

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: P845166

Luminaire Tested: **SQ4P-PR1-050U-125D-B40-1D-UNV**

Issue Date: 8/14/2023

Test Information

Test Method: LM-79-08
Report Number: P845166
REPORT IS A COMBINATION OF REPORTS P700206 AND P700244
Test Lab: INNOVATION CENTER
Issue Date: 8/14/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4P-PR1-050U-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

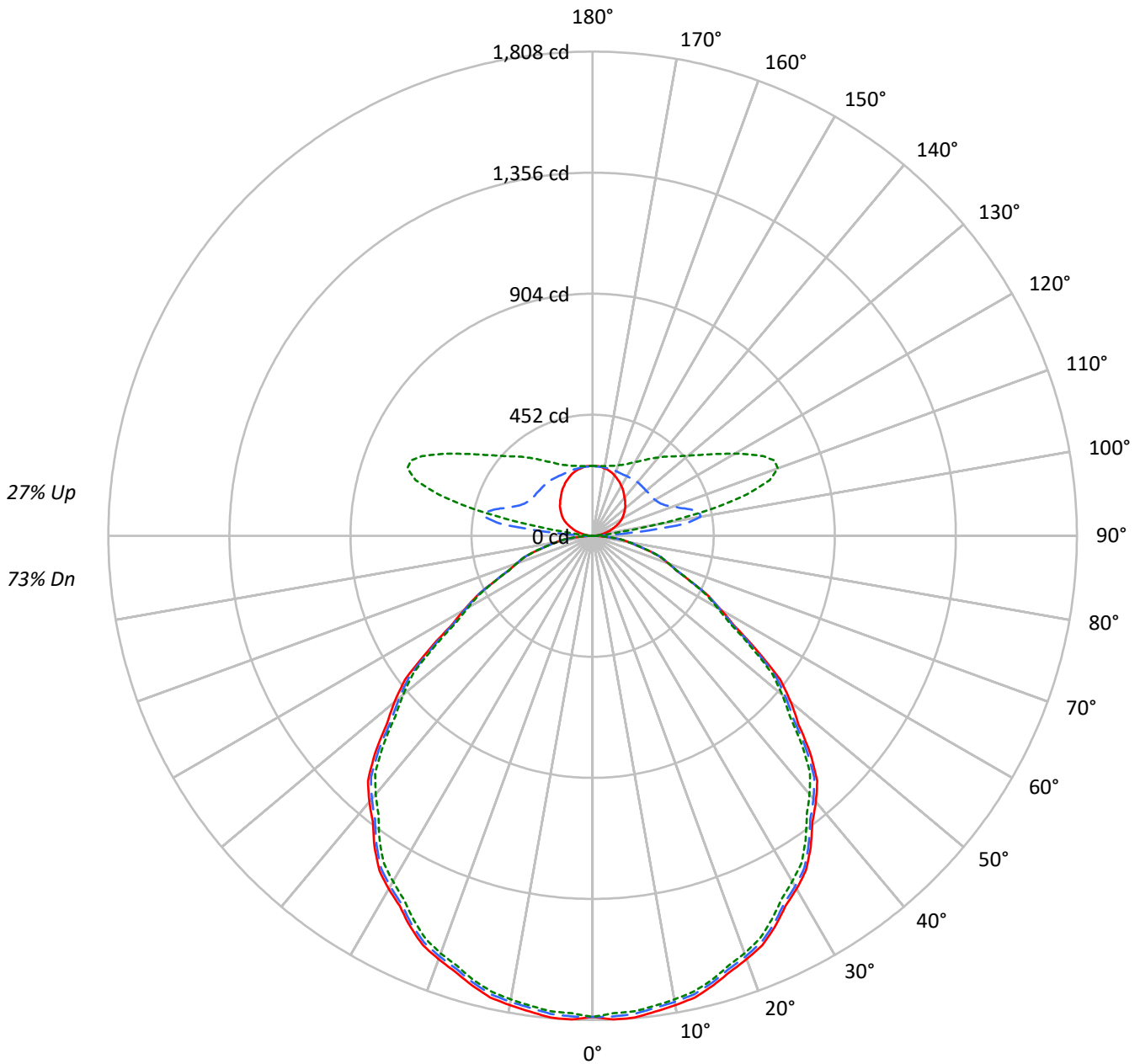
Lumens per Lamp: N/A
Luminaire Lumens: 6185.7 lumens
Efficiency: N/A
Efficacy: 105.2 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Direct

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

TEST NUMBER: P845166

CATALOG NUMBER: SQ4P-PR1-050U-125D-B40-1D-UNV

Luminous Intensity Polar Plot





TEST NUMBER: P845166

CATALOG NUMBER: SQ4P-PR1-050U-125D-B40-1D-UNV

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									20									20									20									
RC	80									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	92	98	94	91	88	85	82	80	76	74	73	69	67	66	66	66	66	62																
2	94	87	81	76	89	83	77	73	75	71	67	68	64	61	61	58	56	56	56	56	53																
3	86	77	69	64	82	73	67	61	66	61	57	60	56	52	54	51	48	48	48	48	45																
4	79	68	60	54	75	65	58	52	59	53	49	54	49	45	49	45	42	42	42	42	39																
5	73	61	53	47	69	58	51	45	53	47	42	49	44	40	44	40	37	37	37	37	34																
6	67	55	47	41	64	53	45	40	48	42	37	44	39	35	40	36	32	32	32	32	30																
7	63	50	42	36	59	48	40	35	44	38	33	40	35	31	37	32	29	29	29	29	27																
8	58	46	38	32	55	44	36	31	40	34	29	37	32	28	34	29	26	26	26	26	24																
9	54	42	34	29	51	40	33	28	37	31	27	34	29	25	31	27	24	24	24	24	22																
10	51	38	31	26	48	37	30	25	34	28	24	31	26	23	29	25	21	21	21	21	20																

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	16576	16576	16576
5°	16726	16597	16511
10°	16672	16557	16470
15°	16601	16497	16407
20°	16516	16408	16289
25°	16400	16291	16101
30°	16222	16108	15878
35°	15985	15844	15617
40°	15617	15450	15172
45°	14984	14721	14417
50°	13861	13528	13260
55°	12096	11826	11577
60°	10195	10110	9909
65°	8818	8852	8783
70°	8095	8139	8139
75°	7778	7778	7835
80°	7311	7401	7311
85°	5896	6553	6553



TEST NUMBER: P845166

CATALOG NUMBER: SQ4P-PR1-050U-125D-B40-1D-UNV

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	169.9	2.7
10°-20°	486.1	7.9
20°-30°	733.2	11.9
30°-40°	873.6	14.1
40°-50°	861.3	13.9
50°-60°	658.3	10.6
60°-70°	407.3	6.6
70°-80°	231.4	3.7
80°-90°	71.0	1.1
90°-100°	103.8	1.7
100°-110°	361.4	5.8
110°-120°	350.0	5.7
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°	1389.3	22.5
0°-40°	2262.9	36.6
0°-60°	3782.5	61.1
0°-90°	4492.2	72.6
90°-120°	815.2	13.2
90°-150°	1474.9	23.8
90°-180°	1694.0	27.4
0°-180°	6185.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1797	1797	1797	1797	1797	
5°	1806	1786	1792	1786	1783	171
15°	1738	1720	1727	1721	1718	490
25°	1611	1591	1600	1583	1582	741
35°	1419	1402	1407	1388	1387	886
45°	1148	1133	1128	1108	1105	880
55°	752	740	735	723	720	674
65°	404	401	406	402	402	409
75°	218	218	218	220	220	230
85°	56	59	62	62	62	65
90°	4	6	6	4	2	5
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: P845166

CATALOG NUMBER: SQ4P-PR1-050U-125D-B40-1D-UNV

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1796.6	1796.6	1796.6	1796.6	1796.6
2.5°	1807.9	1792.1	1796.6	1793.0	1784.4
5°	1806.0	1786.3	1792.1	1785.7	1782.8
7.5°	1792.1	1772.7	1778.5	1772.1	1770.5
10°	1779.6	1761.5	1767.3	1761.2	1758.0
12.5°	1766.0	1746.7	1753.7	1746.3	1743.3
15°	1738.0	1719.8	1727.1	1720.9	1717.7
17.5°	1707.0	1687.5	1695.0	1687.8	1683.8
20°	1682.2	1664.1	1671.2	1660.6	1659.0
22.5°	1655.1	1636.8	1644.1	1629.7	1629.4
25°	1611.0	1591.3	1600.3	1583.3	1581.6
27.5°	1558.7	1540.6	1547.8	1530.4	1528.8
30°	1522.7	1504.6	1512.0	1493.3	1490.4
32.5°	1481.9	1465.1	1471.2	1452.5	1450.7
35°	1419.2	1402.4	1406.7	1388.3	1386.6
37.5°	1347.7	1332.5	1334.9	1314.3	1313.0
40°	1296.7	1281.8	1282.8	1261.2	1259.7
42.5°	1241.3	1226.1	1224.7	1203.1	1201.5
45°	1148.4	1133.2	1128.2	1107.8	1104.9
47.5°	1042.5	1027.3	1018.0	1001.4	999.3
50°	965.7	950.5	942.5	928.4	923.8
52.5°	882.7	867.5	860.8	848.0	843.5
55°	752.0	740.0	735.2	722.6	719.7
57.5°	628.0	620.0	618.4	606.3	605.0
60°	552.5	547.9	547.9	537.0	537.0
62.5°	488.2	484.7	487.1	479.9	478.8
65°	403.9	400.9	405.5	402.3	402.3
67.5°	337.4	337.4	340.1	338.8	338.8
70°	300.1	300.1	301.7	301.7	301.7
72.5°	266.8	265.7	269.7	269.4	268.3
75°	218.2	218.2	218.2	219.8	219.8
77.5°	170.0	170.2	171.5	171.2	170.0
80°	137.6	139.3	139.3	137.6	137.6
82.5°	105.6	107.0	107.0	106.7	105.6
85°	55.7	58.7	61.9	61.9	61.9
87.5°	16.0	20.8	24.8	24.8	23.5
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: P845166

CATALOG NUMBER: SQ4P-PR1-050U-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)