

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: P521655

Luminaire Tested: SQ4-F-150U-050D-92765-1D-UNV-STD-W-4_4000K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521655
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-150U-050D-92765-1D-UNV-STD-W-4_4000K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 1500 LUMENS PER FOOT
Light Source: 2700K-6500K CCT, 90 CRI LEDS, TUNED TO 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

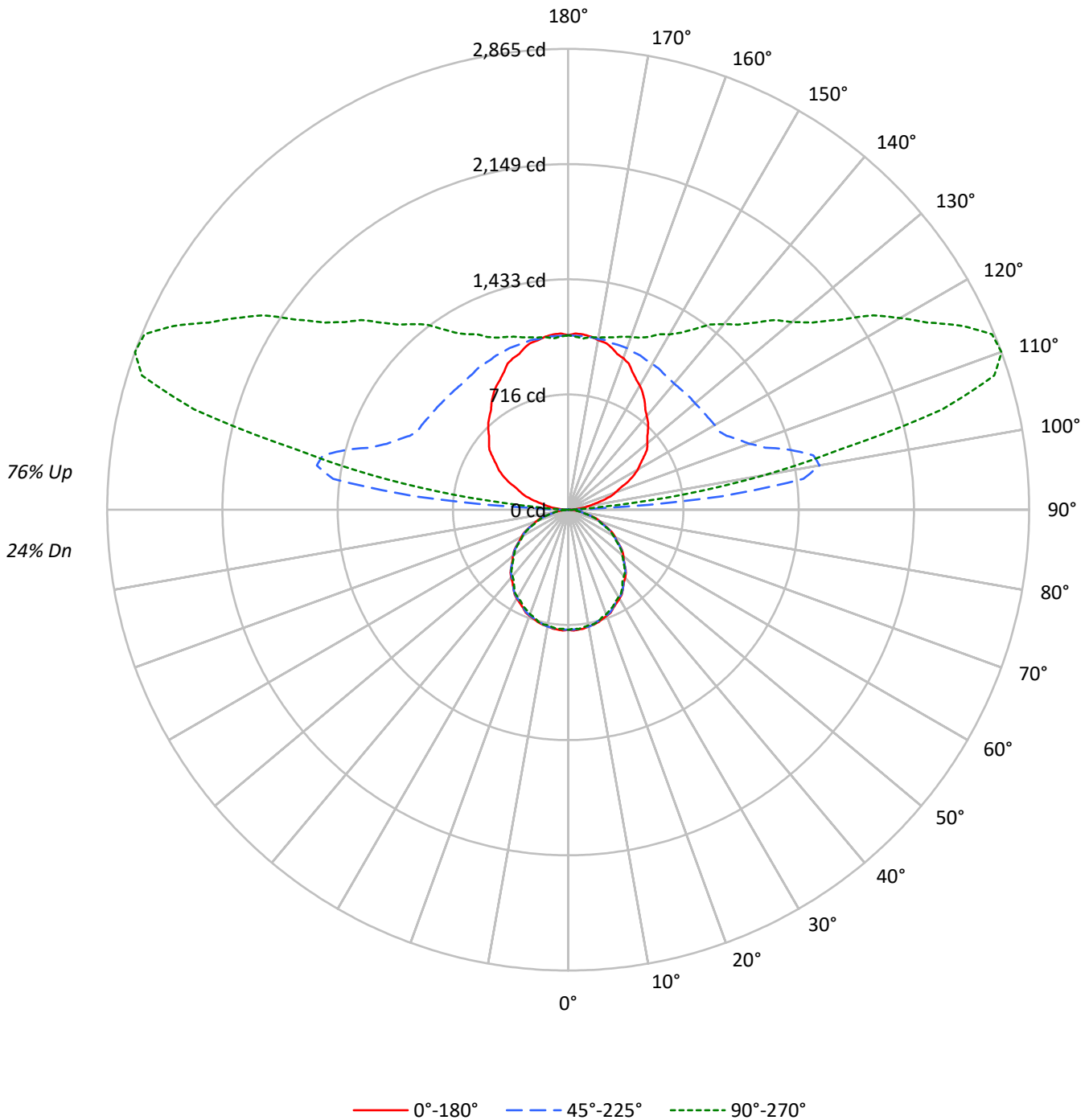
Lumens per Lamp: N/A
Luminaire Lumens: 8863.0 lumens
Efficiency: N/A
Efficacy: 123.3 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.26 / 1.38
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 71.9
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	101	101	101	101	90	90	90	90	69	69	69		50	50	50		32	32	32	24
1	92	88	84	81	82	78	75	72	60	58	56		44	42	41		28	28	27	20
2	84	76	71	66	74	68	63	59	53	49	46		38	36	34		25	24	23	17
3	76	67	60	54	67	60	54	49	46	42	39		34	31	29		22	20	19	14
4	69	59	52	46	61	53	46	41	41	36	33		30	27	24		19	18	16	12
5	64	52	45	39	56	47	40	35	36	32	28		27	23	21		17	16	14	10
6	58	47	39	33	52	42	35	30	33	28	24		24	21	18		16	14	12	9
7	54	42	34	29	48	38	31	26	29	25	21		22	18	16		14	12	11	8
8	50	38	31	25	44	34	28	23	27	22	19		20	16	14		13	11	10	7
9	46	35	27	22	41	31	25	20	24	20	17		18	15	13		12	10	9	6
10	43	31	25	20	38	28	22	18	22	18	15		17	13	11		11	9	8	6

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6886	6886	6886
5°	6931	6885	6894
10°	6897	6917	6831
15°	6915	6848	6876
20°	6889	6858	6788
25°	6810	6769	6728
30°	6792	6748	6683
35°	6687	6687	6583
40°	6635	6574	6488
45°	6511	6511	6417
50°	6430	6387	6300
55°	6323	6257	6159
60°	6182	6069	5975
65°	5936	5803	5691
70°	5659	5465	5328
75°	5044	4902	4827
80°	4166	4112	4059
85°	3017	3345	3345

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 6511 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	70.7	0.8
10°-20°	202.5	2.3
20°-30°	305.9	3.5
30°-40°	368.4	4.2
40°-50°	382.0	4.3
50°-60°	346.3	3.9
60°-70°	263.3	3.0
70°-80°	146.6	1.7
80°-90°	37.8	0.4
90°-100°	494.4	5.6
100°-110°	1406.7	15.9
110°-120°	1347.8	15.2
120°-130°	1066.7	12.0
130°-140°	856.2	9.7
140°-150°	670.3	7.6
150°-160°	490.5	5.5
160°-170°	303.8	3.4
170°-180°	103.1	1.2
0°-30°	579.0	6.5
0°-40°	947.4	10.7
0°-60°	1675.8	18.9
0°-90°	2123.4	24.0
90°-120°	3249.0	36.7
90°-150°	5842.2	65.9
90°-180°	6740.0	76.0
0°-180°	8863.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	746	746	746	746	746	
5°	748	740	743	744	744	71
15°	724	717	717	717	720	204
25°	669	664	665	661	661	310
35°	594	588	594	586	584	372
45°	499	496	499	490	492	386
55°	393	392	389	385	383	351
65°	272	271	266	263	261	269
75°	142	140	138	135	135	151
85°	28	30	32	33	32	35
90°	0	0	0	0	0	3
95°	54	213	957	331	204	61
105°	219	332	1434	2532	2407	231
115°	406	491	1087	2303	2704	400
125°	573	636	1038	1722	2059	513
135°	701	760	1025	1454	1644	541
145°	827	870	1033	1259	1372	517
155°	945	967	1058	1138	1184	437
165°	1044	1048	1070	1094	1110	294
175°	1093	1087	1083	1076	1068	104
180°	1085	1085	1085	1085	1085	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	746.4	746.4	746.4	746.4	746.4
2.5°	752.1	744.1	745.6	746.3	740.7
5°	748.4	739.5	743.4	744.4	744.4
7.5°	745.2	738.2	740.7	737.6	737.2
10°	736.2	733.2	738.3	731.1	729.1
12.5°	732.2	727.6	728.5	727.1	729.1
15°	724.0	717.0	716.9	716.9	719.9
17.5°	711.4	702.4	708.3	702.0	701.2
20°	701.6	692.6	698.5	691.4	691.4
22.5°	691.8	681.3	687.1	677.5	675.1
25°	669.0	664.0	664.9	660.9	660.9
27.5°	652.9	642.0	645.6	639.9	640.3
30°	637.5	626.5	633.4	625.3	627.3
32.5°	622.0	615.0	618.7	609.8	613.4
35°	593.7	587.7	593.7	586.5	584.5
37.5°	568.8	562.6	564.5	559.9	555.0
40°	550.9	543.9	545.8	539.7	538.7
42.5°	531.3	526.8	527.1	521.8	522.4
45°	499.0	496.0	499.0	489.8	491.8
47.5°	470.0	466.5	466.2	460.1	462.5
50°	448.0	446.1	445.0	438.9	438.9
52.5°	425.2	423.2	422.2	417.7	416.9
55°	393.1	392.1	389.0	384.9	382.9
57.5°	357.8	355.8	354.2	349.8	348.3
60°	335.0	333.0	328.9	323.8	323.8
62.5°	309.8	307.8	302.8	300.9	297.7
65°	271.9	270.9	265.8	262.7	260.7
67.5°	234.2	231.0	228.7	224.8	222.8
70°	209.8	205.8	202.6	199.5	197.5
72.5°	182.9	179.7	176.6	175.1	172.3
75°	141.5	139.6	137.5	135.4	135.4
77.5°	102.8	102.3	100.2	100.2	99.2
80°	78.4	79.4	77.4	77.4	76.4
82.5°	56.4	57.4	57.0	57.8	56.8
85°	28.5	30.5	31.6	32.6	31.6
87.5°	8.1	10.5	12.2	13.0	13.0
90°	0.0	0.0	0.0	0.0	0.0
92.5°	16.5	87.5	203.0	59.1	44.6
95°	53.6	213.0	957.1	331.3	204.2
97.5°	98.6	249.5	1474.0	1054.7	722.8
100°	129.9	271.1	1586.2	1606.7	1237.6
102.5°	164.6	294.5	1561.5	2056.6	1734.3
105°	218.6	331.6	1433.6	2532.2	2407.2
107.5°	273.5	374.8	1284.2	2666.3	2777.6
110°	311.5	406.3	1198.4	2615.0	2865.1

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	347.8	437.7	1140.7	2493.7	2850.2
115°	406.4	491.1	1087.0	2302.8	2704.2
117.5°	457.9	537.4	1055.3	2094.2	2519.4
120°	499.2	565.7	1052.0	1975.0	2382.4
122.5°	532.2	598.7	1043.7	1870.4	2248.8
125°	573.4	636.0	1037.5	1721.8	2058.6
127.5°	618.4	676.9	1034.2	1632.9	1910.5
130°	641.5	700.0	1029.3	1571.1	1813.1
132.5°	666.3	723.1	1029.3	1522.8	1745.5
135°	701.3	759.8	1025.2	1454.4	1644.0
137.5°	734.3	791.2	1024.7	1396.5	1560.2
140°	759.1	817.6	1023.1	1348.5	1505.8
142.5°	787.1	835.9	1028.0	1310.1	1451.3
145°	827.1	869.5	1033.4	1258.7	1371.7
147.5°	861.4	902.5	1042.5	1206.8	1304.4
150°	891.1	919.3	1045.8	1189.7	1258.2
152.5°	914.2	944.0	1049.1	1166.5	1230.2
155°	944.7	966.9	1058.2	1137.6	1184.0
157.5°	982.7	996.0	1060.2	1124.5	1157.6
160°	1002.5	1012.6	1068.5	1114.5	1142.7
162.5°	1014.0	1025.7	1070.1	1106.1	1127.9
165°	1043.7	1047.8	1070.5	1093.6	1109.7
167.5°	1063.9	1060.3	1080.0	1090.5	1096.9
170°	1070.5	1068.5	1076.7	1079.0	1087.0
172.5°	1085.4	1078.5	1081.7	1075.6	1082.1
175°	1093.2	1087.2	1082.9	1076.5	1068.5
177.5°	1096.5	1086.8	1081.7	1075.1	1076.7
180°	1085.0	1085.0	1085.0	1085.0	1085.0

(END OF REPORT)