

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: P521768

Luminaire Tested: **SQ4-WB-050U-050D-93050-1D-UNV-STD-W-4 (5000K)**

Issue Date: 5/5/2021

Test Information

Test Method: LM-79-08
Report Number: P521768
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 (5000K)
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 5000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

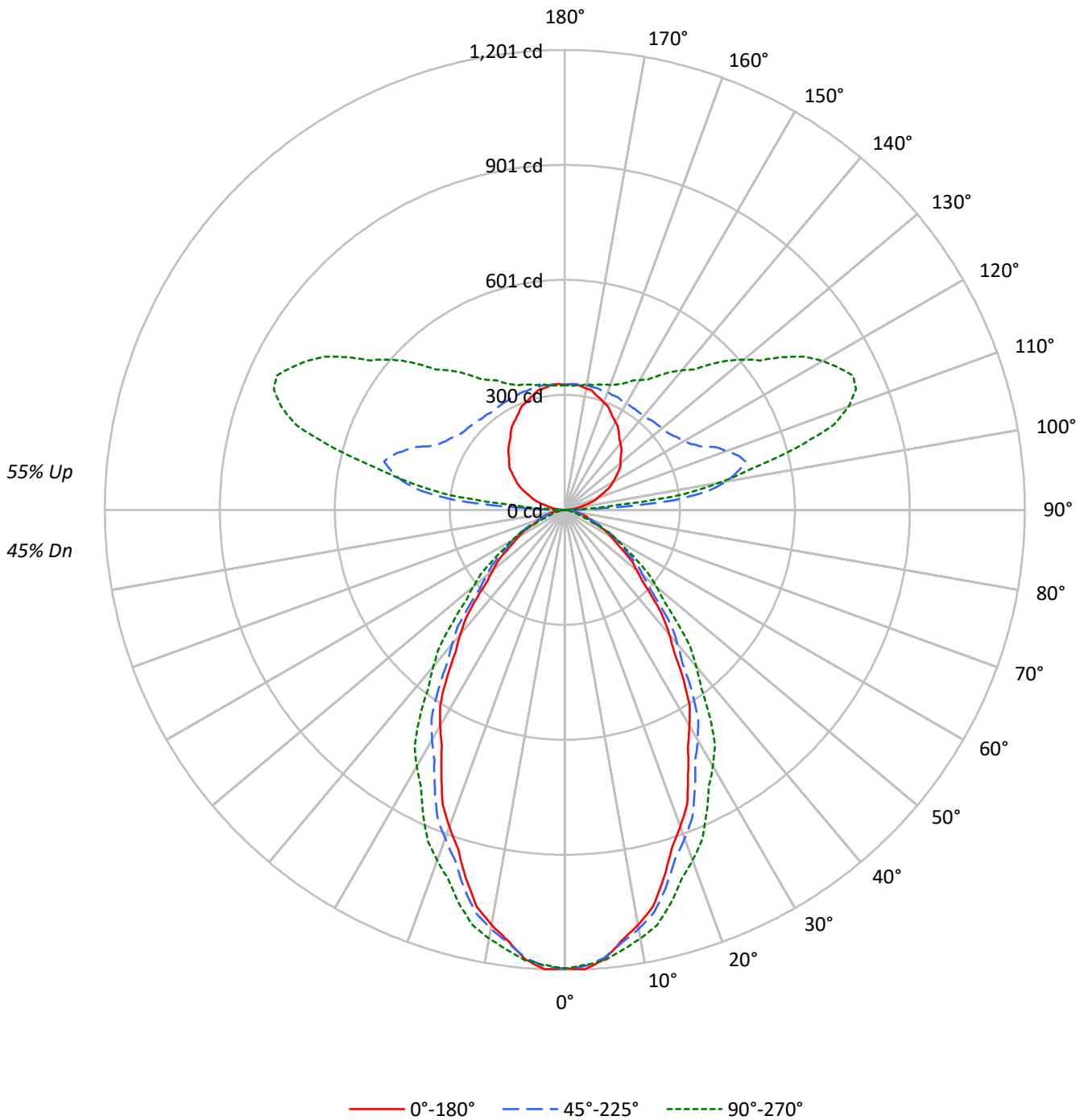
Lumens per Lamp: N/A
Luminaire Lumens: 3858.2 lumens
Efficiency: N/A
Efficacy: 104.6 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

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°	11054	11054	11054
5°	10916	10877	10941
10°	10313	10407	10648
15°	9520	9742	10178
20°	8646	8971	9564
25°	7754	8178	8911
30°	6933	7387	8233
35°	6063	6501	7431
40°	5103	5509	6433
45°	4212	4575	5370
50°	3517	3834	4474
55°	2985	3289	3695
60°	2552	2853	2949
65°	2030	2399	1906
70°	1802	1872	1163
75°	1668	1519	713
80°	1536	1397	616
85°	1387	1281	498



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	109.9	2.8
10°-20°	285.8	7.4
20°-30°	370.2	9.6
30°-40°	362.6	9.4
40°-50°	277.5	7.2
50°-60°	184.9	4.8
60°-70°	100.9	2.6
70°-80°	42.1	1.1
80°-90°	11.9	0.3
90°-100°	168.2	4.4
100°-110°	406.5	10.5
110°-120°	433.5	11.2
120°-130°	351.1	9.1
130°-140°	271.8	7.0
140°-150°	207.4	5.4
150°-160°	150.1	3.9
160°-170°	92.5	2.4
170°-180°	31.3	0.8
0°-30°	766.0	19.9
0°-40°	1128.5	29.2
0°-60°	1591.0	41.2
0°-90°	1745.9	45.3
90°-120°	1008.1	26.1
90°-150°	1838.5	47.7
90°-180°	2112.0	54.7
0°-180°	3858.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1198	1198	1198	1198	1198	
5°	1179	1167	1174	1177	1181	110
15°	997	993	1020	1048	1066	278
25°	762	764	803	838	875	350
35°	538	541	577	616	660	335
45°	323	329	351	377	412	252
55°	186	193	204	212	230	168
65°	93	101	110	96	87	97
75°	47	47	43	29	20	50
85°	13	13	12	8	5	14
90°	0	0	0	0	0	1
95°	17	84	288	187	131	19
105°	65	112	488	632	624	69
115°	119	152	392	744	830	117
125°	169	195	341	592	695	151
135°	208	232	327	467	537	161
145°	246	264	321	397	428	154
155°	282	294	325	351	364	130
165°	312	316	329	334	339	88
175°	330	328	330	327	326	31
180°	326	326	326	326	326	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	<i>1198.1</i>	1198.1	1198.1	1198.1	1198.1
2.5°	<i>1201.0</i>	<i>1190.3</i>	<i>1193.0</i>	<i>1193.0</i>	<i>1189.7</i>
5°	<i>1178.6</i>	1166.8	1174.4	1177.1	1181.3
7.5°	<i>1134.9</i>	1125.9	1139.8	1150.1	1158.4
10°	<i>1100.8</i>	1093.1	1110.8	1125.8	1136.6
12.5°	<i>1061.3</i>	1054.8	1076.7	1096.8	1110.9
15°	<i>996.7</i>	993.1	1019.9	1047.6	1065.6
17.5°	<i>927.7</i>	925.9	956.6	989.0	1012.0
20°	<i>880.6</i>	880.0	913.7	947.4	974.1
22.5°	<i>833.0</i>	834.2	869.5	904.6	935.0
25°	<i>761.7</i>	763.8	803.3	838.3	875.3
27.5°	<i>695.8</i>	696.7	737.6	774.5	814.0
30°	<i>650.8</i>	653.4	693.4	731.7	772.8
32.5°	<i>605.8</i>	608.8	648.0	687.5	729.5
35°	<i>538.3</i>	540.9	577.2	616.1	659.8
37.5°	<i>468.7</i>	472.2	504.5	541.2	584.2
40°	<i>423.7</i>	428.9	457.4	492.0	534.1
42.5°	<i>380.4</i>	386.8	413.2	446.0	484.1
45°	<i>322.8</i>	329.0	350.6	377.2	411.6
47.5°	<i>273.2</i>	280.2	296.9	319.8	349.2
50°	<i>245.0</i>	251.7	267.1	284.0	311.7
52.5°	<i>220.2</i>	226.8	240.6	253.6	277.3
55°	<i>185.6</i>	193.3	204.5	212.3	229.7
57.5°	<i>157.2</i>	164.6	173.5	177.0	187.6
60°	<i>138.3</i>	146.5	154.6	154.2	159.8
62.5°	<i>121.0</i>	128.0	136.1	130.5	130.8
65°	<i>93.0</i>	100.8	109.9	96.0	87.3
67.5°	<i>75.2</i>	76.8	86.2	66.9	56.6
70°	<i>66.8</i>	66.8	69.4	51.8	43.1
72.5°	<i>58.8</i>	58.8	56.4	42.2	33.0
75°	<i>46.8</i>	46.8	42.6	29.2	20.0
77.5°	<i>36.1</i>	35.7	32.6	21.8	14.5
80°	<i>28.9</i>	28.9	26.3	17.2	11.6
82.5°	<i>22.6</i>	22.6	20.4	13.5	8.6
85°	<i>13.1</i>	13.1	12.1	7.8	4.7
87.5°	<i>4.6</i>	4.6	4.2	2.5	2.1
90°	<i>0.0</i>	0.0	0.0	0.0	0.0
92.5°	<i>5.5</i>	45.5	107.2	52.1	35.4
95°	<i>16.6</i>	84.1	288.1	187.4	131.3
97.5°	<i>29.4</i>	93.2	379.5	365.6	313.8
100°	<i>39.4</i>	98.8	429.8	453.7	411.1
102.5°	<i>48.8</i>	103.9	463.0	527.1	501.8
105°	<i>65.0</i>	112.2	488.5	632.1	623.9
107.5°	<i>80.8</i>	122.1	473.5	716.3	735.3
110°	<i>91.9</i>	130.4	449.1	752.6	788.4

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	103.0	138.8	427.6	761.5	822.7
115°	118.8	152.0	392.5	744.1	829.9
117.5°	134.6	165.8	371.9	704.0	804.6
120°	145.1	174.2	358.6	672.6	778.0
122.5°	156.2	183.0	350.3	640.5	744.3
125°	169.3	195.0	340.6	591.7	695.1
127.5°	182.3	206.5	333.9	550.4	641.2
130°	190.0	213.7	331.7	521.6	610.8
132.5°	197.2	221.9	328.4	500.9	576.5
135°	208.0	232.3	326.8	466.6	536.9
137.5°	218.2	242.7	322.0	443.4	496.4
140°	225.9	248.2	322.0	426.7	475.4
142.5°	233.7	256.0	319.2	412.2	453.3
145°	246.0	264.2	320.6	396.6	427.7
147.5°	257.5	275.2	319.8	378.7	404.4
150°	264.6	280.2	322.0	370.8	391.1
152.5°	272.4	287.4	321.4	362.5	380.6
155°	281.9	294.1	324.8	351.3	364.1
157.5°	293.4	303.8	324.1	347.0	354.6
160°	297.8	306.6	326.8	341.5	346.9
162.5°	305.0	312.7	325.7	339.8	343.0
165°	311.6	316.4	328.9	333.8	338.6
167.5°	319.8	322.9	328.1	333.5	333.6
170°	322.0	324.0	330.3	329.7	333.0
172.5°	325.9	327.3	328.6	330.1	328.1
175°	329.6	328.2	329.6	326.8	326.1
177.5°	328.9	328.9	327.8	326.6	323.9
180°	326.1	326.1	326.1	326.1	326.1

(END OF REPORT)