

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: P519915

Luminaire Tested: **SQ4-F-050U-075D-840-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P519915
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-21, G3-1910-536-18)
Test Lab: INNOVATION CENTER
Issue Date: 4/29/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-F-050U-075D-840-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

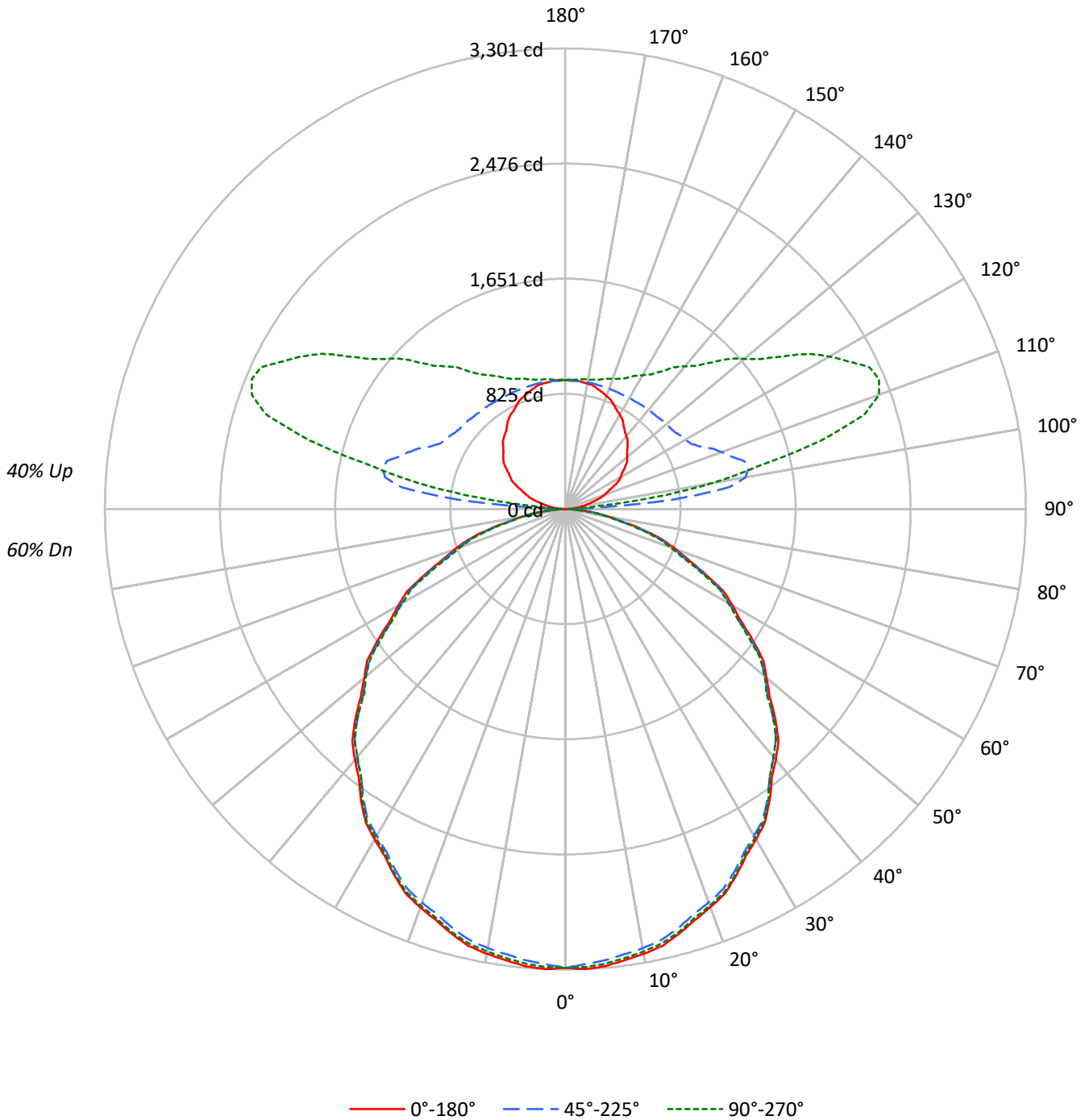
Lumens per Lamp: N/A
Luminaire Lumens: 15018.2 lumens
Efficiency: N/A
Efficacy: 131.4 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 114.3
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	109	109	109	109	102	102	102	102	89	89	89	76	76	76	65	65	65	60
1	100	96	92	88	93	89	86	83	78	75	73	67	65	64	58	56	55	50
2	91	83	77	72	85	78	73	68	68	64	60	59	56	53	51	48	46	42
3	83	73	66	60	77	69	62	57	60	55	51	52	48	45	45	42	39	35
4	76	65	57	50	71	61	54	48	53	48	43	46	42	38	40	36	34	30
5	70	58	49	43	65	54	47	41	48	42	37	42	37	33	36	32	29	26
6	64	52	43	37	60	49	41	36	43	37	32	38	33	29	32	29	26	23
7	59	47	39	33	55	44	37	31	39	33	28	34	29	26	30	26	23	20
8	55	42	35	29	51	40	33	28	35	30	25	31	26	23	27	23	20	18
9	51	39	31	26	48	37	30	25	33	27	23	29	24	21	25	21	18	16
10	48	36	28	23	45	34	27	22	30	24	20	27	22	19	23	19	17	15

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10115	10115	10115
5°	10154	10025	10098
10°	10113	9982	10057
15°	10035	9912	9997
20°	9945	9827	9905
25°	9835	9734	9805
30°	9710	9604	9657
35°	9583	9482	9527
40°	9422	9326	9314
45°	9260	9143	9169
50°	9002	8931	8931
55°	8793	8682	8601
60°	8510	8364	8290
65°	8051	7898	7790
70°	7561	7373	7186
75°	6803	6556	6414
80°	5439	5333	5281
85°	3260	3684	3790



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	310.4	2.1
10°-20°	883.8	5.9
20°-30°	1327.8	8.8
30°-40°	1584.4	10.5
40°-50°	1624.9	10.8
50°-60°	1447.9	9.6
60°-70°	1079.6	7.2
70°-80°	585.4	3.9
80°-90°	138.1	0.9
90°-100°	443.8	3.0
100°-110°	1205.5	8.0
110°-120°	1239.5	8.3
120°-130°	991.0	6.6
130°-140°	778.7	5.2
140°-150°	597.1	4.0
150°-160°	429.4	2.9
160°-170°	262.6	1.7
170°-180°	88.5	0.6
0°-30°	2522.1	16.8
0°-40°	4106.5	27.3
0°-60°	7179.3	47.8
0°-90°	8982.3	59.8
90°-120°	2888.8	19.2
90°-150°	5255.5	35.0
90°-180°	6036.0	40.2
0°-180°	15018.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3289	3289	3289	3289	3289	
5°	3289	3283	3247	3274	3271	312
15°	3152	3146	3113	3137	3140	889
25°	2898	2896	2868	2884	2890	1335
35°	2552	2547	2526	2526	2538	1595
45°	2129	2120	2102	2102	2108	1639
55°	1640	1637	1619	1604	1604	1465
65°	1106	1106	1085	1073	1070	1101
75°	572	561	552	543	540	601
85°	92	98	104	104	107	128
90°	3	12	21	27	27	7
95°	65	243	773	336	226	69
105°	214	333	1326	2019	1899	227
115°	380	462	1061	2111	2405	375
125°	523	596	960	1618	1908	466
135°	630	700	933	1318	1486	487
145°	728	781	921	1120	1204	457
155°	823	852	916	1005	1034	380
165°	892	903	918	957	960	252
175°	924	927	921	933	930	88
180°	924	924	924	924	924	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3289.0	3289.0	3289.0	3289.0	3289.0
2.5°	3300.9	3293.9	3265.2	3288.9	3286.7
5°	3289.0	3283.2	3247.3	3274.1	3271.1
7.5°	3262.2	3255.8	3220.4	3247.3	3246.7
10°	3238.3	3229.6	3196.6	3223.4	3220.4
12.5°	3207.4	3198.6	3165.6	3192.4	3189.4
15°	3151.8	3146.0	3113.1	3137.0	3139.9
17.5°	3088.7	3077.6	3048.1	3071.5	3074.3
20°	3038.6	3029.8	3002.8	3023.7	3026.6
22.5°	2986.0	2977.3	2950.3	2971.2	2974.1
25°	2898.4	2895.5	2868.5	2883.6	2889.5
27.5°	2803.6	2795.4	2773.8	2785.2	2791.1
30°	2734.4	2728.6	2704.6	2713.6	2719.5
32.5°	2662.9	2659.3	2637.8	2642.1	2650.3
35°	2552.5	2546.7	2525.7	2525.9	2537.6
37.5°	2430.2	2423.8	2406.4	2403.5	2408.2
40°	2346.8	2338.0	2322.9	2319.9	2319.9
42.5°	2260.9	2254.5	2234.6	2229.4	2236.4
45°	2129.1	2120.4	2102.2	2102.3	2108.2
47.5°	1986.5	1983.1	1962.1	1952.6	1954.9
50°	1881.6	1887.4	1866.7	1855.0	1866.7
52.5°	1790.9	1787.4	1768.8	1757.0	1761.7
55°	1640.0	1637.1	1619.2	1604.2	1604.2
57.5°	1488.6	1481.0	1462.3	1451.2	1460.0
60°	1383.6	1380.6	1359.8	1339.1	1347.8
62.5°	1278.6	1273.4	1252.4	1238.8	1245.2
65°	1106.3	1106.3	1085.4	1073.4	1070.5
67.5°	955.4	941.5	929.7	915.4	911.2
70°	840.9	829.3	820.0	807.9	799.2
72.5°	728.8	721.8	707.9	695.9	694.2
75°	572.5	560.8	551.7	542.6	539.8
77.5°	407.3	405.0	396.6	391.9	393.6
80°	307.1	307.1	301.1	301.1	298.2
82.5°	216.5	218.9	217.7	212.9	212.3
85°	92.4	98.3	104.4	104.4	107.4
87.5°	17.3	30.7	30.4	31.6	31.6
90°	2.9	11.7	20.8	26.8	26.8
92.5°	26.8	121.5	211.1	90.7	76.7
95°	65.4	242.7	772.9	336.4	225.9
97.5°	108.2	268.1	1184.8	921.7	647.4
100°	136.7	285.0	1310.9	1328.9	1073.0
102.5°	165.2	301.8	1344.2	1643.4	1417.9
105°	214.0	333.1	1325.7	2018.6	1899.4
107.5°	264.6	369.7	1249.0	2212.2	2245.4
110°	300.2	396.1	1192.0	2250.4	2392.9

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	331.1	422.3	1134.9	2218.8	2433.3
115°	380.4	461.9	1061.2	2111.1	2404.7
117.5°	426.9	504.8	1014.2	1958.6	2289.3
120°	457.8	533.3	992.8	1856.3	2184.7
122.5°	483.9	559.5	978.5	1753.9	2070.6
125°	523.1	595.8	960.1	1617.6	1908.3
127.5°	558.3	630.3	950.0	1514.5	1763.9
130°	579.6	649.4	945.3	1449.7	1673.5
132.5°	601.0	670.8	940.5	1394.4	1592.6
135°	630.2	700.0	933.4	1317.7	1486.3
137.5°	661.7	725.1	929.8	1249.9	1391.7
140°	680.7	741.8	927.4	1206.8	1334.6
142.5°	699.8	756.1	925.1	1173.0	1279.9
145°	728.2	780.6	921.4	1119.5	1203.8
147.5°	760.4	805.1	918.5	1077.5	1143.8
150°	781.8	819.6	918.5	1053.4	1105.7
152.5°	798.4	831.5	916.1	1031.8	1074.8
155°	823.4	852.4	915.5	1005.3	1034.4
157.5°	847.7	870.4	915.5	987.4	1009.4
160°	862.1	882.4	915.5	975.4	992.8
162.5°	876.3	892.0	917.9	965.8	978.5
165°	891.7	903.4	918.5	957.2	960.1
167.5°	907.8	913.6	921.4	947.0	949.4
170°	912.5	918.4	921.4	942.2	942.2
172.5°	917.3	920.7	921.4	937.5	937.5
175°	924.5	927.3	921.4	933.3	930.4
177.5°	926.8	926.8	919.7	929.1	924.5
180°	924.5	924.5	924.5	924.5	924.5

(END OF REPORT)