

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: P855328

Luminaire Tested: SQ2-PP3-150U-075D-840-UNV-STD-W-4

Issue Date: 7/12/2024

Test Information

Test Method: LM-79-2019
Report Number: P855328
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-840-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

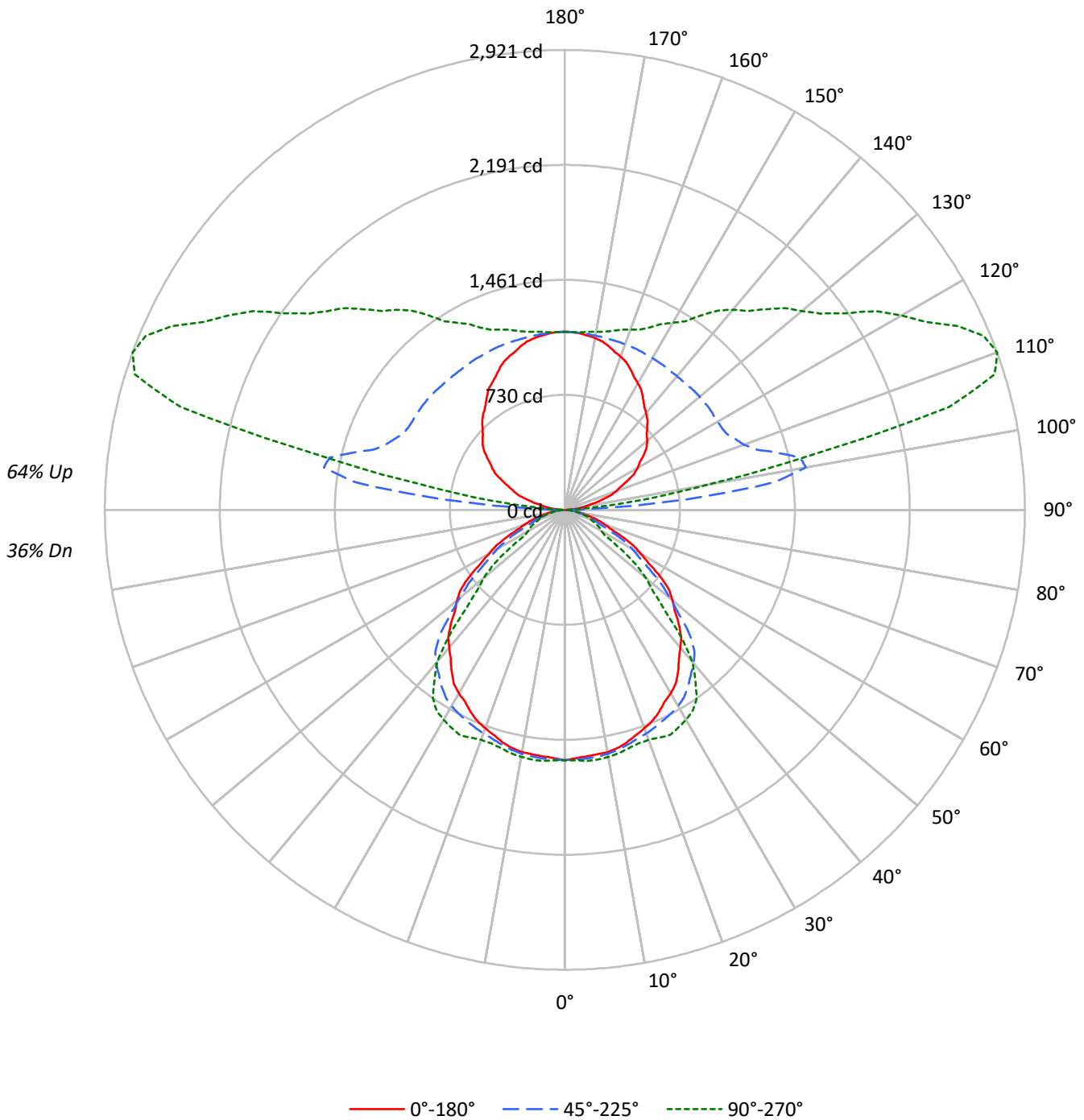
Lumens per Lamp: N/A
Luminaire Lumens: 10981.2 lumens
Efficiency: N/A
Efficacy: 131.8 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.41 / 1.4
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Semi-Indirect

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	50	30	10	0	
RCR																						
0	104	104	104	104	94	94	94	94	76	76	76	59	59	59	44	44	44	36				36
1	95	91	87	84	86	83	80	77	67	65	63	53	51	50	39	38	38	32				32
2	87	80	74	69	79	73	68	64	59	56	53	47	44	42	35	34	32	27				27
3	79	70	64	58	72	64	58	53	52	48	45	41	39	36	31	29	28	23				23
4	73	62	55	49	66	57	51	45	47	42	38	37	34	31	28	26	24	20				20
5	67	56	48	42	60	51	44	39	42	37	33	33	30	27	25	23	21	18				18
6	62	50	42	37	56	46	39	34	38	33	29	30	26	24	23	21	19	16				16
7	57	45	37	32	51	41	35	30	34	29	25	27	24	21	21	19	17	14				14
8	53	41	33	28	48	37	31	26	31	26	22	25	21	19	19	17	15	12				12
9	49	37	30	25	44	34	28	23	28	23	20	23	19	17	18	15	13	11				11
10	46	34	27	22	41	31	25	21	26	21	18	21	18	15	17	14	12	10				10

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	25678	25678	25678
5°	25477	25695	25939
10°	25607	25799	26130
15°	25544	25797	26191
20°	25362	25969	26720
25°	25219	26297	28124
30°	25076	26828	28711
35°	24721	26909	28763
40°	24059	26860	26574
45°	23341	25642	20228
50°	22423	21876	16849
55°	20870	18410	12116
60°	17970	15797	8686
65°	15156	12202	8542
70°	12619	9607	8176
75°	10692	8291	7654
80°	9066	7197	6881
85°	7169	5910	3742

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 25642 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	151.4	1.4
10°-20°	438.3	4.0
20°-30°	686.6	6.3
30°-40°	847.0	7.7
40°-50°	797.5	7.3
50°-60°	564.6	5.1
60°-70°	321.7	2.9
70°-80°	159.2	1.4
80°-90°	40.2	0.4
90°-100°	430.6	3.9
100°-110°	1409.9	12.8
110°-120°	1393.9	12.7
120°-130°	1139.4	10.4
130°-140°	929.8	8.5
140°-150°	723.6	6.6
150°-160°	521.0	4.7
160°-170°	318.8	2.9
170°-180°	107.7	1.0
0°-30°	1276.3	11.6
0°-40°	2123.3	19.3
0°-60°	3485.5	31.7
0°-90°	4006.5	36.5
90°-120°	3234.3	29.5
90°-150°	6027.2	54.9
90°-180°	6975.0	63.5
0°-180°	10981.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1590	1590	1590	1590	1590	
5°	1572	1600	1585	1589	1600	150
15°	1528	1550	1543	1559	1567	431
25°	1416	1452	1476	1536	1579	652
35°	1254	1289	1365	1443	1459	782
45°	1022	1099	1123	952	886	787
55°	741	786	654	493	430	654
65°	397	418	319	225	224	398
75°	171	190	133	124	123	186
85°	39	35	32	25	20	45
90°	1	3	9	8	9	5
95°	60	175	783	279	181	69
105°	245	350	1399	2659	2526	258
115°	441	528	1137	2349	2758	436
125°	614	685	1121	1853	2176	547
135°	740	818	1111	1598	1801	572
145°	865	929	1109	1375	1506	542
155°	986	1019	1116	1230	1278	454
165°	1077	1087	1121	1164	1176	303
175°	1125	1125	1127	1135	1132	107
180°	1130	1130	1130	1130	1130	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1590.4	1590.4	1590.4	1590.4	1590.4
2.5°	1578.3	1600.7	1586.3	1589.1	1591.7
5°	1571.9	1599.9	1585.4	1589.0	1600.4
7.5°	1565.8	1594.5	1580.3	1586.3	1600.4
10°	1561.9	1586.5	1573.6	1582.3	1593.8
12.5°	1549.8	1573.1	1561.5	1572.8	1583.0
15°	1528.2	1549.5	1543.3	1558.6	1566.9
17.5°	1498.9	1524.9	1524.8	1546.6	1555.1
20°	1476.1	1507.3	1511.4	1538.7	1555.1
22.5°	1451.9	1488.3	1495.2	1536.2	1564.6
25°	1415.6	1451.7	1476.1	1535.9	1578.7
27.5°	1373.2	1409.0	1459.3	1526.3	1560.1
30°	1345.0	1379.5	1439.0	1508.7	1540.0
32.5°	1310.0	1345.8	1409.6	1484.5	1513.0
35°	1254.2	1288.7	1365.2	1442.9	1459.3
37.5°	1190.0	1229.0	1314.7	1358.0	1359.1
40°	1141.5	1192.4	1274.4	1282.3	1260.8
42.5°	1094.4	1159.9	1217.8	1182.4	1087.4
45°	1022.2	1099.4	1123.0	951.8	885.9
47.5°	945.1	1021.5	983.8	798.2	752.8
50°	892.7	965.1	870.9	713.6	670.8
52.5°	833.5	897.9	770.0	632.3	567.2
55°	741.4	785.8	654.0	492.8	430.4
57.5°	630.5	661.7	559.2	369.9	300.0
60°	556.5	581.2	489.2	303.5	269.0
62.5°	489.2	511.3	416.6	263.6	251.5
65°	396.7	418.1	319.4	225.3	223.6
67.5°	315.7	339.0	245.1	196.6	194.7
70°	267.3	291.9	203.5	176.4	173.2
72.5°	226.9	250.3	172.5	155.0	153.0
75°	171.4	189.6	132.9	124.3	122.7
77.5°	124.5	135.9	98.8	94.4	92.8
80°	97.5	102.4	77.4	75.6	74.0
82.5°	73.3	71.7	58.5	56.8	53.8
85°	38.7	35.4	31.9	25.1	20.2
87.5°	12.4	12.8	7.2	5.7	5.9
90°	1.2	3.4	9.3	8.2	9.3
92.5°	19.7	72.0	221.1	71.9	57.6
95°	60.4	175.0	782.8	278.9	181.2
97.5°	109.7	230.9	1343.0	812.4	503.6
100°	144.0	259.9	1553.9	1387.6	919.9
102.5°	183.1	296.1	1530.8	2044.7	1585.1
105°	245.1	349.5	1399.4	2658.9	2526.0
107.5°	306.2	401.9	1271.5	2716.3	2862.3
110°	346.1	439.2	1210.2	2649.4	2920.8



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	384.2	474.6	1173.0	2533.2	2880.9
115°	441.3	527.6	1137.0	2349.4	2758.3
117.5°	496.8	577.5	1123.3	2168.9	2584.0
120°	533.1	609.2	1119.6	2063.7	2468.0
122.5°	565.6	639.8	1119.6	1972.9	2348.1
125°	614.4	684.8	1120.8	1852.8	2176.4
127.5°	655.8	727.4	1119.4	1764.3	2045.9
130°	681.8	754.4	1118.4	1710.7	1965.1
132.5°	705.0	779.4	1115.6	1664.7	1895.4
135°	739.8	818.1	1111.4	1598.0	1801.2
137.5°	776.5	854.1	1108.9	1528.7	1712.3
140°	802.5	877.4	1107.9	1484.7	1658.5
142.5°	828.5	899.0	1107.9	1437.9	1595.3
145°	865.2	928.8	1109.1	1374.6	1506.3
147.5°	903.8	956.7	1110.7	1319.5	1419.0
150°	927.9	974.5	1112.6	1287.5	1371.6
152.5°	952.1	993.2	1113.5	1261.2	1330.7
155°	986.0	1018.9	1116.1	1229.8	1277.5
157.5°	1016.5	1040.2	1118.7	1205.1	1239.6
160°	1035.9	1055.3	1119.6	1191.0	1218.3
162.5°	1052.7	1068.3	1119.6	1179.7	1199.7
165°	1076.6	1086.9	1120.8	1164.0	1176.5
167.5°	1096.8	1101.8	1122.2	1151.8	1158.6
170°	1107.9	1110.3	1123.1	1145.1	1147.5
172.5°	1116.3	1117.7	1125.9	1140.5	1140.9
175°	1125.4	1125.4	1126.6	1134.6	1132.3
177.5°	1130.0	1129.2	1128.1	1133.7	1130.0
180°	1130.0	1130.0	1130.0	1130.0	1130.0



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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	17.41	18.14	18.48	19.21	20.66	13.81	14.54	14.88	15.61	17.06
	3H	18.50	19.15	19.58	20.22	21.70	14.90	15.55	15.98	16.63	18.10
	4H	18.83	19.45	19.92	20.53	22.01	15.36	15.97	16.45	17.05	18.53
	6H	19.04	19.61	20.14	20.69	22.18	15.70	16.26	16.80	17.35	18.84
	8H	19.08	19.63	20.19	20.72	22.21	15.78	16.32	16.88	17.42	18.90
	12H	19.09	19.61	20.20	20.70	22.21	15.79	16.30	16.90	17.39	18.90
4H	2H	17.50	18.12	18.60	19.20	20.68	14.50	15.12	15.60	16.20	17.68
	3H	18.80	19.31	19.90	20.42	21.91	15.74	16.25	16.85	17.36	18.85
	4H	19.27	19.74	20.38	20.83	22.35	16.29	16.76	17.40	17.86	19.37
	6H	19.60	20.00	20.71	21.12	22.62	16.72	17.13	17.84	18.25	19.75
	8H	19.69	20.06	20.80	21.17	22.70	16.84	17.22	17.96	18.33	19.85
	12H	19.72	20.06	20.85	21.18	22.71	16.87	17.21	18.00	18.33	19.85
8H	4H	19.28	19.65	20.39	20.76	22.28	16.55	16.93	17.67	18.04	19.56
	6H	19.70	20.01	20.84	21.17	22.68	17.10	17.41	18.23	18.56	20.08
	8H	19.86	20.13	21.00	21.26	22.80	17.28	17.55	18.43	18.69	20.22
	12H	19.94	20.18	21.09	21.31	22.88	17.35	17.59	18.50	18.72	20.29
12H	4H	19.23	19.57	20.36	20.69	22.22	16.56	16.90	17.69	18.02	19.55
	6H	19.69	19.96	20.83	21.10	22.63	17.15	17.42	18.29	18.55	20.09
	8H	19.86	20.10	21.00	21.22	22.80	17.35	17.59	18.50	18.72	20.29