

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: P519371

Luminaire Tested: **SQ4-WB-100U-050D-935-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P519371  
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-050D-935-1D-UNV-STD-W-12  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE  
DOWNLIGHT 500 LUMENS PER FOOT  
UPLIGHT 1000 LUMENS PER FOOT  
Light Source: 3500K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

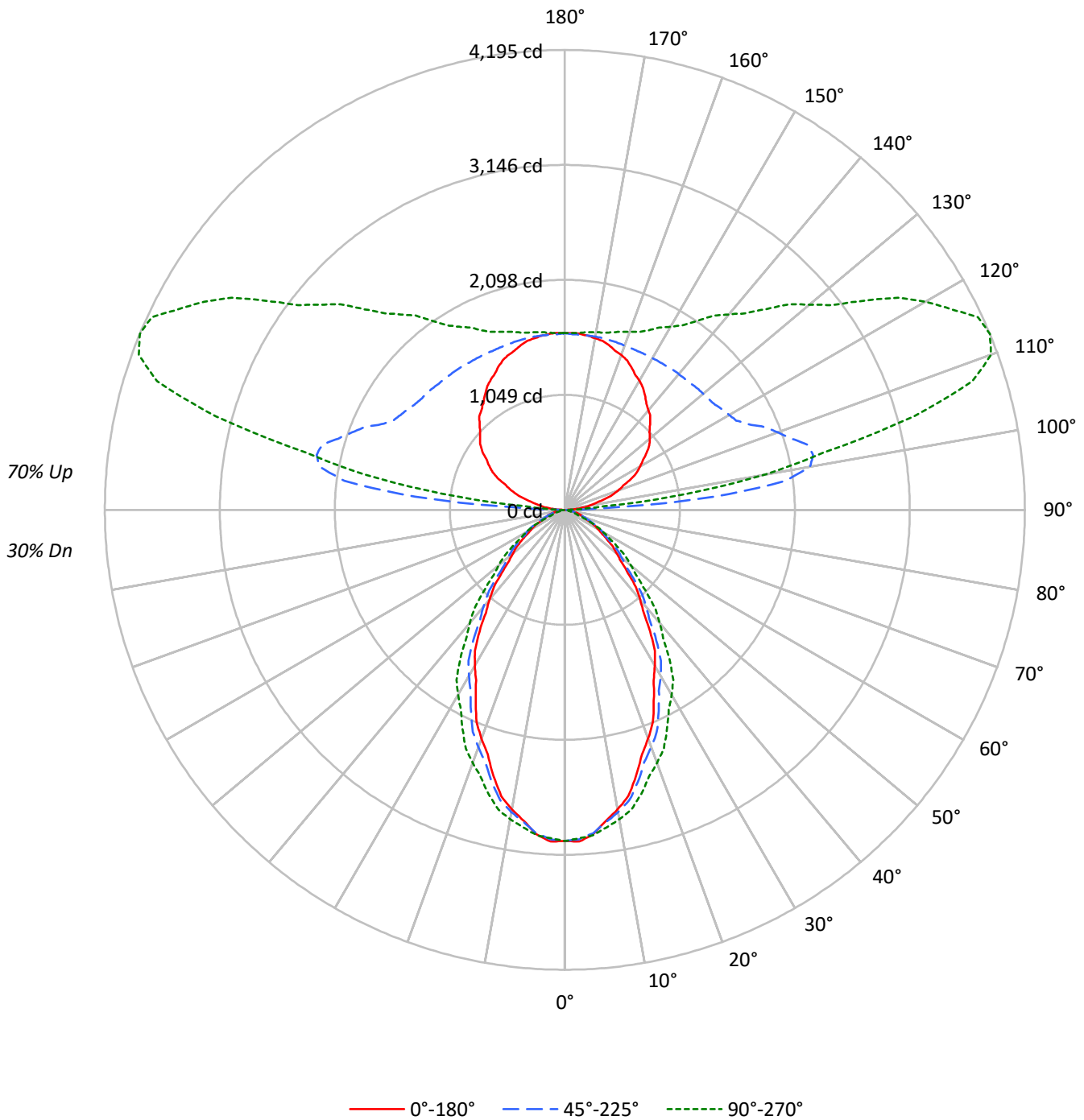
Lumens per Lamp: N/A  
Luminaire Lumens: 14873.5 lumens  
Efficiency: N/A  
Efficacy: 116.7 lumens/watt  
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02  
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')  
CIE Type: Semi-Indirect

Input Watts (W): 127.4  
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	102	102	102	102	92	92	92	92	72	72	72	54	54	54	37	37	37	30
1	94	90	86	83	84	81	78	75	64	62	60	48	47	46	34	33	33	26
2	86	79	74	69	77	72	67	63	57	54	51	43	41	40	31	30	29	23
3	79	70	64	58	71	64	58	53	51	47	44	39	36	34	28	27	25	20
4	72	63	55	50	65	57	51	46	46	41	38	35	32	30	25	24	22	18
5	67	56	49	43	60	51	44	40	41	36	33	32	29	26	23	21	20	16
6	62	50	43	38	55	46	39	35	37	33	29	29	26	23	21	19	18	15
7	57	46	38	33	51	42	35	31	34	29	26	27	23	21	20	18	16	13
8	53	42	34	29	48	38	32	27	31	26	23	24	21	19	18	16	15	12
9	49	38	31	26	44	35	29	24	28	24	21	23	19	17	17	15	14	11
10	46	35	28	24	42	32	26	22	26	22	19	21	18	16	16	14	12	10

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	9288	9288	9288
5°	9172	9140	9193
10°	8666	8744	8947
15°	8000	8185	8553
20°	7265	7538	8037
25°	6516	6871	7487
30°	5826	6207	6918
35°	5095	5463	6244
40°	4288	4628	5405
45°	3539	3844	4513
50°	2954	3221	3760
55°	2508	2764	3105
60°	2144	2396	2478
65°	1707	2016	1601
70°	1513	1573	977
75°	1401	1275	599
80°	1291	1174	517
85°	1168	1076	420



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	277.0	1.9
10°-20°	720.5	4.8
20°-30°	933.3	6.3
30°-40°	913.9	6.1
40°-50°	699.6	4.7
50°-60°	466.1	3.1
60°-70°	254.4	1.7
70°-80°	106.0	0.7
80°-90°	33.3	0.2
90°-100°	754.6	5.1
100°-110°	2083.1	14.0
110°-120°	2148.4	14.4
120°-130°	1726.4	11.6
130°-140°	1356.8	9.1
140°-150°	1040.6	7.0
150°-160°	747.9	5.0
160°-170°	457.3	3.1
170°-180°	154.2	1.0
0°-30°	1930.8	13.0
0°-40°	2844.8	19.1
0°-60°	4010.5	27.0
0°-90°	4404.2	29.6
90°-120°	4986.1	33.5
90°-150°	9109.9	61.2
90°-180°	10469.0	70.4
0°-180°	14873.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	3020	3020	3020	3020	3020	
5°	2971	2941	2960	2967	2978	276
15°	2513	2504	2571	2641	2686	702
25°	1920	1925	2025	2113	2206	883
35°	1357	1364	1455	1553	1663	844
45°	814	829	884	951	1038	635
55°	468	487	516	535	579	424
65°	235	254	277	242	220	244
75°	118	118	107	74	50	126
85°	33	33	30	20	12	36
90°	5	10	21	23	26	10
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°	3020.1	3020.1	3020.1	3020.1	3020.1
2.5°	3027.5	3000.6	3007.4	3007.2	2998.9
5°	2971.1	2941.3	2960.5	2967.3	2977.7
7.5°	2860.8	2838.3	2873.3	2899.2	2920.2
10°	2775.0	2755.5	2800.1	2837.9	2865.1
12.5°	2675.3	2659.0	2714.3	2764.9	2800.4
15°	2512.6	2503.5	2570.9	2640.8	2686.2
17.5°	2338.4	2334.0	2411.3	2492.9	2551.0
20°	2219.7	2218.4	2303.2	2388.2	2455.6
22.5°	2099.9	2102.8	2191.9	2280.3	2357.0
25°	1920.2	1925.4	2024.9	2113.2	2206.4
27.5°	1754.0	1756.4	1859.2	1952.4	2051.9
30°	1640.6	1647.1	1747.9	1844.4	1948.0
32.5°	1527.2	1534.7	1633.4	1733.1	1838.8
35°	1357.0	1363.5	1455.1	1553.0	1663.1
37.5°	1181.5	1190.4	1271.7	1364.2	1472.6
40°	1068.1	1081.1	1152.9	1240.1	1346.4
42.5°	958.9	975.0	1041.6	1124.4	1220.2
45°	813.7	829.2	883.9	950.8	1037.6
47.5°	688.6	706.5	748.5	806.1	880.2
50°	617.5	634.4	673.2	715.9	785.8
52.5°	555.0	571.8	606.4	639.3	698.9
55°	467.8	487.2	515.5	535.1	579.1
57.5°	396.2	414.9	437.3	446.1	472.8
60°	348.5	369.3	389.6	388.6	402.9
62.5°	305.1	322.7	343.0	328.9	329.7
65°	234.6	254.0	277.0	242.0	220.0
67.5°	189.5	193.6	217.3	168.8	142.6
70°	168.3	168.3	174.9	130.7	108.7
72.5°	148.2	148.2	142.1	106.3	83.2
75°	117.9	117.9	107.3	73.7	50.4
77.5°	90.9	89.9	82.2	55.0	36.6
80°	72.9	72.9	66.3	43.4	29.2
82.5°	57.0	57.0	51.4	33.9	21.7
85°	33.1	33.1	30.5	19.7	11.9
87.5°	12.7	13.7	14.7	11.0	10.5
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)