

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: P521043

Luminaire Tested: SQ4-BB-050U-075D-92765-1D-UNV-STD-W-4_3500K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521043
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_3500K
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 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4121.0 lumens
Efficiency: N/A
Efficacy: 86.4 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

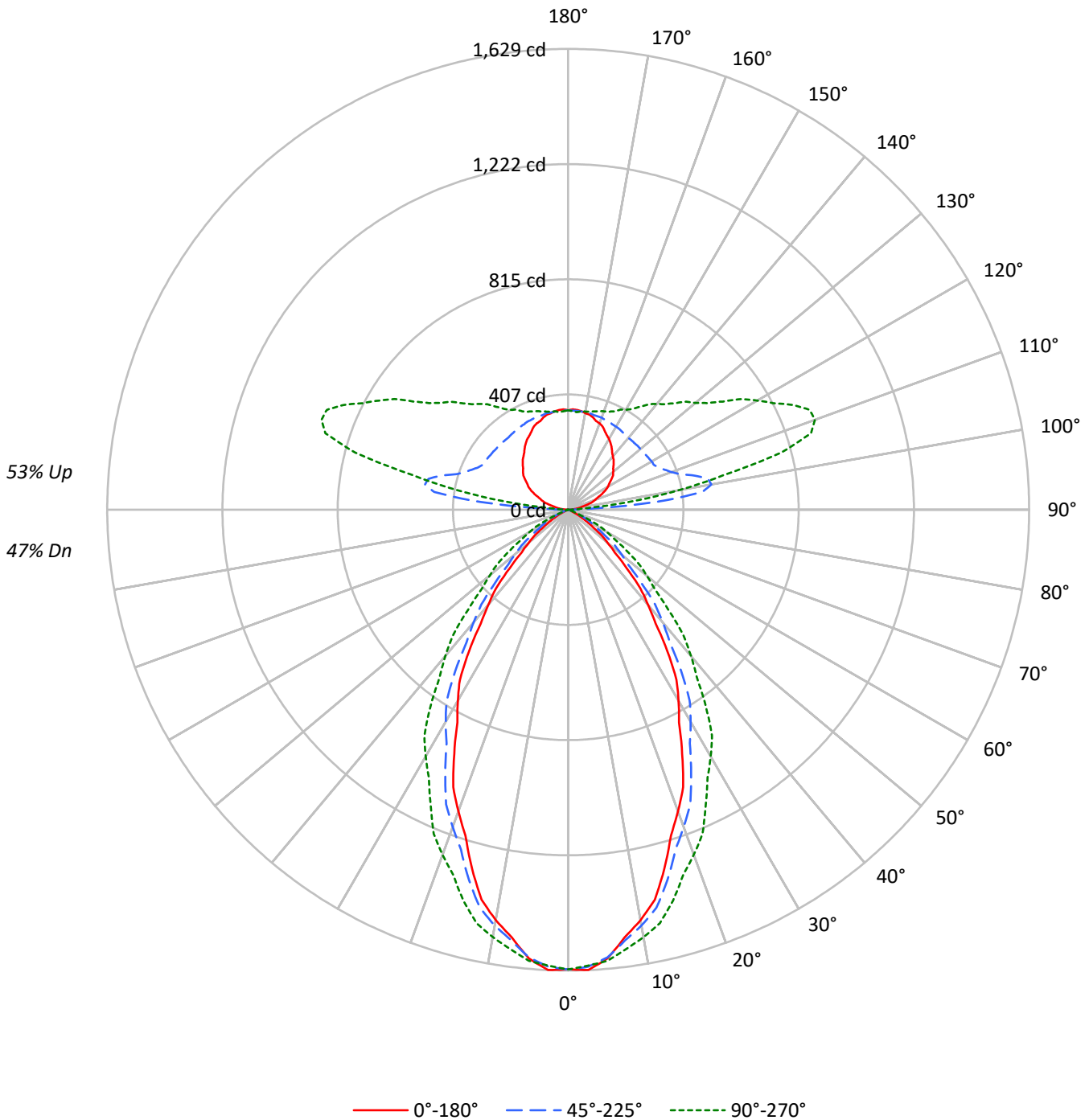
Input Watts (W): 47.7
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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°	14991	14991	14991
5°	14750	14713	14822
10°	13801	13984	14375
15°	12546	12944	13665
20°	11137	11716	12742
25°	9698	10467	11707
30°	8308	9221	10728
35°	6889	7827	9544
40°	5292	6258	8132
45°	3826	4739	6543
50°	2607	3531	5190
55°	1694	2554	4034
60°	972	1799	2915
65°	258	1098	1476
70°	127	340	424
75°	57	29	0
80°	43	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 6543 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	148.3	3.6
10°-20°	379.2	9.2
20°-30°	474.7	11.5
30°-40°	438.5	10.6
40°-50°	294.6	7.1
50°-60°	152.2	3.7
60°-70°	47.7	1.2
70°-80°	3.0	0.1
80°-90°	0.1	0.0
90°-100°	160.1	3.9
100°-110°	455.6	11.1
110°-120°	436.5	10.6
120°-130°	345.5	8.4
130°-140°	277.3	6.7
140°-150°	217.1	5.3
150°-160°	158.8	3.9
160°-170°	98.4	2.4
170°-180°	33.4	0.8
0°-30°	1002.2	24.3
0°-40°	1440.7	35.0
0°-60°	1887.5	45.8
0°-90°	1938.3	47.0
90°-120°	1052.2	25.5
90°-150°	1892.1	45.9
90°-180°	2183.0	53.0
0°-180°	4121.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1625	1625	1625	1625	1625	
5°	1593	1576	1589	1594	1600	148
15°	1314	1309	1355	1401	1431	366
25°	953	960	1028	1098	1150	437
35°	612	627	695	777	847	379
45°	293	311	363	434	502	230
55°	105	123	159	204	251	98
65°	12	23	50	61	68	20
75°	2	2	1	0	0	2
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°	1624.8	1624.8	1624.8	1624.8	1624.8
2.5°	1628.6	1613.2	1617.3	1617.2	1612.9
5°	1592.6	1576.4	1588.6	1594.3	1600.4
7.5°	1525.3	1512.7	1536.1	1553.7	1566.5
10°	1473.1	1462.3	1492.7	1516.7	1534.4
12.5°	1412.7	1404.4	1441.2	1474.1	1496.7
15°	1313.5	1308.9	1355.2	1400.7	1430.6
17.5°	1207.2	1207.1	1259.9	1316.4	1352.5
20°	1134.3	1136.6	1193.3	1255.5	1297.8
22.5°	1061.4	1066.7	1127.2	1192.2	1240.6
25°	952.7	960.4	1028.2	1098.5	1150.0
27.5°	848.3	859.5	930.9	1004.0	1066.7
30°	779.8	792.8	865.5	942.4	1007.0
32.5°	712.5	728.0	798.8	880.2	946.0
35°	611.6	626.9	694.9	776.7	847.4
37.5°	507.3	522.4	588.8	669.3	745.7
40°	439.4	456.3	519.6	597.6	675.2
42.5°	377.8	394.7	454.2	530.8	604.2
45°	293.2	310.9	363.2	433.9	501.5
47.5°	223.1	242.3	288.2	352.1	413.8
50°	181.6	200.8	246.0	302.4	361.6
52.5°	148.3	166.9	207.7	260.8	315.1
55°	105.3	123.0	158.8	203.9	250.8
57.5°	72.8	88.0	120.1	157.7	194.5
60°	52.7	67.3	97.5	128.0	158.0
62.5°	35.1	48.4	78.0	101.4	121.5
65°	11.8	22.6	50.3	60.7	67.6
67.5°	6.0	7.2	26.4	27.9	30.2
70°	4.7	4.7	12.6	13.4	15.7
72.5°	3.5	3.5	5.0	6.5	6.9
75°	1.6	1.6	0.8	0.0	0.0
77.5°	0.8	0.8	0.6	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°	5.3	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)