

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: P520994

Luminaire Tested: SQ4-BB-025U-075D-92765-1D-UNV-STD-W-4_5000K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P520994
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-075D-92765-1D-UNV-STD-W-4_5000K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 750 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: 4053.9 lumens
Efficiency: N/A
Efficacy: 88.5 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: General Diffuse

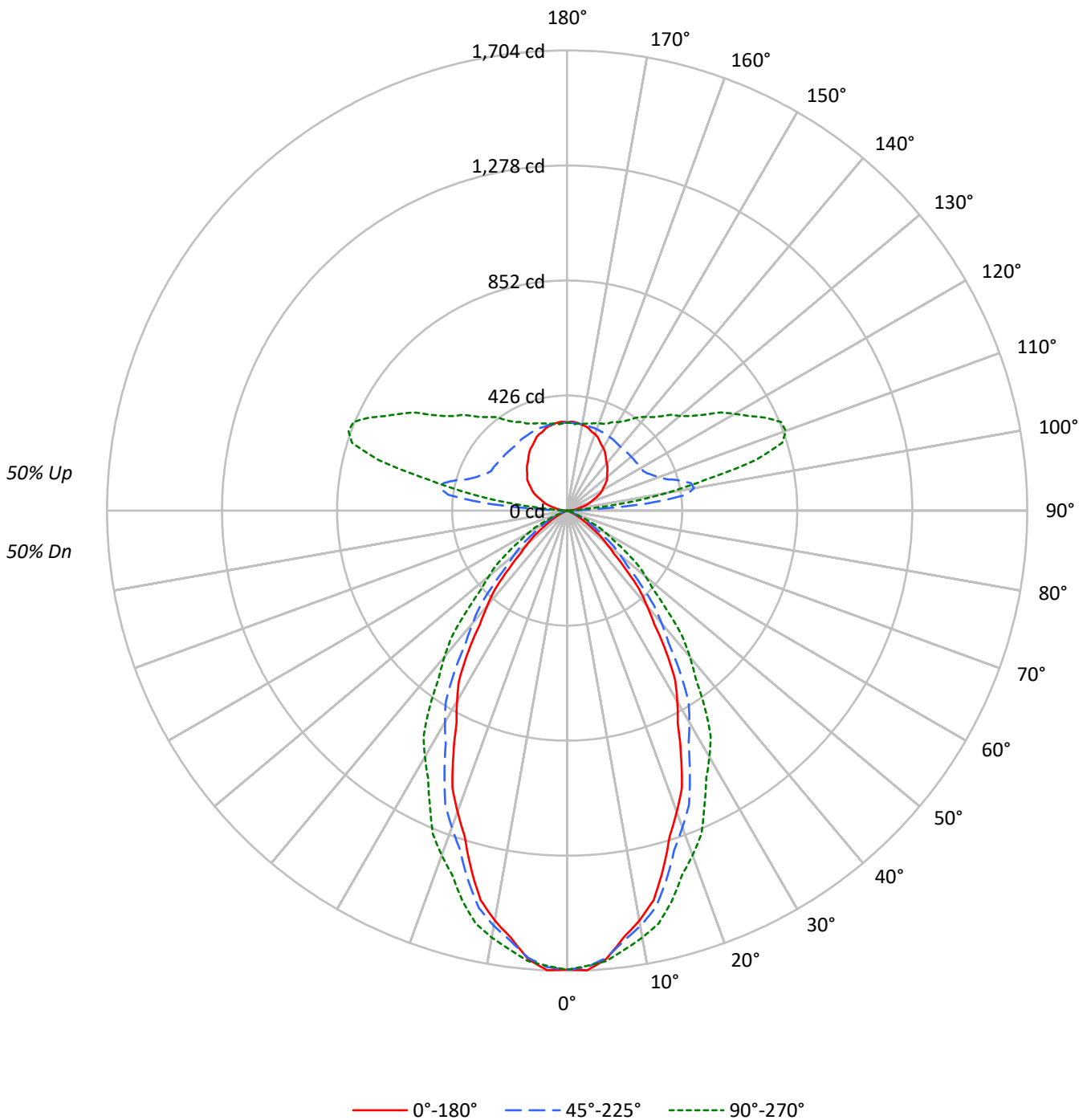
Input Watts (W): 45.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	107	107	107	107	99	99	99	99	83	83	83	69	69	69	56	56	56	50																				
1	100	96	93	90	92	89	86	84	76	74	72	64	62	61	52	52	51	46																				
2	92	86	81	76	85	80	75	72	69	65	63	58	56	54	48	47	46	41																				
3	85	77	71	66	79	72	67	62	62	58	55	53	50	48	45	43	41	37																				
4	79	70	63	58	73	65	59	55	57	52	49	49	45	43	41	39	37	34																				
5	73	63	56	51	68	59	53	48	52	47	43	45	41	38	38	36	34	31																				
6	68	57	50	45	63	54	48	43	47	42	39	41	37	35	35	33	31	28																				
7	64	53	45	40	59	49	43	39	44	39	35	38	34	32	33	30	28	26																				
8	59	48	41	36	55	46	39	35	40	35	32	35	32	29	31	28	26	24																				
9	56	45	38	33	52	42	36	32	37	32	29	33	29	26	29	26	24	22																				
10	52	41	35	30	49	39	33	29	35	30	27	31	27	24	27	24	22	20																				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	15683	15683	15683
5°	15430	15393	15506
10°	14438	14631	15038
15°	13126	13542	14296
20°	11651	12256	13330
25°	10146	10950	12248
30°	8691	9646	11222
35°	7206	8188	9985
40°	5537	6547	8508
45°	4002	4957	6846
50°	2727	3695	5430
55°	1773	2672	4219
60°	1017	1882	3050
65°	269	1148	1543
70°	132	356	442
75°	57	29	0
80°	43	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 6846 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	155.1	3.8
10°-20°	396.7	9.8
20°-30°	496.6	12.3
30°-40°	458.7	11.3
40°-50°	308.2	7.6
50°-60°	159.2	3.9
60°-70°	49.9	1.2
70°-80°	3.1	0.1
80°-90°	0.1	0.0
90°-100°	148.6	3.7
100°-110°	422.9	10.4
110°-120°	405.2	10.0
120°-130°	320.7	7.9
130°-140°	257.4	6.3
140°-150°	201.5	5.0
150°-160°	147.4	3.6
160°-170°	91.3	2.3
170°-180°	31.0	0.8
0°-30°	1048.5	25.9
0°-40°	1507.2	37.2
0°-60°	1974.7	48.7
0°-90°	2027.7	50.0
90°-120°	976.8	24.1
90°-150°	1756.4	43.3
90°-180°	2026.0	50.0
0°-180°	4053.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1700	1700	1700	1700	1700	
5°	1666	1649	1662	1668	1674	154
15°	1374	1369	1418	1465	1497	383
25°	997	1005	1076	1149	1203	457
35°	640	656	727	812	886	396
45°	307	325	380	454	525	241
55°	110	129	166	213	262	103
65°	12	24	53	64	71	21
75°	2	2	1	0	0	2
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°	1699.8	1699.8	1699.8	1699.8	1699.8
2.5°	1703.8	1687.7	1691.9	1691.8	1687.3
5°	1666.1	1649.2	1662.0	1667.9	1674.3
7.5°	1595.7	1582.5	1607.1	1625.5	1638.8
10°	1541.1	1529.8	1561.7	1586.8	1605.2
12.5°	1477.9	1469.3	1507.7	1542.1	1565.8
15°	1374.2	1369.3	1417.8	1465.3	1496.7
17.5°	1263.0	1262.8	1318.1	1377.2	1415.0
20°	1186.7	1189.1	1248.3	1313.5	1357.7
22.5°	1110.4	1116.0	1179.3	1247.2	1297.9
25°	996.7	1004.7	1075.6	1149.2	1203.1
27.5°	887.5	899.2	973.8	1050.3	1115.9
30°	815.8	829.5	905.4	985.9	1053.4
32.5°	745.4	761.6	835.7	920.8	989.6
35°	639.8	655.9	727.0	812.5	886.5
37.5°	530.8	546.5	615.9	700.2	780.1
40°	459.7	477.4	543.6	625.2	706.4
42.5°	395.2	412.9	475.2	555.4	632.1
45°	306.7	325.2	379.9	453.9	524.7
47.5°	233.4	253.5	301.5	368.4	432.9
50°	190.0	210.1	257.4	316.4	378.3
52.5°	155.1	174.6	217.3	272.8	329.6
55°	110.2	128.7	166.1	213.3	262.3
57.5°	76.2	92.1	125.7	165.0	203.5
60°	55.1	70.4	102.0	133.9	165.3
62.5°	36.7	50.7	81.6	106.1	127.1
65°	12.3	23.6	52.6	63.5	70.7
67.5°	6.2	7.5	27.6	29.2	31.6
70°	4.9	4.9	13.2	14.0	16.4
72.5°	3.6	3.6	5.3	6.8	7.2
75°	1.6	1.6	0.8	0.0	0.0
77.5°	0.8	0.8	0.7	0.0	0.0
80°	0.8	0.8	0.0	0.0	0.0
82.5°	0.2	0.2	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)