

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: 112P116

Luminaire Tested: **DCI-240-MECL**

Issue Date: 3/3/2020



Test Information

Test Method: LM-41-14
Report Number: 112P116
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: DCI-240-MECL
Description: DCI Series Heavy Duty Industrial Luminaire with
a white powder painted metal egg crate louver.
Light Source: Two-F40CW/RS/WM - 2650 Lumens ea. - 34 Watts ea.
Ballast/Driver: Advance R-2S40-1-TP

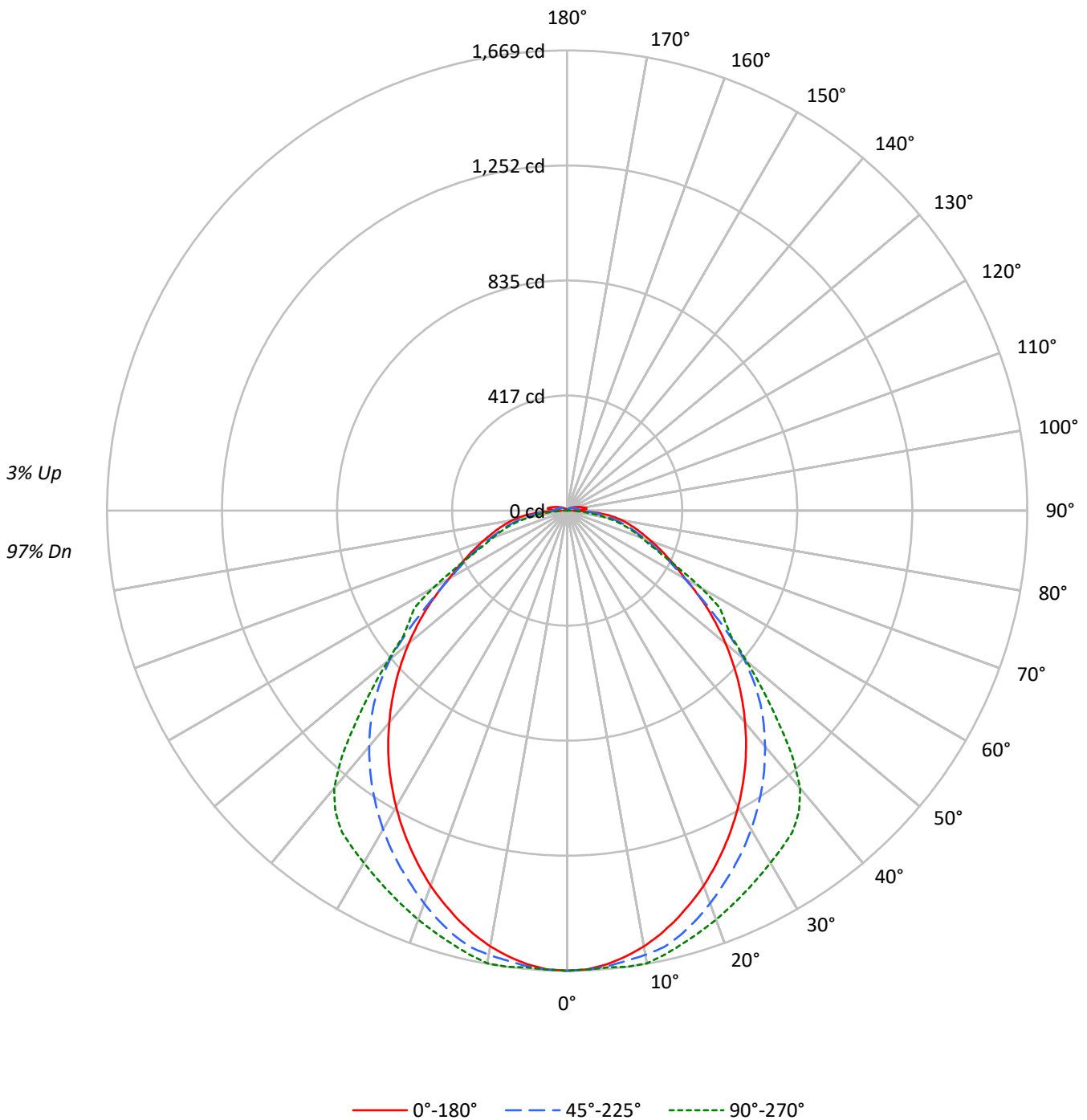
Summary

Lumens per Lamp: 2650 (2 lamps)
Luminaire Lumens: 4268.3 lumens
Efficiency: 80.5%
Efficacy: 57.8 lumens/watt
Spacing Criteria (0/90/45): 1.12 / 1.32 / 1.31
Luminous Opening: Rectangular (W 1.01' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 73.8
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	50	30	10	0	
RCR																						
0	95	95	95	95	93	93	93	93	88	88	88	84	84	84	80	80	80	80	80	80	78	
1	87	83	80	77	85	81	78	76	78	75	73	74	72	70	71	69	68	68	68	68	66	
2	80	73	68	64	77	72	67	63	68	64	61	65	62	59	63	60	57	57	57	57	56	
3	73	65	58	53	71	63	58	53	61	56	52	58	54	50	56	52	49	49	49	49	47	
4	67	58	51	46	65	57	50	45	54	49	44	52	47	44	50	46	43	43	43	43	41	
5	62	52	45	40	60	51	44	39	49	43	39	47	42	38	45	41	38	38	38	38	36	
6	57	47	40	35	56	46	39	35	44	39	34	43	38	34	41	37	33	33	33	33	32	
7	53	43	36	31	52	42	35	31	41	35	30	39	34	30	38	33	30	30	30	30	28	
8	50	39	32	28	48	38	32	28	37	31	27	36	31	27	35	30	27	27	27	27	25	
9	46	36	29	25	45	35	29	25	34	29	25	33	28	24	32	28	24	24	24	24	23	
10	44	33	27	23	42	33	27	23	32	26	23	31	26	22	30	25	22	22	22	22	21	

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4445	4445	4445
5°	4417	4435	4446
10°	4341	4424	4508
15°	4230	4392	4481
20°	4104	4297	4475
25°	3961	4199	4487
30°	3816	4106	4536
35°	3664	4002	4630
40°	3491	3883	4572
45°	3307	3736	4075
50°	3107	3468	3514
55°	2893	2986	3241
60°	2637	2615	2988
65°	2540	2445	2401
70°	2531	2328	2227
75°	2675	2377	2254
80°	3083	2531	2132
85°	3820	3025	1864



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ZONAL LUMENS:

CANDELA DISTRIBUTION:

Zone	Lumens	% Fixture	% Lamp		0°	22.5°	45°	67.5°	90°	Flux
0°-10°	157.7	3.7	3.0	0°	1669	1669	1669	1669	1669	
10°-20°	446.7	10.5	8.4	5°	1652	1654	1659	1665	1663	156
20°-30°	662.2	15.5	12.5	15°	1534	1550	1593	1617	1625	432
30°-40°	783.5	18.4	14.8	25°	1348	1390	1429	1492	1527	620
40°-50°	758.9	17.8	14.3	35°	1127	1169	1231	1343	1424	704
50°-60°	586.7	13.7	11.1	45°	878	924	992	1057	1082	677
60°-70°	390.0	9.1	7.4	55°	623	654	643	642	698	556
70°-80°	250.1	5.9	4.7	65°	403	382	388	383	381	402
80°-90°	113.9	2.7	2.1	75°	260	270	231	209	219	276
90°-100°	44.7	1.0	0.8	85°	125	155	99	67	61	116
100°-110°	32.1	0.8	0.6	90°	22	93	49	16	3	21
110°-120°	20.5	0.5	0.4	95°	71	78	44	13	0	54
120°-130°	12.2	0.3	0.2	105°	49	51	33	13	0	53
130°-140°	6.7	0.2	0.1	115°	29	32	23	12	0	29
140°-150°	2.5	0.1	0.0	125°	16	19	16	11	0	15
150°-160°	0.0	0.0	0.0	135°	10	10	11	8	0	8
160°-170°	0.0	0.0	0.0	145°	6	6	7	7	0	3
170°-180°	0.0	0.0	0.0	155°	0	0	0	0	0	0
0°-30°	1266.5	29.7	23.9	165°	0	0	0	0	0	0
0°-40°	2050.0	48.0	38.7	175°	0	0	0	0	0	0
0°-60°	3395.6	79.6	64.1	180°	0	0	0	0	0	0
0°-90°	4149.6	97.2	78.3							
90°-120°	97.3	2.3	1.8							
90°-150°	118.7	2.8	2.2							
90°-180°	119.0	2.8	2.2							
0°-180°	4268.3	100.0	80.5							



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1669	1669	1669	1669	1669
2.5°	1666	1665	1667	1670	1666
5°	1652	1654	1659	1665	1663
7.5°	1631	1635	1647	1666	1669
10°	1605	1611	1636	1665	1667
12.5°	1572	1582	1622	1644	1648
15°	1534	1550	1593	1617	1625
17.5°	1492	1516	1557	1588	1602
20°	1448	1479	1516	1558	1579
22.5°	1399	1437	1473	1526	1553
25°	1348	1390	1429	1492	1527
27.5°	1295	1338	1384	1456	1501
30°	1241	1284	1335	1419	1475
32.5°	1184	1227	1284	1382	1450
35°	1127	1169	1231	1343	1424
37.5°	1066	1110	1175	1301	1380
40°	1004	1049	1117	1242	1315
42.5°	941	988	1056	1165	1209
45°	878	924	992	1057	1082
47.5°	814	860	918	937	961
50°	750	793	837	826	848
52.5°	686	725	741	726	749
55°	623	654	643	642	698
57.5°	558	579	560	593	657
60°	495	501	491	544	561
62.5°	447	431	435	459	462
65°	403	382	388	383	381
67.5°	363	346	340	322	324
70°	325	317	299	279	286
72.5°	291	294	263	243	252
75°	260	270	231	209	219
77.5°	230	245	199	174	180
80°	201	219	165	137	139
82.5°	169	190	131	101	99
85°	125	155	99	67	61
87.5°	65	122	70	35	25
90°	22	93	49	16	3
92.5°	46	87	45	13	0
95°	71	78	44	13	0
97.5°	71	70	41	13	0
100°	63	63	38	13	0
102.5°	56	56	35	13	0
105°	49	51	33	13	0
107.5°	43	45	30	12	0
110°	38	40	28	12	0



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	33	36	26	12	0
115°	29	32	23	12	0
117.5°	26	29	21	12	0
120°	23	25	19	11	0
122.5°	19	22	18	11	0
125°	16	19	16	11	0
127.5°	13	16	15	10	0
130°	11	14	13	9	0
132.5°	11	12	12	9	0
135°	10	10	11	8	0
137.5°	9	9	10	8	0
140°	7	7	9	7	0
142.5°	7	7	8	7	0
145°	6	6	7	7	0
147.5°	0	0	0	0	0
150°	0	0	0	0	0
152.5°	0	0	0	0	0
155°	0	0	0	0	0
157.5°	0	0	0	0	0
160°	0	0	0	0	0
162.5°	0	0	0	0	0
165°	0	0	0	0	0
167.5°	0	0	0	0	0
170°	0	0	0	0	0
172.5°	0	0	0	0	0
175°	0	0	0	0	0
177.5°	0	0	0	0	0
180°	0	0	0	0	0

(END OF REPORT)