

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-050U-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 (G3-1910-536-21)
Test Lab: INNOVATION CENTER
Issue Date: 8/1/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-WB-050U-075D-927-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

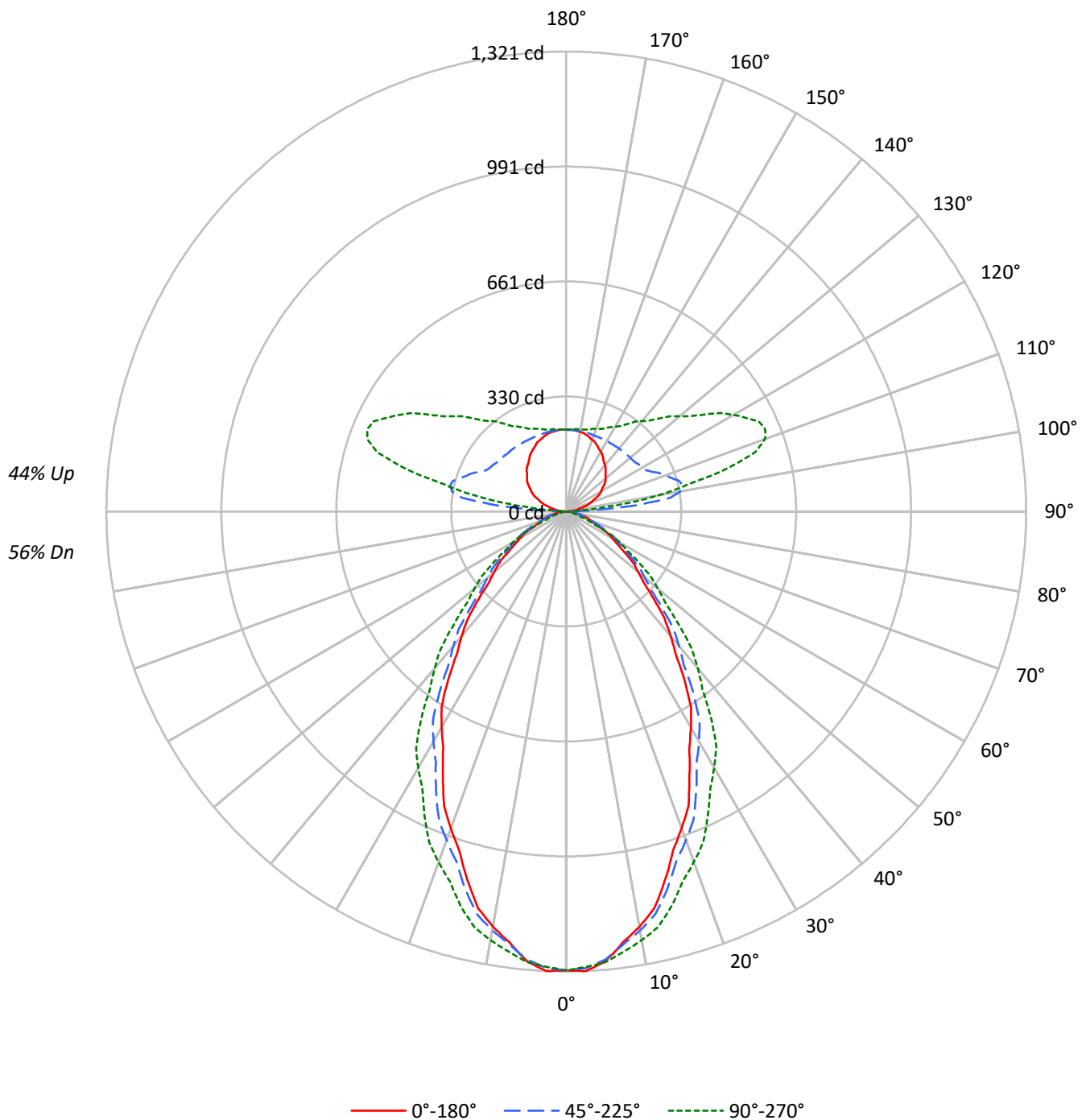
Lumens per Lamp: N/A
Luminaire Lumens: 3455.5 lumens
Efficiency: N/A
Efficacy: 95.2 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 36.3
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	108	108	108	108	101	101	101	101	86	86	86	73	73	73	61	61	61
1	100	96	93	90	93	90	87	84	78	76	74	66	65	64	56	55	54
2	92	86	80	76	86	80	75	71	70	66	63	60	57	55	51	49	48
3	85	77	70	65	79	72	66	61	63	58	55	54	51	48	46	44	42
4	79	69	62	56	73	65	58	53	57	52	48	49	46	43	42	40	38
5	73	62	55	49	68	58	52	47	51	46	42	45	41	38	39	36	34
6	68	56	49	43	63	53	46	41	47	42	38	41	37	34	36	33	30
7	63	51	44	39	59	49	42	37	43	38	34	38	34	31	33	30	28
8	59	47	40	35	55	45	38	33	40	34	31	35	31	28	31	28	25
9	55	43	36	31	51	41	35	30	37	32	28	33	29	26	29	26	23
10	52	40	33	29	48	38	32	28	34	29	26	30	26	23	27	24	21

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	3.5
10°-20°	314.5	9.1
20°-30°	407.3	11.8
30°-40°	398.9	11.5
40°-50°	305.3	8.8
50°-60°	203.4	5.9
60°-70°	111.0	3.2
70°-80°	46.3	1.3
80°-90°	14.0	0.4
90°-100°	112.8	3.3
100°-110°	306.3	8.9
110°-120°	315.0	9.1
120°-130°	251.8	7.3
130°-140°	197.9	5.7
140°-150°	151.7	4.4
150°-160°	109.1	3.2
160°-170°	66.7	1.9
170°-180°	22.5	0.7
0°-30°	842.7	24.4
0°-40°	1241.6	35.9
0°-60°	1750.4	50.7
0°-90°	1921.7	55.6
90°-120°	734.1	21.2
90°-150°	1335.5	38.6
90°-180°	1534.0	44.4
0°-180°	3455.5	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°	17	62	196	86	57	18
105°	54	85	337	513	483	58
115°	97	117	270	536	611	95
125°	133	151	244	411	485	118
135°	160	178	237	335	378	124
145°	185	198	234	284	306	116
155°	209	217	233	256	263	96
165°	227	230	233	243	244	64
175°	235	236	234	237	236	22
180°	235	235	235	235	235	

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°	6.8	30.9	53.6	23.0	19.5
95°	16.6	61.7	196.4	85.5	57.4
97.5°	27.5	68.1	301.1	234.2	164.5
100°	34.7	72.4	333.1	337.7	272.7
102.5°	42.0	76.7	341.6	417.6	360.3
105°	54.4	84.7	336.9	512.9	482.7
107.5°	67.2	94.0	317.4	562.2	570.6
110°	76.3	100.7	302.9	571.8	608.0

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	84.1	107.3	288.4	563.8	618.3
115°	96.7	117.4	269.7	536.5	611.1
117.5°	108.5	128.3	257.7	497.7	581.8
120°	116.3	135.5	252.3	471.7	555.2
122.5°	123.0	142.2	248.7	445.7	526.2
125°	132.9	151.4	244.0	411.1	484.9
127.5°	141.9	160.2	241.4	384.8	448.2
130°	147.3	165.0	240.2	368.4	425.2
132.5°	152.7	170.5	239.0	354.3	404.7
135°	160.1	177.9	237.2	334.8	377.7
137.5°	168.1	184.2	236.3	317.6	353.6
140°	173.0	188.5	235.7	306.6	339.1
142.5°	177.8	192.1	235.1	298.1	325.2
145°	185.1	198.3	234.2	284.5	305.9
147.5°	193.2	204.6	233.4	273.8	290.6
150°	198.7	208.3	233.4	267.7	281.0
152.5°	202.9	211.3	232.8	262.2	273.1
155°	209.2	216.6	232.6	255.5	262.9
157.5°	215.4	221.2	232.6	250.9	256.5
160°	219.0	224.2	232.6	247.8	252.3
162.5°	222.7	226.7	233.2	245.4	248.7
165°	226.6	229.6	233.4	243.2	244.0
167.5°	230.7	232.2	234.2	240.7	241.3
170°	231.9	233.4	234.2	239.4	239.4
172.5°	233.1	234.0	234.2	238.2	238.2
175°	234.9	235.6	234.2	237.2	236.4
177.5°	235.5	235.5	233.7	236.1	234.9
180°	234.9	234.9	234.9	234.9	234.9

(END OF REPORT)