

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: P845176

Luminaire Tested: **SQ4P-PR1-075U-100D-B50-1D-UNV**

Issue Date: 8/14/2023

Test Information

Test Method: LM-79-08
Report Number: P845176
REPORT IS A COMBINATION OF REPORTS P700233 AND P700245
Test Lab: INNOVATION CENTER
Issue Date: 8/14/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4P-PR1-075U-100D-B50-1D-UNV
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, 750 LUMENS PER FOOT
UPLIGHT, 1000 LUMENS PER FOOT DOWNLIGHT

Light Source: -
Ballast/Driver: -

Summary

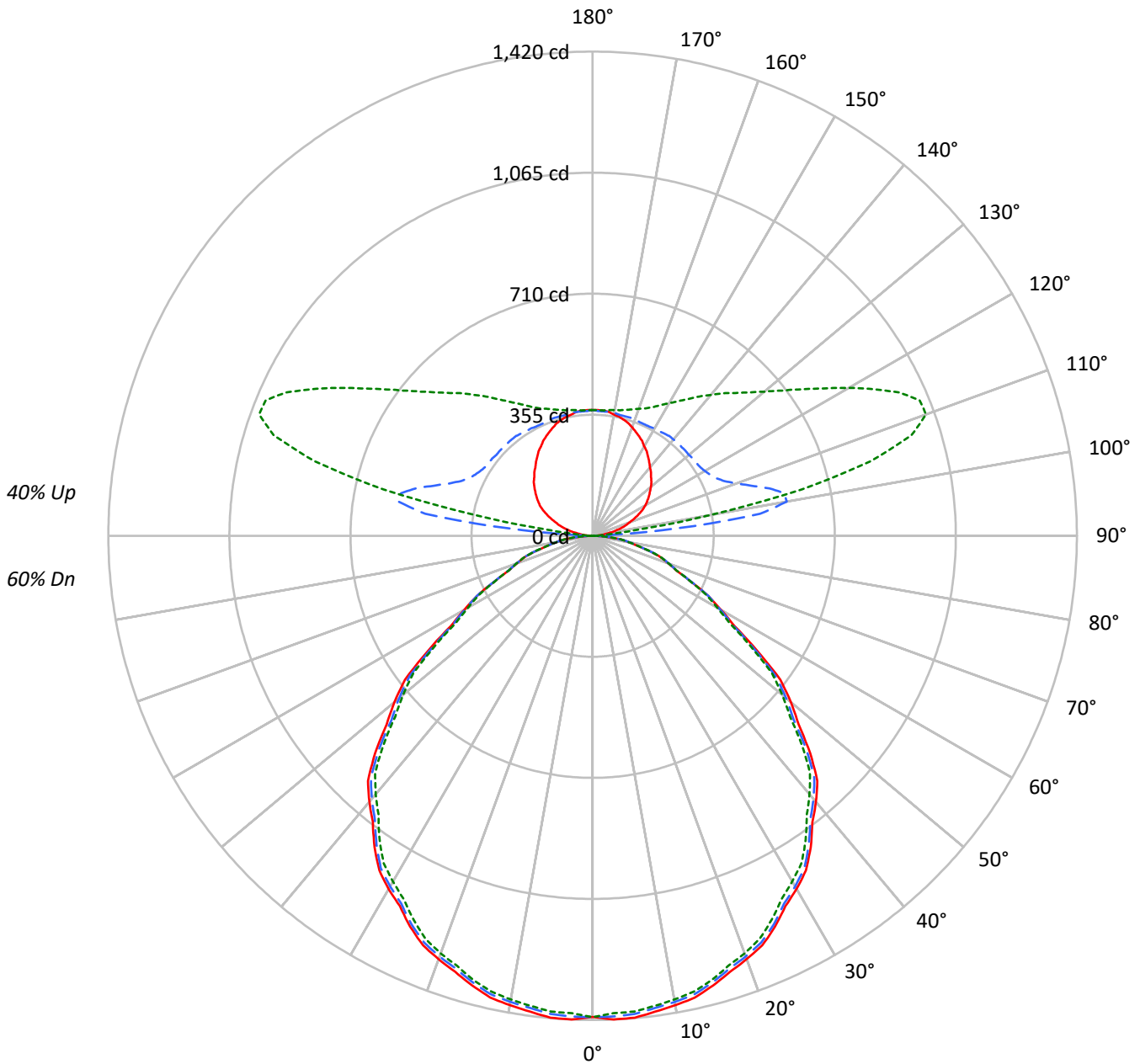
Lumens per Lamp: N/A
Luminaire Lumens: 5922.8 lumens
Efficiency: N/A
Efficacy: 109.9 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 53.9
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

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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	89	89	89	76	76	76	65	65	65	60																			
1	100	96	92	89	94	90	87	84	78	76	74	68	66	64	58	57	56	51																			
2	92	84	78	73	85	79	74	69	69	65	62	60	57	54	51	49	47	43																			
3	84	74	67	61	78	70	63	58	61	56	52	53	49	46	46	43	41	37																			
4	77	66	58	52	72	62	55	50	55	49	45	48	43	40	41	38	35	32																			
5	71	59	51	45	66	56	48	43	49	43	39	43	38	35	37	34	31	28																			
6	65	53	45	39	61	50	43	37	44	38	34	39	34	31	34	30	27	25																			
7	60	48	40	34	56	45	38	33	40	34	30	35	31	27	31	27	24	22																			
8	56	44	36	31	52	41	34	29	37	31	27	32	28	24	28	25	22	20																			
9	52	40	32	27	49	38	31	26	34	28	24	30	25	22	26	23	20	18																			
10	49	37	29	25	46	35	28	24	31	26	22	28	23	20	24	21	18	16																			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	13021	13021	13021
5°	13138	13038	12970
10°	13096	13005	12937
15°	13040	12958	12888
20°	12974	12889	12794
25°	12882	12797	12648
30°	12743	12653	12472
35°	12556	12445	12268
40°	12268	12137	11916
45°	11770	11562	11326
50°	10889	10626	10415
55°	9502	9289	9093
60°	8006	7942	7783
65°	6925	6953	6899
70°	6358	6393	6393
75°	6110	6110	6156
80°	5749	5813	5749
85°	4637	5145	5145



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	133.5	2.3
10°-20°	381.9	6.4
20°-30°	576.0	9.7
30°-40°	686.3	11.6
40°-50°	676.6	11.4
50°-60°	517.1	8.7
60°-70°	319.9	5.4
70°-80°	181.7	3.1
80°-90°	56.2	0.9
90°-100°	146.8	2.5
100°-110°	510.8	8.6
110°-120°	494.8	8.4
120°-130°	388.1	6.6
130°-140°	307.2	5.2
140°-150°	237.1	4.0
150°-160°	169.9	2.9
160°-170°	103.9	1.8
170°-180°	35.2	0.6
0°-30°	1091.3	18.4
0°-40°	1777.5	30.0
0°-60°	2971.2	50.2
0°-90°	3529.1	59.6
90°-120°	1152.3	19.5
90°-150°	2084.7	35.2
90°-180°	2394.0	40.4
0°-180°	5922.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1411	1411	1411	1411	1411	
5°	1419	1403	1408	1403	1400	135
15°	1365	1351	1357	1352	1349	385
25°	1265	1250	1257	1244	1242	582
35°	1115	1102	1105	1090	1089	696
45°	902	890	886	870	868	691
55°	591	581	578	568	565	529
65°	317	315	318	316	316	321
75°	171	171	171	173	173	181
85°	44	46	49	49	49	51
90°	6	8	8	6	3	5
95°	25	85	248	63	39	26
105°	85	121	537	906	842	90
115°	149	179	399	842	994	147
125°	201	248	372	628	749	180
135°	242	272	369	523	592	188
145°	284	303	366	452	490	177
155°	322	333	360	402	416	148
165°	352	355	363	380	383	99
175°	369	369	366	372	369	35
180°	369	369	369	369	369	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1411.3	1411.3	1411.3	1411.3	1411.3
2.5°	1420.1	1407.8	1411.3	1408.3	1401.7
5°	1418.6	1403.1	1407.8	1402.7	1400.4
7.5°	1407.8	1392.4	1397.1	1392.1	1390.8
10°	1397.9	1383.7	1388.2	1383.4	1380.9
12.5°	1387.2	1372.2	1377.6	1371.7	1369.4
15°	1365.2	1350.9	1356.6	1351.8	1349.3
17.5°	1340.9	1325.6	1331.5	1325.8	1322.6
20°	1321.4	1307.1	1312.8	1304.5	1303.1
22.5°	1300.0	1285.8	1291.4	1280.1	1279.9
25°	1265.4	1249.9	1257.1	1243.6	1242.4
27.5°	1224.4	1210.1	1215.8	1202.2	1200.9
30°	1196.1	1181.8	1187.7	1173.1	1170.7
32.5°	1164.0	1150.8	1155.7	1141.0	1139.5
35°	1114.8	1101.6	1104.9	1090.4	1089.2
37.5°	1058.7	1046.7	1048.6	1032.5	1031.4
40°	1018.6	1006.9	1007.7	990.8	989.4
42.5°	975.1	963.1	962.0	945.1	943.8
45°	902.1	890.1	886.1	870.2	868.0
47.5°	818.9	806.9	799.6	786.7	784.9
50°	758.6	746.6	740.3	729.3	725.6
52.5°	693.4	681.5	676.2	666.1	662.6
55°	590.7	581.3	577.5	567.7	565.3
57.5°	493.2	487.0	485.7	476.3	475.3
60°	433.9	430.4	430.4	421.8	421.8
62.5°	383.5	380.7	382.6	377.0	376.1
65°	317.2	314.9	318.5	316.0	316.0
67.5°	265.0	265.0	267.1	266.1	266.1
70°	235.7	235.7	237.0	237.0	237.0
72.5°	209.5	208.7	211.8	211.6	210.8
75°	171.4	171.4	171.4	172.7	172.7
77.5°	133.5	133.7	134.7	134.5	133.5
80°	108.2	109.4	109.4	108.2	108.2
82.5°	83.0	84.1	84.1	83.8	83.0
85°	43.8	46.1	48.6	48.6	48.6
87.5°	12.6	16.4	19.5	19.5	18.5
90°	5.5	8.3	8.3	5.5	2.8
92.5°	13.8	41.3	38.6	16.5	13.8
95°	24.8	85.3	247.7	63.3	38.6
97.5°	38.6	96.3	495.4	225.7	121.1
100°	52.3	101.9	578.0	542.3	349.6
102.5°	68.8	110.1	575.3	762.5	627.6
105°	85.3	121.1	536.8	905.6	842.3



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	132.1	162.4	418.4	911.1	1037.7
115°	148.6	178.9	399.1	842.3	993.6
117.5°	165.2	198.2	388.1	778.9	930.3
120°	178.9	214.7	379.9	718.4	867.0
122.5°	189.9	231.2	374.3	668.9	803.7
125°	201.0	247.7	371.6	627.6	748.7
127.5°	211.9	258.8	371.6	597.3	699.2
130°	223.0	264.3	368.8	567.0	657.8
132.5°	233.9	266.9	368.8	545.0	622.1
135°	242.2	272.5	368.8	522.9	591.8
137.5°	253.2	278.0	368.8	503.7	567.0
140°	261.5	286.3	368.8	484.4	539.5
142.5°	272.5	294.6	368.8	465.2	514.7
145°	283.5	302.7	366.1	451.5	489.9
147.5°	294.6	311.0	363.3	437.6	467.9
150°	302.7	319.3	363.3	423.8	448.7
152.5°	313.8	327.5	360.5	410.1	432.1
155°	322.1	333.0	360.5	401.8	415.7
157.5°	330.3	341.3	360.5	393.6	404.6
160°	338.5	346.8	363.3	388.1	396.3
162.5°	346.8	352.3	363.3	382.6	388.1
165°	352.3	355.1	363.3	379.9	382.6
167.5°	357.9	360.5	363.3	377.1	377.1
170°	360.5	363.3	366.1	374.3	374.3
172.5°	366.1	366.1	366.1	371.6	371.6
175°	368.8	368.8	366.1	371.6	368.8
177.5°	368.8	368.8	366.1	371.6	368.8
180°	368.8	368.8	368.8	368.8	368.8



Report Generated By 670246072 / DESKTOP-50001EG





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







107.5°	101.9	134.9	487.2	968.9	979.9
110°	115.6	148.6	448.7	960.6	1040.5



(END OF REPORT)