

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: P519141

Luminaire Tested: **SQ4-WB-050U-125D-830-1D-UNV-STD-W-6**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P519141  
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-830-1D-UNV-STD-W-6  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE  
DOWNLIGHT 1250 LUMENS PER FOOT  
UPLIGHT 500 LUMENS PER FOOT  
Light Source: 3000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

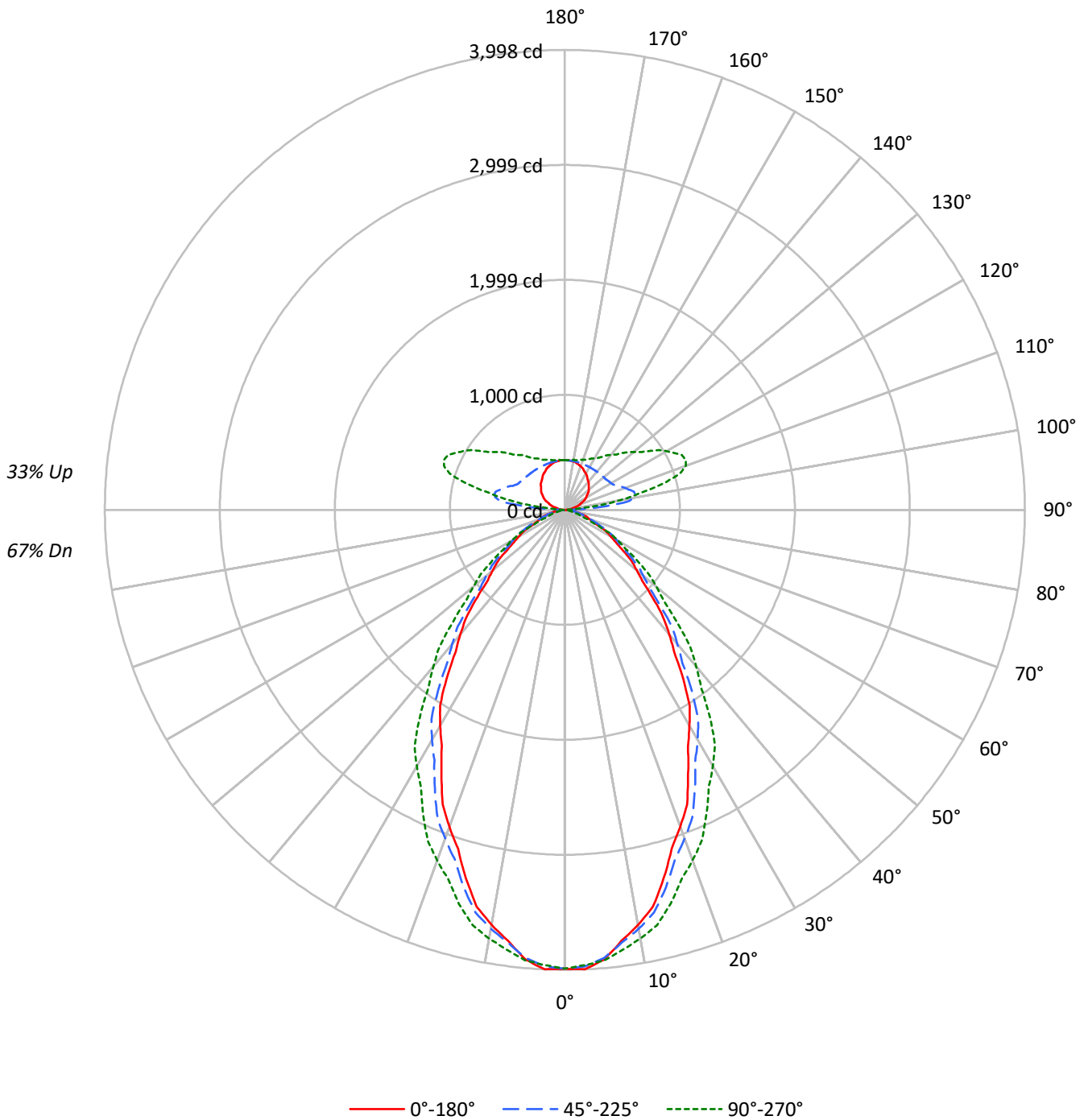
Lumens per Lamp: N/A  
Luminaire Lumens: 8633.9 lumens  
Efficiency: N/A  
Efficacy: 98.3 lumens/watt  
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02  
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')  
CIE Type: Semi-Direct

Input Watts (W): 87.8  
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									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	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°	24532	24532	24532
5°	24226	24140	24280
10°	22889	23097	23632
15°	21130	21620	22590
20°	19188	19910	21227
25°	17210	18149	19776
30°	15388	16395	18272
35°	13456	14429	16492
40°	11326	12225	14277
45°	9347	10154	11920
50°	7803	8508	9931
55°	6625	7301	8201
60°	5662	6329	6544
65°	4509	5324	4228
70°	3998	4154	2581
75°	3703	3370	1580
80°	3411	3099	1364
85°	3091	2844	1115



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	365.8	4.2
10°-20°	951.6	11.0
20°-30°	1232.5	14.3
30°-40°	1207.0	14.0
40°-50°	923.9	10.7
50°-60°	615.6	7.1
60°-70°	335.9	3.9
70°-80°	140.0	1.6
80°-90°	41.3	0.5
90°-100°	207.4	2.4
100°-110°	563.3	6.5
110°-120°	579.1	6.7
120°-130°	463.0	5.4
130°-140°	363.8	4.2
140°-150°	279.0	3.2
150°-160°	200.6	2.3
160°-170°	122.7	1.4
170°-180°	41.3	0.5
0°-30°	2549.9	29.5
0°-40°	3756.9	43.5
0°-60°	5296.4	61.3
0°-90°	5813.6	67.3
90°-120°	1349.8	15.6
90°-150°	2455.6	28.4
90°-180°	2820.0	32.7
0°-180°	8633.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	3988	3988	3988	3988	3988	
5°	3924	3884	3910	3919	3932	365
15°	3318	3306	3395	3488	3548	927
25°	2536	2543	2674	2791	2914	1166
35°	1792	1801	1922	2051	2196	1114
45°	1075	1095	1167	1256	1370	838
55°	618	644	681	707	765	560
65°	310	335	366	320	290	322
75°	156	156	142	97	66	166
85°	44	44	40	26	16	48
90°	1	6	10	12	12	4
95°	31	113	361	157	106	32
105°	100	156	619	943	888	106
115°	178	216	496	986	1124	175
125°	244	278	449	756	892	218
135°	294	327	436	616	694	228
145°	340	365	430	523	562	214
155°	385	398	428	470	483	177
165°	417	422	429	447	449	118
175°	432	433	430	436	435	41
180°	432	432	432	432	432	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	3988.5	3988.5	3988.5	3988.5	3988.5
2.5°	3998.3	3962.7	3971.7	3971.4	3960.5
5°	3923.7	3884.4	3909.7	3918.8	3932.5
7.5°	3778.1	3748.3	3794.6	3828.8	3856.5
10°	3664.7	3639.0	3698.0	3747.8	3783.7
12.5°	3533.1	3511.5	3584.6	3651.4	3698.3
15°	3318.2	3306.2	3395.2	3487.6	3547.5
17.5°	3088.2	3082.4	3184.5	3292.3	3368.9
20°	2931.4	2929.7	3041.7	3154.0	3242.9
22.5°	2773.2	2777.0	2894.7	3011.4	3112.7
25°	2535.9	2542.7	2674.2	2790.7	2913.9
27.5°	2316.4	2319.5	2455.4	2578.4	2709.9
30°	2166.6	2175.2	2308.4	2435.8	2572.7
32.5°	2016.8	2026.7	2157.2	2288.8	2428.4
35°	1792.1	1800.7	1921.6	2050.9	2196.4
37.5°	1560.4	1572.0	1679.4	1801.7	1944.7
40°	1410.6	1427.7	1522.6	1637.8	1778.1
42.5°	1266.4	1287.6	1375.6	1484.9	1611.5
45°	1074.6	1095.1	1167.3	1255.7	1370.3
47.5°	909.4	933.0	988.5	1064.5	1162.4
50°	815.5	837.8	889.1	945.4	1037.8
52.5°	732.9	755.2	800.8	844.3	923.0
55°	617.8	643.5	680.8	706.6	764.8
57.5°	523.3	547.9	577.5	589.2	624.4
60°	460.3	487.7	514.5	513.2	532.0
62.5°	402.9	426.1	452.9	434.4	435.4
65°	309.8	335.4	365.8	319.6	290.5
67.5°	250.3	255.7	287.0	222.9	188.3
70°	222.3	222.3	231.0	172.6	143.5
72.5°	195.7	195.7	187.6	140.4	109.9
75°	155.8	155.8	141.8	97.3	66.5
77.5°	120.1	118.7	108.5	72.6	48.3
80°	96.3	96.3	87.5	57.3	38.5
82.5°	75.3	75.3	67.9	44.8	28.7
85°	43.8	43.8	40.3	26.0	15.8
87.5°	15.7	16.5	15.9	10.9	9.5
90°	1.4	5.5	9.7	12.5	12.5
92.5°	12.5	56.8	98.6	42.4	35.8
95°	30.6	113.4	361.1	157.2	105.6
97.5°	50.6	125.2	553.6	430.7	302.5
100°	63.9	133.1	612.5	620.9	501.4
102.5°	77.2	141.0	628.0	767.9	662.5
105°	100.0	155.7	619.4	943.2	887.5
107.5°	123.6	172.8	583.6	1033.7	1049.1
110°	140.3	185.1	556.9	1051.5	1118.0



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	154.7	197.4	530.3	1036.7	1136.9
115°	177.8	215.8	495.8	986.4	1123.6
117.5°	199.4	235.8	473.9	915.2	1069.7
120°	213.9	249.2	463.9	867.4	1020.8
122.5°	226.1	261.4	457.2	819.5	967.5
125°	244.4	278.4	448.6	755.8	891.6
127.5°	260.8	294.5	443.9	707.6	824.2
130°	270.8	303.4	441.7	677.4	781.9
132.5°	280.8	313.4	439.4	651.5	744.2
135°	294.4	327.0	436.1	615.7	694.4
137.5°	309.2	338.8	434.4	584.0	650.3
140°	318.0	346.6	433.3	563.8	623.6
142.5°	326.9	353.3	432.2	548.1	598.0
145°	340.3	364.7	430.5	523.1	562.5
147.5°	355.3	376.2	429.2	503.5	534.4
150°	365.3	382.9	429.2	492.2	516.7
152.5°	373.0	388.5	428.0	482.1	502.2
155°	384.7	398.3	427.8	469.7	483.3
157.5°	396.1	406.7	427.8	461.3	471.7
160°	402.8	412.3	427.8	455.7	463.9
162.5°	409.4	416.8	428.9	451.2	457.2
165°	416.7	422.1	429.2	447.2	448.6
167.5°	424.2	426.9	430.5	442.5	443.6
170°	426.4	429.1	430.5	440.3	440.3
172.5°	428.6	430.2	430.5	438.0	438.0
175°	431.9	433.3	430.5	436.1	434.7
177.5°	433.0	433.0	429.7	434.1	431.9
180°	431.9	431.9	431.9	431.9	431.9

(END OF REPORT)