

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: P564493

Luminaire Tested: **SQ4-PR1-150U-100D-940-1D-UNV-STD-W-12**

Issue Date: 7/30/2021

Test Information

Test Method: LM-79-2019
Report Number: P564493
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-25, G2-2106-289-4)
Test Lab: INNOVATION CENTER
Issue Date: 7/30/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-PR1-150U-100D-940-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE RIPPLE CONTINUOUS LENS.
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 1500 LUMENS PER FOOT
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

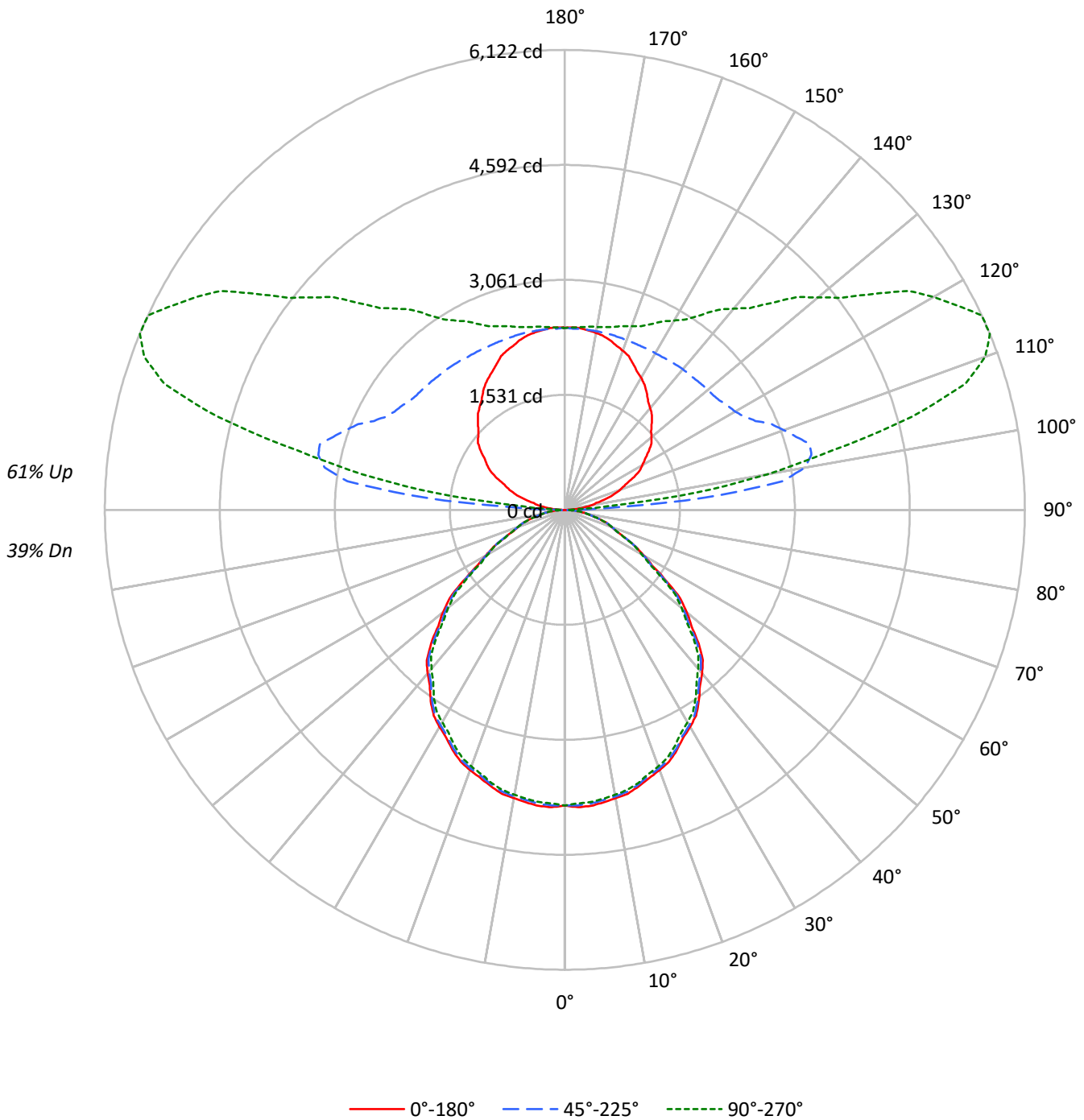
Lumens per Lamp: N/A
Luminaire Lumens: 25469.7 lumens
Efficiency: N/A
Efficacy: 113.9 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: Semi-Indirect

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	0
RCR																		
0	104	104	104	104	95	95	95	95	77	77	77	61	61	61	46	46	46	39
1	95	91	88	84	87	83	80	77	68	66	64	54	52	51	41	40	39	33
2	87	80	74	69	79	73	68	64	60	56	53	47	45	43	36	35	33	28
3	80	70	63	58	72	64	58	53	53	48	45	42	39	36	32	30	28	24
4	73	62	55	49	66	57	50	45	47	42	38	38	34	31	29	27	25	21
5	67	56	48	42	61	51	44	39	42	37	33	34	30	27	26	24	22	18
6	62	50	42	36	56	46	39	34	38	33	29	31	27	24	24	21	19	16
7	57	45	37	32	52	41	34	30	34	29	25	28	24	21	22	19	17	14
8	53	41	33	28	48	37	31	26	31	26	22	25	22	19	20	17	15	13
9	49	37	30	25	45	34	28	23	29	24	20	23	20	17	18	16	14	11
10	46	34	27	22	42	31	25	21	26	21	18	21	18	15	17	14	12	10

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	12108	12108	12108
5°	12217	12123	12060
10°	12178	12093	12030
15°	12125	12049	11984
20°	12063	11986	11897
25°	11978	11898	11760
30°	11849	11765	11596
35°	11674	11572	11407
40°	11408	11286	11082
45°	10943	10751	10530
50°	10124	9880	9686
55°	8836	8636	8454
60°	7446	7383	7238
65°	6440	6465	6416
70°	5916	5945	5945
75°	5681	5681	5721
80°	5345	5405	5345
85°	4308	4785	4785



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	372.3	1.5
10°-20°	1065.2	4.2
20°-30°	1606.6	6.3
30°-40°	1914.3	7.5
40°-50°	1887.3	7.4
50°-60°	1442.4	5.7
60°-70°	892.6	3.5
70°-80°	507.0	2.0
80°-90°	159.3	0.6
90°-100°	1126.1	4.4
100°-110°	3044.8	12.0
110°-120°	3201.2	12.6
120°-130°	2600.2	10.2
130°-140°	2039.6	8.0
140°-150°	1565.4	6.1
150°-160°	1125.8	4.4
160°-170°	687.8	2.7
170°-180°	231.9	0.9
0°-30°	3044.1	12.0
0°-40°	4958.4	19.5
0°-60°	8288.1	32.5
0°-90°	9846.9	38.7
90°-120°	7372.0	28.9
90°-150°	13577.3	53.3
90°-180°	15623.0	61.3
0°-180°	25469.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3937	3937	3937	3937	3937	
5°	3957	3914	3927	3913	3906	375
15°	3808	3768	3784	3771	3764	1075
25°	3530	3487	3506	3469	3466	1625
35°	3110	3073	3082	3042	3038	1941
45°	2516	2483	2472	2428	2421	1928
55°	1648	1622	1611	1583	1577	1477
65°	885	878	888	882	882	897
75°	478	478	478	482	482	505
85°	122	129	136	136	136	142
90°	5	15	34	36	34	17
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	

TEST NUMBER: P564493

CATALOG NUMBER: SQ4-PR1-150U-100D-940-1D-UNV-STD-W-12

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3936.9	3936.9	3936.9	3936.9	3936.9
2.5°	3961.3	3926.9	3936.9	3928.4	3909.8
5°	3957.3	3914.2	3926.8	3913.0	3906.4
7.5°	3926.8	3884.3	3896.9	3883.3	3879.3
10°	3899.6	3859.8	3872.5	3858.8	3852.2
12.5°	3869.8	3827.4	3842.7	3826.2	3819.6
15°	3808.1	3768.3	3784.3	3770.6	3764.0
17.5°	3740.3	3697.8	3713.8	3698.0	3689.4
20°	3686.0	3646.2	3662.3	3638.5	3635.1
22.5°	3626.3	3586.5	3602.6	3570.7	3570.0
25°	3530.0	3486.9	3506.3	3468.9	3465.6
27.5°	3415.4	3375.6	3391.7	3353.6	3349.6
30°	3336.7	3296.9	3313.0	3272.2	3265.5
32.5°	3247.2	3210.1	3223.5	3182.7	3178.7
35°	3109.5	3073.1	3082.4	3041.6	3038.3
37.5°	2952.9	2919.7	2925.1	2880.2	2876.9
40°	2841.6	2808.5	2811.1	2763.6	2760.3
42.5°	2719.6	2686.4	2683.6	2636.1	2632.8
45°	2516.1	2483.0	2472.0	2427.8	2421.2
47.5°	2284.2	2251.0	2230.6	2194.5	2189.9
50°	2116.0	2082.8	2065.1	2034.4	2024.4
52.5°	1934.2	1901.1	1886.1	1858.0	1848.1
55°	1648.0	1621.5	1610.7	1583.4	1576.8
57.5°	1376.1	1358.2	1355.0	1328.5	1325.9
60°	1210.6	1200.6	1200.4	1176.7	1176.7
62.5°	1069.5	1062.2	1067.5	1051.8	1049.2
65°	885.0	878.4	888.4	881.7	881.7
67.5°	739.2	739.2	745.3	742.6	742.6
70°	657.9	657.9	661.2	661.2	661.2
72.5°	584.6	582.0	590.7	590.6	588.0
75°	478.1	478.1	478.1	481.5	481.5
77.5°	372.3	373.0	375.7	375.0	372.3
80°	301.8	305.1	305.2	301.8	301.8
82.5°	231.3	234.6	234.7	233.9	231.3
85°	122.1	128.7	135.6	135.6	135.6
87.5°	36.3	49.0	61.0	61.5	58.3
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



TEST NUMBER: P564493

CATALOG NUMBER: SQ4-PR1-150U-100D-940-1D-UNV-STD-W-12

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)