

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: P521664

Luminaire Tested: **SQ4-F-150U-050D-93050-1D-UNV-STD-W-4 (5000K)**

Issue Date: 5/5/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P521664  
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-050D-93050-1D-UNV-STD-W-4 (5000K)  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE  
DOWNLIGHT 500 LUMENS PER FOOT  
UPLIGHT 1500 LUMENS PER FOOT  
Light Source: 3000K/5000K CCT, 90 CRI LEDS, TUNED TO 5000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

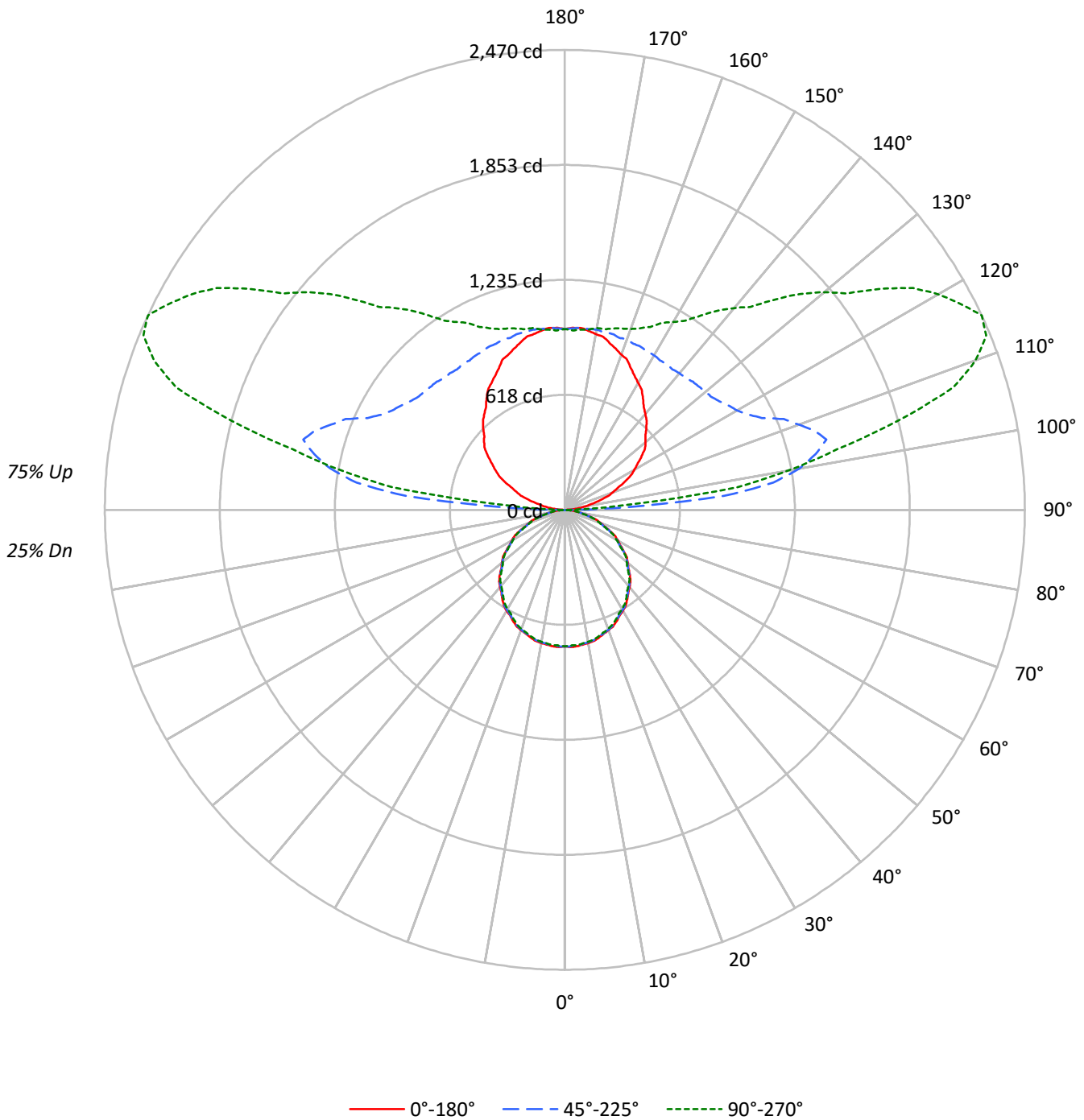
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 8376.6 lumens  
Efficiency: N/A  
Efficacy: 116.7 lumens/watt  
Spacing Criteria (0/90/45): 1.27 / 1.25 / 1.37  
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')  
CIE Type: Semi-Indirect

Input Watts (W): 71.8  
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	50	50	50	33	33	33	25
1	92	88	84	81	82	78	75	72	61	58	57	44	43	42	29	28	28	21
2	84	77	71	66	74	68	63	59	53	50	47	39	37	35	25	24	23	17
3	76	67	60	55	68	60	54	49	47	42	39	34	31	29	22	21	20	15
4	70	59	52	46	62	53	47	42	41	37	33	30	27	25	20	18	17	12
5	64	53	45	39	56	47	40	35	37	32	28	27	24	21	18	16	15	11
6	59	47	39	34	52	42	35	31	33	28	24	24	21	19	16	14	13	9
7	54	42	35	29	48	38	31	27	30	25	21	22	19	16	15	13	11	8
8	50	38	31	26	44	34	28	23	27	22	19	20	17	14	13	11	10	7
9	46	35	27	23	41	31	25	21	25	20	17	18	15	13	12	10	9	7
10	43	32	25	20	38	28	22	18	22	18	15	17	14	11	11	10	8	6

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

	0°	45°	90°
0°	6769	6769	6769
5°	6814	6777	6748
10°	6806	6768	6740
15°	6783	6743	6715
20°	6751	6721	6680
25°	6708	6666	6603
30°	6660	6616	6550
35°	6590	6555	6486
40°	6517	6468	6405
45°	6444	6378	6324
50°	6324	6281	6222
55°	6214	6148	6082
60°	6069	5975	5899
65°	5840	5683	5615
70°	5473	5336	5279
75°	4969	4823	4748
80°	4139	4192	4086
85°	2932	3472	3472



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	69.4	0.8
10°-20°	198.9	2.4
20°-30°	300.5	3.6
30°-40°	362.0	4.3
40°-50°	375.9	4.5
50°-60°	341.0	4.1
60°-70°	258.6	3.1
70°-80°	144.2	1.7
80°-90°	38.1	0.5
90°-100°	500.6	6.0
100°-110°	1209.9	14.4
110°-120°	1290.5	15.4
120°-130°	1045.2	12.5
130°-140°	809.2	9.7
140°-150°	617.3	7.4
150°-160°	446.9	5.3
160°-170°	275.2	3.3
170°-180°	93.2	1.1
0°-30°	568.8	6.8
0°-40°	930.8	11.1
0°-60°	1647.7	19.7
0°-90°	2088.6	24.9
90°-120°	3001.0	35.8
90°-150°	5472.7	65.3
90°-180°	6288.0	75.1
0°-180°	8376.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	734	734	734	734	734	
5°	736	730	732	730	729	70
15°	710	702	706	704	703	200
25°	659	652	655	649	649	303
35°	585	579	582	575	576	366
45°	494	489	489	484	485	380
55°	386	385	382	378	378	345
65°	268	264	260	257	257	264
75°	139	137	135	133	133	147
85°	28	31	33	33	33	34
90°	0	0	0	0	0	3
95°	49	250	858	558	391	55
105°	193	334	1454	1882	1857	204
115°	354	452	1168	2215	2470	350
125°	504	580	1014	1762	2069	450
135°	619	692	973	1389	1598	478
145°	732	787	954	1181	1273	458
155°	839	875	967	1046	1084	387
165°	928	942	979	994	1008	262
175°	981	977	981	973	971	93
180°	971	971	971	971	971	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	733.7	733.7	733.7	733.7	733.7
2.5°	737.8	732.2	733.7	732.8	729.6
5°	735.7	729.7	731.7	729.6	728.6
7.5°	730.6	724.4	726.5	724.5	725.1
10°	726.5	719.5	722.4	720.4	719.4
12.5°	721.6	713.8	716.7	713.8	714.4
15°	710.1	702.1	706.0	704.0	703.0
17.5°	697.4	690.4	694.4	691.1	691.1
20°	687.6	680.6	684.5	680.4	680.4
22.5°	676.9	669.1	673.0	668.1	668.1
25°	658.9	651.9	654.8	648.6	648.6
27.5°	638.2	631.0	634.9	628.8	628.8
30°	625.1	617.1	621.0	614.8	614.8
32.5°	608.7	603.1	605.4	599.3	599.3
35°	585.1	579.1	582.0	574.9	575.9
37.5°	559.1	554.9	555.0	548.7	549.9
40°	541.1	536.0	537.0	529.8	531.8
42.5°	522.2	518.0	518.1	512.6	513.8
45°	493.9	488.9	488.8	483.7	484.7
47.5°	461.9	459.3	458.9	452.9	454.0
50°	440.6	439.6	437.6	432.5	433.5
52.5°	419.3	418.3	416.2	411.1	412.1
55°	386.3	385.3	382.2	378.1	378.1
57.5°	351.9	350.9	347.6	343.5	343.5
60°	328.9	327.9	323.8	319.7	319.7
62.5°	305.2	303.4	299.2	295.9	295.9
65°	267.5	264.4	260.3	257.2	257.2
67.5°	228.3	226.3	223.2	220.3	220.3
70°	202.9	200.9	197.8	195.7	195.7
72.5°	177.5	175.5	172.4	170.3	170.3
75°	139.4	137.4	135.3	133.2	133.2
77.5°	101.7	101.1	101.0	99.0	99.0
80°	77.9	78.9	78.9	76.9	76.9
82.5°	55.7	57.5	58.4	58.0	58.0
85°	27.7	30.7	32.8	32.8	32.8
87.5°	8.2	10.6	13.1	13.1	13.1
90°	0.0	0.0	0.0	0.0	0.0
92.5°	16.5	135.5	319.2	155.2	105.3
95°	49.4	250.5	857.7	557.7	390.8
97.5°	87.6	277.5	1129.6	1088.3	934.2
100°	117.2	294.2	1279.4	1350.6	1223.9
102.5°	145.2	309.3	1378.1	1568.9	1493.7
105°	193.3	334.1	1454.2	1881.5	1857.4
107.5°	240.7	363.3	1409.4	2132.2	2189.0
110°	273.6	388.2	1337.0	2240.3	2346.9



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	306.5	413.1	1272.8	2266.7	2448.9
115°	353.8	452.3	1168.3	2214.9	2470.3
117.5°	400.7	493.6	1107.0	2095.8	2395.1
120°	431.9	518.4	1067.5	2002.3	2316.1
122.5°	464.9	544.9	1042.8	1906.8	2215.7
125°	503.9	580.4	1014.1	1761.5	2069.2
127.5°	542.6	614.6	993.9	1638.5	1908.8
130°	565.6	636.0	987.3	1552.8	1818.3
132.5°	587.0	660.6	977.4	1491.0	1716.3
135°	619.1	691.5	972.9	1389.0	1598.2
137.5°	649.6	722.4	958.5	1320.0	1477.7
140°	672.6	739.0	958.5	1270.3	1415.1
142.5°	695.6	762.0	950.3	1227.0	1349.3
145°	732.3	786.6	954.4	1180.7	1273.2
147.5°	766.4	819.1	951.9	1127.3	1203.7
150°	787.8	834.0	958.5	1103.9	1164.2
152.5°	810.8	855.5	956.9	1079.0	1132.9
155°	839.2	875.4	966.7	1045.8	1084.0
157.5°	873.4	904.3	964.7	1033.1	1055.6
160°	886.5	912.7	972.9	1016.5	1032.6
162.5°	907.9	930.8	969.6	1011.4	1021.0
165°	927.7	941.7	979.1	993.8	1007.9
167.5°	951.9	961.2	976.6	992.7	993.1
170°	958.5	964.5	983.2	981.4	991.4
172.5°	970.0	974.5	978.3	982.6	976.6
175°	981.1	977.1	981.1	972.9	970.9
177.5°	979.1	979.1	975.8	972.3	964.3
180°	970.9	970.9	970.9	970.9	970.9

(END OF REPORT)