

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: P24858

Luminaire Tested: **FMLED20WH840PR**

Issue Date: 3/3/2020



Test Information

Test Method: LM-41-14
Report Number: P24858
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: FMLED20WH840PR
Description: METALUX 20" LED WHITE ROUND PUFF
Light Source: (64) 4000K LEDS
62-217D
Ballast/Driver: COOPER LIGHTING ELECTRONIC DRIVER
SX-AD03000107-0270

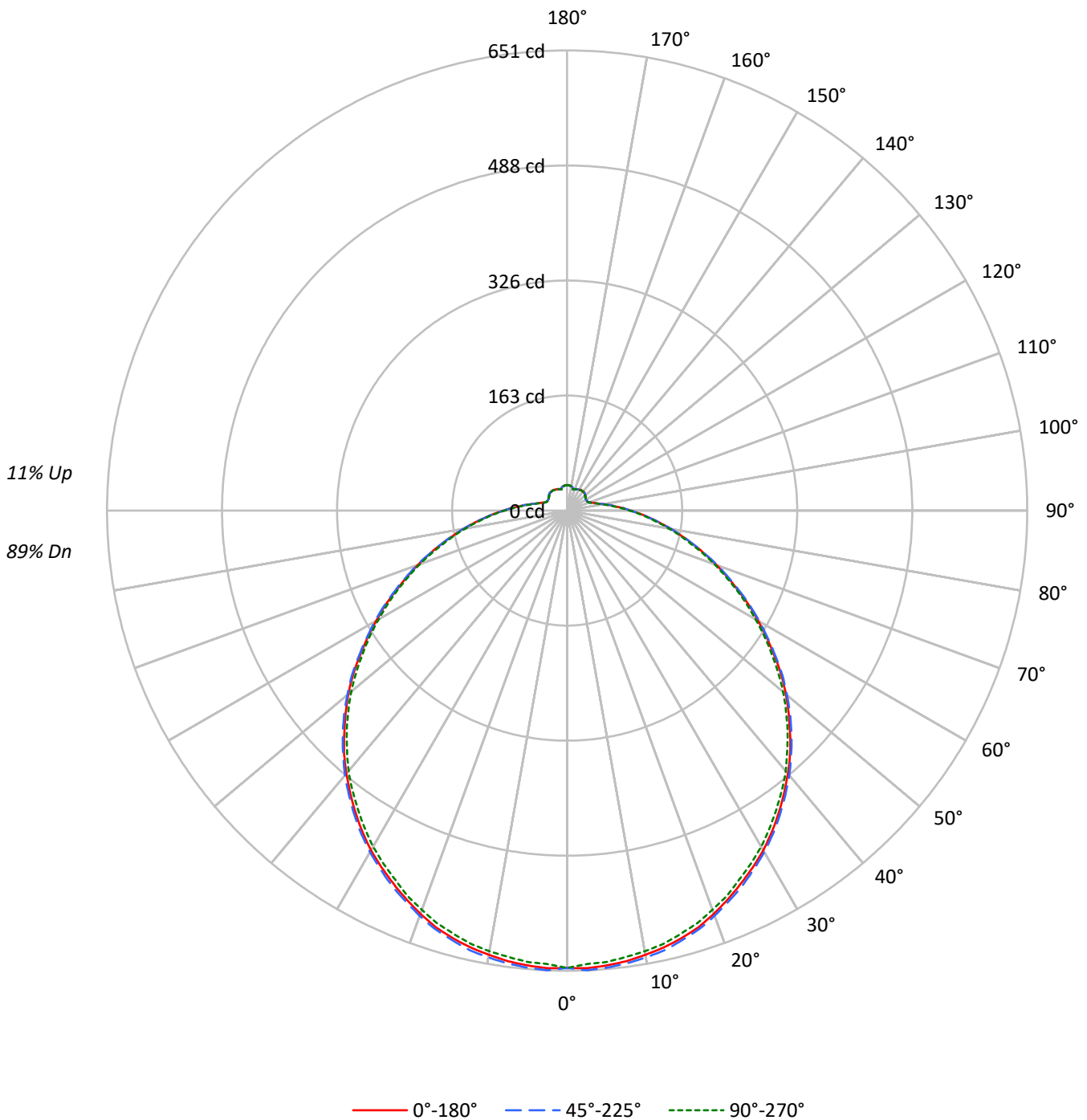
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2335.7 lumens
Efficiency: N/A
Efficacy: 80.3 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.26 / 1.4
Luminous Opening: Vertical Cylinder (Dia: 1.67' x H: 0.33')
CIE Type: Semi-Direct

Input Watts (W): 29.1
Input Voltage (V): 119.96
Input Current (Ain): 0.24848
Voltage Rise (V): NR
Power Factor: 0.9873
Total Harmonic Distortion (THDi): 14.2%
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: 24 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	0
RCR																		
0	116	116	116	116	112	112	112	112	105	105	105	98	98	98	92	92	92	89
1	104	99	94	89	100	96	91	87	89	86	82	83	80	78	78	76	74	71
2	94	85	78	72	91	82	76	70	77	71	67	72	67	63	68	64	60	58
3	86	74	66	59	82	72	64	58	67	61	55	63	58	53	59	55	51	48
4	78	66	56	49	75	64	55	49	60	52	47	56	50	45	53	47	43	40
5	72	58	49	42	69	57	48	42	53	46	40	50	44	39	47	42	37	35
6	66	52	43	37	64	51	42	36	48	41	35	45	39	34	43	37	33	30
7	61	47	39	32	59	46	38	32	44	36	31	41	35	30	39	33	29	27
8	57	43	35	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	29	23	48	36	28	23	34	27	22	32	26	22	31	25	21	19

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3192	3192	3192
5°	3130	3144	3105
10°	3059	3078	3035
15°	2993	3008	2965
20°	2917	2931	2888
25°	2832	2852	2803
30°	2757	2772	2727
35°	2668	2684	2638
40°	2579	2595	2553
45°	2480	2497	2453
50°	2379	2391	2350
55°	2258	2271	2227
60°	2136	2150	2109
65°	2016	2031	1993
70°	1910	1918	1884
75°	1808	1808	1769
80°	1732	1732	1697
85°	1694	1694	1665



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	61.3	2.6
10°-20°	176.2	7.5
20°-30°	267.8	11.5
30°-40°	325.6	13.9
40°-50°	343.2	14.7
50°-60°	319.5	13.7
60°-70°	264.4	11.3
70°-80°	194.9	8.3
80°-90°	127.5	5.5
90°-100°	75.1	3.2
100°-110°	43.8	1.9
110°-120°	31.2	1.3
120°-130°	28.6	1.2
130°-140°	26.7	1.1
140°-150°	21.9	0.9
150°-160°	15.4	0.7
160°-170°	9.2	0.4
170°-180°	3.4	0.1
0°-30°	505.3	21.6
0°-40°	830.8	35.6
0°-60°	1493.4	63.9
0°-90°	2080.2	89.1
90°-120°	150.1	6.4
90°-150°	227.4	9.7
90°-180°	255.0	10.9
0°-180°	2335.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	647	647	647	647	647	
5°	646	645	649	639	641	61
15°	626	626	629	619	620	177
25°	582	582	586	576	576	269
35°	522	521	525	515	516	327
45°	446	446	449	440	441	344
55°	358	358	360	353	353	321
65°	267	267	269	264	264	265
75°	185	184	185	182	181	196
85°	117	116	117	115	115	102
90°	90	89	90	89	88	50
95°	68	68	68	67	67	53
105°	41	40	41	40	40	44
115°	31	31	31	30	31	31
125°	32	32	32	32	32	29
135°	35	35	35	35	35	27
145°	35	35	35	35	35	22
155°	33	33	33	33	33	15
165°	31	31	31	31	31	9
175°	36	36	36	35	36	3
180°	36	36	36	36	36	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	647	647	647	647	647
2.5°	648	647	651	641	642
5°	646	645	649	639	641
7.5°	643	642	646	636	637
10°	638	639	642	632	633
12.5°	633	633	637	626	628
15°	626	626	629	619	620
17.5°	618	617	621	611	612
20°	607	607	610	600	601
22.5°	595	595	598	588	590
25°	582	582	586	576	576
27.5°	569	568	572	562	563
30°	555	554	558	548	549
32.5°	539	538	542	532	533
35°	522	521	525	515	516
37.5°	504	504	507	498	499
40°	486	485	489	480	481
42.5°	467	466	469	461	461
45°	446	446	449	440	441
47.5°	425	425	428	420	420
50°	404	404	406	398	399
52.5°	382	381	384	377	376
55°	358	358	360	353	353
57.5°	335	335	337	332	331
60°	312	312	314	308	308
62.5°	290	289	292	287	286
65°	267	267	269	264	264
67.5°	245	246	247	243	242
70°	225	225	226	222	222
72.5°	204	204	205	202	201
75°	185	184	185	182	181
77.5°	166	166	166	164	164
80°	149	148	149	147	146
82.5°	132	131	132	130	130
85°	117	116	117	115	115
87.5°	103	102	103	101	101
90°	90	89	90	89	88
92.5°	79	78	79	77	77
95°	68	68	68	67	67
97.5°	60	59	60	59	58
100°	52	52	52	51	51
102.5°	46	46	46	45	45
105°	41	40	41	40	40
107.5°	37	37	37	36	36
110°	34	34	34	33	33



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	32	32	32	32	32
115°	31	31	31	30	31
117.5°	31	31	31	30	30
120°	31	31	31	30	31
122.5°	31	31	31	31	31
125°	32	32	32	32	32
127.5°	33	33	33	32	32
130°	33	34	34	33	33
132.5°	34	34	34	34	34
135°	35	35	35	35	35
137.5°	35	35	35	35	35
140°	35	35	35	35	35
142.5°	35	36	36	35	35
145°	35	35	35	35	35
147.5°	35	35	35	34	34
150°	34	34	34	34	34
152.5°	34	34	34	34	34
155°	33	33	33	33	33
157.5°	33	33	33	33	33
160°	32	33	32	32	32
162.5°	32	32	32	32	32
165°	31	31	31	31	31
167.5°	34	34	34	34	34
170°	35	35	35	35	35
172.5°	35	36	35	35	35
175°	36	36	36	35	36
177.5°	36	36	36	35	36
180°	36	36	36	36	36

(END OF REPORT)