

Scaled data based on original data using  
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State  
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: CORELITE

Report Number: P521764

Luminaire Tested: **SQ4-WB-050U-050D-93050-1D-UNV-STD-W-4 (3000K)**

Issue Date: 5/5/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P521764  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2101-105-50,  
Test Lab: INNOVATION CENTER  
Issue Date: 5/5/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: SQ4-WB-050U-050D-93050-1D-UNV-STD-W-4 (3000K)  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE  
DOWNLIGHT 500 LUMENS PER FOOT  
UPLIGHT 500 LUMENS PER FOOT  
Light Source: 3000K/5000K CCT, 90 CRI LEDS, TUNED TO 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

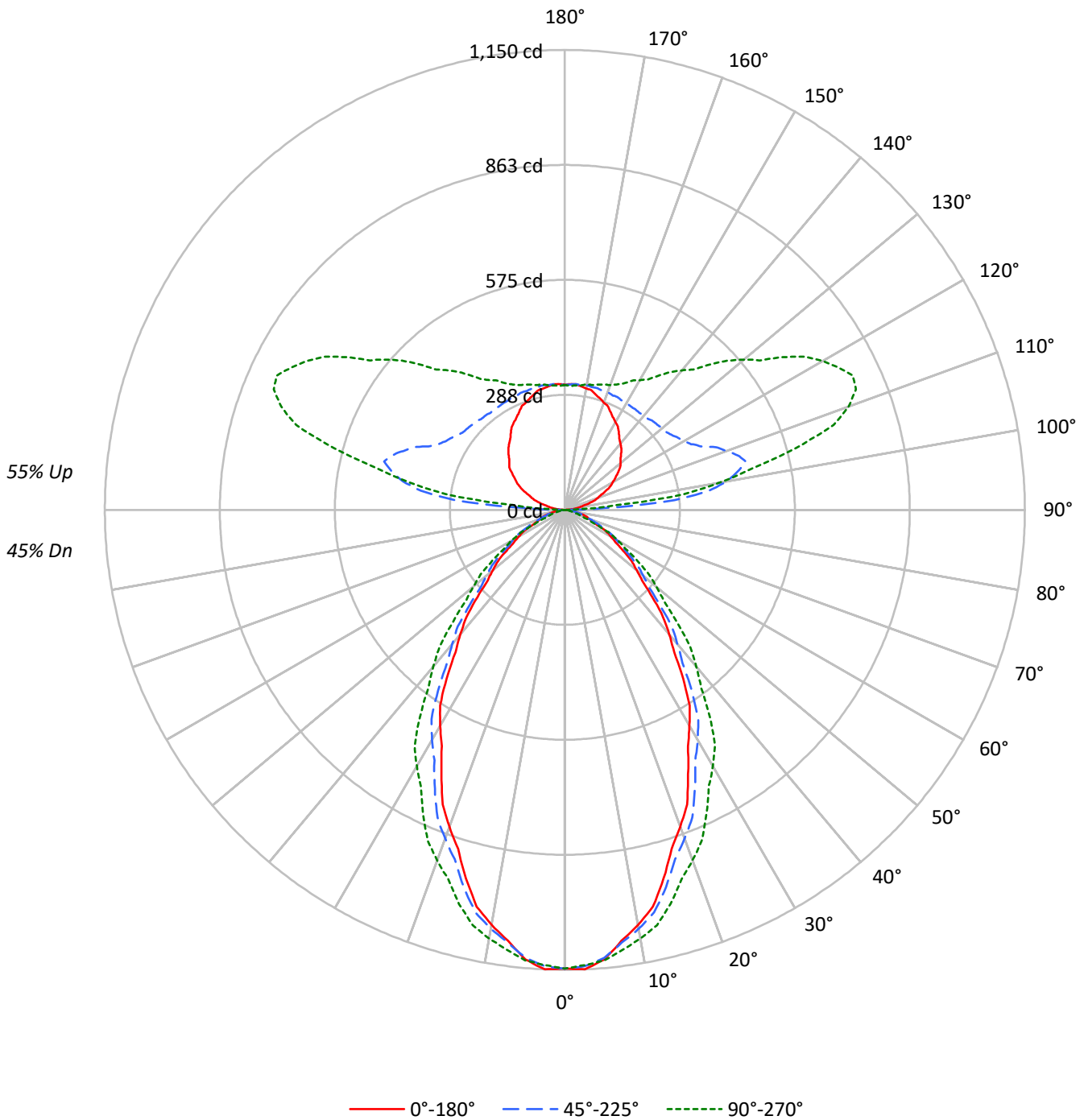
Lumens per Lamp: N/A  
Luminaire Lumens: 3694.4 lumens  
Efficiency: N/A  
Efficacy: 100.1 lumens/watt  
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02  
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')  
CIE Type: General Diffuse

Input Watts (W): 36.9  
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	106	106	106	106	97	97	97	97	81	81	81	66	66	66	52	52	52	45				
1	98	94	90	87	90	86	83	81	72	70	68	59	58	57	47	46	46	40				
2	90	83	78	73	82	77	72	68	65	61	58	53	51	49	43	41	40	35				
3	83	74	67	62	76	68	63	58	58	54	50	48	45	43	39	37	35	31				
4	76	66	59	54	70	61	55	50	52	48	44	44	40	38	36	33	32	28				
5	70	60	52	47	65	55	49	44	47	42	39	40	36	33	33	30	28	25				
6	65	54	46	41	60	50	44	39	43	38	34	36	33	30	30	28	25	23				
7	61	49	42	37	56	46	39	35	39	34	31	33	30	27	28	25	23	21				
8	56	45	38	33	52	42	35	31	36	31	28	31	27	24	26	23	21	19				
9	53	41	34	29	49	39	32	28	33	29	25	29	25	22	24	21	19	17				
10	49	38	31	27	46	36	30	25	31	26	23	27	23	20	23	20	18	16				

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

	0°	45°	90°
0°	10584	10584	10584
5°	10452	10415	10476
10°	9875	9964	10196
15°	9116	9328	9747
20°	8279	8590	9159
25°	7425	7830	8532
30°	6639	7074	7884
35°	5806	6225	7115
40°	4886	5274	6159
45°	4033	4381	5142
50°	3367	3670	4284
55°	2858	3150	3539
60°	2443	2731	2823
65°	1945	2297	1825
70°	1724	1791	1114
75°	1597	1454	681
80°	1472	1339	590
85°	1334	1228	476



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	105.2	2.8
10°-20°	273.7	7.4
20°-30°	354.5	9.6
30°-40°	347.2	9.4
40°-50°	265.7	7.2
50°-60°	177.1	4.8
60°-70°	96.6	2.6
70°-80°	40.3	1.1
80°-90°	11.4	0.3
90°-100°	161.0	4.4
100°-110°	389.2	10.5
110°-120°	415.1	11.2
120°-130°	336.2	9.1
130°-140°	260.3	7.0
140°-150°	198.6	5.4
150°-160°	143.7	3.9
160°-170°	88.5	2.4
170°-180°	30.0	0.8
0°-30°	733.4	19.9
0°-40°	1080.6	29.3
0°-60°	1523.4	41.2
0°-90°	1671.7	45.2
90°-120°	965.3	26.1
90°-150°	1760.4	47.7
90°-180°	2023.0	54.8
0°-180°	3694.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1147	1147	1147	1147	1147	
5°	1129	1117	1125	1127	1131	105
15°	954	951	977	1003	1020	267
25°	729	731	769	803	838	335
35°	516	518	553	590	632	320
45°	309	315	336	361	394	241
55°	178	185	196	203	220	161
65°	89	96	105	92	84	93
75°	45	45	41	28	19	48
85°	13	13	12	8	4	14
90°	0	0	0	0	0	1
95°	16	81	276	179	126	18
105°	62	108	468	605	598	66
115°	114	146	376	712	795	113
125°	162	187	326	567	666	145
135°	199	222	313	447	514	154
145°	236	253	307	380	410	147
155°	270	282	311	336	349	125
165°	298	303	315	320	324	84
175°	316	314	316	313	312	30
180°	312	312	312	312	312	

TEST NUMBER: P521764

CATALOG NUMBER: SQ4-WB-050U-050D-93050-1D-UNV-STD-W-4 (3000K)

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1147.2	1147.2	1147.2	1147.2	1147.2
2.5°	1150.0	1139.8	1142.4	1142.3	1139.2
5°	1128.6	1117.3	1124.6	1127.2	1131.1
7.5°	1086.7	1078.1	1091.4	1101.3	1109.3
10°	1054.1	1046.7	1063.6	1078.0	1088.3
12.5°	1016.2	1010.0	1031.0	1050.3	1063.7
15°	954.4	951.0	976.6	1003.1	1020.4
17.5°	888.3	886.6	916.0	947.0	969.0
20°	843.2	842.7	874.9	907.2	932.8
22.5°	797.7	798.7	832.6	866.2	895.3
25°	729.4	731.4	769.2	802.7	838.1
27.5°	666.3	667.2	706.2	741.6	779.4
30°	623.2	625.6	664.0	700.6	740.0
32.5°	580.1	583.0	620.5	658.3	698.5
35°	515.5	517.9	552.7	589.9	631.7
37.5°	448.8	452.2	483.0	518.2	559.4
40°	405.7	410.6	437.9	471.1	511.4
42.5°	364.2	370.4	395.7	427.1	463.5
45°	309.1	315.0	335.8	361.2	394.1
47.5°	261.6	268.3	284.3	306.2	334.3
50°	234.6	241.0	255.7	271.9	298.5
52.5°	210.8	217.2	230.3	242.8	265.5
55°	177.7	185.1	195.8	203.2	220.0
57.5°	150.5	157.6	166.1	169.5	179.6
60°	132.4	140.3	148.0	147.6	153.0
62.5°	115.9	122.6	130.3	124.9	125.2
65°	89.1	96.5	105.2	91.9	83.6
67.5°	72.0	73.6	82.6	64.1	54.2
70°	63.9	63.9	66.4	49.6	41.3
72.5°	56.3	56.3	54.0	40.4	31.6
75°	44.8	44.8	40.8	28.0	19.1
77.5°	34.5	34.1	31.2	20.9	13.9
80°	27.7	27.7	25.2	16.5	11.1
82.5°	21.6	21.6	19.5	12.9	8.3
85°	12.6	12.6	11.6	7.5	4.5
87.5°	4.4	4.4	4.0	2.4	2.0
90°	0.0	0.0	0.0	0.0	0.0
92.5°	5.3	43.6	102.7	49.9	33.9
95°	15.9	80.6	275.9	179.4	125.7
97.5°	28.2	89.3	363.4	350.1	300.5
100°	37.7	94.6	411.5	434.4	393.7
102.5°	46.7	99.5	443.3	504.7	480.5
105°	62.2	107.5	467.8	605.2	597.5
107.5°	77.4	116.9	453.4	685.9	704.1
110°	88.0	124.9	430.1	720.6	754.9

TEST NUMBER: P521764

CATALOG NUMBER: SQ4-WB-050U-050D-93050-1D-UNV-STD-W-4 (3000K)

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	98.6	132.9	409.4	729.1	787.7
115°	113.8	145.5	375.8	712.5	794.6
117.5°	128.9	158.8	356.1	674.1	770.4
120°	138.9	166.8	343.4	644.1	745.0
122.5°	149.5	175.3	335.4	613.3	712.7
125°	162.1	186.7	326.2	566.6	665.6
127.5°	174.5	197.7	319.7	527.0	614.0
130°	181.9	204.6	317.6	499.5	584.9
132.5°	188.8	212.5	314.4	479.6	552.1
135°	199.2	222.4	313.0	446.8	514.1
137.5°	208.9	232.4	308.3	424.6	475.3
140°	216.4	237.7	308.3	408.6	455.2
142.5°	223.8	245.1	305.7	394.7	434.0
145°	235.5	253.0	307.0	379.8	409.6
147.5°	246.5	263.5	306.2	362.6	387.2
150°	253.4	268.3	308.3	355.1	374.5
152.5°	260.8	275.2	307.8	347.1	364.4
155°	269.9	281.6	311.0	336.4	348.7
157.5°	280.9	290.9	310.3	332.3	339.5
160°	285.2	293.6	313.0	327.0	332.1
162.5°	292.0	299.4	311.9	325.3	328.4
165°	298.4	302.9	314.9	319.7	324.2
167.5°	306.2	309.2	314.1	319.3	319.4
170°	308.3	310.3	316.3	315.7	318.9
172.5°	312.0	313.4	314.7	316.1	314.1
175°	315.6	314.3	315.6	312.9	312.3
177.5°	314.9	314.9	313.9	312.8	310.2
180°	312.3	312.3	312.3	312.3	312.3

(END OF REPORT)