

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: P521224

Luminaire Tested: SQ4-BB-100U-125D-92765-1D-UNV-STD-W-4_3000K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521224
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-125D-92765-1D-UNV-STD-W-4_3000K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 1000 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: 7420.4 lumens
Efficiency: N/A
Efficacy: 84.2 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: General Diffuse

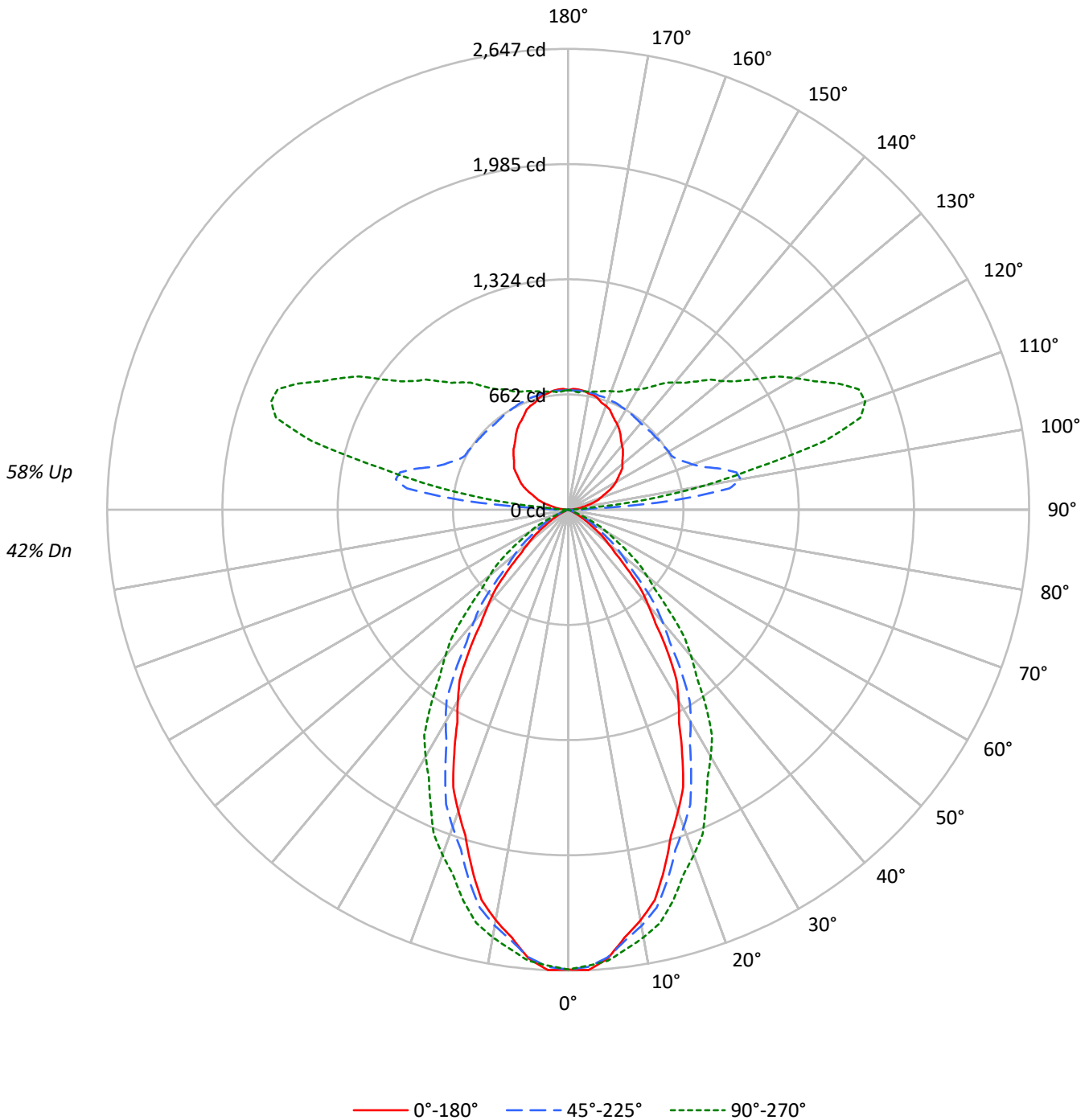
Input Watts (W): 88.1
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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									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	105	105	105	105	96	96	96	96	79	79	79	64	64	64	49	49	49	42						42													
1	98	94	91	88	89	86	83	81	72	70	68	58	57	56	46	45	44	39						39													
2	90	84	79	74	82	77	73	69	65	61	59	53	51	49	42	41	40	35						35													
3	83	75	69	64	76	69	64	60	58	55	51	48	46	43	39	37	36	32						32													
4	77	68	61	55	71	62	57	52	53	49	45	44	41	39	36	34	32	29						29													
5	71	61	54	49	65	57	50	46	48	44	40	40	37	35	33	31	29	26						26													
6	66	55	48	43	61	51	45	41	44	39	36	37	34	31	31	28	27	24						24													
7	62	51	43	38	57	47	41	36	40	36	32	34	31	28	29	26	24	22						22													
8	57	46	39	34	53	43	37	33	37	33	29	32	28	26	27	24	22	20						20													
9	54	43	36	31	50	40	34	30	35	30	27	30	26	24	25	22	21	19						19													
10	50	39	33	28	47	37	31	27	32	28	24	28	24	22	23	21	19	17						17													

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	24365	24365	24365
5°	23973	23914	24092
10°	22431	22730	23364
15°	20392	21039	22210
20°	18101	19042	20711
25°	15764	17012	19028
30°	13502	14986	17436
35°	11196	12721	15513
40°	8602	10171	13218
45°	6219	7702	10635
50°	4236	5740	8436
55°	2754	4152	6556
60°	1580	2923	4739
65°	419	1786	2399
70°	208	550	691
75°	93	46	0
80°	69	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 10635 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	241.0	3.2
10°-20°	616.3	8.3
20°-30°	771.6	10.4
30°-40°	712.7	9.6
40°-50°	478.9	6.5
50°-60°	247.4	3.3
60°-70°	77.5	1.0
70°-80°	4.9	0.1
80°-90°	0.1	0.0
90°-100°	313.2	4.2
100°-110°	891.3	12.0
110°-120°	853.9	11.5
120°-130°	675.9	9.1
130°-140°	542.5	7.3
140°-150°	424.7	5.7
150°-160°	310.7	4.2
160°-170°	192.5	2.6
170°-180°	65.3	0.9
0°-30°	1628.9	22.0
0°-40°	2341.6	31.6
0°-60°	3067.9	41.3
0°-90°	3150.3	42.5
90°-120°	2058.5	27.7
90°-150°	3701.5	49.9
90°-180°	4270.0	57.5
0°-180°	7420.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2641	2641	2641	2641	2641	
5°	2588	2562	2582	2591	2601	240
15°	2135	2127	2203	2277	2325	595
25°	1548	1561	1671	1786	1869	710
35°	994	1019	1129	1262	1377	616
45°	477	505	590	705	815	374
55°	171	200	258	331	408	160
65°	19	37	82	99	110	32
75°	3	3	1	0	0	4
85°	0	0	0	0	0	0
90°	0	0	0	0	0	1
95°	34	135	606	210	129	39
105°	138	210	908	1604	1525	147
115°	258	311	689	1459	1713	253
125°	363	403	657	1091	1304	325
135°	444	481	650	922	1042	343
145°	524	551	655	798	869	327
155°	599	613	670	721	750	277
165°	661	664	678	693	703	186
175°	693	689	686	682	677	66
180°	687	687	687	687	687	

TEST NUMBER: P521224

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2640.9	2640.9	2640.9	2640.9	2640.9
2.5°	2647.0	2622.0	2628.6	2628.4	2621.4
5°	2588.5	2562.2	2582.1	2591.3	2601.3
7.5°	2479.1	2458.6	2496.7	2525.3	2546.1
10°	2394.3	2376.8	2426.2	2465.2	2493.9
12.5°	2296.2	2282.7	2342.4	2395.9	2432.6
15°	2134.9	2127.4	2202.6	2276.6	2325.3
17.5°	1962.2	1961.9	2047.8	2139.6	2198.3
20°	1843.6	1847.4	1939.4	2040.7	2109.4
22.5°	1725.1	1733.8	1832.1	1937.7	2016.4
25°	1548.5	1561.0	1671.1	1785.5	1869.2
27.5°	1378.8	1397.1	1513.0	1631.8	1733.7
30°	1267.4	1288.6	1406.7	1531.7	1636.6
32.5°	1158.0	1183.3	1298.3	1430.6	1537.5
35°	994.0	1019.0	1129.4	1262.4	1377.3
37.5°	824.6	849.1	956.9	1087.8	1212.0
40°	714.2	741.7	844.5	971.3	1097.5
42.5°	614.0	641.5	738.2	862.8	982.0
45°	476.6	505.3	590.3	705.2	815.1
47.5°	362.6	393.8	468.4	572.4	672.5
50°	295.1	326.4	399.9	491.5	587.7
52.5°	241.0	271.2	337.5	423.9	512.1
55°	171.2	199.9	258.1	331.4	407.6
57.5°	118.3	143.0	195.2	256.4	316.1
60°	85.6	109.3	158.4	208.1	256.8
62.5°	57.0	78.7	126.7	164.8	197.5
65°	19.2	36.7	81.8	98.6	109.9
67.5°	9.7	11.7	42.9	45.3	49.1
70°	7.7	7.7	20.4	21.8	25.6
72.5°	5.6	5.6	8.2	10.5	11.2
75°	2.6	2.6	1.3	0.0	0.0
77.5°	1.3	1.3	1.0	0.0	0.0
80°	1.3	1.3	0.0	0.0	0.0
82.5°	0.3	0.3	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°	10.5	55.4	128.6	37.4	28.2
95°	34.0	134.9	606.4	209.9	129.4
97.5°	62.5	158.1	933.9	668.3	457.9
100°	82.3	171.8	1005.0	1018.0	784.1
102.5°	104.3	186.6	989.3	1303.0	1098.8
105°	138.5	210.1	908.3	1604.4	1525.1
107.5°	173.3	237.4	813.7	1689.3	1759.9
110°	197.3	257.4	759.3	1656.8	1815.3

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	220.3	277.3	722.7	1579.9	1805.9
115°	257.5	311.1	688.7	1459.0	1713.3
117.5°	290.1	340.5	668.6	1326.9	1596.2
120°	316.3	358.4	666.5	1251.3	1509.5
122.5°	337.2	379.3	661.3	1185.0	1424.8
125°	363.3	402.9	657.4	1090.9	1304.3
127.5°	391.8	428.9	655.3	1034.6	1210.4
130°	406.4	443.5	652.1	995.4	1148.8
132.5°	422.1	458.2	652.1	964.8	1105.9
135°	444.3	481.4	649.5	921.5	1041.6
137.5°	465.3	501.3	649.3	884.8	988.5
140°	480.9	518.0	648.2	854.4	954.0
142.5°	498.7	529.6	651.4	830.1	919.5
145°	524.1	550.9	654.8	797.5	869.1
147.5°	545.8	571.8	660.5	764.6	826.5
150°	564.6	582.5	662.6	753.8	797.2
152.5°	579.2	598.1	664.7	739.0	779.4
155°	598.6	612.6	670.4	720.8	750.2
157.5°	622.6	631.0	671.7	712.5	733.4
160°	635.1	641.5	677.0	706.1	724.0
162.5°	642.5	649.9	678.0	700.8	714.6
165°	661.3	663.8	678.3	692.9	703.1
167.5°	674.1	671.8	684.3	690.9	695.0
170°	678.3	677.0	682.2	683.6	688.7
172.5°	687.7	683.3	685.3	681.5	685.6
175°	692.7	688.8	686.1	682.1	677.0
177.5°	694.7	688.6	685.3	681.2	682.2
180°	687.4	687.4	687.4	687.4	687.4

(END OF REPORT)