

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: P520011

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

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P520011
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-22, 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-075U-075D-840-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 750 LUMENS PER FOOT
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

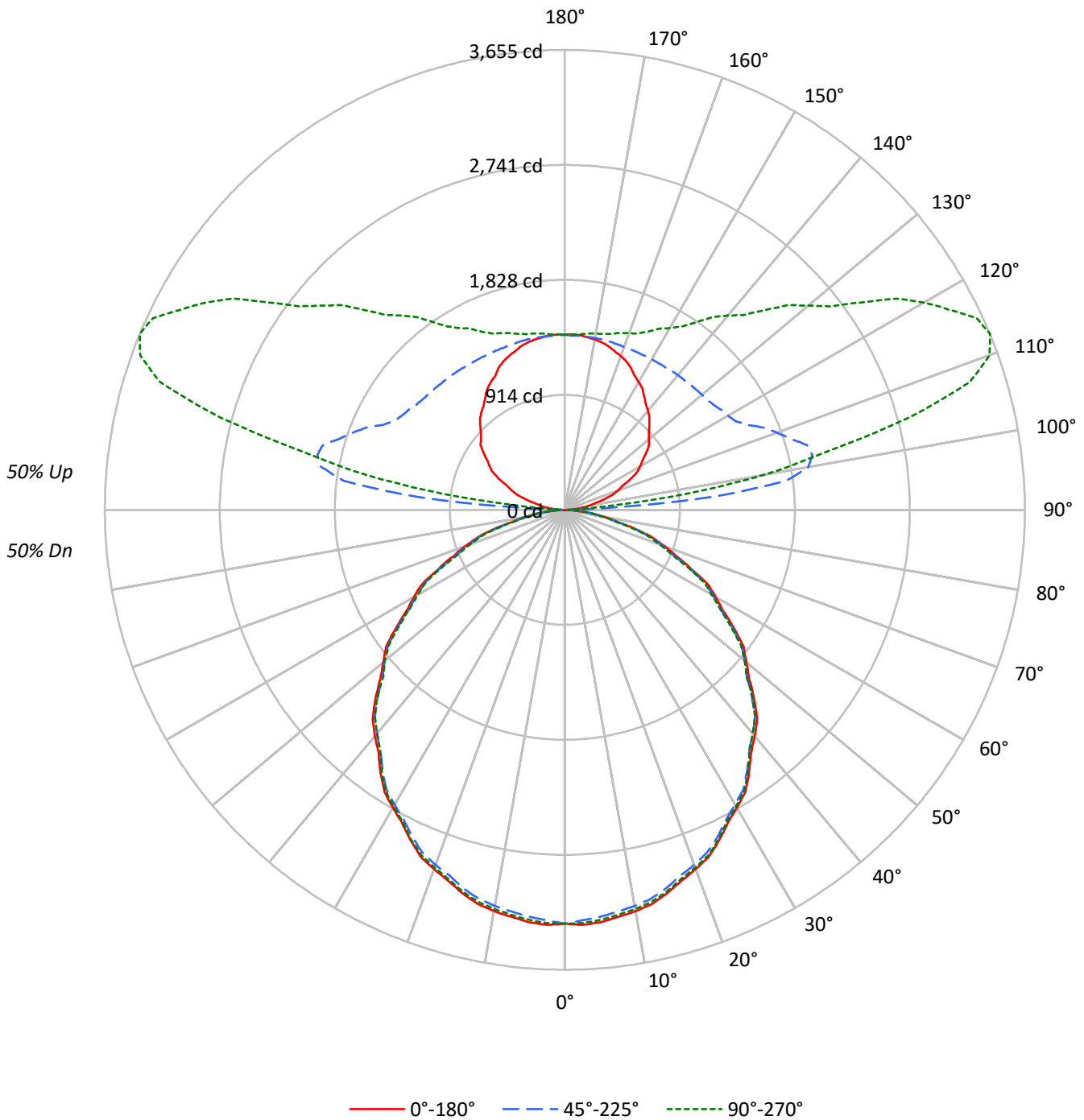
Lumens per Lamp: N/A
Luminaire Lumens: 18054.0 lumens
Efficiency: N/A
Efficacy: 134.2 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 134.5
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	107	107	107	107	99	99	99	99	83	83	83	69	69	69	56	56	56	50
1	98	93	89	86	90	86	83	80	73	71	68	61	59	57	49	48	47	42
2	89	81	75	70	82	75	70	65	64	60	56	53	50	48	43	41	40	35
3	81	72	64	58	74	66	60	55	56	51	47	47	43	40	38	36	34	29
4	74	63	55	49	68	59	52	46	50	44	40	42	38	34	34	31	29	25
5	68	56	48	42	62	52	45	40	45	39	35	37	33	30	31	28	25	22
6	63	50	42	36	57	47	40	34	40	34	30	34	29	26	28	25	22	19
7	58	45	37	32	53	42	35	30	36	31	26	31	26	23	25	22	20	17
8	54	41	33	28	49	38	31	27	33	27	23	28	24	20	23	20	17	15
9	50	38	30	25	46	35	28	24	30	25	21	26	21	18	21	18	16	14
10	47	34	27	22	43	32	26	21	28	23	19	24	20	17	20	17	14	12

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	1.7
10°-20°	883.8	4.9
20°-30°	1327.8	7.4
30°-40°	1584.4	8.8
40°-50°	1624.9	9.0
50°-60°	1447.9	8.0
60°-70°	1079.6	6.0
70°-80°	585.4	3.2
80°-90°	138.1	0.8
90°-100°	656.8	3.6
100°-110°	1807.0	10.0
110°-120°	1865.1	10.3
120°-130°	1494.3	8.3
130°-140°	1173.7	6.5
140°-150°	899.5	5.0
150°-160°	646.7	3.6
160°-170°	395.4	2.2
170°-180°	133.3	0.7
0°-30°	2522.1	14.0
0°-40°	4106.5	22.7
0°-60°	7179.3	39.8
0°-90°	8982.3	49.8
90°-120°	4328.8	24.0
90°-150°	7896.3	43.7
90°-180°	9072.0	50.2
0°-180°	18054.0	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	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°	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	11.6	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)