

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: P519222

Luminaire Tested: **SQ4-WB-075U-100D-840-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P519222
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-100D-840-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 750 LUMENS PER FOOT
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

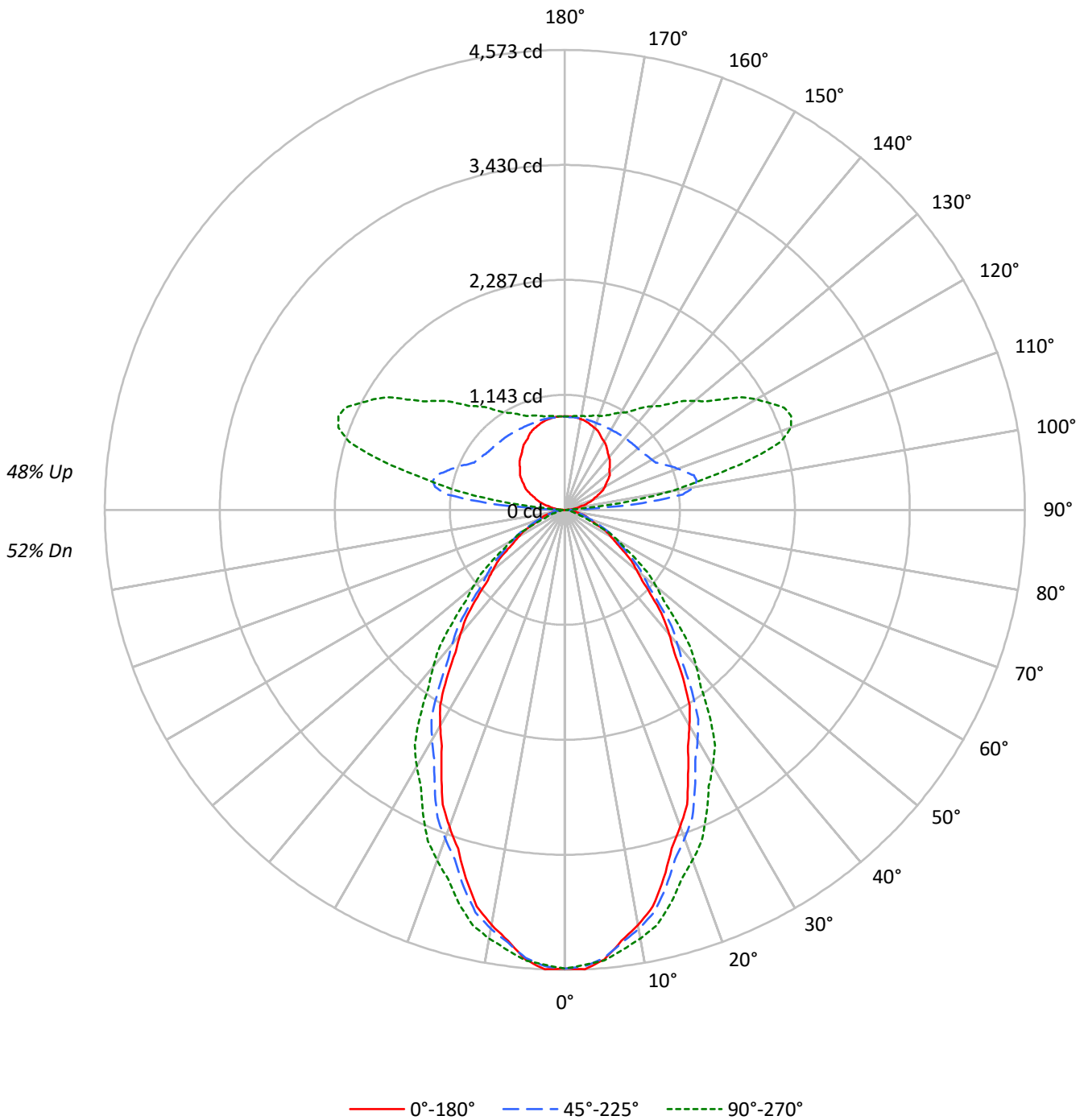
Lumens per Lamp: N/A
Luminaire Lumens: 12697.2 lumens
Efficiency: N/A
Efficacy: 117.2 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 108.3
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: P519222
CATALOG NUMBER: SQ4-WB-075U-100D-840-1D-UNV-STD-W-8

Luminous Intensity Polar Plot





TEST NUMBER: P519222

CATALOG NUMBER: SQ4-WB-075U-100D-840-1D-UNV-STD-W-8

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20					20					20					20				
RC	80					70					50					30				
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0		
RCR																				
0	108	108	108	108	100	100	100	100	85	85	85	71	71	71	58	58	58	52		
1	99	96	92	89	92	89	86	83	76	74	72	64	63	61	53	52	52	46		
2	92	85	79	75	85	79	74	70	68	65	62	58	55	53	48	47	45	41		
3	84	76	69	64	78	71	65	60	61	57	53	52	49	47	44	42	40	36		
4	78	68	61	55	72	64	57	52	55	50	47	48	44	41	40	38	36	32		
5	72	61	54	48	67	57	51	46	50	45	41	43	40	37	37	34	32	29		
6	67	56	48	43	62	52	45	41	46	41	37	40	36	33	34	31	29	26		
7	62	51	43	38	58	48	41	36	42	37	33	37	33	30	32	29	26	24		
8	58	46	39	34	54	44	37	33	39	33	30	34	30	27	29	26	24	22		
9	54	43	36	31	51	40	34	30	36	31	27	31	27	24	27	24	22	20		
10	51	39	33	28	47	37	31	27	33	28	25	29	25	22	26	23	20	18		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	21043	21043	21043
5°	20780	20706	20827
10°	19633	19811	20271
15°	18124	18545	19376
20°	16458	17077	18208
25°	14763	15567	16963
30°	13199	14063	15673
35°	11542	12376	14146
40°	9715	10487	12246
45°	8018	8709	10224
50°	6694	7297	8518
55°	5682	6262	7035
60°	4857	5430	5614
65°	3867	4566	3627
70°	3429	3563	2213
75°	3174	2889	1356
80°	2925	2659	1169
85°	2646	2435	953



TEST NUMBER: P519222

CATALOG NUMBER: SQ4-WB-075U-100D-840-1D-UNV-STD-W-8

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	418.4	3.3
10°-20°	1088.3	8.6
20°-30°	1409.6	11.1
30°-40°	1380.4	10.9
40°-50°	1056.6	8.3
50°-60°	704.1	5.5
60°-70°	384.2	3.0
70°-80°	160.1	1.3
80°-90°	47.7	0.4
90°-100°	437.9	3.4
100°-110°	1204.6	9.5
110°-120°	1243.4	9.8
120°-130°	996.2	7.8
130°-140°	782.5	6.2
140°-150°	599.6	4.7
150°-160°	431.1	3.4
160°-170°	263.6	2.1
170°-180°	88.9	0.7
0°-30°	2916.3	23.0
0°-40°	4296.7	33.8
0°-60°	6057.4	47.7
0°-90°	6649.4	52.4
90°-120°	2885.9	22.7
90°-150°	5264.2	41.5
90°-180°	6048.0	47.6
0°-180°	12697.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4562	4562	4562	4562	4562	
5°	4488	4442	4472	4482	4498	417
15°	3795	3781	3883	3989	4057	1060
25°	2900	2908	3058	3192	3333	1334
35°	2050	2059	2198	2346	2512	1274
45°	1229	1252	1335	1436	1567	958
55°	706	736	779	808	875	641
65°	354	384	418	366	332	368
75°	178	178	162	111	76	190
85°	50	50	46	30	18	54
90°	2	8	14	18	18	7
95°	65	239	774	331	211	69
105°	215	331	1327	2022	1886	227
115°	381	464	1065	2120	2406	376
125°	525	599	966	1634	1914	469
135°	634	704	938	1321	1495	489
145°	733	783	924	1126	1213	460
155°	830	857	918	1012	1041	381
165°	897	908	922	960	966	253
175°	928	930	924	936	934	88
180°	928	928	928	928	928	

TEST NUMBER: P519222

CATALOG NUMBER: SQ4-WB-075U-100D-840-1D-UNV-STD-W-8

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	4561.5	4561.5	4561.5	4561.5	4561.5
2.5°	4572.7	4532.0	4542.3	4542.0	4529.5
5°	4487.5	4442.5	4471.5	4481.8	4497.5
7.5°	4321.0	4286.9	4339.8	4378.9	4410.6
10°	4191.3	4161.9	4229.3	4286.3	4327.4
12.5°	4040.7	4016.1	4099.6	4176.1	4229.7
15°	3794.9	3781.2	3883.0	3988.7	4057.1
17.5°	3531.9	3525.3	3642.0	3765.3	3853.0
20°	3352.6	3350.6	3478.7	3607.1	3708.9
22.5°	3171.7	3176.0	3310.6	3444.1	3560.0
25°	2900.3	2908.1	3058.4	3191.7	3332.6
27.5°	2649.3	2652.8	2808.2	2948.9	3099.2
30°	2477.9	2487.7	2640.0	2785.7	2942.3
32.5°	2306.6	2317.9	2467.1	2617.7	2777.4
35°	2049.6	2059.4	2197.7	2345.6	2511.9
37.5°	1784.6	1797.9	1920.7	2060.5	2224.1
40°	1613.3	1632.8	1741.4	1873.1	2033.6
42.5°	1448.3	1472.6	1573.2	1698.2	1843.0
45°	1229.0	1252.4	1335.0	1436.1	1567.2
47.5°	1040.0	1067.0	1130.5	1217.5	1329.4
50°	932.7	958.2	1016.8	1081.2	1186.9
52.5°	838.3	863.7	915.9	965.6	1055.6
55°	706.5	735.9	778.6	808.1	874.7
57.5°	598.5	626.6	660.5	673.8	714.2
60°	526.4	557.7	588.5	586.9	608.5
62.5°	460.8	487.4	518.0	496.8	498.0
65°	354.3	383.6	418.3	365.5	332.3
67.5°	286.2	292.5	328.3	254.9	215.4
70°	254.2	254.2	264.2	197.4	164.1
72.5°	223.8	223.8	214.6	160.5	125.7
75°	178.1	178.1	162.1	111.3	76.1
77.5°	137.3	135.7	124.1	83.0	55.2
80°	110.1	110.1	100.1	65.6	44.0
82.5°	86.1	86.1	77.7	51.2	32.8
85°	50.0	50.0	46.0	29.8	18.0
87.5°	18.0	19.2	18.8	13.1	11.6
90°	2.0	7.8	13.8	17.8	17.8
92.5°	27.3	116.5	201.9	77.5	63.6
95°	65.2	239.0	774.3	331.1	211.3
97.5°	106.3	265.0	1181.6	910.4	642.3
100°	136.3	281.1	1309.6	1321.8	1078.5
102.5°	164.7	300.3	1342.7	1639.9	1416.6
105°	215.3	331.2	1327.3	2021.5	1886.3
107.5°	263.5	369.3	1251.9	2208.4	2248.6
110°	298.3	394.8	1195.0	2254.9	2394.0

TEST NUMBER: P519222

CATALOG NUMBER: SQ4-WB-075U-100D-840-1D-UNV-STD-W-8

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	329.9	423.3	1138.1	2224.9	2436.6
115°	381.2	464.3	1064.6	2120.0	2405.8
117.5°	430.2	506.7	1018.0	1972.7	2296.0
120°	460.2	533.6	997.5	1862.3	2196.4
122.5°	487.1	560.5	983.3	1765.5	2082.7
125°	525.4	598.8	965.9	1633.9	1914.0
127.5°	561.7	631.7	954.4	1524.1	1769.8
130°	580.7	652.2	948.1	1458.8	1682.9
132.5°	602.8	674.3	943.4	1401.5	1603.9
135°	634.0	703.6	938.2	1321.4	1495.2
137.5°	663.3	727.8	933.9	1256.7	1400.0
140°	685.4	745.3	932.3	1213.7	1343.1
142.5°	704.4	759.6	929.1	1175.4	1286.3
145°	732.8	783.0	924.4	1125.9	1212.8
147.5°	763.2	806.5	922.0	1082.0	1151.5
150°	782.2	820.8	920.4	1058.0	1112.0
152.5°	799.6	835.1	918.9	1037.2	1082.0
155°	829.6	856.6	918.5	1012.0	1040.9
157.5°	851.3	873.3	918.5	991.2	1011.3
160°	867.1	884.5	918.5	980.1	995.5
162.5°	879.8	894.0	920.1	970.5	982.9
165°	896.7	908.3	922.4	960.1	965.9
167.5°	908.6	917.5	924.4	951.3	952.8
170°	916.5	922.3	924.4	948.1	948.1
172.5°	922.8	925.5	924.4	943.3	941.8
175°	928.3	930.3	924.4	936.2	934.3
177.5°	929.9	929.9	923.6	933.0	929.9
180°	928.3	928.3	928.3	928.3	928.3

(END OF REPORT)