

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: P521797

Luminaire Tested: SQ4-WB-050U-125D-92765-1D-UNV-STD-W-4_3500K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521797
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_3500K
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 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6527.4 lumens
Efficiency: N/A
Efficacy: 91.2 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-Direct

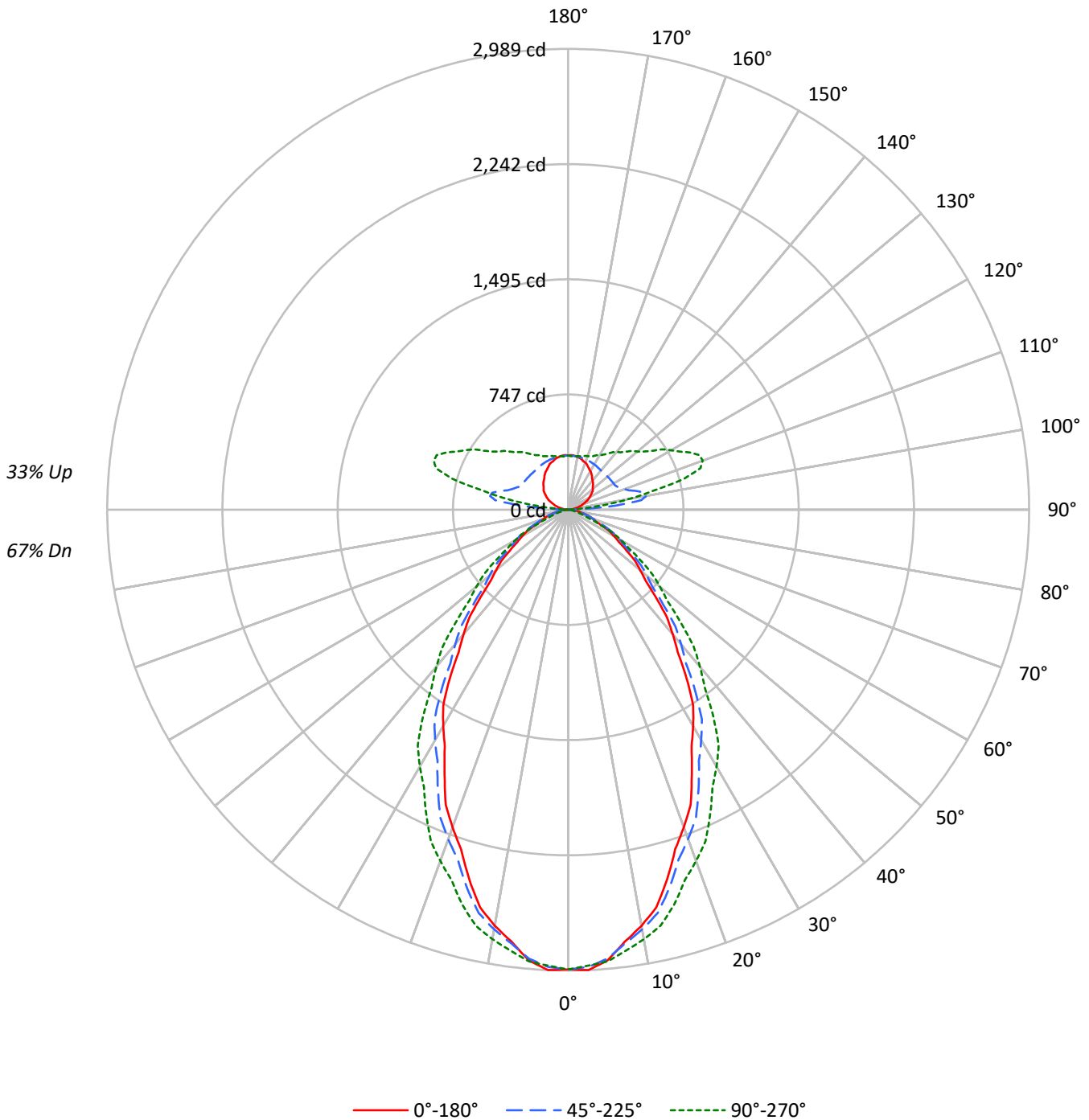
Input Watts (W): 71.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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°	27509	27509	27509
5°	27166	27068	27226
10°	25666	25898	26499
15°	23693	24243	25330
20°	21516	22325	23803
25°	19298	20351	22175
30°	17255	18384	20489
35°	15089	16179	18493
40°	12700	13708	16009
45°	10481	11386	13366
50°	8751	9539	11135
55°	7428	8186	9196
60°	6349	7097	7339
65°	5056	5969	4742
70°	4483	4659	2894
75°	4149	3779	1772
80°	3825	3475	1530
85°	3462	3186	1249

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 13366 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	273.5	4.2
10°-20°	711.3	10.9
20°-30°	921.4	14.1
30°-40°	902.3	13.8
40°-50°	690.6	10.6
50°-60°	460.2	7.1
60°-70°	251.1	3.8
70°-80°	104.6	1.6
80°-90°	29.6	0.5
90°-100°	160.1	2.5
100°-110°	455.6	7.0
110°-120°	436.5	6.7
120°-130°	345.5	5.3
130°-140°	277.3	4.2
140°-150°	217.1	3.3
150°-160°	158.8	2.4
160°-170°	98.4	1.5
170°-180°	33.4	0.5
0°-30°	1906.2	29.2
0°-40°	2808.5	43.0
0°-60°	3959.3	60.7
0°-90°	4344.7	66.6
90°-120°	1052.2	16.1
90°-150°	1892.1	29.0
90°-180°	2183.0	33.4
0°-180°	6527.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2982	2982	2982	2982	2982	
5°	2933	2904	2923	2930	2940	273
15°	2480	2472	2538	2607	2652	693
25°	1896	1901	1999	2086	2178	872
35°	1340	1346	1436	1533	1642	833
45°	803	819	873	939	1024	626
55°	462	481	509	528	572	419
65°	232	251	273	239	217	241
75°	116	116	106	73	50	124
85°	33	33	30	19	12	36
90°	0	0	0	0	0	2
95°	17	69	310	107	66	20
105°	71	107	464	820	780	75
115°	132	159	352	746	876	130
125°	186	206	336	558	667	166
135°	227	246	332	471	532	175
145°	268	282	335	408	444	167
155°	306	313	343	368	384	141
165°	338	339	347	354	359	95
175°	354	352	351	349	346	34
180°	351	351	351	351	351	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2981.6	2981.6	2981.6	2981.6	2981.6
2.5°	2988.9	2962.3	2969.0	2968.8	2960.7
5°	2933.2	2903.8	2922.7	2929.5	2939.7
7.5°	2824.3	2802.1	2836.6	2862.2	2882.9
10°	2739.6	2720.4	2764.4	2801.7	2828.5
12.5°	2641.2	2625.0	2679.6	2729.6	2764.7
15°	2480.5	2471.6	2538.1	2607.1	2651.9
17.5°	2308.6	2304.3	2380.6	2461.1	2518.5
20°	2191.4	2190.1	2273.8	2357.7	2424.3
22.5°	2073.1	2075.9	2163.9	2251.2	2326.9
25°	1895.7	1900.8	1999.1	2086.2	2178.3
27.5°	1731.6	1733.9	1835.5	1927.5	2025.7
30°	1619.7	1626.1	1725.6	1820.8	1923.2
32.5°	1507.7	1515.1	1612.6	1711.0	1815.4
35°	1339.7	1346.1	1436.5	1533.2	1641.9
37.5°	1166.5	1175.2	1255.4	1346.8	1453.8
40°	1054.5	1067.3	1138.2	1224.3	1329.2
42.5°	946.7	962.5	1028.3	1110.0	1204.7
45°	803.3	818.6	872.6	938.7	1024.4
47.5°	679.8	697.4	738.9	795.8	869.0
50°	609.7	626.3	664.6	706.7	775.8
52.5°	547.9	564.5	598.7	631.1	690.0
55°	461.8	481.0	508.9	528.2	571.7
57.5°	391.2	409.6	431.7	440.4	466.8
60°	344.1	364.5	384.6	383.6	397.7
62.5°	301.2	318.6	338.6	324.7	325.5
65°	231.6	250.8	273.4	238.9	217.2
67.5°	187.1	191.2	214.6	166.6	140.8
70°	166.2	166.2	172.7	129.0	107.3
72.5°	146.3	146.3	140.2	104.9	82.2
75°	116.4	116.4	106.0	72.7	49.7
77.5°	89.7	88.7	81.1	54.3	36.1
80°	72.0	72.0	65.4	42.9	28.8
82.5°	56.3	56.3	50.8	33.5	21.5
85°	32.7	32.7	30.1	19.4	11.8
87.5°	11.5	11.5	10.5	6.3	5.2
90°	0.0	0.0	0.0	0.0	0.0
92.5°	5.3	28.3	65.7	19.1	14.4
95°	17.4	69.0	310.0	107.3	66.1
97.5°	31.9	80.8	477.4	341.6	234.1
100°	42.1	87.8	513.7	520.4	400.8
102.5°	53.3	95.4	505.7	666.1	561.7
105°	70.8	107.4	464.3	820.1	779.6
107.5°	88.6	121.4	415.9	863.5	899.6
110°	100.9	131.6	388.1	846.9	927.9

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	112.6	141.8	369.4	807.6	923.1
115°	131.6	159.0	352.1	745.8	875.8
117.5°	148.3	174.0	341.8	678.3	815.9
120°	161.7	183.2	340.7	639.6	771.6
122.5°	172.4	193.9	338.0	605.8	728.3
125°	185.7	206.0	336.0	557.6	666.7
127.5°	200.3	219.2	335.0	528.9	618.7
130°	207.8	226.7	333.4	508.8	587.2
132.5°	215.8	234.2	333.4	493.2	565.3
135°	227.1	246.1	332.0	471.0	532.4
137.5°	237.8	256.2	331.9	452.3	505.3
140°	245.8	264.8	331.3	436.7	487.7
142.5°	254.9	270.7	333.0	424.3	470.0
145°	267.9	281.6	334.7	407.7	444.2
147.5°	279.0	292.3	337.6	390.9	422.5
150°	288.6	297.7	338.7	385.3	407.5
152.5°	296.1	305.7	339.8	377.8	398.4
155°	306.0	313.1	342.7	368.4	383.5
157.5°	318.3	322.6	343.4	364.2	374.9
160°	324.7	327.9	346.0	361.0	370.1
162.5°	328.4	332.2	346.6	358.2	365.3
165°	338.0	339.3	346.7	354.2	359.4
167.5°	344.6	343.4	349.8	353.2	355.3
170°	346.7	346.1	348.7	349.4	352.1
172.5°	351.5	349.3	350.3	348.4	350.5
175°	354.1	352.1	350.7	348.7	346.0
177.5°	355.1	352.0	350.3	348.2	348.7
180°	351.4	351.4	351.4	351.4	351.4

(END OF REPORT)