

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: P518382

Luminaire Tested: **SQ4-BB-025U-125D-840-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P518382  
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-125D-840-1D-UNV-STD-W-8  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE  
DOWNLIGHT 1250 LUMENS PER FOOT  
UPLIGHT 250 LUMENS PER FOOT  
Light Source: 4000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 8109.5 lumens  
Efficiency: N/A  
Efficacy: 79.8 lumens/watt  
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97  
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')  
CIE Type: Semi-Direct

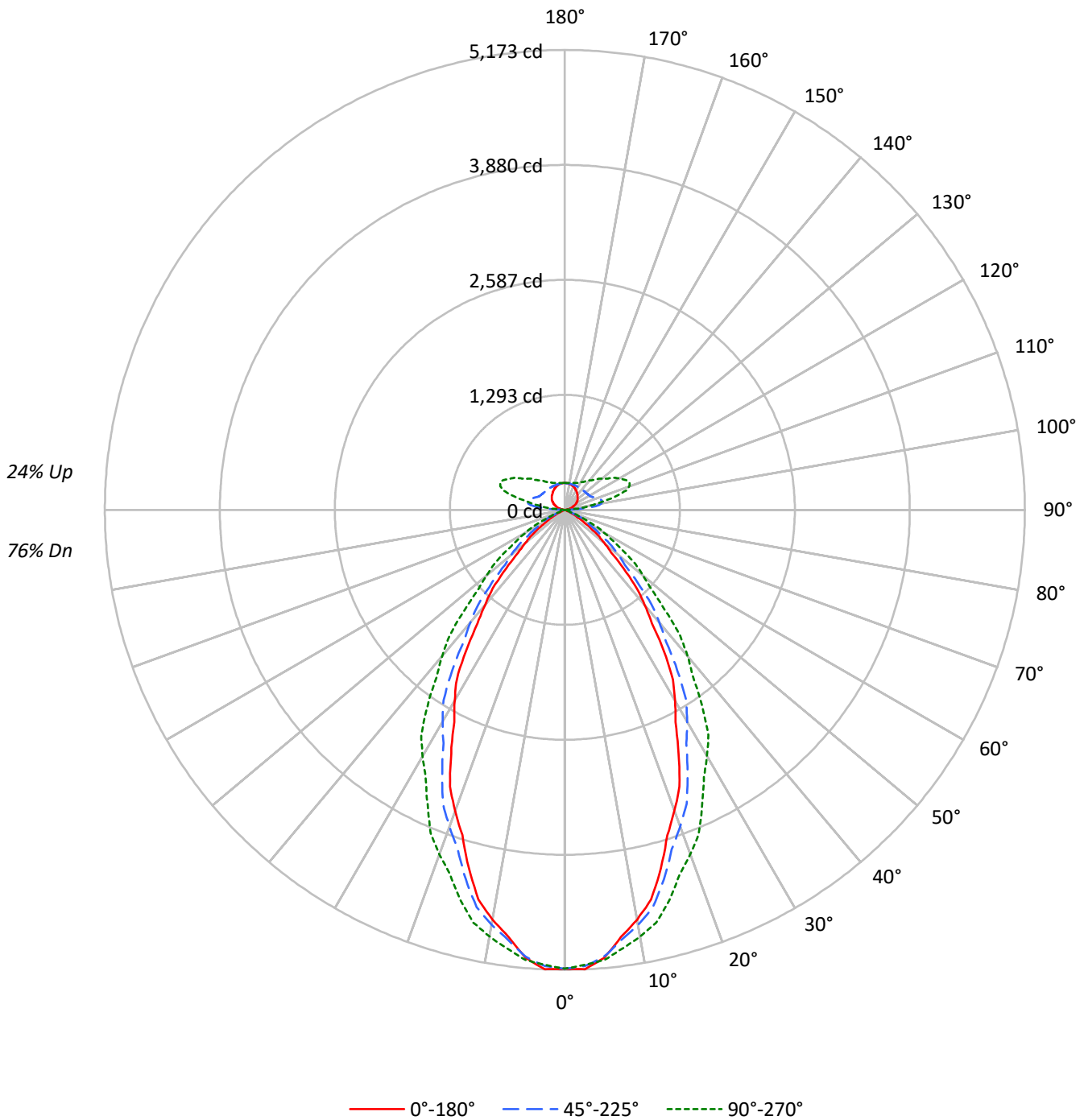
Input Watts (W): 101.6  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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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	0
RCR																		
0	113	113	113	113	108	108	108	108	98	98	98	88	88	88	80	80	80	76
1	106	103	100	97	101	98	96	93	90	88	86	82	81	79	75	74	73	69
2	99	93	88	84	95	89	85	81	82	79	76	75	73	71	69	67	66	63
3	92	84	78	74	88	81	76	71	75	71	67	69	66	63	64	62	59	57
4	86	77	70	65	82	74	68	63	69	64	60	64	60	57	59	56	54	51
5	80	70	63	58	77	68	62	57	63	58	54	59	55	51	55	52	49	46
6	75	65	57	52	72	62	56	51	58	53	49	55	50	47	51	47	45	42
7	70	59	52	47	67	58	51	46	54	49	45	51	46	43	48	44	41	39
8	66	55	48	43	63	53	47	42	50	45	41	47	43	39	44	41	38	36
9	62	51	44	40	60	50	43	39	47	41	38	44	40	36	42	38	35	33
10	59	48	41	37	56	46	40	36	44	38	35	41	37	34	39	35	32	31

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

	0°	45°	90°
0°	23808	23808	23808
5°	23425	23367	23541
10°	21918	22210	22830
15°	19926	20558	21702
20°	17687	18607	20237
25°	15403	16623	18593
30°	13194	14643	17037
35°	10939	12430	15158
40°	8405	9939	12916
45°	6076	7525	10393
50°	4140	5609	8242
55°	2691	4057	6406
60°	1544	2856	4631
65°	409	1744	2344
70°	202	538	673
75°	89	45	0
80°	66	0	0
85°	0	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	471.0	5.8
10°-20°	1204.5	14.9
20°-30°	1507.9	18.6
30°-40°	1392.8	17.2
40°-50°	935.9	11.5
50°-60°	483.4	6.0
60°-70°	151.4	1.9
70°-80°	9.6	0.1
80°-90°	1.8	0.0
90°-100°	146.7	1.8
100°-110°	385.7	4.8
110°-120°	400.0	4.9
120°-130°	320.8	4.0
130°-140°	251.7	3.1
140°-150°	193.2	2.4
150°-160°	139.2	1.7
160°-170°	85.1	1.0
170°-180°	28.8	0.4
0°-30°	3183.4	39.3
0°-40°	4576.2	56.4
0°-60°	5995.4	73.9
0°-90°	6158.2	75.9
90°-120°	932.4	11.5
90°-150°	1698.2	20.9
90°-180°	1951.0	24.1
0°-180°	8109.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	5161	5161	5161	5161	5161	
5°	5059	5007	5046	5064	5084	469
15°	4172	4158	4304	4449	4544	1162
25°	3026	3051	3266	3489	3653	1387
35°	1942	1991	2207	2467	2692	1203
45°	931	988	1154	1378	1593	731
55°	335	391	504	648	796	312
65°	38	72	160	193	215	63
75°	5	5	2	0	0	7
85°	0	0	0	0	0	1
90°	2	6	15	8	8	2
95°	19	76	253	130	89	22
105°	70	105	426	647	604	74
115°	124	150	342	682	778	122
125°	172	192	311	525	620	152
135°	205	225	301	424	480	158
145°	237	252	297	362	390	149
155°	268	276	297	326	336	123
165°	290	293	297	309	313	82
175°	301	301	299	303	303	29
180°	301	301	301	301	301	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	5161.0	5161.0	5161.0	5161.0	5161.0
2.5°	5172.9	5124.1	5137.0	5136.7	5123.0
5°	5058.6	5007.3	5046.1	5064.0	5083.6
7.5°	4844.9	4804.8	4879.3	4935.2	4975.7
10°	4679.1	4644.9	4741.5	4817.7	4873.8
12.5°	4487.3	4460.9	4577.7	4682.2	4754.0
15°	4172.2	4157.6	4304.5	4449.0	4544.2
17.5°	3834.6	3834.1	4001.9	4181.3	4296.1
20°	3602.9	3610.3	3790.2	3988.0	4122.3
22.5°	3371.2	3388.3	3580.5	3786.7	3940.5
25°	3026.2	3050.6	3265.9	3489.3	3652.9
27.5°	2694.6	2730.2	2956.7	3189.0	3388.2
30°	2476.9	2518.4	2749.0	2993.4	3198.4
32.5°	2263.1	2312.4	2537.3	2795.7	3004.7
35°	1942.5	1991.4	2207.2	2467.0	2691.6
37.5°	1611.5	1659.3	1870.1	2125.8	2368.5
40°	1395.7	1449.4	1650.4	1898.2	2144.8
42.5°	1200.0	1253.7	1442.7	1686.2	1919.1
45°	931.3	987.5	1153.5	1378.1	1593.0
47.5°	708.6	769.6	915.3	1118.5	1314.3
50°	576.8	637.8	781.5	960.6	1148.5
52.5°	470.9	530.0	659.7	828.4	1000.7
55°	334.6	390.7	504.4	647.6	796.5
57.5°	231.2	279.5	381.5	501.0	617.7
60°	167.3	213.7	309.6	406.7	501.9
62.5°	111.4	153.8	247.7	322.0	386.0
65°	37.5	71.6	159.8	192.8	214.7
67.5°	19.0	22.9	83.9	88.6	95.9
70°	15.0	15.0	39.9	42.6	49.9
72.5°	11.0	11.0	16.0	20.5	22.0
75°	5.0	5.0	2.5	0.0	0.0
77.5°	2.5	2.5	2.0	0.0	0.0
80°	2.5	2.5	0.0	0.0	0.0
82.5°	0.5	0.5	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.4	1.1	3.1	1.5	1.5
90°	1.9	5.7	15.4	7.7	7.7
92.5°	8.1	39.1	86.5	38.3	24.7
95°	19.3	75.9	252.8	130.3	88.8
97.5°	33.6	83.4	378.2	300.8	221.5
100°	44.4	89.7	416.8	422.4	328.1
102.5°	53.6	95.9	427.6	526.2	445.4
105°	69.5	105.3	426.5	647.4	604.0
107.5°	85.7	118.9	402.2	710.4	721.0
110°	96.5	126.7	382.1	726.6	771.9

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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	107.3	136.0	363.6	716.4	785.8
115°	123.5	149.9	341.6	681.5	777.7
117.5°	139.3	163.5	326.5	633.1	739.9
120°	148.6	171.2	320.3	600.6	704.4
122.5°	157.9	180.5	315.7	568.1	670.4
125°	171.8	192.5	310.7	525.1	619.5
127.5°	182.9	204.1	306.5	490.4	570.1
130°	189.1	211.8	304.9	468.7	542.3
132.5°	195.3	217.9	303.4	450.0	516.0
135°	204.6	225.3	301.0	423.9	480.5
137.5°	214.2	234.6	300.7	404.4	450.8
140°	221.9	240.8	299.1	388.9	432.3
142.5°	228.1	245.5	299.1	377.9	415.3
145°	237.4	252.5	297.2	361.5	389.8
147.5°	246.6	261.3	297.2	347.9	371.3
150°	252.8	266.0	297.2	340.1	358.9
152.5°	259.0	269.2	297.2	333.8	348.1
155°	268.2	275.8	297.2	326.4	335.8
157.5°	275.2	282.4	297.2	319.7	326.5
160°	279.8	285.5	297.2	316.6	320.3
162.5°	284.5	288.6	297.2	313.5	317.3
165°	289.5	293.2	297.2	308.9	312.6
167.5°	294.1	296.0	299.1	306.9	308.4
170°	297.2	299.1	299.1	306.8	306.8
172.5°	298.7	299.1	299.1	305.3	303.8
175°	301.0	301.0	299.1	303.0	303.0
177.5°	301.0	301.0	299.5	302.6	301.0
180°	301.0	301.0	301.0	301.0	301.0

(END OF REPORT)