

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: P521773

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

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521773
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-050U-075D-92765-1D-UNV-STD-W-4_4500K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 500 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: 4959.6 lumens
Efficiency: N/A
Efficacy: 104.0 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: General Diffuse

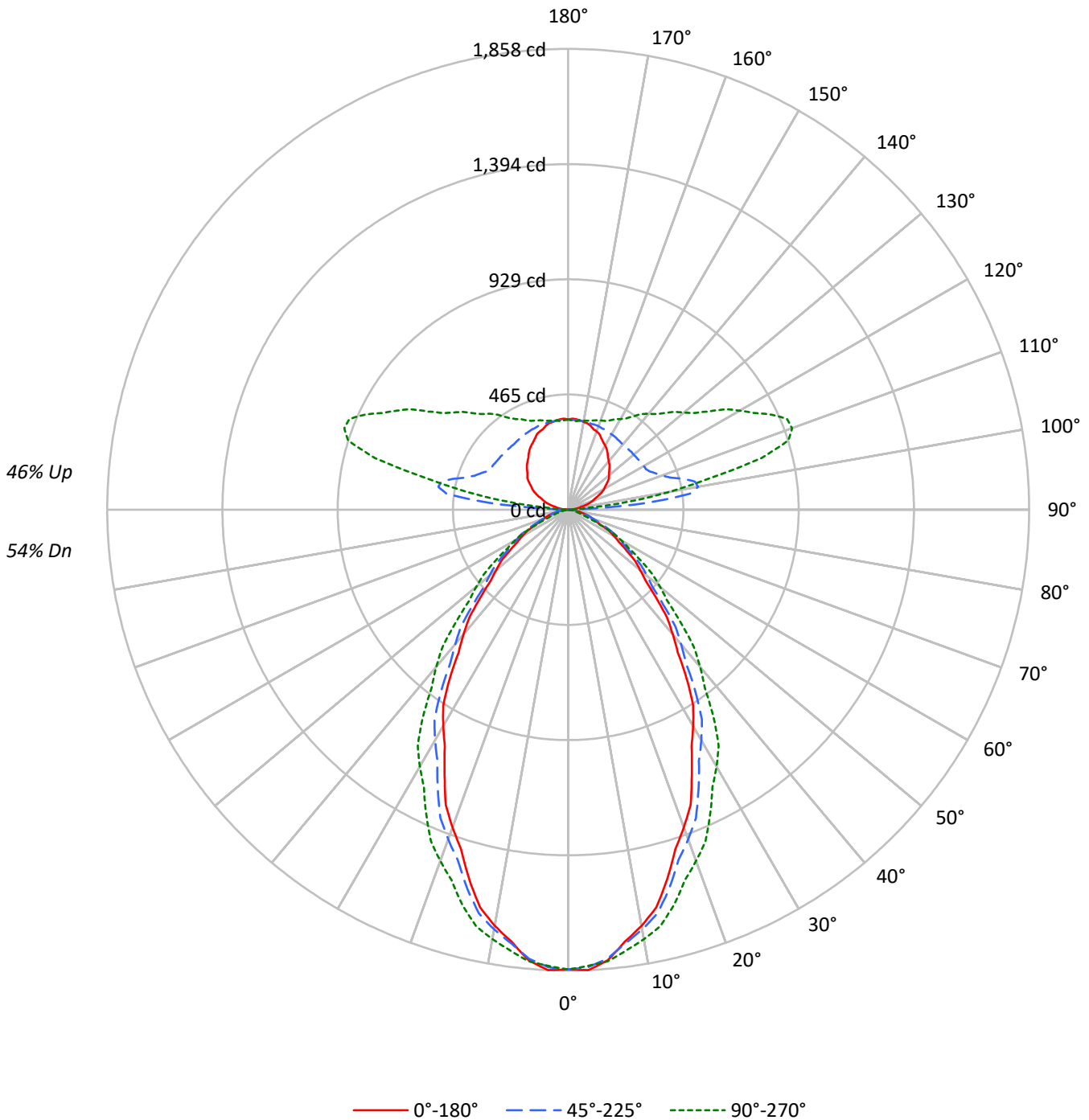
Input Watts (W): 47.7
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Luminous Intensity Polar Plot



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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20					20					20					20					
RC	80					70					50					30					
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	
RCR																					
0	108	108	108	108	100	100	100	100	86	86	86	72	72	72	60	60	60	54			
1	100	96	93	90	93	90	87	84	77	75	73	66	64	63	55	54	53	48			
2	92	85	80	75	85	80	75	71	69	66	63	59	57	55	50	48	47	43			
3	85	76	70	64	79	71	66	61	62	58	54	54	50	48	46	43	41	38			
4	78	69	61	56	73	64	58	53	56	51	47	49	45	42	42	39	37	34			
5	73	62	54	49	67	58	51	46	51	46	42	44	41	37	38	35	33	30			
6	67	56	49	43	63	53	46	41	47	41	37	41	37	34	35	32	30	27			
7	63	51	44	38	58	48	42	37	43	37	34	38	33	30	33	30	27	25			
8	58	47	40	35	54	44	38	33	39	34	30	35	31	28	30	27	25	23			
9	55	43	36	31	51	41	34	30	36	31	28	32	28	25	28	25	23	21			
10	51	40	33	28	48	38	32	27	34	29	25	30	26	23	26	23	21	19			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	17103	17103	17103
5°	16889	16828	16926
10°	15956	16101	16475
15°	14730	15072	15748
20°	13376	13879	14798
25°	11998	12652	13786
30°	10727	11429	12737
35°	9381	10059	11497
40°	7896	8522	9953
45°	6516	7078	8310
50°	5440	5931	6923
55°	4618	5089	5717
60°	3947	4412	4563
65°	3144	3711	2947
70°	2787	2897	1799
75°	2581	2349	1102
80°	2375	2162	951
85°	2149	1980	773

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 8310 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	170.0	3.4
10°-20°	442.2	8.9
20°-30°	572.8	11.5
30°-40°	560.9	11.3
40°-50°	429.4	8.7
50°-60°	286.1	5.8
60°-70°	156.1	3.1
70°-80°	65.0	1.3
80°-90°	18.4	0.4
90°-100°	165.7	3.3
100°-110°	471.4	9.5
110°-120°	451.7	9.1
120°-130°	357.5	7.2
130°-140°	286.9	5.8
140°-150°	224.6	4.5
150°-160°	164.4	3.3
160°-170°	101.8	2.1
170°-180°	34.5	0.7
0°-30°	1185.1	23.9
0°-40°	1746.0	35.2
0°-60°	2461.5	49.6
0°-90°	2701.1	54.5
90°-120°	1088.8	22.0
90°-150°	1957.8	39.5
90°-180°	2259.0	45.5
0°-180°	4959.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1854	1854	1854	1854	1854	
5°	1824	1805	1817	1821	1828	170
15°	1542	1537	1578	1621	1649	431
25°	1179	1182	1243	1297	1354	542
35°	833	837	893	953	1021	518
45°	499	509	542	584	637	389
55°	287	299	316	328	355	260
65°	144	156	170	148	135	150
75°	72	72	66	45	31	77
85°	20	20	19	12	7	22
90°	0	0	0	0	0	2
95°	18	71	321	111	68	21
105°	73	111	480	849	807	78
115°	136	165	364	772	906	134
125°	192	213	348	577	690	172
135°	235	255	344	487	551	181
145°	277	291	346	422	460	173
155°	317	324	355	381	397	146
165°	350	351	359	366	372	98
175°	366	364	363	361	358	35
180°	364	364	364	364	364	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1853.7	1853.7	1853.7	1853.7	1853.7
2.5°	1858.2	1841.7	1845.8	1845.7	1840.6
5°	1823.6	1805.3	1817.0	1821.3	1827.6
7.5°	1755.9	1742.0	1763.5	1779.4	1792.3
10°	1703.2	1691.2	1718.6	1741.8	1758.5
12.5°	1642.0	1632.0	1665.9	1697.0	1718.8
15°	1542.1	1536.6	1577.9	1620.8	1648.7
17.5°	1435.3	1432.6	1480.0	1530.1	1565.7
20°	1362.4	1361.6	1413.6	1465.8	1507.2
22.5°	1288.9	1290.6	1345.3	1399.6	1446.6
25°	1178.6	1181.7	1242.8	1297.0	1354.2
27.5°	1076.6	1078.0	1141.1	1198.3	1259.4
30°	1006.9	1010.9	1072.8	1132.0	1195.6
32.5°	937.3	941.9	1002.5	1063.7	1128.6
35°	832.9	836.9	893.1	953.2	1020.8
37.5°	725.2	730.6	780.5	837.3	903.8
40°	655.6	663.5	707.6	761.2	826.4
42.5°	588.5	598.4	639.3	690.1	748.9
45°	499.4	508.9	542.5	583.6	636.9
47.5°	422.6	433.6	459.4	494.7	540.2
50°	379.0	389.4	413.2	439.4	482.3
52.5°	340.6	351.0	372.2	392.4	429.0
55°	287.1	299.0	316.4	328.4	355.4
57.5°	243.2	254.6	268.4	273.8	290.2
60°	213.9	226.6	239.1	238.5	247.3
62.5°	187.2	198.1	210.5	201.9	202.4
65°	144.0	155.9	170.0	148.5	135.0
67.5°	116.3	118.9	133.4	103.6	87.5
70°	103.3	103.3	107.4	80.2	66.7
72.5°	90.9	90.9	87.2	65.2	51.1
75°	72.4	72.4	65.9	45.2	30.9
77.5°	55.8	55.2	50.4	33.7	22.4
80°	44.7	44.7	40.7	26.6	17.9
82.5°	35.0	35.0	31.6	20.8	13.3
85°	20.3	20.3	18.7	12.1	7.3
87.5°	7.2	7.2	6.5	3.9	3.3
90°	0.0	0.0	0.0	0.0	0.0
92.5°	5.5	29.3	68.0	19.8	14.9
95°	18.0	71.4	320.7	111.0	68.4
97.5°	33.0	83.6	494.0	353.5	242.2
100°	43.5	90.9	531.6	538.4	414.7
102.5°	55.2	98.7	523.3	689.2	581.2
105°	73.3	111.1	480.4	848.6	806.7
107.5°	91.7	125.6	430.4	893.5	930.8
110°	104.4	136.1	401.6	876.3	960.1

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	116.5	146.7	382.3	835.7	955.2
115°	136.2	164.6	364.3	771.7	906.2
117.5°	153.5	180.1	353.6	701.8	844.3
120°	167.3	189.6	352.5	661.9	798.4
122.5°	178.3	200.6	349.8	626.8	753.6
125°	192.2	213.1	347.7	577.0	689.9
127.5°	207.2	226.8	346.6	547.2	640.2
130°	215.0	234.6	344.9	526.5	607.6
132.5°	223.3	242.3	344.9	510.3	584.9
135°	235.0	254.6	343.5	487.4	550.9
137.5°	246.1	265.1	343.4	468.0	522.9
140°	254.4	274.0	342.9	451.9	504.6
142.5°	263.8	280.1	344.5	439.0	486.4
145°	277.2	291.4	346.3	421.8	459.7
147.5°	288.7	302.4	349.4	404.4	437.1
150°	298.6	308.1	350.5	398.7	421.7
152.5°	306.4	316.4	351.6	390.9	412.3
155°	316.6	324.0	354.6	381.2	396.8
157.5°	329.3	333.8	355.3	376.8	387.9
160°	335.9	339.3	358.1	373.5	382.9
162.5°	339.8	343.7	358.6	370.7	378.0
165°	349.8	351.1	358.8	366.5	371.9
167.5°	356.5	355.3	361.9	365.4	367.6
170°	358.8	358.1	360.8	361.6	364.3
172.5°	363.7	361.4	362.5	360.5	362.6
175°	366.4	364.3	362.9	360.8	358.1
177.5°	367.5	364.2	362.5	360.3	360.8
180°	363.6	363.6	363.6	363.6	363.6

(END OF REPORT)