

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: P521034

Luminaire Tested: SQ4-BB-050U-050D-92765-1D-UNV-STD-W-4_5700K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521034
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-050U-050D-92765-1D-UNV-STD-W-4_5700K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 2700K-6500K CCT, 90 CRI LEDS, TUNED TO 5700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3689.3 lumens
Efficiency: N/A
Efficacy: 101.4 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

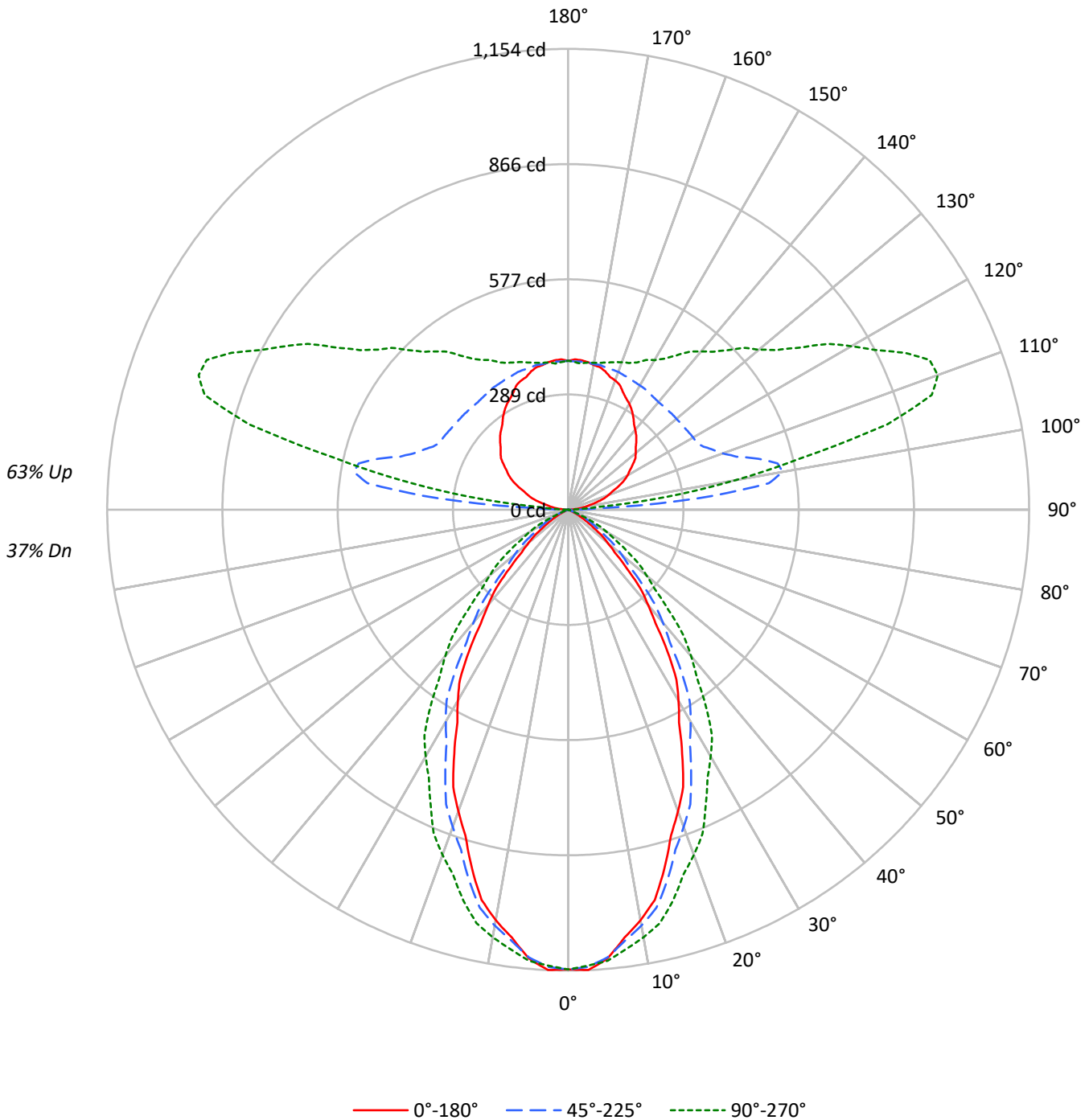
Input Watts (W): 36.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	60	60	60	44	44	44	37				
1	96	93	89	86	87	84	81	79	69	67	65	54	53	52	41	41	40	34				
2	89	82	77	73	81	75	71	67	62	59	56	49	47	46	38	37	36	31				
3	82	74	67	62	74	67	62	58	56	52	49	45	42	40	35	33	32	28				
4	76	66	59	54	69	61	55	50	50	46	43	41	38	36	32	30	29	25				
5	70	60	52	47	64	55	49	44	46	41	38	38	34	32	30	28	26	23				
6	65	54	47	42	59	50	43	39	42	37	34	34	31	29	28	25	24	21				
7	60	49	42	37	55	45	39	35	38	34	30	32	28	26	26	23	22	19				
8	56	45	38	33	51	42	35	31	35	31	27	29	26	24	24	22	20	18				
9	52	41	34	30	48	38	32	28	33	28	25	27	24	22	22	20	18	16				
10	49	38	31	27	45	35	30	26	30	26	23	25	22	20	21	19	17	15				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10621	10621	10621
5°	10450	10425	10502
10°	9778	9908	10185
15°	8889	9171	9682
20°	7890	8300	9028
25°	6871	7416	8295
30°	5886	6533	7600
35°	4880	5545	6762
40°	3749	4433	5762
45°	2710	3357	4636
50°	1847	2502	3677
55°	1200	1810	2858
60°	688	1275	2065
65°	183	777	1046
70°	89	240	299
75°	39	21	0
80°	32	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 4636 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	105.1	2.8
10°-20°	268.7	7.3
20°-30°	336.3	9.1
30°-40°	310.7	8.4
40°-50°	208.8	5.7
50°-60°	107.8	2.9
60°-70°	33.8	0.9
70°-80°	2.1	0.1
80°-90°	0.0	0.0
90°-100°	169.9	4.6
100°-110°	483.4	13.1
110°-120°	463.2	12.6
120°-130°	366.6	9.9
130°-140°	294.2	8.0
140°-150°	230.4	6.2
150°-160°	168.5	4.6
160°-170°	104.4	2.8
170°-180°	35.4	1.0
0°-30°	710.1	19.2
0°-40°	1020.7	27.7
0°-60°	1337.3	36.2
0°-90°	1373.3	37.2
90°-120°	1116.5	30.3
90°-150°	2007.7	54.4
90°-180°	2316.0	62.8
0°-180°	3689.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1151	1151	1151	1151	1151	
5°	1128	1117	1126	1130	1134	105
15°	931	927	960	992	1014	259
25°	675	680	728	778	815	309
35°	433	444	492	550	600	268
45°	208	220	257	307	355	163
55°	75	87	112	144	178	70
65°	8	16	36	43	48	14
75°	1	1	1	0	0	2
85°	0	0	0	0	0	0
90°	0	0	0	0	0	1
95°	18	73	329	114	70	21
105°	75	114	493	870	827	79
115°	140	169	374	791	929	137
125°	197	218	356	592	707	176
135°	241	261	352	500	565	186
145°	284	299	355	433	471	178
155°	325	332	364	391	407	150
165°	359	360	368	376	381	101
175°	376	374	372	370	367	36
180°	373	373	373	373	373	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1151.2	1151.2	1151.2	1151.2	1151.2
2.5°	1153.8	1143.0	1145.8	1145.8	1142.7
5°	1128.3	1116.9	1125.6	1129.6	1133.9
7.5°	1080.7	1071.7	1088.4	1100.8	1109.8
10°	1043.7	1036.1	1057.6	1074.6	1087.1
12.5°	1000.9	995.0	1021.1	1044.4	1060.4
15°	930.6	927.4	960.1	992.4	1013.6
17.5°	855.3	855.2	892.6	932.7	958.3
20°	803.6	805.3	845.4	889.5	919.5
22.5°	752.0	755.8	798.6	844.6	878.9
25°	675.0	680.4	728.5	778.3	814.8
27.5°	601.0	609.0	659.5	711.3	755.8
30°	552.5	561.7	613.2	667.7	713.4
32.5°	504.8	515.8	566.0	623.6	670.2
35°	433.3	444.2	492.3	550.3	600.4
37.5°	359.4	370.1	417.1	474.2	528.3
40°	311.3	323.3	368.1	423.4	478.4
42.5°	267.7	279.6	321.8	376.1	428.1
45°	207.7	220.3	257.3	307.4	355.3
47.5°	158.1	171.7	204.2	249.5	293.2
50°	128.7	142.3	174.3	214.3	256.2
52.5°	105.0	118.2	147.1	184.8	223.2
55°	74.6	87.2	112.5	144.4	177.7
57.5°	51.6	62.4	85.1	111.8	137.8
60°	37.3	47.7	69.1	90.7	111.9
62.5°	24.8	34.3	55.2	71.8	86.1
65°	8.4	16.0	35.6	43.0	47.9
67.5°	4.2	5.1	18.7	19.8	21.4
70°	3.3	3.3	8.9	9.5	11.1
72.5°	2.5	2.5	3.6	4.6	4.9
75°	1.1	1.1	0.6	0.0	0.0
77.5°	0.6	0.6	0.4	0.0	0.0
80°	0.6	0.6	0.0	0.0	0.0
82.5°	0.1	0.1	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°	5.7	30.1	69.8	20.3	15.3
95°	18.4	73.2	328.9	113.8	70.2
97.5°	33.9	85.7	506.5	362.5	248.4
100°	44.7	93.2	545.1	552.1	425.3
102.5°	56.6	101.2	536.6	706.7	596.0
105°	75.1	114.0	492.6	870.2	827.2
107.5°	94.0	128.8	441.3	916.3	954.5
110°	107.0	139.6	411.8	898.6	984.6

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	119.5	150.4	392.0	856.9	979.5
115°	139.6	168.8	373.6	791.4	929.3
117.5°	157.4	184.7	362.6	719.7	865.8
120°	171.5	194.4	361.5	678.7	818.7
122.5°	182.9	205.8	358.7	642.8	772.8
125°	197.1	218.5	356.5	591.7	707.4
127.5°	212.5	232.6	355.4	561.2	656.5
130°	220.4	240.5	353.7	539.9	623.1
132.5°	229.0	248.5	353.7	523.3	599.8
135°	241.0	261.1	352.3	499.8	564.9
137.5°	252.3	271.9	352.2	479.9	536.2
140°	260.9	281.0	351.6	463.4	517.5
142.5°	270.5	287.3	353.3	450.2	498.7
145°	284.2	298.8	355.1	432.6	471.4
147.5°	296.0	310.2	358.2	414.7	448.3
150°	306.2	315.9	359.4	408.8	432.4
152.5°	314.2	324.4	360.5	400.9	422.8
155°	324.6	332.3	363.6	390.9	406.9
157.5°	337.7	342.3	364.3	386.4	397.8
160°	344.5	348.0	367.2	383.0	392.7
162.5°	348.5	352.5	367.7	380.1	387.6
165°	358.7	360.1	367.9	375.8	381.4
167.5°	365.6	364.4	371.1	374.7	377.0
170°	367.9	367.2	370.0	370.8	373.6
172.5°	373.0	370.6	371.7	369.6	371.9
175°	375.7	373.6	372.1	370.0	367.2
177.5°	376.8	373.5	371.7	369.5	370.0
180°	372.9	372.9	372.9	372.9	372.9

(END OF REPORT)