

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: P518453

Luminaire Tested: **SQ4-BB-050U-100D-840-1D-UNV-STD-W-6**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518453
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-100D-840-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

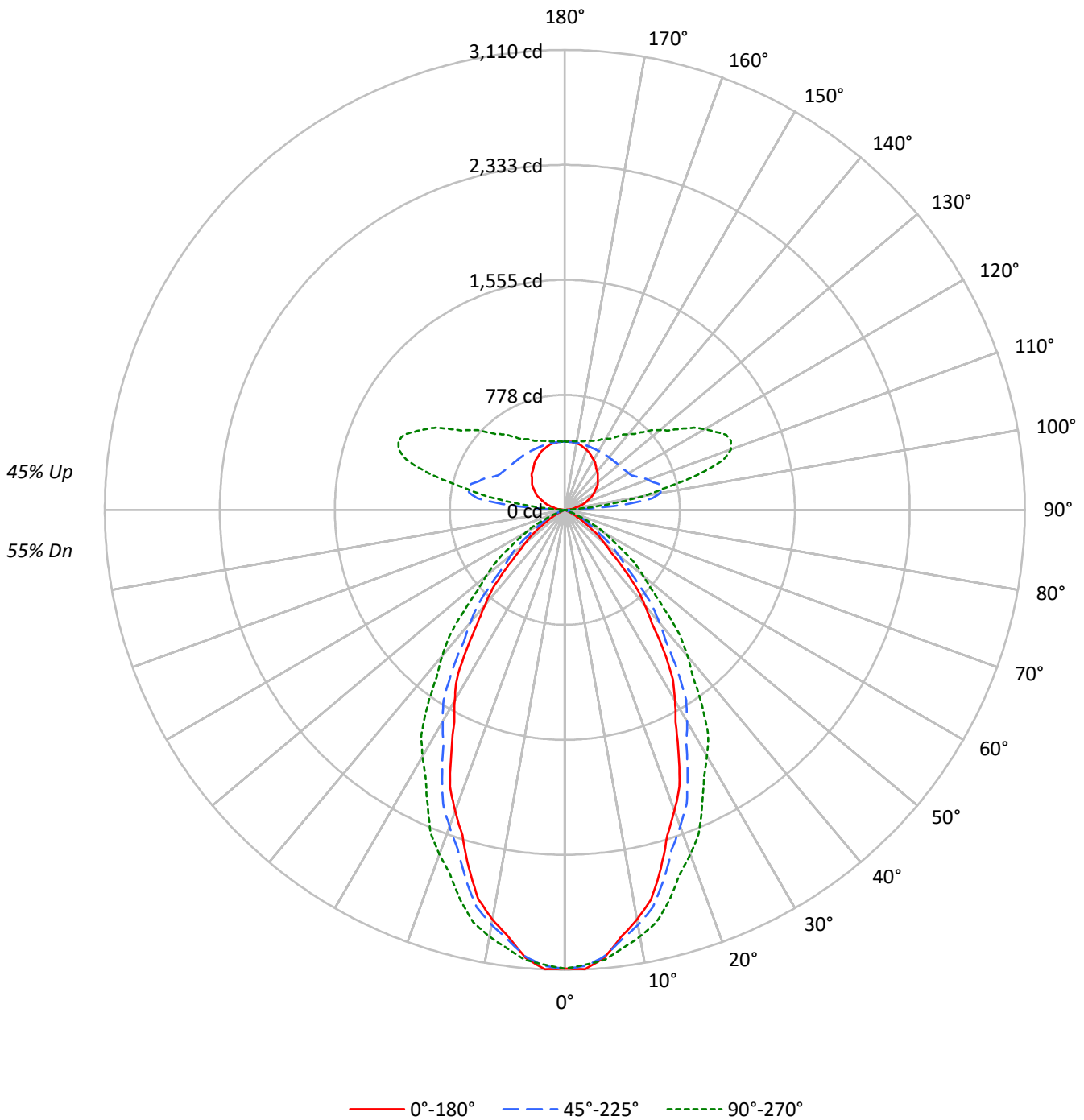
Lumens per Lamp: N/A
Luminaire Lumens: 6720.9 lumens
Efficiency: N/A
Efficacy: 91.6 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 73.4
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									
RC	80									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	108	108	108	108	101	101	101	101	86	86	86	73	73	73	61	61	61	55																			
1	101	97	94	91	94	91	88	86	78	77	75	67	66	65	57	56	55	50																			
2	94	87	82	78	87	82	77	74	71	68	65	61	59	57	52	51	50	45																			
3	87	79	72	67	81	74	68	64	65	61	57	56	53	51	48	46	45	41																			
4	80	71	64	59	75	67	61	56	59	54	51	52	48	46	45	42	40	37																			
5	75	65	57	52	70	61	55	50	54	49	45	47	44	41	41	39	37	34																			
6	70	59	52	46	65	56	49	45	49	44	41	44	40	37	38	36	33	31																			
7	65	54	47	42	61	51	45	40	46	41	37	41	37	34	36	33	31	28																			
8	61	50	43	38	57	47	41	36	42	37	34	38	34	31	33	30	28	26																			
9	57	46	39	34	53	44	37	33	39	34	31	35	31	28	31	28	26	24																			
10	54	42	36	31	50	40	34	30	36	32	28	33	29	26	29	26	24	22																			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	19083	19083	19083
5°	18777	18730	18869
10°	17568	17803	18300
15°	15972	16479	17396
20°	14178	14915	16221
25°	12347	13325	14904
30°	10575	11737	13656
35°	8769	9963	12150
40°	6737	7967	10353
45°	4870	6032	8331
50°	3318	4495	6607
55°	2157	3251	5134
60°	1238	2289	3711
65°	327	1399	1879
70°	162	432	540
75°	71	36	0
80°	53	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	283.2	4.2
10°-20°	724.1	10.8
20°-30°	906.5	13.5
30°-40°	837.3	12.5
40°-50°	562.6	8.4
50°-60°	290.6	4.3
60°-70°	91.0	1.4
70°-80°	5.7	0.1
80°-90°	1.9	0.0
90°-100°	221.9	3.3
100°-110°	602.8	9.0
110°-120°	619.7	9.2
120°-130°	495.5	7.4
130°-140°	389.3	5.8
140°-150°	298.5	4.4
150°-160°	214.7	3.2
160°-170°	131.3	2.0
170°-180°	44.2	0.7
0°-30°	1913.8	28.5
0°-40°	2751.1	40.9
0°-60°	3604.3	53.6
0°-90°	3703.0	55.1
90°-120°	1444.4	21.5
90°-150°	2627.7	39.1
90°-180°	3018.0	44.9
0°-180°	6720.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3103	3103	3103	3103	3103	
5°	3041	3010	3034	3044	3056	282
15°	2508	2499	2588	2675	2732	699
25°	1819	1834	1963	2098	2196	834
35°	1168	1197	1327	1483	1618	723
45°	560	594	694	828	958	440
55°	201	235	303	389	479	188
65°	22	43	96	116	129	38
75°	3	3	2	0	0	4
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	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3102.6	3102.6	3102.6	3102.6	3102.6
2.5°	3109.8	3080.5	3088.2	3088.0	3079.8
5°	3041.1	3010.3	3033.6	3044.4	3056.1
7.5°	2912.6	2888.5	2933.3	2966.9	2991.3
10°	2812.9	2792.4	2850.5	2896.3	2930.0
12.5°	2697.7	2681.8	2752.0	2814.8	2858.0
15°	2508.2	2499.4	2587.8	2674.6	2731.9
17.5°	2305.3	2305.0	2405.9	2513.7	2582.7
20°	2166.0	2170.4	2278.6	2397.5	2478.2
22.5°	2026.7	2037.0	2152.5	2276.5	2368.9
25°	1819.3	1833.9	1963.4	2097.7	2196.0
27.5°	1619.9	1641.3	1777.5	1917.1	2036.9
30°	1489.0	1514.0	1652.6	1799.5	1922.8
32.5°	1360.5	1390.2	1525.3	1680.7	1806.3
35°	1167.8	1197.2	1326.9	1483.1	1618.1
37.5°	968.8	997.5	1124.3	1278.0	1423.9
40°	839.1	871.4	992.2	1141.2	1289.4
42.5°	721.4	753.7	867.3	1013.7	1153.7
45°	559.9	593.6	693.5	828.5	957.7
47.5°	426.0	462.7	550.3	672.4	790.1
50°	346.7	383.4	469.8	577.5	690.5
52.5°	283.1	318.6	396.6	498.0	601.6
55°	201.1	234.9	303.2	389.3	478.8
57.5°	139.0	168.1	229.4	301.2	371.4
60°	100.6	128.5	186.1	244.5	301.7
62.5°	66.9	92.5	148.9	193.6	232.1
65°	22.5	43.1	96.1	115.9	129.1
67.5°	11.4	13.8	50.4	53.2	57.6
70°	9.0	9.0	24.0	25.6	30.0
72.5°	6.6	6.6	9.6	12.3	13.2
75°	3.0	3.0	1.5	0.0	0.0
77.5°	1.5	1.5	1.2	0.0	0.0
80°	1.5	1.5	0.0	0.0	0.0
82.5°	0.3	0.3	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

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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)