

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: P521345

Luminaire Tested: SQ4-F-025U-050D-92765-1D-UNV-STD-W-4_5000K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521345
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-025U-050D-92765-1D-UNV-STD-W-4_5000K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 250 LUMENS PER FOOT
Light Source: 2700K-6500K CCT, 90 CRI LEDS, TUNED TO 5000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

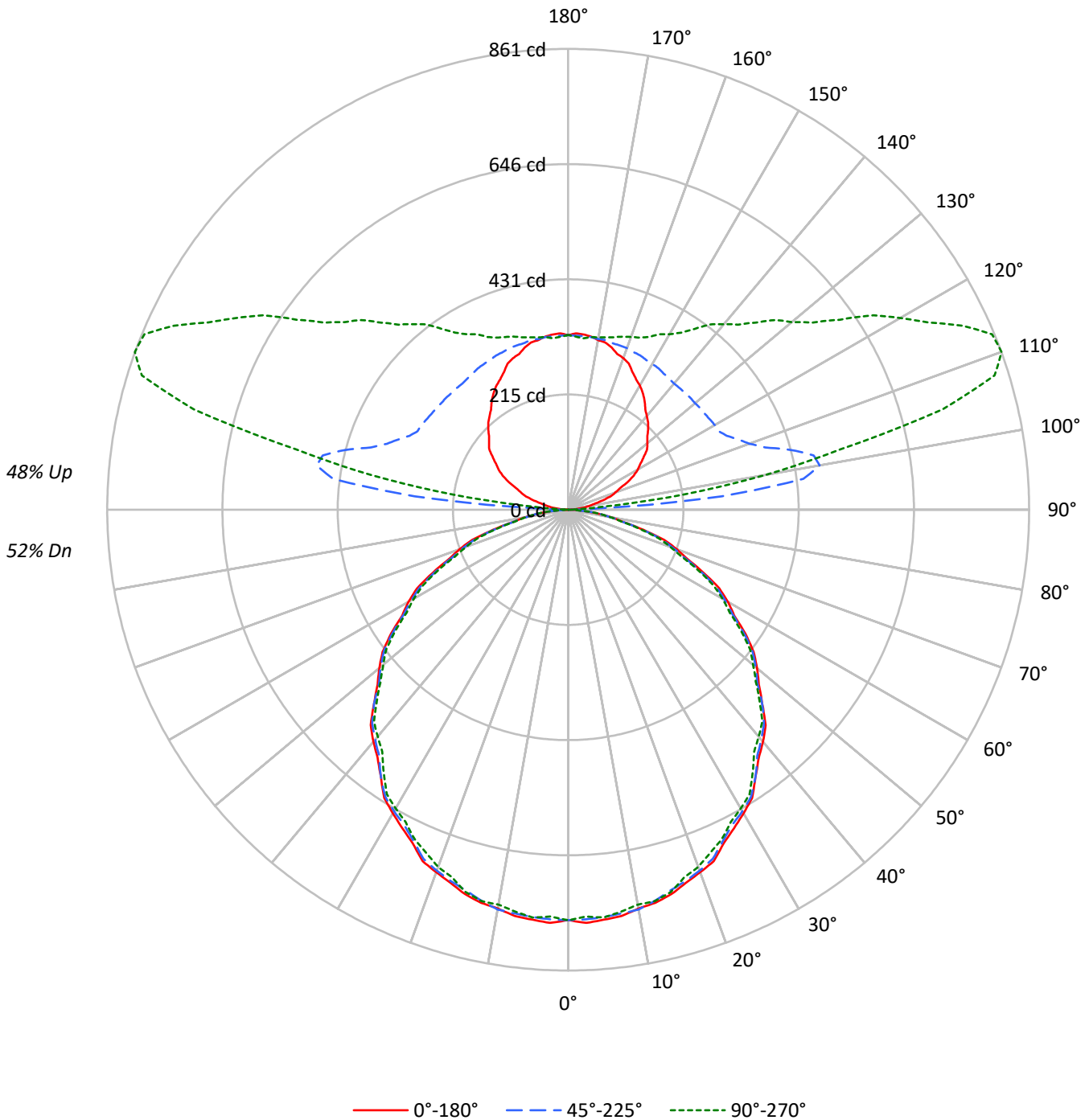
Lumens per Lamp: N/A
Luminaire Lumens: 4207.7 lumens
Efficiency: N/A
Efficacy: 121.3 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.26 / 1.38
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 34.7
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			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	108	108	108	108	99	99	99	99	84	84	84	71	71	71	58	58	58	52
1	98	94	90	86	91	87	83	80	74	71	69	62	60	58	51	50	49	43
2	89	82	75	70	82	76	70	66	64	60	57	54	51	49	45	43	41	36
3	81	72	64	58	75	66	60	55	57	52	48	48	44	41	39	37	34	30
4	74	63	55	49	68	59	52	46	50	45	40	42	38	35	35	32	29	26
5	68	56	48	42	63	52	45	39	45	39	35	38	34	30	31	28	26	22
6	63	50	42	36	58	47	40	34	40	35	30	34	30	26	28	25	22	20
7	58	45	37	32	53	42	35	30	37	31	27	31	27	23	26	22	20	17
8	54	41	33	28	50	38	31	26	33	28	24	28	24	21	24	20	18	15
9	50	38	30	25	46	35	28	24	30	25	21	26	22	18	22	18	16	14
10	47	34	27	22	43	32	26	21	28	23	19	24	20	17	20	17	14	12

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	1.7
10°-20°	208.0	4.9
20°-30°	314.3	7.5
30°-40°	378.5	9.0
40°-50°	392.4	9.3
50°-60°	355.8	8.5
60°-70°	270.5	6.4
70°-80°	150.6	3.6
80°-90°	38.8	0.9
90°-100°	148.6	3.5
100°-110°	422.9	10.1
110°-120°	405.2	9.6
120°-130°	320.7	7.6
130°-140°	257.4	6.1
140°-150°	201.5	4.8
150°-160°	147.4	3.5
160°-170°	91.3	2.2
170°-180°	31.0	0.7
0°-30°	594.9	14.1
0°-40°	973.4	23.1
0°-60°	1721.6	40.9
0°-90°	2181.5	51.8
90°-120°	976.8	23.2
90°-150°	1756.4	41.7
90°-180°	2026.0	48.2
0°-180°	4207.7	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°	16	64	288	100	61	18
105°	66	100	431	761	724	70
115°	122	148	327	692	813	120
125°	172	191	312	518	619	154
135°	211	228	308	437	494	163
145°	249	261	311	378	412	155
155°	284	291	318	342	356	131
165°	314	315	322	329	334	88
175°	329	327	326	324	321	31
180°	326	326	326	326	326	

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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°	5.0	26.3	61.0	17.8	13.4
95°	16.1	64.0	287.7	99.6	61.4
97.5°	29.6	75.0	443.1	317.1	217.3
100°	39.1	81.5	476.9	483.0	372.1
102.5°	49.5	88.5	469.4	618.3	521.4
105°	65.7	99.7	431.0	761.3	723.7
107.5°	82.2	112.7	386.1	801.6	835.1
110°	93.6	122.1	360.3	786.2	861.3

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	104.6	131.6	342.9	749.7	856.9
115°	122.2	147.6	326.8	692.3	813.0
117.5°	137.7	161.6	317.3	629.6	757.4
120°	150.1	170.1	316.3	593.8	716.2
122.5°	160.0	180.0	313.8	562.3	676.1
125°	172.4	191.2	311.9	517.6	618.9
127.5°	185.9	203.5	310.9	490.9	574.4
130°	192.9	210.4	309.4	472.3	545.1
132.5°	200.3	217.4	309.4	457.8	524.7
135°	210.8	228.4	308.2	437.2	494.2
137.5°	220.8	237.9	308.1	419.8	469.1
140°	228.2	245.8	307.6	405.4	452.7
142.5°	236.6	251.3	309.1	393.9	436.3
145°	248.7	261.4	310.7	378.4	412.4
147.5°	259.0	271.3	313.4	362.8	392.2
150°	267.9	276.4	314.4	357.7	378.3
152.5°	274.8	283.8	315.4	350.7	369.8
155°	284.0	290.7	318.1	342.0	355.9
157.5°	295.4	299.4	318.7	338.1	348.0
160°	301.4	304.4	321.2	335.1	343.5
162.5°	304.9	308.4	321.7	332.5	339.1
165°	313.8	315.0	321.8	328.8	333.6
167.5°	319.9	318.8	324.7	327.8	329.8
170°	321.8	321.2	323.7	324.4	326.8
172.5°	326.3	324.2	325.2	323.4	325.3
175°	328.7	326.8	325.6	323.6	321.2
177.5°	329.7	326.7	325.2	323.2	323.7
180°	326.2	326.2	326.2	326.2	326.2

(END OF REPORT)