

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: P519567

Luminaire Tested: **SQ4-WB-150U-050D-940-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P519567
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-050D-940-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 1500 LUMENS PER FOOT
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

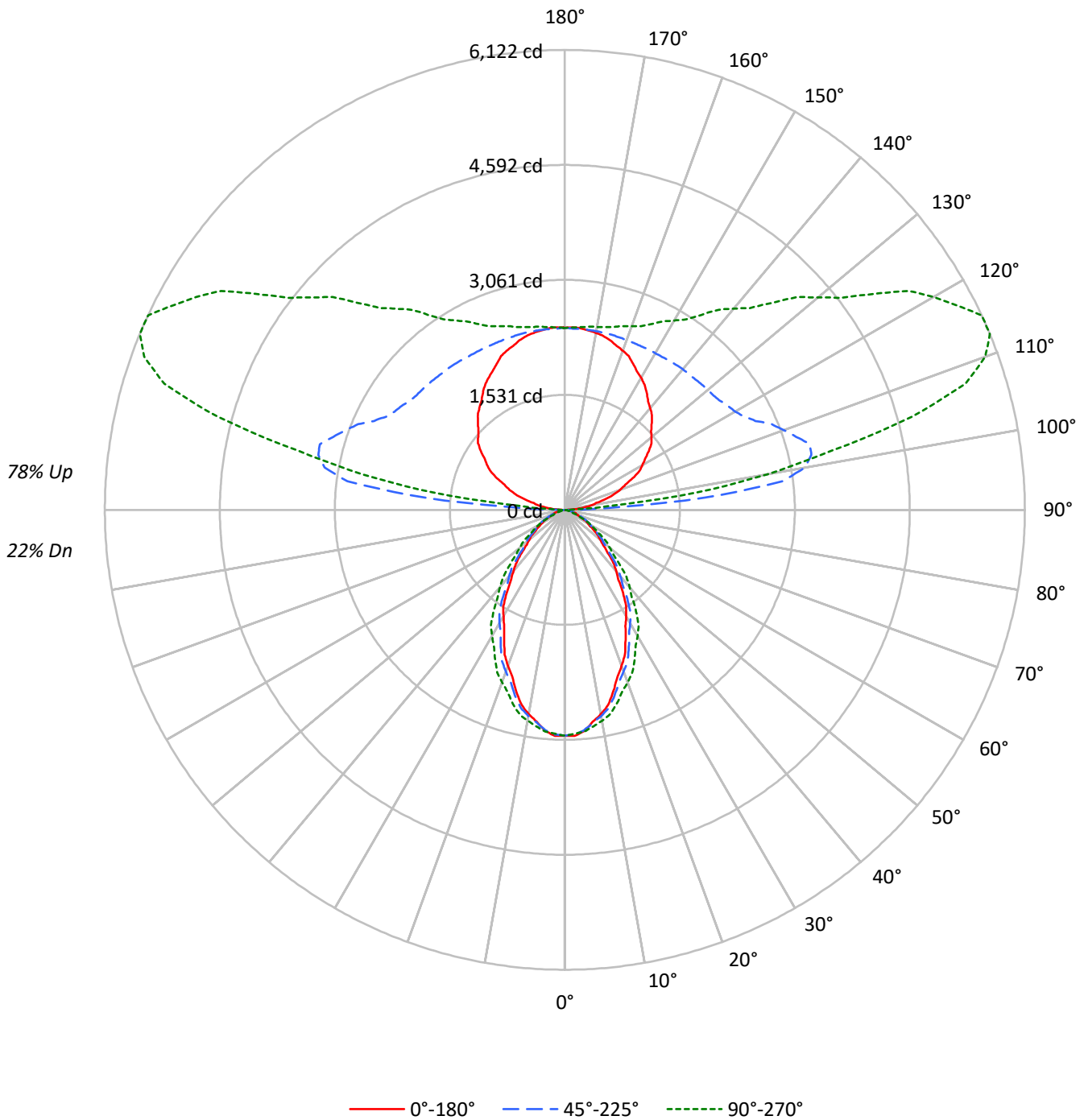
Lumens per Lamp: N/A
Luminaire Lumens: 20006.3 lumens
Efficiency: N/A
Efficacy: 118.5 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 168.9
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	100	100	100	100	89	89	89	89	68	68	68	48	48	48	30	30	30	22
1	92	88	84	81	81	78	75	73	60	58	56	43	42	41	27	27	26	19
2	84	77	72	67	74	69	64	60	53	50	47	38	37	35	25	24	23	17
3	77	68	62	56	68	61	56	51	47	43	40	34	32	30	22	21	20	15
4	71	61	54	48	63	54	48	44	42	38	35	31	28	26	20	19	18	13
5	65	54	47	41	57	49	42	38	38	34	30	28	25	23	19	17	16	12
6	60	49	41	36	53	44	37	33	34	30	26	25	23	20	17	16	14	11
7	55	44	37	32	49	40	33	29	31	27	23	23	20	18	16	14	13	10
8	51	40	33	28	46	36	30	25	28	24	21	21	18	16	15	13	12	9
9	48	36	29	25	42	33	27	23	26	22	19	20	17	15	14	12	11	8
10	45	33	27	22	40	30	24	20	24	20	17	18	15	13	13	11	10	8

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9241	9241	9241
5°	9126	9093	9146
10°	8622	8700	8902
15°	7959	8144	8509
20°	7228	7500	7996
25°	6483	6836	7449
30°	5797	6176	6883
35°	5069	5435	6212
40°	4266	4605	5378
45°	3521	3825	4490
50°	2940	3205	3741
55°	2495	2750	3089
60°	2133	2384	2465
65°	1698	2006	1593
70°	1505	1565	972
75°	1394	1269	595
80°	1284	1167	514
85°	1164	1069	420



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	275.6	1.4
10°-20°	716.9	3.6
20°-30°	928.6	4.6
30°-40°	909.3	4.5
40°-50°	696.0	3.5
50°-60°	463.8	2.3
60°-70°	253.1	1.3
70°-80°	105.4	0.5
80°-90°	34.9	0.2
90°-100°	1126.1	5.6
100°-110°	3044.8	15.2
110°-120°	3201.2	16.0
120°-130°	2600.2	13.0
130°-140°	2039.6	10.2
140°-150°	1565.4	7.8
150°-160°	1125.8	5.6
160°-170°	687.8	3.4
170°-180°	231.9	1.2
0°-30°	1921.0	9.6
0°-40°	2830.3	14.1
0°-60°	3990.1	19.9
0°-90°	4383.5	21.9
90°-120°	7372.0	36.8
90°-150°	13577.3	67.9
90°-180°	15623.0	78.1
0°-180°	20006.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3005	3005	3005	3005	3005	
5°	2956	2926	2945	2952	2963	275
15°	2500	2491	2558	2627	2672	698
25°	1910	1916	2015	2102	2195	879
35°	1350	1357	1448	1545	1655	839
45°	810	825	879	946	1032	631
55°	465	485	513	532	576	422
65°	233	253	276	241	219	243
75°	117	117	107	73	50	125
85°	33	33	30	20	12	36
90°	5	15	34	36	34	13
95°	175	613	1873	969	576	183
105°	566	875	3378	4982	4778	596
115°	996	1218	2801	5423	6122	984
125°	1364	1563	2525	4261	5005	1216
135°	1635	1829	2457	3440	3894	1264
145°	1902	2044	2423	2945	3169	1190
155°	2147	2231	2402	2642	2728	990
165°	2337	2360	2413	2507	2520	658
175°	2426	2423	2415	2446	2441	230
180°	2423	2423	2423	2423	2423	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3004.8	3004.8	3004.8	3004.8	3004.8
2.5°	3012.2	2985.3	2992.1	2991.9	2983.7
5°	2956.0	2926.3	2945.4	2952.3	2962.6
7.5°	2846.3	2823.9	2858.7	2884.5	2905.4
10°	2760.9	2741.5	2785.9	2823.4	2850.5
12.5°	2661.7	2645.5	2700.5	2750.9	2786.2
15°	2499.8	2490.8	2557.8	2627.4	2672.5
17.5°	2326.6	2322.2	2399.1	2480.3	2538.0
20°	2208.4	2207.1	2291.5	2376.1	2443.1
22.5°	2089.2	2092.1	2180.7	2268.7	2345.0
25°	1910.5	1915.6	2014.6	2102.4	2195.2
27.5°	1745.1	1747.4	1849.8	1942.5	2041.5
30°	1632.3	1638.7	1739.1	1835.0	1938.1
32.5°	1519.4	1526.9	1625.1	1724.3	1829.5
35°	1350.1	1356.6	1447.7	1545.1	1654.7
37.5°	1175.5	1184.3	1265.2	1357.3	1465.1
40°	1062.7	1075.6	1147.1	1233.8	1339.6
42.5°	954.0	970.0	1036.3	1118.6	1214.0
45°	809.5	825.0	879.4	946.0	1032.4
47.5°	685.1	702.9	744.7	802.0	875.7
50°	614.4	631.2	669.8	712.2	781.8
52.5°	552.2	568.9	603.3	636.1	695.4
55°	465.4	484.8	512.9	532.3	576.2
57.5°	394.2	412.8	435.1	443.9	470.4
60°	346.8	367.4	387.6	386.6	400.8
62.5°	303.5	321.0	341.2	327.3	328.0
65°	233.4	252.7	275.6	240.8	218.9
67.5°	188.5	192.7	216.2	167.9	141.9
70°	167.4	167.4	174.0	130.0	108.1
72.5°	147.4	147.4	141.3	105.7	82.8
75°	117.3	117.3	106.8	73.3	50.1
77.5°	90.4	89.4	81.7	54.7	36.4
80°	72.5	72.5	65.9	43.2	29.0
82.5°	56.7	56.7	51.2	33.7	21.6
85°	33.0	33.0	30.3	19.6	11.9
87.5°	12.6	14.7	17.3	13.6	12.1
90°	5.2	15.4	33.9	36.5	33.9
92.5°	74.1	269.9	532.6	231.2	167.5
95°	174.8	613.4	1872.8	969.2	576.4
97.5°	280.7	703.5	2919.2	2415.8	1774.2
100°	359.9	739.9	3244.7	3383.9	2736.1
102.5°	433.0	790.5	3359.5	4117.9	3633.4
105°	566.0	874.6	3377.8	4982.5	4778.4
107.5°	689.1	970.7	3230.1	5521.8	5589.6
110°	785.1	1040.1	3098.7	5666.6	5954.8



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	870.7	1109.4	2977.7	5637.7	6121.7
115°	996.4	1218.3	2801.3	5422.9	6121.7
117.5°	1119.5	1327.6	2685.0	5094.8	5887.0
120°	1194.6	1398.6	2616.1	4859.4	5667.9
122.5°	1265.6	1465.5	2574.4	4607.1	5421.6
125°	1364.1	1563.1	2524.8	4260.7	5005.4
127.5°	1454.9	1650.3	2495.6	3978.0	4632.9
130°	1505.0	1706.5	2483.1	3803.3	4395.0
132.5°	1557.2	1756.6	2470.6	3645.8	4190.5
135°	1635.4	1829.2	2457.0	3440.2	3894.2
137.5°	1714.2	1897.3	2445.6	3273.5	3643.3
140°	1768.4	1939.3	2441.4	3166.1	3495.1
142.5°	1820.6	1981.3	2433.0	3069.2	3357.4
145°	1901.5	2044.3	2423.1	2944.7	3169.1
147.5°	1975.0	2101.5	2411.6	2831.9	3004.3
150°	2029.3	2141.5	2407.5	2770.6	2908.3
152.5°	2079.3	2177.3	2405.4	2713.7	2826.9
155°	2146.6	2230.8	2402.3	2641.6	2728.3
157.5°	2216.5	2275.2	2402.8	2591.4	2648.5
160°	2256.2	2304.6	2404.9	2559.7	2600.5
162.5°	2287.5	2327.8	2407.0	2534.4	2565.0
165°	2337.0	2360.0	2412.7	2506.9	2519.6
167.5°	2371.0	2386.8	2413.2	2483.3	2489.4
170°	2391.8	2399.5	2415.3	2472.7	2472.7
172.5°	2408.5	2410.0	2415.3	2460.1	2458.1
175°	2425.7	2423.2	2415.3	2446.5	2441.4
177.5°	2431.5	2425.3	2414.8	2435.5	2429.4
180°	2423.1	2423.1	2423.1	2423.1	2423.1

(END OF REPORT)