

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: P519419

Luminaire Tested: **SQ4-WB-100U-100D-935-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P519419
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-100D-935-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

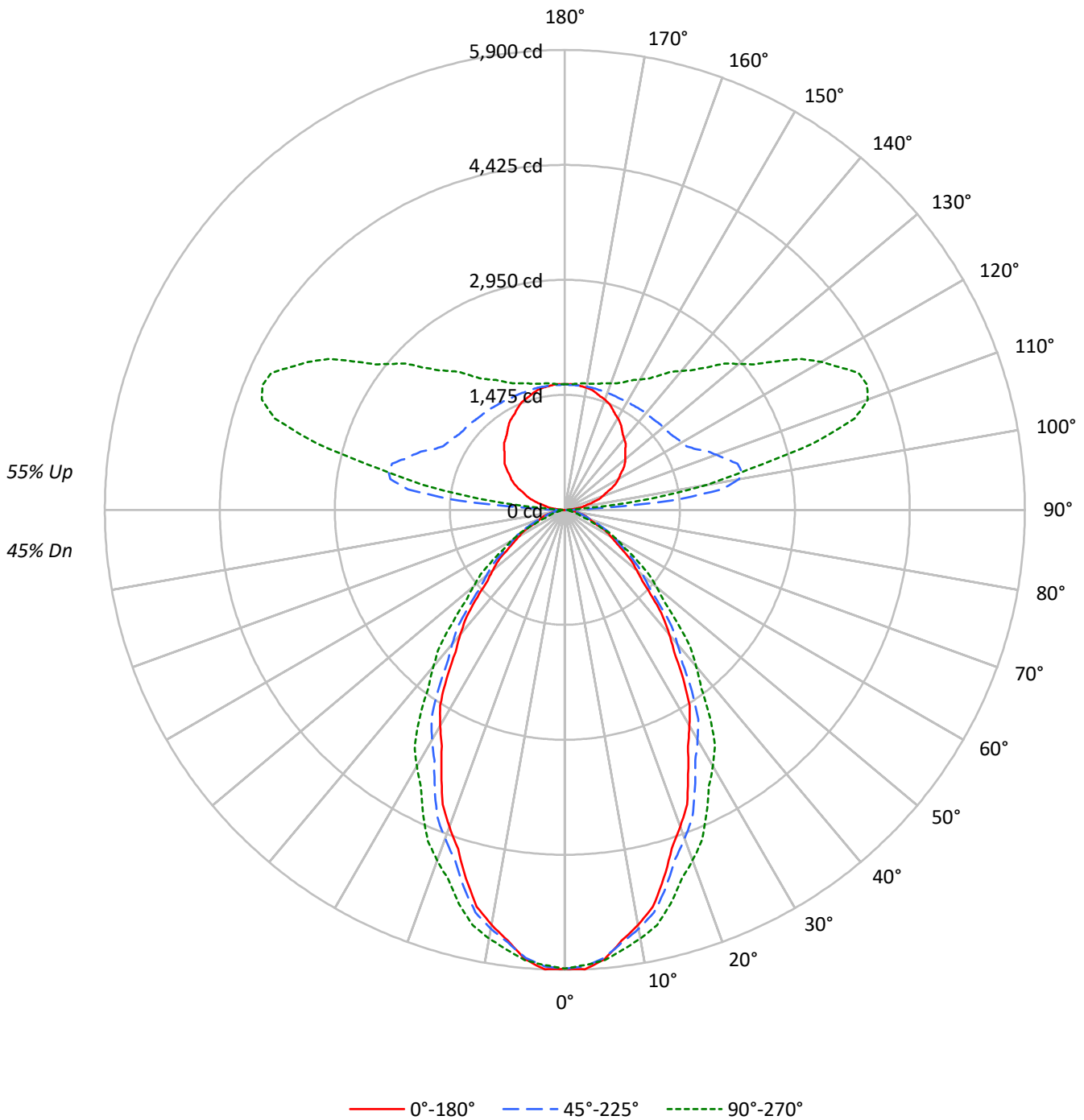
Lumens per Lamp: N/A
Luminaire Lumens: 19049.6 lumens
Efficiency: N/A
Efficacy: 104.6 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 182.2
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	106	106	106	106	97	97	97	97	81	81	81	65	65	65	52	52	52	45
1	98	94	90	87	89	86	83	81	72	70	68	59	58	56	47	46	46	40
2	90	83	78	73	82	77	72	68	64	61	58	53	51	49	43	41	40	35
3	83	74	67	62	76	68	63	58	58	54	50	48	45	43	39	37	35	31
4	76	66	59	54	70	61	55	50	52	47	44	44	40	37	36	33	31	28
5	70	60	52	47	65	55	49	44	47	42	39	40	36	33	33	30	28	25
6	65	54	46	41	60	50	44	39	43	38	34	36	33	30	30	27	25	22
7	61	49	42	36	56	46	39	34	39	34	31	33	30	27	28	25	23	20
8	56	45	38	33	52	42	35	31	36	31	28	31	27	24	26	23	21	19
9	53	41	34	29	49	39	32	28	33	28	25	29	25	22	24	21	19	17
10	49	38	31	27	46	36	29	25	31	26	23	27	23	20	22	20	18	16

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	18102	18102	18102
5°	17876	17812	17916
10°	16889	17042	17437
15°	15591	15953	16668
20°	14158	14691	15663
25°	12699	13391	14592
30°	11355	12097	13482
35°	9929	10647	12169
40°	8357	9021	10534
45°	6897	7492	8796
50°	5758	6277	7327
55°	4888	5387	6051
60°	4178	4670	4829
65°	3326	3928	3120
70°	2949	3065	1904
75°	2732	2486	1166
80°	2515	2286	1006
85°	2279	2096	819



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	539.9	2.8
10°-20°	1404.3	7.4
20°-30°	1818.9	9.5
30°-40°	1781.2	9.4
40°-50°	1363.4	7.2
50°-60°	908.5	4.8
60°-70°	495.8	2.6
70°-80°	206.6	1.1
80°-90°	61.8	0.3
90°-100°	754.6	4.0
100°-110°	2083.1	10.9
110°-120°	2148.4	11.3
120°-130°	1726.4	9.1
130°-140°	1356.8	7.1
140°-150°	1040.6	5.5
150°-160°	747.9	3.9
160°-170°	457.3	2.4
170°-180°	154.2	0.8
0°-30°	3763.1	19.8
0°-40°	5544.3	29.1
0°-60°	7816.2	41.0
0°-90°	8580.3	45.0
90°-120°	4986.1	26.2
90°-150°	9109.9	47.8
90°-180°	10469.0	55.0
0°-180°	19049.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	5886	5886	5886	5886	5886	
5°	5790	5732	5770	5783	5803	539
15°	4897	4879	5010	5147	5235	1367
25°	3742	3752	3946	4118	4300	1721
35°	2645	2657	2836	3027	3241	1644
45°	1586	1616	1723	1853	2022	1237
55°	912	950	1005	1043	1129	827
65°	457	495	540	472	429	475
75°	230	230	209	144	98	245
85°	65	65	59	38	23	70
90°	5	10	21	23	26	11
95°	111	408	1369	563	366	119
105°	371	573	2292	3499	3295	395
115°	665	804	1846	3654	4156	654
125°	913	1039	1673	2832	3323	812
135°	1098	1217	1627	2293	2586	850
145°	1274	1362	1606	1952	2101	797
155°	1436	1484	1593	1752	1807	662
165°	1555	1575	1601	1663	1676	438
175°	1611	1614	1604	1627	1622	153
180°	1611	1611	1611	1611	1611	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	5886.0	5886.0	5886.0	5886.0	5886.0
2.5°	5900.5	5847.9	5861.2	5860.8	5844.7
5°	5790.4	5732.4	5769.8	5783.2	5803.4
7.5°	5575.6	5531.6	5599.8	5650.4	5691.3
10°	5408.2	5370.3	5457.3	5530.8	5583.8
12.5°	5214.0	5182.2	5289.9	5388.6	5457.8
15°	4896.8	4879.1	5010.5	5146.8	5235.2
17.5°	4557.5	4548.9	4699.5	4858.6	4971.7
20°	4326.0	4323.5	4488.8	4654.5	4785.8
22.5°	4092.6	4098.1	4271.8	4444.1	4593.6
25°	3742.4	3752.5	3946.4	4118.4	4300.2
27.5°	3418.5	3423.0	3623.5	3805.1	3999.1
30°	3197.4	3210.0	3406.6	3594.6	3796.6
32.5°	2976.3	2991.0	3183.5	3377.7	3583.8
35°	2644.7	2657.3	2835.8	3026.7	3241.3
37.5°	2302.7	2319.9	2478.4	2658.8	2869.9
40°	2081.7	2106.9	2247.0	2417.0	2624.0
42.5°	1868.9	1900.2	2030.0	2191.3	2378.2
45°	1585.8	1616.1	1722.7	1853.1	2022.3
47.5°	1342.0	1376.8	1458.7	1571.0	1715.4
50°	1203.5	1236.4	1312.0	1395.2	1531.5
52.5°	1081.6	1114.5	1181.9	1246.0	1362.1
55°	911.7	949.6	1004.7	1042.8	1128.6
57.5°	772.2	808.6	852.3	869.5	921.5
60°	679.3	719.7	759.3	757.4	785.1
62.5°	594.5	628.9	668.4	641.1	642.6
65°	457.1	495.0	539.8	471.7	428.7
67.5°	369.3	377.4	423.6	328.9	277.9
70°	328.0	328.0	340.9	254.7	211.8
72.5°	288.7	288.7	276.9	207.1	162.2
75°	229.9	229.9	209.2	143.6	98.1
77.5°	177.2	175.2	160.1	107.1	71.3
80°	142.0	142.0	129.1	84.6	56.8
82.5°	111.1	111.1	100.2	66.1	42.4
85°	64.6	64.6	59.4	38.4	23.2
87.5°	23.8	24.8	24.8	17.0	15.5
90°	5.2	10.2	20.6	23.3	25.8
92.5°	46.4	192.6	344.4	125.7	98.0
95°	110.9	408.3	1368.9	562.7	366.1
97.5°	183.6	457.3	2027.9	1561.3	1130.7
100°	237.2	486.7	2271.3	2287.3	1858.8
102.5°	288.7	520.1	2318.7	2826.1	2419.8
105°	371.2	572.9	2291.9	3498.9	3294.7
107.5°	458.9	638.4	2164.0	3823.4	3898.0
110°	520.8	682.1	2065.0	3893.2	4135.2



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	576.5	731.7	1972.2	3838.1	4195.0
115°	665.1	803.8	1845.9	3654.2	4155.8
117.5°	742.5	880.6	1762.9	3395.4	3966.1
120°	794.0	930.2	1729.9	3220.2	3794.9
122.5°	843.5	973.6	1703.1	3056.5	3601.0
125°	912.6	1038.7	1673.2	2831.6	3323.1
127.5°	971.4	1097.4	1655.6	2641.3	3065.3
130°	1010.6	1136.6	1647.4	2524.9	2910.6
132.5°	1047.7	1167.7	1639.1	2427.2	2776.6
135°	1098.2	1216.7	1626.7	2293.4	2585.8
137.5°	1155.0	1262.9	1620.6	2181.0	2430.6
140°	1185.9	1291.8	1616.4	2106.1	2325.4
142.5°	1221.0	1318.8	1612.3	2039.5	2232.6
145°	1273.6	1361.8	1606.1	1952.4	2101.1
147.5°	1324.1	1401.2	1600.5	1878.9	1994.4
150°	1361.2	1424.2	1598.4	1835.1	1928.4
152.5°	1390.1	1449.1	1596.3	1797.6	1874.8
155°	1436.0	1483.9	1593.2	1751.8	1807.2
157.5°	1478.3	1515.1	1593.7	1718.4	1756.2
160°	1503.0	1535.8	1595.8	1699.6	1727.3
162.5°	1523.6	1552.4	1597.9	1682.9	1704.6
165°	1554.6	1574.7	1601.0	1663.1	1675.7
167.5°	1578.3	1590.4	1603.5	1651.1	1655.1
170°	1590.7	1600.7	1603.5	1644.8	1644.8
172.5°	1601.0	1607.0	1603.5	1636.5	1634.5
175°	1611.3	1613.8	1603.5	1626.6	1621.6
177.5°	1615.4	1613.4	1603.0	1617.4	1613.3
180°	1611.3	1611.3	1611.3	1611.3	1611.3

(END OF REPORT)