

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: P519839

Luminaire Tested: **SQ4-F-025U-100D-835-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P519839
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-32, 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-025U-100D-835-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 250 LUMENS PER FOOT
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

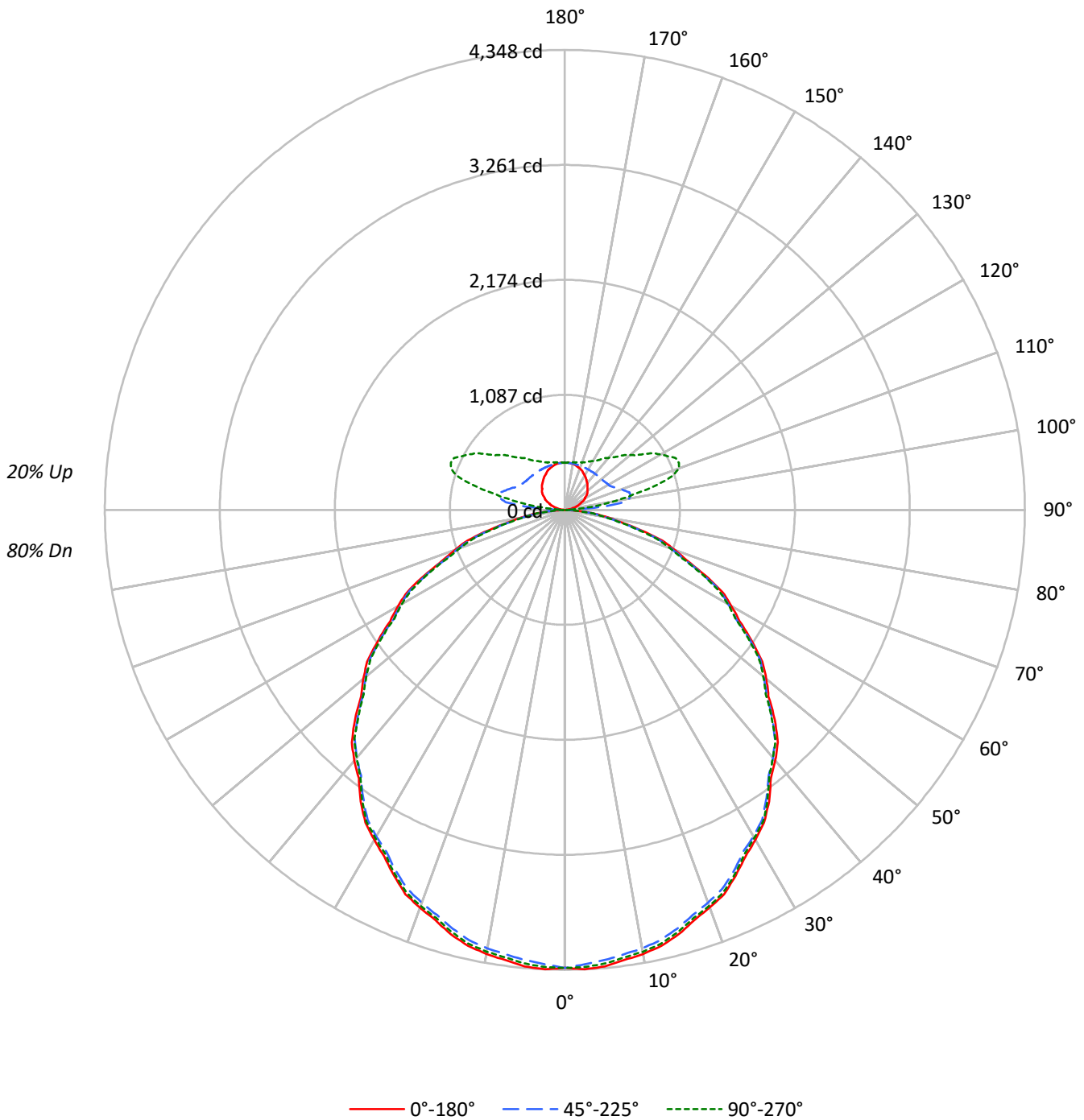
Lumens per Lamp: N/A
Luminaire Lumens: 14712.4 lumens
Efficiency: N/A
Efficacy: 120.6 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 122
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: P519839
CATALOG NUMBER: SQ4-F-025U-100D-835-1D-UNV-STD-W-12

Luminous Intensity Polar Plot





TEST NUMBER: P519839

CATALOG NUMBER: SQ4-F-025U-100D-835-1D-UNV-STD-W-12

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	114	114	114	114	109	109	109	109	100	100	100	92	92	92	84	84	84	80				
1	105	100	96	92	100	96	92	89	88	85	83	81	79	77	74	73	71	68				
2	95	87	81	75	91	84	78	73	77	72	68	71	67	64	65	62	60	56				
3	87	77	69	63	83	74	67	61	68	62	57	63	58	54	58	54	51	48				
4	79	68	59	53	76	65	58	52	60	54	49	56	50	46	51	47	43	41				
5	73	61	52	46	70	58	50	44	54	47	42	50	44	40	46	42	38	35				
6	67	54	46	40	64	52	45	39	49	42	37	45	39	35	42	37	33	31				
7	62	49	41	35	59	48	40	34	44	38	33	41	35	31	38	33	30	27				
8	58	45	37	31	55	43	36	30	40	34	29	38	32	28	35	30	26	24				
9	54	41	33	28	52	40	32	27	37	31	26	35	29	25	32	28	24	22				
10	51	38	30	25	48	37	29	25	34	28	24	32	27	23	30	25	22	20				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	13319	13319	13319
5°	13379	13196	13297
10°	13311	13144	13246
15°	13231	13051	13155
20°	13094	12939	13046
25°	12951	12800	12901
30°	12793	12656	12720
35°	12633	12477	12544
40°	12423	12280	12291
45°	12204	12036	11997
50°	11889	11747	11719
55°	11539	11412	11332
60°	11190	10988	10952
65°	10643	10405	10318
70°	9889	9649	9462
75°	8830	8547	8371
80°	7265	7001	6686
85°	4301	4721	4824



TEST NUMBER: P519839

CATALOG NUMBER: SQ4-F-025U-100D-835-1D-UNV-STD-W-12

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	408.8	2.8
10°-20°	1164.0	7.9
20°-30°	1748.0	11.9
30°-40°	2086.1	14.2
40°-50°	2138.3	14.5
50°-60°	1904.1	12.9
60°-70°	1419.4	9.6
70°-80°	768.5	5.2
80°-90°	177.3	1.2
90°-100°	217.9	1.5
100°-110°	572.8	3.9
110°-120°	594.0	4.0
120°-130°	476.4	3.2
130°-140°	373.8	2.5
140°-150°	286.9	2.0
150°-160°	206.7	1.4
160°-170°	126.4	0.9
170°-180°	42.7	0.3
0°-30°	3320.8	22.6
0°-40°	5406.9	36.8
0°-60°	9449.4	64.2
0°-90°	11814.7	80.3
90°-120°	1384.8	9.4
90°-150°	2522.0	17.1
90°-180°	2898.0	19.7
0°-180°	14712.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4331	4331	4331	4331	4331	
5°	4334	4325	4274	4313	4307	411
15°	4156	4141	4099	4132	4132	1171
25°	3817	3808	3772	3793	3802	1759
35°	3365	3350	3323	3330	3341	2100
45°	2806	2791	2767	2753	2758	2159
55°	2152	2155	2128	2108	2113	1926
65°	1462	1457	1430	1415	1418	1446
75°	743	734	719	704	704	791
85°	122	134	134	137	137	170
90°	3	8	23	12	12	5
95°	29	113	376	194	132	32
105°	103	156	633	962	897	109
115°	183	223	507	1012	1155	181
125°	255	286	461	780	920	226
135°	304	335	447	630	714	235
145°	352	375	441	537	579	221
155°	398	410	441	485	499	183
165°	430	436	441	459	464	121
175°	447	447	444	450	450	42
180°	447	447	447	447	447	

TEST NUMBER: P519839

CATALOG NUMBER: SQ4-F-025U-100D-835-1D-UNV-STD-W-12

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	4330.9	4330.9	4330.9	4330.9	4330.9
2.5°	4347.5	4338.2	4300.0	4330.8	4326.1
5°	4333.9	4325.1	4274.4	4313.0	4307.1
7.5°	4293.4	4284.7	4239.9	4275.5	4270.2
10°	4262.5	4253.8	4209.0	4244.6	4241.7
12.5°	4222.1	4213.4	4168.6	4204.2	4201.3
15°	4155.5	4140.9	4099.0	4131.7	4131.7
17.5°	4067.5	4056.5	4017.6	4044.9	4045.5
20°	4000.9	3992.2	3953.4	3983.2	3986.1
22.5°	3934.4	3925.6	3882.0	3909.5	3914.7
25°	3816.6	3807.9	3772.1	3793.1	3801.8
27.5°	3695.4	3682.6	3647.2	3665.7	3672.2
30°	3602.6	3596.8	3564.0	3573.1	3581.8
32.5°	3505.1	3499.3	3471.2	3475.8	3491.5
35°	3364.8	3350.3	3323.2	3329.5	3341.1
37.5°	3199.0	3192.0	3165.7	3162.4	3173.4
40°	3094.3	3082.7	3058.7	3052.9	3061.6
42.5°	2980.2	2968.6	2939.8	2934.1	2945.1
45°	2806.0	2791.4	2767.4	2752.6	2758.5
47.5°	2611.0	2611.0	2586.0	2569.0	2577.7
50°	2485.0	2485.0	2455.3	2440.6	2449.3
52.5°	2354.2	2356.5	2324.5	2316.6	2313.8
55°	2152.1	2154.9	2128.3	2107.6	2113.4
57.5°	1957.1	1950.6	1919.6	1906.0	1908.9
60°	1819.2	1810.4	1786.5	1765.9	1780.5
62.5°	1678.8	1674.8	1650.9	1627.7	1625.9
65°	1462.5	1456.6	1429.8	1415.0	1417.9
67.5°	1247.2	1240.3	1215.7	1194.5	1202.1
70°	1099.8	1099.8	1073.1	1061.0	1052.3
72.5°	964.3	952.7	932.8	916.0	909.6
75°	743.1	734.4	719.3	704.5	704.5
77.5°	541.0	533.5	523.7	513.5	510.7
80°	410.2	407.3	395.3	392.1	377.5
82.5°	288.9	288.3	281.2	273.5	272.9
85°	121.9	133.5	133.8	136.7	136.7
87.5°	22.0	37.2	38.0	30.9	30.9
90°	2.9	8.5	22.9	11.5	11.5
92.5°	12.0	58.0	128.4	56.9	36.7
95°	28.7	112.7	375.5	193.5	131.8
97.5°	49.9	123.9	561.7	446.7	329.0
100°	66.0	133.2	619.0	627.3	487.2
102.5°	79.7	142.4	635.1	781.4	661.5
105°	103.1	156.4	633.4	961.5	897.0
107.5°	127.2	176.5	597.2	1055.0	1070.7
110°	143.3	188.1	567.4	1079.1	1146.4



TEST NUMBER: P519839

CATALOG NUMBER: SQ4-F-025U-100D-835-1D-UNV-STD-W-12

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	159.3	202.0	540.0	1063.9	1167.0
115°	183.4	222.6	507.3	1012.1	1155.0
117.5°	206.9	242.8	484.9	940.2	1098.8
120°	220.7	254.3	475.7	891.9	1046.0
122.5°	234.5	268.0	468.8	843.7	995.6
125°	255.0	285.9	461.4	779.8	919.9
127.5°	271.7	303.1	455.1	728.4	846.6
130°	280.8	314.5	452.8	696.1	805.3
132.5°	290.0	323.7	450.5	668.2	766.3
135°	303.8	334.6	447.1	629.5	713.6
137.5°	318.1	348.4	446.5	600.6	669.5
140°	329.6	357.6	444.2	577.5	642.0
142.5°	338.8	364.6	444.2	561.3	616.7
145°	352.5	374.9	441.3	536.9	578.9
147.5°	366.3	388.1	441.3	516.6	551.4
150°	375.5	395.1	441.3	505.1	533.1
152.5°	384.6	399.7	441.3	495.7	517.0
155°	398.4	409.6	441.3	484.6	498.7
157.5°	408.6	419.3	441.3	474.8	484.9
160°	415.5	423.9	441.3	470.1	475.7
162.5°	422.4	428.6	441.3	465.5	471.1
165°	429.8	435.5	441.3	458.6	464.3
167.5°	436.7	439.6	444.2	455.8	458.0
170°	441.3	444.2	444.2	455.7	455.7
172.5°	443.6	444.2	444.2	453.4	451.1
175°	447.1	447.1	444.2	449.9	449.9
177.5°	447.1	447.1	444.8	449.3	447.1
180°	447.1	447.1	447.1	447.1	447.1

(END OF REPORT)