

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: P520045

Luminaire Tested: **SQ4-F-075U-100D-935-1D-UNV-STD-W-6**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P520045
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-935-1D-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

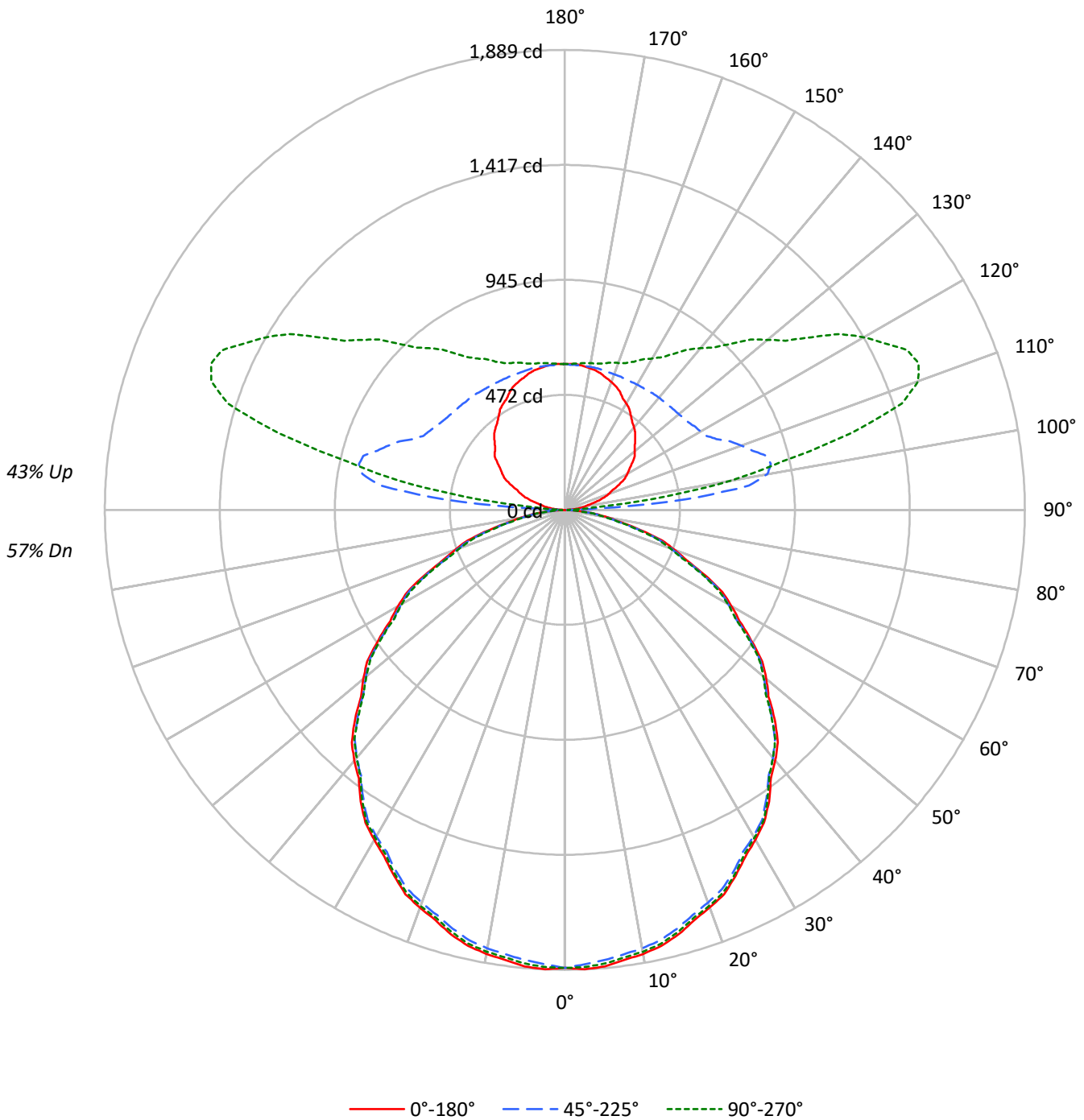
Lumens per Lamp: N/A
Luminaire Lumens: 9035.2 lumens
Efficiency: N/A
Efficacy: 113.2 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: General Diffuse

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°	11573	11573	11573
5°	11626	11466	11553
10°	11566	11421	11510
15°	11496	11340	11430
20°	11377	11242	11336
25°	11253	11121	11210
30°	11116	10997	11052
35°	10977	10840	10900
40°	10794	10669	10680
45°	10604	10458	10424
50°	10331	10207	10182
55°	10025	9915	9846
60°	9722	9547	9515
65°	9246	9040	8965
70°	8593	8384	8222
75°	7671	7427	7274
80°	6312	6082	5809
85°	3733	4107	4192



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	177.6	2.0
10°-20°	505.7	5.6
20°-30°	759.4	8.4
30°-40°	906.3	10.0
40°-50°	929.0	10.3
50°-60°	827.2	9.2
60°-70°	616.7	6.8
70°-80°	333.9	3.7
80°-90°	77.5	0.9
90°-100°	282.5	3.1
100°-110°	777.2	8.6
110°-120°	802.2	8.9
120°-130°	642.7	7.1
130°-140°	504.8	5.6
140°-150°	386.9	4.3
150°-160°	278.1	3.1
160°-170°	170.1	1.9
170°-180°	57.3	0.6
0°-30°	1442.7	16.0
0°-40°	2349.0	26.0
0°-60°	4105.2	45.4
0°-90°	5133.3	56.8
90°-120°	1861.9	20.6
90°-150°	3396.3	37.6
90°-180°	3902.0	43.2
0°-180°	9035.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1882	1882	1882	1882	1882	
5°	1883	1879	1857	1874	1871	179
15°	1805	1799	1781	1795	1795	509
25°	1658	1654	1639	1648	1652	764
35°	1462	1456	1444	1446	1452	913
45°	1219	1213	1202	1196	1198	938
55°	935	936	925	916	918	837
65°	635	633	621	615	616	628
75°	323	319	312	306	306	344
85°	53	58	58	59	59	74
90°	1	5	9	11	11	4
95°	42	154	500	214	136	44
105°	139	214	856	1304	1217	146
115°	246	300	687	1368	1552	243
125°	339	386	623	1054	1235	302
135°	409	454	605	852	965	316
145°	473	505	596	726	782	296
155°	535	553	592	653	672	246
165°	579	586	595	619	623	163
175°	599	600	596	604	603	57
180°	599	599	599	599	599	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1881.6	1881.6	1881.6	1881.6	1881.6
2.5°	1888.8	1884.7	1868.1	1881.5	1879.5
5°	1882.9	1879.0	1857.0	1873.7	1871.2
7.5°	1865.2	1861.5	1842.0	1857.5	1855.2
10°	1851.8	1848.1	1828.6	1844.0	1842.8
12.5°	1834.3	1830.4	1811.0	1826.5	1825.2
15°	1805.4	1799.0	1780.8	1795.0	1795.0
17.5°	1767.1	1762.3	1745.4	1757.3	1757.5
20°	1738.2	1734.4	1717.5	1730.5	1731.8
22.5°	1709.3	1705.5	1686.6	1698.5	1700.7
25°	1658.1	1654.4	1638.7	1647.8	1651.7
27.5°	1605.4	1599.9	1584.5	1592.5	1595.3
30°	1565.1	1562.6	1548.4	1552.3	1556.1
32.5°	1522.8	1520.2	1508.0	1510.0	1516.9
35°	1461.9	1455.5	1443.7	1446.5	1451.6
37.5°	1389.8	1386.8	1375.4	1373.9	1378.6
40°	1344.3	1339.3	1328.8	1326.3	1330.1
42.5°	1294.7	1289.7	1277.2	1274.7	1279.4
45°	1219.1	1212.8	1202.3	1195.9	1198.4
47.5°	1134.4	1134.4	1123.5	1116.1	1119.9
50°	1079.6	1079.6	1066.7	1060.3	1064.1
52.5°	1022.7	1023.8	1009.8	1006.5	1005.2
55°	934.9	936.2	924.6	915.6	918.2
57.5°	850.2	847.5	834.0	828.0	829.3
60°	790.3	786.5	776.1	767.2	773.5
62.5°	729.3	727.6	717.3	707.2	706.4
65°	635.3	632.8	621.1	614.7	616.0
67.5°	541.9	538.8	528.2	519.0	522.3
70°	477.8	477.8	466.2	460.9	457.2
72.5°	418.9	413.9	405.2	397.9	395.1
75°	322.8	319.0	312.5	306.1	306.1
77.5°	235.0	231.8	227.5	223.1	221.8
80°	178.2	177.0	171.7	170.3	164.0
82.5°	125.5	125.2	122.2	118.8	118.5
85°	52.9	58.0	58.2	59.4	59.4
87.5°	9.5	16.3	16.2	14.8	14.8
90°	1.3	5.0	8.9	11.4	11.4
92.5°	17.6	75.1	130.3	50.0	41.1
95°	42.1	154.2	499.5	213.6	136.3
97.5°	68.6	171.0	762.3	587.4	414.4
100°	87.9	181.3	844.9	852.8	695.8
102.5°	106.3	193.8	866.3	1058.0	914.0
105°	138.9	213.6	856.3	1304.2	1217.0
107.5°	170.0	238.3	807.7	1424.8	1450.7
110°	192.4	254.7	771.0	1454.9	1544.5

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	212.8	273.1	734.3	1435.5	1572.0
115°	246.0	299.5	686.8	1367.8	1552.2
117.5°	277.6	326.9	656.8	1272.7	1481.4
120°	297.0	344.3	643.5	1201.5	1417.1
122.5°	314.3	361.6	634.4	1139.1	1343.6
125°	339.0	386.4	623.2	1054.2	1234.9
127.5°	362.4	407.6	615.7	983.3	1141.9
130°	374.6	420.8	611.7	941.2	1085.7
132.5°	388.9	435.1	608.6	904.2	1034.8
135°	409.0	453.9	605.4	852.5	964.7
137.5°	427.9	469.6	602.5	810.8	903.3
140°	442.2	480.8	601.5	783.1	866.6
142.5°	454.4	490.0	599.5	758.3	829.8
145°	472.8	505.2	596.4	726.4	782.5
147.5°	492.4	520.4	594.9	698.1	743.0
150°	504.6	529.6	593.8	682.5	717.5
152.5°	515.9	538.7	592.8	669.2	698.1
155°	535.2	552.6	592.5	652.9	671.6
157.5°	549.2	563.5	592.5	639.5	652.5
160°	559.5	570.6	592.5	632.4	642.2
162.5°	567.6	576.8	593.6	626.2	634.1
165°	578.6	586.0	595.1	619.4	623.2
167.5°	586.2	592.0	596.4	613.8	614.7
170°	591.3	595.1	596.4	611.7	611.7
172.5°	595.4	597.1	596.4	608.6	607.6
175°	598.9	600.2	596.4	604.0	602.8
177.5°	600.0	600.0	595.9	601.9	600.0
180°	598.9	598.9	598.9	598.9	598.9

(END OF REPORT)