

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: P241177

Luminaire Tested: **1800-X-80-L27-4-W-UNV-STD-X-X**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P241177  
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-L27-4-W-UNV-STD-X-X  
Description: SHAPER 1800 SERIES LED PENDANT DIRECT DOWNLIGHT  
WIDE DISTRIBUTION  
Light Source: (168) 2700K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6216.2 lumens  
Efficiency: N/A  
Efficacy: 75.0 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

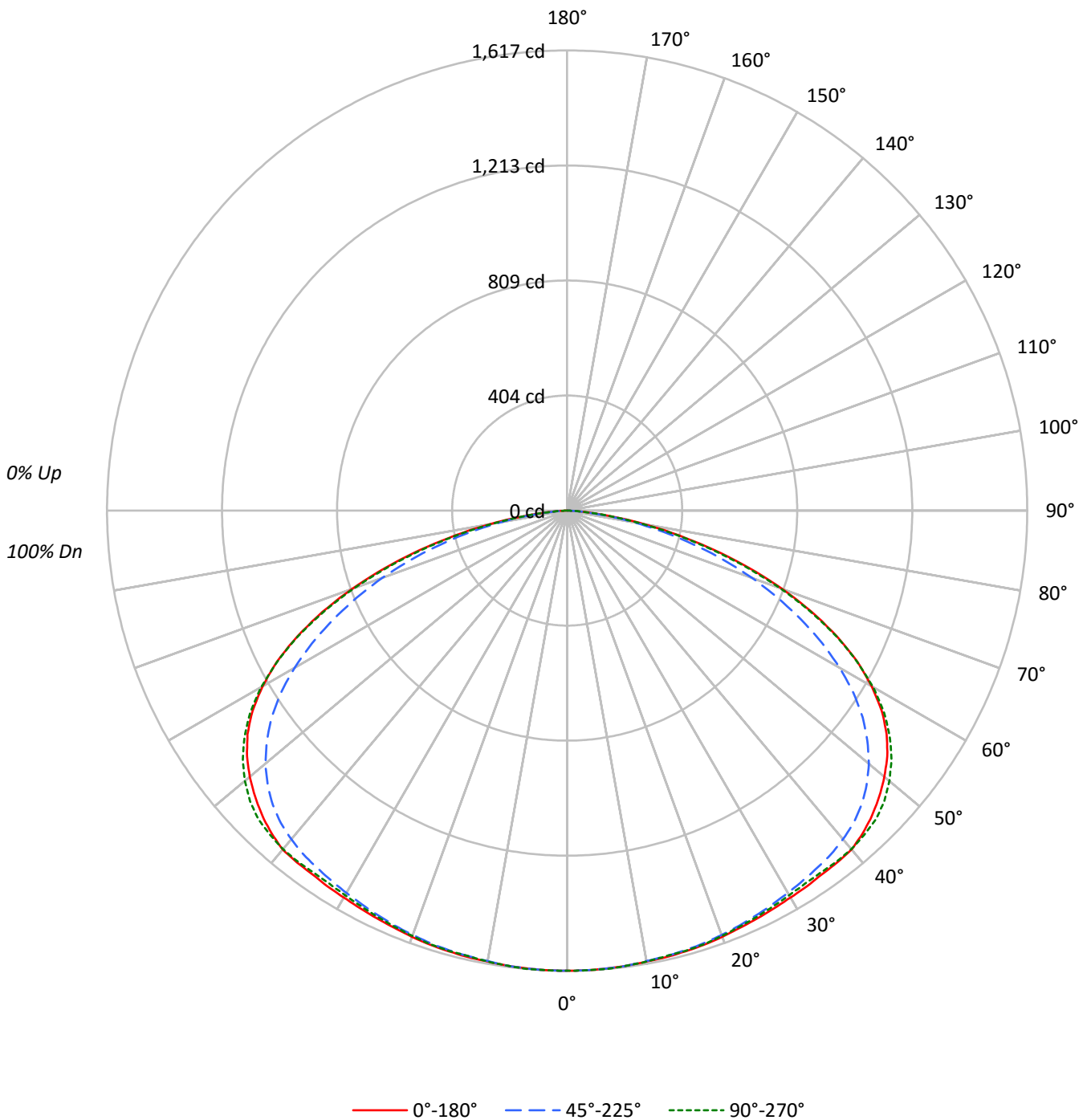
Input Watts (W): 82.9  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	16280	16280	16280
5°	16323	16323	16342
10°	16454	16435	16454
15°	16717	16678	16697
20°	17083	17003	17043
25°	17567	17441	17504
30°	18253	18035	18143
35°	19182	18836	19089
40°	20438	19821	20413
45°	21580	20833	21848
50°	22800	21683	23152
55°	24069	22258	24299
60°	24891	22285	25005
65°	24936	21629	24847
70°	23687	20319	23413
75°	20798	17876	20284
80°	15986	13812	15441
85°	8445	6932	8018



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	154.0	2.5
10°-20°	453.3	7.3
20°-30°	728.1	11.7
30°-40°	970.5	15.6
40°-50°	1151.8	18.5
50°-60°	1177.3	18.9
60°-70°	959.9	15.4
70°-80°	523.6	8.4
80°-90°	97.6	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°	1335.4	21.5
0°-40°	2305.9	37.1
0°-60°	4635.1	74.6
0°-90°	6216.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6216.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1617	1617	1617	1617	1617	
5°	1615	1615	1615	1615	1617	154
15°	1604	1602	1600	1600	1602	454
25°	1581	1576	1570	1574	1576	732
35°	1560	1549	1532	1544	1553	981
45°	1516	1489	1463	1502	1534	1170
55°	1371	1319	1268	1330	1384	1220
65°	1047	977	908	975	1043	1026
75°	535	495	460	495	521	566
85°	73	69	60	68	69	105
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1616.8	1616.8	1616.8	1616.8	1616.8
2.5°	1616.8	1616.8	1616.8	1616.8	1616.8
5°	1614.9	1614.9	1614.9	1614.9	1616.8
7.5°	1613.0	1613.0	1613.0	1613.0	1613.0
10°	1609.3	1609.3	1607.4	1607.4	1609.3
12.5°	1607.4	1605.5	1603.7	1603.7	1603.7
15°	1603.7	1601.8	1599.9	1599.9	1601.8
17.5°	1599.9	1596.2	1594.3	1594.3	1598.0
20°	1594.3	1588.7	1586.8	1588.7	1590.5
22.5°	1586.8	1583.0	1579.3	1581.2	1583.0
25°	1581.2	1575.5	1569.9	1573.7	1575.5
27.5°	1575.5	1568.0	1560.5	1564.3	1568.0
30°	1569.9	1560.5	1551.2	1554.9	1560.5
32.5°	1566.2	1554.9	1541.8	1549.3	1554.9
35°	1560.5	1549.3	1532.4	1543.7	1553.0
37.5°	1558.7	1541.8	1523.0	1538.0	1554.9
40°	1554.9	1530.5	1508.0	1532.4	1553.0
42.5°	1538.0	1513.6	1489.3	1519.3	1545.5
45°	1515.5	1489.3	1463.0	1502.4	1534.3
47.5°	1487.4	1459.2	1427.4	1474.3	1511.8
50°	1455.5	1419.9	1384.2	1434.9	1478.0
52.5°	1418.0	1373.0	1329.8	1388.0	1436.7
55°	1371.1	1318.6	1267.9	1329.8	1384.2
57.5°	1311.1	1252.9	1192.9	1260.4	1320.5
60°	1236.0	1174.2	1106.6	1176.0	1241.7
62.5°	1149.8	1080.4	1011.0	1084.1	1147.9
65°	1046.6	977.2	907.8	975.3	1042.9
67.5°	930.3	862.8	800.9	860.9	922.8
70°	804.6	744.6	690.2	740.9	795.3
72.5°	671.5	620.8	575.8	619.0	658.3
75°	534.6	495.2	459.5	495.2	521.4
77.5°	401.4	371.4	347.0	375.1	390.1
80°	275.7	257.0	238.2	258.8	266.3
82.5°	163.2	155.7	140.7	153.8	157.6
85°	73.1	69.4	60.0	67.5	69.4
87.5°	13.1	11.3	9.4	11.3	13.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)