

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: P521002

Luminaire Tested: SQ4-BB-025U-100D-92765-1D-UNV-STD-W-4_2700K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521002
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-100D-92765-1D-UNV-STD-W-4_2700K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 250 LUMENS PER FOOT
Light Source: 2700K-6500K CCT, 90 CRI LEDS, TUNED TO 2700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4290.7 lumens
Efficiency: N/A
Efficacy: 76.2 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

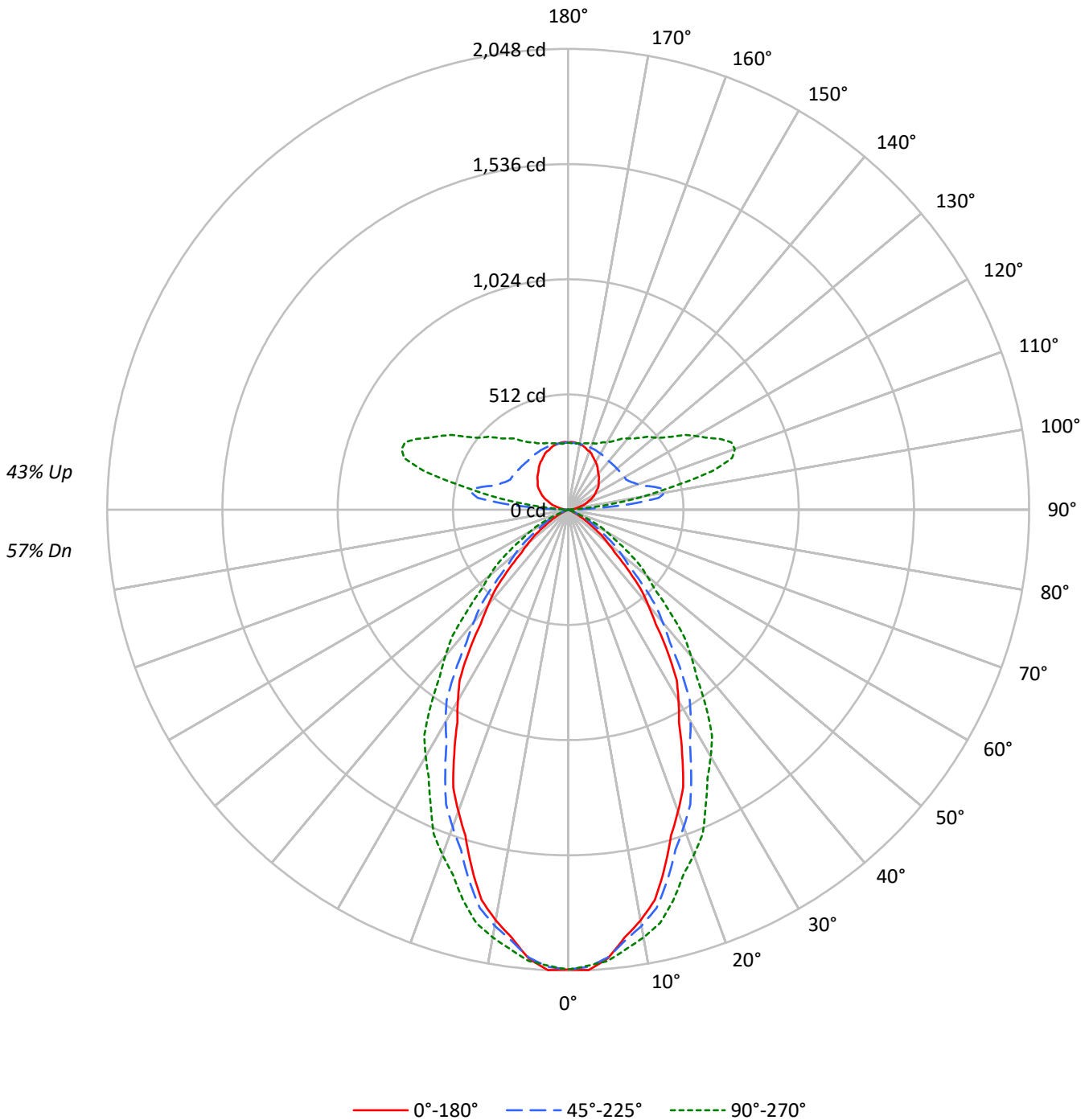
Input Watts (W): 56.3
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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									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	50	30	10	0														
RCR																																						
0	109	109	109	109	101	101	101	101	87	87	87	74	74	74	62	62	62	57																				
1	101	98	95	92	94	91	89	86	79	77	76	68	67	66	58	57	57	52																				
2	94	88	83	78	88	82	78	74	72	69	66	63	60	58	54	52	51	47																				
3	87	79	73	68	81	74	69	65	66	61	58	57	54	52	50	48	46	42																				
4	81	72	65	60	76	67	61	57	60	55	52	53	49	46	46	43	41	38																				
5	75	65	58	53	70	61	55	50	55	50	46	48	45	42	43	40	38	35																				
6	70	59	52	47	66	56	50	45	50	45	41	45	41	38	39	37	34	32																				
7	65	54	47	42	61	52	45	41	46	41	38	41	37	34	37	34	31	29																				
8	61	50	43	38	57	48	41	37	43	38	34	38	34	32	34	31	29	27																				
9	57	46	39	35	54	44	38	34	40	35	31	36	32	29	32	29	27	25																				
10	54	43	36	32	51	41	35	31	37	32	29	34	30	27	30	27	25	23																				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	18854	18854	18854
5°	18551	18504	18642
10°	17357	17588	18079
15°	15779	16280	17186
20°	14007	14735	16025
25°	12198	13164	14724
30°	10448	11596	13492
35°	8664	9844	12004
40°	6655	7871	10228
45°	4812	5960	8231
50°	3278	4441	6528
55°	2131	3212	5073
60°	1222	2262	3666
65°	323	1382	1856
70°	159	426	534
75°	71	36	0
80°	53	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 8231 cd/sqm

TEST NUMBER: P521002

CATALOG NUMBER: SQ4-BB-025U-100D-92765-1D-UNV-STD-W-4_2700K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	186.5	4.3
10°-20°	476.9	11.1
20°-30°	597.1	13.9
30°-40°	551.5	12.9
40°-50°	370.6	8.6
50°-60°	191.4	4.5
60°-70°	60.0	1.4
70°-80°	3.8	0.1
80°-90°	0.1	0.0
90°-100°	135.9	3.2
100°-110°	386.8	9.0
110°-120°	370.6	8.6
120°-130°	293.3	6.8
130°-140°	235.4	5.5
140°-150°	184.3	4.3
150°-160°	134.8	3.1
160°-170°	83.5	1.9
170°-180°	28.3	0.7
0°-30°	1260.5	29.4
0°-40°	1812.0	42.2
0°-60°	2373.9	55.3
0°-90°	2437.7	56.8
90°-120°	893.2	20.8
90°-150°	1606.2	37.4
90°-180°	1853.0	43.2
0°-180°	4290.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2044	2044	2044	2044	2044	
5°	2003	1983	1998	2005	2013	186
15°	1652	1646	1704	1762	1799	460
25°	1198	1208	1293	1382	1446	549
35°	769	788	874	977	1066	476
45°	369	391	457	546	631	290
55°	132	155	200	256	315	124
65°	15	28	63	76	85	25
75°	2	2	1	0	0	3
85°	0	0	0	0	0	0
90°	0	0	0	0	0	1
95°	15	59	263	91	56	17
105°	60	91	394	696	662	64
115°	112	135	299	633	744	110
125°	158	175	285	473	566	141
135°	193	209	282	400	452	149
145°	227	239	284	346	377	142
155°	260	266	291	313	326	120
165°	287	288	294	301	305	81
175°	301	299	298	296	294	28
180°	298	298	298	298	298	

TEST NUMBER: P521002

CATALOG NUMBER: SQ4-BB-025U-100D-92765-1D-UNV-STD-W-4_2700K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2043.5	2043.5	2043.5	2043.5	2043.5
2.5°	2048.3	2028.9	2034.0	2033.9	2028.5
5°	2003.0	1982.7	1998.0	2005.1	2012.9
7.5°	1918.4	1902.5	1932.0	1954.1	1970.2
10°	1852.7	1839.2	1877.4	1907.6	1929.8
12.5°	1776.8	1766.3	1812.6	1853.9	1882.4
15°	1652.0	1646.2	1704.4	1761.6	1799.3
17.5°	1518.4	1518.2	1584.6	1655.6	1701.1
20°	1426.6	1429.5	1500.8	1579.1	1632.2
22.5°	1334.9	1341.6	1417.7	1499.4	1560.3
25°	1198.2	1207.9	1293.1	1381.6	1446.4
27.5°	1066.9	1081.1	1170.7	1262.7	1341.6
30°	980.7	997.2	1088.5	1185.2	1266.4
32.5°	896.1	915.6	1004.7	1107.0	1189.7
35°	769.2	788.5	874.0	976.8	1065.8
37.5°	638.1	657.0	740.5	841.7	937.8
40°	552.6	573.9	653.5	751.6	849.2
42.5°	475.1	496.4	571.2	667.6	759.9
45°	368.8	391.0	456.8	545.7	630.8
47.5°	280.6	304.7	362.4	442.9	520.4
50°	228.4	252.5	309.4	380.3	454.8
52.5°	186.5	209.9	261.2	328.0	396.2
55°	132.5	154.7	199.7	256.4	315.4
57.5°	91.5	110.7	151.1	198.4	244.6
60°	66.2	84.6	122.6	161.0	198.7
62.5°	44.1	60.9	98.1	127.5	152.8
65°	14.8	28.4	63.3	76.3	85.0
67.5°	7.5	9.1	33.2	35.1	38.0
70°	5.9	5.9	15.8	16.9	19.8
72.5°	4.4	4.4	6.3	8.1	8.7
75°	2.0	2.0	1.0	0.0	0.0
77.5°	1.0	1.0	0.8	0.0	0.0
80°	1.0	1.0	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°	4.5	24.1	55.8	16.2	12.2
95°	14.7	58.6	263.1	91.1	56.1
97.5°	27.1	68.6	405.3	290.0	198.7
100°	35.7	74.5	436.1	441.7	340.3
102.5°	45.3	81.0	429.3	565.4	476.8
105°	60.1	91.2	394.1	696.2	661.8
107.5°	75.2	103.0	353.1	733.1	763.7
110°	85.6	111.7	329.5	719.0	787.7

TEST NUMBER: P521002

CATALOG NUMBER: SQ4-BB-025U-100D-92765-1D-UNV-STD-W-4_2700K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	95.6	120.3	313.6	685.6	783.6
115°	111.7	135.0	298.9	633.1	743.5
117.5°	125.9	147.7	290.1	575.8	692.7
120°	137.2	155.5	289.2	543.0	655.0
122.5°	146.3	164.6	287.0	514.2	618.3
125°	157.7	174.8	285.3	473.4	566.0
127.5°	170.0	186.1	284.3	449.0	525.3
130°	176.4	192.5	283.0	431.9	498.5
132.5°	183.2	198.8	283.0	418.7	479.9
135°	192.8	208.9	281.9	399.9	452.0
137.5°	201.9	217.5	281.7	383.9	429.0
140°	208.7	224.8	281.3	370.7	414.0
142.5°	216.4	229.8	282.6	360.2	399.0
145°	227.4	239.1	284.1	346.1	377.1
147.5°	236.8	248.1	286.6	331.8	358.6
150°	245.0	252.8	287.5	327.1	345.9
152.5°	251.3	259.6	288.4	320.7	338.2
155°	259.7	265.8	290.9	312.8	325.5
157.5°	270.2	273.8	291.5	309.2	318.3
160°	275.6	278.4	293.8	306.4	314.2
162.5°	278.8	282.0	294.2	304.1	310.1
165°	287.0	288.1	294.3	300.7	305.1
167.5°	292.5	291.5	296.9	299.8	301.6
170°	294.3	293.8	296.0	296.6	298.9
172.5°	298.4	296.5	297.4	295.7	297.5
175°	300.6	298.9	297.7	296.0	293.8
177.5°	301.5	298.8	297.4	295.6	296.0
180°	298.3	298.3	298.3	298.3	298.3

(END OF REPORT)