

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: P519551

Luminaire Tested: **SQ4-WB-150U-050D-835-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P519551
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-835-1D-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: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

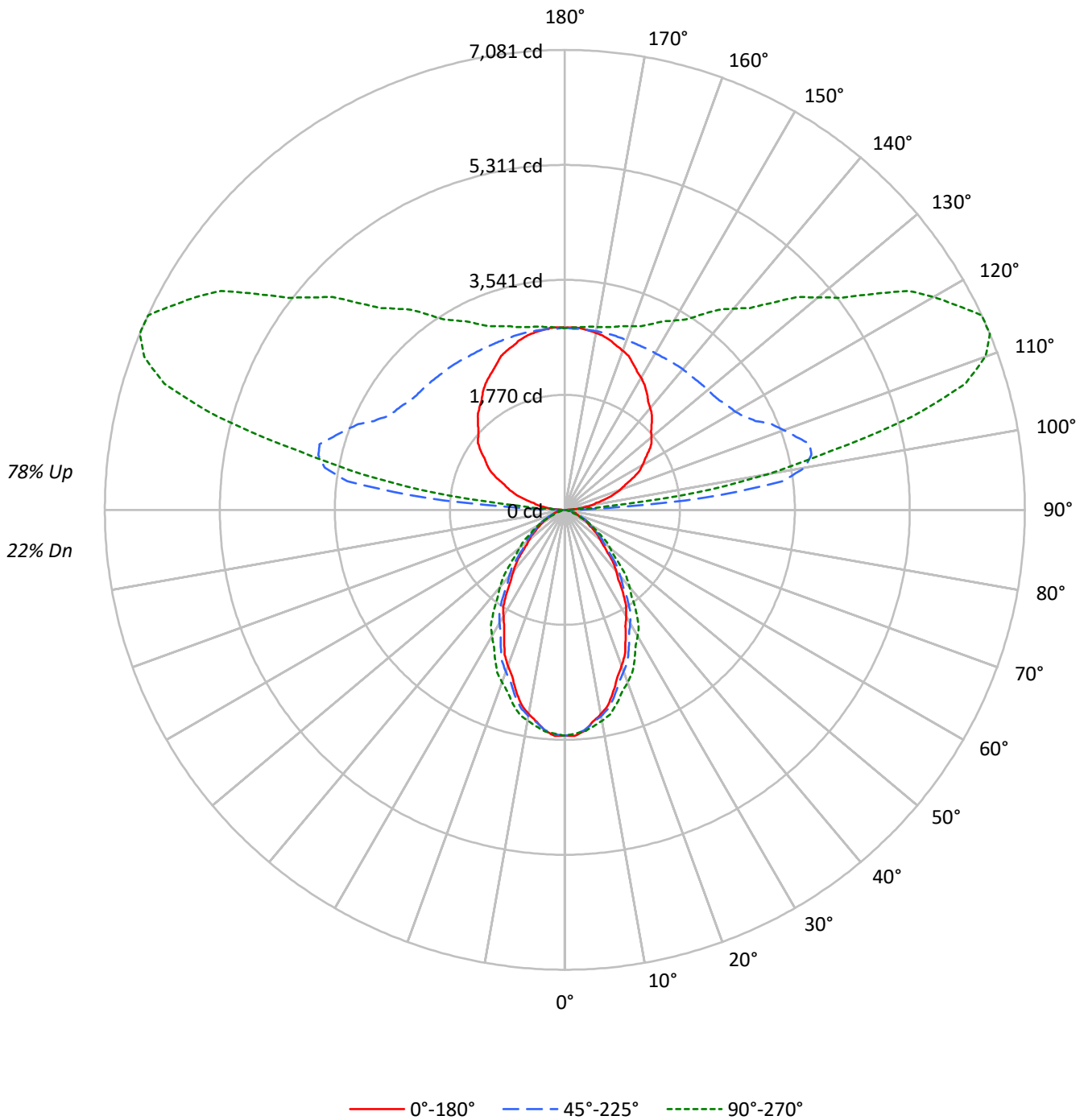
Lumens per Lamp: N/A
Luminaire Lumens: 23142.7 lumens
Efficiency: N/A
Efficacy: 137.0 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: Semi-Indirect

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°	10689	10689	10689
5°	10556	10519	10580
10°	9973	10064	10297
15°	9207	9420	9843
20°	8361	8675	9249
25°	7499	7908	8617
30°	6705	7144	7962
35°	5864	6287	7186
40°	4935	5327	6221
45°	4073	4425	5194
50°	3400	3707	4327
55°	2887	3181	3574
60°	2467	2758	2852
65°	1965	2320	1843
70°	1742	1810	1125
75°	1612	1467	689
80°	1486	1351	595
85°	1344	1239	483



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	318.8	1.4
10°-20°	829.2	3.6
20°-30°	1074.1	4.6
30°-40°	1051.8	4.5
40°-50°	805.1	3.5
50°-60°	536.5	2.3
60°-70°	292.8	1.3
70°-80°	122.0	0.5
80°-90°	40.4	0.2
90°-100°	1302.7	5.6
100°-110°	3522.1	15.2
110°-120°	3703.0	16.0
120°-130°	3007.8	13.0
130°-140°	2359.4	10.2
140°-150°	1810.8	7.8
150°-160°	1302.3	5.6
160°-170°	795.6	3.4
170°-180°	268.2	1.2
0°-30°	2222.2	9.6
0°-40°	3274.0	14.1
0°-60°	4615.6	19.9
0°-90°	5070.8	21.9
90°-120°	8527.7	36.8
90°-150°	15705.8	67.9
90°-180°	18072.0	78.1
0°-180°	23142.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3476	3476	3476	3476	3476	
5°	3419	3385	3407	3415	3427	318
15°	2892	2881	2959	3039	3092	808
25°	2210	2216	2330	2432	2539	1016
35°	1562	1569	1675	1787	1914	971
45°	936	954	1017	1094	1194	730
55°	538	561	593	616	666	488
65°	270	292	319	278	253	281
75°	136	136	124	85	58	145
85°	38	38	35	23	14	42
90°	6	18	39	42	39	15
95°	202	710	2166	1121	667	212
105°	655	1012	3907	5764	5528	690
115°	1153	1409	3240	6273	7081	1138
125°	1578	1808	2921	4929	5790	1407
135°	1892	2116	2842	3980	4505	1462
145°	2200	2365	2803	3406	3666	1376
155°	2483	2580	2779	3056	3156	1145
165°	2703	2730	2791	2900	2915	762
175°	2806	2803	2794	2830	2824	266
180°	2803	2803	2803	2803	2803	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3475.8	3475.8	3475.8	3475.8	3475.8
2.5°	3484.4	3453.3	3461.2	3461.0	3451.4
5°	3419.4	3385.1	3407.2	3415.1	3427.0
7.5°	3292.5	3266.5	3306.8	3336.7	3360.8
10°	3193.7	3171.3	3222.6	3266.1	3297.4
12.5°	3079.0	3060.2	3123.8	3182.1	3223.0
15°	2891.7	2881.2	2958.8	3039.3	3091.5
17.5°	2691.3	2686.2	2775.2	2869.1	2935.9
20°	2554.6	2553.1	2650.7	2748.6	2826.1
22.5°	2416.8	2420.0	2522.6	2624.4	2712.6
25°	2209.9	2215.9	2330.4	2432.0	2539.4
27.5°	2018.7	2021.4	2139.8	2247.0	2361.5
30°	1888.1	1895.6	2011.7	2122.7	2242.0
32.5°	1757.6	1766.2	1879.9	1994.6	2116.3
35°	1561.8	1569.2	1674.6	1787.3	1914.1
37.5°	1359.8	1370.0	1463.5	1570.1	1694.7
40°	1229.3	1244.2	1326.9	1427.3	1549.6
42.5°	1103.6	1122.1	1198.8	1294.0	1404.4
45°	936.4	954.3	1017.3	1094.3	1194.2
47.5°	792.5	813.0	861.4	927.7	1013.0
50°	710.7	730.1	774.8	823.9	904.4
52.5°	638.7	658.1	697.9	735.8	804.4
55°	538.4	560.7	593.3	615.8	666.5
57.5°	456.0	477.5	503.3	513.5	544.2
60°	401.1	425.0	448.4	447.2	463.6
62.5°	351.1	371.4	394.7	378.6	379.5
65°	270.0	292.3	318.8	278.5	253.2
67.5°	218.1	222.9	250.1	194.2	164.1
70°	193.7	193.7	201.3	150.4	125.1
72.5°	170.5	170.5	163.5	122.3	95.8
75°	135.7	135.7	123.5	84.8	58.0
77.5°	104.6	103.4	94.6	63.3	42.1
80°	83.9	83.9	76.3	50.0	33.6
82.5°	65.6	65.6	59.2	39.0	25.0
85°	38.1	38.1	35.1	22.7	13.7
87.5°	14.6	17.0	20.0	15.7	13.9
90°	6.0	17.8	39.2	42.2	39.2
92.5°	85.7	312.3	616.1	267.5	193.7
95°	202.2	709.6	2166.4	1121.1	666.8
97.5°	324.7	813.8	3376.9	2794.6	2052.3
100°	416.4	855.9	3753.4	3914.4	3165.0
102.5°	500.9	914.5	3886.2	4763.5	4203.0
105°	654.7	1011.7	3907.3	5763.5	5527.5
107.5°	797.1	1122.8	3736.5	6387.4	6465.9
110°	908.2	1203.2	3584.4	6554.9	6888.3

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	1007.1	1283.3	3444.4	6521.4	7081.4
115°	1152.6	1409.2	3240.5	6273.0	7081.4
117.5°	1295.0	1535.7	3105.9	5893.5	6809.8
120°	1381.9	1617.9	3026.3	5621.2	6556.4
122.5°	1463.9	1695.2	2978.0	5329.3	6271.6
125°	1578.0	1808.1	2920.7	4928.6	5790.0
127.5°	1683.0	1909.0	2886.9	4601.6	5359.2
130°	1740.9	1974.0	2872.4	4399.5	5084.0
132.5°	1801.3	2032.0	2857.9	4217.3	4847.4
135°	1891.8	2116.0	2842.2	3979.6	4504.7
137.5°	1982.9	2194.7	2828.9	3786.7	4214.4
140°	2045.7	2243.3	2824.1	3662.5	4043.1
142.5°	2106.0	2291.9	2814.4	3550.4	3883.7
145°	2199.5	2364.7	2803.0	3406.3	3665.9
147.5°	2284.6	2431.0	2789.7	3275.8	3475.2
150°	2347.4	2477.2	2784.9	3204.9	3364.2
152.5°	2405.3	2518.6	2782.5	3139.1	3270.0
155°	2483.2	2580.5	2778.8	3055.7	3156.0
157.5°	2564.0	2631.9	2779.4	2997.6	3063.7
160°	2609.9	2665.9	2781.9	2960.9	3008.2
162.5°	2646.1	2692.7	2784.3	2931.7	2967.1
165°	2703.4	2730.0	2790.9	2899.9	2914.6
167.5°	2742.6	2760.9	2791.5	2872.5	2879.6
170°	2766.8	2775.6	2793.9	2860.3	2860.3
172.5°	2786.1	2787.9	2793.9	2845.8	2843.4
175°	2806.0	2803.0	2793.9	2830.0	2824.1
177.5°	2812.6	2805.6	2793.3	2817.3	2810.2
180°	2803.0	2803.0	2803.0	2803.0	2803.0

(END OF REPORT)