

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: P520029

Luminaire Tested: **SQ4-F-075U-100D-830-1D-UNV-STD-W-6**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P520029
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-830-1D-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

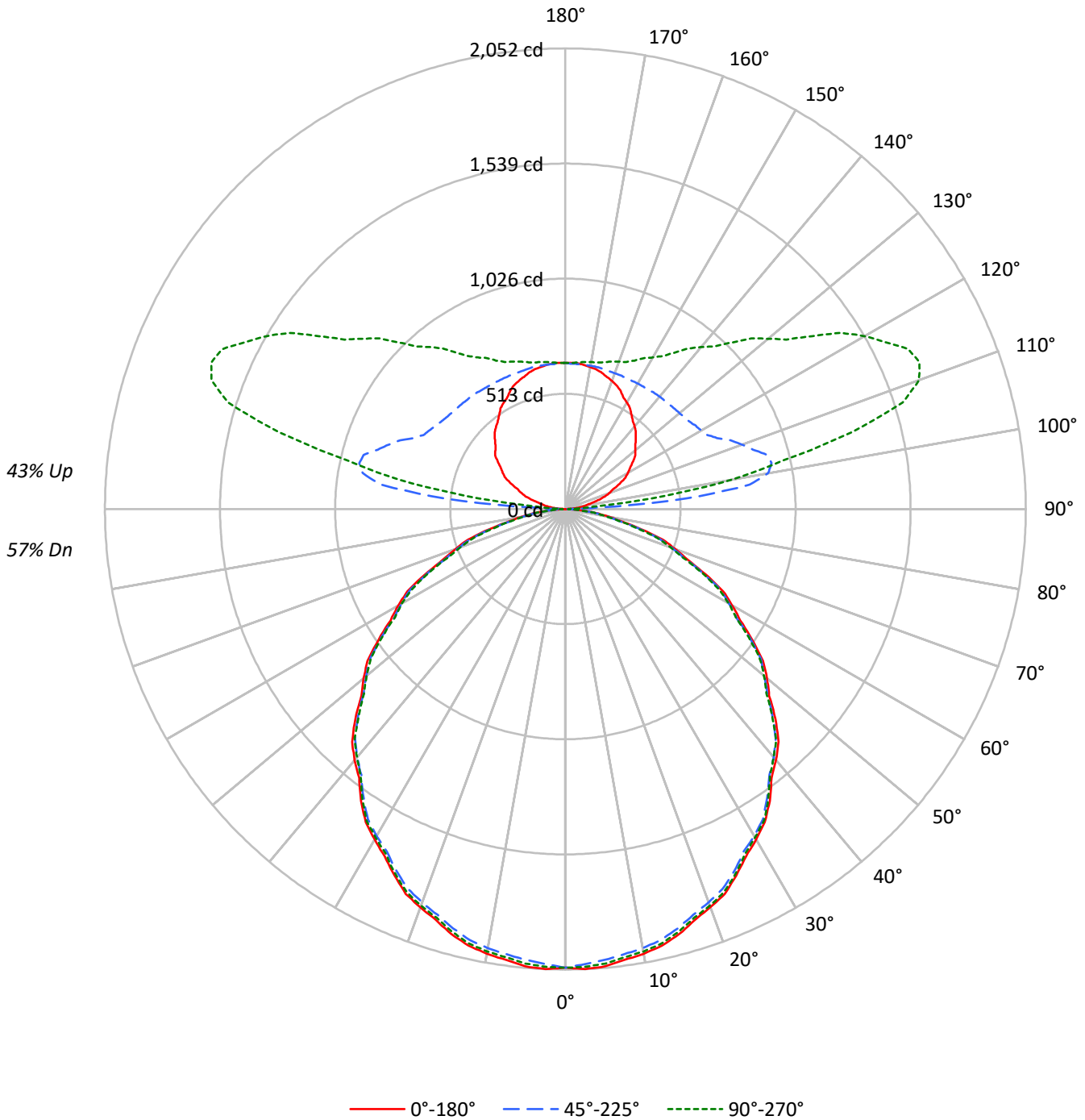
Lumens per Lamp: N/A
Luminaire Lumens: 9815.1 lumens
Efficiency: N/A
Efficacy: 123.0 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: General Diffuse

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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	12572	12572	12572
5°	12629	12455	12551
10°	12564	12406	12503
15°	12488	12318	12417
20°	12359	12213	12313
25°	12224	12082	12177
30°	12076	11946	12006
35°	11924	11777	11840
40°	11726	11590	11602
45°	11519	11360	11324
50°	11222	11088	11062
55°	10892	10771	10697
60°	10561	10371	10337
65°	10045	9821	9740
70°	9335	9107	8931
75°	8337	8068	7902
80°	6858	6610	6308
85°	4058	4453	4552



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	192.9	2.0
10°-20°	549.3	5.6
20°-30°	825.0	8.4
30°-40°	984.5	10.0
40°-50°	1009.2	10.3
50°-60°	898.7	9.2
60°-70°	669.9	6.8
70°-80°	362.7	3.7
80°-90°	84.2	0.9
90°-100°	306.9	3.1
100°-110°	844.3	8.6
110°-120°	871.5	8.9
120°-130°	698.2	7.1
130°-140°	548.4	5.6
140°-150°	420.3	4.3
150°-160°	302.2	3.1
160°-170°	184.8	1.9
170°-180°	62.3	0.6
0°-30°	1567.2	16.0
0°-40°	2551.8	26.0
0°-60°	4459.6	45.4
0°-90°	5576.4	56.8
90°-120°	2022.6	20.6
90°-150°	3689.5	37.6
90°-180°	4239.0	43.2
0°-180°	9815.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2044	2044	2044	2044	2044	
5°	2045	2041	2017	2035	2033	194
15°	1961	1954	1934	1950	1950	552
25°	1801	1797	1780	1790	1794	830
35°	1588	1581	1568	1571	1577	991
45°	1324	1317	1306	1299	1302	1019
55°	1016	1017	1004	995	998	909
65°	690	687	675	668	669	683
75°	351	347	340	332	332	374
85°	58	63	63	64	64	80
90°	1	6	10	12	12	4
95°	46	168	543	232	148	48
105°	151	232	930	1417	1322	159
115°	267	325	746	1486	1686	264
125°	368	420	677	1145	1342	329
135°	444	493	658	926	1048	343
145°	514	549	648	789	850	322
155°	581	600	644	709	730	267
165°	628	637	646	673	677	177
175°	651	652	648	656	655	62
180°	651	651	651	651	651	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2044.0	2044.0	2044.0	2044.0	2044.0
2.5°	2051.8	2047.4	2029.4	2043.9	2041.7
5°	2045.4	2041.2	2017.3	2035.4	2032.8
7.5°	2026.2	2022.2	2001.1	2017.8	2015.3
10°	2011.7	2007.6	1986.4	2003.2	2001.9
12.5°	1992.6	1988.5	1967.4	1984.1	1982.7
15°	1961.1	1954.3	1934.5	1949.9	1949.9
17.5°	1919.6	1914.5	1896.0	1909.0	1909.3
20°	1888.2	1884.1	1865.8	1879.9	1881.2
22.5°	1856.8	1852.7	1832.1	1845.1	1847.6
25°	1801.2	1797.2	1780.2	1790.1	1794.3
27.5°	1744.0	1738.0	1721.3	1730.1	1733.0
30°	1700.3	1697.5	1682.0	1686.3	1690.4
32.5°	1654.3	1651.5	1638.2	1640.4	1647.7
35°	1588.0	1581.2	1568.4	1571.3	1576.8
37.5°	1509.7	1506.4	1494.1	1492.5	1497.6
40°	1460.4	1454.9	1443.5	1440.9	1444.9
42.5°	1406.5	1401.0	1387.4	1384.8	1389.9
45°	1324.3	1317.4	1306.0	1299.1	1301.8
47.5°	1232.3	1232.3	1220.5	1212.5	1216.5
50°	1172.7	1172.7	1158.8	1151.8	1156.0
52.5°	1111.0	1112.2	1097.0	1093.4	1092.0
55°	1015.7	1017.1	1004.4	994.7	997.5
57.5°	923.6	920.6	905.9	899.6	901.0
60°	858.5	854.4	843.1	833.5	840.3
62.5°	792.4	790.4	779.2	768.2	767.4
65°	690.2	687.4	674.8	667.8	669.2
67.5°	588.6	585.4	573.8	563.8	567.3
70°	519.1	519.1	506.4	500.8	496.6
72.5°	455.1	449.6	440.2	432.3	429.2
75°	350.8	346.6	339.5	332.5	332.5
77.5°	255.3	251.8	247.2	242.4	241.0
80°	193.6	192.2	186.6	185.0	178.1
82.5°	136.3	136.0	132.7	129.1	128.8
85°	57.5	63.0	63.1	64.5	64.5
87.5°	10.4	17.8	17.6	16.0	16.0
90°	1.4	5.5	9.7	12.4	12.4
92.5°	19.1	81.7	141.4	54.3	44.6
95°	45.7	167.6	542.7	232.0	148.1
97.5°	74.4	185.7	828.1	638.0	450.2
100°	95.6	197.0	917.9	926.4	755.9
102.5°	115.4	210.5	941.0	1149.3	992.9
105°	150.9	232.1	930.3	1416.8	1322.0
107.5°	184.7	258.8	877.4	1547.8	1575.9
110°	209.0	276.7	837.6	1580.3	1677.9



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	231.2	296.7	797.7	1559.4	1707.7
115°	267.2	325.4	746.2	1485.9	1686.2
117.5°	301.6	355.2	713.5	1382.6	1609.2
120°	322.6	374.0	699.1	1305.2	1539.4
122.5°	341.4	392.8	689.1	1237.4	1459.6
125°	368.3	419.7	677.0	1145.2	1341.5
127.5°	393.7	442.7	668.9	1068.2	1240.4
130°	407.0	457.1	664.5	1022.4	1179.5
132.5°	422.5	472.6	661.2	982.2	1124.1
135°	444.4	493.1	657.6	926.2	1048.0
137.5°	464.9	510.1	654.6	880.8	981.2
140°	480.4	522.3	653.4	850.7	941.3
142.5°	493.7	532.4	651.2	823.8	901.5
145°	513.6	548.8	647.9	789.0	850.0
147.5°	534.9	565.3	646.2	758.3	807.0
150°	548.2	575.2	645.1	741.5	779.4
152.5°	560.4	585.3	644.0	726.9	758.3
155°	581.4	600.4	643.7	709.2	729.6
157.5°	596.7	612.1	643.7	694.8	708.7
160°	607.7	619.9	643.7	686.9	697.7
162.5°	616.6	626.6	644.9	680.2	688.9
165°	628.5	636.7	646.5	672.8	677.0
167.5°	636.9	643.0	647.9	666.7	667.9
170°	642.3	646.4	647.9	664.5	664.5
172.5°	646.7	648.7	647.9	661.1	660.0
175°	650.6	652.0	647.9	656.1	654.8
177.5°	651.7	651.7	647.3	654.0	651.7
180°	650.6	650.6	650.6	650.6	650.6

(END OF REPORT)