

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: P518843

Luminaire Tested: **SQ4-BB-125U-100D-935-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P518843  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-24, 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-125U-100D-935-1D-UNV-STD-W-12  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE  
DOWNLIGHT 1000 LUMENS PER FOOT  
UPLIGHT 1250 LUMENS PER FOOT  
Light Source: 3500K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

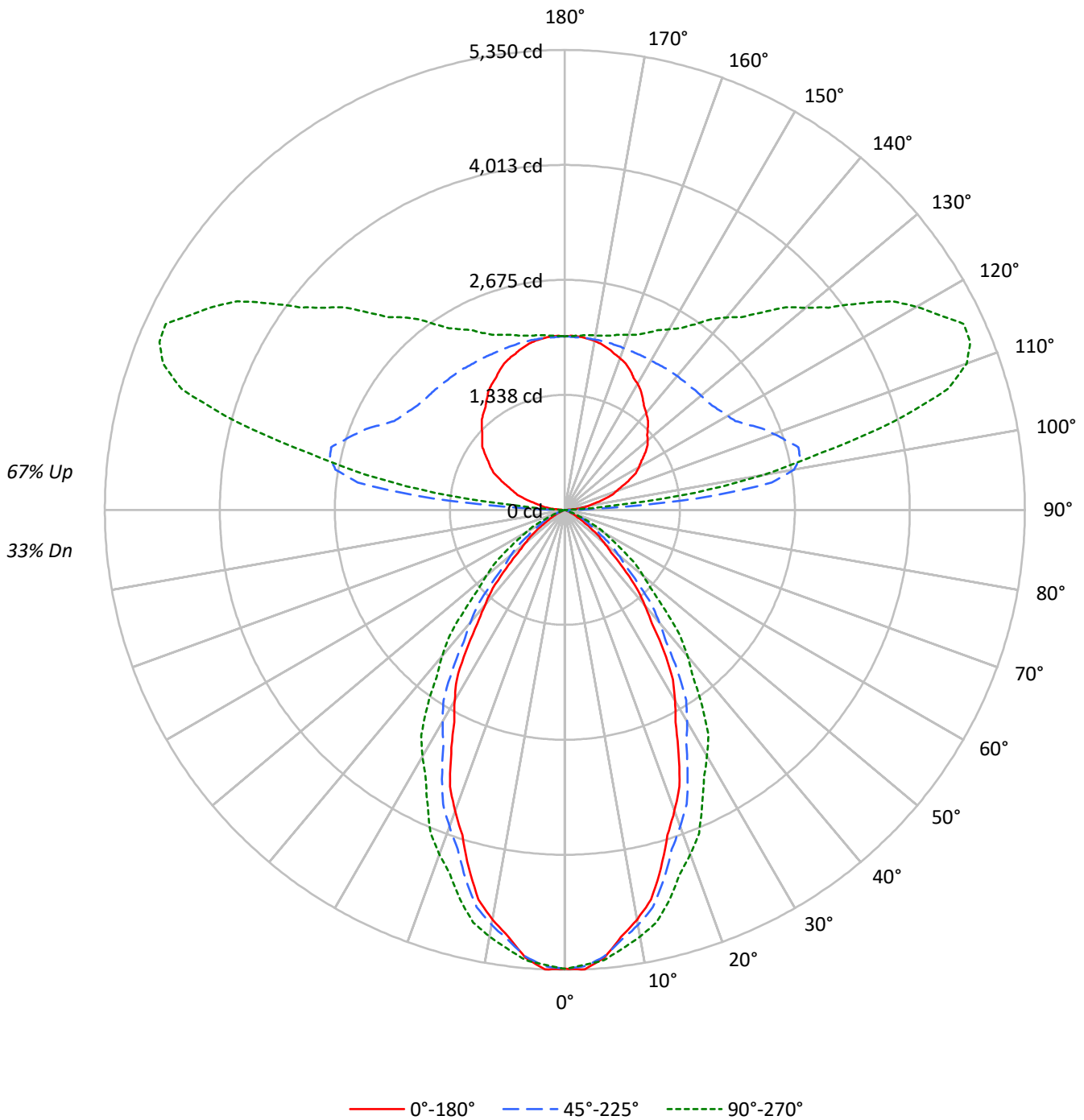
Lumens per Lamp: N/A  
Luminaire Lumens: 19404.1 lumens  
Efficiency: N/A  
Efficacy: 96.4 lumens/watt  
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97  
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')  
CIE Type: Semi-Indirect

Input Watts (W): 201.2  
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	103	103	103	103	93	93	93	93	74	74	74	56	56	56	40	40	40	33
1	95	91	88	85	86	83	80	77	66	64	63	51	50	49	37	37	36	30
2	88	81	76	71	79	74	69	65	59	56	54	46	45	43	34	33	32	27
3	81	72	66	61	73	66	60	56	54	50	47	42	40	38	32	30	29	24
4	74	65	58	53	67	59	53	49	48	44	41	38	36	33	29	27	26	22
5	69	58	51	46	62	53	47	42	44	39	36	35	32	30	27	25	24	20
6	64	53	45	40	58	48	42	38	40	35	32	32	29	27	25	23	21	18
7	59	48	41	36	53	44	38	33	37	32	29	30	26	24	23	21	20	17
8	55	44	37	32	50	40	34	30	34	29	26	27	24	22	21	19	18	15
9	51	40	33	29	47	37	31	27	31	27	23	25	22	20	20	18	16	14
10	48	37	30	26	44	34	28	24	29	24	21	24	20	18	19	17	15	13

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

	0°	45°	90°
0°	16416	16416	16416
5°	16152	16112	16232
10°	15113	15315	15742
15°	13739	14175	14965
20°	12196	12830	13954
25°	10621	11462	12821
30°	9097	10097	11748
35°	7543	8571	10452
40°	5796	6853	8906
45°	4190	5189	7166
50°	2854	3867	5683
55°	1856	2797	4417
60°	1064	1969	3193
65°	282	1203	1616
70°	139	371	464
75°	62	31	0
80°	46	0	0
85°	0	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	487.2	2.5
10°-20°	1245.8	6.4
20°-30°	1559.6	8.0
30°-40°	1440.6	7.4
40°-50°	968.0	5.0
50°-60°	500.0	2.6
60°-70°	156.6	0.8
70°-80°	9.9	0.1
80°-90°	4.9	0.0
90°-100°	944.3	4.9
100°-110°	2543.8	13.1
110°-120°	2669.6	13.8
120°-130°	2166.3	11.2
130°-140°	1699.0	8.8
140°-150°	1304.4	6.7
150°-160°	937.9	4.8
160°-170°	573.0	3.0
170°-180°	193.2	1.0
0°-30°	3292.6	17.0
0°-40°	4733.1	24.4
0°-60°	6201.1	32.0
0°-90°	6372.5	32.8
90°-120°	6157.8	31.7
90°-150°	11327.5	58.4
90°-180°	13032.0	67.2
0°-180°	19404.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	5338	5338	5338	5338	5338	
5°	5232	5179	5219	5238	5258	485
15°	4315	4300	4452	4602	4700	1202
25°	3130	3155	3378	3609	3778	1435
35°	2009	2060	2283	2552	2784	1245
45°	963	1021	1193	1425	1648	757
55°	346	404	522	670	824	323
65°	39	74	165	199	222	65
75°	5	5	3	0	0	7
85°	0	0	0	0	0	1
90°	5	15	31	33	33	10
95°	144	514	1548	792	548	150
105°	471	732	2813	4209	3950	495
115°	831	1017	2343	4526	5120	817
125°	1134	1302	2104	3555	4184	1013
135°	1366	1524	2044	2868	3248	1054
145°	1579	1702	2019	2452	2633	990
155°	1792	1858	2001	2200	2271	825
165°	1944	1967	2008	2088	2098	548
175°	2021	2019	2011	2039	2034	192
180°	2019	2019	2019	2019	2019	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	5338.0	5338.0	5338.0	5338.0	5338.0
2.5°	5350.4	5299.9	5313.2	5312.9	5298.7
5°	5232.1	5179.1	5219.2	5237.7	5257.9
7.5°	5011.1	4969.6	5046.7	5104.5	5146.4
10°	4839.6	4804.2	4904.1	4982.9	5041.0
12.5°	4641.2	4614.0	4734.7	4842.8	4917.1
15°	4315.3	4300.2	4452.2	4601.6	4700.1
17.5°	3966.2	3965.7	4139.2	4324.7	4443.4
20°	3726.5	3734.1	3920.2	4124.8	4263.7
22.5°	3486.9	3504.5	3703.3	3916.6	4075.7
25°	3130.0	3155.2	3377.9	3609.0	3778.2
27.5°	2787.0	2823.9	3058.2	3298.4	3504.4
30°	2561.8	2604.8	2843.3	3096.1	3308.2
32.5°	2340.8	2391.8	2624.3	2891.6	3107.8
35°	2009.2	2059.7	2282.9	2551.6	2783.9
37.5°	1666.7	1716.2	1934.3	2198.8	2449.7
40°	1443.6	1499.2	1707.0	1963.3	2218.4
42.5°	1241.1	1296.7	1492.2	1744.0	1984.9
45°	963.3	1021.3	1193.1	1425.4	1647.6
47.5°	732.9	796.0	946.7	1156.9	1359.4
50°	596.6	659.7	808.3	993.5	1187.9
52.5°	487.1	548.2	682.3	856.8	1035.1
55°	346.1	404.1	521.7	669.8	823.8
57.5°	239.1	289.1	394.6	518.2	638.9
60°	173.0	221.0	320.2	420.6	519.1
62.5°	115.2	159.1	256.2	333.1	399.3
65°	38.7	74.1	165.3	199.4	222.1
67.5°	19.6	23.7	86.8	91.6	99.2
70°	15.5	15.5	41.3	44.1	51.6
72.5°	11.4	11.4	16.5	21.2	22.7
75°	5.2	5.2	2.6	0.0	0.0
77.5°	2.6	2.6	2.1	0.0	0.0
80°	2.6	2.6	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°	1.0	3.0	6.2	6.7	6.7
90°	5.1	15.2	30.9	33.4	33.4
92.5°	62.7	221.7	438.2	210.9	146.6
95°	144.0	513.6	1548.1	791.6	547.7
97.5°	229.9	587.9	2428.0	2028.4	1529.6
100°	295.7	617.6	2707.8	2833.2	2350.4
102.5°	359.5	659.2	2800.4	3435.8	3039.6
105°	470.6	732.1	2813.3	4208.9	3949.9
107.5°	575.5	808.8	2693.4	4606.1	4673.0
110°	645.5	866.7	2584.4	4729.5	4973.4



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	719.5	924.7	2479.5	4702.2	5103.0
115°	830.6	1016.7	2342.7	4526.5	5119.9
117.5°	931.9	1106.4	2236.7	4246.2	4907.0
120°	997.8	1166.2	2183.2	4045.0	4723.9
122.5°	1055.4	1221.8	2144.2	3839.3	4516.1
125°	1134.0	1302.5	2103.5	3555.3	4183.9
127.5°	1209.7	1375.6	2077.8	3304.8	3866.1
130°	1254.9	1420.9	2067.5	3161.3	3654.2
132.5°	1300.2	1464.1	2057.2	3034.9	3487.5
135°	1365.5	1523.9	2044.4	2868.2	3247.9
137.5°	1427.7	1579.6	2037.7	2726.7	3038.5
140°	1470.9	1616.8	2031.5	2639.7	2921.3
142.5°	1516.2	1652.0	2027.4	2558.4	2795.8
145°	1578.9	1702.1	2018.7	2452.2	2633.3
147.5°	1646.8	1753.9	2009.9	2362.9	2505.2
150°	1692.1	1785.1	2005.8	2306.8	2425.0
152.5°	1733.2	1814.2	2003.7	2261.0	2357.1
155°	1792.4	1857.7	2000.7	2200.3	2270.7
157.5°	1844.3	1895.1	2001.2	2157.6	2204.8
160°	1877.2	1920.0	2003.2	2132.6	2167.8
162.5°	1906.0	1940.7	2005.3	2111.8	2137.0
165°	1944.1	1966.7	2008.4	2088.3	2098.4
167.5°	1974.9	1988.0	2010.9	2070.2	2074.2
170°	1995.5	2000.5	2010.9	2059.8	2059.8
172.5°	2007.9	2008.9	2013.0	2049.5	2049.5
175°	2021.2	2018.7	2010.9	2039.1	2034.1
177.5°	2026.9	2022.9	2012.5	2028.9	2024.8
180°	2018.7	2018.7	2018.7	2018.7	2018.7

(END OF REPORT)