

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: P518398

Luminaire Tested: **SQ4-BB-050U-050D-830-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518398
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-8
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

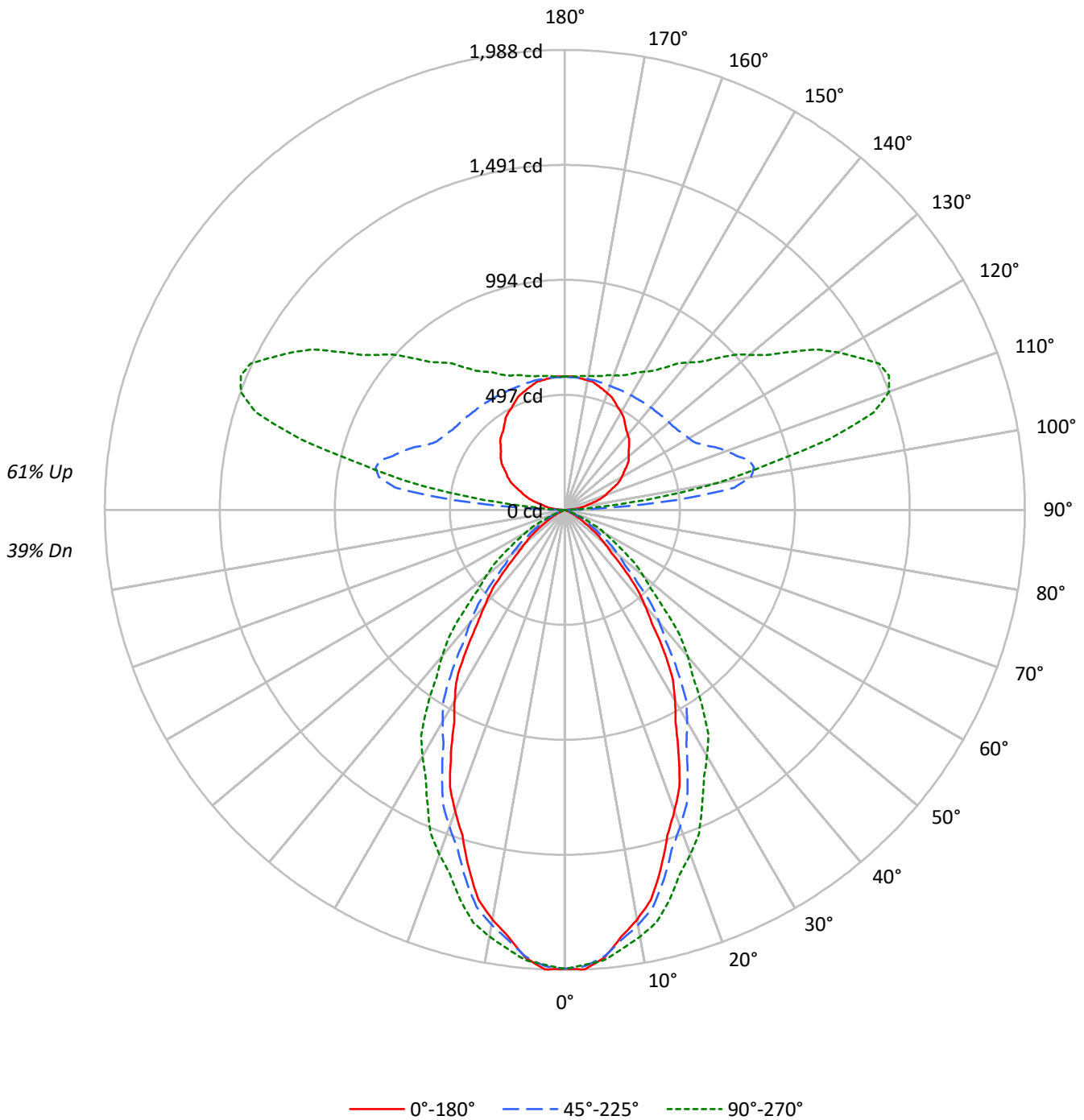
Lumens per Lamp: N/A
Luminaire Lumens: 6128.8 lumens
Efficiency: N/A
Efficacy: 104.1 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 58.9
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				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	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	8536	8775
15°	7658	7901	8341
20°	6798	7151	7778
25°	5920	6389	7146
30°	5071	5628	6548
35°	4205	4777	5826
40°	3230	3820	4964
45°	2335	2893	3994
50°	1591	2156	3168
55°	1034	1559	2462
60°	593	1098	1780
65°	157	670	901
70°	78	208	259
75°	34	18	0
80°	27	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	181.0	3.0
10°-20°	462.9	7.6
20°-30°	579.5	9.5
30°-40°	535.3	8.7
40°-50°	359.7	5.9
50°-60°	185.8	3.0
60°-70°	58.2	0.9
70°-80°	3.7	0.1
80°-90°	2.3	0.0
90°-100°	276.5	4.5
100°-110°	751.0	12.3
110°-120°	772.2	12.6
120°-130°	617.4	10.1
130°-140°	485.1	7.9
140°-150°	372.0	6.1
150°-160°	267.5	4.4
160°-170°	163.6	2.7
170°-180°	55.1	0.9
0°-30°	1223.5	20.0
0°-40°	1758.8	28.7
0°-60°	2304.3	37.6
0°-90°	2368.5	38.6
90°-120°	1799.7	29.4
90°-150°	3274.1	53.4
90°-180°	3760.0	61.3
0°-180°	6128.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1984	1984	1984	1984	1984	
5°	1944	1924	1939	1946	1954	180
15°	1604	1598	1654	1710	1746	447
25°	1163	1172	1255	1341	1404	533
35°	747	765	848	948	1034	462
45°	358	380	443	530	612	281
55°	129	150	194	249	306	120
65°	14	28	61	74	82	24
75°	2	2	1	0	0	3
85°	0	0	0	0	0	0
90°	2	7	13	17	17	3
95°	41	151	482	210	141	43
105°	133	208	826	1258	1183	142
115°	237	288	661	1315	1498	234
125°	326	371	598	1008	1189	291
135°	393	436	582	821	926	304
145°	454	486	574	698	750	285
155°	513	531	570	626	644	237
165°	556	563	572	596	598	157
175°	576	578	574	581	580	55
180°	576	576	576	576	576	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1983.6	1983.6	1983.6	1983.6	1983.6
2.5°	1988.2	1969.4	1974.4	1974.2	1969.0
5°	1944.2	1924.5	1939.4	1946.3	1953.8
7.5°	1862.1	1846.7	1875.3	1896.8	1912.4
10°	1798.4	1785.2	1822.3	1851.6	1873.2
12.5°	1724.7	1714.5	1759.4	1799.6	1827.1
15°	1603.5	1597.9	1654.4	1709.9	1746.5
17.5°	1473.8	1473.6	1538.1	1607.0	1651.1
20°	1384.8	1387.6	1456.7	1532.7	1584.4
22.5°	1295.7	1302.3	1376.1	1455.4	1514.5
25°	1163.1	1172.5	1255.2	1341.1	1403.9
27.5°	1035.6	1049.3	1136.4	1225.7	1302.2
30°	952.0	967.9	1056.6	1150.5	1229.3
32.5°	869.8	888.8	975.2	1074.5	1154.8
35°	746.6	765.4	848.3	948.2	1034.5
37.5°	619.3	637.7	718.8	817.0	910.3
40°	536.4	557.1	634.3	729.6	824.3
42.5°	461.2	481.8	554.5	648.1	737.6
45°	357.9	379.5	443.4	529.7	612.2
47.5°	272.3	295.8	351.8	429.9	505.2
50°	221.7	245.1	300.4	369.2	441.4
52.5°	181.0	203.7	253.5	318.4	384.6
55°	128.6	150.2	193.8	248.9	306.1
57.5°	88.9	107.4	146.6	192.6	237.4
60°	64.3	82.1	119.0	156.3	192.9
62.5°	42.8	59.1	95.2	123.8	148.4
65°	14.4	27.5	61.4	74.1	82.5
67.5°	7.3	8.8	32.2	34.0	36.8
70°	5.8	5.8	15.4	16.4	19.2
72.5°	4.2	4.2	6.1	7.9	8.4
75°	1.9	1.9	1.0	0.0	0.0
77.5°	1.0	1.0	0.8	0.0	0.0
80°	1.0	1.0	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°	0.4	1.5	2.6	3.3	3.3
90°	1.9	7.3	13.0	16.7	16.7
92.5°	16.7	75.7	131.5	56.5	47.8
95°	40.7	151.2	481.5	209.5	140.7
97.5°	67.4	167.0	738.1	574.3	403.3
100°	85.2	177.5	816.7	827.8	668.5
102.5°	103.0	188.1	837.4	1023.8	883.3
105°	133.3	207.6	825.9	1257.5	1183.3
107.5°	164.8	230.4	778.1	1378.2	1398.9
110°	187.0	246.8	742.6	1402.0	1490.7



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	206.3	263.1	707.0	1382.3	1515.9
115°	237.0	287.7	661.1	1315.2	1498.1
117.5°	265.9	314.4	631.8	1220.2	1426.3
120°	285.2	332.3	618.5	1156.5	1361.1
122.5°	301.5	348.6	609.6	1092.6	1290.0
125°	325.9	371.2	598.1	1007.8	1188.9
127.5°	347.8	392.7	591.8	943.5	1098.9
130°	361.1	404.6	588.9	903.2	1042.6
132.5°	374.4	417.9	585.9	868.7	992.2
135°	392.6	436.0	581.5	820.9	925.9
137.5°	412.2	451.7	579.2	778.7	867.0
140°	424.1	462.1	577.8	751.8	831.5
142.5°	435.9	471.0	576.3	730.8	797.4
145°	453.7	486.3	574.1	697.5	750.0
147.5°	473.7	501.6	572.2	671.3	712.6
150°	487.0	510.6	572.2	656.3	688.9
152.5°	497.4	518.0	570.7	642.8	669.6
155°	513.0	531.1	570.4	626.3	644.4
157.5°	528.1	542.3	570.4	615.1	628.9
160°	537.0	549.7	570.4	607.6	618.5
162.5°	545.9	555.7	571.8	601.7	609.6
165°	555.5	562.8	572.2	596.3	598.1
167.5°	565.5	569.2	574.1	590.0	591.5
170°	568.5	572.1	574.1	587.0	587.0
172.5°	571.5	573.6	574.1	584.1	584.1
175°	575.9	577.7	574.1	581.4	579.6
177.5°	577.4	577.4	573.0	578.8	575.9
180°	575.9	575.9	575.9	575.9	575.9

(END OF REPORT)