

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: P520436

Luminaire Tested: **SQ4-F-150U-125D-830-1D-UNV-STD-W-4**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P520436
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-25, 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-150U-125D-830-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 1500 LUMENS PER FOOT
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

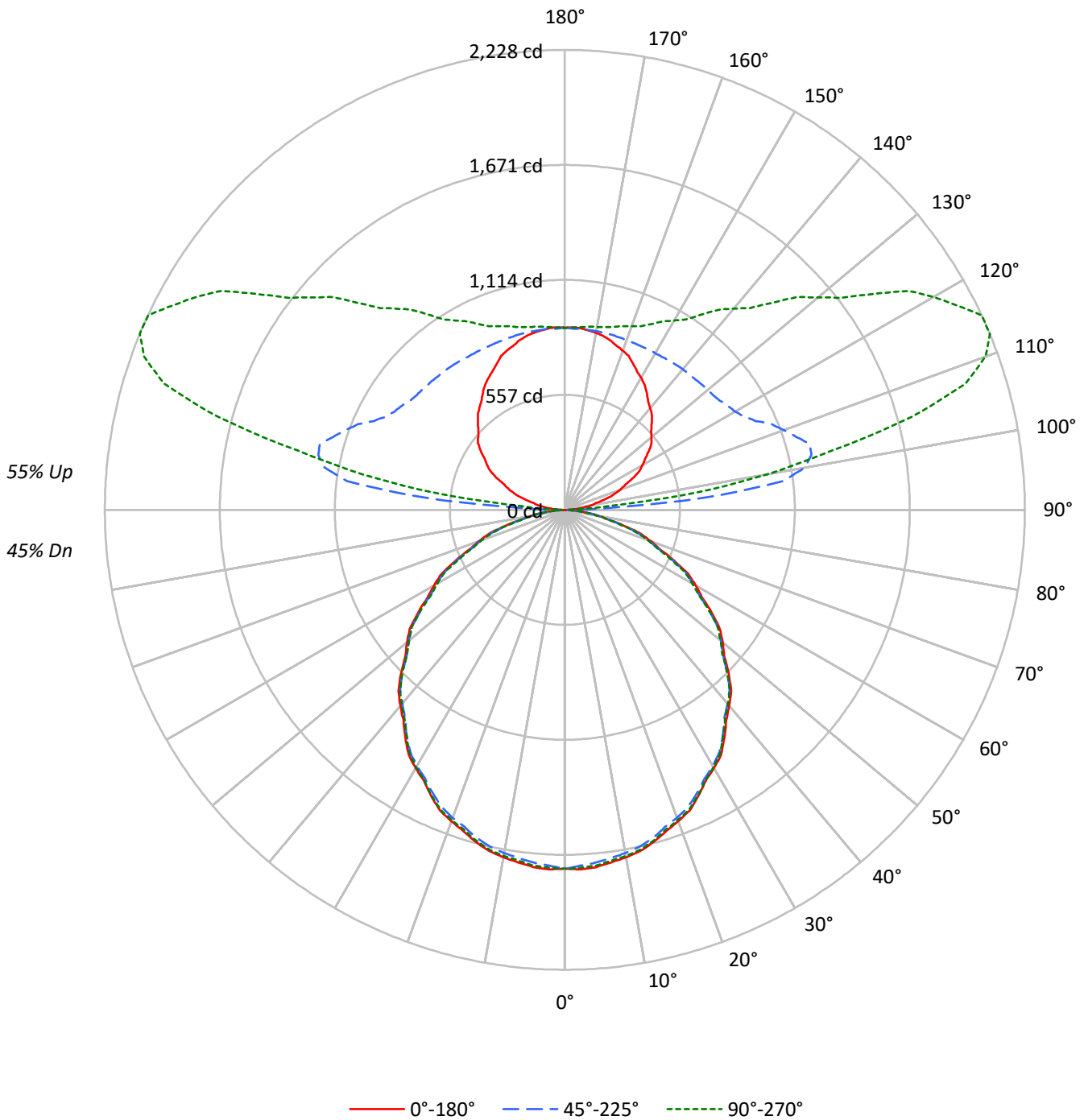
Lumens per Lamp: N/A
Luminaire Lumens: 10430.2 lumens
Efficiency: N/A
Efficacy: 125.5 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 83.1
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	106	106	106	106	97	97	97	97	81	81	81	66	66	66	52	52	52	45
1	97	92	89	85	89	85	82	79	71	68	66	58	56	55	46	45	44	38
2	88	81	75	69	80	74	69	64	62	58	55	51	48	46	40	38	37	32
3	80	71	63	58	73	65	59	54	55	50	46	45	41	38	36	33	31	27
4	73	63	55	49	67	58	51	45	48	43	39	40	36	33	32	29	27	23
5	67	56	48	42	61	51	44	39	43	38	34	36	32	28	29	26	23	20
6	62	50	42	36	57	46	39	34	39	33	29	32	28	25	26	23	20	17
7	57	45	37	31	52	42	35	29	35	30	26	29	25	22	24	20	18	15
8	53	41	33	28	48	38	31	26	32	27	23	27	22	19	22	19	16	14
9	49	37	30	25	45	34	28	23	29	24	20	24	20	17	20	17	15	12
10	46	34	27	22	42	32	25	21	27	22	18	23	19	16	18	15	13	11

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	16038	16038	16038
5°	16090	15886	16020
10°	16016	15819	15944
15°	15908	15716	15844
20°	15761	15583	15704
25°	15581	15417	15544
30°	15390	15257	15339
35°	15171	15042	15052
40°	14920	14759	14806
45°	14642	14479	14504
50°	14322	14158	14115
55°	13957	13756	13727
60°	13505	13203	13134
65°	12802	12531	12365
70°	11923	11613	11459
75°	10609	10366	10060
80°	8645	8384	8336
85°	5166	5865	5865



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	164.0	1.6
10°-20°	467.1	4.5
20°-30°	701.8	6.7
30°-40°	837.3	8.0
40°-50°	858.3	8.2
50°-60°	765.0	7.3
60°-70°	569.5	5.5
70°-80°	308.5	3.0
80°-90°	72.7	0.7
90°-100°	409.8	3.9
100°-110°	1108.2	10.6
110°-120°	1165.1	11.2
120°-130°	946.4	9.1
130°-140°	742.3	7.1
140°-150°	569.7	5.5
150°-160°	409.7	3.9
160°-170°	250.3	2.4
170°-180°	84.4	0.8
0°-30°	1332.9	12.8
0°-40°	2170.2	20.8
0°-60°	3793.5	36.4
0°-90°	4744.3	45.5
90°-120°	2683.1	25.7
90°-150°	4941.5	47.4
90°-180°	5686.0	54.5
0°-180°	10430.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1738	1738	1738	1738	1738	
5°	1737	1734	1715	1731	1730	165
15°	1666	1662	1645	1660	1659	470
25°	1531	1528	1514	1523	1527	705
35°	1347	1346	1336	1336	1336	842
45°	1122	1119	1110	1108	1112	865
55°	868	865	855	849	853	775
65°	586	583	574	570	566	581
75°	298	298	291	285	282	316
85°	49	55	55	56	55	67
90°	2	6	12	13	12	5
95°	64	223	682	353	210	67
105°	206	318	1229	1813	1739	217
115°	363	443	1020	1974	2228	358
125°	496	569	919	1551	1822	443
135°	595	666	894	1252	1417	460
145°	692	744	882	1072	1153	433
155°	781	812	874	961	993	360
165°	851	859	878	912	917	240
175°	883	882	879	890	889	84
180°	882	882	882	882	882	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1738.3	1738.3	1738.3	1738.3	1738.3
2.5°	1743.6	1740.6	1725.2	1738.2	1736.0
5°	1737.3	1734.4	1715.3	1730.6	1729.7
7.5°	1722.6	1719.0	1701.5	1715.8	1714.2
10°	1709.5	1706.8	1688.5	1702.8	1701.9
12.5°	1693.5	1690.6	1672.4	1686.8	1686.6
15°	1665.5	1661.8	1645.4	1659.7	1658.8
17.5°	1632.1	1627.7	1611.6	1622.9	1624.8
20°	1605.3	1602.5	1587.1	1597.6	1599.5
22.5°	1577.7	1574.2	1558.0	1570.1	1572.0
25°	1530.6	1527.9	1514.4	1523.1	1526.9
27.5°	1479.0	1479.0	1466.6	1472.7	1475.0
30°	1444.6	1444.6	1432.1	1436.1	1439.8
32.5°	1407.8	1404.8	1393.1	1396.2	1400.0
35°	1347.0	1346.1	1335.5	1335.5	1336.4
37.5°	1284.0	1281.4	1269.8	1270.7	1275.2
40°	1238.8	1237.0	1225.4	1225.5	1229.3
42.5°	1192.9	1191.1	1181.1	1179.6	1181.1
45°	1122.2	1119.3	1109.7	1107.9	1111.6
47.5°	1046.8	1047.5	1036.0	1033.4	1035.5
50°	997.8	997.8	986.4	980.7	983.4
52.5°	946.5	945.0	933.4	927.2	933.7
55°	867.7	864.8	855.2	848.6	853.4
57.5°	786.9	782.6	773.0	765.7	768.3
60°	731.9	725.3	715.5	709.9	711.8
62.5°	674.4	670.8	660.5	651.8	655.8
65°	586.4	582.7	574.0	570.1	566.4
67.5°	500.2	497.7	487.9	483.9	481.4
70°	442.0	437.3	430.5	425.7	424.8
72.5°	385.3	379.9	373.1	369.0	366.6
75°	297.6	297.6	290.8	285.0	282.2
77.5°	214.0	214.7	209.1	207.2	205.8
80°	162.7	162.7	157.8	156.0	156.9
82.5°	113.6	115.8	114.2	111.5	110.2
85°	48.8	55.3	55.4	56.5	55.4
87.5°	8.8	14.8	17.0	15.6	14.0
90°	1.9	5.6	12.4	13.3	12.4
92.5°	27.0	98.3	193.9	84.1	61.0
95°	63.6	223.2	681.6	352.7	209.7
97.5°	102.1	256.0	1062.4	879.2	645.7
100°	131.0	269.3	1180.9	1231.6	995.8
102.5°	157.5	287.7	1222.7	1498.7	1322.4
105°	206.0	318.3	1229.3	1813.4	1739.1
107.5°	250.8	353.3	1175.6	2009.7	2034.4
110°	285.7	378.6	1127.8	2062.4	2167.3



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	316.9	403.8	1083.7	2051.8	2228.1
115°	362.7	443.4	1019.6	1973.6	2228.1
117.5°	407.4	483.2	977.2	1854.2	2142.5
120°	434.8	509.0	952.2	1768.6	2062.9
122.5°	460.6	533.4	937.0	1676.8	1973.2
125°	496.5	568.9	919.0	1550.7	1821.7
127.5°	529.6	600.6	908.3	1447.8	1686.1
130°	547.8	621.1	903.8	1384.2	1599.6
132.5°	566.8	639.3	899.2	1326.9	1525.2
135°	595.2	665.8	894.2	1252.1	1417.3
137.5°	623.9	690.5	890.1	1191.4	1326.0
140°	643.6	705.8	888.6	1152.4	1272.1
142.5°	662.6	721.1	885.5	1117.0	1222.0
145°	692.0	744.0	881.9	1071.7	1153.4
147.5°	718.8	764.9	877.7	1030.6	1093.4
150°	738.6	779.4	876.2	1008.4	1058.5
152.5°	756.8	792.4	875.4	987.7	1028.8
155°	781.2	811.9	874.3	961.4	993.0
157.5°	806.7	828.0	874.5	943.1	963.9
160°	821.2	838.8	875.3	931.6	946.4
162.5°	832.6	847.2	876.0	922.4	933.6
165°	850.6	858.9	878.1	912.4	917.1
167.5°	862.9	868.7	878.3	903.8	906.0
170°	870.5	873.3	879.0	900.0	900.0
172.5°	876.6	877.1	879.0	895.3	894.6
175°	882.9	881.9	879.0	890.4	888.6
177.5°	885.0	882.8	878.8	886.4	884.2
180°	881.9	881.9	881.9	881.9	881.9

(END OF REPORT)