

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: P518351

Luminaire Tested: **SQ4-BB-025U-100D-835-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P518351  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-32, G2-2009-966-12)  
Test Lab: INNOVATION CENTER  
Issue Date: 4/29/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: SQ4-BB-025U-100D-835-1D-UNV-STD-W-12  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE  
DOWNLIGHT 1000 LUMENS PER FOOT  
UPLIGHT 250 LUMENS PER FOOT  
Light Source: 3500K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

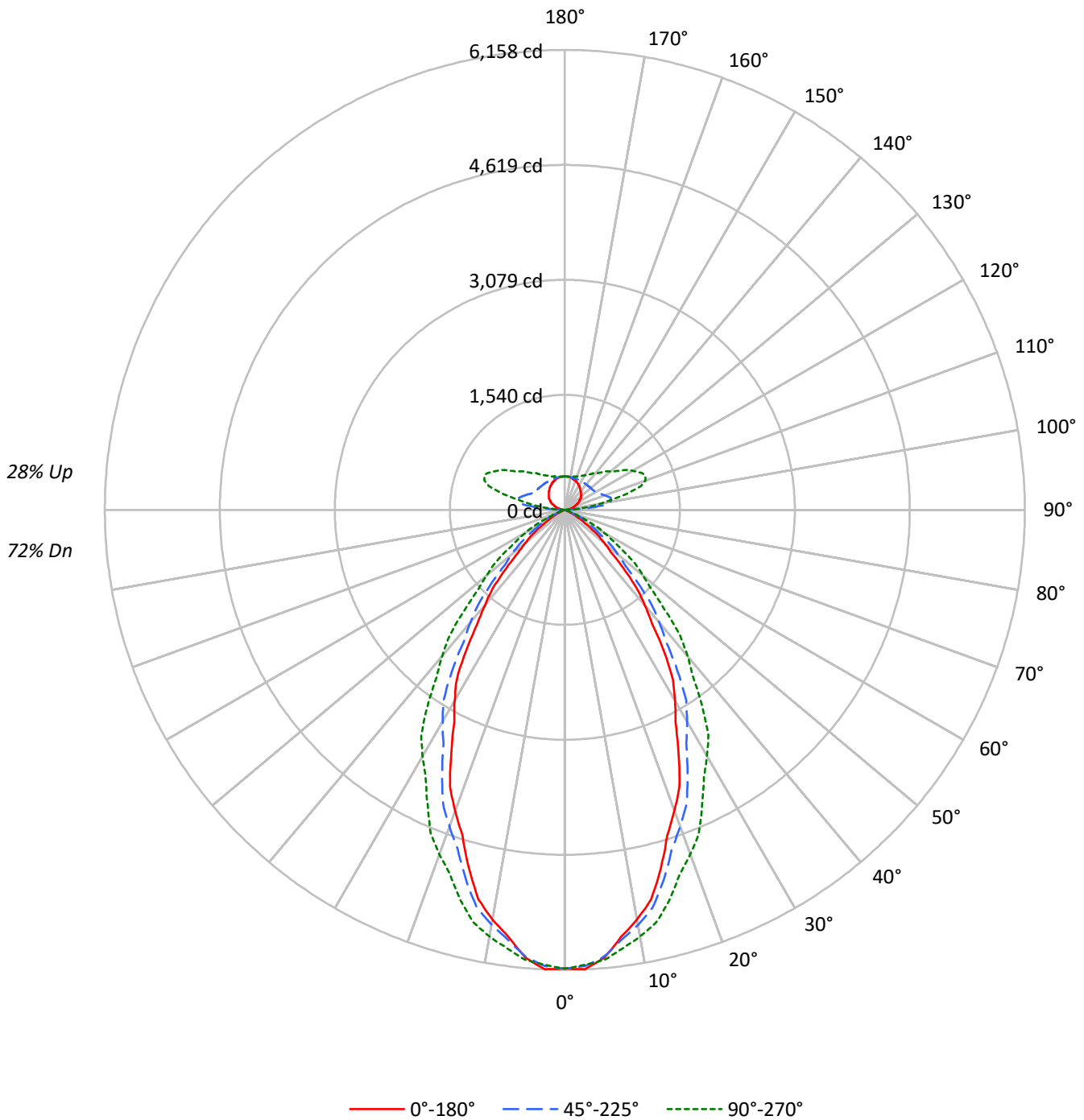
Lumens per Lamp: N/A  
Luminaire Lumens: 10228.7 lumens  
Efficiency: N/A  
Efficacy: 82.8 lumens/watt  
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97  
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')  
CIE Type: Semi-Direct

Input Watts (W): 123.6  
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	50	30	10	0	
RCR																						
0	112	112	112	112	106	106	106	106	95	95	95	85	85	85	76	76	76	76	76	76	72	
1	105	102	99	96	100	97	94	92	87	86	84	79	78	76	71	70	69	69	69	69	65	
2	98	92	87	83	93	88	83	80	80	77	74	73	70	68	66	64	62	62	62	62	59	
3	91	83	77	72	87	80	74	70	73	69	65	67	63	61	61	58	56	56	56	56	53	
4	85	76	69	64	81	73	67	62	67	62	58	61	58	55	56	53	51	51	51	51	48	
5	79	69	62	57	75	66	60	55	61	56	52	57	52	49	52	49	46	46	46	46	44	
6	74	63	56	51	70	61	55	50	57	51	47	52	48	45	48	45	42	42	42	42	40	
7	69	58	51	46	66	56	50	45	52	47	43	49	44	41	45	42	39	39	39	39	37	
8	65	54	47	42	62	52	46	41	49	43	39	45	41	38	42	38	36	36	36	36	34	
9	61	50	43	39	58	48	42	38	45	40	36	42	38	35	40	36	33	33	33	33	31	
10	58	47	40	36	55	45	39	35	42	37	33	40	35	32	37	33	31	31	31	31	29	

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

	0°	45°	90°
0°	18893	18893	18893
5°	18590	18544	18681
10°	17394	17626	18117
15°	15813	16314	17223
20°	14036	14766	16059
25°	12224	13192	14755
30°	10470	11620	13520
35°	8681	9864	12029
40°	6670	7887	10250
45°	4822	5972	8247
50°	3285	4451	6541
55°	2136	3219	5084
60°	1225	2267	3674
65°	325	1384	1860
70°	160	428	534
75°	70	36	0
80°	53	0	0
85°	0	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	560.7	5.5
10°-20°	1433.8	14.0
20°-30°	1794.9	17.5
30°-40°	1657.9	16.2
40°-50°	1114.0	10.9
50°-60°	575.4	5.6
60°-70°	180.2	1.8
70°-80°	11.4	0.1
80°-90°	2.6	0.0
90°-100°	217.9	2.1
100°-110°	572.8	5.6
110°-120°	594.0	5.8
120°-130°	476.5	4.7
130°-140°	373.8	3.7
140°-150°	286.9	2.8
150°-160°	206.7	2.0
160°-170°	126.4	1.2
170°-180°	42.7	0.4
0°-30°	3789.4	37.0
0°-40°	5447.3	53.3
0°-60°	7136.8	69.8
0°-90°	7331.0	71.7
90°-120°	1384.7	13.5
90°-150°	2521.9	24.7
90°-180°	2898.0	28.3
0°-180°	10228.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	6143	6143	6143	6143	6143	
5°	6022	5961	6007	6028	6051	558
15°	4966	4949	5124	5296	5409	1383
25°	3602	3631	3888	4154	4348	1651
35°	2312	2370	2627	2937	3204	1432
45°	1109	1176	1373	1640	1896	871
55°	398	465	600	771	948	372
65°	45	85	190	230	256	75
75°	6	6	3	0	0	9
85°	0	0	0	0	0	1
90°	3	8	23	12	12	3
95°	29	113	375	194	132	32
105°	103	156	633	962	897	109
115°	183	223	507	1012	1155	181
125°	255	286	461	780	920	226
135°	304	335	447	630	714	235
145°	352	375	441	537	579	221
155°	398	410	441	485	499	183
165°	430	436	441	459	464	121
175°	447	447	444	450	450	42
180°	447	447	447	447	447	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	6143.4	6143.4	6143.4	6143.4	6143.4
2.5°	6157.7	6099.6	6114.9	6114.5	6098.3
5°	6021.6	5960.6	6006.7	6028.1	6051.3
7.5°	5767.2	5719.5	5808.2	5874.7	5922.9
10°	5569.8	5529.1	5644.1	5734.8	5801.6
12.5°	5341.6	5310.2	5449.2	5573.5	5659.0
15°	4966.5	4949.0	5124.0	5296.0	5409.3
17.5°	4564.6	4564.1	4763.8	4977.3	5113.9
20°	4288.8	4297.5	4511.7	4747.2	4907.0
22.5°	4013.0	4033.3	4262.1	4507.6	4690.7
25°	3602.3	3631.3	3887.6	4153.6	4348.3
27.5°	3207.6	3250.0	3519.6	3796.1	4033.2
30°	2948.4	2997.8	3272.3	3563.2	3807.3
32.5°	2694.0	2752.7	3020.3	3327.9	3576.7
35°	2312.3	2370.5	2627.4	2936.6	3204.0
37.5°	1918.2	1975.2	2226.1	2530.5	2819.4
40°	1661.4	1725.4	1964.6	2259.6	2553.1
42.5°	1428.4	1492.4	1717.3	2007.2	2284.4
45°	1108.6	1175.5	1373.1	1640.5	1896.2
47.5°	843.5	916.2	1089.6	1331.5	1564.5
50°	686.6	759.2	930.3	1143.4	1367.2
52.5°	560.5	630.9	785.2	986.1	1191.2
55°	398.3	465.1	600.4	770.8	948.1
57.5°	275.2	332.8	454.1	596.4	735.3
60°	199.1	254.4	368.5	484.1	597.4
62.5°	132.6	183.1	294.8	383.4	459.5
65°	44.6	85.3	190.2	229.5	255.6
67.5°	22.6	27.2	99.9	105.4	114.1
70°	17.8	17.8	47.6	50.7	59.4
72.5°	13.1	13.1	19.0	24.4	26.2
75°	5.9	5.9	3.0	0.0	0.0
77.5°	3.0	3.0	2.4	0.0	0.0
80°	3.0	3.0	0.0	0.0	0.0
82.5°	0.6	0.6	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.6	1.7	4.6	2.3	2.3
90°	2.9	8.5	22.9	11.5	11.5
92.5°	12.0	58.0	128.4	56.9	36.7
95°	28.7	112.7	375.4	193.5	131.8
97.5°	49.9	123.8	561.7	446.7	329.0
100°	65.9	133.2	619.0	627.3	487.2
102.5°	79.7	142.4	635.1	781.4	661.4
105°	103.2	156.4	633.4	961.5	897.0
107.5°	127.2	176.6	597.2	1055.0	1070.7
110°	143.3	188.1	567.4	1079.1	1146.3

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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	159.3	201.9	539.9	1063.9	1167.0
115°	183.4	222.6	507.3	1012.0	1154.9
117.5°	206.9	242.8	484.9	940.2	1098.8
120°	220.7	254.3	475.7	891.9	1046.0
122.5°	234.4	268.1	468.9	843.7	995.6
125°	255.1	285.9	461.4	779.8	919.9
127.5°	271.7	303.1	455.1	728.3	846.6
130°	280.9	314.5	452.8	696.0	805.3
132.5°	290.0	323.7	450.5	668.3	766.3
135°	303.8	334.6	447.1	629.5	713.6
137.5°	318.1	348.4	446.5	600.5	669.5
140°	329.6	357.6	444.2	577.5	642.0
142.5°	338.7	364.5	444.2	561.3	616.7
145°	352.5	374.9	441.3	536.9	578.9
147.5°	366.3	388.1	441.3	516.6	551.4
150°	375.4	395.0	441.3	505.0	533.1
152.5°	384.6	399.7	441.3	495.7	517.0
155°	398.4	409.6	441.3	484.6	498.7
157.5°	408.7	419.3	441.3	474.8	484.9
160°	415.5	424.0	441.3	470.1	475.7
162.5°	422.4	428.6	441.3	465.5	471.1
165°	429.9	435.5	441.3	458.7	464.3
167.5°	436.8	439.6	444.2	455.7	458.0
170°	441.3	444.1	444.2	455.7	455.7
172.5°	443.6	444.2	444.2	453.3	451.1
175°	447.1	447.1	444.2	449.9	449.9
177.5°	447.1	447.1	444.8	449.3	447.1
180°	447.1	447.1	447.1	447.1	447.1

(END OF REPORT)