

Scaled data based on original data using  
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State  
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: METALUX

Report Number: P413282

Luminaire Tested: **24PD-90-PC3-L840**

Issue Date: 9/15/2020



**Test Information**

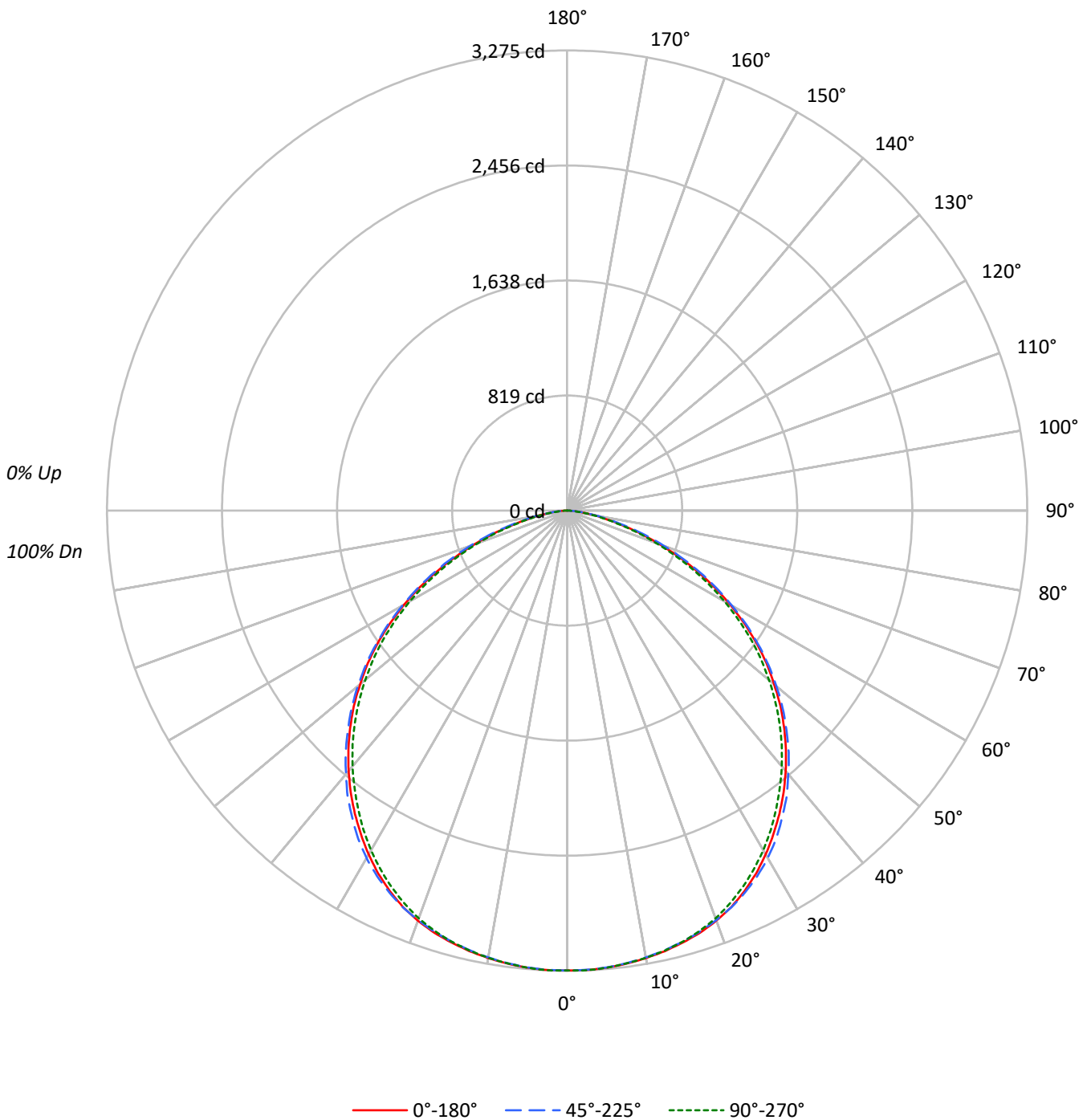
Test Method: LM-79-08  
Report Number: P413282  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2008-911-46)  
Test Lab: INNOVATION CENTER  
Issue Date: 9/15/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24PD-90-PC3-L840  
Description: 9000 LUMEN 2X4 PERCEIVE LED TROFFER WITH PYRAMID PATTERN OPTICS AND 80 CRI, 4000 CCT LEDS  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 8946.0 lumens  
Efficiency: N/A  
Efficacy: 130.2 lumens/watt  
Spacing Criteria (0/90/45): 1.28 / 1.26 / 1.38  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 68.7  
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

TEST NUMBER: P413282  
CATALOG NUMBER: 24PD-90-PC3-L840

### Luminous Intensity Polar Plot





TEST NUMBER: P413282

CATALOG NUMBER: 24PD-90-PC3-L840

**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	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102	102	102	100
1	109	105	101	97	107	103	99	96	99	96	93		95	92	90		91	89	87	85
2	100	92	86	80	97	90	84	79	87	82	77		83	79	75		80	77	74	72
3	91	81	73	67	89	80	72	66	77	70	65		74	69	64		71	67	63	61
4	84	72	63	57	81	71	63	57	68	61	56		66	60	55		64	59	54	52
5	77	64	56	49	75	63	55	49	61	54	48		59	53	48		57	52	47	45
6	71	58	49	43	69	57	49	43	55	48	42		54	47	42		52	46	42	40
7	66	53	44	38	64	52	44	38	50	43	38		49	42	37		47	42	37	35
8	61	48	40	34	60	47	39	34	46	39	34		45	38	33		44	38	33	31
9	57	44	36	30	56	43	36	30	42	35	30		41	35	30		40	34	30	28
10	54	41	33	28	52	40	33	28	39	32	27		38	32	27		37	31	27	25

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	4404	4404	4404
5°	4409	4407	4411
10°	4418	4412	4416
15°	4433	4424	4425
20°	4447	4441	4422
25°	4435	4451	4389
30°	4390	4437	4336
35°	4326	4381	4260
40°	4250	4301	4174
45°	4154	4199	4068
50°	4025	4071	3926
55°	3860	3894	3745
60°	3603	3645	3479
65°	3247	3328	3120
70°	2757	2878	2646
75°	2135	2290	2036
80°	1588	1658	1440
85°	980	1050	909



TEST NUMBER: P413282

CATALOG NUMBER: 24PD-90-PC3-L840

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	310.5	3.5
10°-20°	897.6	10.0
20°-30°	1374.5	15.4
30°-40°	1653.6	18.5
40°-50°	1686.2	18.8
50°-60°	1461.8	16.3
60°-70°	1013.5	11.3
70°-80°	462.9	5.2
80°-90°	85.5	1.0
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	2582.6	28.9
0°-40°	4236.2	47.4
0°-60°	7384.2	82.5
0°-90°	8946.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8946.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	3273	3273	3273	3273	3273	
5°	3265	3265	3263	3261	3266	311
15°	3182	3181	3176	3173	3177	899
25°	2987	2996	2998	2972	2956	1375
35°	2634	2662	2667	2633	2594	1647
45°	2183	2210	2207	2177	2138	1683
55°	1646	1656	1660	1619	1597	1466
65°	1020	1042	1045	1010	980	1008
75°	411	433	441	426	392	449
85°	64	65	68	64	59	86
90°	0	0	0	0	0	



TEST NUMBER: P413282

CATALOG NUMBER: 24PD-90-PC3-L840

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	3272.9	3272.9	3272.9	3272.9	3272.9
2.5°	3272.9	3272.9	3271.1	3269.3	3274.7
5°	3264.7	3264.7	3262.9	3261.1	3265.7
7.5°	3252.1	3251.1	3249.3	3247.5	3250.2
10°	3233.9	3233.0	3229.4	3228.5	3232.1
12.5°	3211.3	3210.3	3204.9	3204.9	3207.6
15°	3182.2	3181.3	3175.9	3173.2	3176.8
17.5°	3149.6	3148.7	3142.4	3135.1	3136.9
20°	3106.1	3106.1	3101.6	3090.7	3088.0
22.5°	3053.5	3056.2	3056.2	3035.4	3027.2
25°	2987.3	2995.5	2998.2	2971.9	2956.5
27.5°	2912.1	2924.8	2932.0	2898.5	2878.5
30°	2825.9	2846.8	2855.9	2819.6	2790.6
32.5°	2731.7	2757.9	2768.8	2733.5	2696.3
35°	2633.7	2661.8	2667.3	2632.8	2593.8
37.5°	2529.5	2558.5	2565.7	2534.9	2486.9
40°	2419.8	2448.8	2448.8	2423.4	2376.3
42.5°	2303.7	2334.6	2333.6	2302.8	2260.2
45°	2183.1	2210.3	2206.7	2176.8	2137.8
47.5°	2058.9	2076.2	2080.7	2045.3	2008.2
50°	1922.9	1940.2	1944.7	1904.8	1875.8
52.5°	1788.8	1799.6	1806.0	1759.8	1738.9
55°	1645.5	1655.5	1660.0	1619.2	1596.6
57.5°	1494.1	1506.8	1512.2	1471.4	1446.1
60°	1339.1	1352.7	1354.5	1316.4	1292.8
62.5°	1181.3	1199.5	1203.1	1165.0	1136.9
65°	1019.9	1041.7	1045.3	1010.0	980.1
67.5°	858.6	887.6	888.5	859.5	824.1
70°	700.8	732.6	731.6	707.2	672.7
72.5°	550.3	579.3	585.7	563.0	529.5
75°	410.7	433.4	440.6	426.1	391.7
77.5°	291.9	312.8	319.1	305.5	280.1
80°	204.9	205.8	214.0	203.1	185.9
82.5°	126.9	125.1	127.8	123.3	113.3
85°	63.5	65.3	68.0	64.4	58.9
87.5°	21.8	22.7	24.5	24.5	21.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)