

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: P520448

Luminaire Tested: **SQ4-F-150U-125D-930-1D-UNV-STD-W-4**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P520448  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-25, G3-1910-536-20)  
Test Lab: INNOVATION CENTER  
Issue Date: 4/29/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: SQ4-F-150U-125D-930-1D-UNV-STD-W-4  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE  
DOWNLIGHT 1250 LUMENS PER FOOT  
UPLIGHT 1500 LUMENS PER FOOT  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

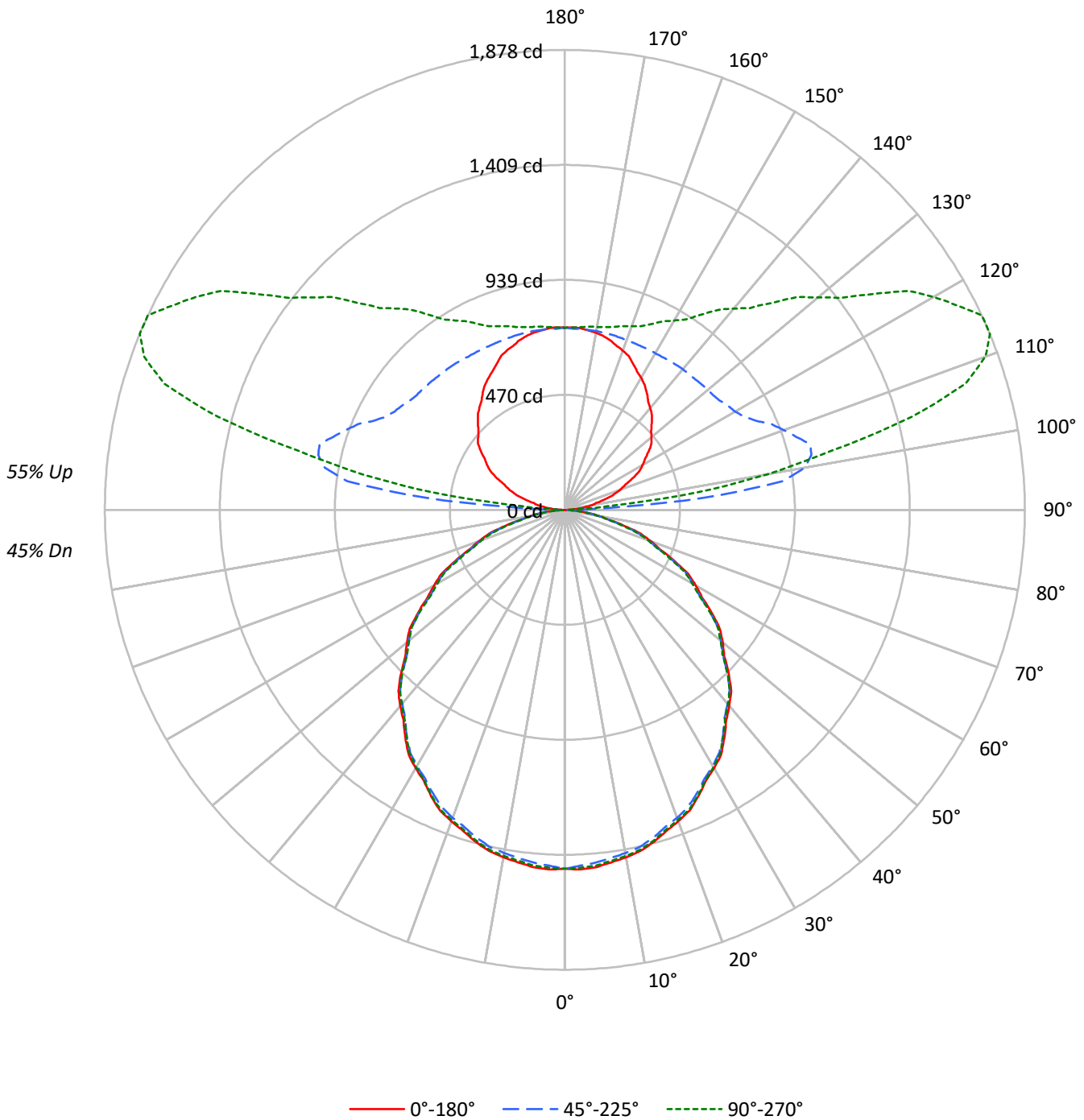
Lumens per Lamp: N/A  
Luminaire Lumens: 8793.2 lumens  
Efficiency: N/A  
Efficacy: 105.8 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35  
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')  
CIE Type: General Diffuse

Input Watts (W): 83.1  
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	106	106	106	106	97	97	97	97	81	81	81	66	66	66	52	52	52	45
1	97	92	89	85	89	85	82	79	71	68	66	58	56	55	46	45	44	38
2	88	81	75	69	80	74	69	64	62	58	55	51	48	46	40	38	37	32
3	80	71	63	58	73	65	59	54	55	50	46	45	41	38	36	33	31	27
4	73	63	55	49	67	58	51	45	48	43	39	40	36	33	32	29	27	23
5	67	56	48	42	61	51	44	39	43	38	34	36	32	28	29	26	23	20
6	62	50	42	36	57	46	39	34	39	33	29	32	28	25	26	23	20	17
7	57	45	37	31	52	42	35	29	35	30	26	29	25	22	24	20	18	15
8	53	41	33	28	48	38	31	26	32	27	23	27	22	19	22	19	16	14
9	49	37	30	25	45	34	28	23	29	24	20	24	20	17	20	17	15	12
10	46	34	27	22	42	32	25	21	27	22	18	23	19	16	18	15	13	11

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	13520	13520	13520
5°	13564	13393	13504
10°	13502	13336	13441
15°	13411	13250	13358
20°	13288	13137	13240
25°	13136	12997	13104
30°	12974	12862	12931
35°	12789	12681	12690
40°	12579	12444	12481
45°	12343	12208	12228
50°	12074	11935	11900
55°	11766	11598	11572
60°	11385	11130	11071
65°	10793	10566	10424
70°	10051	9789	9660
75°	8940	8741	8480
80°	7284	7072	7029
85°	4351	4954	4954



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	138.3	1.6
10°-20°	393.8	4.5
20°-30°	591.6	6.7
30°-40°	705.9	8.0
40°-50°	723.6	8.2
50°-60°	644.9	7.3
60°-70°	480.1	5.5
70°-80°	260.1	3.0
80°-90°	61.3	0.7
90°-100°	345.5	3.9
100°-110°	934.2	10.6
110°-120°	982.2	11.2
120°-130°	797.8	9.1
130°-140°	625.8	7.1
140°-150°	480.3	5.5
150°-160°	345.5	3.9
160°-170°	211.0	2.4
170°-180°	71.1	0.8
0°-30°	1123.7	12.8
0°-40°	1829.6	20.8
0°-60°	3198.1	36.4
0°-90°	3999.6	45.5
90°-120°	2262.0	25.7
90°-150°	4166.0	47.4
90°-180°	4794.0	54.5
0°-180°	8793.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1465	1465	1465	1465	1465	
5°	1465	1462	1446	1459	1458	139
15°	1404	1401	1387	1399	1398	396
25°	1290	1288	1277	1284	1287	594
35°	1136	1135	1126	1126	1127	710
45°	946	944	936	934	937	729
55°	732	729	721	715	719	653
65°	494	491	484	481	478	490
75°	251	251	245	240	238	266
85°	41	47	47	48	47	57
90°	2	5	10	11	10	5
95°	54	188	575	297	177	56
105°	174	268	1036	1529	1466	183
115°	306	374	860	1664	1878	302
125°	419	480	775	1307	1536	373
135°	502	561	754	1056	1195	388
145°	584	627	744	904	972	365
155°	659	684	737	810	837	304
165°	717	724	740	769	773	202
175°	744	744	741	751	749	71
180°	744	744	744	744	744	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1465.4	1465.4	1465.4	1465.4	1465.4
2.5°	1469.9	1467.5	1454.5	1465.3	1463.5
5°	1464.6	1462.3	1446.1	1459.0	1458.1
7.5°	1452.2	1449.2	1434.4	1446.5	1445.1
10°	1441.2	1438.9	1423.5	1435.5	1434.7
12.5°	1427.6	1425.3	1409.9	1422.1	1421.9
15°	1404.1	1401.0	1387.2	1399.3	1398.5
17.5°	1376.0	1372.3	1358.6	1368.2	1369.8
20°	1353.4	1350.9	1338.0	1346.9	1348.5
22.5°	1330.1	1327.1	1313.5	1323.7	1325.3
25°	1290.4	1288.1	1276.7	1284.0	1287.2
27.5°	1246.8	1246.8	1236.4	1241.6	1243.5
30°	1217.8	1217.8	1207.3	1210.6	1213.8
32.5°	1186.8	1184.3	1174.5	1177.1	1180.2
35°	1135.5	1134.7	1125.9	1125.9	1126.7
37.5°	1082.5	1080.3	1070.6	1071.3	1075.0
40°	1044.4	1042.8	1033.2	1033.2	1036.3
42.5°	1005.7	1004.1	995.7	994.5	995.7
45°	946.0	943.7	935.6	934.1	937.2
47.5°	882.5	883.1	873.4	871.2	872.9
50°	841.2	841.2	831.5	826.7	829.1
52.5°	797.9	796.7	787.0	781.6	787.2
55°	731.5	729.1	721.0	715.4	719.4
57.5°	663.4	659.8	651.7	645.6	647.7
60°	617.0	611.5	603.2	598.5	600.0
62.5°	568.6	565.6	556.8	549.4	553.0
65°	494.4	491.3	484.0	480.6	477.5
67.5°	421.6	419.6	411.3	407.8	405.8
70°	372.6	368.6	362.9	358.9	358.1
72.5°	324.8	320.3	314.5	311.1	309.0
75°	250.8	250.8	245.2	240.3	237.9
77.5°	180.3	181.0	176.4	174.6	173.5
80°	137.1	137.1	133.1	131.5	132.3
82.5°	95.8	97.7	96.3	94.1	92.9
85°	41.1	46.6	46.8	47.5	46.8
87.5°	7.4	12.5	14.4	13.2	11.8
90°	1.6	4.7	10.4	11.2	10.4
92.5°	22.7	82.8	163.5	70.9	51.4
95°	53.6	188.2	574.6	297.4	176.9
97.5°	86.1	215.9	895.7	741.3	544.3
100°	110.5	227.1	995.6	1038.3	839.5
102.5°	132.9	242.5	1030.8	1263.5	1114.8
105°	173.6	268.4	1036.4	1528.8	1466.2
107.5°	211.5	297.9	991.1	1694.3	1715.1
110°	240.9	319.1	950.8	1738.7	1827.2



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	267.2	340.4	913.6	1729.8	1878.4
115°	305.7	373.8	859.5	1663.9	1878.4
117.5°	343.5	407.3	823.8	1563.3	1806.3
120°	366.6	429.2	802.7	1491.1	1739.0
122.5°	388.3	449.7	789.9	1413.6	1663.5
125°	418.6	479.6	774.7	1307.3	1535.8
127.5°	446.5	506.3	765.8	1220.6	1421.6
130°	461.7	523.6	761.9	1166.9	1348.5
132.5°	477.7	539.0	758.1	1118.7	1285.8
135°	501.8	561.2	753.9	1055.6	1194.9
137.5°	525.9	582.2	750.4	1004.4	1117.9
140°	542.6	595.0	749.1	971.5	1072.4
142.5°	558.6	607.9	746.5	941.7	1030.1
145°	583.5	627.2	743.5	903.5	972.4
147.5°	606.0	644.8	740.0	868.9	921.8
150°	622.6	657.1	738.7	850.1	892.3
152.5°	638.0	668.1	738.1	832.7	867.4
155°	658.6	684.5	737.1	810.5	837.2
157.5°	680.1	698.2	737.3	795.1	812.6
160°	692.3	707.1	737.9	785.4	797.9
162.5°	701.9	714.3	738.5	777.6	787.0
165°	717.1	724.1	740.3	769.2	773.1
167.5°	727.5	732.4	740.4	761.9	763.8
170°	733.9	736.3	741.1	758.7	758.7
172.5°	739.0	739.5	741.1	754.9	754.2
175°	744.3	743.5	741.1	750.7	749.1
177.5°	746.0	744.1	740.9	747.2	745.4
180°	743.5	743.5	743.5	743.5	743.5

(END OF REPORT)