

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: P521089

Luminaire Tested: **SQ4-BB-075U-050D-93050-1D-UNV-STD-W-4 (3500K)**

Issue Date: 5/5/2021

Test Information

Test Method: LM-79-08
Report Number: P521089
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 (3500K)
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 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

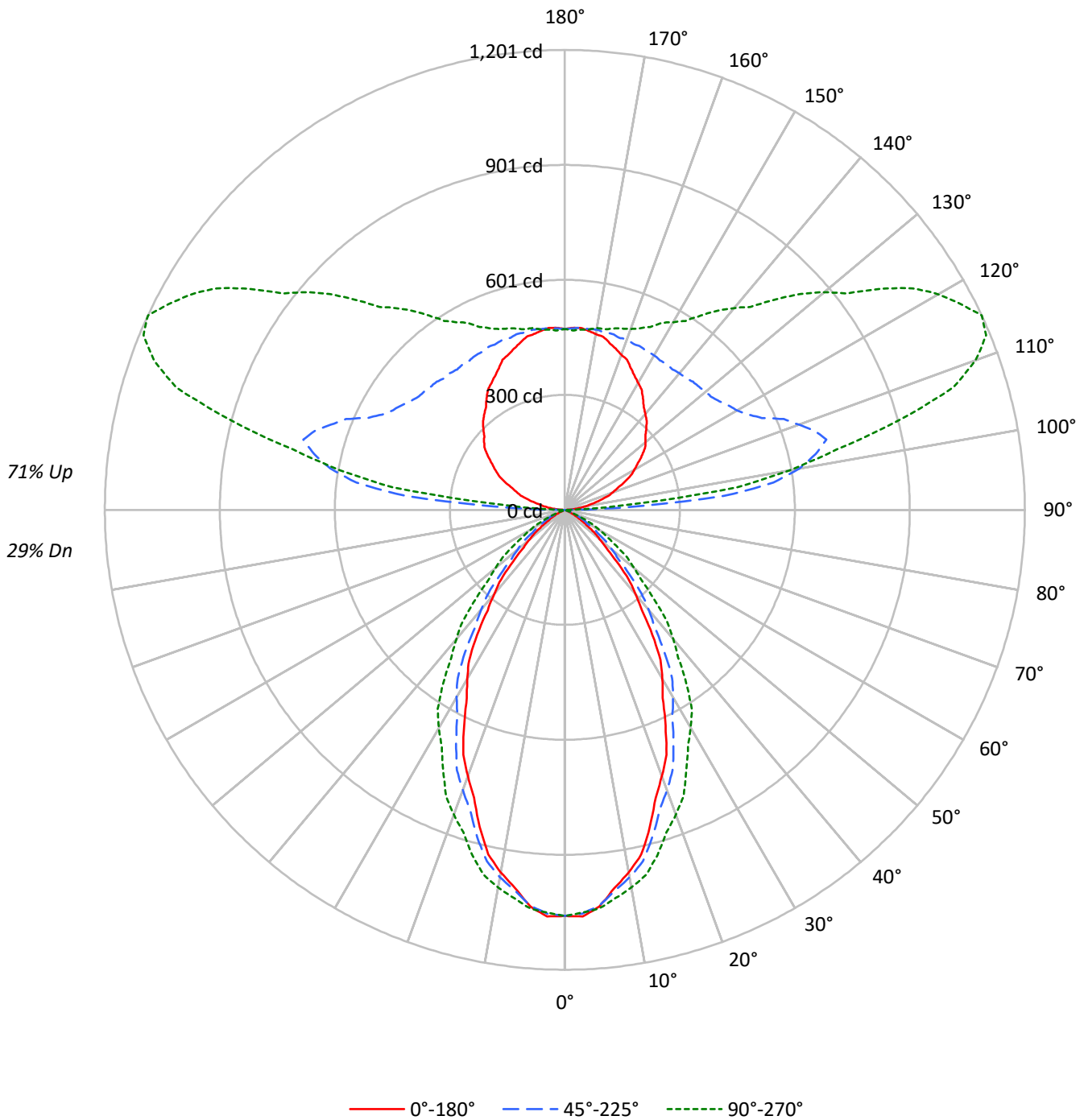
Lumens per Lamp: N/A
Luminaire Lumens: 4322.0 lumens
Efficiency: N/A
Efficacy: 97.1 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Indirect

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	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°	9783	9783	9783
5°	9626	9602	9674
10°	9007	9127	9382
15°	8189	8447	8918
20°	7269	7647	8316
25°	6330	6831	7640
30°	5422	6017	7001
35°	4495	5108	6229
40°	3454	4084	5308
45°	2497	3092	4271
50°	1701	2305	3387
55°	1105	1666	2633
60°	635	1174	1902
65°	168	716	963
70°	84	221	278
75°	36	18	0
80°	27	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	96.8	2.2
10°-20°	247.5	5.7
20°-30°	309.8	7.2
30°-40°	286.2	6.6
40°-50°	192.3	4.4
50°-60°	99.3	2.3
60°-70°	31.1	0.7
70°-80°	2.0	0.0
80°-90°	0.0	0.0
90°-100°	243.4	5.6
100°-110°	588.2	13.6
110°-120°	627.4	14.5
120°-130°	508.1	11.8
130°-140°	393.4	9.1
140°-150°	300.1	6.9
150°-160°	217.3	5.0
160°-170°	133.8	3.1
170°-180°	45.3	1.0
0°-30°	654.1	15.1
0°-40°	940.2	21.8
0°-60°	1231.9	28.5
0°-90°	1265.0	29.3
90°-120°	1459.0	33.8
90°-150°	2660.7	61.6
90°-180°	3057.0	70.7
0°-180°	4322.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1060	1060	1060	1060	1060	
5°	1039	1029	1037	1040	1044	96
15°	857	854	884	914	934	239
25°	622	627	671	717	750	285
35°	399	409	454	507	553	247
45°	191	203	237	283	327	150
55°	69	80	104	133	164	64
65°	8	15	33	40	44	13
75°	1	1	0	0	0	1
85°	0	0	0	0	0	0
90°	0	0	0	0	0	1
95°	24	122	417	271	190	27
105°	94	162	707	915	903	99
115°	172	220	568	1077	1201	170
125°	245	282	493	856	1006	219
135°	301	336	473	675	777	232
145°	356	382	464	574	619	223
155°	408	426	470	508	527	188
165°	451	458	476	483	490	127
175°	477	475	477	473	472	45
180°	472	472	472	472	472	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1060.4	1060.4	1060.4	1060.4	1060.4
2.5°	1062.9	1052.8	1055.5	1055.4	1052.6
5°	1039.4	1028.8	1036.8	1040.5	1044.5
7.5°	995.5	987.2	1002.5	1014.0	1022.3
10°	961.4	954.4	974.2	989.9	1001.4
12.5°	922.0	916.6	940.6	962.0	976.8
15°	857.3	854.2	884.4	914.1	933.7
17.5°	787.9	787.8	822.3	859.1	882.7
20°	740.3	741.8	778.8	819.4	847.0
22.5°	692.7	696.2	735.7	778.0	809.6
25°	621.8	626.8	671.0	716.9	750.5
27.5°	553.7	561.0	607.5	655.2	696.2
30°	508.9	517.4	564.8	615.0	657.2
32.5°	465.0	475.1	521.3	574.4	617.4
35°	399.1	409.2	453.5	506.9	553.0
37.5°	331.1	340.9	384.3	436.8	486.7
40°	286.8	297.8	339.1	390.0	440.7
42.5°	246.6	257.6	296.4	346.5	394.3
45°	191.4	202.9	237.0	283.2	327.3
47.5°	145.6	158.1	188.1	229.8	270.1
50°	118.5	131.0	160.6	197.4	236.0
52.5°	96.8	108.9	135.5	170.2	205.6
55°	68.7	80.3	103.6	133.1	163.7
57.5°	47.5	57.4	78.4	102.9	126.9
60°	34.4	43.9	63.6	83.6	103.1
62.5°	22.9	31.6	50.9	66.2	79.3
65°	7.7	14.7	32.8	39.6	44.1
67.5°	3.9	4.7	17.2	18.2	19.7
70°	3.1	3.1	8.2	8.8	10.3
72.5°	2.3	2.3	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°	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0
92.5°	8.0	65.9	155.2	75.4	51.2
95°	24.0	121.8	417.0	271.2	190.0
97.5°	42.6	134.9	549.2	529.1	454.2
100°	57.0	143.0	622.0	656.6	595.0
102.5°	70.6	150.4	670.0	762.8	726.2
105°	94.0	162.4	707.0	914.7	903.0
107.5°	117.0	176.6	685.2	1036.6	1064.2
110°	133.0	188.7	650.0	1089.2	1141.0



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	149.0	200.8	618.8	1102.0	1190.6
115°	172.0	219.9	568.0	1076.8	1201.0
117.5°	194.8	240.0	538.2	1018.9	1164.4
120°	210.0	252.0	519.0	973.5	1126.0
122.5°	226.0	264.9	507.0	927.0	1077.2
125°	245.0	282.2	493.0	856.4	1006.0
127.5°	263.8	298.8	483.2	796.6	928.0
130°	275.0	309.2	480.0	754.9	884.0
132.5°	285.4	321.2	475.2	724.9	834.4
135°	301.0	336.2	473.0	675.3	777.0
137.5°	315.8	351.2	466.0	641.7	718.4
140°	327.0	359.3	466.0	617.6	688.0
142.5°	338.2	370.5	462.0	596.6	656.0
145°	356.0	382.4	464.0	574.0	619.0
147.5°	372.6	398.2	462.8	548.0	585.2
150°	383.0	405.5	466.0	536.7	566.0
152.5°	394.2	415.9	465.2	524.6	550.8
155°	408.0	425.6	470.0	508.4	527.0
157.5°	424.6	439.7	469.0	502.2	513.2
160°	431.0	443.7	473.0	494.2	502.0
162.5°	441.4	452.5	471.4	491.7	496.4
165°	451.0	457.8	476.0	483.2	490.0
167.5°	462.8	467.3	474.8	482.6	482.8
170°	466.0	468.9	478.0	477.1	482.0
172.5°	471.6	473.8	475.6	477.7	474.8
175°	477.0	475.0	477.0	473.0	472.0
177.5°	476.0	476.0	474.4	472.7	468.8
180°	472.0	472.0	472.0	472.0	472.0

(END OF REPORT)