

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: P520993

Luminaire Tested: SQ4-BB-025U-075D-92765-1D-UNV-STD-W-4_4500K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P520993
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-025U-075D-92765-1D-UNV-STD-W-4_4500K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 250 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: 4009.5 lumens
Efficiency: N/A
Efficacy: 87.4 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

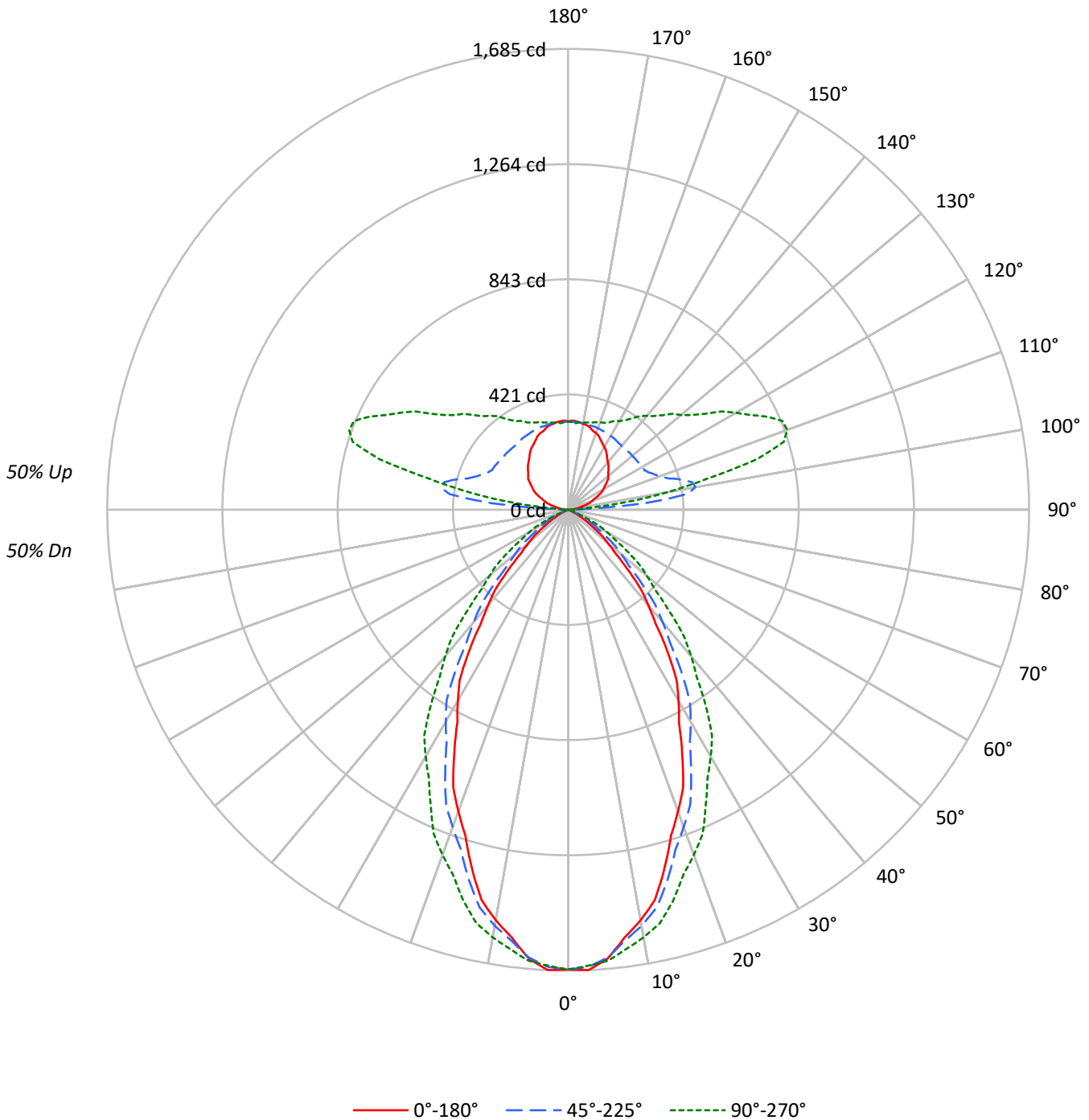
Input Watts (W): 45.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	107	107	107	107	99	99	99	99	83	83	83	69	69	69	56	56	56	50																			
1	100	96	93	90	92	89	86	84	76	74	72	64	62	61	52	52	51	46																			
2	92	86	81	76	85	80	75	72	69	65	63	58	56	54	48	47	46	41																			
3	85	77	71	66	79	72	67	62	62	58	55	53	50	48	45	43	41	37																			
4	79	70	63	58	73	65	59	55	57	52	49	49	45	43	41	39	37	34																			
5	73	63	56	51	68	59	53	48	52	47	43	45	41	38	38	36	34	31																			
6	68	57	50	45	63	54	48	43	47	42	39	41	37	35	35	33	31	28																			
7	64	53	45	40	59	49	43	39	44	39	35	38	34	32	33	30	28	26																			
8	59	48	41	36	55	46	39	35	40	35	32	35	32	29	31	28	26	24																			
9	56	45	38	33	52	42	36	32	37	32	29	33	29	26	29	26	24	22																			
10	52	41	35	30	49	39	33	29	35	30	27	31	27	24	27	24	22	20																			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	15511	15511	15511
5°	15262	15224	15337
10°	14280	14471	14874
15°	12982	13393	14139
20°	11524	12123	13185
25°	10035	10830	12113
30°	8596	9540	11100
35°	7127	8098	9875
40°	5476	6475	8415
45°	3959	4903	6771
50°	2697	3654	5370
55°	1753	2643	4174
60°	1006	1862	3017
65°	266	1137	1526
70°	132	351	440
75°	57	29	0
80°	43	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 6771 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	153.4	3.8
10°-20°	392.4	9.8
20°-30°	491.2	12.3
30°-40°	453.7	11.3
40°-50°	304.9	7.6
50°-60°	157.5	3.9
60°-70°	49.3	1.2
70°-80°	3.1	0.1
80°-90°	0.1	0.0
90°-100°	147.0	3.7
100°-110°	418.3	10.4
110°-120°	400.8	10.0
120°-130°	317.2	7.9
130°-140°	254.6	6.3
140°-150°	199.3	5.0
150°-160°	145.8	3.6
160°-170°	90.3	2.3
170°-180°	30.7	0.8
0°-30°	1037.0	25.9
0°-40°	1490.7	37.2
0°-60°	1953.1	48.7
0°-90°	2005.6	50.0
90°-120°	966.1	24.1
90°-150°	1737.2	43.3
90°-180°	2004.0	50.0
0°-180°	4009.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1681	1681	1681	1681	1681	
5°	1648	1631	1644	1650	1656	153
15°	1359	1354	1402	1449	1480	379
25°	986	994	1064	1137	1190	452
35°	633	649	719	804	877	392
45°	303	322	376	449	519	238
55°	109	127	164	211	260	102
65°	12	23	52	63	70	21
75°	2	2	1	0	0	2
85°	0	0	0	0	0	0
90°	0	0	0	0	0	1
95°	16	63	285	98	61	18
105°	65	99	426	753	716	69
115°	121	146	323	685	804	119
125°	170	189	308	512	612	153
135°	208	226	305	432	489	161
145°	246	258	307	374	408	154
155°	281	288	315	338	352	130
165°	310	312	318	325	330	87
175°	325	323	322	320	318	31
180°	323	323	323	323	323	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1681.2	1681.2	1681.2	1681.2	1681.2
2.5°	1685.1	1669.2	1673.4	1673.3	1668.9
5°	1647.9	1631.2	1643.8	1649.6	1656.0
7.5°	1578.2	1565.2	1589.5	1607.7	1620.9
10°	1524.2	1513.1	1544.6	1569.4	1587.7
12.5°	1461.8	1453.2	1491.2	1525.3	1548.6
15°	1359.1	1354.4	1402.2	1449.3	1480.3
17.5°	1249.2	1249.0	1303.7	1362.1	1399.5
20°	1173.7	1176.1	1234.7	1299.1	1342.9
22.5°	1098.2	1103.8	1166.4	1233.5	1283.6
25°	985.8	993.7	1063.9	1136.7	1189.9
27.5°	877.8	889.4	963.2	1038.8	1103.7
30°	806.9	820.4	895.5	975.1	1041.9
32.5°	737.2	753.3	826.5	910.7	978.8
35°	632.8	648.7	719.0	803.6	876.8
37.5°	524.9	540.5	609.2	692.5	771.6
40°	454.7	472.2	537.6	618.4	698.7
42.5°	390.9	408.4	470.0	549.3	625.1
45°	303.4	321.7	375.8	448.9	518.9
47.5°	230.8	250.7	298.2	364.4	428.2
50°	187.9	207.8	254.6	312.9	374.1
52.5°	153.4	172.6	214.9	269.8	326.0
55°	109.0	127.3	164.3	210.9	259.5
57.5°	75.3	91.1	124.3	163.2	201.2
60°	54.5	69.6	100.9	132.5	163.5
62.5°	36.3	50.1	80.7	104.9	125.7
65°	12.2	23.3	52.1	62.8	69.9
67.5°	6.2	7.5	27.3	28.8	31.2
70°	4.9	4.9	13.0	13.9	16.3
72.5°	3.6	3.6	5.2	6.7	7.2
75°	1.6	1.6	0.8	0.0	0.0
77.5°	0.8	0.8	0.7	0.0	0.0
80°	0.8	0.8	0.0	0.0	0.0
82.5°	0.2	0.2	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°	4.9	26.0	60.4	17.6	13.2
95°	15.9	63.3	284.6	98.5	60.7
97.5°	29.3	74.2	438.3	313.6	214.9
100°	38.6	80.6	471.7	477.7	368.0
102.5°	48.9	87.6	464.3	611.5	515.7
105°	65.0	98.6	426.3	752.9	715.8
107.5°	81.3	111.4	381.9	792.8	825.9
110°	92.6	120.8	356.3	777.6	851.9

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	103.4	130.2	339.2	741.5	847.5
115°	120.8	146.0	323.2	684.7	804.1
117.5°	136.2	159.8	313.8	622.7	749.1
120°	148.4	168.2	312.8	587.3	708.4
122.5°	158.2	178.0	310.3	556.2	668.7
125°	170.5	189.1	308.5	512.0	612.1
127.5°	183.9	201.3	307.5	485.6	568.1
130°	190.7	208.1	306.1	467.2	539.1
132.5°	198.1	215.0	306.1	452.8	519.0
135°	208.5	225.9	304.8	432.5	488.8
137.5°	218.3	235.3	304.7	415.2	463.9
140°	225.7	243.1	304.2	401.0	447.7
142.5°	234.0	248.6	305.7	389.6	431.5
145°	245.9	258.5	307.3	374.3	407.9
147.5°	256.1	268.4	310.0	358.8	387.9
150°	265.0	273.4	311.0	353.7	374.1
152.5°	271.8	280.7	311.9	346.8	365.8
155°	280.9	287.5	314.6	338.3	352.1
157.5°	292.2	296.2	315.3	334.4	344.2
160°	298.1	301.1	317.7	331.4	339.8
162.5°	301.5	305.0	318.2	328.9	335.4
165°	310.3	311.5	318.3	325.2	330.0
167.5°	316.4	315.3	321.1	324.3	326.2
170°	318.3	317.7	320.2	320.8	323.2
172.5°	322.7	320.7	321.6	319.8	321.8
175°	325.1	323.3	322.0	320.1	317.7
177.5°	326.0	323.2	321.6	319.7	320.2
180°	322.6	322.6	322.6	322.6	322.6

(END OF REPORT)