

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: P564445

Luminaire Tested: **SQ4-PR1-150U-050D-940-1D-UNV-STD-W-12**

Issue Date: 7/30/2021

Test Information

Test Method: LM-79-2019
Report Number: P564445
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-25, 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-PR1-150U-050D-940-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE RIPPLE CONTINUOUS LENS.
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 1500 LUMENS PER FOOT
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

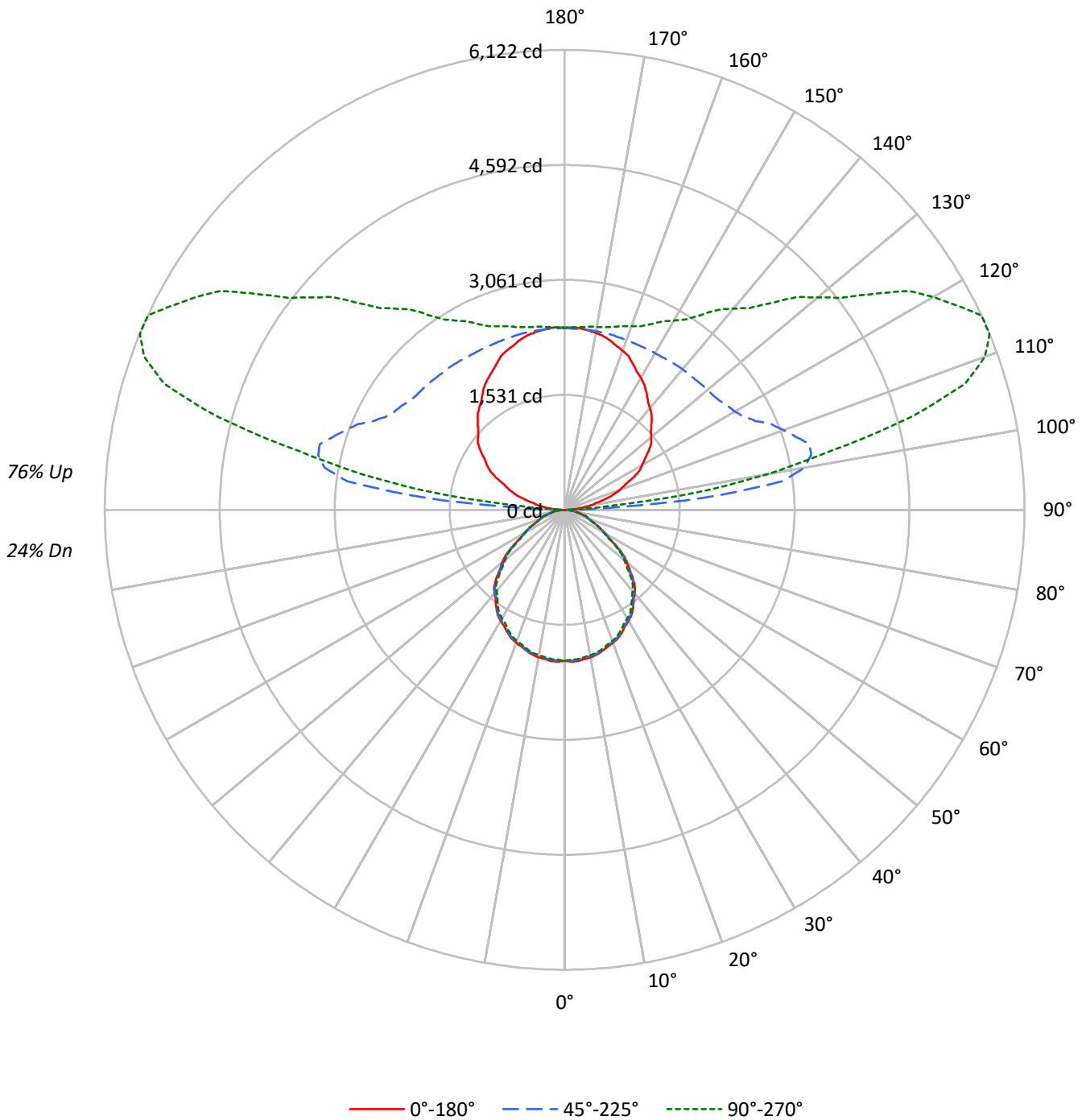
Lumens per Lamp: N/A
Luminaire Lumens: 20653.4 lumens
Efficiency: N/A
Efficacy: 122.3 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 168.9
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	101	101	101	101	90	90	90	90	69	69	69	50	50	50	33	33	33	24
1	92	88	84	81	82	78	75	73	61	59	57	44	43	42	29	28	28	21
2	84	77	71	66	75	69	64	60	53	50	47	39	37	35	26	25	24	18
3	77	68	61	55	68	61	55	50	47	43	40	34	32	30	23	21	20	15
4	70	60	52	47	62	54	47	42	42	37	34	31	28	25	20	19	17	13
5	64	53	46	40	57	48	41	36	37	33	29	28	24	22	18	17	15	11
6	59	48	40	34	52	43	36	31	33	29	25	25	22	19	17	15	13	10
7	54	43	35	30	48	38	32	27	30	26	22	22	19	17	15	13	12	9
8	50	39	31	26	45	35	28	24	27	23	19	20	17	15	14	12	11	8
9	47	35	28	23	42	32	25	21	25	20	17	19	16	13	13	11	10	7
10	44	32	25	21	39	29	23	19	23	19	15	17	14	12	12	10	9	7

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6182	6182	6182
5°	6238	6190	6158
10°	6219	6175	6143
15°	6191	6153	6119
20°	6160	6120	6075
25°	6116	6075	6005
30°	6050	6008	5922
35°	5961	5909	5825
40°	5825	5763	5659
45°	5588	5490	5377
50°	5170	5045	4946
55°	4512	4410	4317
60°	3802	3770	3695
65°	3288	3302	3276
70°	3020	3037	3037
75°	2901	2901	2922
80°	2729	2759	2729
85°	2198	2445	2445



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	190.1	0.9
10°-20°	543.9	2.6
20°-30°	820.4	4.0
30°-40°	977.5	4.7
40°-50°	963.7	4.7
50°-60°	736.5	3.6
60°-70°	455.8	2.2
70°-80°	258.9	1.3
80°-90°	83.8	0.4
90°-100°	1126.1	5.5
100°-110°	3044.8	14.7
110°-120°	3201.2	15.5
120°-130°	2600.2	12.6
130°-140°	2039.6	9.9
140°-150°	1565.4	7.6
150°-160°	1125.8	5.5
160°-170°	687.8	3.3
170°-180°	231.9	1.1
0°-30°	1554.4	7.5
0°-40°	2531.9	12.3
0°-60°	4232.2	20.5
0°-90°	5030.7	24.4
90°-120°	7372.0	35.7
90°-150°	13577.3	65.7
90°-180°	15623.0	75.6
0°-180°	20653.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2010	2010	2010	2010	2010	
5°	2021	1999	2005	1998	1995	192
15°	1944	1924	1932	1925	1922	549
25°	1802	1780	1790	1771	1770	830
35°	1588	1569	1574	1553	1552	991
45°	1285	1268	1262	1240	1236	984
55°	842	828	822	809	805	754
65°	452	448	454	450	450	458
75°	244	244	244	246	246	258
85°	62	66	69	69	69	73
90°	5	15	34	36	34	14
95°	175	613	1873	969	576	183
105°	566	875	3378	4982	4778	596
115°	996	1218	2801	5423	6122	984
125°	1364	1563	2525	4261	5005	1216
135°	1635	1829	2457	3440	3894	1264
145°	1902	2044	2423	2945	3169	1190
155°	2147	2231	2402	2642	2728	990
165°	2337	2360	2413	2507	2520	658
175°	2426	2423	2415	2446	2441	230
180°	2423	2423	2423	2423	2423	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2010.3	2010.3	2010.3	2010.3	2010.3
2.5°	2022.8	2005.2	2010.3	2006.0	1996.5
5°	2020.7	1998.7	2005.1	1998.1	1994.7
7.5°	2005.1	1983.5	1989.9	1982.9	1980.9
10°	1991.3	1971.0	1977.4	1970.4	1967.0
12.5°	1976.0	1954.4	1962.2	1953.8	1950.4
15°	1944.5	1924.2	1932.4	1925.4	1922.0
17.5°	1909.9	1888.2	1896.4	1888.3	1883.9
20°	1882.2	1861.9	1870.1	1857.9	1856.2
22.5°	1851.7	1831.4	1839.6	1823.3	1823.0
25°	1802.5	1780.5	1790.4	1771.3	1769.6
27.5°	1744.0	1723.7	1731.9	1712.5	1710.4
30°	1703.8	1683.5	1691.7	1670.9	1667.5
32.5°	1658.1	1639.2	1646.0	1625.2	1623.2
35°	1587.8	1569.2	1574.0	1553.2	1551.5
37.5°	1507.8	1490.9	1493.6	1470.7	1469.0
40°	1451.0	1434.1	1435.5	1411.2	1409.5
42.5°	1388.7	1371.8	1370.3	1346.1	1344.4
45°	1284.8	1267.9	1262.3	1239.7	1236.3
47.5°	1166.4	1149.4	1139.0	1120.6	1118.2
50°	1080.5	1063.6	1054.5	1038.8	1033.7
52.5°	987.7	970.7	963.1	948.8	943.7
55°	841.5	828.0	822.5	808.6	805.2
57.5°	702.7	693.5	691.9	678.4	677.0
60°	618.2	613.1	613.0	600.8	600.8
62.5°	546.1	542.4	545.1	537.1	535.7
65°	451.9	448.5	453.7	450.2	450.2
67.5°	377.5	377.5	380.6	379.2	379.2
70°	335.9	335.9	337.7	337.7	337.7
72.5°	298.5	297.2	301.6	301.6	300.3
75°	244.1	244.1	244.1	245.9	245.9
77.5°	190.1	190.5	191.9	191.5	190.1
80°	154.1	155.8	155.8	154.1	154.1
82.5°	118.1	119.8	119.8	119.4	118.1
85°	62.3	65.7	69.3	69.3	69.3
87.5°	19.1	26.5	34.5	35.0	33.1
90°	5.2	15.4	33.9	36.5	33.9
92.5°	74.1	269.9	532.6	231.2	167.5
95°	174.8	613.4	1872.8	969.2	576.4
97.5°	280.7	703.5	2919.2	2415.8	1774.2
100°	359.9	739.9	3244.7	3383.9	2736.1
102.5°	433.0	790.5	3359.5	4117.9	3633.4
105°	566.0	874.6	3377.8	4982.5	4778.4
107.5°	689.1	970.7	3230.1	5521.8	5589.6
110°	785.1	1040.1	3098.7	5666.6	5954.8



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	870.7	1109.4	2977.7	5637.7	6121.7
115°	996.4	1218.3	2801.3	5422.9	6121.7
117.5°	1119.5	1327.6	2685.0	5094.8	5887.0
120°	1194.6	1398.6	2616.1	4859.4	5667.9
122.5°	1265.6	1465.5	2574.4	4607.1	5421.6
125°	1364.1	1563.1	2524.8	4260.7	5005.4
127.5°	1454.9	1650.3	2495.6	3978.0	4632.9
130°	1505.0	1706.5	2483.1	3803.3	4395.0
132.5°	1557.2	1756.6	2470.6	3645.8	4190.5
135°	1635.4	1829.2	2457.0	3440.2	3894.2
137.5°	1714.2	1897.3	2445.6	3273.5	3643.3
140°	1768.4	1939.3	2441.4	3166.1	3495.1
142.5°	1820.6	1981.3	2433.0	3069.2	3357.4
145°	1901.5	2044.3	2423.1	2944.7	3169.1
147.5°	1975.0	2101.5	2411.6	2831.9	3004.3
150°	2029.3	2141.5	2407.5	2770.6	2908.3
152.5°	2079.3	2177.3	2405.4	2713.7	2826.9
155°	2146.6	2230.8	2402.3	2641.6	2728.3
157.5°	2216.5	2275.2	2402.8	2591.4	2648.5
160°	2256.2	2304.6	2404.9	2559.7	2600.5
162.5°	2287.5	2327.8	2407.0	2534.4	2565.0
165°	2337.0	2360.0	2412.7	2506.9	2519.6
167.5°	2371.0	2386.8	2413.2	2483.3	2489.4
170°	2391.8	2399.5	2415.3	2472.7	2472.7
172.5°	2408.5	2410.0	2415.3	2460.1	2458.1
175°	2425.7	2423.2	2415.3	2446.5	2441.4
177.5°	2431.5	2425.3	2414.8	2435.5	2429.4
180°	2423.1	2423.1	2423.1	2423.1	2423.1

(END OF REPORT)