

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: P519447

Luminaire Tested: **SQ4-WB-100U-125D-940-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P519447
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-23, G2-2009-966-13)
Test Lab: INNOVATION CENTER
Issue Date: 4/29/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-WB-100U-125D-940-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

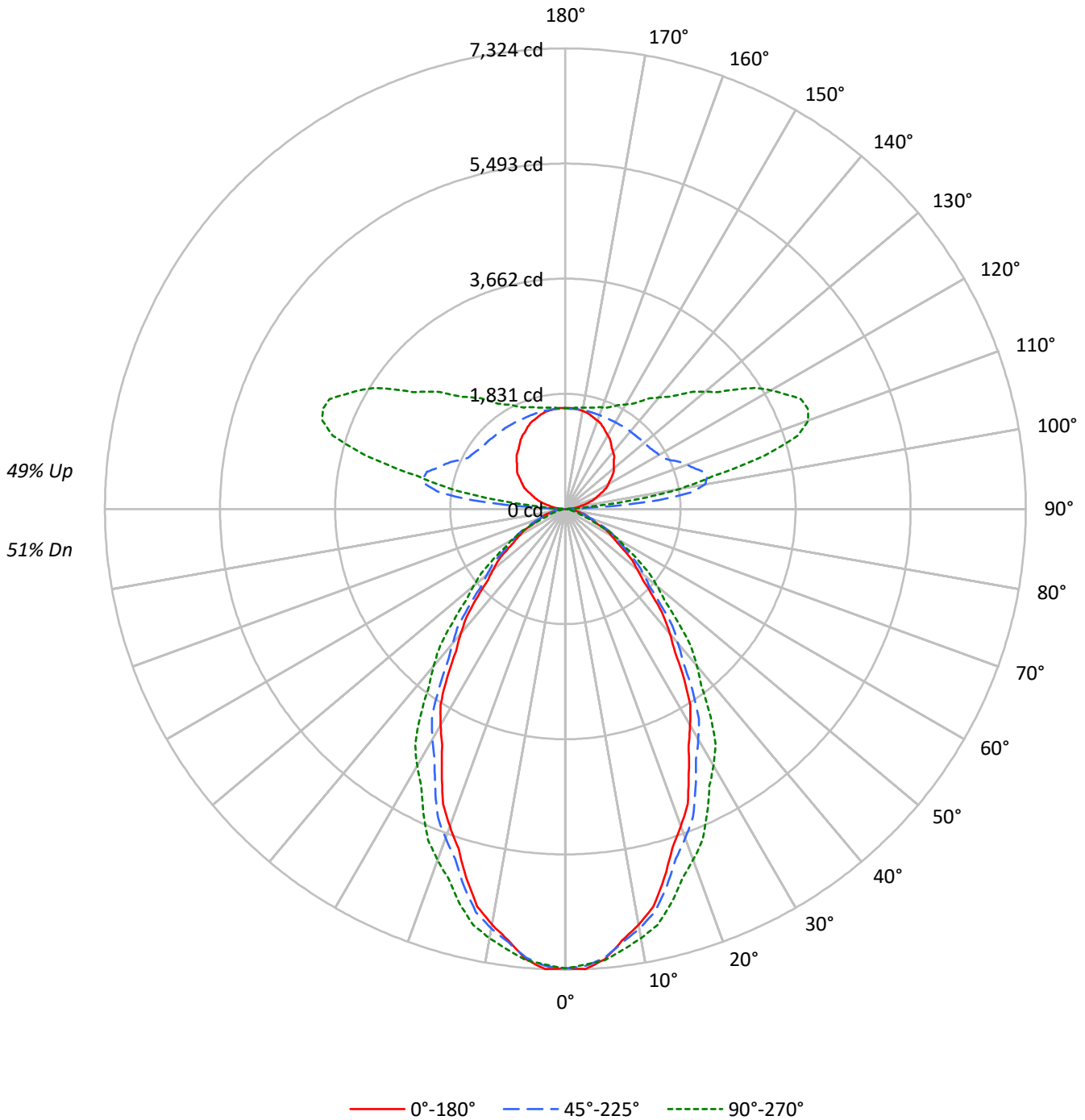
Lumens per Lamp: N/A
Luminaire Lumens: 21065.3 lumens
Efficiency: N/A
Efficacy: 98.1 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 214.8
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	50	30	10	0	
RCR																						
0	107	107	107	107	99	99	99	99	84	84	84	70	70	70	57	57	57	51				
1	99	95	92	89	91	88	85	83	75	73	71	63	62	60	52	51	50	45				
2	91	84	79	74	84	78	74	70	67	64	61	57	54	52	47	45	44	40				
3	84	75	69	63	78	70	64	60	60	56	53	51	48	46	43	41	39	35				
4	77	68	60	55	72	63	57	52	54	50	46	47	43	40	39	37	35	31				
5	72	61	53	48	66	57	50	45	49	44	40	42	39	36	36	33	31	28				
6	66	55	48	42	61	52	45	40	45	40	36	39	35	32	33	30	28	25				
7	62	50	43	38	57	47	41	36	41	36	32	36	32	29	31	28	25	23				
8	58	46	39	34	53	43	37	32	38	33	29	33	29	26	28	25	23	21				
9	54	42	35	30	50	40	33	29	35	30	27	31	27	24	27	24	21	19				
10	50	39	32	28	47	37	31	27	33	28	24	29	25	22	25	22	20	18				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	22468	22468	22468
5°	22188	22109	22238
10°	20963	21153	21644
15°	19352	19801	20689
20°	17573	18235	19441
25°	15762	16622	18112
30°	14094	15016	16735
35°	12324	13215	15105
40°	10373	11197	13076
45°	8561	9300	10917
50°	7148	7792	9095
55°	6067	6686	7511
60°	5186	5797	5994
65°	4129	4876	3873
70°	3661	3805	2364
75°	3390	3086	1447
80°	3122	2839	1249
85°	2826	2601	1020



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	670.1	3.2
10°-20°	1743.0	8.3
20°-30°	2257.7	10.7
30°-40°	2210.9	10.5
40°-50°	1692.3	8.0
50°-60°	1127.6	5.4
60°-70°	615.3	2.9
70°-80°	256.4	1.2
80°-90°	75.9	0.4
90°-100°	750.7	3.6
100°-110°	2072.5	9.8
110°-120°	2137.5	10.1
120°-130°	1717.6	8.2
130°-140°	1349.9	6.4
140°-150°	1035.3	4.9
150°-160°	744.1	3.5
160°-170°	455.0	2.2
170°-180°	153.4	0.7
0°-30°	4670.8	22.2
0°-40°	6881.7	32.7
0°-60°	9701.6	46.1
0°-90°	10649.3	50.6
90°-120°	4960.7	23.5
90°-150°	9063.6	43.0
90°-180°	10416.0	49.4
0°-180°	21065.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	7306	7306	7306	7306	7306	
5°	7187	7115	7162	7178	7203	669
15°	6078	6056	6219	6388	6498	1697
25°	4645	4658	4898	5112	5338	2136
35°	3283	3298	3520	3757	4023	2041
45°	1968	2006	2138	2300	2510	1535
55°	1132	1179	1247	1294	1401	1026
65°	567	614	670	585	532	590
75°	285	285	260	178	122	305
85°	80	80	74	48	29	87
90°	5	10	20	23	26	12
95°	110	406	1362	560	364	118
105°	369	570	2280	3481	3278	393
115°	662	800	1836	3636	4135	650
125°	908	1033	1665	2817	3306	808
135°	1093	1210	1618	2282	2573	845
145°	1267	1355	1598	1942	2090	793
155°	1429	1476	1585	1743	1798	658
165°	1547	1567	1593	1655	1667	436
175°	1603	1606	1595	1618	1613	152
180°	1603	1603	1603	1603	1603	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	7305.8	7305.8	7305.8	7305.8	7305.8
2.5°	7323.8	7258.6	7275.1	7274.6	7254.6
5°	7187.2	7115.1	7161.6	7178.2	7203.3
7.5°	6920.5	6866.0	6950.7	7013.4	7064.1
10°	6712.8	6665.8	6773.7	6865.0	6930.8
12.5°	6471.7	6432.2	6566.0	6688.5	6774.3
15°	6078.1	6056.1	6219.1	6388.3	6498.0
17.5°	5656.8	5646.2	5833.1	6030.6	6171.0
20°	5369.6	5366.5	5571.6	5777.2	5940.2
22.5°	5079.8	5086.7	5302.3	5516.1	5701.7
25°	4645.1	4657.6	4898.3	5111.8	5337.5
27.5°	4243.1	4248.7	4497.6	4723.0	4963.7
30°	3968.7	3984.4	4228.4	4461.7	4712.4
32.5°	3694.3	3712.5	3951.4	4192.5	4448.3
35°	3282.7	3298.3	3519.9	3756.8	4023.2
37.5°	2858.2	2879.5	3076.2	3300.2	3562.2
40°	2583.8	2615.2	2789.0	3000.0	3257.0
42.5°	2319.7	2358.5	2519.7	2719.9	2951.8
45°	1968.3	2005.9	2138.2	2300.1	2510.1
47.5°	1665.7	1709.0	1810.6	1949.9	2129.2
50°	1493.9	1534.6	1628.5	1731.7	1901.0
52.5°	1342.6	1383.3	1466.9	1546.5	1690.7
55°	1131.6	1178.6	1247.0	1294.3	1400.9
57.5°	958.5	1003.6	1057.9	1079.2	1143.8
60°	843.1	893.3	942.5	940.1	974.5
62.5°	738.0	780.6	829.6	795.7	797.6
65°	567.4	614.4	670.0	585.4	532.2
67.5°	458.4	468.4	525.7	408.3	344.9
70°	407.1	407.1	423.2	316.2	262.9
72.5°	358.4	358.4	343.7	257.1	201.3
75°	285.3	285.3	259.7	178.2	121.8
77.5°	219.9	217.4	198.8	133.0	88.5
80°	176.3	176.3	160.3	105.0	70.5
82.5°	137.8	137.8	124.4	82.0	52.6
85°	80.1	80.1	73.7	47.7	28.9
87.5°	29.2	30.2	29.7	20.0	18.0
90°	5.1	10.1	20.5	23.1	25.6
92.5°	46.2	191.6	342.7	125.1	97.5
95°	110.3	406.2	1362.0	559.8	364.2
97.5°	182.6	455.0	2017.6	1553.3	1125.0
100°	236.0	484.3	2259.7	2275.7	1849.3
102.5°	287.3	517.5	2306.9	2811.8	2407.5
105°	369.4	570.0	2280.2	3481.2	3278.0
107.5°	456.6	635.1	2153.0	3804.0	3878.2
110°	518.1	678.6	2054.5	3873.4	4114.2



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	573.5	728.0	1962.2	3818.6	4173.7
115°	661.8	799.7	1836.5	3635.6	4134.7
117.5°	738.7	876.1	1753.9	3378.1	3945.9
120°	790.0	925.4	1721.1	3203.8	3775.6
122.5°	839.3	968.7	1694.4	3041.0	3582.7
125°	908.0	1033.4	1664.7	2817.2	3306.2
127.5°	966.5	1091.9	1647.2	2627.9	3049.7
130°	1005.5	1130.9	1639.0	2512.1	2895.8
132.5°	1042.4	1161.8	1630.8	2414.9	2762.5
135°	1092.7	1210.5	1618.5	2281.7	2572.7
137.5°	1149.1	1256.4	1612.3	2170.0	2418.2
140°	1179.9	1285.2	1608.2	2095.4	2313.6
142.5°	1214.8	1312.1	1604.1	2029.1	2221.3
145°	1267.1	1354.9	1598.0	1942.5	2090.4
147.5°	1317.4	1394.1	1592.3	1869.4	1984.2
150°	1354.3	1417.0	1590.3	1825.8	1918.6
152.5°	1383.0	1441.7	1588.2	1788.5	1865.2
155°	1428.7	1476.3	1585.1	1742.9	1798.0
157.5°	1470.7	1507.4	1585.7	1709.6	1747.2
160°	1495.4	1528.0	1587.7	1690.9	1718.5
162.5°	1515.9	1544.5	1589.8	1674.4	1695.9
165°	1546.7	1566.7	1592.8	1654.7	1667.2
167.5°	1570.3	1582.3	1595.4	1642.7	1646.7
170°	1582.6	1592.6	1595.4	1636.4	1636.4
172.5°	1592.8	1598.9	1595.4	1628.2	1626.2
175°	1603.1	1605.6	1595.4	1618.4	1613.4
177.5°	1607.2	1605.2	1594.9	1609.2	1605.1
180°	1603.1	1603.1	1603.1	1603.1	1603.1

(END OF REPORT)