

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: P519603

Luminaire Tested: **SQ4-WB-150U-100D-840-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P519603
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-25, G2-2009-966-13)
Test Lab: INNOVATION CENTER
Issue Date: 4/29/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-WB-150U-100D-840-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 1500 LUMENS PER FOOT
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

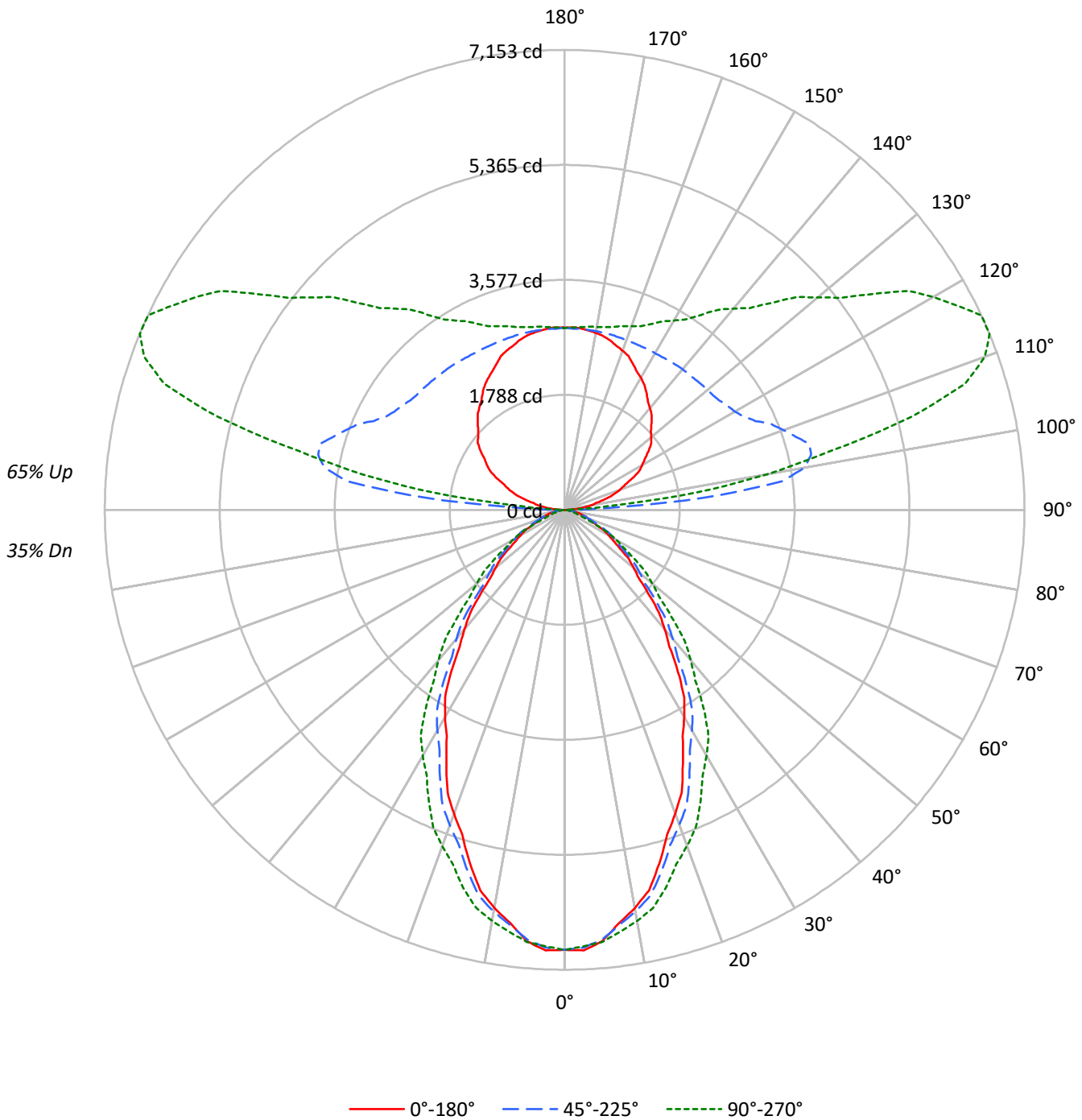
Lumens per Lamp: N/A
Luminaire Lumens: 28230.1 lumens
Efficiency: N/A
Efficacy: 126.2 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: Semi-Indirect

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	104	104	104	104	94	94	94	94	75	75	75	58	58	58	43	43	43	35				
1	95	91	88	85	86	83	80	77	67	65	63	52	51	50	39	38	38	31				
2	87	81	75	71	79	73	69	65	60	56	54	47	45	43	35	34	33	28				
3	80	72	65	60	73	65	60	55	53	49	46	42	40	37	32	30	29	24				
4	74	64	57	51	67	58	52	47	48	44	40	38	35	33	29	27	26	22				
5	68	57	50	44	62	53	46	41	43	39	35	35	31	29	27	25	23	20				
6	63	52	44	39	57	47	41	36	39	35	31	32	28	26	25	22	21	18				
7	58	47	40	34	53	43	37	32	36	31	28	29	26	23	23	20	19	16				
8	54	43	36	31	49	39	33	29	33	28	25	27	23	21	21	19	17	15				
9	51	39	32	27	46	36	30	26	30	26	22	25	21	19	20	17	16	13				
10	47	36	29	25	43	33	27	23	28	23	20	23	20	17	18	16	14	12				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	21043	21043	21043
5°	20780	20706	20827
10°	19633	19811	20270
15°	18124	18545	19376
20°	16458	17078	18207
25°	14762	15567	16963
30°	13199	14063	15673
35°	11542	12377	14146
40°	9715	10486	12246
45°	8017	8710	10224
50°	6694	7297	8518
55°	5682	6262	7035
60°	4857	5429	5614
65°	3867	4566	3627
70°	3429	3563	2214
75°	3175	2890	1356
80°	2924	2658	1171
85°	2650	2438	953



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	627.6	2.2
10°-20°	1632.4	5.8
20°-30°	2114.5	7.5
30°-40°	2070.6	7.3
40°-50°	1584.9	5.6
50°-60°	1056.1	3.7
60°-70°	576.3	2.0
70°-80°	240.1	0.9
80°-90°	73.9	0.3
90°-100°	1315.8	4.7
100°-110°	3557.5	12.6
110°-120°	3740.2	13.2
120°-130°	3038.1	10.8
130°-140°	2383.1	8.4
140°-150°	1829.1	6.5
150°-160°	1315.4	4.7
160°-170°	803.6	2.8
170°-180°	270.9	1.0
0°-30°	4374.5	15.5
0°-40°	6445.1	22.8
0°-60°	9086.1	32.2
0°-90°	9976.4	35.3
90°-120°	8613.5	30.5
90°-150°	15863.8	56.2
90°-180°	18254.0	64.7
0°-180°	28230.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	6842	6842	6842	6842	6842	
5°	6731	6664	6707	6723	6746	626
15°	5692	5672	5824	5983	6086	1590
25°	4350	4362	4588	4788	4999	2001
35°	3074	3089	3297	3518	3768	1911
45°	1843	1879	2003	2154	2351	1438
55°	1060	1104	1168	1212	1312	961
65°	531	575	628	548	498	552
75°	267	267	243	167	114	285
85°	75	75	69	45	27	82
90°	6	18	40	43	40	17
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°	6842.3	6842.3	6842.3	6842.3	6842.3
2.5°	6859.1	6798.1	6813.5	6813.1	6794.3
5°	6731.2	6663.7	6707.2	6722.8	6746.2
7.5°	6481.4	6430.4	6509.7	6568.4	6615.9
10°	6286.9	6242.8	6343.9	6429.4	6491.0
12.5°	6061.1	6024.1	6149.4	6264.1	6344.5
15°	5692.4	5671.9	5824.5	5983.0	6085.7
17.5°	5297.9	5287.9	5463.0	5648.0	5779.5
20°	5028.9	5026.0	5218.1	5410.7	5563.3
22.5°	4757.5	4764.0	4965.9	5166.2	5339.9
25°	4350.4	4362.1	4587.6	4787.5	4998.9
27.5°	3973.9	3979.2	4212.3	4423.4	4648.8
30°	3716.9	3731.6	3960.1	4178.6	4413.4
32.5°	3459.9	3476.9	3700.7	3926.5	4166.0
35°	3074.4	3089.1	3296.6	3518.4	3767.9
37.5°	2676.9	2696.8	2881.0	3090.8	3336.2
40°	2419.9	2449.2	2612.0	2809.6	3050.4
42.5°	2172.5	2208.9	2359.8	2547.3	2764.5
45°	1843.4	1878.7	2002.6	2154.1	2350.8
47.5°	1560.0	1600.5	1695.7	1826.2	1994.1
50°	1399.1	1437.2	1525.2	1621.9	1780.4
52.5°	1257.4	1295.5	1373.9	1448.4	1583.4
55°	1059.8	1103.9	1167.9	1212.2	1312.0
57.5°	897.7	940.0	990.8	1010.8	1071.2
60°	789.6	836.6	882.7	880.4	912.7
62.5°	691.1	731.1	777.0	745.2	747.0
65°	531.4	575.4	627.5	548.3	498.4
67.5°	429.3	438.7	492.4	382.4	323.1
70°	381.3	381.3	396.3	296.1	246.2
72.5°	335.7	335.7	321.8	240.8	188.5
75°	267.2	267.2	243.2	166.9	114.1
77.5°	206.0	203.6	186.1	124.6	82.9
80°	165.1	165.1	150.1	98.3	66.1
82.5°	129.1	129.1	116.5	76.8	49.2
85°	75.1	75.1	69.1	44.6	27.0
87.5°	27.6	30.0	31.9	22.9	19.9
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)