

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: P844887

Luminaire Tested: **SQ4P-BB-150U-100D-B40-1D-UNV**

Issue Date: 8/14/2023

Test Information

Test Method: LM-79-08
Report Number: P844887
REPORT IS A COMBINATION OF REPORTS P700133 AND P700248
Test Lab: INNOVATION CENTER
Issue Date: 8/14/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4P-BB-150U-100D-B40-1D-UNV
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, 1500 LUMENS PER FOOT
UPLIGHT, 1000 LUMENS PER FOOT DOWNLIGHT

Light Source: -
Ballast/Driver: -

Summary

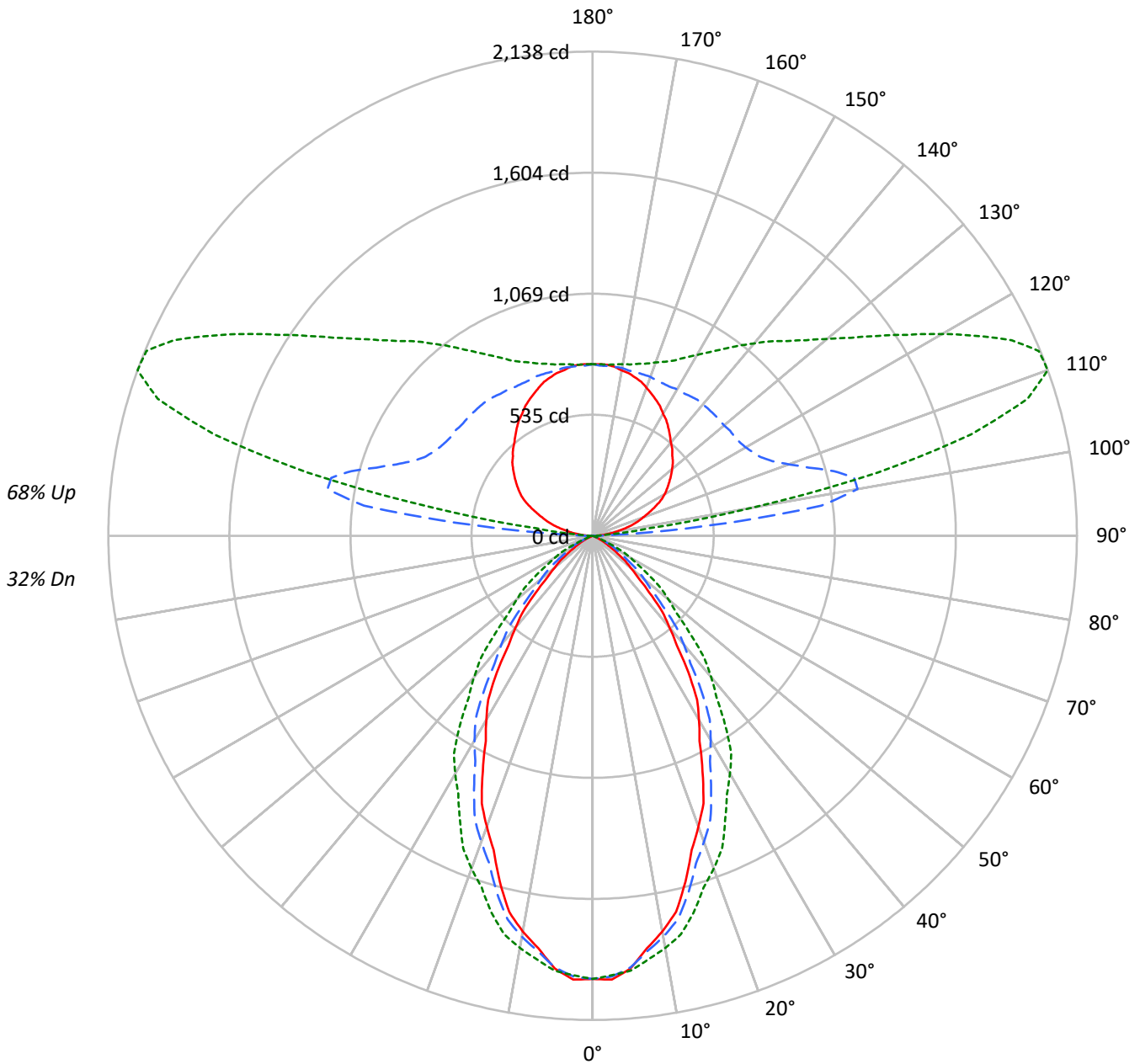
Lumens per Lamp: N/A
Luminaire Lumens: 7254.9 lumens
Efficiency: N/A
Efficacy: 93.1 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 77.9
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	103	103	103	103	93	93	93	93	73	73	73	56	56	56	40	40	40	32																			
1	95	91	88	85	85	82	80	77	66	64	62	51	50	49	37	36	36	29																			
2	87	81	76	71	79	73	69	65	59	56	54	46	44	43	34	33	32	27																			
3	80	72	66	61	73	66	60	56	53	50	46	42	39	37	31	30	29	24																			
4	74	65	58	52	67	59	53	48	48	44	41	38	35	33	29	27	26	22																			
5	68	58	51	46	62	53	47	42	44	39	36	35	32	29	26	25	23	20																			
6	63	53	45	40	57	48	42	37	40	35	32	32	29	26	24	23	21	18																			
7	59	48	41	36	53	44	38	33	36	32	28	29	26	24	23	21	19	16																			
8	55	44	37	32	50	40	34	30	33	29	26	27	24	22	21	19	18	15																			
9	51	40	33	29	46	37	31	27	31	26	23	25	22	20	20	18	16	14																			
10	48	37	30	26	44	34	28	24	29	24	21	23	20	18	18	16	15	13																			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	18056	18056	18056
5°	17765	17722	17853
10°	16622	16844	17314
15°	15112	15591	16459
20°	13415	14111	15346
25°	11681	12606	14100
30°	10007	11104	12921
35°	8295	9427	11494
40°	6374	7538	9794
45°	4608	5707	7881
50°	3138	4251	6252
55°	2041	3076	4859
60°	1172	2168	3511
65°	308	1325	1779
70°	156	410	510
75°	68	32	0
80°	48	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	178.6	2.5
10°-20°	456.7	6.3
20°-30°	571.8	7.9
30°-40°	528.1	7.3
40°-50°	354.9	4.9
50°-60°	183.3	2.5
60°-70°	57.4	0.8
70°-80°	3.6	0.0
80°-90°	1.9	0.0
90°-100°	301.6	4.2
100°-110°	1049.5	14.5
110°-120°	1016.6	14.0
120°-130°	797.5	11.0
130°-140°	631.2	8.7
140°-150°	487.1	6.7
150°-160°	349.2	4.8
160°-170°	213.6	2.9
170°-180°	72.2	1.0
0°-30°	1207.1	16.6
0°-40°	1735.2	23.9
0°-60°	2273.4	31.3
0°-90°	2336.3	32.2
90°-120°	2367.8	32.6
90°-150°	4283.6	59.0
90°-180°	4919.0	67.8
0°-180°	7254.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1957	1957	1957	1957	1957	
5°	1918	1899	1914	1920	1928	178
15°	1582	1577	1632	1687	1723	441
25°	1147	1157	1238	1323	1385	526
35°	736	755	837	935	1020	456
45°	353	374	437	523	604	277
55°	127	148	191	246	302	118
65°	14	27	61	73	82	24
75°	2	2	1	0	0	3
85°	0	0	0	0	0	0
90°	11	17	17	11	6	7
95°	51	175	509	130	79	54
105°	175	249	1103	1861	1731	184
115°	305	368	820	1731	2042	302
125°	413	509	764	1290	1538	370
135°	498	560	758	1075	1216	386
145°	583	622	752	928	1007	364
155°	662	684	741	826	854	305
165°	724	730	747	780	786	204
175°	758	758	752	764	758	72
180°	758	758	758	758	758	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1957.0	1957.0	1957.0	1957.0	1957.0
2.5°	1961.5	1943.1	1947.8	1947.8	1942.6
5°	1918.2	1898.7	1913.5	1920.1	1927.7
7.5°	1837.1	1821.9	1850.2	1871.3	1886.7
10°	1774.2	1761.3	1797.9	1826.7	1848.1
12.5°	1701.5	1691.4	1735.8	1775.4	1802.7
15°	1582.1	1576.6	1632.3	1686.9	1723.2
17.5°	1454.2	1453.9	1517.4	1585.5	1629.0
20°	1366.3	1369.0	1437.2	1512.2	1563.0
22.5°	1278.4	1284.8	1357.7	1436.0	1494.2
25°	1147.4	1156.6	1238.3	1323.2	1385.1
27.5°	1021.8	1035.3	1121.2	1209.1	1284.8
30°	939.3	954.9	1042.3	1135.0	1212.8
32.5°	858.0	876.9	962.0	1060.2	1139.2
35°	736.5	755.2	837.0	935.4	1020.5
37.5°	611.1	629.1	709.1	806.2	898.1
40°	529.2	549.6	625.9	719.8	813.2
42.5°	455.1	475.4	547.0	639.4	727.7
45°	353.2	374.4	437.4	522.6	604.0
47.5°	268.8	291.7	347.0	424.2	498.4
50°	218.6	241.8	296.2	364.2	435.6
52.5°	178.6	201.1	250.1	314.0	379.4
55°	126.9	148.1	191.2	245.7	302.1
57.5°	87.7	106.1	144.7	189.9	234.3
60°	63.5	81.0	117.5	154.1	190.3
62.5°	42.3	58.3	93.9	122.2	146.4
65°	14.1	27.2	60.7	73.1	81.5
67.5°	7.3	8.5	31.7	33.6	36.4
70°	5.8	5.8	15.2	16.1	18.9
72.5°	4.1	4.1	6.0	7.8	8.3
75°	1.9	1.9	0.9	0.0	0.0
77.5°	0.9	0.9	0.9	0.0	0.0
80°	0.9	0.9	0.0	0.0	0.0
82.5°	0.2	0.2	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0
90°	11.3	17.0	17.0	11.3	5.6
92.5°	28.3	84.8	79.2	33.9	28.3
95°	50.9	175.3	509.0	130.0	79.2
97.5°	79.2	198.0	1018.1	463.8	248.9
100°	107.5	209.2	1187.8	1114.2	718.3
102.5°	141.4	226.3	1182.1	1566.7	1289.5
105°	175.3	248.9	1102.9	1860.8	1730.7



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	271.4	333.7	859.7	1872.1	2132.2
115°	305.4	367.7	820.1	1730.7	2041.8
117.5°	339.4	407.2	797.4	1600.6	1911.7
120°	367.7	441.1	780.5	1476.2	1781.6
122.5°	390.2	475.1	769.2	1374.4	1651.5
125°	412.9	509.0	763.5	1289.5	1538.4
127.5°	435.5	531.6	763.5	1227.3	1436.6
130°	458.2	543.0	757.9	1165.1	1351.7
132.5°	480.8	548.6	757.9	1119.8	1278.2
135°	497.7	559.9	757.9	1074.6	1216.0
137.5°	520.4	571.3	757.9	1035.1	1165.1
140°	537.3	588.2	757.9	995.4	1108.5
142.5°	559.9	605.2	757.9	955.9	1057.6
145°	582.6	622.1	752.2	927.6	1006.8
147.5°	605.2	639.1	746.6	899.3	961.5
150°	622.1	656.1	746.6	871.0	921.9
152.5°	644.8	673.0	740.9	842.7	888.0
155°	661.8	684.4	740.9	825.7	854.0
157.5°	678.7	701.3	740.9	808.8	831.5
160°	695.7	712.6	746.6	797.4	814.4
162.5°	712.6	724.0	746.6	786.2	797.4
165°	724.0	729.6	746.6	780.5	786.2
167.5°	735.2	740.9	746.6	774.9	774.9
170°	740.9	746.6	752.2	769.2	769.2
172.5°	752.2	752.2	752.2	763.5	763.5
175°	757.9	757.9	752.2	763.5	757.9
177.5°	757.9	757.9	752.2	763.5	757.9
180°	757.9	757.9	757.9	757.9	757.9



Report Generated By 670246072 / DESKTOP-50001EG





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







107.5°	209.2	277.2	1001.1	1990.8	2013.5
110°	237.5	305.4	921.9	1973.9	2137.9



(END OF REPORT)