

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: P520202

Luminaire Tested: **SQ4-F-100U-075D-835-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P520202
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-23, G3-1910-536-18)
Test Lab: INNOVATION CENTER
Issue Date: 4/29/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-F-100U-075D-835-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

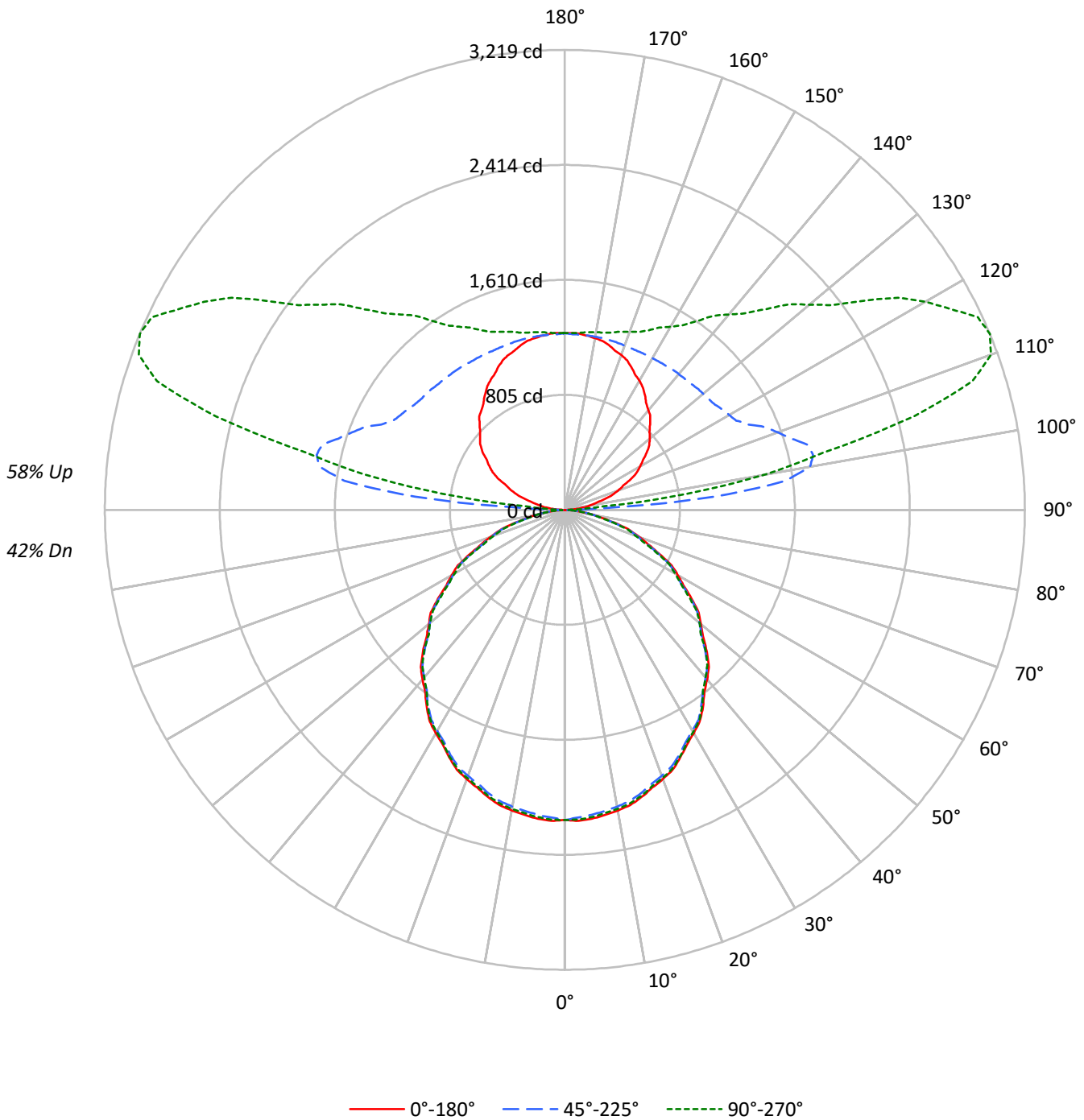
Lumens per Lamp: N/A
Luminaire Lumens: 13961.3 lumens
Efficiency: N/A
Efficacy: 134.6 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 103.7
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	105	105	105	105	96	96	96	96	79	79	79	64	64	64	49	49	49	42
1	96	92	88	84	88	84	81	78	69	67	65	56	54	53	43	42	42	36
2	87	80	74	69	80	73	68	64	61	57	54	49	46	44	38	36	35	30
3	80	70	63	57	72	64	58	53	53	49	45	43	40	37	34	31	30	25
4	73	62	54	48	66	57	50	45	47	42	38	38	35	32	30	28	25	22
5	67	55	47	41	61	51	44	38	42	37	33	34	30	27	27	24	22	19
6	61	49	41	36	56	45	38	33	38	33	29	31	27	24	24	22	19	16
7	57	45	37	31	52	41	34	29	34	29	25	28	24	21	22	19	17	14
8	53	40	33	27	48	37	30	26	31	26	22	26	22	19	20	18	15	13
9	49	37	29	24	45	34	27	23	29	23	20	24	20	17	19	16	14	12
10	46	34	27	22	42	31	25	20	26	21	18	22	18	15	17	15	12	10

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10014	10014	10014
5°	10052	9925	9998
10°	10012	9883	9957
15°	9935	9813	9897
20°	9845	9729	9807
25°	9737	9637	9707
30°	9614	9509	9561
35°	9487	9388	9432
40°	9327	9233	9221
45°	9167	9052	9078
50°	8913	8842	8842
55°	8706	8595	8516
60°	8425	8281	8208
65°	7971	7820	7713
70°	7486	7300	7115
75°	6736	6490	6349
80°	5385	5281	5228
85°	3229	3647	3753



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	204.9	1.5
10°-20°	583.3	4.2
20°-30°	876.4	6.3
30°-40°	1045.8	7.5
40°-50°	1072.5	7.7
50°-60°	955.6	6.8
60°-70°	712.5	5.1
70°-80°	386.4	2.8
80°-90°	91.3	0.7
90°-100°	578.9	4.1
100°-110°	1598.3	11.4
110°-120°	1648.4	11.8
120°-130°	1324.6	9.5
130°-140°	1041.0	7.5
140°-150°	798.4	5.7
150°-160°	573.8	4.1
160°-170°	350.9	2.5
170°-180°	118.3	0.8
0°-30°	1664.6	11.9
0°-40°	2710.4	19.4
0°-60°	4738.5	33.9
0°-90°	5928.8	42.5
90°-120°	3825.6	27.4
90°-150°	6989.6	50.1
90°-180°	8033.0	57.5
0°-180°	13961.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2171	2171	2171	2171	2171	
5°	2171	2167	2143	2161	2159	206
15°	2080	2076	2055	2070	2072	587
25°	1913	1911	1893	1903	1907	881
35°	1685	1681	1667	1667	1675	1052
45°	1405	1399	1388	1388	1392	1082
55°	1082	1080	1069	1059	1059	967
65°	730	730	716	708	707	727
75°	378	370	364	358	356	397
85°	61	65	69	69	71	85
90°	4	8	16	18	20	8
95°	85	313	1050	432	281	91
105°	285	440	1758	2684	2528	303
115°	510	617	1416	2804	3188	501
125°	700	797	1284	2172	2550	623
135°	843	934	1248	1760	1984	652
145°	977	1045	1232	1498	1612	612
155°	1102	1138	1222	1344	1387	508
165°	1193	1208	1228	1276	1286	336
175°	1236	1238	1230	1248	1244	117
180°	1236	1236	1236	1236	1236	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2170.8	2170.8	2170.8	2170.8	2170.8
2.5°	2178.7	2174.1	2155.1	2170.8	2169.3
5°	2170.8	2167.0	2143.3	2161.0	2159.0
7.5°	2153.1	2148.9	2125.6	2143.3	2142.9
10°	2137.4	2131.6	2109.8	2127.5	2125.6
12.5°	2116.9	2111.1	2089.4	2107.1	2105.1
15°	2080.3	2076.5	2054.7	2070.5	2072.4
17.5°	2038.6	2031.3	2011.8	2027.2	2029.1
20°	2005.5	1999.7	1981.9	1995.7	1997.6
22.5°	1970.9	1965.1	1947.3	1961.0	1963.0
25°	1913.0	1911.0	1893.3	1903.3	1907.1
27.5°	1850.4	1845.0	1830.7	1838.3	1842.2
30°	1804.8	1800.9	1785.1	1791.1	1794.9
32.5°	1757.5	1755.3	1741.0	1743.9	1749.3
35°	1684.7	1680.9	1667.0	1667.2	1674.9
37.5°	1604.0	1599.8	1588.3	1586.4	1589.5
40°	1548.9	1543.1	1533.2	1531.2	1531.2
42.5°	1492.2	1488.0	1474.9	1471.5	1476.1
45°	1405.2	1399.4	1387.5	1387.6	1391.5
47.5°	1311.2	1308.9	1295.0	1288.7	1290.3
50°	1241.9	1245.7	1232.0	1224.4	1232.0
52.5°	1182.1	1179.8	1167.5	1159.7	1162.8
55°	1082.5	1080.5	1068.7	1058.8	1058.8
57.5°	982.5	977.5	965.2	957.8	963.6
60°	913.2	911.2	897.5	883.8	889.6
62.5°	843.9	840.5	826.6	817.7	821.9
65°	730.2	730.2	716.4	708.5	706.6
67.5°	630.6	621.3	613.7	604.1	601.5
70°	555.0	547.3	541.2	533.3	527.5
72.5°	481.0	476.4	467.2	459.4	458.2
75°	377.9	370.2	364.1	358.2	356.2
77.5°	268.8	267.3	261.8	258.6	259.8
80°	202.7	202.7	198.8	198.8	196.8
82.5°	142.9	144.5	143.7	140.5	140.1
85°	61.0	64.8	68.9	68.9	70.9
87.5°	11.8	20.3	20.5	20.9	21.3
90°	4.0	7.8	15.8	17.8	19.8
92.5°	35.6	147.8	264.2	96.4	75.2
95°	85.1	313.3	1050.4	431.7	280.8
97.5°	140.9	350.9	1555.9	1197.9	867.5
100°	182.0	373.4	1742.6	1755.0	1426.2
102.5°	221.6	399.1	1779.0	2168.4	1856.6
105°	284.8	439.6	1758.4	2684.5	2527.9
107.5°	352.1	489.8	1660.4	2933.5	2990.8
110°	399.5	523.3	1584.4	2987.0	3172.7



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	442.3	561.4	1513.2	2944.8	3218.6
115°	510.3	616.7	1416.3	2803.7	3188.5
117.5°	569.7	675.6	1352.6	2605.1	3043.0
120°	609.3	713.7	1327.2	2470.7	2911.7
122.5°	647.2	747.1	1306.7	2345.1	2762.9
125°	700.3	796.9	1283.7	2172.5	2549.7
127.5°	745.3	842.0	1270.3	2026.6	2351.9
130°	775.3	872.1	1263.9	1937.3	2233.2
132.5°	803.8	895.9	1257.6	1862.3	2130.4
135°	842.6	933.5	1248.1	1759.6	1984.0
137.5°	886.1	968.9	1243.3	1673.5	1864.9
140°	909.9	991.1	1240.2	1615.9	1784.2
142.5°	936.8	1011.9	1237.0	1564.8	1712.9
145°	977.1	1044.8	1232.3	1498.0	1612.1
147.5°	1015.9	1075.1	1227.9	1441.6	1530.2
150°	1044.4	1092.8	1226.3	1408.1	1479.6
152.5°	1066.6	1111.8	1224.8	1379.3	1438.4
155°	1101.8	1138.5	1222.4	1344.1	1386.6
157.5°	1134.2	1162.4	1222.8	1318.4	1347.4
160°	1153.2	1178.4	1224.4	1304.0	1325.3
162.5°	1169.1	1191.0	1225.9	1291.2	1307.8
165°	1192.8	1208.2	1228.3	1276.1	1285.7
167.5°	1210.9	1220.2	1230.3	1266.8	1269.9
170°	1220.4	1228.2	1230.3	1261.9	1261.9
172.5°	1228.3	1233.0	1230.3	1255.6	1254.0
175°	1236.2	1238.2	1230.3	1248.1	1244.1
177.5°	1239.4	1237.9	1229.9	1241.0	1237.8
180°	1236.2	1236.2	1236.2	1236.2	1236.2

(END OF REPORT)