

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: ITL63242

Luminaire Tested: **HBI-654T5-N-CL-UNV-EHT2-SDF-U**

Issue Date: 3/3/2020



Test Information

Test Method: LM-41-14
Report Number: ITL63242
Test Lab: INDEPENDENT TESTING LABORATORIES, INC.
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: HBI-654T5-N-CL-UNV-EHT2-SDF-U
Description: HBI SERIES, FULL BODY STEEL HOUSING, WITH SIX T5HO LAMPS
NARROW DISTRIBUTION SPECULAR REFLECTOR AND SLOTTED DOORFRAME (SDF)
WITH CLEAR ACRYLIC LENS, NO UPLIGHT
Light Source: SIX T5 HIGH OUTPUT LINEAR FLUORESCENT LAMPS, F54T5 54W - 4400 LUMENS EA
Ballast/Driver: -

Summary

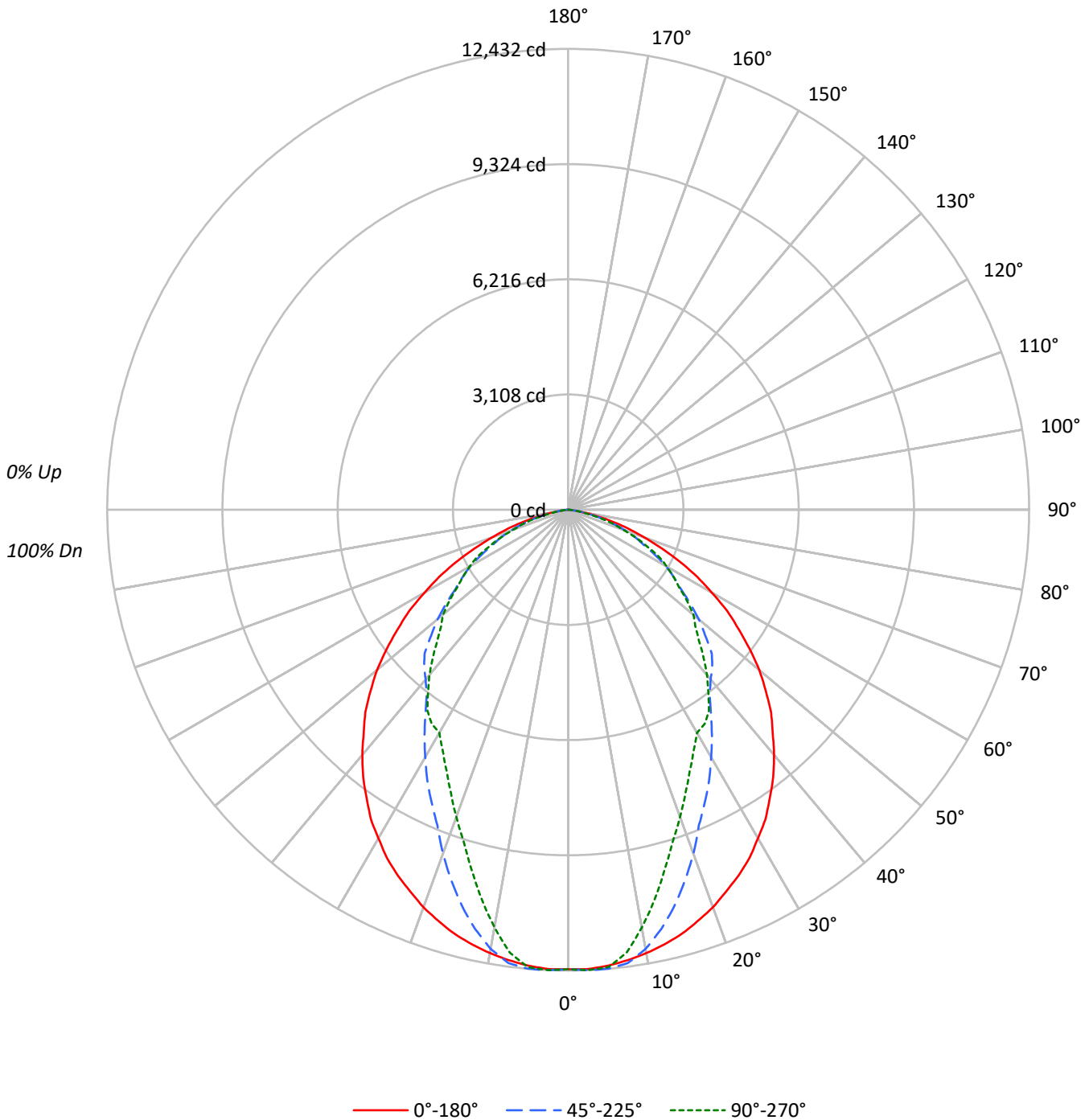
Lumens per Lamp: 4400 (6 lamps)
Luminaire Lumens: 24718.3 lumens
Efficiency: 93.6%
Efficacy: 74.9 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 0.87 / 1.09
Luminous Opening: Rectangular (W 1.2' x L: 3.94' x H: 0')
CIE Type: Direct

Input Watts (W): 330.2
Input Voltage (V): NR
Input Current (A_{in}): 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	109	109	109	109	104	104	104	100	100	100	96	96	96	94
1	103	99	96	93	101	97	94	91	93	91	88	90	88	86	86	85	83	81
2	95	88	82	77	92	86	81	76	83	78	75	80	76	73	77	74	71	69
3	87	78	71	65	85	77	70	65	74	68	64	71	67	63	69	65	62	60
4	80	70	62	56	78	69	61	56	66	60	55	64	59	55	62	58	54	52
5	74	63	55	49	72	62	54	49	60	53	48	58	52	48	56	51	47	46
6	69	57	49	44	67	56	49	43	55	48	43	53	47	43	52	46	42	40
7	64	52	44	39	62	51	44	39	50	43	38	49	43	38	47	42	38	36
8	60	48	40	35	58	47	40	35	46	39	35	45	39	35	44	38	34	33
9	56	44	37	32	55	44	37	32	43	36	32	42	36	31	41	35	31	30
10	53	41	34	29	52	40	34	29	40	33	29	39	33	29	38	33	29	27

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	28295	28295	28295
5°	28289	28479	28373
10°	28150	27883	26514
15°	27984	26153	23760
20°	27719	23979	21419
25°	27403	21941	19552
30°	26962	20306	18311
35°	26410	18682	18440
40°	25727	17808	17344
45°	24973	17663	16094
50°	23889	16324	15656
55°	22288	14717	14518
60°	20379	13911	14016
65°	17922	12128	12673
70°	14499	10982	10462
75°	10836	8491	8244
80°	5546	4941	4823
85°	1204	1440	969



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ZONAL LUMENS:

CANDELA DISTRIBUTION:

Zone	Lumens	% Fixture	% Lamp		0°	22.5°	45°	67.5°	90°	Flux
0°-10°	1168.7	4.7	4.4	0°	12399	12399	12399	12399	12399	
10°-20°	3100.4	12.5	11.7	5°	12349	12414	12432	12409	12386	###
20°-30°	4186.3	16.9	15.9	15°	11845	11900	11070	10305	10057	3339
30°-40°	4612.8	18.7	17.5	25°	10883	10328	8714	7981	7765	5010
40°-50°	4414.3	17.9	16.7	35°	9480	8205	6706	6629	6619	5933
50°-60°	3613.5	14.6	13.7	45°	7738	6023	5473	5111	4987	5944
60°-70°	2458.8	9.9	9.3	55°	5602	3997	3699	3713	3649	5014
70°-80°	1044.5	4.2	4.0	65°	3319	2448	2246	2425	2347	3287
80°-90°	119.0	0.5	0.5	75°	1229	894	963	986	935	1313
90°-100°	0.0	0.0	0.0	85°	46	60	55	37	37	119
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°	8455.4	34.2	32.0							
0°-40°	13068.2	52.9	49.5							
0°-60°	21096.0	85.3	79.9							
0°-90°	24718.3	100.0	93.6							
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°	24718.3	100.0	93.6							



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	12399	12399	12399	12399	12399
2.5°	12404	12423	12432	12432	12432
5°	12349	12414	12432	12409	12386
7.5°	12258	12354	12336	12129	12056
10°	12148	12267	12033	11621	11442
12.5°	12010	12116	11588	10956	10773
15°	11845	11900	11070	10305	10057
17.5°	11634	11621	10479	9645	9379
20°	11414	11231	9874	9054	8820
22.5°	11139	10828	9214	8554	8270
25°	10883	10328	8714	7981	7765
27.5°	10589	9837	8233	7490	7325
30°	10232	9287	7706	7018	6949
32.5°	9902	8778	7211	6766	6849
35°	9480	8205	6706	6629	6619
37.5°	9086	7591	6262	6349	6207
40°	8636	7078	5978	5955	5822
42.5°	8160	6537	5748	5524	5400
45°	7738	6023	5473	5111	4987
47.5°	7224	5515	5006	4694	4648
50°	6729	4955	4598	4359	4410
52.5°	6161	4483	4126	4121	4034
55°	5602	3997	3699	3713	3649
57.5°	5079	3644	3369	3319	3365
60°	4465	3268	3048	2984	3071
62.5°	3924	2860	2636	2732	2778
65°	3319	2448	2246	2425	2347
67.5°	2741	2003	1967	2012	1989
70°	2173	1604	1646	1646	1568
72.5°	1696	1233	1288	1242	1274
75°	1229	894	963	986	935
77.5°	770	646	642	614	541
80°	422	399	376	353	367
82.5°	174	206	170	197	156
85°	46	60	55	37	37
87.5°	9	14	14	18	18
90°	0	0	0	0	0

(END OF REPORT)