

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: P518883

Luminaire Tested: **SQ4-BB-150U-050D-840-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518883
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-050D-840-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 1500 LUMENS PER FOOT
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

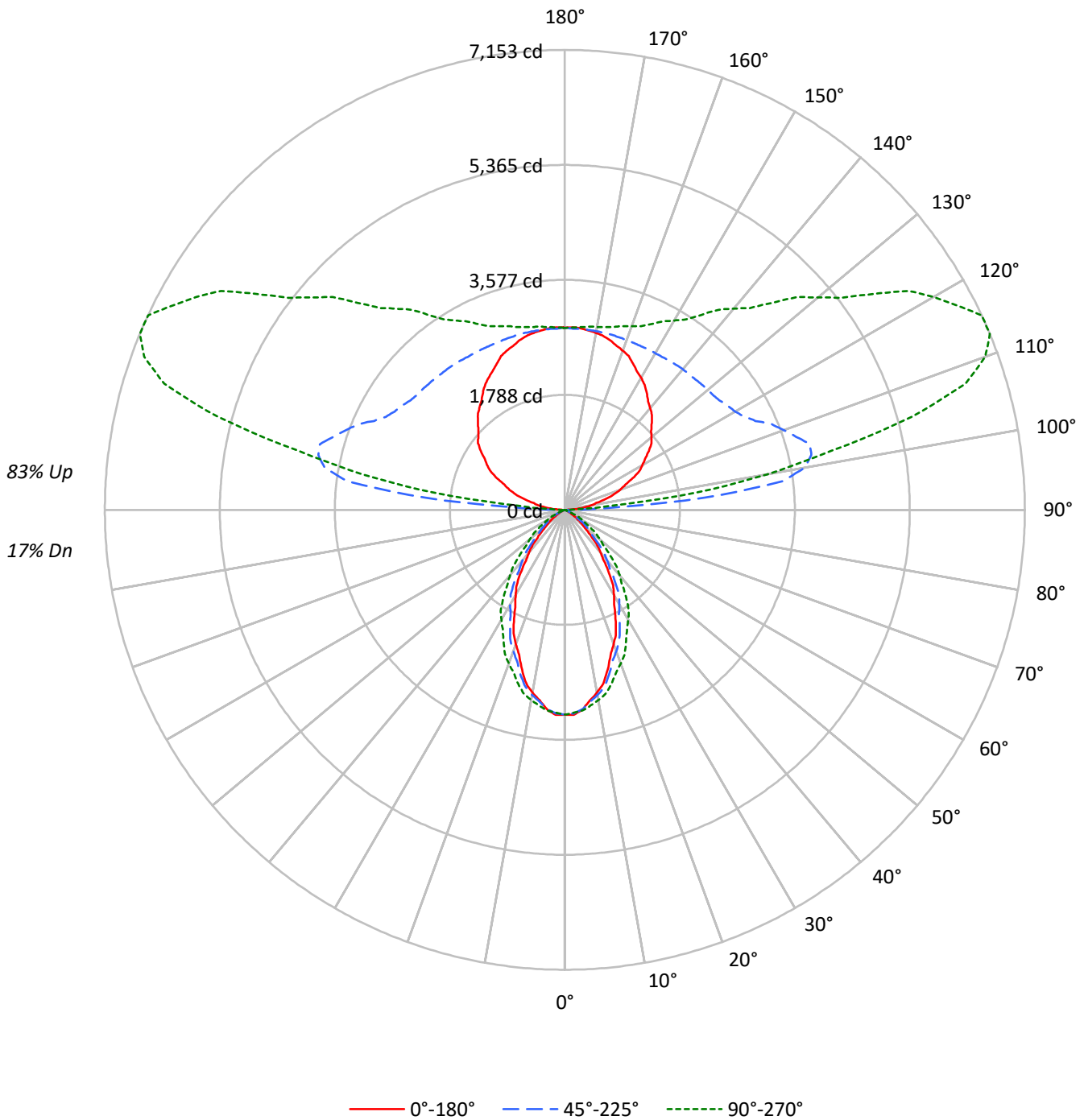
Lumens per Lamp: N/A
Luminaire Lumens: 22057.8 lumens
Efficiency: N/A
Efficacy: 130.6 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 168.9
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									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	50	30	10	50	30	10	50	30	10	0																
RCR																																														
0	99	99	99	99	87	87	87	87	65	65	65	45	45	45	26	26	26	17																												
1	91	87	84	81	80	77	74	72	58	56	54	40	39	38	24	23	23	16																												
2	83	77	71	67	73	68	63	60	51	48	46	36	34	33	22	21	20	14																												
3	76	68	61	56	67	60	55	51	46	42	39	32	30	29	20	19	18	13																												
4	70	60	53	48	62	54	48	43	41	37	34	29	27	25	18	17	16	12																												
5	64	54	47	41	57	48	42	37	37	33	30	26	24	22	17	15	14	11																												
6	59	48	41	36	52	43	37	33	33	29	26	24	21	19	15	14	13	10																												
7	55	44	37	32	48	39	33	29	30	26	23	22	19	17	14	13	12	9																												
8	51	40	33	28	45	36	30	25	28	23	20	20	18	16	13	12	11	8																												
9	47	36	29	25	42	32	27	23	25	21	18	19	16	14	12	11	10	8																												
10	44	33	27	22	39	30	24	20	23	19	16	17	15	13	11	10	9	7																												

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9792	9792	9792
5°	9634	9611	9682
10°	9014	9135	9390
15°	8195	8455	8926
20°	7274	7653	8323
25°	6335	6837	7647
30°	5426	6022	7007
35°	4499	5112	6234
40°	3457	4088	5312
45°	2499	3095	4274
50°	1702	2307	3390
55°	1107	1669	2635
60°	635	1175	1904
65°	168	718	964
70°	83	221	277
75°	37	18	0
80°	27	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	290.6	1.3
10°-20°	743.1	3.4
20°-30°	930.3	4.2
30°-40°	859.2	3.9
40°-50°	577.4	2.6
50°-60°	298.2	1.4
60°-70°	93.4	0.4
70°-80°	5.9	0.0
80°-90°	6.0	0.0
90°-100°	1315.8	6.0
100°-110°	3557.5	16.1
110°-120°	3740.2	17.0
120°-130°	3038.1	13.8
130°-140°	2383.1	10.8
140°-150°	1829.1	8.3
150°-160°	1315.4	6.0
160°-170°	803.6	3.6
170°-180°	270.9	1.2
0°-30°	1963.9	8.9
0°-40°	2823.1	12.8
0°-60°	3698.7	16.8
0°-90°	3804.0	17.2
90°-120°	8613.5	39.0
90°-150°	15863.8	71.9
90°-180°	18254.0	82.8
0°-180°	22057.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3184	3184	3184	3184	3184	
5°	3121	3089	3113	3124	3136	289
15°	2574	2565	2656	2745	2804	717
25°	1867	1882	2015	2153	2254	856
35°	1198	1228	1362	1522	1660	742
45°	575	609	712	850	983	451
55°	206	241	311	400	491	193
65°	23	44	99	119	132	39
75°	3	3	2	0	0	4
85°	0	0	0	0	0	0
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°	3183.9	3183.9	3183.9	3183.9	3183.9
2.5°	3191.3	3161.2	3169.1	3168.9	3160.5
5°	3120.8	3089.1	3113.1	3124.1	3136.2
7.5°	2988.9	2964.2	3010.2	3044.6	3069.6
10°	2886.6	2865.6	2925.1	2972.1	3006.8
12.5°	2768.3	2752.1	2824.1	2888.6	2932.8
15°	2573.9	2564.9	2655.6	2744.7	2803.5
17.5°	2365.7	2365.4	2468.9	2579.6	2650.3
20°	2222.7	2227.3	2338.3	2460.3	2543.1
22.5°	2079.8	2090.3	2208.9	2336.1	2431.0
25°	1866.9	1882.0	2014.8	2152.6	2253.5
27.5°	1662.4	1684.3	1824.1	1967.4	2090.3
30°	1528.0	1553.6	1695.9	1846.7	1973.2
32.5°	1396.2	1426.6	1565.3	1724.7	1853.7
35°	1198.4	1228.5	1361.7	1521.9	1660.5
37.5°	994.1	1023.7	1153.7	1311.5	1461.2
40°	861.1	894.2	1018.2	1171.1	1323.2
42.5°	740.3	773.4	890.0	1040.2	1183.9
45°	574.6	609.2	711.6	850.2	982.8
47.5°	437.2	474.8	564.7	690.1	810.8
50°	355.8	393.5	482.1	592.6	708.6
52.5°	290.5	327.0	407.0	511.0	617.4
55°	206.4	241.0	311.2	399.5	491.4
57.5°	142.6	172.5	235.4	309.1	381.1
60°	103.2	131.8	191.0	250.9	309.6
62.5°	68.7	94.9	152.8	198.7	238.1
65°	23.1	44.2	98.6	118.9	132.5
67.5°	11.7	14.1	51.8	54.6	59.1
70°	9.2	9.2	24.6	26.3	30.8
72.5°	6.8	6.8	9.9	12.7	13.6
75°	3.1	3.1	1.5	0.0	0.0
77.5°	1.5	1.5	1.2	0.0	0.0
80°	1.5	1.5	0.0	0.0	0.0
82.5°	0.3	0.3	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)