

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: P518941

Luminaire Tested: **SQ4-BB-150U-100D-935-1D-UNV-STD-W-6**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518941
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-25, 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-150U-100D-935-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 1500 LUMENS PER FOOT
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

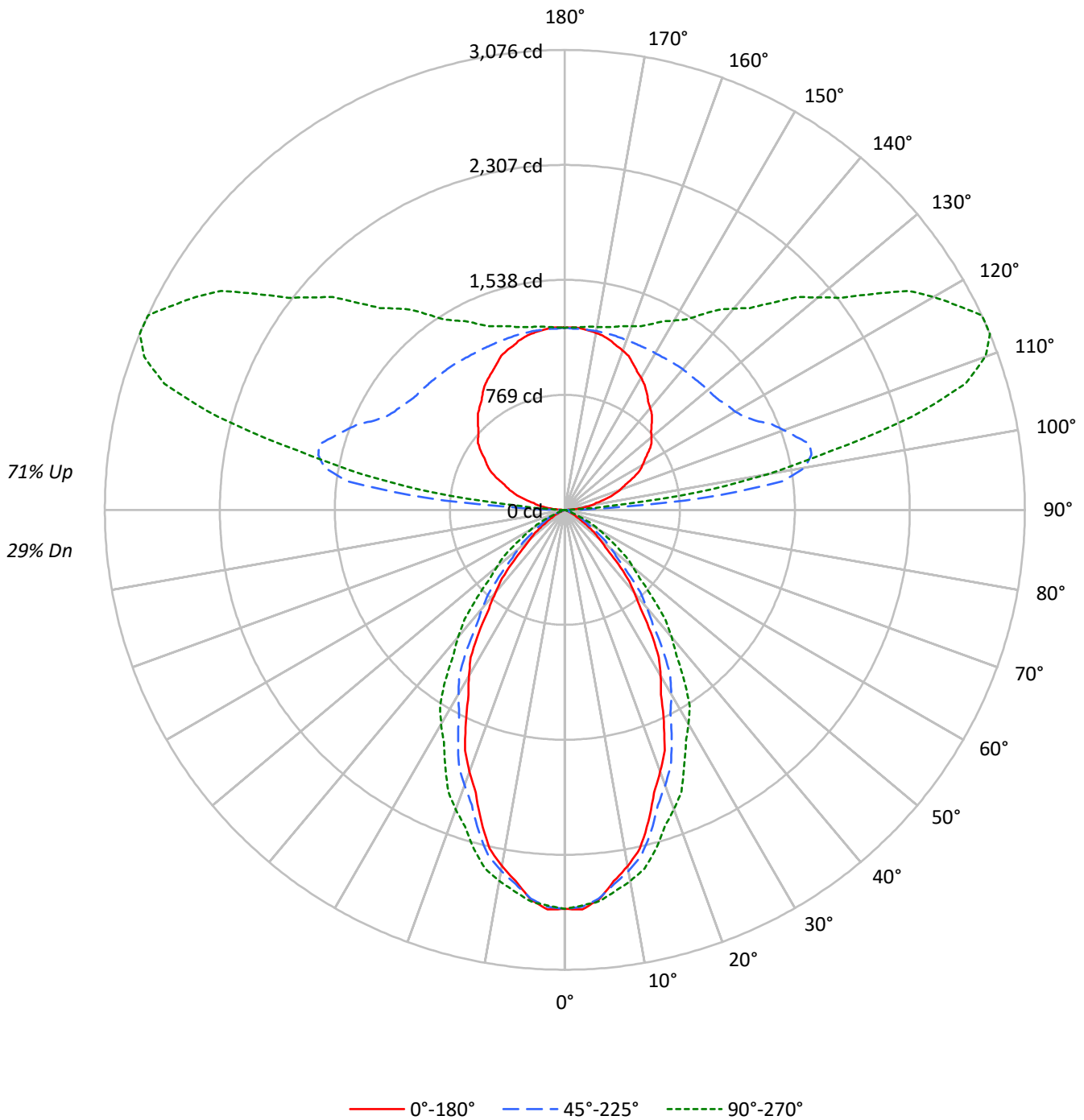
Lumens per Lamp: N/A
Luminaire Lumens: 11037.7 lumens
Efficiency: N/A
Efficacy: 97.9 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 112.7
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	102	102	102	102	91	91	91	91	72	72	72	53	53	53	37	37	37	29
1	94	90	87	84	84	81	78	76	64	62	61	48	47	46	34	33	33	26
2	86	80	75	70	77	72	68	64	57	54	52	44	42	40	31	30	29	24
3	80	71	65	60	71	64	59	55	52	48	45	40	37	35	29	27	26	21
4	73	64	57	51	66	58	52	47	46	42	39	36	33	31	26	25	24	19
5	68	57	50	45	61	52	46	41	42	38	34	33	30	28	24	23	21	18
6	63	52	44	39	56	47	41	36	38	34	30	30	27	25	22	21	19	16
7	58	47	40	35	52	43	37	32	35	30	27	28	25	22	21	19	18	15
8	54	43	36	31	49	39	33	29	32	28	24	26	22	20	19	17	16	14
9	50	39	32	28	45	36	30	26	30	25	22	24	21	18	18	16	15	13
10	47	36	29	25	43	33	27	23	27	23	20	22	19	17	17	15	14	12

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	16416	16416	16416
5°	16153	16112	16232
10°	15113	15315	15742
15°	13740	14175	14965
20°	12196	12830	13954
25°	10621	11462	12821
30°	9097	10097	11748
35°	7543	8571	10452
40°	5796	6853	8906
45°	4189	5190	7166
50°	2854	3868	5684
55°	1855	2797	4417
60°	1064	1969	3192
65°	282	1202	1615
70°	138	372	464
75°	62	31	0
80°	46	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	243.6	2.2
10°-20°	622.9	5.6
20°-30°	779.8	7.1
30°-40°	720.3	6.5
40°-50°	484.0	4.4
50°-60°	250.0	2.3
60°-70°	78.3	0.7
70°-80°	5.0	0.0
80°-90°	2.6	0.0
90°-100°	565.9	5.1
100°-110°	1530.2	13.9
110°-120°	1608.7	14.6
120°-130°	1306.7	11.8
130°-140°	1025.0	9.3
140°-150°	786.7	7.1
150°-160°	565.8	5.1
160°-170°	345.6	3.1
170°-180°	116.5	1.1
0°-30°	1646.3	14.9
0°-40°	2366.6	21.4
0°-60°	3100.6	28.1
0°-90°	3186.4	28.9
90°-120°	3704.8	33.6
90°-150°	6823.3	61.8
90°-180°	7851.0	71.1
0°-180°	11037.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2669	2669	2669	2669	2669	
5°	2616	2590	2610	2619	2629	243
15°	2158	2150	2226	2301	2350	601
25°	1565	1578	1689	1804	1889	717
35°	1005	1030	1142	1276	1392	622
45°	482	511	597	713	824	378
55°	173	202	261	335	412	161
65°	19	37	83	100	111	33
75°	3	3	1	0	0	4
85°	0	0	0	0	0	0
90°	3	8	17	18	17	6
95°	88	308	941	487	290	92
105°	284	440	1698	2504	2401	300
115°	501	612	1408	2725	3076	494
125°	686	786	1269	2141	2515	611
135°	822	919	1235	1729	1957	635
145°	956	1027	1218	1480	1593	598
155°	1079	1121	1207	1328	1371	498
165°	1174	1186	1212	1260	1266	331
175°	1219	1218	1214	1230	1227	116
180°	1218	1218	1218	1218	1218	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2669.0	2669.0	2669.0	2669.0	2669.0
2.5°	2675.2	2649.9	2656.6	2656.4	2649.4
5°	2616.1	2589.5	2609.6	2618.9	2629.0
7.5°	2505.5	2484.8	2523.3	2552.2	2573.2
10°	2419.8	2402.1	2452.1	2491.5	2520.5
12.5°	2320.6	2307.0	2367.4	2421.4	2458.5
15°	2157.7	2150.1	2226.1	2300.8	2350.1
17.5°	1983.1	1982.8	2069.6	2162.4	2221.7
20°	1863.3	1867.1	1960.1	2062.4	2131.8
22.5°	1743.4	1752.3	1851.6	1958.3	2037.8
25°	1565.0	1577.6	1688.9	1804.5	1889.1
27.5°	1393.5	1411.9	1529.1	1649.2	1752.2
30°	1280.9	1302.4	1421.7	1548.0	1654.1
32.5°	1170.4	1195.9	1312.2	1445.8	1553.9
35°	1004.6	1029.8	1141.5	1275.8	1392.0
37.5°	833.4	858.1	967.1	1099.4	1224.9
40°	721.8	749.6	853.5	981.7	1109.2
42.5°	620.6	648.3	746.1	872.0	992.4
45°	481.6	510.7	596.6	712.7	823.8
47.5°	366.5	398.0	473.4	578.5	679.7
50°	298.3	329.8	404.2	496.8	594.0
52.5°	243.5	274.1	341.1	428.4	517.5
55°	173.0	202.1	260.8	334.9	411.9
57.5°	119.6	144.6	197.3	259.1	319.5
60°	86.5	110.5	160.1	210.3	259.5
62.5°	57.6	79.6	128.1	166.5	199.6
65°	19.4	37.0	82.6	99.7	111.0
67.5°	9.8	11.8	43.4	45.8	49.6
70°	7.7	7.7	20.7	22.0	25.8
72.5°	5.7	5.7	8.3	10.6	11.4
75°	2.6	2.6	1.3	0.0	0.0
77.5°	1.3	1.3	1.0	0.0	0.0
80°	1.3	1.3	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°	0.5	1.5	3.4	3.7	3.4
90°	2.6	7.7	17.0	18.3	17.0
92.5°	37.2	135.7	267.7	116.2	84.2
95°	87.8	308.3	941.2	487.1	289.7
97.5°	141.0	353.5	1467.1	1214.1	891.6
100°	180.9	371.9	1630.7	1700.6	1375.0
102.5°	217.6	397.3	1688.3	2069.5	1826.0
105°	284.4	439.5	1697.5	2503.9	2401.4
107.5°	346.3	487.8	1623.3	2775.0	2809.1
110°	394.6	522.7	1557.2	2847.8	2992.6



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	437.5	557.5	1496.4	2833.2	3076.5
115°	500.7	612.2	1407.8	2725.3	3076.5
117.5°	562.6	667.2	1349.4	2560.4	2958.5
120°	600.4	702.9	1314.7	2442.1	2848.4
122.5°	636.0	736.5	1293.8	2315.3	2724.7
125°	685.6	785.5	1268.9	2141.2	2515.4
127.5°	731.2	829.3	1254.2	1999.1	2328.3
130°	756.3	857.6	1247.9	1911.4	2208.7
132.5°	782.6	882.8	1241.6	1832.2	2106.0
135°	821.9	919.3	1234.8	1728.9	1957.0
137.5°	861.5	953.5	1229.0	1645.1	1830.9
140°	888.7	974.6	1226.9	1591.2	1756.5
142.5°	914.9	995.7	1222.7	1542.4	1687.3
145°	955.6	1027.4	1217.7	1479.8	1592.6
147.5°	992.5	1056.1	1212.0	1423.2	1509.8
150°	1019.8	1076.2	1209.9	1392.3	1461.6
152.5°	1045.0	1094.2	1208.8	1363.8	1420.7
155°	1078.8	1121.1	1207.3	1327.5	1371.1
157.5°	1113.9	1143.4	1207.5	1302.3	1331.0
160°	1133.9	1158.2	1208.6	1286.4	1306.9
162.5°	1149.6	1169.8	1209.6	1273.7	1289.1
165°	1174.5	1186.0	1212.5	1259.8	1266.2
167.5°	1191.5	1199.5	1212.8	1248.0	1251.0
170°	1202.0	1205.9	1213.8	1242.7	1242.7
172.5°	1210.4	1211.2	1213.8	1236.3	1235.3
175°	1219.1	1217.8	1213.8	1229.5	1226.9
177.5°	1221.9	1218.9	1213.6	1224.0	1220.9
180°	1217.7	1217.7	1217.7	1217.7	1217.7

(END OF REPORT)