

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: P520007

Luminaire Tested: **SQ4-F-075U-075D-835-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P520007
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-835-1D-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

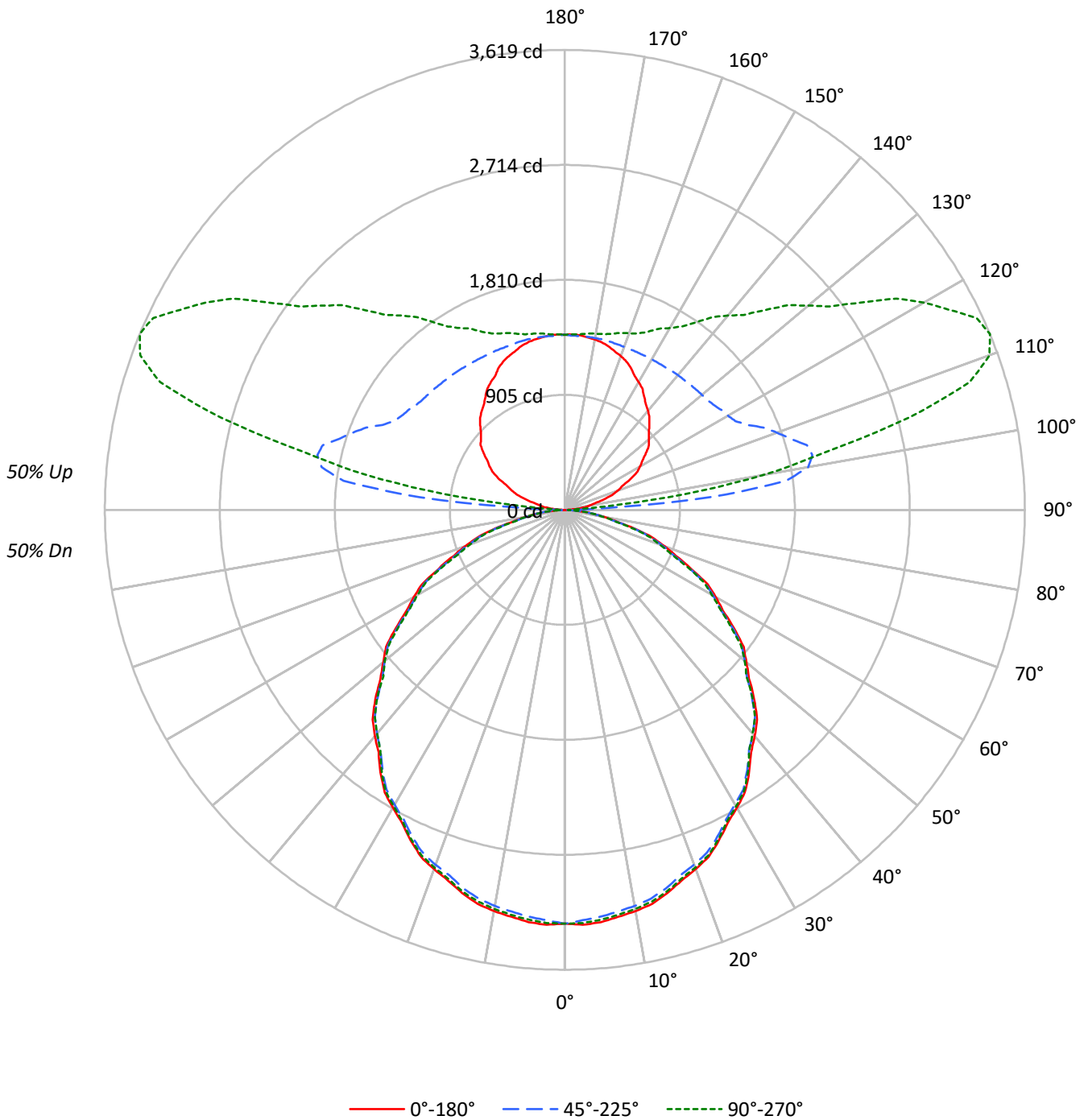
Lumens per Lamp: N/A
Luminaire Lumens: 17874.2 lumens
Efficiency: N/A
Efficacy: 132.9 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: General Diffuse

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°	10014	10014	10014
5°	10053	9925	9998
10°	10012	9883	9957
15°	9935	9813	9897
20°	9845	9729	9807
25°	9737	9637	9707
30°	9614	9509	9561
35°	9488	9388	9432
40°	9328	9233	9221
45°	9168	9052	9078
50°	8913	8842	8842
55°	8706	8595	8516
60°	8425	8280	8208
65°	7971	7820	7712
70°	7486	7300	7114
75°	6735	6490	6349
80°	5386	5281	5228
85°	3229	3645	3751



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	307.4	1.7
10°-20°	875.0	4.9
20°-30°	1314.6	7.4
30°-40°	1568.6	8.8
40°-50°	1608.7	9.0
50°-60°	1433.4	8.0
60°-70°	1068.8	6.0
70°-80°	579.6	3.2
80°-90°	136.7	0.8
90°-100°	650.2	3.6
100°-110°	1789.0	10.0
110°-120°	1846.5	10.3
120°-130°	1479.4	8.3
130°-140°	1162.0	6.5
140°-150°	890.5	5.0
150°-160°	640.2	3.6
160°-170°	391.5	2.2
170°-180°	132.0	0.7
0°-30°	2497.0	14.0
0°-40°	4065.6	22.7
0°-60°	7107.7	39.8
0°-90°	8892.8	49.8
90°-120°	4285.7	24.0
90°-150°	7817.7	43.7
90°-180°	8981.0	50.2
0°-180°	17874.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3256	3256	3256	3256	3256	
5°	3256	3250	3215	3241	3238	309
15°	3120	3115	3082	3106	3109	880
25°	2870	2867	2840	2855	2861	1322
35°	2527	2521	2500	2501	2512	1579
45°	2108	2099	2081	2081	2087	1622
55°	1624	1621	1603	1588	1588	1450
65°	1095	1095	1075	1063	1060	1090
75°	567	555	546	537	534	595
85°	92	97	103	103	106	127
90°	3	12	20	26	26	9
95°	97	355	1150	492	314	102
105°	320	492	1971	3002	2801	337
115°	566	690	1581	3148	3573	559
125°	780	889	1434	2426	2842	696
135°	942	1045	1393	1962	2220	727
145°	1088	1163	1373	1672	1801	682
155°	1232	1272	1364	1503	1546	566
165°	1332	1349	1370	1426	1434	375
175°	1379	1382	1373	1390	1388	131
180°	1379	1379	1379	1379	1379	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3256.3	3256.3	3256.3	3256.3	3256.3
2.5°	3268.1	3261.2	3232.6	3256.3	3253.9
5°	3256.3	3250.5	3214.9	3241.4	3238.5
7.5°	3229.7	3223.4	3188.4	3214.9	3214.3
10°	3206.1	3197.4	3164.7	3191.2	3188.4
12.5°	3175.4	3166.7	3134.0	3160.5	3157.7
15°	3120.5	3114.7	3082.1	3105.8	3108.6
17.5°	3057.9	3046.9	3017.7	3040.8	3043.7
20°	3008.3	2999.6	2972.8	2993.6	2996.5
22.5°	2956.3	2947.7	2920.9	2941.7	2944.5
25°	2869.5	2866.7	2840.0	2854.9	2860.7
27.5°	2775.6	2767.6	2746.1	2757.4	2763.2
30°	2707.2	2701.3	2677.6	2686.6	2692.4
32.5°	2636.3	2632.9	2611.5	2615.8	2623.9
35°	2527.1	2521.3	2500.5	2500.8	2512.3
37.5°	2406.0	2399.6	2382.4	2379.6	2384.2
40°	2323.4	2314.7	2299.8	2296.8	2296.8
42.5°	2238.3	2231.9	2212.4	2207.2	2214.1
45°	2107.9	2099.2	2081.3	2081.4	2087.2
47.5°	1966.7	1963.3	1942.5	1933.2	1935.5
50°	1862.8	1868.6	1848.1	1836.6	1848.1
52.5°	1773.1	1769.6	1751.2	1739.5	1744.1
55°	1623.7	1620.8	1603.0	1588.3	1588.3
57.5°	1473.7	1466.3	1447.8	1436.7	1445.4
60°	1369.8	1367.0	1346.2	1325.7	1334.4
62.5°	1265.9	1260.7	1239.9	1226.4	1232.8
65°	1095.3	1095.3	1074.6	1062.7	1059.8
67.5°	945.9	932.0	920.5	906.2	902.2
70°	832.5	821.0	811.9	799.8	791.2
72.5°	721.5	714.6	700.8	689.0	687.3
75°	566.8	555.3	546.2	537.2	534.3
77.5°	403.3	401.0	392.6	387.9	389.7
80°	304.1	304.1	298.2	298.1	295.2
82.5°	214.3	216.6	215.5	210.8	210.2
85°	91.5	97.3	103.3	103.4	106.3
87.5°	17.1	30.4	30.1	31.3	31.3
90°	2.9	11.5	20.5	26.4	26.4
92.5°	40.5	173.0	299.8	115.1	94.5
95°	96.8	355.0	1149.9	491.7	313.9
97.5°	157.8	393.6	1754.7	1352.0	953.9
100°	202.4	417.5	1944.8	1963.0	1601.6
102.5°	244.6	446.0	1994.1	2435.3	2103.7
105°	319.7	491.8	1971.2	3002.0	2801.3
107.5°	391.3	548.4	1859.1	3279.6	3339.3
110°	442.9	586.4	1774.6	3348.7	3555.2

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	489.8	628.6	1690.2	3304.2	3618.6
115°	566.1	689.5	1581.0	3148.3	3572.8
117.5°	638.9	752.5	1511.8	2929.6	3409.6
120°	683.4	792.5	1481.4	2765.6	3261.8
122.5°	723.3	832.4	1460.2	2621.9	3092.9
125°	780.2	889.2	1434.4	2426.5	2842.4
127.5°	834.2	938.0	1417.4	2263.4	2628.2
130°	862.4	968.5	1408.0	2166.4	2499.2
132.5°	895.3	1001.4	1401.0	2081.2	2381.8
135°	941.6	1044.8	1393.3	1962.4	2220.5
137.5°	985.0	1080.8	1386.9	1866.3	2079.1
140°	1017.8	1106.7	1384.5	1802.5	1994.7
142.5°	1046.0	1128.1	1379.8	1745.6	1910.2
145°	1088.3	1162.8	1372.8	1672.0	1801.0
147.5°	1133.4	1197.7	1369.3	1606.9	1710.1
150°	1161.6	1218.9	1366.9	1571.2	1651.5
152.5°	1187.4	1240.2	1364.6	1540.3	1606.9
155°	1231.9	1272.1	1364.0	1502.8	1545.8
157.5°	1264.2	1297.0	1364.0	1472.0	1501.8
160°	1287.7	1313.5	1364.0	1455.4	1478.4
162.5°	1306.5	1327.7	1366.3	1441.3	1459.6
165°	1331.7	1348.9	1369.9	1425.8	1434.4
167.5°	1349.3	1362.5	1372.8	1412.7	1415.0
170°	1361.1	1369.7	1372.8	1408.0	1408.0
172.5°	1370.4	1374.5	1372.8	1400.9	1398.6
175°	1378.7	1381.5	1372.8	1390.3	1387.5
177.5°	1381.0	1381.0	1371.6	1385.6	1381.0
180°	1378.7	1378.7	1378.7	1378.7	1378.7

(END OF REPORT)