

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: P519131

Luminaire Tested: **SQ4-WB-050U-100D-935-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P519131  
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-100D-935-1D-UNV-STD-W-12  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE  
DOWNLIGHT 1000 LUMENS PER FOOT  
UPLIGHT 500 LUMENS PER FOOT  
Light Source: 3500K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

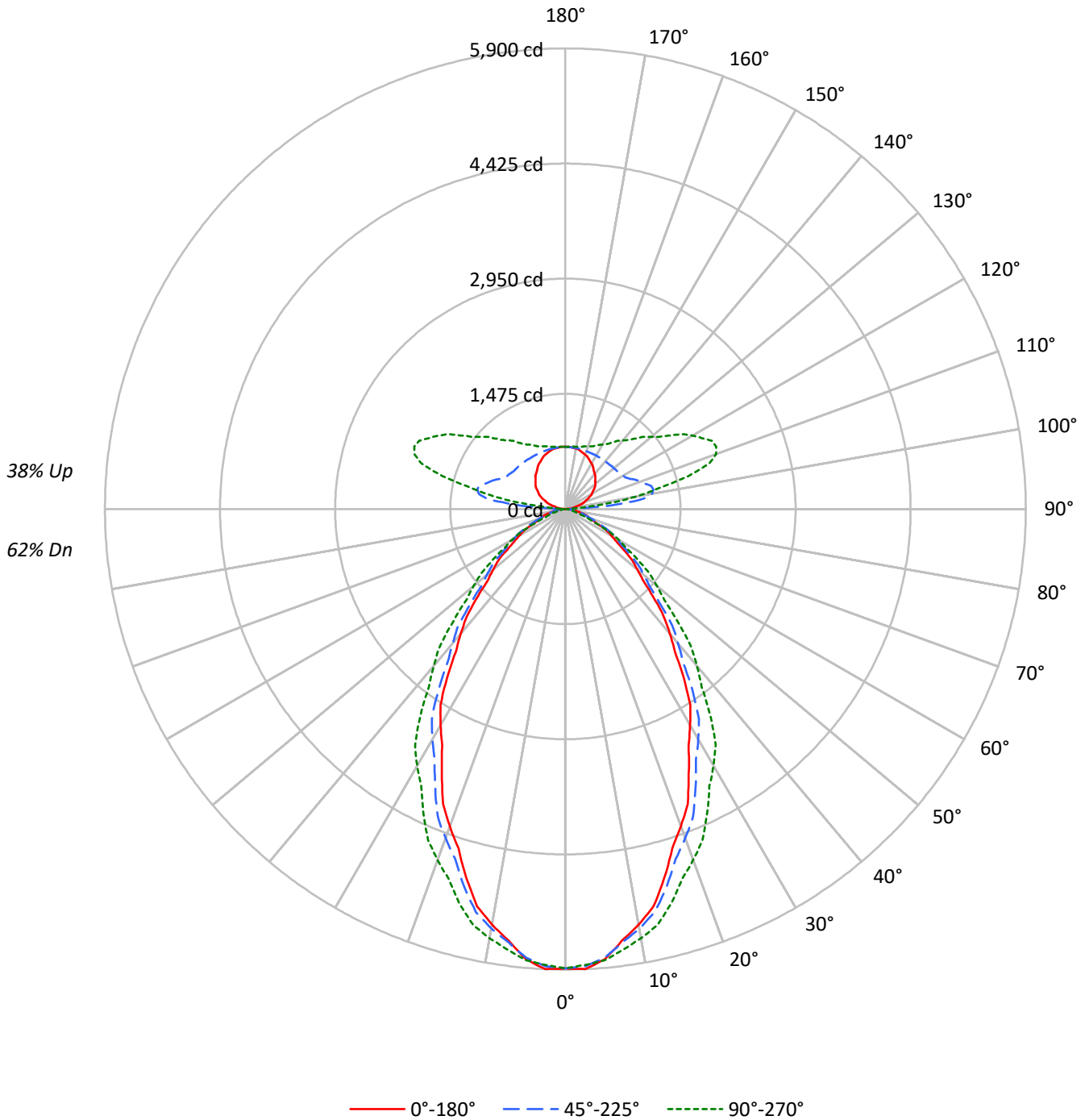
Lumens per Lamp: N/A  
Luminaire Lumens: 13772.4 lumens  
Efficiency: N/A  
Efficacy: 102.5 lumens/watt  
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02  
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')  
CIE Type: Semi-Direct

Input Watts (W): 134.4  
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	110	110	110	110	103	103	103	103	90	90	90	78	78	78	67	67	67	62
1	102	98	95	92	95	92	89	87	81	79	77	71	70	68	62	61	60	55
2	94	87	82	77	88	82	78	73	73	69	66	64	62	59	56	54	53	49
3	87	78	72	66	81	74	68	63	66	61	57	58	55	52	51	49	47	43
4	80	70	63	58	75	67	60	55	60	54	50	53	49	46	47	44	41	38
5	74	64	56	51	70	60	54	49	54	49	45	48	44	41	43	40	37	34
6	69	58	50	45	65	55	48	43	50	44	40	44	40	37	40	36	34	31
7	64	53	45	40	61	50	44	39	45	40	36	41	37	33	37	33	31	28
8	60	49	41	36	57	46	40	35	42	36	33	38	33	30	34	31	28	26
9	56	45	38	33	53	43	36	32	39	33	30	35	31	28	32	28	26	24
10	53	41	35	30	50	40	33	29	36	31	27	33	29	25	30	26	24	22

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

	0°	45°	90°
0°	18102	18102	18102
5°	17876	17812	17916
10°	16889	17042	17437
15°	15591	15953	16668
20°	14158	14691	15663
25°	12699	13391	14592
30°	11355	12097	13482
35°	9929	10647	12169
40°	8357	9021	10534
45°	6897	7492	8796
50°	5758	6277	7327
55°	4888	5387	6051
60°	4178	4670	4829
65°	3326	3928	3120
70°	2949	3065	1904
75°	2732	2486	1166
80°	2515	2286	1006
85°	2279	2096	819



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	539.9	3.9
10°-20°	1404.3	10.2
20°-30°	1818.9	13.2
30°-40°	1781.2	12.9
40°-50°	1363.4	9.9
50°-60°	908.5	6.6
60°-70°	495.8	3.6
70°-80°	206.6	1.5
80°-90°	61.6	0.4
90°-100°	381.7	2.8
100°-110°	1037.0	7.5
110°-120°	1066.3	7.7
120°-130°	852.5	6.2
130°-140°	669.8	4.9
140°-150°	513.6	3.7
150°-160°	369.4	2.7
160°-170°	225.9	1.6
170°-180°	76.1	0.6
0°-30°	3763.1	27.3
0°-40°	5544.3	40.3
0°-60°	7816.2	56.8
0°-90°	8580.1	62.3
90°-120°	2485.0	18.0
90°-150°	4521.0	32.8
90°-180°	5192.0	37.7
0°-180°	13772.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	5886	5886	5886	5886	5886	
5°	5790	5732	5770	5783	5803	539
15°	4897	4879	5010	5147	5235	1367
25°	3742	3752	3946	4118	4300	1721
35°	2645	2657	2836	3027	3241	1644
45°	1586	1616	1723	1853	2022	1237
55°	912	950	1005	1043	1129	827
65°	457	495	540	472	429	475
75°	230	230	209	144	98	245
85°	65	65	59	38	23	70
90°	3	10	18	23	23	7
95°	56	209	665	289	194	60
105°	184	287	1140	1736	1634	196
115°	327	397	913	1816	2069	323
125°	450	512	826	1392	1642	401
135°	542	602	803	1134	1278	419
145°	626	672	793	963	1036	393
155°	708	733	788	865	890	327
165°	767	777	790	823	826	217
175°	795	798	793	803	800	76
180°	795	795	795	795	795	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	5886.0	5886.0	5886.0	5886.0	5886.0
2.5°	5900.5	5847.9	5861.2	5860.8	5844.7
5°	5790.4	5732.4	5769.8	5783.2	5803.4
7.5°	5575.6	5531.6	5599.8	5650.4	5691.3
10°	5408.2	5370.3	5457.3	5530.8	5583.8
12.5°	5214.0	5182.2	5289.9	5388.6	5457.8
15°	4896.8	4879.1	5010.5	5146.8	5235.2
17.5°	4557.5	4548.9	4699.5	4858.6	4971.7
20°	4326.0	4323.5	4488.8	4654.5	4785.8
22.5°	4092.6	4098.1	4271.8	4444.1	4593.6
25°	3742.4	3752.5	3946.4	4118.4	4300.2
27.5°	3418.5	3423.0	3623.5	3805.1	3999.1
30°	3197.4	3210.0	3406.6	3594.6	3796.6
32.5°	2976.3	2991.0	3183.5	3377.7	3583.8
35°	2644.7	2657.3	2835.8	3026.7	3241.3
37.5°	2302.7	2319.9	2478.4	2658.8	2869.9
40°	2081.7	2106.9	2247.0	2417.0	2624.0
42.5°	1868.9	1900.2	2030.0	2191.3	2378.2
45°	1585.8	1616.1	1722.7	1853.1	2022.3
47.5°	1342.0	1376.8	1458.7	1571.0	1715.4
50°	1203.5	1236.4	1312.0	1395.2	1531.5
52.5°	1081.6	1114.5	1181.9	1246.0	1362.1
55°	911.7	949.6	1004.7	1042.8	1128.6
57.5°	772.2	808.6	852.3	869.5	921.5
60°	679.3	719.7	759.3	757.4	785.1
62.5°	594.5	628.9	668.4	641.1	642.6
65°	457.1	495.0	539.8	471.7	428.7
67.5°	369.3	377.4	423.6	328.9	277.9
70°	328.0	328.0	340.9	254.7	211.8
72.5°	288.7	288.7	276.9	207.1	162.2
75°	229.9	229.9	209.2	143.6	98.1
77.5°	177.2	175.2	160.1	107.1	71.3
80°	142.0	142.0	129.1	84.6	56.8
82.5°	111.1	111.1	100.2	66.1	42.4
85°	64.6	64.6	59.4	38.4	23.2
87.5°	23.2	24.7	24.2	17.0	14.9
90°	2.6	10.1	17.9	23.0	23.0
92.5°	23.0	104.5	181.5	78.0	66.0
95°	56.3	208.8	664.8	289.3	194.3
97.5°	93.1	230.6	1019.2	792.9	556.9
100°	117.6	245.1	1127.6	1143.1	923.1
102.5°	142.2	259.7	1156.3	1413.7	1219.7
105°	184.1	286.6	1140.4	1736.4	1633.9
107.5°	227.6	318.1	1074.5	1903.1	1931.6
110°	258.3	340.8	1025.4	1935.9	2058.4

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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	284.9	363.4	976.3	1908.7	2093.2
115°	327.3	397.3	912.9	1816.1	2068.6
117.5°	367.2	434.2	872.5	1684.9	1969.4
120°	393.8	458.8	854.0	1596.9	1879.4
122.5°	416.3	481.3	841.8	1508.7	1781.2
125°	450.0	512.5	825.9	1391.6	1641.6
127.5°	480.2	542.2	817.2	1302.8	1517.3
130°	498.6	558.6	813.1	1247.1	1439.6
132.5°	517.0	577.0	809.0	1199.5	1370.0
135°	542.1	602.1	802.9	1133.5	1278.5
137.5°	569.2	623.7	799.8	1075.2	1197.2
140°	585.6	638.1	797.8	1038.1	1148.1
142.5°	601.9	650.4	795.7	1009.0	1101.0
145°	626.5	671.5	792.7	963.1	1035.6
147.5°	654.1	692.6	790.1	926.9	983.9
150°	672.5	705.0	790.1	906.2	951.2
152.5°	686.8	715.3	788.1	887.6	924.6
155°	708.3	733.3	787.6	864.8	889.8
157.5°	729.3	748.8	787.6	849.4	868.4
160°	741.5	759.0	787.6	839.0	854.0
162.5°	753.8	767.3	789.6	830.8	841.8
165°	767.1	777.1	790.1	823.4	825.9
167.5°	780.9	785.9	792.7	814.7	816.7
170°	785.0	790.0	792.7	810.6	810.6
172.5°	789.1	792.1	792.7	806.5	806.5
175°	795.2	797.7	792.7	802.8	800.3
177.5°	797.3	797.3	791.1	799.2	795.2
180°	795.2	795.2	795.2	795.2	795.2

(END OF REPORT)