

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: 236P188C

Luminaire Tested: **I8-332-UNV-EB81-UPL**

Issue Date: 3/3/2020



Test Information

Test Method: LM-41-14
Report Number: 236P188C
Test Lab: METALUX LABORATORIES
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: I8-332-UNV-EB81-UPL
Description: I8 SERIES LUMINAIRE WITH SPECULAR ALUMINUM MEDIUM
DISTRIBUTION REFLECTOR AND UPLIGHT
Light Source: THREE 32-WATT T8 LAMPS - 3000 LUMENS EA - PHILIPS - F32T8/TL835
Ballast/Driver: GE PROLINE GE-432-MV-N

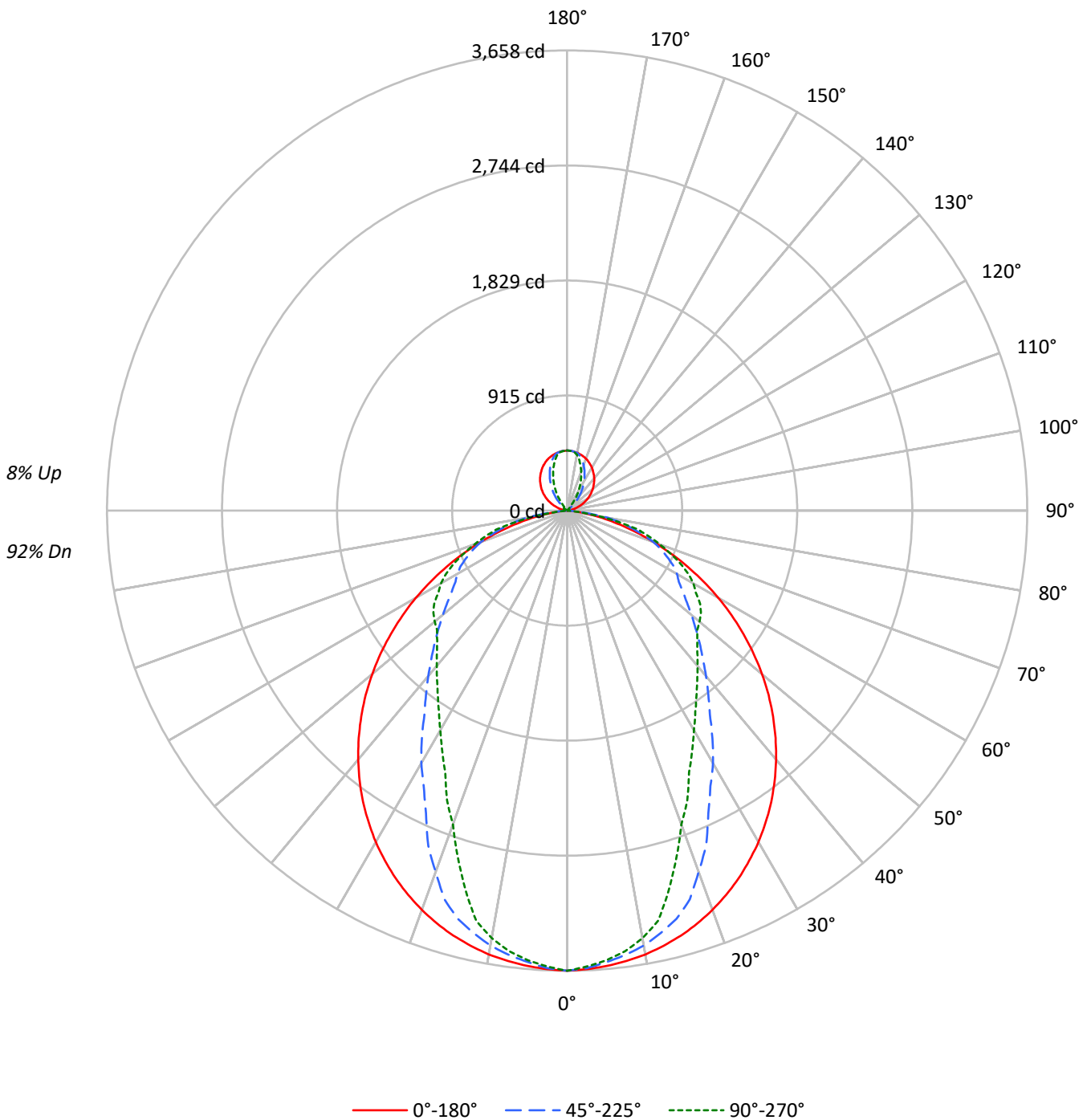
Summary

Lumens per Lamp: 3000 (3 lamps)
Luminaire Lumens: 8468.3 lumens
Efficiency: 94.1%
Efficacy: 91.1 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 0.88 / 1.08
Luminous Opening: Rectangular (W 0.84' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 93
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	110	110	110	110	107	107	107	107	100	100	100		95	95	95		89	89	89	87
1	101	97	93	90	98	94	91	88	89	86	83		84	82	80		79	78	76	74
2	92	85	79	74	89	83	77	72	78	74	70		74	70	67		70	67	64	62
3	85	75	68	62	82	73	66	61	69	64	59		66	61	57		62	59	55	53
4	78	67	59	53	75	65	58	52	62	56	51		59	54	49		56	52	48	46
5	72	60	52	46	69	59	51	45	56	49	44		53	48	43		51	46	42	40
6	66	54	46	41	64	53	46	40	51	44	39		48	43	38		46	41	37	35
7	62	50	42	36	60	48	41	36	46	40	35		44	39	34		43	37	34	32
8	58	45	38	32	56	44	37	32	43	36	32		41	35	31		39	34	30	28
9	54	42	34	29	52	41	34	29	39	33	29		38	32	28		36	31	28	26
10	51	39	32	27	49	38	31	27	37	30	26		35	30	26		34	29	25	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	11666	11666	11666
5°	11634	11532	11487
10°	11604	11370	11176
15°	11550	11091	10312
20°	11465	10372	9014
25°	11352	9339	8073
30°	11206	8540	7424
35°	11011	7697	6977
40°	10758	7144	6715
45°	10441	6711	6590
50°	10037	6396	6817
55°	9519	6222	7178
60°	8860	6436	7393
65°	7977	6633	7479
70°	6844	6798	7292
75°	5397	6482	7147
80°	3692	5877	4628
85°	1647	1939	805



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ZONAL LUMENS:

CANDELA DISTRIBUTION:

Zone	Lumens	% Fixture	% Lamp		0°	22.5°	45°	67.5°	90°	Flux
0°-10°	341.4	4.0	3.8	0°	3658	3658	3658	3658	3658	
10°-20°	931.0	11.0	10.3	5°	3634	3623	3602	3593	3588	345
20°-30°	1257.6	14.9	14.0	15°	3498	3442	3359	3200	3123	987
30°-40°	1354.9	16.0	15.1	25°	3226	3108	2654	2402	2294	1486
40°-50°	1284.7	15.2	14.3	35°	2828	2536	1977	1821	1792	1767
50°-60°	1130.0	13.3	12.6	45°	2315	1805	1488	1459	1461	1784
60°-70°	885.2	10.5	9.8	55°	1712	1184	1119	1250	1291	1528
70°-80°	522.4	6.2	5.8	65°	1057	710	879	977	991	1046
80°-90°	95.6	1.1	1.1	75°	438	409	526	575	580	473
90°-100°	7.9	0.1	0.1	85°	45	93	53	29	22	71
100°-110°	17.3	0.2	0.2	90°	2	6	7	6	4	3
110°-120°	35.6	0.4	0.4	95°	12	5	6	7	6	15
120°-130°	59.4	0.7	0.7	105°	66	8	10	9	8	72
130°-140°	90.7	1.1	1.0	115°	146	20	17	20	19	145
140°-150°	136.9	1.6	1.5	125°	227	115	9	12	18	203
150°-160°	153.2	1.8	1.7	135°	300	213	73	17	10	232
160°-170°	119.8	1.4	1.3	145°	365	311	208	137	95	228
170°-180°	44.8	0.5	0.5	155°	417	399	328	275	255	193
0°-30°	2529.9	29.9	28.1	165°	454	452	432	407	394	128
0°-40°	3884.8	45.9	43.2	175°	474	474	474	475	472	45
0°-60°	6299.5	74.4	70.0	180°	478	478	478	478	478	
0°-90°	7802.7	92.1	86.7							
90°-120°	60.8	0.7	0.7							
90°-150°	347.8	4.1	3.9							
90°-180°	666.0	7.9	7.4							
0°-180°	8468.3	100.0	94.1							



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3658	3658	3658	3658	3658
2.5°	3649	3650	3641	3631	3627
5°	3634	3623	3602	3593	3588
7.5°	3611	3583	3562	3543	3533
10°	3583	3546	3511	3470	3451
12.5°	3543	3499	3440	3380	3340
15°	3498	3442	3359	3200	3123
17.5°	3442	3374	3241	3008	2890
20°	3378	3296	3056	2748	2656
22.5°	3305	3205	2885	2569	2493
25°	3226	3108	2654	2402	2294
27.5°	3136	3001	2468	2203	2151
30°	3043	2870	2319	2071	2016
32.5°	2938	2705	2149	1939	1896
35°	2828	2536	1977	1821	1792
37.5°	2710	2363	1843	1720	1698
40°	2584	2162	1716	1624	1613
42.5°	2452	1969	1597	1537	1532
45°	2315	1805	1488	1459	1461
47.5°	2172	1649	1385	1384	1403
50°	2023	1483	1289	1326	1374
52.5°	1869	1323	1200	1292	1340
55°	1712	1184	1119	1250	1291
57.5°	1550	1050	1052	1191	1213
60°	1389	927	1009	1114	1159
62.5°	1221	813	954	1052	1084
65°	1057	710	879	977	991
67.5°	893	616	807	876	885
70°	734	535	729	770	782
72.5°	580	473	629	670	680
75°	438	409	526	575	580
77.5°	311	338	430	436	415
80°	201	261	320	277	252
82.5°	110	178	172	126	105
85°	45	93	53	29	22
87.5°	15	17	15	16	14
90°	2	6	7	6	4
92.5°	6	5	7	7	6
95°	12	5	6	7	6
97.5°	22	6	6	6	6
100°	36	7	7	6	6
102.5°	49	9	8	7	7
105°	66	8	10	9	8
107.5°	86	7	13	10	10
110°	105	8	16	13	12



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	127	12	19	18	16
115°	146	20	17	20	19
117.5°	167	36	10	23	23
120°	188	66	9	28	26
122.5°	207	91	8	19	29
125°	227	115	9	12	18
127.5°	247	140	16	10	12
130°	265	164	27	9	10
132.5°	283	189	42	10	9
135°	300	213	73	17	10
137.5°	318	239	119	31	19
140°	334	263	148	47	33
142.5°	351	287	178	85	49
145°	365	311	208	137	95
147.5°	379	335	238	171	147
150°	394	359	269	205	182
152.5°	407	380	299	242	219
155°	417	399	328	275	255
157.5°	429	416	357	309	290
160°	439	431	384	342	325
162.5°	447	443	410	375	360
165°	454	452	432	407	394
167.5°	461	459	451	434	424
170°	466	466	464	456	449
172.5°	470	470	470	469	466
175°	474	474	474	475	472
177.5°	475	476	477	478	476
180°	478	478	478	478	478

(END OF REPORT)