

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

(formerly Eaton)

Brand: CORELITE

Report Number: P519790

Luminaire Tested: **SQ4-F-025U-050D-830-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P519790
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-32, G3-1910-536-17)
Test Lab: INNOVATION CENTER
Issue Date: 4/29/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-F-025U-050D-830-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 250 LUMENS PER FOOT
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

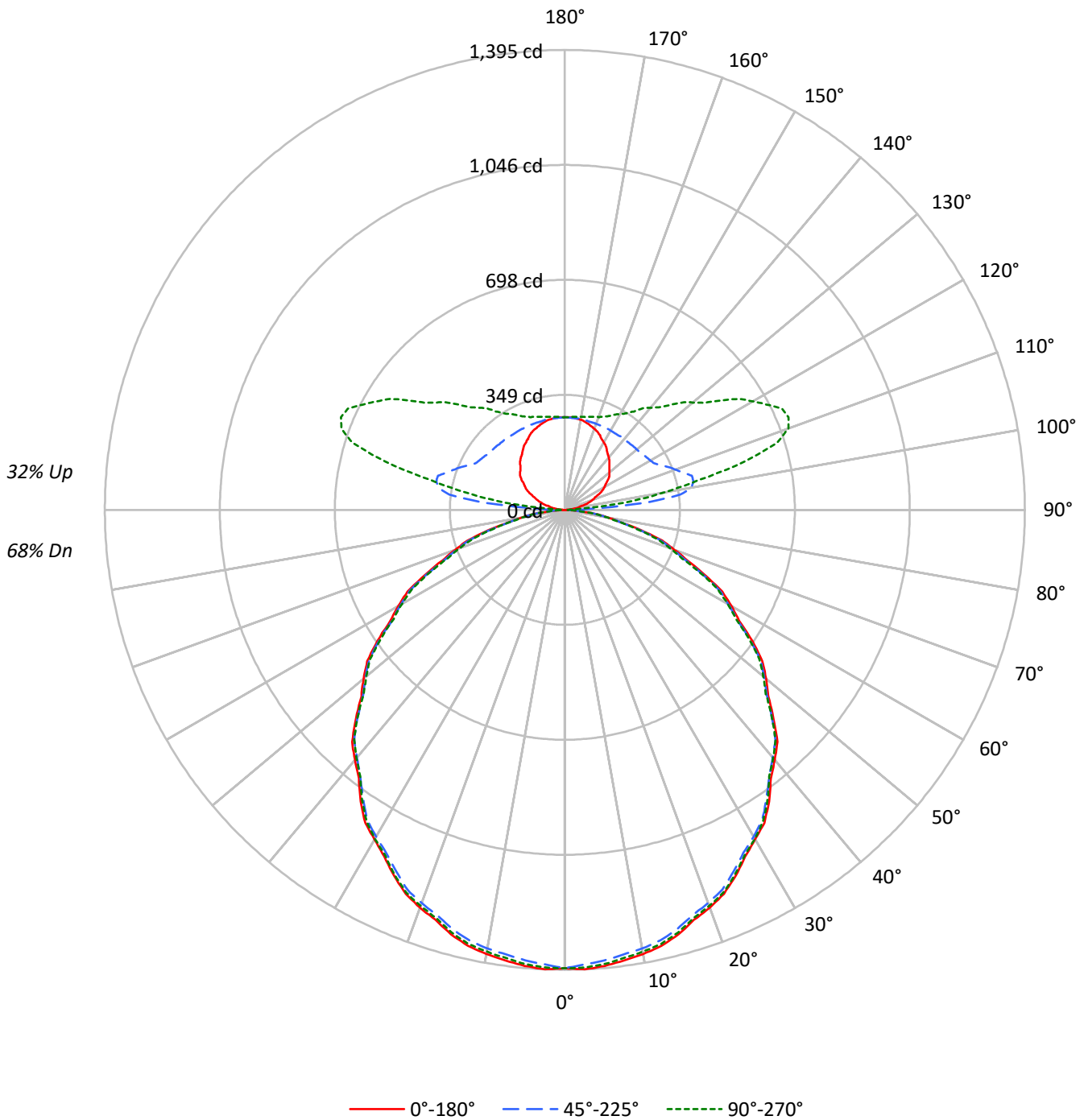
Lumens per Lamp: N/A
Luminaire Lumens: 5620.1 lumens
Efficiency: N/A
Efficacy: 124.3 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 45.2
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	111	111	111	111	105	105	105	105	93	93	93	82	82	82	72	72	72	68
1	102	97	93	90	96	92	88	85	82	79	77	72	70	69	64	62	61	57
2	93	85	78	73	87	80	75	70	72	67	63	63	60	57	56	54	51	47
3	84	75	67	61	79	71	64	58	63	58	53	56	52	48	50	46	43	40
4	77	66	58	51	72	62	55	49	56	50	45	50	45	41	44	40	37	34
5	71	59	50	44	67	56	48	42	50	44	39	45	40	36	40	36	32	30
6	65	53	44	38	61	50	42	37	45	39	34	40	35	31	36	32	29	26
7	60	48	39	34	57	45	38	32	41	35	30	37	32	28	33	29	25	23
8	56	43	35	30	53	41	34	29	37	31	27	34	28	25	30	26	23	20
9	52	40	32	27	49	38	31	26	34	28	24	31	26	22	28	24	20	18
10	49	36	29	24	46	35	28	23	32	26	22	29	24	20	26	22	19	17

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6415	6415	6415
5°	6431	6353	6404
10°	6409	6330	6374
15°	6366	6285	6338
20°	6305	6232	6278
25°	6235	6159	6215
30°	6148	6098	6137
35°	6080	6007	6038
40°	5964	5908	5918
45°	5841	5793	5793
50°	5718	5664	5637
55°	5584	5509	5479
60°	5376	5289	5255
65°	5120	5019	4958
70°	4771	4669	4570
75°	4279	4148	4048
80°	3462	3414	3313
85°	2064	2366	2461



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	131.2	2.3
10°-20°	373.6	6.6
20°-30°	561.2	10.0
30°-40°	669.8	11.9
40°-50°	686.4	12.2
50°-60°	612.2	10.9
60°-70°	455.9	8.1
70°-80°	247.5	4.4
80°-90°	58.8	1.0
90°-100°	137.1	2.4
100°-110°	360.5	6.4
110°-120°	373.8	6.7
120°-130°	299.8	5.3
130°-140°	235.2	4.2
140°-150°	180.5	3.2
150°-160°	130.0	2.3
160°-170°	79.6	1.4
170°-180°	26.9	0.5
0°-30°	1066.0	19.0
0°-40°	1735.8	30.9
0°-60°	3034.4	54.0
0°-90°	3796.6	67.6
90°-120°	871.3	15.5
90°-150°	1587.0	28.2
90°-180°	1823.0	32.4
0°-180°	5620.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1390	1390	1390	1390	1390	
5°	1389	1387	1372	1385	1383	132
15°	1333	1329	1316	1327	1327	376
25°	1225	1221	1210	1218	1221	564
35°	1080	1076	1067	1067	1072	674
45°	895	897	888	886	888	691
55°	694	694	685	680	681	618
65°	469	467	460	454	454	465
75°	240	238	233	229	227	254
85°	39	43	45	46	46	55
90°	2	5	14	7	7	3
95°	18	71	236	122	83	20
105°	65	98	399	605	564	69
115°	115	140	319	637	727	114
125°	160	180	290	491	579	142
135°	191	211	281	396	449	148
145°	222	236	278	338	364	139
155°	251	258	278	305	314	115
165°	270	274	278	289	292	76
175°	281	281	280	283	283	27
180°	281	281	281	281	281	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1390.5	1390.5	1390.5	1390.5	1390.5
2.5°	1395.0	1392.1	1380.1	1390.4	1389.1
5°	1388.7	1386.8	1371.9	1384.9	1383.0
7.5°	1378.6	1375.0	1360.4	1373.0	1371.1
10°	1368.2	1364.5	1351.4	1362.5	1360.8
12.5°	1354.7	1352.6	1338.0	1349.2	1348.8
15°	1332.9	1329.2	1316.1	1327.2	1327.2
17.5°	1303.8	1301.6	1288.9	1299.6	1298.1
20°	1284.4	1280.8	1269.5	1278.8	1278.8
22.5°	1260.6	1258.4	1247.2	1255.1	1256.5
25°	1224.9	1221.2	1210.0	1217.5	1221.1
27.5°	1185.3	1182.5	1173.1	1177.9	1180.5
30°	1154.1	1154.1	1144.8	1146.8	1152.2
32.5°	1125.8	1125.8	1115.0	1116.9	1119.5
35°	1079.6	1076.0	1066.6	1066.7	1072.2
37.5°	1026.0	1024.2	1018.2	1017.1	1018.6
40°	990.3	988.5	981.0	982.8	982.8
42.5°	954.6	952.7	945.2	942.7	945.6
45°	895.3	897.2	887.9	886.1	887.9
47.5°	836.9	836.9	829.5	824.3	827.2
50°	796.7	796.7	789.2	785.5	785.5
52.5°	755.0	756.5	747.5	742.4	743.9
55°	694.3	694.3	685.0	679.5	681.3
57.5°	627.3	627.3	618.0	612.5	615.8
60°	582.7	582.7	573.3	567.8	569.6
62.5°	538.0	538.0	528.6	523.1	523.4
65°	469.1	467.3	459.8	454.2	454.2
67.5°	402.8	398.1	392.4	385.0	385.0
70°	353.7	351.8	346.2	338.8	338.8
72.5°	309.0	305.7	300.1	294.1	294.1
75°	240.1	238.3	232.7	229.0	227.1
77.5°	172.0	170.6	170.1	165.0	166.4
80°	130.3	130.3	128.5	124.7	124.7
82.5°	93.1	94.6	91.2	90.4	88.9
85°	39.0	42.7	44.7	46.5	46.5
87.5°	7.8	12.9	13.4	13.4	13.4
90°	1.8	5.4	14.4	7.2	7.2
92.5°	7.6	36.5	80.8	35.7	23.0
95°	18.1	70.9	236.3	121.8	83.0
97.5°	31.4	77.9	353.5	281.1	207.0
100°	41.5	83.8	389.5	394.8	306.5
102.5°	50.1	89.7	399.6	491.7	416.2
105°	64.9	98.5	398.6	605.1	564.4
107.5°	80.1	111.1	375.8	663.8	673.8
110°	90.1	118.3	357.1	679.0	721.4

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	100.3	127.0	339.7	669.5	734.3
115°	115.4	140.1	319.2	636.8	726.7
117.5°	130.2	152.7	305.1	591.6	691.4
120°	138.9	160.0	299.4	561.3	658.2
122.5°	147.5	168.7	295.1	530.9	626.5
125°	160.5	179.9	290.4	490.7	578.9
127.5°	171.0	190.7	286.4	458.3	532.7
130°	176.7	197.9	284.9	438.0	506.7
132.5°	182.5	203.7	283.5	420.5	482.2
135°	191.2	210.6	281.3	396.1	449.1
137.5°	200.2	219.2	280.9	377.9	421.2
140°	207.4	225.0	279.5	363.4	403.9
142.5°	213.2	229.4	279.5	353.2	388.1
145°	221.9	235.9	277.7	337.8	364.3
147.5°	230.5	244.2	277.7	325.1	347.0
150°	236.3	248.6	277.7	317.8	335.4
152.5°	242.0	251.6	277.7	311.9	325.4
155°	250.6	257.7	277.7	305.0	313.8
157.5°	257.1	263.8	277.7	298.8	305.1
160°	261.5	266.8	277.7	295.8	299.4
162.5°	265.8	269.7	277.7	293.0	296.5
165°	270.5	274.0	277.7	288.6	292.1
167.5°	274.8	276.6	279.5	286.8	288.2
170°	277.7	279.5	279.5	286.8	286.8
172.5°	279.2	279.5	279.5	285.2	283.9
175°	281.3	281.3	279.5	283.1	283.1
177.5°	281.3	281.3	279.9	282.7	281.3
180°	281.3	281.3	281.3	281.3	281.3

(END OF REPORT)