

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: P844970

Luminaire Tested: **SQ4P-F-150U-100D-B35-1D-UNV**

Issue Date: 8/14/2023



Test Information

Test Method: LM-79-08
Report Number: P844970
REPORT IS A COMBINATION OF REPORTS P700137 AND P700248
Test Lab: INNOVATION CENTER
Issue Date: 8/14/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4P-F-150U-100D-B35-1D-UNV
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, 1500 LUMENS PER FOOT UPLIGHT, 1000 LUMENS PER FOOT DOWNLIGHT

Light Source: -
Ballast/Driver: -

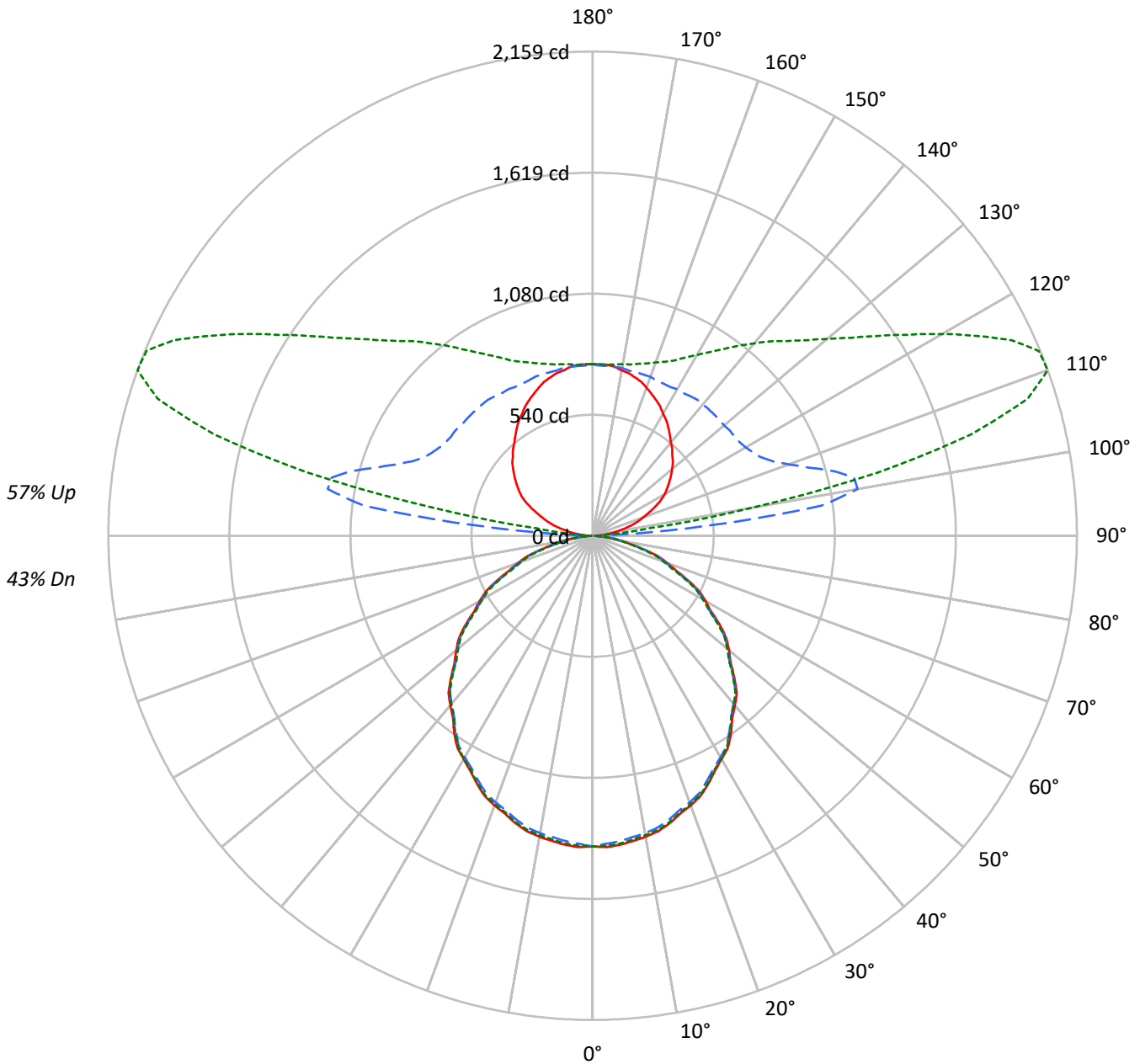
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8749.9 lumens
Efficiency: N/A
Efficacy: 112.3 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): 77.9
Input Voltage (V): NR
Input Current (A_{in}): 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: 25 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	50	30	10	0
RCR																					
0	106	106	106	106	96	96	96	96	80	80	80	64	64	64	50	50	50	43			43
1	96	92	88	85	88	84	81	78	70	67	65	56	55	53	44	43	42	36			36
2	88	80	74	69	80	74	68	64	61	57	54	49	47	44	39	37	35	30			30
3	80	70	63	57	73	65	58	53	54	49	45	44	40	37	34	32	30	26			26
4	73	62	54	48	66	57	50	45	48	42	38	39	35	32	31	28	26	22			22
5	67	55	47	41	61	51	44	39	43	37	33	35	31	28	27	25	22	19			19
6	62	50	41	36	56	46	39	33	38	33	29	31	27	24	25	22	20	17			17
7	57	45	37	31	52	41	34	29	35	29	25	28	24	21	23	20	17	15			15
8	53	40	33	27	48	37	31	26	31	26	22	26	22	19	21	18	16	13			13
9	49	37	29	24	45	34	27	23	29	24	20	24	20	17	19	16	14	12			12
10	46	34	27	22	42	31	25	20	26	21	18	22	18	15	18	15	13	11			11

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	12782	12782	12782
5°	12814	12660	12762
10°	12769	12614	12701
15°	12683	12523	12630
20°	12563	12418	12510
25°	12422	12272	12386
30°	12249	12150	12230
35°	12117	11970	12031
40°	11886	11771	11795
45°	11640	11543	11543
50°	11394	11288	11236
55°	11128	10978	10919
60°	10713	10542	10474
65°	10204	10001	9876
70°	9506	9301	9104
75°	8527	8263	8063
80°	6902	6811	6604
85°	4107	4721	4901



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	130.7	1.5
10°-20°	372.2	4.3
20°-30°	559.1	6.4
30°-40°	667.4	7.6
40°-50°	683.9	7.8
50°-60°	609.9	7.0
60°-70°	454.2	5.2
70°-80°	246.6	2.8
80°-90°	58.9	0.7
90°-100°	304.6	3.5
100°-110°	1059.8	12.1
110°-120°	1026.6	11.7
120°-130°	805.3	9.2
130°-140°	637.4	7.3
140°-150°	491.9	5.6
150°-160°	352.6	4.0
160°-170°	215.7	2.5
170°-180°	73.0	0.8
0°-30°	1062.0	12.1
0°-40°	1729.4	19.8
0°-60°	3023.3	34.6
0°-90°	3783.0	43.2
90°-120°	2391.0	27.3
90°-150°	4325.6	49.4
90°-180°	4967.0	56.8
0°-180°	8749.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1385	1385	1385	1385	1385	
5°	1384	1382	1367	1380	1378	131
15°	1328	1324	1311	1322	1322	374
25°	1220	1217	1206	1213	1217	562
35°	1076	1072	1063	1063	1068	671
45°	892	894	885	883	885	689
55°	692	692	682	677	679	616
65°	467	466	458	452	452	463
75°	239	237	232	228	226	253
85°	39	42	45	46	46	54
90°	11	17	17	11	6	8
95°	51	177	514	131	80	54
105°	177	251	1114	1879	1748	186
115°	308	371	828	1748	2062	305
125°	417	514	771	1302	1554	373
135°	503	565	765	1085	1228	390
145°	588	628	760	937	1017	368
155°	668	691	748	834	862	308
165°	731	737	754	788	794	206
175°	765	765	760	771	765	72
180°	765	765	765	765	765	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1385.4	1385.4	1385.4	1385.4	1385.4
2.5°	1389.7	1386.9	1375.0	1385.4	1384.1
5°	1383.6	1381.7	1367.0	1379.8	1378.0
7.5°	1373.4	1370.0	1355.3	1368.0	1366.1
10°	1363.0	1359.4	1346.4	1357.5	1355.7
12.5°	1349.8	1347.7	1333.2	1344.3	1343.8
15°	1327.8	1324.1	1311.1	1322.3	1322.3
17.5°	1299.0	1296.8	1284.1	1294.6	1293.6
20°	1279.5	1276.1	1264.8	1274.1	1274.1
22.5°	1255.9	1253.7	1242.7	1250.3	1251.8
25°	1220.2	1216.7	1205.5	1213.0	1216.7
27.5°	1181.0	1178.2	1168.9	1173.7	1176.2
30°	1149.8	1149.8	1140.5	1142.5	1148.0
32.5°	1121.7	1121.7	1110.9	1112.8	1115.5
35°	1075.8	1072.1	1062.8	1062.8	1068.2
37.5°	1022.1	1020.4	1014.6	1013.5	1015.0
40°	986.9	984.9	977.3	979.3	979.3
42.5°	951.2	949.2	941.6	939.2	942.1
45°	892.1	894.0	884.7	882.8	884.7
47.5°	834.0	834.0	826.5	821.3	824.1
50°	793.8	793.8	786.4	782.8	782.8
52.5°	752.2	753.7	744.6	739.7	741.2
55°	691.8	691.8	682.5	677.1	678.8
57.5°	624.9	624.9	615.8	610.2	613.5
60°	580.6	580.6	571.3	565.6	567.6
62.5°	536.0	536.0	526.9	521.3	521.5
65°	467.4	465.6	458.1	452.4	452.4
67.5°	401.3	396.5	390.9	383.6	383.6
70°	352.4	350.4	344.8	337.5	337.5
72.5°	307.9	304.5	299.0	293.1	293.1
75°	239.2	237.2	231.8	228.2	226.2
77.5°	171.4	169.9	169.5	164.3	165.8
80°	129.9	129.9	128.2	124.3	124.3
82.5°	92.7	94.1	90.9	90.0	88.6
85°	38.8	42.5	44.6	46.3	46.3
87.5°	7.5	11.6	10.4	11.9	11.9
90°	11.4	17.1	17.1	11.4	5.7
92.5°	28.6	85.6	79.9	34.2	28.6
95°	51.4	177.0	514.0	131.3	79.9
97.5°	79.9	199.9	1028.1	468.3	251.3
100°	108.5	211.3	1199.4	1125.2	725.3
102.5°	142.8	228.5	1193.7	1582.0	1302.2
105°	177.0	251.3	1113.7	1879.0	1747.7



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	274.1	337.0	868.1	1890.5	2153.1
115°	308.4	371.3	828.2	1747.7	2061.8
117.5°	342.7	411.2	805.3	1616.3	1930.4
120°	371.3	445.4	788.1	1490.6	1799.1
122.5°	394.1	479.8	776.8	1387.9	1667.7
125°	417.0	514.0	771.0	1302.2	1553.5
127.5°	439.8	536.8	771.0	1239.4	1450.7
130°	462.7	548.3	765.3	1176.5	1365.0
132.5°	485.5	554.0	765.3	1130.8	1290.7
135°	502.6	565.4	765.3	1085.1	1227.9
137.5°	525.5	576.9	765.3	1045.2	1176.5
140°	542.6	594.0	765.3	1005.2	1119.4
142.5°	565.4	611.1	765.3	965.3	1068.0
145°	588.3	628.2	759.6	936.7	1016.6
147.5°	611.1	645.4	753.9	908.1	970.9
150°	628.2	662.5	753.9	879.5	930.9
152.5°	651.1	679.6	748.2	851.0	896.7
155°	668.3	691.1	748.2	833.8	862.4
157.5°	685.4	708.2	748.2	816.7	839.6
160°	702.5	719.6	753.9	805.3	822.4
162.5°	719.6	731.1	753.9	793.9	805.3
165°	731.1	736.8	753.9	788.1	793.9
167.5°	742.4	748.2	753.9	782.5	782.5
170°	748.2	753.9	759.6	776.8	776.8
172.5°	759.6	759.6	759.6	771.0	771.0
175°	765.3	765.3	759.6	771.0	765.3
177.5°	765.3	765.3	759.6	771.0	765.3
180°	765.3	765.3	765.3	765.3	765.3



Report Generated By 670246072 / DESKTOP-50001EG





— 0°-180° - - 45°-225° - - - - 90°-270°







107.5°	211.3	279.9	1011.0	2010.4	2033.3
110°	239.8	308.4	930.9	1993.2	2158.9



(END OF REPORT)