

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: P855145

Luminaire Tested: SQ2-PP3-025U-075D-835-UNV-STD-W-4

Issue Date: 7/12/2024

Test Information

Test Method: LM-79-2019
Report Number: P855145
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2104-222-9, G2-2308-131-7)
Test Lab: INNOVATION CENTER
Issue Date: 7/12/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ2-PP3-025U-075D-835-UNV-STD-W-4
Description: CORELITE SQ2 SUSPENDED LED LUMINAIRE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 250 LUMENS PER FOOT
Light Source: -
Ballast/Driver: -

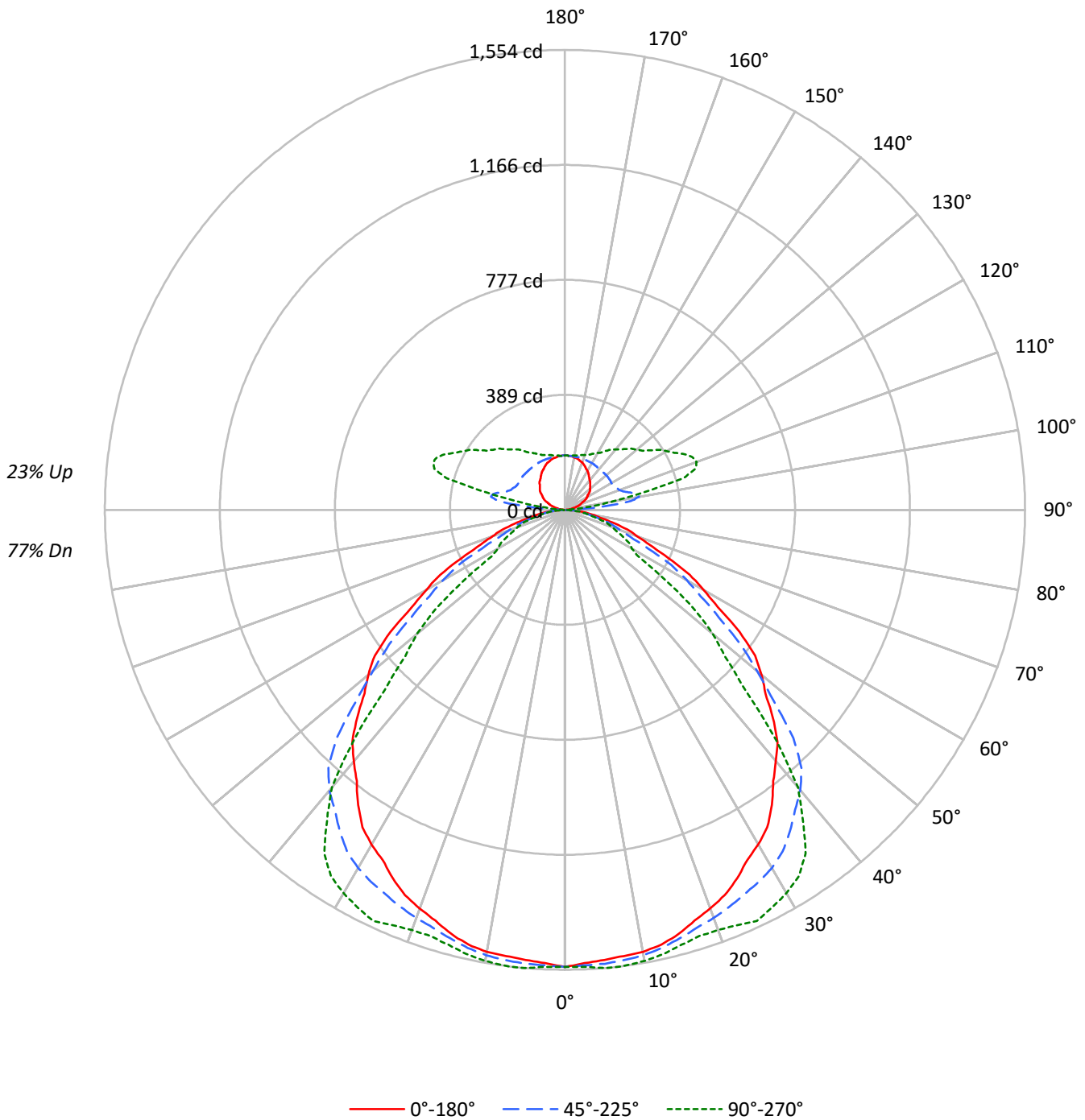
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5027.8 lumens
Efficiency: N/A
Efficacy: 147.4 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: Semi-Direct

Input Watts (W): 34.1
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
RCR																				
0	114	114	114	114	108	108	108	108	99	99	99	90	90	90	81	81	81	77		
1	105	101	97	94	100	96	93	90	88	85	83	80	78	77	73	72	70	67		
2	96	89	83	78	91	85	80	75	78	74	70	71	68	65	65	63	60	57		
3	88	79	71	66	84	76	69	64	69	64	60	64	60	56	59	55	52	49		
4	81	70	62	56	77	67	60	55	62	56	52	57	52	49	53	49	46	43		
5	75	63	55	49	71	61	53	47	56	50	45	52	47	42	48	43	40	38		
6	69	57	49	43	66	55	47	42	51	44	40	47	42	37	43	39	35	33		
7	64	52	43	38	61	50	42	37	46	40	35	43	37	33	40	35	32	29		
8	60	47	39	34	57	45	38	33	42	36	31	39	34	30	37	32	28	26		
9	56	43	35	30	53	42	34	30	39	33	28	36	31	27	34	29	26	24		
10	52	40	32	27	50	38	31	27	36	30	26	34	28	25	31	27	23	22		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	24936	24936	24936
5°	24739	24951	25188
10°	24866	25053	25374
15°	24806	25051	25432
20°	24629	25218	25947
25°	24488	25536	27310
30°	24350	26053	27880
35°	24005	26128	27932
40°	23364	26083	25804
45°	22665	24900	19644
50°	21775	21243	16362
55°	20268	17878	11764
60°	17450	15342	8435
65°	14716	11851	8298
70°	12255	9328	7940
75°	10387	8047	7436
80°	8805	6983	6685
85°	6966	5743	3631

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 24900 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	147.0	2.9
10°-20°	425.6	8.5
20°-30°	666.7	13.3
30°-40°	822.5	16.4
40°-50°	774.4	15.4
50°-60°	548.3	10.9
60°-70°	312.4	6.2
70°-80°	154.6	3.1
80°-90°	38.2	0.8
90°-100°	74.2	1.5
100°-110°	230.8	4.6
110°-120°	225.8	4.5
120°-130°	184.3	3.7
130°-140°	150.8	3.0
140°-150°	117.7	2.3
150°-160°	84.9	1.7
160°-170°	51.9	1.0
170°-180°	17.5	0.3
0°-30°	1239.4	24.7
0°-40°	2061.9	41.0
0°-60°	3384.6	67.3
0°-90°	3889.8	77.4
90°-120°	530.8	10.6
90°-150°	983.6	19.6
90°-180°	1138.0	22.6
0°-180°	5027.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1544	1544	1544	1544	1544	
5°	1526	1554	1540	1543	1554	145
15°	1484	1505	1499	1514	1522	418
25°	1375	1410	1433	1491	1533	633
35°	1218	1251	1326	1401	1417	760
45°	993	1068	1090	924	860	764
55°	720	763	635	479	418	635
65°	385	406	310	219	217	387
75°	166	184	129	121	119	180
85°	38	34	31	24	20	44
90°	0	1	3	3	3	2
95°	10	30	136	50	33	12
105°	40	57	227	434	414	43
115°	72	85	184	381	445	71
125°	100	111	182	299	351	89
135°	120	134	181	258	290	93
145°	141	152	181	223	243	88
155°	161	166	182	200	207	74
165°	176	178	183	189	191	50
175°	183	183	183	184	183	17
180°	183	183	183	183	183	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1544.4	1544.4	1544.4	1544.4	1544.4
2.5°	1532.6	1554.3	1540.4	1543.1	1545.6
5°	1526.4	1553.5	1539.5	1543.0	1554.1
7.5°	1520.5	1548.3	1534.5	1540.4	1554.1
10°	1516.7	1540.5	1528.1	1536.5	1547.7
12.5°	1504.9	1527.5	1516.3	1527.3	1537.1
15°	1484.0	1504.7	1498.7	1513.5	1521.5
17.5°	1455.5	1480.8	1480.7	1501.8	1510.1
20°	1433.4	1463.7	1467.7	1494.1	1510.1
22.5°	1409.8	1445.2	1451.9	1491.8	1519.3
25°	1374.6	1409.7	1433.4	1491.4	1533.0
27.5°	1333.4	1368.2	1417.1	1482.1	1515.0
30°	1306.1	1339.6	1397.4	1465.1	1495.4
32.5°	1272.1	1306.8	1368.7	1441.5	1469.2
35°	1217.9	1251.4	1325.6	1401.1	1417.1
37.5°	1155.5	1193.5	1276.6	1318.7	1319.7
40°	1108.5	1157.9	1237.5	1245.2	1224.3
42.5°	1062.7	1126.3	1182.6	1148.2	1056.0
45°	992.6	1067.6	1090.5	924.2	860.3
47.5°	917.8	991.9	955.4	775.1	731.1
50°	866.9	937.1	845.7	692.9	651.4
52.5°	809.4	871.9	747.7	614.0	550.8
55°	720.0	763.1	635.1	478.6	417.9
57.5°	612.2	642.6	543.0	359.2	291.3
60°	540.4	564.4	475.1	294.7	261.2
62.5°	475.1	496.5	404.6	256.0	244.2
65°	385.2	406.0	310.2	218.8	217.2
67.5°	306.6	329.2	238.0	190.9	189.1
70°	259.6	283.5	197.6	171.3	168.2
72.5°	220.3	243.1	167.5	150.5	148.6
75°	166.5	184.1	129.0	120.7	119.2
77.5°	120.9	132.0	96.0	91.7	90.1
80°	94.7	99.5	75.1	73.4	71.9
82.5°	71.2	69.6	56.8	55.1	52.3
85°	37.6	34.4	31.0	24.3	19.6
87.5°	11.8	12.0	5.9	4.6	4.6
90°	0.0	1.1	3.4	3.4	3.4
92.5°	3.6	12.6	43.0	14.1	11.4
95°	10.1	29.9	136.1	50.2	32.6
97.5°	18.4	38.9	225.4	140.3	88.4
100°	24.8	43.5	254.2	237.8	158.5
102.5°	31.0	48.9	248.9	339.6	266.6
105°	40.5	57.0	227.2	433.8	414.0
107.5°	49.9	65.3	206.5	441.0	462.7
110°	56.2	71.6	195.7	430.6	473.5



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	62.6	77.1	190.3	412.0	466.4
115°	72.0	85.2	184.5	380.6	445.4
117.5°	81.3	93.4	182.0	350.5	416.9
120°	86.6	98.7	181.1	333.3	397.1
122.5°	92.0	104.1	182.0	318.8	377.3
125°	100.2	111.1	182.2	299.2	350.9
127.5°	106.6	117.8	182.2	284.7	328.6
130°	110.2	122.3	182.2	276.5	316.1
132.5°	114.8	126.9	181.3	269.2	306.1
135°	120.4	133.5	181.1	258.4	290.2
137.5°	126.9	139.0	181.1	247.5	276.5
140°	130.5	142.6	181.1	240.1	266.6
142.5°	135.0	146.2	181.1	232.9	256.7
145°	140.6	151.6	181.1	223.2	243.0
147.5°	147.3	156.8	182.2	214.1	229.7
150°	151.9	159.6	182.2	209.5	221.6
152.5°	155.5	162.3	182.2	204.9	215.2
155°	160.8	166.4	182.2	200.4	207.0
157.5°	166.2	170.4	182.2	196.2	200.4
160°	169.9	173.1	182.2	193.5	196.8
162.5°	172.6	175.0	182.2	191.7	194.2
165°	176.5	177.7	183.3	189.0	191.3
167.5°	179.0	179.3	182.2	187.4	188.5
170°	179.9	181.1	182.2	185.6	186.7
172.5°	181.7	182.0	183.1	184.7	184.9
175°	183.3	183.3	183.3	184.5	183.3
177.5°	183.3	183.3	183.3	183.3	183.3
180°	183.3	183.3	183.3	183.3	183.3



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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	20.97	22.09	21.66	22.79	23.61	17.37	18.48	18.05	19.18	20.00
	3H	22.09	23.08	22.79	23.80	24.65	18.49	19.49	19.19	20.20	21.05
	4H	22.44	23.38	23.16	24.10	24.97	18.97	19.90	19.69	20.63	21.49
	6H	22.67	23.53	23.40	24.26	25.15	19.33	20.19	20.06	20.92	21.80
	8H	22.73	23.55	23.47	24.30	25.18	19.42	20.24	20.16	20.99	21.87
	12H	22.75	23.53	23.50	24.28	25.19	19.44	20.23	20.19	20.97	21.88
4H	2H	21.11	22.05	21.84	22.77	23.64	18.11	19.05	18.84	19.77	20.64
	3H	22.44	23.22	23.18	23.98	24.86	19.39	20.16	20.12	20.92	21.81
	4H	22.93	23.63	23.68	24.39	25.31	19.95	20.65	20.70	21.41	22.33
	6H	23.28	23.89	24.05	24.67	25.59	20.41	21.01	21.18	21.80	22.72
	8H	23.38	23.94	24.15	24.72	25.66	20.53	21.10	21.31	21.88	22.81
	12H	23.43	23.93	24.22	24.74	25.68	20.57	21.08	21.37	21.88	22.82
8H	4H	22.96	23.53	23.74	24.31	25.25	20.24	20.81	21.02	21.59	22.52
	6H	23.40	23.87	24.21	24.70	25.63	20.80	21.27	21.60	22.09	23.03
	8H	23.56	23.98	24.38	24.80	25.75	20.98	21.40	21.80	22.22	23.18
	12H	23.66	24.03	24.48	24.84	25.85	21.07	21.44	21.88	22.25	23.26
12H	4H	22.94	23.44	23.73	24.25	25.19	20.26	20.77	21.06	21.57	22.51
	6H	23.39	23.81	24.21	24.63	25.59	20.85	21.27	21.67	22.09	23.04
	8H	23.58	23.94	24.39	24.76	25.77	21.07	21.44	21.89	22.25	23.26