

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: P521028

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

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521028
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_2700K
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 2700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3326.5 lumens
Efficiency: N/A
Efficacy: 91.4 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

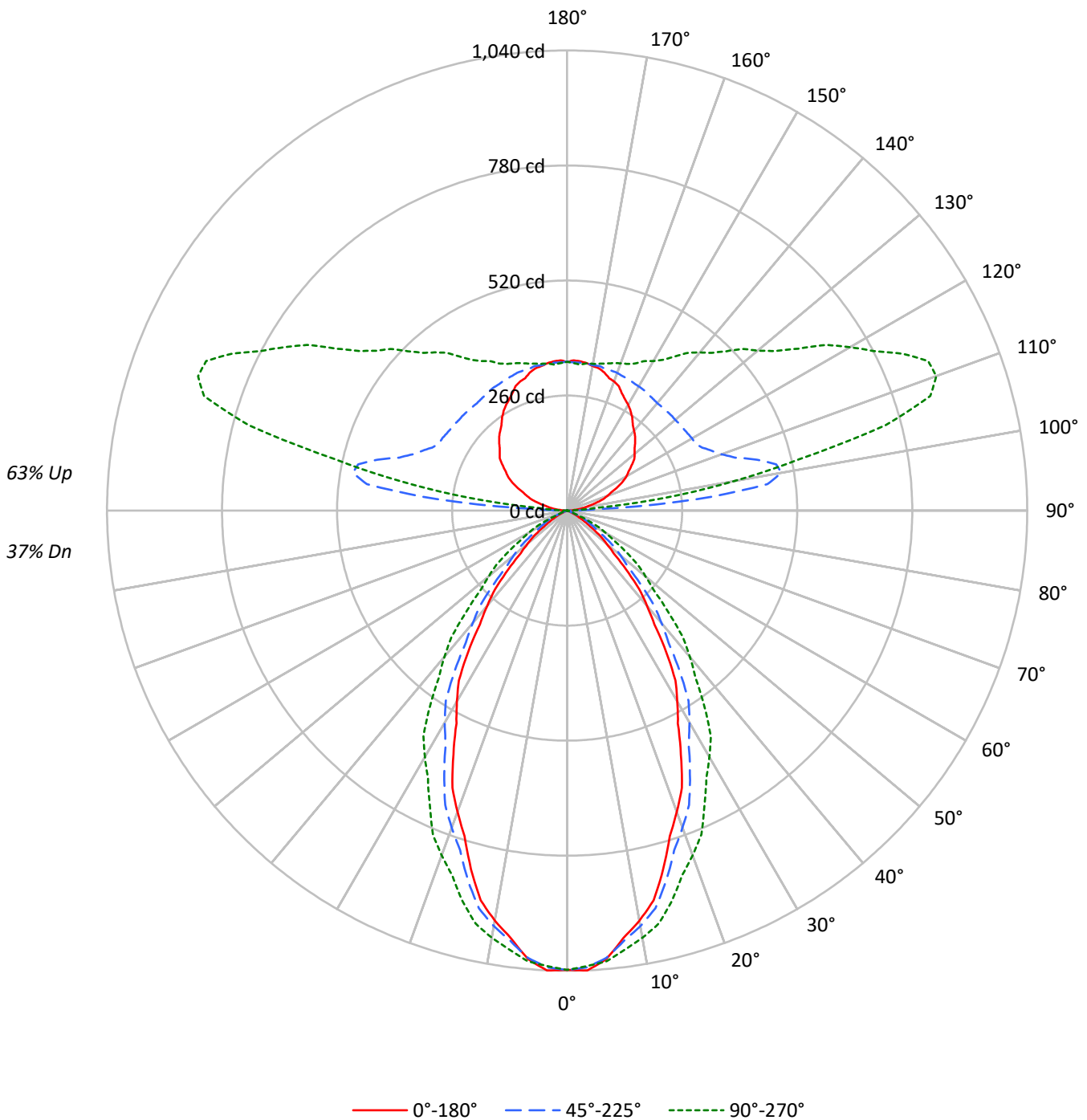
Input Watts (W): 36.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Luminous Intensity Polar Plot



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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									20									20									20										
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	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°	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	2.8
10°-20°	242.2	7.3
20°-30°	303.3	9.1
30°-40°	280.1	8.4
40°-50°	188.2	5.7
50°-60°	97.2	2.9
60°-70°	30.4	0.9
70°-80°	1.9	0.1
80°-90°	0.0	0.0
90°-100°	153.2	4.6
100°-110°	435.9	13.1
110°-120°	417.6	12.6
120°-130°	330.5	9.9
130°-140°	265.3	8.0
140°-150°	207.7	6.2
150°-160°	152.0	4.6
160°-170°	94.1	2.8
170°-180°	31.9	1.0
0°-30°	640.2	19.2
0°-40°	920.4	27.7
0°-60°	1205.8	36.2
0°-90°	1238.2	37.2
90°-120°	1006.7	30.3
90°-150°	1810.2	54.4
90°-180°	2088.0	62.8
0°-180°	3326.5	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°	17	66	297	103	63	19
105°	68	103	444	785	746	72
115°	126	152	337	714	838	124
125°	178	197	322	534	638	159
135°	217	235	318	451	509	168
145°	256	269	320	390	425	160
155°	293	300	328	352	367	135
165°	323	325	332	339	344	91
175°	339	337	336	334	331	32
180°	336	336	336	336	336	

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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°	5.1	27.1	62.9	18.3	13.8
95°	16.6	66.0	296.6	102.6	63.3
97.5°	30.6	77.3	456.7	326.8	224.0
100°	40.3	84.0	491.5	497.8	383.5
102.5°	51.0	91.2	483.8	637.3	537.4
105°	67.7	102.7	444.2	784.6	745.9
107.5°	84.8	116.1	397.9	826.2	860.7
110°	96.5	125.9	371.3	810.3	887.8

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	107.8	135.6	353.4	772.7	883.2
115°	125.9	152.2	336.8	713.6	837.9
117.5°	141.9	166.5	327.0	648.9	780.6
120°	154.7	175.3	326.0	612.0	738.2
122.5°	164.9	185.5	323.4	579.6	696.8
125°	177.7	197.1	321.5	533.5	637.9
127.5°	191.6	209.7	320.5	506.0	592.0
130°	198.8	216.9	318.9	486.8	561.8
132.5°	206.4	224.1	318.9	471.8	540.8
135°	217.3	235.4	317.7	450.7	509.4
137.5°	227.5	245.2	317.5	432.7	483.4
140°	235.2	253.3	317.0	417.8	466.6
142.5°	243.9	259.0	318.5	406.0	449.7
145°	256.3	269.4	320.2	390.0	425.0
147.5°	266.9	279.7	323.0	373.9	404.2
150°	276.1	284.9	324.0	368.6	389.9
152.5°	283.3	292.5	325.1	361.4	381.2
155°	292.7	299.6	327.9	352.5	366.9
157.5°	304.5	308.6	328.5	348.4	358.7
160°	310.6	313.7	331.1	345.3	354.1
162.5°	314.2	317.8	331.6	342.7	349.5
165°	323.4	324.7	331.7	338.9	343.9
167.5°	329.7	328.5	334.7	337.9	339.9
170°	331.7	331.1	333.6	334.3	336.8
172.5°	336.3	334.2	335.2	333.3	335.3
175°	338.7	336.9	335.5	333.6	331.1
177.5°	339.8	336.8	335.2	333.1	333.6
180°	336.2	336.2	336.2	336.2	336.2

(END OF REPORT)