

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: P519125

Luminaire Tested: **SQ4-WB-050U-100D-840-1D-UNV-STD-W-6**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P519125  
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-840-1D-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: 4000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

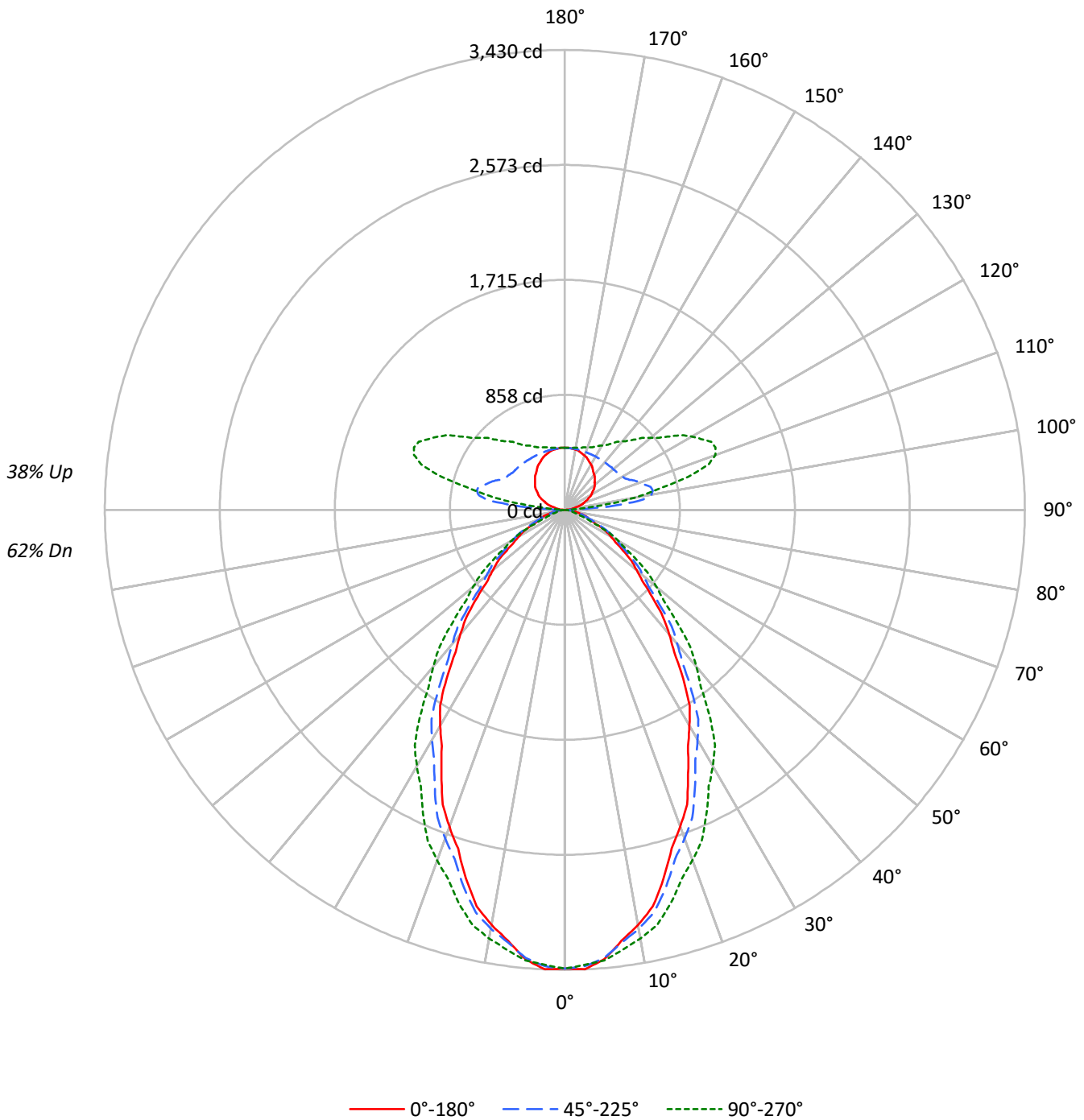
Lumens per Lamp: N/A  
Luminaire Lumens: 8005.0 lumens  
Efficiency: N/A  
Efficacy: 109.1 lumens/watt  
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02  
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')  
CIE Type: Semi-Direct

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°	21043	21043	21043
5°	20780	20706	20827
10°	19633	19811	20270
15°	18124	18545	19377
20°	16459	17077	18208
25°	14762	15567	16963
30°	13199	14063	15673
35°	11542	12377	14146
40°	9715	10486	12246
45°	8017	8710	10224
50°	6693	7297	8518
55°	5682	6263	7035
60°	4857	5429	5614
65°	3867	4566	3627
70°	3428	3564	2214
75°	3175	2890	1355
80°	2926	2660	1169
85°	2646	2435	953



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	313.8	3.9
10°-20°	816.2	10.2
20°-30°	1057.2	13.2
30°-40°	1035.3	12.9
40°-50°	792.5	9.9
50°-60°	528.1	6.6
60°-70°	288.1	3.6
70°-80°	120.1	1.5
80°-90°	35.8	0.4
90°-100°	221.9	2.8
100°-110°	602.8	7.5
110°-120°	619.7	7.7
120°-130°	495.5	6.2
130°-140°	389.3	4.9
140°-150°	298.5	3.7
150°-160°	214.7	2.7
160°-170°	131.3	1.6
170°-180°	44.2	0.6
0°-30°	2187.2	27.3
0°-40°	3222.5	40.3
0°-60°	4543.0	56.8
0°-90°	4987.0	62.3
90°-120°	1444.4	18.0
90°-150°	2627.7	32.8
90°-180°	3018.0	37.7
0°-180°	8005.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	3421	3421	3421	3421	3421	
5°	3366	3332	3354	3361	3373	313
15°	2846	2836	2912	2992	3043	795
25°	2175	2181	2294	2394	2499	1000
35°	1537	1544	1648	1759	1884	956
45°	922	939	1001	1077	1175	719
55°	530	552	584	606	656	480
65°	266	288	314	274	249	276
75°	134	134	122	84	57	143
85°	38	38	34	22	14	41
90°	2	6	10	13	13	4
95°	33	121	386	168	113	35
105°	107	167	663	1009	950	114
115°	190	231	531	1056	1202	188
125°	262	298	480	809	954	233
135°	315	350	467	659	743	244
145°	364	390	461	560	602	229
155°	412	426	458	503	517	190
165°	446	452	459	479	480	126
175°	462	464	461	467	465	44
180°	462	462	462	462	462	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	3421.2	3421.2	3421.2	3421.2	3421.2
2.5°	3429.6	3399.0	3406.7	3406.5	3397.1
5°	3365.6	3331.9	3353.6	3361.4	3373.1
7.5°	3240.7	3215.2	3254.8	3284.2	3308.0
10°	3143.4	3121.4	3172.0	3214.7	3245.5
12.5°	3030.6	3012.1	3074.7	3132.0	3172.3
15°	2846.2	2835.9	2912.3	2991.5	3042.9
17.5°	2649.0	2644.0	2731.5	2824.0	2889.7
20°	2514.5	2513.0	2609.0	2705.3	2781.7
22.5°	2378.7	2382.0	2482.9	2583.1	2670.0
25°	2175.2	2181.1	2293.8	2393.8	2499.4
27.5°	1986.9	1989.6	2106.1	2211.7	2324.4
30°	1858.4	1865.8	1980.0	2089.3	2206.7
32.5°	1729.9	1738.5	1850.3	1963.2	2083.0
35°	1537.2	1544.5	1648.3	1759.2	1884.0
37.5°	1338.4	1348.4	1440.5	1545.4	1668.1
40°	1209.9	1224.6	1306.0	1404.8	1525.2
42.5°	1086.2	1104.4	1179.9	1273.7	1382.3
45°	921.7	939.3	1001.3	1077.1	1175.4
47.5°	780.0	800.3	847.9	913.1	997.1
50°	699.5	718.6	762.6	810.9	890.2
52.5°	628.7	647.8	686.9	724.2	791.7
55°	529.9	551.9	584.0	606.1	656.0
57.5°	448.8	470.0	495.4	505.4	535.6
60°	394.8	418.3	441.3	440.2	456.4
62.5°	345.6	365.5	388.5	372.6	373.5
65°	265.7	287.7	313.7	274.1	249.2
67.5°	214.7	219.4	246.2	191.2	161.5
70°	190.6	190.6	198.2	148.0	123.1
72.5°	167.8	167.8	160.9	120.4	94.3
75°	133.6	133.6	121.6	83.5	57.0
77.5°	103.0	101.8	93.1	62.3	41.4
80°	82.6	82.6	75.1	49.2	33.0
82.5°	64.6	64.6	58.2	38.4	24.6
85°	37.5	37.5	34.5	22.3	13.5
87.5°	13.5	14.4	14.1	9.9	8.7
90°	1.5	5.8	10.4	13.4	13.4
92.5°	13.4	60.8	105.5	45.3	38.3
95°	32.7	121.3	386.4	168.2	113.0
97.5°	54.1	134.0	592.4	460.9	323.7
100°	68.4	142.5	655.4	664.4	536.5
102.5°	82.6	150.9	672.1	821.7	708.9
105°	107.0	166.6	662.9	1009.3	949.7
107.5°	132.3	184.9	624.5	1106.1	1122.7
110°	150.1	198.1	596.0	1125.2	1196.4



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	165.6	211.2	567.4	1109.4	1216.6
115°	190.2	230.9	530.6	1055.6	1202.4
117.5°	213.4	252.4	507.1	979.3	1144.7
120°	228.9	266.7	496.4	928.2	1092.4
122.5°	242.0	279.7	489.3	876.9	1035.3
125°	261.6	297.9	480.1	808.8	954.2
127.5°	279.1	315.2	475.0	757.2	881.9
130°	289.8	324.7	472.6	724.8	836.7
132.5°	300.5	335.4	470.2	697.2	796.3
135°	315.1	350.0	466.7	658.8	743.1
137.5°	330.8	362.5	464.9	624.9	695.9
140°	340.3	370.9	463.7	603.4	667.3
142.5°	349.9	378.0	462.5	586.5	640.0
145°	364.1	390.3	460.7	559.8	601.9
147.5°	380.2	402.6	459.2	538.8	571.9
150°	390.9	409.8	459.2	526.7	552.9
152.5°	399.2	415.8	458.1	515.9	537.4
155°	411.7	426.2	457.8	502.7	517.2
157.5°	423.9	435.2	457.8	493.7	504.7
160°	431.0	441.2	457.8	487.7	496.4
162.5°	438.1	446.0	458.9	482.9	489.3
165°	445.9	451.7	459.2	478.6	480.1
167.5°	453.9	456.8	460.7	473.5	474.7
170°	456.3	459.2	460.7	471.1	471.1
172.5°	458.6	460.4	460.7	468.8	468.8
175°	462.2	463.7	460.7	466.6	465.2
177.5°	463.4	463.4	459.8	464.5	462.2
180°	462.2	462.2	462.2	462.2	462.2

(END OF REPORT)