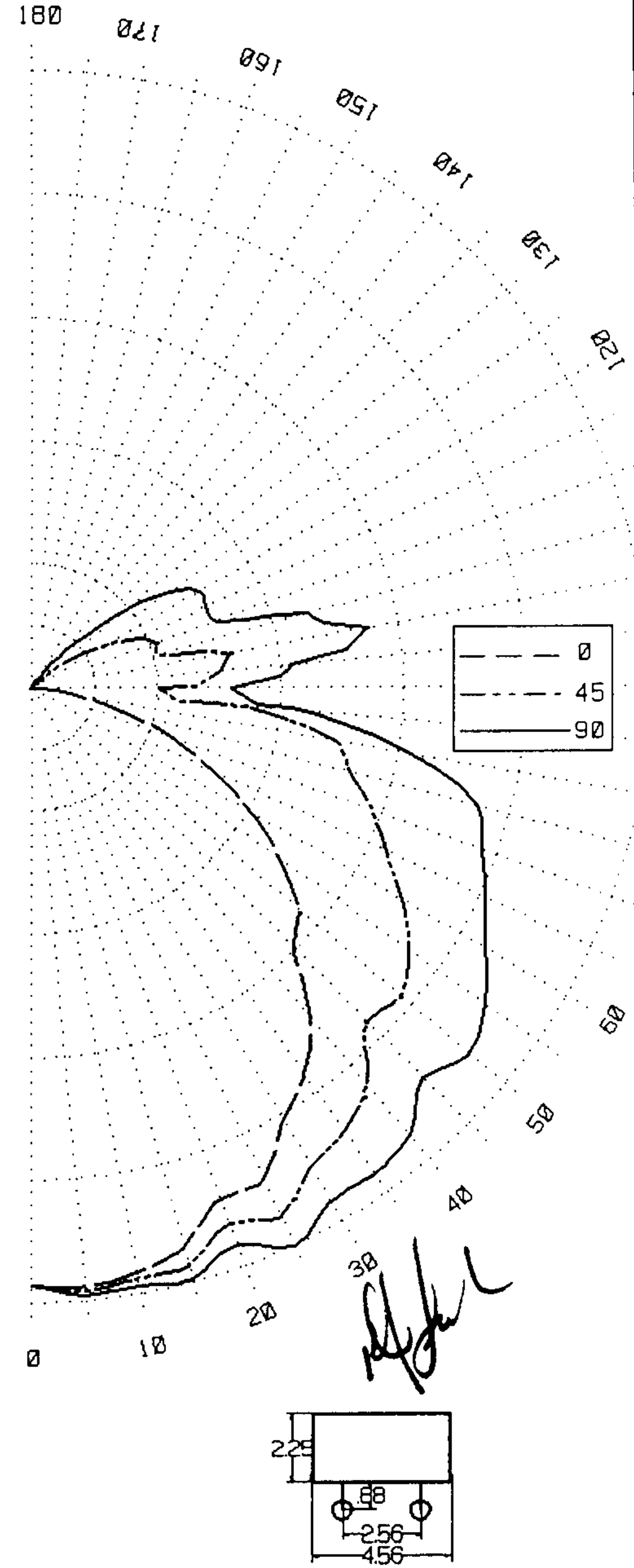


BALLABS CERTIFIED TEST REPORT NO.: 15466.0 DATE 06/08/10  
 PREPARED FOR: TECHBRITE - CINCINNATI, OH  
 DESCRIPTION: 4/54W T5HO LAMP 8'TECHSTRIP LUMINAIRE  
 WHITE FLAT BALLAST COVER REFL=82%  
 SYLVANIA BALLAST #QTP4x54T5HO/UNVPSNHTW WATTS=234  
 CATALOG NBR: T844T51BCHT0000 R894T51BCHT0000  
 LAMP TYPE : FP54/850/HO/ECO RATED LUMENS 4900. NBR. LAMPS:- 4

### CANDLEPOWER DISTRIBUTION

| VERT<br>ANG | HORIZONTAL ANGLE |       |       |       |       | ZONAL<br>LUMENS |
|-------------|------------------|-------|-------|-------|-------|-----------------|
|             | 0                | 22.5  | 45    | 67.5  | 90    |                 |
| 0           | 3747.            | 3747. | 3747. | 3747. | 3747. |                 |
| 5           | 3763.            | 3763. | 3789. | 3808. | 3815. | 361.5           |
| 10          | 3716.            | 3722. | 3755. | 3788. | 3801. |                 |
| 15          | 3627.            | 3672. | 3744. | 3809. | 3835. | 1059.9          |
| 20          | 3403.            | 3455. | 3573. | 3677. | 3709. |                 |
| 25          | 3401.            | 3486. | 3655. | 3798. | 3857. | 1685.7          |
| 30          | 3127.            | 3244. | 3473. | 3642. | 3714. |                 |
| 35          | 2958.            | 3121. | 3394. | 3622. | 3714. | 2115.9          |
| 40          | 2697.            | 2906. | 3251. | 3557. | 3668. |                 |
| 45          | 2300.            | 2541. | 2951. | 3329. | 3453. | 2264.8          |
| 50          | 2163.            | 2482. | 3003. | 3433. | 3570. |                 |
| 55          | 1870.            | 2254. | 2873. | 3303. | 3459. | 2488.4          |
| 60          | 1576.            | 2013. | 2665. | 3114. | 3277. |                 |
| 65          | 1238.            | 1778. | 2430. | 2938. | 3127. | 2314.9          |
| 70          | 931.             | 1537. | 2254. | 2808. | 2997. |                 |
| 75          | 619.             | 1244. | 2052. | 2671. | 2880. | 2040.8          |
| 80          | 332.             | 996.  | 1915. | 2313. | 2410. |                 |
| 85          | 123.             | 834.  | 1322. | 1635. | 1739. | 1288.0          |
| 90          | 13.              | 338.  | 781.  | 1114. | 1231. |                 |
| 95          | 0.               | 560.  | 1166. | 1537. | 1615. | 1110.3          |
| 100         | 0.               | 351.  | 1257. | 1961. | 2130. |                 |
| 105         | 0.               | 332.  | 788.  | 1531. | 1772. | 935.5           |
| 110         | 0.               | 208.  | 814.  | 1101. | 1205. |                 |
| 115         | 0.               | 84.   | 729.  | 1094. | 1185. | 620.3           |
| 120         | 0.               | 19.   | 553.  | 1068. | 1198. |                 |
| 125         | 0.               | 0.    | 358.  | 834.  | 1036. | 383.5           |
| 130         | 0.               | 0.    | 188.  | 586.  | 768.  |                 |
| 135         | 0.               | 0.    | 58.   | 345.  | 469.  | 123.4           |
| 140         | 0.               | 0.    | 32.   | 182.  | 273.  |                 |
| 145         | 0.               | 0.    | 0.    | 58.   | 78.   | 15.2            |
| 150         | 0.               | 0.    | 0.    | 45.   | 45.   |                 |
| 155         | 0.               | 0.    | 0.    | 39.   | 39.   | 6.8             |
| 160         | 0.               | 0.    | 0.    | 0.    | 0.    |                 |
| 165         | 0.               | 0.    | 0.    | 0.    | 0.    | .0              |
| 170         | 0.               | 0.    | 0.    | 0.    | 0.    |                 |
| 175         | 0.               | 0.    | 0.    | 0.    | 0.    | .0              |
| 180         | 0.               | 0.    | 0.    | 0.    | 0.    |                 |



### LUMEN SUMMARY

| ZONE  | LUMENS | %LAMP | %FIXT | ZONE   | LUMENS | %LAMP | %FIXT |
|-------|--------|-------|-------|--------|--------|-------|-------|
| 0- 30 | 3107.  | 15.9  | 16.5  | 90-120 | 2666.  | 13.6  | 14.2  |
| 0- 40 | 5223.  | 26.6  | 27.8  | 90-130 | 3050.  | 15.6  | 16.2  |
| 0- 60 | 9976.  | 50.9  | 53.0  | 90-150 | 3188.  | 16.3  | 16.9  |
| 0- 90 | 15620. | 79.7  | 83.0  | 90-180 | 3195.  | 16.3  | 17.0  |

TOTAL LUMINAIRE = 0-180 18815. 96.0 100.0

IES SPACING CRITERIA: END= 1.2 DIAGONAL = 1.4 CROSS= 1.5

SIGNIFICANCE OF THE TEST IS LIMITED TO THE DEGREE THAT THE TESTED SAMPLE IS REPRESENTATIVE. OTHER FACTORS AFFECT FIELD PERFORMANCE.

BALLABS CERTIFIED TEST REPORT NO.: 15466.0 DATE 06/08/10  
 PREPARED FOR: TECHBRITE - CINCINNATI, OH  
 DESCRIPTION: 4/54W T5HO LAMP 8'TECHSTRIP LUMINAIRE  
 WHITE FLAT BALLAST COVER REFL=82%  
 SYLVANIA BALLAST #QTP4x54T5HO/UNVPSNHTW WATTS=234  
 CATALOG NBR: T844T51BCHT0000 R894T51BCHT0000  
 LAMP TYPE : FP54/850/HO/ECO RATED LUMENS 4900. NBR. LAMPS:- 4  
 \*\*\*\*\*

LUMINANCES-CD/SQ-M  
 HORIZONTAL ANGLE

| VERT ANGLE | 0      | 45     | 90     |
|------------|--------|--------|--------|
| 45         | 11642. | 11690. | 13678. |
| 55         | 11669. | 12836. | 15454. |
| 65         | 10484. | 12897. | 16596. |
| 75         | 8560.  | 13933. | 19555. |
| 85         | 5051.  | 13003. | 17105. |

\*\*MAXIMUM BRIGHTNESSES NOT MEASURED\*\*

\*\*\*\*\*

ZONAL CAVITY COEFFICIENTS OF UTILIZATION

EFFECTIVE FLOOR CAVITY REFLECTANCE=.20

| CEILING | .80  |      |      |      | .70  |      |      |      | .50 |     |     |     | .30 |     |     |     | .10 |     |     |     | .00 |     |     |     |     |     |     |     |     |     |     |     |  |  |  |  |
|---------|------|------|------|------|------|------|------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--|--|--|--|
| WALL    | .70  | .50  | .30  | .10  | .70  | .50  | .30  | .10  | .50 | .30 | .10 | .50 | .30 | .10 | .50 | .30 | .10 | .50 | .30 | .10 | .50 | .30 | .10 | .50 | .30 | .10 | .50 | .30 | .10 | .50 | .30 | .10 |  |  |  |  |
| RCR     |      |      |      |      |      |      |      |      |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |  |  |  |  |
| 0       | 1.10 | 1.10 | 1.10 | 1.10 | 1.06 | 1.06 | 1.06 | 1.06 | .98 | .98 | .98 | .90 | .90 | .90 | .83 | .83 | .83 | .80 |     |     |     |     |     |     |     |     |     |     |     |     |     |     |  |  |  |  |
| 1       | .99  | .93  | .88  | .84  | .94  | .89  | .85  | .81  | .82 | .79 | .75 | .76 | .73 | .70 | .70 | .67 | .65 | .62 |     |     |     |     |     |     |     |     |     |     |     |     |     |     |  |  |  |  |
| 2       | .88  | .80  | .72  | .66  | .84  | .76  | .70  | .64  | .70 | .65 | .60 | .65 | .60 | .56 | .59 | .56 | .52 | .49 |     |     |     |     |     |     |     |     |     |     |     |     |     |     |  |  |  |  |
| 3       | .80  | .69  | .61  | .54  | .76  | .66  | .59  | .52  | .61 | .55 | .49 | .56 | .51 | .46 | .52 | .47 | .44 | .41 |     |     |     |     |     |     |     |     |     |     |     |     |     |     |  |  |  |  |
| 4       | .73  | .61  | .52  | .45  | .69  | .58  | .50  | .44  | .54 | .47 | .41 | .50 | .44 | .39 | .46 | .41 | .37 | .34 |     |     |     |     |     |     |     |     |     |     |     |     |     |     |  |  |  |  |
| 5       | .66  | .53  | .44  | .37  | .63  | .51  | .43  | .36  | .47 | .40 | .34 | .44 | .37 | .33 | .40 | .35 | .31 | .28 |     |     |     |     |     |     |     |     |     |     |     |     |     |     |  |  |  |  |
| 6       | .61  | .47  | .38  | .32  | .58  | .45  | .37  | .31  | .42 | .35 | .29 | .39 | .33 | .28 | .36 | .30 | .26 | .24 |     |     |     |     |     |     |     |     |     |     |     |     |     |     |  |  |  |  |
| 7       | .56  | .42  | .34  | .27  | .53  | .41  | .33  | .27  | .38 | .31 | .25 | .35 | .29 | .24 | .32 | .27 | .23 | .20 |     |     |     |     |     |     |     |     |     |     |     |     |     |     |  |  |  |  |
| 8       | .51  | .38  | .29  | .24  | .49  | .36  | .29  | .23  | .34 | .27 | .22 | .31 | .25 | .21 | .29 | .24 | .20 | .17 |     |     |     |     |     |     |     |     |     |     |     |     |     |     |  |  |  |  |
| 9       | .47  | .34  | .26  | .20  | .45  | .33  | .25  | .20  | .30 | .24 | .19 | .28 | .22 | .18 | .26 | .21 | .17 | .15 |     |     |     |     |     |     |     |     |     |     |     |     |     |     |  |  |  |  |
| 10      | .44  | .31  | .23  | .18  | .42  | .30  | .22  | .17  | .28 | .21 | .17 | .26 | .20 | .16 | .24 | .19 | .15 | .13 |     |     |     |     |     |     |     |     |     |     |     |     |     |     |  |  |  |  |

TESTED IN ACCORDANCE WITH CURRENT IES PROCEDURES