

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: P564685

Luminaire Tested: **SQ4-PW1-050U-100D-940-1D-UNV-STD-W-12**

Issue Date: 7/30/2021

Test Information

Test Method: LM-79-2019
Report Number: P564685
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-21, 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-PW1-050U-100D-940-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE WAVES CONTINUOUS LENS.
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 14961.3 lumens
Efficiency: N/A
Efficacy: 111.3 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-Direct

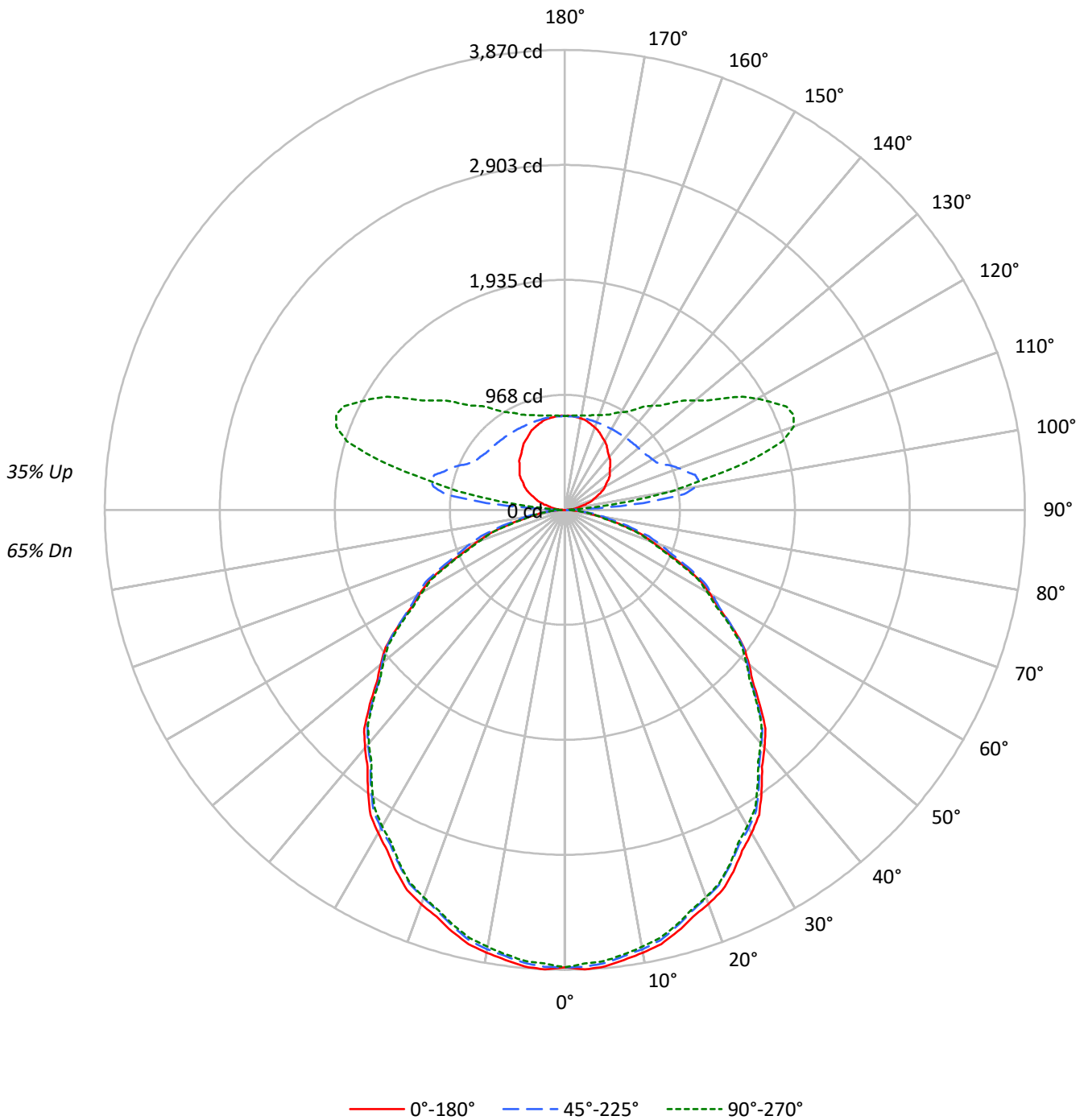
Input Watts (W): 134.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	111	111	111	111	104	104	104	104	92	92	92	81	81	81	70	70	70	65
1	101	97	93	90	95	91	88	85	81	78	76	71	69	68	62	61	60	55
2	92	85	79	73	87	80	75	70	71	67	63	63	59	57	55	53	50	47
3	84	75	67	61	79	71	64	59	63	58	53	56	51	48	49	46	43	40
4	77	66	58	52	72	63	55	50	56	50	45	50	45	41	44	40	37	34
5	71	59	51	45	67	56	48	43	50	44	39	45	40	36	39	36	32	30
6	66	53	45	39	61	50	43	37	45	39	34	40	35	31	36	32	29	26
7	61	48	40	34	57	46	38	33	41	35	30	37	32	28	33	29	25	23
8	56	44	36	30	53	42	34	29	38	31	27	34	29	25	30	26	23	21
9	53	40	32	27	49	38	31	26	34	29	24	31	26	22	28	24	21	19
10	49	37	29	24	46	35	28	24	32	26	22	29	24	20	26	22	19	17

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	2.4
10°-20°	1023.2	6.8
20°-30°	1517.8	10.1
30°-40°	1775.9	11.9
40°-50°	1768.0	11.8
50°-60°	1526.8	10.2
60°-70°	1099.0	7.3
70°-80°	576.3	3.9
80°-90°	145.9	1.0
90°-100°	379.8	2.5
100°-110°	1031.8	6.9
110°-120°	1060.8	7.1
120°-130°	848.2	5.7
130°-140°	666.4	4.5
140°-150°	511.0	3.4
150°-160°	367.5	2.5
160°-170°	224.7	1.5
170°-180°	75.7	0.5
0°-30°	2903.4	19.4
0°-40°	4679.4	31.3
0°-60°	7974.1	53.3
0°-90°	9795.4	65.5
90°-120°	2472.4	16.5
90°-150°	4498.0	30.1
90°-180°	5166.0	34.5
0°-180°	14961.3	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°	2	10	18	23	23	7
95°	56	208	661	288	193	59
105°	183	285	1135	1728	1626	195
115°	326	395	908	1807	2058	321
125°	448	510	822	1384	1633	399
135°	539	599	799	1128	1272	417
145°	623	668	789	958	1030	391
155°	705	730	784	860	885	325
165°	763	773	786	819	822	215
175°	791	794	789	799	796	75
180°	791	791	791	791	791	

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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°	22.2	42.3	55.1	56.2	58.8
90°	2.5	10.0	17.8	22.9	22.9
92.5°	22.9	104.0	180.6	77.6	65.6
95°	56.0	207.7	661.4	287.9	193.3
97.5°	92.6	229.4	1014.0	788.9	554.1
100°	117.0	243.9	1121.9	1137.3	918.4
102.5°	141.4	258.4	1150.4	1406.5	1213.5
105°	183.2	285.2	1134.6	1727.6	1625.6
107.5°	226.4	316.5	1069.0	1893.4	1921.8
110°	256.9	339.0	1020.2	1926.1	2047.9

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	283.4	361.5	971.3	1899.0	2082.5
115°	325.6	395.3	908.2	1806.9	2058.1
117.5°	365.3	432.0	868.0	1676.3	1959.4
120°	391.8	456.5	849.7	1588.8	1869.9
122.5°	414.2	478.8	837.5	1501.0	1772.2
125°	447.7	509.9	821.7	1384.5	1633.3
127.5°	477.8	539.5	813.1	1296.2	1509.6
130°	496.1	555.8	809.0	1240.8	1432.3
132.5°	514.4	574.1	804.9	1193.4	1363.1
135°	539.3	599.0	798.8	1127.7	1272.0
137.5°	566.3	620.5	795.8	1069.7	1191.1
140°	582.6	634.8	793.7	1032.8	1142.3
142.5°	598.9	647.1	791.7	1003.9	1095.5
145°	623.3	668.1	788.6	958.2	1030.3
147.5°	650.8	689.1	786.1	922.2	978.9
150°	669.1	701.4	786.1	901.6	946.4
152.5°	683.3	711.7	784.1	883.1	919.9
155°	704.7	729.6	783.6	860.4	885.3
157.5°	725.6	745.0	783.6	845.0	864.0
160°	737.8	755.2	783.6	834.8	849.7
162.5°	750.0	763.4	785.6	826.5	837.5
165°	763.2	773.2	786.1	819.2	821.7
167.5°	776.9	781.9	788.6	810.6	812.6
170°	781.0	786.0	788.6	806.5	806.5
172.5°	785.1	788.1	788.6	802.4	802.4
175°	791.2	793.7	788.6	798.8	796.3
177.5°	793.2	793.2	787.1	795.2	791.2
180°	791.2	791.2	791.2	791.2	791.2

(END OF REPORT)