

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: P521020

Luminaire Tested: SQ4-BB-025U-125D-92765-1D-UNV-STD-W-4_5000K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521020
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-025U-125D-92765-1D-UNV-STD-W-4_5000K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 250 LUMENS PER FOOT
Light Source: 2700K-6500K CCT, 90 CRI LEDS, TUNED TO 5000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5401.0 lumens
Efficiency: N/A
Efficacy: 77.5 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-Direct

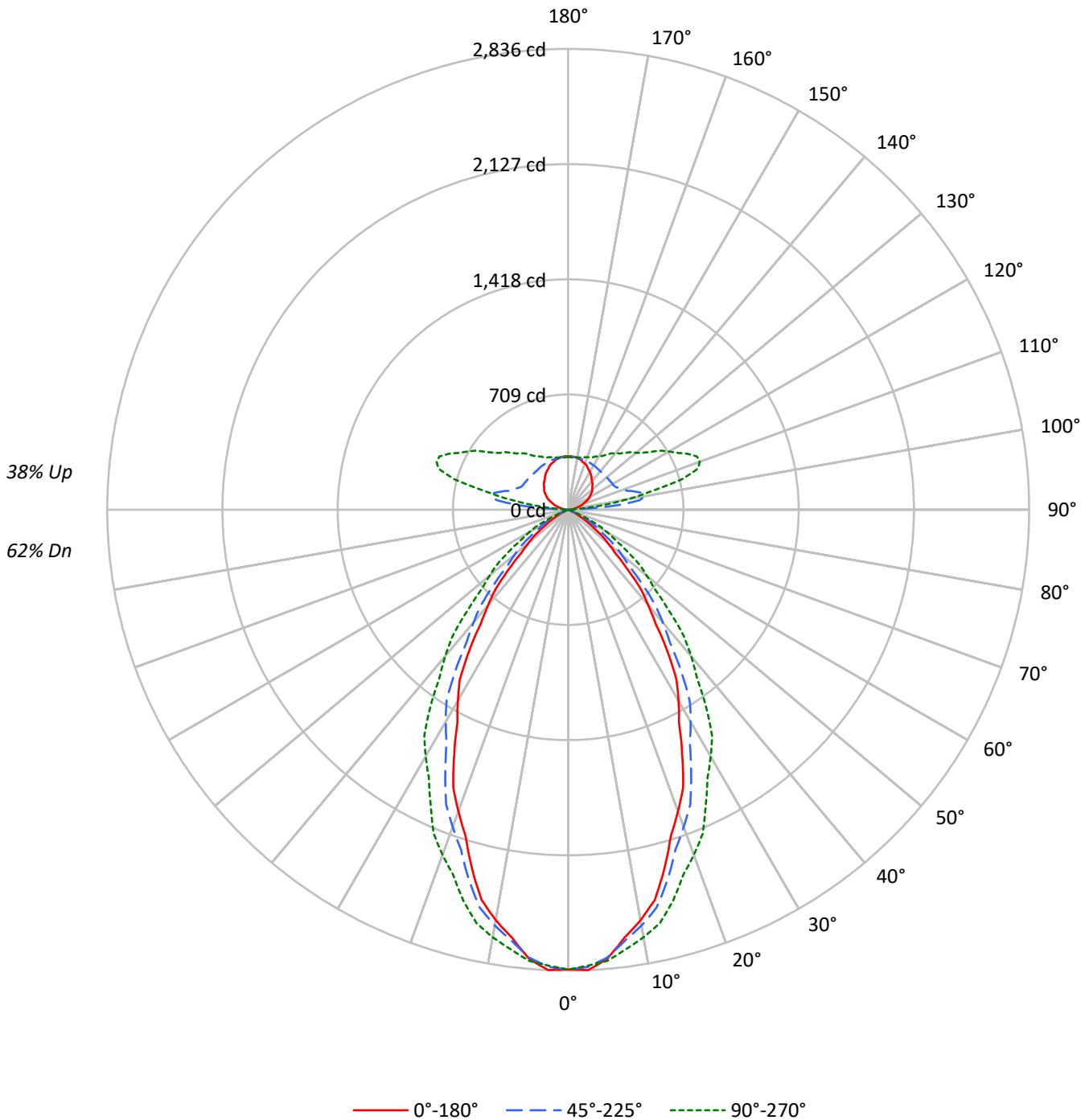
Input Watts (W): 69.7
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	110	110	110	110	103	103	103	103	90	90	90		78	78	78		68	68	68	62
1	103	99	96	93	96	93	91	88	82	81	79		72	71	70		63	62	61	57
2	96	89	84	80	90	84	80	76	75	72	69		66	64	62		58	57	55	52
3	89	81	75	70	83	76	71	67	68	64	61		61	58	55		54	52	50	47
4	82	73	66	61	78	69	63	59	62	58	54		56	52	50		50	47	45	42
5	77	67	60	54	72	63	57	52	57	52	48		52	48	45		46	43	41	38
6	72	61	54	49	67	58	52	47	53	48	44		48	44	40		43	40	37	35
7	67	56	49	44	63	53	47	42	49	43	40		44	40	37		40	37	34	32
8	63	52	45	40	59	49	43	39	45	40	36		41	37	34		37	34	32	29
9	59	48	41	36	56	46	39	35	42	37	33		38	34	31		35	32	29	27
10	55	44	38	33	52	43	36	32	39	34	31		36	32	29		33	29	27	25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	26102	26102	26102
5°	25682	25618	25808
10°	24029	24350	25030
15°	21846	22538	23793
20°	19391	20400	22186
25°	16888	18224	20384
30°	14464	16054	18679
35°	11993	13627	16618
40°	9215	10896	14160
45°	6661	8250	11393
50°	4539	6149	9037
55°	2950	4448	7023
60°	1692	3131	5076
65°	448	1912	2570
70°	221	591	739
75°	96	50	0
80°	74	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 11393 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	258.2	4.8
10°-20°	660.3	12.2
20°-30°	826.6	15.3
30°-40°	763.5	14.1
40°-50°	513.0	9.5
50°-60°	265.0	4.9
60°-70°	83.0	1.5
70°-80°	5.2	0.1
80°-90°	0.1	0.0
90°-100°	148.6	2.8
100°-110°	422.9	7.8
110°-120°	405.2	7.5
120°-130°	320.7	5.9
130°-140°	257.4	4.8
140°-150°	201.5	3.7
150°-160°	147.4	2.7
160°-170°	91.3	1.7
170°-180°	31.0	0.6
0°-30°	1745.0	32.3
0°-40°	2508.5	46.4
0°-60°	3286.5	60.8
0°-90°	3374.8	62.5
90°-120°	976.8	18.1
90°-150°	1756.4	32.5
90°-180°	2026.0	37.5
0°-180°	5401.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2829	2829	2829	2829	2829	
5°	2773	2745	2766	2776	2787	257
15°	2287	2279	2360	2439	2491	637
25°	1659	1672	1790	1913	2002	761
35°	1065	1092	1210	1352	1475	660
45°	510	541	632	756	873	401
55°	183	214	276	355	437	171
65°	20	39	88	106	118	35
75°	3	3	1	0	0	4
85°	0	0	0	0	0	0
90°	0	0	0	0	0	1
95°	16	64	288	100	61	18
105°	66	100	431	761	724	70
115°	122	148	327	692	813	120
125°	172	191	312	518	619	154
135°	211	228	308	437	494	163
145°	249	261	311	378	412	155
155°	284	291	318	342	356	131
165°	314	315	322	329	334	88
175°	329	327	326	324	321	31
180°	326	326	326	326	326	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2829.1	2829.1	2829.1	2829.1	2829.1
2.5°	2835.6	2808.9	2815.9	2815.8	2808.3
5°	2773.0	2744.9	2766.1	2775.9	2786.6
7.5°	2655.8	2633.9	2674.7	2705.3	2727.5
10°	2564.9	2546.2	2599.1	2640.9	2671.7
12.5°	2459.8	2445.4	2509.4	2566.6	2606.0
15°	2287.1	2279.0	2359.6	2438.8	2491.0
17.5°	2102.0	2101.8	2193.7	2292.1	2355.0
20°	1975.0	1979.0	2077.7	2186.1	2259.7
22.5°	1848.0	1857.4	1962.7	2075.8	2160.1
25°	1658.9	1672.2	1790.2	1912.7	2002.4
27.5°	1477.1	1496.6	1620.8	1748.1	1857.3
30°	1357.7	1380.5	1506.9	1640.9	1753.3
32.5°	1240.6	1267.6	1390.9	1532.5	1647.1
35°	1064.8	1091.6	1209.9	1352.3	1475.4
37.5°	883.4	909.6	1025.1	1165.3	1298.3
40°	765.1	794.5	904.7	1040.5	1175.7
42.5°	657.8	687.2	790.8	924.3	1052.0
45°	510.5	541.3	632.3	755.5	873.2
47.5°	388.4	421.9	501.8	613.1	720.5
50°	316.2	349.6	428.4	526.5	629.6
52.5°	258.1	290.5	361.6	454.1	548.6
55°	183.4	214.2	276.5	355.0	436.6
57.5°	126.7	153.2	209.1	274.6	338.6
60°	91.7	117.1	169.7	222.9	275.1
62.5°	61.0	84.3	135.8	176.5	211.6
65°	20.5	39.3	87.6	105.7	117.7
67.5°	10.4	12.5	46.0	48.5	52.6
70°	8.2	8.2	21.9	23.4	27.4
72.5°	6.0	6.0	8.8	11.2	12.0
75°	2.7	2.7	1.4	0.0	0.0
77.5°	1.4	1.4	1.1	0.0	0.0
80°	1.4	1.4	0.0	0.0	0.0
82.5°	0.3	0.3	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°	5.0	26.3	61.0	17.8	13.4
95°	16.1	64.0	287.7	99.6	61.4
97.5°	29.6	75.0	443.1	317.1	217.3
100°	39.1	81.5	476.9	483.0	372.1
102.5°	49.5	88.5	469.4	618.3	521.4
105°	65.7	99.7	431.0	761.3	723.7
107.5°	82.2	112.7	386.1	801.6	835.1
110°	93.6	122.1	360.3	786.2	861.3

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	104.6	131.6	342.9	749.7	856.9
115°	122.2	147.6	326.8	692.3	813.0
117.5°	137.7	161.6	317.3	629.6	757.4
120°	150.1	170.1	316.3	593.8	716.2
122.5°	160.0	180.0	313.8	562.3	676.1
125°	172.4	191.2	311.9	517.6	618.9
127.5°	185.9	203.5	310.9	490.9	574.4
130°	192.9	210.4	309.4	472.3	545.1
132.5°	200.3	217.4	309.4	457.8	524.7
135°	210.8	228.4	308.2	437.2	494.2
137.5°	220.8	237.9	308.1	419.8	469.1
140°	228.2	245.8	307.6	405.4	452.7
142.5°	236.6	251.3	309.1	393.9	436.3
145°	248.7	261.4	310.7	378.4	412.4
147.5°	259.0	271.3	313.4	362.8	392.2
150°	267.9	276.4	314.4	357.7	378.3
152.5°	274.8	283.8	315.4	350.7	369.8
155°	284.0	290.7	318.1	342.0	355.9
157.5°	295.4	299.4	318.7	338.1	348.0
160°	301.4	304.4	321.2	335.1	343.5
162.5°	304.9	308.4	321.7	332.5	339.1
165°	313.8	315.0	321.8	328.8	333.6
167.5°	319.9	318.8	324.7	327.8	329.8
170°	321.8	321.2	323.7	324.4	326.8
172.5°	326.3	324.2	325.2	323.4	325.3
175°	328.7	326.8	325.6	323.6	321.2
177.5°	329.7	326.7	325.2	323.2	323.7
180°	326.2	326.2	326.2	326.2	326.2

(END OF REPORT)