

APPENDIX C: ANTENNA SPECIFICATIONS

Please see the following pages.

APPROVAL SHEET

FOR : SAMSUNG ELECTRONICS CO., LTD

MODEL : Matrix III+ Antenna

0B01WMP240A1 (Microstrip antenna)

SUPPLIER P/N: 0B02WDC240A1 (Dipole antenna)

FILE NO. :

DATE : 19 July 2001

DESCRIPTION : Dipole & Microstrip Antenna

CUSTOMER P/N :

Manager	Supervisor	Engineer
Dan Chen	Lee	Jackson Liu



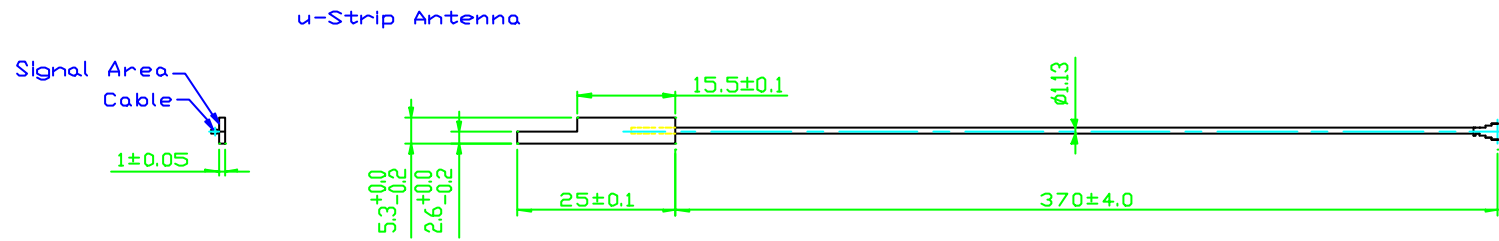
Light Tek Co., Ltd.

TEL : 886-2-89510688

FAX : 886-2-89510681

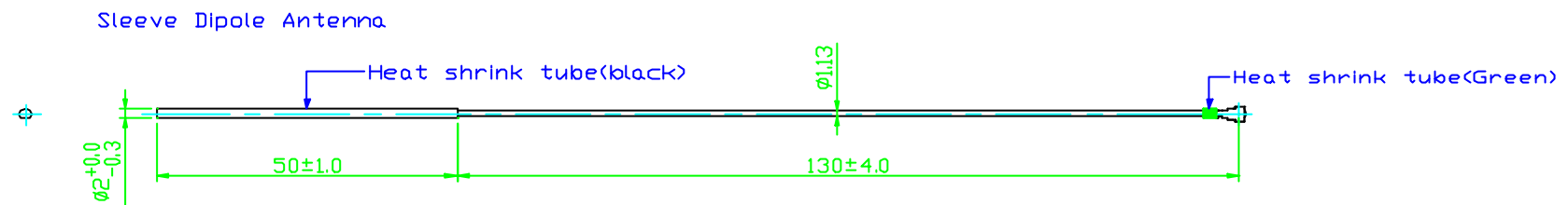
2nd F , NO.158 , Gan Cheng Rd.,
Pan Chiao City , Taipei Hsien ,
Taiwan R.O.C .

1. Antenna Mechanical Dimensions :



Mark	Note
①	
②	
③	
④	
⑤	

		TOL. TABLE		LIGHT TEK CO. LTD		
		RANGE	TOLERANCE	Title: MATRIX-2 PLUS u-Strip ANT.		
ISSUE	OVER 101	±2.5		Part No	0B01WMP240A1	
	51-100	±2.0		LTK Draw NO.		
	31-50	±1.5				
	30 BELOW	±1.0		Approval	CHECK	Drawed
	Units	mm	Scale	1:1		
	Size	A4	Date	90.07.06		
			Sheet	1 of 1		

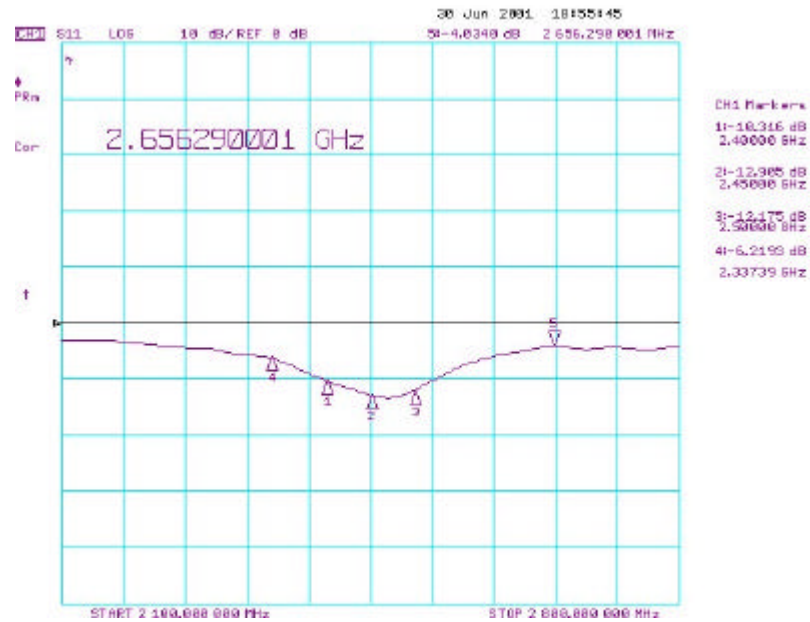


Mark	Note

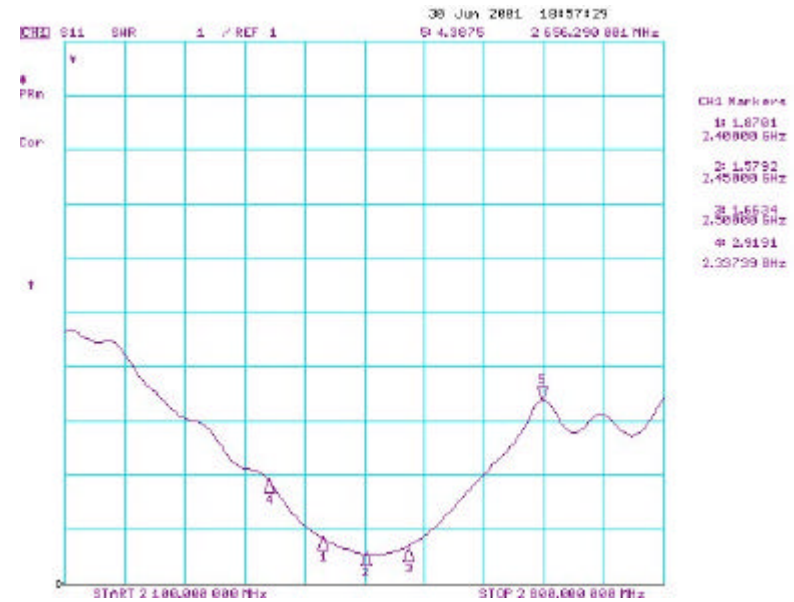
TOL. TABLE				LIGHT TEK CO. LTD		
				Title: MATRIX-2 PLUS Dipole ANT.		
RANGE		TOLERANCE				
ISSUE	OVER 101	±2.5		Part No	0B02WDC240A1	
	51-100	±2.0		LTK. Draw NO.		
	31-50	±1.5				
	30 BELOW	±1.0		Approval	CHECK	Drawed
	Units	mm	Scale	1:1		
	Size	A4	Date	90.07.06		
			Sheet	1 of 1		

2. Antenna Electrical Characteristics :

Return Loss



VSWR



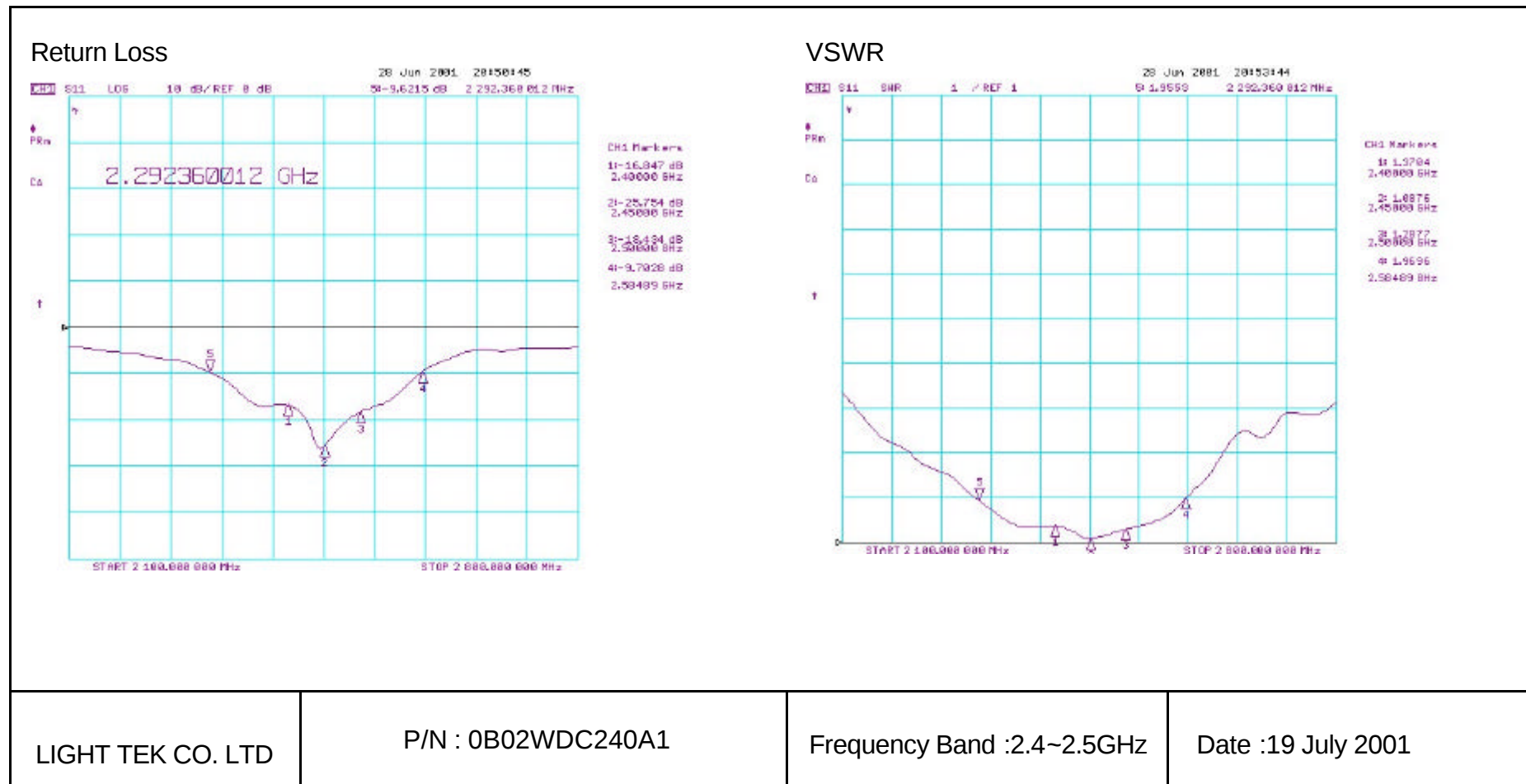
LIGHT TEK CO. LTD

P/N : 0B01WMP240A1

Frequency Band :2.4~2.5GHz

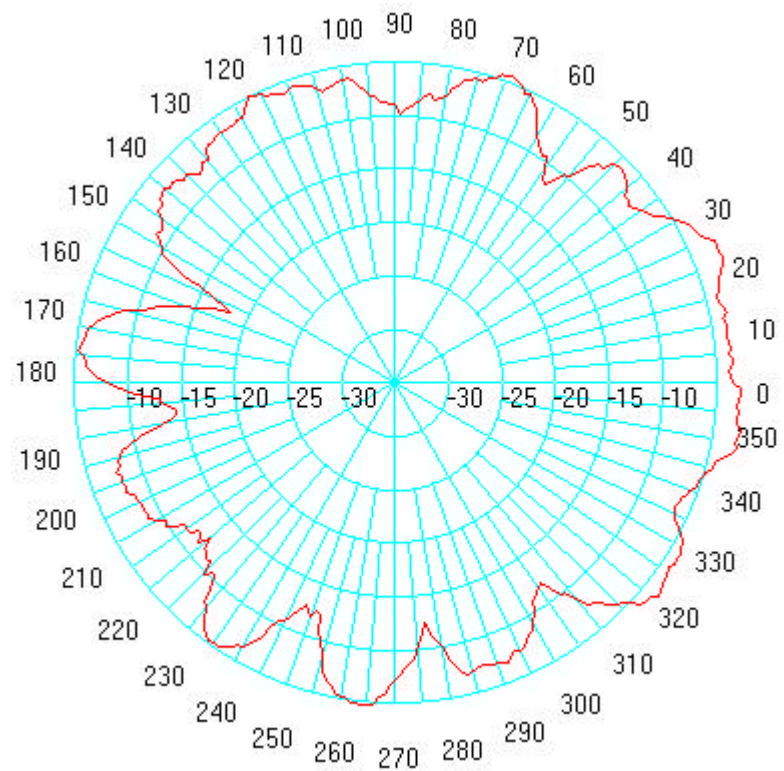
Date :19 July 2001

2-1. Antenna Electrical Characteristics :



3 .Antenna Radiation Pattern :

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



LIGHT TEK CO. LTD

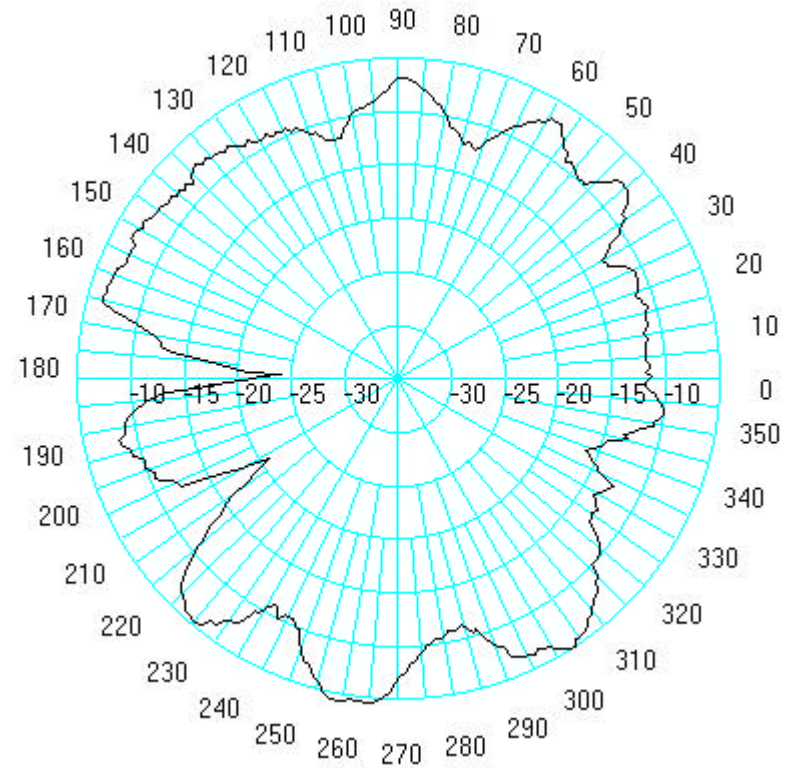
Testing Condition : Anechoic chamber

P/N : 0B01WMP240A1

Date : 19 July 2001

3-3 .Antenna Radiation Pattern :

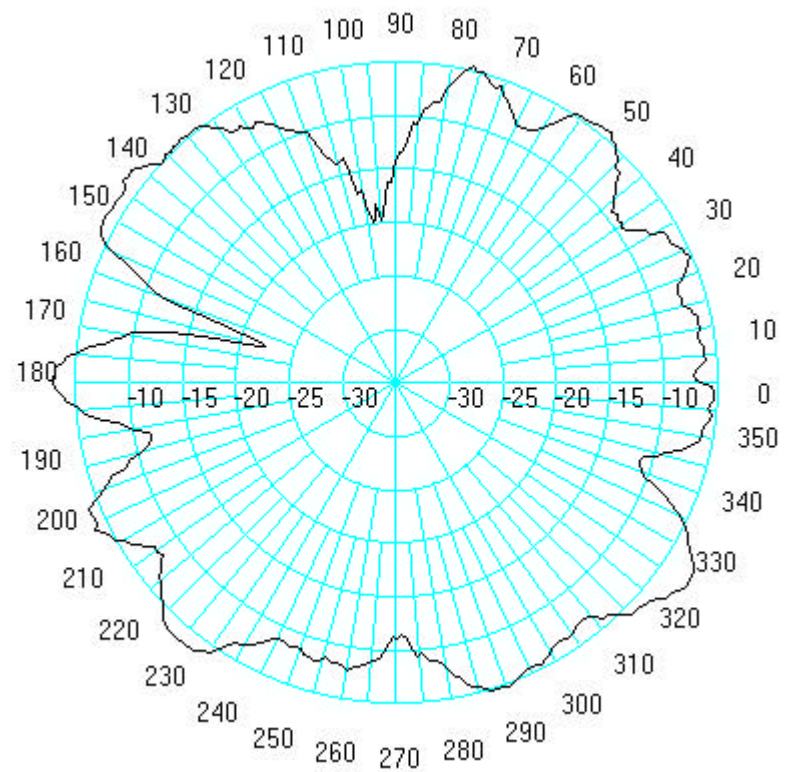
Date : 30 Jun. 2001
 Matrix III+
 Micorstrip antenna
 LCD closed
 Vertical
 X-Y plane
 jackson



LIGHT TEK CO. LTD	Testing Condition : Anechoic chamber	P/N : 0B01WMP240A1	Date : 19 July 2001
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3-4 .Antenna Radiation Pattern :

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



LIGHT TEK CO. LTD

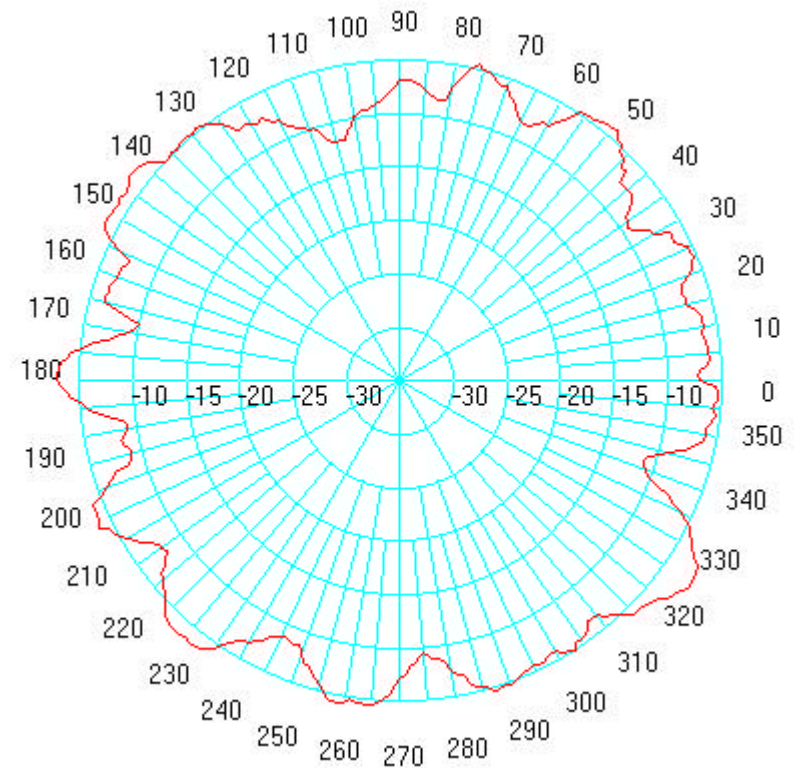
Testing Condition : Anechoic chamber

P/N : 0B01WMP240A1

Date : 19 July 2001

3-5 .Antenna Radiation Pattern :

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



LIGHT TEK CO. LTD

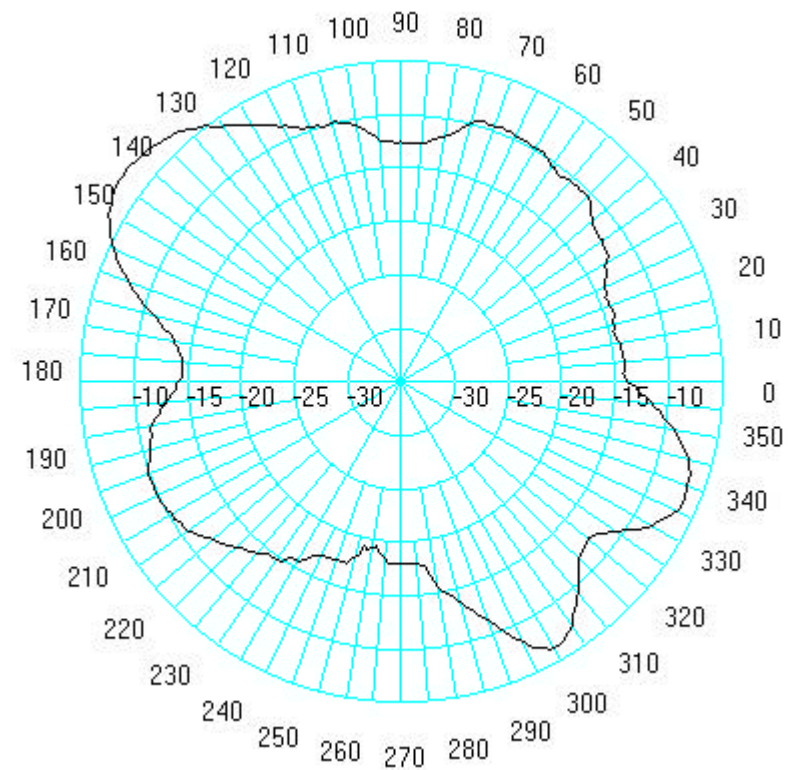
Testing Condition : Anechoic chamber

P/N : 0B01WMP240A1

Date : 19 July 2001

3-6 .Antenna Radiation Pattern :

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



LIGHT TEK CO. LTD

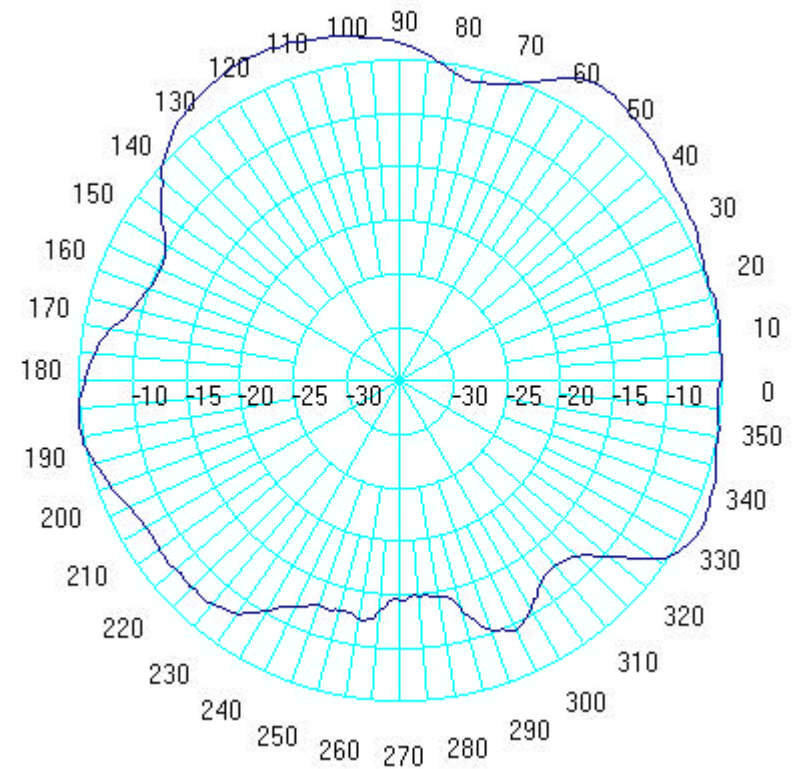
Testing Condition : Anechoic chamber

P/N : 0B02WDC240A1

Date : 19 July 2001

3-7 .Antenna Radiation Pattern :

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



LIGHT TEK CO. LTD

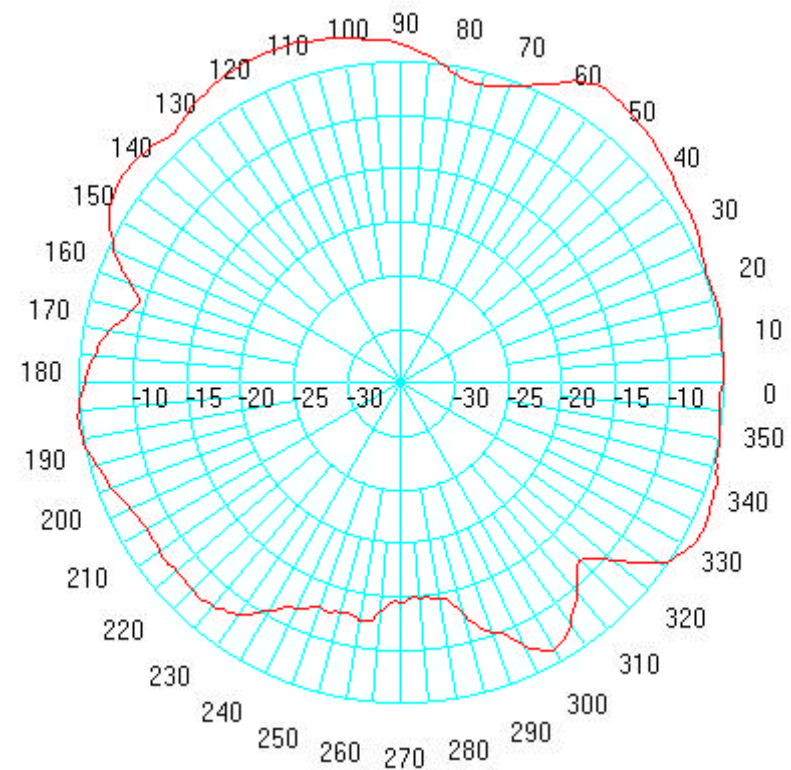
Testing Condition : Anechoic chamber

P/N : 0B02WDC240A1

Date : 19 July 2001

3-8 .Antenna Radiation Pattern :

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



LIGHT TEK CO. LTD

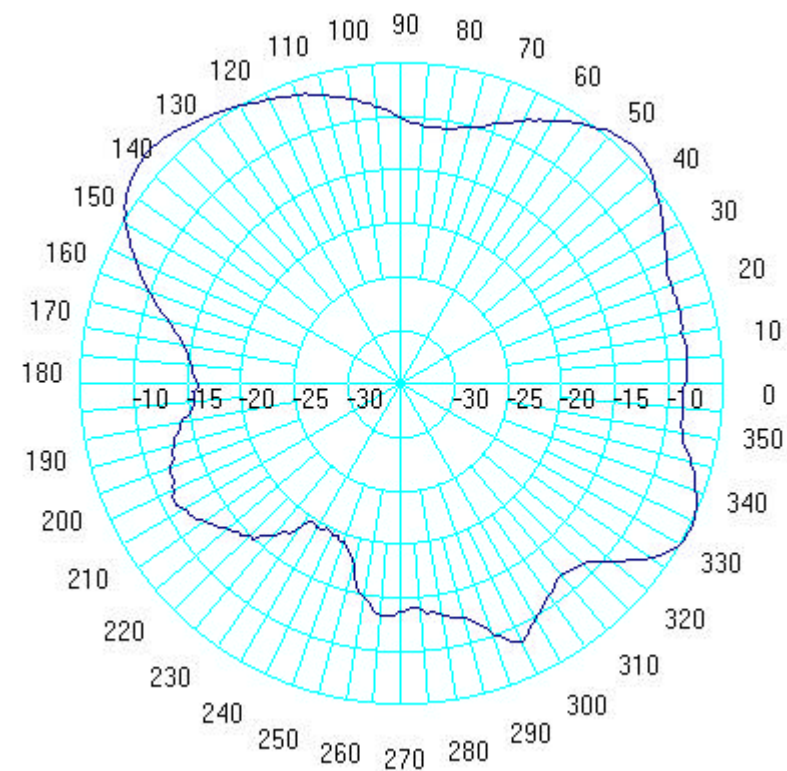
Testing Condition : Anechoic chamber

P/N : 0B02WDC240A1

Date : 19 July 2001

3-9 .Antenna Radiation Pattern :

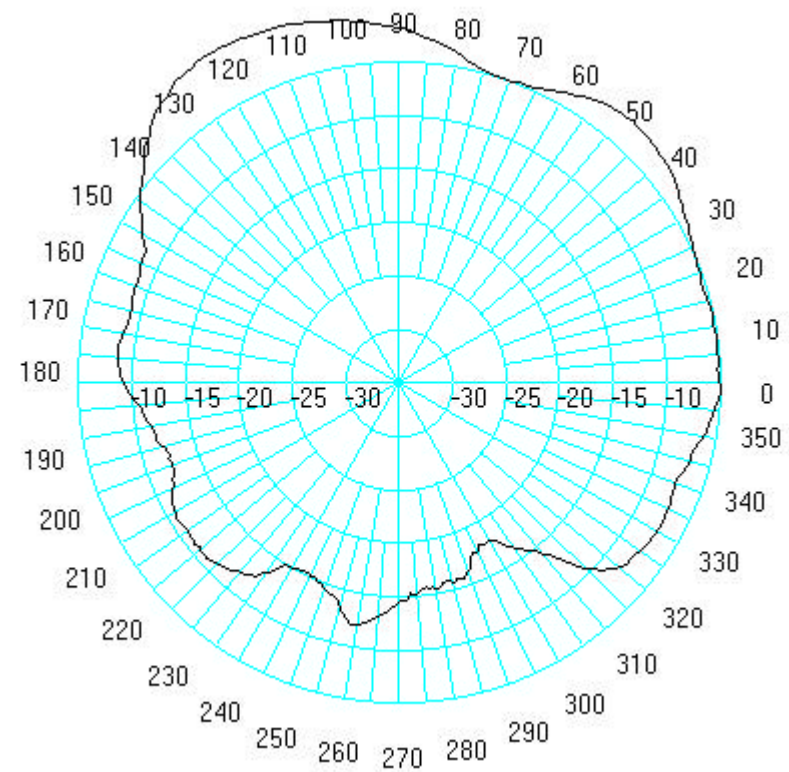
Date : 28 Jun. 2001
 Matrix III+
 Dipole antenna
 LCD closed
 Vertical
 X-Y plane
 jackson



LIGHT TEK CO. LTD	Testing Condition : Anechoic chamber	P/N : 0B02WDC240A1	Date : 19 July 2001
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3-10 .Antenna Radiation Pattern :

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



LIGHT TEK CO. LTD

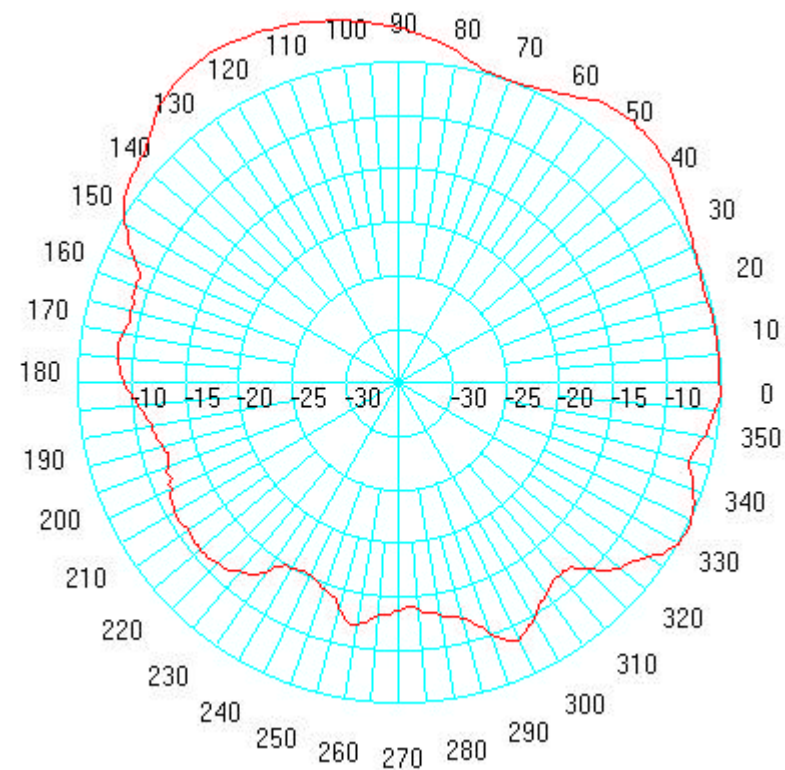
Testing Condition : Anechoic chamber

P/N : 0B02WDC240A1

Date : 19 July 2001

3-11 .Antenna Radiation Pattern :

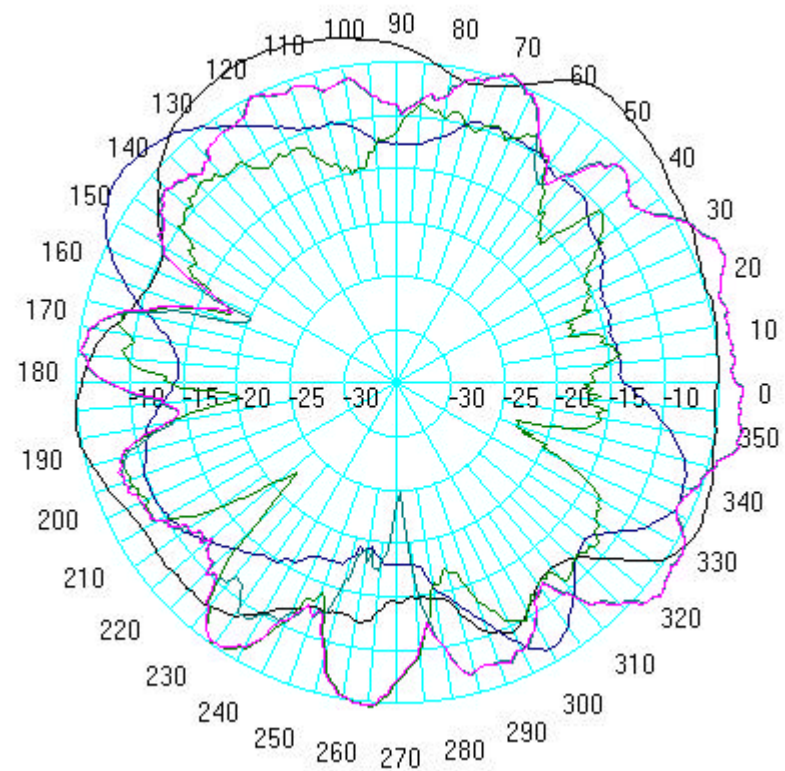
Transmitting pattern
 Dipole antenna
 Date : 28 Jun. 2001
 Matrix III+
 LCD closed
 Synthetic (H+V)
 X-Y plane
 Peak gain =0.5586dBi
 Average gain =-7.108dBi
 jackson



LIGHT TEK CO. LTD	Testing Condition : Anechoic chamber	P/N : 0B02WDC240A1	Date : 19 July 2001
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3-12 .Antenna Radiation Pattern :

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



LIGHT TEK CO. LTD

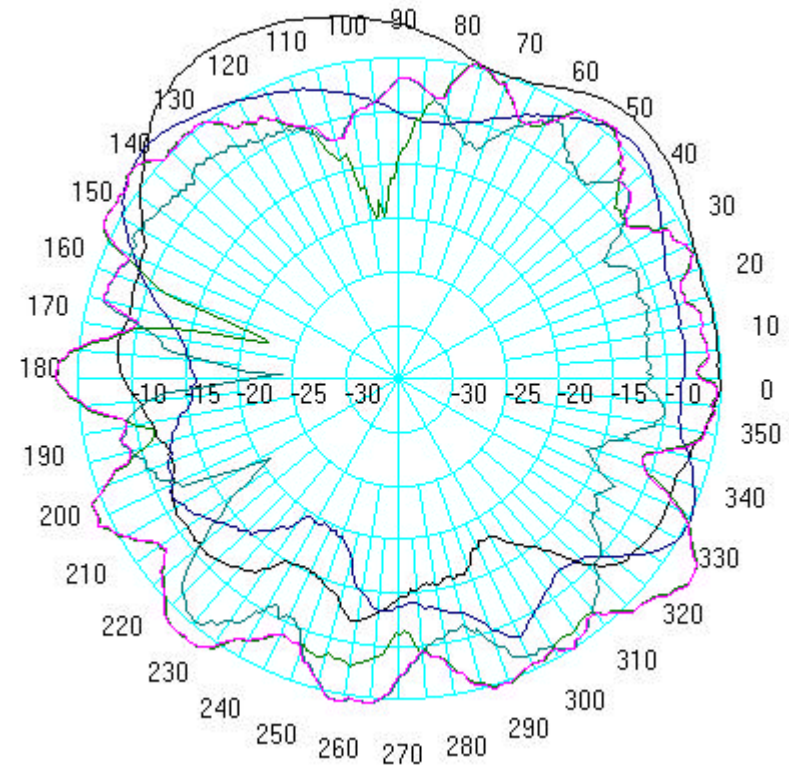
Testing Condition : Anechoic chamber

P/N : 0B01WMP240A1
 0B02WDC240A1

Date : 19 July 2001

3-13 .Antenna Radiation Pattern :

Receiving pattern
 Dipole +Microstrip antenna
 Date : 30 Jun. 2001
 Matrix III+
 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 :

