

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: P519111

Luminaire Tested: **SQ4-WB-050U-075D-940-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P519111  
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-075D-940-1D-UNV-STD-W-12  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE  
DOWNLIGHT 750 LUMENS PER FOOT  
UPLIGHT 500 LUMENS PER FOOT  
Light Source: 4000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

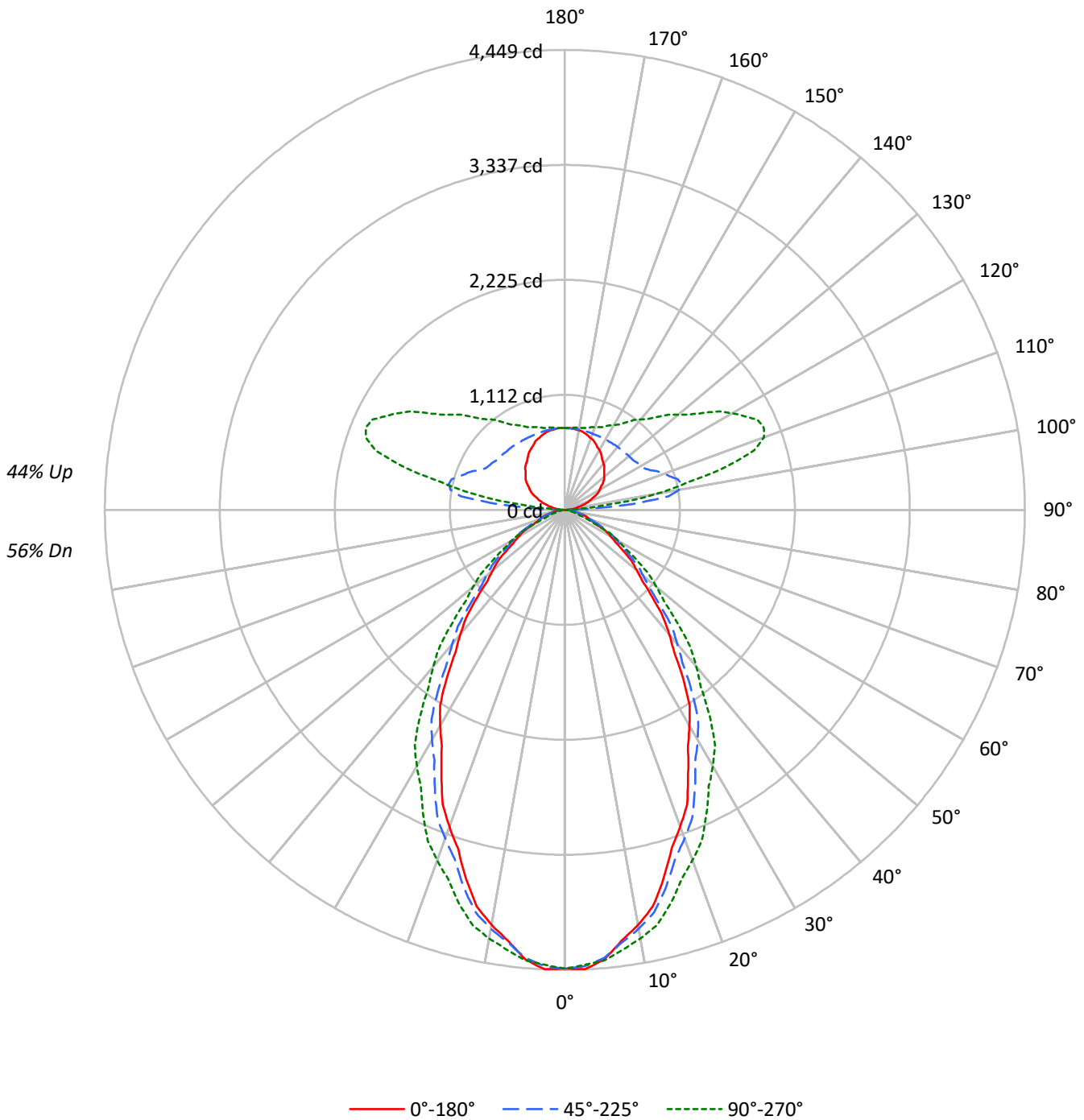
Lumens per Lamp: N/A  
Luminaire Lumens: 11635.4 lumens  
Efficiency: N/A  
Efficacy: 110.2 lumens/watt  
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02  
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')  
CIE Type: General Diffuse

Input Watts (W): 105.6  
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	101	101	101	101	86	86	86	73	73	73	61	61	61	56
1	100	96	93	90	93	90	87	84	78	76	74	66	65	64	56	55	54	49
2	92	86	80	76	86	80	75	71	70	66	63	60	57	55	51	49	48	43
3	85	77	70	65	79	72	66	61	63	58	55	54	51	48	46	44	42	38
4	79	69	62	56	73	65	58	53	57	52	48	49	46	43	42	40	38	34
5	73	62	55	49	68	58	52	47	51	46	42	45	41	38	39	36	34	31
6	68	56	49	43	63	53	46	41	47	42	38	41	37	34	36	33	30	28
7	63	51	44	39	59	49	42	37	43	38	34	38	34	31	33	30	28	25
8	59	47	40	35	55	45	38	33	40	34	31	35	31	28	31	28	25	23
9	55	43	36	31	51	41	35	30	37	32	28	33	29	26	29	26	23	21
10	52	40	33	29	48	38	32	28	34	29	26	30	26	23	27	24	21	20

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

	0°	45°	90°
0°	13648	13648	13648
5°	13477	13429	13508
10°	12733	12849	13147
15°	11755	12027	12567
20°	10674	11076	11809
25°	9574	10096	11002
30°	8560	9121	10165
35°	7486	8027	9175
40°	6301	6801	7943
45°	5200	5649	6631
50°	4341	4733	5525
55°	3686	4062	4562
60°	3150	3521	3641
65°	2508	2962	2352
70°	2224	2311	1436
75°	2059	1874	879
80°	1897	1725	758
85°	1718	1581	618



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	407.0	3.5
10°-20°	1058.7	9.1
20°-30°	1371.4	11.8
30°-40°	1342.9	11.5
40°-50°	1027.9	8.8
50°-60°	685.0	5.9
60°-70°	373.8	3.2
70°-80°	155.7	1.3
80°-90°	47.1	0.4
90°-100°	379.8	3.3
100°-110°	1031.8	8.9
110°-120°	1060.8	9.1
120°-130°	848.2	7.3
130°-140°	666.4	5.7
140°-150°	511.0	4.4
150°-160°	367.5	3.2
160°-170°	224.7	1.9
170°-180°	75.7	0.7
0°-30°	2837.1	24.4
0°-40°	4180.0	35.9
0°-60°	5892.9	50.6
0°-90°	6469.5	55.6
90°-120°	2472.4	21.2
90°-150°	4498.0	38.7
90°-180°	5166.0	44.4
0°-180°	11635.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	4438	4438	4438	4438	4438	
5°	4366	4322	4350	4360	4375	406
15°	3692	3679	3778	3880	3947	1031
25°	2822	2829	2975	3105	3242	1298
35°	1994	2004	2138	2282	2444	1240
45°	1196	1218	1299	1397	1525	932
55°	687	716	758	786	851	623
65°	345	373	407	356	323	358
75°	173	173	158	108	74	185
85°	49	49	45	29	18	53
90°	2	10	18	23	23	6
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°	4437.7	4437.7	4437.7	4437.7	4437.7
2.5°	4448.6	4409.0	4419.0	4418.7	4406.5
5°	4365.6	4321.8	4350.1	4360.1	4375.4
7.5°	4203.6	4170.5	4221.9	4260.0	4290.9
10°	4077.4	4048.9	4114.4	4169.9	4209.9
12.5°	3931.0	3907.0	3988.3	4062.7	4114.8
15°	3691.9	3678.6	3777.6	3880.3	3947.0
17.5°	3436.0	3429.6	3543.1	3663.1	3748.4
20°	3261.6	3259.7	3384.2	3509.2	3608.2
22.5°	3085.5	3089.7	3220.7	3350.6	3463.3
25°	2821.5	2829.1	2975.3	3105.0	3242.1
27.5°	2577.3	2580.7	2731.9	2868.8	3015.1
30°	2410.6	2420.2	2568.4	2710.1	2862.4
32.5°	2244.0	2255.0	2400.1	2546.6	2701.9
35°	1993.9	2003.5	2138.0	2281.9	2443.7
37.5°	1736.1	1749.1	1868.5	2004.6	2163.7
40°	1569.4	1588.5	1694.1	1822.2	1978.4
42.5°	1409.0	1432.6	1530.5	1652.1	1793.0
45°	1195.6	1218.4	1298.8	1397.1	1524.7
47.5°	1011.8	1038.0	1099.8	1184.4	1293.3
50°	907.4	932.1	989.2	1051.9	1154.7
52.5°	815.5	840.2	891.0	939.4	1027.0
55°	687.4	715.9	757.5	786.2	850.9
57.5°	582.2	609.6	642.6	655.5	694.8
60°	512.1	542.6	572.5	571.0	592.0
62.5°	448.2	474.1	503.9	483.3	484.5
65°	344.7	373.2	407.0	355.6	323.2
67.5°	278.5	284.5	319.3	248.0	209.5
70°	247.3	247.3	257.0	192.0	159.7
72.5°	217.7	217.7	208.7	156.2	122.3
75°	173.3	173.3	157.7	108.3	74.0
77.5°	133.6	132.1	120.7	80.8	53.7
80°	107.1	107.1	97.4	63.8	42.8
82.5°	83.7	83.7	75.6	49.8	31.9
85°	48.7	48.7	44.8	28.9	17.5
87.5°	17.6	19.1	19.1	13.9	12.4
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)