

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: P241155

Luminaire Tested: **1800-X-80-L30-1-W-UNV-STD-X-X**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P241155  
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-L30-1-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**

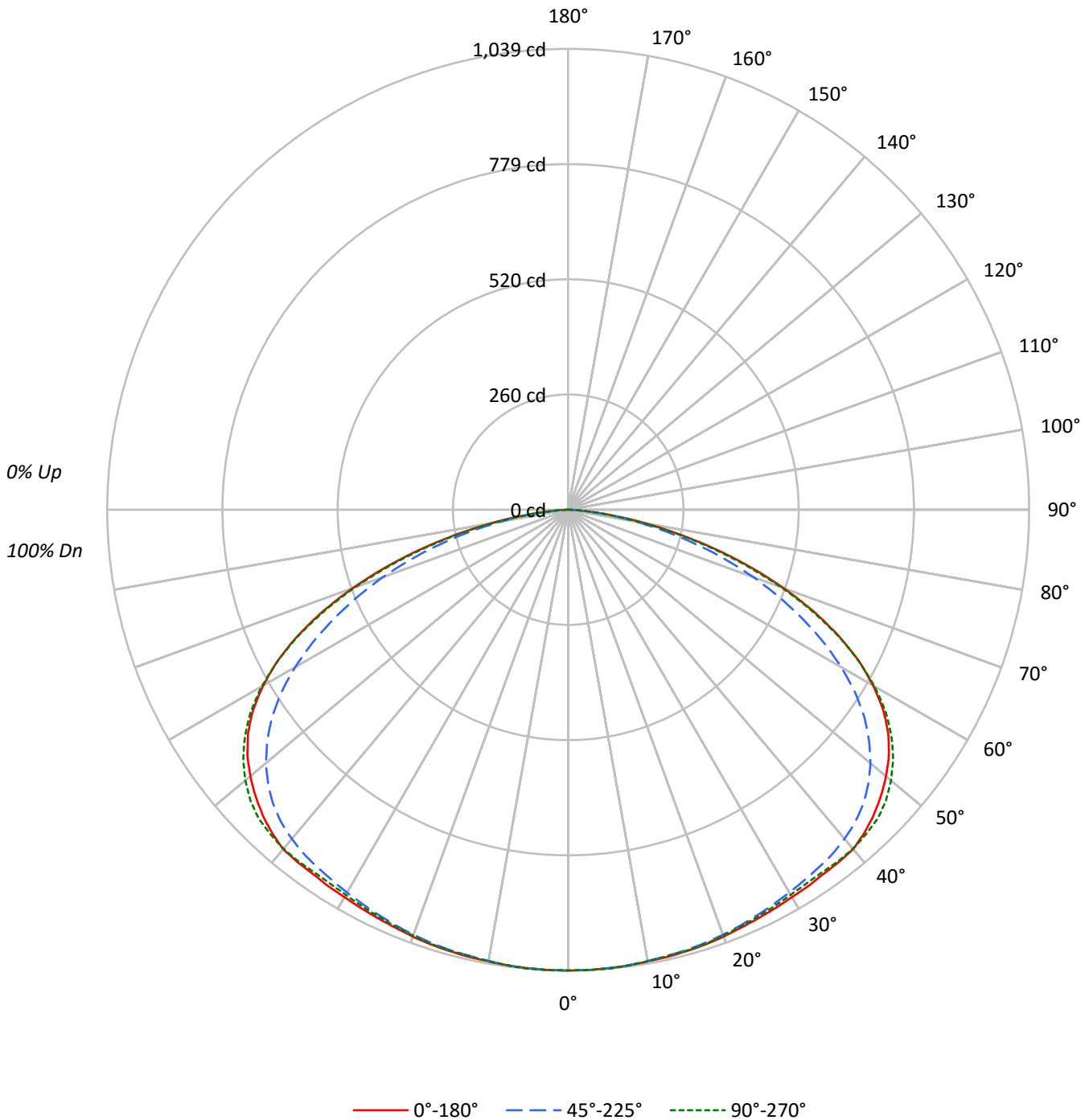
Lumens per Lamp: N/A  
Luminaire Lumens: 3994.1 lumens  
Efficiency: N/A  
Efficacy: 95.6 lumens/watt  
Spacing Criteria (0/90/45): 1.48 / 1.48 / 1.61  
Luminous Opening: Circular (Dia: 1.17' x H: 0')  
CIE Type: Direct

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°	10460	10460	10460
5°	10488	10488	10500
10°	10572	10560	10572
15°	10741	10716	10729
20°	10977	10925	10951
25°	11287	11207	11247
30°	11728	11588	11658
35°	12325	12103	12266
40°	13132	12735	13117
45°	13867	13385	14038
50°	14650	13932	14877
55°	15466	14302	15613
60°	15994	14318	16066
65°	16023	13897	15965
70°	15220	13057	15044
75°	13363	11488	13033
80°	10275	8878	9921
85°	5430	4459	5153



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	98.9	2.5
10°-20°	291.3	7.3
20°-30°	467.8	11.7
30°-40°	623.6	15.6
40°-50°	740.1	18.5
50°-60°	756.5	18.9
60°-70°	616.8	15.4
70°-80°	336.4	8.4
80°-90°	62.7	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°	858.1	21.5
0°-40°	1481.6	37.1
0°-60°	2978.2	74.6
0°-90°	3994.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3994.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1039	1039	1039	1039	1039	
5°	1038	1038	1038	1038	1039	99
15°	1030	1029	1028	1028	1029	292
25°	1016	1012	1009	1011	1012	470
35°	1003	996	985	992	998	630
45°	974	957	940	965	986	751
55°	881	847	815	854	889	784
65°	672	628	583	627	670	659
75°	344	318	295	318	335	364
85°	47	45	39	43	45	68
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1038.8	1038.8	1038.8	1038.8	1038.8
2.5°	1038.8	1038.8	1038.8	1038.8	1038.8
5°	1037.6	1037.6	1037.6	1037.6	1038.8
7.5°	1036.4	1036.4	1036.4	1036.4	1036.4
10°	1034.0	1034.0	1032.8	1032.8	1034.0
12.5°	1032.8	1031.6	1030.4	1030.4	1030.4
15°	1030.4	1029.2	1028.0	1028.0	1029.2
17.5°	1028.0	1025.6	1024.4	1024.4	1026.8
20°	1024.4	1020.8	1019.6	1020.8	1022.0
22.5°	1019.6	1017.1	1014.7	1015.9	1017.1
25°	1015.9	1012.3	1008.7	1011.1	1012.3
27.5°	1012.3	1007.5	1002.7	1005.1	1007.5
30°	1008.7	1002.7	996.7	999.1	1002.7
32.5°	1006.3	999.1	990.6	995.5	999.1
35°	1002.7	995.5	984.6	991.8	997.9
37.5°	1001.5	990.6	978.6	988.2	999.1
40°	999.1	983.4	968.9	984.6	997.9
42.5°	988.2	972.6	956.9	976.2	993.0
45°	973.8	956.9	940.0	965.3	985.8
47.5°	955.7	937.6	917.1	947.2	971.4
50°	935.2	912.3	889.4	921.9	949.7
52.5°	911.1	882.2	854.5	891.8	923.1
55°	881.0	847.2	814.7	854.5	889.4
57.5°	842.4	805.0	766.5	809.9	848.4
60°	794.2	754.4	711.0	755.6	797.8
62.5°	738.8	694.2	649.6	696.6	737.6
65°	672.5	627.9	583.3	626.7	670.1
67.5°	597.8	554.4	514.6	553.2	592.9
70°	517.0	478.4	443.5	476.0	511.0
72.5°	431.4	398.9	370.0	397.7	423.0
75°	343.5	318.2	295.3	318.2	335.0
77.5°	257.9	238.6	223.0	241.0	250.7
80°	177.2	165.1	153.1	166.3	171.1
82.5°	104.8	100.0	90.4	98.8	101.2
85°	47.0	44.6	38.6	43.4	44.6
87.5°	8.4	7.2	6.0	7.2	8.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)