

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: P519167

Luminaire Tested: **SQ4-WB-075U-050D-835-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P519167
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-22, G2-2009-966-13)
Test Lab: INNOVATION CENTER
Issue Date: 4/29/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-WB-075U-050D-835-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 750 LUMENS PER FOOT
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

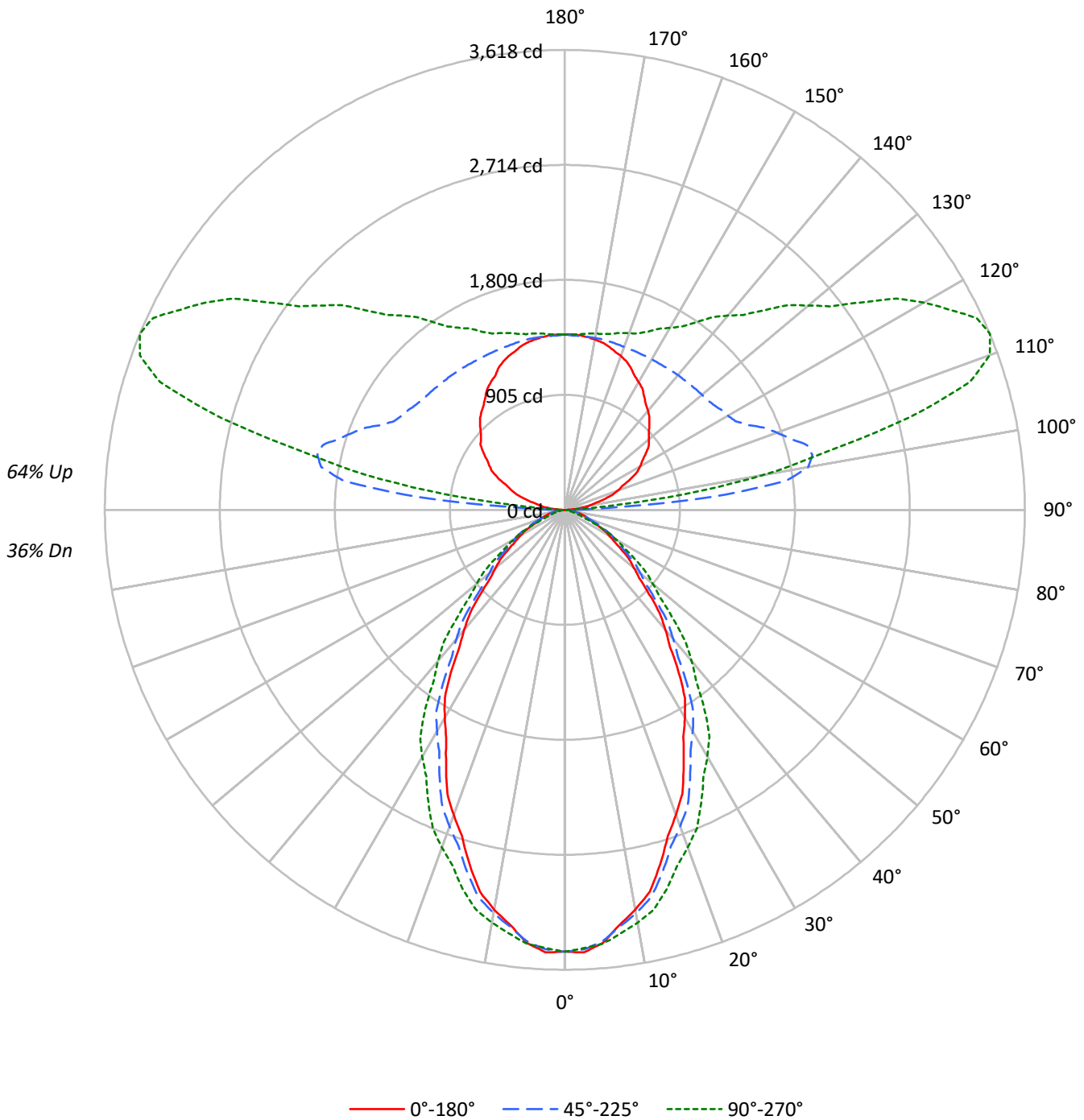
Lumens per Lamp: N/A
Luminaire Lumens: 14049.8 lumens
Efficiency: N/A
Efficacy: 130.8 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 107.4
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	104	104	104	104	94	94	94	94	76	76	76	59	59	59	43	43	43	36
1	95	92	88	85	86	83	80	78	67	65	64	53	52	50	40	39	38	32
2	88	81	75	71	79	74	69	65	60	57	54	47	45	43	36	35	33	28
3	80	72	65	60	73	66	60	55	54	50	46	43	40	38	33	31	29	25
4	74	64	57	51	67	59	52	48	48	44	40	39	36	33	30	28	26	22
5	68	58	50	45	62	53	46	41	44	39	35	35	32	29	27	25	23	20
6	63	52	44	39	57	48	41	36	40	35	31	32	29	26	25	23	21	18
7	58	47	40	35	53	43	37	32	36	31	28	29	26	23	23	21	19	16
8	54	43	36	31	49	40	33	29	33	28	25	27	24	21	21	19	17	15
9	51	39	32	28	46	36	30	26	31	26	23	25	22	19	20	18	16	14
10	47	36	29	25	43	33	27	23	28	24	20	23	20	18	19	16	15	13

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10689	10689	10689
5°	10556	10519	10580
10°	9973	10064	10297
15°	9207	9420	9843
20°	8361	8675	9249
25°	7499	7908	8617
30°	6705	7144	7962
35°	5864	6287	7186
40°	4935	5327	6221
45°	4073	4425	5194
50°	3400	3707	4327
55°	2887	3181	3574
60°	2467	2758	2852
65°	1965	2320	1843
70°	1742	1810	1125
75°	1612	1467	689
80°	1486	1351	595
85°	1344	1239	483



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	318.8	2.3
10°-20°	829.2	5.9
20°-30°	1074.1	7.6
30°-40°	1051.8	7.5
40°-50°	805.1	5.7
50°-60°	536.5	3.8
60°-70°	292.8	2.1
70°-80°	122.0	0.9
80°-90°	38.1	0.3
90°-100°	650.2	4.6
100°-110°	1789.0	12.7
110°-120°	1846.5	13.1
120°-130°	1479.4	10.5
130°-140°	1162.0	8.3
140°-150°	890.5	6.3
150°-160°	640.2	4.6
160°-170°	391.5	2.8
170°-180°	132.0	0.9
0°-30°	2222.2	15.8
0°-40°	3274.0	23.3
0°-60°	4615.6	32.9
0°-90°	5068.4	36.1
90°-120°	4285.7	30.5
90°-150°	7817.7	55.6
90°-180°	8981.0	63.9
0°-180°	14049.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3476	3476	3476	3476	3476	
5°	3419	3385	3407	3415	3427	318
15°	2892	2881	2959	3039	3092	808
25°	2210	2216	2330	2432	2539	1016
35°	1562	1569	1675	1787	1914	971
45°	936	954	1017	1094	1194	730
55°	538	561	593	616	666	488
65°	270	292	319	278	253	281
75°	136	136	124	85	58	145
85°	38	38	35	23	14	42
90°	3	12	20	26	26	8
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	1387	131
180°	1379	1379	1379	1379	1379	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3475.8	3475.8	3475.8	3475.8	3475.8
2.5°	3484.4	3453.3	3461.2	3461.0	3451.4
5°	3419.4	3385.1	3407.2	3415.1	3427.0
7.5°	3292.5	3266.5	3306.8	3336.7	3360.8
10°	3193.7	3171.3	3222.6	3266.1	3297.4
12.5°	3079.0	3060.2	3123.8	3182.1	3223.0
15°	2891.7	2881.2	2958.8	3039.3	3091.5
17.5°	2691.3	2686.2	2775.2	2869.1	2935.9
20°	2554.6	2553.1	2650.7	2748.6	2826.1
22.5°	2416.8	2420.0	2522.6	2624.4	2712.6
25°	2209.9	2215.9	2330.4	2432.0	2539.4
27.5°	2018.7	2021.4	2139.8	2247.0	2361.5
30°	1888.1	1895.6	2011.7	2122.7	2242.0
32.5°	1757.6	1766.2	1879.9	1994.6	2116.3
35°	1561.8	1569.2	1674.6	1787.3	1914.1
37.5°	1359.8	1370.0	1463.5	1570.1	1694.7
40°	1229.3	1244.2	1326.9	1427.3	1549.6
42.5°	1103.6	1122.1	1198.8	1294.0	1404.4
45°	936.4	954.3	1017.3	1094.3	1194.2
47.5°	792.5	813.0	861.4	927.7	1013.0
50°	710.7	730.1	774.8	823.9	904.4
52.5°	638.7	658.1	697.9	735.8	804.4
55°	538.4	560.7	593.3	615.8	666.5
57.5°	456.0	477.5	503.3	513.5	544.2
60°	401.1	425.0	448.4	447.2	463.6
62.5°	351.1	371.4	394.7	378.6	379.5
65°	270.0	292.3	318.8	278.5	253.2
67.5°	218.1	222.9	250.1	194.2	164.1
70°	193.7	193.7	201.3	150.4	125.1
72.5°	170.5	170.5	163.5	122.3	95.8
75°	135.7	135.7	123.5	84.8	58.0
77.5°	104.6	103.4	94.6	63.3	42.1
80°	83.9	83.9	76.3	50.0	33.6
82.5°	65.6	65.6	59.2	39.0	25.0
85°	38.1	38.1	35.1	22.7	13.7
87.5°	14.0	15.7	16.3	12.6	11.4
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	354.9	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	2103.8
105°	319.7	491.8	1971.2	3002.1	2801.3
107.5°	391.3	548.5	1859.1	3279.6	3339.3
110°	442.9	586.3	1774.6	3348.7	3555.2



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	489.9	628.7	1690.2	3304.2	3618.5
115°	566.1	689.5	1581.0	3148.3	3572.8
117.5°	638.9	752.4	1511.8	2929.5	3409.7
120°	683.5	792.4	1481.3	2765.6	3261.8
122.5°	723.4	832.3	1460.2	2621.9	3092.9
125°	780.3	889.2	1434.4	2426.5	2842.4
127.5°	834.2	938.1	1417.4	2263.4	2628.2
130°	862.4	968.5	1408.0	2166.5	2499.2
132.5°	895.2	1001.4	1400.9	2081.3	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°	1017.9	1106.8	1384.5	1802.5	1994.6
142.5°	1046.0	1128.0	1379.8	1745.5	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	1571.1	1651.4
152.5°	1187.4	1240.2	1364.6	1540.3	1606.9
155°	1232.0	1272.1	1364.0	1502.8	1545.8
157.5°	1264.3	1296.9	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	1369.8	1425.8	1434.4
167.5°	1349.3	1362.5	1372.8	1412.7	1415.0
170°	1361.0	1369.7	1372.8	1408.0	1408.0
172.5°	1370.4	1374.5	1372.8	1400.9	1398.6
175°	1378.6	1381.5	1372.8	1390.3	1387.4
177.5°	1381.0	1381.0	1371.6	1385.6	1381.0
180°	1378.6	1378.6	1378.6	1378.6	1378.6

(END OF REPORT)