

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: P519549

Luminaire Tested: **SQ4-WB-150U-050D-830-1D-UNV-STD-W-6**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P519549
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-25, 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-150U-050D-830-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 1500 LUMENS PER FOOT
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

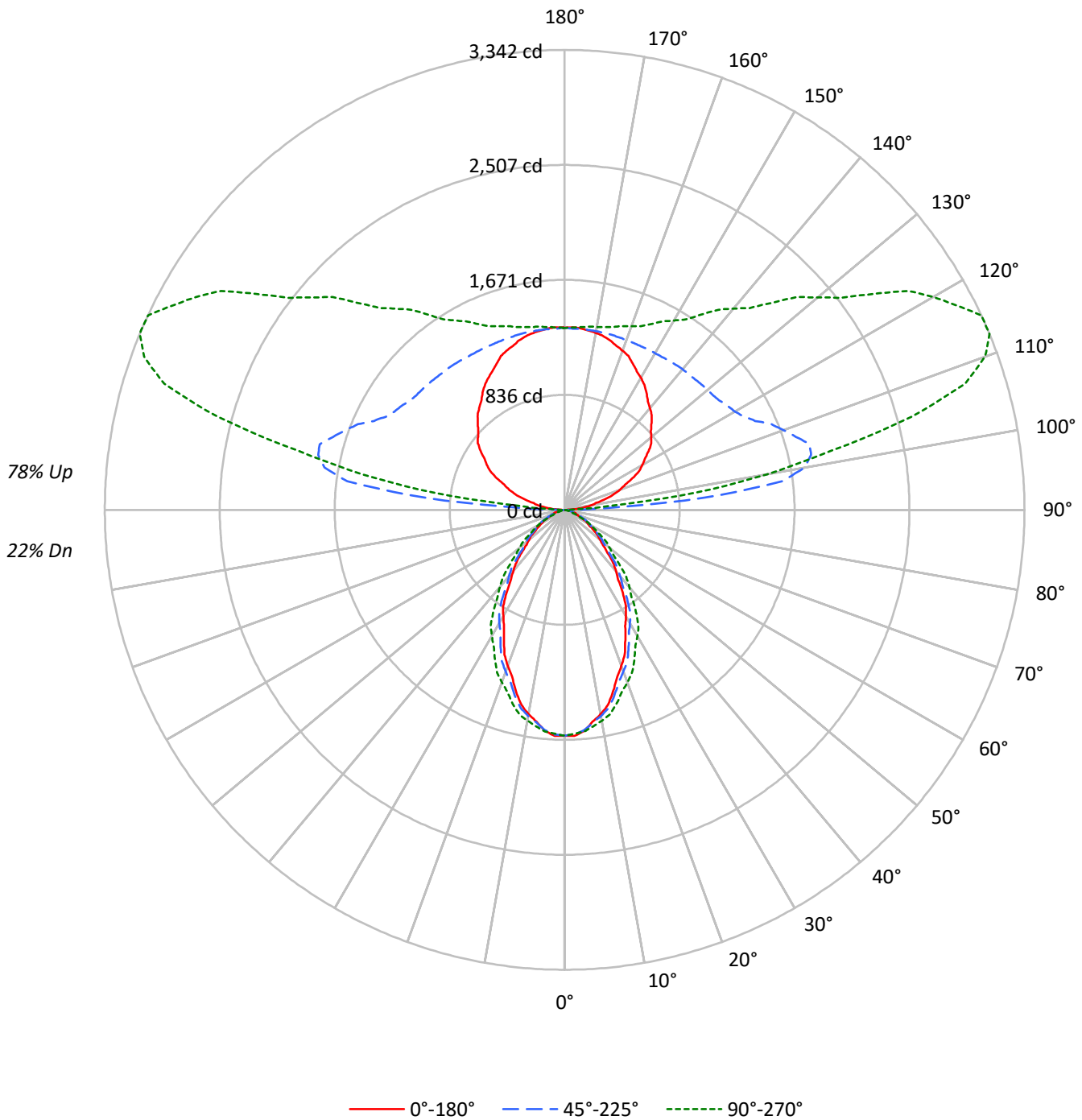
Lumens per Lamp: N/A
Luminaire Lumens: 10922.1 lumens
Efficiency: N/A
Efficacy: 129.9 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 84.1
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	100	100	100	100	89	89	89	89	68	68	68	48	48	48	30	30	30	22
1	92	88	84	81	81	78	75	73	60	58	56	43	42	41	27	27	26	19
2	84	77	72	67	74	69	64	60	53	50	47	38	37	35	25	24	23	17
3	77	68	62	56	68	61	56	51	47	43	40	34	32	30	22	21	20	15
4	71	61	54	48	63	54	48	44	42	38	35	31	28	26	20	19	18	13
5	65	54	47	41	57	49	42	38	38	34	30	28	25	23	19	17	16	12
6	60	49	41	36	53	44	37	33	34	30	26	25	23	20	17	16	14	11
7	55	44	37	32	49	40	33	29	31	27	23	23	20	18	16	14	13	10
8	51	40	33	28	46	36	30	25	28	24	21	21	18	16	15	13	12	9
9	48	36	29	25	42	33	27	23	26	22	19	20	17	15	14	12	11	8
10	45	33	27	22	40	30	24	20	24	20	17	18	15	13	13	11	10	8

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10090	10090	10090
5°	9964	9928	9986
10°	9414	9499	9720
15°	8690	8892	9291
20°	7891	8188	8730
25°	7078	7464	8133
30°	6329	6743	7515
35°	5535	5934	6783
40°	4659	5028	5872
45°	3845	4176	4903
50°	3209	3499	4084
55°	2725	3003	3373
60°	2329	2603	2692
65°	1854	2189	1739
70°	1644	1708	1061
75°	1523	1385	651
80°	1403	1275	560
85°	1270	1172	459



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	150.5	1.4
10°-20°	391.4	3.6
20°-30°	506.9	4.6
30°-40°	496.4	4.5
40°-50°	380.0	3.5
50°-60°	253.2	2.3
60°-70°	138.2	1.3
70°-80°	57.6	0.5
80°-90°	19.1	0.2
90°-100°	614.8	5.6
100°-110°	1662.2	15.2
110°-120°	1747.6	16.0
120°-130°	1419.5	13.0
130°-140°	1113.5	10.2
140°-150°	854.6	7.8
150°-160°	614.6	5.6
160°-170°	375.5	3.4
170°-180°	126.6	1.2
0°-30°	1048.8	9.6
0°-40°	1545.2	14.1
0°-60°	2178.3	19.9
0°-90°	2393.1	21.9
90°-120°	4024.6	36.8
90°-150°	7412.3	67.9
90°-180°	8529.0	78.1
0°-180°	10922.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1640	1640	1640	1640	1640	
5°	1614	1598	1608	1612	1617	150
15°	1365	1360	1396	1434	1459	381
25°	1043	1046	1100	1148	1198	480
35°	737	741	790	844	903	458
45°	442	450	480	516	564	345
55°	254	265	280	291	314	230
65°	127	138	150	131	120	132
75°	64	64	58	40	27	68
85°	18	18	17	11	6	20
90°	3	8	18	20	18	7
95°	95	335	1022	529	315	100
105°	309	478	1844	2720	2609	325
115°	544	665	1529	2960	3342	537
125°	745	853	1378	2326	2733	664
135°	893	999	1341	1878	2126	690
145°	1038	1116	1323	1608	1730	649
155°	1172	1218	1312	1442	1490	541
165°	1276	1288	1317	1369	1376	359
175°	1324	1323	1319	1336	1333	126
180°	1323	1323	1323	1323	1323	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1640.4	1640.4	1640.4	1640.4	1640.4
2.5°	1644.4	1629.8	1633.5	1633.4	1628.9
5°	1613.8	1597.6	1608.0	1611.7	1617.4
7.5°	1553.9	1541.6	1560.6	1574.7	1586.1
10°	1507.2	1496.7	1520.9	1541.4	1556.2
12.5°	1453.1	1444.2	1474.3	1501.8	1521.1
15°	1364.7	1359.8	1396.4	1434.4	1459.0
17.5°	1270.1	1267.7	1309.7	1354.1	1385.6
20°	1205.6	1204.9	1251.0	1297.2	1333.8
22.5°	1140.6	1142.1	1190.5	1238.6	1280.2
25°	1043.0	1045.8	1099.8	1147.8	1198.4
27.5°	952.7	954.0	1009.9	1060.5	1114.5
30°	891.1	894.6	949.4	1001.8	1058.1
32.5°	829.5	833.6	887.2	941.4	998.8
35°	737.1	740.6	790.3	843.5	903.3
37.5°	641.8	646.6	690.7	741.0	799.8
40°	580.2	587.2	626.2	673.6	731.3
42.5°	520.8	529.6	565.8	610.7	662.8
45°	442.0	450.4	480.1	516.4	563.6
47.5°	374.0	383.7	406.5	437.8	478.1
50°	335.4	344.6	365.7	388.8	426.8
52.5°	301.4	310.6	329.4	347.2	379.6
55°	254.1	264.6	280.0	290.6	314.5
57.5°	215.2	225.4	237.5	242.3	256.8
60°	189.3	200.6	211.6	211.1	218.8
62.5°	165.7	175.3	186.3	178.7	179.1
65°	127.4	138.0	150.4	131.4	119.5
67.5°	102.9	105.2	118.0	91.7	77.4
70°	91.4	91.4	95.0	71.0	59.0
72.5°	80.5	80.5	77.2	57.7	45.2
75°	64.1	64.1	58.3	40.0	27.4
77.5°	49.4	48.8	44.6	29.9	19.9
80°	39.6	39.6	36.0	23.6	15.8
82.5°	31.0	31.0	27.9	18.4	11.8
85°	18.0	18.0	16.6	10.7	6.5
87.5°	6.9	8.0	9.5	7.4	6.6
90°	2.8	8.4	18.5	19.9	18.5
92.5°	40.4	147.4	290.8	126.2	91.4
95°	95.4	334.9	1022.4	529.1	314.7
97.5°	153.2	384.1	1593.7	1318.9	968.6
100°	196.5	404.0	1771.4	1847.4	1493.7
102.5°	236.4	431.6	1834.1	2248.1	1983.6
105°	309.0	477.5	1844.0	2720.1	2608.7
107.5°	376.2	529.9	1763.4	3014.5	3051.5
110°	428.6	567.8	1691.7	3093.6	3250.9



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	475.3	605.6	1625.6	3077.8	3342.0
115°	544.0	665.1	1529.3	2960.5	3342.0
117.5°	611.2	724.8	1465.8	2781.4	3213.9
120°	652.2	763.6	1428.2	2652.9	3094.3
122.5°	690.9	800.1	1405.4	2515.1	2959.8
125°	744.7	853.3	1378.4	2326.0	2732.6
127.5°	794.3	900.9	1362.4	2171.7	2529.2
130°	821.6	931.6	1355.6	2076.4	2399.4
132.5°	850.1	959.0	1348.8	1990.3	2287.7
135°	892.8	998.6	1341.4	1878.1	2126.0
137.5°	935.8	1035.8	1335.1	1787.1	1989.0
140°	965.4	1058.7	1332.8	1728.5	1908.1
142.5°	993.9	1081.6	1328.3	1675.6	1832.9
145°	1038.1	1116.0	1322.9	1607.6	1730.1
147.5°	1078.2	1147.3	1316.6	1546.0	1640.1
150°	1107.8	1169.1	1314.3	1512.5	1587.7
152.5°	1135.2	1188.6	1313.2	1481.5	1543.3
155°	1171.9	1217.9	1311.5	1442.1	1489.5
157.5°	1210.1	1242.1	1311.7	1414.7	1445.9
160°	1231.7	1258.2	1312.9	1397.4	1419.7
162.5°	1248.8	1270.8	1314.0	1383.6	1400.3
165°	1275.9	1288.4	1317.2	1368.6	1375.5
167.5°	1294.4	1303.0	1317.4	1355.7	1359.0
170°	1305.8	1309.9	1318.6	1349.9	1349.9
172.5°	1314.9	1315.7	1318.6	1343.1	1341.9
175°	1324.3	1322.9	1318.6	1335.6	1332.8
177.5°	1327.4	1324.1	1318.3	1329.6	1326.3
180°	1322.9	1322.9	1322.9	1322.9	1322.9

(END OF REPORT)