

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: P519159

Luminaire Tested: **SQ4-WB-050U-125D-940-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P519159  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-21, 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-050U-125D-940-1D-UNV-STD-W-12  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE  
DOWNLIGHT 1250 LUMENS PER FOOT  
UPLIGHT 500 LUMENS PER FOOT  
Light Source: 4000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

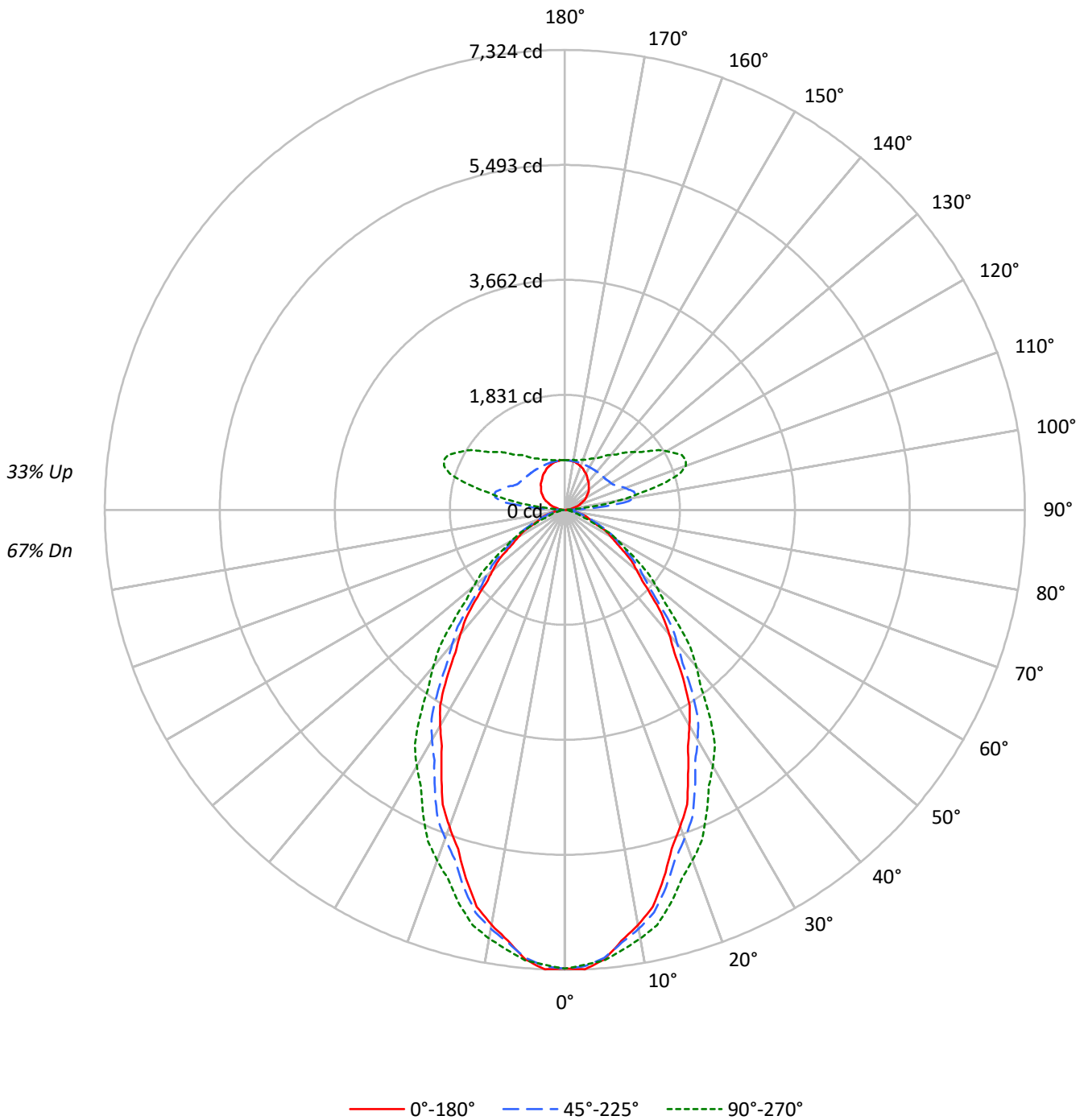
Lumens per Lamp: N/A  
Luminaire Lumens: 15814.9 lumens  
Efficiency: N/A  
Efficacy: 94.7 lumens/watt  
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02  
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')  
CIE Type: Semi-Direct

Input Watts (W): 167  
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									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	50	30	10	50	30	10	50	30	10	50	30	10	0																
RCR	0	111	111	111	111	105	105	105	105	93	93	93	82	82	82	72	72	72	67	67	67	67	67	67	67	67	67	67	67	67																
	1	103	99	96	93	97	94	91	88	84	82	80	75	73	71	66	65	64	60	60	60	60	60	60	60	60	60	60	60	60																
	2	95	89	83	79	90	84	79	75	75	72	69	67	65	62	60	58	56	53	53	53	53	53	53	53	53	53	53	53	53																
	3	88	79	73	67	83	75	70	65	68	63	60	61	58	55	55	52	50	47	47	47	47	47	47	47	47	47	47	47	47																
	4	81	72	64	59	77	68	62	57	62	57	52	56	52	48	50	47	44	41	41	41	41	41	41	41	41	41	41	41	41																
	5	76	65	57	52	71	62	55	50	56	51	47	51	47	43	46	43	40	37	37	37	37	37	37	37	37	37	37	37	37																
	6	70	59	51	46	66	56	49	44	51	46	42	47	42	39	42	39	36	34	34	34	34	34	34	34	34	34	34	34	34																
	7	65	54	46	41	62	52	45	40	47	42	38	43	39	35	39	36	33	31	31	31	31	31	31	31	31	31	31	31	31																
	8	61	50	42	37	58	48	41	36	44	38	34	40	35	32	37	33	30	28	28	28	28	28	28	28	28	28	28	28	28																
	9	57	46	39	34	54	44	37	33	40	35	31	37	33	29	34	30	28	26	26	26	26	26	26	26	26	26	26	26	26																
	10	54	42	36	31	51	41	34	30	38	32	29	35	30	27	32	28	25	24	24	24	24	24	24	24	24	24	24	24	24																

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	22468	22468	22468
5°	22188	22109	22238
10°	20963	21153	21644
15°	19352	19801	20689
20°	17573	18235	19441
25°	15762	16622	18112
30°	14094	15016	16735
35°	12324	13215	15105
40°	10373	11197	13076
45°	8561	9300	10917
50°	7148	7792	9095
55°	6067	6686	7511
60°	5186	5797	5994
65°	4129	4876	3873
70°	3661	3805	2364
75°	3390	3086	1447
80°	3122	2839	1249
85°	2826	2601	1020



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	670.1	4.2
10°-20°	1743.0	11.0
20°-30°	2257.7	14.3
30°-40°	2210.9	14.0
40°-50°	1692.3	10.7
50°-60°	1127.6	7.1
60°-70°	615.3	3.9
70°-80°	256.4	1.6
80°-90°	75.6	0.5
90°-100°	379.8	2.4
100°-110°	1031.8	6.5
110°-120°	1060.8	6.7
120°-130°	848.2	5.4
130°-140°	666.4	4.2
140°-150°	511.0	3.2
150°-160°	367.5	2.3
160°-170°	224.7	1.4
170°-180°	75.7	0.5
0°-30°	4670.8	29.5
0°-40°	6881.7	43.5
0°-60°	9701.6	61.3
0°-90°	10649.0	67.3
90°-120°	2472.4	15.6
90°-150°	4498.0	28.4
90°-180°	5166.0	32.7
0°-180°	15814.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	7306	7306	7306	7306	7306	
5°	7187	7115	7162	7178	7203	669
15°	6078	6056	6219	6388	6498	1697
25°	4645	4658	4898	5112	5338	2136
35°	3283	3298	3520	3757	4023	2041
45°	1968	2006	2138	2300	2510	1535
55°	1132	1179	1247	1294	1401	1026
65°	567	614	670	585	532	590
75°	285	285	260	178	122	305
85°	80	80	74	48	29	87
90°	2	10	18	23	23	8
95°	56	208	661	288	193	59
105°	183	285	1135	1728	1626	195
115°	326	395	908	1807	2058	321
125°	448	510	822	1384	1633	399
135°	539	599	799	1128	1272	417
145°	623	668	789	958	1030	391
155°	705	730	784	860	885	325
165°	763	773	786	819	822	215
175°	791	794	789	799	796	75
180°	791	791	791	791	791	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	7305.8	7305.8	7305.8	7305.8	7305.8
2.5°	7323.8	7258.6	7275.1	7274.6	7254.6
5°	7187.2	7115.1	7161.6	7178.2	7203.3
7.5°	6920.5	6866.0	6950.7	7013.4	7064.1
10°	6712.8	6665.8	6773.7	6865.0	6930.8
12.5°	6471.7	6432.2	6566.0	6688.5	6774.3
15°	6078.1	6056.1	6219.1	6388.3	6498.0
17.5°	5656.8	5646.2	5833.1	6030.6	6171.0
20°	5369.6	5366.5	5571.6	5777.2	5940.2
22.5°	5079.8	5086.7	5302.3	5516.1	5701.7
25°	4645.1	4657.6	4898.3	5111.8	5337.5
27.5°	4243.1	4248.7	4497.6	4723.0	4963.7
30°	3968.7	3984.4	4228.4	4461.7	4712.4
32.5°	3694.3	3712.5	3951.4	4192.5	4448.3
35°	3282.7	3298.3	3519.9	3756.8	4023.2
37.5°	2858.2	2879.5	3076.2	3300.2	3562.2
40°	2583.8	2615.2	2789.0	3000.0	3257.0
42.5°	2319.7	2358.5	2519.7	2719.9	2951.8
45°	1968.3	2005.9	2138.2	2300.1	2510.1
47.5°	1665.7	1709.0	1810.6	1949.9	2129.2
50°	1493.9	1534.6	1628.5	1731.7	1901.0
52.5°	1342.6	1383.3	1466.9	1546.5	1690.7
55°	1131.6	1178.6	1247.0	1294.3	1400.9
57.5°	958.5	1003.6	1057.9	1079.2	1143.8
60°	843.1	893.3	942.5	940.1	974.5
62.5°	738.0	780.6	829.6	795.7	797.6
65°	567.4	614.4	670.0	585.4	532.2
67.5°	458.4	468.4	525.7	408.3	344.9
70°	407.1	407.1	423.2	316.2	262.9
72.5°	358.4	358.4	343.7	257.1	201.3
75°	285.3	285.3	259.7	178.2	121.8
77.5°	219.9	217.4	198.8	133.0	88.5
80°	176.3	176.3	160.3	105.0	70.5
82.5°	137.8	137.8	124.4	82.0	52.6
85°	80.1	80.1	73.7	47.7	28.9
87.5°	28.7	30.2	29.2	19.9	17.4
90°	2.5	10.0	17.8	22.9	22.9
92.5°	22.9	104.0	180.6	77.6	65.6
95°	56.0	207.7	661.4	287.9	193.3
97.5°	92.6	229.4	1014.0	788.9	554.1
100°	117.0	243.9	1121.9	1137.3	918.4
102.5°	141.4	258.4	1150.4	1406.5	1213.5
105°	183.2	285.2	1134.6	1727.6	1625.6
107.5°	226.4	316.5	1069.0	1893.4	1921.8
110°	256.9	339.0	1020.2	1926.1	2047.9

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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	283.4	361.5	971.3	1899.0	2082.5
115°	325.6	395.3	908.2	1806.9	2058.1
117.5°	365.3	432.0	868.0	1676.3	1959.4
120°	391.8	456.5	849.7	1588.8	1869.9
122.5°	414.2	478.8	837.5	1501.0	1772.2
125°	447.7	509.9	821.7	1384.5	1633.3
127.5°	477.8	539.5	813.1	1296.2	1509.6
130°	496.1	555.8	809.0	1240.8	1432.3
132.5°	514.4	574.1	804.9	1193.4	1363.1
135°	539.3	599.0	798.8	1127.7	1272.0
137.5°	566.3	620.5	795.8	1069.7	1191.1
140°	582.6	634.8	793.7	1032.8	1142.3
142.5°	598.9	647.1	791.7	1003.9	1095.5
145°	623.3	668.1	788.6	958.2	1030.3
147.5°	650.8	689.1	786.1	922.2	978.9
150°	669.1	701.4	786.1	901.6	946.4
152.5°	683.3	711.7	784.1	883.1	919.9
155°	704.7	729.6	783.6	860.4	885.3
157.5°	725.6	745.0	783.6	845.0	864.0
160°	737.8	755.2	783.6	834.8	849.7
162.5°	750.0	763.4	785.6	826.5	837.5
165°	763.2	773.2	786.1	819.2	821.7
167.5°	776.9	781.9	788.6	810.6	812.6
170°	781.0	786.0	788.6	806.5	806.5
172.5°	785.1	788.1	788.6	802.4	802.4
175°	791.2	793.7	788.6	798.8	796.3
177.5°	793.2	793.2	787.1	795.2	791.2
180°	791.2	791.2	791.2	791.2	791.2

(END OF REPORT)