

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: CORELITE

Report Number: P521817

Luminaire Tested: **SQ4-WB-075U-050D-93050-1D-UNV-STD-W-4 (3500K)**

Issue Date: 5/5/2021

Test Information

Test Method: LM-79-08
Report Number: P521817
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2101-105-50,
Test Lab: INNOVATION CENTER
Issue Date: 5/5/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-WB-075U-050D-93050-1D-UNV-STD-W-4 (3500K)
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 750 LUMENS PER FOOT
Light Source: 3000K/5000K CCT, 90 CRI LEDS, TUNED TO 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

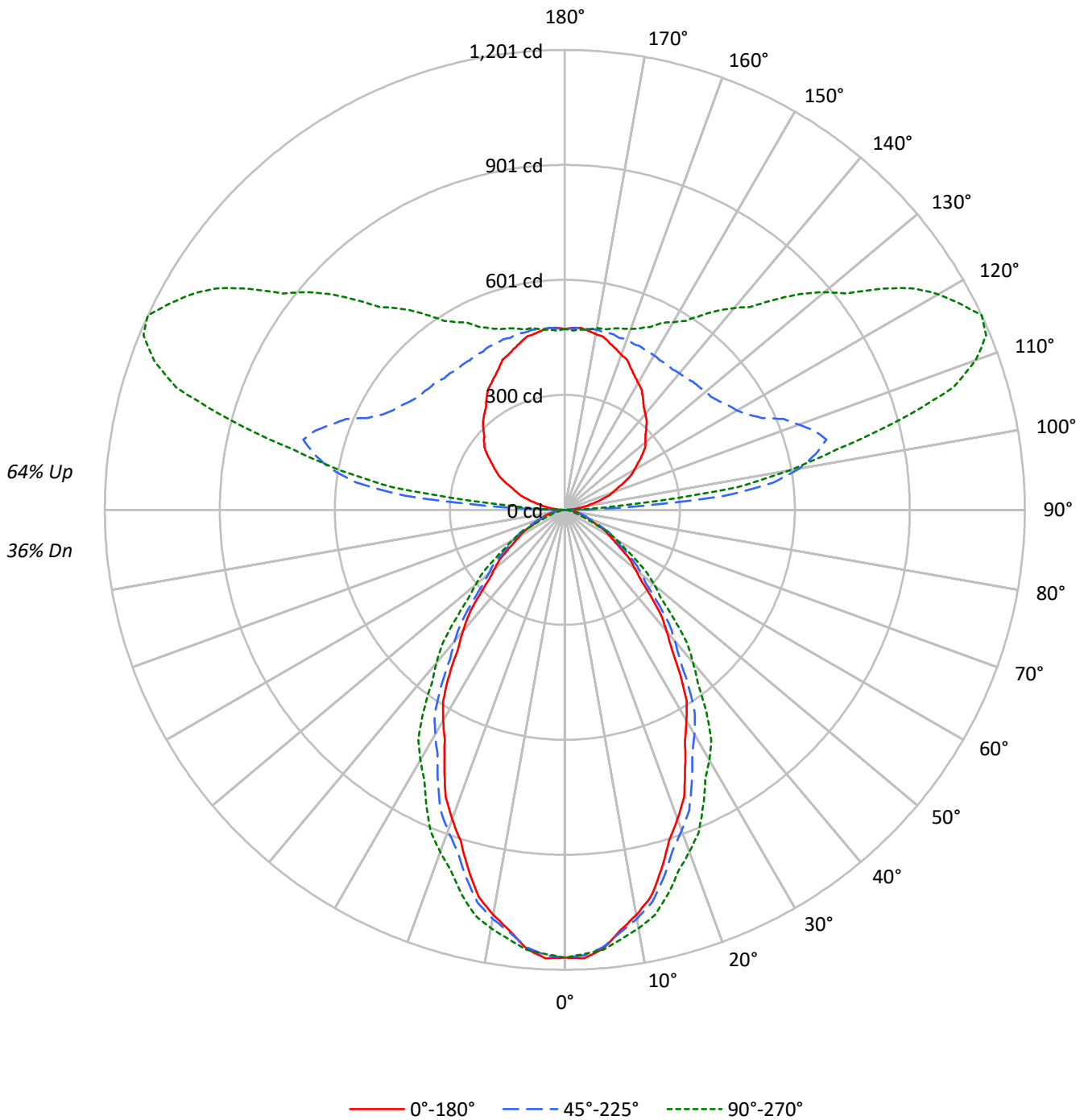
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4760.7 lumens
Efficiency: N/A
Efficacy: 107.0 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 44.5
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	104	104	104	104	94	94	94	94	75	75	75	59	59	59	43	43	43	36
1	95	91	88	85	86	83	80	77	67	65	63	53	51	50	39	39	38	32
2	88	81	75	71	79	74	69	65	60	57	54	47	45	43	36	34	33	28
3	80	72	65	60	73	65	60	55	54	50	46	43	40	38	32	31	29	25
4	74	64	57	51	67	59	52	48	48	44	40	38	35	33	30	28	26	22
5	68	57	50	45	62	53	46	41	43	39	35	35	32	29	27	25	23	20
6	63	52	44	39	57	48	41	36	39	35	31	32	29	26	25	23	21	18
7	58	47	40	34	53	43	37	32	36	31	28	29	26	23	23	21	19	16
8	54	43	36	31	49	39	33	29	33	28	25	27	24	21	21	19	17	15
9	51	39	32	28	46	36	30	26	30	26	22	25	22	19	20	18	16	14
10	47	36	29	25	43	33	27	23	28	24	20	23	20	17	19	16	15	13

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10787	10787	10787
5°	10653	10615	10677
10°	10065	10155	10392
15°	9291	9507	9933
20°	8437	8754	9333
25°	7568	7980	8696
30°	6766	7209	8034
35°	5917	6345	7251
40°	4980	5375	6277
45°	4110	4465	5241
50°	3432	3741	4366
55°	2913	3211	3606
60°	2489	2783	2879
65°	1982	2340	1860
70°	1759	1826	1136
75°	1629	1483	695
80°	1498	1365	600
85°	1355	1249	487



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	107.2	2.3
10°-20°	278.9	5.9
20°-30°	361.3	7.6
30°-40°	353.8	7.4
40°-50°	270.8	5.7
50°-60°	180.5	3.8
60°-70°	98.5	2.1
70°-80°	41.0	0.9
80°-90°	11.6	0.2
90°-100°	243.4	5.1
100°-110°	588.2	12.4
110°-120°	627.4	13.2
120°-130°	508.1	10.7
130°-140°	393.4	8.3
140°-150°	300.1	6.3
150°-160°	217.3	4.6
160°-170°	133.8	2.8
170°-180°	45.3	1.0
0°-30°	747.5	15.7
0°-40°	1101.3	23.1
0°-60°	1552.6	32.6
0°-90°	1703.7	35.8
90°-120°	1459.0	30.6
90°-150°	2660.7	55.9
90°-180°	3057.0	64.2
0°-180°	4760.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1169	1169	1169	1169	1169	
5°	1150	1139	1146	1149	1153	107
15°	973	969	995	1022	1040	272
25°	743	745	784	818	854	342
35°	525	528	563	601	644	327
45°	315	321	342	368	402	246
55°	181	189	200	207	224	164
65°	91	98	107	94	85	94
75°	46	46	42	28	20	49
85°	13	13	12	8	5	14
90°	0	0	0	0	0	2
95°	24	122	417	271	190	27
105°	94	162	707	915	903	99
115°	172	220	568	1077	1201	170
125°	245	282	493	856	1006	219
135°	301	336	473	675	777	232
145°	356	382	464	574	619	223
155°	408	426	470	508	527	188
165°	451	458	476	483	490	127
175°	477	475	477	473	472	45
180°	472	472	472	472	472	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1169.2	1169.2	1169.2	1169.2	1169.2
2.5°	1172.0	1161.6	1164.2	1164.2	1161.0
5°	1150.2	1138.7	1146.1	1148.7	1152.8
7.5°	1107.5	1098.8	1112.3	1122.4	1130.5
10°	1074.3	1066.7	1084.0	1098.6	1109.2
12.5°	1035.7	1029.4	1050.8	1070.4	1084.1
15°	972.7	969.2	995.3	1022.3	1039.9
17.5°	905.3	903.6	933.5	965.1	987.6
20°	859.3	858.8	891.6	924.5	950.6
22.5°	812.9	814.0	848.5	882.8	912.5
25°	743.4	745.4	783.9	818.1	854.2
27.5°	679.0	679.9	719.8	755.8	794.4
30°	635.1	637.6	676.7	714.0	754.1
32.5°	591.2	594.1	632.3	670.9	711.9
35°	525.3	527.8	563.3	601.2	643.8
37.5°	457.4	460.8	492.3	528.1	570.1
40°	413.5	418.5	446.3	480.1	521.2
42.5°	371.2	377.4	403.2	435.3	472.4
45°	315.0	321.0	342.2	368.1	401.7
47.5°	266.6	273.5	289.8	312.1	340.7
50°	239.1	245.6	260.6	277.1	304.2
52.5°	214.9	221.4	234.8	247.5	270.6
55°	181.1	188.6	199.6	207.1	224.2
57.5°	153.4	160.6	169.3	172.7	183.0
60°	134.9	143.0	150.8	150.4	156.0
62.5°	118.1	124.9	132.8	127.3	127.6
65°	90.8	98.3	107.2	93.7	85.2
67.5°	73.4	75.0	84.1	65.3	55.2
70°	65.2	65.2	67.7	50.6	42.1
72.5°	57.4	57.4	55.0	41.1	32.2
75°	45.7	45.7	41.6	28.5	19.5
77.5°	35.2	34.8	31.8	21.3	14.2
80°	28.2	28.2	25.7	16.8	11.3
82.5°	22.1	22.1	19.9	13.1	8.4
85°	12.8	12.8	11.8	7.6	4.6
87.5°	4.5	4.5	4.1	2.5	2.1
90°	0.0	0.0	0.0	0.0	0.0
92.5°	8.0	65.9	155.2	75.4	51.2
95°	24.0	121.8	417.0	271.2	190.0
97.5°	42.6	134.9	549.2	529.1	454.2
100°	57.0	143.0	622.0	656.6	595.0
102.5°	70.6	150.4	670.0	762.8	726.2
105°	94.0	162.4	707.0	914.7	903.0
107.5°	117.0	176.6	685.2	1036.6	1064.2
110°	133.0	188.7	650.0	1089.2	1141.0

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	149.0	200.8	618.8	1102.0	1190.6
115°	172.0	219.9	568.0	1076.8	1201.0
117.5°	194.8	240.0	538.2	1018.9	1164.4
120°	210.0	252.0	519.0	973.5	1126.0
122.5°	226.0	264.9	507.0	927.0	1077.2
125°	245.0	282.2	493.0	856.4	1006.0
127.5°	263.8	298.8	483.2	796.6	928.0
130°	275.0	309.2	480.0	754.9	884.0
132.5°	285.4	321.2	475.2	724.9	834.4
135°	301.0	336.2	473.0	675.3	777.0
137.5°	315.8	351.2	466.0	641.7	718.4
140°	327.0	359.3	466.0	617.6	688.0
142.5°	338.2	370.5	462.0	596.6	656.0
145°	356.0	382.4	464.0	574.0	619.0
147.5°	372.6	398.2	462.8	548.0	585.2
150°	383.0	405.5	466.0	536.7	566.0
152.5°	394.2	415.9	465.2	524.6	550.8
155°	408.0	425.6	470.0	508.4	527.0
157.5°	424.6	439.7	469.0	502.2	513.2
160°	431.0	443.7	473.0	494.2	502.0
162.5°	441.4	452.5	471.4	491.7	496.4
165°	451.0	457.8	476.0	483.2	490.0
167.5°	462.8	467.3	474.8	482.6	482.8
170°	466.0	468.9	478.0	477.1	482.0
172.5°	471.6	473.8	475.6	477.7	474.8
175°	477.0	475.0	477.0	473.0	472.0
177.5°	476.0	476.0	474.4	472.7	468.8
180°	472.0	472.0	472.0	472.0	472.0

(END OF REPORT)