

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: P564481

Luminaire Tested: **SQ4-PR1-150U-100D-840-1D-UNV-STD-W-12**

Issue Date: 7/30/2021

Test Information

Test Method: LM-79-2019
Report Number: P564481
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-840-1D-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, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

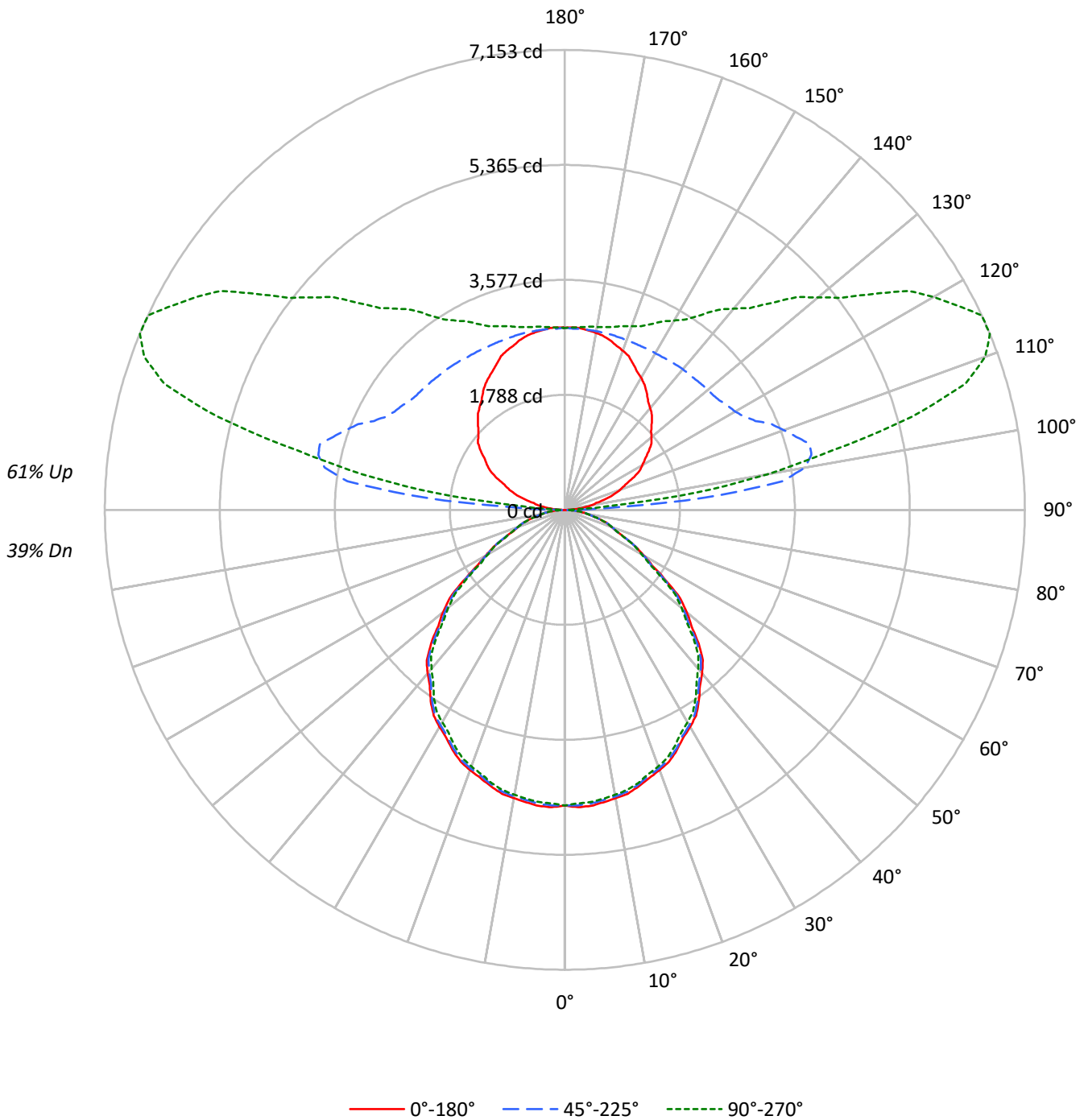
Lumens per Lamp: N/A
Luminaire Lumens: 29758.9 lumens
Efficiency: N/A
Efficacy: 133.0 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: Semi-Indirect

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°	14147	14147	14147
5°	14274	14164	14091
10°	14229	14130	14056
15°	14166	14078	14002
20°	14095	14004	13900
25°	13996	13902	13740
30°	13845	13746	13549
35°	13640	13521	13328
40°	13329	13186	12948
45°	12786	12562	12304
50°	11829	11544	11317
55°	10325	10091	9878
60°	8700	8627	8456
65°	7525	7554	7496
70°	6911	6947	6947
75°	6638	6638	6685
80°	6245	6316	6245
85°	5032	5593	5593



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	435.0	1.5
10°-20°	1244.6	4.2
20°-30°	1877.2	6.3
30°-40°	2236.7	7.5
40°-50°	2205.2	7.4
50°-60°	1685.3	5.7
60°-70°	1042.9	3.5
70°-80°	592.3	2.0
80°-90°	186.1	0.6
90°-100°	1315.8	4.4
100°-110°	3557.5	12.0
110°-120°	3740.2	12.6
120°-130°	3038.1	10.2
130°-140°	2383.1	8.0
140°-150°	1829.1	6.1
150°-160°	1315.4	4.4
160°-170°	803.6	2.7
170°-180°	270.9	0.9
0°-30°	3556.7	12.0
0°-40°	5793.4	19.5
0°-60°	9683.9	32.5
0°-90°	11505.2	38.7
90°-120°	8613.5	28.9
90°-150°	15863.8	53.3
90°-180°	18254.0	61.3
0°-180°	29758.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4600	4600	4600	4600	4600	
5°	4624	4573	4588	4572	4564	439
15°	4449	4403	4422	4406	4398	1256
25°	4124	4074	4097	4053	4049	1898
35°	3633	3591	3602	3554	3550	2268
45°	2940	2901	2888	2837	2829	2252
55°	1926	1895	1882	1850	1842	1725
65°	1034	1026	1038	1030	1030	1047
75°	559	559	559	563	563	590
85°	143	150	158	158	158	166
90°	6	18	40	43	40	19
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°	4599.9	4599.9	4599.9	4599.9	4599.9
2.5°	4628.5	4588.2	4599.9	4589.9	4568.2
5°	4623.7	4573.3	4588.0	4572.0	4564.3
7.5°	4588.0	4538.5	4553.2	4537.2	4532.6
10°	4556.3	4509.9	4524.7	4508.6	4500.9
12.5°	4521.5	4471.9	4489.8	4470.6	4462.8
15°	4449.4	4402.9	4421.6	4405.6	4397.9
17.5°	4370.1	4320.5	4339.2	4320.8	4310.7
20°	4306.7	4260.3	4279.0	4251.2	4247.3
22.5°	4237.0	4190.5	4209.3	4172.0	4171.2
25°	4124.5	4074.1	4096.8	4053.1	4049.2
27.5°	3990.6	3944.1	3962.8	3918.4	3913.7
30°	3898.6	3852.2	3870.9	3823.2	3815.4
32.5°	3794.1	3750.7	3766.3	3718.7	3714.0
35°	3633.2	3590.6	3601.5	3553.9	3550.0
37.5°	3450.1	3411.4	3417.7	3365.3	3361.4
40°	3320.2	3281.5	3284.5	3229.0	3225.1
42.5°	3177.6	3138.8	3135.6	3080.0	3076.1
45°	2939.8	2901.1	2888.3	2836.6	2828.9
47.5°	2668.8	2630.1	2606.2	2564.1	2558.7
50°	2472.3	2433.6	2412.9	2377.0	2365.3
52.5°	2259.9	2221.2	2203.7	2170.9	2159.3
55°	1925.6	1894.6	1882.0	1850.1	1842.3
57.5°	1607.8	1586.9	1583.2	1552.3	1549.2
60°	1414.4	1402.8	1402.6	1374.8	1374.8
62.5°	1249.6	1241.1	1247.3	1229.0	1225.9
65°	1034.1	1026.3	1038.1	1030.1	1030.1
67.5°	863.7	863.7	870.9	867.7	867.7
70°	768.6	768.6	772.6	772.6	772.6
72.5°	683.1	680.0	690.2	690.1	687.0
75°	558.6	558.6	558.6	562.6	562.6
77.5°	435.0	435.8	439.0	438.1	435.0
80°	352.6	356.5	356.6	352.6	352.6
82.5°	270.2	274.1	274.2	273.3	270.2
85°	142.6	150.4	158.5	158.5	158.5
87.5°	42.4	57.2	71.3	71.8	68.1
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)