Report No.	N0618674
Specifications Test Method	FCC Part 18 - Certification ANSI C63.4 1992
Applicant address	FLAT 4, 11/F, EMPIRE CENTRE, 68 MODY ROAD, TST EAST,KOWLOON,HONG KONG.
Applicant Items tested Model No.	NEONLITE ELECTRONIC & LIGHTING (HK) LTD. ENERGY SAVING LAMP K205, K207, K404, K406, GK404, GK406, W105, W205, W107, W207 (Sample # N06674)
Results Sample received date	As detailed within this report 07 / 07 /1998 (month / day / year)
Prepared by	project engineer
Authorized by	Vice General Manager (Jacob Lin)
Issue date	July 16, 1998 (month / day / year)
Modifications	**None**
Tested by Office and Open site at	Training Research Co., Ltd. No. 15, Lane 530, Pa-Lian RD., Sec. 1, His-Chih Town Taipei Hsien, Taiwan, R.O.C.

Conditions of issue:

(1). ***This test report shall not be reproduced except in full, without written approval of TRC. And the test result contained within this report only relate to the sample submitted for testing.***

(2). ***This report must not be used by the client to claim product endorsement by NVLAP or nay agency of U.S. Government.***

★ ***FCC ID : L2ALC40407***

Contents

Chapter 1 Introduction

Description of EUT :

These products are energy saving lamp . There are six EUTs in 4W, 6W, 5W, 7W separately tested in this report .Each lamp is provided with an Edison medium type lamp base for connection to a 110-120v AC source of supply through medium base lampholder .

***P.S.: Model No. K2XX, K4XX,GK4XX , W1XX, W2XX, XX means W. G means with glass clap . For examples , GK404 means 4W with glass clap .

Connection of EUT :

(1)Plug the EUT in the lamp set .
(2)Connect the power cord to 110Vac source.

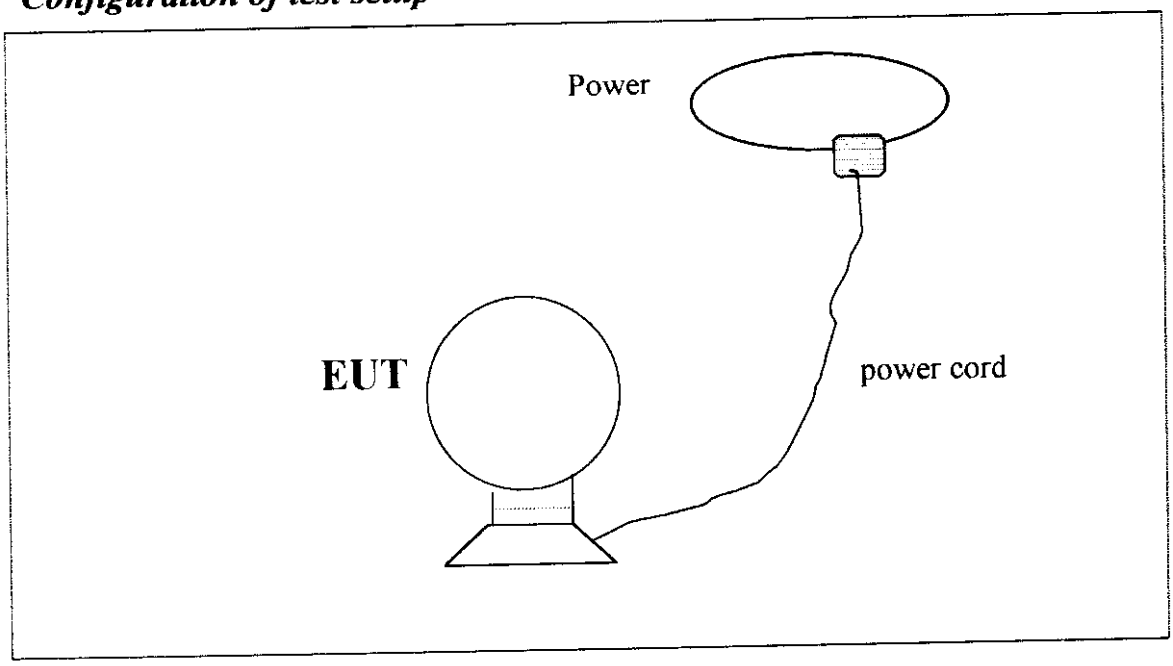
Test method :

Plug the power cord and make the lamp lights-up.

(If the emission is close to the ambience, the resolution BW and view resolution will be reduced and the data will be recorded by detection of maximum hold peak mode.)

The testing configuration of test setup is shown on the next page.

Configuration of test setup



Connections :

* **The power cord 175 cm long, non-shielded.**

Chapter 2 Conducted emission test

Test condition and set up :

All the equipment is placed and setup according to the ANSI C63.4 - 1992 . The EUT is assembled on a wooden table which is 80 cm high , is placed 40 cm from the back-wall which is a vertical conducting plane . One LISN is for EUT ,the other LISN is for support equipment. They are all placed on the conductive ground .The EUT's LISN connect a line switch box for selecting L1 or L2 ,then connect to a preamplifier and spectrum.

The spectrum scans from 450KHz to 30MHz . Conducted emission levels are detected at max. peak mode . But if the max. peak mode failed ,it will be measured by CISPR's quasi-peak detection mode .

While testing, there is a the worst-emission plot printed at peak detection mode ,and there are more than 6 highest emissions relative to limit recorded. The plot is kept as the original data, not included in test report .

List of test Instrument :

				Calibration Date	
Instrument Name	Model No.	Brand	Serial No.	Last time	Next time
Spectrum analyzer	8591EM	H P	3619A00821	08/29/97	08/29/98
LISN (EUT)	3825/2	EMCO	9411-2284	05/15/98	05/15/99
Preamplifier	8447F	H P	2944A03706	05/13/98	05/15/99
Line switch box	AC1-003	TRC	- - - - - - - - -	05/15/98	05/15/99
Line selector	AC1-002	TRC	- - - - - - - - -	05/15/98	05/15/99

The level of confidence of 95% ,the uncertainty of measurement of conducted emission is ± 2.4 dB .

Test Result : Pass (Appendix A)

Chapter 3 Radiated emission test

Test condition and setup :

Pretest : Prior to the final test (OATS test) ,the EUT is placed in a shielded enclosure ,GTEM, and scan from 30MHz to 1GHz.This is done to ensure the radiation is exactly emitted from the EUT.

Final test : Final radiation measurements is made on a open-field test site. The EUT is placed on a nonconductive table which is 0.8 m height, the top surface is 1.0 x 1.5 meter. All the placement is according to ANSI C63.4 - 1992.

The spectrum is examined from 30 MHz to 1000 MHz measured by HP spectrum.

The EMCO whole range Antenna is used to measure frequency from 30 MHz to 1GHz.The final test is used the spectrum HP 8594EM .

Measure more than six top marked frequencies generated form pretest by computer step by step at each frequency . The EUT is rotated 360 degrees, and antenna is raised and lowered from 1 to 4 meter to find the maximum emission levels. The antenna is used with both horizontal and vertical polarization.

Appropriated preamplifier which is made by TRC is used for improving sensitivity and precautions is taken to avoid overloading .The spectrum analyzer's 6dB bandwidth is set to 120 K Hz , and the EUT is measured at quasi-peak mode.

If the emission is close to the frequency band of ambience ,the data will be rechecked by the tester and the corrected data will be written in the test data sheet. If the emission is just within the ambience ,the data from GTEM will be taken as the final data.

List of test Instrument :

				Calibration Date	
Instrument name	Model No.	Brand	Serial No.	Last	Next
Spectrum analyzer	8568B	H P	3004A18617	05/15/98	05/15/99
Quasi-peak Adapter	85650A	H P	2521A00984	05/15/98	05/15/99
RF Pre-selector	85685A	H P	2947A01011	05/15/98	05/15/99
Spectrum analyzer	8594EM	H P	3619A00198	08/07/97	08/07/98
Antenna(30M-2G Hz)	3142	EMCO	9610-1094	10/30/97	10/30/98
Open test side (Antenna ,Amplify, cable calibrated together)				05/15/98	05/15/99

The level of confidence of 95% ,the uncertainty of measurement of radiated emission is ± 4.96 dB .

Test Result : Pass (All emissions are under limit 20dB)

Appendix A

Conducted Emission Test Result : (K205,W105,W205)

Testing room : Temperature : 23 ° C Humidity : 51 % RH

Line 1

Frequency (MHz)	*Amplitude (dBuV)*	*Limit (dBuV/m)*	*Margin (dB)*
0.525	41.33	48	-6.67
1.192	35.39	48	-12.61
2.081	30.86	48	-17.14
2.895	25.68	48	-22.32
3.412	24.88	48	-23.12
4.743	22.10	48	-25.90
5.039	21.43	48	-26.57
5.630	21.25	48	-26.75
6.590	19.69	48	-28.31
28.096	28.47	48	-19.53

Line 2

Frequency (MHz)	*Amplitude (dBuV)*	*Limit (dBuV)*	*Margin (dB)*
0.525	41.05	48	-6.95
1.192	33.35	48	-14.65
2.155	29.32	48	-18.68
2.895	26.29	48	-21.71
3.486	23.72	48	-24.28
5.261	22.05	48	-25.95
13.812	15.83	48	-32.17
28.096	27.39	48	-20.61
***			

Conducted Emission Test Result : (K207, W107,W207)

Line 1

Frequency (MHz)	*Amplitude (dBuV)*	*Limit (dBuV/m)*	*Margin (dB)*
0.451	43.63	48	-4.37
1.192	33.65	48	-14.35
2.377	29.93	48	-18.07
3.117	26.01	48	-21.99
4.743	25.07	48	-22.93
5.113	21.74	48	-26.26
6.664	21.01	48	-26.99
21.591	17.62	48	-30.38
26.637	19.48	48	-28.52
28.169	28.34	48	-19.66

Line 2

Frequency (MHz)	*Amplitude (dBuV)*	*Limit (dBuV)*	*Margin (dB)*
0.451	43.23	48	-4.77
1.340	32.06	48	-15.94
2.155	30.68	48	-17.32
2.673	25.68	48	-22.32
3.412	25.54	48	-22.46
4.374	22.10	48	-25.90
6.073	22.18	48	-25.82
24.152	18.47	48	-29.53
28.169	27.99	48	-20.01
29.190	22.79	48	-25.21

Conducted Emission Test Result : (K404)

Line 1

Frequency (MHz)	*Amplitude (dBuV)*	*Limit (dBuV/m)*	*Margin (dB)*
0.451	38.06	48	-9.94
1.192	33.22	48	-14.78
2.155	24.40	48	-23.60
2.969	23.90	48	-24.10
4.817	24.89	48	-23.11
5.852	24.45	48	-23.55
6.664	23.11	48	-24.89
7.107	22.45	48	-25.55
24.152	19.21	48	-28.79
28.169	27.32	48	-20.68

Line 2

Frequency (MHz)	*Amplitude (dBuV)*	*Limit (dBuV)*	*Margin (dB)*
0.822	36.00	48	-12.00
1.266	31.18	48	-16.82
2.007	25.01	48	-22.99
4.078	22.90	48	-25.10
4.743	24.23	48	-23.77
5.409	24.75	48	-23.25
6.369	24.19	48	-23.81
7.476	20.80	48	-27.20
9.984	19.32	48	-28.68
28.169	24.90	48	-23.10

Conducted Emission Test Result : (K406)

Line 1

Frequency (MHz)	*Amplitude (dBuV)*	*Limit (dBuV/m)*	*Margin (dB)*
0.451	38.99	48	-9.01
1.414	32.10	48	-15.90
2.451	29.95	48	-18.05
2.673	26.95	48	-21.05
3.412	23.28	48	-24.72
4.448	21.78	48	-26.22
25.176	19.24	48	-28.76
28.169	26.83	48	-21.17
29.847	20.11	48	-27.89
***			

Line 2

Frequency (MHz)	*Amplitude (dBuV)*	*Limit (dBuV)*	*Margin (dB)*
0.451	36.44	48	-11.56
1.192	30.74	48	-17.26
2.007	30.12	48	-17.88
3.043	25.67	48	-22.33
3.856	22.85	48	-25.15
4.300	21.12	48	-26.88
5.039	20.72	48	-27.28
9.173	19.04	48	-28.96
24.152	19.39	48	-28.61
28.169	27.12	48	-20.88

Conducted Emission Test Result : (GK404)

Line 1

Frequency (MHz)	*Amplitude (dBuV)*	*Limit (dBuV/m)*	*Margin (dB)*
0.599	39.38	48	-8.62
1.488	30.22	48	-17.78
2.155	28.52	48	-19.48
2.747	25.19	48	-22.81
3.486	24.42	48	-23.58
6.369	22.08	48	-25.92
7.919	22.10	48	-25.90
8.583	18.73	48	-29.27
13.003	17.09	48	-30.91
28.096	27.15	48	-20.85

Line 2

Frequency (MHz)	*Amplitude (dBuV)*	*Limit (dBuV)*	*Margin (dB)*
0.451	39.23	48	-8.77
1.192	29.95	48	-18.05
2.081	26.66	48	-21.34
4.078	22.43	48	-25.57
5.482	21.05	48	-26.95
5.704	20.36	48	-27.64
7.550	19.70	48	-28.30
21.664	16.93	48	-31.07
28.096	25.72	48	-22.28
***			

Conducted Emission Test Result : (GK406)

Line 1

Frequency (MHz)	*Amplitude (dBuV)*	*Limit (dBuV/m)*	*Margin (dB)*
0.970	39.51	48	-8.49
1.192	31.92	48	-16.08
1.933	29.38	48	-18.62
2.673	26.38	48	-21.62
3.486	22.89	48	-25.11
4.743	20.62	48	-27.38
7.107	19.39	48	-28.61
8.878	18.87	48	-29.13
25.030	19.20	48	-28.80
28.096	26.10	48	-21.90

Line 2

Frequency (MHz)	*Amplitude (dBuV)*	*Limit (dBuV)*	*Margin (dB)*
0.451	38.65	48	-9.35
1.266	31.71	48	-16.29
2.377	26.32	48	-21.68
20.747	25.19	48	-22.81
3.560	24.46	48	-23.54
4.817	21.24	48	-26.76
19.466	16.82	48	-31.18
26.272	21.57	48	-26.43
28.096	27.04	48	-20.96
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Final statement :
This test report, measurements made by TRC are traceable to the NIST.