

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: P520365

Luminaire Tested: **SQ4-F-150U-050D-830-1D-UNV-STD-W-6**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P520365
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-25, 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-150U-050D-830-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 1500 LUMENS PER FOOT
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

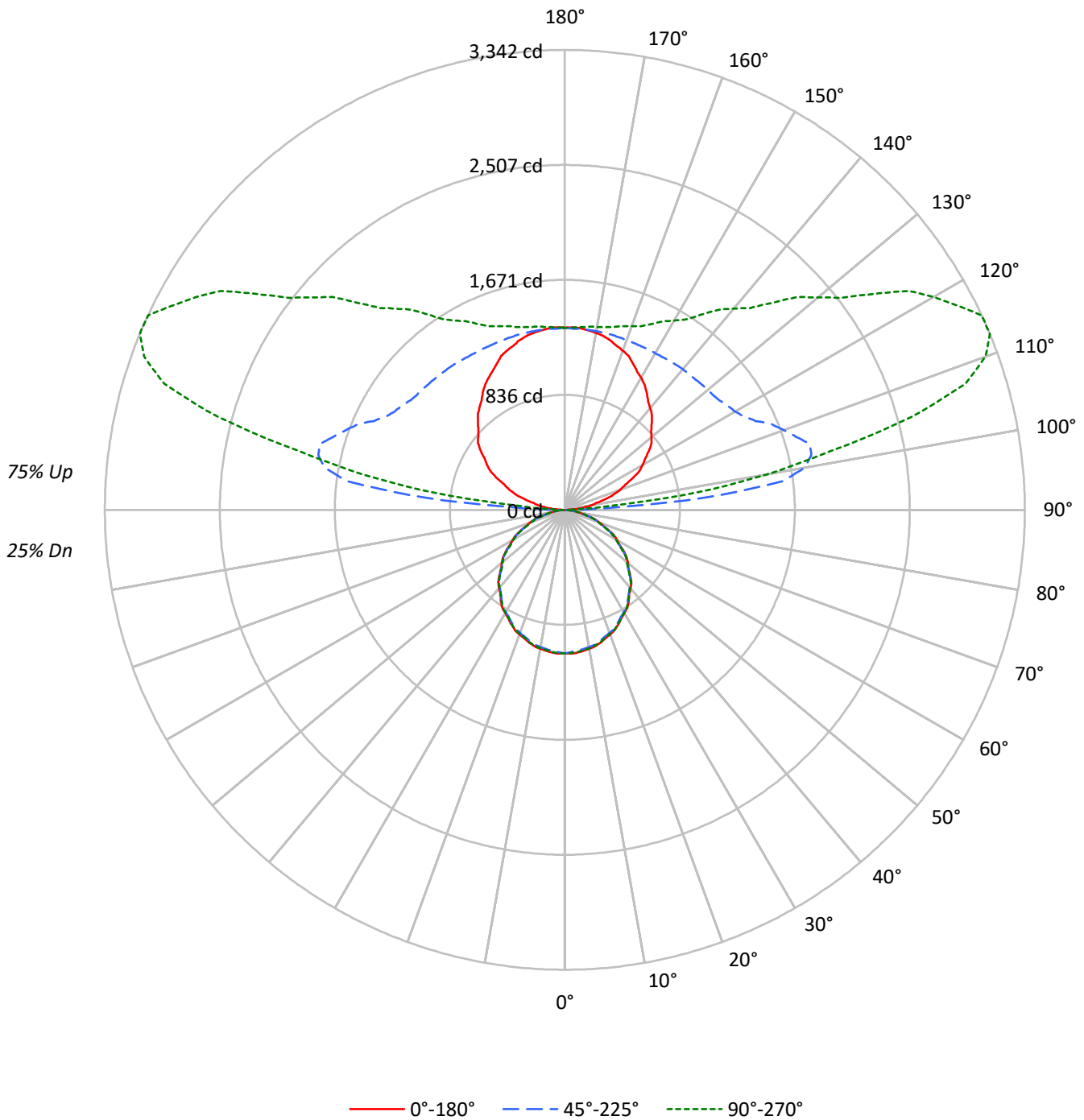
Lumens per Lamp: N/A
Luminaire Lumens: 11378.1 lumens
Efficiency: N/A
Efficacy: 134.8 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 84.4
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	101	101	101	101	90	90	90	90	69	69	69	51	51	51	33	33	33	25
1	92	88	84	81	82	79	75	73	61	59	57	44	43	42	29	29	28	21
2	84	77	71	66	74	69	64	59	53	50	47	39	37	35	26	25	23	18
3	76	67	60	55	68	60	54	49	47	43	39	34	32	29	23	21	20	15
4	70	59	52	46	62	53	47	42	41	37	33	30	27	25	20	18	17	13
5	64	53	45	39	57	47	41	36	37	32	29	27	24	22	18	16	15	11
6	59	47	39	34	52	42	36	31	33	28	25	24	21	19	16	14	13	10
7	54	42	35	29	48	38	31	27	30	25	22	22	19	16	15	13	11	8
8	50	38	31	26	44	34	28	23	27	22	19	20	17	15	14	12	10	8
9	47	35	28	23	41	31	25	21	25	20	17	18	15	13	13	11	9	7
10	43	32	25	20	39	29	23	18	23	18	15	17	14	12	12	10	8	6

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6415	6415	6415
5°	6431	6353	6405
10°	6409	6331	6374
15°	6365	6285	6338
20°	6305	6232	6278
25°	6234	6159	6215
30°	6148	6098	6138
35°	6080	6007	6038
40°	5963	5907	5919
45°	5841	5793	5793
50°	5718	5664	5638
55°	5584	5509	5480
60°	5376	5290	5255
65°	5120	5018	4959
70°	4769	4669	4570
75°	4280	4147	4047
80°	3461	3411	3315
85°	2068	2364	2463



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	98.4	0.9
10°-20°	280.2	2.5
20°-30°	420.9	3.7
30°-40°	502.4	4.4
40°-50°	514.8	4.5
50°-60°	459.1	4.0
60°-70°	341.9	3.0
70°-80°	185.6	1.6
80°-90°	45.7	0.4
90°-100°	614.8	5.4
100°-110°	1662.2	14.6
110°-120°	1747.6	15.4
120°-130°	1419.5	12.5
130°-140°	1113.5	9.8
140°-150°	854.6	7.5
150°-160°	614.6	5.4
160°-170°	375.5	3.3
170°-180°	126.6	1.1
0°-30°	799.5	7.0
0°-40°	1301.9	11.4
0°-60°	2275.8	20.0
0°-90°	2849.1	25.0
90°-120°	4024.6	35.4
90°-150°	7412.3	65.1
90°-180°	8529.0	75.0
0°-180°	11378.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1043	1043	1043	1043	1043	
5°	1042	1040	1029	1039	1037	99
15°	1000	997	987	995	995	282
25°	919	916	908	913	916	423
35°	810	807	800	800	804	505
45°	672	673	666	665	666	518
55°	521	521	514	510	511	464
65°	352	350	345	341	341	348
75°	180	179	174	172	170	190
85°	29	32	34	35	35	41
90°	3	8	18	20	18	7
95°	95	335	1022	529	315	100
105°	309	477	1844	2720	2609	325
115°	544	665	1529	2960	3342	537
125°	745	853	1378	2326	2733	664
135°	893	999	1341	1878	2126	690
145°	1038	1116	1323	1608	1730	649
155°	1172	1218	1312	1442	1490	541
165°	1276	1288	1317	1368	1376	359
175°	1324	1323	1318	1336	1333	126
180°	1323	1323	1323	1323	1323	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1042.9	1042.9	1042.9	1042.9	1042.9
2.5°	1046.2	1044.0	1035.1	1042.9	1041.8
5°	1041.5	1040.1	1029.0	1038.7	1037.3
7.5°	1034.0	1031.2	1020.3	1029.7	1028.4
10°	1026.1	1023.4	1013.6	1021.9	1020.6
12.5°	1016.0	1014.5	1003.5	1011.9	1011.6
15°	999.6	996.9	987.0	995.4	995.4
17.5°	977.9	976.2	966.6	974.7	973.6
20°	963.3	960.6	952.1	959.1	959.1
22.5°	945.4	943.8	935.4	941.3	942.4
25°	918.6	915.9	907.5	913.1	915.8
27.5°	889.0	886.9	879.9	883.5	885.4
30°	865.6	865.6	858.6	860.0	864.2
32.5°	844.4	844.4	836.3	837.7	839.6
35°	809.7	807.0	800.0	800.1	804.1
37.5°	769.5	768.1	763.7	762.8	763.9
40°	742.7	741.3	735.7	737.2	737.2
42.5°	715.9	714.6	709.0	707.0	709.2
45°	671.5	672.9	666.0	664.6	666.0
47.5°	627.7	627.7	622.1	618.3	620.4
50°	597.6	597.6	591.9	589.2	589.2
52.5°	566.3	567.4	560.7	556.8	557.9
55°	520.7	520.7	513.7	509.6	511.0
57.5°	470.4	470.4	463.5	459.4	461.9
60°	437.0	437.0	430.0	425.9	427.2
62.5°	403.5	403.5	396.5	392.4	392.5
65°	351.8	350.4	344.8	340.7	340.7
67.5°	302.1	298.6	294.3	288.7	288.7
70°	265.2	263.9	259.6	254.1	254.1
72.5°	231.7	229.3	225.0	220.6	220.6
75°	180.1	178.8	174.5	171.7	170.3
77.5°	129.0	127.9	127.6	123.8	124.8
80°	97.7	97.7	96.3	93.6	93.6
82.5°	69.8	70.9	68.4	67.8	66.8
85°	29.3	32.0	33.5	34.9	34.9
87.5°	6.1	10.6	11.4	12.8	12.5
90°	2.8	8.5	18.5	19.9	18.5
92.5°	40.4	147.4	290.7	126.3	91.4
95°	95.4	334.9	1022.4	529.1	314.7
97.5°	153.2	384.1	1593.7	1318.8	968.6
100°	196.5	404.0	1771.4	1847.4	1493.7
102.5°	236.4	431.6	1834.0	2248.1	1983.6
105°	309.0	477.4	1844.1	2720.1	2608.7
107.5°	376.2	530.0	1763.4	3014.5	3051.6
110°	428.7	567.9	1691.7	3093.6	3250.8



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	475.3	605.6	1625.6	3077.8	3342.0
115°	543.9	665.1	1529.3	2960.5	3342.0
117.5°	611.1	724.8	1465.8	2781.5	3213.8
120°	652.2	763.5	1428.2	2652.9	3094.2
122.5°	690.9	800.1	1405.5	2515.2	2959.8
125°	744.7	853.4	1378.4	2326.0	2732.6
127.5°	794.3	901.0	1362.4	2171.7	2529.3
130°	821.6	931.6	1355.6	2076.4	2399.4
132.5°	850.1	959.0	1348.7	1990.3	2287.7
135°	892.8	998.6	1341.4	1878.2	2126.0
137.5°	935.9	1035.8	1335.1	1787.1	1988.9
140°	965.4	1058.7	1332.8	1728.5	1908.1
142.5°	993.9	1081.6	1328.3	1675.6	1832.9
145°	1038.1	1116.0	1322.9	1607.6	1730.1
147.5°	1078.2	1147.3	1316.6	1546.0	1640.2
150°	1107.8	1169.1	1314.3	1512.5	1587.7
152.5°	1135.2	1188.7	1313.2	1481.5	1543.3
155°	1171.9	1217.8	1311.5	1442.1	1489.5
157.5°	1210.1	1242.1	1311.7	1414.7	1445.9
160°	1231.7	1258.2	1312.9	1397.4	1419.6
162.5°	1248.8	1270.8	1314.0	1383.6	1400.3
165°	1275.9	1288.4	1317.1	1368.5	1375.6
167.5°	1294.4	1303.1	1317.4	1355.7	1359.0
170°	1305.8	1310.0	1318.5	1349.9	1349.9
172.5°	1314.9	1315.7	1318.5	1343.1	1342.0
175°	1324.3	1322.9	1318.5	1335.6	1332.8
177.5°	1327.4	1324.1	1318.3	1329.6	1326.3
180°	1322.9	1322.9	1322.9	1322.9	1322.9

(END OF REPORT)