

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: P521956

Luminaire Tested: SQ4-WB-100U-125D-92765-1D-UNV-STD-W-4_5000K

Issue Date: 5-5-2021

Test Information

Test Method: LM-79-2019
Report Number: P521956
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-100U-125D-92765-1D-UNV-STD-W-4_5000K
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 2700K-6500K CCT, 90 CRI LEDS, TUNED TO 5000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

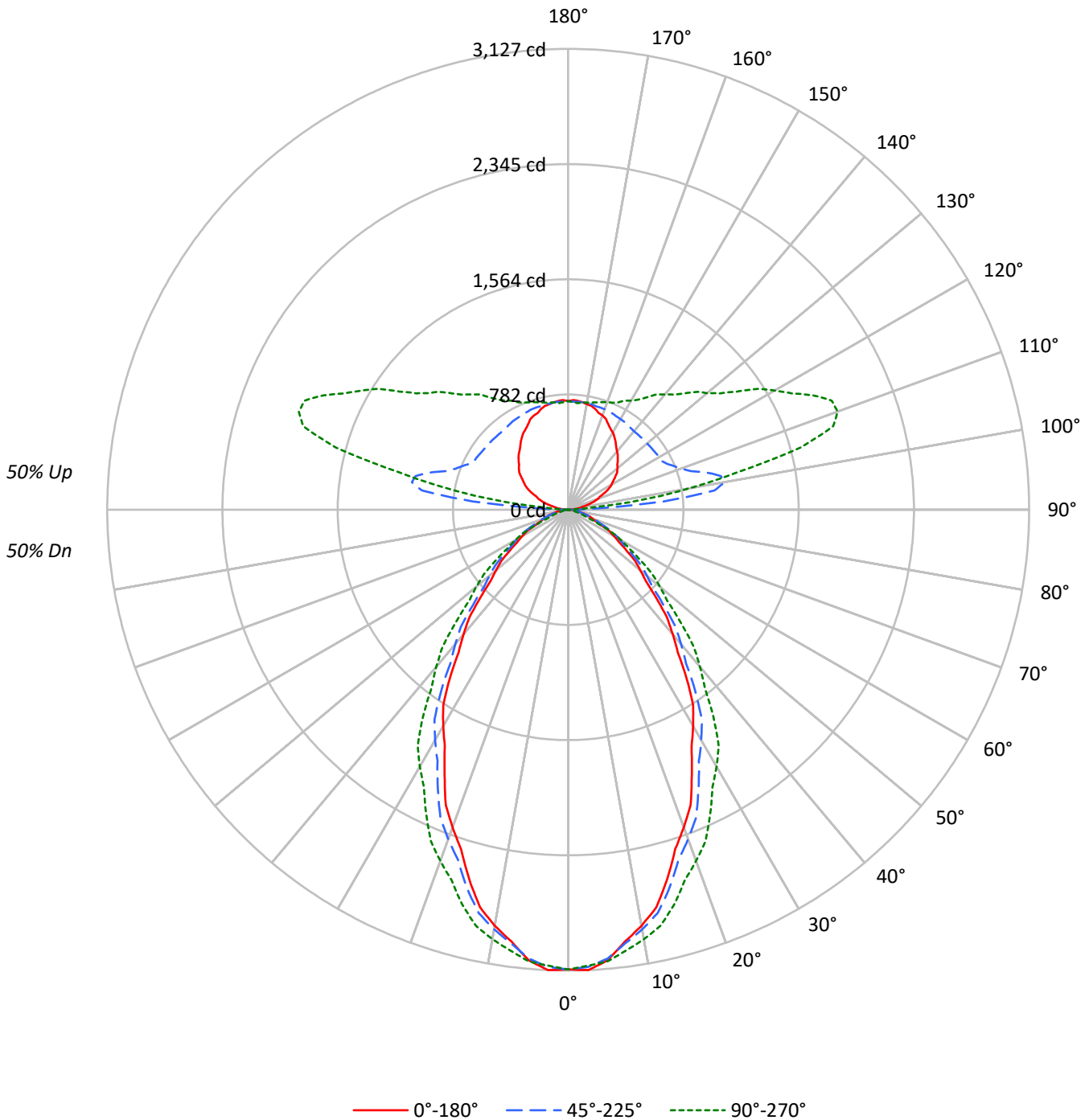
Lumens per Lamp: N/A
Luminaire Lumens: 9119.6 lumens
Efficiency: N/A
Efficacy: 103.6 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 88
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									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	99	95	92	88	91	88	85	82	75	73	71	62	61	60	51	50	49	44																			
2	91	84	79	74	84	78	73	69	67	63	60	56	54	52	47	45	43	39																			
3	84	75	69	63	77	70	64	60	60	56	52	51	48	45	42	40	38	34																			
4	77	67	60	55	71	63	56	52	54	49	46	46	43	40	39	36	34	31																			
5	71	61	53	48	66	57	50	45	49	44	40	42	38	35	35	33	31	28																			
6	66	55	47	42	61	51	45	40	45	40	36	39	35	32	33	30	28	25																			
7	62	50	43	37	57	47	40	36	41	36	32	35	32	29	30	27	25	23																			
8	57	46	39	34	53	43	37	32	38	33	29	33	29	26	28	25	23	21																			
9	54	42	35	30	50	40	33	29	35	30	26	30	26	24	26	23	21	19																			
10	50	39	32	28	47	37	31	26	32	27	24	28	24	22	25	22	19	18																			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	28778	28778	28778
5°	28420	28318	28483
10°	26850	27094	27722
15°	24787	25363	26499
20°	22509	23356	24901
25°	20189	21290	23199
30°	18051	19233	21435
35°	15785	16926	19347
40°	13287	14342	16748
45°	10965	11911	13983
50°	9155	9980	11649
55°	7771	8564	9621
60°	6643	7425	7678
65°	5290	6246	4960
70°	4688	4874	3027
75°	4342	3953	1854
80°	4001	3634	1599
85°	3620	3335	1302

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 13983 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	286.1	3.1
10°-20°	744.2	8.2
20°-30°	963.9	10.6
30°-40°	943.9	10.4
40°-50°	722.5	7.9
50°-60°	481.4	5.3
60°-70°	262.7	2.9
70°-80°	109.5	1.2
80°-90°	31.0	0.3
90°-100°	335.6	3.7
100°-110°	954.8	10.5
110°-120°	914.8	10.0
120°-130°	724.0	7.9
130°-140°	581.1	6.4
140°-150°	455.0	5.0
150°-160°	332.9	3.7
160°-170°	206.2	2.3
170°-180°	70.0	0.8
0°-30°	1994.2	21.9
0°-40°	2938.1	32.2
0°-60°	4142.1	45.4
0°-90°	4545.3	49.8
90°-120°	2205.2	24.2
90°-150°	3965.3	43.5
90°-180°	4574.0	50.2
0°-180°	9119.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3119	3119	3119	3119	3119	
5°	3069	3038	3058	3065	3075	285
15°	2595	2586	2655	2728	2774	725
25°	1983	1989	2091	2182	2279	912
35°	1402	1408	1503	1604	1718	871
45°	840	856	913	982	1072	655
55°	483	503	532	553	598	438
65°	242	262	286	250	227	252
75°	122	122	111	76	52	130
85°	34	34	32	20	12	37
90°	0	0	0	0	0	3
95°	36	144	650	225	139	42
105°	148	225	973	1719	1634	157
115°	276	333	738	1563	1835	272
125°	389	432	704	1169	1397	348
135°	476	516	696	987	1116	367
145°	561	590	701	854	931	351
155°	641	656	718	772	804	296
165°	708	711	727	742	753	199
175°	742	738	735	731	725	70
180°	736	736	736	736	736	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3119.2	3119.2	3119.2	3119.2	3119.2
2.5°	3126.9	3099.1	3106.1	3105.9	3097.3
5°	3068.6	3037.8	3057.6	3064.7	3075.4
7.5°	2954.7	2931.4	2967.6	2994.4	3016.0
10°	2866.0	2846.0	2892.0	2931.0	2959.1
12.5°	2763.1	2746.2	2803.3	2855.6	2892.3
15°	2595.0	2585.7	2655.3	2727.5	2774.3
17.5°	2415.2	2410.6	2490.5	2574.8	2634.7
20°	2292.6	2291.2	2378.8	2466.6	2536.2
22.5°	2168.8	2171.8	2263.8	2355.1	2434.3
25°	1983.2	1988.6	2091.4	2182.5	2278.9
27.5°	1811.6	1814.0	1920.3	2016.5	2119.3
30°	1694.4	1701.1	1805.3	1904.9	2012.0
32.5°	1577.3	1585.0	1687.0	1790.0	1899.2
35°	1401.5	1408.2	1502.8	1604.0	1717.7
37.5°	1220.3	1229.4	1313.4	1409.0	1520.9
40°	1103.2	1116.5	1190.8	1280.8	1390.6
42.5°	990.4	1007.0	1075.8	1161.3	1260.3
45°	840.4	856.4	912.9	982.0	1071.7
47.5°	711.2	729.6	773.0	832.5	909.1
50°	637.8	655.2	695.3	739.4	811.6
52.5°	573.2	590.6	626.3	660.3	721.8
55°	483.1	503.2	532.4	552.6	598.1
57.5°	409.2	428.5	451.7	460.8	488.3
60°	360.0	381.4	402.4	401.4	416.1
62.5°	315.1	333.3	354.2	339.7	340.5
65°	242.3	262.3	286.1	250.0	227.2
67.5°	195.7	200.0	224.5	174.3	147.3
70°	173.8	173.8	180.7	135.0	112.2
72.5°	153.0	153.0	146.7	109.8	86.0
75°	121.8	121.8	110.9	76.1	52.0
77.5°	93.9	92.8	84.9	56.8	37.8
80°	75.3	75.3	68.4	44.8	30.1
82.5°	58.9	58.9	53.1	35.0	22.4
85°	34.2	34.2	31.5	20.3	12.3
87.5°	12.0	12.0	10.9	6.5	5.5
90°	0.0	0.0	0.0	0.0	0.0
92.5°	11.2	59.4	137.8	40.1	30.2
95°	36.4	144.5	649.6	224.8	138.6
97.5°	66.9	169.3	1000.5	715.9	490.6
100°	88.2	184.0	1076.6	1090.5	840.0
102.5°	111.7	199.9	1059.8	1395.9	1177.1
105°	148.4	225.1	973.0	1718.7	1633.8
107.5°	185.6	254.4	871.7	1809.7	1885.3
110°	211.4	275.7	813.4	1774.9	1944.6

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	236.0	297.1	774.2	1692.5	1934.6
115°	275.8	333.3	737.8	1563.0	1835.4
117.5°	310.8	364.7	716.3	1421.4	1710.0
120°	338.8	384.0	714.0	1340.5	1617.0
122.5°	361.2	406.4	708.4	1269.5	1526.3
125°	389.2	431.6	704.2	1168.6	1397.2
127.5°	419.7	459.4	702.0	1108.3	1296.7
130°	435.4	475.1	698.6	1066.4	1230.6
132.5°	452.2	490.8	698.6	1033.6	1184.7
135°	476.0	515.7	695.8	987.1	1115.8
137.5°	498.4	537.0	695.5	947.8	1059.0
140°	515.2	554.9	694.4	915.2	1022.0
142.5°	534.3	567.4	697.8	889.2	985.1
145°	561.4	590.2	701.4	854.4	931.0
147.5°	584.7	612.6	707.6	819.1	885.4
150°	604.8	624.0	709.8	807.5	854.0
152.5°	620.5	640.8	712.1	791.7	835.0
155°	641.2	656.3	718.2	772.1	803.6
157.5°	667.0	676.0	719.6	763.2	785.7
160°	680.4	687.3	725.2	756.5	775.6
162.5°	688.3	696.2	726.3	750.8	765.5
165°	708.4	711.2	726.6	742.3	753.2
167.5°	722.1	719.7	733.1	740.2	744.5
170°	726.6	725.2	730.8	732.3	737.8
172.5°	736.7	732.0	734.2	730.1	734.5
175°	742.0	737.9	735.0	730.7	725.2
177.5°	744.3	737.7	734.2	729.7	730.8
180°	736.4	736.4	736.4	736.4	736.4

(END OF REPORT)