

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: P521411

Luminaire Tested: SQ4-F-050U-075D-92765-1D-UNV-STD-W-4_5700K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521411
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_5700K
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 5700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5629.7 lumens
Efficiency: N/A
Efficacy: 118.3 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

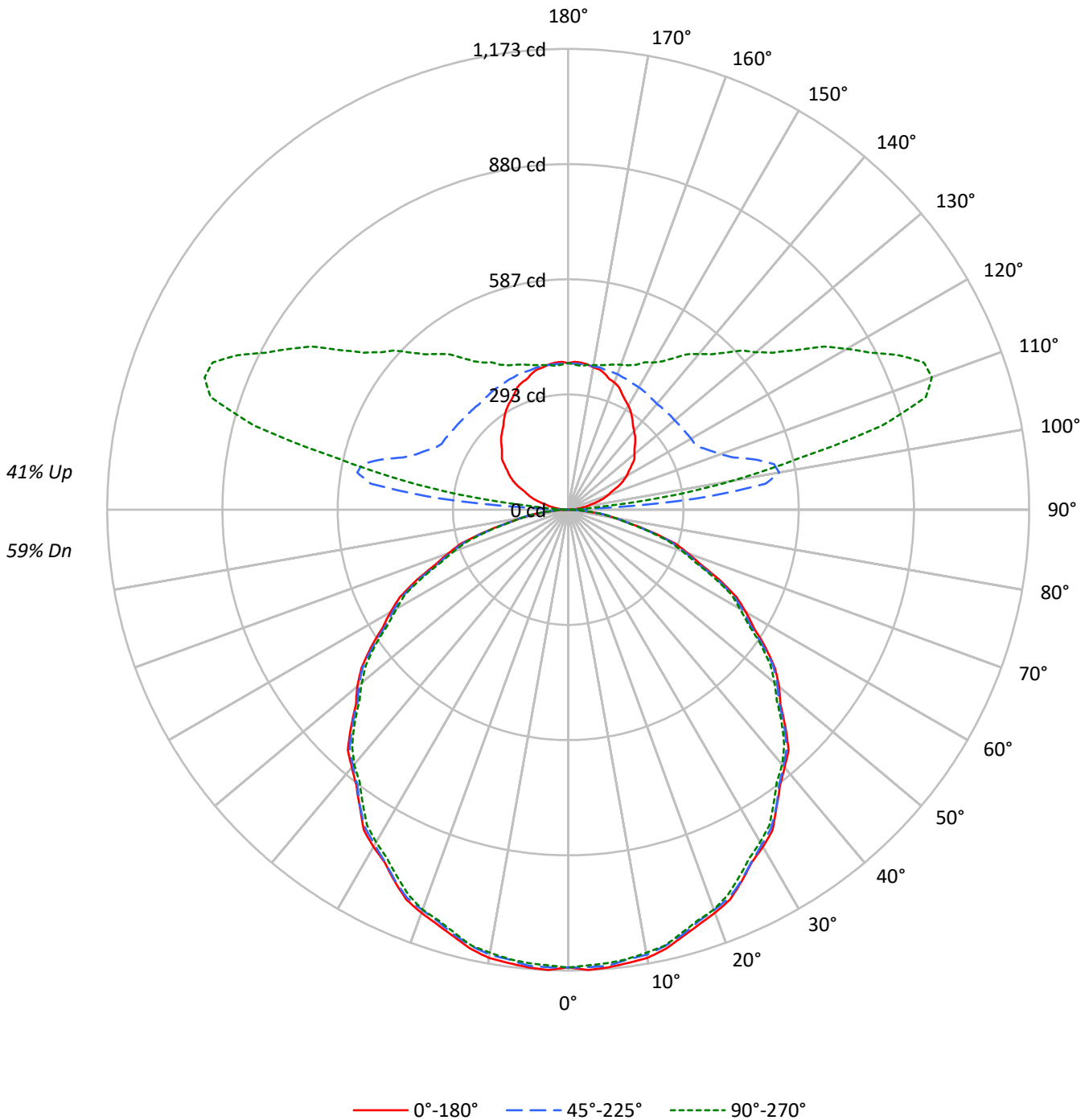
Input Watts (W): 47.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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°	10749	10749	10749
5°	10829	10791	10731
10°	10855	10776	10726
15°	10743	10703	10652
20°	10720	10647	10637
25°	10629	10608	10488
30°	10558	10491	10411
35°	10409	10397	10266
40°	10313	10261	10198
45°	10189	10134	10023
50°	10052	9976	9839
55°	9865	9746	9609
60°	9632	9477	9300
65°	9313	9104	8942
70°	8729	8530	8330
75°	7867	7639	7529
80°	6429	6482	6370
85°	4605	5282	5282

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 10189 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	110.4	2.0
10°-20°	315.7	5.6
20°-30°	477.7	8.5
30°-40°	574.5	10.2
40°-50°	596.5	10.6
50°-60°	540.4	9.6
60°-70°	411.1	7.3
70°-80°	228.5	4.1
80°-90°	58.9	1.0
90°-100°	169.9	3.0
100°-110°	483.4	8.6
110°-120°	463.2	8.2
120°-130°	366.6	6.5
130°-140°	294.2	5.2
140°-150°	230.4	4.1
150°-160°	168.5	3.0
160°-170°	104.4	1.9
170°-180°	35.4	0.6
0°-30°	903.8	16.1
0°-40°	1478.3	26.3
0°-60°	2615.3	46.5
0°-90°	3313.7	58.9
90°-120°	1116.5	19.8
90°-150°	2007.7	35.7
90°-180°	2316.0	41.1
0°-180°	5629.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1165	1165	1165	1165	1165	
5°	1169	1159	1165	1160	1159	111
15°	1125	1115	1120	1119	1115	318
25°	1044	1035	1042	1031	1030	481
35°	924	920	923	912	912	579
45°	781	776	777	768	768	603
55°	613	612	606	600	597	547
65°	427	420	417	411	410	420
75°	221	218	214	212	211	234
85°	44	47	50	50	50	54
90°	0	0	0	0	0	2
95°	18	73	329	114	70	21
105°	75	114	493	870	827	79
115°	140	169	374	791	929	137
125°	197	218	356	592	707	176
135°	241	261	352	500	565	186
145°	284	299	355	433	471	178
155°	325	332	364	391	407	150
165°	359	360	368	376	381	101
175°	376	374	372	370	367	36
180°	373	373	373	373	373	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1165.1	1165.1	1165.1	1165.1	1165.1
2.5°	1172.7	1162.7	1165.9	1163.3	1160.8
5°	1169.3	1158.9	1165.1	1159.7	1158.7
7.5°	1163.8	1151.5	1154.4	1153.4	1153.4
10°	1158.7	1143.1	1150.2	1144.9	1144.9
12.5°	1145.1	1132.0	1137.5	1134.7	1136.4
15°	1124.7	1115.4	1120.5	1119.3	1115.2
17.5°	1107.1	1095.9	1099.7	1097.7	1096.1
20°	1091.8	1081.5	1084.4	1079.2	1083.4
22.5°	1074.9	1064.5	1070.0	1061.3	1061.3
25°	1044.1	1034.8	1042.0	1031.3	1030.3
27.5°	1011.4	1005.4	1010.1	1002.2	999.3
30°	991.0	981.7	984.7	979.3	977.2
32.5°	967.3	957.9	960.9	951.4	952.6
35°	924.2	920.0	923.1	912.5	911.5
37.5°	885.1	876.8	881.8	873.0	872.2
40°	856.3	848.0	852.0	846.7	846.7
42.5°	830.0	820.8	823.2	816.1	813.6
45°	780.9	775.8	776.7	768.2	768.2
47.5°	732.6	728.8	727.3	718.6	720.3
50°	700.3	694.1	695.0	685.5	685.5
52.5°	663.0	663.4	659.4	653.1	648.1
55°	613.3	612.3	605.9	600.5	597.4
57.5°	560.2	555.5	550.9	543.7	543.1
60°	522.0	518.9	513.6	507.1	504.0
62.5°	483.0	479.9	474.5	469.0	468.4
65°	426.6	420.3	417.0	410.6	409.6
67.5°	365.2	360.2	356.1	351.0	350.4
70°	323.6	319.5	316.2	311.9	308.8
72.5°	285.4	278.8	275.5	272.0	269.7
75°	220.7	217.6	214.3	212.2	211.2
77.5°	158.3	158.5	158.5	155.7	154.7
80°	121.0	122.0	122.0	120.9	119.9
82.5°	87.9	89.7	90.6	89.5	89.3
85°	43.5	46.6	49.9	49.9	49.9
87.5°	11.9	16.0	19.5	20.4	19.5
90°	0.0	0.0	0.0	0.0	0.0
92.5°	5.7	30.1	69.8	20.3	15.3
95°	18.4	73.2	328.9	113.8	70.2
97.5°	33.9	85.7	506.5	362.5	248.4
100°	44.7	93.2	545.1	552.1	425.3
102.5°	56.6	101.2	536.6	706.7	596.0
105°	75.1	114.0	492.6	870.2	827.2
107.5°	94.0	128.8	441.3	916.3	954.5
110°	107.0	139.6	411.8	898.6	984.6

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	119.5	150.4	392.0	856.9	979.5
115°	139.6	168.8	373.6	791.4	929.3
117.5°	157.4	184.7	362.6	719.7	865.8
120°	171.5	194.4	361.5	678.7	818.7
122.5°	182.9	205.8	358.7	642.8	772.8
125°	197.1	218.5	356.5	591.7	707.4
127.5°	212.5	232.6	355.4	561.2	656.5
130°	220.4	240.5	353.7	539.9	623.1
132.5°	229.0	248.5	353.7	523.3	599.8
135°	241.0	261.1	352.3	499.8	564.9
137.5°	252.3	271.9	352.2	479.9	536.2
140°	260.9	281.0	351.6	463.4	517.5
142.5°	270.5	287.3	353.3	450.2	498.7
145°	284.2	298.8	355.1	432.6	471.4
147.5°	296.0	310.2	358.2	414.7	448.3
150°	306.2	315.9	359.4	408.8	432.4
152.5°	314.2	324.4	360.5	400.9	422.8
155°	324.6	332.3	363.6	390.9	406.9
157.5°	337.7	342.3	364.3	386.4	397.8
160°	344.5	348.0	367.2	383.0	392.7
162.5°	348.5	352.5	367.7	380.1	387.6
165°	358.7	360.1	367.9	375.8	381.4
167.5°	365.6	364.4	371.1	374.7	377.0
170°	367.9	367.2	370.0	370.8	373.6
172.5°	373.0	370.6	371.7	369.6	371.9
175°	375.7	373.6	372.1	370.0	367.2
177.5°	376.8	373.5	371.7	369.5	370.0
180°	372.9	372.9	372.9	372.9	372.9

(END OF REPORT)