

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: P521009

Luminaire Tested: SQ4-BB-025U-100D-92765-1D-UNV-STD-W-4_6500K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521009
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_6500K
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 6500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4803.7 lumens
Efficiency: N/A
Efficacy: 85.8 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

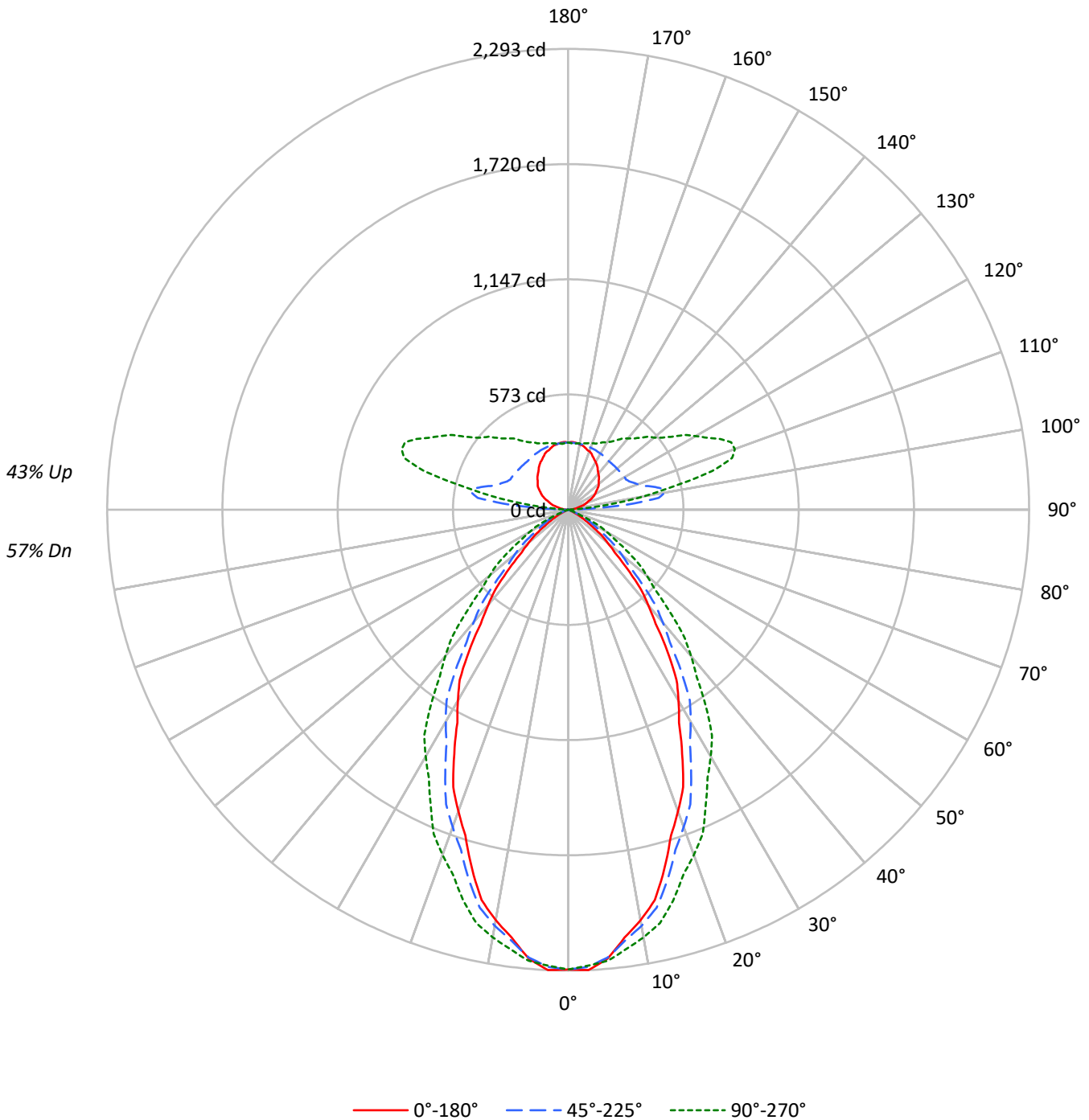
Input Watts (W): 56
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	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°	21109	21109	21109
5°	20769	20717	20871
10°	19432	19692	20242
15°	17666	18226	19242
20°	15682	16497	17942
25°	13656	14739	16484
30°	11698	12982	15106
35°	9699	11021	13439
40°	7452	8811	11451
45°	5387	6673	9214
50°	3670	4972	7307
55°	2385	3597	5680
60°	1369	2532	4106
65°	362	1546	2078
70°	178	477	596
75°	78	39	0
80°	58	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 9214 cd/sqm

TEST NUMBER: P521009

CATALOG NUMBER: SQ4-BB-025U-100D-92765-1D-UNV-STD-W-4_6500K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	208.8	4.3
10°-20°	533.9	11.1
20°-30°	668.4	13.9
30°-40°	617.4	12.9
40°-50°	414.9	8.6
50°-60°	214.3	4.5
60°-70°	67.1	1.4
70°-80°	4.2	0.1
80°-90°	0.1	0.0
90°-100°	152.2	3.2
100°-110°	433.0	9.0
110°-120°	414.9	8.6
120°-130°	328.4	6.8
130°-140°	263.6	5.5
140°-150°	206.3	4.3
150°-160°	151.0	3.1
160°-170°	93.5	1.9
170°-180°	31.7	0.7
0°-30°	1411.2	29.4
0°-40°	2028.6	42.2
0°-60°	2657.8	55.3
0°-90°	2729.2	56.8
90°-120°	1000.1	20.8
90°-150°	1798.3	37.4
90°-180°	2075.0	43.2
0°-180°	4803.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2288	2288	2288	2288	2288	
5°	2242	2220	2237	2245	2254	208
15°	1850	1843	1908	1972	2014	515
25°	1342	1352	1448	1547	1619	615
35°	861	883	978	1094	1193	533
45°	413	438	511	611	706	324
55°	148	173	224	287	353	138
65°	17	32	71	85	95	28
75°	2	2	1	0	0	3
85°	0	0	0	0	0	0
90°	0	0	0	0	0	1
95°	16	66	295	102	63	19
105°	67	102	441	779	741	71
115°	125	151	335	709	832	123
125°	176	196	319	530	634	158
135°	216	234	316	448	506	167
145°	255	268	318	388	422	159
155°	291	298	326	350	364	134
165°	321	322	330	337	342	90
175°	336	335	333	331	329	32
180°	334	334	334	334	334	

TEST NUMBER: P521009

CATALOG NUMBER: SQ4-BB-025U-100D-92765-1D-UNV-STD-W-4_6500K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2287.9	2287.9	2287.9	2287.9	2287.9
2.5°	2293.2	2271.5	2277.2	2277.1	2271.0
5°	2242.5	2219.7	2236.9	2244.9	2253.5
7.5°	2147.7	2130.0	2163.0	2187.8	2205.7
10°	2074.2	2059.1	2101.9	2135.7	2160.6
12.5°	1989.2	1977.5	2029.3	2075.6	2107.4
15°	1849.5	1843.0	1908.2	1972.3	2014.5
17.5°	1699.9	1699.7	1774.1	1853.6	1904.4
20°	1597.2	1600.4	1680.2	1767.9	1827.4
22.5°	1494.5	1502.0	1587.2	1678.6	1746.8
25°	1341.5	1352.3	1447.8	1546.8	1619.3
27.5°	1194.5	1210.3	1310.7	1413.7	1502.0
30°	1098.0	1116.4	1218.6	1327.0	1417.9
32.5°	1003.2	1025.1	1124.8	1239.3	1332.0
35°	861.1	882.8	978.5	1093.6	1193.2
37.5°	714.4	735.6	829.0	942.4	1050.0
40°	618.7	642.5	731.6	841.5	950.8
42.5°	532.0	555.8	639.5	747.5	850.7
45°	412.9	437.7	511.4	610.9	706.2
47.5°	314.1	341.2	405.8	495.8	582.6
50°	255.7	282.7	346.4	425.8	509.1
52.5°	208.8	234.9	292.4	367.2	443.6
55°	148.3	173.2	223.6	287.1	353.1
57.5°	102.5	123.9	169.1	222.1	273.8
60°	74.2	94.7	137.2	180.3	222.5
62.5°	49.4	68.2	109.8	142.8	171.1
65°	16.6	31.8	70.8	85.4	95.2
67.5°	8.4	10.1	37.2	39.3	42.5
70°	6.6	6.6	17.7	18.9	22.1
72.5°	4.9	4.9	7.1	9.1	9.7
75°	2.2	2.2	1.1	0.0	0.0
77.5°	1.1	1.1	0.9	0.0	0.0
80°	1.1	1.1	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°	5.1	26.9	62.5	18.2	13.7
95°	16.5	65.6	294.6	102.0	62.9
97.5°	30.3	76.8	453.7	324.7	222.5
100°	40.0	83.5	488.3	494.6	381.0
102.5°	50.7	90.6	480.6	633.0	533.8
105°	67.3	102.1	441.3	779.4	740.9
107.5°	84.2	115.4	395.3	820.7	855.0
110°	95.9	125.1	368.9	804.9	881.9

TEST NUMBER: P521009

CATALOG NUMBER: SQ4-BB-025U-100D-92765-1D-UNV-STD-W-4_6500K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	107.0	134.7	351.1	767.6	877.3
115°	125.1	151.2	334.6	708.8	832.4
117.5°	141.0	165.4	324.8	644.6	775.5
120°	153.7	174.1	323.8	607.9	733.3
122.5°	163.8	184.3	321.3	575.7	692.2
125°	176.5	195.8	319.4	530.0	633.6
127.5°	190.3	208.4	318.3	502.6	588.1
130°	197.5	215.5	316.8	483.6	558.1
132.5°	205.1	222.6	316.8	468.7	537.3
135°	215.9	233.9	315.6	447.7	506.0
137.5°	226.0	243.5	315.4	429.8	480.3
140°	233.7	251.7	314.9	415.1	463.5
142.5°	242.3	257.3	316.4	403.3	446.7
145°	254.6	267.6	318.1	387.5	422.2
147.5°	265.1	277.8	320.9	371.5	401.5
150°	274.3	283.0	321.9	366.2	387.3
152.5°	281.4	290.6	322.9	359.0	378.7
155°	290.8	297.6	325.7	350.2	364.4
157.5°	302.5	306.6	326.3	346.1	356.3
160°	308.6	311.7	328.9	343.1	351.7
162.5°	312.1	315.7	329.4	340.5	347.2
165°	321.3	322.5	329.5	336.6	341.6
167.5°	327.5	326.4	332.4	335.7	337.6
170°	329.5	328.9	331.4	332.1	334.6
172.5°	334.1	332.0	333.0	331.1	333.1
175°	336.5	334.6	333.3	331.4	328.9
177.5°	337.5	334.5	333.0	330.9	331.4
180°	334.0	334.0	334.0	334.0	334.0

(END OF REPORT)