

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: CORELITE

Report Number: P521494

Luminaire Tested: **SQ4-F-075U-125D-93050-1D-UNV-STD-W-4 (4500K)**

Issue Date: 5/5/2021

Test Information

Test Method: LM-79-08
Report Number: P521494
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2101-105-50,
Test Lab: INNOVATION CENTER
Issue Date: 5/5/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-F-075U-125D-93050-1D-UNV-STD-W-4 (4500K)
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 750 LUMENS PER FOOT
Light Source: 3000K/5000K CCT, 90 CRI LEDS, TUNED TO 4500K CCT
Ballast/Driver: ELECTRONIC DRIVER

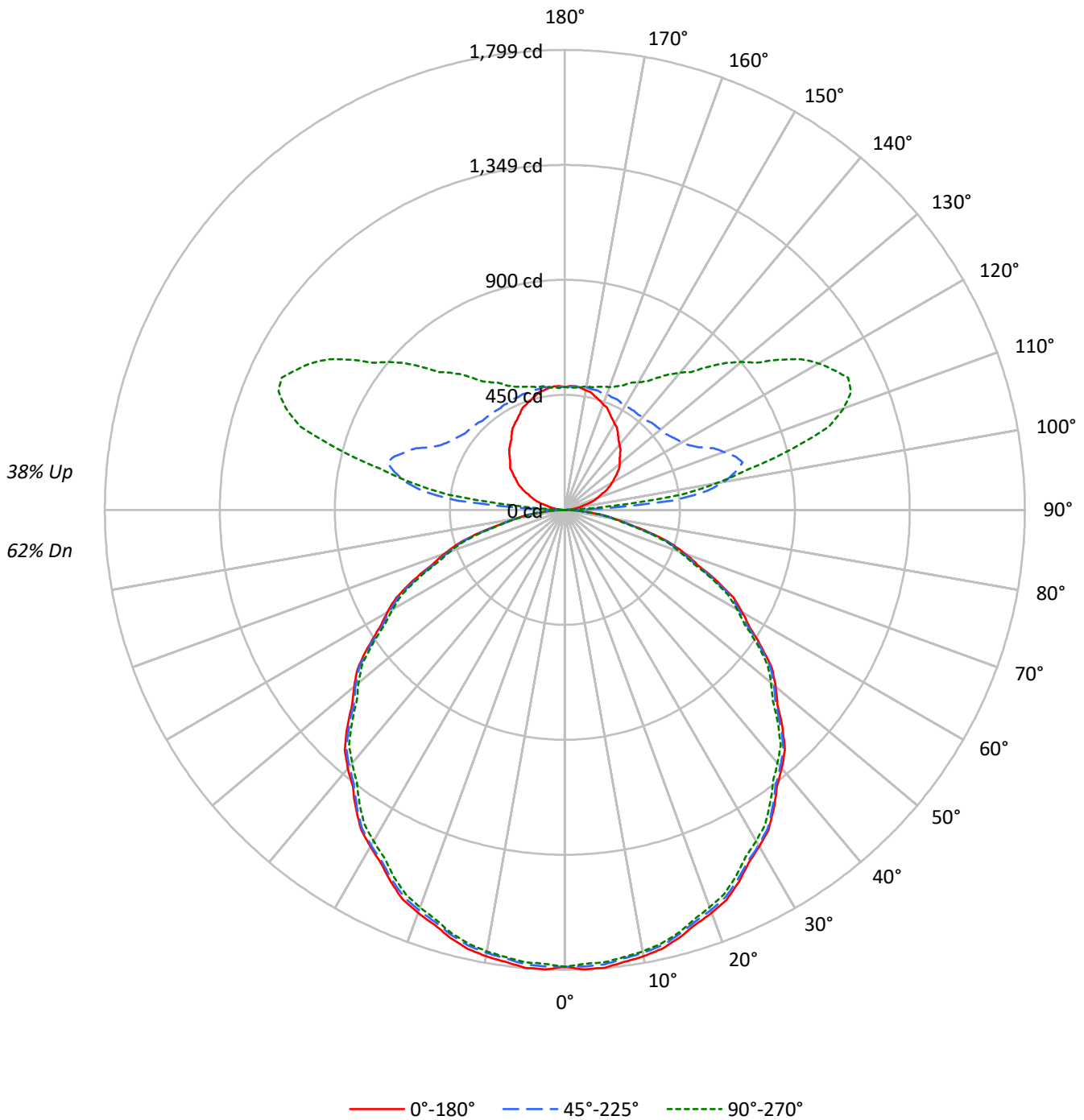
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8204.4 lumens
Efficiency: N/A
Efficacy: 103.7 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.25 / 1.38
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 79.1
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	110	110	110	110	103	103	103	103	90	90	90	78	78	78	67	67	67	62
1	100	96	92	88	94	90	86	83	79	76	74	69	67	65	59	58	56	52
2	91	83	77	72	85	78	73	68	69	64	61	60	57	54	52	49	47	43
3	83	73	66	60	77	69	62	57	61	55	51	53	49	45	46	43	40	36
4	76	65	56	50	71	61	54	48	54	48	43	47	42	39	41	37	34	31
5	70	58	49	43	65	54	47	41	48	42	37	42	37	33	37	33	30	27
6	64	52	43	37	60	49	41	36	43	37	32	38	33	29	33	29	26	23
7	59	47	38	33	55	44	37	31	39	33	28	35	30	26	30	26	23	21
8	55	42	34	29	51	40	33	28	36	30	25	32	27	23	28	24	21	18
9	51	39	31	26	48	37	30	25	33	27	23	29	24	21	26	22	19	17
10	48	36	28	23	45	34	27	22	30	24	20	27	22	19	24	20	17	15

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	16489	16489	16489
5°	16647	16524	16448
10°	16610	16486	16429
15°	16546	16439	16371
20°	16478	16368	16248
25°	16360	16267	16112
30°	16200	16145	15939
35°	16049	15969	15774
40°	15899	15788	15580
45°	15697	15563	15365
50°	15441	15325	15106
55°	15144	14996	14800
60°	14780	14574	14330
65°	14286	13998	13732
70°	13453	13124	12875
75°	12263	11899	11646
80°	10111	10058	9840
85°	7220	8193	8193



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	169.2	2.1
10°-20°	484.6	5.9
20°-30°	732.8	8.9
30°-40°	882.3	10.8
40°-50°	916.2	11.2
50°-60°	830.3	10.1
60°-70°	632.3	7.7
70°-80°	353.4	4.3
80°-90°	91.9	1.1
90°-100°	247.7	3.0
100°-110°	598.7	7.3
110°-120°	638.5	7.8
120°-130°	517.2	6.3
130°-140°	400.4	4.9
140°-150°	305.5	3.7
150°-160°	221.1	2.7
160°-170°	136.2	1.7
170°-180°	46.1	0.6
0°-30°	1386.6	16.9
0°-40°	2268.8	27.7
0°-60°	4015.3	48.9
0°-90°	5092.9	62.1
90°-120°	1485.0	18.1
90°-150°	2708.0	33.0
90°-180°	3111.0	37.9
0°-180°	8204.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1787	1787	1787	1787	1787	
5°	1797	1778	1784	1777	1776	171
15°	1732	1714	1721	1717	1714	489
25°	1607	1589	1598	1584	1583	740
35°	1425	1412	1418	1402	1400	891
45°	1203	1193	1193	1178	1178	927
55°	942	938	932	920	920	841
65°	654	648	641	630	629	646
75°	344	336	334	329	327	362
85°	68	74	77	78	77	84
90°	0	0	0	0	0	4
95°	24	124	424	276	193	27
105°	96	165	720	931	919	101
115°	175	224	578	1096	1222	173
125°	249	287	502	872	1024	222
135°	306	342	481	687	791	237
145°	362	389	472	584	630	226
155°	415	433	478	518	536	192
165°	459	466	484	492	499	130
175°	486	484	486	481	480	46
180°	480	480	480	480	480	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1787.2	1787.2	1787.2	1787.2	1787.2
2.5°	1799.4	1783.5	1788.0	1784.6	1777.5
5°	1797.4	1778.5	1784.2	1777.0	1776.0
7.5°	1783.6	1764.7	1770.3	1766.0	1765.0
10°	1773.0	1754.1	1759.7	1754.6	1753.6
12.5°	1758.3	1740.2	1745.9	1740.0	1739.0
15°	1732.3	1714.4	1721.1	1716.9	1713.9
17.5°	1700.3	1682.0	1689.9	1683.7	1680.2
20°	1678.3	1658.4	1667.1	1656.9	1654.9
22.5°	1651.5	1631.6	1640.3	1627.6	1627.2
25°	1607.1	1589.2	1597.9	1583.6	1582.7
27.5°	1557.2	1540.5	1549.7	1532.3	1531.2
30°	1520.6	1504.6	1515.5	1498.1	1496.1
32.5°	1483.1	1469.6	1476.4	1461.5	1458.7
35°	1424.9	1412.0	1417.8	1401.5	1400.5
37.5°	1362.4	1349.5	1354.9	1339.4	1337.6
40°	1320.1	1307.1	1310.9	1294.6	1293.6
42.5°	1273.7	1263.1	1265.3	1248.2	1248.8
45°	1203.0	1193.1	1192.8	1177.6	1177.6
47.5°	1127.9	1118.0	1118.1	1104.1	1102.9
50°	1075.8	1069.8	1067.7	1054.4	1052.4
52.5°	1022.1	1017.7	1013.9	1000.7	1000.3
55°	941.5	937.5	932.3	920.1	920.1
57.5°	858.8	854.2	847.6	835.4	834.4
60°	801.0	798.0	789.8	777.6	776.6
62.5°	743.2	737.8	731.2	719.8	718.8
65°	654.4	647.5	641.2	630.0	629.0
67.5°	562.2	554.5	549.2	541.4	538.4
70°	498.7	491.7	486.5	480.3	477.3
72.5°	435.2	429.0	425.4	419.3	416.3
75°	344.0	336.0	333.8	328.7	326.7
77.5°	251.4	247.4	245.5	241.8	239.0
80°	190.3	190.3	189.3	187.2	185.2
82.5°	137.4	139.0	140.5	140.0	138.0
85°	68.2	74.2	77.4	78.3	77.4
87.5°	19.5	25.9	30.9	31.7	30.9
90°	0.0	0.0	0.0	0.0	0.0
92.5°	8.1	67.1	158.0	76.8	52.1
95°	24.4	123.9	424.4	276.0	193.4
97.5°	43.4	137.3	559.0	538.5	462.3
100°	58.0	145.6	633.1	668.3	605.6
102.5°	71.9	153.1	681.9	776.3	739.1
105°	95.7	165.3	719.6	931.0	919.1
107.5°	119.1	179.8	697.4	1055.1	1083.1
110°	135.4	192.1	661.6	1108.5	1161.3



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	151.6	204.4	629.8	1121.6	1211.8
115°	175.1	223.8	578.1	1096.0	1222.4
117.5°	198.3	244.2	547.8	1037.0	1185.1
120°	213.7	256.5	528.2	990.8	1146.0
122.5°	230.0	269.6	516.0	943.5	1096.4
125°	249.4	287.2	501.8	871.6	1023.9
127.5°	268.5	304.1	491.8	810.8	944.5
130°	279.9	314.7	488.5	768.4	899.7
132.5°	290.5	326.9	483.7	737.8	849.2
135°	306.4	342.2	481.4	687.3	790.8
137.5°	321.4	357.4	474.3	653.2	731.2
140°	332.8	365.7	474.3	628.6	700.2
142.5°	344.2	377.1	470.2	607.2	667.7
145°	362.3	389.2	472.3	584.2	630.0
147.5°	379.2	405.3	471.0	557.8	595.6
150°	389.8	412.7	474.3	546.2	576.1
152.5°	401.2	423.3	473.5	533.9	560.6
155°	415.3	433.2	478.4	517.5	536.4
157.5°	432.2	447.5	477.3	511.2	522.3
160°	438.7	451.6	481.4	503.0	510.9
162.5°	449.3	460.6	479.8	500.5	505.2
165°	459.0	466.0	484.5	491.7	498.7
167.5°	471.0	475.6	483.2	491.2	491.4
170°	474.3	477.3	486.5	485.6	490.6
172.5°	480.0	482.2	484.1	486.2	483.2
175°	485.5	483.5	485.5	481.4	480.4
177.5°	484.5	484.5	482.8	481.1	477.1
180°	480.4	480.4	480.4	480.4	480.4

(END OF REPORT)