

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: P519627

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

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P519627
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-25, G2-2009-966-13)
Test Lab: INNOVATION CENTER
Issue Date: 4/29/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-WB-150U-125D-840-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 1500 LUMENS PER FOOT
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

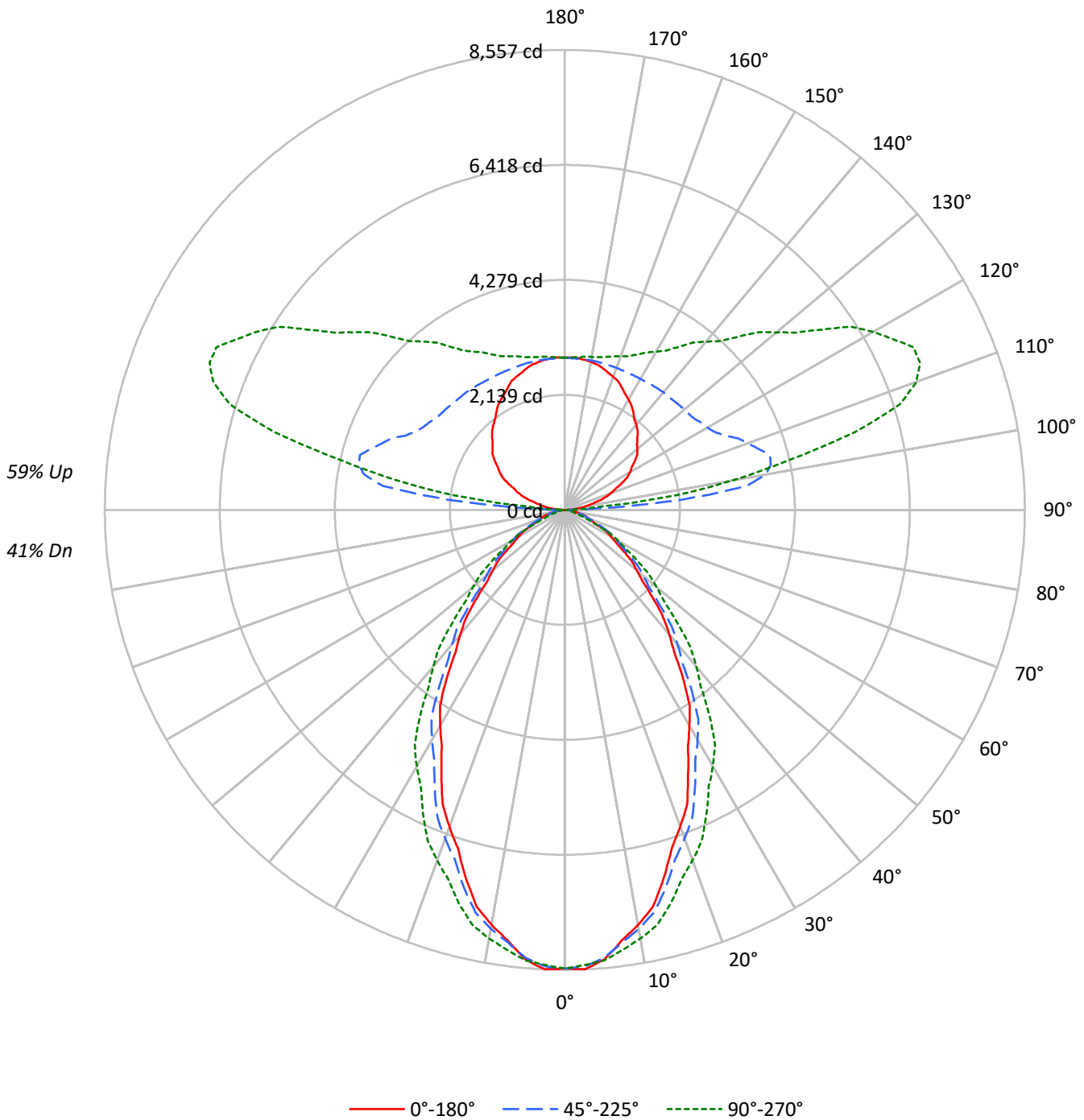
Lumens per Lamp: N/A
Luminaire Lumens: 30698.4 lumens
Efficiency: N/A
Efficacy: 119.8 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: General Diffuse

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	105	105	105	105	96	96	96	96	78	78	78	62	62	62	47	47	47	41
1	97	93	89	86	88	85	82	79	70	68	66	56	55	53	43	43	42	36
2	89	82	76	72	81	75	70	66	62	59	56	50	48	46	39	38	37	32
3	82	73	66	61	74	67	61	57	56	52	48	45	43	40	36	34	32	28
4	75	65	58	52	68	60	54	49	50	46	42	41	38	35	33	31	29	25
5	69	59	51	46	63	54	48	43	45	41	37	37	34	31	30	28	26	22
6	64	53	45	40	59	49	42	38	41	36	33	34	31	28	28	25	23	20
7	59	48	41	35	54	45	38	33	38	33	29	31	28	25	25	23	21	18
8	55	44	37	32	51	41	34	30	35	30	26	29	25	23	24	21	19	17
9	52	40	33	28	47	37	31	27	32	27	24	27	23	21	22	19	18	15
10	48	37	30	26	44	34	28	24	30	25	22	25	21	19	21	18	16	14

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	26252	26252	26252
5°	25925	25832	25982
10°	24493	24715	25288
15°	22611	23135	24173
20°	20533	21305	22715
25°	18417	19421	21162
30°	16467	17544	19553
35°	14400	15440	17648
40°	12120	13083	15278
45°	10002	10866	12756
50°	8351	9104	10627
55°	7089	7812	8776
60°	6059	6773	7004
65°	4825	5696	4525
70°	4277	4446	2761
75°	3962	3605	1691
80°	3648	3317	1459
85°	3303	3038	1189



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	783.0	2.6
10°-20°	2036.5	6.6
20°-30°	2637.9	8.6
30°-40°	2583.2	8.4
40°-50°	1977.3	6.4
50°-60°	1317.6	4.3
60°-70°	719.0	2.3
70°-80°	299.6	1.0
80°-90°	90.7	0.3
90°-100°	1315.8	4.3
100°-110°	3557.5	11.6
110°-120°	3740.2	12.2
120°-130°	3038.1	9.9
130°-140°	2383.1	7.8
140°-150°	1829.1	6.0
150°-160°	1315.4	4.3
160°-170°	803.6	2.6
170°-180°	270.9	0.9
0°-30°	5457.4	17.8
0°-40°	8040.6	26.2
0°-60°	11335.4	36.9
0°-90°	12444.7	40.5
90°-120°	8613.5	28.1
90°-150°	15863.8	51.7
90°-180°	18254.0	59.5
0°-180°	30698.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	8536	8536	8536	8536	8536	
5°	8398	8313	8368	8387	8416	781
15°	7102	7076	7266	7464	7592	1983
25°	5427	5442	5723	5973	6236	2496
35°	3836	3854	4113	4389	4701	2384
45°	2300	2344	2498	2687	2933	1793
55°	1322	1377	1457	1512	1637	1199
65°	663	718	783	684	622	689
75°	333	333	303	208	142	356
85°	94	94	86	56	34	102
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°	8536.2	8536.2	8536.2	8536.2	8536.2
2.5°	8557.2	8481.0	8500.2	8499.7	8476.3
5°	8397.6	8313.4	8367.6	8387.0	8416.3
7.5°	8086.0	8022.2	8121.2	8194.4	8253.8
10°	7843.2	7788.3	7914.4	8021.0	8097.9
12.5°	7561.6	7515.4	7671.7	7814.8	7915.2
15°	7101.6	7076.0	7266.4	7464.1	7592.3
17.5°	6609.5	6597.0	6815.5	7046.2	7210.2
20°	6273.8	6270.2	6509.8	6750.1	6940.6
22.5°	5935.2	5943.3	6195.2	6445.1	6661.9
25°	5427.3	5442.0	5723.2	5972.7	6236.4
27.5°	4957.7	4964.2	5255.1	5518.4	5799.7
30°	4637.0	4655.3	4940.4	5213.0	5506.0
32.5°	4316.4	4337.6	4616.8	4898.5	5197.4
35°	3835.5	3853.8	4112.6	4389.4	4700.7
37.5°	3339.6	3364.5	3594.3	3855.9	4162.1
40°	3018.9	3055.6	3258.7	3505.2	3805.5
42.5°	2710.3	2755.7	2944.0	3177.9	3448.9
45°	2299.8	2343.7	2498.3	2687.4	2932.8
47.5°	1946.2	1996.7	2115.5	2278.3	2487.8
50°	1745.4	1793.1	1902.8	2023.4	2221.1
52.5°	1568.6	1616.3	1714.0	1807.0	1975.4
55°	1322.2	1377.1	1457.0	1512.3	1636.8
57.5°	1119.9	1172.7	1236.0	1261.0	1336.4
60°	985.1	1043.7	1101.2	1098.4	1138.7
62.5°	862.2	912.0	969.4	929.7	931.9
65°	663.0	717.9	782.8	684.0	621.8
67.5°	535.6	547.3	614.3	477.0	403.0
70°	475.7	475.7	494.4	369.4	307.1
72.5°	418.8	418.8	401.5	300.4	235.2
75°	333.4	333.4	303.4	208.3	142.3
77.5°	256.9	254.0	232.2	155.4	103.4
80°	206.0	206.0	187.3	122.7	82.4
82.5°	161.1	161.1	145.3	95.9	61.4
85°	93.6	93.6	86.1	55.7	33.7
87.5°	34.2	36.6	37.9	26.4	22.9
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)