





SUMMARY TEST REPORT FROM UL VS Ltd.

Test of:
Pointer Telocation Ltd - GT9740001-000 CelloTrack3G Power

To: CTIA Certification Program Test Plan for Mobile Station Over the Air
Performance, Revision 3.1: January 2011

Report Serial No: UL_NAO1_RP89975JD04A V3.0

Version 3.0 supersedes all previous versions

This Test Report Is Issued Under The Authority Of Robert Graham, WiSE Program Manager: 	
Checked By: Robert Graham	
Issue Date:	30 May 2013

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LAB CODE 20111025-00



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Test of: Pointer Telocation Ltd - GT9740001-000 CelloTrack3G Power

1. Details of Test

1.1. Client

Company Name	Pointer Telocation Ltd.
Address	14 Hamelacha St, P.O.Box 11473, Rosh Ha'ayin, 48091, Israel

1.2. Location of Test

Company Name	UL VS Limited (formerly RFI Global Services Ltd.)
Address	Unit 3 Horizon, Wade Road, Kingsland Business Park, Basingstoke, Hampshire, RG24 8AH, United Kingdom

Test of: Pointer Telocation Ltd - GT9740001-000 CelloTrack3G Power

1.3. Test Environment

Start Date	17 December 2012
Completion Date	22 May 2013

Environmental Data	Temperature (°C)	Humidity (%)
Maximum Ambient	21	33
Minimum Ambient	21	33

1.4. Test Specification(s)

Name	Revision
CTIA Test Plan for Mobile Station Over the Air Performance	Revision 3.1 January 2011
Reference: 3GPP TS 05.05	
Reference: 3GPP TS 51.010-1	
Reference: 3GPP TS 25.101	
Reference: TIA-98-E	
Reference: TIA-866-1	

Test of: Pointer Telocation Ltd - GT9740001-000 CelloTrack3G Power

1.5. Device under Test Details

Manufacturer	Pointer Telocation Ltd
Model	GT9740001-000 CelloTrack3G Power
Serial Number/ESN/IMEI	353836050006931 (GSM, GPRS and WCDMA Band II & IV) 353836050006881 (EDGE and WCDMA Band V only)
FCC ID Number	RI7HE910NA
Hardware Version	B00
Software Version	31g
Primary Mechanical Mode of Operation	Module Integration

Protocol / Band	Power Class	Multi-Slot Class
GSM 850	Class 4	N/A
GSM 1900	Class 1	N/A
GPRS 850	Class 4	12
GPRS 1900	Class 1	12
EGPRS 850	E2	12
EGPRS 1900	E2	12
WCDMA V	Class 3	N/A
WCDMA II	Class 3	N/A
WCDMA IV	Class 3	N/A

Test of: Pointer Telocation Ltd - GT9740001-000 CelloTrack3G Power

2. Test Results

2.1. Effective Isotropic Radiated Power Summation Test Report

Protocol	Band	Channel	Frequency (MHz)	Conducted Power (dBm)	TRP (dBm)					NHPRP ±45°(dBm)					NHPRP ±30°(dBm)				
					FS	BHL	BHR	BH HR	HR	FS	BHL	BHR	BH HR	HR	FS	BHL	BHR	BH HR	HR
GSM	GSM 850	128	824.2	---	28.24	---	---	---	---	27.55	---	---	---	---	26.42	---	---	---	---
		190	836.6	---	28.51	---	---	---	---	27.81	---	---	---	---	26.65	---	---	---	---
		251	848.8	---	28.64	---	---	---	---	27.96	---	---	---	---	26.84	---	---	---	---
	GSM 1900	512	1850.2	---	26.40	---	---	---	---	24.47	---	---	---	---	22.59	---	---	---	---
		661	1880.0	---	26.27	---	---	---	---	24.35	---	---	---	---	22.48	---	---	---	---
		810	1909.8	---	26.53	---	---	---	---	24.59	---	---	---	---	22.71	---	---	---	---
GPRS	GSM 850	128	824.2	---	26.19	---	---	---	---	25.50	---	---	---	---	24.37	---	---	---	---
		190	836.6	---	26.49	---	---	---	---	25.79	---	---	---	---	24.63	---	---	---	---
		251	848.8	---	26.62	---	---	---	---	25.93	---	---	---	---	24.82	---	---	---	---
	GSM 1900	512	1850.2	---	24.67	---	---	---	---	22.76	---	---	---	---	20.92	---	---	---	---
		661	1880.0	---	24.46	---	---	---	---	22.51	---	---	---	---	20.67	---	---	---	---
		810	1909.8	---	24.71	---	---	---	---	22.75	---	---	---	---	20.90	---	---	---	---
EGPRS	GSM 850	128	824.2	---	21.46	---	---	---	---	20.76	---	---	---	---	19.63	---	---	---	---
		190	836.6	---	21.74	---	---	---	---	21.01	---	---	---	---	19.86	---	---	---	---
		251	848.8	---	22.06	---	---	---	---	21.35	---	---	---	---	20.25	---	---	---	---
	GSM 1900	512	1850.2	---	22.88	---	---	---	---	21.06	---	---	---	---	19.24	---	---	---	---
		661	1880.0	---	22.26	---	---	---	---	20.45	---	---	---	---	18.64	---	---	---	---
		810	1909.8	---	22.48	---	---	---	---	20.64	---	---	---	---	18.82	---	---	---	---

Test of: Pointer Telocation Ltd - GT9740001-000 CelloTrack3G Power

Effective Isotropic Radiated Power Summation Test Report (continued)

Protocol	Band	Channel	Frequency (MHz)	Conducted Power (dBm)	TRP (dBm)					NHPRP ±45° (dBm)					NHPRP ±30° (dBm)				
					FS	BHL	BHR	BH HR	HR	FS	BHL	BHR	BH HR	HR	FS	BHL	BHR	BH HR	HR
WCDMA	WCDMA Band II	9262	1852.4	---	18.87	---	---	---	---	16.52	---	---	---	---	14.37	---	---	---	---
		9400	1880.0	---	18.66	---	---	---	---	16.35	---	---	---	---	14.30	---	---	---	---
		9538	1907.6	---	18.62	---	---	---	---	16.33	---	---	---	---	14.28	---	---	---	---
	WCDMA Band IV	1312	1712.4	---	13.38	---	---	---	---	11.23	---	---	---	---	9.20	---	---	---	---
		1413	1732.6	---	14.47	---	---	---	---	12.34	---	---	---	---	10.29	---	---	---	---
		1513	1752.6	---	14.17	---	---	---	---	11.94	---	---	---	---	9.83	---	---	---	---
	WCDMA Band V	4132	826.4	---	19.23	---	---	---	---	18.51	---	---	---	---	17.34	---	---	---	---
		4183	836.6	---	19.16	---	---	---	---	18.41	---	---	---	---	17.22	---	---	---	---
		4233	846.6	---	19.07	---	---	---	---	18.33	---	---	---	---	17.17	---	---	---	---

Test of: Pointer Telocation Ltd - GT9740001-000 CelloTrack3G Power

2.2. Effective Isotropic Sensitivity Summation Test Report

Protocol	Band	Channel	Frequency (MHz)	Conducted Sensitivity (dBm)	TIS (dBm)					NHPIS ±45° (dBm)					NHPIS ±30° (dBm)				
					FS	BHL	BHR	BH HR	HR	FS	BHL	BHR	BH HR	HR	FS	BHL	BHR	BH HR	HR
GSM	GSM 850	128	869.2	---	-103.89	---	---	---	---	-102.89	---	---	---	---	-102.01	---	---	---	---
		190	881.6	---	-102.68	---	---	---	---	-101.66	---	---	---	---	-100.74	---	---	---	---
		251	893.8	---	-100.85	---	---	---	---	-99.85	---	---	---	---	-98.93	---	---	---	---
	GSM 1900	512	1930.2	---	-105.47	---	---	---	---	-103.43	---	---	---	---	-101.71	---	---	---	---
		661	1960.0	---	-106.15	---	---	---	---	-104.06	---	---	---	---	-102.31	---	---	---	---
		810	1989.8	---	-104.19	---	---	---	---	-102.16	---	---	---	---	-100.46	---	---	---	---
GPRS	GSM 850	128	869.2	---	-105.25	---	---	---	---	-104.25	---	---	---	---	-103.36	---	---	---	---
		190	881.6	---	-104.20	---	---	---	---	-103.19	---	---	---	---	-102.27	---	---	---	---
		251	893.8	---	-101.84	---	---	---	---	-100.85	---	---	---	---	-99.94	---	---	---	---
	GSM 1900	512	1930.2	---	-108.59	---	---	---	---	-106.56	---	---	---	---	-104.83	---	---	---	---
		661	1960.0	---	-108.36	---	---	---	---	-106.27	---	---	---	---	-104.51	---	---	---	---
		810	1989.8	---	-105.32	---	---	---	---	-103.35	---	---	---	---	-101.71	---	---	---	---
EGPRS	GSM 850	128	869.2	---	-95.33	---	---	---	---	-94.31	---	---	---	---	-93.41	---	---	---	---
		190	881.6	---	-95.18	---	---	---	---	-94.14	---	---	---	---	-93.20	---	---	---	---
		251	893.8	---	-95.85	---	---	---	---	-94.84	---	---	---	---	-93.93	---	---	---	---
	GSM 1900	512	1930.2	---	-99.92	---	---	---	---	-97.92	---	---	---	---	-96.22	---	---	---	---
		661	1960.0	---	-101.36	---	---	---	---	-99.26	---	---	---	---	-97.49	---	---	---	---
		810	1989.8	---	-100.39	---	---	---	---	-98.36	---	---	---	---	-96.63	---	---	---	---

Test of: Pointer Telocation Ltd - GT9740001-000 CelloTrack3G Power

Effective Isotropic Sensitivity Summation Test Report (continued)

Protocol	Band	Channel	Frequency (MHz)	Conducted Sensitivity (dBm)	TIS (dBm)					NHPIS ±45° (dBm)					NHPIS ±30° (dBm)				
					FS	BHL	BHR	BH HR	HR	FS	BHL	BHR	BH HR	HR	FS	BHL	BHR	BH HR	HR
WCDMA	WCDMA Band II	9662	1932.4	---	-104.48	---	---	---	---	-102.41	---	---	---	---	-100.66	---	---	---	---
		9800	1960.0	---	-103.38	---	---	---	---	-101.30	---	---	---	---	-99.55	---	---	---	---
		9938	1987.6	---	-102.72	---	---	---	---	-100.60	---	---	---	---	-98.79	---	---	---	---
	WCDMA Band IV	1537	2112.4	---	-101.17	---	---	---	---	-99.19	---	---	---	---	-97.57	---	---	---	---
		1638	2132.6	---	-102.43	---	---	---	---	-100.36	---	---	---	---	-98.65	---	---	---	---
		1738	2152.6	---	-103.87	---	---	---	---	-101.75	---	---	---	---	-100.02	---	---	---	---
	WCDMA Band V	4357	871.4	---	-103.07	---	---	---	---	-102.02	---	---	---	---	-101.09	---	---	---	---
		4408	881.6	---	-103.04	---	---	---	---	-101.99	---	---	---	---	-101.05	---	---	---	---
		4458	891.6	---	-102.50	---	---	---	---	-101.44	---	---	---	---	-100.47	---	---	---	---

Test of: Pointer Telocation Ltd - GT9740001-000 CelloTrack3G Power

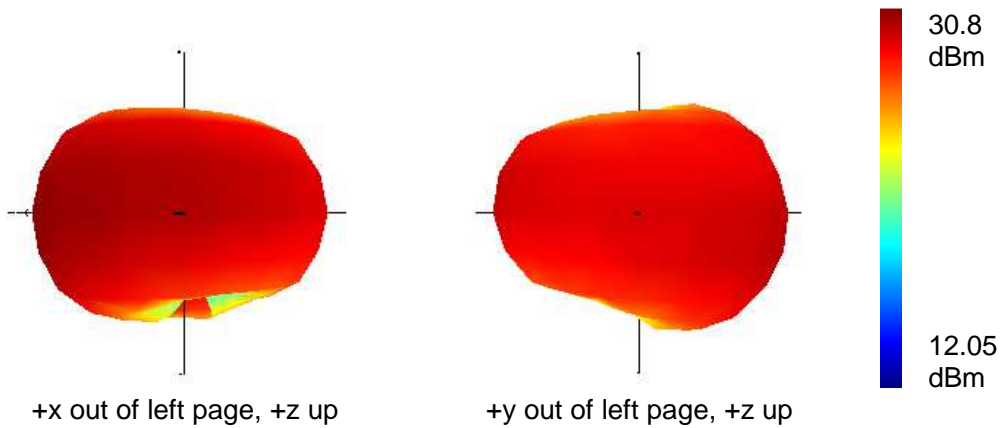
2.2.1. Intermediate Channel Relative Sensitivity

Protocol	Band	Intermediate Channel	FS	BHL	BHR	BHHR	HR
GSM	GSM 850	128-251	Pass	---	---	---	---
	GSM 1900	512-810	Pass	---	---	---	---
GPRS	GSM 850	128-251	Pass	---	---	---	---
	GSM 1900	512-810	Pass	---	---	---	---
EGPRS	GSM 850	128-251	Pass	---	---	---	---
	GSM 1900	512-810	Pass	---	---	---	---
WCDMA	WCDMA Band II	9662-9938	Pass	---	---	---	---
	WCDMA Band IV	1537-1738	Pass	---	---	---	---
	WCDMA Band V	4357-4458	Pass	---	---	---	---

Appendix A - Summation Test Report Plot Matrix

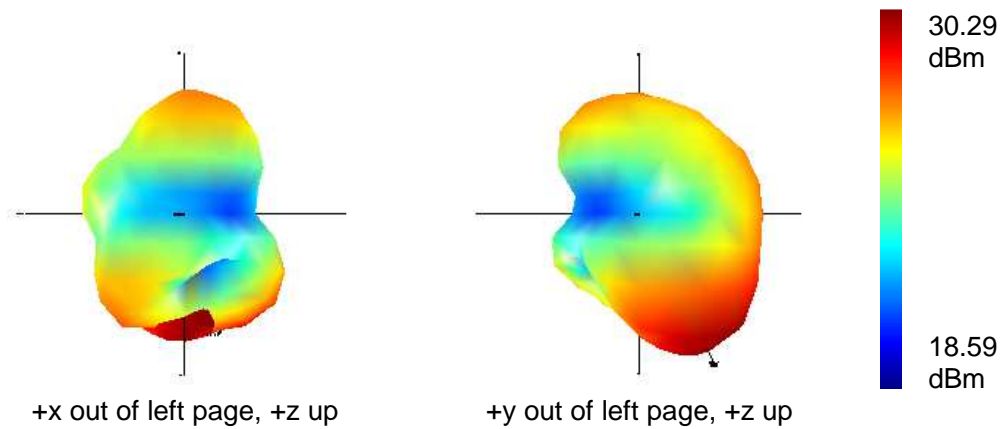
1.	Measurement Algorithm	TRP
	Configuration	FS
	Band	850
	Mode	GSM

3D View at Middle Channel (836.6 MHz)



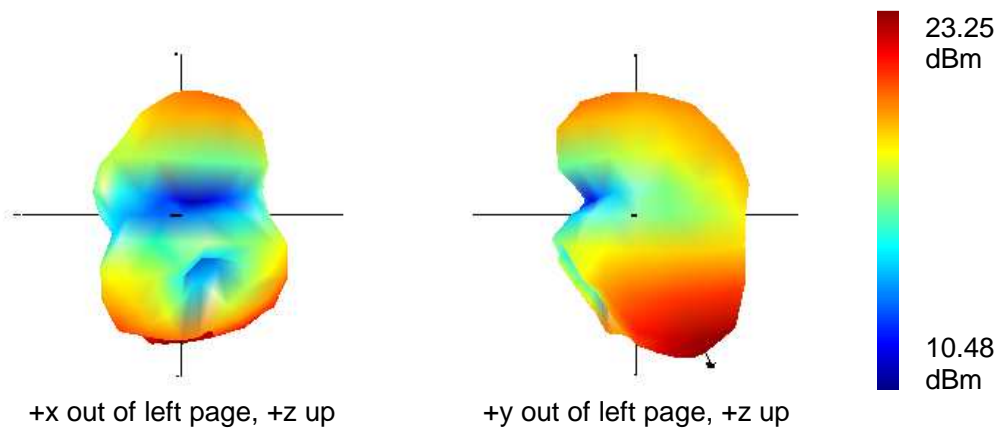
2.	Measurement Algorithm	TRP
	Configuration	FS
	Band	1900
	Mode	GSM

3D View at Middle Channel (1880 MHz)



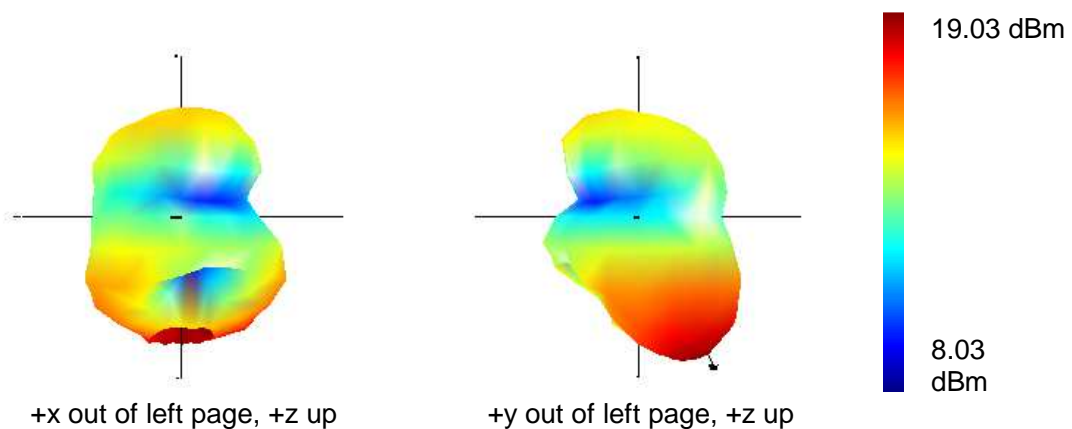
3. Measurement Algorithm	TRP
Configuration	FS
Band	II
Mode	WCDMA

3D View at Middle Channel (1880 MHz)



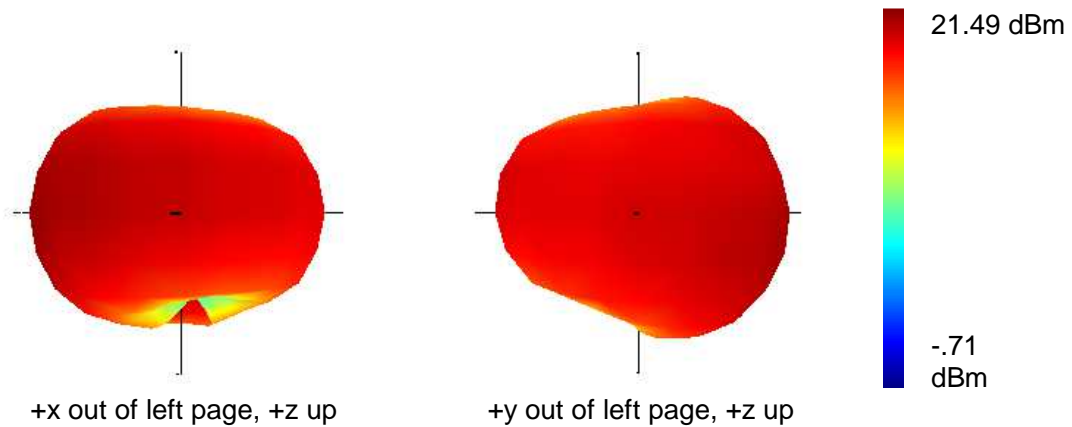
4. Measurement Algorithm	TRP
Configuration	FS
Band	IV
Mode	WCDMA

3D View at Middle Channel (1732.6 MHz)



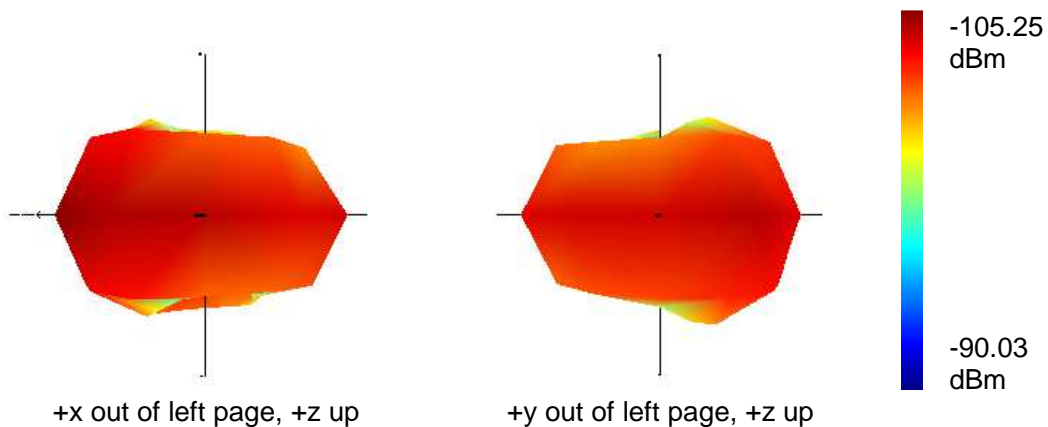
5. Measurement Algorithm	TRP
Configuration	FS
Band	V
Mode	WCDMA

3D View at Middle Channel (836.6 MHz)



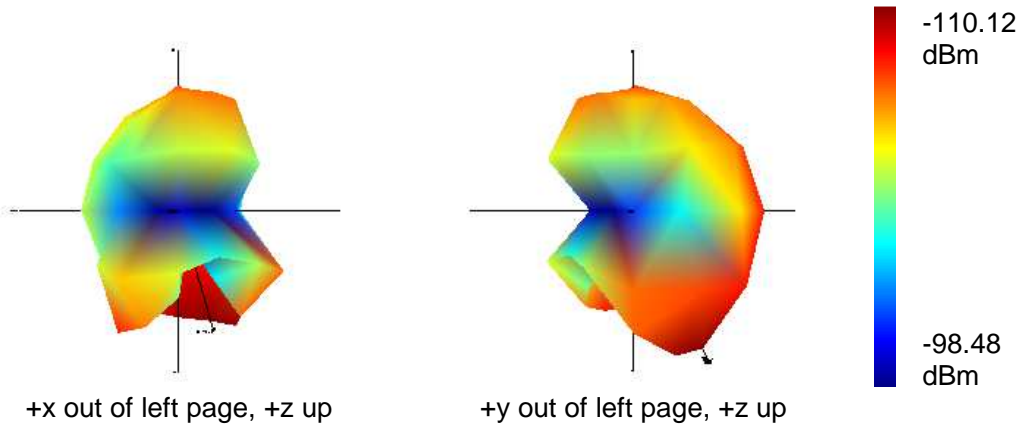
6. Measurement Algorithm	TIS
Configuration	FS
Band	850
Mode	GSM

3D View at Middle Channel (881.6 MHz)



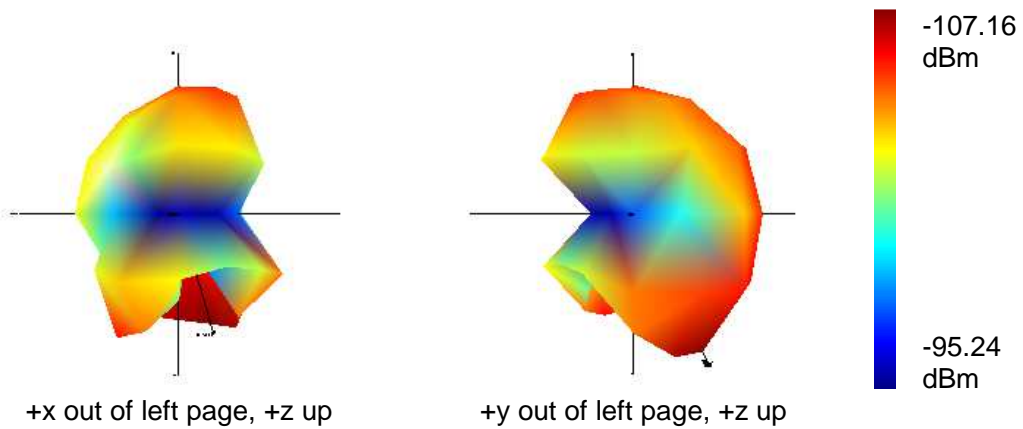
7. Measurement Algorithm	TIS
Configuration	FS
Band	1900
Mode	GSM

3D View at Middle Channel (1960 MHz)



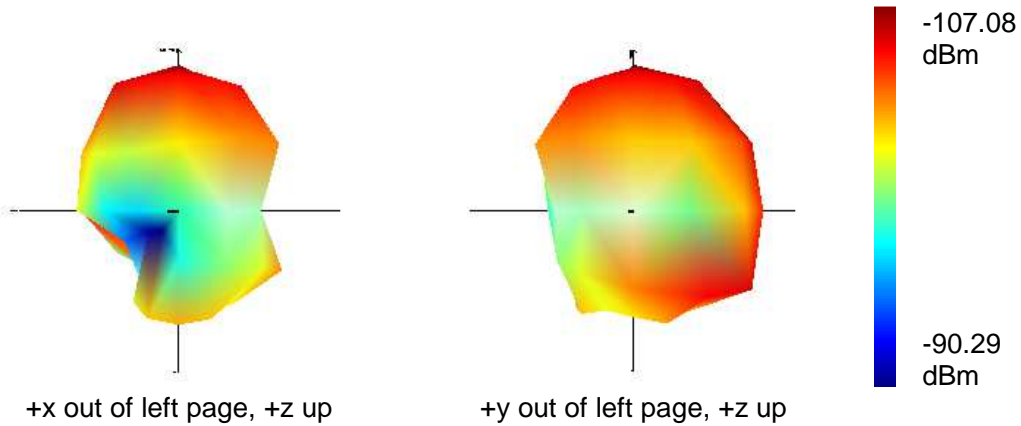
8. Measurement Algorithm	TIS
Configuration	FS
Band	II
Mode	WCDMA

3D View at Middle Channel (1960 MHz)



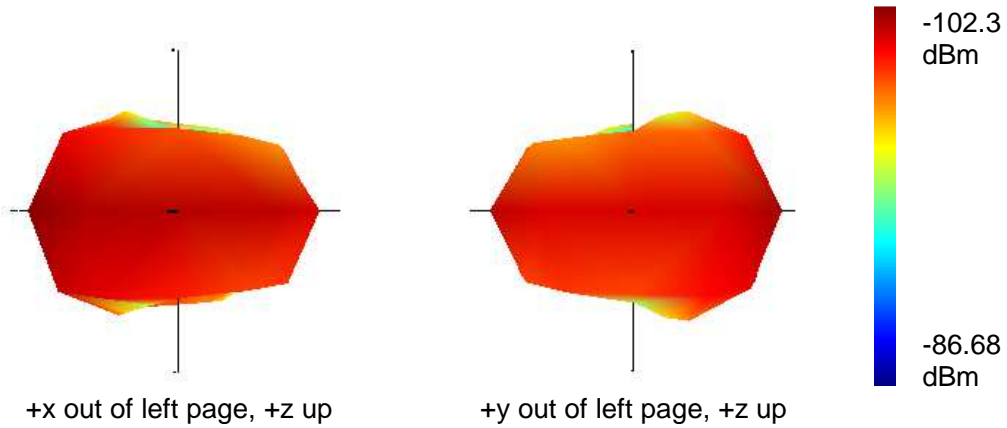
9. Measurement Algorithm	TIS
Configuration	FS
Band	IV
Mode	WCDMA

3D View at Middle Channel (2132.6 MHz)



10. Measurement Algorithm	TIS
Configuration	FS
Band	V
Mode	WCDMA

3D View at Middle Channel (881.6 MHz)



Appendix B – Report Revision History

Version Number	Revision Details		
	Page No(s)	Clause	Details
1.0	-	-	Initial Version.
2.0	-	-	Additional EGPRS testing
3.0	-	-	Additional EGPRS Testing using different BCCH