

**FEATURES**

- Extremely efficient fluorescent luminaire replaces HID in retail and industrial applications
  - 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 bay)
  - Instant restrike
  - Consistent color
  - Superior color rendering (82-84 CRI, versus 65-70 for metal halide)
  - Wide choice of lamp color
- Highly specular contoured reflectors drive light down to provide excellent vertical footcandles
- Battery pack option (-EL) provides instant-on emergency illumination (not available for wet location)
- Damp label standard, wet location label option.
- Fully sealed housing for use in Class I Cleanroom applications
- Anodized extruded aluminum door frame
- One-piece, 18 gauge stainless or cold-rolled steel doors available

**PROJECT INFORMATION**

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

Type \_\_\_\_\_

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

Date \_\_\_\_\_

**CONSTRUCTION**

Riveted code gauge steel construction.

**SHIELDING**

Standard lens is clear, smooth, 100% virgin acrylic. For other available lenses consult lens option sheet or contact your Columbia representative. Standard flush door is formed anodized aluminum with mitered corners, is retained by slide latches, is easily removed without tools, and hinges from either side.

**REFLECTOR**

Choice of MIRO®-4 95% reflectance multi-faceted specular aluminum reflector, low iridescent specular anodized aluminum, or high reflectance powder coat white paint. Retained with quarter-turn fasteners for tool-free ballast access.

**BALLAST AND ELECTRICAL**

Energy-efficient electronic, thermally protected, automatic resetting, Class P, high power factor, sound rated A. Positive stop, anti-vibrational locking lampholders. All configurations have been heat tested to ensure reliable operation and performance under normal conditions. CEE NEMA Premium compliant.

**FINISH**

All steel surfaces are painted after fabrication with high gloss baked white enamel, applied over iron phosphate pre-treatment for maximum adhesion and rust resistance.

**MOUNTING**

Choice of mounting hardware, including the fast and flexible GLH adjustable cable system for simplified mounting to wood, concrete or steel ceiling decks, or to beams, purlins or metal strut. Also available with hardware to mount with jack chain or directly to metal strut. Optional safety tether available.

**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.

**ORDERING INFORMATION**

**EXAMPLE LHC24-654-FACA-M4R-3EPU**

LHC		24 - 6								
MODEL	NO. OF LAMPS	DOOR STYLE	REFLECTOR	BALLAST	VOLTAGE	OPTIONS				
LHC Enclosed & Gasketed Linear High Bay	6 Six	FA Flush Aluminum FCS Flush One-Piece Steel Door FSS Flush One-Piece Stainless Steel Door	M4R MIRO®-4, 95% Reflectance LS Specular Anodized Aluminum GW Gloss White Powder Coat	E (3) 2-Lamp Electronic T8, Instant Start 3E (2) 3-Lamp Electronic T8, Instant Start 3EHL (2) 3-Lamp Electronic T8 High Light Output, Instant Start 24E (1) 2-Lamp and (1) 4-Lamp Electronic T8, Instant Start EP (2) 2-Lamp Electronic T5 or T8, Programmed Start 3EP (2) 3-Lamp Electronic T5HO or T8, Programmed Start (N/A 347V or 480V) 24EP (1) 2-Lamp & (1) 4-Lamp Electronic T5HO or T8 Programmed Start (N/A 347V or 480V)	U 120V-277V 347 347V (HO only) 480 480V (HO only)	F0735 T8 Lamp Installed, 75 CRI, 3500K F0741 T8 Lamp Installed, 75 CRI, 4100K F0750 T8 Lamp Installed, 75 CRI, 5000K F5835 T5 or T5HO Lamp Installed, 82 CRI, 3500K F5841 T5 or T5HO Lamp Installed, 82 CRI, 4100K F5850 T5 or T5HO Lamp Installed, 82 CRI, 5000K WL Wet Location GMF Slow Blow Fuse GLR Fast Blow Fuse EL Emergency Battery Pack <sup>2</sup> WG Wire Guard (FA Door Frame Required) <sup>2</sup>				
	<b>SIZE</b>	<b>LAMP TYPE</b>	<b>SHIELDING</b>							
	24 2' x 4'	28 4', T5: 28 Watt 32 4', T8: 32, 30, 28 or 25 Watt 54 4', T5HO: 54 Watt	CA Clear Acrylic CP Clear Polycarbonate A12 Acrylic Prismatic Pattern 12 A12125 Pattern 12 Acrylic Lens 0.125" Nominal A15 Acrylic Prismatic 15 A19 Acrylic Prismatic 19							
<b>ACCESSORIES (ORDER SEPARATELY)</b>										
LHHB-LHC	Universal Hanger Bracket Kit-LHC									
GLH5	5' Adjustable Cable Kit <sup>1</sup>									
GLH10	10' Adjustable Cable Kit <sup>1</sup>									
GLH15	15' Adjustable Cable Kit <sup>1</sup>									

<sup>2</sup> Not available with FCS or FSS door.

For a specific ballast vendor, show as option.

<sup>1</sup> Use with LHHB.



Test 14331 Test Date 6/12/06

## PHOTOMETRIC DATA

### LUMINAIRE DATA

Luminaire	LHC24-654-FACA-M4R-4EB5 LHC Industrial 2' x 4' 6-Lamp With Clear Acrylic Lens
Ballast	ICN-4554-90C
Ballast Factor	1.00
Lamp	F54T5HO
Lumens per Lamp	4450
Watts	308
Mounting	Surface
Shielding Angle	0° = 0 90° = 0
Spacing Criterion	0° = 1.22 90° = 0.84

### ZONAL LUMEN SUMMARY

Zone	Lumens	% Lamp	% Fixt.
0-30	7165	26.8	39.8
0-40	10451	39.1	58.0
0-60	15721	58.9	87.2
0-90	18023	67.5	100.0
0-180	18023	67.5	100.0

### ENERGY DATA

Total Luminaire Efficiency	67.5%
Luminaire Efficacy Rating (LER)	59
ANSI/IESNA RP-1-2004 Compliance	Noncompliant
Comparative Yearly Lighting Energy Cost per 1000 Lumens	\$4.07 based on 3000 hrs. and \$0.08 per KWH

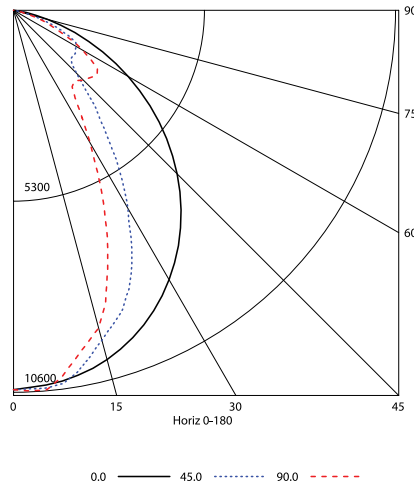
### COEFFICIENTS OF UTILIZATION (%)

RC	80				70				50				0	
	RW	70	50	30	10	70	50	30	10	70	50	30	10	0
1	75	72	70	67	73	71	68	66	68	66	64	64	59	
2	69	64	60	57	67	63	59	56	61	58	55	55	51	
3	64	57	53	49	62	56	52	48	54	51	48	45	45	
4	59	52	46	42	57	51	46	42	49	45	42	39	39	
5	55	47	41	37	53	46	41	37	45	40	37	35	35	
6	51	43	37	33	50	42	37	33	41	36	33	31	31	
7	48	39	34	30	46	39	34	30	38	33	30	28	28	
8	45	36	31	27	44	36	31	27	35	30	27	26	26	
9	42	34	28	25	41	33	28	25	32	28	25	23	23	
10	39	31	26	23	39	31	26	23	30	26	23	22	22	

RCR = Room Cavity Ratio

RC = Effective Ceiling Cavity Reflectance RW = Wall Reflectance

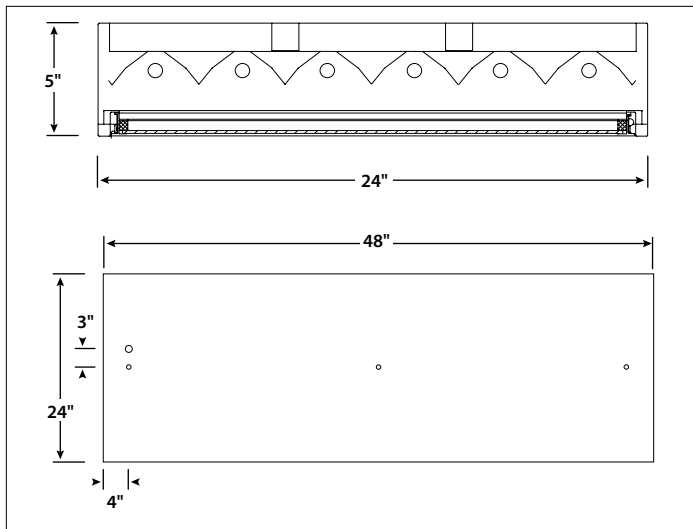
### INDOOR CANDELA PLOT



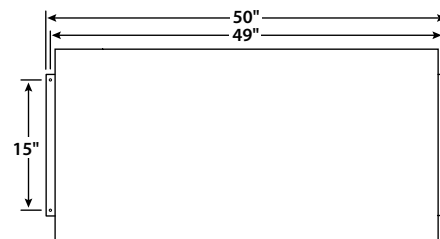
### AVG. LUMINANCE (Candela/Sq. M.)

Average Luminance Angle	0.0	22.5	45.0	67.5	90.0
0	16696	16696	16696	16696	16696
30	15807	14651	11615	8662	7816
40	14973	12703	7357	5346	5410
45	14399	10972	5527	5841	6162
50	13675	9019	5134	6637	7077
55	12780	6963	5790	7508	7845
60	11646	5014	6369	7137	7016
65	10227	4066	6457	5872	5515
70	8397	4198	5010	4300	4184
75	6014	4040	3261	2734	2440
80	3381	2184	1517	1160	1023
85	819	692	637	746	819

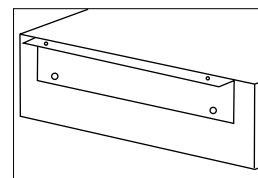
### DIMENSIONAL DATA



### Mounting Dimensions



### Mounting Bracket Detail



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