

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: P518524

Luminaire Tested: **SQ4-BB-075U-075D-840-1D-UNV-STD-W-4**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518524
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-075D-840-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 750 LUMENS PER FOOT
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

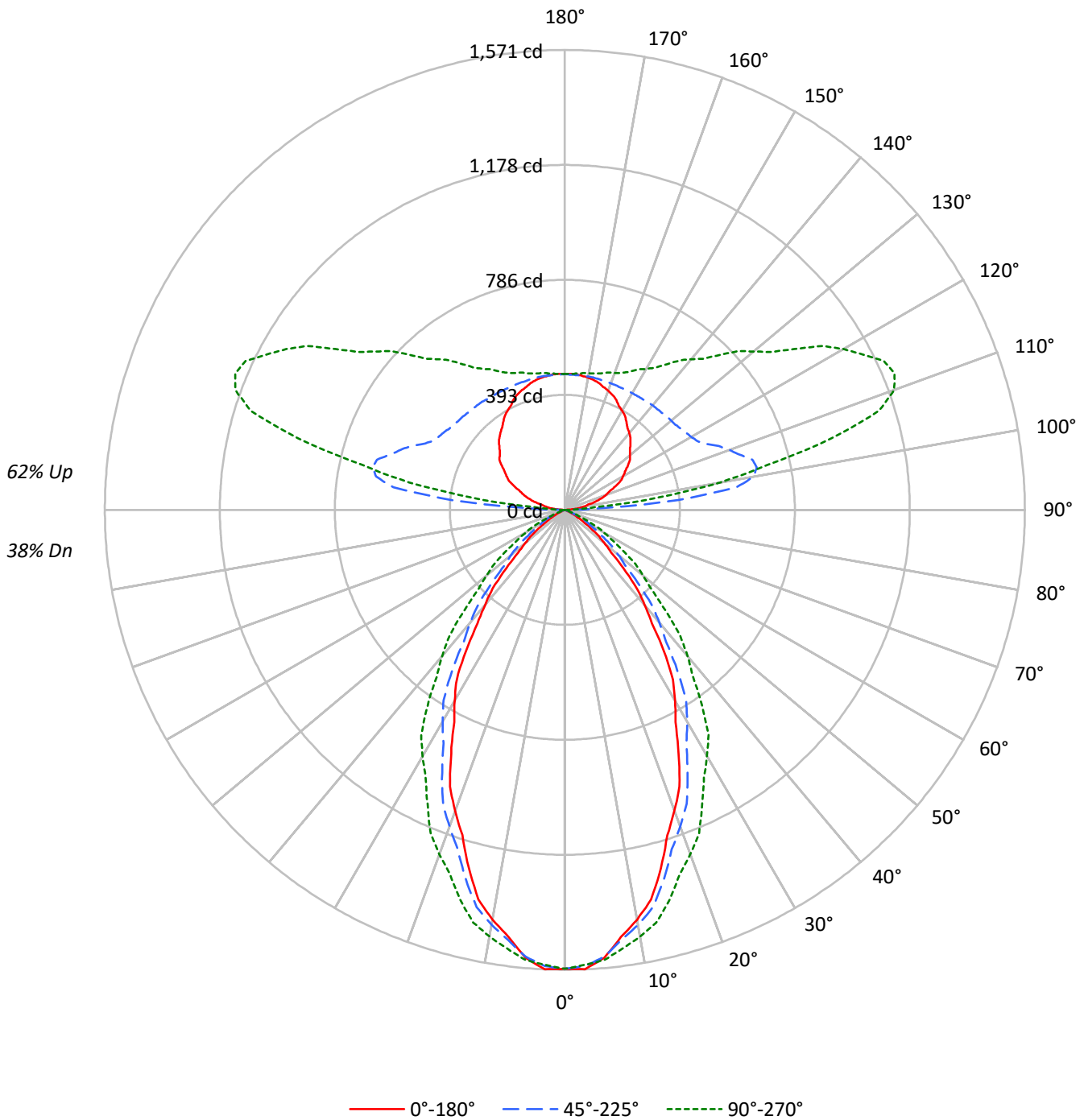
Lumens per Lamp: N/A
Luminaire Lumens: 4894.9 lumens
Efficiency: N/A
Efficacy: 115.2 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 42.5
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	60	60	60	45	45	45	38
1	96	93	89	86	88	85	82	79	69	67	66	55	54	53	42	41	41	35
2	89	83	77	73	81	76	71	67	62	59	57	50	48	46	39	38	37	32
3	82	74	68	62	75	68	62	58	56	52	49	46	43	41	36	34	33	28
4	76	66	59	54	69	61	55	50	51	47	43	42	39	36	33	31	30	26
5	70	60	53	47	64	55	49	44	46	42	38	38	35	32	30	28	27	23
6	65	54	47	42	59	50	44	39	42	38	34	35	32	29	28	26	24	21
7	60	49	42	37	55	46	39	35	39	34	31	32	29	26	26	24	22	20
8	56	45	38	33	52	42	36	31	36	31	28	30	26	24	24	22	20	18
9	53	42	35	30	48	39	33	28	33	28	25	28	24	22	23	20	19	17
10	49	38	32	27	45	36	30	26	31	26	23	26	23	20	21	19	17	15

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	14461	14461	14461
5°	14228	14193	14299
10°	13314	13491	13867
15°	12103	12487	13182
20°	10743	11302	12293
25°	9356	10098	11294
30°	8014	8895	10349
35°	6645	7550	9208
40°	5105	6036	7845
45°	3690	4571	6313
50°	2515	3406	5006
55°	1634	2464	3891
60°	937	1735	2812
65°	249	1059	1423
70°	121	326	410
75°	53	29	0
80°	43	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	143.0	2.9
10°-20°	365.8	7.5
20°-30°	458.0	9.4
30°-40°	423.0	8.6
40°-50°	284.2	5.8
50°-60°	146.8	3.0
60°-70°	46.0	0.9
70°-80°	2.9	0.1
80°-90°	1.2	0.0
90°-100°	218.9	4.5
100°-110°	602.3	12.3
110°-120°	621.7	12.7
120°-130°	498.1	10.2
130°-140°	391.2	8.0
140°-150°	299.8	6.1
150°-160°	215.6	4.4
160°-170°	131.8	2.7
170°-180°	44.4	0.9
0°-30°	966.8	19.8
0°-40°	1389.8	28.4
0°-60°	1820.8	37.2
0°-90°	1871.0	38.2
90°-120°	1442.9	29.5
90°-150°	2632.1	53.8
90°-180°	3024.0	61.8
0°-180°	4894.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1567	1567	1567	1567	1567	
5°	1536	1521	1532	1538	1544	142
15°	1267	1263	1307	1351	1380	353
25°	919	926	992	1060	1109	421
35°	590	605	670	749	818	365
45°	283	300	350	419	484	222
55°	102	119	153	197	242	95
65°	11	22	48	58	65	19
75°	2	2	1	0	0	2
85°	0	0	0	0	0	0
90°	1	4	7	9	9	2
95°	33	120	387	166	106	34
105°	108	166	664	1011	943	113
115°	191	232	532	1060	1203	188
125°	263	299	483	817	957	234
135°	317	352	469	661	748	245
145°	366	392	462	563	606	230
155°	415	428	459	506	520	191
165°	448	454	461	480	483	126
175°	464	465	462	468	467	44
180°	464	464	464	464	464	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1567.4	1567.4	1567.4	1567.4	1567.4
2.5°	1571.1	1556.2	1560.1	1560.0	1555.9
5°	1536.3	1520.8	1532.5	1538.0	1543.9
7.5°	1471.4	1459.3	1481.9	1498.8	1511.2
10°	1421.1	1410.7	1440.0	1463.2	1480.2
12.5°	1362.8	1354.8	1390.3	1422.0	1443.8
15°	1267.1	1262.7	1307.3	1351.2	1380.1
17.5°	1164.6	1164.5	1215.4	1269.9	1304.7
20°	1094.2	1096.5	1151.1	1211.2	1252.0
22.5°	1023.9	1029.1	1087.4	1150.0	1196.8
25°	919.1	926.5	991.9	1059.7	1109.4
27.5°	818.4	829.2	898.0	968.5	1029.0
30°	752.2	764.8	834.9	909.1	971.4
32.5°	687.3	702.3	770.6	849.1	912.5
35°	590.0	604.8	670.3	749.2	817.5
37.5°	489.4	503.9	568.0	645.6	719.3
40°	423.9	440.2	501.2	576.5	651.4
42.5°	364.4	380.8	438.1	512.1	582.8
45°	282.8	299.9	350.3	418.6	483.8
47.5°	215.2	233.7	278.0	339.7	399.2
50°	175.2	193.7	237.3	291.7	348.8
52.5°	143.0	161.0	200.3	251.6	303.9
55°	101.6	118.7	153.2	196.7	241.9
57.5°	70.2	84.9	115.9	152.2	187.6
60°	50.8	64.9	94.0	123.5	152.4
62.5°	33.8	46.7	75.2	97.8	117.2
65°	11.4	21.8	48.5	58.5	65.2
67.5°	5.8	6.9	25.5	26.9	29.1
70°	4.5	4.5	12.1	12.9	15.2
72.5°	3.3	3.3	4.9	6.2	6.7
75°	1.5	1.5	0.8	0.0	0.0
77.5°	0.8	0.8	0.6	0.0	0.0
80°	0.8	0.8	0.0	0.0	0.0
82.5°	0.2	0.2	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	8.9	8.9
92.5°	13.6	58.2	100.9	38.8	31.8
95°	32.6	119.5	387.1	165.5	105.7
97.5°	53.1	132.5	590.8	455.2	321.2
100°	68.1	140.6	654.8	660.9	539.2
102.5°	82.4	150.2	671.4	819.9	708.3
105°	107.6	165.6	663.7	1010.8	943.2
107.5°	131.7	184.7	625.9	1104.2	1124.3
110°	149.1	197.4	597.5	1127.4	1197.0

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	164.9	211.7	569.1	1112.5	1218.3
115°	190.6	232.1	532.3	1060.0	1202.9
117.5°	215.1	253.3	509.0	986.3	1148.0
120°	230.1	266.8	498.7	931.2	1098.2
122.5°	243.5	280.2	491.6	882.8	1041.3
125°	262.7	299.4	482.9	817.0	957.0
127.5°	280.9	315.8	477.2	762.1	884.9
130°	290.4	326.1	474.1	729.4	841.4
132.5°	301.4	337.1	471.7	700.7	801.9
135°	317.0	351.8	469.1	660.7	747.6
137.5°	331.6	363.9	466.9	628.4	700.0
140°	342.7	372.6	466.1	606.9	671.6
142.5°	352.2	379.8	464.6	587.7	643.1
145°	366.4	391.5	462.2	562.9	606.4
147.5°	381.6	403.2	461.0	541.0	575.8
150°	391.1	410.4	460.2	529.0	556.0
152.5°	399.8	417.6	459.4	518.6	541.0
155°	414.8	428.3	459.2	506.0	520.5
157.5°	425.7	436.7	459.2	495.6	505.7
160°	433.6	442.2	459.2	490.0	497.8
162.5°	439.9	447.0	460.0	485.3	491.4
165°	448.4	454.2	461.2	480.0	482.9
167.5°	454.3	458.7	462.2	475.6	476.4
170°	458.2	461.1	462.2	474.1	474.1
172.5°	461.4	462.8	462.2	471.7	470.9
175°	464.2	465.1	462.2	468.1	467.1
177.5°	465.0	465.0	461.8	466.5	465.0
180°	464.2	464.2	464.2	464.2	464.2

(END OF REPORT)