

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: P518955

Luminaire Tested: **SQ4-BB-150U-125D-840-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518955
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-840-1D-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: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

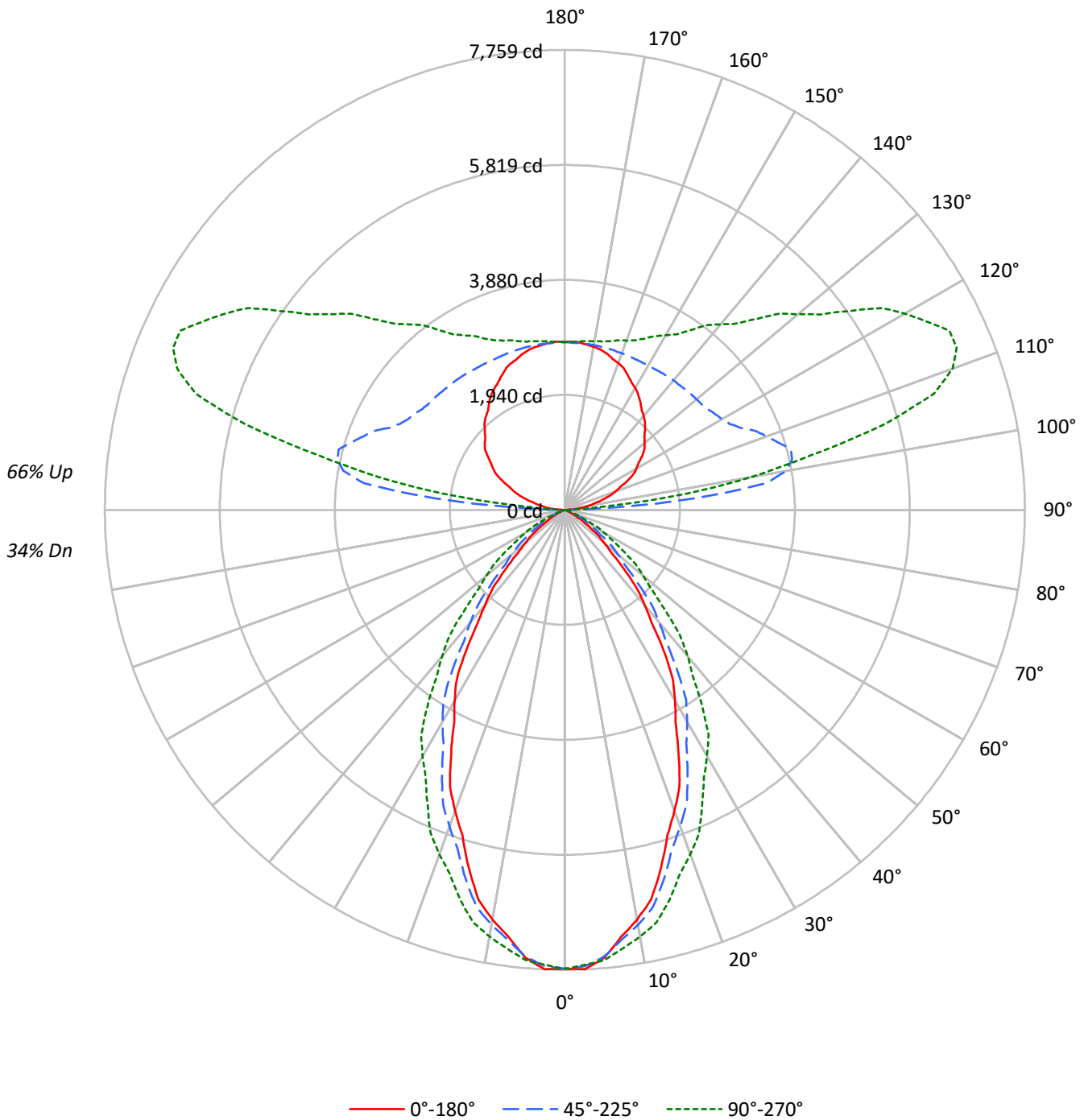
Lumens per Lamp: N/A
Luminaire Lumens: 27494.5 lumens
Efficiency: N/A
Efficacy: 107.3 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: Semi-Indirect

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°	23808	23808	23808
5°	23425	23367	23540
10°	21918	22210	22830
15°	19926	20558	21703
20°	17687	18607	20237
25°	15403	16623	18593
30°	13194	14643	17037
35°	10939	12430	15158
40°	8405	9939	12916
45°	6076	7526	10393
50°	4140	5609	8243
55°	2691	4056	6406
60°	1543	2856	4630
65°	409	1744	2344
70°	202	539	673
75°	89	44	0
80°	66	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	706.5	2.6
10°-20°	1806.7	6.6
20°-30°	2261.8	8.2
30°-40°	2089.2	7.6
40°-50°	1403.8	5.1
50°-60°	725.1	2.6
60°-70°	227.1	0.8
70°-80°	14.4	0.1
80°-90°	6.2	0.0
90°-100°	1315.8	4.8
100°-110°	3557.5	12.9
110°-120°	3740.2	13.6
120°-130°	3038.1	11.0
130°-140°	2383.1	8.7
140°-150°	1829.1	6.7
150°-160°	1315.4	4.8
160°-170°	803.6	2.9
170°-180°	270.9	1.0
0°-30°	4775.0	17.4
0°-40°	6864.2	25.0
0°-60°	8993.1	32.7
0°-90°	9240.7	33.6
90°-120°	8613.5	31.3
90°-150°	15863.8	57.7
90°-180°	18254.0	66.4
0°-180°	27494.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	7741	7741	7741	7741	7741	
5°	7588	7511	7569	7596	7625	703
15°	6258	6236	6457	6674	6816	1743
25°	4539	4576	4899	5234	5479	2081
35°	2914	2987	3311	3700	4037	1805
45°	1397	1481	1730	2067	2390	1097
55°	502	586	756	971	1195	468
65°	56	107	240	289	322	95
75°	8	8	4	0	0	11
85°	0	0	0	0	0	1
90°	6	18	40	43	40	14
95°	204	717	2188	1132	674	214
105°	661	1022	3947	5822	5583	696
115°	1164	1423	3273	6336	7153	1150
125°	1594	1826	2950	4978	5848	1421
135°	1911	2137	2871	4020	4550	1477
145°	2222	2388	2831	3441	3703	1390
155°	2508	2606	2807	3086	3188	1157
165°	2731	2757	2819	2929	2944	769
175°	2834	2831	2822	2858	2852	269
180°	2831	2831	2831	2831	2831	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	7741.4	7741.4	7741.4	7741.4	7741.4
2.5°	7759.4	7686.2	7705.5	7705.0	7684.5
5°	7587.9	7511.0	7569.1	7596.0	7625.3
7.5°	7267.3	7207.2	7319.0	7402.7	7463.5
10°	7018.6	6967.3	7112.2	7226.5	7310.7
12.5°	6731.0	6691.4	6866.5	7023.3	7131.0
15°	6258.3	6236.3	6456.8	6673.5	6816.4
17.5°	5752.0	5751.2	6002.9	6272.0	6444.1
20°	5404.4	5415.4	5685.3	5982.0	6183.4
22.5°	5056.8	5082.5	5370.7	5680.0	5910.8
25°	4539.2	4575.9	4898.8	5233.9	5479.3
27.5°	4041.9	4095.3	4435.1	4783.5	5082.3
30°	3715.3	3777.5	4123.5	4490.1	4797.7
32.5°	3394.7	3468.7	3805.9	4193.6	4507.0
35°	2913.8	2987.0	3310.8	3700.5	4037.4
37.5°	2417.2	2489.0	2805.2	3188.7	3552.7
40°	2093.6	2174.2	2475.6	2847.3	3217.2
42.5°	1800.0	1880.5	2164.0	2529.2	2878.6
45°	1397.0	1481.2	1730.3	2067.2	2389.5
47.5°	1062.9	1154.5	1373.0	1677.8	1971.5
50°	865.2	956.7	1172.3	1440.8	1722.8
52.5°	706.4	795.0	989.5	1242.6	1501.1
55°	501.9	586.1	756.5	971.4	1194.7
57.5°	346.8	419.3	572.3	751.5	926.6
60°	250.9	320.5	464.4	610.0	752.8
62.5°	167.0	230.8	371.5	483.1	579.0
65°	56.2	107.4	239.7	289.1	322.1
67.5°	28.5	34.3	125.8	132.8	143.8
70°	22.5	22.5	59.9	63.9	74.9
72.5°	16.5	16.5	24.0	30.8	33.0
75°	7.5	7.5	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	7.9	8.5	7.9
90°	6.1	18.0	39.6	42.6	39.6
92.5°	86.6	315.4	622.3	270.1	195.7
95°	204.2	716.7	2188.2	1132.4	673.5
97.5°	327.9	822.0	3410.8	2822.7	2073.0
100°	420.6	864.6	3791.2	3953.8	3196.9
102.5°	505.9	923.7	3925.3	4811.4	4245.3
105°	661.3	1021.9	3946.6	5821.5	5583.1
107.5°	805.2	1134.1	3774.1	6451.7	6530.9
110°	917.3	1215.3	3620.5	6620.9	6957.6



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	1017.3	1296.2	3479.1	6587.1	7152.6
115°	1164.2	1423.4	3273.1	6336.2	7152.6
117.5°	1308.0	1551.2	3137.2	5952.8	6878.3
120°	1395.8	1634.2	3056.7	5677.7	6622.4
122.5°	1478.7	1712.3	3007.9	5382.9	6334.7
125°	1593.9	1826.3	2950.0	4978.2	5848.3
127.5°	1699.9	1928.2	2915.9	4647.9	5413.1
130°	1758.4	1993.9	2901.3	4443.8	5135.1
132.5°	1819.4	2052.4	2886.7	4259.7	4896.2
135°	1910.8	2137.3	2870.8	4019.6	4550.0
137.5°	2002.9	2216.8	2857.4	3824.8	4256.8
140°	2066.2	2265.9	2852.5	3699.3	4083.7
142.5°	2127.2	2314.9	2842.8	3586.1	3922.8
145°	2221.7	2388.5	2831.2	3440.6	3702.8
147.5°	2307.6	2455.4	2817.8	3308.7	3510.2
150°	2371.0	2502.1	2812.9	3237.1	3398.0
152.5°	2429.5	2543.9	2810.5	3170.6	3302.9
155°	2508.1	2606.5	2806.8	3086.4	3187.8
157.5°	2589.8	2658.4	2807.4	3027.7	3094.5
160°	2636.1	2692.8	2809.9	2990.7	3038.4
162.5°	2672.7	2719.8	2812.3	2961.2	2997.0
165°	2730.6	2757.4	2819.0	2929.0	2943.9
167.5°	2770.2	2788.7	2819.6	2901.4	2908.6
170°	2794.6	2803.6	2822.0	2889.1	2889.1
172.5°	2814.1	2815.9	2822.0	2874.4	2872.0
175°	2834.2	2831.3	2822.0	2858.5	2852.5
177.5°	2840.9	2833.8	2821.4	2845.7	2838.5
180°	2831.2	2831.2	2831.2	2831.2	2831.2

(END OF REPORT)