

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: P520035

Luminaire Tested: **SQ4-F-075U-100D-840-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P520035
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-840-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 750 LUMENS PER FOOT
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

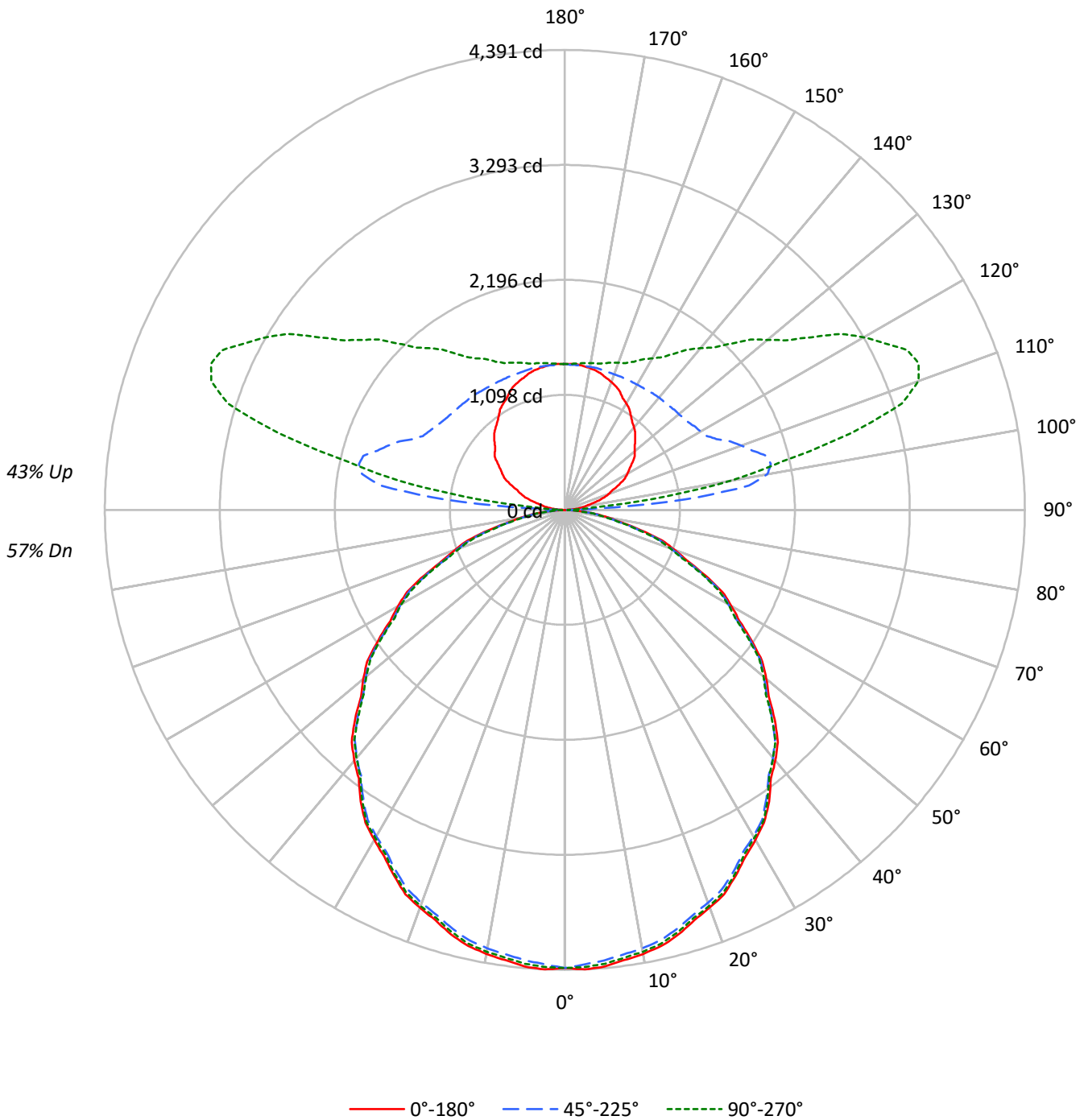
Lumens per Lamp: N/A
Luminaire Lumens: 21006.4 lumens
Efficiency: N/A
Efficacy: 129.6 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 162.1
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°	13453	13453	13453
5°	13514	13328	13430
10°	13445	13276	13380
15°	13364	13182	13287
20°	13226	13069	13177
25°	13082	12929	13030
30°	12922	12784	12848
35°	12760	12602	12670
40°	12548	12403	12415
45°	12327	12157	12118
50°	12009	11865	11837
55°	11655	11526	11446
60°	11302	11099	11062
65°	10750	10509	10421
70°	9989	9746	9557
75°	8918	8634	8456
80°	7339	7072	6753
85°	4344	4767	4873



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	412.9	2.0
10°-20°	1175.7	5.6
20°-30°	1765.6	8.4
30°-40°	2107.1	10.0
40°-50°	2159.8	10.3
50°-60°	1923.3	9.2
60°-70°	1433.7	6.8
70°-80°	776.2	3.7
80°-90°	180.2	0.9
90°-100°	656.8	3.1
100°-110°	1807.0	8.6
110°-120°	1865.1	8.9
120°-130°	1494.3	7.1
130°-140°	1173.7	5.6
140°-150°	899.5	4.3
150°-160°	646.7	3.1
160°-170°	395.4	1.9
170°-180°	133.3	0.6
0°-30°	3354.2	16.0
0°-40°	5461.4	26.0
0°-60°	9544.5	45.4
0°-90°	11934.7	56.8
90°-120°	4328.8	20.6
90°-150°	7896.3	37.6
90°-180°	9072.0	43.2
0°-180°	21006.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4374	4374	4374	4374	4374	
5°	4378	4369	4317	4356	4350	415
15°	4197	4183	4140	4173	4173	1182
25°	3855	3846	3810	3831	3840	1776
35°	3399	3384	3357	3363	3375	2122
45°	2834	2820	2795	2780	2786	2181
55°	2174	2177	2150	2129	2135	1946
65°	1477	1471	1444	1429	1432	1461
75°	750	742	727	712	712	799
85°	123	135	135	138	138	172
90°	3	12	21	27	27	9
95°	98	358	1161	497	317	103
105°	323	497	1991	3032	2830	340
115°	572	696	1597	3180	3609	564
125°	788	898	1449	2451	2871	703
135°	951	1055	1407	1982	2243	734
145°	1099	1174	1387	1689	1819	689
155°	1244	1285	1378	1518	1561	572
165°	1345	1362	1384	1440	1449	379
175°	1392	1395	1387	1404	1401	132
180°	1392	1392	1392	1392	1392	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	4374.5	4374.5	4374.5	4374.5	4374.5
2.5°	4391.3	4381.9	4343.3	4374.4	4369.6
5°	4377.5	4368.6	4317.4	4356.3	4350.4
7.5°	4336.6	4327.8	4282.6	4318.5	4313.2
10°	4305.4	4296.6	4251.3	4287.3	4284.4
12.5°	4264.6	4255.8	4210.5	4246.5	4243.6
15°	4197.3	4182.7	4140.3	4173.3	4173.3
17.5°	4108.4	4097.3	4058.0	4085.7	4086.3
20°	4041.2	4032.4	3993.2	4023.2	4026.2
22.5°	3974.0	3965.2	3921.1	3948.8	3954.2
25°	3855.1	3846.3	3810.0	3831.2	3840.0
27.5°	3732.5	3719.6	3683.9	3702.7	3709.1
30°	3638.9	3633.0	3599.9	3609.1	3617.9
32.5°	3540.4	3534.6	3506.2	3510.8	3526.6
35°	3398.7	3384.1	3356.7	3363.0	3374.6
37.5°	3231.2	3224.1	3197.6	3194.2	3205.3
40°	3125.5	3113.8	3089.5	3083.6	3092.5
42.5°	3010.2	2998.4	2969.4	2963.6	2974.7
45°	2834.2	2819.6	2795.2	2780.3	2786.2
47.5°	2637.3	2637.3	2612.1	2594.9	2603.7
50°	2510.0	2510.0	2479.9	2465.2	2474.0
52.5°	2377.9	2380.3	2347.9	2340.0	2337.1
55°	2173.8	2176.6	2149.7	2128.8	2134.7
57.5°	1976.8	1970.3	1938.9	1925.2	1928.1
60°	1837.5	1828.7	1804.4	1783.8	1798.4
62.5°	1695.8	1691.6	1667.6	1644.1	1642.3
65°	1477.2	1471.3	1444.1	1429.2	1432.1
67.5°	1259.8	1252.8	1227.9	1206.5	1214.2
70°	1110.9	1110.9	1083.9	1071.7	1062.9
72.5°	974.0	962.2	942.2	925.2	918.7
75°	750.5	741.8	726.6	711.6	711.6
77.5°	546.4	538.8	529.0	518.7	515.8
80°	414.4	411.4	399.3	395.9	381.3
82.5°	291.8	291.2	284.1	276.2	275.6
85°	123.1	134.9	135.1	138.1	138.1
87.5°	22.2	38.0	37.8	34.2	34.2
90°	2.9	11.6	20.7	26.7	26.7
92.5°	40.9	174.7	302.8	116.3	95.4
95°	97.8	358.5	1161.4	496.6	317.0
97.5°	159.4	397.5	1772.4	1365.6	963.5
100°	204.4	421.7	1964.4	1982.7	1617.7
102.5°	247.1	450.4	2014.1	2459.8	2125.0
105°	323.0	496.8	1991.1	3032.3	2829.5
107.5°	395.3	554.0	1877.8	3312.6	3372.8
110°	447.4	592.3	1792.5	3382.3	3591.0

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	494.8	635.0	1707.2	3337.4	3654.9
115°	571.8	696.4	1597.0	3180.0	3608.7
117.5°	645.3	760.0	1527.0	2959.0	3444.0
120°	690.4	800.4	1496.2	2793.5	3294.7
122.5°	730.7	840.7	1474.9	2648.4	3124.0
125°	788.1	898.2	1448.8	2450.9	2871.0
127.5°	842.6	947.5	1431.7	2286.2	2654.7
130°	871.1	978.2	1422.2	2188.2	2524.3
132.5°	904.3	1011.5	1415.0	2102.2	2405.8
135°	951.0	1055.4	1407.3	1982.2	2242.8
137.5°	994.9	1091.7	1400.9	1885.1	2100.0
140°	1028.1	1117.9	1398.4	1820.6	2014.7
142.5°	1056.6	1139.4	1393.7	1763.1	1929.3
145°	1099.2	1174.5	1386.6	1688.8	1819.2
147.5°	1144.8	1209.7	1383.1	1623.0	1727.4
150°	1173.3	1231.3	1380.7	1586.9	1668.1
152.5°	1199.4	1252.7	1378.3	1555.8	1623.0
155°	1244.4	1285.0	1377.7	1517.9	1561.4
157.5°	1276.9	1310.0	1377.7	1486.8	1517.0
160°	1300.7	1326.7	1377.7	1470.1	1493.3
162.5°	1319.7	1341.1	1380.1	1455.7	1474.3
165°	1345.1	1362.5	1383.6	1440.1	1448.8
167.5°	1362.9	1376.2	1386.6	1427.0	1429.2
170°	1374.7	1383.5	1386.6	1422.2	1422.2
172.5°	1384.2	1388.2	1386.6	1414.9	1412.7
175°	1392.5	1395.4	1386.6	1404.3	1401.4
177.5°	1394.9	1394.9	1385.4	1399.5	1394.9
180°	1392.5	1392.5	1392.5	1392.5	1392.5

(END OF REPORT)