

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: P518738

Luminaire Tested: **SQ4-BB-100U-100D-835-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518738
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-100D-835-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

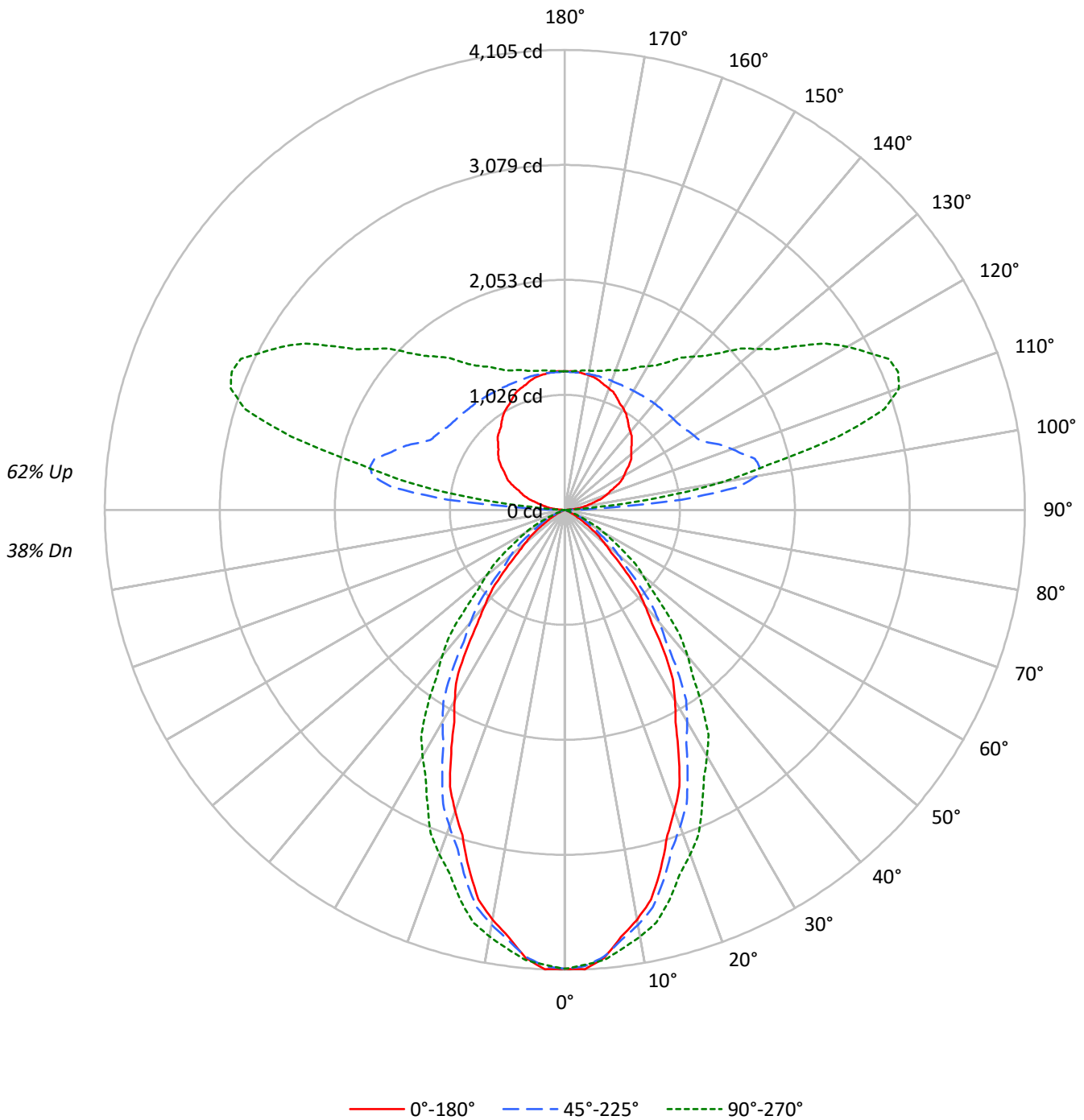
Lumens per Lamp: N/A
Luminaire Lumens: 12921.0 lumens
Efficiency: N/A
Efficacy: 106.6 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 121.2
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	104	104	104	104	95	95	95	95	77	77	77	60	60	60	45	45	45	38
1	96	93	89	86	87	84	82	79	69	67	65	55	54	53	42	41	41	35
2	89	83	77	73	81	75	71	67	62	59	56	50	48	46	38	37	36	31
3	82	74	67	62	75	68	62	58	56	52	49	45	43	41	35	34	33	28
4	76	66	59	54	69	61	55	50	51	46	43	41	38	36	33	31	29	25
5	70	60	53	47	64	55	49	44	46	42	38	38	35	32	30	28	27	23
6	65	54	47	42	59	50	44	39	42	37	34	35	31	29	28	26	24	21
7	60	49	42	37	55	46	39	35	39	34	31	32	29	26	26	24	22	19
8	56	45	38	33	51	42	36	31	36	31	28	30	26	24	24	22	20	18
9	53	41	35	30	48	38	32	28	33	28	25	28	24	22	23	20	19	16
10	49	38	32	27	45	36	30	26	30	26	23	26	22	20	21	19	17	15

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	18893	18893	18893
5°	18590	18544	18681
10°	17394	17626	18118
15°	15813	16314	17223
20°	14036	14766	16060
25°	12224	13192	14755
30°	10470	11621	13520
35°	8682	9864	12029
40°	6670	7887	10250
45°	4822	5972	8248
50°	3285	4451	6542
55°	2135	3219	5084
60°	1225	2267	3675
65°	324	1384	1860
70°	161	428	534
75°	71	36	0
80°	53	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	373.8	2.9
10°-20°	955.9	7.4
20°-30°	1196.6	9.3
30°-40°	1105.3	8.6
40°-50°	742.7	5.7
50°-60°	383.6	3.0
60°-70°	120.2	0.9
70°-80°	7.6	0.1
80°-90°	2.7	0.0
90°-100°	579.0	4.5
100°-110°	1598.3	12.4
110°-120°	1648.4	12.8
120°-130°	1324.6	10.3
130°-140°	1041.0	8.1
140°-150°	798.4	6.2
150°-160°	573.8	4.4
160°-170°	350.9	2.7
170°-180°	118.3	0.9
0°-30°	2526.3	19.6
0°-40°	3631.5	28.1
0°-60°	4757.9	36.8
0°-90°	4888.3	37.8
90°-120°	3825.6	29.6
90°-150°	6989.6	54.1
90°-180°	8033.0	62.2
0°-180°	12921.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4096	4096	4096	4096	4096	
5°	4014	3974	4004	4019	4034	372
15°	3311	3299	3416	3531	3606	922
25°	2402	2421	2592	2769	2899	1101
35°	1542	1580	1752	1958	2136	955
45°	739	784	915	1094	1264	580
55°	266	310	400	514	632	248
65°	30	57	127	153	170	50
75°	4	4	2	0	0	6
85°	0	0	0	0	0	0
90°	4	8	16	18	20	6
95°	85	313	1050	432	281	91
105°	285	440	1758	2685	2528	303
115°	510	617	1416	2804	3189	501
125°	700	797	1284	2172	2550	623
135°	843	934	1248	1760	1984	652
145°	977	1045	1232	1498	1612	612
155°	1102	1138	1222	1344	1387	508
165°	1193	1208	1228	1276	1286	336
175°	1236	1238	1230	1248	1244	117
180°	1236	1236	1236	1236	1236	



TEST NUMBER: P518738

CATALOG NUMBER: SQ4-BB-100U-100D-835-1D-UNV-STD-W-8

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	4095.6	4095.6	4095.6	4095.6	4095.6
2.5°	4105.1	4066.4	4076.6	4076.4	4065.5
5°	4014.4	3973.7	4004.5	4018.7	4034.2
7.5°	3844.8	3813.0	3872.1	3916.4	3948.6
10°	3713.2	3686.1	3762.8	3823.2	3867.8
12.5°	3561.0	3540.1	3632.8	3715.7	3772.7
15°	3311.0	3299.4	3416.0	3530.7	3606.2
17.5°	3043.1	3042.7	3175.8	3318.2	3409.3
20°	2859.2	2865.0	3007.8	3164.8	3271.4
22.5°	2675.3	2688.9	2841.4	3005.0	3127.1
25°	2401.5	2420.9	2591.7	2769.0	2898.8
27.5°	2138.4	2166.7	2346.4	2530.7	2688.8
30°	1965.6	1998.5	2181.6	2375.5	2538.2
32.5°	1796.0	1835.1	2013.5	2218.6	2384.5
35°	1541.6	1580.3	1751.6	1957.7	2136.0
37.5°	1278.8	1316.8	1484.1	1687.0	1879.6
40°	1107.6	1150.2	1309.7	1506.4	1702.1
42.5°	952.3	994.9	1144.9	1338.1	1522.9
45°	739.1	783.6	915.4	1093.7	1264.2
47.5°	562.3	610.8	726.4	887.6	1043.0
50°	457.7	506.1	620.2	762.3	911.5
52.5°	373.7	420.6	523.5	657.4	794.2
55°	265.5	310.1	400.3	513.9	632.1
57.5°	183.5	221.8	302.8	397.6	490.2
60°	132.8	169.6	245.7	322.7	398.3
62.5°	88.4	122.1	196.6	255.6	306.3
65°	29.7	56.8	126.8	153.0	170.4
67.5°	15.1	18.2	66.6	70.3	76.1
70°	11.9	11.9	31.7	33.8	39.6
72.5°	8.7	8.7	12.7	16.3	17.4
75°	4.0	4.0	2.0	0.0	0.0
77.5°	2.0	2.0	1.6	0.0	0.0
80°	2.0	2.0	0.0	0.0	0.0
82.5°	0.4	0.4	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.8	1.6	3.2	3.6	4.0
90°	4.0	7.8	15.8	17.8	19.8
92.5°	35.6	147.8	264.3	96.4	75.2
95°	85.1	313.3	1050.3	431.7	280.9
97.5°	140.8	350.9	1555.9	1197.9	867.6
100°	182.0	373.5	1742.6	1755.0	1426.2
102.5°	221.5	399.1	1779.0	2168.4	1856.6
105°	284.8	439.6	1758.5	2684.6	2527.9
107.5°	352.1	489.8	1660.4	2933.5	2990.8
110°	399.6	523.3	1584.4	2987.1	3172.8



TEST NUMBER: P518738

CATALOG NUMBER: SQ4-BB-100U-100D-835-1D-UNV-STD-W-8

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	442.3	561.4	1513.2	2944.8	3218.7
115°	510.3	616.7	1416.3	2803.7	3188.6
117.5°	569.7	675.7	1352.6	2605.1	3043.0
120°	609.2	713.7	1327.3	2470.7	2911.7
122.5°	647.2	747.0	1306.7	2345.2	2762.9
125°	700.2	796.9	1283.7	2172.5	2549.7
127.5°	745.3	842.0	1270.3	2026.6	2351.9
130°	775.4	872.1	1264.0	1937.3	2233.2
132.5°	803.9	895.9	1257.6	1862.3	2130.3
135°	842.6	933.5	1248.1	1759.6	1984.0
137.5°	886.2	968.9	1243.4	1673.4	1864.9
140°	909.9	991.1	1240.2	1615.9	1784.2
142.5°	936.8	1011.8	1237.1	1564.8	1713.0
145°	977.1	1044.8	1232.3	1498.0	1612.1
147.5°	1015.9	1075.1	1228.0	1441.6	1530.2
150°	1044.4	1092.8	1226.4	1408.0	1479.6
152.5°	1066.6	1111.8	1224.8	1379.2	1438.4
155°	1101.8	1138.5	1222.4	1344.1	1386.6
157.5°	1134.2	1162.4	1222.8	1318.4	1347.4
160°	1153.2	1178.3	1224.4	1304.0	1325.3
162.5°	1169.0	1191.1	1226.0	1291.2	1307.9
165°	1192.8	1208.2	1228.4	1276.1	1285.7
167.5°	1211.0	1220.2	1230.3	1266.8	1269.9
170°	1220.4	1228.2	1230.3	1262.0	1262.0
172.5°	1228.4	1233.0	1230.3	1255.6	1254.1
175°	1236.3	1238.2	1230.3	1248.1	1244.2
177.5°	1239.4	1237.9	1229.9	1240.9	1237.9
180°	1236.3	1236.3	1236.3	1236.3	1236.3

(END OF REPORT)