

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: P564997

Luminaire Tested: **SQ4-PW1-100U-125D-940-1D-UNV-STD-W-12**

Issue Date: 7/30/2021

Test Information

Test Method: LM-79-2019
Report Number: P564997
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-125D-940-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE WAVES CONTINUOUS LENS.
DOWNLIGHT 1250 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: 22915.7 lumens
Efficiency: N/A
Efficacy: 106.7 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

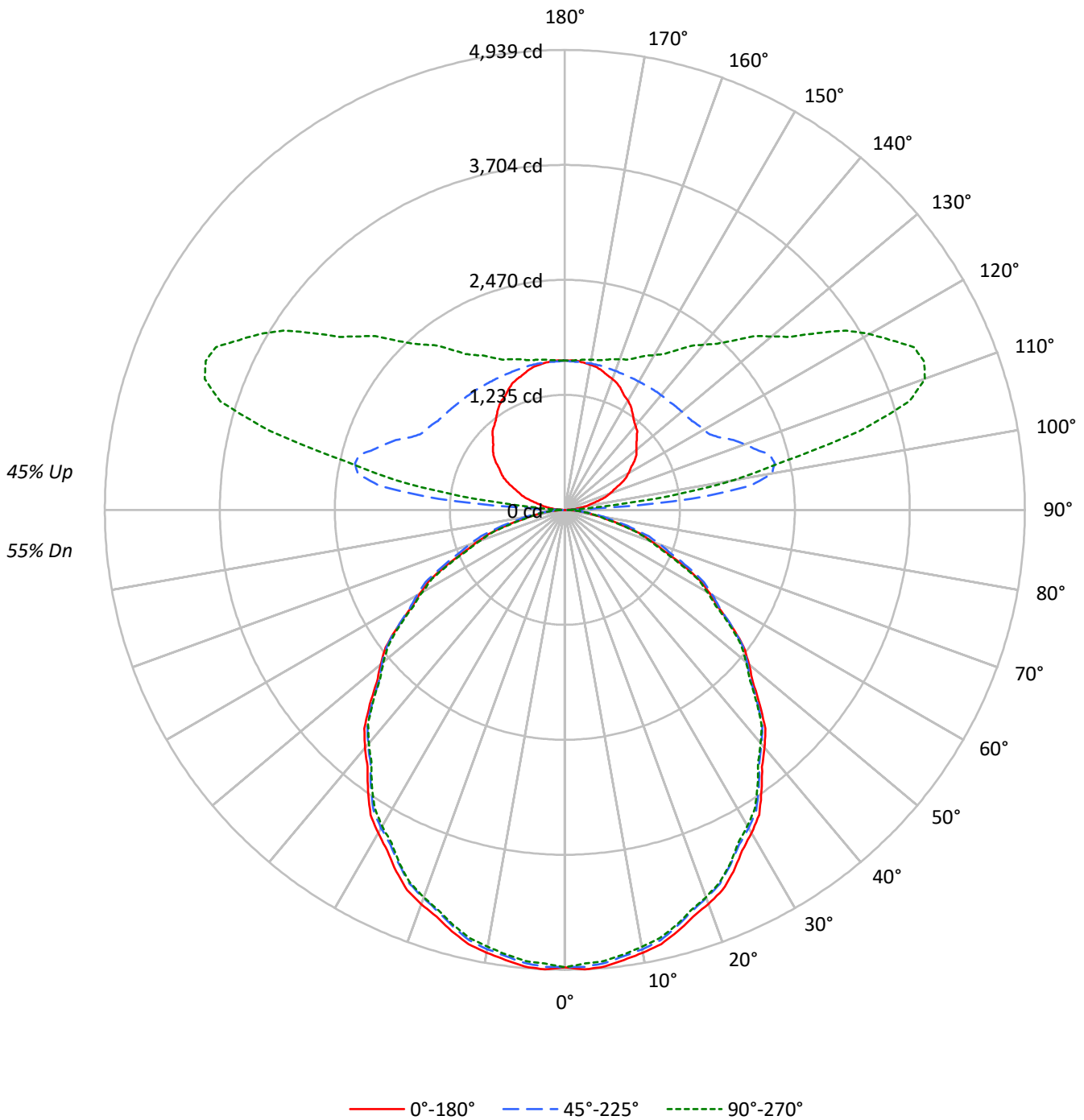
Input Watts (W): 214.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	108	108	108	108	100	100	100	100	86	86	86	73	73	73	60	60	60	55
1	99	95	91	87	92	88	85	82	76	73	71	64	62	61	53	52	51	46
2	90	83	77	71	83	77	72	67	66	62	59	56	53	51	47	45	43	39
3	82	73	65	60	76	68	61	56	59	54	49	50	46	43	42	39	37	33
4	75	64	57	50	70	60	53	48	52	47	42	44	40	37	37	34	32	28
5	69	57	49	43	64	54	46	41	47	41	36	40	36	32	34	30	28	25
6	64	52	43	38	59	48	41	36	42	36	32	36	32	28	31	27	24	22
7	59	47	39	33	55	44	36	31	38	32	28	33	28	25	28	24	22	19
8	55	42	35	29	51	40	33	28	35	29	25	30	26	22	26	22	19	17
9	51	39	31	26	47	36	30	25	32	26	22	28	23	20	24	20	18	15
10	48	36	28	23	44	33	27	22	29	24	20	26	21	18	22	19	16	14

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	15105	15105	15105
5°	15203	15083	15016
10°	15081	14960	14878
15°	14921	14756	14701
20°	14743	14516	14488
25°	14537	14273	14229
30°	14230	14015	13923
35°	13826	13631	13550
40°	13394	13186	13134
45°	12873	12704	12648
50°	12340	12236	12154
55°	11764	11764	11578
60°	11046	11259	10860
65°	10109	10612	9857
70°	8911	9767	8677
75°	7610	8742	7404
80°	5901	7357	5977
85°	3818	5649	5039



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	462.5	2.0
10°-20°	1305.8	5.7
20°-30°	1936.9	8.5
30°-40°	2266.3	9.9
40°-50°	2256.2	9.8
50°-60°	1948.4	8.5
60°-70°	1402.5	6.1
70°-80°	735.4	3.2
80°-90°	185.7	0.8
90°-100°	750.7	3.3
100°-110°	2072.5	9.0
110°-120°	2137.5	9.3
120°-130°	1717.6	7.5
130°-140°	1349.9	5.9
140°-150°	1035.3	4.5
150°-160°	744.1	3.2
160°-170°	455.0	2.0
170°-180°	153.4	0.7
0°-30°	3705.1	16.2
0°-40°	5971.5	26.1
0°-60°	10176.1	44.4
0°-90°	12499.6	54.5
90°-120°	4960.7	21.6
90°-150°	9063.6	39.6
90°-180°	10416.0	45.5
0°-180°	22915.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4912	4912	4912	4912	4912	
5°	4924	4870	4886	4872	4864	466
15°	4686	4627	4635	4626	4617	1321
25°	4284	4212	4206	4180	4193	1970
35°	3683	3632	3631	3596	3609	2302
45°	2960	2934	2921	2912	2908	2284
55°	2194	2190	2194	2164	2159	1958
65°	1389	1431	1458	1401	1354	1377
75°	640	700	736	687	623	686
85°	108	142	160	151	143	143
90°	5	10	20	23	26	12
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°	4911.6	4911.6	4911.6	4911.6	4911.6
2.5°	4939.3	4898.6	4911.6	4900.6	4876.9
5°	4924.5	4869.5	4885.6	4872.4	4864.0
7.5°	4874.3	4823.6	4835.4	4821.4	4816.4
10°	4829.3	4778.6	4790.4	4772.9	4764.4
12.5°	4777.4	4723.3	4735.0	4717.6	4712.5
15°	4686.5	4627.3	4634.6	4625.8	4617.3
17.5°	4580.9	4520.9	4522.1	4508.2	4506.5
20°	4504.8	4441.3	4435.5	4418.4	4426.9
22.5°	4421.7	4354.8	4349.0	4325.0	4336.9
25°	4284.1	4212.2	4206.2	4180.5	4193.2
27.5°	4124.8	4053.8	4053.9	4017.8	4031.4
30°	4007.1	3939.4	3946.6	3903.7	3920.6
32.5°	3882.5	3821.6	3825.4	3782.5	3799.4
35°	3682.6	3631.8	3630.7	3596.3	3609.0
37.5°	3478.3	3433.5	3426.4	3406.6	3410.0
40°	3336.4	3298.3	3284.5	3271.5	3271.5
42.5°	3187.5	3152.8	3139.1	3129.5	3126.1
45°	2959.9	2934.5	2921.0	2912.2	2908.0
47.5°	2734.9	2711.2	2699.4	2693.3	2689.0
50°	2579.1	2562.2	2557.5	2544.4	2540.2
52.5°	2423.3	2413.2	2408.6	2392.1	2387.8
55°	2194.0	2189.7	2194.0	2163.6	2159.4
57.5°	1955.1	1961.9	1975.9	1935.0	1924.8
60°	1795.9	1812.8	1830.5	1782.5	1765.6
62.5°	1633.1	1660.2	1685.1	1630.0	1606.3
65°	1389.1	1431.4	1458.3	1401.0	1354.5
67.5°	1153.7	1206.1	1238.5	1176.7	1124.2
70°	991.0	1050.2	1086.2	1024.2	965.0
72.5°	849.0	915.0	944.2	885.8	826.5
75°	640.4	699.7	735.7	686.6	623.1
77.5°	454.4	510.2	540.1	497.3	444.9
80°	333.2	392.4	415.4	379.8	337.5
82.5°	236.3	285.4	301.2	279.8	251.0
85°	108.2	142.0	160.1	151.3	142.8
87.5°	28.7	53.4	69.9	70.5	74.4
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)