

Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: CORELITE

Report Number: P519378

Luminaire Tested: **SQ4-WB-100U-050D-940-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P519378
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-23, G2-2009-966-13)
Test Lab: INNOVATION CENTER
Issue Date: 4/29/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-WB-100U-050D-940-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

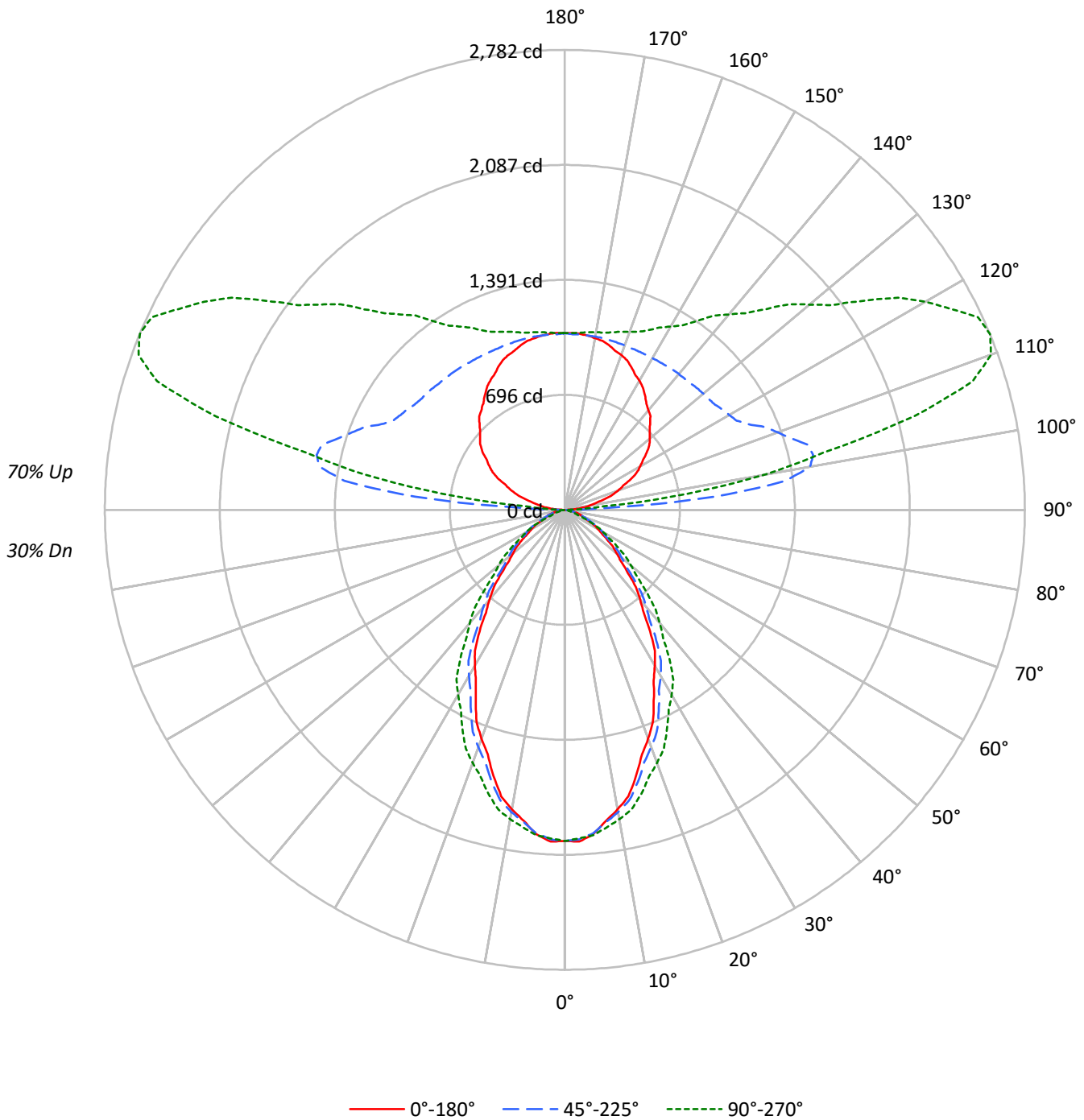
Lumens per Lamp: N/A
Luminaire Lumens: 9865.3 lumens
Efficiency: N/A
Efficacy: 116.5 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 84.7
Input Voltage (V): 120
Input Current (Ain): 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: 24 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	0
RCR																		
0	102	102	102	102	92	92	92	92	72	72	72	54	54	54	37	37	37	30
1	94	90	86	83	84	81	78	75	64	62	60	48	47	46	34	33	33	26
2	86	79	74	69	77	72	67	63	57	54	51	43	41	40	31	30	29	23
3	79	70	64	58	71	64	58	53	51	47	44	39	36	34	28	27	25	20
4	72	63	55	50	65	57	51	46	46	41	38	35	32	30	25	24	22	18
5	67	56	49	43	60	51	44	40	41	36	33	32	29	26	23	21	20	16
6	62	50	43	38	55	46	39	35	37	33	29	29	26	23	21	19	18	15
7	57	46	38	33	51	42	35	31	34	29	26	27	23	21	20	18	16	13
8	53	42	34	29	48	38	32	27	31	26	23	24	21	19	18	16	15	12
9	49	38	31	26	44	35	29	24	28	24	21	23	19	17	17	15	14	11
10	46	35	28	24	42	32	26	22	26	22	19	21	18	16	16	14	12	10

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9241	9241	9241
5°	9126	9093	9146
10°	8622	8700	8902
15°	7959	8144	8509
20°	7228	7500	7996
25°	6483	6836	7449
30°	5797	6176	6883
35°	5069	5435	6212
40°	4267	4605	5378
45°	3521	3825	4490
50°	2940	3204	3741
55°	2496	2750	3089
60°	2133	2384	2465
65°	1698	2005	1593
70°	1505	1565	972
75°	1394	1269	595
80°	1283	1166	513
85°	1164	1069	418



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	183.7	1.9
10°-20°	477.9	4.8
20°-30°	619.0	6.3
30°-40°	606.2	6.1
40°-50°	464.0	4.7
50°-60°	309.2	3.1
60°-70°	168.7	1.7
70°-80°	70.3	0.7
80°-90°	22.1	0.2
90°-100°	500.5	5.1
100°-110°	1381.7	14.0
110°-120°	1425.0	14.4
120°-130°	1145.1	11.6
130°-140°	899.9	9.1
140°-150°	690.2	7.0
150°-160°	496.0	5.0
160°-170°	303.4	3.1
170°-180°	102.3	1.0
0°-30°	1280.7	13.0
0°-40°	1886.9	19.1
0°-60°	2660.1	27.0
0°-90°	2921.2	29.6
90°-120°	3307.2	33.5
90°-150°	6042.4	61.2
90°-180°	6944.0	70.4
0°-180°	9865.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2003	2003	2003	2003	2003	
5°	1971	1951	1964	1968	1975	183
15°	1666	1660	1705	1752	1782	465
25°	1274	1277	1343	1402	1464	586
35°	900	904	965	1030	1103	560
45°	540	550	586	631	688	421
55°	310	323	342	355	384	281
65°	156	168	184	160	146	162
75°	78	78	71	49	33	84
85°	22	22	20	13	8	24
90°	3	7	14	15	17	6
95°	74	271	908	373	243	79
105°	246	380	1520	2321	2185	262
115°	441	533	1224	2424	2756	434
125°	605	689	1110	1878	2204	539
135°	728	807	1079	1521	1715	564
145°	845	903	1065	1295	1394	529
155°	952	984	1057	1162	1199	439
165°	1031	1044	1062	1103	1112	291
175°	1069	1070	1064	1079	1076	102
180°	1069	1069	1069	1069	1069	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2003.2	2003.2	2003.2	2003.2	2003.2
2.5°	2008.1	1990.2	1994.7	1994.6	1989.1
5°	1970.7	1950.9	1963.6	1968.2	1975.1
7.5°	1897.5	1882.6	1905.8	1923.0	1936.9
10°	1840.6	1827.7	1857.3	1882.3	1900.3
12.5°	1774.5	1763.6	1800.3	1833.9	1857.5
15°	1666.5	1660.5	1705.2	1751.6	1781.7
17.5°	1551.0	1548.1	1599.4	1653.5	1692.0
20°	1472.3	1471.4	1527.7	1584.1	1628.7
22.5°	1392.8	1394.7	1453.8	1512.5	1563.3
25°	1273.6	1277.1	1343.1	1401.6	1463.5
27.5°	1163.4	1165.0	1233.2	1295.0	1361.0
30°	1088.2	1092.5	1159.4	1223.3	1292.1
32.5°	1012.9	1017.9	1083.4	1149.5	1219.7
35°	900.1	904.4	965.1	1030.1	1103.1
37.5°	783.7	789.5	843.5	904.9	976.7
40°	708.5	717.0	764.7	822.6	893.0
42.5°	636.0	646.7	690.9	745.8	809.4
45°	539.7	550.0	586.3	630.7	688.2
47.5°	456.7	468.6	496.4	534.7	583.8
50°	409.6	420.8	446.5	474.8	521.2
52.5°	368.1	379.3	402.2	424.0	463.6
55°	310.3	323.2	341.9	354.9	384.1
57.5°	262.8	275.2	290.1	295.9	313.6
60°	231.2	244.9	258.4	257.8	267.2
62.5°	202.3	214.0	227.5	218.2	218.7
65°	155.6	168.5	183.7	160.5	145.9
67.5°	125.7	128.4	144.2	111.9	94.6
70°	111.6	111.6	116.0	86.7	72.1
72.5°	98.3	98.3	94.2	70.5	55.2
75°	78.2	78.2	71.2	48.9	33.4
77.5°	60.3	59.6	54.5	36.5	24.3
80°	48.3	48.3	43.9	28.8	19.3
82.5°	37.8	37.8	34.1	22.5	14.4
85°	22.0	22.0	20.2	13.1	7.9
87.5°	8.4	9.1	9.8	7.3	6.9
90°	3.4	6.8	13.7	15.4	17.1
92.5°	30.8	127.8	228.5	83.4	65.0
95°	73.5	270.8	908.0	373.2	242.8
97.5°	121.7	303.3	1345.1	1035.6	750.0
100°	157.3	322.8	1506.5	1517.1	1232.9
102.5°	191.5	345.0	1537.9	1874.5	1605.0
105°	246.2	380.0	1520.2	2320.8	2185.3
107.5°	304.4	423.4	1435.3	2536.0	2585.5
110°	345.4	452.4	1369.7	2582.3	2742.8

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	382.3	485.3	1308.1	2545.7	2782.5
115°	441.2	533.1	1224.3	2423.8	2756.5
117.5°	492.5	584.1	1169.3	2252.1	2630.6
120°	526.7	617.0	1147.4	2135.9	2517.1
122.5°	559.5	645.8	1129.6	2027.3	2388.5
125°	605.3	688.9	1109.8	1878.1	2204.2
127.5°	644.3	727.9	1098.1	1751.9	2033.2
130°	670.3	753.9	1092.7	1674.7	1930.6
132.5°	694.9	774.5	1087.2	1609.9	1841.6
135°	728.4	807.0	1079.0	1521.2	1715.1
137.5°	766.1	837.6	1074.9	1446.6	1612.2
140°	786.6	856.8	1072.2	1396.9	1542.4
142.5°	809.8	874.7	1069.4	1352.8	1480.8
145°	844.7	903.2	1065.3	1295.0	1393.6
147.5°	878.2	929.4	1061.5	1246.3	1322.8
150°	902.9	944.7	1060.2	1217.2	1279.1
152.5°	922.0	961.1	1058.8	1192.3	1243.5
155°	952.5	984.2	1056.8	1161.9	1198.7
157.5°	980.5	1004.9	1057.1	1139.8	1164.8
160°	996.9	1018.6	1058.5	1127.3	1145.7
162.5°	1010.6	1029.7	1059.8	1116.3	1130.6
165°	1031.1	1044.5	1061.9	1103.1	1111.5
167.5°	1046.8	1054.9	1063.6	1095.1	1097.8
170°	1055.1	1061.7	1063.6	1091.0	1091.0
172.5°	1061.9	1065.9	1063.6	1085.5	1084.1
175°	1068.7	1070.4	1063.6	1078.9	1075.6
177.5°	1071.5	1070.1	1063.3	1072.8	1070.1
180°	1068.7	1068.7	1068.7	1068.7	1068.7

(END OF REPORT)