

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: P519614

Luminaire Tested: **SQ4-WB-150U-100D-935-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P519614
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-25, 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-150U-100D-935-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 1500 LUMENS PER FOOT
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

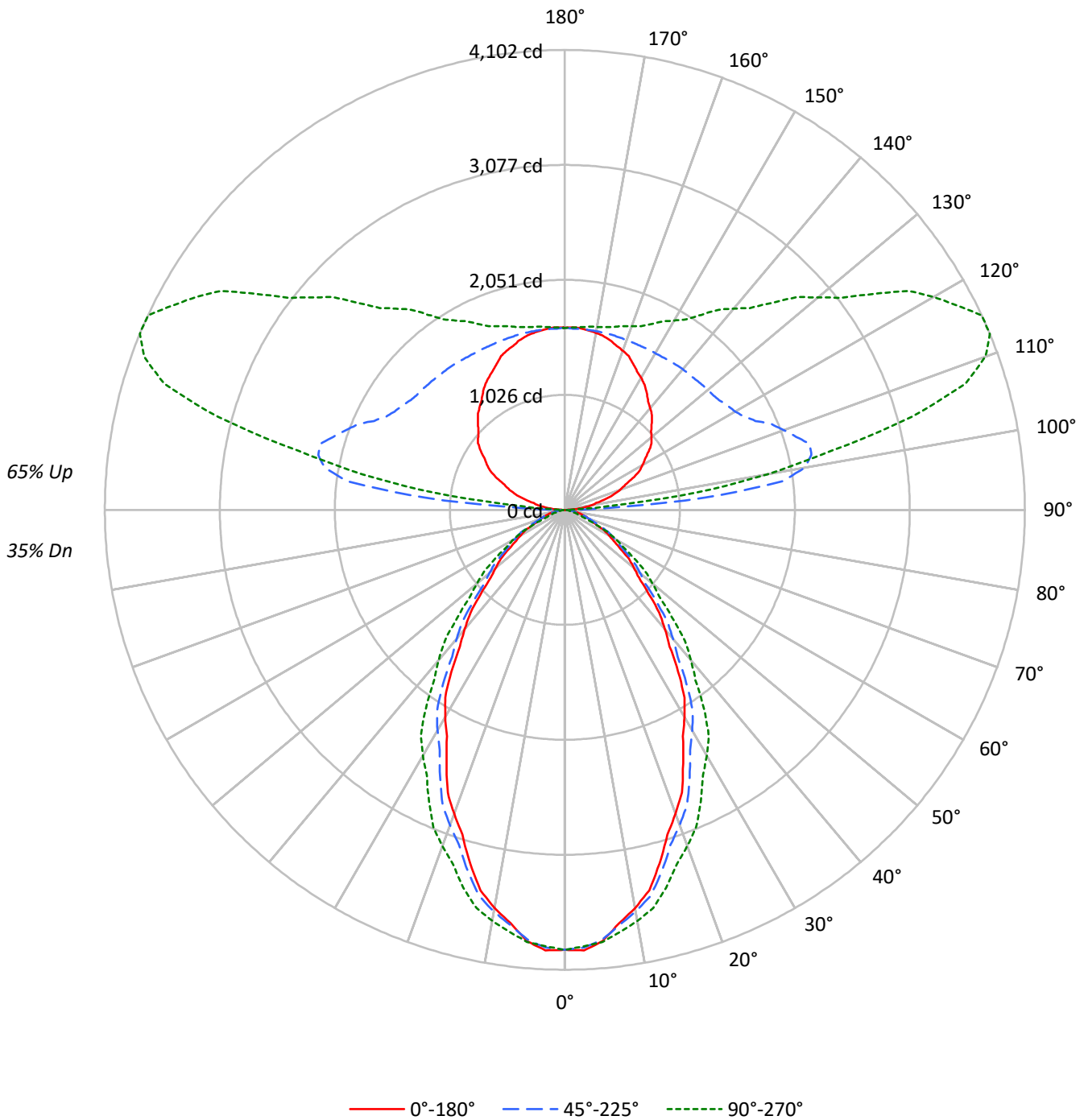
Lumens per Lamp: N/A
Luminaire Lumens: 16189.7 lumens
Efficiency: N/A
Efficacy: 109.1 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 148.4
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	104	104	104	104	94	94	94	94	75	75	75	58	58	58	43	43	43	35
1	95	91	88	85	86	83	80	77	67	65	63	52	51	50	39	38	38	31
2	87	81	75	71	79	73	69	65	60	56	54	47	45	43	35	34	33	28
3	80	72	65	60	73	65	60	55	53	49	46	42	40	37	32	30	29	24
4	74	64	57	51	67	58	52	47	48	44	40	38	35	33	29	27	26	22
5	68	57	50	44	62	53	46	41	43	39	35	35	31	29	27	25	23	20
6	63	52	44	39	57	47	41	36	39	35	31	32	28	26	25	22	21	18
7	58	47	40	34	53	43	37	32	36	31	28	29	26	23	23	20	19	16
8	54	43	36	31	49	39	33	29	33	28	25	27	23	21	21	19	17	15
9	51	39	32	27	46	36	30	26	30	26	22	25	21	19	20	17	16	13
10	47	36	29	25	43	33	27	23	28	23	20	23	20	17	18	16	14	12

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	18102	18102	18102
5°	17876	17812	17916
10°	16889	17042	17438
15°	15591	15953	16668
20°	14158	14691	15663
25°	12699	13391	14592
30°	11355	12098	13483
35°	9929	10646	12169
40°	8357	9021	10535
45°	6897	7492	8796
50°	5759	6277	7327
55°	4888	5387	6051
60°	4178	4670	4829
65°	3327	3928	3120
70°	2950	3066	1904
75°	2731	2486	1166
80°	2516	2287	1007
85°	2276	2096	820



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	359.9	2.2
10°-20°	936.2	5.8
20°-30°	1212.6	7.5
30°-40°	1187.5	7.3
40°-50°	908.9	5.6
50°-60°	605.7	3.7
60°-70°	330.5	2.0
70°-80°	137.7	0.9
80°-90°	42.4	0.3
90°-100°	754.6	4.7
100°-110°	2040.2	12.6
110°-120°	2145.0	13.2
120°-130°	1742.3	10.8
130°-140°	1366.7	8.4
140°-150°	1049.0	6.5
150°-160°	754.4	4.7
160°-170°	460.8	2.8
170°-180°	155.4	1.0
0°-30°	2508.7	15.5
0°-40°	3696.2	22.8
0°-60°	5210.8	32.2
0°-90°	5721.4	35.3
90°-120°	4939.8	30.5
90°-150°	9097.7	56.2
90°-180°	10468.0	64.7
0°-180°	16189.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3924	3924	3924	3924	3924	
5°	3860	3822	3846	3855	3869	359
15°	3265	3253	3340	3431	3490	912
25°	2495	2502	2631	2746	2867	1147
35°	1763	1772	1890	2018	2161	1096
45°	1057	1077	1148	1235	1348	824
55°	608	633	670	695	752	551
65°	305	330	360	314	286	317
75°	153	153	140	96	65	164
85°	43	43	40	26	16	47
90°	4	10	23	24	23	10
95°	117	411	1255	649	386	123
105°	379	586	2263	3339	3202	399
115°	668	816	1877	3634	4102	659
125°	914	1047	1692	2855	3354	815
135°	1096	1226	1646	2305	2609	847
145°	1274	1370	1624	1973	2124	797
155°	1438	1495	1610	1770	1828	663
165°	1566	1581	1617	1680	1688	441
175°	1625	1624	1618	1639	1636	154
180°	1624	1624	1624	1624	1624	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3924.0	3924.0	3924.0	3924.0	3924.0
2.5°	3933.6	3898.6	3907.5	3907.2	3896.5
5°	3860.3	3821.6	3846.5	3855.4	3868.9
7.5°	3717.0	3687.7	3733.2	3766.9	3794.2
10°	3605.5	3580.2	3638.2	3687.2	3722.6
12.5°	3476.0	3454.8	3526.6	3592.4	3638.5
15°	3264.6	3252.8	3340.3	3431.2	3490.1
17.5°	3038.3	3032.6	3133.0	3239.1	3314.5
20°	2884.0	2882.3	2992.5	3103.0	3190.5
22.5°	2728.4	2732.1	2847.9	2962.7	3062.4
25°	2494.9	2501.6	2630.9	2745.6	2866.8
27.5°	2279.0	2282.0	2415.7	2536.8	2666.0
30°	2131.6	2140.0	2271.1	2396.4	2531.1
32.5°	1984.2	1994.0	2122.3	2251.8	2389.2
35°	1763.1	1771.6	1890.5	2017.8	2160.9
37.5°	1535.2	1546.6	1652.2	1772.5	1913.3
40°	1387.8	1404.6	1498.0	1611.3	1749.4
42.5°	1245.9	1266.8	1353.3	1460.9	1585.4
45°	1057.2	1077.4	1148.4	1235.4	1348.2
47.5°	894.7	917.9	972.5	1047.3	1143.6
50°	802.4	824.2	874.7	930.1	1021.0
52.5°	721.1	743.0	787.9	830.6	908.1
55°	607.8	633.1	669.8	695.2	752.4
57.5°	514.8	539.1	568.2	579.7	614.3
60°	452.8	479.8	506.2	504.9	523.4
62.5°	396.4	419.3	445.6	427.4	428.4
65°	304.8	330.0	359.9	314.4	285.8
67.5°	246.2	251.6	282.4	219.3	185.3
70°	218.7	218.7	227.3	169.8	141.2
72.5°	192.5	192.5	184.6	138.1	108.1
75°	153.2	153.2	139.5	95.7	65.4
77.5°	118.1	116.8	106.8	71.4	47.5
80°	94.7	94.7	86.1	56.4	37.9
82.5°	74.0	74.0	66.8	44.1	28.2
85°	43.0	43.0	39.6	25.6	15.5
87.5°	15.9	17.2	18.3	13.1	11.4
90°	3.5	10.3	22.7	24.4	22.7
92.5°	49.6	180.9	356.9	154.9	112.2
95°	117.1	411.0	1254.9	649.4	386.3
97.5°	188.1	471.4	1956.1	1618.8	1188.8
100°	241.2	495.8	2174.2	2267.5	1833.4
102.5°	290.1	529.7	2251.1	2759.3	2434.6
105°	379.3	586.0	2263.3	3338.6	3201.9
107.5°	461.8	650.4	2164.4	3700.0	3745.4
110°	526.1	697.0	2076.3	3797.0	3990.1

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	583.4	743.4	1995.2	3777.6	4102.0
115°	667.6	816.3	1877.1	3633.7	4102.0
117.5°	750.1	889.6	1799.1	3413.9	3944.7
120°	800.5	937.2	1753.0	3256.1	3797.9
122.5°	848.0	982.0	1725.0	3087.0	3632.9
125°	914.1	1047.4	1691.8	2854.9	3353.9
127.5°	974.9	1105.8	1672.2	2665.5	3104.4
130°	1008.5	1143.5	1663.9	2548.5	2945.0
132.5°	1043.4	1177.0	1655.5	2442.9	2807.9
135°	1095.8	1225.7	1646.4	2305.2	2609.4
137.5°	1148.6	1271.3	1638.7	2193.5	2441.3
140°	1185.0	1299.5	1635.9	2121.5	2342.0
142.5°	1219.9	1327.6	1630.3	2056.6	2249.7
145°	1274.1	1369.8	1623.7	1973.1	2123.5
147.5°	1323.4	1408.2	1616.0	1897.5	2013.1
150°	1359.7	1434.9	1613.2	1856.5	1948.7
152.5°	1393.3	1458.9	1611.8	1818.3	1894.2
155°	1438.4	1494.8	1609.7	1770.0	1828.1
157.5°	1485.2	1524.5	1610.0	1736.4	1774.7
160°	1511.8	1544.3	1611.4	1715.2	1742.5
162.5°	1532.8	1559.8	1612.8	1698.2	1718.7
165°	1566.0	1581.4	1616.7	1679.8	1688.3
167.5°	1588.7	1599.3	1617.0	1664.0	1668.1
170°	1602.7	1607.8	1618.4	1656.9	1656.9
172.5°	1613.9	1614.9	1618.4	1648.4	1647.1
175°	1625.4	1623.7	1618.4	1639.3	1635.9
177.5°	1629.3	1625.2	1618.1	1632.0	1627.9
180°	1623.7	1623.7	1623.7	1623.7	1623.7

(END OF REPORT)