

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: P518503

Luminaire Tested: **SQ4-BB-075U-050D-930-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518503
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-930-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 750 LUMENS PER FOOT
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

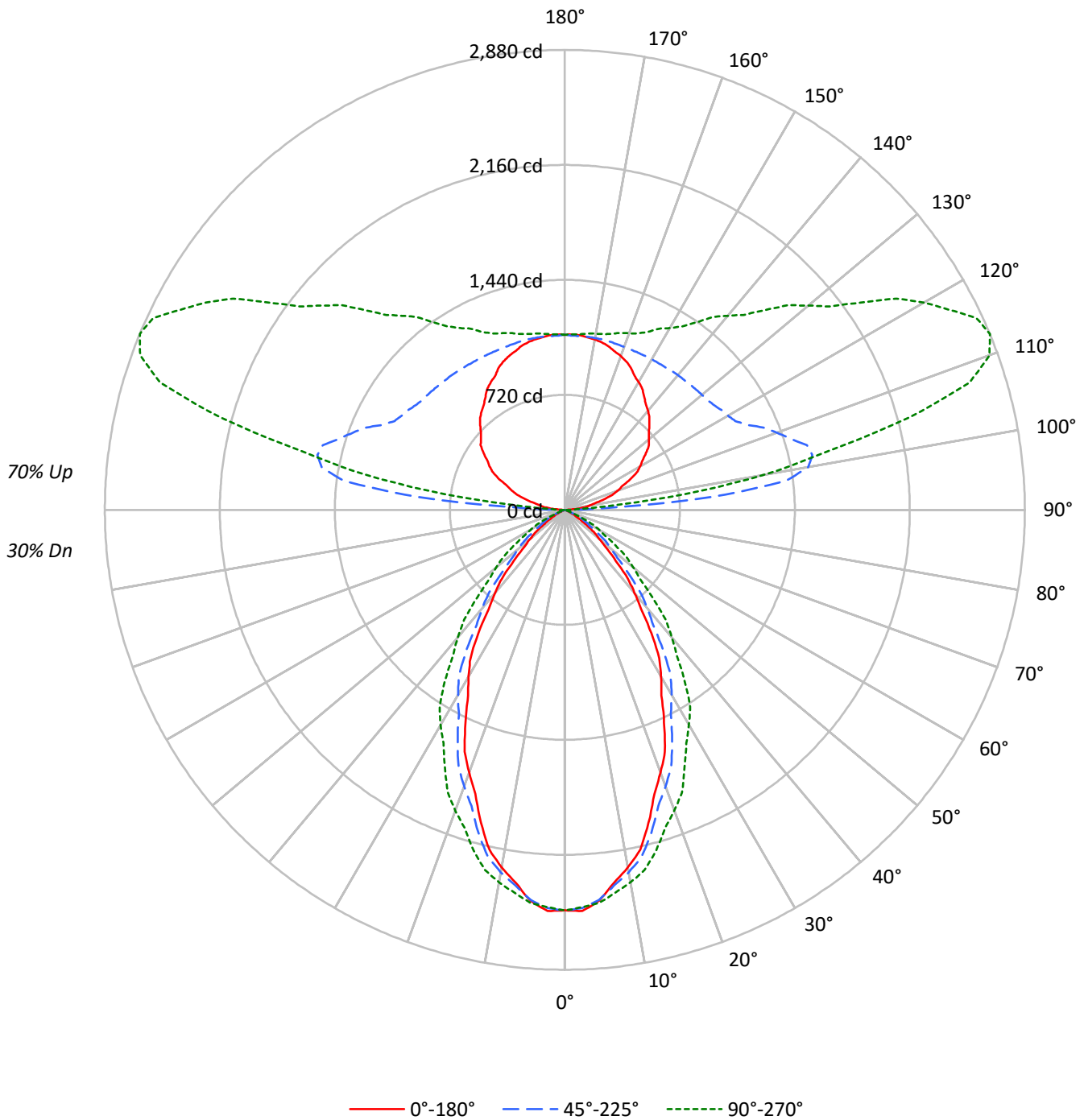
Lumens per Lamp: N/A
Luminaire Lumens: 10142.0 lumens
Efficiency: N/A
Efficacy: 94.4 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 107.4
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					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	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°	7714	7714	7714
5°	7590	7572	7628
10°	7102	7197	7397
15°	6456	6661	7032
20°	5731	6029	6557
25°	4991	5386	6025
30°	4275	4745	5520
35°	3545	4028	4911
40°	2724	3220	4185
45°	1969	2439	3367
50°	1341	1817	2671
55°	872	1314	2076
60°	500	926	1500
65°	132	565	760
70°	66	174	219
75°	29	14	0
80°	21	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	228.9	2.3
10°-20°	585.4	5.8
20°-30°	732.9	7.2
30°-40°	676.9	6.7
40°-50°	454.9	4.5
50°-60°	234.9	2.3
60°-70°	73.6	0.7
70°-80°	4.6	0.0
80°-90°	2.9	0.0
90°-100°	517.4	5.1
100°-110°	1423.6	14.0
110°-120°	1469.4	14.5
120°-130°	1177.3	11.6
130°-140°	924.7	9.1
140°-150°	708.6	7.0
150°-160°	509.5	5.0
160°-170°	311.5	3.1
170°-180°	105.0	1.0
0°-30°	1547.2	15.3
0°-40°	2224.2	21.9
0°-60°	2914.0	28.7
0°-90°	2995.1	29.5
90°-120°	3410.4	33.6
90°-150°	6220.9	61.3
90°-180°	7147.0	70.5
0°-180°	10142.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2508	2508	2508	2508	2508	
5°	2459	2434	2453	2461	2471	228
15°	2028	2021	2092	2162	2209	565
25°	1471	1483	1587	1696	1775	674
35°	944	968	1073	1199	1308	585
45°	453	480	561	670	774	356
55°	163	190	245	315	387	152
65°	18	35	78	94	104	31
75°	2	2	1	0	0	3
85°	0	0	0	0	0	0
90°	2	9	16	21	21	5
95°	77	282	915	391	250	81
105°	254	391	1569	2389	2229	268
115°	450	549	1258	2505	2843	445
125°	621	708	1141	1931	2262	554
135°	749	831	1109	1562	1767	578
145°	866	925	1092	1330	1433	543
155°	980	1012	1085	1196	1230	450
165°	1060	1073	1090	1135	1141	299
175°	1097	1099	1092	1106	1104	104
180°	1097	1097	1097	1097	1097	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2508.4	2508.4	2508.4	2508.4	2508.4
2.5°	2514.2	2490.5	2496.7	2496.6	2489.9
5°	2458.6	2433.7	2452.6	2461.3	2470.8
7.5°	2354.8	2335.3	2371.5	2398.6	2418.3
10°	2274.2	2257.6	2304.5	2341.5	2368.8
12.5°	2181.0	2168.2	2224.9	2275.7	2310.6
15°	2027.8	2020.7	2092.1	2162.4	2208.6
17.5°	1863.8	1863.5	1945.1	2032.2	2088.0
20°	1751.1	1754.7	1842.2	1938.3	2003.6
22.5°	1638.5	1646.8	1740.2	1840.5	1915.2
25°	1470.8	1482.7	1587.3	1695.9	1775.4
27.5°	1309.7	1327.0	1437.1	1549.9	1646.8
30°	1203.8	1224.0	1336.1	1454.9	1554.5
32.5°	1100.0	1123.9	1233.2	1358.8	1460.4
35°	944.1	967.9	1072.8	1199.0	1308.2
37.5°	783.2	806.5	908.9	1033.2	1151.2
40°	678.4	704.5	802.1	922.6	1042.4
42.5°	583.2	609.3	701.2	819.5	932.7
45°	452.7	479.9	560.7	669.8	774.2
47.5°	344.4	374.1	444.9	543.6	638.8
50°	280.3	310.0	379.8	466.9	558.2
52.5°	228.9	257.6	320.6	402.6	486.4
55°	162.6	189.9	245.1	314.7	387.1
57.5°	112.4	135.9	185.4	243.5	300.2
60°	81.3	103.9	150.5	197.6	243.9
62.5°	54.1	74.8	120.4	156.5	187.6
65°	18.2	34.8	77.7	93.7	104.4
67.5°	9.2	11.1	40.8	43.0	46.6
70°	7.3	7.3	19.4	20.7	24.3
72.5°	5.3	5.3	7.8	10.0	10.7
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°	0.5	1.8	3.3	4.2	4.2
90°	2.3	9.2	16.3	21.0	21.0
92.5°	32.2	137.7	238.6	91.6	75.2
95°	77.0	282.4	915.0	391.3	249.8
97.5°	125.6	313.2	1396.3	1075.9	759.1
100°	161.1	332.2	1547.6	1562.0	1274.5
102.5°	194.7	354.9	1586.8	1937.9	1674.1
105°	254.4	391.4	1568.6	2388.9	2229.1
107.5°	311.4	436.5	1479.4	2609.8	2657.2
110°	352.5	466.6	1412.2	2664.7	2829.0



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	389.8	500.3	1345.0	2629.3	2879.5
115°	450.5	548.6	1258.1	2505.3	2843.0
117.5°	508.4	598.8	1203.0	2331.2	2713.3
120°	543.9	630.6	1178.8	2200.8	2595.6
122.5°	575.6	662.3	1162.0	2086.4	2461.2
125°	620.9	707.6	1141.4	1930.9	2261.8
127.5°	663.8	746.5	1127.9	1801.1	2091.4
130°	686.3	770.7	1120.4	1724.0	1988.7
132.5°	712.4	796.8	1114.8	1656.2	1895.4
135°	749.3	831.4	1108.7	1561.6	1767.0
137.5°	783.8	860.0	1103.6	1485.1	1654.5
140°	810.0	880.7	1101.7	1434.3	1587.2
142.5°	832.4	897.6	1098.0	1389.0	1520.0
145°	866.0	925.3	1092.4	1330.5	1433.2
147.5°	901.9	953.1	1089.6	1278.7	1360.8
150°	924.3	970.0	1087.7	1250.2	1314.1
152.5°	944.9	986.9	1085.9	1225.7	1278.7
155°	980.4	1012.3	1085.4	1195.9	1230.1
157.5°	1006.0	1032.1	1085.4	1171.4	1195.1
160°	1024.7	1045.2	1085.4	1158.2	1176.4
162.5°	1039.6	1056.5	1087.3	1146.9	1161.5
165°	1059.7	1073.4	1090.1	1134.6	1141.4
167.5°	1073.7	1084.2	1092.4	1124.2	1126.0
170°	1083.1	1089.9	1092.4	1120.4	1120.4
172.5°	1090.5	1093.7	1092.4	1114.8	1112.9
175°	1097.1	1099.3	1092.4	1106.4	1104.1
177.5°	1098.9	1098.9	1091.5	1102.6	1098.9
180°	1097.1	1097.1	1097.1	1097.1	1097.1

(END OF REPORT)