

FEATURES

- Extremely efficient fluorescent luminaire replaces HID in retail and industrial applications
 - 9¾" narrow uni-body housing
 - Energy savings up to 51%
 - Excellent lumen maintenance (94-95%, versus ~65% for typical metal halide)
 - Higher maintained lumens per watt (up to 83, versus 40 for typical metal halide high bays)
 - Optional white cross baffle softly diffuses light
 - Instant restrike
 - Consistent color
 - Superior color rendering (82-84 CRI, versus 65-70 for typical metal halide)
- Excellent vertical footcandles
- Optional 15% uplight
- Rounded edges and corners for safe handling and installation

PROJECT INFORMATION

Project Name _____

Type _____

Catalog No. _____

Date _____

CONSTRUCTION

Code gauge steel construction. Multi-formed Housing for rigidity.

FINISH

Painted parts are treated with a five stage phosphate bonding process and finished with a high reflectance baked white enamel after fabrication.

OPTIONAL BAFFLE

White steel cross baffle retained by spring steel latches for tool-free removal. Hinges from one side during maintenance.

MOUNTING

Features the fast and flexible GLH adjustable cable system for simplified mounting to wood, concrete or steel decks, or to beams, purlins, or metal strut.

BALLASTS

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

CERTIFICATION

All luminaires are built to UL 1598 standards and bear appropriate UL and cUL or CSA labels. Damp location labeling is standard. Emergency-equipped fixtures labeled UL 924.

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.

ORDERING INFORMATION

EXAMPLE LHR4-354-M4RST-3EPU-F5841

LHR									
MODEL	NO. OF LAMPS IN CROSS SECTION	REFLECTOR	BALLAST	VOLTAGE	OPTIONS	SIZE	LAMP TYPE	UPLIGHT	
LHR Narrow Fluorescent High Bay	2 Two 3 Three	M4R MIRO®-4 Specular, 95% Reflectance GW Gloss White Power Coat LS Specular Anodized Aluminum	EP (1 or 2) 2-Lamp Electronic T5, Programmed Start 3EP (1 or 2) 3-Lamp Electronic T5HO, Programmed Start (N/A 347V or 480V) 24EP (1) 2-Lamp & (1) 4-Lamp Electronic T5HO, Programmed Start (N/A 347V or 480V) E 1 or 2-Lamp Electronic T8, Instant Start 3E (1 or 2) 3-Lamp Electronic T8, Instant Start 3EHL (1 or 2) 3-Lamp Electronic T8 High Light Output, Instant Start 24E (1) 2-Lamp and (1) 4-Lamp Electronic T8, Instant Start 4E 4-Lamp Electronic T8, Instant Start 4EP 4-Lamp Electronic T5, Programmed Start (N/A 347V or 480V)	U 120V-277V 347 347V 480 480V	F0841 32W T8 Lamp Installed, 82 CRI, 4100K F5841 T5 or T5HO Lamp Installed, 82 CRI, 4100K EL Emergency Battery Pack GLR Fast Blow Fuse F3C5 3-conductor 5' Feed Cord Wired to Fixture F3C10 3-conductor 10' Feed Cord Wired to Fixture F3C15 3-conductor 15' Feed Cord Wired to Fixture FSCA Flush Steel Door with Clear Acrylic Lens FSCP Flush Steel Door with Clear Polycarbonate Lens WCB White Cross Baffle NYC NYC Compliant (2-Lamp only) NYCU NYC Compliant, Union Label (2-Lamp only)	4 48" x 9¾" 8 96" x 9¾"	28 4', T5: 28 Watt 32 4', T8: 32, 30, 28 or 25 Watt 54 4', T5HO: 54 or 51 Watt	ST Solid Top U 15% Uplight	
ACCESSORIES (FIELD INSTALLED)									
GLH5 5' Adjustable Cable Kit									
GLH10 10' Adjustable Cable Kit									
GLH15 15' Adjustable Cable Kit									
LHRNWG* Wire Guard for Narrow Body LHR									
OS1K Occupancy Sensor Kit, 120/277/347V, one relay**									
OS2K Occupancy Sensor Kit, 120/277/347V, two relay**									

* N/A when used with WCB option, or door and shielding options.
** Use programmed start ballast. Not recommended for use with an instant start. For more occupancy/daylight harvesting sensor accessories contact your Columbia Lighting representative.

For a specific ballast vendor, show as option.

Protected by US Patents 7,213,938; 7,121,689.
Specifications subject to change without notice.



PHOTOMETRIC DATA

Test 13520 Test Date 12/11/03

LUMINAIRE DATA

Luminaire	LHR4-332-GWU-WCB 10 x 48 3-Lamp with White Cross Baffle and Uplight Slots
Ballast	REL-3P32-SC-HL
Ballast Factor	1.19
Lamp	F32T8
Lumens per Lamp	2900
Watts	110
Mounting	Pendant
Shielding Angle	0° = 27 90° = 7
Spacing Criterion	0° = 1.14 90° = 1.33
Luminous Opening in Feet	Length: 3.96 Width: 0.72 Height: 00.00

ZONAL LUMEN SUMMARY

Zone	Lumens	% Lamp	% Fixt.
0-30	1881	21.6	24.3
0-40	3059	35.2	39.5
0-60	5334	61.3	68.9
0-90	6641	76.3	85.8
0-180	7742	89.0	100.0

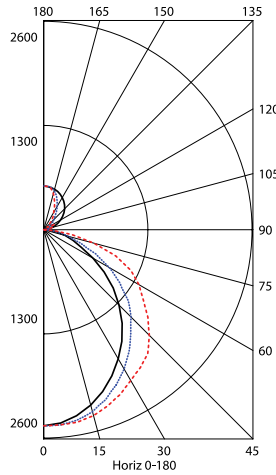
ENERGY DATA

Total Luminaire Efficiency	89%
Luminaire Efficacy Rating (LER)	84
ANSI/IESNA RP-1-1993 Compliance	Noncompliant
Comparative Yearly Lighting Energy Cost per 1000 Lumens	\$2.86 based on 3000 hrs. and \$0.08 per KWH

COEFFICIENTS OF UTILIZATION (%)

RCR	80				70				50				0
	RW	70	50	30	10	70	50	30	10	50	30	10	0
1	94	90	86	83	90	87	84	81	81	78	76	64	
2	86	79	73	68	82	76	71	66	71	66	63	54	
3	78	69	62	57	75	67	60	55	62	57	53	45	
4	72	61	54	48	69	59	52	47	55	50	45	39	
5	66	55	47	41	63	53	46	40	50	44	39	34	
6	61	49	42	36	58	48	41	35	45	39	34	29	
7	56	45	37	32	54	43	36	31	41	35	30	26	
8	52	41	33	28	50	40	33	28	37	31	27	23	
9	49	37	30	25	47	36	30	25	34	28	24	21	
10	46	34	27	23	44	33	27	23	32	26	22	19	

INDOOR CANDELA PLOT



AVG. LUMINANCE (Candela/Sq. M.)

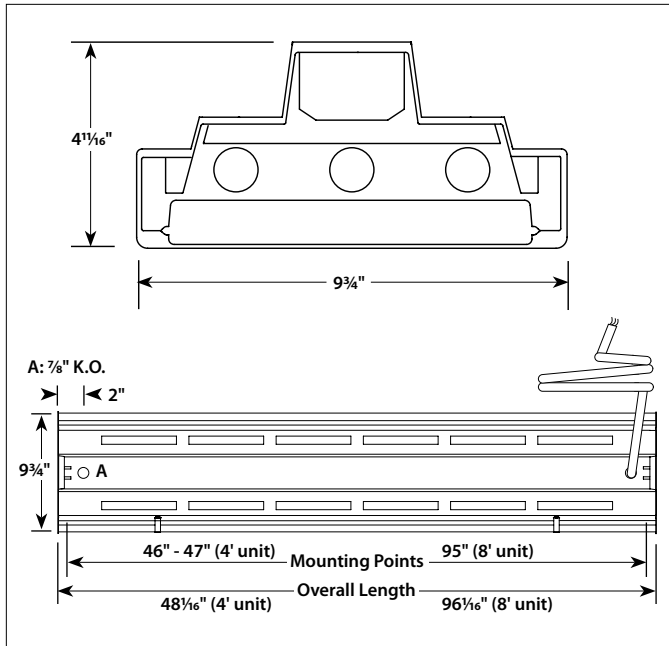
Average Luminance Angle	0.0	22.5	45.0	67.5	90.0
0	9234	9234	9234	9234	9234
30	8108	8357	8745	9189	9468
40	7506	7772	8324	9373	9950
45	7096	7427	8233	9338	9947
50	6648	7018	8087	9174	9967
55	6055	6463	7642	9004	9978
60	5361	5837	7120	8917	10344
65	4592	5056	6459	8933	10720
70	4316	4470	5464	8455	10563
75	4070	4172	4580	7074	9408
80	3783	3783	4131	5457	7870
85	3509	3509	3639	4115	5501

RCR = Room Cavity Ratio

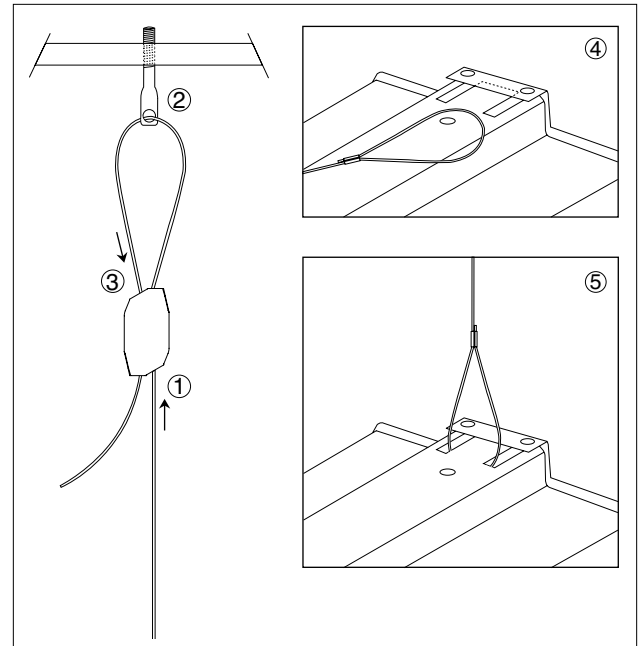
RC = Effective Ceiling Cavity Reflectance RW = Wall Reflectance

0.0 ——— 45.0 ——— 90.0 ——— 100.0

CROSS SECTION



GLH ADJUSTABLE CABLE KIT



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

- 1) Pass free end through grip fastener.
- 2) Feed free end around beam or through lag screw or eye bolt.
- 3) Return free end through grip fastener and adjust desired length.
- 4) Slip loop over retention tongue
- 5) Loop is securely retained.