

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: P521082

Luminaire Tested: SQ4-BB-075U-050D-92765-1D-UNV-STD-W-4_3500K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521082
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-075U-050D-92765-1D-UNV-STD-W-4_3500K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 750 LUMENS PER FOOT
Light Source: 2700K-6500K CCT, 90 CRI LEDS, TUNED TO 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4561.6 lumens
Efficiency: N/A
Efficacy: 102.7 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

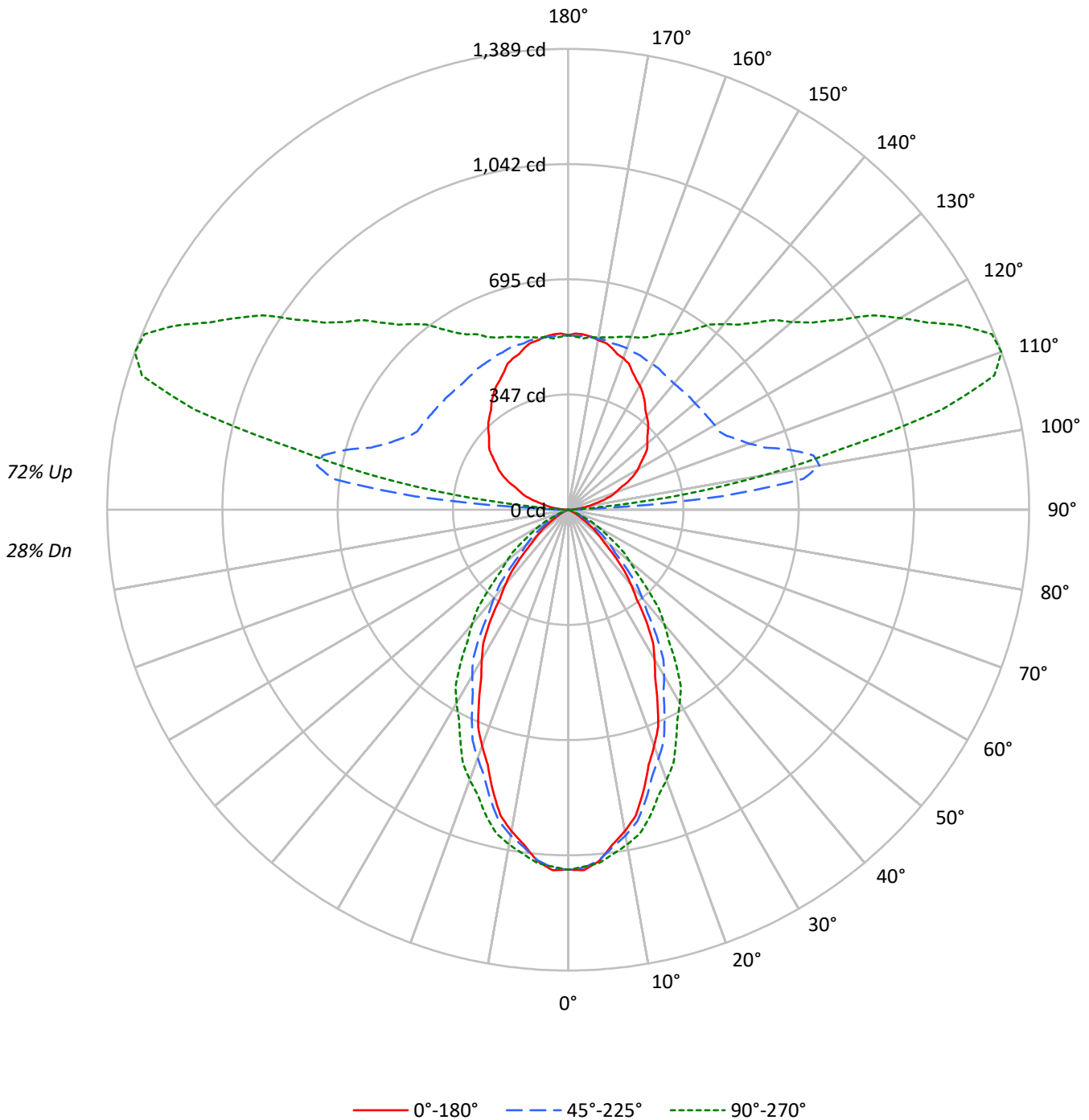
Input Watts (W): 44.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Luminous Intensity Polar Plot



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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									20									20									20									
RC	80									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	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	76	64	62	60	48	47	46	34	33	33	26																			
2	86	80	75	70	77	72	68	64	57	54	52	43	42	40	31	30	29	23																			
3	79	71	65	60	71	64	59	55	51	48	45	39	37	35	28	27	26	21																			
4	73	64	57	51	66	58	52	47	46	42	39	36	33	31	26	24	23	19																			
5	67	57	50	44	61	52	46	41	42	38	34	33	30	28	24	22	21	17																			
6	62	52	44	39	56	47	41	36	38	34	30	30	27	25	22	20	19	16																			
7	58	47	40	35	52	43	36	32	35	30	27	27	24	22	21	19	17	15																			
8	54	43	36	31	48	39	33	29	32	27	24	25	22	20	19	17	16	13																			
9	50	39	32	28	45	36	30	26	29	25	22	23	20	18	18	16	15	12																			
10	47	36	29	25	42	33	27	23	27	23	20	22	19	17	17	15	13	11																			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10010	10010	10010
5°	9849	9825	9897
10°	9215	9338	9599
15°	8378	8643	9125
20°	7436	7823	8509
25°	6475	6989	7817
30°	5547	6157	7163
35°	4600	5226	6373
40°	3534	4178	5431
45°	2555	3164	4370
50°	1740	2358	3465
55°	1131	1705	2693
60°	650	1201	1947
65°	172	734	985
70°	84	227	283
75°	36	18	0
80°	27	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 4370 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	99.0	2.2
10°-20°	253.2	5.6
20°-30°	317.0	6.9
30°-40°	292.8	6.4
40°-50°	196.7	4.3
50°-60°	101.6	2.2
60°-70°	31.8	0.7
70°-80°	2.0	0.0
80°-90°	0.0	0.0
90°-100°	239.7	5.3
100°-110°	682.0	15.0
110°-120°	653.4	14.3
120°-130°	517.2	11.3
130°-140°	415.1	9.1
140°-150°	325.0	7.1
150°-160°	237.8	5.2
160°-170°	147.3	3.2
170°-180°	50.0	1.1
0°-30°	669.2	14.7
0°-40°	962.0	21.1
0°-60°	1260.3	27.6
0°-90°	1294.2	28.4
90°-120°	1575.1	34.5
90°-150°	2832.3	62.1
90°-180°	3267.0	71.6
0°-180°	4561.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1085	1085	1085	1085	1085	
5°	1063	1053	1061	1064	1069	99
15°	877	874	905	935	955	244
25°	636	641	686	734	768	292
35°	408	419	464	519	566	253
45°	196	208	242	290	335	154
55°	70	82	106	136	167	66
65°	8	15	34	40	45	13
75°	1	1	0	0	0	1
85°	0	0	0	0	0	0
90°	0	0	0	0	0	1
95°	26	103	464	161	99	30
105°	106	161	695	1228	1167	112
115°	197	238	527	1116	1311	194
125°	278	308	503	835	998	249
135°	340	368	497	705	797	262
145°	401	422	501	610	665	250
155°	458	469	513	552	574	212
165°	506	508	519	530	538	142
175°	530	527	525	522	518	50
180°	526	526	526	526	526	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1084.9	1084.9	1084.9	1084.9	1084.9
2.5°	1087.4	1077.2	1079.9	1079.8	1076.9
5°	1063.4	1052.6	1060.8	1064.5	1068.6
7.5°	1018.5	1010.1	1025.7	1037.5	1046.0
10°	983.6	976.4	996.7	1012.8	1024.6
12.5°	943.3	937.8	962.3	984.3	999.4
15°	877.1	874.0	904.9	935.3	955.3
17.5°	806.1	806.0	841.3	879.0	903.1
20°	757.4	758.9	796.8	838.3	866.6
22.5°	708.7	712.3	752.7	796.0	828.4
25°	636.1	641.3	686.5	733.5	767.9
27.5°	566.4	573.9	621.6	670.4	712.3
30°	520.7	529.4	577.9	629.3	672.4
32.5°	475.7	486.1	533.4	587.7	631.6
35°	408.4	418.6	464.0	518.6	565.8
37.5°	338.8	348.8	393.1	446.9	497.9
40°	293.4	304.7	346.9	399.0	450.9
42.5°	252.3	263.5	303.3	354.5	403.4
45°	195.8	207.6	242.5	289.7	334.9
47.5°	149.0	161.8	192.4	235.1	276.3
50°	121.2	134.1	164.3	201.9	241.4
52.5°	99.0	111.4	138.7	174.1	210.4
55°	70.3	82.1	106.0	136.1	167.4
57.5°	48.6	58.8	80.2	105.3	129.9
60°	35.2	44.9	65.1	85.5	105.5
62.5°	23.4	32.3	52.1	67.7	81.1
65°	7.9	15.1	33.6	40.5	45.1
67.5°	4.0	4.8	17.6	18.6	20.2
70°	3.1	3.1	8.4	9.0	10.5
72.5°	2.3	2.3	3.4	4.3	4.6
75°	1.0	1.0	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°	8.0	42.4	98.4	28.6	21.6
95°	26.0	103.2	464.0	160.6	99.0
97.5°	47.8	120.9	714.6	511.3	350.4
100°	63.0	131.4	769.0	778.9	600.0
102.5°	79.8	142.8	757.0	997.0	840.8
105°	106.0	160.8	695.0	1227.6	1167.0
107.5°	132.6	181.7	622.6	1292.6	1346.6
110°	151.0	197.0	581.0	1267.8	1389.0

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	168.6	212.2	553.0	1208.9	1381.8
115°	197.0	238.1	527.0	1116.4	1311.0
117.5°	222.0	260.5	511.6	1015.3	1221.4
120°	242.0	274.3	510.0	957.5	1155.0
122.5°	258.0	290.3	506.0	906.8	1090.2
125°	278.0	308.3	503.0	834.7	998.0
127.5°	299.8	328.2	501.4	791.7	926.2
130°	311.0	339.4	499.0	761.7	879.0
132.5°	323.0	350.6	499.0	738.3	846.2
135°	340.0	368.4	497.0	705.1	797.0
137.5°	356.0	383.6	496.8	677.0	756.4
140°	368.0	396.4	496.0	653.7	730.0
142.5°	381.6	405.3	498.4	635.2	703.6
145°	401.0	421.5	501.0	610.2	665.0
147.5°	417.6	437.5	505.4	585.1	632.4
150°	432.0	445.7	507.0	576.8	610.0
152.5°	443.2	457.7	508.6	565.5	596.4
155°	458.0	468.8	513.0	551.5	574.0
157.5°	476.4	482.9	514.0	545.2	561.2
160°	486.0	490.9	518.0	540.3	554.0
162.5°	491.6	497.3	518.8	536.2	546.8
165°	506.0	508.0	519.0	530.2	538.0
167.5°	515.8	514.0	523.6	528.7	531.8
170°	519.0	518.0	522.0	523.1	527.0
172.5°	526.2	522.9	524.4	521.5	524.6
175°	530.0	527.1	525.0	521.9	518.0
177.5°	531.6	526.9	524.4	521.2	522.0
180°	526.0	526.0	526.0	526.0	526.0

(END OF REPORT)