

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: P855121

Luminaire Tested: SQ2-PP3-150U-075D-835-UNV-STD-W-4

Issue Date: 7/12/2024

Test Information

Test Method: LM-79-2019
Report Number: P855121
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2104-222-14, G2-2308-131-7)
Test Lab: INNOVATION CENTER
Issue Date: 7/12/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ2-PP3-150U-075D-835-UNV-STD-W-4
Description: CORELITE SQ2 SUSPENDED LED LUMINAIRE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 1500 LUMENS PER FOOT
Light Source: -
Ballast/Driver: -

Summary

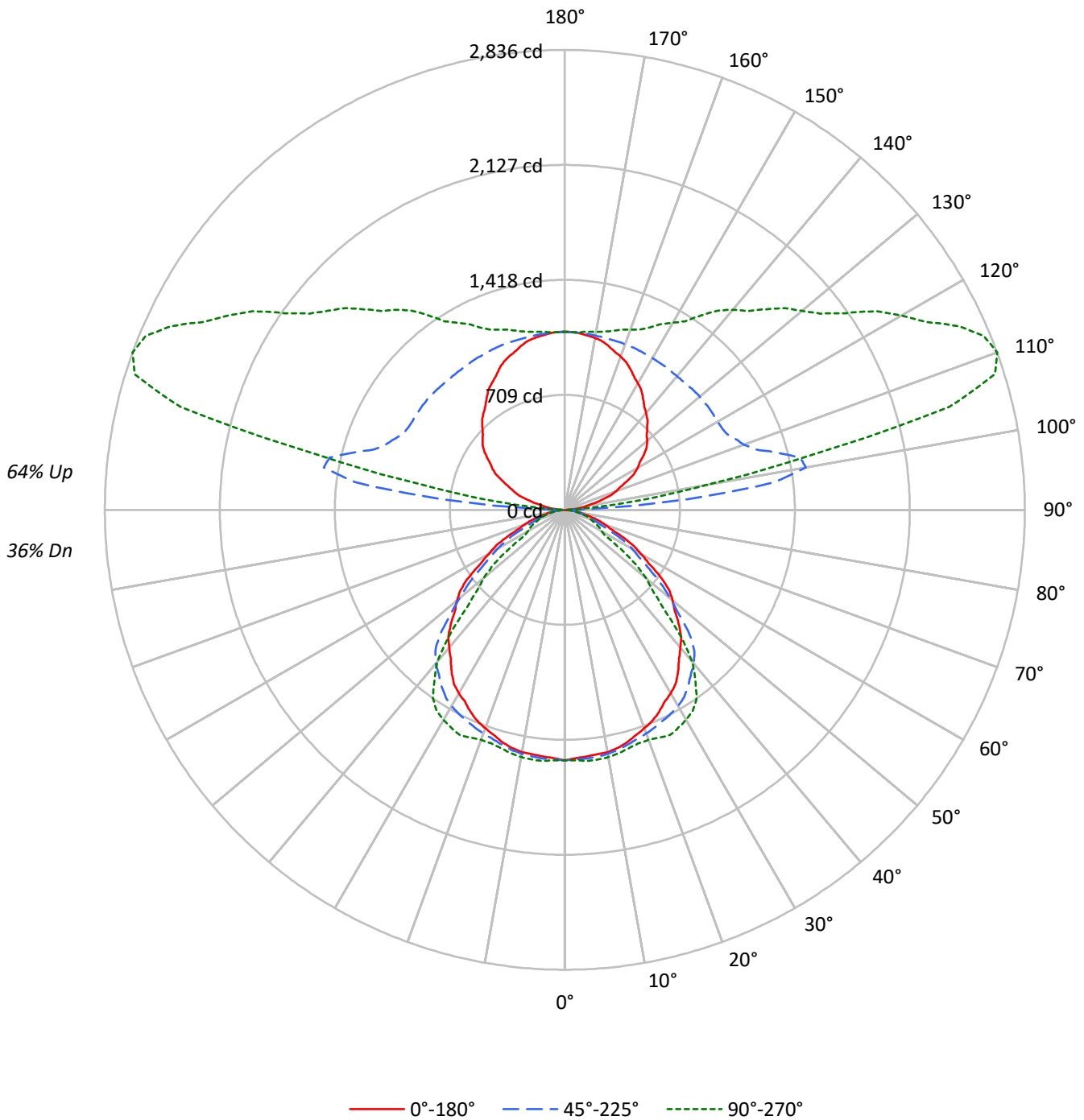
Lumens per Lamp: N/A
Luminaire Lumens: 10663.3 lumens
Efficiency: N/A
Efficacy: 128.0 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.41 / 1.4
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 83.3
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	104	104	104	104	94	94	94	94	76	76	76	59	59	59	44	44	44	36
1	95	91	87	84	86	83	80	77	67	65	63	53	51	50	39	38	38	32
2	87	80	74	69	79	73	68	64	59	56	53	47	44	42	35	34	32	27
3	79	70	64	58	72	64	58	53	52	48	45	41	39	36	31	29	28	23
4	73	62	55	49	66	57	51	45	47	42	38	37	34	31	28	26	24	20
5	67	56	48	42	60	51	44	39	42	37	33	33	30	27	25	23	21	18
6	62	50	42	37	56	46	39	34	38	33	29	30	26	24	23	21	19	16
7	57	45	37	32	51	41	35	30	34	29	25	27	24	21	21	19	17	14
8	53	41	33	28	48	37	31	26	31	26	22	25	21	19	19	17	15	12
9	49	37	30	25	44	34	28	23	28	23	20	23	19	17	18	15	13	11
10	46	34	27	22	41	31	25	21	26	21	18	21	18	15	17	14	12	10

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	1.4
10°-20°	425.6	4.0
20°-30°	666.7	6.3
30°-40°	822.5	7.7
40°-50°	774.4	7.3
50°-60°	548.3	5.1
60°-70°	312.4	2.9
70°-80°	154.6	1.4
80°-90°	39.0	0.4
90°-100°	418.1	3.9
100°-110°	1369.1	12.8
110°-120°	1353.5	12.7
120°-130°	1106.4	10.4
130°-140°	902.9	8.5
140°-150°	702.7	6.6
150°-160°	505.9	4.7
160°-170°	309.5	2.9
170°-180°	104.6	1.0
0°-30°	1239.4	11.6
0°-40°	2061.9	19.3
0°-60°	3384.6	31.7
0°-90°	3890.6	36.5
90°-120°	3140.7	29.5
90°-150°	5852.7	54.9
90°-180°	6773.0	63.5
0°-180°	10663.3	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°	1	3	9	8	9	5
95°	59	170	760	271	176	67
105°	238	339	1359	2582	2453	251
115°	429	512	1104	2281	2678	423
125°	597	665	1088	1799	2113	531
135°	718	794	1079	1552	1749	556
145°	840	902	1077	1335	1463	526
155°	958	989	1084	1194	1240	441
165°	1045	1055	1088	1130	1142	295
175°	1093	1093	1094	1102	1100	104
180°	1097	1097	1097	1097	1097	



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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°	12.0	12.4	7.0	5.5	5.8
90°	1.1	3.3	9.1	7.9	9.1
92.5°	19.1	69.9	214.7	69.8	55.9
95°	58.6	170.0	760.1	270.8	176.0
97.5°	106.5	224.2	1304.1	788.9	489.0
100°	139.9	252.4	1509.0	1347.5	893.2
102.5°	177.8	287.6	1486.4	1985.5	1539.2
105°	238.0	339.4	1358.9	2581.9	2452.9
107.5°	297.3	390.3	1234.6	2637.7	2779.5
110°	336.1	426.5	1175.1	2572.7	2836.3



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	373.1	460.8	1139.0	2459.9	2797.5
115°	428.6	512.3	1104.1	2281.4	2678.4
117.5°	482.4	560.7	1090.8	2106.1	2509.2
120°	517.6	591.5	1087.2	2004.0	2396.5
122.5°	549.2	621.3	1087.2	1915.8	2280.1
125°	596.6	665.0	1088.3	1799.1	2113.4
127.5°	636.8	706.4	1087.0	1713.2	1986.6
130°	662.0	732.5	1086.1	1661.2	1908.2
132.5°	684.5	756.9	1083.3	1616.5	1840.5
135°	718.4	794.4	1079.3	1551.7	1749.1
137.5°	754.0	829.4	1076.8	1484.4	1662.8
140°	779.3	852.0	1075.9	1441.7	1610.5
142.5°	804.5	873.0	1075.9	1396.2	1549.1
145°	840.1	901.9	1077.0	1334.8	1462.7
147.5°	877.6	929.0	1078.6	1281.3	1377.9
150°	901.0	946.3	1080.4	1250.3	1331.9
152.5°	924.6	964.4	1081.3	1224.7	1292.1
155°	957.5	989.4	1083.8	1194.2	1240.5
157.5°	987.0	1010.1	1086.3	1170.3	1203.8
160°	1005.9	1024.7	1087.2	1156.6	1183.0
162.5°	1022.2	1037.4	1087.2	1145.6	1164.9
165°	1045.4	1055.4	1088.3	1130.3	1142.4
167.5°	1065.0	1069.9	1089.7	1118.4	1125.1
170°	1075.9	1078.1	1090.6	1112.0	1114.2
172.5°	1084.0	1085.4	1093.3	1107.4	1107.9
175°	1092.8	1092.8	1094.0	1101.8	1099.5
177.5°	1097.3	1096.5	1095.5	1100.9	1097.3
180°	1097.3	1097.3	1097.3	1097.3	1097.3



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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	17.31	18.04	18.38	19.11	20.56	13.70	14.44	14.78	15.50	16.96
	3H	18.39	19.05	19.47	20.12	21.60	14.80	15.45	15.88	16.53	18.00
	4H	18.73	19.35	19.82	20.43	21.91	15.25	15.87	16.35	16.95	18.43
	6H	18.94	19.51	20.04	20.59	22.08	15.59	16.16	16.69	17.24	18.74
	8H	18.98	19.52	20.09	20.62	22.11	15.68	16.22	16.78	17.31	18.80
	12H	18.99	19.51	20.10	20.60	22.11	15.69	16.20	16.80	17.29	18.80
4H	2H	17.40	18.02	18.50	19.10	20.58	14.40	15.02	15.50	16.10	17.58
	3H	18.70	19.21	19.80	20.32	21.81	15.64	16.15	16.74	17.26	18.75
	4H	19.17	19.64	20.27	20.73	22.24	16.19	16.66	17.30	17.76	19.27
	6H	19.50	19.90	20.61	21.02	22.52	16.62	17.03	17.74	18.14	19.65
	8H	19.59	19.96	20.70	21.07	22.59	16.74	17.12	17.86	18.23	19.75
	12H	19.62	19.96	20.75	21.08	22.61	16.76	17.10	17.90	18.23	19.75
8H	4H	19.17	19.55	20.29	20.66	22.18	16.45	16.83	17.57	17.94	19.46
	6H	19.60	19.91	20.74	21.06	22.58	16.99	17.30	18.13	18.46	19.97
	8H	19.76	20.03	20.90	21.16	22.70	17.18	17.45	18.32	18.58	20.12
	12H	19.84	20.08	20.99	21.21	22.78	17.25	17.49	18.39	18.62	20.19
12H	4H	19.13	19.47	20.26	20.59	22.12	16.45	16.79	17.59	17.92	19.44
	6H	19.59	19.86	20.73	20.99	22.53	17.05	17.32	18.19	18.45	19.99
	8H	19.76	19.99	20.90	21.12	22.70	17.25	17.49	18.40	18.62	20.19