

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: P520049

Luminaire Tested: **SQ4-F-075U-100D-940-1D-UNV-STD-W-6**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P520049
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-22, G3-1910-536-19)
Test Lab: INNOVATION CENTER
Issue Date: 4/29/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-F-075U-100D-940-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 750 LUMENS PER FOOT
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

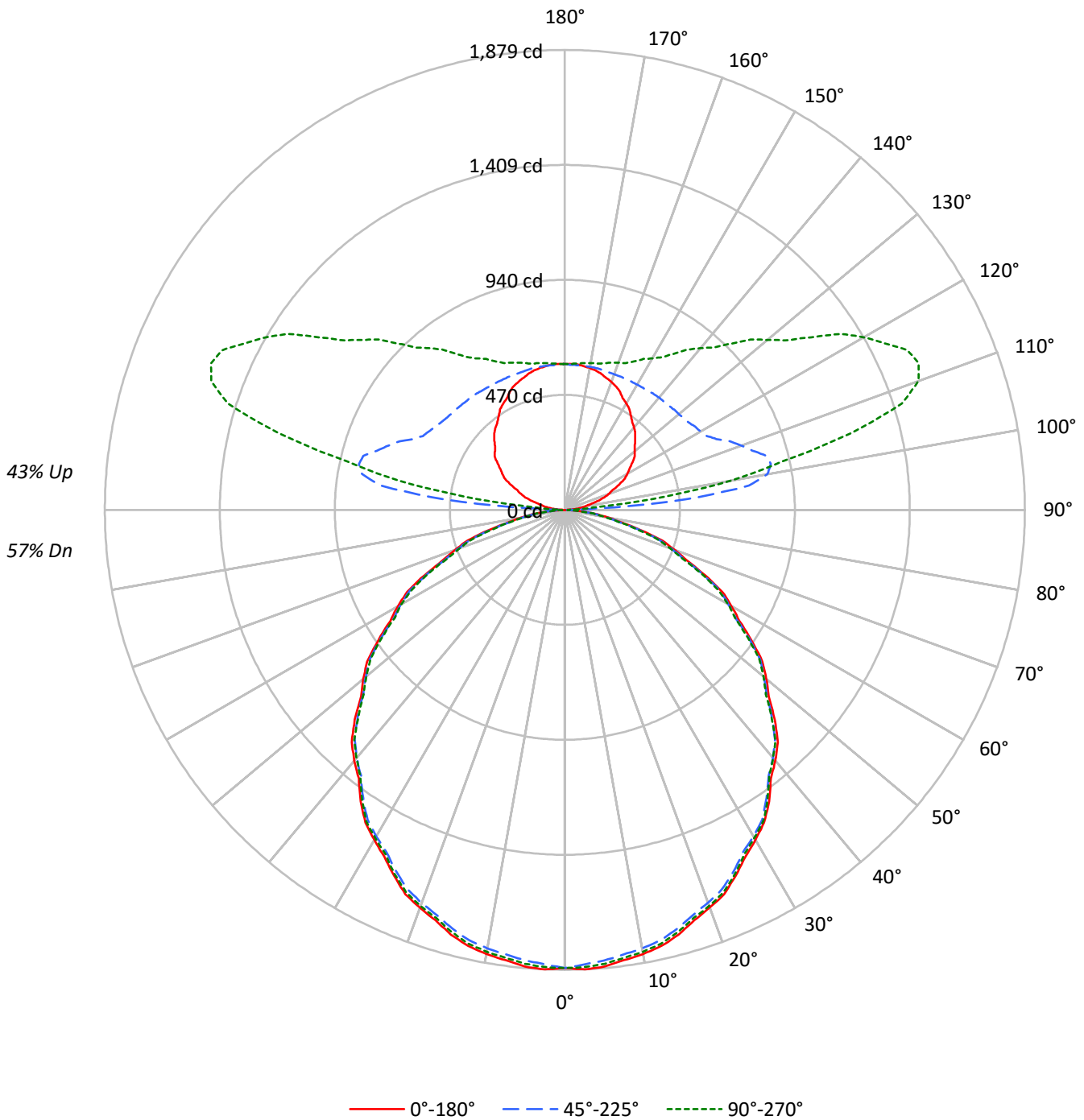
Lumens per Lamp: N/A
Luminaire Lumens: 8989.4 lumens
Efficiency: N/A
Efficacy: 112.6 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 79.8
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	50	30	10	0	
RCR																						
0	109	109	109	109	101	101	101	101	87	87	87	74	74	74	62	62	62	57				57
1	99	95	91	87	92	88	85	82	76	74	72	65	64	62	55	54	53	48				48
2	90	83	77	71	84	77	72	67	67	63	59	57	54	52	48	46	44	40				40
3	82	73	65	59	76	68	61	56	59	54	50	51	47	43	43	40	38	34				34
4	75	64	56	50	70	60	53	47	52	47	42	45	41	37	38	35	32	29				29
5	69	57	49	43	64	54	46	41	47	41	36	40	36	32	34	31	28	25				25
6	64	51	43	37	59	48	41	35	42	36	32	36	32	28	31	27	25	22				22
7	59	46	38	33	55	44	36	31	38	32	28	33	28	25	28	25	22	19				19
8	55	42	34	29	51	40	32	27	35	29	25	30	26	22	26	22	20	17				17
9	51	38	31	26	47	36	29	24	32	26	22	28	23	20	24	20	18	15				15
10	48	35	28	23	44	33	27	22	29	24	20	26	21	18	22	19	16	14				14

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	11514	11514	11514
5°	11566	11408	11495
10°	11507	11363	11451
15°	11438	11282	11372
20°	11320	11185	11277
25°	11196	11065	11153
30°	11060	10941	10996
35°	10921	10786	10843
40°	10739	10616	10625
45°	10550	10404	10372
50°	10279	10156	10131
55°	9975	9866	9796
60°	9673	9498	9467
65°	9200	8994	8919
70°	8549	8341	8179
75°	7633	7388	7236
80°	6280	6053	5781
85°	3719	4086	4171



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	176.7	2.0
10°-20°	503.1	5.6
20°-30°	755.6	8.4
30°-40°	901.7	10.0
40°-50°	924.3	10.3
50°-60°	823.1	9.2
60°-70°	613.5	6.8
70°-80°	332.2	3.7
80°-90°	77.1	0.9
90°-100°	281.0	3.1
100°-110°	773.3	8.6
110°-120°	798.1	8.9
120°-130°	639.5	7.1
130°-140°	502.3	5.6
140°-150°	384.9	4.3
150°-160°	276.7	3.1
160°-170°	169.2	1.9
170°-180°	57.0	0.6
0°-30°	1435.4	16.0
0°-40°	2337.1	26.0
0°-60°	4084.4	45.4
0°-90°	5107.3	56.8
90°-120°	1852.5	20.6
90°-150°	3379.1	37.6
90°-180°	3882.0	43.2
0°-180°	8989.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1872	1872	1872	1872	1872	
5°	1873	1870	1848	1864	1862	178
15°	1796	1790	1772	1786	1786	506
25°	1650	1646	1630	1640	1643	760
35°	1454	1448	1436	1439	1444	908
45°	1213	1207	1196	1190	1192	933
55°	930	932	920	911	914	833
65°	632	630	618	612	613	625
75°	321	318	311	304	304	342
85°	53	58	58	59	59	74
90°	1	5	9	11	11	4
95°	42	153	497	212	136	44
105°	138	212	852	1298	1211	146
115°	245	298	683	1361	1544	241
125°	337	384	620	1049	1229	301
135°	407	452	602	848	960	314
145°	470	503	593	723	778	295
155°	532	550	590	650	668	245
165°	576	583	592	616	620	162
175°	596	597	593	601	600	57
180°	596	596	596	596	596	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1872.0	1872.0	1872.0	1872.0	1872.0
2.5°	1879.2	1875.1	1858.6	1872.0	1869.9
5°	1873.2	1869.5	1847.6	1864.2	1861.7
7.5°	1855.8	1852.0	1832.6	1848.1	1845.8
10°	1842.4	1838.7	1819.3	1834.7	1833.4
12.5°	1825.0	1821.2	1801.8	1817.3	1816.0
15°	1796.2	1789.9	1771.8	1785.9	1785.9
17.5°	1758.1	1753.4	1736.5	1748.4	1748.6
20°	1729.4	1725.6	1708.8	1721.7	1722.9
22.5°	1700.5	1696.8	1678.0	1689.8	1692.1
25°	1649.7	1646.0	1630.4	1639.5	1643.3
27.5°	1597.3	1591.8	1576.5	1584.5	1587.3
30°	1557.2	1554.7	1540.5	1544.4	1548.2
32.5°	1515.1	1512.6	1500.4	1502.4	1509.1
35°	1454.4	1448.1	1436.4	1439.1	1444.1
37.5°	1382.7	1379.7	1368.3	1366.9	1371.7
40°	1337.5	1332.5	1322.1	1319.6	1323.3
42.5°	1288.2	1283.1	1270.7	1268.3	1273.0
45°	1212.9	1206.6	1196.1	1189.8	1192.4
47.5°	1128.5	1128.5	1117.7	1110.4	1114.2
50°	1074.2	1074.2	1061.3	1054.9	1058.7
52.5°	1017.6	1018.6	1004.7	1001.3	1000.1
55°	930.2	931.5	920.0	911.0	913.5
57.5°	846.0	843.2	829.7	823.9	825.2
60°	786.3	782.6	772.1	763.3	769.6
62.5°	725.7	723.9	713.6	703.6	702.8
65°	632.1	629.7	618.0	611.6	612.8
67.5°	539.1	536.1	525.5	516.3	519.6
70°	475.4	475.4	463.8	458.6	454.8
72.5°	416.8	411.8	403.2	395.9	393.2
75°	321.2	317.5	310.9	304.5	304.5
77.5°	233.8	230.6	226.4	221.9	220.8
80°	177.3	176.1	170.9	169.4	163.2
82.5°	124.8	124.6	121.6	118.2	117.9
85°	52.7	57.7	57.9	59.1	59.1
87.5°	9.5	16.2	16.2	14.7	14.7
90°	1.3	5.0	8.9	11.4	11.4
92.5°	17.5	74.7	129.6	49.8	40.8
95°	41.9	153.4	497.0	212.5	135.7
97.5°	68.2	170.1	758.4	584.4	412.3
100°	87.4	180.5	840.6	848.5	692.3
102.5°	105.7	192.8	861.9	1052.7	909.4
105°	138.2	212.5	852.0	1297.6	1210.8
107.5°	169.1	237.1	803.6	1417.6	1443.4
110°	191.4	253.4	767.0	1447.4	1536.7

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	211.8	271.7	730.6	1428.2	1564.1
115°	244.7	298.0	683.4	1360.9	1544.3
117.5°	276.1	325.2	653.5	1266.3	1473.8
120°	295.4	342.5	640.3	1195.5	1409.9
122.5°	312.7	359.8	631.2	1133.3	1336.9
125°	337.3	384.4	620.0	1048.8	1228.6
127.5°	360.6	405.4	612.6	978.3	1136.0
130°	372.8	418.6	608.6	936.5	1080.2
132.5°	386.9	432.8	605.6	899.6	1029.6
135°	407.0	451.6	602.2	848.2	959.8
137.5°	425.8	467.1	599.5	806.7	898.7
140°	440.0	478.4	598.4	779.1	862.2
142.5°	452.1	487.6	596.5	754.5	825.6
145°	470.4	502.7	593.3	722.7	778.5
147.5°	489.9	517.7	591.9	694.6	739.2
150°	502.1	526.9	590.9	679.1	713.8
152.5°	513.2	536.0	589.8	665.8	694.6
155°	532.5	549.9	589.6	649.6	668.2
157.5°	546.5	560.6	589.6	636.3	649.2
160°	556.6	567.8	589.6	629.1	639.0
162.5°	564.8	573.9	590.6	623.0	630.9
165°	575.6	583.1	592.2	616.3	620.0
167.5°	583.3	588.9	593.3	610.6	611.6
170°	588.3	592.1	593.3	608.6	608.6
172.5°	592.3	594.1	593.3	605.6	604.6
175°	595.9	597.1	593.3	601.0	599.7
177.5°	596.9	596.9	592.8	598.9	596.9
180°	595.9	595.9	595.9	595.9	595.9

(END OF REPORT)