

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: P519954

Luminaire Tested: **SQ4-F-050U-100D-940-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P519954
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-940-1D-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

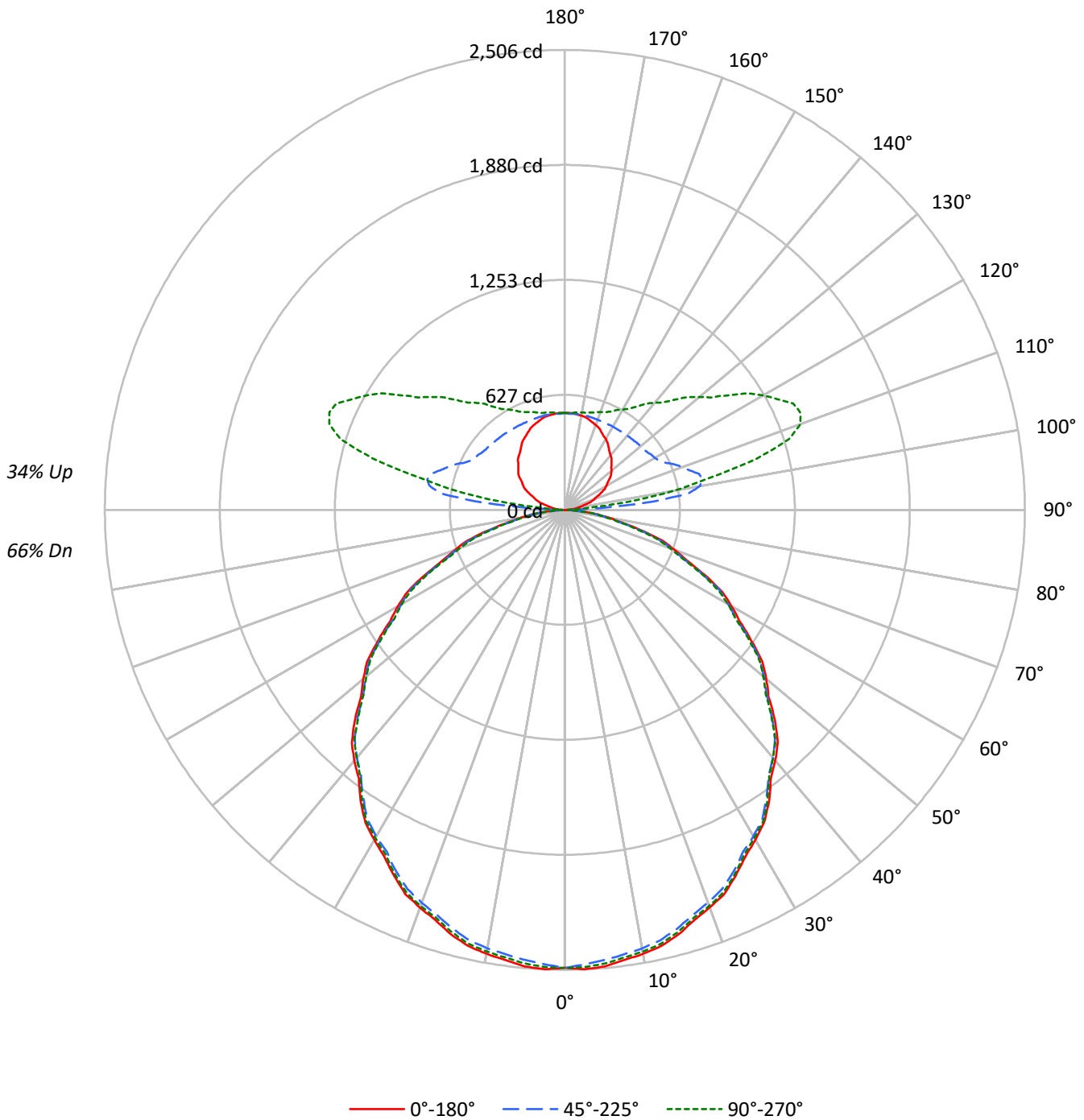
Lumens per Lamp: N/A
Luminaire Lumens: 10253.6 lumens
Efficiency: N/A
Efficacy: 110.7 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: Semi-Direct

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°	11514	11514	11514
5°	11566	11407	11495
10°	11507	11363	11451
15°	11438	11282	11372
20°	11320	11185	11277
25°	11196	11066	11152
30°	11060	10941	10996
35°	10921	10786	10844
40°	10739	10616	10626
45°	10550	10405	10372
50°	10278	10155	10131
55°	9975	9864	9796
60°	9673	9499	9467
65°	9200	8994	8919
70°	8549	8342	8180
75°	7632	7390	7236
80°	6280	6054	5781
85°	3716	4081	4171



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	235.6	2.3
10°-20°	670.8	6.5
20°-30°	1007.4	9.8
30°-40°	1202.3	11.7
40°-50°	1232.3	12.0
50°-60°	1097.4	10.7
60°-70°	818.0	8.0
70°-80°	442.9	4.3
80°-90°	102.8	1.0
90°-100°	253.2	2.5
100°-110°	687.8	6.7
110°-120°	707.2	6.9
120°-130°	565.4	5.5
130°-140°	444.3	4.3
140°-150°	340.7	3.3
150°-160°	245.0	2.4
160°-170°	149.8	1.5
170°-180°	50.5	0.5
0°-30°	1913.8	18.7
0°-40°	3116.1	30.4
0°-60°	5445.9	53.1
0°-90°	6809.6	66.4
90°-120°	1648.3	16.1
90°-150°	2998.7	29.2
90°-180°	3444.0	33.6
0°-180°	10253.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2496	2496	2496	2496	2496	
5°	2498	2493	2463	2486	2482	237
15°	2395	2386	2362	2381	2381	675
25°	2200	2195	2174	2186	2191	1014
35°	1939	1931	1915	1919	1926	1211
45°	1617	1609	1595	1586	1590	1244
55°	1240	1242	1226	1215	1218	1110
65°	843	840	824	815	817	834
75°	428	423	415	406	406	456
85°	70	77	77	79	79	98
90°	2	7	12	15	15	4
95°	37	138	441	192	129	40
105°	122	190	756	1152	1084	130
115°	217	264	606	1205	1372	214
125°	298	340	548	923	1089	266
135°	360	399	532	752	848	278
145°	416	445	526	639	687	261
155°	470	486	522	574	590	217
165°	509	516	524	546	548	144
175°	527	529	526	532	531	50
180°	527	527	527	527	527	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2496.0	2496.0	2496.0	2496.0	2496.0
2.5°	2505.6	2500.2	2478.1	2495.9	2493.2
5°	2497.7	2492.7	2463.4	2485.6	2482.3
7.5°	2474.4	2469.3	2443.6	2464.1	2461.0
10°	2456.5	2451.6	2425.7	2446.2	2444.6
12.5°	2433.3	2428.2	2402.4	2423.0	2421.3
15°	2394.9	2386.5	2362.3	2381.2	2381.2
17.5°	2344.2	2337.8	2315.5	2331.2	2331.5
20°	2305.8	2300.8	2278.4	2295.5	2297.2
22.5°	2267.5	2262.4	2237.3	2253.1	2256.1
25°	2199.6	2194.6	2174.0	2186.1	2191.0
27.5°	2129.7	2122.3	2101.9	2112.6	2116.4
30°	2076.3	2072.9	2054.0	2059.2	2064.3
32.5°	2020.1	2016.7	2000.6	2003.1	2012.2
35°	1939.2	1930.8	1915.3	1918.8	1925.6
37.5°	1843.6	1839.7	1824.4	1822.5	1828.9
40°	1783.3	1776.6	1762.8	1759.5	1764.5
42.5°	1717.6	1710.9	1694.2	1690.9	1697.4
45°	1617.1	1608.8	1594.9	1586.4	1589.8
47.5°	1504.8	1504.8	1490.4	1480.6	1485.6
50°	1432.1	1432.1	1415.0	1406.6	1411.6
52.5°	1356.7	1358.1	1339.6	1335.1	1333.4
55°	1240.3	1242.0	1226.5	1214.6	1218.0
57.5°	1127.9	1124.2	1106.4	1098.4	1100.1
60°	1048.4	1043.4	1029.6	1017.8	1026.1
62.5°	967.5	965.3	951.5	938.1	937.0
65°	842.8	839.5	824.0	815.4	817.1
67.5°	718.8	714.8	700.6	688.4	692.8
70°	633.8	633.8	618.5	611.4	606.5
72.5°	555.8	549.0	537.5	527.9	524.2
75°	428.2	423.3	414.6	406.0	406.0
77.5°	311.8	307.5	301.8	296.0	294.3
80°	236.4	234.7	227.9	225.9	217.6
82.5°	166.6	166.2	162.1	157.6	157.2
85°	70.2	76.9	77.1	78.8	78.8
87.5°	12.7	21.7	21.6	19.5	19.5
90°	1.7	6.7	11.9	15.3	15.3
92.5°	15.3	69.3	120.4	51.7	43.8
95°	37.3	138.5	441.0	191.9	128.9
97.5°	61.7	153.0	676.0	526.0	369.4
100°	78.0	162.6	747.9	758.2	612.2
102.5°	94.3	172.2	767.0	937.7	809.0
105°	122.1	190.1	756.5	1151.7	1083.7
107.5°	150.9	211.0	712.7	1262.2	1281.2
110°	171.3	226.0	680.1	1284.0	1365.3

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	188.9	241.0	647.6	1266.0	1388.3
115°	217.1	263.5	605.5	1204.6	1372.0
117.5°	243.6	288.0	578.7	1117.6	1306.3
120°	261.2	304.3	566.5	1059.2	1246.5
122.5°	276.1	319.2	558.4	1000.7	1181.5
125°	298.5	339.9	547.9	923.0	1088.8
127.5°	318.5	359.6	542.1	864.1	1006.4
130°	330.7	370.5	539.3	827.1	954.9
132.5°	343.0	382.7	536.7	795.6	908.8
135°	359.5	399.4	532.5	751.9	848.0
137.5°	377.5	413.7	530.5	713.2	794.1
140°	388.4	423.2	529.1	688.6	761.5
142.5°	399.3	431.4	527.8	669.2	730.3
145°	415.5	445.4	525.8	638.8	686.9
147.5°	433.8	459.3	524.1	614.8	652.7
150°	446.1	467.6	524.1	601.0	631.0
152.5°	455.5	474.5	522.7	588.8	613.3
155°	469.8	486.4	522.3	573.7	590.2
157.5°	483.7	496.6	522.3	563.4	576.0
160°	491.8	503.5	522.3	556.5	566.5
162.5°	500.0	508.9	523.7	551.0	558.4
165°	508.8	515.5	524.1	546.2	547.9
167.5°	517.9	521.3	525.8	540.4	541.7
170°	520.7	524.0	525.8	537.6	537.6
172.5°	523.4	525.4	525.8	534.9	534.9
175°	527.4	529.1	525.8	532.5	530.9
177.5°	528.8	528.8	524.8	530.1	527.4
180°	527.4	527.4	527.4	527.4	527.4

(END OF REPORT)