

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: P519806

Luminaire Tested: **SQ4-F-025U-050D-935-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P519806
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-935-1D-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

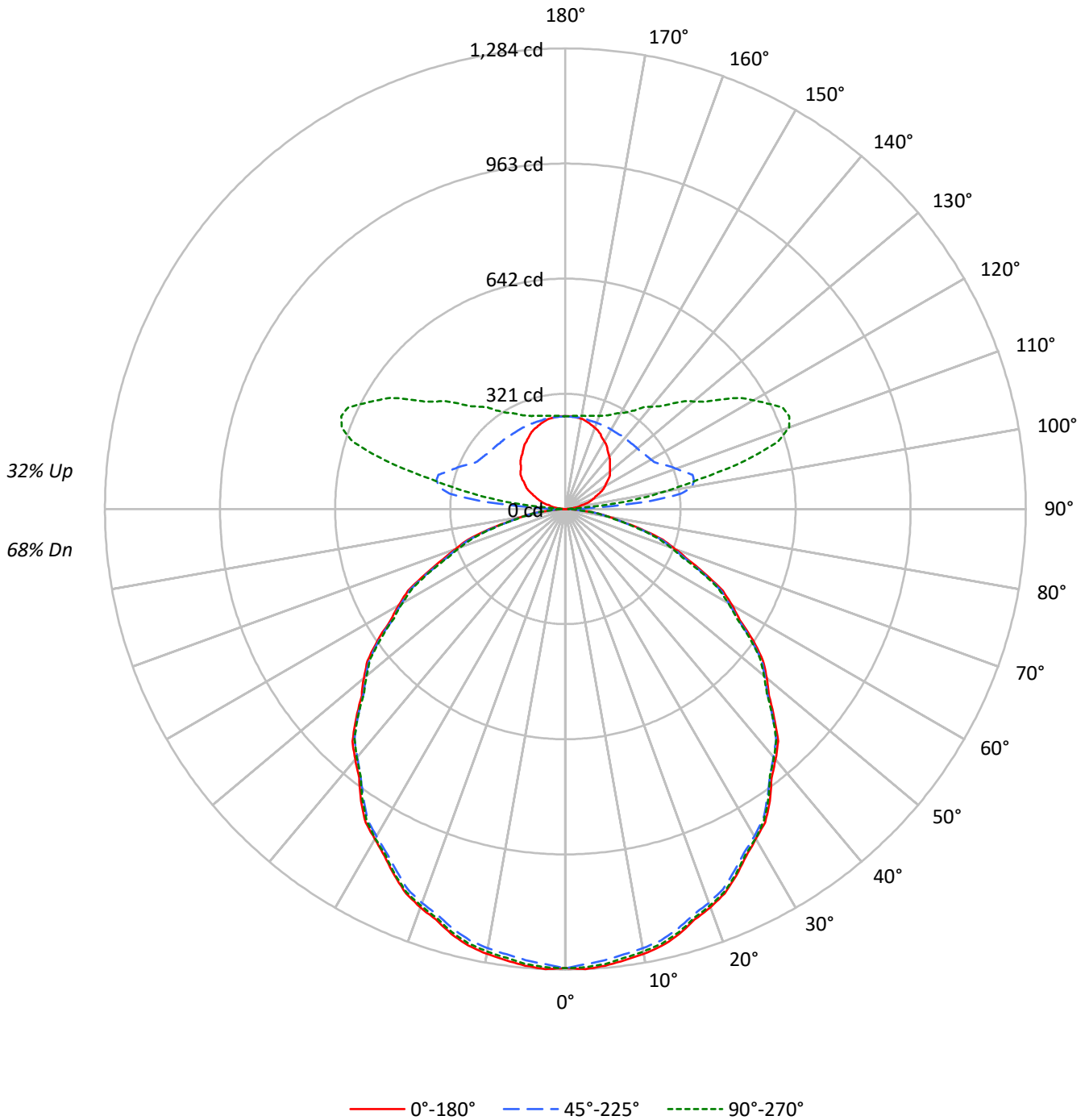
Lumens per Lamp: N/A
Luminaire Lumens: 5173.5 lumens
Efficiency: N/A
Efficacy: 114.5 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: Semi-Direct

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



TEST NUMBER: P519806
CATALOG NUMBER: SQ4-F-025U-050D-935-1D-UNV-STD-W-8

Luminous Intensity Polar Plot





TEST NUMBER: P519806

CATALOG NUMBER: SQ4-F-025U-050D-935-1D-UNV-STD-W-8

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°	5905	5905	5905
5°	5919	5848	5896
10°	5900	5827	5868
15°	5860	5786	5835
20°	5805	5737	5780
25°	5739	5669	5722
30°	5659	5613	5650
35°	5597	5529	5558
40°	5490	5438	5448
45°	5377	5332	5332
50°	5263	5214	5189
55°	5141	5072	5044
60°	4948	4869	4838
65°	4713	4619	4564
70°	4392	4299	4207
75°	3941	3818	3725
80°	3185	3140	3050
85°	1905	2175	2265



TEST NUMBER: P519806

CATALOG NUMBER: SQ4-F-025U-050D-935-1D-UNV-STD-W-8

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	120.8	2.3
10°-20°	343.9	6.6
20°-30°	516.6	10.0
30°-40°	616.6	11.9
40°-50°	631.9	12.2
50°-60°	563.5	10.9
60°-70°	419.7	8.1
70°-80°	227.8	4.4
80°-90°	54.1	1.0
90°-100°	126.2	2.4
100°-110°	331.8	6.4
110°-120°	344.1	6.7
120°-130°	276.0	5.3
130°-140°	216.5	4.2
140°-150°	166.2	3.2
150°-160°	119.7	2.3
160°-170°	73.2	1.4
170°-180°	24.7	0.5
0°-30°	981.3	19.0
0°-40°	1597.9	30.9
0°-60°	2793.3	54.0
0°-90°	3494.9	67.6
90°-120°	802.1	15.5
90°-150°	1460.8	28.2
90°-180°	1679.0	32.5
0°-180°	5173.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1280	1280	1280	1280	1280	
5°	1278	1277	1263	1275	1273	121
15°	1227	1224	1212	1222	1222	346
25°	1128	1124	1114	1121	1124	519
35°	994	990	982	982	987	620
45°	824	826	817	816	817	636
55°	639	639	631	626	627	569
65°	432	430	423	418	418	428
75°	221	219	214	211	209	234
85°	36	39	41	43	43	50
90°	2	5	13	7	7	2
95°	17	65	218	112	76	19
105°	60	91	367	557	520	63
115°	106	129	294	586	669	105
125°	148	166	267	452	533	131
135°	176	194	259	365	413	136
145°	204	217	256	311	335	128
155°	231	237	256	281	289	106
165°	249	252	256	266	269	70
175°	259	259	257	261	261	25
180°	259	259	259	259	259	

TEST NUMBER: P519806

CATALOG NUMBER: SQ4-F-025U-050D-935-1D-UNV-STD-W-8

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	<i>1280.0</i>	1280.0	1280.0	1280.0	1280.0
2.5°	<i>1284.1</i>	<i>1281.5</i>	<i>1270.4</i>	<i>1280.0</i>	<i>1278.6</i>
5°	<i>1278.3</i>	1276.6	1262.8	1274.9	1273.2
7.5°	<i>1269.1</i>	1265.7	1252.3	1263.9	1262.3
10°	<i>1259.5</i>	1256.1	1244.0	1254.3	1252.6
12.5°	<i>1247.2</i>	1245.1	1231.7	1241.9	1241.6
15°	<i>1227.0</i>	1223.6	1211.5	1221.7	1221.7
17.5°	<i>1200.1</i>	1198.2	1186.4	1196.4	1195.0
20°	<i>1182.4</i>	1179.0	1168.7	1177.3	1177.3
22.5°	<i>1160.4</i>	1158.4	1148.1	1155.3	1156.6
25°	<i>1127.6</i>	1124.2	1113.8	1120.8	1124.1
27.5°	<i>1091.2</i>	1088.5	1079.9	1084.4	1086.7
30°	<i>1062.4</i>	1062.4	1053.8	1055.7	1060.7
32.5°	<i>1036.3</i>	1036.3	1026.4	1028.2	1030.5
35°	<i>993.8</i>	990.5	981.8	982.0	987.0
37.5°	<i>944.5</i>	942.9	937.3	936.4	937.6
40°	<i>911.6</i>	909.9	903.0	904.7	904.7
42.5°	<i>878.7</i>	877.0	870.1	867.8	870.5
45°	<i>824.2</i>	825.9	817.3	815.7	817.3
47.5°	<i>770.4</i>	770.4	763.6	758.9	761.5
50°	<i>733.4</i>	733.4	726.5	723.1	723.1
52.5°	<i>695.0</i>	696.4	688.2	683.4	684.7
55°	<i>639.2</i>	639.2	630.6	625.5	627.1
57.5°	<i>577.4</i>	577.4	568.9	563.8	566.9
60°	<i>536.3</i>	536.3	527.7	522.7	524.4
62.5°	<i>495.2</i>	495.2	486.6	481.5	481.9
65°	<i>431.8</i>	430.1	423.2	418.1	418.1
67.5°	<i>370.9</i>	366.4	361.2	354.4	354.4
70°	<i>325.6</i>	323.9	318.7	311.9	311.9
72.5°	<i>284.5</i>	281.4	276.2	270.8	270.8
75°	<i>221.1</i>	219.4	214.2	210.7	209.0
77.5°	<i>158.4</i>	157.0	156.6	151.9	153.2
80°	<i>119.9</i>	119.9	118.2	114.8	114.8
82.5°	<i>85.7</i>	87.0	84.0	83.2	81.9
85°	<i>36.0</i>	39.3	41.1	42.8	42.8
87.5°	<i>7.2</i>	11.9	12.3	12.3	12.3
90°	<i>1.6</i>	4.9	13.3	6.6	6.6
92.5°	<i>7.0</i>	33.6	74.4	33.0	21.2
95°	<i>16.6</i>	65.3	217.5	112.0	76.4
97.5°	<i>28.9</i>	71.8	325.4	258.8	190.6
100°	<i>38.1</i>	77.1	358.5	363.4	282.2
102.5°	<i>46.2</i>	82.5	367.9	452.6	383.1
105°	<i>59.7</i>	90.6	366.9	557.0	519.6
107.5°	<i>73.7</i>	102.3	345.9	611.1	620.2
110°	<i>83.0</i>	109.0	328.7	625.0	664.0

TEST NUMBER: P519806

CATALOG NUMBER: SQ4-F-025U-050D-935-1D-UNV-STD-W-8

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	92.3	117.0	312.8	616.2	676.0
115°	106.3	128.9	293.8	586.2	669.0
117.5°	119.9	140.6	280.9	544.6	636.5
120°	127.8	147.3	275.6	516.6	605.9
122.5°	135.8	155.2	271.6	488.7	576.7
125°	147.8	165.6	267.3	451.7	532.9
127.5°	157.3	175.6	263.6	421.9	490.4
130°	162.7	182.2	262.3	403.2	466.5
132.5°	168.0	187.4	260.9	387.1	443.9
135°	176.0	193.8	258.9	364.7	413.3
137.5°	184.3	201.8	258.7	347.8	387.8
140°	190.9	207.1	257.3	334.6	371.8
142.5°	196.2	211.1	257.3	325.1	357.2
145°	204.2	217.2	255.7	311.0	335.3
147.5°	212.2	224.8	255.7	299.3	319.4
150°	217.5	228.8	255.7	292.6	308.7
152.5°	222.8	231.5	255.7	287.1	299.5
155°	230.7	237.2	255.7	280.7	288.9
157.5°	236.8	242.9	255.7	275.0	280.9
160°	240.7	245.6	255.7	272.3	275.6
162.5°	244.7	248.2	255.7	269.6	272.9
165°	249.0	252.3	255.7	265.7	269.0
167.5°	253.0	254.6	257.3	264.0	265.3
170°	255.7	257.3	257.3	263.9	263.9
172.5°	256.9	257.3	257.3	262.6	261.3
175°	258.9	258.9	257.3	260.7	260.7
177.5°	258.9	258.9	257.6	260.3	258.9
180°	258.9	258.9	258.9	258.9	258.9

(END OF REPORT)