

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: P519121

Luminaire Tested: **SQ4-WB-050U-100D-835-1D-UNV-STD-W-6**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P519121
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-21, G2-2009-966-13)
Test Lab: INNOVATION CENTER
Issue Date: 4/29/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-WB-050U-100D-835-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

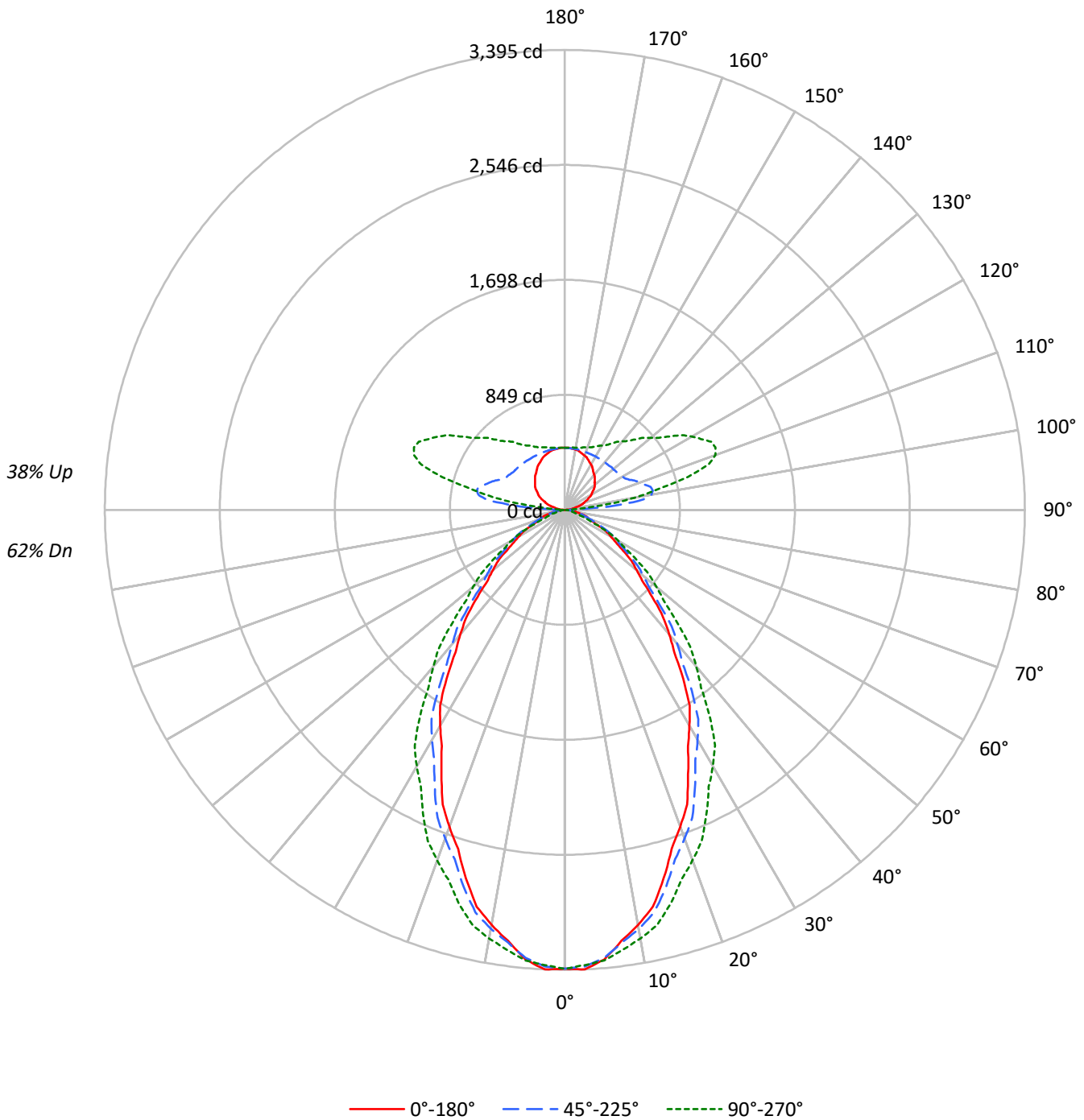
Lumens per Lamp: N/A
Luminaire Lumens: 7925.2 lumens
Efficiency: N/A
Efficacy: 108.0 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 73.4
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	110	110	110	110	103	103	103	103	90	90	90	78	78	78	67	67	67	62
1	102	98	95	92	95	92	89	87	81	79	77	71	70	68	62	61	60	55
2	94	87	82	77	88	82	78	73	73	69	66	64	62	59	56	54	53	49
3	87	78	72	66	81	74	68	63	66	61	57	58	55	52	51	49	47	43
4	80	70	63	58	75	67	60	55	60	54	50	53	49	46	47	44	41	38
5	74	64	56	51	70	60	54	49	54	49	45	48	44	41	43	40	37	34
6	69	58	50	45	65	55	48	43	50	44	40	44	40	37	40	36	34	31
7	64	53	45	40	61	50	44	39	45	40	36	41	37	33	37	33	31	28
8	60	49	41	36	57	46	40	35	42	36	33	38	33	30	34	31	28	26
9	56	45	38	33	53	43	36	32	39	33	30	35	31	28	32	28	26	24
10	53	41	35	30	50	40	33	29	36	31	27	33	29	25	30	26	24	22

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	20833	20833	20833
5°	20573	20500	20619
10°	19437	19614	20069
15°	17944	18360	19183
20°	16294	16907	18026
25°	14615	15412	16794
30°	13068	13923	15516
35°	11428	12254	14005
40°	9618	10382	12124
45°	7937	8623	10122
50°	6627	7225	8433
55°	5626	6199	6965
60°	4809	5375	5558
65°	3829	4520	3590
70°	3394	3528	2192
75°	3144	2861	1343
80°	2894	2632	1158
85°	2625	2414	946



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	310.7	3.9
10°-20°	808.1	10.2
20°-30°	1046.7	13.2
30°-40°	1025.0	12.9
40°-50°	784.6	9.9
50°-60°	522.8	6.6
60°-70°	285.3	3.6
70°-80°	118.9	1.5
80°-90°	35.4	0.4
90°-100°	219.7	2.8
100°-110°	596.8	7.5
110°-120°	613.6	7.7
120°-130°	490.6	6.2
130°-140°	385.5	4.9
140°-150°	295.6	3.7
150°-160°	212.5	2.7
160°-170°	130.0	1.6
170°-180°	43.8	0.6
0°-30°	2165.4	27.3
0°-40°	3190.4	40.3
0°-60°	4497.8	56.8
0°-90°	4937.3	62.3
90°-120°	1430.0	18.0
90°-150°	2601.6	32.8
90°-180°	2988.0	37.7
0°-180°	7925.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3387	3387	3387	3387	3387	
5°	3332	3299	3320	3328	3340	310
15°	2818	2808	2883	2962	3012	787
25°	2154	2159	2271	2370	2474	990
35°	1522	1529	1632	1742	1865	946
45°	912	930	991	1066	1164	712
55°	525	546	578	600	650	476
65°	263	285	311	271	247	273
75°	132	132	120	83	56	141
85°	37	37	34	22	13	40
90°	2	6	10	13	13	4
95°	32	120	383	166	112	34
105°	106	165	656	999	940	113
115°	188	229	525	1045	1190	186
125°	259	295	475	801	945	231
135°	312	346	462	652	736	241
145°	360	386	456	554	596	226
155°	408	422	453	498	512	188
165°	441	447	455	474	475	125
175°	458	459	456	462	461	43
180°	458	458	458	458	458	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3387.1	3387.1	3387.1	3387.1	3387.1
2.5°	3395.4	3365.2	3372.8	3372.6	3363.3
5°	3332.1	3298.7	3320.2	3327.9	3339.5
7.5°	3208.4	3183.1	3222.4	3251.5	3275.0
10°	3112.1	3090.3	3140.4	3182.7	3213.2
12.5°	3000.4	2982.1	3044.1	3100.8	3140.7
15°	2817.9	2807.7	2883.2	2961.7	3012.5
17.5°	2622.6	2617.6	2704.3	2795.9	2861.0
20°	2489.4	2487.9	2583.0	2678.4	2753.9
22.5°	2355.0	2358.2	2458.2	2557.3	2643.4
25°	2153.5	2159.3	2270.9	2369.9	2474.5
27.5°	1967.1	1969.8	2085.2	2189.6	2301.2
30°	1839.9	1847.2	1960.3	2068.5	2184.7
32.5°	1712.7	1721.1	1831.9	1943.7	2062.3
35°	1521.9	1529.1	1631.9	1741.7	1865.2
37.5°	1325.1	1335.0	1426.2	1530.0	1651.5
40°	1197.9	1212.4	1293.0	1390.8	1510.0
42.5°	1075.4	1093.4	1168.2	1261.0	1368.5
45°	912.5	930.0	991.3	1066.3	1163.7
47.5°	772.2	792.3	839.4	904.0	987.1
50°	692.6	711.5	755.0	802.9	881.3
52.5°	622.4	641.3	680.1	717.0	783.8
55°	524.6	546.4	578.1	600.1	649.5
57.5°	444.4	465.3	490.4	500.3	530.3
60°	390.9	414.1	436.9	435.8	451.8
62.5°	342.1	361.9	384.6	368.9	369.8
65°	263.1	284.9	310.6	271.4	246.7
67.5°	212.5	217.2	243.7	189.3	159.9
70°	188.7	188.7	196.2	146.6	121.9
72.5°	166.2	166.2	159.3	119.2	93.3
75°	132.3	132.3	120.4	82.6	56.5
77.5°	102.0	100.8	92.1	61.7	41.0
80°	81.7	81.7	74.3	48.7	32.7
82.5°	63.9	63.9	57.7	38.0	24.4
85°	37.2	37.2	34.2	22.1	13.4
87.5°	13.4	14.2	13.9	9.8	8.6
90°	1.5	5.8	10.3	13.2	13.2
92.5°	13.2	60.1	104.5	44.9	38.0
95°	32.4	120.1	382.6	166.5	111.8
97.5°	53.6	132.7	586.5	456.3	320.5
100°	67.7	141.1	648.9	657.8	531.2
102.5°	81.8	149.4	665.4	813.5	701.9
105°	105.9	164.9	656.3	999.2	940.2
107.5°	131.0	183.0	618.3	1095.1	1111.5
110°	148.6	196.1	590.0	1114.0	1184.5

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	163.9	209.1	561.8	1098.3	1204.5
115°	188.3	228.6	525.3	1045.1	1190.4
117.5°	211.3	249.9	502.0	969.6	1133.3
120°	226.6	264.0	491.5	918.9	1081.5
122.5°	239.5	277.0	484.4	868.2	1025.0
125°	259.0	294.9	475.3	800.8	944.7
127.5°	276.3	312.0	470.3	749.7	873.1
130°	286.9	321.5	467.9	717.6	828.4
132.5°	297.5	332.1	465.6	690.3	788.4
135°	311.9	346.5	462.0	652.3	735.7
137.5°	327.5	358.9	460.3	618.7	688.9
140°	337.0	367.2	459.1	597.4	660.7
142.5°	346.4	374.3	457.9	580.6	633.6
145°	360.5	386.4	456.1	554.2	595.9
147.5°	376.4	398.5	454.7	533.4	566.2
150°	387.0	405.7	454.7	521.5	547.4
152.5°	395.2	411.6	453.5	510.8	532.1
155°	407.6	422.0	453.2	497.7	512.1
157.5°	419.6	430.9	453.2	488.8	499.7
160°	426.7	436.8	453.2	482.8	491.5
162.5°	433.8	441.5	454.4	478.1	484.4
165°	441.4	447.2	454.7	473.8	475.3
167.5°	449.4	452.2	456.1	468.8	470.0
170°	451.7	454.6	456.1	466.4	466.4
172.5°	454.1	455.8	456.1	464.1	464.1
175°	457.6	459.1	456.1	462.0	460.6
177.5°	458.8	458.8	455.3	459.9	457.6
180°	457.6	457.6	457.6	457.6	457.6

(END OF REPORT)