

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: CORELITE

Report Number: P521690

Luminaire Tested: **SQ4-F-150U-100D-93050-1D-UNV-STD-W-4 (5000K)**

Issue Date: 5/5/2021

Test Information

Test Method: LM-79-08
Report Number: P521690
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2101-105-50,
Test Lab: INNOVATION CENTER
Issue Date: 5/5/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-F-150U-100D-93050-1D-UNV-STD-W-4 (5000K)
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 1500 LUMENS PER FOOT
Light Source: 3000K/5000K CCT, 90 CRI LEDS, TUNED TO 5000K CCT
Ballast/Driver: ELECTRONIC DRIVER

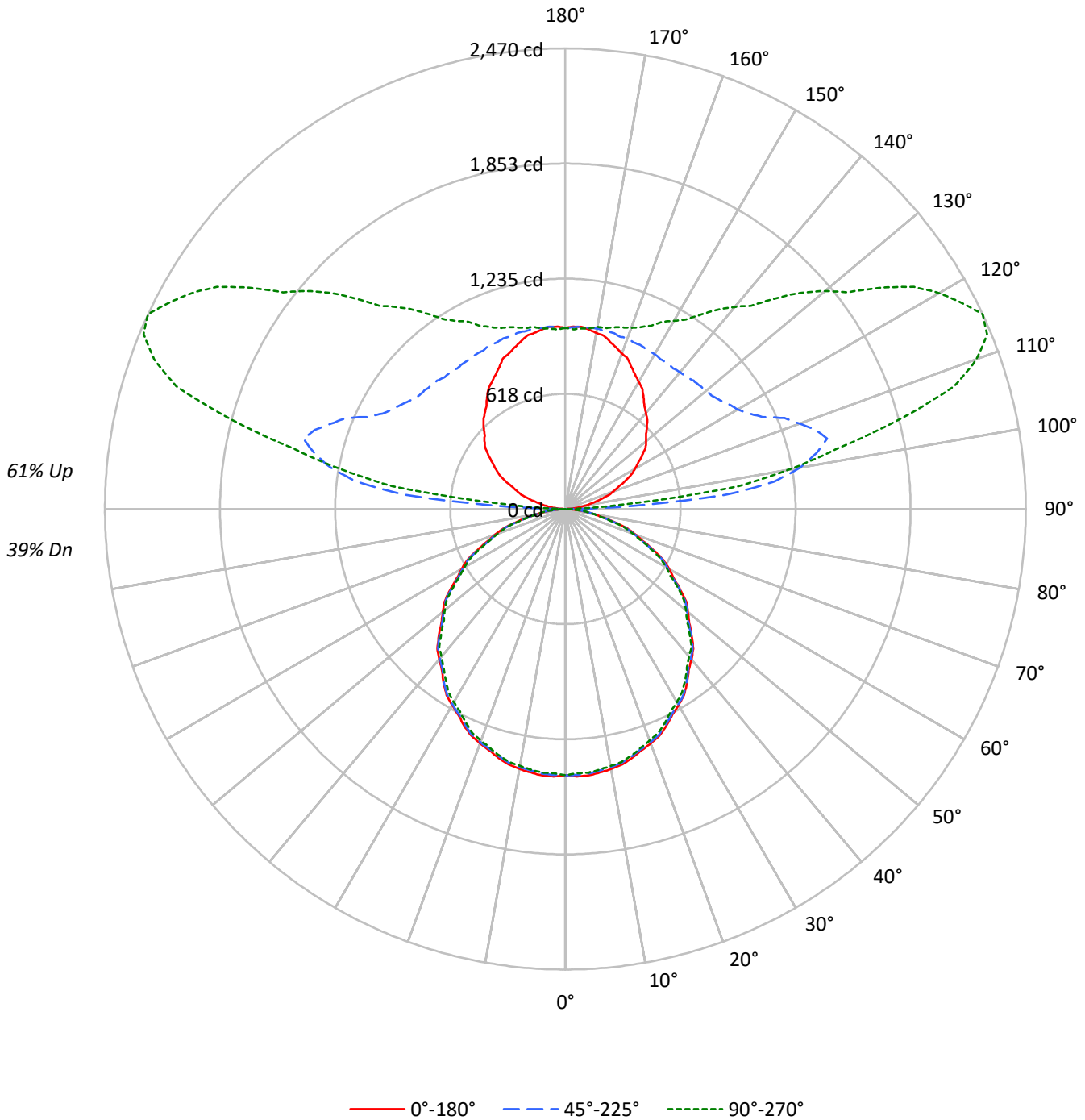
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10361.7 lumens
Efficiency: N/A
Efficacy: 111.1 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.25 / 1.38
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 93.3
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

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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	105	105	105	105	95	95	95	95	77	77	77	61	61	61	46	46	46	39
1	95	91	87	84	86	83	80	77	68	65	63	54	52	51	41	40	39	33
2	87	79	73	68	78	72	67	63	59	55	52	47	44	42	36	34	33	27
3	79	70	62	56	71	63	57	52	52	47	44	41	38	35	31	29	27	23
4	72	61	54	48	65	56	49	44	46	41	37	37	33	30	28	26	24	20
5	66	55	46	41	60	50	43	38	41	36	32	33	29	26	25	23	20	17
6	61	49	41	35	55	45	38	32	37	32	28	30	26	23	23	20	18	15
7	56	44	36	31	51	40	33	28	33	28	24	27	23	20	21	18	16	13
8	52	40	32	27	47	36	30	25	30	25	21	24	21	18	19	16	14	12
9	48	36	29	24	44	33	27	22	28	23	19	22	19	16	17	15	13	10
10	45	33	26	21	41	30	24	20	25	20	17	21	17	14	16	13	11	9

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	13169	13169	13169
5°	13286	13192	13144
10°	13268	13171	13114
15°	13204	13126	13087
20°	13140	13079	12979
25°	13061	12988	12873
30°	12937	12904	12751
35°	12823	12777	12615
40°	12675	12614	12440
45°	12514	12448	12274
50°	12311	12238	12120
55°	12098	11984	11852
60°	11819	11686	11516
65°	11431	11208	11007
70°	10779	10531	10337
75°	9828	9496	9315
80°	8060	8060	8060
85°	5748	6510	6838



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	135.2	1.3
10°-20°	387.0	3.7
20°-30°	585.4	5.7
30°-40°	705.1	6.8
40°-50°	732.2	7.1
50°-60°	664.6	6.4
60°-70°	507.0	4.9
70°-80°	283.4	2.7
80°-90°	73.8	0.7
90°-100°	500.6	4.8
100°-110°	1209.9	11.7
110°-120°	1290.5	12.5
120°-130°	1045.2	10.1
130°-140°	809.2	7.8
140°-150°	617.3	6.0
150°-160°	446.9	4.3
160°-170°	275.2	2.7
170°-180°	93.2	0.9
0°-30°	1107.6	10.7
0°-40°	1812.7	17.5
0°-60°	3209.4	31.0
0°-90°	4073.7	39.3
90°-120°	3001.0	29.0
90°-150°	5472.7	52.8
90°-180°	6288.0	60.7
0°-180°	10361.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1427	1427	1427	1427	1427	
5°	1435	1420	1424	1421	1419	136
15°	1382	1368	1374	1370	1370	390
25°	1283	1270	1276	1264	1264	591
35°	1138	1128	1134	1120	1120	712
45°	959	952	954	941	941	740
55°	752	750	745	737	737	673
65°	524	520	513	506	504	516
75°	276	272	266	262	261	290
85°	54	59	62	63	65	67
90°	0	0	0	0	0	4
95°	49	250	858	558	391	55
105°	193	334	1454	1882	1857	204
115°	354	452	1168	2215	2470	350
125°	504	580	1014	1762	2069	450
135°	619	692	973	1389	1598	478
145°	732	787	954	1181	1273	458
155°	839	875	967	1046	1084	387
165°	928	942	979	994	1008	262
175°	981	977	981	973	971	93
180°	971	971	971	971	971	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1427.4	1427.4	1427.4	1427.4	1427.4
2.5°	1436.5	1424.4	1428.3	1426.5	1419.2
5°	1434.6	1419.6	1424.4	1421.2	1419.2
7.5°	1425.2	1410.2	1414.9	1410.8	1409.6
10°	1416.2	1401.1	1405.9	1401.8	1399.8
12.5°	1403.9	1389.6	1394.4	1389.5	1389.1
15°	1382.4	1368.3	1374.2	1370.1	1370.1
17.5°	1357.1	1344.1	1350.2	1344.2	1343.2
20°	1338.3	1325.3	1332.1	1322.9	1321.9
22.5°	1317.0	1304.8	1310.8	1300.0	1300.6
25°	1283.0	1269.9	1275.8	1264.5	1264.5
27.5°	1243.8	1231.0	1238.3	1224.7	1223.9
30°	1214.3	1202.3	1211.2	1196.9	1196.9
32.5°	1184.8	1174.4	1180.9	1167.3	1164.9
35°	1138.5	1128.4	1134.4	1120.0	1120.0
37.5°	1087.6	1079.4	1082.5	1069.3	1072.3
40°	1052.4	1043.4	1047.3	1033.9	1032.9
42.5°	1016.3	1008.1	1011.2	997.9	1000.9
45°	959.1	952.1	954.0	940.7	940.7
47.5°	901.1	895.9	894.4	882.5	884.5
50°	857.7	855.7	852.6	842.4	844.4
52.5°	818.3	813.9	809.9	800.5	801.7
55°	752.1	750.1	745.0	736.8	736.8
57.5°	688.8	684.4	678.4	670.0	670.0
60°	640.5	638.4	633.3	624.1	624.1
62.5°	594.5	591.7	585.7	577.3	576.5
65°	523.6	519.6	513.4	506.2	504.2
67.5°	449.6	445.4	440.4	433.6	432.4
70°	399.6	394.6	390.4	385.3	383.2
72.5°	348.8	346.2	341.2	336.1	334.9
75°	275.7	271.6	266.4	262.3	261.3
77.5°	198.4	197.8	195.9	193.3	194.3
80°	151.7	152.7	151.7	150.7	151.7
82.5°	109.9	112.5	112.3	112.1	113.1
85°	54.3	59.3	61.5	62.6	64.6
87.5°	15.6	20.4	24.6	25.4	26.2
90°	0.0	0.0	0.0	0.0	0.0
92.5°	16.5	135.5	319.2	155.2	105.3
95°	49.4	250.5	857.7	557.7	390.8
97.5°	87.6	277.5	1129.6	1088.3	934.2
100°	117.2	294.2	1279.4	1350.6	1223.9
102.5°	145.2	309.3	1378.1	1568.9	1493.7
105°	193.3	334.1	1454.2	1881.5	1857.4
107.5°	240.7	363.3	1409.4	2132.2	2189.0
110°	273.6	388.2	1337.0	2240.3	2346.9



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	306.5	413.1	1272.8	2266.7	2448.9
115°	353.8	452.3	1168.3	2214.9	2470.3
117.5°	400.7	493.6	1107.0	2095.8	2395.1
120°	431.9	518.4	1067.5	2002.3	2316.1
122.5°	464.9	544.9	1042.8	1906.8	2215.7
125°	503.9	580.4	1014.1	1761.5	2069.2
127.5°	542.6	614.6	993.9	1638.5	1908.8
130°	565.6	636.0	987.3	1552.8	1818.3
132.5°	587.0	660.6	977.4	1491.0	1716.3
135°	619.1	691.5	972.9	1389.0	1598.2
137.5°	649.6	722.4	958.5	1320.0	1477.7
140°	672.6	739.0	958.5	1270.3	1415.1
142.5°	695.6	762.0	950.3	1227.0	1349.3
145°	732.3	786.6	954.4	1180.7	1273.2
147.5°	766.4	819.1	951.9	1127.3	1203.7
150°	787.8	834.0	958.5	1103.9	1164.2
152.5°	810.8	855.5	956.9	1079.0	1132.9
155°	839.2	875.4	966.7	1045.8	1084.0
157.5°	873.4	904.3	964.7	1033.1	1055.6
160°	886.5	912.7	972.9	1016.5	1032.6
162.5°	907.9	930.8	969.6	1011.4	1021.0
165°	927.7	941.7	979.1	993.8	1007.9
167.5°	951.9	961.2	976.6	992.7	993.1
170°	958.5	964.5	983.2	981.4	991.4
172.5°	970.0	974.5	978.3	982.6	976.6
175°	981.1	977.1	981.1	972.9	970.9
177.5°	979.1	979.1	975.8	972.3	964.3
180°	970.9	970.9	970.9	970.9	970.9

(END OF REPORT)