

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: P565160

Luminaire Tested: **SQ4-PW1-150U-100D-930-1D-UNV-STD-W-8**

Issue Date: 7/30/2021

Test Information

Test Method: LM-79-2019
Report Number: P565160
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-25, 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-PW1-150U-100D-930-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE WAVES CONTINUOUS LENS.
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 1500 LUMENS PER FOOT
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

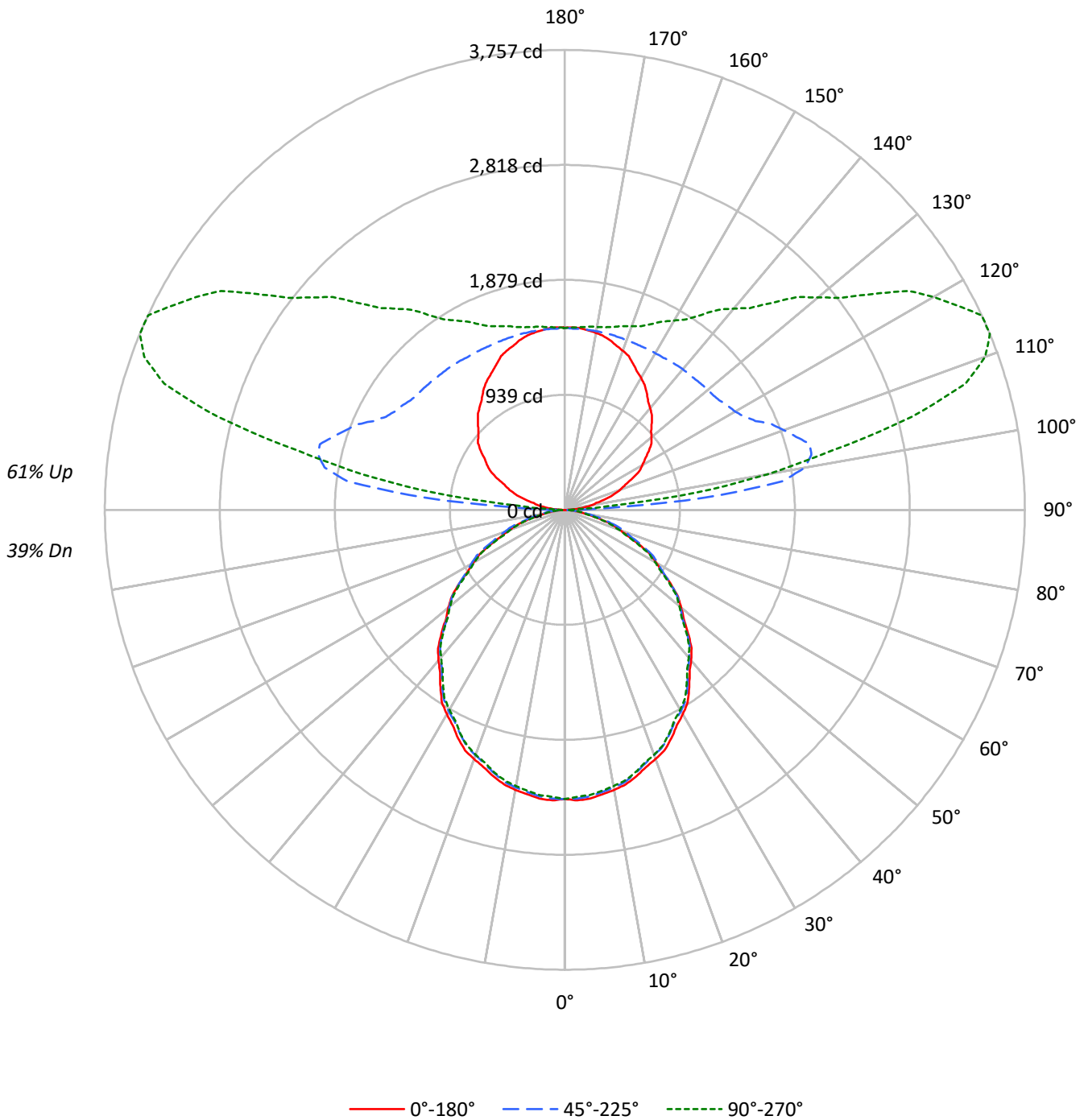
Lumens per Lamp: N/A
Luminaire Lumens: 15599.5 lumens
Efficiency: N/A
Efficacy: 105.1 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.19 / 1.31
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 148.4
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	104	104	104	104	95	95	95	95	77	77	77	61	61	61	46	46	46	39
1	95	91	87	84	86	83	80	77	68	65	63	53	52	51	40	39	39	33
2	87	80	74	69	79	73	67	63	59	56	52	47	44	42	36	34	33	27
3	79	70	63	57	72	64	58	53	52	48	44	42	38	36	32	30	28	23
4	72	62	54	48	66	57	50	45	46	41	38	37	33	31	28	26	24	20
5	66	55	47	41	60	50	43	38	41	36	32	33	29	27	25	23	21	17
6	61	49	41	36	55	45	38	33	37	32	28	30	26	23	23	20	18	15
7	56	44	37	31	51	41	34	29	34	29	25	27	23	20	21	18	16	14
8	52	40	33	27	47	37	30	26	31	26	22	25	21	18	19	17	15	12
9	49	37	29	24	44	34	27	23	28	23	20	23	19	16	18	15	13	11
10	45	34	27	22	41	31	25	20	26	21	18	21	17	15	17	14	12	10

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10896	10896	10896
5°	10966	10879	10831
10°	10878	10791	10732
15°	10763	10644	10604
20°	10635	10471	10451
25°	10486	10296	10263
30°	10265	10109	10043
35°	9973	9832	9774
40°	9662	9511	9474
45°	9286	9163	9123
50°	8901	8826	8766
55°	8485	8485	8352
60°	7968	8121	7833
65°	7292	7655	7109
70°	6427	7045	6260
75°	5490	6306	5342
80°	4256	5308	4312
85°	2752	4076	3636



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	222.4	1.4
10°-20°	627.9	4.0
20°-30°	931.4	6.0
30°-40°	1089.8	7.0
40°-50°	1085.0	7.0
50°-60°	936.9	6.0
60°-70°	674.4	4.3
70°-80°	353.7	2.3
80°-90°	90.8	0.6
90°-100°	691.1	4.4
100°-110°	1868.5	12.0
110°-120°	1964.4	12.6
120°-130°	1595.6	10.2
130°-140°	1251.7	8.0
140°-150°	960.7	6.2
150°-160°	690.9	4.4
160°-170°	422.1	2.7
170°-180°	142.3	0.9
0°-30°	1781.7	11.4
0°-40°	2871.6	18.4
0°-60°	4893.5	31.4
0°-90°	6012.3	38.5
90°-120°	4524.0	29.0
90°-150°	8331.9	53.4
90°-180°	9587.0	61.5
0°-180°	15599.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2362	2362	2362	2362	2362	
5°	2368	2342	2349	2343	2339	224
15°	2254	2225	2229	2224	2220	635
25°	2060	2026	2023	2010	2016	947
35°	1771	1746	1746	1729	1736	1107
45°	1423	1411	1405	1400	1398	1098
55°	1055	1053	1055	1040	1038	941
65°	668	688	701	674	651	662
75°	308	336	354	330	300	330
85°	52	68	77	73	69	69
90°	3	10	21	22	21	9
95°	107	376	1149	595	354	112
105°	347	537	2073	3058	2932	366
115°	611	748	1719	3328	3757	604
125°	837	959	1549	2615	3072	746
135°	1004	1122	1508	2111	2390	776
145°	1167	1254	1487	1807	1945	730
155°	1317	1369	1474	1621	1674	608
165°	1434	1448	1481	1538	1546	404
175°	1489	1487	1482	1501	1498	141
180°	1487	1487	1487	1487	1487	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2361.9	2361.9	2361.9	2361.9	2361.9
2.5°	2375.2	2355.7	2361.9	2356.6	2345.2
5°	2368.1	2341.7	2349.4	2343.0	2339.0
7.5°	2344.0	2319.6	2325.2	2318.5	2316.1
10°	2322.3	2297.9	2303.6	2295.2	2291.1
12.5°	2297.4	2271.3	2277.0	2268.6	2266.1
15°	2253.7	2225.2	2228.7	2224.4	2220.4
17.5°	2202.9	2174.0	2174.6	2167.9	2167.1
20°	2166.3	2135.7	2133.0	2124.7	2128.8
22.5°	2126.3	2094.2	2091.3	2079.8	2085.5
25°	2060.1	2025.5	2022.7	2010.3	2016.4
27.5°	1983.6	1949.4	1949.4	1932.1	1938.6
30°	1927.0	1894.4	1897.8	1877.2	1885.3
32.5°	1867.0	1837.7	1839.6	1818.9	1827.1
35°	1770.9	1746.5	1745.9	1729.4	1735.5
37.5°	1672.7	1651.1	1647.7	1638.2	1639.8
40°	1604.4	1586.1	1579.4	1573.2	1573.2
42.5°	1532.8	1516.1	1509.5	1504.9	1503.3
45°	1423.4	1411.2	1404.6	1400.4	1398.4
47.5°	1315.2	1303.8	1298.1	1295.1	1293.1
50°	1240.2	1232.1	1229.8	1223.5	1221.5
52.5°	1165.3	1160.4	1158.3	1150.3	1148.3
55°	1055.0	1053.0	1055.0	1040.4	1038.4
57.5°	940.2	943.4	950.2	930.5	925.6
60°	863.6	871.7	880.2	857.2	849.0
62.5°	785.3	798.4	810.3	783.8	772.4
65°	668.0	688.3	701.3	673.7	651.3
67.5°	554.8	580.0	595.6	565.9	540.6
70°	476.5	505.0	522.3	492.5	464.1
72.5°	408.3	440.0	454.1	425.9	397.5
75°	308.0	336.5	353.8	330.2	299.7
77.5°	218.5	245.4	259.7	239.2	213.9
80°	160.2	188.7	199.8	182.7	162.3
82.5°	113.6	137.2	144.8	134.5	120.7
85°	52.0	68.3	77.0	72.7	68.7
87.5°	14.0	26.6	35.8	36.1	37.5
90°	3.2	9.5	20.8	22.4	20.8
92.5°	45.5	165.7	326.8	141.9	102.8
95°	107.2	376.4	1149.3	594.8	353.7
97.5°	172.2	431.7	1791.4	1482.5	1088.8
100°	220.9	454.1	1991.2	2076.6	1679.1
102.5°	265.7	485.1	2061.6	2527.0	2229.7
105°	347.3	536.7	2072.8	3057.6	2932.4
107.5°	422.9	595.7	1982.2	3388.5	3430.2
110°	481.8	638.3	1901.6	3477.4	3654.3

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	534.3	680.8	1827.3	3459.6	3756.7
115°	611.4	747.6	1719.1	3327.9	3756.7
117.5°	687.0	814.7	1647.7	3126.5	3612.6
120°	733.1	858.3	1605.4	2982.1	3478.2
122.5°	776.6	899.3	1579.8	2827.2	3327.1
125°	837.1	959.2	1549.4	2614.6	3071.6
127.5°	892.8	1012.7	1531.5	2441.1	2843.0
130°	923.6	1047.2	1523.8	2334.0	2697.1
132.5°	955.6	1078.0	1516.1	2237.3	2571.6
135°	1003.6	1122.5	1507.8	2111.2	2389.7
137.5°	1051.9	1164.3	1500.8	2008.8	2235.8
140°	1085.2	1190.1	1498.2	1943.0	2144.9
142.5°	1117.2	1215.8	1493.1	1883.5	2060.3
145°	1166.9	1254.5	1487.0	1807.0	1944.8
147.5°	1212.0	1289.6	1479.9	1737.8	1843.6
150°	1245.3	1314.2	1477.4	1700.2	1784.7
152.5°	1276.0	1336.1	1476.1	1665.3	1734.8
155°	1317.3	1369.0	1474.2	1621.1	1674.3
157.5°	1360.2	1396.2	1474.5	1590.2	1625.3
160°	1384.5	1414.3	1475.8	1570.8	1595.8
162.5°	1403.8	1428.5	1477.1	1555.3	1574.1
165°	1434.2	1448.3	1480.6	1538.4	1546.2
167.5°	1455.0	1464.7	1480.9	1523.9	1527.6
170°	1467.8	1472.5	1482.2	1517.4	1517.4
172.5°	1478.0	1479.0	1482.2	1509.7	1508.4
175°	1488.6	1487.0	1482.2	1501.3	1498.2
177.5°	1492.1	1488.4	1481.9	1494.6	1490.8
180°	1487.0	1487.0	1487.0	1487.0	1487.0

(END OF REPORT)