

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: P521997

Luminaire Tested: SQ4-WB-125U-100D-92765-1D-UNV-STD-W-4_6500K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521997
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-125U-100D-92765-1D-UNV-STD-W-4_6500K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 1250 LUMENS PER FOOT
Light Source: 2700K-6500K CCT, 90 CRI LEDS, TUNED TO 6500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9558.2 lumens
Efficiency: N/A
Efficacy: 114.7 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: Semi-Indirect

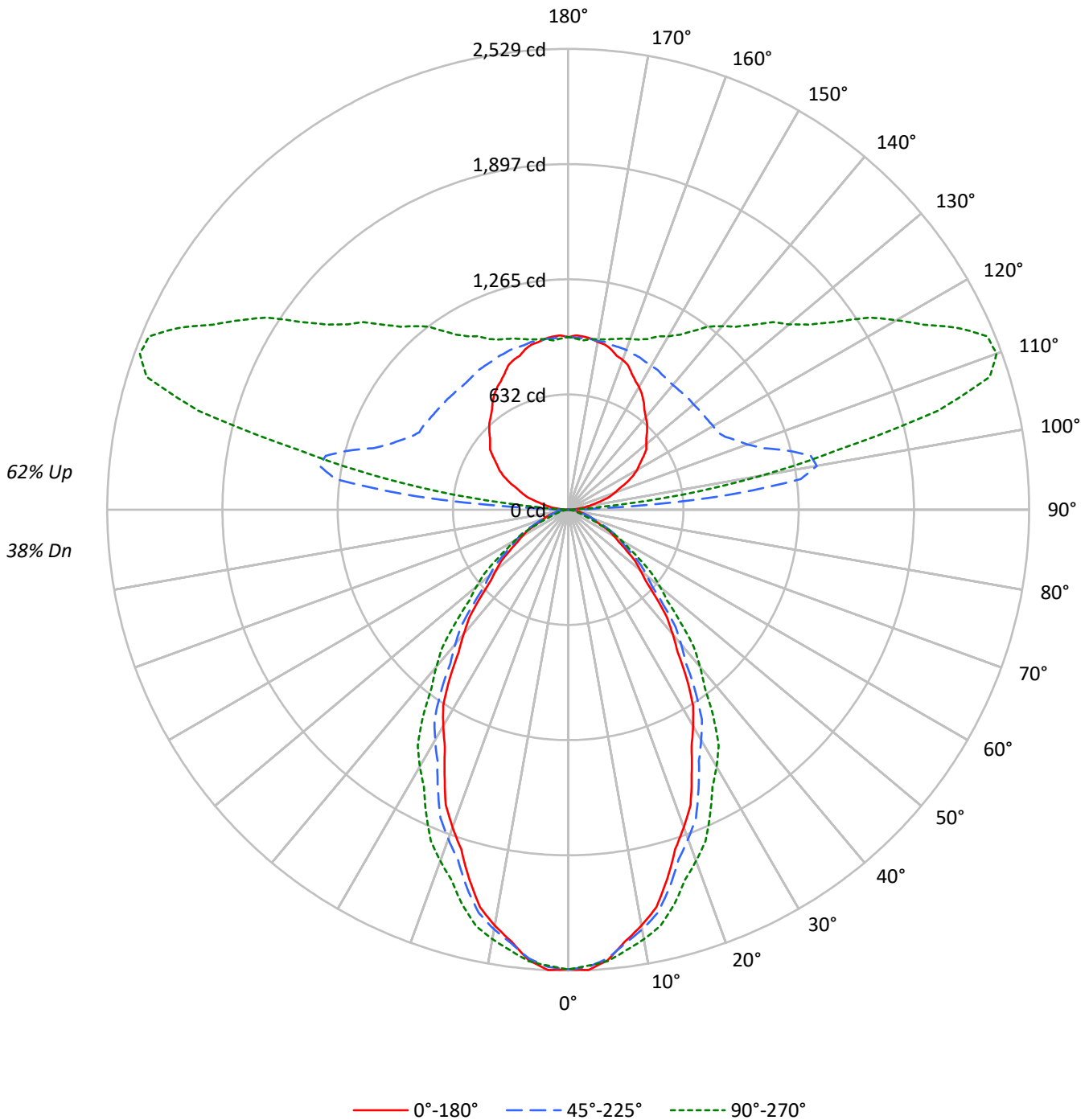
Input Watts (W): 83.3
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



TEST NUMBER: P521997

CATALOG NUMBER: SQ4-WB-125U-100D-92765-1D-UNV-STD-W-4_6500K

Luminous Intensity Polar Plot



TEST NUMBER: P521997

CATALOG NUMBER: SQ4-WB-125U-100D-92765-1D-UNV-STD-W-4_6500K

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	95	95	95	95	77	77	77	61	61	61	46	46	46	38				
1	96	92	89	86	87	84	81	78	69	67	65	55	53	52	42	41	40	34				
2	88	82	76	71	80	74	70	66	61	58	55	49	47	45	38	36	35	30				
3	81	72	66	61	74	66	61	56	55	51	47	44	41	39	34	33	31	27				
4	75	65	57	52	68	59	53	48	49	45	41	40	37	34	31	29	28	24				
5	69	58	51	45	63	53	47	42	45	40	36	36	33	30	29	26	25	21				
6	64	52	45	40	58	48	42	37	41	36	32	33	30	27	26	24	22	19				
7	59	48	40	35	54	44	37	33	37	32	29	30	27	24	24	22	20	17				
8	55	43	36	31	50	40	34	29	34	29	26	28	25	22	23	20	18	16				
9	51	40	33	28	47	37	31	26	31	27	23	26	23	20	21	19	17	15				
10	48	37	30	25	44	34	28	24	29	24	21	24	21	18	20	17	15	14				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	23273	23273	23273
5°	22982	22901	23034
10°	21713	21911	22419
15°	20045	20510	21430
20°	18203	18888	20137
25°	16327	17217	18761
30°	14598	15553	17334
35°	12766	13688	15646
40°	10744	11598	13545
45°	8867	9633	11309
50°	7403	8071	9422
55°	6285	6926	7781
60°	5371	6004	6209
65°	4277	5050	4010
70°	3793	3941	2449
75°	3511	3198	1501
80°	3236	2938	1296
85°	2932	2699	1059

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 11309 cd/sqm

TEST NUMBER: P521997

CATALOG NUMBER: SQ4-WB-125U-100D-92765-1D-UNV-STD-W-4_6500K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	231.4	2.4
10°-20°	601.8	6.3
20°-30°	779.5	8.2
30°-40°	763.3	8.0
40°-50°	584.3	6.1
50°-60°	389.4	4.1
60°-70°	212.5	2.2
70°-80°	88.5	0.9
80°-90°	25.1	0.3
90°-100°	431.5	4.5
100°-110°	1227.8	12.8
110°-120°	1176.4	12.3
120°-130°	931.1	9.7
130°-140°	747.3	7.8
140°-150°	585.1	6.1
150°-160°	428.1	4.5
160°-170°	265.2	2.8
170°-180°	90.0	0.9
0°-30°	1612.7	16.9
0°-40°	2376.0	24.9
0°-60°	3349.7	35.0
0°-90°	3675.8	38.5
90°-120°	2835.8	29.7
90°-150°	5099.2	53.3
90°-180°	5882.0	61.5
0°-180°	9558.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2522	2522	2522	2522	2522	
5°	2482	2457	2473	2478	2487	231
15°	2099	2091	2147	2206	2244	586
25°	1604	1608	1691	1765	1843	738
35°	1133	1139	1215	1297	1389	705
45°	680	693	738	794	867	530
55°	391	407	431	447	484	354
65°	196	212	231	202	184	204
75°	98	98	90	62	42	105
85°	28	28	26	16	10	30
90°	0	0	0	0	0	3
95°	47	186	835	289	178	54
105°	191	289	1251	2210	2101	202
115°	355	429	949	2010	2360	349
125°	500	555	906	1503	1797	448
135°	612	663	895	1269	1435	472
145°	722	759	902	1099	1197	451
155°	825	844	924	993	1033	381
165°	911	914	934	954	969	256
175°	954	949	945	940	933	90
180°	947	947	947	947	947	

TEST NUMBER: P521997

CATALOG NUMBER: SQ4-WB-125U-100D-92765-1D-UNV-STD-W-4_6500K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2522.5	2522.5	2522.5	2522.5	2522.5
2.5°	2528.7	2506.2	2511.9	2511.7	2504.8
5°	2481.5	2456.7	2472.7	2478.4	2487.1
7.5°	2389.5	2370.6	2399.9	2421.5	2439.0
10°	2317.7	2301.5	2338.8	2370.3	2393.0
12.5°	2234.5	2220.9	2267.0	2309.3	2339.0
15°	2098.6	2091.0	2147.3	2205.7	2243.6
17.5°	1953.1	1949.5	2014.0	2082.2	2130.7
20°	1854.0	1852.9	1923.7	1994.7	2051.0
22.5°	1753.9	1756.3	1830.7	1904.6	1968.6
25°	1603.8	1608.1	1691.3	1765.0	1842.9
27.5°	1465.0	1467.0	1552.9	1630.7	1713.8
30°	1370.3	1375.7	1459.9	1540.5	1627.1
32.5°	1275.5	1281.8	1364.3	1447.5	1535.9
35°	1133.4	1138.8	1215.3	1297.1	1389.1
37.5°	986.9	994.2	1062.1	1139.5	1229.9
40°	892.1	902.9	963.0	1035.8	1124.6
42.5°	800.9	814.3	870.0	939.1	1019.2
45°	679.6	692.6	738.3	794.2	866.7
47.5°	575.1	590.1	625.1	673.3	735.2
50°	515.8	529.9	562.3	597.9	656.4
52.5°	463.5	477.6	506.5	534.0	583.8
55°	390.7	407.0	430.6	446.9	483.7
57.5°	330.9	346.5	365.3	372.6	394.9
60°	291.1	308.4	325.4	324.6	336.5
62.5°	254.8	269.5	286.5	274.7	275.4
65°	195.9	212.1	231.3	202.1	183.7
67.5°	158.3	161.7	181.5	141.0	119.1
70°	140.6	140.6	146.1	109.2	90.8
72.5°	123.7	123.7	118.7	88.8	69.5
75°	98.5	98.5	89.7	61.5	42.1
77.5°	75.9	75.1	68.6	45.9	30.5
80°	60.9	60.9	55.3	36.3	24.4
82.5°	47.6	47.6	42.9	28.3	18.2
85°	27.7	27.7	25.5	16.5	10.0
87.5°	9.7	9.7	8.9	5.3	4.4
90°	0.0	0.0	0.0	0.0	0.0
92.5°	14.4	76.4	177.2	51.6	38.9
95°	46.8	185.9	835.4	289.1	178.2
97.5°	86.1	217.7	1286.6	920.6	630.9
100°	113.4	236.6	1384.5	1402.4	1080.2
102.5°	143.7	257.0	1362.9	1795.1	1513.8
105°	190.8	289.4	1251.3	2210.2	2101.0
107.5°	238.7	327.1	1120.9	2327.2	2424.4
110°	271.9	354.6	1046.0	2282.4	2500.7

TEST NUMBER: P521997

CATALOG NUMBER: SQ4-WB-125U-100D-92765-1D-UNV-STD-W-4_6500K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	303.5	382.1	995.6	2176.5	2487.8
115°	354.7	428.6	948.8	2010.0	2360.3
117.5°	399.7	469.0	921.1	1827.9	2199.0
120°	435.7	493.8	918.2	1723.8	2079.4
122.5°	464.5	522.6	911.0	1632.5	1962.8
125°	500.5	555.1	905.6	1502.8	1796.8
127.5°	539.8	590.8	902.7	1425.3	1667.5
130°	559.9	611.0	898.4	1371.3	1582.5
132.5°	581.5	631.2	898.4	1329.1	1523.5
135°	612.1	663.2	894.8	1269.4	1434.9
137.5°	640.9	690.6	894.4	1218.9	1361.8
140°	662.5	713.6	893.0	1177.0	1314.3
142.5°	687.0	729.6	897.3	1143.5	1266.7
145°	722.0	758.9	902.0	1098.7	1197.3
147.5°	751.8	787.8	909.9	1053.4	1138.6
150°	777.8	802.4	912.8	1038.4	1098.2
152.5°	797.9	824.0	915.7	1018.1	1073.7
155°	824.6	843.9	923.6	992.9	1033.4
157.5°	857.7	869.3	925.4	981.5	1010.4
160°	875.0	883.8	932.6	972.8	997.4
162.5°	885.1	895.3	934.0	965.4	984.4
165°	911.0	914.5	934.4	954.5	968.6
167.5°	928.6	925.5	942.7	951.8	957.4
170°	934.4	932.6	939.8	941.8	948.8
172.5°	947.4	941.4	944.1	938.8	944.5
175°	954.2	948.9	945.2	939.6	932.6
177.5°	957.1	948.6	944.1	938.4	939.8
180°	947.0	947.0	947.0	947.0	947.0

(END OF REPORT)