

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: P521930

Luminaire Tested: SQ4-WB-100U-075D-92765-1D-UNV-STD-W-4_5000K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521930
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_5000K
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 5000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7305.3 lumens
Efficiency: N/A
Efficacy: 114.0 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

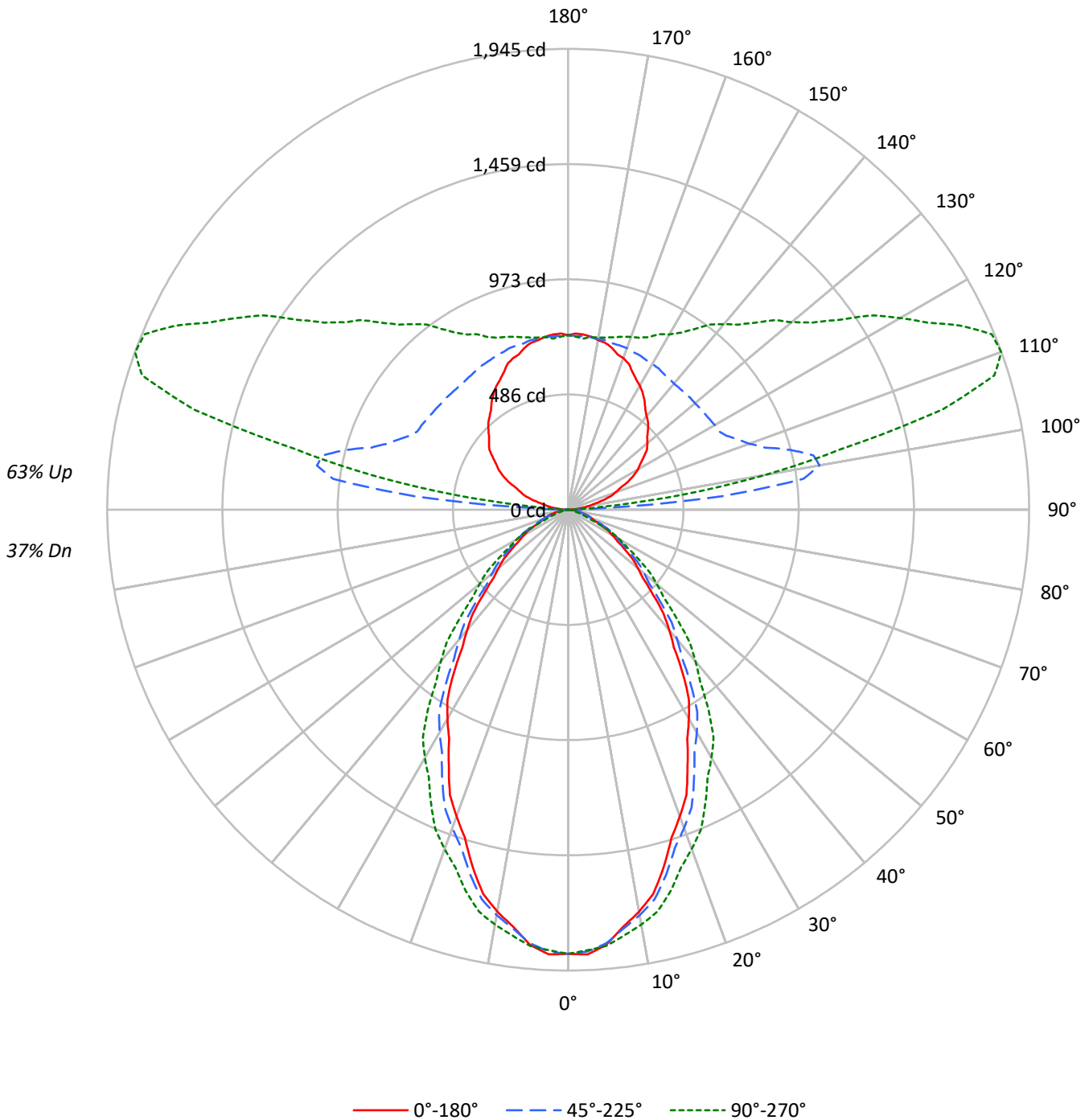
Input Watts (W): 64.1
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



TEST NUMBER: P521930

CATALOG NUMBER: SQ4-WB-100U-075D-92765-1D-UNV-STD-W-4_5000K

Luminous Intensity Polar Plot



TEST NUMBER: P521930

CATALOG NUMBER: SQ4-WB-100U-075D-92765-1D-UNV-STD-W-4_5000K

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	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°	17292	17292	17292
5°	17075	17015	17113
10°	16133	16279	16656
15°	14893	15239	15922
20°	13525	14033	14961
25°	12130	12792	13938
30°	10846	11556	12879
35°	9485	10171	11625
40°	7983	8617	10063
45°	6588	7157	8401
50°	5500	5997	7000
55°	4670	5146	5781
60°	3991	4462	4613
65°	3179	3753	2980
70°	2816	2930	1818
75°	2609	2374	1112
80°	2402	2184	962
85°	2181	2001	783

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 8401 cd/sqm

TEST NUMBER: P521930

CATALOG NUMBER: SQ4-WB-100U-075D-92765-1D-UNV-STD-W-4_5000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	171.9	2.4
10°-20°	447.1	6.1
20°-30°	579.2	7.9
30°-40°	567.1	7.8
40°-50°	434.1	5.9
50°-60°	289.3	4.0
60°-70°	157.9	2.2
70°-80°	65.8	0.9
80°-90°	18.6	0.3
90°-100°	335.6	4.6
100°-110°	954.8	13.1
110°-120°	914.8	12.5
120°-130°	724.0	9.9
130°-140°	581.1	8.0
140°-150°	455.0	6.2
150°-160°	332.9	4.6
160°-170°	206.2	2.8
170°-180°	70.0	1.0
0°-30°	1198.2	16.4
0°-40°	1765.3	24.2
0°-60°	2488.8	34.1
0°-90°	2731.0	37.4
90°-120°	2205.2	30.2
90°-150°	3965.3	54.3
90°-180°	4574.0	62.6
0°-180°	7305.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1874	1874	1874	1874	1874	
5°	1844	1825	1837	1841	1848	172
15°	1559	1554	1595	1639	1667	435
25°	1192	1195	1257	1311	1369	548
35°	842	846	903	964	1032	524
45°	505	515	548	590	644	394
55°	290	302	320	332	359	263
65°	146	158	172	150	136	151
75°	73	73	67	46	31	78
85°	21	21	19	12	7	22
90°	0	0	0	0	0	3
95°	36	144	650	225	139	42
105°	148	225	973	1719	1634	157
115°	276	333	738	1563	1835	272
125°	389	432	704	1169	1397	348
135°	476	516	696	987	1116	367
145°	561	590	701	854	931	351
155°	641	656	718	772	804	296
165°	708	711	727	742	753	199
175°	742	738	735	731	725	70
180°	736	736	736	736	736	

TEST NUMBER: P521930

CATALOG NUMBER: SQ4-WB-100U-075D-92765-1D-UNV-STD-W-4_5000K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1874.2	1874.2	1874.2	1874.2	1874.2
2.5°	1878.8	1862.0	1866.3	1866.1	1861.0
5°	1843.7	1825.2	1837.2	1841.4	1847.8
7.5°	1775.3	1761.3	1783.0	1799.1	1812.2
10°	1722.0	1710.0	1737.6	1761.1	1777.9
12.5°	1660.2	1650.1	1684.4	1715.8	1737.8
15°	1559.2	1553.6	1595.4	1638.8	1666.9
17.5°	1451.1	1448.4	1496.4	1547.0	1583.0
20°	1377.5	1376.7	1429.3	1482.0	1523.8
22.5°	1303.1	1304.9	1360.2	1415.0	1462.7
25°	1191.6	1194.8	1256.6	1311.3	1369.2
27.5°	1088.5	1089.9	1153.8	1211.6	1273.3
30°	1018.1	1022.1	1084.7	1144.5	1208.9
32.5°	947.7	952.4	1013.6	1075.5	1141.1
35°	842.1	846.1	903.0	963.7	1032.1
37.5°	733.2	738.7	789.1	846.6	913.8
40°	662.8	670.9	715.5	769.6	835.5
42.5°	595.1	605.0	646.4	697.7	757.2
45°	504.9	514.6	548.5	590.0	643.9
47.5°	427.3	438.4	464.5	500.2	546.2
50°	383.2	393.7	417.8	444.2	487.7
52.5°	344.4	354.9	376.3	396.7	433.7
55°	290.3	302.4	319.9	332.0	359.4
57.5°	245.9	257.5	271.4	276.9	293.4
60°	216.3	229.1	241.8	241.2	250.0
62.5°	189.3	200.2	212.8	204.1	204.6
65°	145.6	157.6	171.9	150.2	136.5
67.5°	117.6	120.2	134.9	104.7	88.5
70°	104.4	104.4	108.6	81.1	67.4
72.5°	91.9	91.9	88.2	66.0	51.6
75°	73.2	73.2	66.6	45.7	31.2
77.5°	56.4	55.8	51.0	34.1	22.7
80°	45.2	45.2	41.1	26.9	18.1
82.5°	35.4	35.4	31.9	21.0	13.5
85°	20.6	20.6	18.9	12.2	7.4
87.5°	7.2	7.2	6.6	3.9	3.3
90°	0.0	0.0	0.0	0.0	0.0
92.5°	11.2	59.4	137.8	40.1	30.2
95°	36.4	144.5	649.6	224.8	138.6
97.5°	66.9	169.3	1000.5	715.9	490.6
100°	88.2	184.0	1076.6	1090.5	840.0
102.5°	111.7	199.9	1059.8	1395.9	1177.1
105°	148.4	225.1	973.0	1718.7	1633.8
107.5°	185.6	254.4	871.7	1809.7	1885.3
110°	211.4	275.7	813.4	1774.9	1944.6

TEST NUMBER: P521930

CATALOG NUMBER: SQ4-WB-100U-075D-92765-1D-UNV-STD-W-4_5000K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	236.0	297.1	774.2	1692.5	1934.6
115°	275.8	333.3	737.8	1563.0	1835.4
117.5°	310.8	364.7	716.3	1421.4	1710.0
120°	338.8	384.0	714.0	1340.5	1617.0
122.5°	361.2	406.4	708.4	1269.5	1526.3
125°	389.2	431.6	704.2	1168.6	1397.2
127.5°	419.7	459.4	702.0	1108.3	1296.7
130°	435.4	475.1	698.6	1066.4	1230.6
132.5°	452.2	490.8	698.6	1033.6	1184.7
135°	476.0	515.7	695.8	987.1	1115.8
137.5°	498.4	537.0	695.5	947.8	1059.0
140°	515.2	554.9	694.4	915.2	1022.0
142.5°	534.3	567.4	697.8	889.2	985.1
145°	561.4	590.2	701.4	854.4	931.0
147.5°	584.7	612.6	707.6	819.1	885.4
150°	604.8	624.0	709.8	807.5	854.0
152.5°	620.5	640.8	712.1	791.7	835.0
155°	641.2	656.3	718.2	772.1	803.6
157.5°	667.0	676.0	719.6	763.2	785.7
160°	680.4	687.3	725.2	756.5	775.6
162.5°	688.3	696.2	726.3	750.8	765.5
165°	708.4	711.2	726.6	742.3	753.2
167.5°	722.1	719.7	733.1	740.2	744.5
170°	726.6	725.2	730.8	732.3	737.8
172.5°	736.7	732.0	734.2	730.1	734.5
175°	742.0	737.9	735.0	730.7	725.2
177.5°	744.3	737.7	734.2	729.7	730.8
180°	736.4	736.4	736.4	736.4	736.4

(END OF REPORT)