

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: P519108

Luminaire Tested: **SQ4-WB-050U-075D-935-1D-UNV-STD-W-4**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P519108  
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-935-1D-UNV-STD-W-4  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE  
DOWNLIGHT 750 LUMENS PER FOOT  
UPLIGHT 500 LUMENS PER FOOT  
Light Source: 3500K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

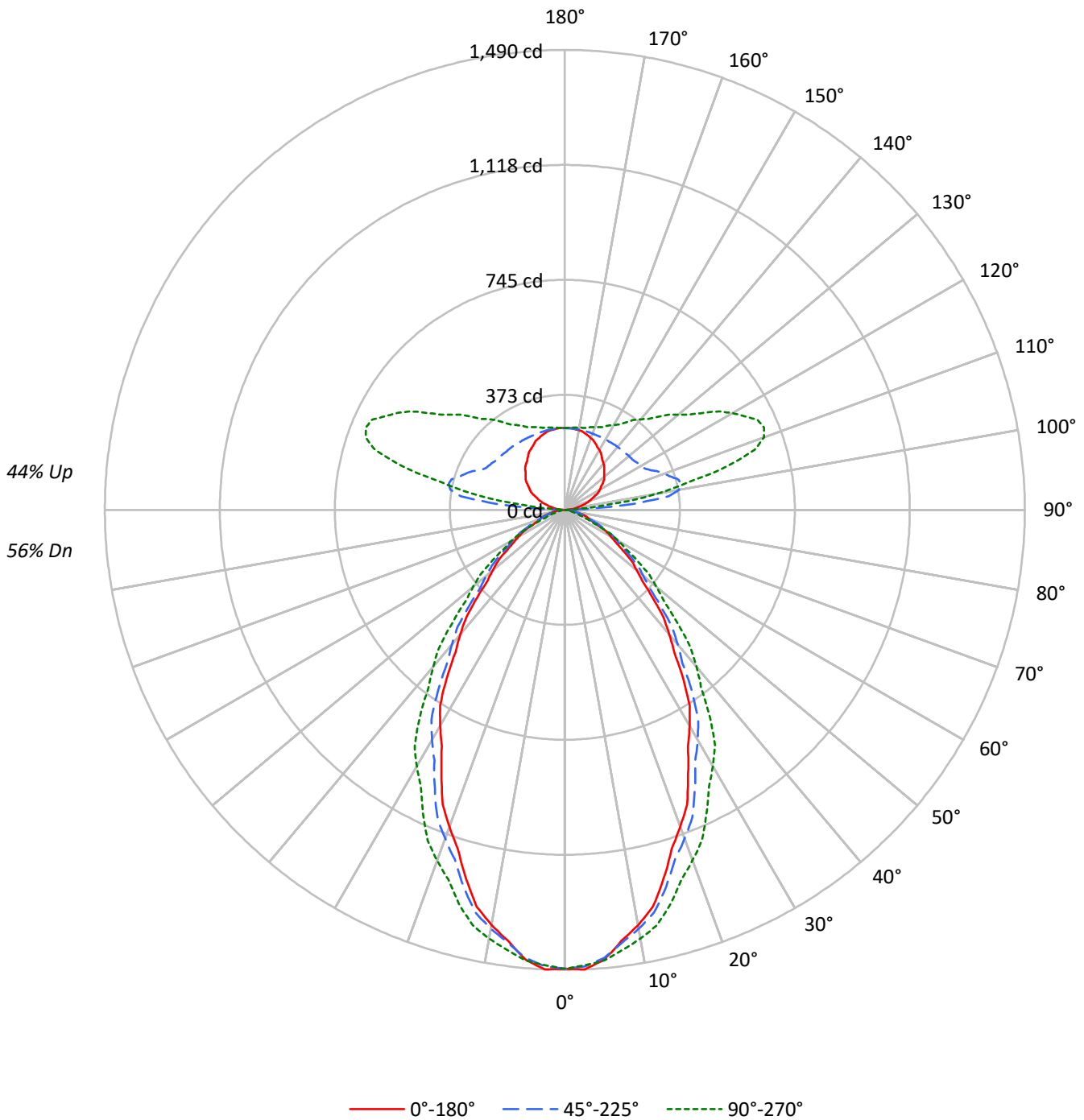
Lumens per Lamp: N/A  
Luminaire Lumens: 3898.3 lumens  
Efficiency: N/A  
Efficacy: 107.4 lumens/watt  
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02  
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')  
CIE Type: General Diffuse

Input Watts (W): 36.3  
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	108	108	108	108	101	101	101	101	86	86	86	73	73	73	61	61	61	56
1	100	96	93	90	93	90	87	84	78	76	74	66	65	64	56	55	54	49
2	92	86	80	76	86	80	75	71	70	66	63	60	57	55	51	49	48	43
3	85	77	70	65	79	72	66	61	63	58	55	54	51	48	46	44	42	38
4	79	69	62	56	73	65	58	53	57	52	48	49	46	43	42	40	38	34
5	73	62	55	49	68	58	52	47	51	46	42	45	41	38	39	36	34	31
6	68	56	49	43	63	53	46	41	47	42	38	41	37	34	36	33	30	28
7	63	51	44	39	59	49	42	37	43	38	34	38	34	31	33	30	28	25
8	59	47	40	35	55	45	38	33	40	34	31	35	31	28	31	28	25	23
9	55	43	36	31	51	41	35	30	37	32	28	33	29	26	29	26	23	21
10	52	40	33	29	48	38	32	28	34	29	26	30	26	23	27	24	21	20

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

	0°	45°	90°
0°	13718	13718	13718
5°	13546	13498	13576
10°	12798	12915	13213
15°	11814	12089	12631
20°	10728	11132	11869
25°	9623	10147	11058
30°	8604	9167	10217
35°	7524	8068	9221
40°	6333	6836	7983
45°	5227	5677	6665
50°	4363	4757	5553
55°	3704	4082	4586
60°	3166	3539	3659
65°	2521	2976	2364
70°	2236	2323	1443
75°	2071	1882	884
80°	1907	1732	765
85°	1725	1588	625



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	136.4	3.5
10°-20°	354.7	9.1
20°-30°	459.5	11.8
30°-40°	449.9	11.5
40°-50°	344.4	8.8
50°-60°	229.5	5.9
60°-70°	125.2	3.2
70°-80°	52.2	1.3
80°-90°	15.8	0.4
90°-100°	127.2	3.3
100°-110°	345.7	8.9
110°-120°	355.4	9.1
120°-130°	284.2	7.3
130°-140°	223.3	5.7
140°-150°	171.2	4.4
150°-160°	123.1	3.2
160°-170°	75.3	1.9
170°-180°	25.4	0.7
0°-30°	950.5	24.4
0°-40°	1400.4	35.9
0°-60°	1974.3	50.6
0°-90°	2167.5	55.6
90°-120°	828.3	21.2
90°-150°	1507.0	38.7
90°-180°	1731.0	44.4
0°-180°	3898.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1487	1487	1487	1487	1487	
5°	1463	1448	1457	1461	1466	136
15°	1237	1232	1266	1300	1322	345
25°	945	948	997	1040	1086	435
35°	668	671	716	764	819	415
45°	401	408	435	468	511	312
55°	230	240	254	263	285	209
65°	116	125	136	119	108	120
75°	58	58	53	36	25	62
85°	16	16	15	10	6	18
90°	1	3	6	8	8	2
95°	19	70	222	96	65	20
105°	61	96	380	579	545	65
115°	109	132	304	605	690	108
125°	150	171	275	464	547	134
135°	181	201	268	378	426	140
145°	209	224	264	321	345	131
155°	236	244	262	288	297	109
165°	256	259	263	274	275	72
175°	265	266	264	268	267	25
180°	265	265	265	265	265	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1486.8	1486.8	1486.8	1486.8	1486.8
2.5°	1490.4	1477.2	1480.5	1480.4	1476.3
5°	1462.6	1448.0	1457.4	1460.8	1465.9
7.5°	1408.4	1397.3	1414.5	1427.3	1437.6
10°	1366.1	1356.5	1378.5	1397.1	1410.4
12.5°	1317.0	1309.0	1336.2	1361.1	1378.6
15°	1236.9	1232.4	1265.6	1300.0	1322.4
17.5°	1151.2	1149.0	1187.1	1227.3	1255.8
20°	1092.7	1092.1	1133.8	1175.7	1208.9
22.5°	1033.8	1035.2	1079.0	1122.6	1160.3
25°	945.3	947.9	996.8	1040.3	1086.2
27.5°	863.5	864.6	915.3	961.2	1010.1
30°	807.6	810.8	860.5	908.0	959.0
32.5°	751.8	755.5	804.1	853.2	905.2
35°	668.0	671.2	716.3	764.5	818.7
37.5°	581.7	586.0	626.0	671.6	724.9
40°	525.8	532.2	567.6	610.5	662.8
42.5°	472.1	480.0	512.8	553.5	600.7
45°	400.6	408.2	435.1	468.1	510.8
47.5°	339.0	347.8	368.5	396.8	433.3
50°	304.0	312.3	331.4	352.4	386.9
52.5°	273.2	281.5	298.5	314.7	344.1
55°	230.3	239.9	253.8	263.4	285.1
57.5°	195.1	204.2	215.3	219.6	232.8
60°	171.6	181.8	191.8	191.3	198.3
62.5°	150.2	158.9	168.8	161.9	162.3
65°	115.5	125.0	136.3	119.1	108.3
67.5°	93.3	95.3	107.0	83.1	70.2
70°	82.9	82.9	86.1	64.3	53.5
72.5°	72.9	72.9	69.9	52.3	41.0
75°	58.1	58.1	52.8	36.3	24.8
77.5°	44.8	44.2	40.4	27.1	18.0
80°	35.9	35.9	32.6	21.4	14.4
82.5°	28.1	28.1	25.3	16.7	10.7
85°	16.3	16.3	15.0	9.7	5.9
87.5°	5.9	6.4	6.4	4.7	4.1
90°	0.9	3.4	6.0	7.7	7.7
92.5°	7.7	34.8	60.5	26.0	22.0
95°	18.8	69.6	221.6	96.4	64.8
97.5°	31.0	76.9	339.7	264.3	185.6
100°	39.2	81.7	375.9	381.0	307.7
102.5°	47.4	86.6	385.4	471.2	406.6
105°	61.4	95.5	380.1	578.8	544.6
107.5°	75.9	106.0	358.2	634.4	643.9
110°	86.1	113.6	341.8	645.3	686.1



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	95.0	121.1	325.4	636.2	697.7
115°	109.1	132.4	304.3	605.4	689.5
117.5°	122.4	144.7	290.8	561.6	656.5
120°	131.3	152.9	284.7	532.3	626.5
122.5°	138.8	160.4	280.6	502.9	593.7
125°	150.0	170.8	275.3	463.9	547.2
127.5°	160.1	180.7	272.4	434.3	505.8
130°	166.2	186.2	271.0	415.7	479.9
132.5°	172.3	192.3	269.7	399.8	456.7
135°	180.7	200.7	267.6	377.8	426.2
137.5°	189.7	207.9	266.6	358.4	399.1
140°	195.2	212.7	265.9	346.0	382.7
142.5°	200.6	216.8	265.2	336.3	367.0
145°	208.8	223.8	264.2	321.0	345.2
147.5°	218.0	230.9	263.4	309.0	328.0
150°	224.2	235.0	263.4	302.1	317.1
152.5°	228.9	238.4	262.7	295.9	308.2
155°	236.1	244.4	262.5	288.3	296.6
157.5°	243.1	249.6	262.5	283.1	289.5
160°	247.2	253.0	262.5	279.7	284.7
162.5°	251.3	255.8	263.2	276.9	280.6
165°	255.7	259.0	263.4	274.5	275.3
167.5°	260.3	262.0	264.2	271.6	272.2
170°	261.7	263.3	264.2	270.2	270.2
172.5°	263.0	264.0	264.2	268.8	268.8
175°	265.1	265.9	264.2	267.6	266.8
177.5°	265.8	265.8	263.7	266.4	265.1
180°	265.1	265.1	265.1	265.1	265.1

(END OF REPORT)