

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: P521410

Luminaire Tested: SQ4-F-050U-075D-92765-1D-UNV-STD-W-4_5000K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521410
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_5000K
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 5000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5550.6 lumens
Efficiency: N/A
Efficacy: 116.6 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

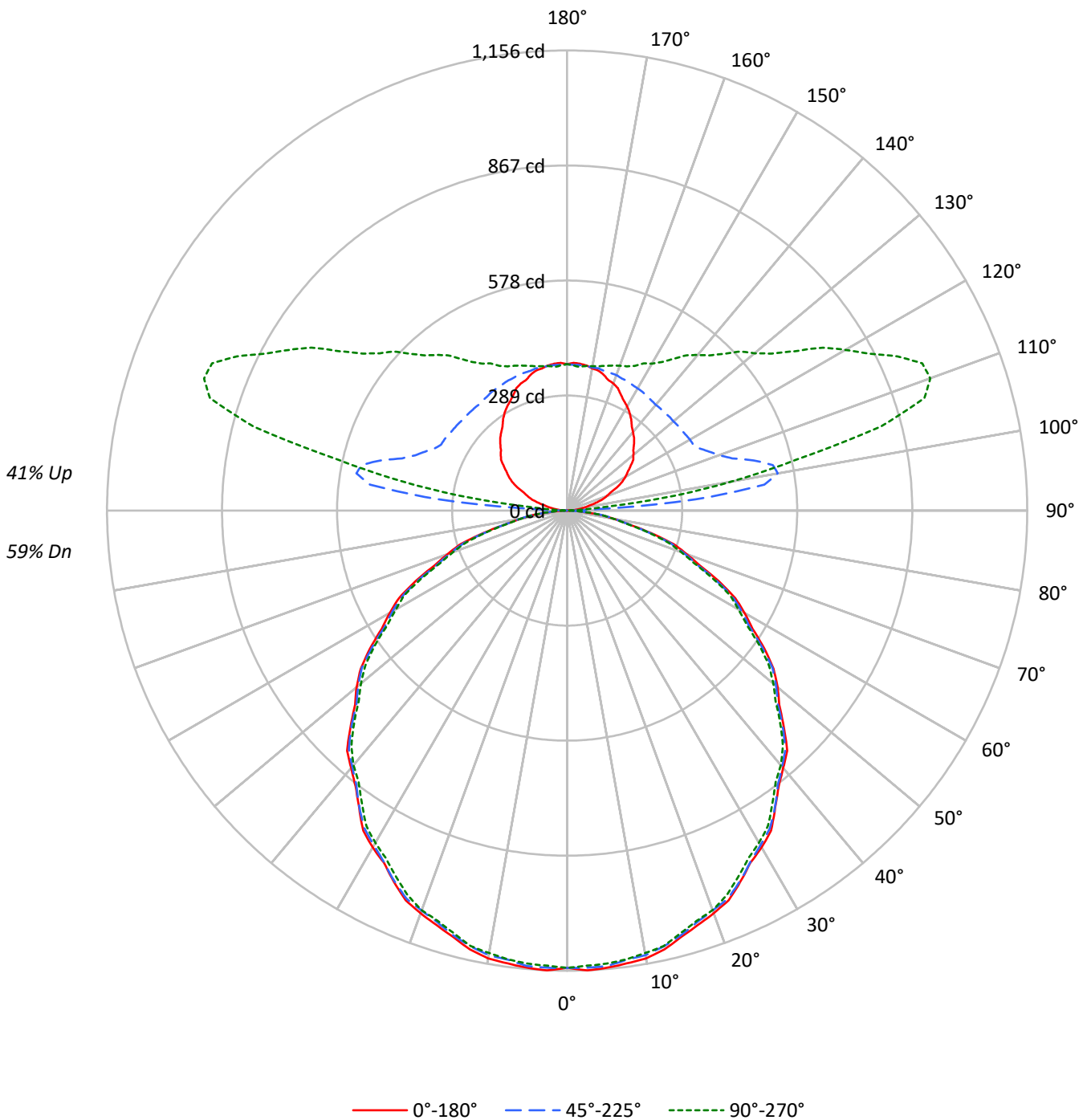
Input Watts (W): 47.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Luminous Intensity Polar Plot



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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									20									20									20										
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	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°	10598	10598	10598
5°	10678	10639	10580
10°	10703	10624	10575
15°	10592	10553	10502
20°	10569	10498	10487
25°	10479	10458	10341
30°	10410	10342	10265
35°	10263	10252	10122
40°	10169	10118	10054
45°	10047	9992	9882
50°	9911	9835	9700
55°	9727	9609	9474
60°	9497	9342	9169
65°	9182	8975	8815
70°	8608	8411	8211
75°	7757	7532	7422
80°	6339	6392	6280
85°	4541	5208	5208

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 10047 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	108.8	2.0
10°-20°	311.3	5.6
20°-30°	471.0	8.5
30°-40°	566.5	10.2
40°-50°	588.1	10.6
50°-60°	532.8	9.6
60°-70°	405.3	7.3
70°-80°	225.3	4.1
80°-90°	58.0	1.0
90°-100°	167.5	3.0
100°-110°	476.6	8.6
110°-120°	456.7	8.2
120°-130°	361.4	6.5
130°-140°	290.1	5.2
140°-150°	227.1	4.1
150°-160°	166.2	3.0
160°-170°	102.9	1.9
170°-180°	34.9	0.6
0°-30°	891.1	16.1
0°-40°	1457.6	26.3
0°-60°	2578.5	46.5
0°-90°	3267.2	58.9
90°-120°	1100.8	19.8
90°-150°	1979.5	35.7
90°-180°	2283.0	41.1
0°-180°	5550.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1149	1149	1149	1149	1149	
5°	1153	1143	1149	1143	1142	110
15°	1109	1100	1105	1104	1100	314
25°	1029	1020	1027	1017	1016	474
35°	911	907	910	900	899	571
45°	770	765	766	757	757	594
55°	605	604	597	592	589	540
65°	421	414	411	405	404	414
75°	218	214	211	209	208	230
85°	43	46	49	49	49	53
90°	0	0	0	0	0	2
95°	18	72	324	112	69	21
105°	74	112	486	858	816	78
115°	138	166	368	780	916	136
125°	194	216	352	583	698	174
135°	238	257	347	493	557	183
145°	280	295	350	426	465	175
155°	320	328	358	385	401	148
165°	354	355	363	370	376	99
175°	370	368	367	365	362	35
180°	368	368	368	368	368	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1148.7	1148.7	1148.7	1148.7	1148.7
2.5°	1156.2	1146.4	1149.5	1147.0	1144.5
5°	1152.9	1142.7	1148.7	1143.4	1142.4
7.5°	1147.4	1135.4	1138.2	1137.2	1137.2
10°	1142.4	1127.1	1134.0	1128.8	1128.8
12.5°	1129.0	1116.1	1121.5	1118.8	1120.4
15°	1108.9	1099.7	1104.8	1103.6	1099.5
17.5°	1091.6	1080.5	1084.3	1082.3	1080.7
20°	1076.5	1066.3	1069.2	1064.0	1068.1
22.5°	1059.8	1049.5	1055.0	1046.4	1046.4
25°	1029.4	1020.2	1027.3	1016.9	1015.8
27.5°	997.2	991.3	996.0	988.1	985.3
30°	977.1	967.9	970.8	965.6	963.5
32.5°	953.7	944.5	947.4	938.0	939.3
35°	911.2	907.1	910.2	899.7	898.7
37.5°	872.7	864.5	869.4	860.8	860.0
40°	844.3	836.1	840.1	834.8	834.8
42.5°	818.3	809.3	811.6	804.7	802.2
45°	770.0	764.9	765.8	757.4	757.4
47.5°	722.3	718.6	717.0	708.5	710.1
50°	690.5	684.3	685.2	675.8	675.8
52.5°	653.6	654.1	650.1	643.9	639.0
55°	604.7	603.7	597.4	592.1	589.0
57.5°	552.4	547.7	543.2	536.0	535.4
60°	514.7	511.6	506.3	500.0	496.9
62.5°	476.2	473.1	467.8	462.4	461.8
65°	420.6	414.4	411.1	404.8	403.8
67.5°	360.1	355.2	351.1	346.1	345.4
70°	319.1	315.0	311.8	307.5	304.4
72.5°	281.4	274.9	271.6	268.2	265.9
75°	217.6	214.5	211.3	209.2	208.2
77.5°	156.1	156.3	156.3	153.6	152.5
80°	119.3	120.3	120.3	119.2	118.2
82.5°	86.6	88.5	89.3	88.3	88.1
85°	42.9	46.0	49.2	49.2	49.2
87.5°	11.7	15.8	19.2	20.1	19.2
90°	0.0	0.0	0.0	0.0	0.0
92.5°	5.6	29.6	68.8	20.0	15.1
95°	18.2	72.2	324.3	112.2	69.2
97.5°	33.4	84.5	499.4	357.4	244.9
100°	44.0	91.9	537.4	544.4	419.3
102.5°	55.8	99.8	529.1	696.8	587.6
105°	74.1	112.3	485.7	858.0	815.6
107.5°	92.7	127.0	435.1	903.4	941.1
110°	105.5	137.6	406.1	886.0	970.8

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	117.8	148.3	386.5	844.9	965.7
115°	137.7	166.4	368.3	780.3	916.2
117.5°	155.2	182.1	357.6	709.6	853.6
120°	169.1	191.7	356.4	669.2	807.2
122.5°	180.3	202.9	353.6	633.7	761.9
125°	194.3	215.5	351.5	583.4	697.5
127.5°	209.5	229.3	350.4	553.3	647.3
130°	217.4	237.2	348.7	532.3	614.3
132.5°	225.7	245.0	348.7	516.0	591.4
135°	237.6	257.4	347.3	492.8	557.0
137.5°	248.8	268.1	347.2	473.1	528.6
140°	257.2	277.0	346.6	456.9	510.2
142.5°	266.7	283.2	348.3	443.9	491.7
145°	280.3	294.6	350.1	426.5	464.8
147.5°	291.9	305.8	353.2	408.9	442.0
150°	301.9	311.5	354.3	403.1	426.3
152.5°	309.7	319.9	355.5	395.2	416.8
155°	320.1	327.6	358.5	385.4	401.2
157.5°	332.9	337.5	359.2	381.0	392.2
160°	339.7	343.1	362.0	377.6	387.2
162.5°	343.6	347.5	362.6	374.8	382.2
165°	353.6	355.0	362.7	370.5	376.0
167.5°	360.5	359.3	365.9	369.5	371.7
170°	362.7	362.0	364.8	365.6	368.3
172.5°	367.8	365.4	366.5	364.4	366.6
175°	370.4	368.4	366.9	364.8	362.0
177.5°	371.5	368.2	366.5	364.3	364.8
180°	367.6	367.6	367.6	367.6	367.6

(END OF REPORT)