

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: P519955

Luminaire Tested: **SQ4-F-050U-125D-830-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P519955
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-21, G3-1910-536-20)
Test Lab: INNOVATION CENTER
Issue Date: 4/29/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-F-050U-125D-830-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

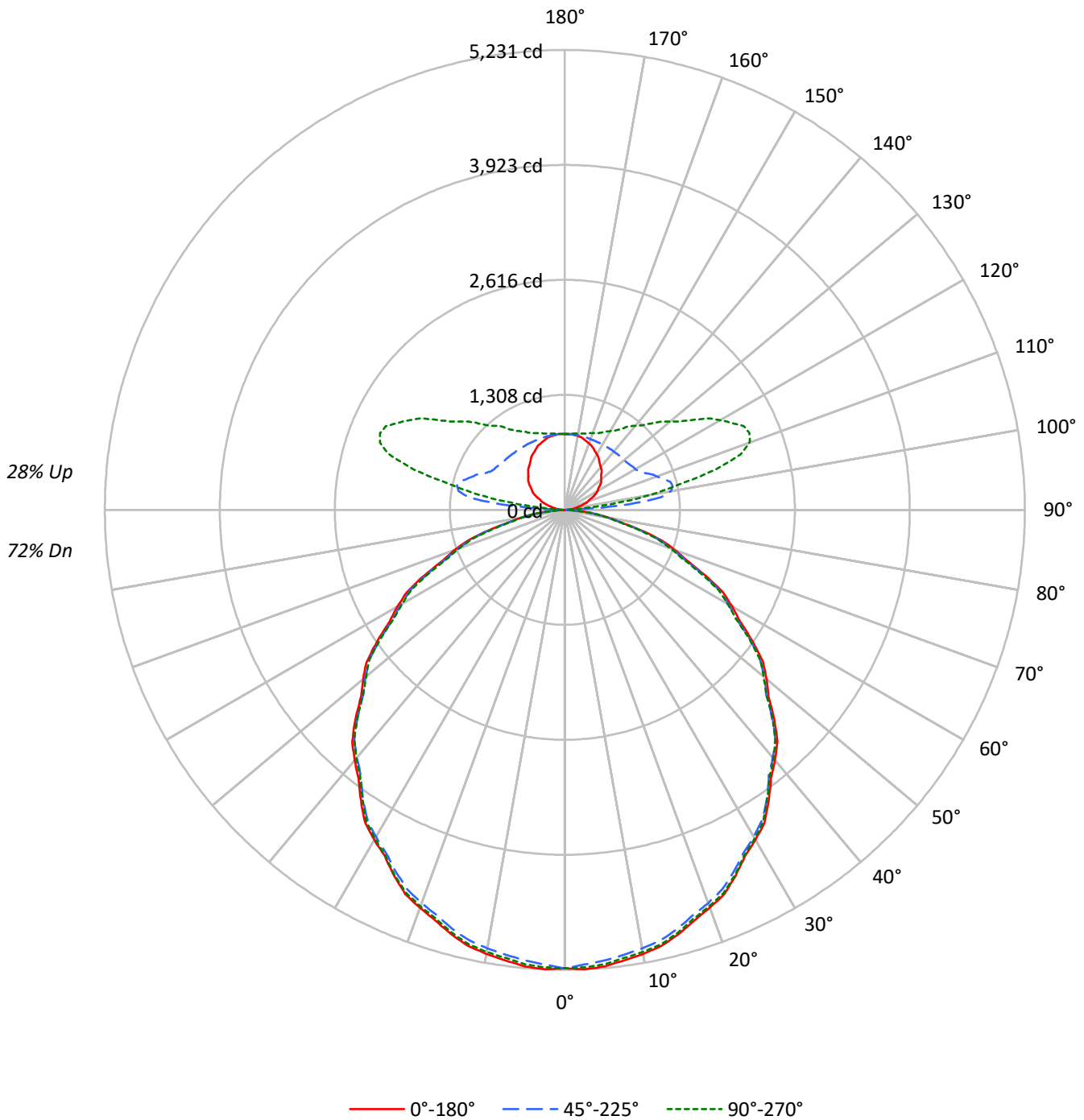
Lumens per Lamp: N/A
Luminaire Lumens: 19871.0 lumens
Efficiency: N/A
Efficacy: 114.3 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 173.9
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	112	112	112	112	106	106	106	106	95	95	95	85	85	85	76	76	76	72
1	103	98	94	90	97	93	90	86	84	81	78	75	73	71	67	66	64	60
2	93	86	79	74	88	81	76	71	73	69	65	66	62	59	59	56	54	50
3	85	75	68	61	80	72	65	59	65	59	54	58	54	50	52	49	46	42
4	78	67	58	52	73	63	56	50	57	51	46	52	47	43	47	43	39	36
5	72	59	51	45	67	57	49	43	51	45	40	46	41	37	42	38	34	31
6	66	53	45	39	62	51	43	37	46	40	35	42	37	32	38	34	30	28
7	61	48	40	34	58	46	38	33	42	36	31	38	33	29	35	30	27	24
8	57	44	36	30	54	42	34	29	38	32	27	35	30	26	32	27	24	22
9	53	40	32	27	50	38	31	26	35	29	25	32	27	23	29	25	22	20
10	49	37	29	24	47	35	28	24	33	26	22	30	25	21	27	23	20	18

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	16038	16038	16038
5°	16090	15886	16019
10°	16016	15819	15944
15°	15908	15717	15845
20°	15761	15582	15705
25°	15582	15416	15543
30°	15389	15257	15339
35°	15171	15042	15052
40°	14921	14759	14806
45°	14642	14479	14504
50°	14321	14157	14116
55°	13957	13757	13726
60°	13504	13204	13134
65°	12802	12531	12364
70°	11922	11613	11458
75°	10606	10366	10060
80°	8641	8386	8336
85°	5166	5872	5872



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	492.0	2.5
10°-20°	1401.3	7.1
20°-30°	2105.3	10.6
30°-40°	2512.0	12.6
40°-50°	2574.9	13.0
50°-60°	2295.1	11.5
60°-70°	1708.5	8.6
70°-80°	925.6	4.7
80°-90°	215.8	1.1
90°-100°	414.7	2.1
100°-110°	1126.5	5.7
110°-120°	1158.3	5.8
120°-130°	926.1	4.7
130°-140°	727.6	3.7
140°-150°	557.9	2.8
150°-160°	401.2	2.0
160°-170°	245.4	1.2
170°-180°	82.7	0.4
0°-30°	3998.6	20.1
0°-40°	6510.7	32.8
0°-60°	11380.6	57.3
0°-90°	14230.5	71.6
90°-120°	2699.5	13.6
90°-150°	4911.2	24.7
90°-180°	5640.0	28.4
0°-180°	19871.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	5215	5215	5215	5215	5215	
5°	5212	5203	5146	5192	5189	494
15°	4996	4985	4936	4979	4976	1409
25°	4592	4584	4543	4569	4580	2115
35°	4041	4038	4006	4006	4009	2527
45°	3366	3358	3329	3324	3335	2594
55°	2603	2595	2566	2546	2560	2325
65°	1759	1748	1722	1710	1699	1742
75°	893	893	872	855	847	948
85°	146	166	166	169	166	202
90°	3	11	19	25	25	8
95°	61	227	722	314	211	65
105°	200	311	1239	1886	1775	212
115°	356	432	992	1973	2247	351
125°	489	557	897	1512	1783	436
135°	589	654	872	1231	1389	455
145°	680	729	861	1046	1125	427
155°	769	797	856	940	967	355
165°	833	844	858	894	897	235
175°	864	867	861	872	869	82
180°	864	864	864	864	864	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	5214.8	5214.8	5214.8	5214.8	5214.8
2.5°	5230.8	5221.8	5175.6	5214.5	5207.9
5°	5211.8	5203.4	5145.8	5191.6	5188.9
7.5°	5167.6	5157.0	5104.5	5147.5	5142.4
10°	5128.6	5120.2	5065.5	5108.4	5105.6
12.5°	5080.4	5071.9	5017.2	5060.3	5059.7
15°	4996.5	4985.4	4936.3	4979.3	4976.5
17.5°	4896.1	4883.2	4834.7	4868.7	4874.3
20°	4815.8	4807.3	4761.2	4792.9	4798.6
22.5°	4733.1	4722.5	4674.0	4710.3	4715.9
25°	4591.9	4583.5	4543.1	4569.2	4580.5
27.5°	4437.0	4437.0	4399.7	4418.1	4424.9
30°	4333.6	4333.6	4296.3	4308.1	4319.3
32.5°	4223.4	4214.4	4179.2	4188.7	4199.9
35°	4040.9	4038.1	4006.4	4006.5	4009.3
37.5°	3852.1	3844.2	3809.6	3812.1	3825.6
40°	3716.6	3711.0	3676.4	3676.6	3687.9
42.5°	3578.8	3573.3	3543.3	3538.8	3543.3
45°	3366.5	3358.0	3329.1	3323.6	3334.9
47.5°	3140.3	3142.5	3108.2	3100.2	3106.4
50°	2993.3	2993.3	2959.0	2941.9	2950.4
52.5°	2839.6	2835.0	2800.5	2781.4	2801.1
55°	2603.0	2594.6	2565.7	2546.0	2560.0
57.5°	2360.8	2347.9	2318.9	2297.2	2305.1
60°	2195.5	2175.8	2146.7	2129.6	2135.3
62.5°	2023.3	2012.6	1981.4	1955.3	1967.6
65°	1759.3	1748.0	1722.0	1710.2	1699.1
67.5°	1500.4	1493.1	1463.7	1451.5	1444.2
70°	1325.9	1311.9	1291.5	1277.0	1274.3
72.5°	1156.0	1139.7	1119.3	1107.1	1099.8
75°	892.6	892.6	872.4	855.1	846.6
77.5°	641.8	644.0	627.4	621.6	617.6
80°	487.9	487.9	473.5	467.8	470.7
82.5°	340.9	347.6	342.7	334.6	330.6
85°	146.4	166.0	166.4	169.3	166.4
87.5°	25.8	43.3	47.6	44.1	39.6
90°	2.7	10.9	19.4	25.0	25.0
92.5°	25.0	113.5	197.2	84.7	71.6
95°	61.1	226.8	722.2	314.3	211.1
97.5°	101.1	250.5	1107.2	861.4	605.0
100°	127.8	266.3	1224.9	1241.7	1002.8
102.5°	154.5	282.1	1256.0	1535.7	1324.9
105°	200.0	311.4	1238.9	1886.3	1774.9
107.5°	247.2	345.5	1167.2	2067.4	2098.3
110°	280.5	370.1	1113.9	2103.0	2236.1

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	309.4	394.7	1060.6	2073.4	2273.8
115°	355.5	431.6	991.7	1972.9	2247.1
117.5°	398.9	471.7	947.7	1830.3	2139.4
120°	427.7	498.4	927.8	1734.7	2041.7
122.5°	452.2	522.8	914.5	1638.9	1935.0
125°	488.9	556.8	897.2	1511.7	1783.3
127.5°	521.7	589.0	887.8	1415.3	1648.3
130°	541.7	606.8	883.4	1354.8	1563.9
132.5°	561.7	626.8	878.8	1303.0	1488.3
135°	588.9	654.0	872.2	1231.3	1388.8
137.5°	618.3	677.6	868.8	1168.0	1300.5
140°	636.1	693.2	866.7	1127.7	1247.2
142.5°	653.8	706.5	864.4	1096.1	1196.1
145°	680.5	729.4	861.1	1046.2	1124.9
147.5°	710.5	752.4	858.3	1006.9	1068.9
150°	730.6	765.9	858.3	984.4	1033.3
152.5°	746.1	777.1	856.1	964.2	1004.4
155°	769.4	796.6	855.6	939.5	966.7
157.5°	792.2	813.4	855.6	922.7	943.3
160°	805.5	824.6	855.6	911.4	927.8
162.5°	818.9	833.5	857.7	902.5	914.5
165°	833.3	844.2	858.3	894.4	897.2
167.5°	848.3	853.7	861.1	885.0	887.2
170°	852.7	858.2	861.1	880.5	880.5
172.5°	857.3	860.5	861.1	876.1	876.1
175°	863.8	866.6	861.1	872.2	869.4
177.5°	866.1	866.1	859.4	868.2	863.8
180°	863.8	863.8	863.8	863.8	863.8

(END OF REPORT)