

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: P241157

Luminaire Tested: **1800-X-80-L35-1-W-UNV-STD-X-X**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P241157  
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-L35-1-W-UNV-STD-X-X  
Description: SHAPER 1800 SERIES LED PENDANT DIRECT DOWNLIGHT  
WIDE DISTRIBUTION  
Light Source: (168) 3500K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

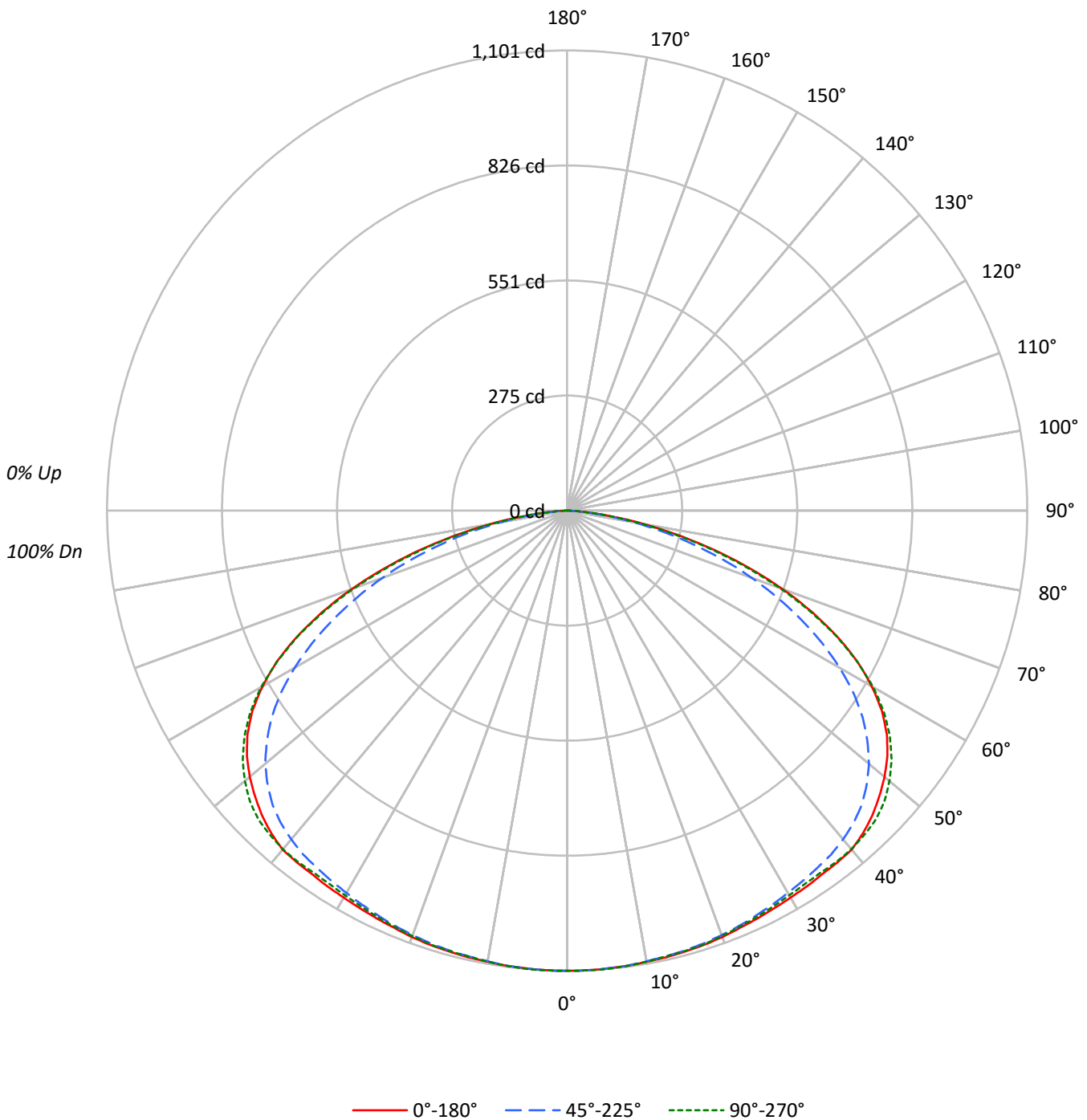
Lumens per Lamp: N/A  
Luminaire Lumens: 4233.5 lumens  
Efficiency: N/A  
Efficacy: 101.3 lumens/watt  
Spacing Criteria (0/90/45): 1.48 / 1.48 / 1.61  
Luminous Opening: Circular (Dia: 1.17' x H: 0')  
CIE Type: Direct

Input Watts (W): 41.8  
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°	11087	11087	11087
5°	11116	11116	11129
10°	11206	11193	11206
15°	11385	11358	11372
20°	11635	11580	11607
25°	11964	11879	11921
30°	12431	12282	12357
35°	13064	12828	13001
40°	13920	13499	13903
45°	14697	14188	14879
50°	15528	14767	15768
55°	16393	15159	16549
60°	16952	15178	17029
65°	16983	14731	16921
70°	16133	13840	15945
75°	14165	12177	13815
80°	10890	9405	10518
85°	5753	4725	5465



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	104.9	2.5
10°-20°	308.7	7.3
20°-30°	495.9	11.7
30°-40°	661.0	15.6
40°-50°	784.5	18.5
50°-60°	801.8	18.9
60°-70°	653.7	15.4
70°-80°	356.6	8.4
80°-90°	66.5	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°	909.5	21.5
0°-40°	1570.5	37.1
0°-60°	3156.7	74.6
0°-90°	4233.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4233.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1101	1101	1101	1101	1101	
5°	1100	1100	1100	1100	1101	105
15°	1092	1091	1090	1090	1091	309
25°	1077	1073	1069	1072	1073	498
35°	1063	1055	1044	1051	1058	668
45°	1032	1014	996	1023	1045	797
55°	934	898	864	906	943	831
65°	713	666	618	664	710	699
75°	364	337	313	337	355	385
85°	50	47	41	46	47	72
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1101.1	1101.1	1101.1	1101.1	1101.1
2.5°	1101.1	1101.1	1101.1	1101.1	1101.1
5°	1099.8	1099.8	1099.8	1099.8	1101.1
7.5°	1098.6	1098.6	1098.6	1098.6	1098.6
10°	1096.0	1096.0	1094.7	1094.7	1096.0
12.5°	1094.7	1093.5	1092.2	1092.2	1092.2
15°	1092.2	1090.9	1089.6	1089.6	1090.9
17.5°	1089.6	1087.1	1085.8	1085.8	1088.4
20°	1085.8	1082.0	1080.7	1082.0	1083.2
22.5°	1080.7	1078.1	1075.6	1076.9	1078.1
25°	1076.9	1073.0	1069.2	1071.7	1073.0
27.5°	1073.0	1067.9	1062.8	1065.4	1067.9
30°	1069.2	1062.8	1056.4	1059.0	1062.8
32.5°	1066.6	1059.0	1050.0	1055.1	1059.0
35°	1062.8	1055.1	1043.6	1051.3	1057.7
37.5°	1061.5	1050.0	1037.3	1047.5	1059.0
40°	1059.0	1042.4	1027.0	1043.6	1057.7
42.5°	1047.5	1030.9	1014.3	1034.7	1052.6
45°	1032.1	1014.3	996.4	1023.2	1044.9
47.5°	1013.0	993.8	972.1	1004.0	1029.6
50°	991.3	967.0	942.7	977.2	1006.6
52.5°	965.7	935.1	905.7	945.3	978.5
55°	933.8	898.0	863.5	905.7	942.7
57.5°	892.9	853.3	812.4	858.4	899.3
60°	841.8	799.7	753.7	800.9	845.6
62.5°	783.1	735.8	688.5	738.3	781.8
65°	712.8	665.5	618.3	664.3	710.2
67.5°	633.6	587.6	545.5	586.3	628.5
70°	548.0	507.1	470.1	504.6	541.6
72.5°	457.3	422.8	392.2	421.5	448.4
75°	364.1	337.2	313.0	337.2	355.1
77.5°	273.4	252.9	236.3	255.5	265.7
80°	187.8	175.0	162.2	176.3	181.4
82.5°	111.1	106.0	95.8	104.7	107.3
85°	49.8	47.3	40.9	46.0	47.3
87.5°	8.9	7.7	6.4	7.7	8.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)