

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: P519926

Luminaire Tested: **SQ4-F-050U-075D-935-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P519926
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-21, G3-1910-536-18)
Test Lab: INNOVATION CENTER
Issue Date: 4/29/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-F-050U-075D-935-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

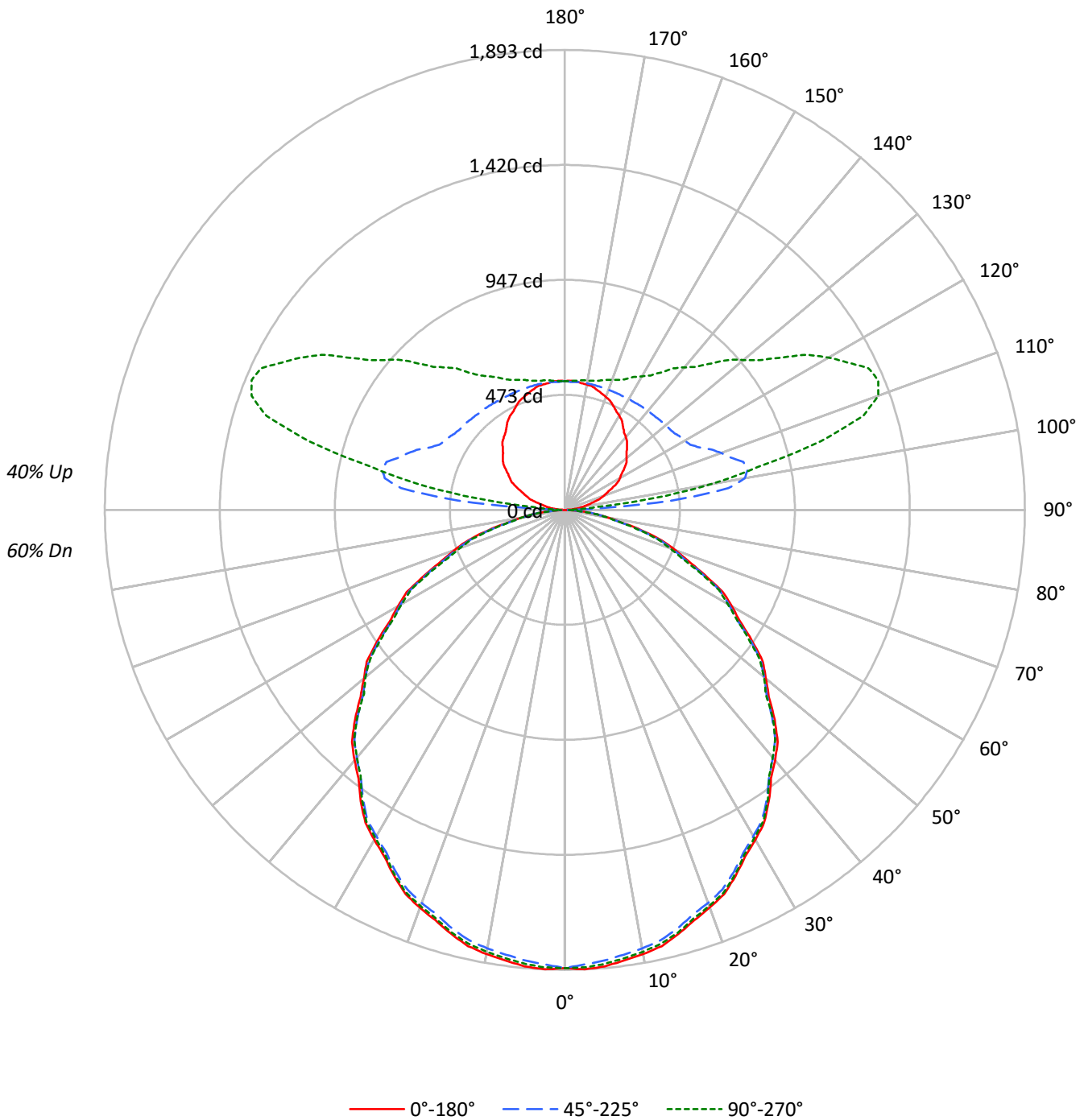
Lumens per Lamp: N/A
Luminaire Lumens: 8612.8 lumens
Efficiency: N/A
Efficacy: 112.6 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 76.5
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	109	109	109	109	102	102	102	102	89	89	89	76	76	76	65	65	65	60
1	100	96	92	88	93	89	86	83	78	75	73	67	65	64	58	56	55	50
2	91	83	77	72	85	78	73	68	68	64	60	59	56	53	51	48	46	42
3	83	73	66	60	77	69	62	57	60	55	51	52	48	45	45	42	39	35
4	76	65	57	50	71	61	54	48	53	48	43	46	42	38	40	36	34	30
5	70	58	49	43	65	54	47	41	48	42	37	42	37	33	36	32	29	26
6	64	52	43	37	60	49	41	36	43	37	32	38	33	29	32	29	26	23
7	59	47	39	33	55	44	37	31	39	33	28	34	29	26	30	26	23	20
8	55	42	35	29	51	40	33	28	35	30	25	31	26	23	27	23	20	18
9	51	39	31	26	48	37	30	25	33	27	23	29	24	21	25	21	18	16
10	48	36	28	23	45	34	27	22	30	24	20	27	22	19	23	19	17	15

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8701	8701	8701
5°	8734	8624	8687
10°	8699	8587	8651
15°	8632	8527	8600
20°	8555	8454	8521
25°	8461	8374	8435
30°	8353	8262	8308
35°	8243	8157	8196
40°	8104	8022	8012
45°	7966	7865	7887
50°	7744	7683	7683
55°	7565	7468	7399
60°	7320	7195	7132
65°	6925	6795	6702
70°	6505	6343	6181
75°	5853	5639	5516
80°	4678	4588	4543
85°	2805	3165	3260



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	178.0	2.1
10°-20°	506.9	5.9
20°-30°	761.5	8.8
30°-40°	908.6	10.5
40°-50°	931.9	10.8
50°-60°	830.3	9.6
60°-70°	619.1	7.2
70°-80°	335.7	3.9
80°-90°	79.2	0.9
90°-100°	254.5	3.0
100°-110°	691.4	8.0
110°-120°	710.8	8.3
120°-130°	568.3	6.6
130°-140°	446.5	5.2
140°-150°	342.4	4.0
150°-160°	246.2	2.9
160°-170°	150.6	1.7
170°-180°	50.7	0.6
0°-30°	1446.4	16.8
0°-40°	2355.1	27.3
0°-60°	4117.3	47.8
0°-90°	5151.3	59.8
90°-120°	1656.7	19.2
90°-150°	3014.0	35.0
90°-180°	3462.0	40.2
0°-180°	8612.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1886	1886	1886	1886	1886	
5°	1886	1883	1862	1878	1876	179
15°	1808	1804	1785	1799	1801	510
25°	1662	1660	1645	1654	1657	766
35°	1464	1460	1448	1449	1455	914
45°	1221	1216	1206	1206	1209	940
55°	941	939	929	920	920	840
65°	634	634	622	616	614	632
75°	328	322	316	311	310	345
85°	53	56	60	60	62	73
90°	2	7	12	15	15	4
95°	38	139	443	193	130	40
105°	123	191	760	1158	1089	130
115°	218	265	609	1211	1379	215
125°	300	342	551	928	1094	267
135°	361	401	535	756	852	280
145°	418	448	528	642	690	262
155°	472	489	525	577	593	218
165°	511	518	527	549	551	144
175°	530	532	528	535	534	50
180°	530	530	530	530	530	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1886.2	1886.2	1886.2	1886.2	1886.2
2.5°	1893.0	1889.1	1872.6	1886.2	1884.9
5°	1886.2	1882.9	1862.3	1877.7	1876.0
7.5°	1870.8	1867.2	1846.9	1862.2	1861.9
10°	1857.1	1852.1	1833.2	1848.6	1846.9
12.5°	1839.4	1834.4	1815.4	1830.7	1829.1
15°	1807.5	1804.2	1785.4	1799.1	1800.7
17.5°	1771.3	1764.9	1748.1	1761.5	1763.1
20°	1742.6	1737.6	1722.1	1734.1	1735.8
22.5°	1712.5	1707.4	1692.0	1704.0	1705.7
25°	1662.2	1660.5	1645.2	1653.7	1657.1
27.5°	1607.9	1603.1	1590.7	1597.3	1600.7
30°	1568.2	1564.9	1551.1	1556.3	1559.6
32.5°	1527.1	1525.1	1512.7	1515.3	1519.9
35°	1463.8	1460.4	1448.4	1448.6	1455.3
37.5°	1393.7	1390.1	1380.0	1378.4	1381.0
40°	1345.8	1340.8	1332.1	1330.5	1330.5
42.5°	1296.6	1293.0	1281.5	1278.6	1282.5
45°	1221.0	1216.0	1205.6	1205.7	1209.0
47.5°	1139.2	1137.3	1125.3	1119.8	1121.1
50°	1079.0	1082.4	1070.6	1063.9	1070.6
52.5°	1027.1	1025.1	1014.5	1007.7	1010.3
55°	940.6	938.9	928.6	920.0	920.0
57.5°	853.7	849.3	838.6	832.2	837.2
60°	793.4	791.8	779.8	768.0	773.0
62.5°	733.3	730.3	718.3	710.5	714.1
65°	634.4	634.4	622.5	615.6	614.0
67.5°	547.9	539.9	533.2	524.9	522.6
70°	482.3	475.6	470.3	463.3	458.3
72.5°	417.9	413.9	406.0	399.1	398.2
75°	328.4	321.7	316.4	311.2	309.5
77.5°	233.6	232.2	227.4	224.8	225.7
80°	176.1	176.1	172.7	172.7	171.0
82.5°	124.2	125.5	124.9	122.1	121.7
85°	53.0	56.4	59.8	59.9	61.6
87.5°	9.9	17.6	17.4	18.1	18.1
90°	1.7	6.7	12.0	15.3	15.3
92.5°	15.3	69.7	121.0	52.0	44.0
95°	37.5	139.1	443.2	192.9	129.5
97.5°	62.0	153.8	679.4	528.6	371.3
100°	78.4	163.4	751.8	762.1	615.4
102.5°	94.8	173.1	770.9	942.4	813.1
105°	122.8	191.1	760.3	1157.6	1089.3
107.5°	151.7	212.1	716.3	1268.7	1287.7
110°	172.2	227.2	683.6	1290.6	1372.2

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	189.9	242.3	650.9	1272.4	1395.5
115°	218.2	264.8	608.6	1210.7	1379.1
117.5°	244.8	289.5	581.6	1123.3	1313.0
120°	262.5	305.9	569.3	1064.6	1252.9
122.5°	277.5	320.9	561.2	1005.8	1187.5
125°	300.0	341.7	550.6	927.7	1094.4
127.5°	320.1	361.5	544.8	868.5	1011.5
130°	332.5	372.4	542.1	831.3	959.7
132.5°	344.7	384.7	539.3	799.6	913.4
135°	361.4	401.3	535.3	755.7	852.3
137.5°	379.5	415.8	533.2	716.8	798.1
140°	390.4	425.4	531.9	692.1	765.4
142.5°	401.2	433.6	530.5	672.7	734.0
145°	417.6	447.7	528.4	642.1	690.4
147.5°	436.1	461.7	526.8	617.9	656.0
150°	448.3	470.0	526.8	604.2	634.1
152.5°	457.9	476.9	525.4	591.7	616.4
155°	472.2	488.9	525.1	576.6	593.2
157.5°	486.1	499.2	525.1	566.2	578.9
160°	494.4	506.0	525.1	559.3	569.3
162.5°	502.5	511.5	526.4	553.8	561.2
165°	511.4	518.0	526.8	548.9	550.6
167.5°	520.6	523.9	528.4	543.1	544.5
170°	523.3	526.7	528.4	540.4	540.4
172.5°	526.1	528.0	528.4	537.6	537.6
175°	530.2	531.9	528.4	535.2	533.5
177.5°	531.6	531.6	527.4	532.8	530.2
180°	530.2	530.2	530.2	530.2	530.2

(END OF REPORT)