

Scaled data based on original data using

LM-41-14 Approved Method for Photometric Testing Of Indoor Fluorescent Luminaires

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: METALUX

Report Number: 236p256

Luminaire Tested: **HBE-832-N-UNV-EB82-U**

Issue Date: 3/3/2020



Test Information

Test Method: LM-41-14
Report Number: 236p256
Test Lab: METALUX RESEARCH LABS
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: HBE-832-N-UNV-EB82-U
Description: OPEN HIGH BAY LUMINAIRE WITH SIDE ENCLOSURES AND SPECULAR REFLECTOR, NARROW DISTRIBUTION, NO UPLIGHT
Light Source: EIGHT 32 WATT T8 - 3100 LUMENS EA
Ballast/Driver: -

Summary

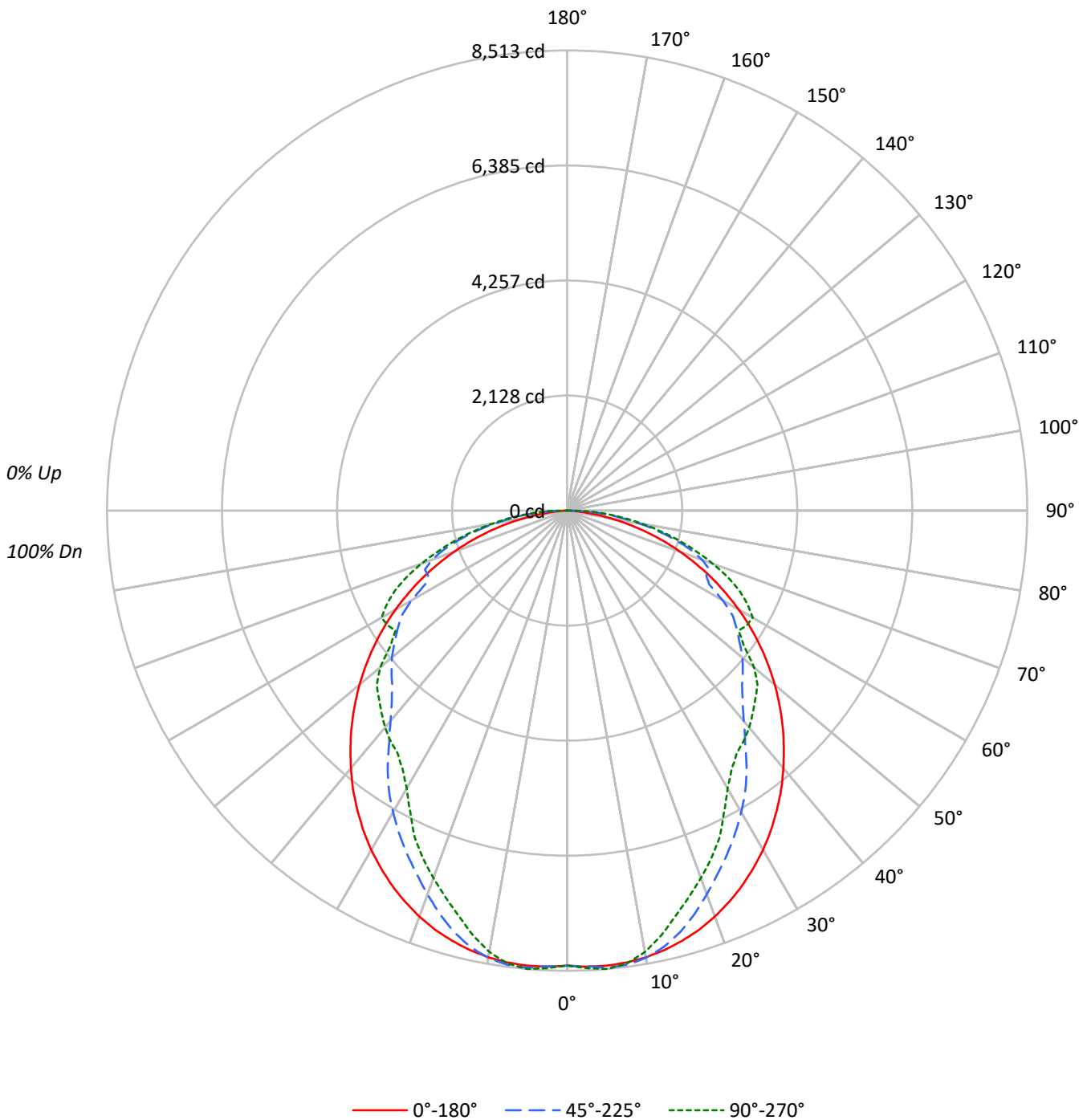
Lumens per Lamp: 3100 (8 lamps)
Luminaire Lumens: 23006.2 lumens
Efficiency: 92.8%
Efficacy: 104.6 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.08 / 1.24
Luminous Opening: Rectangular (W 2.06' x L: 3.75' x H: 0')
CIE Type: Direct

Input Watts (W): 220
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT

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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20			
RC	80				70				50				30				10	0		
RW	70	50	30	10	70	50	30	10	50	30	10		50	30	10		50	30	10	0
RCR																				
0	110	110	110	110	108	108	108	108	103	103	103		99	99	99		95	95	95	93
1	100	95	91	87	98	93	89	86	89	86	83		86	83	81		82	80	78	76
2	91	83	76	71	88	81	75	70	78	73	68		75	70	67		72	68	65	63
3	83	73	65	58	80	71	64	58	68	62	57		66	60	56		63	59	55	53
4	76	64	56	49	73	63	55	49	61	54	48		58	53	48		56	51	47	45
5	70	57	49	43	68	56	48	42	54	47	42		52	46	41		51	45	41	39
6	64	52	43	37	63	51	43	37	49	42	37		48	41	36		46	40	36	34
7	60	47	39	33	58	46	38	33	45	38	33		43	37	32		42	36	32	30
8	56	43	35	29	54	42	35	29	41	34	29		40	34	29		39	33	29	27
9	52	39	32	27	51	39	32	26	38	31	26		37	31	26		36	30	26	24
10	49	36	29	24	48	36	29	24	35	28	24		34	28	24		33	28	24	22

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	11717	11717	11717
5°	11805	11854	11893
10°	11859	11872	11718
15°	11868	11633	11178
20°	11835	11186	10711
25°	11759	10761	10244
30°	11647	10351	9536
35°	11492	9834	9298
40°	11307	9234	9520
45°	11098	9006	9691
50°	10856	9163	9778
55°	10572	9298	9397
60°	10201	9244	11031
65°	9721	9349	11598
70°	9050	10803	11650
75°	8044	11018	11539
80°	6508	10739	11348
85°	3976	10539	11673



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ZONAL LUMENS:

CANDELA DISTRIBUTION:

Zone	Lumens	% Fixture	% Lamp		0°	22.5°	45°	67.5°	90°	Flux
0°-10°	806.0	3.5	3.2	0°	8419	8419	8419	8419	8419	
10°-20°	2263.8	9.8	9.1	5°	8450	8456	8485	8503	8513	805
20°-30°	3267.5	14.2	13.2	15°	8237	8275	8074	7834	7758	2324
30°-40°	3717.4	16.2	15.0	25°	7658	7522	7008	6764	6671	3527
40°-50°	3816.7	16.6	15.4	35°	6764	6328	5788	5461	5473	4231
50°-60°	3496.9	15.2	14.1	45°	5639	5048	4576	4836	4924	4347
60°-70°	2975.9	12.9	12.0	55°	4357	3650	3832	3842	3873	3892
70°-80°	1987.2	8.6	8.0	65°	2952	2503	2839	3433	3522	2917
80°-90°	674.9	2.9	2.7	75°	1496	1480	2049	2129	2146	1585
90°-100°	0.0	0.0	0.0	85°	249	559	660	717	731	334
100°-110°	0.0	0.0	0.0	90°	0	0	0	0	0	
110°-120°	0.0	0.0	0.0							
120°-130°	0.0	0.0	0.0							
130°-140°	0.0	0.0	0.0							
140°-150°	0.0	0.0	0.0							
150°-160°	0.0	0.0	0.0							
160°-170°	0.0	0.0	0.0							
170°-180°	0.0	0.0	0.0							
0°-30°	6337.2	27.5	25.6							
0°-40°	10054.6	43.7	40.5							
0°-60°	17368.2	75.5	70.0							
0°-90°	23006.2	100.0	92.8							
90°-120°	0.0	0.0	0.0							
90°-150°	0.0	0.0	0.0							
90°-180°	0.0	0.0	0.0							
0°-180°	23006.2	100.0	92.8							



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	8419	8419	8419	8419	8419
2.5°	8445	8441	8442	8458	8472
5°	8450	8456	8485	8503	8513
7.5°	8432	8457	8477	8455	8452
10°	8392	8433	8401	8323	8292
12.5°	8324	8373	8268	8110	8047
15°	8237	8275	8074	7834	7758
17.5°	8127	8138	7829	7556	7493
20°	7991	7963	7553	7298	7232
22.5°	7834	7756	7275	7036	6966
25°	7658	7522	7008	6764	6671
27.5°	7459	7251	6732	6442	6288
30°	7248	6958	6441	6055	5934
32.5°	7015	6641	6138	5721	5668
35°	6764	6328	5788	5461	5473
37.5°	6504	6015	5409	5270	5368
40°	6224	5698	5083	5153	5240
42.5°	5932	5374	4800	5010	5080
45°	5639	5048	4576	4836	4924
47.5°	5330	4718	4409	4671	4777
50°	5014	4371	4232	4514	4516
52.5°	4689	4013	4025	4226	4124
55°	4357	3650	3832	3842	3873
57.5°	4017	3297	3636	3637	3943
60°	3665	2996	3321	3711	3963
62.5°	3308	2734	2959	3669	3761
65°	2952	2503	2839	3433	3522
67.5°	2586	2267	2847	3179	3213
70°	2224	2036	2655	2843	2863
72.5°	1857	1759	2386	2486	2506
75°	1496	1480	2049	2129	2146
77.5°	1142	1372	1695	1756	1770
80°	812	1180	1340	1404	1416
82.5°	503	878	991	1052	1068
85°	249	559	660	717	731
87.5°	72	267	351	405	421
90°	0	0	0	0	0

(END OF REPORT)