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Product Number: NB0175-C1B

Product Name: Antenna



1. Specification

Sample Photo



A. Electrical Characteristics

Frequency	2400 ~ 2500 MHz
S.W.R.	≤ 2.0
Efficiency	65 ~ 75 %
Polarization	Linear
Impedance	50 Ohm
Antenna Type	PIFA

B. Material & Mechanical Characteristics

Material of Radiator	Metal (C7521)
Cable Type	O.D. 1.13 mm (Black)
Connector Type	Mini Connector for O.D. 1.13 mm Coaxial Cable
Pull Test	≥ 1.0 Kg

C. Environmental

Operation Temperature	- 40 °C ~ + 65 °C
Storage Temperature	- 40 °C ~ + 80 °C

2. Characteristics and Reliability Test

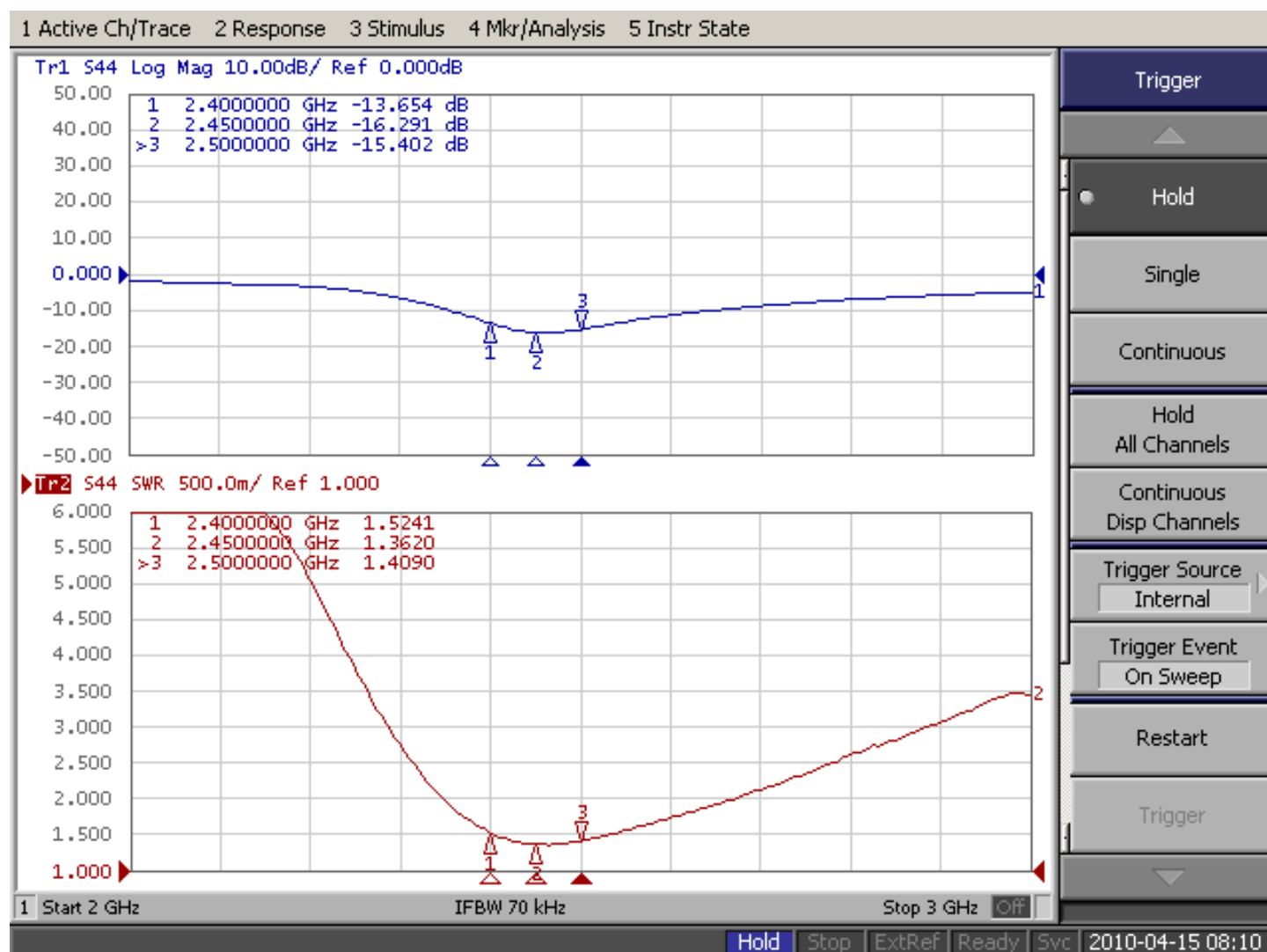
Test Items		Test Condition and Procedure	Requirements
C1	S.W.R.	Set DUT on Network Analyzer; make individual calibration to test	Directive DUT specification
C2	Antenna Gain	Set DUT on Antenna Chamber; make individual calibration to test	Directive DUT specification
M1	Vibration	MIL-STD-202G, 201A Amplitude: 0.03 inch (0.76mm); Freq: 10 to 55 Hz 3 directions; 2 hours for each direction	1. No Visual Damage 2. Frequency Tol.<= 5%
M2	Random Drop	Height: 1.5 Meter; 3 directions; 1 time for each direction	1. No parts separated 2. Frequency Tol.<= 5%
M3	Solderability	MIL-STD-202G, 210F, cond. A Solder iron: 350±10°C; Duration: 5 seconds	1. Mounted on PCB 2. No Visual Damage
M4	Terminal-Pull Test	MIL-STD-202G, 211A, cond. A Holding with individual specification; force applied to axis of terminal	1. Directive DUT specification 2. Frequency Tol.<= 5%
M5	Dimension	Inspection of dimension, color, material, package, surface process	Directive DUT specification
E1	Salt Spray	MIL-STD-202G, 101E, cond. B Temp: 35°C; RH: >= 95%; NaCl solution: >= 5%; Time: 48 hours	After 2 Hours Recovery 1. No Visual Damage 2. Frequency Tol.<= 5%
E2	Humidity	MIL-STD-202G, 103B, cond. B Temp: 40°C; RH: >= 95%; Time: 48 hours	After 2 Hours Recovery 1. No Visual Damage 2. Frequency Tol.<= 5%
E3	Thermal Shock	1 Cycle: - 40°C (30 minutes) to + 80°C (30 minutes) Cycles: 24	After 2 Hours Recovery 1. No Visual Damage 2. Frequency Tol.<= 5%
E4	Life (High Temp.)	MIL-STD-202G, 108A, cond. A Temp: 85°C; Time: 96 hours	After 2 Hours Recovery 1. No Visual Damage 2. Frequency Tol.<= 5%
R1	RoHS	With Reference to IEC 62321:2008 with flow chart	Directive RoHS 2002/95/EC
R2	PFOS	With Reference to USA EPA 3540C:1996 by LC/MS	Directive RoHS 2006/122/EC
R3	PFOA	With Reference to USA EPA 3540C:1996 by LC/MS	Directive RoHS 2006/122/EC

Product Number: NB0175-C1B

Product Name: Antenna



3. Antenna - S Parameter Test Data



4. Antenna - Radiation Pattern Test Data

See attached files

5. Mechanical Drawing

See attached files

6. Material Description and RoHS Test Report

See attached files



Cortec Technology Inc.

广东省东莞市长安镇振安路沙头段咸西工业区

Model : C1B Antenna
Remark : XZ
Tested by : CORTEC Antenna Lab // Zhao Yao Rong

Location: **Chamber**

Date: **2010/7/5**

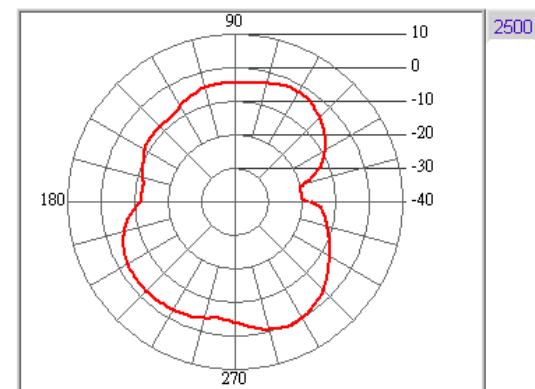
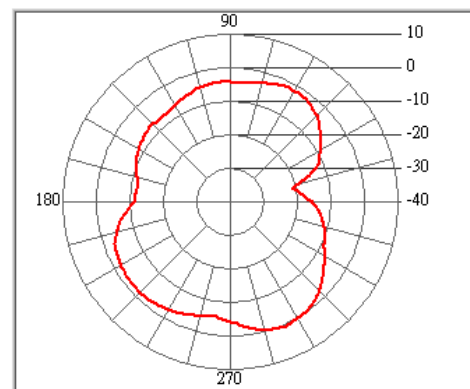
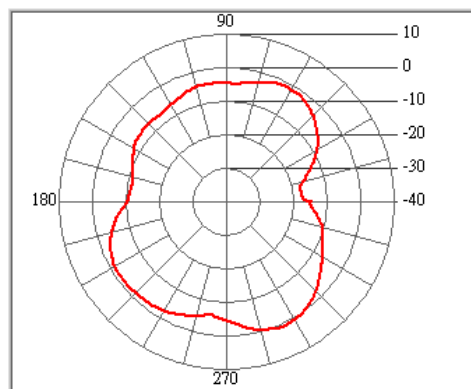
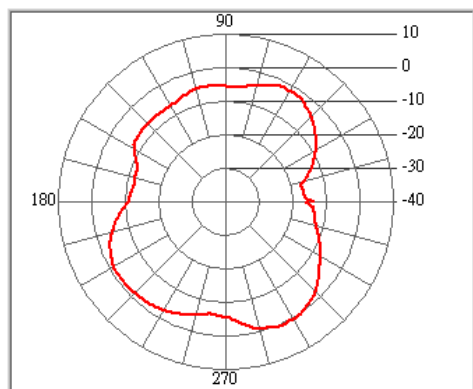
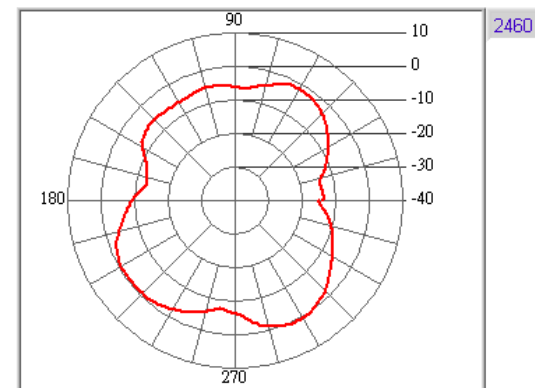
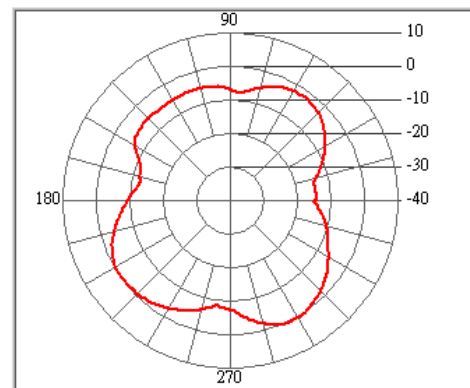
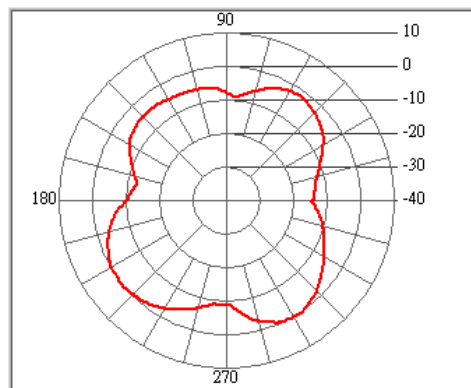
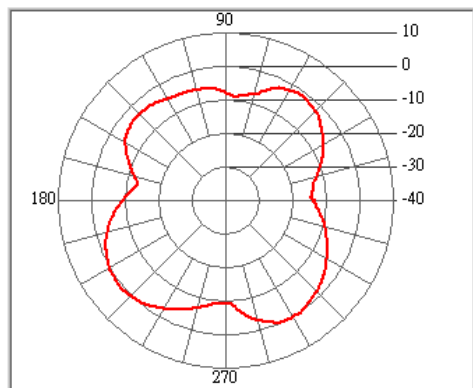
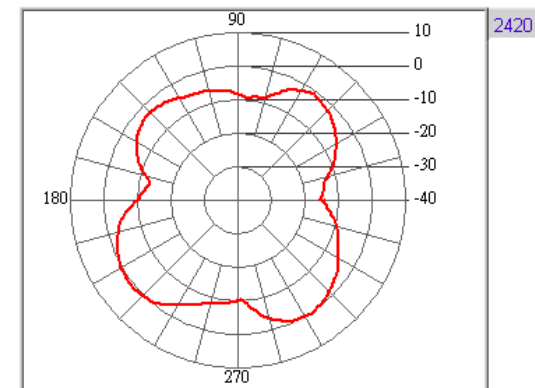
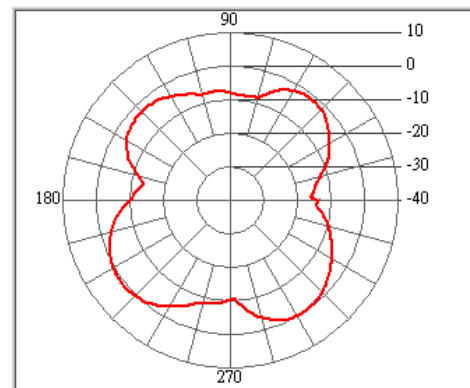
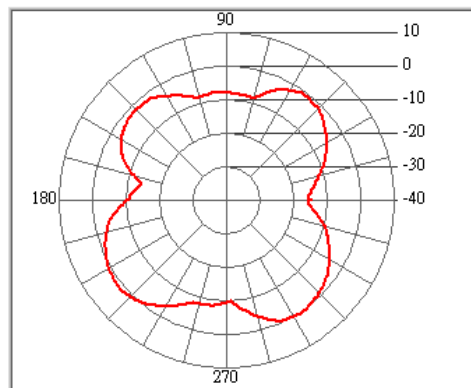
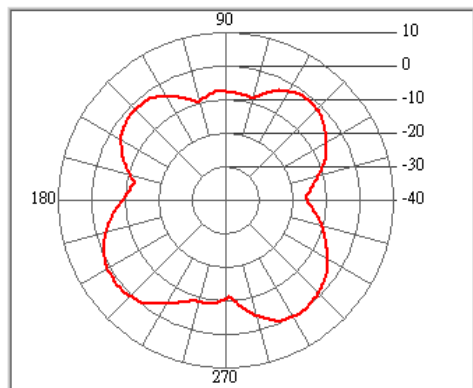
Time: **上午 08:49:43**

Temperature (°C): **22.00**

Humidity (%): **55.00**

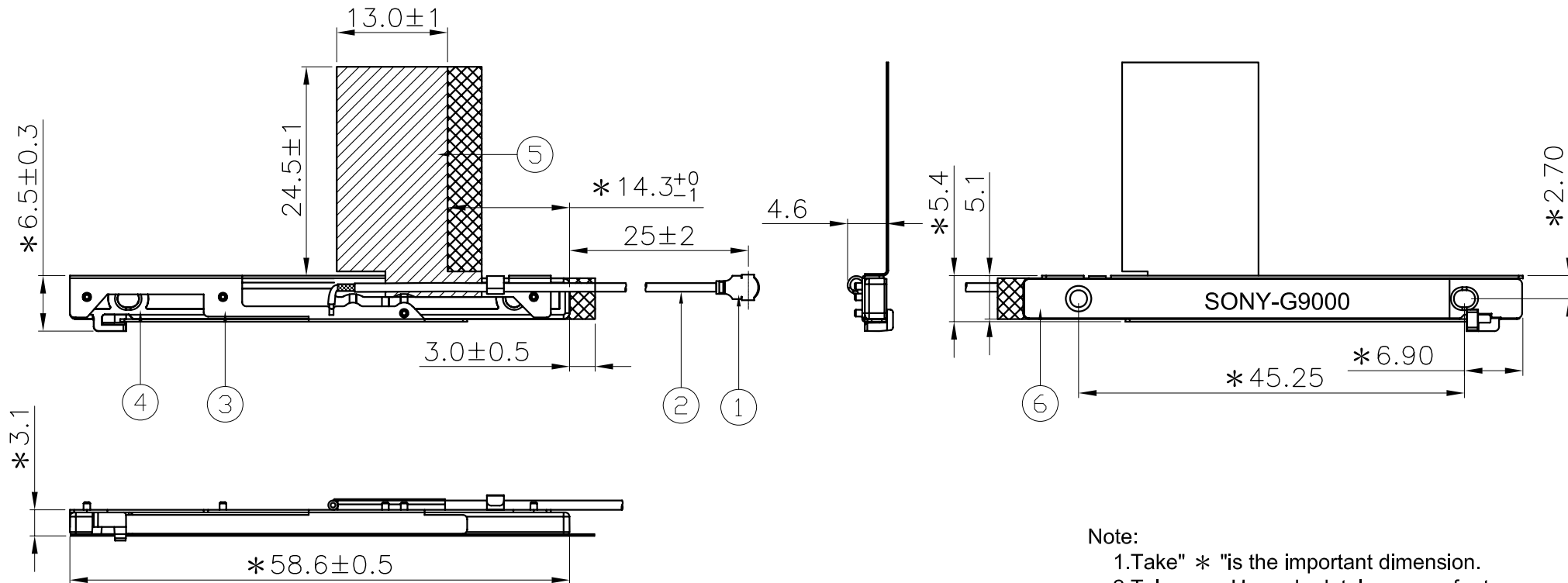
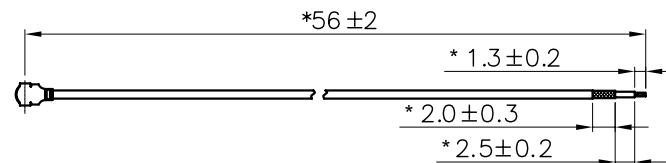
Approved by:

Freq. (MHz)	2390	2400	2410	2420	2430	2440	2450	2460	2470	2480	2490	2500
Peak Gain (dBi)	1.01	1.34	0.86	0.75	0.68	0.15	0.33	0.48	0.59	0.89	0.59	0.39
Peak Degree	220	221	221	221	221	304	294	294	294	294	294	294
AV Gain (dBi)	-3.88	-3.78	-4.04	-4.13	-4.06	-4.38	-4.35	-4.23	-4.51	-4.16	-4.41	-4.7



RoHS

Compatible



Note:

- 1.Take " * "is the important dimension.
- 2.Tolerance:Unmarked tolerance refer to the standard tolerance please.
- 3.Pull Strength of the connector must be $\geq 1.0\text{kg}$.
- 4.Note Connector orientation.

6	GS-NB0175-C1	Paster	SONY-G9000 49.8*4.5mm	1
5	FOIL-AL-NB0175-C1	AL Foil	27mm*13mm	1
4	NB0175-C102	Bracket	ABS Black	1
3	NB0175-C101	Metal Sheet	C7521 T=0.3mm	1
2	R-CB-113B	Coaxial Cable	SHOWA-O.D. 1.13mm Black	1
1	CI-113	Connector	Mini Connector	1
No.	Part Number	Name	Material	Q'ty

SIGN	DATE	DESCRIPTION	APPROVER
△			
△			
△			

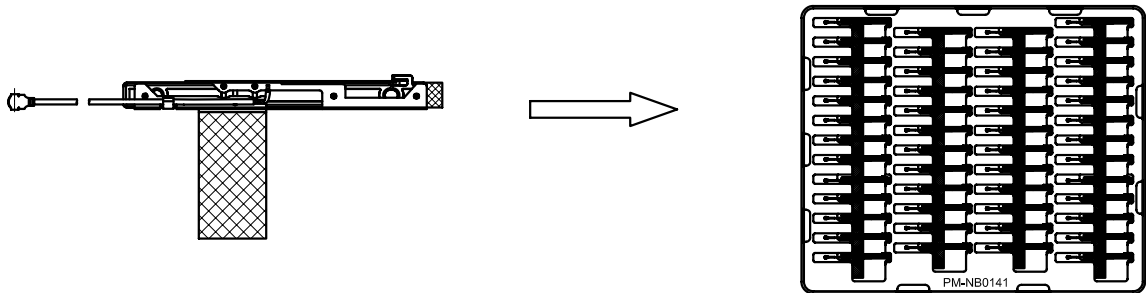
Invax System Group.		Cortec Technology Inc.	
Cortec		Http://www.invaxsystem.com	Tel:886-2-27885218
		E-mail:info@invax.com.tw	Fax:886-2-27831658
TITLE: Embedded Antenna			
PART NO.: NB0175-C1B		DWG NAME: NB0175-C1B.dwg	
APPROVED BY	CHECKED BY	DESIGNED BY	Tolerance
Grant 2010/07/05	Jack 2010/07/05	Seagold 2010/07/05	UNITS: mm
			SCALE: 1/1
			REVISION:A
			X.X ±0.2
			X.XX ±0.1
			X° ±1°

Date: 2010/07/05

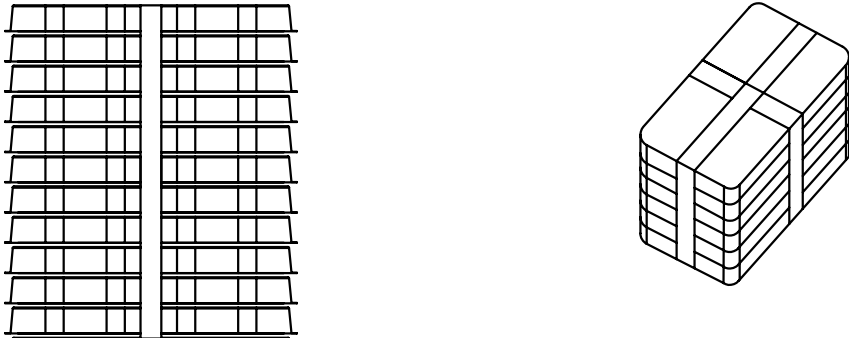
Page: 1 of 1

Part Number : NB0175-C1B	Revision : A
Name: Embedded Antenna	Customer :

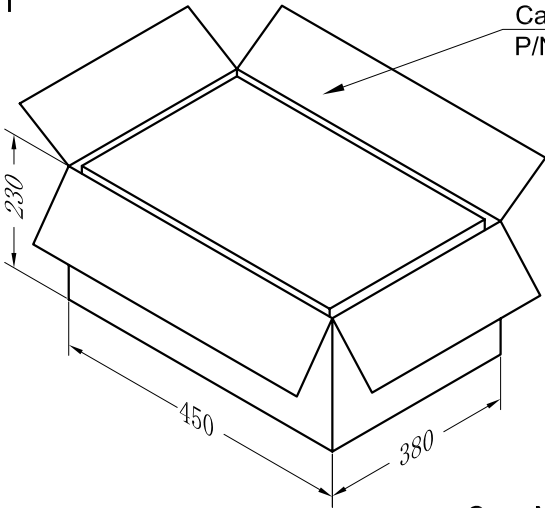
1. 50PCS/per Tray



2. 500PCS/per Bundle

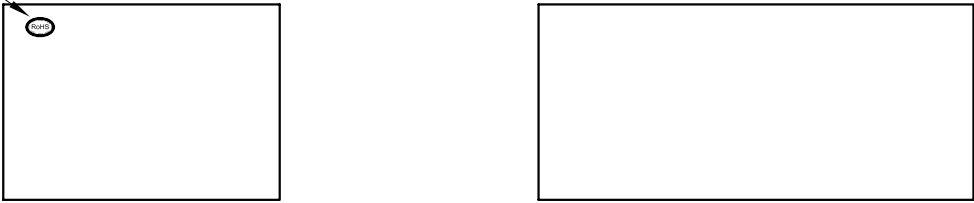


3. 1500PCS/per Carton



Carton 45*38*23CM
P/N: 0TT-K-453823

Green Label Side Mark Case Mark


APPROVED BY : GrantCHECKED BY : JackDESIGNED BY : Seagold