

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: P521573

Luminaire Tested: **SQ4-F-100U-075D-93050-1D-UNV-STD-W-4 (5000K)**

Issue Date: 5/5/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P521573  
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-F-100U-075D-93050-1D-UNV-STD-W-4 (5000K)  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE  
DOWNLIGHT 750 LUMENS PER FOOT  
UPLIGHT 1000 LUMENS PER FOOT  
Light Source: 3000K/5000K CCT, 90 CRI LEDS, TUNED TO 5000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

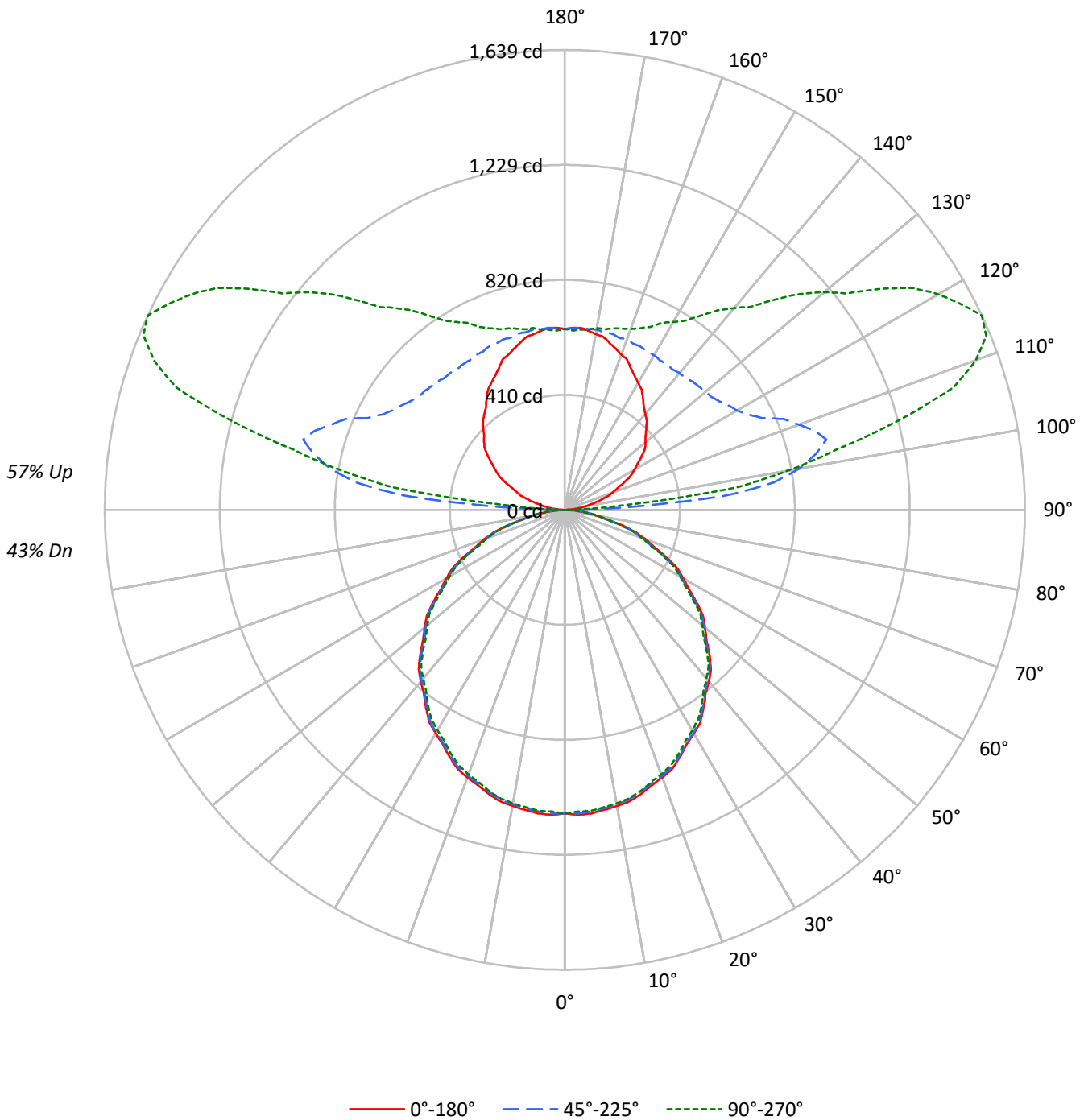
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 7258.4 lumens  
Efficiency: N/A  
Efficacy: 113.9 lumens/watt  
Spacing Criteria (0/90/45): 1.27 / 1.25 / 1.38  
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')  
CIE Type: General Diffuse

Input Watts (W): 63.7  
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	0
RCR																		
0	105	105	105	105	96	96	96	96	79	79	79	64	64	64	49	49	49	43
1	96	92	88	84	88	84	81	78	69	67	65	56	54	53	43	42	41	36
2	87	80	74	69	79	73	68	63	60	57	53	49	46	44	38	36	35	30
3	79	70	63	57	72	64	58	53	53	48	45	43	40	37	33	31	29	25
4	73	62	54	48	66	57	50	45	47	42	38	38	34	31	30	27	25	21
5	67	55	47	41	60	50	43	38	42	37	32	34	30	27	27	24	22	18
6	61	49	41	35	56	45	38	33	38	32	28	31	27	24	24	21	19	16
7	57	44	36	31	51	41	34	29	34	29	25	28	24	21	22	19	17	14
8	52	40	32	27	48	37	30	25	31	26	22	25	21	18	20	17	15	13
9	49	37	29	24	44	34	27	23	28	23	19	23	19	16	19	16	14	11
10	45	33	26	21	41	31	24	20	26	21	17	22	18	15	17	14	12	10

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

	0°	45°	90°
0°	9984	9984	9984
5°	10060	9993	9965
10°	10042	9984	9946
15°	10013	9944	9925
20°	9961	9911	9850
25°	9889	9847	9764
30°	9803	9770	9672
35°	9707	9660	9579
40°	9615	9552	9453
45°	9507	9426	9333
50°	9354	9281	9163
55°	9198	9082	8966
60°	8981	8829	8735
65°	8702	8479	8366
70°	8182	7961	7877
75°	7304	7158	7051
80°	6041	6100	6041
85°	4340	4880	5102



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	102.4	1.4
10°-20°	293.3	4.0
20°-30°	443.6	6.1
30°-40°	534.1	7.4
40°-50°	554.8	7.6
50°-60°	503.4	6.9
60°-70°	383.9	5.3
70°-80°	213.9	2.9
80°-90°	56.2	0.8
90°-100°	332.2	4.6
100°-110°	802.9	11.1
110°-120°	856.3	11.8
120°-130°	693.6	9.6
130°-140°	537.0	7.4
140°-150°	409.7	5.6
150°-160°	296.5	4.1
160°-170°	182.6	2.5
170°-180°	61.8	0.9
0°-30°	839.4	11.6
0°-40°	1373.5	18.9
0°-60°	2431.7	33.5
0°-90°	3085.7	42.5
90°-120°	1991.5	27.4
90°-150°	3631.7	50.0
90°-180°	4173.0	57.5
0°-180°	7258.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1082	1082	1082	1082	1082	
5°	1086	1076	1079	1077	1076	103
15°	1048	1036	1041	1039	1039	296
25°	971	961	967	958	959	447
35°	862	856	858	848	850	539
45°	729	722	722	713	715	561
55°	572	569	565	557	557	510
65°	399	395	388	382	383	393
75°	205	204	201	199	198	218
85°	41	46	46	48	48	50
90°	0	0	0	0	0	3
95°	33	166	569	370	259	37
105°	128	222	965	1249	1233	136
115°	235	300	775	1470	1639	232
125°	334	385	673	1169	1373	298
135°	411	459	646	922	1061	317
145°	486	522	633	784	845	304
155°	557	581	642	694	719	257
165°	616	625	650	660	669	174
175°	651	648	651	646	644	62
180°	644	644	644	644	644	

TEST NUMBER: P521573

CATALOG NUMBER: SQ4-F-100U-075D-93050-1D-UNV-STD-W-4 (5000K)

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1082.1	1082.1	1082.1	1082.1	1082.1
2.5°	1087.8	1079.8	1082.9	1080.4	1076.4
5°	1086.2	1076.2	1079.0	1077.0	1076.0
7.5°	1078.4	1068.4	1072.3	1069.2	1069.0
10°	1071.9	1061.8	1065.7	1062.6	1061.6
12.5°	1063.7	1052.8	1056.7	1053.6	1053.4
15°	1048.3	1036.3	1041.1	1039.1	1039.1
17.5°	1029.2	1017.4	1023.3	1019.6	1018.0
20°	1014.5	1003.5	1009.4	1003.2	1003.2
22.5°	998.9	987.9	993.0	986.0	986.0
25°	971.4	961.4	967.3	958.1	959.1
27.5°	941.5	932.5	937.6	928.8	929.2
30°	920.2	911.2	917.1	905.9	907.9
32.5°	898.1	889.9	893.4	883.7	884.1
35°	861.8	855.8	857.7	848.5	850.5
37.5°	824.5	817.5	819.4	810.0	812.0
40°	798.3	791.2	793.1	782.9	784.9
42.5°	770.4	764.2	765.3	755.1	757.9
45°	728.6	721.6	722.4	713.3	715.3
47.5°	683.7	678.1	676.9	668.6	670.4
50°	651.7	647.7	646.6	637.4	638.4
52.5°	619.8	616.5	613.8	605.5	608.1
55°	571.8	568.8	564.6	557.4	557.4
57.5°	522.0	519.0	513.8	506.7	508.7
60°	486.7	483.7	478.5	471.4	473.4
62.5°	451.5	448.5	442.5	436.1	437.4
65°	398.6	394.6	388.4	382.2	383.2
67.5°	341.8	338.0	332.8	326.9	328.1
70°	303.3	300.3	295.1	290.0	292.0
72.5°	263.1	260.1	255.8	253.1	252.7
75°	204.9	203.9	200.8	198.8	197.8
77.5°	149.8	151.2	147.6	146.7	146.5
80°	113.7	116.8	114.8	114.7	113.7
82.5°	81.8	86.4	85.3	85.3	85.1
85°	41.0	46.0	46.1	48.2	48.2
87.5°	11.5	16.3	18.9	19.7	19.7
90°	0.0	0.0	0.0	0.0	0.0
92.5°	10.9	89.9	211.8	103.0	69.9
95°	32.8	166.2	569.2	370.1	259.3
97.5°	58.1	184.1	749.6	722.2	620.0
100°	77.8	195.2	849.0	896.2	812.1
102.5°	96.4	205.3	914.5	1041.1	991.2
105°	128.3	221.7	965.0	1248.6	1232.6
107.5°	159.7	241.1	935.3	1414.9	1452.6
110°	181.5	257.6	887.2	1486.7	1557.4

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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	203.4	274.1	844.6	1504.2	1625.1
115°	234.8	300.2	775.3	1469.8	1639.3
117.5°	265.9	327.6	734.6	1390.8	1589.3
120°	286.6	344.0	708.4	1328.7	1536.9
122.5°	308.5	361.6	692.0	1265.3	1470.3
125°	334.4	385.1	672.9	1168.9	1373.1
127.5°	360.1	407.9	659.5	1087.3	1266.7
130°	375.4	422.1	655.2	1030.4	1206.6
132.5°	389.6	438.4	648.6	989.4	1138.9
135°	410.9	458.9	645.6	921.8	1060.6
137.5°	431.1	479.4	636.1	875.9	980.6
140°	446.3	490.4	636.1	843.0	939.1
142.5°	461.6	505.7	630.6	814.3	895.4
145°	485.9	522.0	633.3	783.5	844.9
147.5°	508.6	543.5	631.7	748.1	798.8
150°	522.8	553.5	636.1	732.5	772.6
152.5°	538.1	567.7	635.0	716.0	751.8
155°	556.9	580.9	641.5	694.0	719.3
157.5°	579.6	600.1	640.2	685.5	700.5
160°	588.3	605.6	645.6	674.5	685.2
162.5°	602.5	617.7	643.4	671.2	677.6
165°	615.6	624.9	649.7	659.5	668.8
167.5°	631.7	637.8	648.1	658.7	659.0
170°	636.1	640.1	652.4	651.2	657.9
172.5°	643.7	646.6	649.2	652.1	648.1
175°	651.1	648.4	651.1	645.6	644.3
177.5°	649.7	649.7	647.5	645.2	639.9
180°	644.3	644.3	644.3	644.3	644.3

(END OF REPORT)