

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-075D-927-1D-UNV-STD-W-4

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-075D-927-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 750 LUMENS PER FOOT
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

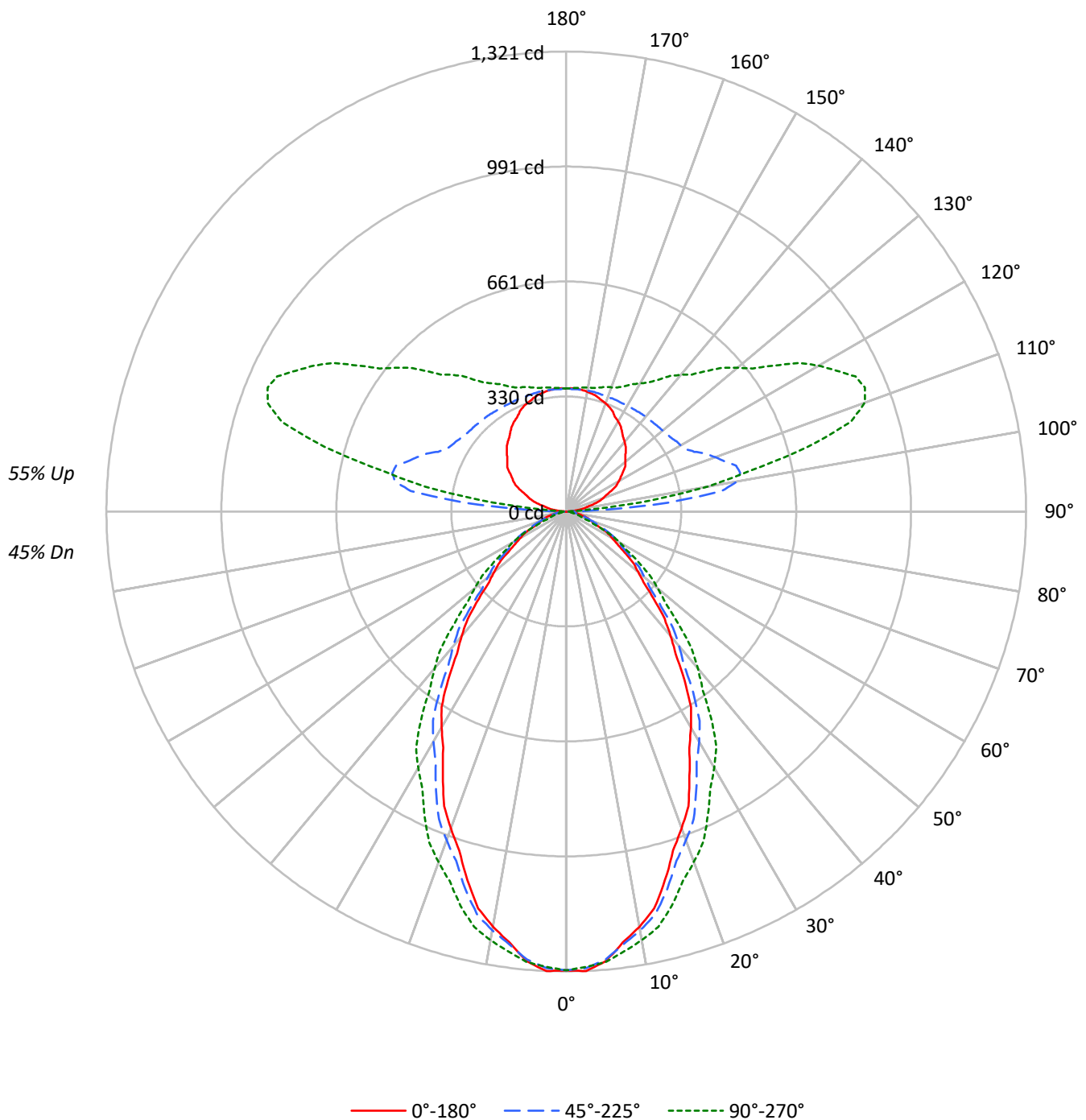
Lumens per Lamp: N/A
Luminaire Lumens: 4226.9 lumens
Efficiency: N/A
Efficacy: 99.5 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 42.5
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	106	106	106	106	97	97	97	97	81	81	81	66	66	66	52	52	52
1	98	94	90	87	90	86	83	81	72	70	68	59	58	57	47	47	46
2	90	83	78	73	82	77	72	68	65	61	58	53	51	49	43	42	40
3	83	74	67	62	76	69	63	58	58	54	50	48	45	43	39	37	36
4	76	66	59	54	70	61	55	50	52	48	44	44	40	38	36	34	32
5	70	60	52	47	65	55	49	44	47	42	39	40	36	33	33	30	28
6	65	54	47	41	60	50	44	39	43	38	34	36	33	30	30	28	26
7	61	49	42	37	56	46	39	35	39	34	31	34	30	27	28	25	23
8	56	45	38	33	52	42	36	31	36	31	28	31	27	24	26	23	21
9	53	41	34	29	49	39	32	28	34	29	25	29	25	22	24	21	19
10	49	38	31	27	46	36	30	25	31	26	23	27	23	20	23	20	18

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	12161	12161	12161
5°	12009	11967	12036
10°	11346	11449	11714
15°	10474	10717	11198
20°	9512	9869	10522
25°	8532	8997	9803
30°	7628	8128	9058
35°	6671	7153	8176
40°	5615	6061	7077
45°	4633	5034	5909
50°	3868	4217	4923
55°	3285	3619	4065
60°	2807	3137	3244
65°	2235	2639	2096
70°	1983	2058	1279
75°	1836	1668	784
80°	1690	1536	675
85°	1535	1408	550

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 5909 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	120.9	2.9
10°-20°	314.5	7.4
20°-30°	407.3	9.6
30°-40°	398.9	9.4
40°-50°	305.3	7.2
50°-60°	203.4	4.8
60°-70°	111.0	2.6
70°-80°	46.3	1.1
80°-90°	14.0	0.3
90°-100°	166.9	3.9
100°-110°	459.2	10.9
110°-120°	473.9	11.2
120°-130°	379.7	9.0
130°-140°	298.2	7.1
140°-150°	228.6	5.4
150°-160°	164.3	3.9
160°-170°	100.5	2.4
170°-180°	33.9	0.8
0°-30°	842.7	19.9
0°-40°	1241.6	29.4
0°-60°	1750.4	41.4
0°-90°	1921.7	45.5
90°-120°	1100.0	26.0
90°-150°	2006.5	47.5
90°-180°	2305.0	54.5
0°-180°	4226.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1318	1318	1318	1318	1318	
5°	1297	1284	1292	1295	1300	121
15°	1097	1093	1122	1153	1172	306
25°	838	840	884	922	963	385
35°	592	595	635	678	726	368
45°	355	362	386	415	453	277
55°	204	213	225	234	253	185
65°	102	111	121	106	96	106
75°	52	52	47	32	22	55
85°	14	14	13	9	5	16
90°	1	3	5	7	7	2
95°	25	91	295	126	81	26
105°	82	126	506	770	719	87
115°	145	177	406	808	917	143
125°	200	228	368	623	730	179
135°	242	268	358	504	570	186
145°	279	298	352	429	462	175
155°	316	326	350	386	397	145
165°	342	346	352	366	368	96
175°	354	355	352	357	356	34
180°	354	354	354	354	354	

TEST NUMBER:

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1318.1	1318.1	1318.1	1318.1	1318.1
2.5°	1321.3	1309.6	1312.6	1312.5	1308.9
5°	1296.7	1283.7	1292.1	1295.1	1299.6
7.5°	1248.6	1238.7	1254.0	1265.3	1274.5
10°	1211.1	1202.6	1222.1	1238.6	1250.4
12.5°	1167.6	1160.5	1184.6	1206.7	1222.2
15°	1096.6	1092.6	1122.0	1152.6	1172.4
17.5°	1020.6	1018.7	1052.4	1088.0	1113.4
20°	968.8	968.2	1005.2	1042.3	1071.7
22.5°	916.5	917.7	956.6	995.2	1028.7
25°	838.1	840.3	883.8	922.3	963.0
27.5°	765.5	766.6	811.5	852.1	895.6
30°	716.0	718.9	762.9	805.0	850.2
32.5°	666.5	669.8	712.9	756.4	802.5
35°	592.3	595.1	635.1	677.8	725.9
37.5°	515.7	519.5	555.0	595.4	642.7
40°	466.2	471.8	503.2	541.3	587.6
42.5°	418.5	425.5	454.6	490.7	532.6
45°	355.1	361.9	385.8	415.0	452.9
47.5°	300.5	308.3	326.7	351.8	384.2
50°	269.5	276.9	293.8	312.4	343.0
52.5°	242.2	249.6	264.7	279.0	305.0
55°	204.2	212.6	225.0	233.5	252.7
57.5°	172.9	181.1	190.9	194.7	206.4
60°	152.1	161.2	170.0	169.6	175.8
62.5°	133.1	140.8	149.7	143.6	143.9
65°	102.4	110.9	120.9	105.6	96.0
67.5°	82.7	84.5	94.9	73.7	62.2
70°	73.5	73.5	76.3	57.0	47.4
72.5°	64.7	64.7	62.0	46.4	36.3
75°	51.5	51.5	46.8	32.2	22.0
77.5°	39.7	39.2	35.9	24.0	16.0
80°	31.8	31.8	28.9	18.9	12.7
82.5°	24.9	24.9	22.4	14.8	9.5
85°	14.5	14.5	13.3	8.6	5.2
87.5°	5.2	5.7	5.7	4.1	3.7
90°	0.8	3.0	5.3	6.8	6.8
92.5°	10.4	44.4	76.9	29.5	24.2
95°	24.8	91.1	295.1	126.2	80.6
97.5°	40.5	101.0	450.4	347.0	244.8
100°	51.9	107.2	499.2	503.8	411.1
102.5°	62.8	114.5	511.8	625.1	540.0
105°	82.1	126.2	505.9	770.5	719.0
107.5°	100.4	140.8	477.2	841.8	857.1
110°	113.7	150.5	455.5	859.5	912.5

TEST NUMBER:

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	125.7	161.4	433.8	848.1	928.8
115°	145.3	177.0	405.8	808.1	917.0
117.5°	164.0	193.1	388.0	751.9	875.1
120°	175.4	203.4	380.2	709.8	837.2
122.5°	185.7	213.6	374.8	673.0	793.8
125°	200.3	228.2	368.2	622.8	729.5
127.5°	214.1	240.8	363.8	580.9	674.6
130°	221.3	248.6	361.4	556.1	641.5
132.5°	229.8	257.0	359.6	534.2	611.3
135°	241.7	268.2	357.6	503.7	569.9
137.5°	252.8	277.4	356.0	479.0	533.6
140°	261.2	284.1	355.4	462.6	512.0
142.5°	268.5	289.5	354.2	448.0	490.3
145°	279.3	298.5	352.3	429.1	462.3
147.5°	290.9	307.4	351.4	412.4	438.9
150°	298.1	312.9	350.8	403.3	423.9
152.5°	304.8	318.3	350.2	395.3	412.4
155°	316.2	326.5	350.1	385.7	396.8
157.5°	324.5	332.9	350.1	377.8	385.5
160°	330.5	337.1	350.1	373.6	379.5
162.5°	335.3	340.8	350.7	369.9	374.6
165°	341.8	346.2	351.6	365.9	368.2
167.5°	346.3	349.7	352.3	362.6	363.2
170°	349.3	351.5	352.3	361.4	361.4
172.5°	351.7	352.8	352.3	359.6	359.0
175°	353.9	354.6	352.3	356.8	356.1
177.5°	354.5	354.5	352.0	355.6	354.5
180°	353.9	353.9	353.9	353.9	353.9

(END OF REPORT)