

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: P519385

Luminaire Tested: **SQ4-WB-100U-075D-835-1D-UNV-STD-W-6**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P519385
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-075D-835-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

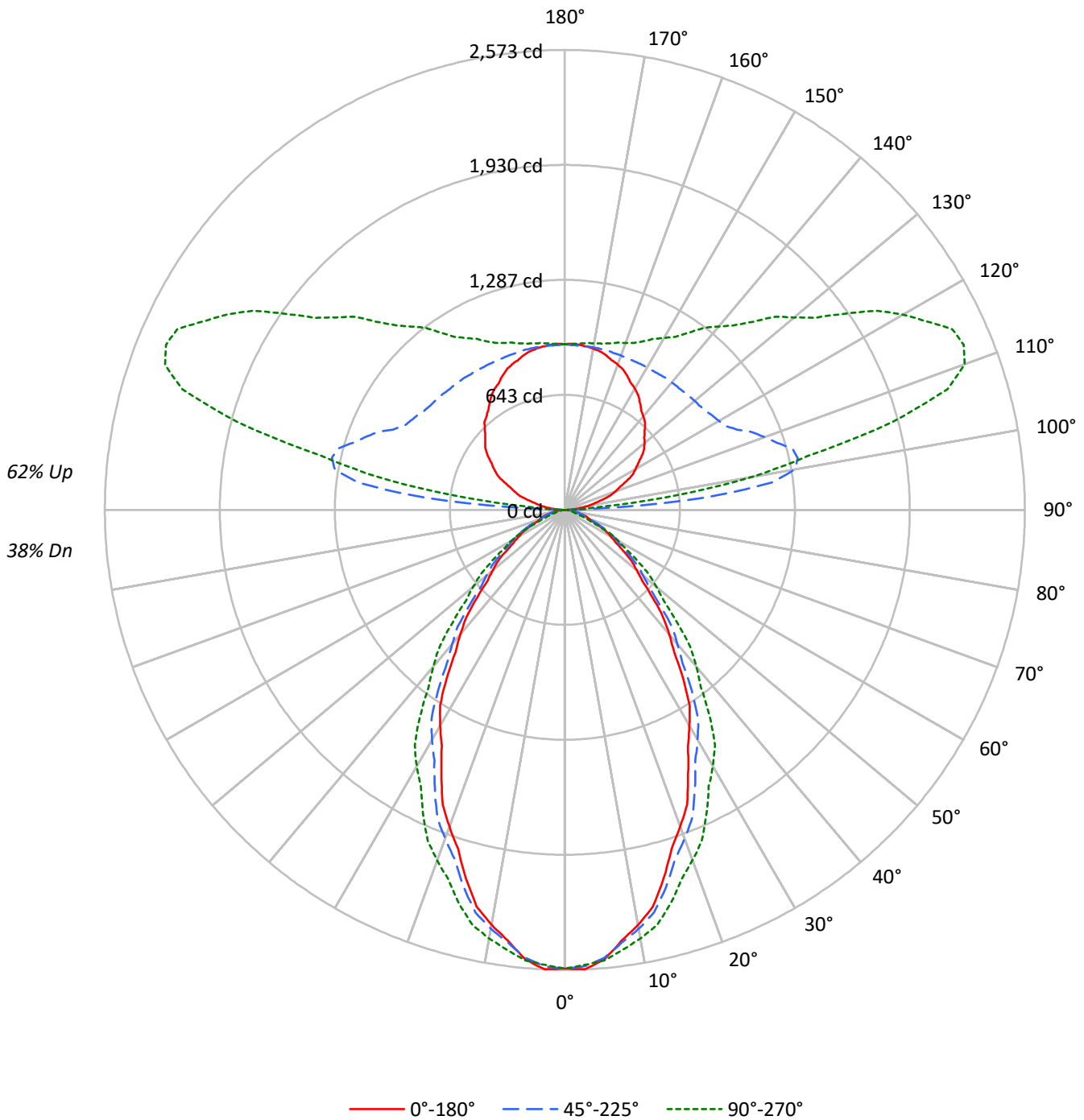
Lumens per Lamp: N/A
Luminaire Lumens: 9766.5 lumens
Efficiency: N/A
Efficacy: 125.2 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 78
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	95	95	95	95	77	77	77	60	60	60	45	45	45	38
1	96	92	89	85	87	84	81	78	69	67	65	54	53	52	41	41	40	34
2	88	81	76	71	80	74	70	66	61	58	55	49	47	45	38	36	35	30
3	81	72	66	60	74	66	61	56	55	51	47	44	41	39	34	32	31	26
4	75	65	57	52	68	59	53	48	49	45	41	40	37	34	31	29	27	24
5	69	58	51	45	62	53	47	42	45	40	36	36	33	30	29	26	25	21
6	64	52	45	40	58	48	42	37	40	36	32	33	30	27	26	24	22	19
7	59	48	40	35	54	44	37	33	37	32	29	30	27	24	24	22	20	17
8	55	43	36	31	50	40	34	29	34	29	26	28	24	22	23	20	18	16
9	51	40	33	28	47	37	31	26	31	26	23	26	22	20	21	19	17	15
10	48	37	30	25	44	34	28	24	29	24	21	24	21	18	20	17	15	13

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	15787	15787	15787
5°	15590	15535	15625
10°	14729	14863	15208
15°	13597	13913	14537
20°	12348	12812	13660
25°	11075	11679	12726
30°	9903	10551	11759
35°	8660	9285	10613
40°	7288	7867	9187
45°	6015	6534	7670
50°	5022	5474	6391
55°	4264	4698	5278
60°	3644	4073	4212
65°	2901	3426	2722
70°	2572	2674	1662
75°	2381	2167	1017
80°	2193	1994	878
85°	1990	1828	713



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	235.4	2.4
10°-20°	612.3	6.3
20°-30°	793.2	8.1
30°-40°	776.7	8.0
40°-50°	594.5	6.1
50°-60°	396.2	4.1
60°-70°	216.2	2.2
70°-80°	90.1	0.9
80°-90°	27.4	0.3
90°-100°	434.2	4.4
100°-110°	1198.7	12.3
110°-120°	1236.3	12.7
120°-130°	993.5	10.2
130°-140°	780.8	8.0
140°-150°	598.8	6.1
150°-160°	430.4	4.4
160°-170°	263.2	2.7
170°-180°	88.7	0.9
0°-30°	1640.9	16.8
0°-40°	2417.7	24.8
0°-60°	3408.4	34.9
0°-90°	3742.0	38.3
90°-120°	2869.2	29.4
90°-150°	5242.2	53.7
90°-180°	6024.0	61.7
0°-180°	9766.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2567	2567	2567	2567	2567	
5°	2525	2500	2516	2522	2531	235
15°	2135	2128	2185	2244	2283	596
25°	1632	1636	1721	1796	1875	750
35°	1153	1159	1237	1320	1413	717
45°	692	705	751	808	882	539
55°	398	414	438	455	492	360
65°	199	216	235	206	187	207
75°	100	100	91	63	43	107
85°	28	28	26	17	10	31
90°	3	6	12	13	15	6
95°	64	235	788	324	211	68
105°	214	330	1319	2013	1896	227
115°	383	462	1062	2103	2391	376
125°	525	598	963	1629	1912	467
135°	632	700	936	1320	1488	489
145°	733	784	924	1124	1209	459
155°	826	854	917	1008	1040	381
165°	895	906	921	957	964	252
175°	927	929	923	936	933	88
180°	927	927	927	927	927	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2566.7	2566.7	2566.7	2566.7	2566.7
2.5°	2573.0	2550.1	2555.9	2555.7	2548.7
5°	2525.0	2499.7	2516.0	2521.8	2530.6
7.5°	2431.3	2412.1	2441.9	2463.9	2481.8
10°	2358.3	2341.8	2379.7	2411.8	2434.9
12.5°	2273.6	2259.8	2306.7	2349.8	2379.9
15°	2135.3	2127.6	2184.9	2244.3	2282.9
17.5°	1987.3	1983.6	2049.3	2118.7	2168.0
20°	1886.4	1885.3	1957.4	2029.6	2086.9
22.5°	1784.6	1787.0	1862.8	1937.9	2003.1
25°	1631.9	1636.3	1720.9	1795.9	1875.2
27.5°	1490.7	1492.7	1580.1	1659.3	1743.9
30°	1394.3	1399.8	1485.5	1567.5	1655.6
32.5°	1297.9	1304.3	1388.2	1472.9	1562.8
35°	1153.3	1158.8	1236.6	1319.8	1413.4
37.5°	1004.1	1011.6	1080.7	1159.4	1251.5
40°	907.7	918.8	979.8	1053.9	1144.2
42.5°	814.9	828.6	885.2	955.5	1037.0
45°	691.5	704.7	751.2	808.1	881.8
47.5°	585.2	600.4	636.1	685.1	748.0
50°	524.8	539.1	572.1	608.4	667.9
52.5°	471.7	486.0	515.4	543.3	594.0
55°	397.6	414.1	438.1	454.7	492.2
57.5°	336.7	352.6	371.7	379.2	401.8
60°	296.2	313.8	331.1	330.3	342.4
62.5°	259.3	274.2	291.5	279.5	280.2
65°	199.3	215.9	235.4	205.7	187.0
67.5°	161.1	164.6	184.7	143.4	121.2
70°	143.0	143.0	148.7	111.1	92.4
72.5°	125.9	125.9	120.7	90.3	70.7
75°	100.2	100.2	91.2	62.6	42.8
77.5°	77.3	76.4	69.8	46.7	31.1
80°	61.9	61.9	56.3	36.9	24.8
82.5°	48.4	48.4	43.7	28.8	18.5
85°	28.2	28.2	25.9	16.7	10.1
87.5°	10.5	11.1	11.4	8.1	7.5
90°	3.0	5.9	11.9	13.4	14.8
92.5°	26.7	110.8	198.2	72.3	56.4
95°	63.8	235.0	787.8	323.8	210.7
97.5°	105.6	263.2	1166.9	898.4	650.7
100°	136.5	280.1	1307.0	1316.2	1069.6
102.5°	166.2	299.3	1334.3	1626.3	1392.4
105°	213.6	329.7	1318.9	2013.4	1895.9
107.5°	264.1	367.3	1245.3	2200.2	2243.1
110°	299.7	392.5	1188.3	2240.3	2379.6



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	331.7	421.1	1134.9	2208.6	2414.0
115°	382.7	462.5	1062.2	2102.8	2391.4
117.5°	427.3	506.7	1014.4	1953.8	2282.3
120°	456.9	535.3	995.4	1853.0	2183.7
122.5°	485.4	560.3	980.0	1758.9	2072.2
125°	525.2	597.7	962.8	1629.4	1912.3
127.5°	559.0	631.5	952.7	1519.9	1763.9
130°	581.5	654.1	948.0	1453.0	1674.9
132.5°	602.9	672.0	943.2	1396.7	1597.8
135°	632.0	700.2	936.1	1319.7	1488.0
137.5°	664.6	726.7	932.5	1255.1	1398.7
140°	682.4	743.3	930.2	1211.9	1338.1
142.5°	702.6	758.9	927.8	1173.6	1284.7
145°	732.9	783.6	924.2	1123.5	1209.1
147.5°	761.9	806.3	921.0	1081.2	1147.7
150°	783.3	819.6	919.8	1056.0	1109.7
152.5°	799.9	833.9	918.6	1034.4	1078.8
155°	826.3	853.9	916.8	1008.0	1040.0
157.5°	850.7	871.8	917.1	988.8	1010.6
160°	864.9	883.8	918.3	978.0	994.0
162.5°	876.8	893.3	919.5	968.4	980.9
165°	894.6	906.2	921.3	957.0	964.3
167.5°	908.2	915.2	922.8	950.1	952.4
170°	915.3	921.1	922.8	946.5	946.5
172.5°	921.3	924.7	922.8	941.7	940.6
175°	927.2	928.7	922.8	936.0	933.1
177.5°	929.6	928.4	922.5	930.7	928.4
180°	927.2	927.2	927.2	927.2	927.2

(END OF REPORT)