

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

Brand: CORELITE

Report Number: P521308

Luminaire Tested: SQ4-BB-150U-075D-92765-1D-UNV-STD-W-4_6500K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521308
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2101-105-51, G2-2009-966-12)
Test Lab: INNOVATION CENTER
Issue Date: 5-5-2021
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-BB-150U-075D-92765-1D-UNV-STD-W-4_6500K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 1500 LUMENS PER FOOT
Light Source: 2700K-6500K CCT, 90 CRI LEDS, TUNED TO 6500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9165.4 lumens
Efficiency: N/A
Efficacy: 111.1 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Indirect

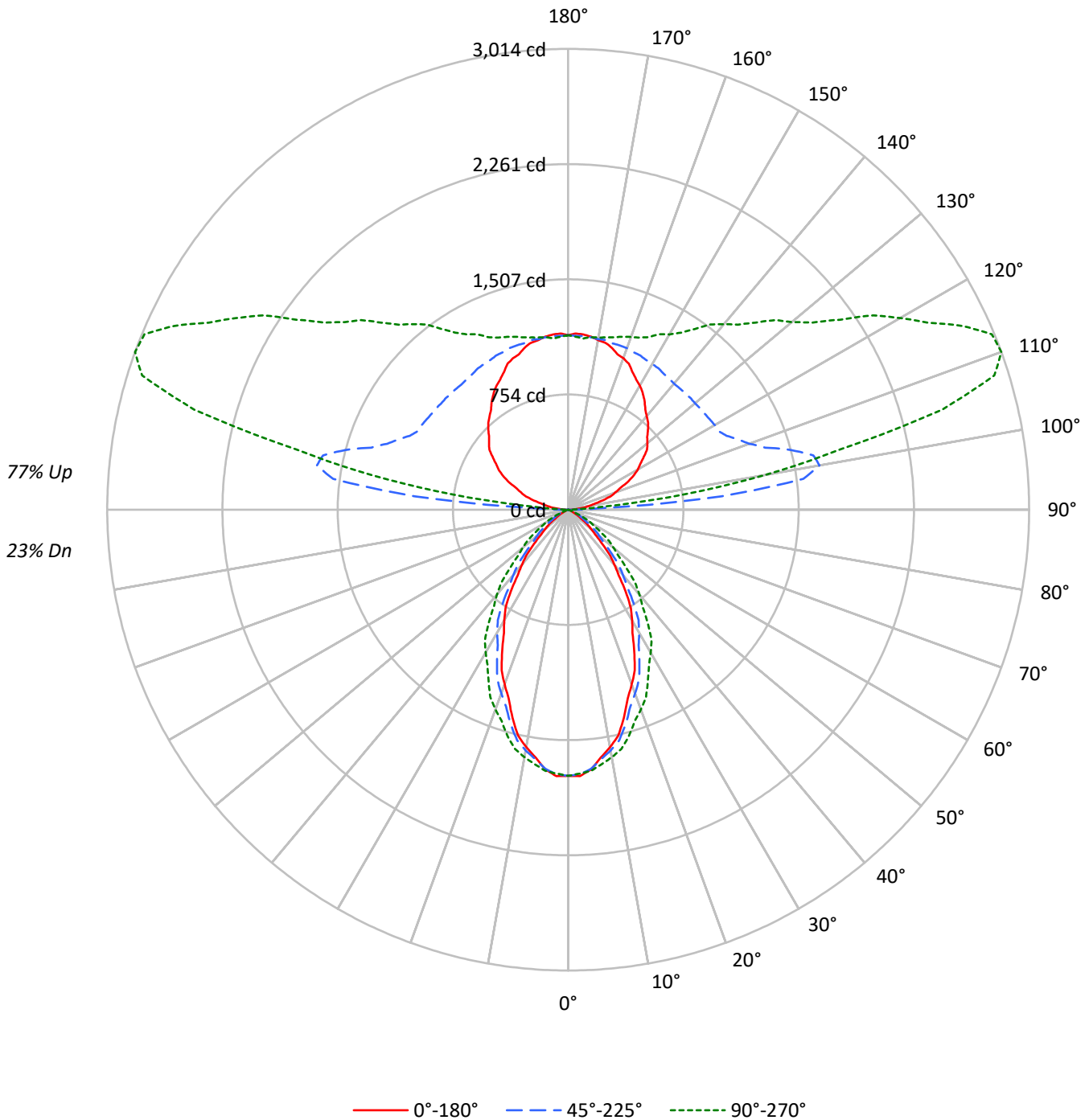
Input Watts (W): 82.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	50	30	10	0	
RCR																						
0	101	101	101	101	89	89	89	89	68	68	68	49	49	49	31	31	31	23				
1	92	89	85	82	82	79	76	74	61	59	57	44	43	42	29	28	28	21				
2	85	78	73	68	75	70	65	62	54	51	49	40	38	36	26	25	25	19				
3	78	70	63	58	69	62	57	52	48	45	42	36	34	32	24	23	22	17				
4	72	62	55	50	64	56	50	45	44	40	36	32	30	28	22	21	20	15				
5	66	56	48	43	59	50	44	39	39	35	32	29	27	25	20	19	18	14				
6	61	50	43	37	54	45	39	34	36	31	28	27	24	22	19	17	16	13				
7	56	45	38	33	50	41	35	30	32	28	25	25	22	20	17	16	14	12				
8	52	41	34	29	47	37	31	27	30	25	22	23	20	18	16	14	13	11				
9	49	38	31	26	44	34	28	24	27	23	20	21	18	16	15	13	12	10				
10	46	35	28	24	41	31	26	22	25	21	18	19	17	15	14	12	11	9				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	16057	16057	16057
5°	15799	15759	15877
10°	14783	14979	15398
15°	13439	13865	14637
20°	11929	12549	13648
25°	10389	11211	12540
30°	8898	9876	11491
35°	7378	8383	10224
40°	5669	6704	8711
45°	4098	5076	7009
50°	2792	3782	5559
55°	1814	2736	4321
60°	1041	1926	3122
65°	275	1177	1581
70°	138	364	453
75°	61	29	0
80°	43	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 7009 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	158.8	1.7
10°-20°	406.2	4.4
20°-30°	508.5	5.5
30°-40°	469.7	5.1
40°-50°	315.6	3.4
50°-60°	163.0	1.8
60°-70°	51.1	0.6
70°-80°	3.2	0.0
80°-90°	0.1	0.0
90°-100°	520.1	5.7
100°-110°	1479.7	16.1
110°-120°	1417.7	15.5
120°-130°	1122.1	12.2
130°-140°	900.6	9.8
140°-150°	705.1	7.7
150°-160°	515.9	5.6
160°-170°	319.6	3.5
170°-180°	108.4	1.2
0°-30°	1073.5	11.7
0°-40°	1543.2	16.8
0°-60°	2021.8	22.1
0°-90°	2076.1	22.7
90°-120°	3417.5	37.3
90°-150°	6145.3	67.0
90°-180°	7089.0	77.3
0°-180°	9165.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1740	1740	1740	1740	1740	
5°	1706	1689	1702	1708	1714	158
15°	1407	1402	1452	1500	1532	392
25°	1020	1029	1101	1177	1232	468
35°	655	672	744	832	908	406
45°	314	333	389	465	537	247
55°	113	132	170	218	269	105
65°	13	24	54	65	72	21
75°	2	2	1	0	0	2
85°	0	0	0	0	0	0
90°	0	0	0	0	0	2
95°	56	224	1007	348	215	64
105°	230	349	1508	2664	2532	243
115°	427	516	1143	2422	2844	421
125°	603	669	1091	1811	2165	540
135°	738	799	1078	1530	1729	569
145°	870	915	1087	1324	1443	544
155°	994	1017	1113	1197	1245	459
165°	1098	1102	1126	1150	1167	309
175°	1150	1144	1139	1132	1124	109
180°	1141	1141	1141	1141	1141	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1740.4	1740.4	1740.4	1740.4	1740.4
2.5°	1744.4	1728.0	1732.3	1732.2	1727.6
5°	1705.9	1688.6	1701.6	1707.7	1714.3
7.5°	1633.8	1620.3	1645.4	1664.2	1677.9
10°	1577.9	1566.4	1598.9	1624.6	1643.6
12.5°	1513.2	1504.3	1543.7	1578.9	1603.1
15°	1407.0	1402.0	1451.6	1500.3	1532.4
17.5°	1293.1	1293.0	1349.5	1410.0	1448.7
20°	1215.0	1217.5	1278.1	1344.8	1390.1
22.5°	1136.8	1142.6	1207.4	1277.0	1328.8
25°	1020.5	1028.7	1101.3	1176.7	1231.8
27.5°	908.7	920.7	997.1	1075.4	1142.6
30°	835.2	849.2	927.0	1009.4	1078.6
32.5°	763.2	779.8	855.6	942.8	1013.2
35°	655.1	671.5	744.3	831.9	907.7
37.5°	543.4	559.6	630.6	716.9	798.7
40°	470.7	488.8	556.6	640.1	723.3
42.5°	404.7	422.8	486.5	568.6	647.1
45°	314.1	333.0	389.0	464.7	537.2
47.5°	239.0	259.5	308.7	377.2	443.2
50°	194.5	215.1	263.5	323.9	387.3
52.5°	158.8	178.7	222.5	279.3	337.5
55°	112.8	131.8	170.1	218.4	268.6
57.5°	78.0	94.3	128.7	169.0	208.3
60°	56.4	72.1	104.4	137.1	169.2
62.5°	37.6	51.9	83.5	108.6	130.2
65°	12.6	24.2	53.9	65.0	72.4
67.5°	6.4	7.7	28.3	29.9	32.3
70°	5.1	5.1	13.5	14.4	16.8
72.5°	3.7	3.7	5.4	6.9	7.4
75°	1.7	1.7	0.8	0.0	0.0
77.5°	0.8	0.8	0.7	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°	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0
92.5°	17.4	92.0	213.5	62.1	46.9
95°	56.4	224.0	1006.8	348.5	214.8
97.5°	103.7	262.4	1550.5	1109.5	760.3
100°	136.7	285.2	1668.5	1690.1	1301.8
102.5°	173.1	309.8	1642.5	2163.3	1824.3
105°	230.0	348.8	1508.0	2663.6	2532.1
107.5°	287.7	394.2	1350.9	2804.6	2921.8
110°	327.6	427.3	1260.6	2750.7	3013.7

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	365.8	460.4	1199.9	2623.0	2998.1
115°	427.4	516.5	1143.4	2422.3	2844.5
117.5°	481.7	565.3	1110.0	2202.9	2650.1
120°	525.1	595.1	1106.6	2077.5	2506.0
122.5°	559.8	629.8	1097.9	1967.4	2365.4
125°	603.2	669.0	1091.4	1811.1	2165.4
127.5°	650.5	712.0	1087.9	1717.7	2009.6
130°	674.8	736.3	1082.7	1652.6	1907.2
132.5°	700.8	760.6	1082.7	1601.8	1836.0
135°	737.7	799.2	1078.4	1529.8	1729.3
137.5°	772.4	832.2	1077.9	1468.9	1641.2
140°	798.5	860.0	1076.2	1418.4	1583.9
142.5°	828.0	879.3	1081.4	1378.1	1526.6
145°	870.1	914.6	1087.0	1324.1	1442.9
147.5°	906.1	949.4	1096.6	1269.5	1372.1
150°	937.3	967.0	1100.1	1251.4	1323.5
152.5°	961.6	993.0	1103.5	1227.0	1294.0
155°	993.7	1017.1	1113.1	1196.6	1245.4
157.5°	1033.7	1047.7	1115.2	1182.9	1217.7
160°	1054.5	1065.1	1123.9	1172.3	1202.0
162.5°	1066.6	1078.9	1125.7	1163.5	1186.4
165°	1097.9	1102.1	1126.1	1150.3	1167.3
167.5°	1119.1	1115.3	1136.1	1147.1	1153.9
170°	1126.1	1124.0	1132.6	1135.0	1143.4
172.5°	1141.7	1134.5	1137.8	1131.4	1138.2
175°	1150.0	1143.6	1139.1	1132.4	1123.9
177.5°	1153.4	1143.2	1137.8	1130.9	1132.6
180°	1141.3	1141.3	1141.3	1141.3	1141.3

(END OF REPORT)