

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: P521799

Luminaire Tested: SQ4-WB-050U-125D-92765-1D-UNV-STD-W-4_4500K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521799
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_4500K
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 4500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6754.1 lumens
Efficiency: N/A
Efficacy: 94.5 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: Semi-Direct

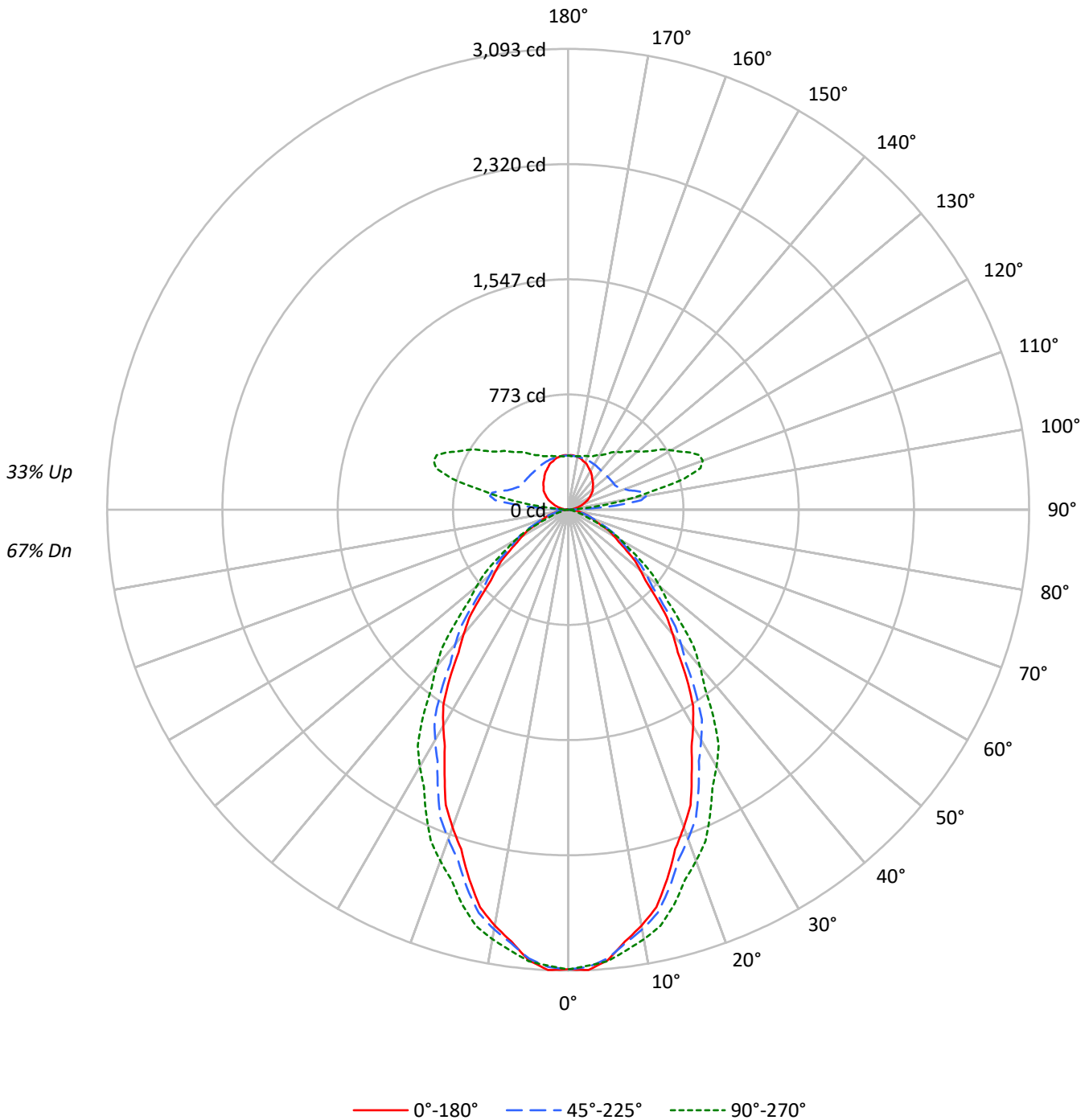
Input Watts (W): 71.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Luminous Intensity Polar Plot



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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									20									20									20																		
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	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°	28464	28464	28464
5°	28108	28008	28171
10°	26557	26798	27419
15°	24515	25085	26210
20°	22263	23100	24628
25°	19968	21057	22945
30°	17854	19022	21200
35°	15613	16741	19135
40°	13141	14184	16565
45°	10845	11781	13831
50°	9054	9871	11523
55°	7687	8471	9516
60°	6569	7344	7593
65°	5231	6176	4905
70°	4637	4821	2994
75°	4296	3911	1832
80°	3958	3597	1583
85°	3578	3292	1291

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 13831 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	283.0	4.2
10°-20°	736.0	10.9
20°-30°	953.4	14.1
30°-40°	933.6	13.8
40°-50°	714.6	10.6
50°-60°	476.2	7.1
60°-70°	259.8	3.8
70°-80°	108.3	1.6
80°-90°	30.6	0.5
90°-100°	165.7	2.5
100°-110°	471.4	7.0
110°-120°	451.7	6.7
120°-130°	357.5	5.3
130°-140°	286.9	4.2
140°-150°	224.6	3.3
150°-160°	164.4	2.4
160°-170°	101.8	1.5
170°-180°	34.5	0.5
0°-30°	1972.4	29.2
0°-40°	2906.0	43.0
0°-60°	4096.8	60.7
0°-90°	4495.6	66.6
90°-120°	1088.8	16.1
90°-150°	1957.8	29.0
90°-180°	2259.0	33.4
0°-180°	6754.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3085	3085	3085	3085	3085	
5°	3035	3005	3024	3031	3042	282
15°	2567	2557	2626	2698	2744	717
25°	1962	1967	2068	2159	2254	902
35°	1386	1393	1486	1586	1699	862
45°	831	847	903	971	1060	648
55°	478	498	527	547	592	433
65°	240	260	283	247	225	249
75°	120	120	110	75	51	129
85°	34	34	31	20	12	37
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	

TEST NUMBER: P521799

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3085.1	3085.1	3085.1	3085.1	3085.1
2.5°	3092.7	3065.2	3072.1	3071.9	3063.4
5°	3035.0	3004.6	3024.2	3031.2	3041.8
7.5°	2922.4	2899.4	2935.1	2961.6	2983.0
10°	2834.7	2814.8	2860.4	2898.9	2926.7
12.5°	2732.9	2716.2	2772.7	2824.4	2860.7
15°	2566.6	2557.4	2626.2	2697.6	2744.0
17.5°	2388.8	2384.3	2463.2	2546.6	2605.9
20°	2267.5	2266.1	2352.7	2439.6	2508.4
22.5°	2145.1	2148.0	2239.0	2329.4	2407.7
25°	1961.5	1966.8	2068.5	2158.6	2253.9
27.5°	1791.8	1794.2	1899.3	1994.4	2096.1
30°	1675.9	1682.5	1785.5	1884.1	1990.0
32.5°	1560.0	1567.7	1668.6	1770.4	1878.4
35°	1386.2	1392.8	1486.4	1586.4	1698.9
37.5°	1207.0	1216.0	1299.0	1393.6	1504.2
40°	1091.1	1104.3	1177.7	1266.8	1375.4
42.5°	979.5	996.0	1064.0	1148.5	1246.5
45°	831.2	847.1	902.9	971.3	1060.0
47.5°	703.4	721.7	764.6	823.4	899.1
50°	630.8	648.0	687.7	731.3	802.8
52.5°	566.9	584.1	619.5	653.1	713.9
55°	477.9	497.7	526.6	546.6	591.6
57.5°	404.8	423.8	446.7	455.7	483.0
60°	356.0	377.2	398.0	397.0	411.5
62.5°	311.6	329.6	350.3	336.0	336.8
65°	239.6	259.5	282.9	247.2	224.7
67.5°	193.6	197.8	222.0	172.4	145.7
70°	171.9	171.9	178.7	133.5	111.0
72.5°	151.3	151.3	145.1	108.6	85.0
75°	120.5	120.5	109.7	75.3	51.4
77.5°	92.9	91.8	83.9	56.2	37.4
80°	74.5	74.5	67.7	44.3	29.8
82.5°	58.2	58.2	52.5	34.6	22.2
85°	33.8	33.8	31.1	20.1	12.2
87.5°	11.9	11.9	10.8	6.5	5.4
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)