

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: P518397

Luminaire Tested: **SQ4-BB-050U-050D-830-1D-UNV-STD-W-6**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518397
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-050D-830-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

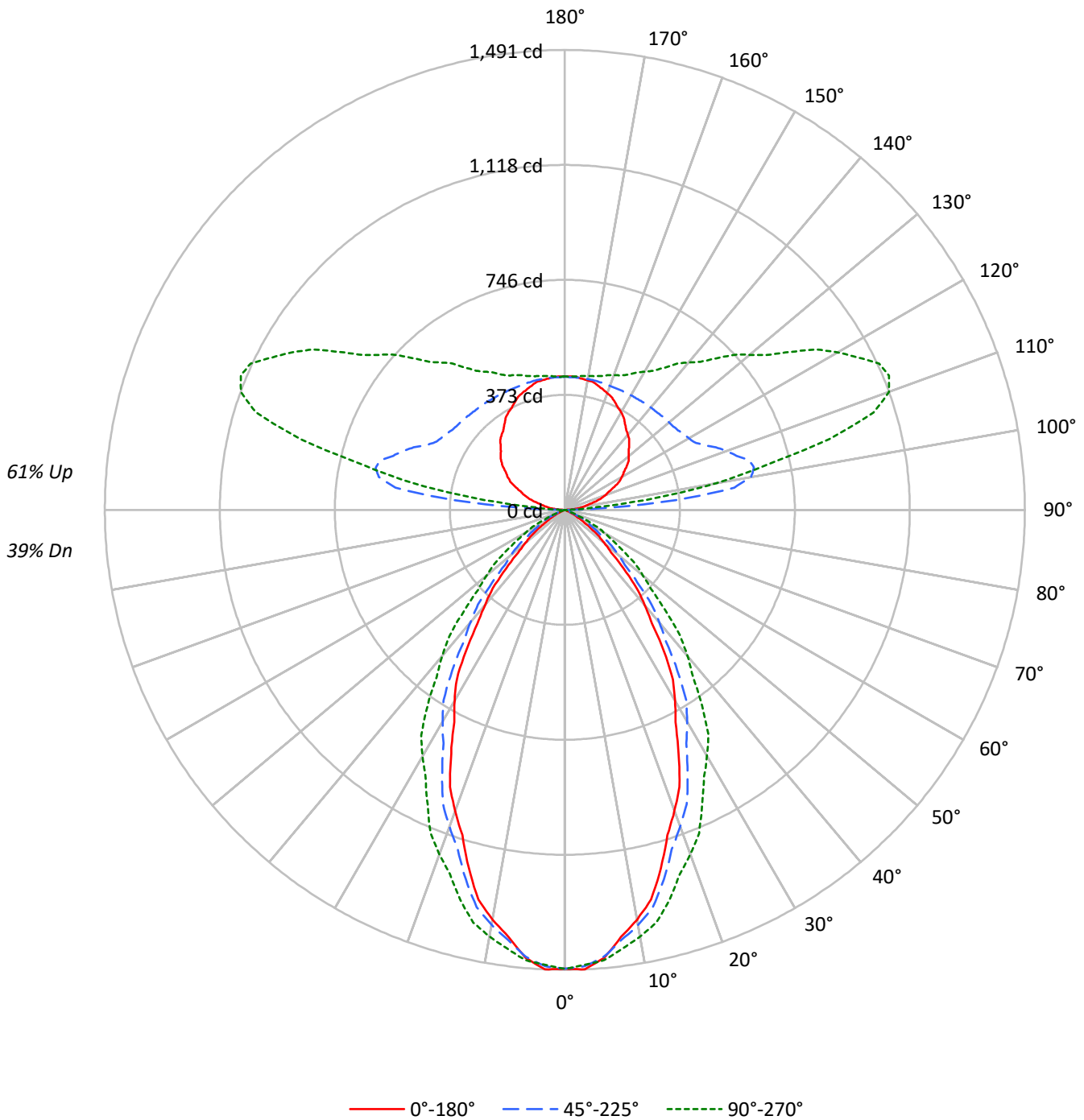
Lumens per Lamp: N/A
Luminaire Lumens: 4596.6 lumens
Efficiency: N/A
Efficacy: 102.6 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 44.8
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	50	30	10	0	
RCR																						
0	104	104	104	104	95	95	95	95	77	77	77	61	61	61	46	46	46	39				
1	97	93	90	87	88	85	82	79	69	68	66	55	54	53	42	42	41	35				
2	89	83	77	73	81	76	71	67	63	59	57	50	48	47	39	38	37	32				
3	82	74	68	63	75	68	62	58	56	53	49	46	43	41	36	34	33	29				
4	76	66	60	54	69	61	55	51	51	47	43	42	39	37	33	31	30	26				
5	70	60	53	47	64	55	49	44	46	42	38	38	35	33	31	29	27	24				
6	65	54	47	42	59	50	44	39	42	38	34	35	32	29	28	26	25	22				
7	61	50	42	37	55	46	40	35	39	34	31	32	29	27	26	24	22	20				
8	56	45	38	33	52	42	36	32	36	31	28	30	27	24	25	22	21	18				
9	53	42	35	30	48	39	33	29	33	29	25	28	25	22	23	21	19	17				
10	49	38	32	27	45	36	30	26	31	26	23	26	23	20	22	19	18	16				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9151	9151	9151
5°	9003	8981	9048
10°	8424	8537	8775
15°	7659	7901	8341
20°	6798	7151	7778
25°	5920	6389	7146
30°	5071	5628	6548
35°	4204	4777	5826
40°	3230	3820	4964
45°	2336	2892	3994
50°	1591	2156	3168
55°	1034	1559	2462
60°	593	1097	1780
65°	157	671	901
70°	77	207	259
75°	33	17	0
80°	25	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	135.8	3.0
10°-20°	347.2	7.6
20°-30°	434.7	9.5
30°-40°	401.5	8.7
40°-50°	269.8	5.9
50°-60°	139.3	3.0
60°-70°	43.6	0.9
70°-80°	2.8	0.1
80°-90°	1.7	0.0
90°-100°	207.4	4.5
100°-110°	563.3	12.3
110°-120°	579.1	12.6
120°-130°	463.0	10.1
130°-140°	363.8	7.9
140°-150°	279.0	6.1
150°-160°	200.6	4.4
160°-170°	122.7	2.7
170°-180°	41.3	0.9
0°-30°	917.6	20.0
0°-40°	1319.1	28.7
0°-60°	1728.2	37.6
0°-90°	1776.3	38.6
90°-120°	1349.8	29.4
90°-150°	2455.6	53.4
90°-180°	2820.0	61.4
0°-180°	4596.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1488	1488	1488	1488	1488	
5°	1458	1443	1455	1460	1465	135
15°	1203	1198	1241	1282	1310	335
25°	872	879	941	1006	1053	400
35°	560	574	636	711	776	347
45°	268	285	332	397	459	211
55°	96	113	145	187	230	90
65°	11	21	46	56	62	18
75°	1	1	1	0	0	2
85°	0	0	0	0	0	0
90°	1	6	10	12	12	2
95°	31	113	361	157	106	32
105°	100	156	619	943	888	106
115°	178	216	496	986	1124	175
125°	244	278	449	756	892	218
135°	294	327	436	616	694	228
145°	340	365	430	523	562	214
155°	385	398	428	470	483	177
165°	417	422	429	447	449	118
175°	432	433	430	436	435	41
180°	432	432	432	432	432	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1487.7	1487.7	1487.7	1487.7	1487.7
2.5°	1491.1	1477.1	1480.8	1480.7	1476.7
5°	1458.2	1443.4	1454.6	1459.7	1465.4
7.5°	1396.6	1385.0	1406.5	1422.6	1434.3
10°	1348.8	1338.9	1366.8	1388.7	1404.9
12.5°	1293.5	1285.9	1319.5	1349.7	1370.4
15°	1202.7	1198.4	1240.8	1282.5	1309.9
17.5°	1105.4	1105.2	1153.6	1205.3	1238.4
20°	1038.6	1040.7	1092.5	1149.6	1188.3
22.5°	971.8	976.7	1032.1	1091.5	1135.9
25°	872.3	879.3	941.4	1005.8	1053.0
27.5°	776.7	787.0	852.3	919.2	976.7
30°	714.0	725.9	792.4	862.9	922.0
32.5°	652.4	666.6	731.4	805.9	866.1
35°	559.9	574.0	636.2	711.1	775.9
37.5°	464.5	478.3	539.1	612.8	682.7
40°	402.3	417.8	475.7	547.2	618.2
42.5°	345.9	361.4	415.9	486.0	553.2
45°	268.5	284.6	332.5	397.3	459.2
47.5°	204.3	221.9	263.9	322.4	378.9
50°	166.3	183.8	225.3	276.9	331.1
52.5°	135.7	152.8	190.2	238.8	288.5
55°	96.4	112.6	145.4	186.7	229.6
57.5°	66.6	80.6	110.0	144.4	178.1
60°	48.2	61.6	89.2	117.2	144.7
62.5°	32.1	44.3	71.4	92.8	111.3
65°	10.8	20.6	46.1	55.6	61.9
67.5°	5.5	6.6	24.2	25.5	27.6
70°	4.3	4.3	11.5	12.3	14.4
72.5°	3.2	3.2	4.6	5.9	6.3
75°	1.4	1.4	0.7	0.0	0.0
77.5°	0.7	0.7	0.6	0.0	0.0
80°	0.7	0.7	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°	0.3	1.1	1.9	2.5	2.5
90°	1.4	5.5	9.7	12.5	12.5
92.5°	12.5	56.8	98.6	42.4	35.8
95°	30.6	113.4	361.1	157.2	105.6
97.5°	50.6	125.2	553.6	430.7	302.5
100°	63.9	133.1	612.5	620.9	501.4
102.5°	77.2	141.0	628.0	767.9	662.5
105°	100.0	155.7	619.4	943.2	887.5
107.5°	123.6	172.8	583.6	1033.7	1049.1
110°	140.3	185.1	556.9	1051.5	1118.0

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	154.7	197.4	530.3	1036.7	1136.9
115°	177.8	215.8	495.8	986.4	1123.6
117.5°	199.4	235.8	473.9	915.2	1069.7
120°	213.9	249.2	463.9	867.4	1020.8
122.5°	226.1	261.4	457.2	819.5	967.5
125°	244.4	278.4	448.6	755.8	891.6
127.5°	260.8	294.5	443.9	707.6	824.2
130°	270.8	303.4	441.7	677.4	781.9
132.5°	280.8	313.4	439.4	651.5	744.2
135°	294.4	327.0	436.1	615.7	694.4
137.5°	309.2	338.8	434.4	584.0	650.3
140°	318.0	346.6	433.3	563.8	623.6
142.5°	326.9	353.3	432.2	548.1	598.0
145°	340.3	364.7	430.5	523.1	562.5
147.5°	355.3	376.2	429.2	503.5	534.4
150°	365.3	382.9	429.2	492.2	516.7
152.5°	373.0	388.5	428.0	482.1	502.2
155°	384.7	398.3	427.8	469.7	483.3
157.5°	396.1	406.7	427.8	461.3	471.7
160°	402.8	412.3	427.8	455.7	463.9
162.5°	409.4	416.8	428.9	451.2	457.2
165°	416.7	422.1	429.2	447.2	448.6
167.5°	424.2	426.9	430.5	442.5	443.6
170°	426.4	429.1	430.5	440.3	440.3
172.5°	428.6	430.2	430.5	438.0	438.0
175°	431.9	433.3	430.5	436.1	434.7
177.5°	433.0	433.0	429.7	434.1	431.9
180°	431.9	431.9	431.9	431.9	431.9

(END OF REPORT)