

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: P521409

Luminaire Tested: SQ4-F-050U-075D-92765-1D-UNV-STD-W-4_4500K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521409
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_4500K
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 4500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5489.9 lumens
Efficiency: N/A
Efficacy: 115.1 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

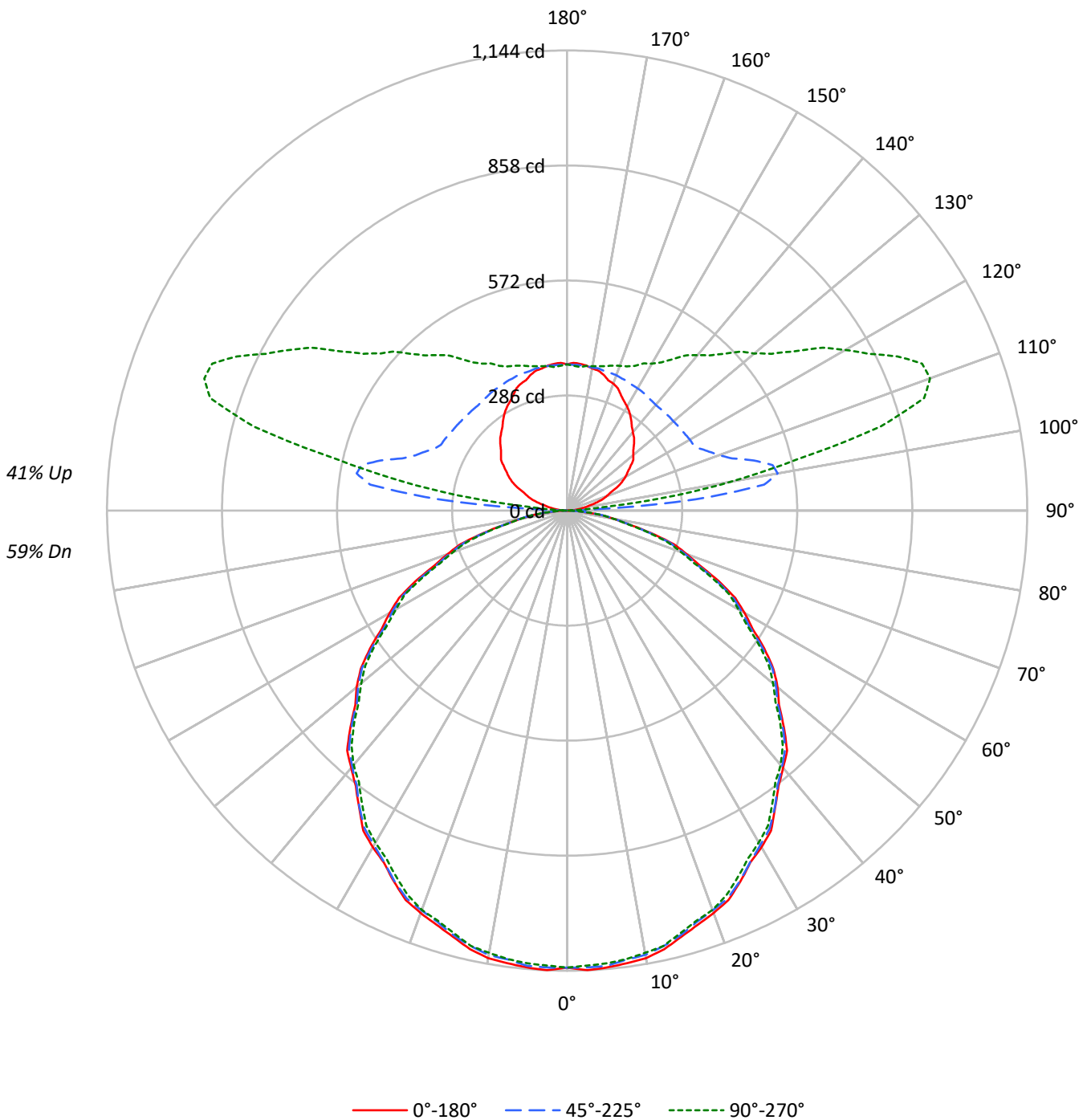
Input Watts (W): 47.7
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Luminous Intensity Polar Plot



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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									20									20									20									
RC	80									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	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°	10482	10482	10482
5°	10561	10522	10465
10°	10586	10508	10460
15°	10476	10437	10387
20°	10454	10383	10373
25°	10365	10344	10228
30°	10296	10229	10153
35°	10150	10139	10011
40°	10057	10007	9945
45°	9937	9882	9774
50°	9802	9727	9594
55°	9621	9503	9370
60°	9394	9241	9069
65°	9082	8877	8719
70°	8514	8317	8122
75°	7671	7450	7340
80°	6270	6323	6211
85°	4488	5145	5145

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 9937 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	107.6	2.0
10°-20°	307.9	5.6
20°-30°	465.8	8.5
30°-40°	560.3	10.2
40°-50°	581.7	10.6
50°-60°	527.0	9.6
60°-70°	400.9	7.3
70°-80°	222.8	4.1
80°-90°	57.4	1.0
90°-100°	165.7	3.0
100°-110°	471.4	8.6
110°-120°	451.7	8.2
120°-130°	357.5	6.5
130°-140°	286.9	5.2
140°-150°	224.6	4.1
150°-160°	164.4	3.0
160°-170°	101.8	1.9
170°-180°	34.5	0.6
0°-30°	881.4	16.1
0°-40°	1441.6	26.3
0°-60°	2550.3	46.5
0°-90°	3231.4	58.9
90°-120°	1088.8	19.8
90°-150°	1957.8	35.7
90°-180°	2259.0	41.1
0°-180°	5489.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1136	1136	1136	1136	1136	
5°	1140	1130	1136	1131	1130	108
15°	1097	1088	1093	1092	1088	310
25°	1018	1009	1016	1006	1005	469
35°	901	897	900	890	889	565
45°	762	756	757	749	749	588
55°	598	597	591	586	582	534
65°	416	410	407	400	399	410
75°	215	212	209	207	206	228
85°	42	46	49	49	49	52
90°	0	0	0	0	0	2
95°	18	71	321	111	68	21
105°	73	111	480	849	807	78
115°	136	165	364	772	906	134
125°	192	213	348	577	690	172
135°	235	255	344	487	551	181
145°	277	291	346	422	460	173
155°	317	324	355	381	397	146
165°	350	351	359	366	372	98
175°	366	364	363	361	358	35
180°	364	364	364	364	364	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1136.1	1136.1	1136.1	1136.1	1136.1
2.5°	1143.6	1133.9	1137.0	1134.4	1132.0
5°	1140.3	1130.1	1136.1	1130.9	1129.9
7.5°	1134.9	1122.9	1125.8	1124.7	1124.7
10°	1129.9	1114.7	1121.6	1116.5	1116.5
12.5°	1116.7	1103.9	1109.2	1106.6	1108.2
15°	1096.8	1087.7	1092.7	1091.5	1087.5
17.5°	1079.6	1068.7	1072.4	1070.5	1068.9
20°	1064.7	1054.6	1057.5	1052.4	1056.5
22.5°	1048.2	1038.1	1043.4	1034.9	1034.9
25°	1018.2	1009.1	1016.1	1005.7	1004.7
27.5°	986.3	980.4	985.1	977.3	974.5
30°	966.4	957.3	960.2	955.0	953.0
32.5°	943.3	934.1	937.0	927.8	929.0
35°	901.2	897.2	900.2	889.8	888.8
37.5°	863.2	855.1	859.9	851.4	850.5
40°	835.0	826.9	830.9	825.7	825.7
42.5°	809.4	800.5	802.7	795.9	793.4
45°	761.6	756.5	757.4	749.1	749.1
47.5°	714.4	710.7	709.2	700.8	702.4
50°	682.9	676.8	677.7	668.4	668.4
52.5°	646.5	646.9	643.0	636.9	632.0
55°	598.1	597.1	590.8	585.6	582.5
57.5°	546.3	541.7	537.2	530.2	529.6
60°	509.1	506.0	500.8	494.5	491.5
62.5°	471.0	468.0	462.7	457.3	456.7
65°	416.0	409.9	406.6	400.4	399.4
67.5°	356.2	351.3	347.3	342.3	341.7
70°	315.6	311.5	308.3	304.1	301.1
72.5°	278.3	271.9	268.6	265.3	263.0
75°	215.2	212.2	209.0	206.9	205.9
77.5°	154.4	154.6	154.6	151.9	150.9
80°	118.0	119.0	119.0	117.9	116.9
82.5°	85.7	87.5	88.4	87.3	87.1
85°	42.4	45.5	48.6	48.6	48.6
87.5°	11.6	15.6	19.0	19.8	19.0
90°	0.0	0.0	0.0	0.0	0.0
92.5°	5.5	29.3	68.0	19.8	14.9
95°	18.0	71.4	320.7	111.0	68.4
97.5°	33.0	83.6	494.0	353.5	242.2
100°	43.5	90.9	531.6	538.4	414.7
102.5°	55.2	98.7	523.3	689.2	581.2
105°	73.3	111.1	480.4	848.6	806.7
107.5°	91.7	125.6	430.4	893.5	930.8
110°	104.4	136.1	401.6	876.3	960.1

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	116.5	146.7	382.3	835.7	955.2
115°	136.2	164.6	364.3	771.7	906.2
117.5°	153.5	180.1	353.6	701.8	844.3
120°	167.3	189.6	352.5	661.9	798.4
122.5°	178.3	200.6	349.8	626.8	753.6
125°	192.2	213.1	347.7	577.0	689.9
127.5°	207.2	226.8	346.6	547.2	640.2
130°	215.0	234.6	344.9	526.5	607.6
132.5°	223.3	242.3	344.9	510.3	584.9
135°	235.0	254.6	343.5	487.4	550.9
137.5°	246.1	265.1	343.4	468.0	522.9
140°	254.4	274.0	342.9	451.9	504.6
142.5°	263.8	280.1	344.5	439.0	486.4
145°	277.2	291.4	346.3	421.8	459.7
147.5°	288.7	302.4	349.4	404.4	437.1
150°	298.6	308.1	350.5	398.7	421.7
152.5°	306.4	316.4	351.6	390.9	412.3
155°	316.6	324.0	354.6	381.2	396.8
157.5°	329.3	333.8	355.3	376.8	387.9
160°	335.9	339.3	358.1	373.5	382.9
162.5°	339.8	343.7	358.6	370.7	378.0
165°	349.8	351.1	358.8	366.5	371.9
167.5°	356.5	355.3	361.9	365.4	367.6
170°	358.8	358.1	360.8	361.6	364.3
172.5°	363.7	361.4	362.5	360.5	362.6
175°	366.4	364.3	362.9	360.8	358.1
177.5°	367.5	364.2	362.5	360.3	360.8
180°	363.6	363.6	363.6	363.6	363.6

(END OF REPORT)