

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: P521689

Luminaire Tested: **SQ4-F-150U-100D-93050-1D-UNV-STD-W-4 (4500K)**

Issue Date: 5/5/2021

Test Information

Test Method: LM-79-08
Report Number: P521689
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 (4500K)
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 4500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

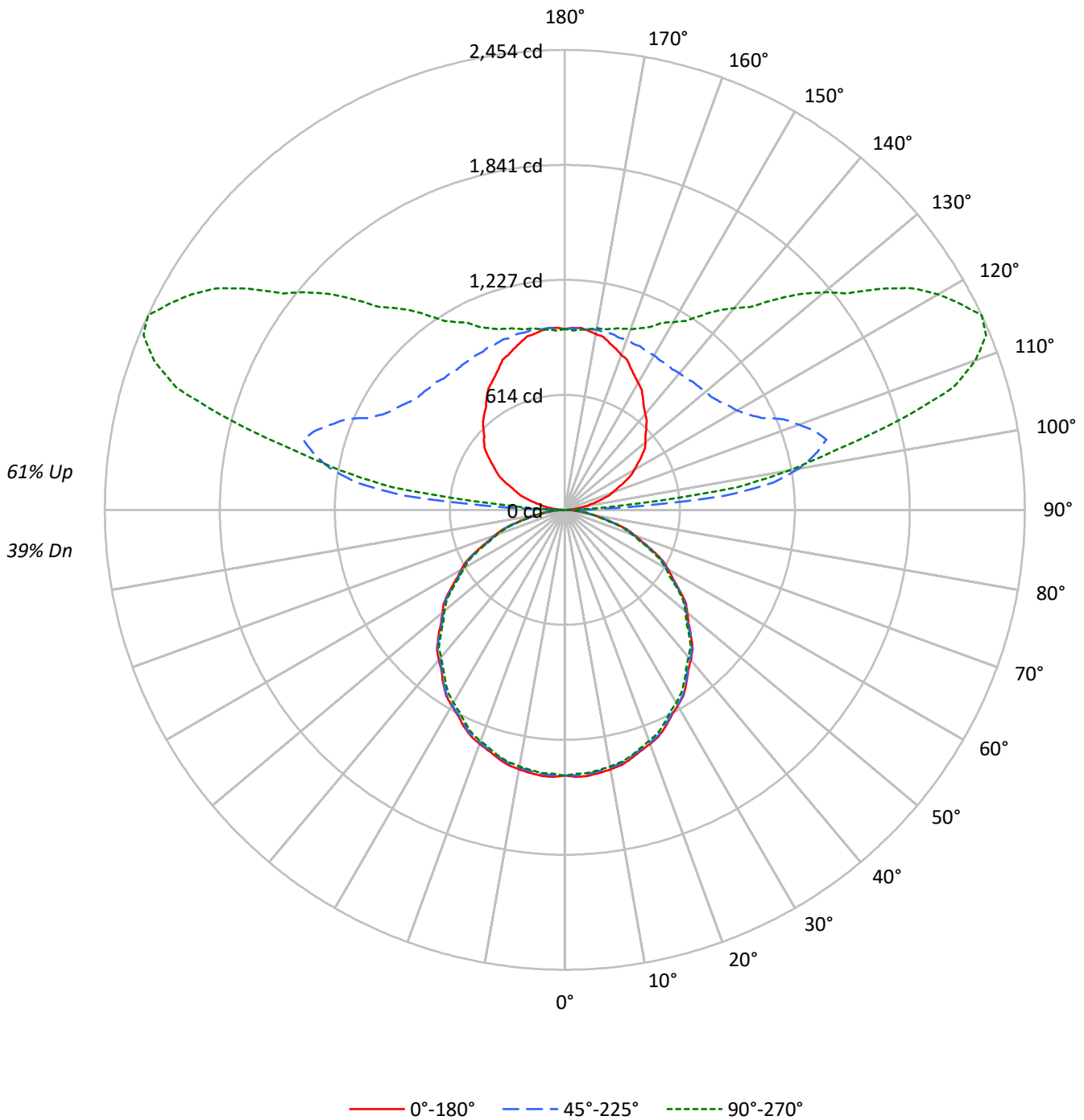
Lumens per Lamp: N/A
Luminaire Lumens: 10291.5 lumens
Efficiency: N/A
Efficacy: 110.3 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.25 / 1.38
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Indirect

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°	13081	13081	13081
5°	13197	13102	13055
10°	13178	13082	13025
15°	13114	13036	12998
20°	13051	12991	12890
25°	12972	12899	12785
30°	12849	12816	12665
35°	12736	12690	12529
40°	12590	12528	12356
45°	12429	12364	12191
50°	12228	12154	12038
55°	12017	11902	11771
60°	11738	11607	11437
65°	11354	11132	10931
70°	10707	10461	10270
75°	9760	9432	9250
80°	8002	8002	8002
85°	5706	6468	6786



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	134.2	1.3
10°-20°	384.4	3.7
20°-30°	581.5	5.6
30°-40°	700.3	6.8
40°-50°	727.3	7.1
50°-60°	660.1	6.4
60°-70°	503.6	4.9
70°-80°	281.5	2.7
80°-90°	73.3	0.7
90°-100°	497.2	4.8
100°-110°	1201.7	11.7
110°-120°	1281.7	12.5
120°-130°	1038.1	10.1
130°-140°	803.7	7.8
140°-150°	613.1	6.0
150°-160°	443.8	4.3
160°-170°	273.4	2.7
170°-180°	92.6	0.9
0°-30°	1100.1	10.7
0°-40°	1800.4	17.5
0°-60°	3187.7	31.0
0°-90°	4046.1	39.3
90°-120°	2980.7	29.0
90°-150°	5435.7	52.8
90°-180°	6245.0	60.7
0°-180°	10291.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1418	1418	1418	1418	1418	
5°	1425	1410	1415	1412	1410	135
15°	1373	1359	1365	1361	1361	387
25°	1274	1261	1267	1256	1256	587
35°	1131	1121	1127	1112	1112	707
45°	953	946	948	934	934	735
55°	747	745	740	732	732	668
65°	520	516	510	503	501	513
75°	274	270	265	260	260	288
85°	54	59	61	62	64	67
90°	0	0	0	0	0	4
95°	49	249	852	554	388	55
105°	192	332	1444	1869	1845	203
115°	351	449	1160	2200	2454	347
125°	500	576	1007	1750	2055	447
135°	615	687	966	1380	1587	475
145°	727	781	948	1173	1265	455
155°	834	870	960	1039	1077	385
165°	921	935	972	987	1001	260
175°	974	970	974	966	964	92
180°	964	964	964	964	964	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1417.8	1417.8	1417.8	1417.8	1417.8
2.5°	1426.7	1414.8	1418.6	1416.8	1409.6
5°	1424.9	1410.0	1414.7	1411.6	1409.6
7.5°	1415.5	1400.6	1405.4	1401.3	1400.1
10°	1406.6	1391.6	1396.4	1392.3	1390.3
12.5°	1394.4	1380.2	1385.0	1380.1	1379.7
15°	1373.0	1359.1	1364.8	1360.8	1360.8
17.5°	1348.0	1335.0	1341.0	1335.1	1334.1
20°	1329.2	1316.3	1323.1	1313.9	1312.9
22.5°	1308.1	1295.9	1301.9	1291.2	1291.8
25°	1274.3	1261.3	1267.1	1255.9	1255.9
27.5°	1235.4	1222.6	1229.9	1216.4	1215.6
30°	1206.1	1194.1	1203.0	1188.8	1188.8
32.5°	1176.8	1166.4	1172.9	1159.4	1157.0
35°	1130.8	1120.8	1126.7	1112.4	1112.4
37.5°	1080.3	1072.1	1075.2	1062.0	1065.0
40°	1045.3	1036.3	1040.2	1026.9	1025.9
42.5°	1009.4	1001.3	1004.3	991.2	994.2
45°	952.6	945.7	947.6	934.3	934.3
47.5°	895.0	889.9	888.3	876.6	878.6
50°	851.9	849.9	846.8	836.7	838.7
52.5°	812.8	808.4	804.5	795.1	796.3
55°	747.1	745.1	739.9	731.8	731.8
57.5°	684.2	679.8	673.8	665.4	665.4
60°	636.1	634.1	629.0	619.8	619.8
62.5°	590.5	587.7	581.8	573.4	572.6
65°	520.1	516.1	509.9	502.7	500.7
67.5°	446.6	442.4	437.4	430.7	429.5
70°	396.9	392.0	387.8	382.6	380.7
72.5°	346.5	343.9	338.9	333.8	332.6
75°	273.8	269.8	264.6	260.5	259.5
77.5°	197.0	196.4	194.6	192.0	193.0
80°	150.6	151.6	150.6	149.6	150.6
82.5°	109.1	111.7	111.5	111.4	112.4
85°	53.9	58.9	61.1	62.1	64.1
87.5°	15.5	20.2	24.4	25.3	26.1
90°	0.0	0.0	0.0	0.0	0.0
92.5°	16.3	134.6	317.1	154.1	104.6
95°	49.0	248.8	851.9	554.0	388.2
97.5°	87.0	275.6	1122.0	1080.9	927.9
100°	116.4	292.2	1270.7	1341.4	1215.6
102.5°	144.2	307.2	1368.8	1558.3	1483.6
105°	192.0	331.9	1444.4	1868.8	1844.8
107.5°	239.0	360.9	1399.8	2117.8	2174.1
110°	271.7	385.6	1327.9	2225.2	2331.0

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	304.4	410.3	1264.2	2251.4	2432.4
115°	351.4	449.3	1160.4	2199.9	2453.6
117.5°	398.0	490.3	1099.5	2081.6	2378.8
120°	429.0	514.9	1060.3	1988.8	2300.4
122.5°	461.7	541.2	1035.8	1893.9	2200.7
125°	500.5	576.4	1007.2	1749.6	2055.2
127.5°	538.9	610.4	987.2	1627.4	1895.9
130°	561.8	631.7	980.6	1542.3	1806.0
132.5°	583.1	656.2	970.8	1480.9	1704.7
135°	614.9	686.8	966.3	1379.6	1587.4
137.5°	645.2	717.5	952.0	1311.1	1467.7
140°	668.1	734.0	952.0	1261.7	1405.6
142.5°	690.9	756.9	943.9	1218.7	1340.2
145°	727.3	781.2	947.9	1172.7	1264.6
147.5°	761.2	813.5	945.5	1119.6	1195.5
150°	782.5	828.4	952.0	1096.4	1156.3
152.5°	805.3	849.7	950.4	1071.7	1125.3
155°	833.5	869.5	960.2	1038.7	1076.6
157.5°	867.4	898.2	958.2	1026.1	1048.5
160°	880.5	906.5	966.3	1009.6	1025.6
162.5°	901.8	924.5	963.1	1004.5	1014.1
165°	921.4	935.4	972.5	987.1	1001.1
167.5°	945.5	954.7	970.0	985.9	986.3
170°	952.0	958.0	976.5	974.7	984.7
172.5°	963.5	967.9	971.6	976.0	970.0
175°	974.5	970.5	974.5	966.3	964.3
177.5°	972.5	972.5	969.2	965.7	957.7
180°	964.3	964.3	964.3	964.3	964.3

(END OF REPORT)