

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: P521407

Luminaire Tested: SQ4-F-050U-075D-92765-1D-UNV-STD-W-4_3500K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521407
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-050U-075D-92765-1D-UNV-STD-W-4_3500K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 500 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: 5305.7 lumens
Efficiency: N/A
Efficacy: 111.2 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: General Diffuse

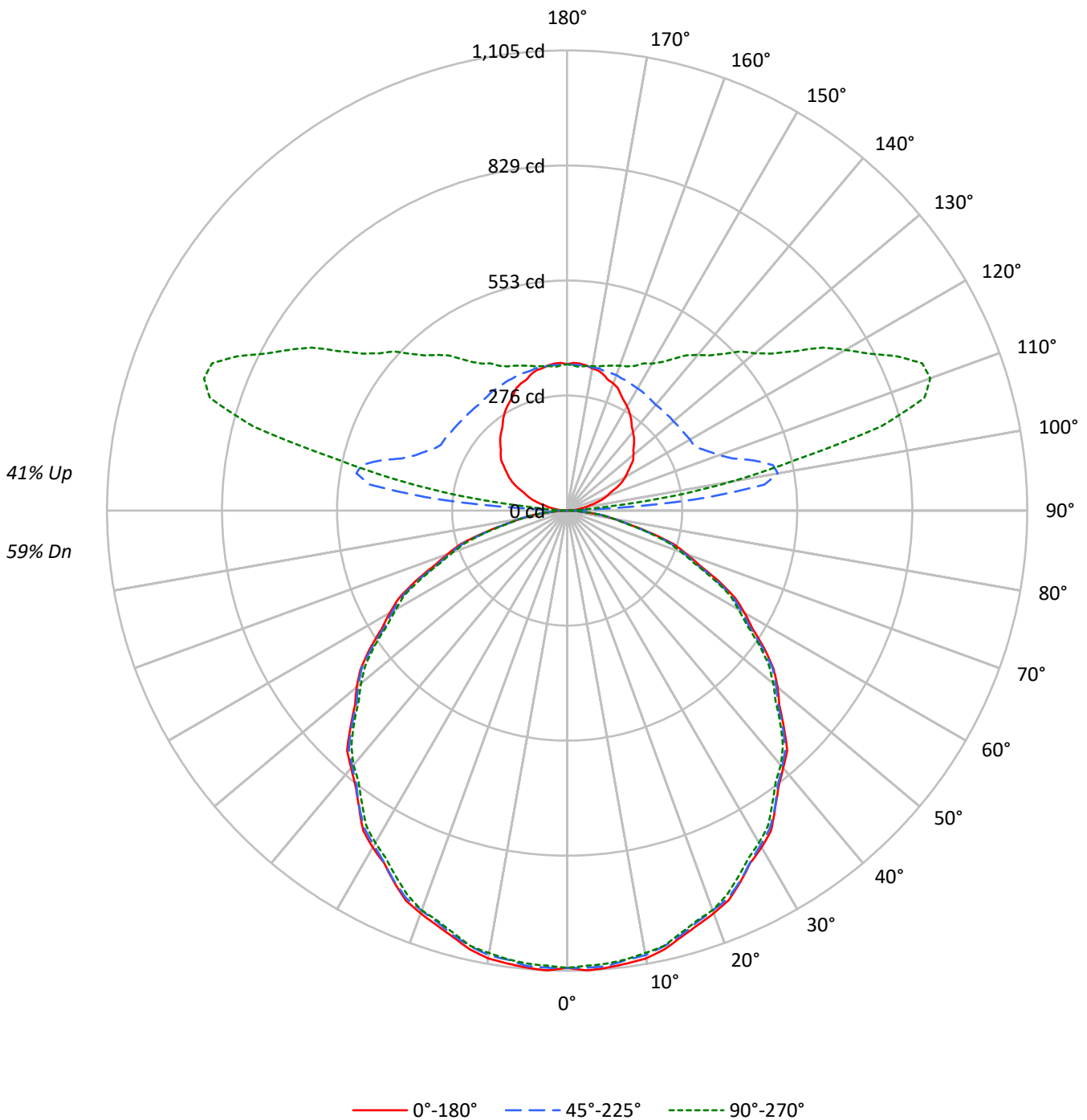
Input Watts (W): 47.7
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	109	109	109	109	102	102	102	102	88	88	88		76	76	76		64	64	64	59
1	100	95	91	88	93	89	85	82	77	75	72		66	65	63		57	55	54	49
2	91	83	77	71	84	78	72	67	67	63	60		58	55	52		50	47	45	41
3	83	73	65	59	77	68	61	56	59	54	50		51	47	44		44	41	38	34
4	75	64	56	50	70	60	53	47	53	47	42		46	41	37		39	36	33	29
5	69	57	49	43	64	54	46	41	47	41	36		41	36	32		35	31	28	25
6	64	51	43	37	59	48	41	35	42	36	32		37	32	28		32	28	25	22
7	59	46	38	32	55	44	36	31	38	32	28		33	29	25		29	25	22	20
8	55	42	34	29	51	40	32	27	35	29	25		31	26	22		26	23	20	17
9	51	38	31	25	47	36	29	24	32	26	22		28	23	20		24	21	18	16
10	48	35	28	23	44	33	26	22	29	24	20		26	21	18		23	19	16	14

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	2.0
10°-20°	297.5	5.6
20°-30°	450.2	8.5
30°-40°	541.5	10.2
40°-50°	562.2	10.6
50°-60°	509.3	9.6
60°-70°	387.5	7.3
70°-80°	215.3	4.1
80°-90°	55.5	1.0
90°-100°	160.1	3.0
100°-110°	455.6	8.6
110°-120°	436.5	8.2
120°-130°	345.5	6.5
130°-140°	277.3	5.2
140°-150°	217.1	4.1
150°-160°	158.8	3.0
160°-170°	98.4	1.9
170°-180°	33.4	0.6
0°-30°	851.8	16.1
0°-40°	1393.3	26.3
0°-60°	2464.7	46.5
0°-90°	3123.0	58.9
90°-120°	1052.2	19.8
90°-150°	1892.1	35.7
90°-180°	2183.0	41.1
0°-180°	5305.7	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	2
95°	17	69	310	107	66	20
105°	71	107	464	820	780	75
115°	132	159	352	746	876	130
125°	186	206	336	558	667	166
135°	227	246	332	471	532	175
145°	268	282	335	408	444	167
155°	306	313	343	368	384	141
165°	338	339	347	354	359	95
175°	354	352	351	349	346	34
180°	351	351	351	351	351	

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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°	5.3	28.3	65.7	19.1	14.4
95°	17.4	69.0	310.0	107.3	66.1
97.5°	31.9	80.8	477.4	341.6	234.1
100°	42.1	87.8	513.7	520.4	400.8
102.5°	53.3	95.4	505.7	666.1	561.7
105°	70.8	107.4	464.3	820.1	779.6
107.5°	88.6	121.4	415.9	863.5	899.6
110°	100.9	131.6	388.1	846.9	927.9

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	112.6	141.8	369.4	807.6	923.1
115°	131.6	159.0	352.1	745.8	875.8
117.5°	148.3	174.0	341.8	678.3	815.9
120°	161.7	183.2	340.7	639.6	771.6
122.5°	172.4	193.9	338.0	605.8	728.3
125°	185.7	206.0	336.0	557.6	666.7
127.5°	200.3	219.2	335.0	528.9	618.7
130°	207.8	226.7	333.4	508.8	587.2
132.5°	215.8	234.2	333.4	493.2	565.3
135°	227.1	246.1	332.0	471.0	532.4
137.5°	237.8	256.2	331.9	452.3	505.3
140°	245.8	264.8	331.3	436.7	487.7
142.5°	254.9	270.7	333.0	424.3	470.0
145°	267.9	281.6	334.7	407.7	444.2
147.5°	279.0	292.3	337.6	390.9	422.5
150°	288.6	297.7	338.7	385.3	407.5
152.5°	296.1	305.7	339.8	377.8	398.4
155°	306.0	313.1	342.7	368.4	383.5
157.5°	318.3	322.6	343.4	364.2	374.9
160°	324.7	327.9	346.0	361.0	370.1
162.5°	328.4	332.2	346.6	358.2	365.3
165°	338.0	339.3	346.7	354.2	359.4
167.5°	344.6	343.4	349.8	353.2	355.3
170°	346.7	346.1	348.7	349.4	352.1
172.5°	351.5	349.3	350.3	348.4	350.5
175°	354.1	352.1	350.7	348.7	346.0
177.5°	355.1	352.0	350.3	348.2	348.7
180°	351.4	351.4	351.4	351.4	351.4

(END OF REPORT)