

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: P241194

Luminaire Tested: **1800-X-90-L30-2-W-UNV-STD-X-X**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P241194  
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-L30-2-W-UNV-STD-X-X  
Description: SHAPER 1800 SERIES LED PENDANT DIRECT DOWNLIGHT  
WIDE DISTRIBUTION  
Light Source: (168) 3000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4016.4 lumens  
Efficiency: N/A  
Efficacy: 74.5 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

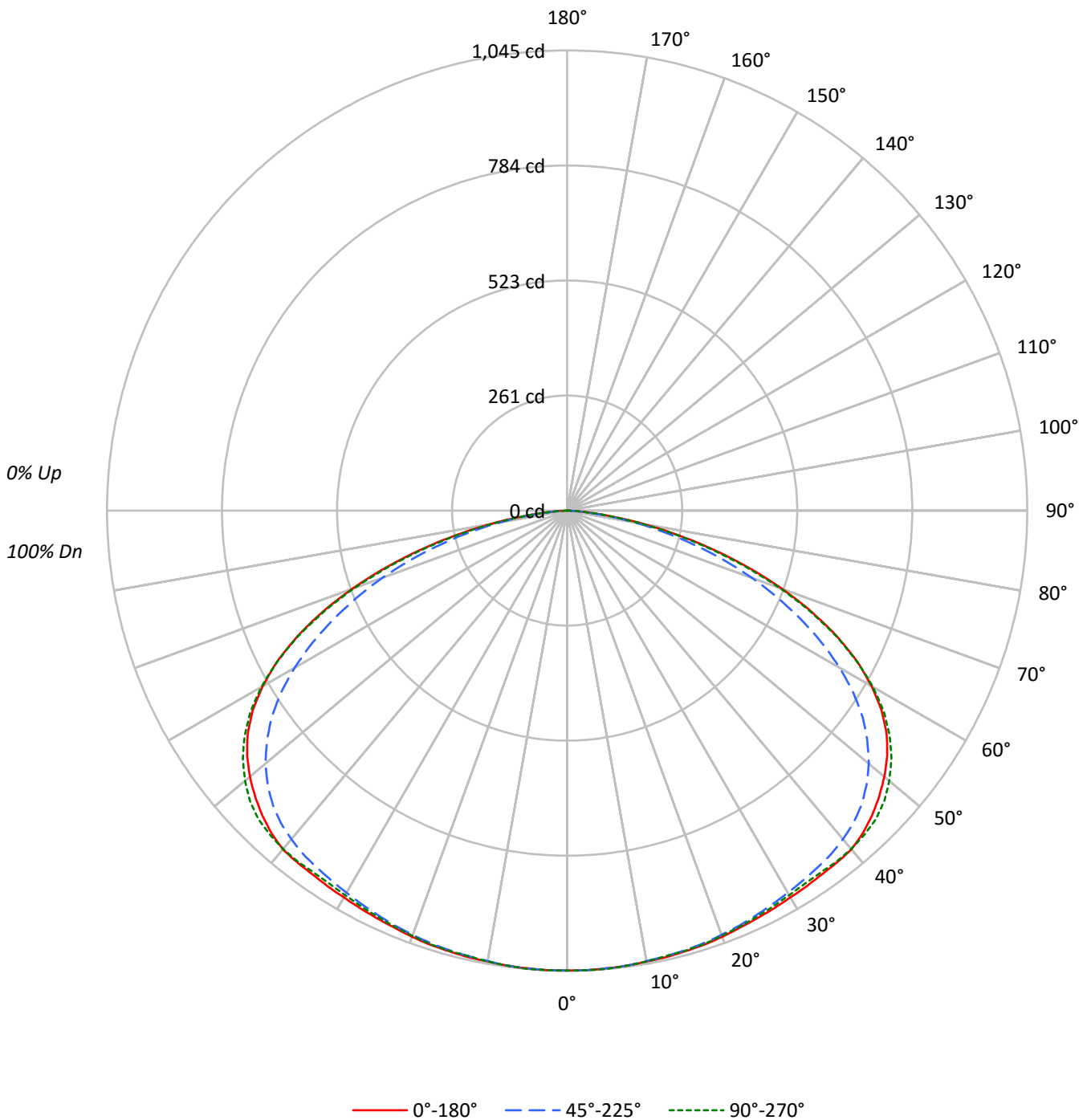
Input Watts (W): 53.9  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	10518	10518	10518
5°	10546	10546	10558
10°	10631	10619	10631
15°	10802	10775	10789
20°	11038	10986	11012
25°	11350	11269	11310
30°	11793	11652	11723
35°	12394	12170	12334
40°	13206	12808	13189
45°	13944	13461	14116
50°	14731	14010	14960
55°	15552	14381	15701
60°	16082	14399	16157
65°	16111	13976	16053
70°	15306	13130	15126
75°	13437	11550	13107
80°	10327	8924	9979
85°	5465	4483	5176



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	99.5	2.5
10°-20°	292.9	7.3
20°-30°	470.5	11.7
30°-40°	627.1	15.6
40°-50°	744.2	18.5
50°-60°	760.7	18.9
60°-70°	620.2	15.4
70°-80°	338.3	8.4
80°-90°	63.1	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°	862.8	21.5
0°-40°	1489.9	37.1
0°-60°	2994.8	74.6
0°-90°	4016.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4016.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1045	1045	1045	1045	1045	
5°	1043	1043	1043	1043	1045	99
15°	1036	1035	1034	1034	1035	293
25°	1022	1018	1014	1017	1018	473
35°	1008	1001	990	997	1003	634
45°	979	962	945	971	991	756
55°	886	852	819	859	894	788
65°	676	631	587	630	674	663
75°	345	320	297	320	337	366
85°	47	45	39	44	45	68
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1044.6	1044.6	1044.6	1044.6	1044.6
2.5°	1044.6	1044.6	1044.6	1044.6	1044.6
5°	1043.4	1043.4	1043.4	1043.4	1044.6
7.5°	1042.2	1042.2	1042.2	1042.2	1042.2
10°	1039.8	1039.8	1038.6	1038.6	1039.8
12.5°	1038.6	1037.4	1036.2	1036.2	1036.2
15°	1036.2	1035.0	1033.7	1033.7	1035.0
17.5°	1033.7	1031.3	1030.1	1030.1	1032.5
20°	1030.1	1026.5	1025.3	1026.5	1027.7
22.5°	1025.3	1022.8	1020.4	1021.6	1022.8
25°	1021.6	1018.0	1014.3	1016.8	1018.0
27.5°	1018.0	1013.1	1008.3	1010.7	1013.1
30°	1014.3	1008.3	1002.2	1004.7	1008.3
32.5°	1011.9	1004.7	996.2	1001.0	1004.7
35°	1008.3	1001.0	990.1	997.4	1003.4
37.5°	1007.1	996.2	984.1	993.7	1004.7
40°	1004.7	988.9	974.4	990.1	1003.4
42.5°	993.7	978.0	962.2	981.6	998.6
45°	979.2	962.2	945.3	970.7	991.3
47.5°	961.0	942.8	922.2	952.5	976.8
50°	940.4	917.4	894.4	927.1	955.0
52.5°	916.2	887.1	859.2	896.8	928.3
55°	885.9	852.0	819.2	859.2	894.4
57.5°	847.1	809.5	770.8	814.4	853.2
60°	798.6	758.6	715.0	759.9	802.3
62.5°	742.9	698.0	653.2	700.5	741.7
65°	676.2	631.4	586.6	630.2	673.8
67.5°	601.1	557.5	517.5	556.3	596.2
70°	519.9	481.1	446.0	478.7	513.8
72.5°	433.9	401.1	372.0	399.9	425.4
75°	345.4	319.9	296.9	319.9	336.9
77.5°	259.3	240.0	224.2	242.4	252.1
80°	178.1	166.0	153.9	167.2	172.1
82.5°	105.4	100.6	90.9	99.4	101.8
85°	47.3	44.8	38.8	43.6	44.8
87.5°	8.5	7.3	6.1	7.3	8.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)