

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: P24857

Luminaire Tested: **FMLED16WH840PR**

Issue Date: 3/3/2020



Test Information

Test Method: LM-41-14
Report Number: P24857
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: FMLED16WH840PR
Description: METALUX 16" LED WHITE ROUND PUFF
Light Source: (44) 4000K LEDS
62-217D
Ballast/Driver: COOPER LIGHTING ELECTRONIC DRIVER
SX-AD03000107-0270

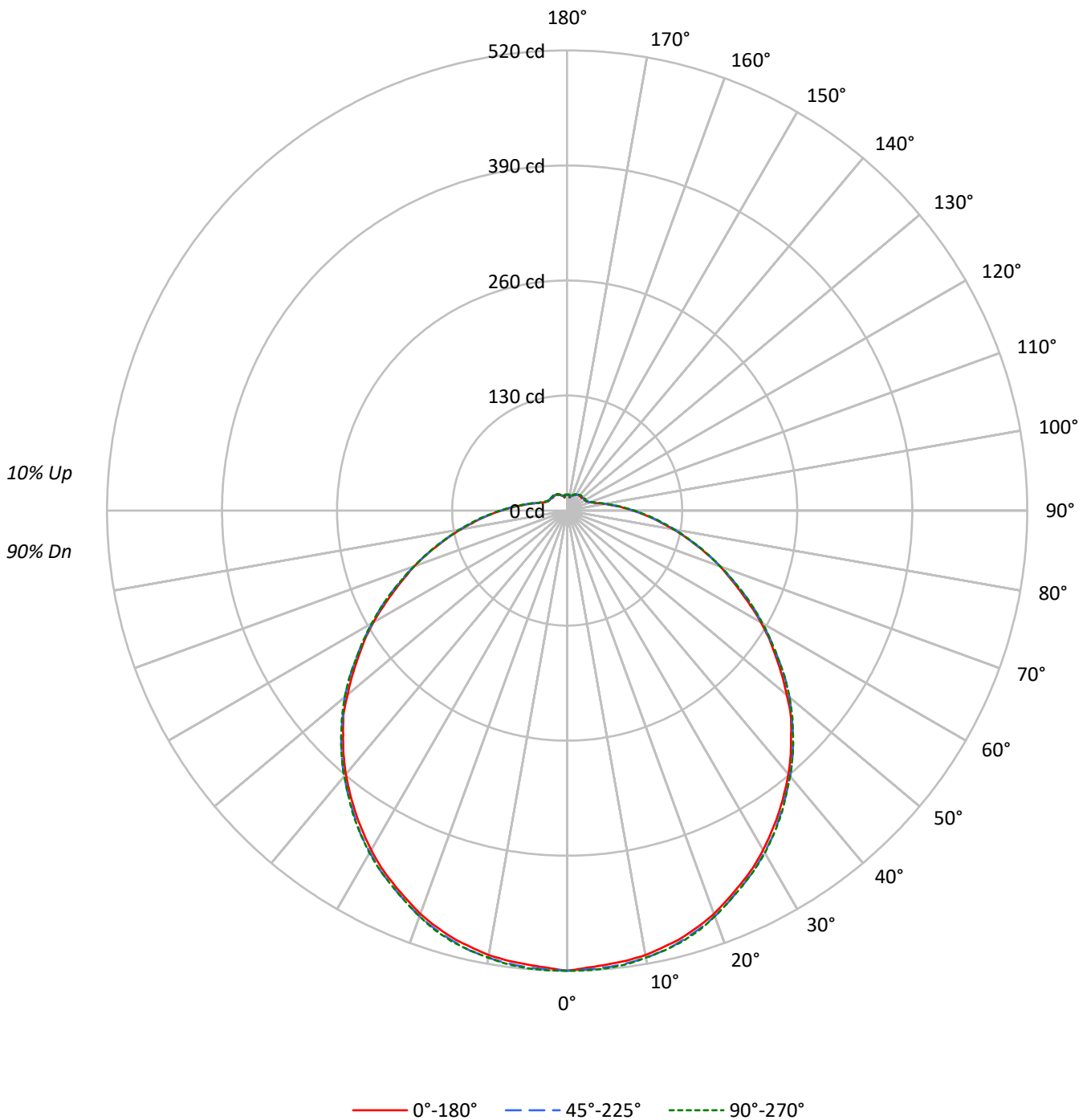
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1886.9 lumens
Efficiency: N/A
Efficacy: 82.8 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.28 / 1.4
Luminous Opening: Vertical Cylinder (Dia: 1.33' x H: 0.29')
CIE Type: Semi-Direct

Input Watts (W): 22.8
Input Voltage (V): 120.11
Input Current (Ain): 0.19266
Voltage Rise (V): NR
Power Factor: 0.9936
Total Harmonic Distortion (THDi): 12.7%
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: 13 HR
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	117	117	117	117	113	113	113	113	105	105	105	99	99	99	93	93	93	90				
1	104	99	94	89	101	96	91	87	89	86	82	84	81	78	78	76	74	71				
2	94	85	78	71	91	82	76	70	77	71	67	72	68	64	68	64	61	58				
3	86	74	66	59	82	72	64	57	67	61	55	63	58	53	59	55	51	48				
4	78	66	56	49	75	64	55	48	60	52	47	56	50	45	53	48	43	41				
5	72	58	49	42	69	57	48	41	53	46	40	50	44	39	47	42	37	35				
6	66	52	43	37	63	51	42	36	48	40	35	45	39	34	43	37	33	30				
7	61	47	38	32	59	46	38	32	44	36	31	41	35	30	39	33	29	27				
8	57	43	34	29	55	42	34	28	40	33	27	38	31	27	36	30	26	24				
9	53	40	31	26	51	39	31	25	37	30	25	35	28	24	33	27	23	21				
10	50	36	28	23	48	36	28	23	34	27	22	32	26	22	31	25	21	19				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4009	4009	4009
5°	3891	3913	3921
10°	3805	3828	3828
15°	3713	3736	3743
20°	3613	3635	3635
25°	3501	3523	3523
30°	3397	3420	3428
35°	3284	3308	3315
40°	3173	3198	3198
45°	3053	3078	3078
50°	2917	2953	2953
55°	2769	2798	2798
60°	2631	2642	2652
65°	2467	2501	2501
70°	2349	2349	2349
75°	2205	2220	2220
80°	2100	2117	2117
85°	2030	2051	2072



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	49.3	2.6
10°-20°	142.0	7.5
20°-30°	216.1	11.5
30°-40°	263.1	13.9
40°-50°	278.4	14.8
50°-60°	260.6	13.8
60°-70°	216.9	11.5
70°-80°	161.0	8.5
80°-90°	106.5	5.6
90°-100°	63.4	3.4
100°-110°	36.7	1.9
110°-120°	25.1	1.3
120°-130°	20.8	1.1
130°-140°	17.5	0.9
140°-150°	13.7	0.7
150°-160°	9.2	0.5
160°-170°	4.9	0.3
170°-180°	1.7	0.1
0°-30°	407.4	21.6
0°-40°	670.4	35.5
0°-60°	1209.5	64.1
0°-90°	1693.9	89.8
90°-120°	125.3	6.6
90°-150°	177.3	9.4
90°-180°	193.0	10.2
0°-180°	1886.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	520	520	520	520	520	
5°	515	518	518	520	519	49
15°	500	503	503	505	504	141
25°	465	468	468	469	468	215
35°	417	421	420	421	421	261
45°	358	361	361	361	361	276
55°	288	291	291	292	291	258
65°	216	218	219	219	219	215
75°	151	151	152	152	152	160
85°	96	97	97	97	98	84
90°	74	75	75	75	76	41
95°	57	57	57	58	58	44
105°	33	34	34	34	34	36
115°	24	25	25	25	25	25
125°	23	23	23	23	24	21
135°	22	22	22	23	23	17
145°	22	22	22	22	22	14
155°	20	20	20	20	20	9
165°	17	17	17	17	17	5
175°	18	18	18	18	18	2
180°	18	18	18	18	18	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	520	520	520	520	520
2.5°	517	520	519	521	520
5°	515	518	518	520	519
7.5°	513	516	516	518	517
10°	510	513	513	514	513
12.5°	505	509	509	510	509
15°	500	503	503	505	504
17.5°	493	497	496	498	497
20°	485	488	488	489	488
22.5°	475	479	478	480	478
25°	465	468	468	469	468
27.5°	455	458	458	462	458
30°	443	447	446	447	447
32.5°	430	434	434	435	434
35°	417	421	420	421	421
37.5°	403	407	406	407	406
40°	389	393	392	393	392
42.5°	374	377	377	378	377
45°	358	361	361	361	361
47.5°	343	345	344	345	345
50°	324	327	328	328	328
52.5°	306	310	310	311	310
55°	288	291	291	292	291
57.5°	271	273	273	275	273
60°	253	255	254	256	255
62.5°	234	237	237	238	237
65°	216	218	219	219	219
67.5°	199	201	201	202	201
70°	184	184	184	185	184
72.5°	167	167	168	168	168
75°	151	151	152	152	152
77.5°	136	137	137	137	137
80°	122	123	123	123	123
82.5°	108	109	109	110	110
85°	96	97	97	97	98
87.5°	85	85	85	86	86
90°	74	75	75	75	76
92.5°	65	66	66	66	66
95°	57	57	57	58	58
97.5°	49	50	50	50	50
100°	43	43	44	44	44
102.5°	38	38	38	39	39
105°	33	34	34	34	34
107.5°	30	30	31	31	31
110°	27	28	28	28	28



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	26	26	26	27	27
115°	24	25	25	25	25
117.5°	24	24	24	24	24
120°	23	24	24	24	24
122.5°	23	23	23	24	24
125°	23	23	23	23	24
127.5°	23	23	23	23	23
130°	22	23	23	23	23
132.5°	22	23	23	23	23
135°	22	22	22	23	23
137.5°	22	22	22	23	23
140°	22	22	22	23	23
142.5°	22	22	22	22	22
145°	22	22	22	22	22
147.5°	21	21	21	22	22
150°	21	21	21	21	21
152.5°	20	20	20	21	21
155°	20	20	20	20	20
157.5°	19	19	19	19	19
160°	18	18	18	19	19
162.5°	18	18	18	18	18
165°	17	17	17	17	17
167.5°	16	17	16	17	17
170°	15	16	16	16	16
172.5°	18	18	18	18	18
175°	18	18	18	18	18
177.5°	18	18	18	18	18
180°	18	18	18	18	18

(END OF REPORT)