

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: P518927

Luminaire Tested: **SQ4-BB-150U-100D-835-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P518927  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-25, 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-150U-100D-835-1D-UNV-STD-W-12  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE  
DOWNLIGHT 1000 LUMENS PER FOOT  
UPLIGHT 1500 LUMENS PER FOOT  
Light Source: 3500K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

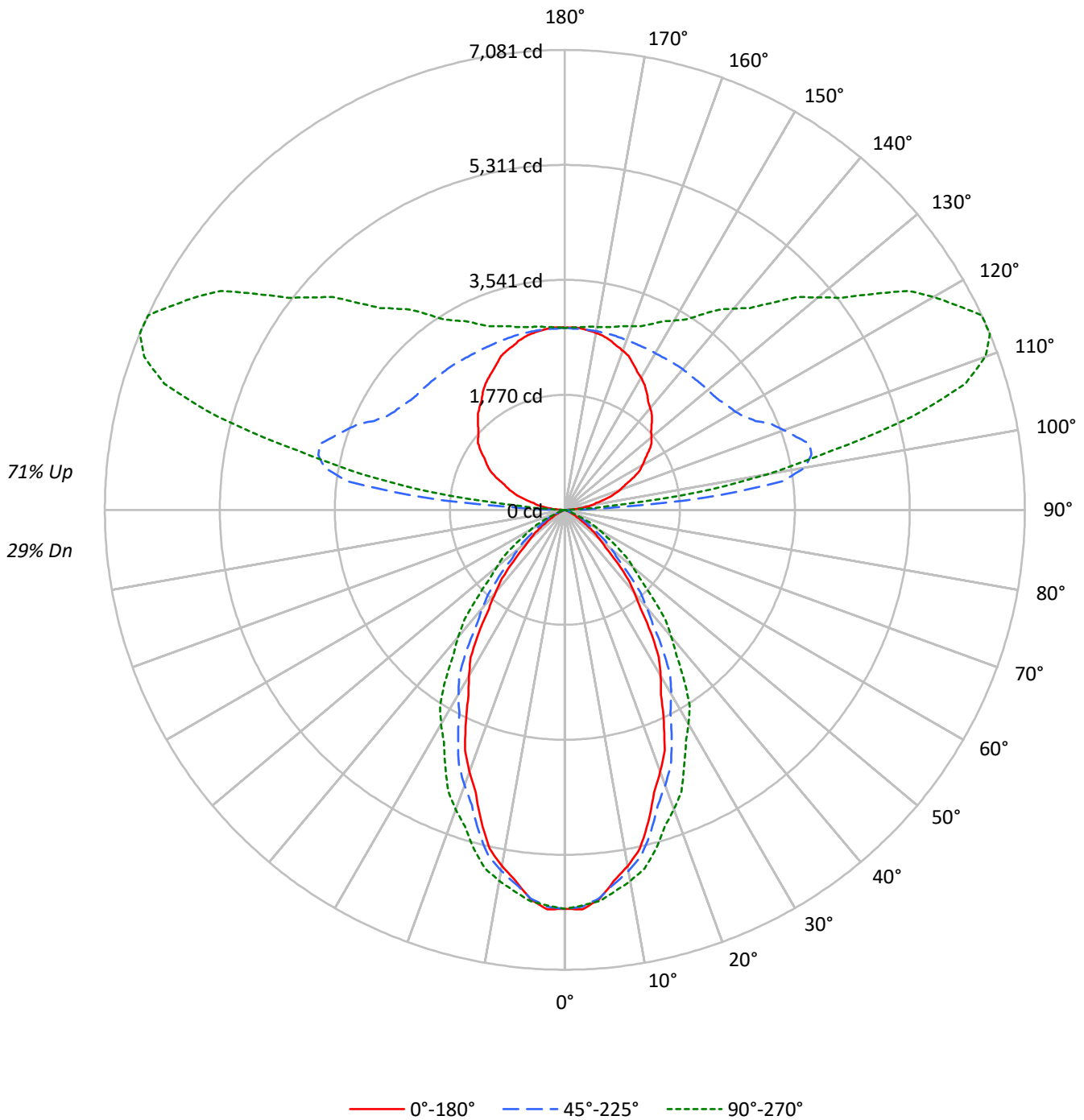
Lumens per Lamp: N/A  
Luminaire Lumens: 25406.3 lumens  
Efficiency: N/A  
Efficacy: 113.6 lumens/watt  
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97  
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')  
CIE Type: Semi-Indirect

Input Watts (W): 223.7  
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	50	30	10	0	
RCR																						
0	102	102	102	102	91	91	91	91	72	72	72	53	53	53	37	37	37	29				
1	94	90	87	84	84	81	78	76	64	62	61	48	47	46	34	33	33	26				
2	86	80	75	70	77	72	68	64	57	54	52	44	42	40	31	30	29	24				
3	80	71	65	60	71	64	59	55	52	48	45	40	37	35	29	27	26	21				
4	73	64	57	51	66	58	52	47	46	42	39	36	33	31	26	25	24	19				
5	68	57	50	45	61	52	46	41	42	38	34	33	30	28	24	23	21	18				
6	63	52	44	39	56	47	41	36	38	34	30	30	27	25	22	21	19	16				
7	58	47	40	35	52	43	37	32	35	30	27	28	25	22	21	19	18	15				
8	54	43	36	31	49	39	33	29	32	28	24	26	22	20	19	17	16	14				
9	50	39	32	28	45	36	30	26	30	25	22	24	21	18	18	16	15	13				
10	47	36	29	25	43	33	27	23	27	23	20	22	19	17	17	15	14	12				

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

	0°	45°	90°
0°	18893	18893	18893
5°	18590	18544	18681
10°	17394	17626	18117
15°	15813	16314	17223
20°	14036	14766	16059
25°	12224	13192	14755
30°	10470	11620	13520
35°	8681	9864	12029
40°	6670	7887	10250
45°	4822	5972	8247
50°	3285	4451	6541
55°	2136	3219	5084
60°	1225	2267	3674
65°	325	1384	1860
70°	160	428	534
75°	70	36	0
80°	53	0	0
85°	0	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	560.7	2.2
10°-20°	1433.8	5.6
20°-30°	1794.9	7.1
30°-40°	1657.9	6.5
40°-50°	1114.0	4.4
50°-60°	575.4	2.3
60°-70°	180.2	0.7
70°-80°	11.4	0.0
80°-90°	6.0	0.0
90°-100°	1302.7	5.1
100°-110°	3522.1	13.9
110°-120°	3703.0	14.6
120°-130°	3007.8	11.8
130°-140°	2359.4	9.3
140°-150°	1810.8	7.1
150°-160°	1302.3	5.1
160°-170°	795.6	3.1
170°-180°	268.2	1.1
0°-30°	3789.4	14.9
0°-40°	5447.3	21.4
0°-60°	7136.8	28.1
0°-90°	7334.4	28.9
90°-120°	8527.7	33.6
90°-150°	15705.8	61.8
90°-180°	18072.0	71.1
0°-180°	25406.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	6143	6143	6143	6143	6143	
5°	6022	5961	6007	6028	6051	558
15°	4966	4949	5124	5296	5409	1383
25°	3602	3631	3888	4154	4348	1651
35°	2312	2370	2627	2937	3204	1432
45°	1109	1176	1373	1640	1896	871
55°	398	465	600	771	948	372
65°	45	85	190	230	256	75
75°	6	6	3	0	0	9
85°	0	0	0	0	0	1
90°	6	18	39	42	39	14
95°	202	710	2166	1121	667	212
105°	655	1012	3907	5764	5528	690
115°	1153	1409	3240	6273	7081	1138
125°	1578	1808	2921	4929	5790	1407
135°	1892	2116	2842	3980	4505	1462
145°	2200	2365	2803	3406	3666	1376
155°	2483	2580	2779	3056	3156	1145
165°	2703	2730	2791	2900	2915	762
175°	2806	2803	2794	2830	2824	266
180°	2803	2803	2803	2803	2803	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	6143.4	6143.4	6143.4	6143.4	6143.4
2.5°	6157.7	6099.6	6114.9	6114.5	6098.3
5°	6021.6	5960.6	6006.7	6028.1	6051.3
7.5°	5767.2	5719.5	5808.2	5874.7	5922.9
10°	5569.8	5529.1	5644.1	5734.8	5801.6
12.5°	5341.6	5310.2	5449.2	5573.5	5659.0
15°	4966.5	4949.0	5124.0	5296.0	5409.3
17.5°	4564.6	4564.1	4763.8	4977.3	5113.9
20°	4288.8	4297.5	4511.7	4747.2	4907.0
22.5°	4013.0	4033.3	4262.1	4507.6	4690.7
25°	3602.3	3631.3	3887.6	4153.6	4348.3
27.5°	3207.6	3250.0	3519.6	3796.1	4033.2
30°	2948.4	2997.8	3272.3	3563.2	3807.3
32.5°	2694.0	2752.7	3020.3	3327.9	3576.7
35°	2312.3	2370.5	2627.4	2936.6	3204.0
37.5°	1918.2	1975.2	2226.1	2530.5	2819.4
40°	1661.4	1725.4	1964.6	2259.6	2553.1
42.5°	1428.4	1492.4	1717.3	2007.2	2284.4
45°	1108.6	1175.5	1373.1	1640.5	1896.2
47.5°	843.5	916.2	1089.6	1331.5	1564.5
50°	686.6	759.2	930.3	1143.4	1367.2
52.5°	560.5	630.9	785.2	986.1	1191.2
55°	398.3	465.1	600.4	770.8	948.1
57.5°	275.2	332.8	454.1	596.4	735.3
60°	199.1	254.4	368.5	484.1	597.4
62.5°	132.6	183.1	294.8	383.4	459.5
65°	44.6	85.3	190.2	229.5	255.6
67.5°	22.6	27.2	99.9	105.4	114.1
70°	17.8	17.8	47.6	50.7	59.4
72.5°	13.1	13.1	19.0	24.4	26.2
75°	5.9	5.9	3.0	0.0	0.0
77.5°	3.0	3.0	2.4	0.0	0.0
80°	3.0	3.0	0.0	0.0	0.0
82.5°	0.6	0.6	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	1.2	3.6	7.8	8.4	7.8
90°	6.0	17.8	39.2	42.2	39.2
92.5°	85.7	312.3	616.1	267.5	193.7
95°	202.2	709.6	2166.4	1121.1	666.8
97.5°	324.7	813.8	3376.9	2794.6	2052.3
100°	416.4	855.9	3753.4	3914.4	3165.0
102.5°	500.9	914.5	3886.2	4763.5	4203.0
105°	654.7	1011.7	3907.3	5763.5	5527.5
107.5°	797.1	1122.8	3736.5	6387.4	6465.9
110°	908.2	1203.2	3584.4	6554.9	6888.3

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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	1007.1	1283.3	3444.4	6521.4	7081.4
115°	1152.6	1409.2	3240.5	6273.0	7081.4
117.5°	1295.0	1535.7	3105.9	5893.5	6809.8
120°	1381.9	1617.9	3026.3	5621.2	6556.4
122.5°	1463.9	1695.2	2978.0	5329.3	6271.6
125°	1578.0	1808.1	2920.7	4928.6	5790.0
127.5°	1683.0	1909.0	2886.9	4601.6	5359.2
130°	1740.9	1974.0	2872.4	4399.5	5084.0
132.5°	1801.3	2032.0	2857.9	4217.3	4847.4
135°	1891.8	2116.0	2842.2	3979.6	4504.7
137.5°	1982.9	2194.7	2828.9	3786.7	4214.4
140°	2045.7	2243.3	2824.1	3662.5	4043.1
142.5°	2106.0	2291.9	2814.4	3550.4	3883.7
145°	2199.5	2364.7	2803.0	3406.3	3665.9
147.5°	2284.6	2431.0	2789.7	3275.8	3475.2
150°	2347.4	2477.2	2784.9	3204.9	3364.2
152.5°	2405.3	2518.6	2782.5	3139.1	3270.0
155°	2483.2	2580.5	2778.8	3055.7	3156.0
157.5°	2564.0	2631.9	2779.4	2997.6	3063.7
160°	2609.9	2665.9	2781.9	2960.9	3008.2
162.5°	2646.1	2692.7	2784.3	2931.7	2967.1
165°	2703.4	2730.0	2790.9	2899.9	2914.6
167.5°	2742.6	2760.9	2791.5	2872.5	2879.6
170°	2766.8	2775.6	2793.9	2860.3	2860.3
172.5°	2786.1	2787.9	2793.9	2845.8	2843.4
175°	2806.0	2803.0	2793.9	2830.0	2824.1
177.5°	2812.6	2805.6	2793.3	2817.3	2810.2
180°	2803.0	2803.0	2803.0	2803.0	2803.0

(END OF REPORT)