

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: P520201

Luminaire Tested: **SQ4-F-100U-075D-835-1D-UNV-STD-W-6**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P520201
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-6
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

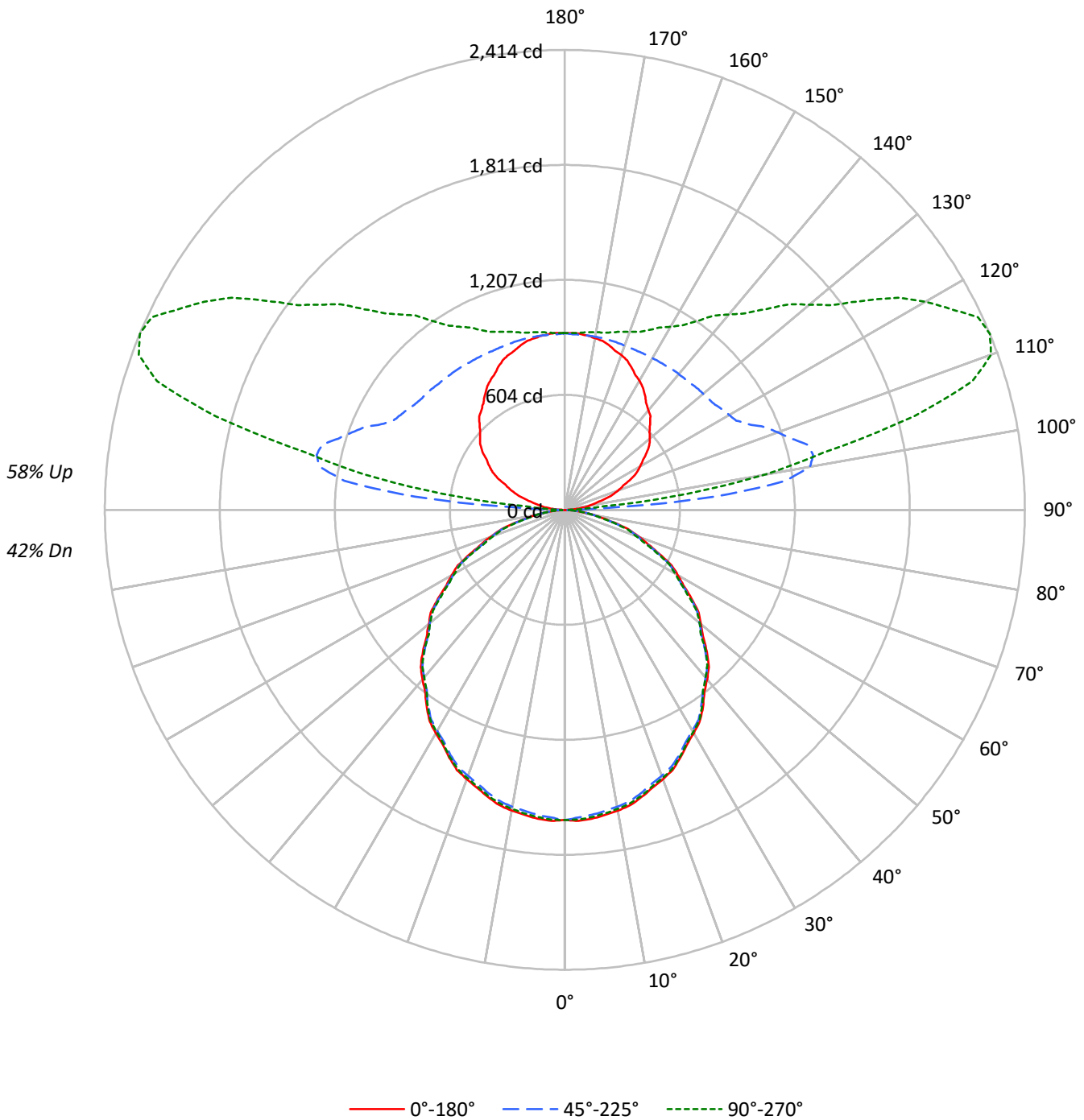
Lumens per Lamp: N/A
Luminaire Lumens: 10471.0 lumens
Efficiency: N/A
Efficacy: 136.9 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 76.5
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	105	105	105	105	96	96	96	96	79	79	79	64	64	64	49	49	49	42				42
1	96	92	88	84	88	84	81	78	69	67	65	56	54	53	43	42	42	36				36
2	87	80	74	69	80	73	68	64	61	57	54	49	46	44	38	36	35	30				30
3	80	70	63	57	72	64	58	53	53	49	45	43	40	37	34	31	30	25				25
4	73	62	54	48	66	57	50	45	47	42	38	38	35	32	30	28	25	22				22
5	67	55	47	41	61	51	44	38	42	37	33	34	30	27	27	24	22	19				19
6	61	49	41	36	56	45	38	33	38	33	29	31	27	24	24	22	19	16				16
7	57	45	37	31	52	41	34	29	34	29	25	28	24	21	22	19	17	14				14
8	53	40	33	27	48	37	30	26	31	26	22	26	22	19	20	18	15	13				13
9	49	37	29	24	45	34	27	23	29	23	20	24	20	17	19	16	14	12				12
10	46	34	27	22	42	31	25	20	26	21	18	22	18	15	17	15	12	10				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	9387	9432
40°	9328	9233	9221
45°	9167	9052	9078
50°	8913	8842	8842
55°	8706	8595	8516
60°	8425	8280	8208
65°	7970	7820	7712
70°	7487	7300	7114
75°	6735	6490	6350
80°	5384	5281	5228
85°	3232	3649	3747



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	153.7	1.5
10°-20°	437.5	4.2
20°-30°	657.3	6.3
30°-40°	784.3	7.5
40°-50°	804.3	7.7
50°-60°	716.7	6.8
60°-70°	534.4	5.1
70°-80°	289.8	2.8
80°-90°	68.5	0.7
90°-100°	434.2	4.1
100°-110°	1198.7	11.4
110°-120°	1236.3	11.8
120°-130°	993.5	9.5
130°-140°	780.8	7.5
140°-150°	598.8	5.7
150°-160°	430.3	4.1
160°-170°	263.2	2.5
170°-180°	88.7	0.8
0°-30°	1248.5	11.9
0°-40°	2032.8	19.4
0°-60°	3553.9	33.9
0°-90°	4446.6	42.5
90°-120°	2869.2	27.4
90°-150°	5242.2	50.1
90°-180°	6024.0	57.5
0°-180°	10471.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1628	1628	1628	1628	1628	
5°	1628	1625	1608	1621	1619	154
15°	1560	1557	1541	1553	1554	440
25°	1435	1433	1420	1428	1430	661
35°	1264	1261	1250	1250	1256	789
45°	1054	1050	1041	1041	1044	811
55°	812	810	802	794	794	725
65°	548	548	537	531	530	545
75°	283	278	273	269	267	298
85°	46	49	52	52	53	63
90°	3	6	12	13	15	6
95°	64	235	788	324	211	68
105°	214	330	1319	2014	1896	227
115°	383	463	1062	2103	2391	376
125°	525	598	963	1629	1912	467
135°	632	700	936	1320	1488	489
145°	733	784	924	1124	1209	459
155°	826	854	917	1008	1040	381
165°	895	906	921	957	964	252
175°	927	929	923	936	933	88
180°	927	927	927	927	927	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1628.1	1628.1	1628.1	1628.1	1628.1
2.5°	1634.0	1630.6	1616.3	1628.1	1626.9
5°	1628.1	1625.3	1607.5	1620.7	1619.3
7.5°	1614.8	1611.7	1594.2	1607.5	1607.2
10°	1603.0	1598.7	1582.4	1595.7	1594.2
12.5°	1587.7	1583.4	1567.0	1580.3	1578.8
15°	1560.2	1557.4	1541.0	1552.8	1554.3
17.5°	1528.9	1523.4	1508.9	1520.4	1521.9
20°	1504.1	1499.8	1486.4	1496.8	1498.2
22.5°	1478.2	1473.8	1460.4	1470.8	1472.3
25°	1434.8	1433.3	1420.0	1427.5	1430.3
27.5°	1387.8	1383.8	1373.1	1378.8	1381.6
30°	1353.6	1350.7	1338.8	1343.3	1346.2
32.5°	1318.1	1316.4	1305.8	1307.9	1312.0
35°	1263.5	1260.7	1250.2	1250.3	1256.2
37.5°	1203.0	1199.9	1191.2	1189.8	1192.1
40°	1161.7	1157.4	1149.9	1148.4	1148.4
42.5°	1119.2	1116.0	1106.2	1103.6	1107.1
45°	1053.9	1049.6	1040.6	1040.7	1043.6
47.5°	983.4	981.6	971.3	966.5	967.7
50°	931.4	934.3	924.0	918.2	924.0
52.5°	886.5	884.8	875.6	869.8	872.1
55°	811.9	810.4	801.5	794.1	794.1
57.5°	736.9	733.1	723.9	718.4	722.7
60°	684.9	683.4	673.1	662.9	667.2
62.5°	632.9	630.4	620.0	613.3	616.4
65°	547.6	547.6	537.3	531.4	529.9
67.5°	472.9	466.1	460.2	453.2	451.1
70°	416.3	410.5	405.9	399.9	395.6
72.5°	360.8	357.3	350.4	344.5	343.6
75°	283.4	277.6	273.1	268.6	267.2
77.5°	201.6	200.5	196.3	194.0	194.8
80°	152.0	152.0	149.1	149.1	147.6
82.5°	107.2	108.3	107.8	105.4	105.1
85°	45.8	48.6	51.7	51.7	53.1
87.5°	8.9	15.3	15.4	15.6	15.9
90°	3.0	5.8	11.9	13.4	14.8
92.5°	26.7	110.8	198.2	72.3	56.4
95°	63.8	234.9	787.7	323.8	210.7
97.5°	105.6	263.1	1167.0	898.4	650.7
100°	136.5	280.0	1307.0	1316.3	1069.6
102.5°	166.2	299.3	1334.3	1626.3	1392.4
105°	213.7	329.7	1318.8	2013.5	1895.9
107.5°	264.0	367.4	1245.2	2200.1	2243.1
110°	299.6	392.5	1188.3	2240.3	2379.6



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	331.7	421.1	1134.9	2208.6	2414.0
115°	382.7	462.6	1062.2	2102.8	2391.4
117.5°	427.2	506.8	1014.4	1953.8	2282.2
120°	456.9	535.3	995.5	1853.0	2183.7
122.5°	485.4	560.3	980.0	1758.8	2072.2
125°	525.2	597.7	962.8	1629.4	1912.3
127.5°	559.0	631.5	952.7	1519.9	1763.9
130°	581.6	654.1	948.0	1453.0	1674.9
132.5°	602.9	672.0	943.2	1396.7	1597.8
135°	632.0	700.2	936.1	1319.7	1488.0
137.5°	664.7	726.7	932.5	1255.0	1398.7
140°	682.5	743.3	930.2	1211.9	1338.1
142.5°	702.6	758.8	927.8	1173.6	1284.7
145°	732.8	783.7	924.2	1123.5	1209.0
147.5°	761.9	806.3	921.0	1081.2	1147.7
150°	783.3	819.6	919.8	1056.0	1109.7
152.5°	799.9	833.8	918.6	1034.4	1078.8
155°	826.3	853.9	916.8	1008.0	1040.0
157.5°	850.6	871.8	917.1	988.8	1010.6
160°	864.9	883.8	918.3	978.0	994.0
162.5°	876.7	893.3	919.5	968.4	980.9
165°	894.6	906.1	921.3	957.1	964.3
167.5°	908.2	915.2	922.7	950.1	952.4
170°	915.3	921.2	922.7	946.5	946.5
172.5°	921.3	924.7	922.7	941.7	940.5
175°	927.2	928.7	922.7	936.0	933.1
177.5°	929.6	928.4	922.4	930.8	928.4
180°	927.2	927.2	927.2	927.2	927.2

(END OF REPORT)