

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: P521667

Luminaire Tested: SQ4-F-150U-075D-92765-1D-UNV-STD-W-4_3500K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521667
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_3500K
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 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9741.4 lumens
Efficiency: N/A
Efficacy: 117.2 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

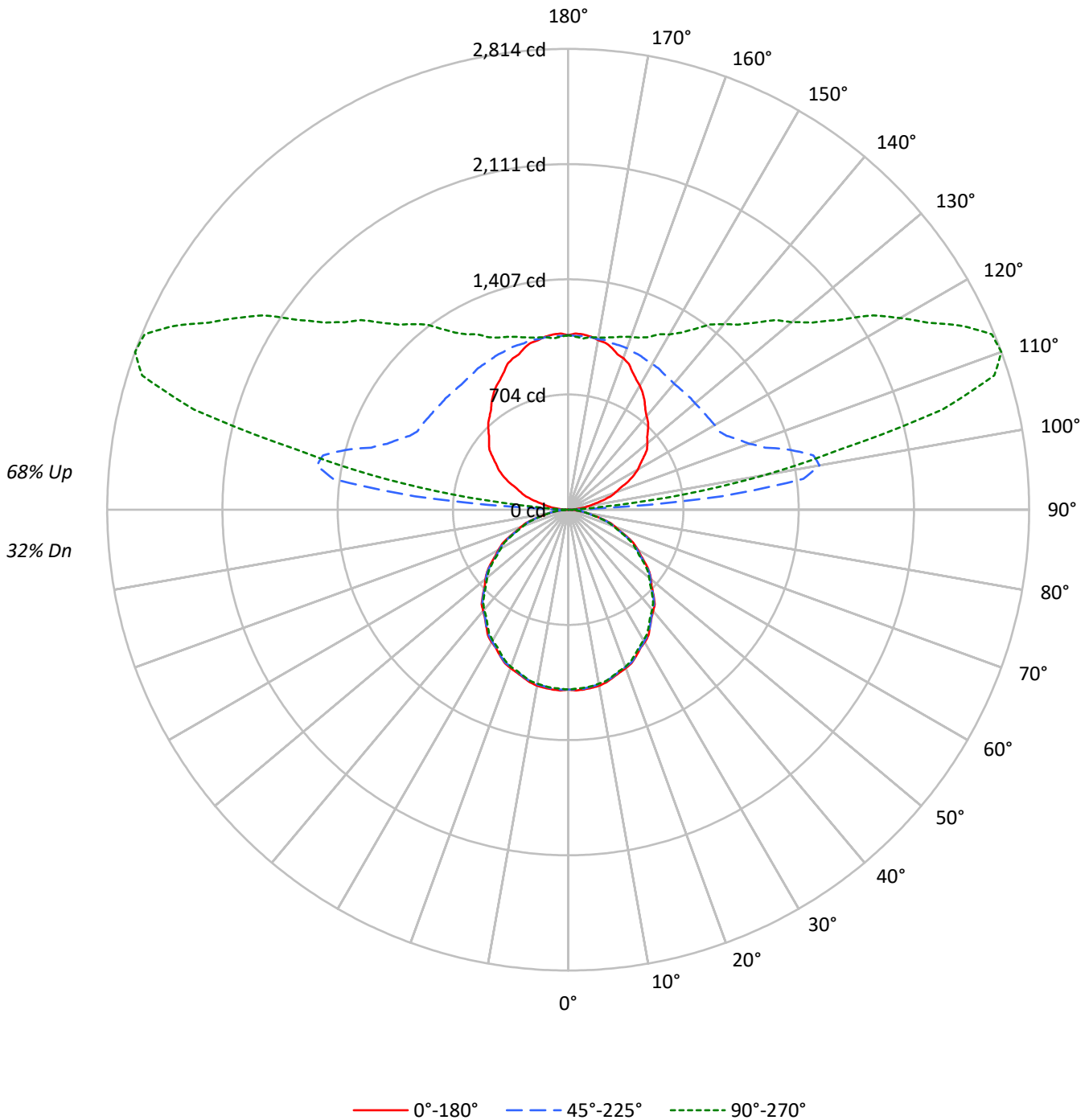
Input Watts (W): 83.1
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	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°	10130	10130	10130
5°	10206	10169	10113
10°	10230	10155	10109
15°	10125	10087	10039
20°	10103	10034	10025
25°	10017	9997	9885
30°	9950	9886	9812
35°	9810	9799	9675
40°	9719	9671	9611
45°	9603	9551	9447
50°	9473	9401	9272
55°	9297	9185	9056
60°	9079	8931	8765
65°	8776	8580	8427
70°	8228	8039	7850
75°	7415	7201	7094
80°	6057	6110	6004
85°	4340	4975	4975

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 9603 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	104.0	1.1
10°-20°	297.5	3.1
20°-30°	450.2	4.6
30°-40°	541.5	5.6
40°-50°	562.2	5.8
50°-60°	509.3	5.2
60°-70°	387.5	4.0
70°-80°	215.3	2.2
80°-90°	55.5	0.6
90°-100°	485.5	5.0
100°-110°	1381.5	14.2
110°-120°	1323.6	13.6
120°-130°	1047.6	10.8
130°-140°	840.8	8.6
140°-150°	658.3	6.8
150°-160°	481.7	4.9
160°-170°	298.3	3.1
170°-180°	101.2	1.0
0°-30°	851.8	8.7
0°-40°	1393.3	14.3
0°-60°	2464.7	25.3
0°-90°	3123.0	32.1
90°-120°	3190.6	32.8
90°-150°	5737.2	58.9
90°-180°	6618.0	67.9
0°-180°	9741.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1098	1098	1098	1098	1098	
5°	1102	1092	1098	1093	1092	105
15°	1060	1051	1056	1055	1051	300
25°	984	975	982	972	971	454
35°	871	867	870	860	859	546
45°	736	731	732	724	724	568
55°	578	577	571	566	563	516
65°	402	396	393	387	386	396
75°	208	205	202	200	199	220
85°	41	44	47	47	47	51
90°	0	0	0	0	0	4
95°	53	209	940	325	200	60
105°	215	326	1408	2487	2364	227
115°	399	482	1068	2262	2656	393
125°	563	624	1019	1691	2022	504
135°	689	746	1007	1428	1614	531
145°	812	854	1015	1236	1347	507
155°	928	950	1039	1117	1163	429
165°	1025	1029	1051	1074	1090	288
175°	1074	1068	1064	1057	1049	102
180°	1066	1066	1066	1066	1066	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1098.0	1098.0	1098.0	1098.0	1098.0
2.5°	1105.2	1095.8	1098.8	1096.3	1094.0
5°	1102.0	1092.2	1098.0	1093.0	1092.0
7.5°	1096.8	1085.3	1088.0	1087.0	1087.0
10°	1092.0	1077.3	1084.0	1079.0	1079.0
12.5°	1079.2	1066.9	1072.0	1069.4	1071.0
15°	1060.0	1051.2	1056.0	1054.9	1051.0
17.5°	1043.4	1032.8	1036.4	1034.6	1033.0
20°	1029.0	1019.2	1022.0	1017.1	1021.0
22.5°	1013.0	1003.2	1008.4	1000.2	1000.2
25°	984.0	975.2	982.0	972.0	971.0
27.5°	953.2	947.5	952.0	944.5	941.8
30°	934.0	925.2	928.0	923.0	921.0
32.5°	911.6	902.8	905.6	896.6	897.8
35°	871.0	867.1	870.0	860.0	859.0
37.5°	834.2	826.4	831.0	822.8	822.0
40°	807.0	799.2	803.0	798.0	798.0
42.5°	782.2	773.6	775.8	769.1	766.8
45°	736.0	731.1	732.0	724.0	724.0
47.5°	690.4	686.9	685.4	677.2	678.8
50°	660.0	654.1	655.0	646.0	646.0
52.5°	624.8	625.2	621.4	615.5	610.8
55°	578.0	577.0	571.0	565.9	563.0
57.5°	528.0	523.5	519.2	512.4	511.8
60°	492.0	489.1	484.0	477.9	475.0
62.5°	455.2	452.3	447.2	442.0	441.4
65°	402.0	396.1	393.0	387.0	386.0
67.5°	344.2	339.5	335.6	330.8	330.2
70°	305.0	301.1	298.0	293.9	291.0
72.5°	269.0	262.7	259.6	256.4	254.2
75°	208.0	205.1	202.0	200.0	199.0
77.5°	149.2	149.4	149.4	146.8	145.8
80°	114.0	115.0	115.0	114.0	113.0
82.5°	82.8	84.6	85.4	84.4	84.2
85°	41.0	43.9	47.0	47.0	47.0
87.5°	11.2	15.1	18.4	19.2	18.4
90°	0.0	0.0	0.0	0.0	0.0
92.5°	16.2	85.9	199.3	58.0	43.8
95°	52.7	209.1	939.9	325.3	200.5
97.5°	96.8	245.0	1447.5	1035.8	709.8
100°	127.6	266.3	1557.7	1577.8	1215.4
102.5°	161.6	289.2	1533.4	2019.7	1703.2
105°	214.7	325.6	1407.8	2486.7	2363.9
107.5°	268.6	368.0	1261.2	2618.4	2727.7
110°	305.9	399.0	1176.9	2568.0	2813.6

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	341.5	429.9	1120.2	2448.9	2799.0
115°	399.1	482.2	1067.5	2261.5	2655.6
117.5°	449.7	527.7	1036.3	2056.6	2474.1
120°	490.2	555.6	1033.1	1939.5	2339.6
122.5°	522.6	588.0	1025.0	1836.8	2208.4
125°	563.1	624.5	1018.9	1690.8	2021.6
127.5°	607.3	664.7	1015.7	1603.6	1876.1
130°	630.0	687.4	1010.8	1542.9	1780.5
132.5°	654.3	710.1	1010.8	1495.4	1714.1
135°	688.7	746.2	1006.7	1428.3	1614.4
137.5°	721.1	777.0	1006.3	1371.4	1532.2
140°	745.4	802.9	1004.7	1324.2	1478.7
142.5°	773.0	820.9	1009.6	1286.6	1425.2
145°	812.3	853.9	1014.8	1236.1	1347.0
147.5°	845.9	886.3	1023.8	1185.2	1281.0
150°	875.1	902.8	1027.0	1168.3	1235.6
152.5°	897.8	927.1	1030.2	1145.5	1208.1
155°	927.7	949.5	1039.2	1117.2	1162.7
157.5°	965.0	978.1	1041.2	1104.3	1136.8
160°	984.5	994.4	1049.3	1094.5	1122.2
162.5°	995.8	1007.3	1050.9	1086.2	1107.6
165°	1025.0	1028.9	1051.3	1073.9	1089.8
167.5°	1044.8	1041.3	1060.6	1070.9	1077.2
170°	1051.3	1049.3	1057.4	1059.6	1067.5
172.5°	1065.9	1059.2	1062.2	1056.3	1062.6
175°	1073.6	1067.6	1063.5	1057.2	1049.3
177.5°	1076.8	1067.3	1062.2	1055.8	1057.4
180°	1065.5	1065.5	1065.5	1065.5	1065.5

(END OF REPORT)