

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: P518429

Luminaire Tested: **SQ4-BB-050U-075D-840-1D-UNV-STD-W-6**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518429
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-840-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

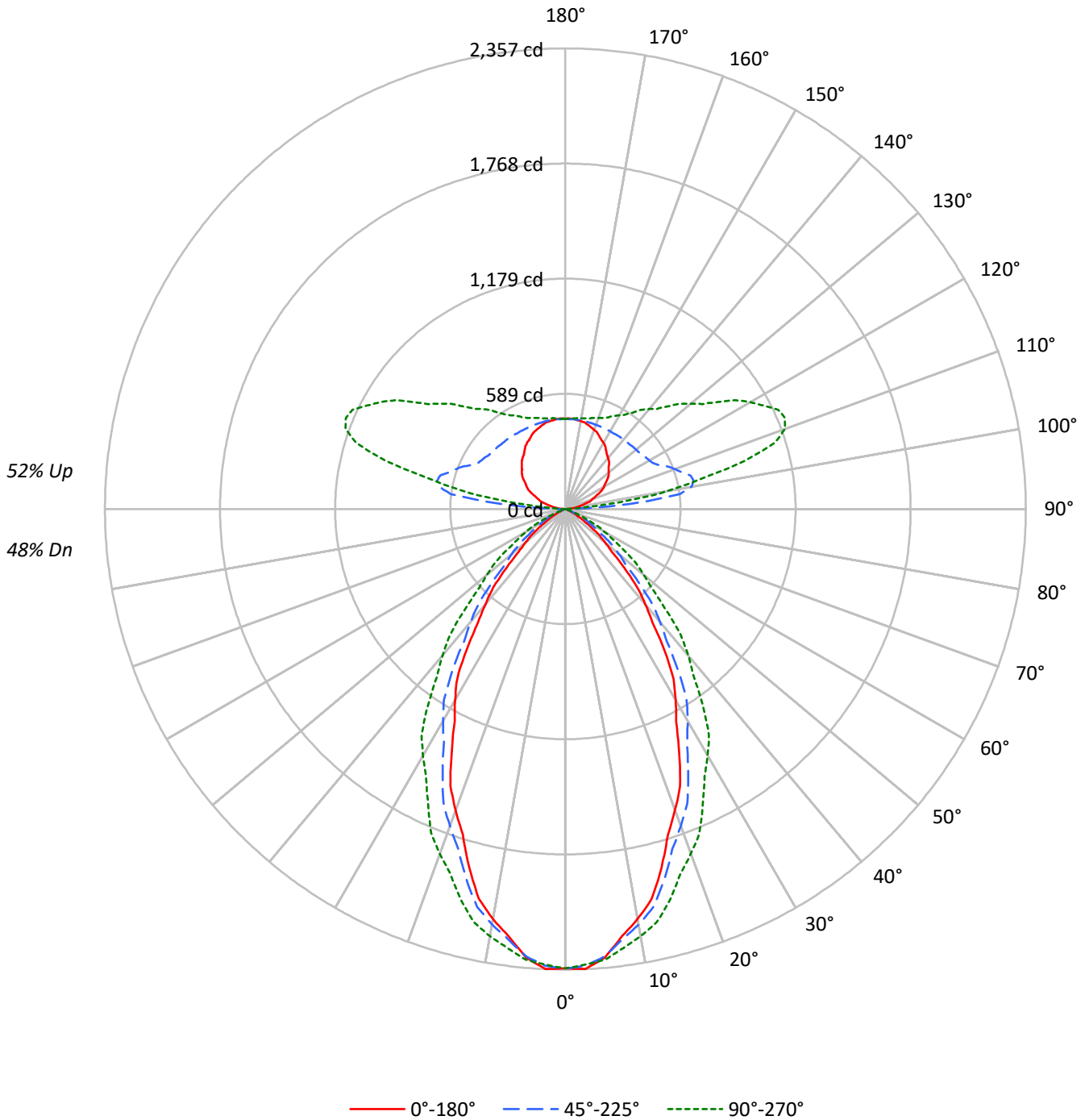
Lumens per Lamp: N/A
Luminaire Lumens: 5824.4 lumens
Efficiency: N/A
Efficacy: 99.6 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 58.5
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	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°	14461	14461	14461
5°	14229	14193	14299
10°	13313	13491	13867
15°	12103	12487	13183
20°	10744	11302	12292
25°	9356	10097	11294
30°	8014	8894	10349
35°	6644	7550	9207
40°	5105	6037	7845
45°	3691	4571	6313
50°	2515	3407	5006
55°	1634	2464	3891
60°	937	1735	2812
65°	249	1060	1423
70°	122	327	408
75°	55	26	0
80°	39	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	214.6	3.7
10°-20°	548.7	9.4
20°-30°	686.9	11.8
30°-40°	634.5	10.9
40°-50°	426.4	7.3
50°-60°	220.2	3.8
60°-70°	69.0	1.2
70°-80°	4.3	0.1
80°-90°	1.9	0.0
90°-100°	221.9	3.8
100°-110°	602.8	10.3
110°-120°	619.7	10.6
120°-130°	495.5	8.5
130°-140°	389.3	6.7
140°-150°	298.5	5.1
150°-160°	214.7	3.7
160°-170°	131.3	2.3
170°-180°	44.2	0.8
0°-30°	1450.2	24.9
0°-40°	2084.7	35.8
0°-60°	2731.3	46.9
0°-90°	2806.4	48.2
90°-120°	1444.4	24.8
90°-150°	2627.7	45.1
90°-180°	3018.0	51.8
0°-180°	5824.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2351	2351	2351	2351	2351	
5°	2304	2281	2299	2307	2316	214
15°	1901	1894	1961	2027	2070	529
25°	1379	1390	1488	1590	1664	632
35°	885	907	1006	1124	1226	548
45°	424	450	526	628	726	333
55°	152	178	230	295	363	142
65°	17	33	73	88	98	29
75°	2	2	1	0	0	3
85°	0	0	0	0	0	0
90°	2	6	10	13	13	2
95°	33	121	386	168	113	35
105°	107	167	663	1009	950	114
115°	190	231	531	1056	1202	188
125°	262	298	480	809	954	233
135°	315	350	467	659	743	244
145°	364	390	461	560	602	229
155°	412	426	458	503	517	190
165°	446	452	459	479	480	126
175°	462	464	461	467	465	44
180°	462	462	462	462	462	

TEST NUMBER: P518429

CATALOG NUMBER: SQ4-BB-050U-075D-840-1D-UNV-STD-W-6

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2351.1	2351.1	2351.1	2351.1	2351.1
2.5°	2356.6	2334.3	2340.2	2340.1	2333.8
5°	2304.5	2281.1	2298.8	2307.0	2315.9
7.5°	2207.1	2188.9	2222.8	2248.3	2266.7
10°	2131.6	2116.0	2160.0	2194.7	2220.3
12.5°	2044.2	2032.2	2085.4	2133.0	2165.7
15°	1900.7	1894.0	1961.0	2026.8	2070.2
17.5°	1746.9	1746.7	1823.1	1904.8	1957.1
20°	1641.4	1644.7	1726.7	1816.8	1877.9
22.5°	1535.8	1543.6	1631.1	1725.1	1795.1
25°	1378.6	1389.7	1487.8	1589.6	1664.1
27.5°	1227.5	1243.8	1347.0	1452.8	1543.5
30°	1128.4	1147.3	1252.3	1363.7	1457.1
32.5°	1031.0	1053.5	1155.9	1273.6	1368.8
35°	884.9	907.2	1005.5	1123.9	1226.2
37.5°	734.1	755.9	852.0	968.4	1079.0
40°	635.8	660.3	751.9	864.7	977.1
42.5°	546.7	571.1	657.2	768.1	874.3
45°	424.3	449.9	525.5	627.8	725.7
47.5°	322.8	350.6	417.0	509.6	598.8
50°	262.8	290.6	356.0	437.6	523.2
52.5°	214.5	241.4	300.5	377.4	455.9
55°	152.4	178.0	229.8	295.0	362.8
57.5°	105.3	127.3	173.8	228.2	281.4
60°	76.2	97.3	141.0	185.3	228.6
62.5°	50.7	70.1	112.8	146.7	175.9
65°	17.1	32.6	72.8	87.8	97.8
67.5°	8.6	10.4	38.2	40.3	43.7
70°	6.8	6.8	18.2	19.4	22.7
72.5°	5.0	5.0	7.3	9.3	10.0
75°	2.3	2.3	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°	0.3	1.2	2.1	2.7	2.7
90°	1.5	5.8	10.4	13.4	13.4
92.5°	13.4	60.8	105.5	45.3	38.3
95°	32.7	121.3	386.4	168.2	113.0
97.5°	54.1	134.0	592.4	460.9	323.7
100°	68.4	142.5	655.4	664.4	536.5
102.5°	82.6	150.9	672.1	821.7	708.9
105°	107.0	166.6	662.9	1009.3	949.7
107.5°	132.3	184.9	624.5	1106.1	1122.7
110°	150.1	198.1	596.0	1125.2	1196.4

TEST NUMBER: P518429

CATALOG NUMBER: SQ4-BB-050U-075D-840-1D-UNV-STD-W-6

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	165.6	211.2	567.4	1109.4	1216.6
115°	190.2	230.9	530.6	1055.6	1202.4
117.5°	213.4	252.4	507.1	979.3	1144.7
120°	228.9	266.7	496.4	928.2	1092.4
122.5°	242.0	279.7	489.3	876.9	1035.3
125°	261.6	297.9	480.1	808.8	954.2
127.5°	279.1	315.2	475.0	757.2	881.9
130°	289.8	324.7	472.6	724.8	836.7
132.5°	300.5	335.4	470.2	697.2	796.3
135°	315.1	350.0	466.7	658.8	743.1
137.5°	330.8	362.5	464.9	624.9	695.9
140°	340.3	370.9	463.7	603.4	667.3
142.5°	349.9	378.0	462.5	586.5	640.0
145°	364.1	390.3	460.7	559.8	601.9
147.5°	380.2	402.6	459.2	538.8	571.9
150°	390.9	409.8	459.2	526.7	552.9
152.5°	399.2	415.8	458.1	515.9	537.4
155°	411.7	426.2	457.8	502.7	517.2
157.5°	423.9	435.2	457.8	493.7	504.7
160°	431.0	441.2	457.8	487.7	496.4
162.5°	438.1	446.0	458.9	482.9	489.3
165°	445.9	451.7	459.2	478.6	480.1
167.5°	453.9	456.8	460.7	473.5	474.7
170°	456.3	459.2	460.7	471.1	471.1
172.5°	458.6	460.4	460.7	468.8	468.8
175°	462.2	463.7	460.7	466.6	465.2
177.5°	463.4	463.4	459.8	464.5	462.2
180°	462.2	462.2	462.2	462.2	462.2

(END OF REPORT)