

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: P521054

Luminaire Tested: SQ4-BB-050U-100D-92765-1D-UNV-STD-W-4_2700K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521054
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-100D-92765-1D-UNV-STD-W-4_2700K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 1000 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: 4526.0 lumens
Efficiency: N/A
Efficacy: 77.9 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

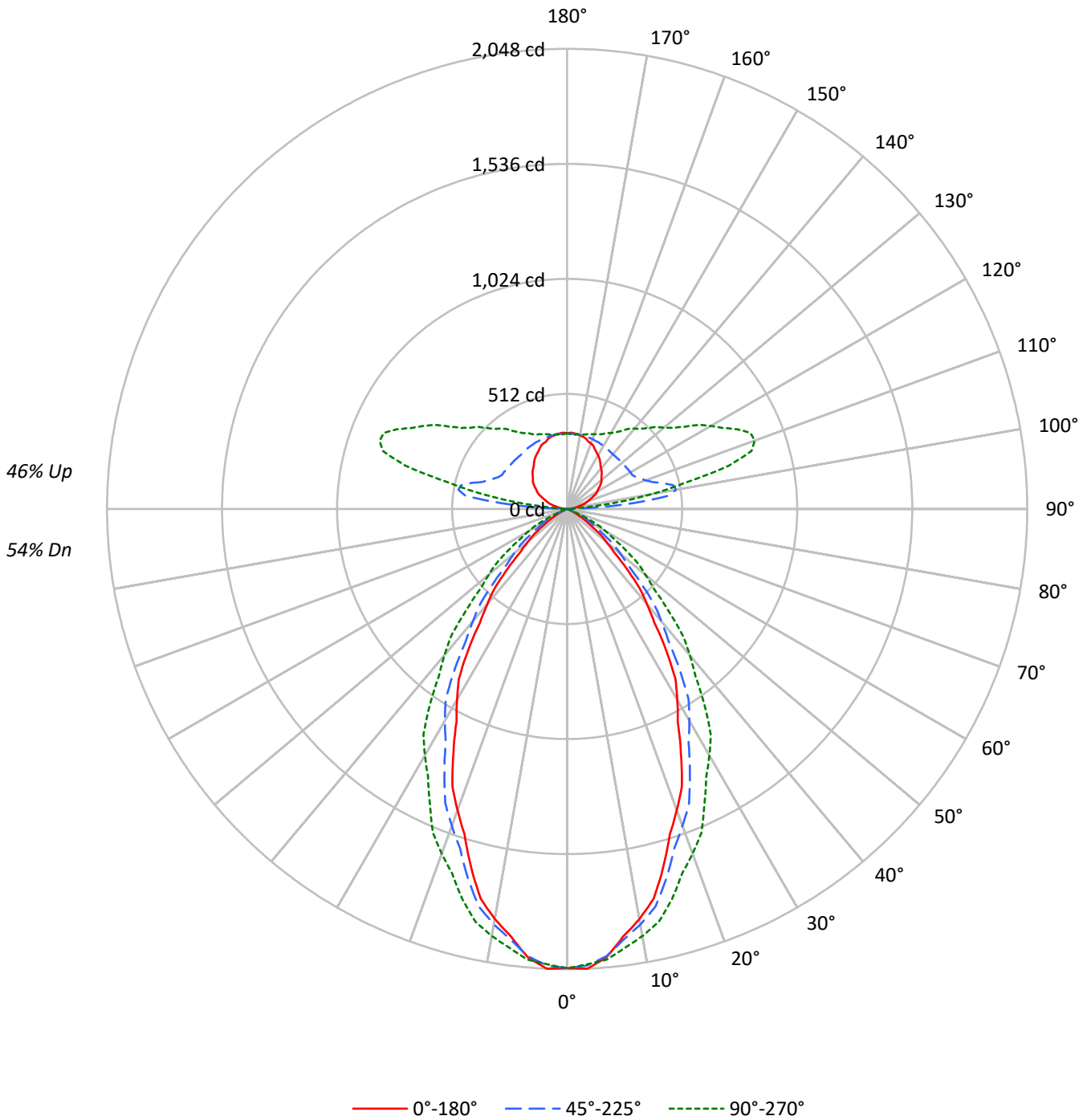
Input Watts (W): 58.1
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	108	108	108	108	100	100	100	100	85	85	85	72	72	72	60	60	60	54				
1	101	97	94	91	93	90	88	85	78	76	74	66	65	64	56	55	54	49				
2	93	87	82	78	87	81	77	73	71	67	65	61	58	56	51	50	49	44				
3	86	78	72	67	80	73	68	64	64	60	57	55	53	50	47	46	44	40				
4	80	71	64	59	75	66	60	56	58	54	50	51	48	45	44	42	40	36				
5	74	64	57	52	69	60	54	49	53	49	45	47	43	40	41	38	36	33				
6	69	59	51	46	65	55	49	44	49	44	40	43	39	36	38	35	33	30				
7	65	54	46	41	60	51	44	40	45	40	36	40	36	33	35	32	30	28				
8	60	49	42	37	56	47	40	36	42	37	33	37	33	30	33	30	28	25				
9	57	46	39	34	53	43	37	33	39	34	30	35	31	28	31	28	25	23				
10	53	42	36	31	50	40	34	30	36	31	28	32	28	26	29	26	24	22				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	18854	18854	18854
5°	18551	18504	18642
10°	17357	17588	18079
15°	15779	16280	17186
20°	14007	14735	16025
25°	12198	13164	14724
30°	10448	11596	13492
35°	8664	9844	12004
40°	6655	7871	10228
45°	4812	5960	8231
50°	3278	4441	6528
55°	2131	3212	5073
60°	1222	2262	3666
65°	323	1382	1856
70°	159	426	534
75°	71	36	0
80°	53	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 8231 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	186.5	4.1
10°-20°	476.9	10.5
20°-30°	597.1	13.2
30°-40°	551.5	12.2
40°-50°	370.6	8.2
50°-60°	191.4	4.2
60°-70°	60.0	1.3
70°-80°	3.8	0.1
80°-90°	0.1	0.0
90°-100°	153.2	3.4
100°-110°	435.9	9.6
110°-120°	417.6	9.2
120°-130°	330.5	7.3
130°-140°	265.3	5.9
140°-150°	207.7	4.6
150°-160°	152.0	3.4
160°-170°	94.1	2.1
170°-180°	31.9	0.7
0°-30°	1260.5	27.8
0°-40°	1812.0	40.0
0°-60°	2373.9	52.5
0°-90°	2437.7	53.9
90°-120°	1006.7	22.2
90°-150°	1810.2	40.0
90°-180°	2088.0	46.1
0°-180°	4526.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2044	2044	2044	2044	2044	
5°	2003	1983	1998	2005	2013	186
15°	1652	1646	1704	1762	1799	460
25°	1198	1208	1293	1382	1446	549
35°	769	788	874	977	1066	476
45°	369	391	457	546	631	290
55°	132	155	200	256	315	124
65°	15	28	63	76	85	25
75°	2	2	1	0	0	3
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°	2043.5	2043.5	2043.5	2043.5	2043.5
2.5°	2048.3	2028.9	2034.0	2033.9	2028.5
5°	2003.0	1982.7	1998.0	2005.1	2012.9
7.5°	1918.4	1902.5	1932.0	1954.1	1970.2
10°	1852.7	1839.2	1877.4	1907.6	1929.8
12.5°	1776.8	1766.3	1812.6	1853.9	1882.4
15°	1652.0	1646.2	1704.4	1761.6	1799.3
17.5°	1518.4	1518.2	1584.6	1655.6	1701.1
20°	1426.6	1429.5	1500.8	1579.1	1632.2
22.5°	1334.9	1341.6	1417.7	1499.4	1560.3
25°	1198.2	1207.9	1293.1	1381.6	1446.4
27.5°	1066.9	1081.1	1170.7	1262.7	1341.6
30°	980.7	997.2	1088.5	1185.2	1266.4
32.5°	896.1	915.6	1004.7	1107.0	1189.7
35°	769.2	788.5	874.0	976.8	1065.8
37.5°	638.1	657.0	740.5	841.7	937.8
40°	552.6	573.9	653.5	751.6	849.2
42.5°	475.1	496.4	571.2	667.6	759.9
45°	368.8	391.0	456.8	545.7	630.8
47.5°	280.6	304.7	362.4	442.9	520.4
50°	228.4	252.5	309.4	380.3	454.8
52.5°	186.5	209.9	261.2	328.0	396.2
55°	132.5	154.7	199.7	256.4	315.4
57.5°	91.5	110.7	151.1	198.4	244.6
60°	66.2	84.6	122.6	161.0	198.7
62.5°	44.1	60.9	98.1	127.5	152.8
65°	14.8	28.4	63.3	76.3	85.0
67.5°	7.5	9.1	33.2	35.1	38.0
70°	5.9	5.9	15.8	16.9	19.8
72.5°	4.4	4.4	6.3	8.1	8.7
75°	2.0	2.0	1.0	0.0	0.0
77.5°	1.0	1.0	0.8	0.0	0.0
80°	1.0	1.0	0.0	0.0	0.0
82.5°	0.2	0.2	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)