

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: P521449

Luminaire Tested: SQ4-F-075U-050D-92765-1D-UNV-STD-W-4_5000K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521449
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-075U-050D-92765-1D-UNV-STD-W-4_5000K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 750 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: 5599.7 lumens
Efficiency: N/A
Efficacy: 126.4 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

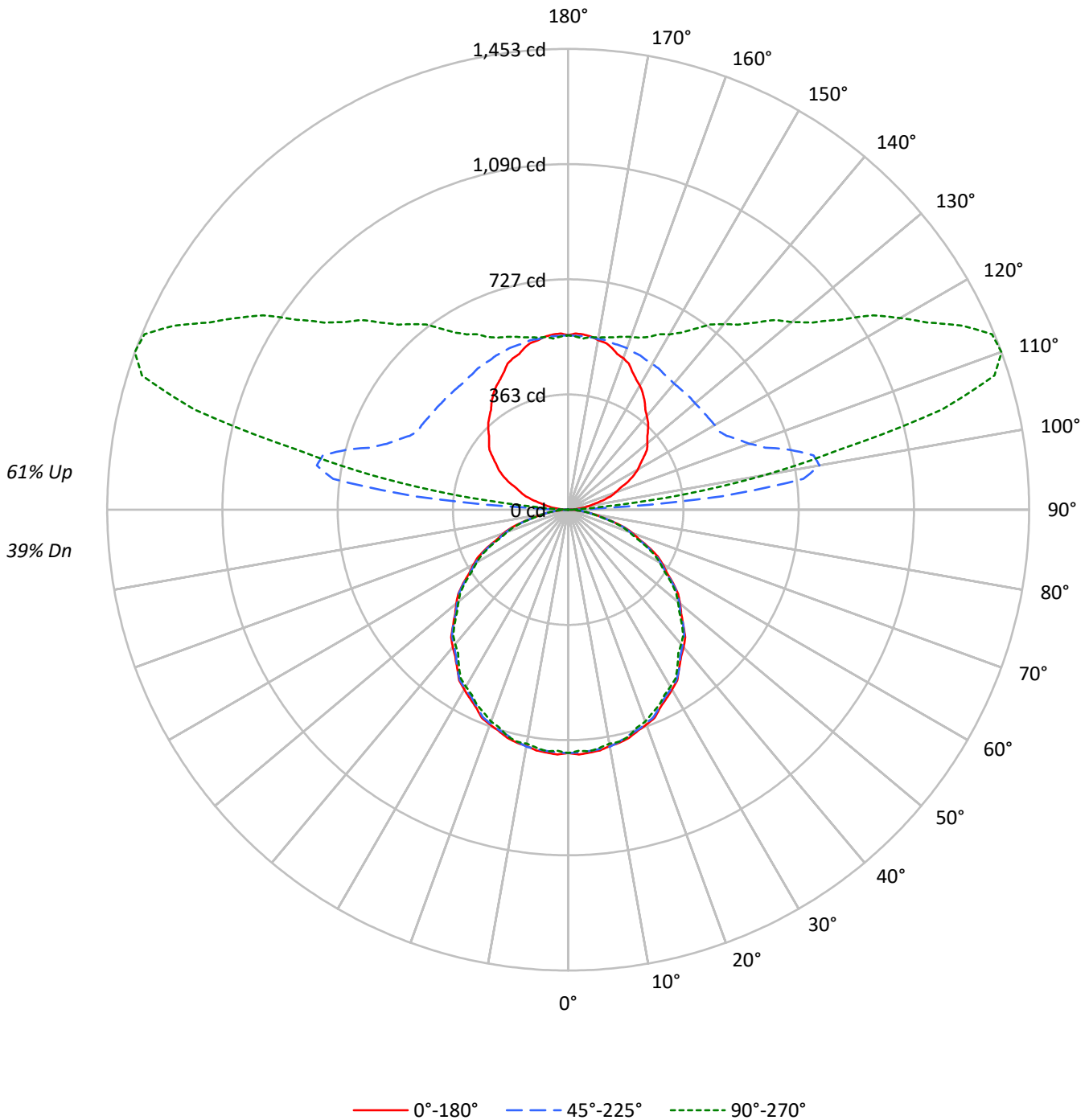
Input Watts (W): 44.3
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Luminous Intensity Polar Plot



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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20			20			20			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	105	105	105	105	95	95	95	95	77	77	77	61	61	61	46	46	46	39
1	95	91	87	84	86	83	79	77	67	65	63	53	52	50	40	40	39	33
2	87	79	73	68	78	72	67	63	59	55	52	47	44	42	35	34	32	27
3	79	69	62	56	71	63	57	52	52	47	44	41	38	35	31	29	27	23
4	72	61	54	48	65	56	49	44	46	41	37	37	33	30	28	25	23	19
5	66	54	46	41	60	50	43	38	41	36	32	33	29	26	25	22	20	17
6	61	49	41	35	55	45	38	32	37	31	27	29	26	23	23	20	18	15
7	56	44	36	31	51	40	33	28	33	28	24	27	23	20	21	18	16	13
8	52	40	32	27	47	36	30	25	30	25	21	24	20	18	19	16	14	12
9	48	36	29	24	44	33	27	22	28	23	19	22	19	16	17	15	13	10
10	45	33	26	21	41	30	24	20	25	20	17	21	17	14	16	13	11	9

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	1.3
10°-20°	208.0	3.7
20°-30°	314.3	5.6
30°-40°	378.5	6.8
40°-50°	392.4	7.0
50°-60°	355.8	6.4
60°-70°	270.5	4.8
70°-80°	150.6	2.7
80°-90°	38.8	0.7
90°-100°	250.8	4.5
100°-110°	713.5	12.7
110°-120°	683.6	12.2
120°-130°	541.0	9.7
130°-140°	434.3	7.8
140°-150°	340.0	6.1
150°-160°	248.8	4.4
160°-170°	154.1	2.8
170°-180°	52.3	0.9
0°-30°	594.9	10.6
0°-40°	973.4	17.4
0°-60°	1721.6	30.7
0°-90°	2181.5	39.0
90°-120°	1647.8	29.4
90°-150°	2963.1	52.9
90°-180°	3418.0	61.0
0°-180°	5599.7	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	2
95°	27	108	485	168	104	31
105°	111	168	727	1284	1221	117
115°	206	249	551	1168	1372	203
125°	291	322	526	873	1044	260
135°	356	385	520	738	834	274
145°	420	441	524	638	696	262
155°	479	490	537	577	600	221
165°	529	531	543	555	563	149
175°	554	551	549	546	542	53
180°	550	550	550	550	550	

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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°	8.4	44.4	102.9	30.0	22.6
95°	27.2	108.0	485.4	168.0	103.6
97.5°	50.0	126.5	747.6	535.0	366.6
100°	65.9	137.5	804.5	814.9	627.7
102.5°	83.5	149.4	792.0	1043.1	879.6
105°	110.9	168.2	727.1	1284.3	1220.9
107.5°	138.7	190.1	651.3	1352.3	1408.8
110°	158.0	206.0	607.8	1326.3	1453.1

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	176.4	222.0	578.5	1264.7	1445.6
115°	206.1	249.1	551.3	1168.0	1371.5
117.5°	232.2	272.6	535.2	1062.2	1277.8
120°	253.2	286.9	533.5	1001.7	1208.3
122.5°	269.9	303.7	529.4	948.6	1140.5
125°	290.8	322.5	526.2	873.2	1044.1
127.5°	313.6	343.3	524.5	828.2	969.0
130°	325.4	355.0	522.0	796.8	919.6
132.5°	337.9	366.8	522.0	772.3	885.3
135°	355.7	385.4	519.9	737.6	833.8
137.5°	372.4	401.3	519.7	708.3	791.3
140°	385.0	414.7	518.9	683.9	763.7
142.5°	399.2	424.0	521.4	664.5	736.1
145°	419.5	441.0	524.1	638.4	695.7
147.5°	436.9	457.7	528.7	612.1	661.6
150°	451.9	466.3	530.4	603.4	638.2
152.5°	463.7	478.8	532.1	591.6	623.9
155°	479.1	490.4	536.7	577.0	600.5
157.5°	498.4	505.1	537.7	570.3	587.1
160°	508.4	513.6	541.9	565.3	579.6
162.5°	514.3	520.2	542.8	561.0	572.0
165°	529.4	531.4	543.0	554.7	562.8
167.5°	539.6	537.8	547.8	553.1	556.4
170°	543.0	541.9	546.1	547.2	551.3
172.5°	550.5	547.0	548.6	545.5	548.8
175°	554.5	551.4	549.2	546.0	541.9
177.5°	556.1	551.2	548.6	545.3	546.1
180°	550.3	550.3	550.3	550.3	550.3

(END OF REPORT)