

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: P519891

Luminaire Tested: **SQ4-F-050U-050D-840-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P519891
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-840-1D-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

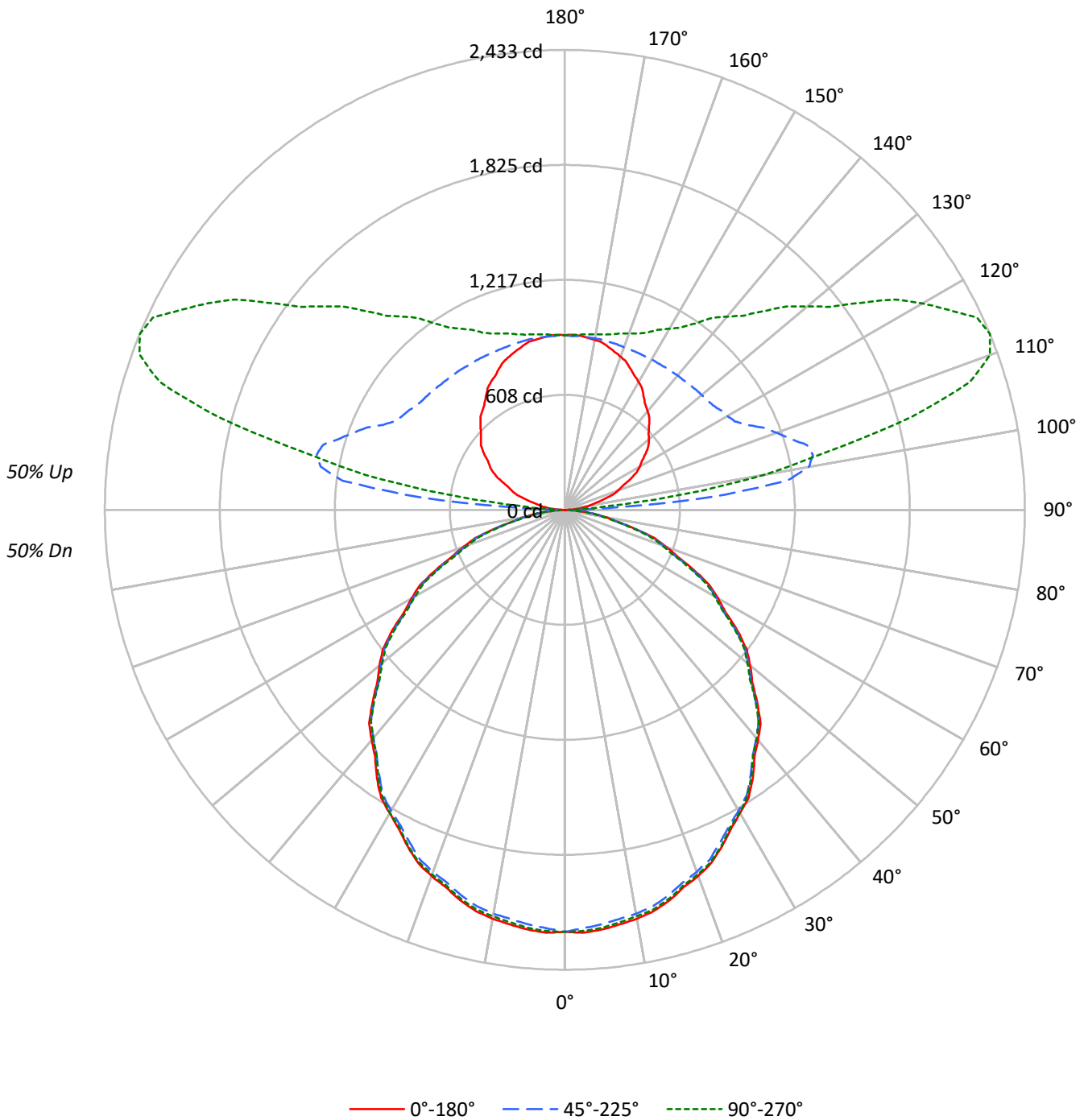
Lumens per Lamp: N/A
Luminaire Lumens: 12131.2 lumens
Efficiency: N/A
Efficacy: 135.5 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: General Diffuse

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	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°	6864	6864	6864
5°	6881	6798	6853
10°	6858	6774	6821
15°	6811	6726	6783
20°	6747	6669	6718
25°	6672	6590	6651
30°	6579	6526	6568
35°	6506	6428	6462
40°	6382	6321	6334
45°	6251	6199	6199
50°	6118	6061	6033
55°	5976	5896	5863
60°	5752	5661	5624
65°	5480	5371	5306
70°	5105	4997	4890
75°	4579	4438	4331
80°	3703	3652	3546
85°	2212	2530	2636



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	210.6	1.7
10°-20°	599.7	4.9
20°-30°	900.7	7.4
30°-40°	1075.2	8.9
40°-50°	1101.8	9.1
50°-60°	982.6	8.1
60°-70°	731.8	6.0
70°-80°	397.3	3.3
80°-90°	95.6	0.8
90°-100°	443.8	3.7
100°-110°	1205.5	9.9
110°-120°	1239.5	10.2
120°-130°	991.0	8.2
130°-140°	778.7	6.4
140°-150°	597.1	4.9
150°-160°	429.4	3.5
160°-170°	262.6	2.2
170°-180°	88.5	0.7
0°-30°	1711.0	14.1
0°-40°	2786.3	23.0
0°-60°	4870.7	40.1
0°-90°	6095.3	50.2
90°-120°	2888.8	23.8
90°-150°	5255.5	43.3
90°-180°	6036.0	49.8
0°-180°	12131.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2232	2232	2232	2232	2232	
5°	2229	2226	2202	2223	2220	212
15°	2139	2134	2112	2130	2130	603
25°	1966	1960	1942	1954	1960	905
35°	1733	1727	1712	1712	1721	1081
45°	1437	1440	1425	1422	1425	1109
55°	1114	1114	1100	1091	1094	993
65°	753	750	738	729	729	746
75°	385	382	374	367	364	407
85°	63	69	72	75	75	88
90°	3	12	21	27	27	6
95°	65	243	773	336	226	69
105°	214	333	1326	2019	1899	227
115°	380	462	1061	2111	2405	375
125°	523	596	960	1618	1908	466
135°	630	700	933	1318	1486	487
145°	728	781	921	1120	1204	457
155°	823	852	916	1005	1034	380
165°	892	903	918	957	960	252
175°	924	927	921	933	930	88
180°	924	924	924	924	924	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2231.9	2231.9	2231.9	2231.9	2231.9
2.5°	2239.1	2234.5	2215.3	2231.9	2229.6
5°	2229.0	2226.1	2202.1	2223.0	2220.0
7.5°	2212.9	2207.0	2183.6	2203.8	2200.9
10°	2196.1	2190.3	2169.2	2187.1	2184.2
12.5°	2174.6	2171.1	2147.7	2165.7	2165.1
15°	2139.3	2133.5	2112.4	2130.4	2130.4
17.5°	2092.7	2089.3	2068.8	2086.1	2083.8
20°	2061.6	2055.8	2037.8	2052.7	2052.7
22.5°	2023.4	2019.9	2001.9	2014.5	2016.9
25°	1966.1	1960.2	1942.1	1954.3	1960.1
27.5°	1902.7	1898.1	1883.0	1890.9	1894.9
30°	1852.5	1852.5	1837.6	1840.8	1849.5
32.5°	1807.1	1807.1	1789.8	1792.8	1797.0
35°	1733.0	1727.2	1712.1	1712.3	1721.1
37.5°	1646.9	1644.1	1634.4	1632.6	1635.0
40°	1589.6	1586.7	1574.6	1577.6	1577.6
42.5°	1532.2	1529.3	1517.2	1513.2	1517.8
45°	1437.2	1440.1	1425.2	1422.3	1425.2
47.5°	1343.4	1343.4	1331.4	1323.2	1327.8
50°	1278.8	1278.8	1266.9	1260.9	1260.9
52.5°	1211.9	1214.2	1199.9	1191.6	1194.0
55°	1114.5	1114.5	1099.6	1090.7	1093.5
57.5°	1007.0	1007.0	992.0	983.2	988.4
60°	935.2	935.2	920.3	911.4	914.3
62.5°	863.5	863.5	848.6	839.6	840.2
65°	753.0	750.0	738.1	729.1	729.1
67.5°	646.6	639.0	629.9	617.9	617.9
70°	567.7	564.8	555.7	543.8	543.8
72.5°	496.0	490.8	481.7	472.1	472.1
75°	385.4	382.5	373.5	367.4	364.5
77.5°	276.1	273.7	273.1	264.8	267.1
80°	209.1	209.1	206.2	200.2	200.2
82.5°	149.4	151.8	146.4	145.1	142.8
85°	62.7	68.6	71.7	74.7	74.7
87.5°	12.5	21.3	20.9	24.5	24.5
90°	2.9	11.7	20.8	26.8	26.8
92.5°	26.8	121.5	211.1	90.7	76.7
95°	65.4	242.7	772.9	336.4	225.9
97.5°	108.2	268.1	1184.8	921.7	647.4
100°	136.7	285.0	1310.9	1328.9	1073.0
102.5°	165.2	301.8	1344.2	1643.4	1417.9
105°	214.0	333.1	1325.7	2018.6	1899.4
107.5°	264.6	369.7	1249.0	2212.2	2245.4
110°	300.2	396.1	1192.0	2250.4	2392.9

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	331.1	422.3	1134.9	2218.8	2433.3
115°	380.4	461.9	1061.2	2111.1	2404.7
117.5°	426.9	504.8	1014.2	1958.6	2289.3
120°	457.8	533.3	992.8	1856.3	2184.7
122.5°	483.9	559.5	978.5	1753.9	2070.6
125°	523.1	595.8	960.1	1617.6	1908.3
127.5°	558.3	630.3	950.0	1514.5	1763.9
130°	579.6	649.4	945.3	1449.7	1673.5
132.5°	601.0	670.8	940.5	1394.4	1592.6
135°	630.2	700.0	933.4	1317.7	1486.3
137.5°	661.7	725.1	929.8	1249.9	1391.7
140°	680.7	741.8	927.4	1206.8	1334.6
142.5°	699.8	756.1	925.1	1173.0	1279.9
145°	728.2	780.6	921.4	1119.5	1203.8
147.5°	760.4	805.1	918.5	1077.5	1143.8
150°	781.8	819.6	918.5	1053.4	1105.7
152.5°	798.4	831.5	916.1	1031.8	1074.8
155°	823.4	852.4	915.5	1005.3	1034.4
157.5°	847.7	870.4	915.5	987.4	1009.4
160°	862.1	882.4	915.5	975.4	992.8
162.5°	876.3	892.0	917.9	965.8	978.5
165°	891.7	903.4	918.5	957.2	960.1
167.5°	907.8	913.6	921.4	947.0	949.4
170°	912.5	918.4	921.4	942.2	942.2
172.5°	917.3	920.7	921.4	937.5	937.5
175°	924.5	927.3	921.4	933.3	930.4
177.5°	926.8	926.8	919.7	929.1	924.5
180°	924.5	924.5	924.5	924.5	924.5

(END OF REPORT)