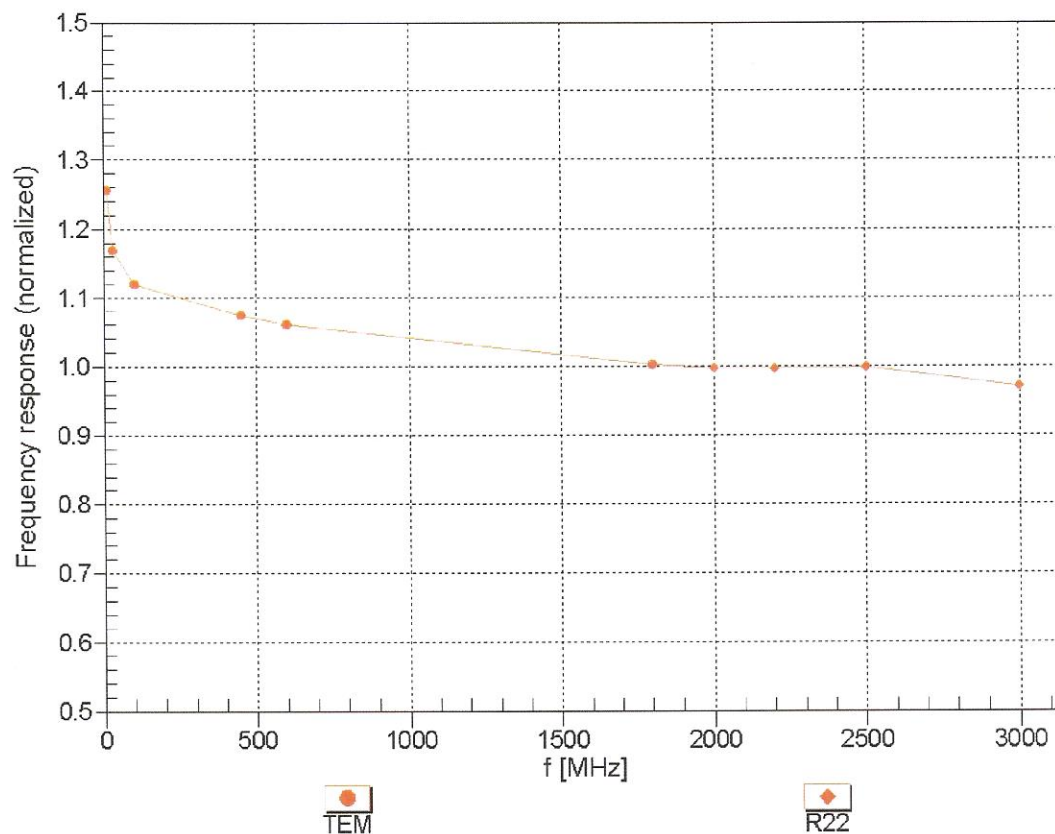


Frequency Response of E-Field

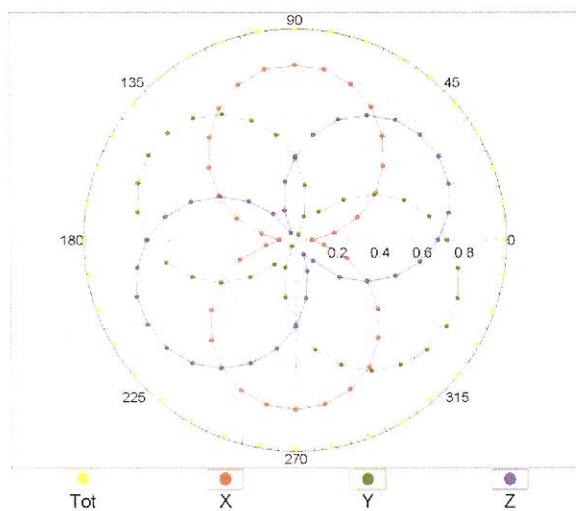
(TEM-Cell:ifi110 EXX, Waveguide: R22)



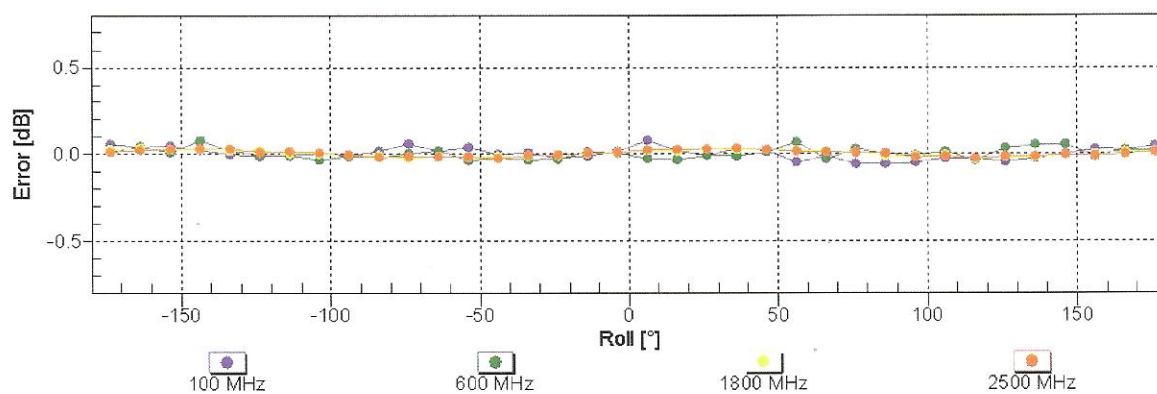
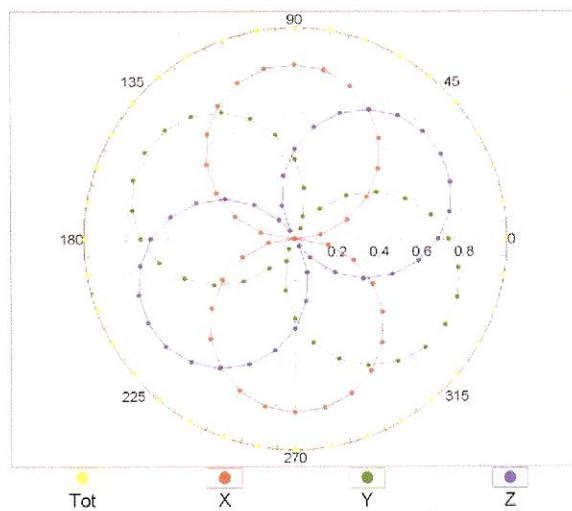
Uncertainty of Frequency Response of E-field: $\pm 6.3\%$ ($k=2$)

Receiving Pattern (ϕ), $\theta = 0^\circ$

f=600 MHz,TEM

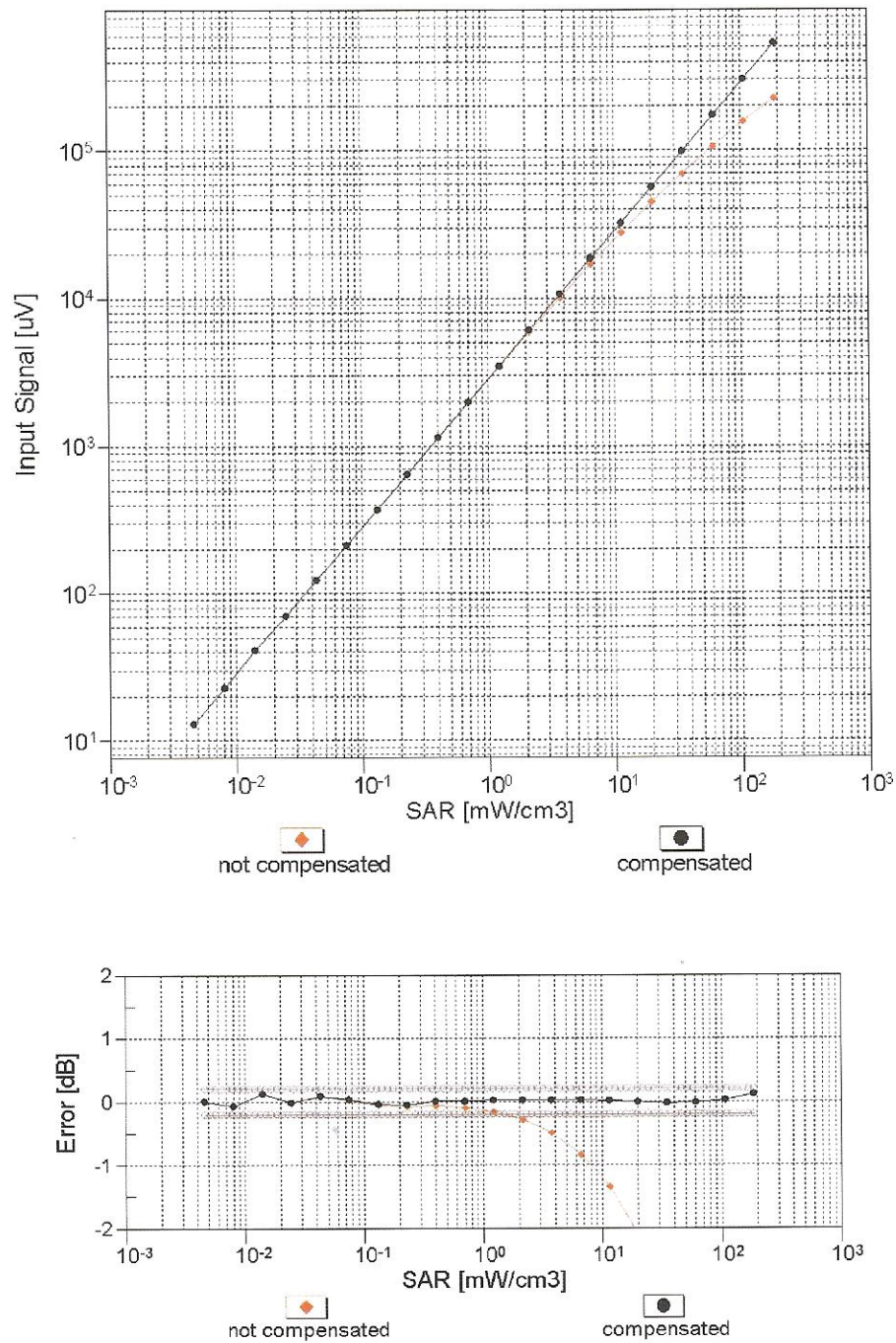


f=1800 MHz,R22



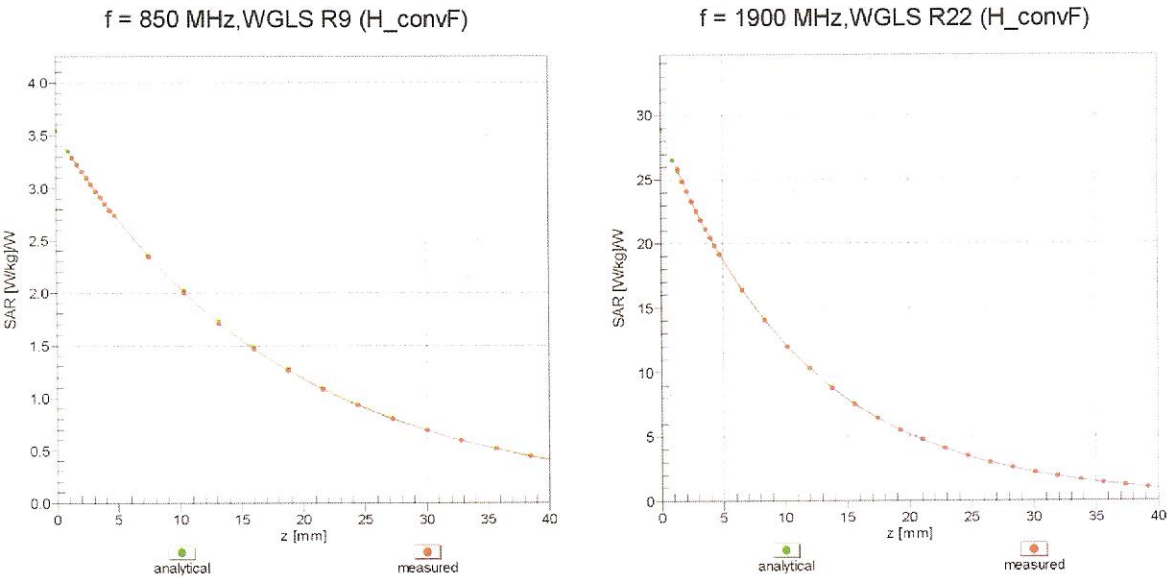
Uncertainty of Axial Isotropy Assessment: $\pm 0.5\%$ (k=2)

Dynamic Range $f(\text{SAR}_{\text{head}})$ (TEM cell , $f_{\text{eval}} = 1900 \text{ MHz}$)

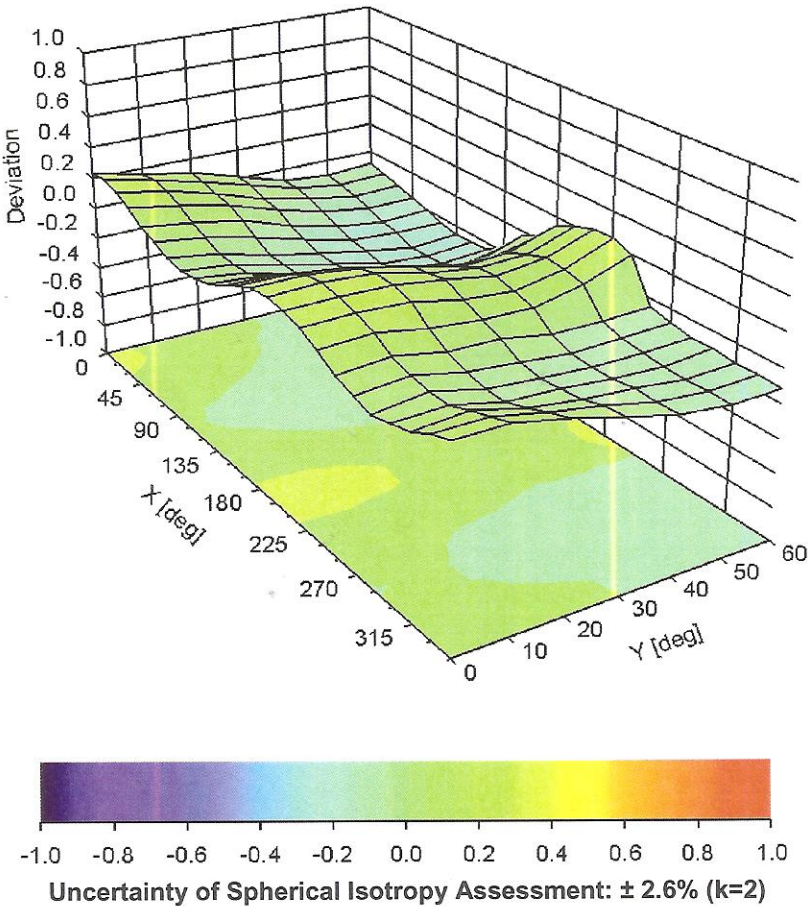


Uncertainty of Linearity Assessment: $\pm 0.6\%$ ($k=2$)

Conversion Factor Assessment



Deviation from Isotropy in Liquid Error (ϕ, θ), f = 900 MHz



DASY/EASY - Parameters of Probe: EX3DV4 - SN:7381

Other Probe Parameters

Sensor Arrangement	Triangular
Connector Angle (°)	116.2
Mechanical Surface Detection Mode	enabled
Optical Surface Detection Mode	disabled
Probe Overall Length	337 mm
Probe Body Diameter	10 mm
Tip Length	9 mm
Tip Diameter	2.5 mm
Probe Tip to Sensor X Calibration Point	1 mm
Probe Tip to Sensor Y Calibration Point	1 mm
Probe Tip to Sensor Z Calibration Point	1 mm
Recommended Measurement Distance from Surface	1.4 mm

Appendix: Modulation Calibration Parameters

UID	Communication System Name		A dB	B dB/μV	C	D dB	VR mV	Max Unc ^E (k=2)
0	CW	X	0.00	0.00	1.00	0.00	143.0	± 3.3 %
		Y	0.00	0.00	1.00		148.6	
		Z	0.00	0.00	1.00		139.1	
10010- CAA	SAR Validation (Square, 100ms, 10ms)	X	1.87	63.41	8.60	10.00	20.0	± 9.6 %
		Y	2.16	64.29	9.29		20.0	
		Z	1.87	63.10	8.36		20.0	
10011- CAB	UMTS-FDD (WCDMA)	X	1.26	71.18	17.68	0.00	150.0	± 9.6 %
		Y	1.51	75.12	19.67		150.0	
		Z	1.11	69.16	16.38		150.0	
10012- CAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps)	X	1.18	64.26	15.89	0.41	150.0	± 9.6 %
		Y	1.18	64.88	16.50		150.0	
		Z	1.14	63.73	15.30		150.0	
10013- CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps)	X	4.81	66.53	17.07	1.46	150.0	± 9.6 %
		Y	4.78	66.68	17.20		150.0	
		Z	4.72	66.47	16.88		150.0	
10021- DAB	GSM-FDD (TDMA, GMSK)	X	7.64	78.57	15.86	9.39	50.0	± 9.6 %
		Y	14.78	86.38	18.78		50.0	
		Z	5.00	73.55	13.93		50.0	
10023- DAB	GPRS-FDD (TDMA, GMSK, TN 0)	X	6.18	76.04	15.01	9.57	50.0	± 9.6 %
		Y	9.47	81.04	17.14		50.0	
		Z	4.50	72.15	13.41		50.0	
10024- DAB	GPRS-FDD (TDMA, GMSK, TN 0-1)	X	31.84	93.57	18.88	6.56	60.0	± 9.6 %
		Y	100.00	107.28	22.67		60.0	
		Z	4.25	74.61	13.23		60.0	
10025- DAB	EDGE-FDD (TDMA, 8PSK, TN 0)	X	6.58	84.96	33.31	12.57	50.0	± 9.6 %
		Y	4.22	70.11	25.42		50.0	
		Z	5.77	80.29	30.67		50.0	
10026- DAB	EDGE-FDD (TDMA, 8PSK, TN 0-1)	X	7.55	88.58	31.44	9.56	60.0	± 9.6 %
		Y	6.07	83.03	29.17		60.0	
		Z	6.67	85.50	30.01		60.0	
10027- DAB	GPRS-FDD (TDMA, GMSK, TN 0-1-2)	X	100.00	104.25	20.61	4.80	80.0	± 9.6 %
		Y	100.00	109.36	22.60		80.0	
		Z	53.53	97.01	18.43		80.0	
10028- DAB	GPRS-FDD (TDMA, GMSK, TN 0-1-2-3)	X	100.00	106.10	20.78	3.55	100.0	± 9.6 %
		Y	100.00	114.53	23.94		100.0	
		Z	100.00	102.88	19.22		100.0	
10029- DAB	EDGE-FDD (TDMA, 8PSK, TN 0-1-2)	X	4.61	77.41	25.78	7.80	80.0	± 9.6 %
		Y	3.91	73.86	24.29		80.0	
		Z	4.16	75.20	24.61		80.0	
10030- CAA	IEEE 802.15.1 Bluetooth (GFSK, DH1)	X	15.51	86.57	16.42	5.30	70.0	± 9.6 %
		Y	100.00	105.98	21.50		70.0	
		Z	2.43	70.53	11.23		70.0	
10031- CAA	IEEE 802.15.1 Bluetooth (GFSK, DH3)	X	100.00	105.44	19.36	1.88	100.0	± 9.6 %
		Y	100.00	119.70	24.36		100.0	
		Z	100.00	98.05	16.18		100.0	

10032-CAA	IEEE 802.15.1 Bluetooth (GFSK, DH5)	X	100.00	124.69	26.03	1.17	100.0	± 9.6 %
		Y	100.00	213.77	57.78		100.0	
		Z	100.00	106.22	18.67		100.0	
10033-CAA	IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH1)	X	4.94	81.54	20.44	5.30	70.0	± 9.6 %
		Y	4.68	81.79	20.78		70.0	
		Z	3.51	76.21	17.97		70.0	
10034-CAA	IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH3)	X	2.27	74.32	16.92	1.88	100.0	± 9.6 %
		Y	2.54	77.31	18.28		100.0	
		Z	1.66	70.14	14.62		100.0	
10035-CAA	IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH5)	X	1.87	72.93	16.30	1.17	100.0	± 9.6 %
		Y	2.25	76.71	17.94		100.0	
		Z	1.41	69.22	14.13		100.0	
10036-CAA	IEEE 802.15.1 Bluetooth (8-DPSK, DH1)	X	6.11	84.90	21.67	5.30	70.0	± 9.6 %
		Y	5.95	85.65	22.20		70.0	
		Z	4.06	78.47	18.89		70.0	
10037-CAA	IEEE 802.15.1 Bluetooth (8-DPSK, DH3)	X	2.10	73.44	16.54	1.88	100.0	± 9.6 %
		Y	2.25	75.81	17.70		100.0	
		Z	1.56	69.43	14.29		100.0	
10038-CAA	IEEE 802.15.1 Bluetooth (8-DPSK, DH5)	X	1.89	73.33	16.59	1.17	100.0	± 9.6 %
		Y	2.29	77.33	18.33		100.0	
		Z	1.42	69.48	14.37		100.0	
10039-CAB	CDMA2000 (1xRTT, RC1)	X	3.53	81.73	19.56	0.00	150.0	± 9.6 %
		Y	17.77	104.06	26.01		150.0	
		Z	2.30	75.80	16.79		150.0	
10042-CAB	IS-54 / IS-136 FDD (TDMA/FDM, PI/4-DQPSK, Halfrate)	X	3.81	72.34	12.74	7.78	50.0	± 9.6 %
		Y	8.30	80.58	15.84		50.0	
		Z	2.60	68.50	11.06		50.0	
10044-CAA	IS-91/EIA/TIA-553 FDD (FDMA, FM)	X	0.00	104.39	1.95	0.00	150.0	± 9.6 %
		Y	0.00	112.21	1.28		150.0	
		Z	0.00	100.36	0.38		150.0	
10048-CAA	DECT (TDD, TDMA/FDM, GFSK, Full Slot, 24)	X	4.84	69.06	13.68	13.80	25.0	± 9.6 %
		Y	5.92	70.50	14.69		25.0	
		Z	4.51	67.49	12.92		25.0	
10049-CAA	DECT (TDD, TDMA/FDM, GFSK, Double Slot, 12)	X	4.80	71.85	13.65	10.79	40.0	± 9.6 %
		Y	5.89	73.89	14.85		40.0	
		Z	4.26	70.00	12.77		40.0	
10056-CAA	UMTS-TDD (TD-SCDMA, 1.28 Mcps)	X	11.27	87.10	22.00	9.03	50.0	± 9.6 %
		Y	11.36	86.97	22.03		50.0	
		Z	8.58	82.33	19.97		50.0	
10058-DAB	EDGE-FDD (TDMA, 8PSK, TN 0-1-2-3)	X	3.64	72.87	23.03	6.55	100.0	± 9.6 %
		Y	3.18	70.25	21.96		100.0	
		Z	3.33	71.14	22.05		100.0	
10059-CAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps)	X	1.18	65.02	16.27	0.61	110.0	± 9.6 %
		Y	1.17	65.53	16.86		110.0	
		Z	1.13	64.29	15.58		110.0	
10060-CAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps)	X	10.47	107.76	29.35	1.30	110.0	± 9.6 %
		Y	19.68	123.43	34.57		110.0	
		Z	2.79	87.05	22.88		110.0	

10061-CAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps)	X	1.98	75.54	20.50	2.04	110.0	± 9.6 %
		Y	1.77	75.08	20.90		110.0	
		Z	1.60	72.06	18.71		110.0	
10062-CAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps)	X	4.66	66.71	16.67	0.49	100.0	± 9.6 %
		Y	4.64	66.91	16.83		100.0	
		Z	4.57	66.63	16.48		100.0	
10063-CAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps)	X	4.66	66.75	16.72	0.72	100.0	± 9.6 %
		Y	4.64	66.94	16.88		100.0	
		Z	4.57	66.67	16.52		100.0	
10064-CAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps)	X	4.93	66.98	16.92	0.86	100.0	± 9.6 %
		Y	4.91	67.14	17.06		100.0	
		Z	4.83	66.88	16.72		100.0	
10065-CAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps)	X	4.78	66.78	16.95	1.21	100.0	± 9.6 %
		Y	4.75	66.94	17.08		100.0	
		Z	4.68	66.67	16.74		100.0	
10066-CAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps)	X	4.78	66.74	17.06	1.46	100.0	± 9.6 %
		Y	4.75	66.87	17.19		100.0	
		Z	4.67	66.62	16.84		100.0	
10067-CAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps)	X	5.05	66.87	17.45	2.04	100.0	± 9.6 %
		Y	5.02	67.00	17.56		100.0	
		Z	4.95	66.80	17.25		100.0	
10068-CAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps)	X	5.07	66.82	17.60	2.55	100.0	± 9.6 %
		Y	5.03	66.89	17.68		100.0	
		Z	4.96	66.69	17.37		100.0	
10069-CAB	IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps)	X	5.15	66.82	17.78	2.67	100.0	± 9.6 %
		Y	5.10	66.89	17.85		100.0	
		Z	5.04	66.71	17.55		100.0	
10071-CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 9 Mbps)	X	4.88	66.53	17.30	1.99	100.0	± 9.6 %
		Y	4.85	66.66	17.42		100.0	
		Z	4.79	66.47	17.11		100.0	
10072-CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 12 Mbps)	X	4.83	66.76	17.45	2.30	100.0	± 9.6 %
		Y	4.80	66.88	17.57		100.0	
		Z	4.74	66.66	17.24		100.0	
10073-CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 18 Mbps)	X	4.86	66.83	17.70	2.83	100.0	± 9.6 %
		Y	4.84	66.93	17.80		100.0	
		Z	4.77	66.74	17.49		100.0	
10074-CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 24 Mbps)	X	4.83	66.67	17.80	3.30	100.0	± 9.6 %
		Y	4.81	66.76	17.89		100.0	
		Z	4.75	66.60	17.59		100.0	
10075-CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 36 Mbps)	X	4.85	66.71	18.05	3.82	90.0	± 9.6 %
		Y	4.82	66.76	18.11		90.0	
		Z	4.76	66.60	17.82		90.0	
10076-CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 48 Mbps)	X	4.86	66.49	18.15	4.15	90.0	± 9.6 %
		Y	4.83	66.55	18.21		90.0	
		Z	4.78	66.43	17.94		90.0	
10077-CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 54 Mbps)	X	4.88	66.54	18.23	4.30	90.0	± 9.6 %
		Y	4.86	66.60	18.30		90.0	
		Z	4.81	66.49	18.03		90.0	

10081-CAB	CDMA2000 (1xRTT, RC3)	X	1.20	71.41	15.32	0.00	150.0	± 9.6 %
		Y	2.16	79.85	18.48		150.0	
		Z	0.90	67.70	13.03		150.0	
10082-CAB	IS-54 / IS-136 FDD (TDMA/FDM, PI/4-DQPSK, Fullrate)	X	6.20	67.51	6.04	4.77	80.0	± 9.6 %
		Y	0.54	60.00	3.52		80.0	
		Z	0.58	60.00	3.48		80.0	
10090-DAB	GPRS-FDD (TDMA, GMSK, TN 0-4)	X	28.40	92.49	18.63	6.56	60.0	± 9.6 %
		Y	100.00	107.28	22.68		60.0	
		Z	4.18	74.43	13.18		60.0	
10097-CAB	UMTS-FDD (HSDPA)	X	2.03	69.78	17.03	0.00	150.0	± 9.6 %
		Y	2.23	71.90	18.12		150.0	
		Z	1.92	69.05	16.37		150.0	
10098-CAB	UMTS-FDD (HSUPA, Subtest 2)	X	2.00	69.77	17.02	0.00	150.0	± 9.6 %
		Y	2.19	71.91	18.13		150.0	
		Z	1.89	69.01	16.35		150.0	
10099-DAB	EDGE-FDD (TDMA, 8PSK, TN 0-4)	X	7.60	88.71	31.48	9.56	60.0	± 9.6 %
		Y	6.10	83.12	29.20		60.0	
		Z	6.71	85.62	30.04		60.0	
10100-CAB	LTE-FDD (SC-FDMA, 100% RB, 20 MHz, QPSK)	X	3.36	71.73	17.69	0.00	150.0	± 9.6 %
		Y	3.53	72.97	18.39		150.0	
		Z	3.18	70.97	17.20		150.0	
10101-CAB	LTE-FDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM)	X	3.33	68.12	16.52	0.00	150.0	± 9.6 %
		Y	3.37	68.64	16.88		150.0	
		Z	3.23	67.78	16.20		150.0	
10102-CAB	LTE-FDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM)	X	3.43	68.05	16.58	0.00	150.0	± 9.6 %
		Y	3.47	68.56	16.94		150.0	
		Z	3.33	67.75	16.28		150.0	
10103-CAB	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, QPSK)	X	5.16	72.86	19.25	3.98	65.0	± 9.6 %
		Y	4.84	72.32	19.23		65.0	
		Z	4.99	72.57	18.99		65.0	
10104-CAB	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM)	X	5.46	71.77	19.59	3.98	65.0	± 9.6 %
		Y	5.05	70.72	19.24		65.0	
		Z	5.15	70.93	19.05		65.0	
10105-CAB	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM)	X	5.07	70.09	19.10	3.98	65.0	± 9.6 %
		Y	4.77	69.31	18.87		65.0	
		Z	5.04	70.28	19.05		65.0	
10108-CAC	LTE-FDD (SC-FDMA, 100% RB, 10 MHz, QPSK)	X	2.93	71.05	17.58	0.00	150.0	± 9.6 %
		Y	3.08	72.40	18.34		150.0	
		Z	2.76	70.28	17.06		150.0	
10109-CAC	LTE-FDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM)	X	2.99	68.14	16.51	0.00	150.0	± 9.6 %
		Y	3.04	68.84	16.95		150.0	
		Z	2.88	67.77	16.14		150.0	
10110-CAC	LTE-FDD (SC-FDMA, 100% RB, 5 MHz, QPSK)	X	2.40	70.44	17.33	0.00	150.0	± 9.6 %
		Y	2.55	72.06	18.22		150.0	
		Z	2.24	69.57	16.70		150.0	
10111-CAC	LTE-FDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM)	X	2.77	69.53	17.03	0.00	150.0	± 9.6 %
		Y	2.91	70.94	17.79		150.0	
		Z	2.64	69.09	16.56		150.0	

10112-CAC	LTE-FDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM)	X	3.11	68.10	16.53	0.00	150.0	± 9.6 %
		Y	3.16	68.77	16.96		150.0	
		Z	3.01	67.78	16.19		150.0	
10113-CAC	LTE-FDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM)	X	2.92	69.60	17.12	0.00	150.0	± 9.6 %
		Y	3.06	70.98	17.85		150.0	
		Z	2.80	69.22	16.68		150.0	
10114-CAB	IEEE 802.11n (HT Greenfield, 13.5 Mbps, BPSK)	X	5.18	67.44	16.78	0.00	150.0	± 9.6 %
		Y	5.17	67.61	16.94		150.0	
		Z	5.08	67.30	16.59		150.0	
10115-CAB	IEEE 802.11n (HT Greenfield, 81 Mbps, 16-QAM)	X	5.45	67.50	16.81	0.00	150.0	± 9.6 %
		Y	5.43	67.64	16.95		150.0	
		Z	5.33	67.34	16.61		150.0	
10116-CAB	IEEE 802.11n (HT Greenfield, 135 Mbps, 64-QAM)	X	5.27	67.62	16.80	0.00	150.0	± 9.6 %
		Y	5.26	67.80	16.96		150.0	
		Z	5.17	67.49	16.61		150.0	
10117-CAB	IEEE 802.11n (HT Mixed, 13.5 Mbps, BPSK)	X	5.14	67.26	16.71	0.00	150.0	± 9.6 %
		Y	5.13	67.46	16.88		150.0	
		Z	5.05	67.19	16.55		150.0	
10118-CAB	IEEE 802.11n (HT Mixed, 81 Mbps, 16-QAM)	X	5.53	67.72	16.93	0.00	150.0	± 9.6 %
		Y	5.51	67.87	17.07		150.0	
		Z	5.41	67.55	16.72		150.0	
10119-CAB	IEEE 802.11n (HT Mixed, 135 Mbps, 64-QAM)	X	5.26	67.59	16.79	0.00	150.0	± 9.6 %
		Y	5.25	67.77	16.95		150.0	
		Z	5.15	67.45	16.60		150.0	
10140-CAB	LTE-FDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM)	X	3.46	68.05	16.50	0.00	150.0	± 9.6 %
		Y	3.50	68.55	16.85		150.0	
		Z	3.36	67.76	16.20		150.0	
10141-CAB	LTE-FDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM)	X	3.58	68.14	16.65	0.00	150.0	± 9.6 %
		Y	3.62	68.65	17.00		150.0	
		Z	3.48	67.88	16.37		150.0	
10142-CAC	LTE-FDD (SC-FDMA, 100% RB, 3 MHz, QPSK)	X	2.23	70.98	17.19	0.00	150.0	± 9.6 %
		Y	2.46	73.31	18.33		150.0	
		Z	2.04	69.88	16.37		150.0	
10143-CAC	LTE-FDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM)	X	2.73	70.97	16.97	0.00	150.0	± 9.6 %
		Y	3.04	73.29	18.02		150.0	
		Z	2.55	70.19	16.25		150.0	
10144-CAC	LTE-FDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM)	X	2.36	67.83	14.95	0.00	150.0	± 9.6 %
		Y	2.44	68.84	15.41		150.0	
		Z	2.20	67.08	14.22		150.0	
10145-CAC	LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK)	X	1.37	67.00	12.74	0.00	150.0	± 9.6 %
		Y	1.47	68.36	13.15		150.0	
		Z	1.09	64.53	10.89		150.0	
10146-CAC	LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM)	X	1.50	64.09	10.18	0.00	150.0	± 9.6 %
		Y	1.46	64.20	10.14		150.0	
		Z	1.34	62.84	8.82		150.0	
10147-CAC	LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM)	X	1.70	65.48	11.02	0.00	150.0	± 9.6 %
		Y	1.70	65.97	11.15		150.0	
		Z	1.46	63.74	9.40		150.0	