

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: P519959

Luminaire Tested: **SQ4-F-050U-125D-835-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P519959
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-835-1D-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

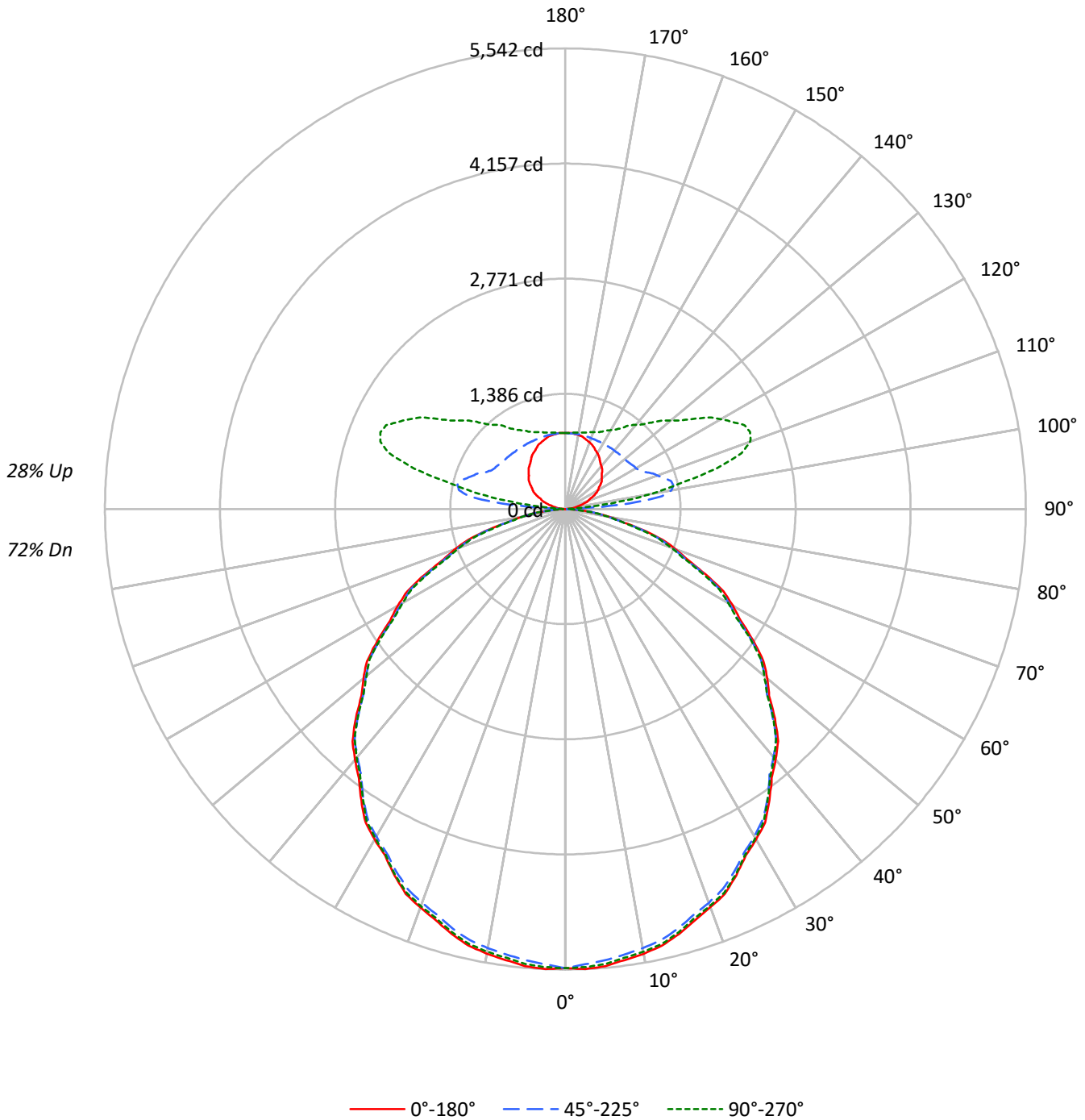
Lumens per Lamp: N/A
Luminaire Lumens: 21052.3 lumens
Efficiency: N/A
Efficacy: 121.1 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: Semi-Direct

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°	16991	16991	16991
5°	17046	16830	16971
10°	16968	16759	16892
15°	16854	16651	16786
20°	16698	16509	16638
25°	16508	16333	16467
30°	16304	16164	16250
35°	16073	15936	15947
40°	15808	15637	15686
45°	15512	15340	15366
50°	15173	14998	14955
55°	14787	14575	14542
60°	14307	13989	13914
65°	13564	13275	13099
70°	12631	12303	12139
75°	11236	10983	10659
80°	9155	8885	8832
85°	5473	6224	6224



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	521.3	2.5
10°-20°	1484.6	7.1
20°-30°	2230.4	10.6
30°-40°	2661.4	12.6
40°-50°	2728.0	13.0
50°-60°	2431.5	11.5
60°-70°	1810.1	8.6
70°-80°	980.6	4.7
80°-90°	228.7	1.1
90°-100°	439.3	2.1
100°-110°	1193.5	5.7
110°-120°	1227.1	5.8
120°-130°	981.1	4.7
130°-140°	770.9	3.7
140°-150°	591.1	2.8
150°-160°	425.1	2.0
160°-170°	260.0	1.2
170°-180°	87.6	0.4
0°-30°	4236.3	20.1
0°-40°	6897.7	32.8
0°-60°	12057.2	57.3
0°-90°	15076.5	71.6
90°-120°	2860.0	13.6
90°-150°	5203.1	24.7
90°-180°	5976.0	28.4
0°-180°	21052.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	5525	5525	5525	5525	5525	
5°	5522	5513	5452	5500	5497	524
15°	5294	5282	5230	5275	5272	1492
25°	4865	4856	4813	4841	4853	2240
35°	4281	4278	4245	4245	4248	2677
45°	3567	3558	3527	3521	3533	2748
55°	2758	2749	2718	2697	2712	2463
65°	1864	1852	1824	1812	1800	1846
75°	946	946	924	906	897	1004
85°	155	176	176	179	176	214
90°	3	12	21	26	26	8
95°	65	240	765	333	224	69
105°	212	330	1312	1998	1880	225
115°	377	457	1051	2090	2381	372
125°	518	590	951	1602	1889	462
135°	624	693	924	1304	1471	483
145°	721	773	912	1108	1192	453
155°	815	844	906	995	1024	376
165°	883	894	909	948	951	249
175°	915	918	912	924	921	87
180°	915	915	915	915	915	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	5524.7	5524.7	5524.7	5524.7	5524.7
2.5°	5541.7	5532.2	5483.3	5524.5	5517.4
5°	5521.6	5512.7	5451.7	5500.3	5497.3
7.5°	5474.8	5463.5	5407.9	5453.4	5448.1
10°	5433.5	5424.5	5366.6	5412.1	5409.1
12.5°	5382.4	5373.5	5315.5	5361.1	5360.5
15°	5293.6	5281.7	5229.8	5275.3	5272.3
17.5°	5187.2	5173.5	5122.1	5158.1	5164.1
20°	5102.0	5093.1	5044.3	5077.8	5083.8
22.5°	5014.5	5003.1	4951.8	4990.3	4996.2
25°	4864.9	4856.0	4813.2	4840.9	4852.7
27.5°	4700.7	4700.7	4661.2	4680.8	4687.9
30°	4591.2	4591.2	4551.7	4564.2	4576.0
32.5°	4474.5	4465.0	4427.7	4437.7	4449.5
35°	4281.1	4278.2	4244.6	4244.7	4247.7
37.5°	4081.0	4072.7	4036.0	4038.8	4053.1
40°	3937.5	3931.5	3894.9	3895.3	3907.1
42.5°	3791.6	3785.6	3753.9	3749.1	3753.9
45°	3566.6	3557.6	3527.0	3521.3	3533.1
47.5°	3327.0	3329.3	3292.9	3284.5	3291.1
50°	3171.3	3171.3	3134.8	3116.8	3125.7
52.5°	3008.3	3003.6	2967.0	2946.8	2967.6
55°	2757.8	2748.9	2718.3	2697.3	2712.2
57.5°	2501.2	2487.5	2456.8	2433.9	2442.2
60°	2326.0	2305.2	2274.3	2256.2	2262.2
62.5°	2143.6	2132.3	2099.2	2071.5	2084.6
65°	1863.9	1852.0	1824.3	1811.9	1800.0
67.5°	1589.6	1581.9	1550.7	1537.7	1530.0
70°	1404.7	1389.8	1368.2	1352.9	1350.0
72.5°	1224.7	1207.5	1185.8	1172.8	1165.1
75°	945.6	945.6	924.3	905.9	897.0
77.5°	679.9	682.2	664.7	658.5	654.3
80°	516.9	516.9	501.7	495.7	498.7
82.5°	361.2	368.3	363.0	354.4	350.3
85°	155.1	175.8	176.4	179.3	176.4
87.5°	27.4	45.8	50.5	46.7	42.0
90°	2.9	11.6	20.6	26.5	26.5
92.5°	26.5	120.3	208.9	89.7	76.0
95°	64.8	240.2	765.1	333.0	223.6
97.5°	107.2	265.3	1173.0	912.6	641.0
100°	135.4	282.1	1297.8	1315.6	1062.3
102.5°	163.6	298.9	1330.7	1627.1	1403.7
105°	211.9	329.9	1312.5	1998.5	1880.4
107.5°	261.9	366.1	1236.6	2190.2	2223.0
110°	297.2	392.2	1180.1	2228.0	2369.0

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	327.8	418.2	1123.6	2196.6	2409.1
115°	376.7	457.3	1050.6	2090.1	2380.8
117.5°	422.6	499.7	1004.1	1939.1	2266.6
120°	453.2	528.0	983.0	1837.9	2163.0
122.5°	479.1	553.9	968.8	1736.4	2050.0
125°	517.9	589.9	950.6	1601.6	1889.3
127.5°	552.7	624.0	940.6	1499.4	1746.3
130°	573.9	642.9	935.9	1435.2	1656.8
132.5°	595.1	664.1	931.1	1380.6	1576.7
135°	623.9	693.0	924.1	1304.5	1471.4
137.5°	655.1	717.8	920.5	1237.4	1377.8
140°	673.9	734.3	918.2	1194.7	1321.3
142.5°	692.8	748.5	915.8	1161.3	1267.2
145°	721.0	772.8	912.3	1108.4	1191.9
147.5°	752.7	797.1	909.4	1066.8	1132.4
150°	773.9	811.3	909.4	1042.9	1094.7
152.5°	790.4	823.2	907.0	1021.5	1064.1
155°	815.2	843.9	906.4	995.3	1024.1
157.5°	839.3	861.8	906.4	977.6	999.3
160°	853.4	873.5	906.4	965.7	983.0
162.5°	867.6	883.1	908.8	956.2	968.8
165°	882.9	894.3	909.4	947.6	950.6
167.5°	898.8	904.5	912.3	937.6	940.0
170°	903.5	909.2	912.3	932.9	932.9
172.5°	908.2	911.6	912.3	928.2	928.2
175°	915.2	918.1	912.3	924.0	921.1
177.5°	917.6	917.6	910.5	919.9	915.2
180°	915.2	915.2	915.2	915.2	915.2

(END OF REPORT)