

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: P241188

Luminaire Tested: **1800-X-90-L35-1-W-UNV-STD-X-X**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P241188
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-L35-1-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

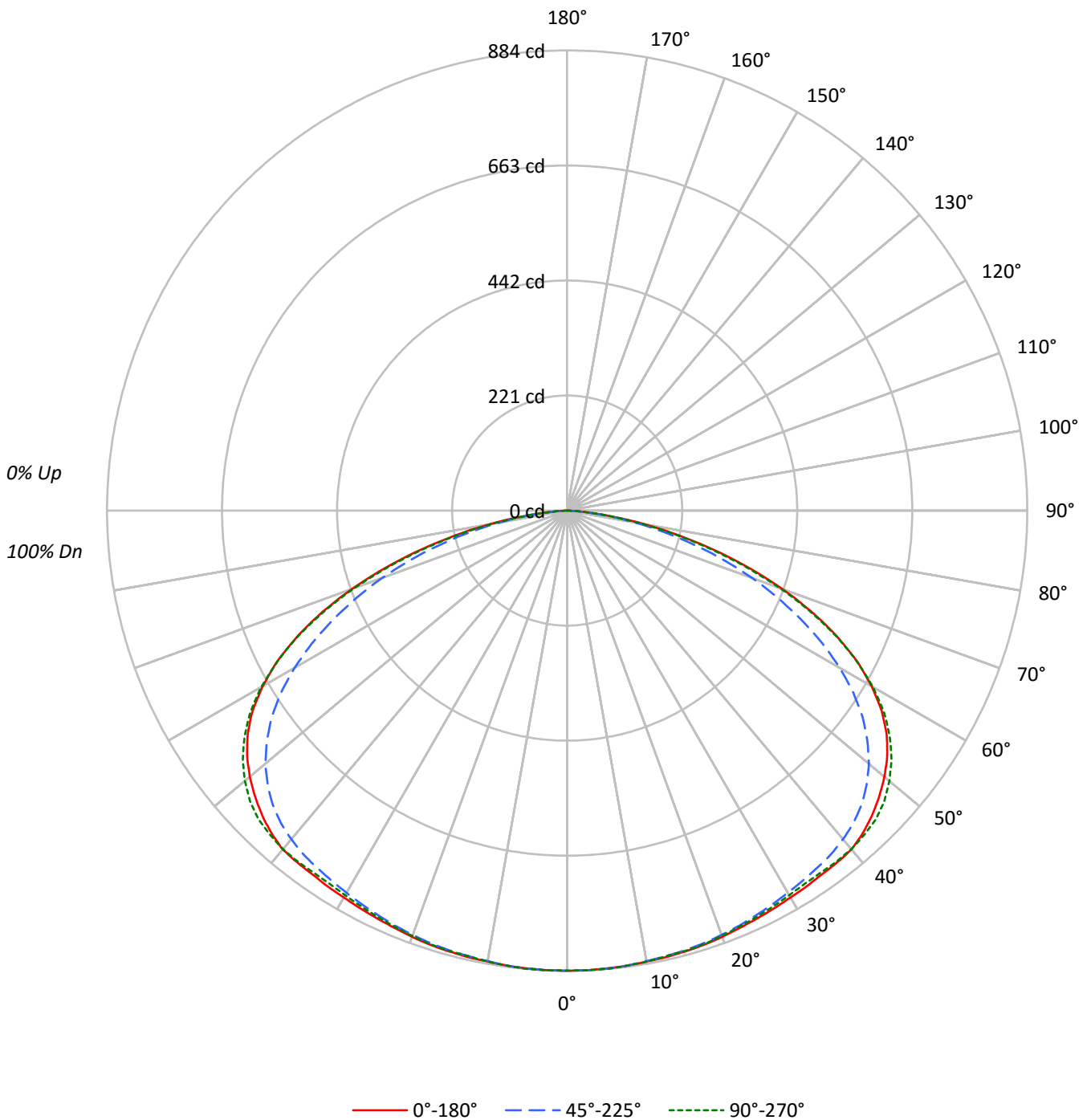
Lumens per Lamp: N/A
Luminaire Lumens: 3398.1 lumens
Efficiency: N/A
Efficacy: 81.3 lumens/watt
Spacing Criteria (0/90/45): 1.48 / 1.48 / 1.61
Luminous Opening: Circular (Dia: 1.17' x H: 0')
CIE Type: Direct

Input Watts (W): 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



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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°	8899	8899	8899
5°	8923	8923	8933
10°	8994	8984	8994
15°	9139	9117	9127
20°	9338	9294	9317
25°	9602	9535	9569
30°	9978	9858	9919
35°	10486	10297	10436
40°	11173	10836	11159
45°	11798	11389	11943
50°	12464	11853	12657
55°	13157	12167	13284
60°	13607	12181	13670
65°	13630	11824	13583
70°	12951	11108	12797
75°	11368	9773	11088
80°	8738	7550	8443
85°	4621	3789	4379



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	84.2	2.5
10°-20°	247.8	7.3
20°-30°	398.0	11.7
30°-40°	530.5	15.6
40°-50°	629.7	18.5
50°-60°	643.6	18.9
60°-70°	524.7	15.4
70°-80°	286.2	8.4
80°-90°	53.3	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°	730.0	21.5
0°-40°	1260.6	37.1
0°-60°	2533.8	74.6
0°-90°	3398.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3398.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	884	884	884	884	884	
5°	883	883	883	883	884	84
15°	877	876	875	875	876	248
25°	864	861	858	860	861	400
35°	853	847	838	844	849	536
45°	828	814	800	821	839	639
55°	750	721	693	727	757	667
65°	572	534	496	533	570	561
75°	292	271	251	271	285	309
85°	40	38	33	37	38	58
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	883.8	883.8	883.8	883.8	883.8
2.5°	883.8	883.8	883.8	883.8	883.8
5°	882.8	882.8	882.8	882.8	883.8
7.5°	881.8	881.8	881.8	881.8	881.8
10°	879.7	879.7	878.7	878.7	879.7
12.5°	878.7	877.7	876.7	876.7	876.7
15°	876.7	875.6	874.6	874.6	875.6
17.5°	874.6	872.5	871.5	871.5	873.6
20°	871.5	868.4	867.4	868.4	869.5
22.5°	867.4	865.4	863.3	864.3	865.4
25°	864.3	861.3	858.2	860.2	861.3
27.5°	861.3	857.2	853.1	855.1	857.2
30°	858.2	853.1	847.9	850.0	853.1
32.5°	856.1	850.0	842.8	846.9	850.0
35°	853.1	846.9	837.7	843.8	849.0
37.5°	852.0	842.8	832.6	840.8	850.0
40°	850.0	836.7	824.4	837.7	849.0
42.5°	840.8	827.4	814.1	830.5	844.9
45°	828.5	814.1	799.8	821.3	838.7
47.5°	813.1	797.7	780.3	805.9	826.4
50°	795.7	776.2	756.7	784.4	808.0
52.5°	775.1	750.5	727.0	758.7	785.4
55°	749.5	720.8	693.1	727.0	756.7
57.5°	716.7	684.9	652.1	689.0	721.8
60°	675.7	641.9	604.9	642.9	678.8
62.5°	628.5	590.6	552.6	592.6	627.5
65°	572.1	534.2	496.3	533.2	570.1
67.5°	508.6	471.6	437.8	470.6	504.5
70°	439.9	407.1	377.3	405.0	434.7
72.5°	367.1	339.4	314.8	338.4	359.9
75°	292.2	270.7	251.2	270.7	285.0
77.5°	219.4	203.0	189.7	205.1	213.3
80°	150.7	140.5	130.2	141.5	145.6
82.5°	89.2	85.1	76.9	84.1	86.1
85°	40.0	37.9	32.8	36.9	37.9
87.5°	7.2	6.2	5.1	6.2	7.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)