

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: P519405

Luminaire Tested: **SQ4-WB-100U-100D-830-1D-UNV-STD-W-6**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P519405
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-830-1D-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: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

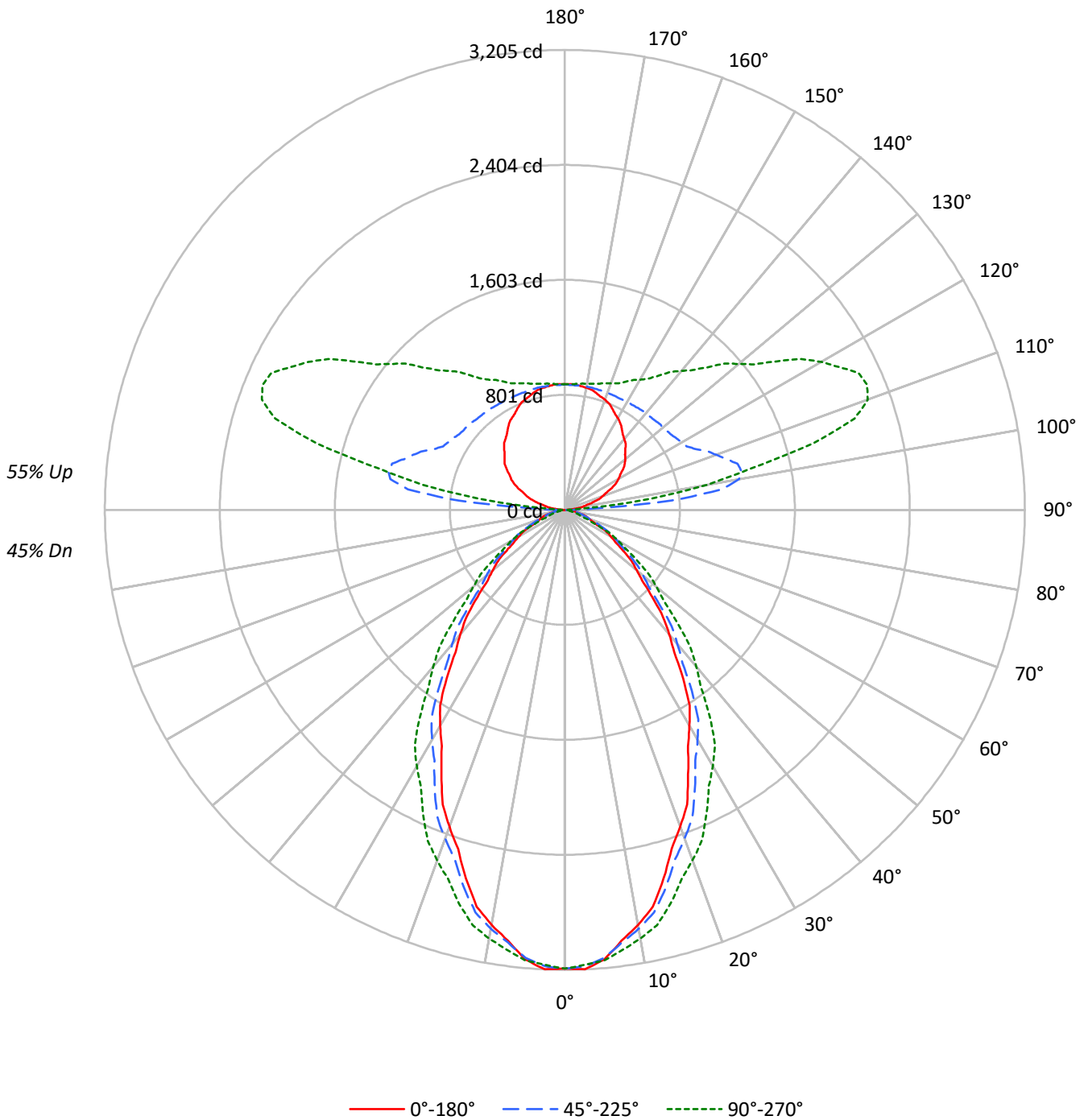
Lumens per Lamp: N/A
Luminaire Lumens: 10347.0 lumens
Efficiency: N/A
Efficacy: 111.4 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: General Diffuse

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



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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	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°	19664	19664	19664
5°	19419	19350	19462
10°	18347	18513	18943
15°	16937	17330	18107
20°	15380	15959	17014
25°	13795	14547	15852
30°	12335	13141	14646
35°	10786	11566	13219
40°	9079	9800	11444
45°	7492	8139	9554
50°	6255	6819	7960
55°	5310	5852	6574
60°	4538	5073	5247
65°	3614	4267	3390
70°	3205	3331	2068
75°	2968	2700	1267
80°	2735	2483	1095
85°	2477	2279	889



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	293.2	2.8
10°-20°	762.7	7.4
20°-30°	988.0	9.5
30°-40°	967.5	9.4
40°-50°	740.5	7.2
50°-60°	493.5	4.8
60°-70°	269.3	2.6
70°-80°	112.2	1.1
80°-90°	33.6	0.3
90°-100°	409.9	4.0
100°-110°	1131.5	10.9
110°-120°	1166.9	11.3
120°-130°	937.7	9.1
130°-140°	736.9	7.1
140°-150°	565.2	5.5
150°-160°	406.2	3.9
160°-170°	248.4	2.4
170°-180°	83.8	0.8
0°-30°	2043.9	19.8
0°-40°	3011.4	29.1
0°-60°	4245.4	41.0
0°-90°	4660.5	45.0
90°-120°	2708.2	26.2
90°-150°	4948.1	47.8
90°-180°	5686.0	55.0
0°-180°	10347.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3197	3197	3197	3197	3197	
5°	3145	3114	3134	3141	3152	293
15°	2660	2650	2722	2796	2844	743
25°	2033	2038	2144	2237	2336	935
35°	1436	1443	1540	1644	1760	893
45°	861	878	936	1006	1098	672
55°	495	516	546	566	613	449
65°	248	269	293	256	233	258
75°	125	125	114	78	53	133
85°	35	35	32	21	13	38
90°	3	6	11	13	14	6
95°	60	222	744	306	199	64
105°	202	311	1245	1900	1790	215
115°	361	437	1003	1985	2257	355
125°	496	564	909	1538	1805	441
135°	596	661	884	1246	1404	462
145°	692	740	872	1060	1141	433
155°	780	806	865	952	982	359
165°	844	855	870	903	910	238
175°	875	876	871	884	881	83
180°	875	875	875	875	875	

TEST NUMBER: P519405

CATALOG NUMBER: SQ4-WB-100U-100D-830-1D-UNV-STD-W-6

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3197.0	3197.0	3197.0	3197.0	3197.0
2.5°	3204.9	3176.4	3183.6	3183.4	3174.6
5°	3145.1	3113.6	3133.9	3141.2	3152.1
7.5°	3028.4	3004.5	3041.6	3069.0	3091.3
10°	2937.5	2916.9	2964.2	3004.1	3032.9
12.5°	2832.0	2814.7	2873.3	2926.9	2964.4
15°	2659.8	2650.1	2721.5	2795.5	2843.5
17.5°	2475.4	2470.8	2552.6	2639.0	2700.4
20°	2349.7	2348.4	2438.1	2528.1	2599.4
22.5°	2222.9	2225.9	2320.3	2413.9	2495.1
25°	2032.7	2038.2	2143.5	2236.9	2335.7
27.5°	1856.8	1859.2	1968.2	2066.8	2172.1
30°	1736.7	1743.6	1850.3	1952.4	2062.1
32.5°	1616.6	1624.6	1729.1	1834.6	1946.6
35°	1436.5	1443.3	1540.3	1644.0	1760.5
37.5°	1250.8	1260.1	1346.1	1444.1	1558.8
40°	1130.7	1144.4	1220.5	1312.8	1425.3
42.5°	1015.1	1032.1	1102.6	1190.2	1291.7
45°	861.3	877.8	935.7	1006.5	1098.4
47.5°	728.9	747.8	792.3	853.3	931.8
50°	653.7	671.5	712.6	757.8	831.9
52.5°	587.5	605.3	641.9	676.8	739.8
55°	495.2	515.8	545.7	566.4	613.0
57.5°	419.4	439.2	462.9	472.3	500.5
60°	368.9	390.9	412.4	411.4	426.5
62.5°	322.9	341.6	363.1	348.2	349.0
65°	248.3	268.9	293.2	256.2	232.9
67.5°	200.6	205.0	230.1	178.7	150.9
70°	178.2	178.2	185.2	138.3	115.0
72.5°	156.8	156.8	150.4	112.5	88.1
75°	124.9	124.9	113.6	78.0	53.3
77.5°	96.2	95.1	87.0	58.2	38.7
80°	77.2	77.2	70.1	46.0	30.9
82.5°	60.3	60.3	54.4	35.9	23.0
85°	35.1	35.1	32.3	20.9	12.6
87.5°	12.9	13.5	13.5	9.2	8.4
90°	2.8	5.5	11.2	12.6	14.0
92.5°	25.2	104.6	187.1	68.3	53.2
95°	60.2	221.8	743.6	305.6	198.8
97.5°	99.7	248.4	1101.5	848.0	614.2
100°	128.8	264.4	1233.7	1242.4	1009.6
102.5°	156.8	282.5	1259.4	1535.0	1314.3
105°	201.6	311.2	1244.9	1900.5	1789.6
107.5°	249.3	346.7	1175.4	2076.7	2117.2
110°	282.9	370.5	1121.6	2114.6	2246.1

TEST NUMBER: P519405

CATALOG NUMBER: SQ4-WB-100U-100D-830-1D-UNV-STD-W-6

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	313.1	397.4	1071.2	2084.7	2278.5
115°	361.3	436.6	1002.6	1984.8	2257.3
117.5°	403.3	478.3	957.5	1844.2	2154.2
120°	431.3	505.2	939.6	1749.1	2061.2
122.5°	458.2	528.8	925.0	1660.2	1955.9
125°	495.7	564.2	908.8	1538.0	1805.0
127.5°	527.6	596.1	899.3	1434.6	1664.9
130°	548.9	617.4	894.8	1371.4	1580.9
132.5°	569.1	634.2	890.3	1318.3	1508.1
135°	596.5	660.9	883.6	1245.7	1404.5
137.5°	627.3	685.9	880.2	1184.6	1320.2
140°	644.1	701.6	878.0	1143.9	1263.1
142.5°	663.2	716.3	875.7	1107.8	1212.6
145°	691.7	739.7	872.4	1060.5	1141.2
147.5°	719.2	761.1	869.3	1020.6	1083.3
150°	739.4	773.6	868.2	996.8	1047.4
152.5°	755.0	787.1	867.1	976.4	1018.3
155°	780.0	806.0	865.4	951.5	981.6
157.5°	802.9	822.9	865.7	933.3	953.9
160°	816.4	834.2	866.8	923.1	938.2
162.5°	827.6	843.2	867.9	914.1	925.9
165°	844.4	855.3	869.6	903.3	910.2
167.5°	857.3	863.8	871.0	896.8	899.0
170°	864.0	869.5	871.0	893.4	893.4
172.5°	869.6	872.9	871.0	888.9	887.8
175°	875.2	876.5	871.0	883.5	880.8
177.5°	877.4	876.3	870.7	878.5	876.3
180°	875.2	875.2	875.2	875.2	875.2

(END OF REPORT)