APPROVAL SHEET

FOR : SAMSUNG ELECTRONICS CO., LTD

MODEL : Matrix II+ Antenna

DESCRIPTION : Dipole & Microstrip Antenna

SUPPLIER P/N: 0B01WMP240A1 (Microstrip antenna)
0B02WDC240A1 (Dipole antenna)

CUSTOMER P/N :

FILE NO. :

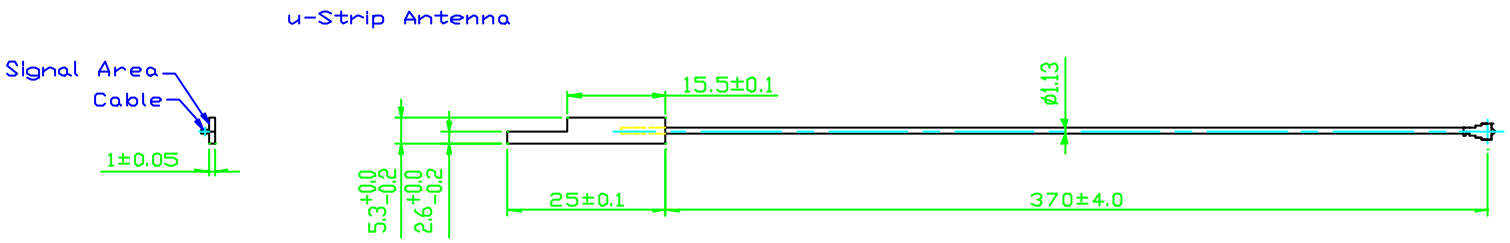
DATE : 19 July 2001

Manager	Supervisor	Engineer
Dan Chen	Lee	Jackson Liu

Light Tek Co., Ltd.
TEL : 886-2-89510688
FAX : 886-2-89510681

2nd F , NO.158 , Gan Cheng Rd.,
Pan Chiao City , Taipei Hsien ,
Taiwan R.O.C .

1. Antenna Mechanical Dimensions :



Mark	Note
1	
2	
3	
4	
5	

ISSUE

TOL. TABLE	
RANGE	TOLERANCE
OVER 101	±2.5
51–100	±2.0
31–50	±1.5
30 BELOW	±1.0

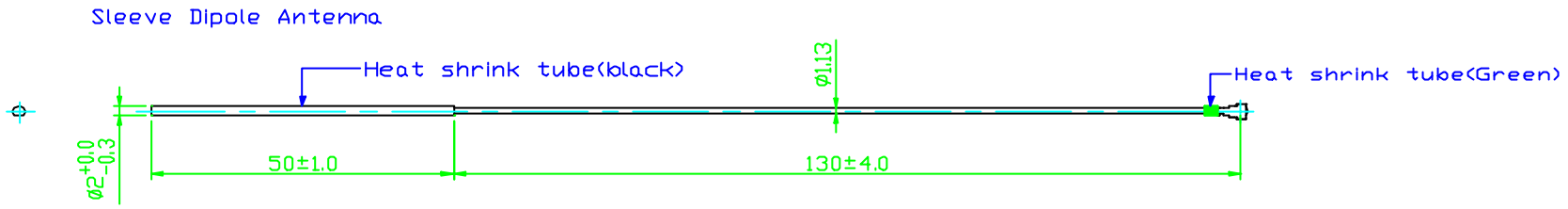
Units	MM	Scale	1:1
Size	A4	Date	90.07.06
		Sheet	1 of 1

LIGHT TEK CO. LTD

Title: MATRIX-2 PLUS u-Strip ANT.

Part No	0B01WMP240A1
LTK.Draw NO.	

Approval	CHECK	Drawed



Mark	Note
1	
2	
3	
4	
5	

ISSUE

TOL. TABLE			
RANGE		TOLERANCE	
OVER 101		±2.5	
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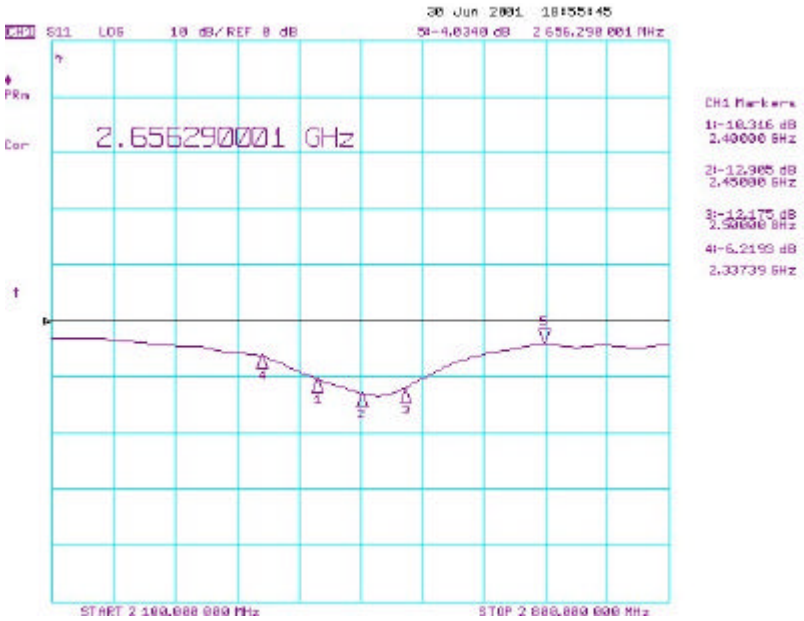
31-50		±1.5	
30 BELOW		±1.0	
Units	MM	Scale	1:1
Size	A4	Date	90.07.06
		Sheet	1 of 1

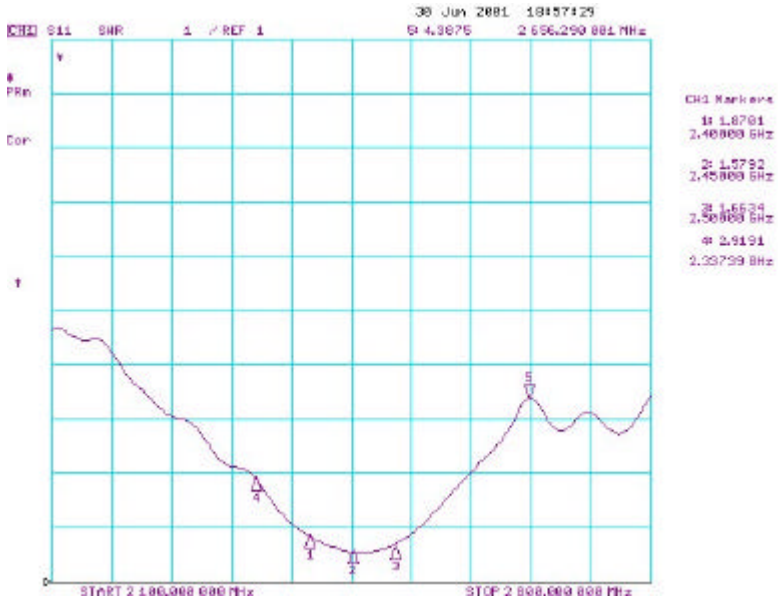
LIGHT TEK CO. LTD		
Title:MATRIX-2 PLUS Dipole ANT.		
Part No	0B02WDC240A1	
LTK.Draw NO.		
Approval	CHECK	Drawed

2.Antenna Electrical Characteristics :

Return Loss



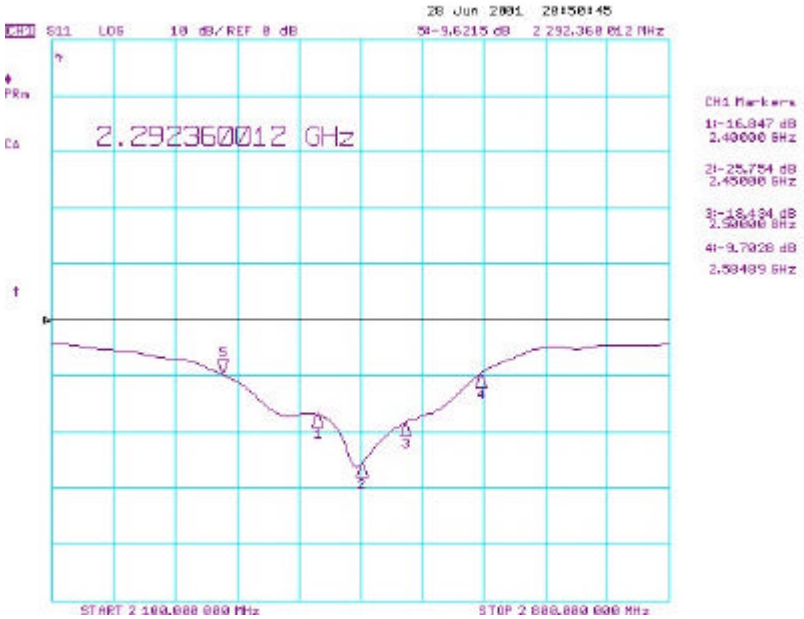
VSWR



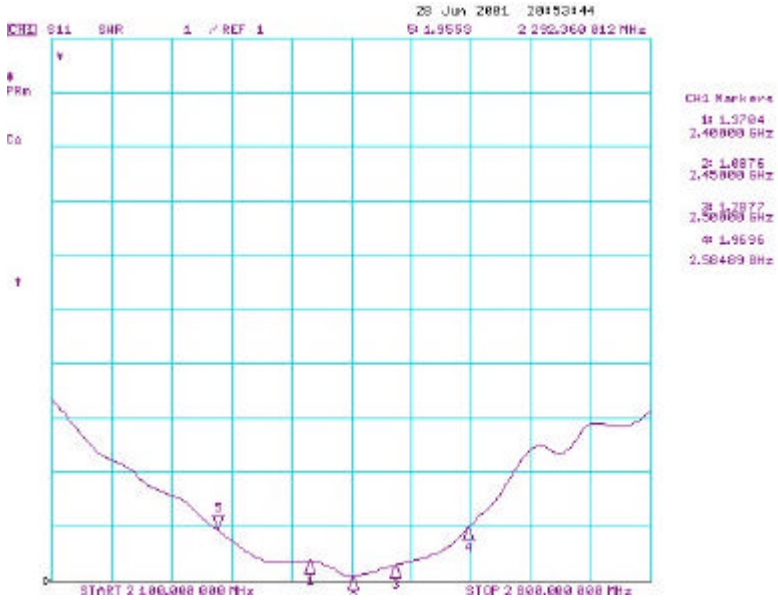
LIGHT TEK CO. LTD	P/N : 0B01WMP240A1	Frequency Band :2.4~2.5GHz	Date :19 July 2001

2-1.Antenna Electrical Characteristics :

Return Loss



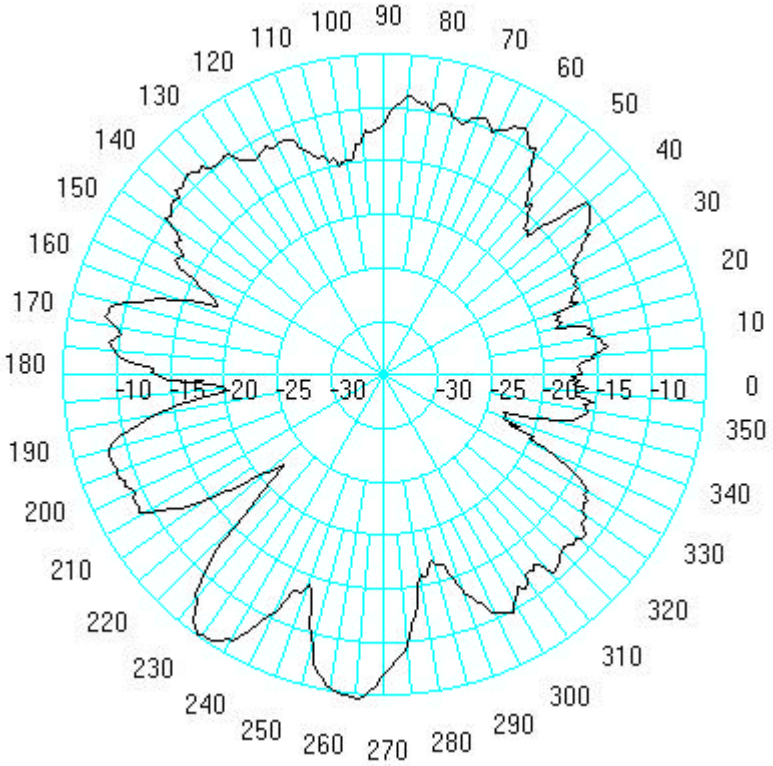
VSWR



LIGHT TEK CO. LTD	P/N : 0B02WDC240A1	Frequency Band :2.4~2.5GHz	Date :19 July 2001

3 .Antenna Radiation Pattern :

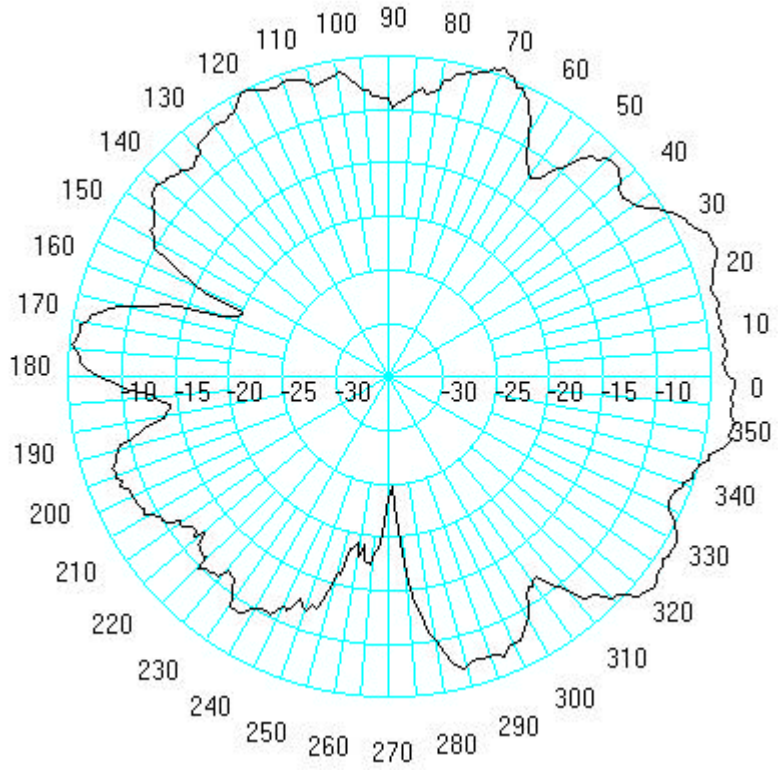
Date : 30 Jun. 2001
Matrix II+
Micorstrip antenna
LCD open
Vertical
X-Y plane
jackson



LIGHT TEK CO. LTD	Testing Condition : Anechoic chamber	P/N : 0B01WMP240A1	Date : 19 July 2001

3-1 .Antenna Radiation Pattern :

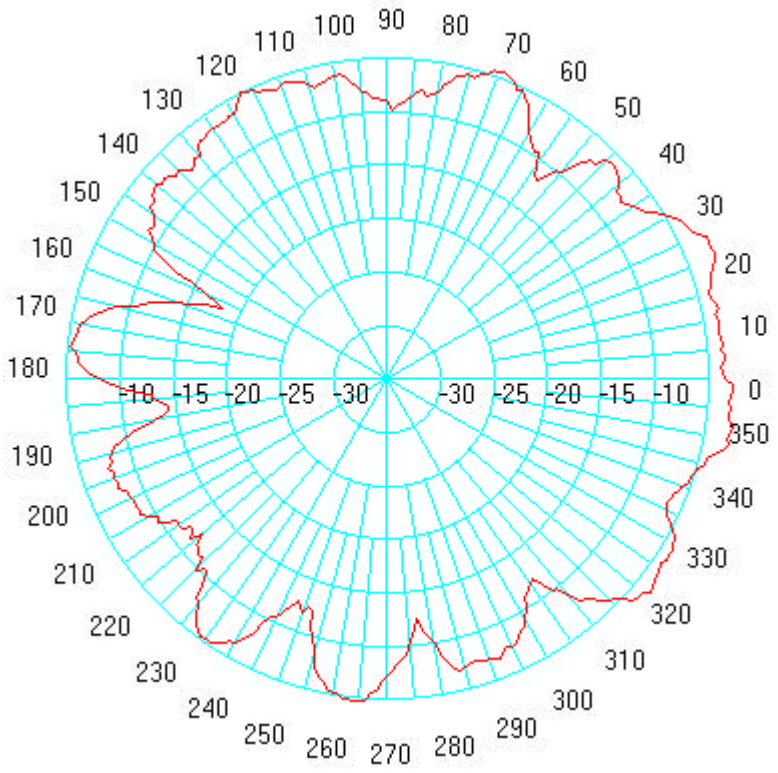
Date : 30 Jun. 2001
Matrix II+
Micorstrip antenna
LCD open
Horizontal
X-Y plane
jackson



LIGHT TEK CO. LTD	Testing Condition : Anechoic chamber	P/N : 0B01WMP240A1	Date : 19 July 2001

3-2 .Antenna Radiation Pattern :

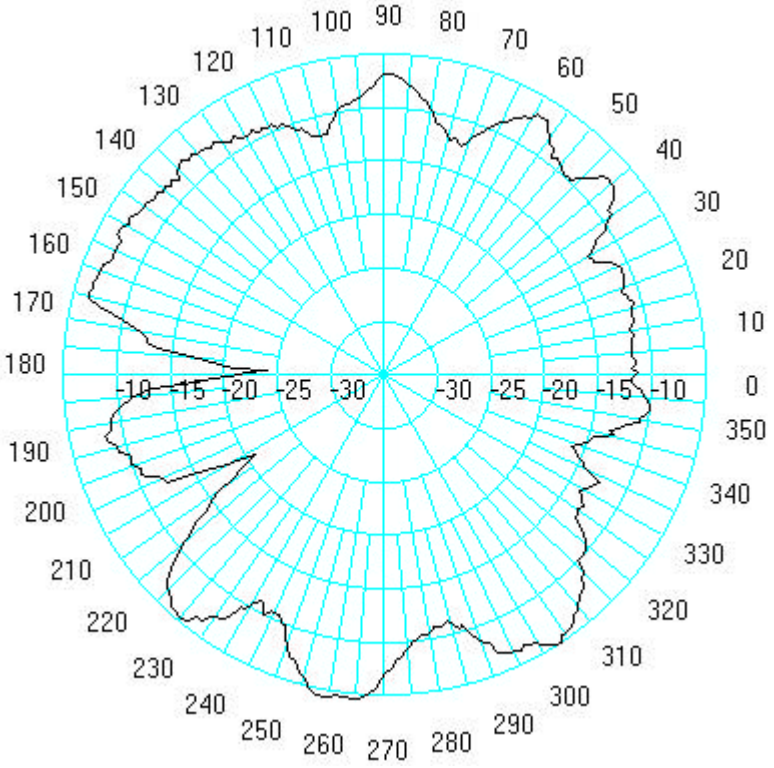
Microstrip antenna
Date : 30 Jun. 2001
Matrix II+
LCD open
Synthetic (H+V)
X-Y plane
Peak gain =-2.1826dBi
Average gain =-7.3256dBi
jackson



LIGHT TEK CO. LTD	Testing Condition : Anechoic chamber	P/N : 0B01WMP240A1	Date : 19 July 2001

3-3 .Antenna Radiation Pattern :

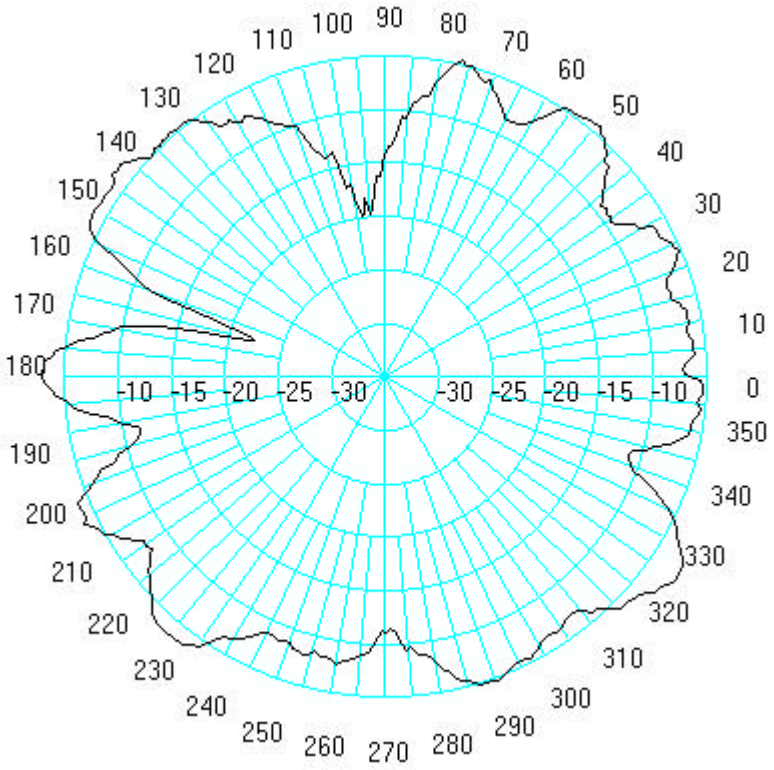
Date : 30 Jun. 2001
Matrix II+
Micorstrip antenna
LCD closed
Vertical
X-Y plane
jackson



LIGHT TEK CO. LTD	Testing Condition : Anechoic chamber	P/N : 0B01WMP240A1	Date : 19 July 2001

3-4 .Antenna Radiation Pattern :

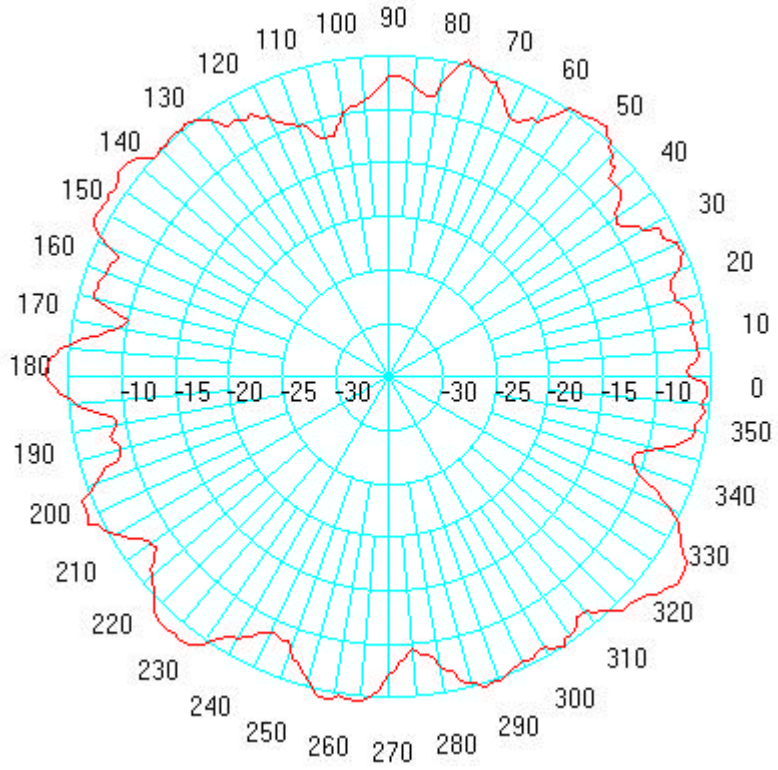
Date : 30 Jun. 2001
Matrix II+
Micorstrip antenna
LCD closed
Horizontal
X-Y plane
jackson



LIGHT TEK CO. LTD	Testing Condition : Anechoic chamber	P/N : 0B01WMP240A1	Date : 19 July 2001

3-5 .Antenna Radiation Pattern :

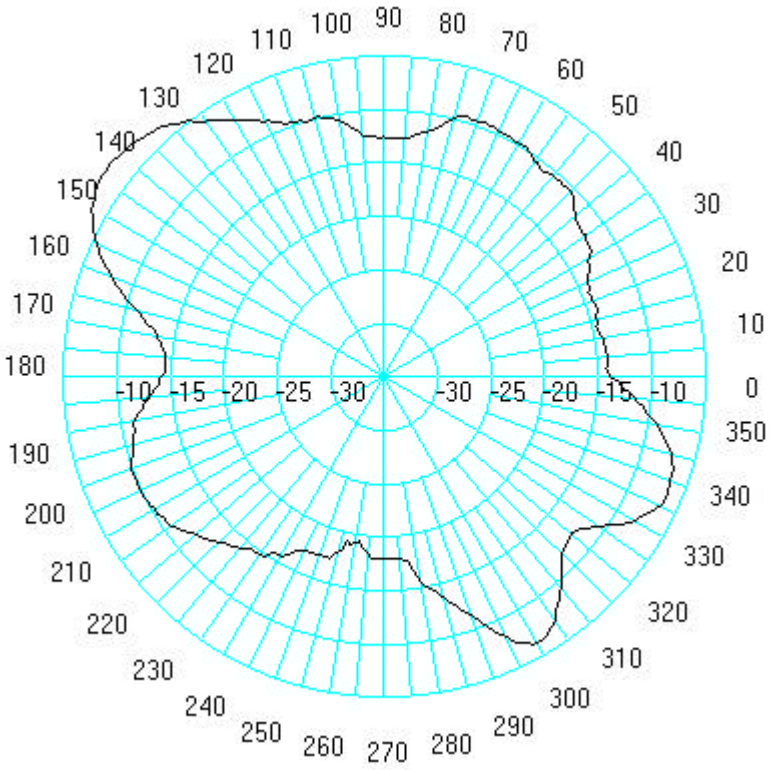
Microstrip antenna
Date : 30 Jun. 2001
Matrix II+
LCD closed
Synthetic (H+V)
X-Y plane
Peak gain =-1.8237dBi
Average gain =-6.269dBi
jackson



LIGHT TEK CO. LTD	Testing Condition : Anechoic chamber	P/N : 0B01WMP240A1	Date : 19 July 2001

3-6 .Antenna Radiation Pattern :

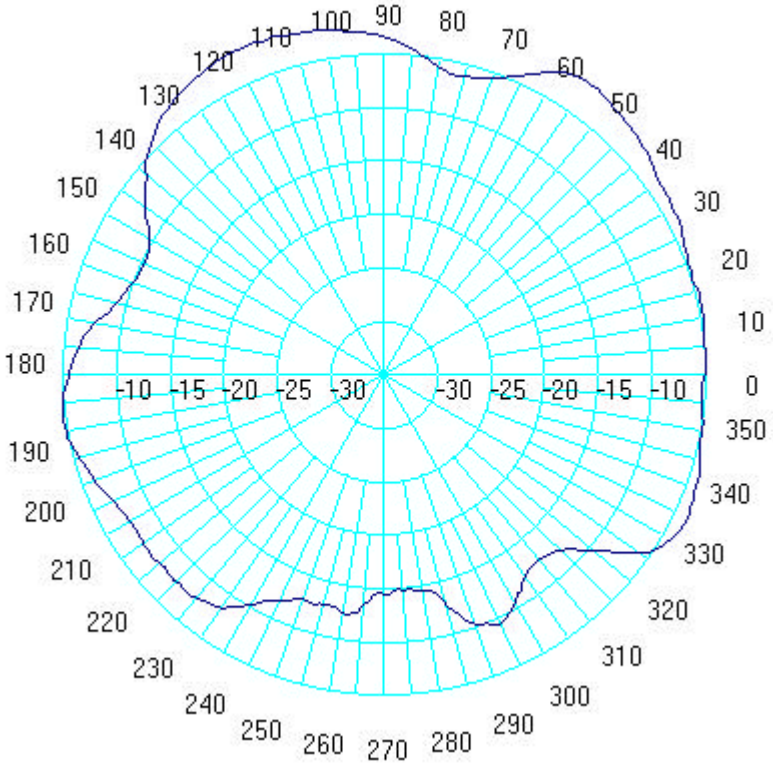
Date : 28 Jun. 2001
Matrix II+
Dipole antenna
LCD OPEN
Vertical
X-Y plane
jackson



LIGHT TEK CO. LTD	Testing Condition : Anechoic chamber	P/N : 0B02WDC240A1	Date : 19 July 2001

3-7 .Antenna Radiation Pattern :

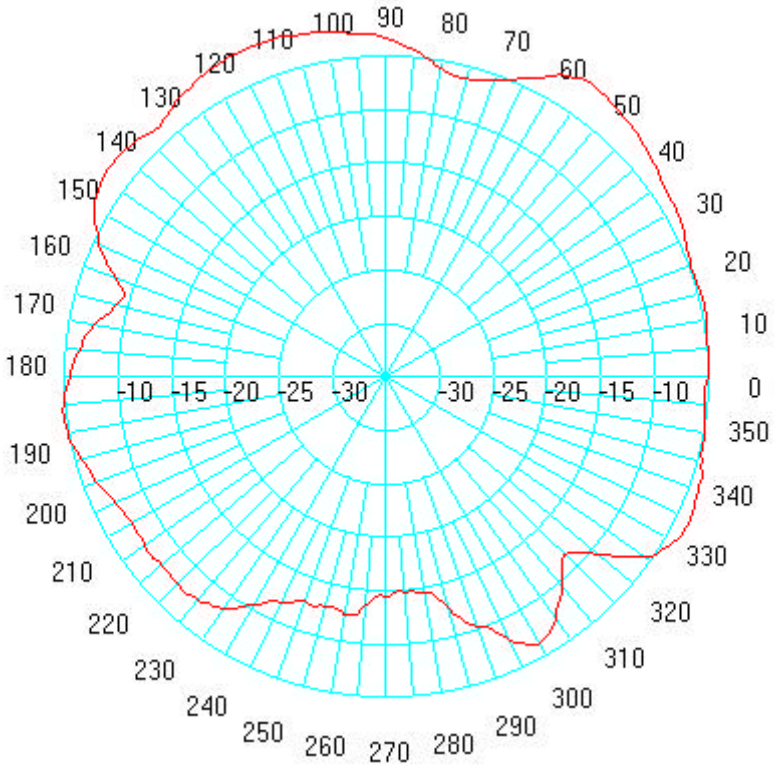
Date : 28 Jun. 2001
Matrix II+
Dipole antenna
LCD OPEN
Horizontal
X-Y plane
jackson



LIGHT TEK CO. LTD	Testing Condition : Anechoic chamber	P/N : 0B02WDC240A1	Date : 19 July 2001

3-8 .Antenna Radiation Pattern :

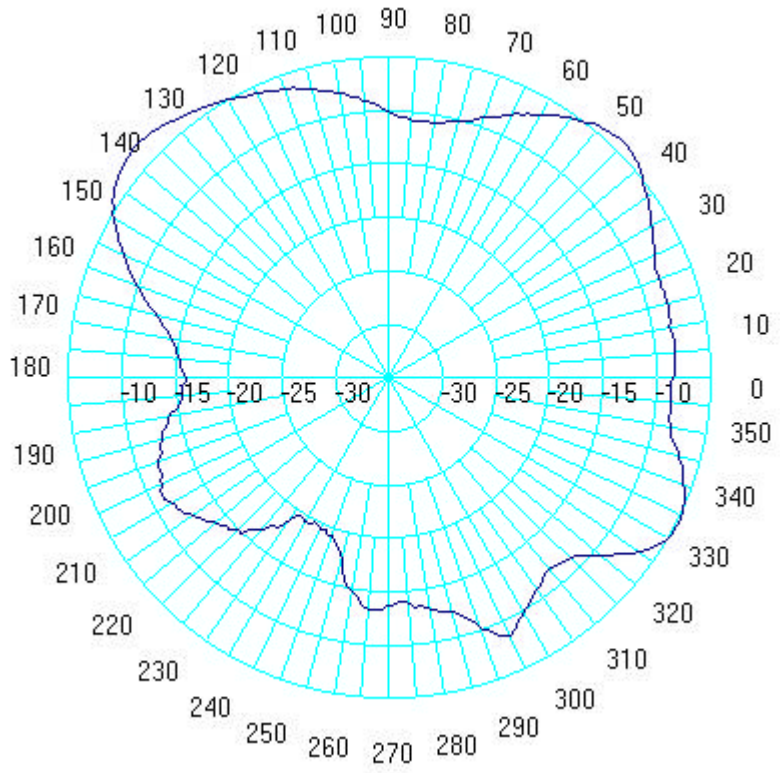
Transmitting pattern
Dipole antenna
Date : 28 Jun. 2001
Matrix II+
LCD open
Synthetic (H+V)
X-Y plane
Peak gain =-1.5927dBi
Average gain =-6.1867dBi
jackson



LIGHT TEK CO. LTD	Testing Condition : Anechoic chamber	P/N : 0B02WDC240A1	Date : 19 July 2001

3-9 .Antenna Radiation Pattern :

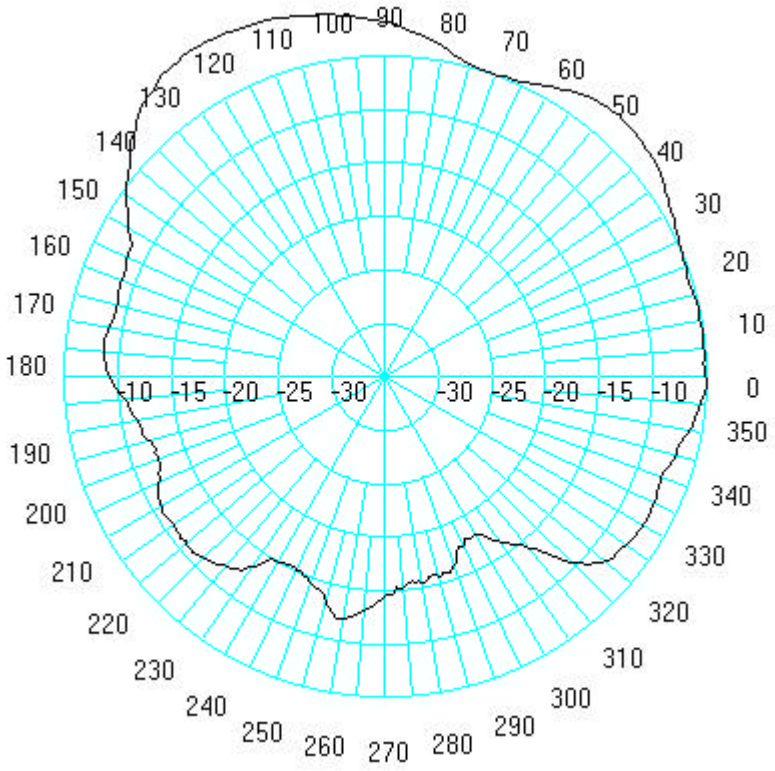
Date : 28 Jun. 2001
Matrix II+
Dipole antenna
LCD closed
Vertical
X-Y plane
jackson



LIGHT TEK CO. LTD	Testing Condition : Anechoic chamber	P/N : 0B02WDC240A1	Date : 19 July 2001

3-10 .Antenna Radiation Pattern :

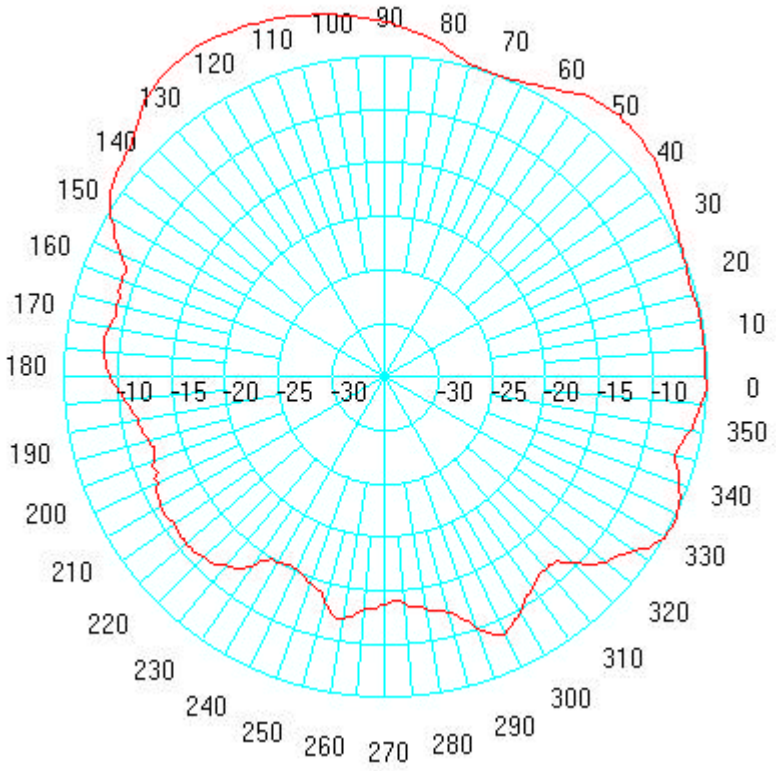
Date : 28 Jun. 2001
Matrix II+
Dipole antenna
LCD closed
Horizontal
X-Y plane
jackson



LIGHT TEK CO. LTD	Testing Condition : Anechoic chamber	P/N : 0B02WDC240A1	Date : 19 July 2001

3-11 .Antenna Radiation Pattern :

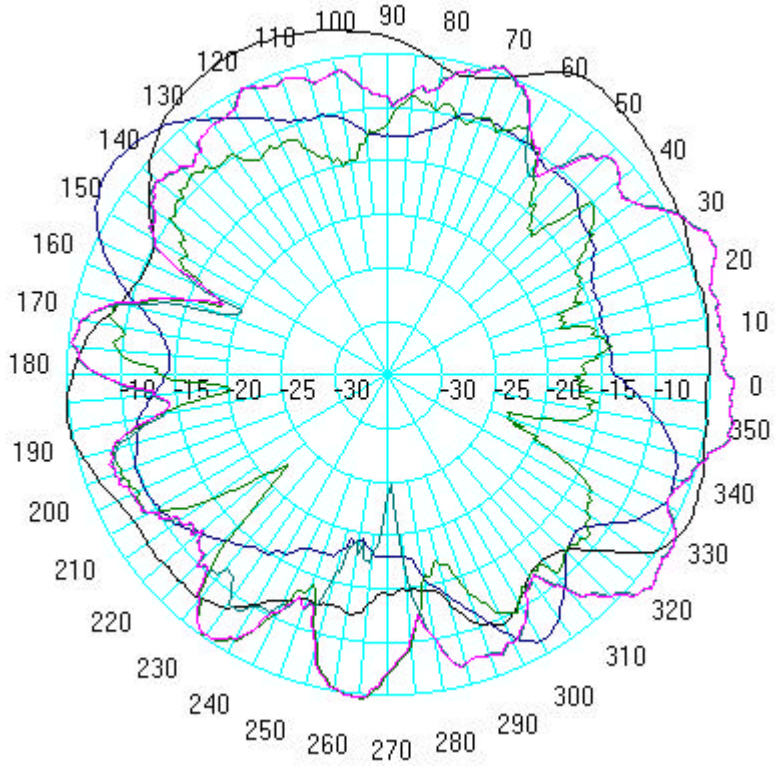
Transmitting pattern
Dipole antenna
Date : 28 Jun. 2001
Matrix II+
LCD closed
Synthetic (H+V)
X-Y plane
Peak gain =0.5586dBi
Average gain =-7.108dBi
jackson



LIGHT TEK CO. LTD	Testing Condition : Anechoic chamber	P/N : 0B02WDC240A1	Date : 19 July 2001

3-12 .Antenna Radiation Pattern :

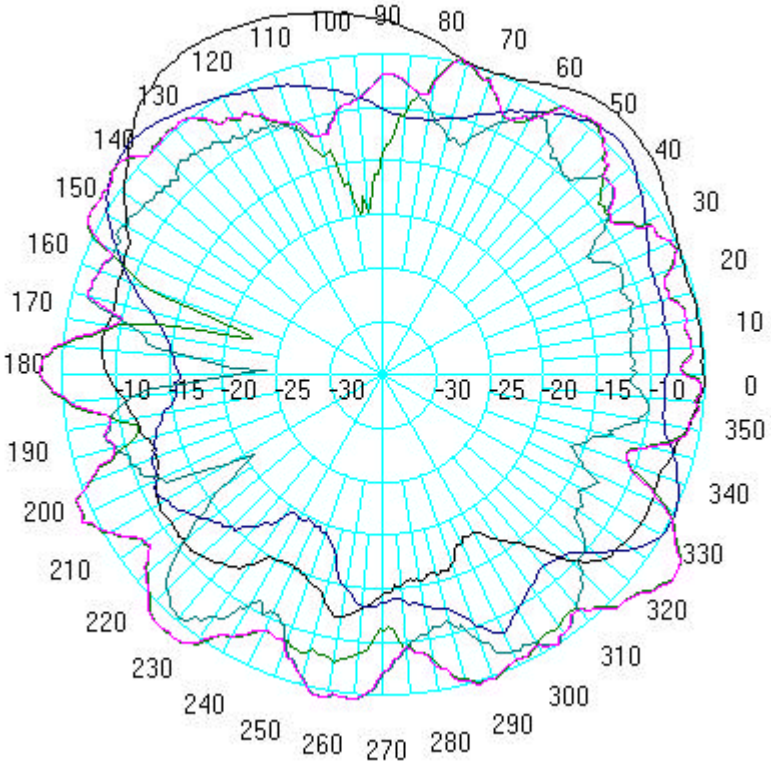
Receiving pattern
Dipole +Microstrip antenna
Date : 30 Jun. 2001
Matrix II+
LCD open
Synthetic (H+V)
X-Y plane
jackson



LIGHT TEK CO. LTD	Testing Condition : Anechoic chamber	P/N : 0B01WMP240A1 0B02WDC240A1	Date : 19 July 2001

3-13 .Antenna Radiation Pattern :

Receiving pattern
Dipole +Microstrip antenna
Date : 30 Jun. 2001
Matrix II+
LCD closed
Synthetic (H+V)
X-Y plane
jackson

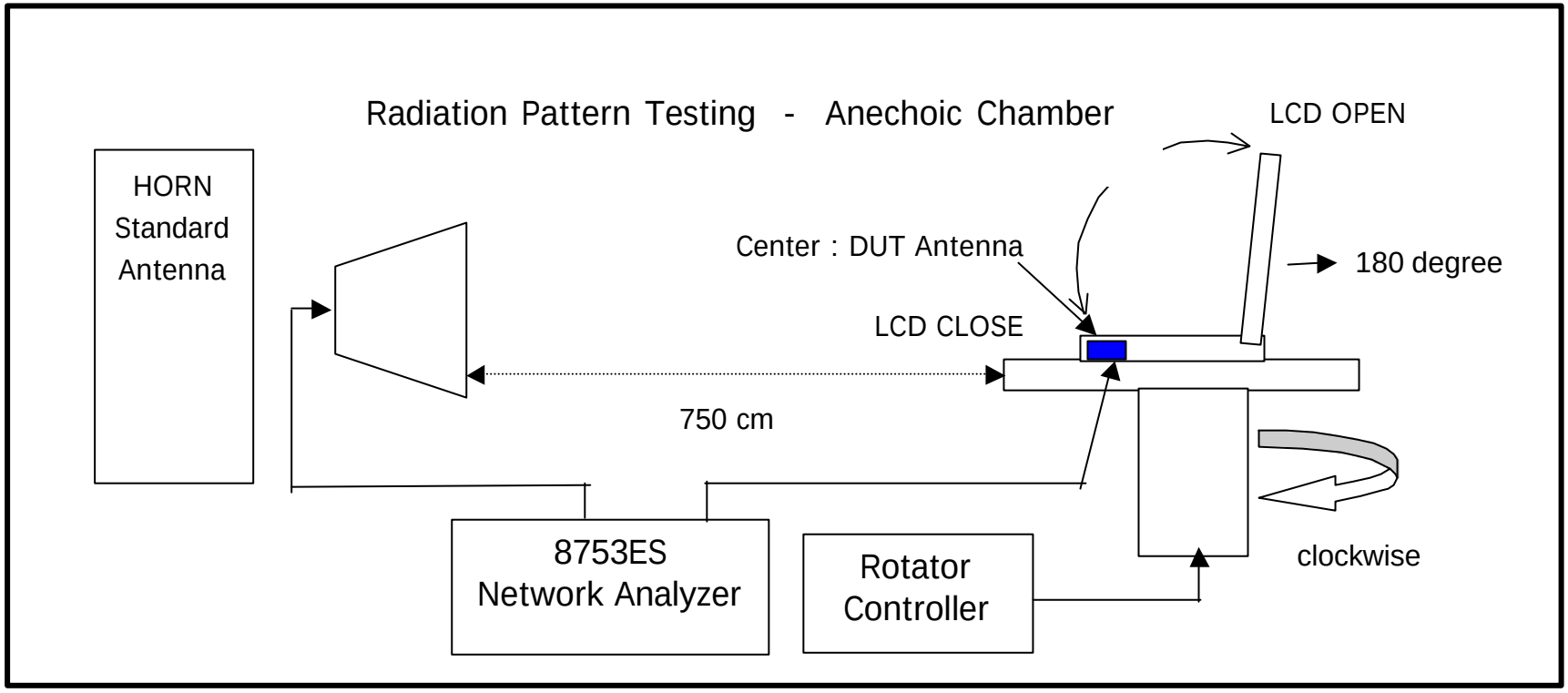


LIGHT TEK CO. LTD	Testing Condition : Anechoic chamber	P/N : 0B01WMP240A1 0B02WDC240A1	Date : 19 July 2001

4. SPECIFICATIONS:

- Electrical Properties

Frequency Range……2.4~2.5GHz
Impedance……50 Ohms nominal
VSWR……<2.0
Peak Gain…… -5Bi < peak gain < 3dBi
Standard Connector……HIROSE Female Connector

5. IEEE .802.11 and BLUETOOTH Antenna Testing Conditions :

NoteBook Placement :