

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: P521653

Luminaire Tested: SQ4-F-150U-050D-92765-1D-UNV-STD-W-4_3000K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521653
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_3000K
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 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8499.8 lumens
Efficiency: N/A
Efficacy: 118.2 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

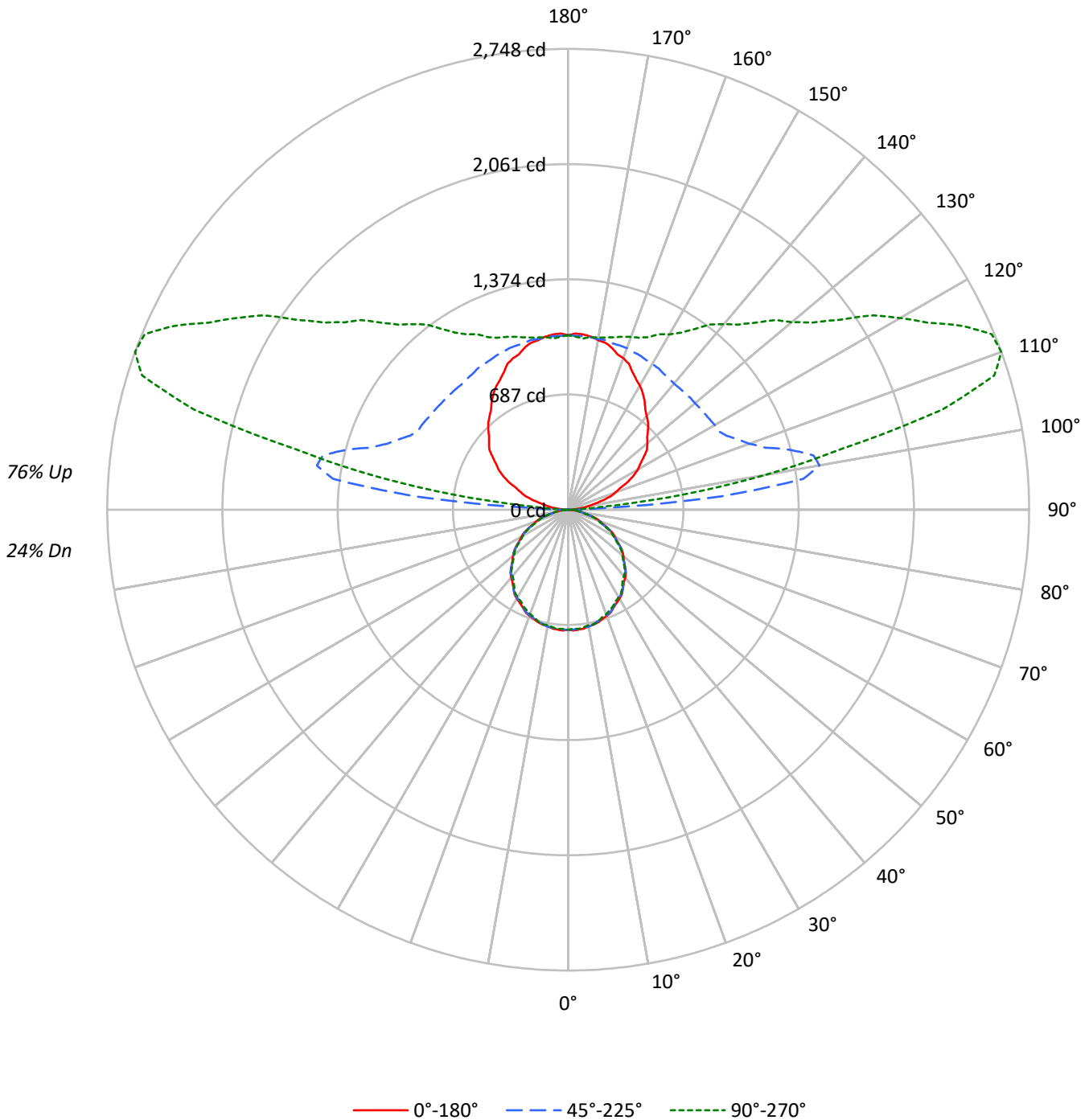
Input Watts (W): 71.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Luminous Intensity Polar Plot



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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20			20			20			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°	6604	6604	6604
5°	6648	6602	6612
10°	6615	6633	6550
15°	6632	6567	6594
20°	6607	6577	6511
25°	6531	6492	6452
30°	6512	6471	6409
35°	6412	6412	6313
40°	6363	6304	6222
45°	6243	6243	6155
50°	6168	6126	6041
55°	6064	6000	5907
60°	5929	5820	5729
65°	5691	5565	5458
70°	5427	5241	5112
75°	4837	4698	4631
80°	3995	3942	3889
85°	2890	3208	3208

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 6243 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	67.8	0.8
10°-20°	194.2	2.3
20°-30°	293.4	3.5
30°-40°	353.3	4.2
40°-50°	366.3	4.3
50°-60°	332.1	3.9
60°-70°	252.5	3.0
70°-80°	140.6	1.7
80°-90°	36.2	0.4
90°-100°	474.1	5.6
100°-110°	1349.1	15.9
110°-120°	1292.6	15.2
120°-130°	1023.0	12.0
130°-140°	821.1	9.7
140°-150°	642.8	7.6
150°-160°	470.4	5.5
160°-170°	291.4	3.4
170°-180°	98.9	1.2
0°-30°	555.3	6.5
0°-40°	908.6	10.7
0°-60°	1607.1	18.9
0°-90°	2036.4	24.0
90°-120°	3115.8	36.7
90°-150°	5602.8	65.9
90°-180°	6463.0	76.0
0°-180°	8499.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	716	716	716	716	716	
5°	718	709	713	714	714	68
15°	694	688	688	688	690	196
25°	642	637	638	634	634	297
35°	569	564	569	562	560	357
45°	478	476	478	470	472	370
55°	377	376	373	369	367	336
65°	261	260	255	252	250	258
75°	136	134	132	130	130	144
85°	27	29	30	31	30	33
90°	0	0	0	0	0	3
95°	51	204	918	318	196	59
105°	210	318	1375	2428	2308	222
115°	390	471	1042	2208	2593	384
125°	550	610	995	1651	1974	492
135°	673	729	983	1395	1577	519
145°	793	834	991	1207	1316	496
155°	906	927	1015	1091	1136	419
165°	1001	1005	1027	1049	1064	281
175°	1048	1043	1038	1032	1025	99
180°	1040	1040	1040	1040	1040	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	715.8	715.8	715.8	715.8	715.8
2.5°	721.3	713.7	715.0	715.7	710.4
5°	717.8	709.2	712.9	713.9	713.9
7.5°	714.6	708.0	710.4	707.4	707.0
10°	706.1	703.2	708.0	701.1	699.2
12.5°	702.1	697.8	698.6	697.3	699.2
15°	694.3	687.7	687.5	687.6	690.4
17.5°	682.2	673.6	679.3	673.2	672.5
20°	672.9	664.3	669.9	663.1	663.1
22.5°	663.5	653.4	659.0	649.8	647.5
25°	641.6	636.8	637.7	633.8	633.8
27.5°	626.2	615.7	619.1	613.7	614.1
30°	611.3	600.8	607.4	599.7	601.6
32.5°	596.5	589.8	593.4	584.8	588.3
35°	569.3	563.6	569.3	562.5	560.5
37.5°	545.5	539.6	541.4	537.0	532.2
40°	528.3	521.6	523.4	517.6	516.6
42.5°	509.6	505.2	505.5	500.4	501.0
45°	478.5	475.7	478.5	469.8	471.7
47.5°	450.8	447.3	447.1	441.3	443.6
50°	429.7	427.8	426.8	420.9	420.9
52.5°	407.8	405.9	404.9	400.6	399.8
55°	377.0	376.0	373.0	369.1	367.2
57.5°	343.2	341.3	339.6	335.5	334.0
60°	321.3	319.4	315.4	310.5	310.5
62.5°	297.1	295.2	290.4	288.6	285.5
65°	260.7	259.8	254.9	251.9	250.0
67.5°	224.6	221.6	219.3	215.6	213.7
70°	201.2	197.4	194.3	191.4	189.5
72.5°	175.4	172.3	169.3	167.9	165.2
75°	135.7	133.8	131.8	129.9	129.9
77.5°	98.6	98.1	96.1	96.1	95.1
80°	75.2	76.2	74.2	74.2	73.2
82.5°	54.1	55.1	54.7	55.4	54.5
85°	27.3	29.3	30.3	31.2	30.3
87.5°	7.8	10.1	11.7	12.5	12.5
90°	0.0	0.0	0.0	0.0	0.0
92.5°	15.8	83.9	194.7	56.7	42.7
95°	51.4	204.2	917.9	317.7	195.8
97.5°	94.6	239.2	1413.6	1011.5	693.2
100°	124.6	260.0	1521.2	1540.9	1186.9
102.5°	157.9	282.4	1497.5	1972.3	1663.2
105°	209.7	318.0	1374.8	2428.4	2308.5
107.5°	262.3	359.4	1231.6	2557.0	2663.8
110°	298.7	389.6	1149.3	2507.8	2747.7

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	333.5	419.8	1093.9	2391.5	2733.4
115°	389.7	470.9	1042.5	2208.5	2593.4
117.5°	439.2	515.4	1012.0	2008.4	2416.1
120°	478.7	542.5	1008.9	1894.1	2284.8
122.5°	510.4	574.2	1001.0	1793.7	2156.6
125°	549.9	609.9	995.0	1651.2	1974.2
127.5°	593.1	649.1	991.9	1566.0	1832.2
130°	615.2	671.3	987.1	1506.7	1738.8
132.5°	638.9	693.5	987.1	1460.4	1673.9
135°	672.6	728.7	983.2	1394.8	1576.6
137.5°	704.2	758.8	982.8	1339.2	1496.3
140°	728.0	784.1	981.2	1293.2	1444.1
142.5°	754.9	801.7	985.9	1256.4	1391.8
145°	793.2	833.9	991.1	1207.2	1315.5
147.5°	826.1	865.5	999.8	1157.4	1251.0
150°	854.6	881.6	1002.9	1140.9	1206.7
152.5°	876.7	905.4	1006.1	1118.7	1179.8
155°	906.0	927.3	1014.8	1091.0	1135.5
157.5°	942.4	955.2	1016.8	1078.4	1110.1
160°	961.4	971.1	1024.7	1068.8	1095.9
162.5°	972.5	983.7	1026.3	1060.8	1081.7
165°	1001.0	1004.8	1026.7	1048.8	1064.3
167.5°	1020.3	1016.9	1035.8	1045.8	1052.0
170°	1026.7	1024.7	1032.6	1034.8	1042.5
172.5°	1040.9	1034.3	1037.4	1031.6	1037.7
175°	1048.4	1042.6	1038.5	1032.4	1024.7
177.5°	1051.6	1042.3	1037.4	1031.1	1032.6
180°	1040.5	1040.5	1040.5	1040.5	1040.5

(END OF REPORT)