

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: P521614

Luminaire Tested: SQ4-F-125U-075D-92765-1D-UNV-STD-W-4_3000K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521614
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-125U-075D-92765-1D-UNV-STD-W-4_3000K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 1250 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: 8413.0 lumens
Efficiency: N/A
Efficacy: 114.6 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

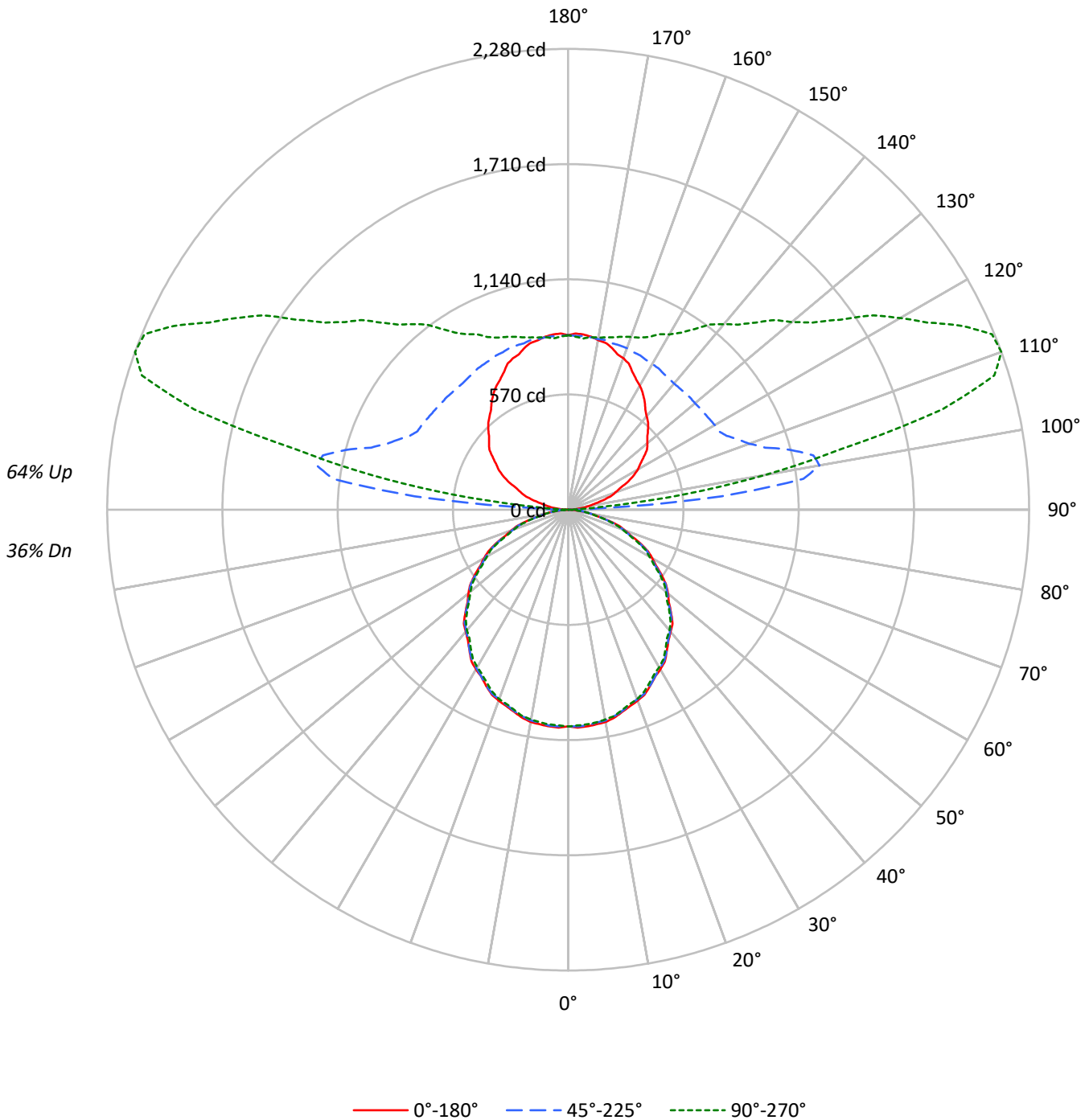
Input Watts (W): 73.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	104	104	104	104	94	94	94	94	76	76	76	59	59	59	43	43	43	36				
1	95	90	86	83	86	82	79	76	66	64	62	52	50	49	38	37	37	30				
2	86	79	73	68	78	71	66	62	58	54	51	45	43	41	34	32	31	25				
3	78	69	62	56	71	63	57	52	51	46	43	40	37	34	30	28	26	21				
4	72	61	53	47	64	55	49	43	45	40	36	35	32	29	26	24	22	18				
5	66	54	46	40	59	49	42	37	40	35	31	32	28	25	24	21	19	16				
6	60	48	40	35	54	44	37	32	36	31	27	28	25	22	21	19	17	14				
7	56	44	36	30	50	40	33	28	33	27	24	26	22	19	19	17	15	12				
8	52	39	32	27	47	36	29	25	30	24	21	24	20	17	18	15	13	11				
9	48	36	29	24	43	33	26	22	27	22	18	22	18	15	16	14	12	10				
10	45	33	26	21	40	30	24	19	25	20	17	20	16	14	15	13	11	9				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9893	9893	9893
5°	9967	9931	9876
10°	9991	9918	9872
15°	9888	9851	9804
20°	9866	9800	9790
25°	9782	9763	9653
30°	9717	9655	9582
35°	9580	9569	9449
40°	9492	9445	9386
45°	9379	9327	9225
50°	9251	9182	9056
55°	9080	8969	8844
60°	8866	8722	8560
65°	8571	8379	8230
70°	8036	7850	7666
75°	7240	7033	6926
80°	5914	5967	5866
85°	4234	4859	4859

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 9379 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	101.6	1.2
10°-20°	290.6	3.5
20°-30°	439.7	5.2
30°-40°	528.8	6.3
40°-50°	549.0	6.5
50°-60°	497.4	5.9
60°-70°	378.4	4.5
70°-80°	210.3	2.5
80°-90°	54.2	0.6
90°-100°	393.4	4.7
100°-110°	1119.5	13.3
110°-120°	1072.5	12.7
120°-130°	848.9	10.1
130°-140°	681.4	8.1
140°-150°	533.4	6.3
150°-160°	390.3	4.6
160°-170°	241.8	2.9
170°-180°	82.0	1.0
0°-30°	831.8	9.9
0°-40°	1360.6	16.2
0°-60°	2407.0	28.6
0°-90°	3049.8	36.3
90°-120°	2585.4	30.7
90°-150°	4649.1	55.3
90°-180°	5363.0	63.7
0°-180°	8413.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1072	1072	1072	1072	1072	
5°	1076	1067	1072	1067	1066	102
15°	1035	1027	1031	1030	1026	293
25°	961	952	959	949	948	443
35°	851	847	850	840	839	533
45°	719	714	715	707	707	555
55°	564	564	558	553	550	504
65°	393	387	384	378	377	386
75°	203	200	197	195	194	215
85°	40	43	46	46	46	49
90°	0	0	0	0	0	3
95°	43	170	762	264	162	49
105°	174	264	1141	2015	1916	184
115°	323	391	865	1832	2152	318
125°	456	506	826	1370	1638	408
135°	558	605	816	1157	1308	431
145°	658	692	822	1002	1092	411
155°	752	769	842	905	942	348
165°	831	834	852	870	883	234
175°	870	865	862	857	850	82
180°	863	863	863	863	863	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1072.3	1072.3	1072.3	1072.3	1072.3
2.5°	1079.3	1070.1	1073.1	1070.7	1068.4
5°	1076.2	1066.6	1072.3	1067.4	1066.4
7.5°	1071.1	1059.8	1062.5	1061.5	1061.5
10°	1066.4	1052.1	1058.6	1053.7	1053.7
12.5°	1053.9	1041.9	1046.9	1044.4	1045.9
15°	1035.2	1026.6	1031.3	1030.2	1026.4
17.5°	1019.0	1008.6	1012.1	1010.3	1008.8
20°	1004.9	995.3	998.1	993.3	997.1
22.5°	989.3	979.7	984.8	976.8	976.8
25°	960.9	952.3	959.0	949.2	948.2
27.5°	930.9	925.3	929.7	922.4	919.7
30°	912.1	903.5	906.3	901.3	899.4
32.5°	890.2	881.6	884.4	875.6	876.8
35°	850.6	846.8	849.6	839.8	838.9
37.5°	814.7	807.0	811.5	803.5	802.7
40°	788.1	780.5	784.2	779.3	779.3
42.5°	763.9	755.5	757.6	751.1	748.8
45°	718.8	714.0	714.8	707.0	707.0
47.5°	674.2	670.8	669.3	661.4	662.9
50°	644.5	638.8	639.7	630.9	630.9
52.5°	610.2	610.5	606.8	601.1	596.5
55°	564.5	563.5	557.6	552.7	549.8
57.5°	515.6	511.2	507.0	500.4	499.8
60°	480.5	477.6	472.7	466.7	463.9
62.5°	444.5	441.7	436.7	431.6	431.1
65°	392.6	386.9	383.8	377.9	377.0
67.5°	336.1	331.6	327.7	323.0	322.5
70°	297.9	294.0	291.0	287.0	284.2
72.5°	262.7	256.6	253.5	250.3	248.2
75°	203.1	200.3	197.3	195.3	194.3
77.5°	145.7	145.9	145.9	143.3	142.4
80°	111.3	112.3	112.3	111.3	110.4
82.5°	80.9	82.6	83.4	82.4	82.2
85°	40.0	42.9	45.9	45.9	45.9
87.5°	10.9	14.8	18.0	18.7	18.0
90°	0.0	0.0	0.0	0.0	0.0
92.5°	13.1	69.6	161.5	47.0	35.5
95°	42.7	169.5	761.6	263.6	162.5
97.5°	78.5	198.5	1173.0	839.3	575.2
100°	103.4	215.8	1262.3	1278.6	984.9
102.5°	131.0	234.3	1242.6	1636.6	1380.1
105°	174.0	263.9	1140.8	2015.1	1915.6
107.5°	217.7	298.2	1022.0	2121.8	2210.4
110°	247.9	323.3	953.7	2080.9	2279.9

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	276.7	348.3	907.7	1984.4	2268.1
115°	323.4	390.8	865.0	1832.5	2151.9
117.5°	364.4	427.6	839.8	1666.5	2004.8
120°	397.2	450.2	837.1	1571.7	1895.9
122.5°	423.5	476.5	830.6	1488.4	1789.5
125°	456.3	506.1	825.6	1370.1	1638.1
127.5°	492.1	538.6	823.0	1299.5	1520.3
130°	510.5	557.0	819.1	1250.2	1442.8
132.5°	530.2	575.4	819.1	1211.8	1389.0
135°	558.1	604.6	815.8	1157.4	1308.2
137.5°	584.3	629.6	815.5	1111.3	1241.6
140°	604.0	650.6	814.2	1073.1	1198.2
142.5°	626.4	665.2	818.1	1042.6	1154.9
145°	658.2	691.9	822.4	1001.7	1091.6
147.5°	685.5	718.2	829.6	960.4	1038.0
150°	709.1	731.6	832.2	946.7	1001.3
152.5°	727.5	751.2	834.8	928.2	978.9
155°	751.8	769.4	842.1	905.3	942.2
157.5°	782.0	792.6	843.7	894.9	921.2
160°	797.7	805.8	850.3	886.9	909.4
162.5°	806.9	816.2	851.6	880.2	897.5
165°	830.6	833.8	851.9	870.3	883.1
167.5°	846.7	843.8	859.5	867.8	872.9
170°	851.9	850.3	856.8	858.6	865.0
172.5°	863.7	858.3	860.8	856.0	861.1
175°	870.0	865.1	861.8	856.7	850.3
177.5°	872.6	864.9	860.8	855.5	856.8
180°	863.4	863.4	863.4	863.4	863.4

(END OF REPORT)