

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: P520027

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

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P520027
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-22, G3-1910-536-19)
Test Lab: INNOVATION CENTER
Issue Date: 4/29/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-F-075U-100D-830-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 750 LUMENS PER FOOT
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

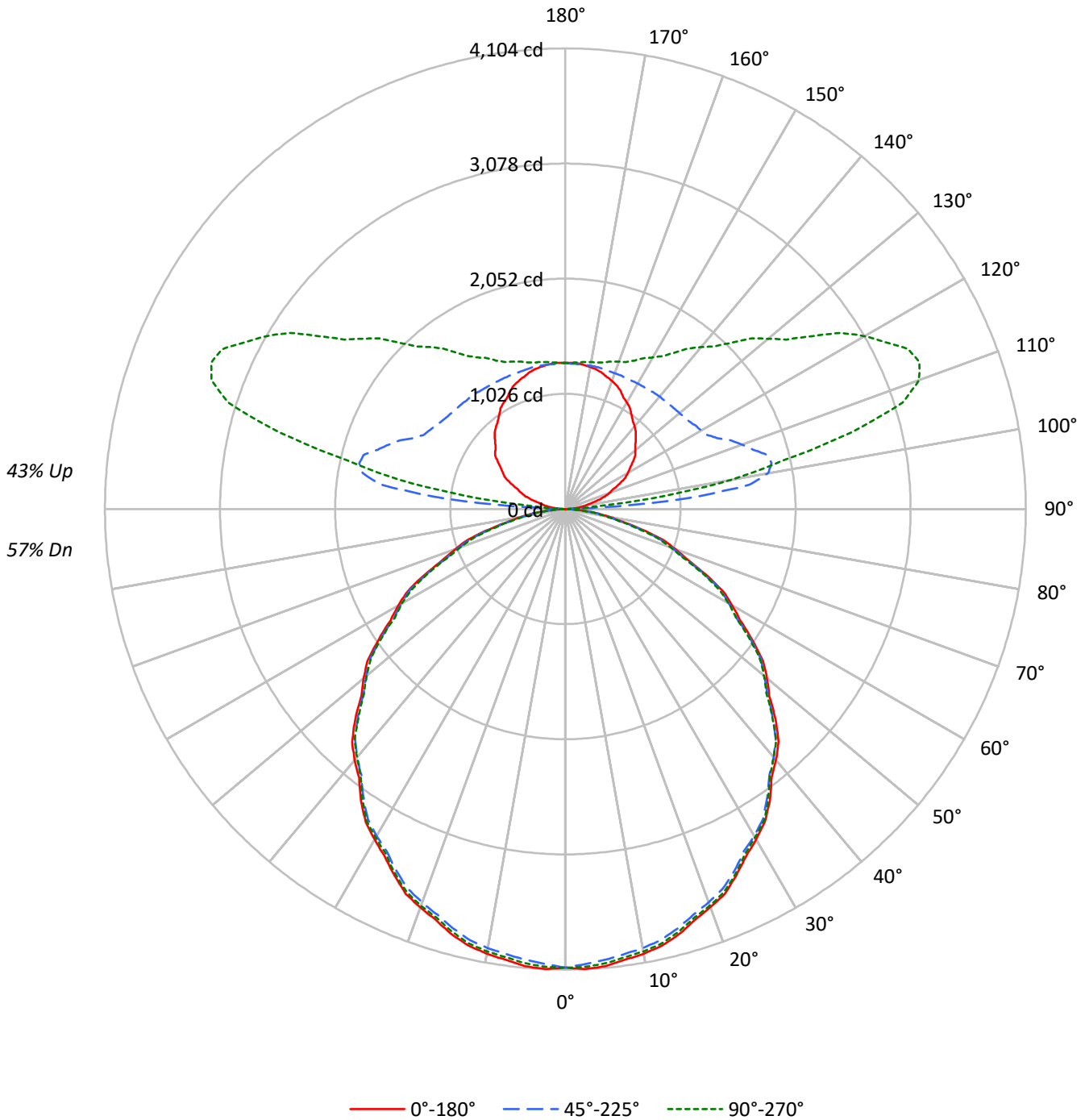
Lumens per Lamp: N/A
Luminaire Lumens: 19630.2 lumens
Efficiency: N/A
Efficacy: 121.1 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 162.1
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			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	109	109	109	109	101	101	101	101	87	87	87	74	74	74	62	62	62	57
1	99	95	91	87	92	88	85	82	76	74	72	65	64	62	55	54	53	48
2	90	83	77	71	84	77	72	67	67	63	59	57	54	52	48	46	44	40
3	82	73	65	59	76	68	61	56	59	54	50	51	47	43	43	40	38	34
4	75	64	56	50	70	60	53	47	52	47	42	45	41	37	38	35	32	29
5	69	57	49	43	64	54	46	41	47	41	36	40	36	32	34	31	28	25
6	64	51	43	37	59	48	41	35	42	36	32	36	32	28	31	27	25	22
7	59	46	38	33	55	44	36	31	38	32	28	33	28	25	28	25	22	19
8	55	42	34	29	51	40	32	27	35	29	25	30	26	22	26	22	20	17
9	51	38	31	26	47	36	29	24	32	26	22	28	23	20	24	20	18	15
10	48	35	28	23	44	33	27	22	29	24	20	26	21	18	22	19	16	14

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	12572	12572	12572
5°	12629	12455	12550
10°	12564	12407	12503
15°	12488	12319	12417
20°	12359	12212	12314
25°	12224	12082	12177
30°	12076	11946	12006
35°	11924	11776	11840
40°	11726	11591	11602
45°	11519	11361	11324
50°	11222	11088	11061
55°	10891	10771	10696
60°	10562	10371	10337
65°	10045	9820	9739
70°	9334	9107	8931
75°	8334	8068	7901
80°	6858	6608	6310
85°	4058	4453	4555



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	385.8	2.0
10°-20°	1098.7	5.6
20°-30°	1650.0	8.4
30°-40°	1969.1	10.0
40°-50°	2018.3	10.3
50°-60°	1797.3	9.2
60°-70°	1339.8	6.8
70°-80°	725.4	3.7
80°-90°	168.4	0.9
90°-100°	613.7	3.1
100°-110°	1688.6	8.6
110°-120°	1742.9	8.9
120°-130°	1396.4	7.1
130°-140°	1096.8	5.6
140°-150°	840.5	4.3
150°-160°	604.3	3.1
160°-170°	369.5	1.9
170°-180°	124.6	0.6
0°-30°	3134.5	16.0
0°-40°	5103.6	26.0
0°-60°	8919.2	45.4
0°-90°	11152.8	56.8
90°-120°	4045.2	20.6
90°-150°	7379.0	37.6
90°-180°	8477.0	43.2
0°-180°	19630.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4088	4088	4088	4088	4088	
5°	4091	4082	4035	4071	4065	388
15°	3922	3909	3869	3900	3900	1105
25°	3602	3594	3560	3580	3588	1660
35°	3176	3162	3137	3143	3154	1983
45°	2649	2635	2612	2598	2604	2038
55°	2031	2034	2009	1989	1995	1818
65°	1380	1375	1350	1336	1338	1365
75°	701	693	679	665	665	747
85°	115	126	126	129	129	161
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°	4087.9	4087.9	4087.9	4087.9	4087.9
2.5°	4103.6	4094.9	4058.7	4087.8	4083.4
5°	4090.7	4082.5	4034.6	4070.9	4065.4
7.5°	4052.6	4044.3	4002.0	4035.6	4030.7
10°	4023.3	4015.1	3972.9	4006.5	4003.7
12.5°	3985.2	3977.0	3934.7	3968.3	3965.6
15°	3922.4	3908.6	3869.1	3899.9	3899.9
17.5°	3839.3	3828.8	3792.2	3818.0	3818.5
20°	3776.4	3768.2	3731.5	3759.7	3762.5
22.5°	3713.6	3705.4	3664.3	3690.1	3695.1
25°	3602.5	3594.3	3560.4	3580.2	3588.5
27.5°	3488.0	3476.0	3442.6	3460.2	3466.2
30°	3400.5	3395.1	3364.0	3372.7	3380.9
32.5°	3308.5	3303.0	3276.5	3280.7	3295.6
35°	3176.1	3162.3	3136.7	3142.6	3153.6
37.5°	3019.5	3012.9	2988.0	2985.0	2995.4
40°	2920.7	2909.7	2887.1	2881.6	2889.8
42.5°	2812.9	2802.0	2774.8	2769.4	2779.9
45°	2648.6	2634.9	2612.1	2598.2	2603.7
47.5°	2464.5	2464.5	2441.0	2424.8	2433.1
50°	2345.6	2345.6	2317.5	2303.7	2311.9
52.5°	2222.1	2224.3	2194.1	2186.6	2184.0
55°	2031.3	2034.1	2008.9	1989.4	1994.8
57.5°	1847.3	1841.2	1811.9	1799.0	1801.8
60°	1717.1	1708.9	1686.2	1666.9	1680.6
62.5°	1584.6	1580.9	1558.3	1536.4	1534.7
65°	1380.4	1374.9	1349.5	1335.5	1338.3
67.5°	1177.3	1170.7	1147.6	1127.5	1134.6
70°	1038.1	1038.1	1012.8	1001.4	993.2
72.5°	910.2	899.2	880.4	864.6	858.5
75°	701.4	693.2	679.0	664.9	664.9
77.5°	510.7	503.5	494.3	484.8	482.0
80°	387.2	384.4	373.1	370.1	356.3
82.5°	272.7	272.2	265.4	258.1	257.5
85°	115.0	126.0	126.2	129.1	129.1
87.5°	20.8	35.6	35.4	32.0	32.0
90°	2.7	10.9	19.4	24.9	24.9
92.5°	38.2	163.2	283.0	108.7	89.1
95°	91.4	335.0	1085.3	464.1	296.3
97.5°	149.0	371.5	1656.2	1276.2	900.4
100°	191.0	394.1	1835.6	1852.9	1511.7
102.5°	230.9	421.0	1882.2	2298.7	1985.7
105°	301.7	464.2	1860.6	2833.6	2644.1
107.5°	369.3	517.7	1754.8	3095.6	3151.9
110°	418.0	553.4	1675.0	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	3118.7	3415.5
115°	534.3	650.7	1492.3	2971.6	3372.3
117.5°	603.0	710.2	1427.0	2765.1	3218.4
120°	645.1	748.0	1398.2	2610.5	3078.8
122.5°	682.7	785.6	1378.3	2474.8	2919.3
125°	736.5	839.3	1353.9	2290.4	2682.9
127.5°	787.4	885.4	1337.9	2136.4	2480.8
130°	814.0	914.1	1329.0	2045.0	2358.9
132.5°	845.0	945.2	1322.3	1964.5	2248.2
135°	888.7	986.2	1315.2	1852.3	2095.9
137.5°	929.7	1020.2	1309.0	1761.6	1962.5
140°	960.7	1044.6	1306.9	1701.3	1882.7
142.5°	987.3	1064.8	1302.4	1647.6	1803.0
145°	1027.2	1097.5	1295.7	1578.2	1700.0
147.5°	1069.9	1130.5	1292.4	1516.7	1614.2
150°	1096.4	1150.6	1290.2	1483.0	1558.8
152.5°	1120.7	1170.6	1288.0	1453.9	1516.7
155°	1162.9	1200.7	1287.5	1418.5	1459.2
157.5°	1193.3	1224.2	1287.5	1389.4	1417.6
160°	1215.5	1239.9	1287.5	1373.8	1395.4
162.5°	1233.2	1253.3	1289.6	1360.4	1377.7
165°	1257.0	1273.2	1293.0	1345.8	1353.9
167.5°	1273.6	1286.0	1295.7	1333.5	1335.6
170°	1284.7	1292.8	1295.7	1329.0	1329.0
172.5°	1293.6	1297.4	1295.7	1322.3	1320.2
175°	1301.3	1304.0	1295.7	1312.3	1309.6
177.5°	1303.5	1303.5	1294.6	1307.8	1303.5
180°	1301.3	1301.3	1301.3	1301.3	1301.3

(END OF REPORT)