

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: P519362

Luminaire Tested: **SQ4-WB-100U-050D-835-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P519362
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-050D-835-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

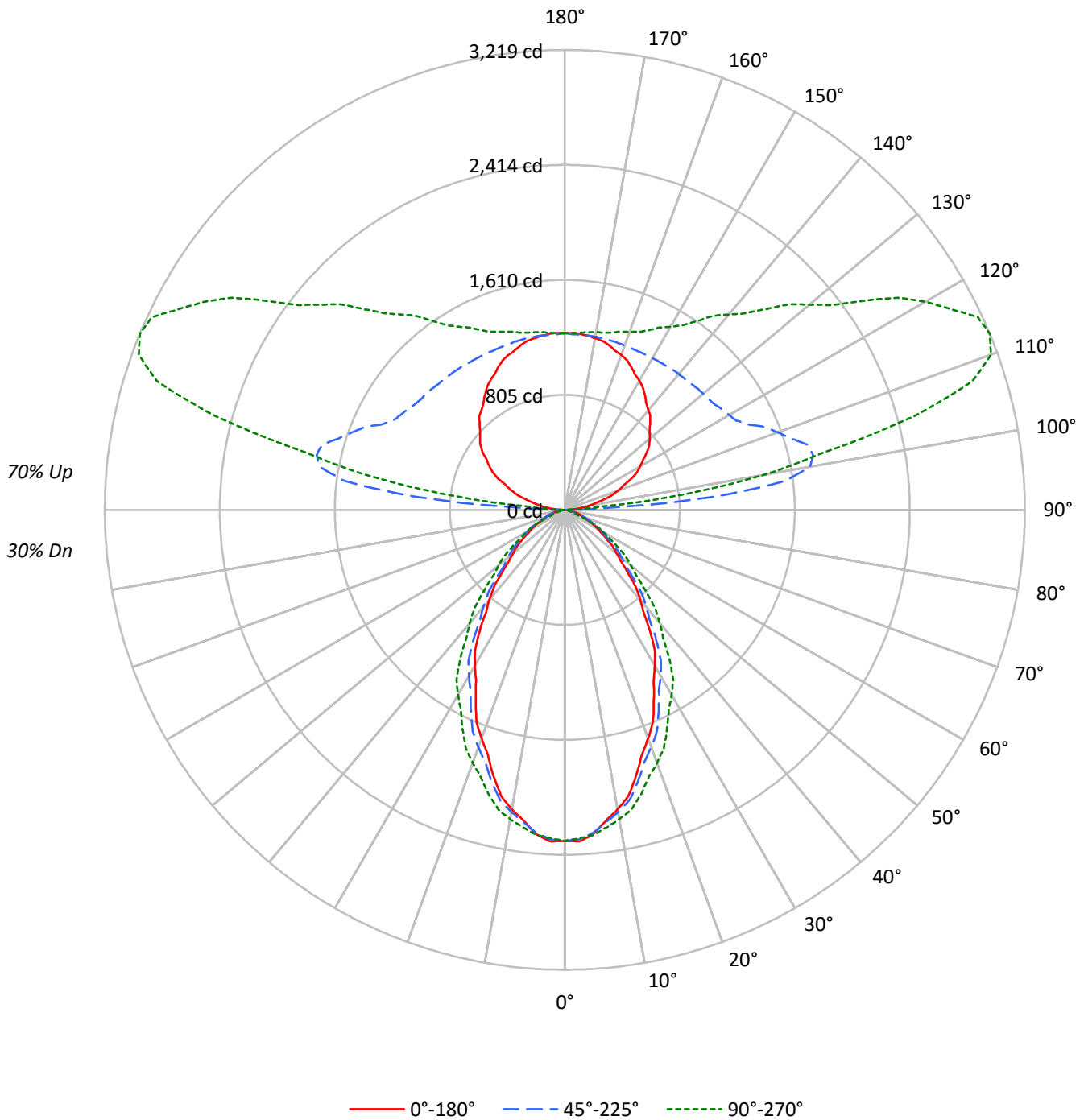
Lumens per Lamp: N/A
Luminaire Lumens: 11411.8 lumens
Efficiency: N/A
Efficacy: 134.7 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 84.7
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	102	102	102	102	92	92	92	92	72	72	72	54	54	54	37	37	37	30
1	94	90	86	83	84	81	78	75	64	62	60	48	47	46	34	33	33	26
2	86	79	74	69	77	72	67	63	57	54	51	43	41	40	31	30	29	23
3	79	70	64	58	71	64	58	53	51	47	44	39	36	34	28	27	25	20
4	72	63	55	50	65	57	51	46	46	41	38	35	32	30	25	24	22	18
5	67	56	49	43	60	51	44	40	41	36	33	32	29	26	23	21	20	16
6	62	50	43	38	55	46	39	35	37	33	29	29	26	23	21	19	18	15
7	57	46	38	33	51	42	35	31	34	29	26	27	23	21	20	18	16	13
8	53	42	34	29	48	38	32	27	31	26	23	24	21	19	18	16	15	12
9	49	38	31	26	44	35	29	24	28	24	21	23	19	17	17	15	14	11
10	46	35	28	24	42	32	26	22	26	22	19	21	18	16	16	14	12	10

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	7961
35°	5864	6287	7186
40°	4935	5327	6221
45°	4073	4425	5194
50°	3400	3707	4327
55°	2887	3181	3573
60°	2467	2758	2852
65°	1965	2320	1843
70°	1741	1810	1125
75°	1613	1469	688
80°	1485	1350	595
85°	1344	1239	487



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	212.5	1.9
10°-20°	552.8	4.8
20°-30°	716.1	6.3
30°-40°	701.2	6.1
40°-50°	536.7	4.7
50°-60°	357.6	3.1
60°-70°	195.2	1.7
70°-80°	81.3	0.7
80°-90°	25.6	0.2
90°-100°	579.0	5.1
100°-110°	1598.3	14.0
110°-120°	1648.4	14.4
120°-130°	1324.6	11.6
130°-140°	1041.0	9.1
140°-150°	798.4	7.0
150°-160°	573.8	5.0
160°-170°	350.9	3.1
170°-180°	118.3	1.0
0°-30°	1481.5	13.0
0°-40°	2182.7	19.1
0°-60°	3077.1	27.0
0°-90°	3379.1	29.6
90°-120°	3825.6	33.5
90°-150°	6989.6	61.2
90°-180°	8033.0	70.4
0°-180°	11411.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2317	2317	2317	2317	2317	
5°	2280	2257	2272	2277	2285	212
15°	1928	1921	1972	2026	2061	538
25°	1473	1477	1554	1621	1693	678
35°	1041	1046	1116	1192	1276	647
45°	624	636	678	730	796	487
55°	359	374	396	410	444	325
65°	180	195	212	186	169	187
75°	90	90	82	56	39	97
85°	25	25	23	15	9	28
90°	4	8	16	18	20	7
95°	85	313	1050	432	281	91
105°	285	440	1758	2685	2528	303
115°	510	617	1416	2804	3189	501
125°	700	797	1284	2172	2550	623
135°	843	934	1248	1760	1984	652
145°	977	1045	1232	1498	1612	612
155°	1102	1138	1222	1344	1387	508
165°	1193	1208	1228	1276	1286	336
175°	1236	1238	1230	1248	1244	117
180°	1236	1236	1236	1236	1236	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2317.2	2317.2	2317.2	2317.2	2317.2
2.5°	2322.9	2302.2	2307.5	2307.3	2300.9
5°	2279.6	2256.7	2271.5	2276.7	2284.7
7.5°	2195.0	2177.7	2204.6	2224.4	2240.5
10°	2129.1	2114.2	2148.4	2177.4	2198.3
12.5°	2052.7	2040.1	2082.5	2121.4	2148.6
15°	1927.8	1920.8	1972.5	2026.2	2061.0
17.5°	1794.2	1790.8	1850.1	1912.7	1957.3
20°	1703.1	1702.1	1767.1	1832.4	1884.1
22.5°	1611.2	1613.4	1681.7	1749.6	1808.4
25°	1473.3	1477.3	1553.6	1621.3	1692.9
27.5°	1345.8	1347.6	1426.5	1498.0	1574.4
30°	1258.8	1263.7	1341.1	1415.1	1494.6
32.5°	1171.7	1177.5	1253.3	1329.7	1410.9
35°	1041.2	1046.1	1116.4	1191.5	1276.0
37.5°	906.6	913.3	975.7	1046.7	1129.8
40°	819.5	829.5	884.6	951.5	1033.0
42.5°	735.7	748.1	799.2	862.7	936.2
45°	624.3	636.2	678.2	729.5	796.1
47.5°	528.3	542.0	574.3	618.5	675.3
50°	473.8	486.7	516.5	549.3	602.9
52.5°	425.8	438.7	465.3	490.5	536.2
55°	358.9	373.8	395.5	410.5	444.3
57.5°	304.0	318.3	335.5	342.3	362.8
60°	267.4	283.3	298.9	298.2	309.1
62.5°	234.1	247.6	263.1	252.4	253.0
65°	180.0	194.9	212.5	185.7	168.8
67.5°	145.4	148.6	166.7	129.5	109.4
70°	129.1	129.1	134.2	100.3	83.4
72.5°	113.7	113.7	109.0	81.5	63.9
75°	90.5	90.5	82.4	56.5	38.6
77.5°	69.8	69.0	63.0	42.2	28.1
80°	55.9	55.9	50.8	33.3	22.4
82.5°	43.7	43.7	39.5	26.0	16.7
85°	25.4	25.4	23.4	15.1	9.2
87.5°	9.7	10.5	11.3	8.4	8.0
90°	4.0	7.8	15.8	17.8	19.8
92.5°	35.6	147.8	264.3	96.4	75.2
95°	85.1	313.3	1050.3	431.7	280.9
97.5°	140.8	350.9	1555.9	1197.9	867.6
100°	182.0	373.5	1742.6	1755.0	1426.2
102.5°	221.5	399.1	1779.0	2168.4	1856.6
105°	284.8	439.6	1758.5	2684.6	2527.9
107.5°	352.1	489.8	1660.4	2933.5	2990.8
110°	399.6	523.3	1584.4	2987.1	3172.8



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	442.3	561.4	1513.2	2944.8	3218.7
115°	510.3	616.7	1416.3	2803.7	3188.6
117.5°	569.7	675.7	1352.6	2605.1	3043.0
120°	609.2	713.7	1327.3	2470.7	2911.7
122.5°	647.2	747.0	1306.7	2345.2	2762.9
125°	700.2	796.9	1283.7	2172.5	2549.7
127.5°	745.3	842.0	1270.3	2026.6	2351.9
130°	775.4	872.1	1264.0	1937.3	2233.2
132.5°	803.9	895.9	1257.6	1862.3	2130.3
135°	842.6	933.5	1248.1	1759.6	1984.0
137.5°	886.2	968.9	1243.4	1673.4	1864.9
140°	909.9	991.1	1240.2	1615.9	1784.2
142.5°	936.8	1011.8	1237.1	1564.8	1713.0
145°	977.1	1044.8	1232.3	1498.0	1612.1
147.5°	1015.9	1075.1	1228.0	1441.6	1530.2
150°	1044.4	1092.8	1226.4	1408.0	1479.6
152.5°	1066.6	1111.8	1224.8	1379.2	1438.4
155°	1101.8	1138.5	1222.4	1344.1	1386.6
157.5°	1134.2	1162.4	1222.8	1318.4	1347.4
160°	1153.2	1178.3	1224.4	1304.0	1325.3
162.5°	1169.0	1191.1	1226.0	1291.2	1307.9
165°	1192.8	1208.2	1228.4	1276.1	1285.7
167.5°	1211.0	1220.2	1230.3	1266.8	1269.9
170°	1220.4	1228.2	1230.3	1262.0	1262.0
172.5°	1228.4	1233.0	1230.3	1255.6	1254.1
175°	1236.3	1238.2	1230.3	1248.1	1244.2
177.5°	1239.4	1237.9	1229.9	1240.9	1237.9
180°	1236.3	1236.3	1236.3	1236.3	1236.3

(END OF REPORT)