

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: P521808

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

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521808
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-075U-050D-92765-1D-UNV-STD-W-4_2700K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 750 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: 4793.6 lumens
Efficiency: N/A
Efficacy: 108.5 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: Semi-Indirect

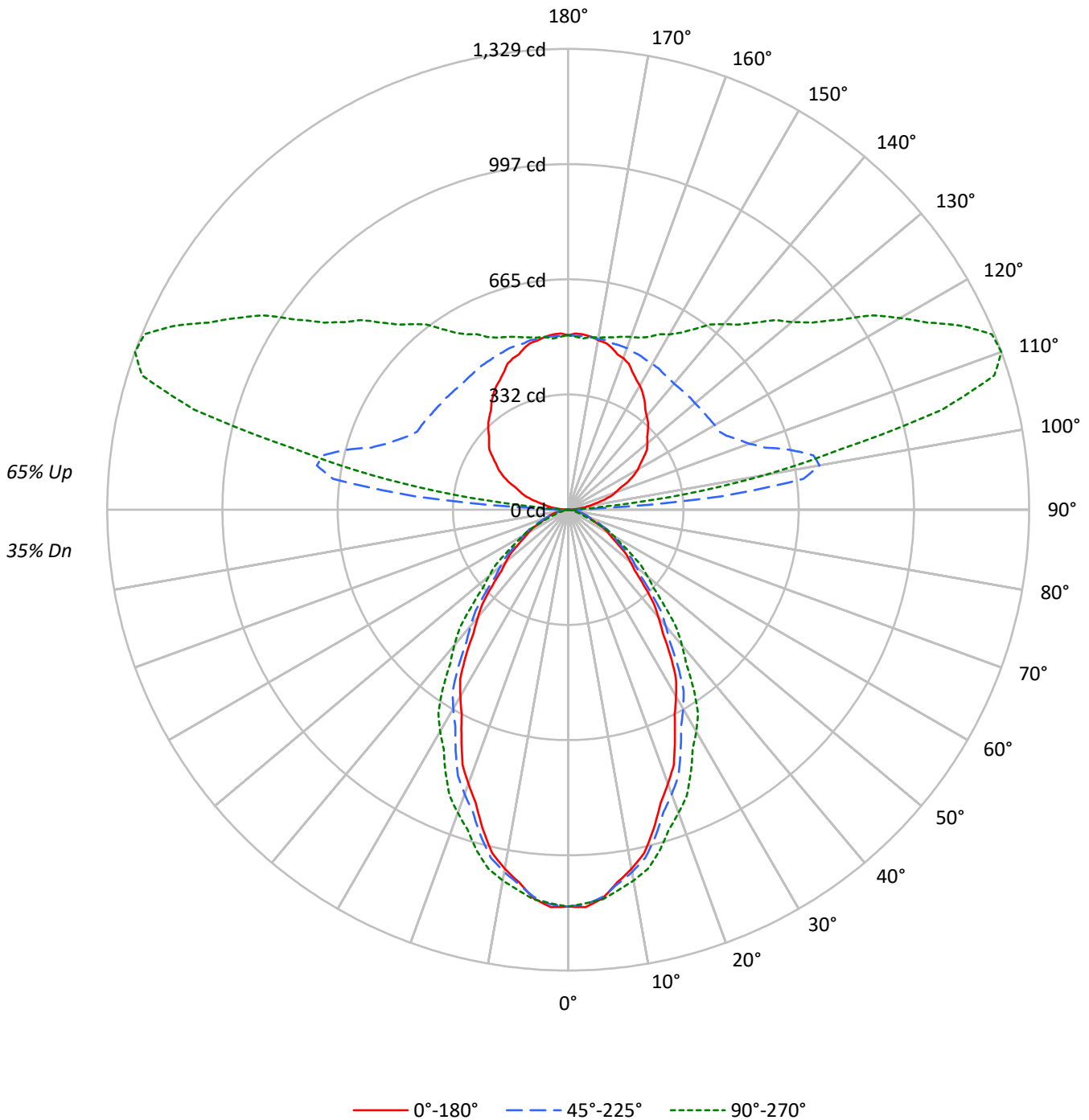
Input Watts (W): 44.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	104	104	104	104	94	94	94	94	75	75	75	58	58	58	42	42	42	35																			
1	95	91	88	85	86	83	80	77	67	65	63	52	51	50	38	38	37	31																			
2	87	81	75	70	79	73	69	65	59	56	53	47	45	43	35	34	33	27																			
3	80	72	65	60	72	65	60	55	53	49	46	42	39	37	32	30	29	24																			
4	74	64	57	51	67	58	52	47	48	43	40	38	35	33	29	27	25	21																			
5	68	57	50	44	61	52	46	41	43	38	35	34	31	29	26	24	23	19																			
6	63	52	44	39	57	47	41	36	39	34	31	31	28	26	24	22	20	17																			
7	58	47	39	34	53	43	37	32	36	31	27	29	25	23	22	20	19	16																			
8	54	43	35	31	49	39	33	29	33	28	25	27	23	21	21	19	17	14																			
9	50	39	32	27	46	36	30	26	30	25	22	25	21	19	19	17	15	13																			
10	47	36	29	25	43	33	27	23	28	23	20	23	20	17	18	16	14	12																			

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	2.2
10°-20°	273.0	5.7
20°-30°	353.7	7.4
30°-40°	346.3	7.2
40°-50°	265.1	5.5
50°-60°	176.6	3.7
60°-70°	96.4	2.0
70°-80°	40.2	0.8
80°-90°	11.4	0.2
90°-100°	229.3	4.8
100°-110°	652.5	13.6
110°-120°	625.2	13.0
120°-130°	494.8	10.3
130°-140°	397.1	8.3
140°-150°	310.9	6.5
150°-160°	227.5	4.7
160°-170°	140.9	2.9
170°-180°	47.8	1.0
0°-30°	731.7	15.3
0°-40°	1078.0	22.5
0°-60°	1519.7	31.7
0°-90°	1667.7	34.8
90°-120°	1507.0	31.4
90°-150°	2709.8	56.5
90°-180°	3126.0	65.2
0°-180°	4793.6	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	2
95°	25	99	444	154	95	28
105°	101	154	665	1174	1116	107
115°	188	228	504	1068	1254	186
125°	266	295	481	799	955	238
135°	325	352	476	675	762	251
145°	384	403	479	584	636	240
155°	438	448	491	528	549	203
165°	484	486	496	507	515	136
175°	507	504	502	499	496	48
180°	503	503	503	503	503	

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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°	7.7	40.6	94.1	27.4	20.7
95°	24.9	98.8	443.9	153.7	94.7
97.5°	45.7	115.7	683.7	489.2	335.2
100°	60.3	125.8	735.7	745.2	574.0
102.5°	76.3	136.6	724.3	953.9	804.4
105°	101.4	153.8	664.9	1174.5	1116.5
107.5°	126.9	173.8	595.7	1236.7	1288.3
110°	144.5	188.4	555.9	1212.9	1328.9

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	161.3	203.0	529.1	1156.6	1322.0
115°	188.5	227.8	504.2	1068.1	1254.3
117.5°	212.4	249.3	489.5	971.4	1168.6
120°	231.5	262.4	487.9	916.1	1105.0
122.5°	246.8	277.7	484.1	867.5	1043.0
125°	266.0	295.0	481.2	798.6	954.8
127.5°	286.8	314.0	479.7	757.4	886.1
130°	297.5	324.7	477.4	728.7	841.0
132.5°	309.0	335.4	477.4	706.3	809.6
135°	325.3	352.4	475.5	674.6	762.5
137.5°	340.6	367.0	475.3	647.7	723.7
140°	352.1	379.2	474.5	625.5	698.4
142.5°	365.1	387.7	476.8	607.7	673.2
145°	383.7	403.3	479.3	583.8	636.2
147.5°	399.5	418.6	483.5	559.8	605.0
150°	413.3	426.4	485.1	551.8	583.6
152.5°	424.0	437.9	486.6	541.0	570.6
155°	438.2	448.5	490.8	527.7	549.2
157.5°	455.8	462.0	491.8	521.6	536.9
160°	465.0	469.7	495.6	516.9	530.0
162.5°	470.3	475.8	496.4	513.0	523.1
165°	484.1	486.0	496.5	507.2	514.7
167.5°	493.5	491.8	500.9	505.8	508.8
170°	496.5	495.6	499.4	500.5	504.2
172.5°	503.4	500.3	501.7	498.9	501.9
175°	507.1	504.3	502.3	499.3	495.6
177.5°	508.6	504.1	501.7	498.7	499.4
180°	503.2	503.2	503.2	503.2	503.2

(END OF REPORT)