

承 認 書
Specification for Approval

客戶名稱 :光寶科技股份有限公司

客戶型號: **BMH-280**

客戶料號: **20-01969-00A**

翔訊型號 :**SC-325B**

PIFA Antenna

Date: 2006/12/19

Customer Approval

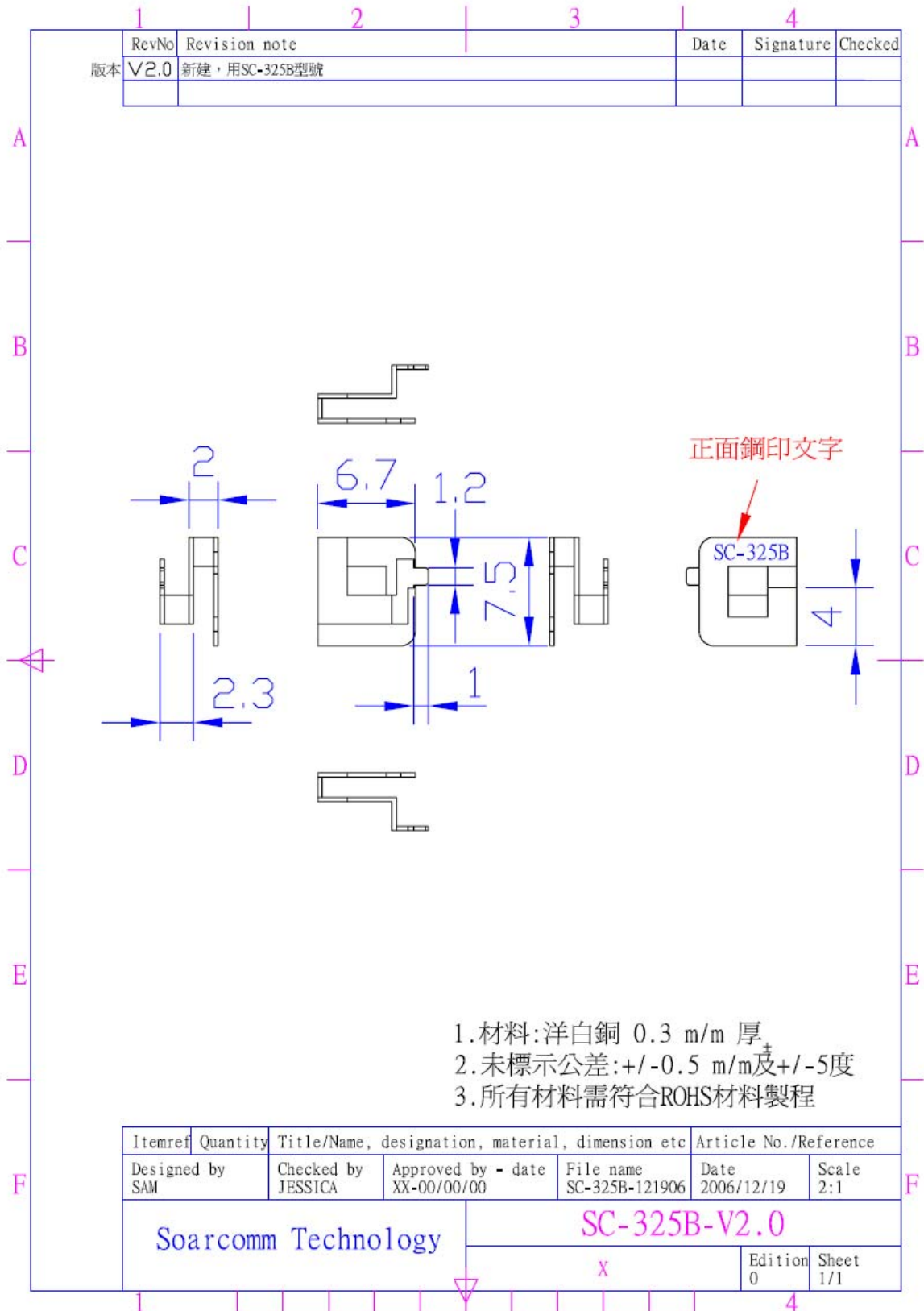
翔訊科技有限公司

Soarcomm Technology Company

Tel: 02-2625-2547 Fax:02-8631-2232

I. Outline drawing

Part No: SC-325B PIFA ANTENNA



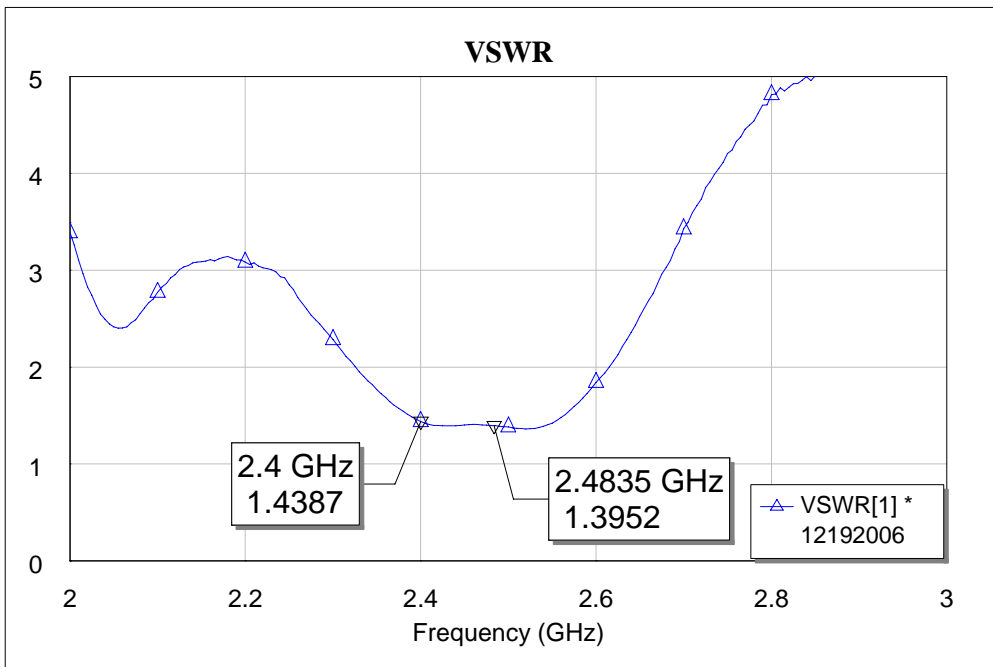
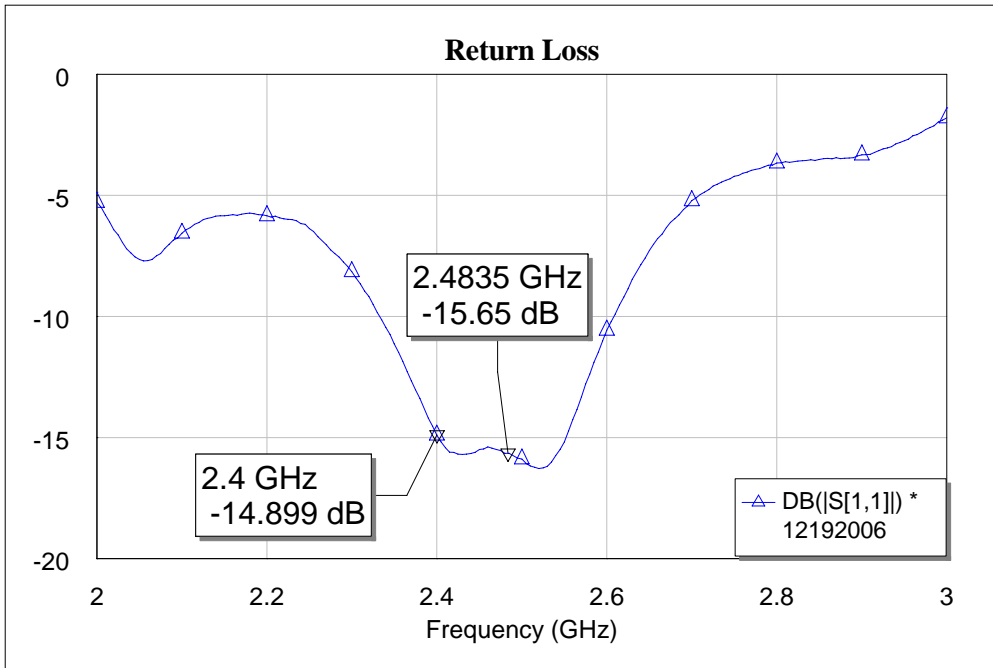
II. Electrical Properties:

- | | |
|-----------------------|----------------------|
| 1. Frequency Range: | 2.4-2.485 GHz |
| 2. Impedance: | 50 Ohms |
| 3. V.S.W.R: | 2.0(Max.) |
| 4. Gain: | 2.0(Max.) |
| 5. Polarization: | Vertical |
| 6. Radiation: | Omni |
| 7. Electrical Length: | $1/4 \lambda$ Dipole |

III. Mechanical Properties:

- | | |
|---------------------------|---------------|
| 1. Operation Temperature: | -20°C ~ +70°C |
| 2. Storage Temperature: | -30°C ~ +80° |

IV. Input Impedance Reports



V. Antenna Pattern Reports (2.4GHz, 2.45GHz, 2.48GHz)

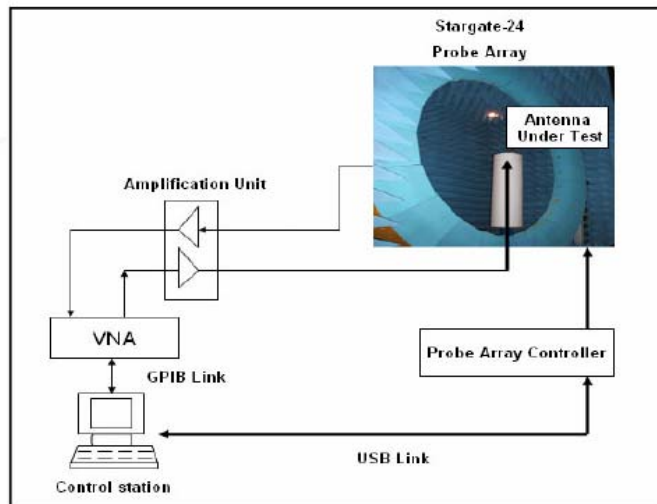
CTIA Authorized Test Lab
 LAB CODE 20050712-00
 Report No.: EO/2006/C0019
 Page No.: 1 of 4

OTA Summation Test Report
 Date: December 12, 2006

Basic Information

Company Name	SoarComm Technology Company
Company Address	台北縣淡水鎮大智街22號1樓
Product Category	Antenna
Product Model Name	BMH-280 (SC-325)
Tested By (Satimo Stargate-24)	SGS Taiwan Ltd. / E&E Laboratory 134, Wu Kung Road, Wuku Industrial Zone, Taipei County, Taiwan, R.O.C.

Test Setup



Test Procedures

1. Before measuring EUT, it is necessary to check system deviation by standard sleeve dipoles. If testing results are unacceptable, it is necessary to recalibrate the measuring system.
2. The EUT was placed on the top of turntable, and the position of EUT has to be adjusted to the center of the probe array arch by two axes of laser. The distance from the center of the arch to each probe is 1.2 meters.

This document is issued by the Company subject to its General Conditions of Service which is available on request or accessible at www.sgs.com. Attention is drawn to the limitations of liability, indemnification and jurisdictional issues defined therein. Unless otherwise stated, the results shown in this test report refer only to the sample(s) tested. This document cannot be reproduced except in full, without prior approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this report is unlawful and offenders may be prosecuted to the fullest extent of the law. 此報告是海華本公司訂定之通用服務條款所製作發放，相關服務條款備索，或可在 www.sgs.com 中查閱。本公司之義務、免責、管轄權皆明確規於其中，除非另有說明，此報告結果僅對檢驗之樣品負責。本報告未經本公司書面許可，不可部份複製，對本報告內容或外觀之任何未經授權之變更、偽造、篡改皆屬非法，違犯者將會被依法追訴。

SGS Taiwan Ltd. No.134, Wu Kung Road, Wuku Industrial Zone, Taipei County, Taiwan 248 / 台北縣五股工業區五工路 134 號
 台灣檢驗科技股份有限公司 t (886-2) 2299 - 3279 f (886-2) 2298 - 0488 www.tw.sgs.com
 Member of SGS Group

3. The VNA output a power of level -25dBm to the EUT at considered frequencies.
4. The turntable will be rotated horizontally from 0 degree to 165 degrees with step 15 degrees in each step during the measurement.
5. In each step, the radiated power of the EUT in different directions will be received by 23 probes each separated by 15 degrees and then measured by the Agilent VNA one by one.
6. The antenna gain and efficiency will be post-processed by the Satimo software.

Product Photos



Antenna Gain and Efficiency

BMH-280 (SC-325)			
Frequency	E Total. dB	Efficiency	Efficiency . dB
2402000000	4.62	0.75	-1.27
2441000000	2.52	0.72	-1.41
2480000000	2.51	0.56	-2.52

This document is issued by the Company subject to its General Conditions of Service which is available on request or accessible at www.sgs.com. Attention is drawn to the limitations of liability, indemnification and jurisdictional issues defined therein. Unless otherwise stated, the results shown in this test report refer only to the sample(s) tested. This document cannot be reproduced except in full, without prior approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this report is unlawful and offenders may be prosecuted to the fullest extent of the law. 此報告是遵照本公司訂定之通用服務條款所製作發放，相關服務條款請索，或可在 www.sgs.com 中查閱。本公司之義務、免責、管轄權皆明確規範其中。除非另有說明，此報告結果僅對檢驗之樣品負責。本報告未經本公司書面許可，不可部份複製，對本報告內容或外觀之任何未經授權之變更、偽造、竄改皆屬非法，違犯者將會被依法追訴。

SGS Taiwan Ltd. No.134, Wu Kung Road, Wuku Industrial Zone, Taipei County, Taiwan 248 / 台北縣五股工業區五工路 134 號
 台灣檢驗科技股份有限公司 t (886-2) 2299 - 3279 f (886-2) 2299 - 0488 www.tw.sgs.com
 Member of SGS Group

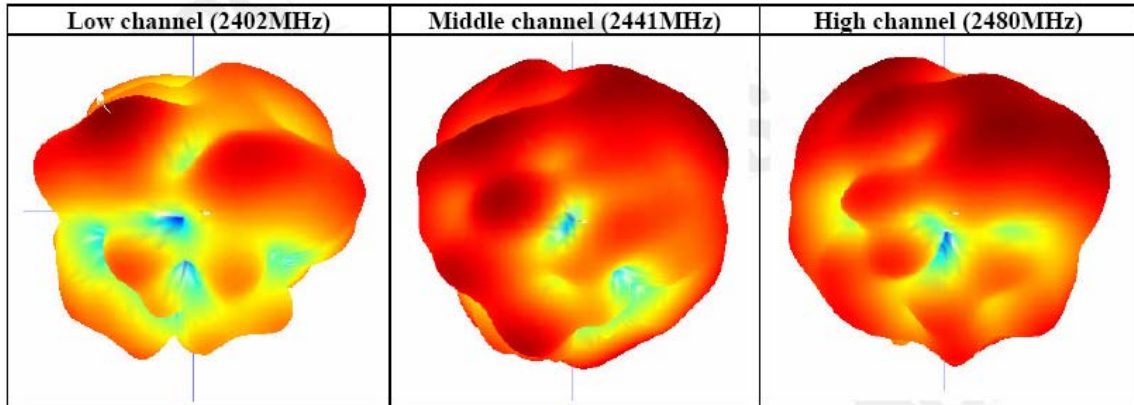


CTIA Authorized Test Lab

LAB CODE 20060712-00
Report No.: EO/2006/C0019
Page No.: 3 of 4

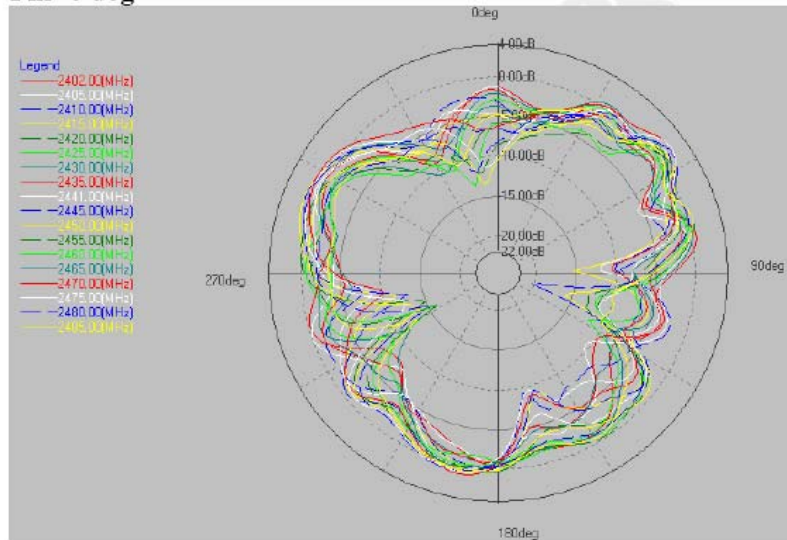
Antenna 3D Graph

All plots in this section show the E Total.dB with the +x-axis pointing out of the page, +y-axis pointing right, and +z-axis pointing up.



Antenna 2D Graph

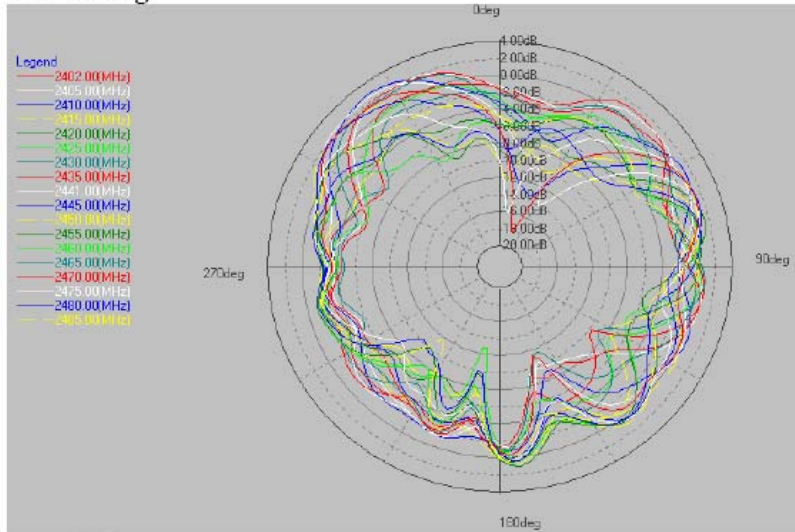
Phi=0 deg



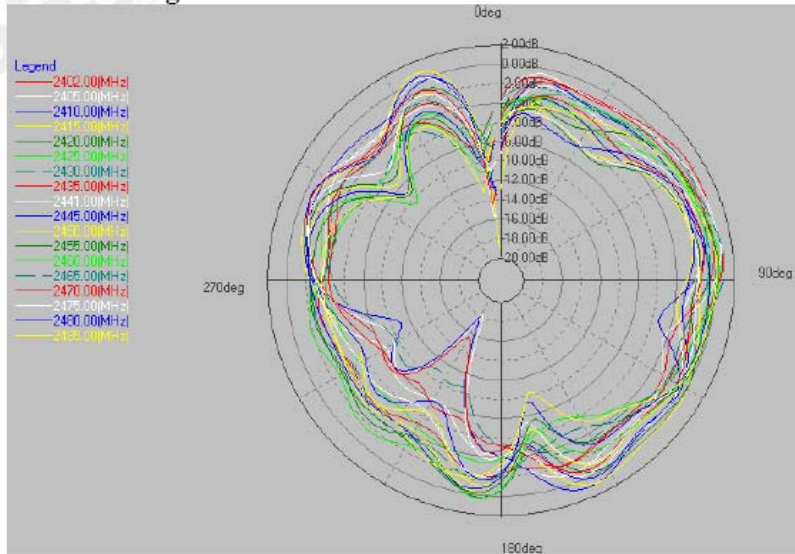
This document is issued by the Company subject to its General Conditions of Service which is available on request or accessible at www.sgs.com. Attention is drawn to the limitations of liability, indemnification and jurisdictional issues defined therein. Unless otherwise stated, the results shown in this test report refer only to the sample(s) tested. This document cannot be reproduced except in full, without prior approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this report is unlawful and offenders may be prosecuted to the fullest extent of the law. 此報告是遵照本公司訂定之通用服務條款所製作發放，相關服務條款備索，或可在 www.sgs.com 中查閱，本公司之義務、免責、管轄權皆明確規範其中，除非另有說明，此報告結果僅對檢驗之樣品負責，本報告未經本公司書面許可，不可部份複製，對本報告內容或外觀之任何未經授權之變更、偽造、竄改皆屬非法，違犯者將會被依法追訴。

SGS Taiwan Ltd. No.134, Wu Kung Road, Wuku Industrial Zone, Taipei County, Taiwan 246 / 台北縣五股工業區五工路 134 號
台灣檢驗科技股份有限公司 t (886-2) 2299 - 3279 f (886-2) 2298 - 0488 www.tw.sgs.com
Member of SGS Group

Phi=90 deg



Theta=90 deg



This document is issued by the Company subject to its General Conditions of Service which is available on request or accessible at www.sgs.com. Attention is drawn to the limitations of liability, indemnification and jurisdictional issues defined therein. Unless otherwise stated, the results shown in this test report refer only to the sample(s) tested. This document cannot be reproduced except in full, without prior approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this report is unlawful and offenders may be prosecuted to the fullest extent of the law. 此報告是遵照本公司訂定之通用服務條款所製作發放，相關服務條款請索，或可在 www.sgs.com 中查詢。本公司之義務、免責、管轄權皆明確規範其中，除非另有說明，此報告結果僅對檢驗之樣品負責。本報告未經本公司書面許可，不可部份複製，對本報告內容或外觀之任何未經授權之變更、偽造、更改皆屬非法，違犯者將會被依法追訴。

SGS Taiwan Ltd. No.134, Wu Kung Road, Wuku Industrial Zone, Taipei County, Taiwan 248 / 台北縣五股工業區五工路 134 號
台灣檢驗科技股份有限公司 t (886-2) 2298 - 3279 f (886-2) 2298 - 0488 www.tw.sgs.com
Member of SGS Group



Test Report

SOARCOMM TECHNOLOGY COMPANY
 1F., NO. 22, DAZHI ST., DANSHUI TOWN, TAIPEI COUNTY
 251, TAIWAN (R. O. C.)

Report No. : CE/2006/61156
 Date : 2006/06/12
 Page : 1 of 2

The following merchandise was (were) submitted and identified by the client as :

Type of Product : ANTENNA
Style/Item No : SC-3XX SERIES
Sample Received : 2006/06/05
Testing Date : 2006/06/05 TO 2006/06/12

=====
Conclusion : The test results of Pb, Cd, Hg and Cr+6 for the submitted sample comply with the requirements of RoHS (2002/95/EC).

Test Result

PART NAME NO.1 : SILVER COLORED METAL

PASS

Test Item (s):	Unit	Method	MDL	Result	Limit of
				No.1	ROHS
Chromium VI (Cr+6)	ppm	UV-VIS(US EPA 7196A) after reference to US EPA 3060A.	2	N.D.	1000
Cadmium (Cd)	ppm	ICP-AES after reference to EN 1122, method B:2001 or other acid digestion.	2	N.D.	100
Mercury (Hg)	ppm	ICP-AES after reference to US EPA 3052 or other acid digestion.	2	N.D.	1000
Lead (Pb)	ppm	ICP-AES after reference to US EPA 3050B or other acid digestion.	2	19.1	1000

NOTE: (1) N.D. = Not detected (<MDL)
 (2) ppm = mg/kg
 (3) MDL = Method Detection Limit


 Daniel Yeh, M.R. / Operation Manager
 Signed for and on behalf of
 SGS TAIWAN LTD.

The content of this PDF file is in accordance with the original issued reports for reference only. This Test Report cannot be reproduced, except in full, without prior written permission of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this report is unlawful and offenders may be prosecuted to the fullest extent of the law.

SGS TAIWAN LIMITED NO. 136-1, Wu Kung Road, WuKu Industrial Zone, Taipei county, Taiwan.
 t(886-2) 22993939 f(886-2) 2299-3237 www.sgs.com.tw



Test Report

SOARCOMM TECHNOLOGY COMPANY
1F., NO. 22, DAZHI ST., DANSHUI TOWN, TAIPEI COUNTY
251, TAIWAN (R. O. C.)

Report No. : CE/2006/61156
Date : 2006/06/12
Page : 2 of 2



The content of this PDF file is in accordance with the original issued reports for reference only. This Test Report cannot be reproduced, except in full, without prior written permission of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this report is unlawful and offenders may be prosecuted to the fullest extent of the law.

SGS TAIWAN LIMITED

NO. 136-1, Wu Kung Road, WuKu Industrial Zone, Taipei county, Taiwan.
t(886-2) 22893939 f(886-2) 2299-3237 www.sgs.com.tw