

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: P518474

Luminaire Tested: **SQ4-BB-050U-125D-835-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518474
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-125D-835-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

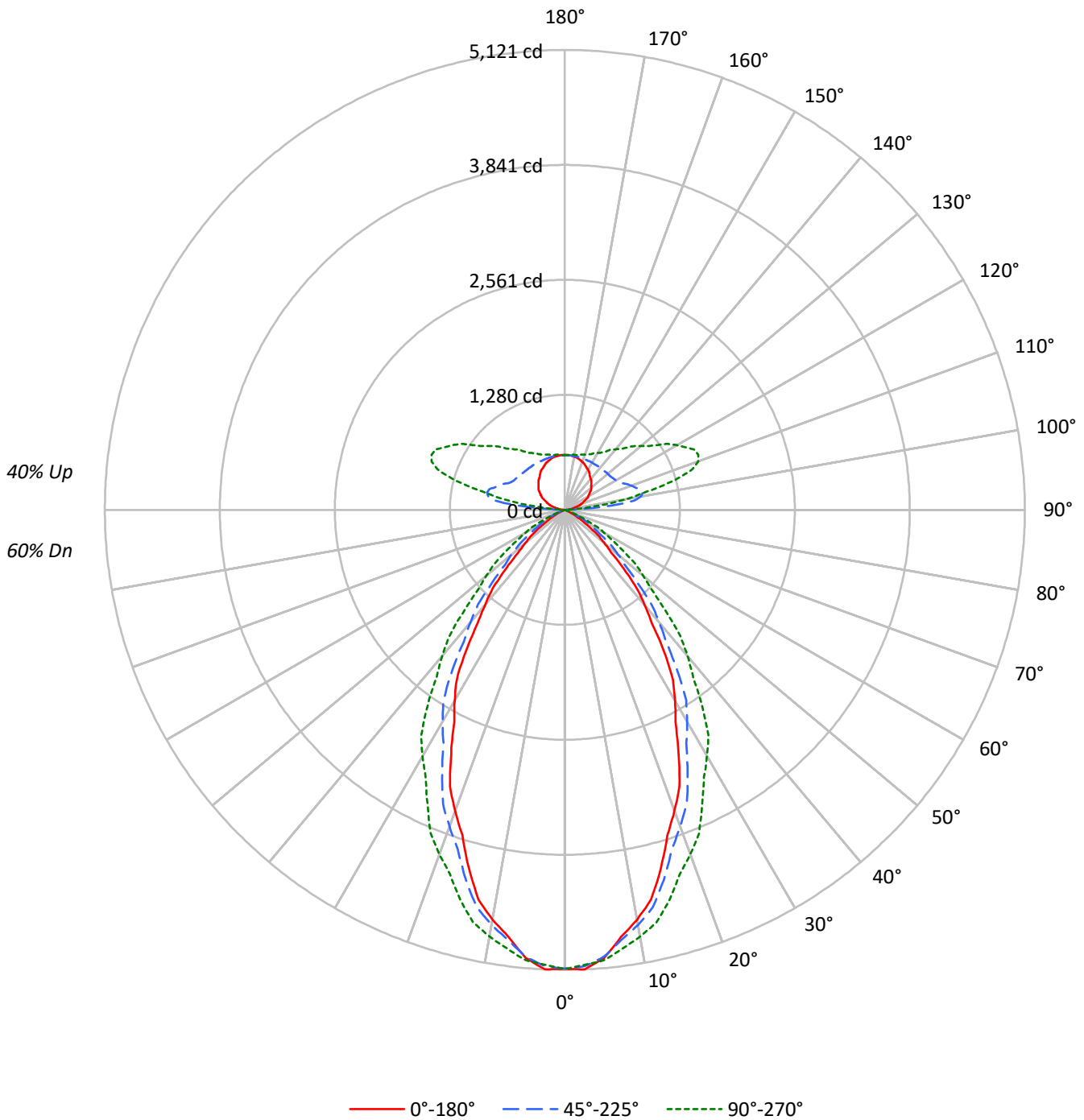
Lumens per Lamp: N/A
Luminaire Lumens: 10081.4 lumens
Efficiency: N/A
Efficacy: 87.8 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 114.8
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	110	110	110	110	102	102	102	102	89	89	89	77	77	77	66	66	66	60
1	102	99	96	93	96	93	90	88	81	79	78	71	70	68	61	61	60	55
2	95	89	84	79	89	84	79	76	74	71	68	65	63	61	57	55	54	50
3	88	80	74	69	83	76	70	66	67	63	60	60	57	54	52	50	48	45
4	82	73	66	61	77	69	63	58	61	57	53	55	51	48	48	46	44	41
5	76	66	59	54	72	63	56	52	56	51	48	50	47	44	45	42	40	37
6	71	60	53	48	67	57	51	46	52	47	43	47	43	40	42	39	36	34
7	66	55	48	43	62	53	46	42	48	43	39	43	39	36	39	36	33	31
8	62	51	44	39	59	49	42	38	44	39	35	40	36	33	36	33	31	29
9	58	47	40	36	55	45	39	35	41	36	33	37	33	30	34	31	28	26
10	55	44	37	33	52	42	36	32	38	33	30	35	31	28	32	29	26	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	23571	23571	23571
5°	23192	23134	23306
10°	21700	21989	22603
15°	19727	20353	21486
20°	17511	18421	20035
25°	15250	16457	18408
30°	13062	14497	16868
35°	10831	12306	15007
40°	8321	9840	12787
45°	6015	7450	10289
50°	4098	5553	8161
55°	2664	4016	6342
60°	1528	2828	4584
65°	405	1727	2321
70°	200	534	666
75°	87	45	0
80°	66	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	466.3	4.6
10°-20°	1192.5	11.8
20°-30°	1492.9	14.8
30°-40°	1378.9	13.7
40°-50°	926.5	9.2
50°-60°	478.6	4.7
60°-70°	149.9	1.5
70°-80°	9.5	0.1
80°-90°	2.5	0.0
90°-100°	292.9	2.9
100°-110°	795.7	7.9
110°-120°	818.1	8.1
120°-130°	654.1	6.5
130°-140°	513.9	5.1
140°-150°	394.1	3.9
150°-160°	283.4	2.8
160°-170°	173.3	1.7
170°-180°	58.4	0.6
0°-30°	3151.6	31.3
0°-40°	4530.6	44.9
0°-60°	5935.7	58.9
0°-90°	6097.6	60.5
90°-120°	1906.7	18.9
90°-150°	3468.7	34.4
90°-180°	3984.0	39.5
0°-180°	10081.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	5110	5110	5110	5110	5110	
5°	5008	4957	4996	5014	5033	464
15°	4131	4116	4262	4405	4499	1150
25°	2996	3020	3233	3454	3616	1374
35°	1923	1972	2185	2442	2665	1191
45°	922	978	1142	1364	1577	724
55°	331	387	499	641	789	309
65°	37	71	158	191	213	63
75°	5	5	2	0	0	7
85°	0	0	0	0	0	1
90°	2	8	14	18	18	3
95°	43	160	510	222	149	46
105°	141	220	875	1332	1254	150
115°	251	305	700	1393	1587	248
125°	345	393	634	1068	1260	308
135°	416	462	616	870	981	322
145°	481	515	608	739	795	302
155°	543	563	604	664	683	251
165°	589	596	606	632	634	166
175°	610	612	608	616	614	58
180°	610	610	610	610	610	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	5109.5	5109.5	5109.5	5109.5	5109.5
2.5°	5121.4	5073.1	5085.8	5085.5	5072.0
5°	5008.2	4957.4	4995.8	5013.6	5032.9
7.5°	4796.6	4756.9	4830.7	4886.0	4926.1
10°	4632.5	4598.6	4694.2	4769.7	4825.3
12.5°	4442.6	4416.5	4532.1	4635.5	4706.6
15°	4130.6	4116.1	4261.7	4404.7	4499.0
17.5°	3796.4	3796.0	3962.1	4139.7	4253.3
20°	3567.0	3574.3	3752.4	3948.3	4081.2
22.5°	3337.6	3354.6	3544.8	3749.0	3901.2
25°	2996.0	3020.2	3233.3	3454.5	3616.5
27.5°	2667.7	2703.0	2927.3	3157.2	3354.4
30°	2452.2	2493.3	2721.6	2963.5	3166.6
32.5°	2240.6	2289.4	2512.0	2767.9	2974.8
35°	1923.2	1971.5	2185.2	2442.4	2664.8
37.5°	1595.4	1642.8	1851.5	2104.6	2344.9
40°	1381.8	1435.0	1634.0	1879.3	2123.4
42.5°	1188.0	1241.2	1428.3	1669.4	1899.9
45°	922.0	977.6	1142.0	1364.4	1577.1
47.5°	701.5	762.0	906.2	1107.4	1301.2
50°	571.0	631.4	773.7	951.0	1137.1
52.5°	466.2	524.7	653.1	820.1	990.8
55°	331.2	386.8	499.3	641.1	788.6
57.5°	228.9	276.8	377.7	496.0	611.6
60°	165.6	211.5	306.5	402.6	496.9
62.5°	110.2	152.3	245.2	318.8	382.2
65°	37.1	70.9	158.2	190.8	212.6
67.5°	18.8	22.7	83.1	87.7	94.9
70°	14.8	14.8	39.6	42.2	49.4
72.5°	10.9	10.9	15.8	20.3	21.8
75°	4.9	4.9	2.5	0.0	0.0
77.5°	2.5	2.5	2.0	0.0	0.0
80°	2.5	2.5	0.0	0.0	0.0
82.5°	0.5	0.5	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.4	1.5	2.7	3.5	3.5
90°	2.0	7.7	13.7	17.7	17.7
92.5°	17.7	80.2	139.3	59.8	50.6
95°	43.2	160.2	510.1	222.0	149.1
97.5°	71.4	176.9	782.0	608.4	427.3
100°	90.2	188.1	865.2	877.1	708.2
102.5°	109.1	199.2	887.2	1084.7	935.8
105°	141.3	219.9	875.0	1332.3	1253.6
107.5°	174.6	244.1	824.4	1460.1	1482.0
110°	198.2	261.5	786.7	1485.3	1579.3



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	218.6	278.8	749.1	1464.4	1606.0
115°	251.1	304.8	700.4	1393.4	1587.2
117.5°	281.7	333.1	669.4	1292.7	1511.0
120°	302.1	352.0	655.3	1225.2	1442.0
122.5°	319.4	369.3	645.9	1157.6	1366.7
125°	345.3	393.3	633.7	1067.7	1259.5
127.5°	368.4	416.0	627.0	999.6	1164.2
130°	382.6	428.6	623.9	956.8	1104.5
132.5°	396.7	442.7	620.7	920.4	1051.2
135°	415.9	462.0	616.0	869.7	980.9
137.5°	436.7	478.5	613.7	824.9	918.6
140°	449.3	489.6	612.1	796.5	880.9
142.5°	461.8	499.0	610.5	774.2	844.8
145°	480.7	515.2	608.2	738.9	794.6
147.5°	501.9	531.4	606.2	711.2	754.9
150°	516.0	540.9	606.2	695.3	729.8
152.5°	527.0	548.8	604.7	681.0	709.4
155°	543.4	562.6	604.3	663.6	682.7
157.5°	559.5	574.5	604.3	651.7	666.3
160°	568.9	582.4	604.3	643.8	655.3
162.5°	578.4	588.7	605.8	637.4	645.9
165°	588.6	596.2	606.2	631.8	633.7
167.5°	599.2	603.0	608.2	625.1	626.6
170°	602.3	606.1	608.2	621.9	621.9
172.5°	605.4	607.7	608.2	618.8	618.8
175°	610.1	612.1	608.2	616.0	614.1
177.5°	611.7	611.7	607.0	613.2	610.1
180°	610.1	610.1	610.1	610.1	610.1

(END OF REPORT)