

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: P518890

Luminaire Tested: **SQ4-BB-150U-050D-930-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518890
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-25, 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-150U-050D-930-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 1500 LUMENS PER FOOT
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

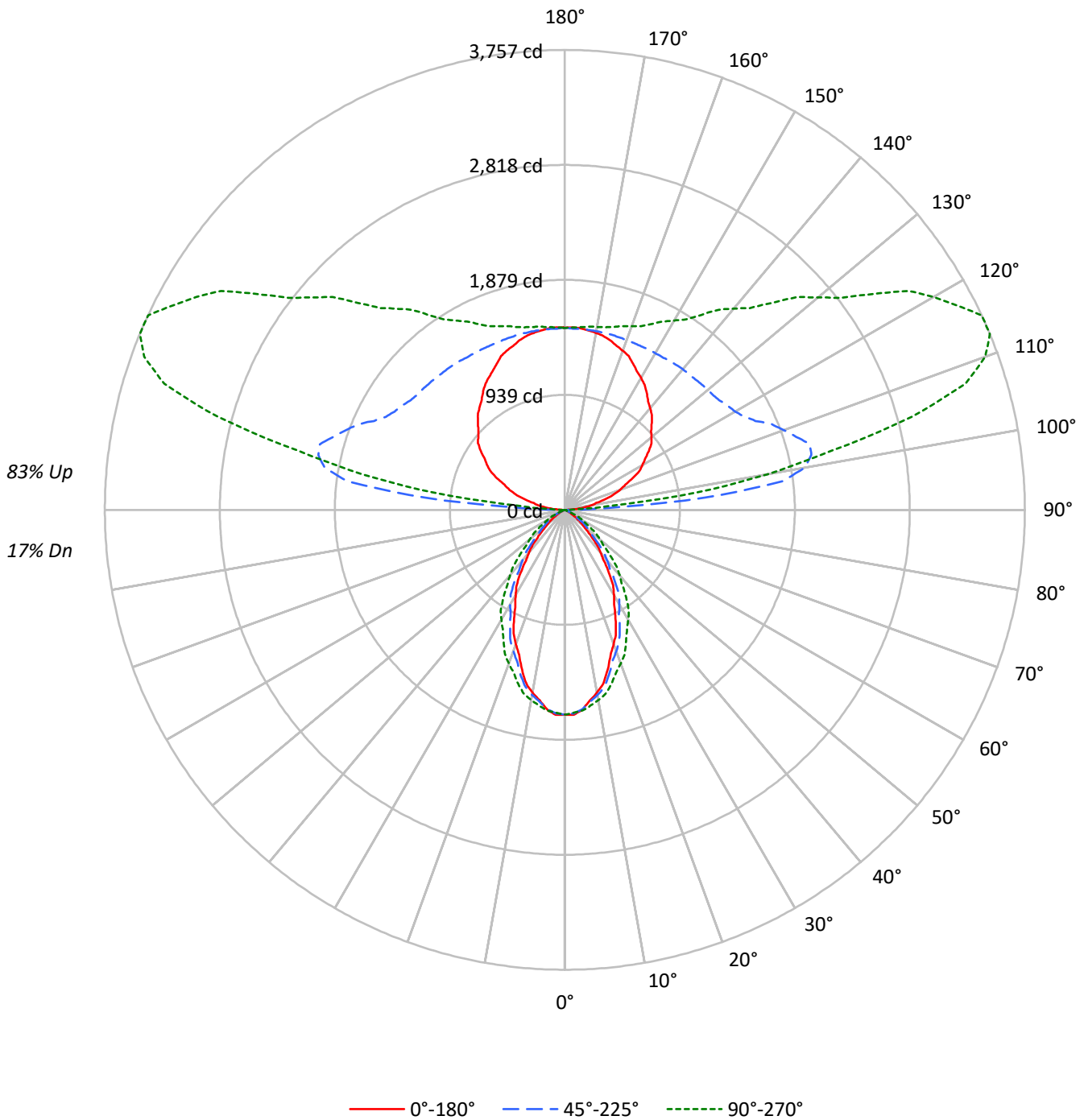
Lumens per Lamp: N/A
Luminaire Lumens: 11585.2 lumens
Efficiency: N/A
Efficacy: 103.5 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 111.9
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									
RC	80									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	99	99	99	99	87	87	87	87	65	65	65	45	45	45	26	26	26	17																			
1	91	87	84	81	80	77	74	72	58	56	54	40	39	38	24	23	23	16																			
2	83	77	71	67	73	68	63	60	51	48	46	36	34	33	22	21	20	14																			
3	76	68	61	56	67	60	55	51	46	42	39	32	30	29	20	19	18	13																			
4	70	60	53	48	62	54	48	43	41	37	34	29	27	25	18	17	16	12																			
5	64	54	47	41	57	48	42	37	37	33	30	26	24	22	17	15	14	11																			
6	59	48	41	36	52	43	37	33	33	29	26	24	21	19	15	14	13	10																			
7	55	44	37	32	48	39	33	29	30	26	23	22	19	17	14	13	12	9																			
8	51	40	33	28	45	36	30	25	28	23	20	20	18	16	13	12	11	8																			
9	47	36	29	25	42	32	27	23	25	21	18	19	16	14	12	11	10	8																			
10	44	33	27	22	39	30	24	20	23	19	16	17	15	13	11	10	9	7																			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7714	7714	7714
5°	7590	7571	7628
10°	7102	7196	7397
15°	6456	6661	7032
20°	5731	6029	6557
25°	4991	5386	6025
30°	4275	4745	5521
35°	3545	4028	4911
40°	2723	3221	4185
45°	1969	2439	3368
50°	1341	1817	2671
55°	872	1314	2076
60°	500	925	1500
65°	132	565	760
70°	66	174	219
75°	29	14	0
80°	21	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	152.6	1.3
10°-20°	390.3	3.4
20°-30°	488.6	4.2
30°-40°	451.3	3.9
40°-50°	303.3	2.6
50°-60°	156.6	1.4
60°-70°	49.1	0.4
70°-80°	3.1	0.0
80°-90°	3.2	0.0
90°-100°	691.1	6.0
100°-110°	1868.5	16.1
110°-120°	1964.4	17.0
120°-130°	1595.6	13.8
130°-140°	1251.7	10.8
140°-150°	960.7	8.3
150°-160°	690.9	6.0
160°-170°	422.1	3.6
170°-180°	142.3	1.2
0°-30°	1031.5	8.9
0°-40°	1482.8	12.8
0°-60°	1942.6	16.8
0°-90°	1998.0	17.2
90°-120°	4524.0	39.0
90°-150°	8331.9	71.9
90°-180°	9587.0	82.8
0°-180°	11585.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1672	1672	1672	1672	1672	
5°	1639	1622	1635	1641	1647	152
15°	1352	1347	1395	1442	1472	377
25°	980	988	1058	1131	1184	450
35°	629	645	715	799	872	390
45°	302	320	374	446	516	237
55°	108	127	163	210	258	101
65°	12	23	52	62	70	20
75°	2	2	1	0	0	2
85°	0	0	0	0	0	0
90°	3	10	21	22	21	7
95°	107	376	1149	595	354	112
105°	347	537	2073	3058	2932	366
115°	611	748	1719	3328	3757	604
125°	837	959	1549	2615	3072	746
135°	1004	1122	1508	2111	2390	776
145°	1167	1254	1487	1807	1945	730
155°	1317	1369	1474	1621	1674	608
165°	1434	1448	1481	1538	1546	404
175°	1489	1487	1482	1501	1498	141
180°	1487	1487	1487	1487	1487	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1672.3	1672.3	1672.3	1672.3	1672.3
2.5°	1676.1	1660.3	1664.5	1664.4	1660.0
5°	1639.1	1622.5	1635.0	1640.8	1647.2
7.5°	1569.8	1556.9	1581.0	1599.1	1612.2
10°	1516.1	1505.0	1536.3	1561.0	1579.2
12.5°	1454.0	1445.4	1483.3	1517.1	1540.4
15°	1351.9	1347.1	1394.8	1441.6	1472.4
17.5°	1242.5	1242.3	1296.7	1354.8	1392.0
20°	1167.4	1169.8	1228.1	1292.2	1335.7
22.5°	1092.3	1097.9	1160.1	1227.0	1276.8
25°	980.5	988.5	1058.2	1130.6	1183.6
27.5°	873.1	884.7	958.0	1033.3	1097.8
30°	802.6	816.0	890.7	969.9	1036.4
32.5°	733.3	749.3	822.1	905.9	973.6
35°	629.4	645.2	715.2	799.4	872.1
37.5°	522.1	537.7	606.0	688.8	767.4
40°	452.2	469.6	534.8	615.1	695.0
42.5°	388.8	406.2	467.5	546.4	621.8
45°	301.8	320.0	373.8	446.5	516.2
47.5°	229.6	249.4	296.6	362.4	425.9
50°	186.9	206.7	253.2	311.2	372.2
52.5°	152.6	171.7	213.7	268.4	324.3
55°	108.4	126.6	163.4	209.8	258.1
57.5°	74.9	90.6	123.6	162.3	200.2
60°	54.2	69.2	100.3	131.8	162.6
62.5°	36.1	49.8	80.3	104.4	125.1
65°	12.1	23.2	51.8	62.5	69.6
67.5°	6.1	7.4	27.2	28.7	31.1
70°	4.9	4.9	12.9	13.8	16.2
72.5°	3.6	3.6	5.2	6.6	7.1
75°	1.6	1.6	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°	0.6	1.9	4.2	4.5	4.2
90°	3.2	9.5	20.8	22.4	20.8
92.5°	45.5	165.7	326.8	141.9	102.8
95°	107.2	376.4	1149.3	594.8	353.7
97.5°	172.2	431.7	1791.4	1482.5	1088.8
100°	220.9	454.1	1991.2	2076.6	1679.1
102.5°	265.7	485.1	2061.6	2527.0	2229.7
105°	347.3	536.7	2072.8	3057.6	2932.4
107.5°	422.9	595.7	1982.2	3388.5	3430.2
110°	481.8	638.3	1901.6	3477.4	3654.3

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	534.3	680.8	1827.3	3459.6	3756.7
115°	611.4	747.6	1719.1	3327.9	3756.7
117.5°	687.0	814.7	1647.7	3126.5	3612.6
120°	733.1	858.3	1605.4	2982.1	3478.2
122.5°	776.6	899.3	1579.8	2827.2	3327.1
125°	837.1	959.2	1549.4	2614.6	3071.6
127.5°	892.8	1012.7	1531.5	2441.1	2843.0
130°	923.6	1047.2	1523.8	2334.0	2697.1
132.5°	955.6	1078.0	1516.1	2237.3	2571.6
135°	1003.6	1122.5	1507.8	2111.2	2389.7
137.5°	1051.9	1164.3	1500.8	2008.8	2235.8
140°	1085.2	1190.1	1498.2	1943.0	2144.9
142.5°	1117.2	1215.8	1493.1	1883.5	2060.3
145°	1166.9	1254.5	1487.0	1807.0	1944.8
147.5°	1212.0	1289.6	1479.9	1737.8	1843.6
150°	1245.3	1314.2	1477.4	1700.2	1784.7
152.5°	1276.0	1336.1	1476.1	1665.3	1734.8
155°	1317.3	1369.0	1474.2	1621.1	1674.3
157.5°	1360.2	1396.2	1474.5	1590.2	1625.3
160°	1384.5	1414.3	1475.8	1570.8	1595.8
162.5°	1403.8	1428.5	1477.1	1555.3	1574.1
165°	1434.2	1448.3	1480.6	1538.4	1546.2
167.5°	1455.0	1464.7	1480.9	1523.9	1527.6
170°	1467.8	1472.5	1482.2	1517.4	1517.4
172.5°	1478.0	1479.0	1482.2	1509.7	1508.4
175°	1488.6	1487.0	1482.2	1501.3	1498.2
177.5°	1492.1	1488.4	1481.9	1494.6	1490.8
180°	1487.0	1487.0	1487.0	1487.0	1487.0

(END OF REPORT)