

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: P521106

Luminaire Tested: SQ4-BB-075U-100D-92765-1D-UNV-STD-W-4_2700K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521106
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-075U-100D-92765-1D-UNV-STD-W-4_2700K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 750 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: 5563.7 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

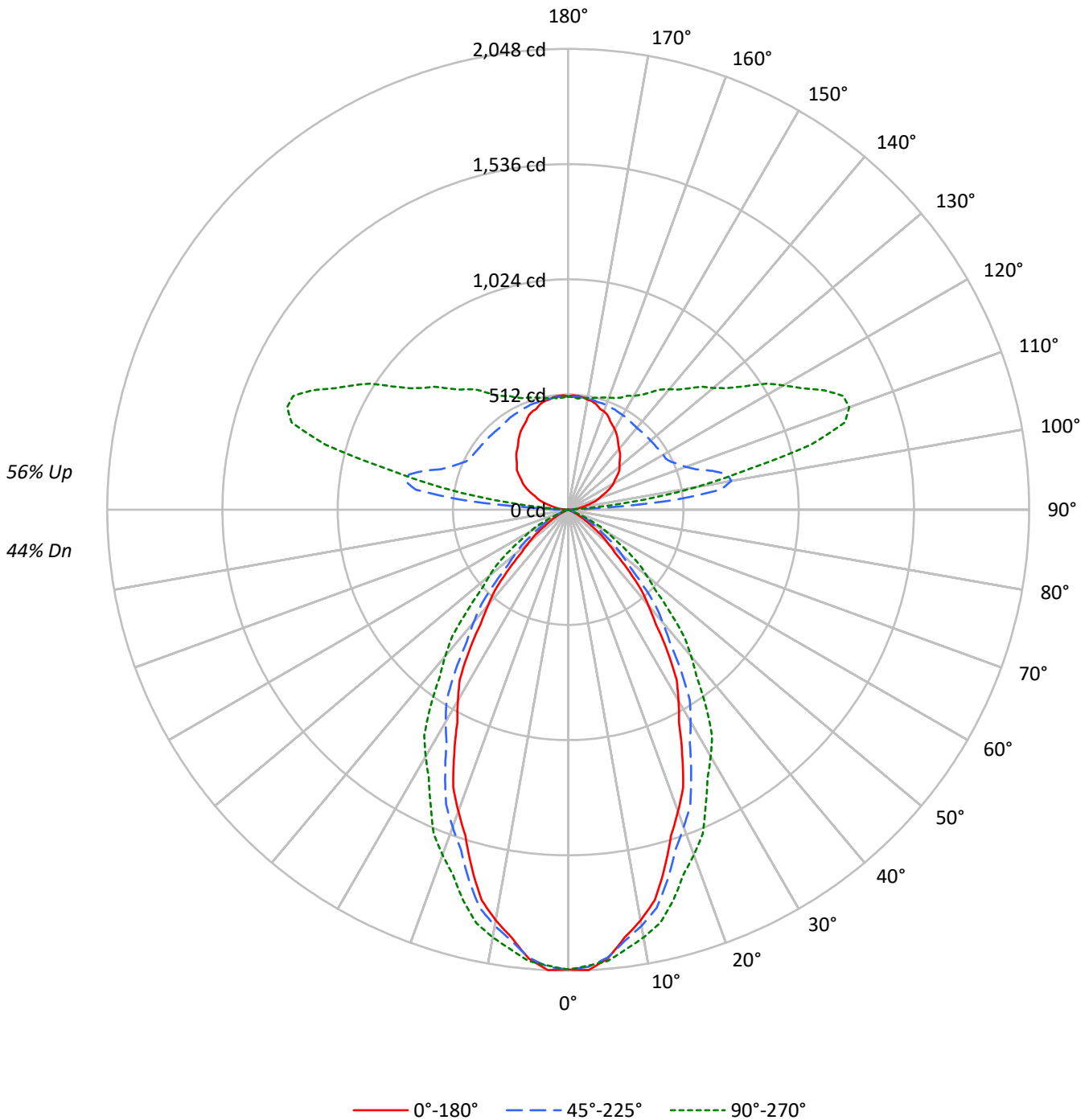
Input Watts (W): 65.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	97	97	97	97	80	80	80	65	65	65	50	50	50	44				
1	98	94	91	88	90	87	84	81	72	70	69	59	58	57	47	46	46	40				
2	91	84	79	75	83	78	73	69	65	62	59	54	52	50	43	42	41	36				
3	84	75	69	64	77	70	64	60	59	55	52	49	46	44	40	38	37	33				
4	77	68	61	56	71	63	57	52	54	49	46	45	42	39	37	35	33	30				
5	72	61	54	49	66	57	51	46	49	44	41	41	38	35	34	32	30	27				
6	67	56	49	43	61	52	46	41	45	40	36	38	34	32	32	29	27	24				
7	62	51	44	39	57	48	41	37	41	36	33	35	31	29	29	27	25	22				
8	58	47	40	35	53	44	37	33	38	33	30	32	29	26	27	25	23	21				
9	54	43	36	32	50	40	34	30	35	30	27	30	27	24	26	23	21	19				
10	51	40	33	29	47	37	31	27	33	28	25	28	25	22	24	21	20	18				

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

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	186.5	3.4
10°-20°	476.9	8.6
20°-30°	597.1	10.7
30°-40°	551.5	9.9
40°-50°	370.6	6.7
50°-60°	191.4	3.4
60°-70°	60.0	1.1
70°-80°	3.8	0.1
80°-90°	0.1	0.0
90°-100°	229.3	4.1
100°-110°	652.5	11.7
110°-120°	625.2	11.2
120°-130°	494.8	8.9
130°-140°	397.1	7.1
140°-150°	310.9	5.6
150°-160°	227.5	4.1
160°-170°	140.9	2.5
170°-180°	47.8	0.9
0°-30°	1260.5	22.7
0°-40°	1812.0	32.6
0°-60°	2373.9	42.7
0°-90°	2437.7	43.8
90°-120°	1507.0	27.1
90°-150°	2709.8	48.7
90°-180°	3126.0	56.2
0°-180°	5563.7	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°	25	99	444	154	95	28
105°	101	154	665	1174	1116	107
115°	188	228	504	1068	1254	186
125°	266	295	481	799	955	238
135°	325	352	476	675	762	251
145°	384	403	479	584	636	240
155°	438	448	491	528	549	203
165°	484	486	496	507	515	136
175°	507	504	502	499	496	48
180°	503	503	503	503	503	

TEST NUMBER: P521106

CATALOG NUMBER: SQ4-BB-075U-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°	7.7	40.6	94.1	27.4	20.7
95°	24.9	98.8	443.9	153.7	94.7
97.5°	45.7	115.7	683.7	489.2	335.2
100°	60.3	125.8	735.7	745.2	574.0
102.5°	76.3	136.6	724.3	953.9	804.4
105°	101.4	153.8	664.9	1174.5	1116.5
107.5°	126.9	173.8	595.7	1236.7	1288.3
110°	144.5	188.4	555.9	1212.9	1328.9

TEST NUMBER: P521106

CATALOG NUMBER: SQ4-BB-075U-100D-92765-1D-UNV-STD-W-4_2700K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	161.3	203.0	529.1	1156.6	1322.0
115°	188.5	227.8	504.2	1068.1	1254.3
117.5°	212.4	249.3	489.5	971.4	1168.6
120°	231.5	262.4	487.9	916.1	1105.0
122.5°	246.8	277.7	484.1	867.5	1043.0
125°	266.0	295.0	481.2	798.6	954.8
127.5°	286.8	314.0	479.7	757.4	886.1
130°	297.5	324.7	477.4	728.7	841.0
132.5°	309.0	335.4	477.4	706.3	809.6
135°	325.3	352.4	475.5	674.6	762.5
137.5°	340.6	367.0	475.3	647.7	723.7
140°	352.1	379.2	474.5	625.5	698.4
142.5°	365.1	387.7	476.8	607.7	673.2
145°	383.7	403.3	479.3	583.8	636.2
147.5°	399.5	418.6	483.5	559.8	605.0
150°	413.3	426.4	485.1	551.8	583.6
152.5°	424.0	437.9	486.6	541.0	570.6
155°	438.2	448.5	490.8	527.7	549.2
157.5°	455.8	462.0	491.8	521.6	536.9
160°	465.0	469.7	495.6	516.9	530.0
162.5°	470.3	475.8	496.4	513.0	523.1
165°	484.1	486.0	496.5	507.2	514.7
167.5°	493.5	491.8	500.9	505.8	508.8
170°	496.5	495.6	499.4	500.5	504.2
172.5°	503.4	500.3	501.7	498.9	501.9
175°	507.1	504.3	502.3	499.3	495.6
177.5°	508.6	504.1	501.7	498.7	499.4
180°	503.2	503.2	503.2	503.2	503.2

(END OF REPORT)