

Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: CORELITE

Report Number: P518396

Luminaire Tested: **SQ4-BB-050U-050D-830-1D-UNV-STD-W-4**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518396
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-21, G2-2009-966-12)
Test Lab: INNOVATION CENTER
Issue Date: 4/29/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-BB-050U-050D-830-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

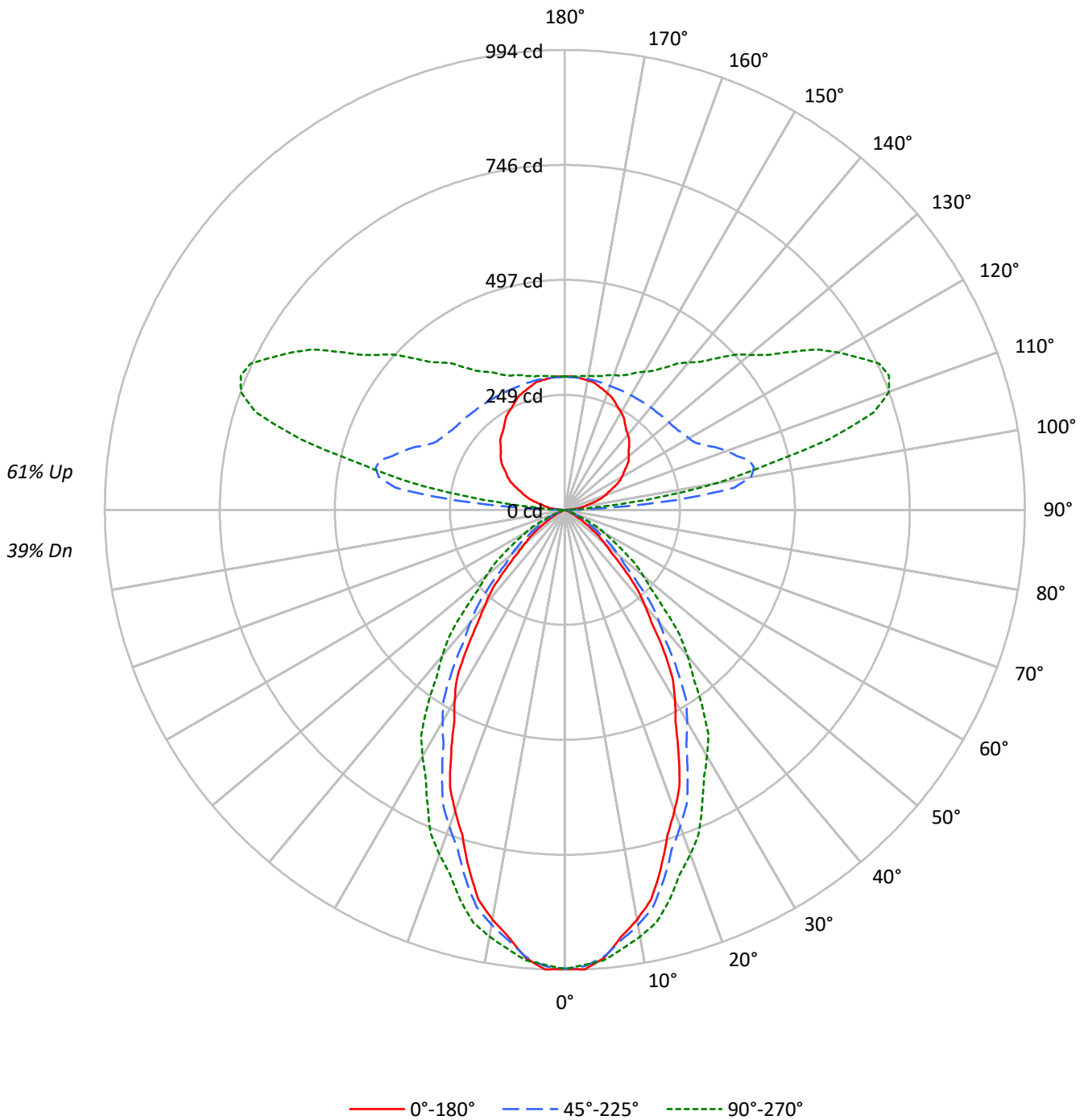
Lumens per Lamp: N/A
Luminaire Lumens: 3064.4 lumens
Efficiency: N/A
Efficacy: 107.5 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 28.5
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	104	104	104	104	95	95	95	95	77	77	77	61	61	61	46	46	46	39
1	97	93	90	87	88	85	82	79	69	68	66	55	54	53	42	42	41	35
2	89	83	77	73	81	76	71	67	63	59	57	50	48	47	39	38	37	32
3	82	74	68	63	75	68	62	58	56	53	49	46	43	41	36	34	33	29
4	76	66	60	54	69	61	55	51	51	47	43	42	39	37	33	31	30	26
5	70	60	53	47	64	55	49	44	46	42	38	38	35	33	31	29	27	24
6	65	54	47	42	59	50	44	39	42	38	34	35	32	29	28	26	25	22
7	61	50	42	37	55	46	40	35	39	34	31	32	29	27	26	24	22	20
8	56	45	38	33	52	42	36	32	36	31	28	30	27	24	25	22	21	18
9	53	42	35	30	48	39	33	29	33	29	25	28	25	22	23	21	19	17
10	49	38	32	27	45	36	30	26	31	26	23	26	23	20	22	19	18	16

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9151	9151	9151
5°	9003	8981	9048
10°	8424	8537	8775
15°	7659	7901	8341
20°	6798	7152	7778
25°	5920	6389	7146
30°	5071	5628	6548
35°	4205	4778	5825
40°	3230	3820	4965
45°	2336	2893	3994
50°	1590	2156	3168
55°	1034	1559	2463
60°	592	1098	1779
65°	157	670	902
70°	78	208	259
75°	36	18	0
80°	27	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	90.5	3.0
10°-20°	231.5	7.6
20°-30°	289.8	9.5
30°-40°	267.7	8.7
40°-50°	179.8	5.9
50°-60°	92.9	3.0
60°-70°	29.1	0.9
70°-80°	1.8	0.1
80°-90°	1.1	0.0
90°-100°	138.2	4.5
100°-110°	375.5	12.3
110°-120°	386.1	12.6
120°-130°	308.7	10.1
130°-140°	242.5	7.9
140°-150°	186.0	6.1
150°-160°	133.7	4.4
160°-170°	81.8	2.7
170°-180°	27.6	0.9
0°-30°	611.8	20.0
0°-40°	879.4	28.7
0°-60°	1152.1	37.6
0°-90°	1184.2	38.6
90°-120°	899.8	29.4
90°-150°	1637.0	53.4
90°-180°	1880.0	61.4
0°-180°	3064.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	992	992	992	992	992	
5°	972	962	970	973	977	90
15°	802	799	827	855	873	223
25°	582	586	628	670	702	267
35°	373	383	424	474	517	231
45°	179	190	222	265	306	141
55°	64	75	97	124	153	60
65°	7	14	31	37	41	12
75°	1	1	0	0	0	1
85°	0	0	0	0	0	0
90°	1	4	6	8	8	1
95°	20	76	241	105	70	22
105°	67	104	413	629	592	71
115°	118	144	330	658	749	117
125°	163	186	299	504	594	145
135°	196	218	291	410	463	152
145°	227	243	287	349	375	142
155°	256	266	285	313	322	118
165°	278	281	286	298	299	78
175°	288	289	287	291	290	27
180°	288	288	288	288	288	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	991.8	991.8	991.8	991.8	991.8
2.5°	994.1	984.7	987.2	987.1	984.5
5°	972.1	962.3	969.7	973.2	976.9
7.5°	931.0	923.3	937.7	948.4	956.2
10°	899.2	892.6	911.2	925.8	936.6
12.5°	862.3	857.3	879.7	899.8	913.6
15°	801.8	799.0	827.2	855.0	873.3
17.5°	736.9	736.8	769.1	803.5	825.6
20°	692.4	693.8	728.4	766.4	792.2
22.5°	647.8	651.1	688.1	727.7	757.2
25°	581.5	586.2	627.6	670.5	702.0
27.5°	517.8	524.7	568.2	612.8	651.1
30°	476.0	484.0	528.3	575.2	614.6
32.5°	434.9	444.4	487.6	537.3	577.4
35°	373.3	382.7	424.2	474.1	517.2
37.5°	309.7	318.9	359.4	408.5	455.2
40°	268.2	278.5	317.2	364.8	412.2
42.5°	230.6	240.9	277.2	324.0	368.8
45°	179.0	189.8	221.7	264.8	306.1
47.5°	136.2	147.9	175.9	214.9	252.6
50°	110.8	122.6	150.2	184.6	220.7
52.5°	90.5	101.8	126.8	159.2	192.3
55°	64.3	75.1	96.9	124.4	153.1
57.5°	44.4	53.7	73.3	96.3	118.7
60°	32.1	41.1	59.5	78.1	96.4
62.5°	21.4	29.6	47.6	61.9	74.2
65°	7.2	13.8	30.7	37.0	41.3
67.5°	3.6	4.4	16.1	17.0	18.4
70°	2.9	2.9	7.7	8.2	9.6
72.5°	2.1	2.1	3.1	3.9	4.2
75°	1.0	1.0	0.5	0.0	0.0
77.5°	0.5	0.5	0.4	0.0	0.0
80°	0.5	0.5	0.0	0.0	0.0
82.5°	0.1	0.1	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.2	0.7	1.3	1.7	1.7
90°	0.9	3.6	6.5	8.3	8.3
92.5°	8.3	37.8	65.7	28.2	23.9
95°	20.4	75.6	240.7	104.8	70.4
97.5°	33.7	83.5	369.1	287.1	201.7
100°	42.6	88.8	408.3	413.9	334.3
102.5°	51.5	94.0	418.7	511.9	441.7
105°	66.7	103.8	413.0	628.8	591.7
107.5°	82.4	115.2	389.1	689.1	699.4
110°	93.5	123.4	371.3	701.0	745.4



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	103.1	131.6	353.5	691.1	757.9
115°	118.5	143.9	330.5	657.6	749.1
117.5°	133.0	157.2	315.9	610.1	713.1
120°	142.6	166.1	309.3	578.2	680.5
122.5°	150.7	174.3	304.8	546.3	645.0
125°	163.0	185.6	299.1	503.9	594.4
127.5°	173.9	196.3	295.9	471.8	549.4
130°	180.6	202.3	294.4	451.6	521.3
132.5°	187.2	208.9	293.0	434.4	496.1
135°	196.3	218.0	290.7	410.4	463.0
137.5°	206.1	225.8	289.6	389.3	433.5
140°	212.0	231.0	288.9	375.9	415.7
142.5°	218.0	235.5	288.1	365.4	398.7
145°	226.8	243.1	287.0	348.7	375.0
147.5°	236.8	250.8	286.1	335.6	356.3
150°	243.5	255.3	286.1	328.1	344.4
152.5°	248.7	259.0	285.4	321.4	334.8
155°	256.5	265.5	285.2	313.2	322.2
157.5°	264.1	271.1	285.2	307.6	314.4
160°	268.5	274.9	285.2	303.8	309.3
162.5°	273.0	277.8	285.9	300.8	304.8
165°	277.8	281.4	286.1	298.2	299.1
167.5°	282.8	284.6	287.0	295.0	295.7
170°	284.3	286.1	287.0	293.5	293.5
172.5°	285.7	286.8	287.0	292.0	292.0
175°	288.0	288.9	287.0	290.7	289.8
177.5°	288.7	288.7	286.5	289.4	288.0
180°	288.0	288.0	288.0	288.0	288.0

(END OF REPORT)