

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: P521615

Luminaire Tested: SQ4-F-125U-075D-92765-1D-UNV-STD-W-4_3500K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521615
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_3500K
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 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8614.8 lumens
Efficiency: N/A
Efficacy: 117.4 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

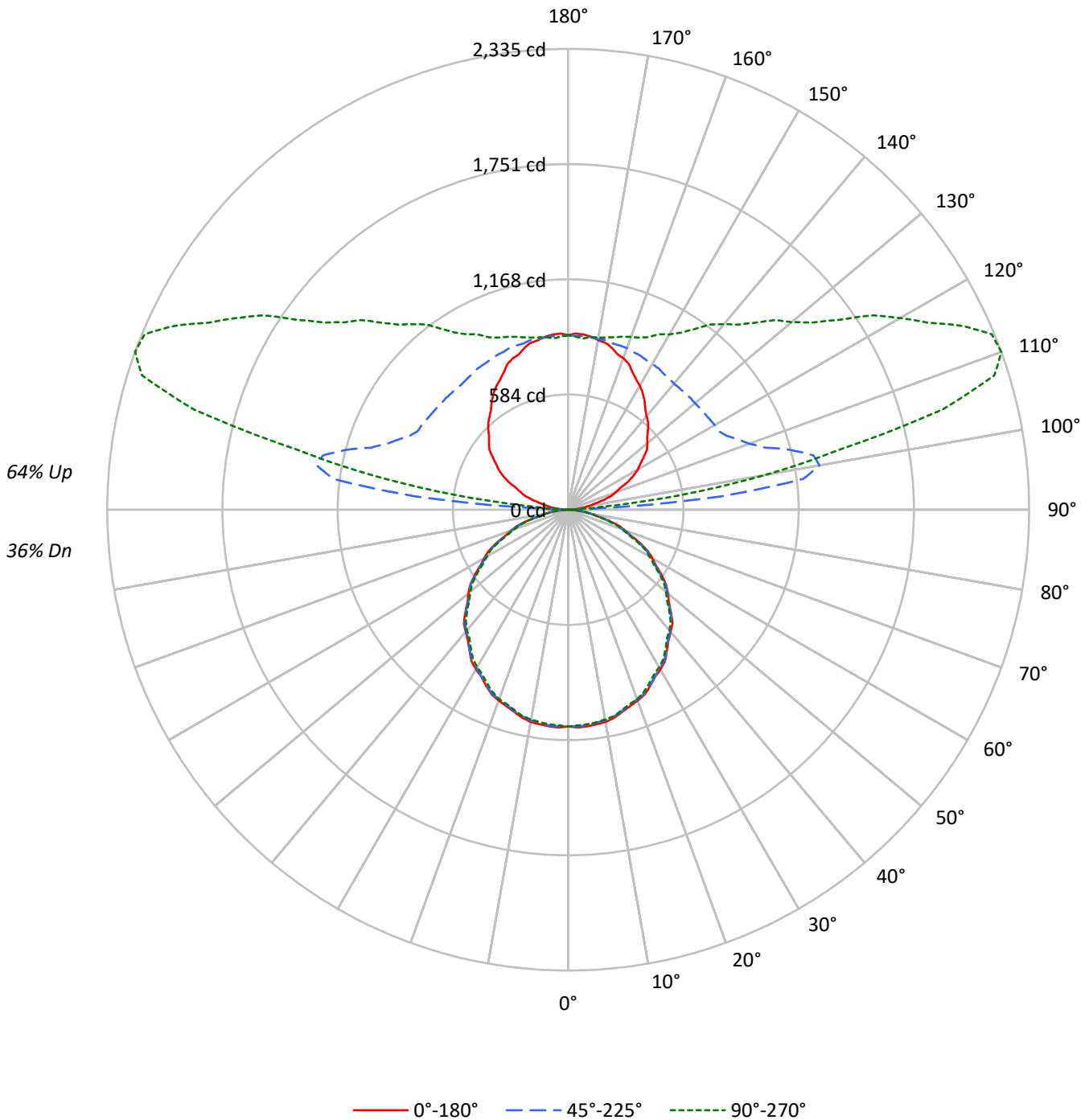
Input Watts (W): 73.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	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°	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	1.2
10°-20°	297.5	3.5
20°-30°	450.2	5.2
30°-40°	541.5	6.3
40°-50°	562.2	6.5
50°-60°	509.3	5.9
60°-70°	387.5	4.5
70°-80°	215.3	2.5
80°-90°	55.5	0.6
90°-100°	402.9	4.7
100°-110°	1146.3	13.3
110°-120°	1098.3	12.7
120°-130°	869.3	10.1
130°-140°	697.7	8.1
140°-150°	546.2	6.3
150°-160°	399.7	4.6
160°-170°	247.6	2.9
170°-180°	84.0	1.0
0°-30°	851.8	9.9
0°-40°	1393.3	16.2
0°-60°	2464.7	28.6
0°-90°	3123.0	36.3
90°-120°	2647.5	30.7
90°-150°	4760.6	55.3
90°-180°	5492.0	63.8
0°-180°	8614.8	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	3
95°	44	174	780	270	166	50
105°	178	270	1168	2063	1962	188
115°	331	400	886	1876	2204	326
125°	467	518	846	1403	1678	418
135°	572	619	835	1185	1340	441
145°	674	708	842	1026	1118	421
155°	770	788	862	927	965	356
165°	850	854	872	891	904	239
175°	891	886	882	877	871	84
180°	884	884	884	884	884	

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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°	13.4	71.3	165.4	48.1	36.3
95°	43.7	173.5	779.9	269.9	166.4
97.5°	80.3	203.3	1201.1	859.5	589.0
100°	105.9	220.9	1292.6	1309.2	1008.5
102.5°	134.1	240.0	1272.4	1675.9	1413.2
105°	178.2	270.2	1168.2	2063.4	1961.5
107.5°	222.9	305.4	1046.5	2172.7	2263.4
110°	253.8	331.0	976.6	2130.9	2334.7

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	283.4	356.7	929.5	2032.0	2322.6
115°	331.1	400.1	885.8	1876.5	2203.6
117.5°	373.1	437.9	859.9	1706.5	2053.0
120°	406.8	461.0	857.2	1609.4	1941.3
122.5°	433.7	487.9	850.5	1524.1	1832.4
125°	467.3	518.2	845.5	1403.0	1677.5
127.5°	503.9	551.6	842.8	1330.6	1556.8
130°	522.7	570.4	838.7	1280.2	1477.4
132.5°	542.9	589.3	838.7	1240.9	1422.3
135°	571.5	619.1	835.4	1185.1	1339.6
137.5°	598.4	644.7	835.0	1137.9	1271.4
140°	618.5	666.2	833.7	1098.8	1227.0
142.5°	641.4	681.2	837.7	1067.6	1182.6
145°	674.0	708.5	842.1	1025.7	1117.7
147.5°	701.9	735.4	849.5	983.4	1063.0
150°	726.1	749.1	852.2	969.4	1025.3
152.5°	744.9	769.3	854.9	950.5	1002.4
155°	769.8	787.9	862.3	927.0	964.8
157.5°	800.7	811.6	863.9	916.3	943.3
160°	816.9	825.1	870.7	908.2	931.2
162.5°	826.3	835.8	872.0	901.3	919.1
165°	850.5	853.8	872.3	891.1	904.3
167.5°	867.0	864.0	880.1	888.6	893.9
170°	872.3	870.7	877.4	879.2	885.8
172.5°	884.4	878.9	881.4	876.5	881.8
175°	890.8	885.9	882.4	877.2	870.7
177.5°	893.5	885.6	881.4	876.1	877.4
180°	884.1	884.1	884.1	884.1	884.1

(END OF REPORT)