

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: P518685

Luminaire Tested: **SQ4-BB-100U-050D-830-1D-UNV-STD-W-6**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518685
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-23, 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-100U-050D-830-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

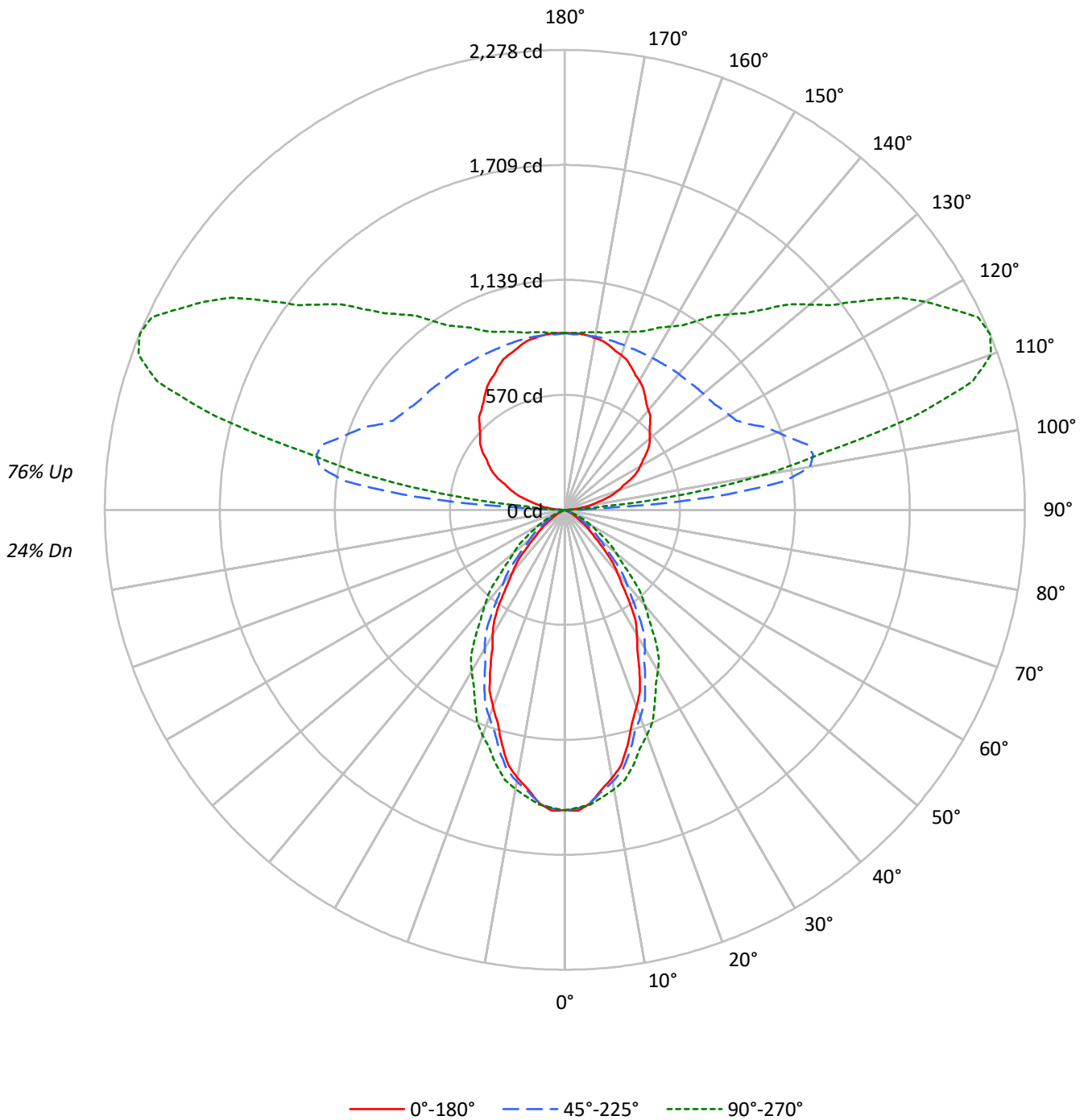
Lumens per Lamp: N/A
Luminaire Lumens: 7462.9 lumens
Efficiency: N/A
Efficacy: 116.1 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 64.3
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	101	101	101	101	90	90	90	90	69	69	69	50	50	50	32	32	32	24
1	93	89	86	82	82	79	77	74	61	60	58	45	44	43	30	29	29	22
2	85	79	73	69	76	70	66	62	55	52	49	40	39	37	27	26	25	20
3	78	70	63	58	70	63	57	53	49	45	42	36	34	32	25	24	23	18
4	72	62	55	50	64	56	50	45	44	40	37	33	31	28	23	21	20	16
5	66	56	49	43	59	50	44	39	40	36	32	30	27	25	21	19	18	15
6	61	50	43	38	55	45	39	35	36	32	28	27	25	22	19	18	17	13
7	57	46	38	33	51	41	35	31	33	29	25	25	22	20	18	16	15	12
8	53	41	34	30	47	38	31	27	30	26	23	23	20	18	17	15	14	11
9	49	38	31	26	44	34	28	24	28	23	20	21	19	17	16	14	13	10
10	46	35	28	24	41	32	26	22	26	21	19	20	17	15	15	13	12	10

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	1.8
10°-20°	347.2	4.7
20°-30°	434.7	5.8
30°-40°	401.5	5.4
40°-50°	269.8	3.6
50°-60°	139.3	1.9
60°-70°	43.6	0.6
70°-80°	2.8	0.0
80°-90°	1.9	0.0
90°-100°	409.9	5.5
100°-110°	1131.5	15.2
110°-120°	1166.9	15.6
120°-130°	937.7	12.6
130°-140°	736.9	9.9
140°-150°	565.2	7.6
150°-160°	406.2	5.4
160°-170°	248.4	3.3
170°-180°	83.8	1.1
0°-30°	917.6	12.3
0°-40°	1319.1	17.7
0°-60°	1728.2	23.2
0°-90°	1776.5	23.8
90°-120°	2708.2	36.3
90°-150°	4948.1	66.3
90°-180°	5686.0	76.2
0°-180°	7462.9	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	6	11	13	14	4
95°	60	222	744	306	199	64
105°	202	311	1245	1900	1790	215
115°	361	437	1003	1985	2257	355
125°	496	564	909	1538	1805	441
135°	596	661	884	1246	1404	462
145°	692	740	872	1060	1141	433
155°	780	806	865	952	982	359
165°	844	855	870	903	910	238
175°	875	876	871	884	881	83
180°	875	875	875	875	875	



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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	1.1	2.2	2.5	2.8
90°	2.8	5.5	11.2	12.6	14.0
92.5°	25.2	104.6	187.1	68.3	53.2
95°	60.2	221.8	743.6	305.6	198.8
97.5°	99.7	248.4	1101.5	848.0	614.2
100°	128.8	264.4	1233.7	1242.4	1009.6
102.5°	156.8	282.5	1259.4	1535.0	1314.3
105°	201.6	311.2	1244.9	1900.5	1789.6
107.5°	249.3	346.7	1175.4	2076.7	2117.2
110°	282.9	370.5	1121.6	2114.6	2246.1



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	313.1	397.4	1071.2	2084.7	2278.5
115°	361.3	436.6	1002.6	1984.8	2257.3
117.5°	403.3	478.3	957.5	1844.2	2154.2
120°	431.3	505.2	939.6	1749.1	2061.2
122.5°	458.2	528.8	925.0	1660.2	1955.9
125°	495.7	564.2	908.8	1538.0	1805.0
127.5°	527.6	596.1	899.3	1434.6	1664.9
130°	548.9	617.4	894.8	1371.4	1580.9
132.5°	569.1	634.2	890.3	1318.3	1508.1
135°	596.5	660.9	883.6	1245.7	1404.5
137.5°	627.3	685.9	880.2	1184.6	1320.2
140°	644.1	701.6	878.0	1143.9	1263.1
142.5°	663.2	716.3	875.7	1107.8	1212.6
145°	691.7	739.7	872.4	1060.5	1141.2
147.5°	719.2	761.1	869.3	1020.6	1083.3
150°	739.4	773.6	868.2	996.8	1047.4
152.5°	755.0	787.1	867.1	976.4	1018.3
155°	780.0	806.0	865.4	951.5	981.6
157.5°	802.9	822.9	865.7	933.3	953.9
160°	816.4	834.2	866.8	923.1	938.2
162.5°	827.6	843.2	867.9	914.1	925.9
165°	844.4	855.3	869.6	903.3	910.2
167.5°	857.3	863.8	871.0	896.8	899.0
170°	864.0	869.5	871.0	893.4	893.4
172.5°	869.6	872.9	871.0	888.9	887.8
175°	875.2	876.5	871.0	883.5	880.8
177.5°	877.4	876.3	870.7	878.5	876.3
180°	875.2	875.2	875.2	875.2	875.2

(END OF REPORT)