

Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions
(formerly Eaton)

Brand: CORELITE

Report Number: P564996

Luminaire Tested: **SQ4-PW1-100U-125D-935-1D-UNV-STD-W-8**

Issue Date: 7/30/2021

Test Information

Test Method: LM-79-2019
Report Number: P564996
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-23, G2-2106-289-3)
Test Lab: INNOVATION CENTER
Issue Date: 7/30/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-PW1-100U-125D-935-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE WAVES CONTINUOUS LENS.
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

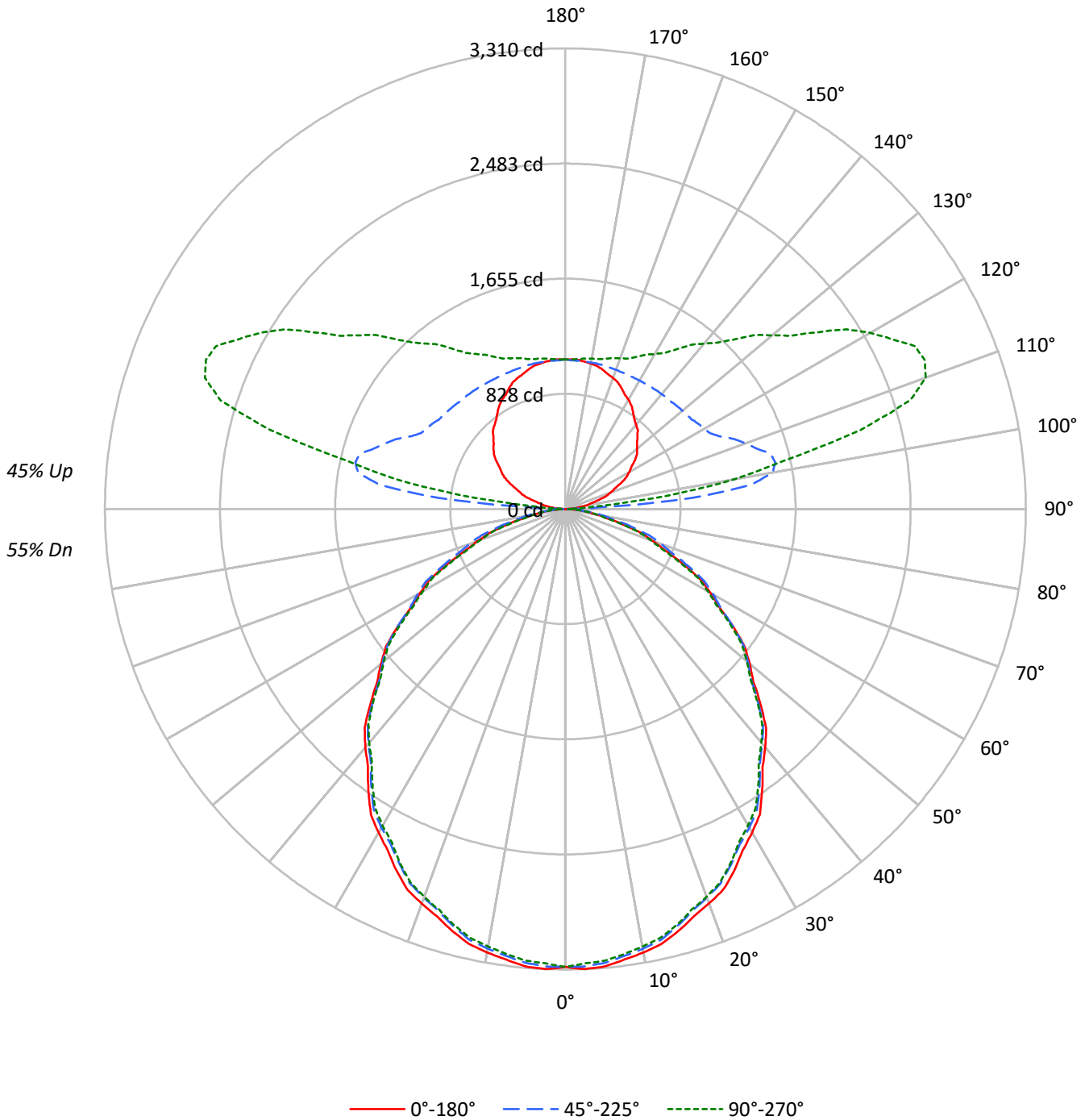
Lumens per Lamp: N/A
Luminaire Lumens: 15355.1 lumens
Efficiency: N/A
Efficacy: 109.2 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.19 / 1.31
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 140.6
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: 24 FT



TEST NUMBER: P564996
CATALOG NUMBER: SQ4-PW1-100U-125D-935-1D-UNV-STD-W-8

Luminous Intensity Polar Plot





TEST NUMBER: P564996

CATALOG NUMBER: SQ4-PW1-100U-125D-935-1D-UNV-STD-W-8

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	108	108	108	108	100	100	100	100	86	86	86	73	73	73	60	60	60	55
1	99	95	91	87	92	88	85	82	76	73	71	64	62	61	53	52	51	46
2	90	83	77	71	83	77	72	67	66	62	59	56	53	51	47	45	43	39
3	82	73	65	60	76	68	61	56	59	54	49	50	46	43	42	39	37	33
4	75	64	57	50	70	60	53	48	52	47	42	44	40	37	37	34	32	28
5	69	57	49	43	64	54	46	41	47	41	36	40	36	32	34	30	28	25
6	64	52	43	38	59	48	41	36	42	36	32	36	32	28	31	27	24	22
7	59	47	39	33	55	44	36	31	38	32	28	33	28	25	28	24	22	19
8	55	42	35	29	51	40	33	28	35	29	25	30	26	22	26	22	19	17
9	51	39	31	26	47	36	30	25	32	26	22	28	23	20	24	20	18	15
10	48	36	28	23	44	33	27	22	29	24	20	26	21	18	22	19	16	14

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	15182	15182	15182
5°	15280	15160	15092
10°	15158	15036	14955
15°	14998	14831	14776
20°	14818	14591	14562
25°	14611	14346	14301
30°	14303	14087	13994
35°	13896	13700	13619
40°	13463	13253	13201
45°	12939	12769	12712
50°	12403	12299	12215
55°	11824	11824	11637
60°	11102	11316	10916
65°	10160	10667	9907
70°	8956	9816	8721
75°	7648	8785	7441
80°	5932	7396	6009
85°	3837	5679	5065



TEST NUMBER: P564996

CATALOG NUMBER: SQ4-PW1-100U-125D-935-1D-UNV-STD-W-8

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	309.9	2.0
10°-20°	875.0	5.7
20°-30°	1297.8	8.5
30°-40°	1518.6	9.9
40°-50°	1511.8	9.8
50°-60°	1305.5	8.5
60°-70°	939.7	6.1
70°-80°	492.8	3.2
80°-90°	124.4	0.8
90°-100°	503.0	3.3
100°-110°	1388.8	9.0
110°-120°	1432.3	9.3
120°-130°	1150.9	7.5
130°-140°	904.5	5.9
140°-150°	693.7	4.5
150°-160°	498.6	3.2
160°-170°	304.9	2.0
170°-180°	102.8	0.7
0°-30°	2482.7	16.2
0°-40°	4001.3	26.1
0°-60°	6818.7	44.4
0°-90°	8375.6	54.5
90°-120°	3324.1	21.6
90°-150°	6073.2	39.6
90°-180°	6979.0	45.5
0°-180°	15355.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3291	3291	3291	3291	3291	
5°	3300	3263	3274	3265	3259	313
15°	3140	3101	3106	3100	3094	885
25°	2871	2822	2818	2801	2810	1320
35°	2468	2434	2433	2410	2418	1543
45°	1983	1966	1957	1951	1949	1530
55°	1470	1467	1470	1450	1447	1312
65°	931	959	977	939	908	922
75°	429	469	493	460	418	460
85°	72	95	107	101	96	96
90°	3	7	14	16	17	8
95°	74	272	913	375	244	79
105°	248	382	1528	2333	2196	263
115°	443	536	1231	2436	2770	436
125°	608	692	1115	1888	2215	541
135°	732	811	1084	1529	1724	566
145°	849	908	1071	1302	1401	532
155°	957	989	1062	1168	1205	441
165°	1036	1050	1067	1109	1117	292
175°	1074	1076	1069	1084	1081	102
180°	1074	1074	1074	1074	1074	

TEST NUMBER: P564996

CATALOG NUMBER: SQ4-PW1-100U-125D-935-1D-UNV-STD-W-8

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3291.1	3291.1	3291.1	3291.1	3291.1
2.5°	3309.6	3282.4	3291.1	3283.8	3267.9
5°	3299.8	3262.9	3273.7	3264.9	3259.2
7.5°	3266.1	3232.1	3240.1	3230.7	3227.3
10°	3236.0	3202.0	3209.9	3198.2	3192.5
12.5°	3201.2	3164.9	3172.8	3161.1	3157.7
15°	3140.3	3100.6	3105.5	3099.6	3093.9
17.5°	3069.6	3029.3	3030.1	3020.8	3019.7
20°	3018.5	2976.0	2972.1	2960.7	2966.3
22.5°	2962.8	2918.0	2914.1	2898.1	2906.0
25°	2870.6	2822.4	2818.4	2801.2	2809.7
27.5°	2763.9	2716.3	2716.4	2692.2	2701.3
30°	2685.1	2639.7	2644.5	2615.7	2627.1
32.5°	2601.6	2560.7	2563.3	2534.5	2545.9
35°	2467.6	2433.6	2432.8	2409.8	2418.3
37.5°	2330.7	2300.7	2295.9	2282.6	2284.9
40°	2235.6	2210.1	2200.8	2192.1	2192.1
42.5°	2135.9	2112.6	2103.4	2097.0	2094.7
45°	1983.3	1966.3	1957.3	1951.4	1948.6
47.5°	1832.6	1816.7	1808.8	1804.7	1801.8
50°	1728.2	1716.8	1713.7	1704.9	1702.1
52.5°	1623.8	1617.0	1613.9	1602.9	1600.0
55°	1470.1	1467.3	1470.1	1449.8	1446.9
57.5°	1310.1	1314.6	1324.0	1296.6	1289.8
60°	1203.3	1214.7	1226.5	1194.4	1183.1
62.5°	1094.3	1112.5	1129.1	1092.2	1076.3
65°	930.8	959.1	977.2	938.8	907.6
67.5°	773.0	808.2	829.9	788.5	753.3
70°	664.0	703.7	727.8	686.3	646.6
72.5°	568.9	613.1	632.7	593.5	553.8
75°	429.1	468.8	492.9	460.1	417.5
77.5°	304.5	341.9	361.9	333.2	298.1
80°	223.3	263.0	278.4	254.5	226.2
82.5°	158.3	191.2	201.8	187.5	168.2
85°	72.5	95.2	107.3	101.4	95.7
87.5°	19.2	35.8	46.8	47.2	49.8
90°	3.4	6.8	13.7	15.5	17.2
92.5°	30.9	128.4	229.6	83.8	65.3
95°	73.9	272.2	912.6	375.1	244.1
97.5°	122.4	304.9	1351.9	1040.9	753.8
100°	158.1	324.5	1514.2	1524.9	1239.2
102.5°	192.5	346.8	1545.8	1884.1	1613.2
105°	247.5	381.9	1527.9	2332.6	2196.5
107.5°	305.9	425.6	1442.7	2548.9	2598.7
110°	347.2	454.7	1376.7	2595.5	2756.8

TEST NUMBER: P564996

CATALOG NUMBER: SQ4-PW1-100U-125D-935-1D-UNV-STD-W-8

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	384.3	487.8	1314.8	2558.7	2796.7
115°	443.4	535.9	1230.6	2436.1	2770.5
117.5°	495.0	587.1	1175.2	2263.6	2644.0
120°	529.4	620.1	1153.2	2146.8	2529.9
122.5°	562.4	649.1	1135.4	2037.7	2400.7
125°	608.4	692.4	1115.4	1887.7	2215.4
127.5°	647.6	731.6	1103.7	1760.9	2043.5
130°	673.7	757.8	1098.2	1683.3	1940.4
132.5°	698.5	778.5	1092.7	1618.1	1851.0
135°	732.2	811.1	1084.5	1528.9	1723.9
137.5°	770.0	841.9	1080.4	1454.0	1620.4
140°	790.6	861.2	1077.6	1404.1	1550.3
142.5°	814.0	879.2	1074.9	1359.7	1488.4
145°	849.0	907.9	1070.7	1301.6	1400.7
147.5°	882.7	934.1	1067.0	1252.6	1329.6
150°	907.5	949.5	1065.6	1223.4	1285.6
152.5°	926.7	966.0	1064.2	1198.4	1249.8
155°	957.3	989.2	1062.2	1167.8	1204.8
157.5°	985.5	1010.0	1062.5	1145.6	1170.8
160°	1002.0	1023.8	1063.9	1133.0	1151.5
162.5°	1015.8	1034.9	1065.2	1122.0	1136.4
165°	1036.4	1049.8	1067.3	1108.8	1117.2
167.5°	1052.2	1060.3	1069.0	1100.7	1103.4
170°	1060.4	1067.2	1069.0	1096.5	1096.5
172.5°	1067.3	1071.3	1069.0	1091.0	1089.7
175°	1074.2	1075.9	1069.0	1084.4	1081.1
177.5°	1076.9	1075.6	1068.7	1078.2	1075.6
180°	1074.2	1074.2	1074.2	1074.2	1074.2

(END OF REPORT)