

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: P518302

Luminaire Tested: **SQ4-BB-025U-050D-830-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P518302  
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-050D-830-1D-UNV-STD-W-8  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE  
DOWNLIGHT 500 LUMENS PER FOOT  
UPLIGHT 250 LUMENS PER FOOT  
Light Source: 3000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

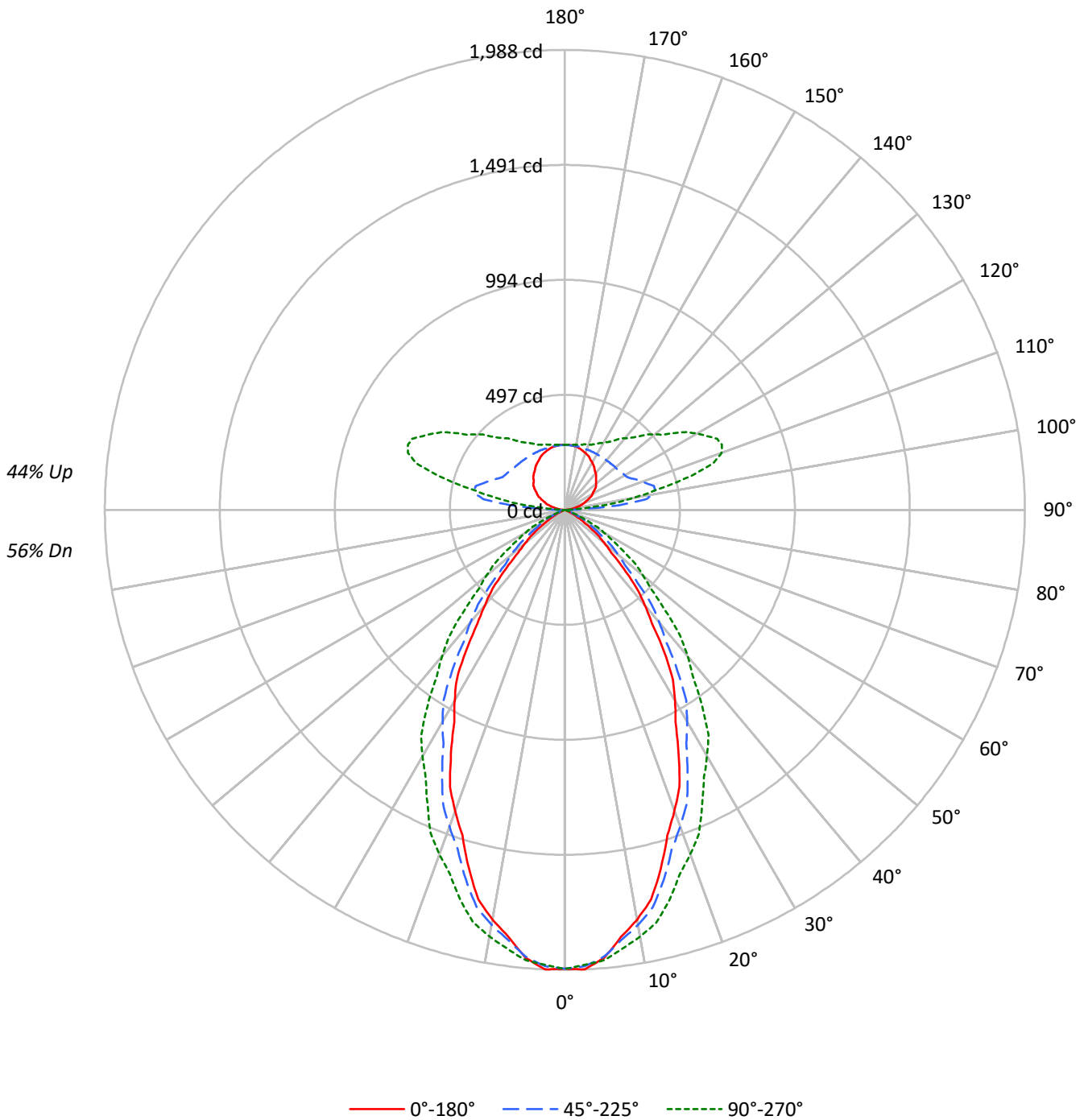
Lumens per Lamp: N/A  
Luminaire Lumens: 4191.1 lumens  
Efficiency: N/A  
Efficacy: 91.7 lumens/watt  
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97  
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')  
CIE Type: General Diffuse

Input Watts (W): 45.7  
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	109	109	109	109	101	101	101	101	87	87	87	74	74	74	62	62	62	56
1	101	98	94	92	94	91	89	86	79	77	76	68	67	66	58	57	56	52
2	94	88	83	78	87	82	78	74	72	69	66	62	60	58	54	52	51	47
3	87	79	73	68	81	74	69	64	65	61	58	57	54	52	49	47	46	42
4	81	71	65	59	75	67	61	57	60	55	51	52	49	46	46	43	41	38
5	75	65	58	53	70	61	55	50	55	50	46	48	45	42	42	40	37	35
6	70	59	52	47	65	56	50	45	50	45	41	44	41	38	39	36	34	32
7	65	54	47	42	61	51	45	41	46	41	37	41	37	34	37	34	31	29
8	61	50	43	38	57	47	41	37	43	38	34	38	34	31	34	31	29	27
9	57	46	39	35	54	44	38	34	40	35	31	36	32	29	32	29	27	25
10	54	43	36	32	51	41	35	31	37	32	29	33	29	27	30	27	25	23

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

	0°	45°	90°
0°	9151	9151	9151
5°	9003	8981	9048
10°	8424	8536	8775
15°	7658	7901	8341
20°	6798	7151	7778
25°	5920	6389	7146
30°	5071	5628	6548
35°	4205	4777	5826
40°	3230	3820	4964
45°	2335	2893	3994
50°	1591	2156	3168
55°	1034	1559	2462
60°	593	1098	1780
65°	157	670	901
70°	78	208	259
75°	34	18	0
80°	27	0	0
85°	0	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	181.0	4.3
10°-20°	462.9	11.0
20°-30°	579.5	13.8
30°-40°	535.3	12.8
40°-50°	359.7	8.6
50°-60°	185.8	4.4
60°-70°	58.2	1.4
70°-80°	3.7	0.1
80°-90°	1.6	0.0
90°-100°	137.1	3.3
100°-110°	360.4	8.6
110°-120°	373.8	8.9
120°-130°	299.8	7.2
130°-140°	235.2	5.6
140°-150°	180.5	4.3
150°-160°	130.0	3.1
160°-170°	79.6	1.9
170°-180°	26.9	0.6
0°-30°	1223.5	29.2
0°-40°	1758.8	42.0
0°-60°	2304.3	55.0
0°-90°	2367.7	56.5
90°-120°	871.3	20.8
90°-150°	1586.9	37.9
90°-180°	1823.0	43.5
0°-180°	4191.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1984	1984	1984	1984	1984	
5°	1944	1924	1939	1946	1954	180
15°	1604	1598	1654	1710	1746	447
25°	1163	1172	1255	1341	1404	533
35°	747	765	848	948	1034	462
45°	358	380	443	530	612	281
55°	129	150	194	249	306	120
65°	14	28	61	74	82	24
75°	2	2	1	0	0	3
85°	0	0	0	0	0	0
90°	2	5	14	7	7	2
95°	18	71	236	122	83	20
105°	65	98	398	605	564	69
115°	115	140	319	637	727	114
125°	160	180	290	491	579	142
135°	191	211	281	396	449	148
145°	222	236	278	338	364	139
155°	251	258	278	305	314	115
165°	270	274	278	289	292	76
175°	281	281	280	283	283	27
180°	281	281	281	281	281	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1983.6	1983.6	1983.6	1983.6	1983.6
2.5°	1988.2	1969.4	1974.4	1974.2	1969.0
5°	1944.2	1924.5	1939.4	1946.3	1953.8
7.5°	1862.1	1846.7	1875.3	1896.8	1912.4
10°	1798.4	1785.2	1822.3	1851.6	1873.2
12.5°	1724.7	1714.5	1759.4	1799.6	1827.1
15°	1603.5	1597.9	1654.4	1709.9	1746.5
17.5°	1473.8	1473.6	1538.1	1607.0	1651.1
20°	1384.8	1387.6	1456.7	1532.7	1584.4
22.5°	1295.7	1302.3	1376.1	1455.4	1514.5
25°	1163.1	1172.5	1255.2	1341.1	1403.9
27.5°	1035.6	1049.3	1136.4	1225.7	1302.2
30°	952.0	967.9	1056.6	1150.5	1229.3
32.5°	869.8	888.8	975.2	1074.5	1154.8
35°	746.6	765.4	848.3	948.2	1034.5
37.5°	619.3	637.7	718.8	817.0	910.3
40°	536.4	557.1	634.3	729.6	824.3
42.5°	461.2	481.8	554.5	648.1	737.6
45°	357.9	379.5	443.4	529.7	612.2
47.5°	272.3	295.8	351.8	429.9	505.2
50°	221.7	245.1	300.4	369.2	441.4
52.5°	181.0	203.7	253.5	318.4	384.6
55°	128.6	150.2	193.8	248.9	306.1
57.5°	88.9	107.4	146.6	192.6	237.4
60°	64.3	82.1	119.0	156.3	192.9
62.5°	42.8	59.1	95.2	123.8	148.4
65°	14.4	27.5	61.4	74.1	82.5
67.5°	7.3	8.8	32.2	34.0	36.8
70°	5.8	5.8	15.4	16.4	19.2
72.5°	4.2	4.2	6.1	7.9	8.4
75°	1.9	1.9	1.0	0.0	0.0
77.5°	1.0	1.0	0.8	0.0	0.0
80°	1.0	1.0	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°	0.4	1.1	2.9	1.4	1.4
90°	1.8	5.3	14.4	7.2	7.2
92.5°	7.6	36.5	80.8	35.8	23.1
95°	18.0	70.9	236.2	121.7	83.0
97.5°	31.4	77.9	353.5	281.1	207.0
100°	41.5	83.8	389.5	394.7	306.6
102.5°	50.1	89.6	399.6	491.7	416.2
105°	64.9	98.4	398.5	605.0	564.5
107.5°	80.1	111.1	375.8	663.9	673.7
110°	90.2	118.4	357.1	679.0	721.4

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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	100.3	127.1	339.8	669.4	734.3
115°	115.4	140.1	319.2	636.8	726.8
117.5°	130.2	152.8	305.1	591.6	691.4
120°	138.9	160.0	299.4	561.3	658.2
122.5°	147.5	168.7	295.0	530.9	626.5
125°	160.5	179.9	290.3	490.7	578.9
127.5°	171.0	190.7	286.4	458.3	532.7
130°	176.7	197.9	284.9	438.0	506.7
132.5°	182.5	203.7	283.5	420.5	482.2
135°	191.2	210.6	281.3	396.1	449.0
137.5°	200.2	219.2	281.0	377.9	421.3
140°	207.4	225.0	279.5	363.4	404.0
142.5°	213.2	229.4	279.5	353.2	388.1
145°	221.8	235.9	277.7	337.8	364.3
147.5°	230.5	244.2	277.7	325.1	347.0
150°	236.2	248.6	277.7	317.8	335.4
152.5°	242.0	251.5	277.7	311.9	325.3
155°	250.7	257.7	277.7	305.0	313.8
157.5°	257.2	263.9	277.7	298.8	305.1
160°	261.5	266.8	277.7	295.8	299.4
162.5°	265.8	269.7	277.7	292.9	296.5
165°	270.5	274.0	277.7	288.6	292.1
167.5°	274.8	276.6	279.5	286.8	288.2
170°	277.7	279.5	279.5	286.7	286.7
172.5°	279.2	279.5	279.5	285.3	283.9
175°	281.3	281.3	279.5	283.1	283.1
177.5°	281.3	281.3	279.9	282.7	281.3
180°	281.3	281.3	281.3	281.3	281.3

(END OF REPORT)