	737.5	2x2 MIMO	24.14	24.40
CA_4A-7A-12A	LTE B4	20	20300	1745	QPSK	1	0	2300	2145	2x2 MIMO	LTE B7	20	3100	2655	4x4 MIMO	LTE B12	10	5095	737.5	2x2 MIMO	24.18	24.40
CA_4A-12A-30A	LTE B4	20	20300	1745	QPSK	1	0	2300	2145	2x2 MIMO	LTE B12	10	5095	737.5	2x2 MIMO	LTE B30	10	9820	2355	4x4 MIMO	24.06	24.40
CA_4A-29A-30A	LTE B4	20	20300	1745	QPSK	1	0	2300	2145	2x2 MIMO	LTE B29	10	9715	722.5	2x2 MIMO	LTE B30	10	9820	2355	4x4 MIMO	24.07	24.40

Table I-34
LTE Band 66 Additional Maximum Output Powers – 3 Component Carriers

	PCC										SCC 1					SCC 2					Power	
Combination	PCC Band	PCC Bandwidth [MHz]	PCC (UL) Channel	PCC (UL) Frequency [MHz]	Modulation	PCC UL# RB	PCC UL RB Offset	PCC (DL) Channel	PCC (DL) Frequency [MHz]	DL Ant. Config.	SCC Band	SCC Bandwidth [MHz]	SCC (DL) Channel	SCC (DL) Frequency [MHz]	DL Ant. Config.	SCC Band	SCC Bandwidth [MHz]	SCC (DL) Channel	SCC (DL) Frequency [MHz]	DL Ant. Config.	LTE Tx.Power with DL CA Enabled (dBm)	LTE Single Carrier Tx Power (dBm)
CA_2C-66A	LTE B66	20	132572	1770	QPSK	1	0	67036	2170	2x2 MIMO	LTE B2	20	900	1960	4x4 MIMO	LTE B2	20	702	1940.2	4x4 MIMO	24.47	24.40
CA_2C-66A	LTE B66	20	132572	1770	QPSK	1	0	67036	2170	4x4 MIMO	LTE B2	20	900	1960	2x2 MIMO	LTE B2	20	702	1940.2	2x2 MIMO	24.42	24.40
CA_2C-66A	LTE B66	20	132572	1770	QPSK	1	0	67036	2170	4x4 MIMO	LTE B2	20	900	1960	4x4 MIMO	LTE B2	20	702	1940.2	4x4 MIMO	24.39	24.40
CA_2A-2A-66A	LTE B66	20	132572	1770	QPSK	1	0	67036	2170	2x2 MIMO	LTE B2	20	900	1960	4x4 MIMO	LTE B2	20	700	1940	2x2 MIMO	24.42	24.40
CA_2A-2A-66A	LTE B66	20	132572	1770	QPSK	1	0	67036	2170	4x4 MIMO	LTE B2	20	900	1960	2x2 MIMO	LTE B2	20	700	1940	2x2 MIMO	24.40	24.40
CA_2A-5A-66A	LTE B66	20	132572	1770	QPSK	1	0	67036	2170	2x2 MIMO	LTE B2	20	900	1960	4x4 MIMO	LTE B5	10	2525	881.5	2x2 MIMO	24.46	24.40
CA_2A-5A-66A	LTE B66	20	132572	1770	QPSK	1	0	67036	2170	4x4 MIMO	LTE B2	20	900	1960	2x2 MIMO	LTE B5	10	2525	881.5	2x2 MIMO	24.41	24.40
CA_2A-12A-66A	LTE B66	20	132572	1770	QPSK	1	0	67036	2170	2x2 MIMO	LTE B2	20	900	1960	4x4 MIMO	LTE B12	10	5095	737.5	2x2 MIMO	24.44	24.40
CA_2A-12A-66A	LTE B66	20	132572	1770	QPSK	1	0	67036	2170	4x4 MIMO	LTE B2	20	900	1960	2x2 MIMO	LTE B12	10	5095	737.5	2x2 MIMO	24.43	24.40
CA_2A-13A-66A	LTE B66	20	132572	1770	QPSK	1	0	67036	2170	2x2 MIMO	LTE B2	20	900	1960	4x4 MIMO	LTE B13	10	5230	751	2x2 MIMO	24.48	24.40
CA_2A-13A-66A	LTE B66	20	132572	1770	QPSK	1	0	67036	2170	4x4 MIMO	LTE B2	20	900	1960	2x2 MIMO	LTE B13	10	5230	751	2x2 MIMO	24.44	24.40
CA_2A-30A-66A	LTE B66	20	132572	1770	QPSK	1	0	67036	2170	2x2 MIMO	LTE B2	20	900	1960	4x4 MIMO	LTE B30	10	9820	2355	2x2 MIMO	24.58	24.40
CA_2A-30A-66A	LTE B66	20	132572	1770	QPSK	1	0	67036	2170	4x4 MIMO	LTE B2	20	900	1960	2x2 MIMO	LTE B30	10	9820	2355	2x2 MIMO	24.60	24.40
CA_2A-66B	LTE B66	15	132597	1772.5	QPSK	1	0	67061	2172.5	4x4 MIMO	LTE B66	5	66968	2163.2	4x4 MIMO	LTE B2	20	900	1960	4x4 MIMO	24.34	24.40
CA_2A-66C	LTE B66	20	132572	1770	QPSK	1	0	67036	2170	4x4 MIMO	LTE B66	20	66838	2150.2	4x4 MIMO	LTE B2	20	900	1960	4x4 MIMO	24.41	24.40
CA_2A-66A-66A	LTE B66	20	132572	1770	QPSK	1	0	67036	2170	2x2 MIMO	LTE B66	20	66536	2120	2x2 MIMO	LTE B2	20	900	1960	4x4 MIMO	24.45	24.40
CA_2A-66A-66A	LTE B66	20	132572	1770	QPSK	1	0	67036	2170	4x4 MIMO	LTE B66	20	66536	2120	2x2 MIMO	LTE B2	20	900	1960	2x2 MIMO	24.43	24.40
CA_2A-66A-66A	LTE B66	20	132572	1770	QPSK	1	0	67036	2170	2x2 MIMO	LTE B66	20	66536	2120	4x4 MIMO	LTE B2	20	900	1960	2x2 MIMO	24.41	24.40
CA_2A-66A-71A	LTE B66	20	132572	1770	QPSK	1	0	67036	2170	2x2 MIMO	LTE B2	20	900	1960	4x4 MIMO	LTE B71	20	68761	634.5	2x2 MIMO	24.43	24.40
CA_2A-66A-71A	LTE B66	20	132572	1770	QPSK	1	0	67036	2170	4x4 MIMO	LTE B2	20	900	1960	2x2 MIMO	LTE B71	20	68761	634.5	2x2 MIMO	24.46	24.40
CA_5A-30A-66A	LTE B66	20	132572	1770	QPSK	1	0	67036	2170	2x2 MIMO	LTE B5	10	2525	881.5	4x4 MIMO	LTE B30	10	9820	2355	4x4 MIMO	24.59	24.40
CA_5A-30A-66A	LTE B66	20	132572	1770	QPSK	1	0	67036	2170	4x4 MIMO	LTE B5	10	2525	881.5	2x2 MIMO	LTE B30	10	9820	2355	2x2 MIMO	24.57	24.40
CA_5A-66A-66A	LTE B66	20	132572	1770	QPSK	1	0	67036	2170	4x4 MIMO	LTE B66	20	66536	2120	2x2 MIMO	LTE B5	10	2525	881.5	2x2 MIMO	24.41	24.40
CA_5A-66A-66A	LTE B66	20	132572	1770	QPSK	1	0	67036	2170	2x2 MIMO	LTE B66	20	66536	2120	4x4 MIMO	LTE B5	10	2525	881.5	2x2 MIMO	24.45	24.40
CA_12A-66C	LTE B66	20	132572	1770	QPSK	1	0	67036	2170	4x4 MIMO	LTE B66	20	66838	2150.2	4x4 MIMO	LTE B12	10	5095	737.5	2x2 MIMO	24.45	24.40
CA_12A-66A-66A	LTE B66	20	132572	1770	QPSK	1	0	67036	2170	4x4 MIMO	LTE B66	20	66536	2120	2x2 MIMO	LTE B12	10	5095	737.5	2x2 MIMO	24.43	24.40
CA_12A-66A-66A	LTE B66	20	132572	1770	QPSK	1	0	67036	2170	2x2 MIMO	LTE B66	20	66536	2120	4x4 MIMO	LTE B12	10	5095	737.5	2x2 MIMO	24.48	24.40
CA_12A-30A-66A	LTE B66	20	132572	1770	QPSK	1	0	67036	2170	2x2 MIMO	LTE B12	10	5095	737.5	2x2 MIMO	LTE B30	10	9820	2355	4x4 MIMO	24.57	24.40
CA_12A-30A-66A	LTE B66	20	132572	1770	QPSK	1	0	67036	2170	4x4 MIMO	LTE B12	10	5095	737.5	2x2 MIMO	LTE B30	10	9820	2355	2x2 MIMO	24.58	24.40
CA_13A-66A-66A	LTE B66	20	132572	1770	QPSK	1	0	67036	2170	4x4 MIMO	LTE B66	20	66536	2120	2x2 MIMO	LTE B13	10	5230	751	2x2 MIMO	24.44	24.40
CA_13A-66A-66A	LTE B66	20	132572	1770	QPSK	1	0	67036	2170	2x2 MIMO	LTE B66	20	66536	2120	4x4 MIMO	LTE B13	10	5230	751	2x2 MIMO	24.40	24.40
CA_30A-66A-66A	LTE B66	20	132572	1770	QPSK	1	0	67036	2170	2x2 MIMO	LTE B66	20	66536	2120	2x2 MIMO	LTE B30	10	9820	2355	4x4 MIMO	24.57	24.40
CA_30A-66A-66A	LTE B66	20	132572	1770	QPSK	1	0	67036	2170	4x4 MIMO	LTE B66	20	66536	2120	2x2 MIMO	LTE B30	10	9820	2355	2x2 MIMO	24.57	24.40
CA_30A-66A-66A	LTE B66	20	132572	1770	QPSK	1	0	67036	2170	2x2 MIMO	LTE B66	20	66536	2120	4x4 MIMO	LTE B30	10	9820	2355	2x2 MIMO	24.57	24.40
CA_66D	LTE B66	20	132572	1770	QPSK	1	0	67036	2170	4x4 MIMO	LTE B66	20	66838	2150.2	4x4 MIMO	LTE B66	20	66640	2130.4	4x4 MIMO	24.43	24.40
CA_66A-66C	LTE B66	20	132572	1770	QPSK	1	0	67036	2170	4x4 MIMO	LTE B66	20	66734	2139.8	2x2 MIMO	LTE B66	20	66536	2120	2x2 MIMO	24.43	24.40
CA_66C-66A	LTE B66	20	132572	1770	QPSK	1	0	67036	2170	2x2 MIMO	LTE B66	20	66838	2150.2	2x2 MIMO	LTE B66	20	66536	2120	4x4 MIMO	24.42	24.40
CA_66A-66C	LTE B66	20	132572	1770	QPSK	1	0	67036	2170	2x2 MIMO	LTE B66	20	66734	2139.8	4x4 MIMO	LTE B66	20	66536	2120	4x4 MIMO	24.45	24.40
CA_66C-66A	LTE B66	20	132572	1770	QPSK	1	0	67036	2170	4x4 MIMO	LTE B66	20	66838	2150.2	4x4 MIMO	LTE B66	20	66536	2120	2x2 MIMO	24.42	24.40
CA_66A-66C	LTE B66	20	132572	1770	QPSK	1	0	67036	2170	4x4 MIMO	LTE B66	20	66734	2139.8	4x4 MIMO	LTE B66	20	66536	2120	4x4 MIMO	24.40	24.40
CA_66C-66A	LTE B66	20	132572	1770	QPSK	1	0	67036	2170	4x4 MIMO	LTE B66	20	66838	2150.2	4x4 MIMO	LTE B66	20	66536	2120	4x4 MIMO	24.41	24.40
CA_66C-71A	LTE B66	20	132572	1770	QPSK	1	0	67036	2170	4x4 MIMO	LTE B66	20	66838	2150.2	4x4 MIMO	LTE B71	20	68761	634.5	2x2 MIMO	24.40	24.40
CA_66A-66A-71A	LTE B66	20	132572	1770	QPSK	1	0	67036	2170	4x4 MIMO	LTE B66	20	66536	2120	4x4 MIMO	LTE B71	20	68761	634.5	2x2 MIMO	24.46	24.40
CA_66A-66A-71A	LTE B66	20	132572	1770	QPSK	1	0	67036	2170	2x2 MIMO	LTE B66	20	66536	2120	4x4 MIMO	LTE B71	20	68761	634.5	2x2 MIMO	24.45	24.40

Table I-35
LTE Band 2 Additional Maximum Output Powers – 3 Component Carriers

	PCC										SCC 1					SCC 2					Power	
Combination	PCC Band	PCC Bandwidth [MHz]	PCC (UL) Channel	PCC (UL) Frequency [MHz]	Modulation	PCC UL# RB	PCC UL RB Offset	PCC (DL) Channel	PCC (DL) Frequency [MHz]	DL Ant. Config.	SCC Band	SCC Bandwidth [MHz]	SCC (DL) Channel	SCC (DL) Frequency [MHz]	DL Ant. Config.	SCC Band	SCC Bandwidth [MHz]	SCC (DL) Channel	SCC (DL) Frequency [MHz]	DL Ant. Config.	LTE Tx.Power with DL CA Enabled (dBm)	LTE Single Carrier Tx Power (dBm)
CA_2A-2A-4A	LTE B2	10	18650	1855	QPSK	1	0	650	1935	4x4 MIMO	LTE B2	20	1100	1980	2x2 MIMO	LTE B4	20	2175	2132.5	2x2 MIMO	24.75	24.78
CA_2A-2A-4A	LTE B2	10	18650	1855	QPSK	1	0	650	1935	2x2 MIMO	LTE B2	20	1100	1980	4x4 MIMO	LTE B4	20	2175	2132.5	2x2 MIMO	24.81	24.78
CA_2A-2A-4A	LTE B2	10	18650	1855	QPSK	1	0	650	1935	2x2 MIMO	LTE B2	20	1100	1980	2x2 MIMO	LTE B4	20	2175	2132.5	4x4 MIMO	24.83	24.78
CA_2A-2A-5A	LTE B2	10	18650	1855	QPSK	1	0	650	1935	4x4 MIMO	LTE B2	20	1100	1980	2x2 MIMO	LTE B5	10	2525	881.5	2x2 MIMO	24.75	24.78
CA_2A-2A-5A	LTE B2	10	18650	1855	QPSK	1	0	650	1935	2x2 MIMO	LTE B2	20	1100	1980	4x4 MIMO	LTE B5	10	2525	881.5	2x2 MIMO	24.82	24.78
CA_2A-2A-12A	LTE B2	10	18650	1855	QPSK	1	0	650	1935	4x4 MIMO	LTE B2	20	1100	1980	2x2 MIMO	LTE B12	10	5095	737.5	2x2 MIMO	24.70	24.78
CA_2A-2A-12A	LTE B2	10	18650	1855	QPSK	1	0	650	1935	2x2 MIMO	LTE B2	20	1100	1980	4x4 MIMO	LTE B12	10	5095	737.5	2x2 MIMO	24.81	24.78
CA_2A-2A-13A	LTE B2	10	18650	1855	QPSK	1	0	650	1935	4x4 MIMO	LTE B2	20	1100	1980	2x2 MIMO	LTE B13	10	5230	751	2x2 MIMO	24.84	24.78
CA_2A-2A-13A	LTE B2	10	18650	1855	QPSK	1	0	650	1935	2x2 MIMO	LTE B2	20	1100	1980	4x4 MIMO	LTE B13	10	5230	751	2x2 MIMO	24.75	24.78
CA_2A-2A-30A	LTE B2	10	18650	1855	QPSK	1	0	650	1935	4x4 MIMO	LTE B2	20	1100	1980	2x2 MIMO	LTE B30	10	9820	2355	2x2 MIMO	24.70	24.78
CA_2A-2A-30A	LTE B2	10	18650	1855	QPSK	1	0	650	1935	2x2 MIMO	LTE B2	20	1100	1980	4x4 MIMO	LTE B30	10	9820	2355	2x2 MIMO	24.74	24.78
CA_2A-2A-30A	LTE B2	10	18650	1855	QPSK	1	0	650	1935	2x2 MIMO	LTE B2	20	1100	1980	2x2 MIMO	LTE B30	10	9820	2355	4x4 MIMO	24.78	24.78
CA_2C-66A	LTE B2	10	18650	1855	QPSK	1	0	650	1935	4x4 MIMO	LTE B2	20	794	1949.4	4x4 MIMO	LTE B66	20	66786	2145	2x2 MIMO	24.86	24.78
CA_2C-66A	LTE B2	10	18650	1855	QPSK	1	0	650	1935	2x2 MIMO	LTE B2	20	794	1949.4	2x2 MIMO	LTE B66	20	66786	2145	4x4 MIMO	24.84	24.78
CA_2C-66A	LTE B2	10	18650	1855	QPSK	1	0	650	1935	4x4 MIMO	LTE B2	20	794	1949.4	4x4 MIMO	LTE B66	20	66786	2145	4x4 MIMO	24.93	24.78
CA_2A-2A-66A	LTE B2	10	18650	1855	QPSK	1	0	650	1935	4x4 MIMO	LTE B2	20	1100	1980	2x2 MIMO	LTE B66	20	66786	2145	2x2 MIMO	24.74	24.78
CA_2A-2A-66A	LTE B2	10	18650	1855	QPSK	1	0	650	1935	2x2 MIMO	LTE B2	20	1100	1980	4x4 MIMO	LTE B66	20	66786	2145	2x2 MIMO	24.71	24.78
CA_2A-2A-66A	LTE B2	10	18650	1855	QPSK	1	0	650	1935	2x2 MIMO	LTE B2	20	1100	1980	2x2 MIMO	LTE B66	20	66786	2145	4x4 MIMO	24.80	24.78
CA_2A-2A-71A	LTE B2	10	18650	1855	QPSK	1	0	650	1935	4x4 MIMO	LTE B2	20	1100	1980	2x2 MIMO	LTE B71	20	68761	634.5	2x2 MIMO	24.76	24.78
CA_2A-2A-71A	LTE B2	10	18650	1855	QPSK	1	0	650	1935	2x2 MIMO	LTE B2	20	1100	1980	4x4 MIMO	LTE B71	20	68761	634.5	2x2 MIMO	24.80	24.78
CA_2A-4A-4A	LTE B2	10	18650	1855	QPSK	1	0	650	1935	4x4 MIMO	LTE B4	20	2175	2132.5	2x2 MIMO	LTE B4	10	2350	2150	2x2 MIMO	24.79	24.78
CA_2A-4A-4A	LTE B2	10	18650	1855	QPSK	1	0	650	1935	2x2 MIMO	LTE B4	20	2175	2132.5	4x4 MIMO	LTE B4	10	2350	2150	2x2 MIMO	24.81	24.78
CA_2A-4A-5A	LTE B2	10	18650	1855	QPSK	1	0	650	1935	4x4 MIMO	LTE B4	20	2175	2132.5	2x2 MIMO	LTE B5	10	2525	881.5	2x2 MIMO	24.78	24.78
CA_2A-4A-5A	LTE B2	10	18650	1855	QPSK	1	0	650	1935	2x2 MIMO	LTE B4	20	2175	2132.5	4x4 MIMO	LTE B5	10	2525	881.5	2x2 MIMO	24.78	24.78
CA_2A-4A-7A	LTE B2	10	18650	1855	QPSK	1	0	650	1935	4x4 MIMO	LTE B4	20	2175	2132.5	2x2 MIMO	LTE B7	20	3100	2655	2x2 MIMO	25.02	24.78
CA_2A-4A-7A	LTE B2	10	18650	1855	QPSK	1	0	650	1935	2x2 MIMO	LTE B4	20	2175	2132.5	4x4 MIMO	LTE B7	20	3100	2655	2x2 MIMO	24.98	24.78
CA_2A-4A-7A	LTE B2	10	18650	1855	QPSK	1	0	650	1935	2x2 MIMO	LTE B4	20	2175	2132.5	2x2 MIMO	LTE B7	20	3100	2655	4x4 MIMO	24.71	24.78
CA_2A-4A-12A	LTE B2	10	18650	1855	QPSK	1	0	650	1935	4x4 MIMO	LTE B4	20	2175	2132.5	2x2 MIMO	LTE B12	10	5095	737.5	2x2 MIMO	24.76	24.78
CA_2A-4A-12A	LTE B2	10	18650	1855	QPSK	1	0	650	1935	2x2 MIMO	LTE B4	20	2175	2132.5	4x4 MIMO	LTE B12	10	5095	737.5	2x2 MIMO	24.76	24.78
CA_2A-4A-13A	LTE B2	10	18650	1855	QPSK	1	0	650	1935	4x4 MIMO	LTE B4	20	2175	2132.5	2x2 MIMO	LTE B13	10	5230	751	2x2 MIMO	24.78	24.78
CA_2A-4A-13A	LTE B2	10	18650	1855	QPSK	1	0	650	1935	2x2 MIMO	LTE B4	20	2175	2132.5	4x4 MIMO	LTE B13	10	5230	751	2x2 MIMO	24.81	24.78
CA_2A-4A-29A	LTE B2	10	18650	1855	QPSK	1	0	650	1935	4x4 MIMO	LTE B4	20	2175	2132.5	2x2 MIMO	LTE B29	10	9715	722.5	2x2 MIMO	24.77	24.78
CA_2A-4A-29A	LTE B2	10	18650	1855	QPSK	1	0	650	1935	2x2 MIMO	LTE B4	20	2175	2132.5	4x4 MIMO	LTE B29	10	9715	722.5	2x2 MIMO	24.80	24.78
CA_2A-4A-30A	LTE B2	10	18650	1855	QPSK	1	0	650	1935	2x2 MIMO	LTE B4	20	2175	2132.5	2x2 MIMO	LTE B30	10	9820	2355	4x4 MIMO	24.77	24.78
CA_2A-4A-71A	LTE B2	10	18650	1855	QPSK	1	0	650	1935	4x4 MIMO	LTE B4	20	2175	2132.5	2x2 MIMO	LTE B71	20	68761	634.5	2x2 MIMO	24.78	24.78
CA_2A-4A-71A	LTE B2	10	18650	1855	QPSK	1	0	650	1935	2x2 MIMO	LTE B4	20	2175	2132.5	4x4 MIMO	LTE B71	20	68761	634.5	2x2 MIMO	24.78	24.78
CA_2A-5A-30A	LTE B2	10	18650	1855	QPSK	1	0	650	1935	4x4 MIMO	LTE B5	10	2525	881.5	2x2 MIMO	LTE B30	10	9820	2355	2x2 MIMO	24.72	24.78
CA_2A-5A-30A	LTE B2	10	18650	1855	QPSK	1	0	650	1935	2x2 MIMO	LTE B5	10	2525	881.5	2x2 MIMO	LTE B30	10	9820	2355	4x4 MIMO	24.77	24.78
CA_2A-5A-66A	LTE B2	10	18650	1855	QPSK	1	0	650	1935	4x4 MIMO	LTE B5	10	2525	881.5	2x2 MIMO	LTE B66	20	66786	2145	2x2 MIMO	24.80	24.78
CA_2A-5A-66A	LTE B2	10	18650	1855	QPSK	1	0	650	1935	2x2 MIMO	LTE B5	10	2525	881.5	2x2 MIMO	LTE B66	20	66786	2145	4x4 MIMO	24.77	24.78
CA_2A-7A-7A	LTE B2	10	18650	1855	QPSK	1	0	650	1935	4x4 MIMO	LTE B7	20	3100	2655	2x2 MIMO	LTE B7	20	2850	2630	2x2 MIMO	24.70	24.78
CA_2A-7A-12A	LTE B2	10	18650	1855	QPSK	1	0	650	1935	4x4 MIMO	LTE B7	20	3100	2655	2x2 MIMO	LTE B12	10	5095	737.5	2x2 MIMO	24.67	24.78
CA_2A-7A-12A	LTE B2	10	18650	1855	QPSK	1	0	650	1935	2x2 MIMO	LTE B7	20	3100	2655	4x4 MIMO	LTE B12	10	5095	737.5	2x2 MIMO	24.66	24.78
CA_2A-12A-30A	LTE B2	10	18650	1855	QPSK	1	0	650	1935	4x4 MIMO	LTE B12	10	5095	737.5	2x2 MIMO	LTE B30	10	9820	2355	2x2 MIMO	24.73	24.78
CA_2A-12A-30A	LTE B2	10	18650	1855	QPSK	1	0	650	1935	2x2 MIMO	LTE B12	10	5095	737.5	2x2 MIMO	LTE B30	10	9820	2355	4x4 MIMO	24.77	24.78
CA_2A-12A-66A	LTE B2	10	18650	1855	QPSK	1	0	650	1935	4x4 MIMO	LTE B12	10	5095	737.5	2x2 MIMO	LTE B66	20	66786	2145	2x2 MIMO	24.77	24.78
CA_2A-12A-66A	LTE B2	10	18650	1855	QPSK	1	0	650	1935	2x2 MIMO	LTE B12	10	5095	737.5	2x2 MIMO	LTE B66	20	66786	2145	4x4 MIMO	24.78	24.78
CA_2A-13A-66A	LTE B2	10	18650	1855	QPSK	1	0	650	1935	4x4 MIMO	LTE B13	10	5230	751	2x2 MIMO	LTE B66	20	66786	2145	2x2 MIMO	24.81	24.78
CA_2A-13A-66A	LTE B2	10	18650	1855	QPSK	1	0	650	1935	2x2 MIMO	LTE B13	10	5230	751	2x2 MIMO	LTE B66	20	66786	2145	4x4 MIMO	24.78	24.78
CA_2A-29A-30A	LTE B2	10	18650	1855	QPSK	1	0	650	1935	4x4 MIMO	LTE B29	10	9715	722.5	2x2 MIMO	LTE B30	10	9820	2355	2x2 MIMO	24.74	24.78
CA_2A-29A-30A	LTE B2	10	18650	1855	QPSK	1	0	650	1935	2x2 MIMO	LTE B29	10	9715	722.5	2x2 MIMO	LTE B30	10	9820	2355	4x4 MIMO	24.77	24.78
CA_2A-30A-66A	LTE B2	10	18650	1855	QPSK	1	0	650	1935	4x4 MIMO	LTE B30	10	9820	2355	2x2 MIMO	LTE B66	20	66786	2145	2x2 MIMO	24.74	24.78
CA_2A-30A-66A	LTE B2	10	18650	1855	QPSK	1	0	650	1935	2x2 MIMO	LTE B30	10	9820	2355	2x2 MIMO	LTE B66	20	66786	2145	4x4 MIMO	24.75	24.78
CA_2A-66E	LTE B2	10	18650	1855	QPSK	1	0	650	1935	4x4 MIMO	LTE B66	15	66786	2145	4x4 MIMO	LTE B66	5	66929	2154.3	4x4 MIMO	24.74	24.78
CA_2A-66C	LTE B2	10	18650	1855	QPSK	1	0	650	1935	4x4 MIMO	LTE B66	20	66786	2145	4x4 MIMO	LTE B66	20	66984	2164.8	4x4 MIMO	24.75	24.78
CA_2A-66A-66A	LTE B2	10	18650	1855	QPSK	1	0	650	1935	4x4 MIMO	LTE B66	20	66786	2145	2x2 MIMO	LTE B66	20	67236	2190	2x2 MIMO	24.77	24.78
CA_2A-66A-66A	LTE B2	10	18650	1855	QPSK	1	0	650	1935	2x2 MIMO	LTE B66	20	66786	2145	4x4 MIMO	LTE B66	20	67236	2190	2x2 MIMO	24.79	24.78
CA_2A-66A-71A	LTE B2	10	18650	1855	QPSK	1	0	650	1935	4x4 MIMO	LTE B66	20	66786	2145	2x2 MIMO	LTE B71	20	68761	634.5	2x2 MIMO	24.76	24.78
CA_2A-66A-71A	LTE B2	10	18650	1855	QPSK	1	0	650	1935	2x2 MIMO	LTE B66	20	66786	2145	4x4 MIMO	LTE B71	20	68761	634.5	2x2 MIMO	24.80	24.78

Table I-36
LTE Band 25 Additional Maximum Output Powers – 3 Component Carriers

	PCC										SCC 1					SCC 2					Power	
Combination	PCC Band	PCC Bandwidth [MHz]	PCC (UL) Channel	PCC (UL) Frequency [MHz]	Modulation	PCC UL# RB	PCC UL RB Offset	PCC (DL) Channel	PCC (DL) Frequency [MHz]	DL Ant. Config.	SCC Band	SCC Bandwidth [MHz]	SCC (DL) Channel	SCC (DL) Frequency [MHz]	DL Ant. Config.	SCC Band	SCC Bandwidth [MHz]	SCC (DL) Channel	SCC (DL) Frequency [MHz]	DL Ant. Config.	LTE Tx.Power with DL CA Enabled (dBm)	LTE Single Carrier Tx Power (dBm)
CA_25A-25A-26A	LTE B25	10	26090	1855	QPSK	1	0	8090	1935	4x4 MIMO	LTE B25	20	8590	1985	2x2 MIMO	LTE B26	5	8865	876.5	2x2 MIMO	24.79	24.78
CA_25A-25A-26A	LTE B25	10	26090	1855	QPSK	1	0	8090	1935	2x2 MIMO	LTE B25	20	8590	1985	4x4 MIMO	LTE B26	5	8865	876.5	2x2 MIMO	24.80	24.78
CA_25A-41C	LTE B25	10	26090	1855	QPSK	1	0	8090	1935	4x4 MIMO	LTE B41	20	40620	2593	2x2 MIMO	LTE B41	20	40422	2573.2	2x2 MIMO	24.33	24.78
CA_25A-41C	LTE B25	10	26090	1855	QPSK	1	0	8090	1935	2x2 MIMO	LTE B41	20	40620	2593	4x4 MIMO	LTE B41	20	40422	2573.2	4x4 MIMO	24.34	24.78

Table I-37
LTE Band 30 Ant A Additional Maximum Output Powers – 3 Component Carriers

	PCC										SCC 1					SCC 2					Power	
Combination	PCC Band	PCC Bandwidth [MHz]	PCC (UL) Channel	PCC (UL) Frequency [MHz]	Modulation	PCC UL# RB	PCC UL RB Offset	PCC (DL) Channel	PCC (DL) Frequency [MHz]	DL Ant. Config.	SCC Band	SCC Bandwidth [MHz]	SCC (DL) Channel	SCC (DL) Frequency [MHz]	DL Ant. Config.	SCC Band	SCC Bandwidth [MHz]	SCC (DL) Channel	SCC (DL) Frequency [MHz]	DL Ant. Config.	LTE Tx.Power with DL CA Enabled (dBm)	LTE Ant. A Tx Power (dBm)
CA_2A-2A-30A	LTE B30 AntA	10	27710	2310	QPSK	1	0	9820	2355	2x2 MIMO	LTE B2	20	900	1960	4x4 MIMO	LTE B2	20	700	1940	2x2 MIMO	23.35	23.41
CA_2A-2A-30A	LTE B30 AntA	10	27710	2310	QPSK	1	0	9820	2355	4x4 MIMO	LTE B2	20	900	1960	2x2 MIMO	LTE B2	20	700	1940	2x2 MIMO	23.35	23.41
CA_2A-2A-30A	LTE B30 AntA	10	27710	2310	QPSK	1	0	9820	2355	4x4 MIMO	LTE B2	20	900	1960	2x2 MIMO	LTE B4	20	2175	2132.5	2x2 MIMO	23.36	23.41
CA_2A-5A-30A	LTE B30 AntA	10	27710	2310	QPSK	1	0	9820	2355	2x2 MIMO	LTE B2	20	900	1960	4x4 MIMO	LTE B5	10	2525	881.5	2x2 MIMO	23.47	23.41
CA_2A-5A-30A	LTE B30 AntA	10	27710	2310	QPSK	1	0	9820	2355	4x4 MIMO	LTE B2	20	900	1960	4x4 MIMO	LTE B5	10	2525	881.5	2x2 MIMO	23.36	23.41
CA_2A-12A-30A	LTE B30 AntA	10	27710	2310	QPSK	1	0	9820	2355	2x2 MIMO	LTE B2	20	900	1960	4x4 MIMO	LTE B12	10	5095	737.5	2x2 MIMO	23.47	23.41
CA_2A-12A-30A	LTE B30 AntA	10	27710	2310	QPSK	1	0	9820	2355	4x4 MIMO	LTE B2	20	900	1960	2x2 MIMO	LTE B12	10	5095	737.5	2x2 MIMO	23.40	23.41
CA_2A-29A-30A	LTE B30 AntA	10	27710	2310	QPSK	1	0	9820	2355	2x2 MIMO	LTE B2	20	900	1960	4x4 MIMO	LTE B29	10	9715	722.5	2x2 MIMO	23.49	23.41
CA_2A-29A-30A	LTE B30 AntA	10	27710	2310	QPSK	1	0	9820	2355	4x4 MIMO	LTE B2	20	900	1960	2x2 MIMO	LTE B29	10	9715	722.5	2x2 MIMO	23.39	23.41
CA_2A-30A-66A	LTE B30 AntA	10	27710	2310	QPSK	1	0	9820	2355	2x2 MIMO	LTE B2	20	900	1960	4x4 MIMO	LTE B66	20	66786	2145	2x2 MIMO	23.49	23.41
CA_2A-30A-66A	LTE B30 AntA	10	27710	2310	QPSK	1	0	9820	2355	4x4 MIMO	LTE B2	20	900	1960	2x2 MIMO	LTE B66	20	66786	2145	4x4 MIMO	23.39	23.41
CA_4A-5A-30A	LTE B30 AntA	10	27710	2310	QPSK	1	0	9820	2355	4x4 MIMO	LTE B4	20	2175	2132.5	2x2 MIMO	LTE B5	10	2525	881.5	2x2 MIMO	23.42	23.41
CA_4A-12A-30A	LTE B30 AntA	10	27710	2310	QPSK	1	0	9820	2355	4x4 MIMO	LTE B4	20	2175	2132.5	2x2 MIMO	LTE B12	10	5095	737.5	2x2 MIMO	23.43	23.41
CA_4A-29A-30A	LTE B30 AntA	10	27710	2310	QPSK	1	0	9820	2355	4x4 MIMO	LTE B4	20	2175	2132.5	2x2 MIMO	LTE B29	10	9715	722.5	2x2 MIMO	23.37	23.41
CA_5A-30A-66A	LTE B30 AntA	10	27710	2310	QPSK	1	0	9820	2355	4x4 MIMO	LTE B5	10	2525	881.5	2x2 MIMO	LTE B66	20	66786	2145	2x2 MIMO	23.43	23.41
CA_5A-30A-66A	LTE B30 AntA	10	27710	2310	QPSK	1	0	9820	2355	2x2 MIMO	LTE B5	10	2525	881.5	2x2 MIMO	LTE B66	20	66786	2145	4x4 MIMO	23.41	23.41
CA_12A-30A-66A	LTE B30 AntA	10	27710	2310	QPSK	1	0	9820	2355	2x2 MIMO	LTE B12	10	5095	737.5	2x2 MIMO	LTE B66	20	66786	2145	4x4 MIMO	23.38	23.41
CA_30A-66A-66A	LTE B30 AntA	10	27710	2310	QPSK	1	0	9820	2355	4x4 MIMO	LTE B66	20	66786	2145	2x2 MIMO	LTE B66	20	67236	2190	2x2 MIMO	23.27	23.41
CA_30A-66A-66A	LTE B30 AntA	10	27710	2310	QPSK	1	0	9820	2355	2x2 MIMO	LTE B66	20	66786	2145	4x4 MIMO	LTE B66	20	67236	2190	2x2 MIMO	23.27	23.41

Table I-38
LTE Band 7 Ant A Additional Maximum Output Powers – 3 Component Carriers

	PCC										SCC 1					SCC 2					Power	
Combination	PCC Band	PCC Bandwidth [MHz]	PCC (UL) Channel	PCC (UL) Frequency [MHz]	Modulation	PCC UL# RB	PCC UL RB Offset	PCC (DL) Channel	PCC (DL) Frequency [MHz]	DL Ant. Config.	SCC Band	SCC Bandwidth [MHz]	SCC (DL) Channel	SCC (DL) Frequency [MHz]	DL Ant. Config.	SCC Band	SCC Bandwidth [MHz]	SCC (DL) Channel	SCC (DL) Frequency [MHz]	DL Ant. Config.	LTE Tx.Power with DL CA Enabled (dBm)	LTE Ant. A Tx Power (dBm)
CA_2A-4A-7A	LTE B7 AntA	20	21100	2535	QPSK	1	0	3100	2655	2x2 MIMO	LTE B2	20	900	1960	4x4 MIMO	LTE B4	20	2175	2132.5	2x2 MIMO	23.90	23.91
CA_2A-4A-7A	LTE B7 AntA	20	21100	2535	QPSK	1	0	3100	2655	2x2 MIMO	LTE B2	20	900	1960	2x2 MIMO	LTE B4	20	2175	2132.5	4x4 MIMO	24.00	23.91
CA_2A-4A-7A	LTE B7 AntA	20	21100	2535	QPSK	1	0	3100	2655	4x4 MIMO	LTE B2	20	900	1960	2x2 MIMO	LTE B4	20	2175	2132.5	2x2 MIMO	23.89	23.91
CA_2A-7A-7A	LTE B7 AntA	20	21100	2535	QPSK	1	0	3100	2655	2x2 MIMO	LTE B7	20	2850	2630	2x2 MIMO	LTE B2	20	900	1960	4x4 MIMO	23.97	23.91
CA_2A-7A-7A	LTE B7 AntA	20	21100	2535	QPSK	1	0	3100	2655	4x4 MIMO	LTE B7	20	2850	2630	2x2 MIMO	LTE B2	20	900	1960	2x2 MIMO	23.86	23.91
CA_2A-7A-7A	LTE B7 AntA	20	21100	2535	QPSK	1	0	3100	2655	2x2 MIMO	LTE B7	20	2850	2630	4x4 MIMO	LTE B2	20	900	1960	2x2 MIMO	23.99	23.91
CA_2A-7A-12A	LTE B7 AntA	20	21100	2535	QPSK	1	0	3100	2655	2x2 MIMO	LTE B2	20	900	1960	4x4 MIMO	LTE B12	10	5095	737.5	2x2 MIMO	23.94	23.91
CA_2A-7A-12A	LTE B7 AntA	20	21100	2535	QPSK	1	0	3100	2655	4x4 MIMO	LTE B2	20	900	1960	2x2 MIMO	LTE B12	10	5095	737.5	2x2 MIMO	23.88	23.91
CA_4A-7A-7A	LTE B7 AntA	20	21100	2535	QPSK	1	0	3100	2655	2x2 MIMO	LTE B7	20	2850	2630	2x2 MIMO	LTE B4	20	2175	2132.5	4x4 MIMO	23.90	23.91
CA_4A-7A-7A	LTE B7 AntA	20	21100	2535	QPSK	1	0	3100	2655	4x4 MIMO	LTE B7	20	2850	2630	2x2 MIMO	LTE B4	20	2175	2132.5	2x2 MIMO	23.86	23.91
CA_4A-7A-7A	LTE B7 AntA	20	21100	2535	QPSK	1	0	3100	2655	2x2 MIMO	LTE B7	20	2850	2630	4x4 MIMO	LTE B4	20	2175	2132.5	2x2 MIMO	23.98	23.91
CA_4A-7A-12A	LTE B7 AntA	20	21100	2535	QPSK	1	0	3100	2655	2x2 MIMO	LTE B4	20	2175	2132.5	4x4 MIMO	LTE B12	10	5095	737.5	2x2 MIMO	23.89	23.91
CA_4A-7A-12A	LTE B7 AntA	20	21100	2535	QPSK	1	0	3100	2655	4x4 MIMO	LTE B4	20	2175	2132.5	2x2 MIMO	LTE B12	10	5095	737.5	2x2 MIMO	23.87	23.91

Table I-39
LTE Band 41 PC3 Additional Maximum Output Powers –3 Component Carriers

	PCC										SCC 1					SCC 2					Power	
Combination	PCC Band	PCC Bandwidth [MHz]	PCC (UL) Channel	PCC (UL) Frequency [MHz]	Modulation	PCC UL# RB	PCC UL RB Offset	PCC (DL) Channel	PCC (DL) Frequency [MHz]	DL Ant. Config.	SCC Band	SCC Bandwidth [MHz]	SCC (DL) Channel	SCC (DL) Frequency [MHz]	DL Ant. Config.	SCC Band	SCC Bandwidth [MHz]	SCC (DL) Channel	SCC (DL) Frequency [MHz]	DL Ant. Config.	LTE Tx.Power with DL CA Enabled (dBm)	LTE Single Carrier Tx Power (dBm)
CA_41D	LTE B41	20	40185	2549.5	QPSK	1	0	40185	2549.5	4x4 MIMO	LTE B41	20	40383	2569.3	4x4 MIMO	LTE B41	20	40581	2589.1	4x4 MIMO	24.41	24.41
CA_41A-41C	LTE B41	20	40185	2549.5	QPSK	1	0	40185	2549.5	4x4 MIMO	LTE B41	20	41292	2660.2	2x2 MIMO	LTE B41	20	41490	2680	2x2 MIMO	24.42	24.41
CA_41C-41A	LTE B41	20	40185	2549.5	QPSK	1	0	40185	2549.5	2x2 MIMO	LTE B41	20	40383	2569.3	2x2 MIMO	LTE B41	20	41490	2680	4x4 MIMO	24.41	24.41
CA_41A-41C	LTE B41	20	40185	2549.5	QPSK	1	0	40185	2549.5	2x2 MIMO	LTE B41	20	41292	2660.2	4x4 MIMO	LTE B41	20	41490	2680	4x4 MIMO	24.47	24.41
CA_41C-41A	LTE B41	20	40185	2549.5	QPSK	1	0	40185	2549.5	4x4 MIMO	LTE B41	20	40383	2569.3	4x4 MIMO	LTE B41	20	41490	2680	2x2 MIMO	24.38	24.41
CA_41A-41C	LTE B41	20	40185	2549.5	QPSK	1	0	40185	2549.5	4x4 MIMO	LTE B41	20	41292	2660.2	4x4 MIMO	LTE B41	20	41490	2680	4x4 MIMO	24.42	24.41
CA_41C-41A	LTE B41	20	40185	2549.5	QPSK	1	0	40185	2549.5	4x4 MIMO	LTE B41	20	40383	2569.3	4x4 MIMO	LTE B41	20	41490	2680	4x4 MIMO	24.39	24.41

Table I-40
LTE Band 41 PC2 Additional Maximum Output Powers – 3 Component Carriers

	PCC										SCC 1					SCC 2					Power	
Combination	PCC Band	PCC Bandwidth [MHz]	PCC (UL) Channel	PCC (UL) Frequency [MHz]	Modulation	PCC UL# RB	PCC UL RB Offset	PCC (DL) Channel	PCC (DL) Frequency [MHz]	DL Ant. Config.	SCC Band	SCC Bandwidth [MHz]	SCC (DL) Channel	SCC (DL) Frequency [MHz]	DL Ant. Config.	SCC Band	SCC Bandwidth [MHz]	SCC (DL) Channel	SCC (DL) Frequency [MHz]	DL Ant. Config.	LTE Tx.Power with DL CA Enabled (dBm)	LTE Single Carrier Tx Power (dBm)
CA_41D	LTE B41 PC2	20	40620	2593	QPSK	1	0	40620	2593	4x4 MIMO	LTE B41 PC2	20	40422	2573.2	4x4 MIMO	LTE B41 PC2	20	40818	2612.8	4x4 MIMO	27.49	27.48
CA_41A-41C	LTE B41 PC2	20	40620	2593	QPSK	1	0	40620	2593	4x4 MIMO	LTE B41 PC2	20	41292	2660.2	2x2 MIMO	LTE B41 PC2	20	41490	2680	2x2 MIMO	27.46	27.48
CA_41C-41A	LTE B41 PC2	20	40620	2593	QPSK	1	0	40620	2593	2x2 MIMO	LTE B41 PC2	20	40818	2612.8	2x2 MIMO	LTE B41 PC2	20	39750	2506	4x4 MIMO	27.50	27.48
CA_41A-41C	LTE B41 PC2	20	40620	2593	QPSK	1	0	40620	2593	2x2 MIMO	LTE B41 PC2	20	41292	2660.2	4x4 MIMO	LTE B41 PC2	20	41490	2680	4x4 MIMO	27.46	27.48
CA_41C-41A	LTE B41 PC2	20	40620	2593	QPSK	1	0	40620	2593	4x4 MIMO	LTE B41 PC2	20	40818	2612.8	4x4 MIMO	LTE B41 PC2	20	39750	2506	2x2 MIMO	27.48	27.48
CA_41A-41C	LTE B41 PC2	20	40620	2593	QPSK	1	0	40620	2593	4x4 MIMO	LTE B41 PC2	20	41292	2660.2	4x4 MIMO	LTE B41 PC2	20	41490	2680	4x4 MIMO	27.49	27.48
CA_41C-41A	LTE B41 PC2	20	40620	2593	QPSK	1	0	40620	2593	4x4 MIMO	LTE B41 PC2	20	40818	2612.8	4x4 MIMO	LTE B41 PC2	20	39750	2506	4x4 MIMO	27.47	27.48

Table I-41
LTE Band 4 Additional Hotspot Reduced Output Powers – 3 Component Carriers

	PCC										SCC 1					SCC 2					Power	
Combination	PCC Band	PCC Bandwidth [MHz]	PCC (UL) Channel	PCC (UL) Frequency [MHz]	Modulation	PCC UL# RB	PCC UL RB Offset	PCC (DL) Channel	PCC (DL) Frequency [MHz]	DL Ant. Config.	SCC Band	SCC Bandwidth [MHz]	SCC (DL) Channel	SCC (DL) Frequency [MHz]	DL Ant. Config.	SCC Band	SCC Bandwidth [MHz]	SCC (DL) Channel	SCC (DL) Frequency [MHz]	DL Ant. Config.	LTE Tx.Power with DL CA Enabled (dBm)	LTE Single Carrier Tx Power (dBm)
CA_2A-2A-4A	LTE B4	20	20300	1745	64QAM	1	0	2300	2145	2x2 MIMO	LTE B2	20	900	1960	4x4 MIMO	LTE B2	20	700	1940	2x2 MIMO	19.65	20.00
CA_2A-2A-4A	LTE B4	20	20300	1745	64QAM	1	0	2300	2145	4x4 MIMO	LTE B2	20	900	1960	2x2 MIMO	LTE B2	20	700	1940	2x2 MIMO	19.77	20.00
CA_2A-4A-4A	LTE B4	20	20300	1745	64QAM	1	0	2300	2145	2x2 MIMO	LTE B4	20	2050	2120	2x2 MIMO	LTE B2	20	900	1960	4x4 MIMO	19.71	20.00
CA_2A-4A-4A	LTE B4	20	20300	1745	64QAM	1	0	2300	2145	4x4 MIMO	LTE B4	20	2050	2120	2x2 MIMO	LTE B2	20	900	1960	2x2 MIMO	19.71	20.00
CA_2A-4A-4A	LTE B4	20	20300	1745	64QAM	1	0	2300	2145	2x2 MIMO	LTE B4	20	2050	2120	4x4 MIMO	LTE B2	20	900	1960	2x2 MIMO	19.70	20.00
CA_2A-4A-5A	LTE B4	20	20300	1745	64QAM	1	0	2300	2145	2x2 MIMO	LTE B2	20	900	1960	4x4 MIMO	LTE B5	10	2525	881.5	2x2 MIMO	19.66	20.00
CA_2A-4A-5A	LTE B4	20	20300	1745	64QAM	1	0	2300	2145	4x4 MIMO	LTE B2	20	900	1960	2x2 MIMO	LTE B5	10	2525	881.5	2x2 MIMO	19.68	20.00
CA_2A-4A-7A	LTE B4	20	20300	1745	64QAM	1	0	2300	2145	2x2 MIMO	LTE B2	20	900	1960	4x4 MIMO	LTE B7	20	3100	2655	2x2 MIMO	19.46	20.00
CA_2A-4A-7A	LTE B4	20	20300	1745	64QAM	1	0	2300	2145	4x4 MIMO	LTE B2	20	900	1960	2x2 MIMO	LTE B7	20	3100	2655	2x2 MIMO	19.98	20.00
CA_2A-4A-7A	LTE B4	20	20300	1745	64QAM	1	0	2300	2145	2x2 MIMO	LTE B2	20	900	1960	2x2 MIMO	LTE B7	20	3100	2655	4x4 MIMO	19.53	20.00
CA_2A-4A-12A	LTE B4	20	20300	1745	64QAM	1	0	2300	2145	2x2 MIMO	LTE B2	20	900	1960	4x4 MIMO	LTE B12	10	5095	737.5	2x2 MIMO	19.68	20.00
CA_2A-4A-12A	LTE B4	20	20300	1745	64QAM	1	0	2300	2145	4x4 MIMO	LTE B2	20	900	1960	2x2 MIMO	LTE B12	10	5095	737.5	2x2 MIMO	19.72	20.00
CA_2A-4A-13A	LTE B4	20	20300	1745	64QAM	1	0	2300	2145	2x2 MIMO	LTE B2	20	900	1960	4x4 MIMO	LTE B13	10	5230	751	2x2 MIMO	19.69	20.00
CA_2A-4A-13A	LTE B4	20	20300	1745	64QAM	1	0	2300	2145	4x4 MIMO	LTE B2	20	900	1960	2x2 MIMO	LTE B13	10	5230	751	2x2 MIMO	19.71	20.00
CA_2A-4A-29A	LTE B4	20	20300	1745	64QAM	1	0	2300	2145	2x2 MIMO	LTE B2	20	900	1960	4x4 MIMO	LTE B29	10	9715	722.5	2x2 MIMO	19.69	20.00
CA_2A-4A-29A	LTE B4	20	20300	1745	64QAM	1	0	2300	2145	4x4 MIMO	LTE B2	20	900	1960	2x2 MIMO	LTE B29	10	9715	722.5	2x2 MIMO	19.78	20.00
CA_2A-4A-30A	LTE B4	20	20300	1745	64QAM	1	0	2300	2145	2x2 MIMO	LTE B2	20	900	1960	2x2 MIMO	LTE B30	10	9820	2355	4x4 MIMO	19.43	20.00
CA_2A-4A-71A	LTE B4	20	20300	1745	64QAM	1	0	2300	2145	2x2 MIMO	LTE B2	20	900	1960	4x4 MIMO	LTE B71	20	68761	634.5	2x2 MIMO	19.68	20.00
CA_2A-4A-71A	LTE B4	20	20300	1745	64QAM	1	0	2300	2145	4x4 MIMO	LTE B2	20	900	1960	2x2 MIMO	LTE B71	20	68761	634.5	2x2 MIMO	19.75	20.00
CA_4A-4A-5A	LTE B4	20	20300	1745	64QAM	1	0	2300	2145	4x4 MIMO	LTE B4	20	2050	2120	2x2 MIMO	LTE B5	10	2525	881.5	2x2 MIMO	19.71	20.00
CA_4A-4A-5A	LTE B4	20	20300	1745	64QAM	1	0	2300	2145	2x2 MIMO	LTE B4	20	2050	2120	4x4 MIMO	LTE B5	10	2525	881.5	2x2 MIMO	19.63	20.00
CA_4A-4A-12A	LTE B4	20	20300	1745	64QAM	1	0	2300	2145	4x4 MIMO	LTE B4	20	2050	2120	2x2 MIMO	LTE B12	10	5095	737.5	2x2 MIMO	19.77	20.00
CA_4A-4A-12A	LTE B4	20	20300	1745	64QAM	1	0	2300	2145	2x2 MIMO	LTE B4	20	2050	2120	4x4 MIMO	LTE B12	10	5095	737.5	2x2 MIMO	19.69	20.00
CA_4A-4A-13A	LTE B4	20	20300	1745	64QAM	1	0	2300	2145	4x4 MIMO	LTE B4	20	2050	2120	2x2 MIMO	LTE B13	10	5230	751	2x2 MIMO	19.85	20.00
CA_4A-4A-13A	LTE B4	20	20300	1745	64QAM	1	0	2300	2145	2x2 MIMO	LTE B4	20	2050	2120	4x4 MIMO	LTE B13	10	5230	751	2x2 MIMO	19.71	20.00
CA_4A-4A-29A	LTE B4	20	20300	1745	64QAM	1	0	2300	2145	4x4 MIMO	LTE B4	20	2050	2120	2x2 MIMO	LTE B29	10	9715	722.5	2x2 MIMO	19.70	20.00
CA_4A-4A-29A	LTE B4	20	20300	1745	64QAM	1	0	2300	2145	2x2 MIMO	LTE B4	20	2050	2120	4x4 MIMO	LTE B29	10	9715	722.5	2x2 MIMO	19.86	20.00
CA_4A-4A-71A	LTE B4	20	20300	1745	64QAM	1	0	2300	2145	4x4 MIMO	LTE B4	20	2050	2120	2x2 MIMO	LTE B71	20	68761	634.5	2x2 MIMO	19.71	20.00
CA_4A-4A-71A	LTE B4	20	20300	1745	64QAM	1	0	2300	2145	2x2 MIMO	LTE B4	20	2050	2120	4x4 MIMO	LTE B71	20	68761	634.5	2x2 MIMO	19.68	20.00
CA_4A-5A-30A	LTE B4	20	20300	1745	64QAM	1	0	2300	2145	2x2 MIMO	LTE B5	10	2525	881.5	2x2 MIMO	LTE B30	10	9820	2355	4x4 MIMO	19.34	20.00
CA_4A-7A-7A	LTE B4	20	20300	1745	64QAM	1	0	2300	2145	4x4 MIMO	LTE B7	20	3100	2655	2x2 MIMO	LTE B7	20	2850	2630	2x2 MIMO	19.48	20.00
CA_4A-7A-7A	LTE B4	20	20300	1745	64QAM	1	0	2300	2145	2x2 MIMO	LTE B7	20	3100	2655	4x4 MIMO	LTE B7	20	2850	2630	2x2 MIMO	19.93	20.00
CA_4A-7A-12A	LTE B4	20	20300	1745	64QAM	1	0	2300	2145	4x4 MIMO	LTE B7	20	3100	2655	2x2 MIMO	LTE B12	10	5095	737.5	2x2 MIMO	19.43	20.00
CA_4A-7A-12A	LTE B4	20	20300	1745	64QAM	1	0	2300	2145	2x2 MIMO	LTE B7	20	3100	2655	4x4 MIMO	LTE B12	10	5095	737.5	2x2 MIMO	19.41	20.00
CA_4A-12A-30A	LTE B4	20	20300	1745	64QAM	1	0	2300	2145	2x2 MIMO	LTE B12	10	5095	737.5	2x2 MIMO	LTE B30	10	9820	2355	4x4 MIMO	19.33	20.00
CA_4A-29A-30A	LTE B4	20	20300	1745	64QAM	1	0	2300	2145	2x2 MIMO	LTE B29	10	9715	722.5	2x2 MIMO	LTE B30	10	9820	2355	4x4 MIMO	19.38	20.00

Table I-42

LTE Band 66 Additional Hotspot Reduced Output Powers – 3 Component Carriers

	PCC										SCC 1					SCC 2					Power	
Combination	PCC Band	PCC Bandwidth [MHz]	PCC (UL) Channel	PCC (UL) Frequency [MHz]	Modulation	PCC UL# RB	PCC UL RB Offset	PCC (DL) Channel	PCC (DL) Frequency [MHz]	DL Ant. Config.	SCC Band	SCC Bandwidth [MHz]	SCC (DL) Channel	SCC (DL) Frequency [MHz]	DL Ant. Config.	SCC Band	SCC Bandwidth [MHz]	SCC (DL) Channel	SCC (DL) Frequency [MHz]	DL Ant. Config.	LTE Tx.Power with DL CA Enabled (dBm)	LTE Single Carrier Tx Power (dBm)
CA_2C-66A	LTE B66	20	132572	1770	64QAM	1	0	67036	2170	2x2 MIMO	LTE B2	20	900	1960	4x4 MIMO	LTE B2	20	702	1940.2	4x4 MIMO	19.79	20.00
CA_2C-66A	LTE B66	20	132572	1770	64QAM	1	0	67036	2170	4x4 MIMO	LTE B2	20	900	1960	2x2 MIMO	LTE B2	20	702	1940.2	2x2 MIMO	19.83	20.00
CA_2C-66A	LTE B66	20	132572	1770	64QAM	1	0	67036	2170	4x4 MIMO	LTE B2	20	900	1960	4x4 MIMO	LTE B2	20	702	1940.2	4x4 MIMO	19.79	20.00
CA_2A-2A-66A	LTE B66	20	132572	1770	64QAM	1	0	67036	2170	2x2 MIMO	LTE B2	20	900	1960	4x4 MIMO	LTE B2	20	700	1940	2x2 MIMO	19.82	20.00
CA_2A-2A-66A	LTE B66	20	132572	1770	64QAM	1	0	67036	2170	4x4 MIMO	LTE B2	20	900	1960	2x2 MIMO	LTE B2	20	700	1940	2x2 MIMO	19.82	20.00
CA_2A-5A-66A	LTE B66	20	132572	1770	64QAM	1	0	67036	2170	2x2 MIMO	LTE B2	20	900	1960	4x4 MIMO	LTE B5	10	2525	881.5	2x2 MIMO	19.80	20.00
CA_2A-5A-66A	LTE B66	20	132572	1770	64QAM	1	0	67036	2170	4x4 MIMO	LTE B2	20	900	1960	2x2 MIMO	LTE B5	10	2525	881.5	2x2 MIMO	19.83	20.00
CA_2A-12A-66A	LTE B66	20	132572	1770	64QAM	1	0	67036	2170	2x2 MIMO	LTE B2	20	900	1960	4x4 MIMO	LTE B12	10	5095	737.5	2x2 MIMO	19.78	20.00
CA_2A-12A-66A	LTE B66	20	132572	1770	64QAM	1	0	67036	2170	4x4 MIMO	LTE B2	20	900	1960	2x2 MIMO	LTE B12	10	5095	737.5	2x2 MIMO	19.82	20.00
CA_2A-13A-66A	LTE B66	20	132572	1770	64QAM	1	0	67036	2170	2x2 MIMO	LTE B2	20	900	1960	4x4 MIMO	LTE B13	10	5230	751	2x2 MIMO	19.81	20.00
CA_2A-13A-66A	LTE B66	20	132572	1770	64QAM	1	0	67036	2170	4x4 MIMO	LTE B2	20	900	1960	2x2 MIMO	LTE B13	10	5230	751	2x2 MIMO	19.81	20.00
CA_2A-30A-66A	LTE B66	20	132572	1770	64QAM	1	0	67036	2170	2x2 MIMO	LTE B2	20	900	1960	4x4 MIMO	LTE B30	10	9820	2355	2x2 MIMO	19.90	20.00
CA_2A-30A-66A	LTE B66	20	132572	1770	64QAM	1	0	67036	2170	4x4 MIMO	LTE B2	20	900	1960	2x2 MIMO	LTE B30	10	9820	2355	2x2 MIMO	20.00	20.00
CA_2A-66B	LTE B66	15	132597	1772.5	64QAM	1	0	67061	2172.5	4x4 MIMO	LTE B66	5	66968	2163.2	4x4 MIMO	LTE B2	20	900	1960	4x4 MIMO	19.45	19.94
CA_2A-66C	LTE B66	20	132572	1770	64QAM	1	0	67036	2170	4x4 MIMO	LTE B66	20	66838	2150.2	4x4 MIMO	LTE B2	20	900	1960	4x4 MIMO	19.80	20.00
CA_2A-66A-66A	LTE B66	20	132572	1770	64QAM	1	0	67036	2170	2x2 MIMO	LTE B66	20	66536	2120	2x2 MIMO	LTE B2	20	900	1960	4x4 MIMO	19.82	20.00
CA_2A-66A-66A	LTE B66	20	132572	1770	64QAM	1	0	67036	2170	4x4 MIMO	LTE B66	20	66536	2120	2x2 MIMO	LTE B2	20	900	1960	2x2 MIMO	19.82	20.00
CA_2A-66A-66A	LTE B66	20	132572	1770	64QAM	1	0	67036	2170	2x2 MIMO	LTE B66	20	66536	2120	4x4 MIMO	LTE B2	20	900	1960	2x2 MIMO	19.78	20.00
CA_2A-66A-71A	LTE B66	20	132572	1770	64QAM	1	0	67036	2170	2x2 MIMO	LTE B2	20	900	1960	4x4 MIMO	LTE B71	20	68761	634.5	2x2 MIMO	19.84	20.00
CA_2A-66A-71A	LTE B66	20	132572	1770	64QAM	1	0	67036	2170	4x4 MIMO	LTE B2	20	900	1960	2x2 MIMO	LTE B71	20	68761	634.5	2x2 MIMO	19.79	20.00
CA_5A-30A-66A	LTE B66	20	132572	1770	64QAM	1	0	67036	2170	2x2 MIMO	LTE B5	10	2525	881.5	2x2 MIMO	LTE B30	10	9820	2355	4x4 MIMO	19.93	20.00
CA_5A-30A-66A	LTE B66	20	132572	1770	64QAM	1	0	67036	2170	4x4 MIMO	LTE B5	10	2525	881.5	2x2 MIMO	LTE B30	10	9820	2355	2x2 MIMO	19.92	20.00
CA_5A-66A-66A	LTE B66	20	132572	1770	64QAM	1	0	67036	2170	4x4 MIMO	LTE B66	20	66536	2120	2x2 MIMO	LTE B5	10	2525	881.5	2x2 MIMO	19.81	20.00
CA_5A-66A-66A	LTE B66	20	132572	1770	64QAM	1	0	67036	2170	2x2 MIMO	LTE B66	20	66536	2120	4x4 MIMO	LTE B5	10	2525	881.5	2x2 MIMO	19.78	20.00
CA_12A-66C	LTE B66	20	132572	1770	64QAM	1	0	67036	2170	4x4 MIMO	LTE B66	20	66838	2150.2	4x4 MIMO	LTE B12	10	5095	737.5	2x2 MIMO	19.82	20.00
CA_12A-66A-66A	LTE B66	20	132572	1770	64QAM	1	0	67036	2170	4x4 MIMO	LTE B66	20	66536	2120	2x2 MIMO	LTE B12	10	5095	737.5	2x2 MIMO	19.79	20.00
CA_12A-66A-66A	LTE B66	20	132572	1770	64QAM	1	0	67036	2170	2x2 MIMO	LTE B66	20	66536	2120	4x4 MIMO	LTE B12	10	5095	737.5	2x2 MIMO	19.81	20.00
CA_12A-30A-66A	LTE B66	20	132572	1770	64QAM	1	0	67036	2170	2x2 MIMO	LTE B12	10	5095	737.5	2x2 MIMO	LTE B30	10	9820	2355	4x4 MIMO	19.94	20.00
CA_12A-30A-66A	LTE B66	20	132572	1770	64QAM	1	0	67036	2170	4x4 MIMO	LTE B12	10	5095	737.5	2x2 MIMO	LTE B30	10	9820	2355	2x2 MIMO	19.95	20.00
CA_13A-66A-66A	LTE B66	20	132572	1770	64QAM	1	0	67036	2170	4x4 MIMO	LTE B66	20	66536	2120	2x2 MIMO	LTE B13	10	5230	751	2x2 MIMO	19.79	20.00
CA_13A-66A-66A	LTE B66	20	132572	1770	64QAM	1	0	67036	2170	2x2 MIMO	LTE B66	20	66536	2120	4x4 MIMO	LTE B13	10	5230	751	2x2 MIMO	19.80	20.00
CA_30A-66A-66A	LTE B66	20	132572	1770	64QAM	1	0	67036	2170	2x2 MIMO	LTE B66	20	66536	2120	2x2 MIMO	LTE B30	10	9820	2355	4x4 MIMO	19.79	20.00
CA_30A-66A-66A	LTE B66	20	132572	1770	64QAM	1	0	67036	2170	4x4 MIMO	LTE B66	20	66536	2120	2x2 MIMO	LTE B30	10	9820	2355	2x2 MIMO	19.81	20.00
CA_30A-66A-66A	LTE B66	20	132572	1770	64QAM	1	0	67036	2170	2x2 MIMO	LTE B66	20	66536	2120	4x4 MIMO	LTE B30	10	9820	2355	2x2 MIMO	19.74	20.00
CA_66D	LTE B66	20	132572	1770	64QAM	1	0	67036	2170	4x4 MIMO	LTE B66	20	66838	2150.2	4x4 MIMO	LTE B66	20	66640	2130.4	4x4 MIMO	19.78	20.00
CA_66A-66C	LTE B66	20	132572	1770	64QAM	1	0	67036	2170	4x4 MIMO	LTE B66	20	66734	2139.8	2x2 MIMO	LTE B66	20	66536	2120	2x2 MIMO	19.79	20.00
CA_66C-66A	LTE B66	20	132572	1770	64QAM	1	0	67036	2170	2x2 MIMO	LTE B66	20	66838	2150.2	2x2 MIMO	LTE B66	20	66536	2120	4x4 MIMO	19.80	20.00
CA_66A-66C	LTE B66	20	132572	1770	64QAM	1	0	67036	2170	2x2 MIMO	LTE B66	20	66734	2139.8	4x4 MIMO	LTE B66	20	66536	2120	4x4 MIMO	19.79	20.00
CA_66C-66A	LTE B66	20	132572	1770	64QAM	1	0	67036	2170	4x4 MIMO	LTE B66	20	66838	2150.2	4x4 MIMO	LTE B66	20	66536	2120	2x2 MIMO	19.80	20.00
CA_66A-66C	LTE B66	20	132572	1770	64QAM	1	0	67036	2170	4x4 MIMO	LTE B66	20	66734	2139.8	4x4 MIMO	LTE B66	20	66536	2120	4x4 MIMO	19.78	20.00
CA_66C-66A	LTE B66	20	132572	1770	64QAM	1	0	67036	2170	4x4 MIMO	LTE B66	20	66838	2150.2	4x4 MIMO	LTE B66	20	66536	2120	4x4 MIMO	19.76	20.00
CA_66C-71A	LTE B66	20	132572	1770	64QAM	1	0	67036	2170	4x4 MIMO	LTE B66	20	66838	2150.2	4x4 MIMO	LTE B71	20	68761	634.5	2x2 MIMO	19.77	20.00
CA_66A-66A-71A	LTE B66	20	132572	1770	64QAM	1	0	67036	2170	4x4 MIMO	LTE B66	20	66536	2120	2x2 MIMO	LTE B71	20	68761	634.5	2x2 MIMO	19.78	20.00
CA_66A-66A-71A	LTE B66	20	132572	1770	64QAM	1	0	67036	2170	2x2 MIMO	LTE B66	20	66536	2120	4x4 MIMO	LTE B71	20	68761	634.5	2x2 MIMO	19.79	20.00

Table I-43

LTE Band 2 Additional Hotspot Reduced Output Powers – 3 Component Carriers

	PCC										SCC 1					SCC 2					Power	
Combination	PCC Band	PCC Bandwidth [MHz]	PCC (UL) Channel	PCC (UL) Frequency [MHz]	Modulation	PCC UL# RB	PCC UL RB Offset	PCC (DL) Channel	PCC (DL) Frequency [MHz]	DL Ant. Config.	SCC Band	SCC Bandwidth [MHz]	SCC (DL) Channel	SCC (DL) Frequency [MHz]	DL Ant. Config.	SCC Band	SCC Bandwidth [MHz]	SCC (DL) Channel	SCC (DL) Frequency [MHz]	DL Ant. Config.	LTE Tx.Power with DL CA Enabled (dBm)	LTE Single Carrier Tx Power (dBm)
CA_2A-2A-4A	LTE B2	20	18925	1882.5	64QAM	1	0	925	1962.5	4x4 MIMO	LTE B2	20	700	1940	2x2 MIMO	LTE B4	20	2175	2132.5	2x2 MIMO	19.72	20.00
CA_2A-2A-4A	LTE B2	20	18925	1882.5	64QAM	1	0	925	1962.5	2x2 MIMO	LTE B2	20	700	1940	4x4 MIMO	LTE B4	20	2175	2132.5	2x2 MIMO	19.71	20.00
CA_2A-2A-4A	LTE B2	20	18925	1882.5	64QAM	1	0	925	1962.5	2x2 MIMO	LTE B2	20	700	1940	2x2 MIMO	LTE B4	20	2175	2132.5	4x4 MIMO	19.73	20.00
CA_2A-2A-5A	LTE B2	20	18925	1882.5	64QAM	1	0	925	1962.5	4x4 MIMO	LTE B2	20	700	1940	2x2 MIMO	LTE B5	10	2525	881.5	2x2 MIMO	19.69	20.00
CA_2A-2A-5A	LTE B2	20	18925	1882.5	64QAM	1	0	925	1962.5	2x2 MIMO	LTE B2	20	700	1940	4x4 MIMO	LTE B5	10	2525	881.5	2x2 MIMO	19.74	20.00
CA_2A-2A-12A	LTE B2	20	18925	1882.5	64QAM	1	0	925	1962.5	4x4 MIMO	LTE B2	20	700	1940	2x2 MIMO	LTE B12	10	5095	737.5	2x2 MIMO	19.73	20.00
CA_2A-2A-12A	LTE B2	20	18925	1882.5	64QAM	1	0	925	1962.5	2x2 MIMO	LTE B2	20	700	1940	4x4 MIMO	LTE B12	10	5095	737.5	2x2 MIMO	19.76	20.00
CA_2A-2A-13A	LTE B2	20	18925	1882.5	64QAM	1	0	925	1962.5	4x4 MIMO	LTE B2	20	700	1940	2x2 MIMO	LTE B13	10	5230	751	2x2 MIMO	19.72	20.00
CA_2A-2A-13A	LTE B2	20	18925	1882.5	64QAM	1	0	925	1962.5	2x2 MIMO	LTE B2	20	700	1940	4x4 MIMO	LTE B13	10	5230	751	2x2 MIMO	19.66	20.00
CA_2A-2A-30A	LTE B2	20	18925	1882.5	64QAM	1	0	925	1962.5	4x4 MIMO	LTE B2	20	700	1940	2x2 MIMO	LTE B30	10	9820	2355	2x2 MIMO	19.71	20.00
CA_2A-2A-30A	LTE B2	20	18925	1882.5	64QAM	1	0	925	1962.5	2x2 MIMO	LTE B2	20	700	1940	4x4 MIMO	LTE B30	10	9820	2355	2x2 MIMO	19.66	20.00
CA_2A-2A-30A	LTE B2	20	18925	1882.5	64QAM	1	0	925	1962.5	2x2 MIMO	LTE B2	20	700	1940	2x2 MIMO	LTE B30	10	9820	2355	4x4 MIMO	19.74	20.00
CA_2C-66A	LTE B2	20	18925	1882.5	64QAM	1	0	925	1962.5	4x4 MIMO	LTE B2	20	727	1942.7	4x4 MIMO	LTE B66	20	66786	2145	2x2 MIMO	19.71	20.00
CA_2C-66A	LTE B2	20	18925	1882.5	64QAM	1	0	925	1962.5	2x2 MIMO	LTE B2	20	727	1942.7	2x2 MIMO	LTE B66	20	66786	2145	4x4 MIMO	19.82	20.00
CA_2C-66A	LTE B2	20	18925	1882.5	64QAM	1	0	925	1962.5	4x4 MIMO	LTE B2	20	727	1942.7	4x4 MIMO	LTE B66	20	66786	2145	4x4 MIMO	19.75	20.00
CA_2A-2A-66A	LTE B2	20	18925	1882.5	64QAM	1	0	925	1962.5	4x4 MIMO	LTE B2	20	700	1940	2x2 MIMO	LTE B66	20	66786	2145	2x2 MIMO	19.72	20.00
CA_2A-2A-66A	LTE B2	20	18925	1882.5	64QAM	1	0	925	1962.5	2x2 MIMO	LTE B2	20	700	1940	4x4 MIMO	LTE B66	20	66786	2145	2x2 MIMO	19.75	20.00
CA_2A-2A-66A	LTE B2	20	18925	1882.5	64QAM	1	0	925	1962.5	2x2 MIMO	LTE B2	20	700	1940	2x2 MIMO	LTE B66	20	66786	2145	4x4 MIMO	19.79	20.00
CA_2A-2A-71A	LTE B2	20	18925	1882.5	64QAM	1	0	925	1962.5	4x4 MIMO	LTE B2	20	700	1940	2x2 MIMO	LTE B71	20	68761	634.5	2x2 MIMO	19.71	20.00
CA_2A-2A-71A	LTE B2	20	18925	1882.5	64QAM	1	0	925	1962.5	2x2 MIMO	LTE B2	20	700	1940	4x4 MIMO	LTE B71	20	68761	634.5	2x2 MIMO	19.76	20.00
CA_2A-4A-4A	LTE B2	20	18925	1882.5	64QAM	1	0	925	1962.5	4x4 MIMO	LTE B4	20	2175	2132.5	2x2 MIMO	LTE B4	10	2350	2150	2x2 MIMO	19.72	20.00
CA_2A-4A-4A	LTE B2	20	18925	1882.5	64QAM	1	0	925	1962.5	2x2 MIMO	LTE B4	20	2175	2132.5	4x4 MIMO	LTE B4	10	2350	2150	2x2 MIMO	19.72	20.00
CA_2A-4A-5A	LTE B2	20	18925	1882.5	64QAM	1	0	925	1962.5	4x4 MIMO	LTE B4	20	2175	2132.5	2x2 MIMO	LTE B5	10	2525	881.5	2x2 MIMO	19.71	20.00
CA_2A-4A-5A	LTE B2	20	18925	1882.5	64QAM	1	0	925	1962.5	2x2 MIMO	LTE B4	20	2175	2132.5	4x4 MIMO	LTE B5	10	2525	881.5	2x2 MIMO	19.71	20.00
CA_2A-4A-7A	LTE B2	20	18925	1882.5	64QAM	1	0	925	1962.5	4x4 MIMO	LTE B4	20	2175	2132.5	2x2 MIMO	LTE B7	20	3100	2655	2x2 MIMO	19.46	20.00
CA_2A-4A-7A	LTE B2	20	18925	1882.5	64QAM	1	0	925	1962.5	2x2 MIMO	LTE B4	20	2175	2132.5	4x4 MIMO	LTE B7	20	3100	2655	2x2 MIMO	19.39	20.00
CA_2A-4A-7A	LTE B2	20	18925	1882.5	64QAM	1	0	925	1962.5	2x2 MIMO	LTE B4	20	2175	2132.5	2x2 MIMO	LTE B7	20	3100	2655	4x4 MIMO	19.71	20.00
CA_2A-4A-12A	LTE B2	20	18925	1882.5	64QAM	1	0	925	1962.5	4x4 MIMO	LTE B4	20	2175	2132.5	2x2 MIMO	LTE B12	10	5095	737.5	2x2 MIMO	19.74	20.00
CA_2A-4A-12A	LTE B2	20	18925	1882.5	64QAM	1	0	925	1962.5	2x2 MIMO	LTE B4	20	2175	2132.5	4x4 MIMO	LTE B12	10	5095	737.5	2x2 MIMO	19.76	20.00
CA_2A-4A-13A	LTE B2	20	18925	1882.5	64QAM	1	0	925	1962.5	4x4 MIMO	LTE B4	20	2175	2132.5	2x2 MIMO	LTE B13	10	5230	751	2x2 MIMO	19.73	20.00
CA_2A-4A-13A	LTE B2	20	18925	1882.5	64QAM	1	0	925	1962.5	2x2 MIMO	LTE B4	20	2175	2132.5	4x4 MIMO	LTE B13	10	5230	751	2x2 MIMO	19.60	20.00
CA_2A-4A-29A	LTE B2	20	18925	1882.5	64QAM	1	0	925	1962.5	4x4 MIMO	LTE B4	20	2175	2132.5	2x2 MIMO	LTE B29	10	9715	722.5	2x2 MIMO	19.72	20.00
CA_2A-4A-29A	LTE B2	20	18925	1882.5	64QAM	1	0	925	1962.5	2x2 MIMO	LTE B4	20	2175	2132.5	4x4 MIMO	LTE B29	10	9715	722.5	2x2 MIMO	19.72	20.00
CA_2A-4A-30A	LTE B2	20	18925	1882.5	64QAM	1	0	925	1962.5	2x2 MIMO	LTE B4	20	2175	2132.5	2x2 MIMO	LTE B30	10	9820	2355	4x4 MIMO	19.64	20.00
CA_2A-4A-71A	LTE B2	20	18925	1882.5	64QAM	1	0	925	1962.5	4x4 MIMO	LTE B4	20	2175	2132.5	2x2 MIMO	LTE B71	20	68761	634.5	2x2 MIMO	19.71	20.00
CA_2A-4A-71A	LTE B2	20	18925	1882.5	64QAM	1	0	925	1962.5	2x2 MIMO	LTE B4	20	2175	2132.5	4x4 MIMO	LTE B71	20	68761	634.5	2x2 MIMO	19.74	20.00
CA_2A-5A-30A	LTE B2	20	18925	1882.5	64QAM	1	0	925	1962.5	4x4 MIMO	LTE B5	10	2525	881.5	2x2 MIMO	LTE B30	10	9820	2355	2x2 MIMO	19.79	20.00
CA_2A-5A-30A	LTE B2	20	18925	1882.5	64QAM	1	0	925	1962.5	2x2 MIMO	LTE B5	10	2525	881.5	2x2 MIMO	LTE B30	10	9820	2355	4x4 MIMO	19.64	20.00
CA_2A-5A-66A	LTE B2	20	18925	1882.5	64QAM	1	0	925	1962.5	4x4 MIMO	LTE B5	10	2525	881.5	2x2 MIMO	LTE B66	20	66786	2145	2x2 MIMO	19.69	20.00
CA_2A-5A-66A	LTE B2	20	18925	1882.5	64QAM	1	0	925	1962.5	2x2 MIMO	LTE B5	10	2525	881.5	2x2 MIMO	LTE B66	20	66786	2145	4x4 MIMO	19.71	20.00
CA_2A-7A-7A	LTE B2	20	18925	1882.5	64QAM	1	0	925	1962.5	4x4 MIMO	LTE B7	20	3100	2655	2x2 MIMO	LTE B7	20	2850	2630	2x2 MIMO	19.65	20.00
CA_2A-7A-7A	LTE B2	20	18925	1882.5	64QAM	1	0	925	1962.5	2x2 MIMO	LTE B7	20	3100	2655	4x4 MIMO	LTE B7	20	2850	2630	2x2 MIMO	19.33	20.00
CA_2A-7A-12A	LTE B2	20	18925	1882.5	64QAM	1	0	925	1962.5	4x4 MIMO	LTE B7	20	3100	2655	2x2 MIMO	LTE B12	10	5095	737.5	2x2 MIMO	19.64	20.00
CA_2A-7A-12A	LTE B2	20	18925	1882.5	64QAM	1	0	925	1962.5	2x2 MIMO	LTE B7	20	3100	2655	4x4 MIMO	LTE B12	10	5095	737.5	2x2 MIMO	19.68	20.00
CA_2A-12A-30A	LTE B2	20	18925	1882.5	64QAM	1	0	925	1962.5	4x4 MIMO	LTE B12	10	5095	737.5	2x2 MIMO	LTE B30	10	9820	2355	2x2 MIMO	19.76	20.00
CA_2A-12A-30A	LTE B2	20	18925	1882.5	64QAM	1	0	925	1962.5	2x2 MIMO	LTE B12	10	5095	737.5	2x2 MIMO	LTE B30	10	9820	2355	4x4 MIMO	19.72	20.00
CA_2A-12A-66A	LTE B2	20	18925	1882.5	64QAM	1	0	925	1962.5	4x4 MIMO	LTE B12	10	5095	737.5	2x2 MIMO	LTE B66	20	66786	2145	2x2 MIMO	19.68	20.00
CA_2A-12A-66A	LTE B2	20	18925	1882.5	64QAM	1	0	925	1962.5	2x2 MIMO	LTE B12	10	5095	737.5	2x2 MIMO	LTE B66	20	66786	2145	4x4 MIMO	19.73	20.00
CA_2A-13A-66A	LTE B2	20	18925	1882.5	64QAM	1	0	925	1962.5	4x4 MIMO	LTE B13	10	5230	751	2x2 MIMO	LTE B66	20	66786	2145	2x2 MIMO	19.73	20.00
CA_2A-13A-66A	LTE B2	20	18925	1882.5	64QAM	1	0	925	1962.5	2x2 MIMO	LTE B13	10	5230	751	2x2 MIMO	LTE B66	20	66786	2145	4x4 MIMO	19.75	20.00
CA_2A-29A-30A	LTE B2	20	18925	1882.5	64QAM	1	0	925	1962.5	4x4 MIMO	LTE B29	10	9715	722.5	2x2 MIMO	LTE B30	10	9820	2355	2x2 MIMO	19.69	20.00
CA_2A-29A-30A	LTE B2	20	18925	1882.5	64QAM	1	0	925	1962.5	2x2 MIMO	LTE B29	10	9715	722.5	2x2 MIMO	LTE B30	10	9820	2355	4x4 MIMO	19.79	20.00
CA_2A-30A-66A	LTE B2	20	18925	1882.5	64QAM	1	0	925	1962.5	4x4 MIMO	LTE B30	10	9820	2355	2x2 MIMO	LTE B66	20	66786	2145	2x2 MIMO	19.61	20.00
CA_2A-30A-66A	LTE B2	20	18925	1882.5	64QAM	1	0	925	1962.5	2x2 MIMO	LTE B30	10	9820	2355	2x2 MIMO	LTE B66	20	66786	2145	4x4 MIMO	19.76	20.00
CA_2A-66B	LTE B2	20	18925	1882.5	64QAM	1	0	925	1962.5	4x4 MIMO	LTE B66	15	66786	2145	4x4 MIMO	LTE B66	5	66879	2154.3	4x4 MIMO	19.72	20.00
CA_2A-66C	LTE B2	20	18925	1882.5	64QAM	1	0	925	1962.5	4x4 MIMO	LTE B66	20	66786	2145	4x4 MIMO	LTE B66	20	66984	2164.8	4x4 MIMO	19.73	20.00
CA_2A-66A-66A	LTE B2	20	18925	1882.5	64QAM	1	0	925	1962.5	4x4 MIMO	LTE B66	20	66786	2145	2x2 MIMO	LTE B66	20	67236	2190	2x2 MIMO	19.72	20.00
CA_2A-66A-66A	LTE B2	20	18925	1882.5	64QAM	1	0	925	1962.5	2x2 MIMO	LTE B66	20	66786	2145	4x4 MIMO	LTE B66	20	67236	2190	2x2 MIMO	19.72	20.00
CA_2A-66A-71A	LTE B2	20	18925	1882.5	64QAM	1	0	925	1962.5	4x4 MIMO	LTE B66	20	66786	2145	2x2 MIMO	LTE B71	20	68761	634.5	2x2 MIMO	19.71	20.00
CA_2A-66A-71A	LTE B2	20	18925	1882.5	64QAM	1	0	925	1962.5	2x2 MIMO	LTE B66	20	66786	2145	4x4 MIMO	LTE B71	20	68761	634.5	2x2 MIMO	19.77	20.00

Table I-44
LTE Band 25 Additional Hotspot Reduced Output Powers – 3 Component Carriers

	PCC										SCC 1					SCC 2					Power	
Combination	PCC Band	PCC Bandwidth [MHz]	PCC (UL) Channel	PCC (UL) Frequency [MHz]	Modulation	PCC UL# RB	PCC UL RB Offset	PCC (DL) Channel	PCC (DL) Frequency [MHz]	DL Ant. Config.	SCC Band	SCC Bandwidth [MHz]	SCC (DL) Channel	SCC (DL) Frequency [MHz]	DL Ant. Config.	SCC Band	SCC Bandwidth [MHz]	SCC (DL) Channel	SCC (DL) Frequency [MHz]	DL Ant. Config.	LTE Tx.Power with DL CA Enabled (dBm)	LTE Single Carrier Tx Power (dBm)
CA_25A-25A-26A	LTE B25	20	26365	1882.5	64QAM	1	0	8365	1962.5	4x4 MIMO	LTE B25	20	8140	1940	2x2 MIMO	LTE B26	5	8865	876.5	2x2 MIMO	19.87	20.00
CA_25A-25A-26A	LTE B25	20	26365	1882.5	64QAM	1	0	8365	1962.5	2x2 MIMO	LTE B25	20	8140	1940	4x4 MIMO	LTE B26	5	8865	876.5	2x2 MIMO	19.88	20.00
CA_25A-41C	LTE B25	20	26365	1882.5	64QAM	1	0	8365	1962.5	4x4 MIMO	LTE B41	20	40620	2593	2x2 MIMO	LTE B41	20	40422	2573.2	2x2 MIMO	19.65	20.00
CA_25A-41C	LTE B25	20	26365	1882.5	64QAM	1	0	8365	1962.5	2x2 MIMO	LTE B41	20	40620	2593	4x4 MIMO	LTE B41	20	40422	2573.2	4x4 MIMO	19.62	20.00

Table I-45
LTE Band 30 Ant A Additional Hotspot Reduced Output Powers – 3 Component Carriers

	PCC										SCC 1					SCC 2					Power	
Combination	PCC Band	PCC Bandwidth [MHz]	PCC (UL) Channel	PCC (UL) Frequency [MHz]	Modulation	PCC UL# RB	PCC UL RB Offset	PCC (DL) Channel	PCC (DL) Frequency [MHz]	DL Ant. Config.	SCC Band	SCC Bandwidth [MHz]	SCC (DL) Channel	SCC (DL) Frequency [MHz]	DL Ant. Config.	SCC Band	SCC Bandwidth [MHz]	SCC (DL) Channel	SCC (DL) Frequency [MHz]	DL Ant. Config.	LTE Tx.Power with DL CA Enabled (dBm)	LTE Ant. A Tx Power (dBm)
CA_2A-2A-30A	LTE B30 AntA	10	27710	2310	16QAM	1	0	9820	2355	2x2 MIMO	LTE B2	20	900	1960	4x4 MIMO	LTE B2	20	700	1940	2x2 MIMO	19.91	20.00
CA_2A-2A-30A	LTE B30 AntA	10	27710	2310	16QAM	1	0	9820	2355	4x4 MIMO	LTE B2	20	900	1960	2x2 MIMO	LTE B2	20	700	1940	2x2 MIMO	19.91	20.00
CA_2A-4A-30A	LTE B30 AntA	10	27710	2310	16QAM	1	0	9820	2355	4x4 MIMO	LTE B2	20	900	1960	2x2 MIMO	LTE B4	20	2175	2132.5	2x2 MIMO	19.86	20.00
CA_2A-5A-30A	LTE B30 AntA	10	27710	2310	16QAM	1	0	9820	2355	2x2 MIMO	LTE B2	20	900	1960	4x4 MIMO	LTE B5	10	2525	881.5	2x2 MIMO	19.95	20.00
CA_2A-5A-30A	LTE B30 AntA	10	27710	2310	16QAM	1	0	9820	2355	4x4 MIMO	LTE B2	20	900	1960	2x2 MIMO	LTE B5	10	2525	881.5	2x2 MIMO	19.88	20.00
CA_2A-12A-30A	LTE B30 AntA	10	27710	2310	16QAM	1	0	9820	2355	2x2 MIMO	LTE B2	20	900	1960	4x4 MIMO	LTE B12	10	5095	737.5	2x2 MIMO	19.96	20.00
CA_2A-12A-30A	LTE B30 AntA	10	27710	2310	16QAM	1	0	9820	2355	4x4 MIMO	LTE B2	20	900	1960	2x2 MIMO	LTE B12	10	5095	737.5	2x2 MIMO	19.89	20.00
CA_2A-29A-30A	LTE B30 AntA	10	27710	2310	16QAM	1	0	9820	2355	2x2 MIMO	LTE B2	20	900	1960	4x4 MIMO	LTE B29	10	9715	722.5	2x2 MIMO	19.96	20.00
CA_2A-29A-30A	LTE B30 AntA	10	27710	2310	16QAM	1	0	9820	2355	4x4 MIMO	LTE B2	20	900	1960	2x2 MIMO	LTE B29	10	9715	722.5	2x2 MIMO	19.86	20.00
CA_2A-30A-66A	LTE B30 AntA	10	27710	2310	16QAM	1	0	9820	2355	2x2 MIMO	LTE B2	20	900	1960	4x4 MIMO	LTE B66	20	66786	2145	2x2 MIMO	19.86	20.00
CA_2A-30A-66A	LTE B30 AntA	10	27710	2310	16QAM	1	0	9820	2355	2x2 MIMO	LTE B2	20	900	1960	2x2 MIMO	LTE B66	20	66786	2145	4x4 MIMO	19.90	20.00
CA_4A-5A-30A	LTE B30 AntA	10	27710	2310	16QAM	1	0	9820	2355	4x4 MIMO	LTE B4	20	2175	2132.5	2x2 MIMO	LTE B5	10	2525	881.5	2x2 MIMO	19.88	20.00
CA_4A-12A-30A	LTE B30 AntA	10	27710	2310	16QAM	1	0	9820	2355	4x4 MIMO	LTE B4	20	2175	2132.5	2x2 MIMO	LTE B12	10	5095	737.5	2x2 MIMO	19.85	20.00
CA_4A-29A-30A	LTE B30 AntA	10	27710	2310	16QAM	1	0	9820	2355	4x4 MIMO	LTE B4	20	2175	2132.5	2x2 MIMO	LTE B29	10	9715	722.5	2x2 MIMO	19.90	20.00
CA_5A-30A-66A	LTE B30 AntA	10	27710	2310	16QAM	1	0	9820	2355	4x4 MIMO	LTE B5	10	2525	881.5	2x2 MIMO	LTE B66	20	66786	2145	2x2 MIMO	19.90	20.00
CA_5A-30A-66A	LTE B30 AntA	10	27710	2310	16QAM	1	0	9820	2355	2x2 MIMO	LTE B5	10	2525	881.5	2x2 MIMO	LTE B66	20	66786	2145	4x4 MIMO	19.85	20.00
CA_12A-30A-66A	LTE B30 AntA	10	27710	2310	16QAM	1	0	9820	2355	4x4 MIMO	LTE B12	10	5095	737.5	2x2 MIMO	LTE B66	20	66786	2145	2x2 MIMO	19.90	20.00
CA_12A-30A-66A	LTE B30 AntA	10	27710	2310	16QAM	1	0	9820	2355	2x2 MIMO	LTE B12	10	5095	737.5	2x2 MIMO	LTE B66	20	66786	2145	4x4 MIMO	19.87	20.00
CA_30A-66A-66A	LTE B30 AntA	10	27710	2310	16QAM	1	0	9820	2355	4x4 MIMO	LTE B66	20	66786	2145	2x2 MIMO	LTE B66	20	67236	2190	2x2 MIMO	19.90	20.00
CA_30A-66A-66A	LTE B30 AntA	10	27710	2310	16QAM	1	0	9820	2355	2x2 MIMO	LTE B66	20	66786	2145	4x4 MIMO	LTE B66	20	67236	2190	2x2 MIMO	19.92	20.00

Table I-46
LTE Band 7 Ant A Additional Hotspot/Grip Sensor Reduced Output Powers – 3 Component Carriers

	PCC										SCC 1					SCC 2					Power	
Combination	PCC Band	PCC Bandwidth [MHz]	PCC (UL) Channel	PCC (UL) Frequency [MHz]	Modulation	PCC UL# RB	PCC UL RB Offset	PCC (DL) Channel	PCC (DL) Frequency [MHz]	DL Ant. Config.	SCC Band	SCC Bandwidth [MHz]	SCC (DL) Channel	SCC (DL) Frequency [MHz]	DL Ant. Config.	SCC Band	SCC Bandwidth [MHz]	SCC (DL) Channel	SCC (DL) Frequency [MHz]	DL Ant. Config.	LTE Tx.Power with DL CA Enabled (dBm)	LTE Ant. A Tx Power (dBm)
CA_2A-4A-7A	LTE B7 AntA	20	20850	2510	64QAM	1	0	2850	2630	2x2 MIMO	LTE B2	20	900	1960	4x4 MIMO	LTE B4	20	2175	2132.5	2x2 MIMO	20.84	21.00
CA_2A-4A-7A	LTE B7 AntA	20	20850	2510	64QAM	1	0	2850	2630	2x2 MIMO	LTE B2	20	900	1960	2x2 MIMO	LTE B4	20	2175	2132.5	4x4 MIMO	20.76	21.00
CA_2A-4A-7A	LTE B7 AntA	20	20850	2510	64QAM	1	0	2850	2630	4x4 MIMO	LTE B2	20	900	1960	2x2 MIMO	LTE B4	20	2175	2132.5	2x2 MIMO	20.83	21.00
CA_2A-7A-7A	LTE B7 AntA	20	20850	2510	64QAM	1	0	2850	2630	2x2 MIMO	LTE B7	20	3350	2680	2x2 MIMO	LTE B2	20	900	1960	4x4 MIMO	20.80	21.00
CA_2A-7A-7A	LTE B7 AntA	20	20850	2510	64QAM	1	0	2850	2630	4x4 MIMO	LTE B7	20	3350	2680	2x2 MIMO	LTE B2	20	900	1960	2x2 MIMO	20.86	21.00
CA_2A-7A-7A	LTE B7 AntA	20	20850	2510	64QAM	1	0	2850	2630	2x2 MIMO	LTE B7	20	3350	2680	4x4 MIMO	LTE B2	20	900	1960	2x2 MIMO	20.80	21.00
CA_2A-7A-12A	LTE B7 AntA	20	20850	2510	64QAM	1	0	2850	2630	2x2 MIMO	LTE B2	20	900	1960	4x4 MIMO	LTE B12	10	5095	737.5	2x2 MIMO	20.80	21.00
CA_2A-7A-12A	LTE B7 AntA	20	20850	2510	64QAM	1	0	2850	2630	4x4 MIMO	LTE B2	20	900	1960	2x2 MIMO	LTE B12	10	5095	737.5	2x2 MIMO	20.88	21.00
CA_4A-7A-7A	LTE B7 AntA	20	20850	2510	64QAM	1	0	2850	2630	2x2 MIMO	LTE B7	20	3350	2680	2x2 MIMO	LTE B4	20	2175	2132.5	4x4 MIMO	20.94	21.00
CA_4A-7A-7A	LTE B7 AntA	20	20850	2510	64QAM	1	0	2850	2630	4x4 MIMO	LTE B7	20	3350	2680	2x2 MIMO	LTE B4	20	2175	2132.5	2x2 MIMO	20.96	21.00
CA_4A-7A-7A	LTE B7 AntA	20	20850	2510	64QAM	1	0	2850	2630	2x2 MIMO	LTE B7	20	3350	2680	4x4 MIMO	LTE B4	20	2175	2132.5	2x2 MIMO	20.99	21.00
CA_4A-7A-12A	LTE B7 AntA	20	20850	2510	64QAM	1	0	2850	2630	2x2 MIMO	LTE B4	20	2175	2132.5	4x4 MIMO	LTE B12	10	5095	737.5	2x2 MIMO	20.94	21.00
CA_4A-7A-12A	LTE B7 AntA	20	20850	2510	64QAM	1	0	2850	2630	4x4 MIMO	LTE B4	20	2175	2132.5	2x2 MIMO	LTE B12	10	5095	737.5	2x2 MIMO	20.92	21.00

Table I-47
LTE Band 41 PC3 Additional Hotspot Reduced Output Powers –3 Component Carriers

	PCC										SCC 1					SCC 2					Power	
Combination	PCC Band	PCC Bandwidth [MHz]	PCC (UL) Channel	PCC (UL) Frequency [MHz]	Modulation	PCC UL# RB	PCC UL RB Offset	PCC (DL) Channel	PCC (DL) Frequency [MHz]	DL Ant. Config.	SCC Band	SCC Bandwidth [MHz]	SCC (DL) Channel	SCC (DL) Frequency [MHz]	DL Ant. Config.	SCC Band	SCC Bandwidth [MHz]	SCC (DL) Channel	SCC (DL) Frequency [MHz]	DL Ant. Config.	LTE Tx.Power with DL CA Enabled (dBm)	LTE Single Carrier Tx Power (dBm)
CA_41D	LTE B41	20	40185	2549.5	16QAM	1	0	40185	2549.5	4x4 MIMO	LTE B41	20	40383	2569.3	4x4 MIMO	LTE B41	20	40581	2589.1	4x4 MIMO	22.99	23.00
CA_41A-41C	LTE B41	20	40185	2549.5	16QAM	1	0	40185	2549.5	4x4 MIMO	LTE B41	20	41292	2660.2	2x2 MIMO	LTE B41	20	41490	2680	2x2 MIMO	22.98	23.00
CA_41C-41A	LTE B41	20	40185	2549.5	16QAM	1	0	40185	2549.5	2x2 MIMO	LTE B41	20	40383	2569.3	2x2 MIMO	LTE B41	20	41490	2680	4x4 MIMO	23.00	23.00
CA_41A-41C	LTE B41	20	40185	2549.5	16QAM	1	0	40185	2549.5	2x2 MIMO	LTE B41	20	41292	2660.2	4x4 MIMO	LTE B41	20	41490	2680	4x4 MIMO	22.99	23.00
CA_41C-41A	LTE B41	20	40185	2549.5	16QAM	1	0	40185	2549.5	4x4 MIMO	LTE B41	20	40383	2569.3	4x4 MIMO	LTE B41	20	41490	2680	2x2 MIMO	22.95	23.00
CA_41A-41C	LTE B41	20	40185	2549.5	16QAM	1	0	40185	2549.5	4x4 MIMO	LTE B41	20	41292	2660.2	4x4 MIMO	LTE B41	20	41490	2680	4x4 MIMO	22.98	23.00
CA_41C-41A	LTE B41	20	40185	2549.5	16QAM	1	0	40185	2549.5	4x4 MIMO	LTE B41	20	40383	2569.3	4x4 MIMO	LTE B41	20	41490	2680	4x4 MIMO	23.00	23.00

Table I-48
LTE Band 41 PC2 Additional Hotspot Reduced Output Powers – 3 Component Carriers

	PCC										SCC 1					SCC 2					Power	
Combination	PCC Band	PCC Bandwidth [MHz]	PCC (UL) Channel	PCC (UL) Frequency [MHz]	Modulation	PCC UL# RB	PCC UL RB Offset	PCC (DL) Channel	PCC (DL) Frequency [MHz]	DL Ant. Config.	SCC Band	SCC Bandwidth [MHz]	SCC (DL) Channel	SCC (DL) Frequency [MHz]	DL Ant. Config.	SCC Band	SCC Bandwidth [MHz]	SCC (DL) Channel	SCC (DL) Frequency [MHz]	DL Ant. Config.	LTE Tx.Power with DL CA Enabled (dBm)	LTE Single Carrier Tx Power (dBm)
CA_41D	LTE B41 PC2	20	39750	2506	16QAM	1	0	39750	2506	4x4 MIMO	LTE B41 PC2	20	39948	2525.8	4x4 MIMO	LTE B41 PC2	20	40146	2545.6	4x4 MIMO	22.75	23.00
CA_41A-41C	LTE B41 PC2	20	39750	2506	16QAM	1	0	39750	2506	4x4 MIMO	LTE B41 PC2	20	41292	2660.2	2x2 MIMO	LTE B41 PC2	20	41490	2680	2x2 MIMO	22.76	23.00
CA_41C-41A	LTE B41 PC2	20	39750	2506	16QAM	1	0	39750	2506	2x2 MIMO	LTE B41 PC2	20	39948	2525.8	2x2 MIMO	LTE B41 PC2	20	41490	2680	4x4 MIMO	22.75	23.00
CA_41A-41C	LTE B41 PC2	20	39750	2506	16QAM	1	0	39750	2506	2x2 MIMO	LTE B41 PC2	20	41292	2660.2	4x4 MIMO	LTE B41 PC2	20	41490	2680	4x4 MIMO	22.75	23.00
CA_41C-41A	LTE B41 PC2	20	39750	2506	16QAM	1	0	39750	2506	4x4 MIMO	LTE B41 PC2	20	39948	2525.8	4x4 MIMO	LTE B41 PC2	20	41490	2680	2x2 MIMO	22.70	23.00
CA_41A-41C	LTE B41 PC2	20	39750	2506	16QAM	1	0	39750	2506	4x4 MIMO	LTE B41 PC2	20	41292	2660.2	4x4 MIMO	LTE B41 PC2	20	41490	2680	4x4 MIMO	22.74	23.00
CA_41C-41A	LTE B41 PC2	20	39750	2506	16QAM	1	0	39750	2506	4x4 MIMO	LTE B41 PC2	20	39948	2525.8	4x4 MIMO	LTE B41 PC2	20	41490	2680	4x4 MIMO	22.76	23.00

Table I-49
LTE Band 4 Additional Grip Sensor Reduced Output Powers – 3 Component Carriers

	PCC										SCC 1					SCC 2					Power	
Combination	PCC Band	PCC Bandwidth [MHz]	PCC (UL) Channel	PCC (UL) Frequency [MHz]	Modulation	PCC UL# RB	PCC UL RB Offset	PCC (DL) Channel	PCC (DL) Frequency [MHz]	DL Ant. Config.	SCC Band	SCC Bandwidth [MHz]	SCC (DL) Channel	SCC (DL) Frequency [MHz]	DL Ant. Config.	SCC Band	SCC Bandwidth [MHz]	SCC (DL) Channel	SCC (DL) Frequency [MHz]	DL Ant. Config.	LTE Tx.Power with DL CA Enabled (dBm)	LTE Single Carrier Tx Power (dBm)
CA_2A-2A-4A	LTE B4	20	20300	1745	16QAM	1	0	2300	2145	2x2 MIMO	LTE B2	20	900	1960	4x4 MIMO	LTE B2	20	700	1940	2x2 MIMO	21.10	21.50
CA_2A-2A-4A	LTE B4	20	20300	1745	16QAM	1	0	2300	2145	4x4 MIMO	LTE B2	20	900	1960	2x2 MIMO	LTE B2	20	700	1940	2x2 MIMO	21.10	21.50
CA_2A-4A-4A	LTE B4	20	20300	1745	16QAM	1	0	2300	2145	2x2 MIMO	LTE B4	20	2050	2120	2x2 MIMO	LTE B2	20	900	1960	4x4 MIMO	21.10	21.50
CA_2A-4A-4A	LTE B4	20	20300	1745	16QAM	1	0	2300	2145	4x4 MIMO	LTE B4	20	2050	2120	2x2 MIMO	LTE B2	20	900	1960	2x2 MIMO	21.17	21.50
CA_2A-4A-4A	LTE B4	20	20300	1745	16QAM	1	0	2300	2145	2x2 MIMO	LTE B4	20	2050	2120	4x4 MIMO	LTE B2	20	900	1960	2x2 MIMO	21.09	21.50
CA_2A-4A-5A	LTE B4	20	20300	1745	16QAM	1	0	2300	2145	2x2 MIMO	LTE B2	20	900	1960	4x4 MIMO	LTE B5	10	2525	881.5	2x2 MIMO	21.11	21.50
CA_2A-4A-5A	LTE B4	20	20300	1745	16QAM	1	0	2300	2145	4x4 MIMO	LTE B2	20	900	1960	2x2 MIMO	LTE B5	10	2525	881.5	2x2 MIMO	21.10	21.50
CA_2A-4A-7A	LTE B4	20	20300	1745	16QAM	1	0	2300	2145	2x2 MIMO	LTE B2	20	900	1960	4x4 MIMO	LTE B7	20	3100	2655	2x2 MIMO	21.25	21.50
CA_2A-4A-7A	LTE B4	20	20300	1745	16QAM	1	0	2300	2145	4x4 MIMO	LTE B2	20	900	1960	2x2 MIMO	LTE B7	20	3100	2655	2x2 MIMO	21.19	21.50
CA_2A-4A-7A	LTE B4	20	20300	1745	16QAM	1	0	2300	2145	2x2 MIMO	LTE B2	20	900	1960	2x2 MIMO	LTE B7	20	3100	2655	4x4 MIMO	21.22	21.50
CA_2A-4A-12A	LTE B4	20	20300	1745	16QAM	1	0	2300	2145	2x2 MIMO	LTE B2	20	900	1960	4x4 MIMO	LTE B12	10	5095	737.5	2x2 MIMO	21.09	21.50
CA_2A-4A-12A	LTE B4	20	20300	1745	16QAM	1	0	2300	2145	4x4 MIMO	LTE B2	20	900	1960	2x2 MIMO	LTE B12	10	5095	737.5	2x2 MIMO	21.02	21.50
CA_2A-4A-13A	LTE B4	20	20300	1745	16QAM	1	0	2300	2145	2x2 MIMO	LTE B2	20	900	1960	4x4 MIMO	LTE B13	10	5230	751	2x2 MIMO	21.10	21.50
CA_2A-4A-13A	LTE B4	20	20300	1745	16QAM	1	0	2300	2145	4x4 MIMO	LTE B2	20	900	1960	2x2 MIMO	LTE B13	10	5230	751	2x2 MIMO	21.09	21.50
CA_2A-4A-29A	LTE B4	20	20300	1745	16QAM	1	0	2300	2145	2x2 MIMO	LTE B2	20	900	1960	4x4 MIMO	LTE B29	10	9715	722.5	2x2 MIMO	21.12	21.50
CA_2A-4A-29A	LTE B4	20	20300	1745	16QAM	1	0	2300	2145	4x4 MIMO	LTE B2	20	900	1960	2x2 MIMO	LTE B29	10	9715	722.5	2x2 MIMO	21.09	21.50
CA_2A-4A-30A	LTE B4	20	20300	1745	16QAM	1	0	2300	2145	2x2 MIMO	LTE B2	20	900	1960	2x2 MIMO	LTE B30	10	9820	2355	4x4 MIMO	20.87	21.50
CA_2A-4A-71A	LTE B4	20	20300	1745	16QAM	1	0	2300	2145	2x2 MIMO	LTE B2	20	900	1960	4x4 MIMO	LTE B71	20	68761	634.5	2x2 MIMO	21.11	21.50
CA_2A-4A-71A	LTE B4	20	20300	1745	16QAM	1	0	2300	2145	4x4 MIMO	LTE B2	20	900	1960	2x2 MIMO	LTE B71	20	68761	634.5	2x2 MIMO	21.14	21.50
CA_4A-4A-5A	LTE B4	20	20300	1745	16QAM	1	0	2300	2145	4x4 MIMO	LTE B4	20	2050	2120	2x2 MIMO	LTE B5	10	2525	881.5	2x2 MIMO	21.09	21.50
CA_4A-4A-5A	LTE B4	20	20300	1745	16QAM	1	0	2300	2145	2x2 MIMO	LTE B4	20	2050	2120	4x4 MIMO	LTE B5	10	2525	881.5	2x2 MIMO	21.15	21.50
CA_4A-4A-12A	LTE B4	20	20300	1745	16QAM	1	0	2300	2145	4x4 MIMO	LTE B4	20	2050	2120	2x2 MIMO	LTE B12	10	5095	737.5	2x2 MIMO	21.07	21.50
CA_4A-4A-12A	LTE B4	20	20300	1745	16QAM	1	0	2300	2145	2x2 MIMO	LTE B4	20	2050	2120	4x4 MIMO	LTE B12	10	5095	737.5	2x2 MIMO	21.11	21.50
CA_4A-4A-13A	LTE B4	20	20300	1745	16QAM	1	0	2300	2145	4x4 MIMO	LTE B4	20	2050	2120	2x2 MIMO	LTE B13	10	5230	751	2x2 MIMO	21.11	21.50
CA_4A-4A-13A	LTE B4	20	20300	1745	16QAM	1	0	2300	2145	2x2 MIMO	LTE B4	20	2050	2120	4x4 MIMO	LTE B13	10	5230	751	2x2 MIMO	21.15	21.50
CA_4A-4A-29A	LTE B4	20	20300	1745	16QAM	1	0	2300	2145	4x4 MIMO	LTE B4	20	2050	2120	2x2 MIMO	LTE B29	10	9715	722.5	2x2 MIMO	21.08	21.50
CA_4A-4A-29A	LTE B4	20	20300	1745	16QAM	1	0	2300	2145	2x2 MIMO	LTE B4	20	2050	2120	4x4 MIMO	LTE B29	10	9715	722.5	2x2 MIMO	21.12	21.50
CA_4A-4A-71A	LTE B4	20	20300	1745	16QAM	1	0	2300	2145	4x4 MIMO	LTE B4	20	2050	2120	2x2 MIMO	LTE B71	20	68761	634.5	2x2 MIMO	21.07	21.50
CA_4A-4A-71A	LTE B4	20	20300	1745	16QAM	1	0	2300	2145	2x2 MIMO	LTE B4	20	2050	2120	4x4 MIMO	LTE B71	20	68761	634.5	2x2 MIMO	21.10	21.50
CA_4A-5A-30A	LTE B4	20	20300	1745	16QAM	1	0	2300	2145	2x2 MIMO	LTE B5	10	2525	881.5	2x2 MIMO	LTE B30	10	9820	2355	4x4 MIMO	20.89	21.50
CA_4A-7A-7A	LTE B4	20	20300	1745	16QAM	1	0	2300	2145	4x4 MIMO	LTE B7	20	3100	2655	2x2 MIMO	LTE B7	20	2850	2630	2x2 MIMO	20.84	21.50
CA_4A-7A-7A	LTE B4	20	20300	1745	16QAM	1	0	2300	2145	2x2 MIMO	LTE B7	20	3100	2655	4x4 MIMO	LTE B7	20	2850	2630	2x2 MIMO	21.17	21.50
CA_4A-7A-12A	LTE B4	20	20300	1745	16QAM	1	0	2300	2145	4x4 MIMO	LTE B7	20	3100	2655	2x2 MIMO	LTE B12	10	5095	737.5	2x2 MIMO	20.89	21.50
CA_4A-7A-12A	LTE B4	20	20300	1745	16QAM	1	0	2300	2145	2x2 MIMO	LTE B7	20	3100	2655	4x4 MIMO	LTE B12	10	5095	737.5	2x2 MIMO	20.86	21.50
CA_4A-12A-30A	LTE B4	20	20300	1745	16QAM	1	0	2300	2145	2x2 MIMO	LTE B12	10	5095	737.5	2x2 MIMO	LTE B30	10	9820	2355	4x4 MIMO	20.78	21.50
CA_4A-29A-30A	LTE B4	20	20300	1745	16QAM	1	0	2300	2145	2x2 MIMO	LTE B29	10	9715	722.5	2x2 MIMO	LTE B30	10	9820	2355	4x4 MIMO	20.79	21.50

Table I-50
LTE Band 66 Additional Grip Sensor Reduced Output Powers – 3 Component Carriers

	PCC										SCC 1					SCC 2					Power	
Combination	PCC Band	PCC Bandwidth [MHz]	PCC (UL) Channel	PCC (UL) Frequency [MHz]	Modulation	PCC UL# RB	PCC UL RB Offset	PCC (DL) Channel	PCC (DL) Frequency [MHz]	DL Ant. Config.	SCC Band	SCC Bandwidth [MHz]	SCC (DL) Channel	SCC (DL) Frequency [MHz]	DL Ant. Config.	SCC Band	SCC Bandwidth [MHz]	SCC (DL) Channel	SCC (DL) Frequency [MHz]	DL Ant. Config.	LTE Tx.Power with DL CA Enabled (dBm)	LTE Single Carrier Tx Power (dBm)
CA_2C-66A	LTE B66	20	132322	1745	16QAM	1	0	66786	2145	2x2 MIMO	LTE B2	20	900	1960	4x4 MIMO	LTE B2	20	702	1940.2	4x4 MIMO	21.27	21.50
CA_2C-66A	LTE B66	20	132322	1745	16QAM	1	0	66786	2145	4x4 MIMO	LTE B2	20	900	1960	2x2 MIMO	LTE B2	20	702	1940.2	2x2 MIMO	21.32	21.50
CA_2C-66A	LTE B66	20	132322	1745	16QAM	1	0	66786	2145	4x4 MIMO	LTE B2	20	900	1960	4x4 MIMO	LTE B2	20	702	1940.2	4x4 MIMO	21.30	21.50
CA_2A-2A-66A	LTE B66	20	132322	1745	16QAM	1	0	66786	2145	2x2 MIMO	LTE B2	20	900	1960	4x4 MIMO	LTE B2	20	700	1940	2x2 MIMO	21.35	21.50
CA_2A-2A-66A	LTE B66	20	132322	1745	16QAM	1	0	66786	2145	4x4 MIMO	LTE B2	20	900	1960	2x2 MIMO	LTE B2	20	700	1940	2x2 MIMO	21.30	21.50
CA_2A-5A-66A	LTE B66	20	132322	1745	16QAM	1	0	66786	2145	2x2 MIMO	LTE B2	20	900	1960	4x4 MIMO	LTE B5	10	2525	881.5	2x2 MIMO	21.33	21.50
CA_2A-5A-66A	LTE B66	20	132322	1745	16QAM	1	0	66786	2145	4x4 MIMO	LTE B2	20	900	1960	2x2 MIMO	LTE B5	10	2525	881.5	2x2 MIMO	21.33	21.50
CA_2A-12A-66A	LTE B66	20	132322	1745	16QAM	1	0	66786	2145	2x2 MIMO	LTE B2	20	900	1960	4x4 MIMO	LTE B12	10	5095	737.5	2x2 MIMO	21.35	21.50
CA_2A-12A-66A	LTE B66	20	132322	1745	16QAM	1	0	66786	2145	4x4 MIMO	LTE B2	20	900	1960	2x2 MIMO	LTE B12	10	5095	737.5	2x2 MIMO	21.31	21.50
CA_2A-13A-66A	LTE B66	20	132322	1745	16QAM	1	0	66786	2145	2x2 MIMO	LTE B2	20	900	1960	4x4 MIMO	LTE B13	10	5230	751	2x2 MIMO	21.39	21.50
CA_2A-13A-66A	LTE B66	20	132322	1745	16QAM	1	0	66786	2145	4x4 MIMO	LTE B2	20	900	1960	2x2 MIMO	LTE B13	10	5230	751	2x2 MIMO	21.32	21.50
CA_2A-30A-66A	LTE B66	20	132322	1745	16QAM	1	0	66786	2145	2x2 MIMO	LTE B2	20	900	1960	4x4 MIMO	LTE B30	10	9820	2355	2x2 MIMO	21.37	21.50
CA_2A-30A-66A	LTE B66	20	132322	1745	16QAM	1	0	66786	2145	4x4 MIMO	LTE B2	20	900	1960	2x2 MIMO	LTE B30	10	9820	2355	2x2 MIMO	21.33	21.50
CA_2A-66B	LTE B66	15	132047	1717.5	64QAM	1	0	66511	2117.5	4x4 MIMO	LTE B66	5	66604	2126.8	4x4 MIMO	LTE B2	20	900	1960	4x4 MIMO	21.32	21.50
CA_2A-66C	LTE B66	20	132322	1745	16QAM	1	0	66786	2145	4x4 MIMO	LTE B66	20	66588	2125.2	4x4 MIMO	LTE B2	20	900	1960	4x4 MIMO	21.34	21.50
CA_2A-66A-66A	LTE B66	20	132322	1745	16QAM	1	0	66786	2145	2x2 MIMO	LTE B66	20	67236	2190	2x2 MIMO	LTE B2	20	900	1960	4x4 MIMO	21.33	21.50
CA_2A-66A-66A	LTE B66	20	132322	1745	16QAM	1	0	66786	2145	4x4 MIMO	LTE B66	20	67236	2190	2x2 MIMO	LTE B2	20	900	1960	2x2 MIMO	21.32	21.50
CA_2A-66A-66A	LTE B66	20	132322	1745	16QAM	1	0	66786	2145	2x2 MIMO	LTE B66	20	67236	2190	4x4 MIMO	LTE B2	20	900	1960	2x2 MIMO	21.35	21.50
CA_2A-66A-71A	LTE B66	20	132322	1745	16QAM	1	0	66786	2145	4x4 MIMO	LTE B2	20	900	1960	4x4 MIMO	LTE B71	20	68761	634.5	2x2 MIMO	21.33	21.50
CA_2A-66A-71A	LTE B66	20	132322	1745	16QAM	1	0	66786	2145	4x4 MIMO	LTE B2	20	900	1960	2x2 MIMO	LTE B71	20	68761	634.5	2x2 MIMO	21.36	21.50
CA_5A-30A-66A	LTE B66	20	132322	1745	16QAM	1	0	66786	2145	2x2 MIMO	LTE B5	10	2525	881.5	2x2 MIMO	LTE B30	10	9820	2355	4x4 MIMO	20.96	21.50
CA_5A-30A-66A	LTE B66	20	132322	1745	16QAM	1	0	66786	2145	4x4 MIMO	LTE B5	10	2525	881.5	2x2 MIMO	LTE B30	10	9820	2355	2x2 MIMO	20.97	21.50
CA_5A-66A-66A	LTE B66	20	132322	1745	16QAM	1	0	66786	2145	4x4 MIMO	LTE B66	20	67236	2190	2x2 MIMO	LTE B5	10	2525	881.5	2x2 MIMO	21.32	21.50
CA_5A-66A-66A	LTE B66	20	132322	1745	16QAM	1	0	66786	2145	2x2 MIMO	LTE B66	20	67236	2190	4x4 MIMO	LTE B5	10	2525	881.5	2x2 MIMO	21.35	21.50
CA_12A-66C	LTE B66	20	132322	1745	16QAM	1	0	66786	2145	4x4 MIMO	LTE B66	20	66588	2125.2	4x4 MIMO	LTE B12	10	5095	737.5	2x2 MIMO	21.30	21.50
CA_12A-66A-66A	LTE B66	20	132322	1745	16QAM	1	0	66786	2145	4x4 MIMO	LTE B66	20	67236	2190	2x2 MIMO	LTE B12	10	5095	737.5	2x2 MIMO	21.30	21.50
CA_12A-66A-66A	LTE B66	20	132322	1745	16QAM	1	0	66786	2145	2x2 MIMO	LTE B66	20	67236	2190	4x4 MIMO	LTE B12	10	5095	737.5	2x2 MIMO	21.30	21.50
CA_12A-30A-66A	LTE B66	20	132322	1745	16QAM	1	0	66786	2145	2x2 MIMO	LTE B12	10	5095	737.5	2x2 MIMO	LTE B30	10	9820	2355	4x4 MIMO	21.00	21.50
CA_12A-30A-66A	LTE B66	20	132322	1745	16QAM	1	0	66786	2145	4x4 MIMO	LTE B12	10	5095	737.5	2x2 MIMO	LTE B30	10	9820	2355	2x2 MIMO	21.02	21.50
CA_13A-66A-66A	LTE B66	20	132322	1745	16QAM	1	0	66786	2145	4x4 MIMO	LTE B66	20	67236	2190	2x2 MIMO	LTE B13	10	5230	751	2x2 MIMO	21.34	21.50
CA_13A-66A-66A	LTE B66	20	132322	1745	16QAM	1	0	66786	2145	2x2 MIMO	LTE B66	20	67236	2190	4x4 MIMO	LTE B13	10	5230	751	2x2 MIMO	21.32	21.50
CA_30A-66A-66A	LTE B66	20	132322	1745	16QAM	1	0	66786	2145	2x2 MIMO	LTE B66	20	67236	2190	2x2 MIMO	LTE B30	10	9820	2355	4x4 MIMO	21.06	21.50
CA_30A-66A-66A	LTE B66	20	132322	1745	16QAM	1	0	66786	2145	4x4 MIMO	LTE B66	20	67236	2190	2x2 MIMO	LTE B30	10	9820	2355	2x2 MIMO	21.39	21.50
CA_30A-66A-66A	LTE B66	20	132322	1745	16QAM	1	0	66786	2145	2x2 MIMO	LTE B66	20	67236	2190	4x4 MIMO	LTE B30	10	9820	2355	2x2 MIMO	21.40	21.50
CA_66D	LTE B66	20	132322	1745	16QAM	1	0	66786	2145	4x4 MIMO	LTE B66	20	66588	2125.2	4x4 MIMO	LTE B66	20	66984	2164.8	4x4 MIMO	21.37	21.50
CA_66A-66C	LTE B66	20	132322	1745	16QAM	1	0	66786	2145	4x4 MIMO	LTE B66	20	67038	2170.2	2x2 MIMO	LTE B66	20	67236	2190	2x2 MIMO	21.28	21.50
CA_66C-66A	LTE B66	20	132322	1745	16QAM	1	0	66786	2145	4x4 MIMO	LTE B66	20	66588	2125.2	2x2 MIMO	LTE B66	20	67236	2190	4x4 MIMO	21.33	21.50
CA_66A-66C	LTE B66	20	132322	1745	16QAM	1	0	66786	2145	2x2 MIMO	LTE B66	20	67038	2170.2	4x4 MIMO	LTE B66	20	67236	2190	4x4 MIMO	21.31	21.50
CA_66C-66A	LTE B66	20	132322	1745	16QAM	1	0	66786	2145	4x4 MIMO	LTE B66	20	66588	2125.2	4x4 MIMO	LTE B66	20	67236	2190	2x2 MIMO	21.34	21.50
CA_66A-66C	LTE B66	20	132322	1745	16QAM	1	0	66786	2145	4x4 MIMO	LTE B66	20	67038	2170.2	4x4 MIMO	LTE B66	20	67236	2190	4x4 MIMO	21.34	21.50
CA_66C-66A	LTE B66	20	132322	1745	16QAM	1	0	66786	2145	4x4 MIMO	LTE B66	20	66588	2125.2	4x4 MIMO	LTE B66	20	67236	2190	4x4 MIMO	21.35	21.50
CA_66C-71A	LTE B66	20	132322	1745	16QAM	1	0	66786	2145	4x4 MIMO	LTE B66	20	66588	2125.2	4x4 MIMO	LTE B71	20	68761	634.5	2x2 MIMO	21.35	21.50
CA_66A-66A-71A	LTE B66	20	132322	1745	16QAM	1	0	66786	2145	4x4 MIMO	LTE B66	20	67236	2190	2x2 MIMO	LTE B71	20	68761	634.5	2x2 MIMO	21.36	21.50
CA_66A-66A-71A	LTE B66	20	132322	1745	16QAM	1	0	66786	2145	2x2 MIMO	LTE B66	20	67236	2190	4x4 MIMO	LTE B71	20	68761	634.5	2x2 MIMO	21.37	21.50

Table I-51
LTE Band 2 Additional Grip Sensor Reduced Output Powers – 3 Component Carriers

	PCC										SCC 1					SCC 2					Power	
Combination	PCC Band	PCC Bandwidth [MHz]	PCC (UL) Channel	PCC (UL) Frequency [MHz]	Modulation	PCC UL# RB	PCC UL RB Offset	PCC (DL) Channel	PCC (DL) Frequency [MHz]	DL Ant. Config.	SCC Band	SCC Bandwidth [MHz]	SCC (DL) Channel	SCC (DL) Frequency [MHz]	DL Ant. Config.	SCC Band	SCC Bandwidth [MHz]	SCC (DL) Channel	SCC (DL) Frequency [MHz]	DL Ant. Config.	LTE Tx.Power with DL CA Enabled (dBm)	LTE Single Carrier Tx Power (dBm)
CA_2A-2A-4A	LTE B2	20	18700	1860	16QAM	1	99	700	1940	4x4 MIMO	LTE B2	20	1100	1980	2x2 MIMO	LTE B4	20	2175	2132.5	2x2 MIMO	22.13	22.50
CA_2A-2A-4A	LTE B2	20	18700	1860	16QAM	1	99	700	1940	2x2 MIMO	LTE B2	20	1100	1980	4x4 MIMO	LTE B4	20	2175	2132.5	2x2 MIMO	22.17	22.50
CA_2A-2A-4A	LTE B2	20	18700	1860	16QAM	1	99	700	1940	2x2 MIMO	LTE B2	20	1100	1980	2x2 MIMO	LTE B4	20	2175	2132.5	4x4 MIMO	22.16	22.50
CA_2A-2A-5A	LTE B2	20	18700	1860	16QAM	1	99	700	1940	4x4 MIMO	LTE B2	20	1100	1980	2x2 MIMO	LTE B5	10	2525	881.5	2x2 MIMO	22.13	22.50
CA_2A-2A-5A	LTE B2	20	18700	1860	16QAM	1	99	700	1940	2x2 MIMO	LTE B2	20	1100	1980	4x4 MIMO	LTE B5	10	2525	881.5	2x2 MIMO	22.18	22.50
CA_2A-2A-12A	LTE B2	20	18700	1860	16QAM	1	99	700	1940	4x4 MIMO	LTE B2	20	1100	1980	2x2 MIMO	LTE B12	10	5095	737.5	2x2 MIMO	22.31	22.50
CA_2A-2A-12A	LTE B2	20	18700	1860	16QAM	1	99	700	1940	2x2 MIMO	LTE B2	20	1100	1980	4x4 MIMO	LTE B12	10	5095	737.5	2x2 MIMO	22.16	22.50
CA_2A-2A-13A	LTE B2	20	18700	1860	16QAM	1	99	700	1940	4x4 MIMO	LTE B2	20	1100	1980	2x2 MIMO	LTE B13	10	5230	751	2x2 MIMO	22.13	22.50
CA_2A-2A-13A	LTE B2	20	18700	1860	16QAM	1	99	700	1940	2x2 MIMO	LTE B2	20	1100	1980	4x4 MIMO	LTE B13	10	5230	751	2x2 MIMO	22.18	22.50
CA_2A-2A-30A	LTE B2	20	18700	1860	16QAM	1	99	700	1940	4x4 MIMO	LTE B2	20	1100	1980	2x2 MIMO	LTE B30	10	9820	2355	2x2 MIMO	22.26	22.50
CA_2A-2A-30A	LTE B2	20	18700	1860	16QAM	1	99	700	1940	2x2 MIMO	LTE B2	20	1100	1980	4x4 MIMO	LTE B30	10	9820	2355	2x2 MIMO	22.12	22.50
CA_2A-2A-30A	LTE B2	20	18700	1860	16QAM	1	99	700	1940	2x2 MIMO	LTE B2	20	1100	1980	2x2 MIMO	LTE B30	10	9820	2355	4x4 MIMO	22.23	22.50
CA_2C-66A	LTE B2	20	18700	1860	16QAM	1	99	700	1940	4x4 MIMO	LTE B2	20	898	1959.8	4x4 MIMO	LTE B66	20	66786	2145	2x2 MIMO	22.14	22.50
CA_2C-66A	LTE B2	20	18700	1860	16QAM	1	99	700	1940	2x2 MIMO	LTE B2	20	898	1959.8	2x2 MIMO	LTE B66	20	66786	2145	4x4 MIMO	22.13	22.50
CA_2C-66A	LTE B2	20	18700	1860	16QAM	1	99	700	1940	4x4 MIMO	LTE B2	20	898	1959.8	4x4 MIMO	LTE B66	20	66786	2145	4x4 MIMO	22.22	22.50
CA_2A-2A-66A	LTE B2	20	18700	1860	16QAM	1	99	700	1940	4x4 MIMO	LTE B2	20	1100	1980	2x2 MIMO	LTE B66	20	66786	2145	2x2 MIMO	22.11	22.50
CA_2A-2A-66A	LTE B2	20	18700	1860	16QAM	1	99	700	1940	2x2 MIMO	LTE B2	20	1100	1980	4x4 MIMO	LTE B66	20	66786	2145	2x2 MIMO	22.15	22.50
CA_2A-2A-66A	LTE B2	20	18700	1860	16QAM	1	99	700	1940	2x2 MIMO	LTE B2	20	1100	1980	2x2 MIMO	LTE B66	20	66786	2145	4x4 MIMO	22.13	22.50
CA_2A-2A-71A	LTE B2	20	18700	1860	16QAM	1	99	700	1940	4x4 MIMO	LTE B2	20	1100	1980	2x2 MIMO	LTE B71	20	68761	634.5	2x2 MIMO	22.14	22.50
CA_2A-2A-71A	LTE B2	20	18700	1860	16QAM	1	99	700	1940	2x2 MIMO	LTE B2	20	1100	1980	4x4 MIMO	LTE B71	20	68761	634.5	2x2 MIMO	22.14	22.50
CA_2A-4A-4A	LTE B2	20	18700	1860	16QAM	1	99	700	1940	4x4 MIMO	LTE B4	20	2175	2132.5	4x4 MIMO	LTE B4	10	2350	2150	2x2 MIMO	22.18	22.50
CA_2A-4A-4A	LTE B2	20	18700	1860	16QAM	1	99	700	1940	2x2 MIMO	LTE B4	20	2175	2132.5	4x4 MIMO	LTE B4	10	2350	2150	2x2 MIMO	22.13	22.50
CA_2A-4A-5A	LTE B2	20	18700	1860	16QAM	1	99	700	1940	4x4 MIMO	LTE B4	20	2175	2132.5	2x2 MIMO	LTE B5	10	2525	881.5	2x2 MIMO	22.12	22.50
CA_2A-4A-5A	LTE B2	20	18700	1860	16QAM	1	99	700	1940	2x2 MIMO	LTE B4	20	2175	2132.5	4x4 MIMO	LTE B5	10	2525	881.5	2x2 MIMO	22.19	22.50
CA_2A-4A-7A	LTE B2	20	18700	1860	16QAM	1	99	700	1940	4x4 MIMO	LTE B4	20	2175	2132.5	2x2 MIMO	LTE B7	20	3100	2655	2x2 MIMO	22.10	22.50
CA_2A-4A-7A	LTE B2	20	18700	1860	16QAM	1	99	700	1940	2x2 MIMO	LTE B4	20	2175	2132.5	2x2 MIMO	LTE B7	20	3100	2655	4x4 MIMO	22.10	22.50
CA_2A-4A-12A	LTE B2	20	18700	1860	16QAM	1	99	700	1940	4x4 MIMO	LTE B4	20	2175	2132.5	2x2 MIMO	LTE B12	10	5095	737.5	2x2 MIMO	22.13	22.50
CA_2A-4A-12A	LTE B2	20	18700	1860	16QAM	1	99	700	1940	2x2 MIMO	LTE B4	20	2175	2132.5	4x4 MIMO	LTE B12	10	5095	737.5	2x2 MIMO	22.14	22.50
CA_2A-4A-13A	LTE B2	20	18700	1860	16QAM	1	99	700	1940	4x4 MIMO	LTE B4	20	2175	2132.5	2x2 MIMO	LTE B13	10	5230	751	2x2 MIMO	22.15	22.50
CA_2A-4A-13A	LTE B2	20	18700	1860	16QAM	1	99	700	1940	2x2 MIMO	LTE B4	20	2175	2132.5	4x4 MIMO	LTE B13	10	5230	751	2x2 MIMO	22.19	22.50
CA_2A-4A-29A	LTE B2	20	18700	1860	16QAM	1	99	700	1940	4x4 MIMO	LTE B4	20	2175	2132.5	2x2 MIMO	LTE B29	10	9715	722.5	2x2 MIMO	22.16	22.50
CA_2A-4A-29A	LTE B2	20	18700	1860	16QAM	1	99	700	1940	2x2 MIMO	LTE B4	20	2175	2132.5	4x4 MIMO	LTE B29	10	9715	722.5	2x2 MIMO	22.13	22.50
CA_2A-4A-30A	LTE B2	20	18700	1860	16QAM	1	99	700	1940	2x2 MIMO	LTE B4	20	2175	2132.5	2x2 MIMO	LTE B30	10	9820	2355	4x4 MIMO	22.23	22.50
CA_2A-4A-71A	LTE B2	20	18700	1860	16QAM	1	99	700	1940	4x4 MIMO	LTE B4	20	2175	2132.5	2x2 MIMO	LTE B71	20	68761	634.5	2x2 MIMO	22.14	22.50
CA_2A-4A-71A	LTE B2	20	18700	1860	16QAM	1	99	700	1940	2x2 MIMO	LTE B4	20	2175	2132.5	4x4 MIMO	LTE B71	20	68761	634.5	2x2 MIMO	22.23	22.50
CA_2A-5A-30A	LTE B2	20	18700	1860	16QAM	1	99	700	1940	4x4 MIMO	LTE B5	10	2525	881.5	2x2 MIMO	LTE B30	10	9820	2355	2x2 MIMO	22.19	22.50
CA_2A-5A-30A	LTE B2	20	18700	1860	16QAM	1	99	700	1940	2x2 MIMO	LTE B5	10	2525	881.5	2x2 MIMO	LTE B30	10	9820	2355	4x4 MIMO	22.23	22.50
CA_2A-5A-66A	LTE B2	20	18700	1860	16QAM	1	99	700	1940	4x4 MIMO	LTE B5	10	2525	881.5	2x2 MIMO	LTE B66	20	66786	2145	2x2 MIMO	22.12	22.50
CA_2A-5A-66A	LTE B2	20	18700	1860	16QAM	1	99	700	1940	2x2 MIMO	LTE B5	10	2525	881.5	2x2 MIMO	LTE B66	20	66786	2145	4x4 MIMO	22.18	22.50
CA_2A-7A-7A	LTE B2	20	18700	1860	16QAM	1	99	700	1940	4x4 MIMO	LTE B7	20	3100	2655	2x2 MIMO	LTE B7	20	2850	2630	2x2 MIMO	21.90	22.50
CA_2A-7A-7A	LTE B2	20	18700	1860	16QAM	1	99	700	1940	2x2 MIMO	LTE B7	20	3100	2655	4x4 MIMO	LTE B7	20	2850	2630	2x2 MIMO	22.02	22.50
CA_2A-7A-12A	LTE B2	20	18700	1860	16QAM	1	99	700	1940	4x4 MIMO	LTE B7	20	3100	2655	2x2 MIMO	LTE B12	10	5095	737.5	2x2 MIMO	22.04	22.50
CA_2A-7A-12A	LTE B2	20	18700	1860	16QAM	1	99	700	1940	2x2 MIMO	LTE B7	20	3100	2655	4x4 MIMO	LTE B12	10	5095	737.5	2x2 MIMO	22.08	22.50
CA_2A-12A-30A	LTE B2	20	18700	1860	16QAM	1	99	700	1940	4x4 MIMO	LTE B12	10	5095	737.5	2x2 MIMO	LTE B30	10	9820	2355	2x2 MIMO	22.18	22.50
CA_2A-12A-30A	LTE B2	20	18700	1860	16QAM	1	99	700	1940	2x2 MIMO	LTE B12	10	5095	737.5	2x2 MIMO	LTE B30	10	9820	2355	4x4 MIMO	22.24	22.50
CA_2A-12A-66A	LTE B2	20	18700	1860	16QAM	1	99	700	1940	4x4 MIMO	LTE B12	10	5095	737.5	2x2 MIMO	LTE B66	20	66786	2145	2x2 MIMO	22.13	22.50
CA_2A-12A-66A	LTE B2	20	18700	1860	16QAM	1	99	700	1940	2x2 MIMO	LTE B12	10	5095	737.5	2x2 MIMO	LTE B66	20	66786	2145	4x4 MIMO	22.19	22.50
CA_2A-13A-66A	LTE B2	20	18700	1860	16QAM	1	99	700	1940	4x4 MIMO	LTE B13	10	5230	751	2x2 MIMO	LTE B66	20	66786	2145	2x2 MIMO	22.19	22.50
CA_2A-13A-66A	LTE B2	20	18700	1860	16QAM	1	99	700	1940	2x2 MIMO	LTE B13	10	5230	751	2x2 MIMO	LTE B66	20	66786	2145	4x4 MIMO	22.23	22.50
CA_2A-29A-30A	LTE B2	20	18700	1860	16QAM	1	99	700	1940	4x4 MIMO	LTE B29	10	9715	722.5	2x2 MIMO	LTE B30	10	9820	2355	2x2 MIMO	22.20	22.50
CA_2A-29A-30A	LTE B2	20	18700	1860	16QAM	1	99	700	1940	2x2 MIMO	LTE B29	10	9715	722.5	2x2 MIMO	LTE B30	10	9820	2355	4x4 MIMO	22.22	22.50
CA_2A-30A-66A	LTE B2	20	18700	1860	16QAM	1	99	700	1940	4x4 MIMO	LTE B30	10	9820	2355	2x2 MIMO	LTE B66	20	66786	2145	2x2 MIMO	22.13	22.50
CA_2A-30A-66A	LTE B2	20	18700	1860	16QAM	1	99	700	1940	2x2 MIMO	LTE B30	10	9820	2355	2x2 MIMO	LTE B66	20	66786	2145	4x4 MIMO	22.04	22.50
CA_2A-66E	LTE B2	20	18700	1860	16QAM	1	99	700	1940	4x4 MIMO	LTE B66	15	66786	2145	4x4 MIMO	LTE B66	5	66929	2154.3	4x4 MIMO	22.13	22.50
CA_2A-66C	LTE B2	20	18700	1860	16QAM	1	99	700	1940	4x4 MIMO	LTE B66	20	66786	2145	4x4 MIMO	LTE B66	20	66984	2154.8	4x4 MIMO	22.14	22.50
CA_2A-66A-66A	LTE B2	20	18700	1860	16QAM	1	99	700	1940	4x4 MIMO	LTE B66	20	66786	2145	2x2 MIMO	LTE B66	20	67236	2190	2x2 MIMO	22.13	22.50
CA_2A-66A-66A	LTE B2	20	18700	1860	16QAM	1	99	700	1940	2x2 MIMO	LTE B66	20	66786	2145	4x4 MIMO	LTE B66	20	67236	2190	2x2 MIMO	22.15	22.50
CA_2A-66A-71A	LTE B2	20	18700	1860	16QAM	1	99	700	1940	4x4 MIMO	LTE B66	20	66786	2145	2x2 MIMO	LTE B71	20	68761	634.5	2x2 MIMO	22.12	22.50
CA_2A-66A-71A	LTE B2	20	18700	1860	16QAM	1	99	700	1940	2x2 MIMO	LTE B66	20	66786	2145	4x4 MIMO	LTE B71	20	68761	634.5	2x2 MIMO	22.21	22.50

Table I-52
LTE Band 25 Additional Grip Sensor Reduced Output Powers – 3 Component Carriers

	PCC										SCC 1					SCC 2					Power	
Combination	PCC Band	PCC Bandwidth [MHz]	PCC (UL) Channel	PCC (UL) Frequency [MHz]	Modulation	PCC UL# RB	PCC UL RB Offset	PCC (DL) Channel	PCC (DL) Frequency [MHz]	DL Ant. Config.	SCC Band	SCC Bandwidth [MHz]	SCC (DL) Channel	SCC (DL) Frequency [MHz]	DL Ant. Config.	SCC Band	SCC Bandwidth [MHz]	SCC (DL) Channel	SCC (DL) Frequency [MHz]	DL Ant. Config.	LTE Tx.Power with DL CA Enabled (dBm)	LTE Single Carrier Tx Power (dBm)
CA_25A-25A-26A	LTE B25	20	26140	1860	16QAM	1	99	8140	1940	4x4 MIMO	LTE B25	20	8590	1985	2x2 MIMO	LTE B26	5	8865	876.5	2x2 MIMO	22.26	22.50
CA_25A-25A-26A	LTE B25	20	26140	1860	16QAM	1	99	8140	1940	2x2 MIMO	LTE B25	20	8590	1985	4x4 MIMO	LTE B26	5	8865	876.5	2x2 MIMO	22.29	22.50
CA_25A-41C	LTE B25	20	26140	1860	16QAM	1	99	8140	1940	4x4 MIMO	LTE B41	20	40620	2593	2x2 MIMO	LTE B41	20	40422	2573.2	2x2 MIMO	22.09	22.50
CA_25A-41C	LTE B25	20	26140	1860	16QAM	1	99	8140	1940	2x2 MIMO	LTE B41	20	40620	2593	4x4 MIMO	LTE B41	20	40422	2573.2	4x4 MIMO	22.06	22.50

Table I-53
LTE Band 30 Ant A Additional Grip Sensor Reduced Output Powers – 3 Component Carriers

	PCC										SCC 1					SCC 2					Power	
Combination	PCC Band	PCC Bandwidth [MHz]	PCC (UL) Channel	PCC (UL) Frequency [MHz]	Modulation	PCC UL# RB	PCC UL RB Offset	PCC (DL) Channel	PCC (DL) Frequency [MHz]	DL Ant. Config.	SCC Band	SCC Bandwidth [MHz]	SCC (DL) Channel	SCC (DL) Frequency [MHz]	DL Ant. Config.	SCC Band	SCC Bandwidth [MHz]	SCC (DL) Channel	SCC (DL) Frequency [MHz]	DL Ant. Config.	LTE Tx.Power with DL CA Enabled (dBm)	LTE Ant. A Tx Power (dBm)
CA_2A-2A-30A	LTE B30 AntA	10	27710	2310	16QAM	1	0	9820	2355	2x2 MIMO	LTE B2	20	900	1960	4x4 MIMO	LTE B2	20	700	1940	2x2 MIMO	21.42	21.50
CA_2A-2A-30A	LTE B30 AntA	10	27710	2310	16QAM	1	0	9820	2355	4x4 MIMO	LTE B2	20	900	1960	2x2 MIMO	LTE B2	20	700	1940	2x2 MIMO	21.46	21.50
CA_2A-4A-30A	LTE B30 AntA	10	27710	2310	16QAM	1	0	9820	2355	4x4 MIMO	LTE B2	20	900	1960	2x2 MIMO	LTE B4	20	2175	2132.5	2x2 MIMO	21.40	21.50
CA_2A-5A-30A	LTE B30 AntA	10	27710	2310	16QAM	1	0	9820	2355	2x2 MIMO	LTE B2	20	900	1960	4x4 MIMO	LTE B5	10	2525	881.5	2x2 MIMO	21.42	21.50
CA_2A-5A-30A	LTE B30 AntA	10	27710	2310	16QAM	1	0	9820	2355	4x4 MIMO	LTE B2	20	900	1960	2x2 MIMO	LTE B5	10	2525	881.5	2x2 MIMO	21.45	21.50
CA_2A-12A-30A	LTE B30 AntA	10	27710	2310	16QAM	1	0	9820	2355	2x2 MIMO	LTE B2	20	900	1960	4x4 MIMO	LTE B12	10	5095	737.5	2x2 MIMO	21.40	21.50
CA_2A-12A-30A	LTE B30 AntA	10	27710	2310	16QAM	1	0	9820	2355	4x4 MIMO	LTE B2	20	900	1960	2x2 MIMO	LTE B12	10	5095	737.5	2x2 MIMO	21.43	21.50
CA_2A-29A-30A	LTE B30 AntA	10	27710	2310	16QAM	1	0	9820	2355	2x2 MIMO	LTE B2	20	900	1960	4x4 MIMO	LTE B29	10	9715	722.5	2x2 MIMO	21.42	21.50
CA_2A-29A-30A	LTE B30 AntA	10	27710	2310	16QAM	1	0	9820	2355	4x4 MIMO	LTE B2	20	900	1960	2x2 MIMO	LTE B29	10	9715	722.5	2x2 MIMO	21.46	21.50
CA_2A-30A-66A	LTE B30 AntA	10	27710	2310	16QAM	1	0	9820	2355	2x2 MIMO	LTE B2	20	900	1960	4x4 MIMO	LTE B66	20	66786	2145	2x2 MIMO	21.44	21.50
CA_2A-30A-66A	LTE B30 AntA	10	27710	2310	16QAM	1	0	9820	2355	2x2 MIMO	LTE B2	20	900	1960	2x2 MIMO	LTE B66	20	66786	2145	4x4 MIMO	21.39	21.50
CA_4A-5A-30A	LTE B30 AntA	10	27710	2310	16QAM	1	0	9820	2355	4x4 MIMO	LTE B4	20	2175	2132.5	2x2 MIMO	LTE B5	10	2525	881.5	2x2 MIMO	21.44	21.50
CA_4A-12A-30A	LTE B30 AntA	10	27710	2310	16QAM	1	0	9820	2355	4x4 MIMO	LTE B4	20	2175	2132.5	2x2 MIMO	LTE B12	10	5095	737.5	2x2 MIMO	21.47	21.50
CA_4A-29A-30A	LTE B30 AntA	10	27710	2310	16QAM	1	0	9820	2355	4x4 MIMO	LTE B4	20	2175	2132.5	2x2 MIMO	LTE B29	10	9715	722.5	2x2 MIMO	21.42	21.50
CA_5A-30A-66A	LTE B30 AntA	10	27710	2310	16QAM	1	0	9820	2355	4x4 MIMO	LTE B5	10	2525	881.5	2x2 MIMO	LTE B66	20	66786	2145	2x2 MIMO	21.42	21.50
CA_5A-30A-66A	LTE B30 AntA	10	27710	2310	16QAM	1	0	9820	2355	2x2 MIMO	LTE B5	10	2525	881.5	2x2 MIMO	LTE B66	20	66786	2145	4x4 MIMO	21.40	21.50
CA_12A-30A-66A	LTE B30 AntA	10	27710	2310	16QAM	1	0	9820	2355	4x4 MIMO	LTE B12	10	5095	737.5	2x2 MIMO	LTE B66	20	66786	2145	4x4 MIMO	21.41	21.50
CA_30A-66A-66A	LTE B30 AntA	10	27710	2310	16QAM	1	0	9820	2355	4x4 MIMO	LTE B66	20	66786	2145	2x2 MIMO	LTE B66	20	67236	2190	2x2 MIMO	21.33	21.50
CA_30A-66A-66A	LTE B30 AntA	10	27710	2310	16QAM	1	0	9820	2355	2x2 MIMO	LTE B66	20	66786	2145	4x4 MIMO	LTE B66	20	67236	2190	2x2 MIMO	21.41	21.50

Table I-54
LTE Band 41 PC2 Additional Grip Sensor Reduced Output Powers – 3 Component Carriers

PCC												SCC 1						SCC 2						Power	
Combination	PCC Band	PCC Bandwidth [MHz]	PCC (UL) Channel	PCC (UL) Frequency [MHz]	Modulation	PCC UL# RB	PCC UL RB Offset	PCC (DL) Channel	PCC (DL) Frequency [MHz]	DL Ant. Config.	SCC Band	SCC Bandwidth [MHz]	SCC (DL) Channel	SCC (DL) Frequency [MHz]	DL Ant. Config.	SCC Band	SCC Bandwidth [MHz]	SCC (DL) Channel	SCC (DL) Frequency [MHz]	DL Ant. Config.	LTE Tx.Power with DL CA Enabled (dBm)	LTE Single Carrier Tx Power (dBm)
CA_41D	LTE B41 PC2	15	40185	2549.5	16QAM	1	0	40185	2549.5	4x4 MIMO	LTE B41 PC2	20	40356	2566.6	4x4 MIMO	LTE B41 PC2	20	40554	2586.4	4x4 MIMO	24.12	24.50
CA_41A-41C	LTE B41 PC2	15	40185	2549.5	16QAM	1	0	40185	2549.5	4x4 MIMO	LTE B41 PC2	20	41292	2660.2	2x2 MIMO	LTE B41 PC2	20	41490	2680	2x2 MIMO	24.08	24.50
CA_41C-41A	LTE B41 PC2	15	40185	2549.5	16QAM	1	0	40185	2549.5	2x2 MIMO	LTE B41 PC2	20	40356	2566.6	2x2 MIMO	LTE B41 PC2	20	41490	2680	4x4 MIMO	24.12	24.50
CA_41A-41C	LTE B41 PC2	15	40185	2549.5	16QAM	1	0	40185	2549.5	2x2 MIMO	LTE B41 PC2	20	41292	2660.2	4x4 MIMO	LTE B41 PC2	20	41490	2680	4x4 MIMO	24.11	24.50
CA_41C-41A	LTE B41 PC2	15	40185	2549.5	16QAM	1	0	40185	2549.5	4x4 MIMO	LTE B41 PC2	20	40356	2566.6	4x4 MIMO	LTE B41 PC2	20	41490	2680	2x2 MIMO	24.13	24.50
CA_41A-41C	LTE B41 PC2	15	40185	2549.5	16QAM	1	0	40185	2549.5	4x4 MIMO	LTE B41 PC2	20	41292	2660.2	4x4 MIMO	LTE B41 PC2	20	41490	2680	4x4 MIMO	24.11	24.50
CA_41C-41A	LTE B41 PC2	15	40185	2549.5	16QAM	1	0	40185	2549.5	4x4 MIMO	LTE B41 PC2	20	40356	2566.6	4x4 MIMO	LTE B41 PC2	20	41490	2680	4x4 MIMO	24.09	24.50

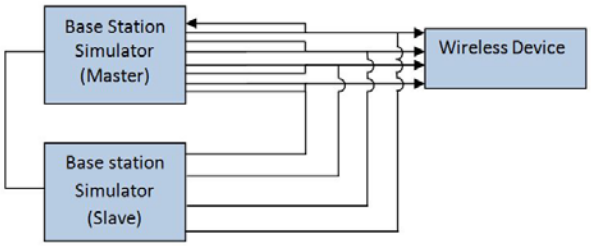


Figure I-3
Power Measurement Setup

I.4 Carrier Aggregation Scenarios with 4 Component Carriers with 4x4 Downlink MIMO

Table I-55
LTE Band 13 Additional Maximum Output Powers – 4 Component Carriers

PCC											SCC 1					SCC 2					SCC 3					Power	
Combination	PCC Band	PCC BW [MHz]	PCC (UL) Ch.	PCC (UL) Freq. [MHz]	Mod.	PCC UL# RB	PCC UL RB Offset	PCC (DL) Ch.	PCC (DL) Freq. [MHz]	DL Ant. Config.	SCC Band	SCC BW [MHz]	SCC (DL) Ch.	SCC (DL) Freq. [MHz]	DL Ant. Config.	SCC Band	SCC BW [MHz]	SCC (DL) Ch.	SCC (DL) Freq. [MHz]	DL Ant. Config.	SCC Band	SCC BW [MHz]	SCC (DL) Ch.	SCC (DL) Freq. [MHz]	DL Ant. Config.	LTE Tx.Power with DL CA Enabled (dBm)	LTE Single Carrier Tx Power (dBm)
CA_2A-13A-66B	LTE B13	10	23230	782	QPSK	1	0	5230	751	2x2 MIMO	LTE B2	20	900	1960	4x4 MIMO	LTE B66	15	66786	2145	2x2 MIMO	LTE B66	5	66879	2154.3	2x2 MIMO	24.56	24.98
CA_2A-13A-66B	LTE B13	10	23230	782	QPSK	1	0	5230	751	2x2 MIMO	LTE B2	20	900	1960	2x2 MIMO	LTE B66	15	66786	2145	4x4 MIMO	LTE B66	5	66879	2154.3	4x4 MIMO	24.44	24.98
CA_2A-13A-66C	LTE B13	10	23230	782	QPSK	1	0	5230	751	2x2 MIMO	LTE B2	20	900	1960	4x4 MIMO	LTE B66	20	66786	2145	2x2 MIMO	LTE B66	20	66984	2164.8	2x2 MIMO	24.46	24.98
CA_2A-13A-66C	LTE B13	10	23230	782	QPSK	1	0	5230	751	2x2 MIMO	LTE B2	20	900	1960	2x2 MIMO	LTE B66	20	66786	2145	4x4 MIMO	LTE B66	20	66984	2164.8	4x4 MIMO	24.42	24.98

Table I-56
LTE Band 5 Additional Maximum Output Powers – 4 Component Carriers

PCC											SCC 1					SCC 2					SCC 3					Power	
Combination	PCC Band	PCC BW [MHz]	PCC (UL) Ch.	PCC (UL) Freq. [MHz]	Mod.	PCC UL# RB	PCC UL RB Offset	PCC (DL) Ch.	PCC (DL) Freq. [MHz]	DL Ant. Config.	SCC Band	SCC BW [MHz]	SCC (DL) Ch.	SCC (DL) Freq. [MHz]	DL Ant. Config.	SCC Band	SCC BW [MHz]	SCC (DL) Ch.	SCC (DL) Freq. [MHz]	DL Ant. Config.	SCC Band	SCC BW [MHz]	SCC (DL) Ch.	SCC (DL) Freq. [MHz]	DL Ant. Config.	LTE Tx.Power with DL CA Enabled (dBm)	LTE Single Carrier Tx Power (dBm)
CA_2A-5B-66A	LTE B5	10	20525	836.5	QPSK	1	0	2525	881.5	2x2 MIMO	LTE B5	5	2453	874.3	2x2 MIMO	LTE B2	20	900	1960	4x4 MIMO	LTE B66	20	66786	2145	2x2 MIMO	24.43	24.45
CA_2A-5B-66A	LTE B5	10	20525	836.5	QPSK	1	0	2525	881.5	2x2 MIMO	LTE B5	5	2453	874.3	2x2 MIMO	LTE B2	20	900	1960	2x2 MIMO	LTE B66	20	66786	2145	4x4 MIMO	24.42	24.45
CA_2A-5A-66B	LTE B5	10	20525	836.5	QPSK	1	0	2525	881.5	2x2 MIMO	LTE B2	20	900	1960	4x4 MIMO	LTE B66	15	66786	2145	2x2 MIMO	LTE B66	5	66879	2154.3	2x2 MIMO	24.44	24.45
CA_2A-5A-66B	LTE B5	10	20525	836.5	QPSK	1	0	2525	881.5	2x2 MIMO	LTE B2	20	900	1960	2x2 MIMO	LTE B66	15	66786	2145	4x4 MIMO	LTE B66	5	66879	2154.3	4x4 MIMO	24.41	24.45
CA_2A-5A-66C	LTE B5	10	20525	836.5	QPSK	1	0	2525	881.5	2x2 MIMO	LTE B2	20	900	1960	4x4 MIMO	LTE B66	20	66786	2145	2x2 MIMO	LTE B66	20	66984	2164.8	2x2 MIMO	24.42	24.45
CA_2A-5A-66C	LTE B5	10	20525	836.5	QPSK	1	0	2525	881.5	2x2 MIMO	LTE B2	20	900	1960	2x2 MIMO	LTE B66	20	66786	2145	4x4 MIMO	LTE B66	20	66984	2164.8	4x4 MIMO	24.43	24.45
CA_5B-66A-66A	LTE B5	10	20525	836.5	QPSK	1	0	2525	881.5	2x2 MIMO	LTE B5	5	2453	874.3	2x2 MIMO	LTE B66	20	66786	2145	4x4 MIMO	LTE B66	20	67236	2180	2x2 MIMO	24.42	24.45

Table I-57
LTE Band 4 Additional Maximum Output Powers – 4 Component Carriers

PCC										SCC 1					SCC 2					SCC 3					Power	
Combination	PCC Band	PCC BW [MHz]	PCC (UL) Ch.	PCC (UL) Freq. [MHz]	Mod.	PCC UL# RB	PCC UL RB Offset	PCC (DL) Ch.	PCC (DL) Freq. [MHz]	DL Ant. Config.	SCC Band	SCC BW [MHz]	SCC (DL) Ch.	SCC (DL) Freq. [MHz]	DL Ant. Config.	SCC Band	SCC BW [MHz]	SCC (DL) Ch.	SCC (DL) Freq. [MHz]	DL Ant. Config.	SCC Band	SCC BW [MHz]	SCC (DL) Ch.	SCC (DL) Freq. [MHz]	DL Ant. Config.	LTE Tx.Power with DL CA Enabled (dBm)	LTE Single Carrier Tx Power (dBm)
CA_2A-4A-7C	LTE B4	20	20300	1745	QPSK	1	0	2300	2145	2x2 MIMO	LTE B2	20	900	1960	2x2 MIMO	LTE B7	20	3100	2655	4x4 MIMO	LTE B7	20	2902	2635.2	4x4 MIMO	24.53	24.40

Table I-58
LTE Band 66 Additional Maximum Output Powers – 4 Component Carriers

PCC										SCC 1					SCC 2					SCC 3					Power	
Combination	PCC Band	PCC BW [MHz]	PCC (UL) Ch.	PCC (UL) Freq. [MHz]	Mod.	PCC UL# RB	PCC UL RB Offset	PCC (DL) Ch.	PCC (DL) Freq. [MHz]	DL Ant. Config.	SCC Band	SCC BW [MHz]	SCC (DL) Ch.	SCC (DL) Freq. [MHz]	DL Ant. Config.	SCC Band	SCC BW [MHz]	SCC (DL) Ch.	SCC (DL) Freq. [MHz]	DL Ant. Config.	SCC Band	SCC BW [MHz]	SCC (DL) Ch.	SCC (DL) Freq. [MHz]	DL Ant. Config.	LTE Tx.Power with DL CA Enabled (dBm)	LTE Single Carrier Tx Power (dBm)
CA_2A-5B-66A	LTE B66	20	132572	1720	QPSK	1	0	67036	2170	2x2 MIMO	LTE B2	20	900	1960	4x4 MIMO	LTE B5	10	2525	881.5	2x2 MIMO	LTE B5	5	2453	874.3	2x2 MIMO	24.41	24.40
CA_2A-5B-66A	LTE B66	20	132572	1720	QPSK	1	0	67036	2170	4x4 MIMO	LTE B2	20	900	1960	2x2 MIMO	LTE B5	10	2525	881.5	2x2 MIMO	LTE B5	5	2453	874.3	2x2 MIMO	24.42	24.40
CA_2A-5A-66B	LTE B66	15	132597	1772.5	QPSK	1	0	67061	2172.5	2x2 MIMO	LTE B66	5	66968	2163.2	2x2 MIMO	LTE B2	20	900	1960	4x4 MIMO	LTE B5	10	2525	881.5	2x2 MIMO	24.39	24.40
CA_2A-5A-66B	LTE B66	15	132597	1772.5	QPSK	1	0	67061	2172.5	4x4 MIMO	LTE B66	5	66968	2163.2	4x4 MIMO	LTE B2	20	900	1960	2x2 MIMO	LTE B5	10	2525	881.5	2x2 MIMO	24.35	24.40
CA_2A-5A-66C	LTE B66	20	132572	1720	QPSK	1	0	67036	2170	2x2 MIMO	LTE B66	20	66838	2150.2	2x2 MIMO	LTE B2	20	900	1960	2x2 MIMO	LTE B5	10	2525	881.5	2x2 MIMO	24.42	24.40
CA_2A-5A-66C	LTE B66	20	132572	1720	QPSK	1	0	67036	2170	4x4 MIMO	LTE B66	20	66838	2150.2	4x4 MIMO	LTE B2	20	900	1960	2x2 MIMO	LTE B5	10	2525	881.5	2x2 MIMO	24.40	24.40
CA_2A-13A-66B	LTE B66	15	132597	1772.5	QPSK	1	0	67061	2172.5	2x2 MIMO	LTE B66	5	66968	2163.2	2x2 MIMO	LTE B2	20	900	1960	4x4 MIMO	LTE B13	10	5230	751	2x2 MIMO	24.37	24.40
CA_2A-13A-66B	LTE B66	15	132597	1772.5	QPSK	1	0	67061	2172.5	4x4 MIMO	LTE B66	5	66968	2163.2	4x4 MIMO	LTE B2	20	900	1960	2x2 MIMO	LTE B13	10	5230	751	2x2 MIMO	24.36	24.40
CA_2A-13A-66C	LTE B66	20	132572	1720	QPSK	1	0	67036	2170	2x2 MIMO	LTE B66	20	66838	2150.2	2x2 MIMO	LTE B2	20	900	1960	4x4 MIMO	LTE B13	10	5230	751	2x2 MIMO	24.43	24.40
CA_2A-13A-66C	LTE B66	20	132572	1720	QPSK	1	0	67036	2170	4x4 MIMO	LTE B66	20	66838	2150.2	4x4 MIMO	LTE B2	20	900	1960	2x2 MIMO	LTE B13	10	5230	751	2x2 MIMO	24.46	24.40
CA_5B-66A-66A	LTE B66	20	132572	1720	QPSK	1	0	67036	2170	4x4 MIMO	LTE B66	20	66536	2120	4x4 MIMO	LTE B5	10	2525	881.5	2x2 MIMO	LTE B5	5	2453	874.3	2x2 MIMO	24.42	24.40
CA_5B-66A-66A	LTE B66	20	132572	1720	QPSK	1	0	67036	2170	2x2 MIMO	LTE B66	20	66536	2120	2x2 MIMO	LTE B5	10	2525	881.5	2x2 MIMO	LTE B5	5	2453	874.3	2x2 MIMO	24.38	24.40

Table I-59
LTE Band 2 Additional Maximum Output Powers – 4 Component Carriers

	PCC									SCC 1					SCC 2					SCC 3					Power	
Combination	PCC Band	PCC BW [MHz]	PCC (UL) Ch.	PCC (UL) Freq. [MHz]	Mod.	PCC UL# RB	PCC UL RB Offset	PCC (DL) Ch.	PCC (DL) Freq. [MHz]	DL Ant. Config.	SCC Band	SCC BW [MHz]	SCC (DL) Ch.	SCC (DL) Freq. [MHz]	DL Ant. Config.	SCC Band	SCC BW [MHz]	SCC (DL) Ch.	SCC (DL) Freq. [MHz]	DL Ant. Config.	SCC Band	SCC BW [MHz]	SCC (DL) Ch.	SCC (DL) Freq. [MHz]	DL Ant. Config.	LTE Tx.Power with DL CA Enabled (dBm)	LTE Single Carrier Tx Power (dBm)
CA_2A-4A-7C	LTE B2	10	18650	1855	QPSK	1	0	650	1935	2x2 MIMO	LTE B4	20	2175	2132.5	2x2 MIMO	LTE B7	20	3100	2655	4x4 MIMO	LTE B7	20	2902	2635.2	4x4 MIMO	24.92	24.78
CA_2A-5B-66A	LTE B2	10	18650	1855	QPSK	1	0	650	1935	4x4 MIMO	LTE B5	10	2525	881.5	2x2 MIMO	LTE B5	5	2453	874.3	2x2 MIMO	LTE B66	20	66786	2145	2x2 MIMO	24.83	24.78
CA_2A-5B-66A	LTE B2	10	18650	1855	QPSK	1	0	650	1935	2x2 MIMO	LTE B5	10	2525	881.5	2x2 MIMO	LTE B5	5	2453	874.3	2x2 MIMO	LTE B66	20	66786	2145	4x4 MIMO	24.82	24.78
CA_2A-5A-66B	LTE B2	10	18650	1855	QPSK	1	0	650	1935	4x4 MIMO	LTE B5	10	2525	881.5	2x2 MIMO	LTE B66	15	66786	2145	2x2 MIMO	LTE B66	5	66879	2154.3	2x2 MIMO	24.82	24.78
CA_2A-5A-66B	LTE B2	10	18650	1855	QPSK	1	0	650	1935	2x2 MIMO	LTE B5	10	2525	881.5	2x2 MIMO	LTE B66	15	66786	2145	4x4 MIMO	LTE B66	5	66879	2154.3	4x4 MIMO	24.82	24.78
CA_2A-5A-66C	LTE B2	10	18650	1855	QPSK	1	0	650	1935	4x4 MIMO	LTE B5	10	2525	881.5	2x2 MIMO	LTE B66	20	66786	2145	2x2 MIMO	LTE B66	20	66984	2164.8	2x2 MIMO	24.83	24.78
CA_2A-5A-66C	LTE B2	10	18650	1855	QPSK	1	0	650	1935	2x2 MIMO	LTE B5	10	2525	881.5	2x2 MIMO	LTE B66	20	66786	2145	4x4 MIMO	LTE B66	20	66984	2164.8	4x4 MIMO	24.82	24.78
CA_2A-13A-66B	LTE B2	10	18650	1855	QPSK	1	0	650	1935	4x4 MIMO	LTE B13	10	5230	751	2x2 MIMO	LTE B66	15	66786	2145	2x2 MIMO	LTE B66	5	66879	2154.3	2x2 MIMO	24.84	24.78
CA_2A-13A-66B	LTE B2	10	18650	1855	QPSK	1	0	650	1935	2x2 MIMO	LTE B13	10	5230	751	2x2 MIMO	LTE B66	15	66786	2145	4x4 MIMO	LTE B66	5	66879	2154.3	4x4 MIMO	24.83	24.78
CA_2A-13A-66C	LTE B2	10	18650	1855	QPSK	1	0	650	1935	4x4 MIMO	LTE B13	10	5230	751	2x2 MIMO	LTE B66	20	66786	2145	2x2 MIMO	LTE B66	20	66984	2164.8	2x2 MIMO	24.83	24.78
CA_2A-13A-66C	LTE B2	10	18650	1855	QPSK	1	0	650	1935	2x2 MIMO	LTE B13	10	5230	751	2x2 MIMO	LTE B66	20	66786	2145	4x4 MIMO	LTE B66	20	66984	2164.8	4x4 MIMO	24.86	24.78

Table I-60
LTE Band 25 Additional Maximum Output Powers – 4 Component Carriers

	PCC								SCC 1					SCC 2					SCC 3					Power	
Combination	PCC Band	PCC BW [MHz]	PCC (UL) Ch.	PCC (UL) Freq. [MHz]	Mod.	PCC UL# RB	PCC UL RB Offset	PCC (DL) Ch.	PCC (DL) Freq. [MHz]	DL Ant. Config.	SCC Band	SCC BW [MHz]	SCC (DL) Ch.	SCC (DL) Freq. [MHz]	DL Ant. Config.	SCC Band	SCC BW [MHz]	SCC (DL) Ch.	SCC (DL) Freq. [MHz]	DL Ant. Config.	SCC Band	SCC BW [MHz]	SCC (DL) Ch.	SCC (DL) Freq. [MHz]	DL Ant. Config.	LTE Tx.Power with DL CA Enabled (dBm)	LTE Single Carrier Tx Power (dBm)
CA_25A-41D	LTE B25	10	26090	1855	QPSK	1	0	8090	1935	4x4 MIMO	LTE B41	20	40422	2573.2	2x2 MIMO	LTE B41	20	40620	2593	2x2 MIMO	LTE B41	20	40818	2612.8	2x2 MIMO	24.93	24.78

Table I-61
LTE Band 7 Ant A Additional Maximum Output Powers – 4 Component Carriers

	PCC									SCC 1					SCC 2					SCC 3					Power	
Combination	PCC Band	PCC BW [MHz]	PCC (UL) Ch.	PCC (UL) Freq. [MHz]	Mod.	PCC UL# RB	PCC UL RB Offset	PCC (DL) Ch.	PCC (DL) Freq. [MHz]	DL Ant. Config.	SCC Band	SCC BW [MHz]	SCC (DL) Ch.	SCC (DL) Freq. [MHz]	DL Ant. Config.	SCC Band	SCC BW [MHz]	SCC (DL) Ch.	SCC (DL) Freq. [MHz]	DL Ant. Config.	SCC Band	SCC BW [MHz]	SCC (DL) Ch.	SCC (DL) Freq. [MHz]	DL Ant. Config.	LTE Tx.Power with DL CA Enabled (dBm)	LTE Ant. A Tx Power (dBm)
CA_2A-4A-7C	LTE B7 AntA	20	21100	2535	QPSK	1	0	3100	2655	4x4 MIMO	LTE B7	20	2902	2635.2	4x4 MIMO	LTE B2	20	900	1960	2x2 MIMO	LTE B4	20	2175	2132.5	2x2 MIMO	24.00	23.91

Table I-62
LTE Band 41 PC3 Additional Maximum Output Powers – 4 Component Carriers

	PCC									SCC 1					SCC 2					SCC 3					Power	
Combination	PCC Band	PCC BW [MHz]	PCC (UL) Ch.	PCC (UL) Freq. [MHz]	Mod.	PCC UL# RB	PCC UL RB Offset	PCC (DL) Ch.	PCC (DL) Freq. [MHz]	DL Ant. Config.	SCC Band	SCC BW [MHz]	SCC (DL) Ch.	SCC (DL) Freq. [MHz]	DL Ant. Config.	SCC Band	SCC BW [MHz]	SCC (DL) Ch.	SCC (DL) Freq. [MHz]	DL Ant. Config.	SCC Band	SCC BW [MHz]	SCC (DL) Ch.	SCC (DL) Freq. [MHz]	DL Ant. Config.	LTE Tx.Power with DL CA Enabled (dBm)	LTE Single Carrier Tx Power (dBm)
CA_41C-41C	LTE B41	20	40185	2549.5	QPSK	1	0	40185	2549.5	4x4 MIMO	LTE B41	20	40383	2569.3	4x4 MIMO	LTE B41	20	41292	2660.2	2x2 MIMO	LTE B41	20	41490	2680	2x2 MIMO	24.37	24.41
CA_41C-41C	LTE B41	20	40185	2549.5	QPSK	1	0	40185	2549.5	2x2 MIMO	LTE B41	20	40383	2569.3	2x2 MIMO	LTE B41	20	41292	2660.2	4x4 MIMO	LTE B41	20	41490	2680	4x4 MIMO	24.38	24.41

Table I-63
LTE Band 41 PC2 Additional Maximum Output Powers – 4 Component Carriers

	PCC									SCC 1					SCC 2					SCC 3					Power	
Combination	PCC Band	PCC BW [MHz]	PCC (UL) Ch.	PCC (UL) Freq. [MHz]	Mod.	PCC UL# RB	PCC UL RB Offset	PCC (DL) Ch.	PCC (DL) Freq. [MHz]	DL Ant. Config.	SCC Band	SCC BW [MHz]	SCC (DL) Ch.	SCC (DL) Freq. [MHz]	DL Ant. Config.	SCC Band	SCC BW [MHz]	SCC (DL) Ch.	SCC (DL) Freq. [MHz]	DL Ant. Config.	SCC Band	SCC BW [MHz]	SCC (DL) Ch.	SCC (DL) Freq. [MHz]	DL Ant. Config.	LTE Tx.Power with DL CA Enabled (dBm)	LTE Single Carrier Tx Power (dBm)
CA_41C-41C	LTE B41 PC2	20	40620	2593	QPSK	1	0	40620	2593	4x4 MIMO	LTE B41 PC2	20	40422	2573.2	4x4 MIMO	LTE B41 PC2	20	41292	2660.2	2x2 MIMO	LTE B41 PC2	20	41490	2680	2x2 MIMO	27.47	27.48
CA_41C-41C	LTE B41 PC2	20	40620	2593	QPSK	1	0	40620	2593	2x2 MIMO	LTE B41 PC2	20	40422	2573.2	2x2 MIMO	LTE B41 PC2	20	41292	2660.2	4x4 MIMO	LTE B41 PC2	20	41490	2680	4x4 MIMO	27.50	27.48

Table I-64
LTE Band 4 Additional Hotspot Reduced Output Powers – 4 Component Carriers

	PCC									SCC 1					SCC 2					SCC 3					Power	
Combination	PCC Band	PCC BW [MHz]	PCC (UL) Ch.	PCC (UL) Freq. [MHz]	Mod.	PCC UL# RB	PCC UL RB Offset	PCC (DL) Ch.	PCC (DL) Freq. [MHz]	DL Ant. Config.	SCC Band	SCC BW [MHz]	SCC (DL) Ch.	SCC (DL) Freq. [MHz]	DL Ant. Config.	SCC Band	SCC BW [MHz]	SCC (DL) Ch.	SCC (DL) Freq. [MHz]	DL Ant. Config.	SCC Band	SCC BW [MHz]	SCC (DL) Ch.	SCC (DL) Freq. [MHz]	DL Ant. Config.	LTE Tx.Power with DL CA Enabled (dBm)	LTE Single Carrier Tx Power (dBm)
CA_2A-4A-7C	LTE B4	20	20300	1745	64QAM	1	0	2300	2145	2x2 MIMO	LTE B2	20	900	1960	2x2 MIMO	LTE B7	20	3100	2655	4x4 MIMO	LTE B7	20	2902	2635.2	4x4 MIMO	19.99	20.00

Table I-65
LTE Band 66 Additional Hotspot Reduced Output Powers – 4 Component Carriers

	PCC									SCC 1					SCC 2					SCC 3					Power	
Combination	PCC Band	PCC BW [MHz]	PCC (UL) Ch.	PCC (UL) Freq. [MHz]	Mod.	PCC UL# RB	PCC UL RB Offset	PCC (DL) Ch.	PCC (DL) Freq. [MHz]	DL Ant. Config.	SCC Band	SCC BW [MHz]	SCC (DL) Ch.	SCC (DL) Freq. [MHz]	DL Ant. Config.	SCC Band	SCC BW [MHz]	SCC (DL) Ch.	SCC (DL) Freq. [MHz]	DL Ant. Config.	SCC Band	SCC BW [MHz]	SCC (DL) Ch.	SCC (DL) Freq. [MHz]	DL Ant. Config.	LTE Tx.Power with DL CA Enabled (dBm)	LTE Single Carrier Tx Power (dBm)
CA_2A-5B-66A	LTE B66	20	132572	1770	64QAM	1	0	67036	2170	2x2 MIMO	LTE B2	20	900	1960	2x2 MIMO	LTE B5	10	2525	881.5	2x2 MIMO	LTE B5	5	2453	874.3	2x2 MIMO	19.80	20.00
CA_2A-5B-66A	LTE B66	20	132572	1770	64QAM	1	0	67036	2170	4x4 MIMO	LTE B2	20	900	1960	2x2 MIMO	LTE B5	10	2525	881.5	2x2 MIMO	LTE B5	5	2453	874.3	2x2 MIMO	19.80	20.00
CA_2A-5A-66B	LTE B66	15	132597	1772.5	64QAM	1	0	67061	2172.5	2x2 MIMO	LTE B66	5	66968	2163.2	2x2 MIMO	LTE B2	20	900	1960	4x4 MIMO	LTE B5	10	2525	881.5	2x2 MIMO	19.77	19.94
CA_2A-5A-66B	LTE B66	15	132597	1772.5	64QAM	1	0	67061	2172.5	4x4 MIMO	LTE B66	5	66968	2163.2	4x4 MIMO	LTE B2	20	900	1960	2x2 MIMO	LTE B5	10	2525	881.5	2x2 MIMO	19.72	19.94
CA_2A-5A-66C	LTE B66	20	132572	1770	64QAM	1	0	67036	2170	4x4 MIMO	LTE B66	20	66838	2150.2	4x4 MIMO	LTE B2	20	900	1960	4x4 MIMO	LTE B5	10	2525	881.5	2x2 MIMO	19.77	20.00
CA_2A-5A-66C	LTE B66	20	132572	1770	64QAM	1	0	67036	2170	4x4 MIMO	LTE B66	20	66838	2150.2	4x4 MIMO	LTE B2	20	900	1960	2x2 MIMO	LTE B5	10	2525	881.5	2x2 MIMO	19.77	20.00
CA_2A-13A-66B	LTE B66	15	132597	1772.5	64QAM	1	0	67061	2172.5	2x2 MIMO	LTE B66	5	66968	2163.2	2x2 MIMO	LTE B2	20	900	1960	4x4 MIMO	LTE B13	10	5230	751	2x2 MIMO	19.70	19.94
CA_2A-13A-66B	LTE B66	15	132597	1772.5	64QAM	1	0	67061	2172.5	4x4 MIMO	LTE B66	5	66968	2163.2	4x4 MIMO	LTE B2	20	900	1960	2x2 MIMO	LTE B13	10	5230	751	2x2 MIMO	19.75	19.94
CA_2A-13A-66C	LTE B66	20	132572	1770	64QAM	1	0	67036	2170	2x2 MIMO	LTE B66	20	66838	2150.2	2x2 MIMO	LTE B2	20	900	1960	4x4 MIMO	LTE B13	10	5230	751	2x2 MIMO	19.81	20.00
CA_2A-13A-66C	LTE B66	20	132572	1770	64QAM	1	0	67036	2170	4x4 MIMO	LTE B66	20	66838	2150.2	4x4 MIMO	LTE B2	20	900	1960	2x2 MIMO	LTE B13	10	5230	751	2x2 MIMO	19.77	20.00
CA_5B-66A-66A	LTE B66	20	132572	1770	64QAM	1	0	67036	2170	2x2 MIMO	LTE B66	20	66536	2120	2x2 MIMO	LTE B5	10	2525	881.5	2x2 MIMO	LTE B5	5	2453	874.3	2x2 MIMO	19.87	20.00
CA_5B-66A-66A	LTE B66	20	132572	1770	64QAM	1	0	67036	2170	2x2 MIMO	LTE B66	20	66536	2120	4x4 MIMO	LTE B5	10	2525	881.5	2x2 MIMO	LTE B5	5	2453	874.3	2x2 MIMO	19.78	20.00

Table I-66
LTE Band 2 Additional Hotspot Reduced Output Powers – 4 Component Carriers

	PCC									SCC 1					SCC 2					SCC 3					Power	
Combination	PCC Band	PCC BW [MHz]	PCC (UL) Ch.	PCC (UL) Freq. [MHz]	Mod.	PCC UL# RB	PCC UL RB Offset	PCC (DL) Ch.	PCC (DL) Freq. [MHz]	DL Ant. Config.	SCC Band	SCC BW [MHz]	SCC (DL) Ch.	SCC (DL) Freq. [MHz]	DL Ant. Config.	SCC Band	SCC BW [MHz]	SCC (DL) Ch.	SCC (DL) Freq. [MHz]	DL Ant. Config.	SCC Band	SCC BW [MHz]	SCC (DL) Ch.	SCC (DL) Freq. [MHz]	DL Ant. Config.	LTE Tx.Power with DL CA Enabled (dBm)	LTE Single Carrier Tx Power (dBm)
CA_2A-4A-7C	LTE B2	20	18925	1882.5	64QAM	1	0	925	1962.5	2x2 MIMO	LTE B4	20	2175	2132.5	2x2 MIMO	LTE B7	20	3100	2655	4x4 MIMO	LTE B7	20	2902	2635.2	4x4 MIMO	19.80	20.00
CA_2A-5B-66A	LTE B2	20	18925	1882.5	64QAM	1	0	925	1962.5	4x4 MIMO	LTE B5	10	2525	881.5	2x2 MIMO	LTE B5	5	2453	874.3	2x2 MIMO	LTE B66	20	66786	2145	2x2 MIMO	19.82	20.00
CA_2A-5B-66A	LTE B2	20	18925	1882.5	64QAM	1	0	925	1962.5	2x2 MIMO	LTE B5	10	2525	881.5	2x2 MIMO	LTE B5	5	2453	874.3	2x2 MIMO	LTE B66	20	66786	2145	4x4 MIMO	19.76	20.00
CA_2A-5A-66B	LTE B2	20	18925	1882.5	64QAM	1	0	925	1962.5	4x4 MIMO	LTE B5	10	2525	881.5	2x2 MIMO	LTE B66	15	66786	2145	2x2 MIMO	LTE B66	5	66879	2154.3	2x2 MIMO	19.77	20.00
CA_2A-5A-66B	LTE B2	20	18925	1882.5	64QAM	1	0	925	1962.5	2x2 MIMO	LTE B5	10	2525	881.5	2x2 MIMO	LTE B66	15	66786	2145	4x4 MIMO	LTE B66	5	66879	2154.3	4x4 MIMO	19.78	20.00
CA_2A-5A-66C	LTE B2	20	18925	1882.5	64QAM	1	0	925	1962.5	4x4 MIMO	LTE B5	10	2525	881.5	2x2 MIMO	LTE B66	20	66786	2145	2x2 MIMO	LTE B66	20	66984	2164.8	2x2 MIMO	19.77	20.00
CA_2A-5A-66C	LTE B2	20	18925	1882.5	64QAM	1	0	925	1962.5	2x2 MIMO	LTE B5	10	2525	881.5	2x2 MIMO	LTE B66	20	66786	2145	4x4 MIMO	LTE B66	20	66984	2164.8	4x4 MIMO	19.79	20.00
CA_2A-13A-66B	LTE B2	20	18925	1882.5	64QAM	1	0	925	1962.5	4x4 MIMO	LTE B13	10	5230	751	2x2 MIMO	LTE B66	15	66786	2145	2x2 MIMO	LTE B66	5	66879	2154.3	2x2 MIMO	19.80	20.00
CA_2A-13A-66B	LTE B2	20	18925	1882.5	64QAM	1	0	925	1962.5	2x2 MIMO	LTE B13	10	5230	751	2x2 MIMO	LTE B66	15	66786	2145	4x4 MIMO	LTE B66	5	66879	2154.3	4x4 MIMO	19.84	20.00
CA_2A-13A-66C	LTE B2	20	18925	1882.5	64QAM	1	0	925	1962.5	4x4 MIMO	LTE B13	10	5230	751	2x2 MIMO	LTE B66	20	66786	2145	2x2 MIMO	LTE B66	20	66984	2164.8	2x2 MIMO	19.76	20.00
CA_2A-13A-66C	LTE B2	20	18925	1882.5	64QAM	1	0	925	1962.5	2x2 MIMO	LTE B13	10	5230	751	2x2 MIMO	LTE B66	20	66786	2145	4x4 MIMO	LTE B66	20	66984	2164.8	4x4 MIMO	19.83	20.00

Table I-67
LTE Band 25 Additional Hotspot Reduced Output Powers – 4 Component Carriers

	PCC											SCC 1					SCC 2					SCC 3					Power	
Combination	PCC Band	PCC BW [MHz]	PCC (UL) Ch.	PCC (UL) Freq. [MHz]	Mod.	PCC UL# RB	PCC UL RB Offset	PCC (DL) Ch.	PCC (DL) Freq. [MHz]	DL Ant. Config.	SCC Band	SCC BW [MHz]	SCC (DL) Ch.	SCC (DL) Freq. [MHz]	DL Ant. Config.	SCC Band	SCC BW [MHz]	SCC (DL) Ch.	SCC (DL) Freq. [MHz]	DL Ant. Config.	SCC Band	SCC BW [MHz]	SCC (DL) Ch.	SCC (DL) Freq. [MHz]	DL Ant. Config.	LTE Tx.Power with DL CA Enabled (dBm)	LTE Single Carrier Tx Power (dBm)
CA_25A-41D	LTE B25	20	26365	1882.5	64QAM	1	0	8365	1962.5	4x4 MIMO	LTE B41	20	40422	2573.2	2x2 MIMO	LTE B41	20	40620	2593	2x2 MIMO	LTE B41	20	40818	2612.8	2x2 MIMO	19.98	20.09

Table I-68
LTE Band 7 Ant A Additional Hotspot/Grip Sensor Reduced Output Powers – 4 Component Carriers

	PCC										SCC 1					SCC 2					SCC 3					Power	
Combination	PCC Band	PCC BW [MHz]	PCC (UL) Ch.	PCC (UL) Freq. [MHz]	Mod.	PCC UL# RB	PCC UL RB Offset	PCC (DL) Ch.	PCC (DL) Freq. [MHz]	DL Ant. Config.	SCC Band	SCC BW [MHz]	SCC (DL) Ch.	SCC (DL) Freq. [MHz]	DL Ant. Config.	SCC Band	SCC BW [MHz]	SCC (DL) Ch.	SCC (DL) Freq. [MHz]	DL Ant. Config.	SCC Band	SCC BW [MHz]	SCC (DL) Ch.	SCC (DL) Freq. [MHz]	DL Ant. Config.	LTE Tx.Power with DL CA Enabled (dBm)	LTE Ant. A Tx Power (dBm)
CA_2A-4A-7C	LTE B7 AntA	20	20850	2510	64QAM	1	0	2850	2630	4x4 MIMO	LTE B7	20	3048	2649.8	4x4 MIMO	LTE B2	20	900	1960	2x2 MIMO	LTE B4	20	2175	2132.5	2x2 MIMO	20.40	21.00

Table I-69
LTE Band 41 PC3 Additional Hotspot Reduced Output Powers – 4 Component Carriers

	PCC										SCC 1					SCC 2					SCC 3					Power	
Combination	PCC Band	PCC BW [MHz]	PCC (UL) Ch.	PCC (UL) Freq. [MHz]	Mod.	PCC UL# RB	PCC UL RB Offset	PCC (DL) Ch.	PCC (DL) Freq. [MHz]	DL Ant. Config.	SCC Band	SCC BW [MHz]	SCC (DL) Ch.	SCC (DL) Freq. [MHz]	DL Ant. Config.	SCC Band	SCC BW [MHz]	SCC (DL) Ch.	SCC (DL) Freq. [MHz]	DL Ant. Config.	SCC Band	SCC BW [MHz]	SCC (DL) Ch.	SCC (DL) Freq. [MHz]	DL Ant. Config.	LTE Tx.Power with DL CA Enabled (dBm)	LTE Single Carrier Tx Power (dBm)
CA_41C-41C	LTE B41	20	40185	2549.5	16QAM	1	0	40185	2549.5	4x4 MIMO	LTE B41	20	40383	2569.3	4x4 MIMO	LTE B41	20	41292	2660.2	2x2 MIMO	LTE B41	20	41490	2680	2x2 MIMO	22.98	23.00
CA_41C-41C	LTE B41	20	40185	2549.5	16QAM	1	0	40185	2549.5	2x2 MIMO	LTE B41	20	40383	2569.3	2x2 MIMO	LTE B41	20	41292	2660.2	4x4 MIMO	LTE B41	20	41490	2680	4x4 MIMO	22.95	23.00

Table I-70
LTE Band 41 PC2 Additional Hotspot Reduced Output Powers – 4 Component Carriers

	PCC										SCC 1					SCC 2					SCC 3					Power	
Combination	PCC Band	PCC BW [MHz]	PCC (UL) Ch.	PCC (UL) Freq. [MHz]	Mod.	PCC UL# RB	PCC UL RB Offset	PCC (DL) Ch.	PCC (DL) Freq. [MHz]	DL Ant. Config.	SCC Band	SCC BW [MHz]	SCC (DL) Ch.	SCC (DL) Freq. [MHz]	DL Ant. Config.	SCC Band	SCC BW [MHz]	SCC (DL) Ch.	SCC (DL) Freq. [MHz]	DL Ant. Config.	SCC Band	SCC BW [MHz]	SCC (DL) Ch.	SCC (DL) Freq. [MHz]	DL Ant. Config.	LTE Tx.Power with DL CA Enabled (dBm)	LTE Single Carrier Tx Power (dBm)
CA_41C-41C	LTE B41 PC2	20	39750	2506	16QAM	1	0	39750	2506	4x4 MIMO	LTE B41 PC2	20	39948	2525.8	4x4 MIMO	LTE B41 PC2	20	41292	2660.2	2x2 MIMO	LTE B41 PC2	20	41490	2680	2x2 MIMO	22.73	23.00
CA_41C-41C	LTE B41 PC2	20	39750	2506	16QAM	1	0	39750	2506	2x2 MIMO	LTE B41 PC2	20	39948	2525.8	2x2 MIMO	LTE B41 PC2	20	41292	2660.2	4x4 MIMO	LTE B41 PC2	20	41490	2680	4x4 MIMO	22.95	23.00

Table I-71
LTE Band 4 Additional Grip Sensor Reduced Output Powers – 4 Component Carriers

	PCC										SCC 1					SCC 2					SCC 3					Power	
Combination	PCC Band	PCC BW [MHz]	PCC (UL) Ch.	PCC (UL) Freq. [MHz]	Mod.	PCC UL# RB	PCC UL RB Offset	PCC (DL) Ch.	PCC (DL) Freq. [MHz]	DL Ant. Config.	SCC Band	SCC BW [MHz]	SCC (DL) Ch.	SCC (DL) Freq. [MHz]	DL Ant. Config.	SCC Band	SCC BW [MHz]	SCC (DL) Ch.	SCC (DL) Freq. [MHz]	DL Ant. Config.	SCC Band	SCC BW [MHz]	SCC (DL) Ch.	SCC (DL) Freq. [MHz]	DL Ant. Config.	LTE Tx.Power with DL CA Enabled (dBm)	LTE Single Carrier Tx Power (dBm)
CA_2A-4A-7C	LTE B4	20	20300	1745	16QAM	1	0	2300	2145	2x2 MIMO	LTE B2	20	900	1960	2x2 MIMO	LTE B7	20	3100	2655	4x4 MIMO	LTE B7	20	2902	2635.2	4x4 MIMO	21.50	21.50

Table I-72
LTE Band 66 Additional Grip Sensor Reduced Output Powers – 4 Component Carriers

	PCC										SCC 1					SCC 2					SCC 3					Power	
Combination	PCC Band	PCC BW [MHz]	PCC (UL) Ch.	PCC (UL) Freq. [MHz]	Mod.	PCC UL# RB	PCC UL RB Offset	PCC (DL) Ch.	PCC (DL) Freq. [MHz]	DL Ant. Config.	SCC Band	SCC BW [MHz]	SCC (DL) Ch.	SCC (DL) Freq. [MHz]	DL Ant. Config.	SCC Band	SCC BW [MHz]	SCC (DL) Ch.	SCC (DL) Freq. [MHz]	DL Ant. Config.	SCC Band	SCC BW [MHz]	SCC (DL) Ch.	SCC (DL) Freq. [MHz]	DL Ant. Config.	LTE Tx.Power with DL CA Enabled (dBm)	LTE Single Carrier Tx Power (dBm)
CA_2A-5B-66A	LTE B66	20	132322	1745	16QAM	1	0	66786	2145	2x2 MIMO	LTE B2	20	900	1960	4x4 MIMO	LTE B5	10	2525	881.5	2x2 MIMO	LTE B5	5	2453	874.3	2x2 MIMO	21.11	21.50
CA_2A-5B-66A	LTE B66	20	132322	1745	16QAM	1	0	66786	2145	4x4 MIMO	LTE B2	20	900	1960	2x2 MIMO	LTE B5	10	2525	881.5	2x2 MIMO	LTE B5	5	2453	874.3	2x2 MIMO	21.10	21.50
CA_2A-5A-66B	LTE B66	15	132047	1717.5	64QAM	1	0	66511	2117.5	2x2 MIMO	LTE B66	5	66604	2126.8	2x2 MIMO	LTE B2	20	900	1960	4x4 MIMO	LTE B5	10	2525	881.5	2x2 MIMO	21.70	21.50
CA_2A-5A-66B	LTE B66	15	132047	1717.5	64QAM	1	0	66511	2117.5	4x4 MIMO	LTE B66	5	66604	2126.8	4x4 MIMO	LTE B2	20	900	1960	2x2 MIMO	LTE B5	10	2525	881.5	2x2 MIMO	21.27	21.50
CA_2A-5A-66C	LTE B66	20	132322	1745	16QAM	1	0	66786	2145	2x2 MIMO	LTE B66	20	66588	2125.2	2x2 MIMO	LTE B2	20	900	1960	4x4 MIMO	LTE B5	10	2525	881.5	2x2 MIMO	21.09	21.50
CA_2A-5A-66C	LTE B66	20	132322	1745	16QAM	1	0	66786	2145	4x4 MIMO	LTE B66	20	66588	2125.2	4x4 MIMO	LTE B2	20	900	1960	2x2 MIMO	LTE B5	10	2525	881.5	2x2 MIMO	21.11	21.50
CA_2A-13A-66B	LTE B66	15	132047	1717.5	64QAM	1	0	66511	2117.5	2x2 MIMO	LTE B66	5	66604	2126.8	2x2 MIMO	LTE B2	20	900	1960	4x4 MIMO	LTE B13	10	5230	751	2x2 MIMO	21.22	21.50
CA_2A-13A-66B	LTE B66	15	132047	1717.5	64QAM	1	0	66511	2117.5	4x4 MIMO	LTE B66	5	66604	2126.8	4x4 MIMO	LTE B2	20	900	1960	2x2 MIMO	LTE B13	10	5230	751	2x2 MIMO	21.24	21.50
CA_2A-13A-66C	LTE B66	20	132322	1745	16QAM	1	0	66786	2145	2x2 MIMO	LTE B66	20	66588	2125.2	2x2 MIMO	LTE B2	20	900	1960	4x4 MIMO	LTE B13	10	5230	751	2x2 MIMO	21.13	21.50
CA_2A-13A-66C	LTE B66	20	132322	1745	16QAM	1	0	66786	2145	4x4 MIMO	LTE B66	20	66588	2125.2	4x4 MIMO	LTE B2	20	900	1960	2x2 MIMO	LTE B13	10	5230	751	2x2 MIMO	21.14	21.50
CA_5B-66A-66A	LTE B66	20	132322	1745	16QAM	1	0	66786	2145	4x4 MIMO	LTE B66	20	67236	2190	2x2 MIMO	LTE B5	10	2525	881.5	2x2 MIMO	LTE B5	5	2453	874.3	2x2 MIMO	21.14	21.50
CA_5B-66A-66A	LTE B66	20	132322	1745	16QAM	1	0	66786	2145	2x2 MIMO	LTE B66	20	67236	2190	4x4 MIMO	LTE B5	10	2525	881.5	2x2 MIMO	LTE B5	5	2453	874.3	2x2 MIMO	21.13	21.50

Table I-73
LTE Band 2 Additional Grip Sensor Reduced Output Powers – 4 Component Carriers

	PCC										SCC 1					SCC 2					SCC 3					Power	
Combination	PCC Band	PCC BW [MHz]	PCC (UL) Ch.	PCC (UL) Freq. [MHz]	Mod.	PCC UL# RB	PCC UL RB Offset	PCC (DL) Ch.	PCC (DL) Freq. [MHz]	DL Ant. Config.	SCC Band	SCC BW [MHz]	SCC (DL) Ch.	SCC (DL) Freq. [MHz]	DL Ant. Config.	SCC Band	SCC BW [MHz]	SCC (DL) Ch.	SCC (DL) Freq. [MHz]	DL Ant. Config.	SCC Band	SCC BW [MHz]	SCC (DL) Ch.	SCC (DL) Freq. [MHz]	DL Ant. Config.	LTE Tx.Power with DL CA Enabled (dBm)	LTE Single Carrier Tx Power (dBm)
CA_2A-4A-7C	LTE B2	20	18700	1860	16QAM	1	99	700	1940	2x2 MIMO	LTE B4	20	2175	2132.5	2x2 MIMO	LTE B7	20	3100	2655	4x4 MIMO	LTE B7	20	2902	2635.2	4x4 MIMO	22.11	22.50
CA_2A-5B-66A	LTE B2	20	18700	1860	16QAM	1	99	700	1940	4x4 MIMO	LTE B5	10	2525	881.5	2x2 MIMO	LTE B5	5	2453	874.3	2x2 MIMO	LTE B66	20	66786	2145	2x2 MIMO	22.13	22.50
CA_2A-5B-66A	LTE B2	20	18700	1860	16QAM	1	99	700	1940	2x2 MIMO	LTE B5	10	2525	881.5	2x2 MIMO	LTE B5	5	2453	874.3	2x2 MIMO	LTE B66	20	66786	2145	4x4 MIMO	22.10	22.50
CA_2A-5A-66B	LTE B2	20	18700	1860	16QAM	1	99	700	1940	4x4 MIMO	LTE B5	10	2525	881.5	2x2 MIMO	LTE B66	15	66786	2145	2x2 MIMO	LTE B66	5	66879	2154.3	2x2 MIMO	22.14	22.50
CA_2A-5A-66B	LTE B2	20	18700	1860	16QAM	1	99	700	1940	2x2 MIMO	LTE B5	10	2525	881.5	2x2 MIMO	LTE B66	15	66786	2145	4x4 MIMO	LTE B66	5	66879	2154.3	4x4 MIMO	22.11	22.50
CA_2A-5A-66C	LTE B2	20	18700	1860	16QAM	1	99	700	1940	4x4 MIMO	LTE B5	10	2525	881.5	2x2 MIMO	LTE B66	20	66786	2145	2x2 MIMO	LTE B66	20	66984	2164.8	2x2 MIMO	22.13	22.50
CA_2A-5A-66C	LTE B2	20	18700	1860	16QAM	1	99	700	1940	2x2 MIMO	LTE B5	10	2525	881.5	2x2 MIMO	LTE B66	20	66786	2145	4x4 MIMO	LTE B66	20	66984	2164.8	4x4 MIMO	22.11	22.50
CA_2A-13A-66B	LTE B2	20	18700	1860	16QAM	1	99	700	1940	4x4 MIMO	LTE B13	10	5230	751	2x2 MIMO	LTE B66	15	66786	2145	2x2 MIMO	LTE B66	5	66879	2154.3	2x2 MIMO	22.12	22.50
CA_2A-13A-66B	LTE B2	20	18700	1860	16QAM	1	99	700	1940	2x2 MIMO	LTE B13	10	5230	751	2x2 MIMO	LTE B66	15	66786	2145	4x4 MIMO	LTE B66	5	66879	2154.3	4x4 MIMO	22.14	22.50
CA_2A-13A-66C	LTE B2	20	18700	1860	16QAM	1	99	700	1940	4x4 MIMO	LTE B13	10	5230	751	2x2 MIMO	LTE B66	20	66786	2145	2x2 MIMO	LTE B66	20	66984	2164.8	2x2 MIMO	22.16	22.50
CA_2A-13A-66C	LTE B2	20	18700	1860	16QAM	1	99	700	1940	2x2 MIMO	LTE B13	10	5230	751	2x2 MIMO	LTE B66	20	66786	2145	4x4 MIMO	LTE B66	20	66984	2164.8	4x4 MIMO	22.12	22.50

Table I-74
LTE Band 25 Additional Grip Sensor Reduced Output Powers – 4 Component Carriers

	PCC										SCC 1					SCC 2					SCC 3					Power	
Combination	PCC Band	PCC BW [MHz]	PCC (UL) Ch.	PCC (UL) Freq. [MHz]	Mod.	PCC UL# RB	PCC UL RB Offset	PCC (DL) Ch.	PCC (DL) Freq. [MHz]	DL Ant. Config.	SCC Band	SCC BW [MHz]	SCC (DL) Ch.	SCC (DL) Freq. [MHz]	DL Ant. Config.	SCC Band	SCC BW [MHz]	SCC (DL) Ch.	SCC (DL) Freq. [MHz]	DL Ant. Config.	SCC Band	SCC BW [MHz]	SCC (DL) Ch.	SCC (DL) Freq. [MHz]	DL Ant. Config.	LTE Tx.Power with DL CA Enabled (dBm)	LTE Single Carrier Tx Power (dBm)
CA_25A-41D	LTE B25	20	26140	1860	16QAM	1	99	8140	1940	4x4 MIMO	LTE B41	20	40422	2573.2	2x2 MIMO	LTE B41	20	40620	2593	2x2 MIMO	LTE B41	20	40818	2612.8	2x2 MIMO	22.04	22.50

Table I-75
LTE Band 41 PC2 Additional Grip Sensor Reduced Output Powers – 4 Component Carriers

	PCC										SCC 1					SCC 2					SCC 3					Power	
Combination	PCC Band	PCC BW [MHz]	PCC (UL) Ch.	PCC (UL) Freq. [MHz]	Mod.	PCC UL# RB	PCC UL RB Offset	PCC (DL) Ch.	PCC (DL) Freq. [MHz]	DL Ant. Config.	SCC Band	SCC BW [MHz]	SCC (DL) Ch.	SCC (DL) Freq. [MHz]	DL Ant. Config.	SCC Band	SCC BW [MHz]	SCC (DL) Ch.	SCC (DL) Freq. [MHz]	DL Ant. Config.	SCC Band	SCC BW [MHz]	SCC (DL) Ch.	SCC (DL) Freq. [MHz]	DL Ant. Config.	LTE Tx.Power with DL CA Enabled (dBm)	LTE Single Carrier Tx Power (dBm)
CA_41C-41C	LTE B41 PC2	15	40185	2548.5	16QAM	1	0	40185	2548.5	4x4 MIMO	LTE B41 PC2	20	40356	2566.6	4x4 MIMO	LTE B41 PC2	20	41292	2660.2	2x2 MIMO	LTE B41 PC2	20	41490	2680	2x2 MIMO	24.09	24.50
CA_41C-41C	LTE B41 PC2	15	40185	2548.5	16QAM	1	0	40185	2548.5	2x2 MIMO	LTE B41 PC2	20	40356	2566.6	2x2 MIMO	LTE B41 PC2	20	41292	2660.2	4x4 MIMO	LTE B41 PC2	20	41490	2680	4x4 MIMO	23.99	24.50

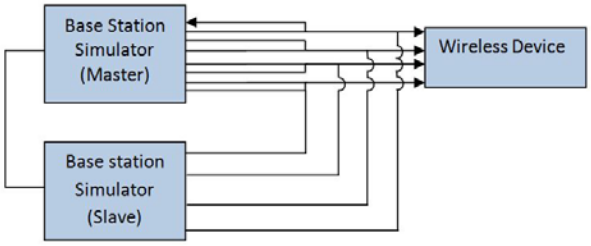


Figure I-4
Power Measurement Setup

I.5 Downlink 4X4 MIMO LAA Additional Conducted Powers

Table I-76
Additional Maximum Output Powers- 2 Component Carriers

Combination	PCC										SCC					Power	
	PCC Band	PCC Bandwidth [MHz]	PCC (UL) Channel	PCC (UL) Frequency [MHz]	Modulation	PCC UL# RB	PCC UL RB Offset	PCC (DL) Channel	PCC (DL) Frequency [MHz]	DL Ant. Config.	SCC Band	SCC Bandwidth [MHz]	SCC (DL) Channel	SCC (DL) Frequency [MHz]	DL Ant. Config.	LTE Tx.Power with DL CA Enabled (dBm)	LTE Single Carrier Tx Power (dBm)
CA_7A-46$_A$A	LTE B7	15	21375	2562.5	QPSK	1	0	3375	2682.5	4x4 MIMO	LTE B46$_A$	20	47290	5200	2x2 MIMO	23.86	23.90
CA_7A-46$_B$A	LTE B7	15	21375	2562.5	QPSK	1	0	3375	2682.5	4x4 MIMO	LTE B46$_B$	20	48290	5300	2x2 MIMO	23.82	23.90
CA_7A-46$_C$A	LTE B7	15	21375	2562.5	QPSK	1	0	3375	2682.5	4x4 MIMO	LTE B46$_C$	20	51290	5600	2x2 MIMO	23.86	23.90
CA_7A-46$_D$A	LTE B7	15	21375	2562.5	QPSK	1	0	3375	2682.5	4x4 MIMO	LTE B46$_D$	20	53140	5785	2x2 MIMO	23.84	23.90

Table I-77
Additional Maximum Output Powers- 3 Component Carriers

	PCC										SCC 1					SCC 2					Power	
Combination	PCC Band	PCC Bandwidth [MHz]	PCC (UL) Channel	PCC (UL) Frequency [MHz]	Modulation	PCC UL# RB	PCC UL RB Offset	PCC (DL) Channel	PCC (DL) Frequency [MHz]	DL Ant. Config.	SCC Band	SCC Bandwidth [MHz]	SCC (DL) Channel	SCC (DL) Frequency [MHz]	DL Ant. Config.	SCC Band	SCC Bandwidth [MHz]	SCC (DL) Channel	SCC (DL) Frequency [MHz]	DL Ant. Config.	LTE Tx.Power with DL CA Enabled (dBm)	LTE Single Carrier Tx Power (dBm)
CA_2A-46$_A$A-46$_A$A	LTE B2	10	18650	1855	QPSK	1	0	650	1935	4x4 MIMO	LTE B46$_A$	20	47090	5180	2x2 MIMO	LTE B46$_D$	20	53540	5825	2x2 MIMO	24.68	24.78
CA_2A-46$_A$A-66A	LTE B2	10	18650	1855	QPSK	1	0	650	1935	4x4 MIMO	LTE B46$_A$	20	47290	5200	2x2 MIMO	LTE B66	20	66786	2145	2x2 MIMO	24.71	24.78
CA_2A-46$_A$A-66A	LTE B2	10	18650	1855	QPSK	1	0	650	1935	4x4 MIMO	LTE B46$_B$	20	48290	5300	2x2 MIMO	LTE B66	20	66786	2145	2x2 MIMO	24.68	24.78
CA_2A-46$_A$A-66A	LTE B2	10	18650	1855	QPSK	1	0	650	1935	4x4 MIMO	LTE B46$_C$	20	51290	5600	2x2 MIMO	LTE B66	20	66786	2145	2x2 MIMO	24.68	24.78
CA_2A-46$_A$A-66A	LTE B2	10	18650	1855	QPSK	1	0	650	1935	4x4 MIMO	LTE B46$_D$	20	53140	5785	2x2 MIMO	LTE B66	20	66786	2145	2x2 MIMO	24.70	24.78
CA_2A-46$_A$A-66A	LTE B2	10	18650	1855	QPSK	1	0	650	1935	2x2 MIMO	LTE B46$_A$	20	47290	5200	2x2 MIMO	LTE B66	20	66786	2145	4x4 MIMO	24.68	24.78
CA_2A-46$_A$A-66A	LTE B2	10	18650	1855	QPSK	1	0	650	1935	2x2 MIMO	LTE B46$_B$	20	48290	5300	2x2 MIMO	LTE B66	20	66786	2145	4x4 MIMO	24.68	24.78
CA_2A-46$_A$A-66A	LTE B2	10	18650	1855	QPSK	1	0	650	1935	2x2 MIMO	LTE B46$_C$	20	51290	5600	2x2 MIMO	LTE B66	20	66786	2145	4x4 MIMO	24.70	24.78
CA_2A-46$_A$A-66A	LTE B2	10	18650	1855	QPSK	1	0	650	1935	2x2 MIMO	LTE B46$_D$	20	53140	5785	2x2 MIMO	LTE B66	20	66786	2145	4x4 MIMO	24.70	24.78
CA_4A-46$_A$A-46$_D$A	LTE B4	20	20300	1745	QPSK	1	0	2300	2145	4x4 MIMO	LTE B46$_A$	20	47090	5180	2x2 MIMO	LTE B46$_D$	20	53540	5825	2x2 MIMO	24.30	24.40
CA_2A-46$_A$A-66A	LTE B66	20	132572	1770	QPSK	1	0	67036	2170	4x4 MIMO	LTE B2	20	900	1960	2x2 MIMO	LTE B46$_A$	20	47290	5200	2x2 MIMO	24.29	24.40
CA_2A-46$_A$A-66A	LTE B66	20	132572	1770	QPSK	1	0	67036	2170	4x4 MIMO	LTE B2	20	900	1960	2x2 MIMO	LTE B46$_B$	20	48290	5300	2x2 MIMO	24.35	24.40
CA_2A-46$_A$A-66A	LTE B66	20	132572	1770	QPSK	1	0	67036	2170	4x4 MIMO	LTE B2	20	900	1960	2x2 MIMO	LTE B46$_C$	20	51290	5600	2x2 MIMO	24.32	24.40
CA_2A-46$_A$A-66A	LTE B66	20	132572	1770	QPSK	1	0	67036	2170	4x4 MIMO	LTE B2	20	900	1960	2x2 MIMO	LTE B46$_D$	20	53140	5785	2x2 MIMO	24.32	24.40
CA_2A-46$_A$A-66A	LTE B66	20	132572	1770	QPSK	1	0	67036	2170	2x2 MIMO	LTE B2	20	900	1960	4x4 MIMO	LTE B46$_A$	20	47290	5200	2x2 MIMO	24.30	24.40
CA_2A-46$_A$A-66A	LTE B66	20	132572	1770	QPSK	1	0	67036	2170	2x2 MIMO	LTE B2	20	900	1960	4x4 MIMO	LTE B46$_B$	20	48290	5300	2x2 MIMO	24.34	24.40
CA_2A-46$_A$A-66A	LTE B66	20	132572	1770	QPSK	1	0	67036	2170	2x2 MIMO	LTE B2	20	900	1960	4x4 MIMO	LTE B46$_C$	20	51290	5600	2x2 MIMO	24.30	24.40
CA_2A-46$_A$A-66A	LTE B66	20	132572	1770	QPSK	1	0	67036	2170	2x2 MIMO	LTE B2	20	900	1960	4x4 MIMO	LTE B46$_D$	20	53140	5785	2x2 MIMO	24.29	24.40
CA_46$_A$A-46$_A$A-66A	LTE B66	20	132572	1770	QPSK	1	0	67036	2170	4x4 MIMO	LTE B46$_A$	20	47090	5180	2x2 MIMO	LTE B46$_D$	20	53540	5825	2x2 MIMO	24.35	24.40
CA_7A-46$_A$C	LTE B7	15	21375	2562.5	QPSK	1	0	3375	2682.5	4x4 MIMO	LTE B46$_A$	20	47290	5200	2x2 MIMO	LTE B46$_A$	20	47488	5219.8	2x2 MIMO	23.89	23.90
CA_7A-46$_B$C	LTE B7	15	21375	2562.5	QPSK	1	0	3375	2682.5	4x4 MIMO	LTE B46$_B$	20	48290	5300	2x2 MIMO	LTE B46$_B$	20	48488	5319.8	2x2 MIMO	23.88	23.90
CA_7A-46$_C$C	LTE B7	15	21375	2562.5	QPSK	1	0	3375	2682.5	4x4 MIMO	LTE B46$_C$	20	51290	5600	2x2 MIMO	LTE B46$_C$	20	51488	5619.8	2x2 MIMO	23.89	23.90
CA_7A-46$_D$C	LTE B7	15	21375	2562.5	QPSK	1	0	3375	2682.5	4x4 MIMO	LTE B46$_D$	20	53140	5785	2x2 MIMO	LTE B46$_D$	20	53338	5804.8	2x2 MIMO	23.91	23.90

Table I-78
Additional Maximum Output Powers- 4 Component Carriers

	PCC										SCC 1					SCC 2					SCC 3					Power	
Combination	PCC Band	PCC BW [MHz]	PCC (UL) Channel	PCC (UL) Freq. [MHz]	Modulation	PCC UL# RB	PCC UL RB Offset	PCC (DL) Channel	PCC (DL) Freq. [MHz]	DL Ant. Config.	SCC Band	SCC BW [MHz]	SCC (DL) Channel	SCC (DL) Freq. [MHz]	DL Ant. Config.	SCC Band	SCC BW [MHz]	SCC (DL) Channel	SCC (DL) Freq. [MHz]	DL Ant. Config.	SCC Band	SCC BW [MHz]	SCC (DL) Channel	SCC (DL) Freq. [MHz]	DL Ant. Config.	LTE Tx.Power with DL CA Enabled (dBm)	LTE Single Carrier Tx Power (dBm)
CA_2A-46$_A$D	LTE B2	10	18650	1855	QPSK	1	0	650	1935	4x4 MIMO	LTE B46$_A$	20	47290	5200	2x2 MIMO	LTE B46$_A$	20	47488	5219.8	2x2 MIMO	LTE B46$_A$	20	47092	5180.2	2x2 MIMO	24.71	24.78
CA_2A-46$_B$D	LTE B2	10	18650	1855	QPSK	1	0	650	1935	4x4 MIMO	LTE B46$_B$	20	48290	5300	2x2 MIMO	LTE B46$_B$	20	48488	5319.8	2x2 MIMO	LTE B46$_B$	20	48092	5280.2	2x2 MIMO	24.77	24.78
CA_2A-46$_C$D	LTE B2	10	18650	1855	QPSK	1	0	650	1935	4x4 MIMO	LTE B46$_C$	20	51290	5600	2x2 MIMO	LTE B46$_C$	20	51488	5619.8	2x2 MIMO	LTE B46$_C$	20	51092	5580.2	2x2 MIMO	24.80	24.78
CA_2A-46$_D$D	LTE B2	10	18650	1855	QPSK	1	0	650	1935	4x4 MIMO	LTE B46$_D$	20	53140	5785	2x2 MIMO	LTE B46$_D$	20	53338	5804.8	2x2 MIMO	LTE B46$_D$	20	52942	5765.2	2x2 MIMO	24.79	24.78
CA_2A-46$_A$A-46$_C$C	LTE B2	10	18650	1855	QPSK	1	0	650	1935	4x4 MIMO	LTE B46$_A$	20	47090	5180	2x2 MIMO	LTE B46$_C$	20	53540	5825	2x2 MIMO	LTE B46$_C$	20	53342	5805.2	2x2 MIMO	24.77	24.78
CA_2A-46$_A$C-66A	LTE B2	10	18650	1855	QPSK	1	0	650	1935	4x4 MIMO	LTE B46$_A$	20	47290	5200	2x2 MIMO	LTE B46$_A$	20	47488	5219.8	2x2 MIMO	LTE B66	20	66786	2145	2x2 MIMO	24.70	24.78
CA_2A-46$_A$C-66A	LTE B2	10	18650	1855	QPSK	1	0	650	1935	4x4 MIMO	LTE B46$_B$	20	48290	5300	2x2 MIMO	LTE B46$_B$	20	48488	5319.8	2x2 MIMO	LTE B66	20	66786	2145	2x2 MIMO	24.71	24.78
CA_2A-46$_A$C-66A	LTE B2	10	18650	1855	QPSK	1	0	650	1935	4x4 MIMO	LTE B46$_C$	20	51290	5600	2x2 MIMO	LTE B46$_C$	20	51488	5619.8	2x2 MIMO	LTE B66	20	66786	2145	2x2 MIMO	24.73	24.78
CA_2A-46$_A$C-66A	LTE B2	10	18650	1855	QPSK	1	0	650	1935	4x4 MIMO	LTE B46$_D$	20	53140	5785	2x2 MIMO	LTE B46$_D$	20	53338	5804.8	2x2 MIMO	LTE B66	20	66786	2145	2x2 MIMO	24.71	24.78
CA_2A-46$_A$C-66A	LTE B2	10	18650	1855	QPSK	1	0	650	1935	2x2 MIMO	LTE B46$_A$	20	47290	5200	2x2 MIMO	LTE B46$_A$	20	47488	5219.8	2x2 MIMO	LTE B66	20	66786	2145	4x4 MIMO	24.73	24.78
CA_2A-46$_A$C-66A	LTE B2	10	18650	1855	QPSK	1	0	650	1935	2x2 MIMO	LTE B46$_B$	20	48290	5300	2x2 MIMO	LTE B46$_B$	20	48488	5319.8	2x2 MIMO	LTE B66	20	66786	2145	4x4 MIMO	24.72	24.78
CA_2A-46$_A$C-66A	LTE B2	10	18650	1855	QPSK	1	0	650	1935	2x2 MIMO	LTE B46$_C$	20	51290	5600	2x2 MIMO	LTE B46$_C$	20	51488	5619.8	2x2 MIMO	LTE B66	20	66786	2145	4x4 MIMO	24.71	24.78
CA_2A-46$_A$C-66A	LTE B2	10	18650	1855	QPSK	1	0	650	1935	2x2 MIMO	LTE B46$_D$	20	53140	5785	2x2 MIMO	LTE B46$_D$	20	53338	5804.8	2x2 MIMO	LTE B66	20	66786	2145	4x4 MIMO	24.75	24.78
CA_4A-46$_A$D	LTE B4	20	20300	1745	QPSK	1	0	2300	2145	4x4 MIMO	LTE B46$_A$	20	47290	5200	2x2 MIMO	LTE B46$_A$	20	47488	5219.8	2x2 MIMO	LTE B46$_A$	20	47092	5180.2	2x2 MIMO	24.32	24.40
CA_4A-46$_B$D	LTE B4	20	20300	1745	QPSK	1	0	2300	2145	4x4 MIMO	LTE B46$_B$	20	48290	5300	2x2 MIMO	LTE B46$_B$	20	48488	5319.8	2x2 MIMO	LTE B46$_B$	20	48092	5280.2	2x2 MIMO	24.30	24.40
CA_4A-46$_C$D	LTE B4	20	20300	1745	QPSK	1	0	2300	2145	4x4 MIMO	LTE B46$_C$	20	51290	5600	2x2 MIMO	LTE B46$_C$	20	51488	5619.8	2x2 MIMO	LTE B46$_C$	20	51092	5580.2	2x2 MIMO	24.32	24.40
CA_4A-46$_D$D	LTE B4	20	20300	1745	QPSK	1	0	2300	2145	4x4 MIMO	LTE B46$_D$	20	53140	5785	2x2 MIMO	LTE B46$_D$	20	53338	5804.8	2x2 MIMO	LTE B46$_D$	20	52942	5765.2	2x2 MIMO	24.31	24.40
CA_4A-46$_A$A-46$_C$C	LTE B4	20	20300	1745	QPSK	1	0	2300	2145	4x4 MIMO	LTE B46$_A$	20	47090	5180	2x2 MIMO	LTE B46$_C$	20	53540	5825	2x2 MIMO	LTE B46$_C$	20	53342	5805.2	2x2 MIMO	24.30	24.40
CA_2A-46$_A$C-66A	LTE B66	20	132572	1770	QPSK	1	0	67036	2170	4x4 MIMO	LTE B2	20	900	1960	2x2 MIMO	LTE B46$_A$	20	47290	5200	2x2 MIMO	LTE B46$_A$	20	47488	5219.8	2x2 MIMO	24.31	24.40
CA_2A-46$_B$C-66A	LTE B66	20	132572	1770	QPSK	1	0	67036	2170	4x4 MIMO	LTE B2	20	900	1960	2x2 MIMO	LTE B46$_B$	20	48290	5300	2x2 MIMO	LTE B46$_B$	20	48488	5319.8	2x2 MIMO	24.35	24.40
CA_2A-46$_C$C-66A	LTE B66	20	132572	1770	QPSK	1	0	67036	2170	4x4 MIMO	LTE B2	20	900	1960	2x2 MIMO	LTE B46$_C$	20	51290	5600	2x2 MIMO	LTE B46$_C$	20	51488	5619.8	2x2 MIMO	24.33	24.40
CA_2A-46$_D$C-66A	LTE B66	20	132572	1770	QPSK	1	0	67036	2170	4x4 MIMO	LTE B2	20	900	1960	2x2 MIMO	LTE B46$_D$	20	53140	5785	2x2 MIMO	LTE B46$_D$	20	53338	5804.8	2x2 MIMO	24.35	24.40
CA_2A-46$_A$C-66A	LTE B66	20	132572	1770	QPSK	1	0	67036	2170	2x2 MIMO	LTE B2	20	900	1960	4x4 MIMO	LTE B46$_A$	20	47290	5200	2x2 MIMO	LTE B46$_A$	20	47488	5219.8	2x2 MIMO	24.35	24.40
CA_2A-46$_A$C-66A	LTE B66	20	132572	1770	QPSK	1	0	67036	2170	2x2 MIMO	LTE B2	20	900	1960	4x4 MIMO	LTE B46$_B$	20	48290	5300	2x2 MIMO	LTE B46$_B$	20	48488	5319.8	2x2 MIMO	24.33	24.40
CA_2A-46$_A$C-66A	LTE B66	20	132572	1770	QPSK	1	0	67036	2170	2x2 MIMO	LTE B2	20	900	1960	4x4 MIMO	LTE B46$_C$	20	51290	5600	2x2 MIMO	LTE B46$_C$	20	51488	5619.8	2x2 MIMO	24.35	24.40
CA_2A-46$_A$C-66A	LTE B66	20	132572	1770	QPSK	1	0	67036	2170	2x2 MIMO	LTE B2	20	900	1960	4x4 MIMO	LTE B46$_D$	20	53140	5785	2x2 MIMO	LTE B46$_D$	20	53338	5804.8	2x2 MIMO	24.34	24.40
CA_4A-46$_D$D-66A	LTE B66	20	132572	1770	QPSK	1	0	67036	2170	4x4 MIMO	LTE B46$_A$	20	47290	5200	2x2 MIMO	LTE B46$_A$	20	47488	5219.8	2x2 MIMO	LTE B46$_A$	20	47092	5180.2	2x2 MIMO	24.32	24.40
CA_4A-46$_D$D-66A	LTE B66	20	132572	1770	QPSK	1	0	67036	2170	4x4 MIMO	LTE B46$_B$	20	48290	5300	2x2 MIMO	LTE B46$_B$	20	48488	5319.8	2x2 MIMO	LTE B46$_B$	20	48092	5280.2	2x2 MIMO	24.35	24.40
CA_4A-46$_C$D-66A	LTE B66	20	132572	1770	QPSK	1	0	67036	2170	4x4 MIMO	LTE B46$_C$	20	51290	5600	2x2 MIMO	LTE B46$_C$	20	51488	5619.8	2x2 MIMO	LTE B46$_C$	20	51092	5580.2	2x2 MIMO	24.37	24.40
CA_4A-46$_D$D-66A	LTE B66	20	132572	1770	QPSK	1	0	67036	2170	4x4 MIMO	LTE B46$_D$	20	53140	5785	2x2 MIMO	LTE B46$_D$	20	53338	5804.8	2x2 MIMO	LTE B46$_D$	20	52942	5765.2	2x2 MIMO	24.34	24.40
CA_4A-46$_A$A-46$_C$C-66A	LTE B66	20	132572	1770	QPSK	1	0	67036	2170	4x4 MIMO	LTE B46$_A$	20	47090	5180	2x2 MIMO	LTE B46$_C$	20	53540	5825	2x2 MIMO	LTE B46$_C$	20	53342	5805.2	2x2 MIMO	24.31	24.40
CA_7A-46$_A$D	LTE B7	15	21375	2562.5	QPSK	1	0	3375	2682.5	4x4 MIMO	LTE B46$_A$	20	47290	5200	2x2 MIMO	LTE B46$_A$	20	47488	5219.8	2x2 MIMO	LTE B46$_A$	20	47092	5180.2	2x2 MIMO	23.87	23.90
CA_7A-46$_B$D	LTE B7	15	21375	2562.5	QPSK	1	0	3375	2682.5	4x4 MIMO	LTE B46$_B$	20	48290	5300	2x2 MIMO	LTE B46$_B$	20	48488	5319.8	2x2 MIMO	LTE B46$_B$	20	48092	5280.2	2x2 MIMO	23.90	23.90
CA_7A-46$_C$D	LTE B7	15	21375	2562.5	QPSK	1	0	3375	2682.5	4x4 MIMO	LTE B46$_C$	20	51290	5600	2x2 MIMO	LTE B46$_C$	20	51488	5619.8	2x2 MIMO	LTE B46$_C$	20	51092	5580.2	2x2 MIMO	23.88	23.90
CA_7A-46$_D$D	LTE B7	15	21375	2562.5	QPSK	1	0	3375	2682.5	4x4 MIMO	LTE B46$_D$	20	53140	5785	2x2 MIMO	LTE B46$_D$	20	53338	5804.8	2x2 MIMO	LTE B46$_D$	20	52942	5765.2	2x2 MIMO	23.92	23.90

Table I-79
Additional Hotspot/Grip Sensor Reduced Output Powers- 2 Component Carriers

	PCC									SCC					Power	
Combination	PCC Band	PCC Bandwidth [MHz]	PCC (UL) Channel	PCC (UL) Frequency [MHz]	Modulation	PCC UL# RB	PCC UL RB Offset	PCC (DL) Channel	PCC (DL) Frequency [MHz]	DL Ant. Config.	SCC Band	SCC Bandwidth [MHz]	SCC (DL) Channel	SCC (DL) Frequency [MHz]	DL Ant. Config.	LTE Tx.Power with DL CA Enabled (dBm)	LTE Single Carrier Tx Power (dBm)
CA_7A-46$_A$A	LTE B7	20	21350	2560	64QAM	1	0	3350	2680	4x4 MIMO	LTE B46$_A$	20	47290	5200	2x2 MIMO	20.82	21.00
CA_7A-46$_B$A	LTE B7	20	21350	2560	64QAM	1	0	3350	2680	4x4 MIMO	LTE B46$_B$	20	48290	5300	2x2 MIMO	20.74	21.00
CA_7A-46$_C$A	LTE B7	20	21350	2560	64QAM	1	0	3350	2680	4x4 MIMO	LTE B46$_C$	20	51290	5600	2x2 MIMO	20.78	21.00
CA_7A-46$_D$A	LTE B7	20	21350	2560	64QAM	1	0	3350	2680	4x4 MIMO	LTE B46$_D$	20	53140	5785	2x2 MIMO	20.81	21.00

Table I-80
Additional Hotspot Reduced Output Powers- 3 Component Carriers

	PCC									SCC 1					SCC 2					Power	
Combination	PCC Band	PCC Bandwidth [MHz]	PCC (UL) Channel	PCC (UL) Frequency [MHz]	Modulation	PCC UL# RB	PCC UL RB Offset	PCC (DL) Channel	PCC (DL) Frequency [MHz]	DL Ant. Config.	SCC Band	SCC Bandwidth [MHz]	SCC (DL) Channel	SCC (DL) Frequency [MHz]	DL Ant. Config.	SCC Band	SCC Bandwidth [MHz]	SCC (DL) Channel	SCC (DL) Frequency [MHz]	DL Ant. Config.	LTE Tx.Power with DL CA Enabled (dBm)	LTE Single Carrier Tx Power (dBm)
CA_2A-46$_A$A-46$_D$A	LTE B2	20	18925	1882.5	64QAM	1	0	925	1962.5	4x4 MIMO	LTE B46$_A$	20	47090	5180	2x2 MIMO	LTE B46$_D$	20	53540	5825	2x2 MIMO	19.72	20.00
CA_2A-46$_A$A-66A	LTE B2	20	18925	1882.5	64QAM	1	0	925	1962.5	4x4 MIMO	LTE B46$_A$	20	47290	5200	2x2 MIMO	LTE B66	20	66786	2145	2x2 MIMO	19.78	20.00
CA_2A-46$_B$A-66A	LTE B2	20	18925	1882.5	64QAM	1	0	925	1962.5	4x4 MIMO	LTE B46$_B$	20	48290	5300	2x2 MIMO	LTE B66	20	66786	2145	2x2 MIMO	19.79	20.00
CA_2A-46$_C$A-66A	LTE B2	20	18925	1882.5	64QAM	1	0	925	1962.5	4x4 MIMO	LTE B46$_C$	20	51290	5600	2x2 MIMO	LTE B66	20	66786	2145	2x2 MIMO	19.77	20.00
CA_2A-46$_D$A-66A	LTE B2	20	18925	1882.5	64QAM	1	0	925	1962.5	4x4 MIMO	LTE B46$_D$	20	53140	5785	2x2 MIMO	LTE B66	20	66786	2145	2x2 MIMO	19.80	20.00
CA_2A-46$_A$A-66A	LTE B2	20	18925	1882.5	64QAM	1	0	925	1962.5	2x2 MIMO	LTE B46$_A$	20	47290	5200	2x2 MIMO	LTE B66	20	66786	2145	4x4 MIMO	19.75	20.00
CA_2A-46$_B$A-66A	LTE B2	20	18925	1882.5	64QAM	1	0	925	1962.5	2x2 MIMO	LTE B46$_B$	20	48290	5300	2x2 MIMO	LTE B66	20	66786	2145	4x4 MIMO	19.71	20.00
CA_2A-46$_C$A-66A	LTE B2	20	18925	1882.5	64QAM	1	0	925	1962.5	2x2 MIMO	LTE B46$_C$	20	51290	5600	2x2 MIMO	LTE B66	20	66786	2145	4x4 MIMO	19.73	20.00
CA_2A-46$_D$A-66A	LTE B2	20	18925	1882.5	64QAM	1	0	925	1962.5	2x2 MIMO	LTE B46$_D$	20	53140	5785	2x2 MIMO	LTE B66	20	66786	2145	4x4 MIMO	19.73	20.00
CA_4A-46$_A$A-46$_D$A	LTE B4	20	20300	1745	64QAM	1	0	2300	2145	4x4 MIMO	LTE B46$_A$	20	47090	5180	2x2 MIMO	LTE B46$_D$	20	53540	5825	2x2 MIMO	19.74	20.00
CA_2A-46$_A$A-66A	LTE B66	20	132572	1770	64QAM	1	0	67036	2170	4x4 MIMO	LTE B2	20	900	1960	2x2 MIMO	LTE B46$_A$	20	47290	5200	2x2 MIMO	19.80	20.00
CA_2A-46$_B$A-66A	LTE B66	20	132572	1770	64QAM	1	0	67036	2170	4x4 MIMO	LTE B2	20	900	1960	2x2 MIMO	LTE B46$_B$	20	48290	5300	2x2 MIMO	19.82	20.00
CA_2A-46$_C$A-66A	LTE B66	20	132572	1770	64QAM	1	0	67036	2170	4x4 MIMO	LTE B2	20	900	1960	2x2 MIMO	LTE B46$_C$	20	51290	5600	2x2 MIMO	19.83	20.00
CA_2A-46$_D$A-66A	LTE B66	20	132572	1770	64QAM	1	0	67036	2170	4x4 MIMO	LTE B2	20	900	1960	2x2 MIMO	LTE B46$_D$	20	53140	5785	2x2 MIMO	19.88	20.00
CA_2A-46$_A$A-66A	LTE B66	20	132572	1770	64QAM	1	0	67036	2170	2x2 MIMO	LTE B2	20	900	1960	4x4 MIMO	LTE B46$_A$	20	47290	5200	2x2 MIMO	19.78	20.00
CA_2A-46$_A$A-66A	LTE B66	20	132572	1770	64QAM	1	0	67036	2170	2x2 MIMO	LTE B2	20	900	1960	4x4 MIMO	LTE B46$_B$	20	48290	5300	2x2 MIMO	19.78	20.00
CA_2A-46$_A$A-66A	LTE B66	20	132572	1770	64QAM	1	0	67036	2170	2x2 MIMO	LTE B2	20	900	1960	4x4 MIMO	LTE B46$_C$	20	51290	5600	2x2 MIMO	19.81	20.00
CA_2A-46$_A$A-66A	LTE B66	20	132572	1770	64QAM	1	0	67036	2170	2x2 MIMO	LTE B2	20	900	1960	4x4 MIMO	LTE B46$_D$	20	53140	5785	2x2 MIMO	19.80	20.00
CA_4A-46$_A$A-66A	LTE B66	20	132572	1770	64QAM	1	0	67036	2170	4x4 MIMO	LTE B46$_A$	20	47090	5180	2x2 MIMO	LTE B46$_D$	20	53540	5825	2x2 MIMO	19.81	20.00
CA_7A-46$_A$C	LTE B7	20	21350	2560	64QAM	1	0	3350	2680	4x4 MIMO	LTE B46$_A$	20	47290	5200	2x2 MIMO	LTE B46$_A$	20	47488	5219.8	2x2 MIMO	20.78	21.00
CA_7A-46$_B$C	LTE B7	20	21350	2560	64QAM	1	0	3350	2680	4x4 MIMO	LTE B46$_B$	20	48290	5300	2x2 MIMO	LTE B46$_B$	20	48488	5319.8	2x2 MIMO	20.80	21.00
CA_7A-46$_C$C	LTE B7	20	21350	2560	64QAM	1	0	3350	2680	4x4 MIMO	LTE B46$_C$	20	51290	5600	2x2 MIMO	LTE B46$_C$	20	51488	5619.8	2x2 MIMO	20.82	21.00
CA_7A-46$_D$C	LTE B7	20	21350	2560	64QAM	1	0	3350	2680	4x4 MIMO	LTE B46$_D$	20	53140	5785	2x2 MIMO	LTE B46$_D$	20	53338	5804.8	2x2 MIMO	20.84	21.00

Table I-81
Additional Hotspot Reduced Output Powers- 4 Component Carriers

	PCC										SCC 1					SCC 2					SCC 3					Power	
Combination	PCC Band	PCC BW [MHz]	PCC (UL) Channel	PCC (UL) Freq. [MHz]	Modulation	PCC UL# RB	PCC UL RB Offset	PCC (DL) Channel	PCC (DL) Freq. [MHz]	DL Ant. Config.	SCC Band	SCC BW [MHz]	SCC (DL) Channel	SCC (DL) Freq. [MHz]	DL Ant. Config.	SCC Band	SCC BW [MHz]	SCC (DL) Channel	SCC (DL) Freq. [MHz]	DL Ant. Config.	SCC Band	SCC BW [MHz]	SCC (DL) Channel	SCC (DL) Freq. [MHz]	DL Ant. Config.	LTE Tx.Power with DL CA Enabled (dBm)	LTE Single Carrier Tx Power (dBm)
CA_2A-46$_D$	LTE B2	20	18925	1882.5	64QAM	1	0	925	1962.5	4x4 MIMO	LTE B46$_A$	20	47290	5200	2x2 MIMO	LTE B46$_A$	20	47488	5219.8	2x2 MIMO	LTE B46$_A$	20	47092	5180.2	2x2 MIMO	19.74	20.00
CA_2A-46$_D$	LTE B2	20	18925	1882.5	64QAM	1	0	925	1962.5	4x4 MIMO	LTE B46$_A$	20	48290	5300	2x2 MIMO	LTE B46$_A$	20	48488	5319.8	2x2 MIMO	LTE B46$_A$	20	48092	5280.2	2x2 MIMO	19.76	20.00
CA_2A-46$_D$	LTE B2	20	18925	1882.5	64QAM	1	0	925	1962.5	4x4 MIMO	LTE B46$_B$	20	51290	5600	2x2 MIMO	LTE B46$_B$	20	51488	5619.8	2x2 MIMO	LTE B46$_B$	20	51092	5580.2	2x2 MIMO	19.74	20.00
CA_2A-46$_D$	LTE B2	20	18925	1882.5	64QAM	1	0	925	1962.5	4x4 MIMO	LTE B46$_C$	20	53140	5785	2x2 MIMO	LTE B46$_C$	20	53338	5804.8	2x2 MIMO	LTE B46$_C$	20	52942	5765.2	2x2 MIMO	19.75	20.00
CA_2A-46$_A$A-46$_C$	LTE B2	20	18925	1882.5	64QAM	1	0	925	1962.5	4x4 MIMO	LTE B46$_A$	20	47090	5180	2x2 MIMO	LTE B46$_D$	20	53540	5825	2x2 MIMO	LTE B46$_D$	20	53342	5805.2	2x2 MIMO	19.67	20.00
CA_2A-46$_A$C-66A	LTE B2	20	18925	1882.5	64QAM	1	0	925	1962.5	4x4 MIMO	LTE B46$_A$	20	47290	5200	2x2 MIMO	LTE B46$_A$	20	47488	5219.8	2x2 MIMO	LTE B66	20	66786	2145	2x2 MIMO	19.77	20.00
CA_2A-46$_A$C-66A	LTE B2	20	18925	1882.5	64QAM	1	0	925	1962.5	4x4 MIMO	LTE B46$_B$	20	48290	5300	2x2 MIMO	LTE B46$_B$	20	48488	5319.8	2x2 MIMO	LTE B66	20	66786	2145	2x2 MIMO	19.81	20.00
CA_2A-46$_A$C-66A	LTE B2	20	18925	1882.5	64QAM	1	0	925	1962.5	4x4 MIMO	LTE B46$_C$	20	51290	5600	2x2 MIMO	LTE B46$_C$	20	51488	5619.8	2x2 MIMO	LTE B66	20	66786	2145	2x2 MIMO	19.76	20.00
CA_2A-46$_A$C-66A	LTE B2	20	18925	1882.5	64QAM	1	0	925	1962.5	4x4 MIMO	LTE B46$_D$	20	53140	5785	2x2 MIMO	LTE B46$_D$	20	53338	5804.8	2x2 MIMO	LTE B66	20	66786	2145	2x2 MIMO	19.73	20.00
CA_2A-46$_A$C-66A	LTE B2	20	18925	1882.5	64QAM	1	0	925	1962.5	4x4 MIMO	LTE B46$_A$	20	47290	5200	2x2 MIMO	LTE B46$_A$	20	47488	5219.8	2x2 MIMO	LTE B66	20	66786	2145	4x4 MIMO	19.73	20.00
CA_2A-46$_A$C-66A	LTE B2	20	18925	1882.5	64QAM	1	0	925	1962.5	2x2 MIMO	LTE B46$_B$	20	48290	5300	2x2 MIMO	LTE B46$_B$	20	48488	5319.8	2x2 MIMO	LTE B66	20	66786	2145	4x4 MIMO	19.75	20.00
CA_2A-46$_A$C-66A	LTE B2	20	18925	1882.5	64QAM	1	0	925	1962.5	2x2 MIMO	LTE B46$_C$	20	51290	5600	2x2 MIMO	LTE B46$_C$	20	51488	5619.8	2x2 MIMO	LTE B66	20	66786	2145	4x4 MIMO	19.72	20.00
CA_2A-46$_A$C-66A	LTE B2	20	18925	1882.5	64QAM	1	0	925	1962.5	2x2 MIMO	LTE B46$_D$	20	53140	5785	2x2 MIMO	LTE B46$_D$	20	53338	5804.8	2x2 MIMO	LTE B66	20	66786	2145	4x4 MIMO	19.71	20.00
CA_4A-46$_D$	LTE B4	20	20300	1745	64QAM	1	0	2300	2145	4x4 MIMO	LTE B46$_A$	20	47290	5200	2x2 MIMO	LTE B46$_A$	20	47488	5219.8	2x2 MIMO	LTE B46$_A$	20	47092	5180.2	2x2 MIMO	19.78	20.00
CA_4A-46$_D$	LTE B4	20	20300	1745	64QAM	1	0	2300	2145	4x4 MIMO	LTE B46$_A$	20	48290	5300	2x2 MIMO	LTE B46$_A$	20	48488	5319.8	2x2 MIMO	LTE B46$_A$	20	48092	5280.2	2x2 MIMO	19.75	20.00
CA_4A-46$_D$	LTE B4	20	20300	1745	64QAM	1	0	2300	2145	4x4 MIMO	LTE B46$_B$	20	51290	5600	2x2 MIMO	LTE B46$_B$	20	51488	5619.8	2x2 MIMO	LTE B46$_B$	20	51092	5580.2	2x2 MIMO	19.73	20.00
CA_4A-46$_D$	LTE B4	20	20300	1745	64QAM	1	0	2300	2145	4x4 MIMO	LTE B46$_C$	20	53140	5785	2x2 MIMO	LTE B46$_C$	20	53338	5804.8	2x2 MIMO	LTE B46$_C$	20	52942	5765.2	2x2 MIMO	19.75	20.00
CA_4A-46$_A$A-46$_C$	LTE B4	20	20300	1745	64QAM	1	0	2300	2145	4x4 MIMO	LTE B46$_D$	20	47090	5180	2x2 MIMO	LTE B46$_D$	20	53540	5825	2x2 MIMO	LTE B46$_D$	20	53342	5805.2	2x2 MIMO	19.72	20.00
CA_2A-46$_A$C-66A	LTE B66	20	132572	1770	64QAM	1	0	67036	2170	4x4 MIMO	LTE B2	20	900	1960	2x2 MIMO	LTE B46$_A$	20	47290	5200	2x2 MIMO	LTE B46$_A$	20	47488	5219.8	2x2 MIMO	19.81	20.00
CA_2A-46$_A$C-66A	LTE B66	20	132572	1770	64QAM	1	0	67036	2170	4x4 MIMO	LTE B2	20	900	1960	2x2 MIMO	LTE B46$_B$	20	48290	5300	2x2 MIMO	LTE B46$_B$	20	48488	5319.8	2x2 MIMO	19.76	20.00
CA_2A-46$_A$C-66A	LTE B66	20	132572	1770	64QAM	1	0	67036	2170	4x4 MIMO	LTE B2	20	900	1960	2x2 MIMO	LTE B46$_C$	20	51290	5600	2x2 MIMO	LTE B46$_C$	20	51488	5619.8	2x2 MIMO	19.82	20.00
CA_2A-46$_A$C-66A	LTE B66	20	132572	1770	64QAM	1	0	67036	2170	4x4 MIMO	LTE B2	20	900	1960	2x2 MIMO	LTE B46$_D$	20	53140	5785	2x2 MIMO	LTE B46$_D$	20	53338	5804.8	2x2 MIMO	19.83	20.00
CA_2A-46$_A$C-66A	LTE B66	20	132572	1770	64QAM	1	0	67036	2170	2x2 MIMO	LTE B2	20	900	1960	4x4 MIMO	LTE B46$_A$	20	47290	5200	2x2 MIMO	LTE B46$_A$	20	47488	5219.8	2x2 MIMO	19.80	20.00
CA_2A-46$_A$C-66A	LTE B66	20	132572	1770	64QAM	1	0	67036	2170	2x2 MIMO	LTE B2	20	900	1960	4x4 MIMO	LTE B46$_B$	20	48290	5300	2x2 MIMO	LTE B46$_B$	20	48488	5319.8	2x2 MIMO	19.79	20.00
CA_2A-46$_A$C-66A	LTE B66	20	132572	1770	64QAM	1	0	67036	2170	2x2 MIMO	LTE B2	20	900	1960	4x4 MIMO	LTE B46$_C$	20	51290	5600	2x2 MIMO	LTE B46$_C$	20	51488	5619.8	2x2 MIMO	19.80	20.00
CA_2A-46$_A$C-66A	LTE B66	20	132572	1770	64QAM	1	0	67036	2170	2x2 MIMO	LTE B2	20	900	1960	4x4 MIMO	LTE B46$_D$	20	53140	5785	2x2 MIMO	LTE B46$_D$	20	53338	5804.8	2x2 MIMO	19.84	20.00
CA_46$_D$-66A	LTE B66	20	132572	1770	64QAM	1	0	67036	2170	4x4 MIMO	LTE B46$_A$	20	47290	5200	2x2 MIMO	LTE B46$_A$	20	47488	5219.8	2x2 MIMO	LTE B46$_A$	20	47092	5180.2	2x2 MIMO	19.81	20.00
CA_46$_D$-66A	LTE B66	20	132572	1770	64QAM	1	0	67036	2170	4x4 MIMO	LTE B46$_A$	20	48290	5300	2x2 MIMO	LTE B46$_A$	20	48488	5319.8	2x2 MIMO	LTE B46$_A$	20	48092	5280.2	2x2 MIMO	19.79	20.00
CA_46$_D$-66A	LTE B66	20	132572	1770	64QAM	1	0	67036	2170	4x4 MIMO	LTE B46$_B$	20	51290	5600	2x2 MIMO	LTE B46$_B$	20	51488	5619.8	2x2 MIMO	LTE B46$_B$	20	51092	5580.2	2x2 MIMO	19.77	20.00
CA_46$_D$-66A	LTE B66	20	132572	1770	64QAM	1	0	67036	2170	4x4 MIMO	LTE B46$_C$	20	53140	5785	2x2 MIMO	LTE B46$_C$	20	53338	5804.8	2x2 MIMO	LTE B46$_C$	20	52942	5765.2	2x2 MIMO	19.85	20.00
CA_46$_A$-46$_C$-66A	LTE B66	20	132572	1770	64QAM	1	0	67036	2170	4x4 MIMO	LTE B46$_D$	20	47090	5180	2x2 MIMO	LTE B46$_D$	20	53540	5825	2x2 MIMO	LTE B46$_D$	20	53342	5805.2	2x2 MIMO	19.82	20.00
CA_7A-46$_D$	LTE B7	20	21350	2560	64QAM	1	0	3350	2680	4x4 MIMO	LTE B46$_A$	20	47290	5200	2x2 MIMO	LTE B46$_A$	20	47488	5219.8	2x2 MIMO	LTE B46$_A$	20	47092	5180.2	2x2 MIMO	20.77	21.00
CA_7A-46$_D$	LTE B7	20	21350	2560	64QAM	1	0	3350	2680	4x4 MIMO	LTE B46$_A$	20	48290	5300	2x2 MIMO	LTE B46$_A$	20	48488	5319.8	2x2 MIMO	LTE B46$_A$	20	48092	5280.2	2x2 MIMO	20.81	21.00
CA_7A-46$_D$	LTE B7	20	21350	2560	64QAM	1	0	3350	2680	4x4 MIMO	LTE B46$_B$	20	51290	5600	2x2 MIMO	LTE B46$_B$	20	51488	5619.8	2x2 MIMO	LTE B46$_B$	20	51092	5580.2	2x2 MIMO	20.79	21.00
CA_7A-46$_D$	LTE B7	20	21350	2560	64QAM	1	0	3350	2680	4x4 MIMO	LTE B46$_C$	20	53140	5785	2x2 MIMO	LTE B46$_C$	20	53338	5804.8	2x2 MIMO	LTE B46$_C$	20	52942	5765.2	2x2 MIMO	20.79	21.00

Table I-82
Additional Grip Sensor Reduced Output Powers- 3 Component Carriers

	PCC										SCC 1					SCC 2					Power	
Combination	PCC Band	PCC Bandwidth [MHz]	PCC (UL) Channel	PCC (UL) Frequency [MHz]	Modulation	PCC UL# RB	PCC UL RB Offset	PCC (DL) Channel	PCC (DL) Frequency [MHz]	DL Ant. Config.	SCC Band	SCC Bandwidth [MHz]	SCC (DL) Channel	SCC (DL) Frequency [MHz]	DL Ant. Config.	SCC Band	SCC Bandwidth [MHz]	SCC (DL) Channel	SCC (DL) Frequency [MHz]	DL Ant. Config.	LTE Tx.Power with DL CA Enabled (dBm)	LTE Single Carrier Tx Power (dBm)
CA_2A-46$_A$A-46$_D$A	LTE B2	20	18700	1860	16QAM	1	99	700	1940	4x4 MIMO	LTE B46$_A$	20	47090	5180	2x2 MIMO	LTE B46$_D$	20	53540	5825	2x2 MIMO	22.31	22.50
CA_2A-46$_A$A-66A	LTE B2	20	18700	1860	16QAM	1	99	700	1940	4x4 MIMO	LTE B46$_A$	20	47290	5200	2x2 MIMO	LTE B66	20	66786	2145	2x2 MIMO	22.29	22.50
CA_2A-46$_A$A-66A	LTE B2	20	18700	1860	16QAM	1	99	700	1940	4x4 MIMO	LTE B46$_B$	20	48290	5300	2x2 MIMO	LTE B66	20	66786	2145	2x2 MIMO	22.27	22.50
CA_2A-46$_A$A-66A	LTE B2	20	18700	1860	16QAM	1	99	700	1940	4x4 MIMO	LTE B46$_C$	20	51290	5600	2x2 MIMO	LTE B66	20	66786	2145	2x2 MIMO	22.31	22.50
CA_2A-46$_A$A-66A	LTE B2	20	18700	1860	16QAM	1	99	700	1940	4x4 MIMO	LTE B46$_D$	20	53140	5785	2x2 MIMO	LTE B66	20	66786	2145	2x2 MIMO	22.34	22.50
CA_2A-46$_A$A-66A	LTE B2	20	18700	1860	16QAM	1	99	700	1940	2x2 MIMO	LTE B46$_A$	20	47290	5200	2x2 MIMO	LTE B66	20	66786	2145	4x4 MIMO	22.35	22.50
CA_2A-46$_A$A-66A	LTE B2	20	18700	1860	16QAM	1	99	700	1940	2x2 MIMO	LTE B46$_B$	20	48290	5300	2x2 MIMO	LTE B66	20	66786	2145	4x4 MIMO	22.36	22.50
CA_2A-46$_A$A-66A	LTE B2	20	18700	1860	16QAM	1	99	700	1940	2x2 MIMO	LTE B46$_C$	20	51290	5600	2x2 MIMO	LTE B66	20	66786	2145	4x4 MIMO	22.38	22.50
CA_2A-46$_A$A-66A	LTE B2	20	18700	1860	16QAM	1	99	700	1940	2x2 MIMO	LTE B46$_D$	20	53140	5785	2x2 MIMO	LTE B66	20	66786	2145	4x4 MIMO	22.37	22.50
CA_4A-46$_A$A-46$_D$A	LTE B4	20	20300	1745	16QAM	1	0	2300	2145	4x4 MIMO	LTE B46$_A$	20	47090	5180	2x2 MIMO	LTE B46$_D$	20	53540	5825	2x2 MIMO	21.30	21.50
CA_2A-46$_A$A-66A	LTE B66	20	132322	1745	16QAM	1	0	66786	2145	4x4 MIMO	LTE B2	20	900	1960	2x2 MIMO	LTE B46$_A$	20	47290	5200	2x2 MIMO	21.24	21.50
CA_2A-46$_A$A-66A	LTE B66	20	132322	1745	16QAM	1	0	66786	2145	4x4 MIMO	LTE B2	20	900	1960	2x2 MIMO	LTE B46$_B$	20	48290	5300	2x2 MIMO	21.21	21.50
CA_2A-46$_A$A-66A	LTE B66	20	132322	1745	16QAM	1	0	66786	2145	4x4 MIMO	LTE B2	20	900	1960	2x2 MIMO	LTE B46$_C$	20	51290	5600	2x2 MIMO	21.21	21.50
CA_2A-46$_A$A-66A	LTE B66	20	132322	1745	16QAM	1	0	66786	2145	4x4 MIMO	LTE B2	20	900	1960	2x2 MIMO	LTE B46$_D$	20	53140	5785	2x2 MIMO	21.20	21.50
CA_2A-46$_A$A-66A	LTE B66	20	132322	1745	16QAM	1	0	66786	2145	2x2 MIMO	LTE B2	20	900	1960	4x4 MIMO	LTE B46$_A$	20	47290	5200	2x2 MIMO	21.31	21.50
CA_2A-46$_A$A-66A	LTE B66	20	132322	1745	16QAM	1	0	66786	2145	2x2 MIMO	LTE B2	20	900	1960	4x4 MIMO	LTE B46$_B$	20	48290	5300	2x2 MIMO	21.25	21.50
CA_2A-46$_A$A-66A	LTE B66	20	132322	1745	16QAM	1	0	66786	2145	2x2 MIMO	LTE B2	20	900	1960	4x4 MIMO	LTE B46$_C$	20	51290	5600	2x2 MIMO	21.33	21.50
CA_2A-46$_A$A-66A	LTE B66	20	132322	1745	16QAM	1	0	66786	2145	2x2 MIMO	LTE B2	20	900	1960	4x4 MIMO	LTE B46$_D$	20	53140	5785	2x2 MIMO	21.27	21.50
CA_46$_A$A-46$_D$A-66A	LTE B66	20	132322	1745	16QAM	1	0	66786	2145	4x4 MIMO	LTE B46$_A$	20	47090	5180	2x2 MIMO	LTE B46$_D$	20	53540	5825	2x2 MIMO	21.29	21.50
CA_7A-46$_A$C	LTE B7	20	21350	2560	64QAM	1	0	3350	2680	4x4 MIMO	LTE B46$_A$	20	47290	5200	2x2 MIMO	LTE B46$_A$	20	47488	5219.8	2x2 MIMO	20.78	21.00
CA_7A-46$_B$C	LTE B7	20	21350	2560	64QAM	1	0	3350	2680	4x4 MIMO	LTE B46$_B$	20	48290	5300	2x2 MIMO	LTE B46$_B$	20	48488	5319.8	2x2 MIMO	20.80	21.00
CA_7A-46$_C$C	LTE B7	20	21350	2560	64QAM	1	0	3350	2680	4x4 MIMO	LTE B46$_C$	20	51290	5600	2x2 MIMO	LTE B46$_C$	20	51488	5619.8	2x2 MIMO	20.82	21.00
CA_7A-46$_D$C	LTE B7	20	21350	2560	64QAM	1	0	3350	2680	4x4 MIMO	LTE B46$_D$	20	53140	5785	2x2 MIMO	LTE B46$_D$	20	53338	5804.8	2x2 MIMO	20.84	21.00

Table I-83
Additional Grip Sensor Reduced Output Powers- 4 Component Carriers

	PCC										SCC 1						SCC 2						SCC 3					Power	
Combination	PCC Band	PCC BW [MHz]	PCC (UL) Channel	PCC (UL) Freq. [MHz]	Modulation	PCC UL# RB	PCC UL RB Offset	PCC (DL) Channel	PCC (DL) Freq. [MHz]	DL Ant. Config.	SCC Band	SCC BW [MHz]	SCC (DL) Channel	SCC (DL) Freq. [MHz]	DL Ant. Config.	SCC Band	SCC BW [MHz]	SCC (DL) Channel	SCC (DL) Freq. [MHz]	DL Ant. Config.	SCC Band	SCC BW [MHz]	SCC (DL) Channel	SCC (DL) Freq. [MHz]	DL Ant. Config.	LTE Tx.Power with DL CA Enabled (dBm)	LTE Single Carrier Tx Power (dBm)
CA_2A-46$_D$	LTE B2	20	18700	1860	16QAM	1	99	700	1940	4x4 MIMO	LTE B46$_D$	20	47290	5200	2x2 MIMO	LTE B46$_D$	20	47488	5219.8	2x2 MIMO	LTE B46$_D$	20	47092	5180.2	2x2 MIMO	22.30	22.50
CA_2A-46$_D$	LTE B2	20	18700	1860	16QAM	1	99	700	1940	4x4 MIMO	LTE B46$_D$	20	48290	5300	2x2 MIMO	LTE B46$_D$	20	48488	5319.8	2x2 MIMO	LTE B46$_D$	20	48092	5280.2	2x2 MIMO	22.27	22.50
CA_2A-46$_D$	LTE B2	20	18700	1860	16QAM	1	99	700	1940	4x4 MIMO	LTE B46$_D$	20	51290	5600	2x2 MIMO	LTE B46$_D$	20	51488	5619.8	2x2 MIMO	LTE B46$_D$	20	51092	5580.2	2x2 MIMO	22.28	22.50
CA_2A-46$_D$	LTE B2	20	18700	1860	16QAM	1	99	700	1940	4x4 MIMO	LTE B46$_D$	20	53140	5785	2x2 MIMO	LTE B46$_D$	20	53338	5804.8	2x2 MIMO	LTE B46$_D$	20	52942	5765.2	2x2 MIMO	22.26	22.50
CA_2A-46$_A$-46$_C$	LTE B2	20	18700	1860	16QAM	1	99	700	1940	4x4 MIMO	LTE B46$_A$	20	47090	5180	2x2 MIMO	LTE B46$_D$	20	53540	5825	2x2 MIMO	LTE B46$_D$	20	53342	5805.2	2x2 MIMO	22.28	22.50
CA_2A-46$_C$-66A	LTE B2	20	18700	1860	16QAM	1	99	700	1940	4x4 MIMO	LTE B46$_A$	20	47290	5200	2x2 MIMO	LTE B46$_A$	20	47488	5219.8	2x2 MIMO	LTE B66	20	66786	2145	2x2 MIMO	22.25	22.50
CA_2A-46$_C$-66A	LTE B2	20	18700	1860	16QAM	1	99	700	1940	4x4 MIMO	LTE B46$_A$	20	48290	5300	2x2 MIMO	LTE B46$_A$	20	48488	5319.8	2x2 MIMO	LTE B66	20	66786	2145	2x2 MIMO	22.31	22.50
CA_2A-46$_C$-66A	LTE B2	20	18700	1860	16QAM	1	99	700	1940	4x4 MIMO	LTE B46$_A$	20	51290	5600	2x2 MIMO	LTE B46$_A$	20	51488	5619.8	2x2 MIMO	LTE B66	20	66786	2145	2x2 MIMO	22.28	22.50
CA_2A-46$_C$-66A	LTE B2	20	18700	1860	16QAM	1	99	700	1940	4x4 MIMO	LTE B46$_A$	20	53140	5785	2x2 MIMO	LTE B46$_A$	20	53338	5804.8	2x2 MIMO	LTE B66	20	66786	2145	2x2 MIMO	22.29	22.50
CA_2A-46$_C$-66A	LTE B2	20	18700	1860	16QAM	1	99	700	1940	2x2 MIMO	LTE B46$_A$	20	47290	5200	2x2 MIMO	LTE B46$_A$	20	47488	5219.8	2x2 MIMO	LTE B66	20	66786	2145	4x4 MIMO	22.40	22.50
CA_2A-46$_C$-66A	LTE B2	20	18700	1860	16QAM	1	99	700	1940	2x2 MIMO	LTE B46$_A$	20	48290	5300	2x2 MIMO	LTE B46$_A$	20	48488	5319.8	2x2 MIMO	LTE B66	20	66786	2145	4x4 MIMO	22.36	22.50
CA_2A-46$_C$-66A	LTE B2	20	18700	1860	16QAM	1	99	700	1940	2x2 MIMO	LTE B46$_A$	20	51290	5600	2x2 MIMO	LTE B46$_A$	20	51488	5619.8	2x2 MIMO	LTE B66	20	66786	2145	4x4 MIMO	22.39	22.50
CA_2A-46$_C$-66A	LTE B2	20	18700	1860	16QAM	1	99	700	1940	2x2 MIMO	LTE B46$_A$	20	53140	5785	2x2 MIMO	LTE B46$_A$	20	53338	5804.8	2x2 MIMO	LTE B66	20	66786	2145	4x4 MIMO	22.43	22.50
CA_4A-46$_D$	LTE B4	20	20300	1745	16QAM	1	0	2300	2145	4x4 MIMO	LTE B46$_A$	20	47290	5200	2x2 MIMO	LTE B46$_A$	20	47488	5219.8	2x2 MIMO	LTE B46$_A$	20	47092	5180.2	2x2 MIMO	21.28	21.50
CA_4A-46$_D$	LTE B4	20	20300	1745	16QAM	1	0	2300	2145	4x4 MIMO	LTE B46$_A$	20	48290	5300	2x2 MIMO	LTE B46$_A$	20	48488	5319.8	2x2 MIMO	LTE B46$_A$	20	48092	5280.2	2x2 MIMO	21.23	21.50
CA_4A-46$_D$	LTE B4	20	20300	1745	16QAM	1	0	2300	2145	4x4 MIMO	LTE B46$_A$	20	51290	5600	2x2 MIMO	LTE B46$_A$	20	51488	5619.8	2x2 MIMO	LTE B46$_A$	20	51092	5580.2	2x2 MIMO	21.28	21.50
CA_4A-46$_D$	LTE B4	20	20300	1745	16QAM	1	0	2300	2145	4x4 MIMO	LTE B46$_A$	20	53140	5785	2x2 MIMO	LTE B46$_A$	20	53338	5804.8	2x2 MIMO	LTE B46$_A$	20	52942	5765.2	2x2 MIMO	21.22	21.50
CA_4A-46$_A$-46$_C$	LTE B4	20	20300	1745	16QAM	1	0	2300	2145	4x4 MIMO	LTE B46$_A$	20	47090	5180	2x2 MIMO	LTE B46$_D$	20	53540	5825	2x2 MIMO	LTE B46$_A$	20	53342	5805.2	2x2 MIMO	21.24	21.50
CA_2A-46$_C$-66A	LTE B66	20	132322	1745	16QAM	1	0	66786	2145	4x4 MIMO	LTE B2	20	900	1960	2x2 MIMO	LTE B46$_A$	20	47290	5200	2x2 MIMO	LTE B46$_A$	20	47488	5219.8	2x2 MIMO	21.30	21.50
CA_2A-46$_C$-66A	LTE B66	20	132322	1745	16QAM	1	0	66786	2145	4x4 MIMO	LTE B2	20	900	1960	2x2 MIMO	LTE B46$_A$	20	48290	5300	2x2 MIMO	LTE B46$_A$	20	48488	5319.8	2x2 MIMO	21.34	21.50
CA_2A-46$_C$-66A	LTE B66	20	132322	1745	16QAM	1	0	66786	2145	4x4 MIMO	LTE B2	20	900	1960	2x2 MIMO	LTE B46$_A$	20	51290	5600	2x2 MIMO	LTE B46$_A$	20	51488	5619.8	2x2 MIMO	21.30	21.50
CA_2A-46$_C$-66A	LTE B66	20	132322	1745	16QAM	1	0	66786	2145	4x4 MIMO	LTE B2	20	900	1960	2x2 MIMO	LTE B46$_A$	20	53140	5785	2x2 MIMO	LTE B46$_A$	20	53338	5804.8	2x2 MIMO	21.30	21.50
CA_2A-46$_C$-66A	LTE B66	20	132322	1745	16QAM	1	0	66786	2145	2x2 MIMO	LTE B2	20	900	1960	4x4 MIMO	LTE B46$_A$	20	47290	5200	2x2 MIMO	LTE B46$_A$	20	47488	5219.8	2x2 MIMO	21.28	21.50
CA_2A-46$_C$-66A	LTE B66	20	132322	1745	16QAM	1	0	66786	2145	2x2 MIMO	LTE B2	20	900	1960	4x4 MIMO	LTE B46$_A$	20	51290	5600	2x2 MIMO	LTE B46$_A$	20	51488	5619.8	2x2 MIMO	21.28	21.50
CA_2A-46$_C$-66A	LTE B66	20	132322	1745	16QAM	1	0	66786	2145	2x2 MIMO	LTE B2	20	900	1960	4x4 MIMO	LTE B46$_A$	20	48290	5300	2x2 MIMO	LTE B46$_A$	20	48488	5319.8	2x2 MIMO	21.34	21.50
CA_2A-46$_C$-66A	LTE B66	20	132322	1745	16QAM	1	0	66786	2145	2x2 MIMO	LTE B2	20	900	1960	4x4 MIMO	LTE B46$_A$	20	51290	5600	2x2 MIMO	LTE B46$_A$	20	51488	5619.8	2x2 MIMO	21.28	21.50
CA_2A-46$_C$-66A	LTE B66	20	132322	1745	16QAM	1	0	66786	2145	2x2 MIMO	LTE B2	20	900	1960	4x4 MIMO	LTE B46$_A$	20	53140	5785	2x2 MIMO	LTE B46$_A$	20	53338	5804.8	2x2 MIMO	21.26	21.50
CA_46$_D$-66A	LTE B66	20	132322	1745	16QAM	1	0	66786	2145	4x4 MIMO	LTE B46$_A$	20	47290	5200	2x2 MIMO	LTE B46$_A$	20	47488	5219.8	2x2 MIMO	LTE B46$_A$	20	47092	5180.2	2x2 MIMO	21.23	21.50
CA_46$_D$-66A	LTE B66	20	132322	1745	16QAM	1	0	66786	2145	4x4 MIMO	LTE B46$_A$	20	48290	5300	2x2 MIMO	LTE B46$_A$	20	48488	5319.8	2x2 MIMO	LTE B46$_A$	20	48092	5280.2	2x2 MIMO	21.26	21.50
CA_46$_D$-66A	LTE B66	20	132322	1745	16QAM	1	0	66786	2145	4x4 MIMO	LTE B46$_A$	20	51290	5600	2x2 MIMO	LTE B46$_A$	20	51488	5619.8	2x2 MIMO	LTE B46$_A$	20	51092	5580.2	2x2 MIMO	21.28	21.50
CA_46$_D$-66A	LTE B66	20	132322	1745	16QAM	1	0	66786	2145	4x4 MIMO	LTE B46$_A$	20	53140	5785	2x2 MIMO	LTE B46$_A$	20	53338	5804.8	2x2 MIMO	LTE B46$_A$	20	52942	5765.2	2x2 MIMO	21.32	21.50
CA_46$_A$-46$_C$-66A	LTE B66	20	132322	1745	16QAM	1	0	66786	2145	4x4 MIMO	LTE B46$_A$	20	47090	5180	2x2 MIMO	LTE B46$_A$	20	53540	5825	2x2 MIMO	LTE B46$_A$	20	53342	5805.2	2x2 MIMO	21.28	21.50
CA_7A-46$_D$	LTE B7	20	21350	2560	64QAM	1	0	3350	2680	4x4 MIMO	LTE B46$_A$	20	47290	5200	2x2 MIMO	LTE B46$_A$	20	47488	5219.8	2x2 MIMO	LTE B46$_A$	20	47092	5180.2	2x2 MIMO	20.77	21.00
CA_7A-46$_D$	LTE B7	20	21350	2560	64QAM	1	0	3350	2680	4x4 MIMO	LTE B46$_A$	20	48290	5300	2x2 MIMO	LTE B46$_A$	20	48488	5319.8	2x2 MIMO	LTE B46$_A$	20	48092	5280.2	2x2 MIMO	20.81	21.00
CA_7A-46$_D$	LTE B7	20	21350	2560	64QAM	1	0	3350	2680	4x4 MIMO	LTE B46$_A$	20	51290	5600	2x2 MIMO	LTE B46$_A$	20	51488	5619.8	2x2 MIMO	LTE B46$_A$	20	51092	5580.2	2x2 MIMO	20.79	21.00
CA_7A-46$_D$	LTE B7	20	21350	2560	64QAM	1	0	3350	2680	4x4 MIMO	LTE B46$_A$	20	53140	5785	2x2 MIMO	LTE B46$_A$	20	53338	5804.8	2x2 MIMO	LTE B46$_A$	20	52942	5765.2	2x2 MIMO	20.79	21.00

This device supports LAA with downlink carrier aggregation only. All uplink communications and acknowledgements on the PCC remain identical to specifications when downlink carrier aggregation is inactive.

For those combinations required by FCC Guidance, power measurements were performed with downlink carrier aggregation active for the configuration with highest measured maximum conducted power with downlink carrier aggregation inactive measured among the channel bandwidth, modulation, and RB combinations in each frequency band.

The PCC uplink channel was selected based on section C)3)b)ii) of KBD 941225 D05 V01r02. The downlink PCC channel was paired with the selected PCC uplink channel according to normal configurations without carrier aggregation per 3GPP requirements. The SCC downlink channels were selected near the middle of their transmission bands. For contiguous intra-band carriers, the downlink channel spacing between the component carriers was set to multiple of 300 kHz less than the nominal channel spacing defined in section 5.4.1A of 3GPP TS 36.521. For LAA operations, each Band 46 sub-band was evaluated independently due to the wide downlink bandwidth.

Per FCC KDB Publication 941225 D05Av01r02, no SAR measurements are required for carrier aggregation configurations when the average output power with downlink only carrier aggregation active is not more than 0.25 dB higher than the average output power with downlink only carrier aggregation inactive.

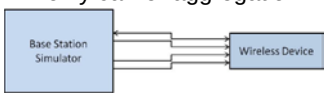


Figure I-5
Power Measurement Setup for 2CC LAA 4X4 DL MIMO

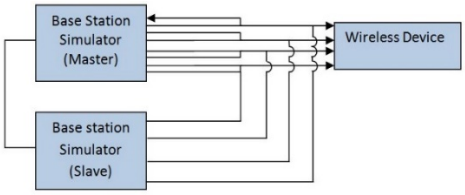


Figure I-6
Power Measurement Setup for 3CC/4CC LAA 4x4 DL MIMO

I.6 LTE CA_41C Uplink Carrier Aggregation with 4x4 Downlink MIMO

Table I-84
Additional Maximum Output Powers- 2 Component Carriers

	PCC								SCC								Power		
Combination	PCC Band	PCC Bandwidth [MHz]	PCC (UL/DL) Channel	PCC (UL/DL) Frequency [MHz]	Modulation	PCC UL# RB	PCC UL RB Offset	DL Ant. Config.	SCC Band	SCC Bandwidth [MHz]	SCC (UL/DL) Channel	SCC (UL/DL) Frequency [MHz]	Modulation	SCC UL# RB	SCC UL RB Offset	DL Ant. Config.	CA_41C ULCA Tx. Power with 4x4 DL MIMO Enabled (dBm)	CA_41C ULCA Tx. Power (dBm)	Target Power (dBm)
CA_41C	LTE B41	20	40185	2549.5	QPSK	1	0	4x4 MIMO	LTE B41	20	39987	2529.7	QPSK	1	99	4x4 MIMO	24.31	24.23	24.0

Table I-85
Additional Maximum Output Powers LTE CA_41C Uplink Carrier Aggregation with Three Component Carrier Aggregation on the Downlink

	PCC								SCC1								SCC 2					Power		
Combination	PCC Band	PCC Bandwidth [MHz]	PCC (UL/DL) Channel	PCC (UL/DL) Frequency [MHz]	Modulation	PCC UL# RB	PCC UL RB Offset	DL Ant. Config.	SCC Band	SCC Bandwidth [MHz]	SCC (UL/DL) Channel	SCC (UL/DL) Frequency [MHz]	Modulation	SCC UL# RB	SCC UL RB Offset	DL Ant. Config.	SCC Band	SCC Bandwidth [MHz]	SCC (DL) Channel	SCC (DL) Frequency [MHz]	DL Ant. Config.	CA_41C ULCA Tx. Power with 4x4 DL MIMO Enabled (dBm)	CA_41C ULCA Tx. Power (dBm)	Target Power (dBm)
CA_41D	LTE B41	20	40185	2549.5	QPSK	1	0	4x4 MIMO	LTE B41	20	39987	2529.7	QPSK	1	99	4x4 MIMO	LTE B41	20	40383	2569.3	4x4 MIMO	24.32	24.23	24.0
CA_41C-41A	LTE B41	20	40185	2549.5	QPSK	1	0	2x2 MIMO	LTE B41	20	39987	2529.7	QPSK	1	99	2x2 MIMO	LTE B41	20	41490	2680	4x4 MIMO	24.33	24.23	24.0
CA_41C-41A	LTE B41	20	40185	2549.5	QPSK	1	0	4x4 MIMO	LTE B41	20	39987	2529.7	QPSK	1	99	4x4 MIMO	LTE B41	20	41490	2680	2x2 MIMO	24.34	24.23	24.0
CA_41C-41A	LTE B41	20	40185	2549.5	QPSK	1	0	4x4 MIMO	LTE B41	20	39987	2529.7	QPSK	1	99	4x4 MIMO	LTE B41	20	41490	2680	4x4 MIMO	24.33	24.23	24.0

Table I-86
Additional Maximum Output Powers LTE CA_41C Uplink Carrier Aggregation with Four Component Carrier Aggregation on the Downlink

	PCC								SCC1								SCC2					SCC3					Power		
Combination	PCC Band	PCC Bandwidth [MHz]	PCC (UL/DL) Channel	PCC (UL/DL) Frequency [MHz]	Modulation	PCC UL# RB	PCC UL RB Offset	DL Ant. Config.	SCC Band	SCC Bandwidth [MHz]	SCC (UL/DL) Channel	SCC (UL/DL) Frequency [MHz]	Modulation	SCC UL# RB	SCC UL RB Offset	DL Ant. Config.	SCC Band	SCC Bandwidth [MHz]	SCC (DL) Channel	SCC (DL) Frequency [MHz]	DL Ant. Config.	SCC Band	SCC Bandwidth [MHz]	SCC (DL) Channel	SCC (DL) Frequency [MHz]	DL Ant. Config.	CA_41C ULCA Tx. Power with 4x4 DL MIMO Enabled (dBm)	CA_41C ULCA Tx. Power (dBm)	Target Power (dBm)
CA_41C-41C	LTE B41	20	40185	2549.5	QPSK	1	0	4x4 MIMO	LTE B41	20	39987	2529.7	QPSK	1	99	4x4 MIMO	LTE B41	20	41292	2660.2	2x2 MIMO	LTE B41	20	41490	2680	2x2 MIMO	24.34	24.23	24.0
CA_41C-41C	LTE B41	20	40185	2549.5	QPSK	1	0	2x2 MIMO	LTE B41	20	39987	2529.7	QPSK	1	99	2x2 MIMO	LTE B41	20	41292	2660.2	4x4 MIMO	LTE B41	20	41490	2680	4x4 MIMO	24.33	24.23	24.0

Table I-87
Additional Hotspot Reduced Output Powers- 2 Component Carriers

	PCC								SCC								Power		
Combination	PCC Band	PCC Bandwidth [MHz]	PCC (UL/DL) Channel	PCC (UL/DL) Frequency [MHz]	Modulation	PCC UL# RB	PCC UL RB Offset	DL Ant. Config.	SCC Band	SCC Bandwidth [MHz]	SCC (UL/DL) Channel	SCC (UL/DL) Frequency [MHz]	Modulation	SCC UL# RB	SCC UL RB Offset	DL Ant. Config.	CA_41C ULCA Tx. Power with 4x4 DL MIMO enabled (dBm)	CA_41C ULCA Tx. Power (dBm)	Target Power (dBm)
CA_41C	LTE B41	20	40620	2593	QPSK	1	0	4x4 MIMO	LTE B41	20	40422	2573.2	QPSK	1	99	4x4 MIMO	22.85	22.90	22.5

Table I-88
Additional Hotspot Reduced Output Powers LTE CA_41C Uplink Carrier Aggregation with Three Component Carrier Aggregation on the Downlink

	PCC								SCC1								SCC 2					Power		
Combination	PCC Band	PCC Bandwidth [MHz]	PCC (UL/DL) Channel	PCC (UL/DL) Frequency [MHz]	Modulation	PCC UL# RB	PCC UL RB Offset	DL Ant. Config.	SCC Band	SCC Bandwidth [MHz]	SCC (UL/DL) Channel	SCC (UL/DL) Frequency [MHz]	Modulation	SCC UL# RB	SCC UL RB Offset	DL Ant. Config.	SCC Band	SCC Bandwidth [MHz]	SCC (DL) Channel	SCC (DL) Frequency [MHz]	DL Ant. Config.	CA_41C ULCA Tx. Power with 4x4 DL MIMO enabled (dBm)	CA_41C ULCA Tx. Power (dBm)	Target Power (dBm)
CA_41D	LTE B41	20	40620	2593	QPSK	1	0	4x4 MIMO	LTE B41	20	40422	2573.2	QPSK	1	99	4x4 MIMO	LTE B41	20	40818	2612.8	4x4 MIMO	22.86	22.90	22.5
CA_41C-41A	LTE B41	20	40620	2593	QPSK	1	0	2x2 MIMO	LTE B41	20	40422	2573.2	QPSK	1	99	2x2 MIMO	LTE B41	20	41490	2680	4x4 MIMO	22.85	22.90	22.5
CA_41C-41A	LTE B41	20	40620	2593	QPSK	1	0	4x4 MIMO	LTE B41	20	40422	2573.2	QPSK	1	99	4x4 MIMO	LTE B41	20	41490	2680	2x2 MIMO	22.85	22.90	22.5
CA_41C-41A	LTE B41	20	40620	2593	QPSK	1	0	4x4 MIMO	LTE B41	20	40422	2573.2	QPSK	1	99	4x4 MIMO	LTE B41	20	41490	2680	4x4 MIMO	22.84	22.90	22.5

Table I-89
Additional Hotspot Reduced Output Powers LTE CA_41C Uplink Carrier Aggregation with Four Component Carrier Aggregation on the Downlink

	PCC								SCC1								SCC2					SCC3					Power		
Combination	PCC Band	PCC Bandwidth [MHz]	PCC (UL/DL) Channel	PCC (UL/DL) Frequency [MHz]	Modulation	PCC UL# RB	PCC UL RB Offset	DL Ant. Config.	SCC Band	SCC Bandwidth [MHz]	SCC (UL/DL) Channel	SCC (UL/DL) Frequency [MHz]	Modulation	SCC UL# RB	SCC UL RB Offset	DL Ant. Config.	SCC Band	SCC Bandwidth [MHz]	SCC (DL) Channel	SCC (DL) Frequency [MHz]	DL Ant. Config.	SCC Band	SCC Bandwidth [MHz]	SCC (DL) Channel	SCC (DL) Frequency [MHz]	DL Ant. Config.	CA_41C ULCA Tx. Power with 4x4 DL MIMO enabled (dBm)	CA_41C ULCA Tx. Power (dBm)	Target Power (dBm)
CA_41C-41C	LTE B41	20	40620	2593	QPSK	1	0	4x4 MIMO	LTE B41	20	40422	2573.2	QPSK	1	99	4x4 MIMO	LTE B41	20	41292	2660.2	2x2 MIMO	LTE B41	20	41490	2680	2x2 MIMO	22.84	22.90	22.5
CA_41C-41C	LTE B41	20	40620	2593	QPSK	1	0	2x2 MIMO	LTE B41	20	40422	2573.2	QPSK	1	99	2x2 MIMO	LTE B41	20	41292	2660.2	4x4 MIMO	LTE B41	20	41490	2680	4x4 MIMO	22.86	22.90	22.5