

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: ITL66961

Luminaire Tested: **HBI-447T5-N-UNV-EHT1**

Issue Date: 3/3/2020



Test Information

Test Method: LM-41-14
Report Number: ITL66961
Test Lab: INDEPENDENT TESTING LABORATORIES, INC.
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: HBI-447T5-N-UNV-EHT1
Description: METALUX F-BAY HBI SERIES, FULL BODY STEEL HOUSING, WITH
A NARROW DISTRIBUTION SPECULAR ALUMINUM REFLECTOR, NO UPLIGHT
Light Source: FOUR 47-WATT T5 GE F54T5/47W/841/ECO LINEAR FLUORESCENTS - 4285 LUMENS EA
GE F54T5-47W 841-ECO 47W
Ballast/Driver: -

Summary

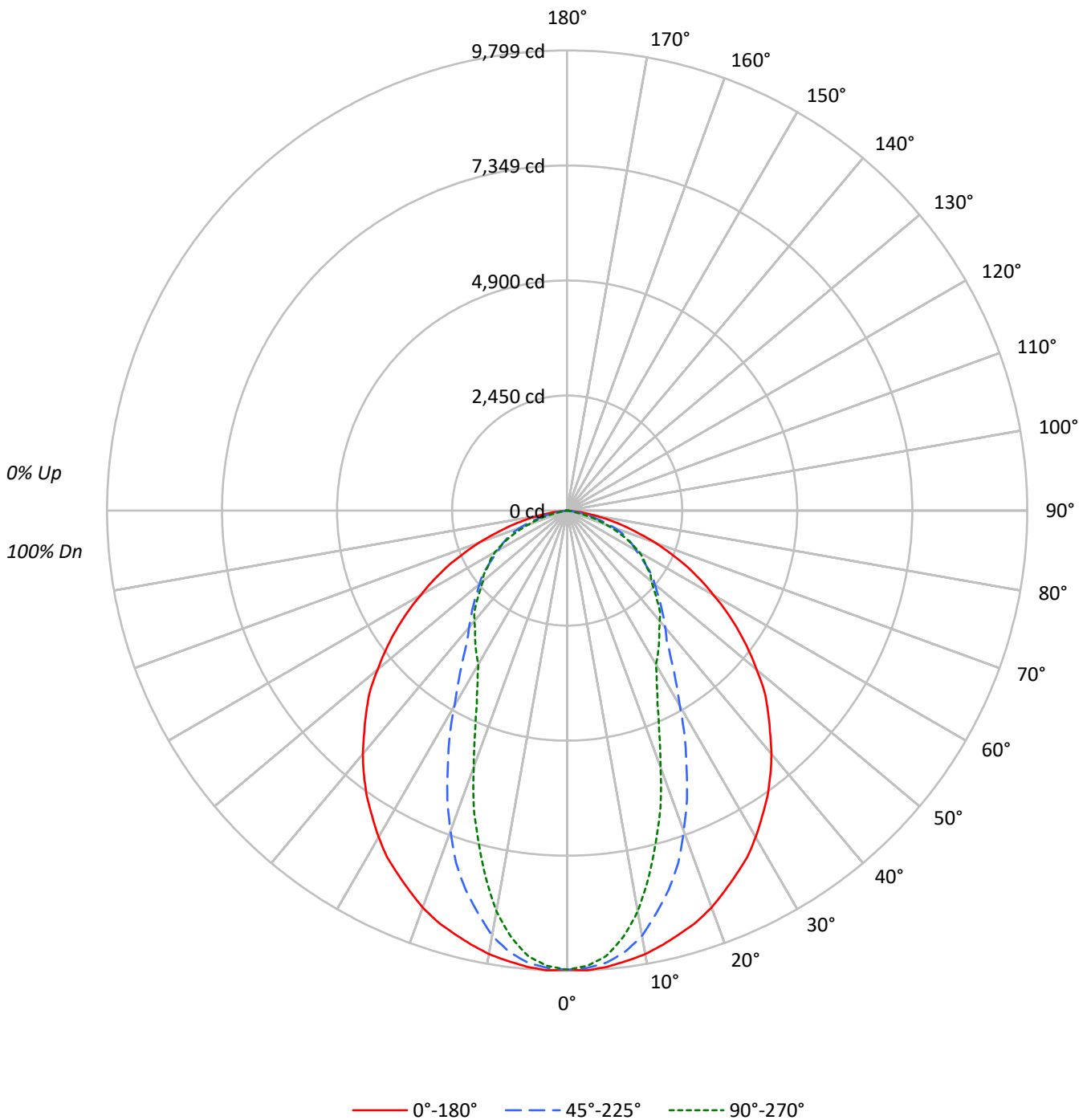
Lumens per Lamp: 4285 (4 lamps)
Luminaire Lumens: 16255.3 lumens
Efficiency: 94.8%
Efficacy: 78.9 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 0.72 / 0.92
Luminous Opening: Rectangular (W 1.29' x L: 3.99' x H: 0')
CIE Type: Direct

Input Watts (W): 205.9
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	113	113	113	113	110	110	110	110	105	105	105	101	101	101	97	97	97	95
1	105	101	97	94	102	99	95	93	95	92	90	91	89	87	88	86	84	82
2	96	89	84	79	94	88	82	78	84	80	76	81	78	74	79	76	73	71
3	89	80	73	67	86	78	72	67	76	70	66	73	68	65	71	67	63	62
4	82	72	64	58	80	71	63	58	68	62	57	66	61	57	64	60	56	54
5	76	65	57	51	74	64	57	51	62	56	51	60	55	50	58	54	50	48
6	71	59	51	46	69	58	51	46	57	50	45	55	49	45	54	49	44	43
7	66	54	47	41	64	53	46	41	52	46	41	51	45	41	50	44	40	38
8	62	50	43	37	60	49	42	37	48	42	37	47	41	37	46	41	37	35
9	58	46	39	34	57	46	39	34	45	38	34	44	38	34	43	37	34	32
10	55	43	36	31	54	43	36	31	42	35	31	41	35	31	40	35	31	29

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	20393	20393	20393
5°	20421	20232	19946
10°	20310	19473	18352
15°	20132	18044	15755
20°	19964	16114	12909
25°	19654	13845	10466
30°	19342	11557	9105
35°	18934	9838	8689
40°	18436	8845	8355
45°	17848	8302	8013
50°	17093	7899	7594
55°	16195	7514	7459
60°	15020	7084	7414
65°	13870	6994	6683
70°	12125	6490	5538
75°	9906	5110	3845
80°	6956	2919	1033
85°	2800	1125	1508



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ZONAL LUMENS:

CANDELA DISTRIBUTION:

Zone	Lumens	% Fixture	% Lamp		0°	22.5°	45°	67.5°	90°	Flux
0°-10°	905.0	5.6	5.3	0°	9776	9776	9776	9776	9776	
10°-20°	2330.7	14.3	13.6	5°	9752	9733	9662	9553	9525	925
20°-30°	2905.3	17.9	17.0	15°	9322	9126	8355	7619	7295	2632
30°-40°	2927.8	18.0	17.1	25°	8539	7811	6015	4853	4547	3936
40°-50°	2673.5	16.4	15.6	35°	7435	5944	3863	3444	3412	4644
50°-60°	2166.1	13.3	12.6	45°	6050	3945	2814	2763	2716	4662
60°-70°	1539.1	9.5	9.0	55°	4453	2278	2066	2051	2051	3977
70°-80°	712.1	4.4	4.2	65°	2810	1362	1417	1354	1354	2767
80°-90°	95.8	0.6	0.6	75°	1229	689	634	528	477	1313
90°-100°	0.0	0.0	0.0	85°	117	67	47	63	63	206
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°	6141.0	37.8	35.8							
0°-40°	9068.8	55.8	52.9							
0°-60°	13908.3	85.6	81.1							
0°-90°	16255.3	100.0	94.8							
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°	16255.3	100.0	94.8							



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	9776	9776	9776	9776	9776
2.5°	9799	9787	9748	9709	9705
5°	9752	9733	9662	9553	9525
7.5°	9674	9635	9474	9267	9157
10°	9588	9510	9193	8774	8664
12.5°	9463	9345	8778	8261	8007
15°	9322	9126	8355	7619	7295
17.5°	9181	8860	7866	6876	6621
20°	8993	8551	7259	6175	5815
22.5°	8766	8159	6664	5447	5127
25°	8539	7811	6015	4853	4547
27.5°	8312	7432	5420	4336	4133
30°	8030	6954	4798	3921	3780
32.5°	7725	6488	4301	3659	3600
35°	7435	5944	3863	3444	3412
37.5°	7107	5455	3487	3252	3217
40°	6770	4915	3248	3052	3068
42.5°	6394	4410	3025	2919	2927
45°	6050	3945	2814	2763	2716
47.5°	5698	3448	2610	2544	2512
50°	5267	2998	2434	2344	2340
52.5°	4868	2591	2281	2180	2238
55°	4453	2278	2066	2051	2051
57.5°	4039	2019	1867	1890	1933
60°	3600	1788	1698	1757	1777
62.5°	3209	1569	1565	1608	1565
65°	2810	1362	1417	1354	1354
67.5°	2379	1194	1268	1154	1127
70°	1988	990	1064	935	908
72.5°	1581	826	841	724	681
75°	1229	689	634	528	477
77.5°	892	540	446	301	243
80°	579	364	243	102	86
82.5°	337	196	67	70	70
85°	117	67	47	63	63
87.5°	16	23	20	23	23
90°	0	0	0	0	0

(END OF REPORT)