

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: P521088

Luminaire Tested: **SQ4-BB-075U-050D-93050-1D-UNV-STD-W-4 (3000K)**

Issue Date: 5/5/2021

Test Information

Test Method: LM-79-08
Report Number: P521088
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-BB-075U-050D-93050-1D-UNV-STD-W-4 (3000K)
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 750 LUMENS PER FOOT
Light Source: 3000K/5000K CCT, 90 CRI LEDS, TUNED TO 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

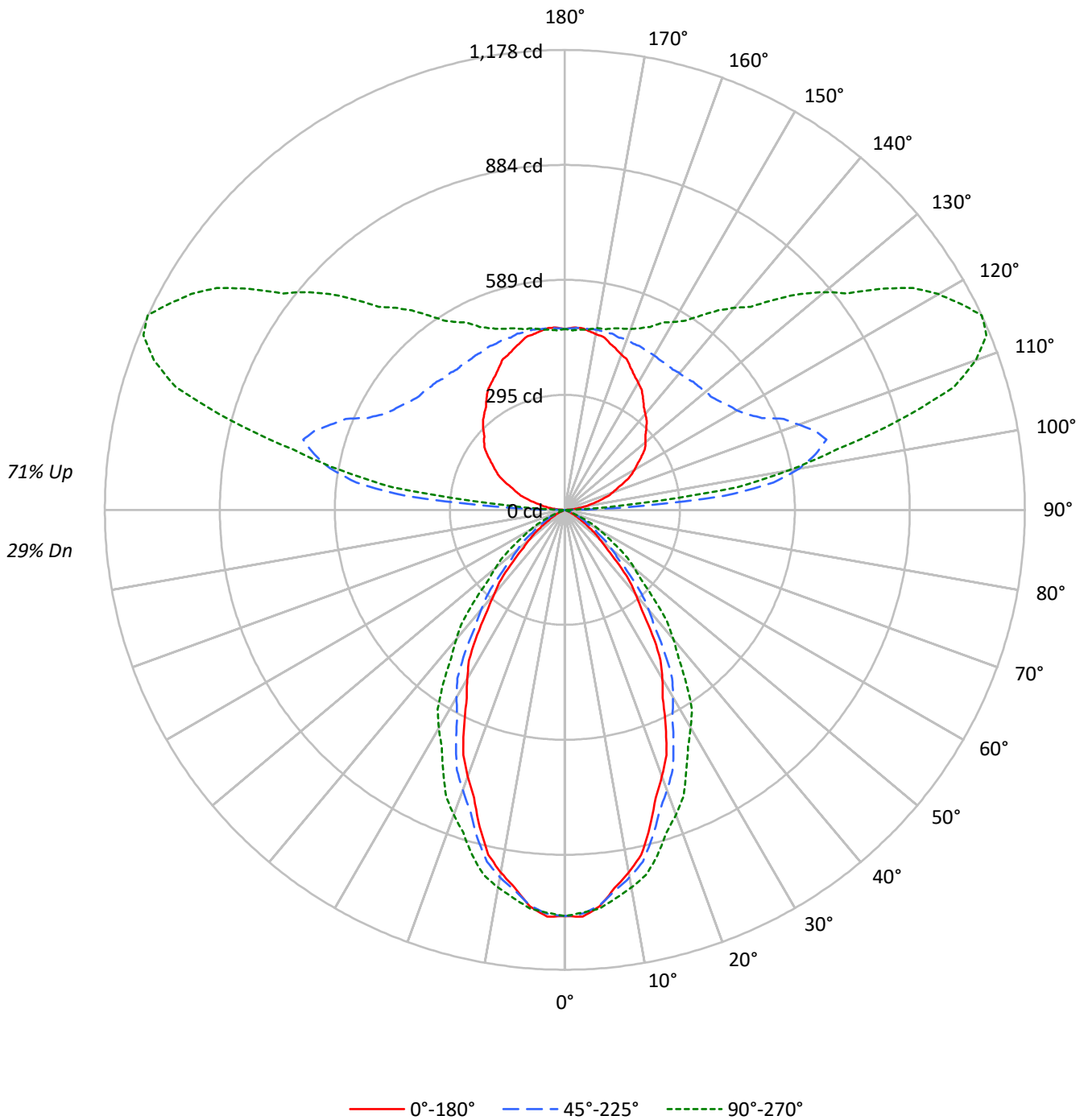
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4240.8 lumens
Efficiency: N/A
Efficacy: 95.3 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): 44.5
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	102	102	102	102	92	92	92	92	72	72	72	54	54	54	37	37	37	29				
1	94	90	87	84	84	81	79	76	64	63	61	49	48	47	34	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	71	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	31	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	38	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	20	20	18	16	14				
9	50	39	32	28	46	36	30	26	30	25	22	24	21	19	18	16	15	13				
10	47	36	30	25	43	33	27	23	28	23	20	22	19	17	17	15	14	12				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9600	9600	9600
5°	9446	9422	9492
10°	8837	8955	9206
15°	8035	8289	8751
20°	7132	7502	8160
25°	6211	6703	7497
30°	5320	5904	6869
35°	4411	5012	6111
40°	3389	4007	5208
45°	2450	3035	4191
50°	1669	2262	3324
55°	1086	1636	2583
60°	622	1151	1867
65°	166	703	945
70°	81	219	272
75°	36	18	0
80°	27	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	95.0	2.2
10°-20°	242.8	5.7
20°-30°	304.0	7.2
30°-40°	280.8	6.6
40°-50°	188.7	4.4
50°-60°	97.5	2.3
60°-70°	30.5	0.7
70°-80°	1.9	0.0
80°-90°	0.0	0.0
90°-100°	238.8	5.6
100°-110°	577.2	13.6
110°-120°	615.6	14.5
120°-130°	498.6	11.8
130°-140°	386.0	9.1
140°-150°	294.5	6.9
150°-160°	213.2	5.0
160°-170°	131.3	3.1
170°-180°	44.5	1.0
0°-30°	641.8	15.1
0°-40°	922.6	21.8
0°-60°	1208.7	28.5
0°-90°	1241.2	29.3
90°-120°	1431.6	33.8
90°-150°	2610.7	61.6
90°-180°	3000.0	70.7
0°-180°	4240.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1040	1040	1040	1040	1040	
5°	1020	1010	1017	1021	1025	95
15°	841	838	868	897	916	234
25°	610	615	658	704	736	280
35°	392	402	445	497	543	243
45°	188	199	233	278	321	147
55°	68	79	102	131	161	63
65°	8	14	32	39	43	13
75°	1	1	0	0	0	1
85°	0	0	0	0	0	0
90°	0	0	0	0	0	1
95°	24	120	409	266	186	26
105°	92	159	694	898	886	97
115°	169	216	557	1057	1178	167
125°	240	277	484	840	987	215
135°	295	330	464	663	762	228
145°	349	375	455	563	607	218
155°	400	418	461	499	517	185
165°	442	449	467	474	481	125
175°	468	466	468	464	463	44
180°	463	463	463	463	463	

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CATALOG NUMBER: SQ4-BB-075U-050D-93050-1D-UNV-STD-W-4 (3000K)

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1040.5	1040.5	1040.5	1040.5	1040.5
2.5°	1042.9	1033.1	1035.7	1035.6	1032.8
5°	1019.9	1009.5	1017.3	1020.9	1024.9
7.5°	976.8	968.7	983.7	995.0	1003.1
10°	943.3	936.4	955.9	971.3	982.6
12.5°	904.7	899.4	922.9	944.0	958.4
15°	841.2	838.2	867.8	897.0	916.2
17.5°	773.1	773.0	806.8	843.0	866.1
20°	726.4	727.9	764.1	804.0	831.1
22.5°	679.7	683.1	721.8	763.4	794.4
25°	610.1	615.0	658.4	703.5	736.4
27.5°	543.2	550.4	596.1	642.9	683.1
30°	499.4	507.7	554.2	603.5	644.8
32.5°	456.3	466.2	511.5	563.6	605.8
35°	391.6	401.5	445.0	497.4	542.6
37.5°	324.9	334.5	377.0	428.6	477.5
40°	281.4	292.2	332.7	382.7	432.4
42.5°	241.9	252.8	290.9	339.9	386.9
45°	187.8	199.1	232.6	277.8	321.2
47.5°	142.9	155.2	184.5	225.5	265.0
50°	116.3	128.6	157.6	193.7	231.6
52.5°	94.9	106.8	133.0	167.0	201.8
55°	67.5	78.8	101.7	130.6	160.6
57.5°	46.6	56.4	76.9	101.0	124.5
60°	33.7	43.1	62.4	82.0	101.2
62.5°	22.5	31.0	49.9	64.9	77.8
65°	7.6	14.4	32.2	38.9	43.3
67.5°	3.8	4.6	16.9	17.9	19.3
70°	3.0	3.0	8.1	8.6	10.1
72.5°	2.2	2.2	3.2	4.1	4.4
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°	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0
92.5°	7.8	64.6	152.3	74.0	50.2
95°	23.5	119.5	409.2	266.1	186.4
97.5°	41.8	132.4	538.9	519.2	445.7
100°	55.9	140.4	610.3	644.3	583.8
102.5°	69.3	147.6	657.4	748.4	712.6
105°	92.2	159.4	693.7	897.5	886.0
107.5°	114.8	173.3	672.3	1017.2	1044.2
110°	130.5	185.2	637.8	1068.7	1119.6



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	146.2	197.0	607.2	1081.3	1168.2
115°	168.8	215.8	557.3	1056.6	1178.4
117.5°	191.1	235.5	528.1	999.8	1142.5
120°	206.1	247.3	509.2	955.2	1104.8
122.5°	221.8	259.9	497.5	909.6	1057.0
125°	240.4	276.9	483.7	840.3	987.1
127.5°	258.8	293.2	474.1	781.6	910.6
130°	269.8	303.4	471.0	740.8	867.4
132.5°	280.0	315.2	466.3	711.3	818.7
135°	295.3	329.9	464.1	662.6	762.4
137.5°	309.9	344.6	457.2	629.7	704.9
140°	320.9	352.5	457.2	606.0	675.1
142.5°	331.8	363.5	453.3	585.3	643.7
145°	349.3	375.2	455.3	563.2	607.4
147.5°	365.6	390.7	454.1	537.7	574.2
150°	375.8	397.9	457.2	526.6	555.4
152.5°	386.8	408.1	456.5	514.7	540.5
155°	400.3	417.6	461.2	498.9	517.1
157.5°	416.6	431.4	460.2	492.8	503.6
160°	422.9	435.4	464.1	484.9	492.6
162.5°	433.1	444.0	462.5	482.5	487.1
165°	442.5	449.2	467.1	474.1	480.8
167.5°	454.1	458.5	465.9	473.5	473.7
170°	457.2	460.1	469.0	468.1	472.9
172.5°	462.7	464.9	466.7	468.8	465.9
175°	468.0	466.1	468.0	464.1	463.1
177.5°	467.1	467.1	465.5	463.8	460.0
180°	463.1	463.1	463.1	463.1	463.1

(END OF REPORT)