

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: P521315

Luminaire Tested: SQ4-BB-150U-100D-92765-1D-UNV-STD-W-4_3000K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521315
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_3000K
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 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8951.6 lumens
Efficiency: N/A
Efficacy: 95.6 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

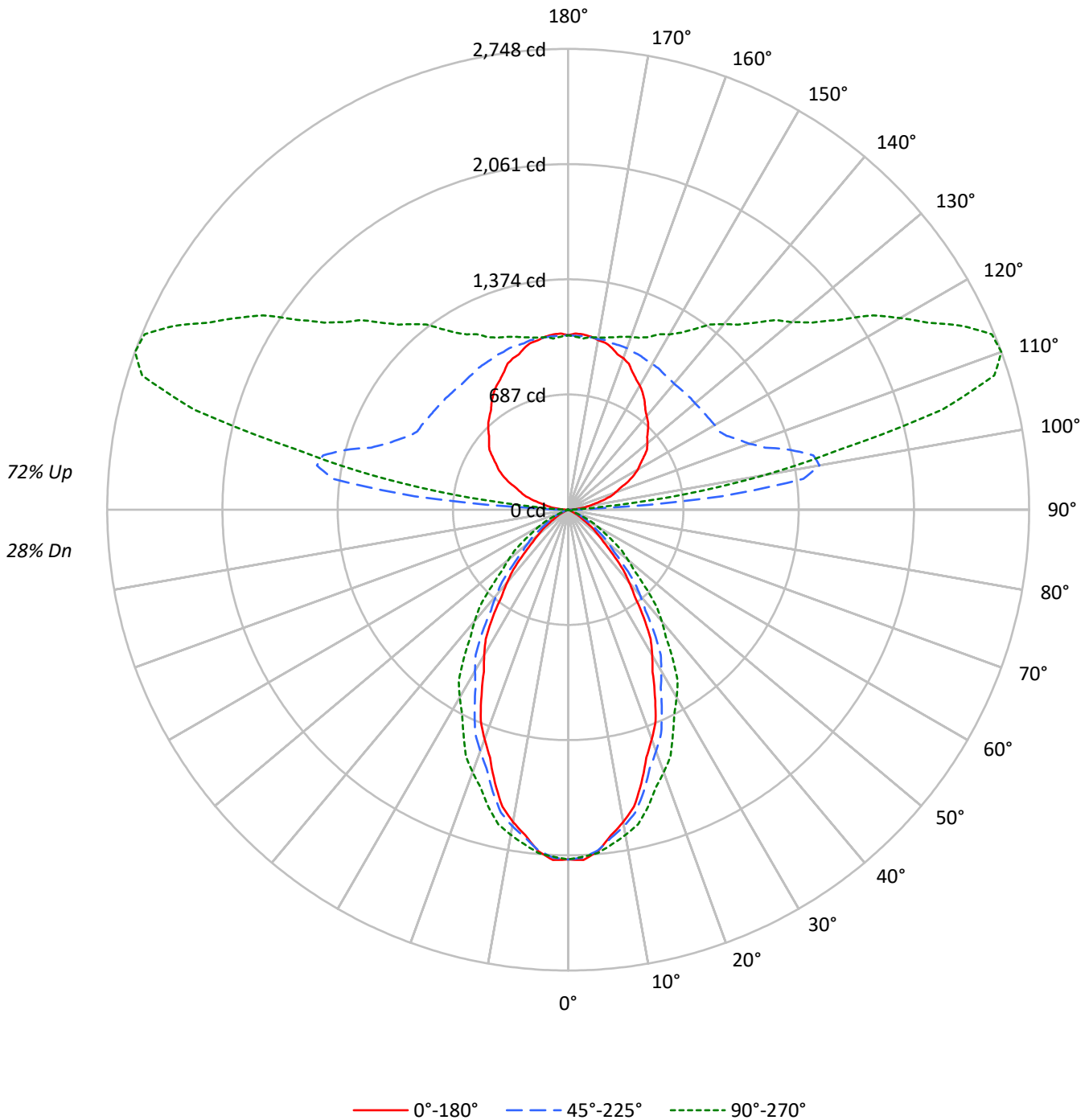
Input Watts (W): 93.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Luminous Intensity Polar Plot



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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									20									20									20										
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°	19245	19245	19245
5°	18935	18888	19029
10°	17717	17953	18454
15°	16107	16617	17543
20°	14297	15041	16358
25°	12451	13437	15030
30°	10665	11836	13772
35°	8843	10048	12252
40°	6794	8033	10440
45°	4911	6083	8400
50°	3346	4534	6663
55°	2175	3278	5178
60°	1247	2308	3742
65°	330	1410	1895
70°	165	434	545
75°	71	36	0
80°	53	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 8400 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	190.4	2.1
10°-20°	486.8	5.4
20°-30°	609.4	6.8
30°-40°	562.9	6.3
40°-50°	378.3	4.2
50°-60°	195.4	2.2
60°-70°	61.2	0.7
70°-80°	3.9	0.0
80°-90°	0.1	0.0
90°-100°	474.1	5.3
100°-110°	1349.1	15.1
110°-120°	1292.6	14.4
120°-130°	1023.0	11.4
130°-140°	821.1	9.2
140°-150°	642.8	7.2
150°-160°	470.4	5.3
160°-170°	291.4	3.3
170°-180°	98.9	1.1
0°-30°	1286.6	14.4
0°-40°	1849.5	20.7
0°-60°	2423.1	27.1
0°-90°	2488.3	27.8
90°-120°	3115.8	34.8
90°-150°	5602.8	62.6
90°-180°	6463.0	72.2
0°-180°	8951.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2086	2086	2086	2086	2086	
5°	2044	2024	2039	2047	2055	190
15°	1686	1680	1740	1798	1837	470
25°	1223	1233	1320	1410	1476	561
35°	785	805	892	997	1088	486
45°	376	399	466	557	644	296
55°	135	158	204	262	322	126
65°	15	29	65	78	87	26
75°	2	2	1	0	0	3
85°	0	0	0	0	0	0
90°	0	0	0	0	0	2
95°	51	204	918	318	196	59
105°	210	318	1375	2428	2308	222
115°	390	471	1042	2208	2593	384
125°	550	610	995	1651	1974	492
135°	673	729	983	1395	1577	519
145°	793	834	991	1207	1316	496
155°	906	927	1015	1091	1136	419
165°	1001	1005	1027	1049	1064	281
175°	1048	1043	1038	1032	1025	99
180°	1040	1040	1040	1040	1040	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2085.9	2085.9	2085.9	2085.9	2085.9
2.5°	2090.7	2071.0	2076.2	2076.1	2070.5
5°	2044.5	2023.8	2039.4	2046.7	2054.6
7.5°	1958.1	1941.9	1972.0	1994.6	2011.0
10°	1891.1	1877.3	1916.3	1947.1	1969.8
12.5°	1813.6	1802.9	1850.1	1892.4	1921.4
15°	1686.3	1680.3	1739.7	1798.1	1836.6
17.5°	1549.8	1549.6	1617.4	1689.9	1736.3
20°	1456.2	1459.1	1531.9	1611.8	1666.1
22.5°	1362.5	1369.4	1447.1	1530.4	1592.6
25°	1223.1	1232.9	1319.9	1410.2	1476.4
27.5°	1089.1	1103.5	1195.0	1288.9	1369.4
30°	1001.1	1017.8	1111.0	1209.8	1292.7
32.5°	914.7	934.6	1025.5	1129.9	1214.4
35°	785.1	804.8	892.1	997.1	1087.8
37.5°	651.3	670.6	755.8	859.2	957.3
40°	564.1	585.8	667.0	767.2	866.8
42.5°	485.0	506.7	583.1	681.5	775.6
45°	376.4	399.1	466.2	557.0	643.8
47.5°	286.4	311.1	369.9	452.1	531.2
50°	233.1	257.8	315.9	388.2	464.2
52.5°	190.3	214.2	266.6	334.8	404.5
55°	135.2	157.9	203.8	261.7	321.9
57.5°	93.4	113.0	154.2	202.5	249.7
60°	67.6	86.4	125.1	164.4	202.8
62.5°	45.0	62.2	100.1	130.2	156.0
65°	15.1	29.0	64.6	77.9	86.8
67.5°	7.7	9.2	33.9	35.8	38.8
70°	6.1	6.1	16.1	17.2	20.2
72.5°	4.4	4.4	6.5	8.3	8.9
75°	2.0	2.0	1.0	0.0	0.0
77.5°	1.0	1.0	0.8	0.0	0.0
80°	1.0	1.0	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°	15.8	83.9	194.7	56.7	42.7
95°	51.4	204.2	917.9	317.7	195.8
97.5°	94.6	239.2	1413.6	1011.5	693.2
100°	124.6	260.0	1521.2	1540.9	1186.9
102.5°	157.9	282.4	1497.5	1972.3	1663.2
105°	209.7	318.0	1374.8	2428.4	2308.5
107.5°	262.3	359.4	1231.6	2557.0	2663.8
110°	298.7	389.6	1149.3	2507.8	2747.7

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	333.5	419.8	1093.9	2391.5	2733.4
115°	389.7	470.9	1042.5	2208.5	2593.4
117.5°	439.2	515.4	1012.0	2008.4	2416.1
120°	478.7	542.5	1008.9	1894.1	2284.8
122.5°	510.4	574.2	1001.0	1793.7	2156.6
125°	549.9	609.9	995.0	1651.2	1974.2
127.5°	593.1	649.1	991.9	1566.0	1832.2
130°	615.2	671.3	987.1	1506.7	1738.8
132.5°	638.9	693.5	987.1	1460.4	1673.9
135°	672.6	728.7	983.2	1394.8	1576.6
137.5°	704.2	758.8	982.8	1339.2	1496.3
140°	728.0	784.1	981.2	1293.2	1444.1
142.5°	754.9	801.7	985.9	1256.4	1391.8
145°	793.2	833.9	991.1	1207.2	1315.5
147.5°	826.1	865.5	999.8	1157.4	1251.0
150°	854.6	881.6	1002.9	1140.9	1206.7
152.5°	876.7	905.4	1006.1	1118.7	1179.8
155°	906.0	927.3	1014.8	1091.0	1135.5
157.5°	942.4	955.2	1016.8	1078.4	1110.1
160°	961.4	971.1	1024.7	1068.8	1095.9
162.5°	972.5	983.7	1026.3	1060.8	1081.7
165°	1001.0	1004.8	1026.7	1048.8	1064.3
167.5°	1020.3	1016.9	1035.8	1045.8	1052.0
170°	1026.7	1024.7	1032.6	1034.8	1042.5
172.5°	1040.9	1034.3	1037.4	1031.6	1037.7
175°	1048.4	1042.6	1038.5	1032.4	1024.7
177.5°	1051.6	1042.3	1037.4	1031.1	1032.6
180°	1040.5	1040.5	1040.5	1040.5	1040.5

(END OF REPORT)