

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: P519148

Luminaire Tested: **SQ4-WB-050U-125D-840-1D-UNV-STD-W-4**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P519148  
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-840-1D-UNV-STD-W-4  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE  
DOWNLIGHT 1250 LUMENS PER FOOT  
UPLIGHT 500 LUMENS PER FOOT  
Light Source: 4000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

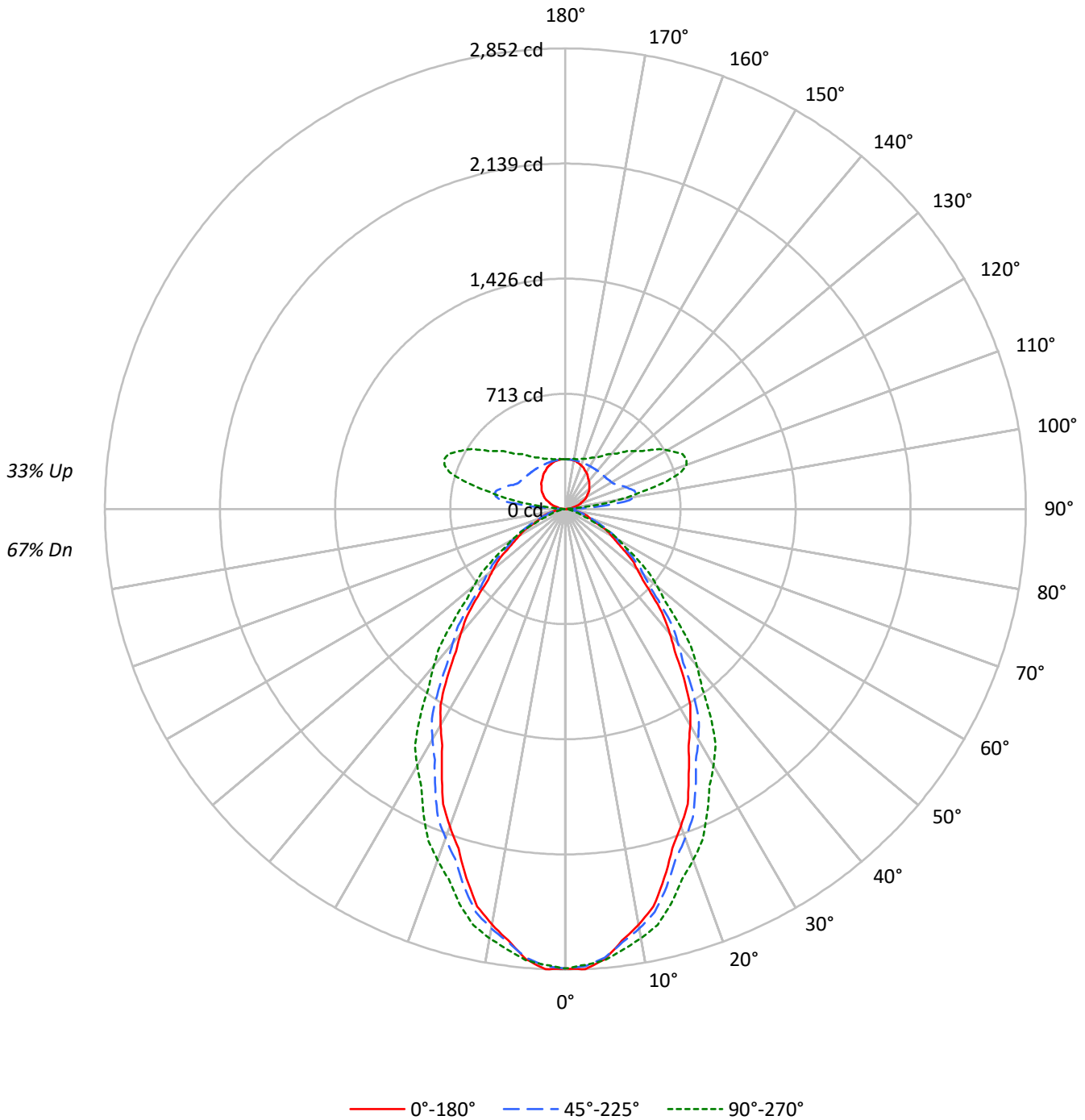
Lumens per Lamp: N/A  
Luminaire Lumens: 6159.4 lumens  
Efficiency: N/A  
Efficacy: 110.2 lumens/watt  
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02  
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')  
CIE Type: Semi-Direct

Input Watts (W): 55.9  
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°	26252	26252	26252
5°	25925	25832	25982
10°	24493	24715	25288
15°	22611	23135	24173
20°	20533	21305	22715
25°	18417	19420	21162
30°	16467	17544	19552
35°	14400	15441	17648
40°	12120	13082	15278
45°	10002	10866	12756
50°	8351	9104	10627
55°	7089	7813	8776
60°	6060	6774	7005
65°	4825	5696	4526
70°	4278	4446	2762
75°	3960	3604	1690
80°	3650	3315	1461
85°	3303	3038	1186



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	261.0	4.2
10°-20°	678.8	11.0
20°-30°	879.3	14.3
30°-40°	861.1	14.0
40°-50°	659.1	10.7
50°-60°	439.2	7.1
60°-70°	239.7	3.9
70°-80°	99.9	1.6
80°-90°	29.5	0.5
90°-100°	147.9	2.4
100°-110°	401.8	6.5
110°-120°	413.2	6.7
120°-130°	330.3	5.4
130°-140°	259.5	4.2
140°-150°	199.0	3.2
150°-160°	143.1	2.3
160°-170°	87.5	1.4
170°-180°	29.5	0.5
0°-30°	1819.1	29.5
0°-40°	2680.2	43.5
0°-60°	3778.5	61.3
0°-90°	4147.4	67.3
90°-120°	962.9	15.6
90°-150°	1751.8	28.4
90°-180°	2012.0	32.7
0°-180°	6159.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2845	2845	2845	2845	2845	
5°	2799	2771	2789	2796	2805	260
15°	2367	2359	2422	2488	2531	661
25°	1809	1814	1908	1991	2079	832
35°	1278	1285	1371	1463	1567	795
45°	767	781	833	896	978	598
55°	441	459	486	504	546	400
65°	221	239	261	228	207	230
75°	111	111	101	69	47	119
85°	31	31	29	19	11	34
90°	1	4	7	9	9	3
95°	22	81	258	112	75	23
105°	71	111	442	673	633	76
115°	127	154	354	704	802	125
125°	174	199	320	539	636	155
135°	210	233	311	439	495	162
145°	243	260	307	373	401	152
155°	274	284	305	335	345	127
165°	297	301	306	319	320	84
175°	308	309	307	311	310	29
180°	308	308	308	308	308	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2845.4	2845.4	2845.4	2845.4	2845.4
2.5°	2852.4	2827.0	2833.4	2833.2	2825.4
5°	2799.2	2771.1	2789.2	2795.7	2805.4
7.5°	2695.3	2674.1	2707.1	2731.5	2751.3
10°	2614.4	2596.1	2638.1	2673.7	2699.3
12.5°	2520.5	2505.1	2557.2	2604.9	2638.4
15°	2367.2	2358.7	2422.1	2488.0	2530.8
17.5°	2203.2	2199.0	2271.8	2348.7	2403.4
20°	2091.3	2090.1	2169.9	2250.0	2313.5
22.5°	1978.4	1981.1	2065.1	2148.4	2220.6
25°	1809.1	1814.0	1907.7	1990.9	2078.8
27.5°	1652.6	1654.7	1751.7	1839.5	1933.2
30°	1545.7	1551.8	1646.8	1737.7	1835.3
32.5°	1438.8	1445.9	1538.9	1632.8	1732.5
35°	1278.5	1284.6	1370.9	1463.1	1566.9
37.5°	1113.2	1121.5	1198.1	1285.3	1387.4
40°	1006.3	1018.5	1086.2	1168.4	1268.5
42.5°	903.4	918.6	981.3	1059.3	1149.6
45°	766.6	781.2	832.8	895.8	977.6
47.5°	648.7	665.6	705.2	759.4	829.3
50°	581.8	597.7	634.3	674.5	740.4
52.5°	522.9	538.8	571.3	602.3	658.5
55°	440.7	459.0	485.7	504.1	545.6
57.5°	373.3	390.9	412.0	420.3	445.5
60°	328.4	347.9	367.1	366.1	379.6
62.5°	287.4	304.0	323.1	309.9	310.6
65°	221.0	239.3	260.9	228.0	207.3
67.5°	178.5	182.4	204.8	159.0	134.3
70°	158.6	158.6	164.8	123.1	102.4
72.5°	139.6	139.6	133.8	100.1	78.4
75°	111.1	111.1	101.1	69.4	47.4
77.5°	85.6	84.7	77.4	51.8	34.5
80°	68.7	68.7	62.4	40.9	27.5
82.5°	53.7	53.7	48.4	32.0	20.5
85°	31.2	31.2	28.7	18.6	11.2
87.5°	11.2	11.8	11.4	7.8	6.8
90°	1.0	3.9	6.9	8.9	8.9
92.5°	8.9	40.5	70.3	30.2	25.6
95°	21.8	80.9	257.6	112.1	75.3
97.5°	36.1	89.3	394.9	307.3	215.8
100°	45.6	95.0	437.0	442.9	357.7
102.5°	55.1	100.6	448.0	547.8	472.6
105°	71.3	111.1	441.9	672.9	633.1
107.5°	88.2	123.3	416.3	737.4	748.5
110°	100.1	132.0	397.3	750.1	797.6



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	110.4	140.8	378.3	739.6	811.1
115°	126.8	154.0	353.7	703.7	801.6
117.5°	142.3	168.2	338.1	652.9	763.1
120°	152.6	177.8	330.9	618.8	728.3
122.5°	161.3	186.5	326.2	584.6	690.2
125°	174.4	198.6	320.0	539.2	636.1
127.5°	186.1	210.1	316.7	504.8	588.0
130°	193.2	216.5	315.1	483.2	557.8
132.5°	200.3	223.6	313.5	464.8	530.9
135°	210.1	233.3	311.1	439.2	495.4
137.5°	220.6	241.7	309.9	416.6	463.9
140°	226.9	247.2	309.1	402.2	444.9
142.5°	233.2	252.0	308.3	391.0	426.6
145°	242.8	260.2	307.2	373.2	401.3
147.5°	253.5	268.4	306.2	359.2	381.3
150°	260.6	273.2	306.2	351.1	368.6
152.5°	266.1	277.2	305.4	343.9	358.3
155°	274.5	284.1	305.2	335.1	344.8
157.5°	282.6	290.1	305.2	329.1	336.5
160°	287.3	294.1	305.2	325.1	330.9
162.5°	292.1	297.3	306.0	321.9	326.2
165°	297.2	301.1	306.2	319.1	320.0
167.5°	302.6	304.5	307.2	315.7	316.5
170°	304.2	306.1	307.2	314.1	314.1
172.5°	305.8	306.9	307.2	312.5	312.5
175°	308.1	309.1	307.2	311.1	310.1
177.5°	308.9	308.9	306.6	309.7	308.1
180°	308.1	308.1	308.1	308.1	308.1

(END OF REPORT)