

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: P520980

Luminaire Tested: SQ4-BB-025U-050D-92765-1D-UNV-STD-W-4_4500K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P520980
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-025U-050D-92765-1D-UNV-STD-W-4_4500K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 250 LUMENS PER FOOT
Light Source: 2700K-6500K CCT, 90 CRI LEDS, TUNED TO 4500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3343.2 lumens
Efficiency: N/A
Efficacy: 96.3 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

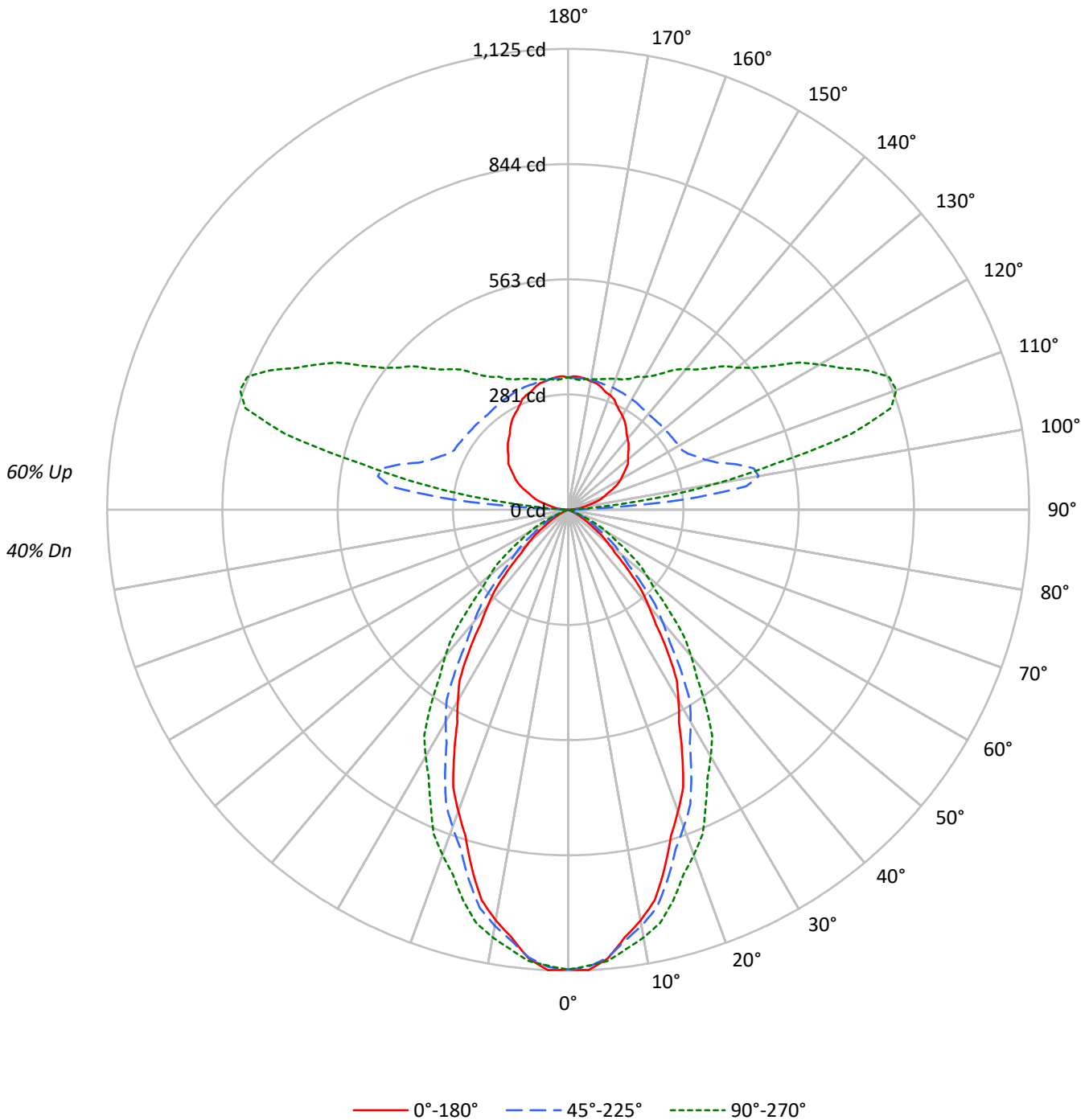
Input Watts (W): 34.7
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	105	105	105	105	95	95	95	95	78	78	78	62	62	62	47	47	47	40				
1	97	93	90	87	88	85	83	80	70	68	67	56	55	54	44	43	42	37				
2	89	83	78	73	82	76	72	68	63	60	58	51	49	48	40	39	38	33				
3	83	74	68	63	75	68	63	59	57	53	50	47	44	42	37	35	34	30				
4	76	67	60	55	70	62	56	51	52	48	44	43	40	37	34	32	31	27				
5	71	60	53	48	65	56	50	45	47	43	39	39	36	33	32	29	28	25				
6	66	55	47	42	60	51	44	40	43	38	35	36	33	30	29	27	25	22				
7	61	50	43	38	56	46	40	36	40	35	31	33	30	27	27	25	23	21				
8	57	46	39	34	52	42	36	32	36	32	28	31	27	25	25	23	21	19				
9	53	42	35	31	49	39	33	29	34	29	26	29	25	23	24	21	20	17				
10	50	39	32	28	46	36	30	26	31	27	24	27	23	21	22	20	18	16				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10357	10357	10357
5°	10190	10165	10240
10°	9535	9662	9932
15°	8668	8943	9441
20°	7695	8094	8804
25°	6700	7232	8089
30°	5740	6371	7412
35°	4759	5407	6595
40°	3657	4324	5619
45°	2643	3274	4521
50°	1801	2440	3585
55°	1171	1765	2786
60°	672	1242	2015
65°	177	760	1020
70°	89	235	294
75°	39	18	0
80°	27	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 4521 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	102.4	3.1
10°-20°	262.0	7.8
20°-30°	328.0	9.8
30°-40°	303.0	9.1
40°-50°	203.6	6.1
50°-60°	105.2	3.1
60°-70°	32.9	1.0
70°-80°	2.1	0.1
80°-90°	0.0	0.0
90°-100°	147.0	4.4
100°-110°	418.3	12.5
110°-120°	400.8	12.0
120°-130°	317.2	9.5
130°-140°	254.6	7.6
140°-150°	199.3	6.0
150°-160°	145.8	4.4
160°-170°	90.3	2.7
170°-180°	30.7	0.9
0°-30°	692.4	20.7
0°-40°	995.4	29.8
0°-60°	1304.1	39.0
0°-90°	1339.2	40.1
90°-120°	966.1	28.9
90°-150°	1737.2	52.0
90°-180°	2004.0	59.9
0°-180°	3343.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1123	1123	1123	1123	1123	
5°	1100	1089	1098	1102	1106	102
15°	908	904	936	968	988	253
25°	658	664	710	759	795	302
35°	422	433	480	537	586	262
45°	203	215	251	300	346	159
55°	73	85	110	141	173	68
65°	8	16	35	42	47	14
75°	1	1	0	0	0	2
85°	0	0	0	0	0	0
90°	0	0	0	0	0	1
95°	16	63	285	98	61	18
105°	65	99	426	753	716	69
115°	121	146	323	685	804	119
125°	170	189	308	512	612	153
135°	208	226	305	432	489	161
145°	246	258	307	374	408	154
155°	281	288	315	338	352	130
165°	310	312	318	325	330	87
175°	325	323	322	320	318	31
180°	323	323	323	323	323	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1122.6	1122.6	1122.6	1122.6	1122.6
2.5°	1125.2	1114.6	1117.4	1117.3	1114.3
5°	1100.3	1089.2	1097.6	1101.5	1105.7
7.5°	1053.8	1045.1	1061.3	1073.5	1082.3
10°	1017.8	1010.3	1031.3	1047.9	1060.1
12.5°	976.1	970.3	995.7	1018.4	1034.1
15°	907.5	904.3	936.3	967.7	988.4
17.5°	834.1	834.0	870.5	909.5	934.5
20°	783.7	785.3	824.4	867.4	896.7
22.5°	733.3	737.0	778.8	823.7	857.1
25°	658.2	663.5	710.4	759.0	794.6
27.5°	586.1	593.9	643.1	693.7	737.0
30°	538.8	547.8	598.0	651.1	695.7
32.5°	492.3	503.0	551.9	608.1	653.6
35°	422.5	433.2	480.1	536.6	585.5
37.5°	350.5	360.9	406.8	462.4	515.2
40°	303.6	315.3	359.0	412.9	466.5
42.5°	261.0	272.7	313.8	366.8	417.4
45°	202.6	214.8	250.9	299.8	346.5
47.5°	154.1	167.4	199.1	243.3	285.9
50°	125.5	138.7	170.0	208.9	249.8
52.5°	102.4	115.3	143.5	180.2	217.7
55°	72.8	85.0	109.7	140.9	173.2
57.5°	50.3	60.8	83.0	109.0	134.4
60°	36.4	46.5	67.3	88.5	109.2
62.5°	24.2	33.5	53.9	70.1	84.0
65°	8.1	15.6	34.8	41.9	46.7
67.5°	4.1	5.0	18.2	19.3	20.9
70°	3.3	3.3	8.7	9.3	10.9
72.5°	2.4	2.4	3.5	4.5	4.8
75°	1.1	1.1	0.5	0.0	0.0
77.5°	0.5	0.5	0.4	0.0	0.0
80°	0.5	0.5	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°	4.9	26.0	60.4	17.6	13.2
95°	15.9	63.3	284.6	98.5	60.7
97.5°	29.3	74.2	438.3	313.6	214.9
100°	38.6	80.6	471.7	477.7	368.0
102.5°	48.9	87.6	464.3	611.5	515.7
105°	65.0	98.6	426.3	752.9	715.8
107.5°	81.3	111.4	381.9	792.8	825.9
110°	92.6	120.8	356.3	777.6	851.9

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	103.4	130.2	339.2	741.5	847.5
115°	120.8	146.0	323.2	684.7	804.1
117.5°	136.2	159.8	313.8	622.7	749.1
120°	148.4	168.2	312.8	587.3	708.4
122.5°	158.2	178.0	310.3	556.2	668.7
125°	170.5	189.1	308.5	512.0	612.1
127.5°	183.9	201.3	307.5	485.6	568.1
130°	190.7	208.1	306.1	467.2	539.1
132.5°	198.1	215.0	306.1	452.8	519.0
135°	208.5	225.9	304.8	432.5	488.8
137.5°	218.3	235.3	304.7	415.2	463.9
140°	225.7	243.1	304.2	401.0	447.7
142.5°	234.0	248.6	305.7	389.6	431.5
145°	245.9	258.5	307.3	374.3	407.9
147.5°	256.1	268.4	310.0	358.8	387.9
150°	265.0	273.4	311.0	353.7	374.1
152.5°	271.8	280.7	311.9	346.8	365.8
155°	280.9	287.5	314.6	338.3	352.1
157.5°	292.2	296.2	315.3	334.4	344.2
160°	298.1	301.1	317.7	331.4	339.8
162.5°	301.5	305.0	318.2	328.9	335.4
165°	310.3	311.5	318.3	325.2	330.0
167.5°	316.4	315.3	321.1	324.3	326.2
170°	318.3	317.7	320.2	320.8	323.2
172.5°	322.7	320.7	321.6	319.8	321.8
175°	325.1	323.3	322.0	320.1	317.7
177.5°	326.0	323.2	321.6	319.7	320.2
180°	322.6	322.6	322.6	322.6	322.6

(END OF REPORT)