

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: P241169

Luminaire Tested: **1800-X-80-L27-3-W-UNV-STD-X-X**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P241169
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-L27-3-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: 5472.1 lumens
Efficiency: N/A
Efficacy: 77.5 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

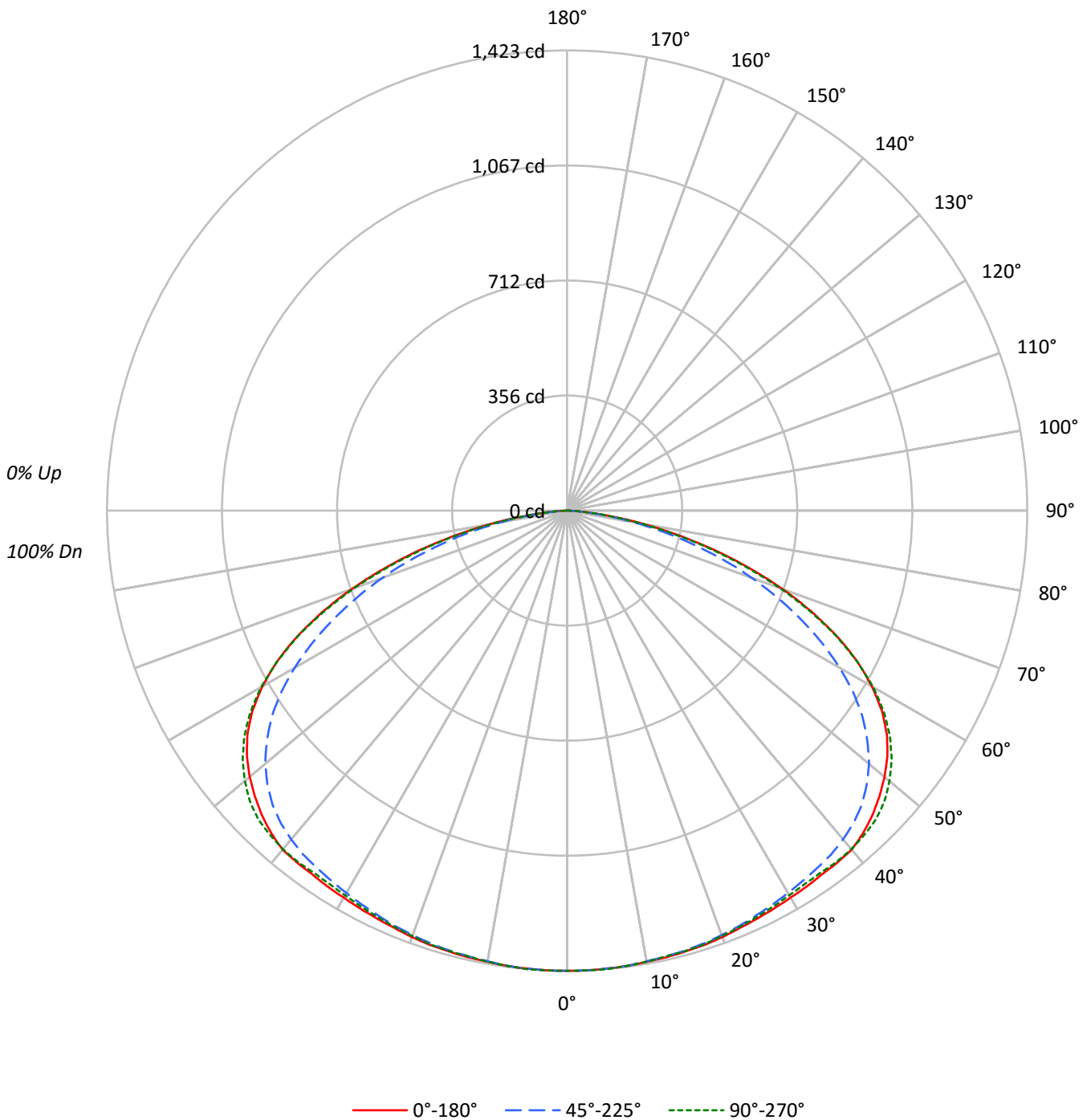
Input Watts (W): 70.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	14331	14331	14331
5°	14369	14369	14386
10°	14485	14467	14485
15°	14716	14681	14699
20°	15039	14968	15003
25°	15464	15354	15409
30°	16068	15876	15972
35°	16886	16582	16804
40°	17992	17449	17969
45°	18997	18339	19232
50°	20071	19087	20381
55°	21189	19595	21390
60°	21912	19618	22013
65°	21950	19041	21872
70°	20852	17888	20611
75°	18308	15737	17857
80°	14073	12159	13598
85°	7440	6100	7059



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	135.6	2.5
10°-20°	399.1	7.3
20°-30°	641.0	11.7
30°-40°	854.3	15.6
40°-50°	1014.0	18.5
50°-60°	1036.4	18.9
60°-70°	845.0	15.4
70°-80°	460.9	8.4
80°-90°	85.9	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°	1175.6	21.5
0°-40°	2029.9	37.1
0°-60°	4080.3	74.6
0°-90°	5472.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5472.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1423	1423	1423	1423	1423	
5°	1422	1422	1422	1422	1423	136
15°	1412	1410	1408	1408	1410	400
25°	1392	1387	1382	1385	1387	644
35°	1374	1364	1349	1359	1367	864
45°	1334	1311	1288	1323	1351	1030
55°	1207	1161	1116	1171	1218	1074
65°	921	860	799	859	918	904
75°	471	436	404	436	459	498
85°	64	61	53	59	61	93
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1423.3	1423.3	1423.3	1423.3	1423.3
2.5°	1423.3	1423.3	1423.3	1423.3	1423.3
5°	1421.6	1421.6	1421.6	1421.6	1423.3
7.5°	1420.0	1420.0	1420.0	1420.0	1420.0
10°	1416.7	1416.7	1415.0	1415.0	1416.7
12.5°	1415.0	1413.4	1411.7	1411.7	1411.7
15°	1411.7	1410.1	1408.4	1408.4	1410.1
17.5°	1408.4	1405.1	1403.5	1403.5	1406.8
20°	1403.5	1398.5	1396.9	1398.5	1400.2
22.5°	1396.9	1393.6	1390.3	1391.9	1393.6
25°	1391.9	1387.0	1382.0	1385.3	1387.0
27.5°	1387.0	1380.4	1373.7	1377.0	1380.4
30°	1382.0	1373.7	1365.5	1368.8	1373.7
32.5°	1378.7	1368.8	1357.2	1363.8	1368.8
35°	1373.7	1363.8	1349.0	1358.9	1367.1
37.5°	1372.1	1357.2	1340.7	1353.9	1368.8
40°	1368.8	1347.3	1327.5	1349.0	1367.1
42.5°	1353.9	1332.5	1311.0	1337.4	1360.5
45°	1334.1	1311.0	1287.9	1322.6	1350.6
47.5°	1309.4	1284.6	1256.5	1297.8	1330.8
50°	1281.3	1249.9	1218.5	1263.1	1301.1
52.5°	1248.3	1208.6	1170.7	1221.8	1264.8
55°	1207.0	1160.7	1116.2	1170.7	1218.5
57.5°	1154.1	1103.0	1050.1	1109.6	1162.4
60°	1088.1	1033.6	974.2	1035.3	1093.1
62.5°	1012.1	951.1	890.0	954.4	1010.5
65°	921.3	860.2	799.2	858.6	918.0
67.5°	819.0	759.5	705.0	757.9	812.4
70°	708.3	655.5	607.6	652.2	700.1
72.5°	591.1	546.5	506.9	544.9	579.5
75°	470.6	435.9	404.5	435.9	459.0
77.5°	353.3	326.9	305.5	330.2	343.4
80°	242.7	226.2	209.7	227.9	234.5
82.5°	143.6	137.0	123.8	135.4	138.7
85°	64.4	61.1	52.8	59.4	61.1
87.5°	11.6	9.9	8.3	9.9	11.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)