

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: P521840

Luminaire Tested: SQ4-WB-075U-100D-92765-1D-UNV-STD-W-4_5700K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521840
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-075U-100D-92765-1D-UNV-STD-W-4_5700K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 750 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: 7108.1 lumens
Efficiency: N/A
Efficacy: 107.9 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: General Diffuse

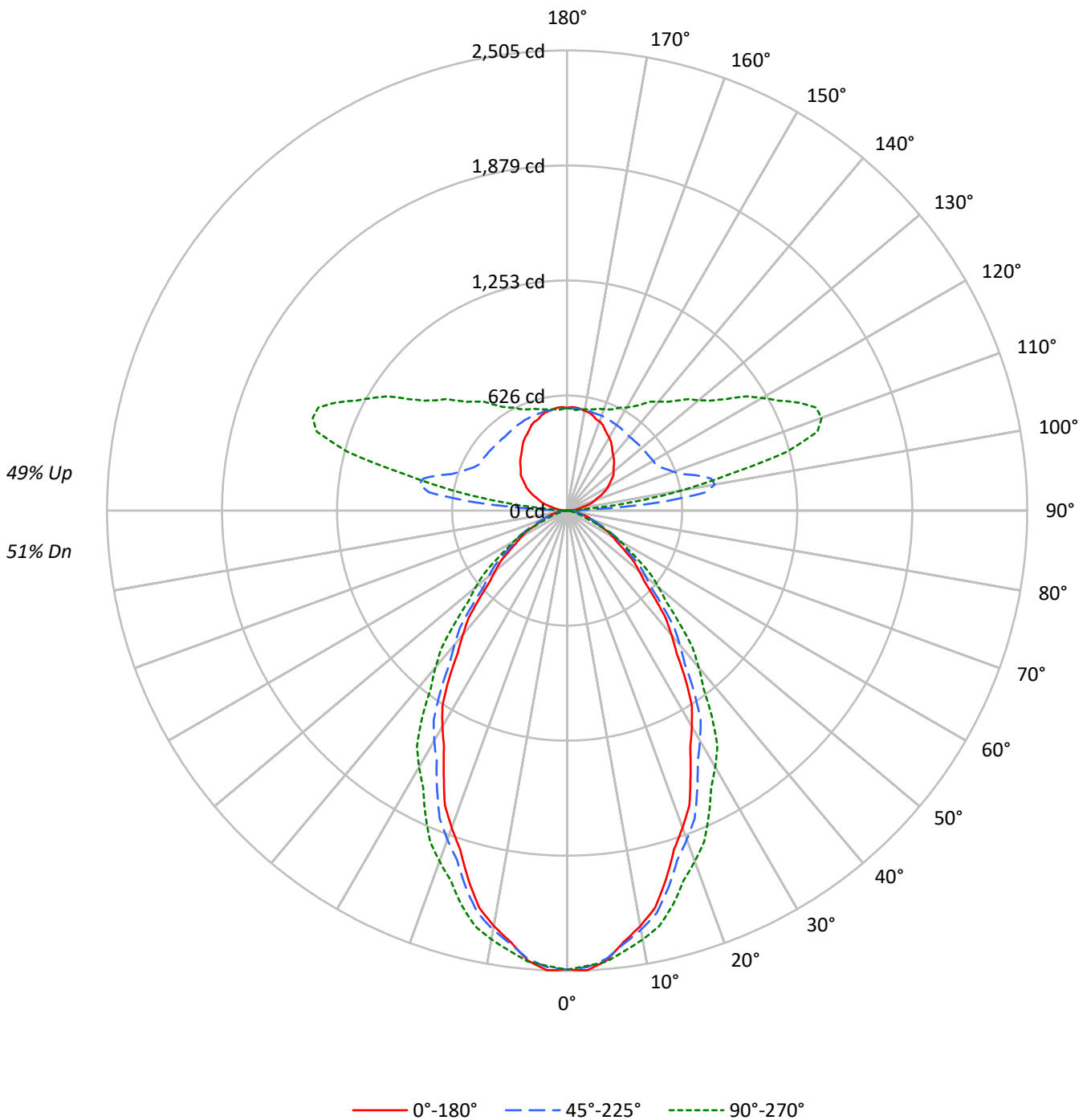
Input Watts (W): 65.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	107	107	107	107	99	99	99	99	84	84	84	70	70	70	57	57	57	51				51
1	99	95	92	89	92	88	85	83	75	73	71	63	62	61	52	51	51	45				45
2	91	85	79	75	84	79	74	70	67	64	61	57	55	53	48	46	45	40				40
3	84	76	69	64	78	70	65	60	61	56	53	52	49	46	43	41	39	35				35
4	78	68	60	55	72	63	57	52	55	50	46	47	43	41	40	37	35	32				32
5	72	61	54	48	66	57	51	46	50	45	41	43	39	36	36	34	31	28				28
6	67	55	48	42	62	52	45	40	45	40	36	39	35	32	33	31	28	26				26
7	62	50	43	38	57	47	41	36	42	36	33	36	32	29	31	28	26	23				23
8	58	46	39	34	54	43	37	32	38	33	29	33	29	26	29	26	23	21				21
9	54	42	35	31	50	40	34	29	35	30	27	31	27	24	27	24	22	20				20
10	51	39	32	28	47	37	31	27	33	28	24	29	25	22	25	22	20	18				18

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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CATALOG NUMBER: SQ4-WB-075U-100D-92765-1D-UNV-STD-W-4_5700K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	229.2	3.2
10°-20°	596.2	8.4
20°-30°	772.2	10.9
30°-40°	756.2	10.6
40°-50°	578.8	8.1
50°-60°	385.7	5.4
60°-70°	210.5	3.0
70°-80°	87.7	1.2
80°-90°	24.8	0.3
90°-100°	254.3	3.6
100°-110°	723.6	10.2
110°-120°	693.3	9.8
120°-130°	548.7	7.7
130°-140°	440.5	6.2
140°-150°	344.8	4.9
150°-160°	252.3	3.5
160°-170°	156.3	2.2
170°-180°	53.0	0.7
0°-30°	1597.6	22.5
0°-40°	2353.7	33.1
0°-60°	3318.2	46.7
0°-90°	3641.2	51.2
90°-120°	1671.3	23.5
90°-150°	3005.3	42.3
90°-180°	3467.0	48.8
0°-180°	7108.1	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°	28	110	492	170	105	32
105°	112	171	737	1303	1238	119
115°	209	253	559	1185	1391	206
125°	295	327	534	886	1059	264
135°	361	391	527	748	846	278
145°	426	447	532	648	706	266
155°	486	497	544	585	609	225
165°	537	539	551	563	571	151
175°	562	559	557	554	550	53
180°	558	558	558	558	558	

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CATALOG NUMBER: SQ4-WB-075U-100D-92765-1D-UNV-STD-W-4_5700K

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°	8.5	45.0	104.4	30.4	22.9
95°	27.6	109.5	492.3	170.4	105.0
97.5°	50.7	128.3	758.2	542.6	371.8
100°	66.8	139.5	816.0	826.5	636.6
102.5°	84.7	151.5	803.2	1057.9	892.1
105°	112.5	170.6	737.4	1302.6	1238.3
107.5°	140.7	192.8	660.6	1371.6	1428.8
110°	160.2	209.0	616.5	1345.2	1473.8

TEST NUMBER: P521840

CATALOG NUMBER: SQ4-WB-075U-100D-92765-1D-UNV-STD-W-4_5700K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	178.9	225.2	586.8	1282.8	1466.2
115°	209.0	252.6	559.2	1184.6	1391.1
117.5°	235.6	276.4	542.8	1077.3	1296.0
120°	256.8	291.0	541.1	1016.0	1225.5
122.5°	273.8	308.0	536.9	962.1	1156.8
125°	295.0	327.1	533.7	885.7	1058.9
127.5°	318.1	348.2	532.0	840.0	982.8
130°	330.0	360.1	529.5	808.2	932.7
132.5°	342.7	372.0	529.5	783.3	897.9
135°	360.8	390.9	527.4	748.1	845.7
137.5°	377.7	407.0	527.1	718.4	802.6
140°	390.5	420.6	526.3	693.7	774.6
142.5°	404.9	430.0	528.8	673.9	746.6
145°	425.5	447.3	531.6	647.5	705.6
147.5°	443.1	464.3	536.3	620.8	671.0
150°	458.4	472.9	538.0	612.0	647.3
152.5°	470.3	485.6	539.7	600.0	632.8
155°	486.0	497.4	544.3	585.2	609.1
157.5°	505.5	512.3	545.4	578.5	595.5
160°	515.7	520.9	549.6	573.3	587.8
162.5°	521.6	527.6	550.5	569.0	580.2
165°	536.9	539.0	550.7	562.6	570.9
167.5°	547.3	545.4	555.6	561.0	564.3
170°	550.7	549.7	553.9	555.0	559.2
172.5°	558.3	554.8	556.4	553.3	556.6
175°	562.4	559.3	557.1	553.8	549.6
177.5°	564.1	559.1	556.4	553.0	553.9
180°	558.1	558.1	558.1	558.1	558.1

(END OF REPORT)