

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: P519218

Luminaire Tested: **SQ4-WB-075U-100D-835-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P519218
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-835-1D-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: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

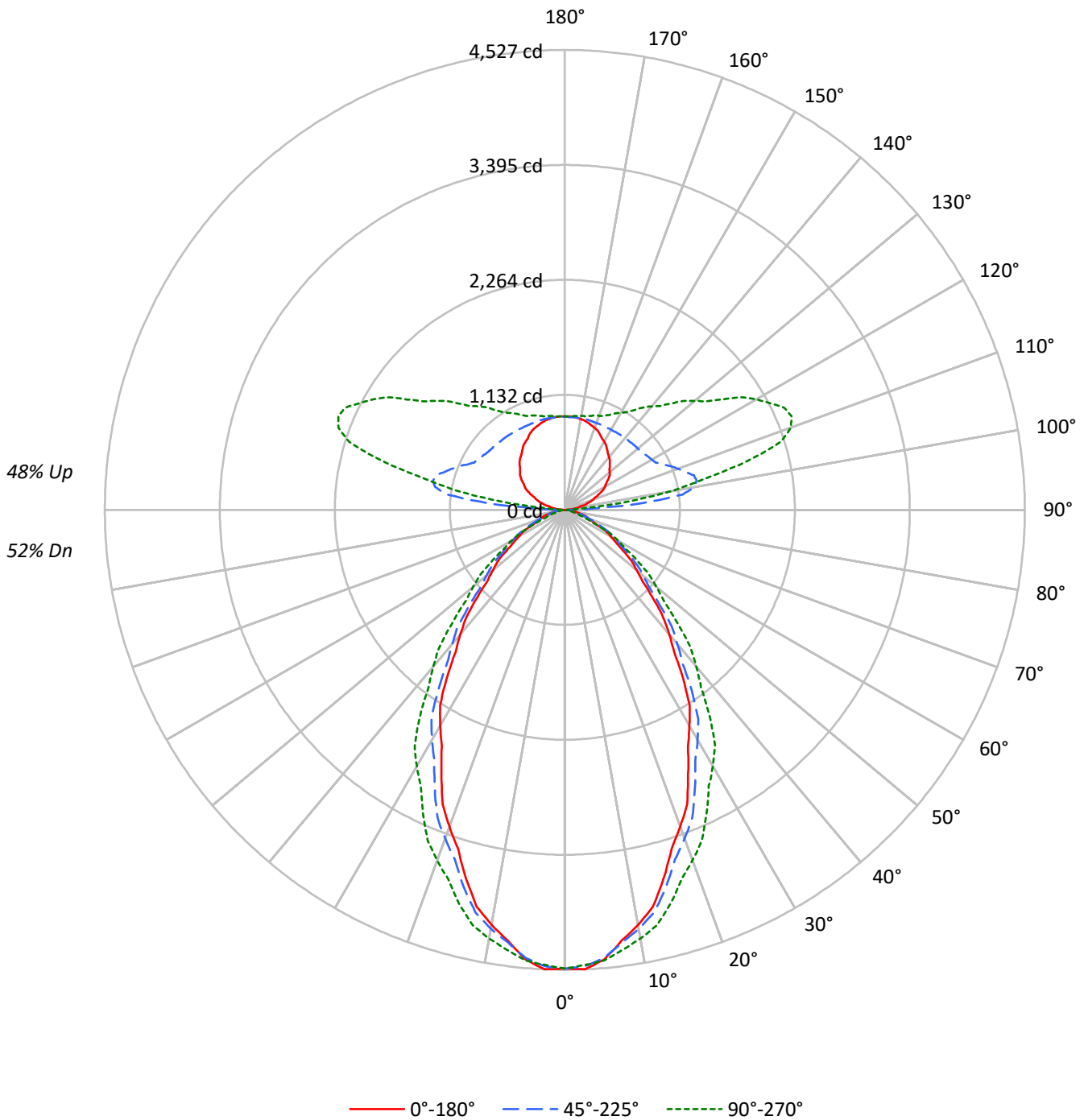
Lumens per Lamp: N/A
Luminaire Lumens: 12570.7 lumens
Efficiency: N/A
Efficacy: 116.1 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: General Diffuse

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



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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	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°	20833	20833	20833
5°	20573	20500	20619
10°	19437	19613	20068
15°	17943	18360	19183
20°	16294	16907	18026
25°	14615	15412	16794
30°	13068	13923	15517
35°	11428	12253	14005
40°	9618	10382	12124
45°	7938	8623	10122
50°	6627	7225	8433
55°	5626	6199	6965
60°	4809	5375	5558
65°	3828	4521	3590
70°	3395	3528	2192
75°	3144	2861	1342
80°	2896	2633	1158
85°	2620	2414	942



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	414.2	3.3
10°-20°	1077.4	8.6
20°-30°	1395.6	11.1
30°-40°	1366.6	10.9
40°-50°	1046.1	8.3
50°-60°	697.1	5.5
60°-70°	380.4	3.0
70°-80°	158.5	1.3
80°-90°	47.2	0.4
90°-100°	433.5	3.4
100°-110°	1192.6	9.5
110°-120°	1231.0	9.8
120°-130°	986.3	7.8
130°-140°	774.7	6.2
140°-150°	593.7	4.7
150°-160°	426.8	3.4
160°-170°	261.0	2.1
170°-180°	88.0	0.7
0°-30°	2887.3	23.0
0°-40°	4253.9	33.8
0°-60°	5997.0	47.7
0°-90°	6583.1	52.4
90°-120°	2857.1	22.7
90°-150°	5211.7	41.5
90°-180°	5988.0	47.6
0°-180°	12570.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4516	4516	4516	4516	4516	
5°	4443	4398	4427	4437	4453	413
15°	3757	3744	3844	3949	4017	1049
25°	2871	2879	3028	3160	3299	1320
35°	2029	2039	2176	2322	2487	1262
45°	1217	1240	1322	1422	1552	949
55°	700	729	771	800	866	634
65°	351	380	414	362	329	365
75°	176	176	160	110	75	188
85°	50	50	46	30	18	54
90°	2	8	14	18	18	7
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°	4516.1	4516.1	4516.1	4516.1	4516.1
2.5°	4527.2	4486.9	4497.1	4496.8	4484.4
5°	4442.8	4398.2	4426.9	4437.2	4452.7
7.5°	4277.9	4244.2	4296.5	4335.3	4366.7
10°	4149.5	4120.4	4187.1	4243.6	4284.2
12.5°	4000.5	3976.1	4058.7	4134.5	4187.5
15°	3757.1	3743.6	3844.3	3948.9	4016.7
17.5°	3496.8	3490.2	3605.7	3727.8	3814.6
20°	3319.2	3317.3	3444.0	3571.2	3671.9
22.5°	3140.1	3144.3	3277.6	3409.8	3524.5
25°	2871.4	2879.1	3027.9	3159.9	3299.4
27.5°	2622.9	2626.4	2780.2	2919.5	3068.3
30°	2453.2	2462.9	2613.7	2758.0	2913.0
32.5°	2283.6	2294.8	2442.5	2591.6	2749.7
35°	2029.2	2038.9	2175.8	2322.2	2486.9
37.5°	1766.8	1780.0	1901.6	2040.0	2202.0
40°	1597.2	1616.6	1724.0	1854.4	2013.3
42.5°	1433.9	1457.9	1557.5	1681.3	1824.7
45°	1216.7	1240.0	1321.7	1421.8	1551.6
47.5°	1029.6	1056.4	1119.2	1205.4	1316.2
50°	923.4	948.6	1006.7	1070.5	1175.1
52.5°	829.9	855.1	906.8	956.0	1045.1
55°	699.5	728.6	770.8	800.1	866.0
57.5°	592.5	620.4	653.9	667.1	707.0
60°	521.2	552.2	582.6	581.1	602.4
62.5°	456.2	482.5	512.8	491.9	493.0
65°	350.7	379.8	414.2	361.9	328.9
67.5°	283.4	289.6	325.0	252.4	213.2
70°	251.7	251.7	261.6	195.4	162.5
72.5°	221.5	221.5	212.4	158.9	124.4
75°	176.4	176.4	160.5	110.2	75.3
77.5°	135.9	134.4	122.9	82.2	54.7
80°	109.0	109.0	99.1	64.9	43.6
82.5°	85.2	85.2	76.9	50.7	32.5
85°	49.5	49.5	45.6	29.5	17.8
87.5°	17.8	19.0	18.6	13.0	11.4
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)