

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: P241171

Luminaire Tested: **1800-X-80-L30-3-W-UNV-STD-X-X**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P241171  
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-L30-3-W-UNV-STD-X-X  
Description: SHAPER 1800 SERIES LED PENDANT DIRECT DOWNLIGHT  
WIDE DISTRIBUTION  
Light Source: (168) 3000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

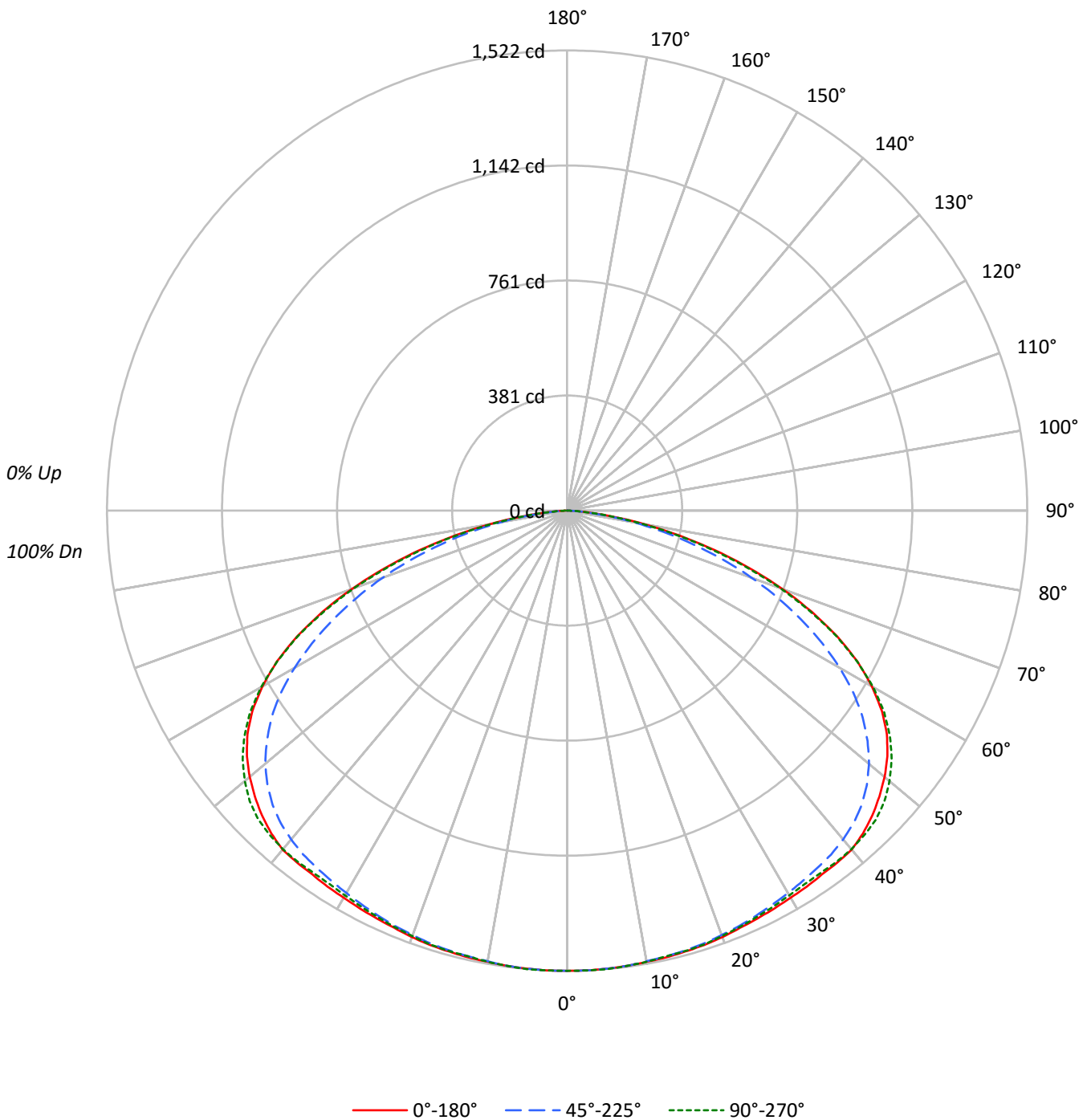
Lumens per Lamp: N/A  
Luminaire Lumens: 5853.4 lumens  
Efficiency: N/A  
Efficacy: 82.9 lumens/watt  
Spacing Criteria (0/90/45): 1.48 / 1.48 / 1.61  
Luminous Opening: Circular (Dia: 1.17' x H: 0')  
CIE Type: Direct

Input Watts (W): 70.6  
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°	15329	15329	15329
5°	15370	15370	15388
10°	15494	15476	15494
15°	15742	15705	15723
20°	16087	16011	16048
25°	16542	16424	16483
30°	17188	16982	17085
35°	18063	17737	17976
40°	19246	18665	19222
45°	20322	19617	20572
50°	21470	20417	21802
55°	22665	20959	22881
60°	23439	20984	23545
65°	23480	20366	23396
70°	22307	19136	22047
75°	19584	16834	19102
80°	15053	13006	14543
85°	7960	6527	7544



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	145.0	2.5
10°-20°	426.9	7.3
20°-30°	685.7	11.7
30°-40°	913.9	15.6
40°-50°	1084.6	18.5
50°-60°	1108.6	18.9
60°-70°	903.9	15.4
70°-80°	493.1	8.4
80°-90°	91.9	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°	1257.5	21.5
0°-40°	2171.4	37.1
0°-60°	4364.6	74.6
0°-90°	5853.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5853.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1522	1522	1522	1522	1522	
5°	1521	1521	1521	1521	1522	145
15°	1510	1508	1507	1507	1508	428
25°	1489	1484	1478	1482	1484	689
35°	1470	1459	1443	1454	1462	924
45°	1427	1402	1378	1415	1445	1101
55°	1291	1242	1194	1252	1303	1148
65°	986	920	855	918	982	966
75°	503	466	433	466	491	533
85°	69	65	56	64	65	99
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1522.4	1522.4	1522.4	1522.4	1522.4
2.5°	1522.4	1522.4	1522.4	1522.4	1522.4
5°	1520.7	1520.7	1520.7	1520.7	1522.4
7.5°	1518.9	1518.9	1518.9	1518.9	1518.9
10°	1515.4	1515.4	1513.6	1513.6	1515.4
12.5°	1513.6	1511.9	1510.1	1510.1	1510.1
15°	1510.1	1508.3	1506.6	1506.6	1508.3
17.5°	1506.6	1503.0	1501.3	1501.3	1504.8
20°	1501.3	1496.0	1494.2	1496.0	1497.7
22.5°	1494.2	1490.7	1487.1	1488.9	1490.7
25°	1488.9	1483.6	1478.3	1481.8	1483.6
27.5°	1483.6	1476.5	1469.5	1473.0	1476.5
30°	1478.3	1469.5	1460.6	1464.2	1469.5
32.5°	1474.8	1464.2	1451.8	1458.9	1464.2
35°	1469.5	1458.9	1443.0	1453.6	1462.4
37.5°	1467.7	1451.8	1434.1	1448.3	1464.2
40°	1464.2	1441.2	1420.0	1443.0	1462.4
42.5°	1448.3	1425.3	1402.3	1430.6	1455.3
45°	1427.1	1402.3	1377.6	1414.7	1444.7
47.5°	1400.6	1374.1	1344.1	1388.2	1423.5
50°	1370.6	1337.0	1303.4	1351.1	1391.8
52.5°	1335.2	1292.8	1252.2	1307.0	1352.9
55°	1291.1	1241.6	1193.9	1252.2	1303.4
57.5°	1234.6	1179.8	1123.3	1186.9	1243.4
60°	1163.9	1105.6	1042.0	1107.4	1169.2
62.5°	1082.7	1017.3	952.0	1020.9	1080.9
65°	985.5	920.2	854.8	918.4	982.0
67.5°	876.0	812.4	754.2	810.7	869.0
70°	757.7	701.2	650.0	697.6	748.9
72.5°	632.3	584.6	542.2	582.8	619.9
75°	503.4	466.3	432.7	466.3	491.0
77.5°	378.0	349.7	326.7	353.2	367.4
80°	259.6	242.0	224.3	243.7	250.8
82.5°	153.7	146.6	132.5	144.8	148.4
85°	68.9	65.3	56.5	63.6	65.3
87.5°	12.4	10.6	8.8	10.6	12.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)