

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:

Report Number: P381945

Luminaire Tested: **845-36-PSJCAC-L15/827-UNV**

Issue Date: 06/30/15

**Test Information**

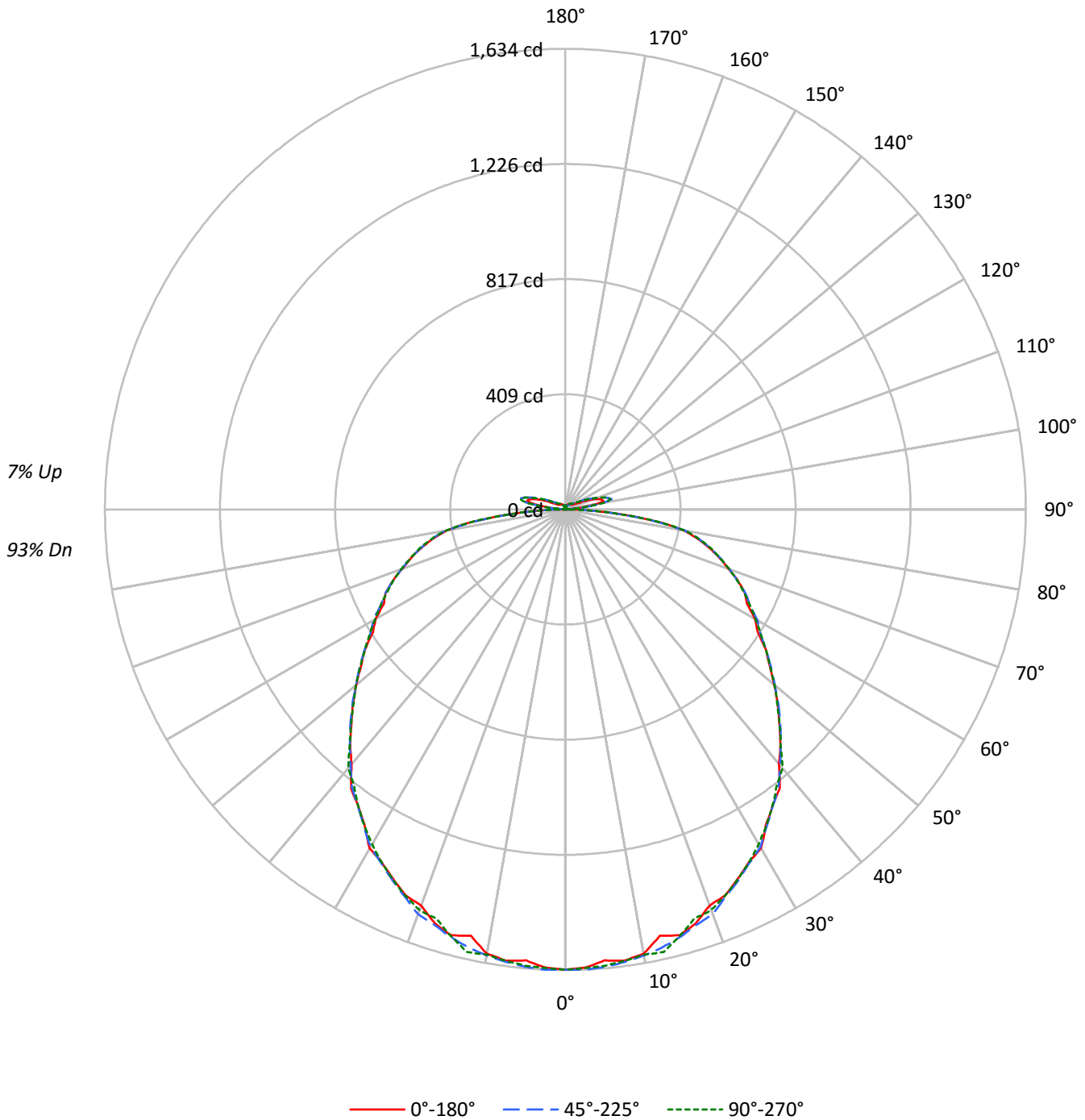
Test Method: LM-79-08  
Report Number: P381945  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P34238)  
Test Lab: INNOVATIONS CENTER-P3  
Issue Date: 06/30/15  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line:  
Catalog Number: 845-36-PSJCAC-L15/827-UNV  
Description: SHAPER 845 INDOOR PENDANT.  
Light Source: [72] COOPER LIGHTING 2700K LEDS  
Ballast/Driver: [6] HATCH ELECTRONIC DRIVER  
LC25-1050Z-UNV-Q

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5516.8 lumens  
Efficiency: N/A  
Efficacy: 39.9 lumens/watt  
Spacing Criteria (0/90/45): 1.25 / 1.25 / 1.37  
Luminous Opening: Vertical Cylinder (Dia: 3' x H: 0.38')  
CIE Type: Direct  
  
Input Watts (W): 138.3  
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	117	117	117	117	114	114	114	114	107	107	107	101	101	101	96	96	96	93				
1	106	100	95	91	102	97	93	89	92	88	85	87	84	81	82	80	77	75				
2	95	86	79	72	92	84	77	71	79	73	68	75	70	66	71	67	63	61				
3	86	75	66	59	83	73	65	58	69	62	57	65	60	55	62	57	53	50				
4	79	66	57	50	76	64	56	49	61	54	48	58	51	46	55	50	45	43				
5	72	59	50	43	70	57	49	42	55	47	41	52	45	40	49	44	39	37				
6	67	53	44	37	64	52	43	37	49	41	36	47	40	35	45	39	34	32				
7	62	48	39	33	60	47	38	32	45	37	32	43	36	31	41	35	30	28				
8	58	44	35	29	56	43	34	29	41	33	28	39	32	28	37	31	27	25				
9	54	40	32	26	52	39	31	26	38	30	25	36	29	25	35	29	24	22				
10	50	37	29	24	49	36	28	23	35	28	23	33	27	22	32	26	22	20				

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

	0°	45°	90°
0°	2487	2487	2487
5°	2421	2456	2450
10°	2408	2418	2412
15°	2365	2375	2369
20°	2291	2340	2318
25°	2263	2272	2265
30°	2237	2228	2208
35°	2145	2147	2145
40°	2069	2079	2102
45°	1994	2004	1997
50°	1928	1931	1931
55°	1879	1882	1879
60°	1854	1877	1861
65°	1891	1895	1880
70°	1909	1913	1918
75°	1956	1961	1976
80°	1964	1976	1983
85°	1178	1153	1187



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	154.4	2.8
10°-20°	441.3	8.0
20°-30°	668.0	12.1
30°-40°	803.2	14.6
40°-50°	831.9	15.1
50°-60°	780.1	14.1
60°-70°	695.1	12.6
70°-80°	560.2	10.2
80°-90°	220.7	4.0
90°-100°	51.1	0.9
100°-110°	150.9	2.7
110°-120°	80.3	1.5
120°-130°	34.4	0.6
130°-140°	20.8	0.4
140°-150°	13.4	0.2
150°-160°	6.7	0.1
160°-170°	3.2	0.1
170°-180°	1.2	0.0
0°-30°	1263.7	22.9
0°-40°	2067.0	37.5
0°-60°	3679.0	66.7
0°-90°	5154.9	93.4
90°-120°	282.3	5.1
90°-150°	350.9	6.4
90°-180°	362.0	6.6
0°-180°	5516.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1633	1633	1633	1633	1633	
5°	1606	1620	1629	1633	1625	154
15°	1564	1548	1571	1570	1567	438
25°	1447	1443	1452	1452	1448	667
35°	1282	1285	1284	1285	1282	805
45°	1073	1067	1079	1079	1075	830
55°	868	874	870	871	868	775
65°	704	697	705	703	700	692
75°	530	531	531	535	535	557
85°	190	189	186	190	192	210
90°	1	3	1	1	3	12
95°	24	27	28	30	30	44
105°	135	143	158	159	158	133
115°	58	74	84	84	82	65
125°	28	32	40	40	39	27
135°	24	23	28	28	30	19
145°	22	20	18	23	23	14
155°	18	16	15	12	11	8
165°	12	12	11	9	9	4
175°	14	14	14	14	14	1
180°	15	15	15	15	15	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1633.0	1633.0	1633.0	1633.0	1633.0
2.5°	1627.6	1623.6	1634.4	1631.7	1629.0
5°	1606.1	1619.5	1629.0	1633.0	1624.9
7.5°	1614.2	1607.4	1619.5	1618.2	1615.5
10°	1600.7	1604.7	1607.4	1606.1	1603.4
12.5°	1549.4	1579.1	1591.2	1592.6	1608.8
15°	1564.3	1548.1	1571.0	1569.7	1567.0
17.5°	1540.0	1526.5	1545.4	1545.4	1522.5
20°	1495.5	1510.3	1527.9	1517.1	1513.0
22.5°	1482.0	1476.6	1487.4	1487.4	1483.4
25°	1446.9	1442.9	1452.3	1452.3	1448.3
27.5°	1410.5	1405.1	1414.6	1415.9	1411.9
30°	1389.0	1364.7	1383.6	1374.1	1371.4
32.5°	1325.6	1324.2	1331.0	1332.3	1328.3
35°	1282.4	1285.1	1283.8	1285.1	1282.4
37.5°	1248.7	1231.2	1243.3	1233.9	1232.5
40°	1179.9	1170.5	1185.3	1186.7	1198.8
42.5°	1130.0	1126.0	1131.4	1134.1	1131.4
45°	1073.4	1066.7	1078.8	1078.8	1074.8
47.5°	1022.2	1019.5	1024.9	1038.3	1019.5
50°	968.2	973.6	969.6	975.0	969.6
52.5°	914.3	910.2	919.7	921.0	917.0
55°	868.4	873.8	869.8	871.1	868.4
57.5°	809.1	822.6	819.9	826.6	822.6
60°	776.7	779.4	786.2	782.1	779.4
62.5°	726.8	737.6	739.0	749.8	739.0
65°	703.9	697.2	705.3	702.6	699.9
67.5°	663.5	662.1	660.8	663.5	660.8
70°	616.3	621.7	617.6	627.1	619.0
72.5°	574.5	574.5	577.2	579.9	575.8
75°	530.0	531.3	531.3	535.4	535.4
77.5°	481.4	488.2	486.8	488.2	486.8
80°	426.1	423.4	428.8	432.9	430.2
82.5°	327.7	325.0	319.6	326.3	325.0
85°	190.1	188.8	186.1	190.1	191.5
87.5°	79.6	85.0	79.6	85.0	83.6
90°	1.3	2.7	1.3	1.3	2.7
92.5°	4.0	5.4	5.4	5.4	5.4
95°	24.3	27.0	28.3	29.7	29.7
97.5°	75.5	82.3	90.3	91.7	90.3
100°	117.3	126.8	140.2	141.6	140.2
102.5°	138.9	149.7	168.6	167.2	163.2
105°	134.8	142.9	157.8	159.1	157.8
107.5°	120.0	128.1	140.2	140.2	138.9
110°	102.5	109.2	120.0	122.7	118.7



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	83.6	91.7	101.1	101.1	99.8
115°	58.0	74.2	83.6	83.6	82.3
117.5°	47.2	59.3	68.8	70.1	68.8
120°	37.8	47.2	56.6	56.6	55.3
122.5°	32.4	39.1	47.2	47.2	45.8
125°	28.3	32.4	40.5	40.5	39.1
127.5°	25.6	27.0	35.1	35.1	35.1
130°	25.6	25.6	31.0	32.4	32.4
132.5°	24.3	22.9	29.7	31.0	31.0
135°	24.3	22.9	28.3	28.3	29.7
137.5°	25.6	21.6	27.0	27.0	28.3
140°	24.3	21.6	25.6	25.6	25.6
142.5°	22.9	21.6	21.6	24.3	24.3
145°	21.6	20.2	17.5	22.9	22.9
147.5°	21.6	20.2	17.5	21.6	21.6
150°	20.2	18.9	16.2	16.2	20.2
152.5°	18.9	17.5	12.1	12.1	13.5
155°	17.5	16.2	14.8	12.1	10.8
157.5°	16.2	16.2	14.8	9.4	12.1
160°	13.5	13.5	12.1	9.4	9.4
162.5°	13.5	12.1	10.8	9.4	9.4
165°	12.1	12.1	10.8	9.4	9.4
167.5°	13.5	12.1	10.8	10.8	9.4
170°	13.5	13.5	12.1	10.8	10.8
172.5°	13.5	12.1	12.1	12.1	12.1
175°	13.5	13.5	13.5	13.5	13.5
177.5°	13.5	12.1	13.5	13.5	13.5
180°	14.8	14.8	14.8	14.8	14.8

(END OF REPORT)