

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: P241192

Luminaire Tested: **1800-X-90-L27-2-W-UNV-STD-X-X**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P241192
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-L27-2-W-UNV-STD-X-X
Description: SHAPER 1800 SERIES LED PENDANT DIRECT DOWNLIGHT
WIDE DISTRIBUTION
Light Source: (168) 2700K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3841.4 lumens
Efficiency: N/A
Efficacy: 71.3 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

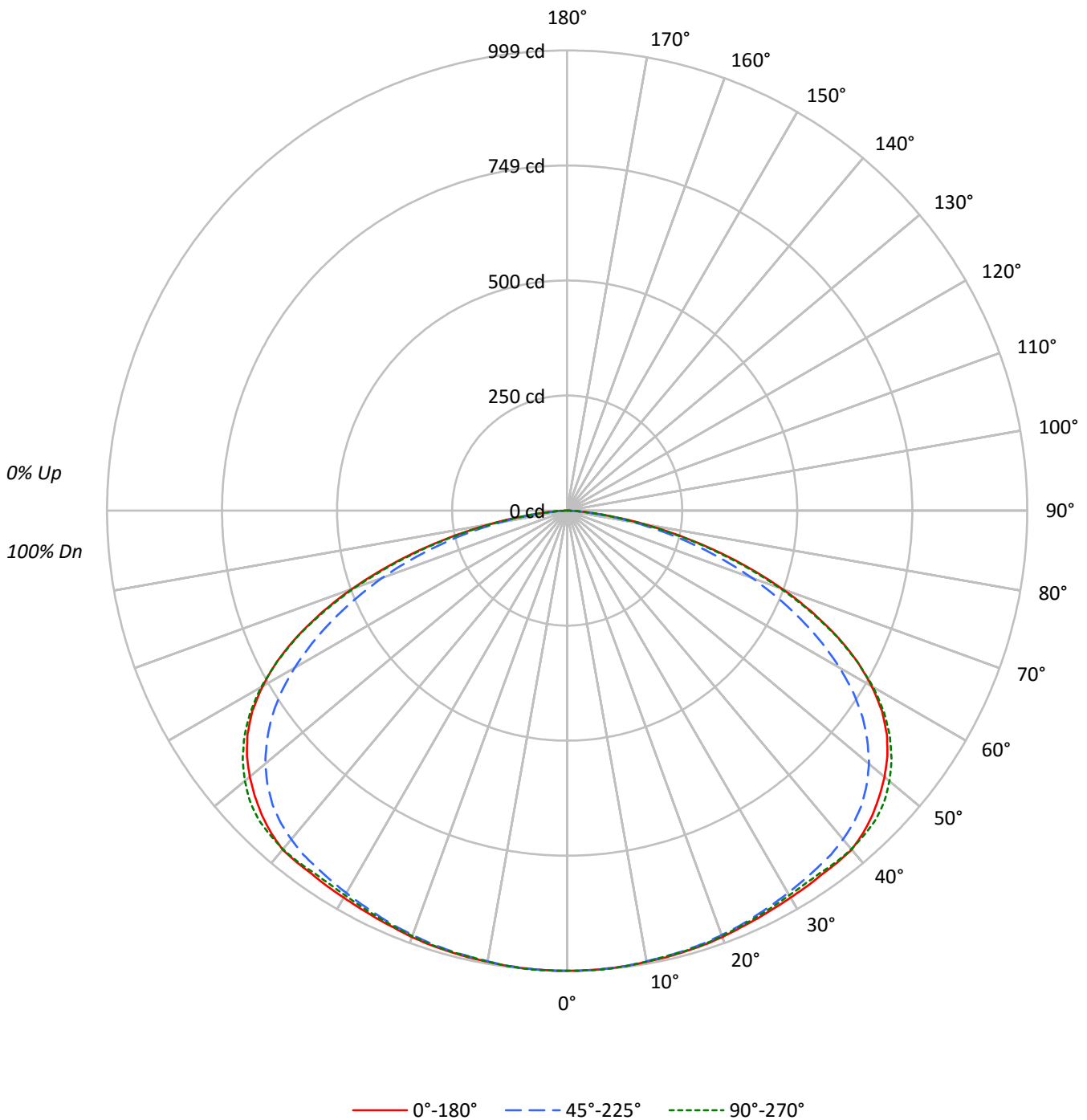
Input Watts (W): 53.9
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	10060	10060	10060
5°	10087	10087	10098
10°	10168	10156	10168
15°	10330	10306	10319
20°	10557	10507	10532
25°	10856	10779	10817
30°	11280	11145	11213
35°	11854	11641	11797
40°	12630	12249	12614
45°	13336	12874	13501
50°	14090	13399	14308
55°	14874	13754	15016
60°	15381	13772	15452
65°	15410	13366	15355
70°	14640	12556	14470
75°	12850	11049	12535
80°	9881	8535	9544
85°	5222	4286	4956



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	95.2	2.5
10°-20°	280.1	7.3
20°-30°	450.0	11.7
30°-40°	599.8	15.6
40°-50°	711.8	18.5
50°-60°	727.6	18.9
60°-70°	593.2	15.4
70°-80°	323.6	8.4
80°-90°	60.3	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°	825.3	21.5
0°-40°	1425.0	37.1
0°-60°	2864.4	74.6
0°-90°	3841.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3841.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	999	999	999	999	999	
5°	998	998	998	998	999	95
15°	991	990	989	989	990	281
25°	977	974	970	972	974	452
35°	964	957	947	954	960	606
45°	936	920	904	928	948	723
55°	847	815	784	822	855	754
65°	647	604	561	603	644	634
75°	330	306	284	306	322	350
85°	45	43	37	42	43	65
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	999.1	999.1	999.1	999.1	999.1
2.5°	999.1	999.1	999.1	999.1	999.1
5°	998.0	998.0	998.0	998.0	999.1
7.5°	996.8	996.8	996.8	996.8	996.8
10°	994.5	994.5	993.3	993.3	994.5
12.5°	993.3	992.2	991.0	991.0	991.0
15°	991.0	989.9	988.7	988.7	989.9
17.5°	988.7	986.4	985.2	985.2	987.5
20°	985.2	981.8	980.6	981.8	982.9
22.5°	980.6	978.3	976.0	977.1	978.3
25°	977.1	973.6	970.2	972.5	973.6
27.5°	973.6	969.0	964.4	966.7	969.0
30°	970.2	964.4	958.6	960.9	964.4
32.5°	967.8	960.9	952.8	957.4	960.9
35°	964.4	957.4	947.0	953.9	959.7
37.5°	963.2	952.8	941.2	950.5	960.9
40°	960.9	945.8	931.9	947.0	959.7
42.5°	950.5	935.4	920.3	938.9	955.1
45°	936.5	920.3	904.1	928.4	948.1
47.5°	919.2	901.8	882.1	911.0	934.2
50°	899.5	877.4	855.4	886.7	913.4
52.5°	876.3	848.5	821.8	857.7	887.9
55°	847.3	814.8	783.5	821.8	855.4
57.5°	810.2	774.3	737.2	778.9	816.0
60°	763.8	725.6	683.9	726.8	767.3
62.5°	710.5	667.6	624.8	670.0	709.4
65°	646.8	603.9	561.0	602.7	644.5
67.5°	574.9	533.2	494.9	532.0	570.3
70°	497.3	460.2	426.5	457.8	491.5
72.5°	415.0	383.7	355.8	382.5	406.8
75°	330.3	306.0	284.0	306.0	322.2
77.5°	248.0	229.5	214.4	231.8	241.1
80°	170.4	158.8	147.2	160.0	164.6
82.5°	100.8	96.2	86.9	95.0	97.4
85°	45.2	42.9	37.1	41.7	42.9
87.5°	8.1	7.0	5.8	7.0	8.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)