

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: P519950

Luminaire Tested: **SQ4-F-050U-100D-935-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P519950
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-21, G3-1910-536-19)
Test Lab: INNOVATION CENTER
Issue Date: 4/29/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-F-050U-100D-935-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

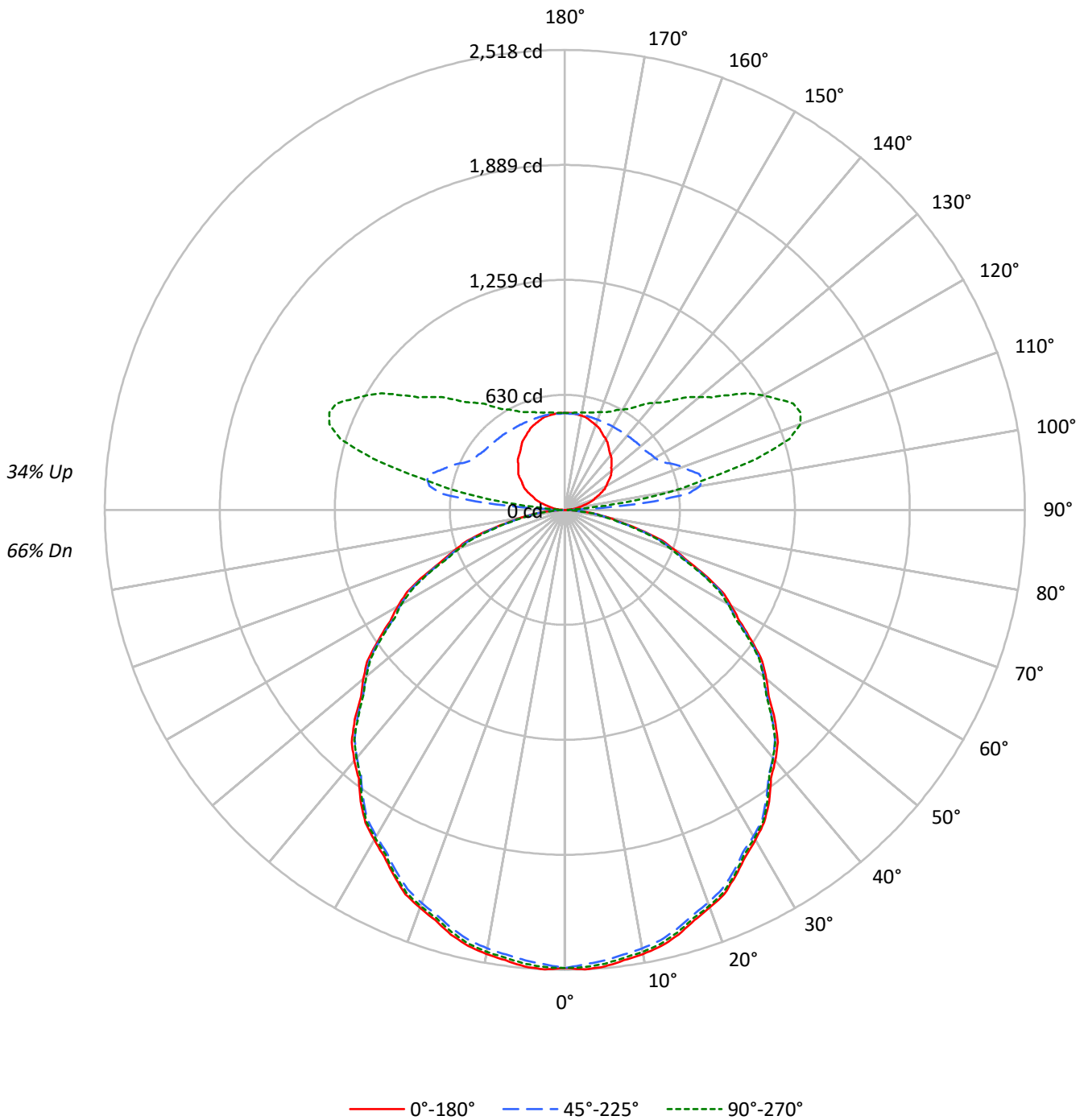
Lumens per Lamp: N/A
Luminaire Lumens: 10305.9 lumens
Efficiency: N/A
Efficacy: 111.3 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 92.6
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	111	111	111	111	105	105	105	105	92	92	92	81	81	81	71	71	71	66
1	101	97	93	89	95	91	88	85	81	79	76	72	70	68	63	61	60	56
2	92	85	78	73	87	80	74	69	71	67	63	63	59	57	55	53	51	47
3	84	74	67	61	79	70	63	58	63	57	53	55	51	48	49	46	43	39
4	77	66	58	51	72	62	55	49	56	50	45	49	45	41	44	40	37	34
5	71	59	50	44	66	56	48	42	50	44	39	44	39	35	39	35	32	29
6	65	53	44	38	61	50	42	37	45	39	34	40	35	31	36	31	28	26
7	60	48	39	34	57	45	38	32	41	34	30	36	31	27	32	28	25	23
8	56	43	35	30	53	41	34	29	37	31	27	33	28	24	30	26	22	20
9	52	40	32	27	49	38	31	26	34	28	24	31	26	22	27	23	20	18
10	49	36	29	24	46	35	28	23	31	26	21	28	23	20	25	21	18	16

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	11573	11573	11573
5°	11625	11466	11554
10°	11566	11421	11509
15°	11496	11340	11430
20°	11377	11242	11335
25°	11253	11122	11209
30°	11116	10997	11052
35°	10976	10841	10899
40°	10794	10670	10680
45°	10604	10458	10425
50°	10331	10207	10182
55°	10027	9916	9847
60°	9722	9547	9515
65°	9248	9040	8965
70°	8593	8383	8222
75°	7671	7425	7274
80°	6312	6084	5810
85°	3732	4102	4192



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	236.8	2.3
10°-20°	674.3	6.5
20°-30°	1012.6	9.8
30°-40°	1208.4	11.7
40°-50°	1238.6	12.0
50°-60°	1103.0	10.7
60°-70°	822.2	8.0
70°-80°	445.2	4.3
80°-90°	103.4	1.0
90°-100°	254.5	2.5
100°-110°	691.4	6.7
110°-120°	710.8	6.9
120°-130°	568.3	5.5
130°-140°	446.5	4.3
140°-150°	342.4	3.3
150°-160°	246.2	2.4
160°-170°	150.6	1.5
170°-180°	50.7	0.5
0°-30°	1923.6	18.7
0°-40°	3132.0	30.4
0°-60°	5473.7	53.1
0°-90°	6844.4	66.4
90°-120°	1656.7	16.1
90°-150°	3014.0	29.2
90°-180°	3462.0	33.6
0°-180°	10305.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2509	2509	2509	2509	2509	
5°	2510	2505	2476	2498	2495	238
15°	2407	2399	2374	2393	2393	678
25°	2211	2206	2185	2197	2202	1019
35°	1949	1941	1925	1929	1935	1217
45°	1625	1617	1603	1594	1598	1251
55°	1247	1248	1233	1221	1224	1116
65°	847	844	828	820	821	838
75°	430	425	417	408	408	458
85°	70	77	78	79	79	99
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°	2508.8	2508.8	2508.8	2508.8	2508.8
2.5°	2518.4	2512.9	2490.8	2508.7	2506.0
5°	2510.4	2505.4	2476.0	2498.4	2495.0
7.5°	2487.1	2482.0	2456.1	2476.7	2473.6
10°	2469.1	2464.1	2438.1	2458.7	2457.0
12.5°	2445.7	2440.7	2414.7	2435.3	2433.7
15°	2407.1	2398.7	2374.4	2393.3	2393.3
17.5°	2356.2	2349.7	2327.2	2343.1	2343.4
20°	2317.6	2312.6	2290.1	2307.3	2309.0
22.5°	2279.0	2273.9	2248.7	2264.6	2267.7
25°	2210.8	2205.8	2185.1	2197.1	2202.2
27.5°	2140.6	2133.1	2112.7	2123.4	2127.2
30°	2086.9	2083.5	2064.5	2069.7	2074.8
32.5°	2030.4	2027.0	2010.8	2013.4	2022.5
35°	1949.1	1940.7	1925.0	1928.6	1935.4
37.5°	1853.0	1849.0	1833.7	1831.8	1838.3
40°	1792.4	1785.7	1771.8	1768.4	1773.5
42.5°	1726.3	1719.6	1702.9	1699.6	1706.0
45°	1625.4	1617.0	1603.1	1594.5	1597.9
47.5°	1512.5	1512.5	1498.0	1488.1	1493.2
50°	1439.5	1439.5	1422.2	1413.7	1418.8
52.5°	1363.7	1365.1	1346.4	1342.0	1340.3
55°	1246.7	1248.3	1232.9	1220.9	1224.3
57.5°	1133.7	1129.9	1112.0	1104.1	1105.8
60°	1053.7	1048.7	1034.8	1022.9	1031.3
62.5°	972.5	970.1	956.3	942.9	941.9
65°	847.2	843.8	828.2	819.6	821.3
67.5°	722.5	718.4	704.3	691.9	696.4
70°	637.1	637.1	621.5	614.6	609.6
72.5°	558.5	551.8	540.3	530.6	526.9
75°	430.4	425.4	416.6	408.1	408.1
77.5°	313.4	309.0	303.4	297.5	295.9
80°	237.6	235.9	229.0	227.1	218.7
82.5°	167.3	167.1	162.9	158.4	158.0
85°	70.5	77.3	77.5	79.2	79.2
87.5°	12.8	21.8	21.7	19.6	19.6
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)