

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: P241190

Luminaire Tested: **1800-X-90-L40-1-W-UNV-STD-X-X**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P241190
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-L40-1-W-UNV-STD-X-X
Description: SHAPER 1800 SERIES LED PENDANT DIRECT DOWNLIGHT
WIDE DISTRIBUTION
Light Source: (168) 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

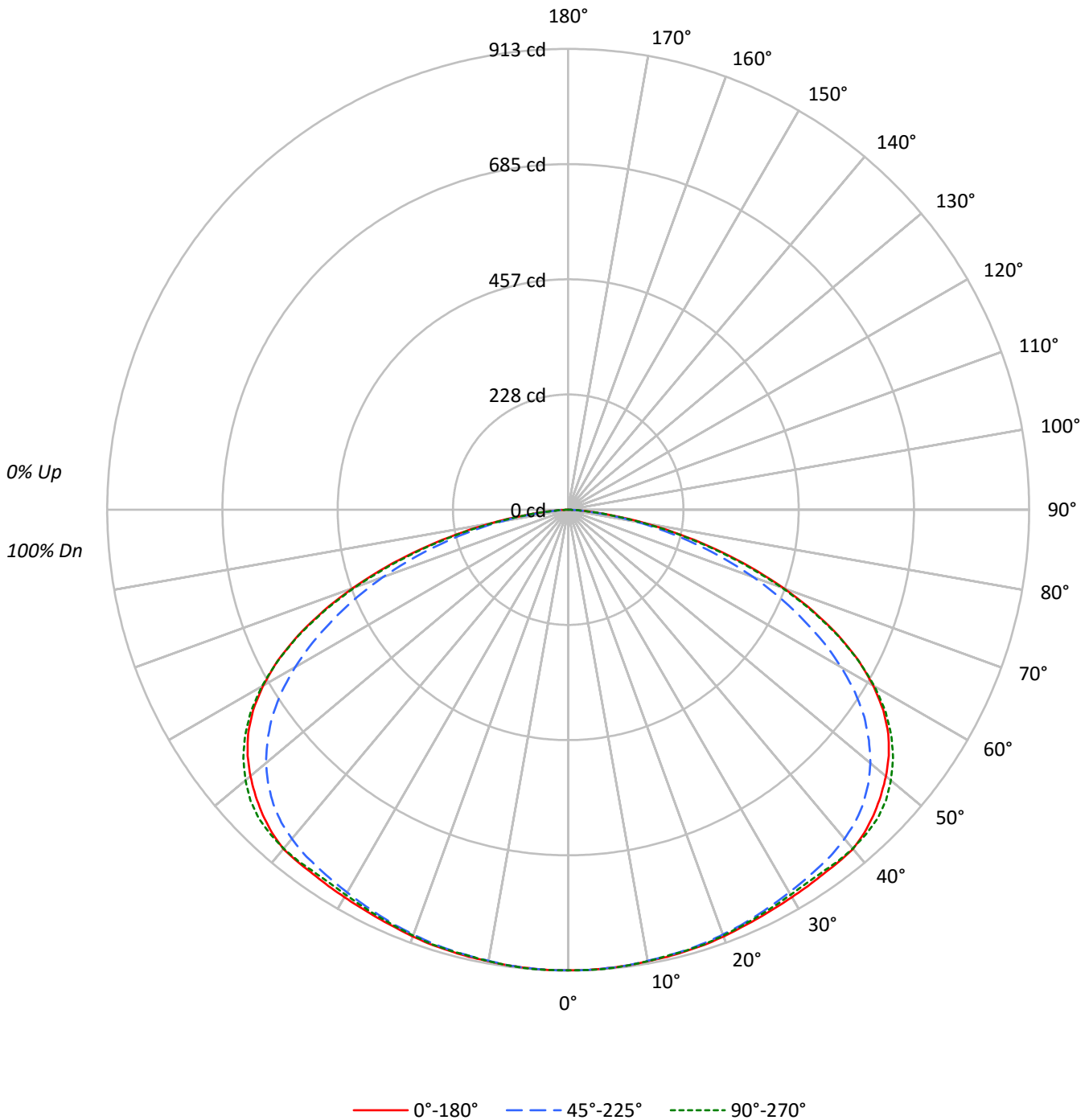
Lumens per Lamp: N/A
Luminaire Lumens: 3508.8 lumens
Efficiency: N/A
Efficacy: 83.9 lumens/watt
Spacing Criteria (0/90/45): 1.48 / 1.48 / 1.61
Luminous Opening: Circular (Dia: 1.17' x H: 0')
CIE Type: Direct

Input Watts (W): 41.8
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



TEST NUMBER: P241190
CATALOG NUMBER: 1800-X-90-L40-1-W-UNV-STD-X-X

Luminous Intensity Polar Plot





TEST NUMBER: P241190

CATALOG NUMBER: 1800-X-90-L40-1-W-UNV-STD-X-X

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°	9189	9189	9189
5°	9214	9214	9224
10°	9288	9277	9288
15°	9436	9414	9426
20°	9643	9598	9620
25°	9916	9846	9880
30°	10304	10180	10242
35°	10828	10633	10775
40°	11537	11188	11522
45°	12182	11759	12332
50°	12870	12239	13069
55°	13586	12564	13716
60°	14050	12578	14115
65°	14076	12208	14026
70°	13372	11470	13216
75°	11737	10092	11449
80°	9022	7799	8715
85°	4771	3916	4529



TEST NUMBER: P241190

CATALOG NUMBER: 1800-X-90-L40-1-W-UNV-STD-X-X

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	86.9	2.5
10°-20°	255.9	7.3
20°-30°	411.0	11.7
30°-40°	547.8	15.6
40°-50°	650.2	18.5
50°-60°	664.6	18.9
60°-70°	541.8	15.4
70°-80°	295.6	8.4
80°-90°	55.1	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°	753.8	21.5
0°-40°	1301.6	37.1
0°-60°	2616.3	74.6
0°-90°	3508.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3508.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	913	913	913	913	913	
5°	912	912	912	912	913	87
15°	905	904	903	903	904	256
25°	892	889	886	888	889	413
35°	881	874	865	871	877	554
45°	856	841	826	848	866	660
55°	774	744	716	751	781	688
65°	591	552	512	550	589	579
75°	302	280	259	280	294	319
85°	41	39	34	38	39	59
90°	0	0	0	0	0	



TEST NUMBER: P241190

CATALOG NUMBER: 1800-X-90-L40-1-W-UNV-STD-X-X

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	912.6	912.6	912.6	912.6	912.6
2.5°	912.6	912.6	912.6	912.6	912.6
5°	911.6	911.6	911.6	911.6	912.6
7.5°	910.5	910.5	910.5	910.5	910.5
10°	908.4	908.4	907.3	907.3	908.4
12.5°	907.3	906.3	905.2	905.2	905.2
15°	905.2	904.2	903.1	903.1	904.2
17.5°	903.1	901.0	899.9	899.9	902.0
20°	899.9	896.7	895.7	896.7	897.8
22.5°	895.7	893.6	891.4	892.5	893.6
25°	892.5	889.3	886.2	888.3	889.3
27.5°	889.3	885.1	880.9	883.0	885.1
30°	886.2	880.9	875.6	877.7	880.9
32.5°	884.0	877.7	870.3	874.5	877.7
35°	880.9	874.5	865.0	871.3	876.6
37.5°	879.8	870.3	859.7	868.2	877.7
40°	877.7	863.9	851.2	865.0	876.6
42.5°	868.2	854.4	840.6	857.6	872.4
45°	855.5	840.6	825.8	848.0	866.0
47.5°	839.6	823.7	805.7	832.2	853.3
50°	821.6	801.5	781.3	809.9	834.3
52.5°	800.4	775.0	750.6	783.5	811.0
55°	773.9	744.3	715.7	750.6	781.3
57.5°	740.0	707.2	673.4	711.5	745.3
60°	697.7	662.8	624.6	663.8	700.9
62.5°	649.0	609.8	570.7	611.9	647.9
65°	590.8	551.6	512.4	550.5	588.7
67.5°	525.1	487.0	452.1	486.0	520.9
70°	454.2	420.3	389.6	418.2	448.9
72.5°	379.0	350.4	325.0	349.4	371.6
75°	301.7	279.5	259.4	279.5	294.3
77.5°	226.6	209.6	195.9	211.7	220.2
80°	155.6	145.0	134.5	146.1	150.3
82.5°	92.1	87.9	79.4	86.8	88.9
85°	41.3	39.2	33.9	38.1	39.2
87.5°	7.4	6.4	5.3	6.4	7.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)