

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: P844914

Luminaire Tested: **SQ4P-F-050U-125D-B40-1D-UNV**

Issue Date: 8/14/2023

Test Information

Test Method: LM-79-08
Report Number: P844914
REPORT IS A COMBINATION OF REPORTS P700194 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-125D-B40-1D-UNV
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, 500 LUMENS PER FOOT
UPLIGHT, 1250 LUMENS PER FOOT DOWNLIGHT

Light Source: -
Ballast/Driver: -

Summary

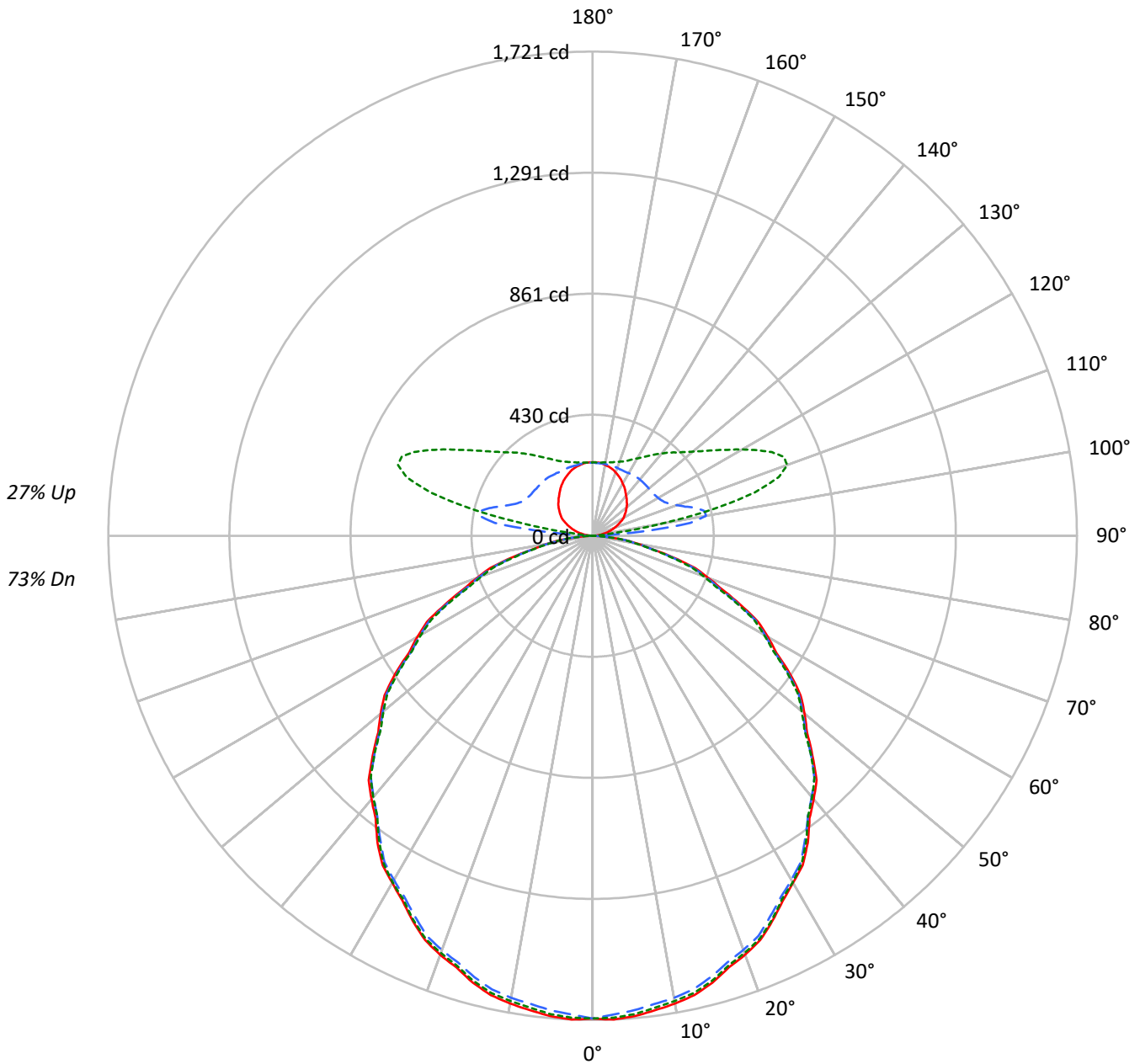
Lumens per Lamp: N/A
Luminaire Lumens: 6377.6 lumens
Efficiency: N/A
Efficacy: 108.5 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 58.8
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				20				20	
RC	80				70				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	113	113	113	113	107	107	107	107	96	96	96	87	87	87	78	78	78	73				73
1	103	99	94	91	98	94	90	87	85	82	79	76	74	72	69	67	66	62				62
2	94	86	80	74	89	82	76	71	74	70	66	67	63	60	60	58	55	52				52
3	85	76	68	62	81	72	65	59	65	60	55	59	55	51	53	50	47	44				44
4	78	67	59	52	74	64	56	50	58	52	47	53	48	43	48	44	40	37				37
5	72	60	51	45	68	57	49	43	52	45	40	47	42	38	43	38	35	32				32
6	66	54	45	39	63	51	43	38	47	40	35	43	37	33	39	34	31	28				28
7	61	48	40	34	58	46	39	33	42	36	31	39	33	29	35	31	27	25				25
8	57	44	36	30	54	42	35	30	39	32	28	36	30	26	32	28	24	22				22
9	53	40	32	27	50	39	31	26	36	29	25	33	27	23	30	25	22	20				20
10	50	37	30	25	47	36	29	24	33	27	23	30	25	21	28	23	20	18				18

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	15831	15831	15831
5°	15872	15681	15807
10°	15817	15624	15732
15°	15709	15512	15645
20°	15560	15381	15494
25°	15386	15200	15342
30°	15173	15050	15147
35°	15009	14828	14903
40°	14723	14580	14609
45°	14417	14298	14298
50°	14112	13982	13916
55°	13784	13599	13526
60°	13269	13057	12974
65°	12636	12387	12234
70°	11775	11521	11276
75°	10559	10234	9988
80°	8549	8432	8177
85°	5081	5843	6076



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	161.9	2.5
10°-20°	461.1	7.2
20°-30°	692.5	10.9
30°-40°	826.7	13.0
40°-50°	847.1	13.3
50°-60°	755.5	11.8
60°-70°	562.6	8.8
70°-80°	305.4	4.8
80°-90°	71.3	1.1
90°-100°	103.8	1.6
100°-110°	361.4	5.7
110°-120°	350.0	5.5
120°-130°	274.6	4.3
130°-140°	217.3	3.4
140°-150°	167.7	2.6
150°-160°	120.2	1.9
160°-170°	73.5	1.2
170°-180°	24.9	0.4
0°-30°	1315.5	20.6
0°-40°	2142.1	33.6
0°-60°	3744.7	58.7
0°-90°	4684.1	73.4
90°-120°	815.2	12.8
90°-150°	1474.9	23.1
90°-180°	1694.0	26.6
0°-180°	6377.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1716	1716	1716	1716	1716	
5°	1714	1711	1693	1709	1707	163
15°	1645	1640	1624	1638	1638	463
25°	1511	1507	1493	1502	1507	696
35°	1333	1328	1316	1316	1323	831
45°	1105	1107	1096	1093	1096	853
55°	857	857	845	839	841	763
65°	579	577	567	560	560	573
75°	296	294	287	283	280	313
85°	48	52	55	57	57	67
90°	4	6	6	4	2	4
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°	1715.9	1715.9	1715.9	1715.9	1715.9
2.5°	1721.3	1717.9	1703.1	1715.9	1714.4
5°	1713.8	1711.4	1693.1	1708.9	1706.8
7.5°	1701.2	1696.9	1678.7	1694.5	1692.1
10°	1688.3	1683.7	1667.7	1681.3	1679.2
12.5°	1672.0	1669.3	1651.4	1665.0	1664.5
15°	1644.6	1640.0	1624.0	1637.9	1637.9
17.5°	1608.9	1606.3	1590.5	1603.6	1602.2
20°	1584.8	1580.5	1566.6	1578.1	1578.1
22.5°	1555.6	1552.9	1539.3	1548.7	1550.5
25°	1511.4	1507.1	1493.1	1502.5	1507.1
27.5°	1462.9	1459.4	1447.9	1453.7	1457.0
30°	1424.2	1424.2	1412.7	1415.1	1421.8
32.5°	1389.3	1389.3	1376.0	1378.4	1381.6
35°	1332.6	1328.0	1316.5	1316.5	1323.2
37.5°	1266.1	1263.9	1256.7	1255.3	1257.2
40°	1222.4	1220.0	1210.6	1213.0	1213.0
42.5°	1178.1	1175.7	1166.4	1163.4	1166.8
45°	1104.9	1107.3	1095.8	1093.4	1095.8
47.5°	1033.0	1033.0	1023.7	1017.2	1020.7
50°	983.2	983.2	974.1	969.5	969.5
52.5°	931.8	933.6	922.4	916.2	918.0
55°	856.9	856.9	845.4	838.6	840.9
57.5°	774.1	774.1	762.7	755.9	759.8
60°	719.1	719.1	707.6	700.6	703.1
62.5°	663.9	663.9	652.6	645.6	645.9
65°	578.8	576.7	567.4	560.4	560.4
67.5°	497.1	491.2	484.2	475.1	475.1
70°	436.5	434.0	427.1	418.0	418.0
72.5°	381.2	377.3	370.3	363.0	363.0
75°	296.2	293.8	287.1	282.6	280.2
77.5°	212.3	210.5	209.9	203.5	205.3
80°	160.9	160.9	158.7	153.9	153.9
82.5°	114.7	116.7	112.6	111.5	109.7
85°	48.0	52.5	55.2	57.4	57.4
87.5°	9.4	14.4	12.9	14.7	14.7
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)