

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: P521665

Luminaire Tested: SQ4-F-150U-075D-92765-1D-UNV-STD-W-4_2700K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521665
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-150U-075D-92765-1D-UNV-STD-W-4_2700K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 1500 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: 9320.0 lumens
Efficiency: N/A
Efficacy: 112.6 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: Semi-Indirect

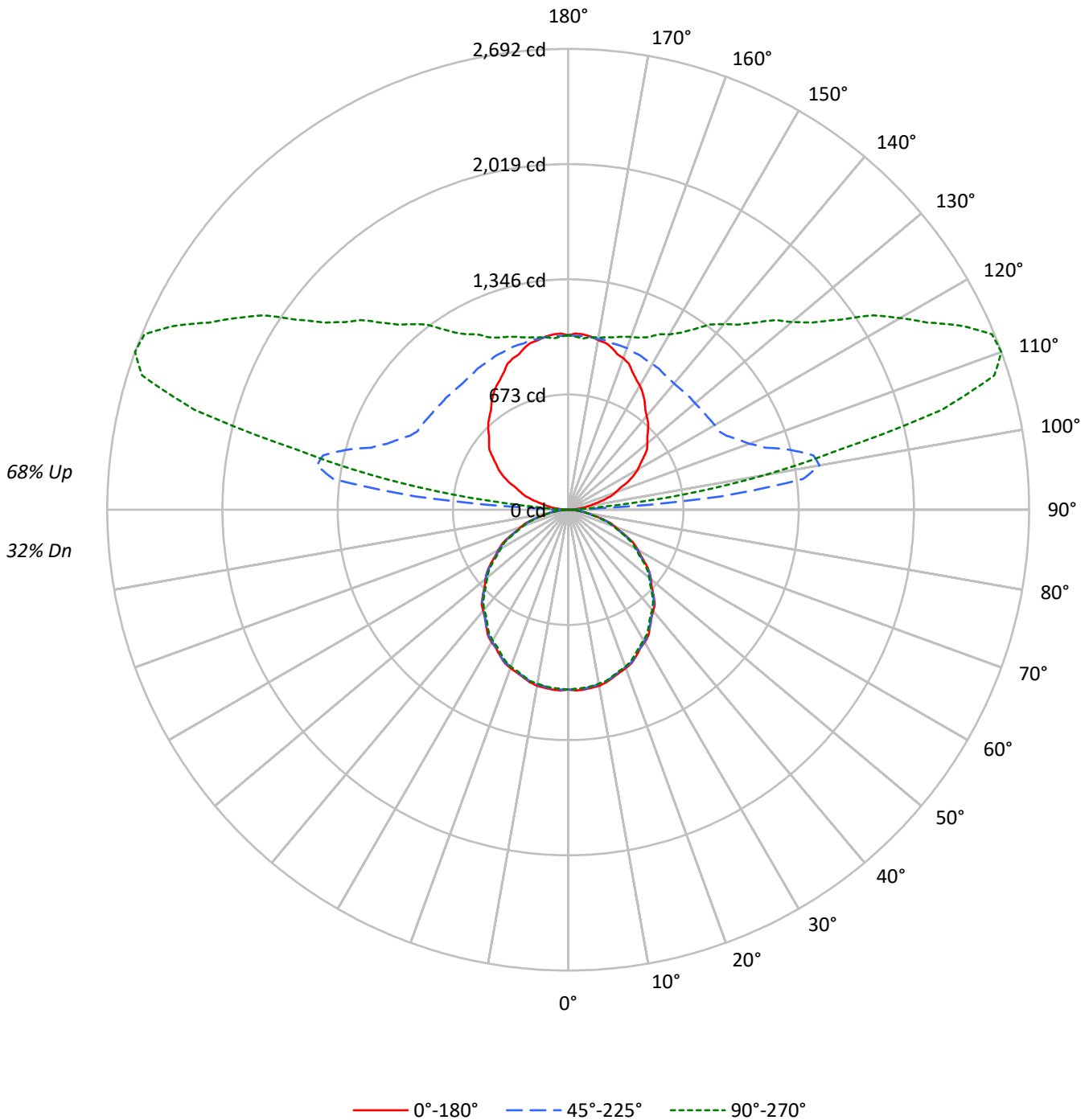
Input Watts (W): 82.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	103	103	103	103	93	93	93	93	73	73	73	56	56	56	40	40	40	32				
1	94	89	86	82	84	81	77	75	64	62	60	49	47	46	35	34	33	27				
2	85	78	72	67	76	70	65	61	56	52	49	43	40	38	31	29	28	22				
3	78	68	61	56	70	62	56	51	49	45	41	38	35	32	27	25	24	19				
4	71	60	53	47	63	55	48	43	44	39	35	33	30	27	24	22	20	16				
5	65	54	46	40	58	48	42	36	39	34	30	30	26	24	22	19	17	14				
6	60	48	40	34	53	43	37	31	35	30	26	27	23	21	19	17	15	12				
7	55	43	35	30	49	39	32	27	31	26	23	24	21	18	18	15	14	11				
8	51	39	31	26	46	35	29	24	29	24	20	22	19	16	16	14	12	10				
9	47	35	28	23	43	32	26	21	26	21	18	20	17	14	15	13	11	9				
10	44	32	25	21	40	29	23	19	24	19	16	19	15	13	14	11	10	8				

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	1.1
10°-20°	284.7	3.1
20°-30°	430.7	4.6
30°-40°	518.0	5.6
40°-50°	537.9	5.8
50°-60°	487.3	5.2
60°-70°	370.7	4.0
70°-80°	206.0	2.2
80°-90°	53.1	0.6
90°-100°	464.5	5.0
100°-110°	1321.7	14.2
110°-120°	1266.3	13.6
120°-130°	1002.2	10.8
130°-140°	804.5	8.6
140°-150°	629.8	6.8
150°-160°	460.8	4.9
160°-170°	285.4	3.1
170°-180°	96.9	1.0
0°-30°	814.9	8.7
0°-40°	1333.0	14.3
0°-60°	2358.1	25.3
0°-90°	2987.9	32.1
90°-120°	3052.5	32.8
90°-150°	5489.0	58.9
90°-180°	6332.0	67.9
0°-180°	9320.0	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	4
95°	50	200	899	311	192	58
105°	205	312	1347	2379	2262	217
115°	382	461	1021	2164	2541	376
125°	539	598	975	1618	1934	482
135°	659	714	963	1366	1545	508
145°	777	817	971	1183	1289	485
155°	888	908	994	1069	1112	410
165°	981	984	1006	1028	1043	276
175°	1027	1022	1018	1012	1004	97
180°	1019	1019	1019	1019	1019	

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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°	15.5	82.2	190.7	55.5	41.9
95°	50.4	200.1	899.2	311.2	191.9
97.5°	92.6	234.4	1384.9	991.0	679.1
100°	122.1	254.7	1490.3	1509.6	1162.8
102.5°	154.7	276.7	1467.1	1932.3	1629.5
105°	205.4	311.5	1346.9	2379.1	2261.7
107.5°	257.0	352.1	1206.6	2505.1	2609.7
110°	292.6	381.7	1126.0	2456.9	2691.9

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	326.7	411.3	1071.7	2342.9	2677.9
115°	381.8	461.4	1021.3	2163.6	2540.7
117.5°	430.2	504.9	991.5	1967.6	2367.1
120°	469.0	531.5	988.4	1855.6	2238.4
122.5°	500.0	562.5	980.6	1757.3	2112.8
125°	538.8	597.5	974.8	1617.7	1934.1
127.5°	581.0	636.0	971.7	1534.2	1795.0
130°	602.7	657.7	967.1	1476.1	1703.5
132.5°	626.0	679.4	967.1	1430.7	1639.9
135°	658.9	713.9	963.2	1366.5	1544.6
137.5°	689.9	743.4	962.8	1312.0	1465.9
140°	713.2	768.1	961.3	1266.9	1414.7
142.5°	739.5	785.4	965.9	1230.9	1363.6
145°	777.1	816.9	970.9	1182.7	1288.8
147.5°	809.3	848.0	979.5	1133.9	1225.6
150°	837.2	863.7	982.6	1117.8	1182.2
152.5°	858.9	887.0	985.7	1095.9	1155.8
155°	887.6	908.5	994.2	1068.8	1112.4
157.5°	923.3	935.8	996.1	1056.5	1087.6
160°	941.9	951.3	1003.9	1047.1	1073.7
162.5°	952.7	963.7	1005.4	1039.2	1059.7
165°	980.6	984.4	1005.8	1027.5	1042.6
167.5°	999.6	996.2	1014.7	1024.6	1030.6
170°	1005.8	1003.9	1011.6	1013.7	1021.3
172.5°	1019.8	1013.3	1016.3	1010.6	1016.7
175°	1027.1	1021.5	1017.5	1011.5	1003.9
177.5°	1030.2	1021.1	1016.3	1010.1	1011.6
180°	1019.4	1019.4	1019.4	1019.4	1019.4

(END OF REPORT)