

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: P520033

Luminaire Tested: **SQ4-F-075U-100D-835-1D-UNV-STD-W-6**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P520033
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-22, 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-075U-100D-835-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 750 LUMENS PER FOOT
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

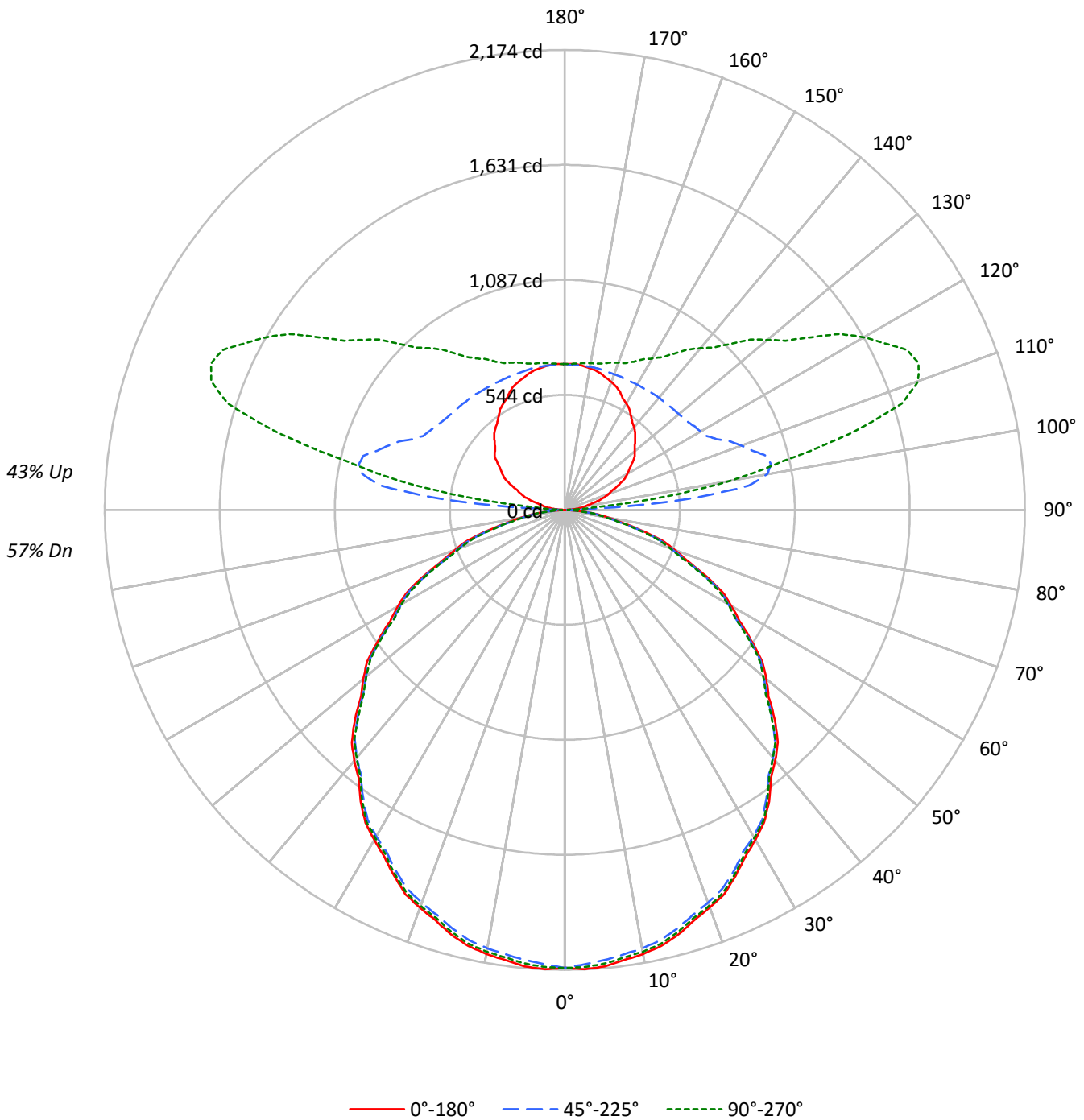
Lumens per Lamp: N/A
Luminaire Lumens: 10398.5 lumens
Efficiency: N/A
Efficacy: 130.3 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 79.8
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	
RC	80									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	101	101	101	101	87	87	87	74	74	74	62	62	62	57	
1	99	95	91	87	92	88	85	82	76	74	72	65	64	62	55	54	53	48	
2	90	83	77	71	84	77	72	67	67	63	59	57	54	52	48	46	44	40	
3	82	73	65	59	76	68	61	56	59	54	50	51	47	43	43	40	38	34	
4	75	64	56	50	70	60	53	47	52	47	42	45	41	37	38	35	32	29	
5	69	57	49	43	64	54	46	41	47	41	36	40	36	32	34	31	28	25	
6	64	51	43	37	59	48	41	35	42	36	32	36	32	28	31	27	25	22	
7	59	46	38	33	55	44	36	31	38	32	28	33	28	25	28	25	22	19	
8	55	42	34	29	51	40	32	27	35	29	25	30	26	22	26	22	20	17	
9	51	38	31	26	47	36	29	24	32	26	22	28	23	20	24	20	18	15	
10	48	35	28	23	44	33	27	22	29	24	20	26	21	18	22	19	16	14	

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	13319	13319	13319
5°	13379	13196	13297
10°	13311	13144	13246
15°	13231	13051	13155
20°	13094	12939	13045
25°	12951	12800	12901
30°	12793	12656	12720
35°	12633	12477	12543
40°	12423	12279	12291
45°	12204	12036	11997
50°	11889	11747	11719
55°	11539	11411	11332
60°	11190	10988	10952
65°	10642	10405	10317
70°	9889	9648	9461
75°	8831	8548	8370
80°	7265	7003	6687
85°	4298	4721	4827



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	204.4	2.0
10°-20°	582.0	5.6
20°-30°	874.0	8.4
30°-40°	1043.1	10.0
40°-50°	1069.2	10.3
50°-60°	952.1	9.2
60°-70°	709.7	6.8
70°-80°	384.3	3.7
80°-90°	89.2	0.9
90°-100°	325.1	3.1
100°-110°	894.5	8.6
110°-120°	923.2	8.9
120°-130°	739.7	7.1
130°-140°	581.0	5.6
140°-150°	445.2	4.3
150°-160°	320.1	3.1
160°-170°	195.7	1.9
170°-180°	66.0	0.6
0°-30°	1660.4	16.0
0°-40°	2703.5	26.0
0°-60°	4724.7	45.4
0°-90°	5907.9	56.8
90°-120°	2142.8	20.6
90°-150°	3908.8	37.6
90°-180°	4491.0	43.2
0°-180°	10398.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2165	2165	2165	2165	2165	
5°	2167	2163	2137	2156	2154	205
15°	2078	2070	2050	2066	2066	585
25°	1908	1904	1886	1896	1901	879
35°	1682	1675	1662	1665	1670	1050
45°	1403	1396	1384	1376	1379	1079
55°	1076	1078	1064	1054	1057	963
65°	731	728	715	707	709	723
75°	372	367	360	352	352	396
85°	61	67	67	68	68	85
90°	2	6	10	13	13	5
95°	48	177	575	246	157	51
105°	160	246	986	1501	1401	169
115°	283	345	790	1574	1786	279
125°	390	445	717	1213	1421	348
135°	471	522	697	981	1110	363
145°	544	581	686	836	901	341
155°	616	636	682	751	773	283
165°	666	674	685	713	717	188
175°	689	691	686	695	694	65
180°	689	689	689	689	689	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2165.4	2165.4	2165.4	2165.4	2165.4
2.5°	2173.8	2169.1	2150.0	2165.3	2163.1
5°	2166.9	2162.6	2137.2	2156.4	2153.6
7.5°	2146.7	2142.4	2120.0	2137.7	2135.1
10°	2131.3	2126.9	2104.5	2122.3	2120.9
12.5°	2111.0	2106.7	2084.3	2102.1	2100.6
15°	2077.8	2070.5	2049.5	2065.9	2065.9
17.5°	2033.8	2028.2	2008.8	2022.5	2022.8
20°	2000.5	1996.1	1976.7	1991.6	1993.0
22.5°	1967.2	1962.8	1941.0	1954.8	1957.4
25°	1908.3	1904.0	1886.0	1896.5	1900.9
27.5°	1847.7	1841.2	1823.6	1832.9	1836.1
30°	1801.3	1798.4	1782.0	1786.6	1790.9
32.5°	1752.6	1749.7	1735.6	1737.9	1745.7
35°	1682.4	1675.2	1661.6	1664.7	1670.5
37.5°	1599.5	1596.0	1582.8	1581.2	1586.7
40°	1547.2	1541.3	1529.3	1526.5	1530.8
42.5°	1490.1	1484.3	1469.9	1467.0	1472.6
45°	1403.0	1395.8	1383.7	1376.4	1379.2
47.5°	1305.5	1305.5	1293.0	1284.5	1288.9
50°	1242.5	1242.5	1227.6	1220.3	1224.7
52.5°	1177.1	1178.3	1162.2	1158.4	1156.9
55°	1076.0	1077.5	1064.1	1053.8	1056.7
57.5°	978.5	975.4	959.8	953.0	954.5
60°	909.6	905.2	893.2	883.0	890.3
62.5°	839.4	837.3	825.5	813.9	813.0
65°	731.2	728.4	714.9	707.4	708.9
67.5°	623.6	620.2	607.9	597.3	601.0
70°	549.9	549.9	536.5	530.5	526.1
72.5°	482.1	476.3	466.4	458.0	454.8
75°	371.6	367.2	359.7	352.2	352.2
77.5°	270.5	266.7	261.9	256.8	255.3
80°	205.1	203.6	197.7	196.0	188.8
82.5°	144.5	144.2	140.6	136.7	136.4
85°	60.9	66.8	66.9	68.4	68.4
87.5°	11.0	18.8	18.7	16.9	16.9
90°	1.5	5.8	10.3	13.2	13.2
92.5°	20.2	86.5	149.8	57.5	47.2
95°	48.4	177.4	574.9	245.8	156.9
97.5°	78.9	196.8	877.4	676.0	476.9
100°	101.2	208.7	972.3	981.4	800.8
102.5°	122.4	223.0	997.0	1217.7	1051.9
105°	159.8	245.9	985.6	1501.0	1400.7
107.5°	195.6	274.3	929.6	1639.8	1669.6
110°	221.4	293.1	887.3	1674.3	1777.5

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	244.9	314.4	845.1	1652.0	1809.2
115°	283.1	344.7	790.5	1574.2	1786.3
117.5°	319.5	376.2	755.9	1464.7	1704.9
120°	341.8	396.2	740.6	1382.9	1630.9
122.5°	361.7	416.2	730.1	1311.0	1546.4
125°	390.2	444.7	717.2	1213.3	1421.2
127.5°	417.1	469.0	708.6	1131.7	1314.1
130°	431.2	484.3	704.0	1083.3	1249.5
132.5°	447.6	500.7	700.4	1040.6	1191.0
135°	470.8	522.4	696.6	981.2	1110.3
137.5°	492.5	540.4	693.4	933.1	1039.5
140°	508.9	553.4	692.2	901.2	997.3
142.5°	523.0	564.0	689.9	872.8	955.0
145°	544.1	581.4	686.3	836.0	900.6
147.5°	566.7	598.8	684.6	803.4	855.1
150°	580.8	609.5	683.4	785.5	825.7
152.5°	593.7	620.1	682.2	770.2	803.4
155°	616.0	636.1	681.9	751.4	772.9
157.5°	632.2	648.5	681.9	736.0	750.9
160°	643.9	656.8	681.9	727.7	739.2
162.5°	653.3	663.8	683.1	720.6	729.8
165°	665.9	674.5	684.9	712.9	717.2
167.5°	674.7	681.3	686.3	706.4	707.5
170°	680.5	684.8	686.3	704.0	704.0
172.5°	685.2	687.2	686.3	700.4	699.3
175°	689.3	690.7	686.3	695.1	693.7
177.5°	690.5	690.5	685.8	692.8	690.5
180°	689.3	689.3	689.3	689.3	689.3

(END OF REPORT)