

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: P518408

Luminaire Tested: **SQ4-BB-050U-050D-930-1D-UNV-STD-W-4**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518408
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-930-1D-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, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

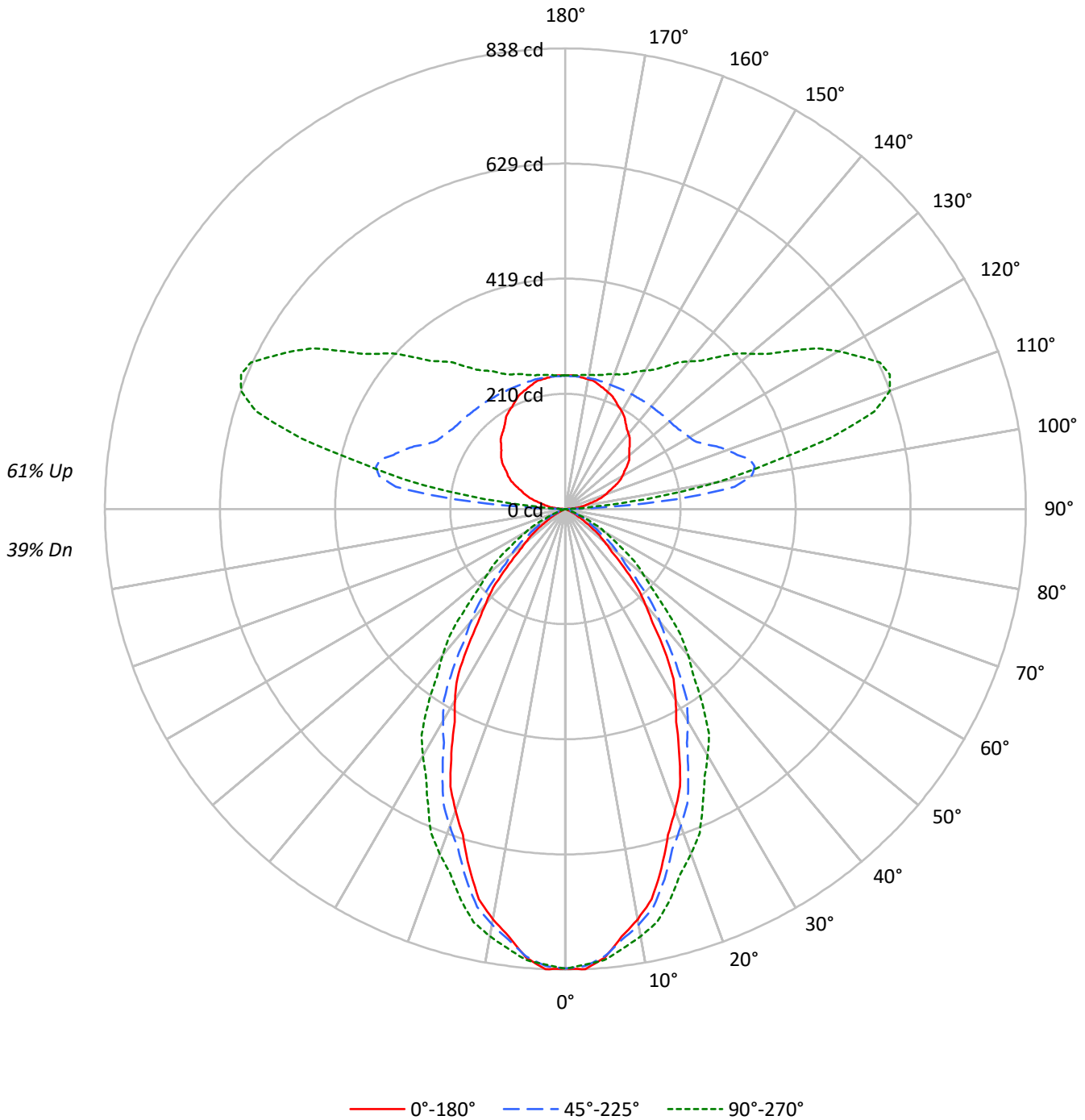
Lumens per Lamp: N/A
Luminaire Lumens: 2583.4 lumens
Efficiency: N/A
Efficacy: 90.6 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Indirect

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	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°	7714	7714	7714
5°	7590	7571	7628
10°	7102	7197	7397
15°	6456	6661	7032
20°	5731	6029	6558
25°	4991	5386	6025
30°	4275	4745	5521
35°	3545	4028	4912
40°	2723	3221	4185
45°	1969	2439	3368
50°	1341	1817	2671
55°	872	1314	2075
60°	500	926	1500
65°	133	565	760
70°	65	175	219
75°	29	14	0
80°	21	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	76.3	3.0
10°-20°	195.1	7.6
20°-30°	244.3	9.5
30°-40°	225.6	8.7
40°-50°	151.6	5.9
50°-60°	78.3	3.0
60°-70°	24.5	0.9
70°-80°	1.5	0.1
80°-90°	1.0	0.0
90°-100°	116.5	4.5
100°-110°	316.6	12.3
110°-120°	325.5	12.6
120°-130°	260.2	10.1
130°-140°	204.5	7.9
140°-150°	156.8	6.1
150°-160°	112.8	4.4
160°-170°	69.0	2.7
170°-180°	23.2	0.9
0°-30°	515.7	20.0
0°-40°	741.4	28.7
0°-60°	971.3	37.6
0°-90°	998.4	38.6
90°-120°	758.6	29.4
90°-150°	1380.1	53.4
90°-180°	1585.0	61.4
0°-180°	2583.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	836	836	836	836	836	
5°	820	811	818	820	824	76
15°	676	674	697	721	736	188
25°	490	494	529	565	592	225
35°	315	323	358	400	436	195
45°	151	160	187	223	258	118
55°	54	63	82	105	129	51
65°	6	12	26	31	35	10
75°	1	1	0	0	0	1
85°	0	0	0	0	0	0
90°	1	3	6	7	7	1
95°	17	64	203	88	59	18
105°	56	88	348	530	499	60
115°	100	121	279	554	632	99
125°	137	156	252	425	501	122
135°	166	184	245	346	390	128
145°	191	205	242	294	316	120
155°	216	224	240	264	272	100
165°	234	237	241	251	252	66
175°	243	244	242	245	244	23
180°	243	243	243	243	243	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	836.1	836.1	836.1	836.1	836.1
2.5°	838.1	830.2	832.2	832.2	830.0
5°	819.5	811.2	817.5	820.4	823.6
7.5°	784.9	778.4	790.5	799.5	806.1
10°	758.1	752.5	768.2	780.5	789.6
12.5°	727.0	722.7	741.6	758.6	770.2
15°	675.9	673.6	697.4	720.8	736.2
17.5°	621.3	621.2	648.4	677.4	696.0
20°	583.7	584.9	614.1	646.1	667.9
22.5°	546.2	548.9	580.1	613.5	638.4
25°	490.3	494.2	529.1	565.3	591.8
27.5°	436.6	442.3	479.0	516.6	548.9
30°	401.3	408.0	445.4	485.0	518.2
32.5°	366.7	374.6	411.1	452.9	486.8
35°	314.7	322.6	357.6	399.7	436.1
37.5°	261.1	268.8	303.0	344.4	383.7
40°	226.1	234.8	267.4	307.5	347.5
42.5°	194.4	203.1	233.7	273.2	310.9
45°	150.9	160.0	186.9	223.3	258.1
47.5°	114.8	124.7	148.3	181.2	212.9
50°	93.4	103.3	126.6	155.6	186.1
52.5°	76.3	85.9	106.9	134.2	162.1
55°	54.2	63.3	81.7	104.9	129.0
57.5°	37.5	45.3	61.8	81.2	100.1
60°	27.1	34.6	50.2	65.9	81.3
62.5°	18.0	24.9	40.1	52.2	62.5
65°	6.1	11.6	25.9	31.2	34.8
67.5°	3.1	3.7	13.6	14.3	15.5
70°	2.4	2.4	6.5	6.9	8.1
72.5°	1.8	1.8	2.6	3.3	3.6
75°	0.8	0.8	0.4	0.0	0.0
77.5°	0.4	0.4	0.3	0.0	0.0
80°	0.4	0.4	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	0.6	1.1	1.4	1.4
90°	0.8	3.1	5.5	7.0	7.0
92.5°	7.0	31.9	55.4	23.8	20.1
95°	17.2	63.7	203.0	88.3	59.3
97.5°	28.4	70.4	311.1	242.1	170.0
100°	35.9	74.8	344.2	349.0	281.8
102.5°	43.4	79.3	353.0	431.6	372.3
105°	56.2	87.5	348.1	530.1	498.8
107.5°	69.5	97.1	328.0	581.0	589.7
110°	78.8	104.0	313.0	591.0	628.4



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	87.0	110.9	298.0	582.7	639.0
115°	99.9	121.3	278.7	554.4	631.5
117.5°	112.1	132.5	266.3	514.4	601.2
120°	120.2	140.1	260.7	487.5	573.7
122.5°	127.1	146.9	257.0	460.6	543.8
125°	137.4	156.5	252.1	424.8	501.1
127.5°	146.6	165.5	249.5	397.7	463.2
130°	152.2	170.5	248.2	380.7	439.5
132.5°	157.8	176.2	247.0	366.2	418.2
135°	165.5	183.8	245.1	346.0	390.3
137.5°	173.8	190.4	244.2	328.2	365.5
140°	178.8	194.8	243.5	316.9	350.5
142.5°	183.8	198.6	242.9	308.0	336.1
145°	191.2	205.0	242.0	294.0	316.1
147.5°	199.7	211.4	241.2	283.0	300.4
150°	205.3	215.2	241.2	276.6	290.4
152.5°	209.7	218.4	240.6	271.0	282.3
155°	216.2	223.9	240.4	264.0	271.6
157.5°	222.6	228.6	240.4	259.3	265.1
160°	226.4	231.7	240.4	256.1	260.7
162.5°	230.1	234.2	241.0	253.6	257.0
165°	234.2	237.2	241.2	251.4	252.1
167.5°	238.4	239.9	242.0	248.7	249.3
170°	239.6	241.2	242.0	247.4	247.4
172.5°	240.9	241.8	242.0	246.2	246.2
175°	242.8	243.5	242.0	245.1	244.3
177.5°	243.4	243.4	241.5	244.0	242.8
180°	242.8	242.8	242.8	242.8	242.8

(END OF REPORT)