

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: P564949

Luminaire Tested: **SQ4-PW1-100U-075D-940-1D-UNV-STD-W-12**

Issue Date: 7/30/2021

Test Information

Test Method: LM-79-2019
Report Number: P564949
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-23, 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-PW1-100U-075D-940-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE WAVES CONTINUOUS LENS.
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 17789.2 lumens
Efficiency: N/A
Efficacy: 116.0 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.19 / 1.31
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: General Diffuse

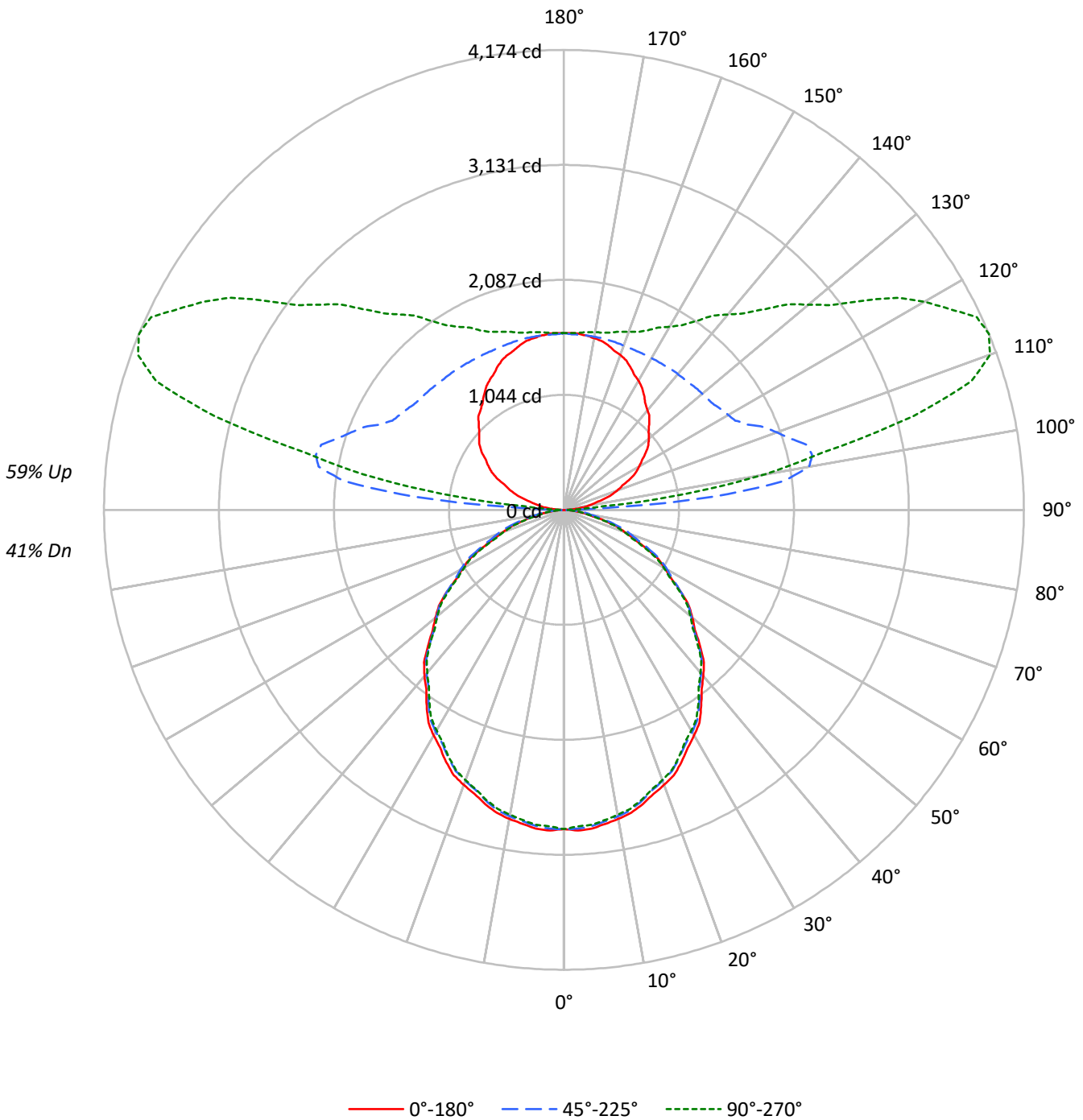
Input Watts (W): 153.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	105	105	105	105	96	96	96	96	79	79	79	63	63	63	48	48	48	41
1	96	92	88	85	87	84	81	78	69	67	65	55	54	52	43	42	41	35
2	87	80	74	69	79	73	68	64	60	57	54	49	46	44	38	36	35	30
3	80	70	63	58	72	65	58	53	53	49	45	43	40	37	33	31	29	25
4	73	62	55	49	66	57	50	45	47	42	38	38	35	32	30	27	25	22
5	67	55	48	42	61	51	44	39	42	37	33	34	31	28	27	24	22	19
6	62	50	42	36	56	46	39	34	38	33	29	31	27	24	24	22	19	16
7	57	45	37	32	52	41	34	29	35	29	25	28	24	21	22	19	17	15
8	53	41	33	28	48	37	31	26	31	26	22	26	22	19	20	18	15	13
9	49	37	30	25	45	34	28	23	29	24	20	24	20	17	19	16	14	12
10	46	34	27	22	42	31	25	21	26	21	18	22	18	15	18	15	13	11

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8908	8908	8908
5°	8966	8895	8856
10°	8894	8823	8775
15°	8800	8703	8670
20°	8695	8561	8545
25°	8574	8418	8392
30°	8392	8265	8211
35°	8154	8039	7991
40°	7900	7777	7746
45°	7592	7492	7459
50°	7278	7216	7168
55°	6938	6938	6828
60°	6514	6640	6405
65°	5961	6259	5813
70°	5255	5760	5117
75°	4488	5156	4367
80°	3480	4339	3526
85°	2251	3331	2971



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	272.8	1.5
10°-20°	770.1	4.3
20°-30°	1142.3	6.4
30°-40°	1336.6	7.5
40°-50°	1330.6	7.5
50°-60°	1149.0	6.5
60°-70°	827.1	4.6
70°-80°	433.7	2.4
80°-90°	110.8	0.6
90°-100°	750.7	4.2
100°-110°	2072.5	11.7
110°-120°	2137.5	12.0
120°-130°	1717.6	9.7
130°-140°	1349.9	7.6
140°-150°	1035.3	5.8
150°-160°	744.1	4.2
160°-170°	455.0	2.6
170°-180°	153.4	0.9
0°-30°	2185.1	12.3
0°-40°	3521.8	19.8
0°-60°	6001.4	33.7
0°-90°	7373.1	41.4
90°-120°	4960.7	27.9
90°-150°	9063.6	50.9
90°-180°	10416.0	58.6
0°-180°	17789.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2897	2897	2897	2897	2897	
5°	2904	2872	2881	2874	2869	275
15°	2764	2729	2733	2728	2723	779
25°	2527	2484	2481	2466	2473	1162
35°	2172	2142	2141	2121	2128	1358
45°	1746	1731	1723	1718	1715	1347
55°	1294	1291	1294	1276	1274	1154
65°	819	844	860	826	799	812
75°	378	413	434	405	368	405
85°	64	84	94	89	84	84
90°	5	10	20	23	26	10
95°	110	406	1362	560	364	118
105°	369	570	2280	3481	3278	393
115°	662	800	1836	3636	4135	650
125°	908	1033	1665	2817	3306	808
135°	1093	1210	1618	2282	2573	845
145°	1267	1355	1598	1942	2090	793
155°	1429	1476	1585	1743	1798	658
165°	1547	1567	1593	1655	1667	436
175°	1603	1606	1595	1618	1613	152
180°	1603	1603	1603	1603	1603	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2896.6	2896.6	2896.6	2896.6	2896.6
2.5°	2913.0	2889.0	2896.6	2890.2	2876.2
5°	2904.3	2871.9	2881.3	2873.6	2868.6
7.5°	2874.7	2844.8	2851.7	2843.5	2840.5
10°	2848.2	2818.2	2825.2	2814.9	2809.9
12.5°	2817.5	2785.6	2792.5	2782.2	2779.2
15°	2763.9	2729.0	2733.3	2728.1	2723.1
17.5°	2701.7	2666.2	2667.0	2658.8	2657.8
20°	2656.7	2619.3	2615.9	2605.8	2610.8
22.5°	2607.7	2568.3	2564.9	2550.7	2557.7
25°	2526.6	2484.2	2480.7	2465.5	2473.0
27.5°	2432.7	2390.7	2390.8	2369.6	2377.5
30°	2363.3	2323.3	2327.5	2302.2	2312.2
32.5°	2289.8	2253.8	2256.1	2230.8	2240.8
35°	2171.8	2141.9	2141.2	2121.0	2128.5
37.5°	2051.4	2024.9	2020.8	2009.1	2011.1
40°	1967.7	1945.2	1937.1	1929.4	1929.4
42.5°	1879.9	1859.4	1851.3	1845.6	1843.6
45°	1745.6	1730.7	1722.7	1717.5	1715.0
47.5°	1612.9	1599.0	1592.0	1588.4	1585.9
50°	1521.1	1511.1	1508.3	1500.6	1498.1
52.5°	1429.2	1423.2	1420.5	1410.7	1408.3
55°	1293.9	1291.4	1293.9	1276.0	1273.5
57.5°	1153.0	1157.0	1165.3	1141.2	1135.2
60°	1059.1	1069.1	1079.5	1051.2	1041.3
62.5°	963.2	979.1	993.8	961.3	947.3
65°	819.2	844.2	860.1	826.3	798.8
67.5°	680.4	711.3	730.4	694.0	663.0
70°	584.4	619.4	640.6	604.1	569.1
72.5°	500.7	539.7	556.9	522.4	487.5
75°	377.7	412.6	433.9	404.9	367.5
77.5°	268.0	300.9	318.5	293.3	262.4
80°	196.5	231.4	245.0	224.0	199.1
82.5°	139.3	168.3	177.6	165.0	148.0
85°	63.8	83.8	94.4	89.2	84.2
87.5°	17.4	32.3	42.9	43.5	46.0
90°	5.1	10.1	20.5	23.1	25.6
92.5°	46.2	191.6	342.7	125.1	97.5
95°	110.3	406.2	1362.0	559.8	364.2
97.5°	182.6	455.0	2017.6	1553.3	1125.0
100°	236.0	484.3	2259.7	2275.7	1849.3
102.5°	287.3	517.5	2306.9	2811.8	2407.5
105°	369.4	570.0	2280.2	3481.2	3278.0
107.5°	456.6	635.1	2153.0	3804.0	3878.2
110°	518.1	678.6	2054.5	3873.4	4114.2

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	573.5	728.0	1962.2	3818.6	4173.7
115°	661.8	799.7	1836.5	3635.6	4134.7
117.5°	738.7	876.1	1753.9	3378.1	3945.9
120°	790.0	925.4	1721.1	3203.8	3775.6
122.5°	839.3	968.7	1694.4	3041.0	3582.7
125°	908.0	1033.4	1664.7	2817.2	3306.2
127.5°	966.5	1091.9	1647.2	2627.9	3049.7
130°	1005.5	1130.9	1639.0	2512.1	2895.8
132.5°	1042.4	1161.8	1630.8	2414.9	2762.5
135°	1092.7	1210.5	1618.5	2281.7	2572.7
137.5°	1149.1	1256.4	1612.3	2170.0	2418.2
140°	1179.9	1285.2	1608.2	2095.4	2313.6
142.5°	1214.8	1312.1	1604.1	2029.1	2221.3
145°	1267.1	1354.9	1598.0	1942.5	2090.4
147.5°	1317.4	1394.1	1592.3	1869.4	1984.2
150°	1354.3	1417.0	1590.3	1825.8	1918.6
152.5°	1383.0	1441.7	1588.2	1788.5	1865.2
155°	1428.7	1476.3	1585.1	1742.9	1798.0
157.5°	1470.7	1507.4	1585.7	1709.6	1747.2
160°	1495.4	1528.0	1587.7	1690.9	1718.5
162.5°	1515.9	1544.5	1589.8	1674.4	1695.9
165°	1546.7	1566.7	1592.8	1654.7	1667.2
167.5°	1570.3	1582.3	1595.4	1642.7	1646.7
170°	1582.6	1592.6	1595.4	1636.4	1636.4
172.5°	1592.8	1598.9	1595.4	1628.2	1626.2
175°	1603.1	1605.6	1595.4	1618.4	1613.4
177.5°	1607.2	1605.2	1594.9	1609.2	1605.1
180°	1603.1	1603.1	1603.1	1603.1	1603.1

(END OF REPORT)