

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: P520444

Luminaire Tested: **SQ4-F-150U-125D-840-1D-UNV-STD-W-4**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P520444
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-840-1D-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

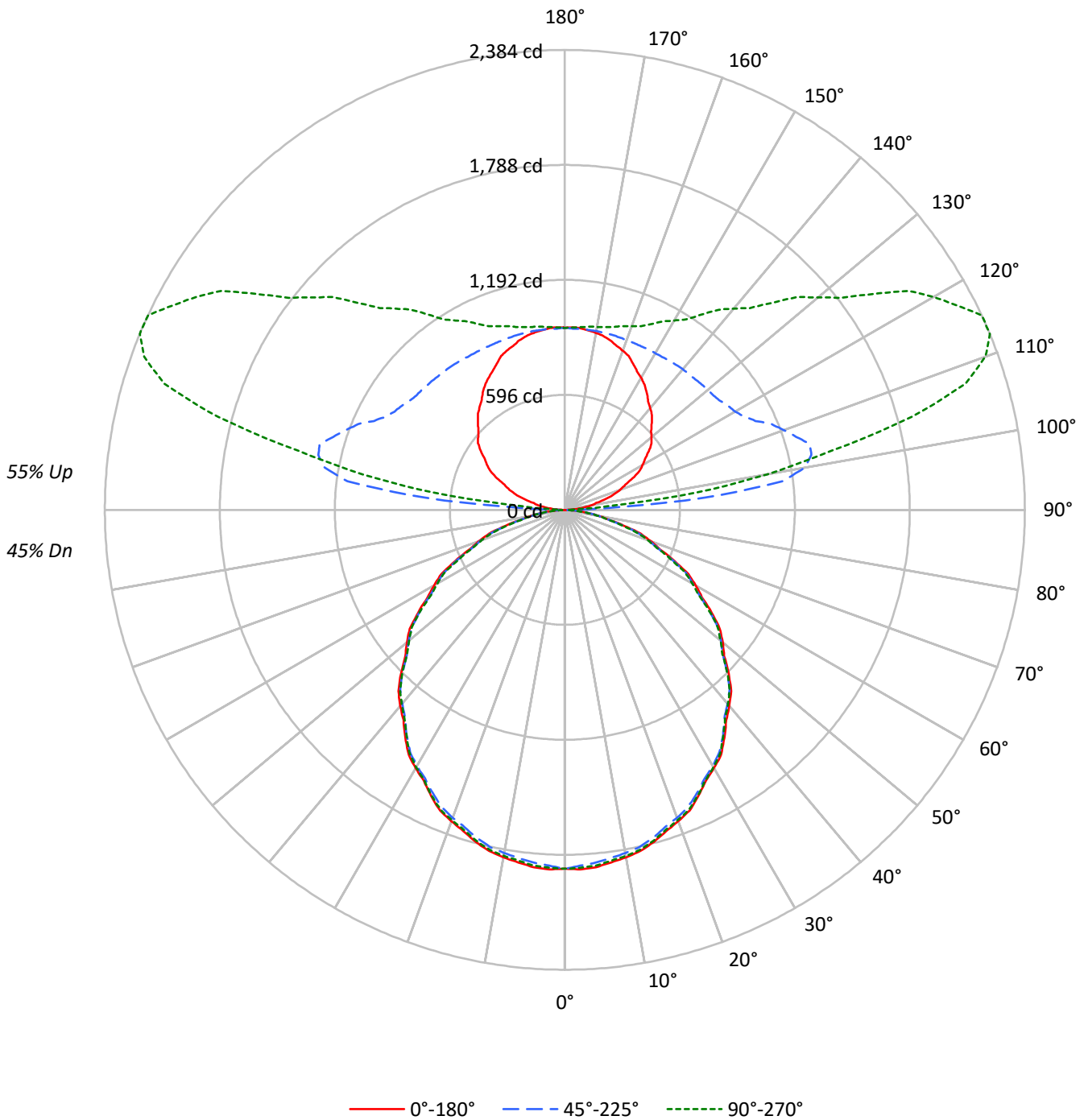
Lumens per Lamp: N/A
Luminaire Lumens: 11161.4 lumens
Efficiency: N/A
Efficacy: 134.3 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

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°	17162	17162	17162
5°	17218	16999	17142
10°	17139	16928	17062
15°	17024	16819	16955
20°	16866	16675	16805
25°	16674	16497	16633
30°	16468	16326	16413
35°	16235	16096	16109
40°	15967	15794	15843
45°	15668	15494	15522
50°	15325	15150	15104
55°	14935	14721	14689
60°	14450	14129	14055
65°	13701	13409	13232
70°	12757	12425	12263
75°	11347	11097	10765
80°	9245	8979	8921
85°	5526	6288	6288



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	175.5	1.6
10°-20°	499.8	4.5
20°-30°	751.0	6.7
30°-40°	896.0	8.0
40°-50°	918.5	8.2
50°-60°	818.6	7.3
60°-70°	609.4	5.5
70°-80°	330.2	3.0
80°-90°	77.8	0.7
90°-100°	438.6	3.9
100°-110°	1185.8	10.6
110°-120°	1246.7	11.2
120°-130°	1012.7	9.1
130°-140°	794.4	7.1
140°-150°	609.7	5.5
150°-160°	438.5	3.9
160°-170°	267.9	2.4
170°-180°	90.3	0.8
0°-30°	1426.3	12.8
0°-40°	2322.4	20.8
0°-60°	4059.5	36.4
0°-90°	5076.8	45.5
90°-120°	2871.2	25.7
90°-150°	5287.9	47.4
90°-180°	6085.0	54.5
0°-180°	11161.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1860	1860	1860	1860	1860	
5°	1859	1856	1836	1852	1851	176
15°	1782	1778	1761	1776	1775	502
25°	1638	1635	1620	1630	1634	754
35°	1441	1440	1429	1429	1430	901
45°	1201	1198	1188	1186	1190	925
55°	928	926	915	908	913	829
65°	628	624	614	610	606	621
75°	318	318	311	305	302	338
85°	52	59	59	60	59	72
90°	2	6	13	14	13	6
95°	68	239	729	377	224	71
105°	220	341	1316	1940	1861	232
115°	388	474	1091	2112	2384	383
125°	531	609	983	1659	1949	474
135°	637	712	957	1340	1517	492
145°	741	796	944	1147	1234	463
155°	836	869	936	1029	1063	386
165°	910	919	940	976	981	256
175°	945	944	941	953	951	90
180°	944	944	944	944	944	

TEST NUMBER: P520444

CATALOG NUMBER: SQ4-F-150U-125D-840-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1860.1	1860.1	1860.1	1860.1	1860.1
2.5°	1865.8	1862.6	1846.1	1860.0	1857.7
5°	1859.1	1856.1	1835.5	1851.9	1850.9
7.5°	1843.3	1839.5	1820.8	1836.1	1834.3
10°	1829.4	1826.4	1806.9	1822.2	1821.2
12.5°	1812.2	1809.1	1789.7	1805.0	1804.8
15°	1782.3	1778.3	1760.8	1776.1	1775.1
17.5°	1746.5	1741.8	1724.6	1736.7	1738.7
20°	1717.8	1714.8	1698.4	1709.6	1711.6
22.5°	1688.3	1684.5	1667.2	1680.2	1682.1
25°	1637.9	1634.9	1620.5	1629.8	1633.9
27.5°	1582.7	1582.7	1569.3	1575.9	1578.4
30°	1545.8	1545.8	1532.5	1536.7	1540.6
32.5°	1506.5	1503.2	1490.8	1494.1	1498.1
35°	1441.4	1440.4	1429.1	1429.2	1430.2
37.5°	1374.0	1371.2	1358.9	1359.8	1364.6
40°	1325.7	1323.8	1311.4	1311.5	1315.4
42.5°	1276.5	1274.6	1263.9	1262.2	1263.9
45°	1200.8	1197.8	1187.5	1185.5	1189.6
47.5°	1120.1	1121.0	1108.7	1105.8	1108.1
50°	1067.7	1067.7	1055.5	1049.4	1052.3
52.5°	1012.9	1011.3	998.9	992.1	999.1
55°	928.5	925.5	915.2	908.1	913.2
57.5°	842.1	837.5	827.1	819.4	822.3
60°	783.1	776.2	765.7	759.6	761.7
62.5°	721.7	717.9	706.7	697.5	701.9
65°	627.6	623.5	614.2	610.0	606.1
67.5°	535.2	532.6	522.1	517.7	515.2
70°	472.9	467.9	460.6	455.6	454.6
72.5°	412.4	406.5	399.2	394.9	392.3
75°	318.3	318.3	311.3	305.0	302.0
77.5°	228.9	229.7	223.8	221.7	220.3
80°	174.0	174.0	169.0	166.9	167.9
82.5°	121.6	124.1	122.2	119.3	118.0
85°	52.2	59.2	59.4	60.4	59.4
87.5°	9.4	15.8	18.2	16.7	14.9
90°	2.0	6.0	13.2	14.2	13.2
92.5°	28.9	105.1	207.4	90.0	65.2
95°	68.1	238.9	729.3	377.4	224.5
97.5°	109.4	274.0	1137.0	940.9	691.0
100°	140.2	288.2	1263.7	1317.9	1065.6
102.5°	168.6	307.9	1308.4	1603.8	1415.1
105°	220.4	340.6	1315.5	1940.5	1861.1
107.5°	268.4	378.0	1258.0	2150.6	2177.0
110°	305.8	405.1	1206.9	2206.9	2319.2



TEST NUMBER: P520444

CATALOG NUMBER: SQ4-F-150U-125D-840-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	339.1	432.1	1159.7	2195.7	2384.2
115°	388.0	474.4	1091.0	2112.1	2384.2
117.5°	436.0	517.1	1045.7	1984.3	2292.7
120°	465.3	544.7	1018.9	1892.6	2207.4
122.5°	492.9	570.8	1002.7	1794.3	2111.6
125°	531.3	608.7	983.4	1659.4	1949.4
127.5°	566.7	642.7	972.0	1549.3	1804.3
130°	586.2	664.7	967.1	1481.3	1711.7
132.5°	606.5	684.2	962.2	1419.9	1632.1
135°	637.0	712.4	956.9	1339.9	1516.6
137.5°	667.6	738.9	952.5	1274.9	1418.9
140°	688.8	755.3	950.9	1233.1	1361.2
142.5°	709.0	771.7	947.6	1195.4	1307.6
145°	740.6	796.1	943.7	1146.8	1234.2
147.5°	769.2	818.5	939.3	1103.0	1170.1
150°	790.3	834.1	937.7	1079.0	1132.6
152.5°	809.8	847.9	936.8	1056.9	1101.0
155°	836.1	868.9	935.6	1028.8	1062.6
157.5°	863.2	886.1	935.8	1009.2	1031.5
160°	878.7	897.5	936.6	996.9	1012.8
162.5°	890.9	906.6	937.5	987.1	998.9
165°	910.2	919.2	939.7	976.3	981.3
167.5°	923.4	929.5	939.9	967.2	969.6
170°	931.5	934.6	940.7	963.0	963.0
172.5°	938.1	938.7	940.7	958.1	957.3
175°	944.7	943.7	940.7	952.9	950.9
177.5°	946.9	944.6	940.5	948.5	946.1
180°	943.7	943.7	943.7	943.7	943.7

(END OF REPORT)