

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: P845201

Luminaire Tested: **SQ4P-PR1-100U-125D-B35-1D-UNV**

Issue Date: 8/14/2023

Test Information

Test Method: LM-79-08
Report Number: P845201
REPORT IS A COMBINATION OF REPORTS P700094 AND P700246
Test Lab: INNOVATION CENTER
Issue Date: 8/14/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4P-PR1-100U-125D-B35-1D-UNV
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, 1000 LUMENS PER FOOT
UPLIGHT, 1250 LUMENS PER FOOT DOWNLIGHT

Light Source: -
Ballast/Driver: -

Summary

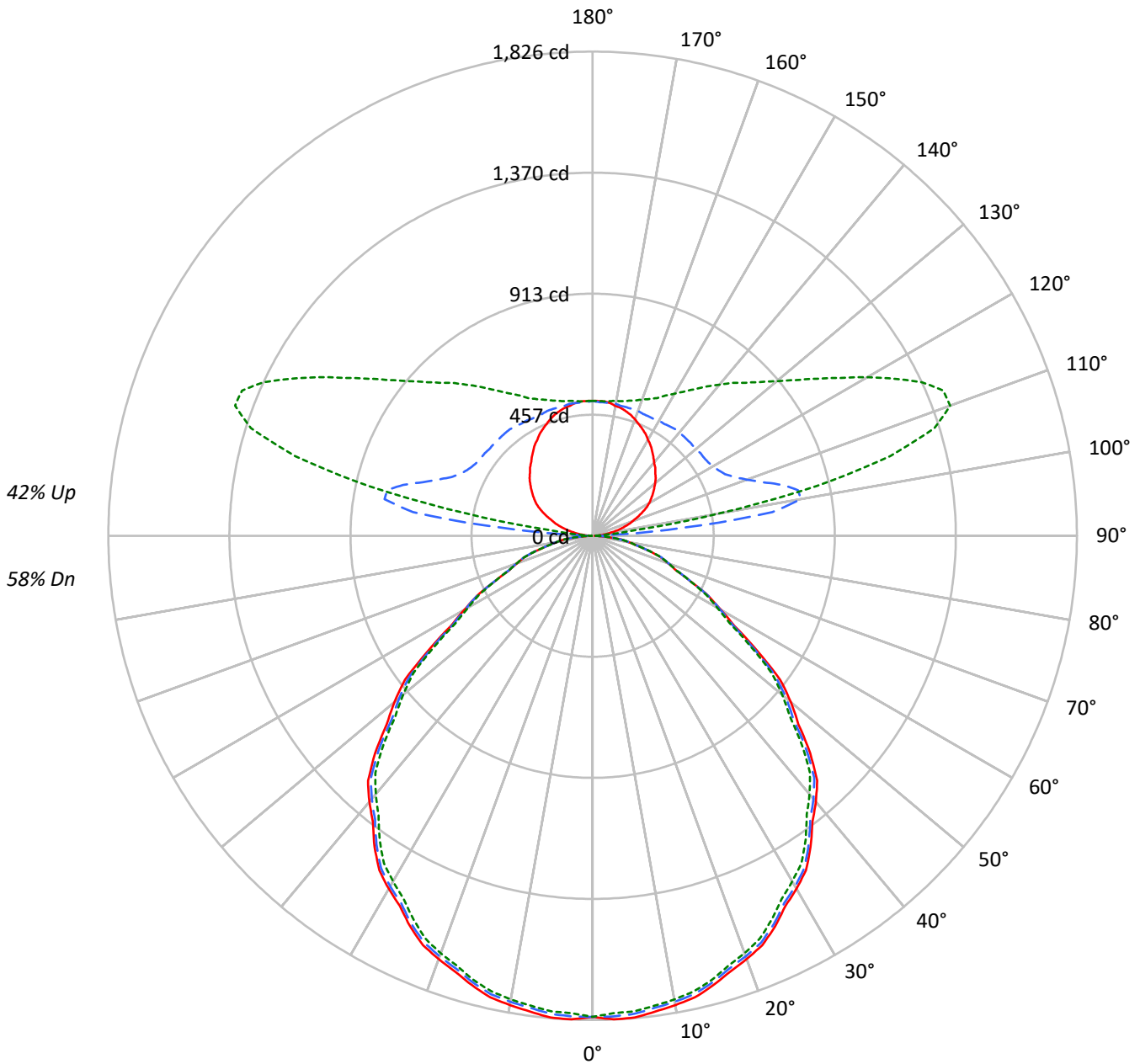
Lumens per Lamp: N/A
Luminaire Lumens: 7837.6 lumens
Efficiency: N/A
Efficacy: 109.2 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 71.8
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: P845201

CATALOG NUMBER: SQ4P-PR1-100U-125D-B35-1D-UNV

Luminous Intensity Polar Plot





TEST NUMBER: P845201

CATALOG NUMBER: SQ4P-PR1-100U-125D-B35-1D-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	109	109	109	109	102	102	102	102	88	88	88	75	75	75	63	63	63	58																			
1	100	96	92	88	93	89	86	83	77	75	73	67	65	63	57	55	54	49																			
2	91	84	78	73	85	78	73	69	68	64	61	59	56	53	50	48	46	42																			
3	83	74	67	61	78	69	63	58	61	56	52	52	49	45	45	42	40	36																			
4	76	66	58	52	71	62	55	49	54	49	44	47	43	39	40	37	34	31																			
5	70	59	51	45	65	55	48	43	48	43	38	42	38	34	36	33	30	27																			
6	65	53	45	39	60	50	42	37	44	38	34	38	34	30	33	29	27	24																			
7	60	48	40	34	56	45	38	33	40	34	30	35	30	27	30	27	24	21																			
8	56	43	36	30	52	41	34	29	36	31	26	32	27	24	28	24	21	19																			
9	52	40	32	27	48	38	31	26	33	28	24	29	25	21	26	22	19	17																			
10	49	36	29	24	45	35	28	23	31	25	21	27	23	19	24	20	18	16																			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	16739	16739	16739
5°	16891	16760	16673
10°	16835	16719	16631
15°	16764	16658	16567
20°	16678	16569	16449
25°	16561	16451	16258
30°	16381	16267	16034
35°	16141	15999	15771
40°	15770	15602	15320
45°	15132	14864	14559
50°	13996	13662	13390
55°	12215	11942	11691
60°	10295	10210	10005
65°	8905	8938	8868
70°	8176	8217	8217
75°	7857	7857	7910
80°	7385	7470	7385
85°	5960	6616	6616



TEST NUMBER: P845201

CATALOG NUMBER: SQ4P-PR1-100U-125D-B35-1D-UNV

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	171.6	2.2
10°-20°	490.9	6.3
20°-30°	740.4	9.4
30°-40°	882.2	11.3
40°-50°	869.8	11.1
50°-60°	664.7	8.5
60°-70°	411.3	5.2
70°-80°	233.6	3.0
80°-90°	72.3	0.9
90°-100°	202.4	2.6
100°-110°	704.3	9.0
110°-120°	682.2	8.7
120°-130°	535.2	6.8
130°-140°	423.6	5.4
140°-150°	326.9	4.2
150°-160°	234.3	3.0
160°-170°	143.3	1.8
170°-180°	48.5	0.6
0°-30°	1402.9	17.9
0°-40°	2285.1	29.2
0°-60°	3819.6	48.7
0°-90°	4536.8	57.9
90°-120°	1588.9	20.3
90°-150°	2874.6	36.7
90°-180°	3301.0	42.1
0°-180°	7837.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1814	1814	1814	1814	1814	
5°	1824	1804	1810	1803	1800	173
15°	1755	1737	1744	1738	1734	495
25°	1627	1607	1616	1599	1597	749
35°	1433	1416	1420	1402	1400	894
45°	1160	1144	1139	1119	1116	888
55°	759	747	742	730	727	680
65°	408	405	409	406	406	413
75°	220	220	220	222	222	233
85°	56	59	62	62	62	65
90°	8	11	11	8	4	7
95°	34	118	342	87	53	36
105°	118	167	740	1249	1162	124
115°	205	247	550	1162	1370	202
125°	277	342	512	865	1032	248
135°	334	376	509	721	816	259
145°	391	418	505	622	676	245
155°	444	459	497	554	573	205
165°	486	490	501	524	528	137
175°	509	509	505	512	509	48
180°	509	509	509	509	509	



TEST NUMBER: P845201

CATALOG NUMBER: SQ4P-PR1-100U-125D-B35-1D-UNV

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1814.3	1814.3	1814.3	1814.3	1814.3
2.5°	1825.6	1809.7	1814.3	1810.5	1801.9
5°	1823.8	1803.8	1809.7	1803.2	1800.3
7.5°	1809.7	1790.1	1796.0	1789.5	1787.8
10°	1797.0	1778.7	1784.6	1778.4	1775.2
12.5°	1783.3	1763.9	1770.9	1763.4	1760.4
15°	1755.1	1736.7	1744.0	1737.7	1734.5
17.5°	1723.7	1704.1	1711.6	1704.4	1700.4
20°	1698.7	1680.4	1687.6	1676.9	1675.3
22.5°	1671.3	1652.9	1660.2	1645.7	1645.4
25°	1626.8	1606.9	1616.0	1598.8	1597.1
27.5°	1574.0	1555.7	1563.0	1545.4	1543.8
30°	1537.6	1519.3	1526.9	1508.0	1505.0
32.5°	1496.4	1479.5	1485.7	1466.8	1464.9
35°	1433.1	1416.2	1420.5	1401.9	1400.2
37.5°	1360.9	1345.5	1348.0	1327.2	1325.9
40°	1309.4	1294.3	1295.4	1273.6	1272.0
42.5°	1253.4	1238.1	1236.7	1214.9	1213.3
45°	1159.7	1144.3	1139.2	1118.7	1115.8
47.5°	1052.7	1037.4	1028.0	1011.3	1009.1
50°	975.1	959.8	951.8	937.5	932.9
52.5°	891.4	876.0	869.3	856.3	851.7
55°	759.4	747.2	742.4	729.7	726.8
57.5°	634.1	626.1	624.4	612.3	610.9
60°	557.9	553.3	553.3	542.2	542.2
62.5°	493.0	489.5	491.9	484.6	483.5
65°	407.9	404.8	409.4	406.2	406.2
67.5°	340.7	340.7	343.5	342.1	342.1
70°	303.1	303.1	304.6	304.6	304.6
72.5°	269.4	268.3	272.3	272.0	271.0
75°	220.4	220.4	220.4	221.9	221.9
77.5°	171.6	171.8	173.2	172.9	171.6
80°	139.0	140.6	140.6	139.0	139.0
82.5°	106.7	108.0	108.0	107.7	106.7
85°	56.3	59.3	62.5	62.5	62.5
87.5°	16.1	21.0	25.1	25.1	23.7
90°	7.6	11.4	11.4	7.6	3.8
92.5°	19.0	57.0	53.1	22.8	19.0
95°	34.2	117.6	341.6	87.3	53.1
97.5°	53.1	132.9	683.2	311.3	167.0
100°	72.1	140.4	797.0	747.7	482.0
102.5°	94.9	151.8	793.2	1051.4	865.3
105°	117.6	167.0	740.1	1248.7	1161.5



TEST NUMBER: P845201

CATALOG NUMBER: SQ4P-PR1-100U-125D-B35-1D-UNV

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	182.2	223.9	577.0	1256.3	1431.0
115°	204.9	246.7	550.3	1161.5	1370.2
117.5°	227.7	273.3	535.2	1074.2	1282.9
120°	246.7	296.0	523.8	990.6	1195.6
122.5°	261.9	318.8	516.2	922.3	1108.3
125°	277.0	341.6	512.4	865.3	1032.4
127.5°	292.3	356.8	512.4	823.7	964.1
130°	307.5	364.4	508.6	781.9	907.1
132.5°	322.6	368.1	508.6	751.5	857.8
135°	334.0	375.8	508.6	721.2	816.0
137.5°	349.2	383.3	508.6	694.6	781.9
140°	360.6	394.8	508.6	668.0	743.9
142.5°	375.8	406.1	508.6	641.5	709.8
145°	390.9	417.6	504.8	622.5	675.6
147.5°	406.1	428.9	501.0	603.5	645.3
150°	417.6	440.3	501.0	584.5	618.6
152.5°	432.7	451.7	497.2	565.5	595.9
155°	444.1	459.2	497.2	554.2	573.1
157.5°	455.4	470.7	497.2	542.8	558.0
160°	466.9	478.2	501.0	535.2	546.5
162.5°	478.2	485.9	501.0	527.5	535.2
165°	485.9	489.7	501.0	523.8	527.5
167.5°	493.4	497.2	501.0	520.0	520.0
170°	497.2	501.0	504.8	516.2	516.2
172.5°	504.8	504.8	504.8	512.4	512.4
175°	508.6	508.6	504.8	512.4	508.6
177.5°	508.6	508.6	504.8	512.4	508.6
180°	508.6	508.6	508.6	508.6	508.6



Report Generated By 670246072 / DESKTOP-50001EG





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







107.5°	140.4	186.0	671.8	1336.0	1351.2
110°	159.4	204.9	618.6	1324.7	1434.7



(END OF REPORT)