

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: P521687

Luminaire Tested: **SQ4-F-150U-100D-93050-1D-UNV-STD-W-4 (3500K)**

Issue Date: 5/5/2021

Test Information

Test Method: LM-79-08
Report Number: P521687
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 (3500K)
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 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

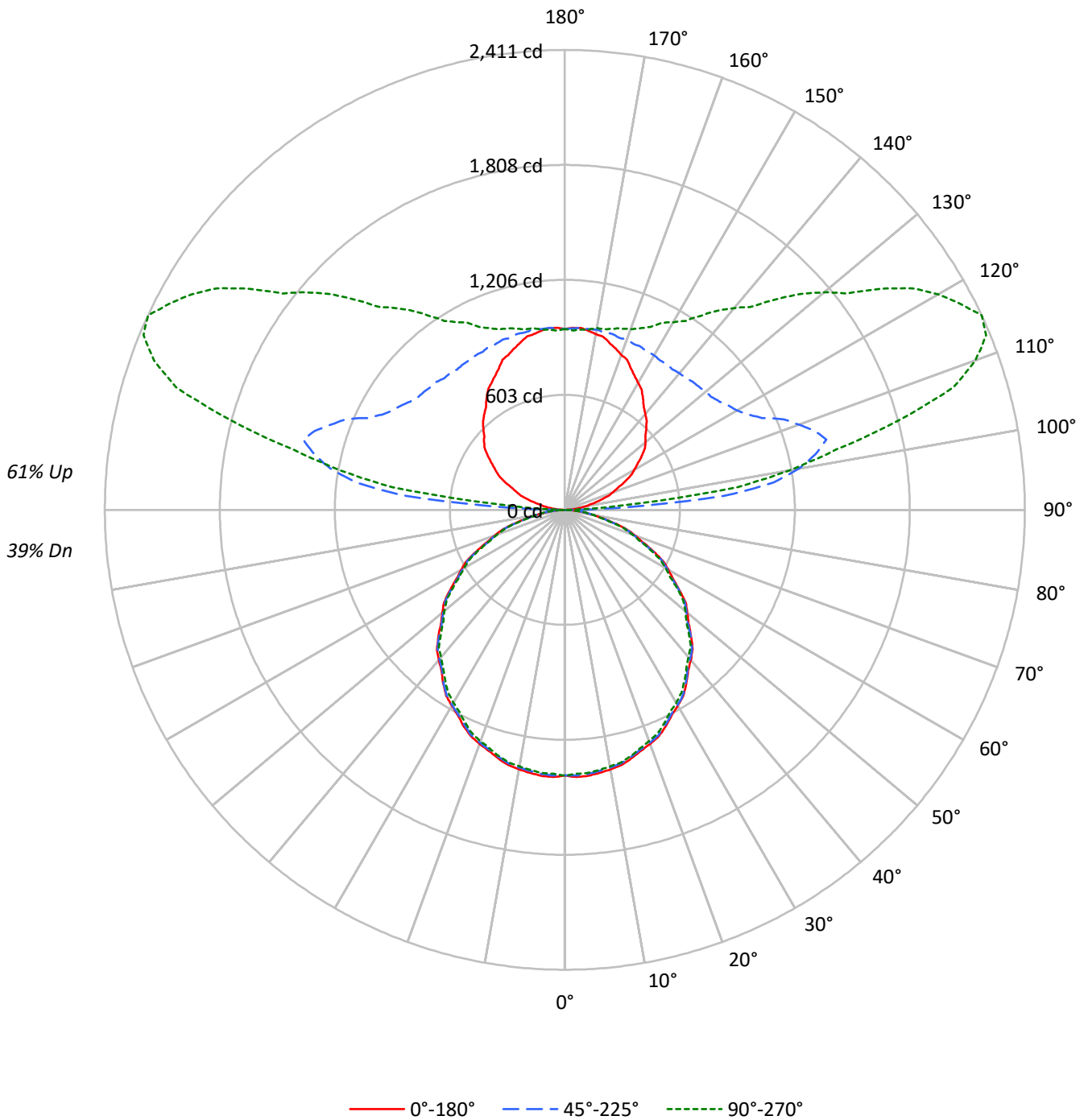
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10111.7 lumens
Efficiency: N/A
Efficacy: 108.1 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): 93.5
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

TEST NUMBER: P521687
CATALOG NUMBER: SQ4-F-150U-100D-93050-1D-UNV-STD-W-4 (3500K)

Luminous Intensity Polar Plot





TEST NUMBER: P521687

CATALOG NUMBER: SQ4-F-150U-100D-93050-1D-UNV-STD-W-4 (3500K)

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°	12852	12852	12852
5°	12966	12873	12827
10°	12947	12854	12797
15°	12885	12809	12771
20°	12823	12764	12666
25°	12745	12674	12562
30°	12624	12592	12443
35°	12513	12468	12311
40°	12369	12309	12140
45°	12213	12148	11978
50°	12014	11942	11827
55°	11807	11694	11565
60°	11533	11404	11238
65°	11156	10937	10741
70°	10520	10278	10089
75°	9589	9268	9090
80°	7863	7863	7863
85°	5611	6352	6669



TEST NUMBER: P521687

CATALOG NUMBER: SQ4-F-150U-100D-93050-1D-UNV-STD-W-4 (3500K)

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	131.9	1.3
10°-20°	377.7	3.7
20°-30°	571.3	5.6
30°-40°	688.1	6.8
40°-50°	714.6	7.1
50°-60°	648.5	6.4
60°-70°	494.8	4.9
70°-80°	276.6	2.7
80°-90°	72.0	0.7
90°-100°	488.5	4.8
100°-110°	1180.8	11.7
110°-120°	1259.3	12.5
120°-130°	1020.0	10.1
130°-140°	789.7	7.8
140°-150°	602.4	6.0
150°-160°	436.1	4.3
160°-170°	268.6	2.7
170°-180°	90.9	0.9
0°-30°	1080.9	10.7
0°-40°	1768.9	17.5
0°-60°	3132.0	31.0
0°-90°	3975.4	39.3
90°-120°	2928.6	29.0
90°-150°	5340.7	52.8
90°-180°	6136.0	60.7
0°-180°	10111.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1393	1393	1393	1393	1393	
5°	1400	1385	1390	1387	1385	133
15°	1349	1335	1341	1337	1337	381
25°	1252	1239	1245	1234	1234	576
35°	1111	1101	1107	1093	1093	694
45°	936	929	931	918	918	722
55°	734	732	727	719	719	657
65°	511	507	501	494	492	504
75°	269	265	260	256	255	283
85°	53	58	60	61	63	66
90°	0	0	0	0	0	4
95°	48	244	837	544	381	54
105°	189	326	1419	1836	1813	199
115°	345	441	1140	2162	2411	341
125°	492	566	990	1719	2019	439
135°	604	675	949	1356	1560	466
145°	715	768	931	1152	1242	447
155°	819	854	943	1020	1058	378
165°	905	919	956	970	984	255
175°	958	954	958	949	947	90
180°	947	947	947	947	947	

TEST NUMBER: P521687

CATALOG NUMBER: SQ4-F-150U-100D-93050-1D-UNV-STD-W-4 (3500K)

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1393.0	1393.0	1393.0	1393.0	1393.0
2.5°	1401.8	1390.1	1393.8	1392.0	1385.0
5°	1400.0	1385.3	1390.0	1387.0	1385.0
7.5°	1390.8	1376.1	1380.8	1376.8	1375.6
10°	1382.0	1367.3	1372.0	1368.0	1366.0
12.5°	1370.0	1356.1	1360.8	1356.0	1355.6
15°	1349.0	1335.3	1341.0	1337.0	1337.0
17.5°	1324.4	1311.7	1317.6	1311.8	1310.8
20°	1306.0	1293.3	1300.0	1291.0	1290.0
22.5°	1285.2	1273.3	1279.2	1268.6	1269.2
25°	1252.0	1239.3	1245.0	1234.0	1234.0
27.5°	1213.8	1201.3	1208.4	1195.2	1194.4
30°	1185.0	1173.3	1182.0	1168.0	1168.0
32.5°	1156.2	1146.0	1152.4	1139.1	1136.8
35°	1111.0	1101.2	1107.0	1093.0	1093.0
37.5°	1061.4	1053.4	1056.4	1043.5	1046.4
40°	1027.0	1018.2	1022.0	1009.0	1008.0
42.5°	991.8	983.8	986.8	973.9	976.8
45°	936.0	929.2	931.0	918.0	918.0
47.5°	879.4	874.3	872.8	861.2	863.2
50°	837.0	835.0	832.0	822.0	824.0
52.5°	798.6	794.3	790.4	781.2	782.4
55°	734.0	732.0	727.0	719.0	719.0
57.5°	672.2	667.9	662.0	653.8	653.8
60°	625.0	623.0	618.0	609.0	609.0
62.5°	580.2	577.5	571.6	563.4	562.6
65°	511.0	507.1	501.0	494.0	492.0
67.5°	438.8	434.7	429.8	423.2	422.0
70°	390.0	385.1	381.0	376.0	374.0
72.5°	340.4	337.9	333.0	328.0	326.8
75°	269.0	265.1	260.0	256.0	255.0
77.5°	193.6	193.0	191.2	188.6	189.6
80°	148.0	149.0	148.0	147.0	148.0
82.5°	107.2	109.7	109.6	109.4	110.4
85°	53.0	57.9	60.0	61.0	63.0
87.5°	15.2	19.9	24.0	24.8	25.6
90°	0.0	0.0	0.0	0.0	0.0
92.5°	16.1	132.2	311.5	151.4	102.8
95°	48.2	244.4	837.0	544.3	381.4
97.5°	85.5	270.8	1102.4	1062.0	911.7
100°	114.4	287.1	1248.5	1318.0	1194.3
102.5°	141.7	301.9	1344.9	1531.1	1457.7
105°	188.7	326.1	1419.1	1836.1	1812.6
107.5°	234.9	354.6	1375.4	2080.8	2136.1
110°	267.0	378.8	1304.7	2186.3	2290.3



TEST NUMBER: P521687

CATALOG NUMBER: SQ4-F-150U-100D-93050-1D-UNV-STD-W-4 (3500K)

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	299.1	403.1	1242.1	2212.0	2389.9
115°	345.3	441.4	1140.1	2161.5	2410.7
117.5°	391.0	481.7	1080.3	2045.2	2337.3
120°	421.5	505.9	1041.8	1954.0	2260.2
122.5°	453.6	531.8	1017.7	1860.8	2162.2
125°	491.8	566.4	989.6	1719.0	2019.3
127.5°	529.5	599.8	969.9	1599.0	1862.7
130°	552.0	620.7	963.5	1515.4	1774.4
132.5°	572.9	644.7	953.9	1455.0	1674.9
135°	604.2	674.8	949.4	1355.5	1559.6
137.5°	633.9	704.9	935.4	1288.2	1442.0
140°	656.4	721.1	935.4	1239.7	1381.0
142.5°	678.9	743.6	927.4	1197.4	1316.8
145°	714.6	767.6	931.4	1152.2	1242.5
147.5°	747.9	799.3	929.0	1100.1	1174.7
150°	768.8	813.9	935.4	1077.2	1136.1
152.5°	791.3	834.8	933.8	1053.0	1105.6
155°	819.0	854.3	943.4	1020.5	1057.8
157.5°	852.3	882.5	941.4	1008.1	1030.1
160°	865.1	890.6	949.4	991.9	1007.7
162.5°	886.0	908.4	946.2	987.0	996.4
165°	905.3	919.0	955.5	969.8	983.6
167.5°	929.0	938.0	953.1	968.7	969.1
170°	935.4	941.3	959.5	957.7	967.5
172.5°	946.6	950.9	954.7	958.9	953.1
175°	957.5	953.5	957.5	949.4	947.4
177.5°	955.5	955.5	952.2	948.9	941.0
180°	947.4	947.4	947.4	947.4	947.4

(END OF REPORT)