

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: P844922

Luminaire Tested: **SQ4P-F-075U-100D-B35-1D-UNV**

Issue Date: 8/14/2023



Test Information

Test Method: LM-79-08
Report Number: P844922
REPORT IS A COMBINATION OF REPORTS P700221 AND P700245
Test Lab: INNOVATION CENTER
Issue Date: 8/14/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4P-F-075U-100D-B35-1D-UNV
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, 750 LUMENS PER FOOT UPLIGHT, 1000 LUMENS PER FOOT DOWNLIGHT

Light Source: -
Ballast/Driver: -

Summary

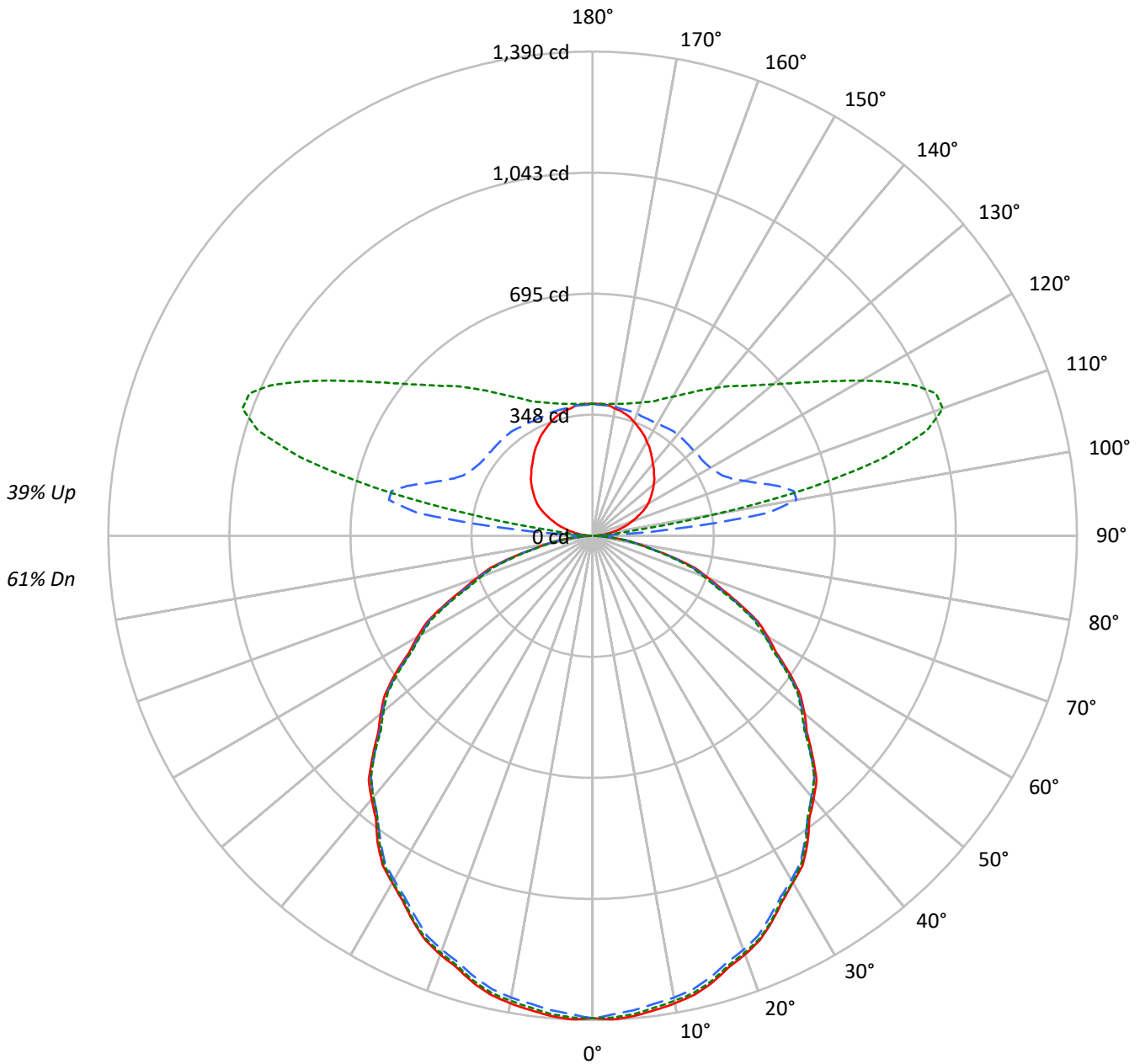
Lumens per Lamp: N/A
Luminaire Lumens: 6242.5 lumens
Efficiency: N/A
Efficacy: 115.8 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Direct

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	110	110	110	110	103	103	103	103	89	89	89	77	77	77	66	66	66	61																			
1	100	96	92	88	93	90	86	83	78	76	73	68	66	64	58	57	56	51																			
2	91	84	77	72	85	78	73	68	68	64	61	59	56	53	51	49	47	43																			
3	83	73	66	60	77	69	62	57	60	55	51	52	48	45	45	42	40	36																			
4	76	65	57	51	71	61	54	48	54	48	43	47	42	39	40	37	34	31																			
5	70	58	49	43	65	54	47	41	48	42	37	42	37	33	36	33	30	27																			
6	64	52	44	38	60	49	41	36	43	37	33	38	33	29	33	29	26	23																			
7	59	47	39	33	55	44	37	31	39	33	29	34	29	26	30	26	23	21																			
8	55	43	35	29	51	40	33	28	36	30	25	31	27	23	27	24	21	18																			
9	51	39	31	26	48	37	30	25	33	27	23	29	24	21	25	21	19	17																			
10	48	36	28	23	45	34	27	22	30	24	21	27	22	19	24	20	17	15																			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	12782	12782	12782
5°	12814	12660	12762
10°	12769	12614	12701
15°	12683	12523	12630
20°	12563	12418	12510
25°	12422	12272	12386
30°	12249	12150	12230
35°	12117	11970	12031
40°	11886	11771	11795
45°	11640	11543	11543
50°	11394	11288	11236
55°	11128	10978	10919
60°	10713	10542	10474
65°	10204	10001	9876
70°	9506	9301	9104
75°	8527	8263	8063
80°	6902	6811	6604
85°	4107	4721	4901



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	130.7	2.1
10°-20°	372.2	6.0
20°-30°	559.1	9.0
30°-40°	667.4	10.7
40°-50°	683.9	11.0
50°-60°	609.9	9.8
60°-70°	454.2	7.3
70°-80°	246.6	3.9
80°-90°	58.0	0.9
90°-100°	150.9	2.4
100°-110°	525.0	8.4
110°-120°	508.6	8.1
120°-130°	398.9	6.4
130°-140°	315.7	5.1
140°-150°	243.7	3.9
150°-160°	174.7	2.8
160°-170°	106.8	1.7
170°-180°	36.1	0.6
0°-30°	1062.0	17.0
0°-40°	1729.4	27.7
0°-60°	3023.3	48.4
0°-90°	3782.1	60.6
90°-120°	1184.4	19.0
90°-150°	2142.8	34.3
90°-180°	2460.0	39.4
0°-180°	6242.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1385	1385	1385	1385	1385	
5°	1384	1382	1367	1380	1378	131
15°	1328	1324	1311	1322	1322	374
25°	1220	1217	1206	1213	1217	562
35°	1076	1072	1063	1063	1068	671
45°	892	894	885	883	885	689
55°	692	692	682	677	679	616
65°	467	466	458	452	452	463
75°	239	237	232	228	226	253
85°	39	42	45	46	46	54
90°	6	8	8	6	3	5
95°	25	88	255	65	40	27
105°	88	124	552	931	866	92
115°	153	184	410	866	1021	151
125°	207	255	382	645	770	185
135°	249	280	379	538	608	193
145°	291	311	376	464	504	182
155°	331	342	371	413	427	153
165°	362	365	373	390	393	102
175°	379	379	376	382	379	36
180°	379	379	379	379	379	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1385.4	1385.4	1385.4	1385.4	1385.4
2.5°	1389.7	1386.9	1375.0	1385.4	1384.1
5°	1383.6	1381.7	1367.0	1379.8	1378.0
7.5°	1373.4	1370.0	1355.3	1368.0	1366.1
10°	1363.0	1359.4	1346.4	1357.5	1355.7
12.5°	1349.8	1347.7	1333.2	1344.3	1343.8
15°	1327.8	1324.1	1311.1	1322.3	1322.3
17.5°	1299.0	1296.8	1284.1	1294.6	1293.6
20°	1279.5	1276.1	1264.8	1274.1	1274.1
22.5°	1255.9	1253.7	1242.7	1250.3	1251.8
25°	1220.2	1216.7	1205.5	1213.0	1216.7
27.5°	1181.0	1178.2	1168.9	1173.7	1176.2
30°	1149.8	1149.8	1140.5	1142.5	1148.0
32.5°	1121.7	1121.7	1110.9	1112.8	1115.5
35°	1075.8	1072.1	1062.8	1062.8	1068.2
37.5°	1022.1	1020.4	1014.6	1013.5	1015.0
40°	986.9	984.9	977.3	979.3	979.3
42.5°	951.2	949.2	941.6	939.2	942.1
45°	892.1	894.0	884.7	882.8	884.7
47.5°	834.0	834.0	826.5	821.3	824.1
50°	793.8	793.8	786.4	782.8	782.8
52.5°	752.2	753.7	744.6	739.7	741.2
55°	691.8	691.8	682.5	677.1	678.8
57.5°	624.9	624.9	615.8	610.2	613.5
60°	580.6	580.6	571.3	565.6	567.6
62.5°	536.0	536.0	526.9	521.3	521.5
65°	467.4	465.6	458.1	452.4	452.4
67.5°	401.3	396.5	390.9	383.6	383.6
70°	352.4	350.4	344.8	337.5	337.5
72.5°	307.9	304.5	299.0	293.1	293.1
75°	239.2	237.2	231.8	228.2	226.2
77.5°	171.4	169.9	169.5	164.3	165.8
80°	129.9	129.9	128.2	124.3	124.3
82.5°	92.7	94.1	90.9	90.0	88.6
85°	38.8	42.5	44.6	46.3	46.3
87.5°	7.5	11.6	10.4	11.9	11.9
90°	5.7	8.5	8.5	5.7	2.8
92.5°	14.2	42.5	39.6	16.9	14.2
95°	25.4	87.7	254.6	65.1	39.6
97.5°	39.6	99.0	509.2	232.0	124.5
100°	53.7	104.7	594.1	557.4	359.3
102.5°	70.8	113.1	591.3	783.7	645.1
105°	87.7	124.5	551.7	930.8	865.7



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	135.8	166.9	430.1	936.5	1066.6
115°	152.8	183.9	410.2	865.7	1021.3
117.5°	169.8	203.7	399.0	800.7	956.3
120°	183.9	220.7	390.4	738.4	891.2
122.5°	195.2	237.7	384.8	687.5	826.1
125°	206.6	254.6	381.9	645.1	769.5
127.5°	217.8	266.0	381.9	614.0	718.7
130°	229.2	271.6	379.1	582.8	676.2
132.5°	240.4	274.4	379.1	560.2	639.4
135°	248.9	280.1	379.1	537.5	608.3
137.5°	260.3	285.7	379.1	517.8	582.8
140°	268.8	294.3	379.1	497.9	554.6
142.5°	280.1	302.8	379.1	478.1	529.0
145°	291.4	311.2	376.3	464.0	503.6
147.5°	302.8	319.7	373.4	449.8	481.0
150°	311.2	328.2	373.4	435.7	461.2
152.5°	322.5	336.6	370.6	421.6	444.2
155°	331.0	342.3	370.6	413.1	427.2
157.5°	339.5	350.8	370.6	404.5	415.9
160°	348.0	356.5	373.4	399.0	407.4
162.5°	356.5	362.2	373.4	393.3	399.0
165°	362.2	365.0	373.4	390.4	393.3
167.5°	367.8	370.6	373.4	387.6	387.6
170°	370.6	373.4	376.3	384.8	384.8
172.5°	376.3	376.3	376.3	381.9	381.9
175°	379.1	379.1	376.3	381.9	379.1
177.5°	379.1	379.1	376.3	381.9	379.1
180°	379.1	379.1	379.1	379.1	379.1



Report Generated By 670246072 / DESKTOP-50001EG





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







107.5°	104.7	138.7	500.7	995.9	1007.2
110°	118.8	152.8	461.2	987.4	1069.5



(END OF REPORT)