

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: P521812

Luminaire Tested: SQ4-WB-075U-050D-92765-1D-UNV-STD-W-4_4500K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521812
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-050D-92765-1D-UNV-STD-W-4_4500K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 750 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: 5184.4 lumens
Efficiency: N/A
Efficacy: 116.8 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-Indirect

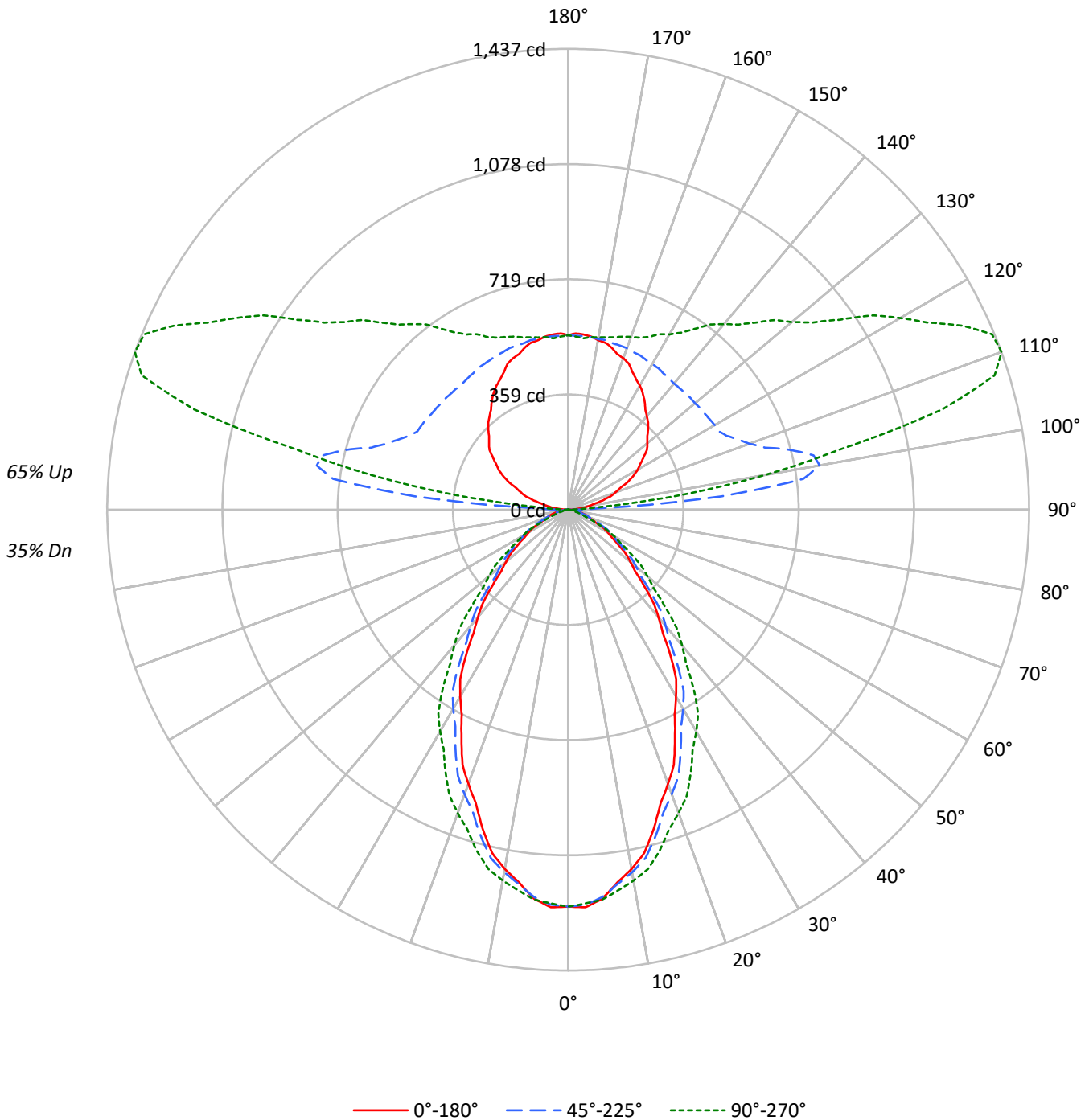
Input Watts (W): 44.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



TEST NUMBER: P521812

CATALOG NUMBER: SQ4-WB-075U-050D-92765-1D-UNV-STD-W-4_4500K

Luminous Intensity Polar Plot



TEST NUMBER: P521812

CATALOG NUMBER: SQ4-WB-075U-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	104	104	104	104	94	94	94	94	75	75	75		58	58	58		42	42	42	35
1	95	91	88	85	86	83	80	77	67	65	63		52	51	50		38	38	37	31
2	87	81	75	70	79	73	69	65	59	56	53		47	45	43		35	34	33	27
3	80	72	65	60	72	65	60	55	53	49	46		42	39	37		32	30	29	24
4	74	64	57	51	67	58	52	47	48	43	40		38	35	33		29	27	25	21
5	68	57	50	44	61	52	46	41	43	38	35		34	31	29		26	24	23	19
6	63	52	44	39	57	47	41	36	39	34	31		31	28	26		24	22	20	17
7	58	47	39	34	53	43	37	32	36	31	27		29	25	23		22	20	19	16
8	54	43	35	31	49	39	33	29	33	28	25		27	23	21		21	19	17	14
9	50	39	32	27	46	36	30	26	30	25	22		25	21	19		19	17	15	13
10	47	36	29	25	43	33	27	23	28	23	20		23	20	17		18	16	14	12

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: P521812

CATALOG NUMBER: SQ4-WB-075U-050D-92765-1D-UNV-STD-W-4_4500K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	113.5	2.2
10°-20°	295.3	5.7
20°-30°	382.5	7.4
30°-40°	374.5	7.2
40°-50°	286.7	5.5
50°-60°	191.0	3.7
60°-70°	104.3	2.0
70°-80°	43.4	0.8
80°-90°	12.3	0.2
90°-100°	248.0	4.8
100°-110°	705.7	13.6
110°-120°	676.1	13.0
120°-130°	535.1	10.3
130°-140°	429.5	8.3
140°-150°	336.2	6.5
150°-160°	246.0	4.7
160°-170°	152.4	2.9
170°-180°	51.7	1.0
0°-30°	791.3	15.3
0°-40°	1165.9	22.5
0°-60°	1643.6	31.7
0°-90°	1803.6	34.8
90°-120°	1629.8	31.4
90°-150°	2930.6	56.5
90°-180°	3381.0	65.2
0°-180°	5184.4	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	2
95°	27	107	480	166	102	31
105°	110	166	719	1270	1208	116
115°	204	246	545	1155	1356	201
125°	288	319	520	864	1033	257
135°	352	381	514	730	825	271
145°	415	436	518	631	688	259
155°	474	485	531	571	594	219
165°	524	526	537	549	557	147
175°	548	545	543	540	536	52
180°	544	544	544	544	544	

TEST NUMBER: P521812

CATALOG NUMBER: SQ4-WB-075U-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°	8.3	43.9	101.8	29.6	22.3
95°	26.9	106.8	480.1	166.2	102.4
97.5°	49.5	125.1	739.4	529.1	362.6
100°	65.2	136.0	795.7	806.0	620.8
102.5°	82.6	147.7	783.3	1031.7	870.0
105°	109.7	166.3	719.1	1270.2	1207.5
107.5°	137.2	188.0	644.2	1337.5	1393.4
110°	156.2	203.8	601.2	1311.8	1437.2

TEST NUMBER: P521812

CATALOG NUMBER: SQ4-WB-075U-050D-92765-1D-UNV-STD-W-4_4500K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	174.5	219.6	572.2	1250.9	1429.8
115°	203.8	246.3	545.3	1155.2	1356.5
117.5°	229.7	269.6	529.4	1050.5	1263.8
120°	250.4	283.8	527.7	990.7	1195.1
122.5°	267.0	300.3	523.6	938.3	1128.1
125°	287.7	319.0	520.5	863.7	1032.7
127.5°	310.2	339.5	518.8	819.1	958.4
130°	321.8	351.1	516.3	788.1	909.5
132.5°	334.2	362.7	516.3	763.9	875.6
135°	351.8	381.1	514.3	729.6	824.7
137.5°	368.4	396.9	514.0	700.5	782.7
140°	380.8	410.1	513.2	676.4	755.3
142.5°	394.8	419.3	515.7	657.2	728.0
145°	414.9	436.2	518.4	631.4	688.1
147.5°	432.1	452.7	522.9	605.4	654.4
150°	447.0	461.2	524.6	596.8	631.2
152.5°	458.6	473.6	526.3	585.1	617.1
155°	473.9	485.0	530.8	570.7	593.9
157.5°	492.9	499.6	531.8	564.1	580.7
160°	502.9	507.9	536.0	559.1	573.2
162.5°	508.7	514.5	536.8	554.9	565.8
165°	523.6	525.6	537.0	548.6	556.7
167.5°	533.7	531.9	541.8	547.0	550.3
170°	537.0	536.0	540.1	541.3	545.3
172.5°	544.5	541.0	542.6	539.6	542.8
175°	548.4	545.4	543.2	540.0	536.0
177.5°	550.1	545.2	542.6	539.3	540.1
180°	544.3	544.3	544.3	544.3	544.3

(END OF REPORT)