

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: P564953

Luminaire Tested: **SQ4-PW1-100U-100D-830-1D-UNV-STD-W-12**

Issue Date: 7/30/2021

Test Information

Test Method: LM-79-2019
Report Number: P564953
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-23, G2-2106-289-3)
Test Lab: INNOVATION CENTER
Issue Date: 7/30/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-PW1-100U-100D-830-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE WAVES CONTINUOUS LENS.
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

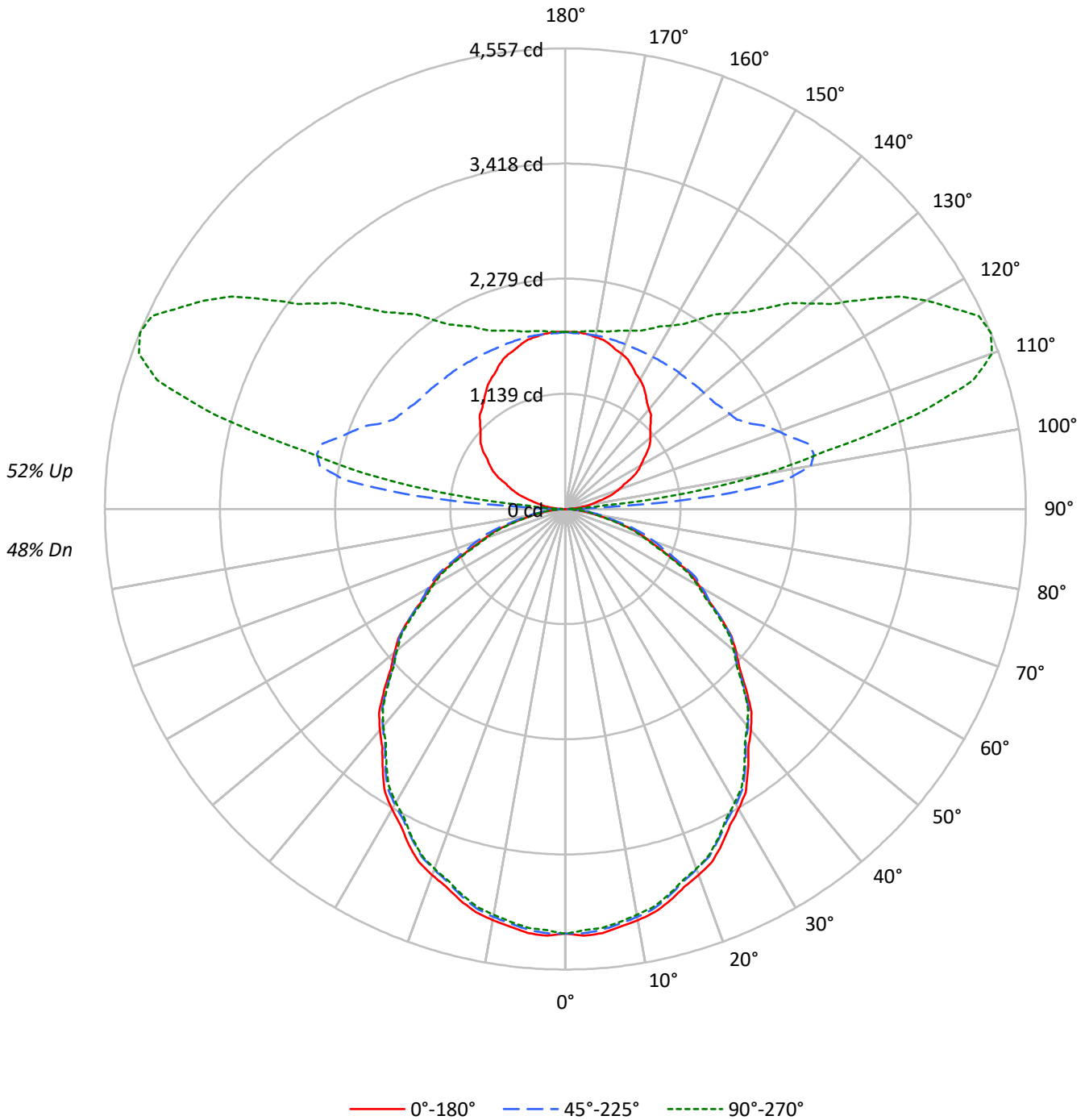
Lumens per Lamp: N/A
Luminaire Lumens: 22068.4 lumens
Efficiency: N/A
Efficacy: 121.1 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.19 / 1.31
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 182.2
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	107	107	107	107	98	98	98	98	82	82	82	68	68	68	55	55	55	48
1	98	93	89	86	90	86	83	80	72	70	68	60	58	57	49	47	46	41
2	89	82	75	70	82	75	70	66	64	60	56	53	50	48	43	41	39	35
3	81	72	64	59	74	66	60	55	56	51	47	47	43	40	38	36	33	29
4	74	63	56	50	68	59	52	47	50	45	40	42	38	35	34	31	29	25
5	68	57	48	43	62	52	45	40	45	39	35	37	33	30	31	28	25	22
6	63	51	43	37	58	47	40	35	40	35	30	34	30	26	28	25	22	19
7	58	46	38	32	53	43	35	30	36	31	27	31	26	23	25	22	20	17
8	54	42	34	29	49	39	32	27	33	28	24	28	24	21	23	20	18	15
9	50	38	30	25	46	35	29	24	30	25	21	26	22	19	21	18	16	14
10	47	35	28	23	43	32	26	22	28	23	19	24	20	17	20	17	14	12

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	12924	12924	12924
5°	13007	12905	12847
10°	12904	12800	12730
15°	12767	12625	12578
20°	12614	12421	12396
25°	12438	12212	12174
30°	12175	11991	11912
35°	11829	11663	11593
40°	11460	11282	11237
45°	11015	10870	10821
50°	10558	10469	10399
55°	10065	10065	9906
60°	9451	9633	9291
65°	8649	9080	8433
70°	7624	8356	7425
75°	6512	7479	6336
80°	5049	6294	5115
85°	3268	4834	4312



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	395.7	1.8
10°-20°	1117.2	5.1
20°-30°	1657.2	7.5
30°-40°	1939.1	8.8
40°-50°	1930.4	8.7
50°-60°	1667.0	7.6
60°-70°	1199.9	5.4
70°-80°	629.3	2.9
80°-90°	159.6	0.7
90°-100°	819.7	3.7
100°-110°	2262.9	10.3
110°-120°	2333.8	10.6
120°-130°	1875.4	8.5
130°-140°	1473.9	6.7
140°-150°	1130.4	5.1
150°-160°	812.4	3.7
160°-170°	496.8	2.3
170°-180°	167.5	0.8
0°-30°	3170.1	14.4
0°-40°	5109.2	23.2
0°-60°	8706.7	39.5
0°-90°	10695.5	48.5
90°-120°	5416.4	24.5
90°-150°	9896.1	44.8
90°-180°	11373.0	51.5
0°-180°	22068.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4202	4202	4202	4202	4202	
5°	4213	4166	4180	4169	4162	399
15°	4010	3959	3965	3958	3951	1130
25°	3666	3604	3599	3577	3588	1685
35°	3151	3107	3106	3077	3088	1970
45°	2532	2511	2499	2492	2488	1954
55°	1877	1874	1877	1851	1848	1675
65°	1188	1225	1248	1199	1159	1178
75°	548	599	629	588	533	587
85°	93	122	137	129	122	122
90°	6	11	22	25	28	12
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°	4202.3	4202.3	4202.3	4202.3	4202.3
2.5°	4226.0	4191.3	4202.3	4193.0	4172.7
5°	4213.4	4166.4	4180.1	4168.8	4161.6
7.5°	4170.5	4127.0	4137.2	4125.2	4120.9
10°	4132.0	4088.5	4098.7	4083.7	4076.4
12.5°	4087.6	4041.2	4051.3	4036.4	4032.0
15°	4009.8	3959.1	3965.4	3957.8	3950.6
17.5°	3919.5	3868.1	3869.1	3857.2	3855.8
20°	3854.3	3800.0	3795.1	3780.4	3787.7
22.5°	3783.2	3726.0	3721.0	3700.5	3710.6
25°	3665.5	3603.9	3598.8	3576.9	3587.7
27.5°	3529.2	3468.4	3468.5	3437.7	3449.2
30°	3428.5	3370.6	3376.7	3340.0	3354.5
32.5°	3321.9	3269.7	3273.0	3236.3	3250.8
35°	3150.8	3107.4	3106.4	3077.0	3087.9
37.5°	2976.1	2937.7	2931.6	2914.7	2917.6
40°	2854.6	2822.0	2810.2	2799.1	2799.1
42.5°	2727.3	2697.6	2685.8	2677.6	2674.7
45°	2532.5	2510.8	2499.2	2491.7	2488.1
47.5°	2340.0	2319.7	2309.6	2304.3	2300.7
50°	2206.7	2192.2	2188.2	2177.0	2173.4
52.5°	2073.4	2064.7	2060.8	2046.7	2043.0
55°	1877.2	1873.5	1877.2	1851.2	1847.5
57.5°	1672.8	1678.6	1690.6	1655.6	1646.9
60°	1536.5	1551.0	1566.2	1525.1	1510.6
62.5°	1397.3	1420.5	1441.8	1394.6	1374.4
65°	1188.5	1224.7	1247.7	1198.7	1158.9
67.5°	987.1	1032.0	1059.7	1006.8	961.9
70°	847.9	898.6	929.3	876.3	825.7
72.5°	726.4	782.9	807.9	757.9	707.2
75°	548.0	598.7	629.4	587.5	533.2
77.5°	388.8	436.5	462.1	425.5	380.6
80°	285.1	335.8	355.4	325.0	288.8
82.5°	202.2	244.2	257.7	239.4	214.7
85°	92.6	121.5	137.0	129.4	122.2
87.5°	24.8	46.2	60.8	61.4	64.8
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)