

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: P520059

Luminaire Tested: **SQ4-F-075U-125D-840-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P520059  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-22, G3-1910-536-20)  
Test Lab: INNOVATION CENTER  
Issue Date: 4/29/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: SQ4-F-075U-125D-840-1D-UNV-STD-W-12  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE  
DOWNLIGHT 1250 LUMENS PER FOOT  
UPLIGHT 750 LUMENS PER FOOT  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

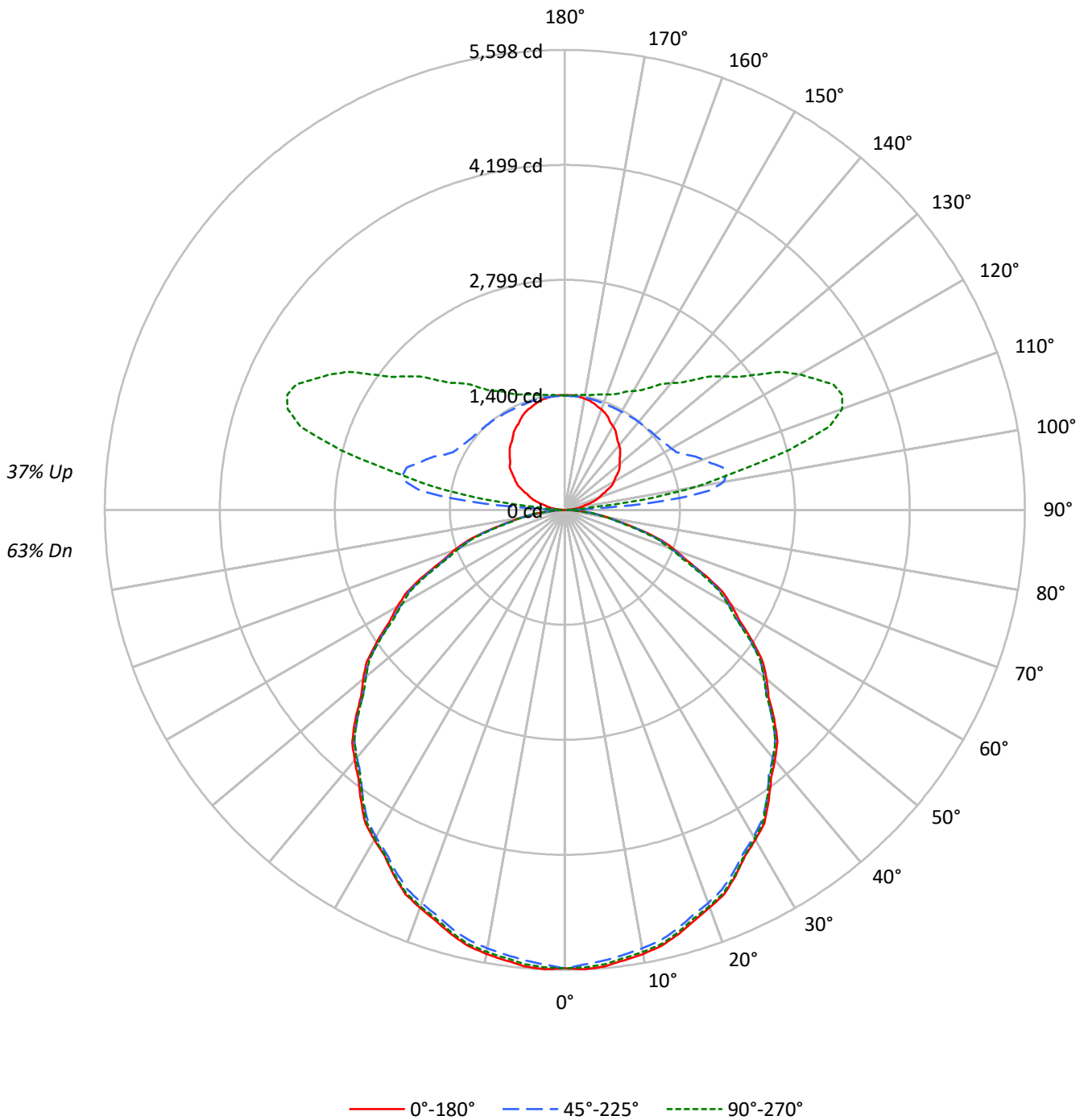
Lumens per Lamp: N/A  
Luminaire Lumens: 24300.0 lumens  
Efficiency: N/A  
Efficacy: 125.2 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35  
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')  
CIE Type: Semi-Direct

Input Watts (W): 194.1  
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	79	79	79	68	68	68	63
1	101	96	92	89	94	90	87	84	79	77	74	69	67	66	60	59	57	53
2	92	84	78	72	86	79	73	69	69	65	61	61	57	55	53	50	48	44
3	83	74	66	60	78	69	63	57	61	56	52	54	49	46	47	43	41	37
4	76	65	57	51	71	61	54	48	54	48	44	48	43	39	41	38	35	32
5	70	58	50	44	65	55	47	42	49	42	38	43	38	34	37	34	30	27
6	65	52	44	38	60	49	42	36	44	38	33	39	34	30	34	30	27	24
7	60	47	39	33	56	45	37	32	40	34	29	35	30	26	31	27	24	21
8	55	43	35	29	52	41	33	28	36	30	26	32	27	24	28	24	21	19
9	52	39	31	26	48	37	30	25	33	27	23	30	25	21	26	22	19	17
10	48	36	28	24	45	34	27	23	31	25	21	27	23	19	24	20	17	15

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	17161	17161	17161
5°	17218	16999	17142
10°	17138	16928	17062
15°	17024	16819	16955
20°	16866	16675	16806
25°	16674	16497	16633
30°	16469	16326	16413
35°	16235	16096	16108
40°	15967	15794	15843
45°	15668	15494	15521
50°	15326	15149	15105
55°	14936	14721	14688
60°	14451	14130	14055
65°	13700	13409	13230
70°	12758	12427	12261
75°	11349	11095	10765
80°	9247	8976	8921
85°	5526	6288	6288



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	526.5	2.2
10°-20°	1499.5	6.2
20°-30°	2252.9	9.3
30°-40°	2688.1	11.1
40°-50°	2755.4	11.3
50°-60°	2456.0	10.1
60°-70°	1828.3	7.5
70°-80°	990.5	4.1
80°-90°	231.0	1.0
90°-100°	656.8	2.7
100°-110°	1807.0	7.4
110°-120°	1865.1	7.7
120°-130°	1494.3	6.1
130°-140°	1173.7	4.8
140°-150°	899.5	3.7
150°-160°	646.7	2.7
160°-170°	395.4	1.6
170°-180°	133.3	0.5
0°-30°	4279.0	17.6
0°-40°	6967.1	28.7
0°-60°	12178.5	50.1
0°-90°	15228.2	62.7
90°-120°	4328.8	17.8
90°-150°	7896.3	32.5
90°-180°	9072.0	37.3
0°-180°	24300.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	5580	5580	5580	5580	5580	
5°	5577	5568	5506	5556	5553	529
15°	5347	5335	5282	5328	5325	1507
25°	4914	4905	4862	4890	4902	2263
35°	4324	4321	4287	4287	4290	2704
45°	3602	3593	3562	3557	3569	2776
55°	2786	2776	2746	2724	2739	2488
65°	1883	1871	1843	1830	1818	1864
75°	955	955	934	915	906	1014
85°	157	178	178	181	178	216
90°	3	12	21	27	27	10
95°	98	358	1161	497	317	103
105°	323	497	1991	3032	2830	340
115°	572	696	1597	3180	3609	564
125°	788	898	1449	2451	2871	703
135°	951	1055	1407	1982	2243	734
145°	1099	1174	1387	1689	1819	689
155°	1244	1285	1378	1518	1561	572
165°	1345	1362	1384	1440	1449	379
175°	1392	1395	1387	1404	1401	132
180°	1392	1392	1392	1392	1392	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	5580.2	5580.2	5580.2	5580.2	5580.2
2.5°	5597.5	5587.8	5538.5	5580.1	5572.9
5°	5577.2	5568.2	5506.5	5555.6	5552.7
7.5°	5530.0	5518.5	5462.4	5508.3	5502.9
10°	5488.1	5479.2	5420.6	5466.6	5463.6
12.5°	5436.5	5427.5	5369.0	5415.0	5414.4
15°	5346.9	5334.9	5282.4	5328.4	5325.3
17.5°	5239.4	5225.6	5173.7	5210.0	5216.1
20°	5153.4	5144.4	5095.1	5128.9	5135.0
22.5°	5065.0	5053.5	5001.7	5040.5	5046.5
25°	4913.8	4904.8	4861.6	4889.5	4901.6
27.5°	4748.0	4748.0	4708.1	4727.9	4735.1
30°	4637.5	4637.5	4597.5	4610.1	4622.0
32.5°	4519.5	4509.8	4472.2	4482.3	4494.3
35°	4324.2	4321.1	4287.3	4287.4	4290.4
37.5°	4122.1	4113.7	4076.7	4079.4	4093.8
40°	3977.1	3971.2	3934.2	3934.4	3946.4
42.5°	3829.7	3823.7	3791.7	3786.8	3791.7
45°	3602.4	3593.4	3562.5	3556.6	3568.7
47.5°	3360.4	3362.9	3326.1	3317.6	3324.2
50°	3203.2	3203.2	3166.3	3148.1	3157.1
52.5°	3038.6	3033.8	2996.9	2976.4	2997.5
55°	2785.6	2776.5	2745.6	2724.4	2739.4
57.5°	2526.3	2512.5	2481.5	2458.3	2466.7
60°	2349.4	2328.5	2297.2	2278.9	2285.0
62.5°	2165.2	2153.7	2120.3	2092.4	2105.6
65°	1882.6	1870.6	1842.7	1830.1	1818.1
67.5°	1605.6	1597.8	1566.3	1553.2	1545.4
70°	1418.8	1403.8	1382.0	1366.6	1363.6
72.5°	1237.1	1219.7	1197.8	1184.7	1176.9
75°	955.1	955.1	933.7	915.0	906.0
77.5°	686.7	689.1	671.4	665.1	660.9
80°	522.1	522.1	506.8	500.7	503.7
82.5°	364.9	372.1	366.7	358.0	353.8
85°	156.6	177.7	178.2	181.1	178.2
87.5°	27.7	46.2	51.0	47.2	42.4
90°	2.9	11.6	20.7	26.7	26.7
92.5°	40.9	174.7	302.8	116.3	95.4
95°	97.8	358.5	1161.4	496.6	317.0
97.5°	159.4	397.5	1772.4	1365.6	963.5
100°	204.4	421.7	1964.4	1982.7	1617.7
102.5°	247.1	450.4	2014.1	2459.8	2125.0
105°	323.0	496.8	1991.1	3032.3	2829.5
107.5°	395.3	554.0	1877.8	3312.6	3372.8
110°	447.4	592.3	1792.5	3382.3	3591.0



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	494.8	635.0	1707.2	3337.4	3654.9
115°	571.8	696.4	1597.0	3180.0	3608.7
117.5°	645.3	760.0	1527.0	2959.0	3444.0
120°	690.4	800.4	1496.2	2793.5	3294.7
122.5°	730.7	840.7	1474.9	2648.4	3124.0
125°	788.1	898.2	1448.8	2450.9	2871.0
127.5°	842.6	947.5	1431.7	2286.2	2654.7
130°	871.1	978.2	1422.2	2188.2	2524.3
132.5°	904.3	1011.5	1415.0	2102.2	2405.8
135°	951.0	1055.4	1407.3	1982.2	2242.8
137.5°	994.9	1091.7	1400.9	1885.1	2100.0
140°	1028.1	1117.9	1398.4	1820.6	2014.7
142.5°	1056.6	1139.4	1393.7	1763.1	1929.3
145°	1099.2	1174.5	1386.6	1688.8	1819.2
147.5°	1144.8	1209.7	1383.1	1623.0	1727.4
150°	1173.3	1231.3	1380.7	1586.9	1668.1
152.5°	1199.4	1252.7	1378.3	1555.8	1623.0
155°	1244.4	1285.0	1377.7	1517.9	1561.4
157.5°	1276.9	1310.0	1377.7	1486.8	1517.0
160°	1300.7	1326.7	1377.7	1470.1	1493.3
162.5°	1319.7	1341.1	1380.1	1455.7	1474.3
165°	1345.1	1362.5	1383.6	1440.1	1448.8
167.5°	1362.9	1376.2	1386.6	1427.0	1429.2
170°	1374.7	1383.5	1386.6	1422.2	1422.2
172.5°	1384.2	1388.2	1386.6	1414.9	1412.7
175°	1392.5	1395.4	1386.6	1404.3	1401.4
177.5°	1394.9	1394.9	1385.4	1399.5	1394.9
180°	1392.5	1392.5	1392.5	1392.5	1392.5

(END OF REPORT)