

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: P519410

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

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P519410  
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-100D-835-1D-UNV-STD-W-8  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE  
DOWNLIGHT 1000 LUMENS PER FOOT  
UPLIGHT 1000 LUMENS PER FOOT  
Light Source: 3500K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

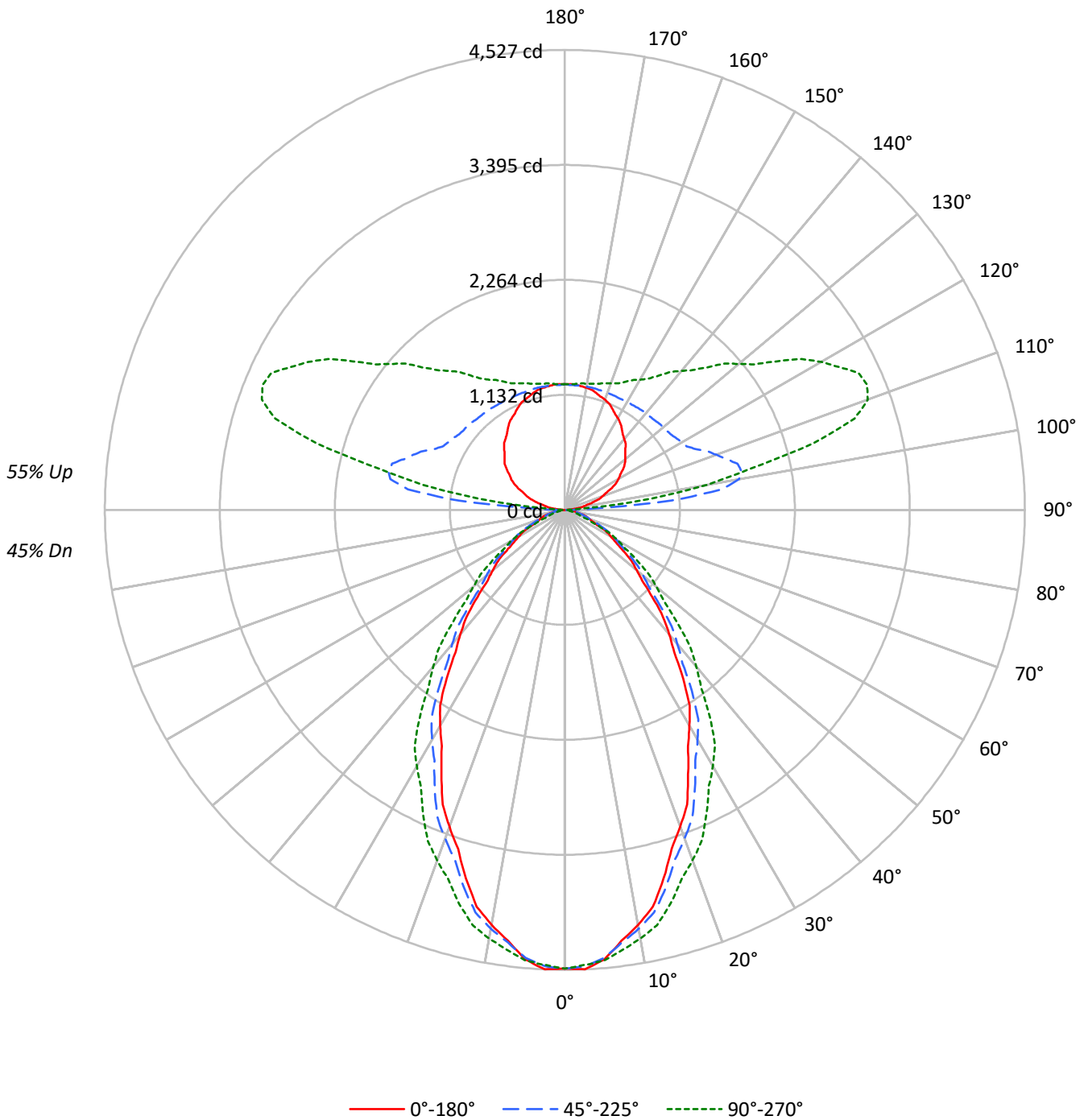
Lumens per Lamp: N/A  
Luminaire Lumens: 14616.0 lumens  
Efficiency: N/A  
Efficacy: 120.6 lumens/watt  
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02  
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')  
CIE Type: General Diffuse

Input Watts (W): 121.2  
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	106	106	106	106	97	97	97	97	81	81	81	65	65	65	52	52	52	45
1	98	94	90	87	89	86	83	81	72	70	68	59	58	56	47	46	46	40
2	90	83	78	73	82	77	72	68	64	61	58	53	51	49	43	41	40	35
3	83	74	67	62	76	68	63	58	58	54	50	48	45	43	39	37	35	31
4	76	66	59	54	70	61	55	50	52	47	44	44	40	37	36	33	31	28
5	70	60	52	47	65	55	49	44	47	42	39	40	36	33	33	30	28	25
6	65	54	46	41	60	50	44	39	43	38	34	36	33	30	30	27	25	22
7	61	49	42	36	56	46	39	34	39	34	31	33	30	27	28	25	23	20
8	56	45	38	33	52	42	35	31	36	31	28	31	27	24	26	23	21	19
9	53	41	34	29	49	39	32	28	33	28	25	29	25	22	24	21	19	17
10	49	38	31	27	46	36	29	25	31	26	23	27	23	20	22	20	18	16

**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	2.8
10°-20°	1077.4	7.4
20°-30°	1395.6	9.5
30°-40°	1366.6	9.4
40°-50°	1046.1	7.2
50°-60°	697.1	4.8
60°-70°	380.4	2.6
70°-80°	158.5	1.1
80°-90°	47.4	0.3
90°-100°	579.0	4.0
100°-110°	1598.3	10.9
110°-120°	1648.4	11.3
120°-130°	1324.6	9.1
130°-140°	1041.0	7.1
140°-150°	798.4	5.5
150°-160°	573.8	3.9
160°-170°	350.9	2.4
170°-180°	118.3	0.8
0°-30°	2887.3	19.8
0°-40°	4253.9	29.1
0°-60°	5997.0	41.0
0°-90°	6583.3	45.0
90°-120°	3825.6	26.2
90°-150°	6989.6	47.8
90°-180°	8033.0	55.0
0°-180°	14616.0	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°	4	8	16	18	20	8
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°	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°	18.2	19.0	19.0	13.0	11.9
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)