

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: P519943

Luminaire Tested: **SQ4-F-050U-100D-930-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P519943
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-21, 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-050U-100D-930-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

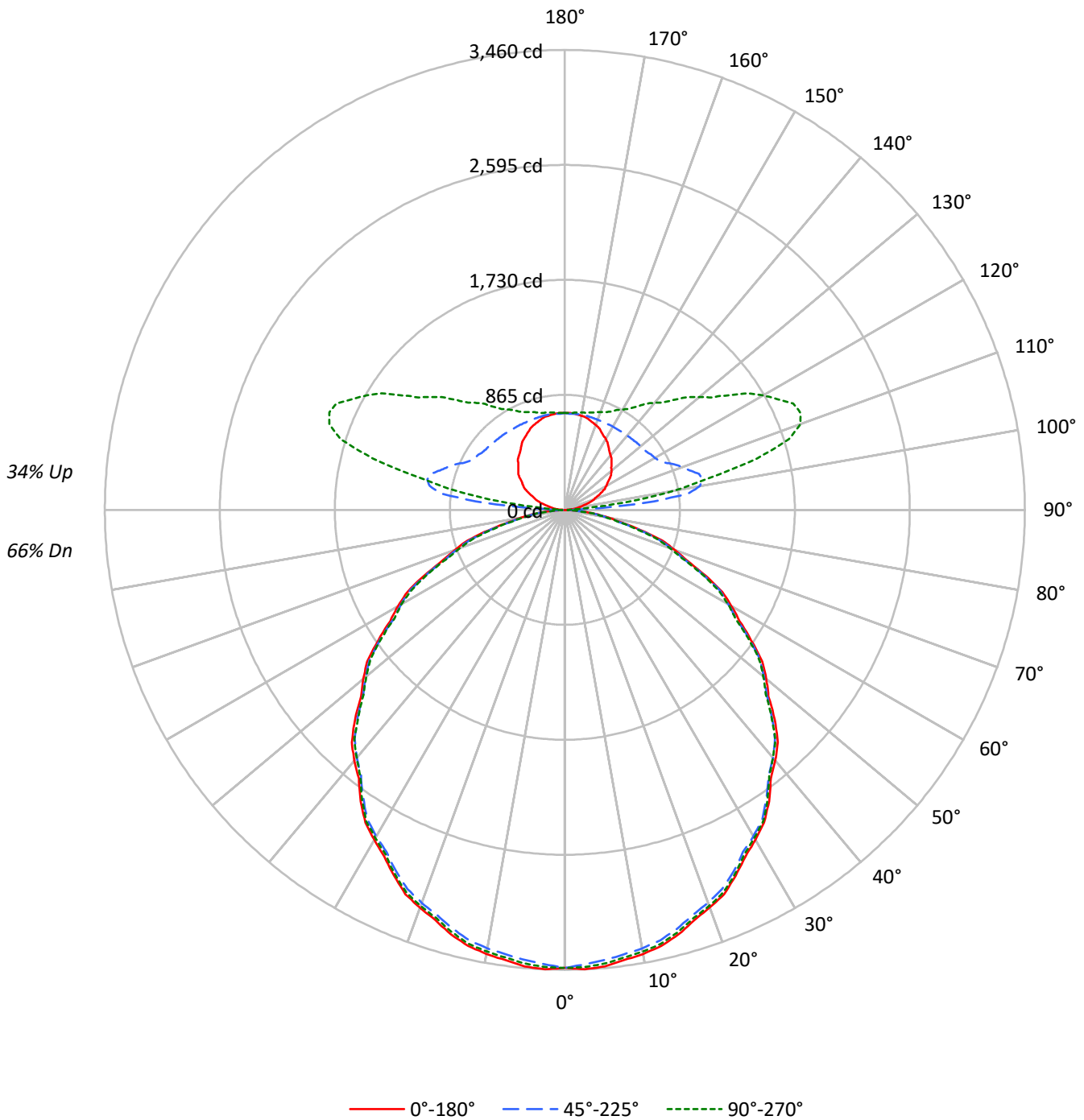
Lumens per Lamp: N/A
Luminaire Lumens: 14157.7 lumens
Efficiency: N/A
Efficacy: 99.8 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 141.9
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



TEST NUMBER: P519943
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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	111	111	111	111	105	105	105	105	92	92	92	81	81	81	71	71	71	66
1	101	97	93	89	95	91	88	85	81	79	76	72	70	68	63	61	60	56
2	92	85	78	73	87	80	74	69	71	67	63	63	59	57	55	53	51	47
3	84	74	67	61	79	70	63	58	63	57	53	55	51	48	49	46	43	39
4	77	66	58	51	72	62	55	49	56	50	45	49	45	41	44	40	37	34
5	71	59	50	44	66	56	48	42	50	44	39	44	39	35	39	35	32	29
6	65	53	44	38	61	50	42	37	45	39	34	40	35	31	36	31	28	26
7	60	48	39	34	57	45	38	32	41	34	30	36	31	27	32	28	25	23
8	56	43	35	30	53	41	34	29	37	31	27	33	28	24	30	26	22	20
9	52	40	32	27	49	38	31	26	34	28	24	31	26	22	27	23	20	18
10	49	36	29	24	46	35	28	23	31	26	21	28	23	20	25	21	18	16

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	2.3
10°-20°	926.3	6.5
20°-30°	1391.0	9.8
30°-40°	1660.1	11.7
40°-50°	1701.6	12.0
50°-60°	1515.2	10.7
60°-70°	1129.5	8.0
70°-80°	611.5	4.3
80°-90°	142.0	1.0
90°-100°	349.6	2.5
100°-110°	949.7	6.7
110°-120°	976.5	6.9
120°-130°	780.7	5.5
130°-140°	613.5	4.3
140°-150°	470.4	3.3
150°-160°	338.3	2.4
160°-170°	206.9	1.5
170°-180°	69.7	0.5
0°-30°	2642.6	18.7
0°-40°	4302.6	30.4
0°-60°	7519.4	53.1
0°-90°	9402.5	66.4
90°-120°	2275.9	16.1
90°-150°	4140.4	29.2
90°-180°	4755.0	33.6
0°-180°	14157.7	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	6
95°	52	191	609	265	178	55
105°	169	262	1044	1590	1496	179
115°	300	364	836	1663	1894	296
125°	412	469	756	1274	1503	367
135°	496	551	735	1038	1171	384
145°	574	615	726	882	948	360
155°	649	672	721	792	815	299
165°	702	712	724	754	756	198
175°	728	731	726	735	733	69
180°	728	728	728	728	728	

TEST NUMBER: P519943

CATALOG NUMBER: SQ4-F-050U-100D-930-1D-UNV-STD-W-12

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°	2.4	9.2	16.4	21.1	21.1
92.5°	21.1	95.7	166.2	71.4	60.4
95°	51.5	191.2	608.9	264.9	178.0
97.5°	85.3	211.2	933.4	726.2	510.1
100°	107.7	224.5	1032.7	1046.8	845.4
102.5°	130.2	237.9	1058.9	1294.7	1117.0
105°	168.6	262.5	1044.5	1590.3	1496.4
107.5°	208.4	291.3	984.0	1742.9	1769.0
110°	236.5	312.0	939.1	1772.9	1885.1



TEST NUMBER: P519943

CATALOG NUMBER: SQ4-F-050U-100D-930-1D-UNV-STD-W-12

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	260.8	332.8	894.0	1748.0	1916.9
115°	299.8	363.9	836.1	1663.3	1894.5
117.5°	336.3	397.6	799.1	1543.1	1803.6
120°	360.6	420.2	782.2	1462.5	1721.2
122.5°	381.2	440.8	770.9	1381.7	1631.3
125°	412.1	469.3	756.4	1274.5	1503.4
127.5°	439.8	496.5	748.4	1193.1	1389.6
130°	456.7	511.6	744.7	1142.1	1318.5
132.5°	473.5	528.4	741.0	1098.5	1254.8
135°	496.4	551.4	735.3	1038.1	1170.9
137.5°	521.3	571.2	732.5	984.7	1096.4
140°	536.3	584.4	730.7	950.7	1051.4
142.5°	551.3	595.6	728.8	924.1	1008.4
145°	573.8	615.0	726.0	882.0	948.4
147.5°	599.1	634.3	723.6	848.9	901.1
150°	615.9	645.7	723.6	830.0	871.2
152.5°	629.0	655.1	721.7	812.9	846.8
155°	648.6	671.6	721.2	792.0	815.0
157.5°	667.9	685.7	721.2	777.9	795.2
160°	679.1	695.1	721.2	768.4	782.2
162.5°	690.3	702.7	723.1	760.8	770.9
165°	702.5	711.7	723.6	754.1	756.4
167.5°	715.2	719.8	726.0	746.2	747.9
170°	718.9	723.5	726.0	742.3	742.3
172.5°	722.7	725.5	726.0	738.6	738.6
175°	728.3	730.6	726.0	735.3	733.0
177.5°	730.2	730.2	724.6	731.9	728.3
180°	728.3	728.3	728.3	728.3	728.3

(END OF REPORT)