

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: P519112

Luminaire Tested: **SQ4-WB-050U-075D-940-1D-UNV-STD-W-4**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P519112  
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-940-1D-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: 4000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

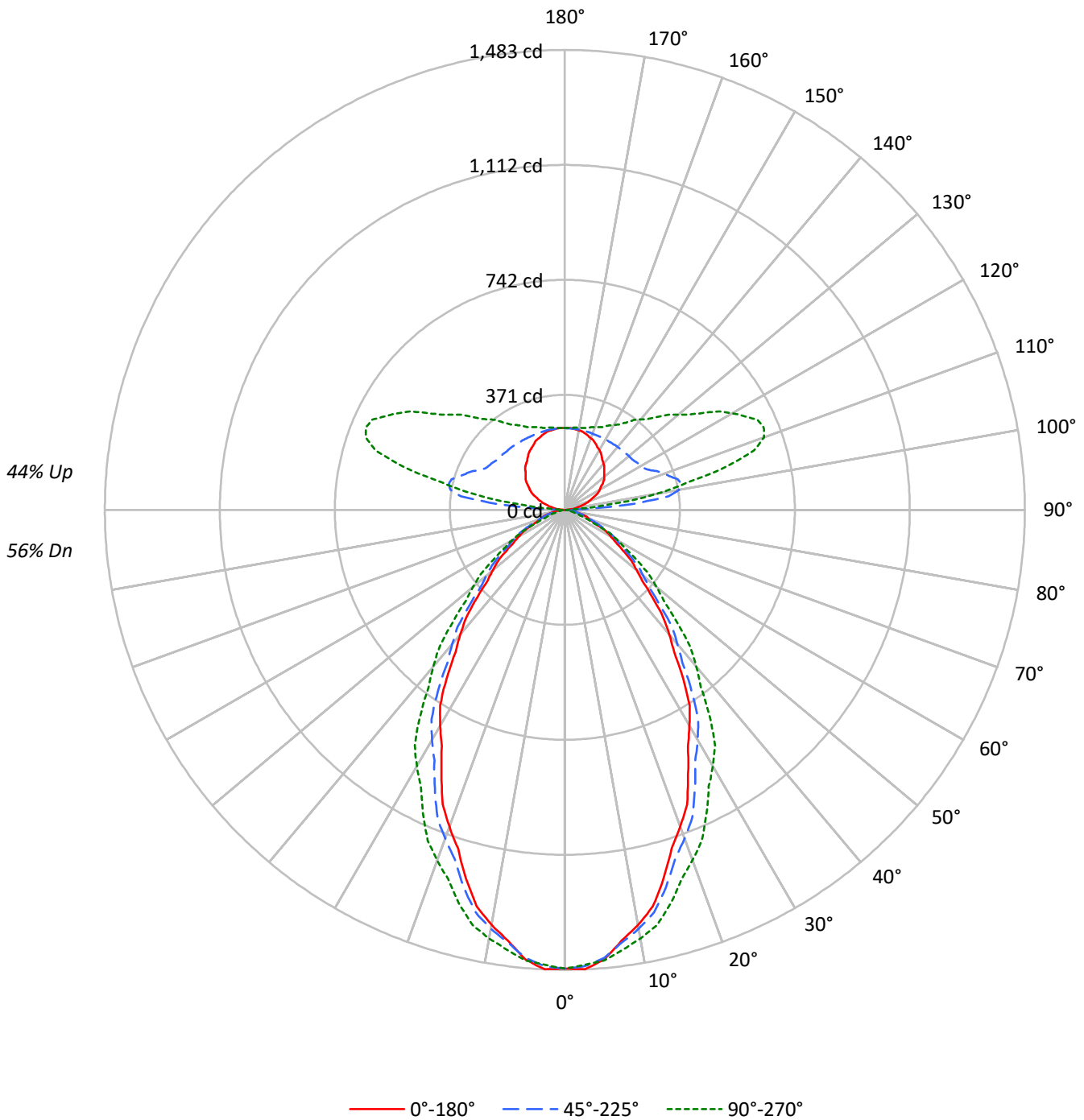
Lumens per Lamp: N/A  
Luminaire Lumens: 3878.5 lumens  
Efficiency: N/A  
Efficacy: 106.8 lumens/watt  
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02  
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')  
CIE Type: General Diffuse

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°	13647	13647	13647
5°	13477	13429	13508
10°	12733	12849	13147
15°	11754	12027	12567
20°	10674	11076	11808
25°	9574	10097	11002
30°	8560	9120	10165
35°	7485	8027	9175
40°	6300	6801	7943
45°	5200	5648	6631
50°	4342	4732	5525
55°	3685	4062	4562
60°	3150	3521	3641
65°	2508	2962	2351
70°	2223	2312	1435
75°	2060	1875	880
80°	1897	1727	760
85°	1715	1577	614



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	135.7	3.5
10°-20°	352.9	9.1
20°-30°	457.1	11.8
30°-40°	447.6	11.5
40°-50°	342.6	8.8
50°-60°	228.3	5.9
60°-70°	124.6	3.2
70°-80°	51.9	1.3
80°-90°	15.7	0.4
90°-100°	126.6	3.3
100°-110°	343.9	8.9
110°-120°	353.6	9.1
120°-130°	282.7	7.3
130°-140°	222.2	5.7
140°-150°	170.3	4.4
150°-160°	122.5	3.2
160°-170°	74.9	1.9
170°-180°	25.2	0.7
0°-30°	945.7	24.4
0°-40°	1393.3	35.9
0°-60°	1964.3	50.6
0°-90°	2156.5	55.6
90°-120°	824.1	21.2
90°-150°	1499.3	38.7
90°-180°	1722.0	44.4
0°-180°	3878.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1479	1479	1479	1479	1479	
5°	1455	1441	1450	1453	1458	135
15°	1231	1226	1259	1293	1316	344
25°	940	943	992	1035	1081	433
35°	665	668	713	761	815	413
45°	398	406	433	466	508	311
55°	229	239	252	262	284	208
65°	115	124	136	118	108	119
75°	58	58	53	36	25	62
85°	16	16	15	10	6	18
90°	1	3	6	8	8	2
95°	19	69	220	96	64	20
105°	61	95	378	576	542	65
115°	108	132	303	602	686	107
125°	149	170	274	462	544	133
135°	180	200	266	376	424	139
145°	208	223	263	319	343	130
155°	235	243	261	287	295	108
165°	254	258	262	273	274	72
175°	264	265	263	266	265	25
180°	264	264	264	264	264	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1479.2	1479.2	1479.2	1479.2	1479.2
2.5°	1482.9	1469.7	1473.0	1472.9	1468.8
5°	1455.2	1440.6	1450.0	1453.4	1458.5
7.5°	1401.2	1390.2	1407.3	1420.0	1430.3
10°	1359.1	1349.6	1371.5	1390.0	1403.3
12.5°	1310.3	1302.3	1329.4	1354.2	1371.6
15°	1230.6	1226.2	1259.2	1293.4	1315.7
17.5°	1145.3	1143.2	1181.0	1221.0	1249.5
20°	1087.2	1086.6	1128.1	1169.7	1202.7
22.5°	1028.5	1029.9	1073.6	1116.9	1154.4
25°	940.5	943.0	991.8	1035.0	1080.7
27.5°	859.1	860.2	910.6	956.3	1005.0
30°	803.5	806.7	856.1	903.4	954.1
32.5°	748.0	751.7	800.0	848.9	900.6
35°	664.6	667.8	712.7	760.6	814.6
37.5°	578.7	583.0	622.8	668.2	721.2
40°	523.1	529.5	564.7	607.4	659.5
42.5°	469.7	477.5	510.2	550.7	597.7
45°	398.5	406.1	432.9	465.7	508.2
47.5°	337.3	346.0	366.6	394.8	431.1
50°	302.5	310.7	329.7	350.6	384.9
52.5°	271.8	280.1	297.0	313.1	342.3
55°	229.1	238.6	252.5	262.1	283.6
57.5°	194.1	203.2	214.2	218.5	231.6
60°	170.7	180.9	190.8	190.3	197.3
62.5°	149.4	158.0	168.0	161.1	161.5
65°	114.9	124.4	135.7	118.5	107.7
67.5°	92.8	94.8	106.4	82.7	69.8
70°	82.4	82.4	85.7	64.0	53.2
72.5°	72.6	72.6	69.6	52.1	40.8
75°	57.8	57.8	52.6	36.1	24.7
77.5°	44.5	44.0	40.2	26.9	17.9
80°	35.7	35.7	32.5	21.3	14.3
82.5°	27.9	27.9	25.2	16.6	10.6
85°	16.2	16.2	14.9	9.6	5.8
87.5°	5.9	6.4	6.4	4.6	4.1
90°	0.8	3.3	5.9	7.6	7.6
92.5°	7.6	34.7	60.2	25.9	21.9
95°	18.7	69.2	220.5	96.0	64.4
97.5°	30.9	76.5	338.0	263.0	184.7
100°	39.0	81.3	374.0	379.1	306.1
102.5°	47.1	86.1	383.5	468.8	404.5
105°	61.1	95.1	378.2	575.9	541.9
107.5°	75.5	105.5	356.3	631.1	640.6
110°	85.6	113.0	340.1	642.0	682.6



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	94.5	120.5	323.8	633.0	694.2
115°	108.5	131.8	302.7	602.3	686.0
117.5°	121.8	144.0	289.3	558.8	653.1
120°	130.6	152.2	283.2	529.6	623.3
122.5°	138.1	159.6	279.2	500.3	590.7
125°	149.2	170.0	273.9	461.5	544.4
127.5°	159.3	179.8	271.0	432.1	503.2
130°	165.4	185.3	269.7	413.6	477.4
132.5°	171.5	191.4	268.3	397.8	454.4
135°	179.8	199.7	266.3	375.9	424.0
137.5°	188.8	206.8	265.3	356.6	397.0
140°	194.2	211.6	264.6	344.3	380.8
142.5°	199.6	215.7	263.9	334.6	365.2
145°	207.8	222.7	262.9	319.4	343.4
147.5°	216.9	229.7	262.0	307.4	326.3
150°	223.0	233.8	262.0	300.5	315.5
152.5°	227.8	237.2	261.4	294.4	306.6
155°	234.9	243.2	261.2	286.8	295.1
157.5°	241.9	248.3	261.2	281.7	288.0
160°	245.9	251.7	261.2	278.3	283.2
162.5°	250.0	254.5	261.9	275.5	279.2
165°	254.4	257.7	262.0	273.1	273.9
167.5°	259.0	260.6	262.9	270.2	270.9
170°	260.3	262.0	262.9	268.8	268.8
172.5°	261.7	262.7	262.9	267.5	267.5
175°	263.7	264.6	262.9	266.3	265.4
177.5°	264.4	264.4	262.4	265.1	263.7
180°	263.7	263.7	263.7	263.7	263.7

(END OF REPORT)