

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: P564441

Luminaire Tested: **SQ4-PR1-150U-050D-935-1D-UNV-STD-W-12**

Issue Date: 7/30/2021

Test Information

Test Method: LM-79-2019
Report Number: P564441
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-935-1D-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: 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 20758.8 lumens
Efficiency: N/A
Efficacy: 122.9 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

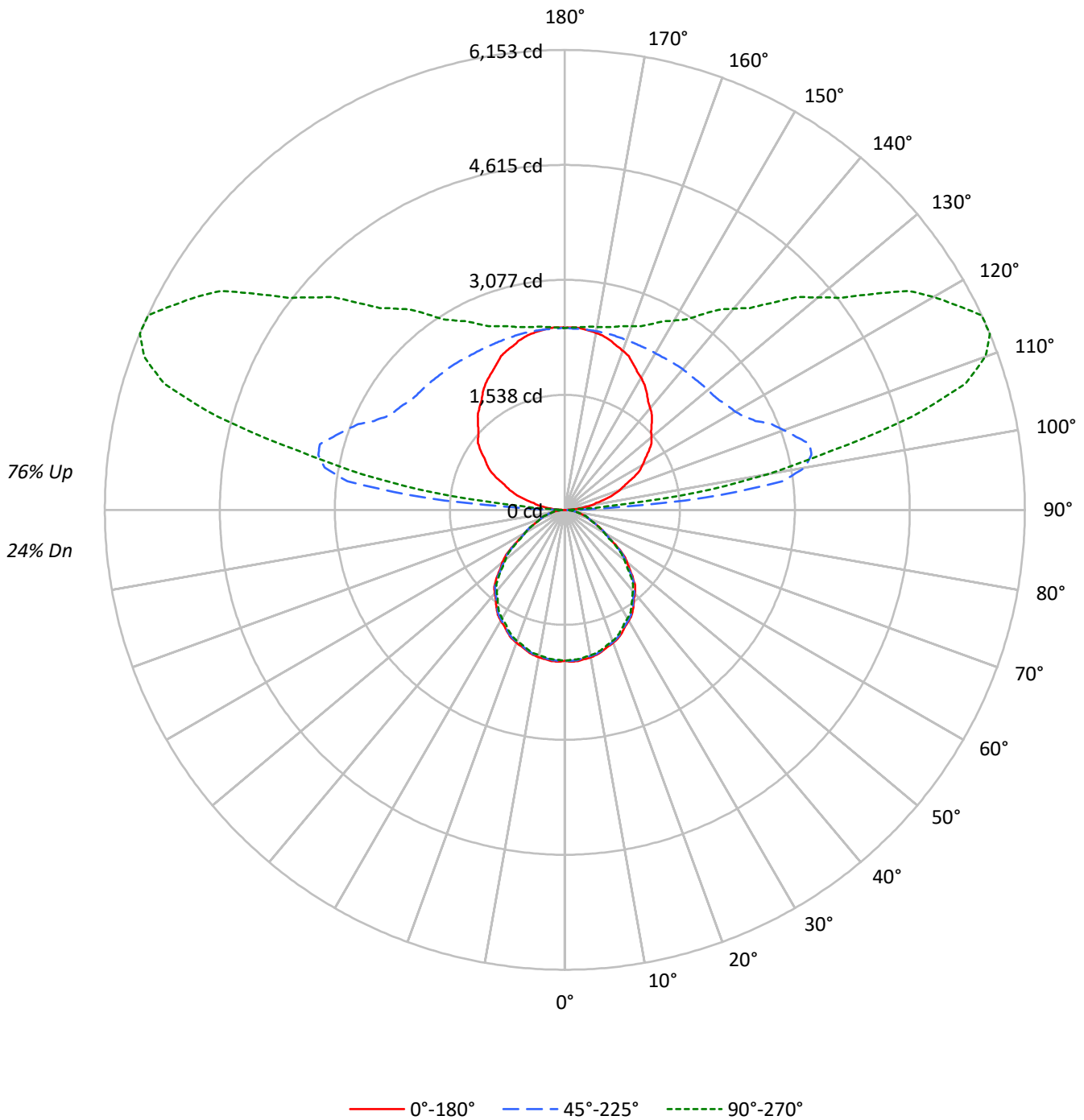
Input Watts (W): 168.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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°	6214	6214	6214
5°	6270	6222	6189
10°	6250	6207	6174
15°	6223	6184	6151
20°	6191	6152	6106
25°	6148	6107	6036
30°	6081	6038	5952
35°	5992	5939	5855
40°	5855	5792	5688
45°	5617	5518	5404
50°	5196	5071	4971
55°	4535	4433	4339
60°	3821	3790	3714
65°	3305	3318	3293
70°	3036	3052	3052
75°	2916	2916	2936
80°	2743	2773	2743
85°	2212	2456	2456



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	191.1	0.9
10°-20°	546.7	2.6
20°-30°	824.6	4.0
30°-40°	982.5	4.7
40°-50°	968.6	4.7
50°-60°	740.3	3.6
60°-70°	458.1	2.2
70°-80°	260.2	1.3
80°-90°	84.2	0.4
90°-100°	1131.9	5.5
100°-110°	3060.3	14.7
110°-120°	3217.5	15.5
120°-130°	2613.5	12.6
130°-140°	2050.0	9.9
140°-150°	1573.4	7.6
150°-160°	1131.6	5.5
160°-170°	691.3	3.3
170°-180°	233.1	1.1
0°-30°	1562.4	7.5
0°-40°	2544.8	12.3
0°-60°	4253.8	20.5
0°-90°	5056.3	24.4
90°-120°	7409.7	35.7
90°-150°	13646.6	65.7
90°-180°	15703.0	75.6
0°-180°	20758.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2021	2021	2021	2021	2021	
5°	2031	2009	2015	2008	2005	193
15°	1954	1934	1942	1935	1932	552
25°	1812	1790	1800	1780	1779	834
35°	1596	1577	1582	1561	1559	996
45°	1291	1274	1269	1246	1243	989
55°	846	832	827	813	809	758
65°	454	451	456	452	452	460
75°	245	245	245	247	247	259
85°	63	66	70	70	70	73
90°	5	16	34	37	34	14
95°	176	616	1882	974	579	184
105°	569	879	3395	5008	4803	599
115°	1002	1224	2816	5451	6153	989
125°	1371	1571	2538	4282	5031	1222
135°	1644	1839	2470	3458	3914	1270
145°	1911	2055	2436	2960	3185	1196
155°	2158	2242	2414	2655	2742	995
165°	2349	2372	2425	2520	2532	662
175°	2438	2436	2428	2459	2454	231
180°	2436	2436	2436	2436	2436	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2020.6	2020.6	2020.6	2020.6	2020.6
2.5°	2033.1	2015.4	2020.6	2016.2	2006.7
5°	2031.0	2008.9	2015.4	2008.3	2004.9
7.5°	2015.4	1993.6	2000.1	1993.0	1991.0
10°	2001.4	1981.0	1987.5	1980.5	1977.1
12.5°	1986.1	1964.3	1972.2	1963.8	1960.4
15°	1954.5	1934.0	1942.3	1935.2	1931.8
17.5°	1919.6	1897.9	1906.1	1898.0	1893.5
20°	1891.8	1871.4	1879.6	1867.4	1865.7
22.5°	1861.2	1840.7	1849.0	1832.6	1832.3
25°	1811.7	1789.6	1799.6	1780.4	1778.7
27.5°	1752.9	1732.5	1740.7	1721.2	1719.2
30°	1712.5	1692.1	1700.4	1679.4	1676.0
32.5°	1666.6	1647.5	1654.4	1633.5	1631.4
35°	1595.9	1577.2	1582.0	1561.1	1559.4
37.5°	1515.5	1498.5	1501.3	1478.2	1476.5
40°	1458.4	1441.4	1442.8	1418.4	1416.7
42.5°	1395.8	1378.8	1377.3	1352.9	1351.2
45°	1291.4	1274.3	1268.7	1246.0	1242.6
47.5°	1172.3	1155.3	1144.8	1126.3	1123.9
50°	1086.0	1069.0	1059.9	1044.1	1039.0
52.5°	992.7	975.7	968.0	953.6	948.5
55°	845.8	832.2	826.7	812.7	809.3
57.5°	706.2	697.1	695.5	681.9	680.5
60°	621.3	616.2	616.1	603.9	603.9
62.5°	548.9	545.2	547.9	539.8	538.5
65°	454.2	450.8	456.0	452.5	452.5
67.5°	379.4	379.4	382.5	381.1	381.1
70°	337.6	337.6	339.4	339.4	339.4
72.5°	300.0	298.7	303.2	303.1	301.8
75°	245.4	245.4	245.4	247.1	247.1
77.5°	191.1	191.4	192.8	192.5	191.1
80°	154.9	156.6	156.6	154.9	154.9
82.5°	118.7	120.4	120.4	120.1	118.7
85°	62.7	66.1	69.6	69.6	69.6
87.5°	19.1	26.6	34.7	35.1	33.3
90°	5.2	15.5	34.1	36.6	34.1
92.5°	74.5	271.3	535.3	232.4	168.3
95°	175.6	616.5	1882.3	974.1	579.4
97.5°	282.1	707.1	2934.1	2428.2	1783.2
100°	361.8	743.7	3261.3	3401.2	2750.1
102.5°	435.2	794.6	3376.7	4139.0	3651.9
105°	568.9	879.1	3395.0	5007.9	4802.8
107.5°	692.6	975.6	3246.6	5550.0	5618.1
110°	789.1	1045.4	3114.5	5695.5	5985.2

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	875.1	1115.0	2992.8	5666.4	6153.0
115°	1001.5	1224.5	2815.6	5450.6	6153.0
117.5°	1125.2	1334.4	2698.7	5120.8	5917.0
120°	1200.7	1405.8	2629.5	4884.2	5696.8
122.5°	1272.0	1473.0	2587.5	4630.6	5449.3
125°	1371.1	1571.1	2537.7	4282.4	5030.9
127.5°	1462.3	1658.7	2508.4	3998.3	4656.5
130°	1512.7	1715.2	2495.8	3822.7	4417.4
132.5°	1565.1	1765.6	2483.2	3664.4	4211.9
135°	1643.8	1838.6	2469.6	3457.8	3914.1
137.5°	1722.9	1907.0	2458.0	3290.2	3661.9
140°	1777.5	1949.2	2453.8	3182.3	3513.0
142.5°	1829.9	1991.4	2445.5	3084.9	3374.6
145°	1911.2	2054.7	2435.5	2959.7	3185.3
147.5°	1985.1	2112.2	2424.0	2846.3	3019.6
150°	2039.6	2152.4	2419.8	2784.7	2923.1
152.5°	2090.0	2188.4	2417.7	2727.5	2841.3
155°	2157.6	2242.2	2414.5	2655.1	2742.2
157.5°	2227.9	2286.8	2415.0	2604.6	2662.0
160°	2267.7	2316.4	2417.1	2572.7	2613.8
162.5°	2299.2	2339.7	2419.2	2547.3	2578.1
165°	2349.0	2372.0	2425.0	2519.7	2532.5
167.5°	2383.1	2399.0	2425.5	2495.9	2502.1
170°	2404.0	2411.7	2427.6	2485.3	2485.3
172.5°	2420.8	2422.3	2427.6	2472.7	2470.6
175°	2438.1	2435.5	2427.6	2459.0	2453.8
177.5°	2443.9	2437.7	2427.1	2447.9	2441.8
180°	2435.5	2435.5	2435.5	2435.5	2435.5

(END OF REPORT)