

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: P241167

Luminaire Tested: **1800-X-80-L40-2-W-UNV-STD-X-X**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P241167
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-L40-2-W-UNV-STD-X-X
Description: SHAPER 1800 SERIES LED PENDANT DIRECT DOWNLIGHT
WIDE DISTRIBUTION
Light Source: (168) 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

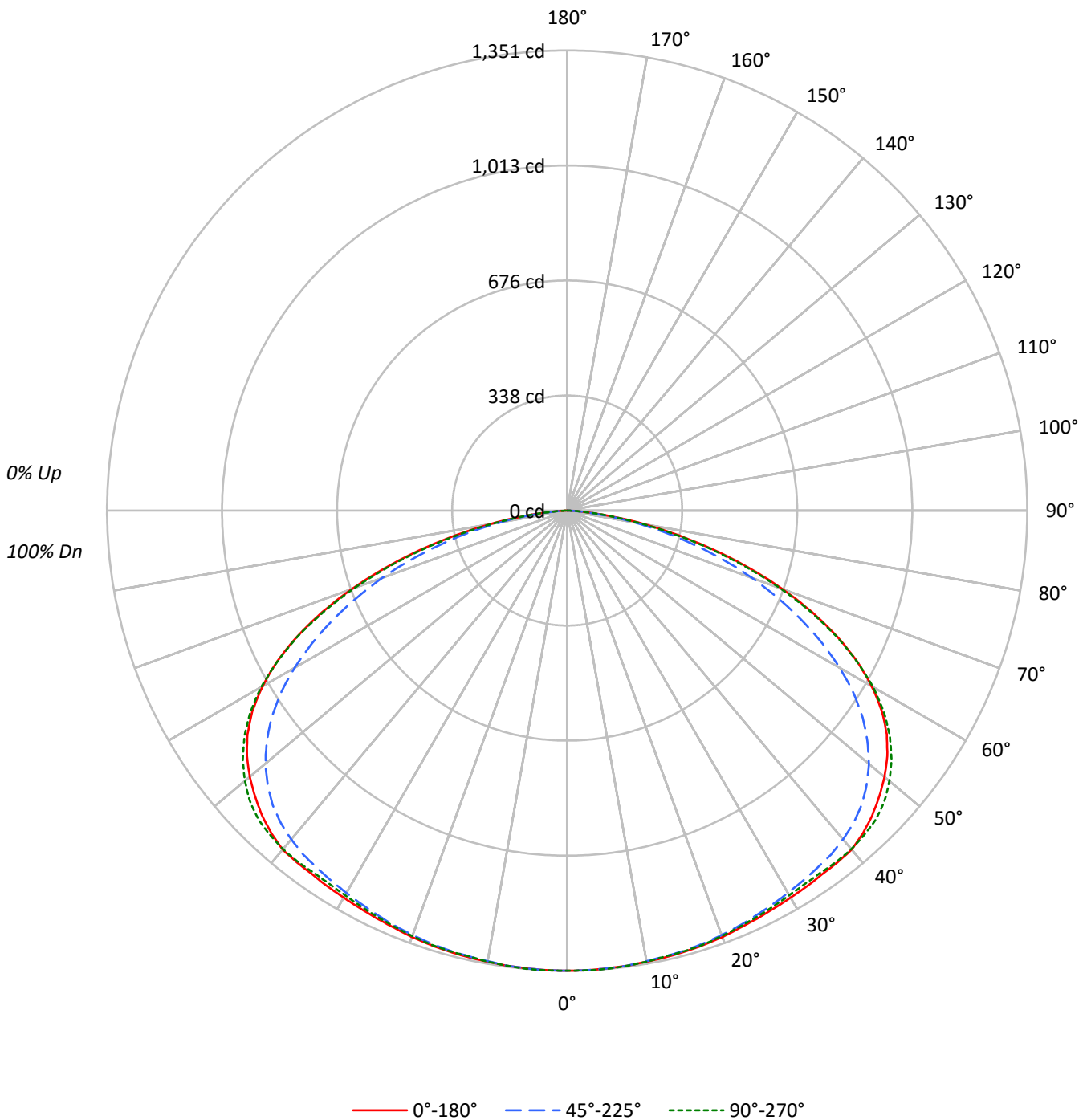
Lumens per Lamp: N/A
Luminaire Lumens: 5194.4 lumens
Efficiency: N/A
Efficacy: 96.4 lumens/watt
Spacing Criteria (0/90/45): 1.48 / 1.48 / 1.61
Luminous Opening: Circular (Dia: 1.17' x H: 0')
CIE Type: Direct

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	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°	13603	13603	13603
5°	13640	13640	13655
10°	13750	13733	13750
15°	13969	13936	13953
20°	14275	14208	14242
25°	14680	14575	14627
30°	15253	15071	15161
35°	16029	15740	15953
40°	17078	16563	17058
45°	18033	17408	18257
50°	19053	18119	19347
55°	20113	18599	20306
60°	20801	18622	20895
65°	20838	18074	20761
70°	19795	16981	19566
75°	17378	14939	16950
80°	13360	11545	12907
85°	7059	5800	6701



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	128.7	2.5
10°-20°	378.8	7.3
20°-30°	608.5	11.7
30°-40°	811.0	15.6
40°-50°	962.5	18.5
50°-60°	983.8	18.9
60°-70°	802.1	15.4
70°-80°	437.6	8.4
80°-90°	81.5	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°	1115.9	21.5
0°-40°	1926.9	37.1
0°-60°	3873.2	74.6
0°-90°	5194.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5194.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1351	1351	1351	1351	1351	
5°	1350	1350	1350	1350	1351	129
15°	1340	1338	1337	1337	1338	380
25°	1321	1317	1312	1315	1317	611
35°	1304	1295	1280	1290	1298	820
45°	1266	1244	1222	1255	1282	977
55°	1146	1102	1060	1111	1157	1019
65°	875	817	759	815	871	858
75°	447	414	384	414	436	473
85°	61	58	50	56	58	88
90°	0	0	0	0	0	



TEST NUMBER: P241167

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1351.0	1351.0	1351.0	1351.0	1351.0
2.5°	1351.0	1351.0	1351.0	1351.0	1351.0
5°	1349.5	1349.5	1349.5	1349.5	1351.0
7.5°	1347.9	1347.9	1347.9	1347.9	1347.9
10°	1344.8	1344.8	1343.2	1343.2	1344.8
12.5°	1343.2	1341.6	1340.1	1340.1	1340.1
15°	1340.1	1338.5	1336.9	1336.9	1338.5
17.5°	1336.9	1333.8	1332.2	1332.2	1335.4
20°	1332.2	1327.5	1326.0	1327.5	1329.1
22.5°	1326.0	1322.8	1319.7	1321.3	1322.8
25°	1321.3	1316.6	1311.9	1315.0	1316.6
27.5°	1316.6	1310.3	1304.0	1307.2	1310.3
30°	1311.9	1304.0	1296.2	1299.3	1304.0
32.5°	1308.7	1299.3	1288.4	1294.6	1299.3
35°	1304.0	1294.6	1280.5	1289.9	1297.8
37.5°	1302.5	1288.4	1272.7	1285.2	1299.3
40°	1299.3	1279.0	1260.1	1280.5	1297.8
42.5°	1285.2	1264.8	1244.5	1269.5	1291.5
45°	1266.4	1244.5	1222.5	1255.4	1282.1
47.5°	1242.9	1219.4	1192.7	1231.9	1263.3
50°	1216.3	1186.5	1156.7	1199.0	1235.1
52.5°	1184.9	1147.3	1111.2	1159.8	1200.6
55°	1145.7	1101.8	1059.5	1111.2	1156.7
57.5°	1095.6	1047.0	996.8	1053.3	1103.4
60°	1032.9	981.2	924.7	982.7	1037.6
62.5°	960.8	902.8	844.8	905.9	959.2
65°	874.6	816.6	758.6	815.0	871.4
67.5°	777.4	721.0	669.3	719.4	771.1
70°	672.4	622.2	576.8	619.1	664.6
72.5°	561.1	518.8	481.2	517.2	550.1
75°	446.7	413.8	384.0	413.8	435.7
77.5°	335.4	310.3	290.0	313.5	326.0
80°	230.4	214.7	199.1	216.3	222.6
82.5°	136.4	130.1	117.6	128.5	131.7
85°	61.1	58.0	50.2	56.4	58.0
87.5°	11.0	9.4	7.8	9.4	11.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)