

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: P519858

Luminaire Tested: **SQ4-F-025U-100D-940-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P519858
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-32, 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-025U-100D-940-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 250 LUMENS PER FOOT
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

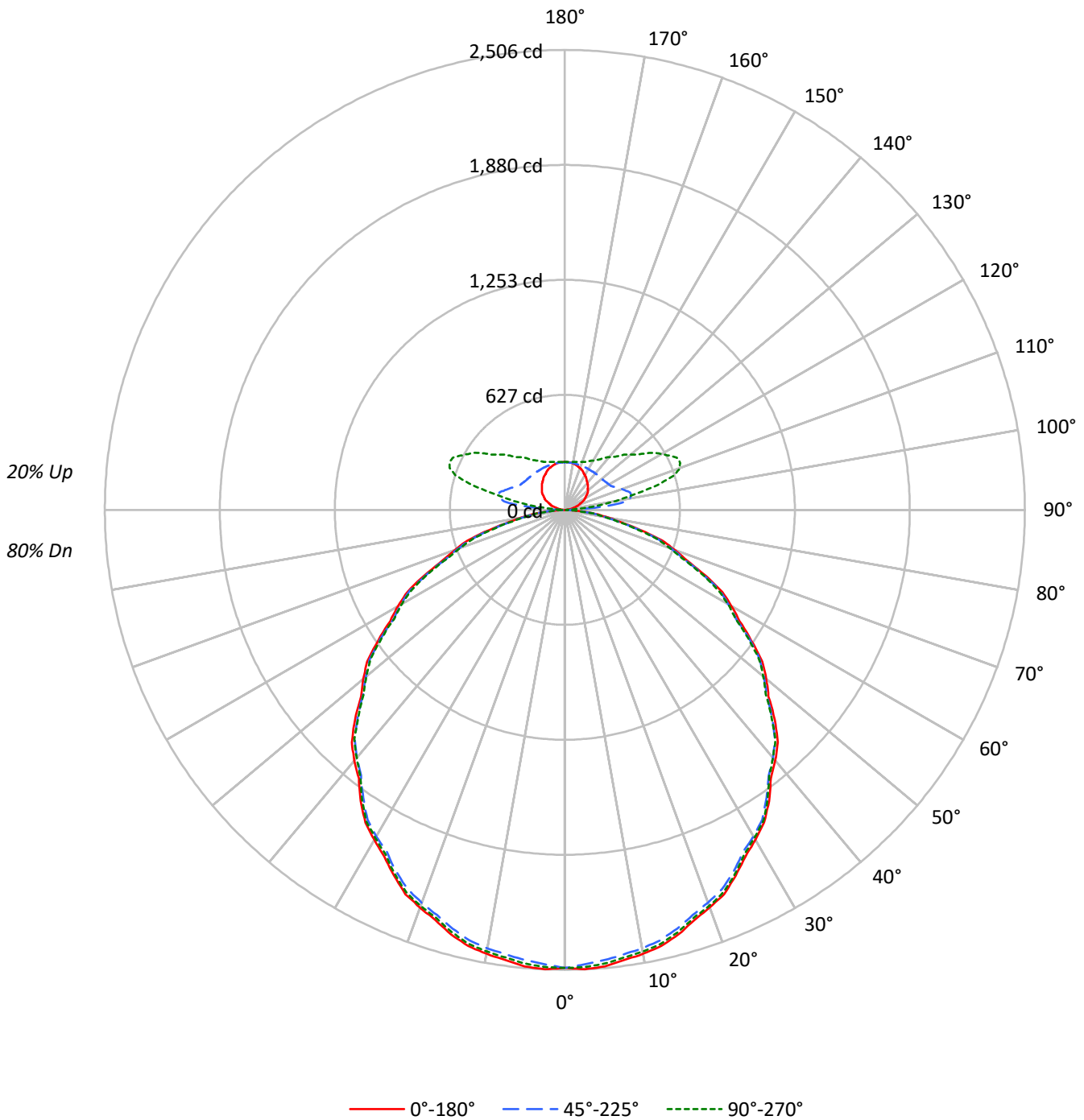
Lumens per Lamp: N/A
Luminaire Lumens: 8495.9 lumens
Efficiency: N/A
Efficacy: 107.1 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 79.3
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	114	114	114	114	109	109	109	109	100	100	100	92	92	92	84	84	84	80				
1	105	100	96	92	100	96	92	89	88	85	82	81	79	76	74	72	71	67				
2	95	87	81	75	91	84	78	73	77	72	68	71	67	64	65	62	59	56				
3	87	77	69	63	83	74	66	61	68	62	57	63	58	54	58	54	50	48				
4	79	68	59	53	76	65	58	52	60	54	49	56	50	46	51	47	43	41				
5	73	61	52	46	69	58	50	44	54	47	42	50	44	40	46	42	38	35				
6	67	54	46	40	64	52	45	39	49	42	37	45	39	35	42	37	33	31				
7	62	49	41	35	59	48	40	34	44	37	33	41	35	31	38	33	29	27				
8	58	45	37	31	55	43	36	30	40	34	29	38	32	28	35	30	26	24				
9	54	41	33	28	52	40	32	27	37	31	26	35	29	25	32	27	24	22				
10	51	38	30	25	48	37	29	25	34	28	24	32	27	23	30	25	22	20				

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	2.8
10°-20°	670.8	7.9
20°-30°	1007.4	11.9
30°-40°	1202.3	14.2
40°-50°	1232.3	14.5
50°-60°	1097.4	12.9
60°-70°	818.0	9.6
70°-80°	442.9	5.2
80°-90°	102.2	1.2
90°-100°	126.8	1.5
100°-110°	333.4	3.9
110°-120°	345.8	4.1
120°-130°	277.3	3.3
130°-140°	217.6	2.6
140°-150°	167.0	2.0
150°-160°	120.3	1.4
160°-170°	73.6	0.9
170°-180°	24.9	0.3
0°-30°	1913.8	22.5
0°-40°	3116.1	36.7
0°-60°	5445.9	64.1
0°-90°	6809.0	80.1
90°-120°	806.1	9.5
90°-150°	1468.1	17.3
90°-180°	1687.0	19.9
0°-180°	8495.9	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	5	13	7	7	3
95°	17	66	218	113	77	19
105°	60	91	369	560	522	64
115°	107	130	295	589	672	105
125°	148	166	269	454	536	132
135°	177	195	260	366	415	137
145°	205	218	257	313	337	129
155°	232	238	257	282	290	107
165°	250	254	257	267	270	71
175°	260	260	259	262	262	25
180°	260	260	260	260	260	

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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	21.4	22.0	17.8	17.8
90°	1.6	5.0	13.4	6.7	6.7
92.5°	7.0	33.7	74.7	33.1	21.3
95°	16.7	65.6	218.5	112.6	76.8
97.5°	29.1	72.1	327.0	260.0	191.6
100°	38.3	77.5	360.4	365.1	283.6
102.5°	46.4	82.9	369.7	454.9	385.0
105°	60.0	91.1	368.7	559.7	522.2
107.5°	74.1	102.8	347.6	614.1	623.2
110°	83.4	109.5	330.3	628.2	667.3



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	92.7	117.6	314.3	619.3	679.3
115°	106.8	129.6	295.3	589.1	672.4
117.5°	120.4	141.4	282.3	547.3	639.7
120°	128.5	148.1	276.9	519.2	608.9
122.5°	136.5	156.0	272.9	491.1	579.5
125°	148.4	166.4	268.6	453.9	535.5
127.5°	158.2	176.5	265.0	424.0	492.8
130°	163.5	183.0	263.6	405.2	468.8
132.5°	168.8	188.4	262.3	389.0	446.1
135°	176.8	194.8	260.3	366.5	415.4
137.5°	185.1	202.8	259.9	349.6	389.7
140°	191.8	208.2	258.6	336.2	373.7
142.5°	197.2	212.2	258.6	326.7	359.0
145°	205.2	218.2	256.9	312.6	337.0
147.5°	213.3	226.0	256.9	300.7	321.0
150°	218.5	230.0	256.9	294.0	310.3
152.5°	223.9	232.7	256.9	288.6	301.0
155°	231.9	238.4	256.9	282.2	290.3
157.5°	237.9	244.1	256.9	276.4	282.3
160°	241.9	246.8	256.9	273.7	276.9
162.5°	245.9	249.5	256.9	271.0	274.2
165°	250.2	253.5	256.9	267.0	270.2
167.5°	254.3	255.9	258.6	265.3	266.6
170°	256.9	258.6	258.6	265.3	265.3
172.5°	258.3	258.6	258.6	263.9	262.6
175°	260.3	260.3	258.6	261.9	261.9
177.5°	260.3	260.3	258.9	261.5	260.3
180°	260.3	260.3	260.3	260.3	260.3

(END OF REPORT)