

REPORT NUMBER: ITL82325

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ISSUE DATE: 07/28/14

PREPARED FOR: RAB LIGHTING, INC.

CATALOG NUMBER: TRLED2X2-37YN/D10

LUMINAIRE: FABRICATED METAL HOUSING WITH WHITE PAINTED INTERIOR FINISH, FORMED WHITE PAINTED METAL DRIVER COVER, 4 WHITE CIRCUIT BOARDS EACH WITH 32 LEDS, CLEAR FLAT PRISMATIC PLASTIC LENS IN FABRICATED WHITE PAINTED METAL FRAME. LENS PRISMS OUT.

LAMPS: ONE HUNDRED TWENTY-EIGHT WHITE LIGHT EMITTING DIODES (LEDS), VERTICAL BASE-UP POSITION.

TOTAL INPUT WATTS = 37.5 AT 120.0 VOLTS

MOUNTING: RECESSED

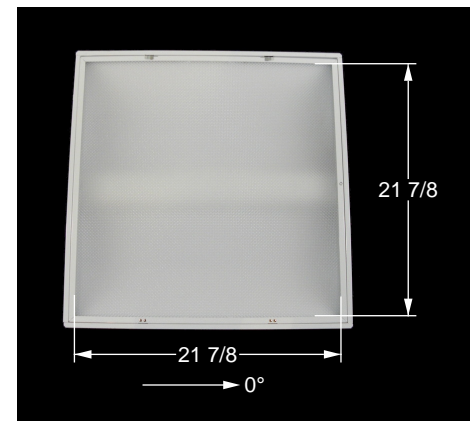
LED DRIVER: RAB LIGHTING RDD-037W-350G, DRIVER HAS MULTIPLE LEADS, ONLY LINE INPUT AND LED OUTPUT LEADS CONNECTED FOR THIS TEST.

NOTE: DATA SHOWN IS ABSOLUTE FOR THE SAMPLE PROVIDED AT RATED INPUT VOLTAGE (120VAC, 60Hz) TO THE DRIVER.

DRIVER INFORMATION PROVIDED BY CLIENT.

TEST PROCEDURE: IESNA LM-79-08

TEST DISTANCE = 20.0 FEET



#### CANDELA DISTRIBUTION

|    | 0.0  | 22.5 | 45.0 | 67.5 | 90.0 |     |
|----|------|------|------|------|------|-----|
| 0  | 1496 | 1496 | 1496 | 1496 | 1496 |     |
| 5  | 1486 | 1487 | 1488 | 1485 | 1484 | 141 |
| 15 | 1400 | 1402 | 1407 | 1410 | 1411 | 396 |
| 25 | 1233 | 1237 | 1247 | 1254 | 1259 | 572 |
| 35 | 1003 | 1008 | 1018 | 1024 | 1029 | 634 |
| 45 | 745  | 747  | 751  | 755  | 756  | 579 |
| 55 | 502  | 497  | 499  | 498  | 497  | 448 |
| 65 | 310  | 303  | 298  | 299  | 303  | 302 |
| 75 | 180  | 174  | 171  | 172  | 178  | 184 |
| 85 | 65   | 62   | 60   | 57   | 60   | 65  |
| 90 | 0    | 0    | 0    | 0    | 0    |     |

#### FLUX

#### ZONAL LUMEN SUMMARY

| ZONE   | LUMENS | %FIXT |
|--------|--------|-------|
| 0- 30  | 1109   | 33.4  |
| 0- 40  | 1744   | 52.5  |
| 0- 60  | 2770   | 83.4  |
| 0- 90  | 3322   | 100.0 |
| 90-180 | 0      | 0.0   |
| 0-180  | 3322   | 100.0 |

EFFICACY = 88.6 lm/W

CIE TYPE - DIRECT

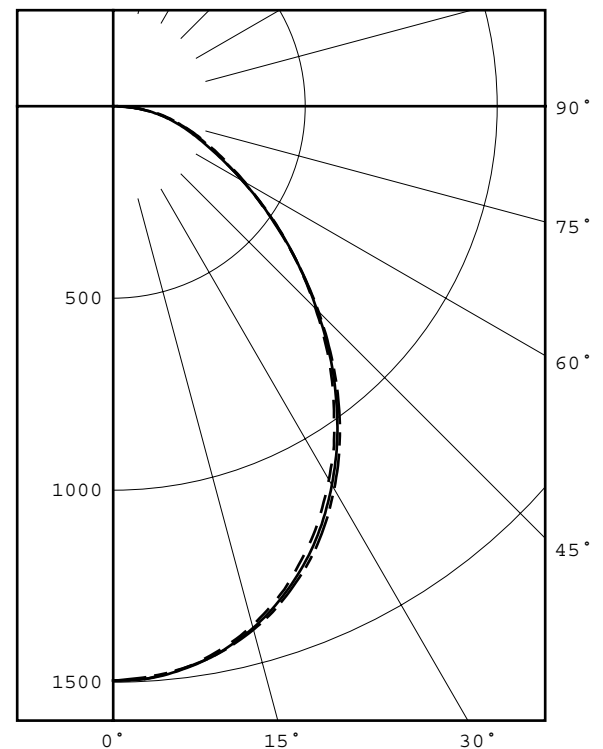
PLANE : 0-DEG 90-DEG

SPACING CRITERIA : 1.13 1.15

LUMINOUS LENGTH : 21.875 21.875

#### LUMINANCE DATA IN CANDELA/SQ M

| ANGLE IN DEG | AVERAGE 0-DEG | AVERAGE 45-DEG | AVERAGE 90-DEG |
|--------------|---------------|----------------|----------------|
| 45           | 3413.         | 3440.          | 3463.          |
| 55           | 2835.         | 2818.          | 2807.          |
| 65           | 2376.         | 2284.          | 2322.          |
| 75           | 2253.         | 2140.          | 2228.          |
| 85           | 2416.         | 2230.          | 2230.          |



#### LEGEND:

|        |       |
|--------|-------|
| 0-deg  | ----- |
| 45-deg | ===== |
| 90-deg | ----- |

Checked B. HYRE  
Approved R. BEATTIE  
Lighting Engineer



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CANDELA DISTRIBUTION  
LATERAL ANGLE

|      | 0.0  | 22.5 | 45.0 | 67.5 | 90.0 |
|------|------|------|------|------|------|
| 0.0  | 1496 | 1496 | 1496 | 1496 | 1496 |
| 2.5  | 1495 | 1496 | 1495 | 1492 | 1491 |
| 5.0  | 1486 | 1487 | 1488 | 1485 | 1484 |
| 7.5  | 1473 | 1474 | 1475 | 1474 | 1473 |
| 10.0 | 1453 | 1455 | 1458 | 1458 | 1458 |
| 12.5 | 1429 | 1431 | 1435 | 1436 | 1437 |
| 15.0 | 1400 | 1402 | 1407 | 1410 | 1411 |
| 17.5 | 1365 | 1368 | 1374 | 1378 | 1381 |
| 20.0 | 1326 | 1329 | 1336 | 1342 | 1344 |
| 22.5 | 1280 | 1285 | 1294 | 1301 | 1304 |
| 25.0 | 1233 | 1237 | 1247 | 1254 | 1259 |
| 27.5 | 1179 | 1185 | 1195 | 1203 | 1207 |
| 30.0 | 1123 | 1130 | 1139 | 1147 | 1151 |
| 32.5 | 1067 | 1070 | 1080 | 1087 | 1092 |
| 35.0 | 1003 | 1008 | 1018 | 1024 | 1029 |
| 37.5 | 941  | 944  | 953  | 959  | 963  |
| 40.0 | 877  | 879  | 887  | 891  | 895  |
| 42.5 | 811  | 813  | 819  | 822  | 825  |
| 45.0 | 745  | 747  | 751  | 755  | 756  |
| 47.5 | 683  | 682  | 685  | 688  | 687  |
| 50.0 | 620  | 618  | 621  | 623  | 621  |
| 52.5 | 560  | 557  | 559  | 557  | 557  |
| 55.0 | 502  | 497  | 499  | 498  | 497  |
| 57.5 | 445  | 442  | 443  | 441  | 441  |
| 60.0 | 396  | 391  | 390  | 388  | 390  |
| 62.5 | 350  | 344  | 341  | 341  | 343  |
| 65.0 | 310  | 303  | 298  | 299  | 303  |
| 67.5 | 273  | 267  | 261  | 262  | 268  |
| 70.0 | 240  | 234  | 228  | 230  | 236  |
| 72.5 | 210  | 204  | 199  | 201  | 207  |
| 75.0 | 180  | 174  | 171  | 172  | 178  |
| 77.5 | 152  | 146  | 144  | 144  | 148  |
| 80.0 | 125  | 118  | 117  | 116  | 119  |
| 82.5 | 95   | 90   | 89   | 86   | 90   |
| 85.0 | 65   | 62   | 60   | 57   | 60   |
| 87.5 | 31   | 31   | 28   | 27   | 26   |
| 90.0 | 0    | 0    | 0    | 0    | 0    |



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5-DEGREE  
ZONAL LUMEN SUMMARY

|        |     |
|--------|-----|
| 0- 5   | 36  |
| 5- 10  | 105 |
| 10- 15 | 170 |
| 15- 20 | 226 |
| 20- 25 | 271 |
| 25- 30 | 302 |
| 30- 35 | 317 |
| 35- 40 | 317 |
| 40- 45 | 303 |
| 45- 50 | 277 |
| 50- 55 | 243 |
| 55- 60 | 205 |
| 60- 65 | 167 |
| 65- 70 | 135 |
| 70- 75 | 106 |
| 75- 80 | 78  |
| 80- 85 | 49  |
| 85- 90 | 16  |

10-DEGREE  
ZONAL LUMEN SUMMARY

|       |      |
|-------|------|
| 0- 10 | 141  |
| 0- 20 | 537  |
| 0- 30 | 1109 |
| 0- 40 | 1744 |
| 0- 50 | 2323 |
| 0- 60 | 2770 |
| 0- 70 | 3073 |
| 0- 80 | 3257 |
| 0- 90 | 3322 |



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# COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

EFFECTIVE FLOOR CAVITY REFLECTANCE 0.20

| RC | 80  |     |     |     | 70  |     |     |     | 50  |     |     | 30  |     |     | 10  |     |     | 0   |
|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| RW | 70  | 50  | 30  | 10  | 70  | 50  | 30  | 10  | 50  | 30  | 10  | 50  | 30  | 10  | 50  | 30  | 10  | 0   |
| 0  | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 | 106 | 106 | 106 | 102 | 102 | 102 | 100 |
| 1  | 109 | 105 | 101 | 97  | 107 | 103 | 99  | 96  | 98  | 95  | 93  | 95  | 92  | 90  | 91  | 89  | 87  | 85  |
| 2  | 100 | 93  | 86  | 81  | 98  | 91  | 85  | 80  | 87  | 82  | 78  | 84  | 80  | 76  | 81  | 78  | 75  | 73  |
| 3  | 92  | 82  | 75  | 68  | 90  | 81  | 74  | 68  | 78  | 72  | 67  | 75  | 70  | 66  | 73  | 68  | 64  | 62  |
| 4  | 85  | 74  | 65  | 59  | 83  | 72  | 65  | 59  | 70  | 63  | 58  | 68  | 62  | 57  | 65  | 60  | 56  | 54  |
| 5  | 79  | 66  | 58  | 52  | 76  | 65  | 57  | 51  | 63  | 56  | 51  | 61  | 55  | 50  | 59  | 54  | 50  | 48  |
| 6  | 73  | 60  | 52  | 46  | 71  | 59  | 51  | 45  | 57  | 50  | 45  | 56  | 49  | 45  | 54  | 49  | 44  | 42  |
| 7  | 68  | 55  | 47  | 41  | 66  | 54  | 46  | 41  | 53  | 45  | 40  | 51  | 45  | 40  | 50  | 44  | 40  | 38  |
| 8  | 63  | 50  | 42  | 37  | 62  | 50  | 42  | 37  | 48  | 41  | 36  | 47  | 41  | 36  | 46  | 40  | 36  | 34  |
| 9  | 59  | 46  | 39  | 33  | 58  | 46  | 38  | 33  | 45  | 38  | 33  | 44  | 37  | 33  | 43  | 37  | 33  | 31  |
| 10 | 56  | 43  | 35  | 30  | 55  | 43  | 35  | 30  | 42  | 35  | 30  | 41  | 34  | 30  | 40  | 34  | 30  | 28  |

ALL CANDELA, LUMENS, LUMINANCE, AND VCP VALUES IN THIS REPORT ARE BASED ON ABSOLUTE PHOTOMETRY. THE COEFFICIENT OF UTILIZATION VALUES ARE BASED ON THE TOTAL ABSOLUTE LUMEN OUTPUT OF THIS TEST SAMPLE.



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