

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: 236P198C

Luminaire Tested: **I8-432-G-UNV-EB81-UPL**

Issue Date: 3/3/2020



Test Information

Test Method: LM-41-14
Report Number: 236P198C
Test Lab: METALUX LABORATORIES
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: I8-432-G-UNV-EB81-UPL
Description: I8 SERIES LUMINAIRE WITH HIGH REFLECTANCE WHITE WIDE
DISTRIBUTION REFLECTOR AND UPLIGHT
Light Source: FOUR 32-WATT T8 LAMPS - 3000 LUMENS EA - PHILIPS - F32T8/TL835
Ballast/Driver: GE PROLINE GE-432-MV-N

Summary

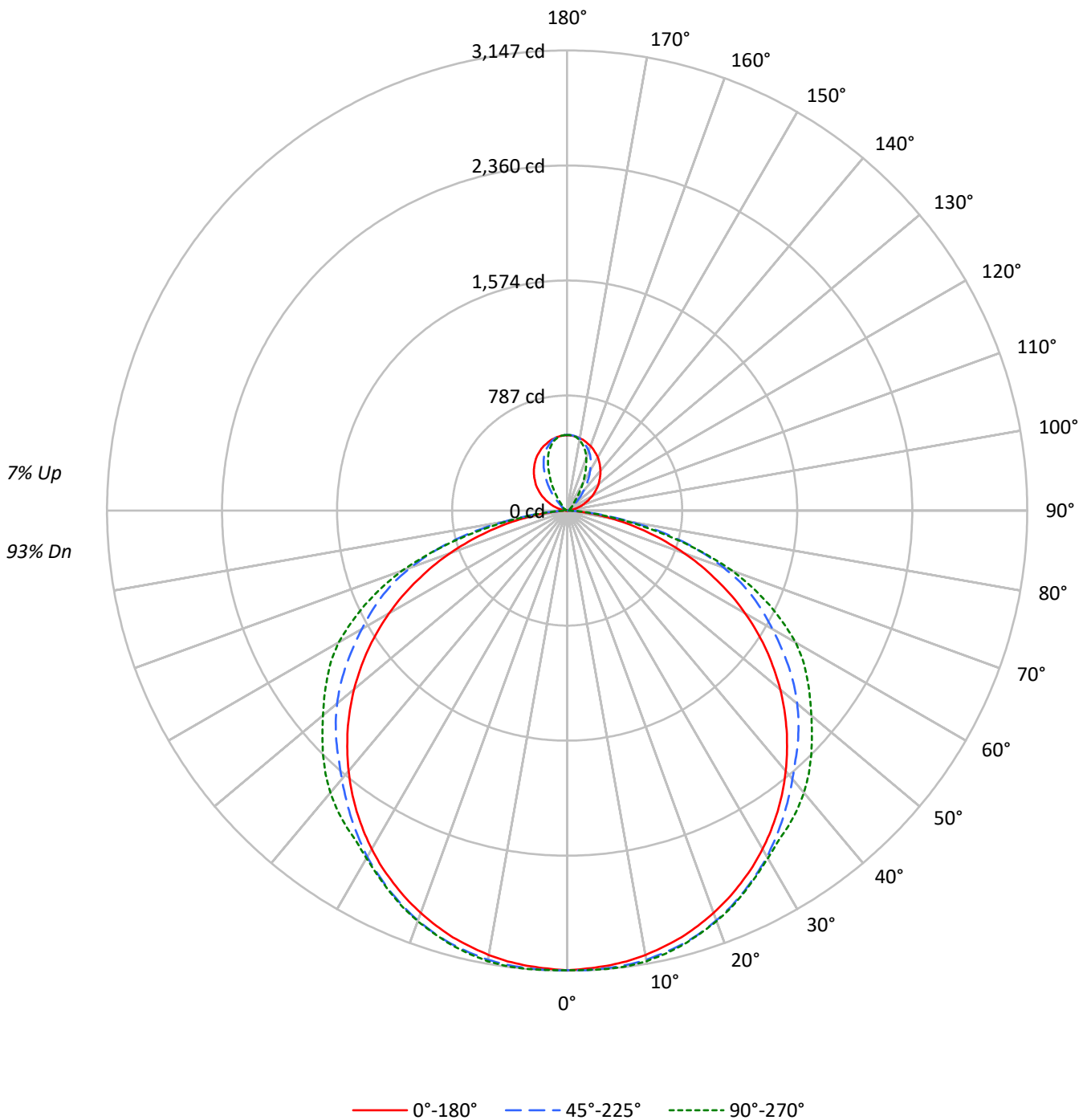
Lumens per Lamp: 3000 (4 lamps)
Luminaire Lumens: 10528.7 lumens
Efficiency: 87.7%
Efficacy: 94.9 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.3 / 1.42
Luminous Opening: Rectangular (W 0.84' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 111
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	103	103	103	103	100	100	100	100	94	94	94	89	89	89	84	84	84	81
1	94	89	86	82	91	87	83	80	82	79	76	77	75	73	73	71	70	67
2	85	77	71	66	82	75	70	65	71	66	62	67	63	60	64	61	58	56
3	77	68	60	55	74	66	59	54	62	57	52	59	54	50	56	52	49	46
4	70	60	52	46	68	58	51	45	55	49	44	52	47	43	50	45	41	39
5	65	53	45	39	62	52	44	39	49	43	38	47	41	37	44	40	36	34
6	59	48	40	34	57	46	39	34	44	38	33	42	36	32	40	35	31	29
7	55	43	35	30	53	42	35	30	40	34	29	38	33	28	37	31	28	26
8	51	39	32	27	49	38	31	26	37	30	26	35	29	25	34	28	25	23
9	48	36	29	24	46	35	28	24	34	27	23	32	27	23	31	26	22	20
10	45	33	26	21	43	32	26	21	31	25	21	30	24	20	29	24	20	18

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10027	10027	10027
5°	10005	10056	10075
10°	9994	10101	10133
15°	9975	10127	10146
20°	9938	10124	10141
25°	9892	10096	10117
30°	9844	10068	10109
35°	9776	10014	10263
40°	9684	9980	10487
45°	9576	10067	10649
50°	9442	10191	10816
55°	9252	10259	11143
60°	8968	10346	11507
65°	8543	10588	11516
70°	7936	10612	11181
75°	6999	10117	9735
80°	5565	8100	7310
85°	2818	4501	4098



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ZONAL LUMENS:

CANDELA DISTRIBUTION:

Zone	Lumens	% Fixture	% Lamp		0°	22.5°	45°	67.5°	90°	Flux
0°-10°	298.9	2.8	2.5	0°	3144	3144	3144	3144	3144	
10°-20°	863.1	8.2	7.2	5°	3125	3132	3141	3150	3147	297
20°-30°	1318.8	12.5	11.0	15°	3021	3043	3067	3077	3073	852
30°-40°	1614.2	15.3	13.5	25°	2811	2850	2869	2878	2875	1296
40°-50°	1730.2	16.4	14.4	35°	2511	2557	2572	2606	2636	1570
50°-60°	1639.5	15.6	13.7	45°	2123	2168	2232	2333	2361	1637
60°-70°	1339.8	12.7	11.2	55°	1664	1698	1845	1957	2004	1485
70°-80°	785.6	7.5	6.5	65°	1132	1202	1403	1502	1526	1120
80°-90°	165.4	1.6	1.4	75°	568	684	821	809	790	602
90°-100°	9.0	0.1	0.1	85°	77	131	123	117	112	114
100°-110°	19.7	0.2	0.2	90°	0	6	7	6	5	4
110°-120°	40.2	0.4	0.3	95°	17	6	7	8	7	19
120°-130°	77.9	0.7	0.6	105°	73	16	10	9	9	78
130°-140°	116.0	1.1	1.0	115°	152	41	22	11	12	151
140°-150°	158.4	1.5	1.3	125°	238	133	41	35	35	213
150°-160°	172.0	1.6	1.4	135°	317	247	111	52	51	245
160°-170°	131.5	1.2	1.1	145°	388	351	244	161	135	243
170°-180°	48.5	0.5	0.4	155°	445	430	380	321	298	205
0°-30°	2480.8	23.6	20.7	165°	488	485	470	455	446	138
0°-40°	4095.0	38.9	34.1	175°	512	514	514	513	513	49
0°-60°	7464.7	70.9	62.2	180°	516	516	516	516	516	
0°-90°	9755.5	92.7	81.3							
90°-120°	68.9	0.7	0.6							
90°-150°	421.2	4.0	3.5							
90°-180°	773.0	7.3	6.4							
0°-180°	10528.7	100.0	87.7							



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3144	3144	3144	3144	3144
2.5°	3135	3140	3146	3149	3144
5°	3125	3132	3141	3150	3147
7.5°	3110	3118	3134	3144	3143
10°	3086	3098	3119	3130	3129
12.5°	3055	3072	3095	3107	3104
15°	3021	3043	3067	3077	3073
17.5°	2978	3003	3029	3037	3032
20°	2928	2958	2983	2989	2988
22.5°	2874	2909	2930	2939	2936
25°	2811	2850	2869	2878	2875
27.5°	2747	2788	2804	2814	2810
30°	2673	2717	2734	2742	2745
32.5°	2594	2639	2654	2671	2683
35°	2511	2557	2572	2606	2636
37.5°	2421	2469	2485	2551	2582
40°	2326	2372	2397	2488	2519
42.5°	2226	2271	2312	2414	2445
45°	2123	2168	2232	2333	2361
47.5°	2015	2058	2147	2241	2270
50°	1903	1942	2054	2146	2180
52.5°	1784	1820	1955	2049	2093
55°	1664	1698	1845	1957	2004
57.5°	1537	1574	1733	1863	1914
60°	1406	1451	1622	1764	1804
62.5°	1273	1329	1514	1643	1669
65°	1132	1202	1403	1502	1526
67.5°	994	1073	1282	1354	1368
70°	851	939	1138	1192	1199
72.5°	708	807	986	1013	999
75°	568	684	821	809	790
77.5°	433	559	636	603	585
80°	303	423	441	413	398
82.5°	182	279	263	242	234
85°	77	131	123	117	112
87.5°	19	36	41	43	43
90°	0	6	7	6	5
92.5°	8	6	8	8	5
95°	17	6	7	8	7
97.5°	28	6	7	7	6
100°	40	7	7	8	6
102.5°	56	10	8	8	8
105°	73	16	10	9	9
107.5°	93	20	10	10	9
110°	111	24	10	10	9



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	131	28	15	10	10
115°	152	41	22	11	12
117.5°	174	61	28	15	13
120°	197	82	32	23	18
122.5°	217	106	39	32	26
125°	238	133	41	35	35
127.5°	260	162	46	42	39
130°	280	190	61	48	45
132.5°	297	217	82	47	49
135°	317	247	111	52	51
137.5°	336	275	141	69	55
140°	354	301	171	95	72
142.5°	371	327	207	127	102
145°	388	351	244	161	135
147.5°	404	372	279	198	170
150°	420	394	314	240	211
152.5°	433	412	349	281	254
155°	445	430	380	321	298
157.5°	459	447	410	363	341
160°	469	462	433	398	382
162.5°	478	474	453	431	419
165°	488	485	470	455	446
167.5°	496	495	487	476	470
170°	502	502	500	493	489
172.5°	508	509	508	506	504
175°	512	514	514	513	513
177.5°	514	516	517	517	516
180°	516	516	516	516	516

(END OF REPORT)