

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: P518785

Luminaire Tested: **SQ4-BB-125U-050D-835-1D-UNV-STD-W-6**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518785
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-050D-835-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 1250 LUMENS PER FOOT
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

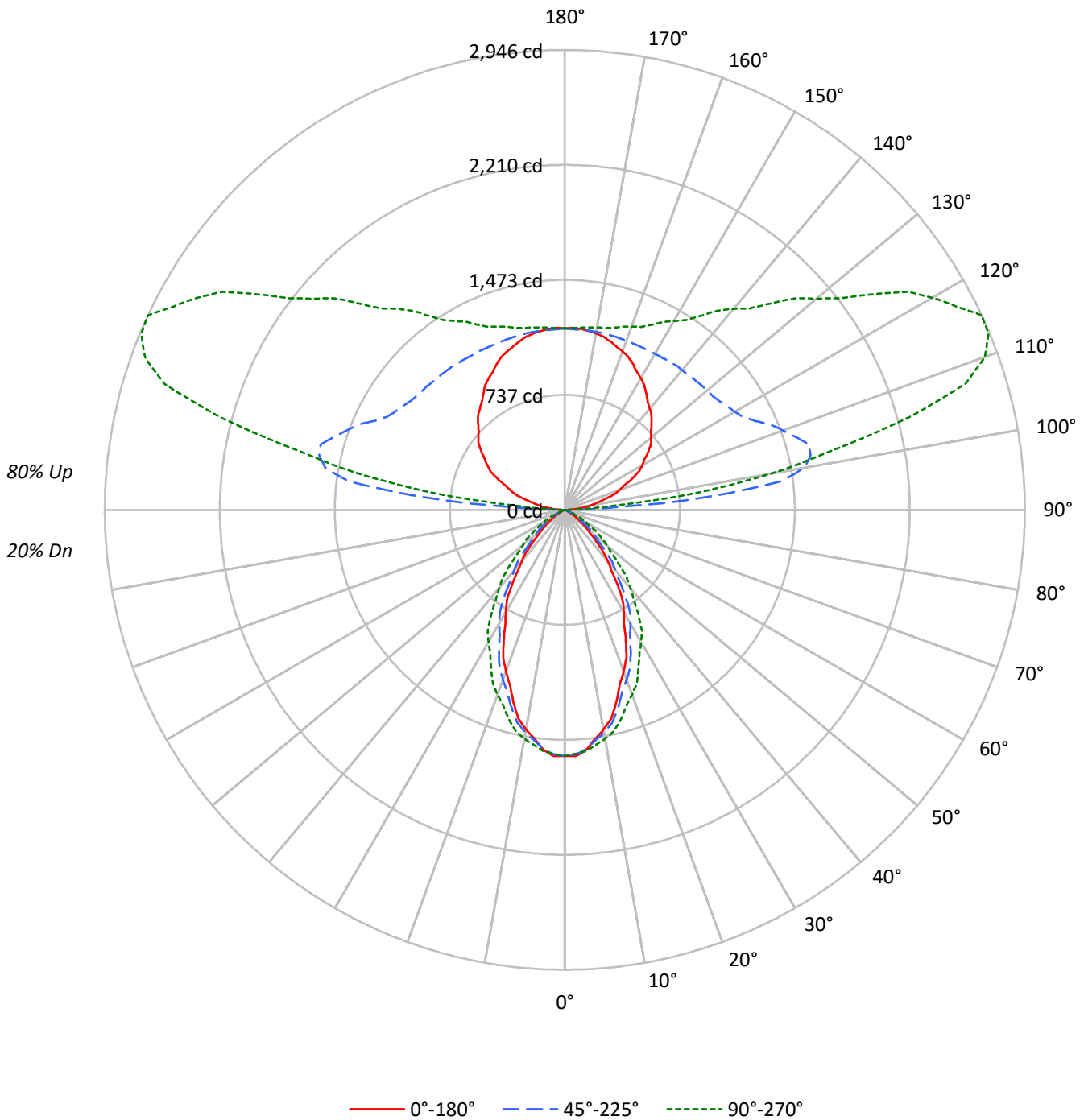
Lumens per Lamp: N/A
Luminaire Lumens: 9381.9 lumens
Efficiency: N/A
Efficacy: 126.4 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 74.2
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	100	100	100	100	88	88	88	88	67	67	67	47	47	47	29	29	29	20
1	92	88	84	81	81	78	75	73	59	58	56	42	41	40	26	26	25	18
2	84	78	72	68	74	69	64	61	53	50	47	38	36	35	24	23	23	17
3	77	69	62	57	68	61	56	52	47	44	41	34	32	30	22	21	20	15
4	71	61	54	49	63	55	49	44	42	38	35	31	28	26	20	19	18	14
5	65	55	47	42	58	49	43	38	38	34	31	28	25	23	19	17	16	12
6	60	49	42	37	53	44	38	33	35	30	27	26	23	21	17	16	15	11
7	56	45	37	32	49	40	34	29	31	27	24	23	21	19	16	14	13	10
8	52	40	33	29	46	36	30	26	29	24	21	21	19	17	15	13	12	9
9	48	37	30	26	43	33	27	23	26	22	19	20	17	15	14	12	11	9
10	45	34	27	23	40	31	25	21	24	20	17	18	16	14	13	11	10	8

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9694	9694	9694
5°	9538	9515	9586
10°	8924	9044	9296
15°	8114	8371	8837
20°	7202	7576	8240
25°	6272	6769	7571
30°	5372	5962	6938
35°	4454	5062	6172
40°	3422	4047	5259
45°	2474	3064	4232
50°	1685	2284	3357
55°	1096	1651	2608
60°	629	1164	1886
65°	166	710	955
70°	83	219	275
75°	36	19	0
80°	28	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	143.8	1.5
10°-20°	367.8	3.9
20°-30°	460.5	4.9
30°-40°	425.3	4.5
40°-50°	285.8	3.0
50°-60°	147.6	1.6
60°-70°	46.2	0.5
70°-80°	2.9	0.0
80°-90°	2.8	0.0
90°-100°	543.4	5.8
100°-110°	1463.8	15.6
110°-120°	1536.2	16.4
120°-130°	1246.6	13.3
130°-140°	977.7	10.4
140°-150°	750.6	8.0
150°-160°	539.7	5.8
160°-170°	329.7	3.5
170°-180°	111.2	1.2
0°-30°	972.2	10.4
0°-40°	1397.5	14.9
0°-60°	1831.0	19.5
0°-90°	1882.9	20.1
90°-120°	3543.5	37.8
90°-150°	6518.4	69.5
90°-180°	7499.0	79.9
0°-180°	9381.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1576	1576	1576	1576	1576	
5°	1545	1529	1541	1546	1552	143
15°	1274	1270	1315	1359	1388	355
25°	924	932	997	1066	1116	424
35°	593	608	674	753	822	367
45°	284	302	352	421	486	223
55°	102	119	154	198	243	95
65°	11	22	49	59	66	19
75°	2	2	1	0	0	2
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°	1576.1	1576.1	1576.1	1576.1	1576.1
2.5°	1579.8	1564.9	1568.8	1568.7	1564.5
5°	1544.8	1529.2	1541.0	1546.5	1552.5
7.5°	1479.6	1467.3	1490.1	1507.2	1519.5
10°	1428.9	1418.5	1448.0	1471.3	1488.4
12.5°	1370.4	1362.3	1398.0	1429.9	1451.8
15°	1274.2	1269.7	1314.6	1358.7	1387.8
17.5°	1171.1	1170.9	1222.1	1276.9	1312.0
20°	1100.3	1102.5	1157.5	1217.9	1258.9
22.5°	1029.5	1034.8	1093.4	1156.4	1203.4
25°	924.2	931.6	997.4	1065.6	1115.5
27.5°	822.9	833.8	903.0	973.9	1034.7
30°	756.4	769.1	839.5	914.1	976.8
32.5°	691.1	706.2	774.9	853.8	917.6
35°	593.2	608.1	674.1	753.4	822.0
37.5°	492.1	506.7	571.1	649.2	723.3
40°	426.2	442.6	504.0	579.7	655.0
42.5°	366.5	382.9	440.6	514.9	586.1
45°	284.4	301.6	352.3	420.9	486.5
47.5°	216.4	235.0	279.5	341.6	401.4
50°	176.1	194.8	238.7	293.3	350.8
52.5°	143.8	161.9	201.5	253.0	305.6
55°	102.2	119.3	154.0	197.8	243.2
57.5°	70.6	85.4	116.5	153.0	188.6
60°	51.1	65.3	94.6	124.2	153.3
62.5°	34.0	47.0	75.6	98.4	117.9
65°	11.4	21.9	48.8	58.9	65.6
67.5°	5.8	7.0	25.6	27.0	29.3
70°	4.6	4.6	12.2	13.0	15.3
72.5°	3.4	3.4	4.9	6.3	6.7
75°	1.5	1.5	0.8	0.0	0.0
77.5°	0.8	0.8	0.6	0.0	0.0
80°	0.8	0.8	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	1.7	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)