

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: P518951

Luminaire Tested: **SQ4-BB-150U-125D-835-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P518951  
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-125D-835-1D-UNV-STD-W-12  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE  
DOWNLIGHT 1250 LUMENS PER FOOT  
UPLIGHT 1500 LUMENS PER FOOT  
Light Source: 3500K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

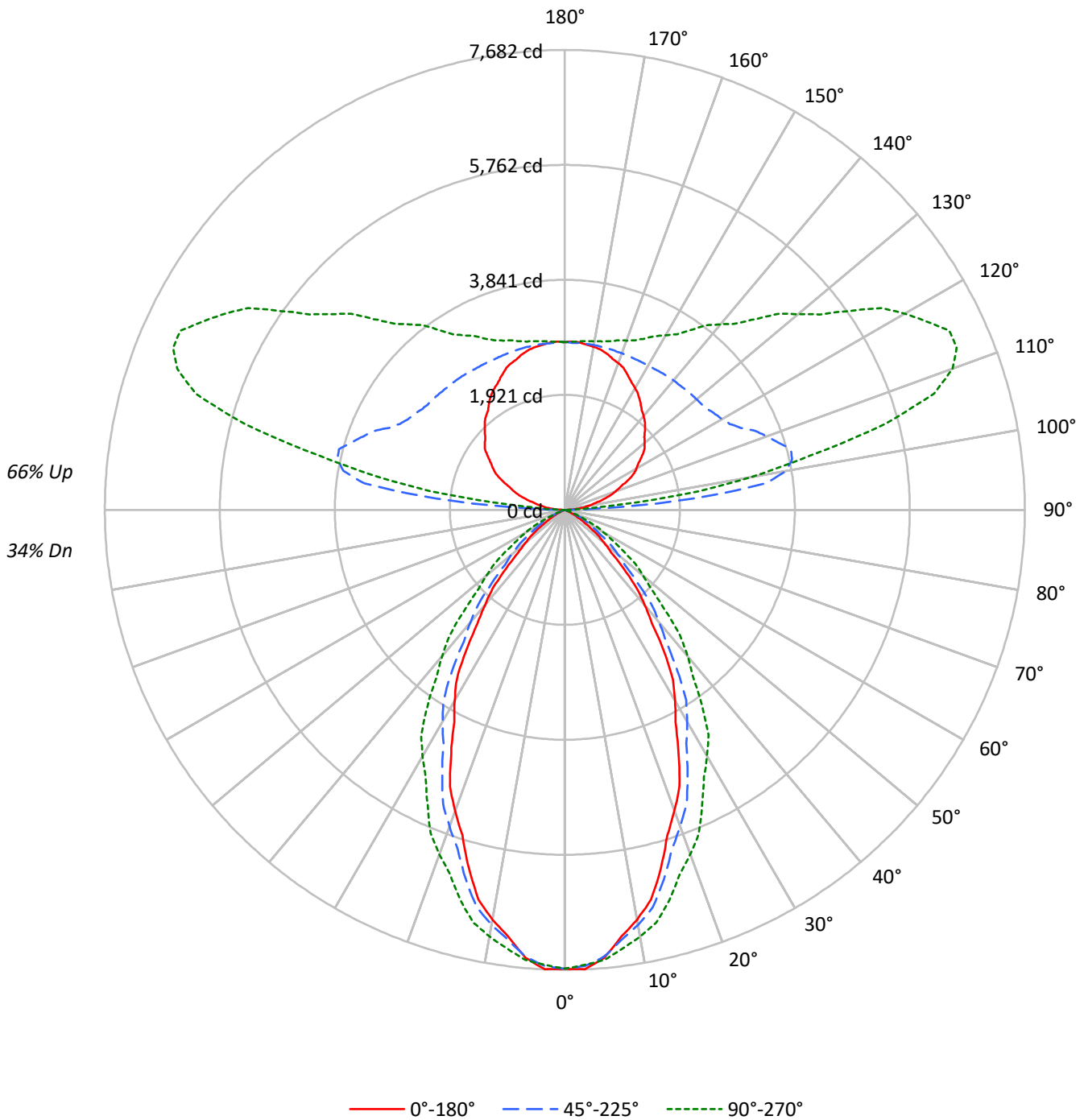
Lumens per Lamp: N/A  
Luminaire Lumens: 27220.6 lumens  
Efficiency: N/A  
Efficacy: 106.2 lumens/watt  
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97  
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')  
CIE Type: Semi-Indirect

Input Watts (W): 256.3  
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	57	57	57	41	41	41	34
1	95	92	88	85	86	83	80	78	67	65	63	52	51	50	38	37	37	31
2	88	81	76	72	79	74	69	66	60	57	54	47	45	43	35	34	33	28
3	81	73	66	61	73	66	61	56	54	50	47	43	40	38	32	31	30	25
4	75	65	58	53	67	59	53	49	49	45	41	39	36	34	30	28	27	23
5	69	59	51	46	62	54	47	43	44	40	36	35	32	30	27	26	24	21
6	64	53	46	40	58	49	42	38	40	36	32	33	29	27	25	23	22	19
7	59	48	41	36	54	44	38	34	37	32	29	30	27	24	23	21	20	17
8	55	44	37	32	50	41	34	30	34	29	26	28	25	22	22	20	18	16
9	52	40	34	29	47	37	31	27	31	27	24	26	23	20	20	18	17	15
10	48	37	31	26	44	34	29	25	29	25	22	24	21	19	19	17	16	14

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

	0°	45°	90°
0°	23571	23571	23571
5°	23192	23134	23306
10°	21700	21989	22603
15°	19727	20353	21486
20°	17511	18421	20035
25°	15250	16458	18408
30°	13062	14497	16868
35°	10831	12306	15007
40°	8321	9840	12787
45°	6015	7451	10289
50°	4098	5553	8161
55°	2664	4016	6342
60°	1528	2828	4584
65°	405	1727	2321
70°	200	533	667
75°	88	44	0
80°	66	0	0
85°	0	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	699.5	2.6
10°-20°	1788.7	6.6
20°-30°	2239.3	8.2
30°-40°	2068.4	7.6
40°-50°	1389.8	5.1
50°-60°	717.9	2.6
60°-70°	224.8	0.8
70°-80°	14.2	0.1
80°-90°	6.1	0.0
90°-100°	1302.7	4.8
100°-110°	3522.1	12.9
110°-120°	3703.0	13.6
120°-130°	3007.8	11.0
130°-140°	2359.4	8.7
140°-150°	1810.8	6.7
150°-160°	1302.3	4.8
160°-170°	795.6	2.9
170°-180°	268.2	1.0
0°-30°	4727.5	17.4
0°-40°	6795.8	25.0
0°-60°	8903.5	32.7
0°-90°	9148.7	33.6
90°-120°	8527.7	31.3
90°-150°	15705.8	57.7
90°-180°	18072.0	66.4
0°-180°	27220.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	7664	7664	7664	7664	7664	
5°	7512	7436	7494	7520	7549	696
15°	6196	6174	6392	6607	6748	1726
25°	4494	4530	4850	5182	5425	2060
35°	2885	2957	3278	3664	3997	1787
45°	1383	1466	1713	2047	2366	1086
55°	497	580	749	962	1183	464
65°	56	106	237	286	319	94
75°	7	7	4	0	0	11
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°	7664.3	7664.3	7664.3	7664.3	7664.3
2.5°	7682.1	7609.6	7628.7	7628.3	7607.9
5°	7512.3	7436.1	7493.7	7520.4	7549.4
7.5°	7194.9	7135.4	7246.1	7329.0	7389.2
10°	6948.7	6897.9	7041.4	7154.5	7237.9
12.5°	6663.9	6624.8	6798.1	6953.3	7059.9
15°	6196.0	6174.2	6392.5	6607.1	6748.4
17.5°	5694.7	5693.9	5943.1	6209.5	6379.9
20°	5350.6	5361.4	5628.7	5922.4	6121.8
22.5°	5006.5	5031.8	5317.2	5623.5	5851.9
25°	4494.0	4530.3	4850.0	5181.8	5424.7
27.5°	4001.6	4054.5	4390.9	4735.8	5031.7
30°	3678.3	3739.9	4082.4	4445.3	4749.9
32.5°	3360.9	3434.1	3768.0	4151.8	4462.1
35°	2884.8	2957.3	3277.8	3663.6	3997.2
37.5°	2393.1	2464.2	2777.2	3157.0	3517.4
40°	2072.7	2152.5	2450.9	2818.9	3185.1
42.5°	1782.0	1861.8	2142.4	2504.0	2849.9
45°	1383.1	1466.4	1713.1	2046.6	2365.7
47.5°	1052.3	1143.0	1359.3	1661.1	1951.9
50°	856.5	947.2	1160.6	1426.5	1705.7
52.5°	699.3	787.1	979.6	1230.2	1486.1
55°	496.9	580.3	749.0	961.7	1182.8
57.5°	343.4	415.1	566.6	744.0	917.3
60°	248.4	317.3	459.8	603.9	745.3
62.5°	165.4	228.5	367.8	478.3	573.2
65°	55.6	106.4	237.3	286.3	318.9
67.5°	28.2	34.0	124.6	131.5	142.4
70°	22.2	22.2	59.3	63.3	74.2
72.5°	16.3	16.3	23.7	30.5	32.6
75°	7.4	7.4	3.7	0.0	0.0
77.5°	3.7	3.7	3.0	0.0	0.0
80°	3.7	3.7	0.0	0.0	0.0
82.5°	0.7	0.7	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)