

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: P241214

Luminaire Tested: **1800-X-90-L40-4-W-UNV-STD-X-X**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P241214
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-L40-4-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

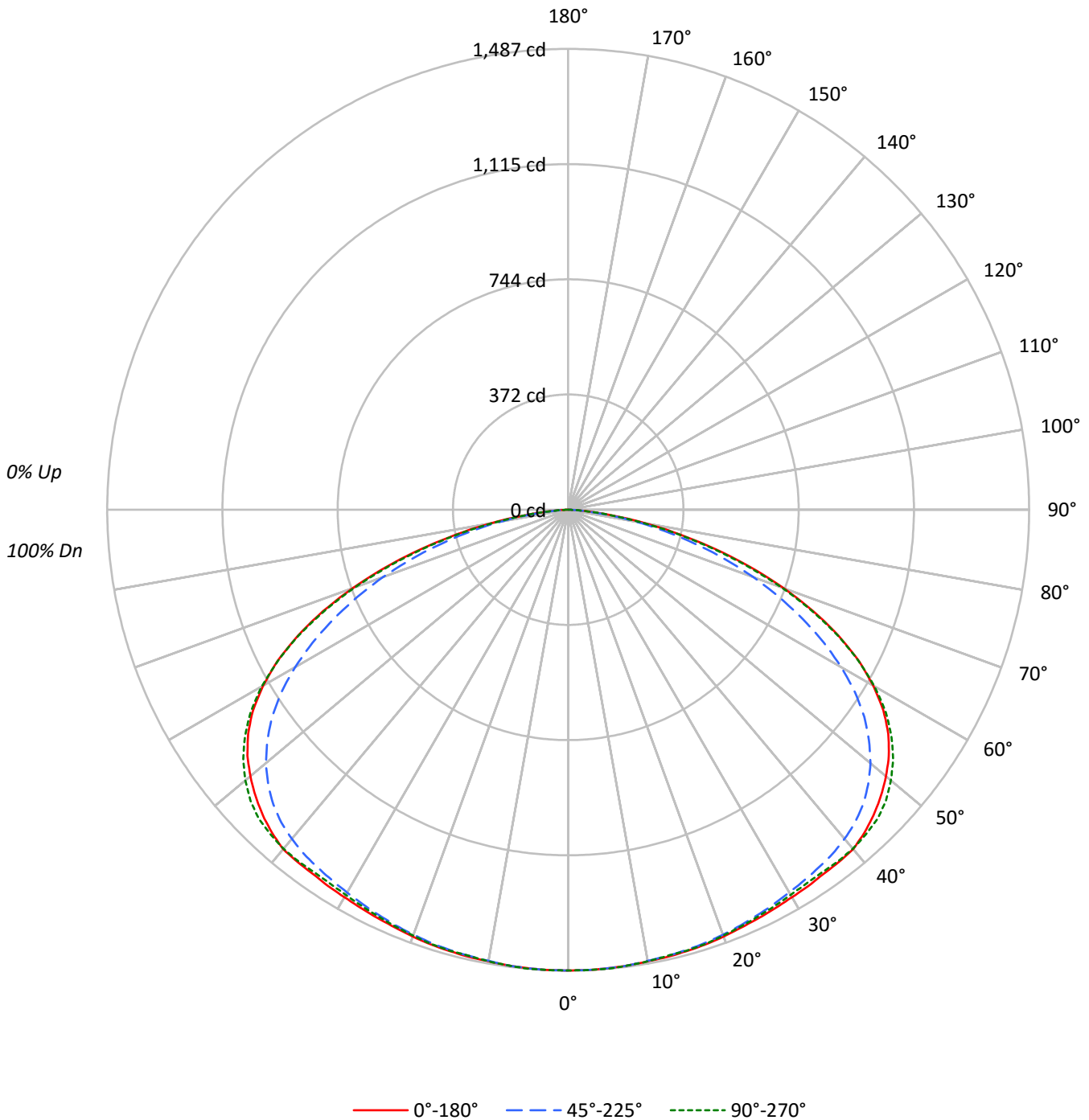
Lumens per Lamp: N/A
Luminaire Lumens: 5716.3 lumens
Efficiency: N/A
Efficacy: 69.0 lumens/watt
Spacing Criteria (0/90/45): 1.48 / 1.48 / 1.61
Luminous Opening: Circular (Dia: 1.17' x H: 0')
CIE Type: Direct

Input Watts (W): 82.9
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: P241214
CATALOG NUMBER: 1800-X-90-L40-4-W-UNV-STD-X-X

Luminous Intensity Polar Plot





TEST NUMBER: P241214

CATALOG NUMBER: 1800-X-90-L40-4-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°	14971	14971	14971
5°	15010	15010	15028
10°	15131	15114	15131
15°	15373	15337	15355
20°	15710	15636	15672
25°	16154	16039	16096
30°	16785	16584	16684
35°	17639	17322	17554
40°	18795	18227	18771
45°	19844	19157	20091
50°	20965	19939	21290
55°	22133	20469	22345
60°	22889	20492	22994
65°	22929	19889	22848
70°	21783	18685	21529
75°	19125	16441	18654
80°	14699	12699	14201
85°	7775	6377	7371



TEST NUMBER: P241214

CATALOG NUMBER: 1800-X-90-L40-4-W-UNV-STD-X-X

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	141.6	2.5
10°-20°	416.9	7.3
20°-30°	669.6	11.7
30°-40°	892.5	15.6
40°-50°	1059.2	18.5
50°-60°	1082.7	18.9
60°-70°	882.7	15.4
70°-80°	481.5	8.4
80°-90°	89.7	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°	1228.0	21.5
0°-40°	2120.5	37.1
0°-60°	4262.4	74.6
0°-90°	5716.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5716.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1487	1487	1487	1487	1487	
5°	1485	1485	1485	1485	1487	142
15°	1475	1473	1471	1471	1473	418
25°	1454	1449	1444	1447	1449	673
35°	1435	1425	1409	1420	1428	902
45°	1394	1370	1345	1382	1411	1075
55°	1261	1212	1166	1223	1273	1121
65°	962	899	835	897	959	944
75°	492	455	423	455	480	520
85°	67	64	55	62	64	97
90°	0	0	0	0	0	



TEST NUMBER: P241214

CATALOG NUMBER: 1800-X-90-L40-4-W-UNV-STD-X-X

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1486.8	1486.8	1486.8	1486.8	1486.8
2.5°	1486.8	1486.8	1486.8	1486.8	1486.8
5°	1485.0	1485.0	1485.0	1485.0	1486.8
7.5°	1483.3	1483.3	1483.3	1483.3	1483.3
10°	1479.9	1479.9	1478.2	1478.2	1479.9
12.5°	1478.2	1476.4	1474.7	1474.7	1474.7
15°	1474.7	1473.0	1471.3	1471.3	1473.0
17.5°	1471.3	1467.8	1466.1	1466.1	1469.5
20°	1466.1	1460.9	1459.2	1460.9	1462.6
22.5°	1459.2	1455.7	1452.3	1454.0	1455.7
25°	1454.0	1448.8	1443.7	1447.1	1448.8
27.5°	1448.8	1441.9	1435.0	1438.5	1441.9
30°	1443.7	1435.0	1426.4	1429.9	1435.0
32.5°	1440.2	1429.9	1417.8	1424.7	1429.9
35°	1435.0	1424.7	1409.2	1419.5	1428.1
37.5°	1433.3	1417.8	1400.5	1414.3	1429.9
40°	1429.9	1407.4	1386.7	1409.2	1428.1
42.5°	1414.3	1391.9	1369.5	1397.1	1421.2
45°	1393.6	1369.5	1345.3	1381.6	1410.9
47.5°	1367.8	1341.9	1312.6	1355.7	1390.2
50°	1338.4	1305.7	1272.9	1319.5	1359.1
52.5°	1303.9	1262.6	1222.9	1276.3	1321.2
55°	1260.8	1212.5	1166.0	1222.9	1272.9
57.5°	1205.6	1152.2	1097.0	1159.1	1214.3
60°	1136.6	1079.7	1017.6	1081.4	1141.8
62.5°	1057.3	993.5	929.7	996.9	1055.6
65°	962.4	898.6	834.8	896.9	959.0
67.5°	855.5	793.4	736.5	791.7	848.6
70°	739.9	684.7	634.7	681.3	731.3
72.5°	617.5	570.9	529.5	569.2	605.4
75°	491.6	455.3	422.6	455.3	479.5
77.5°	369.1	341.5	319.1	345.0	358.8
80°	253.5	236.3	219.0	238.0	244.9
82.5°	150.1	143.2	129.4	141.4	144.9
85°	67.3	63.8	55.2	62.1	63.8
87.5°	12.1	10.3	8.6	10.3	12.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)