

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: P241200

Luminaire Tested: **1800-X-90-L27-3-W-UNV-STD-X-X**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P241200
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-90-L27-3-W-UNV-STD-X-X
Description: SHAPER 1800 SERIES LED PENDANT DIRECT DOWNLIGHT
WIDE DISTRIBUTION
Light Source: (168) 2700K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4626.7 lumens
Efficiency: N/A
Efficacy: 65.5 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

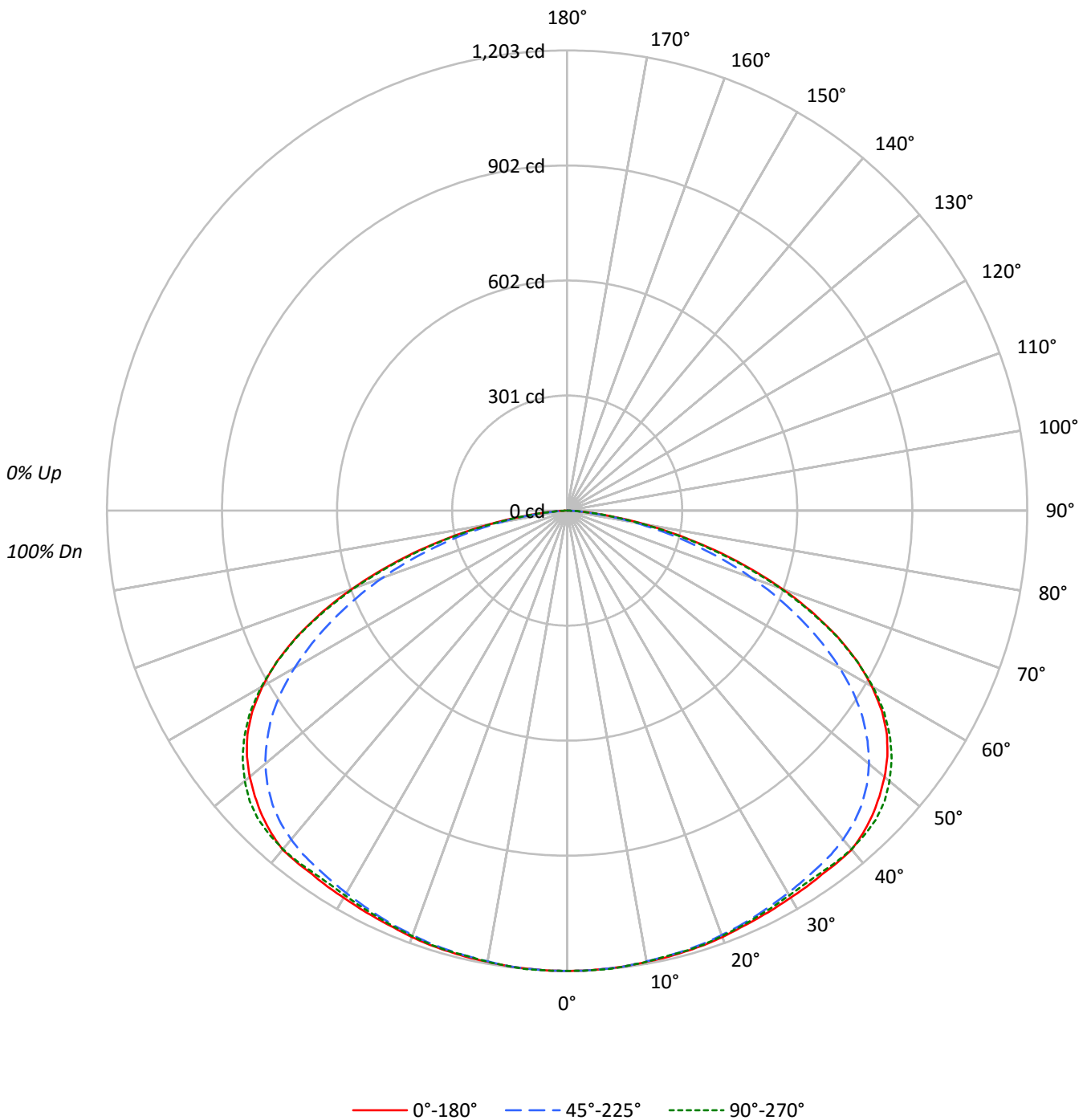
Input Watts (W): 70.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	12117	12117	12117
5°	12149	12149	12163
10°	12247	12232	12247
15°	12442	12413	12428
20°	12715	12655	12685
25°	13074	12982	13029
30°	13586	13423	13504
35°	14277	14019	14208
40°	15212	14753	15193
45°	16062	15506	16260
50°	16969	16139	17233
55°	17915	16566	18087
60°	18527	16586	18612
65°	18560	16099	18493
70°	17631	15123	17425
75°	15480	13305	15099
80°	11899	10281	11493
85°	6285	5164	5973



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	114.6	2.5
10°-20°	337.4	7.3
20°-30°	542.0	11.7
30°-40°	722.3	15.6
40°-50°	857.3	18.5
50°-60°	876.3	18.9
60°-70°	714.4	15.4
70°-80°	389.7	8.4
80°-90°	72.6	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°	994.0	21.5
0°-40°	1716.3	37.1
0°-60°	3449.9	74.6
0°-90°	4626.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4626.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1203	1203	1203	1203	1203	
5°	1202	1202	1202	1202	1203	115
15°	1194	1192	1191	1191	1192	338
25°	1177	1173	1168	1171	1173	545
35°	1162	1153	1140	1149	1156	730
45°	1128	1108	1089	1118	1142	870
55°	1020	981	944	990	1030	908
65°	779	727	676	726	776	764
75°	398	368	342	368	388	421
85°	54	52	45	50	52	78
90°	0	0	0	0	0	



TEST NUMBER: P241200

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1203.4	1203.4	1203.4	1203.4	1203.4
2.5°	1203.4	1203.4	1203.4	1203.4	1203.4
5°	1202.0	1202.0	1202.0	1202.0	1203.4
7.5°	1200.6	1200.6	1200.6	1200.6	1200.6
10°	1197.8	1197.8	1196.4	1196.4	1197.8
12.5°	1196.4	1195.0	1193.6	1193.6	1193.6
15°	1193.6	1192.2	1190.8	1190.8	1192.2
17.5°	1190.8	1188.0	1186.6	1186.6	1189.4
20°	1186.6	1182.4	1181.0	1182.4	1183.8
22.5°	1181.0	1178.2	1175.4	1176.8	1178.2
25°	1176.8	1172.7	1168.5	1171.3	1172.7
27.5°	1172.7	1167.1	1161.5	1164.3	1167.1
30°	1168.5	1161.5	1154.5	1157.3	1161.5
32.5°	1165.7	1157.3	1147.5	1153.1	1157.3
35°	1161.5	1153.1	1140.5	1148.9	1155.9
37.5°	1160.1	1147.5	1133.6	1144.7	1157.3
40°	1157.3	1139.1	1122.4	1140.5	1155.9
42.5°	1144.7	1126.6	1108.4	1130.8	1150.3
45°	1128.0	1108.4	1088.9	1118.2	1141.9
47.5°	1107.0	1086.1	1062.4	1097.3	1125.2
50°	1083.3	1056.8	1030.3	1068.0	1100.1
52.5°	1055.4	1021.9	989.8	1033.1	1069.3
55°	1020.5	981.4	943.7	989.8	1030.3
57.5°	975.8	932.5	887.9	938.1	982.8
60°	920.0	873.9	823.6	875.3	924.2
62.5°	855.8	804.1	752.5	806.9	854.4
65°	779.0	727.3	675.7	725.9	776.2
67.5°	692.4	642.2	596.1	640.8	686.8
70°	598.9	554.2	513.7	551.4	591.9
72.5°	499.8	462.1	428.6	460.7	490.0
75°	397.9	368.5	342.0	368.5	388.1
77.5°	298.7	276.4	258.3	279.2	290.4
80°	205.2	191.3	177.3	192.6	198.2
82.5°	121.5	115.9	104.7	114.5	117.3
85°	54.4	51.7	44.7	50.3	51.7
87.5°	9.8	8.4	7.0	8.4	9.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)