

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: P519106

Luminaire Tested: **SQ4-WB-050U-075D-930-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P519106  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-21, G2-2009-966-13)  
Test Lab: INNOVATION CENTER  
Issue Date: 4/29/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: SQ4-WB-050U-075D-930-1D-UNV-STD-W-8  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE  
DOWNLIGHT 750 LUMENS PER FOOT  
UPLIGHT 500 LUMENS PER FOOT  
Light Source: 3000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

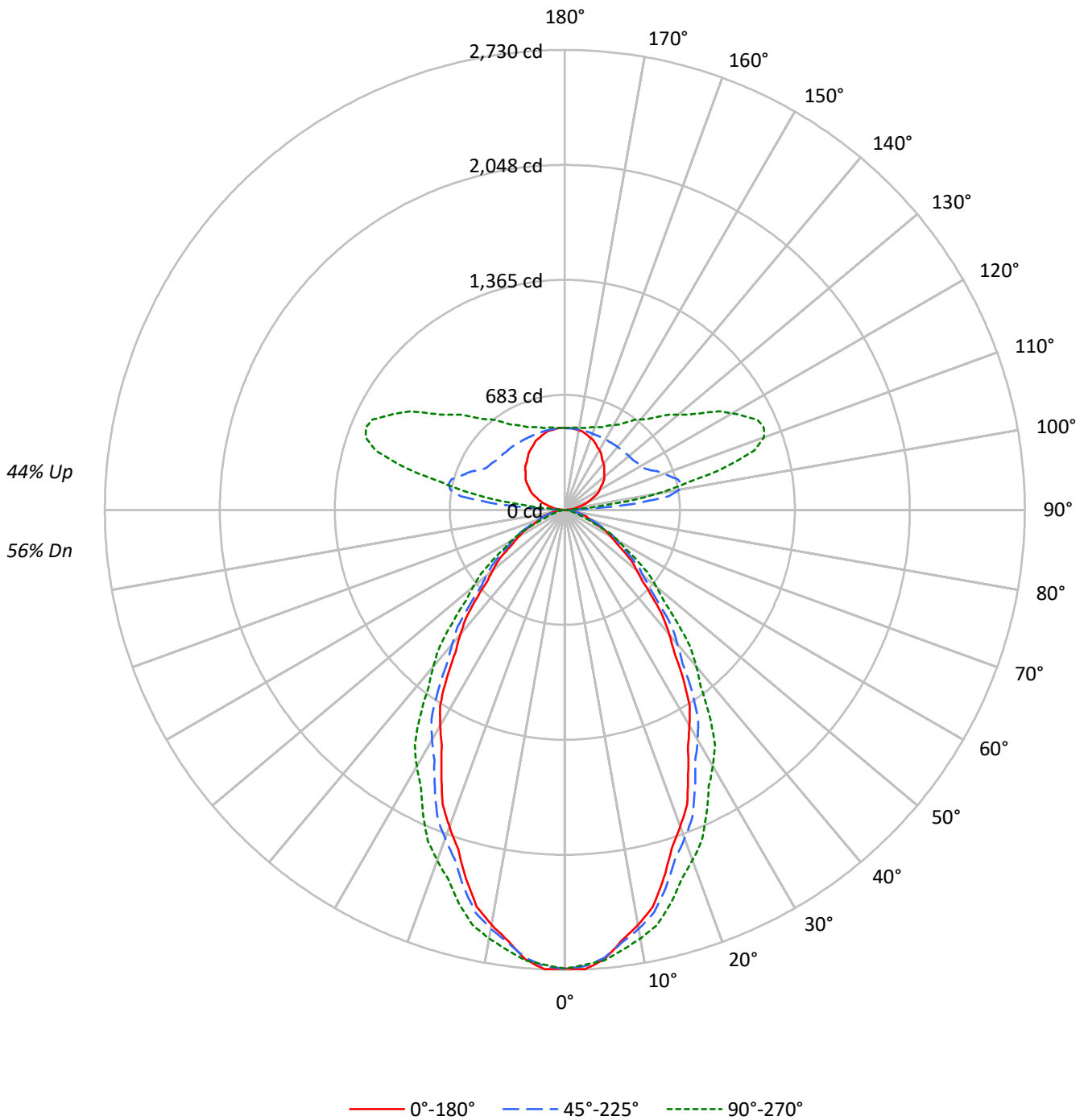
Lumens per Lamp: N/A  
Luminaire Lumens: 7140.3 lumens  
Efficiency: N/A  
Efficacy: 91.4 lumens/watt  
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02  
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')  
CIE Type: General Diffuse

Input Watts (W): 78.1  
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	50	30	10	0	
RCR																						
0	108	108	108	108	101	101	101	101	86	86	86	73	73	73	61	61	61	56				56
1	100	96	93	90	93	90	87	84	78	76	74	66	65	64	56	55	54	49				49
2	92	86	80	76	86	80	75	71	70	66	63	60	57	55	51	49	48	43				43
3	85	77	70	65	79	72	66	61	63	58	55	54	51	48	46	44	42	38				38
4	79	69	62	56	73	65	58	53	57	52	48	49	46	43	42	40	38	34				34
5	73	62	55	49	68	58	52	47	51	46	42	45	41	38	39	36	34	31				31
6	68	56	49	43	63	53	46	41	47	42	38	41	37	34	36	33	30	28				28
7	63	51	44	39	59	49	42	37	43	38	34	38	34	31	33	30	28	25				25
8	59	47	40	35	55	45	38	33	40	34	31	35	31	28	31	28	25	23				23
9	55	43	36	31	51	41	35	30	37	32	28	33	29	26	29	26	23	21				21
10	52	40	33	29	48	38	32	28	34	29	26	30	26	23	27	24	21	20				20

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

	0°	45°	90°
0°	12563	12563	12563
5°	12406	12362	12433
10°	11721	11827	12101
15°	10820	11071	11568
20°	9826	10195	10870
25°	8813	9294	10127
30°	7880	8395	9357
35°	6891	7389	8445
40°	5800	6260	7311
45°	4787	5200	6104
50°	3996	4356	5085
55°	3392	3738	4200
60°	2900	3241	3352
65°	2309	2726	2166
70°	2047	2127	1322
75°	1895	1725	809
80°	1745	1586	699
85°	1583	1456	572



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	249.8	3.5
10°-20°	649.7	9.1
20°-30°	841.6	11.8
30°-40°	824.1	11.5
40°-50°	630.8	8.8
50°-60°	420.3	5.9
60°-70°	229.4	3.2
70°-80°	95.6	1.3
80°-90°	28.9	0.4
90°-100°	233.1	3.3
100°-110°	633.2	8.9
110°-120°	651.0	9.1
120°-130°	520.5	7.3
130°-140°	409.0	5.7
140°-150°	313.6	4.4
150°-160°	225.5	3.2
160°-170°	137.9	1.9
170°-180°	46.5	0.7
0°-30°	1741.0	24.4
0°-40°	2565.1	35.9
0°-60°	3616.3	50.6
0°-90°	3970.1	55.6
90°-120°	1517.2	21.2
90°-150°	2760.3	38.7
90°-180°	3170.0	44.4
0°-180°	7140.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2723	2723	2723	2723	2723	
5°	2679	2652	2670	2676	2685	249
15°	2266	2257	2318	2381	2422	633
25°	1732	1736	1826	1905	1990	796
35°	1224	1230	1312	1400	1500	761
45°	734	748	797	857	936	572
55°	422	439	465	482	522	382
65°	212	229	250	218	198	220
75°	106	106	97	66	45	114
85°	30	30	28	18	11	33
90°	2	6	11	14	14	4
95°	34	128	406	177	119	36
105°	112	175	696	1060	998	119
115°	200	243	557	1109	1263	197
125°	275	313	504	850	1002	245
135°	331	368	490	692	781	256
145°	382	410	484	588	632	240
155°	432	448	481	528	543	199
165°	468	474	482	503	504	132
175°	486	487	484	490	489	46
180°	486	486	486	486	486	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2723.3	2723.3	2723.3	2723.3	2723.3
2.5°	2729.9	2705.6	2711.8	2711.6	2704.1
5°	2679.0	2652.2	2669.5	2675.7	2685.0
7.5°	2579.6	2559.3	2590.9	2614.2	2633.2
10°	2502.2	2484.7	2524.9	2558.9	2583.4
12.5°	2412.3	2397.6	2447.5	2493.1	2525.1
15°	2265.6	2257.4	2318.2	2381.2	2422.1
17.5°	2108.6	2104.6	2174.3	2247.9	2300.2
20°	2001.5	2000.3	2076.8	2153.5	2214.2
22.5°	1893.5	1896.1	1976.4	2056.1	2125.3
25°	1731.5	1736.1	1825.9	1905.4	1989.6
27.5°	1581.6	1583.7	1676.5	1760.5	1850.2
30°	1479.3	1485.2	1576.1	1663.1	1756.6
32.5°	1377.0	1383.8	1472.9	1562.8	1658.1
35°	1223.6	1229.5	1312.0	1400.3	1499.6
37.5°	1065.4	1073.3	1146.7	1230.1	1327.8
40°	963.1	974.8	1039.6	1118.2	1214.1
42.5°	864.7	879.1	939.2	1013.8	1100.3
45°	733.7	747.7	797.0	857.4	935.6
47.5°	620.9	637.0	674.9	726.8	793.7
50°	556.8	572.0	607.0	645.5	708.6
52.5°	500.4	515.6	546.8	576.5	630.2
55°	421.8	439.3	464.8	482.5	522.2
57.5°	357.3	374.1	394.3	402.3	426.4
60°	314.3	333.0	351.3	350.4	363.3
62.5°	275.1	291.0	309.2	296.6	297.3
65°	211.5	229.0	249.7	218.2	198.4
67.5°	170.9	174.6	196.0	152.2	128.6
70°	151.8	151.8	157.7	117.8	98.0
72.5°	133.6	133.6	128.1	95.8	75.0
75°	106.3	106.3	96.8	66.4	45.4
77.5°	82.0	81.0	74.1	49.6	33.0
80°	65.7	65.7	59.7	39.1	26.3
82.5°	51.4	51.4	46.4	30.6	19.6
85°	29.9	29.9	27.5	17.8	10.8
87.5°	10.8	11.7	11.7	8.5	7.6
90°	1.6	6.1	10.9	14.1	14.1
92.5°	14.1	63.8	110.8	47.6	40.3
95°	34.3	127.5	405.9	176.7	118.7
97.5°	56.8	140.8	622.3	484.1	340.0
100°	71.8	149.7	688.5	697.9	563.6
102.5°	86.8	158.5	706.0	863.1	744.7
105°	112.4	175.0	696.3	1060.2	997.6
107.5°	138.9	194.2	656.0	1161.9	1179.3
110°	157.7	208.1	626.0	1182.0	1256.8

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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	173.9	221.8	596.1	1165.3	1278.0
115°	199.8	242.6	557.3	1108.8	1263.0
117.5°	224.2	265.1	532.7	1028.7	1202.4
120°	240.4	280.1	521.4	975.0	1147.5
122.5°	254.2	293.8	513.9	921.1	1087.5
125°	274.8	312.9	504.3	849.6	1002.3
127.5°	293.2	331.0	499.0	795.4	926.4
130°	304.4	341.1	496.5	761.4	878.9
132.5°	315.7	352.3	494.0	732.4	836.5
135°	331.0	367.6	490.2	692.1	780.6
137.5°	347.5	380.8	488.3	656.5	730.9
140°	357.5	389.6	487.1	633.8	701.0
142.5°	367.5	397.1	485.8	616.1	672.2
145°	382.5	410.0	484.0	588.0	632.3
147.5°	399.4	422.9	482.4	565.9	600.7
150°	410.6	430.4	482.4	553.3	580.8
152.5°	419.3	436.7	481.2	541.9	564.5
155°	432.4	447.7	480.8	528.0	543.3
157.5°	445.3	457.2	480.8	518.6	530.2
160°	452.7	463.4	480.8	512.3	521.4
162.5°	460.2	468.5	482.1	507.2	513.9
165°	468.4	474.5	482.4	502.7	504.3
167.5°	476.8	479.8	484.0	497.4	498.6
170°	479.3	482.3	484.0	494.9	494.9
172.5°	481.8	483.6	484.0	492.4	492.4
175°	485.5	487.1	484.0	490.2	488.7
177.5°	486.8	486.8	483.0	488.0	485.5
180°	485.5	485.5	485.5	485.5	485.5

(END OF REPORT)