

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: ITL63418

Luminaire Tested: **HBI-532-W-UNV-EB82-UPL-U**

Issue Date: 3/3/2020



Test Information

Test Method: LM-41-14
Report Number: ITL63418
Test Lab: INDEPENDENT TESTING LABORATORIES, INC.
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: HBI-532-W-UNV-EB82-UPL-U
Description: HBI SERIES, FULL BODY STEEL HOUSING, WITH FIVE T8 LAMPS
WIDE DISTRIBUTION WHITE ALUM REFLECTOR WITH UPLIGHT
Light Source: FIVE T8 LINEAR FLUORESCENT LAMPS, F32T8 32W - 3100 LUMENS EA
Ballast/Driver: -

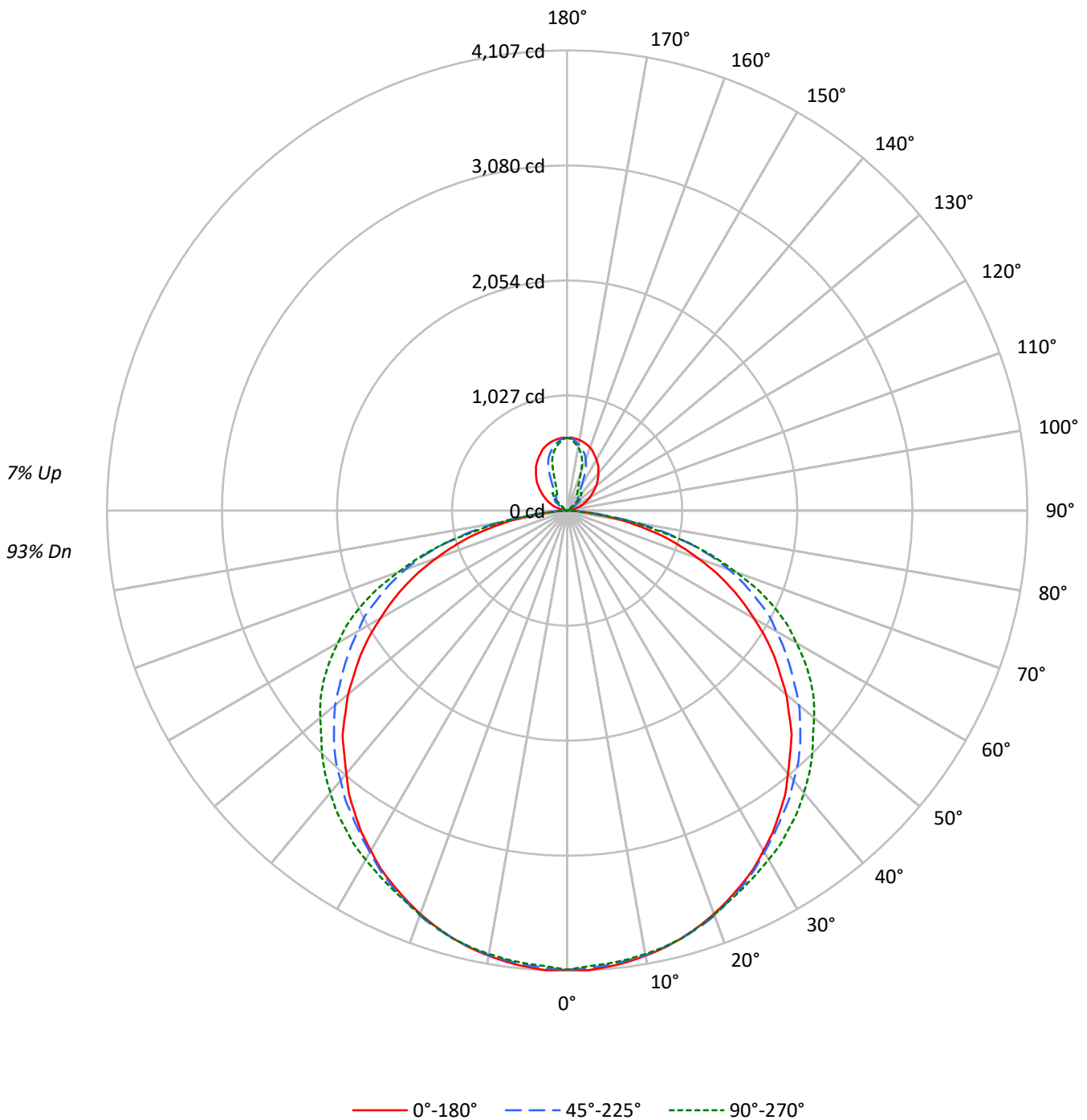
Summary

Lumens per Lamp: 3100 (5 lamps)
Luminaire Lumens: 13861.9 lumens
Efficiency: 89.4%
Efficacy: 93.7 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.31 / 1.43
Luminous Opening: Rectangular (W 1.3' x L: 3.99' x H: 0')
CIE Type: Direct

Input Watts (W): 148
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	105	105	105	105	102	102	102	102	96	96	96	91	91	91	86	86	86	83
1	95	91	87	83	92	88	85	82	83	81	78	79	77	74	75	73	71	69
2	86	79	72	67	83	76	71	66	72	68	63	68	65	61	65	62	59	56
3	78	69	61	55	76	67	60	54	63	57	52	60	55	51	57	53	49	47
4	71	60	52	46	69	59	51	46	56	49	44	53	48	43	50	46	42	40
5	66	54	46	39	63	52	45	39	50	43	38	47	42	37	45	40	36	34
6	60	48	40	34	58	47	39	34	45	38	33	43	37	32	41	36	32	30
7	56	44	36	30	54	43	35	30	41	34	29	39	33	28	37	32	28	26
8	52	40	32	27	50	39	31	26	37	31	26	36	30	25	34	29	25	23
9	48	36	29	24	47	36	28	24	34	28	23	33	27	23	31	26	22	21
10	45	33	26	22	44	33	26	21	31	25	21	30	25	21	29	24	20	19

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8491	8491	8491
5°	8505	8474	8445
10°	8488	8475	8454
15°	8473	8476	8478
20°	8450	8481	8463
25°	8420	8457	8498
30°	8384	8424	8606
35°	8353	8444	8745
40°	8290	8507	8894
45°	8305	8621	9064
50°	8227	8713	9271
55°	8132	8771	9588
60°	7969	8943	9788
65°	7840	9149	9992
70°	7512	9306	9675
75°	7101	9015	9039
80°	5907	7541	7016
85°	2734	4065	2900



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ZONAL LUMENS:

CANDELA DISTRIBUTION:

Zone	Lumens	% Fixture	% Lamp		0°	22.5°	45°	67.5°	90°	Flux
0°-10°	387.5	2.8	2.5	0°	4098	4098	4098	4098	4098	
10°-20°	1115.6	8.0	7.2	5°	4089	4088	4074	4064	4060	389
20°-30°	1707.2	12.3	11.0	15°	3950	3950	3951	3950	3952	1115
30°-40°	2109.0	15.2	13.6	25°	3683	3695	3699	3705	3717	1698
40°-50°	2272.9	16.4	14.7	35°	3302	3328	3338	3437	3457	2067
50°-60°	2175.7	15.7	14.0	45°	2834	2829	2942	3060	3093	2177
60°-70°	1810.6	13.1	11.7	55°	2251	2247	2428	2612	2654	2009
70°-80°	1113.9	8.0	7.2	65°	1599	1641	1866	2039	2038	1579
80°-90°	240.7	1.7	1.6	75°	887	984	1126	1174	1129	922
90°-100°	13.0	0.1	0.1	85°	115	206	171	156	122	181
100°-110°	31.5	0.2	0.2	90°	0	6	9	12	10	4
110°-120°	66.0	0.5	0.4	95°	9	10	12	13	10	17
120°-130°	96.9	0.7	0.6	105°	87	22	17	18	15	95
130°-140°	153.4	1.1	1.0	115°	184	81	39	42	33	182
140°-150°	171.9	1.2	1.1	125°	280	108	103	42	46	251
150°-160°	180.7	1.3	1.2	135°	386	215	146	176	148	297
160°-170°	155.5	1.1	1.0	145°	484	396	192	169	184	301
170°-180°	59.8	0.4	0.4	155°	562	512	380	275	231	259
0°-30°	3210.2	23.2	20.7	165°	622	594	551	528	502	175
0°-40°	5319.2	38.4	34.3	175°	649	646	637	632	621	62
0°-60°	9767.9	70.5	63.0	180°	648	648	648	648	648	
0°-90°	12933.1	93.3	83.4							
90°-120°	110.5	0.8	0.7							
90°-150°	532.7	3.8	3.4							
90°-180°	929.0	6.7	6.0							
0°-180°	13861.9	100.0	89.4							



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	4098	4098	4098	4098	4098
2.5°	4107	4101	4088	4073	4071
5°	4089	4088	4074	4064	4060
7.5°	4067	4063	4053	4045	4043
10°	4034	4033	4028	4022	4018
12.5°	3998	3994	3993	3988	3991
15°	3950	3950	3951	3950	3952
17.5°	3894	3905	3905	3905	3896
20°	3832	3842	3846	3838	3838
22.5°	3759	3776	3769	3777	3774
25°	3683	3695	3699	3705	3717
27.5°	3604	3614	3616	3641	3657
30°	3504	3523	3521	3571	3597
32.5°	3411	3430	3431	3503	3537
35°	3302	3328	3338	3437	3457
37.5°	3196	3206	3252	3349	3382
40°	3065	3084	3145	3261	3288
42.5°	2945	2957	3052	3160	3195
45°	2834	2829	2942	3060	3093
47.5°	2686	2699	2821	2948	2976
50°	2552	2544	2703	2829	2876
52.5°	2395	2405	2560	2720	2776
55°	2251	2247	2428	2612	2654
57.5°	2095	2112	2297	2479	2517
60°	1923	1953	2158	2320	2362
62.5°	1767	1799	2032	2177	2220
65°	1599	1641	1866	2039	2038
67.5°	1432	1469	1710	1841	1841
70°	1240	1310	1536	1624	1597
72.5°	1065	1133	1346	1394	1379
75°	887	984	1126	1174	1129
77.5°	679	814	882	903	829
80°	495	634	632	618	588
82.5°	291	428	371	388	330
85°	115	206	171	156	122
87.5°	25	49	37	44	44
90°	0	6	9	12	10
92.5°	2	9	11	11	8
95°	9	10	12	13	10
97.5°	29	11	12	14	11
100°	46	17	13	15	13
102.5°	66	22	14	15	13
105°	87	22	17	18	15
107.5°	116	34	24	22	17
110°	141	55	31	25	21



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	159	72	39	32	25
115°	184	81	39	42	33
117.5°	208	84	36	56	46
120°	230	84	43	55	60
122.5°	255	93	71	44	59
125°	280	108	103	42	46
127.5°	307	125	131	65	40
130°	332	147	149	109	54
132.5°	362	175	151	148	107
135°	386	215	146	176	148
137.5°	409	264	141	193	183
140°	435	312	148	188	204
142.5°	458	359	168	176	198
145°	484	396	192	169	184
147.5°	503	427	215	182	169
150°	524	456	258	204	180
152.5°	542	484	314	229	204
155°	562	512	380	275	231
157.5°	582	536	442	344	282
160°	597	561	487	431	351
162.5°	611	578	524	486	446
165°	622	594	551	528	502
167.5°	632	611	575	563	540
170°	639	624	600	588	574
172.5°	645	637	619	613	598
175°	649	646	637	632	621
177.5°	653	650	649	646	642
180°	648	648	648	648	648

(END OF REPORT)