

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: P564433

Luminaire Tested: **SQ4-PR1-150U-050D-840-1D-UNV-STD-W-12**

Issue Date: 7/30/2021

Test Information

Test Method: LM-79-2019
Report Number: P564433
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-050D-840-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE RIPPLE CONTINUOUS LENS.
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 1500 LUMENS PER FOOT
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

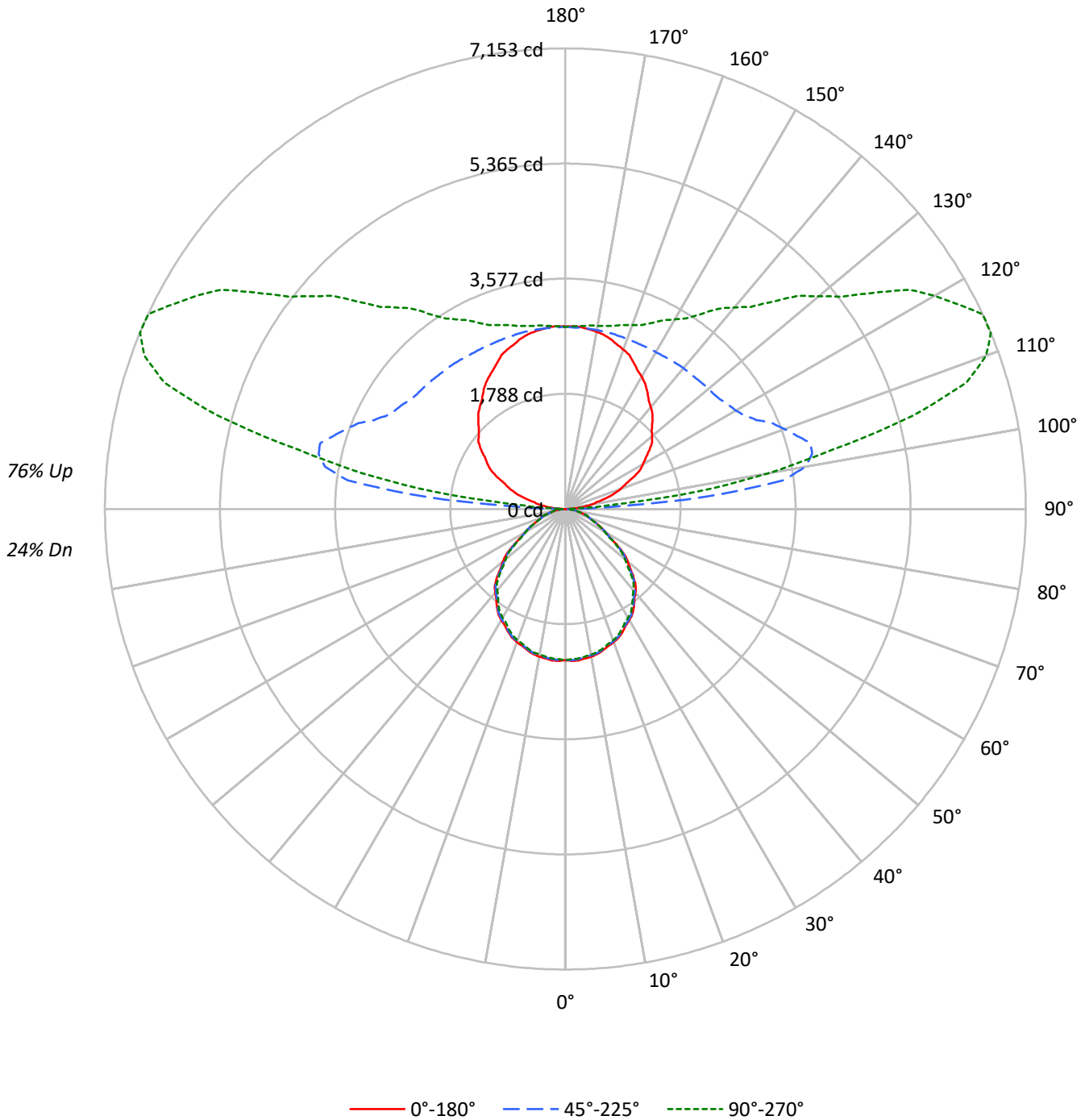
Lumens per Lamp: N/A
Luminaire Lumens: 24131.6 lumens
Efficiency: N/A
Efficacy: 142.9 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 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	
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	101	101	101	101	90	90	90	90	69	69	69	50	50	50	33	33	33	24
1	92	88	84	81	82	78	75	73	61	59	57	44	43	42	29	28	28	21
2	84	77	71	66	75	69	64	60	53	50	47	39	37	35	26	25	24	18
3	77	68	61	55	68	61	55	50	47	43	40	34	32	30	23	21	20	15
4	70	60	52	47	62	54	47	42	42	37	34	31	28	25	20	19	17	13
5	64	53	46	40	57	48	41	36	37	33	29	28	24	22	18	17	15	11
6	59	48	40	34	52	43	36	31	33	29	25	25	22	19	17	15	13	10
7	54	43	35	30	48	38	32	27	30	26	22	22	19	17	15	13	12	9
8	50	39	31	26	45	35	28	24	27	23	19	20	17	15	14	12	11	8
9	47	35	28	23	42	32	25	21	25	20	17	19	16	13	13	11	10	7
10	44	32	25	21	39	29	23	19	23	19	15	17	14	12	12	10	9	7

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7224	7224	7224
5°	7289	7233	7195
10°	7266	7215	7177
15°	7234	7189	7150
20°	7197	7151	7098
25°	7147	7099	7016
30°	7070	7019	6919
35°	6965	6904	6806
40°	6806	6733	6611
45°	6529	6415	6283
50°	6040	5895	5779
55°	5272	5153	5044
60°	4443	4405	4318
65°	3842	3858	3828
70°	3529	3547	3547
75°	3390	3390	3414
80°	3190	3225	3190
85°	2569	2855	2855



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	222.1	0.9
10°-20°	635.5	2.6
20°-30°	958.6	4.0
30°-40°	1142.1	4.7
40°-50°	1126.0	4.7
50°-60°	860.6	3.6
60°-70°	532.5	2.2
70°-80°	302.5	1.3
80°-90°	97.9	0.4
90°-100°	1315.8	5.5
100°-110°	3557.5	14.7
110°-120°	3740.2	15.5
120°-130°	3038.1	12.6
130°-140°	2383.1	9.9
140°-150°	1829.1	7.6
150°-160°	1315.4	5.5
160°-170°	803.6	3.3
170°-180°	270.9	1.1
0°-30°	1816.2	7.5
0°-40°	2958.3	12.3
0°-60°	4944.9	20.5
0°-90°	5877.8	24.4
90°-120°	8613.5	35.7
90°-150°	15863.8	65.7
90°-180°	18254.0	75.6
0°-180°	24131.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2349	2349	2349	2349	2349	
5°	2361	2335	2343	2335	2331	224
15°	2272	2248	2258	2250	2246	641
25°	2106	2080	2092	2070	2068	969
35°	1855	1834	1839	1815	1813	1158
45°	1501	1481	1475	1448	1444	1150
55°	983	967	961	945	941	881
65°	528	524	530	526	526	535
75°	285	285	285	287	287	301
85°	73	77	81	81	81	85
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°	2348.9	2348.9	2348.9	2348.9	2348.9
2.5°	2363.4	2342.9	2348.9	2343.8	2332.7
5°	2361.0	2335.3	2342.8	2334.6	2330.7
7.5°	2342.8	2317.5	2325.0	2316.9	2314.5
10°	2326.6	2302.9	2310.4	2302.3	2298.3
12.5°	2308.8	2283.5	2292.6	2282.8	2278.9
15°	2272.0	2248.3	2257.8	2249.7	2245.7
17.5°	2231.5	2206.2	2215.8	2206.3	2201.2
20°	2199.2	2175.4	2185.0	2170.8	2168.8
22.5°	2163.6	2139.8	2149.4	2130.4	2130.0
25°	2106.1	2080.4	2091.9	2069.6	2067.7
27.5°	2037.7	2014.0	2023.6	2000.8	1998.5
30°	1990.8	1967.0	1976.6	1952.2	1948.3
32.5°	1937.4	1915.2	1923.2	1898.9	1896.5
35°	1855.2	1833.5	1839.0	1814.7	1812.7
37.5°	1761.8	1742.0	1745.2	1718.4	1716.4
40°	1695.4	1675.6	1677.2	1648.8	1646.8
42.5°	1622.6	1602.8	1601.1	1572.8	1570.8
45°	1501.2	1481.4	1474.9	1448.5	1444.5
47.5°	1362.8	1343.0	1330.8	1309.3	1306.5
50°	1262.4	1242.7	1232.1	1213.8	1207.8
52.5°	1154.0	1134.2	1125.3	1108.6	1102.6
55°	983.3	967.4	961.0	944.7	940.8
57.5°	821.0	810.3	808.5	792.6	791.1
60°	722.3	716.3	716.2	702.0	702.0
62.5°	638.1	633.7	636.9	627.5	626.0
65°	528.0	524.1	530.1	526.0	526.0
67.5°	441.0	441.0	444.7	443.1	443.1
70°	392.5	392.5	394.5	394.5	394.5
72.5°	348.8	347.2	352.4	352.4	350.8
75°	285.3	285.3	285.3	287.3	287.3
77.5°	222.1	222.5	224.2	223.7	222.1
80°	180.1	182.0	182.1	180.1	180.1
82.5°	138.0	140.0	140.0	139.6	138.0
85°	72.8	76.8	80.9	80.9	80.9
87.5°	22.3	31.0	40.3	40.9	38.7
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)