

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: 236P252

Luminaire Tested: **HBL-854T5-M-UNV-EBT2-U**

Issue Date: 3/3/2020



Test Information

Test Method: LM-41-14
Report Number: 236P252
Test Lab: METALUX RESEARCH LABS
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: HBL-854T5-M-UNV-EBT2-U
Description: OPEN HIGH BAY LUMINAIRE WITH MATTE REFLECTOR, MEDIUM
DISTRIBUTION, NO UPLIGHT
Light Source: EIGHT 54 WATT T5HO - 4400 LUMENS EA
Ballast/Driver: -

Summary

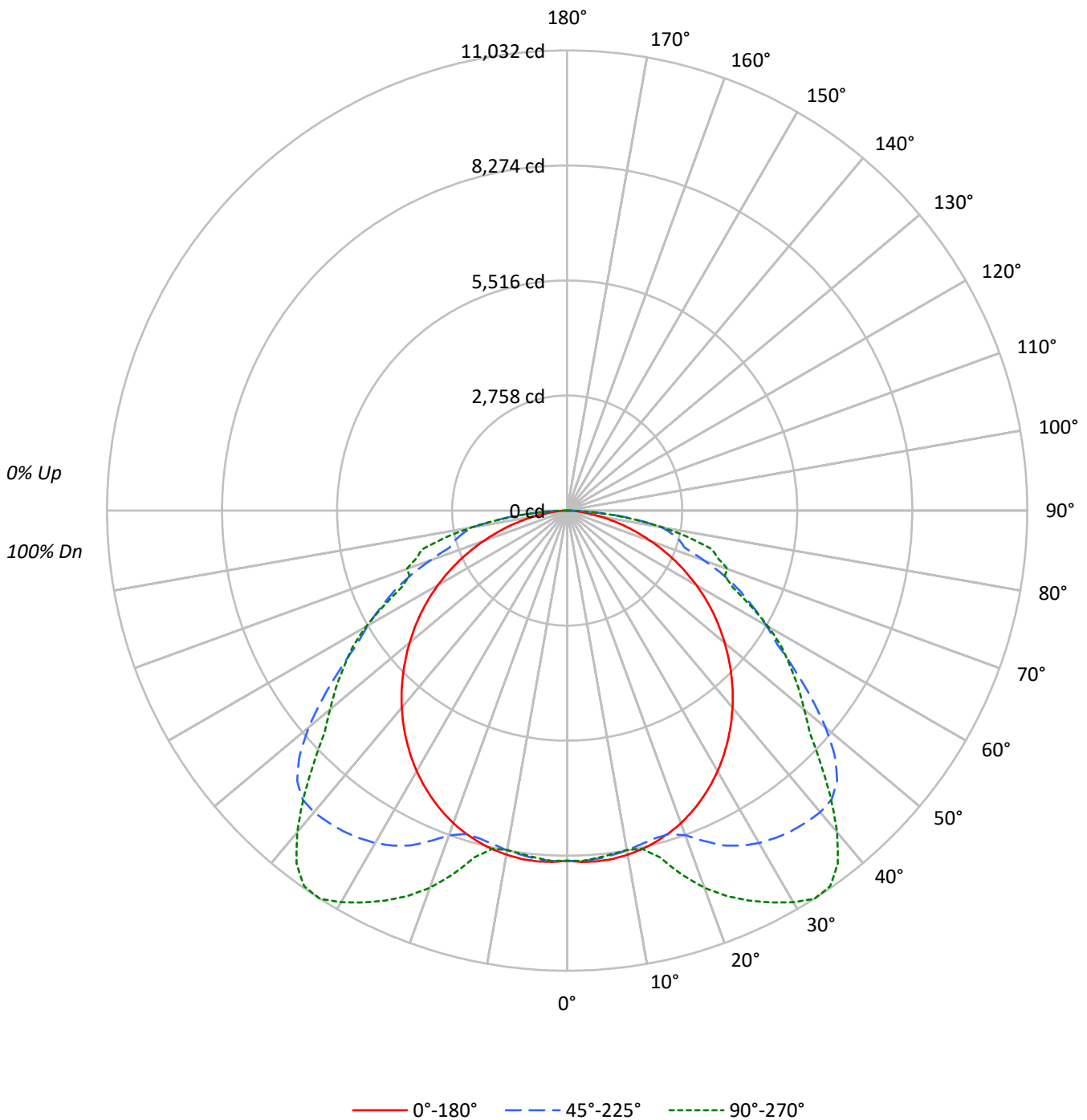
Lumens per Lamp: 4400 (8 lamps)
Luminaire Lumens: 32788.2 lumens
Efficiency: 93.1%
Efficacy: 72.9 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.74 / 1.69
Luminous Opening: Rectangular (W 2.08' x L: 3.75' x H: 0')
CIE Type: Direct

Input Watts (W): 450
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	111	111	111	111	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	80	82	80	78	76
2	91	82	75	70	88	80	74	69	77	72	67	74	70	66	71	67	64	62
3	82	72	63	57	80	70	63	56	67	61	55	65	59	54	62	57	53	51
4	75	63	54	48	73	62	54	47	59	52	47	57	51	46	55	50	45	43
5	68	56	47	40	66	55	46	40	53	45	40	51	44	39	49	43	39	37
6	63	50	41	35	61	49	41	35	47	40	34	46	39	34	44	38	34	32
7	58	45	36	30	56	44	36	30	43	35	30	41	35	30	40	34	30	28
8	54	41	33	27	52	40	32	27	39	32	27	38	31	26	37	31	26	24
9	50	37	29	24	49	37	29	24	36	29	24	35	28	24	34	28	23	22
10	47	34	27	21	46	34	26	21	33	26	21	32	26	21	31	25	21	19

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	11564	11564	11564
5°	11670	11591	11558
10°	11718	11569	11562
15°	11728	11602	12278
20°	11696	12142	14106
25°	11604	13463	15679
30°	11477	14641	17247
35°	11303	15770	18495
40°	11094	16975	18104
45°	10843	17838	16759
50°	10576	17328	15896
55°	10267	15981	15683
60°	9862	15197	15362
65°	9330	14941	14315
70°	8601	14059	16476
75°	7628	14873	19164
80°	6244	18257	18416
85°	4584	15540	14401



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ZONAL LUMENS:

CANDELA DISTRIBUTION:

Zone	Lumens	% Fixture	% Lamp		0°	22.5°	45°	67.5°	90°	Flux
0°-10°	797.4	2.4	2.3	0°	8393	8393	8393	8393	8393	
10°-20°	2366.2	7.2	6.7	5°	8438	8417	8381	8358	8357	803
20°-30°	4079.9	12.4	11.6	15°	8222	8133	8134	8392	8608	2320
30°-40°	5619.6	17.1	16.0	25°	7633	7540	8856	9947	10314	3516
40°-50°	6149.7	18.8	17.5	35°	6720	7138	9376	10702	10996	4202
50°-60°	5571.4	17.0	15.8	45°	5565	6934	9155	8863	8601	4292
60°-70°	4352.1	13.3	12.4	55°	4274	6301	6653	6522	6529	3816
70°-80°	2891.8	8.8	8.2	65°	2862	4836	4583	4462	4391	2829
80°-90°	960.1	2.9	2.7	75°	1433	2448	2794	3394	3600	1521
90°-100°	0.0	0.0	0.0	85°	290	925	983	945	911	356
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°	7243.5	22.1	20.6							
0°-40°	12863.1	39.2	36.5							
0°-60°	24584.1	75.0	69.8							
0°-90°	32788.2	100.0	93.1							
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°	32788.2	100.0	93.1							



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	8393	8393	8393	8393	8393
2.5°	8434	8425	8412	8406	8407
5°	8438	8417	8381	8358	8357
7.5°	8422	8380	8328	8308	8303
10°	8376	8316	8269	8252	8264
12.5°	8313	8233	8193	8244	8303
15°	8222	8133	8134	8392	8608
17.5°	8109	8005	8131	8817	9151
20°	7977	7861	8281	9285	9621
22.5°	7814	7703	8572	9656	9999
25°	7633	7540	8856	9947	10314
27.5°	7431	7373	9057	10191	10591
30°	7214	7249	9203	10405	10841
32.5°	6974	7167	9305	10594	11032
35°	6720	7138	9376	10702	10996
37.5°	6451	7135	9418	10582	10658
40°	6168	7109	9438	10186	10066
42.5°	5872	7038	9389	9566	9357
45°	5565	6934	9155	8863	8601
47.5°	5250	6803	8703	8107	7888
50°	4934	6649	8084	7422	7416
52.5°	4604	6482	7383	6964	6989
55°	4274	6301	6653	6522	6529
57.5°	3930	6101	5981	6074	6102
60°	3579	5838	5515	5632	5575
62.5°	3221	5413	5040	5134	4968
65°	2862	4836	4583	4462	4391
67.5°	2496	4167	4070	3936	4088
70°	2135	3477	3490	3761	4090
72.5°	1779	2904	2957	3677	3785
75°	1433	2448	2794	3394	3600
77.5°	1097	1973	2579	3000	2992
80°	787	1481	2301	2330	2321
82.5°	514	1229	1651	1650	1615
85°	290	925	983	945	911
87.5°	112	382	352	308	280
90°	0	0	0	0	0

(END OF REPORT)