

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: P521033

Luminaire Tested: SQ4-BB-050U-050D-92765-1D-UNV-STD-W-4_5000K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521033
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_5000K
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 5000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3637.4 lumens
Efficiency: N/A
Efficacy: 99.7 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

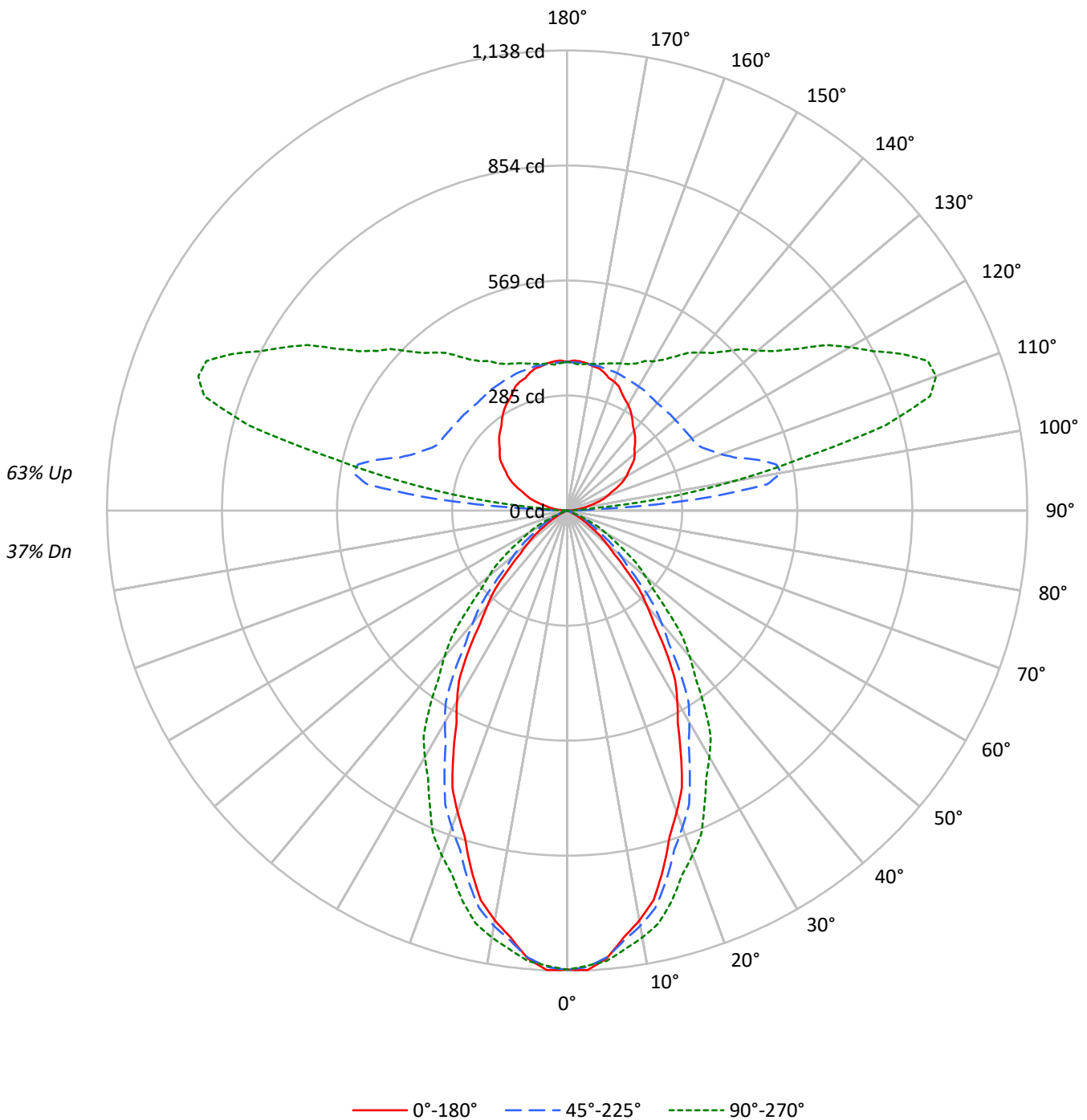
Input Watts (W): 36.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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°	10472	10472	10472
5°	10303	10277	10354
10°	9640	9770	10042
15°	8765	9043	9546
20°	7780	8184	8901
25°	6775	7311	8178
30°	5803	6441	7494
35°	4812	5467	6667
40°	3697	4372	5681
45°	2672	3310	4571
50°	1820	2467	3626
55°	1184	1784	2818
60°	679	1257	2037
65°	179	766	1030
70°	89	237	297
75°	39	18	0
80°	27	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 4571 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	103.6	2.8
10°-20°	264.9	7.3
20°-30°	331.6	9.1
30°-40°	306.3	8.4
40°-50°	205.8	5.7
50°-60°	106.3	2.9
60°-70°	33.3	0.9
70°-80°	2.1	0.1
80°-90°	0.0	0.0
90°-100°	167.5	4.6
100°-110°	476.6	13.1
110°-120°	456.7	12.6
120°-130°	361.4	9.9
130°-140°	290.1	8.0
140°-150°	227.1	6.2
150°-160°	166.2	4.6
160°-170°	102.9	2.8
170°-180°	34.9	1.0
0°-30°	700.1	19.2
0°-40°	1006.4	27.7
0°-60°	1318.5	36.2
0°-90°	1354.0	37.2
90°-120°	1100.8	30.3
90°-150°	1979.5	54.4
90°-180°	2283.0	62.8
0°-180°	3637.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1135	1135	1135	1135	1135	
5°	1112	1101	1110	1114	1118	103
15°	918	914	947	978	999	256
25°	666	671	718	767	803	305
35°	427	438	485	542	592	265
45°	205	217	254	303	350	161
55°	74	86	111	142	175	69
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°	18	72	324	112	69	21
105°	74	112	486	858	816	78
115°	138	166	368	780	916	136
125°	194	216	352	583	698	174
135°	238	257	347	493	557	183
145°	280	295	350	426	465	175
155°	320	328	358	385	401	148
165°	354	355	363	370	376	99
175°	370	368	367	365	362	35
180°	368	368	368	368	368	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1135.0	1135.0	1135.0	1135.0	1135.0
2.5°	1137.6	1126.9	1129.7	1129.7	1126.7
5°	1112.5	1101.2	1109.7	1113.7	1118.0
7.5°	1065.5	1056.7	1073.1	1085.3	1094.3
10°	1029.0	1021.5	1042.8	1059.5	1071.9
12.5°	986.9	981.1	1006.7	1029.7	1045.5
15°	917.6	914.3	946.7	978.4	999.4
17.5°	843.3	843.2	880.1	919.6	944.8
20°	792.4	794.0	833.5	877.0	906.6
22.5°	741.4	745.2	787.4	832.8	866.6
25°	665.5	670.9	718.2	767.4	803.3
27.5°	592.6	600.4	650.3	701.3	745.1
30°	544.7	553.8	604.6	658.3	703.4
32.5°	497.7	508.6	558.0	614.8	660.8
35°	427.2	437.9	485.4	542.5	591.9
37.5°	354.4	364.9	411.3	467.5	520.9
40°	307.0	318.8	363.0	417.5	471.7
42.5°	263.9	275.7	317.3	370.8	422.0
45°	204.8	217.2	253.7	303.1	350.3
47.5°	155.8	169.3	201.3	246.0	289.1
50°	126.8	140.3	171.9	211.2	252.6
52.5°	103.6	116.6	145.1	182.2	220.1
55°	73.6	85.9	110.9	142.4	175.2
57.5°	50.8	61.5	83.9	110.2	135.8
60°	36.8	47.0	68.1	89.4	110.4
62.5°	24.5	33.8	54.5	70.8	84.9
65°	8.2	15.8	35.1	42.4	47.2
67.5°	4.2	5.0	18.5	19.5	21.1
70°	3.3	3.3	8.8	9.4	11.0
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°	5.6	29.6	68.8	20.0	15.1
95°	18.2	72.2	324.3	112.2	69.2
97.5°	33.4	84.5	499.4	357.4	244.9
100°	44.0	91.9	537.4	544.4	419.3
102.5°	55.8	99.8	529.1	696.8	587.6
105°	74.1	112.3	485.7	858.0	815.6
107.5°	92.7	127.0	435.1	903.4	941.1
110°	105.5	137.6	406.1	886.0	970.8

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	117.8	148.3	386.5	844.9	965.7
115°	137.7	166.4	368.3	780.3	916.2
117.5°	155.2	182.1	357.6	709.6	853.6
120°	169.1	191.7	356.4	669.2	807.2
122.5°	180.3	202.9	353.6	633.7	761.9
125°	194.3	215.5	351.5	583.4	697.5
127.5°	209.5	229.3	350.4	553.3	647.3
130°	217.4	237.2	348.7	532.3	614.3
132.5°	225.7	245.0	348.7	516.0	591.4
135°	237.6	257.4	347.3	492.8	557.0
137.5°	248.8	268.1	347.2	473.1	528.6
140°	257.2	277.0	346.6	456.9	510.2
142.5°	266.7	283.2	348.3	443.9	491.7
145°	280.3	294.6	350.1	426.5	464.8
147.5°	291.9	305.8	353.2	408.9	442.0
150°	301.9	311.5	354.3	403.1	426.3
152.5°	309.7	319.9	355.5	395.2	416.8
155°	320.1	327.6	358.5	385.4	401.2
157.5°	332.9	337.5	359.2	381.0	392.2
160°	339.7	343.1	362.0	377.6	387.2
162.5°	343.6	347.5	362.6	374.8	382.2
165°	353.6	355.0	362.7	370.5	376.0
167.5°	360.5	359.3	365.9	369.5	371.7
170°	362.7	362.0	364.8	365.6	368.3
172.5°	367.8	365.4	366.5	364.4	366.6
175°	370.4	368.4	366.9	364.8	362.0
177.5°	371.5	368.2	366.5	364.3	364.8
180°	367.6	367.6	367.6	367.6	367.6

(END OF REPORT)