

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: P519395

Luminaire Tested: **SQ4-WB-100U-075D-935-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P519395  
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-075D-935-1D-UNV-STD-W-12  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE  
DOWNLIGHT 750 LUMENS PER FOOT  
UPLIGHT 1000 LUMENS PER FOOT  
Light Source: 3500K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

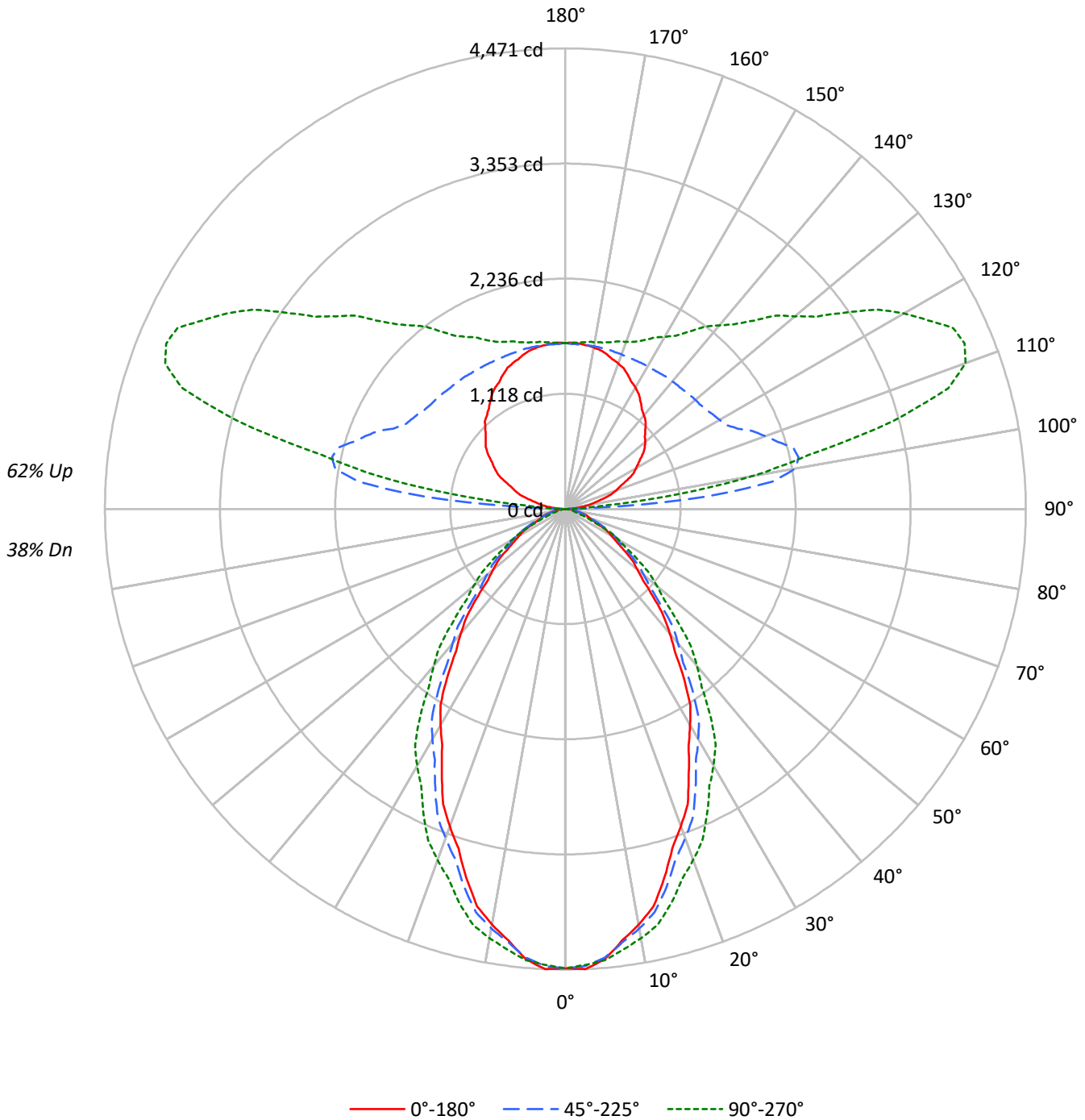
Lumens per Lamp: N/A  
Luminaire Lumens: 16972.1 lumens  
Efficiency: N/A  
Efficacy: 110.6 lumens/watt  
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02  
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')  
CIE Type: Semi-Indirect

Input Watts (W): 153.4  
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	95	95	95	95	77	77	77	60	60	60	45	45	45	38
1	96	92	89	85	87	84	81	78	69	67	65	54	53	52	41	41	40	34
2	88	81	76	71	80	74	70	66	61	58	55	49	47	45	38	36	35	30
3	81	72	66	60	74	66	61	56	55	51	47	44	41	39	34	32	31	26
4	75	65	57	52	68	59	53	48	49	45	41	40	37	34	31	29	27	24
5	69	58	51	45	62	53	47	42	45	40	36	36	33	30	29	26	25	21
6	64	52	45	40	58	48	42	37	40	36	32	33	30	27	26	24	22	19
7	59	48	40	35	54	44	37	33	37	32	29	30	27	24	24	22	20	17
8	55	43	36	31	50	40	34	29	34	29	26	28	24	22	23	20	18	16
9	51	40	33	28	47	37	31	26	31	26	23	26	22	20	21	19	17	15
10	48	37	30	25	44	34	28	24	29	24	21	24	21	18	20	17	15	13

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

	0°	45°	90°
0°	13717	13717	13717
5°	13546	13498	13576
10°	12798	12914	13214
15°	11814	12089	12631
20°	10729	11132	11869
25°	9623	10148	11058
30°	8604	9167	10217
35°	7524	8068	9221
40°	6333	6836	7983
45°	5227	5678	6665
50°	4363	4757	5553
55°	3704	4082	4586
60°	3166	3539	3660
65°	2521	2976	2364
70°	2235	2323	1443
75°	2070	1883	884
80°	1906	1734	763
85°	1725	1588	621



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	409.1	2.4
10°-20°	1064.1	6.3
20°-30°	1378.4	8.1
30°-40°	1349.8	8.0
40°-50°	1033.1	6.1
50°-60°	688.4	4.1
60°-70°	375.7	2.2
70°-80°	156.5	0.9
80°-90°	47.7	0.3
90°-100°	754.6	4.4
100°-110°	2083.1	12.3
110°-120°	2148.4	12.7
120°-130°	1726.4	10.2
130°-140°	1356.8	8.0
140°-150°	1040.6	6.1
150°-160°	747.9	4.4
160°-170°	457.3	2.7
170°-180°	154.2	0.9
0°-30°	2851.6	16.8
0°-40°	4201.4	24.8
0°-60°	5923.0	34.9
0°-90°	6502.8	38.3
90°-120°	4986.1	29.4
90°-150°	9109.9	53.7
90°-180°	10469.0	61.7
0°-180°	16972.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	4460	4460	4460	4460	4460	
5°	4388	4344	4372	4382	4398	408
15°	3711	3697	3797	3900	3967	1036
25°	2836	2844	2990	3121	3259	1304
35°	2004	2014	2149	2294	2456	1246
45°	1202	1225	1305	1404	1532	937
55°	691	720	761	790	855	626
65°	346	375	409	357	325	360
75°	174	174	158	109	74	186
85°	49	49	45	29	18	53
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°	4460.3	4460.3	4460.3	4460.3	4460.3
2.5°	4471.3	4431.5	4441.5	4441.3	4429.0
5°	4387.9	4343.9	4372.3	4382.4	4397.7
7.5°	4225.1	4191.8	4243.5	4281.8	4312.8
10°	4098.3	4069.6	4135.4	4191.2	4231.3
12.5°	3951.1	3927.0	4008.6	4083.4	4135.8
15°	3710.7	3697.3	3796.9	3900.1	3967.1
17.5°	3453.6	3447.1	3561.2	3681.8	3767.5
20°	3278.2	3276.3	3401.5	3527.1	3626.6
22.5°	3101.3	3105.5	3237.1	3367.7	3481.0
25°	2835.9	2843.6	2990.5	3120.9	3258.6
27.5°	2590.5	2593.9	2745.9	2883.5	3030.4
30°	2422.9	2432.5	2581.5	2723.9	2877.0
32.5°	2255.4	2266.5	2412.4	2559.6	2715.7
35°	2004.1	2013.7	2148.9	2293.6	2456.2
37.5°	1745.0	1758.0	1878.1	2014.8	2174.8
40°	1577.5	1596.6	1702.7	1831.5	1988.5
42.5°	1416.2	1439.9	1538.3	1660.5	1802.1
45°	1201.7	1224.6	1305.4	1404.2	1532.4
47.5°	1016.9	1043.3	1105.4	1190.5	1299.9
50°	912.0	936.9	994.2	1057.2	1160.6
52.5°	819.7	844.5	895.6	944.2	1032.2
55°	690.9	719.6	761.3	790.2	855.3
57.5°	585.2	612.7	645.9	658.9	698.3
60°	514.7	545.3	575.4	573.9	595.0
62.5°	450.5	476.6	506.5	485.8	486.9
65°	346.4	375.1	409.0	357.4	324.9
67.5°	279.9	286.0	321.0	249.2	210.6
70°	248.6	248.6	258.3	193.0	160.5
72.5°	218.8	218.8	209.8	157.0	122.9
75°	174.2	174.2	158.5	108.8	74.4
77.5°	134.3	132.7	121.3	81.2	54.0
80°	107.6	107.6	97.9	64.1	43.1
82.5°	84.2	84.2	75.9	50.1	32.1
85°	48.9	48.9	45.0	29.1	17.6
87.5°	18.3	19.3	19.8	14.0	13.0
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)