

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: P518833

Luminaire Tested: **SQ4-BB-125U-100D-835-1D-UNV-STD-W-6**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518833
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-24, 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-125U-100D-835-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 1250 LUMENS PER FOOT
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

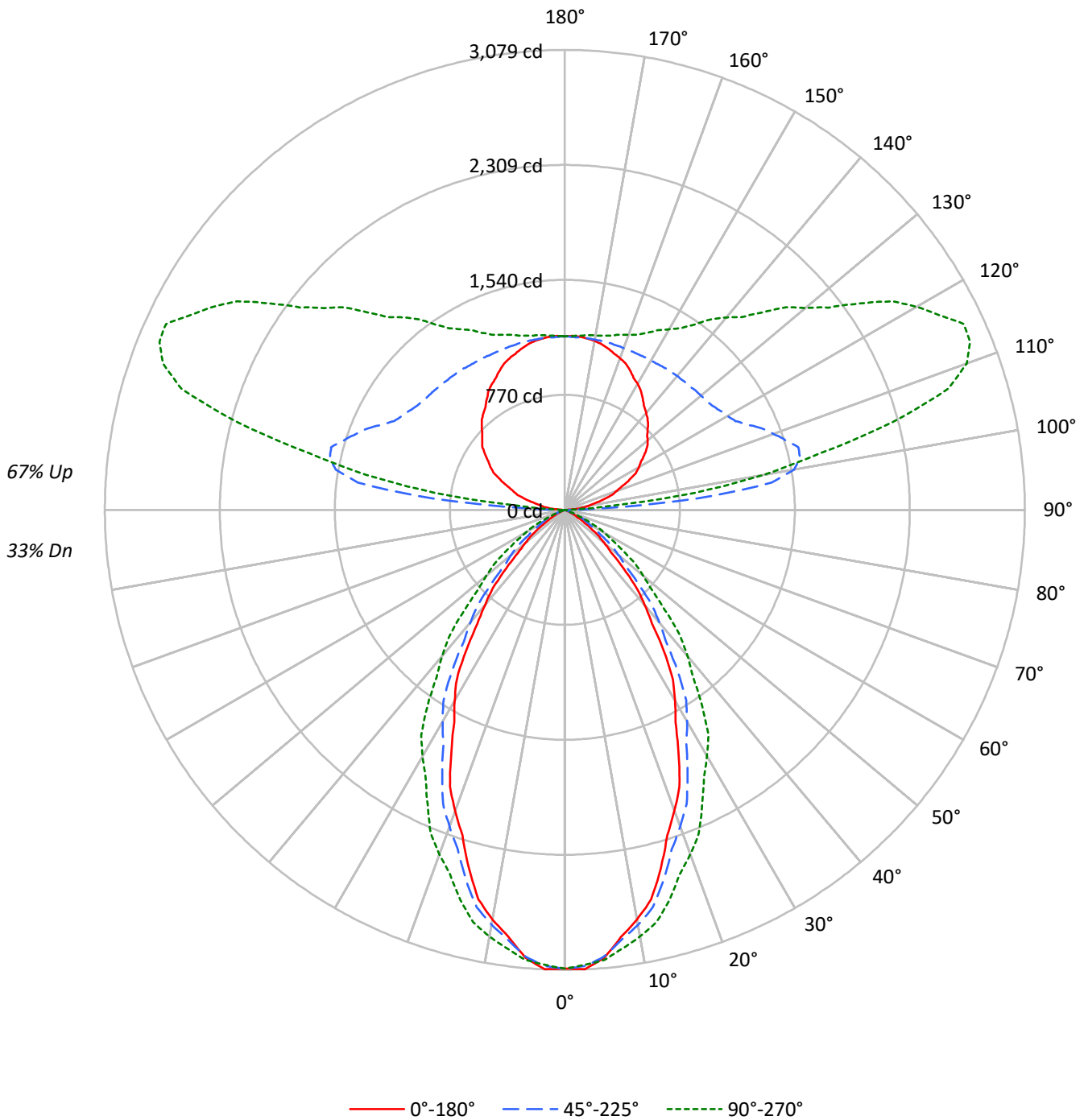
Lumens per Lamp: N/A
Luminaire Lumens: 11166.0 lumens
Efficiency: N/A
Efficacy: 108.6 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 102.8
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	93	93	93	93	74	74	74	56	56	56	40	40	40	33
1	95	91	88	85	86	83	80	77	66	64	63	51	50	49	37	37	36	30
2	88	81	76	71	79	74	69	65	59	56	54	46	45	43	34	33	32	27
3	81	72	66	61	73	66	60	56	54	50	47	42	40	38	32	30	29	24
4	74	65	58	53	67	59	53	49	48	44	41	38	36	33	29	27	26	22
5	69	58	51	46	62	53	47	42	44	39	36	35	32	30	27	25	24	20
6	64	53	45	40	58	48	42	38	40	35	32	32	29	27	25	23	21	18
7	59	48	41	36	53	44	38	33	37	32	29	30	26	24	23	21	20	17
8	55	44	37	32	50	40	34	30	34	29	26	27	24	22	21	19	18	15
9	51	40	33	29	47	37	31	27	31	27	23	25	22	20	20	18	16	14
10	48	37	30	26	44	34	28	24	29	24	21	24	20	18	19	17	15	13

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	18893	18893	18893
5°	18590	18544	18682
10°	17394	17626	18117
15°	15812	16314	17223
20°	14036	14766	16059
25°	12223	13192	14755
30°	10470	11621	13521
35°	8682	9864	12029
40°	6670	7887	10249
45°	4822	5972	8247
50°	3285	4451	6541
55°	2135	3219	5084
60°	1225	2267	3674
65°	325	1384	1860
70°	160	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°	280.3	2.5
10°-20°	716.9	6.4
20°-30°	897.5	8.0
30°-40°	829.0	7.4
40°-50°	557.0	5.0
50°-60°	287.7	2.6
60°-70°	90.1	0.8
70°-80°	5.7	0.1
80°-90°	2.8	0.0
90°-100°	543.4	4.9
100°-110°	1463.8	13.1
110°-120°	1536.2	13.8
120°-130°	1246.6	11.2
130°-140°	977.7	8.8
140°-150°	750.6	6.7
150°-160°	539.7	4.8
160°-170°	329.7	3.0
170°-180°	111.2	1.0
0°-30°	1894.7	17.0
0°-40°	2723.7	24.4
0°-60°	3568.4	32.0
0°-90°	3667.0	32.8
90°-120°	3543.5	31.7
90°-150°	6518.4	58.4
90°-180°	7499.0	67.2
0°-180°	11166.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3072	3072	3072	3072	3072	
5°	3011	2980	3003	3014	3026	279
15°	2483	2474	2562	2648	2705	692
25°	1801	1816	1944	2077	2174	826
35°	1156	1185	1314	1468	1602	716
45°	554	588	687	820	948	435
55°	199	233	300	385	474	186
65°	22	43	95	115	128	38
75°	3	3	2	0	0	4
85°	0	0	0	0	0	0
90°	3	9	18	19	19	6
95°	83	296	891	456	315	87
105°	271	421	1619	2422	2273	285
115°	478	585	1348	2605	2946	470
125°	653	750	1210	2046	2408	583
135°	786	877	1176	1650	1869	607
145°	909	980	1162	1411	1515	570
155°	1031	1069	1151	1266	1307	475
165°	1119	1132	1156	1202	1208	315
175°	1163	1162	1157	1173	1170	110
180°	1162	1162	1162	1162	1162	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3071.7	3071.7	3071.7	3071.7	3071.7
2.5°	3078.9	3049.8	3057.5	3057.3	3049.1
5°	3010.8	2980.3	3003.4	3014.0	3025.7
7.5°	2883.6	2859.8	2904.1	2937.3	2961.5
10°	2784.9	2764.6	2822.1	2867.4	2900.8
12.5°	2670.8	2655.1	2724.6	2786.8	2829.5
15°	2483.2	2474.5	2562.0	2648.0	2704.7
17.5°	2282.3	2282.0	2381.9	2488.7	2556.9
20°	2144.4	2148.8	2255.9	2373.6	2453.5
22.5°	2006.5	2016.7	2131.0	2253.8	2345.3
25°	1801.1	1815.7	1943.8	2076.8	2174.1
27.5°	1603.8	1625.0	1759.8	1898.0	2016.6
30°	1474.2	1498.9	1636.2	1781.6	1903.7
32.5°	1347.0	1376.3	1510.2	1664.0	1788.3
35°	1156.2	1185.2	1313.7	1468.3	1602.0
37.5°	959.1	987.6	1113.1	1265.3	1409.7
40°	830.7	862.7	982.3	1129.8	1276.5
42.5°	714.2	746.2	858.7	1003.6	1142.2
45°	554.3	587.7	686.6	820.2	948.1
47.5°	421.7	458.1	544.8	665.7	782.3
50°	343.3	379.6	465.1	571.7	683.6
52.5°	280.3	315.4	392.6	493.0	595.6
55°	199.1	232.6	300.2	385.4	474.1
57.5°	137.6	166.4	227.1	298.2	367.7
60°	99.6	127.2	184.3	242.0	298.7
62.5°	66.3	91.6	147.4	191.7	229.7
65°	22.3	42.6	95.1	114.7	127.8
67.5°	11.3	13.6	49.9	52.7	57.1
70°	8.9	8.9	23.8	25.4	29.7
72.5°	6.5	6.5	9.5	12.2	13.1
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°	0.6	1.7	3.6	3.8	3.8
90°	3.0	8.7	17.8	19.2	19.2
92.5°	36.1	127.6	252.2	121.4	84.3
95°	82.9	295.6	890.8	455.5	315.2
97.5°	132.3	338.3	1397.2	1167.2	880.2
100°	170.2	355.4	1558.2	1630.3	1352.5
102.5°	206.9	379.3	1611.5	1977.1	1749.1
105°	270.8	421.3	1618.9	2422.0	2272.9
107.5°	331.2	465.4	1549.9	2650.6	2689.1
110°	371.4	498.8	1487.2	2721.5	2861.9

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	414.0	532.1	1426.8	2705.8	2936.5
115°	478.0	585.0	1348.1	2604.8	2946.2
117.5°	536.3	636.7	1287.1	2443.5	2823.7
120°	574.2	671.1	1256.3	2327.7	2718.4
122.5°	607.3	703.1	1233.8	2209.3	2598.8
125°	652.6	749.5	1210.5	2045.9	2407.6
127.5°	696.1	791.6	1195.7	1901.8	2224.7
130°	722.1	817.6	1189.7	1819.2	2102.8
132.5°	748.2	842.5	1183.8	1746.4	2006.9
135°	785.8	876.9	1176.4	1650.5	1869.0
137.5°	821.6	909.0	1172.6	1569.1	1748.5
140°	846.4	930.4	1169.0	1519.0	1681.0
142.5°	872.5	950.6	1166.7	1472.2	1608.8
145°	908.6	979.5	1161.6	1411.1	1515.3
147.5°	947.7	1009.3	1156.6	1359.7	1441.6
150°	973.7	1027.2	1154.2	1327.4	1395.4
152.5°	997.4	1044.0	1153.0	1301.1	1356.4
155°	1031.4	1069.0	1151.3	1266.1	1306.6
157.5°	1061.3	1090.5	1151.6	1241.6	1268.8
160°	1080.2	1104.8	1152.7	1227.2	1247.5
162.5°	1096.8	1116.8	1153.9	1215.2	1229.7
165°	1118.7	1131.7	1155.7	1201.7	1207.5
167.5°	1136.5	1144.0	1157.2	1191.3	1193.6
170°	1148.3	1151.2	1157.2	1185.3	1185.3
172.5°	1155.4	1156.0	1158.4	1179.4	1179.4
175°	1163.1	1161.7	1157.2	1173.4	1170.5
177.5°	1166.4	1164.0	1158.1	1167.5	1165.2
180°	1161.6	1161.6	1161.6	1161.6	1161.6

(END OF REPORT)