

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: P520263

Luminaire Tested: **SQ4-F-100U-125D-940-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P520263
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-23, 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-100U-125D-940-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

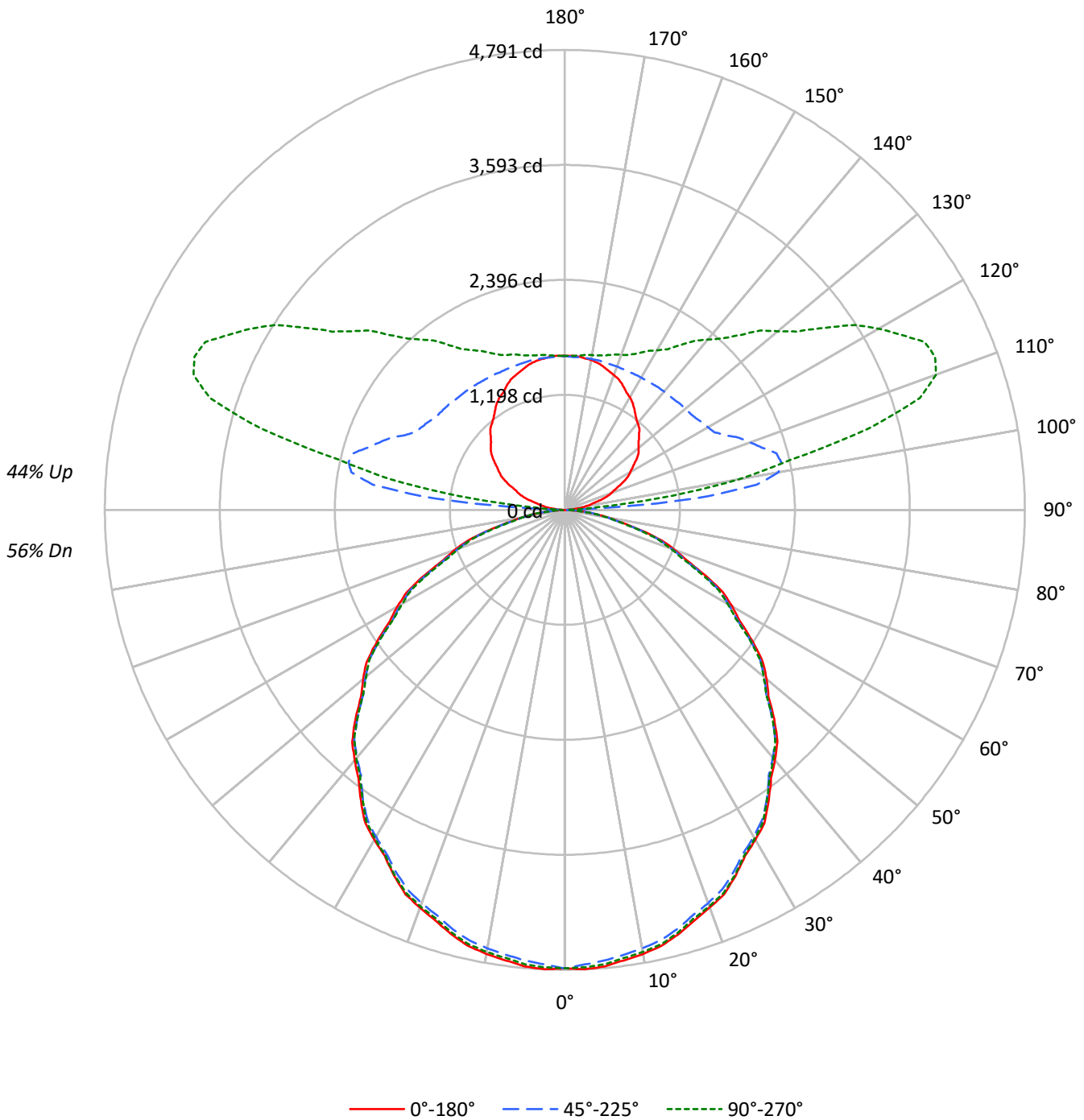
Lumens per Lamp: N/A
Luminaire Lumens: 23449.7 lumens
Efficiency: N/A
Efficacy: 108.8 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 215.6
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	108	108	108	108	101	101	101	101	86	86	86	73	73	73	61	61	61	56
1	99	95	91	87	92	88	85	82	76	73	71	65	63	61	54	53	52	47
2	90	83	76	71	83	77	71	67	66	62	59	57	54	51	48	45	43	39
3	82	73	65	59	76	68	61	56	58	53	49	50	46	43	42	39	37	33
4	75	64	56	50	69	60	53	47	52	46	42	44	40	37	37	34	32	28
5	69	57	49	43	64	53	46	40	46	41	36	40	35	32	34	30	28	24
6	63	51	43	37	59	48	41	35	42	36	31	36	31	28	31	27	24	21
7	59	46	38	32	54	43	36	31	38	32	28	33	28	25	28	24	21	19
8	54	42	34	29	50	39	32	27	34	29	25	30	25	22	26	22	19	17
9	51	38	31	26	47	36	29	24	32	26	22	27	23	20	24	20	17	15
10	47	35	28	23	44	33	26	22	29	24	20	25	21	18	22	18	16	14

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	14688	14688	14688
5°	14736	14549	14671
10°	14668	14488	14603
15°	14570	14394	14512
20°	14435	14272	14383
25°	14271	14119	14235
30°	14095	13973	14048
35°	13895	13776	13786
40°	13665	13518	13560
45°	13410	13261	13284
50°	13117	12965	12928
55°	12783	12599	12571
60°	12368	12093	12029
65°	11725	11477	11324
70°	10920	10636	10494
75°	9714	9495	9214
80°	7915	7681	7633
85°	4732	5378	5378



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	450.6	1.9
10°-20°	1283.4	5.5
20°-30°	1928.2	8.2
30°-40°	2300.7	9.8
40°-50°	2358.3	10.1
50°-60°	2102.0	9.0
60°-70°	1564.8	6.7
70°-80°	847.7	3.6
80°-90°	198.0	0.8
90°-100°	750.7	3.2
100°-110°	2072.6	8.8
110°-120°	2137.5	9.1
120°-130°	1717.7	7.3
130°-140°	1349.9	5.8
140°-150°	1035.3	4.4
150°-160°	744.1	3.2
160°-170°	455.0	1.9
170°-180°	153.4	0.7
0°-30°	3662.2	15.6
0°-40°	5962.9	25.4
0°-60°	10423.1	44.4
0°-90°	13033.6	55.6
90°-120°	4960.8	21.2
90°-150°	9063.6	38.7
90°-180°	10416.0	44.4
0°-180°	23449.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4776	4776	4776	4776	4776	
5°	4773	4766	4713	4755	4752	453
15°	4576	4566	4521	4560	4558	1290
25°	4206	4198	4161	4185	4195	1937
35°	3701	3698	3669	3669	3672	2314
45°	3083	3076	3049	3044	3054	2376
55°	2384	2376	2350	2332	2345	2129
65°	1611	1601	1577	1566	1556	1595
75°	818	818	799	783	775	868
85°	134	152	152	155	152	185
90°	5	10	20	23	26	11
95°	110	406	1362	560	364	118
105°	369	570	2280	3481	3278	393
115°	662	800	1836	3636	4135	650
125°	908	1033	1665	2817	3306	808
135°	1093	1210	1618	2282	2573	845
145°	1267	1355	1598	1942	2090	793
155°	1429	1476	1585	1743	1798	658
165°	1547	1567	1593	1655	1667	436
175°	1603	1606	1595	1618	1613	152
180°	1603	1603	1603	1603	1603	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	4776.0	4776.0	4776.0	4776.0	4776.0
2.5°	4790.7	4782.5	4740.2	4775.8	4769.7
5°	4773.4	4765.7	4712.9	4754.9	4752.3
7.5°	4732.8	4723.1	4675.1	4714.4	4709.7
10°	4697.1	4689.4	4639.3	4678.7	4676.1
12.5°	4653.0	4645.3	4595.2	4634.5	4634.0
15°	4576.2	4565.9	4521.0	4560.4	4557.8
17.5°	4484.2	4472.3	4428.0	4459.1	4464.2
20°	4410.6	4402.9	4360.7	4389.7	4394.8
22.5°	4334.9	4325.2	4280.8	4314.0	4319.1
25°	4205.6	4197.9	4160.9	4184.8	4195.1
27.5°	4063.7	4063.7	4029.4	4046.5	4052.7
30°	3969.0	3969.0	3934.9	3945.6	3955.9
32.5°	3868.1	3859.9	3827.7	3836.3	3846.5
35°	3701.0	3698.3	3669.3	3669.4	3672.0
37.5°	3528.0	3520.8	3489.0	3491.5	3503.8
40°	3403.9	3398.7	3367.1	3367.3	3377.6
42.5°	3277.7	3272.5	3245.2	3241.0	3245.2
45°	3083.2	3075.5	3049.1	3044.0	3054.3
47.5°	2876.1	2878.2	2846.7	2839.5	2845.0
50°	2741.6	2741.6	2709.9	2694.3	2702.1
52.5°	2600.6	2596.5	2564.9	2547.4	2565.4
55°	2384.1	2376.3	2349.8	2331.8	2344.6
57.5°	2162.2	2150.4	2123.8	2104.1	2111.3
60°	2010.8	1992.8	1966.1	1950.4	1955.6
62.5°	1853.1	1843.3	1814.7	1790.8	1802.1
65°	1611.3	1601.0	1577.1	1566.4	1556.1
67.5°	1374.2	1367.5	1340.6	1329.3	1322.6
70°	1214.4	1201.5	1182.8	1169.6	1167.1
72.5°	1058.7	1043.8	1025.1	1013.9	1007.2
75°	817.5	817.5	799.1	783.1	775.4
77.5°	587.7	589.8	574.6	569.3	565.6
80°	446.9	446.9	433.7	428.5	431.0
82.5°	312.3	318.4	313.9	306.4	302.8
85°	134.1	152.0	152.4	155.1	152.4
87.5°	24.2	39.6	44.2	40.4	36.8
90°	5.1	10.2	20.5	23.1	25.6
92.5°	46.2	191.6	342.7	125.0	97.4
95°	110.3	406.3	1362.0	559.8	364.2
97.5°	182.6	454.9	2017.6	1553.4	1125.0
100°	235.9	484.2	2259.8	2275.7	1849.3
102.5°	287.3	517.5	2307.0	2811.8	2407.5
105°	369.4	570.0	2280.2	3481.2	3278.0
107.5°	456.5	635.2	2153.0	3803.9	3878.2
110°	518.2	678.6	2054.5	3873.4	4114.2

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	573.5	728.0	1962.2	3818.6	4173.7
115°	661.8	799.7	1836.5	3635.7	4134.7
117.5°	738.7	876.2	1753.9	3378.1	3945.9
120°	790.0	925.4	1721.0	3203.8	3775.6
122.5°	839.3	968.6	1694.4	3041.1	3582.8
125°	908.0	1033.4	1664.7	2817.2	3306.3
127.5°	966.5	1091.9	1647.2	2627.9	3049.8
130°	1005.4	1130.9	1639.0	2512.1	2895.8
132.5°	1042.4	1161.7	1630.8	2414.9	2762.5
135°	1092.7	1210.5	1618.5	2281.7	2572.7
137.5°	1149.1	1256.4	1612.3	2169.9	2418.2
140°	1179.8	1285.2	1608.3	2095.4	2313.6
142.5°	1214.8	1312.1	1604.1	2029.2	2221.3
145°	1267.1	1354.8	1598.0	1942.4	2090.4
147.5°	1317.3	1394.1	1592.3	1869.4	1984.3
150°	1354.3	1417.0	1590.3	1825.8	1918.6
152.5°	1383.0	1441.7	1588.2	1788.5	1865.3
155°	1428.7	1476.3	1585.1	1742.9	1798.0
157.5°	1470.8	1507.4	1585.6	1709.7	1747.3
160°	1495.4	1527.9	1587.7	1691.0	1718.6
162.5°	1515.9	1544.5	1589.8	1674.4	1695.9
165°	1546.6	1566.7	1592.8	1654.7	1667.2
167.5°	1570.3	1582.3	1595.4	1642.7	1646.7
170°	1582.6	1592.6	1595.4	1636.5	1636.5
172.5°	1592.8	1598.9	1595.4	1628.2	1626.2
175°	1603.1	1605.6	1595.4	1618.4	1613.3
177.5°	1607.2	1605.2	1594.9	1609.2	1605.1
180°	1603.1	1603.1	1603.1	1603.1	1603.1

(END OF REPORT)