

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: P241161

Luminaire Tested: **1800-X-80-L27-2-W-UNV-STD-X-X**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P241161  
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-L27-2-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**

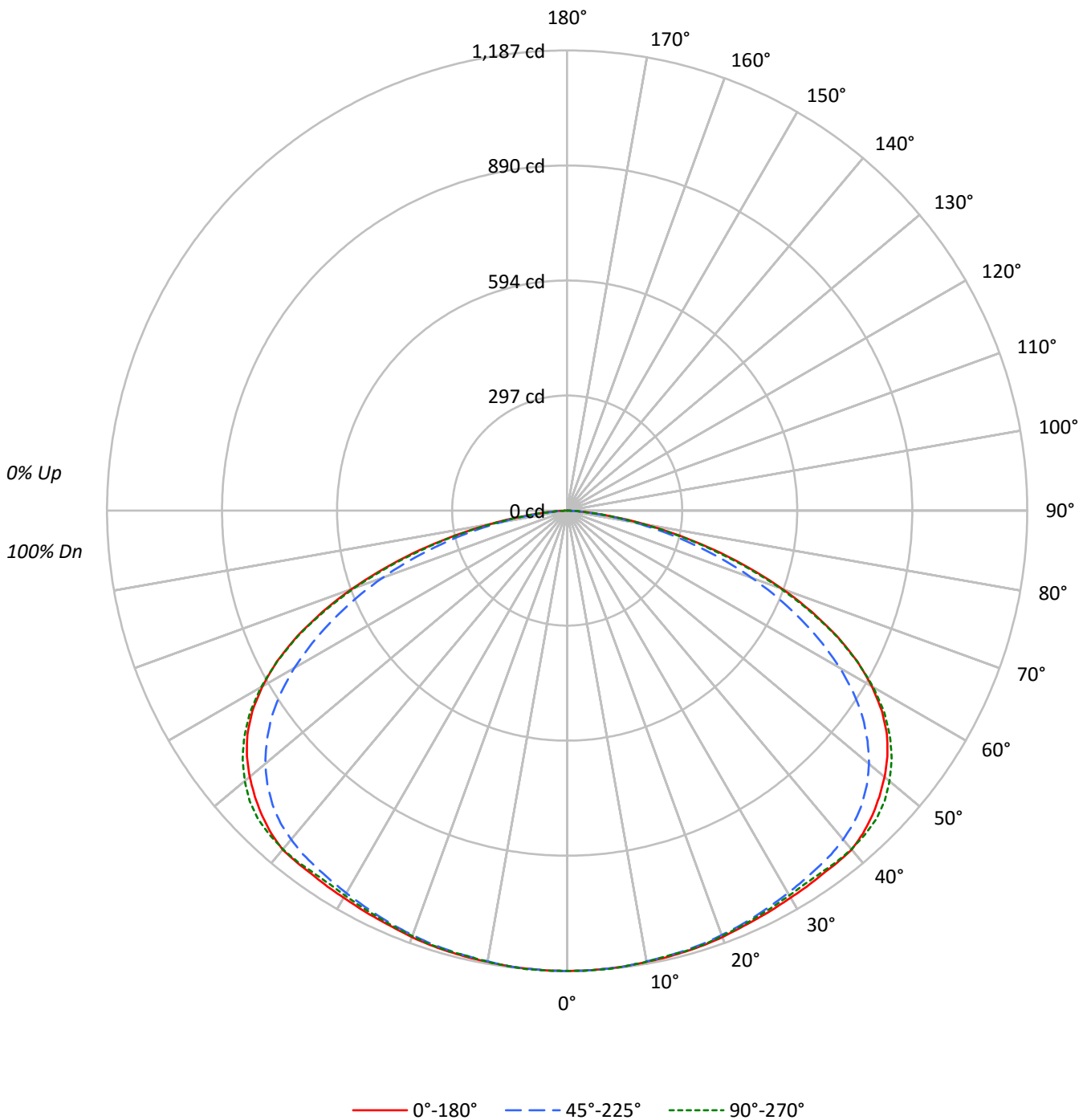
Lumens per Lamp: N/A  
Luminaire Lumens: 4565.3 lumens  
Efficiency: N/A  
Efficacy: 84.7 lumens/watt  
Spacing Criteria (0/90/45): 1.48 / 1.48 / 1.61  
Luminous Opening: Circular (Dia: 1.17' x H: 0')  
CIE Type: Direct

Input Watts (W): 53.9  
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
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102
1	108	103	98	94	105	101	96	93	96	93	90	92	90	87	89	87	84
2	97	89	81	75	95	87	80	74	83	77	72	80	75	71	77	73	69
3	88	77	68	61	85	75	67	60	72	65	59	69	63	58	67	62	57
4	80	67	58	51	78	66	57	50	63	56	49	61	54	49	59	53	48
5	73	59	50	43	71	58	49	43	56	48	42	54	47	42	52	46	41
6	67	53	44	37	65	52	43	37	50	42	36	48	41	36	47	40	35
7	62	48	38	32	60	47	38	32	45	37	32	44	37	31	42	36	31
8	57	43	34	28	56	43	34	28	41	33	28	40	33	28	39	32	27
9	53	39	31	25	52	39	31	25	38	30	25	37	30	25	35	29	24
10	50	36	28	22	49	36	28	22	35	27	22	34	27	22	33	27	22

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	11956	11956	11956
5°	11987	11987	12002
10°	12084	12070	12084
15°	12278	12248	12263
20°	12546	12488	12516
25°	12901	12810	12855
30°	13406	13245	13325
35°	14088	13833	14020
40°	15011	14557	14992
45°	15849	15301	16045
50°	16745	15925	17004
55°	17678	16347	17846
60°	18281	16366	18364
65°	18315	15884	18248
70°	17399	14923	17196
75°	15274	13130	14900
80°	11742	10142	11342
85°	6204	5095	5892



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	113.1	2.5
10°-20°	332.9	7.3
20°-30°	534.8	11.7
30°-40°	712.8	15.6
40°-50°	845.9	18.5
50°-60°	864.7	18.9
60°-70°	705.0	15.4
70°-80°	384.6	8.4
80°-90°	71.7	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°	980.8	21.5
0°-40°	1693.5	37.1
0°-60°	3404.2	74.6
0°-90°	4565.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4565.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1187	1187	1187	1187	1187	
5°	1186	1186	1186	1186	1187	113
15°	1178	1176	1175	1175	1176	334
25°	1161	1157	1153	1156	1157	537
35°	1146	1138	1125	1134	1141	720
45°	1113	1094	1074	1103	1127	859
55°	1007	968	931	977	1017	896
65°	769	718	667	716	766	754
75°	393	364	338	364	383	416
85°	54	51	44	50	51	77
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1187.4	1187.4	1187.4	1187.4	1187.4
2.5°	1187.4	1187.4	1187.4	1187.4	1187.4
5°	1186.0	1186.0	1186.0	1186.0	1187.4
7.5°	1184.7	1184.7	1184.7	1184.7	1184.7
10°	1181.9	1181.9	1180.5	1180.5	1181.9
12.5°	1180.5	1179.2	1177.8	1177.8	1177.8
15°	1177.8	1176.4	1175.0	1175.0	1176.4
17.5°	1175.0	1172.3	1170.9	1170.9	1173.6
20°	1170.9	1166.8	1165.4	1166.8	1168.1
22.5°	1165.4	1162.6	1159.9	1161.2	1162.6
25°	1161.2	1157.1	1153.0	1155.7	1157.1
27.5°	1157.1	1151.6	1146.1	1148.9	1151.6
30°	1153.0	1146.1	1139.2	1142.0	1146.1
32.5°	1150.2	1142.0	1132.3	1137.8	1142.0
35°	1146.1	1137.8	1125.4	1133.7	1140.6
37.5°	1144.7	1132.3	1118.5	1129.6	1142.0
40°	1142.0	1124.1	1107.5	1125.4	1140.6
42.5°	1129.6	1111.7	1093.8	1115.8	1135.1
45°	1113.0	1093.8	1074.5	1103.4	1126.8
47.5°	1092.4	1071.7	1048.3	1082.7	1110.3
50°	1069.0	1042.8	1016.6	1053.8	1085.5
52.5°	1041.4	1008.3	976.7	1019.4	1055.2
55°	1007.0	968.4	931.2	976.7	1016.6
57.5°	962.9	920.2	876.1	925.7	969.8
60°	907.8	862.3	812.7	863.7	911.9
62.5°	844.4	793.5	742.5	796.2	843.0
65°	768.7	717.7	666.7	716.3	765.9
67.5°	683.2	633.7	588.2	632.3	677.7
70°	591.0	546.9	506.9	544.1	584.1
72.5°	493.2	456.0	422.9	454.6	483.5
75°	392.6	363.7	337.5	363.7	383.0
77.5°	294.8	272.7	254.8	275.5	286.5
80°	202.5	188.7	174.9	190.1	195.6
82.5°	119.8	114.3	103.3	113.0	115.7
85°	53.7	51.0	44.1	49.6	51.0
87.5°	9.6	8.3	6.9	8.3	9.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)