# Probe EX3DV4

## SN:3914

Manufactured: December 18, 2012 Calibrated: February 14, 2018

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

### **Basic Calibration Parameters**

	Sensor X	Sensor Y	Sensor Z	Unc (k=2)
Norm $(\mu V/(V/m)^2)^A$	0.47	0.41	0.44	± 10.1 %
	98.1	103.5	99.1	

### **Modulation Calibration Parameters**

UID	Communication System Name		A dB	B dBõV	с	D dB	VR mV	Unc <sup>t</sup> (k=2)
0		X	0.0	0.0	1.0	0.00	157.3	±3.5 %
		Y	0.0	0.0	1.0		143.4	
		Z	0.0	0.0	1.0		153.1	_

Note: For details on UID parameters see Appendix.

#### Sensor Model Parameters

	C1 fF	C2 fF	α V <sup>-1</sup>	T1 ms.V⁻²	T2 ms.V⁻¹	T3 ms	T4 V <sup>-2</sup>	T5 V <sup>-1</sup>	<b>T6</b>
<u> </u>	44,52	338.7	36.78	11.30	0.699	5.054	0.000	0.544	1.006
<u>Y</u>	43.63	317.9	34.18	13.04	0.623	5.031	2.000	0.164	1.007
Z	41.48	314.2	36.51	10.96	0.847	5.054	0.251	0.494	1.008

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%.

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

f (MHz) <sup>c</sup>	Relative Permittivity <sup>F</sup>	Conductivity (S/m) <sup>F</sup>	ConvF X	ConvF Y	ConvF Z	Alpha <sup>G</sup>	Depth <sup>G</sup> (mm)	Unc (k=2)
6	55.5	0.75	21.06	21.06	21.06	0.00	1.00	± 13.3 %
13	55.5	0.75	17.97	17.97	17.97	0.00	1.00	± 13.3 %
750	41.9	0.89	10.18	10.18	10.18	0.58	0.80	± 12.0 %
835	41.5	0.90	9.70	9.70	9.70	0.52	0.80	± 12.0 %
1750_	40.1	1.37	8.34	8.34	8.34	0.40	0.80	± 12.0 %
1900	40.0	1.40	7.98	7.98	7.98	0.41	0.84	± 12.0 %
2300	39.5	1.67	7.58	7.58	7.58	0.37	0.87	± 12.0 %
2450	39.2	1.80	7.26	7.26	7.26	0.43	0.84	± 12.0 %
2600	39.0	1.96	7.04	7.04	7.04	0.29	0.86	± 12.0 %
3500	37.9	2.91	6.99	6.99	6.99	0.25	1.20	± 13.1 %
3700	37.7	3.12	6.72	6.72	6.72	0.23	1.20	± 13.1 %
5250	35.9	4.71	5.41	5.41	5.41	0.30	1.80	± 13.1 %
5600	35.5	5.07	4.79	4.79	4.79	0.40	1.80	± 13.1 %
5750	35.4	5.22	4.78	4.78	4.78	0.40	1.80	± 13.1 %

### Calibration Parameter Determined in Head Tissue Simulating Media

<sup>c</sup> Frequency validity above 300 MHz of  $\pm$  100 MHz only applies for DASY v4.4 and higher (see Page 2), else it is restricted to  $\pm$  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  $\pm$  10, 25, 40, 50 and 70 MHz for ConvF assessments at 30, 64, 128, 150 and 220 MHz respectively. Validity of ConvF assessed at 6 MHz is 4-9 MHz, and ConvF assessed at 13 MHz is 9-19 MHz. Above 5 GHz frequency validity can be extended to  $\pm$  110 MHz.

<sup>r</sup> At frequencies below 3 GHz, the validity of tissue parameters ( $\epsilon$  and  $\sigma$ ) can be relaxed to  $\pm$  10% if liquid compensation formula is applied to measured SAR values. At frequencies above 3 GHz, the validity of tissue parameters ( $\epsilon$  and  $\sigma$ ) is restricted to  $\pm$  5%. The uncertainty is the RSS of the ConvF uncertainty for indicated target tissue parameters.

The ConvF uncertainty for indicated target tissue parameters. <sup>6</sup> Alpha/Depth are determined during calibration. SPEAG warrants that the remaining deviation due to the boundary effect after compensation is always less than  $\pm$  1% for frequencies below 3 GHz and below  $\pm$  2% for frequencies between 3-6 GHz at any distance larger than half the probe tip diameter from the boundary.

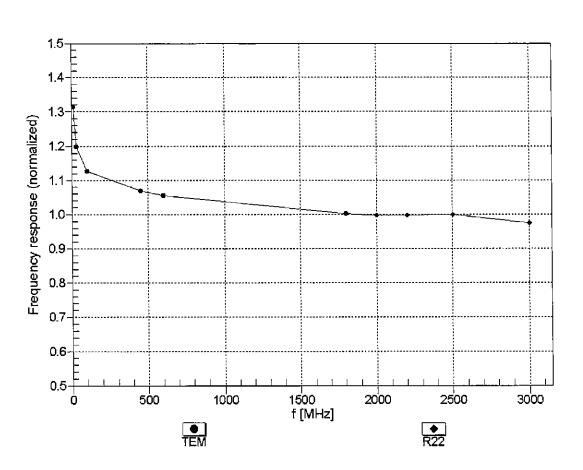
f (MHz) <sup>c</sup>	Relative Permittivity <sup>F</sup>	Conductivity (S/m) <sup>F</sup>	ConvF X	ConvF Y	ConvF Z	Alpha <sup>G</sup>	Depth <sup>G</sup> (mm)	Unc (k=2)
750	55.5	0.96	9.75	9.75	9.75	0.47	0.80	± 12.0 %
835	55.2	0.97	9.57	9.57	9.57	0.44	0.89	± 12.0 %
1750	53.4	1.49	7.91	7.91	7.91	0.37	0.80	± 12.0 %
1900	53.3	1.52	7.62	7.62	7.62	0.29	1.01	± 12.0 %
2300	52.9	1.81	7.46	7.46	7.46	0.40	0.88	<u>± 12.0 %</u>
2450	52.7	1.95	7.39	7.39	7.39	0.39	0.86	± 12.0 %
2600	52.5	2.16	7.05	7.05	7.05	0.28	1.05	± 12.0 %
3500	51.3	3.31	6.81	6.81	6.81	0.30	1.25	± 13.1 %
3700	51.0	3.55	6.64	6.64	6.64	0.30	1.25	± 13.1 %
5250	48.9	5.36	4.81	4.81	4.81	0.35	1.90	± 13.1 %
5600	48.5	5.77	4.09	4.09	4.09	0.40	1.90	± 13.1 %
5750	48.3	5.94	4.22	4.22	4.22	0.40	1.90	± 13.1 %

### **Calibration Parameter Determined in Body Tissue Simulating Media**

<sup>c</sup> Frequency validity above 300 MHz of  $\pm$  100 MHz only applies for DASY v4.4 and higher (see Page 2), else it is restricted to  $\pm$  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  $\pm$  10, 25, 40, 50 and 70 MHz for ConvF assessments at 30, 64, 128, 150 and 220 MHz respectively. Above 5 GHz frequency validity validity can be extended to  $\pm$  110 MHz.

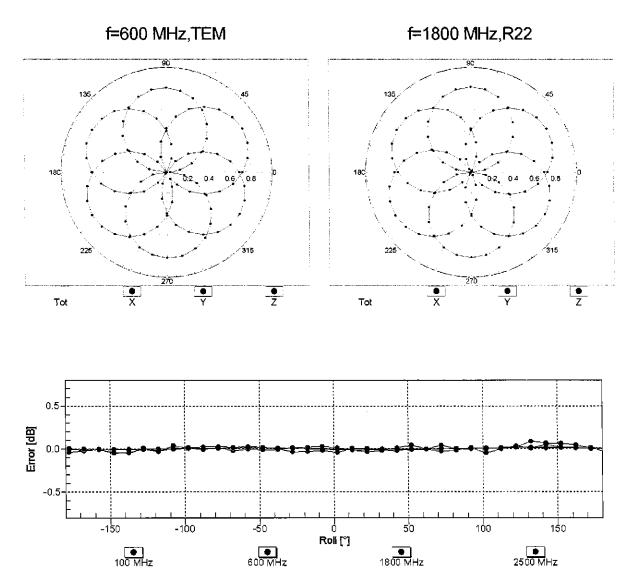
<sup>F</sup> At frequencies below 3 GHz, the validity of tissue parameters ( $\epsilon$  and  $\sigma$ ) can be relaxed to  $\pm$  10% if liquid compensation formula is applied to measured SAR values. At frequencies above 3 GHz, the validity of tissue parameters ( $\epsilon$  and  $\sigma$ ) is restricted to  $\pm$  5%. The uncertainty is the RSS of the ConvF uncertainty for indicated target tissue parameters. <sup>G</sup> Alpha/Depth are determined during calibration. SPEAG warrants that the remaining deviation due to the boundary effect after compensation is

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



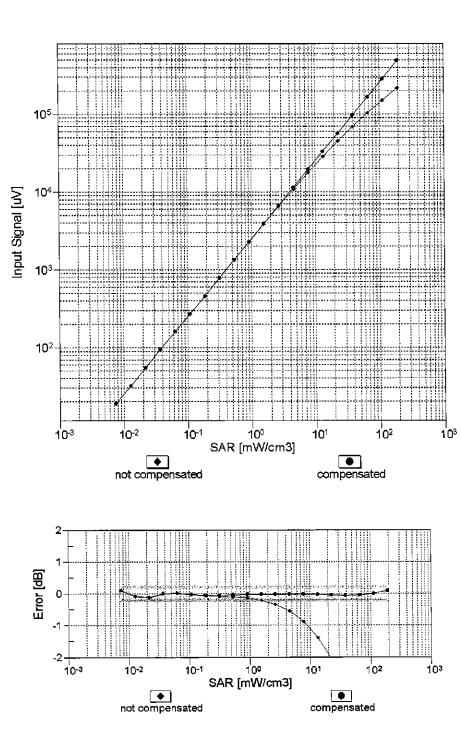
### Frequency Response of E-Field (TEM-Cell:ifi110 EXX, Waveguide: R22)

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



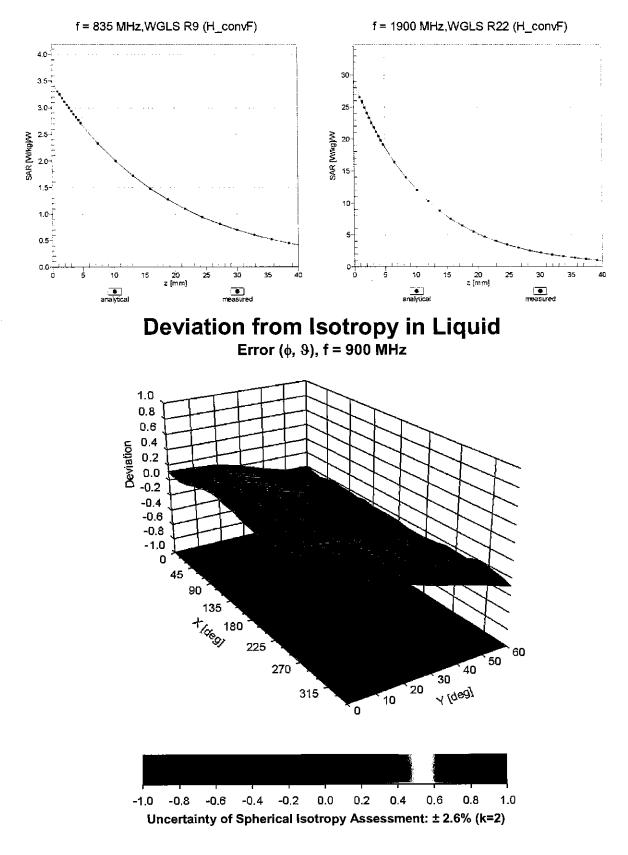
### Receiving Pattern ( $\phi$ ), $\vartheta = 0^{\circ}$

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



### Dynamic Range f(SAR<sub>head</sub>) (TEM cell , f<sub>eval</sub>= 1900 MHz)

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



### **Conversion Factor Assessment**

### **Other Probe Parameters**

Sensor Arrangement	Triangular
Connector Angle (°)	132.3
Mechanical Surface Detection Mode	enabled
Optical Surface Detection Mode	disabled
Probe Overail 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 dBõV	C	D dB	VR mV	Max Unc <sup>E</sup>
0	CW	X	0.00	0.00	1.00	0.00	4570	(k=2)
		Ϋ́	0.00	0.00	1.00	0.00	157.3	± 3.5 %
		Z	0.00	0.00	1.00	<u> </u>	<u>143.4</u> 153.1	+
10010- CAA	SAR Validation (Square, 100ms, 10ms)	X	2.02	63.97	9.10	10.00	20.0	± 9.6 %
		<u> </u>	2.59	66.85	10.84		20.0	<u> </u>
10011-	UMTS-FDD (WCDMA)	Z	2.31	65.14	9.98		20.0	T
CAB		X	0.89	66.39	14.20	0.00	150.0	± 9.6 %
		<u>Y</u>	1.06	68.74	16.01		150.0	†
10012-	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1	Z	0.90	66.80	14.44		150.0	
CAB	Mbps)	X	1.06	63.38	14.79	0.41	150.0	± 9.6 %
		Ý	1.17	64.37	15.54		150.0	T
10013-	IEEE 802.11g WiFi 2.4 GHz (DSSS-	Z	1.07	63.61	14.94		150.0	
CAB	OFDM, 6 Mbps)	X	4.75	66.53	16.97	1.46	150.0	± 9.6 %
·		Y	4.80	66.78	17.02		150.0	
10021-	GSM-FDD (TDMA, GMSK)	<u>Z</u>	4.73	66.65	17.01		150.0	
DAC			100.00	110.09	25.45	9.39	50.0	± 9.6 %
		<u>Y</u>	100.00	112.00	26.43		50.0	
10023-	GPRS-FDD (TDMA, GMSK, TN 0)	Z	100.00	111.93	26.50		50.0	
DAC		X	100.00	109.83	25.39	9.57	50.0	± 9.6 %
		Y	100.00	111.69	26.33		50.0	
10024-	GPRS-FDD (TDMA, GMSK, TN 0-1)	<u>Z</u>	100.00	111.63	26.42		50.0	
DAC		X	100.00	107.43	23.14	6.56	60.0	± 9.6 %
		Y	100.00	110.61	24.77		60.0	
10025-	EDGE-FDD (TDMA, 8PSK, TN 0)		100.00	109.57	24.26		60.0	
DAC		X	4.03	68.96	25.05	12.57	50.0	± 9.6 %
		Y Z	5.30	77.15	29.41		50.0	
10026- DAC	EDGE-FDD (TDMA, 8PSK, TN 0-1)	X	4.06 8.87	68.52 91.28	24.65 32.17	9.56	50.0 60.0	± 9.6 %
		Y	10.08					
		z z	8.65	94.25	33.27	<u> </u>	60.0	
10027- DAC	GPRS-FDD (TDMA, GMSK, TN 0-1-2)	X	100.00	90.32 105.82	31.77 21.66	4.80	60.0 80.0	± 9.6 %
		Y	100.00	111.09	24.24			
		z	100.00	108.42	24.24		80.0	
10028- DAC	GPRS-FDD (TDMA, GMSK, TN 0-1-2-3)	x	100.00	104.11	20.26	3.55	80.0 100.0	± 9.6 %
		Ϋ́	100.00	112.84	24.34	·	100.0	
		Ż	100.00	107.37	21.76		100.0	
10029- DAC	EDGE-FDD (TDMA, 8PSK, TN 0-1-2)	X	5.57	80.93	27.02	7.80	80.0	±9.6 %
		Y	6.11	82.68	27.69		80.0	
10000		Z	5.53	80.55	26.85		80.0	
10030- CAA	IEEE 802.15.1 Bluetooth (GFSK, DH1)	X	100.00	104.99	21.59	5.30	70.0	± 9.6 %
		Y	100.00	109.04	23.62		70.0	
1000 /		Z	100.00	107.17	22.68		70.0	<u> </u>
10031- CAA	IEEE 802.15.1 Bluetooth (GFSK, DH3)	X	0.46	62.47	6.17	1.88	100.0	± 9.6 %
		Ý	100.00	111.97	22.67	— <u> </u>	100.0	
	<b>_</b>	Z	100.00	95.35	15.52		100.0	

	IEEE 802.15.1 Bluetooth (GFSK, DH5)	X	0.19	60.00	3.78	1.17	100.0	± 9.6 %
		Y	100.00	120.03	24.95		100.0	_
		Z	0.19	60.00	4.15		100.0	
10033- CAA	IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH1)	X	13.55	95.45	24.90	5.30	70.0	± 9.6 %
		Y	18.76	100.49	26.60		7 <u>0.0</u>	
		Z	13.36	94.67	24.55	_	70.0	
10034- CAA	IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH3)	х	2.70	75.51	16.71	1.88	100.0	± 9.6 %
		Y	4.49	82.47	19.70		100.0	
		Ζ	2.90	76.09	16.70		100.0	
10035- CAA	IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH5)	Х	1.71	70.85	14.56	1.17	100.0	±9.6 %
		Y	2.70	76.95	17.56		100.0	
		Z	1.78	71.24	14.48		100.0	
10036- CAA	IEEE 802.15.1 Bluetooth (8-DPSK, DH1)	X	22.62	103.29	27.18	5.30	70.0	± 9.6 %
<u> </u>		Y	32.35	108.98	28.96		70.0	
		Z	21.86	102.15	26.73		70.0	
10037- CAA	IEEE 802.15.1 Bluetooth (8-DPSK, DH3)	X	2.48	74.51	16.30	1.88	100.0	± 9.6 %
		Y	3.96	80.90	19.14		100.0	
		Z	2.61	74.90	16.23		100.0	
10038- CAA	IEEE 802.15.1 Bluetooth (8-DPSK, DH5)	X	1.74	71.34	14.88	1.17	100.0	±9.6 %
	· · · · · · · · · · · · · · · · · · ·	Y	2.75	77.52	17.90		100.0	
		Z	1 <u>.82</u>	71.77	14.82		100.0	
10039- CAB	CDMA2000 (1xRTT, RC1)	X	1.34	68.49	13.13	0.00	150.0	± 9.6 %
		Y	2.27	75.66	16.89		<u>150</u> .0	
		Z	1.29	68.35	12.80		150.0	
10042- CAB	IS-54 / IS-136 FDD (TDMA/FDM, PI/4- DQPSK, Halfrate)	X	34.99	94.66	19.93	7.78	50.0	±9.6 %
		Y	100.00	108.11	23.89		50.0	
		Z	100.00	107.01	23.40		50.0	
10044- CAA	IS-91/EIA/TIA-553 FDD (FDMA, FM)	×	0.17	126.30	3.13	0.00	150.0	±9.6 %
		Y	0.00	107.81	5.46		150.0	
		Z	0.15	126.17	2.27		150.0	
10048- CAA	DECT (TDD, TDMA/FDM, GFSK, Full Slot, 24)	X	10.11	79.88	18.52	13.80	25.0	±9.6 %
		Y	23.48	91.75	22.45		25.0	
		Z	12.25	82.71	19.92		25.0	
10049- CAA	DECT (TDD, TDMA/FDM, GFSK, Double Slot, 12)	X	11.72	83.69	18.67	10.79	40.0	± 9.6 %
ļ		Y	40.84	100.05	23.71		40.0	<b>.</b>
		Z	15.78	87.97	20.48	ļ	40.0	
10056- CAA	UMTS-TDD (TD-SCDMA, 1.28 Mcps)	X	18.86	95.31	25.05	9.03	50.0	± 9.6 %
L		Y	26.98	101.35	27.04	<u> </u>	50.0	
		Z	17.19	93.67	24.60		50.0	
10058- DAC	EDGE-FDD (TDMA, 8PSK, TN 0-1-2-3)	X	4.30	76.01	24.21	6.55	100.0	± 9.6 %
		Y	4.66	77.31	24.71		100.0	
·		Z	4.30	75.85	24.15	<u> </u>	100.0	
10059- CAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps)	X	1.10	64.51	15.41	0.61	110.0	± 9.6 %
		Y	1.22	65.59	16.19		110.0	
		Z	1.11	64.78	15.58		110.0	
10060- CAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps)	X	40.70	121.16	30.62	1.30	110.0	±9.6 %
		Y	100.00	138.01	35.59		110.0	
		Z	76.47	130.66	32.92		110.0	

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10061- CAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps)	X	2.97	81.68	22.34	2.04	110.0	± 9.6 %
		Y	3.52	84.01	23.42	<u> </u>	110.0	<u>+-</u>
10062-		Z	3.16	82.63	22.73		110.0	
CAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps)	X	4.54	66.50	16.38	0.49	100.0	± 9.6 %
<u></u>		<u>Y</u>	4.60	66.81	16.49		100.0	
10063-		Z	4.51	66.59	16.41		100.0	<u> </u>
CAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps)	X	4.56	66.59	16.48	0.72	100.0	± 9.6 %
		Y	4.62	66.89	16.58		100.0	+
40004		Z	4.53	66.70	16.52		100.0	+
10064- CAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps)	X	4.84	66.85	16.71	0.86	100.0	± 9.6 %
		Y	4.89	67.12	16.79		100.0	
10065-		Ž	4.80	66.93	16.74		100.0	
CAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps)	X	4.71	66.74	16.80	1.21	100.0	± 9.6 %
		Y	4.76	67.01	16.87		100.0	
10000		Z	4.67	66.83	16.83	<u> </u>	100.0	<u> </u>
10066- CAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps)	X	4.72	66.77	16.97	1.46	100.0	± 9.6 %
		Y	4.77	67.02	17.03		100.0	<u>├-·                                    </u>
40007		Z	4.69	66.86	17.00		100.0	┝───-
10067- CAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps)	X	5.02	66.97	17.43	2.04	100.0	± 9.6 %
		Y	5.06	67.18	17.45		100.0	·
		Z	4.99	67.10	17.47		100.0	
10068- CAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps)	X	5.06	66.99	17.64	2.55	100.0	±9.6 %
		Y	5.10	67.19	17.65	·	100.0	<u> </u>
		Z	5.03	67.09	17.67		100.0	<u> </u>
10069- CAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps)	X	5.14	67.01	17.83	2.67	100.0	± 9.6 %
		Y	5.18	67.19	17.83		100.0	
		Z	5.11	67.11	17.86		100.0	
10071- CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 9 Mbps)	X	4.84	66.62	17.27	1.99	100.0	± 9.6 %
		† Y †	4.89	66.85	17.31		100.0	<u> </u>
		Z	4.83	66.75	17.32		100.0	
10072- CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 12 Mbps)	X	4.82	66.93	17.48	2.30	100.0	± 9.6 %
		Y	4.86	67.16	17.51		100.0	
		Z	4.80	67.06	17.53			
10073- CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 18 Mbps)	x	4.88	67.11	17.81	2.83	<u>100.0</u> 100.0	± 9.6 %
		Y	4.92	67.32	17.83		100.0	
		Ż	4.87	67.25	17.87		100.0	
10074- CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 24 Mbps)	X	4.87	67.01	17.95	3.30	100.0	±9.6 %
		Y	4.91	67.22	17.97		100.0	
		z i	4.87	67.19	18.02		100.0	
10075- CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 36 Mbps)	X	4.90	67.11	18.25	3.82	90.0	± 9.6 %
		Y	4.95	67.32	18.26		90.0	
			4.91	67.27	18.31		90.0	
10076- CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 48 Mbps)	x	4.92	66.92	18.38	4.15	90.0	± 9.6 %
		Y	4.97	67.13	18.38		90.0	
		Z	4.94	67.11	18.46		90.0	
10077- CAB	IEEE 802.11g WIFI 2.4 GHz (DSSS/OFDM, 54 Mbps)	X	4.95	66.99	18.48	4.30	90.0	± 9.6 %
	· · · · · · · · · · · · · · · · · · ·	Y	5.00	67.21	18.49			
			9.00	07.2	0.49	1	90.0	

10081-	CDMA2000 (1xRTT, RC3)	x	0.61	63.26	9.90	0.00	150.0	± 9.6 %
CAB		Y	0.87	67.43	13.01		150.0	
		z	0.58	63.10	9.56		150.0	_
10082- CAB	IS-54 / IS-136 FDD (TDMA/FDM, PI/4- DQPSK, Fullrate)	X	2.50	65.17	5.97	4.77	80.0	±9.6 %
		Y	0.75	60.00	4.55		80.0	
		Z	0.72	60.00	4.31		80.0	
10090- DAC	GPRS-FDD (TDMA, GMSK, TN 0-4)	X	100.00	107.54	23.21	6.56	60.0	±9.6 %
		Y	100.00	110.64	24.80		60.0	
		Ζ	100.00	109.67	24.33		60.0	
10097- CAB	UMTS-FDD (HSDPA)	x	1.69	67.19	15.08	0.00	150.0	±9.6 %
_	· · · · · · · · · · · · · · · · · · ·	Y	1.88	68.79	16.18		150.0	
		Z	1.71	67.59	15.23	0.00	150.0	
10098- CAB	UMTS-FDD (HSUPA, Subtest 2)	X	1.65	67.13	15.04	0.00	150.0	±9.6 %
		Y	1.84	68.75	16.15	-	150.0	
40000		Z	1.67	67.53	15.19	0.50	150.0	+0.00
10099- DAC	EDGE-FDD (TDMA, 8PSK, TN 0-4)	X	8.93	91.41	32.21	9.56	60.0	±9.6 %
	· · · · · · · · · · · · · · · · · · ·	Y	10.16	94.39_	33.31		60.0	
40405		Z	8.70	90.44	31.80	0.00	60.0	1000
10100- CAD	LTE-FDD (SC-FDMA, 100% RB, 20 MHz, QPSK)	X	2.94	69.72	16.26	0.00	150.0	± 9.6 %
	· · · · · · · · · · · · · · · · · · ·	Y Z	<u>3.18</u> 2.94	71.08	17.07		150.0 150.0	
10101- CAD	LTE-FDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM)	X	3.09	69.89 67.13	16.39 15.64	0.00	150.0	± 9.6 %
		Y	3.21	67.85	16.08		150.0	
		z	3.07	67.21	15.70		150.0	
10102- CAD	LTE-FDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM)	x	3.20	67.14	15.76	0.00	150.0	± 9.6 %
		Y	3.32	67.82	16.17		150.0	
		Ζ	3.18	67.23	15.82		150.0	-
10103- CAD	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, QPSK)	×	5.93	75.11	20.17	3.98	65.0	± 9.6 %
		Y	6.63	76.82	20.78		65.0	
		Z	5.91	75.14	20.21		65.0	
10104- CAD	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM)	X	5.89	73.03	20.08	3.98	65.0	± 9.6 %
		Y	6.25	73.91	20.36		65.0	
		Z	5.90	73.09	20.11	<u> </u>	65.0	
10105- CAD	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM)	X	5.51	71.58	19.75	3.98	65.0	± 9.6 %
		Y	6.10	73.31	20.41		65.0	
10108-	LTE-FDD (SC-FDMA, 100% RB, 10	Z X	5.86 2.55	72.81 69.01	20.30 16.09	0.00	65.0 150.0	± 9.6 %
CAE	MHz, QPSK)	Y	0.75	70.00	10 00		150.0	
	+		2.75	70.30	16.89	+	150.0	+••••
10109-	LTE-FDD (SC-FDMA, 100% RB, 10	Z	2.54 2.74	69.20 66.99	16.22	0.00	150.0	± 9.6 %
CAE	MHz, 16-QAM)	^   Y				0.00		± 5.0 %
		Z	2.87 2.72	67.79	16.01 15.56	+	150.0	
10110- CAE	LTE-FDD (SC-FDMA, 100% RB, 5 MHz, QPSK)	X	2.04	68.09	15.59	0.00	150.0	± 9.6 %
		Y	2.23	69.47	16.51		150.0	
		z	2.03	68.32	15.72	1	150.0	
10111- CAE	LTE-FDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM)	X	2.46	67.87	15.72	0.00	150.0	± 9.6 %
	1 · - ••• ••••	_	+					+
		ΙY	2.64	69.03	16.47		150.0	

10112- CAE	LTE-FDD (SC-FDMA, 100% RB, 10	X	2.87	67.02	15.59	0.00	150.0	± 9.6 %
	MHz, 64-QAM)	+			<u> </u>			
		<u>  Y</u>	3.00	67.79	16.07		150.0	
10113-	LTE-FDD (SC-FDMA, 100% RB, 5 MHz,	Z	2.85	67.16	15.65		150.0	
CAE	64-QAM)		2.61	68.07	15.89	0.00	150.0	± 9.6 %
		Y	2.79	69.17	16.59		150.0	
10114-	IEEE 802.11n (HT Greenfield, 13.5	Z	2.61	68.36	15.98		150.0	
CAC	Mbps, BPSK)	X	5.01	67.03	16.34	0.00	150.0	± 9.6 %
		<u>Y</u>	5.06	67.33	16.45		150.0	
10115-	IEEE 802.11n (HT Greenfield, 81 Mbps,	Z	4.97	67.05	16.35		150.0	
CAC	16-QAM)	X	5.27	67.10	16.38	0.00	150.0	± 9.6 %
		Y	5.32	67.38	16.48		150.0	
10116-	IEEE 802.11n (HT Greenfield, 135 Mbps,	Ż	5.22	67.11	16.39	<u>_</u>	150.0	
CAC	64-QAM)	×	5.09	67.20	16.35	0.00	150.0	± 9.6 %
		<u>Y</u>	5.14	67.50	16.46	_	150.0	
10117-	IEEE 802.11n (HT Mixed, 13.5 Mbps,	Z	5.06	67.23	16.37		150.0	
CAC	BPSK)	X	4.97	66.87	16.27	0.00	150.0	± 9.6 %
		Y	5.03	67.20	16.40		150.0	
10118-	IEEE 802 11p /LIT Mined 04 Mines 40	Z	4.94	66.93	16.31		150.0	
CAC	IEEE 802.11n (HT Mixed, 81 Mbps, 16- QAM)	X	5.35	67.31	16.50	0.00	150.0	± 9.6 %
		Y	5.39	67.55	16.57		150.0	
10119-		Z	5.30	67.32	16.50		150.0	
CAC	IEEE 802.11n (HT Mixed, 135 Mbps, 64- QAM)	X	5.08	67.16	16.34	0.00	150.0	± 9.6 %
		Y	5.12	67.45	16.45		150.0	
40440		Z	5.04	67.20	16.36		150.0	
10140- CAD	LTE-FDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM)	X	3.23	67.13	15.67	0.00	150.0	± 9.6 %
		Y	3.35	67.82	16.08		150.0	<u>├</u> ────┤
		Z _	3.21	67.22	15.73		150.0	
10141- CAD	LTE-FDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM)	X	3.36	67.28	15.87	0.00	150.0	± 9.6 %
		Y	3.48	67.94	16.26		150.0	
		Z	3.34	67.38	15.93		150.0	
10142- CAD	LTE-FDD (SC-FDMA, 100% RB, 3 MHz, QPSK)	X	1.80	67.92	15.04	0.00	150.0	± 9.6 %
		_Y [	2.02	69.71	16.23		150.0	
10110		Z	1.78	68.19	15.11		150.0	
10143- CAD	LTE-FDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM)	X	2.28	68.33	15.13	0.00	150.0	±9.6 %
<u> </u>		Y	2.56	70.16	16.27		150.0	
10111		Z	2.27	68.61	15.13		150.0	
10144- CAD	LTE-FDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM)	X	2.03	65.81	13.36	0.00	150.0	± 9.6 %
	<u> </u>	Y	2.22	67.14	14.29		150.0	
10145		_Z	1.98	65.83	13.22		150.0	
10145- CAE	LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK)	×	0.92	62.55	9.46	0.00	150.0	±9.6 %
		Y	1.17	65.32	11.54		150.0	
10146		Z	0.84	61.98	8.80		150.0	
10146- CAE	LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, <u>16-QAM)</u>	x	1.39	62.93	9.23	0.00	150.0	±9.6 %
		Y	1.99	66.57	11.19		150.0	
40447		Z	1.31	62.53	8.72		150.0	
10147- CAE	LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM)	X	1.52	63.83	9.83	0.00	150.0	±9.6 %
		Y	2.52	69.22	12.51		150.0	
		z	1.42	63.36	9.28		150.0	

10149- CAD	LTE-FDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM)	X	2.75	67.05	15.55	0.00	150.0	± 9.6 %
		Y	2.88	67.86	16.07		150.0	
		Z	2.73	67.18	15.62		150.0	
10150- CAD	LTE-FDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM)	X	2.88	67.08	15.63	0.00	150.0	± 9.6 %
		Υ	3.01	67.85	16.12		150.0	
		Ζ	2.86	67.22	15.70		150.0	
10151- CAD	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, QPSK)	х	6.32	77.90	21.36	3.98	65.0	± 9.6 %
		Y	6.91	79.14	21.77		65.0	
		Ζ	6.41	78.22	21.50		65.0	
10152- CAD	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM)	X	5.42	72.95	19.71	3.98	65.0	± 9.6 %
		Ŷ	5.78	73.88	20.03		65.0	
		_Z	5.43	73.04	19.72		65.0	
10153- CAD	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM)	×	5.81	74.06	20.59	3.98	65.0	± 9.6 %
		Y	6.20	74.97	20.87		65.0	
		Ζ	5.84	74.21	20.62		65.0	
10154- CAE	LTE-FDD (SC-FDMA, 50% RB, 10 MHz,   QPSK)	х	2.09	68.53	15.87	0.00	150.0	±9.6 %
		Y	2.29	69.96	16.81		150.0	
		Ζ	2.08	68.78	15.99		150.0	
10155- CAE	LTE-FDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM)	X	2.46	67.89	15.74	0.00	150.0	± 9.6 %
		Y	2.64	69.05	16.49		150.0	
		Ζ	2.46	68.18	15.84		150.0	
10156- CAE	LTE-FDD (SC-FDMA, 50% RB, 5 MHz, QPSK)	X	1.63	67.76	14.61	0.00	150.0	±9.6 %
		Y	1.89	69.98	16.07		150.0	
		Ζ	1.61	67.98	14.61		150.0	
10157- CAE	LTE-FDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM)	Х	1.84	66.10	13.16	0.00	150.0	± 9.6 %
		Y	2.08	67.93	14.40		150.0	
		Z	1.79	66.07	12.96		150.0	
10158- CAE	LTE-FDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM)	Х	2.62	68.14	15.95	0.00	150.0	± 9.6 %
		Y	2.80	69.25	16.65		150.0	
		Ζ	2.62	68.44	16.04		150.0	
10159- CAE	LTE-FDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM)	Х	1.94	66.53	13.44	0.00	150.0	± 9.6 %
		Y	2.21	68.50	14.73		150.0	
		Z	1.88	66.49	13.23		150.0	
10160- CAD	LTE-FDD (SC-FDMA, 50% RB, 15 MHz, QPSK)	X	2.59	68.31	15.97	0.00	150.0	± 9.6 %
		Ϋ́	2.73	69.19	16.57		150.0	
L		Z	2.58	68.51	16.08		150.0	
10161- CAD	LTE-FDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM)	X	2.77	67.03	15.54	0.00	150.0	± 9.6 %
		Y	2.91	67.84	16.05		150.0	
		Z	2.75	67.18	15.60		150.0	
10162- CAD	LTE-FDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM)	X	2.88	67.21	15.67	0.00	150.0	± 9.6 %
		Y	3.02	68.01	16.17		150.0	1
		Z	2.86	67.38	15.74		150.0	
10166- CAE	LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK)	X	3.37	69.04	18.77	3.01	150.0	± 9.6 %
		Y	3.72	71.09	19.82		150.0	
					19.11	1	150.0	1
		Z	3.38	09.03	1 13.11		1 100.0	1
10167- CAE	LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM)	X	4.04	69.53 71.49	19.00	3.01	150.0	± 9.6 %
	LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM)	-				3.01		± 9.6 %

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10168-	LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz,	x	4.56	74.09	20.53	3.01	150.0	± 9.6 %
	64-QAM)	<u> </u>						//
		Υ -	5.99	79.40	22.74		150.0	
10169-		Z	4.72	75.27	21.13		150.0	
CAD	LTE-FDD (SC-FDMA, 1 RB, 20 MHz, QPSK)	X	2.74	67.94	18.26	3.01	150.0	± 9.6 %
		Y	3.25	71.55	20.05		150.0	
10170		Ż	2.77	68.38	18.59		150.0	
10170- CAD	LTE-FDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM)	X	3.65	73.29	20.42	3.01	150.0	± 9.6 %
		Y	6.00	83.03	24.31	· · · ·	150.0	<u>†-</u>
40474		Z	3.81	74.44	21.04		150.0	
10171- AAD	LTE-FDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM)	X	2.98	69.09	17.51	3.01	150.0	±9.6 %
		Y	4.17	75.40	20.24		150.0	· · · · ·
40470		Z	3.05	69.77	17.92		150.0	<u> </u>
10172- CAD	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK)	X	6.26	85.95	26.48	6.02	65.0	± 9.6 %
		Y	13.49	101.43	31.66	i	65.0	
		Z	6.07	85.72	26.58	·	65.0	
10173- CAD	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM)	X	11.36	93.09	26.93	6.02	65.0	± 9.6 %
		Y	61.90	122.46	34.86		65.0	
		Ζ	13.00	96.00	28.02	<u> </u>	65.0	
10174- CAD	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM)	X	8.36	86.77	24.30	6.02	65.0	± 9.6 %
		Y	35.10	110.72	31.17		65.0	
		Z	8.86	88.32	24.99		65.0	
10175- CAE	LTE-FDD (SC-FDMA, 1 RB, 10 MHz, QPSK)	X	2.71	67.63	18.00	3.01	150.0	± 9.6 %
		Y	3.19	71.11	19.75		150.0	
		Z	2.74	68.04	18.32		150.0	
10176- CAE	LTE-FDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM)	X	3.66	73.32	20.43	3.01	150.0	± 9.6 %
		Y	6.01	83.07	24.33		150.0	
		Z	3.81	74.46	21.05		150.0	
10177- CAG	LTE-FDD (SC-FDMA, 1 RB, 5 MHz, QPSK)	X	2.73	67.78	18.10	3.01	150.0	± 9.6 %
		Y	3.23	71.31	19.86		150.0	
		Z	2.76	68.20	18.41		150.0	
10178- CAE	LTE-FDD (SC-FDMA, 1 RB, 5 MHz, 16- QAM)	X	3.63	73.10	20.31	3.01	150.0	± 9.6 %
		Y	5.90	82.67	24.15		150.0	
		Z	3.78	74.24	20.93		150.0	
10179- CAE	LTE-FDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM)	X	3.28	71.01	18.80	3.01	150.0	± 9.6 %
		Y	4.94	78.87	22.07		150.0	
		Z	3.38	71.91	19.31		150.0	
10180- CAE	LTE-FDD (SC-FDMA, 1 RB, 5 MHz, 64- QAM)	X	2.98	69.03	17.47	3.01	150.0	±9.6 %
		Ý	4.15	75.28	20.17		150.0	
<u>_</u>		Z	3.04	69.71	17.88		150.0	
10181- CAD	LTE-FDD (SC-FDMA, 1 RB, 15 MHz, QPSK)	X	2.73	67.76	18.09	3.01	150.0	± 9.6 %
		Y	3.22	71.29	19.85		150.0	
		Z	2.75	68.18	18.41		150.0	
10182- CAD	LTE-FDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM)	X	3.62	73.08	20.30	3.01	150.0	± 9.6 %
		Y	5.88	82.63	24.13		150.0	
		Z	3.77	74.21	20.92		150.0	
10183- AAC	LTE-FDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM)	X	2.97	69.01	17.46	3.01	150.0	± 9.6 %
		Y	4.14	75.24	20.16		150.0	<u> </u>
		Z	3.04	69.68	17.87		150.0	

V.

CAD         QPS           10185- CAD         LTE- QAM           10186- AAD         LTE- QAM           10186- AAD         LTE- QAM           10187- CAE         QPS           10187- CAE         LTE QPS           10188- CAE         LTE AAE           10188- CAE         LTE AAE           10189- AAE         LTE 64-0           10193- CAC         IEEI CAC           10194- CAC         IEEI CAC           10195- CAC         IEEI CAC           10195- CAC         IEE CAC           10196- CAC         IEE CAC           10197- CAC         IEE CAC           10197- CAC         IEE CAC	E-FDD (SC-FDMA, 1 RB, 3 MHz, 16- AM) E-FDD (SC-FDMA, 1 RB, 3 MHz, 64-	X Y Z X Y Z X Y Z X Y Z X Y Z X Y Z X Y Z X Y Z X Y Z Z X Y Z Z X Y Z Z Z Z Z Z Z Z Z Z Z Z Z	2.74 3.24 2.77 3.64 5.93 3.79 2.99 4.16 3.05 2.75 3.25 2.75 3.25 2.78 3.76 6.30	67.80 71.35 68.22 73.15 82.75 74.29 69.07 75.34 69.75 67.86 71.43 68.29 73.83	18.11         19.88         18.43         20.34         24.19         20.96         17.49         20.20         17.90         18.18         19.96	3.01 3.01 3.01 3.01 3.01	150.0 150.0 150.0 150.0 150.0 150.0 150.0 150.0 150.0 150.0 150.0	± 9.6 % ± 9.6 % ± 9.6 %
CAD         QAM           10186-         LTE           AAD         QAM           10186-         LTE           QAM         -           10187-         LTE           CAE         QPS           10188-         LTE           CAE         16-0           10188-         LTE           CAE         16-0           10189-         LTE           AAE         64-0           10193-         IEEI           CAC         BPS           10194-         IEEI           CAC         64-0           10195-         IEEI           CAC         64-0           10195-         IEEI           CAC         BPS           10195-         IEEI           CAC         BPS           10195-         IEEI           CAC         BPS           10196-         IEE           CAC         BPS           10197-         IEE           CAC         QAI	AM) E-FDD (SC-FDMA, 1 RB, 3 MHz, 64- AM) E-FDD (SC-FDMA, 1 RB, 1.4 MHz, PSK) E-FDD (SC-FDMA, 1 RB, 1.4 MHz, G-QAM) E-FDD (SC-FDMA, 1 RB, 1.4 MHz,	Z X Z X Y Z X Y Z X Y Z Z Z	2.77 3.64 5.93 3.79 2.99 4.16 3.05 2.75 3.25 2.78 3.76	68.22 73.15 82.75 74.29 69.07 75.34 69.75 67.86 71.43 68.29	18.43           20.34           24.19           20.96           17.49           20.20           17.90           18.18           19.96	3.01	150.0 150.0 150.0 150.0 150.0 150.0 150.0	±9.6 %
CAD         QAM           10186-         LTE           AAD         QAM           10186-         LTE           AAD         QAM           10187-         LTE           CAE         QPS           10188-         LTE           CAE         16-0           10188-         LTE           CAE         16-0           10193-         IEEI           CAC         BPS           10194-         IEEI           CAC         64-0           10195-         IEEI           CAC         64-0           10196-         IEE           CAC         BPS           10197-         IEE           CAC         BPS           10197-         IEE           CAC         GAL	AM) E-FDD (SC-FDMA, 1 RB, 3 MHz, 64- AM) E-FDD (SC-FDMA, 1 RB, 1.4 MHz, PSK) E-FDD (SC-FDMA, 1 RB, 1.4 MHz, G-QAM) E-FDD (SC-FDMA, 1 RB, 1.4 MHz,	X Y Z X Y Z X Y Z X Y Z	3.64         5.93         3.79         2.99         4.16         3.05         2.75         3.25         2.78         3.76	73.15 82.75 74.29 69.07 75.34 69.75 67.86 71.43 68.29	20.34 24.19 20.96 17.49 20.20 17.90 18.18 19.96	3.01	150.0 150.0 150.0 150.0 150.0 150.0	±9.6 %
CAD         QAM           10186-         LTE           AAD         QAM           10186-         LTE           AAD         QAM           10187-         LTE           CAE         16-0           10188-         LTE           CAE         16-0           10188-         LTE           CAE         16-0           10189-         LTE           AAE         64-0           10193-         IEEI           CAC         16-0           10194-         IEEI           CAC         64-0           10195-         IEE           CAC         64-0           10195-         IEE           CAC         BPS           10195-         IEE           CAC         64-0           10197-         IEE           CAC         BPS           10197-         IEE           CAC         QAI	AM) E-FDD (SC-FDMA, 1 RB, 3 MHz, 64- AM) E-FDD (SC-FDMA, 1 RB, 1.4 MHz, PSK) E-FDD (SC-FDMA, 1 RB, 1.4 MHz, G-QAM) E-FDD (SC-FDMA, 1 RB, 1.4 MHz,	Y Z X Y Z X Y Z X Y Z	5.93 3.79 2.99 4.16 3.05 2.75 3.25 2.78 3.76	82.75 74.29 69.07 75.34 69.75 67.86 71.43 68.29	20.34 24.19 20.96 17.49 20.20 17.90 18.18 19.96	3.01	150.0 150.0 150.0 150.0 150.0	±9.6 %
AAD         QAM           10187-         LTE           CAE         QPS           10188-         LTE           CAE         16-0           10188-         LTE           CAE         16-0           10188-         LTE           CAE         64-0           10193-         IEEI           CAC         BPS           10194-         IEEI           CAC         64-0           10195-         IEE           CAC         64-0           10196-         IEE           CAC         BPS           10197-         IEE           CAC         QAI	AM) E-FDD (SC-FDMA, 1 RB, 1.4 MHz, PSK) E-FDD (SC-FDMA, 1 RB, 1.4 MHz, G-QAM) E-FDD (SC-FDMA, 1 RB, 1.4 MHz,	Z X Y Z X Y Z X Y Z	3.79 2.99 4.16 3.05 2.75 3.25 2.78 3.76	74.29 69.07 75.34 69.75 67.86 71.43 68.29	20.96 17.49 20.20 17.90 18.18 19.96		150.0 150.0 150.0 150.0	
AAD         QAM           10187-         LTE           CAE         QPS           10188-         LTE           CAE         16-0           10188-         LTE           CAE         16-0           10188-         LTE           CAE         64-0           10193-         IEEI           CAC         16-0           10193-         IEEI           CAC         16-0           10194-         IEEI           CAC         64-0           10195-         IEE           CAC         64-0           10197-         IEE           CAC         QAI           10197-         IEE           CAC         QAI	AM) E-FDD (SC-FDMA, 1 RB, 1.4 MHz, PSK) E-FDD (SC-FDMA, 1 RB, 1.4 MHz, G-QAM) E-FDD (SC-FDMA, 1 RB, 1.4 MHz,	X Y Z X Y Z X Y Z	2.99 4.16 3.05 2.75 3.25 2.78 3.76	69.07 75.34 69.75 67.86 71.43 68.29	17.49 20.20 17.90 18.18 19.96		150.0 150.0 150.0	
AAD         QAM           10187-         LTE           CAE         QPS           10188-         LTE           CAE         16-0           10188-         LTE           CAE         16-0           10188-         LTE           CAE         64-0           10193-         IEEI           CAC         16-0           10193-         IEEI           CAC         16-0           10194-         IEEI           CAC         64-0           10195-         IEE           CAC         64-0           10197-         IEE           CAC         QAI           10197-         IEE           CAC         QAI	AM) E-FDD (SC-FDMA, 1 RB, 1.4 MHz, PSK) E-FDD (SC-FDMA, 1 RB, 1.4 MHz, G-QAM) E-FDD (SC-FDMA, 1 RB, 1.4 MHz,	X Y Z X Y Z X Y Z	2.99 4.16 3.05 2.75 3.25 2.78 3.76	69.07 75.34 69.75 67.86 71.43 68.29	17.49 20.20 17.90 18.18 19.96		150.0 150.0 150.0	
CAE QPS 10188- CAE 16-C 10189- AAE 64-C 10193- IEE AAE 64-C 10193- IEE CAC 8PS 10195- IEE CAC 64-C 10196- IEE CAC 8PS 10196- IEE CAC 8PS	PSK) E-FDD (SC-FDMA, 1 RB, 1.4 MHz, -QAM) E-FDD (SC-FDMA, 1 RB, 1.4 MHz,	Z X Y Z X Y Z	3.05 2.75 3.25 2.78 3.76	69.75 67.86 71.43 68.29	17.90 18.18 19.96	3.01	150.0	+0.0 %
CAE QPS 10188- LTE CAE 16-C 10189- LTE AAE 64-C 10193- IEEI CAC BPS 10194- IEEI CAC 16-C 10195- IEE CAC 64-C 10195- IEE CAC BPS 10196- IEE CAC QAI 10197- IEE CAC QAI	PSK) E-FDD (SC-FDMA, 1 RB, 1.4 MHz, -QAM) E-FDD (SC-FDMA, 1 RB, 1.4 MHz,	X Z X Y Z	3.05 2.75 3.25 2.78 3.76	69.75 67.86 71.43 68.29	17.90 18.18 19.96	3.01		+0.6.0/
CAE QPS 10188- LTE CAE 16-C 10189- LTE AAE 64-C 10193- IEEI CAC BPS 10194- IEEI CAC 16-C 10195- IEE CAC 64-C 10195- IEE CAC BPS 10196- IEE CAC QAI 10197- IEE CAC QAI	PSK) E-FDD (SC-FDMA, 1 RB, 1.4 MHz, -QAM) E-FDD (SC-FDMA, 1 RB, 1.4 MHz,	X Z X Y Z	2.75 3.25 2.78 3.76	71.43 68.29	18.18 19.96	3.01		+000/
CAE 16-C	E-FDD (SC-FDMA, 1 RB, 1.4 MHz,	Z X Y Z	2.78 3.76	68.29			. 1	±9.6 %
CAE 16-C 10189- AAE 64-C 10193- CAC BPS 10194- 10194- CAC 16-C 10195- 10195- CAC BPS 10196- CAC BPS 10196- CAC QAI 10197- IEE CAC QAI	E-FDD (SC-FDMA, 1 RB, 1.4 MHz,	X Y Z	3.76				150.0	
CAE 16-C 10189- AAE 64-C 10193- CAC BPS 10194- 10194- CAC 16-C 10195- 10195- CAC BPS 10196- CAC BPS 10196- CAC QAI 10197- IEE	E-FDD (SC-FDMA, 1 RB, 1.4 MHz,	Y Z			18.51		150.0	
AAE 64-0 10193- IEEI CAC BPS 10194- IEEI CAC 16-0 10195- IEEI CAC 64-0 10196- IEEI CAC BPS 10196- IEEI CAC BPS 10197- IEE CAC QAI		Z	6.30		20.74	3.01	150.0	± 9.6 %
AAE 64-0 10193- IEEI CAC BPS 10194- IEEI CAC 16-0 10195- IEEI CAC 64-0 10196- IEEI CAC BPS 10196- IEEI CAC BPS 10197- IEE CAC QAI		Z	0.00	84.02	24.77		150.0	
AAE 64-0 10193- IEEI CAC BPS 10194- IEEI CAC 16-0 10195- IEEI CAC 64-0 10195- IEEI CAC 84-0 10196- IEEI CAC BPS 10197- IEE CAC QAI			3.92	75.04	21.38		150.0	
10193- CAC BPS 10194- CAC 16-0 10195- CAC 64-0 10195- CAC 64-0 10196- CAC BPS 10197- IEE CAC QAI	· · · · · · · · · · · · · · · · · · ·	X	3.05	69.47	17.77	3.01	150.0	± 9.6 %
CAC BPS 10194- IEEI CAC 16-0 10195- IEEI CAC 64-0 10196- IEEI CAC BPS 10197- IEE CAC QAI 10197- IEE		Y	4.32	76.05	20.59		150.0	
CAC BPS 10194- IEEI CAC 16-0 10195- IEEI CAC 64-0 10196- IEEI CAC BPS 10197- IEE CAC QAI 10197- IEE		Z	3.12	70.18	18.19		150.0	
10194- CAC 16-0 10195- CAC 64-0 10196- CAC BPS 10196- CAC BPS 10197- IEE CAC QAI	EE 802.11n (HT Greenfield, 6.5 Mbps, PSK)	X	4.39	66.44	16.00	0.00	150.0	± 9.6 %
CAC 16-0 10195- IEE CAC 64-0 10196- IEE CAC BPS 10197- IEE CAC QAI		Y	4.46	66.83	16.18		150.0	
CAC 16-0 10195- IEE CAC 64-0 10196- IEE CAC BPS 10197- IEE CAC QAI		Z	4.36	66.53	16.02		150.0	
10195- IEE CAC 64-0 10196- IEE CAC BPS 10197- IEE CAC QAI	EE 802.11n (HT Greenfield, 39 Mbps, S-QAM)	X	4.55	66.74	16.13	0.00	150.0	± 9.6 %
CAC 64-0 10196- IEE CAC BPS 10197- IEE CAC QAI 0		Y	4.63	67.12	16.30		150.0	
CAC 64-0 10196- IEE CAC BPS 10197- IEE CAC QAI 0		Z	4.51	66.81	16.16		150.0	
10196- IEE CAC BPS 10197- IEE CAC QAI	EE 802.11n (HT Greenfield, 65 Mbps, I-QAM)	X	4.59	66.77	16.15	0.00	150.0	± 9.6 %
CAC BPS 10197- IEE CAC QAI		Y	4.67	67.15	16.32		150.0	
CAC BPS 10197- IEE CAC QAI		Z	4.55	66.84	16.18		150.0	
10197- IEE CAC QAI	EE 802.11n (HT Mixed, 6.5 Mbps, PSK)	Х	4.39	66.48	16.01	0.00	150.0	± 9.6 %
		Y	4.46	66.87	16.19	-	150.0	
		Ż	4.35	66.57	16.03		150.0	<u> </u>
	EE 802.11n (HT Mixed, 39 Mbps, 16-	x	4.56	66.75	16.14	0.00	150.0	± 9.6 %
10198- IEE		Y	4.64	67.14	16.31		150.0	<u> </u>
10198- IEE		Z	4.53	66.83	16.17		150.0	
	EE 802.11n (HT Mixed, 65 Mbps, 64- AM)	X	4.59	66.78	16.16	0.00	150.0	± 9.6 %
		Y	4.67	67.16	16.33		150.0	
		Z	4.55	66.85	16.19		150.0	
	EE 802.11n (HT Mixed, 7.2 Mbps, PSK)	X	4.34	66.50	15.97	0.00	150.0	±9.6 %
		Y	4.41	66.90	16.15		150.0	
		Z	4.30	66.59	15.99	-	150.0	
	EE 802.11n (HT Mixed, 43.3 Mbps, 16-	X	4.56	66.72	16.13	0.00	150.0	± 9.6 %
	AM)	Y	4.63	67.10	16.30		150.0	
		Z	4.52	66.79	16.15		150.0	1
		X	4.60	66.71	16.14	0.00	150.0	± 9.6 %
			4.67	67.09	16.31		150.0	<u> </u>
	AM) EE 802.11n (HT Mixed, 72.2 Mbps, 64-	Y	4.56	66.79	16.17		150.0	
	AM) EE 802.11n (HT Mixed, 72.2 Mbps, 64-			66.87	16.27	0.00	150.0	± 9.6 %
	AM) EEE 802.11n (HT Mixed, 72.2 Mbps, 64- AM) EEE 802.11n (HT Mixed, 15 Mbps,	Y Z X	4.94	00.07			1	
	AM) EEE 802.11n (HT Mixed, 72.2 Mbps, 64- AM)	Z	4.94 5.00	67.20	16.40		150.0	<u>.</u>

10223- CAC	IEEE 802.11n (HT Mixed, 90 Mbps, 16- QAM)	X	5.26	67.15	16.43	0.00	150.0	± 9.6 %
		Ŧγ	5.29	67.39	10 54	<u> </u>		
		† <u>-</u>	5.29	67.16	16.51	<u> </u>	150.0	
10224-	IEEE 802.11n (HT Mixed, 150 Mbps, 64-	<u>x</u>	4.98		16.44	L	150.0	
CAC	QAM)			66.98	16.25	0.00	150.0	± 9.6 %
		<u> </u>	5.05	67.32	16.38		150.0	
10225-	UMTS-FDD (HSPA+)	Z	4.95	67.03	16.28		150.0	
CAB		X	2.65	65.82	14.94	0.00	150.0	± 9.6 %
		Y	2.77	66.54	15.42		150.0	
10226-	LTE TOD (00 FDU ) ( TE )	Z	2.63	65.96	14.93		150.0	
	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM)	X	12.29	94.61	27.52	6.02	65.0	± 9.6 %
		Y	76.74	126.49	35.96		65.0	
4000-		Z	14.23	97.75	28.67		65.0	<u> </u>
10227- CAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM)	X	11.60	92.16	26.09	6.02	65.0	± 9.6 %
		Y	58.51	119.10	33.33		65.0	<u>+                                     </u>
		Z	13.58	95.42	27.28		65.0	<del> </del>
10228- CAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK)	X	8.07	91.29	28.44	6.02	65.0	± 9.6 %
		Y	14.98	103.75	32.45		65.0	
		Z	8.37	92.43	29.01	<u> </u>	65.0	
10229- CAB	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 16- QAM)	X	11.46	93.21	26.98	6.02	65.0	± 9.6 %
		Ŷ	62.74	122.68	34.92		65.0	
		Z	13.11	96.13	28.07		65.0	
10230- CAB	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 64- QAM)	X	10.78	90.84	25.59	6.02	65.0	± 9.6 %
		Y	48.68	115.84	32.42		05.0	
		Z	12.46	93.85	26.71		65.0	
10231- CAB	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, QPSK)	X	7.66	90.18	27.97	6.02	65.0 65.0	± 9.6 %
		Y	13.86	102.08	31.86			
		z	7.92	91.24			65.0	
10232- CAD	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 16-	X	11.44	93.19	28.52 26.97	6.02	65.0 65.0	± 9.6 %
	QAM)							
	·	Y	62.67	122.68	34.92		65.0	
10000		Z	<u>1</u> 3.08	96.11	28.07		65.0	
10233- CAD	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 64- QAM)	X	10.75	90.81	25.58	6.02	65.0	± 9.6 %
		Y	48.50	115.79	32.41		65.0	
			12.42	93.82	26.70		65.0	
10234- CAD	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK)	X	7.34	89.19	27.51	6.02	65.0	± 9.6 %
		Y	12.98	100.59	31.27		65.0	
		Z	7.57	90.21	28.04		65.0	
10235- 	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM)	X	11.45	93.23	26.99	6.02	65.0	± 9.6 %
·		Y	63.03	122.79	34.95		65.0	
		Z	13.11	96.15	28.08		65.0	
10236- CAD	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM)	X	10.87	90.96	25.62	6.02	65.0	± 9.6 %
		Ý 	49.65	116.13	32.49		65.0	
10237-	LTE-TDD (SC-FDMA, 1 RB, 10 MHz.	Z	12.57	93.99	26.75		65.0	
CAD	QPSK)	X	7.67	90.24	28.00	6.02	65.0	±9.6 %
	<u> </u>	Y	13.91	102.19	31.90		65.0	
10000		Z	7.93	91.30	28.54		65.0	
10238- CAD	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM)	X	11.41	93.16	26.96	6.02	65.0	± 9.6 %
· ·		Y	62.56	122.66	34.91		65.0	
		Z	13.06	96.08	28.06		65.0	

			40.70		05.57		65.0	100%
10239- CAD	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM)	Х	10.72	90.78	25.57	6.02	65.0	±9.6 %
	·····	Y	48.29	115.74	32.40		65.0	
		Ζ	12.38	93.78	26.69		65.0	
10240- CAD	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, QPSK)	X	7.65	90.20	27.98	6.02	65.0	±9.6 %
		Y	13.86	102. <u>14</u>	31.88		65.0	
		Ζ	7.91	91.26	28.53		65.0	
10241- CAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM)	X	7.49	79.94	24.73	6.98	65.0	±9.6 %
		Y	9.15	84.52	26.53		65.0	
		Z	7.78	81.10	25.24		65.0	
10242- CAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM)	×	6.76	77.82	23.76	6.98	65.0	±9.6 %
		Y	8.56	83.16	25.93		65.0	
		Ζ_	7.57	80.56	24.94		65.0	
10243- CAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK)	X	5.55	74.73	23.33	6.98	65.0	±9.6 %
		<u>Y</u>	6.44	78.27	24.91		65.0	
		Z	5.56	75.03	23.50		65.0	
10244- CAB	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM)	X	4.91	73.06	16.84	3.98	65.0	±9.6 %
		<u>Y</u>	6.23	76.34	18.14		65.0	
		Z	4.96	73.17	16.71		65.0	
10245- CAB	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM)	×	4.78	72.39	16.50	3.98	65.0	± 9.6 %
		Y	5.96	75.43	17.72		65.0	
		Z	4.79	72.41	16.32		65.0	
10246- CAB	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, QPSK)	х	4.86	76.58	18.54	3.98	65.0	± 9.6 %
		Ŷ	5.74	78.81	19.49		65.0	
		Z	4.75	76.10	18.16		65.0	
10247- CAD	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM)	X	4.54	72.63	17.68	3.98	65.0	± 9.6 %
		Y	5.00	73.89	18.23		65.0	
		Z	4.50	72.44	17.41		65.0	
10248- CAD	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM)	X	4.51	72.01	17.39	3.98	65.0	± 9.6 %
		Y	4.93	73.18	17.90		65.0	
		Z	4.45	71.77	17.09		65.0	
10249- CAD	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, QPSK)	X	6.38	81.20	21.41	3.98	65.0	± 9.6 %
		Y	7.34	83.11	22.13		65.0	
		Z	6.46	81.34	21.34		65.0	
10250- CAD	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM)	X	5.54	75.67	20.83	3.98	65.0	± 9.6 %
		Y	5.99	76.71	21.17		65.0	
		Z	5.60	75.87	20.83		65.0	
10251- CAD	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM)	X	5.22	73.28	19.41	3.98	65.0	± 9.6 %
		Y	5.60	74.26	19.76		65.0	
		Z	5.22	73.35	19.34		65.0	
10252- CAD	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, QPSK)	X	6.60	81.03	22.49	3.98	65.0	±9.6 %
		Y	7.35	82.49	22.99	<u> </u>	65.0	
		Z	6.74	81.46	22.63		65.0	
10253- CAD	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM)	×	5.32	72.45	19.46	3.98	65.0	± 9.6 %
		Y	5.67	73.38	19.78		65.0	
		Z	5.34	72.58	19.46		65.0	
10254- CAD	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM)	X	5.67	73.46	20.23	3.98	65.0	± 9.6 %
		Y	6.04	74.36	20.52	İ	65.0	
		Z	5.70	73.62	20.25		65.0	

10255-		<del></del>						uary 14, 20 <sup>-</sup>
CAD	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, QPSK)		6.00	77.17	21.28	3.98	65.0	± 9.6 %
		Y	6.54	78.36	21.67		65.0	
10256-		<u>Z</u>	6.09	77.51	21.41		65.0	<u>+</u>
CAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM)	X	3.55	68.31	13.56	3.98	65.0	± 9.6 %
		Y	4.31	70.70	14.63		65.0	+·
40057		Z	3.47	67.95	13.18		65.0	
10257- CAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM)	X	3.46	67.65	13.15	3.98	65.0	± 9.6 %
<u> </u>		Y	4.12	69.78	14.12	<u> </u>	65.0	
10050		Z	3.37	67.24	12.73		65.0	<u> </u>
10258- CAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK)	X	3.31	70.56	15.03	3.98	65.0	± 9.6 %
		Y	3.93	72.68	16.08		65.0	+ <u>-</u> -
40050		Z	3.14	69.68	14.40	<u> </u>	65.0	+
10259- CAB	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM)	X	4.95	73.85	18.86	3.98	65.0	± 9.6 %
		Y	5.40	75.01	19.32		65.0	+
10000		Z	4.95	73.84	18.70	<u>_</u>	65.0	
10260- CAB	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM)	X	4.97	73.54	18.73	3.98	65.0	± 9.6 %
<u> </u>		Y	5.40	74.66	19.18		65.0	
10004		Z	4.96	73.50	18.55		65.0	
10261- CAB	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, QPSK)	X	6.09	80.15	21.50	3.98	65.0	± 9.6 %
		Y	6.88	81.79	22.11		65.0	
		Z	6.20	80.42	21.51		65.0	<u> </u>
10262- CAD	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM)	X	5.53	75.60	20.77	3.98	65.0	± 9.6 %
		Ŷ	5.97	76.64	21.12		65.0	
		Z	5.58	75.79	20.77		65.0	
10263- CAD	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM)	X	5.21	73.26	19.40	3.98	65.0	± 9.6 %
		TY	5.59	74.24	19.76		65.0	
		Z	5.21	73.32	19.33		65.0	+
10264- CAD	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, QPSK)	X	6.52	80.79	22.38	3.98	65.0	± 9.6 %
		Y	7.26	82.25	22.87		65.0	
		Z	6.65	81.20	22.51		65.0	
10265- CAD	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM)	X	5.42	72.95	19.72	3.98	65.0	± 9.6 %
		Ý	5.78	73.89	20.03		65.0	
		Z	5.43	73.04	19.72		65.0	
10266- CAD	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM)	X	5.81	74.04	20.57	3.98	65.0	± 9.6 %
		Y	6.19	74.96	20.86		65.0	
		Z	5.84	74.19	20.60		65.0	<u>-</u>
10267- <u>CA</u> D	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, QPSK)	Х	6.31	77.85	21.33	3.98	65.0	± 9.6 %
		Y	6.90	79.09	21.75		65.0	<u> </u>
		Z	<u>6.</u> 39	78.16	21.48		65.0	
10268- CAD	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM)	X	6.05	72.91	20.14	3.98	65.0	±9.6 %
	ļ	Y	6.40	73.76	20.40		65.0	
10000		Z	6.06	73.00	20.17		65.0	
10269- CAD	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM)	X	6.03	72.50	20.01	3.98	65.0	± 9.6 %
	<u></u>	Y	6.37	73.34	20.27		65.0	
10070		Z	6.05	72.60	20.04		65.0	·
10270- CAD	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, QPSK)	X	6.14	75.03	20.36	3.98	65.0	± 9.6 %
<u> </u>		Y	6.59	76.06	20.69		65.0	

10274-	UMTS-FDD (HSUPA, Subtest 5, 3GPP	Х	2.45	66.18	14.83	0.00	150.0	±9.6 %
CAB	Rel8.10)						( == ,	
	-	<u>Y</u>	2.58	67.05	15.42		150.0	
10075		Z	2.44	66.39	14.86	0.00	150.0	
10275- CAB	UMTS-FDD (HSUPA, Subtest 5, 3GPP Rel8.4)	x	1.45	67.15	14.79	0.00	150.0	± 9.6 %
		Y	1.65	68.98	<u>16.07</u>		150.0	
		Z	1.46	67.49	14.94		150.0	
10277- CAA	PHS (QPSK)	×	2.05	60.99	6.61	9.03	50.0	± 9.6 %
		Y	2.14	61.42	6.98		50.0	
		Z	2.15	61.21	6.84		50.0	
10278- CAA	PHS (QPSK, BW 884MHz, Rolloff 0.5)	х	3.88	69.24	13.58	9.03	50.0	± 9.6 %
		Y	4.38	71.00	14.54		50.0	· · ·
		Z	3.84	68.69	13.30		50.0	
10279- CAA	PHS (QPSK, BW 884MHz, Rolloff 0.38)	Х	4.00	69.55	13.78	9.03	50.0	± 9.6 %
		<u>Y</u>	4.51	71.31	14.73		50.0	
		Ζ	3.94	68.96	13.47		50.0	
10290- AAB	CDMA2000, RC1, SO55, Full Rate	X	1.07	65.69	11.52	0.00	150.0	± 9.6 %
		Y	1.53	70.26	14.37		150.0	
		Z	1.01	65.37	11.10		150.0	
10291- AAB	CDMA2000, RC3, SO55, Full Rate	X	0.60	63.10	9.79	0.00	150.0	±9.6 %
		Y	0.85	67.12	12.84		150.0	
		Z	0.57	62.93	9.45		150.0	
10292- AAB	CDMA2000, RC3, SO32, Full Rate	X	0.74	66.24	11.75	0.00	150.0	± 9.6 %
		Y	1.46	75.17	16.76		150.0	
		Z	0.73	66.36	11.54		150.0	
10293- AAB	CDMA2000, RC3, SO3, Full Rate	Х	1.24	72.67	15.10	0.00	150.0	± 9.6 %
		Y	5.17	93.05	23.35		150.0	
		Ζ	1.42	74.33	15.45		150.0	
10295- AAB	CDMA2000, RC1, SO3, 1/8th Rate 25 fr.	Х	9.92	85.20	23.12	9.03	50.0	± 9.6 %
		Y	9.50	84.91	23.23		50.0	1
		Ζ	10.83	86.02	23.20		50.0	
10297- AAC	LTE-FDD (SC-FDMA, 50% RB, 20 MHz, QPSK)	X	2.57	69.12	16.16	0.00	150.0	± 9.6 %
		Y	2.77	70.42	16.97		150.0	
		Z	2.55	69.32	16.30		150.0	
10298- AAC	LTE-FDD (SC-FDMA, 50% RB, 3 MHz, QPSK)	X	1.27	65.66	12.33	0.00	150.0	± 9.6 %
		Y	1.58	68.64	14.32	1	150.0	1
		Z	1.21	65.43	11.98	İ	150.0	-
10299- AAC	LTE-FDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM)	X	2.00	66.49	12.18	0.00	150.0	± 9.6 %
		Y	3.31	72.57	14.96	1	150.0	1
		Z	1.99	66.70	12.06		150.0	1
10300- AAC	LTE-FDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM)	X	1.58	63.09	9.74	0.00	150.0	± 9.6 %
		Y	1.99	65.54	11.08	+	150.0	
		Z	1.51	62.92	9.42		150.0	
10301- AAA	IEEE 802.16e WIMAX (29:18, 5ms, 10MHz, QPSK, PUSC)	X	4.69	65.76	17.48	4.17	50.0	± 9.6 %
		Y	4.64	65.55	17.37	<u> </u>	50.0	
		Ż	4.67	65.93	17.49		50.0	1
10302-	IEEE 802.16e WiMAX (29:18, 5ms, 10MHz, QPSK, PUSC, 3 CTRL symbols)	X	5.09	65.93	17.93	4.96	50.0	± 9.6 %
IAAA								
	10Mi 12, QF3K, FUSC, 3 CTRL symbols)	Y	5.12	66.18	18.09	+	50.0	-

10303-	IEEE 802.16e WiMAX (31:15, 5ms,							uary 14, 20 <sup>.</sup>
AAA	10MHz, 64QAM, PUSC)	X	4.84	65.58	17.76	4.96	50.0	± 9.6 %
·		Y	4.88	65.83	17.92		50.0	+
10304-	IEEE 802 10- WIMAN (00 10 -	Z	4.85	65.84	17.81		50.0	
<u>AAA</u>	IEEE 802.16e WiMAX (29:18, 5ms, 10MHz, 64QAM, PUSC)	X	4.65	65.44	17.26	4.17	50.0	± 9.6 %
		Y	4.69	65.73	17.44		50.0	
40005		Z	4.65	65.69	17.31		50.0	
10305- AAA	IEEE 802.16e WiMAX (31:15, 10ms, 10MHz, 64QAM, PUSC, 15 symbols)	X	4.44	68.14	19.56	6.02	35.0	± 9.6 %
		Y	4.41	68.01	19.60		35.0	
40000		Z	4.62	69.17	19.86		35.0	
10306- AAA	IEEE 802.16e WIMAX (29:18, 10ms, 10MHz, 64QAM, PUSC, 18 symbols)	X	4.68	66.85	19.08	6.02	35.0	± 9.6 %
		Y	4.67	66.81	19.12		35.0	
40007		Z	4.77	67.53	19.30		35.0	+
10307- AAA	IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, QPSK, PUSC, 18 symbols)	X	4.59	67.04	19.05	6.02	35.0	± 9.6 %
		Ϋ́	4.58	66.99	19.09	<u> </u>	35.0	+
10000		Z	4.69	67.75	19.27	<u> </u>	35.0	<del> </del>
10308- AAA	IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, 16QAM, PUSC)	X	4.57	67.28	19.21	6.02	35.0	± 9.6 %
		Y	4.56	67.23	19.25		35.0	
10000		Z	4.69	68.04	19.45		35.0	<u> </u>
10309- AAA	IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, 16QAM, AMC 2x3, 18 symbols)	X	4.73	67.04	19.22	6.02	35.0	± 9.6 %
		Y	4.72	66.99	19.24		35.0	
		Z	4.82	67.69	19.42		35.0	<u> </u>
10310- AAA	IEEE 802.16e WIMAX (29:18, 10ms, 10MHz, QPSK, AMC 2x3, 18 symbols)	X	4.63	66.94	19.07	6.02	35.0	± 9.6 %
		Y	4.63	66.90	19.11		35.0	·
		Z	4.74	67.65	19.30		35.0	
10311- AAC	LTE-FDD (SC-FDMA, 100% RB, 15 MHz, QPSK)	X	2.92	68.38	15.85	0.00	150.0	± 9.6 %
		Y	3.14	69.67	16.60		150.0	<u> </u>
		Z	2.91	68.56	15.97		150.0	<u> </u>
10313- AAA	iDEN 1:3	X	2.95	70.69	14.66	6.99	70.0	± 9.6 %
		Y	3.98	74.43	16.48		70.0	- <u> </u>
		Z	3.15	71.48	15.14		70.0	
1031 <b>4</b> - AAA	iDEN 1:6	X	5.04	79.92	21.00	10.00	30.0	± 9.6 %
		Y	6.78	84.92	23.16		30.0	
		Z	5.73	81.64	21.73		30.0	<u> </u>
10315- AAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 96pc duty cycle)	X	0.97	63.25	14.68	0.17	150.0	± 9.6 %
		Y	1.08	64.33	15.52		150.0	
		Z	0.98	63.49	14.85		150.0	
10316- AAB	IEEE 802.11g WiFi 2.4 GHz (ERP- OFDM, 6 Mbps, 96pc duty cycle)	X	4.44	66.48	16.13	0.17	150.0	± 9.6 %
		Ý	4.51	66.82	16.27		150.0	
10047		Z	4.41	66.56	16.16		150.0	
10317- AAC	IEEE 802.11a WiFi 5 GHz (OFDM, 6 Mbps, 96pc duty cycle)	X	4.44	66.48	16.13	0.17	150.0	± 9.6 %
		Y	4.51	66.82	16.27		150.0	<u> </u>
0400		Z	4.41	66.56	16.16		150.0	
10400- \AD	IEEE 802.11ac WiFi (20MHz, 64-QAM, 99pc duty cycle)	X	4.53	66.78	16.11	0.00	150.0	± 9.6 %
		Y	4.61	67.15	16.28	·	150.0	
		Z	4.49	66.84	16.14		150.0	
0401- \AD	IEEE 802.11ac WiFi (40MHz, 64-QAM, 99pc duty cycle)	X	5.27	67.03	16.34	0.00	150.0	± 9.6 %
		Y	5.28	67.17	16.36		150.0	

					-			
10402-	IEEE 802.11ac WiFi (80MHz, 64-QAM,	Х	5.50	67.24	16.31	0.00	150.0	±9.6 %
AAD	99pc duty cycle)							
		Y	5.56	67.57	16.43		150.0	
		<u>Z</u>	5.47	67.27	16.33		150.0	
10403- AAB	CDMA2000 (1xEV-DO, Rev. 0)	X	1.07	65.69	11.52	0.00	115.0	±9.6 %
-		Υ	1.53	70.26	14.37		115.0	
-		Z	1.01	65.37	11.10		115.0	
10404- AAB	CDMA2000 (1xEV-DO, Rev. A)	X	1.07	65.69	11.52	0.00	115.0	± 9.6 %
		Y	1.53	70.26	14.37		115.0	
		Z	1.01	65.37	11.10		115.0	
10406- AAB	CDMA2000, RC3, SO32, SCH0, Full Rate	X	23.46	102.23	25.39	0.00	100.0	± 9.6 %
		Y	100.00	115.29	27.21		100.0	
		Z	100.00	120.73	29.57		100.0	
10410- AAD	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9, Subframe Conf=4)	X	55.06	113.36	27.76	3.23	80.0	± 9.6 %
		Y	100.00	120.25	29.20		80.0	
		Z	100.00	122.59	30.17		80.0	
10415- AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 99pc duty cycle)	X	0.91	62.47	14.11	0.00	150.0	± 9.6 %
		Y	1.00	63.52	14.99		150.0	
		Z	0.91	62.68	14.27		150.0	
10416- AAA	IEEE 802.11g WiFi 2.4 GHz (ERP- OFDM, 6 Mbps, 99pc duty cycle)	X	4.39	66.47	16.07	0.00	150.0	± 9.6 %
		Y	4.46	66.85	16.24		150.0	
		Z	4.36	66.56	16.10		150.0	
10417- AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps, 99pc duty cycle)	x	4.39	66.47	16.07	0.00	150.0	± 9.6 %
		Y	4.46	66.85	16.24		150.0	
		Z	4.36	66.56	16.10		150.0	
10418- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 6 Mbps, 99pc duty cycle, Long preambule)	X	4.38	66.64	16.10	0.00	150.0	± 9.6 %
		Y	4.46	67.04	16.28		150.0	
		Z	4.35	66.74	16.14		150.0	
10419- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 6 Mbps, 99pc duty cycle, Short preambule)	X	4.40	66.59	16.10	0.00	150.0	± 9.6 %
		Y	4.48	66.98	16.27		150.0	
		Z	4.37	66.68	16.13		150.0	
10422- AAB	IEEE 802.11n (HT Greenfield, 7.2 Mbps, BPSK)	X	4.51	66.58	16.11	0.00	150.0	± 9.6 %
		Y	4.59	66.96	16.28		150.0	
		Z	4.48	66.67	<b>1</b> 6.14		150.0	
10423- AAB	IEEE 802.11n (HT Greenfield, 43.3 Mbps, 16-QAM)	X	4.67	66.88	16.22	0.00	150.0	±9.6 %
		Y	4.74	67.25	16.38		150.0	
		Z	4.62	66.95	16.24		150.0	
1042 <b>4</b> - AAB	IEEE 802.11n (HT Greenfield, 72.2 Mbps, 64-QAM)	X	4.59	66.83	16.19	0.00	150.0	± 9.6 %
		Y	4.67	67.21	16.36		150.0	
		Z	4.55	66.90	16.22		150.0	
10425- AAB	IEEE 802.11n (HT Greenfield, 15 Mbps, BPSK)	X	5.20	67.12	16.39	0.00	150.0	± 9.6 %
		Y	5.25	67.39	16.48		150.0	
		Z	5.17	67.16	16.41		150.0	
10426- AAB	IEEE 802.11n (HT Greenfield, 90 Mbps, 16-QAM)	X	5.23	67.21	16.43	0.00	150.0	± 9.6 %
		Y	5.26	67.44	16.50		150.0	Í
[		Z	5.19	67.25	16.45		150.0	

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10427- AAB	IEEE 802.11n (HT Greenfield, 150 Mbps, 64-QAM)		5.23	67.14	16.39	0.00	150.0	± 9.6 %
		Y	5.27	67.40	16.48	<b>—</b>	150.0	
10430-		Z	5.18	67.14	16.40		150.0	
AAB	LTE-FDD (OFDMA, 5 MHz, E-TM 3.1)	X	4.20	71.33	18.23	0.00	150.0	± 9.6 %
		Y	4.38	72.12	18.67		150.0	
10431-		Z	4.24	71.88	18.40		150.0	
	LTE-FDD (OFDMA, 10 MHz, E-TM 3.1)	X	4.04	67.01	16.00	0.00	150.0	± 9.6 %
· · · · · ·		Ŷ	4.14	67.47	16.25		150.0	
10432-		Z	4.00	67.12	16.01		150.0	
AAB	LTE-FDD (OFDMA, 15 MHz, E-TM 3.1)	X	4.35	66.89	16.12	0.00	150.0	± 9.6 %
		Y	4.44	67.29	16.32		150.0	
10433-	LTE-FDD (OFDMA, 20 MHz, E-TM 3.1)	Z	4.31	66.97	16.15		150.0	· · · ·
AAB	(OFDMA, 20 MHZ, E-1M 3.1)	X	4.61	66.86	16.21	0.00	150.0	± 9.6 %
		<u> </u>	4.68	67.24	16.38		150.0	
10434-	W-CDMA (BS Test Model 1, 64 DPCH)	Z	4.57	66.94	16.24		150.0	
<u>AAA</u>			4.31	72.22	18.13	0.00	150.0	± 9.6 %
	· · · · · · · · · · · · · · · · · · ·	Ý	4.57	73.29	18.72		150.0	
10435-	LTE-TDD (SC-FDMA, 1 RB, 20 MHz,	Z	4.37	72.83	18.28		150.0	
AAC	QPSK, UL Subframe=2,3,4,7,8,9)	X	46.38	110.94	27.14	3.23	80.0	± 9.6 %
		Y	100.00	119.98	29.08		80.0	
10447-		Z	100.00	122.32	30.05		80.0	<u> </u>
10447- AAB	LTE-FDD (OFDMA, 5 MHz, E-TM 3.1, Clipping 44%)	X	3.31	66.87	15.09	0.00	150.0	± 9.6 %
		Y	3.44	67.57	15.54		150.0	<u> </u>
10448-		Z	3.26	66.97	15.03		150.0	
AAB	LTE-FDD (OFDMA, 10 MHz, E-TM 3.1, Clippin 44%)	X	3.89	66.79	15.86	0.00	150.0	± 9.6 %
		Y	3.98	67.27	16.12		150.0	
10449-		Z	3.85	<u>66.</u> 90	15.88		150.0	· · · ·
AAB	LTE-FDD (OFDMA, 15 MHz, E-TM 3.1, Cliping 44%)	X	4.17	66.71	16.01	0.00	150.0	±9.6 %
		Y	4.26	67.14	16.23	·	150.0	
10450-		Z	4.14	66.80	16.04		150.0	
4450- 44B	LTE-FDD (OFDMA, 20 MHz, E-TM 3.1, Clipping 44%)	X	4.38	66.63	16.06	0.00	150.0	± 9.6 %
	· · · · · · · · · · · · · · · · · · ·	Ŷ	4.46	67.03	16.25		150.0	
10451-		Z	4.35	66.71	16.09		150.0	
AA	W-CDMA (BS Test Model 1, 64 DPCH, Clipping 44%)	X	3.16	66.87	14.55	0.00	150.0	± 9.6 %
	+ ···	Y	3.31	67.71	15.09		150.0	
0456-		Z	3.09	66.88	14.41		150.0	
VAB	IEEE 802.11ac WiFi (160MHz, 64-QAM, 99pc duty cycle)	X	6.10	67.71	16.58	0.00	150.0	± 9.6 %
	· · · · · · · · · · · · · · · · · · ·	- <u>Y</u>	6.13	67.95	16.63		150.0	
0457-	UMTS-FDD (DC-HSDPA)	Z	6.10	67.81	16.63		150.0	
AA		X	3.68	65.12	15.78	0.00	150.0	± 9.6 %
	+	Y	3.75	65.52	15.96		150.0	
0458-		<u>Z</u>	3.67	65.23	<u>15</u> .81		150.0	
VAA	CDMA2000 (1xEV-DO, Rev. B, 2 carriers)	X	3.88	71.11	17.24	0.00	150.0	±9.6 %
	<u>+</u>	Y	4.15	72.36	17.96		150.0	
0459-		_Z	3.88	71.47	17.22		150.0	
VAA	CDMA2000 (1xEV-DO, Rev. B, 3 carriers)	X	5.03	68.93	18.26	0.00	150.0	±9.6%
	+	Y	5.12	69.27	18.40		150.0	
		Z	5.02	69.28	18.31		150.0	

10460-	UMTS-FDD (WCDMA, AMR)	X	0.76	67.21	14.98	0,00	150.0	± 9.6 %
AAA								
		Y	0.95	70.10	17.17		150.0	
		Z	0.78	67.8 <u>4</u>	15.35		150.0	
10461- AAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	Х	100.00	124.22	31.05	3.29	80.0	± 9.6 %
		Y	100.00	126.59	32.12		80.0	
		Ζ	100.00	126.67	32.13		80.0	
10462- 	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	Х	1.13	62.20	9.29	3.23	80.0	±9.6 %
		Y	1.76	66.14	10.65	<u>+</u>	80.0	
		Z	1.32	63.88	10.13		80.0	100
10463- AAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	Х	0.91	60.00	7.67	3.23	80.0	±9.6 %
		<u>Y</u>	0.95	60.52	7.63		80.0	
		Z	0.89	60.00	7.73		80.0	
10464- AAA	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	Х	47.59	111.65	27.34	3.23	80.0	± 9.6 %
		Y	100.00	123.29	30.45		80.0	
		Z	100.00	123.26	30.40		80.0	
10465- AAA	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 16- QAM, UL Subframe=2,3,4,7,8,9)	Х	1.05	61.52	8.89	3.23	80.0	± 9.6 %
		Y	1.46	64.47	9.90		80.0	
		Z	1.18	62.83	9.59		80.0	
10466- AAA	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 64- QAM, UL Subframe=2,3,4,7,8,9)	X	0.91	60.00	7.62	3.23	80.0	± 9.6 %
		Y	0.90	60.08	7.36		80.0	
		Z	0.89	60.00	7.68		80.0	
10467- AAC	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	72.09	117.06	28.59	3.23	80.0	±9.6 %
		Y	100.00	123.66	30.60		80.0	
		Z	100.00	123.63	30.56		80.0	
10468- AAC	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 16- QAM, UL Subframe=2,3,4,7,8,9)	X	1.07	61.70	9.00	3.23	80.0	± 9.6 %
		Y	1.53	64.89	10.09		80.0	
		Z	1.22	63.12	9.74		80.0	1
10469- AAC	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 64- QAM, UL Subframe=2,3,4,7,8,9)	X	0.91	60.00	7.62	3.23	80.0	± 9.6 %
		Y	0.90	60.09	7.36		80.0	
		Z	0.89	60.00	7.68		80.0	
10470- AAC	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	74.02	117.39	28.66	3.23	80.0	± 9.6 %
		Y	100.00	123.68	30.61		80.0	
		Z	100.00	123.65	30.56		80.0	
10471- AAC	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 16- QAM, UL Subframe=2,3,4,7,8,9)	X	1.07	61.65	8.96	3.23	80.0	± 9.6 %
		Y	1.51	64.78	10.03		80.0	
		Z	1.21	63.05	9.70		80.0	
10472- AAC	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 64- QAM, UL Subframe=2,3,4,7,8,9)	×	0.91	60.00	7.61	3.23	80.0	± 9.6 %
		Y	0.89	60.04	7.32		80.0	
		Z	0.89	60.00	7.66		80.0	
10473- AAC	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	72.58	117.11	28.59	3.23	80.0	± 9.6 %
		Y	100.00	123.64	30.59		80.0	
		Z	100.00	123.61	30.54		80.0	
10474- AAC	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 16- QAM, UL Subframe=2,3,4,7,8,9)	X	1.06	61.62	8.95	3.23	80.0	± 9.6 %
		Y	1.50	64.73	10.01		80.0	
		Z	1.20	63.02	9.68		80.0	
10475- AAC	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 64- QAM, UL Subframe=2,3,4,7,8,9)	X	0.91	60.00	7.61	3.23	80.0	± 9.6 %
		Y	0.89	60.02	7.32		80.0	
		Z	0.89	60.00	7.66	-i -	80.0.	

10477- AAC	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 16- QAM, UL Subframe=2,3,4,7,8,9)	X	1.04	61.46	8.85	3.23	80.0	± 9.6 %
		Y	1.44			<u> </u>		
				64.36	9.83		80.0	
10478-	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 64-	† <u>₹</u>	1.17	62.77	9.54		80.0	
AAC	QAM, UL Subframe=2,3,4,7,8,9)		0.91	60.00	7.60	3.23	80.0	± 9.6 %
		Y	0.89	60.00	7.29		80.0	
10479-	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz,	Z	0.89	60.00	7.65		80.0	+
AAA	QPSK, UL Subframe=2,3,4,7,8,9)	X	8.21	87.49	22.94	3.23	80.0	± 9.6 %
		<u> </u>	20.18	101.14	27.13		80.0	
10480-	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz,	Z	18.46	99.74	26.54		80.0	
AAA	16-QAM, UL Subframe=2,3,4,7,8,9)	X	5.14	76.02	17.14	3.23	80.0	± 9.6 %
		Y	17.56	91.22	21.83		80.0	
10481-		Z	8.18	81.93	19.01		80.0	+
	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	3.78	71.70	15.15	3.23	80.0	± 9.6 %
		Y	9.36	82.53	18.82		80.0	<u>+</u>
10482-		<u>Z</u>	4.98	75.18	16.32		80.0	<u>├~~</u>
AAA	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	2.35	69.25	15.02	2.23	80.0	± 9.6 %
		Υ	3.01	72.46	16.59	<u> </u>	80.0	†
10400		Z	2.33	69.25	14.80		80.0	<del> </del>
10483- AAA	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	Х	3.09	69.06	14.42	2.23	80.0	± 9.6 %
		Y	4.90	74.92	16.84		80.0	
10101		Ζ	3.31	69.99	14.61		80.0	· · · · · · · · · · · · · · · · · · ·
10484- AAA	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	2.93	68.12	14.03	2.23	80.0	± 9.6 %
		Y.	4.36	73.23	16.22	··	80.0	
		Ž	3.05	68.75	14.10		80.0	<b>├─</b> ──-
10485- AAC	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	x	2.95	72.33	17.49	2.23	80.0	± 9.6 %
		Y	3.47	74.53	18.53		80.0	
10 100		Ž	3.08	73.09	17.68		80.0	
10486- AAC	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	2.76	67.89	15.02	2.23	80.0	± 9.6 %
		Y	3.16	69.70	15.94		80.0	<u> </u>
		Z	2.75	68.00	14.88		80.0	
10487- AAC	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	2.75	67.50	14.83	2.23	80.0	± 9.6 %
		Y	3.13	69.21	15.71		80.0	
<u></u>		Z	2.74	67.55	14.66		80.0	<u> </u>
10488- AAC	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	3.27	71.87	18.23	2.23	80.0	± 9.6 %
	·	Y	3.61	73.22	18.84		80.0	
		_Z	3.35	72.44	18.47		80.0	
10489- AAC	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	3.21	68.44	16.77	2.23	80.0	± 9.6 %
		Y	3.45	69.44	17.24		80.0	
10.10		Ζ	3.25	68.82	16.89		80.0	
10490- \AC	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	3.29	68.29	16.72	2.23	80.0	± 9.6 %
	·	Y [	3.53	69.24	17.16		80.0	
0404		Z	3.33	68.65	16.82		80.0	
10491- AAC	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	3.51	70.39	17.81	2.23	80.0	± 9.6 %
		Y	3.78	71.45	18.28		80.0	
		Z	3.55	70.76	17.99		80.0	
10492- \AC	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	3.56	67.76	16.86	2.23	80.0	±9.6 %
<u>4AC</u>	10 dr un, OL OUDITAINE=2,5,4,7,0,8)			1				
4AC		Y Z	3.76	68.54	17.20		80.0	

				·				
10493-	LTE-TDD (SC-FDMA, 50% RB, 15 MHz,	Х	3.62	67.64	16.82	2.23	80.0	±9.6 %
AAC	64-QAM, UL Subframe=2,3,4,7,8,9)				47.4			
-		Y	3.82	68.40	17.14		80.0	
		Z	3.64	67.90	16.91		80.0	1000
10494- AAC	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	х	3.79	71.83	18.26	2.23	80.0	± 9.6 %
		Y	4.13	73.06	18.79		80.0	
		Z	3.85	72.23	18.46		80.0	
10495- AAC	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	3.59	68.11	17.06	2.23	80.0	± 9.6 %
		Y	3.79	68.91	17.40		80.0	
		Z	3.61	68.36	17.17		80.0	
10496- AAC	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	3.67	67.87	17.00	2.23	80.0	± 9.6 %
		Y	3.86	68.62	17.31		80.0	
-		Z	3.69	68.11	17.10		80.0	
10497- AAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	1.45	63.41	11.17	2.23	80.0	± 9.6 %
		Y	1.92	66.56	12.95		80.0	
		z	1.35	62.71	10.54		80.0	
10498-	LTE-TDD (SC-FDMA, 100% RB, 1.4	x	1.28	60.00	8.33	2.23	80.0	± 9.6 %
AAA	MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)							
		Y	1.38	60.59	8.91		80.0	
_		Z	1.25	60.00	8.01		80.0	
10499-	LTE-TDD (SC-FDMA, 100% RB, 1.4	X	1.30	60.00	8.19	2.23	80.0	±9.6 %
AAA	MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)					_		
		Y	1.33	60.08	8.49		80.0	
		Z	1.27	60.00	7.87		80.0	
10500- AAA	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	3.04	71.93	17.72	2.23	80.0	±9.6 %
		Y	3.46	73.67	18.54		80.0	
		Z	3.15	72.64	17.94		80.0	
10501- AAA	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	2.98	68.33	15.79	2.23	80.0	± 9.6 %
		ΤΥ	3.31	69.74	16.50		80.0	
		Z	3.01	68.63	15.79		80.0	
10502-   AAA	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	3.03	68.16	15.65	2.23	80.0	± 9.6 %
		Y	3.36	69.55	16.35		80.0	
		Z	3.05	68.42	15.63		80.0	
10503- AAC	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	3.23	71.65	18.12	2.23	80.0	±9.6 %
		Y	3.56	73.00	18.74	<b></b>	80.0	
		Z	3.30	72.21	18.35	<u> </u>	80.0	
10504- AAC	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	3.19	68.33	16.71	2.23	80.0	±9.6 %
		Y	3.43	69.33	17.17		80.0	
		Z	3.23	68.71	16.82		80.0	
10505- AAC	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	3.27	68.19	16.66	2.23	80.0	± 9.6 %
		Y	3.51	69.14	17.10		80.0	
		Z	3.31	68.54	16.75		80.0	
10506- AAC	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	×	3.76	71.67	18.18	2.23	80.0	± 9.6 %
		Y	4.10	72.90	18.71		80.0	
	· · · · · · · · · · · · · · · · · · ·	Z	3.81	72.07	18.38		80.0	
10507- AAC	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	3.57	68.04	17.02	2.23	80.0	±9.6%
	<u>Cubitamo 2,0,7,7,0,0)</u>	Y	3.78	68.84	17.36		80.0	1
		Ż	3.59	68.29	17.13		80.0	
	l		0.00		1 11.10		00.0	

10508- AAC	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	3.65	67.79	16.95	2.23	80.0	± 9.6 %
		Ŷ	3.85	68.55	17.26	┼━──-	80.0	+
		Z	3.67	68.04	17.05		80.0	+
10509- AAC	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	4.11	70.47	17.03	2.23	80.0	± 9.6 %
		Y	4.41	71.52	18.16	+	80.0	<u> </u>
		Z	4.14	70.76	17.87	<u> </u>	80.0	- <u>                                     </u>
10510- AAC	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	4.05	67.79	17.05	2.23	80.0	± 9.6 %
		Ŷ	4.24	68.50	17.33		80.0	+
10.0.0		Z	4.06	67.96	17.14		80.0	<u>+</u>
10511- AAC	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	4.11	67.57	17.00	2.23	80.0	± 9.6 %
		Y	4.30	68.25	17.26	† <b>-</b>	80.0	+
40540		Z	4.12	67.74	17.08	<u> </u>	80.0	+
10512- AAC	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	4.27	71.92	18.15	2.23	80.0	± 9.6 %
		Y	4.64	73.17	18.68		80.0	+
10513-		Ż	4.32	72.22	18.32	i —	80.0	<u>+</u>
AAC	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	3.94	68.01	17.14	2.23	80.0	± 9.6 %
		Y	4.13	68.75	17.43		80.0	
10514-		Z	3.95	68.18	17.23		80.0	
AAC	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	3.97	67.63	17.03	2.23	80.0	± 9.6 %
		Y	4.15	68.33	17.30		80.0	
40545		Z	3.98	67.79	17.12		80.0	<u> </u>
10515- AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps, 99pc duty cycle)	X	0.87	62.63	14.14	0.00	150.0	±9.6 %
		Y	0.97	63.74	15.08		150.0	
10516-	1555 802 115 WE 0 1 011 /5200	Z	0.87	62.85	14.30		150.0	
AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps, 99pc duty cycle)	X	0.49	69.66	15.70	0.00	150.0	± 9.6 %
		<u>Y</u>	0.68	73.95	19.23		150.0	
10517-		Z	0.52	70.86	16.45		150.0	
	IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps, 99pc duty cycle)	X	0.71	64.33	14.51	0.00	150.0	± 9.6 %
		Y	0.83	66.01	15.95		150.0	
10518-		Z	0.72	<u>64</u> .67	14.76		150.0	
AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps, 99pc duty cycle)	X	4.38	66.55	16.05	0.00	150.0	± 9.6 %
	<u> </u>	Y	4.46	66.94	16.23		150.0	
10519-	IEEE 802.11a/h WiFi 5 GHz (OFDM, 12	Z	4.35	66.64	16.08	·	150.0	
4AB	Mbps, 99pc duty cycle)	X	4.55	66.77	16.16	0.00	150.0	± 9.6 %
		Y	4.62	67.14	16.33		150.0	
10520-		Z	4.51	66.84	16.19		150.0	
AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps, 99pc duty cycle)	X	4.40	66.71	16.07	0.00	150.0	± 9.6 %
	<u> </u>	Y.	4.48	67.10	16.26		150.0	
10521-		Z	4.37	66.78	16.10		150.0	
	IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps, 99pc duty cycle)	X	4.34	66.70	16.06	0.00	150.0	± 9.6 %
	<u> </u>	Y	4.42	67.10	16.25		150.0	
10522-		Z	4.30	66.76	16.08		150.0	
AA <u>B</u>	IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps, 99pc duty cycle)	X	4.40	66.82	16.16	0.00	150.0	±9.6 %
	<u> </u>	Ý	4.48	67.21	16.34		150.0	
	1	Z	4.36	66.90	16.19		150.0	

10523-	IEEE 802.11a/h WiFi 5 GHz (OFDM, 48	X	4.29	66.70	16.01	0.00	150.0	± 9.6 %
AAB	Mbps, 99pc duty cycle)		4.23	00.10		0.00		10.0 %
		Y	4.37	67.12	16.22		150.0	
		Z	4.26	66.81	16.06		150.0	
10524- AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps, 99pc duty cycle)	X	4.34	66.74	16.12	0.00	150.0	± 9.6 %
		Y	4.42	67.13	16.31		150.0	
		Z	4.30	66.82	16.16		1 <u>50.0</u>	
10525- AAB	IEEE 802.11ac WiFi (20MHz, MCS0, 99pc duty cycle)	X	4.34	65.80	15.73	0.00	150.0	± 9.6 %
		Y	4.43	66.22	15.92		150.0	
		Z	4.32	65.90	15.77		150.0	
10526- AAB	IEEE 802.11ac WiFi (20MHz, MCS1, _99pc duty cycle)	X	4.50	66.14	15.86	0.00	150.0	±9.6 %
		Y	4 <u>.58</u>	66.55	16.05		150.0	
		Z	4.46	66.22	15.90		150.0	
10527- AAB	IEEE 802.11ac WiFi (20MHz, MCS2, 99pc duty cycle)	X	4.42	66.09	15.80	0.00	150.0	± 9.6 %
		Ϋ́	4.50	66.52	16.00		150.0	
		Z	4.38	66.18	15.84		150.0	
10528- AAB	IEEE 802.11ac WiFi (20MHz, MCS3, 99pc duty cycle)	X	4.44	66.11	15.83	0.00	150.0	± 9.6 %
		Y	4.52	66.53	16.03		150.0	
l		Z	4.40	66.19	15.87		150.0	
10529- AAB	IEEE 802.11ac WiFi (20MHz, MCS4, 99pc duty cycle)	Х	4.44	66.11	15.83	0.00	150.0	± 9.6 %
		Ϋ́	4.52	66.53	16.03		150.0	
		Z	4.40	66.19	15.87		150.0	
10531- AAB	IEEE 802.11ac WiFi (20MHz, MCS6, 99pc duty cycle)	X	4.42	66.18	15.83	0.00	150.0	± 9.6 %
		Y	4.50	66.61	16.03		150.0	
		Z	4.37	66.25	15.86		150.0	
10532- AAB	IEEE 802.11ac WiFi (20MHz, MCS7, 99pc duty cycle)	X	4.29	66.04	15.76	0.00	150.0	±9.6 %
		Y	4.37	66.48	15.97		150.0	
		Z	4.25	66.11	15.79		150.0	
10533- AAB	IEEE 802.11ac WiFi (20MHz, MCS8, 99pc duty cycle)	X	4.44	66.17	15.83	0.00	150.0	± 9.6 %
		Y	4.53	66.60	16.03		150.0	
		Z	4.41	66.26	15.87		150.0	
10534- AAB	IEEE 802.11ac WiFi (40MHz, MCS0, 99pc duty cycle)	X	4.98	66.20	15.91	0.00	150.0	±9.6 %
		Y	5.05	66.57	16.06		150.0	
		Z	4.95	66.26	15.95		150.0	
10535- AAB	IEEE 802.11ac WiFi (40MHz, MCS1, 99pc duty cycle)	X	5.05	66.39	16.00	0.00	150.0	±9.6 %
		Y	5.11	66.72	16.13		150.0	
		Z	5.01	66.43	16.03		150.0	
10536- AAB	IEEE 802.11ac WiFi (40MHz, MCS2, 99pc duty cycle)	X	4.92	66.34	15.95	0.00	150.0	± 9.6 %
		Y	4.99	66.70	16.10		150.0	
		Z	4.89	66.40	15.99		150.0	-
10537- AAB	IEEE 802.11ac WiFi (40MHz, MCS3, 99pc duty cycle)	X	4.98	66.30	15.94	0.00	150.0	± 9.6 %
		Y	5.04	66.66	16.08		150.0	
		Z	4.95	66.35	15.97	ļ	150.0	
10538- AAB	IEEE 802.11ac WiFi (40MHz, MCS4, 99pc duty cycle)	X	5.06	66.31	15.98	0.00	150.0	± 9.6 %
		Y	5.12	66.65	16.12	<u> </u>	150.0	
		Z	5.02	66.35	16.01		150.0	
10540- AAB	IEEE 802.11ac WiFi (40MHz, MCS6, 99pc duty cycle)	X	4.99	66.30	16.00	0.00	150.0	± 9.6 %
		Y	5.05	66.64	16.13		150.0	1
		Z	4.95	66.33	16.02		150.0	1

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AAB	IEEE 802.11ac WiFi (40MHz, MCS7, 99pc duty cycle)	X	4.97	66.19	15.93	0.00	150.0	± 9.6 %
		Y	5.03	66.55	16.07	<u> </u>	150.0	
10542-		<u>Z</u>	4.93	66.22	15.95		150.0	
AAB	IEEE 802.11ac WiFi (40MHz, MCS8, 99pc duty cycle)	X	5.12	66.28	15.99	0.00	150.0	±9.6 %
		Ý	5.19	66.62	16.12		150.0	+
10543-		Z	5.09	66.32	16.02		150.0	<u>+</u>
AAB	IEEE 802.11ac WiFi (40MHz, MCS9, 99pc duty cycle)	X	5.19	66.29	16.02	0.00	150.0	± 9.6 %
		<u>Y</u>	5.25	66.63	16.15		150.0	
10544-		Z	5.15	66.34	16.05		150.0	
AAB	IEEE 802.11ac WiFi (80MHz, MCS0, 99pc duty cycle)	X	5.31	66.31	15.91	0.00	150.0	± 9.6 %
		<u>Y</u>	5.37	66.66	16.05		150.0	
10545-	IEEE 802.11ac WiFi (80MHz, MCS1,	Z	5.28	66.35	15.94		150.0	
AAB	99pc duty cycle)	X	5.50	66.75	16.09	0.00	150.0	± 9.6 %
		- Y	5.54	67.02	16.18		150.0	
10546-	IEEE 802.11ac WiFi (80MHz, MCS2,	Z	5.47	66.79	16.11		150.0	
<u>AAB</u>	99pc duty cycle)	×	5.36	66.48	15.97	0.00	150.0	± 9.6 %
		Y	5.42	66.83	16.10		150.0	
10547-	IEEE 802.11ac WiFi (80MHz, MCS3,	<u>Z</u>	5.33	66.50	15.98		150.0	
	99pc duty cycle)	X	5.43	66.54	15.99	0.00	150.0	± 9.6 %
		<u>Y</u>	5.49	66.87	16.11	_	150.0	
10548-	IEEE 802.11ac WiFi (80MHz, MCS4,	Z	5.40	66.57	16.01		150.0	
<u>AAB</u>	99pc duty cycle)	X	5.66	67.42	16.40	0.00	150.0	± 9.6 %
	+	Y	5.65	67.55	16.42		150.0	
10550-		_ Z	5.60	67.37	16.38		150.0	
AAB	IEEE 802.11ac WiFi (80MHz, MCS6, 99pc duty cycle)	X	5.40	66.56	16.02	0.00	150.0	± 9.6 %
		Ý	5.45	66.87	16.13		150.0	
10551-		Z	5.37	66.62	<u>16.05</u>		150.0	
AAB	IEEE 802.11ac WiFi (80MHz, MCS7, 99pc duty cycle)	X	5.39	66.55	15.97	0.00	150.0	± 9.6 %
		Y	5.45	66.88	16.09		150.0	
10552-		Z	5.35	66.53	15.97		150.0	
AAB	IEEE 802.11ac WiFi (80MHz, MCS8, 99pc duty cycle)	X	5.32	66.38	15.89	0.00	150.0	±9.6%
	<u> </u>	<u>Y</u>	5.38	66.76	16.04		150.0	
10553-		- <u>Z</u>	5.29	66.43	15.92		150.0	
AAB	IEEE 802.11ac WiFi (80MHz, MCS9, 99pc duty cycle)	×	5.39	66.39	15.93	0.00	150.0	± 9.6 %
	<u> </u>	Y	5.45	66.75	16.07		150.0	
10551		Z	5.36	66.42	15.95		150.0	
10554- \AC	IEEE 802.11ac WiFi (160MHz, MCS0, 99pc duty cycle)	X	5.72	66.67	16.01	0.00	150.0	± 9.6 %
	<u> </u>	Ý	5.77	67.00	16.12		150.0	
10555-		Z	5.70	66.69	16.02		150.0	
AAC	IEEE 802.11ac WiFi (160MHz, MCS1, 99pc duty cycle)	X	5.84	66.96	16.13	0.00	150.0	±9.6 %
		Y	5.88	67.25	16.23		150.0	
10556-		Z	5.81	66.97	16.14		150.0	
AC	IEEE 802.11ac WiFi (160MHz, MCS2, 99pc duty cycle)	X	5.87	67.02	16.15	0.00	150.0	± 9.6 %
		Y	5.91	67.31	16.25		150.0	
0557			5.84	67.04	16.17		150.0	
10557- AAC	IEEE 802.11ac WiFi (160MHz, MCS3, 99pc duty cycle)	X	5.83	66.90	16.11	0.00	150.0	±9.6 %
		Y	5.87	67.22	16.22		150.0	
		Z	5.80	66.91	16.13		150.0	

10558- AAC	IEEE 802.11ac WiFi (160MHz, MCS4, 99pc duty cycle)	X	5.87	67.06	16.20	0.00	150.0	± 9.6 %
		Y	5.91	67.36	16.31		150.0	
	· · · · · · · · · · · · · · · · · · ·	z	5.83	67.06	16.21		150.0	
10560- AAC	IEEE 802.11ac WiFi (160MHz, MCS6, 99pc duty cycle)	x	5.86	66.91	16.17	0.00	150.0	±9.6 %
		Y	5.92	67.23	16.28		150.0	
		Z	5.83	66.92	16.18		150.0	
10561-	IEEE 802.11ac WiFi (160MHz, MCS7,	x	5.80	66.89	16.20	0.00	150.0	±9.6 %
AAC	99pc duty cycle)	Y	5.84	67.19	16.30		150.0	_
					16.30		150.0	
		Z	5.77	66.91	16.21	0.00	150.0	± 9.6 %
10562- AAC	IEEE 802.11ac WiFi (160MHz, MCS8, 99pc duty cycle)	X	5.89	67.20		0.00	-	± 9.0 %
		Y	5.93	67.48	16.44		150.0	
		Z	5.84 _	67.16	16.34		150.0	
10563- AAC	IEEE 802.11ac WiFi (160MHz, MCS9, 99pc duty cycle)	X	6.00	67.15	16.29	0.00	150.0	± 9.6 %
		Y	6.02	67.38	16.35		150.0	
_		Z	5.93	67.06	16.25		150.0	
10564- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 9 Mbps, 99pc duty cycle)	X	4.70	66.60	16.19	0.46	150.0	± 9.6 %
<u>/////\</u>		Ŷ	4.77	66.96	16.34		150.0	
		z	4.67	66.68	16.22		150.0	
10565-	IEEE 802.11g WiFi 2.4 GHz (DSSS-	X	4.92	67.06	16.53	0.46	150.0	± 9.6 %
	OFDM, 12 Mbps, 99pc duty cycle)					0.40		± 0.0 %
		≺	4.99	67.39	16.67		150.0	
		Z	4.88	67.12	16.55		150.0	
10566- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 18 Mbps, 99pc duty cycle)	X	4.75	66.88	16.33	0.46	150.0	± 9.6 %
		Y	4.82	67.22	16.47		150.0	
		Z	4.71	66.94	16.35		150.0	i
10567- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 24 Mbps, 99pc duty cycle)	Х	4.79	67.31	16.72	0.46	150.0	± 9.6 %
7000		Y	4.86	67.67	16.87		150.0	
	<u> </u>	Ż	4.75	67.38	16.75		150.0	
10568- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 36 Mbps, 99pc duty cycle)	X	4.66	66.64	16.08	0.46	150.0	± 9.6 %
7000		Y	4.73	66.98	16.23		150.0	
		Z	4.62	66.69	16.09		150.0	
10569- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 48 Mbps, 99pc duty cycle)	X	4.76	67.45	16.81	0.46	150.0	± 9.6 %
~~~		Y	4.83	67.82	16.96		150.0	
		- <u>-</u>	4.73	67.57	16.86		150.0	
10570- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 54 Mbps, 99pc duty cycle)	X	4.78	67.26	16.71	0.46	150.0	± 9.6 %
~~~		Ŷ	4.85	67.62	16.86		150.0	
		Z	4.85	67.35	16.75		150.0	
10571-	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 90pc duty cycle)	X	1.05	63.78	14.98	0.46	130.0	± 9.6 %
AAA		Y	1.16	64.84	15.77		130.0	
	·	Z		64.03	15.14		130.0	
10572-	IEEE 802.11b WiFi 2.4 GHz (DSSS, 2		1.06	64.03		- 0.46	130.0	± 9.6 %
AAA	Mbps, 90pc duty cycle)				15.34	0.46		1 9.0 %
<u> </u>		Y	1.17	65.47	16.16		130.0	
L		Z	1.07	64.63	15.52		130.0	
10573- AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps, 90pc duty cycle)	X	1.81	84.33	21.65	0.46	130.0	± 9.6 %
		Y	2.93	92.85	25.80		130.0	
		Z	2.19	87.52	22.91		130.0	
10574- AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps, 90pc duty cycle)	X	1.15	70.21	18.29	0.46	130.0	± 9.6 %
		Ŷ	1.33	72.12	19.55	1	130.0	
		Z	1.19	70.90	18.68	·· <del>  ·</del> · · · · · · · · · · · · · · · · · ·	130.0	1
L		<u> </u>	1 1.19	1 70.90	00.00	1	1 120.0	1

10575-					<u> </u>			
_AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 6 Mbps, 90pc duty cycle)	X	4.49	66.39	16.24	0.46	130.0	± 9.6 %
		Y	4.55	66.72	16.36		130.0	
		Z	4.46	66.48	16.26	· · · -	130.0	
10576- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 9 Mbps, 90pc duty cycle)	X	4.51	66.57	16.31	0.46	130.0	± 9.6 %
		Y	4.58	66.91	16.44		130.0	
		Z	4.48	66.67	16.34		130.0	
10577- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 12 Mbps, 90pc duty cycle)	X	4.70	66.85	16.48	0.46	130.0	± 9.6 %
		Y	4.77	67.17	16.60		130.0	
		Z	4.67	66.93	16.51		130.0	
10578- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 18 Mbps, 90pc duty cycle)	x	4.60	67.01	16.59	0.46	130.0	± 9.6 %
		Y	4.67	67.35	16.72		130.0	
		Z	4.57	67.10	16.62		130.0	+
10579- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 24 Mbps, 90pc duty cycle)	X	4.36	66.21	15.83	0.46	130.0	± 9.6 %
		Y	4.42	66.54	15.97		130.0	
		Ż	4.32	66.26	15.84	<u> </u>	130.0	
10580- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 36 Mbps, 90pc duty cycle)	X	4.40	66.27	15.86	0.46	130.0	±9.6 %
		Y	4.46	66.59	16.00		130.0	
		Z	4.36	66.33	15.88	<u> </u>	130.0	
10581- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 48 Mbps, 90pc duty cycle)	X	4.50	67.05	16.53	0.46	130.0	± 9.6 %
		Y	4.57	67.39	16.67		130.0	
		Z	4.47	67.15	16.57		130.0	
10582- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 54 Mbps, 90pc duty cycle)	X	4.29	65.96	15.60	0.46	130.0	± 9.6 %
		Y	4.35	66.28	15.74		130.0	
		Z	4.25	66.00	15.61		130.0	
10583- AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps, 90pc duty cycle)	X	4.49	66.39	16.24	0.46	130.0	± 9.6 %
		Y	4.55	66.72	16.36		130.0	
		z	4.46	66.48	16.26		130.0	
10584- AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps, 90pc duty cycle)	X	4.51	66.57	16.31	0.46	130.0	± 9.6 %
		Y	4.58	66.91	16.44		130.0	<u> </u>
		z	4.48	66.67	16.34		130.0	
10585- AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps, 90pc duty cycle)	X	4.70	66.85	16.48	0.46	130.0	± 9.6 %
		Y	4.77	67.17	16.60		130.0	
		z	4.67	66.93	16.51		130.0	
10586- AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps, 90pc duty cycle)	Ī	4.60	67.01	16.59	0.46	130.0	± 9.6 %
		Y	4.67	67.35	16.72		130.0	
		ż i	4.57	67.10	16.62		130.0	<u> </u>
10587- AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps, 90pc duty cycle)	X	4,36	66.21	15.83	0.46	130.0	± 9.6 %
		Y	4.42	66.54	15.97		130.0	
		Z	4.32	66.26	15.84		130.0	
10588- AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps, 90pc duty cycle)	X	4.40	66.27	15.86	0.46	130.0	± 9.6 %
		Y	4.46	66.59	16.00	•	130.0	
		Z	4.36	66.33	15.88		130.0	
10589- AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps, 90pc duty cycle)	X	4.50	67.05	16.53	0.46	130.0	±9.6 %
		Y	4.57	67.39	16.67		130.0	
		Z	4.47	67.15	16.57		130.0	
10590- AAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps, 90pc duty cycle)	×	4.29	65.96	15.60	0.46	130.0	±9.6 %
		Y	4.35	66.28	15.74		130.0	
			7.00	00.20	10.74		30.0	

10591- AAB	IEEE 802.11n (HT Mixed, 20MHz, MCS0, 90pc duty cycle)	X	4.64	66.47	16.35	0.46	130.0	± 9.6 %
		Y	4.70	66.79	16.47		130.0	
	· ·	Z	4.61	66.56	16.38		130.0	
10592- AAB	IEEE 802.11n (HT Mixed, 20MHz, MCS1, 90pc duty cycle)	X	4.78	66.80	16.49	0.46	130.0	± 9.6 %
		Y	4.84	67.11	16.60		130.0	
		Z	4.75	66.87	16.51		130.0	
10593- AAB	IEEE 802.11n (HT Mixed, 20MHz, MCS2, 90pc duty cycle)	X	4.70	66.68	16.35	0.46	130.0	± 9.6 %
		Y	4.76	67.00	16.47		130.0	
		Z	4.66	66.75	16.37		130.0	
10594- AAB	IEEE 802.11n (HT Mixed, 20MHz, MCS3, 90pc duty cycle)	X	4.76	66.86	16.52	0.46	130.0	±9.6 %
		Y	4.82	67.18	16.63		130.0	
		Z	4.72	66.94	16.54		130.0	
10595- AAB	IEEE 802.11n (HT Mixed, 20MHz, MCS4, 90pc duty cycle)	X	4.72	66.81	16.41	0.46	130.0	± 9.6 %
		Y	4.78	67.13	16.53		130.0	
		Z	4.68	66.89	16.44		130.0	
10596- AAB	IEEE 802.11n (HT Mixed, 20MHz, MCS5, 90pc duty cycle)	X	4.66	66.80	16.40	0.46	130.0	± 9.6 %
		Y	4.72	67.12	16.53		130.0	
		Z	4.62	66.87	16.43		130.0	
10597- AAB	IEEE 802.11n (HT Mixed, 20MHz, MCS6, 90pc duty cycle)	X	4.60	66.68	16.27	0.46	130.0	± 9.6 %
		Y	4.67	67.01	16.40		130.0	
		Z	4.57	66.74	16.29		130.0	
10598- AAB	IEEE 802.11n (HT Mixed, 20MHz, MCS7, 90pc duty cycle)	X	4.59	66.93	16.55	0.46	130.0	± 9.6 %
		Y	4.66	67.26	16.68		130.0	
		Z	4.56	67.00	16.58		130.0	
10599- AAB	IEEE 802.11n (HT Mixed, 40MHz, MCS0, 90pc duty cycle)	X	5.32	67.00	16.59	0.46	130.0	± 9.6 %
		Y	5.34	67.19	16.62		130.0	
		Z	5.28	67.04	16.61		130.0	
10600- AAB	IEEE 802.11n (HT Mixed, 40MHz, MCS1, 90pc duty cycle)	X	5.45	67.42	16.77	0.46	130.0	± 9.6 %
		Y	5.44	67.51	16.75		130.0	
		Z	5.41	67.45	16.79		130.0	
10601- AAB	IEEE 802.11n (HT Mixed, 40MHz, MCS2, 90pc duty cycle)	X	5.34	67.16	16.66	0.46	130.0	±9.6 %
		Y	5.36	67.35	16.69		130.0	
	· · · · · · · · · · · · · · · · · · ·	Z	5.30	67.21	16.68		130.0	
10602- AAB	IEEE 802.11n (HT Mixed, 40MHz, MCS3, 90pc duty cycle)	X	5.45	67.27	16.63	0.46	130.0	± 9.6 %
		Y	5.48	67.47	16.67		130.0	
		Z	5.43	67.37	16.68		130.0	
10603- AAB	IEEE 802.11n (HT Mixed, 40MHz, MCS4, 90pc duty cycle)	x	5.52	67.55	16.90	0.46	130.0	± 9.6 %
		Y	5.54	67.72	16.93		130.0	
		Z	5.50	67.66	16.96		130.0	
10604- AAB	IEEE 802.11n (HT Mixed, 40MHz, MCS5, 90pc duty cycle)	X	5.38	67.16	16.70	0.46	130.0	± 9.6 %
		Ý	5.41	67.36	16.73	1	_130.0	
		Z	5.38	67.32	16.78		130.0	
10605- AAB	IEEE 802.11n (HT Mixed, 40MHz, MCS6, 90pc duty cycle)	X	5.44	67.34	16.78	0.46	130.0	± 9.6 %
		Y	5.45	67.47	16.78		130.0	
		Z	5.41	67.37	16.80		130.0	
10606- AAB	IEEE 802.11n (HT Mixed, 40MHz, MCS7, 90pc duty cycle)	X	5.17	66.57	16.25	0.46	130.0	± 9.6 %
		Y	5.21	66.82	16.32	-	130.0	-
	· · · · · ·	Z	5.14	66.65	16.29	4	130.0	

10607- AAB	IEEE 802.11ac WiFi (20MHz, MCS0, 90pc duty cycle)	_ x	4.48	65.79	15.98	0.46	130.0	± 9.6 %
					<u> </u>		<u> </u>	L
	·		4.55	66.14	16.12		130.0	
10608-		Z	4.46	<u>65.</u> 89	16.02		130.0	
AAB	IEEE 802.11ac WiFi (20MHz, MCS1, 90pc duty cycle)	X	4.65	66.17	16.14	0.46	130.0	± 9.6 %
		Y	4.72	66.52	16.28		130.0	
		Z	4.61	66.26	16.18		130.0	
10609- AAB	IEEE 802.11ac WiFI (20MHz, MCS2, 90pc duty cycle)	X	4.54	66.00	15.96	0.46	130.0	± 9.6 %
		Y	4.61	66.36	16.11		130.0	
		Z	4.51	66.08	15.99		130.0	<u> </u>
10610- AAB	IEEE 802.11ac WiFi (20MHz, MCS3, 90pc duty cycle)	X	4.59	66.17	16.14	0.46	130.0	± 9.6 %
		Y	4.66	66.53	16.28		130.0	
		Z	4.56	66.26	16.17		130.0	
10611- AAB	IEEE 802.11ac WiFi (20MHz, MCS4, 90pc duty cycle)	X	4.51	65.97	15.97	0.46	130.0	± 9.6 %
		Y	4.57	66.32	16.12		130.0	
		Z	4.47	66.05	16.01	<u>-</u>	130.0	
10612- AAB	IEEE 802.11ac WiFi (20MHz, MCS5, 90pc duty cycle)	X	4.51	66.11	16.01	0.46	130.0	± 9.6 %
		Y	4.58	66.46	16.16	— <u> </u>	130.0	
		Z	4.47	66.19	16.05		130.0	<u> </u>
10613- AAB	IEEE 802.11ac WiFi (20MHz, MCS6, 90pc duty cycle)	X	4.51	65.96	15.88	0.46	130.0	± 9.6 %
		Y	4.57	66.31	16.02		130.0	
		Z	4.46	66.02	15.90		130.0	
10614- AAB	IEEE 802.11ac WiFi (20MHz, MCS7, 90pc duty cycle)	X	4.46	66.18	16.13	0.46	130.0	± 9.6 %
		Ý	4.53	66.55	16.29		130.0	
		Z	4.43	66.26	16.17		130.0	
10615- AAB	IEEE 802.11ac WiFi (20MHz, MCS8, 90pc duty cycle)	X	4.50	65.78	15.73	0.46	130.0	± 9.6 %
		Y	4.57	66.13	15.88		130.0	
		Z	4.46	65.86	15.76		130.0	
10616- AAB	IEEE 802.11ac WiFi (40MHz, MCS0, 90pc duty cycle)	X	5.13	66.23	16.19	0.46	130.0	± 9.6 %
		Y	5.18	66.52	16.28		130.0	
		Ž	5.10	66.28	16.22		130.0	
10617- AAB	IEEE 802.11ac WiFi (40MHz, MCS1, 90pc duty cycle)	X	5.21	66.44	16.26	0.46	130.0	± 9.6 %
		Ŷ	5.24	66.68	16.33		130.0	
		Z	5.17	66.48	16.29		130.0	
10618- AAB	IEEE 802.11ac WiFi (40MHz, MCS2, 90pc duty cycle)	X	5.09	66.44	16.28	0.46	130.0	± 9.6 %
		Y	5.14	66.73	16.37		130.0	
100.0		Z	5.07	66.51	16.32		130.0	
10619- AAB	IEEE 802.11ac WiFi (40MHz, MCS3, 90pc duty cycle)	X	5.10	66.22	16.10	0.46	130.0	± 9.6 %
	<u> </u>	Y_	5.14	66.49	16.19		130.0	
		Z	5.07	66.27	16.13		130.0	
10620- AAB	IEEE 802.11ac WiFi (40MHz, MCS4, 90pc duty cycle)	X	5.19	66.25	16.17	0.46	130.0	± 9.6 %
		Y	5.23	66.52	16.25		130.0	
1000 1		<u>Z</u>	5.15	66.30	16.20		130.0	
10621- AAB	IEEE 802.11ac WiFi (40MHz, MCS5, 90pc duty cycle)	×	5.20	66.42	16.38	0.46	130.0	± 9.6 %
		Y	5.25	66.70	16.46		130.0	
1		Z	5.17	66.46	16.41		130.0	
10622- AAB	IEEE 802.11ac WiFi (40MHz, MCS6, 90pc duty cycle)	X	5.21	66.59	16.46	0.46	130.0	± 9.6 %
		Y	5.25	66.84	16.53		130.0	
		Z	5.16	66.58				

10623- AAB	IEEE 802.11ac WiFi (40MHz, MCS7, 90pc duty cycle)	X	5.08	66.07	16.06	0.46	130.0	±9.6 %
		Y	5.13	66.35	16.15		130.0	
		Z	5.04	66.08	16.07		130.0	
10624- AAB	IEEE 802.11ac WiFi (40MHz, MCS8, 90pc duty cycle)	X	5.27	66.29	16.24	0.46	130.0	±9.6 %
		Y	5.32	66.55	16.31		130.0	
		Z	5.24	66.33	16.26		130.0	
10625- AAB	IEEE 802.11ac WiFi (40MHz, MCS9, 90pc duty cycle)	X	5.56	67.05	16.67	0.46	130.0	± 9.6 %
		Y	5.57	67.20	16.69	1	130.0	
		Z	5.45	66.85	16.58		130.0	
10626- AAB	IEEE 802.11ac WiFi (80MHz, MCS0, 90pc duty cycle)	X	5.45	66.29	16.15	0.46	130.0	± 9.6 %
		Y	5.49	66.58	16.24		130.0	
		Z	5.42	66.33	16.18		130.0	
10627- AAB	IEEE 802.11ac WiFi (80MHz, MCS1, 90pc duty cycle)	X	5.69	66.90	16.42	0.46	130.0	± 9.6 %
	· · · · · · · · · · · · · · · · · · ·	Y	5.70	67.08	16.45		130.0	
		Z	5.66	66.94	16.45		130.0	
10628- AAB	IEEE 802.11ac WiFi (80MHz, MCS2, 90pc duty cycle)	X	5.46	66.33	16.07	0.46	130.0	± 9.6 %
		Y	5.50	66.60	16.14		130.0	
<u> </u>		Z	5.42	66.33	16.07	ĺ	130.0	
10629- AAB	IEEE 802.11ac WiFi (80MHz, MCS3, 90pc duty cycle)	×	5.54	66.41	16.10	0.46	130.0	± 9.6 %
		Y	5.57	66.66	16.17		130.0	
		Z	5.51	66.44	16.12		130.0	
10630- AAB	IEEE 802.11ac WiFi (80MHz, MCS4, 90pc duty cycle)	X	5.93	67.80	16.79	0.46	130.0	± 9.6 %
		Y	5.86	67.72	16.70		130.0	İ
		Z	5.85	67.67	16.74		130.0	
10631- AAB	IEEE 802.11ac WiFi (80MHz, MCS5, 90pc duty cycle)	X	5.84	67.65	16.92	0.46	130.0	±9.6 %
		Y	5.86	67.82	16.94		130.0	
		Z	5.79	67.61	16.91		130.0	1
10632- AAB	IEEE 802.11ac WiFi (80MHz, MCS6, 90pc duty cycle)	Х	5.66	66.99	16.61	0.46	130.0	± 9.6 %
		Y	5.68	67.19	16.65		130.0	
		Z	5.64	67.07	16.66		130.0	<u> </u>
10633- AAB	IEEE 802.11ac WiFi (80MHz, MCS7, 90pc duty cycle)	X	5.53	66.52	16.20	0.46	130.0	± 9.6 %
		Y	5.57	66.82	16.28		130.0	
		Z	5.50	66.56	16.22		130.0	
10634- AAB	IEEE 802.11ac WiFi (80MHz, MCS8, 90pc duty cycle)	X	5.51	66.55	16.27	0.46	130.0	± 9.6 %
		Y	5.56	66.86	16.37		130.0	
		Z	5.48	66.58	16.29		130.0	
10635- AAB	IEEE 802.11ac WiFi (80MHz, MCS9, 90pc duty cycle)	X	5.38	65.83	15.63	0.46	130.0	± 9.6 %
		Y	5.42	66.12	15.72	1	130.0	1
		Z	5.34	65.82	15.63	<u> </u>	130.0	
10636- AAC	IEEE 802.11ac WiFi (160MHz, MCS0, 90pc duty cycle)	Х	5.87	66.66	16.24	0.46	130.0	± 9.6 %
		Y	5.90	66.93	16.31		130.0	1
		Z_	5.85	66.69	16.27		130.0	
10637- AAC	IEEE 802.11ac WiFi (160MHz, MCS1, 90pc duty cycle)	X	6.02	67.05	16.42	0.46	130.0	± 9.6 %
		Y	6.04	67.25	16.46		130.0	
		Z	5.99	67.06	16.43	1	130.0	
10638- AAC	IEEE 802.11ac WiFi (160MHz, MCS2, 90pc duty cycle)	X	6.02	67.01	16.38	0.46	130.0	± 9.6 %
			1		_	1		I
		Y	6.04	67.26	16.44		130.0	

10639-	IEEE 802.11ac WiFi (160MHz, MCS3,		Enc					ruary 14, 2(
AAC	90pc duty cycle)	>	( 5.99	66.94	16.39	0.46	130.0	± 9.6 %
		Y		67.20	16.45		130.0	<u> </u>
10640-		Z	5.96	66.96	16.40		130.0	
AAC	IEEE 802.11ac WiFi (160MHz, MCS4, 90pc duty cycle)		5.99	66.93	16.32		130.0	± 9.6 9
		Y		67.17	16.38	+	130.0	
10641-	IEEE 800 dda a thille and a	Z		66.93	16.33		130.0	
AAC	IEEE 802.11ac WiFi (160MHz, MCS5, 90pc duty cycle)	X	6.05	66.90	16.33	0.46	130.0	± 9.6 %
		Y		67.10	16.36	- <u></u>	130.0	
10642-	IEEE 802.11ac WiFi (160MHz, MCS6,	Z		66.93	16.35		130.0	
AAC	90pc duty cycle)	X		67.13	16.62	0.46	130.0	± 9.6 %
		Y		67.39	16.68		130.0	<u> </u>
10643-	IEEE 802.11ac WiFi (160MHz, MCS7,	Z		67.15	16.64		130.0	<u> </u>
AAC 90pc duty cycle)	90pc duty cycle)	X		66.82	16.35	0.46	130.0	± 9.6 %
		<u> </u>		67.04	16.40		130.0	+
10644-	IEEE 802.11ac WiFi (160MHz, MCS8,	Z		66.84	16.37		130.0	† — —
AAC	90pc duty cycle)	X		67.19	16.56	0.46	130.0	± 9.6 %
		- <u> </u>	6.06	67.41	16.60		130.0	<u> </u>
10645-	IEEE 802.11ac WiFi (160MHz, MCS9,	Z	5.99	67.13	16.53		130.0	
AAC	90pc duty cycle)	X	6.20	67.30	16.58	0.46	130.0	± 9.6 %
		<u> </u>	6.18	67.42	16.57		130.0	
10646-	LTE-TDD (SC-FDMA, 1 RB, 5 MHz,	<u>Z</u>	6.12	67.19	16.53		130.0	
AAD	QPSK, UL Subframe=2,7)	X	13.97	103.27	34.96	9.30	60.0	±9.6 %
		Y	20.81	112.89	38.12		60.0	
10647-	LTE-TDD (SC-FDMA, 1 RB, 20 MHz,	Z	13.67	103.09	35.06		60.0	
AAC	QPSK, UL Subframe=2,7)	X	12.30	101.10	34.41	9.30	60.0	± 9.6 %
		<u>Y</u>	17.37	109.51	37.26		60.0	
10648-	CDMA2000 (1x Advanced)	Z X	12.00	100.85	34.49		60.0	
			0.49	61.28	8.20	0.00	150.0	±9.6 %
		- Y	0.65	63.85	10.60		150.0	
0652-	LTE-TDD (OFDMA, 5 MHz, E-TM 3.1,	Z	0.46	61.03	7.80		150.0	
AB	Clipping 44%)	X	3.40	66.41	16.15	2.23	80.0	± 9.6 %
		Y	3.58	67.18	16.52		80.0	
0653-	LTE-TDD (OFDMA, 10 MHz, E-TM 3.1,	<u>Z</u>	3.42	66.69	16.22		80.0	<u> </u>
AB	Clipping 44%)	X	3.94	65.81	16.40	2.23	80.0	± 9.6 %
		Y Z	4.08	66.40	16.64		80.0	
0654- AB	LTE-TDD (OFDMA, 15 MHz, E-TM 3.1, Clipping 44%)	X	<u>3.94</u> 3.93	66.00 65.47	<u>16.46</u> 16.42	2.23	80.0 80.0	± 9.6 %
		Y	4.06	66.03	-10.01			
		z z	3.94	65.63	16.64		80.0	
0655-	LTE-TDD (OFDMA, 20 MHz, E-TM 3.1,	X	3.99	65.43	16.48		80.0	·····
AB	Clipping 44%)	Y			16.46	2.23	80.0	±9.6 %
		Z	4.13	65.99	16.67		80.0	
0658- 4A	Pulse Waveform (200Hz, 10%)	X	7.13	65.5 <u>8</u> 77.36	<u>16.52</u> 16.21	10.00	80.0 50.0	±9.6 %
		Y	16.32	87.94				
		z	9.11	80.61	19.95		50.0	
	Ded 184				17.72		50.0	
0659- AA	Pulse Waveform (200Hz, 20%)	X	35.68	94.53	19.76	6.99	60.0	±9.6 %
	Pulse vvaveform (200Hz, 20%)		35.68	94.53	19.76	6.99	60.0 60.0	±9.6 %

10660-	Pulse Waveform (200Hz, 40%)	X	100.00	100.10	18.83	3.98	80.0	±9.6 %
AAA			100.00	106,47	21.86		80.0	
		Ż	100.00	102.58	20.01		80.0	
10661-	Pulse Waveform (200Hz, 60%)	X	1.25	67.33	8.37	2.22	100.0	± 9.6 %
AAA		Ý	100.00	108.17	21.47		100.0	
		Z	100.00	96.28	16.23		100.0	
10662-	Pulse Waveform (200Hz, 80%)	x	0.30	60.00	2.55	0.97	120.0	± 9.6 %
<u>AAA</u>	- <u> </u>		100.00	113.09	21.91		120.0	
		Z	0.20	60.00	3.18		120.0	

<sup>E</sup> 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 Engineering AG Zeughausstrasse 43, 8004 Zurich, Switzerland Hac-MRA



SSchweizerischer KallbrierdienstCService suisse d'étalonnageSServizio svizzero di taraturaSwiss Calibration Service

Issued: April 18, 2017

Accreditation No.: SCS 0108

Accredited by the Swiss Accreditation Service (SAS) The Swiss Accreditation Service is one of the signatories to the EA Multilateral Agreement for the recognition of calibration certificates

PC Test Client

Certificate No: EX3-7406\_Apr17

CALIBRATION	CERTIFICATE		
Object	EX3DV4 - SN:7406	<b>)</b>	
Calibration procedure(s)		CAL-12.v9, QA CAL-23.v5, QA ure for dosimetric E-field probes	CAL-25.V6 BNN 5-3-2017
	· · · · · · · · · · · · · · · · · · ·		5-3-2017
Calibration date:	April 18, 2017		
		al standards, which realize the physical units obability are given on the following pages and a	
The measurements and the unc	enainties with confidence pro-	ability are given on the following pages and c	ne part of the continuate.
All calibrations have been condu	ucted in the closed laboratory f	facility: environment temperature (22 ± 3)°C a	nd humidity < 70%.
Calibration Equipment used (M8	TE critical for calibration)		
Primary Standards		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 Attenualor	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		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 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: Oct-17
Network Analyzer HP 8753E	SN: US37390585	18-Oct-01 (in house check Oct-16)	
	Name	Function	Signature
Calibrated by:	Michael Weber	Laboratory Technician	Milles -
Approved by:	Katja Pokovic	Technical Manager	10M

This calibration certificate shall not be reproduced except in full without written approval of the laboratory.

## **Calibration Laboratory of** Schmid & Partner

Engineering AG Zeughausstrasse 43, 8004 Zurich, Switzerland



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Accreditation No.: SCS 0108

- Servizio svizzero di taratura S
- Swiss Calibration Service

Accredited by the Swiss Accreditation Service (SAS) The Swiss Accreditation Service is one of the signatories to the EA Multilateral Agreement for the recognition of calibration certificates

#### Glossarv:

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 $\phi$	φ rotation around probe axis
Polarization 9	$\vartheta$ rotation around an axis that is in the plane normal to probe axis (at measurement center), i.e., $\vartheta = 0$ is normal to probe axis
	the second s

information used in DASY system to align probe sensor X to the robot coordinate system Connector Angle

#### 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
- IEC 62209-2. "Procedure to determine the Specific Absorption Rate (SAR) for wireless communication devices c) 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.v.z: Assessed for E-field polarization  $\vartheta = 0$  (f  $\leq 900$  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<sup>2</sup>-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:7406

Manufactured: November 24, 2015 Calibrated: April 18, 2017 April 18, 2017

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

#### Basic Calibration Parameters

	Sensor X	Sensor Y	Sensor Z	Unc (k=2)
Norm $(\mu V/(V/m)^2)^A$	0.47	0.42	0.45	± 10.1 %
DCP (mV) <sup>B</sup>	99.5	98.3	95.1	

#### **Modulation Calibration Parameters**

UID	Communication System Name		Α	В	C	D	VR	Unc <sup>E</sup>
			dB	dBõV		dB	mV	(k=2)
0	CW	X	0.0	0.0	1.0	0.00	138.9	±2.5 %
		Y	0.0	0.0	1.0		129.6	
		Z	0.0	0.0	1.0		128.2	

Note: For details on UID parameters see Appendix.

#### Sensor Model Parameters

	C1	C2	α	T1	T2	Т3	T4	T5	T6
	fF	fF	V <sup>−1</sup>	ms.V⁻²	ms.V⁻¹	ms	V <sup>-2</sup>	V-1	
Х	48.83	366.9	<b>3</b> 6.13	15.06	1.101	4.968	0.251	0.437	1.003
Y	19.57	145.7	35.6	3.888	0.704	4.934	0	0.021	1.004
Z	45.42	343.9	36.58	10.69	0.846	4.98	0	0.36	1.004

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%.

<sup>A</sup> The uncertainties of Norm X,Y,Z do not affect the E<sup>2</sup>-field uncertainty inside TSL (see Pages 5 and 6).

<sup>B</sup> Numerical linearization parameter: uncertainty not required.

<sup>E</sup> Uncertainty is determined using the max. deviation from linear response applying rectangular distribution and is expressed for the square of the field value.

f (MHz) <sup>c</sup>	Relative Permittivity <sup>F</sup>	Conductivity (S/m) <sup>F</sup>	ConvF X	ConvF Y	ConvF Z	Alpha <sup>G</sup>	Depth <sup>G</sup> (mm)	Unc (k=2)
600	42.7	0.88	10.42	10.42	10.42	0.10	1.20	± 13.3 %
750	41.9	0.89	10.26	10.26	10.26	0.52	0.80	± 12.0 %
835	41.5	0.90	9.97	9.97	9.97	0.53	0.81	± 12.0_%
1750	40.1	1.37	8.88	8.88	8.88	0.42	0.80	± 12.0 %
1900	40.0	1.40	8.40	8.40	8.40	0.26	0.87	± 12.0 %
2300	39.5	1.67	8.04	8.04	8.04	0.25	0.80	± 12.0 %
2450	39.2	1.80	7.68	7.68	7.68	0.38	0.80	± 12.0 %
2600	39.0	1.96	7.44	7.44	7.44	0.40	0.83	± 12.0 %

#### Calibration Parameter Determined in Head Tissue Simulating Media

<sup>c</sup> 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. <sup>F</sup> At frequencies below 3 GHz, the validity of tissue parameters ( $\epsilon$  and  $\sigma$ ) can be relaxed to ± 10% if liquid compensation formula is applied to

<sup>F</sup> At frequencies below 3 GHz, the validity of tissue parameters ( $\epsilon$  and  $\sigma$ ) 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 ( $\epsilon$  and  $\sigma$ ) is restricted to ± 5%. The uncertainty is the RSS of the ConvF uncertainty for indicated target tissue parameters.

<sup>G</sup> 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.

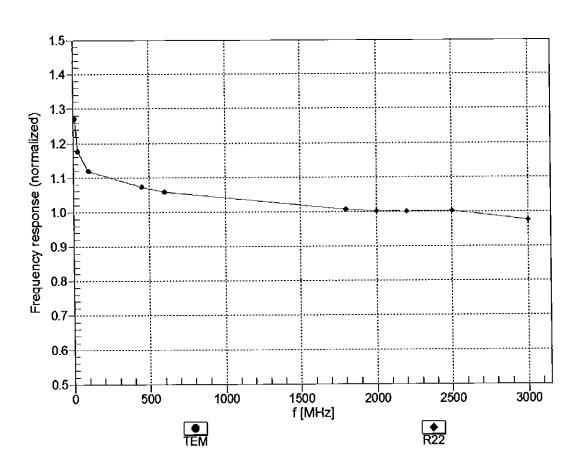
f (MHz) <sup>C</sup>	Relative Permittivity <sup>F</sup>	Conductivity (S/m) <sup>F</sup>	ConvF X	ConvF Y	ConvF Z	Alpha <sup>G</sup>	Depth <sup>G</sup> (mm)	Unc (k=2)
600	56.1	0.95	10.82	10.82	10.82	0.10	1.20	± 13.3 %
750	55.5	0.96	9,90	9.90	9.90	0.51	0.83	± 12.0 %
835	55.2	0.97	9.77	9.77	9.77	0.46	0.80	± 12.0 %
1750	53.4	1.49	8.08	8.08	8.08	0.41	0.85	± 12.0 %
1900	53.3	1.52	7.81	7.81	7.81	0.44	0.80	± 12.0 %
2300	52.9	1.81	7.65	7.65	7.65	0.38	0.84	± 12.0 %
2450	52.7	1.95	7.60	7.60	7.60	0.33	0.89	± 12.0 %
2600	52.5	2.16	7.31	7.31	7.31	0.31	0.94	± 12.0 %

#### **Calibration Parameter Determined in Body Tissue Simulating Media**

<sup>c</sup> 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. <sup>F</sup> At frequencies below 3 GHz, the validity of tissue parameters ( $\epsilon$  and  $\sigma$ ) can be relaxed to ± 10% if liquid compensation formula is applied to

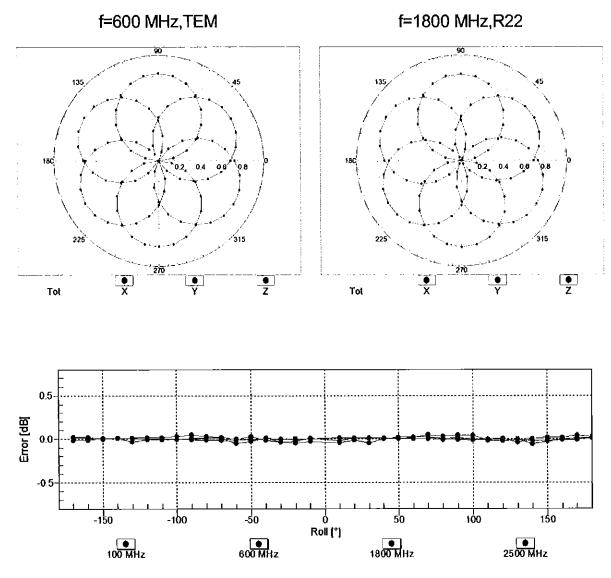
<sup>F</sup> At frequencies below 3 GHz, the validity of tissue parameters ( $\epsilon$  and  $\sigma$ ) can be relaxed to ± 10% if liquid compensation formula is applied to measured SAR values. At frequencies above 3 GHz, the validity of tissue parameters ( $\epsilon$  and  $\sigma$ ) is restricted to ± 5%. The uncertainty is the RSS of the ConvF uncertainty for indicated target tissue parameters. <sup>G</sup> Alpha/Depth are determined during calibration. SPEAG warrants that the remaining deviation due to the boundary effect after compensation is

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



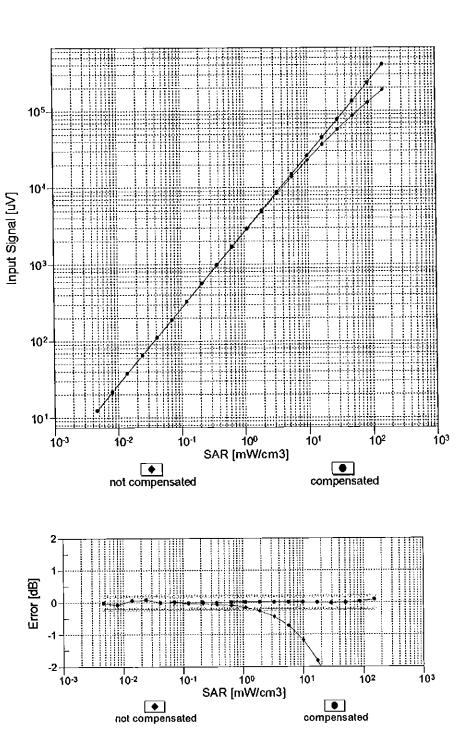
## Frequency Response of E-Field (TEM-Cell:ifi110 EXX, Waveguide: R22)

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



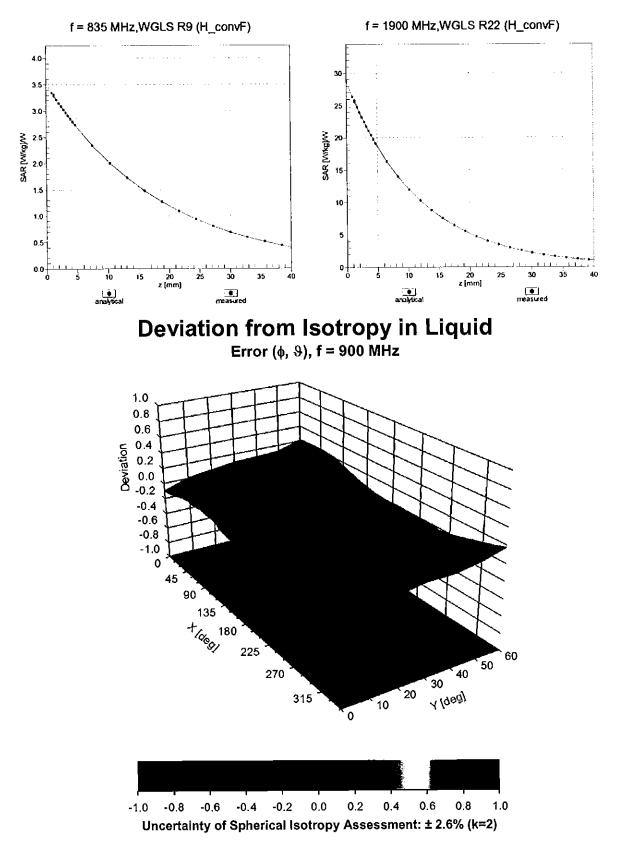
## Receiving Pattern ( $\phi$ ), $\vartheta = 0^{\circ}$

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



Dynamic Range f(SAR<sub>head</sub>) (TEM cell , f<sub>eval</sub>= 1900 MHz)

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



## **Conversion Factor Assessment**

#### **Other Probe Parameters**

Sensor Arrangement	Triangular
Connector Angle (°)	0
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

#### April 18, 2017

#### EX3DV4-SN:7406

#### **Appendix: Modulation Calibration Parameters**

UID	Communication System Name		A dB	B dBõV	С	D dB	VR mV	Max Unc <sup>E</sup> (k=2)
0	CW	X	0.00	0.00	1.00	0.00	138.9	± 2.5 %
		Y	0.00	0.00	1.00		129.6	
		Z	0.00	0.00	1.00		128.2	
10010- CAA	SAR Validation (Square, 100ms, 10ms)	X	2.73	66.22	10.89	10.00	20.0	± 9.6 %
		Y	2.50	65.91	10.39		20.0	
		Z	2.53	65.90	10.54		20.0	
10011- CAB	UMTS-FDD (WCDMA)	х	1.16	69.53	16.71	0.00	150.0	± 9.6 %
		Y	1.55	76.79	19.47		150.0	
10010		Z	1.09	68.24	15.96	0.44	150.0	
10012- CAB	IEEE 802.11b WIFi 2.4 GHz (DSSS, 1 Mbps)	X	1.21	64.38	15.70	0.41	150.0	±9.6 %
		Y	1.20	65.37	16.13		150.0	
40040		Z	1.18	63.82	15.33 16.98	1.46	150.0 150.0	± 9.6 %
10013- CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 6 Mbps)	X	4.87	66.56		1.40		±9.0 %
		Y	4.34	67.27	16.96		150.0	
10021- DAC	GSM-FDD (TDMA, GMSK)	Z X	4,83 9.99	66.50 82.36	16.95 18.50	9.39	150.0 50.0	± 9.6 %
		Y	13.63	85.86	18.88		50.0	
		z	18.22	90.00	20.60		50.0	
10023- DAC	GPRS-FDD (TDMA, GMSK, TN 0)	X	8.49	80.16	17.78	9.57	50.0	±9.6 %
		Y	7.32	78.16	16.31		50.0	
		Ζ	12.47	85.19	19.17		50.0	
10024- DAC	GPRS-FDD (TDMA, GMSK, TN 0-1)	Х	18.19	89.55	19.31	6.56	60.0	±9.6 %
		Y	100.00	107.67	23.01		60.0	
		Z	100.00	108.36	23.76		60.0	
10025- DAC	EDGE-FDD (TDMA, 8PSK, TN 0)	Х	5.54	75.78	27.74	12.57	50.0	± 9.6 %
		Y	8.76	92.32	36.08		50.0	
		Z	4.44	70.37	25.26	0.50	50.0 60.0	1069/
10026- DAC	EDGE-FDD (TDMA, 8PSK, TN 0-1)	X	9.90	90.96	31.21	9.56	60.0	± 9.6 %
		Y Z	5.70 7.85	81.99 86.95	30.11		60.0	
10027-	GPRS-FDD (TDMA, GMSK, TN 0-1-2)	X	100.00	106.69	22.59	4.80	80.0	± 9.6 %
DAC		Y	100.00	110.45	23.34	<u> </u>	80.0	<u> </u>
	· · · · · · · · · · · · · · · ·	z	100.00	108.23	22.93		80.0	
10028- DAC	GPRS-FDD (TDMA, GMSK, TN 0-1-2-3)	X	100.00	107.01	22.11	3.55	100.0	± 9.6 %
		Y	100.00	117.41	25.54	1	100.0	
		Z	100.00	109.42	22.79		100.0	
10029- DAC	EDGE-FDD (TDMA, 8PSK, TN 0-1-2)	X	6.41	81.80	26.70	7.80	80.0	± 9.6 %
		Y	3.86	73.74	24.21		80.0	
10030-	IEEE 802.15.1 Bluetooth (GFSK, DH1)	Z X	5.17 13.75	78.18 86.21	25.56 17.68	5.30	80.0	± 9.6 %
CAA			0.11	00.70	45.00	—	70.0	<u> </u>
		Y	8.41	82.76	15.88		70.0	
10031-	IEEE 802.15.1 Bluetooth (GFSK, DH3)	Z X	100.00 100.00	106.60 106.42	22.49 20.68	1.88	100.0	± 9.6 %
		Y	100.00	120.98	25.51	1	100.0	1
<del>_</del>		z	100.00	108.89	21.35	+	100.0	1

10032-	IEEE 802.15.1 Bluetooth (GFSK, DH5)	X	100.00	113.18	22.62	1.17	100.0	± 9.6 %
		<u> </u>	ļ					
<u> </u>		Y	100.00	160.14	39.75		100.0	
10033-	IEEE 802 15 1 Plustoath (Pl/4 DODCK	Z	100.00	117.70	24.05	l	100.0	
	IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH1)	X	6.02	81.27	20.17	5.30	70.0	± 9.6 %
		Y	2.18	67.67	12.00		70.0	
10034-		Z	5.24	80.63	20.08		70.0	
CAA	IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH3)	X	2.82	75.11	17.10	1.88	100.0	± 9.6 %
	+	Y	0.75	61.82	7.32		100.0	
10035-	IEEE 802.15.1 Bluetooth (PI/4-DQPSK,	Z	2.29	73.13	16.28		100.0	
CAA	DH5)	X X	2.17	73.18	16.32	1.17	100.0	± 9.6 %
		Y	0.59	61.24	6.75		100.0	
10036-	IEEE 802.15.1 Bluetooth (8-DPSK, DH1)	Z	1.79	71.19	15.39		100.0	
CAA		X	7.12	83.90	21.15	5.30	70.0	± 9.6 %
	<u> </u>	Y	2.26	68.25	12.32		70.0	
10037-		Z	6.24	83.43	21.13		70.0	
CAA	IEEE 802.15.1 Bluetooth (8-DPSK, DH3)	X	2.66	74.41	16.79	1.88	100.0	± 9.6 %
		<u>Y</u>	0.71	61.41	7.10		100.0	
10038-	IEEE 802.15.1 Bluetooth (8-DPSK, DH5)	Z	2.15	72.41	15.96	l	100.0	
CAA		X	2.20	73.62	16.61	1.17	100.0	± 9.6 %
		<u>Y</u>	0.60	61.36	6.93		100.0	
10039-		Z	1.80	71.51	15.64		100.0	
CAB	CDMA2000 (1xRTT, RC1)	X	2.76	78.09	18.48	0.00	150.0	± 9.6 %
		Y	0.37	60.00	5.64		150.0	
40040		Ζ	2.22	74.97	16.93		150.0	
10042- CAB	IS-54 / IS-136 FDD (TDMA/FDM, PI/4- DQPSK, Halfrate)	X	7.43	78.80	16.12	7.78	50.0	± 9.6 %
		Y	8.26	80.71	16.15		50.0	
100(1		Z	12.01	84.59	17.75		50.0	
10044- CAA	IS-91/EIA/TIA-553 FDD (FDMA, FM)	X	0.00	100.49	0.10	0.00	150.0	± 9.6 %
		Y	0.04	60.00	50.13		150.0	
		Z	0.00	96.59	0.05		150.0	
10048- CAA	DECT (TDD, TDMA/FDM, GFSK, Full Slot, 24)	X	6.27	73.35	16.78	13.80	25.0	± 9.6 %
		Y	5.47	69.78	14.42		25.0	
40040		Z	7.09	74.59	16.89		25.0	
10049- CAA	DECT (TDD, TDMA/FDM, GFSK, Double Slot, 12)	X	6.62	76.07	16.59	10.79	40.0	± 9.6 %
	+	Y	5.50	73.13	14.63		40.0	
40050		Z	7.47	77.74	16.92		40.0	<u> </u>
10056- CAA	UMTS-TDD (TD-SCDMA, 1.28 Mcps)	X	8.73	81.97	20.70	9.03	50.0	± 9.6 %
		Y	5.30	74.02	15.71		50.0	<b>—</b> — –
40050		Z	9.70	84.35	21.49		50.0	
10058- DAC	EDGE-FDD (TDMA, 8PSK, TN 0-1-2-3)	X	4.93	77.02	24.10	6.55	100.0	±9.6 %
		Y	3.18	70.36	21.96		100.0	
40050		Z	4.10	73.99	23.08		100.0	·
10059- CAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps)	х	1.26	65.49	16.19	0.61	110.0	± 9.6 %
		Y	1.20	65.95	16.36		110.0	<u> </u>
40000		Z	1.20	64.67	15.74		110.0	
10060- CAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps)	X	13.21	104.87	27.26	1.30	110.0	± 9.6 %
		Y	4.90	96.93	26.57		110.0	<b>├───</b> ── <b> </b>
		Z	4.52	91.43	23.95		110.0	

10061-	IEEE 802.11b WiFi 2.4 GHz (DSSS, 11	X	2.92	78.86	20.97	2.04	110.0	±9.6 %
CAB	Mbps)							
		Y	1.70	73.25	19.05		110.0	
10062-		<u>Z</u>	2.19	75.27	19.88	0.10	110.0	
CAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps)	X	4.70	66.68	16.55	0.49	100.0	± 9.6 %
		<u> </u>	4.18	67.42	16.56		100.0	
		_ Z ]	4.65	66.61	16.51		100.0	
10063- CAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps)	X	4.70	66.73	16.62	0.72	100.0	± 9.6 %
_		Y	4.18	67.49	16.63		100.0	
		Ζ	4.66	66.66	16.57		100.0	
10064- CAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps)	X	4.99	66.98	16.82	0.86	100.0	± 9.6 %
		Y	4.36	67.60	16.75		100.0	
		Z	4.94	66.90	16.78		100.0	
10065- CAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps)	X	4.85	66.84	16.87	1.21	100.0	±9.6 %
		Y	4.23	67.25	16.71		100.0	
		Z	4.80	66.75	16.83		100.0	
10066- CAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps)	X	4.86	66.83	16.99	1.46	100.0	± 9.6 %
		Y	4.21	67.08	16.71		100.0	
		Z	4.80	66.72	_ 16.95		100.0	
10067- CAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps)	X	5.14	66.93	17.36	2.04	100.0	±9.6 %
		Ý	4.40	67.10	16.99		100.0	
		Z	5.08	66.86	17.34		100.0	
10068- CAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps)	X	5.19	66.98	17.55	2.55	100.0	±9.6 %
		Υ	4.52	67.37	17.35		100.0	
		Z	5.12	66.84	17.50		100.0	
10069- CAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps)	X	5.27	66.95	17.72	2.67	100.0	±9.6 %
		Y	4.52	67.17	17.38	ĺ	100.0	
		Z	5.20	66.85	17.69		100.0	
10071- CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 9 Mbps)	X	4.96	66.60	17.22	1.99	100.0	± 9.6 %
	······································	TT	4.44	67.29	17.20		100.0	
		Z	4.91	66.53	17.19		100.0	
10072- CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 12 Mbps)	Х	4.94	66.90	17.40	2.30	100.0	± 9.6 %
		Υ	4.35	67.27	17.25		100.0	
		Z	4.87	66.79	17.36	l i	100.0	1
10073- CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 18 Mbps)	X	4.99	67.03	17.67	2.83	100.0	± 9.6 %
		Y	4.41	67.49	17.58		100.0	
		Z	4.92	66.90	17.63		100.0	
10074- CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 24 Mbps)	X	4.97	66.91	17.78	3.30	100.0	± 9.6 %
		Y	4.49	67.70	17.84		100.0	
		Z	4.90	66.77	17.74		100.0	
10075- CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 36 Mbps)	X	5.02	67.05	18.08	3.82	90.0	± 9.6 %
		Y	4.55	67.83	18.12		90.0	
		Z	4.94	66.85	18.01		90.0	
10076- CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 48 Mbps)	X	5.03	66.84	18.17	4.15	90.0	± 9.6 %
		Y	4.61	67.72	18.28		90.0	
		Z	4.95	66.65	18.12		90.0	
10077- CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 54 Mbps)	X	5.06	66.90	18.26	4.30	90.0	± 9.6 %
		Y	4.65	67.85	18.42		90.0	
		Ż	4.98	66.71	18.21		90.0	1

10081- CAB	CDMA2000 (1xRTT, RC3)	x	1.05	69.26	14.55	0.00	150.0	±9.6%
		Y	0.28	60.00	5.33		150.0	
		z	0.92	67.44	13.36	· · ·	150.0	<u> </u>
10082- CAB	IS-54 / IS-136 FDD (TDMA/FDM, PI/4- DQPSK, Fullrate)	х	0.52	58.22	3.69	4.77	80.0	± 9.6 %
		Y	0.41	56.78	1.87		80.0	
		Z	0.54	57.53	2.88		80.0	
10090- DAC	GPRS-FDD (TDMA, GMSK, TN 0-4)	X	17.35	89.03	19.19	6.56	60.0	± 9.6 %
		Y	100.00	107.61	23.00		60.0	
40007		Z	100.00	108.37	23.77		60.0	
10097- CAB	UMTS-FDD (HSDPA)	X	1.96	68.94	16.57	0.00	150.0	±9.6 %
		Y	2.57	76.20	18.23		150.0	
10098-		Z	1.90	68.41	16.17	0.00	150.0	
CAB	UMTS-FDD (HSUPA, Subtest 2)	X	1,92	68.91	16.54	0.00	150.0	± 9.6 %
		Y	2.54	76.26	18.30		150.0	
10099-		Z	1.86	68.36	16.14		150.0	
DAC	EDGE-FDD (TDMA, 8PSK, TN 0-4)	X	9.94	91.01	31.21	9.56	60.0	± 9.6 %
		Y	5.73	82.09	28.86		60.0	
10100-		Z	7.90	87.03	30.13	0.0	60.0	
CAC	LTE-FDD (SC-FDMA, 100% RB, 20 MHz, QPSK)	X	3.32	71.40	17.37	0.00	150.0	± 9.6 %
		Y	2.95	71.83	18.07		150.0	
40404		Z	3.20	70.72	17.06		150.0	
10101- CAC	LTE-FDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM)	x	3.33	67.99	16.32	0.00	150.0	± 9.6 %
		Y	3.00	68.42	16.63	_	<u>15</u> 0.0	
		Z	3.27	67.68			150.0	
10102- CAC	LTE-FDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM)	X	3.43	67.94	16.40	0.00	150.0	± 9.6 %
		Y	3.10	68.46	16.71		150.0	
		z	3.37	67.66	16.24		150.0	
10103- CAC	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, QPSK)	X	6.02	73.90	19.30	3.98	65.0	±9.6 %
		Y	4.68	73.18	19.41		65.0	
		Z	5.62	73.49	19.33		65.0	
10104- CAC	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM)	X	6.42	73.34	19.91	3.98	65.0	± 9.6 %
		Y	4.72	70.79	18.81		65.0	
		Z	5.88	72.35	19.63		65.0	
10105- CAC	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM)	X	6.34	73.01	20.09	3.98	65.0	± 9.6 %
		Y	4.65	70.25	18.83		65.0	
		Z	<u>5.51</u>	70.92	19.28		65.0	
10108- CAD	LTE-FDD (SC-FDMA, 100% RB, 10 MHz, QPSK)	×	2.90	70.63	17.22	0.00	150.0	± 9.6 %
		Ý	2.58	72.09	18.15		150.0	
		Z	2.79	69.99	16.90		150.0	
10109- CAD	LTE-FDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM)	X	2.99	67.94	16.29	0.00	150.0	± 9.6 %
		Y	2.69	69.27	16.60		150.0	
		Z	2.93	67.61	16.08		150.0	
10110- CAD	LTE-FDD (SC-FDMA, 100% RB, 5 MHz, QPSK)	Х	2.37	69.82	16.91	0.00	150.0	± 9.6 %
		Y	2.17	72.66	17.66		150.0	
		Z	2.27	69.17	16.53		150.0	
10111- CAD	LTE-FDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM)	х	2.75	69.14	16.80	0.00	150.0	± 9.6 %
		Y	2.72	72.65	17.00		150.0	
		Z	2.68	68.77	16.52	İ	150.0	

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10112- CAD	LTE-FDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM)	X	3.11	67.90	16.33	0.00	150.0	±9.6 %
		Y	2.81	69.41	16.67		150.0	<u> </u>
10113- CAD	LTE-FDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM)	Z X	3.05 2.91	<u>67.61</u> 69.24	1 <u>6.14</u> 16.90	0.00	150.0 150.0	±9.6 %
		τ <sub>γ</sub> Ι	2.80	72.45	16.91		150.0	
		Z	2.83	68.91	16.64		150.0	
10114- CAB	IEEE 802.11n (HT Greenfield, 13.5 Mbps, BPSK)	X	5.18	67.36	16.63	0.00	150.0	±9.6 %
		Y	4.69	67.54	16.80		150.0	
	· · · · · · · · · · · · · · · · · · ·	Z	5.15	67.30	16.59		150.0	
10115- CAB	IEEE 802.11n (HT Greenfield, 81 Mbps, 16-QAM)	X	5.48	67.50	16.70	0.00	150.0	± 9.6 %
·		Y	4.94	67.76	16.85		150.0	
		Z	5.42	67.37	16.64		150.0	
10116- CAB	IEEE 802.11n (HT Greenfield, 135 Mbps, 64-QAM)	X	5.28	67.57	16.65	0.00	150.0	±9.6 %
		Y T	4.76	67.79	16.84		150.0	
		Z	5.24	67.47	16.61		150.0	
10117- CAB	IEEE 802.11n (HT Mixed, 13.5 Mbps, BPSK)	X	5.14	67.22	16.57	0.00	150.0	± 9.6 %
		Y	4.68	67.44	16.77		150.0	
		Z	5.11	67.13	16.53		150.0	
10118- CAB	IEEE 802.11n (HT Mixed, 81 Mbps, 16- QAM)	X	5.56	67.71	16.81	0.00	150.0	± 9.6 %
		Y	4.92	67.65	16.80		150.0	
-		Z	5.51	67.59	16.75		150.0	
10119- CAB	IEEE 802.11n (HT Mixed, 135 Mbps, 64- QAM)	X	5.26	67.51	16.64	0.00	150.0	± 9.6 %
-		Y	4.75	67.71	16.81		150.0	
		Z	5.23	67.43	16.60		150.0	
10140- CAC	LTE-FDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM)	X	3.47	67.94	16.32	0.00	150.0	± 9.6 %
		Y	3.08	68.53	16.60		150.0	
		Z	3.41	67.65	16.15		150.0	
10141- CAC	LTE-FDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM)	X	3.59	68.02	16.48	0.00	150.0	± 9.6 %
		İΥ	3.23	68.87	16.85		150.0	
		Z	3.53	67.77	16.33		150.0	
10142- CAD	LTE-FDD (SC-FDMA, 100% RB, 3 MHz, QPSK)	X	2.17	70.14	16.75	0.00	150.0	± 9.6 %
		Y	1.93	72.39	15.85		150.0	
		Z	2.06	69.38	16.26		150.0	· · · · · · · · · · · · · · · · · · ·
10143- CAD	LTE-FDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM)	X	2.69	70.39	16.77	0.00	150.0	± 9.6 %
		Y	1.77	67.88	12.65		150.0	
		Z	2.58	69.83	16.31		150.0	
10144- CAD	LTE-FDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM)	X	2.37	67.50	14.86	0.00	150.0	± 9.6 %
		Y	1.24	63.02	9.52		150.0	
		Z	2.27	66.99	14.42		150.0	
10145- CAD	LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK)	X	1.43	67.32	13.24	0.00	150.0	± 9.6 %
		Y	0.41	60.00	4.04		150.0	
		Z	1.25	65.61	11.99		150.0	
10146- CAD	LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM)	X	1.83	65.71	11.47	0.00	150.0	± 9.6 %
		Y	19.01	355.37	40.53		150.0	
		Z	1.52	64.01	10.27		150.0	
10147- CAD	LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM)	X	2.14	67.65	12.55	0.00	150.0	± 9.6 %
		Y	123.11	63.95	2.67		150.0	
		Z	1.70	65.34	11.08		150.0	

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10149- CAC	LTE-FDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM)	X	3.00	68.01	16.34	0.00	150.0	± 9.6 %
		Y	2.71	69.38	16.67		150.0	·
		Z	2.94	67.68	16.14	t	150.0	-
10150- CAC	LTE-FDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM)	X	3.12	67.96	16.38	0.00	150.0	± 9.6 %
		Y	2.83	69.51	16.73		150.0	
40454			3.06	67.68	16.19		150.0	
10151- CAC	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, QPSK)	×	6.55	76.73	20.51	3.98	65.0	± 9.6 %
		Y	4.65	75.11	19.92		65.0	
10152-		Z	5.91	75.87	20.37		65.0	
CAC	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM)	X	5.92	73.14	19.51	3.98	65.0	± 9.6 %
		Y	4.14	70.22	17.64		65.0	
10153-	LTE-TDD (SC-FDMA, 50% RB, 20 MHz,	Z	5.38	72.11	19.20		65.0	
CAC	64-QAM)	X	6.32	74.15	20.32	3.98	65.0	± 9.6 %
		Y	4.49	71.52	18.62		65.0	
10154-	LTE-FDD (SC-FDMA, 50% RB, 10 MHz,	Z X	5.75	73.14	20.03	- <u>-</u>	65.0	L
CAD	QPSK)	Y	2.44	70.37	17.23	0.00	150.0	± 9.6 %
			2.24	73.24	17.96		150.0	<u> </u>
10155-	LTE-FDD (SC-FDMA, 50% RB, 10 MHz,	Z X	2.32	69.67	16.83		150.0	
CAD	16-QAM)	Y	2.75	69.15	16.81	0.00	150.0	± 9.6 %
	<u> </u>	Z	2.68	72.83	17.10		150.0	
10156-	LTE-FDD (SC-FDMA, 50% RB, 5 MHz,	X	2.05	70.60	16.53	- 0.00	150.0	
CAD	QPSK)	Y	1.46			0.00	150.0	± 9.6 %
_		Z	1.92	69.42 69.63	13.50		150.0	<u> </u>
10157- CAD	LTE-FDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM)	X	2.25	69.63	<u>16.11</u> 15.12	0.00	<u>150.0</u> 150.0	± 9.6 %
		ΤΥ	0.93	61.53	7.91	_	150.0	
		Z	2.13	67.76	14.53		150.0	
10158- CAD	LTE-FDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM)	X	2.91	69.31	16.96	0.00	150.0	± 9.6 %
		ΓY	2.84	72.68	17.03		150.0	
		Z	2.84	68.99	16.70	_	150.0	
10159- CAD	LTE-FDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM)	X	2.39	69.07	15.47	0.00	150.0	± 9.6 %
		Y	0.94	61.44	7.84		150.0	
10400		Z	2.25	68.30	14.85	_	150.0	
10160- CAC	LTE-FDD (SC-FDMA, 50% RB, 15 MHz, QPSK)	X	2.87	69.48	16.90	0.00	150.0	± 9.6 %
			2.53	71.06	17.44		150.0	
10161-	LTE-FDD (SC-FDMA, 50% RB, 15 MHz,	Z	2.80	69.08	16.66		150.0	
CAC	16-QAM)	X	3.02	67.94	16.33	0.00	150.0	± 9.6 %
	<u>+</u>	Y	2.72	69.68	16.46		150.0	
10162-	LTE-FDD (SC-FDMA, 50% RB, 15 MHz,	Z	2.96	<u>67.65</u>	16.13		150.0	
CAC	64-QAM)	X	3.13	68.07	16.43	0.00	150.0	± 9.6 %
	<u> </u>		2.84	70.03	16.63	_	150.0	
10166- CAD	LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK)	Z X	<u>3.07</u> 3.48	67.8 <u>1</u> 69.00	<u>16.24</u> 18.84	3.01	150.0 150.0	± 9.6 %
		Y	2.37	66.02	18.17		150.0	<b>_</b>
		z	3.30	68.39	18.62		150.0	
10167- CAD	LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM)	X	4.17	71.58	19.19	3.01	150.0 150.0	± 9.6 %
		Y	2.29	67.15	18.12		150.0	
		Ż	3.79	70.56	18.83		150.0	
			0.10	10.00	10.03		150.0	

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10168- CAD	LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM)	X	4.66	74.00	20.63	3.01	150.0	± 9.6 %
· · P		Y	2.48	69.25	19.67		150.0	
		z	4.22	72.96	20.30		150.0	
10169- CAC	LTE-FDD (SC-FDMA, 1 RB, 20 MHz, QPSK)	X	2.83	68.21	18.52	3.01	150.0	± 9.6 %
		Y	1.98	64.24	17.28		150.0	
		Z	2.57	66.84	17.97		150.0	
10170- CAC	LTE-FDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM)	X	3.78	73.87	20.84	3.01	150.0	±9.6 %
		Y	1.95	66.56	18.68		150.0	
		Z	3.16	71.49	20.02		150.0	-
10171- AAC	LTE-FDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM)	X	3.08	69.63	17.94	3.01	150.0	±9.6 %
		Y	1.72	64.21	_16.34		150.0	
		Z	2.64	67.80	17.26		150.0	
10172- CAC	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK)	X	5.42	80.62	23.60	6.02	65.0	±9.6 %
		Y	2.15	69.85	20.42		65.0	
		Z	4.45	78.76	23.36		65.0	
10173- CAC	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM)	X	8.97	86.28	23.79	6.02	65.0	± 9.6 %
		Y	2.26	72.00	19.72		65.0	
		Z	6.61	83.59	23.38		65.0	
10174- CAC	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM)	X	7.82	83.09	22.18	6.02	65.0	± 9.6 %
		Y	1.97	69.58	18.06		65.0	
		Z	5.22	78.89	21.15		65.0	
10175- CAD	LTE-FDD (SC-FDMA, 1 RB, 10 MHz, QPSK)	X	2.79	67.90	18.26	3.01	150.0	±9.6 %
		Y	1.97	64.07	17.08		150.0	
		Z	2.54	66.56	17.72	_	150.0	
10176- CAD	LTE-FDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM)	X	3.78	73.89	20.85	3.01	150.0	± 9.6 %
		Y	1.95	66.57	18.69		150.0	
		Z	3.16	71.52	20.03		150.0	
10177- CAF	LTE-FDD (SC-FDMA, 1 RB, 5 MHz, QPSK)	X	2.82	68.06	18.36	3.01	150.0	± 9.6 %
		Y	1.98	64.12	17.12		150.0	
		Z	2.56	66.70	17.81		150.0	
10178- CAD	LTE-FDD (SC-FDMA, 1 RB, 5 MHz, 16- QAM)	X	3.74	73.65	20.71	3.01	150.0	± 9.6 %
		Y	1.95	66.53	18.65		150.0	
		Z	3.13	71.32	19.91		150.0	
10179- CAD	LTE-FDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM)	X	3.39	71.59	19.23	3.01	150.0	±9.6 %
		Y	1.82	65.39	17.45		150.0	
		Z	2.87	69.52	18.50		150.0	
10180- CAD	LTE-FDD (SC-FDMA, 1 RB, 5 MHz, 64- QAM)	X	3.08	69.55	17.88	3.01	150.0	± 9.6 %
		Y	1.72	64.21	16.33		150.0	
		Z	2.64	67.75	17.21		150.0	
10181- CAC	LTE-FDD (SC-FDMA, 1 RB, 15 MHz, QPSK)	X	2.81	68.04	18.35	3.01	150.0	± 9.6 %
		Y	1.97	64.11	17.12		150.0	
		Z	2.56	66.68	17.80	<u> </u>	150.0	
10182- CAC	LTE-FDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM)	X	3.73	73.62	20.70	3.01	150.0	±9.6 %
		Y	1.95	66.51	18.64		150.0	
		Z	3.13	71.29	19.90		150.0	L
10183- AAB	LTE-FDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM)	X	3.07	69.53	17.87	3.01	150.0	± 9.6 %
		Y	1.72	64.19	16.32		150.0	
		Z	2.64	67.72	17.20		150.0	

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10184- CAD	LTE-FDD (SC-FDMA, 1 RB, 3 MHz, QPSK)	X	2.82	68.08	18.37	3.01	150.0	± 9.6 %
		Y	1.98	64.13	17.13		150.0	
		Z	2.56	66.72	17.83		150.0	
10185- CAD	LTE-FDD (SC-FDMA, 1 RB, 3 MHz, 16- QAM)	X	3.75	73.70	20.74	3.01	150.0	± 9.6 %
		Y	1.96	66.56	18.67		150.0	
		Z	3.14	71.36	19.94		150.0	
10186- AAD	LTE-FDD (SC-FDMA, 1 RB, 3 MHz, 64- QAM)	X	3.09	69.60	17.91	3.01	150.0	± 9.6 %
		Y	1.73	64.23	16.35		150.0	
10187-		Z	2.65	67.78	17.23		150.0	
CAD	LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK)	X	2.83	68.13	18.43	3.01	150.0	± 9.6 %
		Y	1.99	64.22	17.23		150.0	
10199		Z	2.57	66.77	17.89		150.0	
10188- CAD	LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM)	X	3.88	74.41	21.15	3.01	150.0	± 9.6 %
		Y	1.98	66.86	18.93		150.0	
10189-		<u>Z</u>	3.23	71.97	20.32		150.0	
AAD	LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM)	X	3.15	70.02	18.19	3.01	150.0	± 9.6 %
	+	Y	1.74	64.44	16.55		150.0	
10193-	IEEE 802.11n (HT Greenfield, 6.5 Mbps,	Z	2.70	68.15	17.50		150.0	
CAB	BPSK)	X	4.57	66.79	16.35	0.00	150.0	± 9.6 %
		Y	4.14	67.99	16.59		150.0	
10194-	IEEE 802.11n (HT Greenfield, 39 Mbps,	Z	4.54	66.72	16.28		150.0	
<u>CAB</u>	16-QAM)	X	4.75	67.11	16.47	0.00	150.0	±9.6 %
		Y	4.22	68.00	16.68		150.0	
10195-		Z	4.70	67.02	16.41		150.0	
CAB	IEEE 802.11n (HT Greenfield, 65 Mbps, 64-QAM)	X	4.79	67.14	16.49	0.00	150.0	± 9.6 %
	<u>+                                    </u>	Y	4.23	67.92	16.65		150.0	
10196-		Z	4.74	67.05	16.43		150.0	
CAB	IEEE 802.11n (HT Mixed, 6.5 Mbps, BPSK)	X	4.58	66.86	16.37	0.00	150.0	± 9.6 %
		Y	4.11	67.92	16.54		150.0	
10197-		Z	4.54	66.78	<u>16.3</u> 0		150.0	
CAB	IEEE 802.11n (HT Mixed, 39 Mbps, 16- QAM)	×	4.76	67.13	16.48	0.00	150.0	±9.6 %
		Y	4.23	68.00	16. <u>6</u> 9		150.0	
10100		Z	4.71	67.04	16.42		150.0	
10198- CAB	IEEE 802.11n (HT Mixed, 65 Mbps, 64- QAM)	X	4.79	67.15	16.50	0.00	150.0	± 9.6 %
		Y	4.22	67.91	16.64		150.0	
10219-		Z	4.74	67.07	16.44		150.0	
CAB	IEEE 802.11n (HT Mixed, 7.2 Mbps, BPSK)	X	4.53	66.88	16.34	0.00	150.0	± 9.6 %
		Y	4.08	68.06	16.58		150.0	
10220-		Z	4.49	66.80	16.27		150.0	
CAB	IEEE 802.11n (HT Mixed, 43.3 Mbps, 16- QAM)	X	4.76	67.10	16.47	0.00	150.0	± 9.6 %
		Y	4.22	67.96	16.67	-	150.0	
10221-	IEEE 902 11p (IIT Mixed 70.0 Mixed 04	Z	4.71	67.01	16.41		150.0	
CAB	IEEE 802.11n (HT Mixed, 72.2 Mbps, 64- QAM)	X	4.80	67.08	16.48	0.00	150.0	± 9.6 %
	<u> </u>	Y	4.25	67.92	16.65		150.0	
10222-	IFEE 802 11p /UT Minod 45 Minor	Z	4.75	67.00	16.42		150.0	
<u>CAB</u>	IEEE 802.11n (HT Mixed, 15 Mbps, BPSK)	X	5.12	67.23	16.57	0.00	150.0	± 9.6 %
	<u>+</u>	Y	4.67	67.48	16.77		150.0	
		Ζ	5.09	<u>67.</u> 14	16.52		150.0	

10223-	IEEE 802.11n (HT Mixed, 90 Mbps, 16-	X	5.42	67.42	16.68	0.00	150.0	± 9.6 %
CAB	QAM)	Y	4.05	07.57	40.77		450.0	
	+		4.85	67.57	16.77		150.0	
10224- CAB	IEEE 802.11n (HT Mixed, 150 Mbps, 64- QAM)	Z X	<u>5.40</u> 5.17	67.40 67.35	16.67 16.56	0.00	<u>150.0</u> 150.0	± 9.6 %
		T	4.71	67.68	16.79		150.0	
		z	5.13	67.25	16.51		150.0	
10225- CAB	UMTS-FDD (HSPA+)	×	2.87	66.58	15.73	0.00	150.0	± 9.6 %
		Y	2.38	67.09	13.98		150.0	
		Z	2.82	66.38	15.50		150.0	
10226- CAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM)	X	9.50	87.34	24.24	6.02	65.0	± 9.6 %
		_ Y _	2.34	72.67	20.10		65.0	
		Z	6.98	84.60	23.83		65.0	
10227- CAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM)	X	8.72	84.77	22.80	6.02	65.0	± 9.6 %
		Y	2.21	71.55	18.95		65.0	
		Z	6.78	83.00	22.65		65.0	
10228- CAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK)	X	7.70	87.24	26.02	6.02	65.0	± 9.6 %
		Y	2.35	71.63	21.26		65.0	
		Z	5.43	82.72	24.92		65.0	
10229- CAB	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 16- QAM)	X	9.03	86.38	23.83	6.02	65.0	± 9.6 %
		Y	2.27	72.06	19.75		65.0	
		Z	6.67	83.69	_23.42		65.0	
10230- CAB	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 64- QAM)	X	8.29	83.90	22.43	6.02	65.0	± 9.6 %
		Y	2.13	70.90	18.60		65.0	
		Z	6.44	82.12	22.26		65.0	
10231- CAB	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, QPSK)	X	7.38	86.38	25.64	6.02	65.0	± 9.6 %
		Y	2.30	71.12	20.95		65.0	
		Z	5.24	81.97	24.56		65.0	
10232- CAC	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 16- QAM)	X	9.02	86.36	23.83	6.02	65.0	± 9.6 %
		Y	2.27	72.05	19.75		65.0	
		Z	6.65	83.67	23.41		65.0	
10233- CAC	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 64- QAM)	X	8.28	83.89	22.42	6.02	65.0	± 9.6 %
		Y	2.13	70.87	18.59		65.0	
		Z	6.43	82.09	22.25		65.0	
10234- CAC	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK)	X	7.10	85.54	25.23	6.02	65.0	± 9.6 %
		Y	2.26	70.79	20.68		65.0	
		Z	5.08	81.30	24.19		65.0	
10235- CAC	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM)	X	9.02	86.38	23.84	6.02	65.0	± 9.6 %
		Y	2.27	72.05	19.76		65.0	ļ
		Z	6.65	83.69	23.42		65.0	
10236- CAC	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM)	X	8.34	83.99	22.45	6.02	65.0	± 9.6 %
		Y	2.15	70.97	18.63		65.0	ļ
		Z	6.48	82.21	22.28		65.0	 
10237- CAC	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK)	X	7.38	86.43	25.66	6.02	65.0	± 9.6 %
		Y	2.30	71.11	20.95		65.0	L
		Z	5.24	82.00	24.57		65.0	
10238- CAC	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM)	X	9.00	86.33	23.82	6.02	65.0	± 9.6 %
		Y	2.26	72.03	19.74		65.0	
		Z	6.63	83.64	23.40		65.0	

10239- CAC	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM)	X	8.25	83.86	22.41	6.02	65.0	± 9.6 %
		Y	2.13	70.85	18.59		65.0	1
		Ż	6.41	82.06	22.24		65.0	
10240- CAC	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, QPSK)	X	7.36	86.38	25.64	6.02	65.0	± 9.6 %
		Y	2.30	71.11	20.95		65.0	
	·	Ζ	5.22	81.96	24.56		65.0	
10241- CAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM)	×	7.65	78.90	23.86	6.98	65.0	± 9.6 %
		Y	4.15	74.63	23.03		65.0	
		Ζ	6.65	77.23	23.41		65.0	
10242- CAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM)	х	7.40	78.25	23.51	6.98	65.0	± 9.6 %
		Y	3.84	73.21	22.33		65.0	
		Z	6.07	75.38	22.52		65.0	
10243- CAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK)	X	6.13	75.50	23.22	6.98	65.0	± 9.6 %
·		Y	3.68	71.24	22.18		65.0	
		Z	5.17	72.72	22.17		65.0	
10244- CAB	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM)	×	4.96	71.78	16.23	3.98	65.0	± 9.6 %
		Y	1.47	60.59	6.86		65.0	
1001		Z	4.27	70.57	15.63		65.0	
10245- CAB	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM)	×	4.90	71.39	16.01	3.98	65.0	± 9.6 %
		Y	1.47	60.48	6.73		65.0	
		Z	4.22	70.14	15.39		65.0	
10246- CAB	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, QPSK)	×	4.94	75.03	17.94	3.98	65.0	± 9.6 %
		Y	1.46	62.04	8.51		65.0	
		Z	4.23	73.72	17.40		65.0	
10247- CAC	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM)	X	4.94	72.43	17.57	3.98	65.0	± 9.6 %
		Y	2.10	63.24	9.90		65.0	
		Z	4.38	71.34	17.07		65.0	
10248- CAC	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM)	X	4.96	72.03	17.39	3.98	65.0	± 9.6 %
		Y	2.10	62.93	9.72		65.0	
		Z	4.40	70.92	16.87		65.0	
10249- CAC	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, QPSK)	X	6.07	78.35	20.13	3.98	65.0	± 9.6 %
		Y	2.33	67.19	12.94		65.0	
		Z	5.28	77.21	19.80		65.0	
10250- CAC	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM)	X	5.95	75.24	20.37	3.98	65.0	±9.6%
		Y	3.82	70.93	16.95		65.0	
		Z	5.33	74.14	20.02		65.0	
10251- CAC	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM)	X	5.69	73.28	19.20	3.98	65.0	± 9.6 %
		Y	3.45	68.36	15.25		65.0	
		Z	5.13	72.25	18.83		65.0	
10252- CAC	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, QPSK)	×	6.58	78.88	21.28	3.98	65.0	± 9.6 %
		Y	4.11	75.12	18.99		65.0	
		Z	5.80	77.80	21.07		65.0	
10253- CAC	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM)	×	5.80	72.65	19.29	3.98	65.0	± 9.6 %
		Y	4.01	69.64	16.98		65.0	
		Z	5.29	71.67	18.98		65.0	
10254- CAC	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM)	X	6.17	73.58	20.02	3.98	65.0	± 9.6 %
		Y	4.31	70.68	17.76		65.0	1
		Z	5.63	72.60	19.71		65.0	1

10255-	LTE-TDD (SC-FDMA, 50% RB, 15 MHz,	X	6.29	76.23	20.52	3.98	65.0	± 9.6 %
CAC	QPSK)	Y		74.07	40.40			
			4.41	74.27	19.43		65.0	
10256-	LTE-TDD (SC-FDMA, 100% RB, 1.4	Z	5.67	75.30	20.34		65.0	
CAA	MHz, 16-QAM)	X	3.88	68.28	13.63	3.98	65.0	± 9.6 %
		Y	1.05	58.86	4.54		65.0	
40057		Z	3.28	66.95	12.85		65.0	
10257- CAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM)	X	3.85	67.85	13.35	3.98	65.0	±9.6 %
		Y	1.05	58.75	4.36		65.0	
40050		Z	3.25	66.51	12.54		65.0	
10258- CAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK)	X	3.78	70.85	15.35	3.98	65.0	± 9.6 %
		Y	1.11	60.00	5.99		65.0	
		Z	3.18	69.35	14.58		65.0	
10259- CAB	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM)	X	5.33	73.49	18.59	3.98	65.0	± 9.6 %
		Y	2.60	65.55	12,14		65.0	
		Z	4.76	72.43	18.16		65.0	
10260- CAB	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM)	X	5.38	73.29	18.52	3.98	65.0	±9.6 %
		Y	2.62	65.36	12.01		65.0	
		Z	4.80	72.23	18.08		65.0	
10261- CAB	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, QPSK)	X	6.02	77.89	20.37	3.98	65.0	± 9.6 %
		Y	2.87	69.70	14.96		65.0	
		Z	5.26	76.76	20.06		65.0	
10262- CAC	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM)	X	5.94	75.19	20.32	3.98	65.0	± 9.6 %
		Y	3.80	70.83	16.88		65.0	
		Ż	5.32	74.09	19.98		65.0	
10263- CAC	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM)	X	5.68	73.26	19.19	3.98	65.0	± 9.6 %
0/10		Y	3.45	68.35	15.24		65.0	
		z	5.12	72.23	18.82		65.0	
10264- CAC	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, QPSK)	X	6.52	78.70	21.19	3.98	65.0	± 9.6 %
		Ι γ Ι	4.06	74.89	18.86		65.0	
		Ż	5.75	77.62	20.97		65.0	
10265- CAC	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM)	X	5.92	73.14	19.52	3.98	65.0	± 9.6 %
0/10		Y	4.14	70.23	17.64		65.0	
		Z	5.38	72.12	19.20		65.0	
10266- CAC	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM)	X	6.31	74.13	20.31	3.98	65.0	± 9.6 %
		Y	4.49	71.50	18.60	-	65.0	
	1	Ż	5.75	73.12	20.02	İ	65.0	
10267- CAC	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, QPSK)	X	6.54	76.70	20.49	3.98	65.0	±9.6 %
		Y	4.64	75.05	19.89		65.0	
		Ż	5.90	75.83	20.35		65.0	1
10268- CAC	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM)	X	6.58	73,24	19.99	3.98	65.0	± 9.6 %
		Y	4.89	71.06	18.92		65.0	
40000		Z	6.05	72.29	19.72	0.00	65.0	1000
10269- CAC	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM)	X	6.56	72.88	19.90	3.98	65.0	± 9.6 %
		Y	4.96	70.94	18.86		65.0	
		Z	6.05	71.95	19.63		65.0	
10270-	LTE-TDD (SC-FDMA, 100% RB, 15	X	6.52	74.64	19.85	3.98	65.0	± 9.6 %
CAC	MHz, QPSK)	1 1		1				
		Y	4.97 5.98	73.67	19.72		65.0	

10274- CAB	UMTS-FDD (HSUPA, Subtest 5, 3GPP Rel8.10)	X	2.66	67.03	15.70	0.00	150.0	± 9.6 %
-		Y	2.34	68.55	14.63		150.0	
		z	2.62	66.83	15.48		150.0	
10275- CAB	UMTS-FDD (HSUPA, Subtest 5, 3GPP Rel8.4)	X	1.75	69.41	16.56	0.00	150.0	± 9.6 %
		Y	2.02	74.91	18.12		150.0	
		Ζ	1.67	68.59	16.06		150.0	
10277- CAA	PHS (QPSK)	X	2.57	62.13	7.82	9.03	50.0	± 9.6 %
		Y	1.60	59.68	4.94		50.0	
		Z	2.26	61.44	7.11		50.0	
10278- CAA	PHS (QPSK, BW 884MHz, Rolloff 0.5)	X	4.26	69.41	14.02	9.03	50.0	± 9.6 %
		Y	2.29	61.84	7.55		50.0	
		Ζ	3.87	68.64	13.41		50.0	
10279- CAA	PHS (QPSK, BW 884MHz, Rolloff 0.38)	X	4.37	69.66	14.18	9.03	50.0	± 9.6 %
		Y	2.31	61.88	7.61		_50.0	
(000		Z	3.97	68.90	13.58		<u>5</u> 0.0	
10290- AAB	CDMA2000, RC1, SO55, Full Rate	X	1.85	72.31	15.88	0.00	150.0	± 9.6 %
		Y	0.36	60.00	5.29		150.0	
		Z	1.58	70.17	14.63		150.0	
10291- AAB	CDMA2000, RC3, SO55, Full Rate	Х	1.02	68.88	14.36	0.00	150.0	± 9.6 %
		Y	0.28	60.00	5.31		150.0	
		Ζ	0.90	67.15	13.20		150.0	
10292- AAB	CDMA2000, RC3, SO32, Full Rate	X	1.80	77.95	18.61	0.00	150.0	± 9.6 %
		. Y	0.38	62.69	7.21		150.0	
		Z	1.39	74.03	16.69		150.0	
10293- AAB	CDMA2000, RC3, SO3, Full Rate	X	5.83	95.82	25.10	0.00	150.0	± 9.6 %
		Y	100.00	107.50	20.43		150.0	
		Z	3.54	87.74	22.15		150.0	
10295- AAB	CDMA2000, RC1, SO3, 1/8th Rate 25 fr.	X	7.34	78.85	20.80	9.03	50.0	± 9.6 %
		Y	17.07	85.10	19.02		50.0	
		Z	7.80	80.40	21.29		50.0	
10297- AAB	LTE-FDD (SC-FDMA, 50% RB, 20 MHz, QPSK)	X	2.92	70.76	17.30	0.00	150.0	± 9.6 %
		Ý	2.60	72.27	18.25		150.0	
		Z	2.80	70.10	16.98		150.0	
10298- AAC	LTE-FDD (SC-FDMA, 50% RB, 3 MHz, QPSK)	X	1.81	69.98	15.49	0.00	150.0	± 9.6 %
	·	Y	0.52	60.00	6.04		150.0	
		Z	1.63	68.52	14.51		150.0	
10299- AAC	LTE-FDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM)	X	2.47	68.97	14.03	0.00	150.0	± 9.6 %
		Y	0.58	60.00	4.73		150.0	
		Z	2.10	67.38	13.05		150.0	
10300- 	LTE-FDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM)	X	1.87	64.64	11.20	0.00	150.0	± 9.6 %
		Y	0.56	60.00	_ 4.04 _		150.0	
		Z	1.64	63.62	10.41		150.0	
10301- AAA	IEEE 802.16e WiMAX (29:18, 5ms, 10MHz, QPSK, PUSC)	X	4.64	64.99	17.32	4.17	50.0	± 9.6 %
		Y	3.97	66.09	16.87		50.0	
		Z	4.63	65.19	17.38		50.0	
10302- AAA	IEEE 802.16e WiMAX (29:18, 5ms, 10MHz, QPSK, PUSC, 3 CTRL symbols)	X	5.19	65.93	18.20	4.96	50.0	± 9.6 %
		Y	4.41	66.55	17.60		50.0	
		Z	5.08	65.68	18.02	1	50.0	1 ·

10303- AAA	IEEE 802.16e WIMAX (31:15, 5ms, 10MHz, 64QAM, PUSC)	X	4.95	65.59	18.05	4.96	50.0	± 9.6 %
		T Y	4.26	66.62	17.49		50.0	
		Ż	4.83	65.30	17.84		50.0	
10304- AAA	IEEE 802.16e WIMAX (29:18, 5ms, 10MHz, 64QAM, PUSC)	X	4.75	65.47	17.56	4.17	50.0	± 9.6 %
		Y	4.05	66.34	16.93		50.0	
		Z	4.65	65.23	17.38		50.0	
10305- AAA	IEEE 802.16e WIMAX (31:15, 10ms, 10MHz, 64QAM, PUSC, 15 symbols)	X	4.49	67.73	19.78	6.02	35.0	± 9.6 %
		Y	3.71	67.28	16.67		35.0	
		Z	4.28	66.94	19.23		35.0	
10306- AAA	IEEE 802.16e WIMAX (29:18, 10ms, 10MHz, 64QAM, PUSC, 18 symbols)	X	4.75	66.48	19.22	6.02	35.0	± 9.6 %
		Y	4.04	67.06	17.49		35.0	
40007		Z	4.60	65.99	18.86		35.0	
10307- AAA	IEEE 802.16e WIMAX (29:18, 10ms, 10MHz, QPSK, PUSC, 18 symbols)	X	4.67	66.74	19.24	6.02	35.0	±9.6 %
		<u>Y</u>	3.93	66.99	17.33		35.0	
10000		Z	4.50	66.15	18.83		35.0	<u> </u>
10308- AAA	IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, 16QAM, PUSC)	X	4.65	66.96	19.39	6.02	35.0	± 9.6 %
	·	Y	3.96	67.42	17.62		35.0	
10309-		Z	4.47	66.34	18.96	0.00	35.0	
10309- AAA	IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, 16QAM, AMC 2x3, 18 symbols)	X	4.80	66.69	19.36	6.02	35.0	± 9.6 %
		Y	4.07	67.23	17.68		35.0	
40040		Z	4.64	66.17	18.98		35.0	
10310- AAA	IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, QPSK, AMC 2x3, 18 symbols)	X	4.70	66.58	19.22	6.02	35.0	± 9.6 %
		<u>Y</u>	4.03	67.27	17.61		35.0	
40044		Z	4.55	66.06	18.84		35.0	
10311- AAB	LTE-FDD (SC-FDMA, 100% RB, 15 MHz, QPSK)	X	3.29	69.98	16.90	0.00	150.0	± 9.6 %
		Y	2.90	70.63	17.62		150.0	
10010		Z	3.17	69.35	16.60		150.0	
10313- AAA	iDEN 1:3	X	3.28	70.39	14.65	6.99	70.0	± 9.6 %
	·	Y	2.53	71.17	15.80		70.0	
40044		Z	2.85	70.12	14.78	40.00	70.0	
10314- AAA	iDEN 1:6	X	4.28	75.46	19.37	10.00	30.0	± 9.6 %
	·	Y	4.79	80.62	22.06		30.0	
10315- AAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1	Z X	4.09 1.12	76.26 64.41	<u>19.99</u> 15.77	0.17	30.0 150.0	± 9.6 %
1770	Mbps, 96pc duty cycle)	Y	1.15	65.92	16.47		150.0	
		Z	1.10	63.89	15.39		150.0	
10316- AAB	IEEE 802.11g WiFi 2.4 GHz (ERP- OFDM, 6 Mbps, 96pc duty cycle)	X	4.61	66.72	16.37	0.17	150.0	± 9.6 %
		Y	4.09	67.47	16.39		150.0	
		z	4.56	66.65	16.32		150.0	
10317- AAB	IEEE 802.11a WiFi 5 GHz (OFDM, 6 Mbps, 96pc duty cycle)	X	4.61	66.72	16.37	0.17	150.0	± 9.6 %
		Y	4.09	67.47	16.39		150.0	
		Z	4.56	66.65	16.32		150.0	
10400- AAC	IEEE 802.11ac WiFi (20MHz, 64-QAM, 99pc duty cycle)	X	4.74	67.15	16.46	0.00	150.0	± 9.6 %
		Y	4.09	67.65	16.48		150.0	
		Z	4.69	67.06	16.40		150.0	
10401- AAC	IEEE 802.11ac WiFi (40MHz, 64-QAM, 99pc duty cycle)	X	5.44	67.31	16.60	0.00	150.0	± 9.6 %
		Y	4.84	67.31	16.60		150.0	-

10402-	IEEE 802.11ac WIFi (80MHz, 64-QAM,	X	5.69	67.61	16.60	0.00	150.0	± 9.6 %
AAC	99pc duty cycle)	+					ļ	<u> </u>
		Ϋ́	5.24	67.76	16.80		150.0	
10403-		Z	5.65	67.50	16.56		150.0	
AAB	CDMA2000 (1xEV-DO, Rev. 0)	X	1.85	72.31	15.88	0.00	115.0	± 9.6 %
		Y	0.36	60.00	5.29		115.0	
		Z	1.58	70.17	14.63		115.0	
10404- AAB	CDMA2000 (1xEV-DO, Rev. A)	X	1.85	72.31	15.88	0.00	115.0	± 9.6 %
		Y	0.36	60.00	5.29		115.0	
		Z	1.58	70.17	14.63		115.0	
10406- AAB	CDMA2000, RC3, SO32, SCH0, Full Rate	X	53.12	115.17	29.24	0.00	100.0	± 9.6 %
		Y	100.00	124.65	27.76		100.0	
		Z	28.83	109.13	27.97		100.0	
10410- AAB	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	6.68	83.50	19.17	3.23	80.0	± 9.6 %
		Y	1.37	73.33	16.57		80.0	
		Z	5.13	82.70	19.33		80.0	
10415- AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 99pc duty cycle)	X	1.04	63.68	15.36	0.00	150.0	± 9.6 %
		Y	1.11	65.66	16.32		150.0	
		Z	1.04	63.32	15.03		150.0	
10416- AAA	IEEE 802.11g WiFi 2.4 GHz (ERP- OFDM, 6 Mbps, 99pc duty cycle)	X	4.58	66.83	16.42	0.00	150.0	± 9.6 %
		Y	4.11	67.78	16.58		150.0	
		Z	4.54	66.76	16.35		150.0	
10417- AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps, 99pc duty cycle)	X	4.58	66.83	16.42	0.00	150.0	± 9.6 %
		Y	4.11	67.78	16.58		150.0	·
		Z	4.54	66.76	16.35		150.0	
10418- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 6 Mbps, 99pc duty cycle, Long preambule)	X	4.57	67.00	16.44	0.00	150.0	± 9.6 %
		Y	4.09	68.01	16.69		150.0	
		Z	4.53	66.93	16.39		150.0	
10419- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 6 Mbps, 99pc duty cycle, Short preambule)	X	4.59	66.94	16.44	0.00	150.0	± 9.6 %
		Y	4.11	67.93	16.65		150.0	
		Z	4.55	66.87	16.38	_	150.0	
10422- AAA	IEEE 802.11n (HT Greenfield, 7.2 Mbps, BPSK)	X	4.71	66.93	16.45	0.00	150.0	± 9.6 %
		Y	4.19	67.82	16.64		150.0	
		Z	4.66	66.86	16.39		150.0	
10423- AAA	IEEE 802.11n (HT Greenfield, 43.3 Mbps, 16-QAM)	Х	4.87	67.25	16.56	0.00	150.0	± 9.6 %
		Y	4.27	68.04	16.70	_	150.0	
		Z	4.82	67.16	16.50		150.0	
10424- AAA	IEEE 802.11n (HT Greenfield, 72.2 Mbps, 64-QAM)	X	4.79	67.20	16.54	0.00	150.0	± 9.6 %
		Y	4.21	67.94	16.67		150.0	
		Z	4.74	67.12	16.47		150.0	· · · · ·
10425- AAA	IEEE 802.11n (HT Greenfield, 15 Mbps, BPSK)	X	5.39	67.48	16.69	0.00	150.0	± 9.6 %
		Y	4.86	67.72	16.85		150.0	
		Z	5.35	67.38	16.64		150.0	
10426-	IEEE 802.11n (HT Greenfield, 90 Mbps,	X	5.40	67.51	16.70	0.00	150.0	±9.6 %
AAA	16-QAM)						1	
	16-QAM)	Y	4.89	67.85	16.91		150.0	

10427- AAA	IEEE 802.11n (HT Greenfield, 150 Mbps, 64-QAM)	X	5.41	67.49	16.68	0.00	150.0	± 9.6 %
		Y	4.87	67.71	16.83		150.0	
		Ż	5.37	67.41	16.64		150.0	
10430- AAA	LTE-FDD (OFDMA, 5 MHz, E-TM 3.1)	X	4.48	71.93	18.89	0.00	150.0	± 9.6 %
		Y	5.16	77.88	19.19		150.0	
		Z	4.43	71.96	18.79		150.0	
10431- AAA	LTE-FDD (OFDMA, 10 MHz, E-TM 3.1)	X	4.27	67.46	16.46	0.00	150.0	± 9.6 %
		Y	3.63	68.54	16.11		150.0	
		Z	4.21	67.36	16.35		150.0	
10432- AAA	LTE-FDD (OFDMA, 15 MHz, E-TM 3.1)	X	4.56	67.28	16.50	0.00	150.0	± 9.6 %
		Y I	3.98	68.25	16.55		150.0	
40400		Z	4.51	67.19	16.43		150.0	
10433- AAA	LTE-FDD (OFDMA, 20 MHz, E-TM 3.1)	X	4.81	67.24	16.56	0.00	150.0	± 9.6 %
		Y	4.24	68.00	16.70		150.0	
10434-		Z	4.76	67.15	16.49	0.00	150.0	
10434- AAA	W-CDMA (BS Test Model 1, 64 DPCH)	X	4.67	73.09	18.99	0.00	150.0	± 9.6 %
·	·	Y	4.20	74.62	16.81		150.0	
10435-		Z	4.61	73.09	18.84	0.00	150.0	10.00
AAB	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	6.37	82.80	18.90	3.23	80.0	± 9.6 %
		Y	1.33	72.76	16.26		80.0	
40447		Z	4.91	82.00	19.05		80.0	
10447- AAA	LTE-FDD (OFDMA, 5 MHz, E-TM 3.1, Clipping 44%)	X	3.58	67.63	15.88	0.00	150.0	± 9.6 %
		Y	2.52	66.35	12.95		150.0	
		Z	3.50	67.43	15.64		150.0	
10448- AAA	LTE-FDD (OFDMA, 10 MHz, E-TM 3.1, Clippin 44%)	X	4.11	67.25	16.33	0.00	150.0	± 9.6 %
		Y	3.54	68.41	16.05		150.0	
40440		Z	4.05	67.14	16.22		150.0	
10449- AAA	LTE-FDD (OFDMA, 15 MHz, E-TM 3.1, Cliping 44%)	X	4.38	67.12	16.41	0.00	150.0	±9.6 %
		Y	3.87	68.13	16.50		150.0	
40450		Z	4.33	67.03	16.33		150.0	
10450- AAA	LTE-FDD (OFDMA, 20 MHz, E-TM 3.1, Clipping 44%)	X Y	4.57	67.02	16.42 16.59	0.00	150.0	± 9.6 %
				66.93	16.35		150.0	
10451- AAA	W-CDMA (BS Test Model 1, 64 DPCH, Clipping 44%)	Z X	4.53 3.49	67.88	15.53	0.00	150.0	± 9.6 %
		Y	2.00	64.08	10.79		150.0	
		Z	3.38	67.58	15.21		150.0	
10456- AAA	IEEE 802.11ac WiFi (160MHz, 64-QAM, 99pc duty cycle)	X	6.26	68.00	16.81	0.00	150.0	± 9.6 %
		Y	6.16	68.95	17.43		150.0	
		Z	6.24	67.94	16.79		150.0	
10457- AAA	UMTS-FDD (DC-HSDPA)	X	3.82	65.46	16.13	0.00	150.0	± 9.6 %
		Y	3.61	66.92	16.42		150.0	
		Z	3.81	65.40	16.06	-	150.0	
10458- AAA	CDMA2000 (1xEV-DO, Rev. B, 2 carriers)	X	3.29	67.12	14.89	0.00	150.0	± 9.6 %
		<u>Y</u>	1.44	60.53	7.42		150.0	
		Z	3.18	66.78	14.49		150.0	
10459- AAA	CDMA2000 (1xEV-DO, Rev. B, 3 carriers)	X	4.43	65.51	15.86	0.00	150.0	±9.6 %
		Y	2.62	61.35	10.29		150.0	
		Z	4.37	65.53	15.72		150.0	

10460-	UMTS-FDD (WCDMA, AMR)	X	1.04	71.02	17.96	0.00	150.0	± 9.6 %
		Y	1.96	84.00	22.92		150.0	
10461-	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz,	Z X	0.97 3.48	69.34 77.15	<u>16.98</u> 17.91	3.29	150.0 80.0	± 9.6 %
AAA	QPSK, UL Subframe=2,3,4,7,8,9)		0.40	11.10	17.31	5.25	00.0	19.0 %
		Y	0.97	69.25	15.91		80.0	
		Ζ	2.58	75.48	17.77		80.0	
10462- AAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	Х	1.03	60.33	8.14	3.23	80.0	± 9.6 %
	10 do imi, 02 0dbirginie-2,0,4,7,0,07	Y	0.21	55.42	3.53		80.0	
		Ż	0.84	60.00	7.93		80.0	
10463- AAA	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	х	1.01	60.00	7.51	3.23	80.0	± 9.6 %
		Y	28.36	203.22	3.05		80.0	
		Z	0.86	60.00	7.39		80.0	
10464- AAA	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	2.64	73.32	15.98	3.23	80.0	± 9.6 %
		Y	0.75	66.12	13.77		80.0	
		Ζ	2.03	72.11	15.91		80.0	
10465- AAA	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 16- QAM, UL Subframe=2,3,4,7,8,9)	х	0.99	60.00	7.91	3.23	80.0	± 9.6 %
		. Y	29.96	194.97	5.15		80.0	
10100		_Z	0.84	60.00	7.86		80.0	
10466- AAA	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 64- QAM, UL Subframe=2,3,4,7,8,9)	×	1.01	60.00	7.46	3.23	80.0	± 9.6 %
		Y	30.98	196.96	1.83		80.0	
10467		Z	0.86	60.00	7.34	0.00	80.0	
10467- AAB	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	2.77	73.96	16.25	3.23	80.0	± 9.6 %
	· · · · · · · · · · · · · · · · · · ·	Y	0.77	66.65	14.10		80.0	
10468-		Z X	2.12	72.73	16.19	0.00	80.0	
AAB	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 16- QAM, UL Subframe=2,3,4,7,8,9)		0.99	60.08	7.96	3.23	80.0	±9.6 %
		Y	0.21	55.39	3.50		80.0	
10469-	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 64-	Z X	0.84	60.00 60.00	7.88 7.46	2.00	80.0	
AAB	QAM, UL Subframe=2,3,4,7,8,9)					3.23	80.0	± 9.6 %
		Y	30.66	197.41	1.31		80.0	
10470		Z	0.86	60.00	7.34	0.00	80.0	
10470- AAB	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	2.76	73.94	16.23	3.23	80.0	± 9.6 %
		Y	0.77	66.67	14.10		80.0	
10471- AAB	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 16- QAM, UL Subframe=2,3,4,7,8,9)	X	2,11 0.99	72.72 60.05	<u>16.18</u> 7.93	3.23	80.0 80.0	±9.6 %
		Y	29.34	196.18	6.49		80.0	· ·'
	· · · · · · · · · · · · · · · · · · ·	z	0.84	60.00	7.87		80.0	
10472- AAB	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 64- QAM, UL Subframe=2,3,4,7,8,9)	x	1.01	60.00	7.45	3.23	80.0	± 9.6 %
		Y	30.49	197.73	1.27		80.0	
		Z	0.86	60.00	7.33		80.0	
10473- AAB	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	2.76	73.90	16.22	3.23	80.0	± 9.6 %
		Y	0.77	66.63	14.08		80.0	
10.17		Z	2.11	72.69	16.16		80.0	
10474- AAB	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 16- QAM, UL Subframe=2,3,4,7,8,9)	X	0.99	60.03	7.93	3.23	80.0	± 9.6 %
		Y	29.25	196.25	6.42		80.0	
10475		Z	0.84	60.00	7.87	0.00	80.0	
10475- AAB	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 64- QAM, UL Subframe=2,3,4,7,8,9)	×	1.01	60.00	7.45	3.23	80.0	± 9.6 %
		Y	30.47	197.62	1.42		80.0	
		Z	0.86	60.00	7.33		80.0	

10477- AAB	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 16- QAM, UL Subframe=2,3,4,7,8,9)	X	0.98	60.00	7.89	3.23	80.0	± 9.6 %
		Y	29.49	195.72	5.56		80.0	· · · ·
		Z	0.84	60.00	7.84		80.0	
10478- AAB	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 64- QAM, UL Subframe=2,3,4,7,8,9)	X	1.01	60.00	7.44	3.23	80.0	± 9.6 %
_		Y	30.62	197.39	1.80		80.0	
		Z	0.86	60.00	7.32		80.0	
10479- AAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	×	3.88	74.90	18.39	3.23	80.0	±9.6%
		Y	2.49	77.92	19.26		80.0	
		Z	3.49	74.59	18.40		80.0	
10480- AAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	3.37	69.78	14.78	3.23	80.0	± 9.6 %
		Y	0.68	60.27	8.31		80.0	- ·
40404		Z	2.92	69.11	14.47		80.0	
10481- AAA	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	2.92	67.65	13.55	3.23	80.0	± 9.6 %
		Y	0.66	60.00	7.51		80.0	
40400		Z	2.50	66.84	13.14		80.0	
10482- AAA	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	2.52	68.86	15.13	2.23	80.0	± 9.6 %
		Y_	0.83	60.00	6.91		80.0	
10483-		Z	2.14	67.39	14.41		80.0	
10483- AAA	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	2.86	67.07	13.71	2,23	80.0	± 9.6 %
		Y	1.05	60.00	5.62		80.0	
10404		Z	2.44	65.81	13.01	0.00	80.0	
10484- AAA	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	2.80	66.60	13.51	2.23	80.0	± 9.6 %
	· · · · · · · · · · · · · · · · · · ·	Y	1.07	60.00	5.60		80.0	
10108		Z	2.40	65.34	12.79		80.0	
10485- AAB	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	2.96	70.85	16.91	2.23	80.0	± 9.6 %
		Y	1.17	62.58	10.56		80.0	
		Z	2.58	69.54	16.39		80.0	
10486- AAB	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	2.96	67.72	15.13	2.23	80.0	± 9.6 %
		Y.	1.13	60.00	7.87		80.0	
		Z	2.66	66.76	14.61		80.0	
10487- AAB	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	2.97	67.43	14.99	2.23	80.0	± 9.6 %
		Y	1.16	60.00	7.81		80.0	
10488- AAB	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	Z X	2.67 3.38	66.49 70.90	<u>14.47</u> 17.67	2.23	80.0 80.0	± 9.6 %
		Y	2.25	69.00	16.17		80.0	1
	1	z	3.02	69.76	17.29		80.0	†·
10489- AAB	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	3.39	68.12	16.57	2.23	80.0	± 9.6 %
		Y	2.32	66.16	14.18		80.0	
	· · · ·	Z	3.13	67.37	16.26		80.0	
10490- AAB	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	3.49	68.02	16.54	2.23	80.0	± 9.6 %
		Y	2.33	65.79	13.96	1	80.0	
		Z	3.23	67.30	16.25		80.0	
10491- AAB	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	3.68	69.90	17.42	2.23	80.0	± 9.6 %
		Y	2.62	68.57	16.67		80.0	
		Z	3.36	68.97	17.13		80.0	
10492- AAB	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	3.77	67.68	16.72	2.23	80.0	± 9.6 %
		Y	2.84	66.78	15.53		80.0	
		Z	3.53	67.02	16.47		80.0	

10493- AAB	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	3.84	67.59	16.70	2.23	80.0	±9.6 %
		Y	2.87	66.60	15.40		80.0	
		Z	3.60	66.95	16.45		80.0	
10494- AAB	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	3.93	71.14	17.78	2.23	80.0	±9.6 %
		Y	2.77	69.47	17.23		80.0	
		Z	3.56	70.11	17.48		80.0	
10495- AAB	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	3.80	68.03	16.89	2.23	80.0	± 9.6 %
		Y	2.91	67.12	16.06		80.0	
		Z	3.55	67.32	16.64		80.0	
10496- AAB	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	3.89	67.83	16.85	2.23	80.0	± 9.6 %
		Y	2.99	66.99	16.00		80.0	
		Z	3.64	67.16	16.61		80.0	
10497- AAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	1.81	64.83	12.37	2.23	80.0	± 9.6 %
		Y	0.97	60.00	4.80		80.0	
		Z	1.52	63.38	11.47		80.0	
10498- AAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	1.56	60.98	9.46	2.23	80.0	± 9.6 %
		Y	19.60	209.65	15.97		80.0	
		Z	1.35	60.00	8.64		80.0	
10499- AAA	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	1.53	60.58	9.11	2.23	80.0	± 9.6 %
		Y	17.31	229.94	5.52		80.0	
		Z	1.37	60.00	8.51		80.0	1
10500- AAA	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	3.10	70.67	17.16	2.23	80.0	± 9.6 %
		Y	1.60	65.48	12.91		80.0	
		Z	2.73	69.49	16.71		80.0	
10501- AAA	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	X	3.16	67.97	15.73	2.23	80.0	± 9.6 %
		Y	1.34	60.72	9.33		80.0	
		Z	2.88	67.15	15.31		80.0	
10502- AAA	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	3.22	67.87	15.63	2.23	80.0	± 9.6 %
		Y	1.33	60.43	9.07		80.0	-
		Z	2.93	67.06	15.21		80.0	
10503- AAB	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	3.34	70.72	17.57	2.23	80.0	± 9.6 %
		1. I						
		Y	2.22	68.78	16.06		80.0	
		YZ	2.22 2.98	<u>68.78</u> 69.59	16.06 17.20			
10504- AAB	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	Z X	2.98 3.37	69.59 68.03	17.20 16.51	2.23	80.0 80.0	± 9.6 %
10504-		Z X Y	2.98 3.37 2.30	69.59 68.03 66.01	17.20 16.51 14.09	2.23	80.0	± 9.6 %
10504-	16-QAM, UL Subframe=2,3,4,7,8,9)	Z X	2.98 3.37	69.59 68.03	17.20 16.51	2.23	80.0 80.0	± 9.6 %
10504-		Z X Y Z X	2.98 3.37 2.30 3.11 3.47	69.59 68.03 66.01 67.28 67.93	17.20 16.51 14.09 16.20 16.49	2.23	80.0 80.0 80.0	± 9.6 %
10504- AAB 	16-QAM, UL Subframe=2,3,4,7,8,9)	Z X Y Z X Y	2.98 3.37 2.30 3.11 3.47 2.31	69.59 68.03 66.01 67.28 67.93 65.66	17.20 16.51 14.09 16.20 16.49 13.87		80.0 80.0 80.0 80.0 80.0 80.0 80.0	
10504- AAB 10505- AAB	16-QAM, UL Subframe=2,3,4,7,8,9) LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	Z X Y Z X Y Z	2.98 3.37 2.30 3.11 3.47 2.31 2.31	69.59 68.03 66.01 67.28 67.93 65.66 67.21	17.20 16.51 14.09 16.20 16.49 13.87 16.19	2.23	80.0 80.0 80.0 80.0 80.0	
10504- AAB 	16-QAM, UL Subframe=2,3,4,7,8,9)	Z X Y Z X Y Z X	2.98 3.37 2.30 3.11 3.47 2.31 3.21 3.90	69.59 68.03 66.01 67.28 67.93 65.66 67.21 71.01	17.20 16.51 14.09 16.20 16.49 13.87 16.19 17.71		80.0 80.0 80.0 80.0 80.0 80.0 80.0 80.0	
10504- AAB 10505- AAB 10506-	16-QAM, UL Subframe=2,3,4,7,8,9) LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) LTE-TDD (SC-FDMA, 100% RB, 10	Z X Y Z X Y Z X Y	2.98 3.37 2.30 3.11 3.47 2.31 3.21 3.90 2.75	69.59 68.03 66.01 67.28 67.93 65.66 67.21 71.01 69.34	17.20 16.51 14.09 16.20 16.49 13.87 16.19 17.71 17.15	2.23	80.0 80.0 80.0 80.0 80.0 80.0 80.0 80.0	± 9.6 %
10504- AAB 10505- AAB 10506- AAB	16-QAM, UL Subframe=2,3,4,7,8,9) LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) LTE-TDD (SC-FDMA, 100% RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	Z X Y Z X Y Z X Y Z	2.98 3.37 2.30 3.11 3.47 2.31 3.21 3.90 2.75 3.53	69.59 68.03 66.01 67.28 67.93 65.66 67.21 71.01	17.20 16.51 14.09 16.20 16.49 13.87 16.19 17.71 17.15 17.41	2.23	80.0 80.0 80.0 80.0 80.0 80.0 80.0 80.0	± 9.6 %
10504- AAB 10505- AAB 10506-	16-QAM, UL Subframe=2,3,4,7,8,9) LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) LTE-TDD (SC-FDMA, 100% RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9) LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM, UL	Z X Y Z X Y Z X Y	2.98 3.37 2.30 3.11 3.47 2.31 3.21 3.90 2.75	69.59 68.03 66.01 67.28 67.93 65.66 67.21 71.01 69.34	17.20 16.51 14.09 16.20 16.49 13.87 16.19 17.71 17.15	2.23	80.0 80.0 80.0 80.0 80.0 80.0 80.0 80.0	± 9.6 %
10504- AAB 10505- AAB 10506- AAB 10507-	16-QAM, UL Subframe=2,3,4,7,8,9) LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) LTE-TDD (SC-FDMA, 100% RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9) LTE-TDD (SC-FDMA, 100% RB, 10	Z X Y Z X Y Z X Y Z	2.98 3.37 2.30 3.11 3.47 2.31 3.21 3.90 2.75 3.53	69.59 68.03 66.01 67.28 67.93 65.66 67.21 71.01 69.34 69.98	17.20 16.51 14.09 16.20 16.49 13.87 16.19 17.71 17.15 17.41	2.23	80.0 80.0 80.0 80.0 80.0 80.0 80.0 80.0	± 9.6 %

10508- AAB	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	3.87	67.76	16.81	2.23	80.0	± 9.6 %
		Y	2.97	66.90	15.95		80.0	
		Z	3.63	67.09	16.57		80.0	
10509- AAB	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	4.29	70.13	17.39	2.23	80.0	±9.6 %
		Ŷ	3.19	68.68	17.10		80.0	
		Z	3.96	69.31	17.16		80.0	
10510- AAB	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	×	4.29	67.87	16.94	2.23	80.0	± 9.6 %
		Y	3.35	66.74	16.37		80.0	
		Z	4.04	67.22	16.73		80.0	
10511- AAB	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	X	4.35	67.67	16.90	2.23	80.0	± 9.6 %
		Y	3.43	66.67	16.35		80.0	
		Z	4.11	67.05	16.70		80.0	
10512- AAB	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	X	4.41	71.37	17.74	2.23	80.0	± 9.6 %
		Y	3.20	69.31	17.29		80.0	
		Z	4.03	70.41	17.47		80.0	
10513- AAB	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	×	4.17	68.08	17.01	2.23	80.0	± 9.6 %
		Y	3.27	66.70	16.44		80.0	
10514- AAB	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	Z X	3.92 4.20	67.38 67.73	16.78 16.93	2.23	80.0 80.0	± 9.6 %
	Subirame=2,3,4,7,6,9)	Y	3.34	66.53	16.38		80.0	
		Z	<u> </u>	67.07	16.71		80.0	
10515- AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps, 99pc duty cycle)	X	1.01	63.92	15.46	0.00	150.0	± 9.6 %
7001		Y	1.07	66.05	16.52		150.0	
		Ż	1.00	63.52	15.11		150.0	
10516- AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps, 99pc duty cycle)	X	0.80	76.03	20.57	0.00	150.0	± 9.6 %
		Y	1.63	90.26	26.95		150.0	
		Z	0.67	72.14	18.59		150.0	
10517- AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps, 99pc duty cycle)	X	0.88	66.52	16.52	0.00	150.0	± 9.6 %
		Y	0.99	69.72	18.29		150.0	
10518- AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps, 99pc duty cycle)	Z X	0.86 4.57	65.67 66.91	15.91 16.40	0.00	<u>150.0</u> 150.0	± 9.6 %
		Y	4.10	67.98	16.63		150.0	
	··· · · · · · · · · · · · · · · · · ·	Ż	4.53	66.84	16.34		150.0	
10519- AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps, 99pc duty cycle)	X	4.75	67.14	16.51	0.00	150.0	± 9.6 %
		Y	4.20	68.09	16.69		150.0	
		Z	4.70	67.05	16.44		150.0	
10520- AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps, 99pc duty cycle)	X	4.61	67.11	16.44	0.00	150.0	± 9.6 %
		Y	4.07	67.97	16.60		150.0	<b> </b>
10521- AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps, 99pc duty cycle)	Z X	4.56 4.54	67.01 67.11	16.37 16.43	0.00	150.0 150.0	± 9.6 %
1111		Y	4.00	67.83	16.53		150.0	
		z	4.49	67.00	16.36	<u>+-</u>	150.0	
10522- AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps, 99pc duty cycle)	X	4.60	67.20	16.52	0.00	150.0	± 9.6 %
		Y	4.00	67.82	16.53	I	150.0	
		Z	4.55	67.12	16.45		150.0	

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10523- AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps, 99pc duty cycle)	X	4.49	67.08	16.37	0.00	150.0	± 9.6 %
		Y	4.01	68.16	16.68		150.0	1
		Z	4.44	67.01	16.31		150.0	
10524- AAA	IEEE 802.11a/n WiFi 5 GHz (OFDM, 54 Mbps, 99pc duty cycle)	X	4.54	67.12	16.48	0.00	150.0	± 9.6 %
		Y	3.97	67.92	16.63		150.0	
		Z	4.49	67.03	16.42		150.0	
10525- AAA	IEEE 802.11ac WiFi (20MHz, MCS0, 99pc duty cycle)	X	4.54	66.18	16.08	0.00	150.0	± 9.6 %
	·	Y	4.09	67.26	16.38		150.0	
48-00		Z	4.50	66.10	16.02		150.0	
10526- AAA	IEEE 802.11ac WiFi (20MHz, MCS1, 99pc duty cycle)	X	4.71	66.55	16.22	0.00	150.0	± 9.6 %
		Y	4.14	67.37	16.43		150.0	
40507		Z	4.65	66.45	16.16		150.0	
10527- AAA	IEEE 802.11ac WiFi (20MHz, MCS2, 99pc duly cycle)	X	4.63	66.51	16.17	0.00	150.0	± 9.6 %
		Y.	4.11	67.44	16.42		150.0	
		Z	4.58	66.41	16.10		150.0	
10528- AAA	IEEE 802.11ac WiFi (20MHz, MCS3, 99pc duty cycle)	X	4.64	66.53	16.20	0.00	150.0	± 9.6 %
	·	Y	<u>    4.10    </u>	67.35	16.39		150.0	
		Z	4.59	66.42	16.13		150.0	
10529- AAA	IEEE 802.11ac WiFi (20MHz, MCS4, 99pc duty cycle)	X	4.64	66.53	16.20	0.00	150.0	± 9.6 %
		Y	4.10	67.35	16.39		150.0	
		Z	4.59	66.42	16.13		150.0	
10531- AAA	IEEE 802.11ac WiFi (20MHz, MCS6, 99pc duty cycle)	X	4.64	66.64	16.22	0.00	150.0	± 9.6 %
		Y	4.06	67.36	16.37		150.0	
		Z	4.58	66.51	16.14		150.0	
10532- AAA	IEEE 802.11ac WiFi (20MHz, MCS7, 99pc duty cycle)	X	4.50	66.50	16.16	0.00	150.0	± 9.6 %
		Y.	3.98	67.28	16.33		150.0	
		Z	4.44	66.37	16.07		150.0	
10533- AAA	IEEE 802.11ac WiFi (20MHz, MCS8, 99pc duty cycle)	X	4.65	66.58	16.19	0.00	150.0	± 9.6 %
		Y	4.11	67.58	16.46		150.0	
		Z	4.60	66.49	16.13		150.0	
10534- AAA	IEEE 802.11ac WiFi (40MHz, MCS0, 99pc duty cycle)	X	5.17	66.59	16.23	0.00	150.0	± 9.6 %
		Y	4.70	66.96	16.45		150.0	
		Z	5.13	66.48	16.18		150.0	
10535- AAA	IEEE 802.11ac WiFi (40MHz, MCS1, 99pc duty cycle)	X	5.24	66.77	16.31	0.00	150.0	± 9.6 %
		Y	4.70	67.00	16.48		150.0	
		Z	5.20	66.68	16.26		150.0	
10536- AAA	IEEE 802.11ac WiFi (40MHz, MCS2, 99pc duty cycle)	X	5.11	66.73	16.27	0.00	150.0	± 9.6 %
		Y	4.62	67.02	16.47		150.0	
		Z	5.07	66.63	16.22		150.0	
10537- AAA	IEEE 802.11ac WiFi (40MHz, MCS3, 99pc duty cycle)	X	5.17	66.69	16.25	0.00	150.0	± 9.6 %
		Y	4.71	67.16	16.55		150.0	
10520		Z	5.13	66.59	16.20		150.0	
10538- AAA	IEEE 802.11ac WiFi (40MHz, MCS4, 99pc duty cycle)	X	5.26	66.70	16.30	0.00	150.0	± 9.6 %
	+	Υ	4.72	66.92	16.45		150.0	
40546		Z	5.21	66.59	16.24		150.0	
10540- AAA	IEEE 802.11ac WiFi (40MHz, MCS6, 99pc duty cycle)	X	5.19	66.73	16.33	0.00	150.0	± 9.6 %
<u> </u>		Ϋ́	4.66	66.87	16.46		150.0	
		Z	5.14	66.60	16.27		150.0	

10541- AAA	IEEE 802.11ac WiFi (40MHz, MCS7, 99pc duty cycle)	X	5.16	66.59	16.25	0.00	150.0	± 9.6 %
7991		Y	4.67	66.90	16.44	<u> </u>	150.0	
		z	5.12	66.48	16.19		150.0	
10542- AAA	IEEE 802.11ac WiFi (40MHz, MCS8, 99pc duty cycle)	X	5.31	66.65	16.29	0.00	150.0	±9.6%
		Y	4.80	66.97	16.49		150.0	
		Z	5.27	66.55	16.25		150.0	
10543- AAA	IEEE 802.11ac WiFi (40MHz, MCS9, 99pc duty cycle)	X	5.39	66.68	16.33	0.00	150.0	± 9.6 %
	· · · · · · · · · · · · · · · · · · ·	Y	4.85	67.01	16.54		150.0	
40544		Z	5.34	66.57	16.28		150.0	
10544- AAA	IEEE 802.11ac WiFi (80MHz, MCS0, 99pc duly cycle)	X	5.48	66.68	16.21	0.00	150.0	± 9.6 %
· · -		Υ Υ	5.09	66.77	16.36		150.0	
10545	IEEE 802.11ac WiFi (80MHz, MCS1,	Z	5.46	66.59	16.17		150.0	
10545- AAA	99pc duty cycle)	X	5.68	67.10	16.37	0.00	150.0	±9.6 %
	· · · · · · · · · · · · · · · · · · ·	Y	5.20	67.11	16.51		150.0	
10546-		Z	5.65	67.02	16.33	0.00	150.0	
AAA	IEEE 802.11ac WiFi (80MHz, MCS2, 99pc duty cycle)	X	5.55	66.89	16.28	0.00	150.0	± 9.6 %
		Y	5.10	66.84	16.37		150.0	
10547-	IEEE 802.11ac WiFi (80MHz, MCS3,	Z	5.51	66.77	16.22	0.00	150.0	
AAA	99pc duty cycle)	X	5.62	66.93	16.29	0.00	150.0	±9.6%
		Y	5.22	67.15	16.53		150.0	
10548-		Z	5.58	66.82	16.24	0.00	150.0	
AAA	IEEE 802.11ac WIFi (80MHz, MCS4, 99pc duty cycle)	X	5.87	67.85	16.72	0.00	150.0	± 9.6 %
		Y	5.13	67.04	16.46		150.0	
40550		Z	5.82	67.71	16.65		150.0	
10550- AAA	IEEE 802.11ac WiFi (80MHz, MCS6, 99pc duty cycle)	X	5.58	66.91	16.30	0.00	150.0	±9.6 %
		Y	5.24	67.42	16.68		150.0	
10551-			5.55	66.83	16.27	0.00	150.0	
AAA	IEEE 802.11ac WiFi (80MHz, MCS7, 99pc duty cycle)	X	5.58	66.96	16.28	0.00	150.0	± 9.6 %
		Y -	5.07	66.77	16.33		150.0	
10552- AAA	IEEE 802.11ac WiFi (80MHz, MCS8, 99pc duty cycle)	Z X	5.54 5.50	66.84 66.76	16.2 <u>3</u> 16.19	0.00	150.0 150.0	± 9.6 %
1001		Y	5.09	66.99	16.43		150.0	
		z	5.47	66.66	16.15		150.0	
10553- AAA	IEEE 802.11ac WiFi (80MHz, MCS9, 99pc duty cycle)	X	5.58	66.78	16.23	0.00	150.0	± 9.6 %
		Y	5.11	66.82	16.35		150.0	
		Z	5.54	66.67	16.18		150.0	
10554- AAA	IEEE 1602.11ac WiFi (160MHz, MCS0, 99pc duty cycle)	X	5.89	67.03	16.29	0.00	150.0	± 9.6 %
		Y	5.55	66.98	16.39		150.0	
		Z	5.87	66.94	16.25		150.0	
10555- AAA	IEEE 1602.11ac WiFi (160MHz, MCS1, 99pc duty cycle)	X	6.02	67.33	16.41	0.00	150.0	± 9.6 %
		Y	5.61	67.17	16.48		150.0	
		Z	5.99	67.24	16.37		150.0	
10556- AAA	IEEE 1602.11ac WiFi (160MHz, MCS2, 99pc duly cycle)	X	6.04	67.38	16.43	0.00	150.0	± 9.6 %
		Y	5.65	67.28	16.52		150.0	
		Z	6.02	67.29	16.39		150.0	
10557- AAA	IEEE 1602.11ac WiFi (160MHz, MCS3, 99pc duly cycle)	X	6.01	67.28	16.40	0.00	150.0	± 9.6 %
		Y	5.60	67.14	16.47		150.0	
		Z	5.97	67.17	16.35		150.0	

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10558- AAA	IEEE 1602.11ac WiFi (160MHz, MCS4, 99pc duty cycle)	X	6.05	67.44	16.50	0.00	150.0	± 9.6 %
		Y	5.55	67.02	16.43		150.0	
		Z	6.02	67.33	16.43		150.0	
10560- AAA	IEEE 1602.11ac WiFi (160MHz, MCS6, 99pc duty cycle)	X	6.05	67.29	16.46	0.00	150.0	± 9.6 %
		Y	5.59	67.02	16.46		150.0	
		Z	6.01	67.17	16.41		150.0	
10561- AAA	IEEE 1602.11ac WiFi (160MHz, MCS7, 99pc duty cycle)	X	5.97	67.26	16.48	0.00	150.0	± 9.6 %
		Y	5.53	66.98	16.46		150.0	
		Z	5.94	67.16	16.44		150.0	
10562- AAA	IEEE 1602.11ac WiFi (160MHz, MCS8, 99pc duty cycle)	X	6.09	67.63	16.67	0.00	150.0	± 9.6 %
		Y	5.59	67.19	16.57		150.0	
40500		Z	6.05	67.48	16.60		150.0	
10563- AAA	IEEE 1602.11ac WiFi (160MHz, MCS9, 99pc duly cycle)	X	6.29	67.85	16.73	0.00	150.0	±9.6 %
· · ·		Y	5.86	67.78	16.84		150.0	
40501		Z	6.16	67.47	16.55		150.0	
10564- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 9 Mbps, 99pc duty cycle)	X	4.89	66.92	16.50	0.46	150.0	±9.6 %
		Y	4.37	67.73	16.65		150.0	
40505		Z	4.84	66.85	16.44		150.0	
10565- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 12 Mbps, 99pc duty cycle)	X	5.12	67.38	16.83	0.46	150.0	±9.6 %
		Y	4.53	68.17	16.98		150.0	
		Ž	5.07	67.30	16.78		150.0	
10566- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 18 Mbps, 99pc duty cycle)	X	4.95	67.23	16.64	0.46	150.0	± 9.6 %
		Y	4.37	67.89	16.75		150.0	
		Z	4.90	67.13	16.58		150.0	
10567- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 24 Mbps, 99pc duty cycle)	X	4.98	67.65	17.02	0.46	150.0	± 9.6 %
		Y	4.44	68.37	17.19		150.0	
		Z	4.94	67.56	16.97		150.0	
10568- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 36 Mbps, 99pc duty cycle)	X	4.85	66.96	16.38	0.46	150.0	±9.6 %
		Y	4.20	67.26	16.25		150.0	
		Z	4.80	66.87	16.32		150.0	
10569- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 48 Mbps, 99pc duty cycle)	X	4.94	67.75	17.08	0.46	150.0	± 9.6 %
		Y	4.45	68.76	17.43		150.0	
		Z	4.90	67.68	17.04		150.0	
10570- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 54 Mbps, 99pc duty cycle)	X	4.98	67.59	17.02	0.46	150.0	± 9.6 %
		<u> Y</u>	4.39	68.33	17.21		150.0	l
40554		Z	4.93	67.52	16.97		150.0	L
10571- 	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 90pc duty cycle)	X	1.19	64.81	15.85	0.46	130.0	± 9.6 %
		Y	1.17	65.59	16.16		130.0	L
10575		Z	1.15	64.12	15.44		130.0	
10572- AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps, 90pc duty cycle)	X	1.21	65.43	16.24	0.46	130.0	± 9.6 %
		Ý	1.18	66.27	16.61		130.0	
105-5		Z	1.17	64.67	15.80		130.0	
10573- AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps, 90pc duty cycle)	X	2.73	90.43	24.99	0.46	130.0	± 9.6 %
		Υ	2.86	95.55	28.03		130.0	
		Z	1.51	81.07	21.85		130.0	
10574- AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps, 90pc duly cycle)	X	1.39	72.10	19.60	0.46	130.0	± 9.6 %
		Y	1.35	73.36	20.46		130.0	
		Z	1.26	70.26	18.73	1	130.0	t

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10575-	IEEE 802.11g WiFi 2.4 GHz (DSSS-	X	4.65	66.62	16.45	0.46	130.0	± 9.6 %
	OFDM, 6 Mbps, 90pc duty cycle)					0.40	100.0	± 0.0 %
		Y	4.13	67.33	16.45		130.0	
10576-		Z	4.61	66.55	16.40		130.0	
AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 9 Mbps, 90pc duty cycle)	X	4.68	66.80	16.53	0.46	130.0	± 9.6 %
		Y	4.17	67.68	16.63		130.0	
10577-		Z	4.64	66.73	16.48		130.0	
AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 12 Mbps, 90pc duty cycle)	X	4.88	67.09	16.70	0.46	130.0	± 9.6 %
		Y	4.28	67.86	16.75		130.0	
10578- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 18 Mbps, 90pc duty cycle)	Z X	4.83	67.01 67.27	16.65 16.82	0.46	130.0 130.0	± 9.6 %
	or bin, to hipps, sope duty cycle)	Y	4.22	68.05	16.92		130.0	
		z	4.73	67.18	16.92		130.0	
10579- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 24 Mbps, 90pc duty cycle)	X	4.53	66.48	16.08	0.46	130.0	± 9.6 %
		Y	3.91	66.80	15.89		130.0	
		Z	4.48	66.37	16.01		130.0	
10580- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 36 Mbps, 90pc duty cycle)	X	4.58	66.51	16.09	0.46	130.0	± 9.6 %
		Y	3.89	66.66	15.78		130.0	
		Z	4.53	66.42	16.03		130.0	
10581- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 48 Mbps, 90pc duty cycle)	X	4.68	67.30	16.76	0.46	130.0	±9.6 %
		Y	4.14	68.18	16.94		130.0	
10500		Z	4.63	67.21	16.71		130.0	
10582- AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS- OFDM, 54 Mbps, 90pc duly cycle)	X	4.47	66.23	15.85	0.46	130.0	±9.6 %
		Y	3.80	66.45	15.61		130.0	
10500		Z	4.42	66.12	15.78		130.0	
10583- AAA	IEEE 802.11a/n WiFi 5 GHz (OFDM, 6 Mbps, 90pc duty cycle)	X	4.65	66.62	16.45	0.46	130.0	± 9.6 %
		Y	4.13	67.33	16.45		<u>130.</u> 0	
40504		Z	4.61	66.55	16.40		130.0	
10584- AAA	IEEE 802.11a/n WiFi 5 GHz (OFDM, 9 Mbps, 90pc duty cycle)	X	4.68	66.80	16.53	0.46	130.0	±9.6 %
		Y	4.17	67.68	16.63		130.0	
40505		Z	4.64	66.73	16.48		130.0	
10585- AAA	IEEE 802.11a/n WiFi 5 GHz (OFDM, 12 Mbps, 90pc duty cycle)	X	4.88	67.09	16.70	0.46	130.0	± 9.6 %
		Y	4.28	67.86	16.75		130.0	
10586- AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps, 90pc duty cycle)	Z X	<u>4.83</u> 4.78	67.01 67.27	16.65 16.82	0.46	130.0 130.0	± 9.6 %
		Y	4.22	68.05	16.92		130.0	
		z	4.73	67.18	16.77		130.0	· · · ·
10587- AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps, 90pc duty cycle)	X	4.53	66.48	16.08	0.46	130.0	±9.6 %
		Y	3.91	66.80	15.89		130.0	
		Z	4.48	66.37	16.01		130.0	
10588- AAA	IEEE 802.11a/n WiFi 5 GHz (OFDM, 36 Mbps, 90pc duty cycle)	X	4.58	66.51	16.09	0.46	130.0	± 9.6 %
· · ·		Y	3.89	66.66	15.78		130.0	
40500		Z	4.53	66.42	16.03		130.0	
10589- AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps, 90pc duty cycle)	X	4.68	67.30	16.76	0.46	130.0	±9.6 %
		<u>Y</u>	4.14	68.18	16.94		130.0	
10500		Z	4.63	67.21	16.71		130.0	
10590- AAA	IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps, 90pc duty cycle)	×	4.47	66.23	15.85	0.46	130.0	± 9.6 %
		Y	3.80	66.45	15.61		130.0	
_		Z	4.42	66.12	15.78		130.0	

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10591-	IEEE 802.11n (HT Mixed, 20MHz,	X	4.80	66.69	16.56	0.46	130.0	± 9.6 %
AAA	MCS0, 90pc duly cycle)	-	1.00	0= 15				
		Y	4.29	67.48	16.65		130.0	
40500		Z	4.76	66.62	16.52		130.0	
10592- AAA	IEEE 802.11n (HT Mixed, 20MHz, MCS1, 90pc duly cycle)	X	4.96	67.02	16.69	0.46	130.0	± 9.6 %
		Y	4.35	67.66	16.74		130.0	
		Z	4.91	66.95	16.65		130.0	
10593- AAA	IEEE 802.11n (HT Mixed, 20MHz, MCS2, 90pc duty cycle)	X	4.87	66.92	16.57	0.46	130.0	± 9.6 %
		Y	4.28	67.58	16.60		130.0	
		Z	4.82	66.84	16.52		130.0	
10594- AAA	IEEE 802.11n (HT Mixed, 20MHz, MCS3, 90pc duty cycle)	X	4.93	67.10	16.73	0.46	130.0	± 9.6 %
		Y	4.32	67.69	16.75		130.0	
		Z	4.88	67.02	16.68		130.0	
10595- AAA	IEEE 802.11n (HT Mixed, 20MHz, MCS4, 90pc duty cycle)	X	4.90	67.04	16.62	0.46	130.0	±9.6 %
		Y	4.28	67.67	16.66		130.0	
		Z	4.85	66.97	16.57		130.0	
10596- AAA	IEEE 802.11n (HT Mixed, 20MHz, MCS5, 90pc duty cycle)	X	4.83	67.04	16.62	0.46	130.0	± 9.6 %
		Y	4.19	67.48	16.58		130.0	
		Z	4.78	66.95	16.57		130.0	
10597- AAA	IEEE 802.11n (HT Mixed, 20MHz, MCS6, 90pc duty cycle)	X	4.78	66.93	16.50	0.46	130.0	± 9.6 %
		Y	4.17	67.42	16.44		130.0	
		Z	4.73	66.84	16.44		130.0	
10598- AAA	IEEE 802.11n (HT Mixed, 20MHz, MCS7, 90pc duty cycle)	X	4.77	67.20	16.78	0.46	130.0	± 9.6 %
		Y	4.23	67.87	16.85		130.0	<u> </u>
		Z	4.72	67.09	16.72		130.0	
10599- AAA	IEEE 802.11n (HT Mixed, 40MHz, MCS0, 90pc duty cycle)	X	5.48	67.23	16.77	0.46	130.0	±9.6 %
		Y	5.11	68.05	17.18		130.0	
		Z	5.44	67.15	16.74		130.0	
10600- AAA	IEEE 802.11n (HT Mixed, 40MHz, MCS1, 90pc duty cycle)	X	5.60	67.61	16.93	0.46	130.0	± 9.6 %
		Y	5.02	67.79	17.02		130.0	
		Z	5.57	67.57	16.91		130.0	
10601- AAA	IEEE 802.11n (HT Mixed, 40MHz, MCS2, 90pc duty cycle)	X	5.49	67.38	16.83	0.46	130.0	± 9.6 %
		Y	4.99	67.77	17.04		130.0	
		Ż	5.46	67.31	16.81		130.0	· · · ·
10602- AAA	IEEE 802.11n (HT Mixed, 40MHz, MCS3, 90pc duly cycle)	X	5.59	67.40	16.75	0.46	130.0	±9.6 %
		Y	5.00	67.54	16.84		130.0	
		Ż	5.57	67.40	16.76		130.0	
10603- AAA	IEEE 802.11n (HT Mixed, 40MHz, MCS4, 90pc duty cycle)	X	5.67	67.72	17.05	0.46	130.0	± 9.6 %
		Y	5.02	67.69	17.07		130.0	1
	· · · · ·	Ż	5.64	67.68	17.04		130.0	· ·
10604- AAA	IEEE 802.11n (HT Mixed, 40MHz, MCS5, 90pc duly cycle)	X	5.49	67.21	16.78	0.46	130.0	± 9.6 %
· · ·		Y	5.00	67.56	16.96		130.0	1
		Ż	5.49	67.27	16.82		130.0	1
10605- AAA	IEEE 802.11n (HT Mixed, 40MHz, MCS6, 90pc duty cycle)	X	5.59	67.50	16.92	0.46	130.0	± 9.6 %
		Y	4.95	67.41	16.89		130.0	<b> </b>
	·	Ż	5.56	67.47	16.92	1	130.0	
						+ - <del></del>		1
10606- AAA	IEEE 802.11n (HT Mixed, 40MHz, MCS7, 90pc duly cycle)	X	5.33	66.83	16.44	0.46	130.0	± 9.6 %
10606- AAA	IEEE 802.11n (HT Mixed, 40MHz, MCS7, 90pc duly cycle)		5.33 4.96	66.83 67.58	16.44 16.81	0.46	130.0	± 9.6 %

10607- AAA	IEEE 802.11ac WiFi (20MHz, MCS0, 90pc duty cycle)	X	4.64	66.02	16.19	0.46	130.0	± 9.6 %
		Y	4.16	66.91	16.36	<u> </u>	130.0	ļ
		Z	4.60	65.95	16.15		130.0	
10608- AAA	IEEE 802.11ac WiFi (20MHz, MCS1, 90pc duty cycle)	X	4.83	66.42	16.36	0.46	130.0	±9.6 %
		-   Y	4.22	67.08	16.44		130.0	
		z	4.78	66.34	16.31		130.0	
10609- AAA	IEEE 802.11ac WiFi (20MHz, MCS2, 90pc duty cycle)	X	4.71	66.26	16.19	0.46	130.0	± 9.6 %
		Y	4.14	66.94	16.27		130.0	
		Z	4.67	66.17	16.14		130.0	
10610- AAA	IEEE 802.11ac WiFi (20MHz, MCS3, 90pc duty cycle)	X	4.77	66.42	16.36	0.46	130.0	± 9.6 %
		Y	4.18	67.09	16.43		130.0	_
		Z	4.72	66.34	16.31		130.0	
10611- AAA	IEEE 802.11ac WiFi (20MHz, MCS4, 90pc duty cycle)	X	4.68	66.22	16.20	0.46	130.0	± 9.6 %
		Y	4.10	66.87	16.26		1 <u>30.0</u>	
400 10		Z	4.63	66.13	16.14		130.0	
10612- AAA	IEEE 802.11ac WiFi (20MHz, MCS5, 90pc duty cycle)	X	4.69	66.36	16.23	0.46	130.0	± 9.6 %
	· · · · · · · · · · · · · · · · · · ·	Y	4.03	66.77	16.18		130.0	
40040			4.63	66.26	16.18		130.0	
10613- AAA	IEEE 802.11ac WiFi (20MHz, MCS6, 90pc duty cycle)	X	4.69	66.24	16.12	0.46	130.0	± 9.6 %
		Y	4.05	66.68	16.06		130.0	
10011		_ Z	4.63	66.13	16.05		130.0	
10614- AAA	IEEE 802.11ac WiFi (20MHz, MCS7, 90pc duty cycle)	X	4.64	66.46	16.37	0.46	130.0	± 9.6 %
		Y	4.09	67.10	16.44		<u>130.0</u>	
		Z	4.59	66.36	16.31		130.0	
10615- AAA	IEEE 802.11ac WiFi (20MHz, MCS8, 90pc duty cycle)	X	4.68	66.02	15.96	0.46	130.0	± 9.6 %
		Y	4.06	66.66	15.97		130.0	
		Z	4.62	65.94	15.90		130.0	
10616- AAA	IEEE 802.11ac WIFi (40MHz, MCS0, 90pc duly cycle)	X	5.29	66.48	16.38	0.46	130.0	± 9.6 %
		Y	4.78	66.74	16.52		130.0	
		Z	5.26	66.40	16.35		130.0	
10617- AAA	IEEE 802.11ac WiFi (40MHz, MCS1, 90pc duty cycle)	X	5.36	66.65	16.44	0.46	130.0	± 9.6 %
		Y	4.78	66.75	16.51		130.0	
		Z	5.33	66.60	16.42		130.0	
10618- AAA	IEEE 802.11ac WiFi (40MHz, MCS2, 90pc duty cycle)	X	5.25	66.67	16.46	0.46	130.0	± 9.6 %
		Y	4.72	66.85	16.58		130.0	
		Z	5.21	66.61	16.44		130.0	
10619- AAA	IEEE 802.11ac WiFi (40MHz, MCS3, 90pc duty cycle)	X	5.26	66.46	16.29	0.46	130.0	± 9.6 %
		Y	4.77	66.81	16.49		130.0	
		Z	5.22	66.38	16.26		130.0	
10620- AAA	IEEE 802.11ac WiFi (40MHz, MCS4, 90pc duty cycle)	X	5.35	66.50	16.36	0.46	130.0	± 9.6 %
		Y	4.78	66.60	16.41		130.0	
		Z	5.31	66.41	16.33		130.0	
10621- AAA	IEEE 802.11ac WiFi (40MHz, MCS5, 90pc duty cycle)	X	5.35	66.65	16.56	0.46	130.0	± 9.6 %
		Y	4.83	66.85	16.68		130.0	
		_ Z	5.32	66.59	16.54		130.0	
10622- AAA	IEEE 802.11ac WiFi (40MHz, MCS6, 90pc duly cycle)	×	5.37	66.81	16.63	0.46	130.0	± 9.6 %
		Y	4.79	66.84	16.68		130.0	
		Z	5.33	66.74	16.61		130.0	

10623- AAA	IEEE 802.11ac WiFi (40MHz, MCS7, 90pc duty cycle)	x	5.24	66.32	16.25	0.46	130.0	± 9.6 %
		Y	4.72	66.50	16.34		130.0	
		z	5.20	66.24	16.22		130.0	
10624- AAA	IEEE 802.11ac WiFi (40MHz, MCS8, 90pc duty cycle)	X	5.43	66.52	16.42	0.46	130.0	± 9.6 %
		Y	4.88	66.72	16.52		130.0	
		Z	5.40	66.45	16.39		130.0	
10625- AAA	IEEE 802.11ac WiFi (40MHz, MCS9, 90pc duty cycle)	X	5.79	67.47	16.94	0.46	130.0	± 9.6 %
		Y	5.00	67.06	16.76		130.0	
		Z	5.70	67.26	16.85		130.0	
10626- AAA	IEEE 802.11ac WiFi (80MHz, MCS0, 90pc duty cycle)	X	5.59	66.53	16.33	0.46	130.0	± 9.6 %
		Y	5.18	66.57	16.44		130.0	
40007		Z	5.56	66.46	16.31		130.0	
10627- AAA	IEEE 802.11ac WiFi (80MHz, MCS1, 90pc duly cycle)	X	5.83	67.09	16.57	0.46	130.0	± 9.6 %
		Y	5.32	67.03	16.66		130.0	
40000		Z	5.81	67.05	16.57		130.0	<u> </u>
10628- AAA	IEEE 802.11ac WiFi (80MHz, MCS2, 90pc duty cycle)	X	5.62	66.61	16.26	0.46	130.0	± 9.6 %
		Y	5.14	66.45	16.28		130.0	
40600		Z	5.58	66.50	16.22		130.0	
10629- AAA	IEEE 802.11ac WiFi (80MHz, MCS3, 90pc duty cycle)	X	5.69	66.66	16.28	0.46	130.0	± 9.6 %
		Y	5.30	66.90	16.51		130.0	
40000		Z	5.66	66.57	16.25		130.0	
10630- AAA	IEEE 802.11ac WiFi (80MHz, MCS4, 90pc duty cycle)	X	6.12	68.14	17.02	0.46	130.0	± 9.6 %
		Ý	5.23	66.85	16.50		130.0	
		Z	6.06	67.97	16.95		130.0	
10631- AAA	IEEE 802.11ac WIFi (80MHz, MCS5, 90pc duty cycle)	X	6.03	67.99	17.15	0.46	130.0	±9.6 %
		Y	5.35	67.44	17.00		130.0	
	· · · · · · · · · · · · · · · · · · ·	Z	5.98	67.84	17.09		130.0	
10632- AAA	IEEE 802.11ac WiFi (80MHz, MCS6, 90pc duty cycle)	X	5.80	67.18	16.76	0.46	130.0	± 9.6 %
		Y	5.50	67.84	17.20		130.0	
		Z	<u>5.</u> 78	67.15	16.76		130.0	
10633- AAA	IEEE 802.11ac WiFi (80MHz, MCS7, 90pc duly cycle)	X	5.68	66.78	16.38	0.46	130.0	±9.6 %
		Y	<u>5.16</u>	66.59	16.40		130.0	
		Z	5.65	66.69	16.35		130.0	
10634- AAA	IEEE 802.11ac WiFi (80MHz, MCS8, 90pc duty cycle)	X	5.67	66.82	16.47	0.46	130.0	±9.6 %
		Y	5.24	66.99	16.65		130.0	
		Z	5.63	66.72	16.43		130.0	
10635- AAA	IEEE 802.11ac WiFi (80MHz, MCS9, 90pc duty cycle)	X	5.54	66.10	15.82	0.46	130.0	± 9.6 %
		Y	5.01	65.92	15.79		130.0	
		Ζ	5.50	65.99	15.78		130.0	
10636- AAA	IEEE 1602.11ac WiFi (160MHz, MCS0, 90pc duty cycle)	X	6.00	66.89	16.41	0.46	130.0	± 9.6 %
		Y	5.65	66.81	16.48		130.0	
1000-		Z	5.98	66.82	16.39	<u> </u>	130.0	
10637- AAA	IEEE 1602.11ac WiFi (160MHz, MCS1, 90pc duty cycle)	X	6.16	67.27	16.58	0.46	130.0	±9.6 %
		Y	5.75	67.13	16.64		<u>1</u> 30.0	
		Z	6.14	67.21	16.57		130.0	
10638- AAA	IEEE 1602.11ac WiFi (160MHz, MCS2, 90pc duly cycle)	X	6.15	67.24	16.55	0.46	130.0	±9.6 %
		Ý	<u>5.76</u>	67.17	16.64		130.0	
		Z	6.13	67.17	16.53		130.0	

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10639- AAA	IEEE 1602.11ac WiFi (160MHz, MCS3, 90pc duty cycle)	X	6.13	67.20	16.57	0.46	130.0	± 9.6 %
		Y	5.71	67.01	16.60		130.0	·
		Z	6.11	67.11	16.54	<u> </u>	130.0	
10640- AAA	IEEE 1602.11ac WiFi (160MHz, MCS4, 90pc duty cycle)	X	6.13	67.19	16.51	0.46	130.0	± 9.6 %
		Y	5.60	66.69	16.38		130.0	
		Z	6.11	67.10	16.47		130.0	· · · ·
10641- AAA	IEEE 1602.11ac WiFi (160MHz, MCS5, 90pc duly cycle)	X	6.18	67.10	16.48	0.46	130.0	± 9.6 %
		Y	5.73	66.87	16.49		130.0	
		Z	6.17	67.05	16.47		130.0	
10642- AAA	IEEE 1602.11ac WiFi (160MHz, MCS6, 90pc duty cycle)	X	6.23	67.38	16.79	0.46	130.0	± 9.6 %
		Y	5.75	67.07	16.76		130.0	
		Z	6.20	67.30	16.77		130.0	
10643- 	IEEE 1602.11ac WiFi (160MHz, MCS7, 90pc duty cycle)	Х	6.06	67.04	16.51	0.46	130.0	± 9.6 %
		Y	5.58	66.67	16.43		130.0	
·		Z	6.04	66.97	16.50		130.0	
10644- AAA	IEEE 1602.11ac WiFi (160MHz, MCS8, 90pc duty cycle)	X	6.22	67.52	16.78	0.46	130.0	± 9.6 %
		Y	5.68	67.01	16.62		130.0	
		Z	6.17	67.37	16.71		130.0	
10645- AAA	IEEE 1602.11ac WiFi (160MHz, MCS9, 90pc duty cycle)	X	6.52	68.03	16.98	0.46	130.0	± 9.6 %
		Y	6.07	67.95	17.07		130.0	
		Z	6.34	67.53	16.76		130.0	
10646- AAC	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK, UL Subframe=2,7)	X	13.12	97.57	31.83	9.30	60.0	± 9.6 %
··		Y	3.90	78.39	26.30		60.0	
		Z	9.88	93.63	31.05		60.0	
10647- AAB	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK, UL Subframe=2,7)	X	12.04	96.40	31.56	9.30	60.0	±9.6 %
		Y	3.54	76.66	25.68		60.0	
		Z	8.93	92.04	30.63		60.0	
10648- AAA	CDMA2000 (1x Advanced)	X	0.77	65.21	11.99	0.00	150.0	± 9.6 %
		Y	0.27	60.00	4.67		150.0	
		Z	0.71	64.17	11.12		150.0	

<sup>E</sup> 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
- 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,  $r^2 = \rho^2 + \rho'^2 - 2\rho\rho' \cos \phi'$ ,  $\omega$  is the angular frequency, and  $j = \sqrt{-1}$ .

		omposi	tion of tr	ie lissu	e Equiva	lent wat	ter			
Frequency (MHz)	750	750	835	835	1750	1750	1900	1900	2450	2450
Tissue	Head	Body	Head	Body	Head	Body	Head	Body	Head	Body
Ingredients (% by weight)										
Bactericide			0.1	0.1						
DGBE	1				47	31	44.92	29.44		26.7
HEC	See page	Saa na ga 2	1	1					Saa naga 4	
NaCl	2-3	See page 2	1.45	0.94	0.4	0.2	0.18	0.39	See page 4	0.1
Sucrose	]		57	44.9						
Water	1		40.45	53.06	52.6	68.8	54.9	70.17		73.2

Table D-I Composition of the Tissue Equivalent Matter

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#### 2 Composition / Information on ingredients

#### 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** 

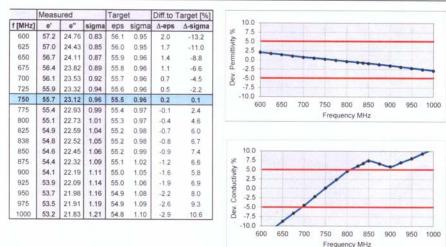
Target parameters as defined in the IEEE 1528 and IEC 62209 compliance standards.

#### **Test Condition**

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

#### Additional Information

TSL Density 1.212 g/cm<sup>3</sup> TSL Heat-capacity 3.006 kJ/(kg\*K)



#### Figure D-2 750MHz Body Tissue Equivalent Matter

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Schmid & Partner Engineering AG	S	D
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Zeughausstrasse 43, 8004 Zurich, Switzerland Phone +41 44 245 9700, Fax +41 44 245 9779 info@speag.com, http://www.speag.com

#### Measurement Certificate / Material Test

Item Name	Head Tissue Simulating Liguid (HSL750V2)	
Product No.	SL AAH 075 AA (Batch: 170612-4)	
Manufacturer	SPEAG	

Measurement Method TSL dielectric parameters measured using calibrated DAK probe.

#### Target Parameters

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

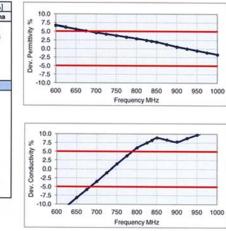
#### **Test Condition**

Ambient	Environment temperatur (22 ± 3)°C and humidity < 70%.
TSL Temperature	22°C
Test Date	20-Jun-17
Operator	CL

#### Additional Information

TSL Density 1.284 g/cm<sup>3</sup> TSL Heat-capacity 2.701 kJ/(kg\*K)

-	Measu	ured		Targe	t	Diff.to Target [%]	
f [MHz]	e'	e"	sigma	eps	sigma	∆-eps	∆-sigma
600	45.6	22.97	0.77	42.7	0.88	6.7	-13.1
625	45.2	22.73	0.79	42.6	0.88	6.2	-10.6
650	44.9	22.49	0.81	42.5	0.89	5.6	-8.2
675	44.5	22.27	0.84	42.3	0.89	5.1	-5.8
700	44.2	22.05	0.86	42.2	0.89	4.6	-3.5
725	43.8	21.88	0.88	42.1	0.89	4.2	-1.0
750	43.5	21.72	0.91	41.9	0.89	3.8	1.4
775	43.2	21.55	0.93	41.8	0.90	3.4	3.7
800	42.9	21.38	0.95	41.7	0.90	2.9	6.0
825	42.6	21.24	0.97	41.6	0.91	2.4	7.5
838	42.5	21.17	0.99	41.5	0.91	2.2	8.2
850	42.3	21.09	1.00	41.5	0.92	2.0	8.9
875	42.0	20.98	1.02	41.5	0.94	1.2	8.3
900	41.7	20.87	1.05	41.5	0.97	0.5	7.7
925	41.5	20.76	1.07	41.5	0.98	0.0	8.7
950	41.2	20.64	1.09	41.4	0.99	-0.6	9.7
975	40.9	20.55	1.11	41.4	1.00	-1.1	10.9
1000	40.6	20.46	1.14	41.3	1.01	-1.7	12.1



a g

e

Figure D-3 750MHz Head Tissue Equivalent Matter

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3 Composition / Info		
The Item is composed of the	ne following ingre	dients:
Water	50 - 73 %	
Non-ionic detergents	25 - 50 %	polyoxyethylenesorbitan monolaurate
NaCl	0-2%	
Preservative	0.05 - 0.1%	6 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 g marked by symbols.	guidelines, the pr	oduct is not a dangerous mixture and therefore not required to be

#### Figure D-4 Composition of 2.4 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.

Schmid Zeugha Phone nfo@sc	+41 44	245 97	100, Fa	IX +41	44 245	9779		<u>speag</u>
Meas	urem	nent (	Certif	ficate	/ Ma	iterial	Test	
tem N Produc Manufi	t No.			AH 196			Liquid () 170619-1)	(BBL 1900-3800V3)
Measu				mast	have	using ca	Brated P	IAK probe.
Setup						and a second	incritico b	
			ere w	ithin ±	2.5%	towards	the targe	t values of Methanol.
Target	Parar	neters						
larget	param	neters	as def	fined in	the li	EEE 15	28 and IE	C 62209 compliance standards.
Test C		on	F					
Ambie TSL Te	nt empera	ature	Envie 22°C	onmen	it temp	peratur (	22 ± 3)*C	and humidity < 70%.
Test D Operat	ate		20-Ju CL	n-17				
Additi TSL D		forma		g/cm	-			
TSL H	eat-ca	pacity		kJ/(kg	3*K)			
(MHz)	Measu		signa	Target eps	sigma	Diff.to T ∆-eps	arget (%) A-sigma	10.0
1900	41.8	12.2	1.3	40.0	1.4	4.5	-8.2	y 75-
1950	41.6	12.3	1.3	40.0	1.4	40	-4.6	April 25 00
2050	41.2	12.6	1.4	39.9	1.4	3.3	-0.9	25
2100	41.1	12.7	1.5	39.8	1.5	3.1	-0.6	25
2150	40.9	12.8	1.5	39.7 39.6	1.5	2.9	-0.2	0 60 75
2250	40.6	13.0	1.6	39.6	1.6	2.5	0.5	-10.0
2300	40.4	13.2	17	39.5	1.7	2.3	1.1	1900 2100 2300 2500 2700 2900 3100 3300 3500 3700 3900
2400	40.0	13.4	1.8	39.3	1.8	1.8	2.1	Frequency MHz
2450 2500	39.8 39.7	13.5	1.8	39.2 39.1	1.8	1.6	2.6	
2550	39.5	13.7	2.0	39.1	1.9	1.1	22	10.0
2600	39.5	13.9	2.0	39.0	2.0	0.8	2.5	78
2650 2700	39.1 39.0	14.0	21	38.9	2.0	0.5	2.6	\$ 50
2750	38.7	14.3	22	38.8	2.1	-0.2	2.6	25 25 25 25
2800 2850	38.6 38.4	14.4	22 23	38.8 38.7	22	-0.4	2.5 2.6	
2900	38.2	14.6	23	38.6	2.3	-1.0	2.6	8 50 75
2950 3000	38.1 37.9	14.7	2.4	38.6	23 24	-1.3	2.6	-10.0
3050	37.7	14.8	2.5	38.4	2.5	-2.0	2.8	1900 2100 2300 2500 2700 2900 3100 3300 3500 3700 3900
3100 3150	37.5	14.9	2.6	38.4 38.3	2.5	-2.3	2.8 2.9	Frequency MHz
3200	37.1	15.1	2.7	38.3	2.6	-3.0	2.9	
3250 3300	37.0 36.8	15.1	2.7	38.2	27	-3.3	3.0 3.1	
3350	36.6	15.3	2.8	38.1	2.8	-3.9	3.2	
3400 3450	36.4	15.3	2.9	38.0	2.8	-42	3.3	
3500	36.1	15.5	3.0	37.9	2.9	-4.8	3.5	
3550 3600	36.0 35.8	15.5 15.6	3.1 3.1	37.9 37.8	3.0 3.0	-5.0	3.6 3.8	
3650	35.7	15.0	3.1	37.8	3.0	-5.6	3.8	
2200	35.5	15.7		37.7	-			
3700	35.4	15.8	3.3	37.6	3.1	-5.8	3.9	

Figure D-5 2.4 GHz Head Tissue Equivalent Matter

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## 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.

	SAR System Valuation Summary – Tg															
SAR	FREQ.		PROBE	PROBE					COND.	PERM.	CI	V VALIDATIO	N	M	DD. VALIDATIO	N
SYSTEM	[MHz]	DATE	SN	TYPE	PROBE C	AL. POINT	(σ)	(ɛr)	SENSITIVITY	PROBE	PROBE	MOD.	DUTY	PAR		
#			314	TIFE			(0)	(13)	SENSITIVITT	LINEARITY	ISOTROPY	TYPE	FACTOR	FAR		
E	750	3/11/2018	3213	ES3DV3	750	Head	0.890	40.788	PASS	PASS	PASS	N/A	N/A	N/A		
E	835	3/5/2018	3213	ES3DV3	835	Head	0.925	43.335	PASS	PASS	PASS	GMSK	PASS	N/A		
J	1750	3/13/2018	3914	EX3DV4	1750	Head	1.404	39.175	PASS	PASS	PASS	N/A	N/A	N/A		
J	1900	3/15/2018	3914	EX3DV4	1900	Head	1.439	39.507	PASS	PASS	PASS	GMSK	PASS	N/A		
G	1900	8/31/2017	3332	ES3DV3	1900	Head	1.457	40.398	PASS	PASS	PASS	GMSK	PASS	N/A		
G	2450	10/16/2017	3332	ES3DV3	2450	Head	1.880	38.615	PASS	PASS	PASS	OFDM/TDD	PASS	PASS		
К	750	5/3/2017	7406	EX3DV4	750	Body	0.952	53.745	PASS	PASS	PASS	N/A	N/A	N/A		
I	750	3/6/2018	3287	ES3DV3	750	Body	0.951	56.970	PASS	PASS	PASS	N/A	N/A	N/A		
E	835	3/16/2018	3213	ES3DV3	835	Body	0.968	53.713	PASS	PASS	PASS	GMSK	PASS	N/A		
J	835	3/4/2018	3914	EX3DV4	835	Body	0.998	52.865	PASS	PASS	PASS	GMSK	PASS	N/A		
К	1750	5/1/2017	7406	EX3DV4	1750	Body	1.514	51.685	PASS	PASS	PASS	N/A	N/A	N/A		
J	1900	3/9/2018	3914	EX3DV4	1900	Body	1.533	53.731	PASS	PASS	PASS	GMSK	PASS	N/A		
G	2450	10/10/2017	3332	ES3DV3	2450	Body	2.040	51.023	PASS	PASS	PASS	OFDM/TDD	PASS	PASS		

Table E-1 SAR System Validation Summary – 1g

Table E-2						
SAR System Validation Summary – 10g						

SAR	FREQ.		PROBE	PROBE			COND.	PERM.	C'	CW VALIDATION		MOD. VALIDATION		N	
SYSTEM	[MHz]	DATE	SN	TYPE	PROBE C	AL. POINT	(7)	(cr)	SENSITIVITY	PROBE	PROBE	MOD.	DUTY	PAR	
#	[IVIHZ]		SIN	TIPE			(σ)	(ɛr)		SENSITIVIT	LINEARITY	ISOTROPY	TYPE	FACTOR	PAR
К	1750	5/1/2017	7406	EX3DV4	1750	Body	1.514	51.685	PASS	PASS	PASS	N/A	N/A	N/A	
J	1900	3/9/2018	3914	EX3DV4	1900	Body	1.533	53.731	PASS	PASS	PASS	GMSK	PASS	N/A	

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.

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## 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.

#### G.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.

#### G.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 low, mid, and high bands, as appropriate (see note below Table G-2 for more details).
- 4. Steps 1 through 3 were repeated for all distance-based power reduction mechanisms.

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## G.3 Main Antenna Verification Summary

Power measurement vernication for main Antenna									
Machaniam(a)	Mada (Dand	Conducted Power (dBm)							
Mechanism(s)	Mode/Band	Un-triggered	Mechanism #1						
		(Max)	(Reduced)						
Grip	UMTS B4	24.36	23.47						
Grip	UMTS B2	24.14	23.21						
Grip	CDMA BC1	24.02	23.26						
Grip	LTE B2	24.4	23.49						
Grip	LTE B4	24.1	23.25						
Grip	LTE B66	24.13	23.29						

Table G-1
Power Measurement Verification for Main Antenna

 Table G-2

 Distance Measurement Verification for Main Antenna

Mechanism(s)	Test Condition	Band	Distance Measu	Minimum Distance per Manufacturer	
			Moving Toward	Moving Away	(mm)
Grip	Body - Back Side	Mid	6	8	4
Grip	Body - Front Side	Mid	3	4	3

\*Note: Mid band refers to: CDMA BC1, GSM1900, UMTS B2/4, LTE B2/4/25/66;

### G.4 WIFI Verification Summary

Table G-3
Power Measurement Verification WIFI

	Mada (Dand	Conducted Power (dBm)			
Mechanism(s)	Mode/Band	Un-triggered	Mechanism #1		
		(Max)	(Reduced)		
Held-to-Ear	802.11b	22.42	17.21		
Held-to-Ear	802.11g	19.53	17.47		
Held-to-Ear	802.11n (2.4GHz)	18.7	17.07		

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