

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: P521925

Luminaire Tested: SQ4-WB-100U-075D-92765-1D-UNV-STD-W-4_2700K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521925
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-100U-075D-92765-1D-UNV-STD-W-4_2700K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 2700K-6500K CCT, 90 CRI LEDS, TUNED TO 2700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6680.9 lumens
Efficiency: N/A
Efficacy: 104.2 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-Indirect

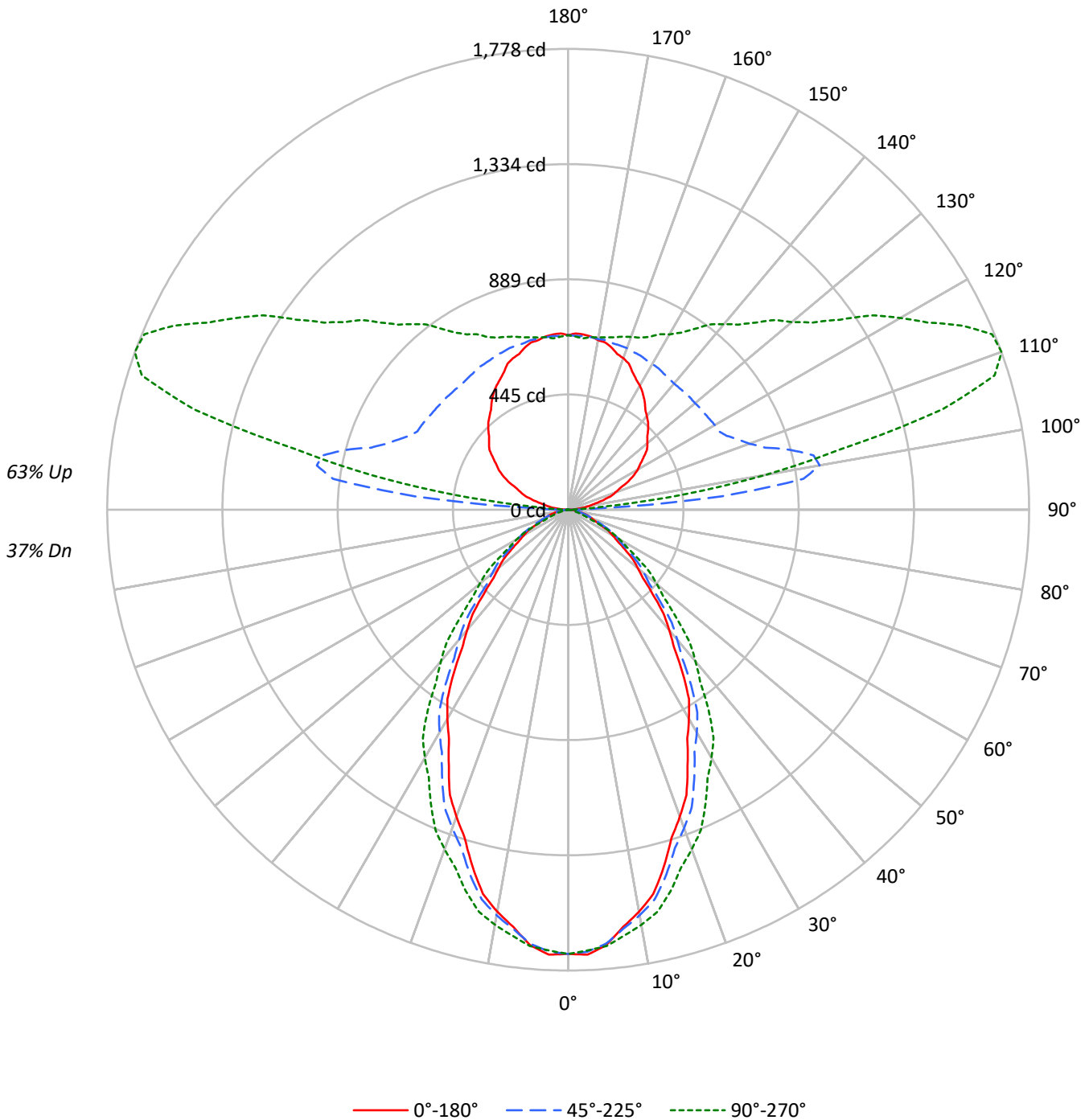
Input Watts (W): 64.1
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



TEST NUMBER: P521925

CATALOG NUMBER: SQ4-WB-100U-075D-92765-1D-UNV-STD-W-4_2700K

Luminous Intensity Polar Plot



TEST NUMBER: P521925

CATALOG NUMBER: SQ4-WB-100U-075D-92765-1D-UNV-STD-W-4_2700K

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	104	104	104	104	94	94	94	94	76	76	76	60	60	60	45	45	45	37				
1	96	92	88	85	87	84	81	78	68	66	64	54	53	51	41	40	39	33				
2	88	81	76	71	80	74	69	65	61	57	55	48	46	44	37	36	34	29				
3	81	72	66	60	73	66	60	56	54	50	47	44	41	39	33	32	30	26				
4	74	64	57	52	67	59	53	48	49	44	41	39	36	34	31	29	27	23				
5	69	58	50	45	62	53	47	42	44	39	36	36	32	30	28	26	24	21				
6	63	52	45	39	58	48	42	37	40	35	32	33	29	27	26	23	22	19				
7	59	47	40	35	53	44	37	33	37	32	28	30	27	24	24	21	20	17				
8	55	43	36	31	50	40	34	29	34	29	25	28	24	22	22	20	18	16				
9	51	40	33	28	47	37	30	26	31	26	23	26	22	20	21	18	16	14				
10	48	36	30	25	44	34	28	24	29	24	21	24	20	18	19	17	15	13				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	15813	15813	15813
5°	15616	15560	15651
10°	14754	14888	15233
15°	13620	13936	14561
20°	12368	12834	13683
25°	11093	11699	12747
30°	9919	10568	11777
35°	8674	9301	10630
40°	7301	7880	9203
45°	6025	6545	7684
50°	5031	5483	6402
55°	4271	4707	5287
60°	3650	4080	4218
65°	2906	3432	2725
70°	2576	2679	1664
75°	2385	2171	1020
80°	2200	1998	877
85°	1990	1831	720

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 7684 cd/sqm

TEST NUMBER: P521925

CATALOG NUMBER: SQ4-WB-100U-075D-92765-1D-UNV-STD-W-4_2700K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	157.2	2.4
10°-20°	408.9	6.1
20°-30°	529.7	7.9
30°-40°	518.7	7.8
40°-50°	397.0	5.9
50°-60°	264.5	4.0
60°-70°	144.4	2.2
70°-80°	60.1	0.9
80°-90°	17.0	0.3
90°-100°	306.9	4.6
100°-110°	873.2	13.1
110°-120°	836.6	12.5
120°-130°	662.1	9.9
130°-140°	531.5	8.0
140°-150°	416.1	6.2
150°-160°	304.4	4.6
160°-170°	188.6	2.8
170°-180°	64.0	1.0
0°-30°	1095.8	16.4
0°-40°	1614.4	24.2
0°-60°	2276.0	34.1
0°-90°	2497.5	37.4
90°-120°	2016.7	30.2
90°-150°	3626.3	54.3
90°-180°	4183.0	62.6
0°-180°	6680.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1714	1714	1714	1714	1714	
5°	1686	1669	1680	1684	1690	157
15°	1426	1421	1459	1499	1524	398
25°	1090	1093	1149	1199	1252	501
35°	770	774	826	881	944	479
45°	462	471	502	540	589	360
55°	266	276	293	304	329	241
65°	133	144	157	137	125	138
75°	67	67	61	42	29	71
85°	19	19	17	11	7	20
90°	0	0	0	0	0	2
95°	33	132	594	206	127	38
105°	136	206	890	1572	1494	144
115°	252	305	675	1429	1678	248
125°	356	395	644	1069	1278	319
135°	435	472	636	903	1020	336
145°	513	540	642	781	851	321
155°	586	600	657	706	735	271
165°	648	650	664	679	689	182
175°	679	675	672	668	663	64
180°	674	674	674	674	674	

TEST NUMBER: P521925

CATALOG NUMBER: SQ4-WB-100U-075D-92765-1D-UNV-STD-W-4_2700K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1713.9	1713.9	1713.9	1713.9	1713.9
2.5°	1718.2	1702.9	1706.7	1706.6	1701.9
5°	1686.1	1669.2	1680.1	1684.0	1689.9
7.5°	1623.6	1610.8	1630.6	1645.3	1657.2
10°	1574.8	1563.8	1589.1	1610.5	1626.0
12.5°	1518.3	1509.0	1540.4	1569.1	1589.3
15°	1425.9	1420.8	1459.0	1498.7	1524.4
17.5°	1327.1	1324.6	1368.5	1414.8	1447.7
20°	1259.7	1259.0	1307.1	1355.3	1393.6
22.5°	1191.7	1193.3	1243.9	1294.1	1337.6
25°	1089.7	1092.7	1149.2	1199.2	1252.2
27.5°	995.4	996.8	1055.1	1108.0	1164.5
30°	931.1	934.7	992.0	1046.7	1105.5
32.5°	866.7	870.9	927.0	983.6	1043.6
35°	770.1	773.8	825.8	881.3	943.8
37.5°	670.5	675.5	721.7	774.2	835.7
40°	606.2	613.5	654.3	703.8	764.1
42.5°	544.2	553.3	591.1	638.1	692.5
45°	461.8	470.6	501.6	539.6	588.9
47.5°	390.8	400.9	424.8	457.5	499.5
50°	350.5	360.0	382.0	406.3	446.0
52.5°	315.0	324.5	344.1	362.8	396.6
55°	265.5	276.5	292.6	303.6	328.7
57.5°	224.9	235.5	248.2	253.2	268.3
60°	197.8	209.6	221.1	220.5	228.6
62.5°	173.1	183.1	194.6	186.7	187.1
65°	133.1	144.1	157.2	137.3	124.8
67.5°	107.5	109.9	123.3	95.8	80.9
70°	95.5	95.5	99.3	74.2	61.7
72.5°	84.1	84.1	80.6	60.3	47.2
75°	66.9	66.9	60.9	41.8	28.6
77.5°	51.6	51.0	46.6	31.2	20.8
80°	41.4	41.4	37.6	24.6	16.5
82.5°	32.3	32.3	29.2	19.2	12.3
85°	18.8	18.8	17.3	11.2	6.8
87.5°	6.6	6.6	6.0	3.6	3.0
90°	0.0	0.0	0.0	0.0	0.0
92.5°	10.2	54.3	126.0	36.7	27.7
95°	33.3	132.2	594.1	205.6	126.8
97.5°	61.2	154.8	914.9	654.7	448.6
100°	80.7	168.3	984.6	997.3	768.2
102.5°	102.2	182.8	969.2	1276.6	1076.5
105°	135.7	205.8	889.8	1571.8	1494.2
107.5°	169.8	232.6	797.1	1655.0	1724.1
110°	193.3	252.2	743.9	1623.2	1778.4

TEST NUMBER: P521925

CATALOG NUMBER: SQ4-WB-100U-075D-92765-1D-UNV-STD-W-4_2700K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	215.9	271.7	708.0	1547.9	1769.2
115°	252.2	304.8	674.7	1429.4	1678.5
117.5°	284.2	333.6	655.0	1299.9	1563.8
120°	309.8	351.2	653.0	1225.9	1478.8
122.5°	330.3	371.6	647.9	1161.0	1395.8
125°	355.9	394.7	644.0	1068.7	1277.8
127.5°	383.8	420.2	642.0	1013.6	1185.9
130°	398.2	434.5	638.9	975.2	1125.4
132.5°	413.6	448.9	638.9	945.2	1083.4
135°	435.3	471.6	636.3	902.8	1020.4
137.5°	455.8	491.1	636.1	866.8	968.5
140°	471.2	507.5	635.1	837.0	934.7
142.5°	488.6	518.9	638.1	813.2	900.9
145°	513.4	539.7	641.5	781.3	851.4
147.5°	534.7	560.2	647.1	749.1	809.7
150°	553.1	570.6	649.1	738.5	781.0
152.5°	567.5	586.0	651.2	724.0	763.6
155°	586.4	600.2	656.8	706.1	734.9
157.5°	610.0	618.2	658.1	698.0	718.5
160°	622.3	628.5	663.2	691.8	709.3
162.5°	629.4	636.7	664.2	686.6	700.1
165°	647.9	650.4	664.5	678.8	688.8
167.5°	660.4	658.2	670.4	676.9	680.9
170°	664.5	663.3	668.3	669.7	674.7
172.5°	673.7	669.5	671.4	667.7	671.7
175°	678.6	674.8	672.2	668.2	663.2
177.5°	680.6	674.6	671.4	667.3	668.3
180°	673.5	673.5	673.5	673.5	673.5

(END OF REPORT)