

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: P518717

Luminaire Tested: **SQ4-BB-100U-075D-840-1D-UNV-STD-W-6**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518717
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-23, 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-100U-075D-840-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

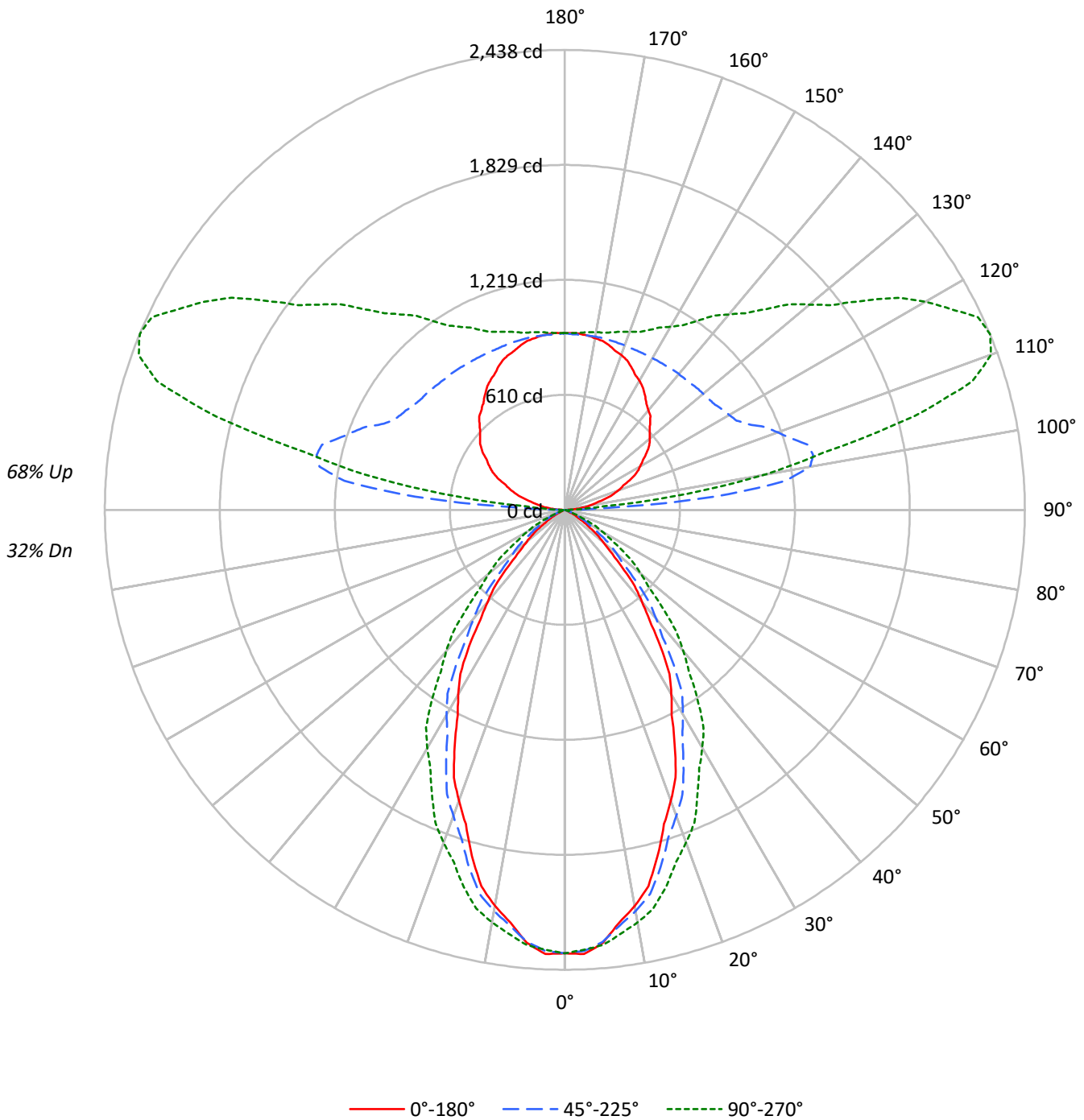
Lumens per Lamp: N/A
Luminaire Lumens: 8891.7 lumens
Efficiency: N/A
Efficacy: 114.0 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 78
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	0
RCR																		
0	103	103	103	103	92	92	92	92	73	73	73	55	55	55	39	39	39	32
1	95	91	88	85	85	82	79	77	66	64	62	50	49	48	36	36	35	29
2	87	81	75	71	78	73	69	65	59	56	53	46	44	42	33	32	31	26
3	80	72	66	60	72	65	60	56	53	49	46	41	39	37	31	29	28	23
4	74	64	57	52	67	59	53	48	48	44	40	38	35	33	28	27	25	21
5	68	58	51	45	62	53	47	42	43	39	36	34	31	29	26	24	23	19
6	63	52	45	40	57	48	42	37	39	35	32	31	28	26	24	22	21	18
7	59	48	40	35	53	44	37	33	36	32	28	29	26	24	22	20	19	16
8	55	43	36	32	49	40	34	30	33	29	25	27	24	21	21	19	17	15
9	51	40	33	28	46	37	31	27	31	26	23	25	22	19	19	17	16	14
10	48	37	30	26	43	34	28	24	28	24	21	23	20	18	18	16	15	13

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	2.4
10°-20°	548.7	6.2
20°-30°	686.9	7.7
30°-40°	634.5	7.1
40°-50°	426.4	4.8
50°-60°	220.2	2.5
60°-70°	69.0	0.8
70°-80°	4.3	0.0
80°-90°	2.0	0.0
90°-100°	438.6	4.9
100°-110°	1210.8	13.6
110°-120°	1248.7	14.0
120°-130°	1003.5	11.3
130°-140°	788.6	8.9
140°-150°	604.8	6.8
150°-160°	434.7	4.9
160°-170°	265.8	3.0
170°-180°	89.6	1.0
0°-30°	1450.2	16.3
0°-40°	2084.7	23.4
0°-60°	2731.3	30.7
0°-90°	2806.6	31.6
90°-120°	2898.1	32.6
90°-150°	5295.0	59.5
90°-180°	6085.0	68.4
0°-180°	8891.7	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°	3	6	12	14	15	5
95°	64	237	796	327	213	69
105°	216	333	1332	2034	1915	230
115°	387	467	1073	2124	2416	380
125°	530	604	972	1646	1932	472
135°	638	707	946	1333	1503	494
145°	740	792	934	1135	1221	463
155°	835	862	926	1018	1050	385
165°	904	915	930	967	974	255
175°	936	938	932	946	942	89
180°	936	936	936	936	936	



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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°	0.6	1.2	2.4	2.7	3.0
90°	3.0	5.9	12.0	13.5	15.0
92.5°	27.0	112.0	200.2	73.1	56.9
95°	64.4	237.3	795.7	327.1	212.8
97.5°	106.7	265.8	1178.7	907.5	657.2
100°	137.9	282.9	1320.1	1329.5	1080.4
102.5°	167.8	302.3	1347.7	1642.6	1406.4
105°	215.8	333.0	1332.1	2033.7	1915.0
107.5°	266.7	371.0	1257.8	2222.3	2265.7
110°	302.7	396.5	1200.3	2262.9	2403.5



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	335.1	425.3	1146.3	2230.8	2438.3
115°	386.6	467.2	1072.9	2123.9	2415.5
117.5°	431.6	511.8	1024.6	1973.5	2305.2
120°	461.5	540.6	1005.5	1871.7	2205.7
122.5°	490.3	565.9	989.9	1776.6	2093.0
125°	530.5	603.7	972.5	1645.8	1931.5
127.5°	564.6	637.9	962.3	1535.2	1781.7
130°	587.4	660.7	957.5	1467.6	1691.8
132.5°	609.0	678.7	952.7	1410.8	1613.8
135°	638.3	707.2	945.5	1333.0	1502.9
137.5°	671.3	734.0	941.9	1267.7	1412.7
140°	689.3	750.8	939.5	1224.1	1351.6
142.5°	709.7	766.5	937.1	1185.4	1297.7
145°	740.2	791.5	933.5	1134.8	1221.2
147.5°	769.6	814.4	930.2	1092.1	1159.2
150°	791.2	827.8	929.0	1066.6	1120.8
152.5°	808.0	842.2	927.8	1044.8	1089.7
155°	834.6	862.5	926.0	1018.2	1050.4
157.5°	859.2	880.6	926.3	998.8	1020.7
160°	873.6	892.6	927.5	987.8	1004.0
162.5°	885.6	902.3	928.7	978.2	990.8
165°	903.6	915.3	930.5	966.7	974.0
167.5°	917.4	924.4	932.0	959.7	962.0
170°	924.5	930.4	932.0	956.0	956.0
172.5°	930.5	934.1	932.0	951.2	950.0
175°	936.5	938.0	932.0	945.5	942.5
177.5°	938.9	937.8	931.7	940.1	937.7
180°	936.5	936.5	936.5	936.5	936.5

(END OF REPORT)