

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: P521457

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

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521457
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-075U-075D-92765-1D-UNV-STD-W-4_2700K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 750 LUMENS PER FOOT
Light Source: 2700K-6500K CCT, 90 CRI LEDS, TUNED TO 2700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

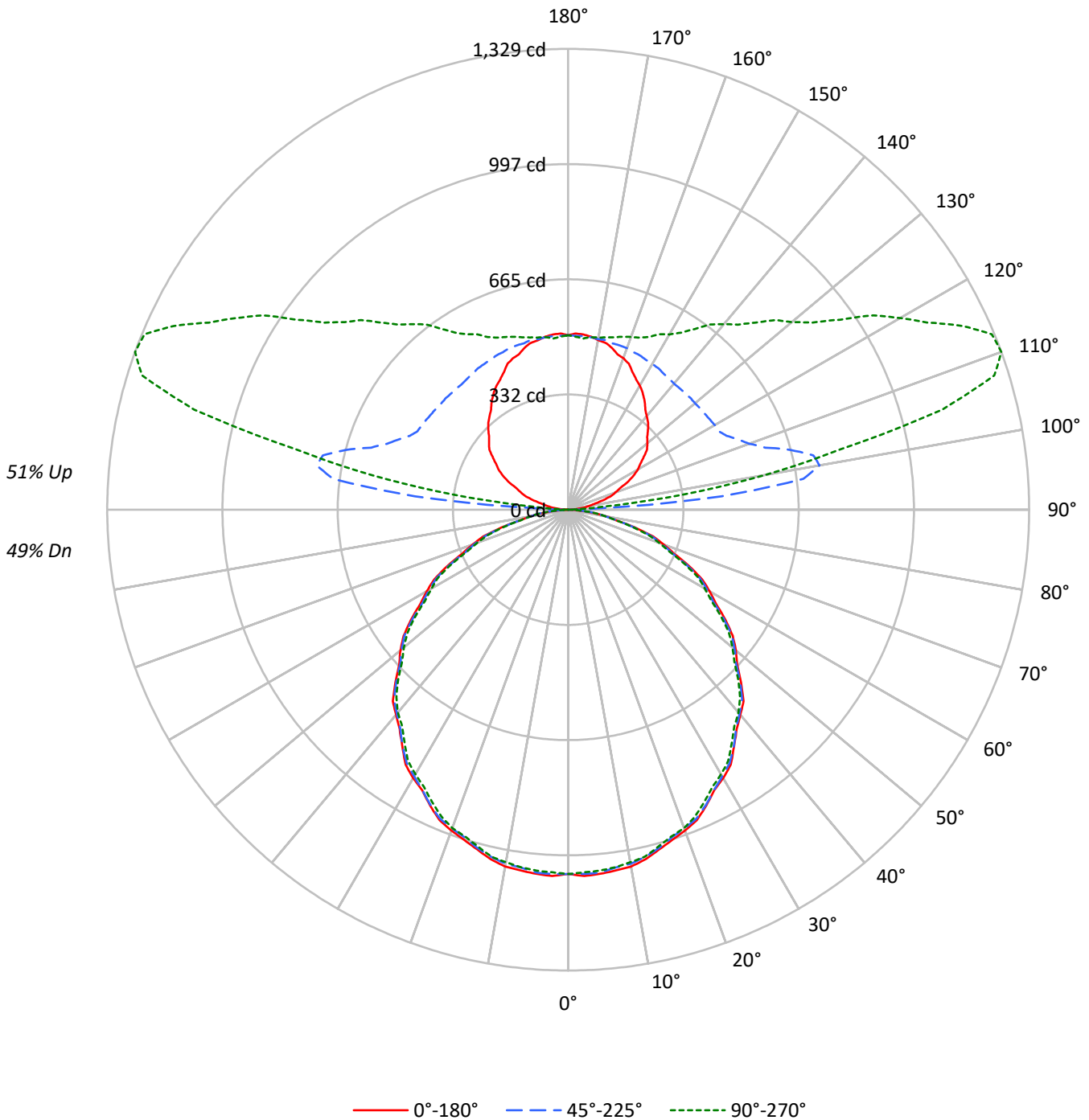
Lumens per Lamp: N/A
Luminaire Lumens: 6113.9 lumens
Efficiency: N/A
Efficacy: 110.4 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.25 / 1.38
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 55.4
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	50	30	10	0	
RCR																						
0	107	107	107	107	98	98	98	98	83	83	83	68	68	68	55	55	55	49				
1	97	93	89	86	90	86	82	79	72	70	68	60	58	57	48	47	46	41				
2	89	81	75	70	81	75	69	65	63	59	56	52	50	47	42	40	39	34				
3	81	71	64	58	74	66	59	54	56	51	47	46	43	40	37	35	33	29				
4	74	63	55	49	68	58	51	46	49	44	40	41	37	34	33	30	28	24				
5	68	56	48	42	62	52	44	39	44	38	34	37	32	29	30	27	24	21				
6	62	50	42	36	57	46	39	34	40	34	30	33	29	25	27	24	21	18				
7	57	45	37	31	53	42	35	30	36	30	26	30	26	22	25	21	19	16				
8	53	41	33	28	49	38	31	26	33	27	23	27	23	20	23	19	17	14				
9	50	37	30	25	46	35	28	23	30	24	21	25	21	18	21	18	15	13				
10	46	34	27	22	43	32	25	21	27	22	18	23	19	16	19	16	14	12				

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	1.6
10°-20°	284.7	4.7
20°-30°	430.7	7.0
30°-40°	518.0	8.5
40°-50°	537.9	8.8
50°-60°	487.3	8.0
60°-70°	370.7	6.1
70°-80°	206.0	3.4
80°-90°	53.1	0.9
90°-100°	229.3	3.8
100°-110°	652.5	10.7
110°-120°	625.2	10.2
120°-130°	494.8	8.1
130°-140°	397.1	6.5
140°-150°	310.9	5.1
150°-160°	227.5	3.7
160°-170°	140.9	2.3
170°-180°	47.8	0.8
0°-30°	814.9	13.3
0°-40°	1333.0	21.8
0°-60°	2358.1	38.6
0°-90°	2987.9	48.9
90°-120°	1507.0	24.6
90°-150°	2709.8	44.3
90°-180°	3126.0	51.1
0°-180°	6113.9	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°	25	99	444	154	95	28
105°	101	154	665	1174	1116	107
115°	188	228	504	1068	1254	186
125°	266	295	481	799	955	238
135°	325	352	476	675	762	251
145°	384	403	479	584	636	240
155°	438	448	491	528	549	203
165°	484	486	496	507	515	136
175°	507	504	502	499	496	48
180°	503	503	503	503	503	

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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°	7.7	40.6	94.1	27.4	20.7
95°	24.9	98.8	443.9	153.7	94.7
97.5°	45.7	115.7	683.7	489.2	335.2
100°	60.3	125.8	735.7	745.2	574.0
102.5°	76.3	136.6	724.3	953.9	804.4
105°	101.4	153.8	664.9	1174.5	1116.5
107.5°	126.9	173.8	595.7	1236.7	1288.3
110°	144.5	188.4	555.9	1212.9	1328.9

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	161.3	203.0	529.1	1156.6	1322.0
115°	188.5	227.8	504.2	1068.1	1254.3
117.5°	212.4	249.3	489.5	971.4	1168.6
120°	231.5	262.4	487.9	916.1	1105.0
122.5°	246.8	277.7	484.1	867.5	1043.0
125°	266.0	295.0	481.2	798.6	954.8
127.5°	286.8	314.0	479.7	757.4	886.1
130°	297.5	324.7	477.4	728.7	841.0
132.5°	309.0	335.4	477.4	706.3	809.6
135°	325.3	352.4	475.5	674.6	762.5
137.5°	340.6	367.0	475.3	647.7	723.7
140°	352.1	379.2	474.5	625.5	698.4
142.5°	365.1	387.7	476.8	607.7	673.2
145°	383.7	403.3	479.3	583.8	636.2
147.5°	399.5	418.6	483.5	559.8	605.0
150°	413.3	426.4	485.1	551.8	583.6
152.5°	424.0	437.9	486.6	541.0	570.6
155°	438.2	448.5	490.8	527.7	549.2
157.5°	455.8	462.0	491.8	521.6	536.9
160°	465.0	469.7	495.6	516.9	530.0
162.5°	470.3	475.8	496.4	513.0	523.1
165°	484.1	486.0	496.5	507.2	514.7
167.5°	493.5	491.8	500.9	505.8	508.8
170°	496.5	495.6	499.4	500.5	504.2
172.5°	503.4	500.3	501.7	498.9	501.9
175°	507.1	504.3	502.3	499.3	495.6
177.5°	508.6	504.1	501.7	498.7	499.4
180°	503.2	503.2	503.2	503.2	503.2

(END OF REPORT)