

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: P521561

Luminaire Tested: SQ4-F-100U-075D-92765-1D-UNV-STD-W-4_2700K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521561
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2101-105-51, G2-2101-105-37)
Test Lab: INNOVATION CENTER
Issue Date: 5-5-2021
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-F-100U-075D-92765-1D-UNV-STD-W-4_2700K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 2700K-6500K CCT, 90 CRI LEDS, TUNED TO 2700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7171.2 lumens
Efficiency: N/A
Efficacy: 111.9 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.25 / 1.38
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

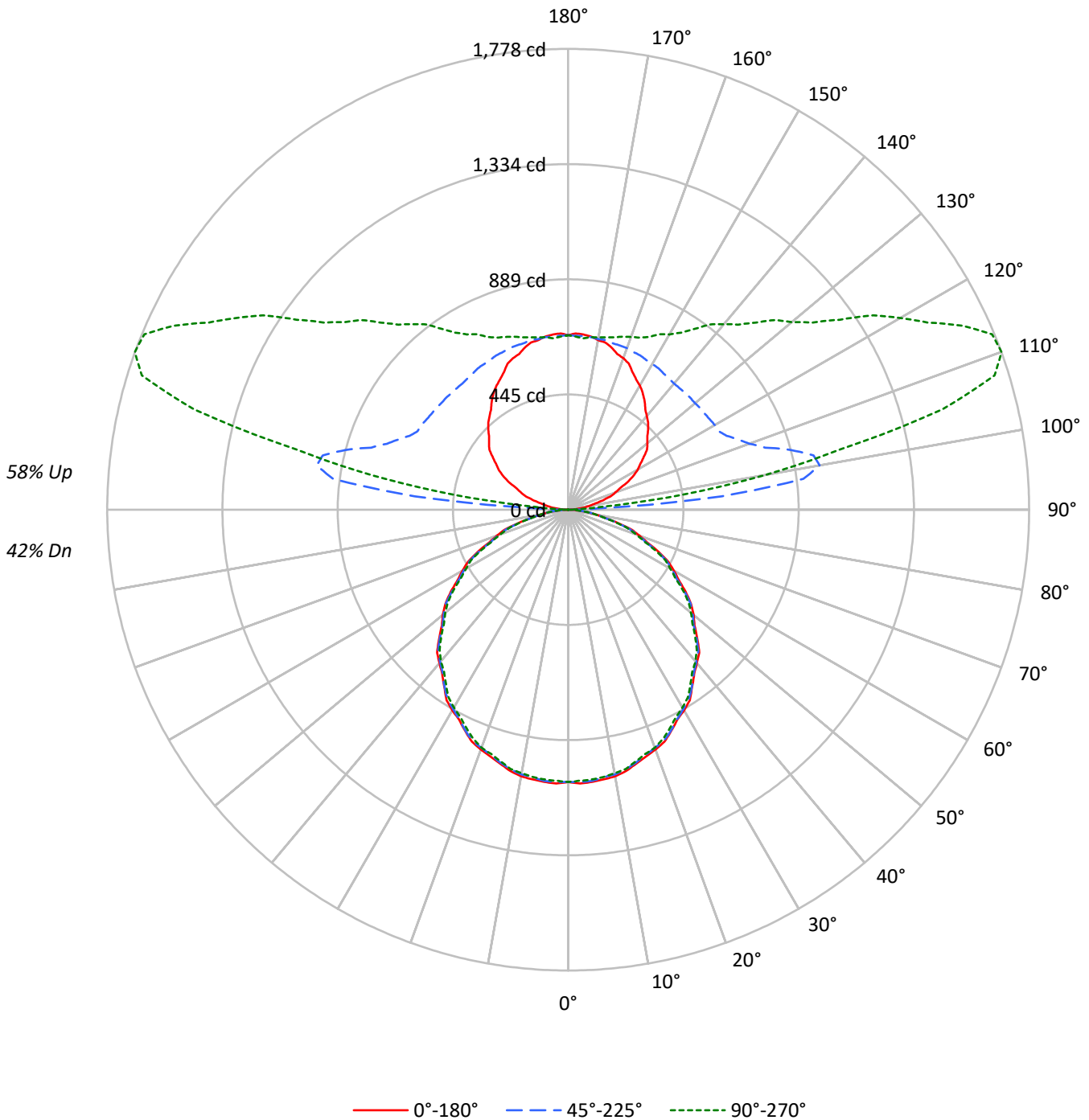
Input Watts (W): 64.1
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	105	105	105	105	96	96	96	96	79	79	79	63	63	63	48	48	48	42
1	96	91	88	84	87	84	80	77	69	66	64	55	54	52	43	42	41	35
2	87	80	74	68	79	73	68	63	60	56	53	48	46	43	37	36	34	29
3	79	70	63	57	72	64	58	53	53	48	44	43	39	36	33	31	29	24
4	72	62	54	48	66	57	50	44	47	42	38	38	34	31	29	27	25	21
5	66	55	47	41	60	50	43	38	42	36	32	34	30	27	26	24	21	18
6	61	49	41	35	55	45	38	33	38	32	28	30	26	23	24	21	19	16
7	56	44	36	31	51	41	34	29	34	29	25	28	24	21	22	19	17	14
8	52	40	32	27	48	37	30	25	31	26	22	25	21	18	20	17	15	12
9	49	36	29	24	44	34	27	22	28	23	19	23	19	16	18	15	13	11
10	45	33	26	21	41	31	24	20	26	21	17	21	17	15	17	14	12	10

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9692	9692	9692
5°	9764	9729	9676
10°	9788	9716	9671
15°	9686	9650	9604
20°	9666	9600	9591
25°	9583	9564	9457
30°	9520	9459	9388
35°	9386	9375	9256
40°	9299	9253	9196
45°	9188	9137	9038
50°	9063	8995	8872
55°	8895	8787	8664
60°	8686	8545	8387
65°	8396	8208	8062
70°	7871	7691	7510
75°	7094	6891	6787
80°	5797	5844	5744
85°	4150	4764	4764

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 9188 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	99.5	1.4
10°-20°	284.7	4.0
20°-30°	430.7	6.0
30°-40°	518.0	7.2
40°-50°	537.9	7.5
50°-60°	487.3	6.8
60°-70°	370.7	5.2
70°-80°	206.0	2.9
80°-90°	53.1	0.7
90°-100°	306.9	4.3
100°-110°	873.2	12.2
110°-120°	836.6	11.7
120°-130°	662.1	9.2
130°-140°	531.5	7.4
140°-150°	416.1	5.8
150°-160°	304.4	4.2
160°-170°	188.6	2.6
170°-180°	64.0	0.9
0°-30°	814.9	11.4
0°-40°	1333.0	18.6
0°-60°	2358.1	32.9
0°-90°	2987.9	41.7
90°-120°	2016.7	28.1
90°-150°	3626.3	50.6
90°-180°	4183.0	58.3
0°-180°	7171.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1050	1050	1050	1050	1050	
5°	1054	1045	1050	1046	1045	100
15°	1014	1006	1010	1009	1006	287
25°	941	933	940	930	929	434
35°	833	830	832	823	822	522
45°	704	700	700	693	693	543
55°	553	552	546	542	539	494
65°	385	379	376	370	369	379
75°	199	196	193	191	190	211
85°	39	42	45	45	45	48
90°	0	0	0	0	0	3
95°	33	132	594	206	127	38
105°	136	206	890	1572	1494	144
115°	252	305	675	1429	1678	248
125°	356	395	644	1069	1278	319
135°	435	472	636	903	1020	336
145°	513	540	642	781	851	321
155°	586	600	657	706	735	271
165°	648	650	664	679	689	182
175°	679	675	672	668	663	64
180°	674	674	674	674	674	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1050.5	1050.5	1050.5	1050.5	1050.5
2.5°	1057.4	1048.4	1051.3	1048.9	1046.7
5°	1054.3	1045.0	1050.5	1045.7	1044.8
7.5°	1049.4	1038.3	1040.9	1040.0	1040.0
10°	1044.8	1030.7	1037.1	1032.3	1032.3
12.5°	1032.5	1020.7	1025.6	1023.2	1024.7
15°	1014.1	1005.7	1010.3	1009.3	1005.5
17.5°	998.3	988.2	991.6	989.8	988.3
20°	984.5	975.1	977.8	973.1	976.8
22.5°	969.2	959.8	964.8	956.9	956.9
25°	941.4	933.0	939.5	929.9	929.0
27.5°	912.0	906.5	910.8	903.7	901.1
30°	893.6	885.2	887.9	883.0	881.2
32.5°	872.2	863.7	866.4	857.8	859.0
35°	833.3	829.6	832.4	822.8	821.8
37.5°	798.1	790.6	795.0	787.2	786.4
40°	772.1	764.6	768.3	763.5	763.5
42.5°	748.4	740.1	742.2	735.9	733.6
45°	704.2	699.5	700.3	692.7	692.7
47.5°	660.5	657.2	655.7	647.9	649.4
50°	631.4	625.8	626.7	618.1	618.1
52.5°	597.8	598.1	594.5	588.9	584.4
55°	553.0	552.1	546.3	541.5	538.6
57.5°	505.2	500.9	496.7	490.2	489.7
60°	470.7	467.9	463.1	457.3	454.5
62.5°	435.5	432.7	427.9	422.9	422.3
65°	384.6	379.0	376.0	370.2	369.3
67.5°	329.3	324.8	321.1	316.5	315.9
70°	291.8	288.1	285.1	281.2	278.4
72.5°	257.4	251.4	248.4	245.3	243.2
75°	199.0	196.2	193.3	191.3	190.4
77.5°	142.7	142.9	142.9	140.4	139.5
80°	109.1	110.0	110.0	109.0	108.1
82.5°	79.2	80.9	81.7	80.7	80.6
85°	39.2	42.0	45.0	45.0	45.0
87.5°	10.7	14.5	17.6	18.4	17.6
90°	0.0	0.0	0.0	0.0	0.0
92.5°	10.2	54.3	126.0	36.7	27.7
95°	33.3	132.2	594.1	205.6	126.8
97.5°	61.2	154.8	914.9	654.7	448.6
100°	80.7	168.3	984.6	997.3	768.2
102.5°	102.2	182.8	969.2	1276.6	1076.5
105°	135.7	205.8	889.8	1571.8	1494.2
107.5°	169.8	232.6	797.1	1655.0	1724.1
110°	193.3	252.2	743.9	1623.2	1778.4

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	215.9	271.7	708.0	1547.9	1769.2
115°	252.2	304.8	674.7	1429.4	1678.5
117.5°	284.2	333.6	655.0	1299.9	1563.8
120°	309.8	351.2	653.0	1225.9	1478.8
122.5°	330.3	371.6	647.9	1161.0	1395.8
125°	355.9	394.7	644.0	1068.7	1277.8
127.5°	383.8	420.2	642.0	1013.6	1185.9
130°	398.2	434.5	638.9	975.2	1125.4
132.5°	413.6	448.9	638.9	945.2	1083.4
135°	435.3	471.6	636.3	902.8	1020.4
137.5°	455.8	491.1	636.1	866.8	968.5
140°	471.2	507.5	635.1	837.0	934.7
142.5°	488.6	518.9	638.1	813.2	900.9
145°	513.4	539.7	641.5	781.3	851.4
147.5°	534.7	560.2	647.1	749.1	809.7
150°	553.1	570.6	649.1	738.5	781.0
152.5°	567.5	586.0	651.2	724.0	763.6
155°	586.4	600.2	656.8	706.1	734.9
157.5°	610.0	618.2	658.1	698.0	718.5
160°	622.3	628.5	663.2	691.8	709.3
162.5°	629.4	636.7	664.2	686.6	700.1
165°	647.9	650.4	664.5	678.8	688.8
167.5°	660.4	658.2	670.4	676.9	680.9
170°	664.5	663.3	668.3	669.7	674.7
172.5°	673.7	669.5	671.4	667.7	671.7
175°	678.6	674.8	672.2	668.2	663.2
177.5°	680.6	674.6	671.4	667.3	668.3
180°	673.5	673.5	673.5	673.5	673.5

(END OF REPORT)