

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: P520415

Luminaire Tested: **SQ4-F-150U-100D-835-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P520415
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-25, 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-150U-100D-835-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 1500 LUMENS PER FOOT
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

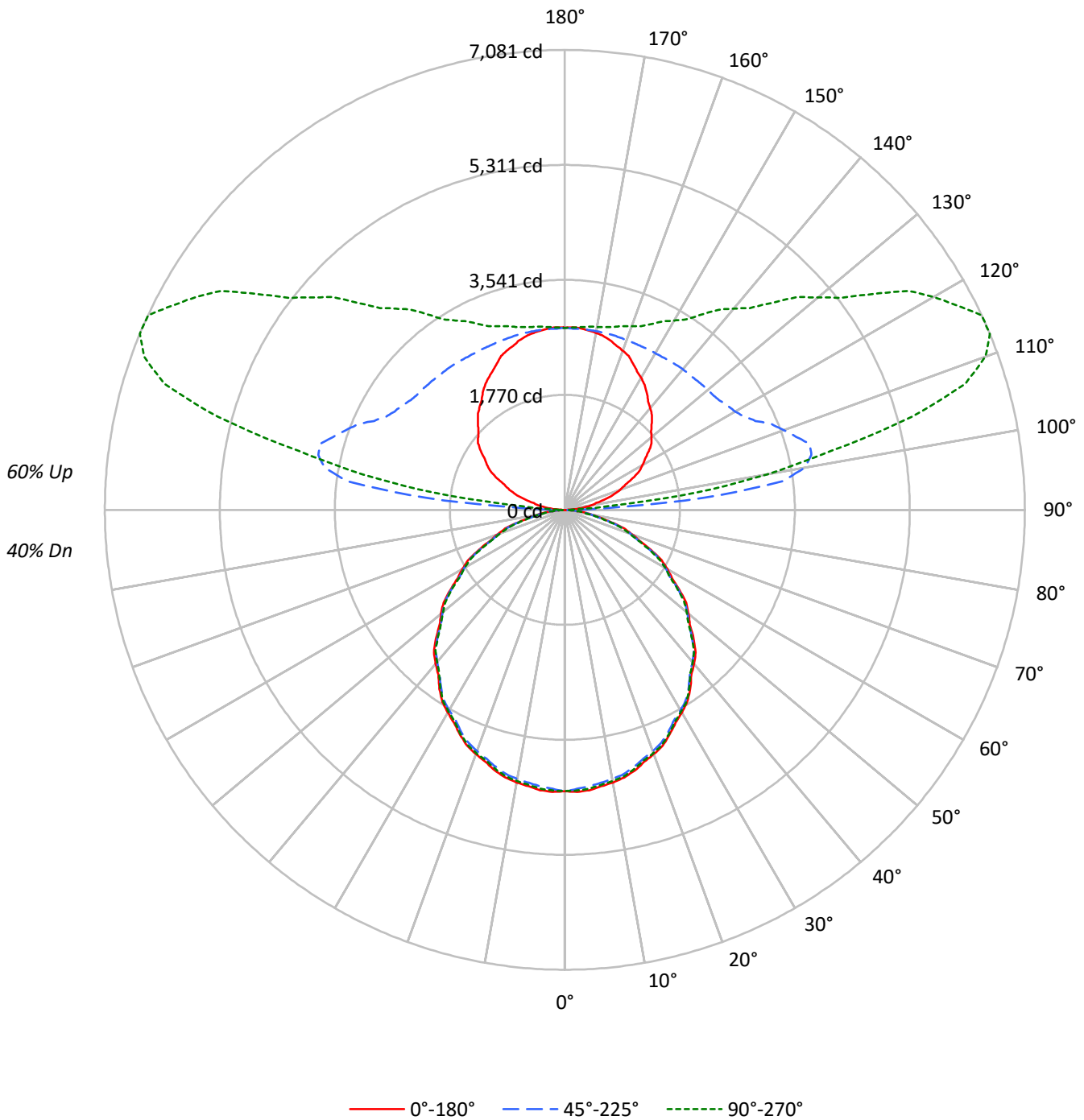
Lumens per Lamp: N/A
Luminaire Lumens: 29889.9 lumens
Efficiency: N/A
Efficacy: 130.9 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 228.3
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	0
RCR																		
0	105	105	105	105	95	95	95	95	78	78	78	61	61	61	47	47	47	40
1	95	91	87	84	87	83	80	77	68	66	64	54	52	51	41	40	39	33
2	87	80	73	68	79	73	67	63	59	56	52	47	45	42	36	34	33	28
3	79	70	63	57	72	64	57	52	52	48	44	42	39	36	32	30	28	23
4	72	62	54	48	65	56	50	44	46	41	37	37	33	31	28	26	24	20
5	66	55	47	41	60	50	43	38	41	36	32	33	29	26	26	23	21	17
6	61	49	41	35	55	45	38	33	37	32	28	30	26	23	23	20	18	15
7	56	44	36	31	51	41	34	29	34	28	24	27	23	20	21	18	16	13
8	52	40	32	27	47	37	30	25	31	25	22	25	21	18	19	17	14	12
9	48	36	29	24	44	34	27	22	28	23	19	23	19	16	18	15	13	11
10	45	33	26	21	41	31	24	20	26	21	17	21	17	15	16	14	12	10

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	13046
25°	12951	12800	12901
30°	12793	12656	12720
35°	12633	12477	12544
40°	12423	12280	12291
45°	12204	12036	11997
50°	11889	11747	11719
55°	11539	11412	11332
60°	11190	10988	10952
65°	10643	10405	10318
70°	9889	9649	9462
75°	8830	8547	8371
80°	7265	7001	6686
85°	4301	4721	4824



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	408.8	1.4
10°-20°	1164.0	3.9
20°-30°	1748.0	5.8
30°-40°	2086.1	7.0
40°-50°	2138.3	7.2
50°-60°	1904.1	6.4
60°-70°	1419.4	4.7
70°-80°	768.5	2.6
80°-90°	180.7	0.6
90°-100°	1302.7	4.4
100°-110°	3522.1	11.8
110°-120°	3703.0	12.4
120°-130°	3007.8	10.1
130°-140°	2359.4	7.9
140°-150°	1810.8	6.1
150°-160°	1302.3	4.4
160°-170°	795.6	2.7
170°-180°	268.2	0.9
0°-30°	3320.8	11.1
0°-40°	5406.9	18.1
0°-60°	9449.4	31.6
0°-90°	11818.1	39.5
90°-120°	8527.7	28.5
90°-150°	15705.7	52.5
90°-180°	18072.0	60.5
0°-180°	29889.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4331	4331	4331	4331	4331	
5°	4334	4325	4274	4313	4307	411
15°	4156	4141	4099	4132	4132	1171
25°	3817	3808	3772	3793	3802	1759
35°	3365	3350	3323	3330	3341	2100
45°	2806	2791	2767	2753	2758	2159
55°	2152	2155	2128	2108	2113	1926
65°	1462	1457	1430	1415	1418	1446
75°	743	734	719	704	704	791
85°	122	134	134	137	137	170
90°	6	18	39	42	39	16
95°	202	710	2166	1121	667	212
105°	655	1012	3907	5764	5528	690
115°	1153	1409	3240	6273	7081	1138
125°	1578	1808	2921	4928	5790	1407
135°	1892	2116	2842	3980	4505	1462
145°	2200	2365	2803	3406	3666	1376
155°	2483	2581	2779	3056	3156	1145
165°	2703	2730	2791	2900	2915	761
175°	2806	2803	2794	2830	2824	266
180°	2803	2803	2803	2803	2803	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	4330.9	4330.9	4330.9	4330.9	4330.9
2.5°	4347.5	4338.2	4300.0	4330.8	4326.1
5°	4333.9	4325.1	4274.4	4313.0	4307.1
7.5°	4293.4	4284.7	4239.9	4275.5	4270.2
10°	4262.5	4253.8	4209.0	4244.6	4241.7
12.5°	4222.1	4213.4	4168.6	4204.2	4201.3
15°	4155.5	4140.9	4099.0	4131.7	4131.7
17.5°	4067.5	4056.5	4017.6	4044.9	4045.5
20°	4000.9	3992.2	3953.4	3983.2	3986.1
22.5°	3934.4	3925.6	3882.0	3909.5	3914.7
25°	3816.6	3807.9	3772.1	3793.1	3801.8
27.5°	3695.4	3682.6	3647.2	3665.7	3672.2
30°	3602.6	3596.8	3564.0	3573.1	3581.8
32.5°	3505.1	3499.3	3471.2	3475.8	3491.5
35°	3364.8	3350.3	3323.2	3329.5	3341.1
37.5°	3199.0	3192.0	3165.7	3162.4	3173.4
40°	3094.3	3082.7	3058.7	3052.9	3061.6
42.5°	2980.2	2968.6	2939.8	2934.1	2945.1
45°	2806.0	2791.4	2767.4	2752.6	2758.5
47.5°	2611.0	2611.0	2586.0	2569.0	2577.7
50°	2485.0	2485.0	2455.3	2440.6	2449.3
52.5°	2354.2	2356.5	2324.5	2316.6	2313.8
55°	2152.1	2154.9	2128.3	2107.6	2113.4
57.5°	1957.1	1950.6	1919.6	1906.0	1908.9
60°	1819.2	1810.4	1786.5	1765.9	1780.5
62.5°	1678.8	1674.8	1650.9	1627.7	1625.9
65°	1462.5	1456.6	1429.8	1415.0	1417.9
67.5°	1247.2	1240.3	1215.7	1194.5	1202.1
70°	1099.8	1099.8	1073.1	1061.0	1052.3
72.5°	964.3	952.7	932.8	916.0	909.6
75°	743.1	734.4	719.3	704.5	704.5
77.5°	541.0	533.5	523.7	513.5	510.7
80°	410.2	407.3	395.3	392.1	377.5
82.5°	288.9	288.3	281.2	273.5	272.9
85°	121.9	133.5	133.8	136.7	136.7
87.5°	22.6	38.8	41.0	36.9	36.3
90°	6.0	17.8	39.2	42.2	39.2
92.5°	85.7	312.3	616.1	267.5	193.8
95°	202.1	709.6	2166.4	1121.2	666.8
97.5°	324.6	813.7	3376.9	2794.5	2052.3
100°	416.4	856.0	3753.4	3914.4	3165.0
102.5°	500.9	914.4	3886.1	4763.4	4203.0
105°	654.7	1011.7	3907.3	5763.5	5527.5
107.5°	797.1	1122.9	3736.5	6387.4	6465.9
110°	908.2	1203.2	3584.4	6554.9	6888.3

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	1007.1	1283.2	3444.4	6521.4	7081.3
115°	1152.6	1409.2	3240.5	6273.0	7081.3
117.5°	1295.0	1535.7	3105.9	5893.5	6809.8
120°	1381.9	1617.9	3026.2	5621.1	6556.4
122.5°	1463.9	1695.3	2978.0	5329.3	6271.5
125°	1578.0	1808.1	2920.7	4928.5	5790.1
127.5°	1683.0	1909.0	2886.9	4601.6	5359.2
130°	1741.0	1973.9	2872.4	4399.6	5084.0
132.5°	1801.3	2032.0	2857.9	4217.3	4847.4
135°	1891.8	2116.0	2842.2	3979.6	4504.7
137.5°	1982.9	2194.8	2828.9	3786.6	4214.4
140°	2045.7	2243.3	2824.1	3662.5	4043.1
142.5°	2106.0	2291.8	2814.4	3550.3	3883.7
145°	2199.6	2364.8	2803.0	3406.3	3665.9
147.5°	2284.6	2431.0	2789.7	3275.8	3475.2
150°	2347.4	2477.1	2784.9	3204.9	3364.2
152.5°	2405.3	2518.6	2782.5	3139.1	3270.1
155°	2483.2	2580.6	2778.8	3055.7	3156.0
157.5°	2564.1	2631.9	2779.4	2997.5	3063.6
160°	2609.8	2666.0	2781.9	2960.9	3008.2
162.5°	2646.0	2692.7	2784.3	2931.7	2967.2
165°	2703.4	2729.9	2790.9	2899.9	2914.6
167.5°	2742.6	2760.9	2791.5	2872.5	2879.6
170°	2766.8	2775.6	2793.9	2860.3	2860.3
172.5°	2786.1	2787.9	2793.9	2845.7	2843.4
175°	2806.0	2803.1	2793.9	2830.0	2824.1
177.5°	2812.6	2805.6	2793.3	2817.3	2810.2
180°	2803.0	2803.0	2803.0	2803.0	2803.0

(END OF REPORT)