

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: P519401

Luminaire Tested: **SQ4-WB-100U-075D-940-1D-UNV-STD-W-6**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P519401
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-940-1D-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: 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

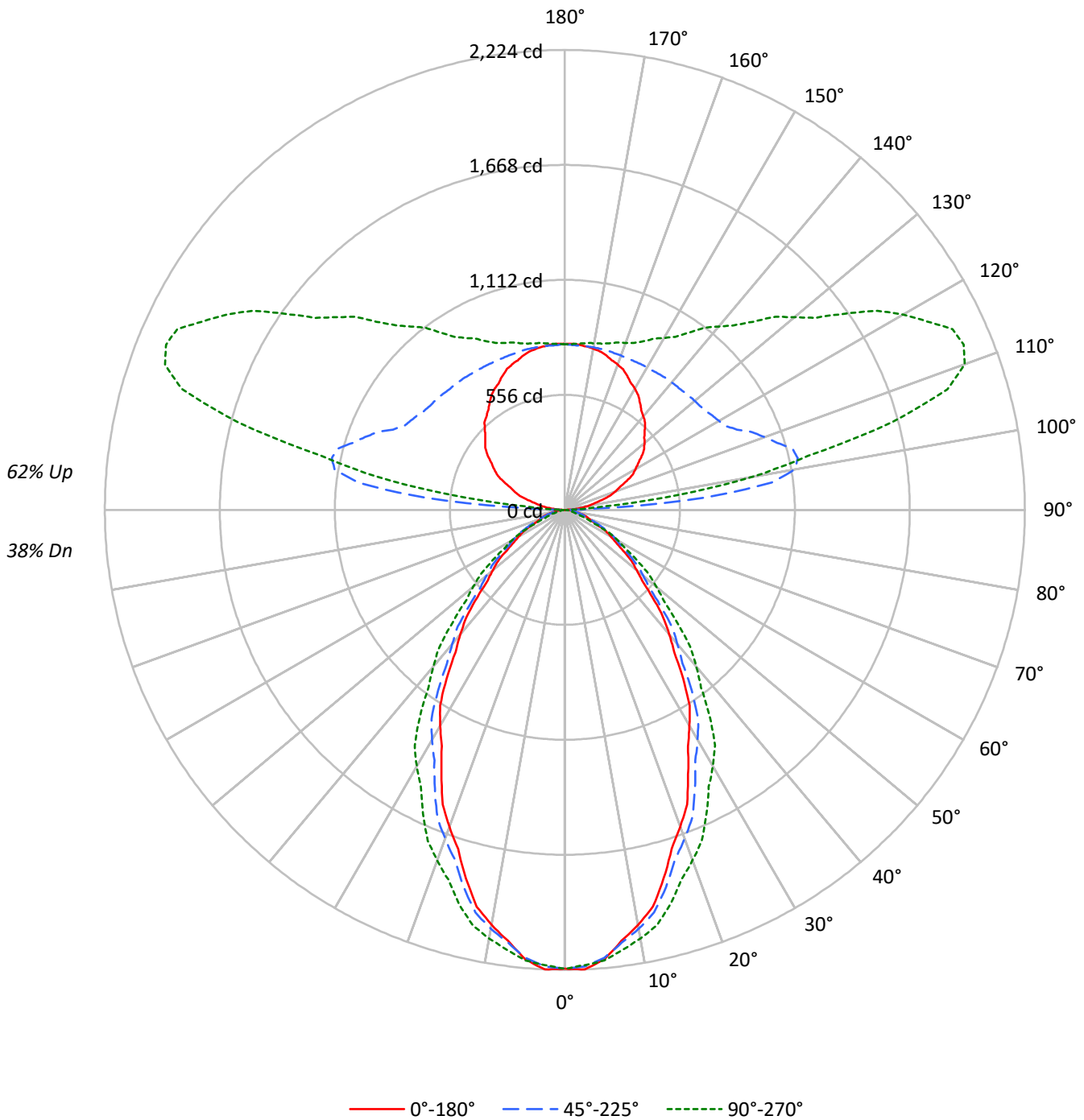
Lumens per Lamp: N/A
Luminaire Lumens: 8443.0 lumens
Efficiency: N/A
Efficacy: 108.2 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: Semi-Indirect

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°	13647	13647	13647
5°	13477	13429	13508
10°	12733	12849	13147
15°	11754	12027	12567
20°	10674	11076	11809
25°	9574	10097	11001
30°	8560	9121	10165
35°	7486	8027	9175
40°	6301	6801	7943
45°	5200	5649	6631
50°	4341	4733	5524
55°	3686	4061	4563
60°	3150	3521	3641
65°	2508	2962	2352
70°	2223	2311	1435
75°	2060	1875	879
80°	1895	1725	758
85°	1715	1581	621



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	203.5	2.4
10°-20°	529.4	6.3
20°-30°	685.7	8.1
30°-40°	671.5	8.0
40°-50°	513.9	6.1
50°-60°	342.5	4.1
60°-70°	186.9	2.2
70°-80°	77.9	0.9
80°-90°	23.7	0.3
90°-100°	375.4	4.4
100°-110°	1036.3	12.3
110°-120°	1068.7	12.7
120°-130°	858.8	10.2
130°-140°	674.9	8.0
140°-150°	517.7	6.1
150°-160°	372.0	4.4
160°-170°	227.5	2.7
170°-180°	76.7	0.9
0°-30°	1418.6	16.8
0°-40°	2090.0	24.8
0°-60°	2946.4	34.9
0°-90°	3234.9	38.3
90°-120°	2480.4	29.4
90°-150°	4531.8	53.7
90°-180°	5208.0	61.7
0°-180°	8443.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2219	2219	2219	2219	2219	
5°	2183	2161	2175	2180	2188	203
15°	1846	1839	1889	1940	1974	515
25°	1411	1415	1488	1552	1621	649
35°	997	1002	1069	1141	1222	620
45°	598	609	649	698	762	466
55°	344	358	379	393	426	312
65°	172	187	204	178	162	179
75°	87	87	79	54	37	92
85°	24	24	22	14	9	27
90°	3	5	10	12	13	5
95°	55	203	681	280	182	59
105°	185	285	1140	1741	1639	196
115°	331	400	918	1818	2067	325
125°	454	517	832	1409	1653	404
135°	546	605	809	1141	1286	423
145°	634	677	799	971	1045	397
155°	714	738	793	871	899	329
165°	773	783	796	827	834	218
175°	802	803	798	809	807	76
180°	802	802	802	802	802	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2218.8	2218.8	2218.8	2218.8	2218.8
2.5°	2224.3	2204.5	2209.5	2209.4	2203.3
5°	2182.8	2160.9	2175.0	2180.1	2187.7
7.5°	2101.8	2085.2	2111.0	2130.0	2145.4
10°	2038.7	2024.4	2057.2	2084.9	2104.9
12.5°	1965.5	1953.5	1994.1	2031.3	2057.4
15°	1845.9	1839.3	1888.8	1940.2	1973.5
17.5°	1718.0	1714.8	1771.6	1831.5	1874.2
20°	1630.8	1629.8	1692.1	1754.6	1804.1
22.5°	1542.8	1544.9	1610.3	1675.3	1731.6
25°	1410.7	1414.6	1487.7	1552.5	1621.0
27.5°	1288.7	1290.4	1366.0	1434.4	1507.5
30°	1205.3	1210.1	1284.2	1355.0	1431.2
32.5°	1122.0	1127.5	1200.1	1273.3	1351.0
35°	997.0	1001.7	1069.0	1141.0	1221.9
37.5°	868.1	874.5	934.3	1002.3	1081.9
40°	784.7	794.2	847.0	911.1	989.2
42.5°	704.5	716.3	765.3	826.0	896.5
45°	597.8	609.2	649.4	698.5	762.3
47.5°	505.9	519.0	549.9	592.2	646.7
50°	453.7	466.1	494.6	525.9	577.3
52.5°	407.7	420.1	445.5	469.7	513.5
55°	343.7	358.0	378.7	393.1	425.5
57.5°	291.1	304.8	321.3	327.8	347.4
60°	256.1	271.3	286.2	285.5	296.0
62.5°	224.1	237.1	252.0	241.7	242.2
65°	172.3	186.6	203.5	177.8	161.6
67.5°	139.2	142.3	159.7	124.0	104.8
70°	123.6	123.6	128.5	96.0	79.8
72.5°	108.8	108.8	104.4	78.1	61.1
75°	86.7	86.7	78.9	54.1	37.0
77.5°	66.8	66.0	60.4	40.4	26.9
80°	53.5	53.5	48.7	31.9	21.4
82.5°	41.9	41.9	37.8	24.9	16.0
85°	24.3	24.3	22.4	14.5	8.8
87.5°	9.1	9.6	9.8	7.0	6.5
90°	2.6	5.1	10.3	11.6	12.8
92.5°	23.1	95.8	171.3	62.5	48.7
95°	55.1	203.1	681.0	279.9	182.1
97.5°	91.3	227.5	1008.8	776.7	562.5
100°	118.0	242.1	1129.9	1137.8	924.7
102.5°	143.6	258.8	1153.5	1405.9	1203.7
105°	184.7	285.0	1140.1	1740.6	1639.0
107.5°	228.3	317.6	1076.5	1902.0	1939.1
110°	259.1	339.3	1027.3	1936.7	2057.1



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	286.8	364.0	981.1	1909.3	2086.8
115°	330.9	399.8	918.3	1817.8	2067.4
117.5°	369.4	438.1	877.0	1689.1	1973.0
120°	395.0	462.7	860.5	1601.9	1887.8
122.5°	419.6	484.3	847.2	1520.5	1791.4
125°	454.0	516.7	832.3	1408.6	1653.1
127.5°	483.2	545.9	823.6	1313.9	1524.9
130°	502.7	565.4	819.5	1256.1	1447.9
132.5°	521.2	580.9	815.4	1207.4	1381.2
135°	546.3	605.3	809.2	1140.9	1286.3
137.5°	574.6	628.2	806.2	1085.0	1209.1
140°	589.9	642.6	804.1	1047.7	1156.8
142.5°	607.4	656.0	802.1	1014.6	1110.6
145°	633.5	677.4	799.0	971.2	1045.2
147.5°	658.7	697.1	796.2	934.7	992.1
150°	677.1	708.5	795.1	912.9	959.3
152.5°	691.5	720.9	794.1	894.2	932.6
155°	714.3	738.2	792.6	871.4	899.0
157.5°	735.4	753.7	792.8	854.8	873.6
160°	747.7	764.0	793.9	845.5	859.3
162.5°	757.9	772.2	794.9	837.2	848.0
165°	773.3	783.4	796.4	827.3	833.6
167.5°	785.1	791.2	797.7	821.3	823.4
170°	791.3	796.3	797.7	818.2	818.2
172.5°	796.4	799.4	797.7	814.1	813.1
175°	801.5	802.8	797.7	809.2	806.7
177.5°	803.6	802.6	797.4	804.6	802.6
180°	801.5	801.5	801.5	801.5	801.5

(END OF REPORT)