

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: P519360

Luminaire Tested: **SQ4-WB-100U-050D-835-1D-UNV-STD-W-4**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P519360  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-23, 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-100U-050D-835-1D-UNV-STD-W-4  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE  
DOWNLIGHT 500 LUMENS PER FOOT  
UPLIGHT 1000 LUMENS PER FOOT  
Light Source: 3500K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

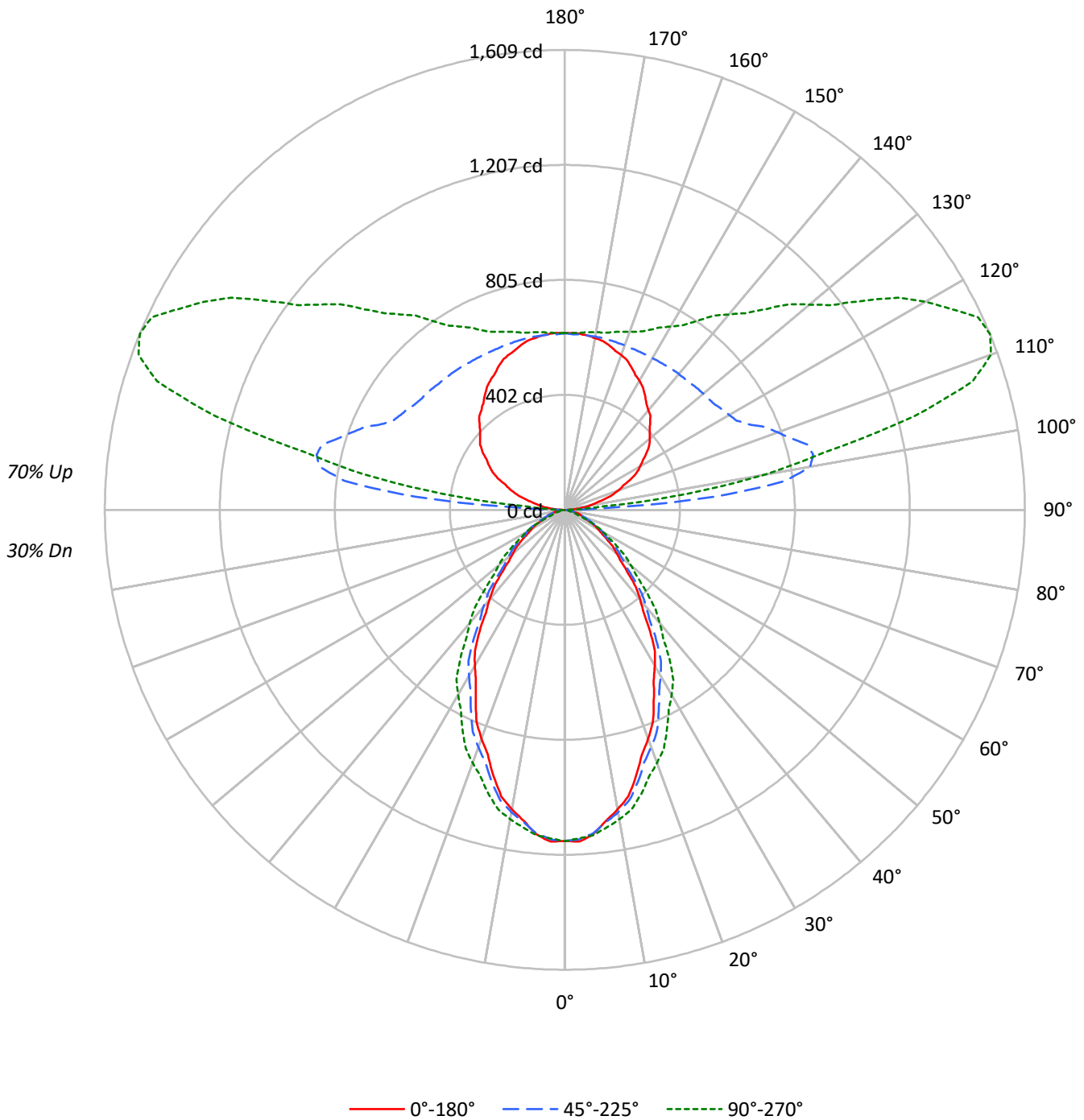
Lumens per Lamp: N/A  
Luminaire Lumens: 5705.9 lumens  
Efficiency: N/A  
Efficacy: 138.2 lumens/watt  
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02  
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')  
CIE Type: Semi-Indirect

Input Watts (W): 41.3  
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	102	102	102	102	92	92	92	92	72	72	72	54	54	54	37	37	37	30
1	94	90	86	83	84	81	78	75	64	62	60	48	47	46	34	33	33	26
2	86	79	74	69	77	72	67	63	57	54	51	43	41	40	31	30	29	23
3	79	70	64	58	71	64	58	53	51	47	44	39	36	34	28	27	25	20
4	72	63	55	50	65	57	51	46	46	41	38	35	32	30	25	24	22	18
5	67	56	49	43	60	51	44	40	41	36	33	32	29	26	23	21	20	16
6	62	50	43	38	55	46	39	35	37	33	29	29	26	23	21	19	18	15
7	57	46	38	33	51	42	35	31	34	29	26	27	23	21	20	18	16	13
8	53	42	34	29	48	38	32	27	31	26	23	24	21	19	18	16	15	12
9	49	38	31	26	44	35	29	24	28	24	21	23	19	17	17	15	14	11
10	46	35	28	24	42	32	26	22	26	22	19	21	18	16	16	14	12	10

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

	0°	45°	90°
0°	10689	10689	10689
5°	10556	10518	10579
10°	9974	10064	10297
15°	9207	9421	9843
20°	8360	8675	9249
25°	7499	7908	8617
30°	6705	7144	7961
35°	5864	6287	7186
40°	4936	5327	6221
45°	4072	4425	5194
50°	3400	3707	4328
55°	2887	3182	3574
60°	2467	2759	2851
65°	1965	2321	1843
70°	1743	1810	1125
75°	1611	1469	688
80°	1488	1350	595
85°	1344	1239	487



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	106.3	1.9
10°-20°	276.4	4.8
20°-30°	358.0	6.3
30°-40°	350.6	6.1
40°-50°	268.4	4.7
50°-60°	178.8	3.1
60°-70°	97.6	1.7
70°-80°	40.7	0.7
80°-90°	12.8	0.2
90°-100°	289.5	5.1
100°-110°	799.1	14.0
110°-120°	824.2	14.4
120°-130°	662.3	11.6
130°-140°	520.5	9.1
140°-150°	399.2	7.0
150°-160°	286.9	5.0
160°-170°	175.5	3.1
170°-180°	59.2	1.0
0°-30°	740.7	13.0
0°-40°	1091.3	19.1
0°-60°	1538.6	27.0
0°-90°	1689.6	29.6
90°-120°	1912.8	33.5
90°-150°	3494.8	61.2
90°-180°	4016.0	70.4
0°-180°	5705.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1159	1159	1159	1159	1159	
5°	1140	1128	1136	1138	1142	106
15°	964	960	986	1013	1030	269
25°	737	739	777	811	846	339
35°	521	523	558	596	638	324
45°	312	318	339	365	398	243
55°	180	187	198	205	222	163
65°	90	97	106	93	84	94
75°	45	45	41	28	19	48
85°	13	13	12	8	5	14
90°	2	4	8	9	10	4
95°	42	157	525	216	140	45
105°	142	220	879	1342	1264	152
115°	255	308	708	1402	1594	251
125°	350	398	642	1086	1275	312
135°	421	467	624	880	992	326
145°	489	522	616	749	806	306
155°	551	569	611	672	693	254
165°	596	604	614	638	643	168
175°	618	619	615	624	622	59
180°	618	618	618	618	618	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1158.6	1158.6	1158.6	1158.6	1158.6
2.5°	1161.5	1151.1	1153.7	1153.7	1150.5
5°	1139.8	1128.4	1135.7	1138.4	1142.3
7.5°	1097.5	1088.8	1102.3	1112.2	1120.3
10°	1064.6	1057.1	1074.2	1088.7	1099.1
12.5°	1026.3	1020.1	1041.3	1060.7	1074.3
15°	963.9	960.4	986.3	1013.1	1030.5
17.5°	897.1	895.4	925.1	956.4	978.6
20°	851.5	851.0	883.6	916.2	942.0
22.5°	805.6	806.7	840.9	874.8	904.2
25°	736.6	738.6	776.8	810.7	846.5
27.5°	672.9	673.8	713.3	749.0	787.2
30°	629.4	631.9	670.6	707.6	747.3
32.5°	585.9	588.7	626.6	664.9	705.4
35°	520.6	523.1	558.2	595.8	638.0
37.5°	453.3	456.7	487.8	523.4	564.9
40°	409.8	414.7	442.3	475.8	516.5
42.5°	367.9	374.0	399.6	431.3	468.1
45°	312.1	318.1	339.1	364.8	398.1
47.5°	264.2	271.0	287.1	309.2	337.7
50°	236.9	243.4	258.3	274.6	301.5
52.5°	212.9	219.4	232.6	245.3	268.1
55°	179.5	186.9	197.8	205.3	222.2
57.5°	152.0	159.2	167.8	171.2	181.4
60°	133.7	141.7	149.5	149.1	154.5
62.5°	117.0	123.8	131.6	126.2	126.5
65°	90.0	97.4	106.3	92.8	84.4
67.5°	72.7	74.3	83.4	64.7	54.7
70°	64.6	64.6	67.1	50.1	41.7
72.5°	56.8	56.8	54.5	40.8	31.9
75°	45.2	45.2	41.2	28.3	19.3
77.5°	34.9	34.5	31.5	21.1	14.0
80°	28.0	28.0	25.4	16.7	11.2
82.5°	21.9	21.9	19.7	13.0	8.3
85°	12.7	12.7	11.7	7.6	4.6
87.5°	4.9	5.3	5.6	4.2	4.0
90°	2.0	3.9	7.9	8.9	9.9
92.5°	17.8	73.9	132.1	48.2	37.6
95°	42.5	156.6	525.2	215.9	140.4
97.5°	70.4	175.4	778.0	599.0	433.8
100°	91.0	186.7	871.3	877.5	713.1
102.5°	110.8	199.5	889.5	1084.2	928.3
105°	142.4	219.8	879.2	1342.3	1264.0
107.5°	176.0	244.9	830.2	1466.8	1495.4
110°	199.8	261.7	792.2	1493.5	1586.4



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	221.1	280.7	756.6	1472.4	1609.3
115°	255.2	308.4	708.1	1401.9	1594.3
117.5°	284.8	337.8	676.3	1302.6	1521.5
120°	304.6	356.8	663.6	1235.3	1455.8
122.5°	323.6	373.5	653.3	1172.6	1381.5
125°	350.1	398.5	641.9	1086.3	1274.8
127.5°	372.7	421.0	635.1	1013.3	1175.9
130°	387.7	436.0	632.0	968.6	1116.6
132.5°	401.9	448.0	628.8	931.1	1065.2
135°	421.3	466.8	624.1	879.8	992.0
137.5°	443.1	484.5	621.7	836.7	932.4
140°	454.9	495.6	620.1	808.0	892.1
142.5°	468.4	505.9	618.5	782.4	856.5
145°	488.6	522.4	616.2	749.0	806.0
147.5°	508.0	537.5	614.0	720.8	765.1
150°	522.2	546.4	613.2	704.0	739.8
152.5°	533.3	555.9	612.4	689.6	719.2
155°	550.9	569.3	611.2	672.0	693.3
157.5°	567.1	581.2	611.4	659.2	673.7
160°	576.6	589.2	612.2	652.0	662.6
162.5°	584.5	595.5	613.0	645.6	653.9
165°	596.4	604.1	614.2	638.0	642.9
167.5°	605.5	610.1	615.2	633.4	634.9
170°	610.2	614.1	615.2	631.0	631.0
172.5°	614.2	616.5	615.2	627.8	627.0
175°	618.1	619.1	615.2	624.0	622.1
177.5°	619.7	618.9	615.0	620.5	618.9
180°	618.1	618.1	618.1	618.1	618.1

(END OF REPORT)