

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: P521916

Luminaire Tested: SQ4-WB-100U-050D-92765-1D-UNV-STD-W-4_4500K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521916
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-050D-92765-1D-UNV-STD-W-4_4500K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 1000 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: 6327.9 lumens
Efficiency: N/A
Efficacy: 119.2 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

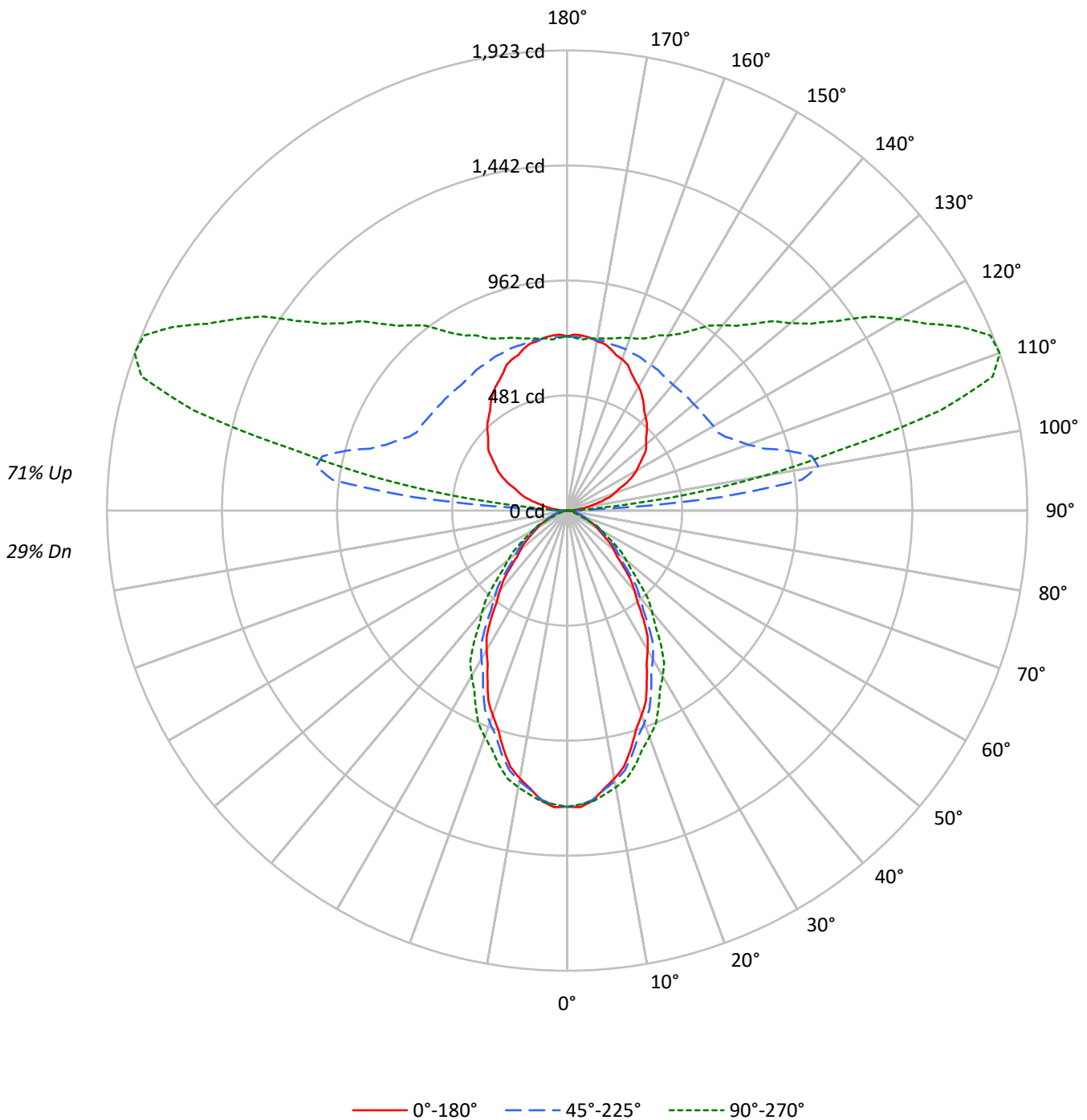
Input Watts (W): 53.1
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Luminous Intensity Polar Plot



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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				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	102	102	102	102	91	91	91	91	71	71	71	53	53	53	36	36	36	29
1	94	90	86	83	84	81	78	75	63	61	60	48	46	45	33	32	32	25
2	86	79	74	69	77	71	67	63	56	53	50	43	41	39	30	29	28	22
3	79	70	63	58	70	63	58	53	50	46	43	38	36	34	27	26	25	20
4	72	62	55	50	65	56	50	45	45	41	37	35	32	29	25	23	22	18
5	66	56	48	43	60	51	44	39	41	36	33	31	28	26	23	21	19	16
6	61	50	43	37	55	46	39	34	37	32	29	28	25	23	21	19	17	14
7	57	45	38	33	51	41	35	30	33	29	25	26	23	21	19	17	16	13
8	53	41	34	29	47	38	31	27	31	26	23	24	21	19	18	16	14	12
9	49	38	31	26	44	34	28	24	28	24	20	22	19	17	17	15	13	11
10	46	35	28	23	41	32	26	22	26	22	19	21	17	15	15	13	12	10

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

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	113.5	1.8
10°-20°	295.3	4.7
20°-30°	382.5	6.0
30°-40°	374.5	5.9
40°-50°	286.7	4.5
50°-60°	191.0	3.0
60°-70°	104.3	1.6
70°-80°	43.4	0.7
80°-90°	12.3	0.2
90°-100°	331.9	5.2
100°-110°	944.4	14.9
110°-120°	904.8	14.3
120°-130°	716.1	11.3
130°-140°	574.8	9.1
140°-150°	450.0	7.1
150°-160°	329.3	5.2
160°-170°	203.9	3.2
170°-180°	69.2	1.1
0°-30°	791.3	12.5
0°-40°	1165.9	18.4
0°-60°	1643.6	26.0
0°-90°	1803.6	28.5
90°-120°	2181.1	34.5
90°-150°	3921.9	62.0
90°-180°	4524.0	71.5
0°-180°	6327.9	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°	36	143	642	222	137	41
105°	147	223	962	1700	1616	155
115°	273	330	730	1546	1815	269
125°	385	427	696	1156	1382	345
135°	471	510	688	976	1104	363
145°	555	584	694	845	921	347
155°	634	649	710	764	795	293
165°	701	703	719	734	745	197
175°	734	730	727	723	717	70
180°	728	728	728	728	728	

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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°	11.1	58.7	136.3	39.7	29.9
95°	36.0	143.0	642.5	222.4	137.1
97.5°	66.2	167.5	989.5	708.1	485.2
100°	87.2	182.0	1064.8	1078.6	830.8
102.5°	110.5	197.7	1048.2	1380.6	1164.3
105°	146.8	222.6	962.4	1699.9	1616.0
107.5°	183.6	251.6	862.1	1789.9	1864.7
110°	209.1	272.7	804.5	1755.5	1923.4

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	233.5	293.8	765.7	1674.0	1913.4
115°	272.8	329.7	729.7	1545.9	1815.4
117.5°	307.4	360.8	708.4	1405.9	1691.3
120°	335.1	379.8	706.2	1325.8	1599.3
122.5°	357.3	401.9	700.7	1255.6	1509.6
125°	385.0	426.9	696.5	1155.8	1381.9
127.5°	415.1	454.4	694.3	1096.2	1282.5
130°	430.6	469.9	691.0	1054.7	1217.2
132.5°	447.3	485.4	691.0	1022.3	1171.7
135°	470.8	510.1	688.2	976.3	1103.6
137.5°	493.0	531.1	687.9	937.5	1047.4
140°	509.6	548.8	686.8	905.2	1010.8
142.5°	528.4	561.2	690.1	879.5	974.3
145°	555.3	583.7	693.7	845.0	920.8
147.5°	578.3	605.9	699.8	810.2	875.7
150°	598.2	617.2	702.0	798.6	844.7
152.5°	613.7	633.7	704.3	783.1	825.8
155°	634.2	649.1	710.4	763.7	794.8
157.5°	659.7	668.6	711.7	754.9	777.1
160°	673.0	679.7	717.3	748.2	767.1
162.5°	680.7	688.6	718.4	742.5	757.2
165°	700.7	703.4	718.7	734.1	745.0
167.5°	714.2	711.8	725.0	732.1	736.4
170°	718.7	717.3	722.8	724.3	729.7
172.5°	728.6	724.0	726.1	722.1	726.4
175°	733.9	729.8	727.0	722.7	717.3
177.5°	736.1	729.6	726.1	721.7	722.8
180°	728.4	728.4	728.4	728.4	728.4

(END OF REPORT)