

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: P519170

Luminaire Tested: **SQ4-WB-075U-050D-835-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P519170
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-8
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

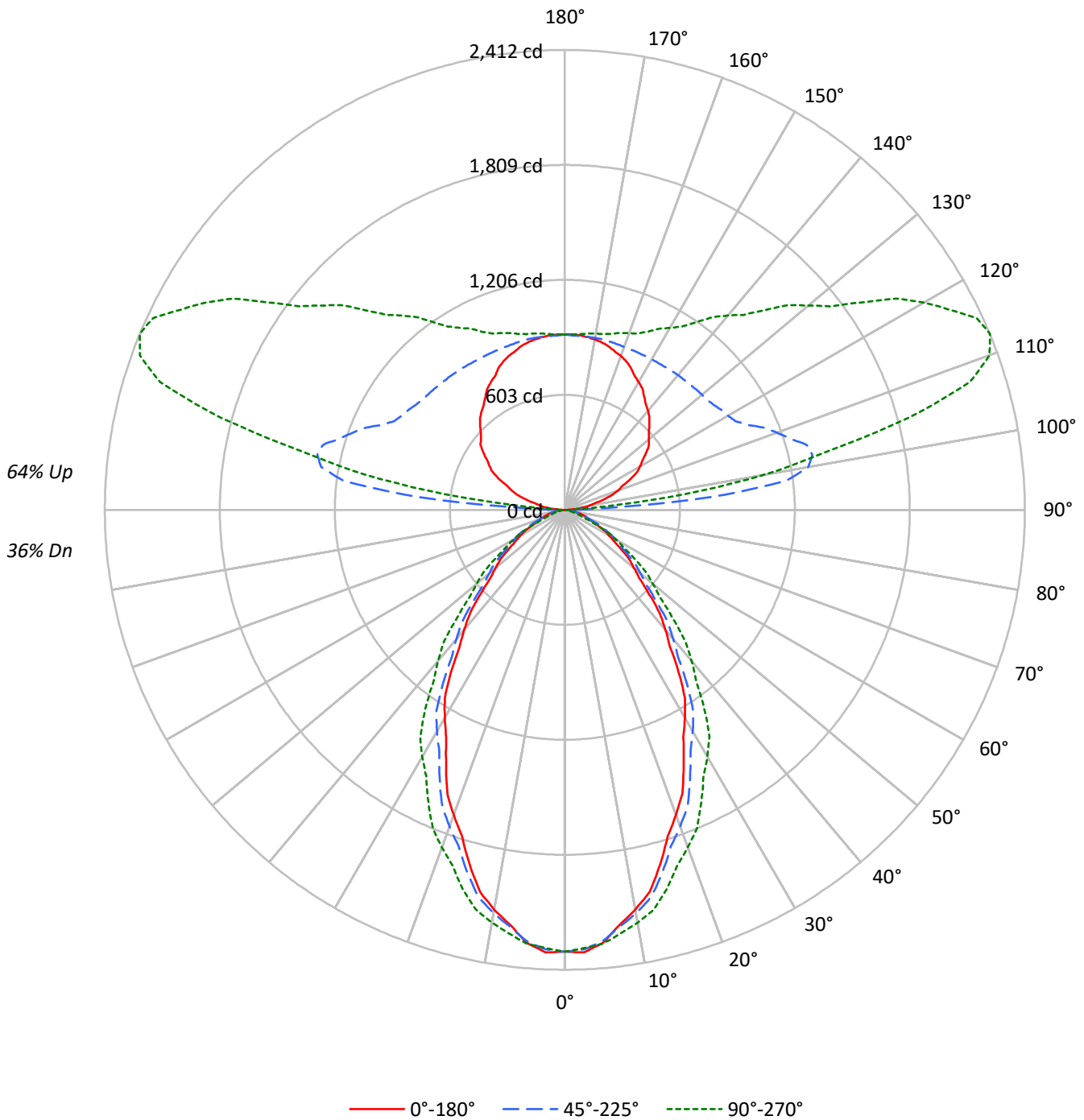
Lumens per Lamp: N/A
Luminaire Lumens: 9366.5 lumens
Efficiency: N/A
Efficacy: 130.5 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 71.8
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	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	2.3
10°-20°	552.8	5.9
20°-30°	716.1	7.6
30°-40°	701.2	7.5
40°-50°	536.7	5.7
50°-60°	357.6	3.8
60°-70°	195.2	2.1
70°-80°	81.3	0.9
80°-90°	25.4	0.3
90°-100°	433.5	4.6
100°-110°	1192.6	12.7
110°-120°	1231.0	13.1
120°-130°	986.3	10.5
130°-140°	774.7	8.3
140°-150°	593.7	6.3
150°-160°	426.8	4.6
160°-170°	261.0	2.8
170°-180°	88.0	0.9
0°-30°	1481.5	15.8
0°-40°	2182.7	23.3
0°-60°	3077.1	32.9
0°-90°	3378.9	36.1
90°-120°	2857.1	30.5
90°-150°	5211.7	55.6
90°-180°	5988.0	63.9
0°-180°	9366.5	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°	2	8	14	18	18	6
95°	64	237	767	328	209	68
105°	213	328	1314	2001	1868	225
115°	377	460	1054	2099	2382	372
125°	520	593	956	1618	1895	464
135°	628	697	929	1308	1480	484
145°	726	775	915	1115	1201	455
155°	821	848	909	1002	1031	377
165°	888	899	913	950	956	250
175°	919	921	915	927	925	87
180°	919	919	919	919	919	



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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°	9.3	10.5	10.9	8.4	7.6
90°	2.0	7.7	13.7	17.6	17.6
92.5°	27.0	115.3	199.9	76.7	63.0
95°	64.5	236.6	766.6	327.8	209.2
97.5°	105.2	262.4	1169.8	901.3	635.9
100°	134.9	278.3	1296.5	1308.6	1067.7
102.5°	163.1	297.3	1329.4	1623.5	1402.5
105°	213.2	327.9	1314.1	2001.4	1867.5
107.5°	260.9	365.6	1239.4	2186.4	2226.2
110°	295.3	390.9	1183.1	2232.4	2370.1



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	326.6	419.1	1126.8	2202.8	2412.3
115°	377.4	459.6	1054.0	2098.8	2381.8
117.5°	425.9	501.6	1007.9	1953.0	2273.1
120°	455.6	528.3	987.5	1843.8	2174.6
122.5°	482.2	554.9	973.5	1747.9	2061.9
125°	520.2	592.8	956.3	1617.7	1894.9
127.5°	556.2	625.4	944.9	1508.9	1752.2
130°	574.9	645.7	938.7	1444.3	1666.1
132.5°	596.8	667.6	934.0	1387.5	1587.9
135°	627.7	696.6	928.9	1308.3	1480.3
137.5°	656.7	720.5	924.6	1244.2	1386.1
140°	678.6	737.8	923.0	1201.7	1329.8
142.5°	697.3	752.0	919.9	1163.7	1273.4
145°	725.5	775.2	915.2	1114.7	1200.7
147.5°	755.6	798.4	912.8	1071.2	1140.1
150°	774.4	812.6	911.3	1047.4	1101.0
152.5°	791.6	826.8	909.7	1026.9	1071.2
155°	821.3	848.1	909.3	1001.9	1030.6
157.5°	842.8	864.6	909.3	981.3	1001.2
160°	858.5	875.7	909.3	970.3	985.6
162.5°	871.0	885.1	910.9	960.8	973.1
165°	887.8	899.3	913.2	950.5	956.3
167.5°	899.5	908.3	915.2	941.8	943.3
170°	907.4	913.1	915.2	938.7	938.7
172.5°	913.6	916.3	915.2	933.9	932.4
175°	919.1	921.0	915.2	926.9	925.0
177.5°	920.7	920.7	914.4	923.7	920.7
180°	919.1	919.1	919.1	919.1	919.1

(END OF REPORT)