

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: P521555

Luminaire Tested: SQ4-F-100U-050D-92765-1D-UNV-STD-W-4_6500K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521555
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_6500K
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 6500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6917.1 lumens
Efficiency: N/A
Efficacy: 131.3 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

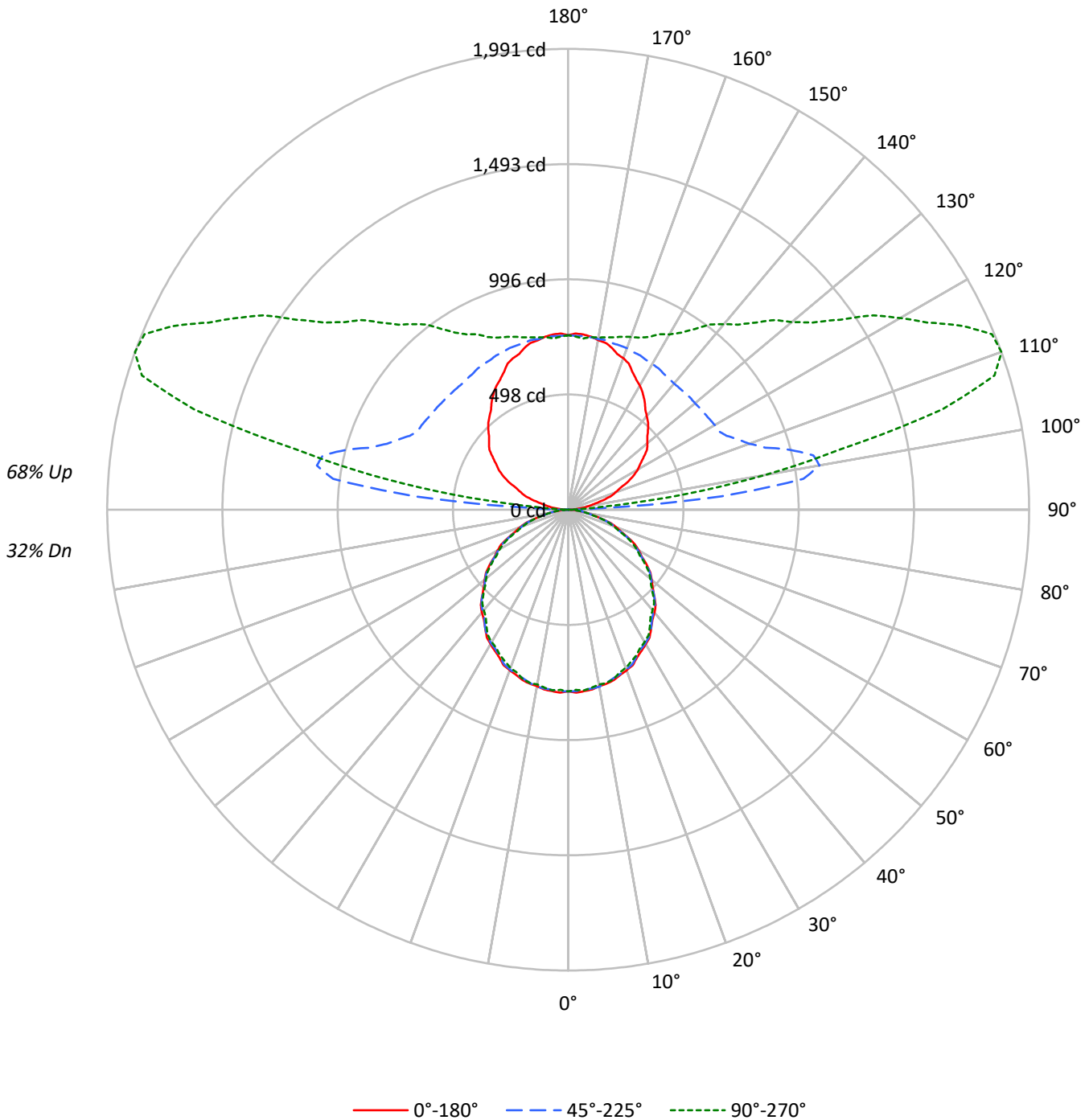
Input Watts (W): 52.7
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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									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	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	29	23	19	24	19	16	19	15	13	14	12	10	8																				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7243	7243	7243
5°	7292	7242	7252
10°	7255	7276	7185
15°	7275	7203	7233
20°	7246	7215	7141
25°	7164	7120	7077
30°	7143	7097	7029
35°	7034	7034	6925
40°	6979	6914	6824
45°	6849	6849	6751
50°	6765	6719	6627
55°	6651	6582	6478
60°	6503	6385	6285
65°	6244	6104	5986
70°	5954	5751	5606
75°	5308	5155	5080
80°	4383	4325	4266
85°	3176	3515	3515

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 6849 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	74.3	1.1
10°-20°	213.0	3.1
20°-30°	321.8	4.7
30°-40°	387.5	5.6
40°-50°	401.8	5.8
50°-60°	364.3	5.3
60°-70°	276.9	4.0
70°-80°	154.2	2.2
80°-90°	39.8	0.6
90°-100°	343.6	5.0
100°-110°	977.6	14.1
110°-120°	936.6	13.5
120°-130°	741.3	10.7
130°-140°	595.0	8.6
140°-150°	465.8	6.7
150°-160°	340.8	4.9
160°-170°	211.1	3.1
170°-180°	71.6	1.0
0°-30°	609.1	8.8
0°-40°	996.6	14.4
0°-60°	1762.7	25.5
0°-90°	2233.6	32.3
90°-120°	2257.8	32.6
90°-150°	4059.9	58.7
90°-180°	4684.0	67.7
0°-180°	6917.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	785	785	785	785	785	
5°	787	778	782	783	783	75
15°	762	754	754	754	757	215
25°	704	698	699	695	695	326
35°	624	618	624	617	615	392
45°	525	522	525	515	517	406
55°	414	412	409	405	403	369
65°	286	285	280	276	274	283
75°	149	147	145	142	142	158
85°	30	32	33	34	33	37
90°	0	0	0	0	0	3
95°	37	148	665	230	142	43
105°	152	230	996	1760	1673	161
115°	282	341	755	1600	1879	278
125°	398	442	721	1196	1431	357
135°	487	528	712	1011	1142	376
145°	575	604	718	875	953	359
155°	656	672	735	791	823	303
165°	725	728	744	760	771	204
175°	760	756	753	748	742	72
180°	754	754	754	754	754	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	785.1	785.1	785.1	785.1	785.1
2.5°	791.1	782.8	784.3	785.0	779.1
5°	787.3	777.9	781.9	783.0	783.0
7.5°	783.9	776.5	779.1	775.9	775.5
10°	774.4	771.3	776.6	769.0	766.9
12.5°	770.1	765.3	766.3	764.8	766.9
15°	761.6	754.2	754.1	754.1	757.3
17.5°	748.3	738.9	745.1	738.4	737.6
20°	738.0	728.6	734.8	727.3	727.3
22.5°	727.7	716.6	722.8	712.7	710.2
25°	703.7	698.5	699.4	695.2	695.2
27.5°	686.8	675.3	679.1	673.1	673.5
30°	670.5	659.0	666.2	657.7	659.8
32.5°	654.2	646.9	650.8	641.5	645.2
35°	624.5	618.2	624.5	616.9	614.8
37.5°	598.3	591.8	593.8	589.0	583.8
40°	579.5	572.1	574.1	567.7	566.6
42.5°	558.9	554.1	554.4	548.9	549.5
45°	524.9	521.7	524.9	515.3	517.4
47.5°	494.4	490.7	490.4	484.0	486.5
50°	471.3	469.2	468.1	461.7	461.7
52.5°	447.3	445.2	444.1	439.4	438.5
55°	413.5	412.4	409.2	404.8	402.7
57.5°	376.4	374.3	372.5	368.0	366.3
60°	352.4	350.3	346.0	340.6	340.6
62.5°	325.8	323.7	318.6	316.5	313.2
65°	286.0	284.9	279.6	276.3	274.2
67.5°	246.4	243.0	240.6	236.5	234.4
70°	220.7	216.5	213.2	209.9	207.8
72.5°	192.4	189.0	185.7	184.2	181.2
75°	148.9	146.8	144.6	142.5	142.5
77.5°	108.2	107.6	105.4	105.4	104.3
80°	82.5	83.5	81.4	81.4	80.3
82.5°	59.3	60.4	60.0	60.8	59.8
85°	30.0	32.1	33.2	34.3	33.2
87.5°	8.6	11.1	12.9	13.7	13.7
90°	0.0	0.0	0.0	0.0	0.0
92.5°	11.5	60.8	141.1	41.1	31.0
95°	37.3	148.0	665.1	230.2	141.9
97.5°	68.5	173.4	1024.3	733.0	502.3
100°	90.3	188.4	1102.3	1116.6	860.1
102.5°	114.4	204.7	1085.1	1429.2	1205.2
105°	151.9	230.4	996.2	1759.7	1672.8
107.5°	190.1	260.4	892.5	1852.9	1930.3
110°	216.4	282.3	832.8	1817.3	1991.1

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	241.7	304.2	792.7	1732.9	1980.7
115°	282.4	341.3	755.4	1600.3	1879.2
117.5°	318.2	373.4	733.3	1455.4	1750.8
120°	346.9	393.1	731.1	1372.5	1655.6
122.5°	369.8	416.1	725.3	1299.8	1562.7
125°	398.5	441.9	721.0	1196.5	1430.6
127.5°	429.7	470.4	718.7	1134.8	1327.7
130°	445.8	486.4	715.3	1091.8	1260.0
132.5°	463.0	502.5	715.3	1058.2	1213.0
135°	487.4	528.0	712.4	1010.7	1142.5
137.5°	510.3	549.8	712.1	970.4	1084.3
140°	527.5	568.2	711.0	937.1	1046.4
142.5°	547.0	580.9	714.4	910.5	1008.6
145°	574.8	604.2	718.2	874.7	953.2
147.5°	598.6	627.2	724.5	838.7	906.5
150°	619.2	638.9	726.8	826.7	874.4
152.5°	635.3	656.0	729.0	810.6	854.9
155°	656.5	671.9	735.4	790.6	822.8
157.5°	682.9	692.1	736.8	781.5	804.4
160°	696.7	703.7	742.5	774.5	794.1
162.5°	704.7	712.8	743.7	768.7	783.8
165°	725.3	728.1	744.0	760.0	771.2
167.5°	739.4	736.8	750.6	757.8	762.3
170°	744.0	742.6	748.3	749.8	755.4
172.5°	754.3	749.5	751.7	747.5	752.0
175°	759.7	755.5	752.6	748.1	742.5
177.5°	762.0	755.3	751.7	747.1	748.3
180°	754.0	754.0	754.0	754.0	754.0

(END OF REPORT)