

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: P521814

Luminaire Tested: SQ4-WB-075U-050D-92765-1D-UNV-STD-W-4_5700K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521814
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_5700K
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 5700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5316.4 lumens
Efficiency: N/A
Efficacy: 120.3 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

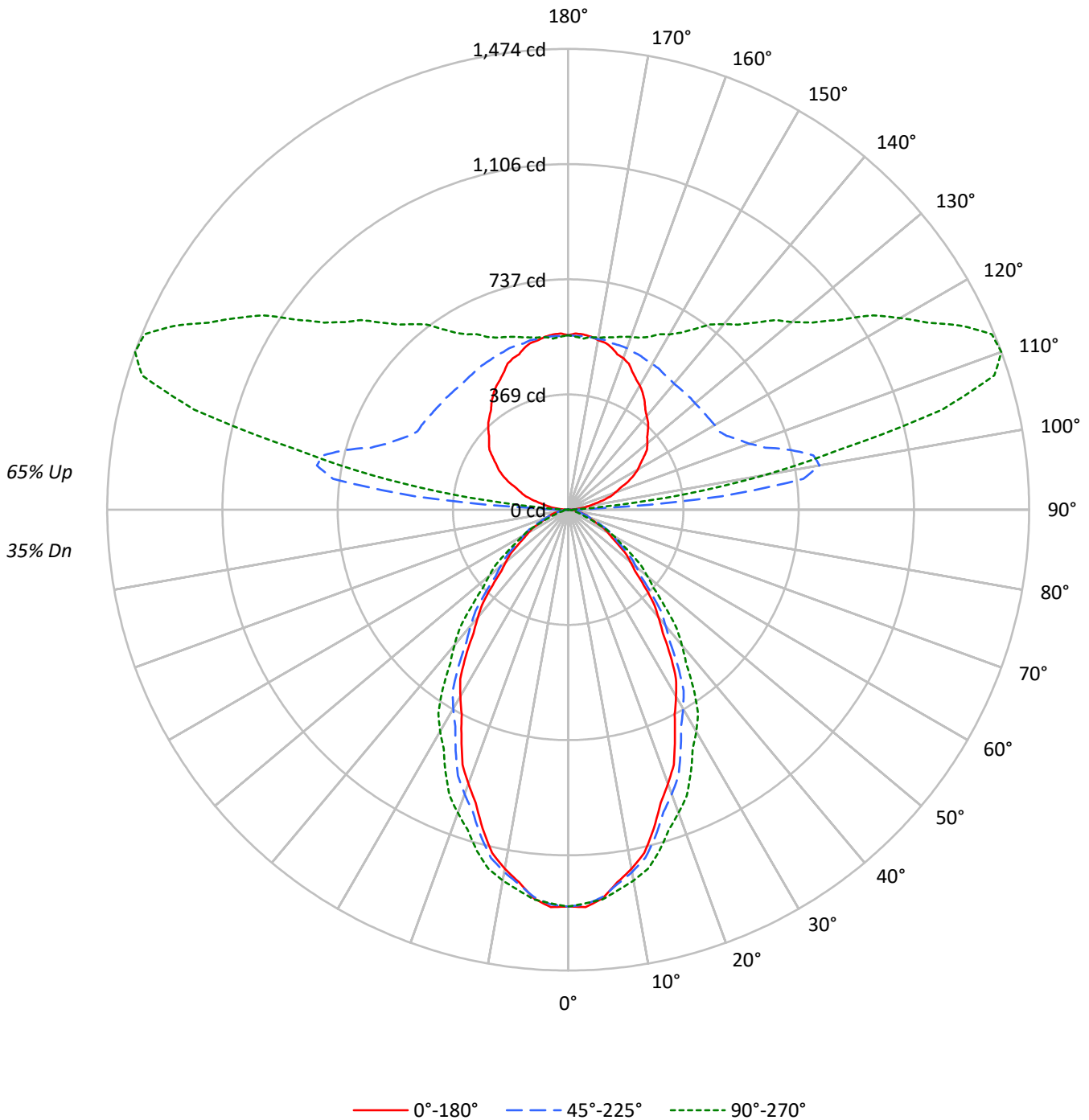
Input Watts (W): 44.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Luminous Intensity Polar Plot



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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				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	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°	11710	11710	11710
5°	11564	11523	11590
10°	10926	11025	11281
15°	10086	10320	10783
20°	9160	9503	10133
25°	8215	8663	9440
30°	7346	7826	8722
35°	6423	6887	7872
40°	5407	5835	6814
45°	4462	4847	5690
50°	3725	4061	4741
55°	3162	3484	3915
60°	2703	3021	3124
65°	2153	2541	2019
70°	1907	1983	1233
75°	1768	1608	756
80°	1626	1477	654
85°	1471	1355	529

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 5690 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	116.4	2.2
10°-20°	302.8	5.7
20°-30°	392.2	7.4
30°-40°	384.1	7.2
40°-50°	294.0	5.5
50°-60°	195.9	3.7
60°-70°	106.9	2.0
70°-80°	44.6	0.8
80°-90°	12.6	0.2
90°-100°	254.3	4.8
100°-110°	723.6	13.6
110°-120°	693.3	13.0
120°-130°	548.7	10.3
130°-140°	440.5	8.3
140°-150°	344.8	6.5
150°-160°	252.3	4.7
160°-170°	156.3	2.9
170°-180°	53.0	1.0
0°-30°	811.5	15.3
0°-40°	1195.6	22.5
0°-60°	1685.5	31.7
0°-90°	1849.5	34.8
90°-120°	1671.3	31.4
90°-150°	3005.3	56.5
90°-180°	3467.0	65.2
0°-180°	5316.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1269	1269	1269	1269	1269	
5°	1249	1236	1244	1247	1251	116
15°	1056	1052	1080	1110	1129	295
25°	807	809	851	888	927	371
35°	570	573	612	653	699	355
45°	342	348	372	400	436	267
55°	197	205	217	225	243	178
65°	99	107	116	102	92	102
75°	50	50	45	31	21	53
85°	14	14	13	8	5	15
90°	0	0	0	0	0	2
95°	28	110	492	170	105	32
105°	112	171	737	1303	1238	119
115°	209	253	559	1185	1391	206
125°	295	327	534	886	1059	264
135°	361	391	527	748	846	278
145°	426	447	532	648	706	266
155°	486	497	544	585	609	225
165°	537	539	551	563	571	151
175°	562	559	557	554	550	53
180°	558	558	558	558	558	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1269.2	1269.2	1269.2	1269.2	1269.2
2.5°	1272.4	1261.0	1263.9	1263.8	1260.3
5°	1248.6	1236.1	1244.2	1247.1	1251.4
7.5°	1202.3	1192.8	1207.5	1218.4	1227.2
10°	1166.2	1158.0	1176.8	1192.6	1204.1
12.5°	1124.3	1117.5	1140.7	1162.0	1176.9
15°	1055.9	1052.1	1080.4	1109.8	1128.9
17.5°	982.8	980.9	1013.4	1047.7	1072.1
20°	932.9	932.3	967.9	1003.7	1032.0
22.5°	882.5	883.7	921.2	958.3	990.6
25°	807.0	809.2	851.0	888.1	927.3
27.5°	737.2	738.1	781.4	820.5	862.3
30°	689.5	692.2	734.6	775.1	818.7
32.5°	641.8	645.0	686.5	728.4	772.8
35°	570.3	573.0	611.5	652.7	698.9
37.5°	496.6	500.3	534.4	573.3	618.9
40°	448.9	454.3	484.5	521.2	565.8
42.5°	403.0	409.7	437.7	472.5	512.8
45°	342.0	348.5	371.5	399.6	436.1
47.5°	289.4	296.9	314.6	338.8	369.9
50°	259.5	266.6	282.9	300.9	330.3
52.5°	233.2	240.3	254.9	268.7	293.7
55°	196.6	204.8	216.6	224.9	243.4
57.5°	166.5	174.4	183.8	187.5	198.7
60°	146.5	155.2	163.7	163.3	169.3
62.5°	128.2	135.6	144.1	138.2	138.6
65°	98.6	106.7	116.4	101.7	92.5
67.5°	79.6	81.4	91.3	70.9	59.9
70°	70.7	70.7	73.5	54.9	45.7
72.5°	62.3	62.3	59.7	44.7	35.0
75°	49.6	49.6	45.1	31.0	21.2
77.5°	38.2	37.8	34.5	23.1	15.4
80°	30.6	30.6	27.8	18.2	12.3
82.5°	23.9	23.9	21.6	14.3	9.1
85°	13.9	13.9	12.8	8.3	5.0
87.5°	4.9	4.9	4.5	2.7	2.2
90°	0.0	0.0	0.0	0.0	0.0
92.5°	8.5	45.0	104.4	30.4	22.9
95°	27.6	109.5	492.3	170.4	105.0
97.5°	50.7	128.3	758.2	542.6	371.8
100°	66.8	139.5	816.0	826.5	636.6
102.5°	84.7	151.5	803.2	1057.9	892.1
105°	112.5	170.6	737.4	1302.6	1238.3
107.5°	140.7	192.8	660.6	1371.6	1428.8
110°	160.2	209.0	616.5	1345.2	1473.8

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	178.9	225.2	586.8	1282.8	1466.2
115°	209.0	252.6	559.2	1184.6	1391.1
117.5°	235.6	276.4	542.8	1077.3	1296.0
120°	256.8	291.0	541.1	1016.0	1225.5
122.5°	273.8	308.0	536.9	962.1	1156.8
125°	295.0	327.1	533.7	885.7	1058.9
127.5°	318.1	348.2	532.0	840.0	982.8
130°	330.0	360.1	529.5	808.2	932.7
132.5°	342.7	372.0	529.5	783.3	897.9
135°	360.8	390.9	527.4	748.1	845.7
137.5°	377.7	407.0	527.1	718.4	802.6
140°	390.5	420.6	526.3	693.7	774.6
142.5°	404.9	430.0	528.8	673.9	746.6
145°	425.5	447.3	531.6	647.5	705.6
147.5°	443.1	464.3	536.3	620.8	671.0
150°	458.4	472.9	538.0	612.0	647.3
152.5°	470.3	485.6	539.7	600.0	632.8
155°	486.0	497.4	544.3	585.2	609.1
157.5°	505.5	512.3	545.4	578.5	595.5
160°	515.7	520.9	549.6	573.3	587.8
162.5°	521.6	527.6	550.5	569.0	580.2
165°	536.9	539.0	550.7	562.6	570.9
167.5°	547.3	545.4	555.6	561.0	564.3
170°	550.7	549.7	553.9	555.0	559.2
172.5°	558.3	554.8	556.4	553.3	556.6
175°	562.4	559.3	557.1	553.8	549.6
177.5°	564.1	559.1	556.4	553.0	553.9
180°	558.1	558.1	558.1	558.1	558.1

(END OF REPORT)