

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: P518877

Luminaire Tested: **SQ4-BB-150U-050D-830-1D-UNV-STD-W-6**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518877
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-830-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 1500 LUMENS PER FOOT
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

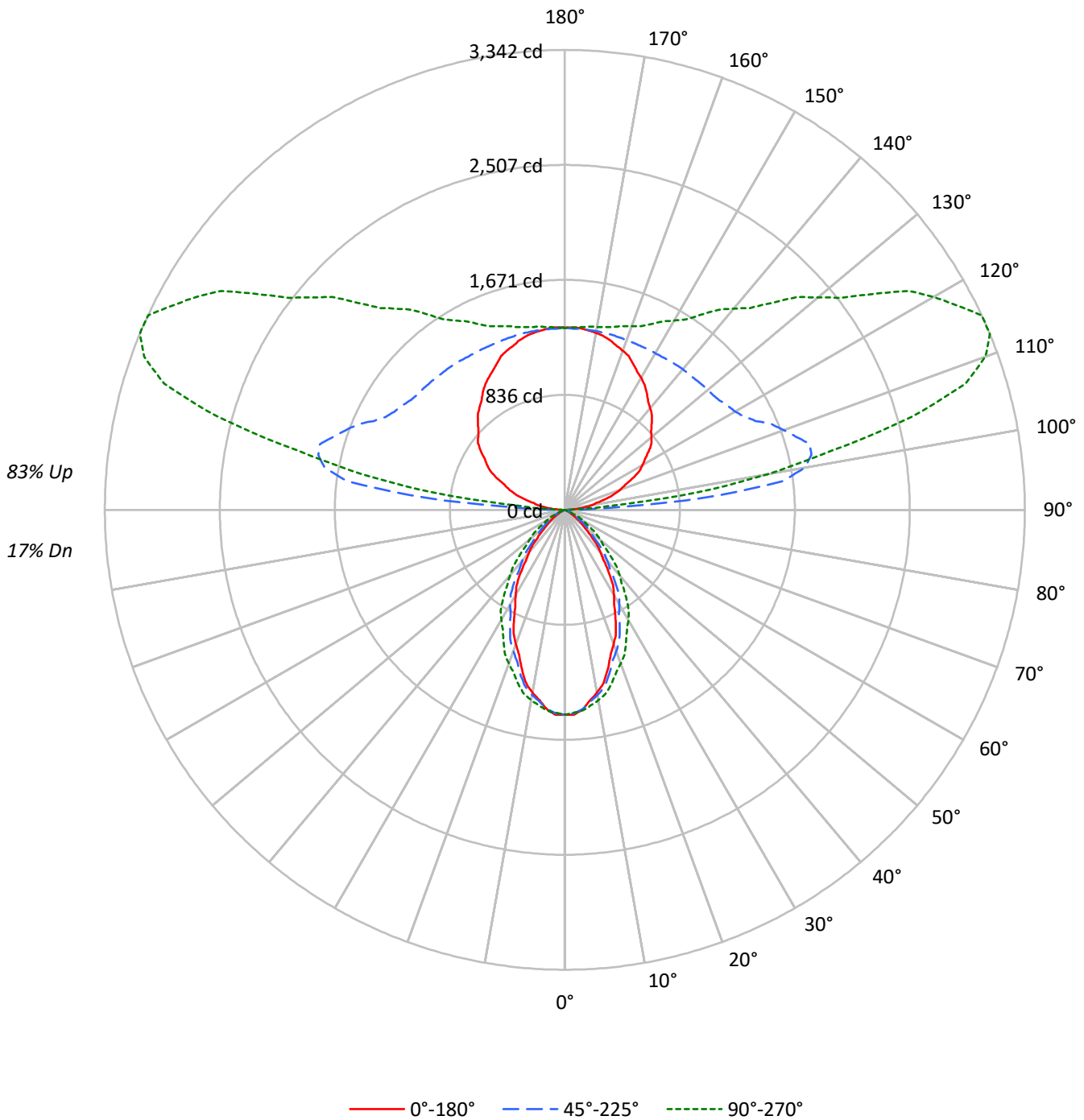
Lumens per Lamp: N/A
Luminaire Lumens: 10306.4 lumens
Efficiency: N/A
Efficacy: 122.5 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 84.1
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°	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	1.3
10°-20°	347.2	3.4
20°-30°	434.7	4.2
30°-40°	401.5	3.9
40°-50°	269.8	2.6
50°-60°	139.3	1.4
60°-70°	43.6	0.4
70°-80°	2.8	0.0
80°-90°	2.8	0.0
90°-100°	614.8	6.0
100°-110°	1662.2	16.1
110°-120°	1747.6	17.0
120°-130°	1419.5	13.8
130°-140°	1113.5	10.8
140°-150°	854.6	8.3
150°-160°	614.6	6.0
160°-170°	375.5	3.6
170°-180°	126.6	1.2
0°-30°	917.6	8.9
0°-40°	1319.1	12.8
0°-60°	1728.2	16.8
0°-90°	1777.4	17.2
90°-120°	4024.6	39.0
90°-150°	7412.3	71.9
90°-180°	8529.0	82.8
0°-180°	10306.4	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°	3	8	18	20	18	6
95°	95	335	1022	529	315	100
105°	309	478	1844	2720	2609	325
115°	544	665	1529	2960	3342	537
125°	745	853	1378	2326	2733	664
135°	893	999	1341	1878	2126	690
145°	1038	1116	1323	1608	1730	649
155°	1172	1218	1312	1442	1490	541
165°	1276	1288	1317	1369	1376	359
175°	1324	1323	1319	1336	1333	126
180°	1323	1323	1323	1323	1323	



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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°	0.6	1.7	3.7	4.0	3.7
90°	2.8	8.4	18.5	19.9	18.5
92.5°	40.4	147.4	290.8	126.2	91.4
95°	95.4	334.9	1022.4	529.1	314.7
97.5°	153.2	384.1	1593.7	1318.9	968.6
100°	196.5	404.0	1771.4	1847.4	1493.7
102.5°	236.4	431.6	1834.1	2248.1	1983.6
105°	309.0	477.5	1844.0	2720.1	2608.7
107.5°	376.2	529.9	1763.4	3014.5	3051.5
110°	428.6	567.8	1691.7	3093.6	3250.9

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	475.3	605.6	1625.6	3077.8	3342.0
115°	544.0	665.1	1529.3	2960.5	3342.0
117.5°	611.2	724.8	1465.8	2781.4	3213.9
120°	652.2	763.6	1428.2	2652.9	3094.3
122.5°	690.9	800.1	1405.4	2515.1	2959.8
125°	744.7	853.3	1378.4	2326.0	2732.6
127.5°	794.3	900.9	1362.4	2171.7	2529.2
130°	821.6	931.6	1355.6	2076.4	2399.4
132.5°	850.1	959.0	1348.8	1990.3	2287.7
135°	892.8	998.6	1341.4	1878.1	2126.0
137.5°	935.8	1035.8	1335.1	1787.1	1989.0
140°	965.4	1058.7	1332.8	1728.5	1908.1
142.5°	993.9	1081.6	1328.3	1675.6	1832.9
145°	1038.1	1116.0	1322.9	1607.6	1730.1
147.5°	1078.2	1147.3	1316.6	1546.0	1640.1
150°	1107.8	1169.1	1314.3	1512.5	1587.7
152.5°	1135.2	1188.6	1313.2	1481.5	1543.3
155°	1171.9	1217.9	1311.5	1442.1	1489.5
157.5°	1210.1	1242.1	1311.7	1414.7	1445.9
160°	1231.7	1258.2	1312.9	1397.4	1419.7
162.5°	1248.8	1270.8	1314.0	1383.6	1400.3
165°	1275.9	1288.4	1317.2	1368.6	1375.5
167.5°	1294.4	1303.0	1317.4	1355.7	1359.0
170°	1305.8	1309.9	1318.6	1349.9	1349.9
172.5°	1314.9	1315.7	1318.6	1343.1	1341.9
175°	1324.3	1322.9	1318.6	1335.6	1332.8
177.5°	1327.4	1324.1	1318.3	1329.6	1326.3
180°	1322.9	1322.9	1322.9	1322.9	1322.9

(END OF REPORT)