

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: P521080

Luminaire Tested: SQ4-BB-075U-050D-92765-1D-UNV-STD-W-4_2700K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521080
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_2700K
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 2700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4364.2 lumens
Efficiency: N/A
Efficacy: 98.7 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

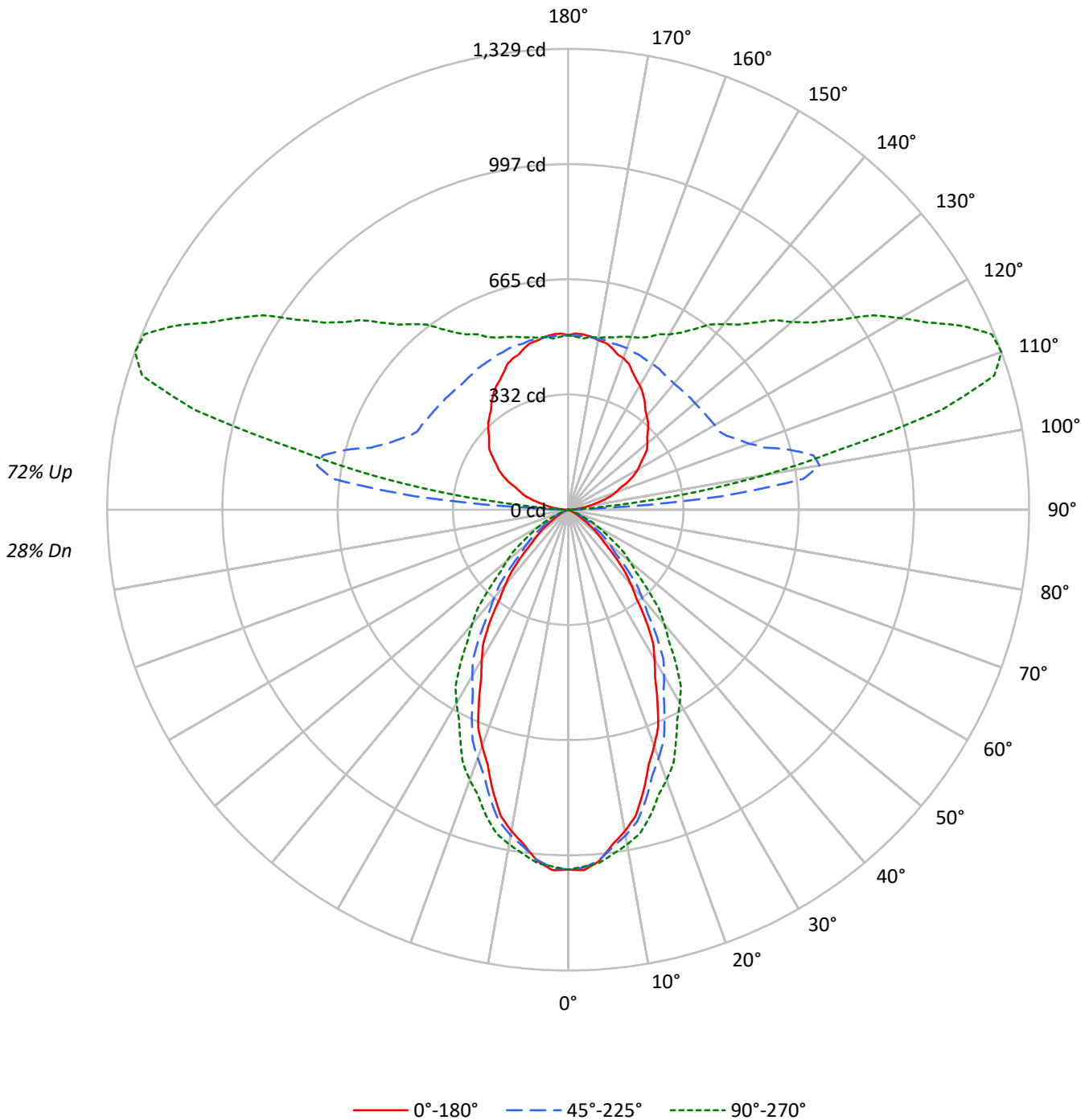
Input Watts (W): 44.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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									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°	9577	9577	9577
5°	9423	9399	9469
10°	8817	8934	9183
15°	8015	8269	8729
20°	7114	7485	8140
25°	6196	6686	7479
30°	5308	5890	6853
35°	4400	5000	6097
40°	3381	3997	5196
45°	2444	3027	4181
50°	1665	2256	3316
55°	1083	1631	2577
60°	620	1150	1862
65°	164	701	943
70°	81	216	270
75°	36	18	0
80°	27	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 4181 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	94.7	2.2
10°-20°	242.2	5.6
20°-30°	303.3	6.9
30°-40°	280.1	6.4
40°-50°	188.2	4.3
50°-60°	97.2	2.2
60°-70°	30.4	0.7
70°-80°	1.9	0.0
80°-90°	0.0	0.0
90°-100°	229.3	5.3
100°-110°	652.5	15.0
110°-120°	625.2	14.3
120°-130°	494.8	11.3
130°-140°	397.1	9.1
140°-150°	310.9	7.1
150°-160°	227.5	5.2
160°-170°	140.9	3.2
170°-180°	47.8	1.1
0°-30°	640.2	14.7
0°-40°	920.4	21.1
0°-60°	1205.8	27.6
0°-90°	1238.2	28.4
90°-120°	1507.0	34.5
90°-150°	2709.8	62.1
90°-180°	3126.0	71.6
0°-180°	4364.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1038	1038	1038	1038	1038	
5°	1017	1007	1015	1018	1022	94
15°	839	836	866	895	914	234
25°	609	614	657	702	735	279
35°	391	400	444	496	541	242
45°	187	199	232	277	320	147
55°	67	79	101	130	160	63
65°	8	14	32	39	43	13
75°	1	1	0	0	0	1
85°	0	0	0	0	0	0
90°	0	0	0	0	0	1
95°	25	99	444	154	95	28
105°	101	154	665	1174	1116	107
115°	188	228	504	1068	1254	186
125°	266	295	481	799	955	238
135°	325	352	476	675	762	251
145°	384	403	479	584	636	240
155°	438	448	491	528	549	203
165°	484	486	496	507	515	136
175°	507	504	502	499	496	48
180°	503	503	503	503	503	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1038.0	1038.0	1038.0	1038.0	1038.0
2.5°	1040.4	1030.6	1033.2	1033.1	1030.3
5°	1017.4	1007.1	1014.9	1018.5	1022.4
7.5°	974.4	966.4	981.3	992.6	1000.7
10°	941.1	934.2	953.6	968.9	980.2
12.5°	902.5	897.2	920.7	941.7	956.1
15°	839.1	836.2	865.7	894.8	913.9
17.5°	771.2	771.1	804.9	841.0	864.0
20°	724.6	726.1	762.3	802.1	829.1
22.5°	678.0	681.5	720.1	761.6	792.5
25°	608.6	613.5	656.8	701.8	734.7
27.5°	541.9	549.1	594.7	641.4	681.4
30°	498.2	506.5	552.9	602.0	643.3
32.5°	455.2	465.1	510.3	562.3	604.3
35°	390.7	400.5	443.9	496.2	541.3
37.5°	324.1	333.7	376.1	427.5	476.4
40°	280.7	291.5	331.9	381.8	431.4
42.5°	241.3	252.1	290.2	339.1	386.0
45°	187.3	198.6	232.0	277.2	320.4
47.5°	142.5	154.8	184.1	225.0	264.3
50°	116.0	128.3	157.2	193.2	231.0
52.5°	94.7	106.6	132.7	166.6	201.3
55°	67.3	78.6	101.4	130.2	160.2
57.5°	46.5	56.2	76.7	100.8	124.2
60°	33.6	43.0	62.3	81.8	100.9
62.5°	22.4	30.9	49.8	64.8	77.6
65°	7.5	14.4	32.1	38.8	43.2
67.5°	3.8	4.6	16.9	17.8	19.3
70°	3.0	3.0	8.0	8.6	10.0
72.5°	2.2	2.2	3.2	4.1	4.4
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°	7.7	40.6	94.1	27.4	20.7
95°	24.9	98.8	443.9	153.7	94.7
97.5°	45.7	115.7	683.7	489.2	335.2
100°	60.3	125.8	735.7	745.2	574.0
102.5°	76.3	136.6	724.3	953.9	804.4
105°	101.4	153.8	664.9	1174.5	1116.5
107.5°	126.9	173.8	595.7	1236.7	1288.3
110°	144.5	188.4	555.9	1212.9	1328.9

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	161.3	203.0	529.1	1156.6	1322.0
115°	188.5	227.8	504.2	1068.1	1254.3
117.5°	212.4	249.3	489.5	971.4	1168.6
120°	231.5	262.4	487.9	916.1	1105.0
122.5°	246.8	277.7	484.1	867.5	1043.0
125°	266.0	295.0	481.2	798.6	954.8
127.5°	286.8	314.0	479.7	757.4	886.1
130°	297.5	324.7	477.4	728.7	841.0
132.5°	309.0	335.4	477.4	706.3	809.6
135°	325.3	352.4	475.5	674.6	762.5
137.5°	340.6	367.0	475.3	647.7	723.7
140°	352.1	379.2	474.5	625.5	698.4
142.5°	365.1	387.7	476.8	607.7	673.2
145°	383.7	403.3	479.3	583.8	636.2
147.5°	399.5	418.6	483.5	559.8	605.0
150°	413.3	426.4	485.1	551.8	583.6
152.5°	424.0	437.9	486.6	541.0	570.6
155°	438.2	448.5	490.8	527.7	549.2
157.5°	455.8	462.0	491.8	521.6	536.9
160°	465.0	469.7	495.6	516.9	530.0
162.5°	470.3	475.8	496.4	513.0	523.1
165°	484.1	486.0	496.5	507.2	514.7
167.5°	493.5	491.8	500.9	505.8	508.8
170°	496.5	495.6	499.4	500.5	504.2
172.5°	503.4	500.3	501.7	498.9	501.9
175°	507.1	504.3	502.3	499.3	495.6
177.5°	508.6	504.1	501.7	498.7	499.4
180°	503.2	503.2	503.2	503.2	503.2

(END OF REPORT)