

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: P521708

Luminaire Tested: SQ4-WB-025U-050D-92765-1D-UNV-STD-W-4_4500K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521708
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-025U-050D-92765-1D-UNV-STD-W-4_4500K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 250 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: 3807.6 lumens
Efficiency: N/A
Efficacy: 109.7 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

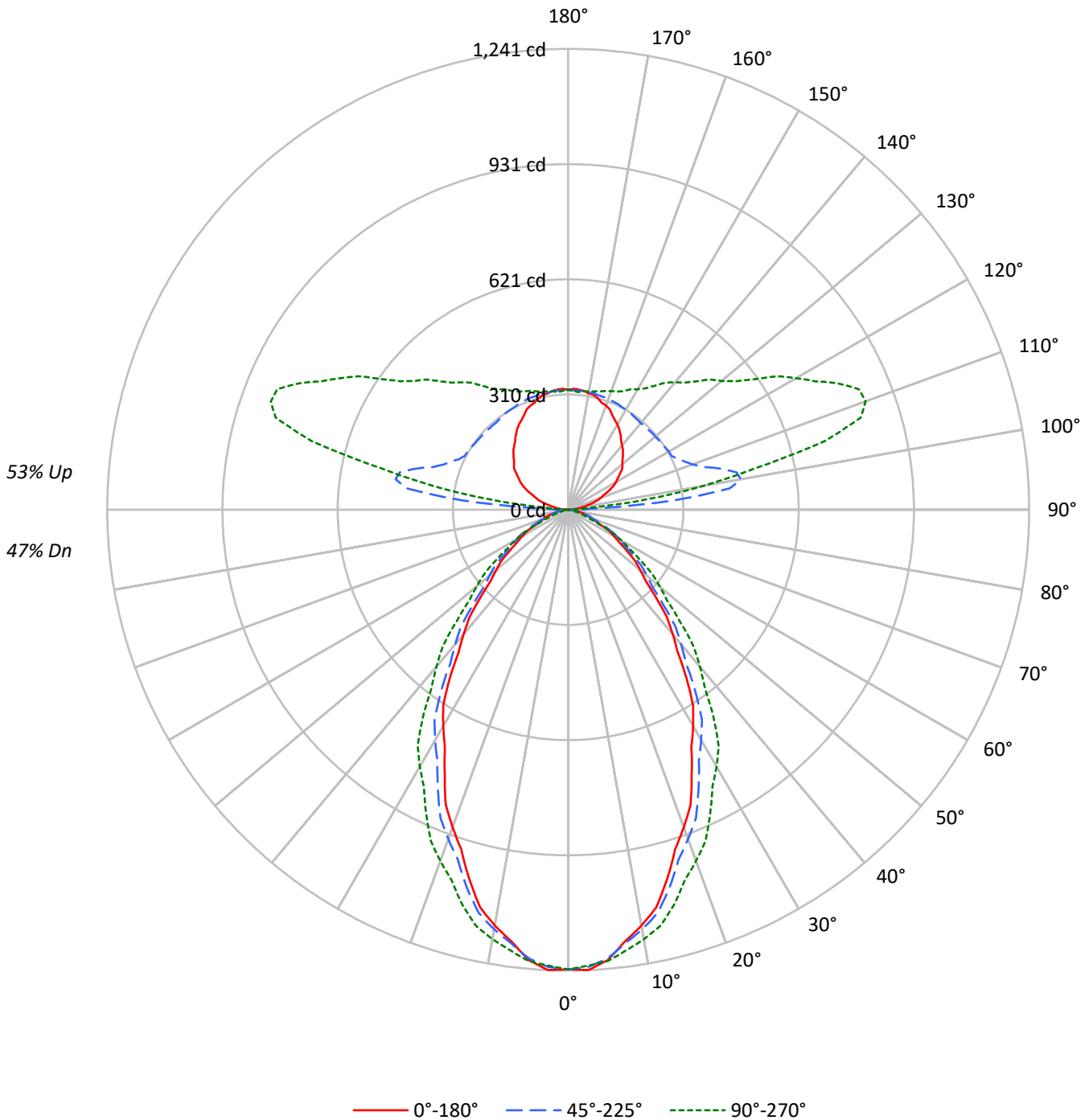
Input Watts (W): 34.7
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



TEST NUMBER: P521708

CATALOG NUMBER: SQ4-WB-025U-050D-92765-1D-UNV-STD-W-4_4500K

Luminous Intensity Polar Plot



TEST NUMBER: P521708

CATALOG NUMBER: SQ4-WB-025U-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	50	30	10	0	
RCR																						
0	107	107	107	107	98	98	98	98	82	82	82	67	67	67	54	54	54	47				47
1	98	94	91	88	90	87	84	81	73	71	69	61	59	58	49	48	47	42				42
2	90	84	78	74	83	77	73	69	66	62	59	55	52	50	45	43	42	37				37
3	83	75	68	63	76	69	63	59	59	55	51	49	46	44	41	39	37	33				33
4	77	67	60	54	71	62	56	51	53	48	45	45	41	39	37	35	33	29				29
5	71	60	53	47	65	56	49	45	48	43	39	41	37	34	34	31	29	26				26
6	66	54	47	42	61	51	44	39	44	39	35	37	34	31	31	29	26	24				24
7	61	50	42	37	56	46	40	35	40	35	31	34	31	28	29	26	24	21				21
8	57	45	38	33	53	42	36	31	37	32	28	32	28	25	27	24	22	20				20
9	53	42	35	30	49	39	33	28	34	29	26	29	26	23	25	22	20	18				18
10	50	38	32	27	46	36	30	26	32	27	23	27	24	21	23	21	19	17				17

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: P521708

CATALOG NUMBER: SQ4-WB-025U-050D-92765-1D-UNV-STD-W-4_4500K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	113.5	3.0
10°-20°	295.3	7.8
20°-30°	382.5	10.0
30°-40°	374.5	9.8
40°-50°	286.7	7.5
50°-60°	191.0	5.0
60°-70°	104.3	2.7
70°-80°	43.4	1.1
80°-90°	12.3	0.3
90°-100°	147.0	3.9
100°-110°	418.3	11.0
110°-120°	400.8	10.5
120°-130°	317.2	8.3
130°-140°	254.6	6.7
140°-150°	199.3	5.2
150°-160°	145.8	3.8
160°-170°	90.3	2.4
170°-180°	30.7	0.8
0°-30°	791.3	20.8
0°-40°	1165.9	30.6
0°-60°	1643.6	43.2
0°-90°	1803.6	47.4
90°-120°	966.1	25.4
90°-150°	1737.2	45.6
90°-180°	2004.0	52.6
0°-180°	3807.6	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°	16	63	285	98	61	18
105°	65	99	426	753	716	69
115°	121	146	323	685	804	119
125°	170	189	308	512	612	153
135°	208	226	305	432	489	161
145°	246	258	307	374	408	154
155°	281	288	315	338	352	130
165°	310	312	318	325	330	87
175°	325	323	322	320	318	31
180°	323	323	323	323	323	

TEST NUMBER: P521708

CATALOG NUMBER: SQ4-WB-025U-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°	4.9	26.0	60.4	17.6	13.2
95°	15.9	63.3	284.6	98.5	60.7
97.5°	29.3	74.2	438.3	313.6	214.9
100°	38.6	80.6	471.7	477.7	368.0
102.5°	48.9	87.6	464.3	611.5	515.7
105°	65.0	98.6	426.3	752.9	715.8
107.5°	81.3	111.4	381.9	792.8	825.9
110°	92.6	120.8	356.3	777.6	851.9

TEST NUMBER: P521708

CATALOG NUMBER: SQ4-WB-025U-050D-92765-1D-UNV-STD-W-4_4500K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	103.4	130.2	339.2	741.5	847.5
115°	120.8	146.0	323.2	684.7	804.1
117.5°	136.2	159.8	313.8	622.7	749.1
120°	148.4	168.2	312.8	587.3	708.4
122.5°	158.2	178.0	310.3	556.2	668.7
125°	170.5	189.1	308.5	512.0	612.1
127.5°	183.9	201.3	307.5	485.6	568.1
130°	190.7	208.1	306.1	467.2	539.1
132.5°	198.1	215.0	306.1	452.8	519.0
135°	208.5	225.9	304.8	432.5	488.8
137.5°	218.3	235.3	304.7	415.2	463.9
140°	225.7	243.1	304.2	401.0	447.7
142.5°	234.0	248.6	305.7	389.6	431.5
145°	245.9	258.5	307.3	374.3	407.9
147.5°	256.1	268.4	310.0	358.8	387.9
150°	265.0	273.4	311.0	353.7	374.1
152.5°	271.8	280.7	311.9	346.8	365.8
155°	280.9	287.5	314.6	338.3	352.1
157.5°	292.2	296.2	315.3	334.4	344.2
160°	298.1	301.1	317.7	331.4	339.8
162.5°	301.5	305.0	318.2	328.9	335.4
165°	310.3	311.5	318.3	325.2	330.0
167.5°	316.4	315.3	321.1	324.3	326.2
170°	318.3	317.7	320.2	320.8	323.2
172.5°	322.7	320.7	321.6	319.8	321.8
175°	325.1	323.3	322.0	320.1	317.7
177.5°	326.0	323.2	321.6	319.7	320.2
180°	322.6	322.6	322.6	322.6	322.6

(END OF REPORT)