

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: P520373

Luminaire Tested: **SQ4-F-150U-050D-840-1D-UNV-STD-W-6**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P520373
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-25, 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-150U-050D-840-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 1500 LUMENS PER FOOT
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

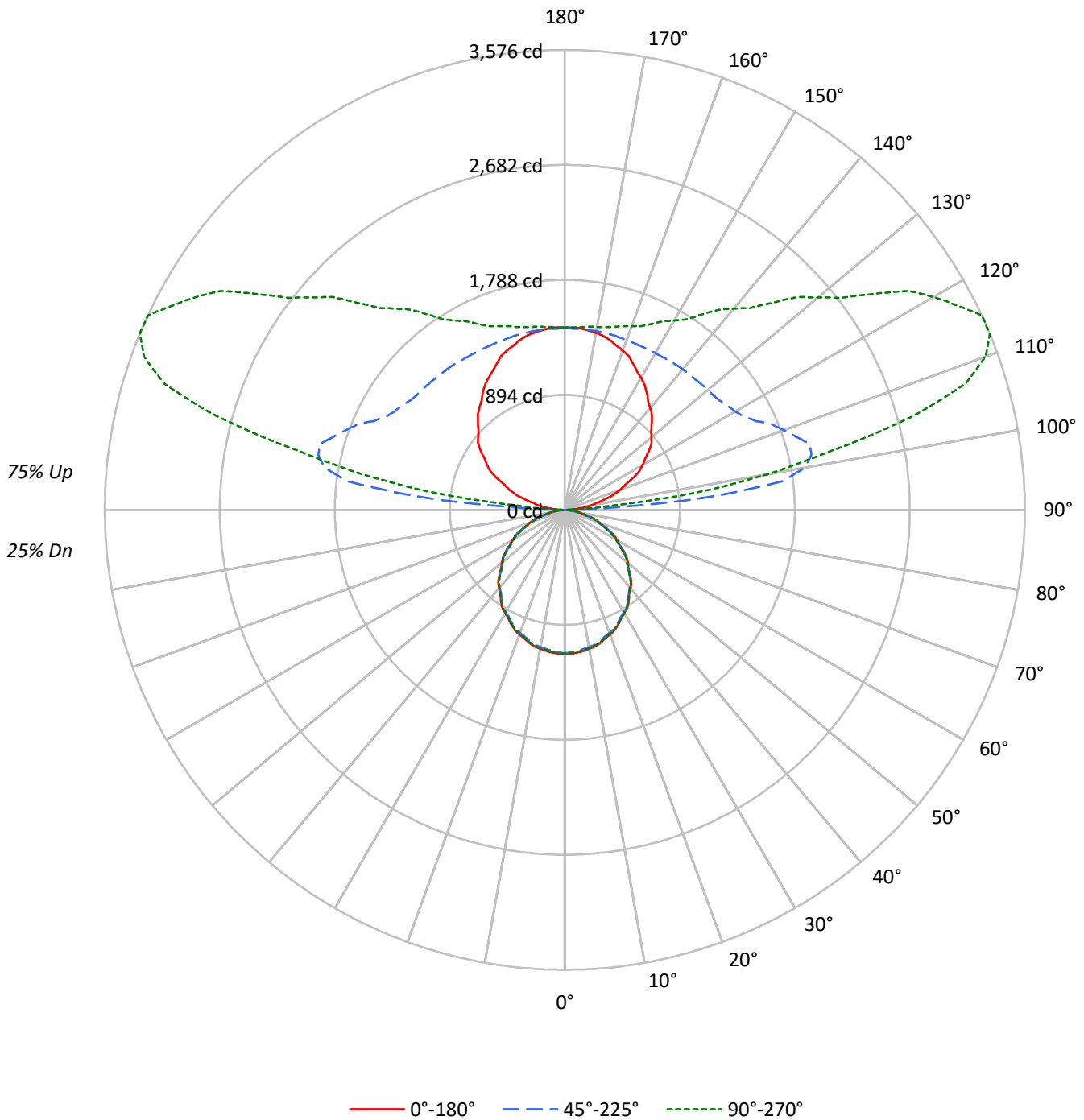
Lumens per Lamp: N/A
Luminaire Lumens: 12175.6 lumens
Efficiency: N/A
Efficacy: 144.3 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 84.4
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	101	101	101	101	90	90	90	90	69	69	69	51	51	51	33	33	33	25
1	92	88	84	81	82	79	75	73	61	59	57	44	43	42	29	29	28	21
2	84	77	71	66	74	69	64	59	53	50	47	39	37	35	26	25	23	18
3	76	67	60	55	68	60	54	49	47	43	39	34	32	29	23	21	20	15
4	70	59	52	46	62	53	47	42	41	37	33	30	27	25	20	18	17	13
5	64	53	45	39	57	47	41	36	37	32	29	27	24	22	18	16	15	11
6	59	47	39	34	52	42	36	31	33	28	25	24	21	19	16	14	13	10
7	54	42	35	29	48	38	31	27	30	25	22	22	19	16	15	13	11	8
8	50	38	31	26	44	34	28	23	27	22	19	20	17	15	14	12	10	8
9	47	35	28	23	41	31	25	21	25	20	17	18	15	13	13	11	9	7
10	43	32	25	20	39	29	23	18	23	18	15	17	14	12	12	10	8	6

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6864	6864	6864
5°	6881	6798	6853
10°	6858	6775	6821
15°	6812	6726	6783
20°	6747	6669	6718
25°	6671	6591	6651
30°	6579	6526	6568
35°	6506	6427	6461
40°	6382	6322	6334
45°	6251	6199	6199
50°	6119	6061	6033
55°	5975	5896	5864
60°	5752	5660	5623
65°	5480	5370	5305
70°	5106	4998	4890
75°	4579	4439	4330
80°	3705	3648	3546
85°	2216	2534	2639



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	105.3	0.9
10°-20°	299.9	2.5
20°-30°	450.4	3.7
30°-40°	537.6	4.4
40°-50°	550.9	4.5
50°-60°	491.3	4.0
60°-70°	365.9	3.0
70°-80°	198.6	1.6
80°-90°	48.9	0.4
90°-100°	657.9	5.4
100°-110°	1778.8	14.6
110°-120°	1870.1	15.4
120°-130°	1519.0	12.5
130°-140°	1191.6	9.8
140°-150°	914.5	7.5
150°-160°	657.7	5.4
160°-170°	401.8	3.3
170°-180°	135.5	1.1
0°-30°	855.5	7.0
0°-40°	1393.1	11.4
0°-60°	2435.3	20.0
0°-90°	3048.8	25.0
90°-120°	4306.7	35.4
90°-150°	7931.9	65.1
90°-180°	9127.0	75.0
0°-180°	12175.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1116	1116	1116	1116	1116	
5°	1114	1113	1101	1112	1110	106
15°	1070	1067	1056	1065	1065	301
25°	983	980	971	977	980	453
35°	866	864	856	856	860	541
45°	719	720	713	711	713	555
55°	557	557	550	545	547	496
65°	376	375	369	364	364	373
75°	193	191	187	184	182	204
85°	31	34	36	37	37	44
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°	1116.0	1116.0	1116.0	1116.0	1116.0
2.5°	1119.6	1117.2	1107.6	1115.9	1114.8
5°	1114.5	1113.1	1101.0	1111.5	1110.0
7.5°	1106.5	1103.5	1091.8	1101.9	1100.4
10°	1098.1	1095.1	1084.7	1093.5	1092.1
12.5°	1087.3	1085.5	1073.8	1082.8	1082.5
15°	1069.7	1066.7	1056.3	1065.2	1065.2
17.5°	1046.4	1044.6	1034.4	1043.1	1041.9
20°	1030.8	1028.0	1018.9	1026.4	1026.4
22.5°	1011.7	1009.9	1000.9	1007.3	1008.4
25°	983.0	980.1	971.1	977.1	980.0
27.5°	951.3	949.0	941.5	945.4	947.5
30°	926.3	926.3	918.8	920.4	924.7
32.5°	903.5	903.5	894.8	896.4	898.5
35°	866.5	863.6	856.0	856.1	860.5
37.5°	823.5	822.0	817.2	816.4	817.5
40°	794.8	793.3	787.4	788.8	788.8
42.5°	766.1	764.7	758.7	756.6	759.0
45°	718.6	720.0	712.6	711.1	712.6
47.5°	671.7	671.7	665.7	661.5	663.9
50°	639.5	639.5	633.4	630.5	630.5
52.5°	605.9	607.1	600.0	595.8	597.0
55°	557.2	557.2	549.8	545.3	546.8
57.5°	503.5	503.5	496.0	491.5	494.2
60°	467.6	467.6	460.1	455.7	457.1
62.5°	431.8	431.8	424.3	419.8	420.1
65°	376.5	375.0	369.0	364.5	364.5
67.5°	323.3	319.5	314.9	308.9	308.9
70°	283.9	282.4	277.9	271.9	271.9
72.5°	248.0	245.3	240.8	236.1	236.1
75°	192.7	191.3	186.8	183.7	182.2
77.5°	138.0	136.9	136.6	132.4	133.5
80°	104.6	104.6	103.0	100.1	100.1
82.5°	74.7	75.8	73.2	72.6	71.4
85°	31.4	34.3	35.9	37.4	37.4
87.5°	6.6	11.2	12.2	13.7	13.4
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)