

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: P518494

Luminaire Tested: **SQ4-BB-075U-050D-830-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518494
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-22, 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-075U-050D-830-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 750 LUMENS PER FOOT
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

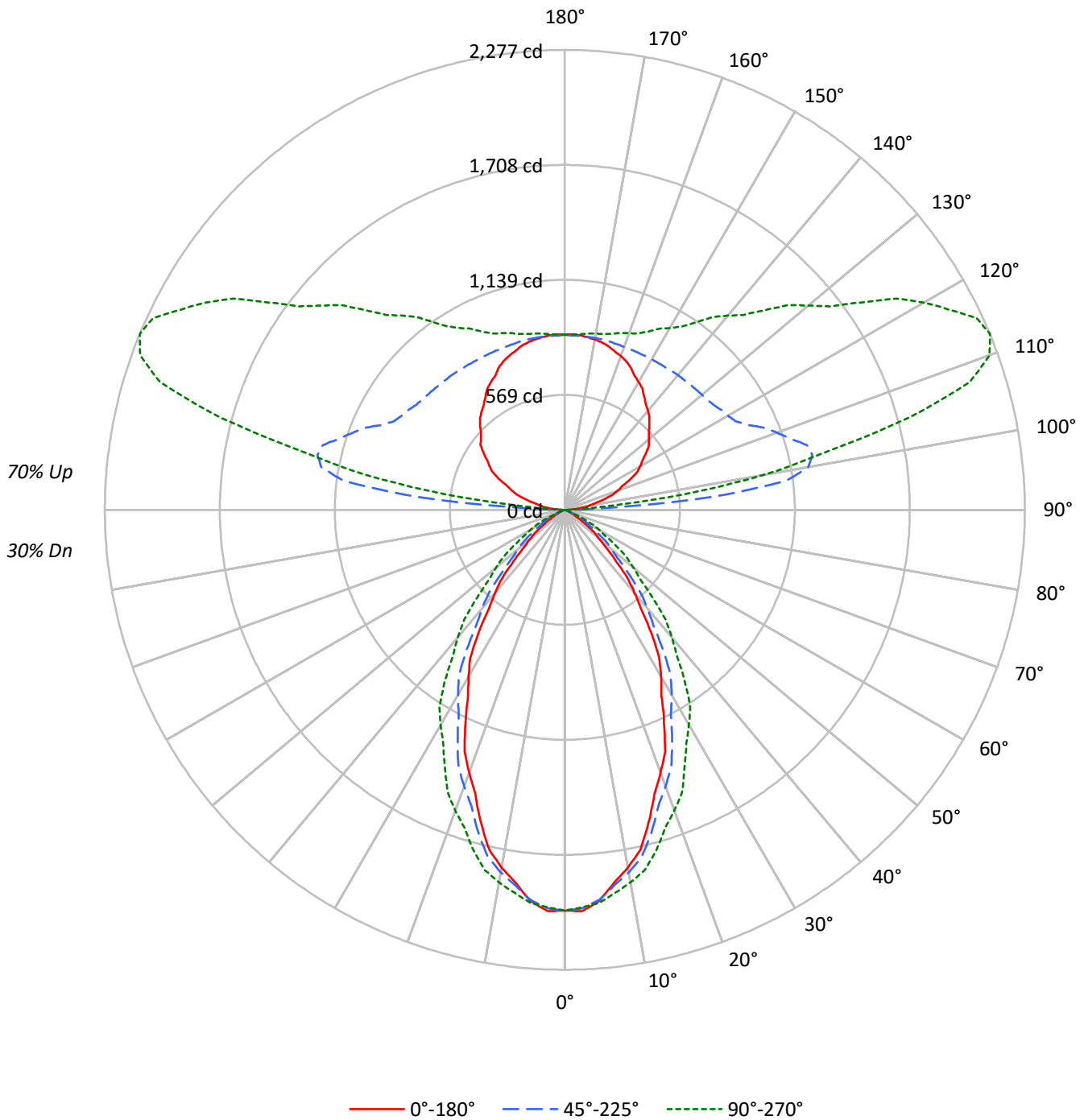
Lumens per Lamp: N/A
Luminaire Lumens: 8020.0 lumens
Efficiency: N/A
Efficacy: 111.7 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 71.8
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



TEST NUMBER: P518494
CATALOG NUMBER: SQ4-BB-075U-050D-830-1D-UNV-STD-W-8

Luminous Intensity Polar Plot





TEST NUMBER: P518494

CATALOG NUMBER: SQ4-BB-075U-050D-830-1D-UNV-STD-W-8

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	102	102	102	102	92	92	92	92	72	72	72	54	54	54	37	37	37	30
1	94	90	87	84	84	81	79	76	64	63	61	49	48	47	35	34	33	27
2	87	80	75	70	78	72	68	64	58	55	52	44	42	41	32	31	30	24
3	80	71	65	60	72	65	59	55	52	48	45	40	38	36	29	28	27	22
4	73	64	57	52	66	58	52	47	47	43	39	36	34	32	27	25	24	20
5	68	57	50	45	61	52	46	41	42	38	35	33	30	28	25	23	22	18
6	63	52	45	39	56	47	41	36	39	34	31	30	27	25	23	21	20	16
7	58	47	40	35	52	43	37	32	35	31	27	28	25	23	21	19	18	15
8	54	43	36	31	49	39	33	29	32	28	25	26	23	21	20	18	16	14
9	51	39	33	28	46	36	30	26	30	25	22	24	21	19	18	16	15	13
10	47	36	30	25	43	33	27	24	28	23	20	22	19	17	17	15	14	12

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



TEST NUMBER: P518494

CATALOG NUMBER: SQ4-BB-075U-050D-830-1D-UNV-STD-W-8

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	181.0	2.3
10°-20°	462.9	5.8
20°-30°	579.5	7.2
30°-40°	535.3	6.7
40°-50°	359.7	4.5
50°-60°	185.8	2.3
60°-70°	58.2	0.7
70°-80°	3.7	0.0
80°-90°	2.3	0.0
90°-100°	409.2	5.1
100°-110°	1125.7	14.0
110°-120°	1161.9	14.5
120°-130°	931.0	11.6
130°-140°	731.2	9.1
140°-150°	560.3	7.0
150°-160°	402.9	5.0
160°-170°	246.4	3.1
170°-180°	83.0	1.0
0°-30°	1223.5	15.3
0°-40°	1758.8	21.9
0°-60°	2304.3	28.7
0°-90°	2368.4	29.5
90°-120°	2696.8	33.6
90°-150°	4919.3	61.3
90°-180°	5652.0	70.5
0°-180°	8020.0	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	4
95°	61	223	724	309	198	64
105°	201	310	1240	1889	1763	212
115°	356	434	995	1981	2248	352
125°	491	560	903	1527	1789	438
135°	592	658	877	1235	1397	457
145°	685	732	864	1052	1133	429
155°	775	800	858	946	973	356
165°	838	849	862	897	903	236
175°	868	869	864	875	873	82
180°	868	868	868	868	868	

TEST NUMBER: P518494

CATALOG NUMBER: SQ4-BB-075U-050D-830-1D-UNV-STD-W-8

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°	1.8	7.3	12.9	16.6	16.6
92.5°	25.5	108.9	188.6	72.4	59.4
95°	60.9	223.3	723.6	309.4	197.5
97.5°	99.3	247.7	1104.2	850.8	600.3
100°	127.4	262.7	1223.8	1235.2	1007.8
102.5°	153.9	280.6	1254.8	1532.4	1323.8
105°	201.2	309.5	1240.4	1889.1	1762.7
107.5°	246.2	345.1	1169.9	2063.7	2101.3
110°	278.7	369.0	1116.7	2107.2	2237.1



TEST NUMBER: P518494

CATALOG NUMBER: SQ4-BB-075U-050D-830-1D-UNV-STD-W-8

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	308.3	395.6	1063.6	2079.2	2277.0
115°	356.2	433.8	994.9	1981.1	2248.2
117.5°	402.0	473.5	951.3	1843.4	2145.6
120°	430.1	498.7	932.1	1740.3	2052.5
122.5°	455.2	523.8	918.8	1649.9	1946.2
125°	491.0	559.6	902.6	1526.9	1788.6
127.5°	524.9	590.3	891.9	1424.3	1653.8
130°	542.7	609.4	886.0	1363.3	1572.6
132.5°	563.3	630.1	881.6	1309.7	1498.8
135°	592.5	657.5	876.8	1234.8	1397.3
137.5°	619.8	680.1	872.7	1174.4	1308.3
140°	640.5	696.4	871.2	1134.2	1255.2
142.5°	658.2	709.8	868.3	1098.4	1202.0
145°	684.8	731.7	863.8	1052.1	1133.3
147.5°	713.2	753.6	861.6	1011.1	1076.1
150°	730.9	767.0	860.1	988.7	1039.2
152.5°	747.2	780.4	858.7	969.3	1011.1
155°	775.2	800.5	858.3	945.7	972.7
157.5°	795.5	816.1	858.3	926.3	945.1
160°	810.3	826.6	858.3	915.9	930.3
162.5°	822.1	835.5	859.8	906.9	918.5
165°	838.0	848.8	862.0	897.2	902.6
167.5°	849.1	857.4	863.8	889.0	890.4
170°	856.5	861.9	863.8	886.0	886.0
172.5°	862.4	864.9	863.8	881.5	880.1
175°	867.5	869.3	863.8	874.9	873.1
177.5°	869.0	869.0	863.1	871.9	869.0
180°	867.5	867.5	867.5	867.5	867.5

(END OF REPORT)