

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: P521045

Luminaire Tested: SQ4-BB-050U-075D-92765-1D-UNV-STD-W-4_4500K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521045
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-075D-92765-1D-UNV-STD-W-4_4500K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 750 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: 4264.1 lumens
Efficiency: N/A
Efficacy: 89.4 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

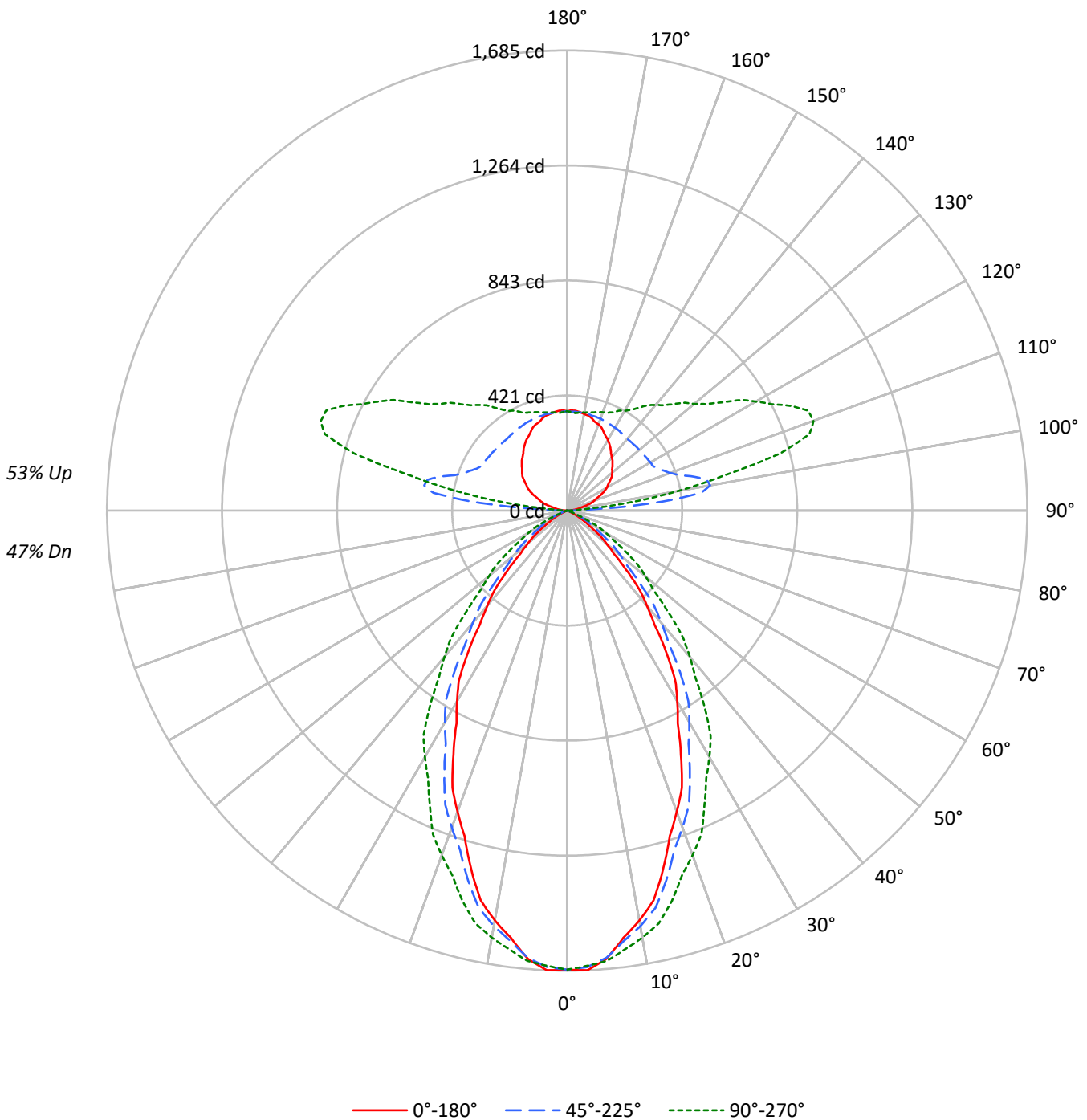
Input Watts (W): 47.7
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Luminous Intensity Polar Plot



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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20					20					20					20					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	0	
RCR																						
0	106	106	106	106	98	98	98	98	82	82	82	67	67	67	53	53	53	47				47
1	99	95	92	89	91	88	85	83	74	72	70	61	60	59	50	49	48	43				43
2	91	85	80	76	84	79	74	71	67	64	61	56	54	52	46	45	43	39				39
3	85	76	70	65	78	71	66	61	61	57	54	51	48	46	42	41	39	35				35
4	78	69	62	57	72	64	58	53	55	51	47	47	44	41	39	37	35	32				32
5	73	62	55	50	67	58	52	47	50	46	42	43	40	37	36	34	32	29				29
6	67	57	49	44	62	53	47	42	46	41	38	40	36	33	33	31	29	26				26
7	63	52	45	40	58	49	42	38	42	37	34	37	33	30	31	29	27	24				24
8	59	47	40	36	54	45	38	34	39	34	31	34	30	28	29	26	24	22				22
9	55	44	37	32	51	41	35	31	36	31	28	32	28	25	27	25	23	21				21
10	52	41	34	29	48	38	32	28	34	29	26	29	26	23	25	23	21	19				19

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	3.6
10°-20°	392.4	9.2
20°-30°	491.2	11.5
30°-40°	453.7	10.6
40°-50°	304.9	7.1
50°-60°	157.5	3.7
60°-70°	49.3	1.2
70°-80°	3.1	0.1
80°-90°	0.1	0.0
90°-100°	165.7	3.9
100°-110°	471.4	11.1
110°-120°	451.7	10.6
120°-130°	357.5	8.4
130°-140°	286.9	6.7
140°-150°	224.6	5.3
150°-160°	164.4	3.9
160°-170°	101.8	2.4
170°-180°	34.5	0.8
0°-30°	1037.0	24.3
0°-40°	1490.7	35.0
0°-60°	1953.1	45.8
0°-90°	2005.6	47.0
90°-120°	1088.8	25.5
90°-150°	1957.8	45.9
90°-180°	2259.0	53.0
0°-180°	4264.1	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°	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	

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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°	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)