

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: P845203

Luminaire Tested: **SQ4P-PR1-100U-125D-B50-1D-UNV**

Issue Date: 8/14/2023

Test Information

Test Method: LM-79-08
Report Number: P845203
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-B50-1D-UNV
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, 1000 LUMENS PER FOOT
UPLIGHT, 1250 LUMENS PER FOOT DOWNLIGHT

Light Source: -
Ballast/Driver: -

Summary

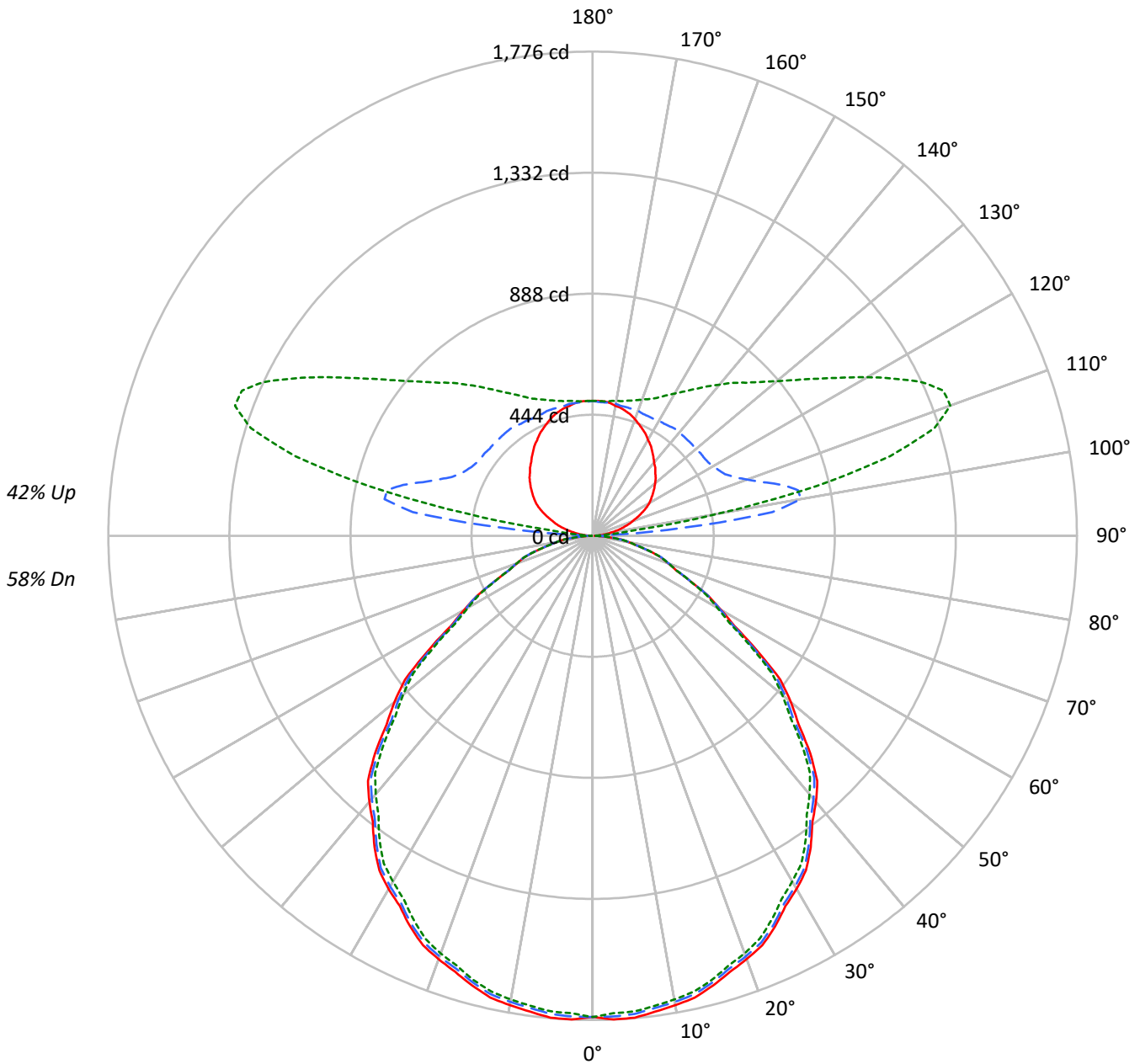
Lumens per Lamp: N/A
Luminaire Lumens: 7625.0 lumens
Efficiency: N/A
Efficacy: 106.2 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

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

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Luminous Intensity Polar Plot





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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°	16285	16285	16285
5°	16433	16306	16220
10°	16379	16266	16180
15°	16309	16206	16118
20°	16226	16121	16003
25°	16111	16005	15818
30°	15937	15825	15599
35°	15703	15566	15344
40°	15343	15179	14904
45°	14721	14461	14163
50°	13617	13290	13027
55°	11884	11618	11374
60°	10014	9933	9734
65°	8663	8695	8628
70°	7952	7996	7996
75°	7643	7643	7696
80°	7183	7268	7183
85°	5790	6436	6436



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	166.9	2.2
10°-20°	477.6	6.3
20°-30°	720.3	9.4
30°-40°	858.3	11.3
40°-50°	846.2	11.1
50°-60°	646.7	8.5
60°-70°	400.2	5.2
70°-80°	227.3	3.0
80°-90°	70.3	0.9
90°-100°	196.9	2.6
100°-110°	685.2	9.0
110°-120°	663.7	8.7
120°-130°	520.7	6.8
130°-140°	412.1	5.4
140°-150°	318.0	4.2
150°-160°	228.0	3.0
160°-170°	139.4	1.8
170°-180°	47.2	0.6
0°-30°	1364.8	17.9
0°-40°	2223.1	29.2
0°-60°	3716.0	48.7
0°-90°	4413.8	57.9
90°-120°	1545.9	20.3
90°-150°	2796.7	36.7
90°-180°	3211.0	42.1
0°-180°	7625.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1765	1765	1765	1765	1765	
5°	1774	1755	1761	1754	1751	168
15°	1708	1690	1697	1691	1688	482
25°	1583	1563	1572	1555	1554	728
35°	1394	1378	1382	1364	1362	870
45°	1128	1113	1108	1088	1086	864
55°	739	727	722	710	707	662
65°	397	394	398	395	395	402
75°	214	214	214	216	216	226
85°	55	58	61	61	61	64
90°	7	11	11	7	4	7
95°	33	114	332	85	52	35
105°	114	162	720	1215	1130	120
115°	199	240	535	1130	1333	197
125°	270	332	498	842	1004	241
135°	325	366	495	702	794	252
145°	380	406	491	606	657	238
155°	432	447	484	539	558	199
165°	473	476	487	510	513	133
175°	495	495	491	498	495	47
180°	495	495	495	495	495	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1765.1	1765.1	1765.1	1765.1	1765.1
2.5°	1776.1	1760.6	1765.1	1761.4	1753.1
5°	1774.3	1754.9	1760.6	1754.3	1751.4
7.5°	1760.6	1741.5	1747.3	1741.0	1739.3
10°	1748.3	1730.5	1736.2	1730.2	1727.1
12.5°	1735.0	1716.0	1722.9	1715.5	1712.7
15°	1707.5	1689.6	1696.7	1690.6	1687.5
17.5°	1677.0	1657.9	1665.2	1658.1	1654.2
20°	1652.6	1634.8	1641.9	1631.4	1629.9
22.5°	1626.0	1608.1	1615.2	1601.0	1600.7
25°	1582.6	1563.3	1572.2	1555.4	1553.8
27.5°	1531.3	1513.5	1520.6	1503.5	1501.9
30°	1495.9	1478.1	1485.4	1467.1	1464.2
32.5°	1455.8	1439.4	1445.4	1427.0	1425.2
35°	1394.2	1377.8	1382.0	1363.9	1362.3
37.5°	1324.0	1309.0	1311.4	1291.2	1289.9
40°	1273.9	1259.2	1260.3	1239.1	1237.5
42.5°	1219.4	1204.5	1203.2	1181.9	1180.4
45°	1128.2	1113.3	1108.3	1088.4	1085.5
47.5°	1024.2	1009.2	1000.1	983.8	981.7
50°	948.7	933.7	925.9	912.0	907.6
52.5°	867.2	852.3	845.7	833.1	828.6
55°	738.8	727.0	722.3	709.9	707.1
57.5°	616.9	609.1	607.5	595.7	594.3
60°	542.7	538.3	538.3	527.5	527.5
62.5°	479.6	476.2	478.6	471.4	470.4
65°	396.8	393.9	398.3	395.2	395.2
67.5°	331.5	331.5	334.2	332.8	332.8
70°	294.8	294.8	296.4	296.4	296.4
72.5°	262.1	261.0	264.9	264.7	263.6
75°	214.4	214.4	214.4	215.9	215.9
77.5°	167.0	167.2	168.5	168.2	167.0
80°	135.2	136.8	136.8	135.2	135.2
82.5°	103.8	105.1	105.1	104.8	103.8
85°	54.7	57.7	60.8	60.8	60.8
87.5°	15.7	20.5	24.4	24.4	23.0
90°	7.4	11.0	11.0	7.4	3.7
92.5°	18.5	55.4	51.7	22.2	18.5
95°	33.2	114.4	332.4	84.9	51.7
97.5°	51.7	129.3	664.7	302.8	162.5
100°	70.2	136.6	775.4	727.4	469.0
102.5°	92.3	147.7	771.7	1022.9	841.9
105°	114.4	162.5	720.0	1214.9	1130.0



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	177.3	217.8	561.3	1222.2	1392.1
115°	199.4	240.0	535.4	1130.0	1333.0
117.5°	221.5	265.9	520.7	1045.0	1248.1
120°	240.0	288.0	509.6	963.7	1163.2
122.5°	254.8	310.2	502.2	897.3	1078.3
125°	269.5	332.4	498.5	841.9	1004.4
127.5°	284.4	347.1	498.5	801.3	937.9
130°	299.1	354.5	494.8	760.7	882.5
132.5°	313.9	358.2	494.8	731.2	834.5
135°	324.9	365.6	494.8	701.6	793.9
137.5°	339.7	372.9	494.8	675.7	760.7
140°	350.8	384.0	494.8	649.9	723.7
142.5°	365.6	395.1	494.8	624.1	690.5
145°	380.3	406.2	491.1	605.6	657.3
147.5°	395.1	417.3	487.4	587.1	627.8
150°	406.2	428.3	487.4	568.6	601.9
152.5°	421.0	439.5	483.7	550.2	579.8
155°	432.0	446.8	483.7	539.1	557.6
157.5°	443.1	457.9	483.7	528.1	542.8
160°	454.2	465.3	487.4	520.7	531.7
162.5°	465.3	472.7	487.4	513.2	520.7
165°	472.7	476.4	487.4	509.6	513.2
167.5°	480.0	483.7	487.4	505.9	505.9
170°	483.7	487.4	491.1	502.2	502.2
172.5°	491.1	491.1	491.1	498.5	498.5
175°	494.8	494.8	491.1	498.5	494.8
177.5°	494.8	494.8	491.1	498.5	494.8
180°	494.8	494.8	494.8	494.8	494.8



Report Generated By 670246072 / DESKTOP-50001EG





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







107.5°	136.6	181.0	653.6	1299.8	1314.6
110°	155.1	199.4	601.9	1288.8	1395.8



(END OF REPORT)