

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: P519994

Luminaire Tested: **SQ4-F-075U-050D-930-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P519994
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-22, G3-1910-536-17)
Test Lab: INNOVATION CENTER
Issue Date: 4/29/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-F-075U-050D-930-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 750 LUMENS PER FOOT
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

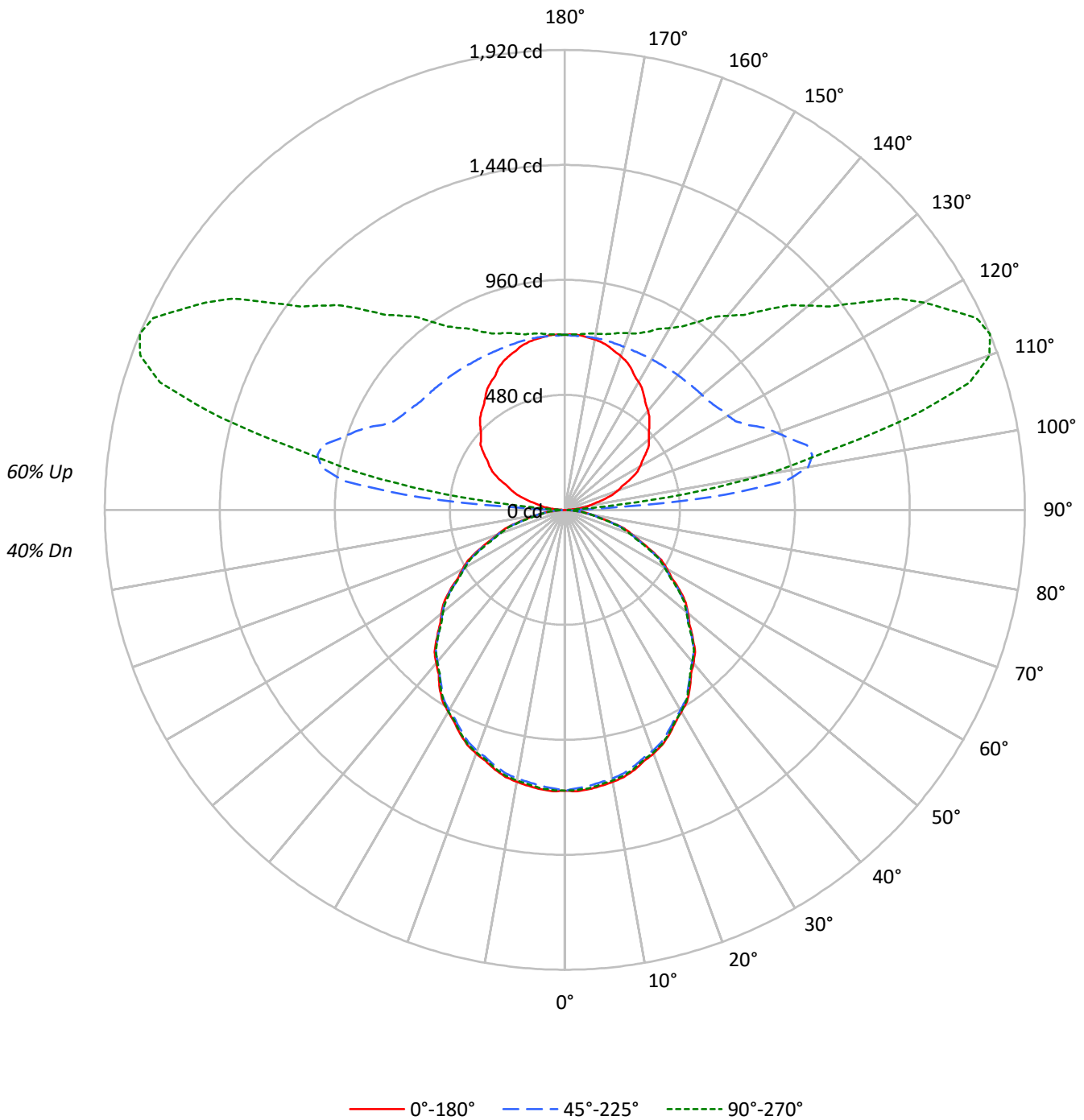
Lumens per Lamp: N/A
Luminaire Lumens: 7965.9 lumens
Efficiency: N/A
Efficacy: 110.3 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 72.2
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	105	105	105	105	95	95	95	95	78	78	78	62	62	62	47	47	47	40
1	96	91	87	84	87	83	80	77	68	66	64	54	53	51	42	41	40	34
2	87	80	74	68	79	73	68	63	60	56	53	48	45	43	37	35	33	28
3	79	70	63	57	72	64	58	53	53	48	44	42	39	36	32	30	28	24
4	72	62	54	48	66	56	50	44	47	42	38	37	34	31	29	26	24	20
5	66	55	47	41	60	50	43	38	42	36	32	33	30	27	26	23	21	18
6	61	49	41	35	55	45	38	33	37	32	28	30	26	23	23	21	19	15
7	56	44	36	31	51	41	34	29	34	28	25	27	23	20	21	19	16	14
8	52	40	32	27	47	37	30	25	31	25	22	25	21	18	20	17	15	12
9	49	37	29	24	44	34	27	23	28	23	19	23	19	16	18	15	13	11
10	45	33	26	22	41	31	24	20	26	21	17	21	17	15	17	14	12	10

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5408	5408	5408
5°	5421	5355	5399
10°	5403	5337	5374
15°	5366	5299	5344
20°	5316	5254	5293
25°	5256	5192	5240
30°	5182	5141	5174
35°	5126	5064	5090
40°	5028	4980	4990
45°	4924	4883	4883
50°	4821	4775	4752
55°	4707	4645	4620
60°	4532	4460	4430
65°	4317	4231	4180
70°	4022	3937	3853
75°	3608	3495	3413
80°	2917	2877	2792
85°	1741	1995	2075



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	110.6	1.4
10°-20°	315.0	4.0
20°-30°	473.1	5.9
30°-40°	564.7	7.1
40°-50°	578.7	7.3
50°-60°	516.1	6.5
60°-70°	384.4	4.8
70°-80°	208.7	2.6
80°-90°	50.2	0.6
90°-100°	345.0	4.3
100°-110°	949.0	11.9
110°-120°	979.6	12.3
120°-130°	784.9	9.9
130°-140°	616.4	7.7
140°-150°	472.4	5.9
150°-160°	339.7	4.3
160°-170°	207.7	2.6
170°-180°	70.0	0.9
0°-30°	898.7	11.3
0°-40°	1463.4	18.4
0°-60°	2558.2	32.1
0°-90°	3201.3	40.2
90°-120°	2273.6	28.5
90°-150°	4147.3	52.1
90°-180°	4765.0	59.8
0°-180°	7965.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1172	1172	1172	1172	1172	
5°	1171	1169	1156	1168	1166	111
15°	1124	1121	1110	1119	1119	317
25°	1033	1030	1020	1026	1029	475
35°	910	907	899	899	904	568
45°	755	756	748	747	748	583
55°	585	585	578	573	574	521
65°	396	394	388	383	383	392
75°	202	201	196	193	192	214
85°	33	36	38	39	39	46
90°	2	6	11	14	14	4
95°	51	188	610	261	166	54
105°	170	261	1046	1593	1486	179
115°	300	366	839	1670	1895	296
125°	414	472	761	1287	1508	369
135°	500	554	739	1041	1178	385
145°	577	617	728	887	955	362
155°	654	675	724	797	820	300
165°	706	716	727	756	761	199
175°	731	733	728	738	736	69
180°	731	731	731	731	731	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1172.3	1172.3	1172.3	1172.3	1172.3
2.5°	1176.1	1173.6	1163.4	1172.2	1171.0
5°	1170.7	1169.2	1156.5	1167.5	1166.0
7.5°	1162.3	1159.2	1146.9	1157.5	1156.0
10°	1153.5	1150.3	1139.3	1148.7	1147.2
12.5°	1142.1	1140.3	1128.0	1137.4	1137.1
15°	1123.6	1120.6	1109.5	1118.9	1118.9
17.5°	1099.2	1097.3	1086.6	1095.7	1094.4
20°	1082.8	1079.7	1070.3	1078.2	1078.2
22.5°	1062.8	1060.9	1051.4	1058.0	1059.3
25°	1032.6	1029.5	1020.1	1026.4	1029.4
27.5°	999.4	996.9	989.0	993.2	995.2
30°	972.9	972.9	965.2	966.8	971.4
32.5°	949.1	949.1	940.0	941.7	943.8
35°	910.2	907.2	899.2	899.3	903.9
37.5°	865.0	863.5	858.5	857.5	858.8
40°	834.9	833.3	827.0	828.6	828.6
42.5°	804.7	803.2	796.9	794.8	797.2
45°	754.8	756.4	748.5	747.0	748.5
47.5°	705.5	705.5	699.3	695.0	697.4
50°	671.7	671.7	665.4	662.2	662.2
52.5°	636.5	637.8	630.2	625.9	627.1
55°	585.3	585.3	577.5	572.8	574.4
57.5°	528.8	528.8	521.0	516.4	519.2
60°	491.2	491.2	483.4	478.6	480.2
62.5°	453.5	453.5	445.7	441.0	441.3
65°	395.5	393.9	387.6	382.9	382.9
67.5°	339.6	335.7	330.8	324.5	324.5
70°	298.2	296.6	291.9	285.7	285.7
72.5°	260.5	257.8	253.0	248.0	248.0
75°	202.4	200.9	196.1	193.0	191.5
77.5°	145.0	143.8	143.5	139.0	140.3
80°	109.8	109.8	108.3	105.1	105.1
82.5°	78.5	79.7	76.9	76.2	75.0
85°	32.9	36.0	37.7	39.2	39.2
87.5°	6.6	11.2	10.9	12.8	12.8
90°	1.6	6.2	10.9	14.0	14.0
92.5°	21.5	91.7	159.0	61.0	50.1
95°	51.4	188.3	610.0	260.9	166.5
97.5°	83.7	208.8	930.9	717.3	506.1
100°	107.4	221.4	1031.7	1041.4	849.7
102.5°	129.8	236.6	1057.8	1291.9	1116.0
105°	169.6	260.9	1045.7	1592.6	1486.1
107.5°	207.6	291.0	986.2	1739.9	1771.5
110°	234.9	311.0	941.4	1776.5	1886.0



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	259.9	333.5	896.6	1752.9	1919.7
115°	300.4	365.7	838.7	1670.1	1895.4
117.5°	338.9	399.2	802.1	1554.1	1808.8
120°	362.6	420.4	785.8	1467.2	1730.4
122.5°	383.7	441.5	774.7	1391.0	1640.8
125°	413.9	471.7	761.0	1287.3	1507.9
127.5°	442.6	497.7	751.9	1200.7	1394.3
130°	457.5	513.8	746.9	1149.3	1325.8
132.5°	475.0	531.2	743.2	1104.1	1263.5
135°	499.5	554.3	739.2	1041.0	1177.9
137.5°	522.5	573.4	735.7	990.1	1103.0
140°	540.0	587.2	734.5	956.2	1058.1
142.5°	554.9	598.4	732.0	926.0	1013.3
145°	577.3	616.9	728.3	887.0	955.4
147.5°	601.2	635.4	726.4	852.4	907.2
150°	616.2	646.6	725.2	833.5	876.1
152.5°	629.9	657.9	723.9	817.1	852.4
155°	653.6	674.9	723.6	797.3	820.1
157.5°	670.7	688.0	723.6	780.9	796.8
160°	683.1	696.8	723.6	772.1	784.3
162.5°	693.1	704.3	724.9	764.6	774.3
165°	706.5	715.6	726.7	756.4	761.0
167.5°	715.8	722.8	728.3	749.4	750.7
170°	722.0	726.6	728.3	746.9	746.9
172.5°	727.0	729.2	728.3	743.2	742.0
175°	731.3	732.9	728.3	737.6	736.0
177.5°	732.6	732.6	727.6	735.1	732.6
180°	731.3	731.3	731.3	731.3	731.3

(END OF REPORT)