

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: P519162

Luminaire Tested: **SQ4-WB-050U-125D-940-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P519162  
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-125D-940-1D-UNV-STD-W-8  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE  
DOWNLIGHT 1250 LUMENS PER FOOT  
UPLIGHT 500 LUMENS PER FOOT  
Light Source: 4000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

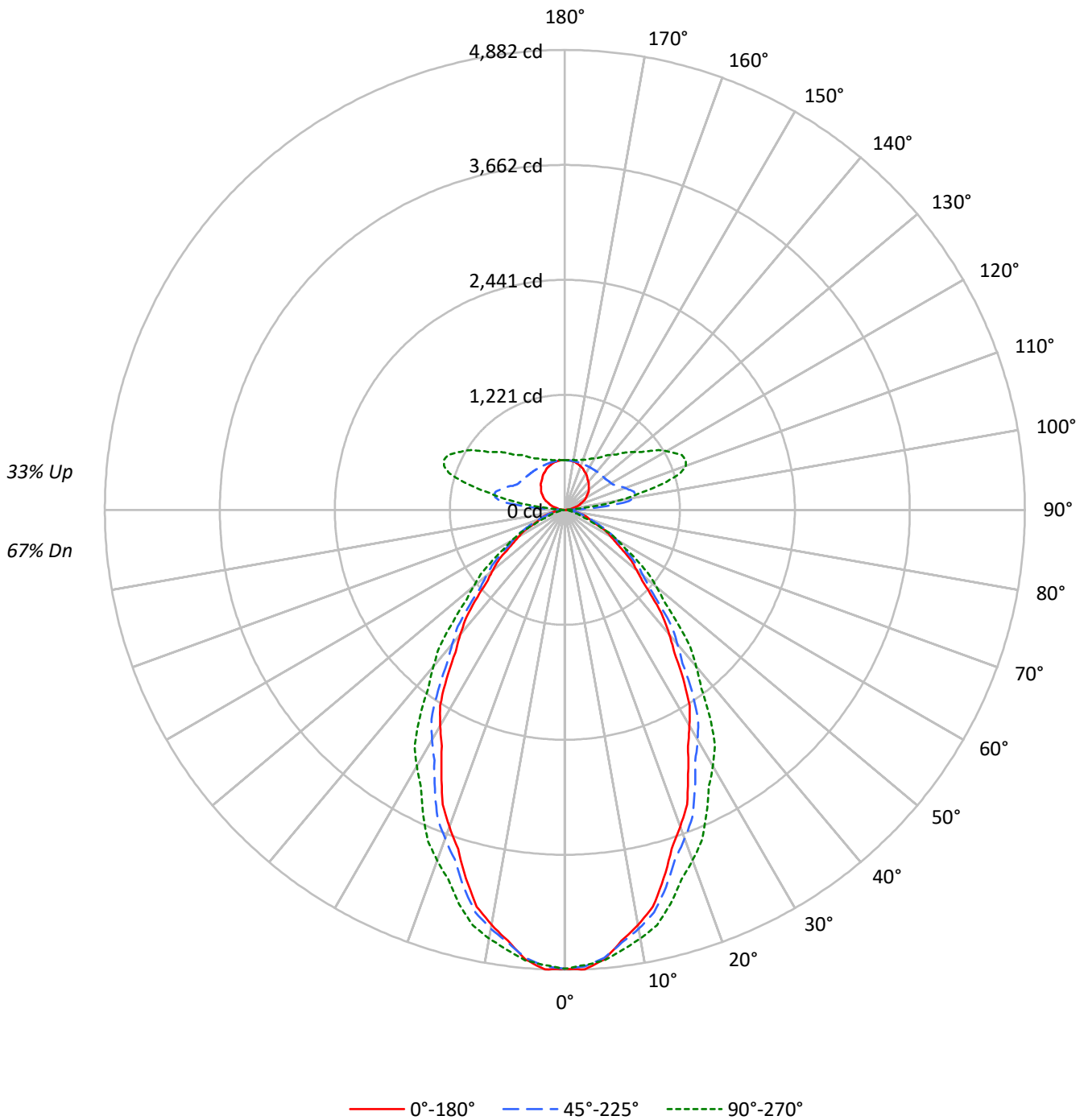
Lumens per Lamp: N/A  
Luminaire Lumens: 10543.3 lumens  
Efficiency: N/A  
Efficacy: 91.8 lumens/watt  
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02  
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')  
CIE Type: Semi-Direct

Input Watts (W): 114.8  
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	50	30	10	0	
RCR																						
0	111	111	111	111	105	105	105	105	93	93	93	82	82	82	72	72	72	67				
1	103	99	96	93	97	94	91	88	84	82	80	75	73	71	66	65	64	60				
2	95	89	83	79	90	84	79	75	75	72	69	67	65	62	60	58	56	53				
3	88	79	73	67	83	75	70	65	68	63	60	61	58	55	55	52	50	47				
4	81	72	64	59	77	68	62	57	62	57	52	56	52	48	50	47	44	41				
5	76	65	57	52	71	62	55	50	56	51	47	51	47	43	46	43	40	37				
6	70	59	51	46	66	56	49	44	51	46	42	47	42	39	42	39	36	34				
7	65	54	46	41	62	52	45	40	47	42	38	43	39	35	39	36	33	31				
8	61	50	42	37	58	48	41	36	44	38	34	40	35	32	37	33	30	28				
9	57	46	39	34	54	44	37	33	40	35	31	37	33	29	34	30	28	26				
10	54	42	36	31	51	41	34	30	38	32	29	35	30	27	32	28	25	24				

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	22469	22469	22469
5°	22188	22109	22238
10°	20963	21153	21644
15°	19352	19801	20689
20°	17573	18235	19441
25°	15762	16622	18112
30°	14094	15016	16735
35°	12324	13215	15104
40°	10373	11197	13076
45°	8561	9300	10917
50°	7147	7792	9095
55°	6067	6687	7511
60°	5186	5797	5994
65°	4129	4876	3873
70°	3661	3805	2363
75°	3390	3085	1447
80°	3121	2840	1249
85°	2826	2604	1016



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	446.7	4.2
10°-20°	1162.0	11.0
20°-30°	1505.1	14.3
30°-40°	1473.9	14.0
40°-50°	1128.2	10.7
50°-60°	751.8	7.1
60°-70°	410.2	3.9
70°-80°	170.9	1.6
80°-90°	50.4	0.5
90°-100°	253.2	2.4
100°-110°	687.8	6.5
110°-120°	707.2	6.7
120°-130°	565.4	5.4
130°-140°	444.3	4.2
140°-150°	340.7	3.2
150°-160°	245.0	2.3
160°-170°	149.8	1.4
170°-180°	50.5	0.5
0°-30°	3113.9	29.5
0°-40°	4587.8	43.5
0°-60°	6467.7	61.3
0°-90°	7099.3	67.3
90°-120°	1648.3	15.6
90°-150°	2998.6	28.4
90°-180°	3444.0	32.7
0°-180°	10543.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	4871	4871	4871	4871	4871	
5°	4792	4743	4774	4786	4802	446
15°	4052	4037	4146	4259	4332	1132
25°	3097	3105	3266	3408	3558	1424
35°	2188	2199	2347	2504	2682	1361
45°	1312	1337	1426	1533	1673	1023
55°	754	786	831	863	934	684
65°	378	410	447	390	355	393
75°	190	190	173	119	81	203
85°	53	53	49	32	19	58
90°	2	7	12	15	15	5
95°	37	138	441	192	129	40
105°	122	190	756	1152	1084	130
115°	217	264	606	1205	1372	214
125°	298	340	548	923	1089	266
135°	360	399	532	752	848	278
145°	416	445	526	639	687	261
155°	470	486	522	574	590	217
165°	509	515	524	546	548	144
175°	528	529	526	532	531	50
180°	528	528	528	528	528	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	4870.6	4870.6	4870.6	4870.6	4870.6
2.5°	4882.5	4839.1	4850.0	4849.7	4836.4
5°	4791.5	4743.4	4774.4	4785.5	4802.2
7.5°	4613.7	4577.3	4633.8	4675.6	4709.4
10°	4475.2	4443.8	4515.8	4576.6	4620.5
12.5°	4314.5	4288.1	4377.3	4459.0	4516.2
15°	4052.0	4037.4	4146.1	4258.9	4332.0
17.5°	3771.2	3764.1	3888.8	4020.4	4114.0
20°	3579.7	3577.6	3714.4	3851.5	3960.1
22.5°	3386.5	3391.1	3534.8	3677.4	3801.1
25°	3096.7	3105.1	3265.6	3407.9	3558.4
27.5°	2828.7	2832.5	2998.4	3148.7	3309.2
30°	2645.8	2656.2	2818.9	2974.4	3141.6
32.5°	2462.9	2475.0	2634.3	2795.0	2965.5
35°	2188.4	2198.9	2346.6	2504.5	2682.1
37.5°	1905.5	1919.7	2050.8	2200.1	2374.8
40°	1722.5	1743.4	1859.3	2000.0	2171.3
42.5°	1546.4	1572.4	1679.8	1813.3	1967.9
45°	1312.2	1337.3	1425.5	1533.4	1673.4
47.5°	1110.5	1139.3	1207.1	1300.0	1419.5
50°	995.9	1023.1	1085.7	1154.5	1267.3
52.5°	895.0	922.2	978.0	1031.0	1127.1
55°	754.4	785.8	831.4	862.9	933.9
57.5°	639.0	669.1	705.3	719.5	762.5
60°	562.1	595.5	628.3	626.7	649.7
62.5°	492.0	520.4	553.1	530.5	531.7
65°	378.3	409.6	446.7	390.3	354.8
67.5°	305.6	312.3	350.5	272.2	230.0
70°	271.4	271.4	282.1	210.8	175.2
72.5°	238.9	238.9	229.1	171.4	134.2
75°	190.2	190.2	173.1	118.8	81.2
77.5°	146.6	144.9	132.5	88.7	59.0
80°	117.5	117.5	106.9	70.0	47.0
82.5°	91.9	91.9	82.9	54.7	35.0
85°	53.4	53.4	49.2	31.8	19.2
87.5°	19.1	20.1	19.5	13.3	11.6
90°	1.7	6.7	11.9	15.3	15.3
92.5°	15.3	69.3	120.4	51.7	43.8
95°	37.3	138.5	441.0	191.9	128.9
97.5°	61.7	152.9	676.0	525.9	369.4
100°	78.0	162.6	747.9	758.2	612.3
102.5°	94.3	172.2	766.9	937.7	809.0
105°	122.1	190.1	756.4	1151.7	1083.8
107.5°	150.9	211.0	712.7	1262.3	1281.2
110°	171.3	226.0	680.1	1284.0	1365.3

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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	188.9	241.0	647.5	1266.0	1388.4
115°	217.1	263.5	605.5	1204.6	1372.1
117.5°	243.5	288.0	578.7	1117.6	1306.3
120°	261.2	304.3	566.5	1059.2	1246.6
122.5°	276.1	319.2	558.3	1000.7	1181.4
125°	298.5	340.0	547.8	923.0	1088.8
127.5°	318.5	359.6	542.0	864.1	1006.4
130°	330.7	370.5	539.3	827.2	954.9
132.5°	342.9	382.7	536.6	795.6	908.7
135°	359.6	399.4	532.5	751.8	848.0
137.5°	377.5	413.7	530.5	713.1	794.1
140°	388.4	423.2	529.2	688.5	761.5
142.5°	399.2	431.4	527.8	669.3	730.3
145°	415.5	445.4	525.8	638.8	686.9
147.5°	433.8	459.4	524.1	614.8	652.6
150°	446.1	467.6	524.1	601.1	630.9
152.5°	455.6	474.5	522.7	588.7	613.3
155°	469.8	486.4	522.4	573.6	590.2
157.5°	483.7	496.6	522.4	563.4	576.0
160°	491.8	503.5	522.4	556.5	566.5
162.5°	500.0	508.9	523.7	551.0	558.3
165°	508.8	515.4	524.1	546.2	547.8
167.5°	518.0	521.3	525.8	540.4	541.7
170°	520.7	524.0	525.8	537.6	537.6
172.5°	523.4	525.4	525.8	534.9	534.9
175°	527.5	529.1	525.8	532.5	530.9
177.5°	528.8	528.8	524.7	530.1	527.5
180°	527.5	527.5	527.5	527.5	527.5

(END OF REPORT)