

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: P844904

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

Issue Date: 8/14/2023

Test Information

Test Method: LM-79-08
Report Number: P844904
REPORT IS A COMBINATION OF REPORTS P700191 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-050D-B35-1D-UNV
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, 500 LUMENS PER FOOT
UPLIGHT, 500 LUMENS PER FOOT DOWNLIGHT

Light Source: -
Ballast/Driver: -

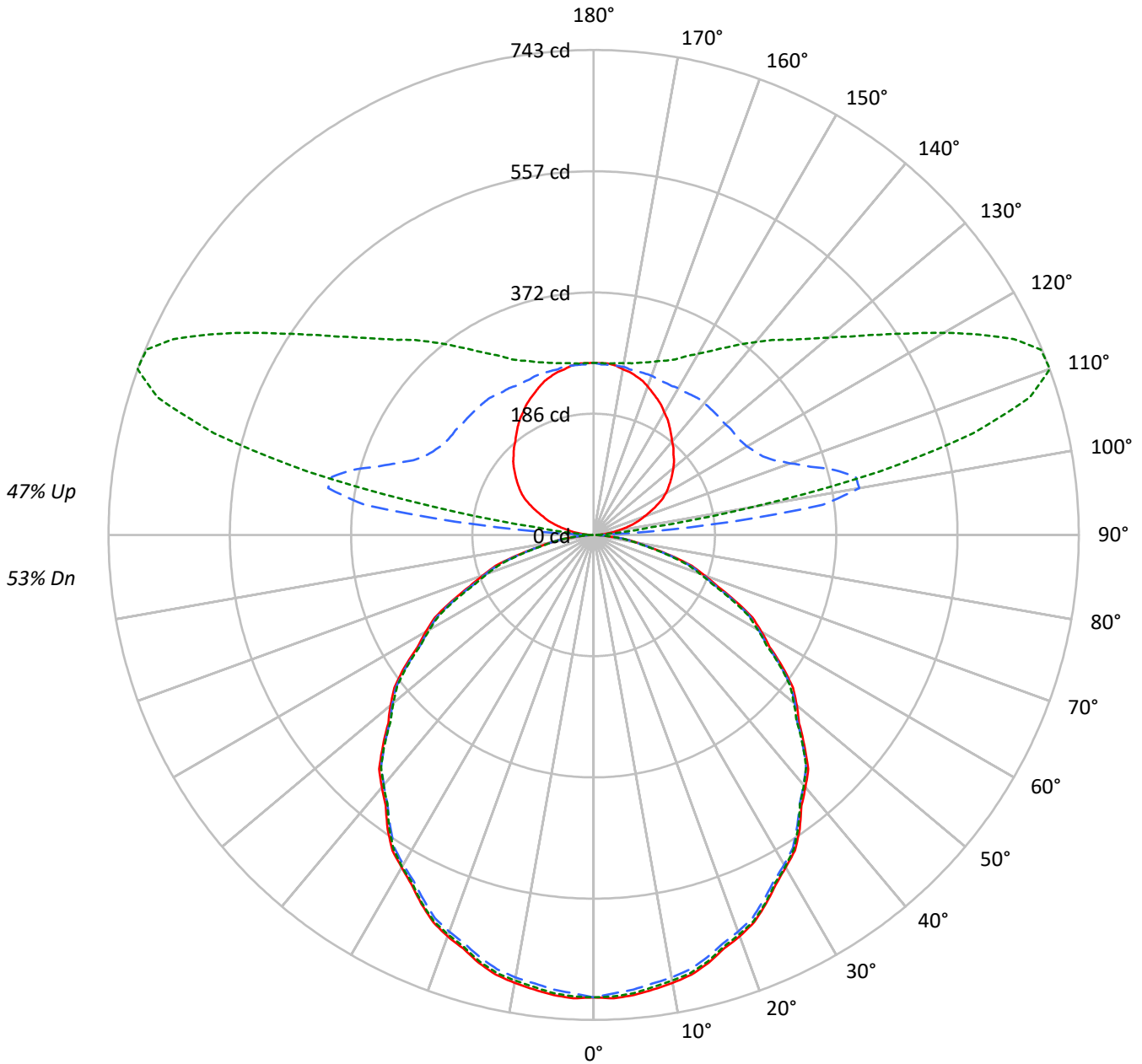
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3644.5 lumens
Efficiency: N/A
Efficacy: 122.3 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: General Diffuse

Input Watts (W): 29.8
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	108	108	108	108	100	100	100	100	85	85	85	71	71	71	59	59	59	53																			
1	98	94	90	87	91	87	84	81	75	72	70	63	61	59	52	51	50	45																			
2	90	82	76	71	83	76	71	66	65	61	58	55	52	50	46	44	42	37																			
3	82	72	65	59	75	67	60	55	57	52	48	49	45	42	40	38	35	31																			
4	75	64	56	50	69	59	52	47	51	45	41	43	39	36	36	33	30	27																			
5	68	57	48	42	63	53	46	40	46	40	35	39	34	31	32	29	26	23																			
6	63	51	43	37	58	47	40	35	41	35	31	35	30	27	29	26	23	20																			
7	58	46	38	32	54	43	36	30	37	31	27	32	27	24	27	23	21	18																			
8	54	42	34	28	50	39	32	27	34	28	24	29	25	21	25	21	18	16																			
9	50	38	30	25	47	36	29	24	31	25	22	27	22	19	23	19	17	14																			
10	47	35	28	23	44	33	26	22	29	23	19	25	20	17	21	18	15	13																			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6537	6537	6537
5°	6553	6475	6527
10°	6530	6450	6495
15°	6486	6404	6460
20°	6425	6350	6397
25°	6352	6276	6335
30°	6264	6213	6254
35°	6196	6122	6153
40°	6077	6020	6032
45°	5952	5903	5903
50°	5826	5773	5744
55°	5691	5615	5583
60°	5479	5390	5355
65°	5218	5115	5050
70°	4864	4756	4656
75°	4360	4228	4124
80°	3528	3485	3374
85°	2096	2414	2509



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	66.8	1.8
10°-20°	190.4	5.2
20°-30°	285.9	7.8
30°-40°	341.3	9.4
40°-50°	349.7	9.6
50°-60°	311.9	8.6
60°-70°	232.3	6.4
70°-80°	126.1	3.5
80°-90°	29.8	0.8
90°-100°	104.9	2.9
100°-110°	364.9	10.0
110°-120°	353.5	9.7
120°-130°	277.3	7.6
130°-140°	219.5	6.0
140°-150°	169.4	4.6
150°-160°	121.4	3.3
160°-170°	74.3	2.0
170°-180°	25.1	0.7
0°-30°	543.1	14.9
0°-40°	884.4	24.3
0°-60°	1546.1	42.4
0°-90°	1934.3	53.1
90°-120°	823.3	22.6
90°-150°	1489.4	40.9
90°-180°	1710.0	46.9
0°-180°	3644.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	708	708	708	708	708	
5°	708	707	699	706	705	67
15°	679	677	670	676	676	191
25°	624	622	616	620	622	287
35°	550	548	544	544	546	343
45°	456	457	452	451	452	352
55°	354	354	349	346	347	315
65°	239	238	234	231	231	237
75°	122	121	119	117	116	129
85°	20	22	23	24	24	28
90°	4	6	6	4	2	3
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	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	708.5	708.5	708.5	708.5	708.5
2.5°	710.6	709.3	703.1	708.5	707.8
5°	707.6	706.6	699.1	705.5	704.7
7.5°	702.4	700.6	693.1	699.6	698.6
10°	697.0	695.2	688.5	694.2	693.3
12.5°	690.3	689.2	681.8	687.4	687.2
15°	679.0	677.2	670.5	676.3	676.3
17.5°	664.3	663.2	656.6	662.1	661.5
20°	654.4	652.6	646.8	651.5	651.5
22.5°	642.2	641.2	635.5	639.4	640.2
25°	624.0	622.3	616.5	620.3	622.3
27.5°	604.0	602.5	597.8	600.2	601.5
30°	588.0	588.0	583.2	584.3	587.0
32.5°	573.6	573.6	568.1	569.1	570.4
35°	550.1	548.3	543.5	543.5	546.3
37.5°	522.8	521.9	518.8	518.2	519.0
40°	504.6	503.7	499.8	500.8	500.8
42.5°	486.4	485.4	481.6	480.3	481.7
45°	456.2	457.2	452.4	451.4	452.4
47.5°	426.6	426.6	422.6	420.0	421.5
50°	405.9	405.9	402.2	400.2	400.2
52.5°	384.7	385.5	380.8	378.2	379.0
55°	353.8	353.8	349.1	346.2	347.1
57.5°	319.6	319.6	314.9	312.1	313.7
60°	296.9	296.9	292.1	289.3	290.2
62.5°	274.1	274.1	269.4	266.6	266.7
65°	239.0	238.1	234.3	231.3	231.3
67.5°	205.2	202.8	199.9	196.2	196.2
70°	180.3	179.2	176.3	172.6	172.6
72.5°	157.5	155.8	152.9	149.9	149.9
75°	122.3	121.3	118.6	116.6	115.7
77.5°	87.7	86.9	86.7	84.1	84.8
80°	66.4	66.4	65.6	63.5	63.5
82.5°	47.4	48.1	46.5	46.1	45.3
85°	19.8	21.7	22.8	23.7	23.7
87.5°	3.9	6.0	5.3	6.1	6.1
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



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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)