

STRATOS[®]

HIGH BAY RACK LIGHTER

BI-AX OPTIC[™]: The most precise system in the marketplace



STRATOS[®] High Bay Rack Lighter

STRATOS[®], the LED High Bay Rack Lighter by LumenOptix[®], was created to address the needs of modern distribution centers, order fulfillment centers and warehouses using advanced material handling and pick systems. The intriguing compact design allows for easy installation in even the tightest of spaces, regardless of the aisle layout, machinery, shelving and ceiling height. The high-quality components and conservative design ensure a lighting system that is built to last, making it perfect for 24/7 operations where maintenance down time must be avoided.

PROPRIETARY BI-AX OPTIC[™] SYSTEM

The STRATOS[®] proprietary BI-AX OPTIC[™] system accomplishes something never before seen in the industry. The precision engineered BI-AX OPTIC[™] system places all the light exactly where it is needed, not on the top of the racks. The < 0.3 spacing criteria across the aisle delivers optimal horizontal and vertical footcandles in tight aisles with high ceilings. The 2.0 spacing criteria along the length of the aisle allows for increased fixture spacing to reduce the fixture count throughout the facility. The end result is a lighting solution that perfectly illuminates the racks and floor while providing the lowest cost of ownership and minimizing down time.

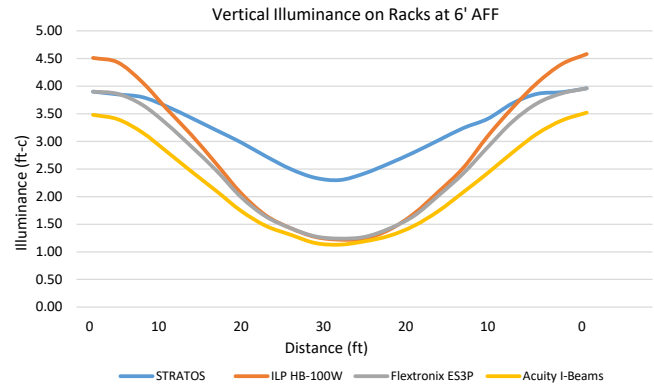
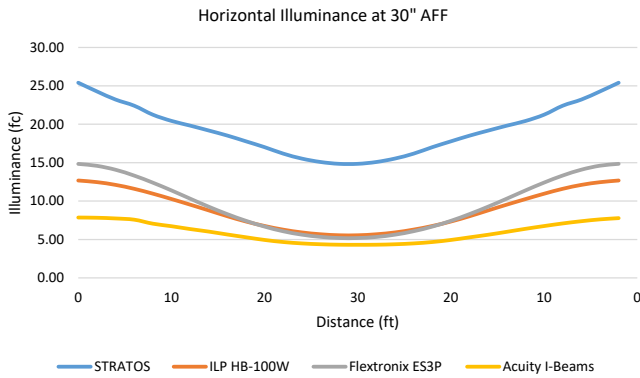
PHOTOMETRIC SIMULATION

STRATOS® High Bay Rack Lighter provides more even illumination on the racks and between fixtures enabling more spacing between STRATOS® fixtures than competitors.

Fixture Mfr/Model	IES File Name*	Lumens	Watts	LPW	Horizontal FC @ 30" AFF			Vertical FC @ 6' AFF on Racks				
					Average	Max	Min	Average	Max	Min	Max/Min	
LumenOptix STRATOS®	STR-2-13-TA7-40K-A2	13,667	119.8	114.1	16.0	25	11	2.27	3.22	4	2	1.72
ILP HB 100w	HB-100WLED-UNIV-5000K-ND	11,419	110.5	103.3	8.86	13	5	2.60	2.79	5	1	3.75
Flextronics ES3P	ES3PH-UL-4MS-50-AISLE	14,756	117.0	126.1	9.00	15	5	3.00	2.58	4	1	3.19
Acuity I-Beam	IBL 9L ND LP740 DLC	12,419	100.0	124.2	6.17	8	4	2.00	2.25	4	1	3.12

Layout Parameters
 Fixture Spacing = 60'
 Mounting Height = 30'
 Aisle Width = 9'
 Rack Height = 20'

*Source: IES files came from each manufacturer's website on 10/13/2016.

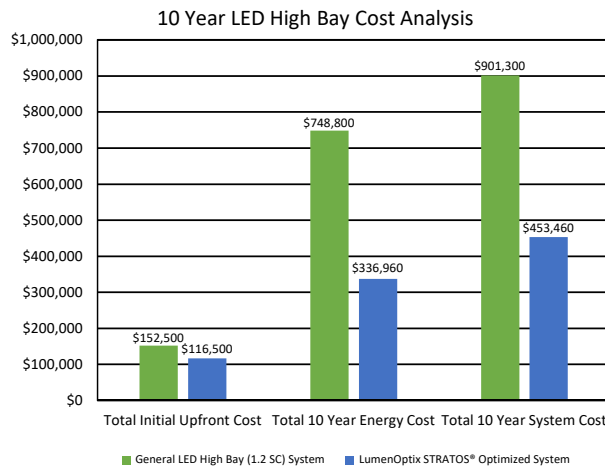


30' = Midpoint between fixture A & B
 AFF = Above finished floor

10 YEAR LED HIGH BAY COST ANALYSIS

STRATOS® High Bay Rack Lighter provides a lifetime savings of \$447,840 (or 50%) vs. standard high bay fixtures.

	STRATOS® Optimized System	General LED High Bay (1.2 SC)	STRATOS® Savings
Total Initial Upfront Cost	\$116,500	\$152,500	\$36,000
Total 10 Year Energy Cost	\$336,960	\$748,800	\$411,840
Total 10 Year System Cost	\$453,460	\$901,300	\$447,840



ASSUMPTIONS

6500 Hour Operation
 12 cent kWh rate
 Standard Distribution Center with 500 Fixtures
 - 80% Aisle, 20% Open Area

General LED High Bay (1.2 SC) System: 500 Fixtures
 - 24000 Lumens, 192W

LumenOptix STRATOS® Optimized System: 300 Fixtures
 - 200 aisle, 100 open area
 - 13000 Lumens, 120 W (aisle)
 - 24000 Lumens, 192W (open area)