

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: P520028

Luminaire Tested: **SQ4-F-075U-100D-830-1D-UNV-STD-W-4**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P520028
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-22, G3-1910-536-19)
Test Lab: INNOVATION CENTER
Issue Date: 4/29/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-F-075U-100D-830-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 750 LUMENS PER FOOT
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

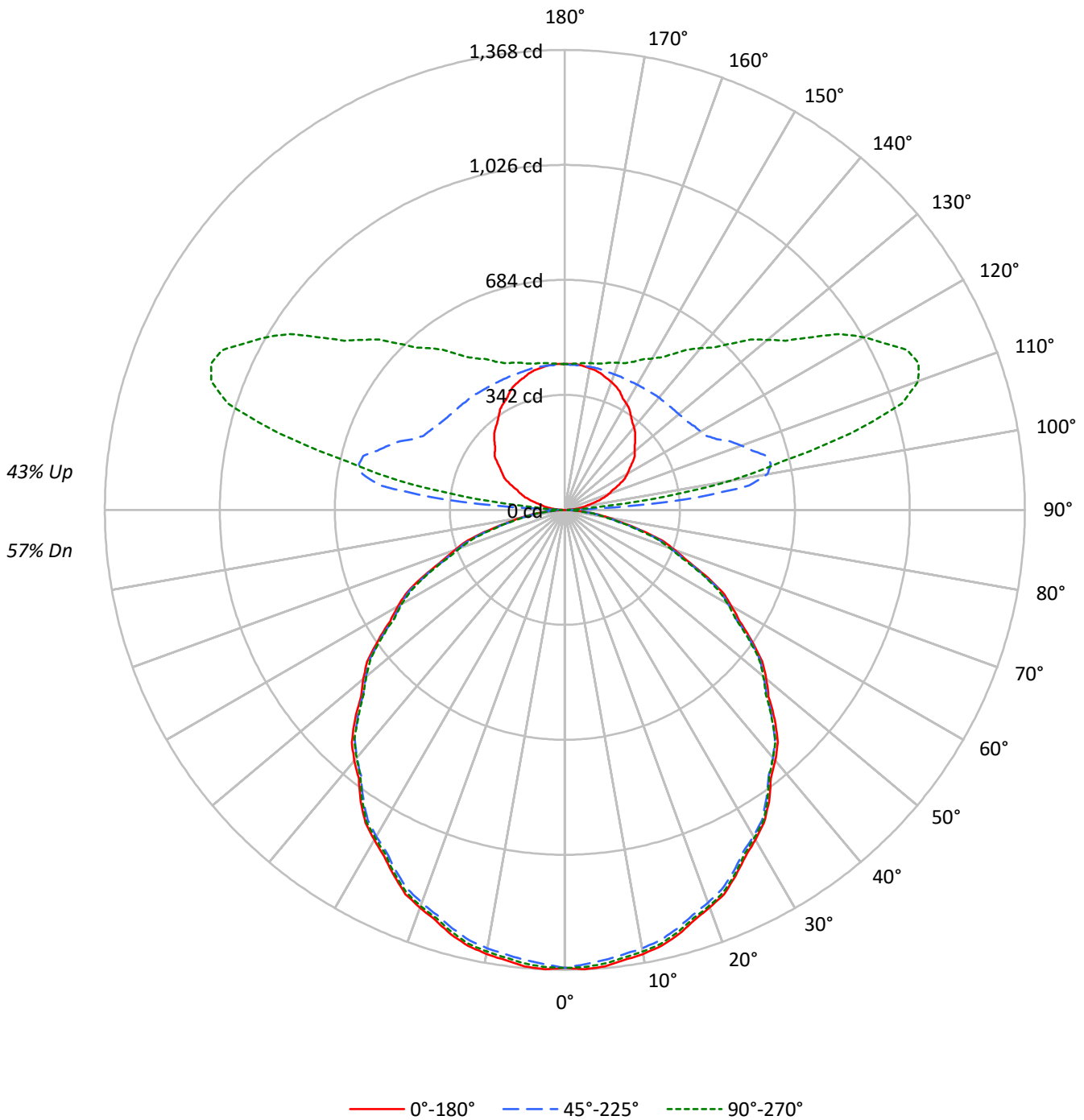
Lumens per Lamp: N/A
Luminaire Lumens: 6543.4 lumens
Efficiency: N/A
Efficacy: 127.6 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 51.3
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



TEST NUMBER: P520028
CATALOG NUMBER: SQ4-F-075U-100D-830-1D-UNV-STD-W-4

Luminous Intensity Polar Plot





TEST NUMBER: P520028

CATALOG NUMBER: SQ4-F-075U-100D-830-1D-UNV-STD-W-4

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	50	30	10	0	
RCR																						
0	109	109	109	109	101	101	101	101	87	87	87	74	74	74	62	62	62	57				57
1	99	95	91	87	92	88	85	82	76	74	72	65	64	62	55	54	53	48				48
2	90	83	77	71	84	77	72	67	67	63	59	57	54	52	48	46	44	40				40
3	82	73	65	59	76	68	61	56	59	54	50	51	47	43	43	40	38	34				34
4	75	64	56	50	70	60	53	47	52	47	42	45	41	37	38	35	32	29				29
5	69	57	49	43	64	54	46	41	47	41	36	40	36	32	34	31	28	25				25
6	64	51	43	37	59	48	41	35	42	36	32	36	32	28	31	27	25	22				22
7	59	46	38	33	55	44	36	31	38	32	28	33	28	25	28	25	22	19				19
8	55	42	34	29	51	40	32	27	35	29	25	30	26	22	26	22	20	17				17
9	51	38	31	26	47	36	29	24	32	26	22	28	23	20	24	20	18	15				15
10	48	35	28	23	44	33	27	22	29	24	20	26	21	18	22	19	16	14				14

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	12573	12573	12573
5°	12629	12455	12550
10°	12564	12407	12502
15°	12489	12319	12417
20°	12359	12213	12314
25°	12225	12082	12176
30°	12076	11946	12006
35°	11924	11777	11840
40°	11726	11591	11602
45°	11519	11361	11324
50°	11223	11088	11062
55°	10891	10771	10695
60°	10562	10372	10337
65°	10044	9820	9739
70°	9334	9107	8929
75°	8334	8067	7899
80°	6859	6604	6312
85°	4054	4457	4552



TEST NUMBER: P520028

CATALOG NUMBER: SQ4-F-075U-100D-830-1D-UNV-STD-W-4

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	128.6	2.0
10°-20°	366.2	5.6
20°-30°	550.0	8.4
30°-40°	656.4	10.0
40°-50°	672.8	10.3
50°-60°	599.1	9.2
60°-70°	446.6	6.8
70°-80°	241.8	3.7
80°-90°	56.1	0.9
90°-100°	204.6	3.1
100°-110°	562.9	8.6
110°-120°	581.0	8.9
120°-130°	465.5	7.1
130°-140°	365.6	5.6
140°-150°	280.2	4.3
150°-160°	201.4	3.1
160°-170°	123.2	1.9
170°-180°	41.5	0.6
0°-30°	1044.8	16.0
0°-40°	1701.2	26.0
0°-60°	2973.1	45.4
0°-90°	3717.6	56.8
90°-120°	1348.4	20.6
90°-150°	2459.6	37.6
90°-180°	2826.0	43.2
0°-180°	6543.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1363	1363	1363	1363	1363	
5°	1364	1361	1345	1357	1355	129
15°	1308	1303	1290	1300	1300	368
25°	1201	1198	1187	1193	1196	553
35°	1059	1054	1046	1048	1051	661
45°	883	878	871	866	868	679
55°	677	678	670	663	665	606
65°	460	458	450	445	446	455
75°	234	231	226	222	222	249
85°	38	42	42	43	43	54
90°	1	4	6	8	8	3
95°	30	112	362	155	99	32
105°	101	155	620	945	881	106
115°	178	217	498	990	1124	176
125°	246	280	451	763	894	219
135°	296	329	438	617	699	229
145°	342	366	432	526	567	215
155°	388	400	429	473	486	178
165°	419	424	431	449	451	118
175°	434	435	432	437	436	41
180°	434	434	434	434	434	

TEST NUMBER: P520028

CATALOG NUMBER: SQ4-F-075U-100D-830-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1362.7	1362.7	1362.7	1362.7	1362.7
2.5°	1367.8	1365.0	1352.9	1362.6	1361.1
5°	1363.6	1360.8	1344.8	1356.9	1355.1
7.5°	1350.9	1348.1	1334.0	1345.2	1343.6
10°	1341.1	1338.4	1324.3	1335.5	1334.5
12.5°	1328.4	1325.6	1311.6	1322.7	1321.9
15°	1307.5	1302.8	1289.7	1300.0	1300.0
17.5°	1279.7	1276.3	1264.1	1272.7	1272.8
20°	1258.8	1256.1	1243.9	1253.2	1254.2
22.5°	1237.8	1235.2	1221.4	1230.0	1231.7
25°	1200.9	1198.1	1186.8	1193.4	1196.1
27.5°	1162.6	1158.7	1147.6	1153.4	1155.4
30°	1133.5	1131.7	1121.3	1124.2	1127.0
32.5°	1102.8	1101.0	1092.2	1093.6	1098.5
35°	1058.7	1054.1	1045.6	1047.5	1051.2
37.5°	1006.5	1004.3	996.0	995.0	998.5
40°	973.6	969.9	962.4	960.5	963.3
42.5°	937.6	934.0	924.9	923.1	926.6
45°	882.8	878.3	870.7	866.1	867.9
47.5°	821.5	821.5	813.7	808.3	811.0
50°	781.9	781.9	772.5	767.9	770.7
52.5°	740.7	741.4	731.3	728.8	728.0
55°	677.1	678.0	669.6	663.2	664.9
57.5°	615.8	613.7	604.0	599.6	600.6
60°	572.4	569.6	562.1	555.7	560.2
62.5°	528.2	526.9	519.4	512.2	511.6
65°	460.1	458.3	449.8	445.2	446.1
67.5°	392.5	390.2	382.6	375.8	378.2
70°	346.0	346.0	337.6	333.8	331.0
72.5°	303.4	299.7	293.5	288.2	286.1
75°	233.8	231.1	226.3	221.6	221.6
77.5°	170.2	167.8	164.8	161.6	160.7
80°	129.1	128.1	124.3	123.4	118.8
82.5°	90.9	90.8	88.5	86.0	85.8
85°	38.3	42.0	42.1	43.0	43.0
87.5°	6.9	11.9	11.8	10.7	10.7
90°	0.9	3.6	6.5	8.3	8.3
92.5°	12.7	54.4	94.3	36.2	29.7
95°	30.4	111.7	361.8	154.7	98.8
97.5°	49.7	123.8	552.1	425.4	300.1
100°	63.7	131.4	611.9	617.6	503.9
102.5°	77.0	140.4	627.4	766.3	661.9
105°	100.6	154.7	620.2	944.6	881.4
107.5°	123.1	172.5	584.9	1031.8	1050.6
110°	139.4	184.5	558.3	1053.6	1118.6

TEST NUMBER: P520028

CATALOG NUMBER: SQ4-F-075U-100D-830-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	154.2	197.8	531.8	1039.5	1138.5
115°	178.1	216.9	497.5	990.5	1124.1
117.5°	201.0	236.7	475.7	921.7	1072.8
120°	215.0	249.3	466.1	870.1	1026.2
122.5°	227.6	261.8	459.4	824.9	973.1
125°	245.5	279.7	451.3	763.4	894.3
127.5°	262.4	295.1	445.9	712.2	826.9
130°	271.3	304.7	443.0	681.7	786.3
132.5°	281.7	315.1	440.7	654.9	749.4
135°	296.3	328.7	438.4	617.4	698.7
137.5°	309.9	340.1	436.3	587.2	654.2
140°	320.2	348.2	435.7	567.1	627.6
142.5°	329.1	355.0	434.1	549.2	601.0
145°	342.4	365.8	431.9	526.0	566.6
147.5°	356.6	376.9	430.8	505.6	538.1
150°	365.4	383.5	430.1	494.3	519.6
152.5°	373.5	390.2	429.3	484.7	505.6
155°	387.6	400.2	429.2	472.8	486.4
157.5°	397.8	408.1	429.2	463.1	472.5
160°	405.1	413.3	429.2	458.0	465.1
162.5°	411.1	417.8	429.9	453.5	459.2
165°	419.0	424.4	431.0	448.6	451.3
167.5°	424.5	428.7	431.9	444.5	445.2
170°	428.2	431.0	431.9	443.0	443.0
172.5°	431.2	432.4	431.9	440.7	440.1
175°	433.8	434.7	431.9	437.4	436.5
177.5°	434.5	434.5	431.5	435.9	434.5
180°	433.8	433.8	433.8	433.8	433.8

(END OF REPORT)