

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: 236P124

Luminaire Tested: **2HBG-632-UNV-EB82**

Issue Date: 3/3/2020



Test Information

Test Method: LM-41-14
Report Number: 236P124
Test Lab: METALUX LABORATORIES
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 2HBG-632-UNV-EB82
Description: 2HB SERIES GRID/LAYIN LUMINAIRE WITH SPECULAR ALUMINUM MEDIUM
DISTRIBUTION REFLECTOR
Light Source: SIX 32 WATT T8 - 3000 LUMENS EA - F32T8/TL835
Ballast/Driver: TWO SYLVANIA QTP3X32T8/UNV ISN-SC

Summary

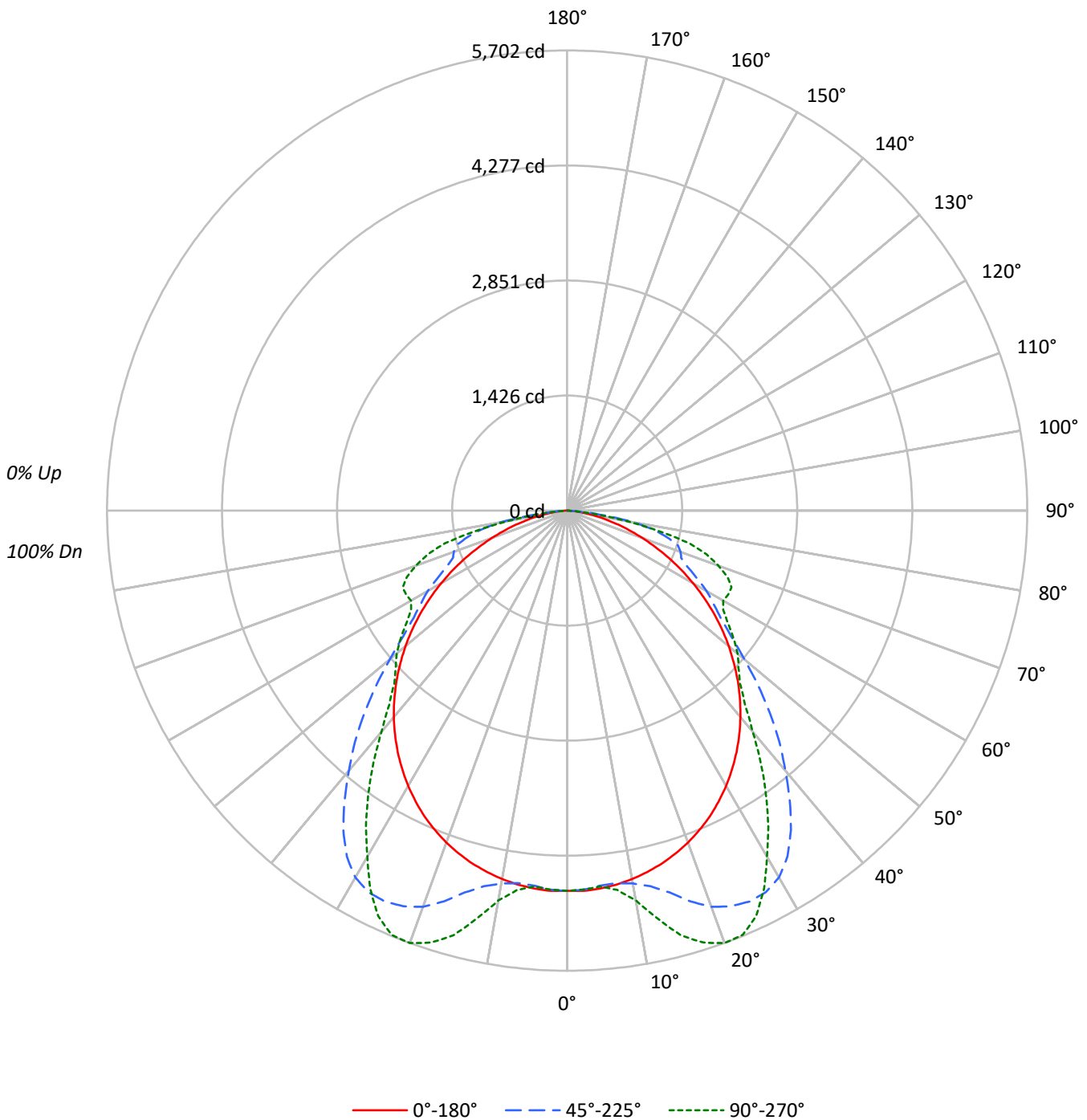
Lumens per Lamp: 3000 (6 lamps)
Luminaire Lumens: 15017.3 lumens
Efficiency: 83.4%
Efficacy: 91.6 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.4 / 1.44
Luminous Opening: Rectangular (W 1.9' x L: 3.92' x H: 0')
CIE Type: Direct

Input Watts (W): 164
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	50	30	10	0	
RCR																						
0	99	99	99	99	97	97	97	97	93	93	93	89	89	89	85	85	85	83				
1	91	87	83	80	88	85	82	79	81	79	76	78	76	74	75	73	72	70				
2	82	75	70	65	80	74	69	64	71	66	63	68	64	61	66	63	60	58				
3	75	66	59	54	73	65	59	53	62	57	53	60	55	52	58	54	51	49				
4	69	59	51	46	67	58	51	45	56	50	45	54	48	44	52	47	44	42				
5	63	52	45	39	62	52	44	39	50	44	39	48	43	38	47	42	38	36				
6	58	47	40	34	57	46	39	34	45	39	34	44	38	34	42	37	33	32				
7	54	43	36	30	53	42	35	30	41	35	30	40	34	30	39	33	30	28				
8	50	39	32	27	49	39	32	27	37	31	27	36	31	27	35	30	26	25				
9	47	36	29	24	46	35	29	24	34	28	24	34	28	24	33	28	24	22				
10	44	33	26	22	43	33	26	22	32	26	22	31	26	22	30	25	22	20				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6831	6831	6831
5°	6841	6790	6803
10°	6826	6905	7220
15°	6797	7351	8176
20°	6752	8060	8796
25°	6689	8549	8866
30°	6595	8786	8287
35°	6473	8556	7602
40°	6322	7959	6767
45°	6132	7286	6210
50°	5897	6461	6222
55°	5603	5871	6141
60°	5230	5787	6477
65°	4764	5639	7711
70°	4196	6336	8447
75°	3506	7203	8777
80°	2663	6946	6178
85°	1414	2861	1347



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ZONAL LUMENS:

CANDELA DISTRIBUTION:

Zone	Lumens	% Fixture	% Lamp		0°	22.5°	45°	67.5°	90°	Flux
0°-10°	447.5	3.0	2.5	0°	4712	4712	4712	4712	4712	
10°-20°	1400.1	9.3	7.8	5°	4701	4666	4666	4665	4675	447
20°-30°	2320.8	15.5	12.9	15°	4529	4526	4898	5320	5448	1278
30°-40°	2757.2	18.4	15.3	25°	4182	4483	5345	5563	5543	1925
40°-50°	2639.6	17.6	14.7	35°	3658	4454	4835	4447	4296	2286
50°-60°	2239.3	14.9	12.4	45°	2991	3979	3554	3108	3029	2305
60°-70°	1772.5	11.8	9.8	55°	2217	2905	2323	2416	2430	1979
70°-80°	1198.4	8.0	6.7	65°	1389	1604	1644	2074	2248	1377
80°-90°	242.0	1.6	1.3	75°	626	773	1286	1529	1567	671
90°-100°	0.0	0.0	0.0	85°	85	226	172	95	81	126
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°	4168.4	27.8	23.2							
0°-40°	6925.5	46.1	38.5							
0°-60°	11804.4	78.6	65.6							
0°-90°	15017.3	100.0	83.4							
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°	15017.3	100.0	83.4							



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	4712	4712	4712	4712	4712
2.5°	4717	4696	4702	4697	4701
5°	4701	4666	4666	4665	4675
7.5°	4674	4625	4656	4709	4740
10°	4637	4582	4691	4832	4905
12.5°	4587	4552	4769	5048	5179
15°	4529	4526	4898	5320	5448
17.5°	4458	4505	5076	5492	5613
20°	4377	4489	5225	5601	5702
22.5°	4284	4482	5306	5633	5689
25°	4182	4483	5345	5563	5543
27.5°	4065	4492	5330	5370	5283
30°	3940	4504	5249	5090	4951
32.5°	3803	4502	5082	4758	4640
35°	3658	4454	4835	4447	4296
37.5°	3503	4374	4533	4105	3943
40°	3341	4275	4206	3760	3576
42.5°	3170	4144	3893	3403	3263
45°	2991	3979	3554	3108	3029
47.5°	2805	3774	3210	2867	2880
50°	2615	3522	2865	2718	2759
52.5°	2418	3226	2563	2583	2599
55°	2217	2905	2323	2416	2430
57.5°	2010	2577	2151	2248	2292
60°	1804	2251	1996	2127	2234
62.5°	1596	1919	1812	2072	2251
65°	1389	1604	1644	2074	2248
67.5°	1187	1325	1530	2043	2149
70°	990	1112	1495	1904	1993
72.5°	803	938	1439	1735	1814
75°	626	773	1286	1529	1567
77.5°	463	640	1097	1182	1145
80°	319	563	832	764	740
82.5°	191	427	466	399	376
85°	85	226	172	95	81
87.5°	27	33	9	8	9
90°	0	0	0	0	0

(END OF REPORT)