

# Photometric Report

CATALOG NUMBER: FS4-4F54-A-N

Monday, December 22, 2008

FILENAME: FS4-4F54-A-N.IES

IESNA:LM-63-2002  
 [TEST]BALLABS TEST NO. 14139.0  
 [TESTLAB] BUILDING ACOUSTICS & LIGHTING LABORATORIES, INC  
 [ISSUE DATE] 03-JUN-2008  
 [MANUFAC] GUTH LIGHTING-ST. LOUIS, MO  
 [LUMINAIRE] 4/54W T5HO C LAMP 51.5x14.5x6"ENCLOSED & GASKETED LUMINAIRE  
 [MORE] SPECULAR REFLECTOR w/CLEAR ACRYLIC DROP LENS  
 [MORE] UNIVERSAL BALLAST #B454|UNV-E WATTS=226 REFL=86%  
 [LUMCAT] FS4-4F54-A-N  
 [LAMPCAT] FP54T5HO/835/C

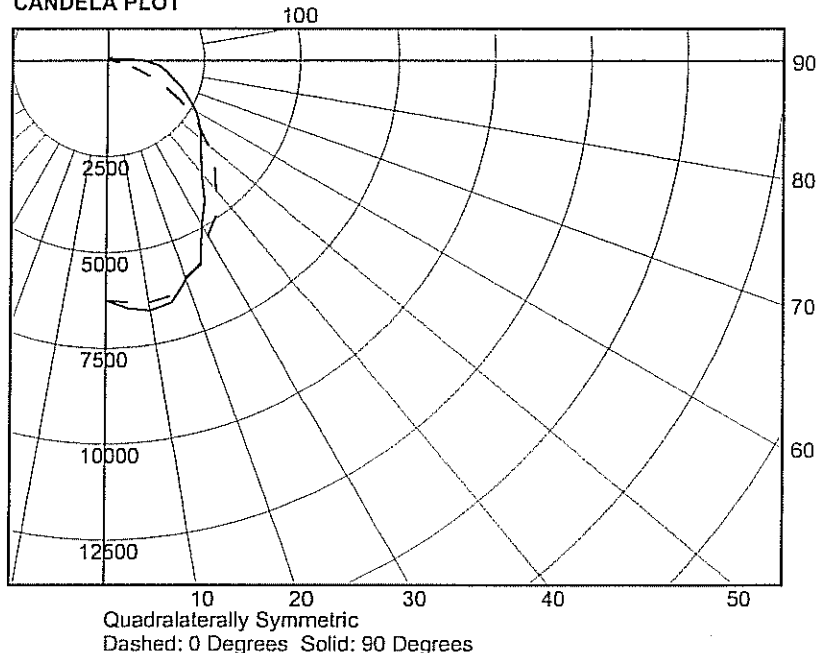
**SUMMARY DATA**

EFFICIENCY (Total): 93.0 %  
 EFFICIENCY (Downlight): 89.2 %  
 EFFICIENCY (Uplight): 3.9 %  
 CIE CLASSIFICATION: DIRECT  
 SPACING CRITERION (0-Deg.): 1.25  
 SPACING CRITERION (90-Deg.): 1.18  
 LUMENS/LAMP: 4900  
 NO. OF LAMPS: 4  
 LUMINOUS OPENING: RECTANGULAR  
     Width: 1.13 (Feet)  
     Length: 4.23  
     Height: 0.25  
 INPUT WATTS: 226

**ZONAL LUMEN SUMMARY**

| Zone     | Lumens  | % Lamp | % Luminaire |
|----------|---------|--------|-------------|
| 0 - 30   | 5096.8  | 26.0   | 27.9        |
| 0 - 40   | 8050.3  | 41.1   | 44.1        |
| 0 - 60   | 13357.9 | 68.2   | 73.3        |
| 60 - 90  | 4121.8  | 21.0   | 22.6        |
| 0 - 90   | 17479.8 | 89.2   | 95.9        |
| 90 - 180 | 756.0   | 3.9    | 4.1         |
| 0 - 180  | 18235.7 | 93.0   | 100.0       |

**CANDELA PLOT**



**AVERAGE LUMINANCE**

(Candelas / Square Meter)

| Angle | 0     | 22.5  | 45    | 67.5  | 90    |
|-------|-------|-------|-------|-------|-------|
| 0     | 14140 | 14140 | 14140 | 14140 | 14140 |
| 45    | 11933 | 11342 | 9474  | 9154  | 9055  |
| 55    | 10399 | 8784  | 7983  | 8472  | 8761  |
| 65    | 8001  | 6361  | 7205  | 8166  | 8455  |
| 75    | 4727  | 4764  | 6562  | 7751  | 8305  |
| 85    | 1766  | 3629  | 6676  | 8806  | 9548  |

**COEFFICIENT OF UTILIZATION TABLE**

Effective Floor Cavity Reflectance = 20%

| Pcc ... | 80   |      |      |      | 70   |      |      |      | 50   |      |      | 30  |     |     | 10  |     |     | 0   |
|---------|------|------|------|------|------|------|------|------|------|------|------|-----|-----|-----|-----|-----|-----|-----|
| Pw ...  | 70   | 50   | 30   | 10   | 70   | 50   | 30   | 10   | 50   | 30   | 10   | 50  | 30  | 10  | 50  | 30  | 10  | 0   |
| RCR     |      |      |      |      |      |      |      |      |      |      |      |     |     |     |     |     |     |     |
| 0       | 1.10 | 1.10 | 1.10 | 1.10 | 1.07 | 1.07 | 1.07 | 1.07 | 1.01 | 1.01 | 1.01 | .96 | .96 | .96 | .91 | .91 | .91 | .89 |
| 1       | .99  | .95  | .90  | .86  | .96  | .92  | .88  | .85  | .87  | .84  | .81  | .83 | .80 | .78 | .79 | .77 | .75 | .73 |
| 2       | .90  | .82  | .76  | .70  | .87  | .80  | .74  | .69  | .76  | .71  | .67  | .73 | .68 | .65 | .69 | .66 | .63 | .61 |
| 3       | .83  | .73  | .65  | .59  | .80  | .71  | .64  | .58  | .67  | .61  | .56  | .64 | .59 | .55 | .61 | .57 | .53 | .51 |
| 4       | .76  | .64  | .56  | .50  | .73  | .63  | .55  | .49  | .60  | .54  | .48  | .57 | .52 | .47 | .55 | .50 | .46 | .44 |
| 5       | .70  | .58  | .49  | .43  | .68  | .56  | .49  | .43  | .54  | .47  | .42  | .52 | .46 | .41 | .50 | .45 | .40 | .38 |
| 6       | .65  | .52  | .44  | .38  | .63  | .51  | .43  | .38  | .49  | .42  | .37  | .47 | .41 | .36 | .45 | .40 | .36 | .34 |
| 7       | .60  | .47  | .39  | .34  | .58  | .47  | .39  | .33  | .45  | .38  | .33  | .43 | .37 | .32 | .41 | .36 | .32 | .30 |
| 8       | .56  | .43  | .36  | .30  | .54  | .43  | .35  | .30  | .41  | .34  | .30  | .40 | .34 | .29 | .38 | .33 | .29 | .27 |
| 9       | .52  | .40  | .32  | .27  | .51  | .39  | .32  | .27  | .38  | .31  | .27  | .37 | .31 | .26 | .35 | .30 | .26 | .24 |
| 10      | .49  | .37  | .30  | .25  | .48  | .36  | .29  | .25  | .35  | .29  | .24  | .34 | .28 | .24 | .33 | .28 | .24 | .22 |

Reported data calculated from manufacturer's data file, based on IESNA recommended methods.