

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: P521572

Luminaire Tested: **SQ4-F-100U-075D-93050-1D-UNV-STD-W-4 (4500K)**

Issue Date: 5/5/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P521572  
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 (4500K)  
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 4500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

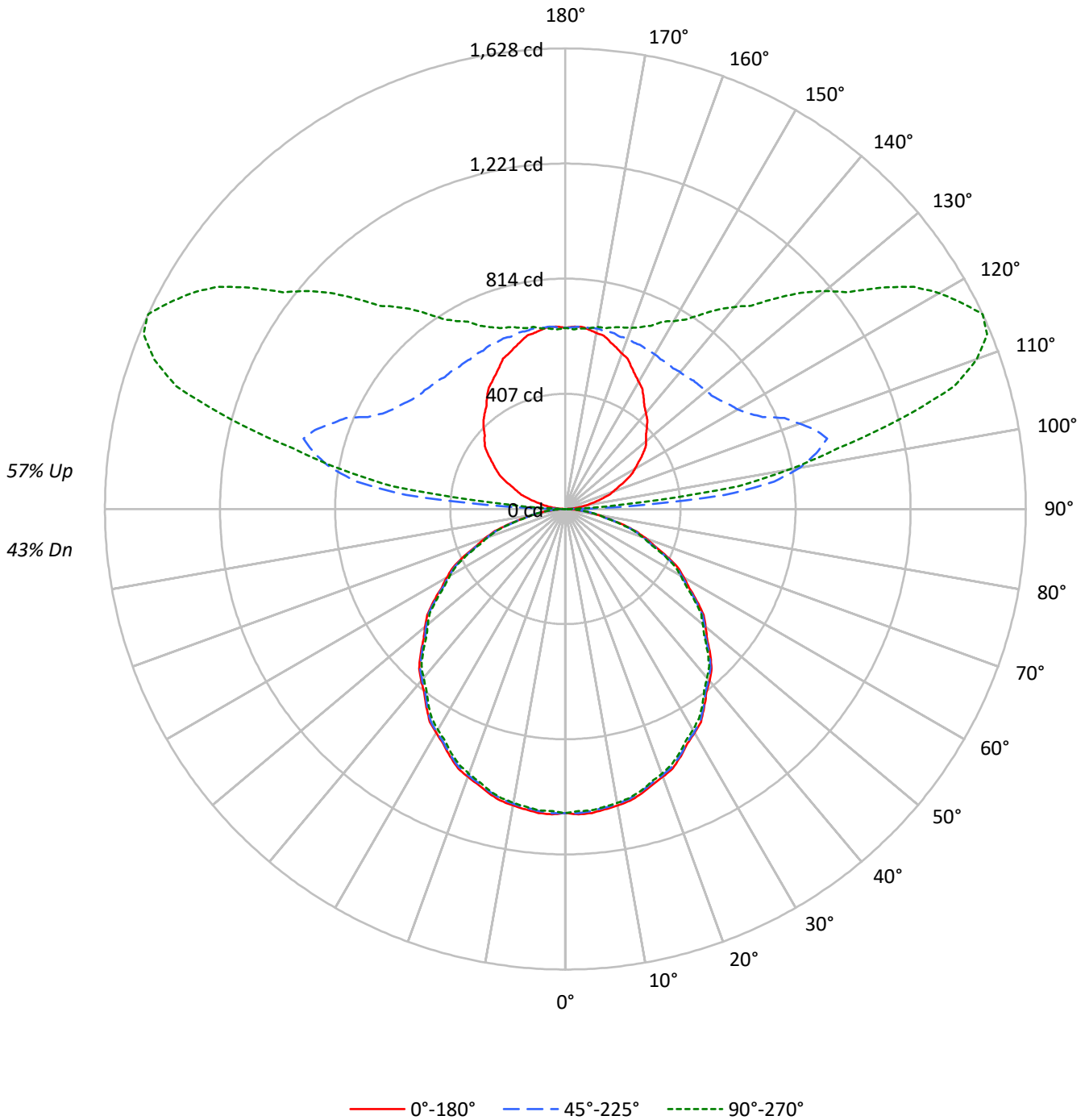
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 7209.3 lumens  
Efficiency: N/A  
Efficacy: 112.8 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): 63.9  
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	105	105	105	105	96	96	96	96	79	79	79	64	64	64	49	49	49	43				43
1	96	92	88	84	88	84	81	78	69	67	65	56	54	53	43	42	41	36				36
2	87	80	74	69	79	73	68	63	60	57	53	49	46	44	38	36	35	30				30
3	79	70	63	57	72	64	58	53	53	48	45	43	40	37	33	31	29	25				25
4	73	62	54	48	66	57	50	45	47	42	38	38	34	31	30	27	25	21				21
5	67	55	47	41	60	50	43	38	42	37	32	34	30	27	27	24	22	18				18
6	61	49	41	35	56	45	38	33	38	32	28	31	27	24	24	21	19	16				16
7	57	44	36	31	51	41	34	29	34	29	25	28	24	21	22	19	17	14				14
8	52	40	32	27	48	37	30	25	31	26	22	25	21	18	20	17	15	13				13
9	49	37	29	24	44	34	27	23	28	23	19	23	19	16	19	16	14	11				11
10	45	33	26	21	41	31	24	20	26	21	17	22	18	15	17	14	12	10				10

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

	0°	45°	90°
0°	9916	9916	9916
5°	9992	9925	9898
10°	9974	9917	9878
15°	9945	9877	9857
20°	9893	9843	9783
25°	9823	9781	9697
30°	9737	9704	9607
35°	9641	9595	9515
40°	9550	9488	9389
45°	9441	9362	9269
50°	9291	9218	9102
55°	9135	9021	8906
60°	8920	8770	8676
65°	8643	8420	8311
70°	8128	7907	7826
75°	7258	7112	7001
80°	6004	6057	6004
85°	4308	4848	5060



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	101.7	1.4
10°-20°	291.3	4.0
20°-30°	440.6	6.1
30°-40°	530.5	7.4
40°-50°	551.0	7.6
50°-60°	500.0	6.9
60°-70°	381.4	5.3
70°-80°	212.5	2.9
80°-90°	55.8	0.8
90°-100°	330.0	4.6
100°-110°	797.5	11.1
110°-120°	850.5	11.8
120°-130°	688.9	9.6
130°-140°	533.4	7.4
140°-150°	406.9	5.6
150°-160°	294.5	4.1
160°-170°	181.4	2.5
170°-180°	61.4	0.9
0°-30°	833.7	11.6
0°-40°	1364.2	18.9
0°-60°	2415.2	33.5
0°-90°	3064.8	42.5
90°-120°	1978.0	27.4
90°-150°	3607.1	50.0
90°-180°	4144.0	57.5
0°-180°	7209.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1075	1075	1075	1075	1075	
5°	1079	1069	1072	1070	1069	102
15°	1041	1029	1034	1032	1032	294
25°	965	955	961	952	953	444
35°	856	850	852	843	845	536
45°	724	717	718	708	710	557
55°	568	565	561	554	554	507
65°	396	392	386	380	381	390
75°	204	203	200	197	196	216
85°	41	46	46	48	48	50
90°	0	0	0	0	0	3
95°	32	165	565	368	258	37
105°	127	220	958	1240	1224	135
115°	233	298	770	1460	1628	231
125°	332	382	668	1161	1364	296
135°	408	456	641	916	1053	315
145°	483	518	629	778	839	302
155°	553	577	637	689	714	255
165°	611	621	645	655	664	173
175°	647	644	647	641	640	61
180°	640	640	640	640	640	

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CATALOG NUMBER: SQ4-F-100U-075D-93050-1D-UNV-STD-W-4 (4500K)

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1074.8	1074.8	1074.8	1074.8	1074.8
2.5°	1080.5	1072.5	1075.6	1073.1	1069.1
5°	1078.9	1068.9	1071.7	1069.7	1068.7
7.5°	1071.1	1061.2	1065.0	1062.0	1061.8
10°	1064.6	1054.7	1058.5	1055.4	1054.4
12.5°	1056.5	1045.7	1049.5	1046.5	1046.3
15°	1041.2	1029.3	1034.1	1032.0	1032.0
17.5°	1022.3	1010.5	1016.4	1012.7	1011.1
20°	1007.6	996.7	1002.5	996.4	996.4
22.5°	992.1	981.2	986.2	979.3	979.3
25°	964.9	954.9	960.8	951.7	952.6
27.5°	935.1	926.2	931.3	922.5	922.9
30°	914.0	905.0	910.9	899.8	901.8
32.5°	892.0	883.8	887.3	877.7	878.1
35°	856.0	850.0	851.9	842.8	844.8
37.5°	818.9	811.9	813.8	804.5	806.5
40°	792.9	785.9	787.8	777.6	779.6
42.5°	765.2	759.0	760.1	750.0	752.8
45°	723.6	716.7	717.5	708.4	710.4
47.5°	679.1	673.5	672.3	664.0	665.8
50°	647.3	643.3	642.2	633.1	634.1
52.5°	615.6	612.4	609.7	601.4	604.0
55°	567.9	564.9	560.8	553.7	553.7
57.5°	518.5	515.5	510.3	503.2	505.2
60°	483.4	480.5	475.3	468.2	470.2
62.5°	448.4	445.5	439.5	433.2	434.4
65°	395.9	391.9	385.7	379.7	380.7
67.5°	339.5	335.8	330.6	324.7	325.9
70°	301.3	298.3	293.1	288.1	290.1
72.5°	261.4	258.4	254.0	251.4	251.0
75°	203.6	202.6	199.5	197.4	196.4
77.5°	148.8	150.2	146.6	145.7	145.5
80°	113.0	116.0	114.0	114.0	113.0
82.5°	81.2	85.8	84.7	84.7	84.5
85°	40.7	45.7	45.8	47.8	47.8
87.5°	11.4	16.2	18.7	19.5	19.5
90°	0.0	0.0	0.0	0.0	0.0
92.5°	10.8	89.3	210.4	102.3	69.4
95°	32.5	165.1	565.3	367.6	257.6
97.5°	57.8	182.9	744.6	717.3	615.8
100°	77.3	193.9	843.3	890.2	806.6
102.5°	95.7	203.9	908.3	1034.1	984.5
105°	127.4	220.2	958.5	1240.1	1224.2
107.5°	158.6	239.5	928.9	1405.4	1442.7
110°	180.3	255.9	881.2	1476.6	1546.9



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	202.0	272.3	838.9	1494.0	1614.1
115°	233.2	298.1	770.0	1459.9	1628.2
117.5°	264.1	325.3	729.6	1381.3	1578.6
120°	284.7	341.7	703.6	1319.7	1526.5
122.5°	306.4	359.1	687.3	1256.8	1460.4
125°	332.1	382.5	668.4	1161.0	1363.8
127.5°	357.6	405.1	655.1	1079.9	1258.1
130°	372.8	419.2	650.7	1023.5	1198.4
132.5°	386.9	435.4	644.2	982.7	1131.2
135°	408.1	455.8	641.2	915.5	1053.4
137.5°	428.1	476.1	631.8	870.0	973.9
140°	443.3	487.1	631.8	837.3	932.7
142.5°	458.5	502.2	626.3	808.7	889.3
145°	482.6	518.4	629.0	778.2	839.2
147.5°	505.1	539.9	627.4	743.0	793.4
150°	519.2	549.7	631.8	727.6	767.3
152.5°	534.4	563.8	630.7	711.2	746.7
155°	553.1	577.0	637.2	689.3	714.5
157.5°	575.6	596.0	635.8	680.9	695.7
160°	584.3	601.5	641.2	670.0	680.6
162.5°	598.4	613.5	639.1	666.6	673.0
165°	611.4	620.7	645.3	655.0	664.3
167.5°	627.4	633.5	643.7	654.3	654.5
170°	631.8	635.7	648.0	646.8	653.5
172.5°	639.4	642.3	644.8	647.7	643.7
175°	646.7	644.0	646.7	641.2	639.9
177.5°	645.3	645.3	643.1	640.9	635.6
180°	639.9	639.9	639.9	639.9	639.9

(END OF REPORT)