

Attention: Pentaone Co., Ltd

Approval No.

Issue

1.0

Approval Document

Description	SLEEVE DIPOLE ANTENNA
Model No.	LBE-2405T
Item No.	

Conditional approval	
1.	
2.	
3.	

The Product addressed above is approved

Approved by	Description		Written by	Reviewed by	Approved by	
	H/W	Dept./name				
ALOGICS CO., LTD.		Signature				
Mechanical	Dept./name					
	Approved by supplier		Signature			
	Approved by supplier		Description	Written by	Reviewed by	Approved by
			Dept./name	Shin Seong-Yo		Choi Pak - Sik
			Signature			

Company name	LTUBI Co., Ltd.
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Telephone	031-311-2856

History list of approval document

Model No. : LBE-2405T

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1. Specification

Electrical Specifications	
Frequency Range	2400 ~ 2484MHz
V.S.W.R	1.9 : 1 (below)
Gain(Max)	4.5 dBi
Nominal Impedance	50 ohm
Radiation Pattern	Omni – Directional
Polarization	Linear
Power Handling	3 watts (Max)

Mechanical Specifications	
Dimensions	160.0 (mm) x Ø10.0 (mm)
Weight	about 12.0g
Operating Temperature	-30°C ~ 70°C
Operating Humidity	0 ~ 95 %
Option	N/A

2. Measurement Setup

2-1. Test Equipments

Network Analyzer	Agilent E8362B
Calibration Kit	Agilent 85052D
Base Station Simulator	Agilent 8960
Adaptor	SMA Type Female ↔ SMA male
Measurement Cable	2803 (Cable P/N)

2-2. Test Equipments Setting

2.1 Display	Dual channel : On
	Split display : On
2.2 Menu	Number of points : 801
	Power : 0 dBm
2.3 Measure	Channel 1 : S11

2-3. Calibration

Calibration-	Cal. Kit : 50 Ω
	Calibration menu → Full-2-Port
	Reflection
	Forward : Open → Short → Load
	Reverse : Open → Short → Load
	Done
	Transmission
	Do Both → FWD + REV
	Done
	Isolation
	Omit Isolation
	Done

3. Test Procedures

3-1. V.S.W.R

Step1. Connect Ant Port With Cable included Adaptor to Port1 of Network Analyzer.

Step2. Point out Markers on Network Analyzer Display
At 824MHz, 849MHz, 869MHz, 894MHz

Step3. Inspect V.S.W.R < 1.9

Step4. Measurement

3-2. Gain and Pattern (Far Field Chamber)

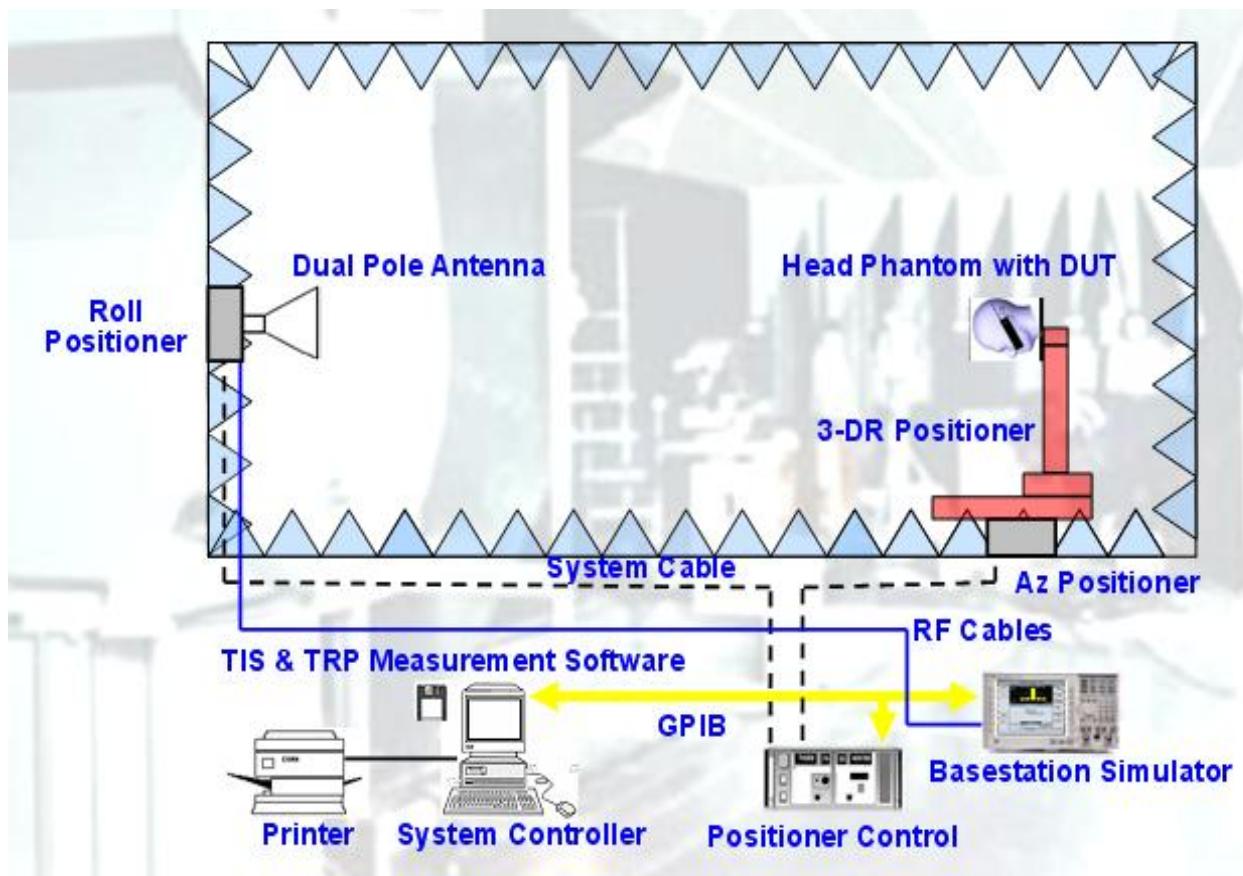
Chamber Size : 5.5 (L)m x 5.5 (W)m x 5 (H)m

Frequency Range : 800MHz ~ 6GHz (Far Field)

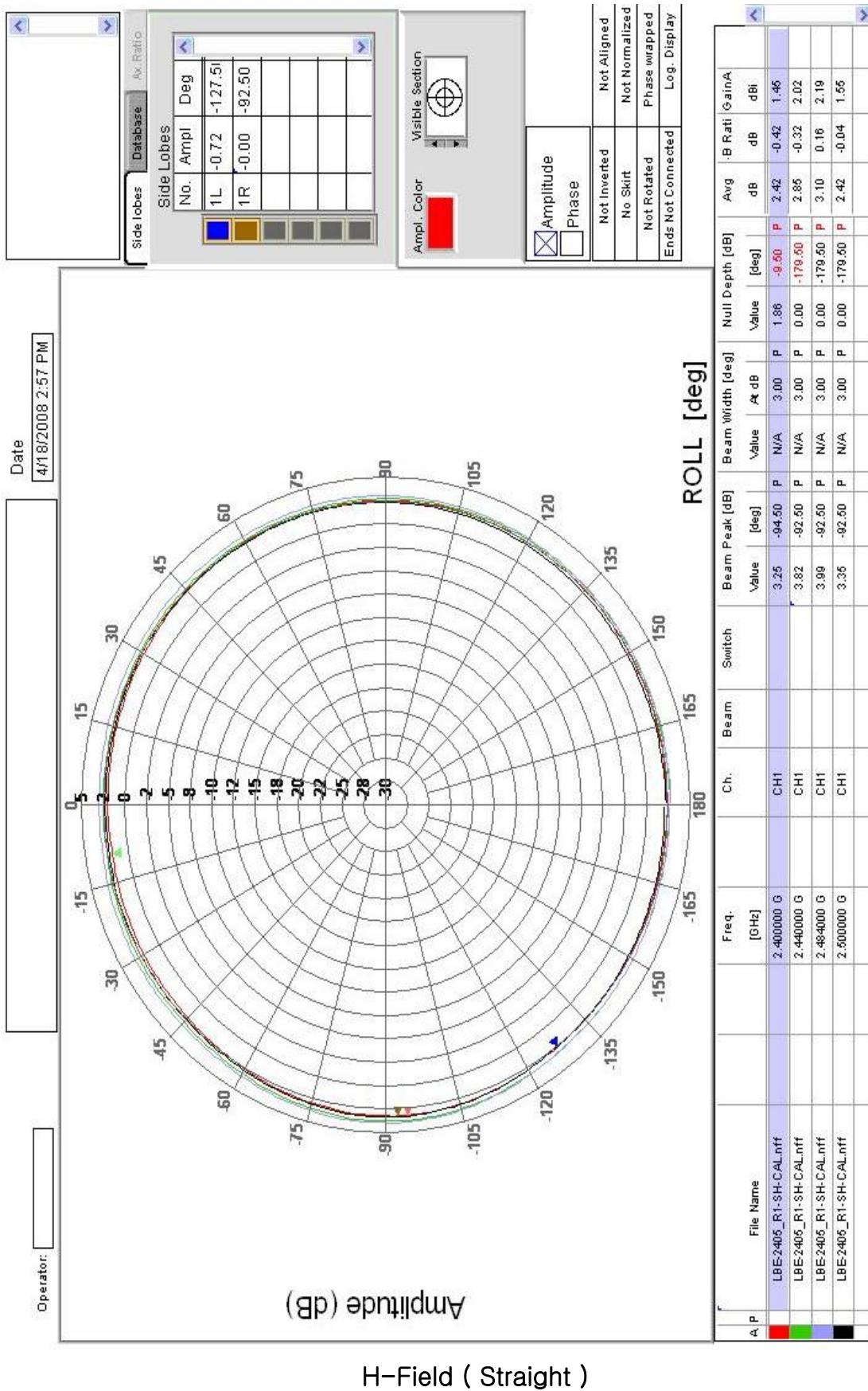
Quiet Zone : 0.8m x 0.8m @ 800MHz

Chamber Type : Rectangular

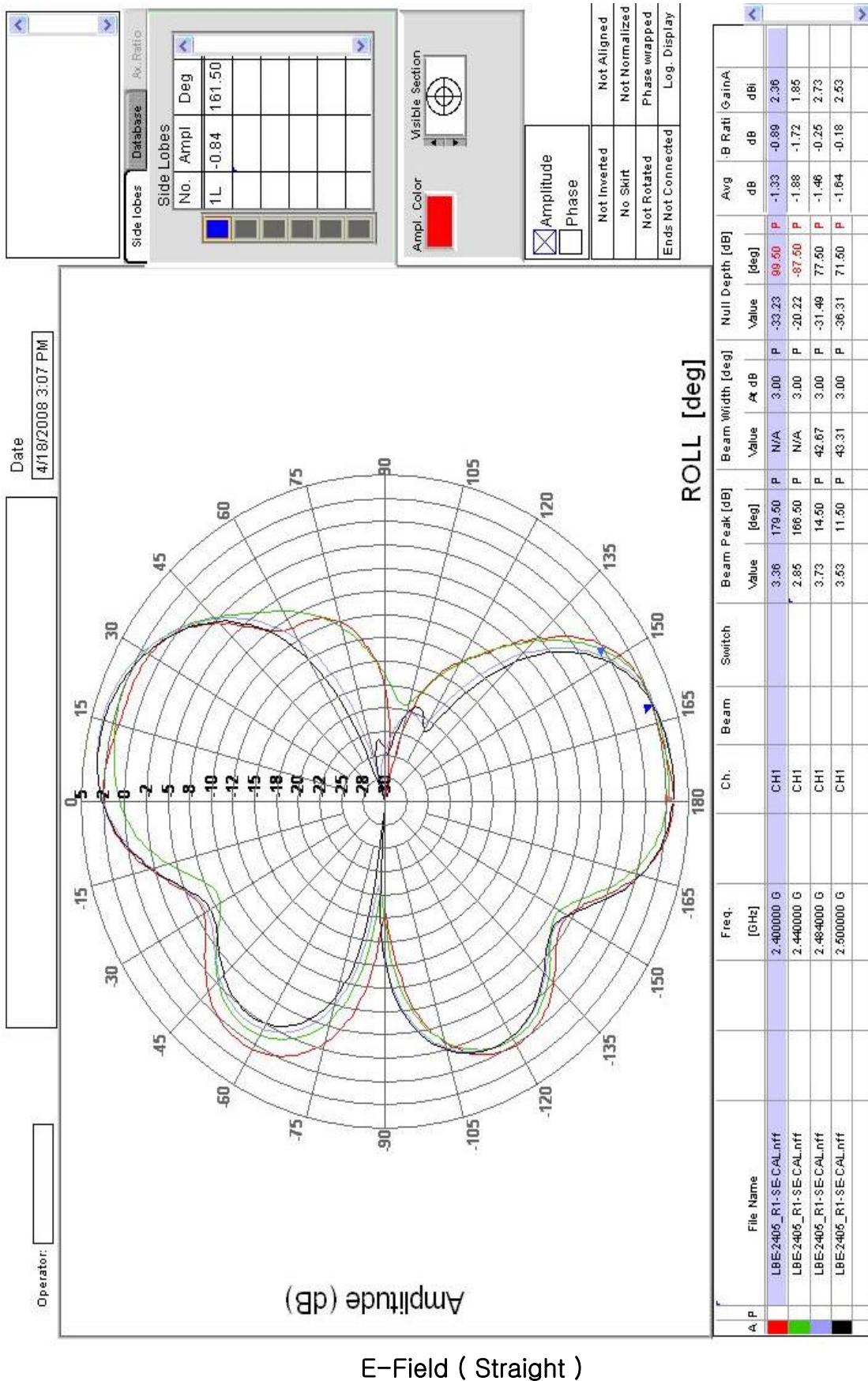
Measurement weight : $\leq 12\text{kg}$



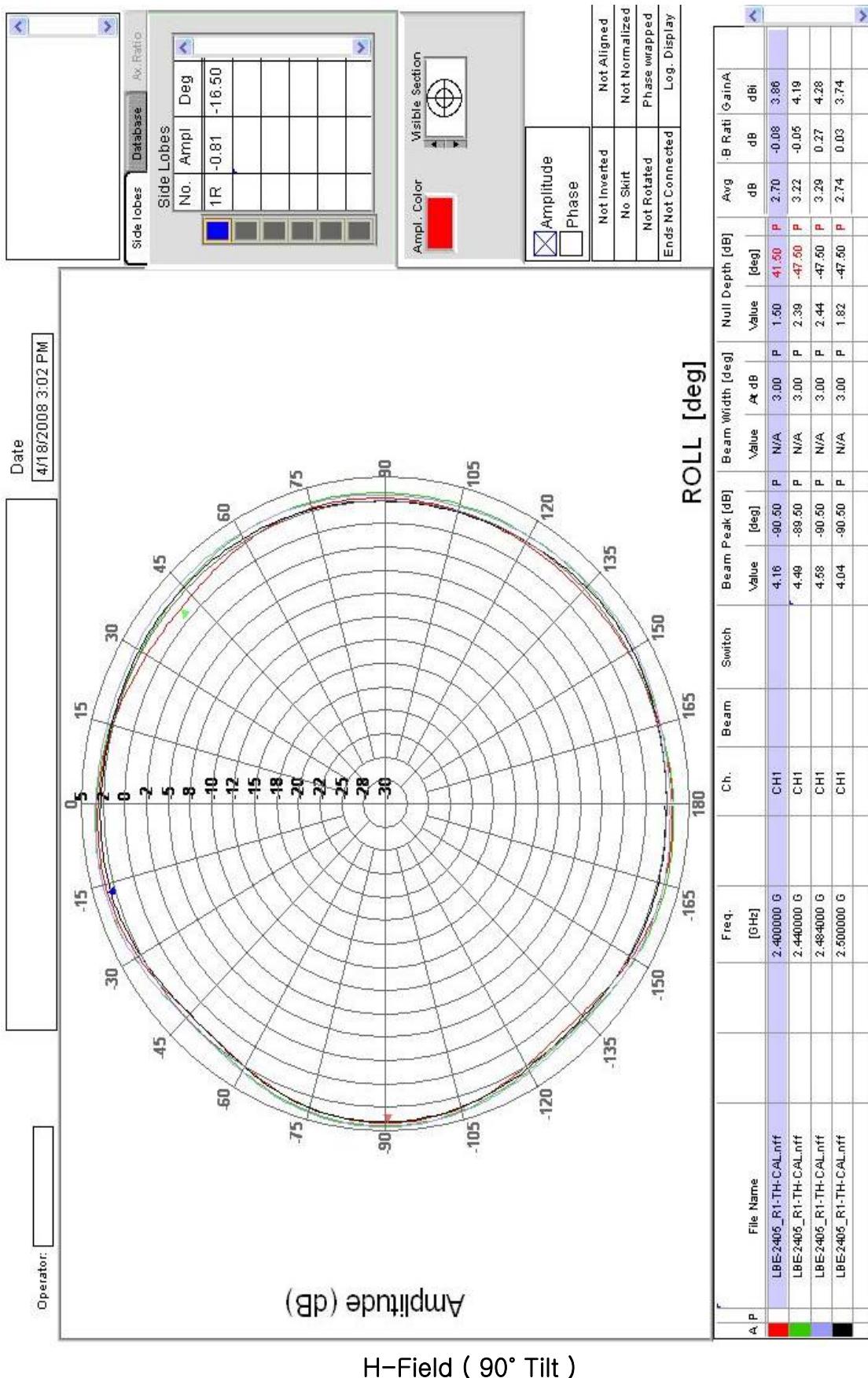
4. Electrical Specification Data



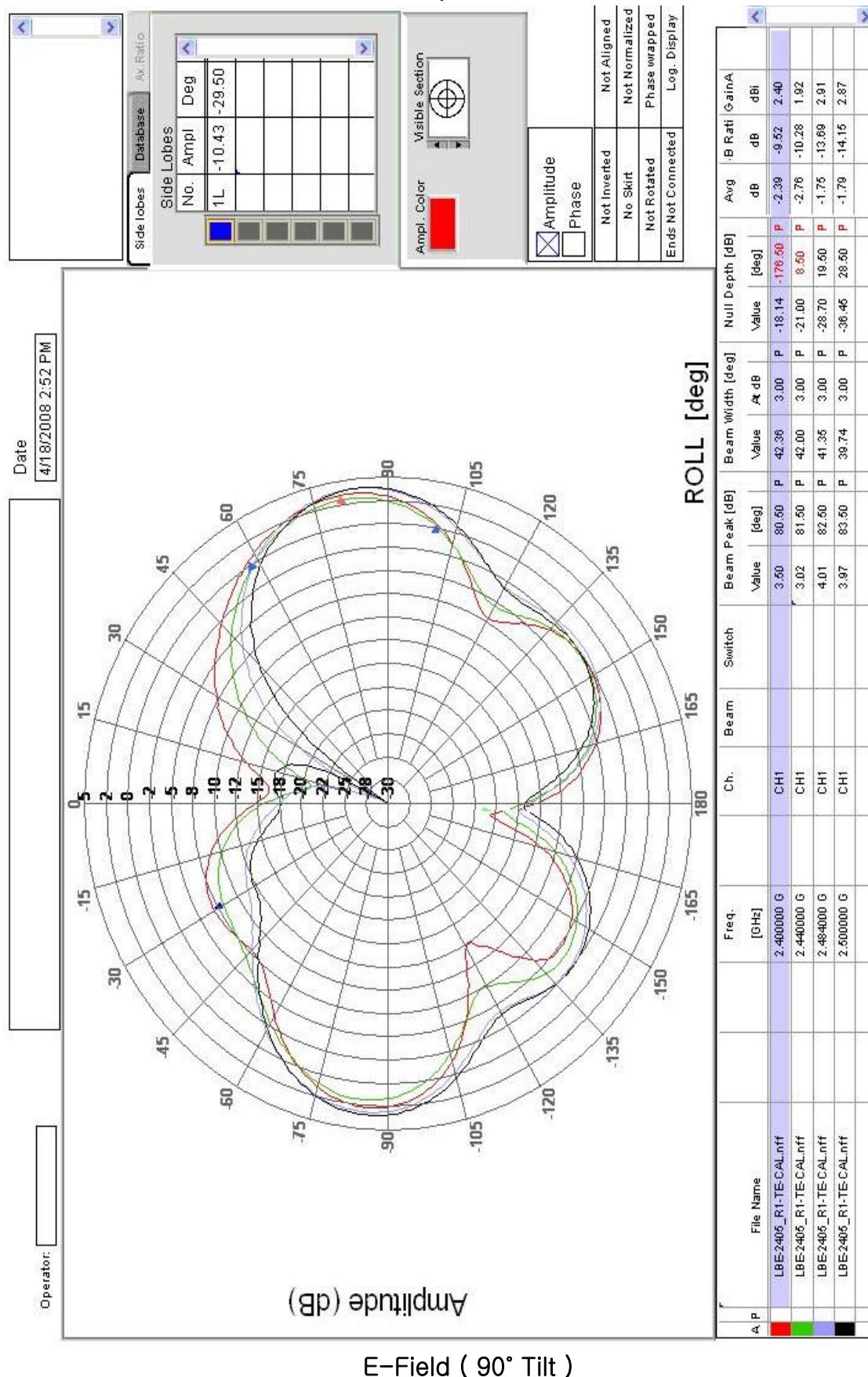
4. Electrical Specification Data



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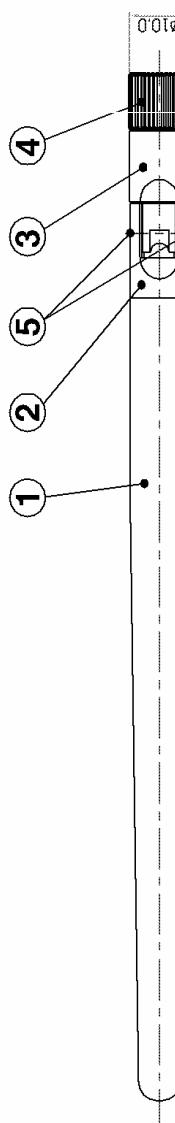


4. Electrical Specification Data

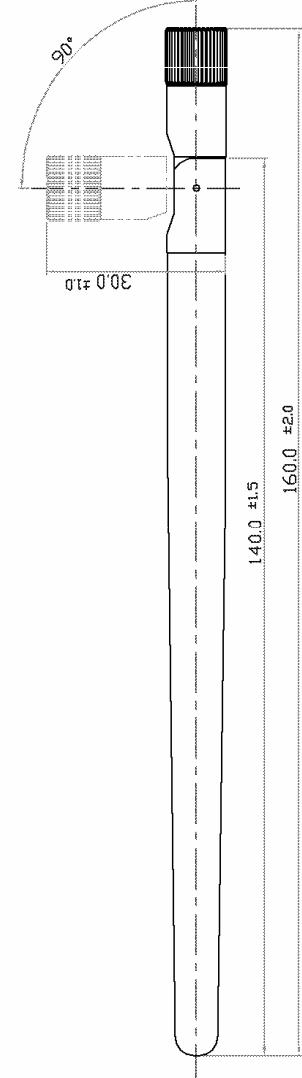


5. Mechanical Drawing

No.		DATE	CHANGE CONTENTS		REVISION	CHANGE CAUSE	
1	2	3			4		
A	B	C			D		



Front View



Side View

NOTE

1. FREQUENCY RANGE : 2400 ~ 2484MHz
2. ANTENNA TYPE : SLEEVE DIPOLE (FPCB TYPE)
3. GAIN (MAX) : 4.5dBi
4. V.S.W.R : LESS THAN 1.9 : 1
5. IMPEDANCE : 50 Ω
6. WEIGHT : 12.0g
7. CONNECTOR TYPE : SMA-FEMALE
8. GENERALLY TOLERANCE : ±0.2

Table E: Material List

NO.	DESCRIPTION	QTY	MATERIAL	SIZE	MATERIAL	SIZE	REMARKS
5	JOUNT PAN	2 EA	Brass	92.2 x 3.6	Ni-Patin	IR	
4	CONNECTOR	1 EA	Brass	910.0 x 18.6	Ni-Au-Patin	IR	
3	JOUNT-DOWN	1 EA	Nylon 6	910.0 x 19.1	BLACK	IR	
2	JOUNT-UP	1 EA	Nylon 6	910.0 x 23.4	BLACK	IR	
1	COVER	1 EA	KeyFlex	910.0 x 125.0	BLACK	IR	

Table F: Tolerance Table

TOLERANCE	DRAWN		DESIGN	CHECK	APPROVE
	Decimal	Angle			
X 1:10					
XX 1:10					
SCALE	UNIT	REV			
N/S	mm	IR			

Table G: Drawing Information

DRAWING NO.		REV		DRAWING NO.		REV	
LBE-2405T		08.01.28		LBE2405T-AS-100		08.01.28	

Table H: Sheet Information

SHEET		REV	
1 / 1		A4	





