

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: P521761

Luminaire Tested: SQ4-WB-050U-050D-92765-1D-UNV-STD-W-4_5000K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521761
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-050D-92765-1D-UNV-STD-W-4_5000K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 500 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: 4107.0 lumens
Efficiency: N/A
Efficacy: 112.5 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

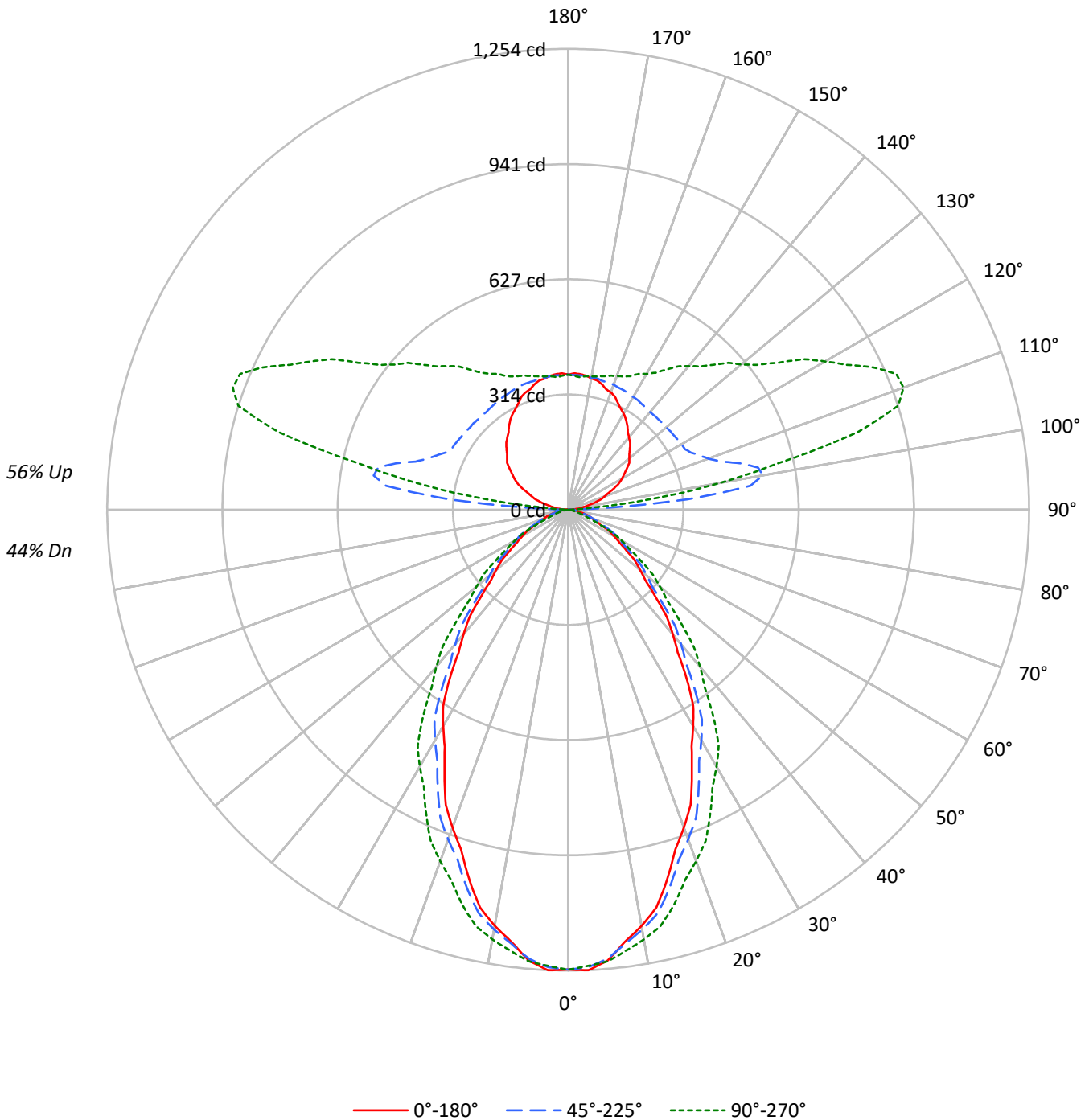
Input Watts (W): 36.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Luminous Intensity Polar Plot



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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20					20					20					20					20	
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	106	106	106	106	97	97	97	97	80	80	80	65	65	65	51	51	51	44				
1	98	94	90	87	89	86	83	80	72	70	68	59	57	56	47	46	45	39				
2	90	83	77	73	82	76	72	68	64	61	58	53	50	48	42	41	40	35				
3	82	74	67	62	76	68	62	58	58	53	50	48	45	42	38	37	35	31				
4	76	66	59	53	70	61	55	50	52	47	44	43	40	37	35	33	31	27				
5	70	59	52	46	64	55	49	44	47	42	38	39	36	33	32	30	28	25				
6	65	54	46	41	60	50	43	39	43	38	34	36	32	29	30	27	25	22				
7	60	49	42	36	55	46	39	34	39	34	30	33	29	27	27	25	23	20				
8	56	45	37	32	52	42	35	31	36	31	27	31	27	24	25	23	21	18				
9	53	41	34	29	48	38	32	28	33	28	25	28	25	22	24	21	19	17				
10	49	38	31	27	45	35	29	25	31	26	23	26	23	20	22	19	18	16				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	11546	11546	11546
5°	11402	11361	11427
10°	10772	10870	11122
15°	9944	10175	10631
20°	9031	9370	9990
25°	8100	8541	9308
30°	7242	7716	8600
35°	6333	6791	7761
40°	5331	5753	6719
45°	4400	4779	5611
50°	3673	4003	4673
55°	3117	3436	3860
60°	2665	2978	3080
65°	2122	2506	1991
70°	1880	1956	1214
75°	1743	1586	745
80°	1605	1461	643
85°	1450	1334	519

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 5611 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	114.8	2.8
10°-20°	298.6	7.3
20°-30°	386.7	9.4
30°-40°	378.7	9.2
40°-50°	289.9	7.1
50°-60°	193.2	4.7
60°-70°	105.4	2.6
70°-80°	43.9	1.1
80°-90°	12.4	0.3
90°-100°	167.5	4.1
100°-110°	476.6	11.6
110°-120°	456.7	11.1
120°-130°	361.4	8.8
130°-140°	290.1	7.1
140°-150°	227.1	5.5
150°-160°	166.2	4.0
160°-170°	102.9	2.5
170°-180°	34.9	0.9
0°-30°	800.1	19.5
0°-40°	1178.8	28.7
0°-60°	1661.8	40.5
0°-90°	1823.5	44.4
90°-120°	1100.8	26.8
90°-150°	1979.5	48.2
90°-180°	2283.0	55.6
0°-180°	4107.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1251	1251	1251	1251	1251	
5°	1231	1219	1227	1230	1234	115
15°	1041	1037	1065	1094	1113	291
25°	796	798	839	876	914	366
35°	562	565	603	644	689	350
45°	337	344	366	394	430	263
55°	194	202	214	222	240	176
65°	97	105	115	100	91	101
75°	49	49	44	30	21	52
85°	14	14	13	8	5	15
90°	0	0	0	0	0	1
95°	18	72	324	112	69	21
105°	74	112	486	858	816	78
115°	138	166	368	780	916	136
125°	194	216	352	583	698	174
135°	238	257	347	493	557	183
145°	280	295	350	426	465	175
155°	320	328	358	385	401	148
165°	354	355	363	370	376	99
175°	370	368	367	365	362	35
180°	368	368	368	368	368	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1251.4	1251.4	1251.4	1251.4	1251.4
2.5°	1254.5	1243.3	1246.1	1246.1	1242.6
5°	1231.1	1218.8	1226.7	1229.5	1233.8
7.5°	1185.4	1176.1	1190.6	1201.3	1210.0
10°	1149.8	1141.8	1160.3	1175.9	1187.2
12.5°	1108.5	1101.8	1124.7	1145.7	1160.4
15°	1041.1	1037.3	1065.3	1094.2	1113.0
17.5°	969.0	967.1	999.2	1033.0	1057.0
20°	919.8	919.2	954.3	989.6	1017.5
22.5°	870.1	871.3	908.2	944.9	976.6
25°	795.7	797.8	839.0	875.6	914.3
27.5°	726.8	727.8	770.4	809.0	850.2
30°	679.8	682.5	724.3	764.2	807.2
32.5°	632.8	635.9	676.8	718.1	761.9
35°	562.3	565.0	602.9	643.5	689.1
37.5°	489.6	493.2	526.9	565.3	610.2
40°	442.6	447.9	477.7	513.9	557.9
42.5°	397.3	404.0	431.6	465.9	505.6
45°	337.2	343.6	366.3	394.0	430.0
47.5°	285.3	292.7	310.1	334.0	364.7
50°	255.9	262.9	278.9	296.6	325.6
52.5°	230.0	236.9	251.3	264.9	289.6
55°	193.8	201.9	213.6	221.7	240.0
57.5°	164.2	171.9	181.2	184.9	195.9
60°	144.4	153.0	161.4	161.0	166.9
62.5°	126.4	133.7	142.1	136.3	136.6
65°	97.2	105.2	114.8	100.3	91.2
67.5°	78.5	80.2	90.1	69.9	59.1
70°	69.7	69.7	72.5	54.2	45.0
72.5°	61.4	61.4	58.9	44.0	34.5
75°	48.9	48.9	44.5	30.5	20.9
77.5°	37.7	37.2	34.0	22.8	15.2
80°	30.2	30.2	27.5	18.0	12.1
82.5°	23.6	23.6	21.3	14.1	9.0
85°	13.7	13.7	12.6	8.2	4.9
87.5°	4.8	4.8	4.4	2.6	2.2
90°	0.0	0.0	0.0	0.0	0.0
92.5°	5.6	29.6	68.8	20.0	15.1
95°	18.2	72.2	324.3	112.2	69.2
97.5°	33.4	84.5	499.4	357.4	244.9
100°	44.0	91.9	537.4	544.4	419.3
102.5°	55.8	99.8	529.1	696.8	587.6
105°	74.1	112.3	485.7	858.0	815.6
107.5°	92.7	127.0	435.1	903.4	941.1
110°	105.5	137.6	406.1	886.0	970.8

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	117.8	148.3	386.5	844.9	965.7
115°	137.7	166.4	368.3	780.3	916.2
117.5°	155.2	182.1	357.6	709.6	853.6
120°	169.1	191.7	356.4	669.2	807.2
122.5°	180.3	202.9	353.6	633.7	761.9
125°	194.3	215.5	351.5	583.4	697.5
127.5°	209.5	229.3	350.4	553.3	647.3
130°	217.4	237.2	348.7	532.3	614.3
132.5°	225.7	245.0	348.7	516.0	591.4
135°	237.6	257.4	347.3	492.8	557.0
137.5°	248.8	268.1	347.2	473.1	528.6
140°	257.2	277.0	346.6	456.9	510.2
142.5°	266.7	283.2	348.3	443.9	491.7
145°	280.3	294.6	350.1	426.5	464.8
147.5°	291.9	305.8	353.2	408.9	442.0
150°	301.9	311.5	354.3	403.1	426.3
152.5°	309.7	319.9	355.5	395.2	416.8
155°	320.1	327.6	358.5	385.4	401.2
157.5°	332.9	337.5	359.2	381.0	392.2
160°	339.7	343.1	362.0	377.6	387.2
162.5°	343.6	347.5	362.6	374.8	382.2
165°	353.6	355.0	362.7	370.5	376.0
167.5°	360.5	359.3	365.9	369.5	371.7
170°	362.7	362.0	364.8	365.6	368.3
172.5°	367.8	365.4	366.5	364.4	366.6
175°	370.4	368.4	366.9	364.8	362.0
177.5°	371.5	368.2	366.5	364.3	364.8
180°	367.6	367.6	367.6	367.6	367.6

(END OF REPORT)