

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: P521811

Luminaire Tested: SQ4-WB-075U-050D-92765-1D-UNV-STD-W-4_4000K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521811
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_4000K
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 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5102.1 lumens
Efficiency: N/A
Efficacy: 114.9 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

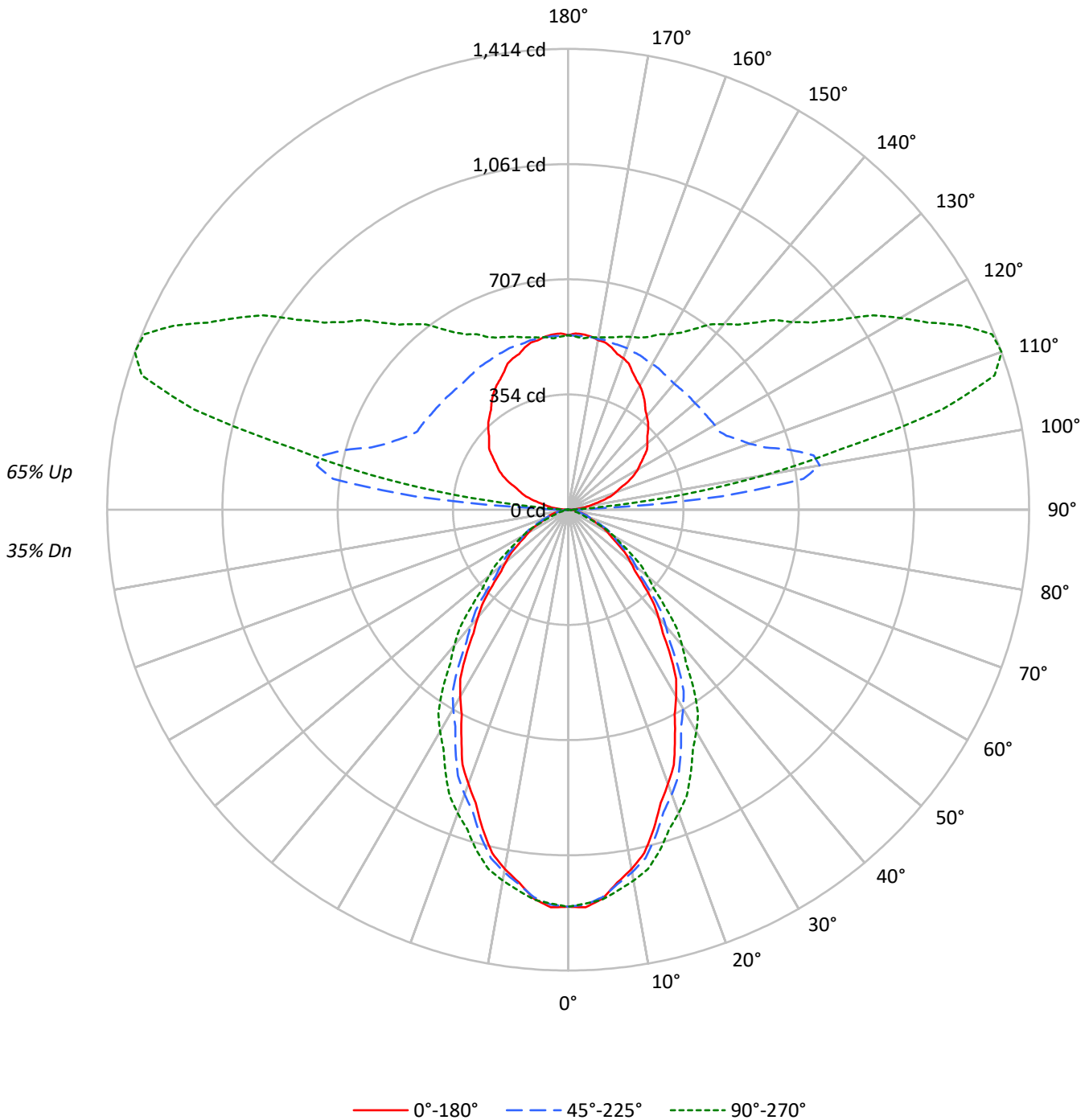
Input Watts (W): 44.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Luminous Intensity Polar Plot



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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									20									20									20										
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	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°	11238	11238	11238
5°	11098	11058	11123
10°	10485	10580	10825
15°	9680	9904	10348
20°	8789	9120	9724
25°	7884	8314	9059
30°	7049	7511	8370
35°	6164	6610	7555
40°	5189	5600	6540
45°	4282	4652	5461
50°	3575	3897	4549
55°	3035	3344	3758
60°	2594	2899	2999
65°	2065	2439	1936
70°	1832	1904	1182
75°	1697	1544	724
80°	1562	1419	627
85°	1419	1302	508

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 5461 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	111.7	2.2
10°-20°	290.6	5.7
20°-30°	376.4	7.4
30°-40°	368.6	7.2
40°-50°	282.1	5.5
50°-60°	188.0	3.7
60°-70°	102.6	2.0
70°-80°	42.8	0.8
80°-90°	12.1	0.2
90°-100°	244.1	4.8
100°-110°	694.5	13.6
110°-120°	665.4	13.0
120°-130°	526.6	10.3
130°-140°	422.7	8.3
140°-150°	330.9	6.5
150°-160°	242.1	4.7
160°-170°	150.0	2.9
170°-180°	50.9	1.0
0°-30°	778.7	15.3
0°-40°	1147.4	22.5
0°-60°	1617.5	31.7
0°-90°	1775.0	34.8
90°-120°	1603.9	31.4
90°-150°	2884.1	56.5
90°-180°	3327.0	65.2
0°-180°	5102.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1218	1218	1218	1218	1218	
5°	1198	1186	1194	1197	1201	111
15°	1013	1010	1037	1065	1083	283
25°	774	776	817	852	890	356
35°	547	550	587	626	671	340
45°	328	334	356	384	418	256
55°	189	196	208	216	234	171
65°	95	102	112	98	89	98
75°	48	48	43	30	20	51
85°	13	13	12	8	5	15
90°	0	0	0	0	0	2
95°	26	105	472	164	101	30
105°	108	164	708	1250	1188	114
115°	201	242	537	1137	1335	198
125°	283	314	512	850	1016	253
135°	346	375	506	718	812	267
145°	408	429	510	621	677	255
155°	466	477	522	562	584	216
165°	515	517	528	540	548	145
175°	540	537	535	532	528	51
180°	536	536	536	536	536	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1218.1	1218.1	1218.1	1218.1	1218.1
2.5°	1221.1	1210.2	1212.9	1212.9	1209.5
5°	1198.3	1186.3	1194.0	1196.8	1201.0
7.5°	1153.8	1144.7	1158.9	1169.3	1177.8
10°	1119.2	1111.4	1129.3	1144.6	1155.5
12.5°	1079.0	1072.4	1094.7	1115.1	1129.5
15°	1013.4	1009.7	1036.9	1065.1	1083.4
17.5°	943.1	941.4	972.5	1005.5	1028.9
20°	895.2	894.7	928.9	963.2	990.4
22.5°	846.9	848.1	884.0	919.7	950.6
25°	774.5	776.5	816.7	852.3	889.9
27.5°	707.4	708.4	749.9	787.4	827.6
30°	661.7	664.3	705.0	743.9	785.7
32.5°	615.9	619.0	658.8	699.0	741.6
35°	547.3	549.9	586.9	626.3	670.8
37.5°	476.5	480.1	512.9	550.2	593.9
40°	430.8	436.0	465.0	500.2	543.0
42.5°	386.7	393.2	420.1	453.5	492.1
45°	328.2	334.4	356.5	383.5	418.5
47.5°	277.7	284.9	301.9	325.1	355.0
50°	249.1	255.9	271.5	288.7	316.9
52.5°	223.8	230.6	244.6	257.8	281.9
55°	188.7	196.5	207.9	215.8	233.6
57.5°	159.8	167.3	176.4	179.9	190.7
60°	140.6	148.9	157.1	156.7	162.5
62.5°	123.0	130.1	138.3	132.7	133.0
65°	94.6	102.4	111.7	97.6	88.7
67.5°	76.4	78.1	87.7	68.1	57.5
70°	67.9	67.9	70.6	52.7	43.8
72.5°	59.8	59.8	57.3	42.9	33.6
75°	47.6	47.6	43.3	29.7	20.3
77.5°	36.7	36.2	33.1	22.2	14.8
80°	29.4	29.4	26.7	17.5	11.8
82.5°	23.0	23.0	20.7	13.7	8.8
85°	13.4	13.4	12.3	7.9	4.8
87.5°	4.7	4.7	4.3	2.6	2.1
90°	0.0	0.0	0.0	0.0	0.0
92.5°	8.1	43.2	100.2	29.2	22.0
95°	26.5	105.1	472.5	163.5	100.8
97.5°	48.7	123.2	727.7	520.7	356.8
100°	64.2	133.8	783.1	793.2	611.0
102.5°	81.3	145.4	770.8	1015.3	856.2
105°	107.9	163.7	707.7	1250.1	1188.4
107.5°	135.0	185.0	634.0	1316.3	1371.2
110°	153.8	200.6	591.6	1290.9	1414.4

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	171.7	216.1	563.1	1231.0	1407.1
115°	200.6	242.4	536.6	1136.8	1335.0
117.5°	226.1	265.3	521.0	1033.9	1243.7
120°	246.4	279.3	519.3	975.0	1176.1
122.5°	262.7	295.6	515.3	923.4	1110.1
125°	283.1	314.0	512.2	850.0	1016.3
127.5°	305.3	334.2	510.6	806.1	943.1
130°	316.7	345.6	508.1	775.6	895.1
132.5°	328.9	357.0	508.1	751.8	861.7
135°	346.2	375.1	506.1	718.0	811.6
137.5°	362.5	390.6	505.9	689.4	770.2
140°	374.7	403.6	505.1	665.7	743.4
142.5°	388.6	412.7	507.5	646.8	716.5
145°	408.3	429.2	510.2	621.4	677.2
147.5°	425.2	445.6	514.6	595.8	644.0
150°	439.9	453.8	516.3	587.3	621.2
152.5°	451.3	466.0	517.9	575.8	607.3
155°	466.4	477.3	522.4	561.6	584.5
157.5°	485.1	491.7	523.4	555.1	571.5
160°	494.9	499.9	527.5	550.2	564.1
162.5°	500.6	506.4	528.3	546.1	556.8
165°	515.3	517.2	528.5	539.9	547.8
167.5°	525.2	523.4	533.2	538.3	541.5
170°	528.5	527.5	531.5	532.7	536.6
172.5°	535.8	532.4	534.0	531.0	534.2
175°	539.7	536.7	534.6	531.5	527.5
177.5°	541.3	536.5	534.0	530.8	531.5
180°	535.6	535.6	535.6	535.6	535.6

(END OF REPORT)