

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: P844908

Luminaire Tested: **SQ4P-F-050U-075D-B40-1D-UNV**

Issue Date: 8/14/2023



Test Information

Test Method: LM-79-08
Report Number: P844908
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-B40-1D-UNV
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, 500 LUMENS PER FOOT UPLIGHT, 750 LUMENS PER FOOT DOWNLIGHT

Light Source: -
Ballast/Driver: -

Summary

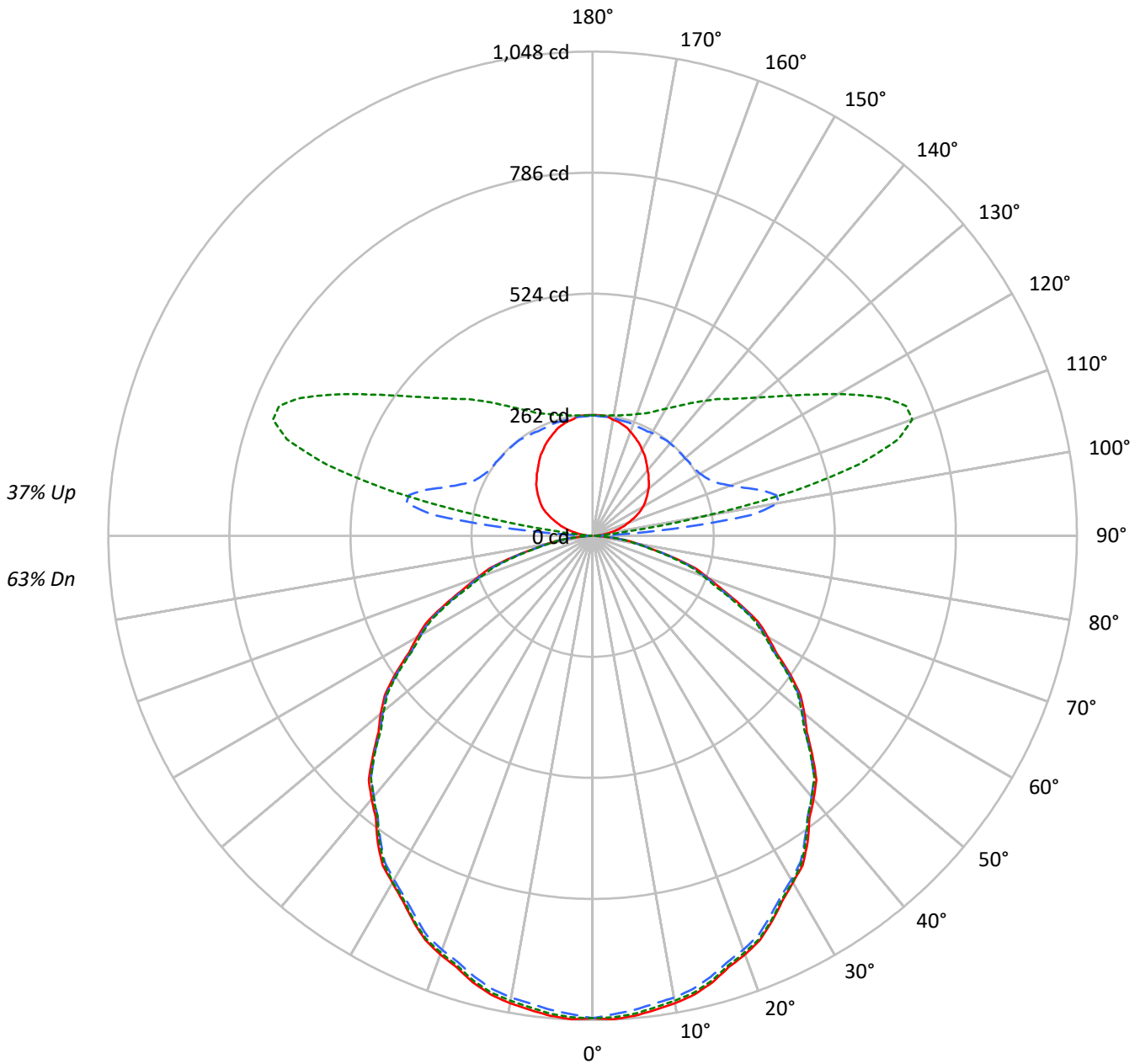
Lumens per Lamp: N/A
Luminaire Lumens: 4544.2 lumens
Efficiency: N/A
Efficacy: 117.7 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Direct

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°	9634	9634	9634
5°	9659	9542	9619
10°	9625	9507	9574
15°	9559	9440	9520
20°	9469	9361	9429
25°	9363	9250	9336
30°	9233	9159	9217
35°	9133	9023	9069
40°	8959	8873	8890
45°	8772	8700	8700
50°	8588	8509	8469
55°	8389	8276	8231
60°	8075	7946	7894
65°	7691	7538	7444
70°	7165	7011	6863
75°	6424	6228	6078
80°	5202	5133	4973
85°	3091	3557	3694



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	98.5	2.2
10°-20°	280.6	6.2
20°-30°	421.4	9.3
30°-40°	503.1	11.1
40°-50°	515.5	11.3
50°-60°	459.7	10.1
60°-70°	342.4	7.5
70°-80°	185.8	4.1
80°-90°	43.7	1.0
90°-100°	103.8	2.3
100°-110°	361.4	8.0
110°-120°	350.0	7.7
120°-130°	274.6	6.0
130°-140°	217.3	4.8
140°-150°	167.7	3.7
150°-160°	120.2	2.6
160°-170°	73.5	1.6
170°-180°	24.9	0.5
0°-30°	800.5	17.6
0°-40°	1303.6	28.7
0°-60°	2278.8	50.1
0°-90°	2850.7	62.7
90°-120°	815.2	17.9
90°-150°	1474.9	32.5
90°-180°	1694.0	37.3
0°-180°	4544.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1044	1044	1044	1044	1044	
5°	1043	1042	1030	1040	1039	99
15°	1001	998	988	997	997	282
25°	920	917	909	914	917	424
35°	811	808	801	801	805	506
45°	672	674	667	665	667	519
55°	522	522	514	510	512	464
65°	352	351	345	341	341	349
75°	180	179	175	172	170	191
85°	29	32	34	35	35	41
90°	4	6	6	4	2	3
95°	18	60	175	45	27	19
105°	60	86	380	641	596	63
115°	105	127	282	596	703	104
125°	142	175	263	444	530	127
135°	171	193	261	370	419	133
145°	201	214	259	319	347	125
155°	228	236	255	284	294	105
165°	249	251	257	269	271	70
175°	261	261	259	263	261	25
180°	261	261	261	261	261	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1044.2	1044.2	1044.2	1044.2	1044.2
2.5°	1047.5	1045.3	1036.4	1044.2	1043.2
5°	1042.9	1041.5	1030.3	1040.0	1038.6
7.5°	1035.3	1032.6	1021.5	1031.2	1029.7
10°	1027.4	1024.6	1014.8	1023.1	1021.9
12.5°	1017.4	1015.8	1004.9	1013.3	1012.9
15°	1000.8	998.0	988.3	996.7	996.7
17.5°	979.1	977.5	967.8	975.8	975.1
20°	964.4	961.8	953.4	960.3	960.3
22.5°	946.7	945.0	936.7	942.4	943.6
25°	919.7	917.1	908.6	914.3	917.1
27.5°	890.2	888.0	881.1	884.7	886.6
30°	866.7	866.7	859.7	861.1	865.2
32.5°	845.5	845.5	837.4	838.8	840.8
35°	810.9	808.1	801.1	801.1	805.2
37.5°	770.4	769.1	764.7	763.9	765.1
40°	743.9	742.4	736.7	738.1	738.1
42.5°	716.9	715.5	709.7	707.9	710.0
45°	672.3	673.8	666.8	665.4	666.8
47.5°	628.6	628.6	622.9	619.0	621.2
50°	598.3	598.3	592.8	590.0	590.0
52.5°	567.0	568.1	561.3	557.5	558.7
55°	521.5	521.5	514.5	510.3	511.7
57.5°	471.1	471.1	464.2	459.9	462.3
60°	437.6	437.6	430.6	426.3	427.8
62.5°	404.0	404.0	397.1	392.9	393.1
65°	352.3	351.0	345.3	341.0	341.0
67.5°	302.4	298.9	294.7	289.1	289.1
70°	265.6	264.2	259.9	254.4	254.4
72.5°	232.0	229.6	225.3	220.9	220.9
75°	180.2	178.8	174.7	172.0	170.5
77.5°	129.2	128.1	127.7	123.8	125.0
80°	97.9	97.9	96.6	93.6	93.6
82.5°	69.9	70.9	68.5	67.8	66.8
85°	29.2	32.0	33.6	34.9	34.9
87.5°	5.7	8.8	7.8	9.0	9.0
90°	3.9	5.8	5.8	3.9	1.9
92.5°	9.7	29.2	27.2	11.7	9.7
95°	17.5	60.4	175.3	44.8	27.2
97.5°	27.2	68.1	350.5	159.7	85.7
100°	37.0	72.1	408.9	383.7	247.3
102.5°	48.6	77.9	407.0	539.4	444.0
105°	60.4	85.7	379.8	640.6	595.9



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	93.5	114.9	296.0	644.6	734.2
115°	105.1	126.6	282.4	595.9	703.0
117.5°	116.9	140.2	274.5	551.1	658.2
120°	126.6	151.9	268.7	508.3	613.4
122.5°	134.4	163.6	264.8	473.2	568.6
125°	142.2	175.3	262.9	444.0	529.7
127.5°	149.9	183.1	262.9	422.6	494.6
130°	157.8	186.9	261.0	401.2	465.4
132.5°	165.5	188.9	261.0	385.6	440.1
135°	171.3	192.7	261.0	370.0	418.7
137.5°	179.2	196.7	261.0	356.3	401.2
140°	185.0	202.5	261.0	342.8	381.7
142.5°	192.7	208.3	261.0	329.1	364.2
145°	200.6	214.3	259.0	319.4	346.6
147.5°	208.3	220.1	257.1	309.6	331.0
150°	214.3	225.9	257.1	299.9	317.5
152.5°	222.0	231.7	255.2	290.1	305.7
155°	227.8	235.7	255.2	284.3	294.0
157.5°	233.6	241.5	255.2	278.5	286.3
160°	239.6	245.4	257.1	274.5	280.4
162.5°	245.4	249.2	257.1	270.7	274.5
165°	249.2	251.2	257.1	268.7	270.7
167.5°	253.1	255.2	257.1	266.8	266.8
170°	255.2	257.1	259.0	264.8	264.8
172.5°	259.0	259.0	259.0	262.9	262.9
175°	261.0	261.0	259.0	262.9	261.0
177.5°	261.0	261.0	259.0	262.9	261.0
180°	261.0	261.0	261.0	261.0	261.0



Report Generated By 670246072 / DESKTOP-50001EG





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







107.5°	72.1	95.5	344.7	685.5	693.3
110°	81.8	105.1	317.5	679.6	736.1



(END OF REPORT)