

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: P521215

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

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521215
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-100U-100D-92765-1D-UNV-STD-W-4_5000K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 1000 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: 7240.0 lumens
Efficiency: N/A
Efficacy: 97.1 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

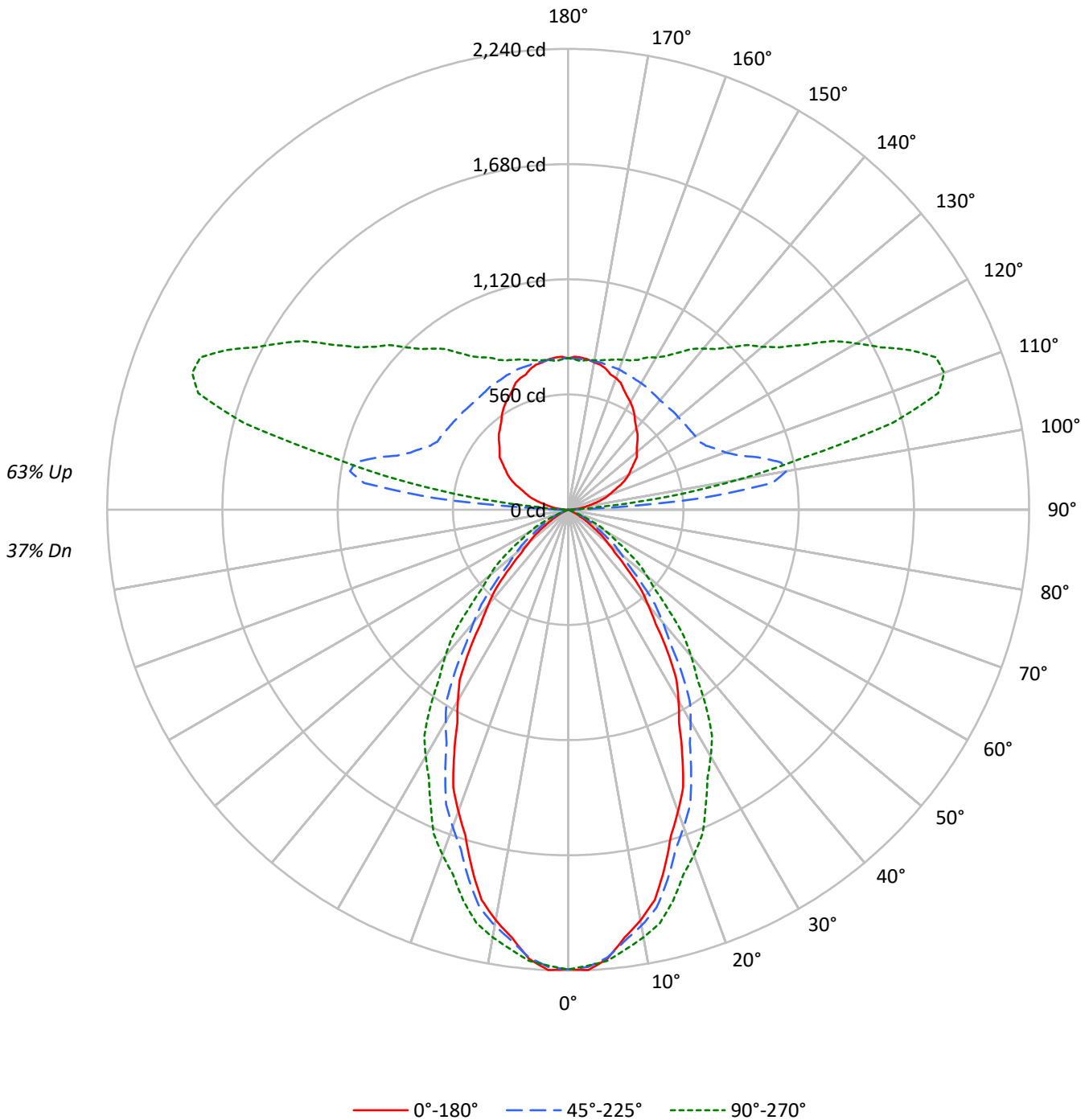
Input Watts (W): 74.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Luminous Intensity Polar Plot



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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20					20					20					20					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	104	104	104	104	94	94	94	94	76	76	76	59	59	59	44	44	44	37				
1	96	92	89	86	87	84	81	79	68	67	65	54	53	52	41	40	40	34				
2	89	82	77	73	80	75	71	67	62	59	56	49	47	45	38	37	36	30				
3	82	74	67	62	74	67	62	58	56	52	49	45	42	40	35	33	32	27				
4	75	66	59	54	69	61	55	50	50	46	43	41	38	36	32	30	29	25				
5	70	59	52	47	63	55	48	44	46	41	38	37	34	32	29	27	26	23				
6	65	54	47	41	59	50	43	39	42	37	34	34	31	29	27	25	24	21				
7	60	49	42	37	55	45	39	35	38	34	30	32	28	26	25	23	22	19				
8	56	45	38	33	51	42	35	31	35	31	27	29	26	23	24	21	20	17				
9	52	41	34	30	48	38	32	28	33	28	25	27	24	21	22	20	18	16				
10	49	38	31	27	45	35	29	26	30	26	23	25	22	20	21	18	17	15				

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

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	203.9	2.8
10°-20°	521.5	7.2
20°-30°	652.9	9.0
30°-40°	603.0	8.3
40°-50°	405.2	5.6
50°-60°	209.3	2.9
60°-70°	65.5	0.9
70°-80°	4.2	0.1
80°-90°	0.1	0.0
90°-100°	335.6	4.6
100°-110°	954.8	13.2
110°-120°	914.8	12.6
120°-130°	724.0	10.0
130°-140°	581.1	8.0
140°-150°	455.0	6.3
150°-160°	332.9	4.6
160°-170°	206.2	2.8
170°-180°	70.0	1.0
0°-30°	1378.3	19.0
0°-40°	1981.3	27.4
0°-60°	2595.8	35.9
0°-90°	2665.6	36.8
90°-120°	2205.2	30.5
90°-150°	3965.3	54.8
90°-180°	4574.0	63.2
0°-180°	7240.0	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°	36	144	650	225	139	42
105°	148	225	973	1719	1634	157
115°	276	333	738	1563	1835	272
125°	389	432	704	1169	1397	348
135°	476	516	696	987	1116	367
145°	561	590	701	854	931	351
155°	641	656	718	772	804	296
165°	708	711	727	742	753	199
175°	742	738	735	731	725	70
180°	736	736	736	736	736	

TEST NUMBER: P521215

CATALOG NUMBER: SQ4-BB-100U-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°	11.2	59.4	137.8	40.1	30.2
95°	36.4	144.5	649.6	224.8	138.6
97.5°	66.9	169.3	1000.5	715.9	490.6
100°	88.2	184.0	1076.6	1090.5	840.0
102.5°	111.7	199.9	1059.8	1395.9	1177.1
105°	148.4	225.1	973.0	1718.7	1633.8
107.5°	185.6	254.4	871.7	1809.7	1885.3
110°	211.4	275.7	813.4	1774.9	1944.6

TEST NUMBER: P521215

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

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	236.0	297.1	774.2	1692.5	1934.6
115°	275.8	333.3	737.8	1563.0	1835.4
117.5°	310.8	364.7	716.3	1421.4	1710.0
120°	338.8	384.0	714.0	1340.5	1617.0
122.5°	361.2	406.4	708.4	1269.5	1526.3
125°	389.2	431.6	704.2	1168.6	1397.2
127.5°	419.7	459.4	702.0	1108.3	1296.7
130°	435.4	475.1	698.6	1066.4	1230.6
132.5°	452.2	490.8	698.6	1033.6	1184.7
135°	476.0	515.7	695.8	987.1	1115.8
137.5°	498.4	537.0	695.5	947.8	1059.0
140°	515.2	554.9	694.4	915.2	1022.0
142.5°	534.3	567.4	697.8	889.2	985.1
145°	561.4	590.2	701.4	854.4	931.0
147.5°	584.7	612.6	707.6	819.1	885.4
150°	604.8	624.0	709.8	807.5	854.0
152.5°	620.5	640.8	712.1	791.7	835.0
155°	641.2	656.3	718.2	772.1	803.6
157.5°	667.0	676.0	719.6	763.2	785.7
160°	680.4	687.3	725.2	756.5	775.6
162.5°	688.3	696.2	726.3	750.8	765.5
165°	708.4	711.2	726.6	742.3	753.2
167.5°	722.1	719.7	733.1	740.2	744.5
170°	726.6	725.2	730.8	732.3	737.8
172.5°	736.7	732.0	734.2	730.1	734.5
175°	742.0	737.9	735.0	730.7	725.2
177.5°	744.3	737.7	734.2	729.7	730.8
180°	736.4	736.4	736.4	736.4	736.4

(END OF REPORT)