

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: P518434

Luminaire Tested: **SQ4-BB-050U-075D-930-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518434
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-075D-930-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6118.2 lumens
Efficiency: N/A
Efficacy: 78.3 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: General Diffuse

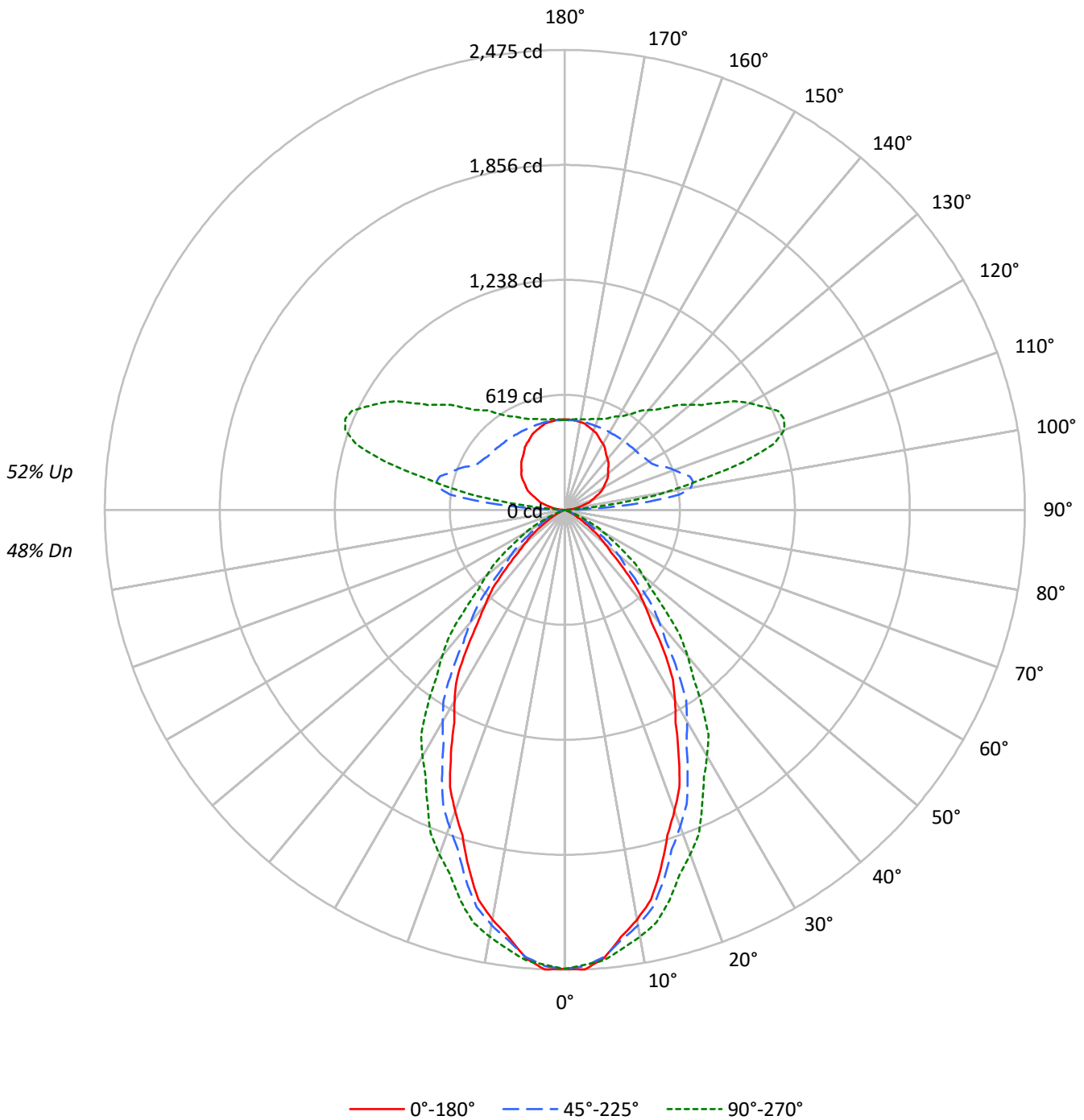
Input Watts (W): 78.1
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



TEST NUMBER: P518434

CATALOG NUMBER: SQ4-BB-050U-075D-930-1D-UNV-STD-W-8

Luminous Intensity Polar Plot





TEST NUMBER: P518434

CATALOG NUMBER: SQ4-BB-050U-075D-930-1D-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	50	30	10	0	
RCR																						
0	107	107	107	107	98	98	98	98	82	82	82	68	68	68	54	54	54	48				48
1	99	95	92	89	91	88	85	83	75	73	71	62	61	60	51	50	49				44	
2	92	85	80	76	84	79	75	71	68	64	62	57	55	53	47	45	44				40	
3	85	77	70	65	78	71	66	62	61	57	54	52	49	47	43	41	40				36	
4	79	69	62	57	73	64	58	54	56	51	48	47	44	42	40	38	36				32	
5	73	63	55	50	67	59	52	48	51	46	42	44	40	37	37	34	33				29	
6	68	57	50	45	63	53	47	42	47	42	38	40	37	34	34	32	30				27	
7	63	52	45	40	58	49	43	38	43	38	34	37	33	31	32	29	27				25	
8	59	48	41	36	55	45	39	34	40	35	31	34	31	28	30	27	25				23	
9	55	44	37	33	51	42	35	31	37	32	28	32	28	26	28	25	23				21	
10	52	41	34	30	48	38	33	29	34	29	26	30	26	24	26	23	21				20	

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	11393	11393	11393
5°	11210	11182	11265
10°	10489	10629	10925
15°	9535	9838	10386
20°	8464	8904	9684
25°	7371	7955	8897
30°	6314	7007	8153
35°	5235	5948	7253
40°	4022	4756	6181
45°	2908	3601	4973
50°	1981	2684	3944
55°	1288	1942	3066
60°	739	1367	2216
65°	195	835	1122
70°	97	258	322
75°	43	21	0
80°	32	0	0
85°	0	0	0



TEST NUMBER: P518434

CATALOG NUMBER: SQ4-BB-050U-075D-930-1D-UNV-STD-W-8

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	225.4	3.7
10°-20°	576.4	9.4
20°-30°	721.6	11.8
30°-40°	666.5	10.9
40°-50°	447.9	7.3
50°-60°	231.3	3.8
60°-70°	72.5	1.2
70°-80°	4.6	0.1
80°-90°	1.9	0.0
90°-100°	233.1	3.8
100°-110°	633.2	10.3
110°-120°	651.0	10.6
120°-130°	520.5	8.5
130°-140°	409.0	6.7
140°-150°	313.6	5.1
150°-160°	225.5	3.7
160°-170°	137.9	2.3
170°-180°	46.5	0.8
0°-30°	1523.4	24.9
0°-40°	2189.9	35.8
0°-60°	2869.0	46.9
0°-90°	2948.0	48.2
90°-120°	1517.2	24.8
90°-150°	2760.3	45.1
90°-180°	3170.0	51.8
0°-180°	6118.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2470	2470	2470	2470	2470	
5°	2421	2396	2415	2423	2433	224
15°	1997	1990	2060	2129	2175	556
25°	1448	1460	1563	1670	1748	664
35°	930	953	1056	1180	1288	576
45°	446	472	552	660	762	350
55°	160	187	241	310	381	149
65°	18	34	76	92	103	30
75°	2	2	1	0	0	3
85°	0	0	0	0	0	0
90°	2	6	11	14	14	2
95°	34	128	406	177	119	36
105°	112	175	696	1060	998	119
115°	200	243	557	1109	1263	197
125°	275	313	504	850	1002	245
135°	331	368	490	692	781	256
145°	382	410	484	588	632	240
155°	432	448	481	528	543	199
165°	468	474	482	503	504	132
175°	486	487	484	490	489	46
180°	486	486	486	486	486	

TEST NUMBER: P518434

CATALOG NUMBER: SQ4-BB-050U-075D-930-1D-UNV-STD-W-8

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2469.7	2469.7	2469.7	2469.7	2469.7
2.5°	2475.4	2452.1	2458.2	2458.1	2451.6
5°	2420.7	2396.2	2414.7	2423.3	2432.7
7.5°	2318.4	2299.3	2334.9	2361.7	2381.1
10°	2239.1	2222.8	2269.0	2305.4	2332.3
12.5°	2147.3	2134.7	2190.6	2240.6	2275.0
15°	1996.6	1989.5	2059.9	2129.0	2174.6
17.5°	1835.0	1834.8	1915.1	2000.9	2055.8
20°	1724.1	1727.6	1813.8	1908.4	1972.7
22.5°	1613.3	1621.4	1713.4	1812.1	1885.7
25°	1448.1	1459.8	1562.8	1669.8	1748.0
27.5°	1289.5	1306.5	1414.9	1526.1	1621.4
30°	1185.3	1205.1	1315.5	1432.4	1530.6
32.5°	1083.0	1106.6	1214.2	1337.9	1437.9
35°	929.6	952.9	1056.2	1180.5	1288.0
37.5°	771.1	794.0	894.9	1017.3	1133.4
40°	667.9	693.6	789.8	908.4	1026.4
42.5°	574.2	599.9	690.4	806.9	918.3
45°	445.7	472.5	552.0	659.5	762.3
47.5°	339.1	368.3	438.0	535.3	629.0
50°	276.0	305.2	374.0	459.7	549.6
52.5°	225.3	253.6	315.7	396.4	478.9
55°	160.1	187.0	241.4	309.9	381.2
57.5°	110.6	133.8	182.6	239.8	295.6
60°	80.1	102.3	148.2	194.6	240.2
62.5°	53.3	73.6	118.5	154.1	184.7
65°	17.9	34.3	76.5	92.2	102.8
67.5°	9.1	10.9	40.1	42.4	45.9
70°	7.2	7.2	19.1	20.4	23.9
72.5°	5.3	5.3	7.6	9.8	10.5
75°	2.4	2.4	1.2	0.0	0.0
77.5°	1.2	1.2	1.0	0.0	0.0
80°	1.2	1.2	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°	0.3	1.2	2.2	2.8	2.8
90°	1.6	6.1	10.9	14.1	14.1
92.5°	14.1	63.8	110.8	47.6	40.3
95°	34.3	127.5	405.9	176.7	118.7
97.5°	56.8	140.8	622.3	484.1	340.0
100°	71.8	149.7	688.5	697.9	563.6
102.5°	86.8	158.5	706.0	863.1	744.7
105°	112.4	175.0	696.3	1060.2	997.6
107.5°	138.9	194.2	656.0	1161.9	1179.3
110°	157.7	208.1	626.0	1182.0	1256.8

TEST NUMBER: P518434

CATALOG NUMBER: SQ4-BB-050U-075D-930-1D-UNV-STD-W-8

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	173.9	221.8	596.1	1165.3	1278.0
115°	199.8	242.6	557.3	1108.8	1263.0
117.5°	224.2	265.1	532.7	1028.7	1202.4
120°	240.4	280.1	521.4	975.0	1147.5
122.5°	254.2	293.8	513.9	921.1	1087.5
125°	274.8	312.9	504.3	849.6	1002.3
127.5°	293.2	331.0	499.0	795.4	926.4
130°	304.4	341.1	496.5	761.4	878.9
132.5°	315.7	352.3	494.0	732.4	836.5
135°	331.0	367.6	490.2	692.1	780.6
137.5°	347.5	380.8	488.3	656.5	730.9
140°	357.5	389.6	487.1	633.8	701.0
142.5°	367.5	397.1	485.8	616.1	672.2
145°	382.5	410.0	484.0	588.0	632.3
147.5°	399.4	422.9	482.4	565.9	600.7
150°	410.6	430.4	482.4	553.3	580.8
152.5°	419.3	436.7	481.2	541.9	564.5
155°	432.4	447.7	480.8	528.0	543.3
157.5°	445.3	457.2	480.8	518.6	530.2
160°	452.7	463.4	480.8	512.3	521.4
162.5°	460.2	468.5	482.1	507.2	513.9
165°	468.4	474.5	482.4	502.7	504.3
167.5°	476.8	479.8	484.0	497.4	498.6
170°	479.3	482.3	484.0	494.9	494.9
172.5°	481.8	483.6	484.0	492.4	492.4
175°	485.5	487.1	484.0	490.2	488.7
177.5°	486.8	486.8	483.0	488.0	485.5
180°	485.5	485.5	485.5	485.5	485.5

(END OF REPORT)