

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: P521081

Luminaire Tested: SQ4-BB-075U-050D-92765-1D-UNV-STD-W-4_3000K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521081
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2101-105-51, G2-2009-966-12)
Test Lab: INNOVATION CENTER
Issue Date: 5-5-2021
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-BB-075U-050D-92765-1D-UNV-STD-W-4_3000K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 750 LUMENS PER FOOT
Light Source: 2700K-6500K CCT, 90 CRI LEDS, TUNED TO 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4454.7 lumens
Efficiency: N/A
Efficacy: 100.3 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Indirect

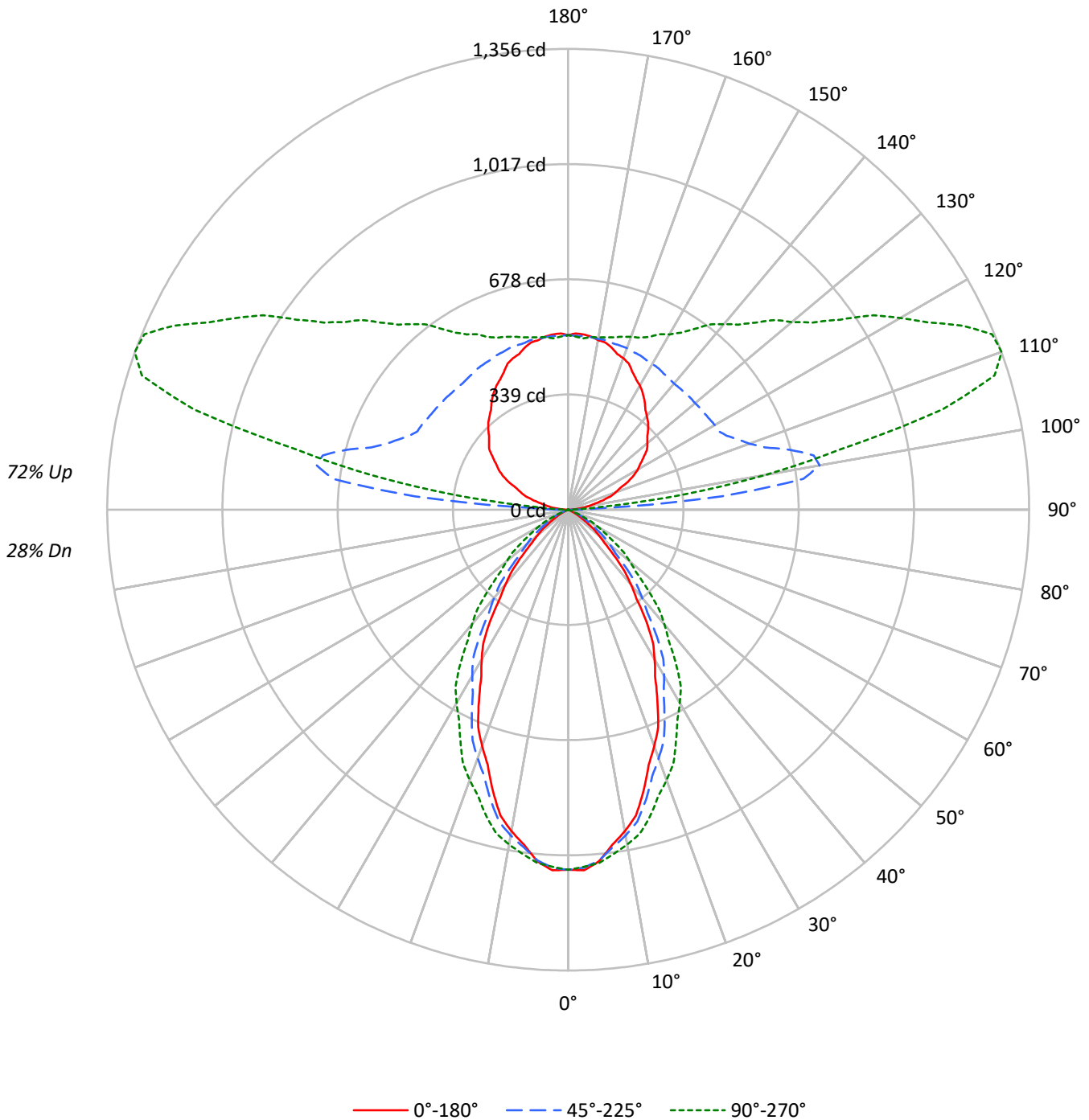
Input Watts (W): 44.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	102	102	102	102	91	91	91	91	71	71	71	53	53	53	36	36	36	28				
1	94	90	87	84	84	81	78	76	64	62	60	48	47	46	34	33	33	26				
2	86	80	75	70	77	72	68	64	57	54	52	43	42	40	31	30	29	23				
3	79	71	65	60	71	64	59	55	51	48	45	39	37	35	28	27	26	21				
4	73	64	57	51	66	58	52	47	46	42	39	36	33	31	26	24	23	19				
5	67	57	50	44	61	52	46	41	42	38	34	33	30	28	24	22	21	17				
6	62	52	44	39	56	47	41	36	38	34	30	30	27	25	22	20	19	16				
7	58	47	40	35	52	43	36	32	35	30	27	27	24	22	21	19	17	15				
8	54	43	36	31	48	39	33	29	32	27	24	25	22	20	19	17	16	13				
9	50	39	32	28	45	36	30	26	29	25	22	23	20	18	18	16	15	12				
10	47	36	29	25	42	33	27	23	27	23	20	22	19	17	17	15	13	11				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9775	9775	9775
5°	9618	9594	9665
10°	8999	9119	9373
15°	8181	8441	8911
20°	7262	7640	8309
25°	6324	6825	7634
30°	5417	6012	6995
35°	4492	5103	6224
40°	3451	4080	5303
45°	2495	3090	4267
50°	1699	2302	3385
55°	1105	1665	2630
60°	633	1174	1901
65°	168	716	963
70°	84	221	278
75°	36	18	0
80°	27	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 4267 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	96.7	2.2
10°-20°	247.3	5.6
20°-30°	309.6	6.9
30°-40°	285.9	6.4
40°-50°	192.1	4.3
50°-60°	99.2	2.2
60°-70°	31.1	0.7
70°-80°	2.0	0.0
80°-90°	0.0	0.0
90°-100°	234.1	5.3
100°-110°	666.0	15.0
110°-120°	638.1	14.3
120°-130°	505.0	11.3
130°-140°	405.4	9.1
140°-150°	317.4	7.1
150°-160°	232.2	5.2
160°-170°	143.8	3.2
170°-180°	48.8	1.1
0°-30°	653.5	14.7
0°-40°	939.4	21.1
0°-60°	1230.8	27.6
0°-90°	1263.9	28.4
90°-120°	1538.2	34.5
90°-150°	2766.0	62.1
90°-180°	3191.0	71.6
0°-180°	4454.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1060	1060	1060	1060	1060	
5°	1038	1028	1036	1040	1044	96
15°	856	854	884	913	933	239
25°	621	626	670	716	750	285
35°	399	409	453	506	553	247
45°	191	203	237	283	327	150
55°	69	80	104	133	164	64
65°	8	15	33	40	44	13
75°	1	1	0	0	0	1
85°	0	0	0	0	0	0
90°	0	0	0	0	0	1
95°	25	101	453	157	97	29
105°	104	157	679	1199	1140	110
115°	192	232	515	1090	1280	189
125°	272	301	491	815	975	243
135°	332	360	485	689	778	256
145°	392	412	489	596	649	245
155°	447	458	501	539	560	207
165°	494	496	507	518	525	139
175°	518	515	513	510	506	49
180°	514	514	514	514	514	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1059.5	1059.5	1059.5	1059.5	1059.5
2.5°	1062.0	1051.9	1054.6	1054.5	1051.7
5°	1038.5	1028.0	1035.9	1039.6	1043.6
7.5°	994.6	986.4	1001.7	1013.1	1021.5
10°	960.6	953.5	973.4	989.0	1000.5
12.5°	921.2	915.8	939.8	961.2	975.9
15°	856.5	853.5	883.7	913.3	932.9
17.5°	787.2	787.1	821.6	858.4	881.9
20°	739.6	741.1	778.1	818.7	846.3
22.5°	692.1	695.6	735.0	777.4	808.9
25°	621.2	626.3	670.4	716.3	749.9
27.5°	553.2	560.5	607.0	654.7	695.6
30°	508.5	517.0	564.3	614.5	656.6
32.5°	464.6	474.7	520.9	573.9	616.8
35°	398.8	408.8	453.1	506.4	552.6
37.5°	330.8	340.6	383.9	436.4	486.2
40°	286.5	297.6	338.8	389.7	440.3
42.5°	246.3	257.4	296.2	346.2	394.0
45°	191.2	202.7	236.8	282.9	327.0
47.5°	145.5	158.0	187.9	229.6	269.8
50°	118.4	130.9	160.4	197.2	235.8
52.5°	96.7	108.8	135.4	170.1	205.4
55°	68.7	80.2	103.5	132.9	163.5
57.5°	47.5	57.4	78.3	102.9	126.8
60°	34.3	43.9	63.6	83.5	103.0
62.5°	22.9	31.6	50.8	66.1	79.2
65°	7.7	14.7	32.8	39.6	44.1
67.5°	3.9	4.7	17.2	18.2	19.7
70°	3.1	3.1	8.2	8.7	10.3
72.5°	2.3	2.3	3.3	4.2	4.5
75°	1.0	1.0	0.5	0.0	0.0
77.5°	0.5	0.5	0.4	0.0	0.0
80°	0.5	0.5	0.0	0.0	0.0
82.5°	0.1	0.1	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0
92.5°	7.8	41.4	96.1	28.0	21.1
95°	25.4	100.8	453.1	156.8	96.7
97.5°	46.7	118.1	697.9	499.4	342.2
100°	61.5	128.4	751.0	760.7	585.9
102.5°	77.9	139.4	739.3	973.7	821.1
105°	103.5	157.0	678.7	1198.9	1139.7
107.5°	129.5	177.4	608.0	1262.3	1315.0
110°	147.5	192.3	567.4	1238.0	1356.5

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	164.6	207.2	540.0	1180.6	1349.4
115°	192.4	232.5	514.7	1090.3	1280.3
117.5°	216.8	254.4	499.6	991.5	1192.8
120°	236.3	267.8	498.0	935.1	1127.9
122.5°	252.0	283.5	494.1	885.5	1064.7
125°	271.5	301.1	491.2	815.2	974.6
127.5°	292.8	320.5	489.7	773.1	904.5
130°	303.7	331.4	487.3	743.8	858.4
132.5°	315.4	342.4	487.3	721.0	826.4
135°	332.0	359.7	485.4	688.6	778.3
137.5°	347.7	374.6	485.2	661.1	738.7
140°	359.4	387.1	484.4	638.4	712.9
142.5°	372.7	395.8	486.7	620.3	687.1
145°	391.6	411.7	489.3	595.9	649.4
147.5°	407.8	427.3	493.6	571.4	617.6
150°	421.9	435.2	495.1	563.2	595.7
152.5°	432.8	446.9	496.7	552.3	582.4
155°	447.3	457.8	501.0	538.6	560.5
157.5°	465.2	471.5	502.0	532.4	548.0
160°	474.6	479.4	505.9	527.6	541.0
162.5°	480.1	485.6	506.6	523.7	534.0
165°	494.1	496.1	506.8	517.8	525.4
167.5°	503.7	502.0	511.3	516.3	519.3
170°	506.8	505.9	509.8	510.8	514.7
172.5°	513.9	510.6	512.1	509.3	512.3
175°	517.6	514.7	512.7	509.7	505.9
177.5°	519.1	514.6	512.1	509.0	509.8
180°	513.7	513.7	513.7	513.7	513.7

(END OF REPORT)