

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: P519902

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

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P519902
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-21, 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-050U-050D-935-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

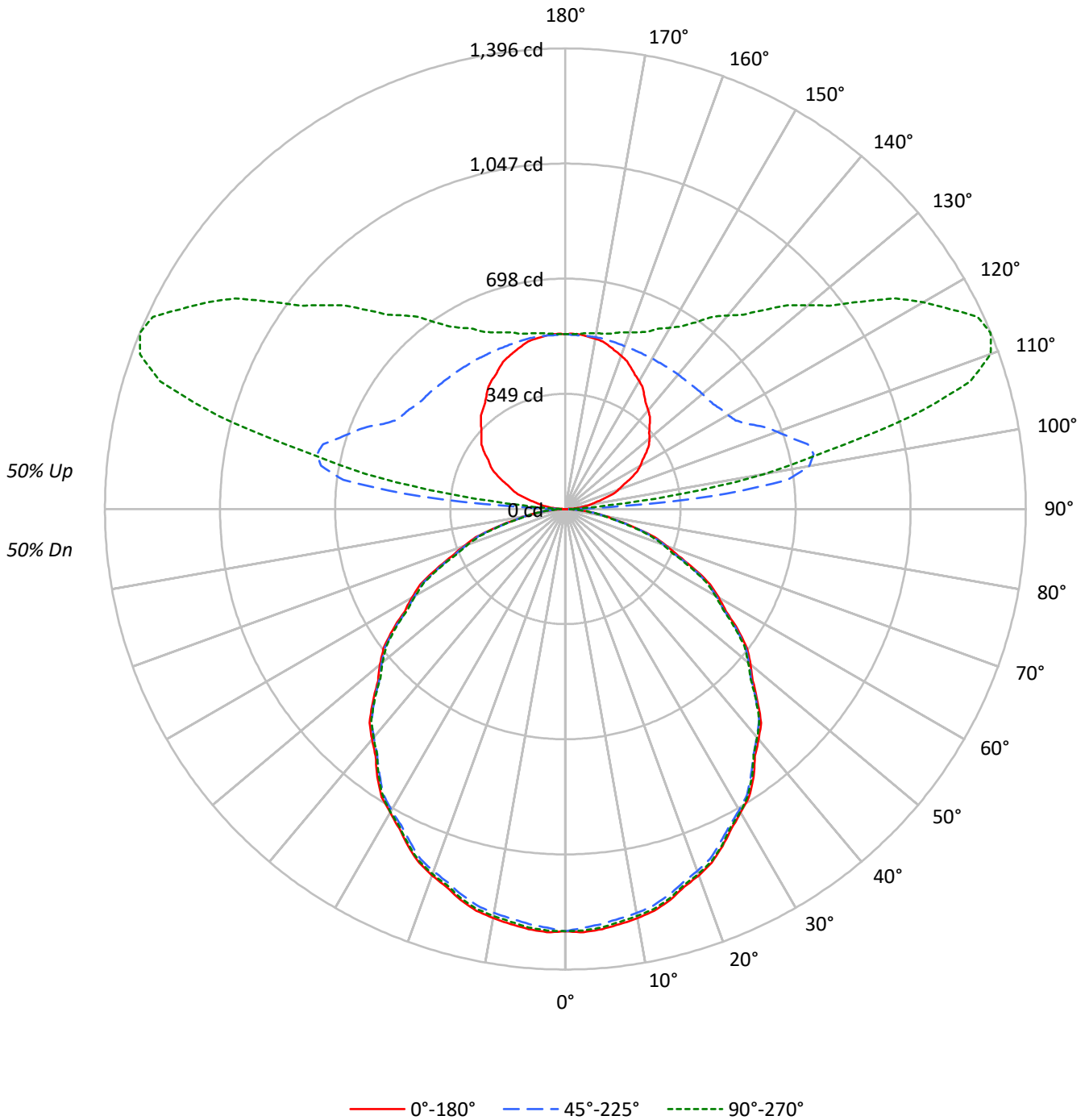
Lumens per Lamp: N/A
Luminaire Lumens: 6957.1 lumens
Efficiency: N/A
Efficacy: 118.9 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 58.5
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	107	107	107	107	99	99	99	99	83	83	83	69	69	69	56	56	56	50
1	98	93	90	86	90	86	83	80	73	71	69	61	59	58	50	49	48	42
2	89	82	75	70	82	75	70	66	64	60	57	53	51	48	44	42	40	35
3	81	72	64	58	75	66	60	55	56	51	47	47	44	41	39	36	34	30
4	74	63	55	49	68	59	52	46	50	45	40	42	38	35	34	32	29	25
5	68	56	48	42	62	52	45	40	45	39	35	38	33	30	31	28	25	22
6	63	50	42	36	58	47	40	34	40	34	30	34	30	26	28	25	22	19
7	58	46	38	32	53	42	35	30	36	31	27	31	26	23	26	22	20	17
8	54	41	33	28	49	38	31	27	33	28	24	28	24	21	23	20	18	15
9	50	38	30	25	46	35	28	24	30	25	21	26	22	18	22	18	16	14
10	47	35	27	22	43	32	26	21	28	23	19	24	20	17	20	17	14	12

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



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	120.8	1.7
10°-20°	343.9	4.9
20°-30°	516.6	7.4
30°-40°	616.6	8.9
40°-50°	631.9	9.1
50°-60°	563.5	8.1
60°-70°	419.7	6.0
70°-80°	227.8	3.3
80°-90°	54.8	0.8
90°-100°	254.5	3.7
100°-110°	691.4	9.9
110°-120°	710.8	10.2
120°-130°	568.3	8.2
130°-140°	446.5	6.4
140°-150°	342.4	4.9
150°-160°	246.2	3.5
160°-170°	150.6	2.2
170°-180°	50.7	0.7
0°-30°	981.3	14.1
0°-40°	1597.9	23.0
0°-60°	2793.3	40.2
0°-90°	3495.6	50.2
90°-120°	1656.7	23.8
90°-150°	3014.0	43.3
90°-180°	3462.0	49.8
0°-180°	6957.1	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	7	12	15	15	4
95°	38	139	443	193	130	40
105°	123	191	760	1158	1089	130
115°	218	265	609	1211	1379	215
125°	300	342	551	928	1094	267
135°	361	401	535	756	852	280
145°	418	448	528	642	690	262
155°	472	489	525	577	593	218
165°	511	518	527	549	551	144
175°	530	532	528	535	534	50
180°	530	530	530	530	530	

TEST NUMBER: P519902

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

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1280.0	1280.0	1280.0	1280.0	1280.0
2.5°	1284.1	1281.5	1270.4	1280.0	1278.6
5°	1278.3	1276.6	1262.8	1274.9	1273.2
7.5°	1269.1	1265.7	1252.3	1263.9	1262.3
10°	1259.5	1256.1	1244.0	1254.3	1252.6
12.5°	1247.2	1245.1	1231.7	1241.9	1241.6
15°	1227.0	1223.6	1211.5	1221.7	1221.7
17.5°	1200.1	1198.2	1186.4	1196.4	1195.0
20°	1182.4	1179.0	1168.7	1177.3	1177.3
22.5°	1160.4	1158.4	1148.1	1155.3	1156.6
25°	1127.6	1124.2	1113.8	1120.8	1124.1
27.5°	1091.2	1088.5	1079.9	1084.4	1086.7
30°	1062.4	1062.4	1053.8	1055.7	1060.7
32.5°	1036.3	1036.3	1026.4	1028.2	1030.5
35°	993.8	990.5	981.8	982.0	987.0
37.5°	944.5	942.9	937.3	936.4	937.6
40°	911.6	909.9	903.0	904.7	904.7
42.5°	878.7	877.0	870.1	867.8	870.5
45°	824.2	825.9	817.3	815.7	817.3
47.5°	770.4	770.4	763.6	758.9	761.5
50°	733.4	733.4	726.5	723.1	723.1
52.5°	695.0	696.4	688.2	683.4	684.7
55°	639.2	639.2	630.6	625.5	627.1
57.5°	577.4	577.4	568.9	563.8	566.9
60°	536.3	536.3	527.7	522.7	524.4
62.5°	495.2	495.2	486.6	481.5	481.9
65°	431.8	430.1	423.2	418.1	418.1
67.5°	370.9	366.4	361.2	354.4	354.4
70°	325.6	323.9	318.7	311.9	311.9
72.5°	284.5	281.4	276.2	270.8	270.8
75°	221.1	219.4	214.2	210.7	209.0
77.5°	158.4	157.0	156.6	151.9	153.2
80°	119.9	119.9	118.2	114.8	114.8
82.5°	85.7	87.0	84.0	83.2	81.9
85°	36.0	39.3	41.1	42.8	42.8
87.5°	7.2	12.2	12.0	14.0	14.0
90°	1.7	6.7	12.0	15.3	15.3
92.5°	15.3	69.7	121.0	52.0	44.0
95°	37.5	139.1	443.2	192.9	129.5
97.5°	62.0	153.8	679.4	528.6	371.3
100°	78.4	163.4	751.8	762.1	615.4
102.5°	94.8	173.1	770.9	942.4	813.1
105°	122.8	191.1	760.3	1157.6	1089.3
107.5°	151.7	212.1	716.3	1268.7	1287.7
110°	172.2	227.2	683.6	1290.6	1372.2



TEST NUMBER: P519902

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

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	189.9	242.3	650.9	1272.4	1395.5
115°	218.2	264.8	608.6	1210.7	1379.1
117.5°	244.8	289.5	581.6	1123.3	1313.0
120°	262.5	305.9	569.3	1064.6	1252.9
122.5°	277.5	320.9	561.2	1005.8	1187.5
125°	300.0	341.7	550.6	927.7	1094.4
127.5°	320.1	361.5	544.8	868.5	1011.5
130°	332.5	372.4	542.1	831.3	959.7
132.5°	344.7	384.7	539.3	799.6	913.4
135°	361.4	401.3	535.3	755.7	852.3
137.5°	379.5	415.8	533.2	716.8	798.1
140°	390.4	425.4	531.9	692.1	765.4
142.5°	401.2	433.6	530.5	672.7	734.0
145°	417.6	447.7	528.4	642.1	690.4
147.5°	436.1	461.7	526.8	617.9	656.0
150°	448.3	470.0	526.8	604.2	634.1
152.5°	457.9	476.9	525.4	591.7	616.4
155°	472.2	488.9	525.1	576.6	593.2
157.5°	486.1	499.2	525.1	566.2	578.9
160°	494.4	506.0	525.1	559.3	569.3
162.5°	502.5	511.5	526.4	553.8	561.2
165°	511.4	518.0	526.8	548.9	550.6
167.5°	520.6	523.9	528.4	543.1	544.5
170°	523.3	526.7	528.4	540.4	540.4
172.5°	526.1	528.0	528.4	537.6	537.6
175°	530.2	531.9	528.4	535.2	533.5
177.5°	531.6	531.6	527.4	532.8	530.2
180°	530.2	530.2	530.2	530.2	530.2

(END OF REPORT)