

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: P20008

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

Issue Date: 3/3/2020



Test Information

Test Method: LM-41-14
Report Number: P20008
Test Lab: COOPER LIGHTING PTC RESEARCH LAB
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: HBI-654T5-N-UNV-EHT2-U
Description: [HBI SERIES, FULL BODY STEEL HOUSING, WITH SIX T5HO LAMPS
NARROW DISTRIBUTION SPECULAR REFLECTOR NO UPLIGHT
Light Source: SIX T5 HIGH OUTPUT LINEAR FLUORESCENT LAMPS, F54T5 54W - 4400 LUMENS EA
Ballast/Driver: -

Summary

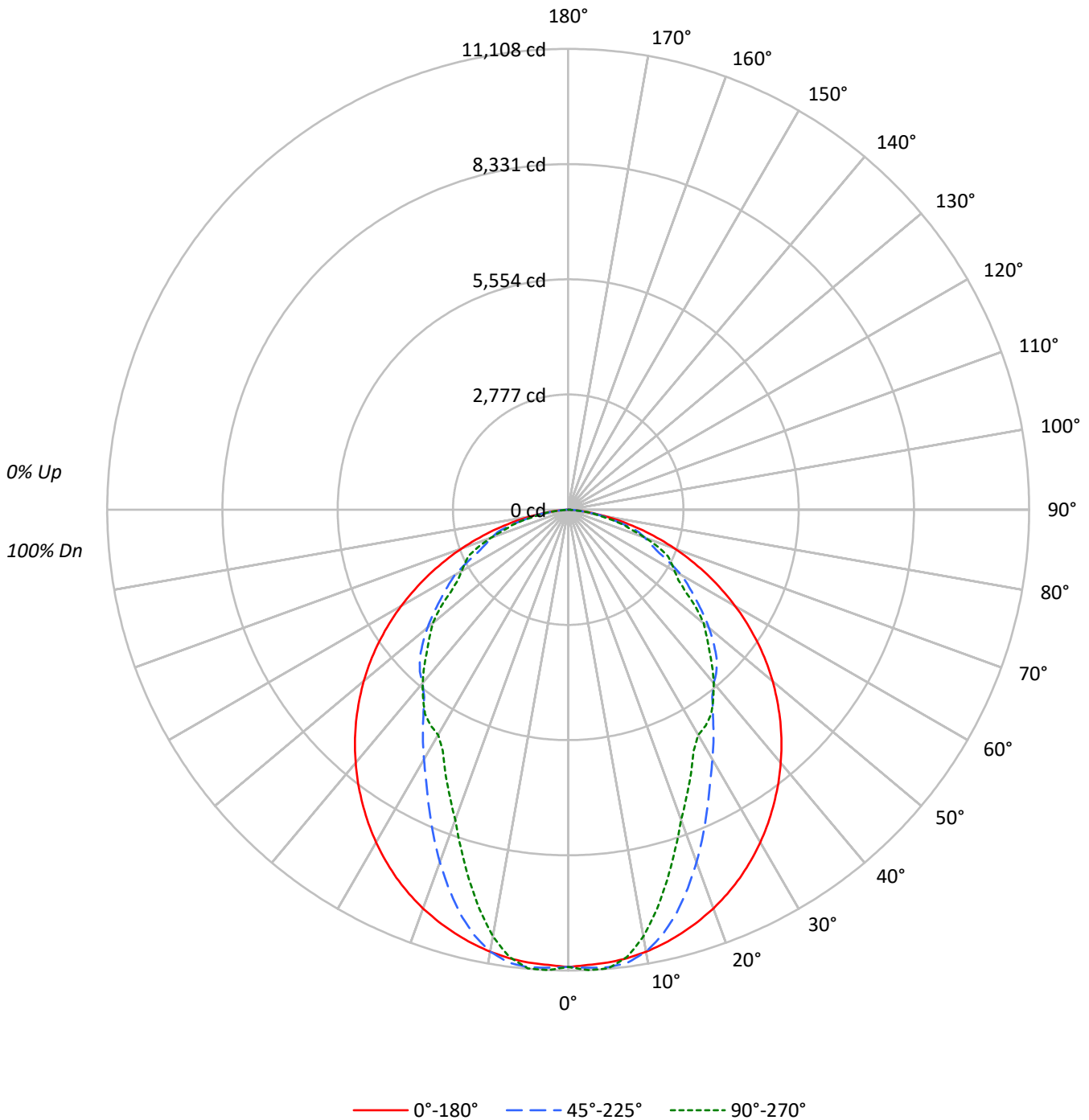
Lumens per Lamp: 4400 (6 lamps)
Luminaire Lumens: 23972.3 lumens
Efficiency: 90.8%
Efficacy: 72.3 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 0.89 / 1.11
Luminous Opening: Rectangular (W 1.19' x L: 3.9' x H: 0')
CIE Type: Direct

Input Watts (W): 331.5
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	108	108	108	108	106	106	106	106	101	101	101		97	97	97		93	93	93	91
1	99	95	92	88	97	93	90	87	89	87	84		86	84	81		83	81	79	77
2	91	84	78	73	88	82	76	72	79	74	70		76	72	69		73	70	67	65
3	83	74	67	61	81	72	66	61	70	64	59		67	62	58		65	61	57	56
4	76	66	58	52	74	65	58	52	62	56	51		60	55	51		58	54	50	48
5	70	59	51	46	69	58	51	45	56	50	45		55	49	44		53	48	44	42
6	65	54	46	40	64	53	45	40	51	45	40		50	44	39		48	43	39	37
7	61	49	41	36	59	48	41	36	47	40	35		45	40	35		44	39	35	33
8	57	45	37	32	55	44	37	32	43	36	32		42	36	32		41	35	31	30
9	53	41	34	29	52	41	34	29	40	33	29		39	33	29		38	33	29	27
10	50	38	31	27	49	38	31	27	37	31	26		36	30	26		35	30	26	25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	25642	25642	25642
5°	25598	25857	25922
10°	25563	25558	24672
15°	25451	24263	22226
20°	25325	22381	19702
25°	25136	20366	17973
30°	24878	18664	16834
35°	24555	17272	17076
40°	24201	16571	16565
45°	23786	16640	15820
50°	23278	16021	15420
55°	22582	15183	13999
60°	21629	14667	13797
65°	20315	13048	14617
70°	18517	13347	13381
75°	15948	12738	12199
80°	12046	10612	9205
85°	6007	6781	2563



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ZONAL LUMENS:

CANDELA DISTRIBUTION:

Zone	Lumens	% Fixture	% Lamp		0°	22.5°	45°	67.5°	90°	Flux
0°-10°	1044.8	4.4	4.0	0°	11021	11021	11021	11021	11021	
10°-20°	2806.4	11.7	10.6	5°	10960	11005	11071	11108	11099	###
20°-30°	3789.8	15.8	14.4	15°	10566	10632	10073	9467	9227	2982
30°-40°	4208.6	17.6	15.9	25°	9791	9399	7933	7215	7001	4510
40°-50°	4146.6	17.3	15.7	35°	8645	7536	6081	5988	6012	5408
50°-60°	3531.3	14.7	13.4	45°	7229	5540	5057	4892	4808	5573
60°-70°	2656.4	11.1	10.1	55°	5567	3846	3743	3609	3451	4970
70°-80°	1477.0	6.2	5.6	65°	3690	2620	2370	2576	2655	3649
80°-90°	311.5	1.3	1.2	75°	1774	1257	1417	1330	1357	1884
90°-100°	0.0	0.0	0.0	85°	225	268	254	119	96	337
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°	7641.0	31.9	28.9							
0°-40°	11849.5	49.4	44.9							
0°-60°	19527.5	81.5	74.0							
0°-90°	23972.3	100.0	90.8							
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°	23972.3	100.0	90.8							



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	11021	11021	11021	11021	11021
2.5°	10985	11002	11050	11105	11108
5°	10960	11005	11071	11108	11099
7.5°	10903	10979	11009	10940	10874
10°	10820	10916	10818	10572	10443
12.5°	10706	10802	10494	10062	9865
15°	10566	10632	10073	9467	9227
17.5°	10409	10406	9571	8847	8575
20°	10228	10122	9039	8226	7957
22.5°	10021	9782	8491	7670	7460
25°	9791	9399	7933	7215	7001
27.5°	9535	8968	7405	6759	6543
30°	9260	8510	6947	6339	6266
32.5°	8962	8031	6517	6102	6167
35°	8645	7536	6081	5988	6012
37.5°	8316	7032	5697	5805	5743
40°	7968	6521	5456	5541	5454
42.5°	7606	6016	5288	5251	5138
45°	7229	5540	5057	4892	4808
47.5°	6834	5092	4747	4554	4526
50°	6431	4661	4426	4272	4260
52.5°	6008	4229	4086	3995	3892
55°	5567	3846	3743	3609	3451
57.5°	5114	3547	3446	3183	3147
60°	4648	3280	3152	2901	2965
62.5°	4172	2969	2749	2723	2807
65°	3690	2620	2370	2576	2655
67.5°	3208	2262	2138	2398	2345
70°	2722	1923	1962	2027	1967
72.5°	2242	1617	1775	1648	1594
75°	1774	1257	1417	1330	1357
77.5°	1324	976	1050	1054	977
80°	899	796	792	677	687
82.5°	524	515	448	530	499
85°	225	268	254	119	96
87.5°	42	80	60	59	58
90°	0	0	0	0	0

(END OF REPORT)