

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: P241175

Luminaire Tested: **1800-X-80-L40-3-W-UNV-STD-X-X**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P241175
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-L40-3-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: 6226.2 lumens
Efficiency: N/A
Efficacy: 88.2 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

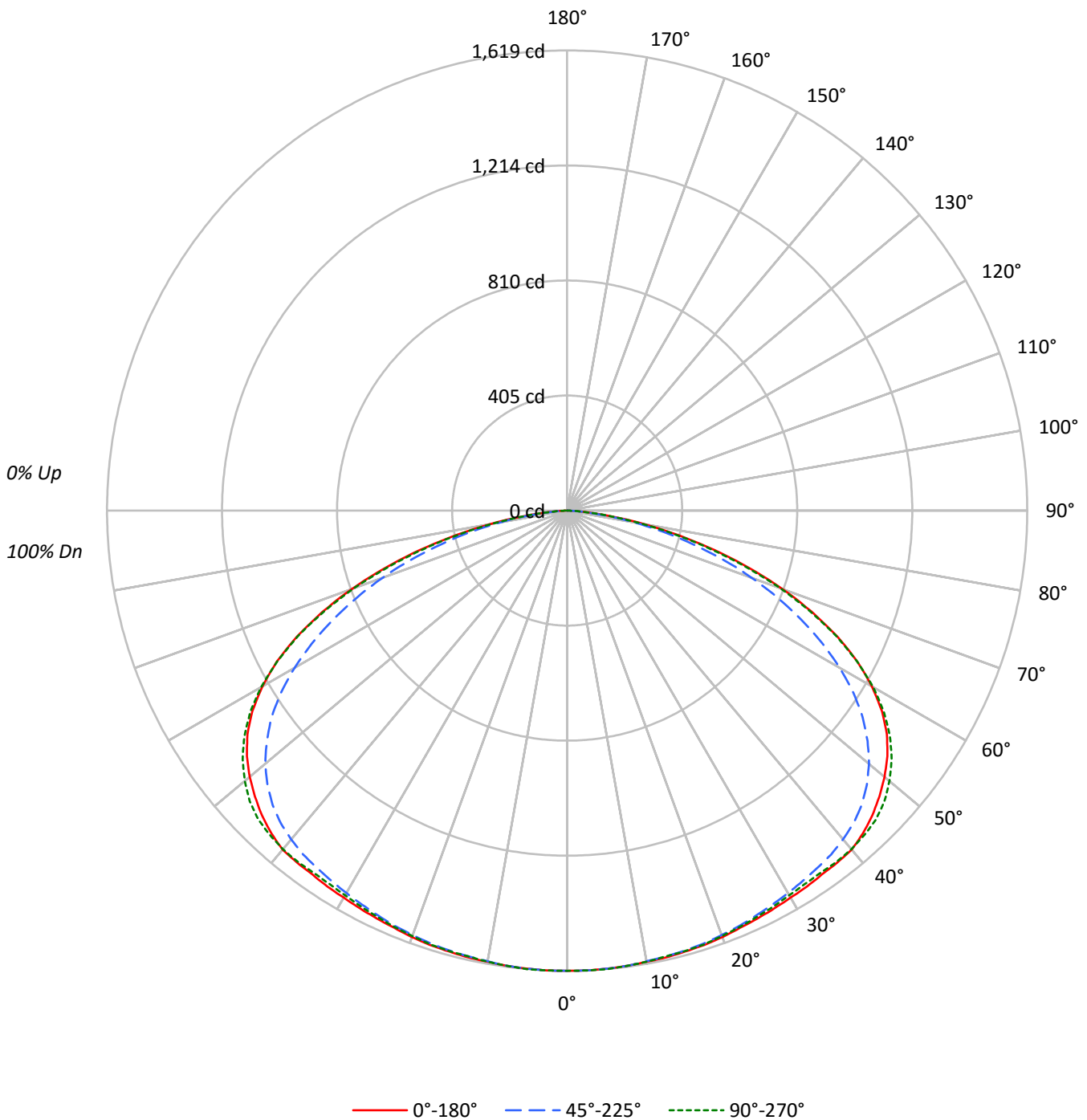
Input Watts (W): 70.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	16306	16306	16306
5°	16349	16349	16368
10°	16481	16461	16481
15°	16744	16705	16725
20°	17111	17030	17070
25°	17595	17469	17533
30°	18282	18064	18173
35°	19212	18867	19120
40°	20471	19853	20446
45°	21616	20867	21882
50°	22836	21719	23190
55°	24108	22295	24340
60°	24931	22321	25046
65°	24976	21664	24886
70°	23726	20352	23452
75°	20829	17907	20319
80°	16015	13835	15470
85°	8468	6943	8029



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	154.2	2.5
10°-20°	454.0	7.3
20°-30°	729.3	11.7
30°-40°	972.1	15.6
40°-50°	1153.7	18.5
50°-60°	1179.2	18.9
60°-70°	961.4	15.4
70°-80°	524.5	8.4
80°-90°	97.7	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°	1337.6	21.5
0°-40°	2309.7	37.1
0°-60°	4642.6	74.6
0°-90°	6226.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6226.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1619	1619	1619	1619	1619	
5°	1618	1618	1618	1618	1619	154
15°	1606	1604	1602	1602	1604	455
25°	1584	1578	1572	1576	1578	733
35°	1563	1552	1535	1546	1556	983
45°	1518	1492	1465	1505	1537	1171
55°	1373	1321	1270	1332	1386	1222
65°	1048	979	909	977	1044	1028
75°	535	496	460	496	522	567
85°	73	70	60	68	70	105
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1619.4	1619.4	1619.4	1619.4	1619.4
2.5°	1619.4	1619.4	1619.4	1619.4	1619.4
5°	1617.5	1617.5	1617.5	1617.5	1619.4
7.5°	1615.6	1615.6	1615.6	1615.6	1615.6
10°	1611.9	1611.9	1610.0	1610.0	1611.9
12.5°	1610.0	1608.1	1606.3	1606.3	1606.3
15°	1606.3	1604.4	1602.5	1602.5	1604.4
17.5°	1602.5	1598.7	1596.9	1596.9	1600.6
20°	1596.9	1591.2	1589.3	1591.2	1593.1
22.5°	1589.3	1585.6	1581.8	1583.7	1585.6
25°	1583.7	1578.1	1572.4	1576.2	1578.1
27.5°	1578.1	1570.6	1563.0	1566.8	1570.6
30°	1572.4	1563.0	1553.7	1557.4	1563.0
32.5°	1568.7	1557.4	1544.3	1551.8	1557.4
35°	1563.0	1551.8	1534.9	1546.1	1555.5
37.5°	1561.2	1544.3	1525.5	1540.5	1557.4
40°	1557.4	1533.0	1510.4	1534.9	1555.5
42.5°	1540.5	1516.1	1491.7	1521.7	1548.0
45°	1518.0	1491.7	1465.4	1504.8	1536.7
47.5°	1489.8	1461.6	1429.7	1476.6	1514.2
50°	1457.8	1422.1	1386.5	1437.2	1480.4
52.5°	1420.3	1375.2	1332.0	1390.2	1439.1
55°	1373.3	1320.7	1270.0	1332.0	1386.5
57.5°	1313.2	1254.9	1194.8	1262.5	1322.6
60°	1238.0	1176.0	1108.4	1177.9	1243.7
62.5°	1151.6	1082.1	1012.6	1085.9	1149.7
65°	1048.3	978.8	909.3	976.9	1044.5
67.5°	931.8	864.2	802.2	862.3	924.3
70°	805.9	745.8	691.3	742.1	796.6
72.5°	672.6	621.8	576.7	620.0	659.4
75°	535.4	496.0	460.3	496.0	522.3
77.5°	402.0	372.0	347.6	375.7	390.8
80°	276.2	257.4	238.6	259.3	266.8
82.5°	163.4	155.9	140.9	154.1	157.8
85°	73.3	69.5	60.1	67.6	69.5
87.5°	13.2	11.3	9.4	11.3	13.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)