

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: P844915

Luminaire Tested: **SQ4P-F-050U-125D-B50-1D-UNV**

Issue Date: 8/14/2023



Test Information

Test Method: LM-79-08
Report Number: P844915
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-B50-1D-UNV
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, 500 LUMENS PER FOOT UPLIGHT, 1250 LUMENS PER FOOT DOWNLIGHT

Light Source: -
Ballast/Driver: -

Summary

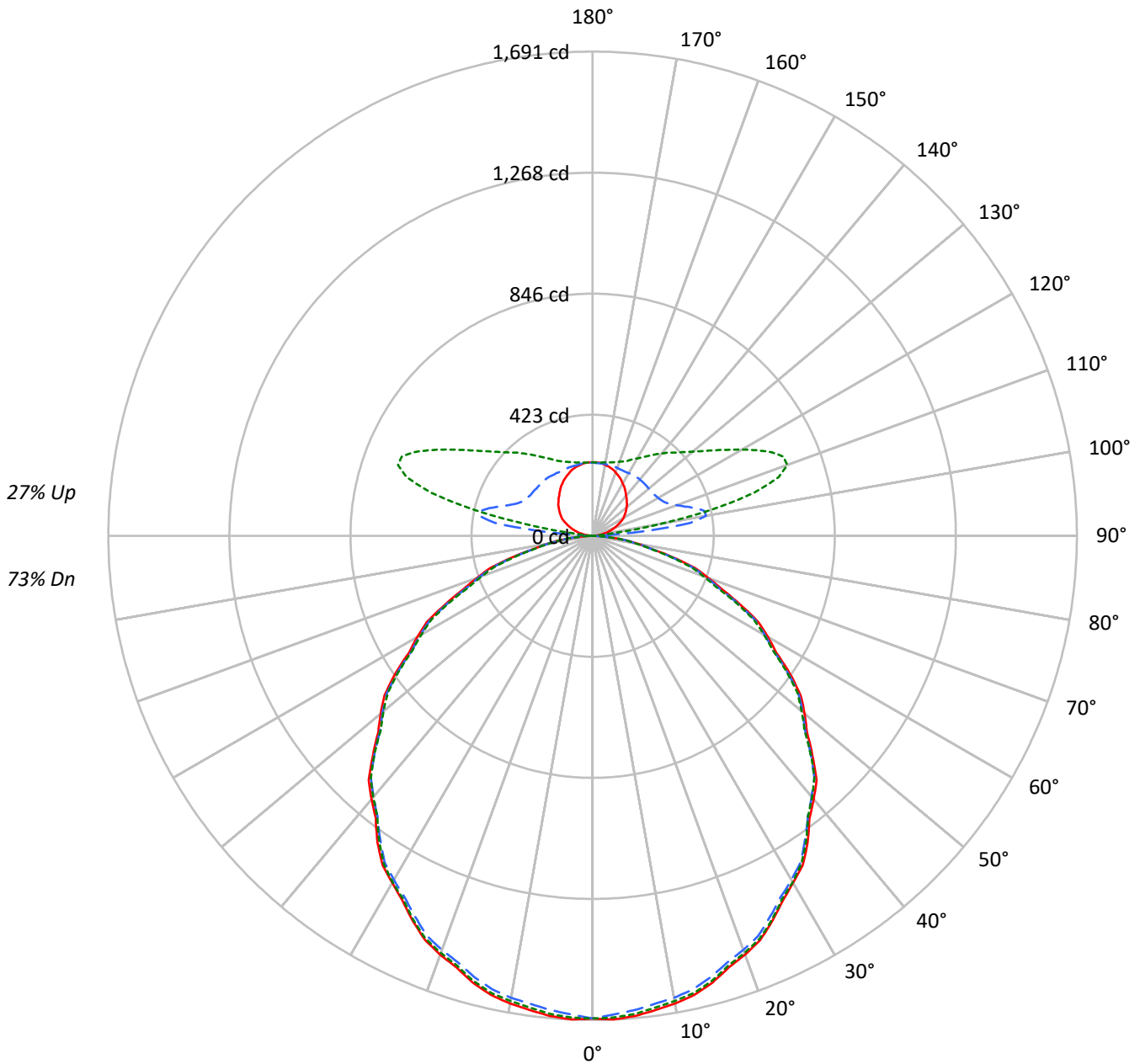
Lumens per Lamp: N/A
Luminaire Lumens: 6265.6 lumens
Efficiency: N/A
Efficacy: 106.6 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Direct

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					
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°	15554	15554	15554
5°	15593	15405	15530
10°	15539	15348	15455
15°	15433	15239	15370
20°	15286	15110	15222
25°	15115	14933	15072
30°	14906	14786	14881
35°	14745	14567	14641
40°	14464	14324	14352
45°	14163	14046	14046
50°	13864	13736	13672
55°	13542	13359	13288
60°	13037	12828	12745
65°	12413	12169	12020
70°	11567	11319	11076
75°	10373	10056	9810
80°	8395	8283	8033
85°	4986	5748	5970



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	159.0	2.5
10°-20°	453.0	7.2
20°-30°	680.3	10.9
30°-40°	812.1	13.0
40°-50°	832.2	13.3
50°-60°	742.2	11.8
60°-70°	552.7	8.8
70°-80°	300.0	4.8
80°-90°	70.1	1.1
90°-100°	102.0	1.6
100°-110°	355.0	5.7
110°-120°	343.9	5.5
120°-130°	269.8	4.3
130°-140°	213.5	3.4
140°-150°	164.8	2.6
150°-160°	118.1	1.9
160°-170°	72.3	1.2
170°-180°	24.4	0.4
0°-30°	1292.3	20.6
0°-40°	2104.5	33.6
0°-60°	3678.9	58.7
0°-90°	4601.8	73.4
90°-120°	800.9	12.8
90°-150°	1449.0	23.1
90°-180°	1664.0	26.6
0°-180°	6265.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1686	1686	1686	1686	1686	
5°	1684	1681	1663	1679	1677	160
15°	1616	1611	1595	1609	1609	455
25°	1485	1481	1467	1476	1481	684
35°	1309	1305	1293	1293	1300	817
45°	1086	1088	1076	1074	1076	838
55°	842	842	830	824	826	750
65°	569	567	557	551	551	563
75°	291	289	282	278	275	308
85°	47	52	54	56	56	66
90°	4	6	6	4	2	4
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°	1685.8	1685.8	1685.8	1685.8	1685.8
2.5°	1691.1	1687.7	1673.2	1685.8	1684.2
5°	1683.7	1681.3	1663.4	1678.9	1676.8
7.5°	1671.3	1667.1	1649.2	1664.7	1662.3
10°	1658.6	1654.1	1638.3	1651.8	1649.7
12.5°	1642.6	1640.0	1622.3	1635.8	1635.2
15°	1615.7	1611.2	1595.4	1609.1	1609.1
17.5°	1580.6	1578.1	1562.6	1575.4	1574.1
20°	1556.9	1552.8	1539.0	1550.4	1550.4
22.5°	1528.3	1525.6	1512.2	1521.4	1523.2
25°	1484.8	1480.6	1466.9	1476.1	1480.6
27.5°	1437.2	1433.7	1422.4	1428.1	1431.4
30°	1399.2	1399.2	1387.9	1390.2	1396.8
32.5°	1364.9	1364.9	1351.8	1354.2	1357.3
35°	1309.1	1304.7	1293.3	1293.3	1299.9
37.5°	1243.8	1241.7	1234.6	1233.3	1235.1
40°	1200.9	1198.5	1189.3	1191.6	1191.6
42.5°	1157.4	1155.0	1145.9	1142.9	1146.3
45°	1085.5	1087.9	1076.5	1074.2	1076.5
47.5°	1014.9	1014.9	1005.7	999.3	1002.8
50°	965.9	965.9	957.0	952.5	952.5
52.5°	915.4	917.2	906.1	900.0	901.9
55°	841.9	841.9	830.5	823.9	826.1
57.5°	760.5	760.5	749.3	742.6	746.5
60°	706.5	706.5	695.2	688.3	690.7
62.5°	652.2	652.2	641.1	634.2	634.5
65°	568.6	566.6	557.4	550.6	550.6
67.5°	488.4	482.6	475.7	466.8	466.8
70°	428.8	426.4	419.6	410.6	410.6
72.5°	374.5	370.6	363.8	356.6	356.6
75°	291.0	288.7	282.1	277.6	275.2
77.5°	208.6	206.8	206.2	199.9	201.7
80°	158.0	158.0	155.9	151.2	151.2
82.5°	112.7	114.6	110.6	109.6	107.8
85°	47.1	51.6	54.3	56.4	56.4
87.5°	9.2	14.2	12.7	14.5	14.5
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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CATALOG NUMBER: SQ4P-F-050U-125D-B50-1D-UNV

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)