

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: P521355

Luminaire Tested: SQ4-F-025U-075D-92765-1D-UNV-STD-W-4_3500K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521355
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-025U-075D-92765-1D-UNV-STD-W-4_3500K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 250 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: 5059.7 lumens
Efficiency: N/A
Efficacy: 110.2 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-Direct

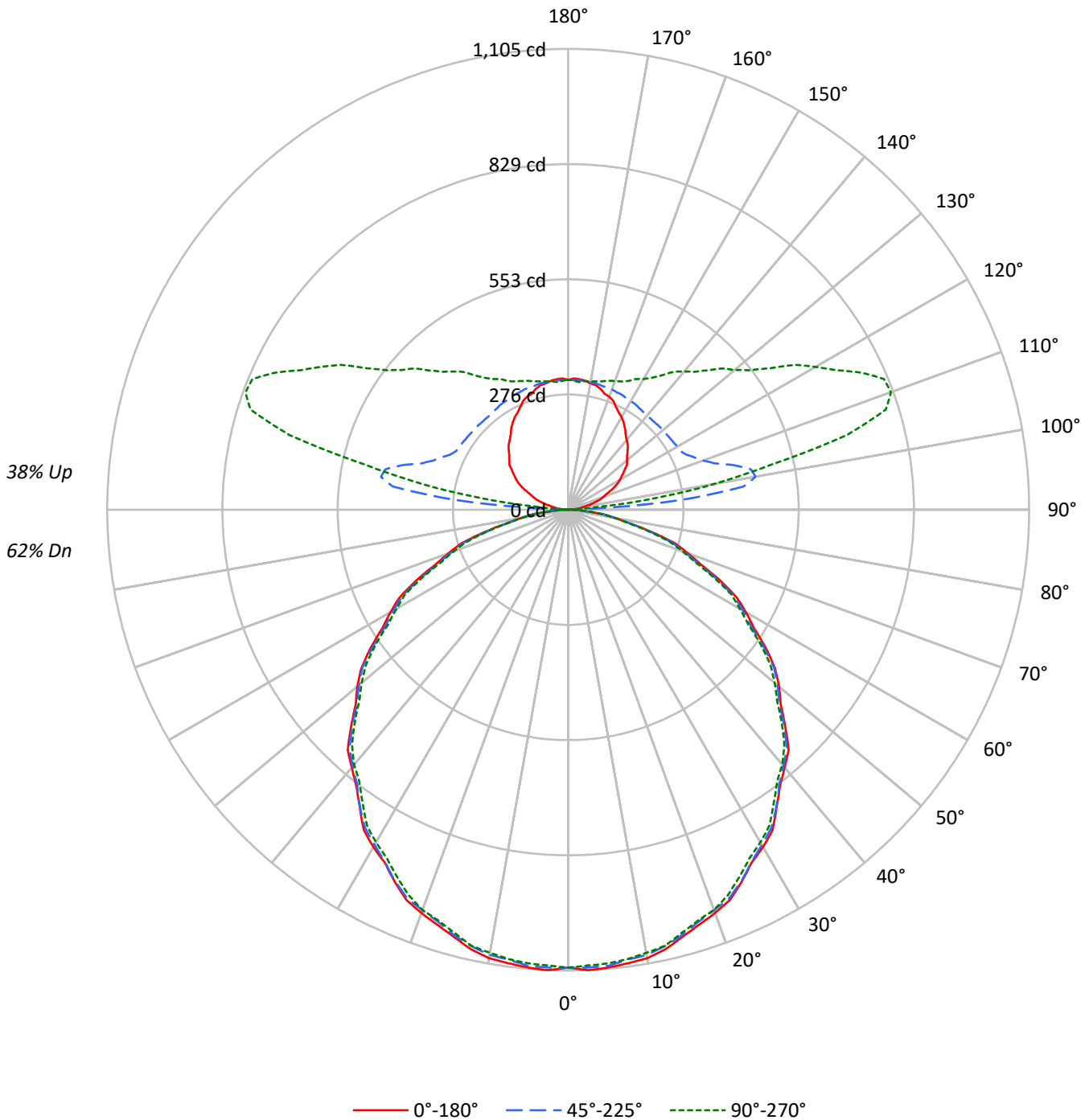
Input Watts (W): 45.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
RCR																	
0	110	110	110	110	103	103	103	103	90	90	90	78	78	78	67	67	67
1	100	96	92	88	94	90	86	83	79	76	74	68	66	65	59	58	56
2	91	83	77	72	85	78	73	68	69	64	61	60	57	54	52	49	47
3	83	73	66	60	77	69	62	57	60	55	51	53	49	45	46	42	40
4	76	65	56	50	71	61	53	48	54	48	43	47	42	39	41	37	34
5	70	58	49	43	65	54	47	41	48	42	37	42	37	33	36	33	30
6	64	52	43	37	60	49	41	36	43	37	32	38	33	29	33	29	26
7	59	47	38	33	55	44	37	31	39	33	28	34	29	26	30	26	23
8	55	42	34	29	51	40	33	28	36	30	25	31	27	23	28	24	21
9	51	39	31	26	48	37	30	25	33	27	23	29	24	21	25	21	19
10	48	35	28	23	45	34	27	22	30	24	20	27	22	19	24	20	17

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	2.1
10°-20°	297.5	5.9
20°-30°	450.2	8.9
30°-40°	541.5	10.7
40°-50°	562.2	11.1
50°-60°	509.3	10.1
60°-70°	387.5	7.7
70°-80°	215.3	4.3
80°-90°	55.5	1.1
90°-100°	142.1	2.8
100°-110°	404.2	8.0
110°-120°	387.3	7.7
120°-130°	306.6	6.1
130°-140°	246.0	4.9
140°-150°	192.6	3.8
150°-160°	140.9	2.8
160°-170°	87.3	1.7
170°-180°	29.6	0.6
0°-30°	851.8	16.8
0°-40°	1393.3	27.5
0°-60°	2464.7	48.7
0°-90°	3123.0	61.7
90°-120°	933.6	18.5
90°-150°	1678.9	33.2
90°-180°	1937.0	38.3
0°-180°	5059.7	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°	15	61	275	95	59	18
105°	63	95	412	728	692	66
115°	117	141	312	662	777	115
125°	165	183	298	495	592	147
135°	202	218	295	418	472	156
145°	238	250	297	362	394	148
155°	272	278	304	327	340	126
165°	300	301	308	314	319	84
175°	314	312	311	309	307	30
180°	312	312	312	312	312	

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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°	4.7	25.1	58.3	17.0	12.8
95°	15.4	61.2	275.0	95.2	58.7
97.5°	28.3	71.7	423.6	303.1	207.7
100°	37.3	77.9	455.8	461.7	355.7
102.5°	47.3	84.6	448.7	591.0	498.4
105°	62.8	95.3	412.0	727.7	691.7
107.5°	78.6	107.7	369.0	766.2	798.2
110°	89.5	116.7	344.4	751.5	823.3

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	99.9	125.8	327.8	716.6	819.1
115°	116.8	141.1	312.4	661.8	777.1
117.5°	131.6	154.4	303.3	601.8	724.0
120°	143.4	162.6	302.3	567.6	684.6
122.5°	152.9	172.1	299.9	537.5	646.2
125°	164.8	182.8	298.2	494.8	591.6
127.5°	177.7	194.5	297.2	469.3	549.0
130°	184.3	201.2	295.8	451.5	521.0
132.5°	191.5	207.8	295.8	437.6	501.6
135°	201.5	218.3	294.6	417.9	472.4
137.5°	211.0	227.4	294.5	401.3	448.4
140°	218.1	234.9	294.0	387.5	432.7
142.5°	226.2	240.2	295.4	376.5	417.1
145°	237.7	249.9	297.0	361.7	394.2
147.5°	247.5	259.4	299.6	346.8	374.9
150°	256.1	264.2	300.5	341.9	361.6
152.5°	262.7	271.3	301.5	335.2	353.5
155°	271.5	277.9	304.1	326.9	340.2
157.5°	282.4	286.2	304.7	323.1	332.7
160°	288.1	291.0	307.0	320.3	328.4
162.5°	291.4	294.8	307.5	317.9	324.1
165°	299.9	301.1	307.6	314.3	318.9
167.5°	305.7	304.7	310.4	313.4	315.2
170°	307.6	307.1	309.4	310.1	312.4
172.5°	311.9	309.9	310.8	309.1	311.0
175°	314.2	312.4	311.2	309.4	307.0
177.5°	315.1	312.3	310.8	309.0	309.4
180°	311.8	311.8	311.8	311.8	311.8

(END OF REPORT)