

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: P519810

Luminaire Tested: **SQ4-F-025U-050D-940-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P519810
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-940-1D-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

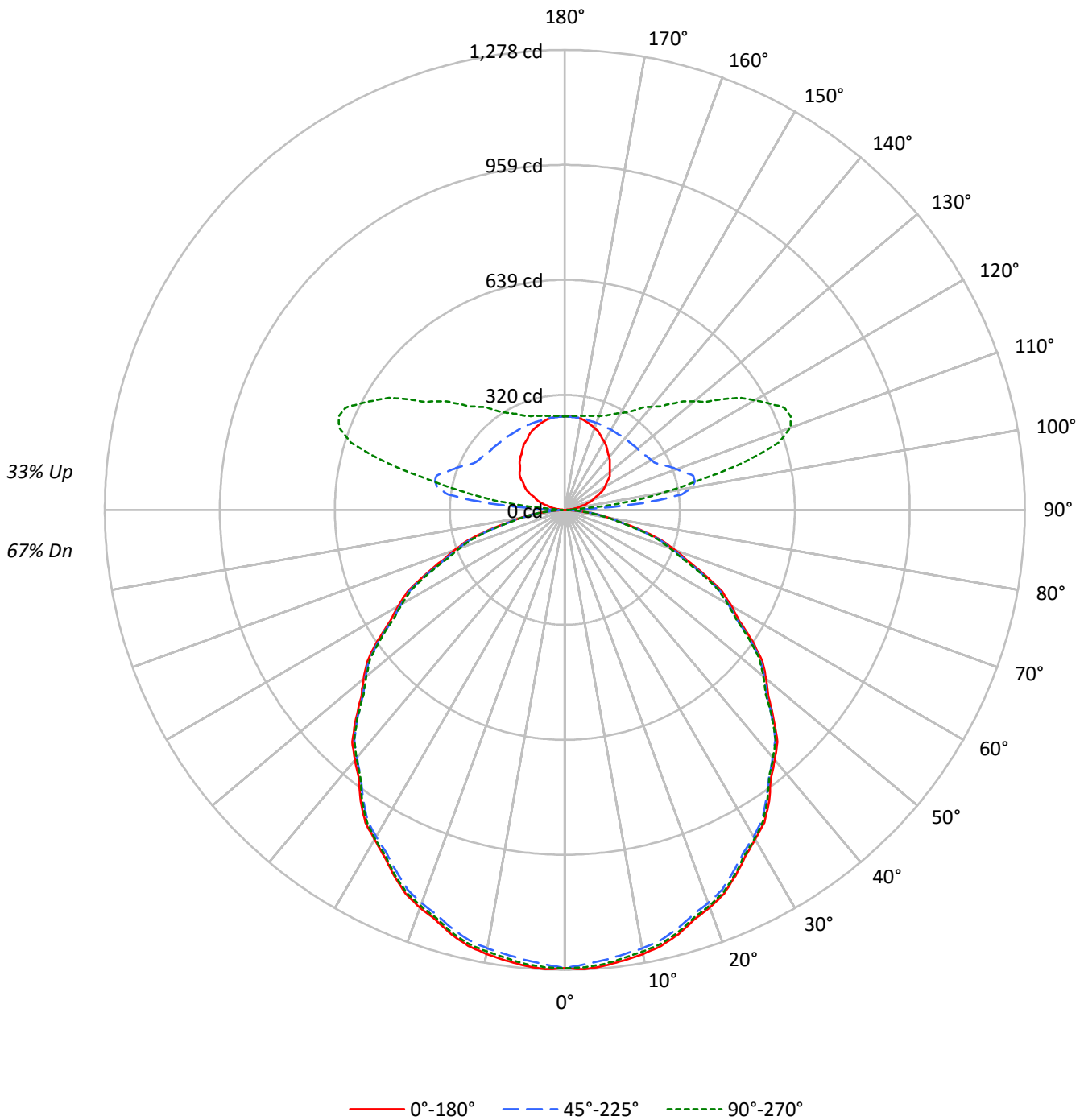
Lumens per Lamp: N/A
Luminaire Lumens: 5164.1 lumens
Efficiency: N/A
Efficacy: 114.2 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: Semi-Direct

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	67
1	102	97	93	90	96	92	88	85	82	79	76	72	70	68	64	62	61	57
2	92	85	78	73	87	80	74	70	71	67	63	63	60	57	56	53	51	47
3	84	74	67	61	79	70	64	58	63	57	53	56	52	48	49	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	66	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	28	26
7	60	48	39	34	57	45	38	32	41	35	30	37	31	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°	5875	5875	5875
5°	5889	5818	5866
10°	5870	5798	5838
15°	5829	5757	5805
20°	5775	5708	5750
25°	5710	5640	5693
30°	5631	5585	5621
35°	5568	5501	5530
40°	5462	5411	5421
45°	5350	5305	5305
50°	5237	5188	5163
55°	5114	5046	5019
60°	4924	4845	4813
65°	4689	4597	4541
70°	4369	4277	4185
75°	3919	3798	3707
80°	3169	3124	3034
85°	1895	2165	2255



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	120.2	2.3
10°-20°	342.2	6.6
20°-30°	513.9	10.0
30°-40°	613.5	11.9
40°-50°	628.7	12.2
50°-60°	560.7	10.9
60°-70°	417.5	8.1
70°-80°	226.7	4.4
80°-90°	53.9	1.0
90°-100°	126.8	2.5
100°-110°	333.4	6.5
110°-120°	345.8	6.7
120°-130°	277.3	5.4
130°-140°	217.6	4.2
140°-150°	167.0	3.2
150°-160°	120.3	2.3
160°-170°	73.6	1.4
170°-180°	24.9	0.5
0°-30°	976.3	18.9
0°-40°	1589.8	30.8
0°-60°	2779.1	53.8
0°-90°	3477.2	67.3
90°-120°	806.1	15.6
90°-150°	1468.1	28.4
90°-180°	1687.0	32.7
0°-180°	5164.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1274	1274	1274	1274	1274	
5°	1272	1270	1256	1268	1267	121
15°	1221	1217	1205	1216	1216	344
25°	1122	1118	1108	1115	1118	517
35°	989	986	977	977	982	617
45°	820	822	813	812	813	633
55°	636	636	627	622	624	566
65°	430	428	421	416	416	425
75°	220	218	213	210	208	232
85°	36	39	41	43	43	50
90°	2	5	13	7	7	2
95°	17	66	218	113	77	19
105°	60	91	369	560	522	64
115°	107	130	295	589	672	105
125°	148	166	269	454	536	132
135°	177	195	260	366	415	137
145°	205	218	257	313	337	129
155°	232	238	257	282	290	107
165°	250	254	257	267	270	71
175°	260	260	259	262	262	25
180°	260	260	260	260	260	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1273.5	1273.5	1273.5	1273.5	1273.5
2.5°	1277.6	1275.0	1264.0	1273.5	1272.1
5°	1271.8	1270.1	1256.4	1268.4	1266.7
7.5°	1262.6	1259.3	1245.9	1257.4	1255.8
10°	1253.1	1249.7	1237.7	1248.0	1246.3
12.5°	1240.8	1238.8	1225.5	1235.6	1235.3
15°	1220.6	1217.4	1205.4	1215.5	1215.5
17.5°	1194.1	1192.0	1180.4	1190.3	1189.0
20°	1176.4	1173.0	1162.8	1171.2	1171.2
22.5°	1154.6	1152.5	1142.2	1149.4	1150.7
25°	1121.8	1118.5	1108.1	1115.0	1118.4
27.5°	1085.6	1083.0	1074.4	1078.8	1081.2
30°	1057.1	1057.1	1048.5	1050.3	1055.3
32.5°	1031.1	1031.1	1021.2	1022.9	1025.3
35°	988.8	985.5	976.9	977.0	982.0
37.5°	939.7	938.0	932.5	931.5	932.9
40°	907.0	905.3	898.5	900.2	900.2
42.5°	874.2	872.6	865.8	863.4	866.1
45°	820.0	821.7	813.2	811.5	813.2
47.5°	766.5	766.5	759.7	754.9	757.6
50°	729.7	729.7	722.9	719.4	719.4
52.5°	691.5	692.8	684.6	679.9	681.3
55°	635.9	635.9	627.4	622.3	624.0
57.5°	574.6	574.6	566.0	561.0	563.9
60°	533.7	533.7	525.1	520.0	521.7
62.5°	492.7	492.7	484.2	479.0	479.4
65°	429.6	427.9	421.1	416.0	416.0
67.5°	368.9	364.6	359.4	352.5	352.5
70°	323.9	322.2	317.1	310.3	310.3
72.5°	283.0	280.0	274.8	269.4	269.4
75°	219.9	218.2	213.1	209.6	208.0
77.5°	157.6	156.2	155.8	151.1	152.4
80°	119.3	119.3	117.6	114.2	114.2
82.5°	85.2	86.6	83.5	82.8	81.4
85°	35.8	39.1	40.9	42.6	42.6
87.5°	7.2	11.8	12.3	12.3	12.3
90°	1.6	5.0	13.4	6.7	6.7
92.5°	7.0	33.7	74.7	33.1	21.3
95°	16.7	65.6	218.5	112.6	76.8
97.5°	29.1	72.1	327.0	260.0	191.6
100°	38.3	77.5	360.4	365.1	283.6
102.5°	46.4	82.9	369.7	454.9	385.0
105°	60.0	91.1	368.7	559.7	522.2
107.5°	74.1	102.8	347.6	614.1	623.2
110°	83.4	109.5	330.3	628.2	667.3

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	92.7	117.6	314.3	619.3	679.3
115°	106.8	129.6	295.3	589.1	672.4
117.5°	120.4	141.4	282.3	547.3	639.7
120°	128.5	148.1	276.9	519.2	608.9
122.5°	136.5	156.0	272.9	491.1	579.5
125°	148.4	166.4	268.6	453.9	535.5
127.5°	158.2	176.5	265.0	424.0	492.8
130°	163.5	183.0	263.6	405.2	468.8
132.5°	168.8	188.4	262.3	389.0	446.1
135°	176.8	194.8	260.3	366.5	415.4
137.5°	185.1	202.8	259.9	349.6	389.7
140°	191.8	208.2	258.6	336.2	373.7
142.5°	197.2	212.2	258.6	326.7	359.0
145°	205.2	218.2	256.9	312.6	337.0
147.5°	213.3	226.0	256.9	300.7	321.0
150°	218.5	230.0	256.9	294.0	310.3
152.5°	223.9	232.7	256.9	288.6	301.0
155°	231.9	238.4	256.9	282.2	290.3
157.5°	237.9	244.1	256.9	276.4	282.3
160°	241.9	246.8	256.9	273.7	276.9
162.5°	245.9	249.5	256.9	271.0	274.2
165°	250.2	253.5	256.9	267.0	270.2
167.5°	254.3	255.9	258.6	265.3	266.6
170°	256.9	258.6	258.6	265.3	265.3
172.5°	258.3	258.6	258.6	263.9	262.6
175°	260.3	260.3	258.6	261.9	261.9
177.5°	260.3	260.3	258.9	261.5	260.3
180°	260.3	260.3	260.3	260.3	260.3

(END OF REPORT)