

REPORT NUMBER: PRORATED FROM RAB03430

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ISSUE DATE: 05/25/17

PREPARED FOR: RAB LIGHTING INC.

CATALOG NUMBER: RAIL400W/480/D10, RAILP400W/480/D10 (Standard Distribution) (ALSO APPLIES TO 347 RCL)

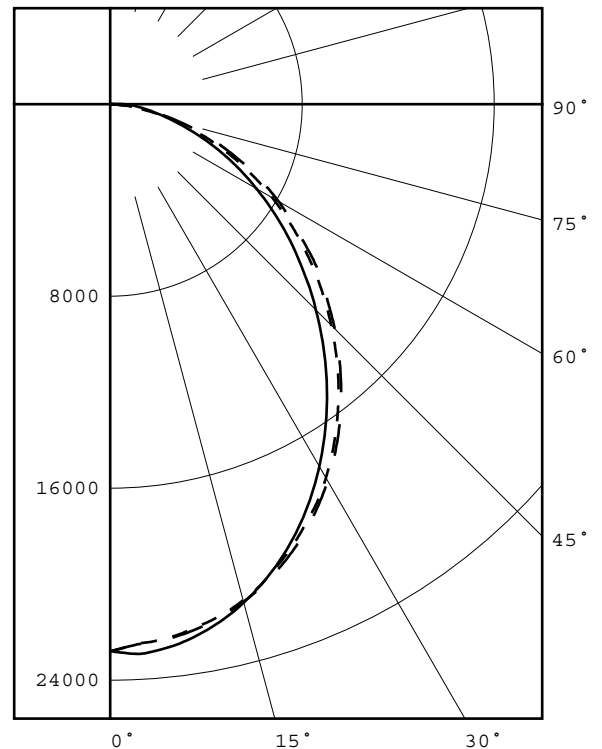
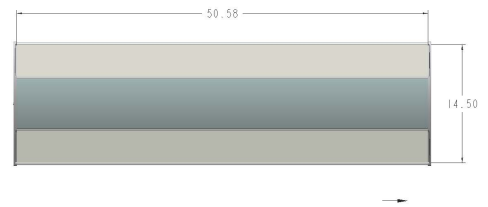
LUMINAIRE: EXTRUDED METAL HOUSING WITH HEAT SINK FINS, FOUR WHITE CIRCUIT BOARD WITH THREE HUNDRED LEDS ON EACH BOARD, METAL REFLECTOR WITH SPECULAR FINISH, FLAT TRANSLUCENT LENS WITH FROSTED SIDE IN.

LAMPS: TWELVE HUNDRED LIGHT EMITTING DIODES (LEDs).

(SEE PAGE 2 FOR MORE INFORMATION)

CANDELA DISTRIBUTION

| | 0.0 | 45.0 | 90.0 | 135.0 | 180.0 | FLUX |
|-----|-------|-------|-------|-------|-------|-------|
| 0 | 22793 | 22793 | 22793 | 22793 | 22793 | |
| 5 | 22439 | 22689 | 22838 | 22715 | 22474 | 2151 |
| 15 | 21399 | 21488 | 21502 | 21550 | 21465 | 6058 |
| 25 | 19283 | 19187 | 19012 | 19291 | 19460 | 8851 |
| 35 | 16432 | 16073 | 15717 | 16209 | 16608 | 10092 |
| 45 | 13024 | 12553 | 12118 | 12704 | 13228 | 9758 |
| 55 | 9512 | 9070 | 8678 | 9236 | 9732 | 8202 |
| 65 | 6120 | 5792 | 5507 | 5959 | 6412 | 5845 |
| 75 | 2965 | 2861 | 2793 | 2999 | 3216 | 3149 |
| 85 | 480 | 889 | 1139 | 958 | 628 | 1032 |
| 90 | 2 | 346 | 569 | 394 | 18 | |
| 95 | 4 | 40 | 158 | 58 | 5 | 117 |
| 105 | 7 | 7 | 7 | 8 | 8 | 8 |
| 115 | 8 | 8 | 7 | 10 | 11 | 9 |
| 125 | 11 | 10 | 8 | 11 | 12 | 9 |
| 135 | 14 | 13 | 13 | 14 | 15 | 11 |
| 145 | 18 | 18 | 17 | 19 | 20 | 11 |
| 155 | 22 | 22 | 22 | 23 | 24 | 11 |
| 165 | 27 | 27 | 28 | 28 | 28 | 8 |
| 175 | 29 | 30 | 34 | 31 | 31 | 3 |
| 180 | 32 | 32 | 32 | 32 | 32 | |



LEGEND:
 0-deg: - - - - -
 90-deg: _____
 180-deg: — — — — —

ZONAL LUMEN SUMMARY

| ZONE | LUMENS | %FIXT |
|--------|--------|-------|
| 0- 30 | 17061 | 30.8 |
| 0- 40 | 27153 | 49.1 |
| 0- 60 | 45114 | 81.5 |
| 0- 90 | 55140 | 99.7 |
| 90-120 | 134 | 0.2 |
| 90-130 | 143 | 0.3 |
| 90-150 | 165 | 0.3 |
| 90-180 | 186 | 0.3 |
| 0-180 | 55326 | 100.0 |

TOTAL INPUT WATTS = 399

EFFICACY = 138.7 Lm/W

CIE TYPE - DIRECT

PLANE : 0-DEG 90-DEG 180-DEG

SPACING CRITERIA : 1.2 1.1 1.2

Checked X.CAO
 Approved D.WANG-MUNSON

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ADDITIONAL INFORMATION

NOTE: THIS REPORT WAS PRORATED FROM RAB03430 WHICH WAS
RAIL400NW/480/D10. ACTUAL PERFORMANCE MAY VARY.
TOTAL INPUT WATTS = 399 W AT 347.0 VAC.
LED DRIVER: 4X RDD-096-A3600-240C
TEST PROCEDURE: IESNA LM-79-08
LM-80 DATA AVAILABLE FROM MANUFACTURER FOR SOLID STATE SOURCE

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PLANE : 0-DEG 90-DEG
BEAM ANGLE (50%) : 99.7 X 93.8 DEGREES
FIELD ANGLE (10%): 155.5 X 154.6 DEGREES

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PLANE : 0-DEG 90-DEG
LUMINOUS LENGTH : 50.580 14.500

LUMINANCE DATA IN CANDELA/SQ METER

| ANGLE IN DEG | AVERAGE 0-DEG | AVERAGE 90-DEG | AVERAGE 180-DEG |
|-----------------|------------------|-------------------|--------------------|
| 45 | 38913. | 36205. | 39521. |
| 55 | 35036. | 31963. | 35844. |
| 65 | 30593. | 27530. | 32055. |
| 75 | 24203. | 22801. | 26253. |
| 85 | 11640. | 27598. | 15212. |

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[illegible]

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ZONAL LUMEN SUMMARY

| | |
|---------|-------|
| 0- 5 | 544. |
| 5- 10 | 1607. |
| 10- 15 | 2596. |
| 15- 20 | 3463. |
| 20- 25 | 4167. |
| 25- 30 | 4684. |
| 30- 35 | 4994. |
| 35- 40 | 5098. |
| 40- 45 | 5008. |
| 45- 50 | 4750. |
| 50- 55 | 4355. |
| 55- 60 | 3848. |
| 60- 65 | 3254. |
| 65- 70 | 2590. |
| 70- 75 | 1901. |
| 75- 80 | 1248. |
| 80- 85 | 706. |
| 85- 90 | 326. |
| 90- 95 | 102. |
| 95-100 | 15. |
| 100-105 | 4. |
| 105-110 | 4. |
| 110-115 | 4. |
| 115-120 | 4. |
| 120-125 | 4. |
| 125-130 | 5. |
| 130-135 | 5. |
| 135-140 | 5. |
| 140-145 | 6. |
| 145-150 | 6. |
| 150-155 | 5. |
| 155-160 | 5. |
| 160-165 | 4. |
| 165-170 | 3. |
| 170-175 | 2. |
| 175-180 | 1. |

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5-DEGREE ZONAL LUMEN SUMMARY

| | |
|---------|------|
| 0- 5 | 544 |
| 5- 10 | 1607 |
| 10- 15 | 2596 |
| 15- 20 | 3463 |
| 20- 25 | 4167 |
| 25- 30 | 4684 |
| 30- 35 | 4994 |
| 35- 40 | 5098 |
| 40- 45 | 5008 |
| 45- 50 | 4750 |
| 50- 55 | 4355 |
| 55- 60 | 3848 |
| 60- 65 | 3254 |
| 65- 70 | 2590 |
| 70- 75 | 1901 |
| 75- 80 | 1248 |
| 80- 85 | 706 |
| 85- 90 | 326 |
| 90- 95 | 102 |
| 95-100 | 15 |
| 100-105 | 4 |
| 105-110 | 4 |
| 110-115 | 4 |
| 115-120 | 4 |
| 120-125 | 4 |
| 125-130 | 5 |
| 130-135 | 5 |
| 135-140 | 5 |
| 140-145 | 6 |
| 145-150 | 6 |
| 150-155 | 5 |
| 155-160 | 5 |
| 160-165 | 4 |
| 165-170 | 3 |
| 170-175 | 2 |
| 175-180 | 1 |

10-DEGREE ZONAL LUMEN SUMMARY

| | |
|-------|-------|
| 0- 10 | 2151 |
| 0- 20 | 8210 |
| 0- 30 | 17061 |
| 0- 40 | 27153 |
| 0- 50 | 36911 |
| 0- 60 | 45114 |
| 0- 70 | 50959 |
| 0- 80 | 54108 |
| 0- 90 | 55140 |
| 0-100 | 55257 |
| 0-110 | 55265 |
| 0-120 | 55274 |
| 0-130 | 55283 |
| 0-140 | 55294 |
| 0-150 | 55305 |
| 0-160 | 55315 |
| 0-170 | 55323 |
| 0-180 | 55326 |

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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 | 100 | 97 | 106 | 102 | 99 | 95 | 98 | 95 | 92 | 94 | 92 | 89 | 90 | 88 | 87 | 84 |
| 2 | 100 | 92 | 85 | 80 | 97 | 90 | 84 | 79 | 86 | 81 | 77 | 83 | 79 | 75 | 80 | 76 | 73 | 71 |
| 3 | 91 | 81 | 73 | 67 | 89 | 80 | 72 | 66 | 77 | 70 | 65 | 74 | 68 | 64 | 71 | 67 | 63 | 61 |
| 4 | 84 | 72 | 64 | 57 | 82 | 71 | 63 | 57 | 68 | 62 | 56 | 66 | 60 | 55 | 64 | 59 | 55 | 52 |
| 5 | 77 | 65 | 56 | 50 | 75 | 64 | 56 | 49 | 62 | 54 | 49 | 60 | 53 | 48 | 58 | 52 | 48 | 46 |
| 6 | 72 | 59 | 50 | 44 | 70 | 58 | 49 | 44 | 56 | 49 | 43 | 54 | 48 | 43 | 53 | 47 | 42 | 40 |
| 7 | 67 | 53 | 45 | 39 | 65 | 53 | 44 | 39 | 51 | 44 | 38 | 50 | 43 | 38 | 48 | 42 | 38 | 36 |
| 8 | 62 | 49 | 41 | 35 | 60 | 48 | 40 | 35 | 47 | 40 | 35 | 46 | 39 | 34 | 44 | 38 | 34 | 32 |
| 9 | 58 | 45 | 37 | 32 | 57 | 44 | 37 | 31 | 43 | 36 | 31 | 42 | 36 | 31 | 41 | 35 | 31 | 29 |
| 10 | 55 | 42 | 34 | 29 | 53 | 41 | 34 | 29 | 40 | 33 | 28 | 39 | 33 | 28 | 38 | 32 | 28 | 26 |

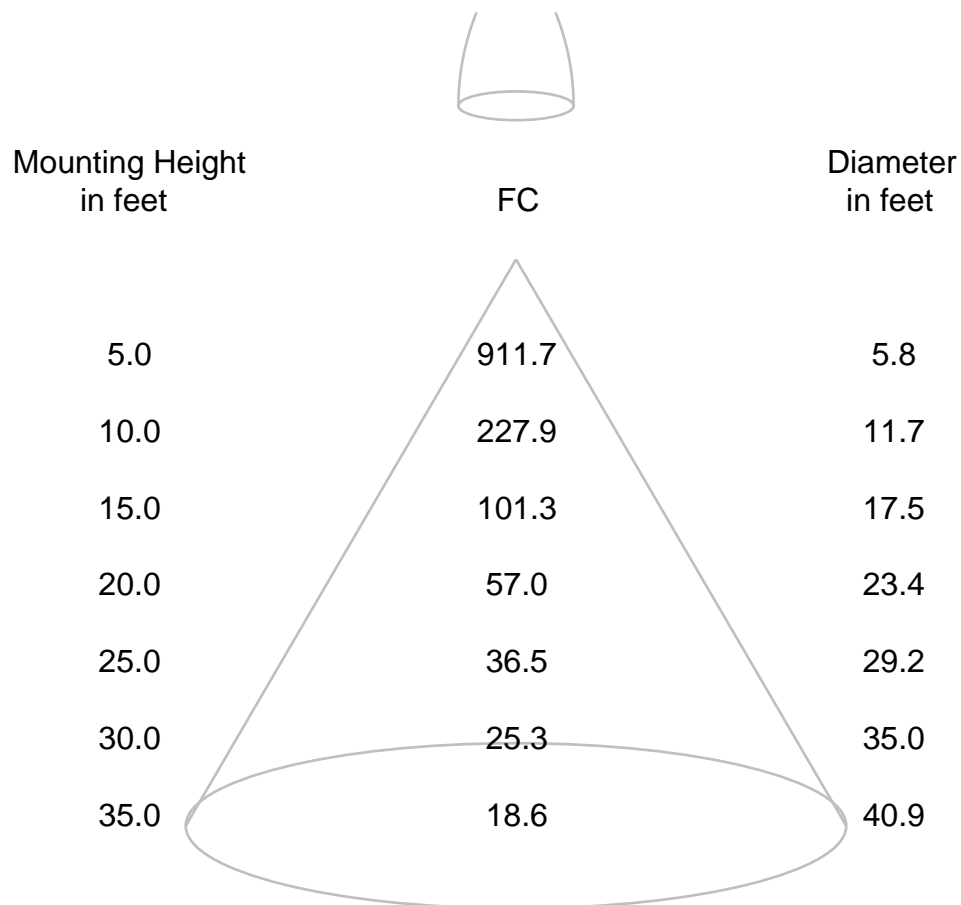
ALL CANDELA, LUMENS, LUMINANCE, AND VCP VALUES IN THIS REPORT ARE BASED ON ABSOLUTE PHOTOMETRY. THE COEFFICIENT OF UTILIZATION VALUES ARE BASED ON THE TOTAL ABSOLUTE LUMEN OUTPUT OF THIS LUMINAIRE SAMPLE.

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CONE OF LIGHT DIAGRAM

(diameter shown is where fc value is half the fc at nadir)



Note: The candela values used to generate this diagram were obtained by averaging the photometric data into a single plane.