

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: P521042

Luminaire Tested: SQ4-BB-050U-075D-92765-1D-UNV-STD-W-4_3000K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521042
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_3000K
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 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4024.4 lumens
Efficiency: N/A
Efficacy: 84.4 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

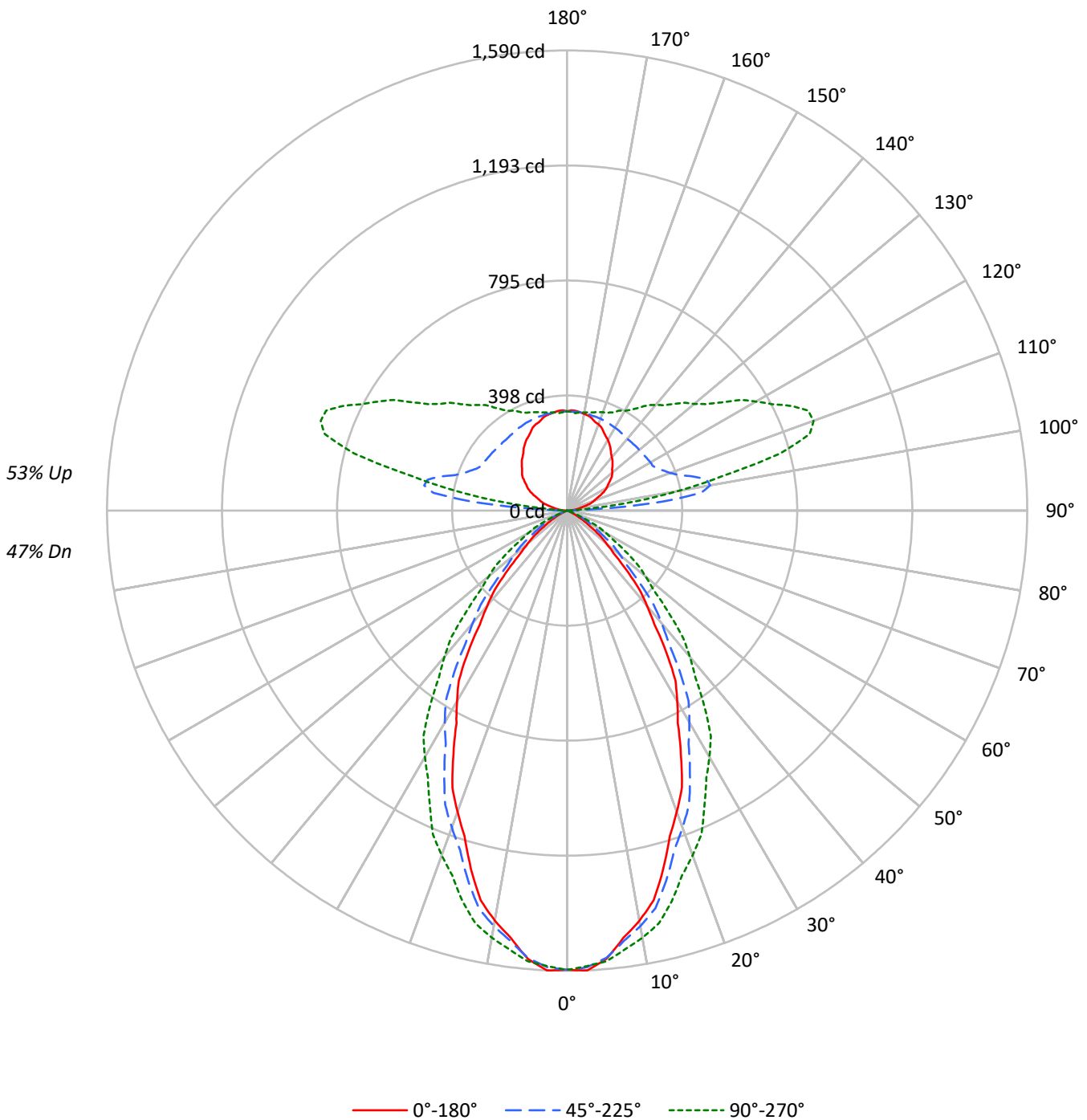
Input Watts (W): 47.7
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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°	14639	14639	14639
5°	14404	14368	14475
10°	13478	13657	14038
15°	12252	12641	13345
20°	10876	11441	12444
25°	9471	10222	11433
30°	8113	9004	10477
35°	6726	7643	9320
40°	5168	6111	7942
45°	3736	4628	6391
50°	2545	3449	5068
55°	1655	2495	3939
60°	948	1757	2847
65°	251	1072	1441
70°	124	332	415
75°	53	29	0
80°	43	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 6391 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	144.8	3.6
10°-20°	370.3	9.2
20°-30°	463.6	11.5
30°-40°	428.2	10.6
40°-50°	287.7	7.1
50°-60°	148.6	3.7
60°-70°	46.5	1.2
70°-80°	2.9	0.1
80°-90°	0.1	0.0
90°-100°	156.4	3.9
100°-110°	444.9	11.1
110°-120°	426.3	10.6
120°-130°	337.4	8.4
130°-140°	270.8	6.7
140°-150°	212.0	5.3
150°-160°	155.1	3.9
160°-170°	96.1	2.4
170°-180°	32.6	0.8
0°-30°	978.7	24.3
0°-40°	1406.9	35.0
0°-60°	1843.3	45.8
0°-90°	1892.8	47.0
90°-120°	1027.6	25.5
90°-150°	1847.8	45.9
90°-180°	2132.0	53.0
0°-180°	4024.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1587	1587	1587	1587	1587	
5°	1555	1540	1551	1557	1563	144
15°	1283	1278	1323	1368	1397	357
25°	930	938	1004	1073	1123	427
35°	597	612	679	758	828	370
45°	286	304	355	424	490	225
55°	103	120	155	199	245	96
65°	12	22	49	59	66	19
75°	2	2	1	0	0	2
85°	0	0	0	0	0	0
90°	0	0	0	0	0	1
95°	17	67	303	105	65	19
105°	69	105	453	801	761	73
115°	128	155	344	728	855	127
125°	181	201	328	545	651	162
135°	222	240	324	460	520	171
145°	262	275	327	398	434	163
155°	299	306	335	360	374	138
165°	330	331	339	346	351	93
175°	346	344	342	340	338	33
180°	343	343	343	343	343	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1586.7	1586.7	1586.7	1586.7	1586.7
2.5°	1590.4	1575.4	1579.4	1579.3	1575.1
5°	1555.3	1539.5	1551.4	1556.9	1562.9
7.5°	1489.5	1477.2	1500.1	1517.3	1529.8
10°	1438.6	1428.1	1457.8	1481.2	1498.4
12.5°	1379.6	1371.5	1407.4	1439.5	1461.6
15°	1282.7	1278.2	1323.4	1367.8	1397.1
17.5°	1179.0	1178.8	1230.4	1285.5	1320.8
20°	1107.7	1110.0	1165.3	1226.1	1267.4
22.5°	1036.5	1041.7	1100.8	1164.2	1211.5
25°	930.4	937.9	1004.1	1072.8	1123.1
27.5°	828.4	839.4	909.0	980.5	1041.7
30°	761.5	774.3	845.2	920.3	983.4
32.5°	695.8	711.0	780.1	859.5	923.8
35°	597.2	612.2	678.6	758.5	827.5
37.5°	495.4	510.2	575.0	653.6	728.2
40°	429.1	445.6	507.4	583.6	659.4
42.5°	368.9	385.4	443.5	518.4	590.0
45°	286.3	303.6	354.7	423.7	489.8
47.5°	217.9	236.6	281.4	343.9	404.1
50°	177.3	196.1	240.3	295.3	353.1
52.5°	144.8	162.9	202.8	254.7	307.7
55°	102.9	120.1	155.1	199.1	244.9
57.5°	71.1	85.9	117.3	154.0	189.9
60°	51.4	65.7	95.2	125.0	154.3
62.5°	34.2	47.3	76.2	99.0	118.7
65°	11.5	22.0	49.1	59.3	66.0
67.5°	5.8	7.0	25.8	27.2	29.5
70°	4.6	4.6	12.3	13.1	15.4
72.5°	3.4	3.4	4.9	6.3	6.8
75°	1.5	1.5	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°	5.2	27.7	64.2	18.7	14.1
95°	17.0	67.4	302.7	104.8	64.6
97.5°	31.2	78.9	466.2	333.6	228.6
100°	41.1	85.8	501.7	508.2	391.4
102.5°	52.1	93.1	493.9	650.5	548.5
105°	69.2	104.9	453.4	800.9	761.3
107.5°	86.5	118.5	406.2	843.3	878.5
110°	98.5	128.5	379.0	827.1	906.2

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	<i>110.0</i>	138.4	360.8	788.7	901.5
115°	<i>128.5</i>	155.3	343.8	728.3	855.3
117.5°	<i>144.8</i>	170.0	333.8	662.4	796.8
120°	<i>157.9</i>	178.9	332.7	624.7	753.5
122.5°	<i>168.3</i>	189.4	330.1	591.6	711.2
125°	<i>181.4</i>	201.1	328.2	544.6	651.1
127.5°	<i>195.6</i>	214.1	327.1	516.5	604.2
130°	<i>202.9</i>	221.4	325.5	496.9	573.4
132.5°	<i>210.7</i>	228.7	325.5	481.6	552.1
135°	<i>221.8</i>	240.3	324.2	460.0	520.0
137.5°	<i>232.3</i>	250.2	324.1	441.7	493.5
140°	<i>240.1</i>	258.6	323.6	426.5	476.2
142.5°	<i>249.0</i>	264.4	325.2	414.4	459.0
145°	<i>261.6</i>	275.0	326.8	398.1	433.8
147.5°	<i>272.4</i>	285.5	329.7	381.7	412.6
150°	<i>281.8</i>	290.8	330.8	376.3	398.0
152.5°	<i>289.1</i>	298.6	331.8	368.9	389.1
155°	<i>298.8</i>	305.8	334.7	359.8	374.5
157.5°	<i>310.8</i>	315.0	335.3	355.7	366.1
160°	<i>317.1</i>	320.3	337.9	352.5	361.4
162.5°	<i>320.7</i>	324.4	338.5	349.8	356.7
165°	<i>330.1</i>	331.4	338.6	345.9	351.0
167.5°	<i>336.5</i>	335.4	341.6	344.9	346.9
170°	<i>338.6</i>	338.0	340.5	341.3	343.8
172.5°	<i>343.3</i>	341.1	342.1	340.2	342.2
175°	<i>345.8</i>	343.9	342.5	340.5	337.9
177.5°	<i>346.8</i>	343.7	342.1	340.0	340.5
180°	<i>343.2</i>	343.2	343.2	343.2	343.2

(END OF REPORT)