

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: P519855

Luminaire Tested: **SQ4-F-025U-100D-940-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P519855
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-12
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 250 LUMENS PER FOOT
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

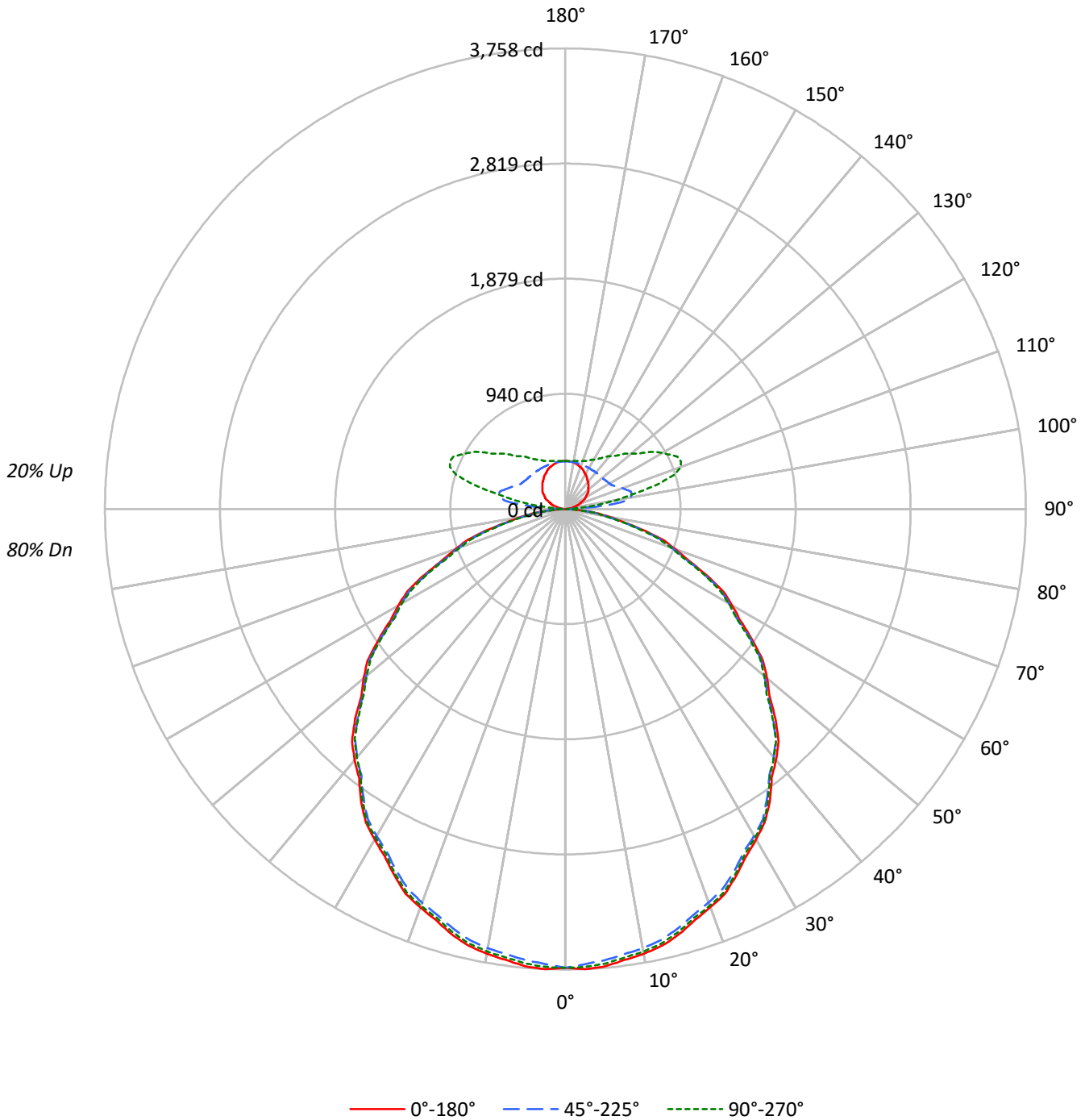
Lumens per Lamp: N/A
Luminaire Lumens: 12743.8 lumens
Efficiency: N/A
Efficacy: 104.5 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 122
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	84	84	84	80	
1	105	100	96	92	100	96	92	89	88	85	82	81	79	76	74	72	71	71	71	71	67	
2	95	87	81	75	91	84	78	73	77	72	68	71	67	64	65	62	59	59	59	59	56	
3	87	77	69	63	83	74	66	61	68	62	57	63	58	54	58	54	50	50	50	50	48	
4	79	68	59	53	76	65	58	52	60	54	49	56	50	46	51	47	43	43	43	43	41	
5	73	61	52	46	69	58	50	44	54	47	42	50	44	40	46	42	38	38	38	38	35	
6	67	54	46	40	64	52	45	39	49	42	37	45	39	35	42	37	33	33	33	33	31	
7	62	49	41	35	59	48	40	34	44	37	33	41	35	31	38	33	29	29	29	29	27	
8	58	45	37	31	55	43	36	30	40	34	29	38	32	28	35	30	26	26	26	26	24	
9	54	41	33	28	52	40	32	27	37	31	26	35	29	25	32	27	24	24	24	24	22	
10	51	38	30	25	48	37	29	25	34	28	24	32	27	23	30	25	22	22	22	22	20	

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	11514	11514	11514
5°	11566	11408	11495
10°	11507	11363	11451
15°	11437	11282	11372
20°	11320	11185	11278
25°	11196	11065	11153
30°	11060	10941	10996
35°	10921	10786	10843
40°	10739	10616	10626
45°	10550	10405	10371
50°	10278	10155	10131
55°	9976	9865	9796
60°	9673	9499	9467
65°	9200	8994	8919
70°	8549	8341	8180
75°	7633	7388	7236
80°	6280	6052	5781
85°	3716	4079	4171



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	353.4	2.8
10°-20°	1006.3	7.9
20°-30°	1511.2	11.9
30°-40°	1803.4	14.2
40°-50°	1848.5	14.5
50°-60°	1646.1	12.9
60°-70°	1227.1	9.6
70°-80°	664.4	5.2
80°-90°	153.3	1.2
90°-100°	190.3	1.5
100°-110°	500.2	3.9
110°-120°	518.7	4.1
120°-130°	416.0	3.3
130°-140°	326.4	2.6
140°-150°	250.5	2.0
150°-160°	180.5	1.4
160°-170°	110.4	0.9
170°-180°	37.3	0.3
0°-30°	2870.8	22.5
0°-40°	4674.2	36.7
0°-60°	8168.8	64.1
0°-90°	10213.6	80.1
90°-120°	1209.1	9.5
90°-150°	2202.1	17.3
90°-180°	2530.0	19.9
0°-180°	12743.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3744	3744	3744	3744	3744	
5°	3746	3739	3695	3728	3723	355
15°	3592	3580	3544	3572	3572	1012
25°	3299	3292	3261	3279	3287	1520
35°	2909	2896	2873	2878	2888	1816
45°	2426	2413	2392	2380	2385	1866
55°	1860	1863	1840	1822	1827	1665
65°	1264	1259	1236	1223	1226	1250
75°	642	635	622	609	609	684
85°	105	115	116	118	118	147
90°	2	7	20	10	10	5
95°	25	98	328	169	115	28
105°	90	137	553	840	783	95
115°	160	194	443	884	1008	158
125°	223	250	403	681	803	198
135°	265	292	390	550	623	205
145°	308	327	385	469	506	193
155°	348	358	385	423	435	160
165°	375	380	385	400	405	106
175°	390	390	388	393	393	37
180°	390	390	390	390	390	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3743.9	3743.9	3743.9	3743.9	3743.9
2.5°	3758.4	3750.4	3717.3	3743.9	3739.9
5°	3746.5	3739.0	3695.2	3728.5	3723.4
7.5°	3711.6	3704.1	3665.3	3696.1	3691.5
10°	3684.9	3677.3	3638.6	3669.4	3666.8
12.5°	3649.9	3642.4	3603.6	3634.4	3632.0
15°	3592.3	3579.8	3543.6	3571.8	3571.8
17.5°	3516.3	3506.7	3473.1	3496.8	3497.3
20°	3458.8	3451.2	3417.6	3443.4	3445.9
22.5°	3401.2	3393.7	3355.9	3379.7	3384.3
25°	3299.4	3291.9	3260.9	3279.0	3286.6
27.5°	3194.6	3183.5	3153.0	3169.0	3174.5
30°	3114.5	3109.4	3081.0	3088.9	3096.4
32.5°	3030.1	3025.1	3000.8	3004.8	3018.3
35°	2908.9	2896.3	2872.9	2878.2	2888.2
37.5°	2765.5	2759.4	2736.7	2733.8	2743.4
40°	2675.0	2664.9	2644.2	2639.2	2646.7
42.5°	2576.3	2566.2	2541.4	2536.4	2546.0
45°	2425.7	2413.1	2392.3	2379.6	2384.6
47.5°	2257.2	2257.2	2235.6	2220.8	2228.4
50°	2148.2	2148.2	2122.5	2109.9	2117.4
52.5°	2035.1	2037.1	2009.5	2002.7	2000.2
55°	1860.5	1862.9	1839.9	1822.0	1827.0
57.5°	1691.8	1686.3	1659.4	1647.7	1650.2
60°	1572.6	1565.1	1544.4	1526.7	1539.2
62.5°	1451.4	1447.8	1427.2	1407.1	1405.6
65°	1264.3	1259.2	1236.0	1223.2	1225.7
67.5°	1078.2	1072.2	1051.0	1032.6	1039.2
70°	950.8	950.8	927.6	917.2	909.7
72.5°	833.6	823.6	806.3	791.9	786.3
75°	642.4	634.9	621.8	609.0	609.0
77.5°	467.7	461.1	452.8	444.0	441.5
80°	354.6	352.1	341.7	338.9	326.4
82.5°	249.8	249.3	243.0	236.4	235.9
85°	105.3	115.4	115.6	118.2	118.2
87.5°	19.0	32.1	32.9	26.8	26.8
90°	2.5	7.4	20.0	10.0	10.0
92.5°	10.5	50.7	112.1	49.6	32.0
95°	25.0	98.5	327.9	168.9	115.1
97.5°	43.6	108.1	490.5	390.1	287.2
100°	57.5	116.2	540.5	547.7	425.5
102.5°	69.6	124.4	554.5	682.3	577.5
105°	90.0	136.6	553.1	839.5	783.2
107.5°	111.1	154.2	521.5	921.2	934.9
110°	125.1	164.3	495.5	942.3	1001.0

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	139.2	176.4	471.4	928.9	1018.9
115°	160.2	194.4	442.9	883.7	1008.4
117.5°	180.7	212.0	423.4	820.9	959.4
120°	192.7	222.0	415.4	778.8	913.4
122.5°	204.6	234.1	409.4	736.7	869.4
125°	222.7	249.7	402.9	681.0	803.3
127.5°	237.2	264.7	397.4	635.9	739.2
130°	245.3	274.6	395.3	607.7	703.1
132.5°	253.2	282.6	393.3	583.6	669.1
135°	265.3	292.2	390.4	549.7	623.1
137.5°	277.8	304.2	389.9	524.4	584.6
140°	287.8	312.3	387.9	504.3	560.5
142.5°	295.7	318.3	387.9	490.1	538.5
145°	307.8	327.4	385.4	468.8	505.5
147.5°	319.8	338.9	385.4	451.2	481.5
150°	327.9	345.0	385.4	440.9	465.4
152.5°	335.8	349.1	385.4	432.8	451.5
155°	347.8	357.6	385.4	423.2	435.4
157.5°	356.8	366.1	385.4	414.6	423.4
160°	362.8	370.2	385.4	410.5	415.4
162.5°	368.9	374.2	385.4	406.5	411.4
165°	375.4	380.2	385.4	400.5	405.4
167.5°	381.4	383.8	387.9	397.9	399.9
170°	385.4	387.8	387.9	397.9	397.9
172.5°	387.4	387.9	387.9	395.8	393.9
175°	390.4	390.4	387.9	392.9	392.9
177.5°	390.4	390.4	388.4	392.4	390.4
180°	390.4	390.4	390.4	390.4	390.4

(END OF REPORT)