

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: CORELITE

Report Number: P845250

Luminaire Tested: **SQ4P-PW1-050U-125D-B40-1D-UNV**

Issue Date: 8/14/2023

Test Information

Test Method: LM-79-08
Report Number: P845250
REPORT IS A COMBINATION OF REPORTS P700210 AND P700244
Test Lab: INNOVATION CENTER
Issue Date: 8/14/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4P-PW1-050U-125D-B40-1D-UNV
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, 500 LUMENS PER FOOT
UPLIGHT, 1250 LUMENS PER FOOT DOWNLIGHT

Light Source: -
Ballast/Driver: -

Summary

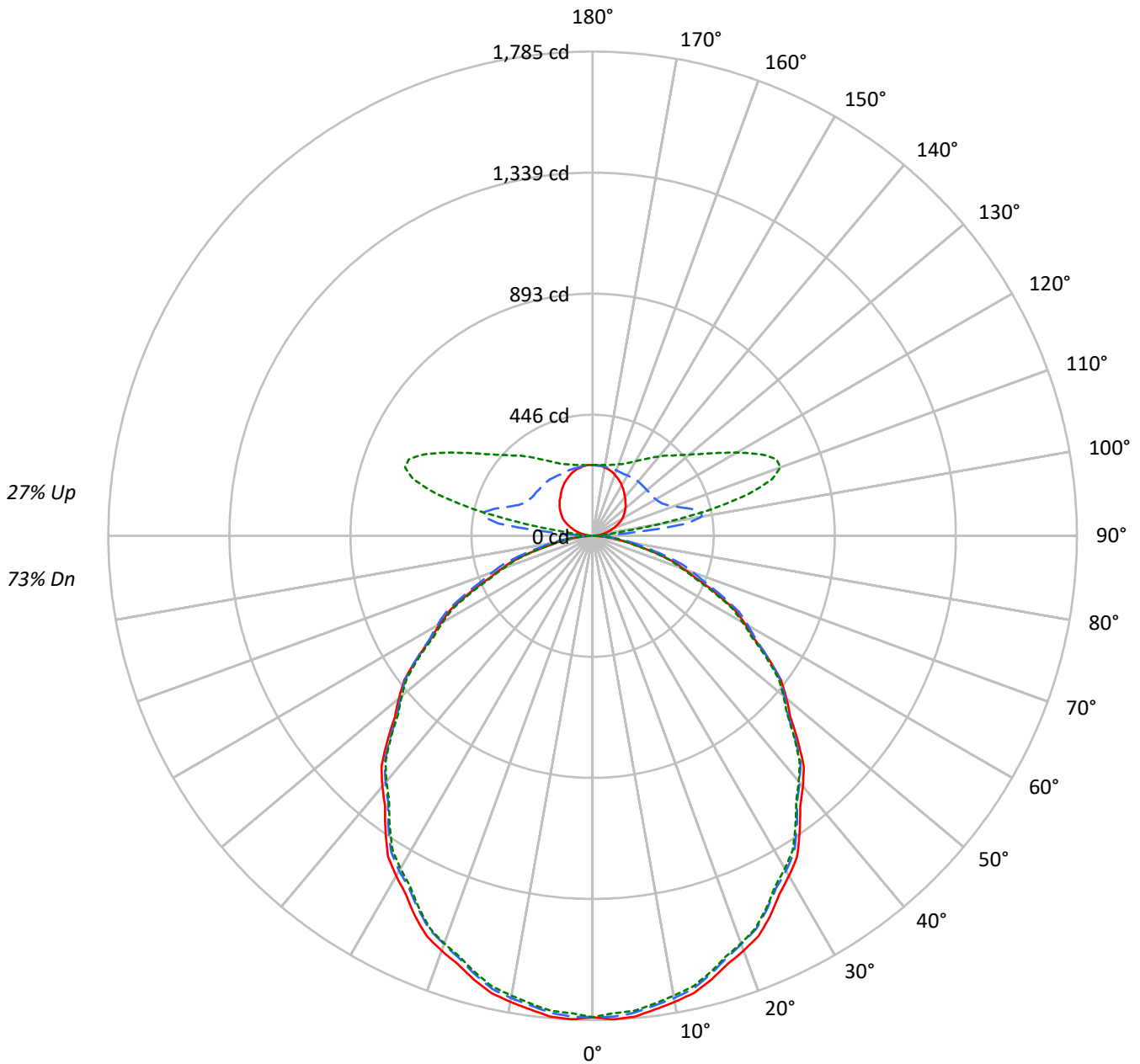
Lumens per Lamp: N/A
Luminaire Lumens: 6209.1 lumens
Efficiency: N/A
Efficacy: 105.6 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.19 / 1.31
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 58.8
Input Voltage (V): NR
Input Current (A_{in}): 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: 25 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				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	50	30	10	0
RCR																					
0	113	113	113	113	107	107	107	107	96	96	96	86	86	86	77	77	77	77	77	77	73
1	103	99	95	91	98	94	90	87	85	82	79	76	74	72	68	67	65	65	65	65	62
2	94	86	80	75	89	82	76	72	74	70	66	67	64	60	60	58	55	55	55	55	52
3	86	76	68	62	81	72	66	60	66	60	56	59	55	51	54	50	47	47	47	47	44
4	79	67	59	53	74	64	57	51	58	52	48	53	48	44	48	44	41	41	41	41	38
5	72	60	52	46	68	58	50	44	52	46	41	48	42	38	43	39	36	36	36	36	33
6	67	54	46	40	63	52	44	39	47	41	36	43	38	34	39	35	31	31	31	31	29
7	62	49	41	35	58	47	39	34	43	37	32	39	34	30	36	31	28	28	28	28	26
8	57	45	37	31	54	43	35	30	39	33	28	36	31	27	33	28	25	25	25	25	23
9	54	41	33	28	51	39	32	27	36	30	26	33	28	24	30	26	23	23	23	23	21
10	50	38	30	25	48	36	29	25	33	27	23	31	26	22	28	24	21	21	21	21	19

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	16372	16372	16372
5°	16479	16348	16276
10°	16346	16214	16126
15°	16173	15993	15934
20°	15979	15733	15704
25°	15757	15471	15421
30°	15424	15192	15091
35°	14986	14773	14686
40°	14519	14291	14237
45°	13953	13771	13708
50°	13376	13264	13172
55°	12749	12749	12550
60°	11976	12204	11771
65°	10955	11503	10684
70°	9655	10585	9409
75°	8252	9471	8021
80°	6402	7975	6487
85°	4139	6129	5452



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	167.1	2.7
10°-20°	471.8	7.6
20°-30°	699.8	11.3
30°-40°	818.8	13.2
40°-50°	815.2	13.1
50°-60°	703.9	11.3
60°-70°	506.7	8.2
70°-80°	265.7	4.3
80°-90°	66.5	1.1
90°-100°	103.8	1.7
100°-110°	361.4	5.8
110°-120°	350.0	5.6
120°-130°	274.6	4.4
130°-140°	217.3	3.5
140°-150°	167.7	2.7
150°-160°	120.2	1.9
160°-170°	73.5	1.2
170°-180°	24.9	0.4
0°-30°	1338.6	21.6
0°-40°	2157.5	34.7
0°-60°	3676.6	59.2
0°-90°	4515.5	72.7
90°-120°	815.2	13.1
90°-150°	1474.9	23.8
90°-180°	1694.0	27.3
0°-180°	6209.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1774	1774	1774	1774	1774	
5°	1779	1759	1765	1760	1757	169
15°	1693	1672	1674	1671	1668	477
25°	1548	1522	1520	1510	1515	712
35°	1330	1312	1312	1299	1304	832
45°	1069	1060	1055	1052	1051	825
55°	793	791	793	782	780	707
65°	502	517	527	506	489	497
75°	232	253	266	248	225	248
85°	39	51	58	55	52	52
90°	4	6	6	4	2	4
95°	18	60	175	45	27	19
105°	60	86	380	641	596	63
115°	105	127	282	596	703	104
125°	142	175	263	444	530	127
135°	171	193	261	370	419	133
145°	201	214	259	319	347	125
155°	228	236	255	284	294	105
165°	249	251	257	269	271	70
175°	261	261	259	263	261	25
180°	261	261	261	261	261	



TEST NUMBER: P845250

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1774.5	1774.5	1774.5	1774.5	1774.5
2.5°	1784.6	1769.8	1774.5	1770.7	1762.0
5°	1779.3	1759.3	1765.2	1760.4	1757.4
7.5°	1761.2	1742.9	1746.9	1742.1	1740.1
10°	1744.8	1726.4	1730.7	1724.5	1721.3
12.5°	1726.2	1706.5	1710.8	1704.3	1702.7
15°	1693.2	1671.7	1674.4	1671.1	1668.2
17.5°	1655.1	1633.5	1633.7	1628.9	1628.0
20°	1627.5	1604.6	1602.4	1596.2	1599.5
22.5°	1597.6	1573.4	1571.2	1562.6	1566.9
25°	1547.8	1521.9	1519.7	1510.3	1514.8
27.5°	1490.3	1464.7	1464.7	1451.6	1456.4
30°	1447.8	1423.3	1426.0	1410.3	1416.5
32.5°	1402.7	1380.6	1382.0	1366.7	1372.9
35°	1330.5	1312.2	1311.6	1299.3	1303.9
37.5°	1256.7	1240.5	1237.8	1230.8	1231.9
40°	1205.5	1191.8	1186.6	1182.1	1182.1
42.5°	1151.5	1139.2	1134.1	1130.6	1129.4
45°	1069.4	1060.3	1055.4	1052.1	1050.6
47.5°	988.0	979.6	975.4	973.1	971.6
50°	931.9	925.7	924.1	919.3	917.7
52.5°	875.6	871.9	870.2	864.3	862.7
55°	792.6	791.2	792.6	781.8	780.2
57.5°	706.4	708.8	713.9	699.1	695.3
60°	649.0	654.9	661.4	644.1	637.9
62.5°	590.0	599.9	608.8	588.9	580.3
65°	501.8	517.2	526.9	506.1	489.4
67.5°	416.9	435.8	447.4	425.3	406.1
70°	357.9	379.5	392.4	370.0	348.8
72.5°	306.7	330.6	341.2	319.9	298.6
75°	231.5	252.8	265.7	248.0	225.0
77.5°	164.2	184.3	195.1	179.8	160.7
80°	120.5	141.8	150.1	137.2	122.1
82.5°	85.5	103.2	108.9	101.1	90.5
85°	39.1	51.2	57.9	54.8	51.5
87.5°	10.0	18.6	23.7	23.7	25.1
90°	3.9	5.8	5.8	3.9	1.9
92.5°	9.7	29.2	27.2	11.7	9.7
95°	17.5	60.4	175.3	44.8	27.2
97.5°	27.2	68.1	350.5	159.7	85.7
100°	37.0	72.1	408.9	383.7	247.3
102.5°	48.6	77.9	407.0	539.4	444.0
105°	60.4	85.7	379.8	640.6	595.9



TEST NUMBER: P845250

CATALOG NUMBER: SQ4P-PW1-050U-125D-B40-1D-UNV

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	93.5	114.9	296.0	644.6	734.2
115°	105.1	126.6	282.4	595.9	703.0
117.5°	116.9	140.2	274.5	551.1	658.2
120°	126.6	151.9	268.7	508.3	613.4
122.5°	134.4	163.6	264.8	473.2	568.6
125°	142.2	175.3	262.9	444.0	529.7
127.5°	149.9	183.1	262.9	422.6	494.6
130°	157.8	186.9	261.0	401.2	465.4
132.5°	165.5	188.9	261.0	385.6	440.1
135°	171.3	192.7	261.0	370.0	418.7
137.5°	179.2	196.7	261.0	356.3	401.2
140°	185.0	202.5	261.0	342.8	381.7
142.5°	192.7	208.3	261.0	329.1	364.2
145°	200.6	214.3	259.0	319.4	346.6
147.5°	208.3	220.1	257.1	309.6	331.0
150°	214.3	225.9	257.1	299.9	317.5
152.5°	222.0	231.7	255.2	290.1	305.7
155°	227.8	235.7	255.2	284.3	294.0
157.5°	233.6	241.5	255.2	278.5	286.3
160°	239.6	245.4	257.1	274.5	280.4
162.5°	245.4	249.2	257.1	270.7	274.5
165°	249.2	251.2	257.1	268.7	270.7
167.5°	253.1	255.2	257.1	266.8	266.8
170°	255.2	257.1	259.0	264.8	264.8
172.5°	259.0	259.0	259.0	262.9	262.9
175°	261.0	261.0	259.0	262.9	261.0
177.5°	261.0	261.0	259.0	262.9	261.0
180°	261.0	261.0	261.0	261.0	261.0



Report Generated By 670246072 / DESKTOP-50001EG





— 0°-180° - - 45°-225° - - - - 90°-270°







107.5°	72.1	95.5	344.7	685.5	693.3
110°	81.8	105.1	317.5	679.6	736.1



(END OF REPORT)