

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: P565165

Luminaire Tested: **SQ4-PW1-150U-100D-940-1D-UNV-STD-W-12**

Issue Date: 7/30/2021

Test Information

Test Method: LM-79-2019
Report Number: P565165
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-25, 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-PW1-150U-100D-940-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE WAVES CONTINUOUS LENS.
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 1500 LUMENS PER FOOT
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

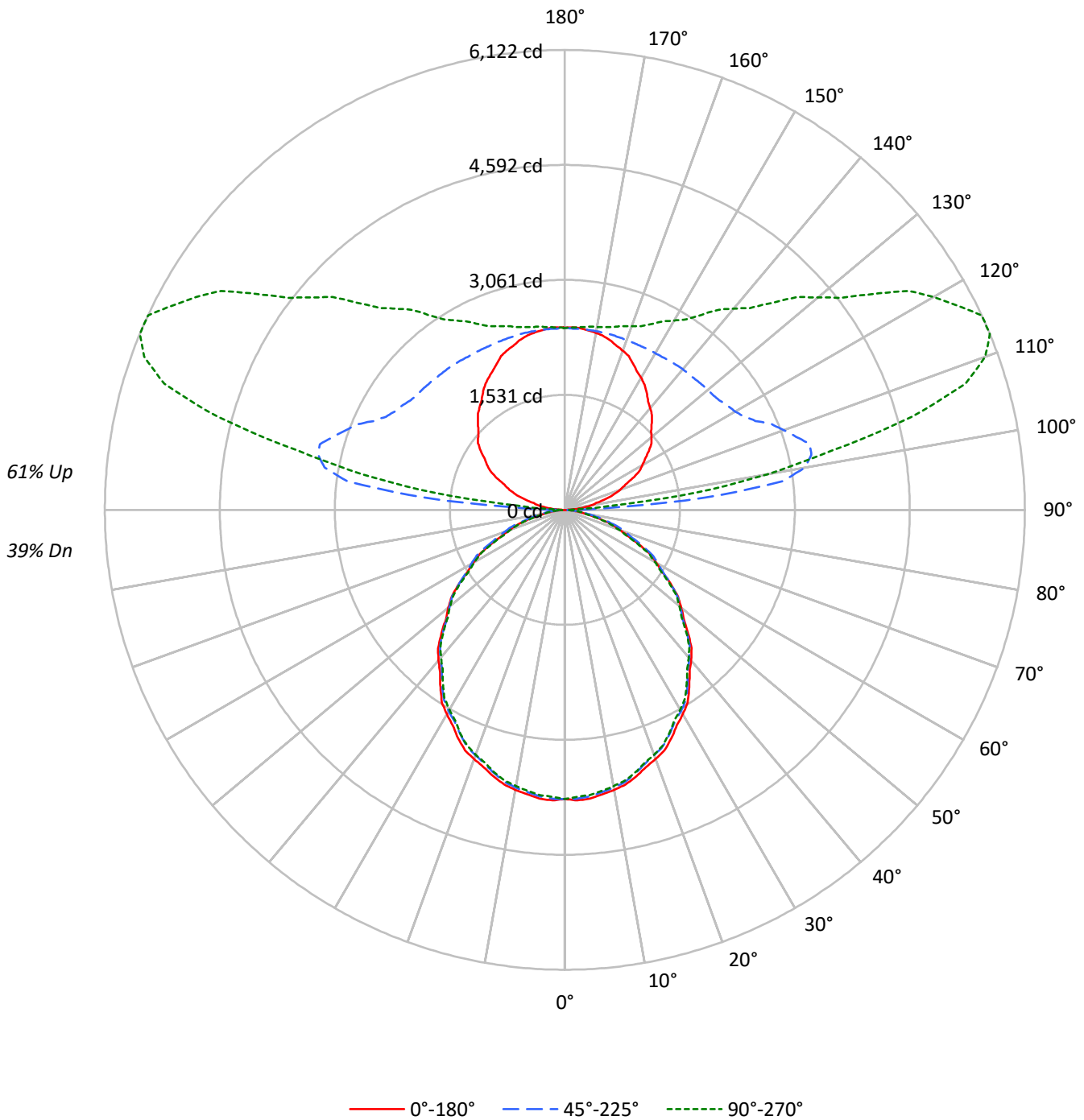
Lumens per Lamp: N/A
Luminaire Lumens: 25420.2 lumens
Efficiency: N/A
Efficacy: 113.6 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.19 / 1.31
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 223.7
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



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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	104	104	104	104	95	95	95	95	77	77	77	61	61	61	46	46	46	39
1	95	91	87	84	86	83	80	77	68	65	63	53	52	51	40	39	39	33
2	87	80	74	69	79	73	67	63	59	56	52	47	44	42	36	34	33	27
3	79	70	63	57	72	64	58	53	52	48	44	42	38	36	32	30	28	23
4	72	62	54	48	66	57	50	45	46	41	38	37	33	31	28	26	24	20
5	66	55	47	41	60	50	43	38	41	36	32	33	29	27	25	23	21	17
6	61	49	41	36	55	45	38	33	37	32	28	30	26	23	23	20	18	15
7	56	44	37	31	51	41	34	29	34	29	25	27	23	20	21	18	16	14
8	52	40	33	27	47	37	30	26	31	26	22	25	21	18	19	17	15	12
9	49	37	29	24	44	34	27	23	28	23	20	23	19	16	18	15	13	11
10	45	34	27	22	41	31	25	20	26	21	18	21	17	15	17	14	12	10

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	11837	11837	11837
5°	11913	11819	11767
10°	11818	11723	11659
15°	11693	11563	11520
20°	11553	11376	11353
25°	11392	11184	11150
30°	11151	10982	10910
35°	10834	10681	10618
40°	10496	10333	10292
45°	10088	9955	9911
50°	9669	9589	9523
55°	9218	9218	9073
60°	8656	8823	8510
65°	7921	8316	7724
70°	6982	7653	6800
75°	5964	6850	5802
80°	4624	5765	4684
85°	2992	4428	3949



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	362.4	1.4
10°-20°	1023.2	4.0
20°-30°	1517.8	6.0
30°-40°	1775.9	7.0
40°-50°	1768.0	7.0
50°-60°	1526.8	6.0
60°-70°	1099.0	4.3
70°-80°	576.3	2.3
80°-90°	147.9	0.6
90°-100°	1126.1	4.4
100°-110°	3044.8	12.0
110°-120°	3201.2	12.6
120°-130°	2600.2	10.2
130°-140°	2039.6	8.0
140°-150°	1565.4	6.2
150°-160°	1125.8	4.4
160°-170°	687.8	2.7
170°-180°	231.9	0.9
0°-30°	2903.4	11.4
0°-40°	4679.4	18.4
0°-60°	7974.1	31.4
0°-90°	9797.4	38.5
90°-120°	7372.0	29.0
90°-150°	13577.3	53.4
90°-180°	15623.0	61.5
0°-180°	25420.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3849	3849	3849	3849	3849	
5°	3859	3816	3828	3818	3812	366
15°	3672	3626	3632	3625	3618	1035
25°	3357	3301	3296	3276	3286	1544
35°	2886	2846	2845	2818	2828	1804
45°	2319	2300	2289	2282	2279	1790
55°	1719	1716	1719	1695	1692	1534
65°	1088	1122	1143	1098	1061	1079
75°	502	548	576	538	488	538
85°	85	111	126	118	112	112
90°	5	15	34	36	34	15
95°	175	613	1873	969	576	183
105°	566	875	3378	4982	4778	596
115°	996	1218	2801	5423	6122	984
125°	1364	1563	2525	4261	5005	1216
135°	1635	1829	2457	3440	3894	1264
145°	1902	2044	2423	2945	3169	1190
155°	2147	2231	2402	2642	2728	990
165°	2337	2360	2413	2507	2520	658
175°	2426	2423	2415	2446	2441	230
180°	2423	2423	2423	2423	2423	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3848.8	3848.8	3848.8	3848.8	3848.8
2.5°	3870.5	3838.7	3848.8	3840.2	3821.7
5°	3859.0	3815.8	3828.4	3818.1	3811.5
7.5°	3819.6	3779.8	3789.1	3778.2	3774.2
10°	3784.4	3744.6	3753.8	3740.1	3733.5
12.5°	3743.7	3701.2	3710.4	3696.8	3692.8
15°	3672.4	3626.0	3631.8	3624.8	3618.2
17.5°	3589.7	3542.6	3543.6	3532.7	3531.4
20°	3530.0	3480.3	3475.8	3462.4	3469.0
22.5°	3464.9	3412.5	3408.0	3389.2	3398.5
25°	3357.1	3300.7	3296.0	3275.9	3285.9
27.5°	3232.3	3176.6	3176.7	3148.4	3159.1
30°	3140.1	3087.0	3092.6	3059.0	3072.2
32.5°	3042.4	2994.7	2997.6	2964.0	2977.3
35°	2885.7	2845.9	2845.0	2818.1	2828.1
37.5°	2725.7	2690.5	2685.0	2669.5	2672.1
40°	2614.5	2584.6	2573.8	2563.6	2563.6
42.5°	2497.8	2470.6	2459.8	2452.3	2449.7
45°	2319.4	2299.5	2288.9	2282.1	2278.7
47.5°	2143.1	2124.5	2115.3	2110.5	2107.2
50°	2021.0	2007.8	2004.1	1993.8	1990.5
52.5°	1899.0	1891.0	1887.4	1874.5	1871.2
55°	1719.2	1715.9	1719.2	1695.4	1692.1
57.5°	1532.1	1537.4	1548.3	1516.3	1508.3
60°	1407.3	1420.5	1434.4	1396.8	1383.5
62.5°	1279.8	1301.0	1320.5	1277.3	1258.7
65°	1088.5	1121.7	1142.8	1097.9	1061.4
67.5°	904.0	945.2	970.5	922.1	881.0
70°	776.5	823.0	851.1	802.6	756.2
72.5°	665.3	717.0	739.9	694.1	647.7
75°	501.9	548.3	576.5	538.0	488.3
77.5°	356.1	399.8	423.2	389.7	348.6
80°	261.1	307.5	325.5	297.7	264.5
82.5°	185.1	223.6	236.0	219.2	196.7
85°	84.8	111.3	125.5	118.5	111.9
87.5°	22.7	43.4	58.3	58.9	61.0
90°	5.2	15.4	33.9	36.5	33.9
92.5°	74.1	269.9	532.6	231.2	167.5
95°	174.8	613.4	1872.8	969.2	576.4
97.5°	280.7	703.5	2919.2	2415.8	1774.2
100°	359.9	739.9	3244.7	3383.9	2736.1
102.5°	433.0	790.5	3359.5	4117.9	3633.4
105°	566.0	874.6	3377.8	4982.5	4778.4
107.5°	689.1	970.7	3230.1	5521.8	5589.6
110°	785.1	1040.1	3098.7	5666.6	5954.8



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	870.7	1109.4	2977.7	5637.7	6121.7
115°	996.4	1218.3	2801.3	5422.9	6121.7
117.5°	1119.5	1327.6	2685.0	5094.8	5887.0
120°	1194.6	1398.6	2616.1	4859.4	5667.9
122.5°	1265.6	1465.5	2574.4	4607.1	5421.6
125°	1364.1	1563.1	2524.8	4260.7	5005.4
127.5°	1454.9	1650.3	2495.6	3978.0	4632.9
130°	1505.0	1706.5	2483.1	3803.3	4395.0
132.5°	1557.2	1756.6	2470.6	3645.8	4190.5
135°	1635.4	1829.2	2457.0	3440.2	3894.2
137.5°	1714.2	1897.3	2445.6	3273.5	3643.3
140°	1768.4	1939.3	2441.4	3166.1	3495.1
142.5°	1820.6	1981.3	2433.0	3069.2	3357.4
145°	1901.5	2044.3	2423.1	2944.7	3169.1
147.5°	1975.0	2101.5	2411.6	2831.9	3004.3
150°	2029.3	2141.5	2407.5	2770.6	2908.3
152.5°	2079.3	2177.3	2405.4	2713.7	2826.9
155°	2146.6	2230.8	2402.3	2641.6	2728.3
157.5°	2216.5	2275.2	2402.8	2591.4	2648.5
160°	2256.2	2304.6	2404.9	2559.7	2600.5
162.5°	2287.5	2327.8	2407.0	2534.4	2565.0
165°	2337.0	2360.0	2412.7	2506.9	2519.6
167.5°	2371.0	2386.8	2413.2	2483.3	2489.4
170°	2391.8	2399.5	2415.3	2472.7	2472.7
172.5°	2408.5	2410.0	2415.3	2460.1	2458.1
175°	2425.7	2423.2	2415.3	2446.5	2441.4
177.5°	2431.5	2425.3	2414.8	2435.5	2429.4
180°	2423.1	2423.1	2423.1	2423.1	2423.1

(END OF REPORT)