

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: P844909

Luminaire Tested: **SQ4P-F-050U-075D-B50-1D-UNV**

Issue Date: 8/14/2023



Test Information

Test Method: LM-79-08
Report Number: P844909
REPORT IS A COMBINATION OF REPORTS P700192 AND P700244
Test Lab: INNOVATION CENTER
Issue Date: 8/14/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4P-F-050U-075D-B50-1D-UNV
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, 500 LUMENS PER FOOT UPLIGHT, 750 LUMENS PER FOOT DOWNLIGHT

Light Source: -
Ballast/Driver: -

Summary

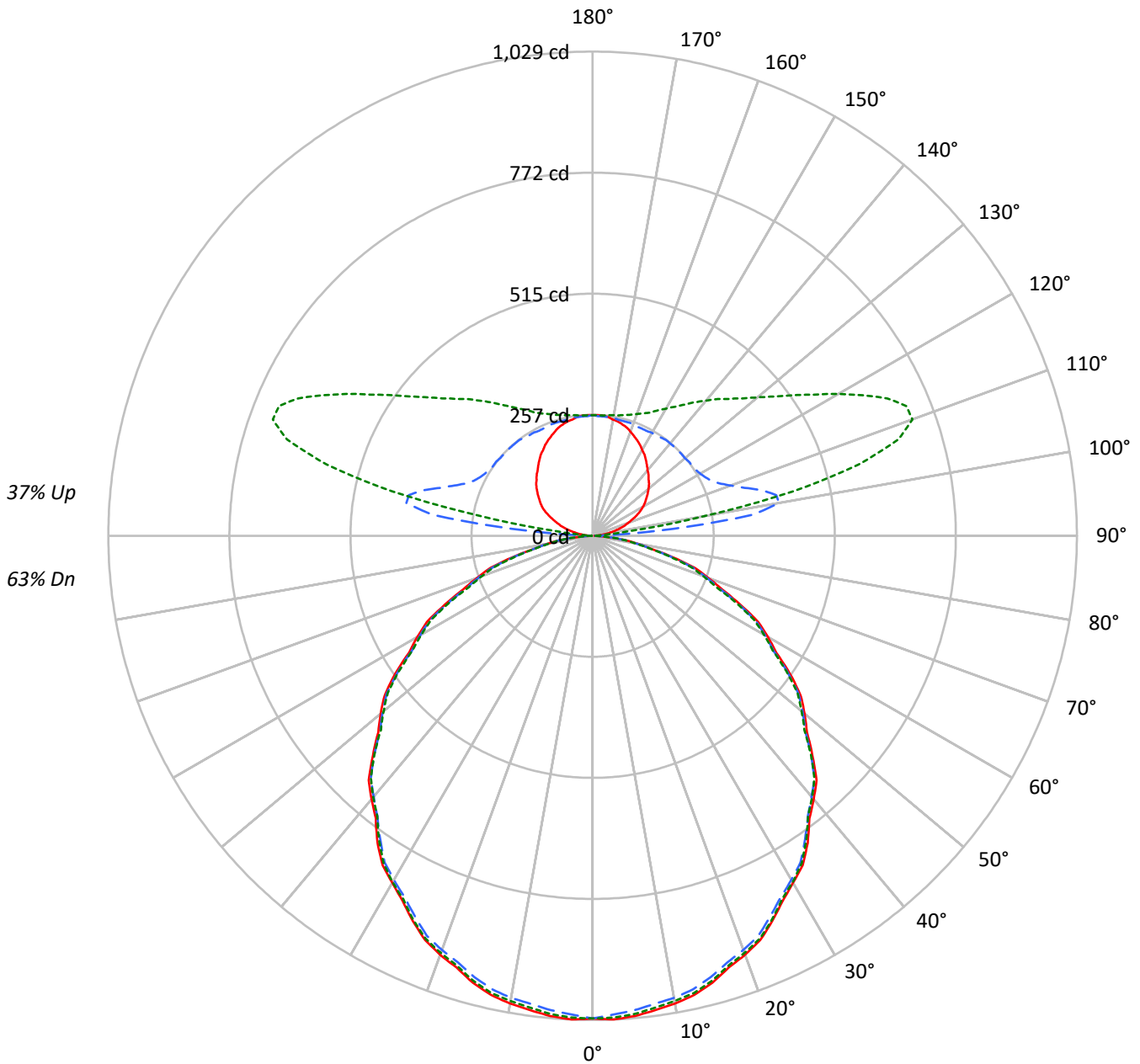
Lumens per Lamp: N/A
Luminaire Lumens: 4464.3 lumens
Efficiency: N/A
Efficacy: 115.7 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 38.6
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	90	90	90	79	79	79	68	68	68	63																			
1	101	96	92	89	94	90	87	84	79	77	74	69	67	66	60	59	57	53																			
2	92	84	78	72	86	79	73	69	69	65	61	61	57	55	53	50	48	44																			
3	83	74	66	60	78	69	63	57	61	56	52	54	49	46	47	43	41	37																			
4	76	65	57	51	71	61	54	48	54	48	44	48	43	39	42	38	35	32																			
5	70	58	50	44	65	55	47	42	49	42	38	43	38	34	37	34	30	28																			
6	65	52	44	38	60	49	42	36	44	38	33	39	34	30	34	30	27	24																			
7	60	47	39	33	56	45	37	32	40	34	29	35	30	26	31	27	24	21																			
8	55	43	35	29	52	41	33	28	36	30	26	32	27	24	28	24	21	19																			
9	52	39	31	26	48	37	30	25	33	27	23	30	25	21	26	22	19	17																			
10	48	36	28	24	45	34	27	23	31	25	21	27	23	19	24	20	17	15																			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9464	9464	9464
5°	9489	9374	9450
10°	9456	9340	9405
15°	9392	9274	9353
20°	9303	9196	9264
25°	9199	9087	9172
30°	9071	8997	9055
35°	8973	8864	8909
40°	8802	8716	8734
45°	8618	8548	8548
50°	8437	8359	8319
55°	8241	8130	8086
60°	7933	7805	7756
65°	7556	7405	7313
70°	7041	6887	6741
75°	6313	6121	5971
80°	5111	5042	4888
85°	3038	3493	3631



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	96.8	2.2
10°-20°	275.6	6.2
20°-30°	414.0	9.3
30°-40°	494.2	11.1
40°-50°	506.4	11.3
50°-60°	451.6	10.1
60°-70°	336.3	7.5
70°-80°	182.6	4.1
80°-90°	42.9	1.0
90°-100°	102.0	2.3
100°-110°	355.0	8.0
110°-120°	343.9	7.7
120°-130°	269.8	6.0
130°-140°	213.5	4.8
140°-150°	164.8	3.7
150°-160°	118.1	2.6
160°-170°	72.3	1.6
170°-180°	24.4	0.5
0°-30°	786.4	17.6
0°-40°	1280.6	28.7
0°-60°	2238.7	50.1
0°-90°	2800.5	62.7
90°-120°	800.9	17.9
90°-150°	1449.0	32.5
90°-180°	1664.0	37.3
0°-180°	4464.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1026	1026	1026	1026	1026	
5°	1025	1023	1012	1022	1020	97
15°	983	980	971	979	979	277
25°	904	901	893	898	901	416
35°	797	794	787	787	791	497
45°	660	662	655	654	655	510
55°	512	512	505	501	503	456
65°	346	345	339	335	335	343
75°	177	176	172	169	168	187
85°	29	31	33	34	34	40
90°	4	6	6	4	2	3
95°	17	59	172	44	27	18
105°	59	84	373	629	585	62
115°	103	124	277	585	691	102
125°	140	172	258	436	520	125
135°	168	189	256	364	411	130
145°	197	210	254	314	340	123
155°	224	232	251	279	289	103
165°	245	247	253	264	266	69
175°	256	256	254	258	256	24
180°	256	256	256	256	256	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1025.8	1025.8	1025.8	1025.8	1025.8
2.5°	1029.0	1026.9	1018.2	1025.8	1024.9
5°	1024.6	1023.1	1012.2	1021.7	1020.4
7.5°	1017.0	1014.5	1003.5	1013.0	1011.6
10°	1009.3	1006.6	997.0	1005.1	1003.9
12.5°	999.5	997.9	987.2	995.4	995.1
15°	983.3	980.5	970.9	979.2	979.2
17.5°	961.9	960.3	950.8	958.7	957.9
20°	947.5	944.9	936.6	943.5	943.5
22.5°	930.0	928.4	920.2	925.8	927.0
25°	903.6	901.0	892.6	898.2	901.0
27.5°	874.5	872.4	865.6	869.1	871.0
30°	851.5	851.5	844.5	846.0	850.0
32.5°	830.6	830.6	822.6	824.1	826.0
35°	796.7	793.9	787.0	787.0	791.0
37.5°	756.9	755.6	751.2	750.5	751.6
40°	730.8	729.3	723.7	725.2	725.2
42.5°	704.3	702.9	697.3	695.5	697.5
45°	660.5	661.9	655.1	653.7	655.1
47.5°	617.6	617.6	612.0	608.2	610.2
50°	587.8	587.8	582.4	579.6	579.6
52.5°	557.0	558.1	551.4	547.7	548.8
55°	512.3	512.3	505.4	501.3	502.7
57.5°	462.8	462.8	456.0	451.8	454.2
60°	429.9	429.9	423.0	418.8	420.3
62.5°	396.9	396.9	390.1	386.0	386.1
65°	346.1	344.8	339.2	335.0	335.0
67.5°	297.1	293.6	289.5	284.0	284.0
70°	261.0	259.5	255.3	249.9	249.9
72.5°	227.9	225.5	221.3	217.1	217.1
75°	177.1	175.6	171.7	169.0	167.5
77.5°	126.9	125.9	125.5	121.7	122.8
80°	96.2	96.2	94.9	92.0	92.0
82.5°	68.6	69.7	67.3	66.6	65.6
85°	28.7	31.4	33.0	34.3	34.3
87.5°	5.6	8.7	7.7	8.9	8.9
90°	3.8	5.7	5.7	3.8	1.9
92.5°	9.5	28.7	26.8	11.5	9.5
95°	17.2	59.3	172.2	44.0	26.8
97.5°	26.8	66.9	344.3	156.9	84.2
100°	36.4	70.8	401.8	376.9	243.0
102.5°	47.8	76.5	399.9	529.9	436.2
105°	59.3	84.2	373.1	629.4	585.4



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	91.9	112.9	290.8	633.3	721.3
115°	103.3	124.3	277.4	585.4	690.6
117.5°	114.8	137.8	269.7	541.4	646.6
120°	124.3	149.2	264.0	499.3	602.6
122.5°	132.0	160.7	260.2	464.9	558.6
125°	139.7	172.2	258.3	436.2	520.4
127.5°	147.3	179.8	258.3	415.2	485.9
130°	155.0	183.6	256.4	394.1	457.3
132.5°	162.6	185.5	256.4	378.8	432.4
135°	168.3	189.4	256.4	363.5	411.4
137.5°	176.0	193.3	256.4	350.1	394.1
140°	181.7	199.0	256.4	336.7	375.0
142.5°	189.4	204.7	256.4	323.3	357.8
145°	197.1	210.5	254.5	313.8	340.5
147.5°	204.7	216.2	252.6	304.2	325.2
150°	210.5	221.9	252.6	294.7	311.9
152.5°	218.1	227.6	250.7	285.0	300.4
155°	223.8	231.5	250.7	279.3	288.8
157.5°	229.5	237.2	250.7	273.6	281.2
160°	235.3	241.1	252.6	269.7	275.5
162.5°	241.1	244.9	252.6	265.9	269.7
165°	244.9	246.8	252.6	264.0	265.9
167.5°	248.7	250.7	252.6	262.1	262.1
170°	250.7	252.6	254.5	260.2	260.2
172.5°	254.5	254.5	254.5	258.3	258.3
175°	256.4	256.4	254.5	258.3	256.4
177.5°	256.4	256.4	254.5	258.3	256.4
180°	256.4	256.4	256.4	256.4	256.4



Report Generated By 670246072 / DESKTOP-50001EG





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







107.5°	70.8	93.8	338.6	673.5	681.1
110°	80.4	103.3	311.9	667.7	723.2



(END OF REPORT)