

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: P521225

Luminaire Tested: SQ4-BB-100U-125D-92765-1D-UNV-STD-W-4_3500K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521225
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-125D-92765-1D-UNV-STD-W-4_3500K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 2700K-6500K CCT, 90 CRI LEDS, TUNED TO 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7598.4 lumens
Efficiency: N/A
Efficacy: 86.1 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

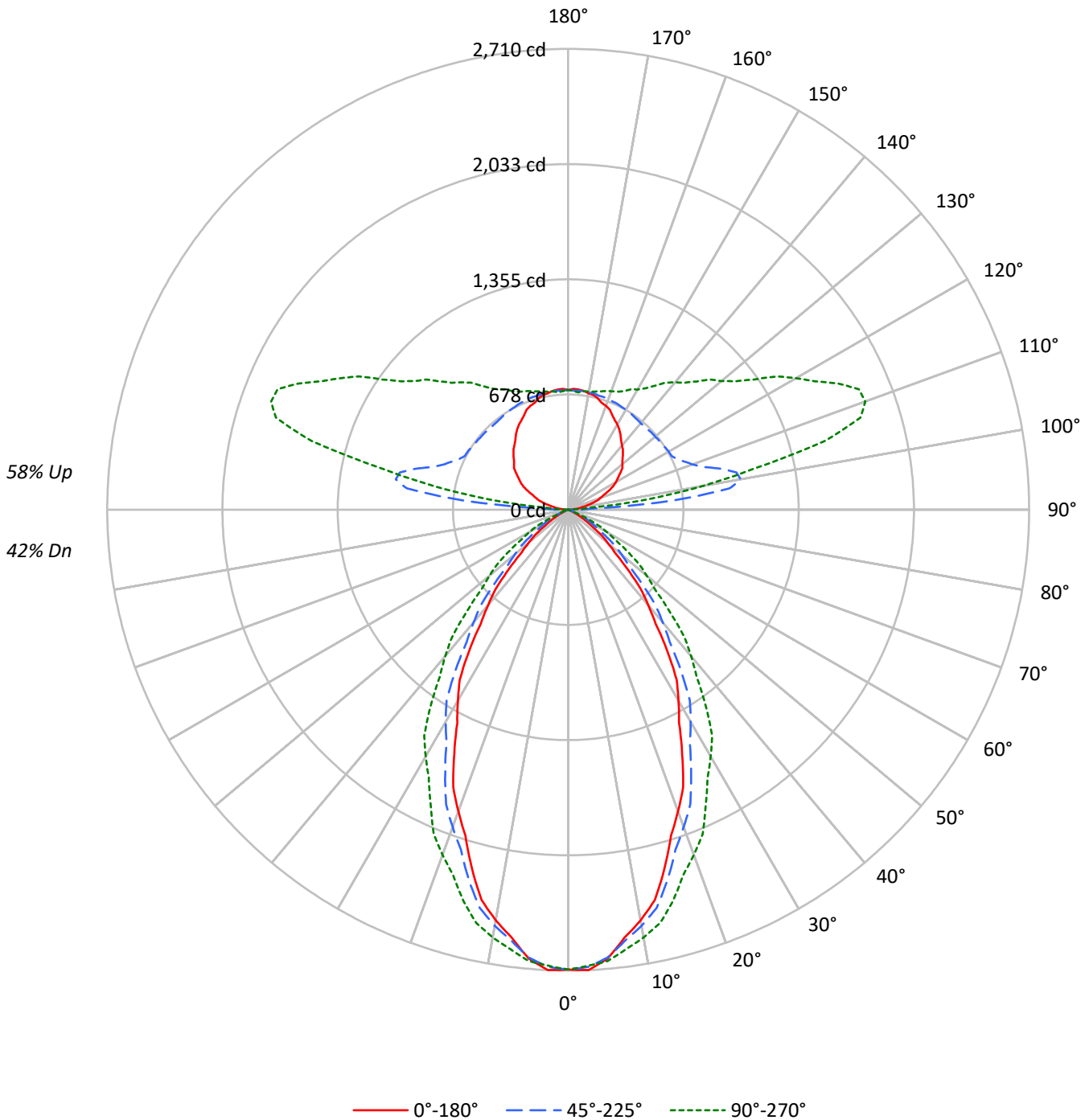
Input Watts (W): 88.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Luminous Intensity Polar Plot



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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									20									20									20										
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	105	105	105	105	96	96	96	96	79	79	79	64	64	64	49	49	49	42																				
1	98	94	91	88	89	86	83	81	72	70	68	58	57	56	46	45	44	39																				
2	90	84	79	74	82	77	73	69	65	61	59	53	51	49	42	41	40	35																				
3	83	75	69	64	76	69	64	60	58	55	51	48	46	43	39	37	36	32																				
4	77	68	61	55	71	62	57	52	53	49	45	44	41	39	36	34	32	29																				
5	71	61	54	49	65	57	50	46	48	44	40	40	37	35	33	31	29	26																				
6	66	55	48	43	61	51	45	41	44	39	36	37	34	31	31	28	27	24																				
7	62	51	43	38	57	47	41	36	40	36	32	34	31	28	29	26	24	22																				
8	57	46	39	34	53	43	37	33	37	33	29	32	28	26	27	24	22	20																				
9	54	43	36	31	50	40	34	30	35	30	27	30	26	24	25	22	21	19																				
10	50	39	33	28	47	37	31	27	32	28	24	28	24	22	23	21	19	17																				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	24949	24949	24949
5°	24548	24487	24670
10°	22969	23275	23925
15°	20881	21544	22743
20°	18536	19499	21208
25°	16141	17420	19484
30°	13826	15345	17854
35°	11464	13026	15884
40°	8808	10416	13535
45°	6367	7886	10891
50°	4338	5878	8638
55°	2820	4251	6712
60°	1618	2993	4853
65°	428	1827	2456
70°	210	564	707
75°	93	46	0
80°	69	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 10891 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	246.8	3.2
10°-20°	631.1	8.3
20°-30°	790.1	10.4
30°-40°	729.8	9.6
40°-50°	490.4	6.5
50°-60°	253.3	3.3
60°-70°	79.3	1.0
70°-80°	5.0	0.1
80°-90°	0.1	0.0
90°-100°	320.7	4.2
100°-110°	912.7	12.0
110°-120°	874.4	11.5
120°-130°	692.1	9.1
130°-140°	555.5	7.3
140°-150°	434.9	5.7
150°-160°	318.2	4.2
160°-170°	197.1	2.6
170°-180°	66.9	0.9
0°-30°	1668.0	22.0
0°-40°	2397.8	31.6
0°-60°	3141.5	41.3
0°-90°	3225.9	42.5
90°-120°	2107.9	27.7
90°-150°	3790.4	49.9
90°-180°	4373.0	57.6
0°-180°	7598.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2704	2704	2704	2704	2704	
5°	2651	2624	2644	2653	2664	246
15°	2186	2178	2256	2331	2381	609
25°	1586	1598	1711	1828	1914	727
35°	1018	1043	1156	1293	1410	631
45°	488	517	604	722	835	383
55°	175	205	264	339	417	164
65°	20	38	84	101	112	33
75°	3	3	1	0	0	4
85°	0	0	0	0	0	0
90°	0	0	0	0	0	1
95°	35	138	621	215	132	40
105°	142	215	930	1643	1562	150
115°	264	319	705	1494	1754	260
125°	372	413	673	1117	1336	333
135°	455	493	665	944	1067	351
145°	537	564	670	817	890	335
155°	613	627	686	738	768	283
165°	677	680	695	710	720	190
175°	709	705	703	698	693	67
180°	704	704	704	704	704	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2704.2	2704.2	2704.2	2704.2	2704.2
2.5°	2710.5	2684.9	2691.7	2691.5	2684.3
5°	2650.6	2623.7	2644.0	2653.4	2663.7
7.5°	2538.6	2517.6	2556.7	2585.9	2607.2
10°	2451.7	2433.8	2484.4	2524.4	2553.8
12.5°	2351.3	2337.4	2398.6	2453.4	2491.0
15°	2186.1	2178.5	2255.5	2331.2	2381.1
17.5°	2009.3	2009.0	2096.9	2190.9	2251.0
20°	1887.9	1891.7	1986.0	2089.6	2160.0
22.5°	1766.4	1775.4	1876.1	1984.1	2064.7
25°	1585.6	1598.4	1711.2	1828.3	1914.0
27.5°	1411.9	1430.6	1549.3	1671.0	1775.3
30°	1297.8	1319.6	1440.4	1568.5	1675.9
32.5°	1185.8	1211.7	1329.5	1464.9	1574.4
35°	1017.8	1043.4	1156.5	1292.6	1410.3
37.5°	844.4	869.4	979.9	1113.9	1241.0
40°	731.3	759.5	864.8	994.6	1123.8
42.5°	628.8	656.9	755.9	883.5	1005.5
45°	488.0	517.4	604.4	722.1	834.7
47.5°	371.3	403.3	479.6	586.1	688.7
50°	302.2	334.2	409.5	503.3	601.8
52.5°	246.7	277.7	345.6	434.0	524.4
55°	175.3	204.7	264.3	339.3	417.3
57.5°	121.1	146.5	199.9	262.5	323.7
60°	87.7	112.0	162.2	213.1	263.0
62.5°	58.3	80.6	129.8	168.7	202.3
65°	19.6	37.5	83.7	101.0	112.5
67.5°	9.9	12.0	44.0	46.4	50.2
70°	7.8	7.8	20.9	22.3	26.2
72.5°	5.8	5.8	8.4	10.7	11.5
75°	2.6	2.6	1.3	0.0	0.0
77.5°	1.3	1.3	1.0	0.0	0.0
80°	1.3	1.3	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°	10.7	56.8	131.7	38.3	28.9
95°	34.8	138.2	620.9	214.9	132.5
97.5°	64.0	161.8	956.3	684.3	468.9
100°	84.3	175.9	1029.1	1042.4	802.9
102.5°	106.8	191.1	1013.1	1334.3	1125.2
105°	141.9	215.1	930.1	1642.9	1561.7
107.5°	177.5	243.1	833.2	1729.9	1802.1
110°	202.1	263.6	777.5	1696.6	1858.8

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	225.6	284.0	740.1	1617.8	1849.2
115°	263.6	318.6	705.3	1494.1	1754.4
117.5°	297.1	348.6	684.6	1358.7	1634.5
120°	323.9	367.0	682.5	1281.4	1545.7
122.5°	345.3	388.4	677.2	1213.5	1459.0
125°	372.0	412.6	673.1	1117.1	1335.6
127.5°	401.2	439.2	671.0	1059.4	1239.5
130°	416.2	454.1	667.8	1019.3	1176.3
132.5°	432.3	469.2	667.8	988.0	1132.4
135°	455.0	493.0	665.1	943.6	1066.6
137.5°	476.4	513.3	664.8	906.0	1012.3
140°	492.5	530.4	663.8	874.9	976.9
142.5°	510.7	542.3	667.0	850.0	941.6
145°	536.6	564.1	670.5	816.7	889.9
147.5°	558.9	585.5	676.4	783.0	846.3
150°	578.1	596.4	678.5	771.8	816.3
152.5°	593.1	612.5	680.6	756.8	798.1
155°	612.9	627.3	686.5	738.1	768.2
157.5°	637.5	646.2	687.9	729.6	751.0
160°	650.4	656.9	693.2	723.1	741.4
162.5°	657.9	665.5	694.3	717.6	731.8
165°	677.2	679.8	694.6	709.5	720.0
167.5°	690.3	687.9	700.7	707.5	711.7
170°	694.6	693.2	698.6	700.0	705.3
172.5°	704.2	699.7	701.8	697.9	702.0
175°	709.3	705.3	702.6	698.4	693.2
177.5°	711.4	705.1	701.8	697.5	698.6
180°	703.9	703.9	703.9	703.9	703.9

(END OF REPORT)