

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: P520205

Luminaire Tested: **SQ4-F-100U-075D-840-1D-UNV-STD-W-6**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P520205
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-840-1D-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

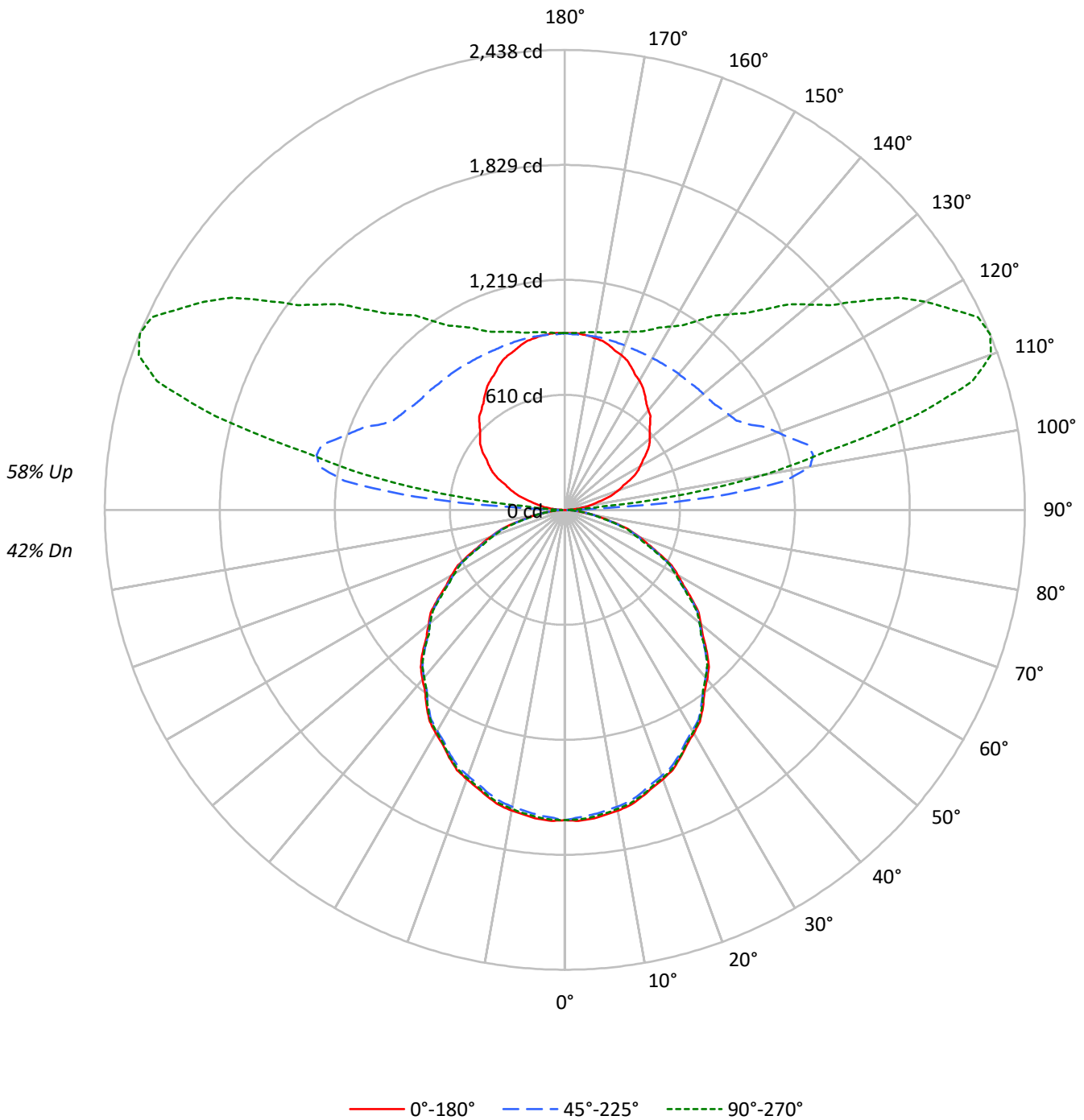
Lumens per Lamp: N/A
Luminaire Lumens: 10576.4 lumens
Efficiency: N/A
Efficacy: 138.3 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: General Diffuse

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	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°	10116	10116	10116
5°	10154	10025	10099
10°	10113	9982	10057
15°	10036	9912	9997
20°	9945	9827	9905
25°	9835	9734	9805
30°	9710	9604	9658
35°	9583	9482	9527
40°	9422	9326	9313
45°	9260	9143	9169
50°	9002	8931	8931
55°	8793	8682	8601
60°	8510	8364	8290
65°	8050	7898	7789
70°	7562	7375	7185
75°	6804	6554	6412
80°	5441	5334	5281
85°	3268	3684	3783



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	155.2	1.5
10°-20°	441.9	4.2
20°-30°	663.9	6.3
30°-40°	792.2	7.5
40°-50°	812.4	7.7
50°-60°	723.9	6.8
60°-70°	539.8	5.1
70°-80°	292.7	2.8
80°-90°	69.2	0.7
90°-100°	438.6	4.1
100°-110°	1210.8	11.4
110°-120°	1248.7	11.8
120°-130°	1003.5	9.5
130°-140°	788.6	7.5
140°-150°	604.8	5.7
150°-160°	434.7	4.1
160°-170°	265.8	2.5
170°-180°	89.6	0.8
0°-30°	1261.0	11.9
0°-40°	2053.2	19.4
0°-60°	3589.6	33.9
0°-90°	4491.3	42.5
90°-120°	2898.1	27.4
90°-150°	5295.0	50.1
90°-180°	6085.0	57.5
0°-180°	10576.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1645	1645	1645	1645	1645	
5°	1645	1642	1624	1637	1636	156
15°	1576	1573	1557	1568	1570	444
25°	1449	1448	1434	1442	1445	667
35°	1276	1273	1263	1263	1269	797
45°	1065	1060	1051	1051	1054	819
55°	820	818	810	802	802	732
65°	553	553	543	537	535	551
75°	286	280	276	271	270	301
85°	46	49	52	52	54	64
90°	3	6	12	14	15	6
95°	64	237	796	327	213	69
105°	216	333	1332	2034	1915	230
115°	387	467	1073	2124	2416	380
125°	530	604	972	1646	1932	472
135°	638	707	946	1333	1503	494
145°	740	792	934	1135	1221	463
155°	835	862	926	1018	1050	385
165°	904	915	931	967	974	255
175°	936	938	932	946	942	89
180°	936	936	936	936	936	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1644.6	1644.6	1644.6	1644.6	1644.6
2.5°	1650.5	1647.0	1632.6	1644.5	1643.3
5°	1644.6	1641.6	1623.6	1637.0	1635.6
7.5°	1631.1	1627.9	1610.2	1623.6	1623.3
10°	1619.2	1614.7	1598.3	1611.7	1610.2
12.5°	1603.6	1599.3	1582.8	1596.1	1594.7
15°	1576.0	1573.0	1556.6	1568.5	1570.0
17.5°	1544.3	1538.8	1524.0	1535.7	1537.2
20°	1519.3	1514.9	1501.4	1511.8	1513.3
22.5°	1493.0	1488.7	1475.1	1485.6	1487.1
25°	1449.2	1447.8	1434.3	1441.8	1444.7
27.5°	1401.8	1397.7	1386.8	1392.6	1395.5
30°	1367.2	1364.3	1352.3	1356.8	1359.8
32.5°	1331.4	1329.7	1318.9	1321.1	1325.1
35°	1276.2	1273.4	1262.8	1262.9	1268.8
37.5°	1215.1	1211.9	1203.2	1201.7	1204.1
40°	1173.4	1169.0	1161.5	1159.9	1159.9
42.5°	1130.4	1127.2	1117.3	1114.7	1118.2
45°	1064.6	1060.1	1051.1	1051.2	1054.1
47.5°	993.3	991.5	981.0	976.3	977.5
50°	940.8	943.7	933.3	927.5	933.3
52.5°	895.5	893.7	884.5	878.5	880.8
55°	820.0	818.5	809.6	802.1	802.1
57.5°	744.2	740.5	731.2	725.5	730.0
60°	691.8	690.3	679.9	669.6	673.9
62.5°	639.3	636.7	626.2	619.4	622.6
65°	553.1	553.1	542.7	536.7	535.2
67.5°	477.7	470.7	464.9	457.7	455.6
70°	420.5	414.6	410.1	404.0	399.5
72.5°	364.4	360.9	354.0	348.0	347.1
75°	286.3	280.5	275.8	271.3	269.8
77.5°	203.7	202.5	198.3	195.9	196.8
80°	153.6	153.6	150.6	150.6	149.1
82.5°	108.2	109.4	108.8	106.5	106.2
85°	46.3	49.1	52.2	52.3	53.6
87.5°	9.0	15.4	15.5	15.8	16.1
90°	3.0	5.9	12.0	13.6	14.9
92.5°	27.0	112.0	200.2	73.1	57.0
95°	64.4	237.3	795.7	327.0	212.8
97.5°	106.7	265.8	1178.7	907.5	657.2
100°	137.9	282.9	1320.1	1329.4	1080.4
102.5°	167.9	302.3	1347.7	1642.6	1406.5
105°	215.7	333.0	1332.1	2033.7	1915.0
107.5°	266.7	371.1	1257.8	2222.3	2265.7
110°	302.7	396.5	1200.2	2262.8	2403.5



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	335.0	425.3	1146.3	2230.8	2438.3
115°	386.6	467.2	1072.9	2124.0	2415.5
117.5°	431.6	511.8	1024.6	1973.5	2305.2
120°	461.6	540.6	1005.4	1871.7	2205.8
122.5°	490.3	565.9	989.9	1776.5	2093.1
125°	530.4	603.7	972.5	1645.8	1931.5
127.5°	564.6	637.8	962.3	1535.3	1781.7
130°	587.4	660.7	957.5	1467.6	1691.8
132.5°	609.0	678.7	952.7	1410.7	1613.8
135°	638.3	707.2	945.5	1333.0	1502.9
137.5°	671.3	734.0	941.9	1267.7	1412.7
140°	689.3	750.8	939.6	1224.2	1351.6
142.5°	709.7	766.5	937.1	1185.4	1297.7
145°	740.2	791.5	933.5	1134.8	1221.2
147.5°	769.6	814.4	930.3	1092.1	1159.2
150°	791.2	827.8	929.1	1066.7	1120.9
152.5°	808.0	842.2	927.9	1044.8	1089.7
155°	834.6	862.5	926.0	1018.2	1050.5
157.5°	859.2	880.6	926.3	998.8	1020.8
160°	873.6	892.7	927.6	987.8	1004.0
162.5°	885.5	902.3	928.8	978.1	990.8
165°	903.6	915.3	930.6	966.7	974.0
167.5°	917.4	924.4	932.0	959.6	962.0
170°	924.5	930.4	932.0	956.0	956.0
172.5°	930.6	934.0	932.0	951.2	950.0
175°	936.5	938.0	932.0	945.5	942.5
177.5°	939.0	937.8	931.7	940.1	937.8
180°	936.5	936.5	936.5	936.5	936.5

(END OF REPORT)