

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: P520397

Luminaire Tested: **SQ4-F-150U-075D-840-1D-UNV-STD-W-6**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P520397
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-25, 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-150U-075D-840-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 1500 LUMENS PER FOOT
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

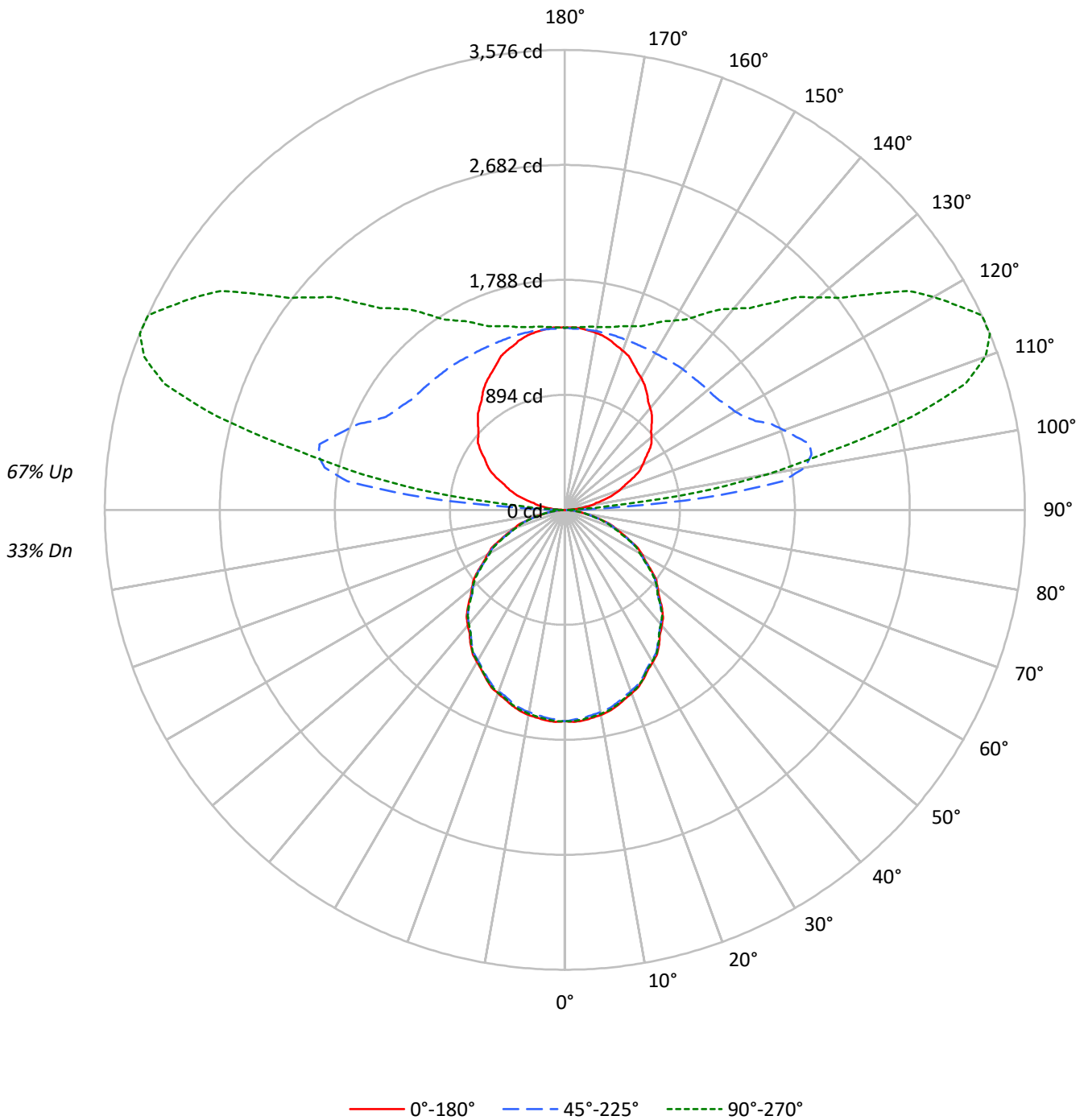
Lumens per Lamp: N/A
Luminaire Lumens: 13619.2 lumens
Efficiency: N/A
Efficacy: 140.5 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 96.9
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	103	103	103	103	93	93	93	93	74	74	74	56	56	56	40	40	40	33
1	94	90	86	83	85	81	78	75	65	62	60	50	48	47	36	35	34	28
2	85	78	72	67	77	71	66	61	57	53	50	43	41	39	31	30	29	23
3	78	69	62	56	70	62	56	51	50	45	42	38	35	33	28	26	24	20
4	71	61	53	47	64	55	48	43	44	39	36	34	31	28	25	23	21	17
5	65	54	46	40	58	49	42	37	39	34	30	30	27	24	22	20	18	14
6	60	48	40	35	54	44	37	32	35	30	26	27	24	21	20	18	16	13
7	55	43	36	30	50	39	33	28	32	27	23	25	21	19	18	16	14	11
8	51	39	32	26	46	36	29	24	29	24	20	23	19	16	17	14	13	10
9	48	36	28	23	43	33	26	22	26	22	18	21	17	15	15	13	11	9
10	44	33	26	21	40	30	24	19	24	20	16	19	16	13	14	12	10	8

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	1.1
10°-20°	441.9	3.2
20°-30°	663.9	4.9
30°-40°	792.2	5.8
40°-50°	812.4	6.0
50°-60°	723.9	5.3
60°-70°	539.8	4.0
70°-80°	292.7	2.1
80°-90°	70.2	0.5
90°-100°	657.9	4.8
100°-110°	1778.8	13.1
110°-120°	1870.1	13.7
120°-130°	1519.0	11.2
130°-140°	1191.6	8.7
140°-150°	914.5	6.7
150°-160°	657.7	4.8
160°-170°	401.8	3.0
170°-180°	135.5	1.0
0°-30°	1261.0	9.3
0°-40°	2053.2	15.1
0°-60°	3589.6	26.4
0°-90°	4492.3	33.0
90°-120°	4306.7	31.6
90°-150°	7931.9	58.2
90°-180°	9127.0	67.0
0°-180°	13619.2	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	9	20	21	20	8
95°	102	358	1094	566	337	107
105°	331	511	1973	2911	2792	348
115°	582	712	1636	3168	3576	575
125°	797	913	1475	2489	2924	710
135°	955	1069	1435	2010	2275	738
145°	1111	1194	1416	1720	1851	695
155°	1254	1303	1404	1543	1594	578
165°	1365	1379	1410	1464	1472	385
175°	1417	1416	1411	1429	1426	135
180°	1416	1416	1416	1416	1416	

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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	15.9	17.0	17.3	17.0
90°	3.0	9.1	19.8	21.3	19.8
92.5°	43.3	157.7	311.2	135.1	97.8
95°	102.1	358.3	1094.1	566.2	336.8
97.5°	164.0	410.9	1705.4	1411.3	1036.5
100°	210.3	432.3	1895.6	1976.9	1598.4
102.5°	252.9	461.8	1962.7	2405.7	2122.6
105°	330.7	510.9	1973.3	2910.7	2791.6
107.5°	402.6	567.1	1887.0	3225.8	3265.4
110°	458.6	607.6	1810.3	3310.4	3478.8



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	508.6	648.1	1739.6	3293.5	3576.3
115°	582.1	711.7	1636.5	3168.1	3576.3
117.5°	654.0	775.6	1568.5	2976.4	3439.2
120°	697.9	817.1	1528.4	2838.9	3311.2
122.5°	739.3	856.2	1503.9	2691.4	3167.3
125°	796.9	913.1	1475.0	2489.1	2924.1
127.5°	850.0	964.1	1458.0	2323.9	2706.5
130°	879.2	996.9	1450.6	2221.9	2567.6
132.5°	909.7	1026.2	1443.3	2129.9	2448.1
135°	955.4	1068.7	1435.4	2009.8	2275.0
137.5°	1001.5	1108.4	1428.7	1912.4	2128.5
140°	1033.1	1132.9	1426.3	1849.7	2041.9
142.5°	1063.6	1157.5	1421.4	1793.1	1961.4
145°	1110.8	1194.3	1415.6	1720.2	1851.4
147.5°	1153.8	1227.7	1408.9	1654.3	1755.0
150°	1185.5	1251.0	1406.5	1618.5	1699.0
152.5°	1214.7	1272.0	1405.3	1585.3	1651.4
155°	1254.1	1303.3	1403.5	1543.2	1593.9
157.5°	1294.9	1329.2	1403.8	1513.9	1547.2
160°	1318.0	1346.4	1405.0	1495.4	1519.2
162.5°	1336.4	1359.9	1406.2	1480.6	1498.5
165°	1365.3	1378.7	1409.5	1464.5	1472.0
167.5°	1385.1	1394.4	1409.8	1450.7	1454.3
170°	1397.3	1401.7	1411.0	1444.5	1444.5
172.5°	1407.1	1408.0	1411.0	1437.3	1436.0
175°	1417.1	1415.6	1411.0	1429.2	1426.3
177.5°	1420.5	1416.9	1410.7	1422.9	1419.2
180°	1415.6	1415.6	1415.6	1415.6	1415.6

(END OF REPORT)