

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: P521204

Luminaire Tested: SQ4-BB-100U-075D-92765-1D-UNV-STD-W-4_6500K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521204
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-100U-075D-92765-1D-UNV-STD-W-4_6500K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 2700K-6500K CCT, 90 CRI LEDS, TUNED TO 6500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6759.7 lumens
Efficiency: N/A
Efficacy: 105.8 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

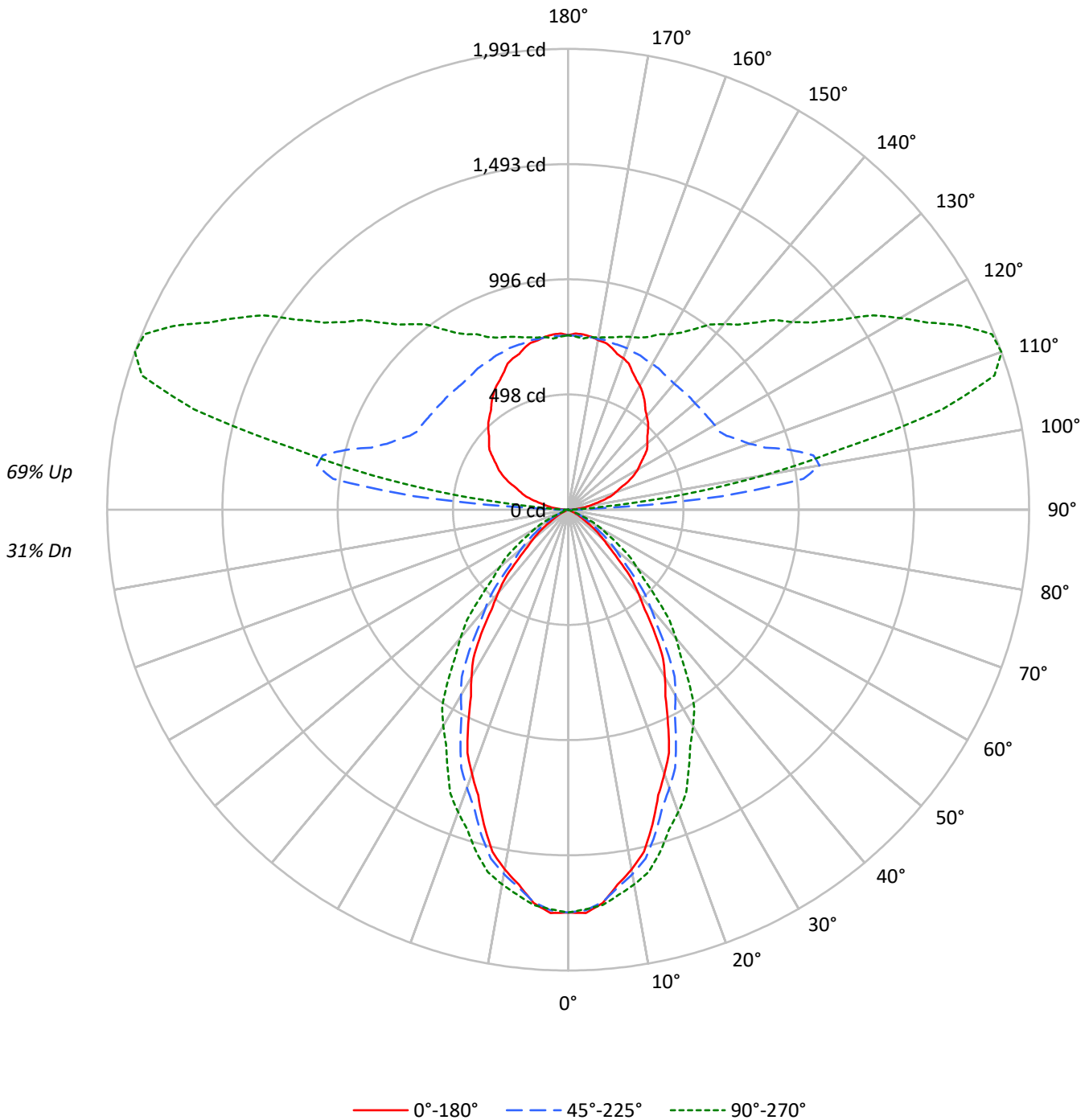
Input Watts (W): 63.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	103	103	103	103	92	92	92	92	73	73	73	55	55	55	38	38	38	31																				
1	95	91	87	84	85	82	79	77	65	63	62	50	49	48	36	35	35	28																				
2	87	81	75	71	78	73	68	65	58	55	53	45	43	42	33	32	31	25																				
3	80	72	65	60	72	65	60	55	53	49	46	41	38	36	30	29	28	23																				
4	74	64	57	52	66	58	52	48	47	43	40	37	34	32	28	26	25	21																				
5	68	58	51	45	61	53	46	42	43	39	35	34	31	29	25	24	22	19																				
6	63	52	45	40	57	48	41	37	39	35	31	31	28	26	24	22	20	17																				
7	58	47	40	35	53	43	37	33	36	31	28	29	25	23	22	20	18	16																				
8	54	43	36	31	49	40	34	29	33	28	25	26	23	21	20	18	17	14																				
9	51	40	33	28	46	36	30	26	30	26	23	24	21	19	19	17	16	13																				
10	48	36	30	25	43	34	28	24	28	24	21	23	20	18	18	16	14	12																				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	16057	16057	16057
5°	15799	15759	15877
10°	14783	14979	15398
15°	13439	13865	14637
20°	11929	12549	13648
25°	10389	11211	12540
30°	8898	9876	11491
35°	7378	8383	10224
40°	5669	6704	8711
45°	4098	5076	7009
50°	2792	3782	5559
55°	1814	2736	4321
60°	1041	1926	3122
65°	275	1177	1581
70°	138	364	453
75°	61	29	0
80°	43	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 7009 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	158.8	2.3
10°-20°	406.2	6.0
20°-30°	508.5	7.5
30°-40°	469.7	6.9
40°-50°	315.6	4.7
50°-60°	163.0	2.4
60°-70°	51.1	0.8
70°-80°	3.2	0.0
80°-90°	0.1	0.0
90°-100°	343.6	5.1
100°-110°	977.6	14.5
110°-120°	936.6	13.9
120°-130°	741.3	11.0
130°-140°	595.0	8.8
140°-150°	465.8	6.9
150°-160°	340.8	5.0
160°-170°	211.1	3.1
170°-180°	71.6	1.1
0°-30°	1073.5	15.9
0°-40°	1543.2	22.8
0°-60°	2021.8	29.9
0°-90°	2076.1	30.7
90°-120°	2257.8	33.4
90°-150°	4059.9	60.1
90°-180°	4684.0	69.3
0°-180°	6759.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1740	1740	1740	1740	1740	
5°	1706	1689	1702	1708	1714	158
15°	1407	1402	1452	1500	1532	392
25°	1020	1029	1101	1177	1232	468
35°	655	672	744	832	908	406
45°	314	333	389	465	537	247
55°	113	132	170	218	269	105
65°	13	24	54	65	72	21
75°	2	2	1	0	0	2
85°	0	0	0	0	0	0
90°	0	0	0	0	0	2
95°	37	148	665	230	142	43
105°	152	230	996	1760	1673	161
115°	282	341	755	1600	1879	278
125°	398	442	721	1196	1431	357
135°	487	528	712	1011	1142	376
145°	575	604	718	875	953	359
155°	656	672	735	791	823	303
165°	725	728	744	760	771	204
175°	760	756	753	748	742	72
180°	754	754	754	754	754	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1740.4	1740.4	1740.4	1740.4	1740.4
2.5°	1744.4	1728.0	1732.3	1732.2	1727.6
5°	1705.9	1688.6	1701.6	1707.7	1714.3
7.5°	1633.8	1620.3	1645.4	1664.2	1677.9
10°	1577.9	1566.4	1598.9	1624.6	1643.6
12.5°	1513.2	1504.3	1543.7	1578.9	1603.1
15°	1407.0	1402.0	1451.6	1500.3	1532.4
17.5°	1293.1	1293.0	1349.5	1410.0	1448.7
20°	1215.0	1217.5	1278.1	1344.8	1390.1
22.5°	1136.8	1142.6	1207.4	1277.0	1328.8
25°	1020.5	1028.7	1101.3	1176.7	1231.8
27.5°	908.7	920.7	997.1	1075.4	1142.6
30°	835.2	849.2	927.0	1009.4	1078.6
32.5°	763.2	779.8	855.6	942.8	1013.2
35°	655.1	671.5	744.3	831.9	907.7
37.5°	543.4	559.6	630.6	716.9	798.7
40°	470.7	488.8	556.6	640.1	723.3
42.5°	404.7	422.8	486.5	568.6	647.1
45°	314.1	333.0	389.0	464.7	537.2
47.5°	239.0	259.5	308.7	377.2	443.2
50°	194.5	215.1	263.5	323.9	387.3
52.5°	158.8	178.7	222.5	279.3	337.5
55°	112.8	131.8	170.1	218.4	268.6
57.5°	78.0	94.3	128.7	169.0	208.3
60°	56.4	72.1	104.4	137.1	169.2
62.5°	37.6	51.9	83.5	108.6	130.2
65°	12.6	24.2	53.9	65.0	72.4
67.5°	6.4	7.7	28.3	29.9	32.3
70°	5.1	5.1	13.5	14.4	16.8
72.5°	3.7	3.7	5.4	6.9	7.4
75°	1.7	1.7	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°	11.5	60.8	141.1	41.1	31.0
95°	37.3	148.0	665.1	230.2	141.9
97.5°	68.5	173.4	1024.3	733.0	502.3
100°	90.3	188.4	1102.3	1116.6	860.1
102.5°	114.4	204.7	1085.1	1429.2	1205.2
105°	151.9	230.4	996.2	1759.7	1672.8
107.5°	190.1	260.4	892.5	1852.9	1930.3
110°	216.4	282.3	832.8	1817.3	1991.1

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	241.7	304.2	792.7	1732.9	1980.7
115°	282.4	341.3	755.4	1600.3	1879.2
117.5°	318.2	373.4	733.3	1455.4	1750.8
120°	346.9	393.1	731.1	1372.5	1655.6
122.5°	369.8	416.1	725.3	1299.8	1562.7
125°	398.5	441.9	721.0	1196.5	1430.6
127.5°	429.7	470.4	718.7	1134.8	1327.7
130°	445.8	486.4	715.3	1091.8	1260.0
132.5°	463.0	502.5	715.3	1058.2	1213.0
135°	487.4	528.0	712.4	1010.7	1142.5
137.5°	510.3	549.8	712.1	970.4	1084.3
140°	527.5	568.2	711.0	937.1	1046.4
142.5°	547.0	580.9	714.4	910.5	1008.6
145°	574.8	604.2	718.2	874.7	953.2
147.5°	598.6	627.2	724.5	838.7	906.5
150°	619.2	638.9	726.8	826.7	874.4
152.5°	635.3	656.0	729.0	810.6	854.9
155°	656.5	671.9	735.4	790.6	822.8
157.5°	682.9	692.1	736.8	781.5	804.4
160°	696.7	703.7	742.5	774.5	794.1
162.5°	704.7	712.8	743.7	768.7	783.8
165°	725.3	728.1	744.0	760.0	771.2
167.5°	739.4	736.8	750.6	757.8	762.3
170°	744.0	742.6	748.3	749.8	755.4
172.5°	754.3	749.5	751.7	747.5	752.0
175°	759.7	755.5	752.6	748.1	742.5
177.5°	762.0	755.3	751.7	747.1	748.3
180°	754.0	754.0	754.0	754.0	754.0

(END OF REPORT)