

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: P845162

Luminaire Tested: **SQ4P-PR1-050U-100D-B35-1D-UNV**

Issue Date: 8/14/2023



Test Information

Test Method: LM-79-08
Report Number: P845162
REPORT IS A COMBINATION OF REPORTS P700205 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-100D-B35-1D-UNV
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, 500 LUMENS PER FOOT UPLIGHT, 1000 LUMENS PER FOOT DOWNLIGHT

Light Source: -
Ballast/Driver: -

Summary

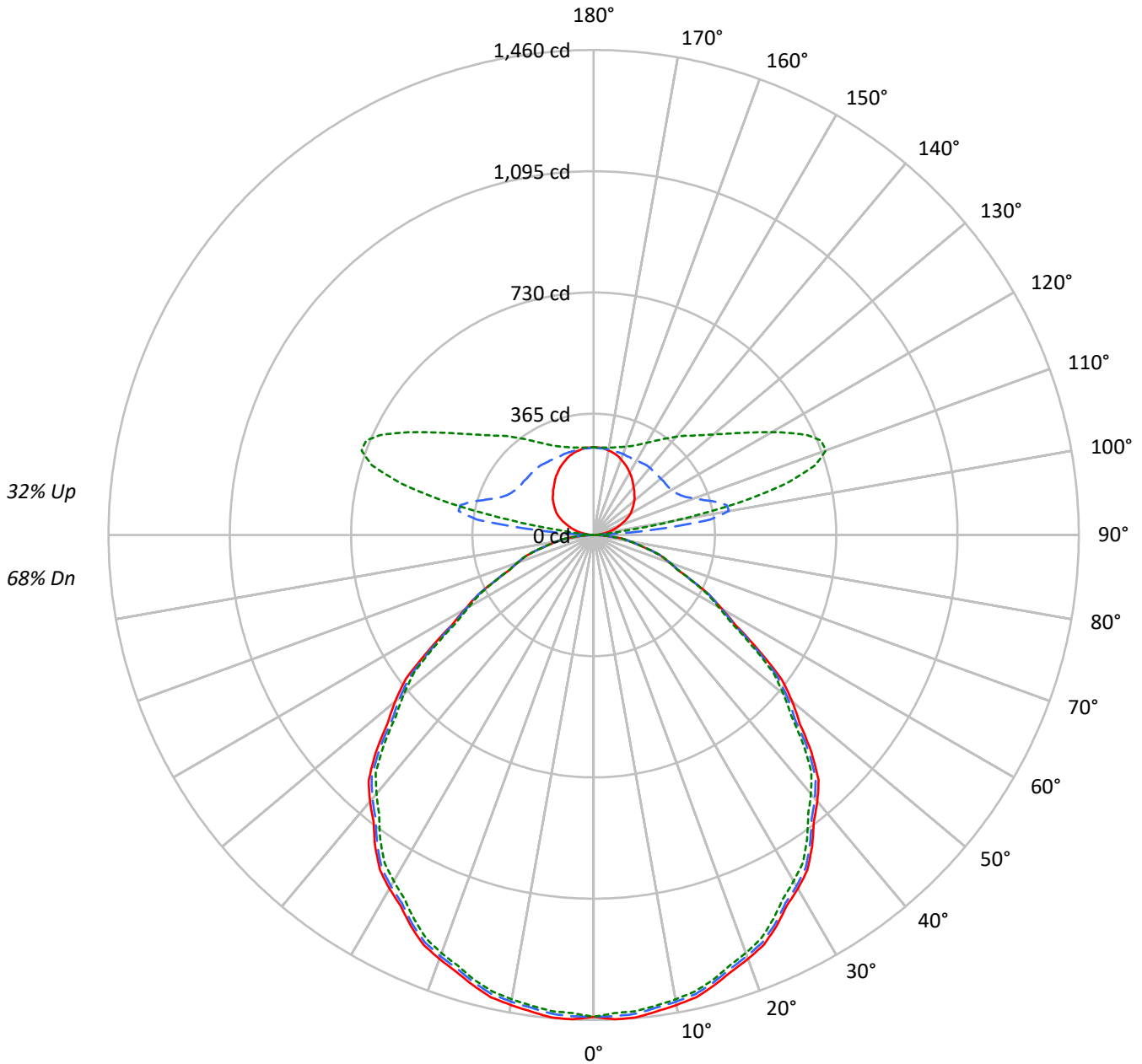
Lumens per Lamp: N/A
Luminaire Lumens: 5337.3 lumens
Efficiency: N/A
Efficacy: 111.4 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 47.9
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: P845162

CATALOG NUMBER: SQ4P-PR1-050U-100D-B35-1D-UNV

Luminous Intensity Polar Plot





TEST NUMBER: P845162

CATALOG NUMBER: SQ4P-PR1-050U-100D-B35-1D-UNV

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									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	111	111	111	111	105	105	105	105	93	93	93	83	83	83	73	73	73	68																											
1	102	98	94	91	96	93	89	86	83	80	78	73	71	70	65	63	62	58																											
2	93	86	80	75	88	81	76	71	73	69	65	65	62	59	58	55	53	49																											
3	85	76	69	63	80	72	65	60	65	59	55	58	54	50	51	48	45	42																											
4	78	68	60	53	74	64	57	51	58	52	47	52	47	43	46	42	39	36																											
5	72	60	52	46	68	57	50	44	52	46	41	47	42	38	42	38	35	32																											
6	67	54	46	40	63	52	44	39	47	41	36	42	37	33	38	34	31	28																											
7	62	49	41	36	58	47	40	34	43	36	32	39	33	30	35	30	27	25																											
8	57	45	37	32	54	43	36	31	39	33	29	35	30	27	32	28	25	22																											
9	54	41	33	28	51	39	32	27	36	30	26	33	28	24	29	25	22	20																											
10	50	38	30	26	47	36	29	25	33	27	23	30	25	22	27	23	20	18																											

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	13384	13384	13384
5°	13505	13401	13332
10°	13461	13368	13298
15°	13404	13320	13247
20°	13335	13249	13152
25°	13241	13154	13000
30°	13098	13007	12819
35°	12906	12792	12610
40°	12610	12475	12249
45°	12099	11884	11641
50°	11191	10922	10706
55°	9767	9548	9347
60°	8230	8163	8001
65°	7119	7147	7091
70°	6536	6571	6571
75°	6277	6277	6327
80°	5908	5972	5908
85°	4764	5293	5293



TEST NUMBER: P845162

CATALOG NUMBER: SQ4P-PR1-050U-100D-B35-1D-UNV

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	137.2	2.6
10°-20°	392.5	7.4
20°-30°	592.0	11.1
30°-40°	705.4	13.2
40°-50°	695.4	13.0
50°-60°	531.5	10.0
60°-70°	328.9	6.2
70°-80°	186.8	3.5
80°-90°	57.5	1.1
90°-100°	104.9	2.0
100°-110°	364.9	6.8
110°-120°	353.5	6.6
120°-130°	277.3	5.2
130°-140°	219.5	4.1
140°-150°	169.4	3.2
150°-160°	121.4	2.3
160°-170°	74.3	1.4
170°-180°	25.1	0.5
0°-30°	1121.7	21.0
0°-40°	1827.1	34.2
0°-60°	3054.0	57.2
0°-90°	3627.2	68.0
90°-120°	823.3	15.4
90°-150°	1489.4	27.9
90°-180°	1710.0	32.0
0°-180°	5337.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1451	1451	1451	1451	1451	
5°	1458	1442	1447	1442	1440	138
15°	1403	1389	1394	1390	1387	396
25°	1301	1285	1292	1278	1277	599
35°	1146	1132	1136	1121	1120	715
45°	927	915	911	894	892	710
55°	607	598	594	584	581	544
65°	326	324	327	325	325	330
75°	176	176	176	178	178	186
85°	45	47	50	50	50	52
90°	4	6	6	4	2	4
95°	18	61	177	45	28	19
105°	61	86	384	647	602	64
115°	106	128	285	602	710	105
125°	144	177	266	448	535	129
135°	173	195	264	374	423	134
145°	203	216	262	322	350	127
155°	230	238	258	287	297	106
165°	252	254	260	271	273	71
175°	264	264	262	266	264	25
180°	264	264	264	264	264	



TEST NUMBER: P845162

CATALOG NUMBER: SQ4P-PR1-050U-100D-B35-1D-UNV

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1450.6	1450.6	1450.6	1450.6	1450.6
2.5°	1459.7	1447.0	1450.6	1447.6	1440.7
5°	1458.2	1442.2	1447.0	1441.8	1439.5
7.5°	1447.0	1431.3	1436.0	1430.9	1429.6
10°	1436.8	1422.2	1426.9	1422.0	1419.4
12.5°	1425.9	1410.4	1416.0	1409.9	1407.6
15°	1403.3	1388.6	1394.5	1389.5	1386.9
17.5°	1378.3	1362.6	1368.6	1362.8	1359.5
20°	1358.2	1343.6	1349.4	1340.8	1339.5
22.5°	1336.2	1321.7	1327.4	1315.8	1315.6
25°	1300.7	1284.8	1292.1	1278.3	1277.0
27.5°	1258.5	1243.9	1249.7	1235.7	1234.4
30°	1229.5	1214.8	1220.9	1205.8	1203.3
32.5°	1196.5	1182.9	1187.9	1172.8	1171.2
35°	1145.9	1132.3	1135.7	1120.8	1119.6
37.5°	1088.2	1075.8	1077.8	1061.3	1060.2
40°	1047.0	1034.9	1035.8	1018.4	1017.0
42.5°	1002.2	989.9	988.8	971.4	970.2
45°	927.3	915.0	910.8	894.5	892.2
47.5°	841.8	829.4	821.9	808.6	806.8
50°	779.7	767.4	760.9	749.6	745.9
52.5°	712.7	700.5	695.1	684.7	681.1
55°	607.2	597.5	593.6	583.5	581.1
57.5°	507.0	500.5	499.3	489.6	488.5
60°	446.0	442.4	442.4	433.6	433.6
62.5°	394.2	391.3	393.3	387.5	386.6
65°	326.1	323.7	327.4	324.8	324.8
67.5°	272.4	272.4	274.6	273.5	273.5
70°	242.3	242.3	243.6	243.6	243.6
72.5°	215.4	214.5	217.7	217.5	216.7
75°	176.1	176.1	176.1	177.5	177.5
77.5°	137.2	137.4	138.5	138.3	137.2
80°	111.2	112.4	112.4	111.2	111.2
82.5°	85.3	86.4	86.4	86.1	85.3
85°	45.0	47.4	50.0	50.0	50.0
87.5°	12.9	16.8	20.1	20.1	19.0
90°	3.9	5.9	5.9	3.9	2.0
92.5°	9.8	29.5	27.5	11.8	9.8
95°	17.7	61.0	177.0	45.2	27.5
97.5°	27.5	68.8	353.9	161.3	86.5
100°	37.4	72.8	413.0	387.4	249.7
102.5°	49.1	78.7	411.0	544.7	448.4
105°	61.0	86.5	383.5	646.9	601.7



TEST NUMBER: P845162

CATALOG NUMBER: SQ4P-PR1-050U-100D-B35-1D-UNV

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	94.4	116.1	299.0	650.9	741.4
115°	106.2	127.8	285.2	601.7	709.9
117.5°	118.0	141.6	277.2	556.5	664.6
120°	127.8	153.3	271.4	513.3	619.4
122.5°	135.7	165.2	267.4	477.8	574.2
125°	143.6	177.0	265.5	448.4	534.9
127.5°	151.4	184.9	265.5	426.8	499.5
130°	159.3	188.8	263.5	405.1	470.0
132.5°	167.1	190.7	263.5	389.4	444.5
135°	173.0	194.6	263.5	373.6	422.8
137.5°	180.9	198.6	263.5	359.8	405.1
140°	186.8	204.5	263.5	346.1	385.5
142.5°	194.6	210.4	263.5	332.3	367.7
145°	202.6	216.4	261.6	322.5	350.0
147.5°	210.4	222.2	259.6	312.7	334.3
150°	216.4	228.1	259.6	302.9	320.6
152.5°	224.2	234.0	257.7	293.0	308.7
155°	230.1	238.0	257.7	287.1	296.9
157.5°	235.9	243.9	257.7	281.2	289.1
160°	241.9	247.8	259.6	277.2	283.2
162.5°	247.8	251.7	259.6	273.3	277.2
165°	251.7	253.6	259.6	271.4	273.3
167.5°	255.6	257.7	259.6	269.4	269.4
170°	257.7	259.6	261.6	267.4	267.4
172.5°	261.6	261.6	261.6	265.5	265.5
175°	263.5	263.5	261.6	265.5	263.5
177.5°	263.5	263.5	261.6	265.5	263.5
180°	263.5	263.5	263.5	263.5	263.5



Report Generated By 670246072 / DESKTOP-50001EG





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







107.5°	72.8	96.4	348.1	692.2	700.1
110°	82.6	106.2	320.6	686.3	743.3



(END OF REPORT)