



The LCH series of low profile, lensed LED channels provides superior energy efficiency and a longer, maintenance-free operating life over the traditional T5 and T8 fluorescent fixtures they are designed to replace. Using up to 28% less energy and operating for up to 72,000 hours (L70), the LCH LED delivers bright, even distribution, which makes it ideal for commercial, manufacturing, warehouse, and retail applications. LCH is available in 4' and 8' lengths with a choice of 8 lumen packages and 3 color temperatures.

- Stylish frosted acrylic lens featuring bright, even illumination
- Energy efficient – up to 28% energy savings vs. fluorescent

- Up to 72,000 hour operating life (L70) for maintenance savings
- Control friendly, 0-10V dimming, standard

HOUSING Housing, wireway cover and ends are die-formed heavy gauge steel with high gloss, baked white enamel finish over rust inhibiting phosphate coat. Housing and wireway cover act as a heat sink, maximizing the life of the LEDs and power supplies. Knockouts provided on back, ends, and sides.

OPTICS/SHIELDING Snap on, contoured, high transmission, frosted acrylic lens with internal lineal ribs shields the LEDs from direct view and provides an integrated finished look. Lens is capped by white thermoplastic ends. The 8' lensed units ship standard with (2) 4' lenses and (1) center white thermoplastic joiner band.

LEDS Four foot fixtures available in (4) light levels (delivered): 1,950 lumens (19.4W); 4,100 lumens (43.7W); 5,200 lumens (60.8W); and 7,950 lumens (85.6W) at 3500K CCT (standard), >80 CRI. 4100K and 5000K color temperatures are available. Eight foot fixtures available in 4 light levels (delivered): 4,000 lumens (38.9W); 8,500 lumens (87.3W); 10,700 lumens (121.7W); and 16,350 lumens (171.3) at 4100K CCT, >80 CRI. Also available in 3500K and 5000K color temperatures. Beam spread is 105 degrees. LEDs are LM-80 tested. Operating life is 72,000 hours (L70) for 43W, 86W and 170W units; 60,000 hours (L70) for 60W and 120W units. Light engines consist of 128, 256 or 512 mid-power LED chips mounted on aluminum core printed circuit boards. LED light engines are replaceable.

ELECTRICAL 120-277V LED power supply, power factor is >0.9. 0-10V dimmable, standard. Power supplies are mounted in direct contact with steel housing for cooler operation and longer life. Drive current is 700mA for 4' 20W unit. Drive current is 1500mA for 4' fixtures (43W, 86W units) and for 8' fixtures (43W, 86W, 170W). Drive current is 2100mA for 4', 60W and 8', 170W fixtures. One power supply is used in 20W, 43W, and 60W units. Two power supplies are used in the 86W and 120W units. Four power supplies are used in the 170W unit. Power supplies are field replaceable. The LCH LED series is designed to operate in temperatures of -40°F (-40°C) to 113°F (40°C).

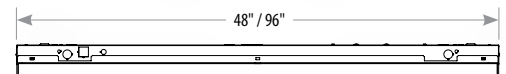
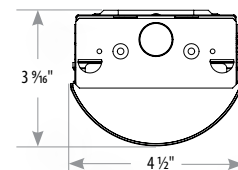
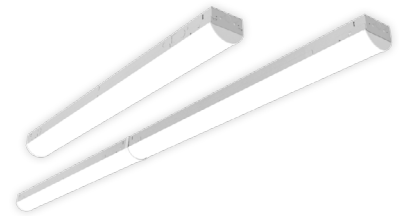
ACCESS / WIRING Toolless access to wireway channel. Wireway cover/LED tray snaps onto the housing and can be removed without tools. Wireway cover/LED tray is tethered to the housing for easier installation and maintenance. Internal plug-in wiring harness.

MOUNTING Suitable for surface, pendant, or stem mounting, individually or in continuous rows. Use accessory CHJ combination end plate joiner to connect long runs fixtures in continuous rows. Also use accessory LCHJB joiner band for a finished look.

LISTINGS C-UL-US listed, damp location.

WARRANTY 5 year limited warranty.

Project _____
Catalog Number _____
Type _____
Date _____



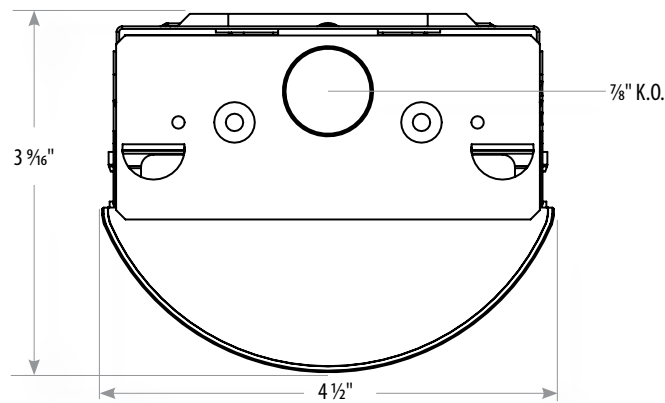
LCH Lensed LED Channel Configuration

SERIES	LENGTH	LENS	WATTAGE*	COLOR TEMPERATURE	VOLTAGE	OPTIONS	ACCESSORIES
LCH	4 = 4' 8 = 8'	FA = Frosted acrylic (standard)	4' UNITS 20 = 20W 43 = 43W 60 = 60W 86 = 86W 8' UNITS 43 = 43W 86 = 86W 120 = 120W 170 = 170W	35 = 3500°K 41 = 4100°K 50 = 5000°K	U1 = Universal 120-277V 347 = 347V 480 = 480V	ELS = Emergency Backup, 900lm 6' CORD AND PLUG CPT(x) 1 = 120V 2 = 277V 3 = 208V 4 = 240V 5 = 480V CP3 = Cord & Plug-120V Straight Blade 5-15P FL4 = 3/8", 6' flex with two #18, one ground and two connectors FL5 = 3/8", 6' flex with three #18, one ground and two connectors	C = Single white canopy (for use with pendant mount) CA24 = Chain Hanger Assembly-(2) 18" chains, (2) "V" hooks, (2) "S" hooks for total drop 24" CS24 = "S" Hook (4) Chain Hanger Assembly (24" total drop) LCHJB = Joiner band for continuous row mounting PM(x) = Twin pendant mount; 2 white stems. Specify length in inches (24, 36, 48, 60, 72) SN = Snapper Brackets TBH = T-Bar grid mounting clip WG240 = 48" wire guard (order 2 for 8' units) REFLECTORS AR(x) 240 = 48" Asymmetrical; order 2 for 96" units. For (x) enter (W) for white or (S) for specular aluminum SR(x) 240 = 48" Symmetrical; order 2 for 96" units. For (x) enter (W) for white or (S) for specular aluminum

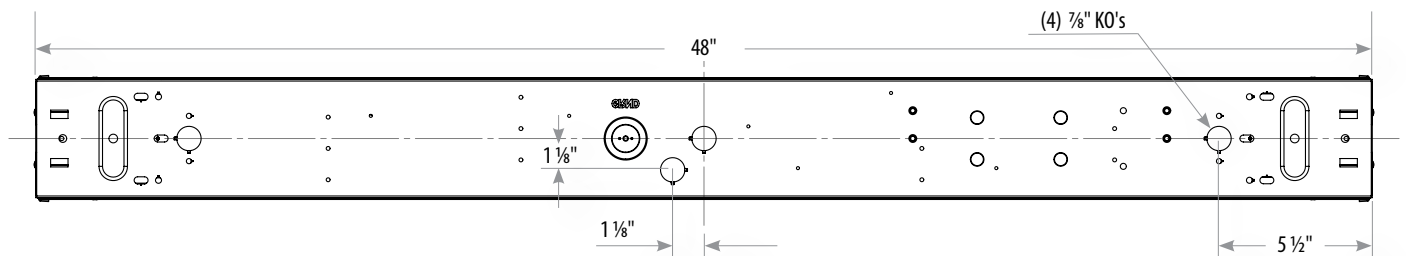
* Nominal. See performance tables for actual input power.

Dimensions *Not to scale*

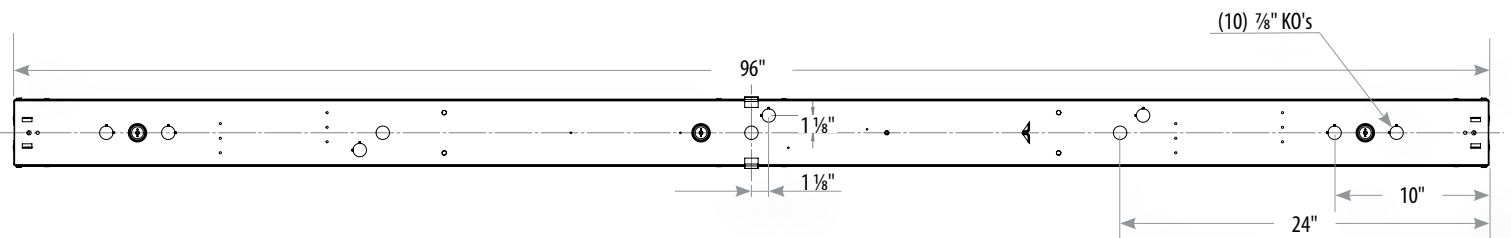
Cross Section – All Models



LCH LED 4' Models



LCH LED 8' Models



LCH Lensed LED Channel Performance - 3500K CCT

Model	Length	Light Output*	Input Power	Efficacy	Equivalent Fluorescent**
LCH4FA2035U1	4 ft.	1,939 lumens	19.4 watts	100.0 lm/W	1-32W T8
LCH4FA4335U1	4 ft.	4,100 lumens	43.7 watts	93.9 lm/W	2-32W T8, 1-54W T5HO
LCH4FA6035U1	4 ft.	5,203 lumens	60.8 watts	85.5 lm/W	2-32W T8, 2-54W T5HO
LCH4FA8635U1	4 ft.	7,943 lumens	85.6 watts	92.8 lm/W	2-54W T5HO
LCH8FA4335U1†	8 ft.	3,878 lumens	38.9 watts	100.0 lm/W	2-32W T8
LCH8FA8635U1†	8 ft.	8,200 lumens	87.3 watts	94.0 lm/W	2-32W T8, 2-54W T5HO
LCH8FA12035U1†	8 ft.	10,406 lumens	121.7 watts	85.5 lm/W	2-54W T5HO
LCH8FA17035U1†	8 ft.	15,868 lumens	171.3 watts	93.0 lm/W	4-54W T5HO

*Delivered lumens **Consult a lighting engineer to meet specific requirements.

†LM79 photometric testing pending. Performance based on calculated data.

LCH Lensed LED Channel Performance - 4100K CCT

Model	Length	Light Output*	Input Power	Efficacy	Equivalent Fluorescent**
LCH4FA2041U1†	4 ft.	1,997 lumens	19.4 watts	103.0 lm/W	1-32W T8
LCH4FA4341U1†	4 ft.	4,223 lumens	43.7 watts	96.6 lm/W	2-32W T8, 1-54W T5HO
LCH4FA6041U1†	4 ft.	5,359 lumens	60.8 watts	88.1 lm/W	2-32W T8, 2-54W T5HO
LCH4FA8641U1†	4 ft.	8,181 lumens	85.6 watts	95.6 lm/W	2-54W T5HO
LCH8FA4341U1†	8 ft.	3,994 lumens	38.9 watts	102.7 lm/W	2-32W T8
LCH8FA8641U1†	8 ft.	8,446 lumens	87.3 watts	96.7 lm/W	2-32W T8, 2-54W T5HO
LCH8FA12041U1†	8 ft.	10,718 lumens	121.7 watts	88.1 lm/W	2-54W T5HO
LCH8FA17041U1†	8 ft.	16,344 lumens	171.3 watts	95.4 lm/W	4-54W T5HO

*Delivered lumens **Consult a lighting engineer to meet specific requirements.

†LM79 photometric testing pending. Performance based on calculated data.

LCH Lensed LED Channel Performance - 5000K CCT

Model	Length	Light Output*	Input Power	Efficacy	Equivalent Fluorescent**
LCH4FA2050U1†	4 ft.	2,057 lumens	19.4 watts	106.0 lm/W	1-32W T8
LCH4FA4350U1†	4 ft.	4,350 lumens	43.7 watts	99.5 lm/W	2-32W T8, 1-54W T5HO
LCH4FA6050U1†	4 ft.	5,520 lumens	60.8 watts	90.8 lm/W	2-32W T8, 2-54W T5HO
LCH4FA8650U1†	4 ft.	8,426 lumens	85.6 watts	98.4 lm/W	2-54W T5HO
LCH8FA4350U1†	8 ft.	4,114 lumens	38.9 watts	105.8 lm/W	2-32W T8
LCH8FA8650U1†	8 ft.	8,699 lumens	87.3 watts	99.6 lm/W	2-32W T8, 2-54W T5HO
LCH8FA12050U1†	8 ft.	11,040 lumens	121.7 watts	90.7 lm/W	2-54W T5HO
LCH8FA17050U1†	8 ft.	16,834 lumens	171.3 watts	98.30 lm/W	4-54W T5HO

*Delivered lumens **Consult a lighting engineer to meet specific requirements.

†LM79 photometric testing pending. Performance based on calculated data.

Photometric Data

Luminaire Data

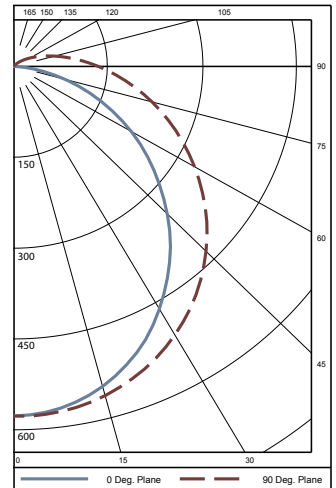
Catalog Number	LCH4FA2035U1
Lab Test#	UL1022798
(#) Power Supply	(1) 700mA
(#) Boards	(2) LED strips, 32 LEDs each
Color Temperature	3500K
Input Watts	19.4
Delivered Lumens	1939
Operating Life	72,000 Hours (L70)
Fixture Efficacy	100 lm/W

Coefficients of Utilization

CC Wall	80				50			30			
RCR	70	50	30	10	50	30	10	50	30	10	
0	2280	2280	2280	2280	2088	2088	2088	1974	1974	1974	
1	2045	1938	1842	1755	1776	1704	1638	1678	1620	1566	
2	1848	1672	1527	1404	1535	1423	1327	1452	1360	1279	
3	1678	1459	1290	1155	1343	1210	1101	1272	1160	1066	
4	1533	1288	1108	971	1188	1045	931	1128	1005	905	
5	1407	1147	966	832	1063	915	801	1011	882	781	
6	1298	1031	852	723	958	809	699	913	783	683	
7	1202	933	758	636	870	723	617	832	701	604	
8	1119	850	682	566	796	652	550	762	633	539	
9	1045	780	617	508	732	592	494	702	576	485	
10	979	719	563	459	677	541	448	650	527	440	

Zonal cavity method Effective floor reflectance = 20%

Candela Plot



Zonal Lumens and Percentages

ZONE	LUMENS	% LUMINAIRE
0-40	733.3	37.8
0-60	1310.8	67.6
0-90	1818.3	93.8
90-180	120.3	6.2

Luminance Summary (Candela/M²)

ANGLE	ALONG	45	ACROSS
0	4409	4409	4409
45	3613	3180	3294
55	3300	2856	3059
65	2892	2522	2832
75	2262	2193	2637
85	998	1922	2494

SC: 0-180: 1.20
90-270: 1.31

Photometric Data

Luminaire Data

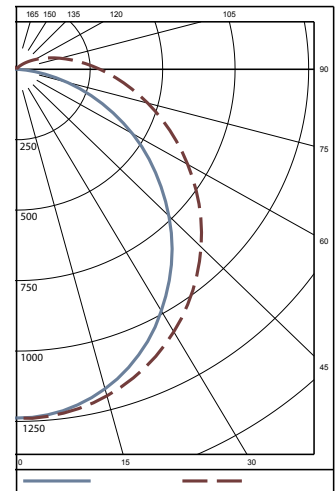
Catalog Number	LCH4FA4335U1
Lab Test#	UL1022799
(#) Power Supply	(1) 1500mA
(#) Boards	(4) LED strips, 32 LEDs each
Color Temperature	3500K
Input Watts	43.7
Delivered Lumens	4100
Operating Life	72,000 Hours (L70)
Fixture Efficacy	94 lm/W

Coefficients of Utilization

CC Wall	80				50			30			
RCR	70	50	30	10	50	30	10	50	30	10	
0	4815	4815	4815	4815	4401	4401	4401	4155	4155	4155	
1	4321	4095	3892	3710	3745	3594	3456	3535	3413	3300	
2	3906	3536	3230	2973	3240	3006	2804	3061	2868	2698	
3	3549	3089	2733	2449	2837	2559	2329	2685	2450	2253	
4	3243	2728	2350	2062	2513	2212	1973	2383	2125	1916	
5	2979	2432	2050	1768	2249	1938	1700	2137	1867	1655	
6	2749	2186	1809	1538	2029	1716	1484	1932	1658	1448	
7	2547	1980	1612	1354	1843	1535	1310	1760	1486	1282	
8	2370	1805	1449	1205	1686	1384	1169	1613	1342	1145	
9	2213	1655	1313	1082	1551	1257	1051	1487	1222	1031	
10	2074	1526	1197	979	1434	1149	953	1378	1119	936	

Zonal cavity method Effective floor reflectance = 20%

Candela Plot



Zonal Lumens and Percentages

ZONE	LUMENS	% LUMINAIRE
0-40	1558.6	38.0
0-60	2764.5	67.4
0-90	3819.6	93.2
90-180	280.0	6.8

Luminance Summary (Candela/M²)

ANGLE	ALONG	45	ACROSS
0	9454	9454	9454
45	7729	6657	6816
55	7046	5911	6275
65	6140	5183	5778
75	4744	4546	5397
85	2925	4148	5222

SC: 0-180: 1.19
90-270: 1.29

Photometric Data

Luminaire Data

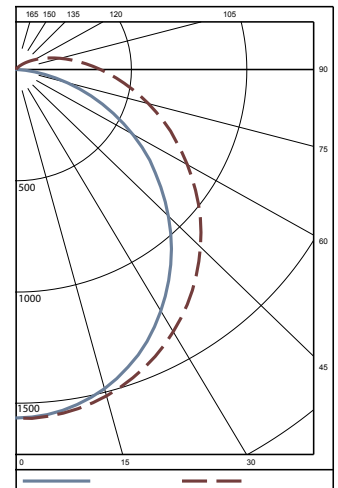
Catalog Number	LCH4FA6035U1
Lab Test#	UL1022800
(#) Power Supply	(1) 2100mA
(#) Boards	(4) LED strips, 32 LEDs each
Color Temperature	3500K
Input Watts	60.8
Delivered Lumens	5203
Operating Life	60,000 Hours (L70)
Fixture Efficacy	86 lm/W

Coefficients of Utilization

CC Wall	80				50			30			
RCR	70	50	30	10	50	30	10	50	30	10	
0	6110	6110	6110	6110	5584	5584	5584	5270	5270	5270	
1	5482	5195	4937	4704	4749	4557	4381	4482	4326	4183	
2	4955	4485	4096	3769	4108	3811	3554	3880	3635	3419	
3	4502	3917	3464	3104	3596	3243	2951	3403	3105	2854	
4	4113	3459	2979	2613	3186	2803	2500	3020	2692	2427	
5	3778	3083	2598	2240	2850	2455	2153	2708	2365	2096	
6	3486	2772	2292	1948	2571	2175	1879	2448	2100	1834	
7	3230	2510	2043	1716	2336	1944	1659	2229	1882	1623	
8	3005	2288	1837	1527	2137	1753	1480	2043	1700	1449	
9	2807	2098	1664	1371	1966	1593	1331	1884	1547	1306	
10	2631	1934	1517	1240	1818	1456	1207	1745	1417	1185	

Zonal cavity method Effective floor reflectance = 20%

Candela Plot



Zonal Lumens and Percentages

ZONE	LUMENS	% LUMINAIRE
0-40	1972.3	37.9
0-60	3499.2	67.2
0-90	4843.9	93.1
90-180	359.5	6.9

Luminance Summary (Candela/M²)

ANGLE	ALONG	45	ACROSS
0	11960	11960	11960
45	9777	8424	8620
55	8992	7482	7938
65	7826	6609	7320
75	6016	5802	6888
85	2544	5301	6669

SC: 0-180: 1.19
90-270: 1.29

Photometric Data

Luminaire Data

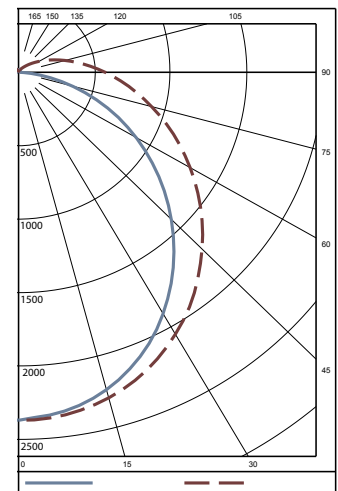
Catalog Number	LCH4FA8635U1
Lab Test#	UL1022801
(#) Power Supply	(2) 1500mA
(#) Boards	(4) LED strips, 64 LEDs each
Color Temperature	3500K
Input Watts	85.6
Delivered Lumens	7943
Operating Life	72,000 Hours (L70)
Fixture Efficacy	93 lm/W

Coefficients of Utilization

CC Wall	80				50			30			
RCR	70	50	30	10	50	30	10	50	30	10	
0	9319	9319	9319	9319	8505	8505	8505	8019	8019	8019	
1	8356	7915	7520	7164	7225	6931	6662	6811	6574	6354	
2	7550	6831	6236	5736	6246	5792	5400	5895	5519	5189	
3	6859	5964	5272	4721	5468	4927	4482	5167	4712	4329	
4	6266	5265	4533	3973	4842	4258	3795	4585	4085	3680	
5	5755	4693	3952	3404	4331	3729	3267	4110	3588	3178	
6	5309	4218	3486	2960	3906	3302	2851	3716	3185	2780	
7	4919	3819	3106	2606	3549	2952	2517	3383	2854	2459	
8	4577	3481	2792	2318	3246	2661	2244	3101	2578	2196	
9	4274	3192	2529	2081	2986	2417	2019	2859	2346	1978	
10	4006	2942	2306	1882	2761	2210	1829	2649	2148	1794	

Zonal cavity method Effective floor reflectance = 20%

Candela Plot



Zonal Lumens and Percentages

ZONE	LUMENS	% LUMINAIRE
0-40	2981.9	37.5
0-60	5296.1	66.7
0-90	7359.6	92.7
90-180	583.1	7.3

Luminance Summary (Candela/M²)

ANGLE	ALONG	45	ACROSS
0	18040	18040	18040
45	14780	12710	12960
55	13540	11350	11960
65	12040	10050	11100
75	9519	8936	10410
85	4655	8219	10210

SC: 0-180: 1.19
90-270: 1.29