



香港標準及檢定中心
Hong Kong Standards and Testing Centre

Date : 2005-11-23

No. : HM155445

TEST REPORT

Page 1 of 21

Applicant:

SIRDAR METAL & PLASTIC WORKS
Bai Shi, San Xiang Town, Zhong Shan City,
Guang Dong, China

Description of Samples:

Model name: Radio Control
Model no.: T3DPS-FM27
Brand name: SDM
FCC ID: RTW8120

Date Samples Received:

2005-10-31

Date Tested:

2005-11-05 to 2005-11-10

Investigation Requested:

FCC Part 15 Subpart C

Conclusions:

The submitted product COMPLIED with the requirements of Federal Communications Commission [FCC] Rules and Regulations Part 15. The tests were performed in accordance with the standards described above and on Section 2.2 in this Test Report.

Remarks:

LEE Kam Chuen, EMD
For and on behalf of
The Hong Kong Standards and Testing Centre Ltd.

This report shall not be reproduced unless with prior written approval from the Hong Kong Standards and Testing Centre.

香港新界大埔工業村大宏街 10 號

10 Dai Wang Street, Taipo Industrial Estate, N.T., Hong Kong

Tel: (852) 2666 1888 Fax: (852) 2664 4353 Homepage: www.hkstc.org E-mail: hkstc@hkstc.org
For full text of "Conditions of Issuance of Test Report", please refer to overleaf or refer to the website of
STC: www.hkstc.org (the section "Application and Quotation").



香港標準及檢定中心
Hong Kong Standards and Testing Centre

Date : 2005-11-23

No. : HM155445

TEST REPORT

Page 2 of 21

CONTENT:

Cover
Content

Page 1 of 21
Page 2-3 of 21

1.0 General Details

- 1.1 Test Laboratory
- 1.2 Applicant Details
Applicant
HKSTC Code Number for Applicant
Manufacturer
- 1.3 Equipment Under Test [EUT]
Description of EUT operation
- 1.4 Date of Order
- 1.5 Submitted Samples
- 1.6 Test Duration
- 1.7 Country of Origin

Page 4 of 21
Page 4 of 21
Page 5 of 21
Page 5 of 21
Page 5 of 21
Page 5 of 21
Page 5 of 21

2.0 Technical Details

- 2.1 Investigations Requested
- 2.2 Test Standards and Results Summary

Page 6 of 21
Page 6 of 21

3.0 Test Results

- 3.1 Emission
- 3.2 Bandwidth Measurement

Page 7-14 of 21
Page 15-18 of 21

香港新界大埔工業村大宏街 10 號

10 Dai Wang Street, Taipo Industrial Estate, N.T., Hong Kong

Tel: (852) 2666 1888 Fax: (852) 2664 4353 Homepage: www.hkstc.org E-mail: hkstc@hkstc.org
For full text of "Conditions of Issuance of Test Report", please refer to overleaf or refer to the website of
STC: www.hkstc.org (the section "Application and Quotation").



香 港 標 準 及 檢 定 中 心
Hong Kong Standards and Testing Centre

Date : 2005-11-23

No. : HM155445

TEST REPORT

Page 3 of 21

Appendix A

List of Measurement Equipment

Page 19 of 21

Appendix B

Photographs

Page 20-21 of 21

香港新界大埔工業村大宏街 10 號

10 Dai Wang Street, Taipo Industrial Estate, N.T., Hong Kong

Tel: (852) 2666 1888 Fax: (852) 2664 4353 Homepage: www.hkstc.org E-mail: hkstc@hkstc.org
For full text of "Conditions of Issuance of Test Report", please refer to overleaf or refer to the website of
STC: www.hkstc.org (the section "Application and Quotation").



香港標準及檢定中心
Hong Kong Standards and Testing Centre

Date : 2005-11-23

TEST REPORT

Page 4 of 21

No. : HM155445

1.0 General Details

1.1 Test Laboratory

The Hong Kong Standards and Testing Centre Ltd.
EMC Laboratory
10 Dai Wang Street, Taipo Industrial Estate
New Territories, Hong Kong

Telephone: 852 2666 1888
Fax: 852 2664 4353

1.2 Applicant Details
Applicant

SIRDAR METAL & PLASTIC WORKS
Bai Shi, San Xiang Town, Zhong Shan City,
Guang Dong, China

Manufacturer

SIRDAR METAL & PLASTIC WORKS
Bai Shi, San Xiang Town, Zhong Shan City,
Guang Dong, China

香港新界大埔工業村大宏街 10 號

10 Dai Wang Street, Taipo Industrial Estate, N.T., Hong Kong

Tel: (852) 2666 1888 Fax: (852) 2664 4353 Homepage: www.hkstc.org E-mail: hkstc@hkstc.org
For full text of "Conditions of Issuance of Test Report", please refer to overleaf or refer to the website of
STC: www.hkstc.org (the section "Application and Quotation").



香港標準及檢定中心
Hong Kong Standards and Testing Centre

Date : 2005-11-23

TEST REPORT

Page 5 of 21

No. : HM155445

1.3 Equipment Under Test [EUT]

Description of Sample

Model Name: Radio Control
Manufacturer: SIRDAR METAL & PLASTIC WORKS
Brand Name: SDM
Model Number: T3DPS-FM27
Rating: 12Vd.c ("AA" size battery x 8)

1.3.1 Description of EUT Operation

The Equipment Under Test (EUT) is a SIRDAR METAL & PLASTIC WORKS, Radio Control. The transmitter is a 1 Joystick transmitter. The EUT continues to transmit while Joystick is being pressed, It is pulse transmitter, Modulation by IC, and type is FM modulation.

1.4 Date of Order

2005-10-31

1.5 Submitted Sample(s):

3 Samples per model

1.6 Test Duration

2005-11-05 to 2005-11-10

1.7 Country of Origin

CHINA

香港新界大埔工業村大宏街 10 號

10 Dai Wang Street, Taipo Industrial Estate, N.T., Hong Kong

Tel: (852) 2666 1888 Fax: (852) 2664 4353 Homepage: www.hkstc.org E-mail: hkstc@hkstc.org
For full text of "Conditions of Issuance of Test Report", please refer to overleaf or refer to the website of
STC: www.hkstc.org (the section "Application and Quotation").



香港標準及檢定中心
Hong Kong Standards and Testing Centre

Date : 2005-11-23

TEST REPORT

Page 6 of 21

No. : HM155445

2.0 Technical Details

2.1 Investigations Requested

Perform ElectroMagnetic Interference measurement in accordance with FCC 47CFR [Codes of Federal Regulations] Part 15 and ANSI C63.4:2003 for FCC Certification.

2.2 Test Standards and Results Summary Tables

EMISSION Results Summary						
Test Condition	Test Requirement	Test Method	Class / Severity	Test Result		
				Pass	Failed	N/A
Field Strength of Fundamental Emissions & Spurious Emissions	FCC 47CFR 15.227	ANSI C63.4:2003	N/A	☒	☐	☐
Radiated Emissions	FCC 47CFR 15.209	ANSI C63.4:2003	N/A	☒	☐	☐
Conducted Emissions on AC, 0.15MHz to 30MHz	FCC 47CFR 15.207	ANSI C63.4:2003	N/A	☐	☐	☒

Note: N/A - Not Applicable

香港新界大埔工業村大宏街 10 號

10 Dai Wang Street, Taipo Industrial Estate, N.T., Hong Kong

Tel: (852) 2666 1888 Fax: (852) 2664 4353 Homepage: www.hkstc.org E-mail: hkstc@hkstc.org
For full text of "Conditions of Issuance of Test Report", please refer to overleaf or refer to the website of
STC: www.hkstc.org (the section "Application and Quotation").



香港標準及檢定中心
Hong Kong Standards and Testing Centre

Date : 2005-11-23

TEST REPORT

Page 7 of 21

No. : HM155445

3.0 Test Results

3.1 Emission

3.1.1 Radiated Emissions (30 – 1000MHz)

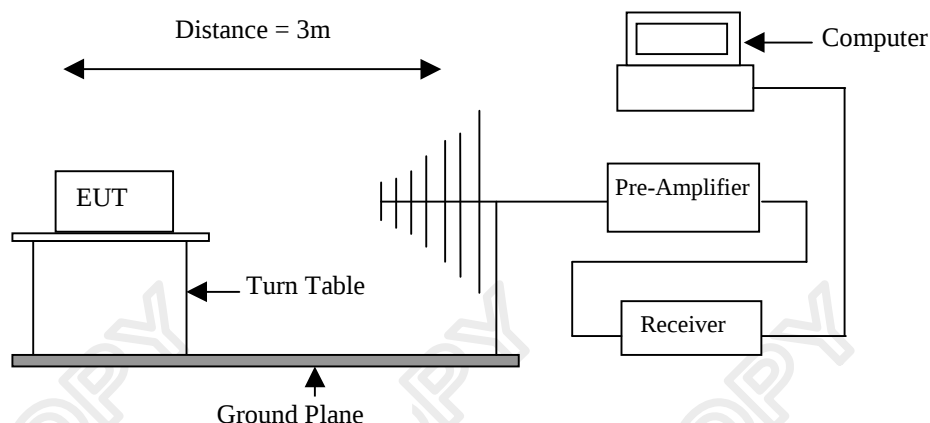
Test Requirement:	FCC 47CFR 15.227
Test Method:	ANSI C63.4:2003
Test Date:	2005-11-05
Mode of Operation:	Tx mode

Test Method:

The sample was placed 0.8m above the ground plane on the OATS *. Measurements in both horizontal and vertical polarities were performed. During the test, each emission was maximized by: having the EUT continuously working, investigated all operating modes, rotated about all 3 axis (X, Y & Z) and considered typical configuration to obtain worst position, manipulating interconnecting cables, rotating turntable, varying antenna height from 1m to 4m in both horizontal and vertical polarizations. The emissions worst-case are shown in Test Results of the following pages.

*: OATS [Open Area Test Site] located at HKSTC with a metal ground plane filed with the FCC pursuant to section 2.948 of the FCC rules, with Registration Number: 607756.

Test Setup:



香港新界大埔工業村大宏街 10 號

10 Dai Wang Street, Taipo Industrial Estate, N.T., Hong Kong

Tel: (852) 2666 1888 Fax: (852) 2664 4353 Homepage: www.hkstc.org E-mail: hkstc@hkstc.org
For full text of "Conditions of Issuance of Test Report", please refer to overleaf or refer to the website of
STC: www.hkstc.org (the section "Application and Quotation").



香港標準及檢定中心
Hong Kong Standards and Testing Centre

Date : 2005-11-23

TEST REPORT

Page 8 of 21

No. : HM155445

Limits for Field Strength of Fundamental Emissions [FCC 47CFR 15.227]:

Frequency Range of Fundamental [MHz]	Field Strength of Fundamental Emission [Peak] [μV/m]	Field Strength of Fundamental Emission [Average] [μV/m]
26.96-27.28	100,000	10,000

Results of Lowest:

Field Strength of Fundamental Emissions Peak Value						
Frequency MHz	Measured Level @3m dBμV	Correction Factor dB/m	Field Strength dBμV/m	Field Strength μV/m	Limit @3m μV/m	E-Field Polarity
26.995	46.70	19.2	65.9	1,972.4	10,000	Vertical

According to FCC 47CFR15.35, the limit on the radio frequency emissions as measured using instrumentation with a peak detector function, corresponding to 20dB above the maximum permitted average limit for the frequency being investigated unless a different peak emission limit is otherwise specified in the rules.

Remarks:

Correction Factor includes Antenna Factor and Cable Attenuation.

Calculated measurement uncertainty : 30MHz to 1GHz ±4.1dB

香港新界大埔工業村大宏街 10 號

10 Dai Wang Street, Taipo Industrial Estate, N.T., Hong Kong

Tel: (852) 2666 1888 Fax: (852) 2664 4353 Homepage: www.hkstc.org E-mail: hkstc@hkstc.org
For full text of "Conditions of Issuance of Test Report", please refer to overleaf or refer to the website of
STC: www.hkstc.org (the section "Application and Quotation").



香港標準及檢定中心
Hong Kong Standards and Testing Centre

Date : 2005-11-23

TEST REPORT

Page 9 of 21

No. : HM155445

Limits for Radiated Emissions [FCC 47 CFR 15.209]:

Frequency Range [MHz]	Quasi-Peak Limits [μV/m]
30-88	100
88-216	150
216-960	200
Above 960	500

The emission limits shown in the above table are based on measurement employing a CISPR quasi - peak detector and above 1000MHz are based on measurements employing an average detector.

Results of Lowest:

Radiated Emissions Quasi-Peak						
Frequency MHz	Measured Level @3m dBμV	Correction Factor dB/m	Field Strength dBμV/m	Field Strength μV/m	Limit @3m μV/m	E-Field Polarity
53.99	< 1.0	10.1	< 11.1	< 3.6	100	Vertical
80.99	20.9	8.7	29.6	30.2	100	Vertical
107.98	27.6	9.7	37.3	73.3	150	Horizontal
134.98	< 1.0	10.2	< 11.2	< 3.6	200	Vertical
161.97	< 1.0	11.9	< 12.9	< 4.4	200	Vertical
188.97	< 1.0	12.4	< 13.4	< 4.7	200	Vertical
215.96	< 1.0	13.2	< 14.2	< 5.1	200	Vertical
242.96	< 1.0	15.0	< 16.0	< 6.3	200	Vertical
269.95	< 1.0	16.1	< 17.1	< 7.2	200	Vertical

Remarks:

Correction Factor includes Antenna Factor and Cable Attenuation.

Calculated measurement uncertainty : 30MHz to 1GHz ±4.1dB

香港新界大埔工業村大宏街 10 號

10 Dai Wang Street, Taipo Industrial Estate, N.T., Hong Kong

Tel: (852) 2666 1888 Fax: (852) 2664 4353 Homepage: www.hkstc.org E-mail: hkstc@hkstc.org
For full text of "Conditions of Issuance of Test Report", please refer to overleaf or refer to the website of
STC: www.hkstc.org (the section "Application and Quotation").



香港標準及檢定中心
Hong Kong Standards and Testing Centre

Date : 2005-11-23

TEST REPORT

Page 10 of 21

No. : HM155445

Limits for Field Strength of Fundamental Emissions [FCC 47CFR 15.227]:

Frequency Range of Fundamental [MHz]	Field Strength of Fundamental Emission [Peak] [μV/m]	Field Strength of Fundamental Emission [Average] [μV/m]
26.96-27.28	100,000	10,000

Results of Mid:

Field Strength of Fundamental Emissions Peak Value						
Frequency MHz	Measured Level @3m dBμV	Correction Factor dB/m	Field Strength dBμV/m	Field Strength μV/m	Limit @3m μV/m	E-Field Polarity
27.10	45.80	19.2	65.0	1,778.3	10,000	Vertical

According to FCC 47CFR15.35, the limit on the radio frequency emissions as measured using instrumentation with a peak detector function, corresponding to 20dB above the maximum permitted average limit for the frequency being investigated unless a different peak emission limit is otherwise specified in the rules.

Remarks:

Correction Factor includes Antenna Factor and Cable Attenuation.

Calculated measurement uncertainty : 30MHz to 1GHz ±4.1dB

香港新界大埔工業村大宏街 10 號

10 Dai Wang Street, Taipo Industrial Estate, N.T., Hong Kong

Tel: (852) 2666 1888 Fax: (852) 2664 4353 Homepage: www.hkstc.org E-mail: hkstc@hkstc.org
For full text of "Conditions of Issuance of Test Report", please refer to overleaf or refer to the website of
STC: www.hkstc.org (the section "Application and Quotation").



香港標準及檢定中心
Hong Kong Standards and Testing Centre

Date : 2005-11-23

TEST REPORT

Page 11 of 21

No. : HM155445

Limits for Radiated Emissions [FCC 47 CFR 15.209]:

Frequency Range [MHz]	Quasi-Peak Limits [μV/m]
30-88	100
88-216	150
216-960	200
Above 960	500

The emission limits shown in the above table are based on measurement employing a CISPR quasi - peak detector and above 1000MHz are based on measurements employing an average detector.

Results of Mid:

Radiated Emissions Quasi-Peak						
Frequency MHz	Measured Level @3m dBμV	Correction Factor dB/m	Field Strength dBμV/m	Field Strength μV/m	Limit @3m μV/m	E-Field Polarity
54.20	< 1.0	10.1	< 11.1	< 3.6	100	Vertical
81.30	21.8	9.0	30.8	34.7	100	Vertical
108.40	23.6	8.9	32.5	42.2	150	Horizontal
135.50	< 1.0	10.2	< 11.2	< 3.6	200	Vertical
162.60	< 1.0	11.9	< 12.9	< 4.4	200	Vertical
189.70	< 1.0	12.4	< 13.4	< 4.7	200	Vertical
216.80	< 1.0	13.2	< 14.2	< 5.1	200	Vertical
243.90	< 1.0	15.0	< 16.0	< 6.3	200	Vertical
271.00	< 1.0	16.1	< 17.1	< 7.2	200	Vertical

Remarks:

Correction Factor includes Antenna Factor and Cable Attenuation.

Calculated measurement uncertainty : 30MHz to 1GHz ±4.1dB

香港新界大埔工業村大宏街 10 號

10 Dai Wang Street, Taipo Industrial Estate, N.T., Hong Kong

Tel: (852) 2666 1888 Fax: (852) 2664 4353 Homepage: www.hkstc.org E-mail: hkstc@hkstc.org
For full text of "Conditions of Issuance of Test Report", please refer to overleaf or refer to the website of
STC: www.hkstc.org (the section "Application and Quotation").



香港標準及檢定中心
Hong Kong Standards and Testing Centre

Date : 2005-11-23

TEST REPORT

Page 12 of 21

No. : HM155445

Limits for Field Strength of Fundamental Emissions [FCC 47CFR 15.227]:

Frequency Range of Fundamental [MHz]	Field Strength of Fundamental Emission [Peak] [$\mu\text{V/m}$]	Field Strength of Fundamental Emission [Average] [$\mu\text{V/m}$]
26.96-27.28	100,000	10,000

Results of Highest:

Field Strength of Fundamental Emissions Peak Value						
Frequency MHz	Measured Level @3m dB μV	Correction Factor dB/m	Field Strength dB $\mu\text{V/m}$	Field Strength $\mu\text{V/m}$	Limit @3m $\mu\text{V/m}$	E-Field Polarity
27.195	42.90	19.2	62.1	1,273.5	10,000	Vertical

According to FCC 47CFR15.35, the limit on the radio frequency emissions as measured using instrumentation with a peak detector function, corresponding to 20dB above the maximum permitted average limit for the frequency being investigated unless a different peak emission limit is otherwise specified in the rules.

Remarks:

Correction Factor includes Antenna Factor and Cable Attenuation.

Calculated measurement uncertainty : 30MHz to 1GHz $\pm 4.1\text{dB}$

香港新界大埔工業村大宏街 10 號

10 Dai Wang Street, Taipo Industrial Estate, N.T., Hong Kong

Tel: (852) 2666 1888 Fax: (852) 2664 4353 Homepage: www.hkstc.org E-mail: hkstc@hkstc.org
For full text of "Conditions of Issuance of Test Report", please refer to overleaf or refer to the website of
STC: www.hkstc.org (the section "Application and Quotation").



香港標準及檢定中心
Hong Kong Standards and Testing Centre

Date : 2005-11-23

TEST REPORT

Page 13 of 21

No. : HM155445

Limits for Radiated Emissions [FCC 47 CFR 15.209]:

Frequency Range [MHz]	Quasi-Peak Limits [μV/m]
30-88	100
88-216	150
216-960	200
Above 960	500

The emission limits shown in the above table are based on measurement employing a CISPR quasi - peak detector and above 1000MHz are based on measurements employing an average detector.

Results of Highest:

Radiated Emissions Quasi-Peak						
Frequency MHz	Measured Level @3m dBμV	Correction Factor dB/m	Field Strength dBμV/m	Field Strength μV/m	Limit @3m μV/m	E-Field Polarity
54.39	< 1.0	10.1	< 11.1	< 3.6	100	Vertical
81.59	26.6	10.0	36.6	67.6	100	Vertical
108.78	< 27.6	9.7	< 37.3	< 73.3	150	Vertical
135.98	< 1.0	10.2	< 11.2	< 3.6	200	Vertical
163.17	< 1.0	11.9	< 12.9	< 4.4	200	Vertical
190.37	< 1.0	12.4	< 13.4	< 4.7	200	Vertical
217.56	< 1.0	13.2	< 14.2	< 5.1	200	Vertical
244.76	< 1.0	15.0	< 16.0	< 6.3	200	Vertical
271.95	< 1.0	16.1	< 17.1	< 7.2	200	Vertical

Remarks:

Correction Factor includes Antenna Factor and Cable Attenuation.

Calculated measurement uncertainty : 30MHz to 1GHz ±4.1dB

香港新界大埔工業村大宏街 10 號

10 Dai Wang Street, Taipo Industrial Estate, N.T., Hong Kong

Tel: (852) 2666 1888 Fax: (852) 2664 4353 Homepage: www.hkstc.org E-mail: hkstc@hkstc.org
For full text of "Conditions of Issuance of Test Report", please refer to overleaf or refer to the website of
STC: www.hkstc.org (the section "Application and Quotation").



香港標準及檢定中心
Hong Kong Standards and Testing Centre

Date : 2005-11-23

No. : HM155445

TEST REPORT

Page 14 of 21

3.1.1 Conducted Emissions (0.15MHz to 30MHz)

Test Requirement:	FCC 47CFR 15.207
Test Method:	ANSI C63.4:2003
Test Date:	N/A
Mode of Operation:	N/A

Results: N/A

The EUT is operated by a single source of internal battery power [located in the battery compartment], therefore power line conducted emission was deemed unnecessary.

香港新界大埔工業村大宏街 10 號

10 Dai Wang Street, Taipo Industrial Estate, N.T., Hong Kong

Tel: (852) 2666 1888 Fax: (852) 2664 4353 Homepage: www.hkstc.org E-mail: hkstc@hkstc.org
For full text of "Conditions of Issuance of Test Report", please refer to overleaf or refer to the website of
STC: www.hkstc.org (the section "Application and Quotation").



香港標準及檢定中心
Hong Kong Standards and Testing Centre

Date : 2005-11-23

TEST REPORT

Page 15 of 21

No. : HM155445

3.2 20dB Bandwidth of Fundamental Emission

Test Requirement:	FCC 47 CFR 15.227
Test Method:	ANSI C63.4:2003 (Section 13.1.7)
Test Date:	2005-11-21
Mode of Operation:	On mode

Test Method:

The bandwidth is measured at an amplitude level reduced from the reference level by a specified ratio. The reference level is the level of the highest amplitude signal observed from the transmitter at the fundamental frequency. Once the reference level is established, the equipment is conditioned with typical modulating signal to produce the worst-case (i.e. the widest) bandwidth.

Test Setup:

As Test Setup of clause 3.1.1 in this test report.

香港新界大埔工業村大宏街 10 號

10 Dai Wang Street, Taipo Industrial Estate, N.T., Hong Kong

Tel: (852) 2666 1888 Fax: (852) 2664 4353 Homepage: www.hkstc.org E-mail: hkstc@hkstc.org
For full text of "Conditions of Issuance of Test Report", please refer to overleaf or refer to the website of
STC: www.hkstc.org (the section "Application and Quotation").



香港標準及檢定中心
Hong Kong Standards and Testing Centre

Date : 2005-11-23

TEST REPORT

Page 16 of 21

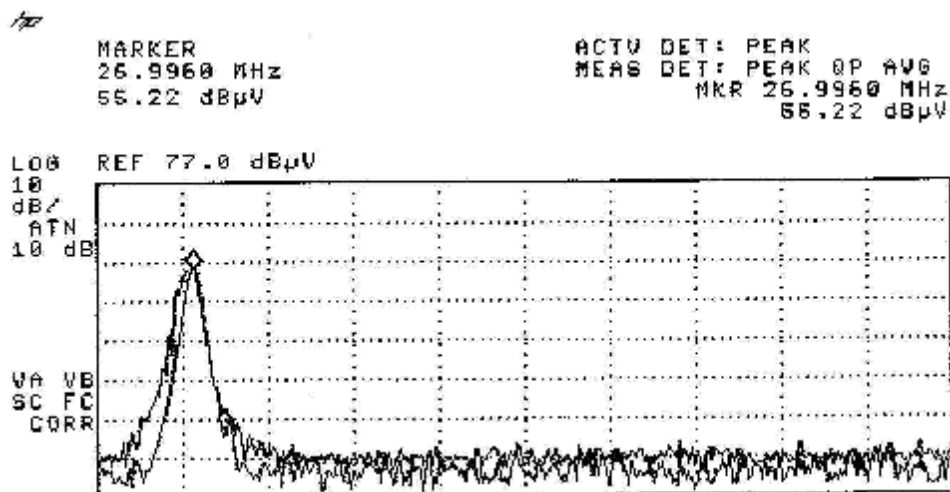
No. : HM155445

Limits for 20dB Bandwidth of Fundamental Emission:

Frequency Range [MHz]	20dB Bandwidth [KHz]	FCC Limits [MHz]
26.995	17.9	within 26.96-27.28

Lowest

20dB Bandwidth of Fundamental Emission



香港新界大埔工業村大宏街 10 號

10 Dai Wang Street, Taipo Industrial Estate, N.T., Hong Kong

Tel: (852) 2666 1888 Fax: (852) 2664 4353 Homepage: www.hkstc.org E-mail: hkstc@hkstc.org
For full text of "Conditions of Issuance of Test Report", please refer to overleaf or refer to the website of
STC: www.hkstc.org (the section "Application and Quotation").



香港標準及檢定中心
Hong Kong Standards and Testing Centre

Date : 2005-11-23

TEST REPORT

Page 17 of 21

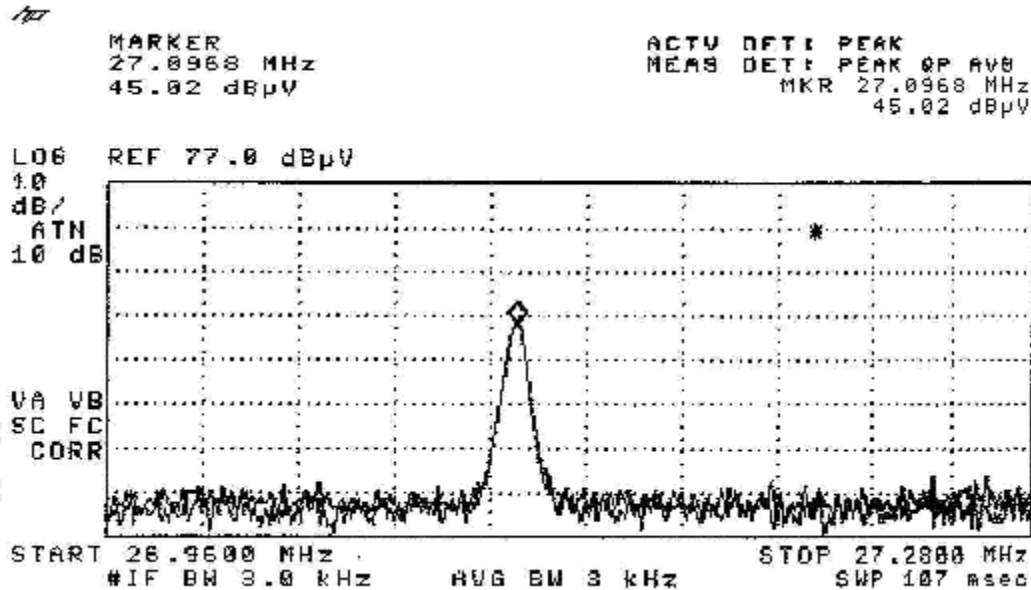
No. : HM155445

Limits for 20dB Bandwidth of Fundamental Emission:

Frequency Range [MHz]	20dB Bandwidth [KHz]	FCC Limits [MHz]
27.1	18.6	within 26.96-27.28

Mid

20dB Bandwidth of Fundamental Emission



香港新界大埔工業村大宏街 10 號

10 Dai Wang Street, Taipo Industrial Estate, N.T., Hong Kong

Tel: (852) 2666 1888 Fax: (852) 2664 4353 Homepage: www.hkstc.org E-mail: hkstc@hkstc.org
For full text of "Conditions of Issuance of Test Report", please refer to overleaf or refer to the website of
STC: www.hkstc.org (the section "Application and Quotation").



香港標準及檢定中心
Hong Kong Standards and Testing Centre

Date : 2005-11-23

TEST REPORT

Page 18 of 21

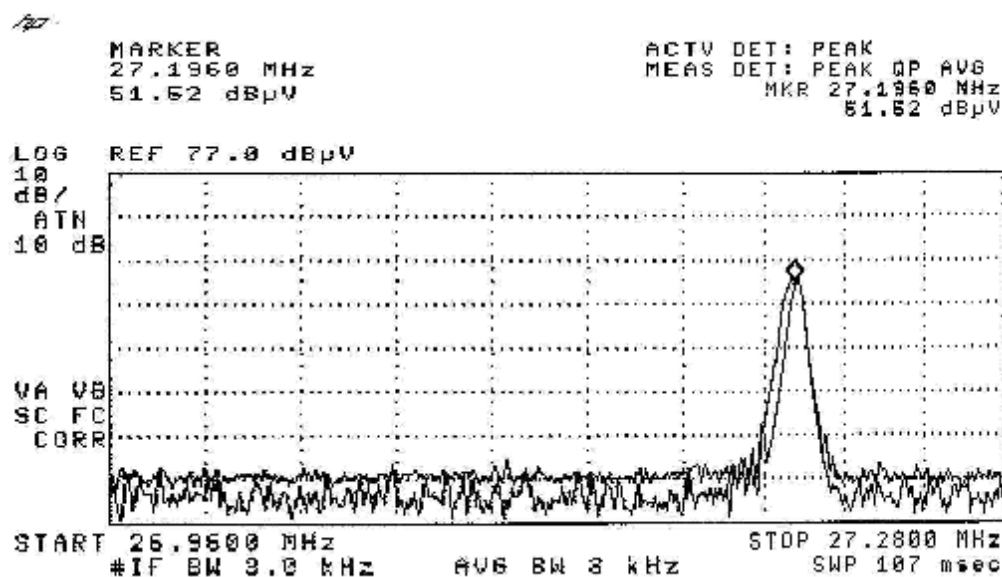
No. : HM155445

Limits for 20dB Bandwidth of Fundamental Emission:

Frequency Range [MHz]	20dB Bandwidth [KHz]	FCC Limits [MHz]
27.195	18.3	within 26.96-27.28

Highest

20dB Bandwidth of Fundamental Emission



香港新界大埔工業村大宏街 10 號

10 Dai Wang Street, Taipo Industrial Estate, N.T., Hong Kong

Tel: (852) 2666 1888 Fax: (852) 2664 4353 Homepage: www.hkstc.org E-mail: hkstc@hkstc.org
For full text of "Conditions of Issuance of Test Report", please refer to overleaf or refer to the website of
STC: www.hkstc.org (the section "Application and Quotation").



香港標準及檢定中心
Hong Kong Standards and Testing Centre

Date : 2005-11-23

TEST REPORT

Page 19 of 21

No. : HM155445

Appendix A

List of Measurement Equipment

Radiated Emission

EQP NO.	DESCRIPTION	MANUFACTURER	MODEL NO.	SERIAL NO.	LAST CAL
EM007	SPECTRUM ANALYZER	HEWLETT PACKARD	HP85660B	3144A21192	15/06/04
EM008	SPECTRUM ANALYZER DISPLAY	HEWLETT PACKARD	HP85662A	3144A20514	15/06/04
EM009	QUASI PEAK ADAPTOR	HEWLETT PACKARD	HP85650A	3303A01702	15/06/04
EM010	RF PRESELECTOR	HEWLETT PACKARD	HP85685A	3221A01410	15/06/04
EM011	ATTENUATOR/SWITCH	HEWLETT PACKARD	HP11713A	2508A10595	15/06/04
EM012	PRE-AMPLIFIER	HEWLETT PACKARD	HP8449B	3008A00262	15/06/04
EM020	HORN ANTENNA	ETS-Linggren	3115	4032	30/07/03
EM022	LOOP ANTENNA	ETS-Linggren	6502	1189-2424	19/09/03
EM072	SIGNAL GENERATOR	HEWLETT PACKARD	8640B	1948A11892	N/A
EM083	OPEN AREA TEST SITE	HKSTC	N/A	N/A	08/02/03
EM131	EMC ANALYZER	HEWLETT PACKARD	8595EM	3710A00155	13/01/04
EM145	EMI TEST RECEIVER	ROHDE & SCHWARZ	ESCS 30	830245/021	04/10/04
EM195	ANTENNA POSITIONING MAST	ETS-Linggren	2075	2368	N/A
EM196	MULTI-DEVICE CONTROLLER	ETS-Linggren	2090	1662	N/A
EM215	MULTI-DEVICE CONTROLLER	ETS-Linggren	2090	00024676	N/A
EM216	MINI MAST SYSTEM	ETS-Linggren	2075	00026842	N/A
EM217	ELECTRIC POWERED TURNTABLE	ETS-Linggren	2088	00029144	N/A
EM218	ANECHOIC CHAMBER	ETS-Linggren	FACT-3	--	19/03/04
EM219	BICONILOG ANTENNA	ETS-Linggren	3142C	00029071	28/10/03
EM218	ETS ANECHOIC CHAMBER	EMCO	Fact-3	N/A	15/03/04
EM215	MULTI-DEVICE CONTROLLER	EMCO	2090	00024676	N/A
EM216	ANTENNA POSITIONING MAST	EMCO	2070	00024727	N/A

Line Conducted

EQP NO.	DESCRIPTION	MANUFACTURER	MODEL NO.	SERIAL NO.	LAST CAL
EM078	VARIAC	SHANGHAI VOLTAGE	TDGC-3/0.5	N/A	CM
EM081	SMALL SCREENED ROOM	MIKO INST HK	N/A	N/A	27/01/05
EM119	LISN	ROHDE & SCHWARZ	ESH3-Z5	0831.5518.52	14/10/04
EM127	ISOLATION TRANSFORMER 220 TO 300V	WING SUN	N/A	N/A	CM
EM142	PULSE LIMITER	ROHDE & SCHWARZ	ESH3Z2	357.8810.52	04/08/04
EM181	EMI TEST RECEIVER	ROHDE & SCHWARZ	ESIB7	100072	06/01/04
EM154	SHIELDING ROOM	SIEMENA MATSUSHITA COMPONENTS	N/A	803-740-057-99A	27/01/05
EM197	LISN	ETS-Linggren	4825/2	1193	05/06/04
EM213	DIGITAL POWER METER	VICNOBL	VIP120	00277	14/09/04

Remarks:-

CM Corrective Maintenance

N/A Not Applicable or Not Available

TBD To Be Determined

香港新界大埔工業村大宏街 10 號

10 Dai Wang Street, Taipo Industrial Estate, N.T., Hong Kong

Tel: (852) 2666 1888 Fax: (852) 2664 4353 Homepage: www.hkstc.org E-mail: hkstc@hkstc.org
For full text of "Conditions of Issuance of Test Report", please refer to overleaf or refer to the website of
STC: www.hkstc.org (the section "Application and Quotation").



香港標準及檢定中心
Hong Kong Standards and Testing Centre

Date : 2005-11-23

No. : HM155445

TEST REPORT

Page 20 of 21

Appendix B

Photographs of EUT

Front View of the product



Rear View of the product



Inner Circuit Top View



Inner Circuit Bottom View



香港新界大埔工業村大宏街 10 號

10 Dai Wang Street, Taipo Industrial Estate, N.T., Hong Kong

Tel: (852) 2666 1888 Fax: (852) 2664 4353 Homepage: www.hkstc.org E-mail: hkstc@hkstc.org
For full text of "Conditions of Issuance of Test Report", please refer to overleaf or refer to the website of
STC: www.hkstc.org (the section "Application and Quotation").



香港標準及檢定中心
Hong Kong Standards and Testing Centre

Date : 2005-11-23

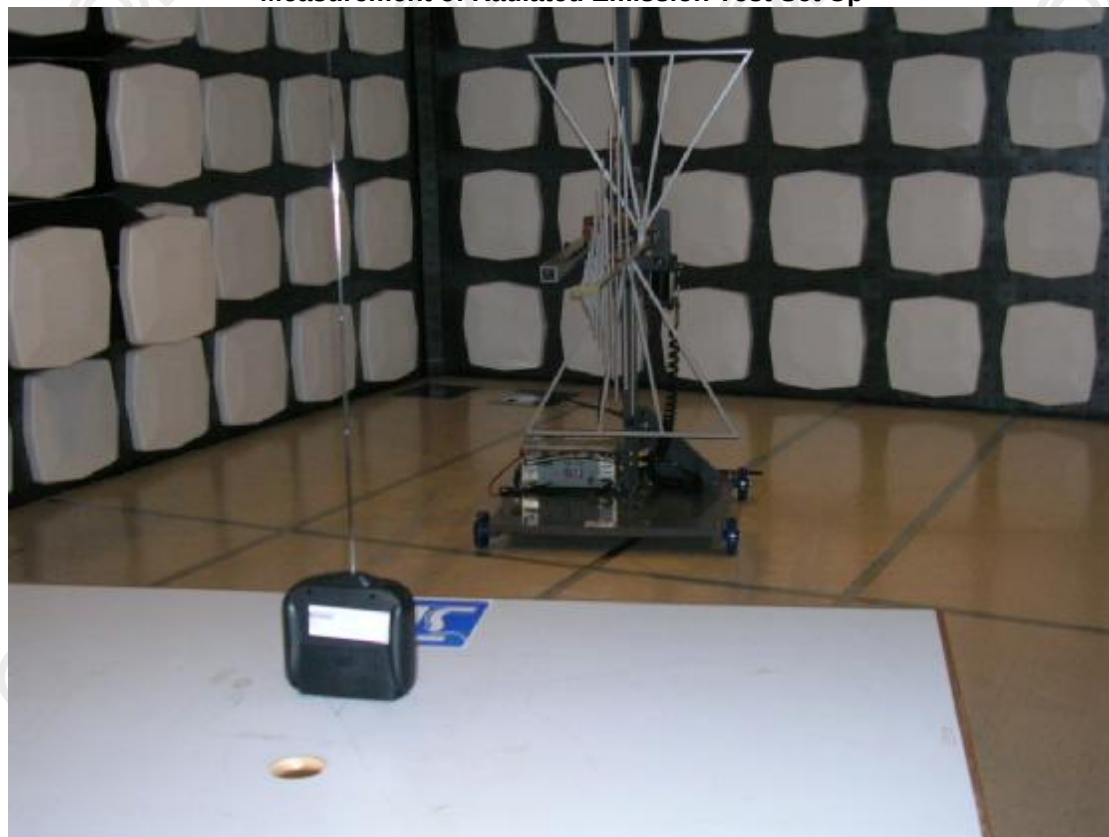
No. : HM155445

TEST REPORT

Page 21 of 21

Photographs of EUT

Measurement of Radiated Emission Test Set Up



******* End of Test Report *******

香港新界大埔工業村大宏街 10 號

10 Dai Wang Street, Taipo Industrial Estate, N.T., Hong Kong

Tel: (852) 2666 1888 Fax: (852) 2664 4353 Homepage: www.hkstc.org E-mail: hkstc@hkstc.org
For full text of "Conditions of Issuance of Test Report", please refer to overleaf or refer to the website of
STC: www.hkstc.org (the section "Application and Quotation").

alice_wong@hkstc.com

寄件者: alice_wong@hkstc.com
寄件日期: 2005年11月29日星期二 下午 3:57
收件者: 'stc_gz'; 'SZ - Kally Chan'
副本: 'dayday_tsang@hkstc.org'; 'KC_Lee@hkstc.com'; 'steven_tsang@hkstc.com'; 'Wendy Zhang'; 'Patrick Wong'
主旨: RE: _GZ:HM155445_apply_for_FCC_Certification

Dear Yan,

I will send out today.

Thanks
Best Regards
Alice

-----Original Message-----

From: stc_gz [mailto:stc_gz@hkstc.com.cn]
Sent: Tuesday, November 29, 2005 1:24 PM
To: alice_wong@hkstc.com; 'SZ - Kally Chan'
Cc: dayday_tsang@hkstc.org; 'KC_Lee@hkstc.com'; steven_tsang@hkstc.com; 'Wendy Zhang'; 'Patrick Wong'
Subject: 答复: _GZ:HM155445_apply_for_FCC_Certification
Importance: High

Dear Alice,

Does this application have been sent out to apply FCC Certification? By EMCC or Phoenix?
Today is the 5th working days, pls. advice, thank you!

Best Regards,
Yan

-----邮件原件-----

发件人: kally chan [mailto:service_sz@hkstc.com.cn]
发送时间: 2005年11月23日 9:48
收件人: stc_gz; alice_wong@hkstc.com
抄送: dayday_tsang@hkstc.org; 'KC_Lee@hkstc.com'; steven_tsang@hkstc.com; 'Wendy Zhang'; 'Patrick Wong'
主题: (瑞星提示-此邮件可能是垃圾邮件)答复: _GZ:HM155445_apply_for_FCC_Ce rt.

Dear Alice,

Please use this correct one.

Thanks.

Kally

----- Original Message -----

From: stc_gz
To: alice_wong@hkstc.com ; 'kally_chen'
Cc: dayday_tsang@hkstc.org ; 'KC_Lee@hkstc.com' ; steven_tsang@hkstc.com ; 'Wendy_Zhang' ; 'Patrick_Wong'
Sent: Wednesday, November 23, 2005 9:42 AM
Subject: (瑞星提示-此邮件可能是垃圾邮件)答复: GZ:HM155445 apply for FCC Cert.

Dear Kally,

Pls. help to check the revised declaration letter, if it is OK, pls. forward to Alice Wong for apply FCC Certification, thank you very much!

Best Regards,
Yan

----- 邮件原件 -----

发件人: stc_gz [mailto:stc_gz@hkstc.com.cn]

发送时间: 2005年11月23日 9:26

收件人: 'alice_wong@hkstc.com'; 'kally chan'

抄送: 'dayday_tsang@hkstc.org'; 'KC_Lee@hkstc.com'; 'steven_tsang@hkstc.com'; 'Wendy

Zhang'; 'Patrick Wong'

主题: RE: GZ:HM155445 apply for FCC Cert.

重要性: 高

Dear Alice/Kally,

由於我們這邊對那個舊APPLICATION的文件並不全，在電腦上也找不到這個APPLICATION的相關資料，之前給你們的那份證書和聲明信都是在folder裏找到的，由於單號對得上，所以我們以為是正確的，我們並不知道會有錯誤的文件放在folder裏。但，是我們的疏忽給你們造成了麻煩，我們鄭重向你們道歉，還請多多包涵！

另，關於HM155445，客戶已經簽回了正確的聲明信，請你們核對！
若沒問題請儘快遞給PHOENIX申請FCC證書，謝！

Thanks & Best Regards,
Yan

----- 邮件原件 -----

发件人: alice_wong@hkstc.com [mailto:alice_wong@hkstc.com]

发送时间: 2005年11月22日 18:02

收件人: 'kally chan'; 'stc_gz'

抄送: dayday_tsang@hkstc.org; 'KC_Lee@hkstc.com'; steven_tsang@hkstc.com; 'Wendy Zhang'; 'Patrick Wong'

主题: (瑞星提示-此邮件可能是垃圾邮件)RE: GZ:HM155445 apply for FCC Cert.

Dear SZ OFFICE / GZ OFFICE,

請各同事sent 文件或問題來香港之前確認有關資料 (包括之前有關之問題, 答案, E-MAIL RECORD 和REPORT內容)

YAN, 你SENT來的附件根本不是最後正確的RECORD, 這個舊APPLICATION 所用的頻率是27.05MHz & 27.175MHz, 正是certificate上所指的頻率.

你那張根本是最後正確的記錄.

- 1) tested frequency: 27.05MHz & 27.175MHz (Please check test report)
- 2) Please check the final confirmation letter.
- 3) Please see your certification record.

所有最後正確的記錄Lowest frequency is 27.05MHz, the Highest frequency is 27.175MHz.

So, please submit the correct information / letter to us for HM155445. (If the client needs to retest the lowest & highest frequency, we will charge the retest fee)

Thanks
Best Regards
Alice

-----Original Message-----

From: kally chan [mailto:service_sz@hkstc.com.cn]

Sent: Tuesday, November 22, 2005 5:00 PM

To: stc_gz; alice_wong@hkstc.com

Cc: dayday_tsang@hkstc.org; 'KC_Lee@hkstc.com'; steven_tsang@hkstc.com

Subject: RE: GZ:HM155445 apply for FCC Cert.

Dear Alice,

Would you please give your comment about the below question?

Awaiting for your earlier reply.

Thanks.

Kally

----- Original Message -----

From: stc_gz

To: alice_wong@hkstc.com ; 'kally chan'

Cc: dayday_tsang@hkstc.org ; 'KC_Lee@hkstc.com' ; steven_tsang@hkstc.com

Sent: Tuesday, November 22, 2005 4:49 PM

Subject: 答复: (瑞星提示-此邮件可能是垃圾邮件)RE: GZ:HM155445 apply for FCC Cert.

Dear Kally,

我们查过这个客户的相关的FCC的测试，单号是HM112237，这个单在2004/02/24拿的一份TCB证书上的Frequency Range写的是27.05-27.18，而当时所送的crystal是26.995，27.025，27.045（请见附件）。如果是这样的话似乎证书上的范围跟所送的crystal没什么关系。我们查过研讨会的相关资料和FCC的网站，发现现在FCC的频率范围已经改为26.96-27.28，我们现在想确认是否现在的FCC证书上的Frequency Range是27.05-27.18还是26.96-27.28？如果是前者，我们将不会要求客户补送crystal。我们会根据这个问题来确定这个单的解决方法，请尽快帮忙确定，谢谢！

Best Regards,
Yan

-----邮件原件-----

发件人: alice_wong@hkstc.com [mailto:alice_wong@hkstc.com]

发送时间: 2005年11月22日 16:05

收件人: alice_wong@hkstc.com; 'kally chan'

抄送: dayday_tsang@hkstc.org; 'KC_Lee@hkstc.com'; steven_tsang@hkstc.com;

stc_gz@hkstc.com.cn

主题: (瑞星提示-此邮件可能是垃圾邮件)RE: GZ:HM155445 apply for FCC Cert.

Dear Yvonne / Kally,

We used the modified main unit and plug in the lowest and highest crystal for retest.
Retest result for lowest & highest frequency (26.995MHz & 27.195MHz) is pass.

- 1) Please confirm and submit the correct document "declaration of frequency" / crystal for test.
- 2) Please submit the confirmation letter for confirm the product can not change or plug in the crystal.

Thanks

Best Regards
Alice

-----Original Message-----

From: alice_wong@hkstc.com [mailto:alice_wong@hkstc.com]

Sent: Tuesday, November 22, 2005 3:48 PM

To: 'kally chan'

Cc: 'dayday_tsang@hkstc.org'; 'KC_Lee@hkstc.com'; 'steven_tsang@hkstc.com';
'stc_gz@hkstc.com.cn'

Subject: RE: GZ:HM155445 apply for FCC Cert.

Dear Yvonne / Kally,

Please check your attached file's "declaration of frequency for FCC" the listed "Lower, Mid & Highest frequency" is not matched with real crystal frequency.
After check the frequency by Engineer (The submitted crystal's frequency is 26.995MHz, 27.0968MHz & 27.195MHz)

- 1) Please confirm and submit the correct document "declaration of frequency" / crystal for test.
- 2) Please submit the confirmation letter for confirm the product can not change or plug in the crystal.

Remark: Please confirm immediate.
Thanks

Best Regards
Alice

-----Original Message-----

From: kally chan [mailto:service_sz@hkstc.com.cn]
Sent: Monday, November 21, 2005 4:39 PM
To: alice_wong
Cc: dayday_tsang@hkstc.org; KC_Lee@hkstc.com; steven_tsang@hkstc.com; stc_gz@hkstc.com.cn
Subject: Fw: GZ:HM155445 apply for FCC Cert.
Importance: High

----- Original Message -----

From: kally_chan
To: alice_wong
Cc: dayday_tsang@hkstc.org ; KC_Lee@hkstc.com ; steven_tsang@hkstc.com ; stc_gz@hkstc.com.cn
Sent: Monday, November 21, 2005 2:47 PM
Subject: Fw: GZ:HM155445 apply for FCC Cert.

Dear Alice,

Attached the documents as below, please help to check.

- 1.sign back confirmation letter
- 2.sign back modification report and quotation
- 3.TX circuit diagram
- 4.TX part list
- 5.TX block diagram
- 6.TX PCB layout
- 7.user manual including FCC 15.21 & 15.105 statement
- 8.label and label location
- 9.circuit description
- 10.letter of appointment
- 11.letter of attestation
- 12.declaration letter for frequency use

Remark: Grantee Code --- RTW
FRN --- 0010301877

Thanks.

Kally

----- Original Message -----

From: stc_gz
To: SZ - Kally Chan
Sent: Monday, November 21, 2005 10:24 AM
Subject: GZ:HM155445 apply for FCC Cert.

Dear Kally,

Here is HM155445 apply for FCC Cert. documents, pls. help to review, thank you!

Remark: the Grantee Code was apply by our company on 2004.
Any problems pls. let me know!

Best Regards,
Yan