

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: P519211

Luminaire Tested: **SQ4-WB-075U-100D-830-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P519211
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-22, 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-075U-100D-830-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 750 LUMENS PER FOOT
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 17798.1 lumens
Efficiency: N/A
Efficacy: 109.7 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: General Diffuse

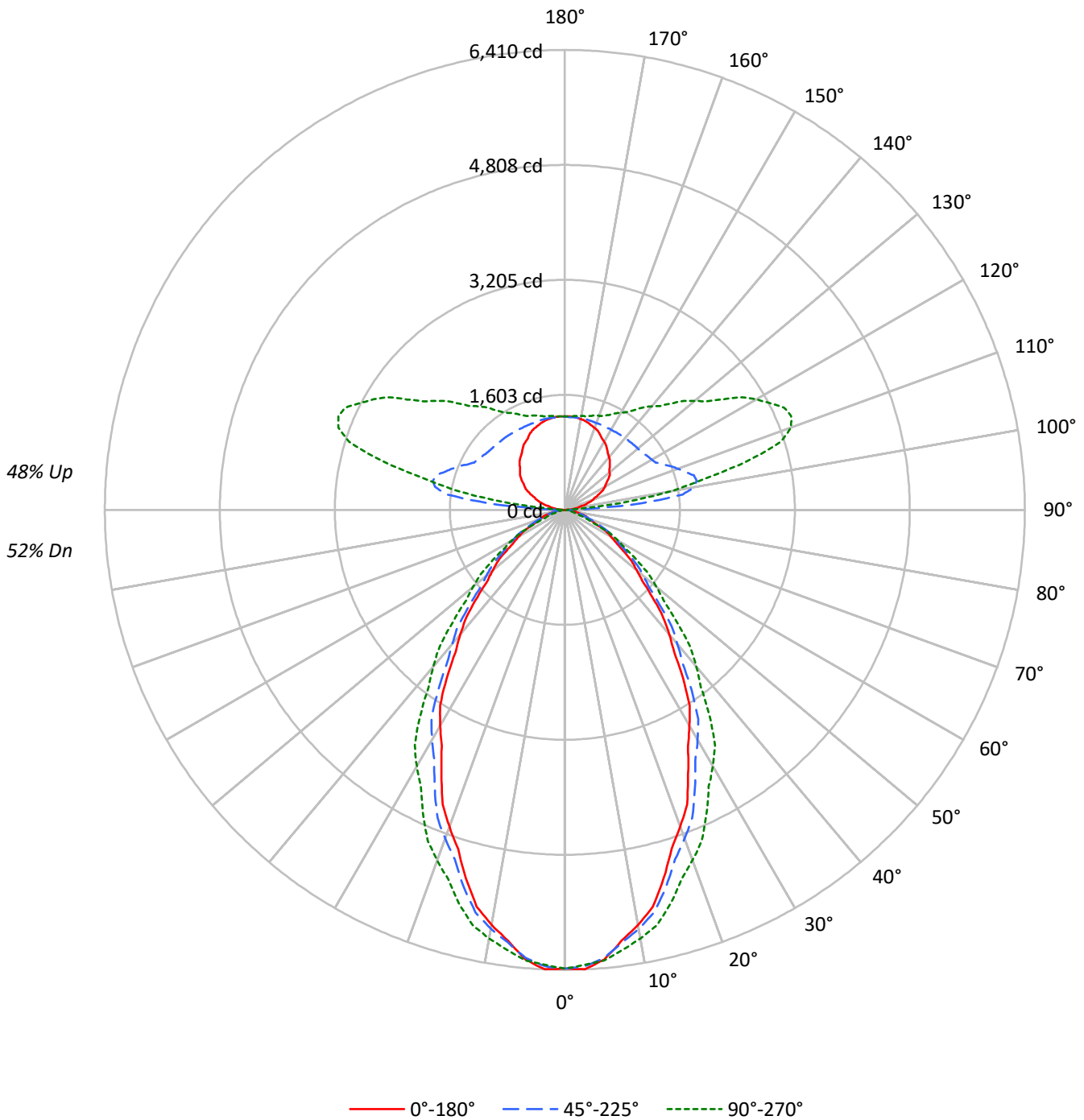
Input Watts (W): 162.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	108	108	108	108	100	100	100	100	85	85	85	71	71	71	58	58	58	52
1	99	96	92	89	92	89	86	83	76	74	72	64	63	61	53	52	52	46
2	92	85	79	75	85	79	74	70	68	65	62	58	55	53	48	47	45	41
3	84	76	69	64	78	71	65	60	61	57	53	52	49	47	44	42	40	36
4	78	68	61	55	72	64	57	52	55	50	47	48	44	41	40	38	36	32
5	72	61	54	48	67	57	51	46	50	45	41	43	40	37	37	34	32	29
6	67	56	48	43	62	52	45	41	46	41	37	40	36	33	34	31	29	26
7	62	51	43	38	58	48	41	36	42	37	33	37	33	30	32	29	26	24
8	58	46	39	34	54	44	37	33	39	33	30	34	30	27	29	26	24	22
9	54	43	36	31	51	40	34	30	36	31	27	31	27	24	27	24	22	20
10	51	39	33	28	47	37	31	27	33	28	25	29	25	22	26	23	20	18

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	19664	19664	19664
5°	19419	19350	19462
10°	18347	18513	18943
15°	16937	17330	18107
20°	15380	15959	17015
25°	13795	14547	15852
30°	12335	13141	14646
35°	10786	11566	13220
40°	9078	9799	11444
45°	7492	8139	9554
50°	6255	6819	7960
55°	5310	5852	6574
60°	4539	5074	5246
65°	3614	4267	3389
70°	3204	3330	2069
75°	2967	2701	1267
80°	2733	2485	1093
85°	2474	2276	893



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	586.5	3.3
10°-20°	1525.5	8.6
20°-30°	1975.9	11.1
30°-40°	1934.9	10.9
40°-50°	1481.1	8.3
50°-60°	986.9	5.5
60°-70°	538.6	3.0
70°-80°	224.4	1.3
80°-90°	66.8	0.4
90°-100°	613.7	3.4
100°-110°	1688.6	9.5
110°-120°	1742.9	9.8
120°-130°	1396.4	7.8
130°-140°	1096.8	6.2
140°-150°	840.5	4.7
150°-160°	604.3	3.4
160°-170°	369.5	2.1
170°-180°	124.6	0.7
0°-30°	4087.9	23.0
0°-40°	6022.8	33.8
0°-60°	8490.8	47.7
0°-90°	9320.6	52.4
90°-120°	4045.3	22.7
90°-150°	7379.0	41.5
90°-180°	8477.0	47.6
0°-180°	17798.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	6394	6394	6394	6394	6394	
5°	6290	6227	6268	6282	6304	585
15°	5320	5300	5443	5591	5687	1485
25°	4065	4076	4287	4474	4671	1870
35°	2873	2887	3081	3288	3521	1786
45°	1723	1756	1871	2013	2197	1343
55°	990	1032	1091	1133	1226	898
65°	497	538	586	512	466	516
75°	250	250	227	156	107	267
85°	70	70	64	42	25	76
90°	3	11	19	25	25	9
95°	91	335	1085	464	296	97
105°	302	464	1861	2834	2644	318
115°	534	651	1492	2972	3372	527
125°	736	839	1354	2290	2683	657
135°	889	986	1315	1852	2096	686
145°	1027	1098	1296	1578	1700	644
155°	1163	1201	1288	1418	1459	534
165°	1257	1273	1293	1346	1354	354
175°	1301	1304	1296	1312	1310	124
180°	1301	1301	1301	1301	1301	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	6394.1	6394.1	6394.1	6394.1	6394.1
2.5°	6409.8	6352.7	6367.1	6366.7	6349.2
5°	6290.3	6227.2	6267.8	6282.3	6304.3
7.5°	6056.8	6009.1	6083.2	6138.1	6182.5
10°	5875.0	5833.9	5928.3	6008.2	6065.8
12.5°	5664.0	5629.5	5746.5	5853.7	5928.9
15°	5319.5	5300.3	5442.9	5591.0	5687.0
17.5°	4950.8	4941.5	5105.2	5278.0	5400.9
20°	4699.5	4696.7	4876.2	5056.2	5198.9
22.5°	4445.8	4451.9	4640.5	4827.7	4990.1
25°	4065.4	4076.4	4287.0	4473.9	4671.4
27.5°	3713.6	3718.5	3936.3	4133.6	4344.3
30°	3473.4	3487.1	3700.6	3904.8	4124.3
32.5°	3233.2	3249.1	3458.2	3669.3	3893.1
35°	2873.0	2886.7	3080.6	3287.9	3521.1
37.5°	2501.5	2520.2	2692.3	2888.3	3117.6
40°	2261.3	2288.8	2440.9	2625.6	2850.5
42.5°	2030.2	2064.2	2205.2	2380.4	2583.4
45°	1722.7	1755.6	1871.4	2013.0	2196.8
47.5°	1457.8	1495.7	1584.6	1706.6	1863.5
50°	1307.4	1343.1	1425.3	1515.6	1663.7
52.5°	1175.0	1210.7	1283.9	1353.5	1479.7
55°	990.4	1031.5	1091.4	1132.8	1226.1
57.5°	838.9	878.4	925.9	944.5	1001.1
60°	737.9	781.8	824.9	822.7	852.9
62.5°	645.9	683.2	726.1	696.4	698.0
65°	496.6	537.7	586.4	512.4	465.7
67.5°	401.2	410.0	460.1	357.3	301.9
70°	356.3	356.3	370.3	276.7	230.1
72.5°	313.7	313.7	300.8	225.0	176.2
75°	249.7	249.7	227.3	156.0	106.6
77.5°	192.5	190.3	173.9	116.4	77.4
80°	154.3	154.3	140.3	91.9	61.7
82.5°	120.6	120.6	108.9	71.8	46.0
85°	70.1	70.1	64.5	41.7	25.3
87.5°	25.2	26.9	26.3	18.4	16.2
90°	2.8	10.9	19.4	24.9	24.9
92.5°	38.2	163.3	283.0	108.6	89.2
95°	91.4	335.0	1085.3	464.1	296.3
97.5°	149.0	371.5	1656.2	1276.1	900.4
100°	191.0	394.1	1835.7	1852.8	1511.7
102.5°	230.9	421.0	1882.2	2298.7	1985.7
105°	301.8	464.2	1860.6	2833.6	2644.1
107.5°	369.3	517.7	1754.8	3095.6	3151.9
110°	418.1	553.4	1675.1	3160.8	3355.7

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	462.4	593.4	1595.3	3118.8	3415.5
115°	534.4	650.8	1492.3	2971.6	3372.3
117.5°	603.0	710.2	1427.0	2765.2	3218.4
120°	645.1	748.0	1398.2	2610.5	3078.8
122.5°	682.8	785.6	1378.3	2474.8	2919.3
125°	736.5	839.4	1353.9	2290.3	2682.9
127.5°	787.4	885.4	1337.8	2136.4	2480.8
130°	814.0	914.2	1329.0	2044.9	2358.9
132.5°	845.0	945.2	1322.3	1964.5	2248.2
135°	888.8	986.2	1315.1	1852.3	2095.9
137.5°	929.7	1020.2	1309.0	1761.6	1962.5
140°	960.7	1044.7	1306.8	1701.3	1882.7
142.5°	987.3	1064.7	1302.4	1647.6	1803.0
145°	1027.2	1097.6	1295.8	1578.2	1700.0
147.5°	1069.8	1130.5	1292.4	1516.7	1614.2
150°	1096.4	1150.6	1290.2	1483.0	1558.8
152.5°	1120.8	1170.6	1288.0	1453.9	1516.7
155°	1162.9	1200.8	1287.5	1418.5	1459.1
157.5°	1193.3	1224.2	1287.5	1389.4	1417.6
160°	1215.5	1239.8	1287.5	1373.8	1395.4
162.5°	1233.2	1253.2	1289.7	1360.4	1377.7
165°	1257.0	1273.2	1293.0	1345.8	1353.9
167.5°	1273.6	1286.1	1295.8	1333.5	1335.6
170°	1284.7	1292.8	1295.8	1329.0	1329.0
172.5°	1293.5	1297.3	1295.8	1322.3	1320.1
175°	1301.3	1304.0	1295.8	1312.3	1309.6
177.5°	1303.5	1303.5	1294.7	1307.8	1303.5
180°	1301.3	1301.3	1301.3	1301.3	1301.3

(END OF REPORT)