

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: SHAPER

Report Number: P241183

Luminaire Tested: **1800-X-80-L40-4-W-UNV-STD-X-X**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P241183  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (ITL90337-GONIOPHOTOMETRY)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: SHAPER  
Catalog Number: 1800-X-80-L40-4-W-UNV-STD-X-X  
Description: SHAPER 1800 SERIES LED PENDANT DIRECT DOWNLIGHT  
WIDE DISTRIBUTION  
Light Source: (168) 4000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

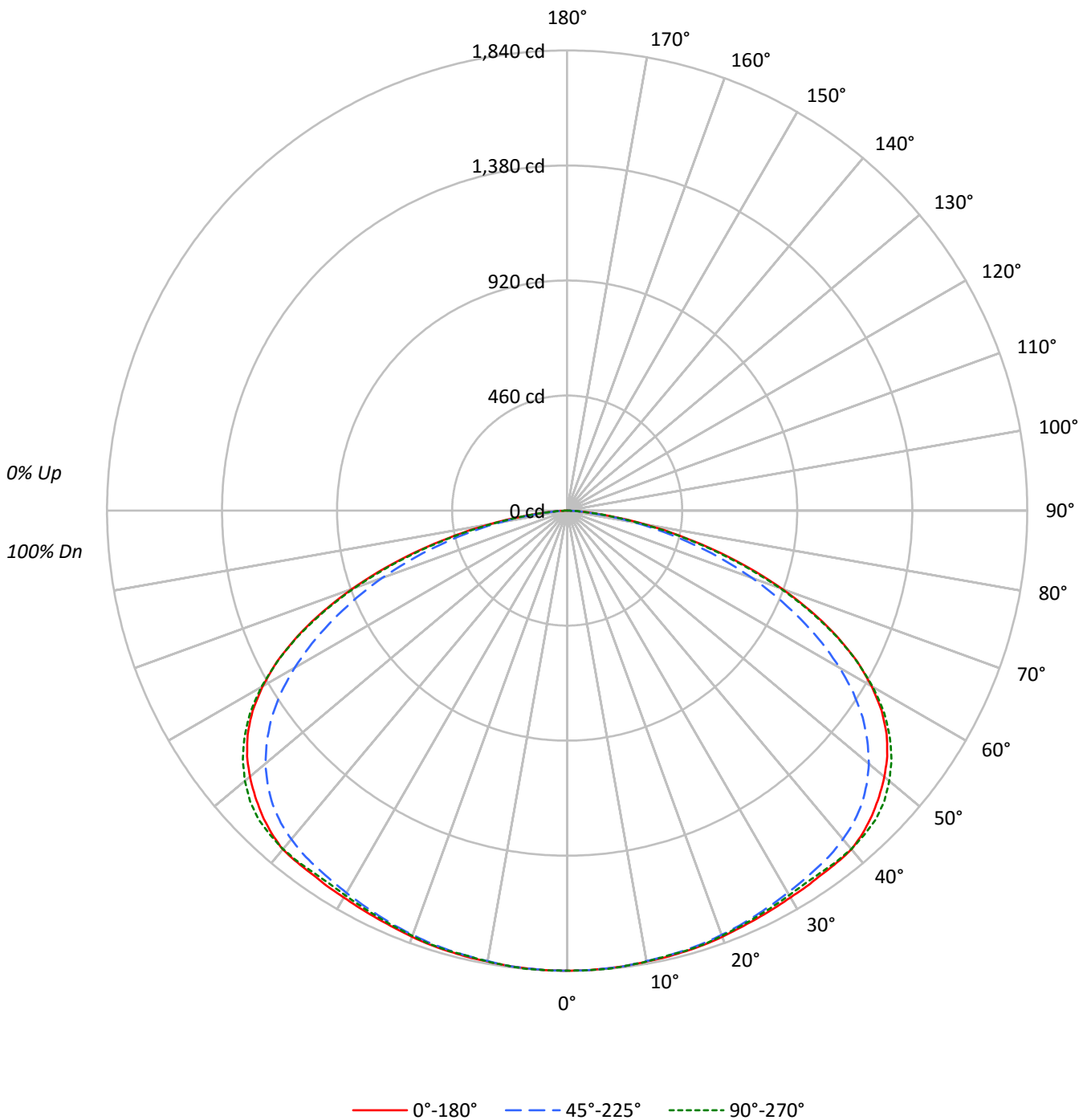
Lumens per Lamp: N/A  
Luminaire Lumens: 7072.8 lumens  
Efficiency: N/A  
Efficacy: 85.3 lumens/watt  
Spacing Criteria (0/90/45): 1.48 / 1.48 / 1.61  
Luminous Opening: Circular (Dia: 1.17' x H: 0')  
CIE Type: Direct

Input Watts (W): 82.9  
Input Voltage (V): 120  
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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	108	103	98	94	105	101	96	93	96	93	90	92	90	87	89	87	84	82
2	97	89	81	75	95	87	80	74	83	77	72	80	75	71	77	73	69	67
3	88	77	68	61	85	75	67	60	72	65	59	69	63	58	67	62	57	55
4	80	67	58	51	78	66	57	50	63	56	49	61	54	49	59	53	48	46
5	73	59	50	43	71	58	49	43	56	48	42	54	47	42	52	46	41	39
6	67	53	44	37	65	52	43	37	50	42	36	48	41	36	47	40	35	33
7	62	48	38	32	60	47	38	32	45	37	32	44	37	31	42	36	31	29
8	57	43	34	28	56	43	34	28	41	33	28	40	33	28	39	32	27	25
9	53	39	31	25	52	39	31	25	38	30	25	37	30	25	35	29	24	23
10	50	36	28	22	49	36	28	22	35	27	22	34	27	22	33	27	22	20

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

	0°	45°	90°
0°	18523	18523	18523
5°	18572	18572	18594
10°	18722	18699	18722
15°	19021	18976	18998
20°	19437	19346	19391
25°	19987	19845	19916
30°	20768	20520	20644
35°	21826	21432	21720
40°	23255	22553	23226
45°	24555	23703	24858
50°	25942	24672	26343
55°	27385	25326	27649
60°	28322	25356	28451
65°	28371	24609	28271
70°	26952	23119	26640
75°	23661	20343	23082
80°	18190	15714	17569
85°	9612	7891	9127



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	175.2	2.5
10°-20°	515.8	7.3
20°-30°	828.5	11.7
30°-40°	1104.3	15.6
40°-50°	1310.6	18.5
50°-60°	1339.6	18.9
60°-70°	1092.1	15.4
70°-80°	595.8	8.4
80°-90°	111.0	1.6
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°	1519.5	21.5
0°-40°	2623.7	37.1
0°-60°	5273.8	74.6
0°-90°	7072.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7072.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1840	1840	1840	1840	1840	
5°	1838	1838	1838	1838	1840	175
15°	1825	1822	1820	1820	1822	517
25°	1799	1793	1786	1790	1793	832
35°	1776	1763	1744	1756	1767	1116
45°	1724	1694	1665	1709	1746	1331
55°	1560	1500	1443	1513	1575	1388
65°	1191	1112	1033	1110	1187	1168
75°	608	563	523	563	593	644
85°	83	79	68	77	79	120
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1839.6	1839.6	1839.6	1839.6	1839.6
2.5°	1839.6	1839.6	1839.6	1839.6	1839.6
5°	1837.5	1837.5	1837.5	1837.5	1839.6
7.5°	1835.3	1835.3	1835.3	1835.3	1835.3
10°	1831.1	1831.1	1828.9	1828.9	1831.1
12.5°	1828.9	1826.8	1824.7	1824.7	1824.7
15°	1824.7	1822.5	1820.4	1820.4	1822.5
17.5°	1820.4	1816.1	1814.0	1814.0	1818.3
20°	1814.0	1807.6	1805.5	1807.6	1809.7
22.5°	1805.5	1801.2	1796.9	1799.0	1801.2
25°	1799.0	1792.6	1786.2	1790.5	1792.6
27.5°	1792.6	1784.1	1775.6	1779.8	1784.1
30°	1786.2	1775.6	1764.9	1769.2	1775.6
32.5°	1782.0	1769.2	1754.2	1762.8	1769.2
35°	1775.6	1762.8	1743.6	1756.4	1767.0
37.5°	1773.4	1754.2	1732.9	1750.0	1769.2
40°	1769.2	1741.4	1715.8	1743.6	1767.0
42.5°	1750.0	1722.2	1694.5	1728.6	1758.5
45°	1724.4	1694.5	1664.6	1709.4	1745.7
47.5°	1692.3	1660.3	1624.1	1677.4	1720.1
50°	1656.1	1615.5	1575.0	1632.6	1681.7
52.5°	1613.4	1562.2	1513.1	1579.2	1634.7
55°	1560.0	1500.3	1442.7	1513.1	1575.0
57.5°	1491.7	1425.6	1357.3	1434.1	1502.4
60°	1406.4	1335.9	1259.1	1338.1	1412.8
62.5°	1308.2	1229.2	1150.3	1233.5	1306.1
65°	1190.8	1111.9	1032.9	1109.7	1186.6
67.5°	1058.5	981.7	911.3	979.6	1050.0
70°	915.5	847.2	785.3	843.0	904.9
72.5°	764.0	706.4	655.2	704.3	749.1
75°	608.2	563.4	522.9	563.4	593.3
77.5°	456.7	422.6	394.8	426.8	443.9
80°	313.7	292.4	271.0	294.5	303.0
82.5°	185.7	177.1	160.1	175.0	179.3
85°	83.2	79.0	68.3	76.8	79.0
87.5°	14.9	12.8	10.7	12.8	14.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)