

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: P241165

Luminaire Tested: **1800-X-80-L35-2-W-UNV-STD-X-X**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P241165
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-L35-2-W-UNV-STD-X-X
Description: SHAPER 1800 SERIES LED PENDANT DIRECT DOWNLIGHT
WIDE DISTRIBUTION
Light Source: (168) 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5176.2 lumens
Efficiency: N/A
Efficacy: 96.0 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

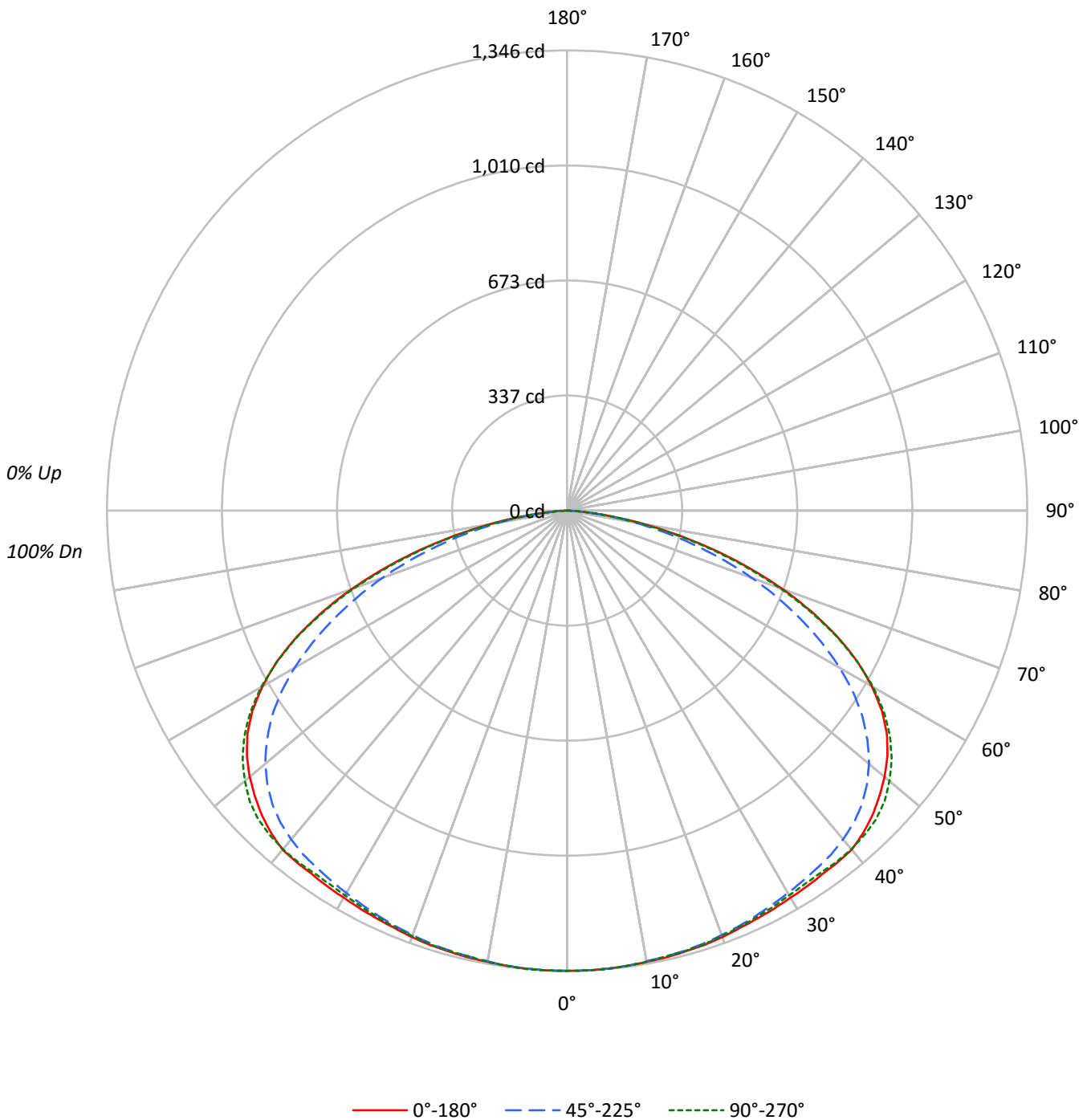
Input Watts (W): 53.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	13556	13556	13556
5°	13593	13593	13608
10°	13702	13685	13702
15°	13920	13888	13904
20°	14226	14158	14191
25°	14627	14524	14576
30°	15200	15018	15109
35°	15973	15685	15896
40°	17019	16505	16998
45°	17971	17347	18193
50°	18985	18055	19278
55°	20042	18534	20234
60°	20728	18557	20821
65°	20764	18010	20690
70°	19725	16922	19495
75°	17316	14888	16892
80°	13313	11504	12861
85°	7036	5776	6678



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	128.2	2.5
10°-20°	377.5	7.3
20°-30°	606.3	11.7
30°-40°	808.1	15.6
40°-50°	959.1	18.5
50°-60°	980.4	18.9
60°-70°	799.3	15.4
70°-80°	436.0	8.4
80°-90°	81.3	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°	1112.0	21.5
0°-40°	1920.2	37.1
0°-60°	3859.7	74.6
0°-90°	5176.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5176.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1346	1346	1346	1346	1346	
5°	1345	1345	1345	1345	1346	128
15°	1335	1334	1332	1332	1334	378
25°	1317	1312	1307	1310	1312	609
35°	1300	1290	1276	1285	1293	817
45°	1262	1240	1218	1251	1278	974
55°	1142	1098	1056	1107	1153	1016
65°	872	814	756	812	868	855
75°	445	412	383	412	434	471
85°	61	58	50	56	58	88
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1346.3	1346.3	1346.3	1346.3	1346.3
2.5°	1346.3	1346.3	1346.3	1346.3	1346.3
5°	1344.8	1344.8	1344.8	1344.8	1346.3
7.5°	1343.2	1343.2	1343.2	1343.2	1343.2
10°	1340.1	1340.1	1338.5	1338.5	1340.1
12.5°	1338.5	1336.9	1335.4	1335.4	1335.4
15°	1335.4	1333.8	1332.3	1332.3	1333.8
17.5°	1332.3	1329.1	1327.6	1327.6	1330.7
20°	1327.6	1322.9	1321.3	1322.9	1324.4
22.5°	1321.3	1318.2	1315.1	1316.6	1318.2
25°	1316.6	1312.0	1307.3	1310.4	1312.0
27.5°	1312.0	1305.7	1299.5	1302.6	1305.7
30°	1307.3	1299.5	1291.7	1294.8	1299.5
32.5°	1304.1	1294.8	1283.8	1290.1	1294.8
35°	1299.5	1290.1	1276.0	1285.4	1293.2
37.5°	1297.9	1283.8	1268.2	1280.7	1294.8
40°	1294.8	1274.5	1255.7	1276.0	1293.2
42.5°	1280.7	1260.4	1240.1	1265.1	1287.0
45°	1262.0	1240.1	1218.2	1251.0	1277.6
47.5°	1238.5	1215.1	1188.6	1227.6	1258.9
50°	1212.0	1182.3	1152.6	1194.8	1230.7
52.5°	1180.8	1143.3	1107.4	1155.8	1196.4
55°	1141.7	1098.0	1055.8	1107.4	1152.6
57.5°	1091.7	1043.3	993.3	1049.6	1099.5
60°	1029.3	977.7	921.5	979.3	1033.9
62.5°	957.4	899.6	841.8	902.7	955.9
65°	871.5	813.7	755.9	812.2	868.4
67.5°	774.7	718.5	666.9	716.9	768.4
70°	670.0	620.1	574.8	616.9	662.2
72.5°	559.1	517.0	479.5	515.4	548.2
75°	445.1	412.3	382.7	412.3	434.2
77.5°	334.2	309.2	288.9	312.4	324.9
80°	229.6	214.0	198.4	215.5	221.8
82.5°	135.9	129.6	117.1	128.1	131.2
85°	60.9	57.8	50.0	56.2	57.8
87.5°	10.9	9.4	7.8	9.4	10.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)