

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: P241202

Luminaire Tested: **1800-X-90-L30-3-W-UNV-STD-X-X**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P241202
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-L30-3-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

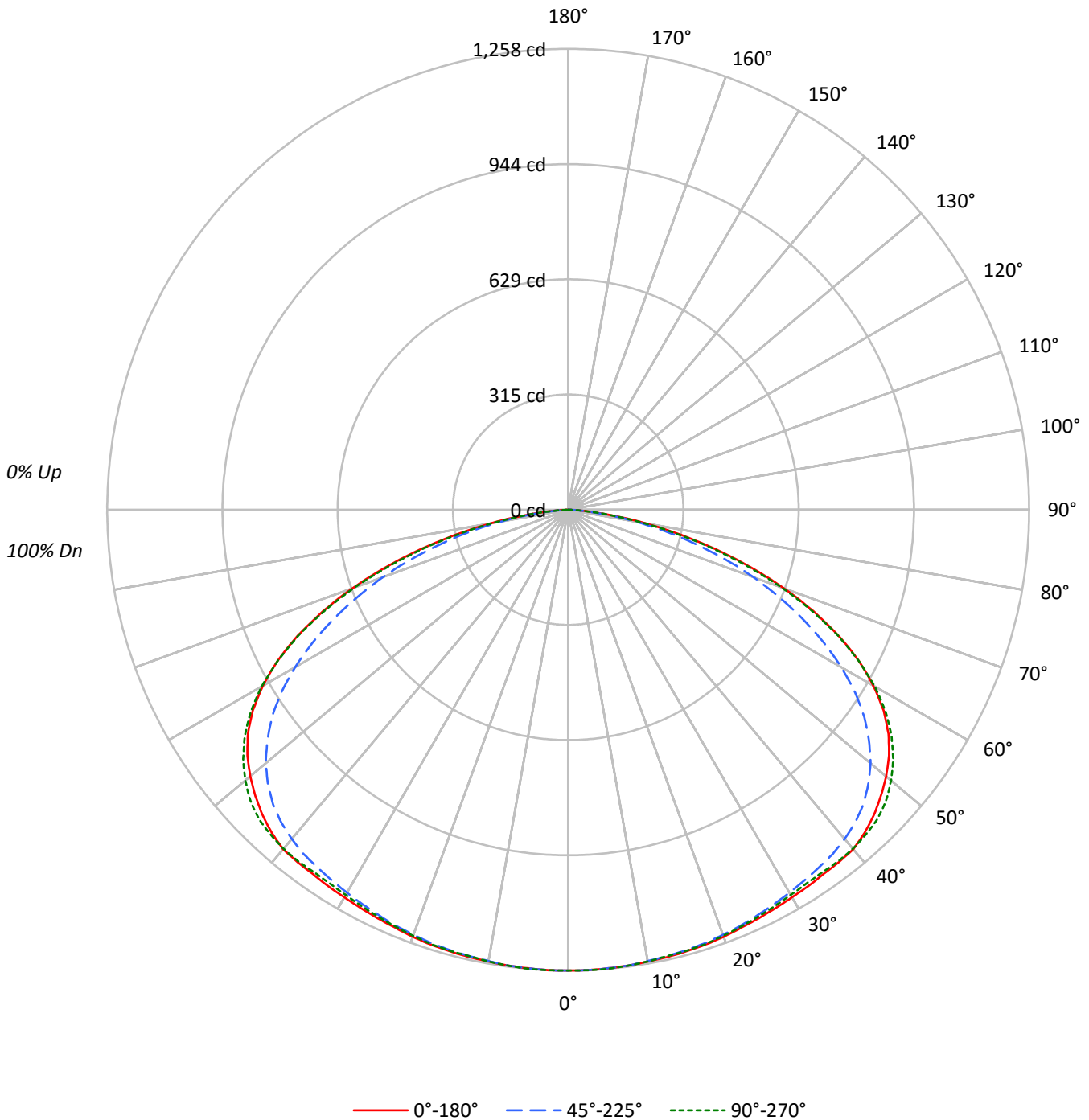
Lumens per Lamp: N/A
Luminaire Lumens: 4837.3 lumens
Efficiency: N/A
Efficacy: 68.5 lumens/watt
Spacing Criteria (0/90/45): 1.48 / 1.48 / 1.61
Luminous Opening: Circular (Dia: 1.17' x H: 0')
CIE Type: Direct

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°	12669	12669	12669
5°	12702	12702	12717
10°	12804	12790	12804
15°	13009	12978	12994
20°	13294	13231	13262
25°	13670	13573	13622
30°	14204	14035	14119
35°	14927	14658	14855
40°	15904	15425	15885
45°	16794	16212	17001
50°	17742	16874	18017
55°	18731	17321	18910
60°	19371	17343	19459
65°	19406	16830	19334
70°	18435	15812	18220
75°	16184	13912	15787
80°	12444	10750	12020
85°	6574	5395	6239



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	119.8	2.5
10°-20°	352.8	7.3
20°-30°	566.6	11.7
30°-40°	755.2	15.6
40°-50°	896.3	18.5
50°-60°	916.2	18.9
60°-70°	747.0	15.4
70°-80°	407.5	8.4
80°-90°	75.9	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°	1039.2	21.5
0°-40°	1794.5	37.1
0°-60°	3607.0	74.6
0°-90°	4837.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4837.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1258	1258	1258	1258	1258	
5°	1257	1257	1257	1257	1258	120
15°	1248	1246	1245	1245	1246	353
25°	1230	1226	1222	1225	1226	569
35°	1214	1206	1192	1201	1208	763
45°	1179	1159	1138	1169	1194	910
55°	1067	1026	987	1035	1077	949
65°	814	760	706	759	812	799
75°	416	385	358	385	406	440
85°	57	54	47	52	54	82
90°	0	0	0	0	0	



TEST NUMBER: P241202

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1258.2	1258.2	1258.2	1258.2	1258.2
2.5°	1258.2	1258.2	1258.2	1258.2	1258.2
5°	1256.7	1256.7	1256.7	1256.7	1258.2
7.5°	1255.3	1255.3	1255.3	1255.3	1255.3
10°	1252.3	1252.3	1250.9	1250.9	1252.3
12.5°	1250.9	1249.4	1248.0	1248.0	1248.0
15°	1248.0	1246.5	1245.0	1245.0	1246.5
17.5°	1245.0	1242.1	1240.7	1240.7	1243.6
20°	1240.7	1236.3	1234.8	1236.3	1237.7
22.5°	1234.8	1231.9	1229.0	1230.4	1231.9
25°	1230.4	1226.1	1221.7	1224.6	1226.1
27.5°	1226.1	1220.2	1214.4	1217.3	1220.2
30°	1221.7	1214.4	1207.1	1210.0	1214.4
32.5°	1218.8	1210.0	1199.8	1205.6	1210.0
35°	1214.4	1205.6	1192.5	1201.2	1208.5
37.5°	1212.9	1199.8	1185.2	1196.9	1210.0
40°	1210.0	1191.0	1173.5	1192.5	1208.5
42.5°	1196.9	1177.9	1158.9	1182.3	1202.7
45°	1179.4	1158.9	1138.5	1169.1	1193.9
47.5°	1157.5	1135.6	1110.8	1147.2	1176.4
50°	1132.6	1104.9	1077.2	1116.6	1150.2
52.5°	1103.5	1068.4	1034.9	1080.1	1118.0
55°	1067.0	1026.1	986.7	1034.9	1077.2
57.5°	1020.3	975.0	928.3	980.8	1027.6
60°	961.9	913.7	861.2	915.2	966.3
62.5°	894.7	840.7	786.7	843.6	893.3
65°	814.5	760.4	706.4	759.0	811.5
67.5°	724.0	671.4	623.2	670.0	718.1
70°	626.2	579.5	537.1	576.5	618.9
72.5°	522.5	483.1	448.1	481.7	512.3
75°	416.0	385.3	357.6	385.3	405.8
77.5°	312.4	289.0	270.0	291.9	303.6
80°	214.6	200.0	185.4	201.4	207.3
82.5°	127.0	121.1	109.5	119.7	122.6
85°	56.9	54.0	46.7	52.5	54.0
87.5°	10.2	8.8	7.3	8.8	10.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)