

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: P518373

Luminaire Tested: **SQ4-BB-025U-125D-830-1D-UNV-STD-W-6**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P518373  
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-830-1D-UNV-STD-W-6  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE  
DOWNLIGHT 1250 LUMENS PER FOOT  
UPLIGHT 250 LUMENS PER FOOT  
Light Source: 3000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

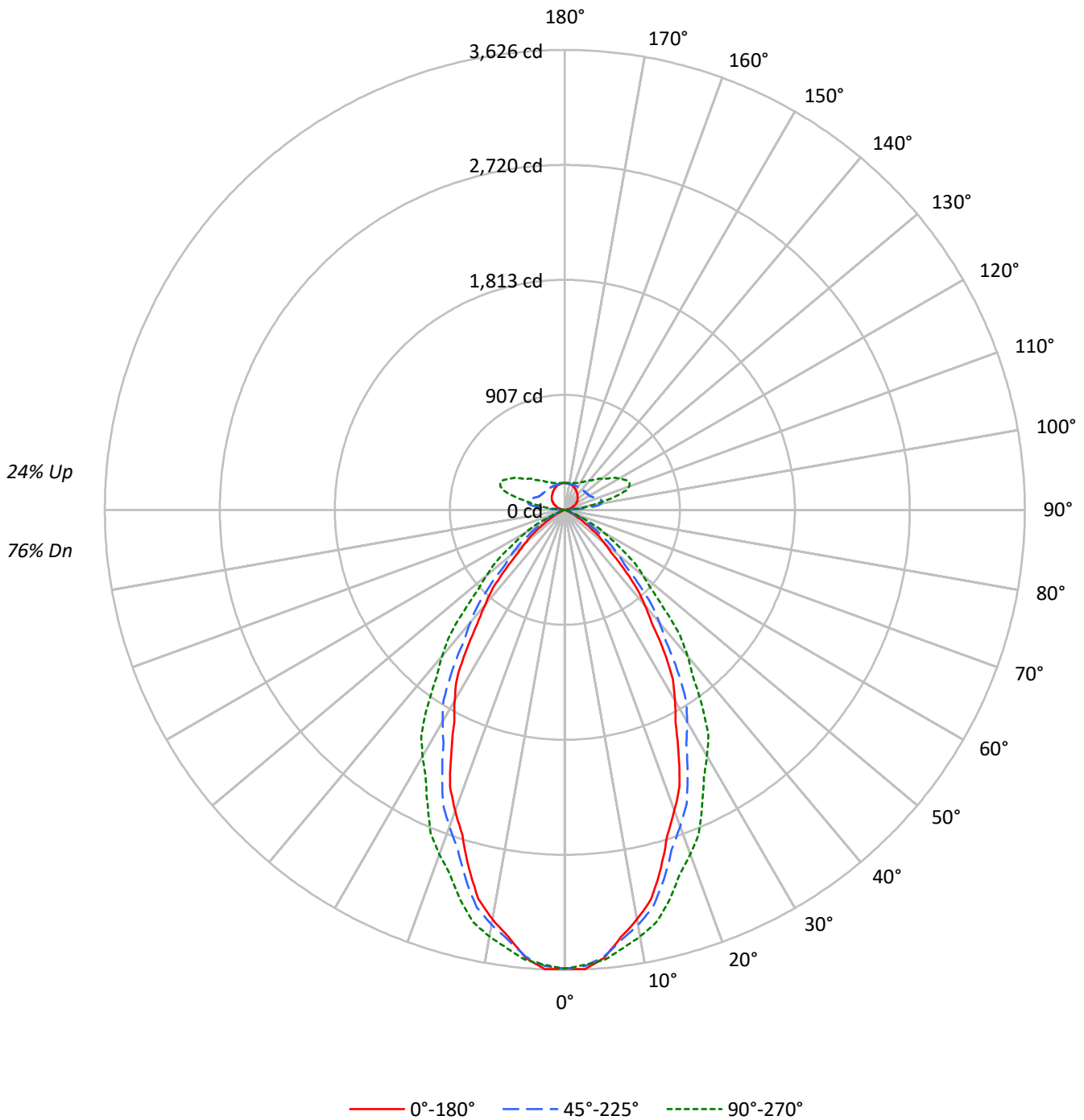
Lumens per Lamp: N/A  
Luminaire Lumens: 5683.6 lumens  
Efficiency: N/A  
Efficacy: 73.0 lumens/watt  
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97  
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')  
CIE Type: Semi-Direct

Input Watts (W): 77.9  
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	113	113	113	113	108	108	108	108	98	98	98	88	88	88	80	80	80	80	80	80	76	
1	106	103	100	97	101	98	96	93	90	88	86	82	81	79	75	74	73	75	74	73	69	
2	99	93	88	84	95	89	85	81	82	79	76	75	73	71	69	67	66	69	67	66	63	
3	92	84	78	74	88	81	76	71	75	71	67	69	66	63	64	62	59	64	62	59	57	
4	86	77	70	65	82	74	68	63	69	64	60	64	60	57	59	56	54	59	56	54	51	
5	80	70	63	58	77	68	62	57	63	58	54	59	55	51	55	52	49	55	52	49	46	
6	75	65	57	52	72	62	56	51	58	53	49	55	50	47	51	47	45	51	47	45	42	
7	70	59	52	47	67	58	51	46	54	49	45	51	46	43	48	44	41	48	44	41	39	
8	66	55	48	43	63	53	47	42	50	45	41	47	43	39	44	41	38	44	41	38	36	
9	62	51	44	40	60	50	43	39	47	41	38	44	40	36	42	38	35	42	38	35	33	
10	59	48	41	37	56	46	40	36	44	38	35	41	37	34	39	35	32	39	35	32	31	

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

	0°	45°	90°
0°	22248	22248	22248
5°	21890	21836	21998
10°	20482	20755	21335
15°	18621	19211	20281
20°	16529	17388	18911
25°	14394	15534	17375
30°	12329	13684	15921
35°	10223	11616	14164
40°	7854	9287	12070
45°	5678	7033	9712
50°	3868	5241	7703
55°	2515	3791	5986
60°	1442	2669	4326
65°	381	1630	2190
70°	189	504	629
75°	83	40	0
80°	60	0	0
85°	0	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	330.1	5.8
10°-20°	844.2	14.9
20°-30°	1056.8	18.6
30°-40°	976.2	17.2
40°-50°	655.9	11.5
50°-60°	338.8	6.0
60°-70°	106.1	1.9
70°-80°	6.7	0.1
80°-90°	1.3	0.0
90°-100°	102.8	1.8
100°-110°	270.3	4.8
110°-120°	280.3	4.9
120°-130°	224.9	4.0
130°-140°	176.4	3.1
140°-150°	135.4	2.4
150°-160°	97.5	1.7
160°-170°	59.7	1.0
170°-180°	20.2	0.4
0°-30°	2231.1	39.3
0°-40°	3207.3	56.4
0°-60°	4202.0	73.9
0°-90°	4316.0	75.9
90°-120°	653.5	11.5
90°-150°	1190.2	20.9
90°-180°	1368.0	24.1
0°-180°	5683.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	3617	3617	3617	3617	3617	
5°	3545	3510	3537	3549	3563	329
15°	2924	2914	3017	3118	3185	814
25°	2121	2138	2289	2446	2560	972
35°	1362	1396	1547	1729	1886	843
45°	653	692	808	966	1116	513
55°	234	274	354	454	558	219
65°	26	50	112	135	150	44
75°	4	4	2	0	0	5
85°	0	0	0	0	0	0
90°	1	4	11	5	5	1
95°	14	53	177	91	62	15
105°	49	74	299	454	423	52
115°	87	105	239	478	545	85
125°	120	135	218	368	434	107
135°	143	158	211	297	337	111
145°	166	177	208	253	273	104
155°	188	193	208	229	235	86
165°	203	206	208	216	219	57
175°	211	211	210	212	212	20
180°	211	211	211	211	211	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	3617.1	3617.1	3617.1	3617.1	3617.1
2.5°	3625.5	3591.3	3600.3	3600.1	3590.5
5°	3545.4	3509.5	3536.6	3549.2	3562.9
7.5°	3395.6	3367.5	3419.7	3458.9	3487.3
10°	3279.4	3255.4	3323.1	3376.5	3415.9
12.5°	3145.0	3126.5	3208.4	3281.6	3331.9
15°	2924.2	2913.9	3016.9	3118.2	3184.9
17.5°	2687.6	2687.2	2804.8	2930.5	3011.0
20°	2525.2	2530.3	2656.4	2795.1	2889.2
22.5°	2362.8	2374.8	2509.4	2654.0	2761.8
25°	2120.9	2138.0	2288.9	2445.5	2560.2
27.5°	1888.5	1913.5	2072.3	2235.1	2374.7
30°	1735.9	1765.0	1926.7	2098.0	2241.7
32.5°	1586.2	1620.7	1778.3	1959.4	2105.9
35°	1361.5	1395.7	1547.0	1729.0	1886.4
37.5°	1129.4	1163.0	1310.7	1489.9	1660.0
40°	978.2	1015.9	1156.7	1330.4	1503.2
42.5°	841.0	878.7	1011.1	1181.8	1345.0
45°	652.7	692.1	808.5	965.9	1116.5
47.5°	496.6	539.4	641.5	783.9	921.2
50°	404.2	447.0	547.7	673.2	805.0
52.5°	330.0	371.4	462.3	580.6	701.4
55°	234.5	273.8	353.5	453.9	558.2
57.5°	162.0	195.9	267.4	351.1	432.9
60°	117.2	149.8	217.0	285.0	351.7
62.5°	78.0	107.8	173.6	225.7	270.5
65°	26.2	50.2	112.0	135.1	150.5
67.5°	13.3	16.0	58.8	62.1	67.2
70°	10.5	10.5	28.0	29.9	35.0
72.5°	7.7	7.7	11.2	14.4	15.4
75°	3.5	3.5	1.7	0.0	0.0
77.5°	1.7	1.7	1.4	0.0	0.0
80°	1.7	1.7	0.0	0.0	0.0
82.5°	0.3	0.3	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.3	0.8	2.2	1.1	1.1
90°	1.4	4.0	10.8	5.4	5.4
92.5°	5.7	27.4	60.6	26.8	17.3
95°	13.5	53.2	177.2	91.3	62.2
97.5°	23.5	58.4	265.1	210.8	155.3
100°	31.1	62.8	292.1	296.1	229.9
102.5°	37.6	67.2	299.7	368.8	312.2
105°	48.7	73.8	298.9	453.8	423.3
107.5°	60.1	83.3	281.9	497.9	505.3
110°	67.6	88.8	267.8	509.3	541.0



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	75.2	95.3	254.8	502.1	550.8
115°	86.6	105.1	239.4	477.6	545.1
117.5°	97.7	114.6	228.8	443.7	518.6
120°	104.1	120.0	224.5	420.9	493.7
122.5°	110.6	126.5	221.3	398.2	469.9
125°	120.4	134.9	217.8	368.0	434.2
127.5°	128.2	143.0	214.8	343.7	399.5
130°	132.5	148.4	213.7	328.5	380.1
132.5°	136.9	152.7	212.6	315.4	361.7
135°	143.4	157.9	211.0	297.1	336.8
137.5°	150.1	164.4	210.7	283.4	316.0
140°	155.5	168.8	209.6	272.6	303.0
142.5°	159.9	172.0	209.6	264.9	291.1
145°	166.4	176.9	208.3	253.4	273.2
147.5°	172.9	183.2	208.3	243.8	260.2
150°	177.2	186.4	208.3	238.3	251.6
152.5°	181.5	188.7	208.3	233.9	244.0
155°	188.0	193.3	208.3	228.7	235.3
157.5°	192.9	197.9	208.3	224.1	228.8
160°	196.1	200.1	208.3	221.9	224.5
162.5°	199.4	202.3	208.3	219.7	222.4
165°	202.9	205.5	208.3	216.5	219.1
167.5°	206.1	207.4	209.6	215.1	216.1
170°	208.3	209.6	209.6	215.1	215.1
172.5°	209.4	209.6	209.6	213.9	212.9
175°	211.0	211.0	209.6	212.3	212.3
177.5°	211.0	211.0	209.9	212.1	211.0
180°	211.0	211.0	211.0	211.0	211.0

(END OF REPORT)