

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: 236p291

Luminaire Tested: **HBI-554T5-N-UNV-EHT2-U**

Issue Date: 3/3/2020



**Test Information**

Test Method: LM-41-14  
Report Number: 236p291  
Test Lab: METALUX RESEARCH LABS  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: HBI-554T5-N-UNV-EHT2-U  
Description: HBI SERIES, FULL BODY STEEL HOUSING, WITH FIVE T5HO LAMPS  
NARROW DISTRIBUTION SPECULAR REFLECTOR, NO UPLIGHT  
Light Source: FIVE T5 HIGH OUTPUT LINEAR FLUORESCENT LAMPS, F54T5 54W - 4400 LUMENS EA  
Ballast/Driver: -

**Summary**

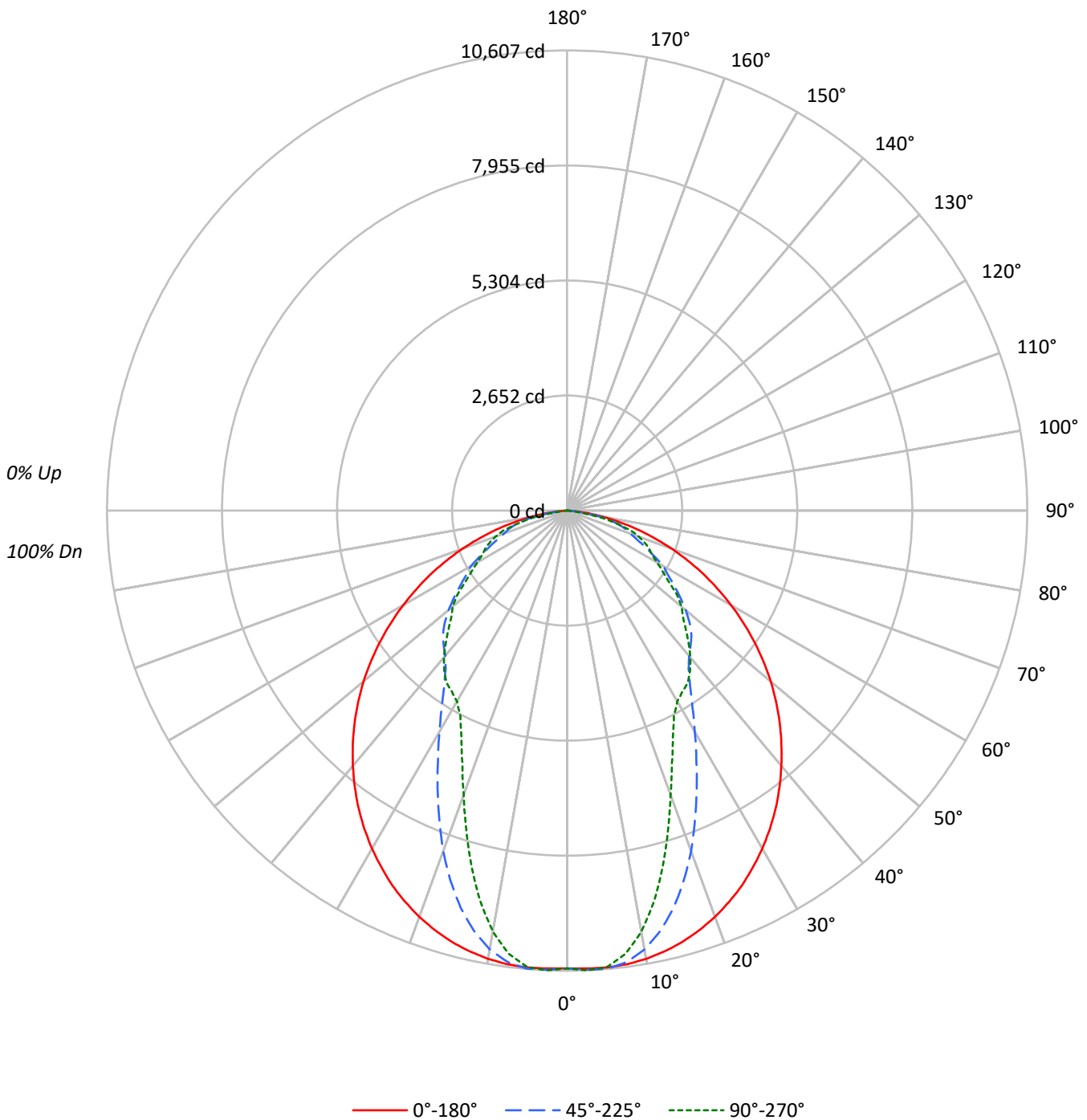
Lumens per Lamp: 4400 (5 lamps)  
Luminaire Lumens: 20855.9 lumens  
Efficiency: 94.8%  
Efficacy: 71.4 lumens/watt  
Spacing Criteria (0/90/45): 1.26 / 0.79 / 1.01  
Luminous Opening: Rectangular (W 1.23' x L: 3.92' x H: 0')  
CIE Type: Direct

Input Watts (W): 292  
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	104	100	96	92	101	98	94	91	94	91	88	90	88	85	86	85	83	81
2	95	88	82	77	93	86	80	76	83	78	74	80	76	72	77	73	71	69
3	87	78	70	65	85	76	69	64	73	68	63	71	66	62	69	64	61	59
4	80	69	62	56	78	68	61	55	66	60	54	64	58	54	62	57	53	51
5	74	63	55	49	72	62	54	48	60	53	48	58	52	47	56	51	47	45
6	69	57	49	43	67	56	48	43	54	47	42	53	47	42	51	46	42	40
7	64	52	44	38	63	51	44	38	50	43	38	48	42	38	47	42	37	36
8	60	48	40	35	59	47	40	35	46	39	34	45	39	34	44	38	34	32
9	56	44	37	32	55	44	36	31	42	36	31	41	35	31	41	35	31	29
10	53	41	34	29	52	40	33	29	39	33	29	39	33	29	38	32	28	27

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	23590	23590	23590
5°	23725	23786	23699
10°	23818	23319	22372
15°	23818	21946	19701
20°	23710	19865	16601
25°	23523	17429	14220
30°	23230	15183	13113
35°	22876	13481	13219
40°	22427	12749	12892
45°	21916	12812	12221
50°	21315	12400	11976
55°	20504	11706	11145
60°	19528	11456	10669
65°	18331	10454	11041
70°	16696	10093	11486
75°	14461	10565	10496
80°	11150	9077	6554
85°	5669	2411	1591



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**ZONAL LUMENS:**

**CANDELA DISTRIBUTION:**

Zone	Lumens	% Fixture	% Lamp		0°	22.5°	45°	67.5°	90°	Flux
0°-10°	998.6	4.8	4.5	0°	10551	10551	10551	10551	10551	
10°-20°	2641.4	12.7	12.0	5°	10571	10598	10598	10570	10559	###
20°-30°	3410.7	16.4	15.5	15°	10290	10176	9481	8783	8511	2902
30°-40°	3639.4	17.5	16.5	25°	9535	8866	7065	6024	5764	4390
40°-50°	3495.9	16.8	15.9	35°	8381	6894	4939	4800	4843	5239
50°-60°	2938.5	14.1	13.4	45°	6931	4737	4052	3952	3865	5343
60°-70°	2202.2	10.6	10.0	55°	5260	3057	3003	2963	2859	4700
70°-80°	1298.4	6.2	5.9	65°	3465	2105	1976	2014	2087	3423
80°-90°	230.7	1.1	1.0	75°	1674	1040	1223	1269	1215	1777
90°-100°	0.0	0.0	0.0	85°	221	252	94	63	62	328
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°	7050.8	33.8	32.0							
0°-40°	10690.2	51.3	48.6							
0°-60°	17124.6	82.1	77.8							
0°-90°	20855.9	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°	20855.9	100.0	94.8							



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	10551	10551	10551	10551	10551
2.5°	10565	10583	10593	10598	10607
5°	10571	10598	10598	10570	10559
7.5°	10547	10574	10498	10365	10304
10°	10491	10495	10271	9980	9854
12.5°	10404	10366	9925	9436	9235
15°	10290	10176	9481	8783	8511
17.5°	10140	9926	8941	8050	7724
20°	9965	9618	8349	7313	6977
22.5°	9760	9260	7705	6621	6309
25°	9535	8866	7065	6024	5764
27.5°	9272	8420	6450	5532	5333
30°	8998	7940	5881	5150	5079
32.5°	8697	7431	5376	4923	4947
35°	8381	6894	4939	4800	4843
37.5°	8040	6343	4598	4672	4653
40°	7684	5798	4368	4471	4417
42.5°	7311	5255	4211	4243	4141
45°	6931	4737	4052	3952	3865
47.5°	6533	4242	3826	3665	3615
50°	6128	3799	3565	3417	3443
52.5°	5699	3391	3282	3239	3190
55°	5260	3057	3003	2963	2859
57.5°	4816	2795	2748	2641	2612
60°	4367	2595	2562	2399	2386
62.5°	3912	2372	2255	2172	2201
65°	3465	2105	1976	2014	2087
67.5°	3004	1821	1741	1889	1935
70°	2554	1541	1544	1727	1757
72.5°	2107	1304	1404	1526	1546
75°	1674	1040	1223	1269	1215
77.5°	1253	811	1004	984	914
80°	866	631	705	571	509
82.5°	515	464	372	195	143
85°	221	252	94	63	62
87.5°	39	47	46	51	50
90°	0	0	0	0	0

(END OF REPORT)