

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: P521788

Luminaire Tested: SQ4-WB-050U-100D-92765-1D-UNV-STD-W-4_5700K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521788
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2101-105-51, G2-2009-966-13)
Test Lab: INNOVATION CENTER
Issue Date: 5-5-2021
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-WB-050U-100D-92765-1D-UNV-STD-W-4_5700K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 2700K-6500K CCT, 90 CRI LEDS, TUNED TO 5700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5957.2 lumens
Efficiency: N/A
Efficacy: 102.5 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Direct

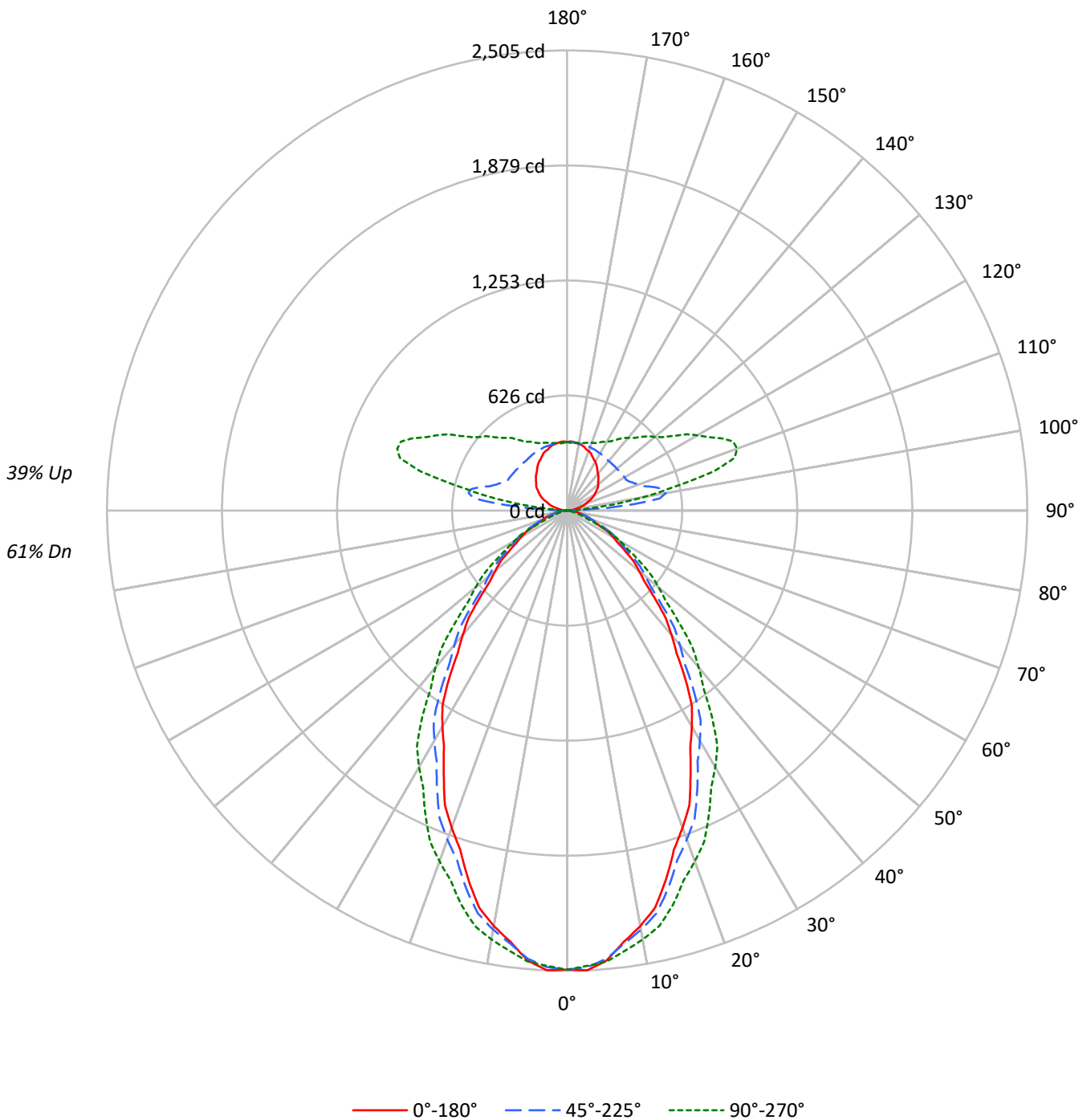
Input Watts (W): 58.1
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Luminous Intensity Polar Plot



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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									20									20									20									
RC	80									70									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	110	110	110	110	103	103	103	103	90	90	90	77	77	77	66	66	66	61	61	61	61	61	61	61													
1	102	98	94	91	95	92	89	86	81	78	76	70	69	67	61	60	59	54	54	54	54	54	54	54													
2	94	87	82	77	88	82	77	73	72	69	66	63	61	59	55	53	52	48	48	48	48	48	48	48													
3	87	78	71	66	81	74	68	63	65	61	57	58	54	51	50	48	46	42	42	42	42	42	42	42													
4	80	70	63	57	75	66	60	55	59	54	50	52	48	45	46	43	41	38	38	38	38	38	38	38													
5	74	63	56	50	69	60	53	48	54	48	44	48	44	40	42	39	37	34	34	34	34	34	34	34													
6	69	58	50	45	65	55	48	43	49	44	40	44	40	36	39	36	33	31	31	31	31	31	31	31													
7	64	53	45	40	60	50	43	38	45	40	36	40	36	33	36	33	30	28	28	28	28	28	28	28													
8	60	48	41	36	56	46	39	35	42	36	32	37	33	30	34	30	27	25	25	25	25	25	25	25													
9	56	45	37	33	53	42	36	32	39	33	29	35	30	27	31	28	25	23	23	23	23	23	23	23													
10	53	41	34	30	50	39	33	29	36	31	27	32	28	25	29	26	23	22	22	22	22	22	22	22													

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	23054	23054	23054
5°	22766	22686	22817
10°	21510	21705	22208
15°	19857	20317	21229
20°	18032	18710	19948
25°	16174	17056	18585
30°	14461	15407	17171
35°	12646	13560	15498
40°	10643	11489	13417
45°	8784	9542	11202
50°	7333	7995	9333
55°	6225	6860	7707
60°	5322	5949	6150
65°	4237	5004	3973
70°	3755	3903	2425
75°	3479	3165	1486
80°	3204	2912	1280
85°	2901	2668	1048

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 11202 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	229.2	3.8
10°-20°	596.2	10.0
20°-30°	772.2	13.0
30°-40°	756.2	12.7
40°-50°	578.8	9.7
50°-60°	385.7	6.5
60°-70°	210.5	3.5
70°-80°	87.7	1.5
80°-90°	24.8	0.4
90°-100°	169.9	2.9
100°-110°	483.4	8.1
110°-120°	463.2	7.8
120°-130°	366.6	6.2
130°-140°	294.2	4.9
140°-150°	230.4	3.9
150°-160°	168.5	2.8
160°-170°	104.4	1.8
170°-180°	35.4	0.6
0°-30°	1597.6	26.8
0°-40°	2353.7	39.5
0°-60°	3318.2	55.7
0°-90°	3641.2	61.1
90°-120°	1116.5	18.7
90°-150°	2007.7	33.7
90°-180°	2316.0	38.9
0°-180°	5957.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2499	2499	2499	2499	2499	
5°	2458	2434	2450	2455	2464	229
15°	2079	2071	2127	2185	2222	581
25°	1589	1593	1675	1748	1826	731
35°	1123	1128	1204	1285	1376	698
45°	673	686	731	787	858	525
55°	387	403	426	443	479	351
65°	194	210	229	200	182	202
75°	98	98	89	61	42	104
85°	27	27	25	16	10	30
90°	0	0	0	0	0	2
95°	18	73	329	114	70	21
105°	75	114	493	870	827	79
115°	140	169	374	791	929	137
125°	197	218	356	592	707	176
135°	241	261	352	500	565	186
145°	284	299	355	433	471	178
155°	325	332	364	391	407	150
165°	359	360	368	376	381	101
175°	376	374	372	370	367	36
180°	373	373	373	373	373	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2498.8	2498.8	2498.8	2498.8	2498.8
2.5°	2504.9	2482.7	2488.3	2488.1	2481.3
5°	2458.2	2433.6	2449.5	2455.1	2463.7
7.5°	2367.0	2348.4	2377.3	2398.8	2416.1
10°	2296.0	2279.9	2316.8	2348.0	2370.5
12.5°	2213.5	2200.0	2245.7	2287.6	2317.0
15°	2078.9	2071.4	2127.1	2185.0	2222.5
17.5°	1934.8	1931.2	1995.1	2062.6	2110.7
20°	1836.6	1835.5	1905.6	1976.0	2031.7
22.5°	1737.4	1739.8	1813.5	1886.7	1950.1
25°	1588.8	1593.0	1675.4	1748.4	1825.6
27.5°	1451.3	1453.2	1538.3	1615.4	1697.7
30°	1357.4	1362.8	1446.2	1526.0	1611.8
32.5°	1263.5	1269.8	1351.5	1434.0	1521.4
35°	1122.8	1128.1	1203.9	1284.9	1376.0
37.5°	977.6	984.9	1052.2	1128.7	1218.4
40°	883.7	894.5	953.9	1026.1	1114.0
42.5°	793.4	806.7	861.8	930.3	1009.6
45°	673.2	686.1	731.3	786.7	858.5
47.5°	569.7	584.5	619.3	666.9	728.3
50°	510.9	524.9	557.0	592.3	650.2
52.5°	459.2	473.1	501.7	529.0	578.3
55°	387.0	403.1	426.5	442.7	479.1
57.5°	327.8	343.3	361.8	369.1	391.2
60°	288.4	305.5	322.4	321.5	333.3
62.5°	252.4	267.0	283.8	272.2	272.8
65°	194.1	210.2	229.2	200.2	182.0
67.5°	156.8	160.2	179.8	139.6	118.0
70°	139.2	139.2	144.7	108.1	89.9
72.5°	122.6	122.6	117.5	87.9	68.9
75°	97.6	97.6	88.8	61.0	41.7
77.5°	75.2	74.4	68.0	45.5	30.3
80°	60.3	60.3	54.8	35.9	24.1
82.5°	47.1	47.1	42.5	28.1	18.0
85°	27.4	27.4	25.2	16.3	9.9
87.5°	9.6	9.6	8.8	5.2	4.4
90°	0.0	0.0	0.0	0.0	0.0
92.5°	5.7	30.1	69.8	20.3	15.3
95°	18.4	73.2	328.9	113.8	70.2
97.5°	33.9	85.7	506.5	362.5	248.4
100°	44.7	93.2	545.1	552.1	425.3
102.5°	56.6	101.2	536.6	706.7	596.0
105°	75.1	114.0	492.6	870.2	827.2
107.5°	94.0	128.8	441.3	916.3	954.5
110°	107.0	139.6	411.8	898.6	984.6

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	119.5	150.4	392.0	856.9	979.5
115°	139.6	168.8	373.6	791.4	929.3
117.5°	157.4	184.7	362.6	719.7	865.8
120°	171.5	194.4	361.5	678.7	818.7
122.5°	182.9	205.8	358.7	642.8	772.8
125°	197.1	218.5	356.5	591.7	707.4
127.5°	212.5	232.6	355.4	561.2	656.5
130°	220.4	240.5	353.7	539.9	623.1
132.5°	229.0	248.5	353.7	523.3	599.8
135°	241.0	261.1	352.3	499.8	564.9
137.5°	252.3	271.9	352.2	479.9	536.2
140°	260.9	281.0	351.6	463.4	517.5
142.5°	270.5	287.3	353.3	450.2	498.7
145°	284.2	298.8	355.1	432.6	471.4
147.5°	296.0	310.2	358.2	414.7	448.3
150°	306.2	315.9	359.4	408.8	432.4
152.5°	314.2	324.4	360.5	400.9	422.8
155°	324.6	332.3	363.6	390.9	406.9
157.5°	337.7	342.3	364.3	386.4	397.8
160°	344.5	348.0	367.2	383.0	392.7
162.5°	348.5	352.5	367.7	380.1	387.6
165°	358.7	360.1	367.9	375.8	381.4
167.5°	365.6	364.4	371.1	374.7	377.0
170°	367.9	367.2	370.0	370.8	373.6
172.5°	373.0	370.6	371.7	369.6	371.9
175°	375.7	373.6	372.1	370.0	367.2
177.5°	376.8	373.5	371.7	369.5	370.0
180°	372.9	372.9	372.9	372.9	372.9

(END OF REPORT)