

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: P519887

Luminaire Tested: **SQ4-F-050U-050D-835-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P519887
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-21, 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-050U-050D-835-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

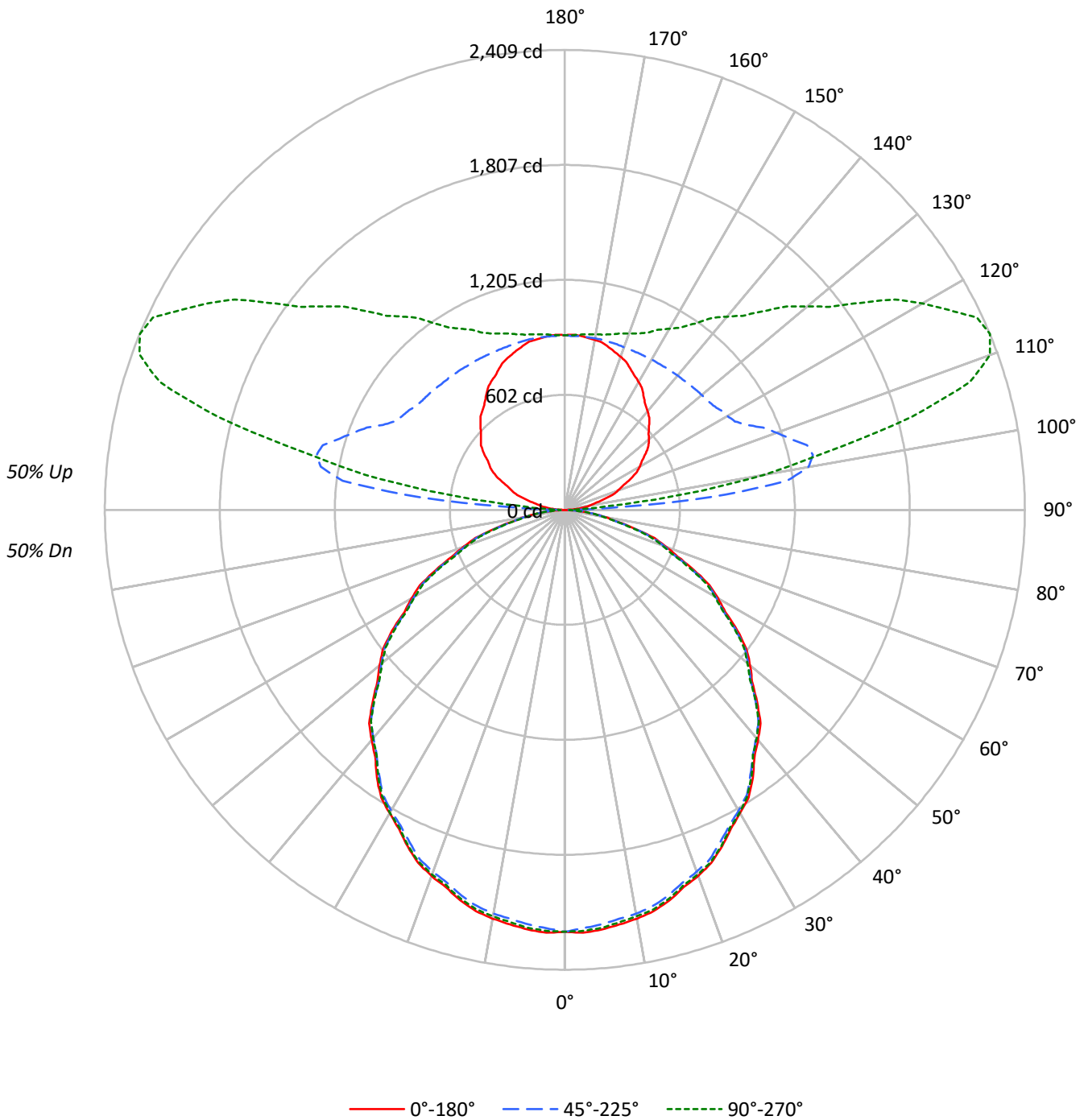
Lumens per Lamp: N/A
Luminaire Lumens: 12010.4 lumens
Efficiency: N/A
Efficacy: 134.2 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 89.5
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	50	30	10	0	
RCR																						
0	107	107	107	107	99	99	99	99	83	83	83	69	69	69	56	56	56	50				
1	98	93	90	86	90	86	83	80	73	71	69	61	59	58	50	49	48	42				
2	89	82	75	70	82	75	70	66	64	60	57	53	51	48	44	42	40	35				
3	81	72	64	58	75	66	60	55	56	51	47	47	44	41	39	36	34	30				
4	74	63	55	49	68	59	52	46	50	45	40	42	38	35	34	32	29	25				
5	68	56	48	42	62	52	45	40	45	39	35	38	33	30	31	28	25	22				
6	63	50	42	36	58	47	40	34	40	34	30	34	30	26	28	25	22	19				
7	58	46	38	32	53	42	35	30	36	31	27	31	26	23	26	22	20	17				
8	54	41	33	28	49	38	31	27	33	28	24	28	24	21	23	20	18	15				
9	50	38	30	25	46	35	28	24	30	25	21	26	22	18	22	18	16	14				
10	47	35	27	22	43	32	26	21	28	23	19	24	20	17	20	17	14	12				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6796	6796	6796
5°	6813	6731	6785
10°	6790	6707	6753
15°	6743	6659	6715
20°	6680	6603	6651
25°	6605	6525	6585
30°	6513	6461	6503
35°	6441	6364	6397
40°	6318	6259	6270
45°	6189	6137	6137
50°	6058	6001	5972
55°	5916	5837	5805
60°	5695	5604	5568
65°	5425	5317	5253
70°	5054	4947	4841
75°	4534	4394	4288
80°	3668	3615	3510
85°	2191	2505	2611



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	208.5	1.7
10°-20°	593.7	4.9
20°-30°	891.8	7.4
30°-40°	1064.5	8.9
40°-50°	1090.8	9.1
50°-60°	972.8	8.1
60°-70°	724.5	6.0
70°-80°	393.3	3.3
80°-90°	94.6	0.8
90°-100°	439.3	3.7
100°-110°	1193.5	9.9
110°-120°	1227.1	10.2
120°-130°	981.1	8.2
130°-140°	770.9	6.4
140°-150°	591.1	4.9
150°-160°	425.1	3.5
160°-170°	260.0	2.2
170°-180°	87.6	0.7
0°-30°	1694.0	14.1
0°-40°	2758.5	23.0
0°-60°	4822.2	40.1
0°-90°	6034.6	50.2
90°-120°	2860.0	23.8
90°-150°	5203.1	43.3
90°-180°	5976.0	49.8
0°-180°	12010.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2210	2210	2210	2210	2210	
5°	2207	2204	2180	2201	2198	210
15°	2118	2112	2091	2109	2109	597
25°	1946	1941	1923	1935	1941	896
35°	1716	1710	1695	1695	1704	1071
45°	1423	1426	1411	1408	1411	1098
55°	1103	1103	1089	1080	1083	983
65°	746	743	731	722	722	738
75°	382	379	370	364	361	403
85°	62	68	71	74	74	87
90°	3	12	21	26	26	6
95°	65	240	765	333	224	69
105°	212	330	1312	1998	1880	225
115°	377	457	1051	2090	2381	372
125°	518	590	951	1602	1889	462
135°	624	693	924	1304	1471	483
145°	721	773	912	1108	1192	453
155°	815	844	906	995	1024	376
165°	883	894	909	948	951	249
175°	915	918	912	924	921	87
180°	915	915	915	915	915	



TEST NUMBER: P519887

CATALOG NUMBER: SQ4-F-050U-050D-835-1D-UNV-STD-W-12

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2209.8	2209.8	2209.8	2209.8	2209.8
2.5°	2216.9	2212.2	2193.2	2209.7	2207.4
5°	2206.8	2203.9	2180.2	2200.8	2197.9
7.5°	2190.8	2185.0	2161.8	2181.8	2179.0
10°	2174.3	2168.4	2147.6	2165.3	2162.4
12.5°	2153.0	2149.5	2126.3	2144.1	2143.5
15°	2118.0	2112.2	2091.4	2109.2	2109.2
17.5°	2071.9	2068.5	2048.2	2065.3	2063.0
20°	2041.1	2035.3	2017.5	2032.3	2032.3
22.5°	2003.3	1999.8	1982.0	1994.5	1996.8
25°	1946.5	1940.7	1922.8	1934.7	1940.6
27.5°	1883.8	1879.1	1864.2	1872.0	1876.1
30°	1834.1	1834.1	1819.3	1822.4	1831.1
32.5°	1789.1	1789.1	1771.9	1775.0	1779.0
35°	1715.7	1709.9	1695.0	1695.2	1703.9
37.5°	1630.5	1627.7	1618.1	1616.4	1618.7
40°	1573.7	1570.9	1559.0	1561.9	1561.9
42.5°	1516.9	1514.1	1502.2	1498.1	1502.8
45°	1422.9	1425.7	1411.0	1408.2	1411.0
47.5°	1330.0	1330.0	1318.2	1310.0	1314.6
50°	1266.1	1266.1	1254.3	1248.3	1248.3
52.5°	1199.8	1202.1	1188.0	1179.8	1182.1
55°	1103.4	1103.4	1088.6	1079.8	1082.7
57.5°	996.9	996.9	982.1	973.3	978.6
60°	925.9	925.9	911.1	902.3	905.2
62.5°	854.9	854.9	840.1	831.2	831.8
65°	745.5	742.6	730.7	721.8	721.8
67.5°	640.1	632.7	623.6	611.7	611.7
70°	562.1	559.2	550.2	538.4	538.4
72.5°	491.1	485.8	476.9	467.4	467.4
75°	381.6	378.7	369.8	363.8	360.9
77.5°	273.3	271.1	270.4	262.2	264.5
80°	207.1	207.1	204.1	198.2	198.2
82.5°	147.9	150.2	145.0	143.7	141.4
85°	62.1	67.9	71.0	74.0	74.0
87.5°	12.4	21.1	20.7	24.3	24.3
90°	2.9	11.6	20.6	26.5	26.5
92.5°	26.5	120.3	208.9	89.7	76.0
95°	64.8	240.2	765.1	333.0	223.6
97.5°	107.2	265.3	1173.0	912.6	641.0
100°	135.4	282.1	1297.8	1315.6	1062.3
102.5°	163.6	298.9	1330.7	1627.1	1403.7
105°	211.9	329.9	1312.5	1998.5	1880.4
107.5°	261.9	366.1	1236.6	2190.2	2223.0
110°	297.2	392.2	1180.1	2228.0	2369.0



TEST NUMBER: P519887

CATALOG NUMBER: SQ4-F-050U-050D-835-1D-UNV-STD-W-12

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	327.8	418.2	1123.6	2196.6	2409.1
115°	376.7	457.3	1050.6	2090.1	2380.8
117.5°	422.6	499.7	1004.1	1939.1	2266.6
120°	453.2	528.0	983.0	1837.9	2163.0
122.5°	479.1	553.9	968.8	1736.4	2050.0
125°	517.9	589.9	950.6	1601.6	1889.3
127.5°	552.7	624.0	940.6	1499.4	1746.3
130°	573.9	642.9	935.9	1435.2	1656.8
132.5°	595.1	664.1	931.1	1380.6	1576.7
135°	623.9	693.0	924.1	1304.5	1471.4
137.5°	655.1	717.8	920.5	1237.4	1377.8
140°	673.9	734.3	918.2	1194.7	1321.3
142.5°	692.8	748.5	915.8	1161.3	1267.2
145°	721.0	772.8	912.3	1108.4	1191.9
147.5°	752.7	797.1	909.4	1066.8	1132.4
150°	773.9	811.3	909.4	1042.9	1094.7
152.5°	790.4	823.2	907.0	1021.5	1064.1
155°	815.2	843.9	906.4	995.3	1024.1
157.5°	839.3	861.8	906.4	977.6	999.3
160°	853.4	873.5	906.4	965.7	983.0
162.5°	867.6	883.1	908.8	956.2	968.8
165°	882.9	894.3	909.4	947.6	950.6
167.5°	898.8	904.5	912.3	937.6	940.0
170°	903.5	909.2	912.3	932.9	932.9
172.5°	908.2	911.6	912.3	928.2	928.2
175°	915.2	918.1	912.3	924.0	921.1
177.5°	917.6	917.6	910.5	919.9	915.2
180°	915.2	915.2	915.2	915.2	915.2

(END OF REPORT)