

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: P241204

Luminaire Tested: **1800-X-90-L35-3-W-UNV-STD-X-X**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P241204
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-L35-3-W-UNV-STD-X-X
Description: SHAPER 1800 SERIES LED PENDANT DIRECT DOWNLIGHT
WIDE DISTRIBUTION
Light Source: (168) 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4959.8 lumens
Efficiency: N/A
Efficacy: 70.3 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

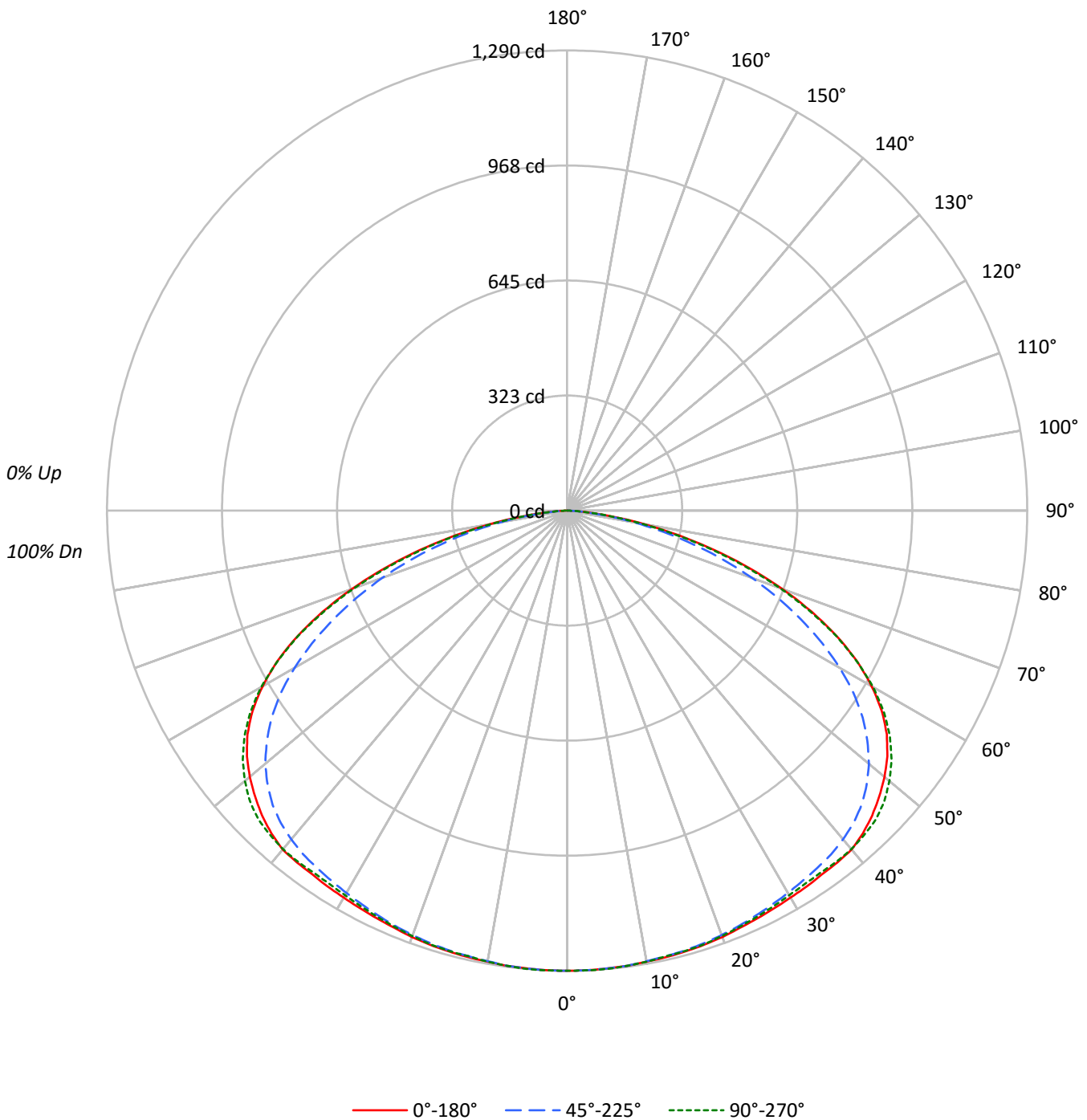
Input Watts (W): 70.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	12989	12989	12989
5°	13023	13023	13039
10°	13128	13113	13128
15°	13339	13308	13323
20°	13631	13567	13599
25°	14016	13916	13966
30°	14564	14390	14476
35°	15305	15029	15231
40°	16307	15815	16287
45°	17219	16622	17432
50°	18191	17302	18473
55°	19205	17760	19389
60°	19860	17782	19951
65°	19897	17257	19825
70°	18900	16212	18680
75°	16592	14266	16184
80°	12757	11023	12322
85°	6747	5534	6400



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	122.9	2.5
10°-20°	361.7	7.3
20°-30°	581.0	11.7
30°-40°	774.4	15.6
40°-50°	919.0	18.5
50°-60°	939.4	18.9
60°-70°	765.9	15.4
70°-80°	417.8	8.4
80°-90°	77.9	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°	1065.5	21.5
0°-40°	1839.9	37.1
0°-60°	3698.3	74.6
0°-90°	4959.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4959.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1290	1290	1290	1290	1290	
5°	1288	1288	1288	1288	1290	123
15°	1280	1278	1277	1277	1278	362
25°	1262	1257	1253	1256	1257	584
35°	1245	1236	1223	1232	1239	783
45°	1209	1188	1167	1199	1224	933
55°	1094	1052	1012	1061	1104	973
65°	835	780	724	778	832	819
75°	426	395	367	395	416	452
85°	58	55	48	54	55	84
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1290.0	1290.0	1290.0	1290.0	1290.0
2.5°	1290.0	1290.0	1290.0	1290.0	1290.0
5°	1288.5	1288.5	1288.5	1288.5	1290.0
7.5°	1287.0	1287.0	1287.0	1287.0	1287.0
10°	1284.0	1284.0	1282.5	1282.5	1284.0
12.5°	1282.5	1281.1	1279.6	1279.6	1279.6
15°	1279.6	1278.1	1276.6	1276.6	1278.1
17.5°	1276.6	1273.6	1272.1	1272.1	1275.1
20°	1272.1	1267.6	1266.1	1267.6	1269.1
22.5°	1266.1	1263.1	1260.1	1261.6	1263.1
25°	1261.6	1257.1	1252.6	1255.6	1257.1
27.5°	1257.1	1251.1	1245.1	1248.1	1251.1
30°	1252.6	1245.1	1237.7	1240.6	1245.1
32.5°	1249.6	1240.6	1230.2	1236.2	1240.6
35°	1245.1	1236.2	1222.7	1231.7	1239.1
37.5°	1243.6	1230.2	1215.2	1227.2	1240.6
40°	1240.6	1221.2	1203.2	1222.7	1239.1
42.5°	1227.2	1207.7	1188.3	1212.2	1233.2
45°	1209.2	1188.3	1167.3	1198.7	1224.2
47.5°	1186.8	1164.3	1138.9	1176.3	1206.2
50°	1161.3	1132.9	1104.5	1144.9	1179.3
52.5°	1131.4	1095.5	1061.1	1107.5	1146.4
55°	1094.0	1052.1	1011.7	1061.1	1104.5
57.5°	1046.1	999.7	951.8	1005.7	1053.6
60°	986.2	936.8	883.0	938.3	990.7
62.5°	917.4	862.0	806.6	865.0	915.9
65°	835.1	779.7	724.3	778.2	832.1
67.5°	742.3	688.4	639.0	686.9	736.3
70°	642.0	594.1	550.7	591.1	634.5
72.5°	535.8	495.4	459.4	493.9	525.3
75°	426.5	395.1	366.7	395.1	416.0
77.5°	320.3	296.3	276.9	299.3	311.3
80°	220.0	205.0	190.1	206.5	212.5
82.5°	130.2	124.2	112.2	122.7	125.7
85°	58.4	55.4	47.9	53.9	55.4
87.5°	10.5	9.0	7.5	9.0	10.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)