

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: P565189

Luminaire Tested: **SQ4-PW1-150U-125D-940-1D-UNV-STD-W-12**

Issue Date: 7/30/2021

Test Information

Test Method: LM-79-2019
Report Number: P565189
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-940-1D-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, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 28124.2 lumens
Efficiency: N/A
Efficacy: 109.7 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

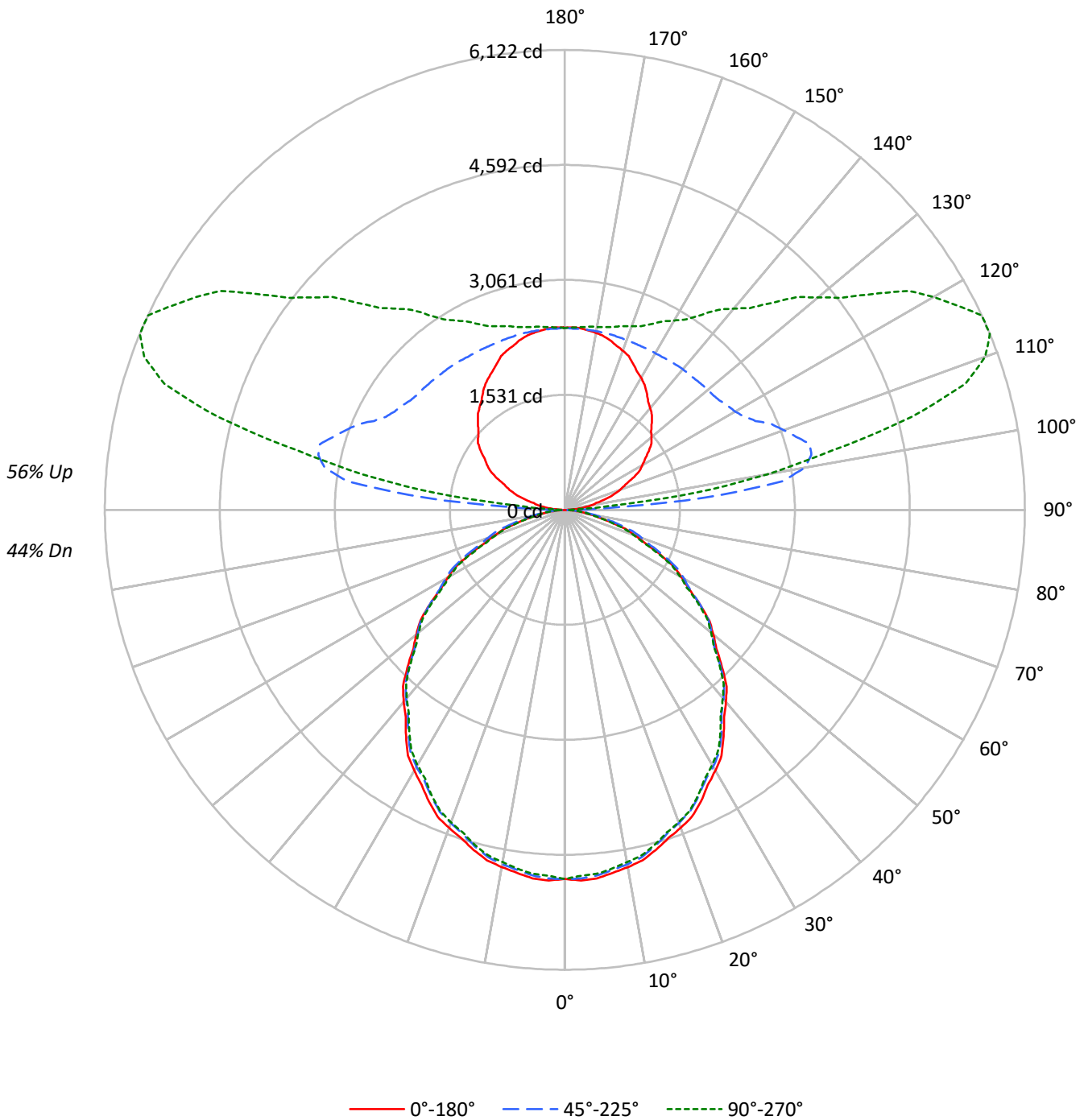
Input Watts (W): 256.3
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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°	15105	15105	15105
5°	15203	15083	15016
10°	15081	14960	14878
15°	14921	14756	14701
20°	14743	14516	14488
25°	14537	14273	14229
30°	14230	14015	13923
35°	13826	13631	13550
40°	13394	13186	13134
45°	12873	12704	12648
50°	12340	12236	12154
55°	11764	11764	11578
60°	11046	11259	10860
65°	10109	10612	9857
70°	8911	9767	8677
75°	7610	8742	7404
80°	5901	7357	5977
85°	3818	5649	5039



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	462.5	1.6
10°-20°	1305.8	4.6
20°-30°	1936.9	6.9
30°-40°	2266.3	8.1
40°-50°	2256.2	8.0
50°-60°	1948.4	6.9
60°-70°	1402.5	5.0
70°-80°	735.4	2.6
80°-90°	187.4	0.7
90°-100°	1126.1	4.0
100°-110°	3044.8	10.8
110°-120°	3201.2	11.4
120°-130°	2600.2	9.2
130°-140°	2039.6	7.3
140°-150°	1565.4	5.6
150°-160°	1125.8	4.0
160°-170°	687.8	2.4
170°-180°	231.9	0.8
0°-30°	3705.1	13.2
0°-40°	5971.5	21.2
0°-60°	10176.1	36.2
0°-90°	12501.4	44.5
90°-120°	7372.0	26.2
90°-150°	13577.3	48.3
90°-180°	15623.0	55.6
0°-180°	28124.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4912	4912	4912	4912	4912	
5°	4924	4870	4886	4872	4864	466
15°	4686	4627	4635	4626	4617	1321
25°	4284	4212	4206	4180	4193	1970
35°	3683	3632	3631	3596	3609	2302
45°	2960	2934	2921	2912	2908	2284
55°	2194	2190	2194	2164	2159	1958
65°	1389	1431	1458	1401	1354	1377
75°	640	700	736	687	623	686
85°	108	142	160	151	143	143
90°	5	15	34	36	34	16
95°	175	613	1873	969	576	183
105°	566	875	3378	4982	4778	596
115°	996	1218	2801	5423	6122	984
125°	1364	1563	2525	4261	5005	1216
135°	1635	1829	2457	3440	3894	1264
145°	1902	2044	2423	2945	3169	1190
155°	2147	2231	2402	2642	2728	990
165°	2337	2360	2413	2507	2520	658
175°	2426	2423	2415	2446	2441	230
180°	2423	2423	2423	2423	2423	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	4911.6	4911.6	4911.6	4911.6	4911.6
2.5°	4939.3	4898.6	4911.6	4900.6	4876.9
5°	4924.5	4869.5	4885.6	4872.4	4864.0
7.5°	4874.3	4823.6	4835.4	4821.4	4816.4
10°	4829.3	4778.6	4790.4	4772.9	4764.4
12.5°	4777.4	4723.3	4735.0	4717.6	4712.5
15°	4686.5	4627.3	4634.6	4625.8	4617.3
17.5°	4580.9	4520.9	4522.1	4508.2	4506.5
20°	4504.8	4441.3	4435.5	4418.4	4426.9
22.5°	4421.7	4354.8	4349.0	4325.0	4336.9
25°	4284.1	4212.2	4206.2	4180.5	4193.2
27.5°	4124.8	4053.8	4053.9	4017.8	4031.4
30°	4007.1	3939.4	3946.6	3903.7	3920.6
32.5°	3882.5	3821.6	3825.4	3782.5	3799.4
35°	3682.6	3631.8	3630.7	3596.3	3609.0
37.5°	3478.3	3433.5	3426.4	3406.6	3410.0
40°	3336.4	3298.3	3284.5	3271.5	3271.5
42.5°	3187.5	3152.8	3139.1	3129.5	3126.1
45°	2959.9	2934.5	2921.0	2912.2	2908.0
47.5°	2734.9	2711.2	2699.4	2693.3	2689.0
50°	2579.1	2562.2	2557.5	2544.4	2540.2
52.5°	2423.3	2413.2	2408.6	2392.1	2387.8
55°	2194.0	2189.7	2194.0	2163.6	2159.4
57.5°	1955.1	1961.9	1975.9	1935.0	1924.8
60°	1795.9	1812.8	1830.5	1782.5	1765.6
62.5°	1633.1	1660.2	1685.1	1630.0	1606.3
65°	1389.1	1431.4	1458.3	1401.0	1354.5
67.5°	1153.7	1206.1	1238.5	1176.7	1124.2
70°	991.0	1050.2	1086.2	1024.2	965.0
72.5°	849.0	915.0	944.2	885.8	826.5
75°	640.4	699.7	735.7	686.6	623.1
77.5°	454.4	510.2	540.1	497.3	444.9
80°	333.2	392.4	415.4	379.8	337.5
82.5°	236.3	285.4	301.2	279.8	251.0
85°	108.2	142.0	160.1	151.3	142.8
87.5°	28.7	54.5	72.6	73.1	76.0
90°	5.2	15.4	33.9	36.5	33.9
92.5°	74.1	269.9	532.6	231.2	167.5
95°	174.8	613.4	1872.8	969.2	576.4
97.5°	280.7	703.5	2919.2	2415.8	1774.2
100°	359.9	739.9	3244.7	3383.9	2736.1
102.5°	433.0	790.5	3359.5	4117.9	3633.4
105°	566.0	874.6	3377.8	4982.5	4778.4
107.5°	689.1	970.7	3230.1	5521.8	5589.6
110°	785.1	1040.1	3098.7	5666.6	5954.8



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	870.7	1109.4	2977.7	5637.7	6121.7
115°	996.4	1218.3	2801.3	5422.9	6121.7
117.5°	1119.5	1327.6	2685.0	5094.8	5887.0
120°	1194.6	1398.6	2616.1	4859.4	5667.9
122.5°	1265.6	1465.5	2574.4	4607.1	5421.6
125°	1364.1	1563.1	2524.8	4260.7	5005.4
127.5°	1454.9	1650.3	2495.6	3978.0	4632.9
130°	1505.0	1706.5	2483.1	3803.3	4395.0
132.5°	1557.2	1756.6	2470.6	3645.8	4190.5
135°	1635.4	1829.2	2457.0	3440.2	3894.2
137.5°	1714.2	1897.3	2445.6	3273.5	3643.3
140°	1768.4	1939.3	2441.4	3166.1	3495.1
142.5°	1820.6	1981.3	2433.0	3069.2	3357.4
145°	1901.5	2044.3	2423.1	2944.7	3169.1
147.5°	1975.0	2101.5	2411.6	2831.9	3004.3
150°	2029.3	2141.5	2407.5	2770.6	2908.3
152.5°	2079.3	2177.3	2405.4	2713.7	2826.9
155°	2146.6	2230.8	2402.3	2641.6	2728.3
157.5°	2216.5	2275.2	2402.8	2591.4	2648.5
160°	2256.2	2304.6	2404.9	2559.7	2600.5
162.5°	2287.5	2327.8	2407.0	2534.4	2565.0
165°	2337.0	2360.0	2412.7	2506.9	2519.6
167.5°	2371.0	2386.8	2413.2	2483.3	2489.4
170°	2391.8	2399.5	2415.3	2472.7	2472.7
172.5°	2408.5	2410.0	2415.3	2460.1	2458.1
175°	2425.7	2423.2	2415.3	2446.5	2441.4
177.5°	2431.5	2425.3	2414.8	2435.5	2429.4
180°	2423.1	2423.1	2423.1	2423.1	2423.1

(END OF REPORT)