

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: P521186

Luminaire Tested: SQ4-BB-100U-050D-92765-1D-UNV-STD-W-4_3500K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521186
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-100U-050D-92765-1D-UNV-STD-W-4_3500K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 2700K-6500K CCT, 90 CRI LEDS, TUNED TO 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5666.7 lumens
Efficiency: N/A
Efficacy: 106.7 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: Semi-Indirect

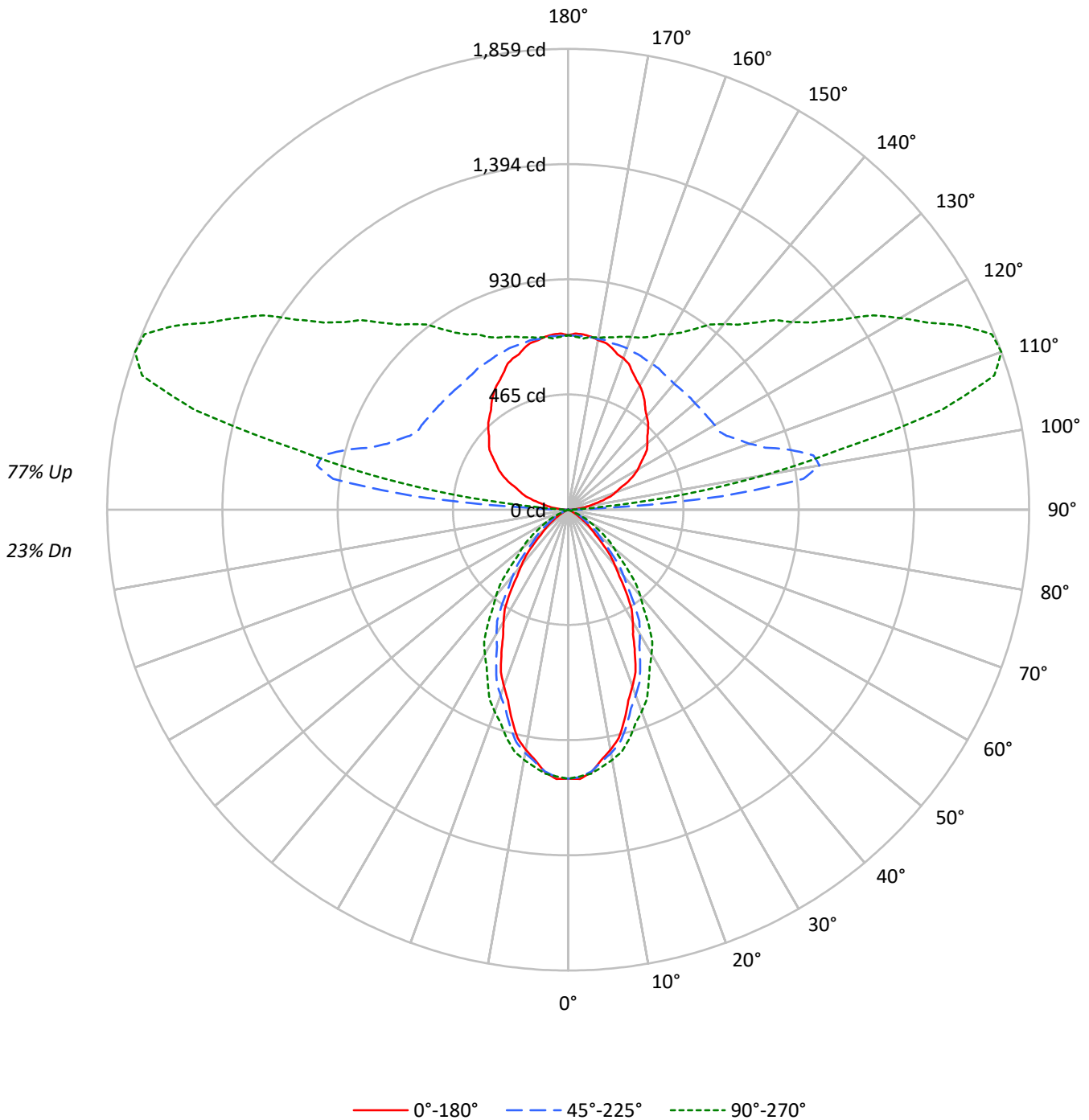
Input Watts (W): 53.1
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	101	101	101	101	89	89	89	89	68	68	68		49	49	49		31	31	31	23
1	93	89	85	82	82	79	76	74	61	59	57		44	43	42		29	28	28	21
2	85	78	73	68	75	70	66	62	54	51	49		40	38	37		26	25	25	19
3	78	70	63	58	69	62	57	53	49	45	42		36	34	32		24	23	22	17
4	72	62	55	50	64	56	50	45	44	40	36		32	30	28		22	21	20	15
5	66	56	48	43	59	50	44	39	39	35	32		30	27	25		20	19	18	14
6	61	50	43	37	54	45	39	34	36	31	28		27	24	22		19	17	16	13
7	56	45	38	33	50	41	35	30	33	28	25		25	22	20		17	16	15	12
8	52	41	34	29	47	37	31	27	30	25	22		23	20	18		16	15	13	11
9	49	38	31	26	44	34	28	24	27	23	20		21	18	16		15	13	12	10
10	46	35	28	24	41	31	26	22	25	21	18		20	17	15		14	12	11	9

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10010	10010	10010
5°	9849	9825	9897
10°	9215	9338	9599
15°	8378	8643	9125
20°	7436	7823	8509
25°	6475	6989	7817
30°	5547	6157	7163
35°	4600	5226	6373
40°	3534	4178	5431
45°	2555	3164	4370
50°	1740	2358	3465
55°	1131	1705	2693
60°	650	1201	1947
65°	172	734	985
70°	84	227	283
75°	36	18	0
80°	27	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 4370 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	99.0	1.7
10°-20°	253.2	4.5
20°-30°	317.0	5.6
30°-40°	292.8	5.2
40°-50°	196.7	3.5
50°-60°	101.6	1.8
60°-70°	31.8	0.6
70°-80°	2.0	0.0
80°-90°	0.0	0.0
90°-100°	320.7	5.7
100°-110°	912.7	16.1
110°-120°	874.4	15.4
120°-130°	692.1	12.2
130°-140°	555.5	9.8
140°-150°	434.9	7.7
150°-160°	318.2	5.6
160°-170°	197.1	3.5
170°-180°	66.9	1.2
0°-30°	669.2	11.8
0°-40°	962.0	17.0
0°-60°	1260.3	22.2
0°-90°	1294.2	22.8
90°-120°	2107.9	37.2
90°-150°	3790.4	66.9
90°-180°	4373.0	77.2
0°-180°	5666.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1085	1085	1085	1085	1085	
5°	1063	1053	1061	1064	1069	99
15°	877	874	905	935	955	244
25°	636	641	686	734	768	292
35°	408	419	464	519	566	253
45°	196	208	242	290	335	154
55°	70	82	106	136	167	66
65°	8	15	34	40	45	13
75°	1	1	0	0	0	1
85°	0	0	0	0	0	0
90°	0	0	0	0	0	1
95°	35	138	621	215	132	40
105°	142	215	930	1643	1562	150
115°	264	319	705	1494	1754	260
125°	372	413	673	1117	1336	333
135°	455	493	665	944	1067	351
145°	537	564	670	817	890	335
155°	613	627	686	738	768	283
165°	677	680	695	710	720	190
175°	709	705	703	698	693	67
180°	704	704	704	704	704	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1084.9	1084.9	1084.9	1084.9	1084.9
2.5°	1087.4	1077.2	1079.9	1079.8	1076.9
5°	1063.4	1052.6	1060.8	1064.5	1068.6
7.5°	1018.5	1010.1	1025.7	1037.5	1046.0
10°	983.6	976.4	996.7	1012.8	1024.6
12.5°	943.3	937.8	962.3	984.3	999.4
15°	877.1	874.0	904.9	935.3	955.3
17.5°	806.1	806.0	841.3	879.0	903.1
20°	757.4	758.9	796.8	838.3	866.6
22.5°	708.7	712.3	752.7	796.0	828.4
25°	636.1	641.3	686.5	733.5	767.9
27.5°	566.4	573.9	621.6	670.4	712.3
30°	520.7	529.4	577.9	629.3	672.4
32.5°	475.7	486.1	533.4	587.7	631.6
35°	408.4	418.6	464.0	518.6	565.8
37.5°	338.8	348.8	393.1	446.9	497.9
40°	293.4	304.7	346.9	399.0	450.9
42.5°	252.3	263.5	303.3	354.5	403.4
45°	195.8	207.6	242.5	289.7	334.9
47.5°	149.0	161.8	192.4	235.1	276.3
50°	121.2	134.1	164.3	201.9	241.4
52.5°	99.0	111.4	138.7	174.1	210.4
55°	70.3	82.1	106.0	136.1	167.4
57.5°	48.6	58.8	80.2	105.3	129.9
60°	35.2	44.9	65.1	85.5	105.5
62.5°	23.4	32.3	52.1	67.7	81.1
65°	7.9	15.1	33.6	40.5	45.1
67.5°	4.0	4.8	17.6	18.6	20.2
70°	3.1	3.1	8.4	9.0	10.5
72.5°	2.3	2.3	3.4	4.3	4.6
75°	1.0	1.0	0.5	0.0	0.0
77.5°	0.5	0.5	0.4	0.0	0.0
80°	0.5	0.5	0.0	0.0	0.0
82.5°	0.1	0.1	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°	10.7	56.8	131.7	38.3	28.9
95°	34.8	138.2	620.9	214.9	132.5
97.5°	64.0	161.8	956.3	684.3	468.9
100°	84.3	175.9	1029.1	1042.4	802.9
102.5°	106.8	191.1	1013.1	1334.3	1125.2
105°	141.9	215.1	930.1	1642.9	1561.7
107.5°	177.5	243.1	833.2	1729.9	1802.1
110°	202.1	263.6	777.5	1696.6	1858.8

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	225.6	284.0	740.1	1617.8	1849.2
115°	263.6	318.6	705.3	1494.1	1754.4
117.5°	297.1	348.6	684.6	1358.7	1634.5
120°	323.9	367.0	682.5	1281.4	1545.7
122.5°	345.3	388.4	677.2	1213.5	1459.0
125°	372.0	412.6	673.1	1117.1	1335.6
127.5°	401.2	439.2	671.0	1059.4	1239.5
130°	416.2	454.1	667.8	1019.3	1176.3
132.5°	432.3	469.2	667.8	988.0	1132.4
135°	455.0	493.0	665.1	943.6	1066.6
137.5°	476.4	513.3	664.8	906.0	1012.3
140°	492.5	530.4	663.8	874.9	976.9
142.5°	510.7	542.3	667.0	850.0	941.6
145°	536.6	564.1	670.5	816.7	889.9
147.5°	558.9	585.5	676.4	783.0	846.3
150°	578.1	596.4	678.5	771.8	816.3
152.5°	593.1	612.5	680.6	756.8	798.1
155°	612.9	627.3	686.5	738.1	768.2
157.5°	637.5	646.2	687.9	729.6	751.0
160°	650.4	656.9	693.2	723.1	741.4
162.5°	657.9	665.5	694.3	717.6	731.8
165°	677.2	679.8	694.6	709.5	720.0
167.5°	690.3	687.9	700.7	707.5	711.7
170°	694.6	693.2	698.6	700.0	705.3
172.5°	704.2	699.7	701.8	697.9	702.0
175°	709.3	705.3	702.6	698.4	693.2
177.5°	711.4	705.1	701.8	697.5	698.6
180°	703.9	703.9	703.9	703.9	703.9

(END OF REPORT)