

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: P521030

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

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521030
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-050D-92765-1D-UNV-STD-W-4_3500K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 500 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: 3476.9 lumens
Efficiency: N/A
Efficacy: 95.3 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: Semi-Indirect

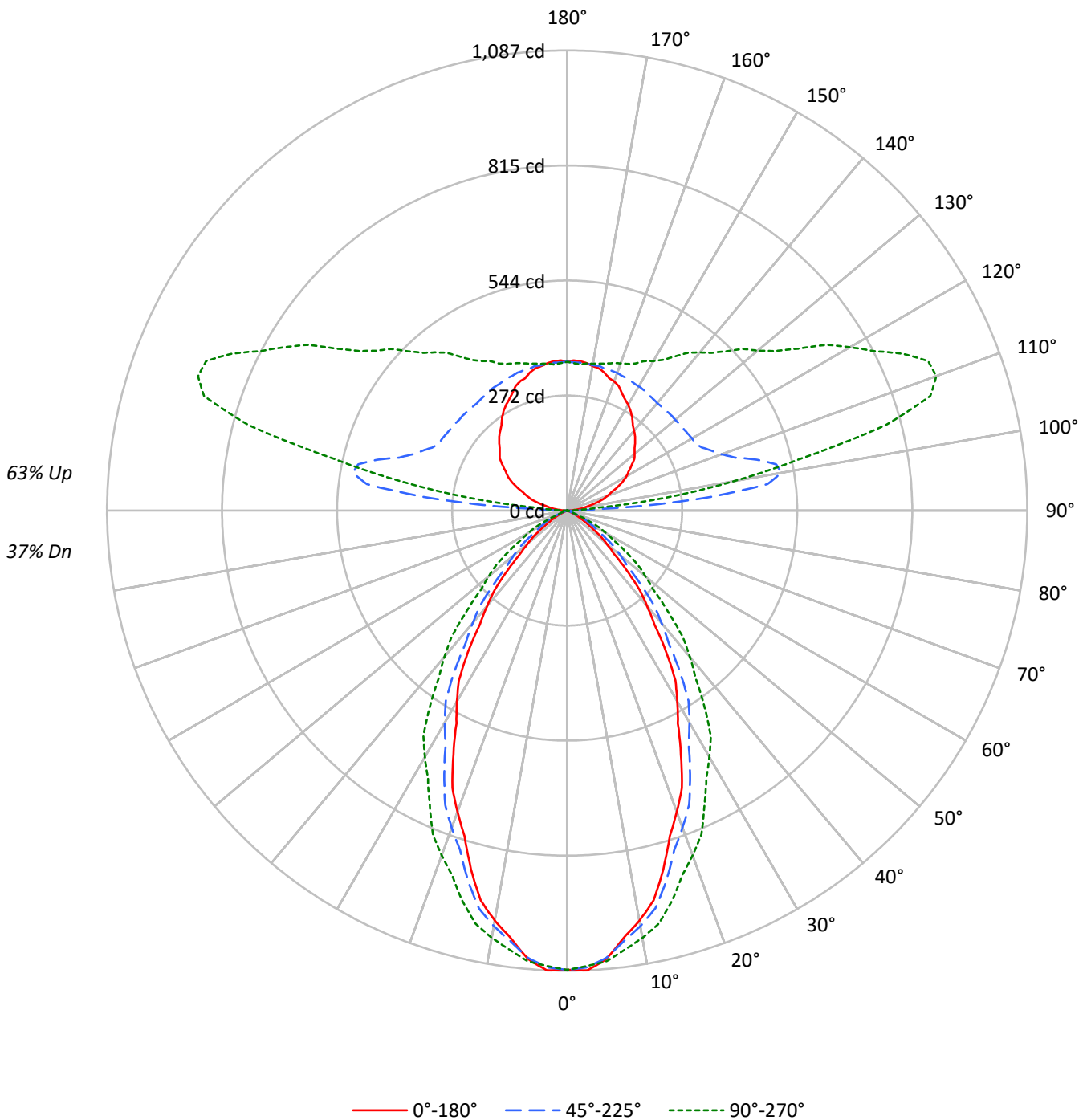
Input Watts (W): 36.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Luminous Intensity Polar Plot



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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				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	0
RCR																				
0	104	104	104	104	94	94	94	94	76	76	76		60	60	60		44	44	44	37
1	96	93	89	86	87	84	81	79	69	67	65		54	53	52		41	41	40	34
2	89	82	77	73	81	75	71	67	62	59	56		49	47	46		38	37	36	31
3	82	74	67	62	74	67	62	58	56	52	49		45	42	40		35	33	32	28
4	76	66	59	54	69	61	55	50	50	46	43		41	38	36		32	30	29	25
5	70	60	52	47	64	55	49	44	46	41	38		38	34	32		30	28	26	23
6	65	54	47	42	59	50	43	39	42	37	34		34	31	29		28	25	24	21
7	60	49	42	37	55	45	39	35	38	34	30		32	28	26		26	23	22	19
8	56	45	38	33	51	42	35	31	35	31	27		29	26	24		24	22	20	18
9	52	41	34	30	48	38	32	28	33	28	25		27	24	22		22	20	18	16
10	49	38	31	27	45	35	30	26	30	26	23		25	22	20		21	19	17	15

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10010	10010	10010
5°	9849	9825	9897
10°	9215	9338	9599
15°	8378	8643	9125
20°	7436	7823	8509
25°	6475	6989	7817
30°	5547	6157	7163
35°	4600	5226	6373
40°	3534	4178	5431
45°	2555	3164	4370
50°	1740	2358	3465
55°	1131	1705	2693
60°	650	1201	1947
65°	172	734	985
70°	84	227	283
75°	36	18	0
80°	27	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 4370 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	99.0	2.8
10°-20°	253.2	7.3
20°-30°	317.0	9.1
30°-40°	292.8	8.4
40°-50°	196.7	5.7
50°-60°	101.6	2.9
60°-70°	31.8	0.9
70°-80°	2.0	0.1
80°-90°	0.0	0.0
90°-100°	160.1	4.6
100°-110°	455.6	13.1
110°-120°	436.5	12.6
120°-130°	345.5	9.9
130°-140°	277.3	8.0
140°-150°	217.1	6.2
150°-160°	158.8	4.6
160°-170°	98.4	2.8
170°-180°	33.4	1.0
0°-30°	669.2	19.2
0°-40°	962.0	27.7
0°-60°	1260.3	36.2
0°-90°	1294.2	37.2
90°-120°	1052.2	30.3
90°-150°	1892.1	54.4
90°-180°	2183.0	62.8
0°-180°	3476.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1085	1085	1085	1085	1085	
5°	1063	1053	1061	1064	1069	99
15°	877	874	905	935	955	244
25°	636	641	686	734	768	292
35°	408	419	464	519	566	253
45°	196	208	242	290	335	154
55°	70	82	106	136	167	66
65°	8	15	34	40	45	13
75°	1	1	0	0	0	1
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°	1084.9	1084.9	1084.9	1084.9	1084.9
2.5°	1087.4	1077.2	1079.9	1079.8	1076.9
5°	1063.4	1052.6	1060.8	1064.5	1068.6
7.5°	1018.5	1010.1	1025.7	1037.5	1046.0
10°	983.6	976.4	996.7	1012.8	1024.6
12.5°	943.3	937.8	962.3	984.3	999.4
15°	877.1	874.0	904.9	935.3	955.3
17.5°	806.1	806.0	841.3	879.0	903.1
20°	757.4	758.9	796.8	838.3	866.6
22.5°	708.7	712.3	752.7	796.0	828.4
25°	636.1	641.3	686.5	733.5	767.9
27.5°	566.4	573.9	621.6	670.4	712.3
30°	520.7	529.4	577.9	629.3	672.4
32.5°	475.7	486.1	533.4	587.7	631.6
35°	408.4	418.6	464.0	518.6	565.8
37.5°	338.8	348.8	393.1	446.9	497.9
40°	293.4	304.7	346.9	399.0	450.9
42.5°	252.3	263.5	303.3	354.5	403.4
45°	195.8	207.6	242.5	289.7	334.9
47.5°	149.0	161.8	192.4	235.1	276.3
50°	121.2	134.1	164.3	201.9	241.4
52.5°	99.0	111.4	138.7	174.1	210.4
55°	70.3	82.1	106.0	136.1	167.4
57.5°	48.6	58.8	80.2	105.3	129.9
60°	35.2	44.9	65.1	85.5	105.5
62.5°	23.4	32.3	52.1	67.7	81.1
65°	7.9	15.1	33.6	40.5	45.1
67.5°	4.0	4.8	17.6	18.6	20.2
70°	3.1	3.1	8.4	9.0	10.5
72.5°	2.3	2.3	3.4	4.3	4.6
75°	1.0	1.0	0.5	0.0	0.0
77.5°	0.5	0.5	0.4	0.0	0.0
80°	0.5	0.5	0.0	0.0	0.0
82.5°	0.1	0.1	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)