

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:

Luminaire Tested: SQ4-WB-075U-125D-927-1D-UNV-STD-W-6

Issue Date: 8/1/2024

Test Information

Test Method: LM-79-2019
Report Number:
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-22)
Test Lab: INNOVATION CENTER
Issue Date: 8/1/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-WB-075U-125D-927-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 750 LUMENS PER FOOT
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

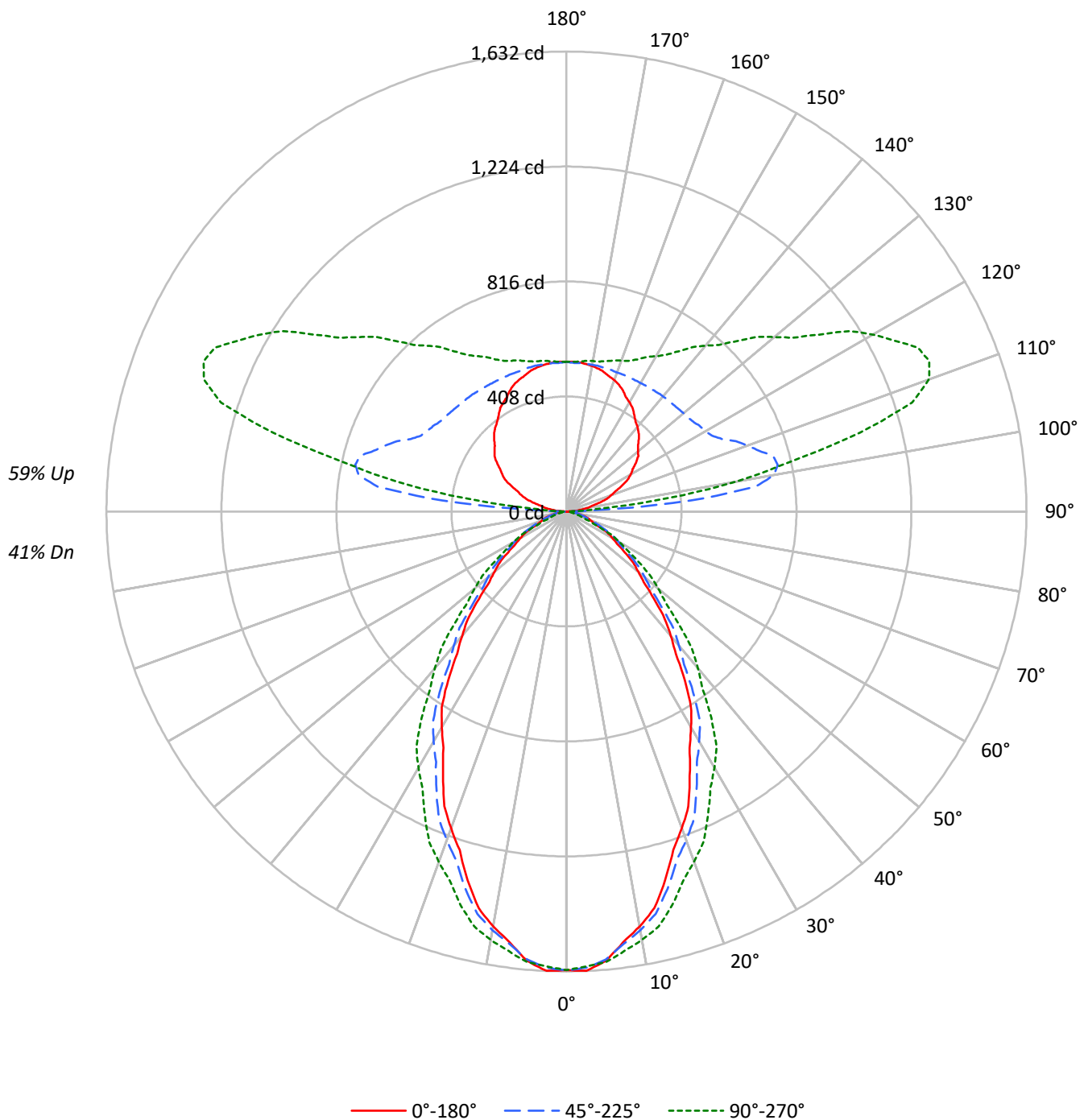
Lumens per Lamp: N/A
Luminaire Lumens: 5830.8 lumens
Efficiency: N/A
Efficacy: 59.9 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 97.3
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
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
RCR																	
0	105	105	105	105	96	96	96	96	78	78	78	62	62	62	48	48	48
1	97	93	89	86	88	85	82	79	70	68	66	56	55	54	43	43	42
2	89	82	77	72	81	75	70	66	62	59	56	50	48	46	39	38	37
3	82	73	66	61	74	67	61	57	56	52	48	45	43	40	36	34	32
4	75	65	58	52	68	60	54	49	50	46	42	41	38	35	33	31	29
5	69	59	51	46	63	54	48	43	45	41	37	37	34	31	30	28	26
6	64	53	45	40	59	49	42	38	41	36	33	34	31	28	28	25	23
7	60	48	41	36	54	45	38	33	38	33	29	31	28	25	25	23	21
8	55	44	37	32	51	41	34	30	35	30	26	29	25	23	24	21	19
9	52	40	33	29	47	37	31	27	32	27	24	27	23	21	22	20	18
10	48	37	30	26	44	35	28	24	30	25	22	25	21	19	21	18	16

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10010	10010	10010
5°	9886	9850	9908
10°	9340	9425	9643
15°	8622	8822	9218
20°	7830	8124	8662
25°	7023	7406	8069
30°	6279	6690	7456
35°	5491	5888	6729
40°	4622	4989	5826
45°	3814	4143	4864
50°	3185	3472	4052
55°	2703	2979	3347
60°	2310	2583	2671
65°	1840	2173	1725
70°	1631	1696	1054
75°	1511	1374	644
80°	1392	1265	556
85°	1263	1157	452

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 4864 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	149.3	2.6
10°-20°	388.3	6.7
20°-30°	503.0	8.6
30°-40°	492.5	8.4
40°-50°	377.0	6.5
50°-60°	251.2	4.3
60°-70°	137.1	2.4
70°-80°	57.1	1.0
80°-90°	17.5	0.3
90°-100°	250.3	4.3
100°-110°	688.7	11.8
110°-120°	710.9	12.2
120°-130°	569.6	9.8
130°-140°	447.4	7.7
140°-150°	342.8	5.9
150°-160°	246.5	4.2
160°-170°	150.7	2.6
170°-180°	50.8	0.9
0°-30°	1040.5	17.8
0°-40°	1533.0	26.3
0°-60°	2161.2	37.1
0°-90°	2373.0	40.7
90°-120°	1650.0	28.3
90°-150°	3009.8	51.6
90°-180°	3458.0	59.3
0°-180°	5830.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1628	1628	1628	1628	1628	
5°	1601	1585	1595	1599	1605	149
15°	1354	1349	1385	1423	1448	378
25°	1035	1038	1091	1139	1189	476
35°	731	735	784	837	896	455
45°	438	447	476	512	559	342
55°	252	263	278	288	312	229
65°	126	137	149	130	118	131
75°	64	64	58	40	27	68
85°	18	18	16	11	6	19
90°	1	4	8	10	10	3
95°	37	137	443	189	121	39
105°	123	189	759	1156	1078	130
115°	218	265	609	1212	1376	215
125°	300	342	552	934	1094	268
135°	362	402	536	756	855	280
145°	419	448	528	644	693	263
155°	474	490	525	579	595	218
165°	513	519	527	549	552	144
175°	531	532	528	535	534	50
180°	531	531	531	531	531	

TEST NUMBER:

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1627.5	1627.5	1627.5	1627.5	1627.5
2.5°	1631.5	1617.0	1620.7	1620.6	1616.1
5°	1601.1	1585.0	1595.4	1599.1	1604.7
7.5°	1541.7	1529.5	1548.4	1562.4	1573.7
10°	1495.4	1484.9	1509.0	1529.3	1544.0
12.5°	1441.7	1432.9	1462.7	1490.0	1509.1
15°	1354.0	1349.1	1385.4	1423.1	1447.6
17.5°	1260.2	1257.8	1299.5	1343.4	1374.7
20°	1196.2	1195.5	1241.2	1287.0	1323.3
22.5°	1131.6	1133.2	1181.2	1228.8	1270.2
25°	1034.8	1037.6	1091.2	1138.8	1189.0
27.5°	945.2	946.5	1001.9	1052.2	1105.8
30°	884.1	887.6	942.0	993.9	1049.8
32.5°	823.0	827.0	880.3	934.0	990.9
35°	731.3	734.8	784.1	836.9	896.2
37.5°	636.7	641.5	685.3	735.2	793.6
40°	575.6	582.6	621.3	668.3	725.6
42.5°	516.8	525.4	561.3	605.9	657.6
45°	438.5	446.9	476.3	512.4	559.2
47.5°	371.1	380.7	403.3	434.4	474.3
50°	332.8	341.9	362.8	385.8	423.5
52.5°	299.1	308.2	326.8	344.5	376.6
55°	252.1	262.6	277.8	288.3	312.1
57.5°	213.5	223.6	235.7	240.4	254.8
60°	187.8	199.0	210.0	209.4	217.1
62.5°	164.4	173.9	184.8	177.3	177.7
65°	126.4	136.9	149.3	130.4	118.5
67.5°	102.1	104.4	117.1	90.9	76.8
70°	90.7	90.7	94.3	70.4	58.6
72.5°	79.8	79.8	76.6	57.3	44.8
75°	63.6	63.6	57.8	39.7	27.1
77.5°	49.0	48.4	44.3	29.6	19.7
80°	39.3	39.3	35.7	23.4	15.7
82.5°	30.7	30.7	27.7	18.3	11.7
85°	17.9	17.9	16.4	10.6	6.4
87.5°	6.5	7.2	7.3	5.4	4.9
90°	1.1	4.4	7.9	10.2	10.2
92.5°	15.6	66.6	115.4	44.3	36.4
95°	37.3	136.6	442.7	189.3	120.8
97.5°	60.8	151.5	675.6	520.5	367.3
100°	77.9	160.7	748.7	755.7	616.6
102.5°	94.2	171.7	767.7	937.6	809.9
105°	123.1	189.3	758.9	1155.8	1078.5
107.5°	150.7	211.2	715.8	1262.6	1285.6
110°	170.5	225.7	683.2	1289.2	1368.7

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	188.6	242.0	650.7	1272.1	1393.1
115°	218.0	265.4	608.7	1212.1	1375.5
117.5°	246.0	289.7	582.0	1127.9	1312.7
120°	263.1	305.1	570.3	1064.8	1255.8
122.5°	278.5	320.4	562.2	1009.4	1190.8
125°	300.4	342.4	552.2	934.2	1094.3
127.5°	321.2	361.2	545.7	871.4	1011.9
130°	332.0	372.9	542.1	834.1	962.2
132.5°	344.7	385.5	539.4	801.3	917.0
135°	362.5	402.3	536.4	755.5	854.9
137.5°	379.2	416.1	533.9	718.5	800.5
140°	391.9	426.1	533.0	694.0	767.9
142.5°	402.7	434.3	531.2	672.0	735.4
145°	419.0	447.7	528.5	643.7	693.4
147.5°	436.4	461.1	527.2	618.6	658.4
150°	447.2	469.3	526.3	604.9	635.8
152.5°	457.1	477.5	525.4	593.0	618.6
155°	474.3	489.8	525.1	578.6	595.1
157.5°	486.7	499.3	525.1	566.7	578.2
160°	495.8	505.7	525.1	560.3	569.2
162.5°	503.0	511.2	526.0	554.9	561.9
165°	512.7	519.3	527.4	548.9	552.2
167.5°	519.5	524.6	528.5	543.9	544.8
170°	524.0	527.3	528.5	542.1	542.1
172.5°	527.6	529.2	528.5	539.3	538.5
175°	530.8	531.9	528.5	535.3	534.2
177.5°	531.7	531.7	528.1	533.4	531.7
180°	530.8	530.8	530.8	530.8	530.8

(END OF REPORT)