

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: P518325

Luminaire Tested: **SQ4-BB-025U-075D-830-1D-UNV-STD-W-6**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P518325  
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-075D-830-1D-UNV-STD-W-6  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE  
DOWNLIGHT 750 LUMENS PER FOOT  
UPLIGHT 250 LUMENS PER FOOT  
Light Source: 3000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

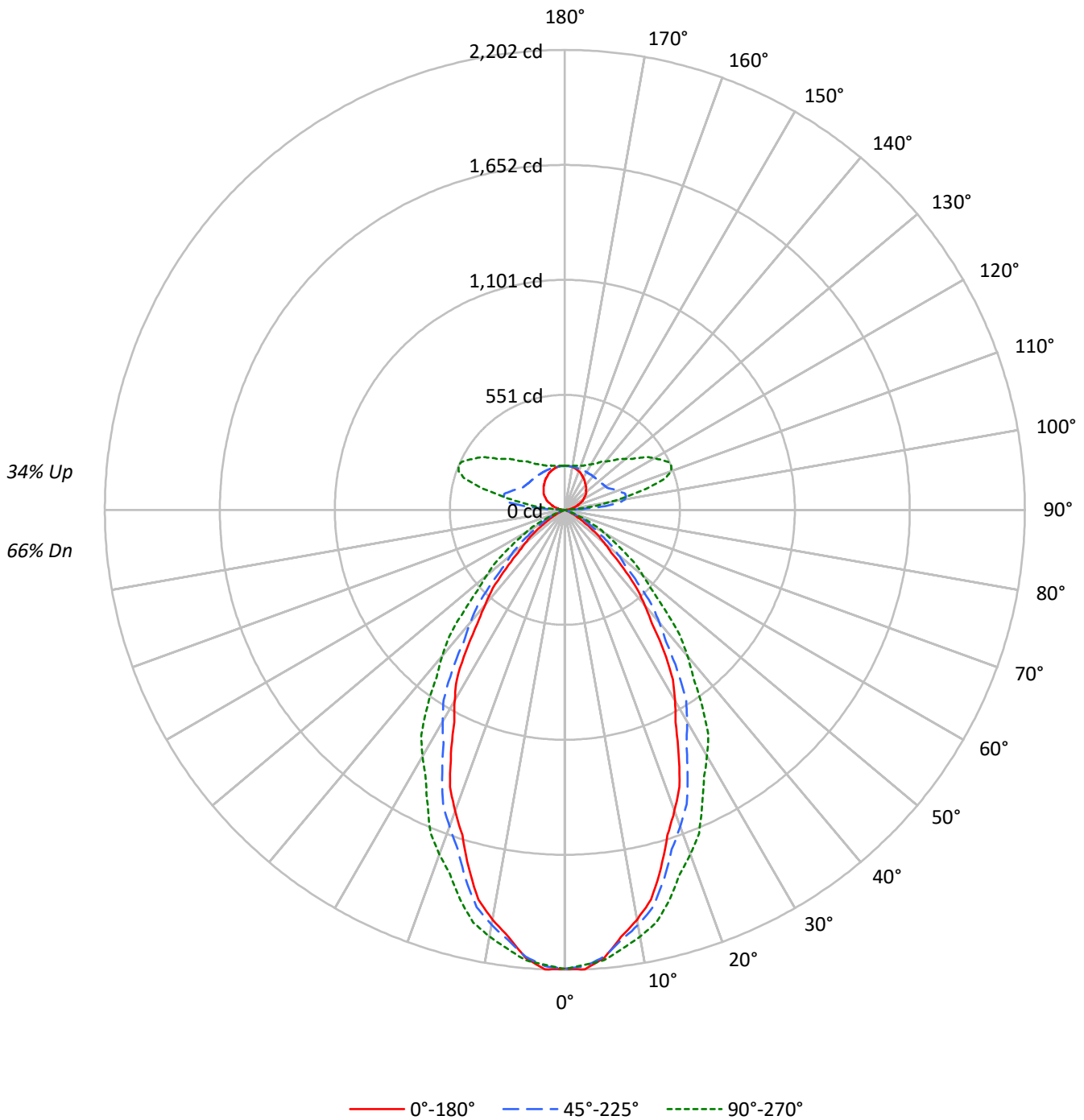
Lumens per Lamp: N/A  
Luminaire Lumens: 3989.7 lumens  
Efficiency: N/A  
Efficacy: 82.1 lumens/watt  
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97  
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')  
CIE Type: Semi-Direct

Input Watts (W): 48.6  
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	111	111	111	111	104	104	104	104	92	92	92	81	81	81	71	71	71	66
1	104	100	97	94	98	95	92	89	84	82	80	75	73	72	66	65	64	60
2	96	90	85	81	91	86	81	77	77	73	71	69	66	64	61	59	58	54
3	90	82	75	71	84	78	72	68	70	66	62	63	60	57	56	54	52	49
4	83	74	67	62	79	71	65	60	64	59	56	58	54	51	52	49	47	44
5	78	67	60	55	73	64	58	53	59	54	50	53	49	46	48	45	43	40
6	72	62	55	49	68	59	53	48	54	49	45	49	45	42	45	42	39	37
7	68	57	50	45	64	54	48	43	50	45	41	46	41	38	42	38	36	34
8	63	52	45	41	60	50	44	39	46	41	37	43	38	35	39	36	33	31
9	60	48	42	37	57	47	40	36	43	38	34	40	35	32	37	33	31	29
10	56	45	38	34	53	43	37	33	40	35	32	37	33	30	34	31	28	27

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

	0°	45°	90°
0°	13514	13514	13514
5°	13296	13264	13362
10°	12441	12607	12959
15°	11310	11669	12319
20°	10040	10561	11487
25°	8743	9435	10554
30°	7489	8312	9671
35°	6210	7055	8604
40°	4771	5641	7332
45°	3449	4272	5899
50°	2349	3184	4679
55°	1527	2302	3636
60°	876	1621	2629
65°	231	990	1330
70°	115	306	383
75°	50	26	0
80°	39	0	0
85°	0	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	200.5	5.0
10°-20°	512.8	12.9
20°-30°	641.9	16.1
30°-40°	592.9	14.9
40°-50°	398.4	10.0
50°-60°	205.8	5.2
60°-70°	64.4	1.6
70°-80°	4.1	0.1
80°-90°	1.2	0.0
90°-100°	102.8	2.6
100°-110°	270.3	6.8
110°-120°	280.3	7.0
120°-130°	224.9	5.6
130°-140°	176.4	4.4
140°-150°	135.4	3.4
150°-160°	97.5	2.4
160°-170°	59.7	1.5
170°-180°	20.2	0.5
0°-30°	1355.2	34.0
0°-40°	1948.1	48.8
0°-60°	2552.4	64.0
0°-90°	2622.1	65.7
90°-120°	653.5	16.4
90°-150°	1190.2	29.8
90°-180°	1368.0	34.3
0°-180°	3989.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2197	2197	2197	2197	2197	
5°	2154	2132	2148	2156	2164	200
15°	1776	1770	1832	1894	1935	495
25°	1288	1299	1390	1486	1555	591
35°	827	848	940	1050	1146	512
45°	396	420	491	587	678	311
55°	142	166	215	276	339	133
65°	16	30	68	82	91	27
75°	2	2	1	0	0	3
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°	2197.1	2197.1	2197.1	2197.1	2197.1
2.5°	2202.2	2181.4	2186.9	2186.8	2180.9
5°	2153.5	2131.7	2148.2	2155.8	2164.2
7.5°	2062.5	2045.5	2077.2	2101.0	2118.2
10°	1992.0	1977.4	2018.5	2051.0	2074.9
12.5°	1910.3	1899.1	1948.8	1993.3	2023.8
15°	1776.2	1769.9	1832.5	1894.0	1934.6
17.5°	1632.5	1632.3	1703.7	1780.1	1828.9
20°	1533.8	1536.9	1613.5	1697.8	1754.9
22.5°	1435.2	1442.5	1524.3	1612.1	1677.5
25°	1288.3	1298.7	1390.3	1485.5	1555.1
27.5°	1147.1	1162.3	1258.7	1357.6	1442.4
30°	1054.4	1072.1	1170.3	1274.3	1361.6
32.5°	963.5	984.4	1080.2	1190.2	1279.1
35°	827.0	847.8	939.6	1050.2	1145.9
37.5°	686.0	706.4	796.1	905.0	1008.3
40°	594.2	617.1	702.6	808.1	913.1
42.5°	510.9	533.7	614.2	717.8	817.0
45°	396.5	420.4	491.1	586.7	678.2
47.5°	301.7	327.6	389.7	476.2	559.5
50°	245.5	271.5	332.7	408.9	489.0
52.5°	200.5	225.6	280.8	352.7	426.0
55°	142.4	166.3	214.7	275.7	339.1
57.5°	98.4	119.0	162.4	213.3	263.0
60°	71.2	91.0	131.8	173.1	213.7
62.5°	47.4	65.5	105.4	137.1	164.3
65°	15.9	30.5	68.0	82.1	91.4
67.5°	8.1	9.7	35.7	37.7	40.8
70°	6.4	6.4	17.0	18.1	21.3
72.5°	4.7	4.7	6.8	8.7	9.4
75°	2.1	2.1	1.1	0.0	0.0
77.5°	1.1	1.1	0.9	0.0	0.0
80°	1.1	1.1	0.0	0.0	0.0
82.5°	0.2	0.2	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)