

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: P518709

Luminaire Tested: **SQ4-BB-100U-075D-830-1D-UNV-STD-W-6**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518709
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-075D-830-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

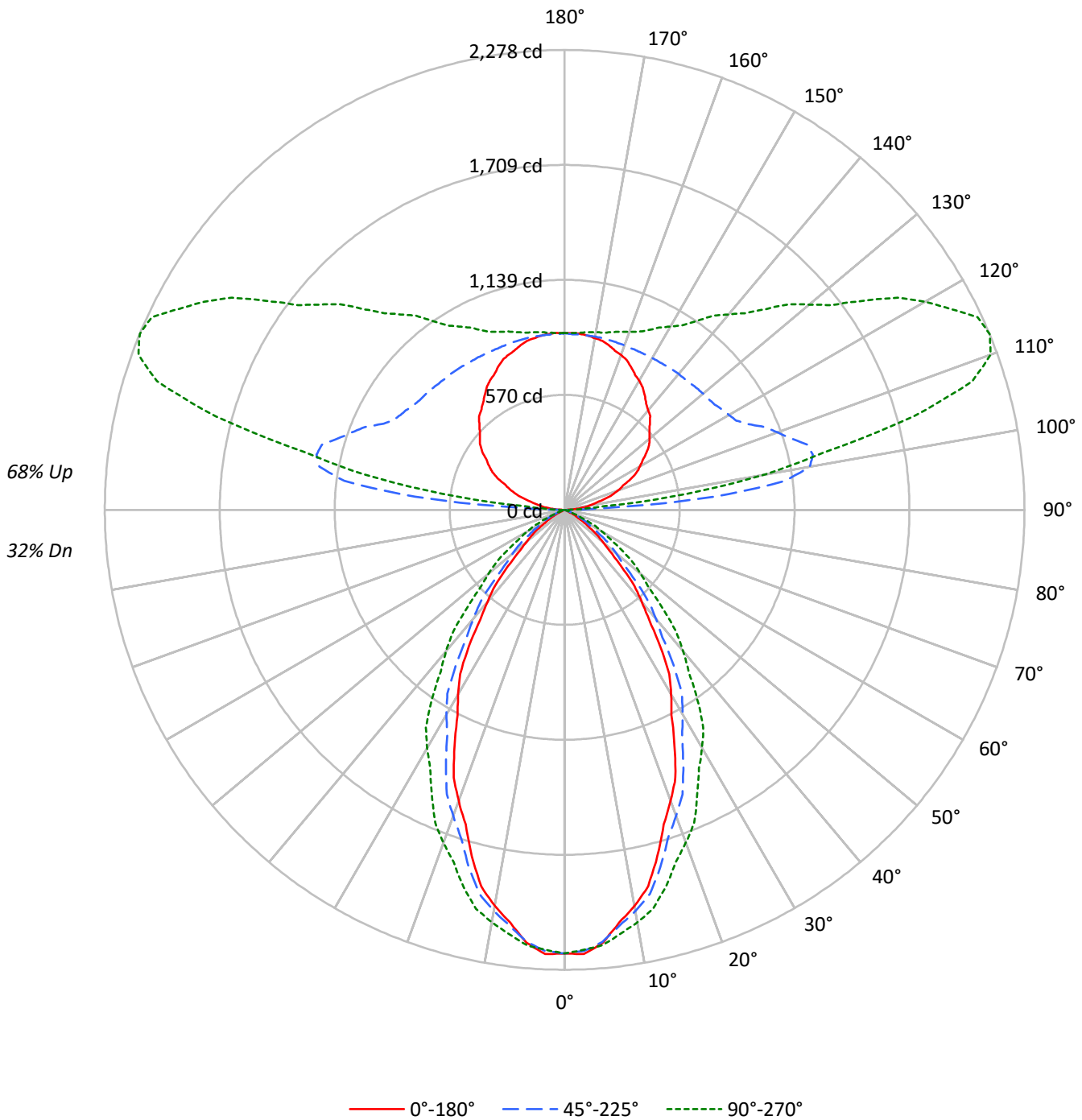
Lumens per Lamp: N/A
Luminaire Lumens: 8309.2 lumens
Efficiency: N/A
Efficacy: 106.5 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 78
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	103	103	103	103	92	92	92	92	73	73	73	55	55	55	39	39	39	32				
1	95	91	88	85	85	82	79	77	66	64	62	50	49	48	36	36	35	29				
2	87	81	75	71	78	73	69	65	59	56	53	46	44	42	33	32	31	26				
3	80	72	66	60	72	65	60	56	53	49	46	41	39	37	31	29	28	23				
4	74	64	57	52	67	59	53	48	48	44	40	38	35	33	28	27	25	21				
5	68	58	51	45	62	53	47	42	43	39	36	34	31	29	26	24	23	19				
6	63	52	45	40	57	48	42	37	39	35	32	31	28	26	24	22	21	18				
7	59	48	40	35	53	44	37	33	36	32	28	29	26	24	22	20	19	16				
8	55	43	36	32	49	40	34	30	33	29	25	27	24	21	21	19	17	15				
9	51	40	33	28	46	37	31	27	31	26	23	25	22	19	19	17	16	14				
10	48	37	30	26	43	34	28	24	28	24	21	23	20	18	18	16	15	13				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	13514	13514	13514
5°	13296	13264	13362
10°	12441	12607	12959
15°	11310	11669	12319
20°	10040	10561	11487
25°	8743	9435	10554
30°	7489	8312	9671
35°	6210	7055	8604
40°	4771	5641	7332
45°	3449	4272	5899
50°	2349	3184	4679
55°	1527	2302	3636
60°	876	1621	2629
65°	231	990	1330
70°	115	306	383
75°	50	26	0
80°	39	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	200.5	2.4
10°-20°	512.8	6.2
20°-30°	641.9	7.7
30°-40°	592.9	7.1
40°-50°	398.4	4.8
50°-60°	205.8	2.5
60°-70°	64.4	0.8
70°-80°	4.1	0.0
80°-90°	1.9	0.0
90°-100°	409.9	4.9
100°-110°	1131.5	13.6
110°-120°	1166.9	14.0
120°-130°	937.7	11.3
130°-140°	736.9	8.9
140°-150°	565.2	6.8
150°-160°	406.2	4.9
160°-170°	248.4	3.0
170°-180°	83.8	1.0
0°-30°	1355.2	16.3
0°-40°	1948.1	23.4
0°-60°	2552.4	30.7
0°-90°	2622.8	31.6
90°-120°	2708.2	32.6
90°-150°	4948.1	59.5
90°-180°	5686.0	68.4
0°-180°	8309.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2197	2197	2197	2197	2197	
5°	2154	2132	2148	2156	2164	200
15°	1776	1770	1832	1894	1935	495
25°	1288	1299	1390	1486	1555	591
35°	827	848	940	1050	1146	512
45°	396	420	491	587	678	311
55°	142	166	215	276	339	133
65°	16	30	68	82	91	27
75°	2	2	1	0	0	3
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°	2197.1	2197.1	2197.1	2197.1	2197.1
2.5°	2202.2	2181.4	2186.9	2186.8	2180.9
5°	2153.5	2131.7	2148.2	2155.8	2164.2
7.5°	2062.5	2045.5	2077.2	2101.0	2118.2
10°	1992.0	1977.4	2018.5	2051.0	2074.9
12.5°	1910.3	1899.1	1948.8	1993.3	2023.8
15°	1776.2	1769.9	1832.5	1894.0	1934.6
17.5°	1632.5	1632.3	1703.7	1780.1	1828.9
20°	1533.8	1536.9	1613.5	1697.8	1754.9
22.5°	1435.2	1442.5	1524.3	1612.1	1677.5
25°	1288.3	1298.7	1390.3	1485.5	1555.1
27.5°	1147.1	1162.3	1258.7	1357.6	1442.4
30°	1054.4	1072.1	1170.3	1274.3	1361.6
32.5°	963.5	984.4	1080.2	1190.2	1279.1
35°	827.0	847.8	939.6	1050.2	1145.9
37.5°	686.0	706.4	796.1	905.0	1008.3
40°	594.2	617.1	702.6	808.1	913.1
42.5°	510.9	533.7	614.2	717.8	817.0
45°	396.5	420.4	491.1	586.7	678.2
47.5°	301.7	327.6	389.7	476.2	559.5
50°	245.5	271.5	332.7	408.9	489.0
52.5°	200.5	225.6	280.8	352.7	426.0
55°	142.4	166.3	214.7	275.7	339.1
57.5°	98.4	119.0	162.4	213.3	263.0
60°	71.2	91.0	131.8	173.1	213.7
62.5°	47.4	65.5	105.4	137.1	164.3
65°	15.9	30.5	68.0	82.1	91.4
67.5°	8.1	9.7	35.7	37.7	40.8
70°	6.4	6.4	17.0	18.1	21.3
72.5°	4.7	4.7	6.8	8.7	9.4
75°	2.1	2.1	1.1	0.0	0.0
77.5°	1.1	1.1	0.9	0.0	0.0
80°	1.1	1.1	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	1.1	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)