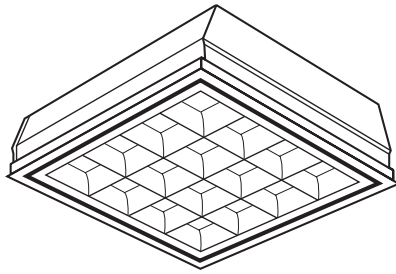


**4" Deep Louver**



**FEATURES**

- Modular 3' x 3' design provides a bold sculptured appearance to match the ceiling system
- Meets IES standard RP-1 glare control recommendations on most models
- Ideal for today's computer intensive electronic offices
- Wide light distribution provides uniform illumination
- 4" deep low iridescent anodized aluminum louver
- UL listed 1598
- Surface mount available
- Mechanical light trap prevents light leaks
- Black reveal with full air handling capabilities
- Damp label standard
- NEC/CEC-compliant ballast disconnect standard

**PROJECT INFORMATION**

Project Name \_\_\_\_\_

Type \_\_\_\_\_

Catalog No. \_\_\_\_\_

Date \_\_\_\_\_

**CONSTRUCTION**

Luminaire housing and end caps are die formed code gauge cold rolled steel. Anodized aluminum louver is secured in open or closed position by die formed steel hinges. Louver hinges from either side. A mechanical light trap prevents light leaks. Latches are finger-tip actuated, positive feed type, fabricated of spring steel, and completely concealed in the black reveal.

plate is furnished with each luminaire. A plastic dust cover which eliminates construction dust and protects the lamps is provided as standard.

**BALLASTS**

Energy efficient, thermally protected, automatic resetting, Class P, high power factor, sound rated A, magnetic or electronic ballasts. CEE NEMA Premium compliant.

**FINISH**

Painted parts are treated with a five stage phosphate bonding process and finished with a high temperature baked white enamel. For post painted housing, suffix catalog number with PAF. Regressed slots are flat black. Choice of low iridescent silver louver finishes.

**ELECTRICAL**

Standard class "P", thermally protected, autoresetting HPF ballast, sound rated A. CEE NEMA Premium compliant. All ballast leads extend a minimum of 6" through access location. NEC/CEC-compliant ballast disconnect is standard.

**AIR HANDLING**

All supply/return and air extract functions are shown on the specification sheet and are available as a specified option. Specify air handling requirement by including function number as part of complete catalog number. Directional control vanes and/or extract dampers must be specified. Air extract slots are located out of sight in end caps. See air removal data on specification sheet.

**CEILING COMPATIBILITY**

Luminaire is available to fit most standard ceiling types as shown in specification sheet. For information on compatibility with specific ceilings, contact your Columbia representative. luminaires for concealed suspension ceilings are furnished with necessary T-bar clips and/or wing hangers.

**INSTALLATION**

For fast wiring connections without the necessity of opening fixture or wireway, a flex connector adapter

**SURFACE OR PENDANT MOUNT**

Attractive surface mount units available to match performance and aesthetics of recessed models.

**ORDERING INFORMATION**

**EXAMPLE 4533-425G-LD44-S-4EU**

|                                    |                     |   |   |  |   |   |
|------------------------------------|---------------------|---|---|--|---|---|
| <b>45</b>                          | <b>33</b> -         | <b>25</b>   | -   | -  | -   | -   |
| <b>MODEL</b>                       | <b>NO. OF LAMPS</b> | <b>CEILING TYPE</b>   | <b>NO. CELLS CROSSWISE</b>  | <b>NO. CELLS LENGTHWISE</b>  | <b>VOLTAGE</b>                                | <b>OPTIONS</b>  |
| 45 Recessed 4" Deep Cell Parabolic | 4 Four<br>6 Six     | G Grid<br>F Overlap Flange<br>M Modular Fit-in Trim<br>SG Slot Grid<br>SM Surface Mount (Static only)                           | 4 Four<br>6 Six   | 4 Four<br>6 Six  | U 120V-277V<br>347 347V                       | GLR Fast Blow Fuse<br>GMF Slow Blow Fuse<br>EL Emergency Battery Pack<br>C388 3-Wire Flex<br>C488 4-Wire Flex<br>MS9 Master/Satellite w/9' Harness<br>PAF Paint After Fabrication<br>NYC NYC Compliant<br>NYCU NYC Compliant, Union Label |
| <b>SIZE</b>                        | <b>LAMP TYPE</b>    | <b>LOUVER FINISH</b>  | <b>AIR FUNCTIONS</b>  | <b>BALLAST</b>   |   |   |
| 33 3' x 3'                         | 25 3', T8: 25 Watt  | LD Low Iridescent Semi-Specular (Std.)<br>MA Matte Anodized Low Iridescent Semi-Specular Aluminum<br>LS Low Iridescent Specular | S Static<br>A Air Handling<br>AV Air Handling w/Supply Vanes<br>C Combination Supply/Extract<br>CV Combination Supply Vanes/Extract<br>CD Combination Supply Extract Dampers<br>CVD Combination Supply Vanes Extract Dampers<br>H Heat Extract<br>HD Heat Extract w/Dampers | E Electronic T8, Instant Start<br>3E 3-Lamp Electronic T8, Instant Start<br>4E 4-Lamp Electronic T8, Instant Start<br>24E (1) 2-Lamp and (1) 4-Lamp Electronic T8, Instant Start | For a specific ballast vendor show as option. |   |

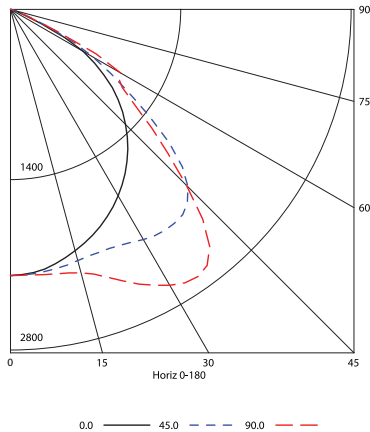
### PHOTOMETRIC DATA

Test 11283 Test Date 6/11/03

#### LUMINAIRE DATA

|                          |  |
|--------------------------|--|
| Luminaire                | 4533-430G-LD44-E<br>45 Parabolic<br>3' x 3' 4-Lamp with 4 x 4 Cell<br>Semi-Specular Louver<br>(2) R-2SP30-TP |
| Ballast                  |  |
| Ballast Factor           | 0.95   |
| Lamp                     | F30T12   |
| Lumens per Lamp          | 2350   |
| Watts                    | 145  |
| Shielding Angle          | N/A  |
| Spacing Criterion        | 0° = 1.22 90° = 1.72   |
| Luminous Opening in Feet | Length: 2.74<br>Width: 2.74<br>Height: 0.00  |

#### INDOOR CANDELA PLOT



#### ENERGY DATA

|   |  |
|---|--|
| Total Luminaire Efficiency                              | 64.8%  |
| Luminaire Efficacy Rating (LER)                         | 40   |
| IESNA RP-1-1993 Compliance                              | Noncompliant                                 |
| Comparative Yearly Lighting Energy Cost per 1000 Lumens | \$6.00 based on 3000 hrs. and \$0.08 per KWH |

#### AVG. LUMINANCE (Candela/Sq. M.)

|    | 0.0  | 22.5 | 45.0 | 67.5 | 90.0 |
|----|------|------|------|------|------|
| 0  | 3136 | 3136 | 3136 | 3136 | 3136 |
| 30 | 2927 | 3096 | 3616 | 4109 | 4333 |
| 40 | 2806 | 3242 | 4121 | 4587 | 4765 |
| 45 | 2711 | 3354 | 4181 | 4167 | 4142 |
| 50 | 2576 | 3419 | 3792 | 3337 | 3377 |
| 55 | 2340 | 3280 | 2945 | 2732 | 2805 |
| 60 | 1973 | 2538 | 2262 | 2498 | 3008 |
| 65 | 960  | 1065 | 1238 | 1384 | 1333 |
| 70 | 277  | 331  | 344  | 356  | 327  |
| 75 | 155  | 177  | 188  | 188  | 177  |
| 80 | 99   | 116  | 124  | 124  | 107  |
| 85 | 82   | 82   | 82   | 82   | 82   |

#### ZONAL LUMEN SUMMARY

| Zone  | Lumens | Lamp | Fixt. |
|-------|--------|------|-------|
| 0-30  | 1819   | 19.3 | 29.9  |
| 0-40  | 3178   | 33.8 | 52.2  |
| 0-60  | 5644   | 60.0 | 92.7  |
| 0-90  | 6087   | 64.8 | 100.0 |
| 0-180 | 6087   | 64.8 | 100.0 |

#### COEFFICIENTS OF UTILIZATION (%)

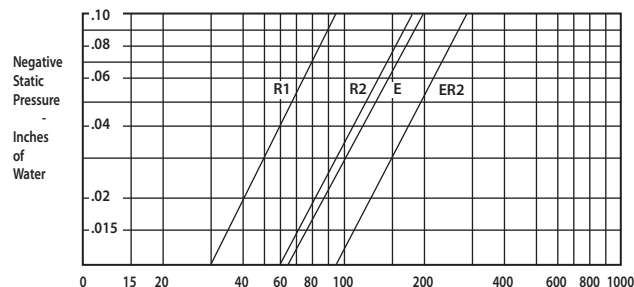
| RC | RW |    |    |    |    |    |    |    |    |    |    |    |
|----|----|----|----|----|----|----|----|----|----|----|----|----|
|    | 70 | 50 | 30 | 10 | 70 | 50 | 30 | 10 | 50 | 30 | 10 | 0  |
| 1  | 72 | 69 | 67 | 65 | 70 | 68 | 66 | 64 | 65 | 64 | 62 | 57 |
| 2  | 66 | 62 | 58 | 55 | 65 | 61 | 57 | 54 | 58 | 55 | 53 | 49 |
| 3  | 61 | 55 | 50 | 47 | 59 | 54 | 50 | 46 | 52 | 48 | 45 | 43 |
| 4  | 56 | 49 | 44 | 40 | 55 | 48 | 43 | 40 | 47 | 42 | 39 | 37 |
| 5  | 52 | 44 | 39 | 35 | 50 | 43 | 38 | 34 | 42 | 37 | 34 | 32 |
| 6  | 48 | 40 | 34 | 30 | 46 | 39 | 34 | 30 | 38 | 33 | 30 | 28 |
| 7  | 44 | 36 | 30 | 27 | 43 | 35 | 30 | 27 | 34 | 30 | 26 | 25 |
| 8  | 41 | 33 | 27 | 24 | 40 | 32 | 27 | 24 | 31 | 27 | 24 | 22 |
| 9  | 38 | 30 | 25 | 21 | 37 | 30 | 25 | 21 | 29 | 24 | 21 | 20 |
| 10 | 36 | 27 | 23 | 19 | 35 | 27 | 22 | 19 | 27 | 22 | 19 | 18 |

RCR = Room Cavity Ratio

RC = Effective Ceiling Cavity Reflectance RW = Wall Reflectance

#### EXTRACT AIR DATA

Report AL-562-1.6



R1 - Air Return thru One Side Passage

R2 - Air Return thru Two Side Passages

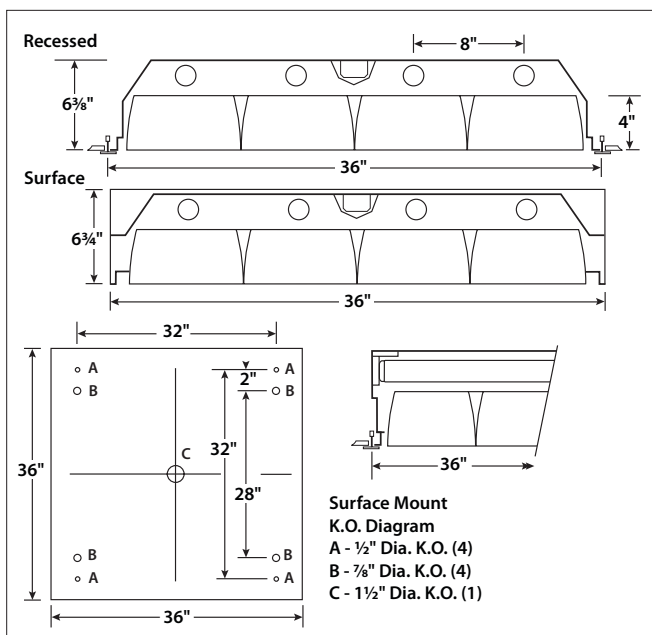
E - Heat Extract thru Lamp Compartment

ER2 - Heat Extract thru Lamp Compartment

4 or 8 Lamps

3 or 6 Lamps

#### DIMENSIONAL DATA



**NOTE:** All dimensions are in inches; dimensions and specifications are subject to change without notice. Please consult factory or check sample for verification.

#### CEILING COMPATIBILITY

