

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: P519085

Luminaire Tested: **SQ4-WB-050U-050D-935-1D-UNV-STD-W-6**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P519085  
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-050D-935-1D-UNV-STD-W-6  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE  
DOWNLIGHT 500 LUMENS PER FOOT  
UPLIGHT 500 LUMENS PER FOOT  
Light Source: 3500K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

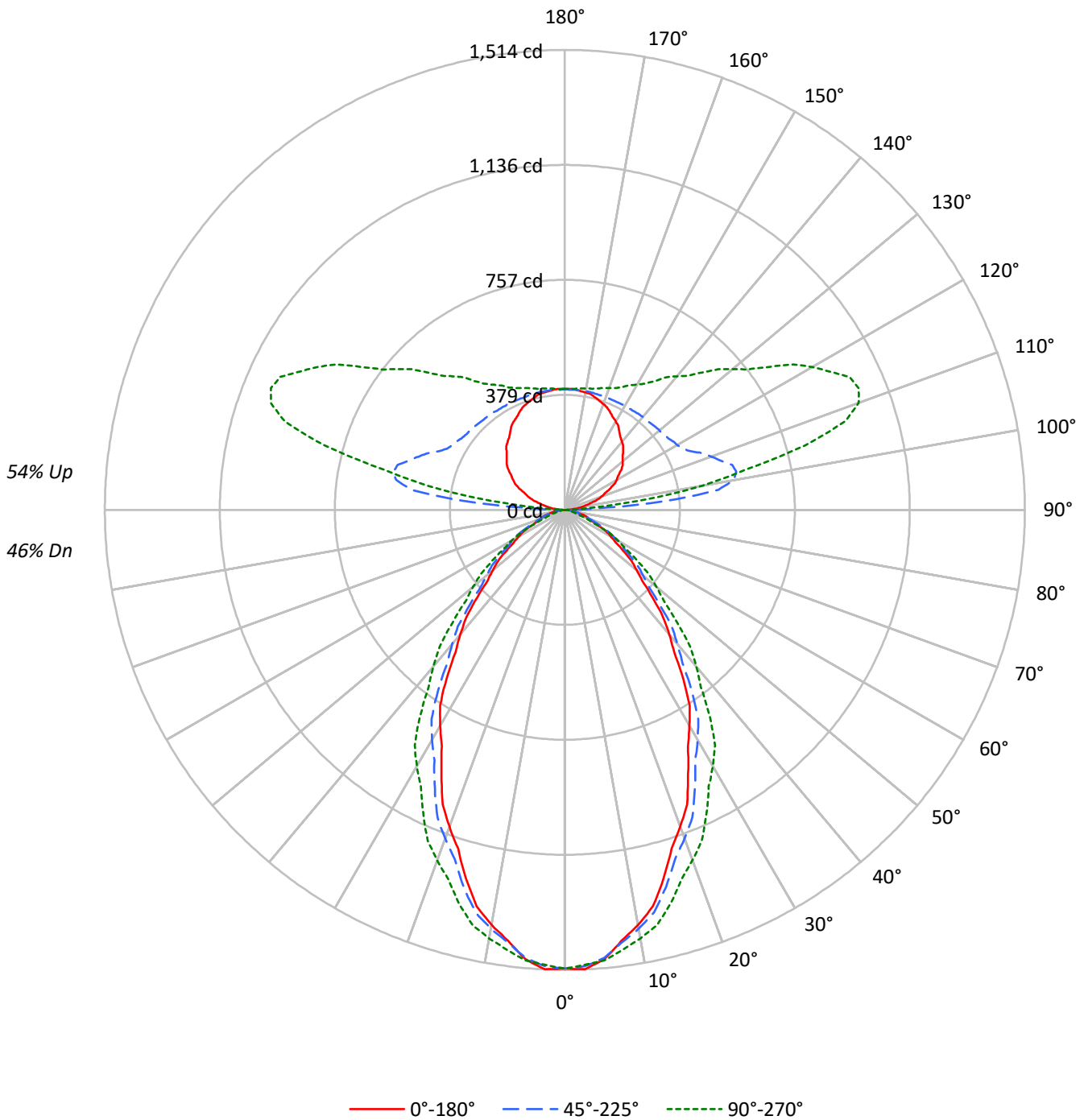
Lumens per Lamp: N/A  
Luminaire Lumens: 4798.1 lumens  
Efficiency: N/A  
Efficacy: 107.1 lumens/watt  
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02  
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')  
CIE Type: General Diffuse

Input Watts (W): 44.8  
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	106	106	106	106	97	97	97	97	81	81	81	66	66	66	52	52	52	46
1	98	94	91	87	90	87	84	81	73	70	69	60	58	57	48	47	46	41
2	90	83	78	73	83	77	72	68	65	61	59	54	51	49	43	42	41	36
3	83	74	68	62	76	69	63	58	58	54	51	49	46	43	40	38	36	32
4	76	66	59	54	70	62	55	50	52	48	44	44	41	38	36	34	32	28
5	71	60	52	47	65	56	49	44	48	43	39	40	36	34	33	31	29	25
6	65	54	47	41	60	50	44	39	43	38	34	37	33	30	30	28	26	23
7	61	49	42	37	56	46	39	35	40	35	31	34	30	27	28	25	23	21
8	57	45	38	33	52	42	36	31	36	31	28	31	27	25	26	23	21	19
9	53	41	34	30	49	39	32	28	34	29	25	29	25	22	24	22	20	17
10	50	38	31	27	46	36	30	26	31	26	23	27	23	21	23	20	18	16

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

	0°	45°	90°
0°	9288	9288	9288
5°	9172	9139	9193
10°	8666	8745	8947
15°	8000	8185	8553
20°	7264	7538	8037
25°	6516	6871	7487
30°	5826	6207	6918
35°	5095	5463	6244
40°	4288	4629	5405
45°	3539	3845	4513
50°	2955	3221	3760
55°	2508	2765	3106
60°	2144	2396	2478
65°	1707	2016	1601
70°	1512	1574	977
75°	1402	1276	599
80°	1289	1172	517
85°	1172	1073	423



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	138.5	2.9
10°-20°	360.3	7.5
20°-30°	466.6	9.7
30°-40°	457.0	9.5
40°-50°	349.8	7.3
50°-60°	233.1	4.9
60°-70°	127.2	2.7
70°-80°	53.0	1.1
80°-90°	16.5	0.3
90°-100°	190.9	4.0
100°-110°	518.5	10.8
110°-120°	533.1	11.1
120°-130°	426.2	8.9
130°-140°	334.9	7.0
140°-150°	256.8	5.4
150°-160°	184.7	3.8
160°-170°	112.9	2.4
170°-180°	38.1	0.8
0°-30°	965.4	20.1
0°-40°	1422.4	29.6
0°-60°	2005.2	41.8
0°-90°	2202.0	45.9
90°-120°	1242.5	25.9
90°-150°	2260.4	47.1
90°-180°	2596.0	54.1
0°-180°	4798.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1510	1510	1510	1510	1510	
5°	1486	1471	1480	1484	1489	138
15°	1256	1252	1285	1320	1343	351
25°	960	963	1012	1057	1103	442
35°	678	682	728	776	832	422
45°	407	415	442	475	519	317
55°	234	244	258	268	290	212
65°	117	127	138	121	110	122
75°	59	59	54	37	25	63
85°	17	17	15	10	6	18
90°	1	5	9	12	12	3
95°	28	104	332	145	97	30
105°	92	143	570	868	817	98
115°	164	199	456	908	1034	161
125°	225	256	413	696	821	201
135°	271	301	402	567	639	210
145°	313	336	396	482	518	197
155°	354	367	394	432	445	163
165°	384	389	395	412	413	108
175°	398	399	396	401	400	38
180°	398	398	398	398	398	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1510.1	1510.1	1510.1	1510.1	1510.1
2.5°	1513.8	1500.3	1503.7	1503.6	1499.5
5°	1485.5	1470.6	1480.2	1483.7	1488.9
7.5°	1430.4	1419.1	1436.6	1449.6	1460.1
10°	1387.5	1377.8	1400.1	1418.9	1432.5
12.5°	1337.7	1329.5	1357.1	1382.4	1400.2
15°	1256.3	1251.7	1285.4	1320.4	1343.1
17.5°	1169.2	1167.0	1205.7	1246.5	1275.5
20°	1109.8	1109.2	1151.6	1194.1	1227.8
22.5°	1050.0	1051.4	1095.9	1140.1	1178.5
25°	960.1	962.7	1012.4	1056.6	1103.2
27.5°	877.0	878.2	929.6	976.2	1026.0
30°	820.3	823.5	874.0	922.2	974.0
32.5°	763.6	767.3	816.7	866.6	919.4
35°	678.5	681.7	727.5	776.5	831.6
37.5°	590.8	595.2	635.8	682.1	736.3
40°	534.1	540.5	576.5	620.1	673.2
42.5°	479.5	487.5	520.8	562.2	610.1
45°	406.8	414.6	442.0	475.4	518.8
47.5°	344.3	353.2	374.2	403.0	440.1
50°	308.8	317.2	336.6	357.9	392.9
52.5°	277.5	285.9	303.2	319.7	349.5
55°	233.9	243.6	257.8	267.5	289.6
57.5°	198.1	207.4	218.7	223.1	236.4
60°	174.3	184.6	194.8	194.3	201.4
62.5°	152.5	161.3	171.5	164.5	164.9
65°	117.3	127.0	138.5	121.0	110.0
67.5°	94.8	96.8	108.7	84.4	71.3
70°	84.1	84.1	87.5	65.3	54.3
72.5°	74.1	74.1	71.0	53.1	41.6
75°	59.0	59.0	53.7	36.8	25.2
77.5°	45.5	44.9	41.1	27.5	18.3
80°	36.4	36.4	33.1	21.7	14.6
82.5°	28.5	28.5	25.7	17.0	10.9
85°	16.6	16.6	15.2	9.9	6.0
87.5°	6.1	6.8	7.1	5.5	5.0
90°	1.3	5.0	8.9	11.5	11.5
92.5°	11.5	52.3	90.8	39.0	33.0
95°	28.1	104.4	332.4	144.7	97.2
97.5°	46.5	115.3	509.6	396.5	278.5
100°	58.8	122.6	563.8	571.5	461.5
102.5°	71.1	129.8	578.1	706.9	609.8
105°	92.1	143.3	570.2	868.2	817.0
107.5°	113.8	159.0	537.2	951.5	965.8
110°	129.1	170.4	512.7	967.9	1029.2



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	142.4	181.7	488.1	954.3	1046.6
115°	163.6	198.7	456.4	908.1	1034.3
117.5°	183.6	217.1	436.2	842.4	984.7
120°	196.9	229.4	427.0	798.4	939.7
122.5°	208.1	240.6	420.9	754.3	890.6
125°	225.0	256.3	413.0	695.8	820.8
127.5°	240.1	271.1	408.6	651.4	758.7
130°	249.3	279.3	406.6	623.5	719.8
132.5°	258.5	288.5	404.5	599.8	685.0
135°	271.0	301.0	401.5	566.7	639.3
137.5°	284.6	311.8	399.9	537.6	598.6
140°	292.8	319.0	398.9	519.0	574.0
142.5°	301.0	325.2	397.9	504.5	550.5
145°	313.2	335.7	396.3	481.5	517.8
147.5°	327.0	346.3	395.1	463.5	492.0
150°	336.2	352.5	395.1	453.1	475.6
152.5°	343.4	357.7	394.0	443.8	462.3
155°	354.1	366.6	393.8	432.4	444.9
157.5°	364.6	374.4	393.8	424.7	434.2
160°	370.8	379.5	393.8	419.5	427.0
162.5°	376.9	383.7	394.8	415.4	420.9
165°	383.6	388.6	395.1	411.7	413.0
167.5°	390.5	393.0	396.3	407.4	408.4
170°	392.5	395.0	396.3	405.3	405.3
172.5°	394.5	396.0	396.3	403.2	403.2
175°	397.6	398.9	396.3	401.4	400.2
177.5°	398.6	398.6	395.6	399.6	397.6
180°	397.6	397.6	397.6	397.6	397.6

(END OF REPORT)