

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: P521553

Luminaire Tested: SQ4-F-100U-050D-92765-1D-UNV-STD-W-4_5000K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521553
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2101-105-51, G2-2101-105-36)
Test Lab: INNOVATION CENTER
Issue Date: 5-5-2021
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-F-100U-050D-92765-1D-UNV-STD-W-4_5000K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 2700K-6500K CCT, 90 CRI LEDS, TUNED TO 5000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6755.9 lumens
Efficiency: N/A
Efficacy: 127.5 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.26 / 1.38
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Indirect

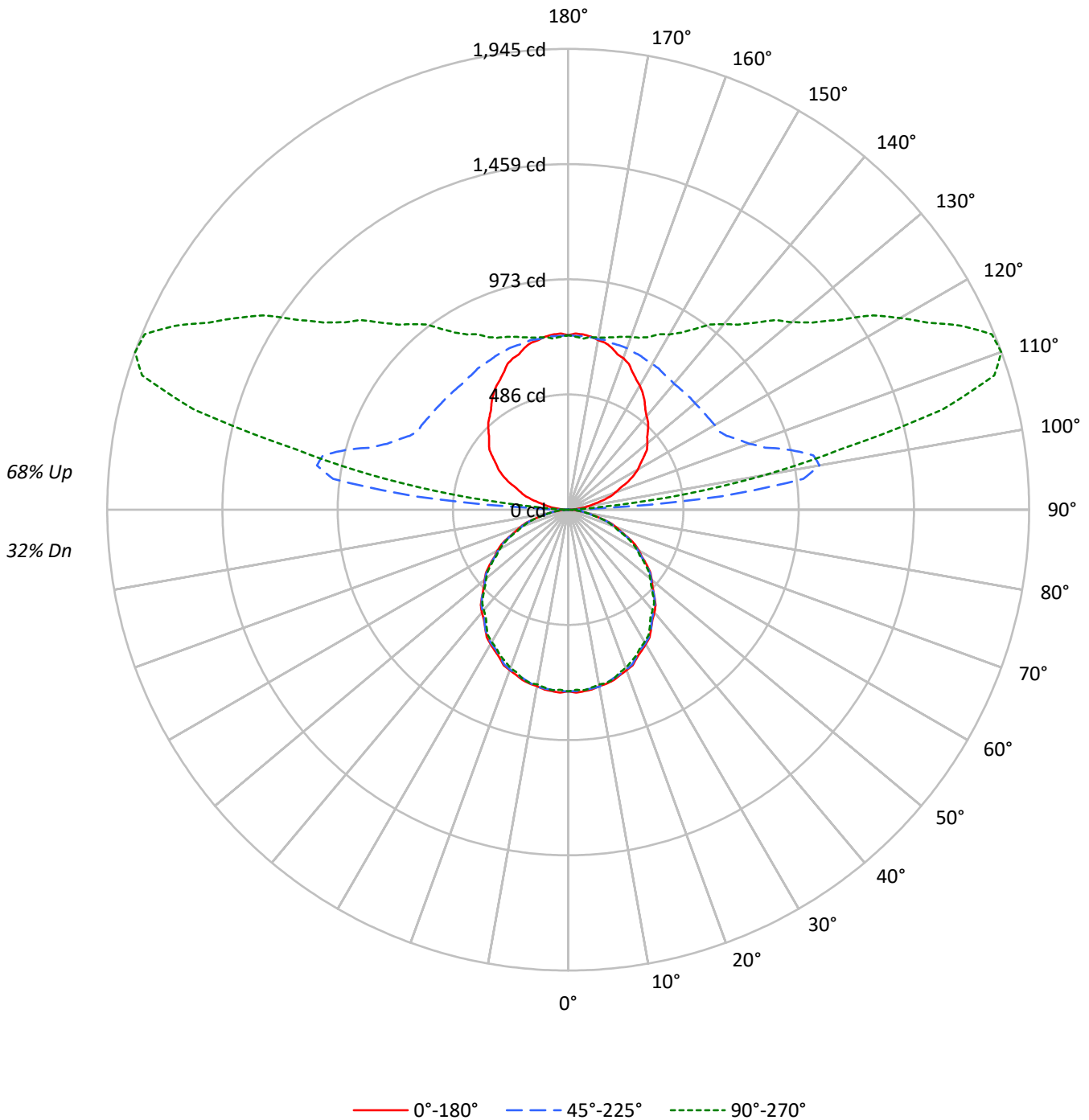
Input Watts (W): 53
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	103	103	103	103	93	93	93	93	73	73	73		56	56	56		40	40	40	32
1	94	89	86	82	84	81	77	75	64	62	60		49	48	46		35	34	33	27
2	85	78	72	67	76	70	65	61	56	53	49		43	41	38		31	29	28	22
3	78	68	61	56	70	62	56	51	49	45	41		38	35	32		27	25	24	19
4	71	60	53	47	64	55	48	43	44	39	35		34	30	28		24	22	20	16
5	65	54	46	40	58	49	42	37	39	34	30		30	26	24		22	19	18	14
6	60	48	40	34	53	43	37	32	35	30	26		27	23	21		20	17	15	12
7	55	43	35	30	49	39	32	27	32	26	23		24	21	18		18	15	14	11
8	51	39	31	26	46	35	29	24	29	24	20		22	19	16		16	14	12	10
9	47	35	28	23	43	32	26	21	26	21	18		20	17	14		15	13	11	9
10	44	32	25	21	40	30	23	19	24	19	16		19	15	13		14	12	10	8

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7075	7075	7075
5°	7121	7073	7082
10°	7086	7106	7018
15°	7105	7035	7064
20°	7077	7047	6974
25°	6997	6954	6912
30°	6977	6932	6865
35°	6869	6869	6763
40°	6817	6753	6665
45°	6688	6688	6593
50°	6607	6562	6472
55°	6495	6428	6328
60°	6351	6235	6139
65°	6097	5960	5846
70°	5813	5616	5476
75°	5183	5033	4959
80°	4282	4224	4171
85°	3102	3430	3430

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 6688 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	72.6	1.1
10°-20°	208.0	3.1
20°-30°	314.3	4.7
30°-40°	378.5	5.6
40°-50°	392.4	5.8
50°-60°	355.8	5.3
60°-70°	270.5	4.0
70°-80°	150.6	2.2
80°-90°	38.8	0.6
90°-100°	335.6	5.0
100°-110°	954.8	14.1
110°-120°	914.8	13.5
120°-130°	724.0	10.7
130°-140°	581.1	8.6
140°-150°	455.0	6.7
150°-160°	332.9	4.9
160°-170°	206.2	3.1
170°-180°	70.0	1.0
0°-30°	594.9	8.8
0°-40°	973.4	14.4
0°-60°	1721.6	25.5
0°-90°	2181.5	32.3
90°-120°	2205.2	32.6
90°-150°	3965.3	58.7
90°-180°	4574.0	67.7
0°-180°	6755.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	767	767	767	767	767	
5°	769	760	764	765	765	73
15°	744	737	736	737	740	210
25°	687	682	683	679	679	318
35°	610	604	610	602	600	383
45°	513	510	513	503	505	397
55°	404	403	400	395	393	360
65°	279	278	273	270	268	277
75°	145	143	141	139	139	155
85°	29	31	32	34	32	36
90°	0	0	0	0	0	3
95°	36	144	650	225	139	42
105°	148	225	973	1719	1634	157
115°	276	333	738	1563	1835	272
125°	389	432	704	1169	1397	348
135°	476	516	696	987	1116	367
145°	561	590	701	854	931	351
155°	641	656	718	772	804	296
165°	708	711	727	742	753	199
175°	742	738	735	731	725	70
180°	736	736	736	736	736	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	766.8	766.8	766.8	766.8	766.8
2.5°	772.7	764.5	766.0	766.7	761.0
5°	768.9	759.7	763.7	764.7	764.7
7.5°	765.6	758.4	761.0	757.8	757.4
10°	756.4	753.3	758.5	751.1	749.1
12.5°	752.2	747.5	748.4	747.0	749.1
15°	743.8	736.7	736.5	736.6	739.6
17.5°	730.9	721.6	727.7	721.2	720.4
20°	720.8	711.6	717.7	710.3	710.3
22.5°	710.8	699.9	706.0	696.1	693.6
25°	687.3	682.2	683.1	679.0	679.0
27.5°	670.8	659.5	663.3	657.4	657.8
30°	654.9	643.6	650.7	642.4	644.4
32.5°	639.0	631.8	635.7	626.5	630.2
35°	609.9	603.8	609.9	602.5	600.5
37.5°	584.4	578.0	580.0	575.3	570.2
40°	566.0	558.8	560.7	554.4	553.4
42.5°	545.9	541.2	541.5	536.1	536.7
45°	512.6	509.6	512.6	503.3	505.3
47.5°	482.9	479.2	478.9	472.7	475.2
50°	460.3	458.3	457.2	450.9	450.9
52.5°	436.9	434.8	433.7	429.1	428.3
55°	403.8	402.8	399.6	395.4	393.4
57.5°	367.6	365.6	363.9	359.4	357.8
60°	344.2	342.1	337.9	332.7	332.7
62.5°	318.2	316.2	311.1	309.2	305.9
65°	279.3	278.3	273.0	269.9	267.8
67.5°	240.6	237.3	235.0	230.9	228.9
70°	215.5	211.4	208.2	205.0	203.0
72.5°	187.9	184.6	181.4	179.9	177.0
75°	145.4	143.4	141.2	139.1	139.1
77.5°	105.7	105.0	102.9	102.9	101.9
80°	80.6	81.6	79.5	79.5	78.5
82.5°	58.0	59.0	58.6	59.4	58.4
85°	29.3	31.3	32.4	33.5	32.4
87.5°	8.4	10.8	12.6	13.4	13.4
90°	0.0	0.0	0.0	0.0	0.0
92.5°	11.2	59.4	137.8	40.1	30.2
95°	36.4	144.5	649.6	224.8	138.6
97.5°	66.9	169.3	1000.5	715.9	490.6
100°	88.2	184.0	1076.6	1090.5	840.0
102.5°	111.7	199.9	1059.8	1395.9	1177.1
105°	148.4	225.1	973.0	1718.7	1633.8
107.5°	185.6	254.4	871.7	1809.7	1885.3
110°	211.4	275.7	813.4	1774.9	1944.6

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	236.0	297.1	774.2	1692.5	1934.6
115°	275.8	333.3	737.8	1563.0	1835.4
117.5°	310.8	364.7	716.3	1421.4	1710.0
120°	338.8	384.0	714.0	1340.5	1617.0
122.5°	361.2	406.4	708.4	1269.5	1526.3
125°	389.2	431.6	704.2	1168.6	1397.2
127.5°	419.7	459.4	702.0	1108.3	1296.7
130°	435.4	475.1	698.6	1066.4	1230.6
132.5°	452.2	490.8	698.6	1033.6	1184.7
135°	476.0	515.7	695.8	987.1	1115.8
137.5°	498.4	537.0	695.5	947.8	1059.0
140°	515.2	554.9	694.4	915.2	1022.0
142.5°	534.3	567.4	697.8	889.2	985.1
145°	561.4	590.2	701.4	854.4	931.0
147.5°	584.7	612.6	707.6	819.1	885.4
150°	604.8	624.0	709.8	807.5	854.0
152.5°	620.5	640.8	712.1	791.7	835.0
155°	641.2	656.3	718.2	772.1	803.6
157.5°	667.0	676.0	719.6	763.2	785.7
160°	680.4	687.3	725.2	756.5	775.6
162.5°	688.3	696.2	726.3	750.8	765.5
165°	708.4	711.2	726.6	742.3	753.2
167.5°	722.1	719.7	733.1	740.2	744.5
170°	726.6	725.2	730.8	732.3	737.8
172.5°	736.7	732.0	734.2	730.1	734.5
175°	742.0	737.9	735.0	730.7	725.2
177.5°	744.3	737.7	734.2	729.7	730.8
180°	736.4	736.4	736.4	736.4	736.4

(END OF REPORT)