

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: P519427

Luminaire Tested: **SQ4-WB-100U-125D-830-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P519427
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-125D-830-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

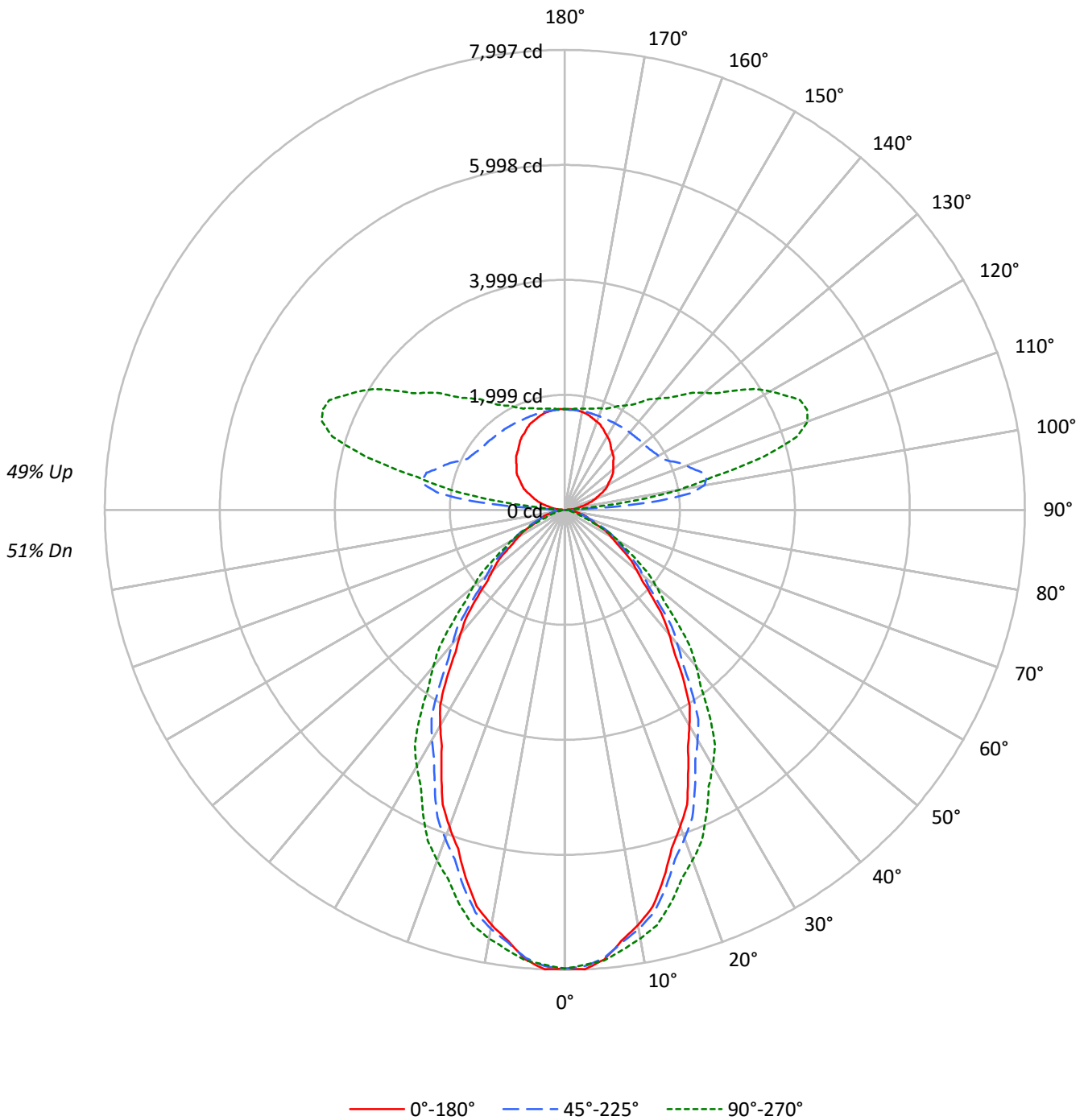
Lumens per Lamp: N/A
Luminaire Lumens: 23000.4 lumens
Efficiency: N/A
Efficacy: 107.1 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 214.8
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	99	99	99	99	84	84	84	70	70	70	57	57	57	51
1	99	95	92	89	91	88	85	83	75	73	71	63	62	60	52	51	50	45
2	91	84	79	74	84	78	74	70	67	64	61	57	54	52	47	45	44	40
3	84	75	69	63	78	70	64	60	60	56	53	51	48	46	43	41	39	35
4	77	68	60	55	72	63	57	52	54	50	46	47	43	40	39	37	35	31
5	72	61	53	48	66	57	50	45	49	44	40	42	39	36	36	33	31	28
6	66	55	48	42	61	52	45	40	45	40	36	39	35	32	33	30	28	25
7	62	50	43	38	57	47	41	36	41	36	32	36	32	29	31	28	25	23
8	58	46	39	34	53	43	37	32	38	33	29	33	29	26	28	25	23	21
9	54	42	35	30	50	40	33	29	35	30	27	31	27	24	27	24	21	19
10	50	39	32	28	47	37	31	27	33	28	24	29	25	22	25	22	20	18

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	24532	24532	24532
5°	24226	24140	24280
10°	22889	23096	23632
15°	21130	21620	22589
20°	19188	19910	21227
25°	17210	18149	19776
30°	15388	16395	18272
35°	13456	14429	16492
40°	11326	12225	14277
45°	9347	10154	11920
50°	7804	8507	9931
55°	6625	7301	8201
60°	5662	6330	6545
65°	4508	5323	4228
70°	3997	4154	2581
75°	3701	3369	1580
80°	3409	3099	1364
85°	3088	2841	1112



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	731.7	3.2
10°-20°	1903.1	8.3
20°-30°	2465.1	10.7
30°-40°	2413.9	10.5
40°-50°	1847.7	8.0
50°-60°	1231.2	5.4
60°-70°	671.9	2.9
70°-80°	280.0	1.2
80°-90°	82.9	0.4
90°-100°	819.7	3.6
100°-110°	2262.9	9.8
110°-120°	2333.8	10.1
120°-130°	1875.4	8.2
130°-140°	1473.9	6.4
140°-150°	1130.4	4.9
150°-160°	812.4	3.5
160°-170°	496.8	2.2
170°-180°	167.5	0.7
0°-30°	5099.9	22.2
0°-40°	7513.8	32.7
0°-60°	10592.8	46.1
0°-90°	11627.5	50.6
90°-120°	5416.4	23.5
90°-150°	9896.1	43.0
90°-180°	11373.0	49.4
0°-180°	23000.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	7977	7977	7977	7977	7977	
5°	7848	7769	7820	7838	7865	730
15°	6636	6612	6790	6975	7095	1853
25°	5072	5086	5348	5581	5828	2332
35°	3584	3601	3843	4102	4393	2228
45°	2149	2190	2335	2511	2741	1676
55°	1236	1287	1362	1413	1530	1120
65°	620	671	732	639	581	644
75°	312	312	284	195	133	333
85°	88	88	80	52	32	95
90°	6	11	22	25	28	13
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°	7977.0	7977.0	7977.0	7977.0	7977.0
2.5°	7996.6	7925.4	7943.4	7942.9	7921.0
5°	7847.5	7768.7	7819.5	7837.6	7865.0
7.5°	7556.2	7496.7	7589.1	7657.6	7713.1
10°	7329.4	7278.1	7395.9	7495.6	7567.4
12.5°	7066.2	7023.1	7169.1	7302.9	7396.6
15°	6636.4	6612.4	6790.4	6975.1	7094.9
17.5°	6176.5	6164.8	6369.0	6584.6	6737.9
20°	5862.8	5859.4	6083.4	6307.9	6485.9
22.5°	5546.4	5554.0	5789.3	6022.9	6225.5
25°	5071.8	5085.5	5348.3	5581.4	5827.8
27.5°	4632.9	4639.0	4910.8	5156.9	5419.7
30°	4333.3	4350.4	4616.8	4871.5	5145.3
32.5°	4033.6	4053.5	4314.4	4577.6	4856.9
35°	3584.2	3601.3	3843.2	4101.9	4392.8
37.5°	3120.8	3144.1	3358.8	3603.3	3889.4
40°	2821.2	2855.4	3045.2	3275.6	3556.2
42.5°	2532.7	2575.2	2751.2	2969.7	3223.0
45°	2149.1	2190.2	2334.6	2511.4	2740.7
47.5°	1818.7	1865.9	1976.9	2129.1	2324.8
50°	1631.1	1675.6	1778.1	1890.8	2075.6
52.5°	1465.9	1510.4	1601.7	1688.6	1846.0
55°	1235.6	1286.9	1361.6	1413.2	1529.6
57.5°	1046.6	1095.8	1155.1	1178.4	1248.9
60°	920.6	975.3	1029.1	1026.4	1064.1
62.5°	805.7	852.3	905.9	868.8	870.9
65°	619.5	670.9	731.5	639.2	581.0
67.5°	500.5	511.5	574.0	445.8	376.6
70°	444.5	444.5	462.0	345.2	287.0
72.5°	391.3	391.3	375.2	280.7	219.8
75°	311.5	311.5	283.5	194.6	133.0
77.5°	240.1	237.4	217.0	145.2	96.6
80°	192.5	192.5	175.0	114.7	77.0
82.5°	150.5	150.5	135.8	89.6	57.4
85°	87.5	87.5	80.5	52.0	31.5
87.5°	31.9	33.0	32.5	21.8	19.6
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)