

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: P565177

Luminaire Tested: **SQ4-PW1-150U-125D-840-1D-UNV-STD-W-12**

Issue Date: 7/30/2021

Test Information

Test Method: LM-79-2019
Report Number: P565177
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-25, G2-2106-289-3)
Test Lab: INNOVATION CENTER
Issue Date: 7/30/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-PW1-150U-125D-840-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE WAVES CONTINUOUS LENS.
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: 32860.4 lumens
Efficiency: N/A
Efficacy: 128.2 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.19 / 1.31
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: General Diffuse

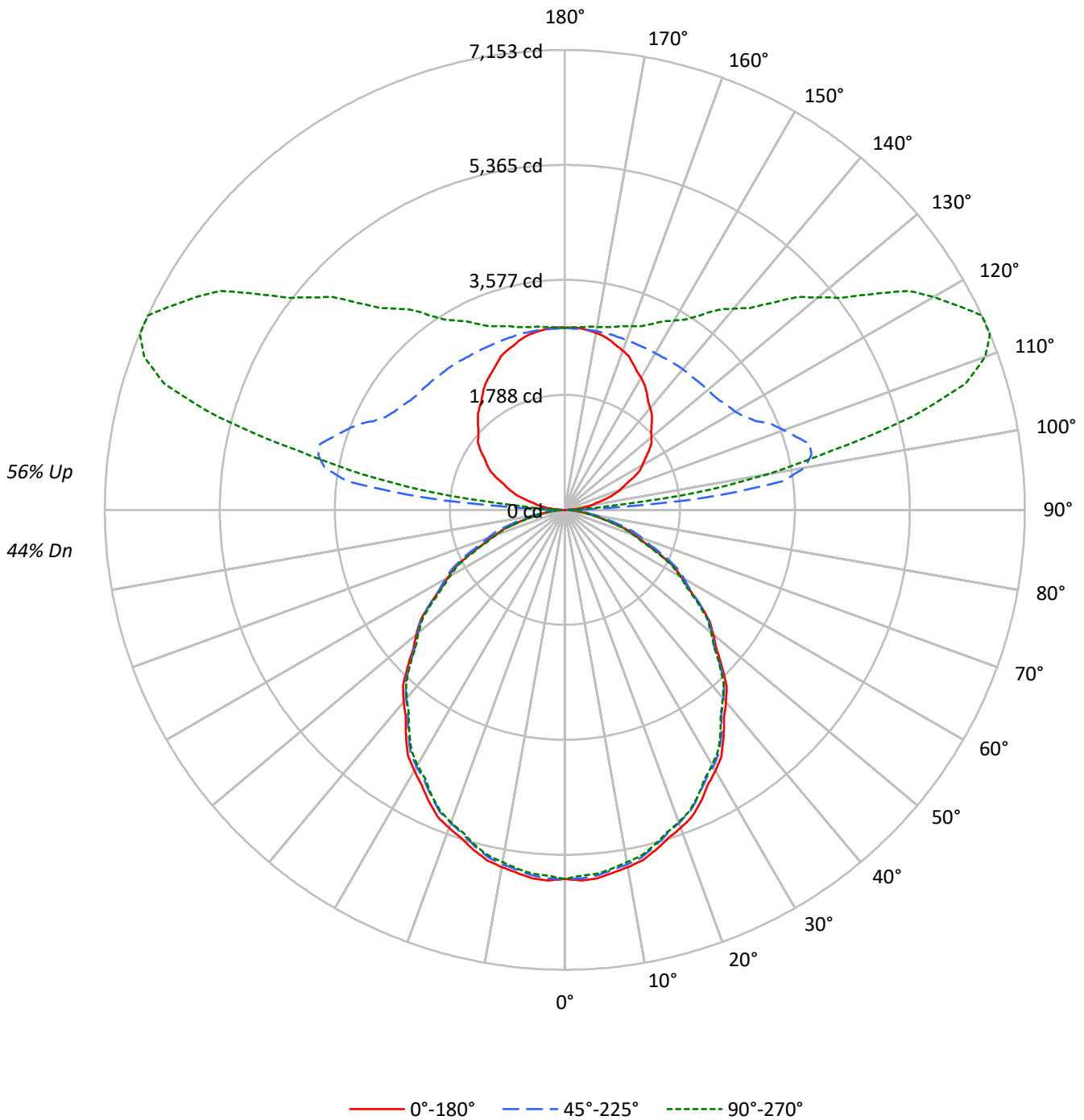
Input Watts (W): 256.3
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	106	106	106	106	97	97	97	97	80	80	80	65	65	65	51	51	51	44
1	97	92	89	85	88	85	82	79	70	68	66	57	56	54	45	44	43	38
2	88	81	75	70	80	74	69	65	62	58	55	50	48	45	40	38	37	32
3	80	71	64	58	73	65	59	54	55	50	46	45	41	38	35	33	31	27
4	73	63	55	49	67	58	51	46	48	43	39	40	36	33	32	29	27	23
5	67	56	48	42	62	52	45	39	43	38	34	36	32	29	29	26	23	20
6	62	50	42	36	57	46	39	34	39	34	30	32	28	25	26	23	21	18
7	57	45	37	32	52	42	35	30	35	30	26	29	25	22	24	21	18	16
8	53	41	33	28	49	38	31	26	32	27	23	27	23	20	22	19	16	14
9	50	37	30	25	45	35	28	24	30	24	21	25	21	18	20	17	15	13
10	46	34	27	22	42	32	25	21	27	22	19	23	19	16	19	16	13	11

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	17649	17649	17649
5°	17763	17622	17545
10°	17621	17479	17384
15°	17434	17241	17177
20°	17226	16961	16928
25°	16985	16677	16625
30°	16627	16375	16267
35°	16154	15926	15831
40°	15650	15407	15346
45°	15042	14844	14778
50°	14418	14297	14200
55°	13744	13744	13528
60°	12906	13155	12688
65°	11811	12399	11517
70°	10411	11412	10138
75°	8892	10213	8652
80°	6895	8597	6985
85°	4460	6602	5889



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	540.4	1.6
10°-20°	1525.7	4.6
20°-30°	2263.1	6.9
30°-40°	2648.0	8.1
40°-50°	2636.2	8.0
50°-60°	2276.4	6.9
60°-70°	1638.6	5.0
70°-80°	859.3	2.6
80°-90°	219.0	0.7
90°-100°	1315.8	4.0
100°-110°	3557.5	10.8
110°-120°	3740.2	11.4
120°-130°	3038.1	9.2
130°-140°	2383.1	7.3
140°-150°	1829.1	5.6
150°-160°	1315.4	4.0
160°-170°	803.6	2.4
170°-180°	270.9	0.8
0°-30°	4329.1	13.2
0°-40°	6977.1	21.2
0°-60°	11889.8	36.2
0°-90°	14606.6	44.5
90°-120°	8613.5	26.2
90°-150°	15863.8	48.3
90°-180°	18254.0	55.6
0°-180°	32860.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	5739	5739	5739	5739	5739	
5°	5754	5690	5708	5693	5683	545
15°	5476	5407	5415	5405	5395	1543
25°	5006	4922	4914	4884	4899	2302
35°	4303	4243	4242	4202	4217	2690
45°	3458	3429	3413	3403	3398	2668
55°	2563	2558	2563	2528	2523	2287
65°	1623	1672	1704	1637	1583	1608
75°	748	818	860	802	728	802
85°	126	166	187	177	167	167
90°	6	18	40	43	40	18
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°	5738.7	5738.7	5738.7	5738.7	5738.7
2.5°	5771.0	5723.6	5738.7	5725.9	5698.2
5°	5753.9	5689.6	5708.3	5693.0	5683.1
7.5°	5695.2	5635.9	5649.7	5633.4	5627.4
10°	5642.6	5583.3	5597.1	5576.7	5566.8
12.5°	5581.9	5518.7	5532.4	5512.0	5506.1
15°	5475.8	5406.6	5415.1	5404.8	5394.9
17.5°	5352.4	5282.2	5283.6	5267.4	5265.4
20°	5263.4	5189.3	5182.5	5162.5	5172.4
22.5°	5166.3	5088.2	5081.4	5053.4	5067.2
25°	5005.5	4921.5	4914.5	4884.5	4899.4
27.5°	4819.5	4736.4	4736.6	4694.5	4710.3
30°	4682.0	4602.9	4611.2	4561.1	4580.8
32.5°	4536.3	4465.2	4469.6	4419.5	4439.3
35°	4302.7	4243.4	4242.1	4202.0	4216.8
37.5°	4064.1	4011.7	4003.4	3980.3	3984.2
40°	3898.3	3853.8	3837.6	3822.4	3822.4
42.5°	3724.3	3683.8	3667.7	3656.5	3652.5
45°	3458.4	3428.7	3412.9	3402.6	3397.7
47.5°	3195.5	3167.8	3154.0	3146.8	3141.9
50°	3013.4	2993.7	2988.2	2972.9	2967.9
52.5°	2831.4	2819.6	2814.2	2794.9	2790.0
55°	2563.4	2558.5	2563.4	2527.9	2523.0
57.5°	2284.4	2292.3	2308.6	2260.8	2249.0
60°	2098.3	2118.1	2138.7	2082.7	2062.9
62.5°	1908.2	1939.8	1968.8	1904.5	1876.8
65°	1623.0	1672.4	1703.9	1636.9	1582.6
67.5°	1348.0	1409.3	1447.1	1374.9	1313.6
70°	1157.8	1227.1	1269.1	1196.7	1127.5
72.5°	992.0	1069.1	1103.2	1034.9	965.7
75°	748.3	817.5	859.5	802.2	728.1
77.5°	530.9	596.1	631.0	581.1	519.8
80°	389.3	458.5	485.4	443.8	394.4
82.5°	276.1	333.4	351.9	326.9	293.3
85°	126.4	166.0	187.1	176.7	166.9
87.5°	33.6	63.6	84.8	85.5	88.8
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)