

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: P521760

Luminaire Tested: SQ4-WB-050U-050D-92765-1D-UNV-STD-W-4_4500K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521760
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-050D-92765-1D-UNV-STD-W-4_4500K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 2700K-6500K CCT, 90 CRI LEDS, TUNED TO 4500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4062.1 lumens
Efficiency: N/A
Efficacy: 111.3 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

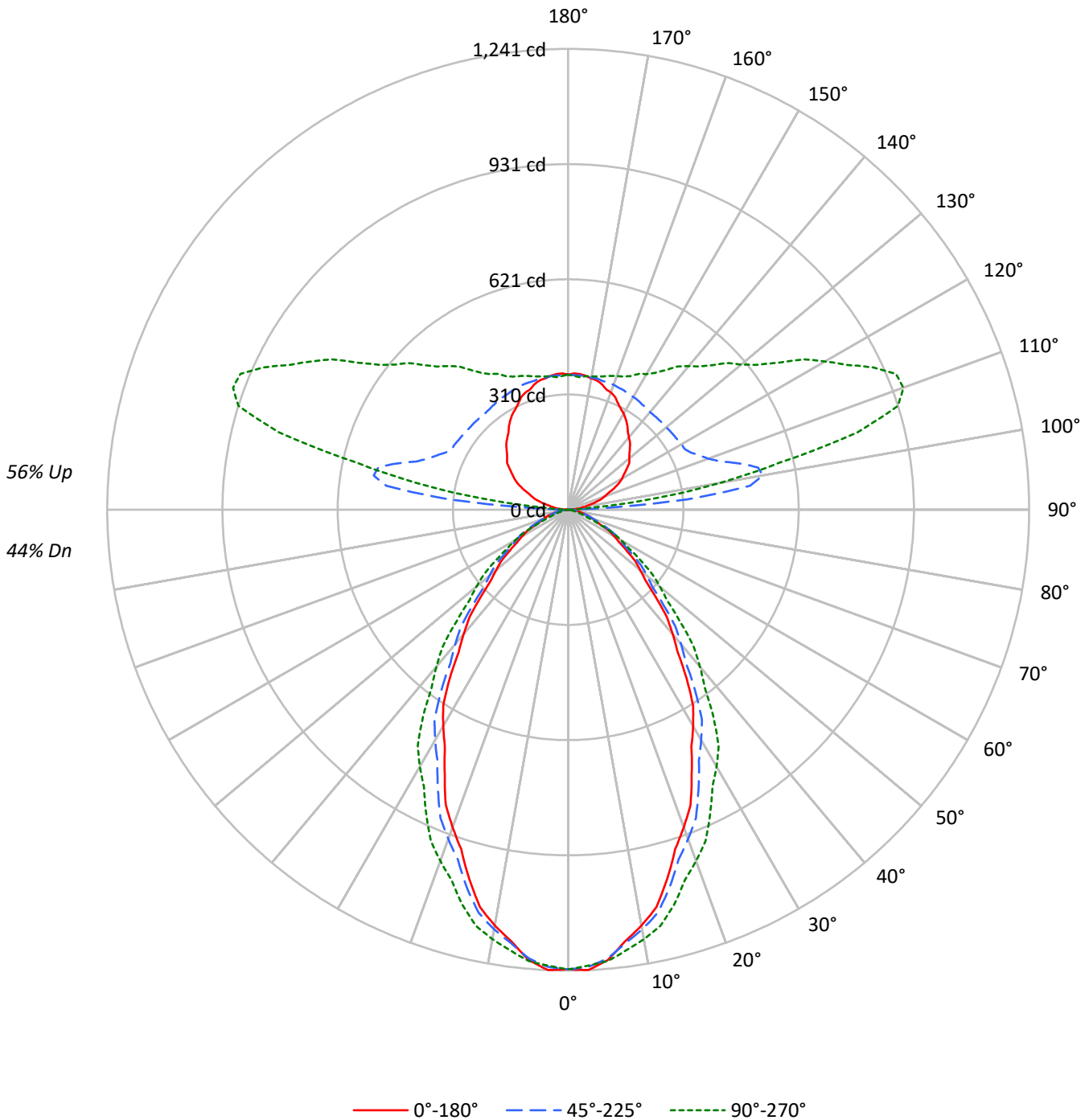
Input Watts (W): 36.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



TEST NUMBER: P521760

CATALOG NUMBER: SQ4-WB-050U-050D-92765-1D-UNV-STD-W-4_4500K

Luminous Intensity Polar Plot



TEST NUMBER: P521760

CATALOG NUMBER: SQ4-WB-050U-050D-92765-1D-UNV-STD-W-4_4500K

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	106	106	106	106	97	97	97	97	80	80	80		65	65	65		51	51	51	44
1	98	94	90	87	89	86	83	80	72	70	68		59	57	56		47	46	45	39
2	90	83	77	73	82	76	72	68	64	61	58		53	50	48		42	41	40	35
3	82	74	67	62	76	68	62	58	58	53	50		48	45	42		38	37	35	31
4	76	66	59	53	70	61	55	50	52	47	44		43	40	37		35	33	31	27
5	70	59	52	46	64	55	49	44	47	42	38		39	36	33		32	30	28	25
6	65	54	46	41	60	50	43	39	43	38	34		36	32	29		30	27	25	22
7	60	49	42	36	55	46	39	34	39	34	30		33	29	27		27	25	23	20
8	56	45	37	32	52	42	35	31	36	31	27		31	27	24		25	23	21	18
9	53	41	34	29	48	38	32	28	33	28	25		28	25	22		24	21	19	17
10	49	38	31	27	45	35	29	25	31	26	23		26	23	20		22	19	18	16

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	11419	11419	11419
5°	11277	11237	11302
10°	10654	10751	11001
15°	9835	10064	10515
20°	8932	9268	9881
25°	8011	8448	9206
30°	7163	7631	8506
35°	6263	6716	7677
40°	5272	5691	6646
45°	4351	4726	5548
50°	3633	3960	4623
55°	3084	3399	3817
60°	2635	2947	3046
65°	2098	2478	1969
70°	1861	1934	1200
75°	1722	1568	734
80°	1589	1445	632
85°	1440	1323	519

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 5548 cd/sqm

TEST NUMBER: P521760

CATALOG NUMBER: SQ4-WB-050U-050D-92765-1D-UNV-STD-W-4_4500K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	113.5	2.8
10°-20°	295.3	7.3
20°-30°	382.5	9.4
30°-40°	374.5	9.2
40°-50°	286.7	7.1
50°-60°	191.0	4.7
60°-70°	104.3	2.6
70°-80°	43.4	1.1
80°-90°	12.3	0.3
90°-100°	165.7	4.1
100°-110°	471.4	11.6
110°-120°	451.7	11.1
120°-130°	357.5	8.8
130°-140°	286.9	7.1
140°-150°	224.6	5.5
150°-160°	164.4	4.0
160°-170°	101.8	2.5
170°-180°	34.5	0.9
0°-30°	791.3	19.5
0°-40°	1165.9	28.7
0°-60°	1643.6	40.5
0°-90°	1803.6	44.4
90°-120°	1088.8	26.8
90°-150°	1957.8	48.2
90°-180°	2259.0	55.6
0°-180°	4062.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1238	1238	1238	1238	1238	
5°	1218	1205	1213	1216	1220	113
15°	1030	1026	1054	1082	1101	288
25°	787	789	830	866	904	362
35°	556	559	596	636	682	346
45°	334	340	362	390	425	260
55°	192	200	211	219	237	174
65°	96	104	114	99	90	100
75°	48	48	44	30	21	52
85°	14	14	12	8	5	15
90°	0	0	0	0	0	1
95°	18	71	321	111	68	21
105°	73	111	480	849	807	78
115°	136	165	364	772	906	134
125°	192	213	348	577	690	172
135°	235	255	344	487	551	181
145°	277	291	346	422	460	173
155°	317	324	355	381	397	146
165°	350	351	359	366	372	98
175°	366	364	363	361	358	35
180°	364	364	364	364	364	

TEST NUMBER: P521760

CATALOG NUMBER: SQ4-WB-050U-050D-92765-1D-UNV-STD-W-4_4500K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1237.7	1237.7	1237.7	1237.7	1237.7
2.5°	1240.8	1229.7	1232.5	1232.4	1229.0
5°	1217.6	1205.4	1213.3	1216.1	1220.3
7.5°	1172.4	1163.2	1177.5	1188.2	1196.8
10°	1137.2	1129.3	1147.6	1163.0	1174.2
12.5°	1096.4	1089.7	1112.4	1133.1	1147.7
15°	1029.7	1026.0	1053.6	1082.3	1100.9
17.5°	958.4	956.5	988.2	1021.7	1045.5
20°	909.7	909.2	943.9	978.7	1006.4
22.5°	860.6	861.8	898.3	934.5	966.0
25°	786.9	789.1	829.9	866.0	904.3
27.5°	718.8	719.8	762.0	800.2	840.9
30°	672.4	675.0	716.3	755.9	798.4
32.5°	625.9	628.9	669.4	710.3	753.6
35°	556.1	558.8	596.3	636.5	681.6
37.5°	484.2	487.8	521.2	559.1	603.5
40°	437.7	443.0	472.5	508.2	551.8
42.5°	393.0	399.6	426.9	460.8	500.1
45°	333.5	339.8	362.2	389.7	425.2
47.5°	282.2	289.5	306.7	330.4	360.7
50°	253.1	260.0	275.9	293.4	322.1
52.5°	227.4	234.4	248.5	262.0	286.4
55°	191.7	199.7	211.3	219.3	237.3
57.5°	162.4	170.0	179.2	182.8	193.8
60°	142.8	151.3	159.7	159.3	165.1
62.5°	125.0	132.2	140.6	134.8	135.1
65°	96.1	104.1	113.5	99.2	90.2
67.5°	77.7	79.4	89.1	69.2	58.4
70°	69.0	69.0	71.7	53.6	44.5
72.5°	60.7	60.7	58.2	43.6	34.1
75°	48.3	48.3	44.0	30.2	20.6
77.5°	37.3	36.8	33.7	22.5	15.0
80°	29.9	29.9	27.2	17.8	11.9
82.5°	23.4	23.4	21.1	13.9	8.9
85°	13.6	13.6	12.5	8.1	4.9
87.5°	4.8	4.8	4.3	2.6	2.2
90°	0.0	0.0	0.0	0.0	0.0
92.5°	5.5	29.3	68.0	19.8	14.9
95°	18.0	71.4	320.7	111.0	68.4
97.5°	33.0	83.6	494.0	353.5	242.2
100°	43.5	90.9	531.6	538.4	414.7
102.5°	55.2	98.7	523.3	689.2	581.2
105°	73.3	111.1	480.4	848.6	806.7
107.5°	91.7	125.6	430.4	893.5	930.8
110°	104.4	136.1	401.6	876.3	960.1

TEST NUMBER: P521760

CATALOG NUMBER: SQ4-WB-050U-050D-92765-1D-UNV-STD-W-4_4500K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	116.5	146.7	382.3	835.7	955.2
115°	136.2	164.6	364.3	771.7	906.2
117.5°	153.5	180.1	353.6	701.8	844.3
120°	167.3	189.6	352.5	661.9	798.4
122.5°	178.3	200.6	349.8	626.8	753.6
125°	192.2	213.1	347.7	577.0	689.9
127.5°	207.2	226.8	346.6	547.2	640.2
130°	215.0	234.6	344.9	526.5	607.6
132.5°	223.3	242.3	344.9	510.3	584.9
135°	235.0	254.6	343.5	487.4	550.9
137.5°	246.1	265.1	343.4	468.0	522.9
140°	254.4	274.0	342.9	451.9	504.6
142.5°	263.8	280.1	344.5	439.0	486.4
145°	277.2	291.4	346.3	421.8	459.7
147.5°	288.7	302.4	349.4	404.4	437.1
150°	298.6	308.1	350.5	398.7	421.7
152.5°	306.4	316.4	351.6	390.9	412.3
155°	316.6	324.0	354.6	381.2	396.8
157.5°	329.3	333.8	355.3	376.8	387.9
160°	335.9	339.3	358.1	373.5	382.9
162.5°	339.8	343.7	358.6	370.7	378.0
165°	349.8	351.1	358.8	366.5	371.9
167.5°	356.5	355.3	361.9	365.4	367.6
170°	358.8	358.1	360.8	361.6	364.3
172.5°	363.7	361.4	362.5	360.5	362.6
175°	366.4	364.3	362.9	360.8	358.1
177.5°	367.5	364.2	362.5	360.3	360.8
180°	363.6	363.6	363.6	363.6	363.6

(END OF REPORT)