

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: P521003

Luminaire Tested: SQ4-BB-025U-100D-92765-1D-UNV-STD-W-4_3000K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521003
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_3000K
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 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4379.6 lumens
Efficiency: N/A
Efficacy: 77.7 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

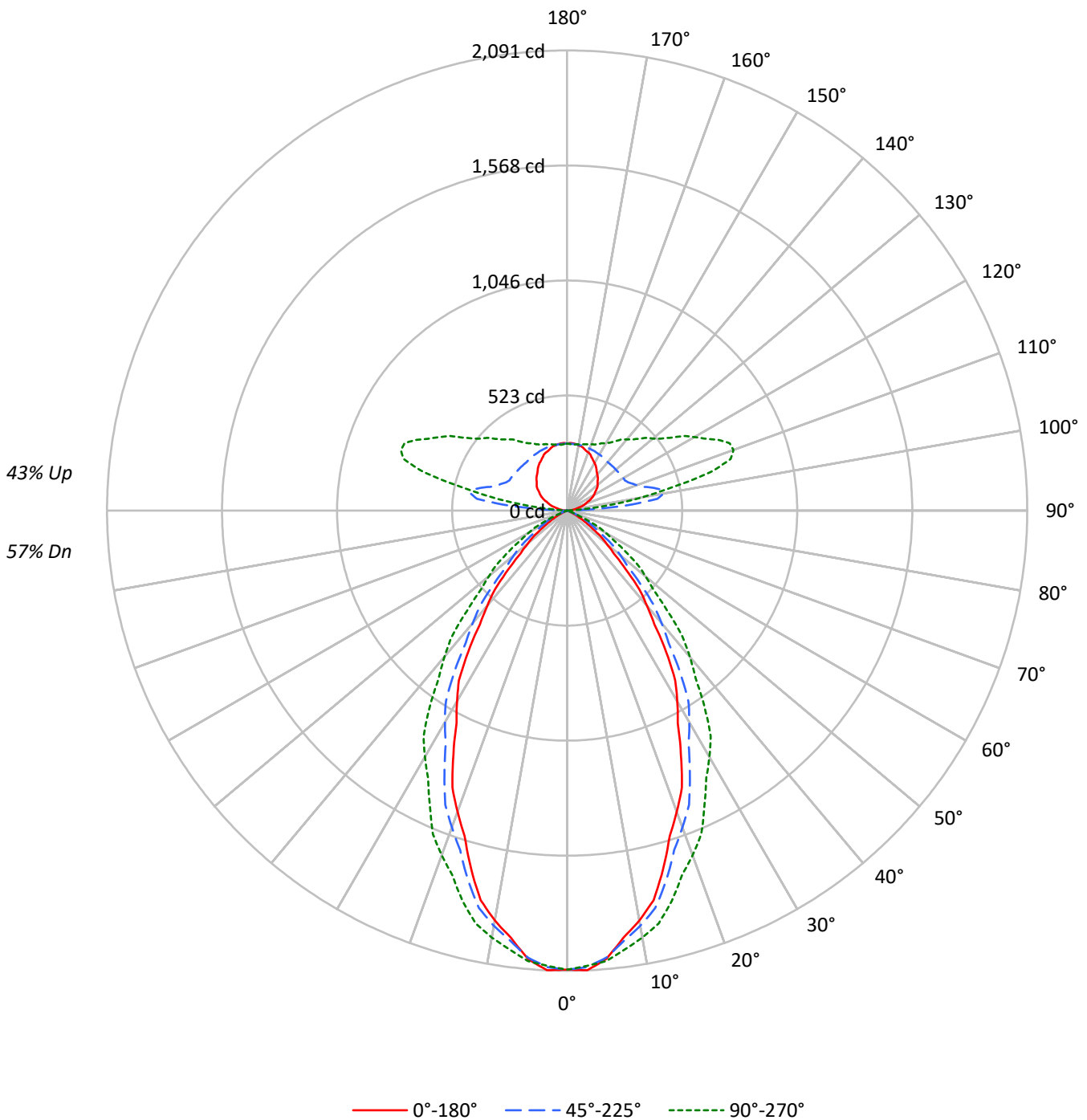
Input Watts (W): 56.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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									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°	19245	19245	19245
5°	18935	18888	19029
10°	17717	17953	18454
15°	16107	16617	17543
20°	14297	15041	16358
25°	12451	13437	15030
30°	10665	11836	13772
35°	8843	10048	12252
40°	6794	8033	10440
45°	4911	6083	8400
50°	3346	4534	6663
55°	2175	3278	5178
60°	1247	2308	3742
65°	330	1410	1895
70°	165	434	545
75°	71	36	0
80°	53	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 8400 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	190.4	4.3
10°-20°	486.8	11.1
20°-30°	609.4	13.9
30°-40°	562.9	12.9
40°-50°	378.3	8.6
50°-60°	195.4	4.5
60°-70°	61.2	1.4
70°-80°	3.9	0.1
80°-90°	0.1	0.0
90°-100°	138.8	3.2
100°-110°	394.8	9.0
110°-120°	378.2	8.6
120°-130°	299.4	6.8
130°-140°	240.3	5.5
140°-150°	188.1	4.3
150°-160°	137.6	3.1
160°-170°	85.3	1.9
170°-180°	28.9	0.7
0°-30°	1286.6	29.4
0°-40°	1849.5	42.2
0°-60°	2423.1	55.3
0°-90°	2488.3	56.8
90°-120°	911.8	20.8
90°-150°	1639.5	37.4
90°-180°	1891.0	43.2
0°-180°	4379.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2086	2086	2086	2086	2086	
5°	2044	2024	2039	2047	2055	190
15°	1686	1680	1740	1798	1837	470
25°	1223	1233	1320	1410	1476	561
35°	785	805	892	997	1088	486
45°	376	399	466	557	644	296
55°	135	158	204	262	322	126
65°	15	29	65	78	87	26
75°	2	2	1	0	0	3
85°	0	0	0	0	0	0
90°	0	0	0	0	0	1
95°	15	60	269	93	57	17
105°	61	93	402	711	676	65
115°	114	138	305	646	759	112
125°	161	178	291	483	578	144
135°	197	213	288	408	461	152
145°	232	244	290	353	385	145
155°	265	271	297	319	332	123
165°	293	294	300	307	311	82
175°	307	305	304	302	300	29
180°	304	304	304	304	304	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2085.9	2085.9	2085.9	2085.9	2085.9
2.5°	2090.7	2071.0	2076.2	2076.1	2070.5
5°	2044.5	2023.8	2039.4	2046.7	2054.6
7.5°	1958.1	1941.9	1972.0	1994.6	2011.0
10°	1891.1	1877.3	1916.3	1947.1	1969.8
12.5°	1813.6	1802.9	1850.1	1892.4	1921.4
15°	1686.3	1680.3	1739.7	1798.1	1836.6
17.5°	1549.8	1549.6	1617.4	1689.9	1736.3
20°	1456.2	1459.1	1531.9	1611.8	1666.1
22.5°	1362.5	1369.4	1447.1	1530.4	1592.6
25°	1223.1	1232.9	1319.9	1410.2	1476.4
27.5°	1089.1	1103.5	1195.0	1288.9	1369.4
30°	1001.1	1017.8	1111.0	1209.8	1292.7
32.5°	914.7	934.6	1025.5	1129.9	1214.4
35°	785.1	804.8	892.1	997.1	1087.8
37.5°	651.3	670.6	755.8	859.2	957.3
40°	564.1	585.8	667.0	767.2	866.8
42.5°	485.0	506.7	583.1	681.5	775.6
45°	376.4	399.1	466.2	557.0	643.8
47.5°	286.4	311.1	369.9	452.1	531.2
50°	233.1	257.8	315.9	388.2	464.2
52.5°	190.3	214.2	266.6	334.8	404.5
55°	135.2	157.9	203.8	261.7	321.9
57.5°	93.4	113.0	154.2	202.5	249.7
60°	67.6	86.4	125.1	164.4	202.8
62.5°	45.0	62.2	100.1	130.2	156.0
65°	15.1	29.0	64.6	77.9	86.8
67.5°	7.7	9.2	33.9	35.8	38.8
70°	6.1	6.1	16.1	17.2	20.2
72.5°	4.4	4.4	6.5	8.3	8.9
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°	4.6	24.6	57.0	16.6	12.5
95°	15.1	59.8	268.6	93.0	57.3
97.5°	27.7	70.0	413.7	296.0	202.8
100°	36.5	76.1	445.1	450.9	347.3
102.5°	46.2	82.6	438.2	577.2	486.7
105°	61.4	93.1	402.3	710.6	675.5
107.5°	76.8	105.2	360.4	748.3	779.5
110°	87.4	114.0	336.3	733.9	804.0

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	97.6	122.8	320.1	699.8	799.9
115°	114.0	137.8	305.1	646.3	758.9
117.5°	128.5	150.8	296.1	587.7	707.0
120°	140.1	158.8	295.2	554.3	668.6
122.5°	149.3	168.0	292.9	524.9	631.1
125°	160.9	178.5	291.2	483.2	577.7
127.5°	173.5	190.0	290.2	458.3	536.1
130°	180.0	196.4	288.9	440.9	508.8
132.5°	187.0	202.9	288.9	427.3	489.8
135°	196.8	213.2	287.7	408.2	461.4
137.5°	206.1	222.0	287.6	391.9	437.9
140°	213.0	229.4	287.1	378.4	422.6
142.5°	220.9	234.6	288.5	367.7	407.3
145°	232.1	244.0	290.0	353.2	384.9
147.5°	241.7	253.3	292.6	338.7	366.1
150°	250.1	258.0	293.5	333.9	353.1
152.5°	256.6	264.9	294.4	327.3	345.2
155°	265.1	271.3	297.0	319.3	332.3
157.5°	275.8	279.5	297.5	315.6	324.9
160°	281.3	284.2	299.9	312.8	320.7
162.5°	284.6	287.9	300.3	310.4	316.5
165°	292.9	294.0	300.4	306.9	311.4
167.5°	298.6	297.6	303.1	306.0	307.8
170°	300.4	299.9	302.2	302.8	305.1
172.5°	304.6	302.7	303.6	301.9	303.7
175°	306.8	305.1	303.9	302.1	299.9
177.5°	307.7	305.0	303.6	301.7	302.2
180°	304.5	304.5	304.5	304.5	304.5

(END OF REPORT)