

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: P521783

Luminaire Tested: SQ4-WB-050U-100D-92765-1D-UNV-STD-W-4_3000K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521783
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_3000K
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 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5482.8 lumens
Efficiency: N/A
Efficacy: 94.2 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

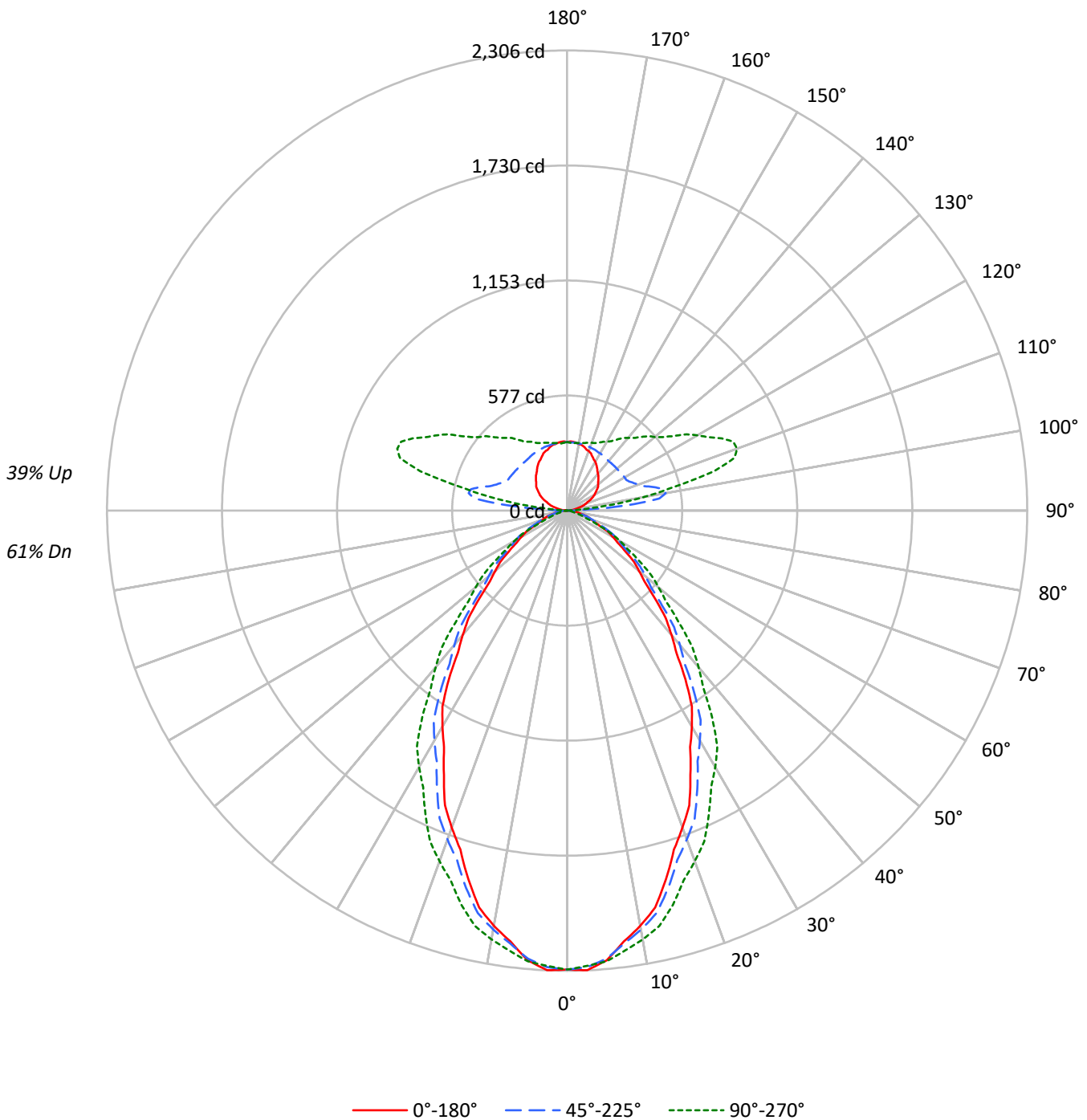
Input Watts (W): 58.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



TEST NUMBER: P521783

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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	0
RCR																				
0	110	110	110	110	103	103	103	103	90	90	90		77	77	77		66	66	66	61
1	102	98	94	91	95	92	89	86	81	78	76		70	69	67		61	60	59	54
2	94	87	82	77	88	82	77	73	72	69	66		63	61	59		55	53	52	48
3	87	78	71	66	81	74	68	63	65	61	57		58	54	51		50	48	46	42
4	80	70	63	57	75	66	60	55	59	54	50		52	48	45		46	43	41	38
5	74	63	56	50	69	60	53	48	54	48	44		48	44	40		42	39	37	34
6	69	58	50	45	65	55	48	43	49	44	40		44	40	36		39	36	33	31
7	64	53	45	40	60	50	43	38	45	40	36		40	36	33		36	33	30	28
8	60	48	41	36	56	46	39	35	42	36	32		37	33	30		34	30	27	25
9	56	45	37	33	53	42	36	32	39	33	29		35	30	27		31	28	25	23
10	53	41	34	30	50	39	33	29	36	31	27		32	28	25		29	26	23	22

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	21218	21218	21218
5°	20954	20879	21000
10°	19797	19977	20439
15°	18275	18699	19538
20°	16596	17220	18359
25°	14885	15697	17104
30°	13309	14180	15803
35°	11638	12480	14265
40°	9797	10573	12349
45°	8084	8782	10309
50°	6750	7358	8589
55°	5730	6315	7094
60°	4897	5475	5661
65°	3899	4604	3657
70°	3458	3593	2231
75°	3201	2912	1365
80°	2949	2683	1180
85°	2668	2456	963

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 10309 cd/sqm

TEST NUMBER: P521783

CATALOG NUMBER: SQ4-WB-050U-100D-92765-1D-UNV-STD-W-4_3000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	210.9	3.8
10°-20°	548.7	10.0
20°-30°	710.7	13.0
30°-40°	696.0	12.7
40°-50°	532.7	9.7
50°-60°	355.0	6.5
60°-70°	193.7	3.5
70°-80°	80.7	1.5
80°-90°	22.9	0.4
90°-100°	156.4	2.9
100°-110°	444.9	8.1
110°-120°	426.3	7.8
120°-130°	337.4	6.2
130°-140°	270.8	4.9
140°-150°	212.0	3.9
150°-160°	155.1	2.8
160°-170°	96.1	1.8
170°-180°	32.6	0.6
0°-30°	1470.3	26.8
0°-40°	2166.3	39.5
0°-60°	3054.0	55.7
0°-90°	3351.2	61.1
90°-120°	1027.6	18.7
90°-150°	1847.8	33.7
90°-180°	2132.0	38.9
0°-180°	5482.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2300	2300	2300	2300	2300	
5°	2262	2240	2254	2260	2268	210
15°	1913	1906	1958	2011	2046	534
25°	1462	1466	1542	1609	1680	672
35°	1033	1038	1108	1183	1266	642
45°	620	631	673	724	790	483
55°	356	371	393	407	441	323
65°	179	193	211	184	168	186
75°	90	90	82	56	38	96
85°	25	25	23	15	9	27
90°	0	0	0	0	0	2
95°	17	67	303	105	65	19
105°	69	105	453	801	761	73
115°	128	155	344	728	855	127
125°	181	201	328	545	651	162
135°	222	240	324	460	520	171
145°	262	275	327	398	434	163
155°	299	306	335	360	374	138
165°	330	331	339	346	351	93
175°	346	344	342	340	338	33
180°	343	343	343	343	343	

TEST NUMBER: P521783

CATALOG NUMBER: SQ4-WB-050U-100D-92765-1D-UNV-STD-W-4_3000K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2299.8	2299.8	2299.8	2299.8	2299.8
2.5°	2305.5	2284.9	2290.1	2290.0	2283.7
5°	2262.5	2239.8	2254.4	2259.6	2267.5
7.5°	2178.5	2161.3	2188.0	2207.7	2223.7
10°	2113.1	2098.3	2132.3	2161.0	2181.7
12.5°	2037.2	2024.8	2066.9	2105.5	2132.5
15°	1913.3	1906.4	1957.7	2011.0	2045.5
17.5°	1780.7	1777.4	1836.2	1898.4	1942.6
20°	1690.3	1689.3	1753.9	1818.6	1869.9
22.5°	1599.1	1601.2	1669.1	1736.4	1794.8
25°	1462.2	1466.2	1541.9	1609.2	1680.2
27.5°	1335.7	1337.5	1415.8	1486.8	1562.5
30°	1249.3	1254.2	1331.0	1404.5	1483.4
32.5°	1162.9	1168.6	1243.9	1319.8	1400.3
35°	1033.3	1038.3	1108.0	1182.6	1266.5
37.5°	899.7	906.4	968.4	1038.9	1121.3
40°	813.4	823.2	877.9	944.4	1025.3
42.5°	730.2	742.4	793.2	856.2	929.2
45°	619.6	631.4	673.1	724.0	790.1
47.5°	524.3	538.0	570.0	613.8	670.3
50°	470.3	483.1	512.6	545.1	598.4
52.5°	422.6	435.4	461.8	486.8	532.2
55°	356.2	371.0	392.6	407.4	441.0
57.5°	301.7	315.9	333.0	339.7	360.1
60°	265.4	281.2	296.7	295.9	306.8
62.5°	232.3	245.7	261.2	250.5	251.1
65°	178.6	193.4	210.9	184.3	167.5
67.5°	144.3	147.5	165.5	128.5	108.6
70°	128.2	128.2	133.2	99.5	82.7
72.5°	112.8	112.8	108.2	80.9	63.4
75°	89.8	89.8	81.7	56.1	38.3
77.5°	69.2	68.4	62.6	41.9	27.9
80°	55.5	55.5	50.5	33.1	22.2
82.5°	43.4	43.4	39.2	25.8	16.5
85°	25.2	25.2	23.2	15.0	9.1
87.5°	8.9	8.9	8.1	4.8	4.0
90°	0.0	0.0	0.0	0.0	0.0
92.5°	5.2	27.7	64.2	18.7	14.1
95°	17.0	67.4	302.7	104.8	64.6
97.5°	31.2	78.9	466.2	333.6	228.6
100°	41.1	85.8	501.7	508.2	391.4
102.5°	52.1	93.1	493.9	650.5	548.5
105°	69.2	104.9	453.4	800.9	761.3
107.5°	86.5	118.5	406.2	843.3	878.5
110°	98.5	128.5	379.0	827.1	906.2

TEST NUMBER: P521783

CATALOG NUMBER: SQ4-WB-050U-100D-92765-1D-UNV-STD-W-4_3000K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	<i>110.0</i>	138.4	360.8	788.7	901.5
115°	<i>128.5</i>	155.3	343.8	728.3	855.3
117.5°	<i>144.8</i>	170.0	333.8	662.4	796.8
120°	<i>157.9</i>	178.9	332.7	624.7	753.5
122.5°	<i>168.3</i>	189.4	330.1	591.6	711.2
125°	<i>181.4</i>	201.1	328.2	544.6	651.1
127.5°	<i>195.6</i>	214.1	327.1	516.5	604.2
130°	<i>202.9</i>	221.4	325.5	496.9	573.4
132.5°	<i>210.7</i>	228.7	325.5	481.6	552.1
135°	<i>221.8</i>	240.3	324.2	460.0	520.0
137.5°	<i>232.3</i>	250.2	324.1	441.7	493.5
140°	<i>240.1</i>	258.6	323.6	426.5	476.2
142.5°	<i>249.0</i>	264.4	325.2	414.4	459.0
145°	<i>261.6</i>	275.0	326.8	398.1	433.8
147.5°	<i>272.4</i>	285.5	329.7	381.7	412.6
150°	<i>281.8</i>	290.8	330.8	376.3	398.0
152.5°	<i>289.1</i>	298.6	331.8	368.9	389.1
155°	<i>298.8</i>	305.8	334.7	359.8	374.5
157.5°	<i>310.8</i>	315.0	335.3	355.7	366.1
160°	<i>317.1</i>	320.3	337.9	352.5	361.4
162.5°	<i>320.7</i>	324.4	338.5	349.8	356.7
165°	<i>330.1</i>	331.4	338.6	345.9	351.0
167.5°	<i>336.5</i>	335.4	341.6	344.9	346.9
170°	<i>338.6</i>	338.0	340.5	341.3	343.8
172.5°	<i>343.3</i>	341.1	342.1	340.2	342.2
175°	<i>345.8</i>	343.9	342.5	340.5	337.9
177.5°	<i>346.8</i>	343.7	342.1	340.0	340.5
180°	<i>343.2</i>	343.2	343.2	343.2	343.2

(END OF REPORT)