

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: P521319

Luminaire Tested: SQ4-BB-150U-100D-92765-1D-UNV-STD-W-4_5000K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521319
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-100D-92765-1D-UNV-STD-W-4_5000K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 1500 LUMENS PER FOOT
Light Source: 2700K-6500K CCT, 90 CRI LEDS, TUNED TO 5000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9589.7 lumens
Efficiency: N/A
Efficacy: 102.7 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

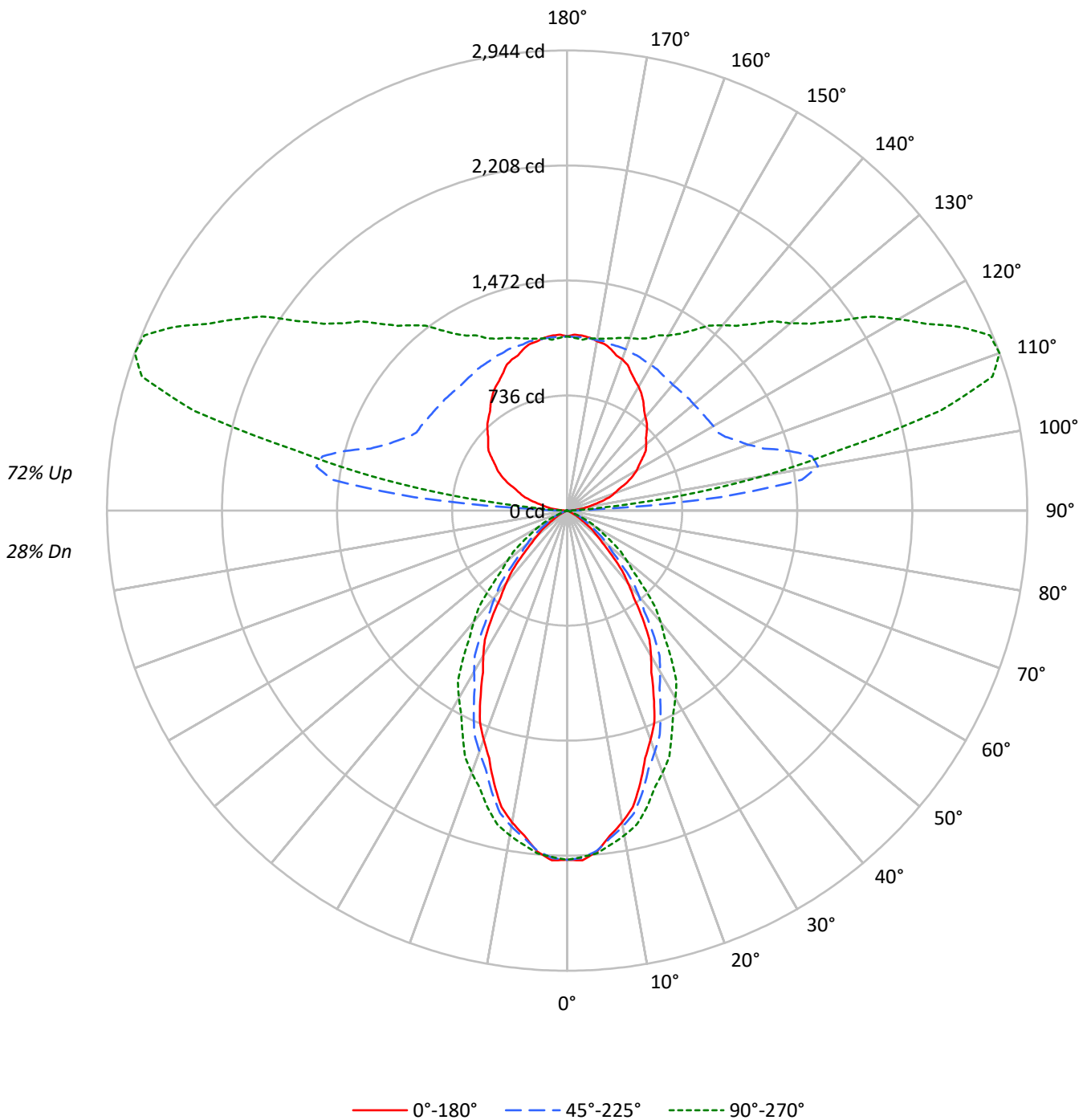
Input Watts (W): 93.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



TEST NUMBER: P521319

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Luminous Intensity Polar Plot



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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	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	50	30	10	0														
RCR																																						
0	102	102	102	102	91	91	91	91	71	71	71	53	53	53	36	36	36	28																				
1	94	90	87	84	84	81	78	75	64	62	60	48	47	46	33	33	32	25																				
2	86	80	74	70	77	72	67	64	57	54	51	43	41	40	30	29	29	23																				
3	79	71	65	59	71	64	59	54	51	47	44	39	37	35	28	27	26	21																				
4	73	63	56	51	65	57	51	47	46	42	39	35	33	31	26	24	23	19																				
5	67	57	50	44	60	52	45	41	42	37	34	32	29	27	24	22	21	17																				
6	62	51	44	39	56	47	40	36	38	33	30	30	27	24	22	20	19	16																				
7	58	47	39	34	52	42	36	32	35	30	27	27	24	22	20	18	17	14																				
8	54	42	35	31	48	39	33	28	32	27	24	25	22	20	19	17	16	13																				
9	50	39	32	27	45	36	30	26	29	25	22	23	20	18	18	16	14	12																				
10	47	36	29	25	42	33	27	23	27	23	20	22	19	17	16	15	13	11																				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	20616	20616	20616
5°	20284	20234	20384
10°	18980	19233	19769
15°	17254	17801	18793
20°	15317	16112	17524
25°	13338	14395	16101
30°	11425	12680	14753
35°	9473	10763	13126
40°	7278	8607	11184
45°	5261	6516	8999
50°	3584	4857	7138
55°	2331	3513	5548
60°	1336	2474	4010
65°	354	1511	2030
70°	175	467	583
75°	78	39	0
80°	58	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 8999 cd/sqm

TEST NUMBER: P521319

CATALOG NUMBER: SQ4-BB-150U-100D-92765-1D-UNV-STD-W-4_5000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	203.9	2.1
10°-20°	521.5	5.4
20°-30°	652.9	6.8
30°-40°	603.0	6.3
40°-50°	405.2	4.2
50°-60°	209.3	2.2
60°-70°	65.5	0.7
70°-80°	4.2	0.0
80°-90°	0.1	0.0
90°-100°	507.9	5.3
100°-110°	1445.2	15.1
110°-120°	1384.7	14.4
120°-130°	1095.9	11.4
130°-140°	879.7	9.2
140°-150°	688.7	7.2
150°-160°	503.9	5.3
160°-170°	312.1	3.3
170°-180°	105.9	1.1
0°-30°	1378.3	14.4
0°-40°	1981.3	20.7
0°-60°	2595.8	27.1
0°-90°	2665.6	27.8
90°-120°	3337.9	34.8
90°-150°	6002.1	62.6
90°-180°	6924.0	72.2
0°-180°	9589.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2234	2234	2234	2234	2234	
5°	2190	2168	2185	2193	2201	203
15°	1806	1800	1864	1926	1968	503
25°	1310	1321	1414	1511	1582	601
35°	841	862	956	1068	1165	521
45°	403	428	499	597	690	317
55°	145	169	218	280	345	135
65°	16	31	69	84	93	27
75°	2	2	1	0	0	3
85°	0	0	0	0	0	0
90°	0	0	0	0	0	2
95°	55	219	983	340	210	63
105°	225	341	1473	2602	2473	238
115°	418	504	1117	2366	2778	411
125°	589	653	1066	1769	2115	527
135°	720	781	1053	1494	1689	556
145°	850	893	1062	1293	1409	531
155°	971	993	1087	1169	1216	449
165°	1072	1076	1100	1124	1140	302
175°	1123	1117	1113	1106	1098	106
180°	1115	1115	1115	1115	1115	

TEST NUMBER: P521319

CATALOG NUMBER: SQ4-BB-150U-100D-92765-1D-UNV-STD-W-4_5000K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2234.5	2234.5	2234.5	2234.5	2234.5
2.5°	2239.7	2218.6	2224.2	2224.0	2218.1
5°	2190.2	2168.0	2184.8	2192.6	2201.0
7.5°	2097.7	2080.3	2112.6	2136.8	2154.3
10°	2025.9	2011.1	2052.9	2085.9	2110.2
12.5°	1942.9	1931.4	1982.0	2027.2	2058.3
15°	1806.4	1800.1	1863.7	1926.3	1967.5
17.5°	1660.3	1660.1	1732.7	1810.4	1860.1
20°	1560.0	1563.1	1641.0	1726.7	1784.8
22.5°	1459.6	1467.0	1550.2	1639.5	1706.1
25°	1310.2	1320.8	1414.0	1510.8	1581.6
27.5°	1166.7	1182.1	1280.2	1380.7	1467.0
30°	1072.4	1090.4	1190.2	1296.0	1384.8
32.5°	979.9	1001.2	1098.6	1210.5	1300.9
35°	841.1	862.2	955.6	1068.1	1165.4
37.5°	697.7	718.4	809.7	920.4	1025.5
40°	604.3	627.6	714.6	821.9	928.6
42.5°	519.6	542.8	624.6	730.1	830.9
45°	403.2	427.5	499.4	596.7	689.7
47.5°	306.8	333.2	396.3	484.3	569.1
50°	249.7	276.1	338.4	415.9	497.3
52.5°	203.9	229.5	285.6	358.7	433.3
55°	144.9	169.2	218.4	280.4	344.9
57.5°	100.1	121.0	165.2	216.9	267.5
60°	72.4	92.5	134.1	176.1	217.3
62.5°	48.2	66.6	107.2	139.4	167.1
65°	16.2	31.0	69.2	83.5	93.0
67.5°	8.2	9.9	36.3	38.3	41.5
70°	6.5	6.5	17.3	18.4	21.6
72.5°	4.8	4.8	6.9	8.9	9.5
75°	2.2	2.2	1.1	0.0	0.0
77.5°	1.1	1.1	0.9	0.0	0.0
80°	1.1	1.1	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°	17.0	89.9	208.5	60.7	45.8
95°	55.1	218.8	983.3	340.3	209.8
97.5°	101.3	256.3	1514.4	1083.6	742.6
100°	133.5	278.6	1629.6	1650.7	1271.5
102.5°	169.1	302.6	1604.2	2112.9	1781.8
105°	224.6	340.7	1472.8	2601.5	2473.1
107.5°	281.0	385.0	1319.4	2739.3	2853.7
110°	320.0	417.4	1231.2	2686.6	2943.5

TEST NUMBER: P521319

CATALOG NUMBER: SQ4-BB-150U-100D-92765-1D-UNV-STD-W-4_5000K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	357.3	449.7	1171.9	2561.9	2928.3
115°	417.5	504.5	1116.8	2365.9	2778.2
117.5°	470.5	552.1	1084.2	2151.6	2588.3
120°	512.8	581.2	1080.8	2029.1	2447.6
122.5°	546.7	615.1	1072.3	1921.6	2310.3
125°	589.1	653.4	1065.9	1768.9	2114.9
127.5°	635.3	695.4	1062.5	1677.6	1962.8
130°	659.1	719.1	1057.5	1614.1	1862.7
132.5°	684.5	742.9	1057.5	1564.5	1793.2
135°	720.5	780.6	1053.2	1494.2	1689.0
137.5°	754.4	812.9	1052.8	1434.7	1602.9
140°	779.9	839.9	1051.1	1385.4	1547.0
142.5°	808.7	858.8	1056.2	1346.0	1491.0
145°	849.8	893.3	1061.7	1293.2	1409.2
147.5°	885.0	927.2	1071.0	1239.9	1340.2
150°	915.5	944.5	1074.4	1222.2	1292.7
152.5°	939.2	969.9	1077.8	1198.4	1263.9
155°	970.6	993.4	1087.1	1168.7	1216.4
157.5°	1009.6	1023.2	1089.2	1155.3	1189.3
160°	1029.9	1040.3	1097.7	1145.0	1174.0
162.5°	1041.8	1053.8	1099.4	1136.4	1158.8
165°	1072.3	1076.4	1099.8	1123.5	1140.1
167.5°	1093.1	1089.3	1109.6	1120.3	1127.0
170°	1099.8	1097.8	1106.2	1108.5	1116.8
172.5°	1115.1	1108.1	1111.3	1105.1	1111.7
175°	1123.2	1116.9	1112.6	1106.0	1097.7
177.5°	1126.5	1116.6	1111.3	1104.5	1106.2
180°	1114.7	1114.7	1114.7	1114.7	1114.7

(END OF REPORT)