

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: P564281

Luminaire Tested: **SQ4-PR1-100U-100D-830-1D-UNV-STD-W-12**

Issue Date: 7/30/2021

Test Information

Test Method: LM-79-2019
Report Number: P564281
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-23, G2-2106-289-4)
Test Lab: INNOVATION CENTER
Issue Date: 7/30/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-PR1-100U-100D-830-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE RIPPLE CONTINUOUS LENS.
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

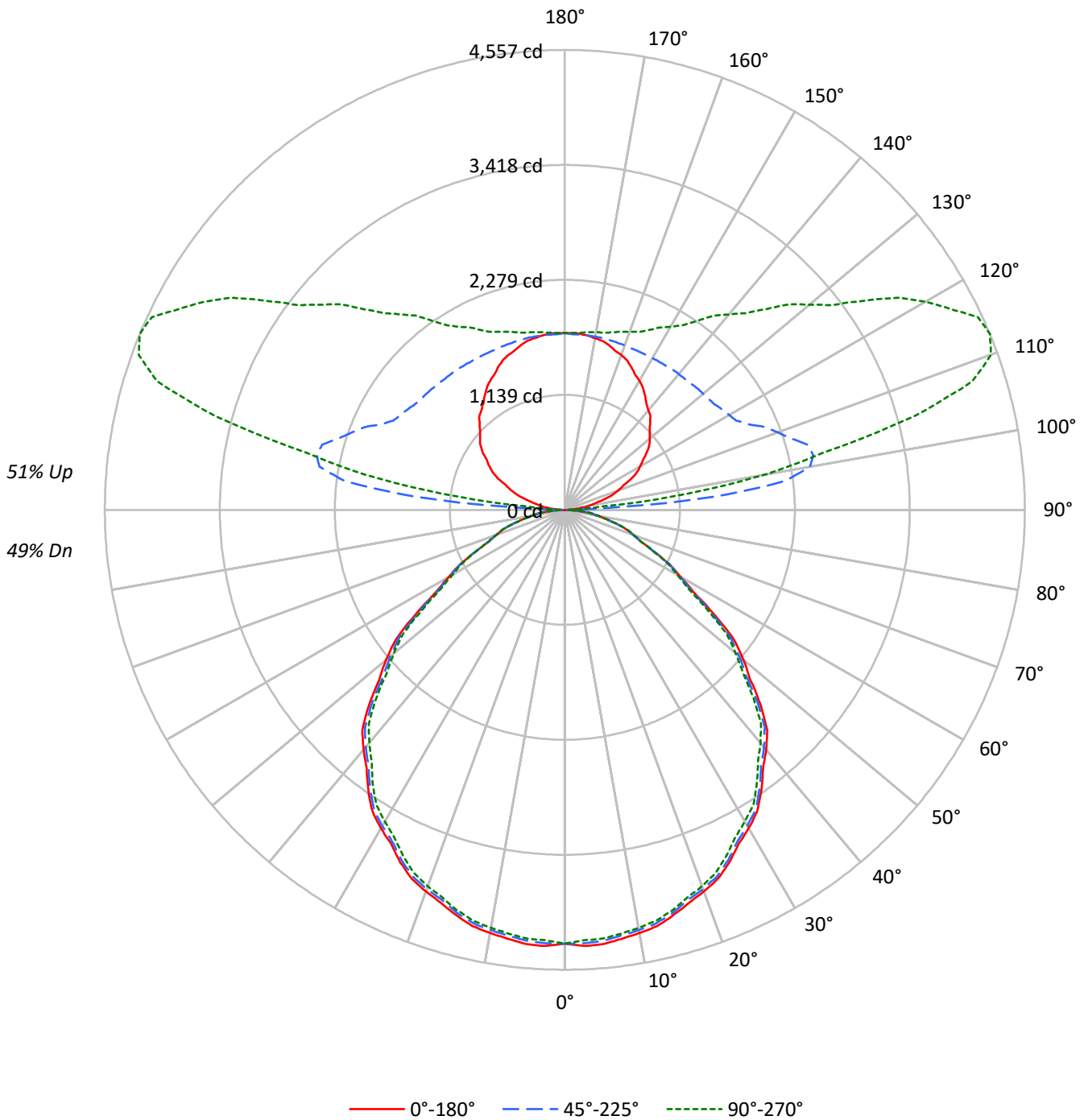
Lumens per Lamp: N/A
Luminaire Lumens: 22122.5 lumens
Efficiency: N/A
Efficacy: 121.4 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: General Diffuse

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	83	83	83	68	68	68	55	55	55	49
1	98	94	90	86	90	86	83	80	73	70	68	60	59	57	49	48	47	41
2	89	82	76	71	82	76	71	66	64	60	57	53	51	48	43	42	40	35
3	82	72	65	59	75	67	61	56	57	52	48	47	44	41	39	36	34	30
4	75	64	56	50	69	59	53	47	51	45	41	42	39	35	35	32	30	26
5	69	57	49	43	63	53	46	41	45	40	36	38	34	31	31	28	26	23
6	63	51	43	38	58	48	41	36	41	35	31	34	30	27	28	25	23	20
7	59	46	39	33	54	43	36	31	37	32	28	31	27	24	26	23	20	18
8	54	42	34	29	50	39	32	28	34	28	25	29	24	21	24	21	18	16
9	51	38	31	26	47	36	29	25	31	26	22	26	22	19	22	19	17	14
10	47	35	28	23	44	33	27	22	29	23	20	24	20	17	20	17	15	13

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	13220	13220	13220
5°	13339	13236	13168
10°	13297	13204	13135
15°	13238	13156	13085
20°	13172	13087	12990
25°	13079	12991	12840
30°	12938	12846	12662
35°	12747	12636	12455
40°	12456	12323	12099
45°	11948	11739	11498
50°	11054	10788	10576
55°	9648	9430	9231
60°	8130	8062	7903
65°	7032	7059	7005
70°	6459	6492	6492
75°	6204	6204	6248
80°	5836	5901	5836
85°	4704	5226	5226



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	406.5	1.8
10°-20°	1163.0	5.3
20°-30°	1754.2	7.9
30°-40°	2090.1	9.4
40°-50°	2060.7	9.3
50°-60°	1574.9	7.1
60°-70°	974.6	4.4
70°-80°	553.6	2.5
80°-90°	172.0	0.8
90°-100°	819.7	3.7
100°-110°	2262.9	10.2
110°-120°	2333.8	10.5
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	2.2
170°-180°	167.5	0.8
0°-30°	3323.7	15.0
0°-40°	5413.9	24.5
0°-60°	9049.4	40.9
0°-90°	10749.6	48.6
90°-120°	5416.4	24.5
90°-150°	9896.1	44.7
90°-180°	11373.0	51.4
0°-180°	22122.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4299	4299	4299	4299	4299	
5°	4321	4274	4288	4272	4265	410
15°	4158	4114	4132	4117	4110	1173
25°	3854	3807	3828	3788	3784	1774
35°	3395	3355	3366	3321	3317	2119
45°	2747	2711	2699	2651	2644	2105
55°	1799	1770	1759	1729	1722	1612
65°	966	959	970	963	963	979
75°	522	522	522	526	526	551
85°	133	140	148	148	148	155
90°	6	11	22	25	28	14
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°	4298.6	4298.6	4298.6	4298.6	4298.6
2.5°	4325.2	4287.6	4298.6	4289.2	4269.0
5°	4320.8	4273.7	4287.5	4272.5	4265.3
7.5°	4287.5	4241.1	4254.9	4240.0	4235.6
10°	4257.9	4214.4	4228.2	4213.3	4206.0
12.5°	4225.3	4178.9	4195.7	4177.7	4170.5
15°	4157.9	4114.4	4132.0	4117.0	4109.8
17.5°	4083.8	4037.5	4055.0	4037.7	4028.3
20°	4024.6	3981.2	3998.7	3972.7	3969.1
22.5°	3959.4	3916.0	3933.5	3898.7	3898.0
25°	3854.3	3807.2	3828.4	3787.6	3783.9
27.5°	3729.1	3685.7	3703.2	3661.7	3657.3
30°	3643.2	3599.8	3617.3	3572.7	3565.5
32.5°	3545.5	3505.0	3519.6	3475.1	3470.7
35°	3395.2	3355.4	3365.6	3321.0	3317.4
37.5°	3224.1	3187.9	3193.8	3144.8	3141.2
40°	3102.7	3066.5	3069.4	3017.4	3013.8
42.5°	2969.4	2933.2	2930.1	2878.2	2874.6
45°	2747.2	2711.0	2699.1	2650.8	2643.6
47.5°	2494.0	2457.8	2435.5	2396.1	2391.1
50°	2310.3	2274.1	2254.8	2221.2	2210.4
52.5°	2111.9	2075.7	2059.3	2028.7	2017.9
55°	1799.4	1770.4	1758.7	1728.9	1721.7
57.5°	1502.5	1482.9	1479.5	1450.6	1447.7
60°	1321.8	1310.9	1310.7	1284.8	1284.8
62.5°	1167.8	1159.8	1165.5	1148.4	1145.5
65°	966.3	959.1	970.1	962.6	962.6
67.5°	807.1	807.1	813.8	810.8	810.8
70°	718.3	718.3	722.0	722.0	722.0
72.5°	638.3	635.4	645.0	644.9	642.0
75°	522.1	522.1	522.1	525.8	525.8
77.5°	406.5	407.3	410.2	409.4	406.5
80°	329.5	333.1	333.2	329.5	329.5
82.5°	252.5	256.1	256.2	255.4	252.5
85°	133.3	140.5	148.1	148.1	148.1
87.5°	39.6	52.3	63.7	64.2	61.9
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)