

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: P521069

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

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521069
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2101-105-51, G2-2009-966-12)
Test Lab: INNOVATION CENTER
Issue Date: 5-5-2021
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-BB-050U-125D-92765-1D-UNV-STD-W-4_3500K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK 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: 5408.6 lumens
Efficiency: N/A
Efficacy: 75.5 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

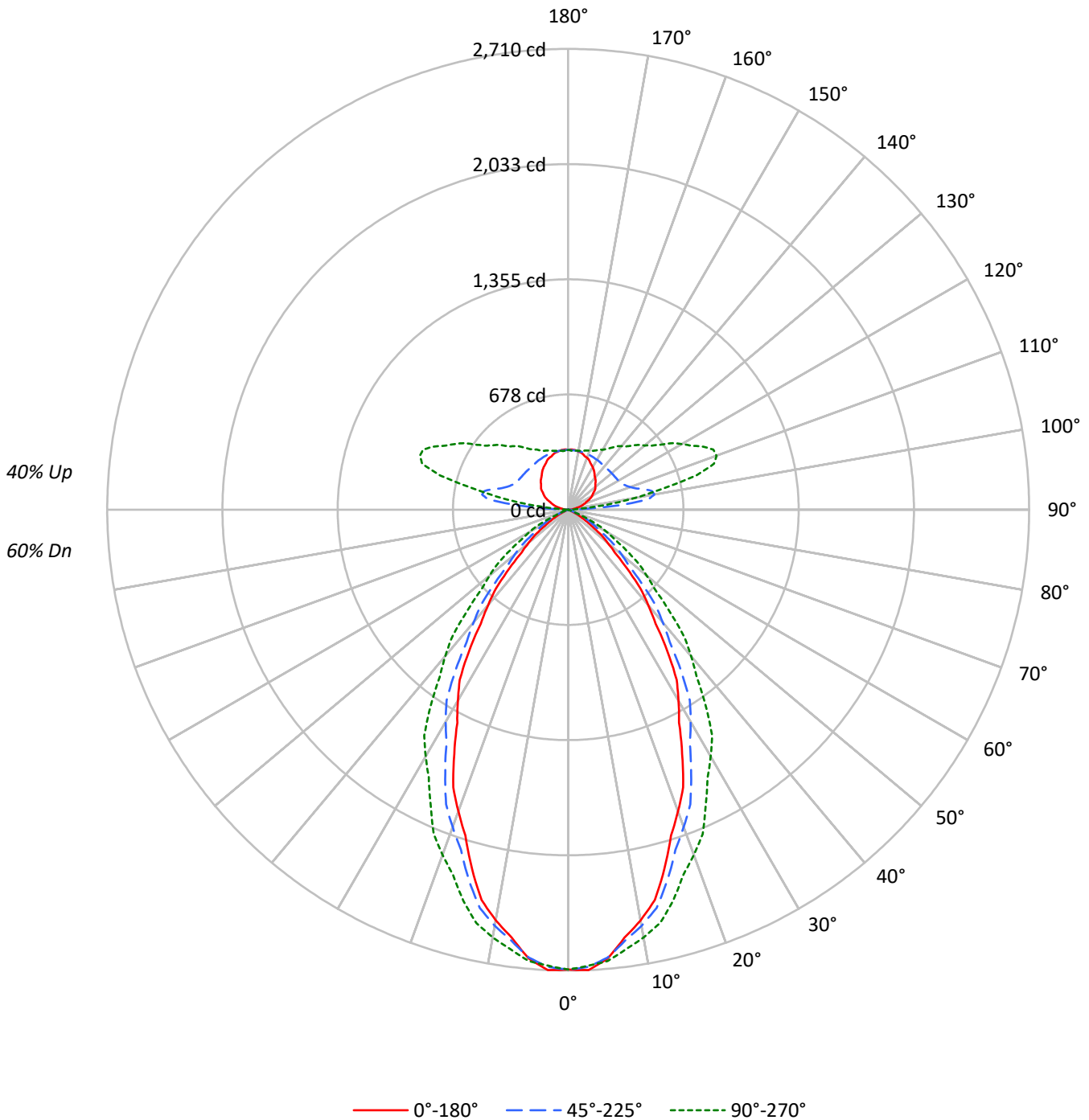
Input Watts (W): 71.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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									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	109	109	109	109	102	102	102	102	89	89	89	76	76	76	65	65	65	60																			
1	102	99	95	92	95	92	90	87	81	79	77	70	69	68	61	60	59	54																			
2	95	89	84	79	89	83	79	75	74	70	68	65	62	60	56	55	53	49																			
3	88	80	74	69	82	75	70	66	67	63	60	59	56	54	52	50	48	44																			
4	82	72	66	60	77	68	62	58	61	56	53	54	51	48	48	45	43	40																			
5	76	66	59	53	71	62	56	51	56	51	47	50	46	43	44	42	39	37																			
6	71	60	53	48	66	57	51	46	51	46	43	46	42	39	41	38	36	33																			
7	66	55	48	43	62	52	46	42	47	42	39	43	39	36	38	35	33	31																			
8	62	51	44	39	58	48	42	38	44	39	35	40	36	33	36	33	30	28																			
9	58	47	40	36	55	45	39	34	41	36	32	37	33	30	33	30	28	26																			
10	55	44	37	33	52	42	36	32	38	33	30	35	31	28	31	28	26	24																			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	24949	24949	24949
5°	24548	24487	24670
10°	22969	23275	23925
15°	20881	21544	22743
20°	18536	19499	21208
25°	16141	17420	19484
30°	13826	15345	17854
35°	11464	13026	15884
40°	8808	10416	13535
45°	6367	7886	10891
50°	4338	5878	8638
55°	2820	4251	6712
60°	1618	2993	4853
65°	428	1827	2456
70°	210	564	707
75°	93	46	0
80°	69	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 10891 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	246.8	4.6
10°-20°	631.1	11.7
20°-30°	790.1	14.6
30°-40°	729.8	13.5
40°-50°	490.4	9.1
50°-60°	253.3	4.7
60°-70°	79.3	1.5
70°-80°	5.0	0.1
80°-90°	0.1	0.0
90°-100°	160.1	3.0
100°-110°	455.6	8.4
110°-120°	436.5	8.1
120°-130°	345.5	6.4
130°-140°	277.3	5.1
140°-150°	217.1	4.0
150°-160°	158.8	2.9
160°-170°	98.4	1.8
170°-180°	33.4	0.6
0°-30°	1668.0	30.8
0°-40°	2397.8	44.3
0°-60°	3141.5	58.1
0°-90°	3225.9	59.6
90°-120°	1052.2	19.5
90°-150°	1892.1	35.0
90°-180°	2183.0	40.4
0°-180°	5408.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2704	2704	2704	2704	2704	
5°	2651	2624	2644	2653	2664	246
15°	2186	2178	2256	2331	2381	609
25°	1586	1598	1711	1828	1914	727
35°	1018	1043	1156	1293	1410	631
45°	488	517	604	722	835	383
55°	175	205	264	339	417	164
65°	20	38	84	101	112	33
75°	3	3	1	0	0	4
85°	0	0	0	0	0	0
90°	0	0	0	0	0	1
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°	2704.2	2704.2	2704.2	2704.2	2704.2
2.5°	2710.5	2684.9	2691.7	2691.5	2684.3
5°	2650.6	2623.7	2644.0	2653.4	2663.7
7.5°	2538.6	2517.6	2556.7	2585.9	2607.2
10°	2451.7	2433.8	2484.4	2524.4	2553.8
12.5°	2351.3	2337.4	2398.6	2453.4	2491.0
15°	2186.1	2178.5	2255.5	2331.2	2381.1
17.5°	2009.3	2009.0	2096.9	2190.9	2251.0
20°	1887.9	1891.7	1986.0	2089.6	2160.0
22.5°	1766.4	1775.4	1876.1	1984.1	2064.7
25°	1585.6	1598.4	1711.2	1828.3	1914.0
27.5°	1411.9	1430.6	1549.3	1671.0	1775.3
30°	1297.8	1319.6	1440.4	1568.5	1675.9
32.5°	1185.8	1211.7	1329.5	1464.9	1574.4
35°	1017.8	1043.4	1156.5	1292.6	1410.3
37.5°	844.4	869.4	979.9	1113.9	1241.0
40°	731.3	759.5	864.8	994.6	1123.8
42.5°	628.8	656.9	755.9	883.5	1005.5
45°	488.0	517.4	604.4	722.1	834.7
47.5°	371.3	403.3	479.6	586.1	688.7
50°	302.2	334.2	409.5	503.3	601.8
52.5°	246.7	277.7	345.6	434.0	524.4
55°	175.3	204.7	264.3	339.3	417.3
57.5°	121.1	146.5	199.9	262.5	323.7
60°	87.7	112.0	162.2	213.1	263.0
62.5°	58.3	80.6	129.8	168.7	202.3
65°	19.6	37.5	83.7	101.0	112.5
67.5°	9.9	12.0	44.0	46.4	50.2
70°	7.8	7.8	20.9	22.3	26.2
72.5°	5.8	5.8	8.4	10.7	11.5
75°	2.6	2.6	1.3	0.0	0.0
77.5°	1.3	1.3	1.0	0.0	0.0
80°	1.3	1.3	0.0	0.0	0.0
82.5°	0.3	0.3	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0
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)