

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: P519154

Luminaire Tested: **SQ4-WB-050U-125D-930-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P519154  
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-930-1D-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: 3000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

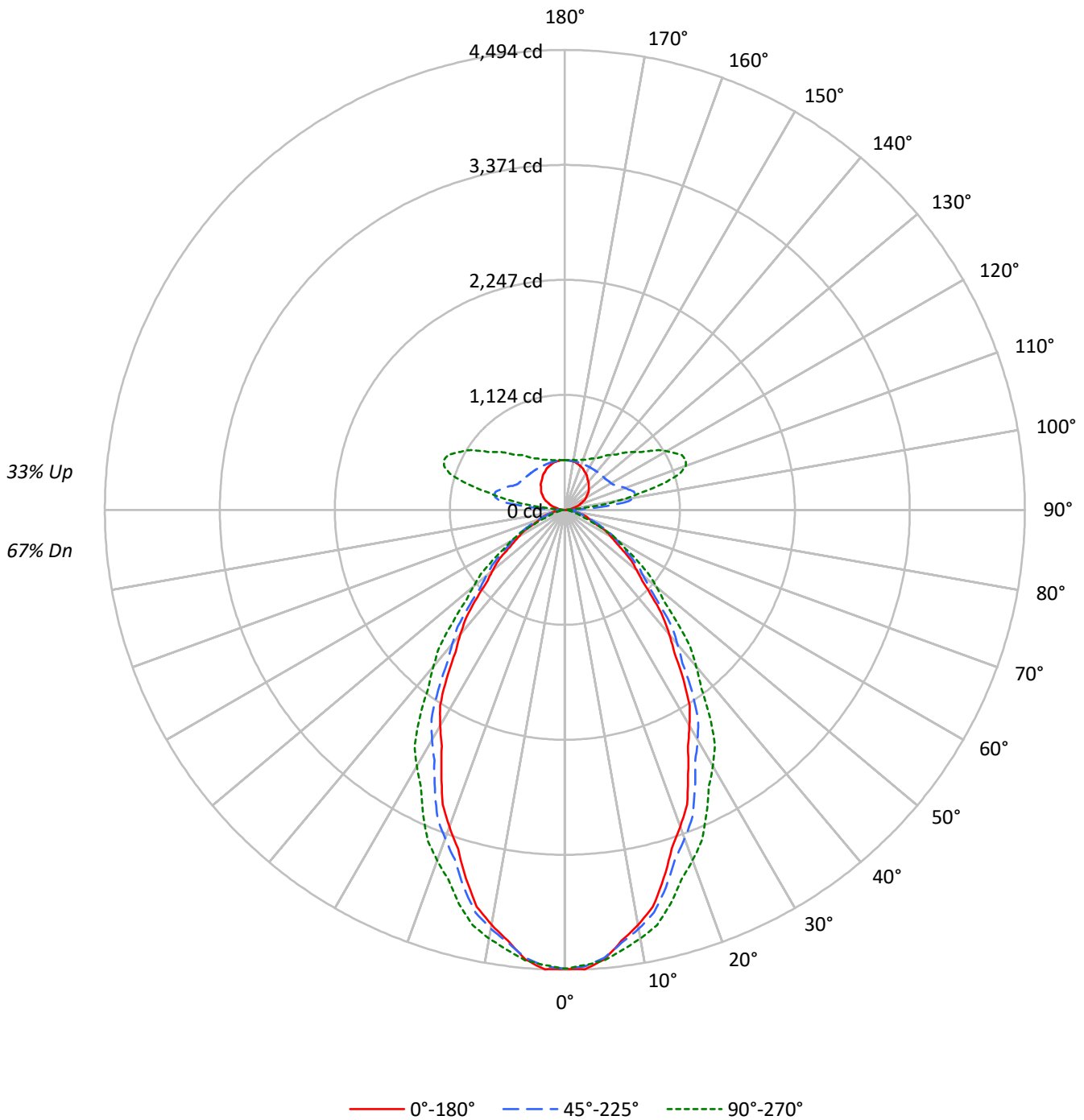
Lumens per Lamp: N/A  
Luminaire Lumens: 9705.1 lumens  
Efficiency: N/A  
Efficacy: 84.5 lumens/watt  
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02  
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')  
CIE Type: Semi-Direct

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																		
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°	20682	20682	20682
5°	20424	20351	20470
10°	19296	19472	19923
15°	17813	18227	19044
20°	16176	16785	17895
25°	14509	15301	16672
30°	12973	13822	15404
35°	11345	12164	13904
40°	9548	10307	12036
45°	7880	8561	10049
50°	6579	7172	8372
55°	5585	6155	6914
60°	4774	5336	5517
65°	3801	4488	3565
70°	3369	3503	2176
75°	3121	2839	1333
80°	2874	2614	1150
85°	2604	2392	937



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	411.2	4.2
10°-20°	1069.6	11.0
20°-30°	1385.5	14.3
30°-40°	1356.7	14.0
40°-50°	1038.5	10.7
50°-60°	692.0	7.1
60°-70°	377.6	3.9
70°-80°	157.3	1.6
80°-90°	46.4	0.5
90°-100°	233.1	2.4
100°-110°	633.2	6.5
110°-120°	651.0	6.7
120°-130°	520.5	5.4
130°-140°	409.0	4.2
140°-150°	313.6	3.2
150°-160°	225.5	2.3
160°-170°	137.9	1.4
170°-180°	46.5	0.5
0°-30°	2866.3	29.5
0°-40°	4223.1	43.5
0°-60°	5953.6	61.3
0°-90°	6534.9	67.3
90°-120°	1517.2	15.6
90°-150°	2760.3	28.4
90°-180°	3170.0	32.7
0°-180°	9705.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	4483	4483	4483	4483	4483	
5°	4411	4366	4395	4405	4420	410
15°	3730	3716	3816	3920	3988	1042
25°	2850	2858	3006	3137	3276	1311
35°	2014	2024	2160	2305	2469	1252
45°	1208	1231	1312	1412	1540	942
55°	694	723	765	794	860	630
65°	348	377	411	359	327	362
75°	175	175	159	109	75	187
85°	49	49	45	29	18	53
90°	2	6	11	14	14	5
95°	34	128	406	177	119	36
105°	112	175	696	1060	998	119
115°	200	243	557	1109	1263	197
125°	275	313	504	850	1002	245
135°	331	368	490	692	781	256
145°	382	410	484	588	632	240
155°	432	448	481	528	543	199
165°	468	474	482	503	504	132
175°	486	487	484	490	489	46
180°	486	486	486	486	486	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	4483.4	4483.4	4483.4	4483.4	4483.4
2.5°	4494.4	4454.4	4464.5	4464.2	4451.9
5°	4410.6	4366.3	4394.8	4405.0	4420.4
7.5°	4246.9	4213.4	4265.4	4303.9	4335.0
10°	4119.4	4090.6	4156.8	4212.8	4253.2
12.5°	3971.5	3947.2	4029.3	4104.5	4157.2
15°	3729.9	3716.4	3816.5	3920.3	3987.6
17.5°	3471.4	3464.9	3579.6	3700.8	3787.0
20°	3295.1	3293.2	3419.1	3545.3	3645.3
22.5°	3117.3	3121.5	3253.8	3385.1	3498.9
25°	2850.5	2858.2	3006.0	3137.0	3275.5
27.5°	2603.8	2607.3	2760.0	2898.4	3046.1
30°	2435.5	2445.1	2594.8	2738.0	2891.9
32.5°	2267.1	2278.2	2424.8	2572.8	2729.8
35°	2014.5	2024.1	2160.0	2305.4	2468.9
37.5°	1754.0	1767.1	1887.8	2025.2	2186.0
40°	1585.6	1604.8	1711.5	1841.0	1998.7
42.5°	1423.5	1447.4	1546.3	1669.1	1811.4
45°	1207.9	1231.0	1312.2	1411.5	1540.4
47.5°	1022.2	1048.7	1111.1	1196.6	1306.6
50°	916.7	941.7	999.4	1062.7	1166.6
52.5°	823.9	848.9	900.2	949.0	1037.5
55°	694.4	723.3	765.3	794.3	859.7
57.5°	588.2	615.9	649.2	662.3	701.9
60°	517.4	548.2	578.4	576.9	598.0
62.5°	452.9	479.0	509.1	488.3	489.5
65°	348.2	377.1	411.2	359.3	326.6
67.5°	281.3	287.5	322.6	250.5	211.7
70°	249.8	249.8	259.7	194.0	161.3
72.5°	219.9	219.9	210.9	157.8	123.5
75°	175.1	175.1	159.3	109.4	74.8
77.5°	135.0	133.4	122.0	81.6	54.3
80°	108.2	108.2	98.4	64.4	43.3
82.5°	84.6	84.6	76.3	50.3	32.3
85°	49.2	49.2	45.2	29.2	17.7
87.5°	17.6	18.5	17.9	12.2	10.7
90°	1.6	6.1	10.9	14.1	14.1
92.5°	14.1	63.8	110.8	47.6	40.3
95°	34.3	127.5	405.9	176.7	118.7
97.5°	56.8	140.8	622.3	484.1	340.0
100°	71.8	149.7	688.5	697.9	563.6
102.5°	86.8	158.5	706.0	863.1	744.7
105°	112.4	175.0	696.3	1060.2	997.6
107.5°	138.9	194.2	656.0	1161.9	1179.3
110°	157.7	208.1	626.0	1182.0	1256.8

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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	173.9	221.8	596.1	1165.3	1278.0
115°	199.8	242.6	557.3	1108.8	1263.0
117.5°	224.2	265.1	532.7	1028.7	1202.4
120°	240.4	280.1	521.4	975.0	1147.5
122.5°	254.2	293.8	513.9	921.1	1087.5
125°	274.8	312.9	504.3	849.6	1002.3
127.5°	293.2	331.0	499.0	795.4	926.4
130°	304.4	341.1	496.5	761.4	878.9
132.5°	315.7	352.3	494.0	732.4	836.5
135°	331.0	367.6	490.2	692.1	780.6
137.5°	347.5	380.8	488.3	656.5	730.9
140°	357.5	389.6	487.1	633.8	701.0
142.5°	367.5	397.1	485.8	616.1	672.2
145°	382.5	410.0	484.0	588.0	632.3
147.5°	399.4	422.9	482.4	565.9	600.7
150°	410.6	430.4	482.4	553.3	580.8
152.5°	419.3	436.7	481.2	541.9	564.5
155°	432.4	447.7	480.8	528.0	543.3
157.5°	445.3	457.2	480.8	518.6	530.2
160°	452.7	463.4	480.8	512.3	521.4
162.5°	460.2	468.5	482.1	507.2	513.9
165°	468.4	474.5	482.4	502.7	504.3
167.5°	476.8	479.8	484.0	497.4	498.6
170°	479.3	482.3	484.0	494.9	494.9
172.5°	481.8	483.6	484.0	492.4	492.4
175°	485.5	487.1	484.0	490.2	488.7
177.5°	486.8	486.8	483.0	488.0	485.5
180°	485.5	485.5	485.5	485.5	485.5

(END OF REPORT)