

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: P518400

Luminaire Tested: **SQ4-BB-050U-050D-835-1D-UNV-STD-W-4**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518400
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-835-1D-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: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

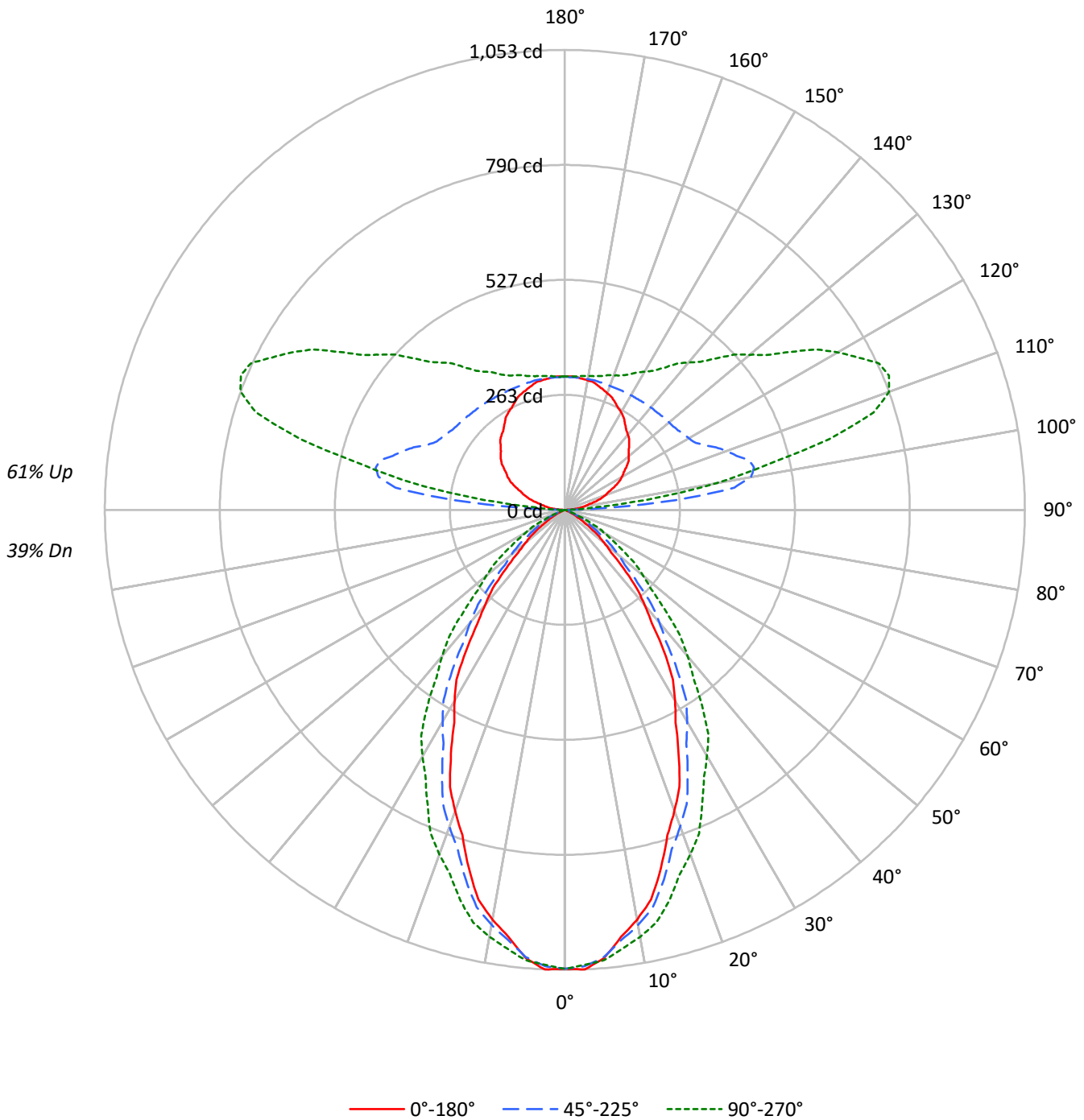
Lumens per Lamp: N/A
Luminaire Lumens: 3246.5 lumens
Efficiency: N/A
Efficacy: 113.9 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Indirect

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°	9694	9694	9694
5°	9538	9515	9586
10°	8924	9043	9296
15°	8113	8371	8837
20°	7202	7577	8241
25°	6272	6769	7571
30°	5373	5963	6938
35°	4455	5062	6172
40°	3423	4047	5260
45°	2474	3065	4231
50°	1685	2284	3356
55°	1095	1652	2609
60°	629	1163	1886
65°	166	710	954
70°	84	219	275
75°	36	18	0
80°	27	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	95.9	3.0
10°-20°	245.2	7.6
20°-30°	307.0	9.5
30°-40°	283.6	8.7
40°-50°	190.5	5.9
50°-60°	98.4	3.0
60°-70°	30.8	0.9
70°-80°	1.9	0.1
80°-90°	1.2	0.0
90°-100°	146.4	4.5
100°-110°	397.8	12.3
110°-120°	409.0	12.6
120°-130°	327.0	10.1
130°-140°	257.0	7.9
140°-150°	197.0	6.1
150°-160°	141.7	4.4
160°-170°	86.7	2.7
170°-180°	29.2	0.9
0°-30°	648.1	20.0
0°-40°	931.7	28.7
0°-60°	1220.6	37.6
0°-90°	1254.6	38.6
90°-120°	953.3	29.4
90°-150°	1734.4	53.4
90°-180°	1992.0	61.4
0°-180°	3246.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1051	1051	1051	1051	1051	
5°	1030	1020	1027	1031	1035	95
15°	849	846	876	906	925	237
25°	616	621	665	710	744	282
35°	396	405	449	502	548	245
45°	190	201	235	281	324	149
55°	68	80	103	132	162	64
65°	8	15	32	39	44	13
75°	1	1	0	0	0	1
85°	0	0	0	0	0	0
90°	1	4	7	9	9	2
95°	22	80	255	111	75	23
105°	71	110	438	666	627	75
115°	126	152	350	697	794	124
125°	173	197	317	534	630	154
135°	208	231	308	435	490	161
145°	240	258	304	370	397	151
155°	272	281	302	332	341	125
165°	294	298	303	316	317	83
175°	305	306	304	308	307	29
180°	305	305	305	305	305	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1050.7	1050.7	1050.7	1050.7	1050.7
2.5°	1053.2	1043.2	1045.9	1045.8	1043.0
5°	1029.9	1019.5	1027.4	1031.0	1035.0
7.5°	986.4	978.2	993.4	1004.8	1013.0
10°	952.6	945.7	965.3	980.8	992.3
12.5°	913.6	908.2	932.0	953.3	967.9
15°	849.4	846.5	876.4	905.8	925.2
17.5°	780.7	780.6	814.8	851.3	874.6
20°	733.5	735.0	771.7	811.9	839.3
22.5°	686.4	689.8	729.0	770.9	802.3
25°	616.1	621.1	664.9	710.4	743.7
27.5°	548.6	555.9	602.0	649.3	689.8
30°	504.3	512.7	559.7	609.4	651.2
32.5°	460.8	470.8	516.6	569.2	611.7
35°	395.5	405.4	449.4	502.3	548.0
37.5°	328.1	337.8	380.7	432.8	482.2
40°	284.2	295.1	336.0	386.5	436.7
42.5°	244.3	255.2	293.7	343.3	390.7
45°	189.6	201.0	234.9	280.6	324.3
47.5°	144.3	156.7	186.4	227.7	267.6
50°	117.4	129.9	159.1	195.6	233.8
52.5°	95.9	107.9	134.3	168.7	203.7
55°	68.1	79.5	102.7	131.8	162.2
57.5°	47.1	56.9	77.7	102.0	125.8
60°	34.1	43.5	63.0	82.8	102.2
62.5°	22.7	31.3	50.4	65.6	78.6
65°	7.6	14.6	32.5	39.2	43.7
67.5°	3.9	4.7	17.1	18.0	19.5
70°	3.1	3.1	8.1	8.7	10.2
72.5°	2.2	2.2	3.3	4.2	4.5
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	0.8	1.4	1.8	1.8
90°	1.0	3.9	6.9	8.8	8.8
92.5°	8.8	40.1	69.6	29.9	25.3
95°	21.6	80.1	255.0	111.0	74.6
97.5°	35.7	88.5	391.0	304.2	213.7
100°	45.1	94.0	432.6	438.5	354.1
102.5°	54.5	99.6	443.6	542.3	467.9
105°	70.6	110.0	437.5	666.1	626.8
107.5°	87.3	122.0	412.2	730.1	741.0
110°	99.1	130.7	393.4	742.7	789.7

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	109.3	139.4	374.5	732.2	803.0
115°	125.6	152.4	350.2	696.7	793.6
117.5°	140.9	166.6	334.7	646.4	755.5
120°	151.1	176.0	327.6	612.6	721.0
122.5°	159.7	184.6	322.9	578.8	683.3
125°	172.6	196.6	316.8	533.9	629.8
127.5°	184.2	208.0	313.5	499.8	582.1
130°	191.3	214.3	311.9	478.4	552.3
132.5°	198.3	221.4	310.4	460.2	525.6
135°	208.0	231.0	308.0	434.8	490.5
137.5°	218.4	239.3	306.8	412.5	459.3
140°	224.6	244.8	306.1	398.2	440.4
142.5°	230.9	249.5	305.3	387.1	422.4
145°	240.3	257.6	304.1	369.5	397.3
147.5°	250.9	265.7	303.1	355.6	377.5
150°	258.0	270.5	303.1	347.6	364.9
152.5°	263.5	274.4	302.3	340.5	354.7
155°	271.7	281.3	302.1	331.8	341.4
157.5°	279.8	287.2	302.1	325.8	333.1
160°	284.5	291.2	302.1	321.9	327.6
162.5°	289.2	294.4	302.9	318.7	322.9
165°	294.3	298.1	303.1	315.9	316.8
167.5°	299.6	301.5	304.1	312.5	313.3
170°	301.2	303.1	304.1	311.0	311.0
172.5°	302.7	303.9	304.1	309.4	309.4
175°	305.1	306.0	304.1	308.0	307.0
177.5°	305.9	305.9	303.5	306.6	305.1
180°	305.1	305.1	305.1	305.1	305.1

(END OF REPORT)