

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: P519413

Luminaire Tested: **SQ4-WB-100U-100D-840-1D-UNV-STD-W-6**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P519413
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-23, 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-100U-100D-840-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

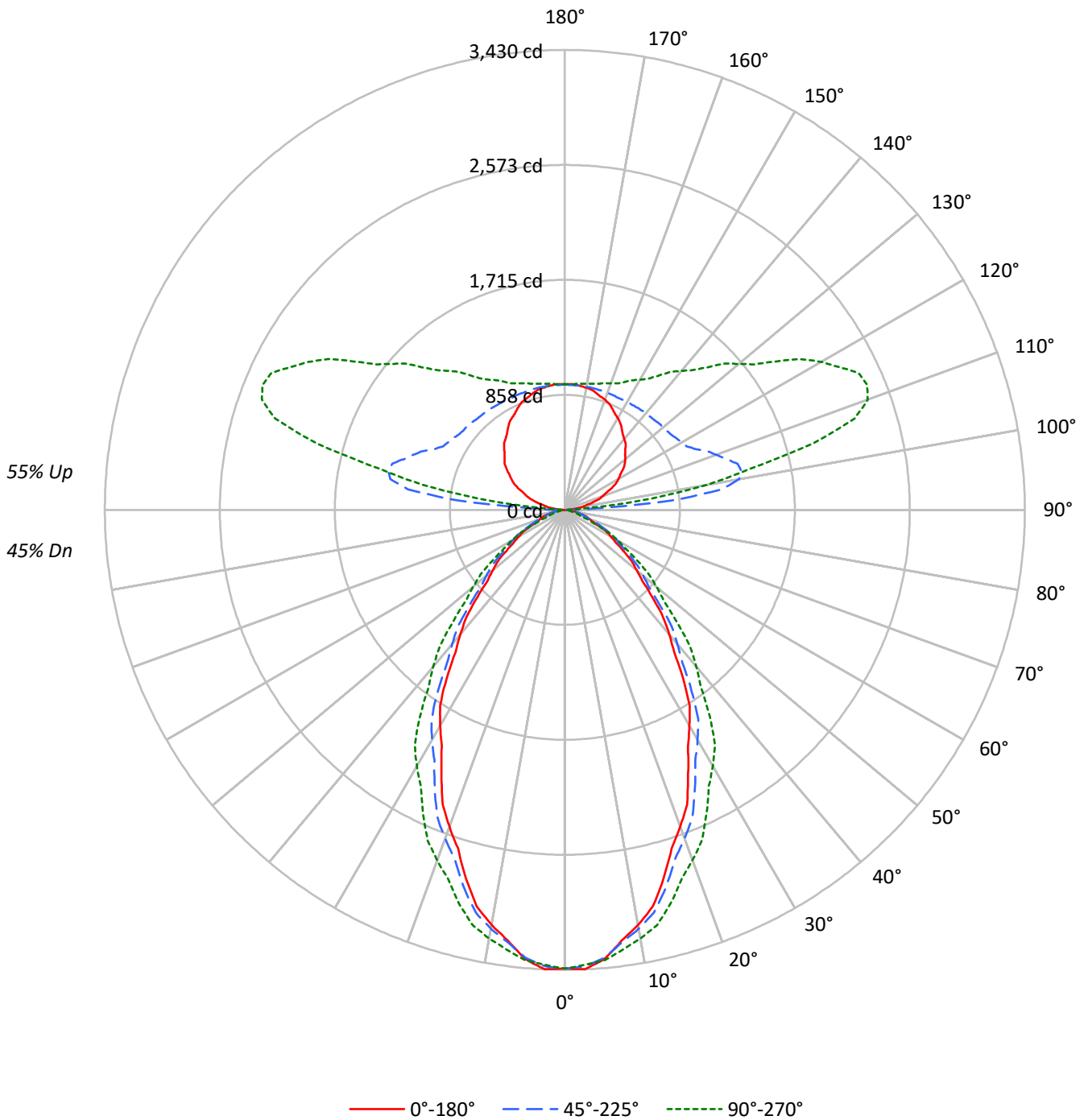
Lumens per Lamp: N/A
Luminaire Lumens: 11072.3 lumens
Efficiency: N/A
Efficacy: 119.2 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 92.9
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



TEST NUMBER: P519413
CATALOG NUMBER: SQ4-WB-100U-100D-840-1D-UNV-STD-W-6

Luminous Intensity Polar Plot





TEST NUMBER: P519413

CATALOG NUMBER: SQ4-WB-100U-100D-840-1D-UNV-STD-W-6

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	50	30	10	0	
RCR																						
0	106	106	106	106	97	97	97	97	81	81	81	65	65	65	52	52	52	45				
1	98	94	90	87	89	86	83	81	72	70	68	59	58	56	47	46	46	40				
2	90	83	78	73	82	77	72	68	64	61	58	53	51	49	43	41	40	35				
3	83	74	67	62	76	68	63	58	58	54	50	48	45	43	39	37	35	31				
4	76	66	59	54	70	61	55	50	52	47	44	44	40	37	36	33	31	28				
5	70	60	52	47	65	55	49	44	47	42	39	40	36	33	33	30	28	25				
6	65	54	46	41	60	50	44	39	43	38	34	36	33	30	30	27	25	22				
7	61	49	42	36	56	46	39	34	39	34	31	33	30	27	28	25	23	20				
8	56	45	38	33	52	42	35	31	36	31	28	31	27	24	26	23	21	19				
9	53	41	34	29	49	39	32	28	33	28	25	29	25	22	24	21	19	17				
10	49	38	31	27	46	36	29	25	31	26	23	27	23	20	22	20	18	16				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	21043	21043	21043
5°	20780	20706	20827
10°	19633	19811	20270
15°	18124	18545	19377
20°	16459	17077	18208
25°	14762	15567	16963
30°	13199	14063	15673
35°	11542	12377	14146
40°	9715	10486	12246
45°	8017	8710	10224
50°	6693	7297	8518
55°	5682	6263	7035
60°	4857	5429	5614
65°	3867	4566	3627
70°	3428	3564	2214
75°	3175	2890	1355
80°	2926	2660	1169
85°	2646	2435	953



TEST NUMBER: P519413

CATALOG NUMBER: SQ4-WB-100U-100D-840-1D-UNV-STD-W-6

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	313.8	2.8
10°-20°	816.2	7.4
20°-30°	1057.2	9.5
30°-40°	1035.3	9.4
40°-50°	792.5	7.2
50°-60°	528.1	4.8
60°-70°	288.1	2.6
70°-80°	120.1	1.1
80°-90°	35.9	0.3
90°-100°	438.6	4.0
100°-110°	1210.8	10.9
110°-120°	1248.7	11.3
120°-130°	1003.5	9.1
130°-140°	788.6	7.1
140°-150°	604.8	5.5
150°-160°	434.7	3.9
160°-170°	265.8	2.4
170°-180°	89.6	0.8
0°-30°	2187.2	19.8
0°-40°	3222.5	29.1
0°-60°	4543.0	41.0
0°-90°	4987.2	45.0
90°-120°	2898.1	26.2
90°-150°	5295.0	47.8
90°-180°	6085.0	55.0
0°-180°	11072.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3421	3421	3421	3421	3421	
5°	3366	3332	3354	3361	3373	313
15°	2846	2836	2912	2992	3043	795
25°	2175	2181	2294	2394	2499	1000
35°	1537	1544	1648	1759	1884	956
45°	922	939	1001	1077	1175	719
55°	530	552	584	606	656	480
65°	266	288	314	274	249	276
75°	134	134	122	84	57	143
85°	38	38	34	22	14	41
90°	3	6	12	14	15	6
95°	64	237	796	327	213	69
105°	216	333	1332	2034	1915	230
115°	387	467	1073	2124	2416	380
125°	530	604	972	1646	1932	472
135°	638	707	946	1333	1503	494
145°	740	792	934	1135	1221	463
155°	835	862	926	1018	1050	385
165°	904	915	930	967	974	255
175°	936	938	932	946	942	89
180°	936	936	936	936	936	

TEST NUMBER: P519413

CATALOG NUMBER: SQ4-WB-100U-100D-840-1D-UNV-STD-W-6

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3421.2	3421.2	3421.2	3421.2	3421.2
2.5°	3429.6	3399.0	3406.7	3406.5	3397.1
5°	3365.6	3331.9	3353.6	3361.4	3373.1
7.5°	3240.7	3215.2	3254.8	3284.2	3308.0
10°	3143.4	3121.4	3172.0	3214.7	3245.5
12.5°	3030.6	3012.1	3074.7	3132.0	3172.3
15°	2846.2	2835.9	2912.3	2991.5	3042.9
17.5°	2649.0	2644.0	2731.5	2824.0	2889.7
20°	2514.5	2513.0	2609.0	2705.3	2781.7
22.5°	2378.7	2382.0	2482.9	2583.1	2670.0
25°	2175.2	2181.1	2293.8	2393.8	2499.4
27.5°	1986.9	1989.6	2106.1	2211.7	2324.4
30°	1858.4	1865.8	1980.0	2089.3	2206.7
32.5°	1729.9	1738.5	1850.3	1963.2	2083.0
35°	1537.2	1544.5	1648.3	1759.2	1884.0
37.5°	1338.4	1348.4	1440.5	1545.4	1668.1
40°	1209.9	1224.6	1306.0	1404.8	1525.2
42.5°	1086.2	1104.4	1179.9	1273.7	1382.3
45°	921.7	939.3	1001.3	1077.1	1175.4
47.5°	780.0	800.3	847.9	913.1	997.1
50°	699.5	718.6	762.6	810.9	890.2
52.5°	628.7	647.8	686.9	724.2	791.7
55°	529.9	551.9	584.0	606.1	656.0
57.5°	448.8	470.0	495.4	505.4	535.6
60°	394.8	418.3	441.3	440.2	456.4
62.5°	345.6	365.5	388.5	372.6	373.5
65°	265.7	287.7	313.7	274.1	249.2
67.5°	214.7	219.4	246.2	191.2	161.5
70°	190.6	190.6	198.2	148.0	123.1
72.5°	167.8	167.8	160.9	120.4	94.3
75°	133.6	133.6	121.6	83.5	57.0
77.5°	103.0	101.8	93.1	62.3	41.4
80°	82.6	82.6	75.1	49.2	33.0
82.5°	64.6	64.6	58.2	38.4	24.6
85°	37.5	37.5	34.5	22.3	13.5
87.5°	13.8	14.4	14.4	9.9	9.0
90°	3.0	5.9	12.0	13.5	15.0
92.5°	27.0	112.0	200.2	73.1	56.9
95°	64.4	237.3	795.7	327.1	212.8
97.5°	106.7	265.8	1178.7	907.5	657.2
100°	137.9	282.9	1320.1	1329.5	1080.4
102.5°	167.8	302.3	1347.7	1642.6	1406.4
105°	215.8	333.0	1332.1	2033.7	1915.0
107.5°	266.7	371.0	1257.8	2222.3	2265.7
110°	302.7	396.5	1200.3	2262.9	2403.5



TEST NUMBER: P519413

CATALOG NUMBER: SQ4-WB-100U-100D-840-1D-UNV-STD-W-6

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	335.1	425.3	1146.3	2230.8	2438.3
115°	386.6	467.2	1072.9	2123.9	2415.5
117.5°	431.6	511.8	1024.6	1973.5	2305.2
120°	461.5	540.6	1005.5	1871.7	2205.7
122.5°	490.3	565.9	989.9	1776.6	2093.0
125°	530.5	603.7	972.5	1645.8	1931.5
127.5°	564.6	637.9	962.3	1535.2	1781.7
130°	587.4	660.7	957.5	1467.6	1691.8
132.5°	609.0	678.7	952.7	1410.8	1613.8
135°	638.3	707.2	945.5	1333.0	1502.9
137.5°	671.3	734.0	941.9	1267.7	1412.7
140°	689.3	750.8	939.5	1224.1	1351.6
142.5°	709.7	766.5	937.1	1185.4	1297.7
145°	740.2	791.5	933.5	1134.8	1221.2
147.5°	769.6	814.4	930.2	1092.1	1159.2
150°	791.2	827.8	929.0	1066.6	1120.8
152.5°	808.0	842.2	927.8	1044.8	1089.7
155°	834.6	862.5	926.0	1018.2	1050.4
157.5°	859.2	880.6	926.3	998.8	1020.7
160°	873.6	892.6	927.5	987.8	1004.0
162.5°	885.6	902.3	928.7	978.2	990.8
165°	903.6	915.3	930.5	966.7	974.0
167.5°	917.4	924.4	932.0	959.7	962.0
170°	924.5	930.4	932.0	956.0	956.0
172.5°	930.5	934.1	932.0	951.2	950.0
175°	936.5	938.0	932.0	945.5	942.5
177.5°	938.9	937.8	931.7	940.1	937.7
180°	936.5	936.5	936.5	936.5	936.5

(END OF REPORT)