

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: P855127

Luminaire Tested: SQ2-PP3-100U-125D-835-UNV-STD-W-4

Issue Date: 7/12/2024

Test Information

Test Method: LM-79-2019
Report Number: P855127
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2104-222-12, G2-2308-131-7)
Test Lab: INNOVATION CENTER
Issue Date: 7/12/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ2-PP3-100U-125D-835-UNV-STD-W-4
Description: CORELITE SQ2 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: -
Ballast/Driver: -

Summary

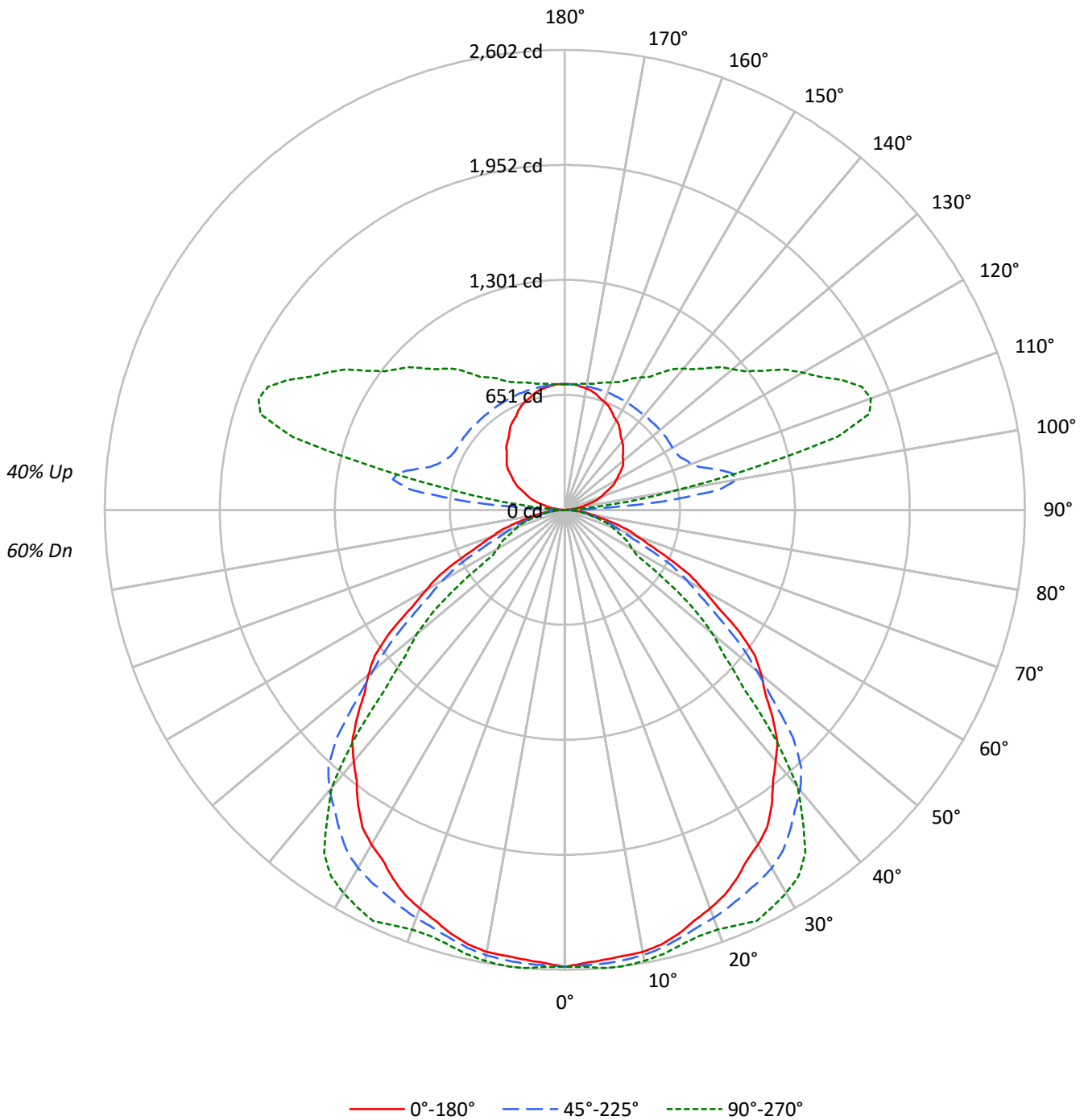
Lumens per Lamp: N/A
Luminaire Lumens: 10941.7 lumens
Efficiency: N/A
Efficacy: 133.8 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.41 / 1.4
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 81.8
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					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	0	
RCR																						
0	109	109	109	109	102	102	102	102	89	89	89	76	76	76	65	65	65	60				
1	101	96	93	89	94	90	87	84	79	76	74	68	66	65	58	57	56	51				
2	92	85	79	74	86	80	74	70	70	66	62	61	58	55	52	50	48	44				
3	84	75	68	62	79	71	64	59	62	57	53	54	50	47	47	44	42	38				
4	77	67	59	53	72	63	56	51	55	50	46	48	44	41	42	39	36	33				
5	71	60	52	46	66	56	49	44	50	44	40	44	39	36	38	35	32	29				
6	66	54	46	40	61	51	44	38	45	39	35	40	35	31	35	31	28	25				
7	61	49	41	35	57	46	39	34	41	35	31	36	31	28	32	28	25	23				
8	57	44	37	31	53	42	35	30	37	32	27	33	28	25	29	25	23	20				
9	53	41	33	28	49	38	32	27	34	29	25	30	26	23	27	23	20	18				
10	49	37	30	25	46	35	29	24	32	26	22	28	24	20	25	21	19	17				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	41743	41743	41743
5°	41417	41772	42169
10°	41627	41940	42478
15°	41526	41937	42576
20°	41230	42216	43436
25°	40996	42749	45719
30°	40762	43617	46674
35°	40186	43741	46759
40°	39112	43663	43203
45°	37943	41687	32887
50°	36452	35560	27392
55°	33926	29928	19696
60°	29214	25682	14121
65°	24642	19839	13887
70°	20516	15611	13294
75°	17386	13468	12445
80°	14737	11688	11186
85°	11634	9615	6076

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 41687 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	246.2	2.2
10°-20°	712.5	6.5
20°-30°	1116.2	10.2
30°-40°	1377.0	12.6
40°-50°	1296.4	11.8
50°-60°	917.9	8.4
60°-70°	523.0	4.8
70°-80°	258.8	2.4
80°-90°	64.5	0.6
90°-100°	297.2	2.7
100°-110°	898.9	8.2
110°-120°	877.5	8.0
120°-130°	717.1	6.6
130°-140°	585.3	5.3
140°-150°	455.7	4.2
150°-160°	328.5	3.0
160°-170°	201.1	1.8
170°-180°	67.9	0.6
0°-30°	2074.9	19.0
0°-40°	3451.8	31.5
0°-60°	5666.1	51.8
0°-90°	6512.5	59.5
90°-120°	2073.7	19.0
90°-150°	3831.8	35.0
90°-180°	4429.0	40.5
0°-180°	10941.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2585	2585	2585	2585	2585	
5°	2555	2601	2577	2583	2602	243
15°	2484	2519	2509	2534	2547	700
25°	2301	2360	2400	2497	2566	1060
35°	2039	2095	2219	2346	2372	1272
45°	1662	1787	1826	1547	1440	1279
55°	1205	1277	1063	801	700	1063
65°	645	680	519	366	364	648
75°	279	308	216	202	200	302
85°	63	58	52	41	33	74
90°	0	2	13	8	7	4
95°	37	117	561	207	131	44
105°	156	220	883	1676	1593	164
115°	278	332	714	1477	1735	275
125°	389	431	704	1167	1373	345
135°	466	515	699	1006	1132	361
145°	544	584	699	866	946	341
155°	620	641	704	776	806	285
165°	678	686	707	734	743	191
175°	709	709	711	716	714	67
180°	712	712	712	712	712	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2585.4	2585.4	2585.4	2585.4	2585.4
2.5°	2565.8	2602.1	2578.8	2583.4	2587.7
5°	2555.4	2600.8	2577.3	2583.1	2601.8
7.5°	2545.6	2592.1	2569.1	2578.8	2601.8
10°	2539.0	2579.1	2558.1	2572.2	2590.9
12.5°	2519.3	2557.2	2538.4	2556.9	2573.4
15°	2484.3	2519.1	2508.9	2533.8	2547.1
17.5°	2436.8	2479.0	2478.9	2514.1	2528.0
20°	2399.6	2450.4	2457.0	2501.3	2528.0
22.5°	2360.2	2419.6	2430.7	2497.4	2543.4
25°	2301.2	2360.0	2399.6	2496.8	2566.3
27.5°	2232.3	2290.6	2372.3	2481.2	2536.3
30°	2186.4	2242.5	2339.5	2452.7	2503.5
32.5°	2129.6	2187.8	2291.4	2413.3	2459.7
35°	2038.8	2094.9	2219.2	2345.6	2372.3
37.5°	1934.5	1998.1	2137.3	2207.8	2209.3
40°	1855.7	1938.5	2071.6	2084.5	2049.8
42.5°	1779.2	1885.6	1979.8	1922.1	1767.8
45°	1661.7	1787.2	1825.7	1547.2	1440.3
47.5°	1536.5	1660.5	1599.4	1297.6	1223.9
50°	1451.2	1568.8	1415.7	1160.0	1090.5
52.5°	1355.1	1459.8	1251.7	1028.0	922.1
55°	1205.2	1277.4	1063.2	801.2	699.7
57.5°	1024.8	1075.6	909.0	601.4	487.5
60°	904.7	944.7	795.3	493.4	437.3
62.5°	795.3	831.1	677.3	428.7	408.9
65°	645.0	679.8	519.3	366.2	363.5
67.5°	513.2	551.2	398.5	319.7	316.5
70°	434.6	474.6	330.7	286.9	281.6
72.5°	368.9	406.9	280.4	251.9	248.7
75°	278.7	308.2	215.9	202.2	199.5
77.5°	202.2	220.9	160.7	153.6	150.9
80°	158.5	166.6	125.7	122.9	120.3
82.5°	119.2	116.4	95.1	92.2	87.5
85°	62.8	57.5	51.9	40.9	32.8
87.5°	19.7	20.1	11.4	8.1	7.9
90°	0.0	2.2	13.4	7.8	6.7
92.5°	12.6	50.6	181.4	60.2	43.3
95°	36.9	116.6	560.9	207.2	130.7
97.5°	71.3	148.4	883.9	585.0	356.1
100°	92.7	168.1	987.6	954.8	641.3
102.5°	116.9	189.7	966.2	1339.2	1067.6
105°	156.4	219.8	882.6	1676.2	1593.2
107.5°	194.0	254.5	802.2	1709.6	1805.7
110°	219.0	276.9	761.9	1667.5	1842.3



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	243.1	299.2	737.8	1597.1	1818.2
115°	278.2	331.7	714.0	1477.3	1735.1
117.5°	313.0	363.7	705.5	1365.0	1628.9
120°	336.3	384.3	702.8	1299.5	1553.0
122.5°	357.7	403.2	702.8	1241.9	1476.1
125°	388.8	431.4	703.9	1166.6	1373.0
127.5°	414.1	458.2	702.8	1109.8	1285.9
130°	430.1	476.0	702.8	1077.3	1236.8
132.5°	444.4	491.1	701.9	1047.6	1194.8
135°	465.9	515.0	699.4	1006.2	1131.8
137.5°	489.8	536.5	699.4	961.9	1078.4
140°	504.9	550.9	699.4	933.2	1043.5
142.5°	520.2	564.4	698.5	906.9	1003.3
145°	544.1	584.5	699.4	865.5	946.3
147.5°	568.0	602.3	700.7	831.3	893.3
150°	583.3	614.8	701.6	812.3	864.7
152.5°	597.5	625.7	702.5	796.0	838.8
155°	620.0	640.9	703.9	776.1	805.5
157.5°	639.7	656.6	705.3	761.3	781.9
160°	651.4	665.5	706.0	752.2	767.5
162.5°	662.9	673.7	707.0	744.2	756.9
165°	678.2	685.8	707.2	734.2	742.9
167.5°	691.1	695.1	708.5	726.5	730.3
170°	698.2	700.5	709.4	722.9	723.9
172.5°	702.8	704.0	709.4	719.3	719.5
175°	709.4	709.4	710.6	716.1	714.0
177.5°	712.6	711.7	710.8	713.4	711.7
180°	711.7	711.7	711.7	711.7	711.7



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CIE UGR TABLE:

Reflectances:											
Ceiling		0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
Wall		0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
Reference plane		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions		Viewed crosswise					Viewed endwise				
X=2H	Y=2H	21.35	22.27	22.23	23.16	24.29	17.75	18.66	18.63	19.56	20.69
	3H	22.45	23.27	23.34	24.17	25.33	18.86	19.67	19.75	20.58	21.73
	4H	22.80	23.57	23.70	24.48	25.64	19.32	20.09	20.23	21.00	22.17
	6H	23.01	23.72	23.93	24.64	25.82	19.67	20.38	20.59	21.30	22.48
	8H	23.06	23.74	23.99	24.67	25.85	19.76	20.43	20.68	21.36	22.54
	12H	23.08	23.72	24.01	24.65	25.85	19.77	20.42	20.71	21.34	22.55
4H	2H	21.47	22.24	22.38	23.15	24.31	18.47	19.24	19.38	20.15	21.31
	3H	22.78	23.42	23.70	24.36	25.54	19.72	20.36	20.65	21.30	22.48
	4H	23.26	23.84	24.19	24.77	25.98	20.28	20.86	21.21	21.80	23.01
	6H	23.60	24.10	24.54	25.06	26.26	20.72	21.22	21.67	22.18	23.39
	8H	23.69	24.16	24.64	25.11	26.33	20.85	21.31	21.80	22.27	23.49
	12H	23.73	24.15	24.70	25.12	26.35	20.88	21.30	21.84	22.27	23.49
8H	4H	23.28	23.74	24.23	24.70	25.92	20.56	21.02	21.51	21.98	23.20
	6H	23.71	24.10	24.69	25.09	26.31	21.11	21.49	22.08	22.49	23.71
	8H	23.87	24.21	24.85	25.19	26.43	21.29	21.63	22.28	22.62	23.86
	12H	23.96	24.26	24.94	25.24	26.52	21.37	21.67	22.35	22.65	23.93
12H	4H	23.24	23.66	24.21	24.63	25.86	20.57	20.99	21.54	21.96	23.19
	6H	23.70	24.04	24.68	25.03	26.26	21.16	21.50	22.14	22.48	23.72
	8H	23.87	24.17	24.86	25.15	26.44	21.37	21.67	22.35	22.65	23.93