

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: P518496

Luminaire Tested: **SQ4-BB-075U-050D-835-1D-UNV-STD-W-4**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518496
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-22, 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-075U-050D-835-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 750 LUMENS PER FOOT
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

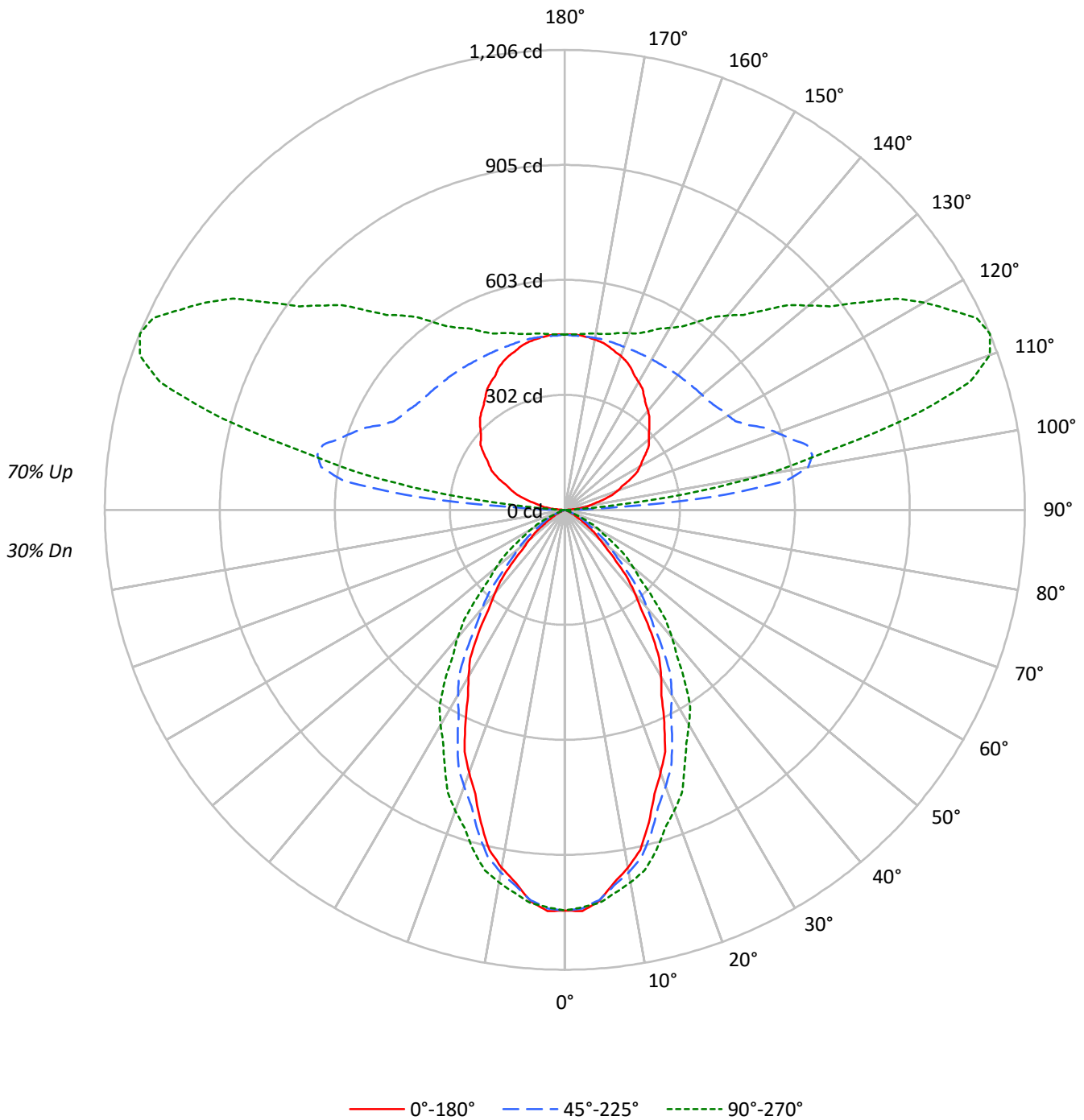
Lumens per Lamp: N/A
Luminaire Lumens: 4248.4 lumens
Efficiency: N/A
Efficacy: 122.4 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 34.7
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	102	102	102	102	92	92	92	92	72	72	72	54	54	54	37	37	37	30				
1	94	90	87	84	84	81	79	76	64	63	61	49	48	47	35	34	33	27				
2	87	80	75	70	78	72	68	64	58	55	52	44	42	41	32	31	30	24				
3	80	71	65	60	72	65	59	55	52	48	45	40	38	36	29	28	27	22				
4	73	64	57	52	66	58	52	47	47	43	39	36	34	32	27	25	24	20				
5	68	57	50	45	61	52	46	41	42	38	35	33	30	28	25	23	22	18				
6	63	52	45	39	56	47	41	36	39	34	31	30	27	25	23	21	20	16				
7	58	47	40	35	52	43	37	32	35	31	27	28	25	23	21	19	18	15				
8	54	43	36	31	49	39	33	29	32	28	25	26	23	21	20	18	16	14				
9	51	39	33	28	46	36	30	26	30	25	22	24	21	19	18	16	15	13				
10	47	36	30	25	43	33	27	24	28	23	20	22	19	17	17	15	14	12				

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	2.3
10°-20°	245.2	5.8
20°-30°	307.0	7.2
30°-40°	283.6	6.7
40°-50°	190.5	4.5
50°-60°	98.4	2.3
60°-70°	30.8	0.7
70°-80°	1.9	0.0
80°-90°	1.2	0.0
90°-100°	216.8	5.1
100°-110°	596.3	14.0
110°-120°	615.5	14.5
120°-130°	493.1	11.6
130°-140°	387.3	9.1
140°-150°	296.8	7.0
150°-160°	213.4	5.0
160°-170°	130.5	3.1
170°-180°	44.0	1.0
0°-30°	648.1	15.3
0°-40°	931.7	21.9
0°-60°	1220.6	28.7
0°-90°	1254.6	29.5
90°-120°	1428.6	33.6
90°-150°	2605.9	61.3
90°-180°	2994.0	70.5
0°-180°	4248.4	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°	32	118	383	164	105	34
105°	107	164	657	1001	934	112
115°	189	230	527	1049	1191	186
125°	260	296	478	809	948	232
135°	314	348	464	654	740	242
145°	363	388	458	557	600	227
155°	411	424	455	501	515	189
165°	444	450	457	475	478	125
175°	460	460	458	463	462	44
180°	460	460	460	460	460	

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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	3.8	6.8	8.8	8.8
92.5°	13.5	57.7	99.9	38.4	31.5
95°	32.3	118.3	383.3	163.9	104.6
97.5°	52.6	131.2	584.9	450.7	318.0
100°	67.5	139.2	648.3	654.3	533.9
102.5°	81.5	148.7	664.7	811.8	701.3
105°	106.6	163.9	657.1	1000.7	933.8
107.5°	130.4	182.8	619.7	1093.2	1113.1
110°	147.6	195.4	591.5	1116.2	1185.1



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	163.3	209.6	563.4	1101.4	1206.2
115°	188.7	229.8	527.0	1049.4	1190.9
117.5°	213.0	250.8	503.9	976.5	1136.6
120°	227.8	264.1	493.8	921.9	1087.3
122.5°	241.1	277.4	486.7	874.0	1031.0
125°	260.1	296.4	478.1	808.8	947.5
127.5°	278.1	312.7	472.5	754.5	876.1
130°	287.5	322.8	469.3	722.2	833.1
132.5°	298.4	333.8	467.0	693.8	793.9
135°	313.9	348.3	464.4	654.1	740.2
137.5°	328.3	360.3	462.3	622.1	693.0
140°	339.3	368.9	461.5	600.8	664.9
142.5°	348.7	376.0	459.9	581.8	636.7
145°	362.8	387.6	457.6	557.3	600.3
147.5°	377.8	399.2	456.4	535.6	570.0
150°	387.2	406.3	455.6	523.7	550.5
152.5°	395.8	413.4	454.9	513.4	535.6
155°	410.7	424.0	454.7	500.9	515.3
157.5°	421.4	432.3	454.7	490.7	500.6
160°	429.2	437.8	454.7	485.1	492.8
162.5°	435.5	442.6	455.4	480.4	486.5
165°	443.9	449.6	456.6	475.3	478.1
167.5°	449.8	454.2	457.6	470.9	471.7
170°	453.7	456.6	457.6	469.3	469.3
172.5°	456.8	458.2	457.6	467.0	466.2
175°	459.5	460.5	457.6	463.4	462.5
177.5°	460.3	460.3	457.2	461.9	460.3
180°	459.5	459.5	459.5	459.5	459.5

(END OF REPORT)