

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: P854249

Luminaire Tested: SQ2-PW1-025U-075D-940-UNV-STD-W-4

Issue Date: 7/12/2024

Test Information

Test Method: LM-79-2019
Report Number: P854249
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2104-222-9, G2-2308-131-8)
Test Lab: INNOVATION CENTER
Issue Date: 7/12/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ2-PW1-025U-075D-940-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

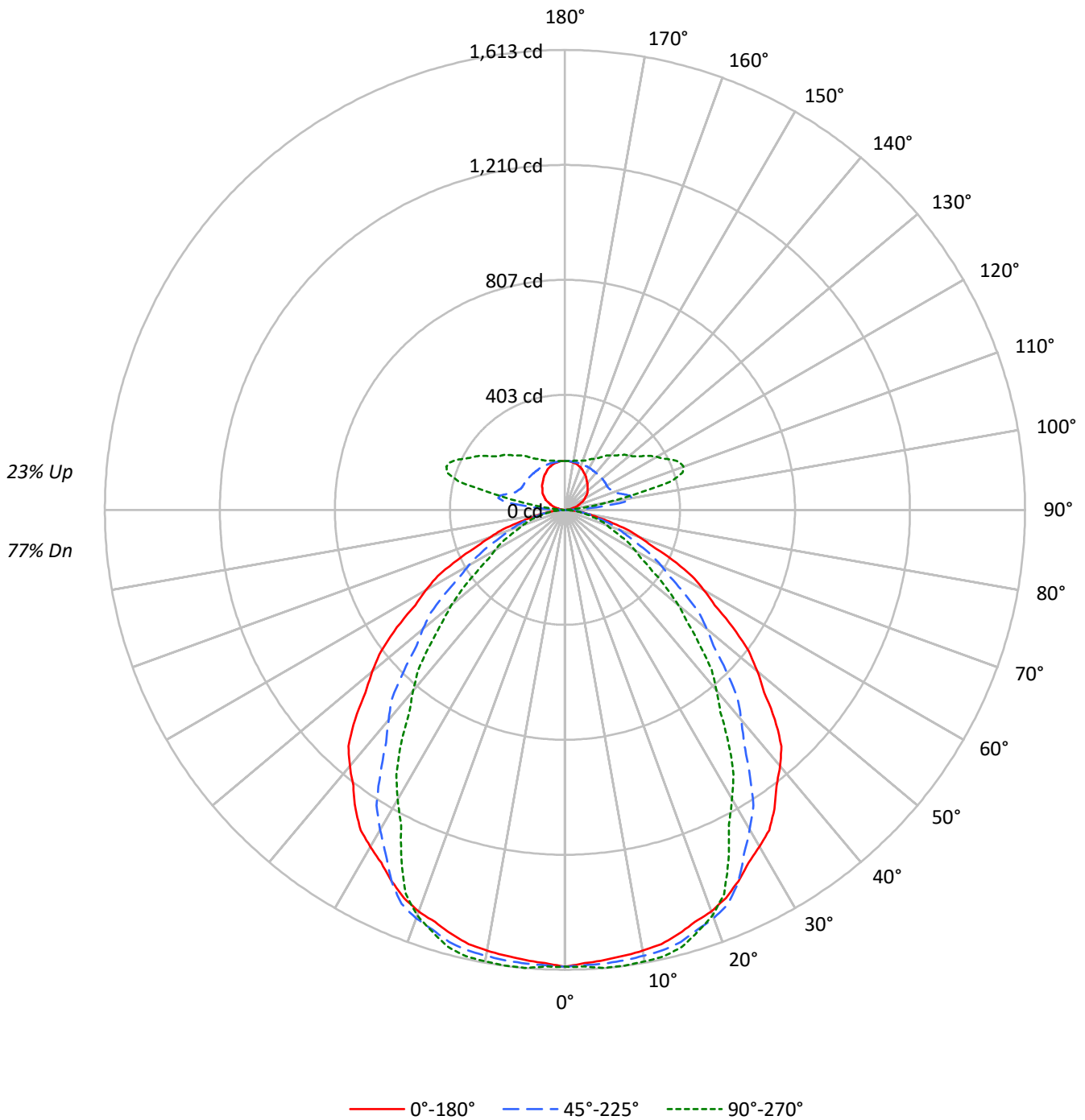
Lumens per Lamp: N/A
Luminaire Lumens: 4619.1 lumens
Efficiency: N/A
Efficacy: 135.5 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.11 / 1.22
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Semi-Direct

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	0
RCR																		
0	114	114	114	114	108	108	108	108	98	98	98	89	89	89	81	81	81	77
1	105	101	97	94	100	96	93	90	88	85	83	80	78	76	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	72	66	84	76	69	64	70	64	60	64	60	56	59	55	52	50
4	81	71	63	57	77	68	61	55	62	57	52	58	53	49	53	49	46	43
5	75	63	55	49	71	61	54	48	56	50	46	52	47	43	48	44	41	38
6	70	57	49	44	66	55	48	42	51	45	40	48	42	38	44	40	36	34
7	65	52	44	39	62	50	43	38	47	41	36	44	38	34	40	36	32	30
8	60	48	40	35	57	46	39	34	43	37	32	40	35	31	37	33	29	27
9	56	44	36	31	54	42	35	31	40	34	29	37	32	28	35	30	27	25
10	53	41	33	28	50	39	32	28	37	31	27	34	29	26	32	28	24	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	25869	25869	25869
5°	25695	25893	26141
10°	25743	26043	26368
15°	25737	26220	26527
20°	25747	26192	26008
25°	25607	25634	24166
30°	25434	24153	21848
35°	25233	22227	19730
40°	24732	20261	17431
45°	23763	18224	15225
50°	22117	16289	13031
55°	20231	14390	10567
60°	18132	12516	9116
65°	15855	10785	8103
70°	12968	9578	7345
75°	10087	8284	6756
80°	7522	7094	5960
85°	5094	5372	3390

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 23763 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	152.6	3.3
10°-20°	442.0	9.6
20°-30°	650.5	14.1
30°-40°	711.2	15.4
40°-50°	638.0	13.8
50°-60°	476.0	10.3
60°-70°	300.8	6.5
70°-80°	149.0	3.2
80°-90°	35.3	0.8
90°-100°	69.4	1.5
100°-110°	215.7	4.7
110°-120°	211.0	4.6
120°-130°	172.3	3.7
130°-140°	140.9	3.1
140°-150°	110.0	2.4
150°-160°	79.4	1.7
160°-170°	48.5	1.1
170°-180°	16.4	0.4
0°-30°	1245.1	27.0
0°-40°	1956.4	42.4
0°-60°	3070.4	66.5
0°-90°	3555.5	77.0
90°-120°	496.1	10.7
90°-150°	919.3	19.9
90°-180°	1064.0	23.0
0°-180°	4619.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1602	1602	1602	1602	1602	
5°	1585	1611	1598	1600	1613	151
15°	1540	1570	1569	1580	1587	435
25°	1437	1469	1439	1379	1356	662
35°	1280	1267	1128	1029	1001	798
45°	1041	957	798	698	667	798
55°	719	650	511	401	375	642
65°	415	381	282	227	212	411
75°	162	174	133	111	108	178
85°	28	35	29	20	18	35
90°	0	1	3	3	3	1
95°	10	28	127	47	30	11
105°	38	53	212	405	387	40
115°	67	80	172	356	416	66
125°	94	104	170	280	328	83
135°	112	125	169	241	271	87
145°	131	142	169	209	227	83
155°	150	156	170	187	193	69
165°	165	166	171	177	179	46
175°	171	171	171	172	171	16
180°	171	171	171	171	171	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1602.2	1602.2	1602.2	1602.2	1602.2
2.5°	1591.2	1611.5	1598.6	1599.9	1603.4
5°	1585.4	1610.8	1597.6	1599.5	1612.9
7.5°	1577.5	1603.2	1593.4	1598.8	1612.0
10°	1570.2	1597.0	1588.5	1596.4	1608.3
12.5°	1560.4	1588.5	1582.4	1591.5	1603.4
15°	1539.7	1569.5	1568.6	1579.5	1587.0
17.5°	1515.5	1545.4	1543.9	1546.8	1550.3
20°	1498.5	1528.3	1524.4	1513.7	1513.7
22.5°	1474.0	1506.3	1496.3	1467.1	1457.6
25°	1437.4	1468.7	1438.9	1378.9	1356.5
27.5°	1394.7	1420.1	1360.2	1275.0	1243.9
30°	1364.2	1383.6	1295.5	1201.7	1171.9
32.5°	1332.4	1339.9	1229.6	1132.1	1099.9
35°	1280.2	1266.8	1127.7	1029.4	1001.0
37.5°	1218.6	1178.6	1029.7	926.7	895.4
40°	1173.4	1116.7	961.3	858.4	827.0
42.5°	1123.4	1052.4	896.6	793.7	761.1
45°	1040.7	957.1	798.1	698.2	666.8
47.5°	947.6	864.6	705.9	609.1	582.3
50°	880.5	799.9	648.5	551.6	518.8
52.5°	812.1	739.9	592.4	492.8	448.0
55°	718.7	650.1	511.2	400.7	375.4
57.5°	622.6	563.2	437.6	337.4	316.5
60°	561.5	509.3	387.6	303.2	282.3
62.5°	502.9	456.7	338.8	271.5	254.2
65°	415.0	380.7	282.3	227.0	212.1
67.5°	329.6	310.5	234.7	186.2	176.4
70°	274.7	268.7	202.9	163.1	155.6
72.5°	227.1	229.4	172.4	141.2	136.1
75°	161.7	173.7	132.8	111.3	108.3
77.5°	110.2	128.1	98.3	82.3	80.0
80°	80.9	98.8	76.3	64.1	64.1
82.5°	56.5	70.8	54.3	48.2	48.2
85°	27.5	34.9	29.0	19.8	18.3
87.5°	7.3	11.1	5.5	4.3	4.3
90°	0.0	1.0	3.2	3.2	3.2
92.5°	3.4	11.8	40.2	13.2	10.7
95°	9.5	28.0	127.2	46.9	30.5
97.5°	17.2	36.4	210.7	131.2	82.6
100°	23.1	40.6	237.6	222.3	148.2
102.5°	29.0	45.7	232.6	317.4	249.2
105°	37.8	53.3	212.4	405.4	386.9
107.5°	46.7	61.1	193.0	412.2	432.5
110°	52.6	67.0	182.9	402.5	442.6



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	58.5	72.0	177.9	385.1	435.9
115°	67.3	79.6	172.4	355.7	416.3
117.5°	75.9	87.2	170.1	327.5	389.6
120°	81.0	92.3	169.3	311.5	371.1
122.5°	86.0	97.3	170.1	297.9	352.6
125°	93.6	103.9	170.3	279.7	328.0
127.5°	99.7	110.2	170.3	266.1	307.2
130°	103.0	114.3	170.3	258.4	295.4
132.5°	107.2	118.5	169.5	251.6	286.2
135°	112.5	124.8	169.3	241.4	271.2
137.5°	118.6	129.9	169.3	231.3	258.4
140°	122.0	133.3	169.3	224.5	249.2
142.5°	126.2	136.6	169.3	217.7	239.9
145°	131.4	141.7	169.3	208.6	227.1
147.5°	137.7	146.6	170.3	200.1	214.7
150°	141.9	149.1	170.3	195.8	207.1
152.5°	145.3	151.7	170.3	191.6	201.2
155°	150.3	155.5	170.3	187.3	193.4
157.5°	155.4	159.3	170.3	183.4	187.4
160°	158.8	161.8	170.3	180.9	184.0
162.5°	161.3	163.5	170.3	179.2	181.5
165°	165.1	166.1	171.4	176.7	178.7
167.5°	167.4	167.6	170.3	175.2	176.2
170°	168.2	169.2	170.3	173.5	174.5
172.5°	169.9	170.1	171.2	172.6	172.8
175°	171.4	171.4	171.4	172.4	171.4
177.5°	171.4	171.4	171.4	171.4	171.4
180°	171.4	171.4	171.4	171.4	171.4



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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	20.59	21.69	21.28	22.39	23.22	17.07	18.17	17.77	18.88	19.71
	3H	21.93	22.91	22.64	23.63	24.49	18.30	19.28	19.00	20.00	20.86
	4H	22.31	23.24	23.04	23.96	24.84	18.75	19.68	19.48	20.41	21.28
	6H	22.53	23.38	23.27	24.12	25.01	19.08	19.94	19.82	20.67	21.56
	8H	22.57	23.38	23.32	24.13	25.03	19.17	19.98	19.92	20.73	21.62
	12H	22.57	23.34	23.33	24.09	25.01	19.18	19.96	19.94	20.71	21.62
4H	2H	20.72	21.65	21.45	22.37	23.25	17.79	18.71	18.52	19.44	20.31
	3H	22.29	23.05	23.03	23.82	24.71	19.20	19.96	19.94	20.72	21.62
	4H	22.80	23.50	23.56	24.26	25.19	19.75	20.44	20.51	21.21	22.13
	6H	23.15	23.75	23.92	24.54	25.47	20.17	20.77	20.94	21.55	22.49
	8H	23.23	23.79	24.01	24.58	25.52	20.28	20.84	21.06	21.62	22.56
	12H	23.26	23.76	24.06	24.57	25.51	20.31	20.81	21.11	21.62	22.57
8H	4H	22.86	23.42	23.64	24.20	25.15	20.09	20.65	20.87	21.44	22.38
	6H	23.30	23.77	24.11	24.59	25.54	20.61	21.07	21.42	21.90	22.84
	8H	23.45	23.86	24.27	24.69	25.65	20.77	21.18	21.59	22.01	22.97
	12H	23.53	23.89	24.35	24.71	25.72	20.84	21.20	21.66	22.02	23.04
12H	4H	22.83	23.33	23.63	24.14	25.09	20.12	20.62	20.92	21.43	22.38
	6H	23.30	23.71	24.12	24.53	25.49	20.67	21.08	21.49	21.91	22.87
	8H	23.47	23.83	24.29	24.65	25.66	20.87	21.23	21.69	22.05	23.07