

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: P521571

Luminaire Tested: **SQ4-F-100U-075D-93050-1D-UNV-STD-W-4 (4000K)**

Issue Date: 5/5/2021

Test Information

Test Method: LM-79-08
Report Number: P521571
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 (4000K)
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 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

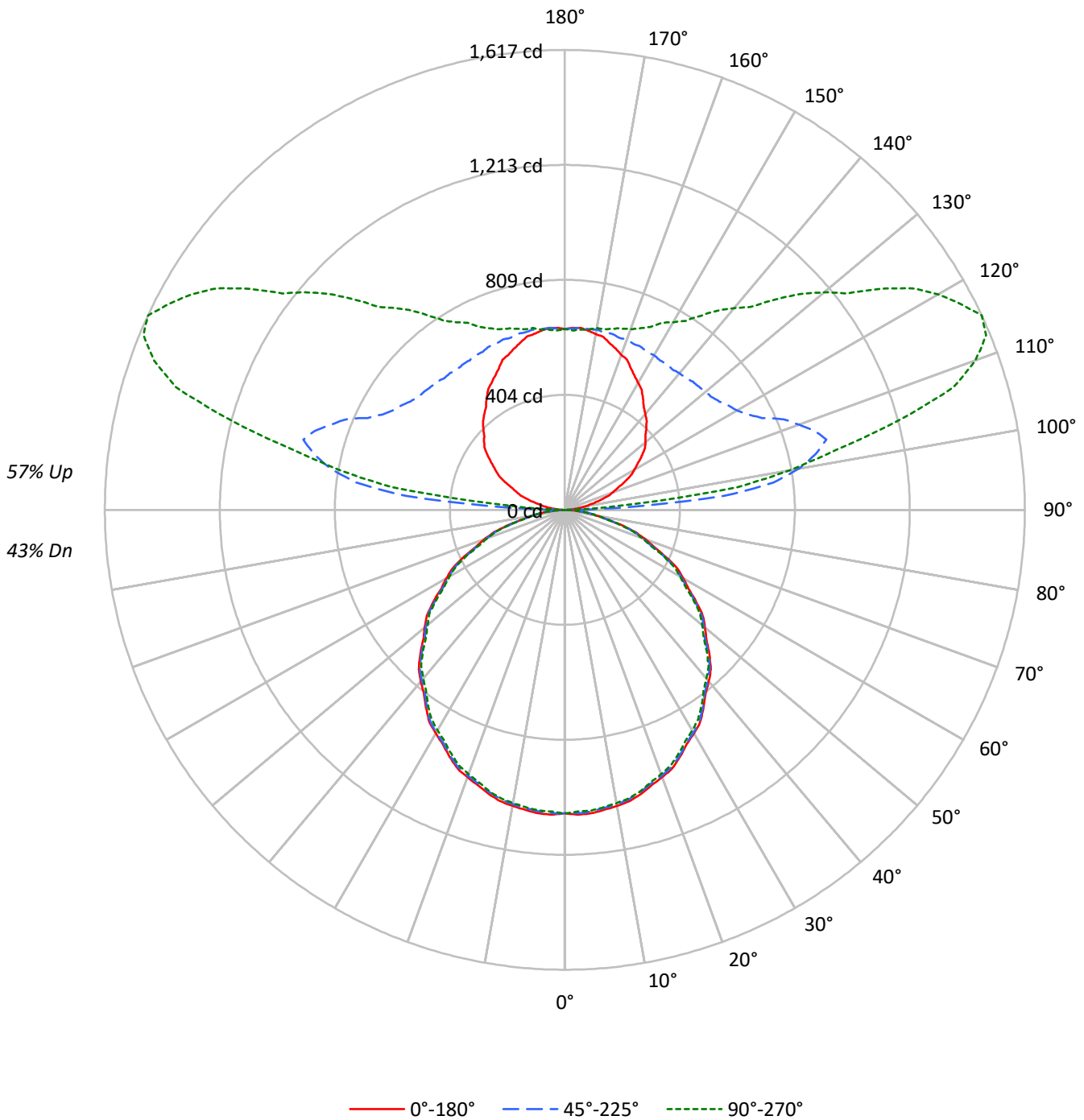
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7158.7 lumens
Efficiency: N/A
Efficacy: 112.0 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°	9846	9846	9846
5°	9922	9856	9828
10°	9903	9847	9809
15°	9875	9808	9789
20°	9823	9774	9714
25°	9753	9712	9630
30°	9669	9636	9539
35°	9574	9527	9447
40°	9482	9421	9324
45°	9376	9297	9204
50°	9226	9153	9037
55°	9071	8958	8844
60°	8859	8710	8615
65°	8582	8361	8252
70°	8071	7853	7769
75°	7204	7062	6955
80°	5961	6014	5961
85°	4277	4817	5028



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	101.0	1.4
10°-20°	289.3	4.0
20°-30°	437.5	6.1
30°-40°	526.8	7.4
40°-50°	547.2	7.6
50°-60°	496.5	6.9
60°-70°	378.7	5.3
70°-80°	211.0	2.9
80°-90°	55.4	0.8
90°-100°	327.6	4.6
100°-110°	791.9	11.1
110°-120°	844.6	11.8
120°-130°	684.0	9.6
130°-140°	529.6	7.4
140°-150°	404.0	5.6
150°-160°	292.5	4.1
160°-170°	180.1	2.5
170°-180°	61.0	0.9
0°-30°	827.8	11.6
0°-40°	1354.6	18.9
0°-60°	2398.3	33.5
0°-90°	3043.3	42.5
90°-120°	1964.1	27.4
90°-150°	3581.8	50.0
90°-180°	4115.0	57.5
0°-180°	7158.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1067	1067	1067	1067	1067	
5°	1071	1061	1064	1062	1061	102
15°	1034	1022	1027	1025	1025	292
25°	958	948	954	945	946	441
35°	850	844	846	837	839	532
45°	719	712	712	704	705	554
55°	564	561	557	550	550	503
65°	393	389	383	377	378	387
75°	202	201	198	196	195	215
85°	40	45	46	48	48	50
90°	0	0	0	0	0	3
95°	32	164	561	365	256	36
105°	126	219	952	1231	1216	134
115°	232	296	765	1450	1617	229
125°	330	380	664	1153	1354	294
135°	405	453	637	909	1046	313
145°	479	515	625	773	833	300
155°	549	573	633	684	709	254
165°	607	616	641	650	660	171
175°	642	640	642	637	635	61
180°	635	635	635	635	635	

TEST NUMBER: P521571

CATALOG NUMBER: SQ4-F-100U-075D-93050-1D-UNV-STD-W-4 (4000K)

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1067.2	1067.2	1067.2	1067.2	1067.2
2.5°	1072.9	1065.0	1068.0	1065.5	1061.6
5°	1071.3	1061.4	1064.2	1062.2	1061.2
7.5°	1063.6	1053.7	1057.5	1054.5	1054.3
10°	1057.1	1047.3	1051.1	1048.0	1047.0
12.5°	1049.0	1038.4	1042.2	1039.1	1038.9
15°	1033.9	1022.0	1026.8	1024.8	1024.8
17.5°	1015.1	1003.4	1009.2	1005.6	1004.0
20°	1000.5	989.7	995.5	989.4	989.4
22.5°	985.2	974.3	979.3	972.4	972.4
25°	958.1	948.2	954.0	945.0	946.0
27.5°	928.6	919.7	924.7	916.1	916.5
30°	907.6	898.7	904.5	893.5	895.4
32.5°	885.7	877.6	881.1	871.6	872.0
35°	850.0	844.0	845.9	836.9	838.8
37.5°	813.2	806.2	808.1	798.9	800.8
40°	787.3	780.4	782.2	772.2	774.2
42.5°	759.8	753.7	754.7	744.7	747.5
45°	718.6	711.6	712.5	703.5	705.4
47.5°	674.3	668.8	667.6	659.4	661.2
50°	642.8	638.8	637.7	628.6	629.6
52.5°	611.2	608.1	605.4	597.1	599.7
55°	563.9	561.0	556.9	549.8	549.8
57.5°	514.8	511.9	506.7	499.7	501.7
60°	480.1	477.1	472.0	464.9	466.9
62.5°	445.3	442.3	436.4	430.2	431.3
65°	393.1	389.2	383.0	377.0	378.0
67.5°	337.2	333.4	328.3	322.4	323.6
70°	299.2	296.2	291.1	286.1	288.0
72.5°	259.5	256.6	252.3	249.6	249.2
75°	202.1	201.1	198.1	196.0	195.1
77.5°	147.8	149.1	145.5	144.7	144.5
80°	112.2	115.1	113.2	113.2	112.2
82.5°	80.6	85.2	84.1	84.1	83.9
85°	40.4	45.4	45.5	47.5	47.5
87.5°	11.3	16.1	18.6	19.4	19.4
90°	0.0	0.0	0.0	0.0	0.0
92.5°	10.8	88.7	208.9	101.6	68.9
95°	32.3	163.9	561.4	365.0	255.8
97.5°	57.3	181.6	739.3	712.3	611.4
100°	76.7	192.6	837.3	883.9	801.0
102.5°	95.0	202.4	902.0	1026.8	977.6
105°	126.5	218.7	951.8	1231.4	1215.6
107.5°	157.5	237.8	922.4	1395.5	1432.6
110°	179.0	254.1	875.0	1466.2	1536.0

TEST NUMBER: P521571

CATALOG NUMBER: SQ4-F-100U-075D-93050-1D-UNV-STD-W-4 (4000K)

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	200.6	270.3	833.0	1483.5	1602.8
115°	231.5	296.0	764.6	1449.6	1616.8
117.5°	262.2	323.1	724.5	1371.6	1567.5
120°	282.7	339.3	698.7	1310.5	1515.8
122.5°	304.2	356.6	682.5	1247.9	1450.1
125°	329.8	379.8	663.7	1152.9	1354.3
127.5°	355.1	402.2	650.5	1072.4	1249.3
130°	370.2	416.3	646.2	1016.3	1190.0
132.5°	384.2	432.4	639.7	975.8	1123.3
135°	405.2	452.6	636.8	909.1	1046.0
137.5°	425.1	472.8	627.3	863.9	967.1
140°	440.2	483.6	627.3	831.4	926.2
142.5°	455.3	498.7	621.9	803.1	883.1
145°	479.2	514.8	624.6	772.7	833.3
147.5°	501.6	536.1	623.0	737.8	787.8
150°	515.6	545.9	627.3	722.5	761.9
152.5°	530.7	559.9	626.2	706.2	741.5
155°	549.2	572.9	632.7	684.4	709.4
157.5°	571.6	591.9	631.4	676.1	690.9
160°	580.2	597.3	636.8	665.3	675.8
162.5°	594.2	609.2	634.6	661.9	668.3
165°	607.1	616.3	640.8	650.4	659.6
167.5°	623.0	629.1	639.2	649.7	649.9
170°	627.3	631.3	643.5	642.3	648.9
172.5°	634.9	637.8	640.3	643.1	639.2
175°	642.1	639.5	642.1	636.7	635.4
177.5°	640.8	640.8	638.6	636.4	631.1
180°	635.4	635.4	635.4	635.4	635.4

(END OF REPORT)