

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: P521756

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

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521756
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2101-105-51, G2-2009-966-13)
Test Lab: INNOVATION CENTER
Issue Date: 5-5-2021
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-WB-050U-050D-92765-1D-UNV-STD-W-4_2700K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE
DOWNLIGHT 500 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: 3756.0 lumens
Efficiency: N/A
Efficacy: 103.2 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

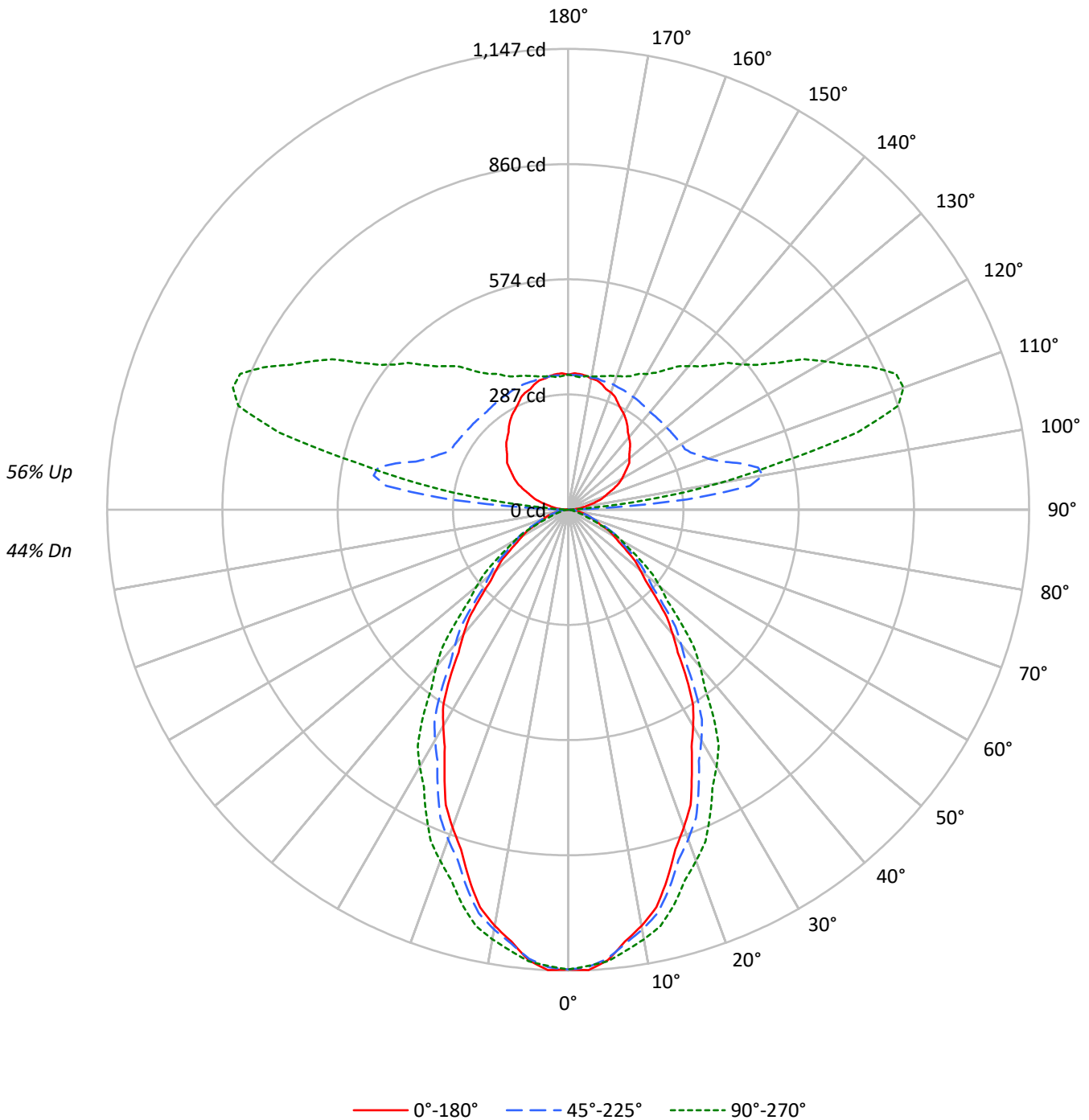
Input Watts (W): 36.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	50	30	10	0	
RCR																						
0	106	106	106	106	97	97	97	97	80	80	80	65	65	65	51	51	51	44				
1	98	94	90	87	89	86	83	80	72	70	68	59	57	56	47	46	45	39				
2	90	83	77	73	82	76	72	68	64	61	58	53	50	48	42	41	40	35				
3	82	74	67	62	76	68	62	58	58	53	50	48	45	42	38	37	35	31				
4	76	66	59	53	70	61	55	50	52	47	44	43	40	37	35	33	31	27				
5	70	59	52	46	64	55	49	44	47	42	38	39	36	33	32	30	28	25				
6	65	54	46	41	60	50	43	39	43	38	34	36	32	29	30	27	25	22				
7	60	49	42	36	55	46	39	34	39	34	30	33	29	27	27	25	23	20				
8	56	45	37	32	52	42	35	31	36	31	27	31	27	24	25	23	21	18				
9	53	41	34	29	48	38	32	28	33	28	25	28	25	22	24	21	19	17				
10	49	38	31	27	45	35	29	25	31	26	23	26	23	20	22	19	18	16				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10558	10558	10558
5°	10427	10389	10451
10°	9851	9941	10171
15°	9094	9305	9723
20°	8258	8569	9136
25°	7407	7811	8511
30°	6623	7057	7864
35°	5791	6210	7098
40°	4874	5262	6145
45°	4023	4370	5130
50°	3359	3662	4274
55°	2852	3141	3529
60°	2438	2724	2818
65°	1941	2292	1821
70°	1721	1788	1111
75°	1593	1451	681
80°	1466	1334	584
85°	1334	1217	476

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 5130 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	105.0	2.8
10°-20°	273.0	7.3
20°-30°	353.7	9.4
30°-40°	346.3	9.2
40°-50°	265.1	7.1
50°-60°	176.6	4.7
60°-70°	96.4	2.6
70°-80°	40.2	1.1
80°-90°	11.4	0.3
90°-100°	153.2	4.1
100°-110°	435.9	11.6
110°-120°	417.6	11.1
120°-130°	330.5	8.8
130°-140°	265.3	7.1
140°-150°	207.7	5.5
150°-160°	152.0	4.0
160°-170°	94.1	2.5
170°-180°	31.9	0.9
0°-30°	731.7	19.5
0°-40°	1078.0	28.7
0°-60°	1519.7	40.5
0°-90°	1667.7	44.4
90°-120°	1006.7	26.8
90°-150°	1810.2	48.2
90°-180°	2088.0	55.6
0°-180°	3756.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1144	1144	1144	1144	1144	
5°	1126	1115	1122	1124	1128	105
15°	952	949	974	1001	1018	266
25°	728	730	767	801	836	335
35°	514	517	551	588	630	320
45°	308	314	335	360	393	240
55°	177	185	195	203	219	161
65°	89	96	105	92	83	92
75°	45	45	41	28	19	48
85°	13	13	12	8	4	14
90°	0	0	0	0	0	1
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°	1144.4	1144.4	1144.4	1144.4	1144.4
2.5°	1147.3	1137.0	1139.6	1139.5	1136.4
5°	1125.9	1114.6	1121.8	1124.4	1128.4
7.5°	1084.1	1075.5	1088.8	1098.6	1106.6
10°	1051.5	1044.2	1061.1	1075.4	1085.7
12.5°	1013.8	1007.6	1028.5	1047.7	1061.2
15°	952.1	948.7	974.2	1000.7	1017.9
17.5°	886.1	884.5	913.7	944.7	966.7
20°	841.1	840.6	872.8	905.0	930.5
22.5°	795.7	796.8	830.6	864.1	893.2
25°	727.6	729.6	767.3	800.8	836.1
27.5°	664.7	665.6	704.5	739.8	777.6
30°	621.7	624.1	662.4	698.9	738.2
32.5°	578.7	581.5	619.0	656.7	696.8
35°	514.2	516.7	551.4	588.5	630.2
37.5°	447.7	451.1	481.9	517.0	558.0
40°	404.7	409.7	436.9	469.9	510.2
42.5°	363.4	369.5	394.7	426.1	462.4
45°	308.3	314.2	334.9	360.3	393.2
47.5°	260.9	267.7	283.6	305.5	333.5
50°	234.0	240.4	255.1	271.3	297.8
52.5°	210.3	216.7	229.8	242.3	264.8
55°	177.3	184.6	195.3	202.8	219.4
57.5°	150.1	157.2	165.7	169.1	179.2
60°	132.1	139.9	147.6	147.3	152.7
62.5°	115.6	122.3	130.0	124.6	124.9
65°	88.9	96.2	105.0	91.7	83.4
67.5°	71.8	73.4	82.4	64.0	54.0
70°	63.8	63.8	66.3	49.5	41.2
72.5°	56.1	56.1	53.8	40.3	31.5
75°	44.7	44.7	40.7	27.9	19.1
77.5°	34.4	34.1	31.1	20.8	13.9
80°	27.6	27.6	25.1	16.4	11.0
82.5°	21.6	21.6	19.5	12.9	8.2
85°	12.6	12.6	11.5	7.5	4.5
87.5°	4.4	4.4	4.0	2.4	2.0
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)