

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: P519355

Luminaire Tested: **SQ4-WB-100U-050D-830-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P519355
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-830-1D-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: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

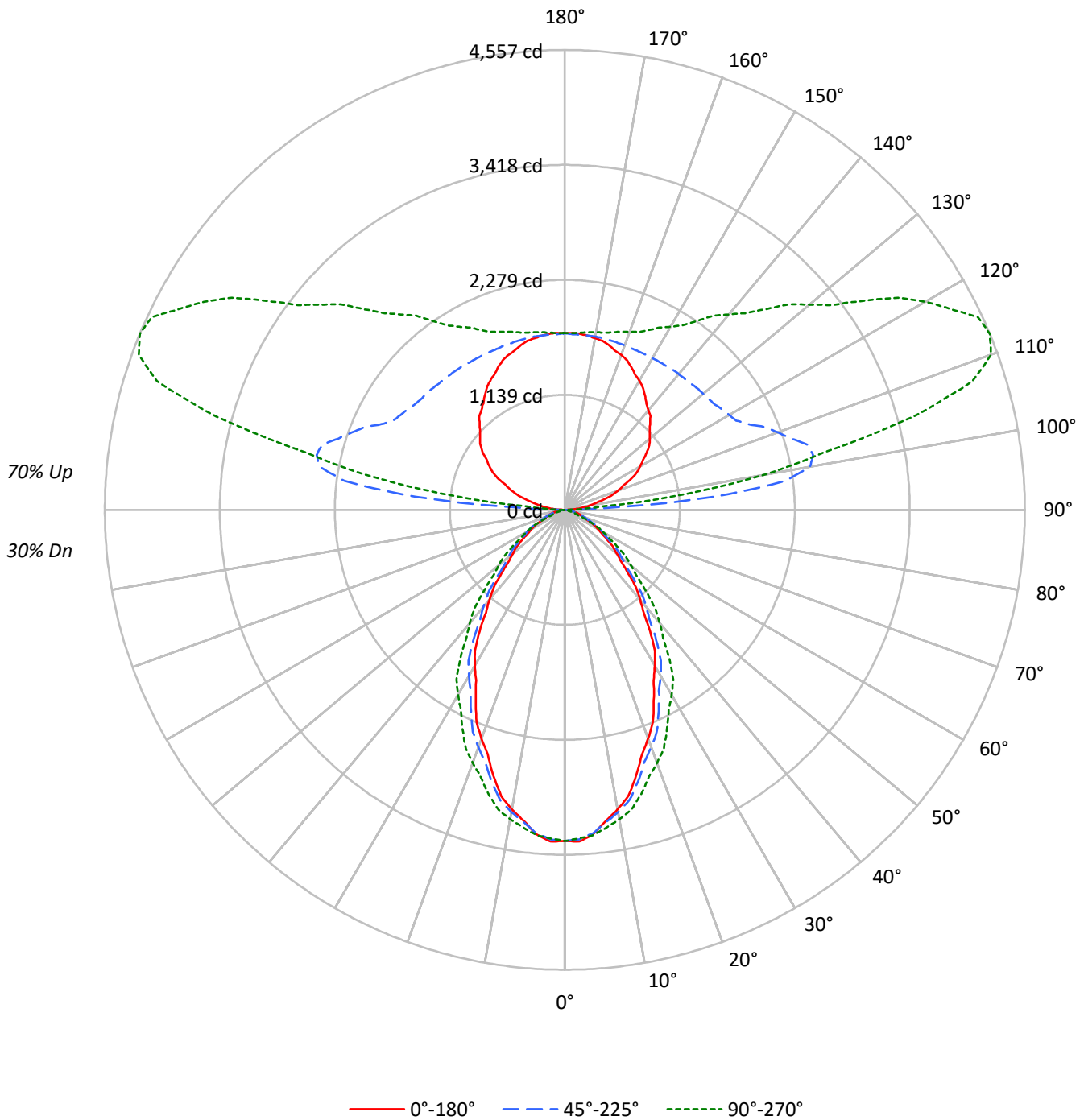
Lumens per Lamp: N/A
Luminaire Lumens: 16157.2 lumens
Efficiency: N/A
Efficacy: 126.8 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: Semi-Indirect

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°	10090	10090	10090
5°	9964	9928	9986
10°	9414	9499	9720
15°	8690	8892	9291
20°	7892	8188	8730
25°	7078	7464	8133
30°	6329	6743	7515
35°	5534	5935	6783
40°	4658	5028	5872
45°	3844	4176	4903
50°	3209	3499	4085
55°	2725	3003	3373
60°	2329	2603	2692
65°	1854	2190	1739
70°	1644	1708	1061
75°	1522	1385	650
80°	1403	1275	561
85°	1270	1168	459



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	300.9	1.9
10°-20°	782.7	4.8
20°-30°	1013.9	6.3
30°-40°	992.8	6.1
40°-50°	759.9	4.7
50°-60°	506.4	3.1
60°-70°	276.3	1.7
70°-80°	115.1	0.7
80°-90°	36.2	0.2
90°-100°	819.7	5.1
100°-110°	2262.9	14.0
110°-120°	2333.8	14.4
120°-130°	1875.4	11.6
130°-140°	1473.9	9.1
140°-150°	1130.4	7.0
150°-160°	812.4	5.0
160°-170°	496.8	3.1
170°-180°	167.5	1.0
0°-30°	2097.5	13.0
0°-40°	3090.3	19.1
0°-60°	4356.6	27.0
0°-90°	4784.4	29.6
90°-120°	5416.4	33.5
90°-150°	9896.1	61.2
90°-180°	11373.0	70.4
0°-180°	16157.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3281	3281	3281	3281	3281	
5°	3228	3195	3216	3224	3235	300
15°	2729	2720	2793	2869	2918	762
25°	2086	2092	2200	2296	2397	959
35°	1474	1481	1581	1687	1807	916
45°	884	901	960	1033	1127	689
55°	508	529	560	581	629	461
65°	255	276	301	263	239	265
75°	128	128	117	80	55	137
85°	36	36	33	21	13	39
90°	6	11	22	25	28	10
95°	120	444	1487	611	398	129
105°	403	622	2490	3801	3579	429
115°	722	873	2005	3970	4514	710
125°	991	1128	1818	3076	3610	882
135°	1193	1322	1767	2491	2809	923
145°	1384	1479	1745	2121	2282	866
155°	1560	1612	1731	1903	1963	719
165°	1689	1711	1739	1807	1820	476
175°	1750	1753	1742	1767	1762	166
180°	1750	1750	1750	1750	1750	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3280.8	3280.8	3280.8	3280.8	3280.8
2.5°	3288.9	3259.6	3267.0	3266.8	3257.8
5°	3227.5	3195.2	3216.0	3223.5	3234.7
7.5°	3107.8	3083.3	3121.3	3149.5	3172.3
10°	3014.5	2993.4	3041.8	3082.8	3112.4
12.5°	2906.2	2888.5	2948.5	3003.5	3042.1
15°	2729.4	2719.6	2792.8	2868.8	2918.0
17.5°	2540.3	2535.5	2619.5	2708.1	2771.2
20°	2411.3	2409.9	2502.0	2594.3	2667.5
22.5°	2281.2	2284.3	2381.1	2477.1	2560.4
25°	2085.9	2091.6	2199.7	2295.6	2396.9
27.5°	1905.4	1908.0	2019.7	2120.9	2229.0
30°	1782.2	1789.2	1898.8	2003.6	2116.2
32.5°	1659.0	1667.1	1774.4	1882.7	1997.6
35°	1474.1	1481.2	1580.7	1687.0	1806.7
37.5°	1283.5	1293.1	1381.4	1482.0	1599.7
40°	1160.3	1174.4	1252.4	1347.2	1462.6
42.5°	1041.7	1059.1	1131.5	1221.4	1325.6
45°	883.9	900.8	960.2	1032.9	1127.2
47.5°	748.0	767.4	813.1	875.7	956.2
50°	670.8	689.1	731.3	777.7	853.7
52.5°	602.9	621.2	658.8	694.5	759.2
55°	508.2	529.3	560.0	581.2	629.1
57.5°	430.4	450.7	475.1	484.6	513.6
60°	378.6	401.1	423.2	422.1	437.6
62.5°	331.4	350.5	372.6	357.3	358.2
65°	254.8	275.9	300.9	262.9	239.0
67.5°	205.9	210.4	236.1	183.3	154.9
70°	182.8	182.8	190.0	142.0	118.0
72.5°	160.9	160.9	154.3	115.5	90.4
75°	128.1	128.1	116.6	80.0	54.7
77.5°	98.8	97.6	89.3	59.7	39.7
80°	79.2	79.2	72.0	47.2	31.7
82.5°	61.9	61.9	55.9	36.8	23.6
85°	36.0	36.0	33.1	21.4	13.0
87.5°	13.8	14.9	16.0	11.9	11.4
90°	5.6	11.1	22.4	25.3	28.0
92.5°	50.4	209.2	374.2	136.5	106.4
95°	120.4	443.5	1487.1	611.3	397.7
97.5°	199.4	496.8	2202.9	1696.0	1228.3
100°	257.7	528.7	2467.3	2484.7	2019.2
102.5°	313.7	565.0	2518.8	3070.0	2628.6
105°	403.3	622.3	2489.7	3800.9	3579.1
107.5°	498.5	693.5	2350.8	4153.4	4234.5
110°	565.7	741.0	2243.3	4229.2	4492.1

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	626.2	794.9	2142.4	4169.3	4557.1
115°	722.5	873.2	2005.2	3969.6	4514.5
117.5°	806.6	956.6	1915.0	3688.4	4308.4
120°	862.6	1010.4	1879.2	3498.1	4122.4
122.5°	916.3	1057.6	1850.1	3320.4	3911.8
125°	991.4	1128.3	1817.6	3076.0	3609.9
127.5°	1055.3	1192.2	1798.5	2869.3	3329.9
130°	1097.8	1234.7	1789.6	2742.9	3161.8
132.5°	1138.2	1268.5	1780.6	2636.7	3016.2
135°	1193.0	1321.7	1767.2	2491.3	2809.0
137.5°	1254.7	1371.9	1760.4	2369.3	2640.4
140°	1288.3	1403.3	1756.0	2287.9	2526.1
142.5°	1326.4	1432.6	1751.5	2215.5	2425.3
145°	1383.5	1479.3	1744.8	2120.9	2282.5
147.5°	1438.4	1522.2	1738.6	2041.1	2166.5
150°	1478.7	1547.2	1736.4	1993.5	2094.8
152.5°	1510.1	1574.1	1734.1	1952.8	2036.6
155°	1559.9	1611.9	1730.8	1903.0	1963.2
157.5°	1605.8	1645.8	1731.3	1866.7	1907.8
160°	1632.7	1668.3	1733.6	1846.3	1876.4
162.5°	1655.1	1686.4	1735.8	1828.2	1851.7
165°	1688.7	1710.7	1739.2	1806.7	1820.4
167.5°	1714.5	1727.7	1742.0	1793.6	1798.0
170°	1728.0	1738.9	1742.0	1786.8	1786.8
172.5°	1739.2	1745.7	1742.0	1777.8	1775.6
175°	1750.4	1753.1	1742.0	1767.0	1761.6
177.5°	1754.8	1752.6	1741.4	1757.0	1752.6
180°	1750.4	1750.4	1750.4	1750.4	1750.4

(END OF REPORT)