

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: P521314

Luminaire Tested: SQ4-BB-150U-100D-92765-1D-UNV-STD-W-4_2700K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521314
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_2700K
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 2700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8769.9 lumens
Efficiency: N/A
Efficacy: 94.0 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

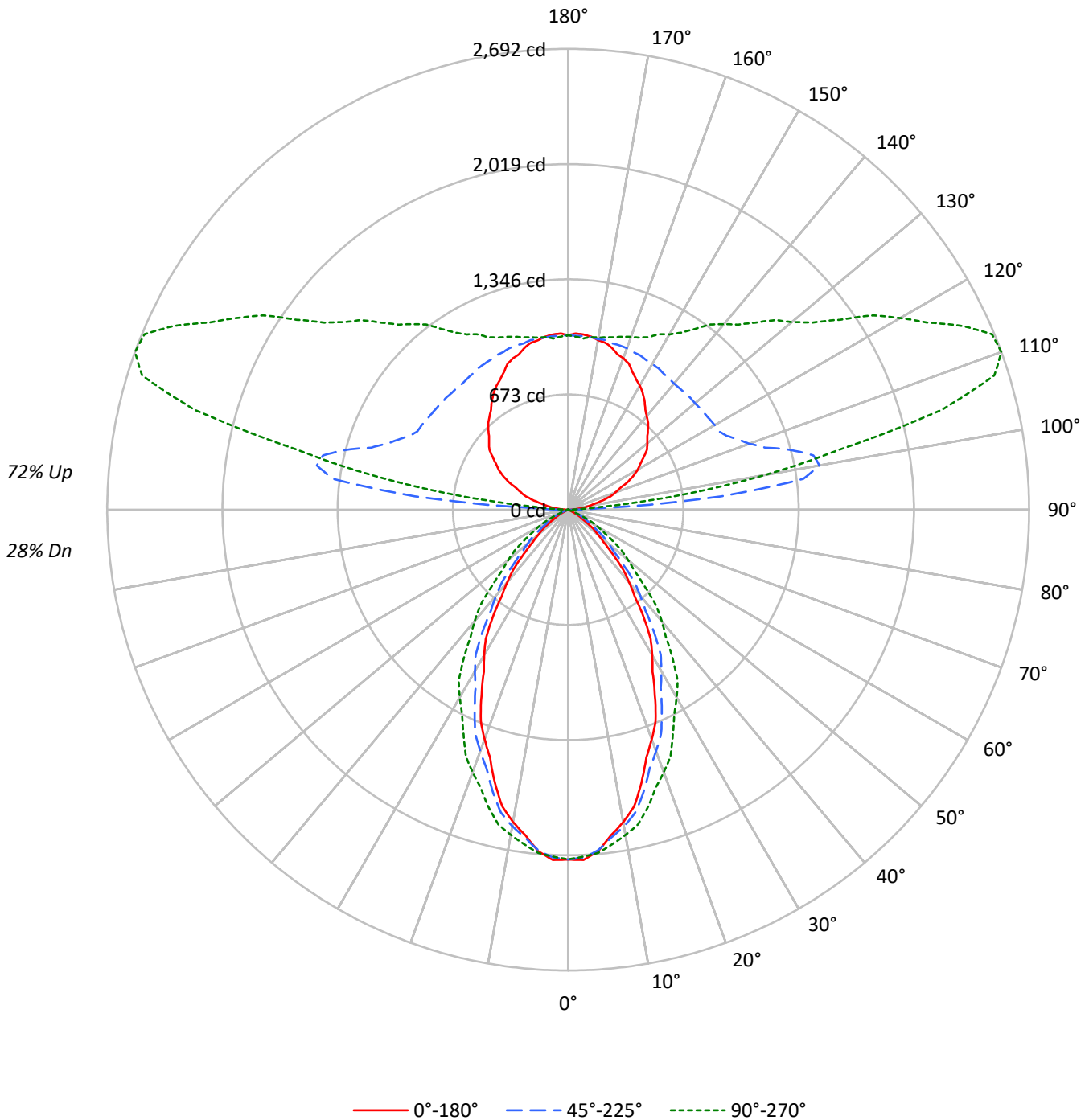
Input Watts (W): 93.3
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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				
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	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°	18854	18854	18854
5°	18551	18504	18642
10°	17357	17588	18079
15°	15779	16280	17186
20°	14007	14735	16025
25°	12198	13164	14724
30°	10448	11596	13492
35°	8664	9844	12004
40°	6655	7871	10228
45°	4812	5960	8231
50°	3278	4441	6528
55°	2131	3212	5073
60°	1222	2262	3666
65°	323	1382	1856
70°	159	426	534
75°	71	36	0
80°	53	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 8231 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	186.5	2.1
10°-20°	476.9	5.4
20°-30°	597.1	6.8
30°-40°	551.5	6.3
40°-50°	370.6	4.2
50°-60°	191.4	2.2
60°-70°	60.0	0.7
70°-80°	3.8	0.0
80°-90°	0.1	0.0
90°-100°	464.5	5.3
100°-110°	1321.7	15.1
110°-120°	1266.3	14.4
120°-130°	1002.2	11.4
130°-140°	804.5	9.2
140°-150°	629.8	7.2
150°-160°	460.8	5.3
160°-170°	285.4	3.3
170°-180°	96.9	1.1
0°-30°	1260.5	14.4
0°-40°	1812.0	20.7
0°-60°	2373.9	27.1
0°-90°	2437.7	27.8
90°-120°	3052.5	34.8
90°-150°	5489.0	62.6
90°-180°	6332.0	72.2
0°-180°	8769.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2044	2044	2044	2044	2044	
5°	2003	1983	1998	2005	2013	186
15°	1652	1646	1704	1762	1799	460
25°	1198	1208	1293	1382	1446	549
35°	769	788	874	977	1066	476
45°	369	391	457	546	631	290
55°	132	155	200	256	315	124
65°	15	28	63	76	85	25
75°	2	2	1	0	0	3
85°	0	0	0	0	0	0
90°	0	0	0	0	0	2
95°	50	200	899	311	192	58
105°	205	312	1347	2379	2262	217
115°	382	461	1021	2164	2541	376
125°	539	598	975	1618	1934	482
135°	659	714	963	1366	1545	508
145°	777	817	971	1183	1289	485
155°	888	908	994	1069	1112	410
165°	981	984	1006	1028	1043	276
175°	1027	1022	1018	1012	1004	97
180°	1019	1019	1019	1019	1019	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2043.5	2043.5	2043.5	2043.5	2043.5
2.5°	2048.3	2028.9	2034.0	2033.9	2028.5
5°	2003.0	1982.7	1998.0	2005.1	2012.9
7.5°	1918.4	1902.5	1932.0	1954.1	1970.2
10°	1852.7	1839.2	1877.4	1907.6	1929.8
12.5°	1776.8	1766.3	1812.6	1853.9	1882.4
15°	1652.0	1646.2	1704.4	1761.6	1799.3
17.5°	1518.4	1518.2	1584.6	1655.6	1701.1
20°	1426.6	1429.5	1500.8	1579.1	1632.2
22.5°	1334.9	1341.6	1417.7	1499.4	1560.3
25°	1198.2	1207.9	1293.1	1381.6	1446.4
27.5°	1066.9	1081.1	1170.7	1262.7	1341.6
30°	980.7	997.2	1088.5	1185.2	1266.4
32.5°	896.1	915.6	1004.7	1107.0	1189.7
35°	769.2	788.5	874.0	976.8	1065.8
37.5°	638.1	657.0	740.5	841.7	937.8
40°	552.6	573.9	653.5	751.6	849.2
42.5°	475.1	496.4	571.2	667.6	759.9
45°	368.8	391.0	456.8	545.7	630.8
47.5°	280.6	304.7	362.4	442.9	520.4
50°	228.4	252.5	309.4	380.3	454.8
52.5°	186.5	209.9	261.2	328.0	396.2
55°	132.5	154.7	199.7	256.4	315.4
57.5°	91.5	110.7	151.1	198.4	244.6
60°	66.2	84.6	122.6	161.0	198.7
62.5°	44.1	60.9	98.1	127.5	152.8
65°	14.8	28.4	63.3	76.3	85.0
67.5°	7.5	9.1	33.2	35.1	38.0
70°	5.9	5.9	15.8	16.9	19.8
72.5°	4.4	4.4	6.3	8.1	8.7
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°	15.5	82.2	190.7	55.5	41.9
95°	50.4	200.1	899.2	311.2	191.9
97.5°	92.6	234.4	1384.9	991.0	679.1
100°	122.1	254.7	1490.3	1509.6	1162.8
102.5°	154.7	276.7	1467.1	1932.3	1629.5
105°	205.4	311.5	1346.9	2379.1	2261.7
107.5°	257.0	352.1	1206.6	2505.1	2609.7
110°	292.6	381.7	1126.0	2456.9	2691.9

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	326.7	411.3	1071.7	2342.9	2677.9
115°	381.8	461.4	1021.3	2163.6	2540.7
117.5°	430.2	504.9	991.5	1967.6	2367.1
120°	469.0	531.5	988.4	1855.6	2238.4
122.5°	500.0	562.5	980.6	1757.3	2112.8
125°	538.8	597.5	974.8	1617.7	1934.1
127.5°	581.0	636.0	971.7	1534.2	1795.0
130°	602.7	657.7	967.1	1476.1	1703.5
132.5°	626.0	679.4	967.1	1430.7	1639.9
135°	658.9	713.9	963.2	1366.5	1544.6
137.5°	689.9	743.4	962.8	1312.0	1465.9
140°	713.2	768.1	961.3	1266.9	1414.7
142.5°	739.5	785.4	965.9	1230.9	1363.6
145°	777.1	816.9	970.9	1182.7	1288.8
147.5°	809.3	848.0	979.5	1133.9	1225.6
150°	837.2	863.7	982.6	1117.8	1182.2
152.5°	858.9	887.0	985.7	1095.9	1155.8
155°	887.6	908.5	994.2	1068.8	1112.4
157.5°	923.3	935.8	996.1	1056.5	1087.6
160°	941.9	951.3	1003.9	1047.1	1073.7
162.5°	952.7	963.7	1005.4	1039.2	1059.7
165°	980.6	984.4	1005.8	1027.5	1042.6
167.5°	999.6	996.2	1014.7	1024.6	1030.6
170°	1005.8	1003.9	1011.6	1013.7	1021.3
172.5°	1019.8	1013.3	1016.3	1010.6	1016.7
175°	1027.1	1021.5	1017.5	1011.5	1003.9
177.5°	1030.2	1021.1	1016.3	1010.1	1011.6
180°	1019.4	1019.4	1019.4	1019.4	1019.4

(END OF REPORT)