

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: P855128

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

Issue Date: 7/12/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P855128  
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-100D-835-UNV-STD-W-4  
Description: CORELITE SQ2 SUSPENDED LED LUMINAIRE  
DOWNLIGHT 1000 LUMENS PER FOOT  
UPLIGHT 1000 LUMENS PER FOOT  
Light Source: -  
Ballast/Driver: -

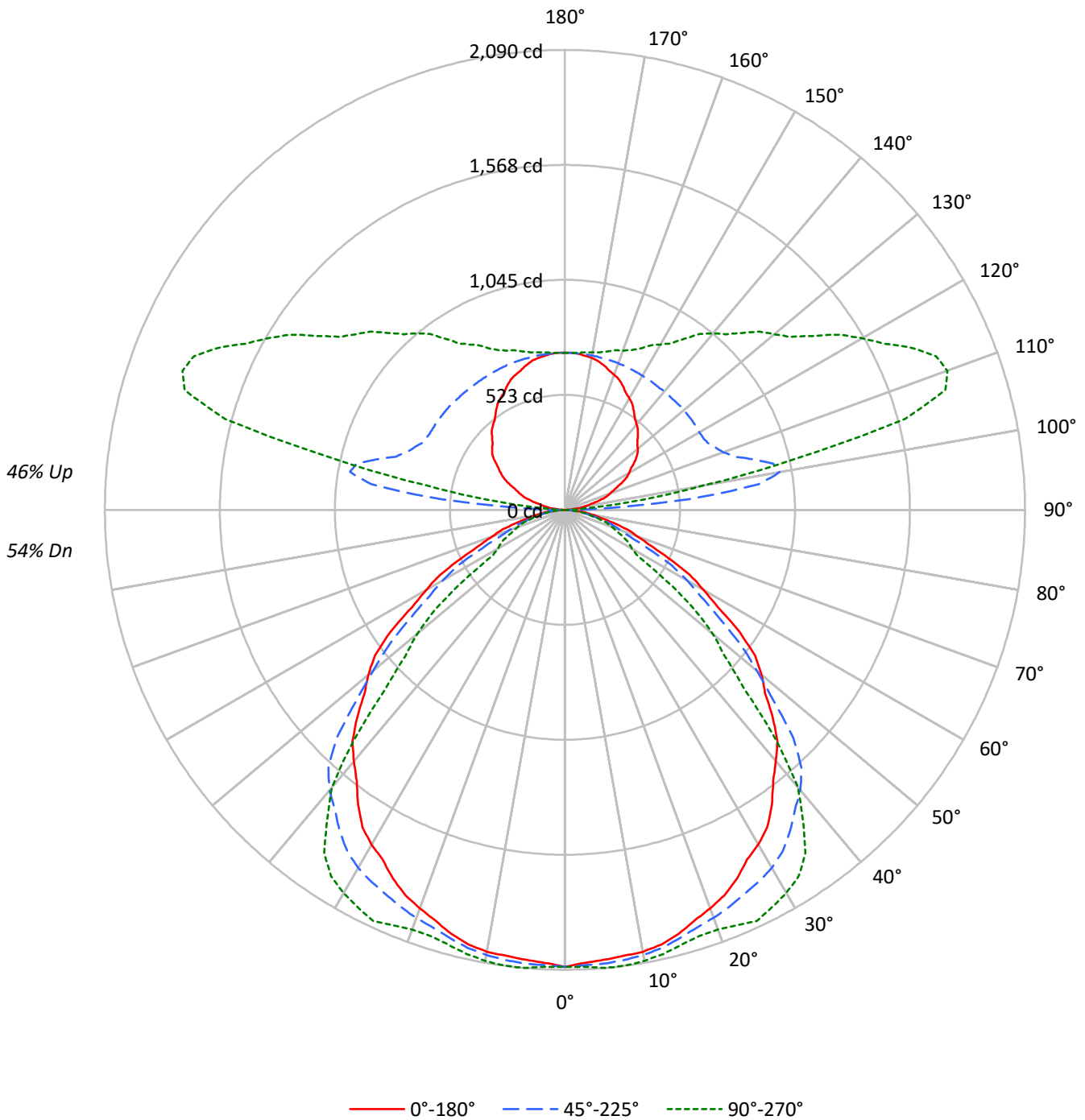
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 9675.2 lumens  
Efficiency: N/A  
Efficacy: 137.8 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): 70.2  
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				
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0		
RCR																				
0	108	108	108	108	100	100	100	100	86	86	86	72	72	72	60	60	60	54		
1	99	95	91	88	92	88	85	82	76	74	72	64	63	61	54	53	52	47		
2	91	84	78	73	84	78	73	69	67	63	60	57	55	52	48	46	44	40		
3	83	74	67	61	77	69	63	58	60	55	51	51	48	45	43	40	38	34		
4	76	66	58	52	71	61	55	49	53	48	44	46	42	39	39	36	33	30		
5	70	59	51	45	65	55	48	43	48	42	38	41	37	34	35	32	29	26		
6	65	53	45	39	60	50	42	37	43	38	33	37	33	30	32	29	26	23		
7	60	48	40	34	56	45	38	33	39	34	30	34	30	26	29	26	23	21		
8	56	43	36	31	52	41	34	29	36	30	26	31	27	24	27	23	21	18		
9	52	40	32	27	48	37	31	26	33	27	24	29	24	21	25	21	19	17		
10	48	36	29	25	45	34	28	23	30	25	21	26	22	19	23	19	17	15		

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	33525	33525	33525
5°	33263	33546	33867
10°	33431	33682	34115
15°	33351	33680	34195
20°	33112	33905	34885
25°	32924	34331	36718
30°	32738	35029	37483
35°	32274	35130	37552
40°	31413	35068	34697
45°	30474	33479	26414
50°	29276	28560	21999
55°	27246	24034	15817
60°	23460	20625	11341
65°	19790	15931	11156
70°	16475	12538	10674
75°	13961	10817	9994
80°	11836	9382	8973
85°	9355	7744	4891

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 45°  
 Vertical Angle: 45°  
 Luminance: 33479 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	197.7	2.0
10°-20°	572.2	5.9
20°-30°	896.4	9.3
30°-40°	1105.8	11.4
40°-50°	1041.2	10.8
50°-60°	737.2	7.6
60°-70°	420.0	4.3
70°-80°	207.8	2.1
80°-90°	52.1	0.5
90°-100°	298.3	3.1
100°-110°	902.1	9.3
110°-120°	880.6	9.1
120°-130°	719.6	7.4
130°-140°	587.4	6.1
140°-150°	457.2	4.7
150°-160°	329.6	3.4
160°-170°	201.8	2.1
170°-180°	68.1	0.7
0°-30°	1666.3	17.2
0°-40°	2772.2	28.7
0°-60°	4550.6	47.0
0°-90°	5230.5	54.1
90°-120°	2081.0	21.5
90°-150°	3845.2	39.7
90°-180°	4445.0	45.9
0°-180°	9675.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2076	2076	2076	2076	2076	
5°	2052	2089	2070	2075	2090	196
15°	1995	2023	2015	2035	2046	562
25°	1848	1895	1927	2005	2061	851
35°	1637	1682	1782	1884	1905	1021
45°	1335	1435	1466	1243	1157	1027
55°	968	1026	854	644	562	854
65°	518	546	417	294	292	520
75°	224	248	173	162	160	243
85°	50	46	42	33	26	59
90°	0	2	14	8	7	4
95°	37	117	563	208	131	44
105°	157	221	886	1682	1599	165
115°	279	333	716	1482	1741	276
125°	390	433	706	1171	1378	347
135°	468	517	702	1010	1136	362
145°	546	586	702	868	950	342
155°	622	643	706	779	808	286
165°	681	688	710	737	746	192
175°	712	712	713	719	716	68
180°	714	714	714	714	714	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2076.4	2076.4	2076.4	2076.4	2076.4
2.5°	2060.6	2089.8	2071.2	2074.7	2078.2
5°	2052.3	2088.7	2069.8	2074.6	2089.6
7.5°	2044.4	2081.7	2063.2	2071.2	2089.6
10°	2039.1	2071.3	2054.4	2065.7	2080.8
12.5°	2023.3	2053.7	2038.7	2053.4	2066.8
15°	1995.2	2023.1	2014.9	2035.0	2045.7
17.5°	1957.0	1990.9	1990.8	2019.1	2030.3
20°	1927.1	1968.0	1973.3	2008.8	2030.3
22.5°	1895.5	1943.2	1952.1	2005.6	2042.7
25°	1848.1	1895.3	1927.1	2005.2	2061.1
27.5°	1792.8	1839.6	1905.2	1992.6	2036.9
30°	1756.0	1801.0	1878.9	1969.8	2010.5
32.5°	1710.3	1757.1	1840.2	1938.1	1975.4
35°	1637.4	1682.4	1782.3	1883.8	1905.2
37.5°	1553.5	1604.7	1716.4	1773.1	1774.3
40°	1490.4	1556.9	1663.8	1674.1	1646.2
42.5°	1429.0	1514.3	1590.0	1543.7	1419.7
45°	1334.6	1435.4	1466.2	1242.6	1156.8
47.5°	1234.0	1333.6	1284.4	1042.1	982.8
50°	1165.5	1260.0	1137.0	931.6	875.8
52.5°	1088.2	1172.4	1005.3	825.5	740.6
55°	967.9	1026.0	853.8	643.5	561.9
57.5°	823.1	863.9	730.0	483.0	391.6
60°	726.5	758.7	638.7	396.3	351.2
62.5°	638.7	667.5	543.9	344.3	328.4
65°	518.0	545.9	417.0	294.1	292.0
67.5°	412.3	442.7	320.0	256.8	254.2
70°	349.0	381.1	265.6	230.4	226.1
72.5°	296.3	326.8	225.2	202.3	199.7
75°	223.8	247.5	173.4	162.4	160.2
77.5°	162.4	177.4	129.0	123.4	121.2
80°	127.3	133.8	100.9	98.7	96.5
82.5°	95.7	93.6	76.4	74.1	70.3
85°	50.5	46.2	41.8	32.8	26.4
87.5°	15.8	16.3	9.7	6.8	6.6
90°	0.0	2.2	13.5	7.8	6.7
92.5°	12.6	50.7	182.1	60.4	43.5
95°	37.0	117.0	562.8	207.9	131.2
97.5°	71.5	148.9	887.0	587.0	357.4
100°	93.0	168.7	991.1	958.2	643.6
102.5°	117.2	190.2	969.6	1343.9	1071.3
105°	157.0	220.6	885.8	1682.1	1598.7
107.5°	194.6	255.3	805.0	1715.5	1812.0
110°	219.8	277.8	764.7	1673.4	1848.8



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	244.0	300.3	740.4	1602.7	1824.6
115°	279.2	332.8	716.5	1482.4	1741.2
117.5°	314.1	365.0	707.9	1369.8	1634.6
120°	337.5	385.7	705.1	1304.0	1558.4
122.5°	359.0	404.6	705.1	1246.2	1481.2
125°	390.2	432.9	706.3	1170.7	1377.9
127.5°	415.5	459.8	705.1	1113.7	1290.4
130°	431.6	477.7	705.1	1081.1	1241.1
132.5°	446.0	493.0	704.3	1051.2	1199.0
135°	467.5	516.8	701.9	1009.7	1135.7
137.5°	491.5	538.4	701.9	965.3	1082.1
140°	506.8	552.8	701.9	936.5	1047.1
142.5°	522.0	566.3	701.0	910.1	1006.7
145°	546.0	586.5	701.9	868.4	949.6
147.5°	570.0	604.4	703.2	834.1	896.5
150°	585.2	617.0	704.1	815.1	867.8
152.5°	599.6	627.8	704.9	798.7	841.7
155°	622.2	643.0	706.3	778.7	808.3
157.5°	642.0	658.9	707.6	764.0	784.6
160°	653.6	667.9	708.5	754.8	770.2
162.5°	665.3	676.1	709.4	746.8	759.5
165°	680.6	688.2	709.7	736.8	745.5
167.5°	693.5	697.4	711.0	729.0	732.8
170°	700.7	702.9	711.9	725.4	726.5
172.5°	705.1	706.5	711.9	721.8	722.0
175°	711.9	711.9	713.1	718.6	716.5
177.5°	715.1	714.2	713.3	715.9	714.2
180°	714.2	714.2	714.2	714.2	714.2



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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	20.12	20.98	21.04	21.92	23.14	16.51	17.38	17.44	18.32	19.53
	3H	21.21	21.98	22.15	22.93	24.17	17.62	18.39	18.56	19.34	20.58
	4H	21.55	22.28	22.51	23.24	24.49	18.08	18.81	19.04	19.76	21.01
	6H	21.77	22.44	22.74	23.40	24.66	18.43	19.10	19.39	20.06	21.32
	8H	21.82	22.46	22.79	23.43	24.69	18.51	19.15	19.48	20.13	21.38
	12H	21.83	22.44	22.81	23.41	24.69	18.53	19.13	19.50	20.10	21.39
4H	2H	20.23	20.95	21.19	21.91	23.16	17.23	17.96	18.19	18.91	20.16
	3H	21.53	22.14	22.50	23.12	24.39	18.48	19.08	19.45	20.07	21.33
	4H	22.01	22.56	22.99	23.54	24.82	19.03	19.58	20.01	20.56	21.85
	6H	22.35	22.82	23.34	23.82	25.11	19.47	19.95	20.47	20.95	22.23
	8H	22.44	22.88	23.43	23.88	25.18	19.59	20.04	20.59	21.03	22.33
	12H	22.48	22.87	23.49	23.89	25.19	19.62	20.02	20.63	21.03	22.34
8H	4H	22.03	22.47	23.02	23.46	24.76	19.31	19.75	20.30	20.74	22.04
	6H	22.46	22.82	23.48	23.86	25.16	19.85	20.22	20.87	21.25	22.55
	8H	22.61	22.94	23.64	23.96	25.28	20.04	20.36	21.06	21.38	22.70
	12H	22.70	22.99	23.73	24.00	25.36	20.11	20.40	21.14	21.41	22.77
12H	4H	21.99	22.38	23.00	23.40	24.70	19.31	19.71	20.33	20.72	22.03
	6H	22.45	22.77	23.47	23.79	25.11	19.90	20.23	20.93	21.25	22.57
	8H	22.62	22.90	23.65	23.92	25.28	20.11	20.40	21.14	21.42	22.78