

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: P521912

Luminaire Tested: **SQ4-WB-100U-050D-92765-1D-UNV-STD-W-4 (2700K)**

Issue Date: 5/5/2021

Test Information

Test Method: LM-79-08
Report Number: P521912
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2101-105-51,
Test Lab: INNOVATION CENTER
Issue Date: 5/5/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-WB-100U-050D-92765-1D-UNV-STD-W-4 (2700K)
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 2700K/65000K CCT, 90 CRI LEDS, TUNED TO 2700K CCT
Ballast/Driver: ELECTRONIC DRIVER

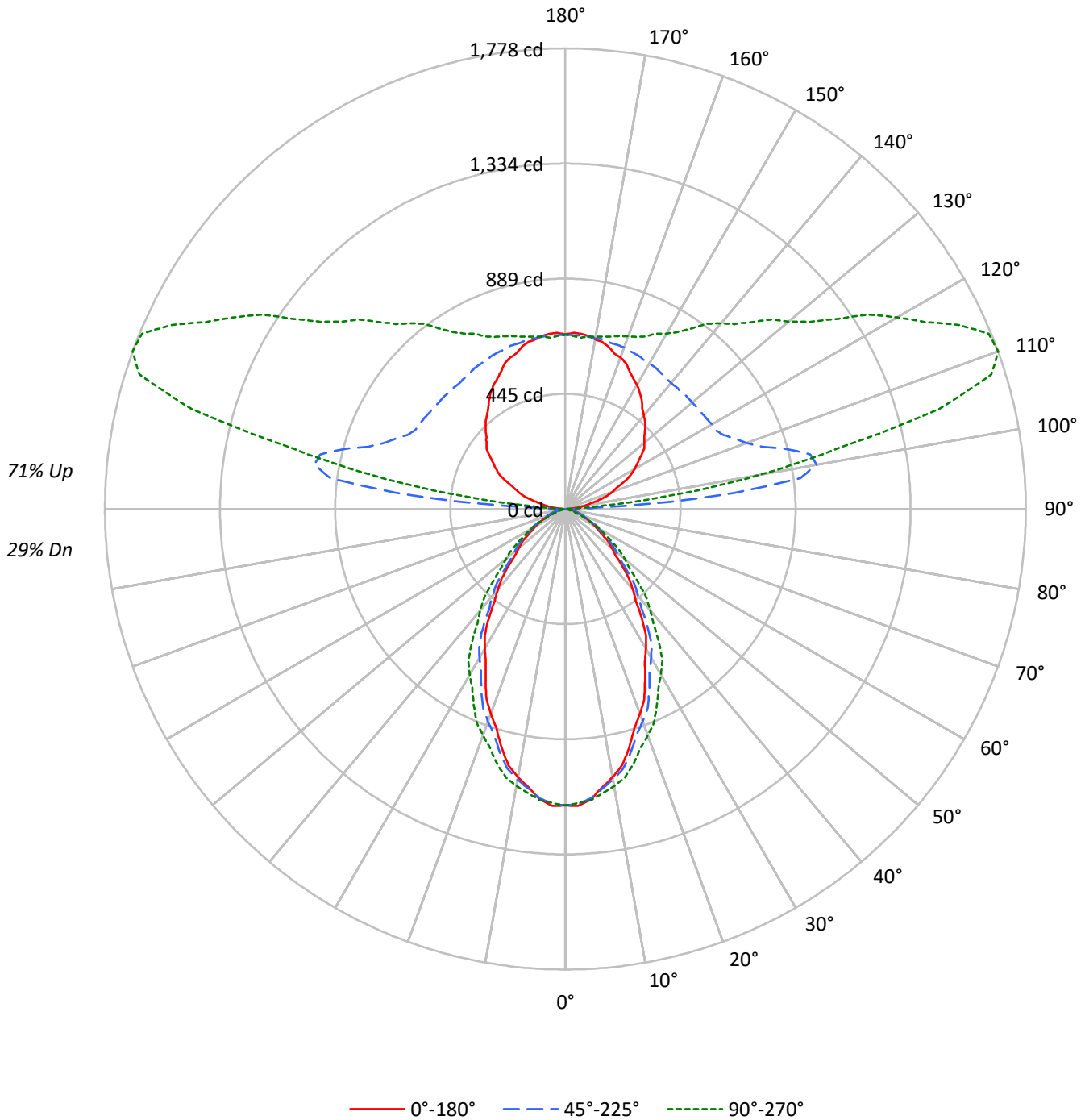
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5851.0 lumens
Efficiency: N/A
Efficacy: 110.6 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-Indirect

Input Watts (W): 52.9
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	0
RCR																		
0	102	102	102	102	91	91	91	91	71	71	71	53	53	53	36	36	36	29
1	94	90	86	83	84	81	78	75	63	61	60	48	46	45	33	32	32	25
2	86	79	74	69	77	71	67	63	56	53	50	43	41	39	30	29	28	22
3	79	70	63	58	70	63	58	53	50	46	43	38	36	34	27	26	25	20
4	72	62	55	50	65	56	50	45	45	41	37	35	32	29	25	23	22	18
5	66	56	48	43	60	51	44	39	41	36	33	31	28	26	23	21	19	16
6	61	50	43	37	55	46	39	34	37	32	29	28	25	23	21	19	17	14
7	57	45	38	33	51	41	35	30	33	29	25	26	23	21	19	17	16	13
8	53	41	34	29	47	38	31	27	31	26	23	24	21	19	18	16	14	12
9	49	38	31	26	44	34	28	24	28	24	20	22	19	17	17	15	13	11
10	46	35	28	23	41	32	26	22	26	22	19	21	17	15	15	13	12	10

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10558	10558	10558
5°	10427	10389	10451
10°	9851	9941	10171
15°	9094	9305	9723
20°	8258	8569	9136
25°	7407	7811	8511
30°	6623	7057	7864
35°	5791	6210	7098
40°	4874	5262	6145
45°	4023	4370	5130
50°	3359	3662	4274
55°	2852	3141	3529
60°	2438	2724	2818
65°	1941	2292	1821
70°	1721	1788	1111
75°	1593	1451	681
80°	1466	1334	584
85°	1334	1217	476



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	105.0	1.8
10°-20°	273.0	4.7
20°-30°	353.7	6.0
30°-40°	346.3	5.9
40°-50°	265.1	4.5
50°-60°	176.6	3.0
60°-70°	96.4	1.6
70°-80°	40.2	0.7
80°-90°	11.4	0.2
90°-100°	306.9	5.2
100°-110°	873.2	14.9
110°-120°	836.6	14.3
120°-130°	662.1	11.3
130°-140°	531.5	9.1
140°-150°	416.1	7.1
150°-160°	304.4	5.2
160°-170°	188.6	3.2
170°-180°	64.0	1.1
0°-30°	731.7	12.5
0°-40°	1078.0	18.4
0°-60°	1519.7	26.0
0°-90°	1667.7	28.5
90°-120°	2016.7	34.5
90°-150°	3626.3	62.0
90°-180°	4183.0	71.5
0°-180°	5851.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1144	1144	1144	1144	1144	
5°	1126	1115	1122	1124	1128	105
15°	952	949	974	1001	1018	266
25°	728	730	767	801	836	335
35°	514	517	551	588	630	320
45°	308	314	335	360	393	240
55°	177	185	195	203	219	161
65°	89	96	105	92	83	92
75°	45	45	41	28	19	48
85°	13	13	12	8	4	14
90°	0	0	0	0	0	2
95°	33	132	594	206	127	38
105°	136	206	890	1572	1494	144
115°	252	305	675	1429	1678	248
125°	356	395	644	1069	1278	319
135°	435	472	636	903	1020	336
145°	513	540	642	781	851	321
155°	586	600	657	706	735	271
165°	648	650	664	679	689	182
175°	679	675	672	668	663	64
180°	674	674	674	674	674	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1144.4	1144.4	1144.4	1144.4	1144.4
2.5°	1147.3	1137.0	1139.6	1139.5	1136.4
5°	1125.9	1114.6	1121.8	1124.4	1128.4
7.5°	1084.1	1075.5	1088.8	1098.6	1106.6
10°	1051.5	1044.2	1061.1	1075.4	1085.7
12.5°	1013.8	1007.6	1028.5	1047.7	1061.2
15°	952.1	948.7	974.2	1000.7	1017.9
17.5°	886.1	884.5	913.7	944.7	966.7
20°	841.1	840.6	872.8	905.0	930.5
22.5°	795.7	796.8	830.6	864.1	893.2
25°	727.6	729.6	767.3	800.8	836.1
27.5°	664.7	665.6	704.5	739.8	777.6
30°	621.7	624.1	662.4	698.9	738.2
32.5°	578.7	581.5	619.0	656.7	696.8
35°	514.2	516.7	551.4	588.5	630.2
37.5°	447.7	451.1	481.9	517.0	558.0
40°	404.7	409.7	436.9	469.9	510.2
42.5°	363.4	369.5	394.7	426.1	462.4
45°	308.3	314.2	334.9	360.3	393.2
47.5°	260.9	267.7	283.6	305.5	333.5
50°	234.0	240.4	255.1	271.3	297.8
52.5°	210.3	216.7	229.8	242.3	264.8
55°	177.3	184.6	195.3	202.8	219.4
57.5°	150.1	157.2	165.7	169.1	179.2
60°	132.1	139.9	147.6	147.3	152.7
62.5°	115.6	122.3	130.0	124.6	124.9
65°	88.9	96.2	105.0	91.7	83.4
67.5°	71.8	73.4	82.4	64.0	54.0
70°	63.8	63.8	66.3	49.5	41.2
72.5°	56.1	56.1	53.8	40.3	31.5
75°	44.7	44.7	40.7	27.9	19.1
77.5°	34.4	34.1	31.1	20.8	13.9
80°	27.6	27.6	25.1	16.4	11.0
82.5°	21.6	21.6	19.5	12.9	8.2
85°	12.6	12.6	11.5	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°	10.2	54.3	126.0	36.7	27.7
95°	33.3	132.2	594.1	205.6	126.8
97.5°	61.2	154.8	914.9	654.7	448.6
100°	80.7	168.3	984.6	997.3	768.2
102.5°	102.2	182.8	969.2	1276.6	1076.5
105°	135.7	205.8	889.8	1571.8	1494.2
107.5°	169.8	232.6	797.1	1655.0	1724.1
110°	193.3	252.2	743.9	1623.2	1778.4



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	215.9	271.7	708.0	1547.9	1769.2
115°	252.2	304.8	674.7	1429.4	1678.5
117.5°	284.2	333.6	655.0	1299.9	1563.8
120°	309.8	351.2	653.0	1225.9	1478.8
122.5°	330.3	371.6	647.9	1161.0	1395.8
125°	355.9	394.7	644.0	1068.7	1277.8
127.5°	383.8	420.2	642.0	1013.6	1185.9
130°	398.2	434.5	638.9	975.2	1125.4
132.5°	413.6	448.9	638.9	945.2	1083.4
135°	435.3	471.6	636.3	902.8	1020.4
137.5°	455.8	491.1	636.1	866.8	968.5
140°	471.2	507.5	635.1	837.0	934.7
142.5°	488.6	518.9	638.1	813.2	900.9
145°	513.4	539.7	641.5	781.3	851.4
147.5°	534.7	560.2	647.1	749.1	809.7
150°	553.1	570.6	649.1	738.5	781.0
152.5°	567.5	586.0	651.2	724.0	763.6
155°	586.4	600.2	656.8	706.1	734.9
157.5°	610.0	618.2	658.1	698.0	718.5
160°	622.3	628.5	663.2	691.8	709.3
162.5°	629.4	636.7	664.2	686.6	700.1
165°	647.9	650.4	664.5	678.8	688.8
167.5°	660.4	658.2	670.4	676.9	680.9
170°	664.5	663.3	668.3	669.7	674.7
172.5°	673.7	669.5	671.4	667.7	671.7
175°	678.6	674.8	672.2	668.2	663.2
177.5°	680.6	674.6	671.4	667.3	668.3
180°	673.5	673.5	673.5	673.5	673.5

(END OF REPORT)