

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: P845286

Luminaire Tested: **SQ4P-PW1-100U-125D-B40-1D-UNV**

Issue Date: 8/14/2023

Test Information

Test Method: LM-79-08
Report Number: P845286
REPORT IS A COMBINATION OF REPORTS P700098 AND P700246
Test Lab: INNOVATION CENTER
Issue Date: 8/14/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4P-PW1-100U-125D-B40-1D-UNV
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, 1000 LUMENS PER FOOT UPLIGHT, 1250 LUMENS PER FOOT DOWNLIGHT

Light Source: -
Ballast/Driver: -

Summary

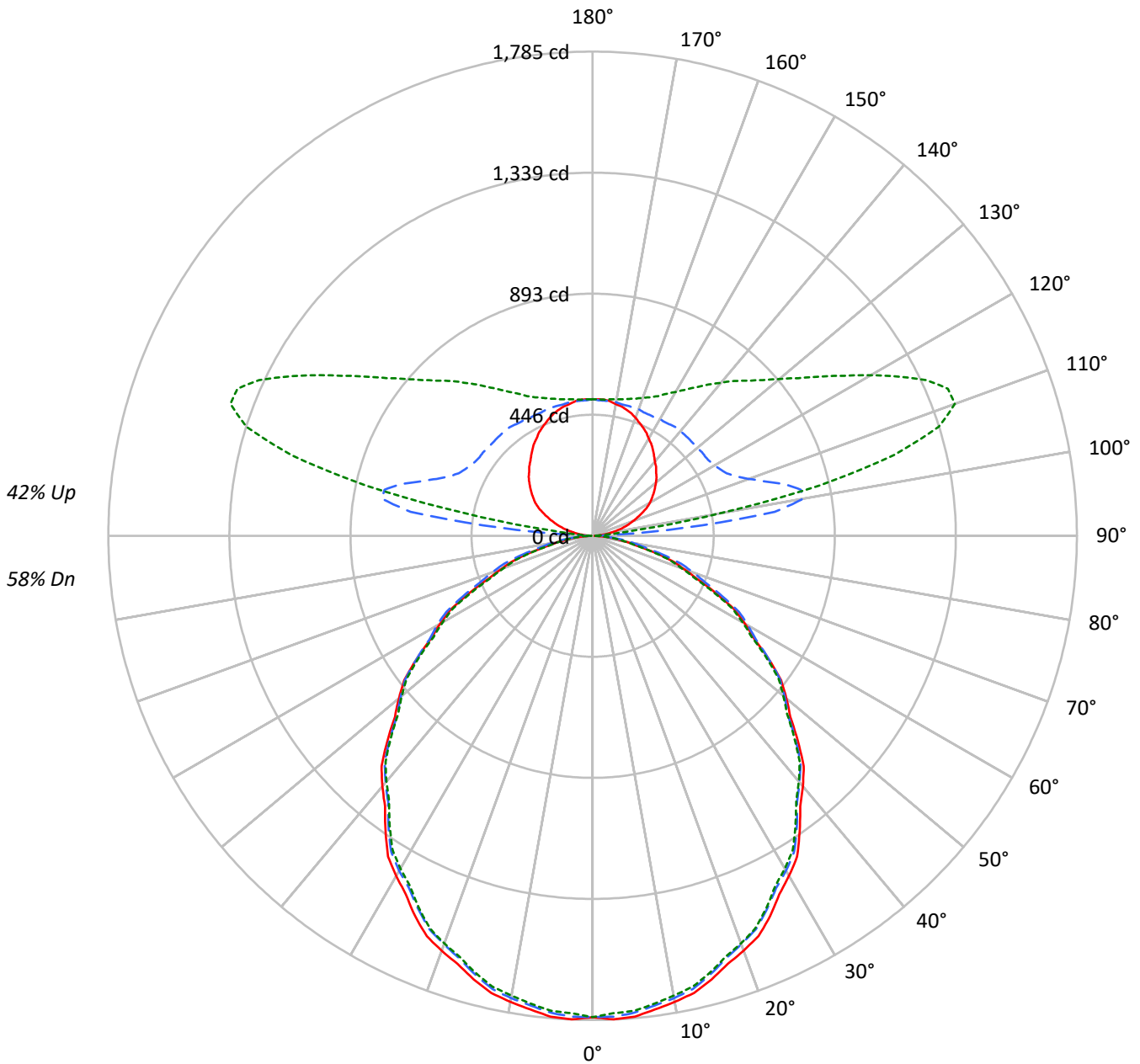
Lumens per Lamp: N/A
Luminaire Lumens: 7784.8 lumens
Efficiency: N/A
Efficacy: 108.4 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.19 / 1.31
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 71.8
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	109	109	109	109	102	102	102	102	88	88	88	75	75	75	63	63	63	58																			
1	100	95	91	88	93	89	86	83	77	75	72	66	65	63	56	55	54	49																			
2	91	83	77	72	84	78	73	68	68	64	60	58	55	53	50	47	46	41																			
3	83	73	66	60	77	69	62	57	60	55	51	52	48	45	44	41	39	35																			
4	76	65	57	51	71	61	54	48	53	48	43	46	42	38	39	36	33	30																			
5	70	58	50	44	65	54	47	42	48	42	37	41	37	33	36	32	29	26																			
6	64	52	44	38	60	49	42	36	43	37	33	37	33	29	32	29	26	23																			
7	59	47	39	33	55	44	37	32	39	33	29	34	29	26	29	26	23	20																			
8	55	43	35	30	51	40	33	28	36	30	26	31	27	23	27	23	21	18																			
9	51	39	32	26	48	37	30	25	33	27	23	29	24	21	25	21	19	16																			
10	48	36	29	24	45	34	27	23	30	25	21	27	22	19	23	20	17	15																			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	16372	16372	16372
5°	16479	16348	16276
10°	16346	16214	16126
15°	16173	15993	15934
20°	15979	15733	15704
25°	15757	15471	15421
30°	15424	15192	15091
35°	14986	14773	14686
40°	14519	14291	14237
45°	13953	13771	13708
50°	13376	13264	13172
55°	12749	12749	12550
60°	11976	12204	11771
65°	10955	11503	10684
70°	9655	10585	9409
75°	8252	9471	8021
80°	6402	7975	6487
85°	4139	6129	5452



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	167.1	2.1
10°-20°	471.8	6.1
20°-30°	699.8	9.0
30°-40°	818.8	10.5
40°-50°	815.2	10.5
50°-60°	703.9	9.0
60°-70°	506.7	6.5
70°-80°	265.7	3.4
80°-90°	67.1	0.9
90°-100°	200.5	2.6
100°-110°	697.4	9.0
110°-120°	675.6	8.7
120°-130°	530.0	6.8
130°-140°	419.5	5.4
140°-150°	323.7	4.2
150°-160°	232.1	3.0
160°-170°	141.9	1.8
170°-180°	48.0	0.6
0°-30°	1338.6	17.2
0°-40°	2157.5	27.7
0°-60°	3676.6	47.2
0°-90°	4516.1	58.0
90°-120°	1573.5	20.2
90°-150°	2846.7	36.6
90°-180°	3269.0	42.0
0°-180°	7784.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1774	1774	1774	1774	1774	
5°	1779	1759	1765	1760	1757	169
15°	1693	1672	1674	1671	1668	477
25°	1548	1522	1520	1510	1515	712
35°	1330	1312	1312	1299	1304	832
45°	1069	1060	1055	1052	1051	825
55°	793	791	793	782	780	707
65°	502	517	527	506	489	497
75°	232	253	266	248	225	248
85°	39	51	58	55	52	52
90°	8	11	11	8	4	6
95°	34	116	338	86	53	36
105°	116	165	733	1237	1150	122
115°	203	244	545	1150	1357	200
125°	274	338	507	857	1022	246
135°	331	372	504	714	808	256
145°	387	414	500	616	669	242
155°	440	455	492	549	568	203
165°	481	485	496	519	522	136
175°	504	504	500	507	504	48
180°	504	504	504	504	504	



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CATALOG NUMBER: SQ4P-PW1-100U-125D-B40-1D-UNV

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1774.5	1774.5	1774.5	1774.5	1774.5
2.5°	1784.6	1769.8	1774.5	1770.7	1762.0
5°	1779.3	1759.3	1765.2	1760.4	1757.4
7.5°	1761.2	1742.9	1746.9	1742.1	1740.1
10°	1744.8	1726.4	1730.7	1724.5	1721.3
12.5°	1726.2	1706.5	1710.8	1704.3	1702.7
15°	1693.2	1671.7	1674.4	1671.1	1668.2
17.5°	1655.1	1633.5	1633.7	1628.9	1628.0
20°	1627.5	1604.6	1602.4	1596.2	1599.5
22.5°	1597.6	1573.4	1571.2	1562.6	1566.9
25°	1547.8	1521.9	1519.7	1510.3	1514.8
27.5°	1490.3	1464.7	1464.7	1451.6	1456.4
30°	1447.8	1423.3	1426.0	1410.3	1416.5
32.5°	1402.7	1380.6	1382.0	1366.7	1372.9
35°	1330.5	1312.2	1311.6	1299.3	1303.9
37.5°	1256.7	1240.5	1237.8	1230.8	1231.9
40°	1205.5	1191.8	1186.6	1182.1	1182.1
42.5°	1151.5	1139.2	1134.1	1130.6	1129.4
45°	1069.4	1060.3	1055.4	1052.1	1050.6
47.5°	988.0	979.6	975.4	973.1	971.6
50°	931.9	925.7	924.1	919.3	917.7
52.5°	875.6	871.9	870.2	864.3	862.7
55°	792.6	791.2	792.6	781.8	780.2
57.5°	706.4	708.8	713.9	699.1	695.3
60°	649.0	654.9	661.4	644.1	637.9
62.5°	590.0	599.9	608.8	588.9	580.3
65°	501.8	517.2	526.9	506.1	489.4
67.5°	416.9	435.8	447.4	425.3	406.1
70°	357.9	379.5	392.4	370.0	348.8
72.5°	306.7	330.6	341.2	319.9	298.6
75°	231.5	252.8	265.7	248.0	225.0
77.5°	164.2	184.3	195.1	179.8	160.7
80°	120.5	141.8	150.1	137.2	122.1
82.5°	85.5	103.2	108.9	101.1	90.5
85°	39.1	51.2	57.9	54.8	51.5
87.5°	10.0	18.6	23.7	23.7	25.1
90°	7.6	11.2	11.2	7.6	3.8
92.5°	18.8	56.4	52.6	22.6	18.8
95°	33.8	116.5	338.3	86.4	52.6
97.5°	52.6	131.6	676.6	308.3	165.4
100°	71.4	139.1	789.3	740.5	477.4
102.5°	94.0	150.3	785.5	1041.2	856.9
105°	116.5	165.4	732.9	1236.6	1150.2



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	180.4	221.7	571.4	1244.1	1417.1
115°	202.9	244.3	545.0	1150.2	1356.9
117.5°	225.5	270.7	530.0	1063.7	1270.4
120°	244.3	293.1	518.7	981.0	1184.0
122.5°	259.3	315.7	511.2	913.3	1097.6
125°	274.3	338.3	507.4	856.9	1022.4
127.5°	289.5	353.3	507.4	815.7	954.7
130°	304.5	360.9	503.6	774.3	898.3
132.5°	319.5	364.6	503.6	744.2	849.5
135°	330.7	372.1	503.6	714.2	808.1
137.5°	345.8	379.6	503.6	687.8	774.3
140°	357.1	390.9	503.6	661.5	736.7
142.5°	372.1	402.2	503.6	635.2	702.9
145°	387.1	413.5	499.9	616.4	669.0
147.5°	402.2	424.7	496.2	597.6	639.0
150°	413.5	436.0	496.2	578.8	612.6
152.5°	428.5	447.3	492.4	560.0	590.2
155°	439.8	454.8	492.4	548.8	567.6
157.5°	451.0	466.1	492.4	537.5	552.6
160°	462.3	473.6	496.2	530.0	541.2
162.5°	473.6	481.1	496.2	522.4	530.0
165°	481.1	484.9	496.2	518.7	522.4
167.5°	488.6	492.4	496.2	515.0	515.0
170°	492.4	496.2	499.9	511.2	511.2
172.5°	499.9	499.9	499.9	507.4	507.4
175°	503.6	503.6	499.9	507.4	503.6
177.5°	503.6	503.6	499.9	507.4	503.6
180°	503.6	503.6	503.6	503.6	503.6



Report Generated By 670246072 / DESKTOP-50001EG





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







107.5°	139.1	184.2	665.3	1323.1	1338.1
110°	157.9	202.9	612.6	1311.8	1420.7



(END OF REPORT)