

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: P520290

Luminaire Tested: **SQ4-F-125U-050D-940-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P520290
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-24, G3-1910-536-17)
Test Lab: INNOVATION CENTER
Issue Date: 4/29/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-F-125U-050D-940-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 1250 LUMENS PER FOOT
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

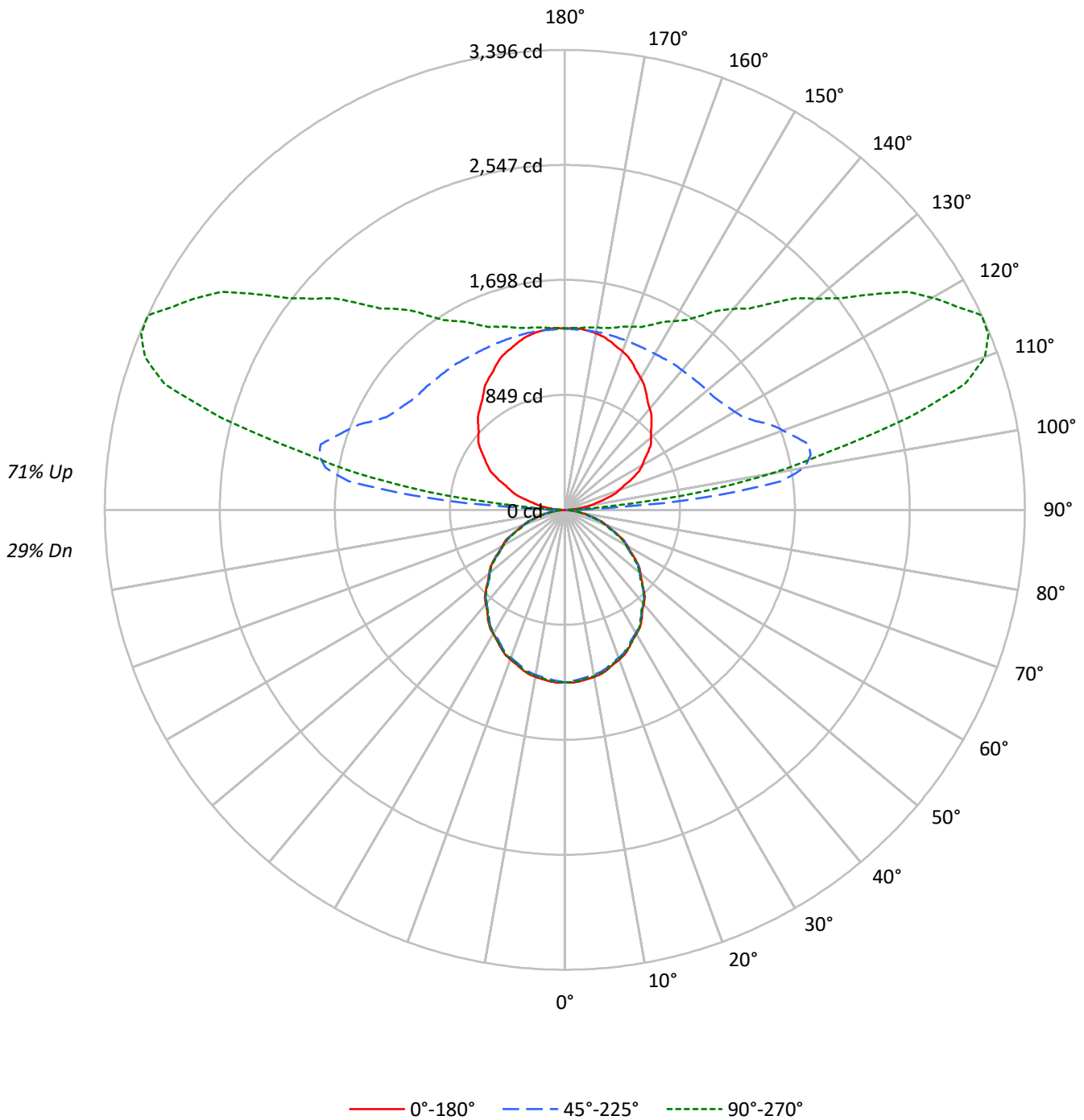
Lumens per Lamp: N/A
Luminaire Lumens: 12122.6 lumens
Efficiency: N/A
Efficacy: 136.1 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 89.1
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	102	102	102	102	91	91	91	91	71	71	71	53	53	53	37	37	37	29
1	93	89	85	82	83	80	77	74	63	60	58	47	45	44	32	31	31	24
2	85	77	72	67	76	70	65	60	55	51	48	41	39	37	28	27	26	20
3	77	68	61	55	69	61	55	50	48	44	40	36	33	31	25	23	22	17
4	70	60	52	47	63	54	47	42	43	38	34	32	29	26	22	20	19	15
5	64	53	45	40	57	48	41	36	38	33	29	29	25	23	20	18	16	13
6	59	48	40	34	53	43	36	31	34	29	25	26	22	20	18	16	14	11
7	55	43	35	30	49	39	32	27	31	26	22	23	20	17	16	14	13	10
8	51	39	31	26	45	35	28	24	28	23	20	21	18	15	15	13	11	9
9	47	35	28	23	42	32	26	21	26	21	17	20	16	14	14	12	10	8
10	44	32	25	21	39	29	23	19	23	19	16	18	15	12	13	11	9	7

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5875	5875	5875
5°	5889	5818	5866
10°	5870	5798	5838
15°	5829	5757	5805
20°	5775	5708	5750
25°	5710	5640	5693
30°	5631	5585	5621
35°	5568	5501	5530
40°	5462	5411	5421
45°	5350	5305	5305
50°	5237	5188	5163
55°	5114	5046	5019
60°	4924	4845	4813
65°	4689	4597	4541
70°	4369	4277	4185
75°	3919	3798	3707
80°	3169	3124	3034
85°	1895	2165	2255



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	120.2	1.0
10°-20°	342.2	2.8
20°-30°	513.9	4.2
30°-40°	613.5	5.1
40°-50°	628.7	5.2
50°-60°	560.7	4.6
60°-70°	417.5	3.4
70°-80°	226.7	1.9
80°-90°	55.6	0.5
90°-100°	626.4	5.2
100°-110°	1687.3	13.9
110°-120°	1770.7	14.6
120°-130°	1436.9	11.9
130°-140°	1126.9	9.3
140°-150°	865.2	7.1
150°-160°	622.1	5.1
160°-170°	380.1	3.1
170°-180°	128.2	1.1
0°-30°	976.3	8.1
0°-40°	1589.8	13.1
0°-60°	2779.1	22.9
0°-90°	3478.9	28.7
90°-120°	4084.4	33.7
90°-150°	7513.4	62.0
90°-180°	8644.0	71.3
0°-180°	12122.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1274	1274	1274	1274	1274	
5°	1272	1270	1256	1268	1267	121
15°	1221	1217	1205	1216	1216	344
25°	1122	1118	1108	1115	1118	517
35°	989	986	977	977	982	617
45°	820	822	813	812	813	633
55°	636	636	627	622	624	566
65°	430	428	421	416	416	425
75°	220	218	213	210	208	232
85°	36	39	41	43	43	50
90°	4	10	20	22	22	8
95°	96	341	1027	525	363	100
105°	312	486	1866	2792	2620	328
115°	551	674	1554	3002	3396	542
125°	752	864	1395	2358	2775	672
135°	906	1011	1356	1902	2154	699
145°	1047	1129	1339	1626	1747	657
155°	1189	1232	1327	1459	1506	547
165°	1289	1304	1332	1385	1392	364
175°	1341	1339	1334	1352	1349	127
180°	1339	1339	1339	1339	1339	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1273.5	1273.5	1273.5	1273.5	1273.5
2.5°	1277.6	1275.0	1264.0	1273.5	1272.1
5°	1271.8	1270.1	1256.4	1268.4	1266.7
7.5°	1262.6	1259.3	1245.9	1257.4	1255.8
10°	1253.1	1249.7	1237.7	1248.0	1246.3
12.5°	1240.8	1238.8	1225.5	1235.6	1235.3
15°	1220.6	1217.4	1205.4	1215.5	1215.5
17.5°	1194.1	1192.0	1180.4	1190.3	1189.0
20°	1176.4	1173.0	1162.8	1171.2	1171.2
22.5°	1154.6	1152.5	1142.2	1149.4	1150.7
25°	1121.8	1118.5	1108.1	1115.0	1118.4
27.5°	1085.6	1083.0	1074.4	1078.8	1081.2
30°	1057.1	1057.1	1048.5	1050.3	1055.3
32.5°	1031.1	1031.1	1021.2	1022.9	1025.3
35°	988.8	985.5	976.9	977.0	982.0
37.5°	939.7	938.0	932.5	931.5	932.9
40°	907.0	905.3	898.5	900.2	900.2
42.5°	874.2	872.6	865.8	863.4	866.1
45°	820.0	821.7	813.2	811.5	813.2
47.5°	766.5	766.5	759.7	754.9	757.6
50°	729.7	729.7	722.9	719.4	719.4
52.5°	691.5	692.8	684.6	679.9	681.3
55°	635.9	635.9	627.4	622.3	624.0
57.5°	574.6	574.6	566.0	561.0	563.9
60°	533.7	533.7	525.1	520.0	521.7
62.5°	492.7	492.7	484.2	479.0	479.4
65°	429.6	427.9	421.1	416.0	416.0
67.5°	368.9	364.6	359.4	352.5	352.5
70°	323.9	322.2	317.1	310.3	310.3
72.5°	283.0	280.0	274.8	269.4	269.4
75°	219.9	218.2	213.1	209.6	208.0
77.5°	157.6	156.2	155.8	151.1	152.4
80°	119.3	119.3	117.6	114.2	114.2
82.5°	85.2	86.6	83.5	82.8	81.4
85°	35.8	39.1	40.9	42.6	42.6
87.5°	7.5	12.8	13.6	15.4	15.4
90°	3.5	10.1	20.4	22.2	22.2
92.5°	41.6	147.0	290.7	139.9	97.2
95°	95.5	340.7	1026.8	525.0	363.3
97.5°	152.4	390.0	1610.5	1345.4	1014.5
100°	196.2	409.6	1796.0	1879.2	1559.0
102.5°	238.5	437.2	1857.5	2278.9	2016.1
105°	312.1	485.6	1866.0	2791.6	2619.9
107.5°	381.8	536.5	1786.5	3055.2	3099.5
110°	428.1	574.9	1714.2	3137.0	3298.7



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	477.3	613.3	1644.6	3118.9	3384.7
115°	550.9	674.3	1553.9	3002.4	3396.0
117.5°	618.2	733.9	1483.6	2816.5	3254.7
120°	661.8	773.5	1448.1	2683.0	3133.3
122.5°	700.0	810.4	1422.2	2546.5	2995.5
125°	752.2	864.0	1395.2	2358.2	2775.1
127.5°	802.3	912.4	1378.1	2192.1	2564.3
130°	832.4	942.4	1371.3	2096.9	2423.8
132.5°	862.4	971.1	1364.5	2013.0	2313.3
135°	905.7	1010.8	1356.0	1902.4	2154.2
137.5°	947.0	1047.7	1351.6	1808.6	2015.4
140°	975.7	1072.4	1347.5	1750.8	1937.6
142.5°	1005.7	1095.7	1344.7	1697.0	1854.4
145°	1047.3	1129.0	1339.0	1626.5	1746.6
147.5°	1092.3	1163.3	1333.2	1567.3	1661.6
150°	1122.3	1184.1	1330.4	1530.0	1608.4
152.5°	1149.6	1203.3	1329.0	1499.7	1563.5
155°	1188.8	1232.2	1327.0	1459.4	1506.1
157.5°	1223.3	1257.0	1327.3	1431.0	1462.4
160°	1245.1	1273.5	1328.7	1414.6	1437.8
162.5°	1264.3	1287.3	1330.1	1400.7	1417.4
165°	1289.4	1304.4	1332.2	1385.2	1391.9
167.5°	1310.0	1318.6	1333.8	1373.1	1375.8
170°	1323.6	1326.9	1333.8	1366.2	1366.2
172.5°	1331.8	1332.5	1335.2	1359.4	1359.4
175°	1340.7	1339.0	1333.8	1352.5	1349.1
177.5°	1344.4	1341.7	1334.8	1345.7	1343.0
180°	1339.0	1339.0	1339.0	1339.0	1339.0

(END OF REPORT)