

**Exhibit B**  
**Test Report**

## Test Report

### Best Laboratory Co., Ltd.

No. 336, Ba Lian Rd., Sec. 1, Hsi Chih City, Taipei Hsien, Taiwan, R.O.C.

Tel: 886-2-2646-2899 Fax: 886-2-2646-2870

Applicant : GOLIGHT INC.  
Address : Route 3, Box 37B  
Culberson, NE 69024, U.S.A.  
Equipment : Transmitter of Spot Light  
Model : 7901T  
FCC ID : MMK7901T  
Device's Class : Class B Device  
Measurement Standard : FCC Part 15.231  
Operating Voltage : 24Vdc  
Test Result : **Compliance** (Detail showed in the test report)  
Sample Received : July 19, 2000  
Test Date : Aug. 04, 2000  
Report Number : RE-T01-FC-029  
Test Firm : No. 336, Ba Lian Rd., Sec. 1,  
Hsi Chih City, Taipei Hsien, Taiwan, R.O.C.

Remark:

- (1) The test report is only relating to the sample tested
- (2) The test report shall not be reproduced except in full, without the written approval of Best Laboratory

Prepared : Jacky Wu

Approved : [Signature]

Date Issued : Aug. 11. 2000

Contain

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## 1. General Information

### 1.1 EUT Description

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Address : Route 3, Box 37B  
Culberson, NE 69024, U.S.A.

Equipment : Transmitter of Spot Light

Model : 7901T

FCC ID : MMK7901T

Device's Class : Class B Device

Operation Voltage : 24Vdc

Introduction : EUT is a transmitter that can control the four directions, Up, Down, Right and Left, and the power on/off of EUT.

## 1.2 Test System Detail

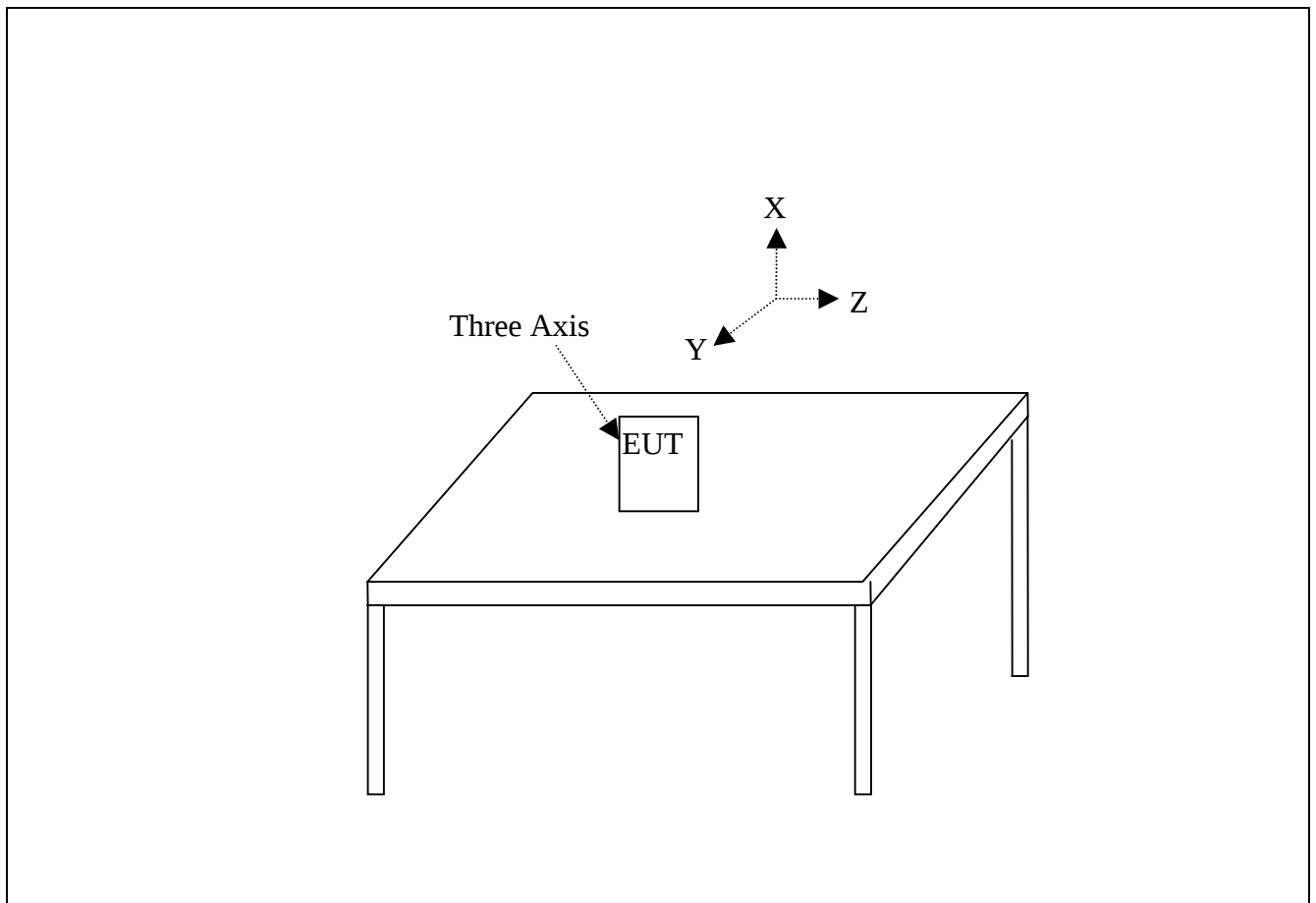
N / A

## 1.3 EUT Configuration

- (1) Put the batteries into the battery cell.
- (2) Press one button to let EUT continuously transmit.

(\*\*\*PS: Please refers to the Photograph\*\*\*)

### Drawing of Configuration



## 1.4 EUT Exercise Software

N / A

## 1.5 Test Performed

Conducted emissions were investigated over the frequency range from 0.15MHz to 30MHz using a receiver which bandwidth is set at 9KHz.

Radiated emissions were investigated over the frequency range from 30MHz to 1000MHz using a receiver which bandwidth is set at 120KHz. A receiver using average detector investigated the frequency range from 1GHz to 2GHz. Radiated measurement was performed at distance that from an antenna to EUT is 3meters.

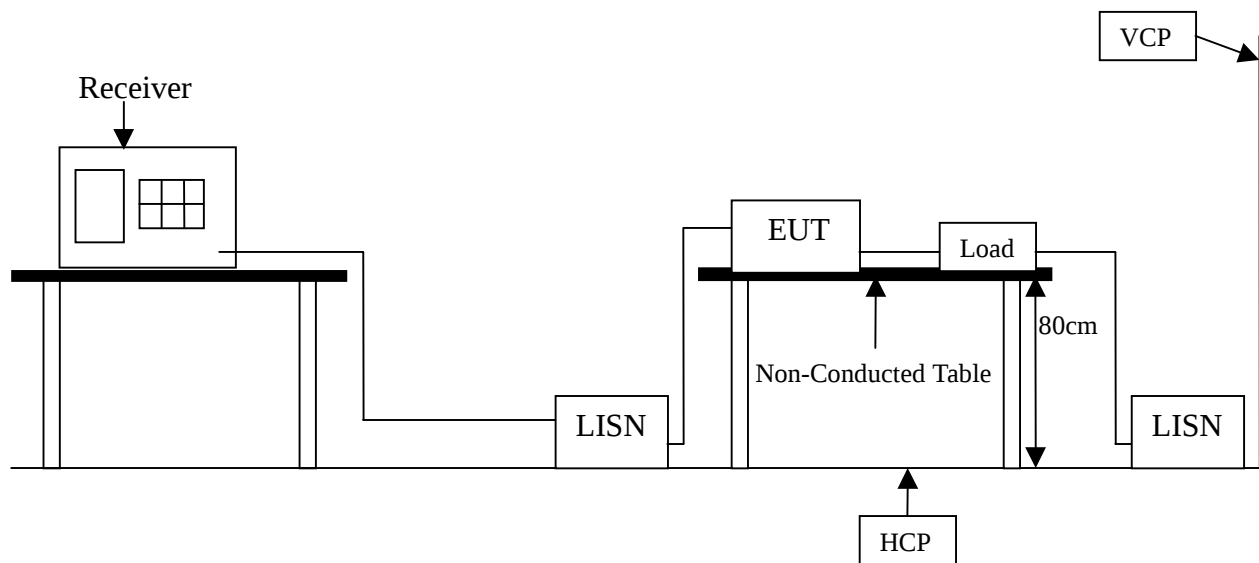
The testing result of pretest was found out that the “ Continuous Transmitting “ mode is worse than the “ standby” mode. So, the final measurement was tested on the “ Continuous Transmitting “ mode.

## 2 Conducted Emission Measurement

### 2.1 Test Equipment

| No. | Instrument   | Manufacture     | Model     | Serial No. | Last Calibrate |
|-----|--------------|-----------------|-----------|------------|----------------|
| 1.  | LISN         | Rolf Heine      | NNB-2/16Z | 99084      | Dec. 14, 1999  |
| 2.  | LISN         | Rolf Heine      | NNB-2/16Z | 99086      | Dec. 14, 1999  |
| 3.  | EMI Receiver | Rohde & Schwarz | ESI 7     | 830154/001 | Nov. 22, 1999  |

### 2.2 Test Set-Up



### 2.3 Limit

| Frequency   | Limit (dB $\mu$ V) |         |            |         |
|-------------|--------------------|---------|------------|---------|
|             |                    |         | Class B    |         |
| MHz         | Quasi Peak         | Average | Quasi Peak | Average |
| 0.15 ~ 0.50 | 79                 | 66      | 66 ~ 56    | 56 ~ 46 |
| 0.50 ~ 5.0  | 73                 | 60      | 56         | 46      |
| 5.0 ~ 30.0  | 73                 | 60      | 60         | 50      |

Remark: In the above table, the tighter limit applies at the band edges.

## 2.4 Test Procedure

The EUT and simulators are connected to the main power through a line impedance stabilization network (LISN). It provides a 50 ohm / 50  $\mu$ H coupling impedance for the measuring equipment. The peripheral devices are also connected to the main power through a LISN that provides a 50 ohm / 50  $\mu$ H coupling impedance with 50 ohm termination. (Please refers to the block diagram of the test setup and photograph.)

Both sides of AC line are checked for the maximum conducted emission interference. In order to find the maximum emissions, the relating positions of equipment and all of the interference cables must be changed according to ANSI C63.4-1992 regulation: The measurement procedure on conducted emission interference.

The resolution bandwidth of the field strength meter ( Rohde & Schwarz ) is set at 9KHz.

## 2.5 Test Specification

According to the ANSI C63.4-1992

## 2.6 Test Result

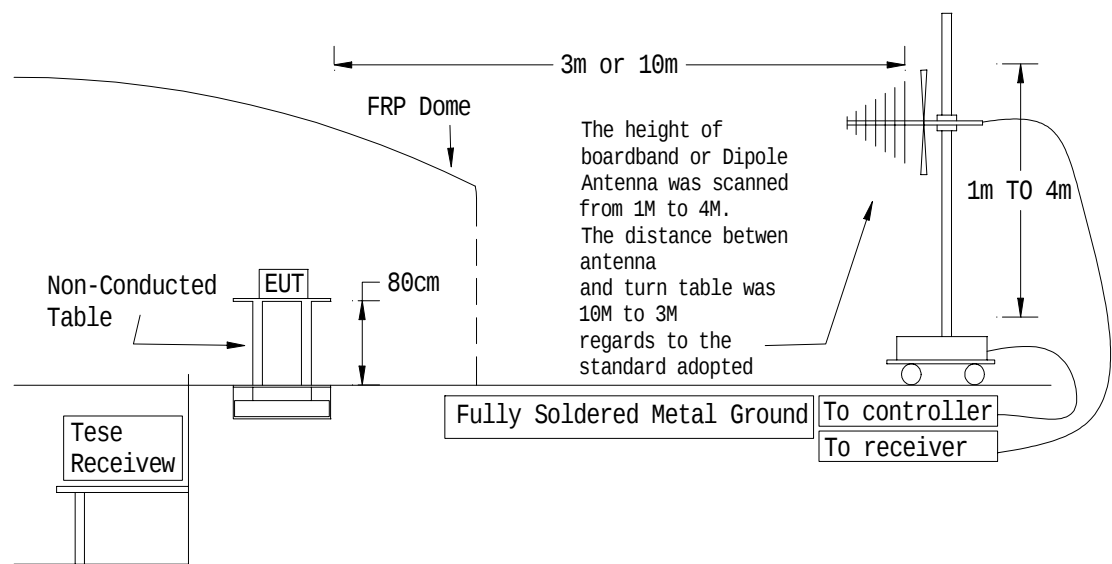
N / A

3. Radiated Emission Measurement

3.1 Test Equipment List

| No. | Instrument   | Manufacture     | Model     | Serial No. | Last Calibrate |
|-----|--------------|-----------------|-----------|------------|----------------|
| 1.  | Antenna      | Schwarzbeck     | VULB 9160 | 9160-3078  | Jan. 19, 2000  |
| 2.  | EMI Receiver | Rohde & Schwarz | ESI 7     | 830154/001 | Nov. 22, 1999  |

3.2 Test Setup



### 3.3 Limit

| FREQUENCY   | DISTANCE | FUNDAMENTAL    | SPURIOUS     |
|-------------|----------|----------------|--------------|
| 40.66-40.70 | 3 Meters | 2250           | 225          |
| 70-130      | 3 Meters | 1250           | 125          |
| 130-174     | 3 Meters | 1250 ~ 3750**  | 125 ~ 375**  |
| 174-260     | 3 Meters | 3750           | 375          |
| 260-470     | 3 Meters | 3750 ~ 12500** | 375 ~ 1250** |
| Above 470   | 3 Meters | 12500          | 1250         |

### 3.4 Test Procedure

The EUT and its simulators are placed on turn table, non-conducted and wooden, which is 0.8 meter above ground. The turn table rotates 360 degree to determine the position of the maximum emission level. The EUT was positioned such that distance from antenna to the EUT is 3 meters. The antenna is moved up and down between 1 meter to 4 meter to receive the maximum emission level.

Both horizontal and vertical polarization of the antenna are set on measurement. In order to find the maximum emission, The three axis were all set on test, X axis, Y axis and Z axis, to find out the maximum radiated emission.

The bandwidth set on the field strength is 120KHz when the frequency range is below 1GHz

### 3.5 Test Specification

According to ANSI C63.4-1992; 47 CFR Part 15.231

### 3.6 Test Result

The emissions that come from the EUT was below the specified limits. The worst case of conducted emissions measurement are shown in the appendix A. The acceptance criterion was met and the EUT has pass the measurement.

## 12 Modification List for EMC Complying Test

There is no any modification.

## 6 Appendix

Appendix A: Summary of Test Result

Appendix B: The test photograph of EUT

Appendix C: The Detail Photograph of EUT

## Appendix A: Summary of Test Result

The test result in the emission and immunity were performed according to the requirement of measurement standard and procedures. Best Laboratory is assumed full responsibility for the accuracy and completeness of these measurements. The Test data of the emissions and immunity are listed as the appendix data.

All these tests are were carried out with the EUT in normal operation, which was defined as:

**\*\*\*\*\* EMC Test Result: The EUT has be passed the all measurements. \*\*\*\*\***

The uncertainty is calculated in accordance with NAMAS NIS 81, the total uncertainty for this test is as follows:

⇒ Emission Test

- |                                                  |         |
|--------------------------------------------------|---------|
| * Uncertainty in the Conducted Emission Test:    | <±2.0dB |
| * Uncertainty in the Field Strength measurement: | <±4.0dB |

## Field Strength Measurement

Date Measurement Performed: Aug. 04, 2000

EUT : Transmitter of Spot Light

Testing Mode : “Continuous Transmitting “ mode

Polarity : Vertical

Temperature : 32°C

Humidity : 64%RH

| Frequency<br>(MHz) | Reading<br>Amplitude<br>(dBμV/m) | Table<br>Degree<br>(°) | Antenna<br>Height<br>(Meter) | Correction<br>Factor<br>(dB) | Corrected<br>Amplitude<br>(dBμV/m) | Limit<br>(dBμV/m) | Margin<br>(dB) |
|--------------------|----------------------------------|------------------------|------------------------------|------------------------------|------------------------------------|-------------------|----------------|
| 315.0051           | 77.42                            | 335                    | 1.00                         | 15.94                        | 61.48                              | 75.56             | -14.08         |
| 630.102            | 68.86                            | 314                    | 1.00                         | 23.96                        | 44.90                              | 55.56             | -10.66         |
| 945.170            | 75.33                            | 330                    | 1.00                         | 29.06                        | 46.27                              | 55.56             | -9.29          |
| 1260.221           | 84.30                            | 325                    | 1.00                         | 32.41                        | 51.89                              | 55.56             | -3.67          |
| 1575.277           | 91.06                            | 327                    | 1.00                         | 36.79                        | 54.27                              | 55.56             | -1.29          |
| 1890.306           | 85.80                            | 317                    | 1.00                         | 39.42                        | 46.38                              | 55.56             | -9.18          |
| ***                |                                  |                        |                              |                              |                                    |                   |                |
|                    |                                  |                        |                              |                              |                                    |                   |                |
|                    |                                  |                        |                              |                              |                                    |                   |                |
|                    |                                  |                        |                              |                              |                                    |                   |                |
|                    |                                  |                        |                              |                              |                                    |                   |                |

Remark:

1. The “ Correction Factor “ contains antenna factor, cable loss.
2. The formula of “ Corrected Amplitude “ is as follow”  

$$\text{Reading Amplitude} - \text{Correction Factor} = \text{Corrected Amplifier.}$$

## Field Strength Measurement

Date Measurement Performed: Aug. 04, 2000

EUT : Transmitter of Spot Light

Testing Mode : “Continuous Transmitting “ mode

Polarity : Horizontal

Temperature : 31°C

Humidity : 63%RH

| Frequency<br>(MHz) | Reading<br>Amplitude<br>(dBμV/m) | Table<br>Degree<br>(°) | Antenna<br>Height<br>(Meter) | Correction<br>Factor<br>(dB) | Corrected<br>Amplitude<br>(dBμV/m) | Limit<br>(dBμV/m) | Margin<br>(dB) |
|--------------------|----------------------------------|------------------------|------------------------------|------------------------------|------------------------------------|-------------------|----------------|
| 315.051            | 90.40                            | 175                    | 1.00                         | 15.94                        | 74.46                              | 75.56             | -1.10          |
| 630.102            | 68.05                            | 180                    | 1.00                         | 23.96                        | 44.09                              | 55.56             | -11.47         |
| 945.170            | 82.01                            | 177                    | 1.00                         | 29.06                        | 52.95                              | 55.56             | -2.61          |
| 1260.221           | 85.81                            | 169                    | 1.00                         | 32.41                        | 53.40                              | 55.56             | -2.16          |
| 1575.277           | 89.81                            | 172                    | 1.00                         | 36.79                        | 53.02                              | 55.56             | -2.54          |
| 1890.306           | 88.55                            | 170                    | 1.00                         | 39.42                        | 49.13                              | 55.56             | -6.43          |
| ***                |                                  |                        |                              |                              |                                    |                   |                |
|                    |                                  |                        |                              |                              |                                    |                   |                |
|                    |                                  |                        |                              |                              |                                    |                   |                |
|                    |                                  |                        |                              |                              |                                    |                   |                |
|                    |                                  |                        |                              |                              |                                    |                   |                |
|                    |                                  |                        |                              |                              |                                    |                   |                |

### Remark:

1. The “ Correction Factor “ contains antenna factor, cable loss.
2. The formula of “ Corrected Amplitude “ is as follow”  
 Reading Amplitude – Correction Factor = Corrected Amplifier.

## **Appendix B: The Test Photograph of EUT**

## The Photograph of Radiated Emission Test

