

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: P521716

Luminaire Tested: **SQ4-WB-025U-050D-93050-1D-UNV-STD-W-4 (5000K)**

Issue Date: 5/5/2021

Test Information

Test Method: LM-79-08
Report Number: P521716
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-025U-050D-93050-1D-UNV-STD-W-4 (5000K)
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 250 LUMENS PER FOOT
Light Source: 3000K/5000K CCT, 90 CRI LEDS, TUNED TO 5000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

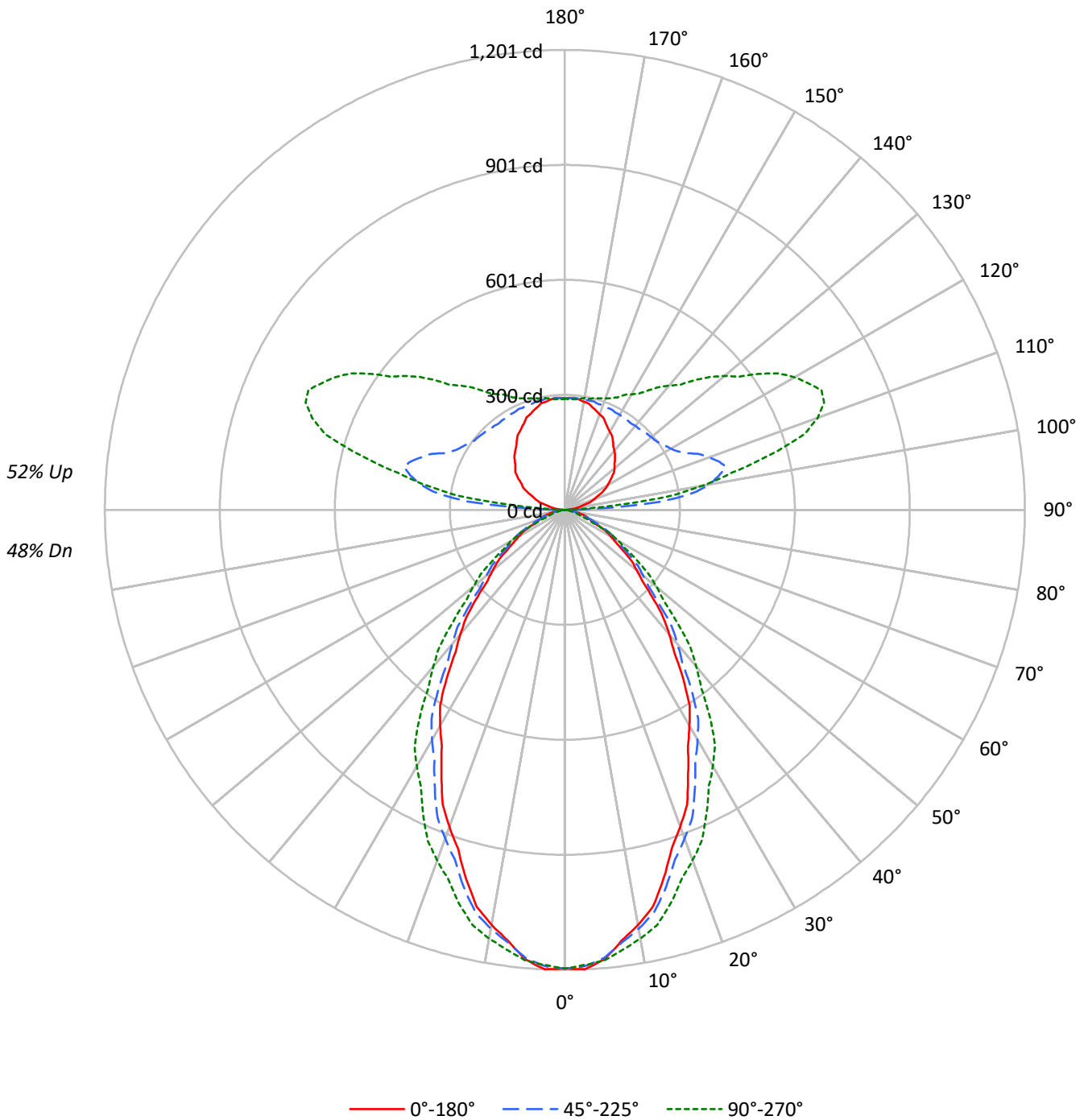
Lumens per Lamp: N/A
Luminaire Lumens: 3626.8 lumens
Efficiency: N/A
Efficacy: 103.0 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 35.2
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	107	107	107	107	98	98	98	98	82	82	82	68	68	68	54	54	54	48
1	98	95	91	88	91	87	84	82	74	72	70	61	60	59	50	49	48	43
2	91	84	78	74	83	78	73	69	66	63	60	55	53	51	45	44	42	38
3	83	75	68	63	77	69	64	59	59	55	52	50	47	44	41	39	37	33
4	77	67	60	54	71	62	56	51	53	49	45	45	42	39	38	35	33	30
5	71	60	53	47	65	56	50	45	48	43	40	41	38	35	34	32	30	27
6	66	55	47	42	61	51	44	40	44	39	35	38	34	31	32	29	27	24
7	61	50	42	37	57	47	40	35	40	35	32	35	31	28	29	27	24	22
8	57	46	38	33	53	43	36	32	37	32	28	32	28	25	27	24	22	20
9	53	42	35	30	49	39	33	29	34	29	26	30	26	23	25	23	20	18
10	50	39	32	27	46	36	30	26	32	27	24	28	24	21	24	21	19	17

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	3.0
10°-20°	285.8	7.9
20°-30°	370.2	10.2
30°-40°	362.6	10.0
40°-50°	277.5	7.7
50°-60°	184.9	5.1
60°-70°	100.9	2.8
70°-80°	42.1	1.2
80°-90°	11.9	0.3
90°-100°	149.8	4.1
100°-110°	361.9	10.0
110°-120°	386.0	10.6
120°-130°	312.7	8.6
130°-140°	242.1	6.7
140°-150°	184.7	5.1
150°-160°	133.7	3.7
160°-170°	82.3	2.3
170°-180°	27.9	0.8
0°-30°	766.0	21.1
0°-40°	1128.5	31.1
0°-60°	1591.0	43.9
0°-90°	1745.9	48.1
90°-120°	897.7	24.8
90°-150°	1637.1	45.1
90°-180°	1881.0	51.9
0°-180°	3626.8	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°	15	75	257	167	117	17
105°	58	100	435	563	556	61
115°	106	135	350	663	739	105
125°	151	174	303	527	619	135
135°	185	207	291	416	478	143
145°	219	235	286	353	381	137
155°	251	262	289	313	324	116
165°	278	282	293	297	302	78
175°	294	292	294	291	290	28
180°	290	290	290	290	290	

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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>4.9</i>	40.5	95.5	46.4	31.5
95°	<i>14.8</i>	74.9	256.6	166.8	116.9
97.5°	<i>26.2</i>	83.0	337.9	325.6	279.5
100°	<i>35.1</i>	88.0	382.7	404.0	366.1
102.5°	<i>43.4</i>	92.5	412.2	469.3	446.8
105°	<i>57.8</i>	100.0	435.0	562.8	555.6
107.5°	<i>72.0</i>	108.7	421.6	637.8	654.8
110°	<i>81.8</i>	116.1	399.9	670.2	702.1

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	91.7	123.6	380.7	678.1	732.6
115°	105.8	135.3	349.5	662.6	739.0
117.5°	119.9	147.7	331.2	626.9	716.4
120°	129.2	155.1	319.3	599.0	692.8
122.5°	139.1	163.0	312.0	570.4	662.8
125°	150.7	173.6	303.3	526.9	619.0
127.5°	162.3	183.9	297.3	490.1	571.0
130°	169.2	190.3	295.3	464.5	543.9
132.5°	175.6	197.6	292.4	446.0	513.4
135°	185.2	206.9	291.0	415.5	478.1
137.5°	194.3	216.1	286.7	394.9	442.0
140°	201.2	221.1	286.7	380.0	423.3
142.5°	208.1	227.9	284.3	367.1	403.6
145°	219.0	235.3	285.5	353.2	380.9
147.5°	229.3	245.0	284.8	337.2	360.1
150°	235.7	249.5	286.7	330.2	348.3
152.5°	242.5	255.9	286.2	322.8	338.9
155°	251.0	261.9	289.2	312.8	324.3
157.5°	261.3	270.5	288.6	309.0	315.8
160°	265.2	273.0	291.0	304.1	308.9
162.5°	271.6	278.4	290.0	302.5	305.4
165°	277.5	281.7	292.9	297.3	301.5
167.5°	284.8	287.5	292.1	296.9	297.1
170°	286.7	288.5	294.1	293.6	296.6
172.5°	290.2	291.5	292.6	293.9	292.1
175°	293.5	292.3	293.5	291.0	290.4
177.5°	292.9	292.9	291.9	290.9	288.5
180°	290.4	290.4	290.4	290.4	290.4

(END OF REPORT)