

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: P520039

Luminaire Tested: **SQ4-F-075U-100D-930-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P520039
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-930-1D-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

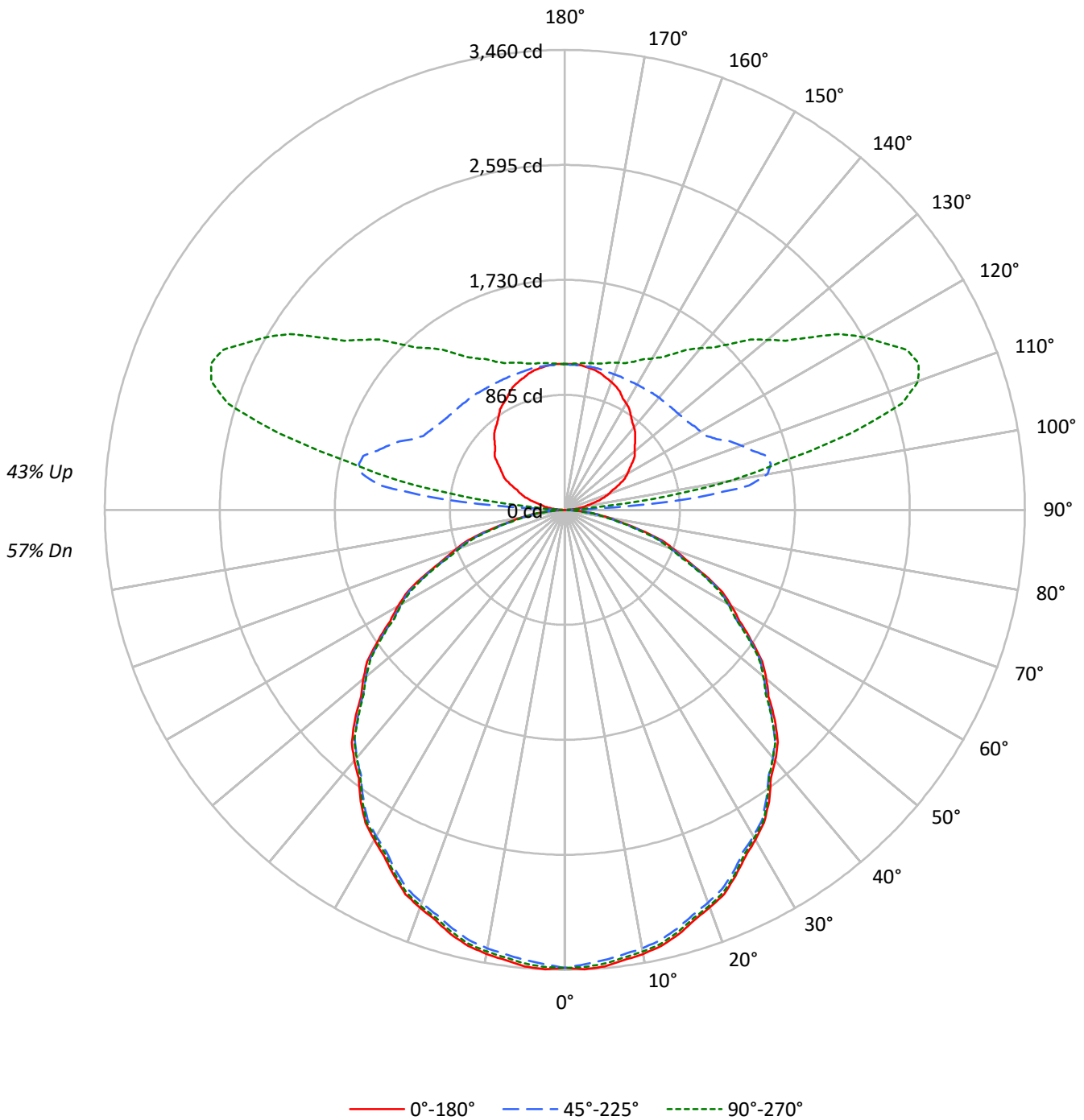
Lumens per Lamp: N/A
Luminaire Lumens: 16549.4 lumens
Efficiency: N/A
Efficacy: 102.1 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: General Diffuse

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	
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°	10599	10599	10599
5°	10647	10501	10581
10°	10592	10460	10541
15°	10528	10385	10468
20°	10420	10296	10381
25°	10306	10185	10266
30°	10180	10071	10122
35°	10053	9928	9982
40°	9885	9772	9781
45°	9711	9578	9547
50°	9461	9348	9325
55°	9182	9081	9017
60°	8904	8743	8715
65°	8468	8280	8210
70°	7870	7678	7529
75°	7026	6802	6661
80°	5781	5572	5320
85°	3423	3754	3839



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	325.3	2.0
10°-20°	926.3	5.6
20°-30°	1391.0	8.4
30°-40°	1660.1	10.0
40°-50°	1701.6	10.3
50°-60°	1515.2	9.2
60°-70°	1129.5	6.8
70°-80°	611.5	3.7
80°-90°	142.0	0.9
90°-100°	517.4	3.1
100°-110°	1423.6	8.6
110°-120°	1469.4	8.9
120°-130°	1177.3	7.1
130°-140°	924.7	5.6
140°-150°	708.6	4.3
150°-160°	509.5	3.1
160°-170°	311.5	1.9
170°-180°	105.0	0.6
0°-30°	2642.6	16.0
0°-40°	4302.6	26.0
0°-60°	7519.4	45.4
0°-90°	9402.4	56.8
90°-120°	3410.4	20.6
90°-150°	6220.9	37.6
90°-180°	7147.0	43.2
0°-180°	16549.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3446	3446	3446	3446	3446	
5°	3449	3442	3401	3432	3427	327
15°	3307	3295	3262	3288	3288	932
25°	3037	3030	3002	3018	3025	1399
35°	2678	2666	2644	2650	2659	1671
45°	2233	2221	2202	2190	2195	1718
55°	1712	1715	1694	1677	1682	1533
65°	1164	1159	1138	1126	1128	1151
75°	591	584	572	561	561	630
85°	97	106	106	109	109	136
90°	2	9	16	21	21	7
95°	77	282	915	391	250	81
105°	254	391	1569	2389	2229	268
115°	450	549	1258	2505	2843	445
125°	621	708	1142	1931	2262	554
135°	749	831	1109	1562	1767	578
145°	866	925	1092	1330	1433	543
155°	980	1012	1085	1196	1230	450
165°	1060	1073	1090	1135	1142	299
175°	1097	1099	1092	1106	1104	104
180°	1097	1097	1097	1097	1097	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3446.3	3446.3	3446.3	3446.3	3446.3
2.5°	3459.6	3452.1	3421.7	3446.3	3442.5
5°	3448.7	3441.7	3401.4	3432.0	3427.4
7.5°	3416.6	3409.6	3373.9	3402.2	3398.0
10°	3391.9	3384.9	3349.4	3377.7	3375.3
12.5°	3359.8	3352.8	3317.2	3345.5	3343.2
15°	3306.8	3295.2	3261.8	3287.8	3287.8
17.5°	3236.7	3228.0	3197.0	3218.8	3219.3
20°	3183.8	3176.9	3146.0	3169.6	3171.9
22.5°	3130.8	3123.9	3089.2	3111.0	3115.1
25°	3037.1	3030.1	3001.6	3018.3	3025.3
27.5°	2940.6	2930.5	2902.3	2917.1	2922.1
30°	2866.8	2862.2	2836.0	2843.4	2850.3
32.5°	2789.3	2784.6	2762.2	2765.9	2778.4
35°	2677.6	2666.0	2644.5	2649.5	2658.7
37.5°	2545.6	2540.1	2519.1	2516.5	2525.2
40°	2462.3	2453.1	2434.0	2429.4	2436.3
42.5°	2371.5	2362.2	2339.3	2334.8	2343.6
45°	2232.9	2221.3	2202.1	2190.4	2195.1
47.5°	2077.8	2077.8	2057.8	2044.3	2051.2
50°	1977.5	1977.5	1953.8	1942.1	1949.0
52.5°	1873.3	1875.2	1849.7	1843.5	1841.1
55°	1712.5	1714.8	1693.6	1677.2	1681.7
57.5°	1557.4	1552.2	1527.6	1516.8	1519.0
60°	1447.6	1440.7	1421.5	1405.3	1416.9
62.5°	1335.9	1332.8	1313.7	1295.2	1293.8
65°	1163.7	1159.2	1137.8	1126.0	1128.2
67.5°	992.5	987.0	967.4	950.5	956.5
70°	875.2	875.2	853.9	844.3	837.3
72.5°	767.3	758.1	742.2	728.8	723.8
75°	591.3	584.4	572.4	560.6	560.6
77.5°	430.5	424.5	416.7	408.7	406.3
80°	326.4	324.1	314.6	312.0	300.4
82.5°	229.9	229.5	223.7	217.6	217.2
85°	97.0	106.2	106.4	108.8	108.8
87.5°	17.5	30.0	29.8	27.0	27.0
90°	2.3	9.2	16.3	21.0	21.0
92.5°	32.2	137.6	238.6	91.6	75.1
95°	77.1	282.5	915.0	391.2	249.7
97.5°	125.6	313.2	1396.3	1075.8	759.1
100°	161.1	332.3	1547.6	1562.1	1274.5
102.5°	194.6	354.9	1586.8	1937.9	1674.1
105°	254.4	391.3	1568.6	2389.0	2229.1
107.5°	311.3	436.4	1479.4	2609.7	2657.3
110°	352.4	466.6	1412.2	2664.7	2829.0



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	389.8	500.3	1344.9	2629.3	2879.5
115°	450.5	548.6	1258.2	2505.3	2843.0
117.5°	508.4	598.8	1203.1	2331.2	2713.3
120°	543.8	630.6	1178.7	2200.8	2595.6
122.5°	575.6	662.4	1162.0	2086.4	2461.1
125°	620.9	707.7	1141.5	1930.9	2261.8
127.5°	663.8	746.5	1127.9	1801.1	2091.4
130°	686.2	770.7	1120.4	1723.9	1988.7
132.5°	712.4	796.9	1114.8	1656.2	1895.4
135°	749.2	831.4	1108.7	1561.6	1767.0
137.5°	783.9	860.1	1103.6	1485.1	1654.5
140°	810.0	880.7	1101.8	1434.3	1587.3
142.5°	832.4	897.6	1098.0	1389.0	1520.0
145°	866.0	925.3	1092.4	1330.4	1433.2
147.5°	901.9	953.1	1089.6	1278.7	1360.9
150°	924.3	970.0	1087.8	1250.2	1314.1
152.5°	944.9	986.8	1085.9	1225.7	1278.7
155°	980.4	1012.4	1085.4	1195.8	1230.1
157.5°	1006.0	1032.0	1085.4	1171.4	1195.1
160°	1024.7	1045.2	1085.4	1158.2	1176.4
162.5°	1039.6	1056.6	1087.3	1146.8	1161.5
165°	1059.7	1073.4	1090.1	1134.6	1141.5
167.5°	1073.7	1084.2	1092.4	1124.2	1126.0
170°	1083.1	1089.9	1092.4	1120.4	1120.4
172.5°	1090.5	1093.7	1092.4	1114.8	1112.9
175°	1097.1	1099.3	1092.4	1106.4	1104.1
177.5°	1098.9	1098.9	1091.5	1102.6	1098.9
180°	1097.1	1097.1	1097.1	1097.1	1097.1

(END OF REPORT)