

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: P521405

Luminaire Tested: SQ4-F-050U-075D-92765-1D-UNV-STD-W-4_2700K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521405
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_2700K
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 2700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5076.2 lumens
Efficiency: N/A
Efficacy: 106.6 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

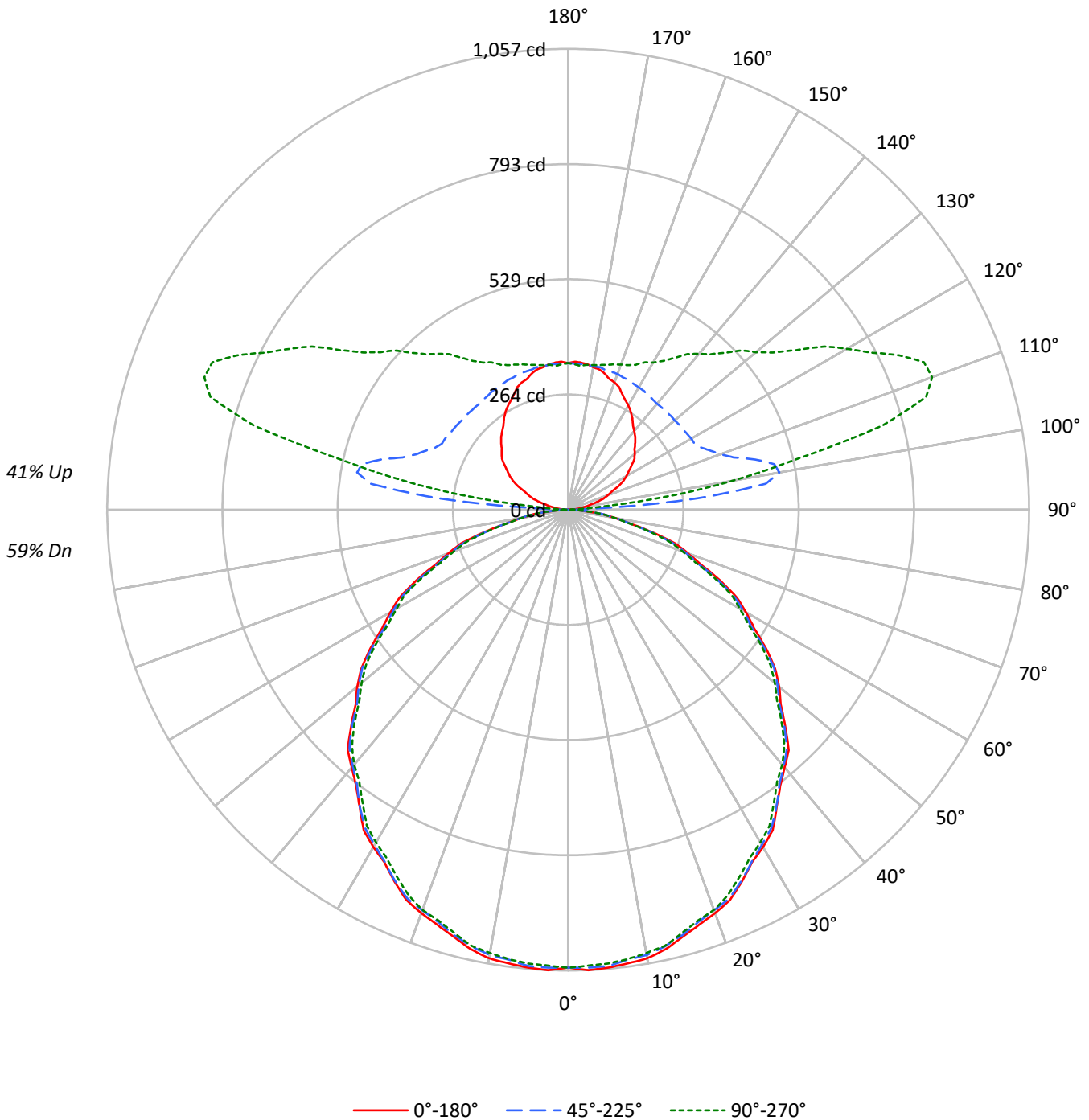
Input Watts (W): 47.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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									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°	9692	9692	9692
5°	9764	9729	9676
10°	9788	9716	9671
15°	9686	9650	9604
20°	9666	9600	9591
25°	9583	9564	9457
30°	9520	9459	9388
35°	9386	9375	9256
40°	9299	9253	9196
45°	9188	9137	9038
50°	9063	8995	8872
55°	8895	8787	8664
60°	8686	8545	8387
65°	8396	8208	8062
70°	7871	7691	7510
75°	7094	6891	6787
80°	5797	5844	5744
85°	4150	4764	4764

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 9188 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	99.5	2.0
10°-20°	284.7	5.6
20°-30°	430.7	8.5
30°-40°	518.0	10.2
40°-50°	537.9	10.6
50°-60°	487.3	9.6
60°-70°	370.7	7.3
70°-80°	206.0	4.1
80°-90°	53.1	1.0
90°-100°	153.2	3.0
100°-110°	435.9	8.6
110°-120°	417.6	8.2
120°-130°	330.5	6.5
130°-140°	265.3	5.2
140°-150°	207.7	4.1
150°-160°	152.0	3.0
160°-170°	94.1	1.9
170°-180°	31.9	0.6
0°-30°	814.9	16.1
0°-40°	1333.0	26.3
0°-60°	2358.1	46.5
0°-90°	2987.9	58.9
90°-120°	1006.7	19.8
90°-150°	1810.2	35.7
90°-180°	2088.0	41.1
0°-180°	5076.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1050	1050	1050	1050	1050	
5°	1054	1045	1050	1046	1045	100
15°	1014	1006	1010	1009	1006	287
25°	941	933	940	930	929	434
35°	833	830	832	823	822	522
45°	704	700	700	693	693	543
55°	553	552	546	542	539	494
65°	385	379	376	370	369	379
75°	199	196	193	191	190	211
85°	39	42	45	45	45	48
90°	0	0	0	0	0	2
95°	17	66	297	103	63	19
105°	68	103	444	785	746	72
115°	126	152	337	714	838	124
125°	178	197	322	534	638	159
135°	217	235	318	451	509	168
145°	256	269	320	390	425	160
155°	293	300	328	352	367	135
165°	323	325	332	339	344	91
175°	339	337	336	334	331	32
180°	336	336	336	336	336	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1050.5	1050.5	1050.5	1050.5	1050.5
2.5°	1057.4	1048.4	1051.3	1048.9	1046.7
5°	1054.3	1045.0	1050.5	1045.7	1044.8
7.5°	1049.4	1038.3	1040.9	1040.0	1040.0
10°	1044.8	1030.7	1037.1	1032.3	1032.3
12.5°	1032.5	1020.7	1025.6	1023.2	1024.7
15°	1014.1	1005.7	1010.3	1009.3	1005.5
17.5°	998.3	988.2	991.6	989.8	988.3
20°	984.5	975.1	977.8	973.1	976.8
22.5°	969.2	959.8	964.8	956.9	956.9
25°	941.4	933.0	939.5	929.9	929.0
27.5°	912.0	906.5	910.8	903.7	901.1
30°	893.6	885.2	887.9	883.0	881.2
32.5°	872.2	863.7	866.4	857.8	859.0
35°	833.3	829.6	832.4	822.8	821.8
37.5°	798.1	790.6	795.0	787.2	786.4
40°	772.1	764.6	768.3	763.5	763.5
42.5°	748.4	740.1	742.2	735.9	733.6
45°	704.2	699.5	700.3	692.7	692.7
47.5°	660.5	657.2	655.7	647.9	649.4
50°	631.4	625.8	626.7	618.1	618.1
52.5°	597.8	598.1	594.5	588.9	584.4
55°	553.0	552.1	546.3	541.5	538.6
57.5°	505.2	500.9	496.7	490.2	489.7
60°	470.7	467.9	463.1	457.3	454.5
62.5°	435.5	432.7	427.9	422.9	422.3
65°	384.6	379.0	376.0	370.2	369.3
67.5°	329.3	324.8	321.1	316.5	315.9
70°	291.8	288.1	285.1	281.2	278.4
72.5°	257.4	251.4	248.4	245.3	243.2
75°	199.0	196.2	193.3	191.3	190.4
77.5°	142.7	142.9	142.9	140.4	139.5
80°	109.1	110.0	110.0	109.0	108.1
82.5°	79.2	80.9	81.7	80.7	80.6
85°	39.2	42.0	45.0	45.0	45.0
87.5°	10.7	14.5	17.6	18.4	17.6
90°	0.0	0.0	0.0	0.0	0.0
92.5°	5.1	27.1	62.9	18.3	13.8
95°	16.6	66.0	296.6	102.6	63.3
97.5°	30.6	77.3	456.7	326.8	224.0
100°	40.3	84.0	491.5	497.8	383.5
102.5°	51.0	91.2	483.8	637.3	537.4
105°	67.7	102.7	444.2	784.6	745.9
107.5°	84.8	116.1	397.9	826.2	860.7
110°	96.5	125.9	371.3	810.3	887.8

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	107.8	135.6	353.4	772.7	883.2
115°	125.9	152.2	336.8	713.6	837.9
117.5°	141.9	166.5	327.0	648.9	780.6
120°	154.7	175.3	326.0	612.0	738.2
122.5°	164.9	185.5	323.4	579.6	696.8
125°	177.7	197.1	321.5	533.5	637.9
127.5°	191.6	209.7	320.5	506.0	592.0
130°	198.8	216.9	318.9	486.8	561.8
132.5°	206.4	224.1	318.9	471.8	540.8
135°	217.3	235.4	317.7	450.7	509.4
137.5°	227.5	245.2	317.5	432.7	483.4
140°	235.2	253.3	317.0	417.8	466.6
142.5°	243.9	259.0	318.5	406.0	449.7
145°	256.3	269.4	320.2	390.0	425.0
147.5°	266.9	279.7	323.0	373.9	404.2
150°	276.1	284.9	324.0	368.6	389.9
152.5°	283.3	292.5	325.1	361.4	381.2
155°	292.7	299.6	327.9	352.5	366.9
157.5°	304.5	308.6	328.5	348.4	358.7
160°	310.6	313.7	331.1	345.3	354.1
162.5°	314.2	317.8	331.6	342.7	349.5
165°	323.4	324.7	331.7	338.9	343.9
167.5°	329.7	328.5	334.7	337.9	339.9
170°	331.7	331.1	333.6	334.3	336.8
172.5°	336.3	334.2	335.2	333.3	335.3
175°	338.7	336.9	335.5	333.6	331.1
177.5°	339.8	336.8	335.2	333.1	333.6
180°	336.2	336.2	336.2	336.2	336.2

(END OF REPORT)