

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: P519379

Luminaire Tested: **SQ4-WB-100U-075D-830-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P519379
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-830-1D-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: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

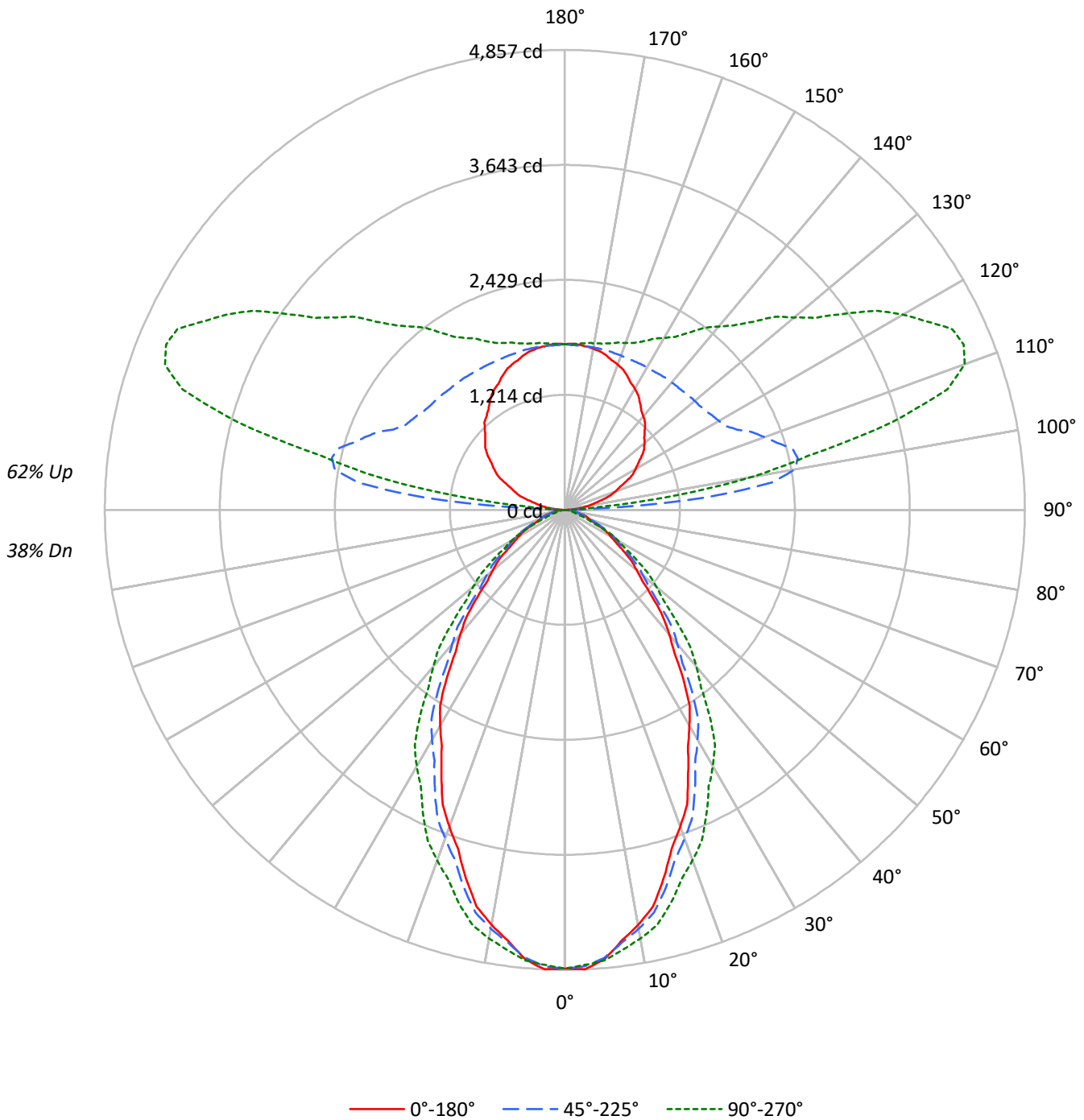
Lumens per Lamp: N/A
Luminaire Lumens: 18437.0 lumens
Efficiency: N/A
Efficacy: 120.2 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: Semi-Indirect

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°	14901	14901	14901
5°	14716	14663	14748
10°	13903	14029	14354
15°	12834	13132	13721
20°	11655	12093	12893
25°	10454	11024	12012
30°	9347	9959	11098
35°	8174	8764	10017
40°	6880	7426	8672
45°	5678	6168	7240
50°	4740	5167	6032
55°	4024	4434	4982
60°	3440	3845	3975
65°	2738	3233	2568
70°	2428	2523	1567
75°	2248	2046	960
80°	2070	1883	829
85°	1877	1725	674



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	444.4	2.4
10°-20°	1156.0	6.3
20°-30°	1497.3	8.1
30°-40°	1466.3	8.0
40°-50°	1122.3	6.1
50°-60°	747.9	4.1
60°-70°	408.1	2.2
70°-80°	170.0	0.9
80°-90°	51.8	0.3
90°-100°	819.7	4.4
100°-110°	2262.9	12.3
110°-120°	2333.8	12.7
120°-130°	1875.4	10.2
130°-140°	1473.9	8.0
140°-150°	1130.4	6.1
150°-160°	812.4	4.4
160°-170°	496.8	2.7
170°-180°	167.5	0.9
0°-30°	3097.7	16.8
0°-40°	4564.0	24.8
0°-60°	6434.2	34.9
0°-90°	7064.1	38.3
90°-120°	5416.4	29.4
90°-150°	9896.1	53.7
90°-180°	11373.0	61.7
0°-180°	18437.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4845	4845	4845	4845	4845	
5°	4767	4719	4750	4761	4777	443
15°	4031	4016	4125	4237	4310	1126
25°	3081	3089	3249	3390	3540	1417
35°	2177	2188	2334	2492	2668	1353
45°	1305	1330	1418	1525	1665	1018
55°	750	782	827	858	929	680
65°	376	408	444	388	353	391
75°	189	189	172	118	81	202
85°	53	53	49	32	19	58
90°	6	11	22	25	28	11
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°	4845.3	4845.3	4845.3	4845.3	4845.3
2.5°	4857.2	4814.0	4824.9	4824.6	4811.3
5°	4766.7	4718.8	4749.7	4760.7	4777.3
7.5°	4589.8	4553.6	4609.8	4651.3	4685.0
10°	4452.0	4420.8	4492.4	4552.9	4596.6
12.5°	4292.1	4265.9	4354.6	4435.9	4492.8
15°	4031.0	4016.5	4124.6	4236.8	4309.6
17.5°	3751.7	3744.6	3868.6	3999.6	4092.7
20°	3561.2	3559.1	3695.1	3831.5	3939.6
22.5°	3369.0	3373.6	3516.5	3658.4	3781.4
25°	3080.7	3089.0	3248.6	3390.2	3539.9
27.5°	2814.1	2817.8	2982.9	3132.4	3292.0
30°	2632.1	2642.5	2804.3	2959.0	3125.3
32.5°	2450.1	2462.1	2620.6	2780.5	2950.1
35°	2177.1	2187.5	2334.4	2491.5	2668.2
37.5°	1895.6	1909.7	2040.2	2188.7	2362.5
40°	1713.6	1734.4	1849.7	1989.6	2160.1
42.5°	1538.4	1564.2	1671.1	1803.9	1957.7
45°	1305.4	1330.4	1418.1	1525.4	1664.7
47.5°	1104.7	1133.4	1200.8	1293.2	1412.1
50°	990.8	1017.8	1080.0	1148.5	1260.8
52.5°	890.4	917.4	972.9	1025.7	1121.3
55°	750.5	781.7	827.0	858.4	929.1
57.5°	635.7	665.6	701.6	715.8	758.6
60°	559.2	592.4	625.1	623.5	646.3
62.5°	489.4	517.7	550.2	527.7	529.0
65°	376.3	407.5	444.3	388.3	352.9
67.5°	304.0	310.7	348.7	270.8	228.8
70°	270.0	270.0	280.6	209.7	174.3
72.5°	237.7	237.7	227.9	170.5	133.5
75°	189.2	189.2	172.2	118.2	80.8
77.5°	145.8	144.2	131.8	88.2	58.7
80°	116.9	116.9	106.3	69.6	46.8
82.5°	91.4	91.4	82.5	54.4	34.9
85°	53.2	53.2	48.9	31.6	19.1
87.5°	19.8	20.9	21.5	15.2	14.1
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)