

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: P521801

Luminaire Tested: SQ4-WB-050U-125D-92765-1D-UNV-STD-W-4_5700K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521801
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-125D-92765-1D-UNV-STD-W-4_5700K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 2700K-6500K CCT, 90 CRI LEDS, TUNED TO 5700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6926.1 lumens
Efficiency: N/A
Efficacy: 97.0 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-Direct

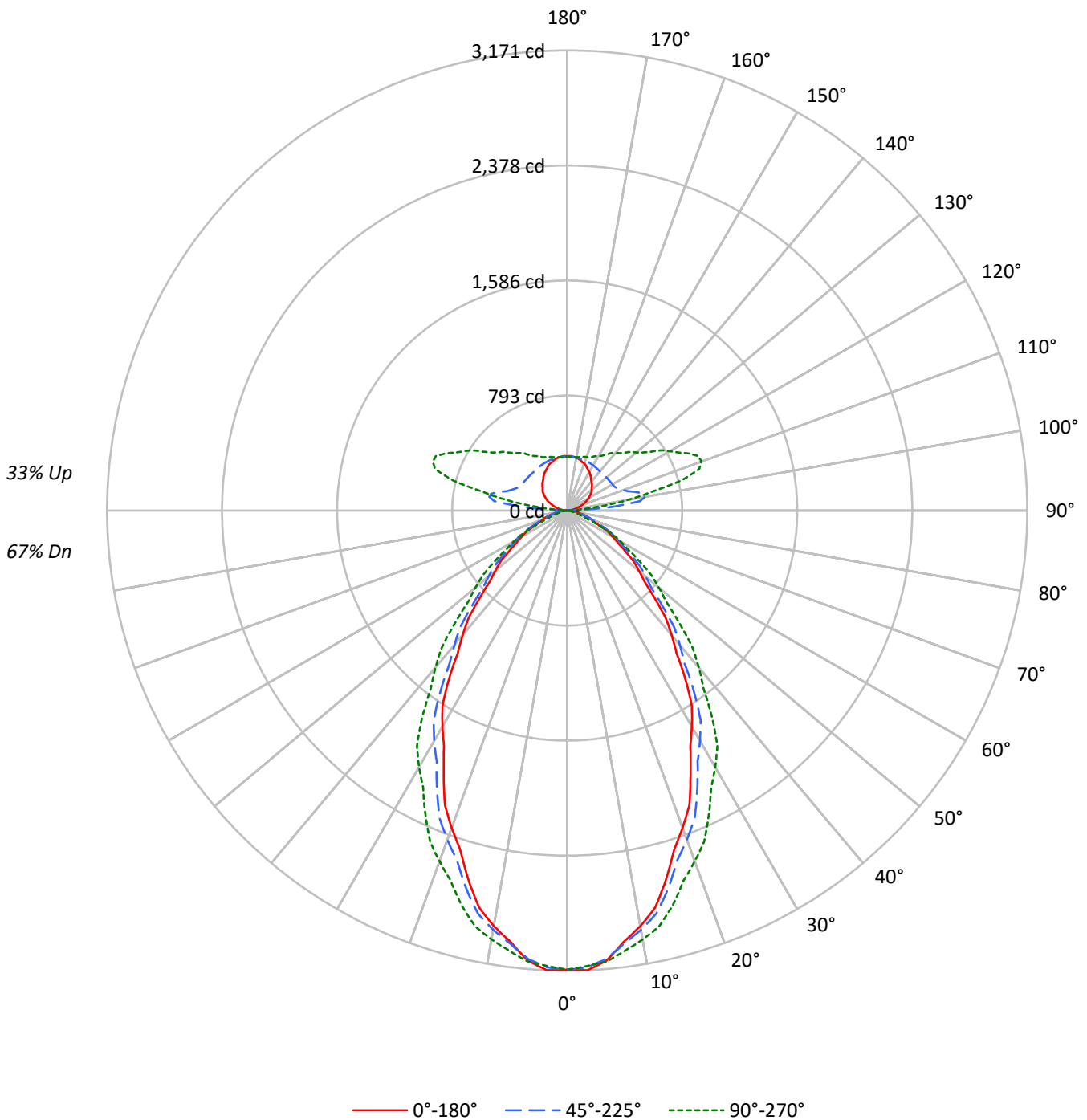
Input Watts (W): 71.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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									10	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0														
RCR																																						
0	111	111	111	111	105	105	105	105	93	93	93	81	81	81	71	71	71	67																				
1	103	99	96	93	97	94	91	88	83	81	79	74	72	71	65	64	63	59																				
2	95	88	83	78	90	84	79	75	75	71	68	67	64	62	60	57	56	52																				
3	88	79	73	67	83	75	69	65	68	63	59	61	57	54	54	52	49	46																				
4	81	71	64	59	77	68	61	56	61	56	52	55	51	48	50	47	44	41																				
5	75	65	57	52	71	62	55	50	56	50	46	51	46	43	46	42	39	37																				
6	70	59	51	46	66	56	49	44	51	46	41	46	42	38	42	38	36	33																				
7	65	54	46	41	62	51	45	40	47	41	37	43	38	35	39	35	32	30																				
8	61	49	42	37	58	47	41	36	43	38	34	40	35	32	36	32	30	28																				
9	57	46	38	34	54	44	37	33	40	35	31	37	32	29	34	30	27	25																				
10	54	42	35	31	51	41	34	30	37	32	28	34	30	27	32	28	25	23																				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	29189	29189	29189
5°	28824	28722	28888
10°	27233	27480	28118
15°	25140	25724	26876
20°	22830	23689	25256
25°	20477	21593	23529
30°	18309	19507	21740
35°	16011	17167	19623
40°	13476	14545	16987
45°	11121	12081	14182
50°	9285	10122	11816
55°	7882	8686	9757
60°	6737	7530	7787
65°	5364	6333	5030
70°	4756	4942	3070
75°	4402	4007	1882
80°	4059	3687	1621
85°	3673	3377	1323

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 14182 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	290.2	4.2
10°-20°	754.8	10.9
20°-30°	977.7	14.1
30°-40°	957.4	13.8
40°-50°	732.8	10.6
50°-60°	488.3	7.1
60°-70°	266.5	3.8
70°-80°	111.0	1.6
80°-90°	31.4	0.5
90°-100°	169.9	2.5
100°-110°	483.4	7.0
110°-120°	463.2	6.7
120°-130°	366.6	5.3
130°-140°	294.2	4.2
140°-150°	230.4	3.3
150°-160°	168.5	2.4
160°-170°	104.4	1.5
170°-180°	35.4	0.5
0°-30°	2022.6	29.2
0°-40°	2980.0	43.0
0°-60°	4201.1	60.7
0°-90°	4610.0	66.6
90°-120°	1116.5	16.1
90°-150°	2007.7	29.0
90°-180°	2316.0	33.4
0°-180°	6926.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3164	3164	3164	3164	3164	
5°	3112	3081	3101	3108	3119	290
15°	2632	2622	2693	2766	2814	735
25°	2012	2017	2121	2214	2311	925
35°	1422	1428	1524	1627	1742	884
45°	852	869	926	996	1087	665
55°	490	510	540	560	607	444
65°	246	266	290	254	230	255
75°	124	124	112	77	53	132
85°	35	35	32	21	12	38
90°	0	0	0	0	0	2
95°	18	73	329	114	70	21
105°	75	114	493	870	827	79
115°	140	169	374	791	929	137
125°	197	218	356	592	707	176
135°	241	261	352	500	565	186
145°	284	299	355	433	471	178
155°	325	332	364	391	407	150
165°	359	360	368	376	381	101
175°	376	374	372	370	367	36
180°	373	373	373	373	373	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3163.7	3163.7	3163.7	3163.7	3163.7
2.5°	3171.4	3143.2	3150.3	3150.1	3141.5
5°	3112.3	3081.1	3101.2	3108.4	3119.2
7.5°	2996.8	2973.2	3009.9	3037.0	3059.0
10°	2906.9	2886.5	2933.2	2972.7	3001.3
12.5°	2802.5	2785.4	2843.3	2896.3	2933.5
15°	2632.0	2622.5	2693.1	2766.3	2813.8
17.5°	2449.6	2445.0	2525.9	2611.4	2672.3
20°	2325.2	2323.9	2412.7	2501.7	2572.3
22.5°	2199.7	2202.7	2296.1	2388.7	2469.0
25°	2011.5	2016.9	2121.1	2213.6	2311.3
27.5°	1837.4	1839.8	1947.6	2045.2	2149.5
30°	1718.6	1725.4	1831.0	1932.0	2040.6
32.5°	1599.7	1607.6	1711.1	1815.5	1926.2
35°	1421.5	1428.3	1524.2	1626.8	1742.2
37.5°	1237.7	1246.9	1332.1	1429.1	1542.6
40°	1118.9	1132.4	1207.7	1299.1	1410.4
42.5°	1004.5	1021.3	1091.1	1177.8	1278.2
45°	852.3	868.6	925.9	996.0	1086.9
47.5°	721.3	740.0	784.0	844.4	922.0
50°	646.9	664.5	705.2	749.9	823.2
52.5°	581.4	599.0	635.2	669.7	732.1
55°	490.0	510.4	540.0	560.5	606.6
57.5°	415.1	434.6	458.1	467.3	495.3
60°	365.1	386.8	408.1	407.1	422.0
62.5°	319.6	338.0	359.3	344.6	345.4
65°	245.7	266.1	290.1	253.5	230.4
67.5°	198.5	202.9	227.7	176.8	149.4
70°	176.3	176.3	183.2	136.9	113.8
72.5°	155.2	155.2	148.8	111.3	87.2
75°	123.5	123.5	112.4	77.2	52.8
77.5°	95.2	94.1	86.1	57.6	38.3
80°	76.4	76.4	69.4	45.5	30.5
82.5°	59.7	59.7	53.9	35.5	22.8
85°	34.7	34.7	31.9	20.6	12.5
87.5°	12.2	12.2	11.1	6.6	5.6
90°	0.0	0.0	0.0	0.0	0.0
92.5°	5.7	30.1	69.8	20.3	15.3
95°	18.4	73.2	328.9	113.8	70.2
97.5°	33.9	85.7	506.5	362.5	248.4
100°	44.7	93.2	545.1	552.1	425.3
102.5°	56.6	101.2	536.6	706.7	596.0
105°	75.1	114.0	492.6	870.2	827.2
107.5°	94.0	128.8	441.3	916.3	954.5
110°	107.0	139.6	411.8	898.6	984.6

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	119.5	150.4	392.0	856.9	979.5
115°	139.6	168.8	373.6	791.4	929.3
117.5°	157.4	184.7	362.6	719.7	865.8
120°	171.5	194.4	361.5	678.7	818.7
122.5°	182.9	205.8	358.7	642.8	772.8
125°	197.1	218.5	356.5	591.7	707.4
127.5°	212.5	232.6	355.4	561.2	656.5
130°	220.4	240.5	353.7	539.9	623.1
132.5°	229.0	248.5	353.7	523.3	599.8
135°	241.0	261.1	352.3	499.8	564.9
137.5°	252.3	271.9	352.2	479.9	536.2
140°	260.9	281.0	351.6	463.4	517.5
142.5°	270.5	287.3	353.3	450.2	498.7
145°	284.2	298.8	355.1	432.6	471.4
147.5°	296.0	310.2	358.2	414.7	448.3
150°	306.2	315.9	359.4	408.8	432.4
152.5°	314.2	324.4	360.5	400.9	422.8
155°	324.6	332.3	363.6	390.9	406.9
157.5°	337.7	342.3	364.3	386.4	397.8
160°	344.5	348.0	367.2	383.0	392.7
162.5°	348.5	352.5	367.7	380.1	387.6
165°	358.7	360.1	367.9	375.8	381.4
167.5°	365.6	364.4	371.1	374.7	377.0
170°	367.9	367.2	370.0	370.8	373.6
172.5°	373.0	370.6	371.7	369.6	371.9
175°	375.7	373.6	372.1	370.0	367.2
177.5°	376.8	373.5	371.7	369.5	370.0
180°	372.9	372.9	372.9	372.9	372.9

(END OF REPORT)